

TPS7H4012-SEP Total Ionizing Dose (TID) Radiation Report



ABSTRACT

This report discusses the results of the TID testing for the Texas Instruments TPS7H4012-SEP 4.5V to 14V input, 6A radiation tolerant synchronous buck converter.

The study was done to determine TID effects under high dose rate (HDR) up to 50krad(Si) after 84h anneal at room temperature (resulting in an effective dose rate of 165mrad(Si)/s).

The results show that all samples passed within the specified limits up to 50krad(Si).

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1 Device Information

1.1 Product Description

The TPS7H4012-SEP is a 14V, 6A synchronous buck converter optimized for use in a space environment. High efficiency and reduced component count are achieved through peak current mode control.

The wide voltage range of the TPS7H4012-SEP enables the device to be used as a point of load regulator to convert directly from a 12V or 5V rail. The output voltage start-up ramp is controlled by the SS_TR pin. Power sequencing is possible with the EN and PWRGD pins. The device can be configured with up to four devices in parallel without an external clock for increased current capabilities. Additionally, various features are included such as differential remote sensing, selectable current limit, a flexible fault input pin, and configurable compensation.

1.2 Device Details

Table 1-1 lists the device information used in the TID HDR characterization.

Table 1-1. Device and Exposure Details

TID Exposure Details	
TI Device	TPS7H4012-SEP
Package	44-pin HTSSOP (DDW)
TI Part Name	TPS7H4012MDDWTSEP
Technology	LBC7 (Linear BiCMOS 7)
Assembly Lot Number	5138190
Quantity Tested	HDR: 30 Devices <ul style="list-style-type: none"> • Five biased and five unbiased units at 20krad (Si) levels • Five biased and five unbiased units at 30krad (Si) levels • Five biased and five unbiased units at 50krad (Si) levels • Five control/correlation units with no exposure
HDR Radiation Facility	Texas Instruments, Dallas, TX
HDR Dose Level	50krad(Si)
HDR Dose Rate	156.71 rads(Si)/s ionizing radiation dose rate
HDR Radiation Source	Gamma cell Co-60
Irradiation Temperature	Ambient, room temperature controlled to 25°C (±6°C) per MIL-STD-883 and MIL-STD-750.

50krad biased and unbiased devices were annealed for 84 hours at room temperature with their respective bias condition resulting in an effective dose rate of 165mrad(Si)/s.

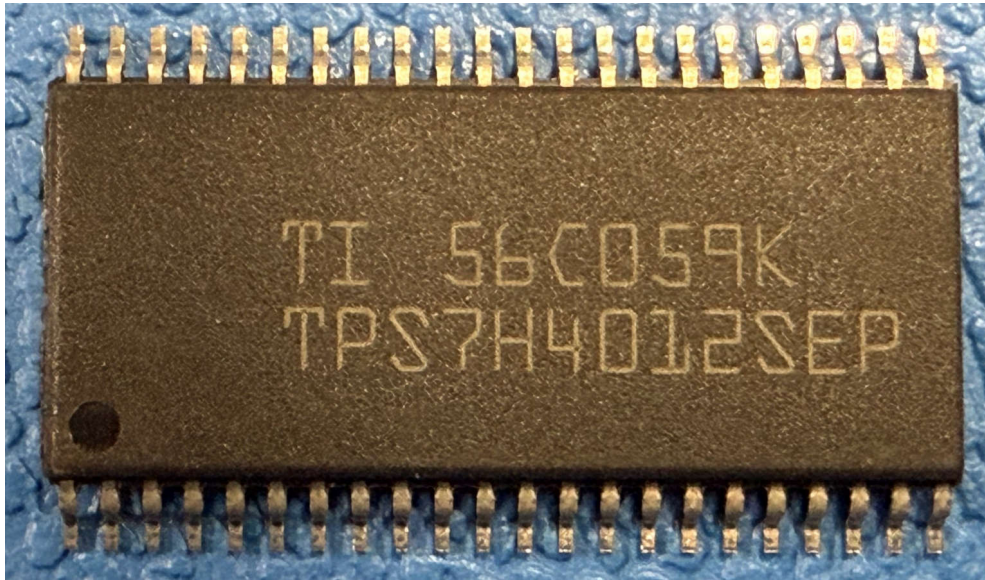


Figure 1-1. TPS7H4012-SEP Device Used in Exposure (Front)

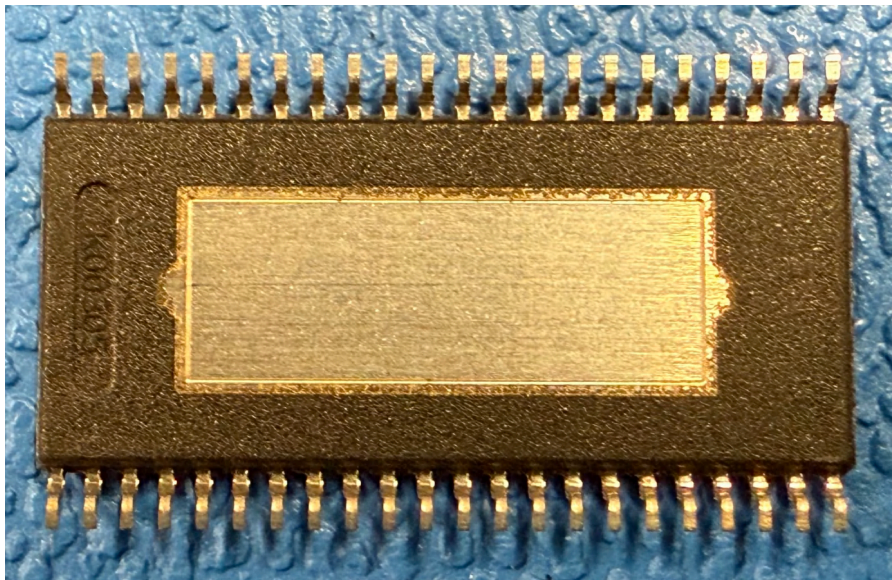


Figure 1-2. TPS7H4012-SEP Device Used in Exposure (Back)

2 Total Dose Test Setup

2.1 Test Overview

The TPS7H4012-SEP was tested according to MIL-STD-883, Test Method 1019.9. For this testing, Condition A was used. The product was irradiated up to the target radiation level, and then put through full electrical parametric testing on the production Automated Test Equipment (ATE). All devices remained functional passing all parametric test limits.

2.2 Test Description and Facilities

The TPS7H4012-SEP HDR exposure was performed on biased and unbiased devices in a Co-60 gamma cell at TI facility in Dallas, Texas. The unattenuated dose rate of this cell was 156.71 rads(Si)/s. The 50krad(Si) biased devices were annealed with the respective biased condition for 84 hours and retested. The effective dose rate for these devices was 165 mrad(Si)/s. ATE test limits are set per data sheet electrical limits based on qualification and characterization data.

2.3 Test Setup Details

The devices under HDR exposure were tested in two conditions, biased and unbiased, as described in the following sections.

2.3.1 Unbiased

For the unbiased HDR condition, the exposure was performed with all pins grounded.

2.3.2 Biased

Figure 2-1 shows the diagram for HDR exposure with biased condition.

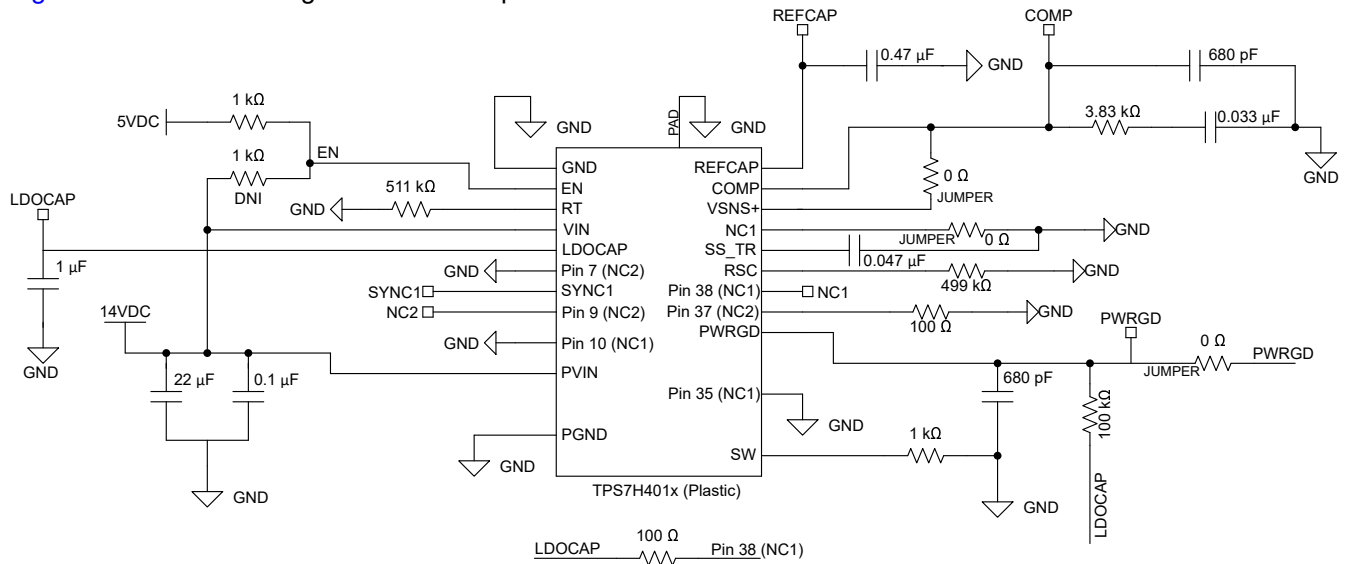


Figure 2-1. TPS7H4012-SEP Bias Diagram

2.4 Biased Test Configuration and Condition

HDR devices were stressed up to 50krad(Si) for biased and unbiased conditions.

Table 2-1. HDR: Biased Device Information

Total Samples: 15		
Exposure Levels		
20krad(Si)	30krad(Si)	50krad(Si)
1, 2, 3, 4, 5	11, 12, 13, 14, 15	88, 89, 90, 91, 92

Table 2-2. HDR: Unbiased Device Information

Total Samples: 15		
Exposure Levels		
20krad(Si)	30krad(Si)	50krad(Si)
6, 7, 8, 9, 10, 11	16, 17, 18, 19, 20	26, 27, 28, 29, 30

3 TID Characterization Test Results

3.1 TID Characterization Summary Results

The parametric data for the TPS7H4012-SEP passes up to 50krad(Si) HDR TID irradiation. The drifts of the electrical parameters through HDR were within the data sheet limits.

Overall, the TPS7H4012-SEP showed a strong degree of hardness to HDR TID irradiation up to 50krad(Si) for both biased and unbiased exposure conditions. The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each dose level for both biased and unbiased. The parameters that did show a greater degree of change pre- and post- irradiation were still within the electrical performance characteristics specified in the data sheet electrical parameters. See [Table 4-1](#) for electrical parameters. Test numbers are listed only for parameters tested for TID.

See [Appendix A](#) for HDR report up to 50krad(Si).

4 Datasheet Electrical Parameter Characteristics

Over $4.5V \leq V_{IN} \leq 14V$, $PV_{IN} = V_{IN}$, $VSNS^- = 0V$, open loop configuration, $I_{OUT} = 0A$, $T_A = 25^\circ C$, unless otherwise noted.

Table 4-1. Data Sheet Electrical Parameter Characteristics

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
POWER SUPPLIES AND CURRENTS									
V_{UVLOR_PVIN}	PVIN internal UVLO rising threshold			1, 2, 3	3.2	3.4	3.6	V	14.1, 14.7, 14.13, 14.19
$V_{UVLOHYST_PVIN}$	PVIN internal UVLO hysteresis			1, 2, 3	425	450	500	mV	14.3, 14.9, 14.15, 14.21
V_{UVLOR_VIN}	VIN internal UVLO rising threshold			1, 2, 3	3.4	3.6	3.8	V	14.4, 14.10, 14.16, 14.22
$V_{UVLOHYST_VIN}$	VIN internal UVLO hysteresis			1, 2, 3	140	155	170	mV	14.6, 14.12, 14.18, 14.24
I_{SHDN_VIN}	VIN shutdown supply current	$V_{EN} = 0V$	VIN = 4.5V	1, 2, 3		2	2.9	mA	12.1
			VIN = 14V	1, 2, 3		2	3		12.16
I_{SHDN_PVIN}	PVIN shutdown supply current	$V_{EN} = 0V$	PVIN = 4.5V	1, 2, 3		2.6	3.5	mA	12.2
			PVIN = 14V	1, 2, 3		3.5	4.7		12.17
I_{Q_VIN}	VIN operating quiescent current (non switching)	$V_{EN} = 7V$, $VSNS^+ = 1V$		1, 2, 3		2.6	5	mA	12.3, 12.8, 12.13, 12.18
ENABLE									
$V_{EN(rising)}$	Enable rising threshold (turn-on)			1, 2, 3	0.555	0.61	0.655	V	15.3, 15.6, 15.9, 15.12
$V_{EN(falling)}$	Enable falling threshold (turn-off)			1, 2, 3	0.455	0.51	0.554	V	15.4, 15.7, 15.10, 15.13
$t_{EN(delay)}$	Enable propagation delay	EN high to SW high, SS pin open		1, 2, 3		52	100	μs	24.23, 24.69, 24.112, 24.155
$I_{EN(LKG)}$	Enable input leakage current	$V_{EN} = 7V$		1, 2, 3		2	100	nA	15.1, 15.15
VOLTAGE REFERENCE AND SENSE									
V_{REF}	Internal voltage reference (including error amplifier VIO)	See datasheet	$T_A = -55^\circ C$	3	0.594	0.598	0.603	V	17.4, 17.16, 17.28, 17.40
			$T_A = 25^\circ C$	1	0.596	0.6	0.603		
			$T_A = 125^\circ C$	2	0.597	0.6	0.604		

Table 4-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
$V_{REF(internal)}$	Internal voltage reference (without error amplifier included)	$V_{REF(internal)} = V_{SS_TR}$		1, 2, 3	0.593	0.6	0.606	V	17.2, 17.14, 17.26, 17.38
V_{BG}	Bandgap voltage (voltage at the REFCAP pin)	$C_{REFCAP} = 470nF$		1, 2, 3	1.184	1.2	1.222	V	12.5, 12.10, 12.15, 12.20
$I_{VSNS+(LKG)}$	VSNS+ input leakage current	$VSNS+ = 0.6V$		1, 2, 3		10	30	nA	17.5, 17.17, 17.29, 17.41
ERROR AMPLIFIER									
V_{IO}	Error amplifier input offset voltage	$VSNS+ = 0.6V$		1, 2, 3	-2.9		2.9	mV	17.3, 17.15, 17.27, 17.39
g_{mEA}	Error amplifier transconductance	$-10\mu A < I_{COMP} < 10\mu A$, $V_{COMP} = 1V$	$T_A = -55^\circ C$	11	1400	2050	2700	μS	18.2, 18.8, 18.14, 18.20
			$T_A = 25^\circ C$	9	1200	1650	2100		
			$T_A = 125^\circ C$	10	1000	1250	1500		
EA_{DC}	Error amplifier DC gain	$VSNS+ = 0.6V$				11500		V/V	
EA_{ISRC}	Error amplifier source	$V_{COMP} = 1V$, 100mV input overdrive		1, 2, 3	90	125	200	μA	18.3, 18.9, 18.15, 18.21
EA_{ISNK}	Error amplifier sink	$V_{COMP} = 1V$, 100mV input overdrive		1, 2, 3	90	125	200	μA	18.4, 18.10, 18.16, 18.22
EA_{Ro}	Error amplifier output resistance					7		M Ω	
EA_{BW}	Error amplifier bandwidth	Unity gain bandwidth				9		MHz	
g_{mps}	Power stage transconductance	$V_{COMP} = 0.7V$	TPS7H4012, HTSSOP	1, 2, 3	8	11.2	14.5	S	20.7, 20.58, 20.109, 20.160
OVERCURRENT PROTECTION									
I_{OC_HS1}	High-side switch current limit threshold 1(4)	$R_{SHORT} = 100m\Omega$	TPS7H4012, HTSSOP	1, 2, 3		9.7	12.2	A	20.5, 20.56, 20.107, 20.158
I_{OC_HS2}	High-side switch current limit threshold 2	$V_{IN} = 12V$, $R_{SHORT} \approx 4m\Omega$	TPS7H4012, HTSSOP	1, 2, 3		11.8		A	20.6, 20.57, 20.108, 20.159
$I_{OC_LS(sink)}$	Low-side switch sinking overcurrent threshold	$T_A = -55^\circ C$		3		2		A	
		$T_A = 25^\circ C$		1		1.9		A	19.14, 19.17, 19.20, 19.23
		$T_A = 125^\circ C$		2		1.7		A	
$COMP_{SHDN}$	COMP shutdown voltage			1, 2, 3	1.7	1.9	2.1	V	22.2, 22.9, 22.16, 22.23
$t_{COMP(delay)}$	COMP shutdown delay			9, 10, 11		30		μs	
SOFT START AND TRACKING									
t_{SS}	Soft start time	V_{SS_TR} from 10% to 90%, $V_{OUT(set)} = 3.3V$	$CSS = 5.6nF$	9, 10, 11		1.5		ms	22.5, 22.12, 22.19, 22.26
			$CSS = 22nF$	9, 10, 11	4.7	5.8	7.3		22.6, 22.13, 22.20, 22.27
			$CSS = 100nF$	9, 10, 11		24.7			22.7, 22.14, 22.21, 22.28

Table 4-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
$R_{SS(\text{discharge})}$	Soft start discharge pull-down resistor			1, 2, 3	200	442	700	Ω	22.3, 22.10, 22.17, 22.24
SS_{startup}	Maximum voltage on SS before startup(5)					20		mV	22.4, 22.11, 22.18, 22.25
SLOPE COMPENSATION									
SC	Slope compensation, TPS74012	$f_{\text{SW}} = 100\text{kHz}$, $V_{\text{IN}} = 12\text{V}$	RSC = 499k Ω			-0.8		A/ μs	
			RSC = 1.5M Ω			-0.3			
		$f_{\text{SW}} = 500\text{kHz}$, $V_{\text{IN}} = 12\text{V}$	RSC = 100k Ω			-4.2		A/ μs	
			RSC = 499k Ω			-1.4			
			RSC = 1.5M Ω			-1			
		$f_{\text{SW}} = 1000\text{kHz}$, $V_{\text{IN}} = 12\text{V}$	RSC = 100k Ω			-5.5		A/ μs	
RSC = 499k Ω				-2.4					
			RSC = 1.5M Ω			-2.3			
MINIMUM ON TIME AND DEAD TIME									
$t_{\text{on}(\text{min})}$	Minimum on time	50% to 50% of V_{IN} , $I_{\text{SW}} = 2\text{A}$	$V_{\text{IN}} = 4.5\text{V}$	9, 10, 11		210	235	ns	24.22
			$V_{\text{IN}} = 5\text{V}$	9, 10, 11		213	250		24.68
			$V_{\text{IN}} = 12\text{V}$	9, 10, 11		199	250		24.11
			$V_{\text{IN}} = 14\text{V}$	9, 10, 11		199	250		24.15
$t_{\text{off}(\text{min})}$	Minimum off time	$I_{\text{SW}} = 2\text{A}$				306		ns	
t_{dead}	Dead time					70		ns	
SWITCHING FREQUENCY AND SYNCHRONIZATION									
f_{SW}	RT programmed switching frequency	$R_{\text{RT}} = 511\text{k}\Omega$		4, 5, 6	90	100	120	kHz	24.12, 24.58, 24.101, 24.144
		$R_{\text{RT}} = 90.9\text{k}\Omega$		4, 5, 6	450	500	550		24.19, 24.65, 24.108, 24.151
		$R_{\text{RT}} = 40.2\text{k}\Omega$	$V_{\text{IN}} = 4.5\text{V}$	4, 5, 6	850	1000	1150	kHz	24.2
$5 \leq V_{\text{IN}} \leq 14$	4, 5, 6		870	1000	1170	24.66, 24.109, 24.152			
t_{SYNC_D}	SYNC1 to SW delay	SYNC1 input, see Datasheet	$V_{\text{IN}} = 4.5\text{V}$	9, 10, 11	150	256	390	ns	24.3
			$5\text{V} \leq V_{\text{IN}} \leq 14\text{V}$	9, 10, 11	160	240	310		24.49, 24.92, 24.135
			$V_{\text{IN}} = 12\text{V}$, $I_{\text{OUT}} = 3\text{A}$			246			
$V_{\text{SYNC1}(\text{IH})}$	SYNC1 input high threshold			1, 2, 3			1.7	V	24.4, 24.50, 24.93, 24.136
$V_{\text{SYNC1}(\text{IL})}$	SYNC1 input low threshold			1, 2, 3	0.7			V	24.5, 24.51, 24.94, 24.137
f_{SYNC}	SYNC1 input frequency range			4, 5, 6	100		1000	kHz	24.1, 24.6, 24.7, 24.47, 24.52, 24.53, 24.90, 24.95, 24.96, 24.133, 24.138, 24.139

Table 4-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
D _{SYNC}	SYNC1 input duty cycle range	External clock duty cycle		4, 5, 6	40%		60%		24.1, 24.6, 24.7, 24.47, 24.52, 24.53, 24.90, 24.95, 24.96, 24.133, 24.138, 24.139
t _{CLK_E_I}	External clock to internal clock detection time	RT populated		9, 10, 11		2	5	(1/f _{sw}) s	24.10, 24.56, 24.99, 24.142
t _{CLK_I_E}	Internal clock to external clock detection time	RT populated		9, 10, 11		1	2	(1/f _{sw}) s	24.11, 24.57, 24.100, 24.143
POWER GOOD AND THERMAL SHUTDOWN									
PWRGD _{LOW_F%}	PWRGD falling threshold (fault), low	Threshold for PWRGD (VSNS+ as percent of V _{REF})	VSNS+ falling	1, 2, 3	89%	92%	95%		23.2, 23.10, 23.17, 23.24
PWRGD _{LOW_R%}	PWRGD rising threshold (good), low	Threshold for PWRGD (VSNS+ as percent of V _{REF})	VSNS+ rising	1, 2, 3	92%	95%	98%		23.3, 23.11, 23.18, 23.25
PWRGD _{HIGH_R%}	PWRGD rising threshold (fault), high	Threshold for PWRGD (VSNS+ as percent of V _{REF})	VSNS+ rising	1, 2, 3	105%	108%	112%		23.4, 23.12, 23.19, 23.26
PWRGD _{HIGH_F%}	PWRGD falling threshold (good), high	Threshold for PWRGD (VSNS+ as percent of V _{REF})	VSNS+ falling	1, 2, 3	102%	105%	109%		23.5, 23.13, 23.20, 23.27
I _{PWRGD(LKG)}	Output high leakage	VSNS+ = V _{REF} , V _{PWRGD} = 7V		1, 2, 3		50	500	nA	23.6, 23.14, 23.21, 23.28
V _{PWRGD(OL)}	Power good output low	I _{PWRGD(SINK)} = 0mA to 2mA		1, 2, 3		250	300	mV	23.7, 23.15, 23.22, 23.29
V _{INMIN_PWRGD}	Minimum VIN for valid PWRGD output	Measured when V _{PWRGD} ≤ 0.5V at 100μA		1, 2, 3		1	2	V	23.1
T _{SD(enter)}	Thermal shutdown enter temperature					175		°C	
T _{SD(exit)}	Thermal shutdown exit temperature					140		°C	
T _{SD(HYS)}	Thermal shutdown hysteresis					35		°C	
MOSFET									

Table 4-1. Data Sheet Electrical Parameter Characteristics (continued)

PARAMETER		TEST CONDITIONS		SUB-GROUP	MIN	TYP	MAX	UNIT	TEST NUMBERS
R _{DS_ON_HS}	High-side switch resistance at I _{HS} = 6A, TPS7H4012, HTSSOP	P _{VIN} = 4.5V	T _A = -55°C	3		29	42	mΩ	20.4
			T _A = 25°C	1		37	48		
			T _A = 125°C	2		47	63		
		5V ≤ P _{VIN} ≤ 14V	T _A = -55°C	3		26	38	mΩ	20.55, 20.106, 20.157
			T _A = 25°C	1		33	46		
			T _A = 125°C	2		41	56		
R _{DS_ON_LS}	Low-side switch resistance at I _{LS} = 6A, TPS7H4012, HTSSOP	P _{VIN} = 4.5V	T _A = -55°C	3		20	31	mΩ	21.26
			T _A = 25°C	1		28	39		
			T _A = 125°C	2		41	50		
		5V ≤ P _{VIN} ≤ 14V	T _A = -55°C	3		20	29	mΩ	21.29, 21.32, 21.35
			T _A = 25°C	1		27	37		
			T _A = 125°C	2		39	48		

5 Applicable and Reference Documents

5.1 Applicable Documents

- Texas Instruments, [TPS7H401X-SP and TPS7H401X-SEP 4.5V to 14V Input, 3A and 6A Radiation Hardened Synchronous Buck Converter](#), data sheet.
- Texas Instruments, [TPS7H4012-SP \(TPS7H4012EVM-CVAL\) Evaluation Module User's Guide](#), user's guide.

5.2 Reference Documents

Texas Instruments total ionizing dose radiation (total dose) test procedure follows the standards put forth in MIL-STD-883 TM 1019. The document can be found at the DLA website.

A Appendix A: HDR Results

This appendix contains the HDR TID report data. The following decoder serves as a reference guide for the test parameters shown in the appendix:

NCAT|HEADER/PIN/V_VIN/I_LOAD/R_RT/CONDITION/@SPEC_ID_PARM

Please reference [Table A-1](#) for an example implementation of this decoder.

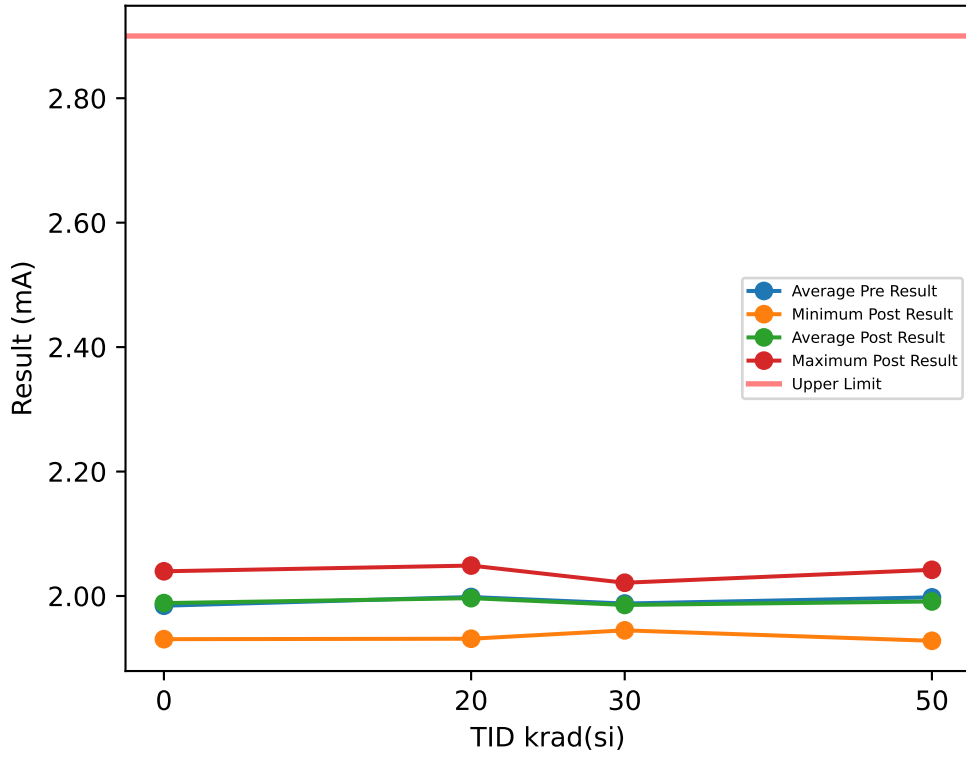
Table A-1. Decoder Implementation, Example Test: IDD|STATIC/VIN/14////@VIN_SHDN_CURR_14V

Test Category	Header	Pin Name	Input Voltage	Load Current	Frequency Set Resistor Value	Condition	Specification Identifier
IDD	STATIC	VIN	14V	N/A	N/A	N/A	@VIN_SHDN_CURR_14

Note that the absence of identifiers in a parameter name indicates that the identifier is not applicable. For instance, this test does not have the device driving an external load, and thus no load current is specified.

Device Test: 12.1 IDD|STATIC/VIN/4.5////@VIN_SHDN_CURR_4V

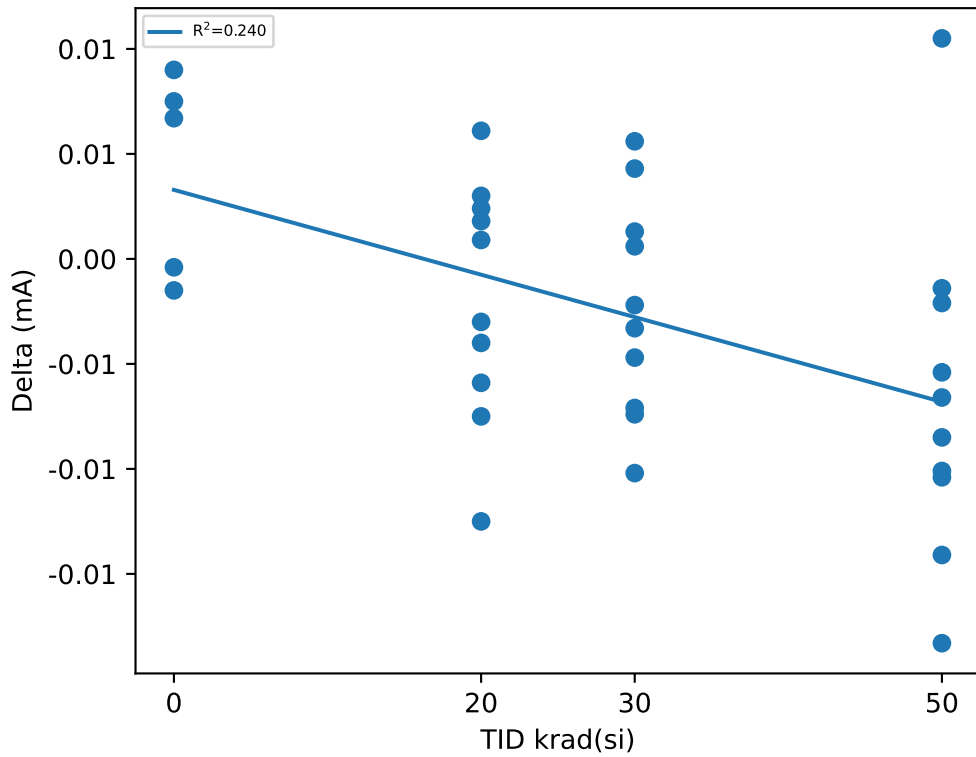
TID vs Result Stats



Test Results (Upper Limit = 2.9 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.0033	2.0094	0.0061
2	20	Biased	2.0465	2.0489	0.0024
3	20	Biased	1.9706	1.9581	-0.0125
4	20	Biased	2.0404	2.0434	0.003
5	20	Biased	2.0202	2.022	0.0018
6	20	Unbiased	1.9343	1.9313	-0.003
7	20	Unbiased	2.0084	2.0044	-0.004
8	20	Unbiased	1.9796	1.9805	0.0009
9	20	Unbiased	2.0117	2.0042	-0.0075
10	20	Unbiased	1.9689	1.963	-0.0059
11	30	Biased	2.0149	2.0155	0.0006
12	30	Biased	1.9868	1.9835	-0.0033
13	30	Biased	1.9744	1.9787	0.0043
14	30	Biased	1.9696	1.9752	0.0056
15	30	Biased	1.9435	1.9448	0.0013
16	30	Unbiased	1.9806	1.9784	-0.0022
17	30	Unbiased	2.026	2.0213	-0.0047
18	30	Unbiased	1.9884	1.9813	-0.0071
19	30	Unbiased	2.0112	2.001	-0.0102
20	30	Unbiased	1.9835	1.9761	-0.0074
26	50	Unbiased	2.0506	2.0421	-0.0085
27	50	Unbiased	2.0255	2.0151	-0.0104
28	50	Unbiased	2.0486	2.0345	-0.0141
29	50	Unbiased	1.9463	1.928	-0.0183
30	50	Unbiased	1.9639	1.9538	-0.0101
88	50	Biased-84Hr-Anneal	1.9752	1.9698	-0.0054
89	50	Biased-84Hr-Anneal	1.9304	1.9283	-0.0021
90	50	Biased-84Hr-Anneal	2.0137	2.0123	-0.0014
91	50	Biased-84Hr-Anneal	2.0252	2.0357	0.0105
92	50	Biased-84Hr-Anneal	1.9989	1.9923	-0.0066
100	0	CORRELATION	2.009	2.0075	-0.0015
101	0	CORRELATION	1.9216	1.9306	0.009
102	0	CORRELATION	1.9724	1.9791	0.0067
103	0	CORRELATION	1.9786	1.9861	0.0075
104	0	CORRELATION	2.0401	2.0397	-0.0004

TID vs Post - Pre Exposure Delta

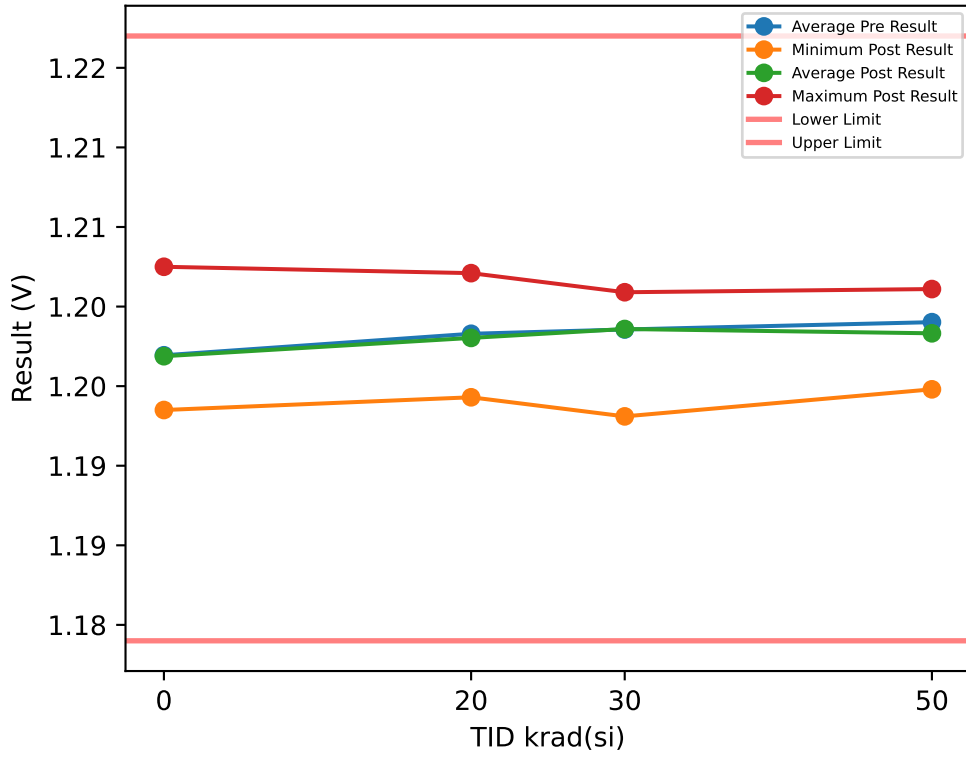


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.9216	1.9843	2.0401	0.044241	1.9306	1.9886	2.0397	0.04009	-0.0015	0.00426	0.009	0.0048428
20	1.9343	1.9984	2.0465	0.034895	1.9313	1.9965	2.0489	0.037988	-0.0125	-0.00187	0.0061	0.0057093
30	1.9435	1.9879	2.026	0.024235	1.9448	1.9856	2.0213	0.022088	-0.0102	-0.00231	0.0056	0.0052235
50	1.9304	1.9978	2.0506	0.042158	1.928	1.9912	2.0421	0.043806	-0.0183	-0.00664	0.0105	0.0079202

Device Test: 12.10 LEVEL|STATIC/REFCAP/5////@VBANDGAP

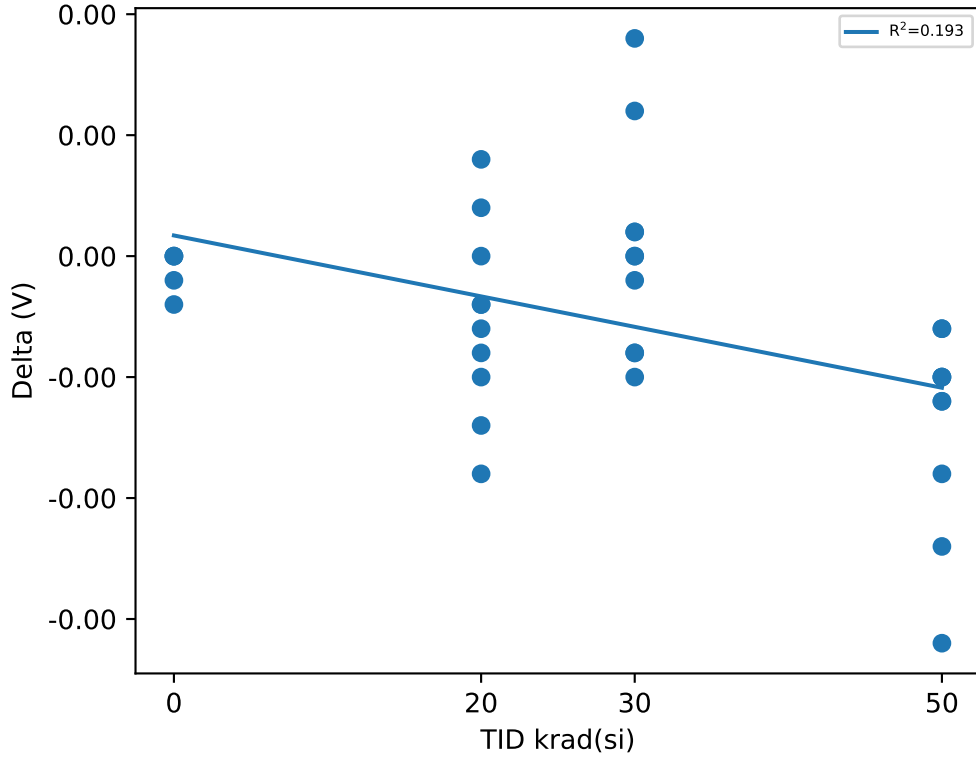
TID vs Result Stats



Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.2054	1.2052	-0.0002
2	20	Biased	1.2078	1.2071	-0.0007
3	20	Biased	1.1996	1.1994	-0.0002
4	20	Biased	1.2039	1.2034	-0.0005
5	20	Biased	1.2049	1.2049	0
6	20	Unbiased	1.2035	1.2037	0.0002
7	20	Unbiased	1.1989	1.1993	0.0004
8	20	Unbiased	1.2023	1.2019	-0.0004
9	20	Unbiased	1.2022	1.2019	-0.0003
10	20	Unbiased	1.2044	1.2035	-0.0009
11	30	Biased	1.2024	1.2024	0
12	30	Biased	1.1986	1.1981	-0.0005
13	30	Biased	1.2033	1.2039	0.0006
14	30	Biased	1.2048	1.2049	0.0001
15	30	Biased	1.2044	1.2043	-0.0001
16	30	Unbiased	1.2059	1.2055	-0.0004
17	30	Unbiased	1.2054	1.205	-0.0004
18	30	Unbiased	1.2014	1.2015	0.0001
19	30	Unbiased	1.205	1.2059	0.0009
20	30	Unbiased	1.2044	1.2044	0
26	50	Unbiased	1.2066	1.2061	-0.0005
27	50	Unbiased	1.2048	1.2045	-0.0003
28	50	Unbiased	1.2041	1.2036	-0.0005
29	50	Unbiased	1.2014	1.1998	-0.0016
30	50	Unbiased	1.2024	1.2019	-0.0005
88	50	Biased-84Hr-Anneal	1.2037	1.2034	-0.0003
89	50	Biased-84Hr-Anneal	1.203	1.2024	-0.0006
90	50	Biased-84Hr-Anneal	1.2034	1.2022	-0.0012
91	50	Biased-84Hr-Anneal	1.2055	1.2046	-0.0009
92	50	Biased-84Hr-Anneal	1.2053	1.2047	-0.0006
100	0	CORRELATION	1.2003	1.2002	-0.0001
101	0	CORRELATION	1.2008	1.2008	0
102	0	CORRELATION	1.2024	1.2024	0
103	0	CORRELATION	1.1987	1.1985	-0.0002
104	0	CORRELATION	1.2075	1.2075	0

TID vs Post - Pre Exposure Delta

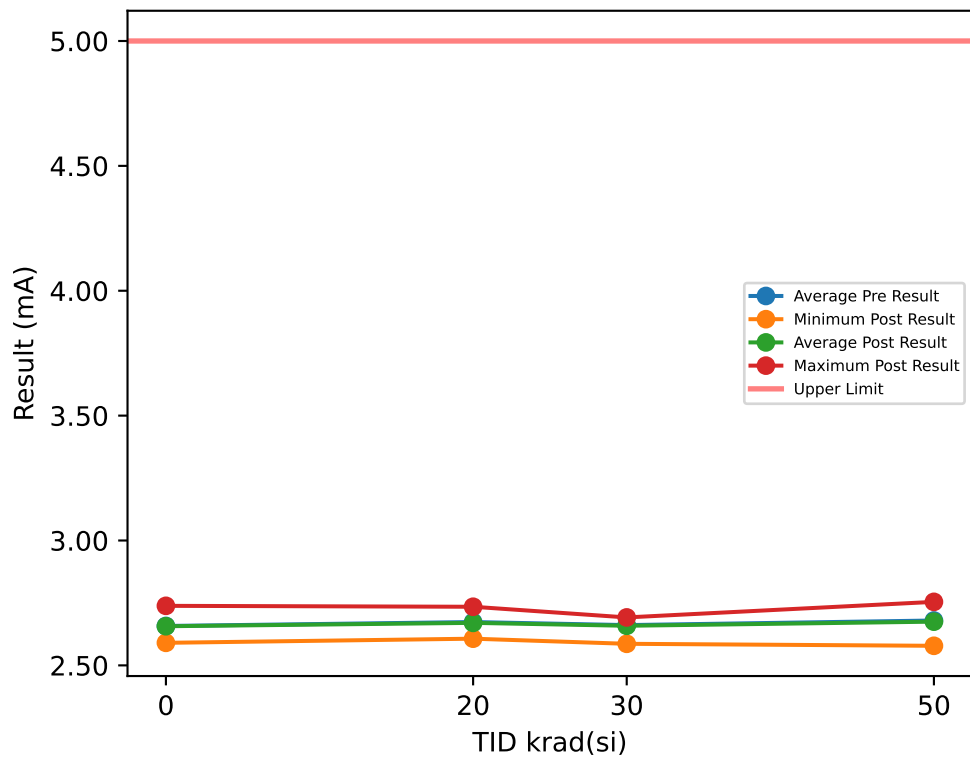


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1987	1.2019	1.2075	0.0033768	1.1985	1.2019	1.2075	0.0034376	-0.0002	-6e-05	0	8.9443e-05
20	1.1989	1.2033	1.2078	0.0026685	1.1993	1.203	1.2071	0.002477	-0.0009	-0.00026	0.0004	0.00039497
30	1.1986	1.2036	1.2059	0.0022252	1.1981	1.2036	1.2059	0.0023539	-0.0005	3e-05	0.0009	0.00044234
50	1.2014	1.204	1.2066	0.0015676	1.1998	1.2033	1.2061	0.001803	-0.0016	-0.0007	-0.0003	0.00041633

Device Test: 12.13 IQ|STATIC/VIN/12////@IQ_VIN

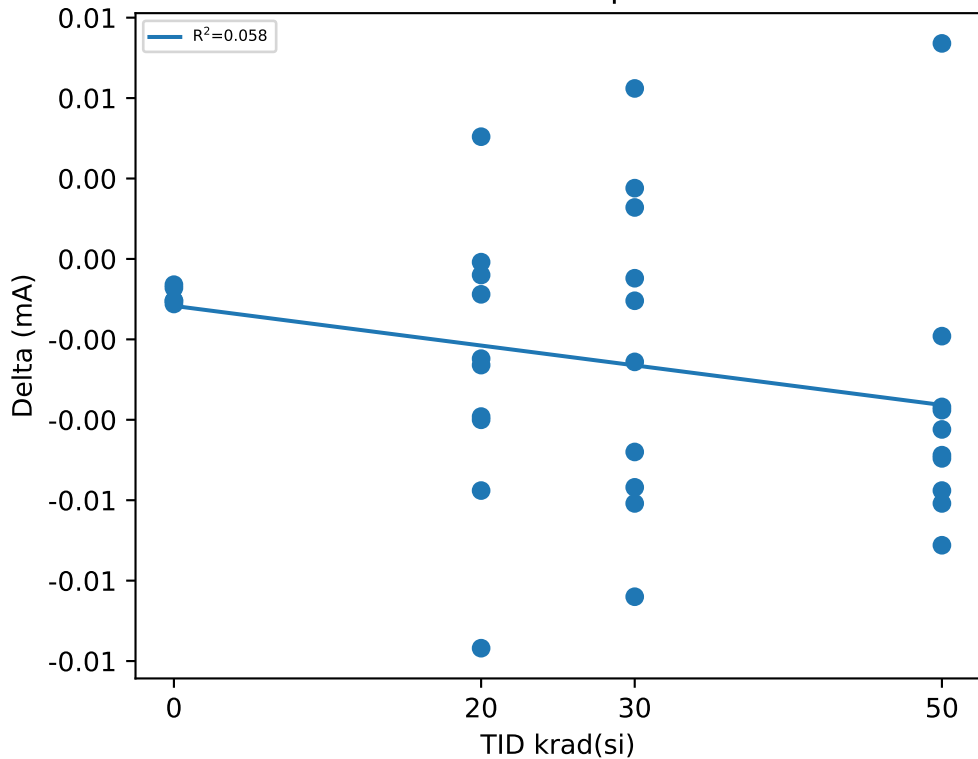
TID vs Result Stats



Test Results (Upper Limit = 5.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.6743	2.6781	0.0038
2	20	Biased	2.7144	2.7143	-0.0001
3	20	Biased	2.6163	2.6113	-0.005
4	20	Biased	2.738	2.7347	-0.0033
5	20	Biased	2.7018	2.6969	-0.0049
6	20	Unbiased	2.6141	2.6069	-0.0072
7	20	Unbiased	2.6708	2.6677	-0.0031
8	20	Unbiased	2.6553	2.6548	-0.0005
9	20	Unbiased	2.7221	2.71	-0.0121
10	20	Unbiased	2.6284	2.6273	-0.0011
11	30	Biased	2.6904	2.692	0.0016
12	30	Biased	2.6684	2.6608	-0.0076
13	30	Biased	2.6395	2.6417	0.0022
14	30	Biased	2.6534	2.6587	0.0053
15	30	Biased	2.587	2.5864	-0.0006
16	30	Unbiased	2.6649	2.6617	-0.0032
17	30	Unbiased	2.6986	2.6915	-0.0071
18	30	Unbiased	2.6437	2.6424	-0.0013
19	30	Unbiased	2.6863	2.6758	-0.0105
20	30	Unbiased	2.6808	2.6748	-0.006
26	50	Unbiased	2.7619	2.7543	-0.0076
27	50	Unbiased	2.7283	2.7221	-0.0062
28	50	Unbiased	2.7574	2.7485	-0.0089
29	50	Unbiased	2.5914	2.5868	-0.0046
30	50	Unbiased	2.6321	2.626	-0.0061
88	50	Biased-84Hr-Anneal	2.6306	2.6253	-0.0053
89	50	Biased-84Hr-Anneal	2.5808	2.5784	-0.0024
90	50	Biased-84Hr-Anneal	2.7199	2.7152	-0.0047
91	50	Biased-84Hr-Anneal	2.7368	2.7435	0.0067
92	50	Biased-84Hr-Anneal	2.6574	2.6502	-0.0072
100	0	CORRELATION	2.6686	2.6672	-0.0014
101	0	CORRELATION	2.5911	2.5903	-0.0008
102	0	CORRELATION	2.6361	2.6348	-0.0013
103	0	CORRELATION	2.6536	2.6527	-0.0009
104	0	CORRELATION	2.7397	2.7384	-0.0013

TID vs Post - Pre Exposure Delta

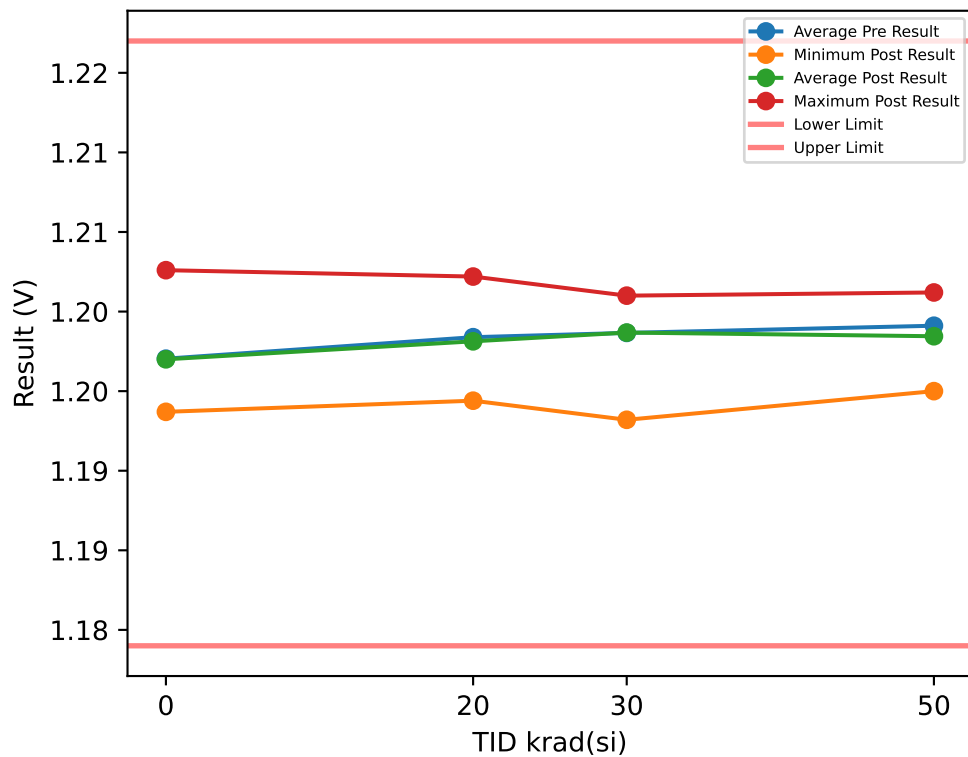


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5911	2.6578	2.7397	0.054226	2.5903	2.6567	2.7384	0.054059	-0.0014	-0.00114	-0.0008	0.00027019
20	2.6141	2.6736	2.738	0.044931	2.6069	2.6702	2.7347	0.044752	-0.0121	-0.00335	0.0038	0.0043646
30	2.587	2.6613	2.6986	0.032787	2.5864	2.6586	2.692	0.030789	-0.0105	-0.00272	0.0053	0.0050356
50	2.5808	2.6797	2.7619	0.068948	2.5784	2.675	2.7543	0.068972	-0.0089	-0.00463	0.0067	0.0043727

Device Test: 12.15 LEVEL|STATIC/REFCAP/12////@VBANDGAP

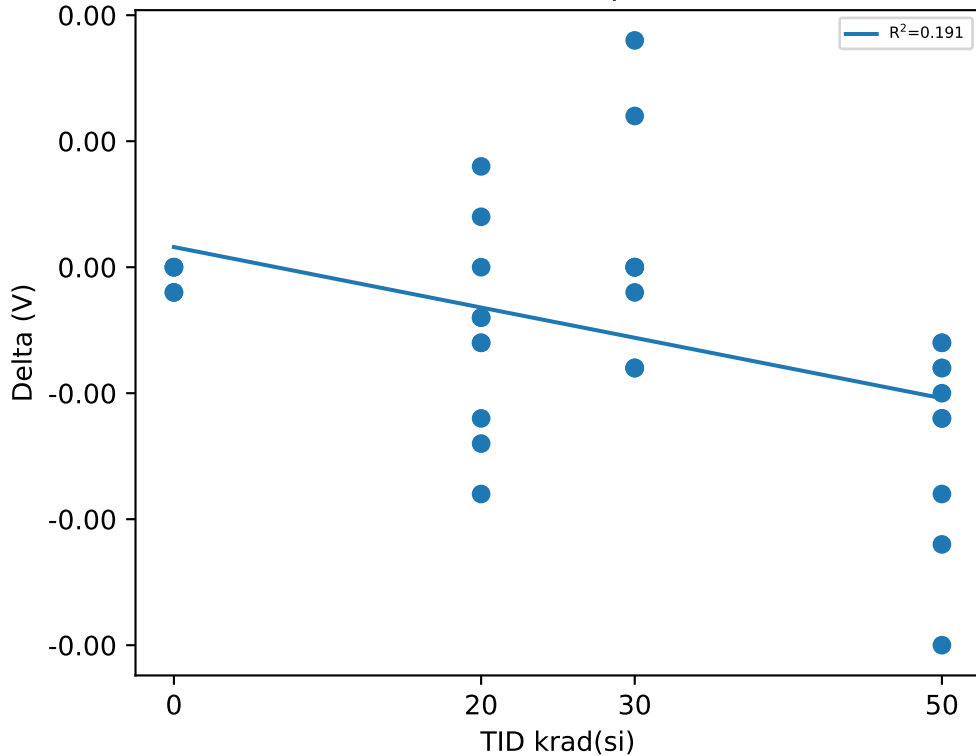
TID vs Result Stats



Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.2055	1.2053	-0.0002
2	20	Biased	1.2079	1.2072	-0.0007
3	20	Biased	1.1997	1.1995	-0.0002
4	20	Biased	1.2041	1.2035	-0.0006
5	20	Biased	1.205	1.205	0
6	20	Unbiased	1.2036	1.2038	0.0002
7	20	Unbiased	1.199	1.1994	0.0004
8	20	Unbiased	1.2023	1.202	-0.0003
9	20	Unbiased	1.2023	1.202	-0.0003
10	20	Unbiased	1.2045	1.2036	-0.0009
11	30	Biased	1.2025	1.2025	0
12	30	Biased	1.1986	1.1982	-0.0004
13	30	Biased	1.2034	1.204	0.0006
14	30	Biased	1.2049	1.2049	0
15	30	Biased	1.2045	1.2044	-0.0001
16	30	Unbiased	1.206	1.2056	-0.0004
17	30	Unbiased	1.2055	1.2051	-0.0004
18	30	Unbiased	1.2016	1.2016	0
19	30	Unbiased	1.2051	1.206	0.0009
20	30	Unbiased	1.2045	1.2045	0
26	50	Unbiased	1.2066	1.2062	-0.0004
27	50	Unbiased	1.2049	1.2046	-0.0003
28	50	Unbiased	1.2042	1.2038	-0.0004
29	50	Unbiased	1.2015	1.2	-0.0015
30	50	Unbiased	1.2025	1.202	-0.0005
88	50	Biased-84Hr-Anneal	1.2038	1.2035	-0.0003
89	50	Biased-84Hr-Anneal	1.2031	1.2025	-0.0006
90	50	Biased-84Hr-Anneal	1.2035	1.2024	-0.0011
91	50	Biased-84Hr-Anneal	1.2056	1.2047	-0.0009
92	50	Biased-84Hr-Anneal	1.2054	1.2048	-0.0006
100	0	CORRELATION	1.2004	1.2003	-0.0001
101	0	CORRELATION	1.2009	1.2009	0
102	0	CORRELATION	1.2025	1.2025	0
103	0	CORRELATION	1.1988	1.1987	-0.0001
104	0	CORRELATION	1.2076	1.2076	0

TID vs Post - Pre Exposure Delta

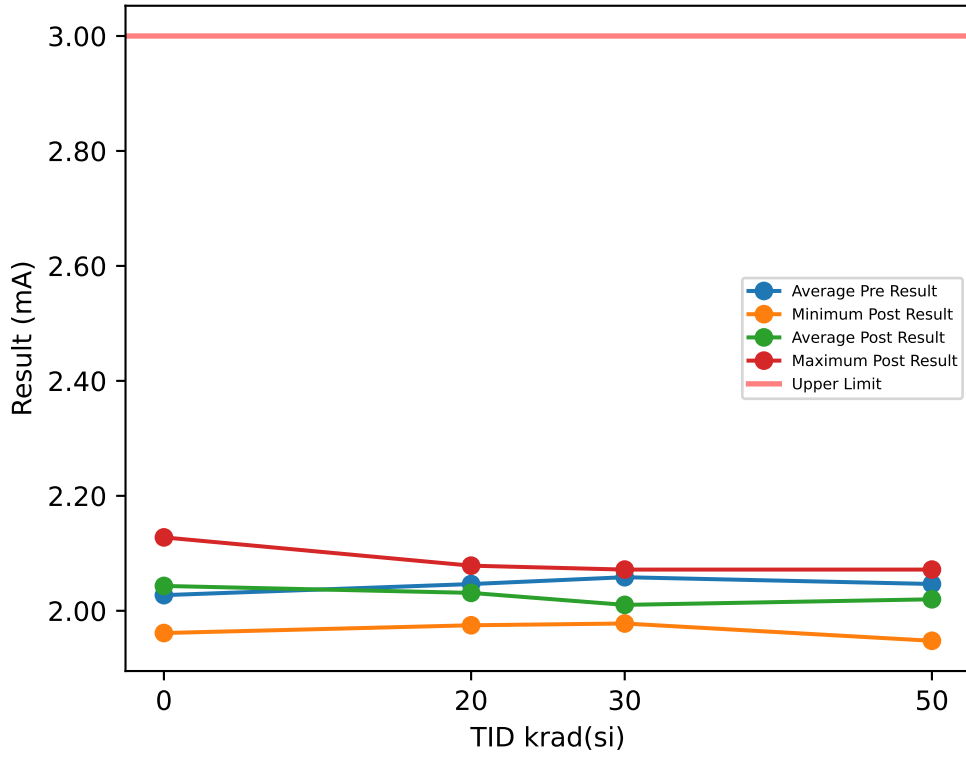


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1988	1.202	1.2076	0.0033768	1.1987	1.202	1.2076	0.0034132	-0.0001	-4e-05	0	5.4772e-05
20	1.199	1.2034	1.2079	0.0026756	1.1994	1.2031	1.2072	0.002477	-0.0009	-0.00026	0.0004	0.00040056
30	1.1986	1.2037	1.206	0.0022396	1.1982	1.2037	1.206	0.002348	-0.0004	2e-05	0.0009	0.00042895
50	1.2015	1.2041	1.2066	0.0015495	1.2	1.2034	1.2062	0.0017765	-0.0015	-0.00066	-0.0003	0.00039215

Device Test: 12.16 IDD|STATIC/VIN/14////@VIN_SHDN_CURR_14V

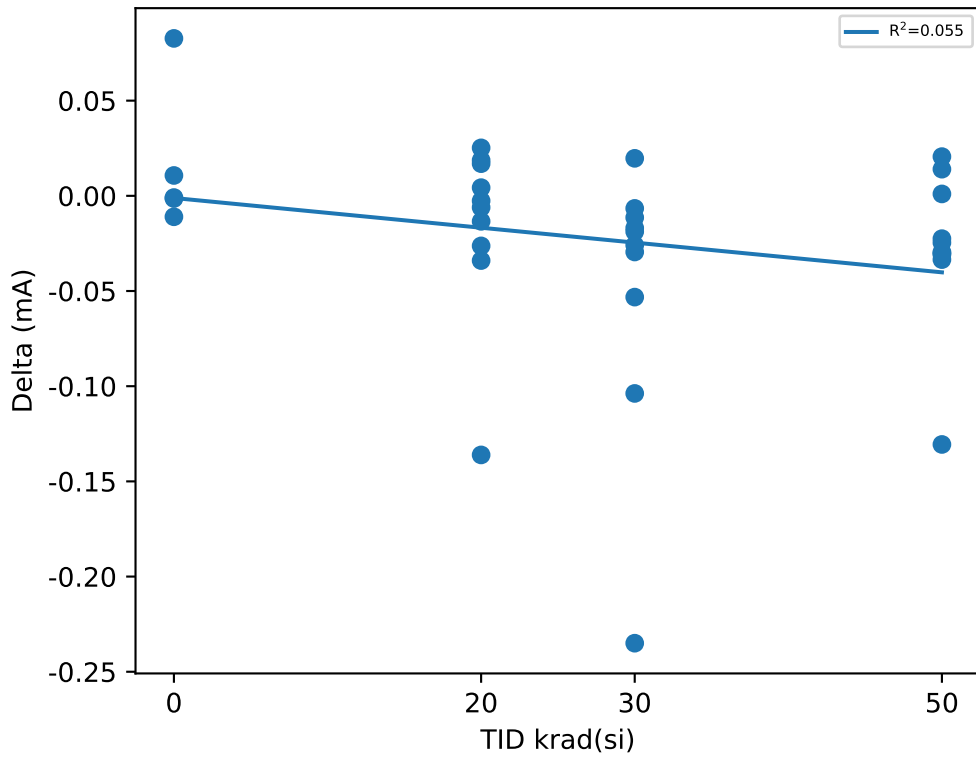
TID vs Result Stats



Test Results (Upper Limit = 3.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.0539	2.0513	-0.0026
2	20	Biased	2.0616	2.0785	0.0169
3	20	Biased	2.1162	1.9801	-0.1361
4	20	Biased	2.0778	2.0717	-0.0061
5	20	Biased	2.089	2.0627	-0.0263
6	20	Unbiased	1.9561	1.9748	0.0187
7	20	Unbiased	2.0534	2.04	-0.0134
8	20	Unbiased	2.0153	1.9813	-0.034
9	20	Unbiased	2.0643	2.0686	0.0043
10	20	Unbiased	1.9774	2.0026	0.0252
11	30	Biased	2.1755	2.0717	-0.1038
12	30	Biased	2.0653	2.0121	-0.0532
13	30	Biased	2.0145	2.0079	-0.0066
14	30	Biased	1.9872	2.0069	0.0197
15	30	Biased	1.9948	1.9779	-0.0169
16	30	Unbiased	2.0158	1.9899	-0.0259
17	30	Unbiased	2.2585	2.0235	-0.235
18	30	Unbiased	2.0035	1.9921	-0.0114
19	30	Unbiased	2.0322	2.0027	-0.0295
20	30	Unbiased	2.0369	2.0181	-0.0188
26	50	Unbiased	2.0637	2.0412	-0.0225
27	50	Unbiased	2.0624	2.0378	-0.0246
28	50	Unbiased	2.0906	2.0571	-0.0335
29	50	Unbiased	1.9786	1.9478	-0.0308
30	50	Unbiased	1.9816	1.9826	0.001
88	50	Biased-84Hr-Anneal	2.0547	2.0252	-0.0295
89	50	Biased-84Hr-Anneal	1.9914	1.9612	-0.0302
90	50	Biased-84Hr-Anneal	2.0577	2.0717	0.014
91	50	Biased-84Hr-Anneal	2.0378	2.0584	0.0206
92	50	Biased-84Hr-Anneal	2.1477	2.0171	-0.1306
100	0	CORRELATION	2.045	2.1277	0.0827
101	0	CORRELATION	1.9723	1.9613	-0.011
102	0	CORRELATION	1.9808	1.9794	-0.0014
103	0	CORRELATION	2.027	2.0261	-0.0009
104	0	CORRELATION	2.111	2.1217	0.0107

TID vs Post - Pre Exposure Delta

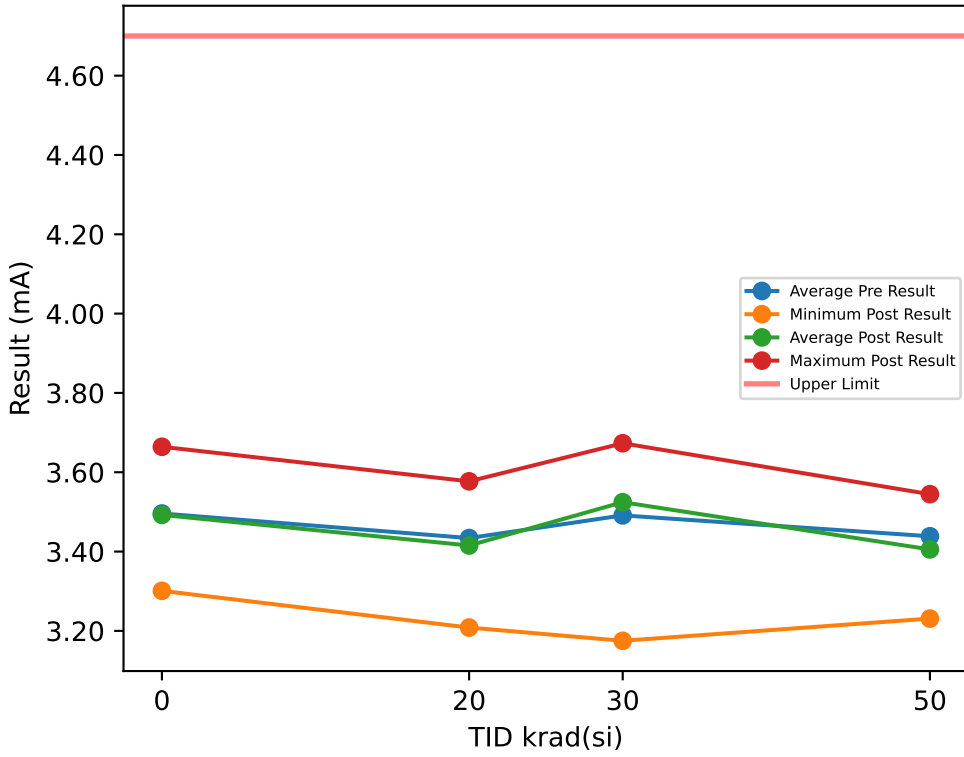


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.9723	2.0272	2.111	0.055916	1.9613	2.0432	2.1277	0.078059	-0.011	0.01602	0.0827	0.03806
20	1.9561	2.0465	2.1162	0.049679	1.9748	2.0312	2.0785	0.041966	-0.1361	-0.01534	0.0252	0.046583
30	1.9872	2.0584	2.2585	0.088706	1.9779	2.0103	2.0717	0.025562	-0.235	-0.04814	0.0197	0.073331
50	1.9786	2.0466	2.1477	0.052558	1.9478	2.02	2.0717	0.042681	-0.1306	-0.02661	0.0206	0.041582

Device Test: 12.17 IDD|STATIC/PVIN/14////@PVIN_SHDN_CURR_14V

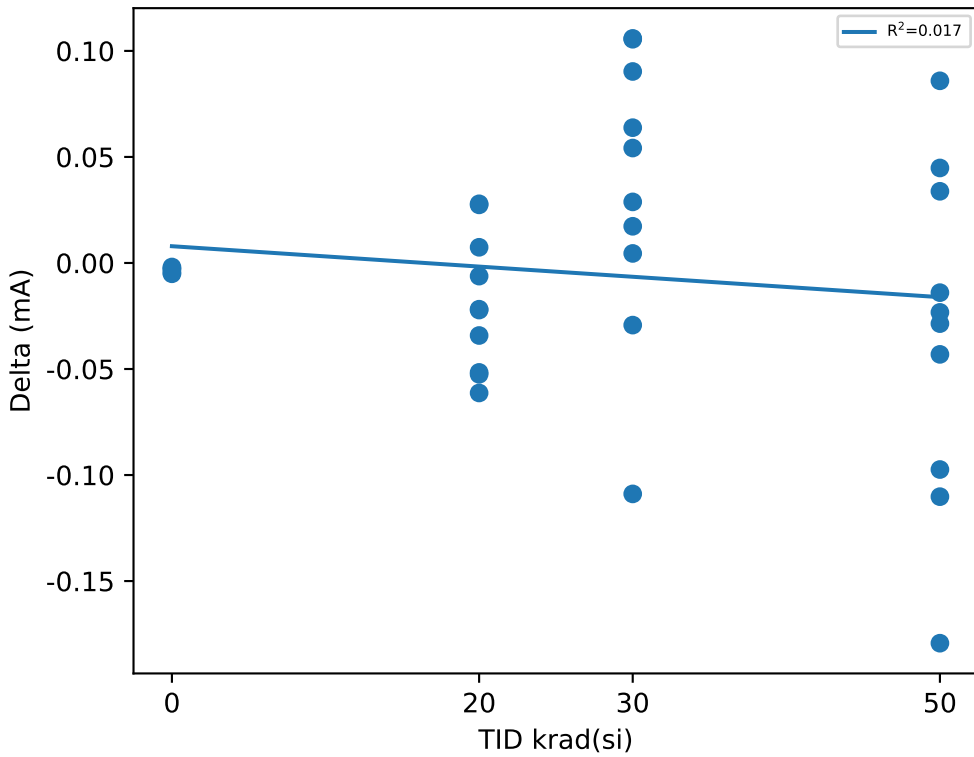
TID vs Result Stats



Test Results (Upper Limit = 4.7 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4455	3.393	-0.0525
2	20	Biased	3.5697	3.5771	0.0074
3	20	Biased	3.4564	3.4838	0.0274
4	20	Biased	3.5439	3.5377	-0.0062
5	20	Biased	3.2697	3.2084	-0.0613
6	20	Unbiased	3.4836	3.432	-0.0516
7	20	Unbiased	3.3315	3.3097	-0.0218
8	20	Unbiased	3.4275	3.3933	-0.0342
9	20	Unbiased	3.2853	3.2631	-0.0222
10	20	Unbiased	3.5272	3.5551	0.0279
11	30	Biased	3.5182	3.4889	-0.0293
12	30	Biased	3.48	3.4845	0.0045
13	30	Biased	3.5324	3.5866	0.0542
14	30	Biased	3.5676	3.6731	0.1055
15	30	Biased	3.5285	3.6344	0.1059
16	30	Unbiased	3.4098	3.4736	0.0638
17	30	Unbiased	3.5806	3.6709	0.0903
18	30	Unbiased	3.5177	3.5465	0.0288
19	30	Unbiased	3.4937	3.511	0.0173
20	30	Unbiased	3.2839	3.175	-0.1089
26	50	Unbiased	3.4152	3.2359	-0.1793
27	50	Unbiased	3.4282	3.4049	-0.0233
28	50	Unbiased	3.3412	3.231	-0.1102
29	50	Unbiased	3.3902	3.424	0.0338
30	50	Unbiased	3.3928	3.3788	-0.014
88	50	Biased-84Hr-Anneal	3.4673	3.3699	-0.0974
89	50	Biased-84Hr-Anneal	3.5173	3.4742	-0.0431
90	50	Biased-84Hr-Anneal	3.512	3.4834	-0.0286
91	50	Biased-84Hr-Anneal	3.4628	3.5076	0.0448
92	50	Biased-84Hr-Anneal	3.4588	3.5447	0.0859
100	0	CORRELATION	3.3029	3.301	-0.0019
101	0	CORRELATION	3.424	3.4189	-0.0051
102	0	CORRELATION	3.5241	3.5215	-0.0026
103	0	CORRELATION	3.5615	3.5569	-0.0046
104	0	CORRELATION	3.6673	3.6642	-0.0031

TID vs Post - Pre Exposure Delta

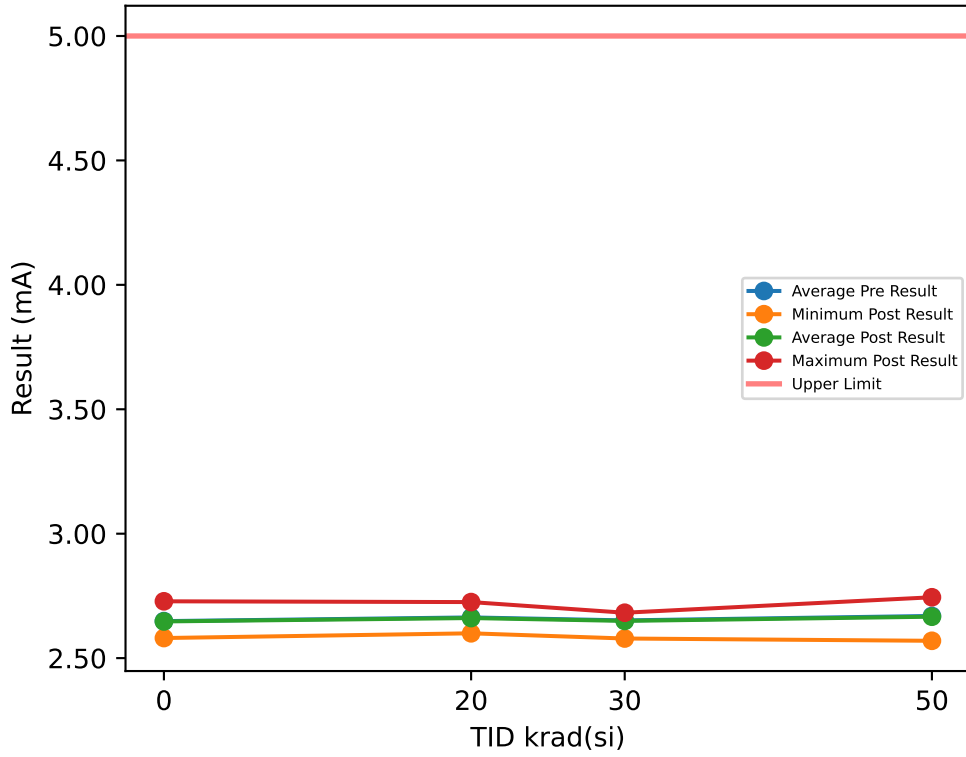


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.3029	3.496	3.6673	0.13865	3.301	3.4925	3.6642	0.13835	-0.0051	-0.00346	-0.0019	0.0013502
20	3.2697	3.434	3.5697	0.10642	3.2084	3.4153	3.5771	0.1264	-0.0613	-0.01871	0.0279	0.03238
30	3.2839	3.4912	3.5806	0.086974	3.175	3.5245	3.6731	0.14442	-0.1089	0.03321	0.1059	0.066953
50	3.3412	3.4386	3.5173	0.055759	3.231	3.4054	3.5447	0.10652	-0.1793	-0.03314	0.0859	0.0794

Device Test: 12.18 IQ|STATIC/VIN/14////@IQ_VIN

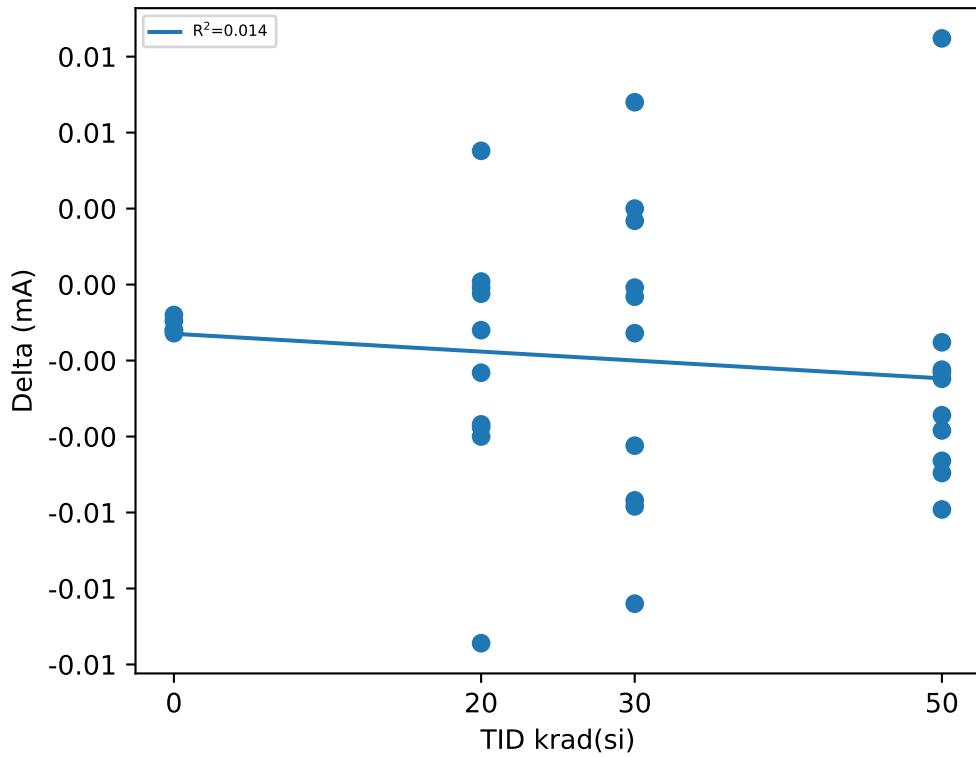
TID vs Result Stats



Test Results (Upper Limit = 5.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.6638	2.6682	0.0044
2	20	Biased	2.7044	2.7043	-0.0001
3	20	Biased	2.6061	2.6014	-0.0047
4	20	Biased	2.7281	2.7252	-0.0029
5	20	Biased	2.6917	2.6871	-0.0046
6	20	Unbiased	2.6047	2.5997	-0.005
7	20	Unbiased	2.6602	2.6587	-0.0015
8	20	Unbiased	2.6458	2.6459	0.0001
9	20	Unbiased	2.712	2.7002	-0.0118
10	20	Unbiased	2.6192	2.6189	-0.0003
11	30	Biased	2.6803	2.6824	0.0021
12	30	Biased	2.6597	2.6524	-0.0073
13	30	Biased	2.6299	2.6324	0.0025
14	30	Biased	2.6444	2.6504	0.006
15	30	Biased	2.5789	2.5788	-0.0001
16	30	Unbiased	2.6552	2.6536	-0.0016
17	30	Unbiased	2.6876	2.6805	-0.0071
18	30	Unbiased	2.634	2.6336	-0.0004
19	30	Unbiased	2.6753	2.6648	-0.0105
20	30	Unbiased	2.6711	2.6658	-0.0053
26	50	Unbiased	2.7507	2.7445	-0.0062
27	50	Unbiased	2.7172	2.7144	-0.0028
28	50	Unbiased	2.7476	2.7402	-0.0074
29	50	Unbiased	2.5806	2.5777	-0.0029
30	50	Unbiased	2.6231	2.6183	-0.0048
88	50	Biased-84Hr-Anneal	2.6201	2.6158	-0.0043
89	50	Biased-84Hr-Anneal	2.5715	2.5696	-0.0019
90	50	Biased-84Hr-Anneal	2.7105	2.7074	-0.0031
91	50	Biased-84Hr-Anneal	2.7271	2.7352	0.0081
92	50	Biased-84Hr-Anneal	2.6466	2.6408	-0.0058
100	0	CORRELATION	2.659	2.658	-0.001
101	0	CORRELATION	2.5823	2.5807	-0.0016
102	0	CORRELATION	2.6269	2.6254	-0.0015
103	0	CORRELATION	2.6457	2.6445	-0.0012
104	0	CORRELATION	2.7298	2.7283	-0.0015

TID vs Post - Pre Exposure Delta

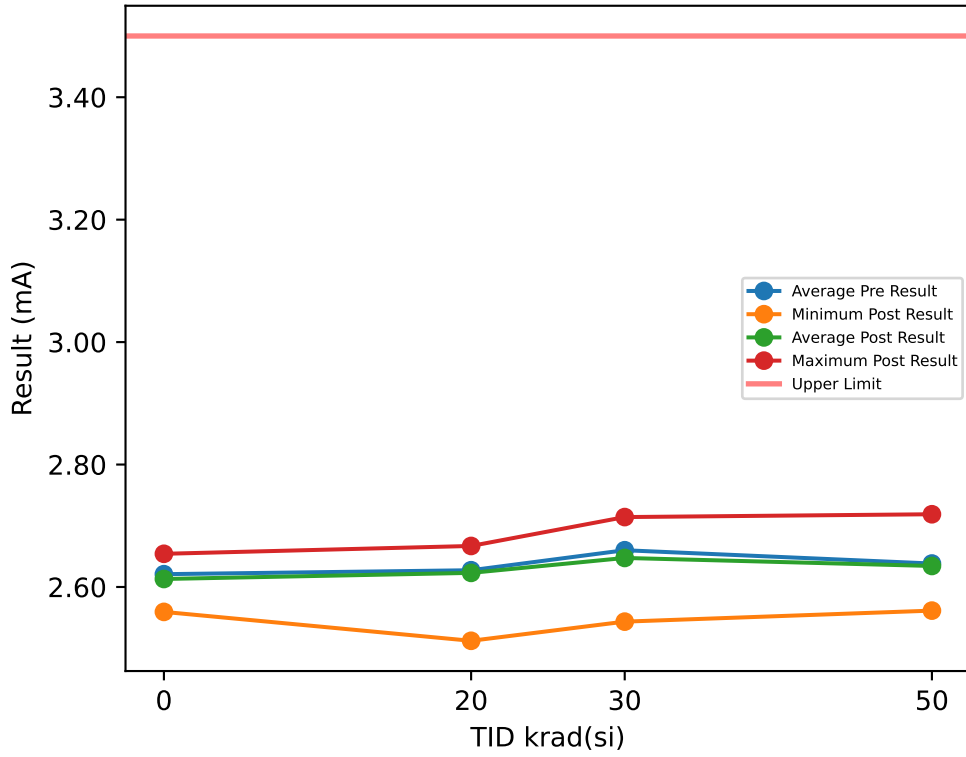


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5823	2.6487	2.7298	0.053797	2.5807	2.6474	2.7283	0.053848	-0.0016	-0.00136	-0.001	0.000251
20	2.6047	2.6636	2.7281	0.044761	2.5997	2.661	2.7252	0.044199	-0.0118	-0.00264	0.0044	0.0043195
30	2.5789	2.6516	2.6876	0.032073	2.5788	2.6495	2.6824	0.030024	-0.0105	-0.00217	0.006	0.0052105
50	2.5715	2.6695	2.7507	0.068793	2.5696	2.6664	2.7445	0.069147	-0.0074	-0.00311	0.0081	0.0043041

Device Test: 12.2 IDD|STATIC/PVIN/4.5////@PVIN_SHDN_CURR_4V

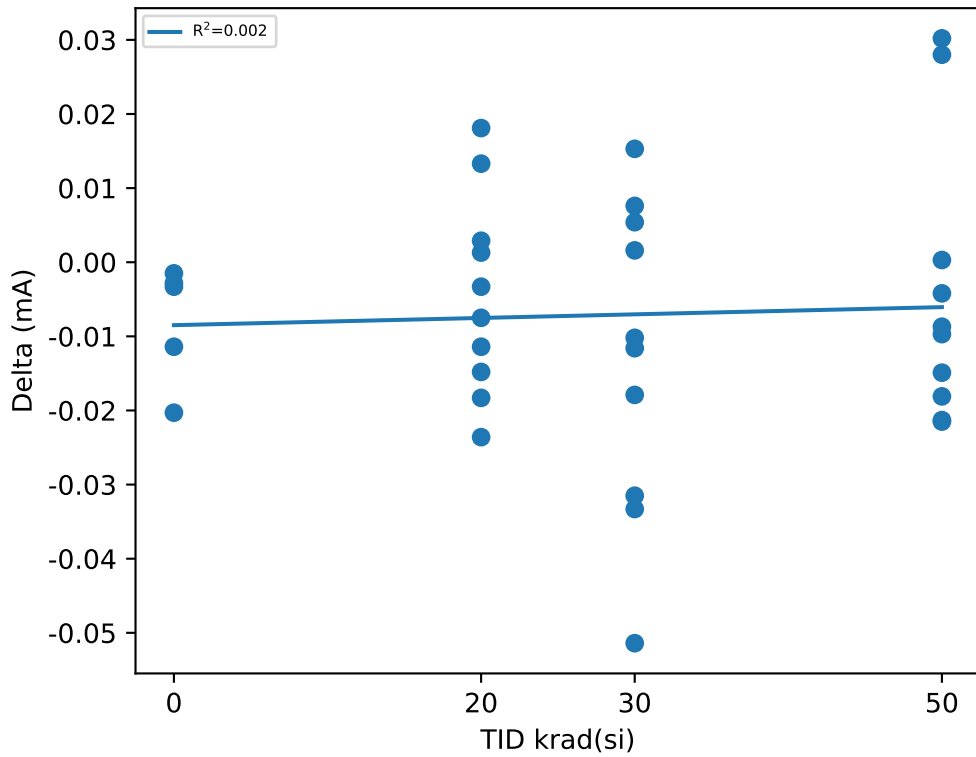
TID vs Result Stats



Test Results (Upper Limit = 3.5 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.6421	2.645	0.0029
2	20	Biased	2.6768	2.6654	-0.0114
3	20	Biased	2.6467	2.66	0.0133
4	20	Biased	2.6853	2.667	-0.0183
5	20	Biased	2.5987	2.5839	-0.0148
6	20	Unbiased	2.6464	2.6431	-0.0033
7	20	Unbiased	2.554	2.5553	0.0013
8	20	Unbiased	2.6459	2.6384	-0.0075
9	20	Unbiased	2.5357	2.5121	-0.0236
10	20	Unbiased	2.6421	2.6602	0.0181
11	30	Biased	2.7457	2.7142	-0.0315
12	30	Biased	2.6811	2.6297	-0.0514
13	30	Biased	2.6657	2.6673	0.0016
14	30	Biased	2.6521	2.6597	0.0076
15	30	Biased	2.6645	2.6798	0.0153
16	30	Unbiased	2.5613	2.5434	-0.0179
17	30	Unbiased	2.6692	2.6746	0.0054
18	30	Unbiased	2.6266	2.6164	-0.0102
19	30	Unbiased	2.6469	2.6353	-0.0116
20	30	Unbiased	2.6872	2.6539	-0.0333
26	50	Unbiased	2.5874	2.5787	-0.0087
27	50	Unbiased	2.5763	2.5614	-0.0149
28	50	Unbiased	2.6187	2.609	-0.0097
29	50	Unbiased	2.6051	2.6054	0.0003
30	50	Unbiased	2.5997	2.6299	0.0302
88	50	Biased-84Hr-Anneal	2.6908	2.7188	0.028
89	50	Biased-84Hr-Anneal	2.7278	2.7065	-0.0213
90	50	Biased-84Hr-Anneal	2.7362	2.7181	-0.0181
91	50	Biased-84Hr-Anneal	2.635	2.6135	-0.0215
92	50	Biased-84Hr-Anneal	2.6062	2.602	-0.0042
100	0	CORRELATION	2.563	2.5602	-0.0028
101	0	CORRELATION	2.5796	2.5593	-0.0203
102	0	CORRELATION	2.6493	2.6478	-0.0015
103	0	CORRELATION	2.6575	2.6542	-0.0033
104	0	CORRELATION	2.6552	2.6438	-0.0114

TID vs Post - Pre Exposure Delta

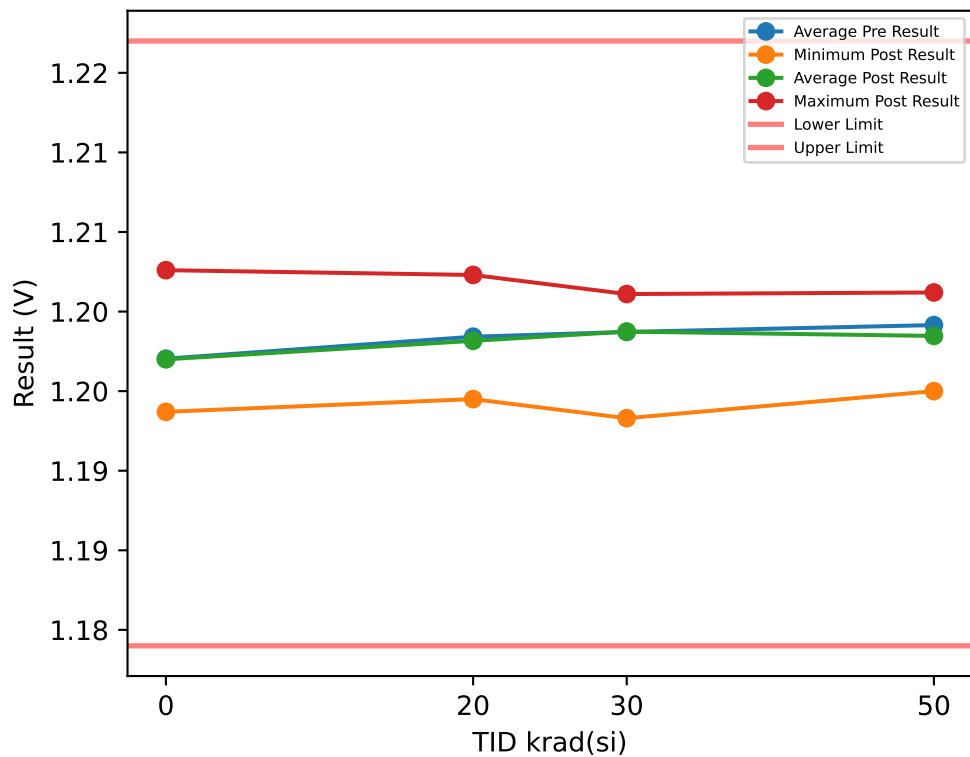


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.563	2.6209	2.6575	0.045773	2.5593	2.6131	2.6542	0.048807	-0.0203	-0.00786	-0.0015	0.0079708
20	2.5357	2.6274	2.6853	0.049352	2.5121	2.623	2.667	0.053772	-0.0236	-0.00433	0.0181	0.013479
30	2.5613	2.66	2.7457	0.046855	2.5434	2.6474	2.7142	0.046041	-0.0514	-0.0126	0.0153	0.021182
50	2.5763	2.6383	2.7362	0.058503	2.5614	2.6343	2.7188	0.058454	-0.0215	-0.00399	0.0302	0.018826

Device Test: 12.20 LEVEL|STATIC/REFCAP/14////@VBANDGAP

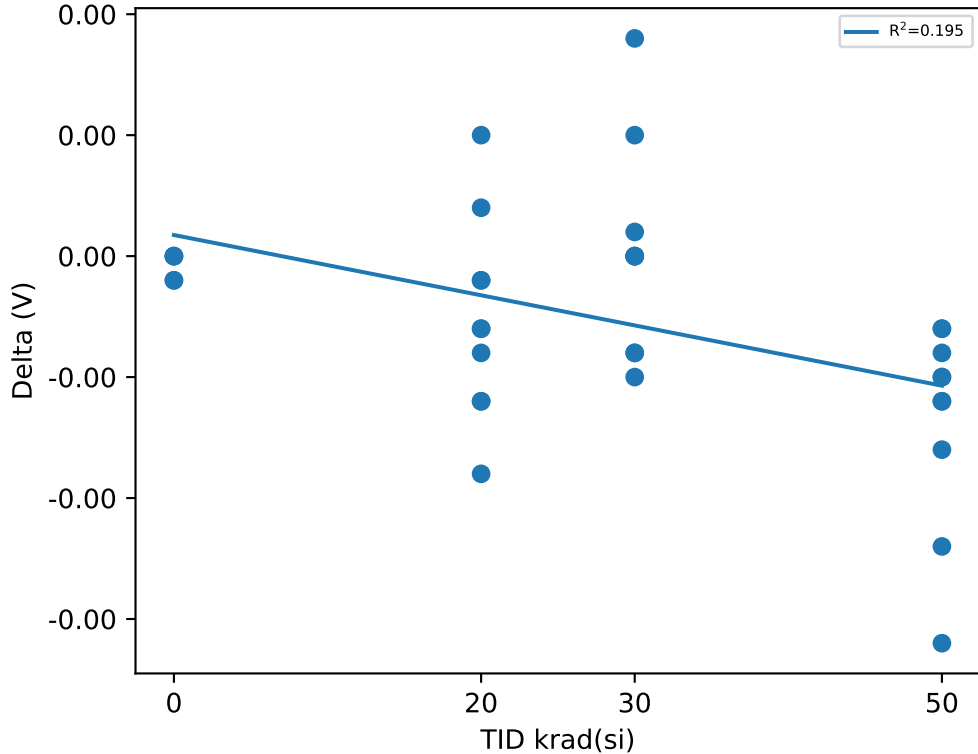
TID vs Result Stats



Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.2055	1.2054	-0.0001
2	20	Biased	1.2079	1.2073	-0.0006
3	20	Biased	1.1998	1.1995	-0.0003
4	20	Biased	1.2041	1.2035	-0.0006
5	20	Biased	1.2051	1.205	-0.0001
6	20	Unbiased	1.2036	1.2038	0.0002
7	20	Unbiased	1.199	1.1995	0.0005
8	20	Unbiased	1.2024	1.202	-0.0004
9	20	Unbiased	1.2023	1.202	-0.0003
10	20	Unbiased	1.2045	1.2036	-0.0009
11	30	Biased	1.2025	1.2025	0
12	30	Biased	1.1987	1.1983	-0.0004
13	30	Biased	1.2035	1.204	0.0005
14	30	Biased	1.205	1.205	0
15	30	Biased	1.2045	1.2045	0
16	30	Unbiased	1.2061	1.2056	-0.0005
17	30	Unbiased	1.2055	1.2051	-0.0004
18	30	Unbiased	1.2016	1.2017	0.0001
19	30	Unbiased	1.2052	1.2061	0.0009
20	30	Unbiased	1.2046	1.2046	0
26	50	Unbiased	1.2067	1.2062	-0.0005
27	50	Unbiased	1.2049	1.2046	-0.0003
28	50	Unbiased	1.2043	1.2039	-0.0004
29	50	Unbiased	1.2016	1.2	-0.0016
30	50	Unbiased	1.2025	1.202	-0.0005
88	50	Biased-84Hr-Anneal	1.2038	1.2035	-0.0003
89	50	Biased-84Hr-Anneal	1.2031	1.2025	-0.0006
90	50	Biased-84Hr-Anneal	1.2036	1.2024	-0.0012
91	50	Biased-84Hr-Anneal	1.2056	1.2048	-0.0008
92	50	Biased-84Hr-Anneal	1.2054	1.2048	-0.0006
100	0	CORRELATION	1.2004	1.2003	-0.0001
101	0	CORRELATION	1.2009	1.2009	0
102	0	CORRELATION	1.2025	1.2025	0
103	0	CORRELATION	1.1988	1.1987	-0.0001
104	0	CORRELATION	1.2076	1.2076	0

TID vs Post - Pre Exposure Delta

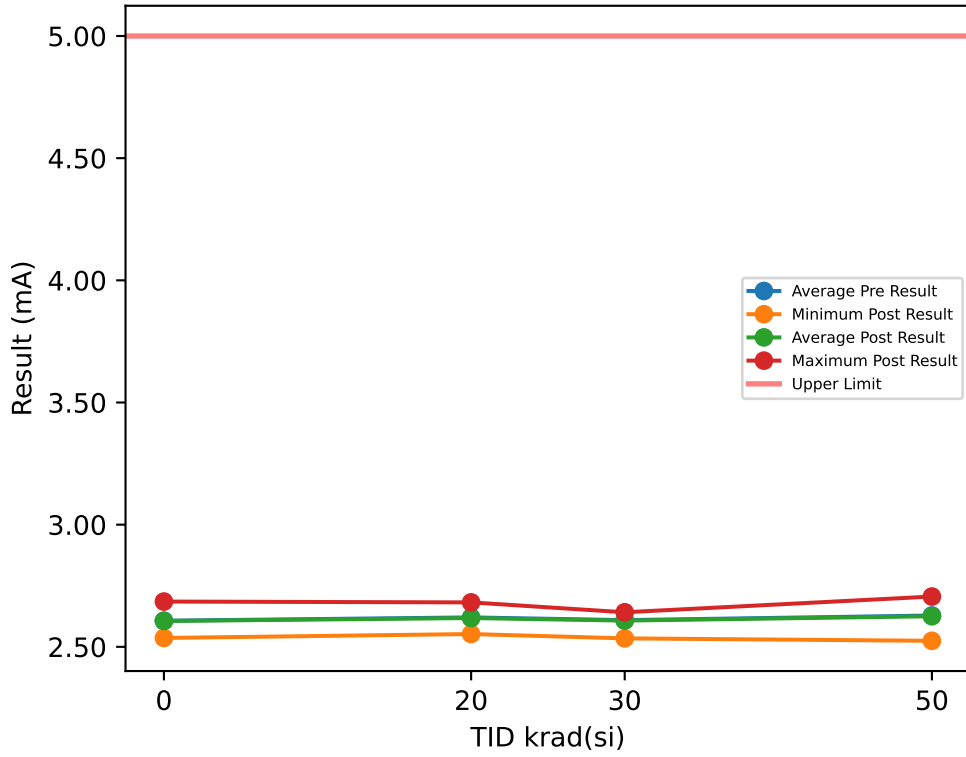


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1988	1.202	1.2076	0.0033768	1.1987	1.202	1.2076	0.0034132	-0.0001	-4e-05	0	5.4772e-05
20	1.199	1.2034	1.2079	0.0026628	1.1995	1.2032	1.2073	0.0024887	-0.0009	-0.00026	0.0005	0.00040879
30	1.1987	1.2037	1.2061	0.0022429	1.1983	1.2037	1.2061	0.0023368	-0.0005	2e-05	0.0009	0.00042635
50	1.2016	1.2041	1.2067	0.0015458	1.2	1.2035	1.2062	0.001787	-0.0016	-0.00068	-0.0003	0.00041846

Device Test: 12.3 IQ|STATIC/VIN/4.5////@IQ_VIN

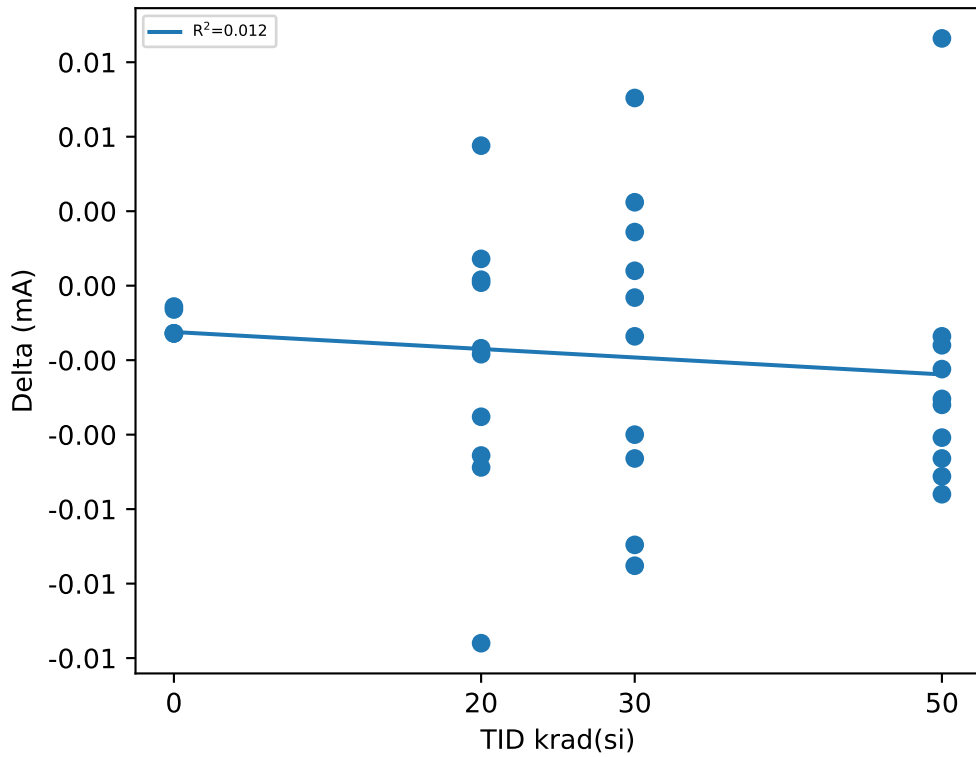
TID vs Result Stats



Test Results (Upper Limit = 5.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.6223	2.627	0.0047
2	20	Biased	2.6617	2.6618	0.0001
3	20	Biased	2.5635	2.5578	-0.0057
4	20	Biased	2.6842	2.6819	-0.0023
5	20	Biased	2.6464	2.642	-0.0044
6	20	Unbiased	2.5585	2.5524	-0.0061
7	20	Unbiased	2.6193	2.6172	-0.0021
8	20	Unbiased	2.6033	2.6042	0.0009
9	20	Unbiased	2.6698	2.6578	-0.012
10	20	Unbiased	2.5755	2.5757	0.0002
11	30	Biased	2.6396	2.6414	0.0018
12	30	Biased	2.6197	2.611	-0.0087
13	30	Biased	2.5875	2.5903	0.0028
14	30	Biased	2.6033	2.6096	0.0063
15	30	Biased	2.5341	2.5346	0.0005
16	30	Unbiased	2.6147	2.613	-0.0017
17	30	Unbiased	2.6444	2.6386	-0.0058
18	30	Unbiased	2.5918	2.5914	-0.0004
19	30	Unbiased	2.6324	2.623	-0.0094
20	30	Unbiased	2.6258	2.6208	-0.005
26	50	Unbiased	2.7122	2.7058	-0.0064
27	50	Unbiased	2.6788	2.6737	-0.0051
28	50	Unbiased	2.7078	2.7008	-0.007
29	50	Unbiased	2.54	2.538	-0.002
30	50	Unbiased	2.5812	2.5754	-0.0058
88	50	Biased-84Hr-Anneal	2.5778	2.574	-0.0038
89	50	Biased-84Hr-Anneal	2.5264	2.5247	-0.0017
90	50	Biased-84Hr-Anneal	2.6674	2.6646	-0.0028
91	50	Biased-84Hr-Anneal	2.6833	2.6916	0.0083
92	50	Biased-84Hr-Anneal	2.6068	2.6028	-0.004
100	0	CORRELATION	2.6208	2.6201	-0.0007
101	0	CORRELATION	2.5379	2.5363	-0.0016
102	0	CORRELATION	2.5844	2.5828	-0.0016
103	0	CORRELATION	2.6056	2.604	-0.0016
104	0	CORRELATION	2.6861	2.6853	-0.0008

TID vs Post - Pre Exposure Delta

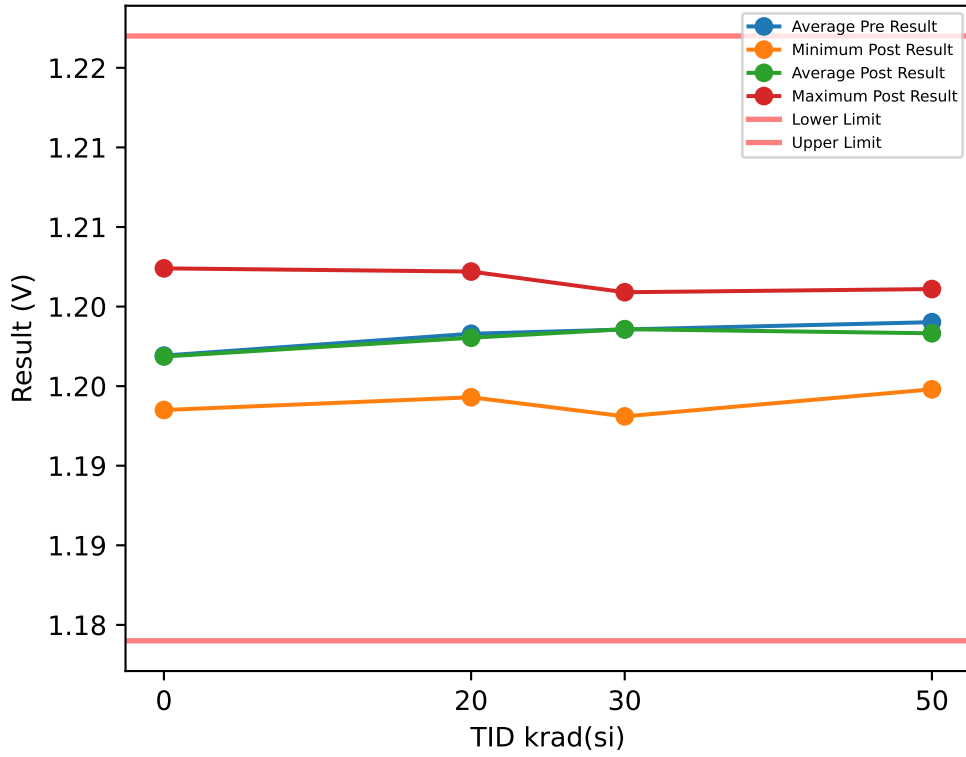


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5379	2.607	2.6861	0.054164	2.5363	2.6057	2.6853	0.054514	-0.0016	-0.00126	-0.0007	0.0004669
20	2.5585	2.6204	2.6842	0.045062	2.5524	2.6178	2.6819	0.044907	-0.012	-0.00267	0.0047	0.0046478
30	2.5341	2.6093	2.6444	0.032602	2.5346	2.6074	2.6414	0.030641	-0.0094	-0.00196	0.0063	0.0051461
50	2.5264	2.6282	2.7122	0.069821	2.5247	2.6251	2.7058	0.069787	-0.007	-0.00303	0.0083	0.0043699

Device Test: 12.5 LEVEL|STATIC/REFCAP/4.5////@VBANDGAP

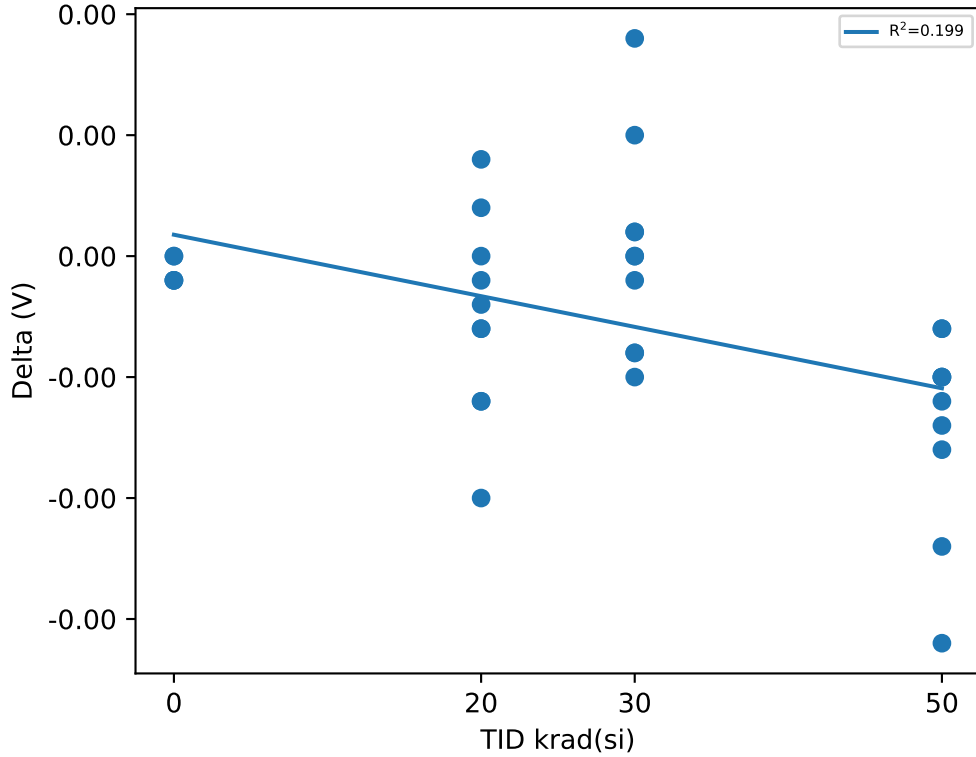
TID vs Result Stats



Test Results (Lower Limit = 1.184, Upper Limit = 1.222 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.2054	1.2053	-0.0001
2	20	Biased	1.2078	1.2072	-0.0006
3	20	Biased	1.1996	1.1994	-0.0002
4	20	Biased	1.204	1.2034	-0.0006
5	20	Biased	1.2049	1.2049	0
6	20	Unbiased	1.2035	1.2037	0.0002
7	20	Unbiased	1.1989	1.1993	0.0004
8	20	Unbiased	1.2022	1.2019	-0.0003
9	20	Unbiased	1.2022	1.2019	-0.0003
10	20	Unbiased	1.2044	1.2034	-0.001
11	30	Biased	1.2024	1.2024	0
12	30	Biased	1.1985	1.1981	-0.0004
13	30	Biased	1.2034	1.2039	0.0005
14	30	Biased	1.2048	1.2049	0.0001
15	30	Biased	1.2044	1.2043	-0.0001
16	30	Unbiased	1.2059	1.2054	-0.0005
17	30	Unbiased	1.2054	1.205	-0.0004
18	30	Unbiased	1.2014	1.2015	0.0001
19	30	Unbiased	1.205	1.2059	0.0009
20	30	Unbiased	1.2044	1.2044	0
26	50	Unbiased	1.2066	1.2061	-0.0005
27	50	Unbiased	1.2048	1.2045	-0.0003
28	50	Unbiased	1.2041	1.2036	-0.0005
29	50	Unbiased	1.2014	1.1998	-0.0016
30	50	Unbiased	1.2024	1.2019	-0.0005
88	50	Biased-84Hr-Anneal	1.2037	1.2034	-0.0003
89	50	Biased-84Hr-Anneal	1.203	1.2023	-0.0007
90	50	Biased-84Hr-Anneal	1.2034	1.2022	-0.0012
91	50	Biased-84Hr-Anneal	1.2055	1.2047	-0.0008
92	50	Biased-84Hr-Anneal	1.2053	1.2047	-0.0006
100	0	CORRELATION	1.2003	1.2002	-0.0001
101	0	CORRELATION	1.2008	1.2008	0
102	0	CORRELATION	1.2024	1.2024	0
103	0	CORRELATION	1.1986	1.1985	-0.0001
104	0	CORRELATION	1.2075	1.2074	-0.0001

TID vs Post - Pre Exposure Delta

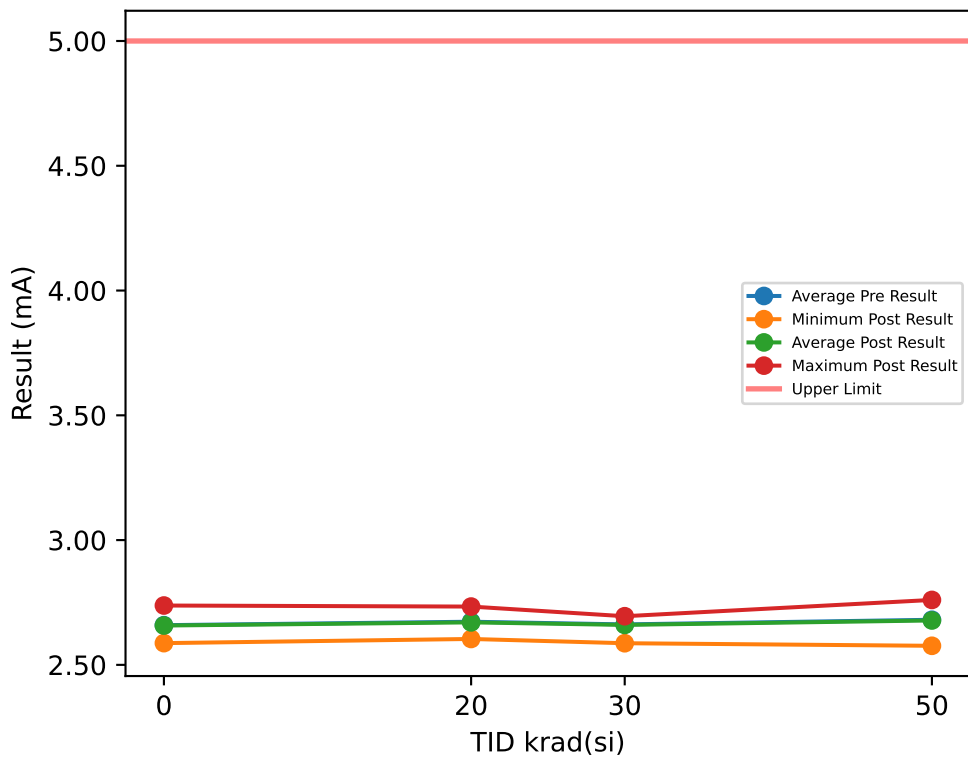


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1986	1.2019	1.2075	0.003401	1.1985	1.2019	1.2074	0.0033968	-0.0001	-6e-05	0	5.4772e-05
20	1.1989	1.2033	1.2078	0.0026756	1.1993	1.203	1.2072	0.0025034	-0.001	-0.00025	0.0004	0.00041164
30	1.1985	1.2036	1.2059	0.002249	1.1981	1.2036	1.2059	0.0023451	-0.0005	2e-05	0.0009	0.00042895
50	1.2014	1.204	1.2066	0.0015676	1.1998	1.2033	1.2061	0.0018171	-0.0016	-0.0007	-0.0003	0.00041096

Device Test: 12.8 IQ|STATIC/VIN/5////@IQ_VIN

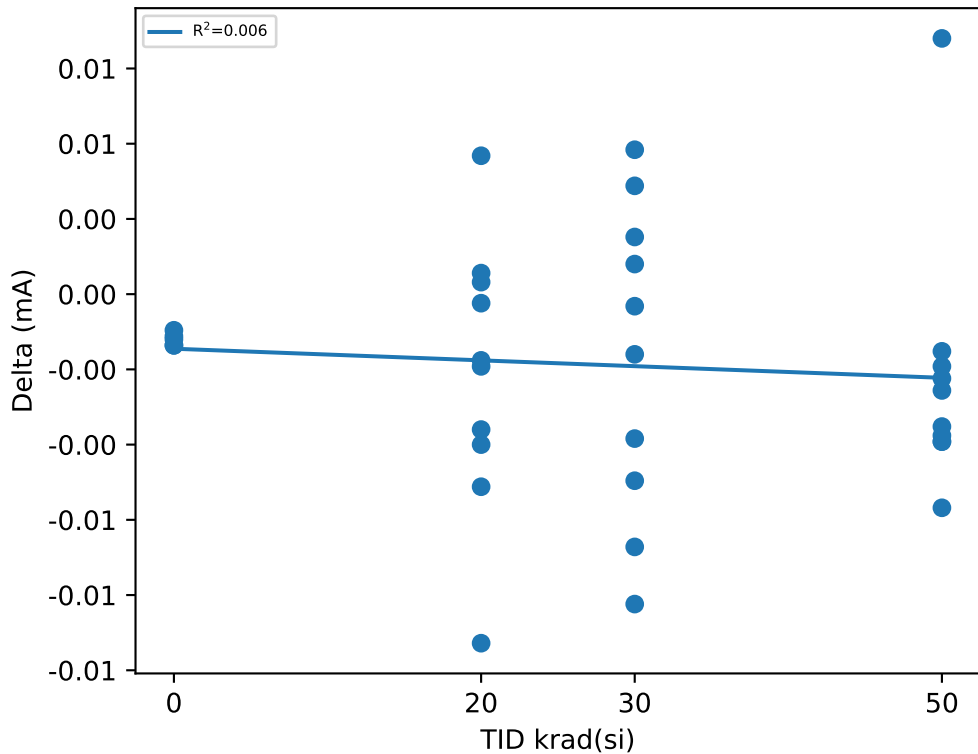
TID vs Result Stats



Test Results (Upper Limit = 5.0 (mA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	2.6755	2.6801	0.0046
2	20	Biased	2.7147	2.7151	0.0004
3	20	Biased	2.6164	2.6114	-0.005
4	20	Biased	2.7358	2.7336	-0.0022
5	20	Biased	2.6984	2.6939	-0.0045
6	20	Unbiased	2.6102	2.6038	-0.0064
7	20	Unbiased	2.6722	2.6698	-0.0024
8	20	Unbiased	2.656	2.6567	0.0007
9	20	Unbiased	2.7223	2.7107	-0.0116
10	20	Unbiased	2.6276	2.6273	-0.0003
11	30	Biased	2.693	2.6949	0.0019
12	30	Biased	2.6716	2.6632	-0.0084
13	30	Biased	2.6396	2.6432	0.0036
14	30	Biased	2.6564	2.6612	0.0048
15	30	Biased	2.5857	2.5867	0.001
16	30	Unbiased	2.667	2.665	-0.002
17	30	Unbiased	2.6984	2.6922	-0.0062
18	30	Unbiased	2.6451	2.6447	-0.0004
19	30	Unbiased	2.6861	2.6758	-0.0103
20	30	Unbiased	2.6787	2.6739	-0.0048
26	50	Unbiased	2.7651	2.7602	-0.0049
27	50	Unbiased	2.7313	2.7269	-0.0044
28	50	Unbiased	2.7604	2.7533	-0.0071
29	50	Unbiased	2.5917	2.5889	-0.0028
30	50	Unbiased	2.6331	2.6282	-0.0049
88	50	Biased-84Hr-Anneal	2.6305	2.6273	-0.0032
89	50	Biased-84Hr-Anneal	2.5783	2.5764	-0.0019
90	50	Biased-84Hr-Anneal	2.7198	2.7174	-0.0024
91	50	Biased-84Hr-Anneal	2.7368	2.7453	0.0085
92	50	Biased-84Hr-Anneal	2.6597	2.655	-0.0047
100	0	CORRELATION	2.6734	2.6717	-0.0017
101	0	CORRELATION	2.5883	2.5871	-0.0012
102	0	CORRELATION	2.6364	2.6347	-0.0017
103	0	CORRELATION	2.6581	2.6566	-0.0015
104	0	CORRELATION	2.7392	2.7378	-0.0014

TID vs Post - Pre Exposure Delta

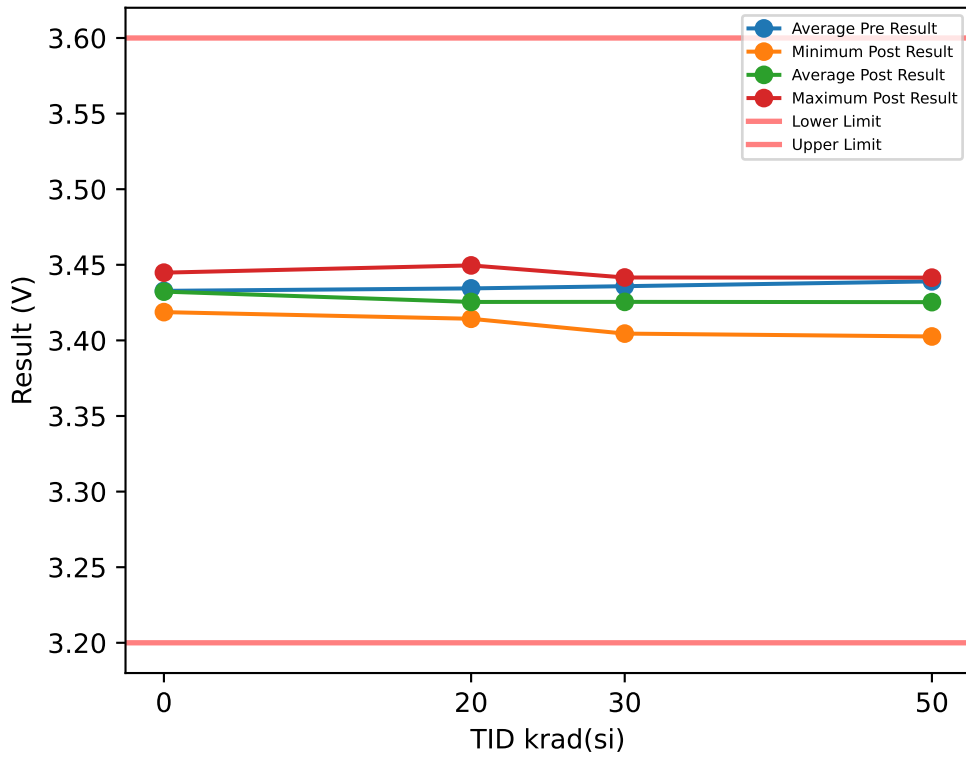


Test Statistics (mA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	2.5883	2.6591	2.7392	0.055112	2.5871	2.6576	2.7378	0.05506	-0.0017	-0.0015	-0.0012	0.00021213
20	2.6102	2.6729	2.7358	0.045047	2.6038	2.6702	2.7336	0.045	-0.0116	-0.00267	0.0046	0.0044967
30	2.5857	2.6622	2.6984	0.033171	2.5867	2.6601	2.6949	0.030954	-0.0103	-0.00208	0.0048	0.0051601
50	2.5783	2.6807	2.7651	0.070194	2.5764	2.6779	2.7602	0.070507	-0.0071	-0.00278	0.0085	0.0042465

Device Test: 14.1 THRESHOLD|RISE/PVIN/4.5////@UVLO_RISE_PVIN

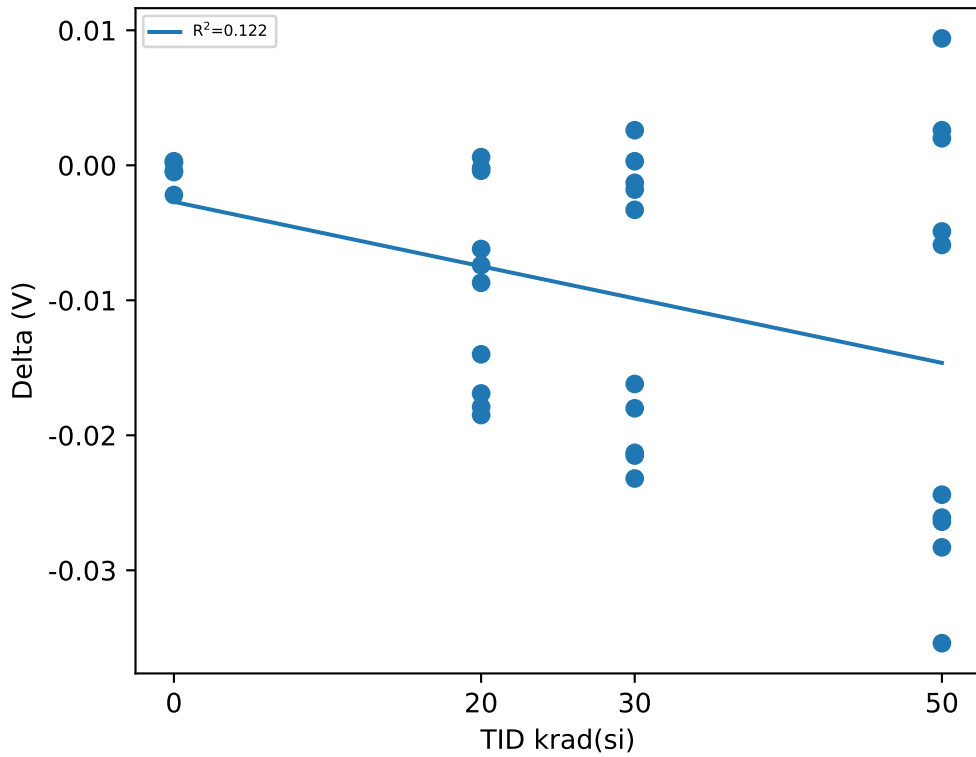
TID vs Result Stats



Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4302	3.4162	-0.014
2	20	Biased	3.4376	3.4191	-0.0185
3	20	Biased	3.4327	3.4148	-0.0179
4	20	Biased	3.4312	3.4143	-0.0169
5	20	Biased	3.447	3.4383	-0.0087
6	20	Unbiased	3.4558	3.4496	-0.0062
7	20	Unbiased	3.4275	3.4273	-0.0002
8	20	Unbiased	3.4319	3.4315	-0.0004
9	20	Unbiased	3.4227	3.4233	0.0006
10	20	Unbiased	3.4273	3.4199	-0.0074
11	30	Biased	3.4281	3.4068	-0.0213
12	30	Biased	3.4283	3.4103	-0.018
13	30	Biased	3.447	3.4238	-0.0232
14	30	Biased	3.426	3.4045	-0.0215
15	30	Biased	3.4512	3.435	-0.0162
16	30	Unbiased	3.4449	3.4416	-0.0033
17	30	Unbiased	3.4279	3.4305	0.0026
18	30	Unbiased	3.4373	3.4376	0.0003
19	30	Unbiased	3.4324	3.4306	-0.0018
20	30	Unbiased	3.4354	3.4341	-0.0013
26	50	Unbiased	3.4409	3.435	-0.0059
27	50	Unbiased	3.4382	3.4408	0.0026
28	50	Unbiased	3.4299	3.4393	0.0094
29	50	Unbiased	3.4324	3.4344	0.002
30	50	Unbiased	3.4464	3.4415	-0.0049
88	50	Biased-84Hr-Anneal	3.4393	3.411	-0.0283
89	50	Biased-84Hr-Anneal	3.4494	3.4233	-0.0261
90	50	Biased-84Hr-Anneal	3.4575	3.4221	-0.0354
91	50	Biased-84Hr-Anneal	3.427	3.4026	-0.0244
92	50	Biased-84Hr-Anneal	3.4295	3.4031	-0.0264
100	0	CORRELATION	3.4192	3.4187	-0.0005
101	0	CORRELATION	3.4421	3.4423	0.0002
102	0	CORRELATION	3.4452	3.4448	-0.0004
103	0	CORRELATION	3.4188	3.4191	0.0003
104	0	CORRELATION	3.4386	3.4364	-0.0022

TID vs Post - Pre Exposure Delta

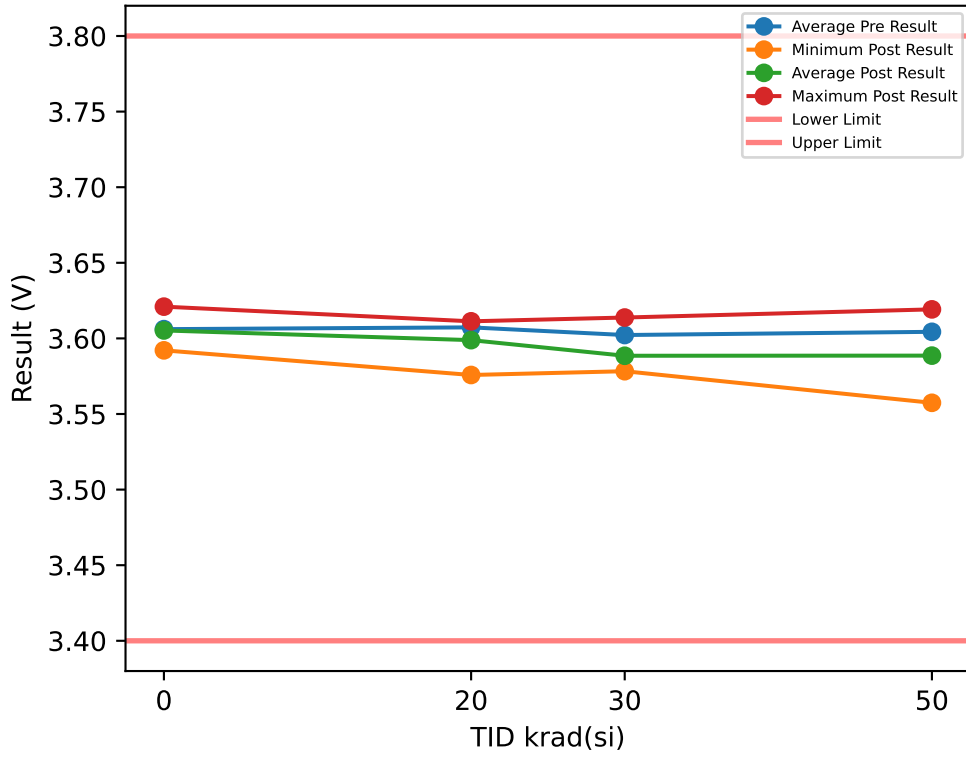


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4188	3.4328	3.4452	0.012795	3.4187	3.4323	3.4448	0.012572	-0.0022	-0.00052	0.0003	0.0010035
20	3.4227	3.4344	3.4558	0.0099938	3.4143	3.4254	3.4496	0.011486	-0.0185	-0.00896	0.0006	0.0075344
30	3.426	3.4358	3.4512	0.0090268	3.4045	3.4255	3.4416	0.013521	-0.0232	-0.01037	0.0026	0.010477
50	3.427	3.4391	3.4575	0.0098325	3.4026	3.4253	3.4415	0.015284	-0.0354	-0.01374	0.0094	0.015978

Device Test: 14.10 THRESHOLD|RISE/VIN/5////@UVLO_RISE_VIN

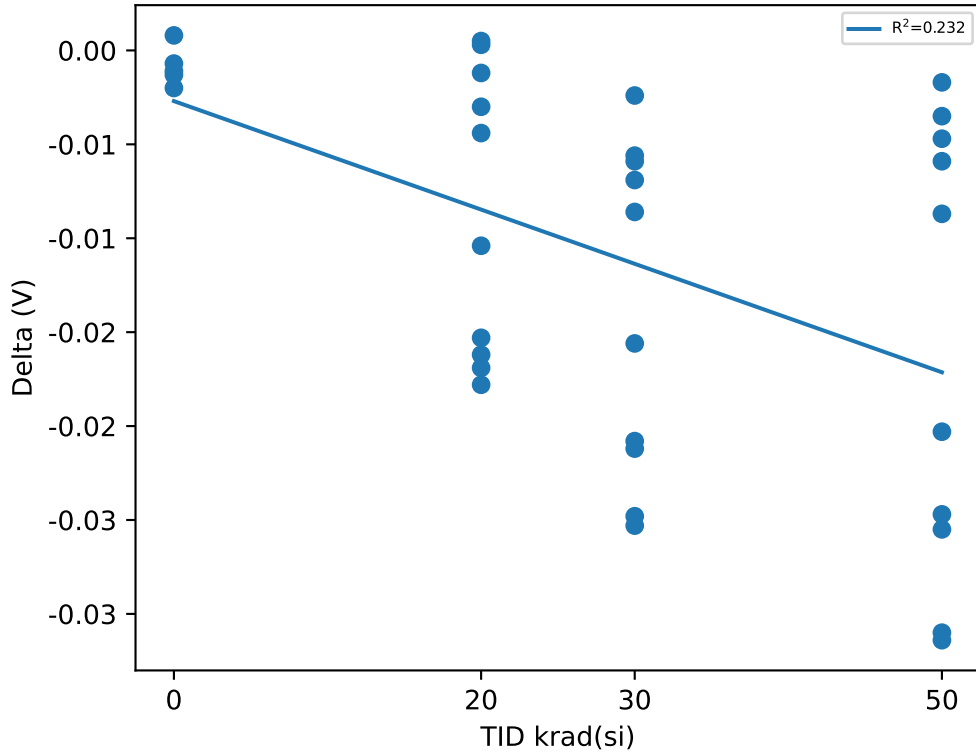
TID vs Result Stats



Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.6074	3.597	-0.0104
2	20	Biased	3.5927	3.5758	-0.0169
3	20	Biased	3.6133	3.5971	-0.0162
4	20	Biased	3.5922	3.5769	-0.0153
5	20	Biased	3.6211	3.6033	-0.0178
6	20	Unbiased	3.6143	3.6099	-0.0044
7	20	Unbiased	3.6108	3.6113	0.0005
8	20	Unbiased	3.6038	3.6008	-0.003
9	20	Unbiased	3.6064	3.6067	0.0003
10	20	Unbiased	3.6109	3.6097	-0.0012
11	30	Biased	3.5939	3.5783	-0.0156
12	30	Biased	3.6041	3.5793	-0.0248
13	30	Biased	3.6102	3.5894	-0.0208
14	30	Biased	3.6077	3.5824	-0.0253
15	30	Biased	3.6008	3.5796	-0.0212
16	30	Unbiased	3.6197	3.6138	-0.0059
17	30	Unbiased	3.5986	3.5917	-0.0069
18	30	Unbiased	3.603	3.5974	-0.0056
19	30	Unbiased	3.5893	3.5869	-0.0024
20	30	Unbiased	3.595	3.5864	-0.0086
26	50	Unbiased	3.614	3.6123	-0.0017
27	50	Unbiased	3.6239	3.6192	-0.0047
28	50	Unbiased	3.6028	3.5941	-0.0087
29	50	Unbiased	3.5895	3.5836	-0.0059
30	50	Unbiased	3.6202	3.6167	-0.0035
88	50	Biased-84Hr-Anneal	3.601	3.5755	-0.0255
89	50	Biased-84Hr-Anneal	3.606	3.5746	-0.0314
90	50	Biased-84Hr-Anneal	3.6138	3.5891	-0.0247
91	50	Biased-84Hr-Anneal	3.5839	3.5636	-0.0203
92	50	Biased-84Hr-Anneal	3.5884	3.5574	-0.031
100	0	CORRELATION	3.5934	3.5921	-0.0013
101	0	CORRELATION	3.5967	3.5975	0.0008
102	0	CORRELATION	3.6085	3.6074	-0.0011
103	0	CORRELATION	3.609	3.6083	-0.0007
104	0	CORRELATION	3.623	3.621	-0.002

TID vs Post - Pre Exposure Delta

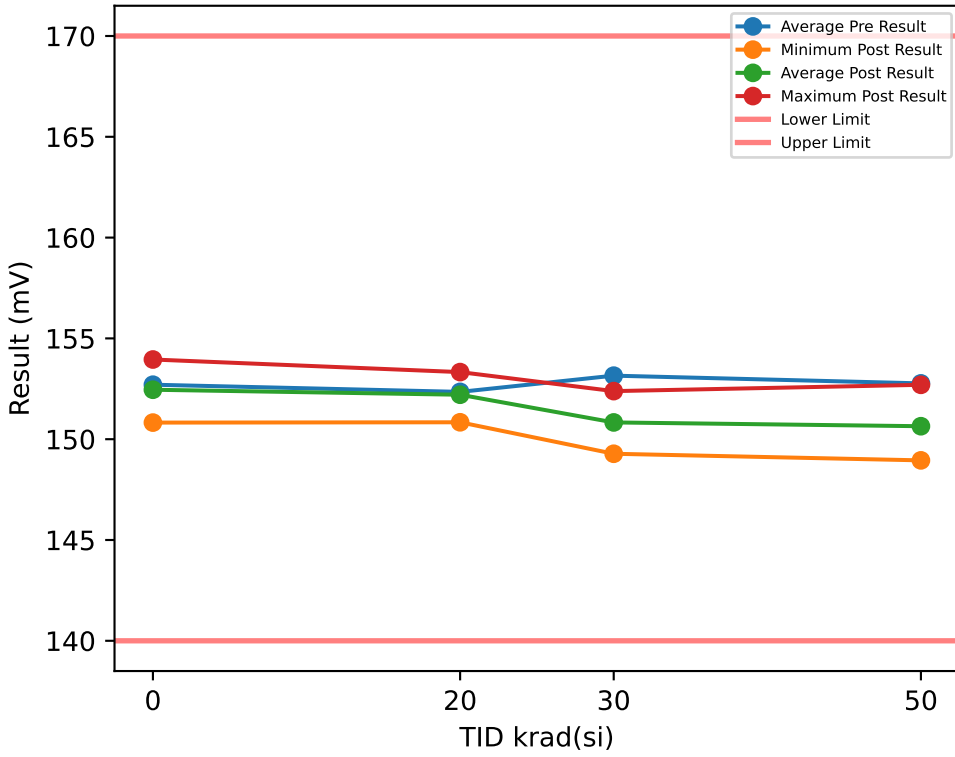


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5934	3.6061	3.623	0.01172	3.5921	3.6053	3.621	0.011124	-0.002	-0.00086	0.0008	0.0010407
20	3.5922	3.6073	3.6211	0.0091584	3.5758	3.5989	3.6113	0.012908	-0.0178	-0.00844	0.0005	0.0076372
30	3.5893	3.6022	3.6197	0.0088619	3.5783	3.5885	3.6138	0.010762	-0.0253	-0.01371	-0.0024	0.008784
50	3.5839	3.6044	3.6239	0.013846	3.5574	3.5886	3.6192	0.021882	-0.0314	-0.01574	-0.0017	0.011971

Device Test: 14.12 THRESHOLD|HYST/VIN/5////@UVLO_HYST_VIN

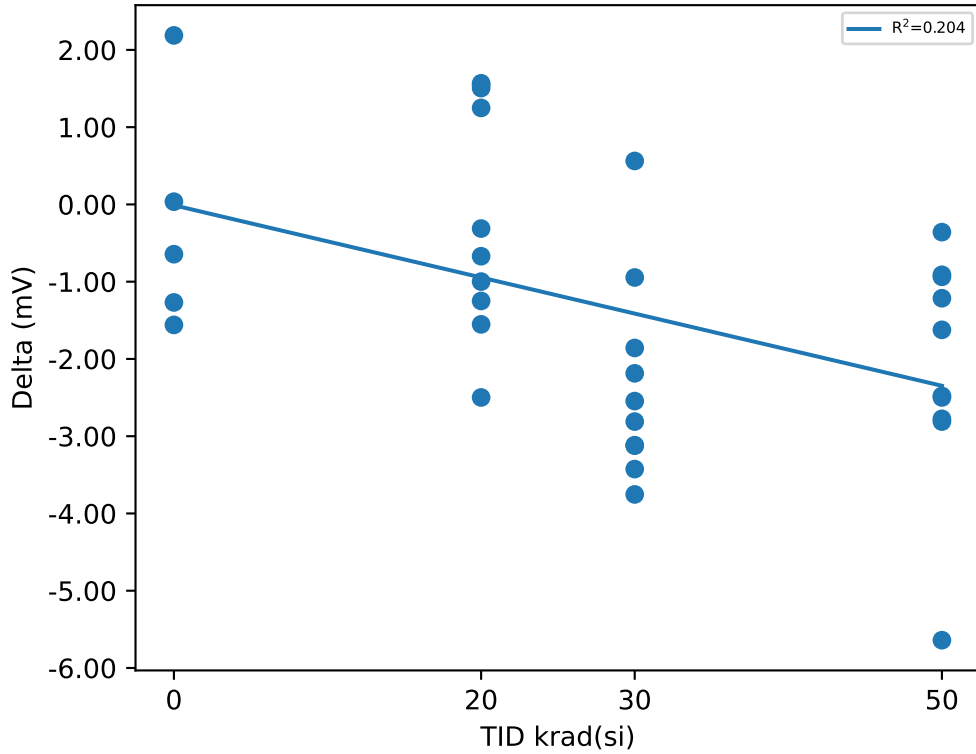
TID vs Result Stats



Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	152.4	152.09	-0.3123
2	20	Biased	151.51	150.84	-0.6707
3	20	Biased	153.01	151.76	-1.2496
4	20	Biased	152.08	153.33	1.2491
5	20	Biased	153.34	150.84	-2.4986
6	20	Unbiased	153.07	152.07	-0.9988
7	20	Unbiased	150.82	152.39	1.5679
8	20	Unbiased	153.95	152.4	-1.5524
9	20	Unbiased	151.46	153.01	1.5457
10	20	Unbiased	151.82	153.33	1.5058
11	30	Biased	152.7	150.84	-1.858
12	30	Biased	154.27	150.51	-3.7539
13	30	Biased	152.71	151.77	-0.9458
14	30	Biased	153.7	151.15	-2.5456
15	30	Biased	153.32	151.14	-2.1863
16	30	Unbiased	154.58	151.45	-3.1229
17	30	Unbiased	152.09	149.28	-2.8107
18	30	Unbiased	151.82	152.38	0.5627
19	30	Unbiased	152.7	149.58	-3.1163
20	30	Unbiased	153.64	150.21	-3.4258
26	50	Unbiased	151.51	151.15	-0.3588
27	50	Unbiased	153.63	152.7	-0.9368
28	50	Unbiased	153.02	150.21	-2.8107
29	50	Unbiased	153.65	151.15	-2.4984
30	50	Unbiased	152.13	150.51	-1.6234
88	50	Biased-84Hr-Anneal	153.61	150.84	-2.7752
89	50	Biased-84Hr-Anneal	152.05	149.57	-2.4788
90	50	Biased-84Hr-Anneal	152.37	151.45	-0.9108
91	50	Biased-84Hr-Anneal	151.12	149.9	-1.2143
92	50	Biased-84Hr-Anneal	154.59	148.95	-5.6405
100	0	CORRELATION	152.09	150.82	-1.2686
101	0	CORRELATION	151.77	153.95	2.1878
102	0	CORRELATION	153.3	153.34	0.0355
103	0	CORRELATION	152.72	152.07	-0.6442
104	0	CORRELATION	153.64	152.08	-1.5595

TID vs Post - Pre Exposure Delta

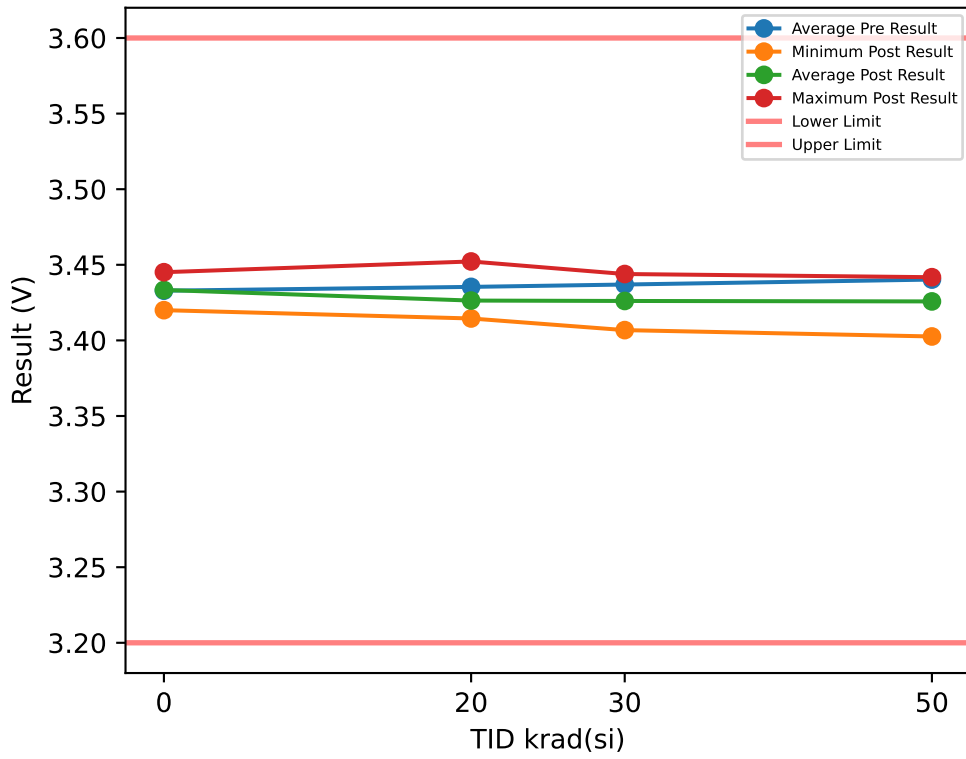


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	151.77	152.7	153.64	0.78856	150.82	152.45	153.95	1.2219	-1.5595	-0.2498	2.1878	1.4943
20	150.82	152.35	153.95	0.98186	150.84	152.21	153.33	0.89467	-2.4986	-0.14139	1.5679	1.4994
30	151.82	153.15	154.58	0.90315	149.28	150.83	152.38	0.96219	-3.7539	-2.3203	0.5627	1.3029
50	151.12	152.77	154.59	1.1061	148.95	150.64	152.7	1.0646	-5.6405	-2.1248	-0.3588	1.513

Device Test: 14.13 THRESHOLD|RISE/PVIN/12////@UVLO_RISE_PVIN

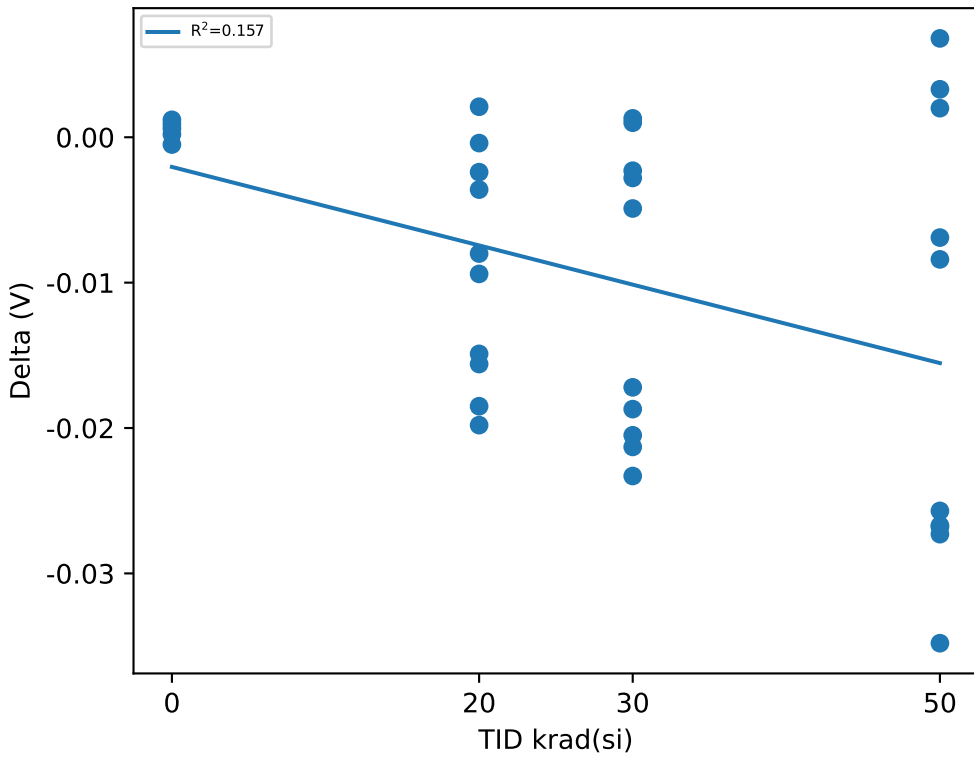
TID vs Result Stats



Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4308	3.4159	-0.0149
2	20	Biased	3.4396	3.4198	-0.0198
3	20	Biased	3.433	3.4145	-0.0185
4	20	Biased	3.4306	3.415	-0.0156
5	20	Biased	3.448	3.4386	-0.0094
6	20	Unbiased	3.4558	3.4522	-0.0036
7	20	Unbiased	3.4278	3.4299	0.0021
8	20	Unbiased	3.4338	3.4334	-0.0004
9	20	Unbiased	3.4253	3.4229	-0.0024
10	20	Unbiased	3.4292	3.4212	-0.008
11	30	Biased	3.4294	3.4081	-0.0213
12	30	Biased	3.4283	3.4096	-0.0187
13	30	Biased	3.448	3.4247	-0.0233
14	30	Biased	3.4273	3.4068	-0.0205
15	30	Biased	3.4518	3.4346	-0.0172
16	30	Unbiased	3.4462	3.4439	-0.0023
17	30	Unbiased	3.4292	3.4302	0.001
18	30	Unbiased	3.4376	3.4389	0.0013
19	30	Unbiased	3.4337	3.4309	-0.0028
20	30	Unbiased	3.438	3.4331	-0.0049
26	50	Unbiased	3.4415	3.4331	-0.0084
27	50	Unbiased	3.4385	3.4418	0.0033
28	50	Unbiased	3.4325	3.4393	0.0068
29	50	Unbiased	3.4347	3.4367	0.002
30	50	Unbiased	3.448	3.4411	-0.0069
88	50	Biased-84Hr-Anneal	3.439	3.4117	-0.0273
89	50	Biased-84Hr-Anneal	3.4504	3.4236	-0.0268
90	50	Biased-84Hr-Anneal	3.4592	3.4244	-0.0348
91	50	Biased-84Hr-Anneal	3.4283	3.4026	-0.0257
92	50	Biased-84Hr-Anneal	3.4302	3.4035	-0.0267
100	0	CORRELATION	3.4201	3.421	0.0009
101	0	CORRELATION	3.4434	3.4436	0.0002
102	0	CORRELATION	3.4445	3.4451	0.0006
103	0	CORRELATION	3.4188	3.42	0.0012
104	0	CORRELATION	3.4376	3.4371	-0.0005

TID vs Post - Pre Exposure Delta

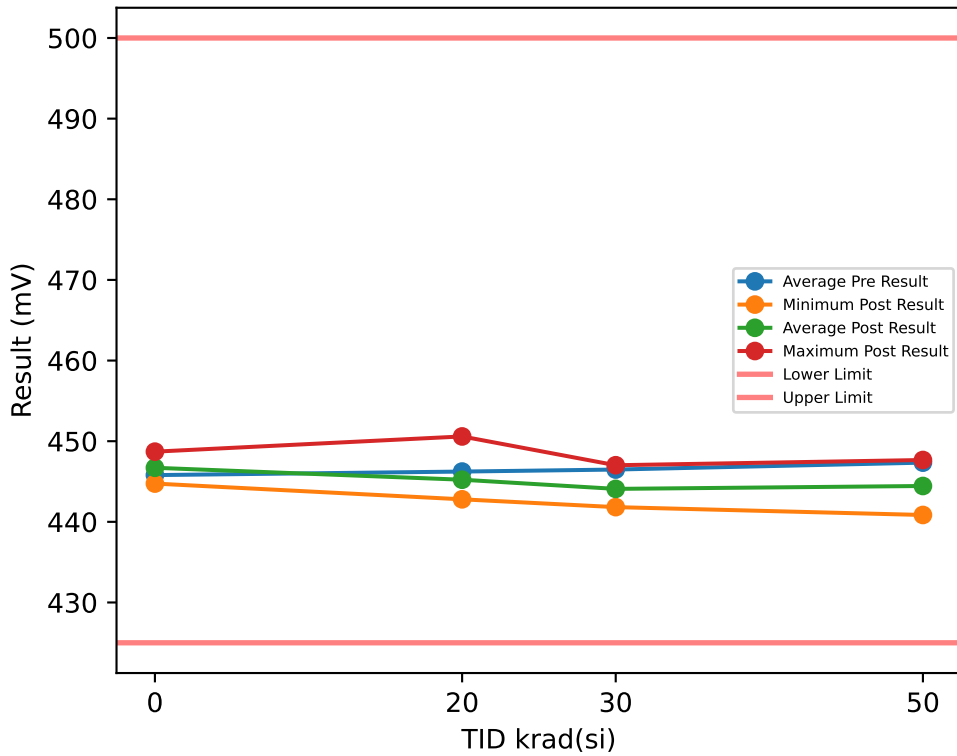


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4188	3.4329	3.4445	0.012545	3.42	3.4334	3.4451	0.012124	-0.0005	0.00048	0.0012	0.00066106
20	3.4253	3.4354	3.4558	0.0096798	3.4145	3.4263	3.4522	0.012204	-0.0198	-0.00905	0.0021	0.0078619
30	3.4273	3.437	3.4518	0.008977	3.4068	3.4261	3.4439	0.013385	-0.0233	-0.01087	0.0013	0.010114
50	3.4283	3.4402	3.4592	0.0097925	3.4026	3.4258	3.4418	0.015223	-0.0348	-0.01445	0.0068	0.015417

Device Test: 14.15 THRESHOLD|HYST/PVIN/12////@UVLO_HYST_PVIN

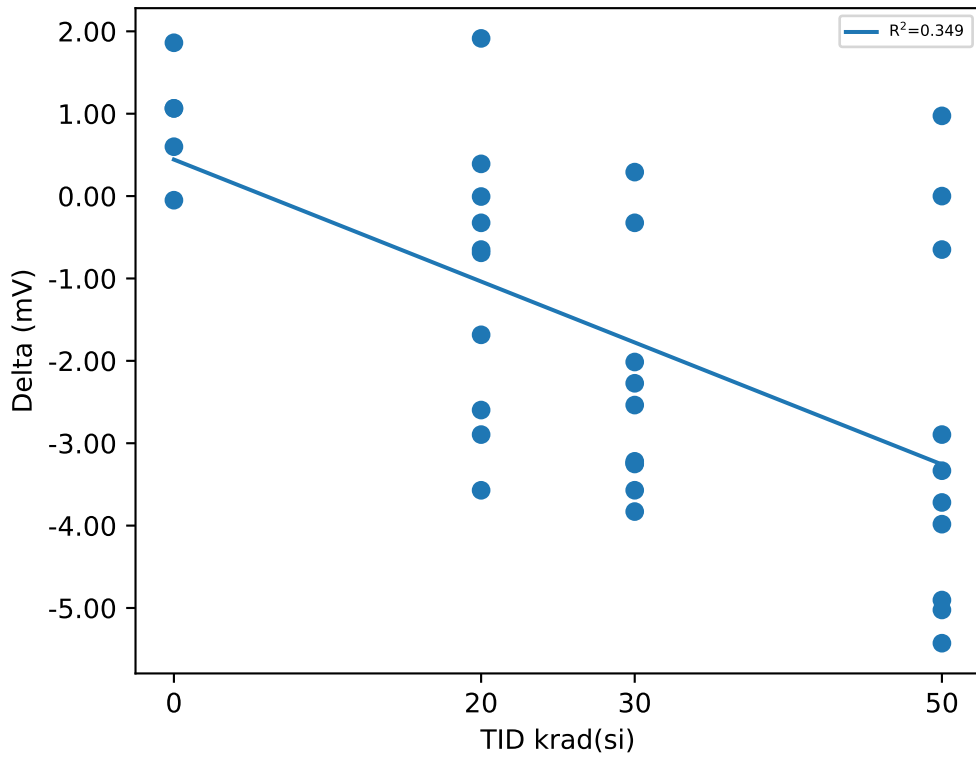
TID vs Result Stats



Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	445.46	442.86	-2.5973
2	20	Biased	446.73	443.83	-2.8952
3	20	Biased	445.07	444.42	-0.6492
4	20	Biased	443.12	442.79	-0.3245
5	20	Biased	449.03	445.46	-3.5713
6	20	Unbiased	448.68	450.59	1.9142
7	20	Unbiased	445.4	445.39	-0.0054
8	20	Unbiased	446.36	446.75	0.3911
9	20	Unbiased	446.11	444.42	-1.684
10	20	Unbiased	446.4	445.71	-0.6885
11	30	Biased	445.4	442.86	-2.5368
12	30	Biased	445.07	441.82	-3.2406
13	30	Biased	447.73	445.71	-2.014
14	30	Biased	446.08	442.86	-3.2197
15	30	Biased	448.97	445.4	-3.5708
16	30	Unbiased	447.99	445.71	-2.2723
17	30	Unbiased	443.83	443.51	-0.3244
18	30	Unbiased	446.73	447.02	0.2911
19	30	Unbiased	445.72	442.47	-3.2519
20	30	Unbiased	447.34	443.51	-3.8295
26	50	Unbiased	446.73	443.83	-2.8949
27	50	Unbiased	446.69	447.67	0.9737
28	50	Unbiased	446.36	446.36	-0.0002
29	50	Unbiased	446.75	446.11	-0.6492
30	50	Unbiased	450.62	445.72	-4.9036
88	50	Biased-84Hr-Anneal	445.87	442.53	-3.3335
89	50	Biased-84Hr-Anneal	448.79	445.07	-3.719
90	50	Biased-84Hr-Anneal	450.09	445.07	-5.0238
91	50	Biased-84Hr-Anneal	445.22	441.24	-3.9826
92	50	Biased-84Hr-Anneal	446.28	440.85	-5.4274
100	0	CORRELATION	443.68	444.75	1.065
101	0	CORRELATION	448.04	447.99	-0.05
102	0	CORRELATION	446.84	448.7	1.8611
103	0	CORRELATION	444.98	446.04	1.0649
104	0	CORRELATION	445.44	446.04	0.5994

TID vs Post - Pre Exposure Delta

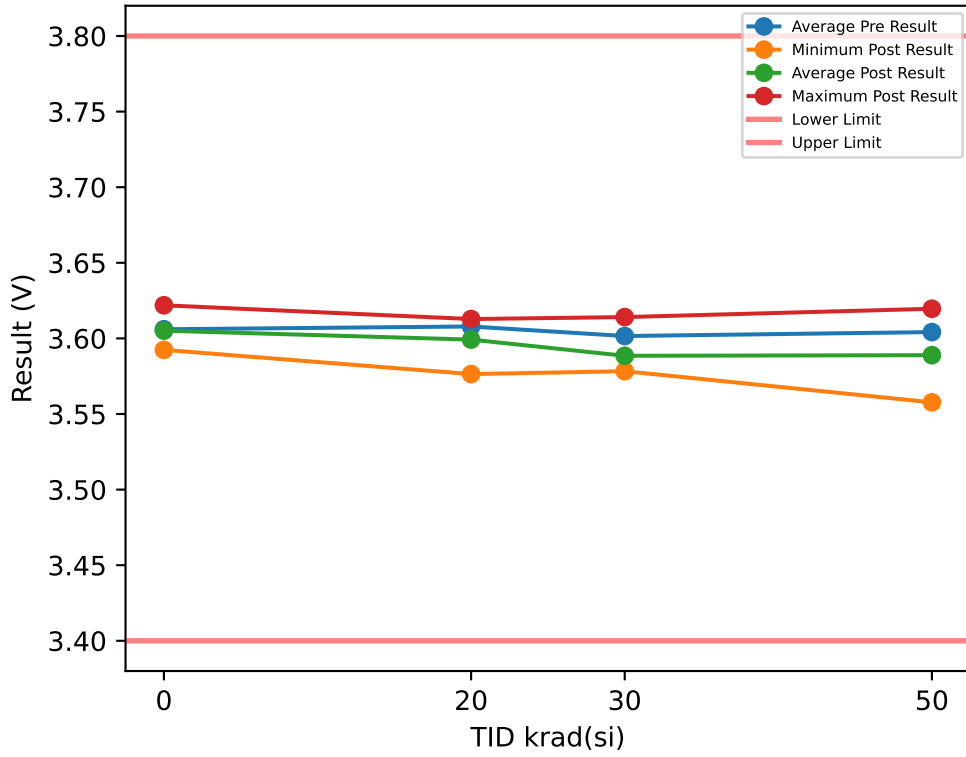


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	443.68	445.8	448.04	1.6867	444.75	446.7	448.7	1.6086	-0.05	0.90808	1.8611	0.7019
20	443.12	446.23	449.03	1.7141	442.79	445.22	450.59	2.2653	-3.5713	-1.011	1.9142	1.6771
30	443.83	446.48	448.97	1.554	441.82	444.09	447.02	1.733	-3.8295	-2.3969	0.2911	1.3845
50	445.22	447.34	450.62	1.8357	440.85	444.44	447.67	2.2725	-5.4274	-2.896	0.9737	2.2466

Device Test: 14.16 THRESHOLD|RISE/VIN/12////@UVLO_RISE_VIN

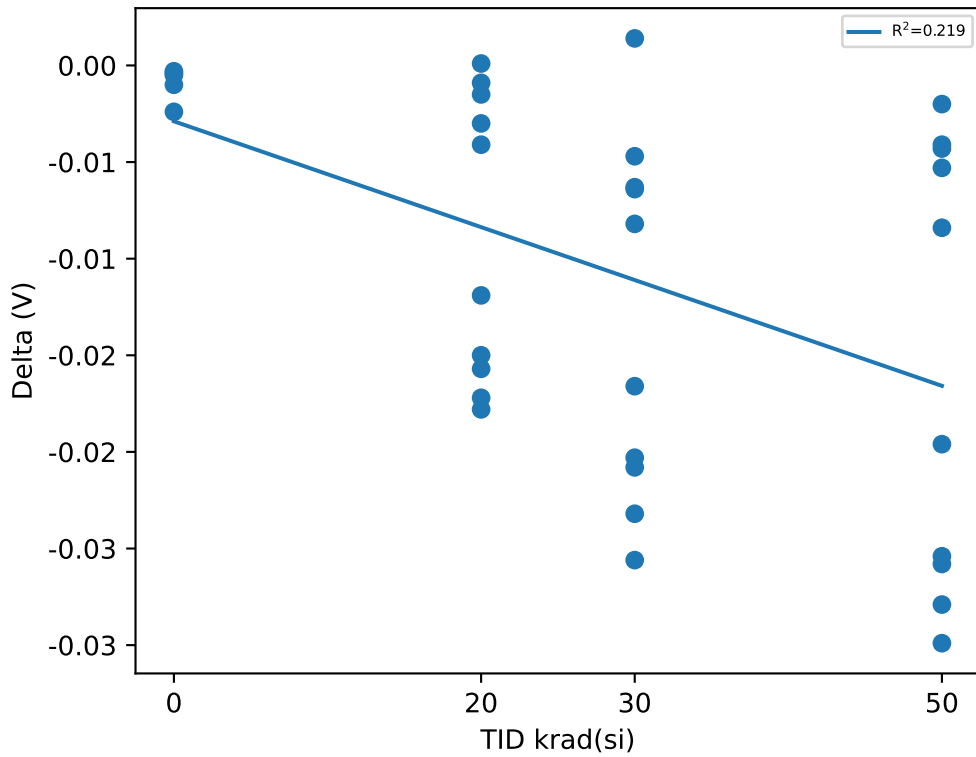
TID vs Result Stats



Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.6077	3.5958	-0.0119
2	20	Biased	3.5921	3.5764	-0.0157
3	20	Biased	3.6139	3.5989	-0.015
4	20	Biased	3.5941	3.5769	-0.0172
5	20	Biased	3.622	3.6042	-0.0178
6	20	Unbiased	3.6137	3.6096	-0.0041
7	20	Unbiased	3.6127	3.6128	0.0001
8	20	Unbiased	3.6035	3.6005	-0.003
9	20	Unbiased	3.608	3.6071	-0.0009
10	20	Unbiased	3.6112	3.6097	-0.0015
11	30	Biased	3.5949	3.5783	-0.0166
12	30	Biased	3.6022	3.579	-0.0232
13	30	Biased	3.6105	3.5897	-0.0208
14	30	Biased	3.6077	3.5821	-0.0256
15	30	Biased	3.6002	3.5799	-0.0203
16	30	Unbiased	3.6188	3.6141	-0.0047
17	30	Unbiased	3.5974	3.5911	-0.0063
18	30	Unbiased	3.6037	3.5955	-0.0082
19	30	Unbiased	3.5868	3.5882	0.0014
20	30	Unbiased	3.5935	3.5871	-0.0064
26	50	Unbiased	3.614	3.612	-0.002
27	50	Unbiased	3.6239	3.6196	-0.0043
28	50	Unbiased	3.6028	3.5944	-0.0084
29	50	Unbiased	3.5892	3.5839	-0.0053
30	50	Unbiased	3.6215	3.6174	-0.0041
88	50	Biased-84Hr-Anneal	3.6007	3.5749	-0.0258
89	50	Biased-84Hr-Anneal	3.6057	3.5758	-0.0299
90	50	Biased-84Hr-Anneal	3.6151	3.5897	-0.0254
91	50	Biased-84Hr-Anneal	3.5832	3.5636	-0.0196
92	50	Biased-84Hr-Anneal	3.5856	3.5577	-0.0279
100	0	CORRELATION	3.5927	3.5924	-0.0003
101	0	CORRELATION	3.5977	3.5972	-0.0005
102	0	CORRELATION	3.6085	3.6061	-0.0024
103	0	CORRELATION	3.609	3.608	-0.001
104	0	CORRELATION	3.6223	3.6219	-0.0004

TID vs Post - Pre Exposure Delta

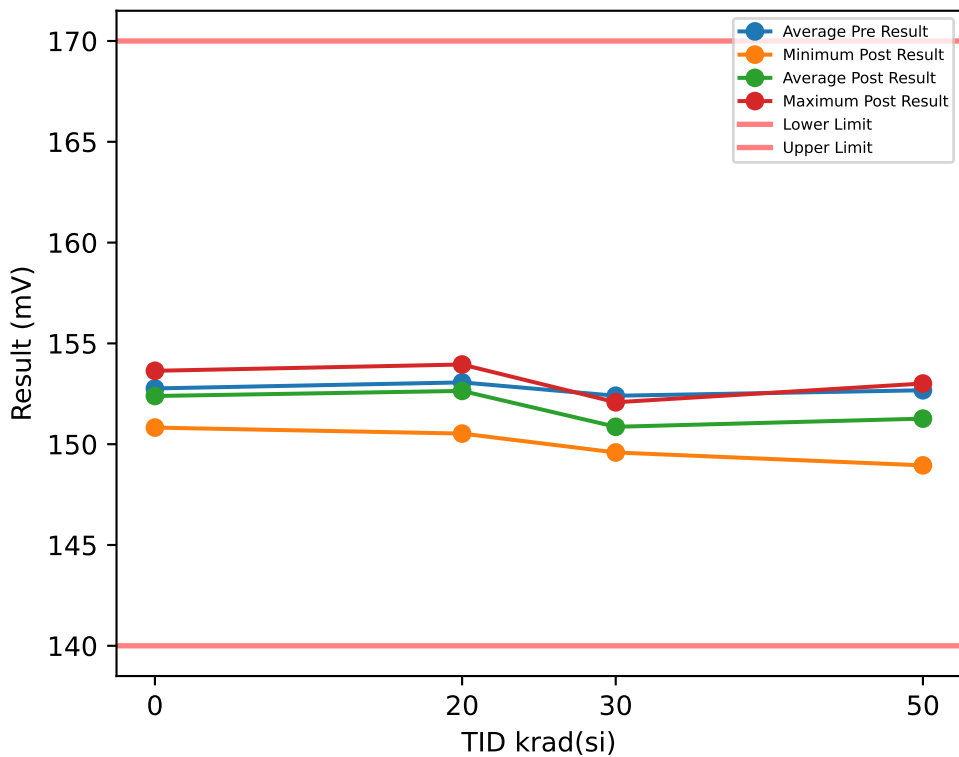


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5927	3.606	3.6223	0.011475	3.5924	3.6051	3.6219	0.011351	-0.0024	-0.00092	-0.0003	0.00087006
20	3.5921	3.6079	3.622	0.0092007	3.5764	3.5992	3.6128	0.013001	-0.0178	-0.0087	0.0001	0.0074368
30	3.5868	3.6016	3.6188	0.0092265	3.5783	3.5885	3.6141	0.010666	-0.0256	-0.01307	0.0014	0.009295
50	3.5832	3.6042	3.6239	0.014646	3.5577	3.5889	3.6196	0.021923	-0.0299	-0.01527	-0.002	0.011419

Device Test: 14.18 THRESHOLD|HYST/VIN/12////@UVLO_HYST_VIN

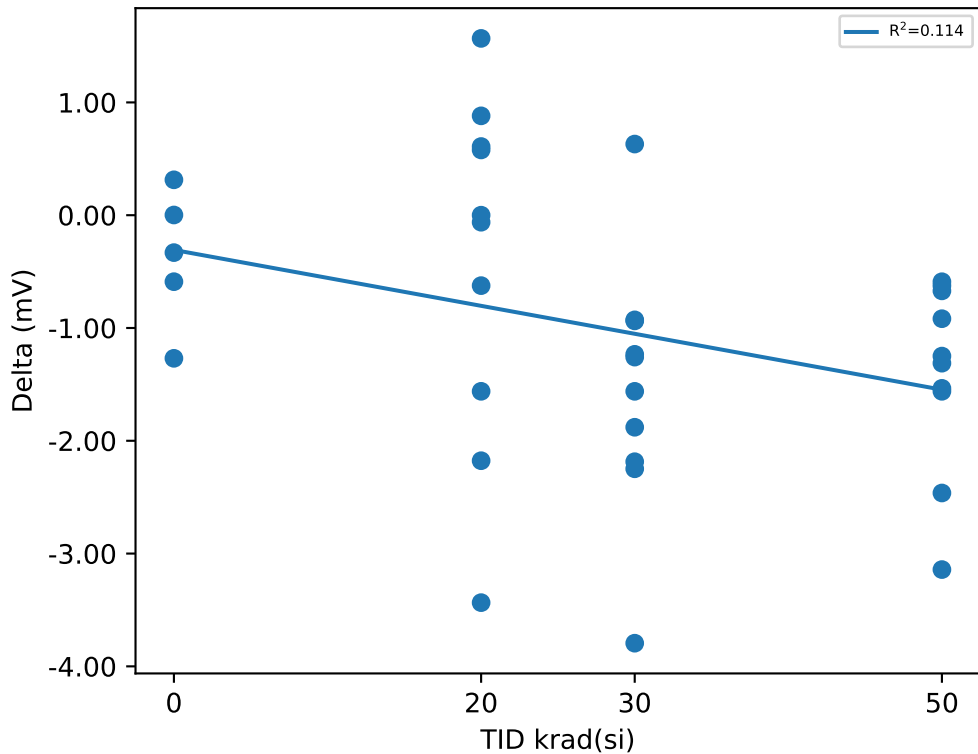
TID vs Result Stats



Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	153.96	150.53	-3.4351
2	20	Biased	150.89	151.46	0.5787
3	20	Biased	153.95	153.95	0.0002
4	20	Biased	153.95	153.33	-0.6244
5	20	Biased	154.27	152.71	-1.5614
6	20	Unbiased	152.13	152.07	-0.0622
7	20	Unbiased	152.39	153.95	1.5676
8	20	Unbiased	153.64	151.46	-2.1767
9	20	Unbiased	153.03	153.63	0.6089
10	20	Unbiased	152.45	153.33	0.8809
11	30	Biased	152.07	150.84	-1.2334
12	30	Biased	152.39	150.51	-1.8801
13	30	Biased	153.34	152.08	-1.2582
14	30	Biased	154.32	150.53	-3.7947
15	30	Biased	152.38	151.45	-0.937
16	30	Unbiased	153.64	151.45	-2.1856
17	30	Unbiased	151.15	149.59	-1.5616
18	30	Unbiased	152.45	150.2	-2.2483
19	30	Unbiased	150.2	150.83	0.6308
20	30	Unbiased	152.08	151.15	-0.9279
26	50	Unbiased	151.2	150.53	-0.6709
27	50	Unbiased	153.63	153.01	-0.6244
28	50	Unbiased	153.02	151.77	-1.2491
29	50	Unbiased	153.34	151.78	-1.5614
30	50	Unbiased	153.7	152.38	-1.312
88	50	Biased-84Hr-Anneal	153.61	151.15	-2.4629
89	50	Biased-84Hr-Anneal	151.74	150.82	-0.9177
90	50	Biased-84Hr-Anneal	153.93	152.39	-1.5352
91	50	Biased-84Hr-Anneal	150.49	149.9	-0.5899
92	50	Biased-84Hr-Anneal	152.09	148.95	-3.1419
100	0	CORRELATION	151.16	150.82	-0.3317
101	0	CORRELATION	153.64	153.64	0.0019
102	0	CORRELATION	152.99	152.4	-0.5894
103	0	CORRELATION	153.03	151.76	-1.2689
104	0	CORRELATION	153.01	153.33	0.3138

TID vs Post - Pre Exposure Delta

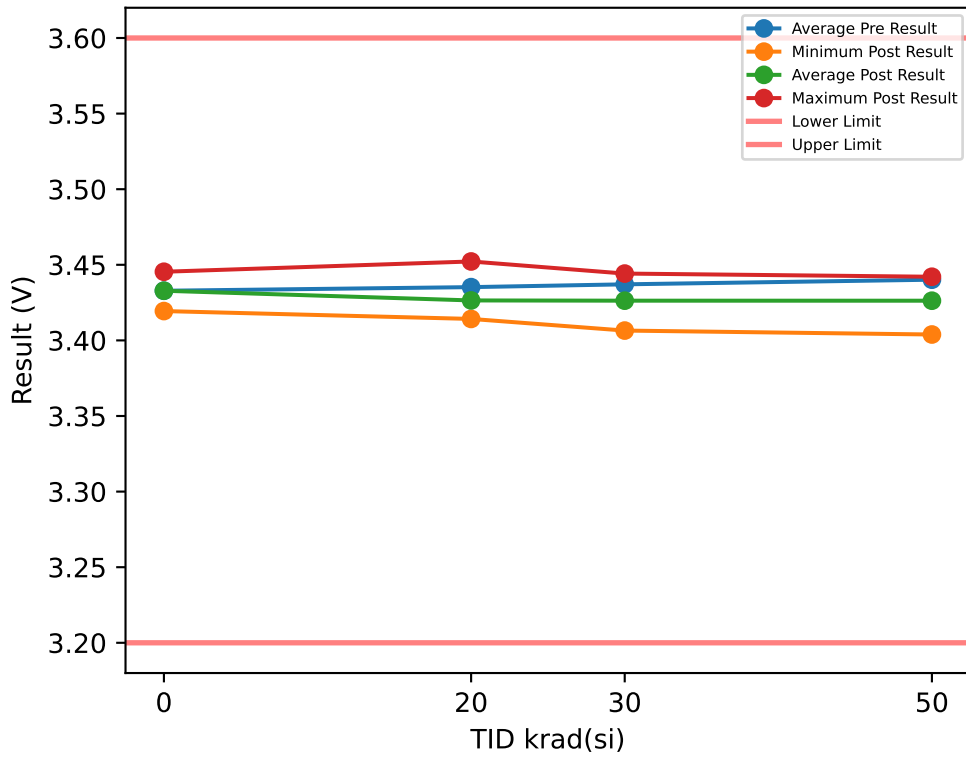


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	151.16	152.77	153.64	0.94029	150.82	152.39	153.64	1.1504	-1.2689	-0.37486	0.3138	0.60486
20	150.89	153.07	154.27	1.0865	150.53	152.64	153.95	1.1984	-3.4351	-0.42235	1.5676	1.5465
30	150.2	152.4	154.32	1.1891	149.59	150.86	152.08	0.71145	-3.7947	-1.5396	0.6308	1.1422
50	150.49	152.67	153.93	1.2077	148.95	151.27	153.01	1.2494	-3.1419	-1.4065	-0.5899	0.83403

Device Test: 14.19 THRESHOLD|RISE/PVIN/14/////@UVLO_RISE_PVIN

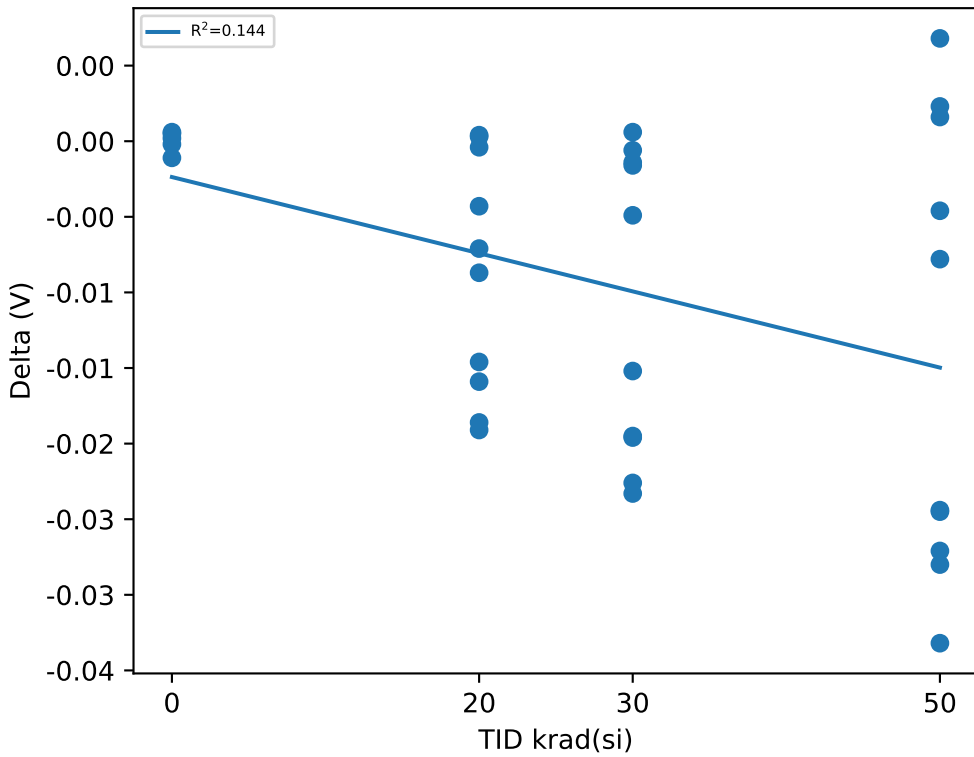
TID vs Result Stats



Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4321	3.4162	-0.0159
2	20	Biased	3.438	3.4194	-0.0186
3	20	Biased	3.4333	3.4142	-0.0191
4	20	Biased	3.4312	3.4166	-0.0146
5	20	Biased	3.447	3.4383	-0.0087
6	20	Unbiased	3.4565	3.4522	-0.0043
7	20	Unbiased	3.4285	3.4289	0.0004
8	20	Unbiased	3.4328	3.4331	0.0003
9	20	Unbiased	3.425	3.4246	-0.0004
10	20	Unbiased	3.4279	3.4208	-0.0071
11	30	Biased	3.4291	3.4065	-0.0226
12	30	Biased	3.4296	3.41	-0.0196
13	30	Biased	3.4474	3.4241	-0.0233
14	30	Biased	3.4273	3.4078	-0.0195
15	30	Biased	3.4515	3.4363	-0.0152
16	30	Unbiased	3.4458	3.4442	-0.0016
17	30	Unbiased	3.4308	3.4302	-0.0006
18	30	Unbiased	3.4383	3.4389	0.0006
19	30	Unbiased	3.4333	3.4319	-0.0014
20	30	Unbiased	3.4377	3.4328	-0.0049
26	50	Unbiased	3.4425	3.4347	-0.0078
27	50	Unbiased	3.4398	3.4421	0.0023
28	50	Unbiased	3.4309	3.4377	0.0068
29	50	Unbiased	3.4354	3.437	0.0016
30	50	Unbiased	3.4467	3.4421	-0.0046
88	50	Biased-84Hr-Anneal	3.4393	3.4113	-0.028
89	50	Biased-84Hr-Anneal	3.4517	3.4246	-0.0271
90	50	Biased-84Hr-Anneal	3.4579	3.4247	-0.0332
91	50	Biased-84Hr-Anneal	3.4283	3.4039	-0.0244
92	50	Biased-84Hr-Anneal	3.4289	3.4044	-0.0245
100	0	CORRELATION	3.4195	3.42	0.0005
101	0	CORRELATION	3.4434	3.4423	-0.0011
102	0	CORRELATION	3.4452	3.4454	0.0002
103	0	CORRELATION	3.4188	3.4194	0.0006
104	0	CORRELATION	3.4373	3.4371	-0.0002

TID vs Post - Pre Exposure Delta

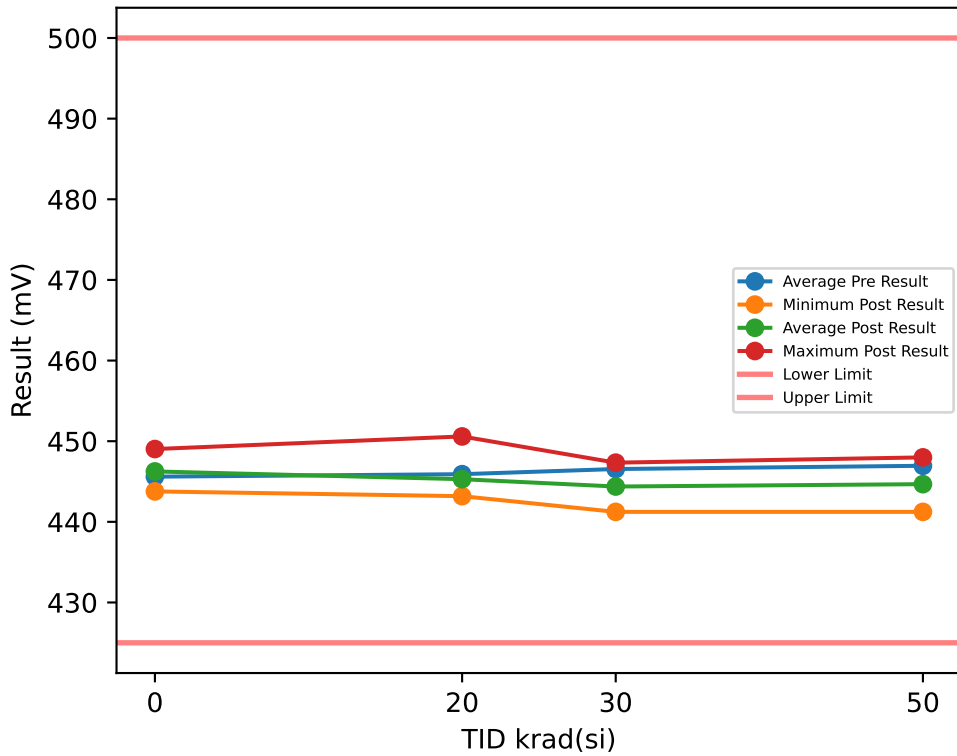


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4188	3.4328	3.4452	0.012838	3.4194	3.4328	3.4454	0.012358	-0.0011	-8.8818e-17	0.0006	0.0006892
20	3.425	3.4352	3.4565	0.0096492	3.4142	3.4264	3.4522	0.011976	-0.0191	-0.0088	0.0004	0.0077984
30	3.4273	3.4371	3.4515	0.0085723	3.4065	3.4263	3.4442	0.013633	-0.0233	-0.01081	0.0006	0.010054
50	3.4283	3.4401	3.4579	0.009848	3.4039	3.4263	3.4421	0.015004	-0.0332	-0.01389	0.0068	0.014993

Device Test: 14.21 THRESHOLD|HYST/PVIN/14////@UVLO_HYST_PVIN

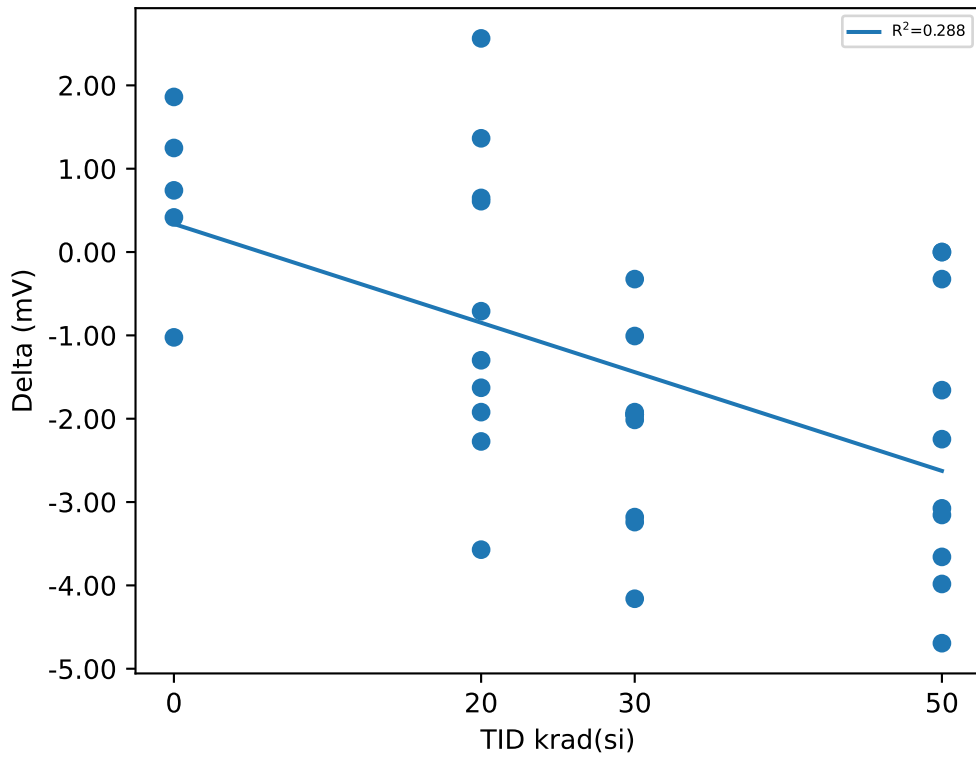
TID vs Result Stats



Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	445.46	443.18	-2.2726
2	20	Biased	445.1	443.18	-1.921
3	20	Biased	445.4	444.1	-1.2987
4	20	Biased	444.09	444.74	0.6495
5	20	Biased	448.38	444.81	-3.5713
6	20	Unbiased	448.03	450.59	2.5636
7	20	Unbiased	446.04	444.42	-1.6286
8	20	Unbiased	445.39	446.75	1.3649
9	20	Unbiased	446.43	445.72	-0.7098
10	20	Unbiased	444.78	445.39	0.6101
11	30	Biased	445.4	441.24	-4.1602
12	30	Biased	445.39	442.15	-3.2406
13	30	Biased	447.08	445.07	-2.0141
14	30	Biased	445.75	443.83	-1.921
15	30	Biased	448.97	447.02	-1.9479
16	30	Unbiased	447.66	447.34	-0.3247
17	30	Unbiased	445.46	443.51	-1.9478
18	30	Unbiased	447.7	446.69	-1.0078
19	30	Unbiased	445.4	443.44	-1.9533
20	30	Unbiased	446.69	443.51	-3.1806
26	50	Unbiased	447.38	445.13	-2.2454
27	50	Unbiased	447.99	447.99	-0.0003
28	50	Unbiased	445.07	444.74	-0.3247
29	50	Unbiased	446.43	446.43	0
30	50	Unbiased	448.03	446.37	-1.6572
88	50	Biased-84Hr-Anneal	445.87	442.21	-3.658
89	50	Biased-84Hr-Anneal	450.41	445.72	-4.6936
90	50	Biased-84Hr-Anneal	448.47	445.39	-3.0755
91	50	Biased-84Hr-Anneal	445.22	441.24	-3.9828
92	50	Biased-84Hr-Anneal	444.65	441.5	-3.1551
100	0	CORRELATION	443.36	443.77	0.4155
101	0	CORRELATION	447.71	446.69	-1.0239
102	0	CORRELATION	447.17	449.03	1.8611
103	0	CORRELATION	444.66	445.4	0.7402
104	0	CORRELATION	445.12	446.36	1.2487

TID vs Post - Pre Exposure Delta

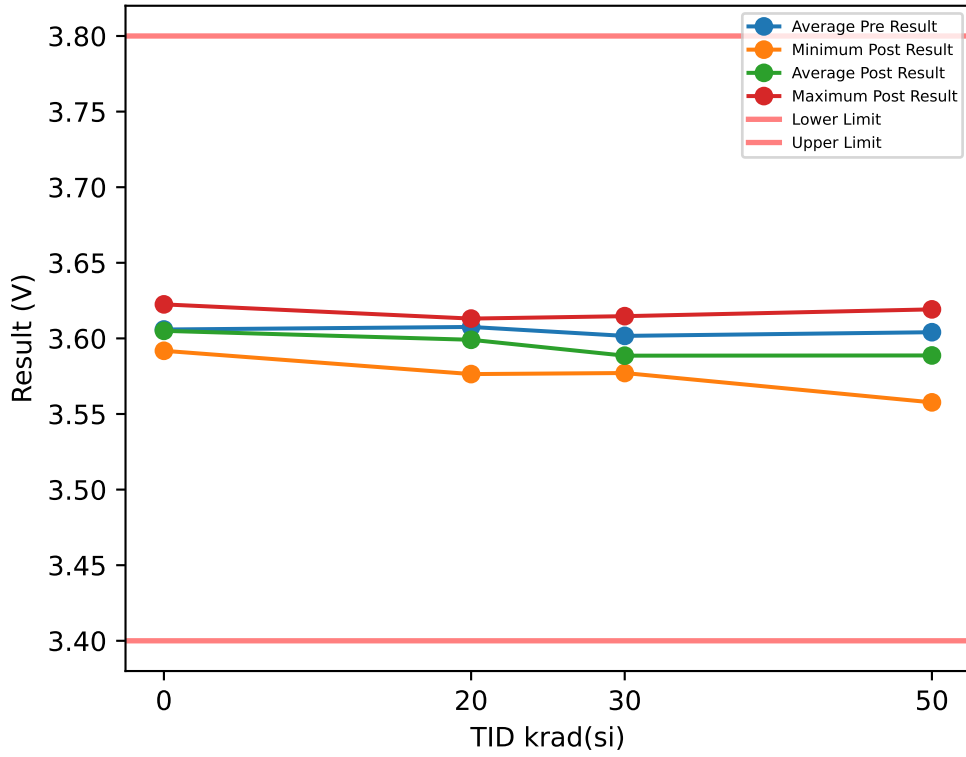


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	443.36	445.6	447.71	1.808	443.77	446.25	449.03	1.9228	-1.0239	0.64832	1.8611	1.0829
20	444.09	445.91	448.38	1.3676	443.18	445.29	450.59	2.1609	-3.5713	-0.62139	2.5636	1.8803
30	445.39	446.55	448.97	1.2713	441.24	444.38	447.34	2.0843	-4.1602	-2.1698	-0.3247	1.1114
50	444.65	446.95	450.41	1.8252	441.24	444.67	447.99	2.2795	-4.6936	-2.2793	0	1.7201

Device Test: 14.22 THRESHOLD|RISE/VIN/14/////@UVLO_RISE_VIN

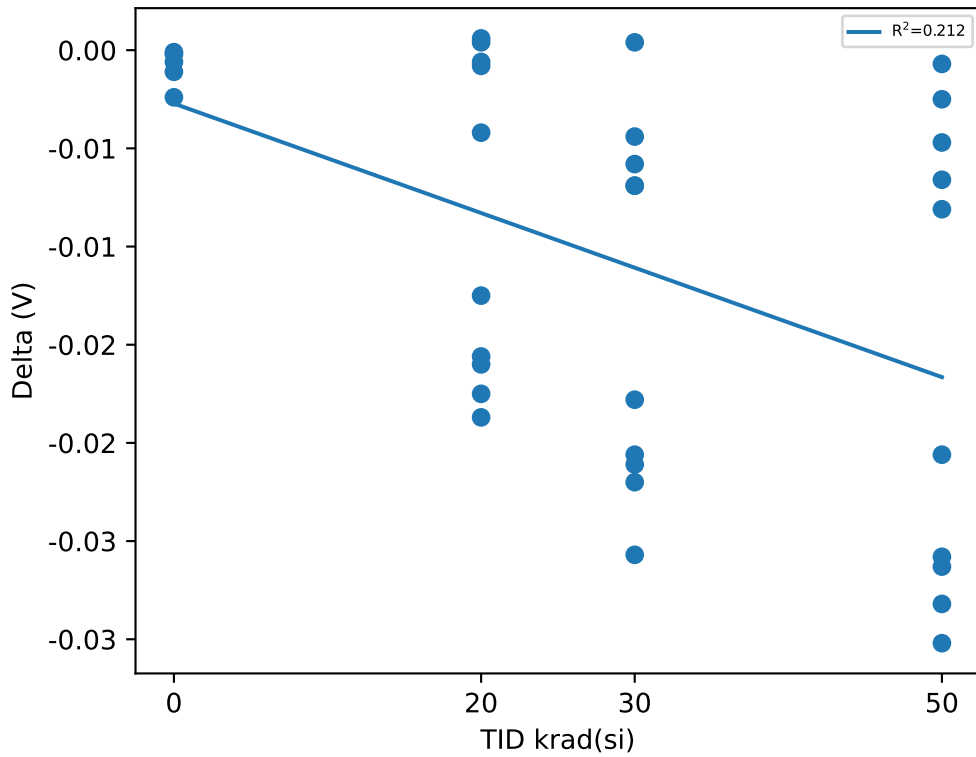
TID vs Result Stats



Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.6077	3.5952	-0.0125
2	20	Biased	3.5924	3.5764	-0.016
3	20	Biased	3.6139	3.5983	-0.0156
4	20	Biased	3.5947	3.5772	-0.0175
5	20	Biased	3.6223	3.6036	-0.0187
6	20	Unbiased	3.6134	3.6092	-0.0042
7	20	Unbiased	3.6127	3.6131	0.0004
8	20	Unbiased	3.6016	3.6008	-0.0008
9	20	Unbiased	3.6061	3.6067	0.0006
10	20	Unbiased	3.6109	3.6103	-0.0006
11	30	Biased	3.5949	3.5771	-0.0178
12	30	Biased	3.6047	3.579	-0.0257
13	30	Biased	3.6102	3.5891	-0.0211
14	30	Biased	3.6059	3.5839	-0.022
15	30	Biased	3.6008	3.5802	-0.0206
16	30	Unbiased	3.6191	3.6147	-0.0044
17	30	Unbiased	3.5983	3.5914	-0.0069
18	30	Unbiased	3.6027	3.5958	-0.0069
19	30	Unbiased	3.5871	3.5875	0.0004
20	30	Unbiased	3.5929	3.5871	-0.0058
26	50	Unbiased	3.6134	3.6127	-0.0007
27	50	Unbiased	3.6239	3.6192	-0.0047
28	50	Unbiased	3.6025	3.5944	-0.0081
29	50	Unbiased	3.5899	3.5833	-0.0066
30	50	Unbiased	3.6199	3.6174	-0.0025
88	50	Biased-84Hr-Anneal	3.6007	3.5749	-0.0258
89	50	Biased-84Hr-Anneal	3.6051	3.5749	-0.0302
90	50	Biased-84Hr-Anneal	3.616	3.5897	-0.0263
91	50	Biased-84Hr-Anneal	3.5836	3.563	-0.0206
92	50	Biased-84Hr-Anneal	3.5859	3.5577	-0.0282
100	0	CORRELATION	3.5924	3.5918	-0.0006
101	0	CORRELATION	3.5974	3.5963	-0.0011
102	0	CORRELATION	3.6085	3.6061	-0.0024
103	0	CORRELATION	3.6084	3.6083	-0.0001
104	0	CORRELATION	3.6227	3.6225	-0.0002

TID vs Post - Pre Exposure Delta

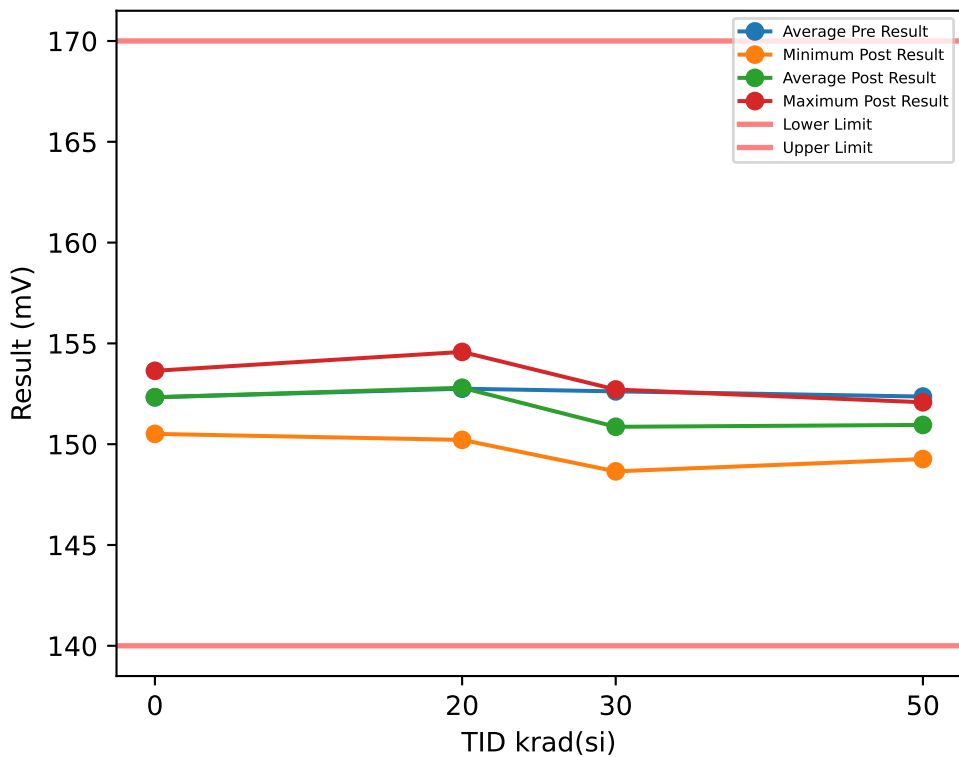


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5924	3.6059	3.6227	0.011723	3.5918	3.605	3.6225	0.011919	-0.0024	-0.00088	-0.0001	0.00093648
20	3.5924	3.6076	3.6223	0.0092016	3.5764	3.5991	3.6131	0.012975	-0.0187	-0.00849	0.0006	0.0082321
30	3.5871	3.6017	3.6191	0.0091399	3.5771	3.5886	3.6147	0.010861	-0.0257	-0.01308	0.0004	0.0092401
50	3.5836	3.6041	3.6239	0.014291	3.5577	3.5887	3.6192	0.022098	-0.0302	-0.01537	-0.0007	0.011854

Device Test: 14.24 THRESHOLD|HYST/VIN/14/////@UVLO_HYST_VIN

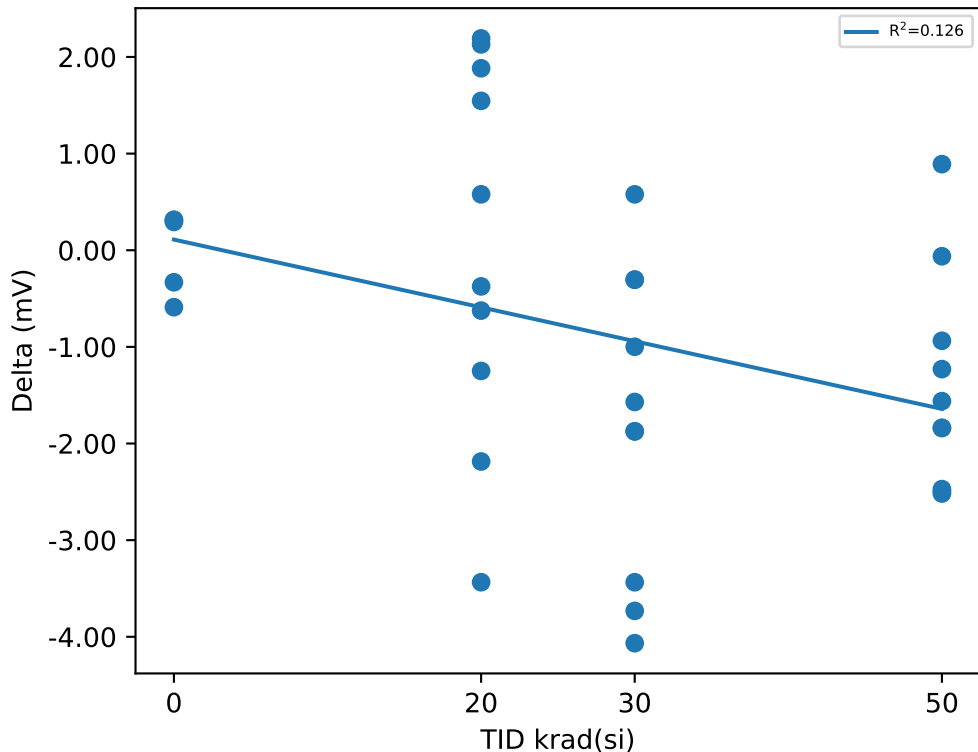
TID vs Result Stats



Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	153.65	150.21	-3.4351
2	20	Biased	151.2	151.78	0.5786
3	20	Biased	153.95	153.32	-0.6245
4	20	Biased	154.89	153.64	-1.2491
5	20	Biased	154.59	152.4	-2.1861
6	20	Unbiased	151.82	151.45	-0.3741
7	20	Unbiased	152.39	154.58	2.1921
8	20	Unbiased	151.45	153.34	1.883
9	20	Unbiased	151.46	153.01	1.5457
10	20	Unbiased	152.13	154.26	2.13
11	30	Biased	153.63	149.9	-3.7318
12	30	Biased	154.58	150.51	-4.0662
13	30	Biased	153.03	151.45	-1.5703
14	30	Biased	152.13	152.71	0.5784
15	30	Biased	153.32	151.45	-1.874
16	30	Unbiased	153.95	152.08	-1.8735
17	30	Unbiased	152.09	148.65	-3.4354
18	30	Unbiased	151.51	150.51	-0.9987
19	30	Unbiased	150.51	150.21	-0.3059
20	30	Unbiased	151.45	151.15	-0.3033
26	50	Unbiased	150.57	151.46	0.8909
27	50	Unbiased	153.63	151.14	-2.4982
28	50	Unbiased	152.7	151.77	-0.9368
29	50	Unbiased	152.71	151.15	-1.5614
30	50	Unbiased	152.13	152.07	-0.0622
88	50	Biased-84Hr-Anneal	153.3	151.46	-1.8385
89	50	Biased-84Hr-Anneal	151.12	149.89	-1.23
90	50	Biased-84Hr-Anneal	154.55	152.08	-2.4717
91	50	Biased-84Hr-Anneal	151.12	149.28	-1.8389
92	50	Biased-84Hr-Anneal	151.78	149.26	-2.5175
100	0	CORRELATION	150.84	150.51	-0.3314
101	0	CORRELATION	152.39	152.7	0.314
102	0	CORRELATION	152.99	152.4	-0.5894
103	0	CORRELATION	152.09	152.39	0.2927
104	0	CORRELATION	153.33	153.64	0.3142

TID vs Post - Pre Exposure Delta

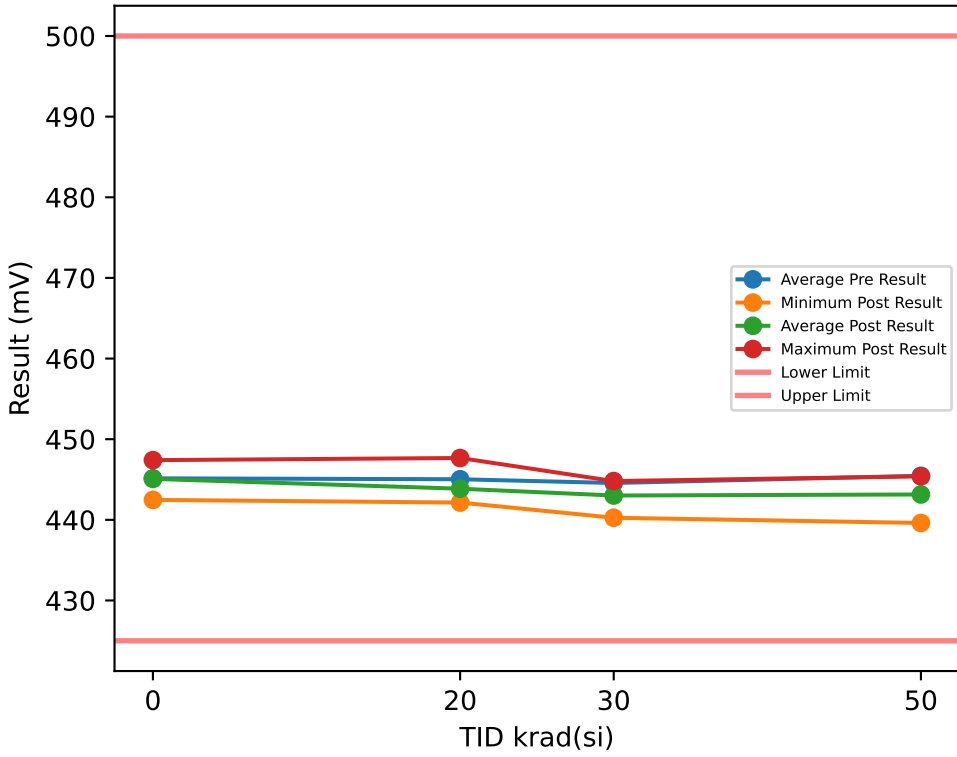


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	150.84	152.33	153.33	0.96176	150.51	152.33	153.64	1.1372	-0.5894	2e-05	0.3142	0.43018
20	151.2	152.75	154.89	1.3867	150.21	152.8	154.58	1.3472	-3.4351	0.04605	2.1921	1.9511
30	150.51	152.62	154.58	1.2845	148.65	150.86	152.71	1.1626	-4.0662	-1.7581	0.5784	1.5762
50	150.57	152.36	154.55	1.2573	149.26	150.96	152.08	1.0843	-2.5175	-1.4064	0.8909	1.1203

Device Test: 14.3 THRESHOLD|HYST/PVIN/4.5////@UVLO_HYST_PVIN

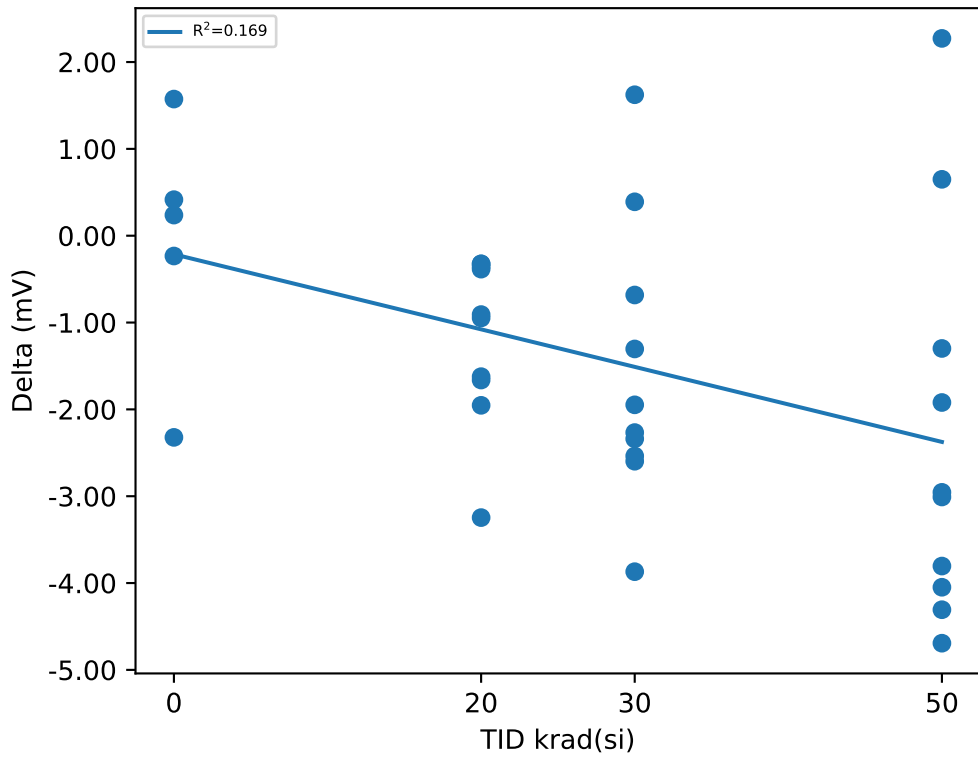
TID vs Result Stats



Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	443.83	443.51	-0.3244
2	20	Biased	443.81	442.86	-0.9471
3	20	Biased	445.07	444.75	-0.325
4	20	Biased	445.39	442.14	-3.2463
5	20	Biased	446.75	445.13	-1.6232
6	20	Unbiased	448.03	447.67	-0.3585
7	20	Unbiased	444.75	442.79	-1.9533
8	20	Unbiased	444.42	443.51	-0.9082
9	20	Unbiased	443.83	443.45	-0.385
10	20	Unbiased	444.45	442.79	-1.662
11	30	Biased	442.8	440.26	-2.537
12	30	Biased	443.77	441.5	-2.267
13	30	Biased	446.75	444.42	-2.3386
14	30	Biased	444.45	440.59	-3.8691
15	30	Biased	447.02	444.42	-2.5971
16	30	Unbiased	445.39	443.44	-1.9476
17	30	Unbiased	442.53	444.16	1.6234
18	30	Unbiased	445.1	444.42	-0.6827
19	30	Unbiased	443.45	442.14	-1.3041
20	30	Unbiased	444.42	444.81	0.3905
26	50	Unbiased	446.08	444.16	-1.9207
27	50	Unbiased	446.69	445.4	-1.2984
28	50	Unbiased	442.79	445.07	2.2723
29	50	Unbiased	443.18	443.83	0.6494
30	50	Unbiased	447.7	444.75	-2.9554
88	50	Biased-84Hr-Anneal	445.22	442.21	-3.0088
89	50	Biased-84Hr-Anneal	447.82	443.12	-4.6927
90	50	Biased-84Hr-Anneal	447.17	443.12	-4.0484
91	50	Biased-84Hr-Anneal	443.92	439.61	-4.3071
92	50	Biased-84Hr-Anneal	444.01	440.2	-3.8043
100	0	CORRELATION	442.71	442.47	-0.2337
101	0	CORRELATION	445.44	447.01	1.5736
102	0	CORRELATION	447.17	447.4	0.2375
103	0	CORRELATION	443.68	444.1	0.4152
104	0	CORRELATION	446.74	444.42	-2.3224

TID vs Post - Pre Exposure Delta

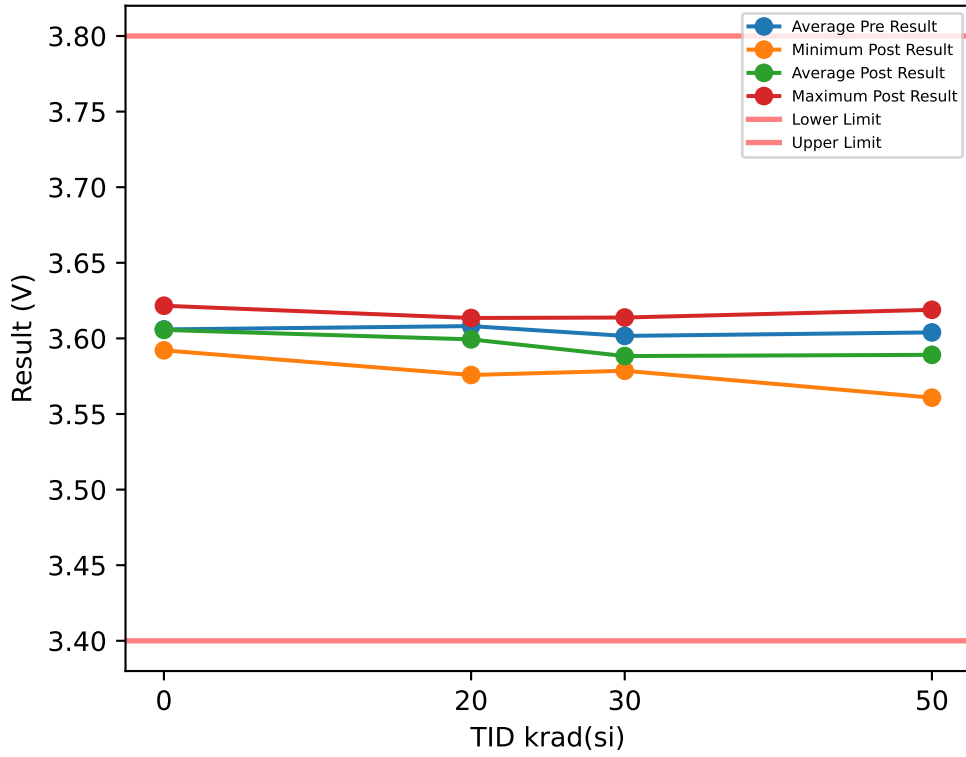


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	442.71	445.15	447.17	1.9232	442.47	445.08	447.4	2.0819	-2.3224	-0.06596	1.5736	1.4258
20	443.81	445.03	448.03	1.3839	442.14	443.86	447.67	1.6174	-3.2463	-1.1733	-0.3244	0.95417
30	442.53	444.57	447.02	1.5258	440.26	443.02	444.81	1.737	-3.8691	-1.5529	1.6234	1.6122
50	442.79	445.46	447.82	1.8925	439.61	443.15	445.4	1.9675	-4.6927	-2.3114	2.2723	2.2793

Device Test: 14.4 THRESHOLD|RISE/VIN/4.5////@UVLO_RISE_VIN

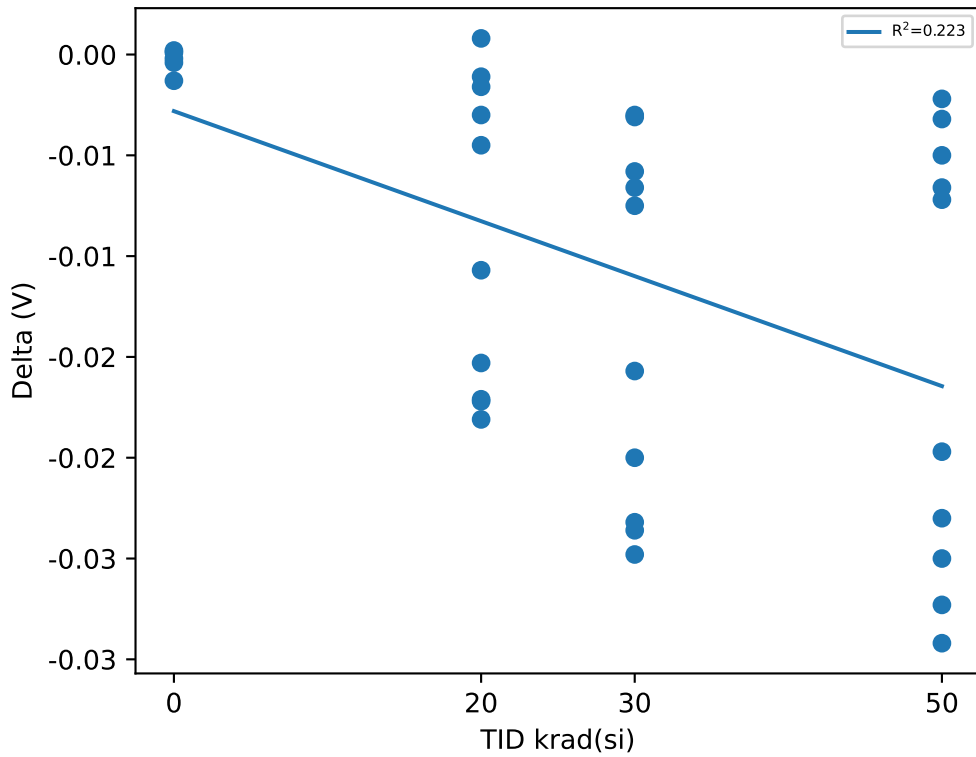
TID vs Result Stats



Test Results (Lower Limit = 3.4, Upper Limit = 3.8 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.6077	3.597	-0.0107
2	20	Biased	3.593	3.5758	-0.0172
3	20	Biased	3.6139	3.5986	-0.0153
4	20	Biased	3.5944	3.5763	-0.0181
5	20	Biased	3.6223	3.6052	-0.0171
6	20	Unbiased	3.6137	3.6092	-0.0045
7	20	Unbiased	3.6127	3.6135	0.0008
8	20	Unbiased	3.6035	3.6005	-0.003
9	20	Unbiased	3.6083	3.6067	-0.0016
10	20	Unbiased	3.6118	3.6107	-0.0011
11	30	Biased	3.5943	3.5786	-0.0157
12	30	Biased	3.6041	3.5793	-0.0248
13	30	Biased	3.6111	3.5875	-0.0236
14	30	Biased	3.6062	3.583	-0.0232
15	30	Biased	3.6005	3.5805	-0.02
16	30	Unbiased	3.6169	3.6138	-0.0031
17	30	Unbiased	3.5983	3.5917	-0.0066
18	30	Unbiased	3.603	3.5955	-0.0075
19	30	Unbiased	3.5896	3.5866	-0.003
20	30	Unbiased	3.5925	3.5867	-0.0058
26	50	Unbiased	3.6143	3.6111	-0.0032
27	50	Unbiased	3.6239	3.6189	-0.005
28	50	Unbiased	3.6022	3.595	-0.0072
29	50	Unbiased	3.5899	3.5833	-0.0066
30	50	Unbiased	3.6202	3.618	-0.0022
88	50	Biased-84Hr-Anneal	3.5982	3.5752	-0.023
89	50	Biased-84Hr-Anneal	3.6057	3.5765	-0.0292
90	50	Biased-84Hr-Anneal	3.6135	3.5885	-0.025
91	50	Biased-84Hr-Anneal	3.5836	3.5639	-0.0197
92	50	Biased-84Hr-Anneal	3.5881	3.5608	-0.0273
100	0	CORRELATION	3.5934	3.5921	-0.0013
101	0	CORRELATION	3.5977	3.5978	0.0001
102	0	CORRELATION	3.6082	3.608	-0.0002
103	0	CORRELATION	3.609	3.6086	-0.0004
104	0	CORRELATION	3.6214	3.6216	0.0002

TID vs Post - Pre Exposure Delta

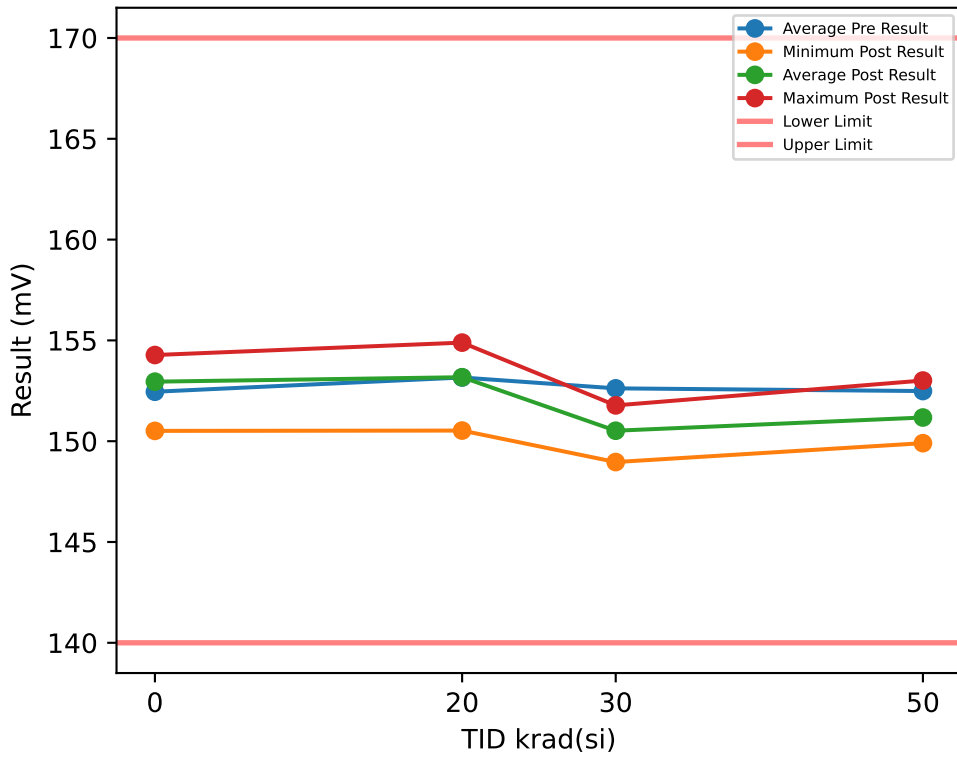


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.5934	3.6059	3.6214	0.010939	3.5921	3.6056	3.6216	0.011334	-0.0013	-0.00032	0.0002	0.00059749
20	3.593	3.6081	3.6223	0.0090587	3.5758	3.5993	3.6135	0.013365	-0.0181	-0.00878	0.0008	0.0076537
30	3.5896	3.6017	3.6169	0.0084714	3.5786	3.5883	3.6138	0.010455	-0.0248	-0.01333	-0.003	0.0090179
50	3.5836	3.604	3.6239	0.013993	3.5608	3.5891	3.6189	0.02125	-0.0292	-0.01484	-0.0022	0.01092

Device Test: 14.6 THRESHOLD|HYST/VIN/4.5////@UVLO_HYST_VIN

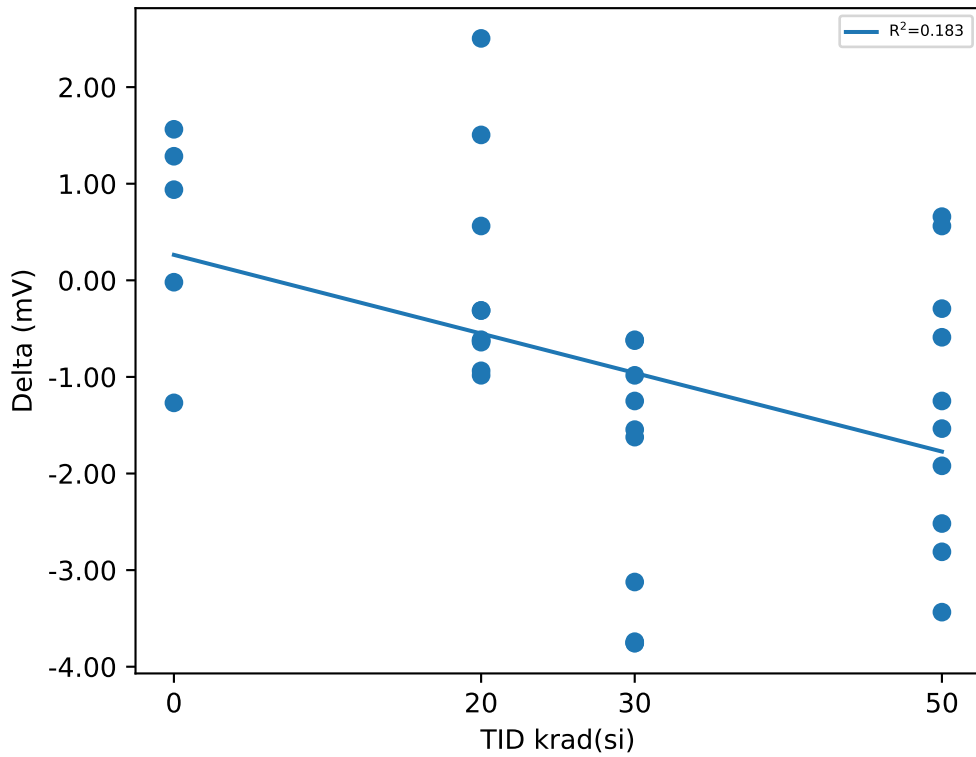
TID vs Result Stats



Test Results (Lower Limit = 140.0, Upper Limit = 170.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	152.71	152.4	-0.3121
2	20	Biased	151.51	150.53	-0.9832
3	20	Biased	153.63	153.32	-0.3124
4	20	Biased	153.95	153.02	-0.9369
5	20	Biased	154.59	153.96	-0.6247
6	20	Unbiased	152.45	153.01	0.5624
7	20	Unbiased	152.39	154.89	2.5044
8	20	Unbiased	153.64	153.03	-0.6151
9	20	Unbiased	153.65	153.01	-0.6404
10	20	Unbiased	153.07	154.58	1.5052
11	30	Biased	152.7	151.15	-1.5456
12	30	Biased	154.27	150.51	-3.7539
13	30	Biased	153.65	149.89	-3.7565
14	30	Biased	152.76	151.78	-0.9835
15	30	Biased	153.01	151.76	-1.2491
16	30	Unbiased	151.77	151.14	-0.6246
17	30	Unbiased	152.09	148.97	-3.123
18	30	Unbiased	151.82	150.2	-1.6234
19	30	Unbiased	153.01	149.27	-3.7408
20	30	Unbiased	151.14	150.53	-0.6154
26	50	Unbiased	151.82	149.9	-1.9203
27	50	Unbiased	153.95	151.14	-2.8105
28	50	Unbiased	152.39	151.14	-1.249
29	50	Unbiased	153.96	150.53	-3.4351
30	50	Unbiased	152.45	153.01	0.5622
88	50	Biased-84Hr-Anneal	150.8	151.46	0.6592
89	50	Biased-84Hr-Anneal	151.74	151.45	-0.2931
90	50	Biased-84Hr-Anneal	152.37	150.83	-1.5351
91	50	Biased-84Hr-Anneal	151.12	150.53	-0.5896
92	50	Biased-84Hr-Anneal	154.28	151.76	-2.5177
100	0	CORRELATION	151.78	150.51	-1.2686
101	0	CORRELATION	152.7	154.27	1.5633
102	0	CORRELATION	152.99	154.27	1.2843
103	0	CORRELATION	152.72	152.7	-0.0196
104	0	CORRELATION	152.08	153.02	0.9385

TID vs Post - Pre Exposure Delta

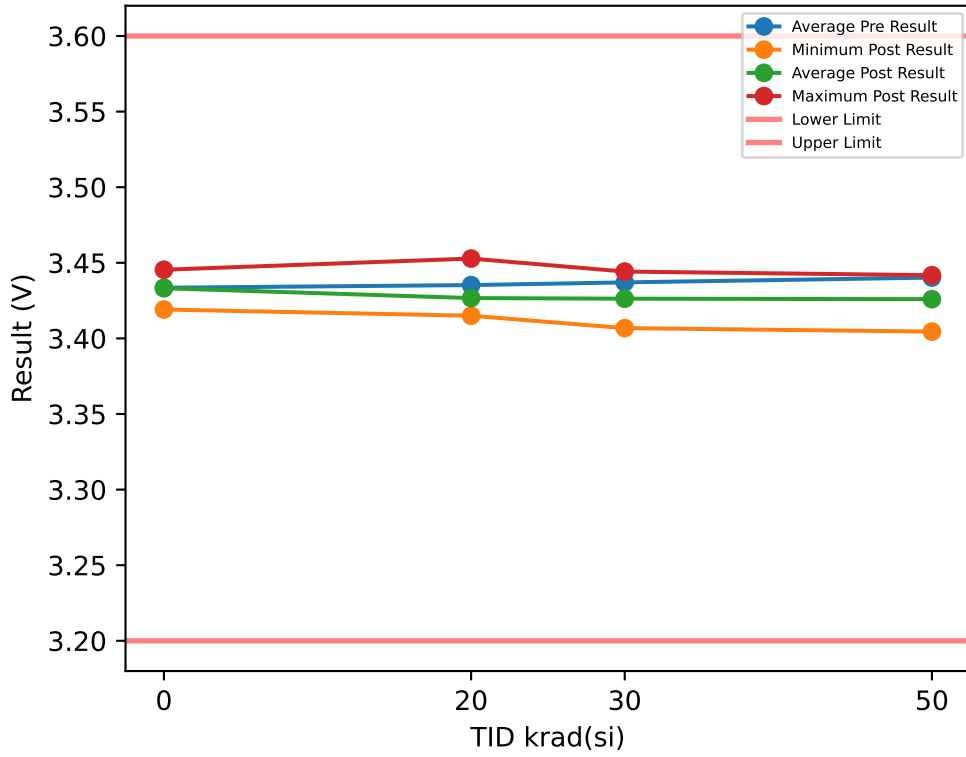


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	151.78	152.45	152.99	0.50351	150.51	152.95	154.27	1.541	-1.2686	0.49958	1.5633	1.155
20	151.51	153.16	154.59	0.90666	150.53	153.17	154.89	1.2139	-0.9832	0.01472	2.5044	1.1581
30	151.14	152.62	154.27	0.93844	148.97	150.52	151.78	0.96506	-3.7565	-2.1016	-0.6154	1.3377
50	150.8	152.49	154.28	1.2132	149.9	151.17	153.01	0.84636	-3.4351	-1.3129	0.6592	1.398

Device Test: 14.7 THRESHOLD|RISE/PVIN/5////@UVLO_RISE_PVIN

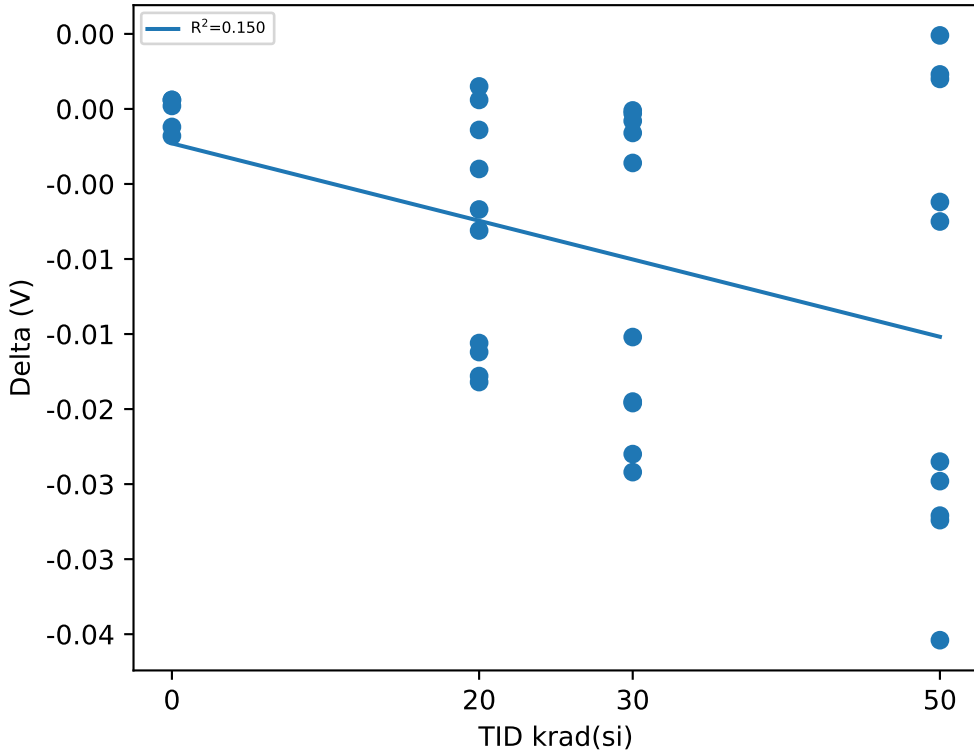
TID vs Result Stats



Test Results (Lower Limit = 3.2, Upper Limit = 3.6 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4318	3.4162	-0.0156
2	20	Biased	3.4389	3.4207	-0.0182
3	20	Biased	3.4333	3.4155	-0.0178
4	20	Biased	3.4312	3.415	-0.0162
5	20	Biased	3.4477	3.4396	-0.0081
6	20	Unbiased	3.4568	3.4528	-0.004
7	20	Unbiased	3.4278	3.4293	0.0015
8	20	Unbiased	3.4332	3.4318	-0.0014
9	20	Unbiased	3.424	3.4246	0.0006
10	20	Unbiased	3.4279	3.4212	-0.0067
11	30	Biased	3.4298	3.4068	-0.023
12	30	Biased	3.4289	3.4093	-0.0196
13	30	Biased	3.447	3.4228	-0.0242
14	30	Biased	3.4273	3.4078	-0.0195
15	30	Biased	3.4518	3.4366	-0.0152
16	30	Unbiased	3.4458	3.4442	-0.0016
17	30	Unbiased	3.4308	3.4305	-0.0003
18	30	Unbiased	3.4383	3.4382	-0.0001
19	30	Unbiased	3.433	3.4322	-0.0008
20	30	Unbiased	3.4377	3.4341	-0.0036
26	50	Unbiased	3.4422	3.4347	-0.0075
27	50	Unbiased	3.4398	3.4418	0.002
28	50	Unbiased	3.4322	3.4371	0.0049
29	50	Unbiased	3.4337	3.436	0.0023
30	50	Unbiased	3.4477	3.4415	-0.0062
88	50	Biased-84Hr-Anneal	3.4397	3.4123	-0.0274
89	50	Biased-84Hr-Anneal	3.4504	3.4233	-0.0271
90	50	Biased-84Hr-Anneal	3.4582	3.4228	-0.0354
91	50	Biased-84Hr-Anneal	3.428	3.4045	-0.0235
92	50	Biased-84Hr-Anneal	3.4302	3.4054	-0.0248
100	0	CORRELATION	3.4211	3.4217	0.0006
101	0	CORRELATION	3.4441	3.4423	-0.0018
102	0	CORRELATION	3.4452	3.4454	0.0002
103	0	CORRELATION	3.4185	3.4191	0.0006
104	0	CORRELATION	3.4386	3.4374	-0.0012

TID vs Post - Pre Exposure Delta

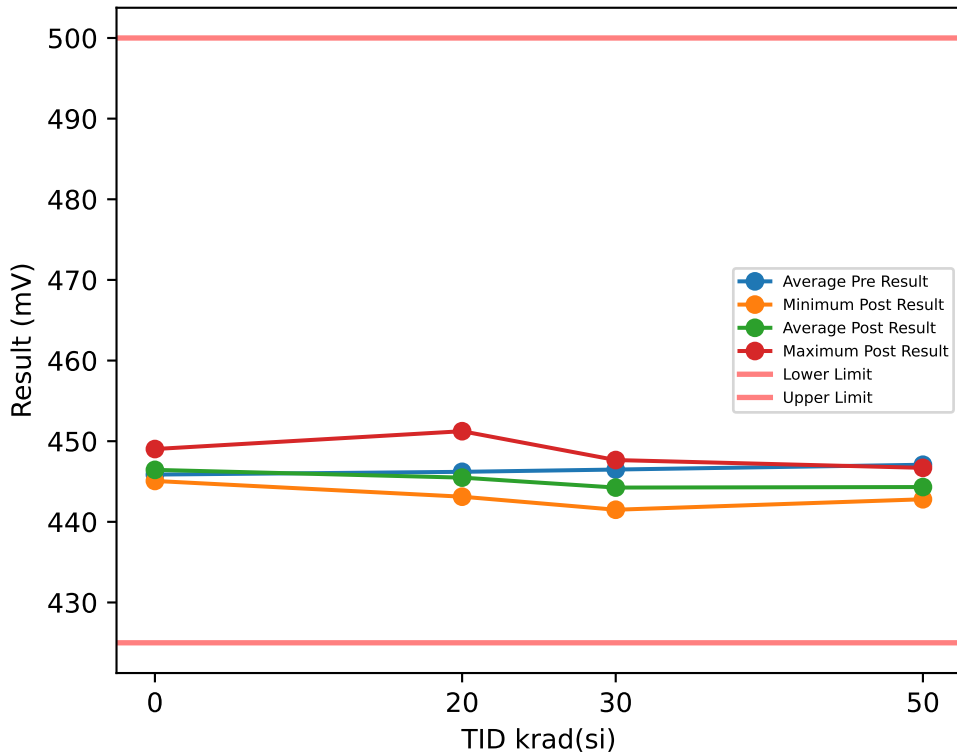


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4185	3.4335	3.4452	0.012787	3.4191	3.4332	3.4454	0.012045	-0.0018	-0.00032	0.0006	0.00111
20	3.424	3.4353	3.4568	0.010028	3.415	3.4267	3.4528	0.012127	-0.0182	-0.00859	0.0015	0.0077965
30	3.4273	3.437	3.4518	0.0085934	3.4068	3.4263	3.4442	0.013764	-0.0242	-0.01079	-0.0001	0.010339
50	3.428	3.4402	3.4582	0.0096827	3.4045	3.4259	3.4418	0.014455	-0.0354	-0.01427	0.0049	0.014897

Device Test: 14.9 THRESHOLD|HYST/PVIN/5////@UVLO_HYST_PVIN

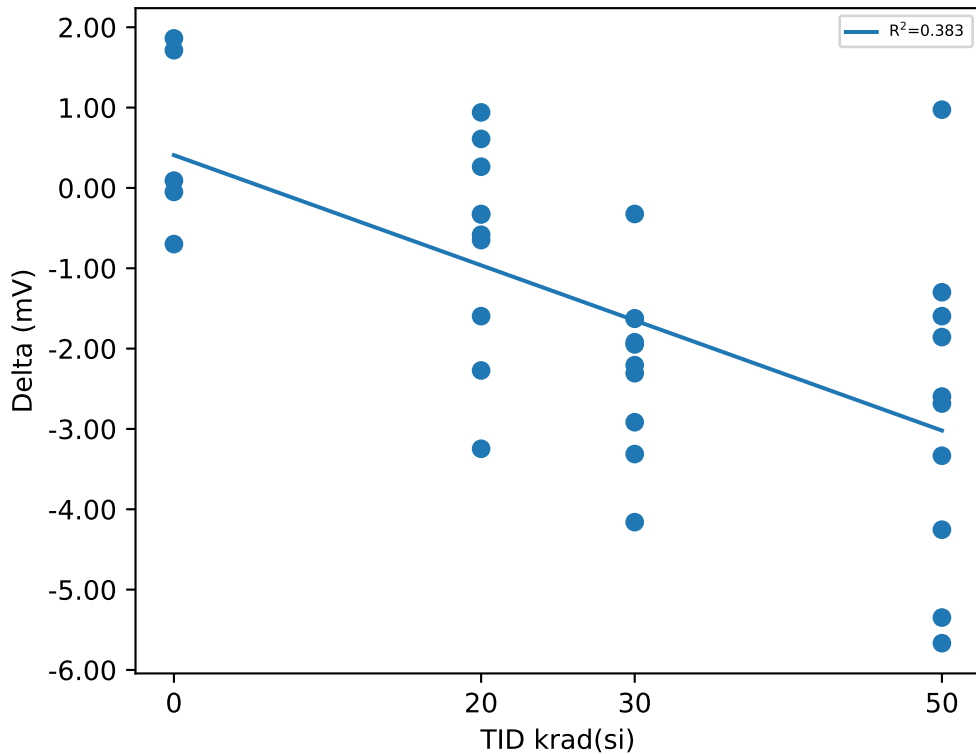
TID vs Result Stats



Test Results (Lower Limit = 425.0, Upper Limit = 500.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	446.43	443.18	-3.2468
2	20	Biased	446.08	444.48	-1.5962
3	20	Biased	445.72	445.4	-0.3247
4	20	Biased	445.39	443.12	-2.2721
5	20	Biased	447.08	446.43	-0.6495
6	20	Unbiased	450.3	451.24	0.94
7	20	Unbiased	445.07	444.74	-0.3301
8	20	Unbiased	445.71	445.13	-0.583
9	20	Unbiased	445.13	445.4	0.264
10	20	Unbiased	445.1	445.71	0.6102
11	30	Biased	445.72	441.56	-4.16
12	30	Biased	444.42	441.5	-2.9162
13	30	Biased	446.75	443.44	-3.3125
14	30	Biased	445.75	443.83	-1.921
15	30	Biased	449.29	447.34	-1.9477
16	30	Unbiased	447.99	447.66	-0.3245
17	30	Unbiased	445.78	444.16	-1.6234
18	30	Unbiased	447.38	445.07	-2.3063
19	30	Unbiased	445.07	443.44	-1.6285
20	30	Unbiased	446.69	444.48	-2.2064
26	50	Unbiased	447.38	445.78	-1.5959
27	50	Unbiased	447.99	446.69	-1.2985
28	50	Unbiased	446.36	443.77	-2.5969
29	50	Unbiased	444.16	445.13	0.9739
30	50	Unbiased	450.3	446.04	-4.2542
88	50	Biased-84Hr-Anneal	446.52	443.18	-3.3336
89	50	Biased-84Hr-Anneal	448.79	443.12	-5.6669
90	50	Biased-84Hr-Anneal	449.11	443.77	-5.3478
91	50	Biased-84Hr-Anneal	445.54	442.86	-2.6839
92	50	Biased-84Hr-Anneal	444.65	442.8	-1.8566
100	0	CORRELATION	444.98	445.07	0.0909
101	0	CORRELATION	447.39	446.69	-0.6992
102	0	CORRELATION	447.17	449.03	1.8611
103	0	CORRELATION	443.36	445.07	1.7139
104	0	CORRELATION	446.41	446.36	-0.0498

TID vs Post - Pre Exposure Delta

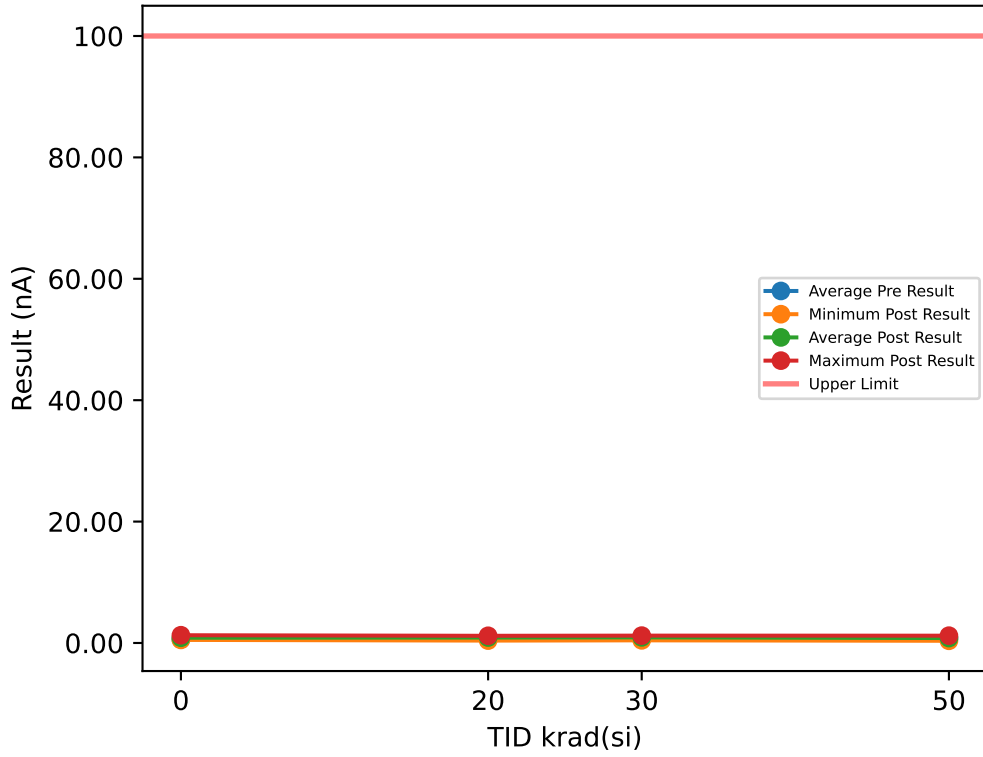


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	443.36	445.86	447.39	1.6873	445.07	446.44	449.03	1.6212	-0.6992	0.58338	1.8611	1.1401
20	445.07	446.2	450.3	1.577	443.12	445.48	451.24	2.2768	-3.2468	-0.71882	0.94	1.3075
30	444.42	446.48	449.29	1.4505	441.5	444.25	447.66	2.0609	-4.16	-2.2346	-0.3245	1.0493
50	444.16	447.08	450.3	1.9989	442.8	444.31	446.69	1.4602	-5.6669	-2.766	0.9739	1.9997

Device Test: 15.1 LEAK|UNPOWERED/EN/0////@EN_LKG_CURR

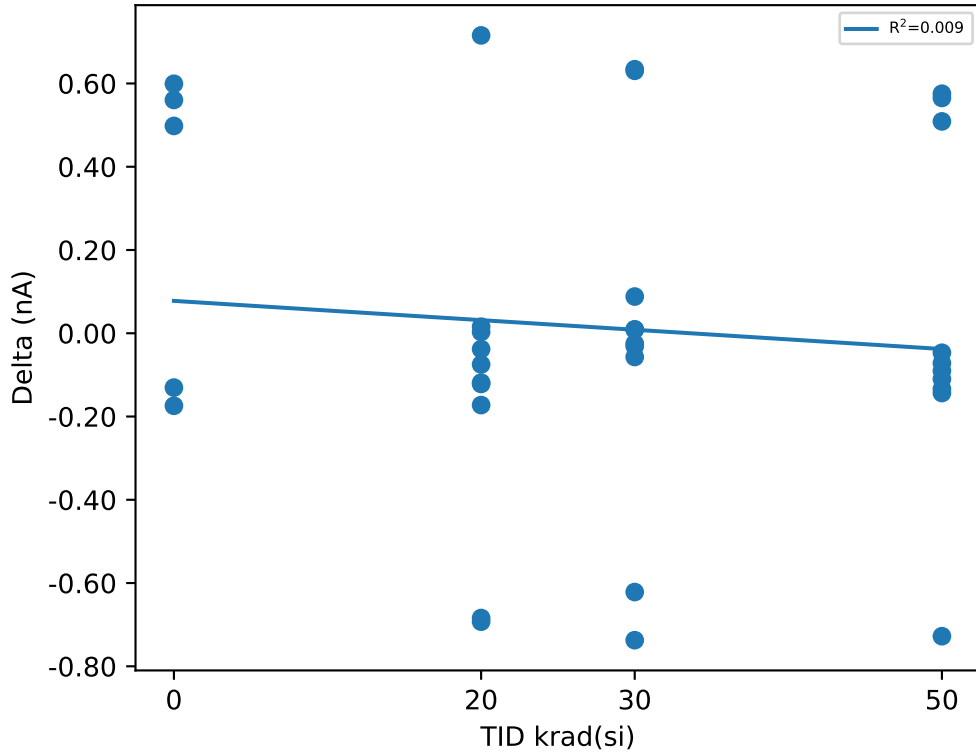
TID vs Result Stats



Test Results (Upper Limit = 100.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0618	0.94	-0.1218
2	20	Biased	1.131	1.093	-0.038
3	20	Biased	0.4689	0.472	0.0031
4	20	Biased	1.1656	1.047	-0.1186
5	20	Biased	1.2491	1.1742	-0.0749
6	20	Unbiased	1.0748	0.3908	-0.684
7	20	Unbiased	0.422	1.1375	0.7155
8	20	Unbiased	1.2062	1.0337	-0.1725
9	20	Unbiased	1.1804	0.4876	-0.6928
10	20	Unbiased	1.1685	1.1843	0.0158
11	30	Biased	0.4876	1.118	0.6304
12	30	Biased	1.1968	0.4595	-0.7373
13	30	Biased	1.1242	1.2124	0.0882
14	30	Biased	1.106	1.1149	0.0089
15	30	Biased	0.5157	0.4845	-0.0312
16	30	Unbiased	1.1999	1.175	-0.0249
17	30	Unbiased	1.0431	1.0524	0.0093
18	30	Unbiased	1.0561	0.4345	-0.6216
19	30	Unbiased	0.4689	1.1032	0.6343
20	30	Unbiased	1.1687	1.1117	-0.057
26	50	Unbiased	1.1373	1.0274	-0.1099
27	50	Unbiased	0.4782	0.4314	-0.0468
28	50	Unbiased	1.1906	1.047	-0.1436
29	50	Unbiased	1.1305	1.0587	-0.0718
30	50	Unbiased	1.0998	0.3721	-0.7277
88	50	Biased-84Hr-Anneal	0.4499	0.9588	0.5089
89	50	Biased-84Hr-Anneal	0.4499	0.3596	-0.0903
90	50	Biased-84Hr-Anneal	0.6277	1.2031	0.5754
91	50	Biased-84Hr-Anneal	0.6277	1.1929	0.5652
92	50	Biased-84Hr-Anneal	0.5899	0.4564	-0.1335
100	0	CORRELATION	0.6368	0.5063	-0.1305
101	0	CORRELATION	0.7176	1.278	0.5604
102	0	CORRELATION	0.4	0.9993	0.5993
103	0	CORRELATION	0.6836	0.5094	-0.1742
104	0	CORRELATION	0.5427	1.0407	0.498

TID vs Post - Pre Exposure Delta

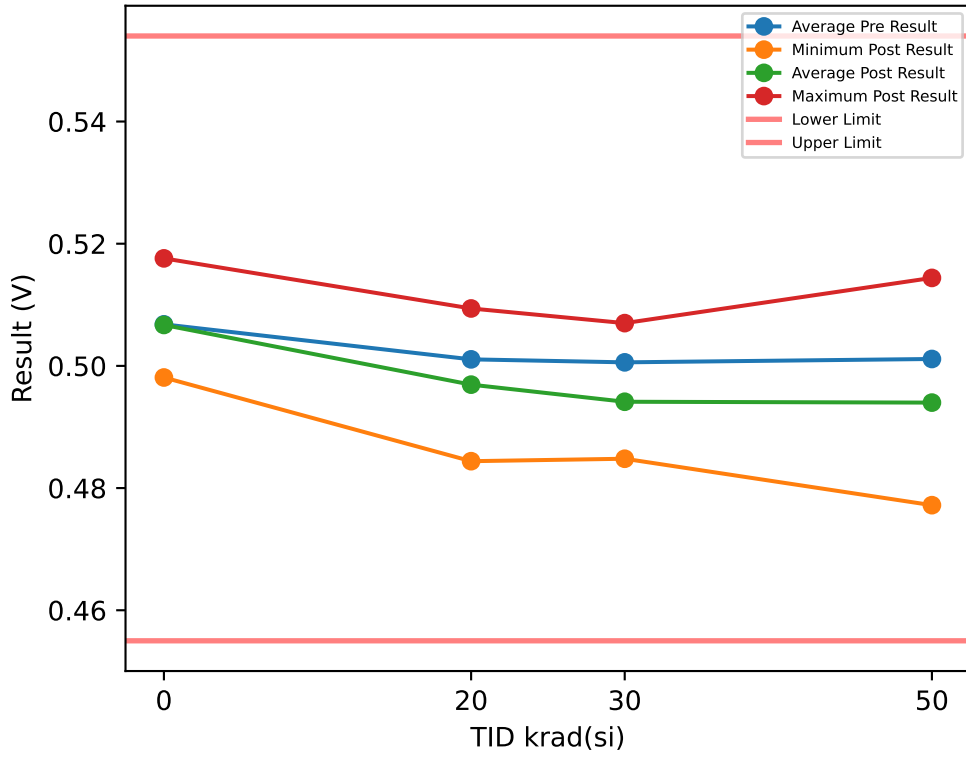


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.59614	0.7176	0.12785	0.5063	0.86674	1.278	0.34445	-0.1742	0.2706	0.5993	0.38809
20	0.422	1.0128	1.2491	0.30441	0.3908	0.89601	1.1843	0.31678	-0.6928	-0.11682	0.7155	0.39289
30	0.4689	0.9367	1.1999	0.31232	0.4345	0.92661	1.2124	0.32533	-0.7373	-0.01009	0.6343	0.43989
50	0.4499	0.77815	1.1906	0.31848	0.3596	0.81074	1.2031	0.3577	-0.7277	0.03259	0.5754	0.40749

Device Test: 15.10 THRESHOLD|FALL/EN/12////@EN_VTH_FALLING

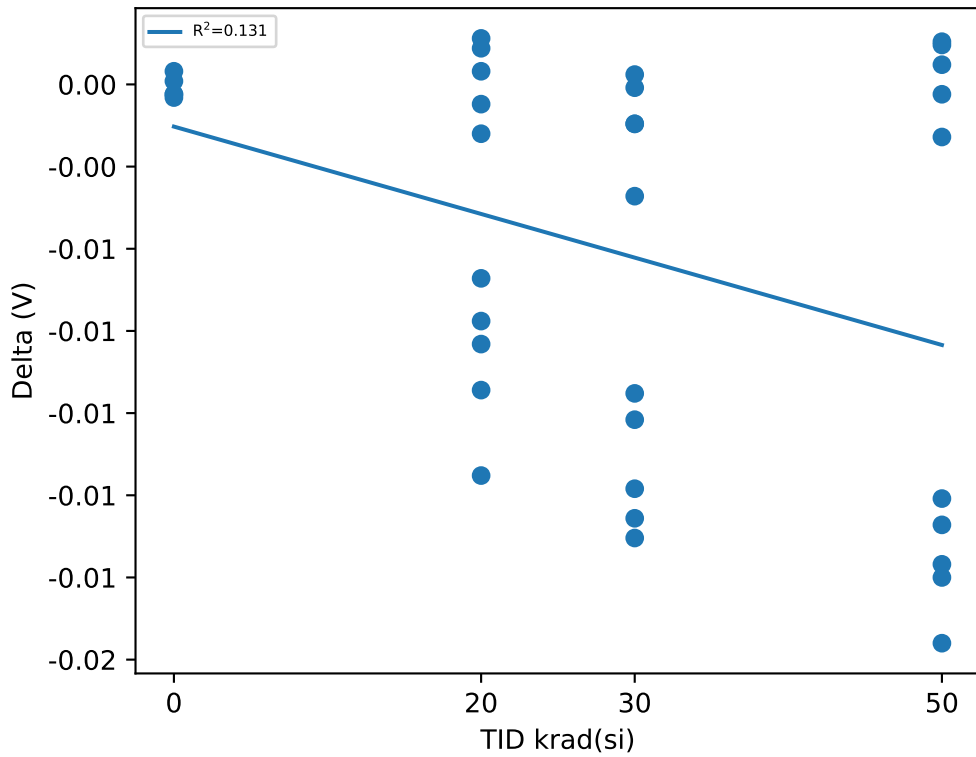
TID vs Result Stats



Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5019	0.4947	-0.0072
2	20	Biased	0.5031	0.4938	-0.0093
3	20	Biased	0.4963	0.4844	-0.0119
4	20	Biased	0.5067	0.5008	-0.0059
5	20	Biased	0.5116	0.5037	-0.0079
6	20	Unbiased	0.4972	0.4966	-0.0006
7	20	Unbiased	0.4969	0.4973	0.0004
8	20	Unbiased	0.4933	0.4947	0.0014
9	20	Unbiased	0.5109	0.5094	-0.0015
10	20	Unbiased	0.4928	0.4939	0.0011
11	30	Biased	0.5054	0.4916	-0.0138
12	30	Biased	0.5011	0.4888	-0.0123
13	30	Biased	0.495	0.4848	-0.0102
14	30	Biased	0.4963	0.4869	-0.0094
15	30	Biased	0.5076	0.4944	-0.0132
16	30	Unbiased	0.4889	0.4855	-0.0034
17	30	Unbiased	0.5044	0.5047	0.0003
18	30	Unbiased	0.5044	0.5032	-0.0012
19	30	Unbiased	0.5082	0.507	-0.0012
20	30	Unbiased	0.4945	0.4944	-0.0001
26	50	Unbiased	0.5131	0.5144	0.0013
27	50	Unbiased	0.5035	0.5047	0.0012
28	50	Unbiased	0.5011	0.5008	-0.0003
29	50	Unbiased	0.4888	0.4872	-0.0016
30	50	Unbiased	0.4885	0.4891	0.0006
88	50	Biased-84Hr-Anneal	0.4942	0.4772	-0.017
89	50	Biased-84Hr-Anneal	0.5092	0.4966	-0.0126
90	50	Biased-84Hr-Anneal	0.5092	0.4942	-0.015
91	50	Biased-84Hr-Anneal	0.5055	0.4909	-0.0146
92	50	Biased-84Hr-Anneal	0.4982	0.4848	-0.0134
100	0	CORRELATION	0.507	0.5066	-0.0004
101	0	CORRELATION	0.5179	0.5176	-0.0003
102	0	CORRELATION	0.498	0.4981	0.0001
103	0	CORRELATION	0.5082	0.5079	-0.0003
104	0	CORRELATION	0.5029	0.5033	0.0004

TID vs Post - Pre Exposure Delta

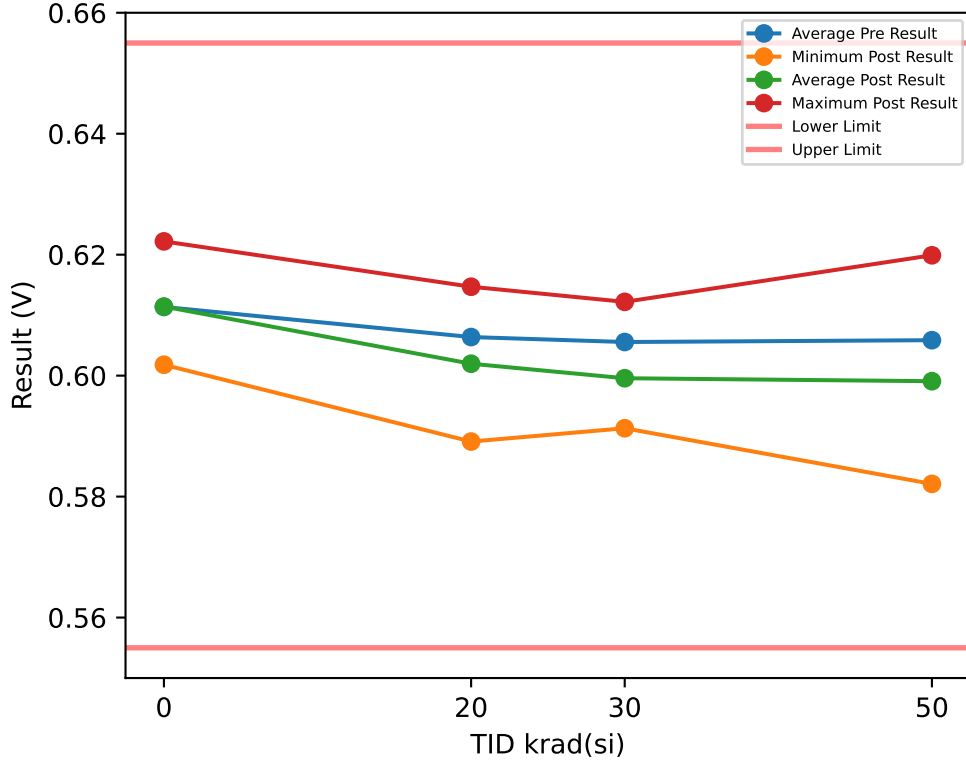


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.498	0.5068	0.5179	0.00738	0.4981	0.5067	0.5176	0.0071725	-0.0004	-0.0001	0.0004	0.00033912
20	0.4928	0.50107	0.5116	0.0068953	0.4844	0.49693	0.5094	0.0066873	-0.0119	-0.00414	0.0014	0.00485
30	0.4889	0.50058	0.5082	0.0065224	0.4848	0.49413	0.507	0.0082218	-0.0138	-0.00645	0.0003	0.0058394
50	0.4885	0.50113	0.5131	0.0086049	0.4772	0.49399	0.5144	0.0107	-0.017	-0.00714	0.0013	0.0079009

Device Test: 15.12 THRESHOLD|RISE/EN/14////@EN_VTH_RISING

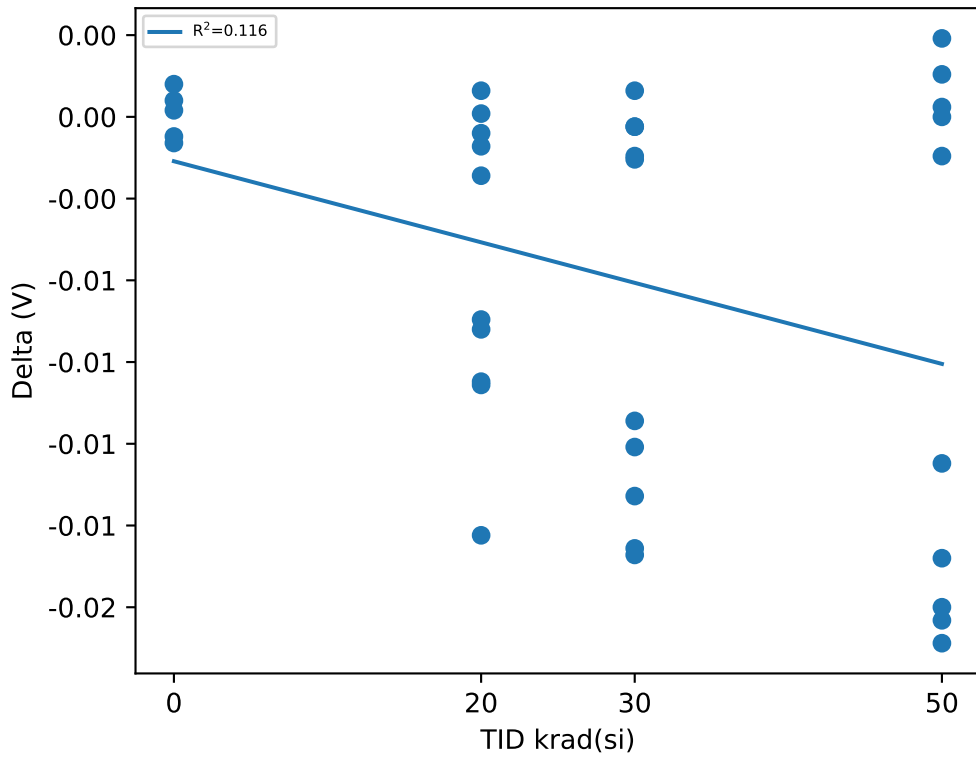
TID vs Result Stats



Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6074	0.6009	-0.0065
2	20	Biased	0.6075	0.5993	-0.0082
3	20	Biased	0.6019	0.5891	-0.0128
4	20	Biased	0.6122	0.606	-0.0062
5	20	Biased	0.6168	0.6087	-0.0081
6	20	Unbiased	0.6031	0.6022	-0.0009
7	20	Unbiased	0.6015	0.601	-0.0005
8	20	Unbiased	0.5985	0.5993	0.0008
9	20	Unbiased	0.6165	0.6147	-0.0018
10	20	Unbiased	0.5984	0.5985	0.0001
11	30	Biased	0.61	0.5968	-0.0132
12	30	Biased	0.6057	0.5941	-0.0116
13	30	Biased	0.6006	0.5913	-0.0093
14	30	Biased	0.6022	0.5921	-0.0101
15	30	Biased	0.6131	0.5997	-0.0134
16	30	Unbiased	0.5926	0.5913	-0.0013
17	30	Unbiased	0.6102	0.6099	-0.0003
18	30	Unbiased	0.6084	0.6081	-0.0003
19	30	Unbiased	0.6134	0.6122	-0.0012
20	30	Unbiased	0.5994	0.6002	0.0008
26	50	Unbiased	0.6175	0.6199	0.0024
27	50	Unbiased	0.6094	0.6094	0
28	50	Unbiased	0.6069	0.6057	-0.0012
29	50	Unbiased	0.5918	0.5921	0.0003
30	50	Unbiased	0.5934	0.5947	0.0013
88	50	Biased-84Hr-Anneal	0.5982	0.5821	-0.0161
89	50	Biased-84Hr-Anneal	0.6125	0.6019	-0.0106
90	50	Biased-84Hr-Anneal	0.6147	0.5997	-0.015
91	50	Biased-84Hr-Anneal	0.611	0.5956	-0.0154
92	50	Biased-84Hr-Anneal	0.6032	0.5897	-0.0135
100	0	CORRELATION	0.6107	0.6112	0.0005
101	0	CORRELATION	0.6228	0.6222	-0.0006
102	0	CORRELATION	0.6026	0.6018	-0.0008
103	0	CORRELATION	0.6132	0.6134	0.0002
104	0	CORRELATION	0.6075	0.6085	0.001

TID vs Post - Pre Exposure Delta

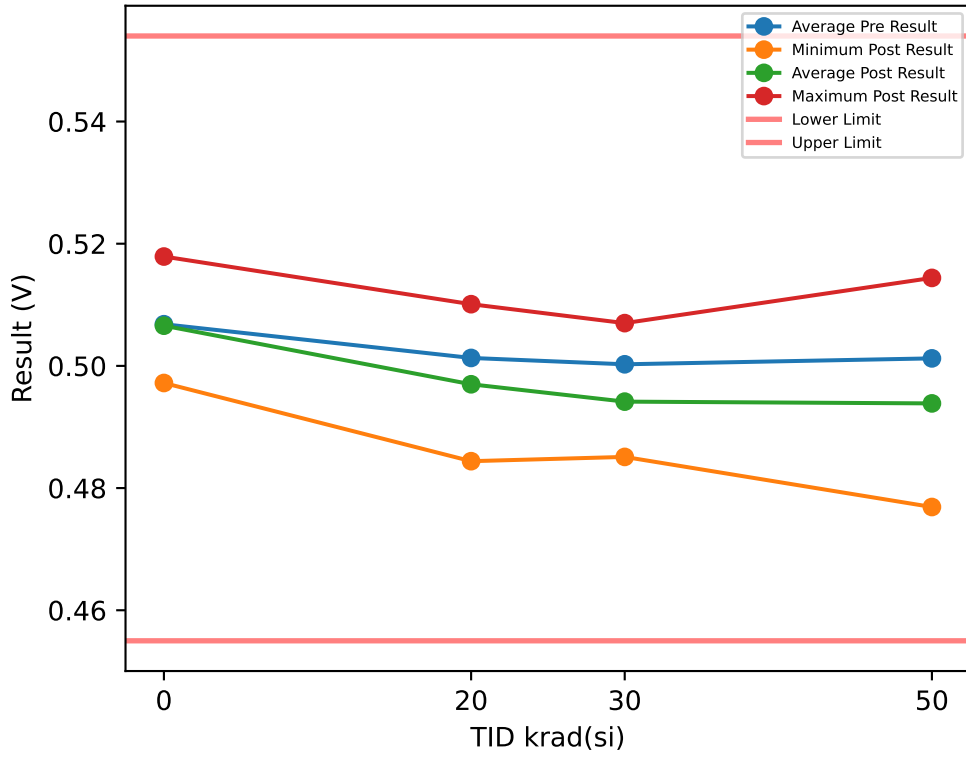


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6026	0.61136	0.6228	0.0075222	0.6018	0.61142	0.6222	0.0074372	-0.0008	6e-05	0.001	0.00075366
20	0.5984	0.60638	0.6168	0.0068926	0.5891	0.60197	0.6147	0.0068123	-0.0128	-0.00441	0.0008	0.0045686
30	0.5926	0.60556	0.6134	0.0067449	0.5913	0.59957	0.6122	0.0079553	-0.0134	-0.00599	0.0008	0.0059815
50	0.5918	0.60586	0.6175	0.0089222	0.5821	0.59908	0.6199	0.010793	-0.0161	-0.00678	0.0024	0.0079252

Device Test: 15.13 THRESHOLD|FALL/EN/14////@EN_VTH_FALLING

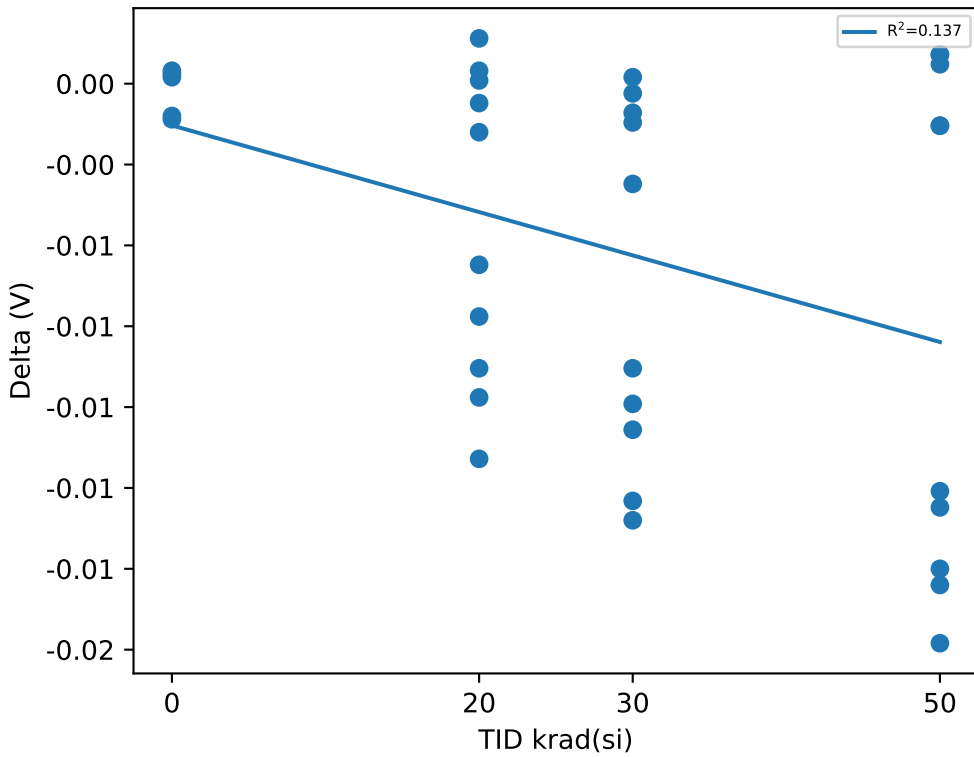
TID vs Result Stats



Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5019	0.4947	-0.0072
2	20	Biased	0.5031	0.4934	-0.0097
3	20	Biased	0.496	0.4844	-0.0116
4	20	Biased	0.507	0.5014	-0.0056
5	20	Biased	0.5119	0.5031	-0.0088
6	20	Unbiased	0.4978	0.4972	-0.0006
7	20	Unbiased	0.4972	0.4973	0.0001
8	20	Unbiased	0.493	0.4944	0.0014
9	20	Unbiased	0.5116	0.5101	-0.0015
10	20	Unbiased	0.4935	0.4939	0.0004
11	30	Biased	0.5044	0.4909	-0.0135
12	30	Biased	0.4998	0.4891	-0.0107
13	30	Biased	0.495	0.4851	-0.0099
14	30	Biased	0.4963	0.4875	-0.0088
15	30	Biased	0.5076	0.4947	-0.0129
16	30	Unbiased	0.4886	0.4855	-0.0031
17	30	Unbiased	0.5047	0.5044	-0.0003
18	30	Unbiased	0.5041	0.5029	-0.0012
19	30	Unbiased	0.5079	0.507	-0.0009
20	30	Unbiased	0.4942	0.4944	0.0002
26	50	Unbiased	0.5135	0.5144	0.0009
27	50	Unbiased	0.5038	0.5047	0.0009
28	50	Unbiased	0.5014	0.5001	-0.0013
29	50	Unbiased	0.4888	0.4875	-0.0013
30	50	Unbiased	0.4885	0.4891	0.0006
88	50	Biased-84Hr-Anneal	0.4942	0.4769	-0.0173
89	50	Biased-84Hr-Anneal	0.5092	0.4966	-0.0126
90	50	Biased-84Hr-Anneal	0.5092	0.4942	-0.015
91	50	Biased-84Hr-Anneal	0.5055	0.49	-0.0155
92	50	Biased-84Hr-Anneal	0.4982	0.4851	-0.0131
100	0	CORRELATION	0.5064	0.5066	0.0002
101	0	CORRELATION	0.5176	0.5179	0.0003
102	0	CORRELATION	0.4983	0.4972	-0.0011
103	0	CORRELATION	0.5089	0.5079	-0.001
104	0	CORRELATION	0.5029	0.5033	0.0004

TID vs Post - Pre Exposure Delta

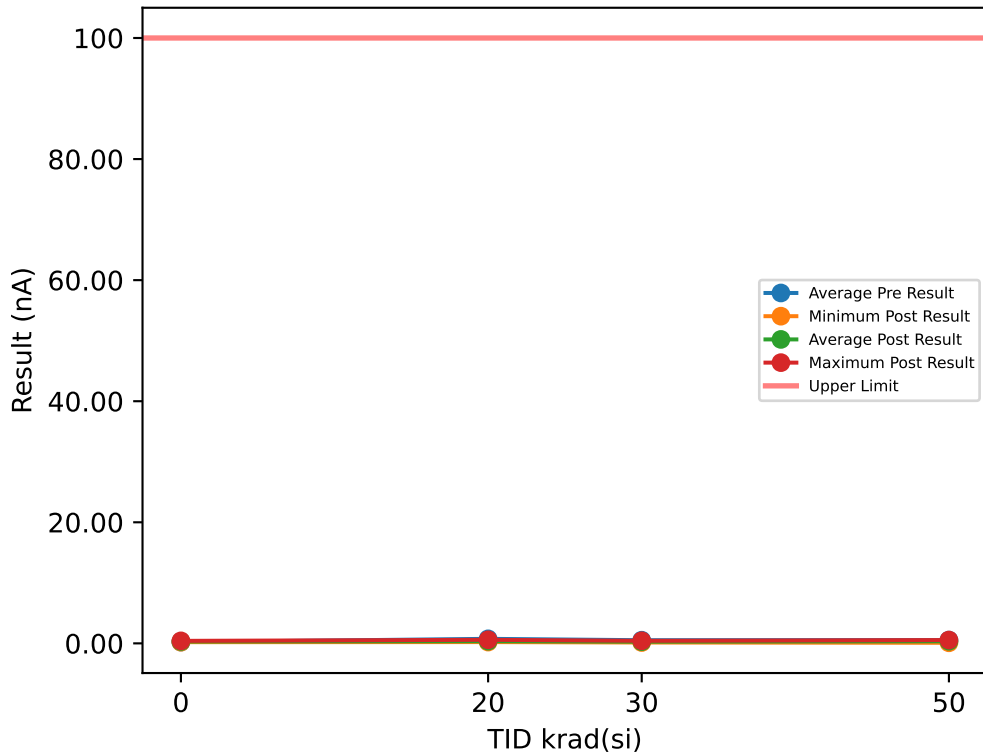


Test Statistics (V)

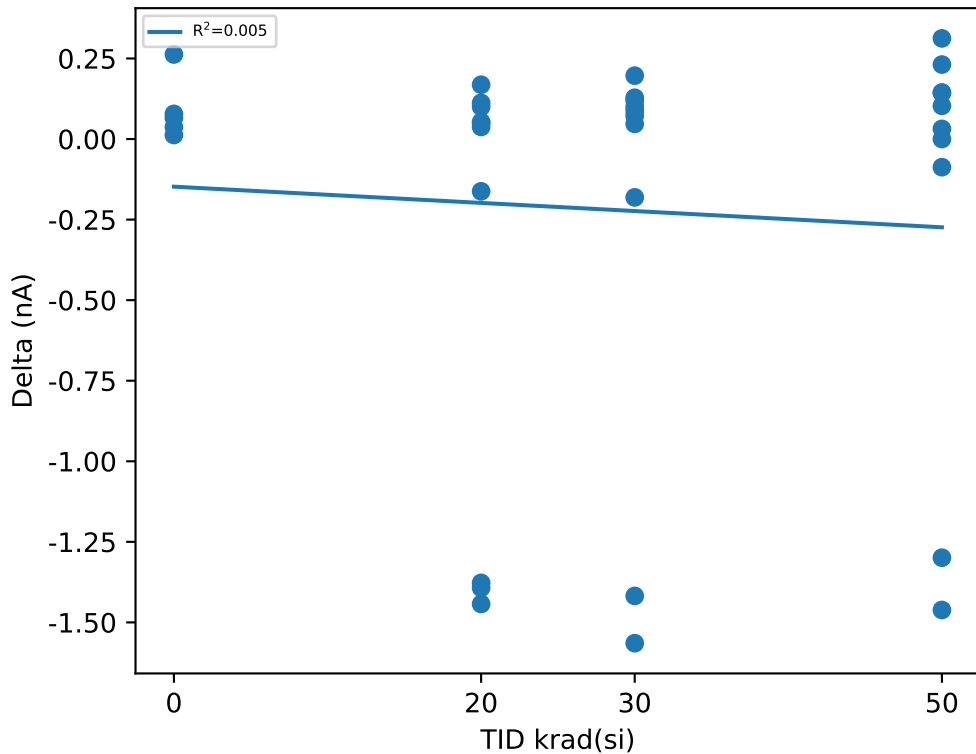
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4983	0.50682	0.5176	0.0072227	0.4972	0.50658	0.5179	0.0075602	-0.0011	-0.00024	0.0004	0.00074364
20	0.493	0.5013	0.5119	0.0070033	0.4844	0.49699	0.5101	0.006845	-0.0116	-0.00431	0.0014	0.0048105
30	0.4886	0.50026	0.5079	0.0064986	0.4851	0.49415	0.507	0.0080562	-0.0135	-0.00611	0.0002	0.0055505
50	0.4885	0.50123	0.5135	0.0086771	0.4769	0.49386	0.5144	0.010689	-0.0173	-0.00737	0.0009	0.0078677

Device Test: 15.15 LEAK|POWERED/EN/14////@EN_LKG_CURR

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Upper Limit = 100.0 (nA))

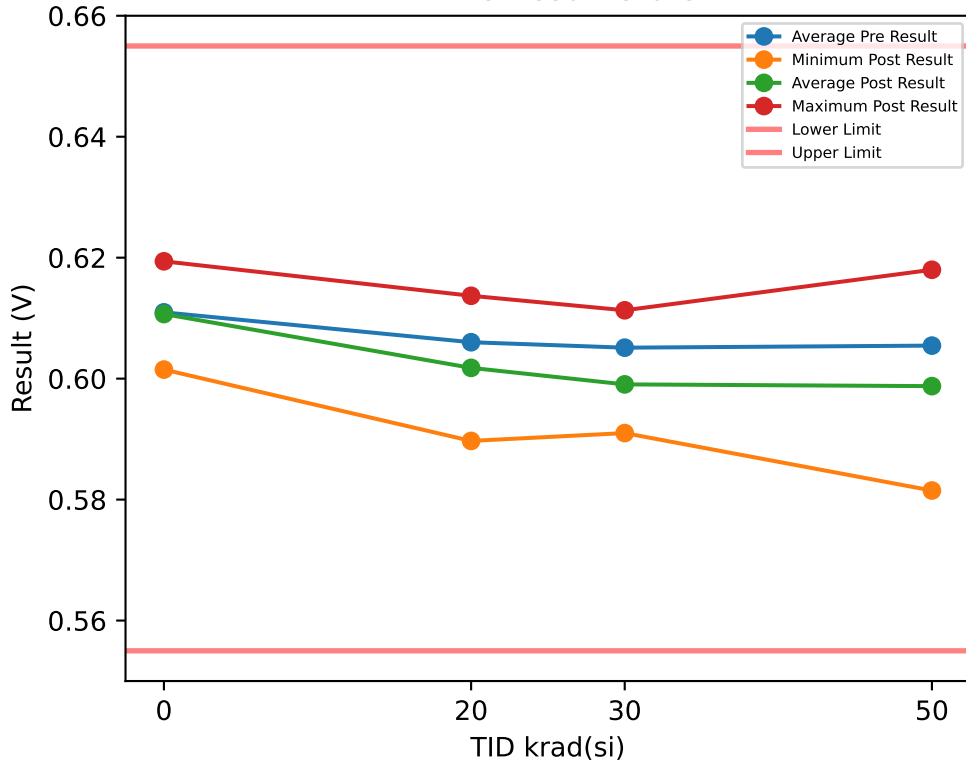
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.3247	0.437	0.1123
2	20	Biased	1.8112	0.3684	-1.4428
3	20	Biased	0.2591	0.2966	0.0375
4	20	Biased	0.256	0.4245	0.1685
5	20	Biased	0.487	0.5869	0.0999
6	20	Unbiased	1.7175	0.3247	-1.3928
7	20	Unbiased	0.2529	0.3028	0.0499
8	20	Unbiased	0.2528	0.3059	0.0531
9	20	Unbiased	0.3746	0.2123	-0.1623
10	20	Unbiased	1.7425	0.3652	-1.3773
11	30	Biased	0.1155	0.3122	0.1967
12	30	Biased	0.0531	0.1405	0.0874
13	30	Biased	0.4558	0.2747	-0.1811
14	30	Biased	1.808	0.3902	-1.4178
15	30	Biased	0.1093	0.2279	0.1186
16	30	Unbiased	0.1654	0.2653	0.0999
17	30	Unbiased	0.3777	0.4246	0.0469
18	30	Unbiased	1.7643	0.1998	-1.5645
19	30	Unbiased	0.1842	0.256	0.0718
20	30	Unbiased	0.181	0.3091	0.1281
26	50	Unbiased	1.73	0.4308	-1.2992
27	50	Unbiased	0.1061	0.3372	0.2311
28	50	Unbiased	0.1654	0.2684	0.103
29	50	Unbiased	0.3746	0.3746	0
30	50	Unbiased	1.6987	0.2373	-1.4614
88	50	Biased-84Hr-Anneal	0.1903	0.5026	0.3123
89	50	Biased-84Hr-Anneal	0.1903	0.334	0.1437
90	50	Biased-84Hr-Anneal	0.3431	0.3746	0.0315
91	50	Biased-84Hr-Anneal	0.4023	0.5463	0.144
92	50	Biased-84Hr-Anneal	0.1811	0.0937	-0.0874
100	0	CORRELATION	0.1967	0.2622	0.0655
101	0	CORRELATION	0.3372	0.3746	0.0374
102	0	CORRELATION	0.1497	0.4121	0.2624
103	0	CORRELATION	0.2217	0.2997	0.078
104	0	CORRELATION	0.1842	0.1967	0.0125

Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.1497	0.2179	0.3372	0.07156	0.1967	0.30906	0.4121	0.086344	0.0125	0.09116	0.2624	0.099036
20	0.2528	0.74783	1.8112	0.7006	0.2123	0.36243	0.5869	0.10268	-1.4428	-0.3854	0.1685	0.70846
30	0.0531	0.52143	1.808	0.67785	0.1405	0.28003	0.4246	0.084567	-1.5645	-0.2414	0.1967	0.66683
50	0.1061	0.53819	1.73	0.62767	0.0937	0.34995	0.5463	0.13125	-1.4614	-0.18824	0.3123	0.63952

Device Test: 15.3 THRESHOLD|RISE/EN/4.5////@EN_VTH_RISING

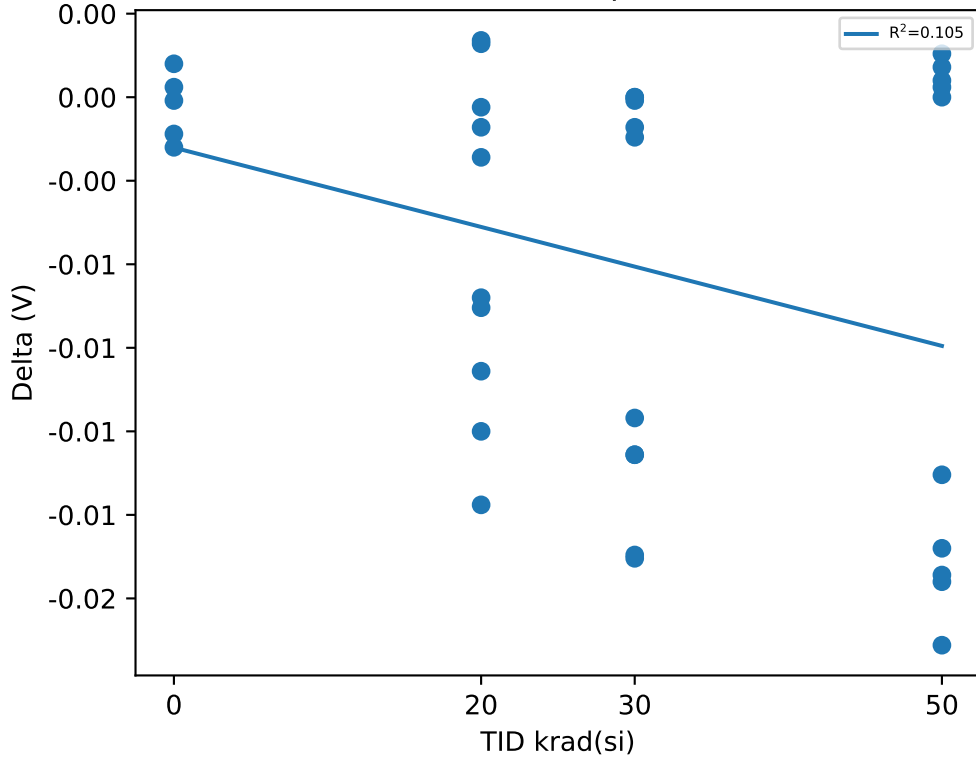
TID vs Result Stats



Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6065	0.6002	-0.0063
2	20	Biased	0.6078	0.5996	-0.0082
3	20	Biased	0.6019	0.5897	-0.0122
4	20	Biased	0.611	0.605	-0.006
5	20	Biased	0.6165	0.6065	-0.01
6	20	Unbiased	0.6031	0.6022	-0.0009
7	20	Unbiased	0.6019	0.6016	-0.0003
8	20	Unbiased	0.5979	0.5996	0.0017
9	20	Unbiased	0.6155	0.6137	-0.0018
10	20	Unbiased	0.5981	0.5997	0.0016
11	30	Biased	0.6103	0.5965	-0.0138
12	30	Biased	0.6038	0.5931	-0.0107
13	30	Biased	0.6006	0.591	-0.0096
14	30	Biased	0.6025	0.5918	-0.0107
15	30	Biased	0.6131	0.5994	-0.0137
16	30	Unbiased	0.5922	0.5913	-0.0009
17	30	Unbiased	0.6099	0.6099	0
18	30	Unbiased	0.6072	0.6072	0
19	30	Unbiased	0.6125	0.6113	-0.0012
20	30	Unbiased	0.5991	0.599	-0.0001
26	50	Unbiased	0.6175	0.618	0.0005
27	50	Unbiased	0.6081	0.6094	0.0013
28	50	Unbiased	0.6057	0.606	0.0003
29	50	Unbiased	0.594	0.5949	0.0009
30	50	Unbiased	0.5941	0.5941	0
88	50	Biased-84Hr-Anneal	0.5979	0.5815	-0.0164
89	50	Biased-84Hr-Anneal	0.6125	0.6012	-0.0113
90	50	Biased-84Hr-Anneal	0.6122	0.5979	-0.0143
91	50	Biased-84Hr-Anneal	0.6097	0.5952	-0.0145
92	50	Biased-84Hr-Anneal	0.6029	0.5894	-0.0135
100	0	CORRELATION	0.6116	0.6115	-0.0001
101	0	CORRELATION	0.6209	0.6194	-0.0015
102	0	CORRELATION	0.6026	0.6015	-0.0011
103	0	CORRELATION	0.6125	0.6128	0.0003
104	0	CORRELATION	0.6072	0.6082	0.001

TID vs Post - Pre Exposure Delta

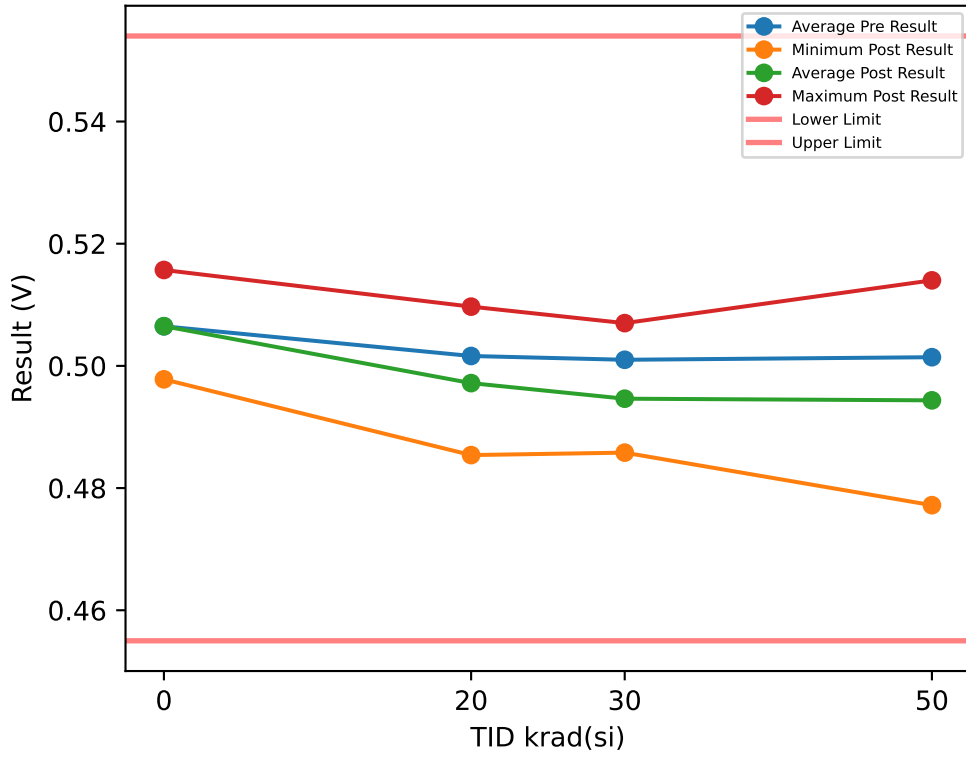


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6026	0.61096	0.6209	0.006812	0.6015	0.61068	0.6194	0.0065503	-0.0015	-0.00028	0.001	0.0010208
20	0.5979	0.60602	0.6165	0.0066586	0.5897	0.60178	0.6137	0.006121	-0.0122	-0.00424	0.0017	0.0049619
30	0.5922	0.60512	0.6131	0.0067029	0.591	0.59905	0.6113	0.0078434	-0.0138	-0.00607	0	0.0060835
50	0.594	0.60546	0.6175	0.0080901	0.5815	0.59876	0.618	0.010421	-0.0164	-0.0067	0.0013	0.0078001

Device Test: 15.4 THRESHOLD|FALL/EN/4.5////@EN_VTH_FALLING

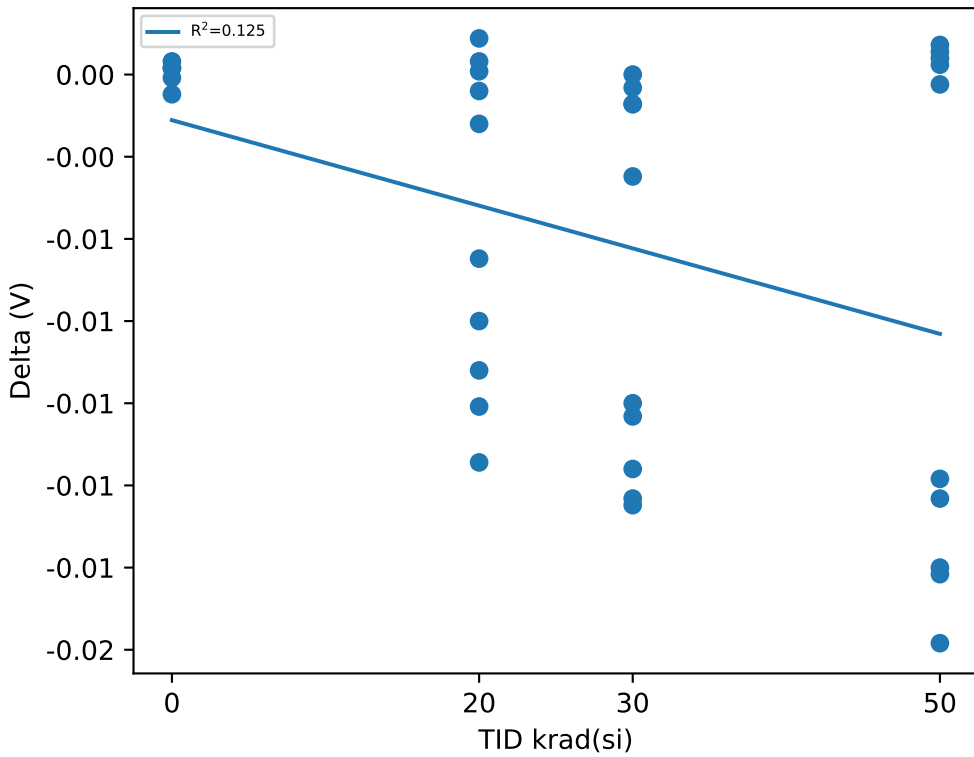
TID vs Result Stats



Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5031	0.4956	-0.0075
2	20	Biased	0.5035	0.4934	-0.0101
3	20	Biased	0.4972	0.4854	-0.0118
4	20	Biased	0.5064	0.5008	-0.0056
5	20	Biased	0.5112	0.5022	-0.009
6	20	Unbiased	0.4981	0.4976	-0.0005
7	20	Unbiased	0.4972	0.4976	0.0004
8	20	Unbiased	0.4939	0.495	0.0011
9	20	Unbiased	0.5112	0.5097	-0.0015
10	20	Unbiased	0.4944	0.4945	0.0001
11	30	Biased	0.5054	0.4925	-0.0129
12	30	Biased	0.5011	0.4891	-0.012
13	30	Biased	0.4962	0.4858	-0.0104
14	30	Biased	0.4978	0.4878	-0.01
15	30	Biased	0.5085	0.4954	-0.0131
16	30	Unbiased	0.4895	0.4864	-0.0031
17	30	Unbiased	0.505	0.505	0
18	30	Unbiased	0.5035	0.5026	-0.0009
19	30	Unbiased	0.5079	0.507	-0.0009
20	30	Unbiased	0.4951	0.4947	-0.0004
26	50	Unbiased	0.5135	0.514	0.0005
27	50	Unbiased	0.5038	0.5047	0.0009
28	50	Unbiased	0.5014	0.5011	-0.0003
29	50	Unbiased	0.4897	0.49	0.0003
30	50	Unbiased	0.4894	0.4901	0.0007
88	50	Biased-84Hr-Anneal	0.4945	0.4772	-0.0173
89	50	Biased-84Hr-Anneal	0.5089	0.4966	-0.0123
90	50	Biased-84Hr-Anneal	0.5089	0.4939	-0.015
91	50	Biased-84Hr-Anneal	0.5055	0.4903	-0.0152
92	50	Biased-84Hr-Anneal	0.4986	0.4857	-0.0129
100	0	CORRELATION	0.507	0.5069	-0.0001
101	0	CORRELATION	0.5163	0.5157	-0.0006
102	0	CORRELATION	0.4976	0.4978	0.0002
103	0	CORRELATION	0.5086	0.5088	0.0002
104	0	CORRELATION	0.5029	0.5033	0.0004

TID vs Post - Pre Exposure Delta

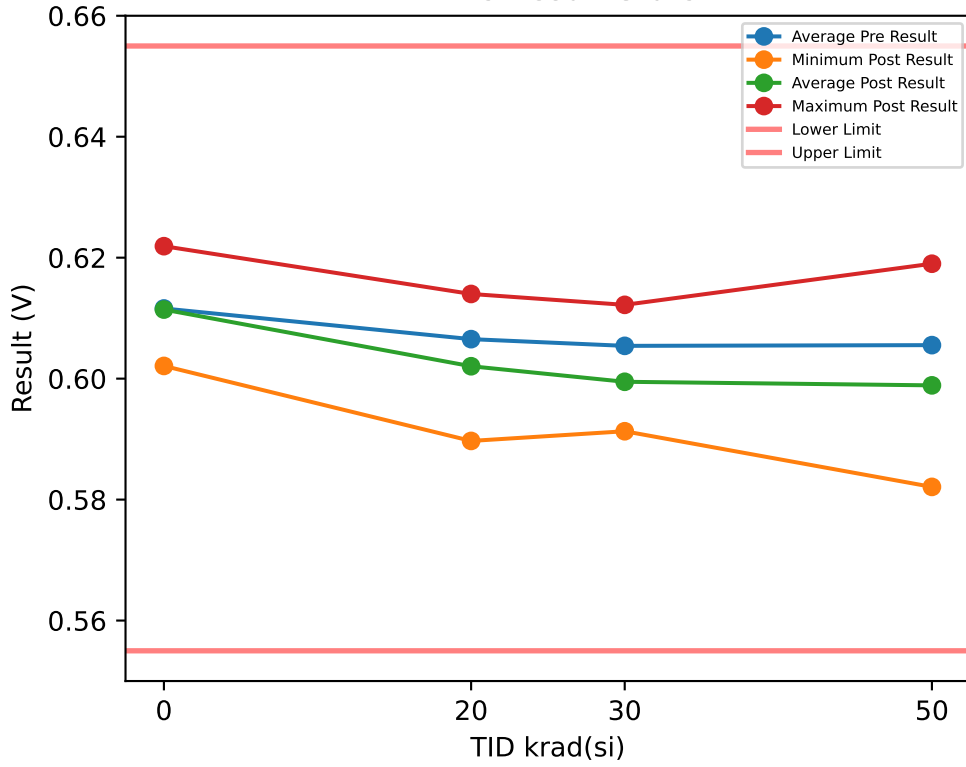


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4976	0.50648	0.5163	0.0069438	0.4978	0.5065	0.5157	0.0066336	-0.0006	2e-05	0.0004	0.00038987
20	0.4939	0.50162	0.5112	0.0064577	0.4854	0.49718	0.5097	0.0063499	-0.0118	-0.00444	0.0011	0.0049058
30	0.4895	0.501	0.5085	0.0061987	0.4858	0.49463	0.507	0.0078326	-0.0131	-0.00637	0	0.005733
50	0.4894	0.50142	0.5135	0.0082853	0.4772	0.49436	0.514	0.010362	-0.0173	-0.00706	0.0009	0.0080022

Device Test: 15.6 THRESHOLD|RISE/EN/5/////@EN_VTH_RISING

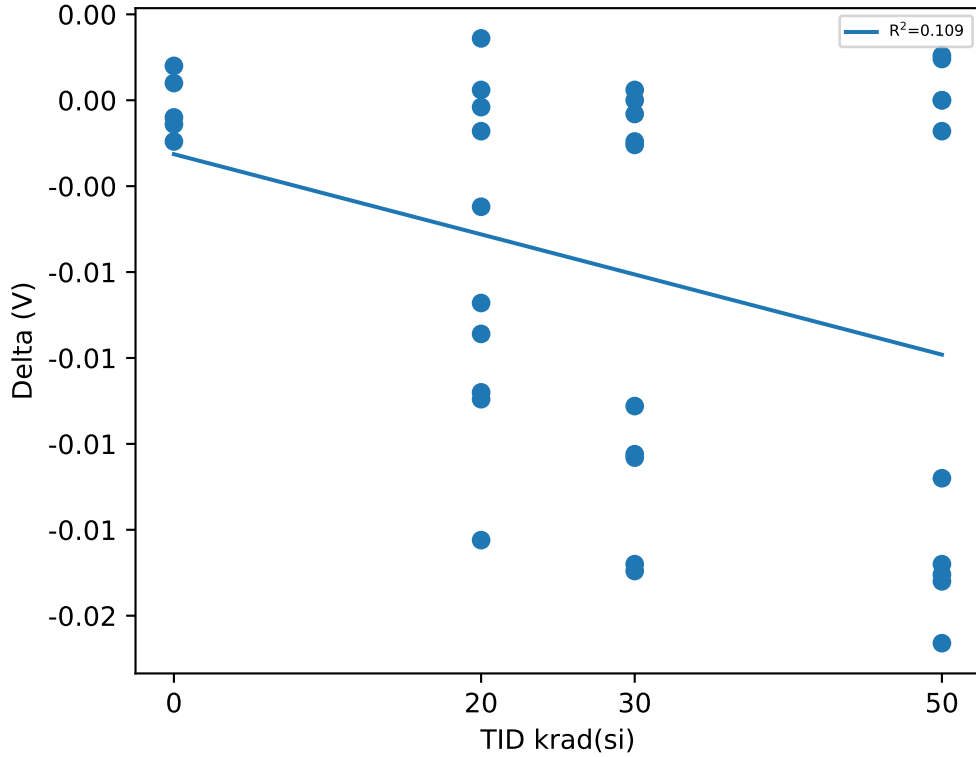
TID vs Result Stats



Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6077	0.6009	-0.0068
2	20	Biased	0.6075	0.599	-0.0085
3	20	Biased	0.6025	0.5897	-0.0128
4	20	Biased	0.6119	0.606	-0.0059
5	20	Biased	0.6174	0.6087	-0.0087
6	20	Unbiased	0.6031	0.6022	-0.0009
7	20	Unbiased	0.6022	0.6025	0.0003
8	20	Unbiased	0.5975	0.5993	0.0018
9	20	Unbiased	0.6171	0.614	-0.0031
10	20	Unbiased	0.5984	0.5982	-0.0002
11	30	Biased	0.6103	0.5968	-0.0135
12	30	Biased	0.6047	0.5944	-0.0103
13	30	Biased	0.6002	0.5913	-0.0089
14	30	Biased	0.6022	0.5918	-0.0104
15	30	Biased	0.6134	0.5997	-0.0137
16	30	Unbiased	0.5926	0.5913	-0.0013
17	30	Unbiased	0.6096	0.6099	0.0003
18	30	Unbiased	0.6081	0.6081	0
19	30	Unbiased	0.6134	0.6122	-0.0012
20	30	Unbiased	0.5997	0.5993	-0.0004
26	50	Unbiased	0.6178	0.619	0.0012
27	50	Unbiased	0.6094	0.6094	0
28	50	Unbiased	0.6066	0.6057	-0.0009
29	50	Unbiased	0.5921	0.5921	0
30	50	Unbiased	0.5934	0.5947	0.0013
88	50	Biased-84Hr-Anneal	0.5979	0.5821	-0.0158
89	50	Biased-84Hr-Anneal	0.6125	0.6015	-0.011
90	50	Biased-84Hr-Anneal	0.6125	0.5985	-0.014
91	50	Biased-84Hr-Anneal	0.61	0.5962	-0.0138
92	50	Biased-84Hr-Anneal	0.6032	0.5897	-0.0135
100	0	CORRELATION	0.6119	0.6112	-0.0007
101	0	CORRELATION	0.6231	0.6219	-0.0012
102	0	CORRELATION	0.6026	0.6021	-0.0005
103	0	CORRELATION	0.6129	0.6134	0.0005
104	0	CORRELATION	0.6075	0.6085	0.001

TID vs Post - Pre Exposure Delta

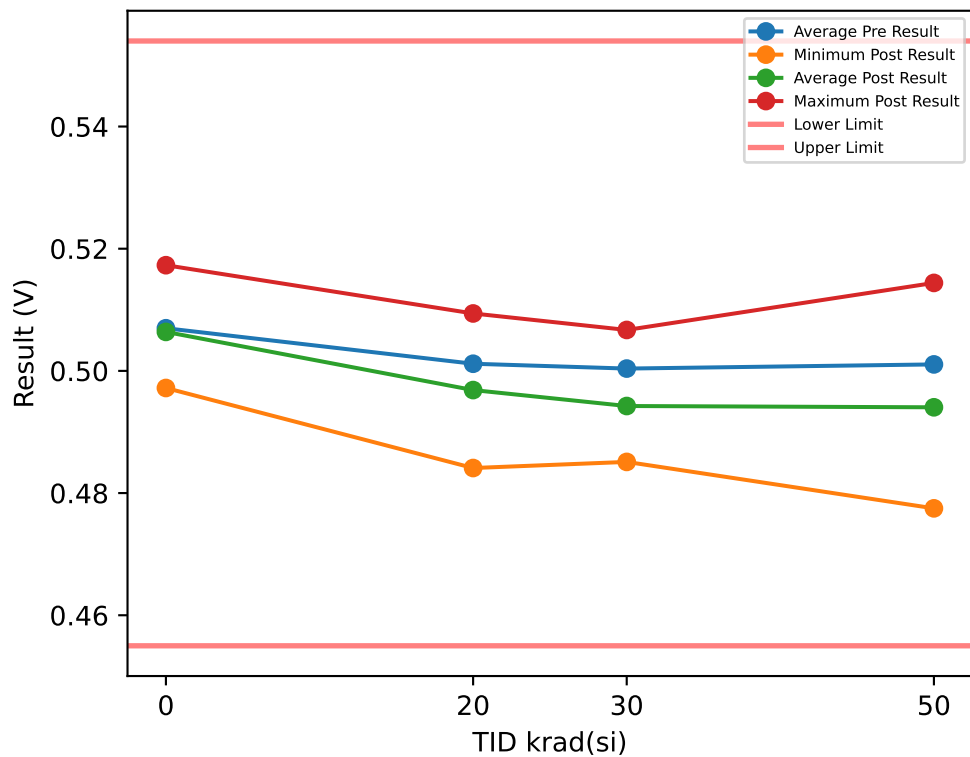


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6026	0.6116	0.6231	0.0076131	0.6021	0.61142	0.6219	0.0072317	-0.0012	-0.00018	0.001	0.00090388
20	0.5975	0.60653	0.6174	0.0071135	0.5897	0.60205	0.614	0.0065692	-0.0128	-0.00448	0.0018	0.0047833
30	0.5926	0.60542	0.6134	0.006758	0.5913	0.59948	0.6122	0.0079621	-0.0137	-0.00594	0.0003	0.0059062
50	0.5921	0.60554	0.6178	0.00866	0.5821	0.59889	0.619	0.01057	-0.0158	-0.00665	0.0013	0.0074613

Device Test: 15.7 THRESHOLD|FALL/EN/5////@EN_VTH_FALLING

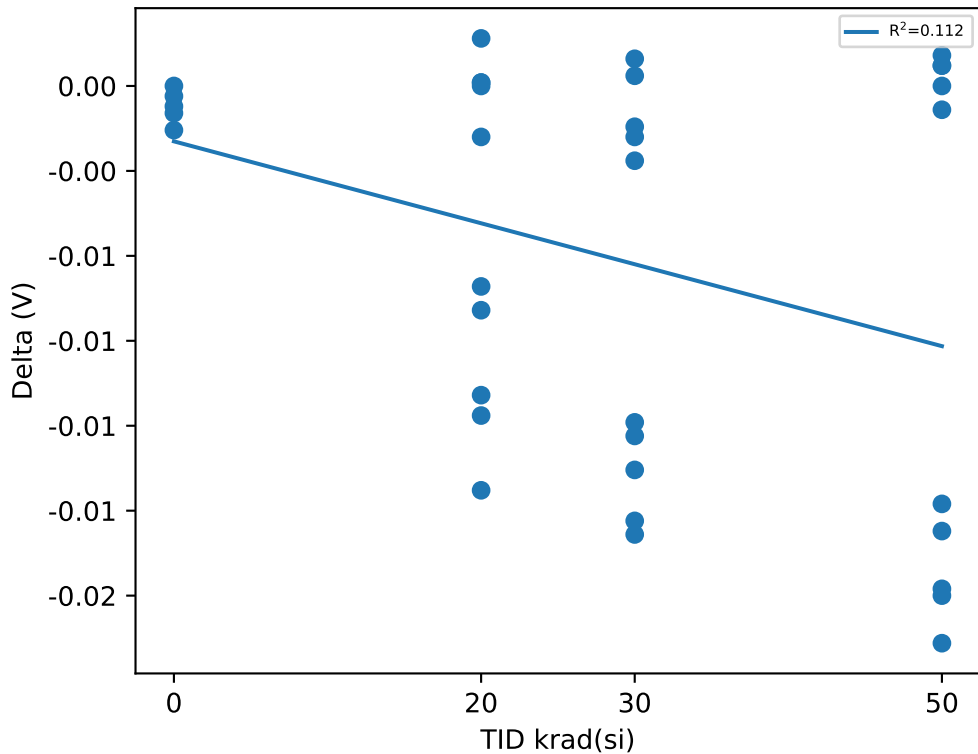
TID vs Result Stats



Test Results (Lower Limit = 0.455, Upper Limit = 0.554 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5022	0.4956	-0.0066
2	20	Biased	0.5028	0.4931	-0.0097
3	20	Biased	0.496	0.4841	-0.0119
4	20	Biased	0.507	0.5011	-0.0059
5	20	Biased	0.5122	0.5031	-0.0091
6	20	Unbiased	0.4972	0.4972	0
7	20	Unbiased	0.4969	0.497	0.0001
8	20	Unbiased	0.493	0.4944	0.0014
9	20	Unbiased	0.5109	0.5094	-0.0015
10	20	Unbiased	0.4935	0.4936	0.0001
11	30	Biased	0.5044	0.4916	-0.0128
12	30	Biased	0.5004	0.4891	-0.0113
13	30	Biased	0.495	0.4851	-0.0099
14	30	Biased	0.4972	0.4869	-0.0103
15	30	Biased	0.5079	0.4947	-0.0132
16	30	Unbiased	0.4883	0.4861	-0.0022
17	30	Unbiased	0.5044	0.5047	0.0003
18	30	Unbiased	0.5041	0.5029	-0.0012
19	30	Unbiased	0.5082	0.5067	-0.0015
20	30	Unbiased	0.4939	0.4947	0.0008
26	50	Unbiased	0.5138	0.5144	0.0006
27	50	Unbiased	0.5035	0.5044	0.0009
28	50	Unbiased	0.5011	0.5004	-0.0007
29	50	Unbiased	0.4884	0.4884	0
30	50	Unbiased	0.4885	0.4891	0.0006
88	50	Biased-84Hr-Anneal	0.4939	0.4775	-0.0164
89	50	Biased-84Hr-Anneal	0.5092	0.4969	-0.0123
90	50	Biased-84Hr-Anneal	0.5092	0.4942	-0.015
91	50	Biased-84Hr-Anneal	0.5051	0.4903	-0.0148
92	50	Biased-84Hr-Anneal	0.4979	0.4848	-0.0131
100	0	CORRELATION	0.5076	0.5063	-0.0013
101	0	CORRELATION	0.5179	0.5173	-0.0006
102	0	CORRELATION	0.498	0.4972	-0.0008
103	0	CORRELATION	0.5082	0.5082	0
104	0	CORRELATION	0.5032	0.5029	-0.0003

TID vs Post - Pre Exposure Delta

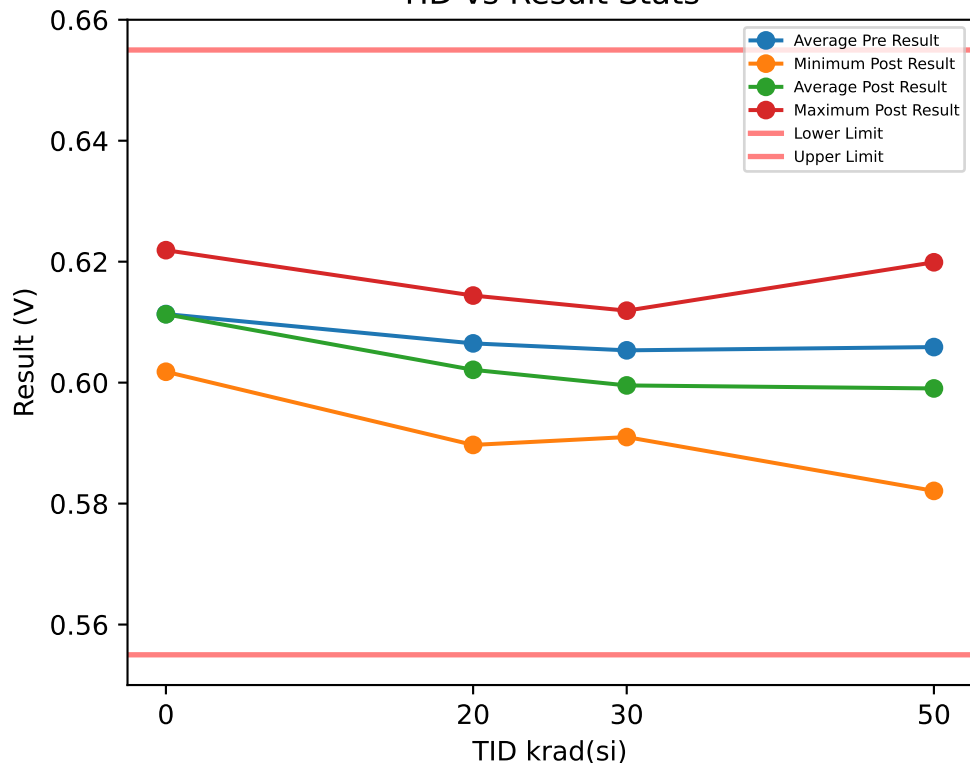


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.498	0.50698	0.5179	0.0073493	0.4972	0.50638	0.5173	0.0073984	-0.0013	-0.0006	0	0.00049497
20	0.493	0.50117	0.5122	0.0069948	0.4841	0.49686	0.5094	0.0067456	-0.0119	-0.00431	0.0014	0.0048916
30	0.4883	0.50038	0.5082	0.0065899	0.4851	0.49425	0.5067	0.0080079	-0.0132	-0.00613	0.0008	0.0058058
50	0.4884	0.50106	0.5138	0.0087964	0.4775	0.49404	0.5144	0.010539	-0.0164	-0.00702	0.0009	0.0077826

Device Test: 15.9 THRESHOLD|RISE/EN/12////@EN_VTH_RISING

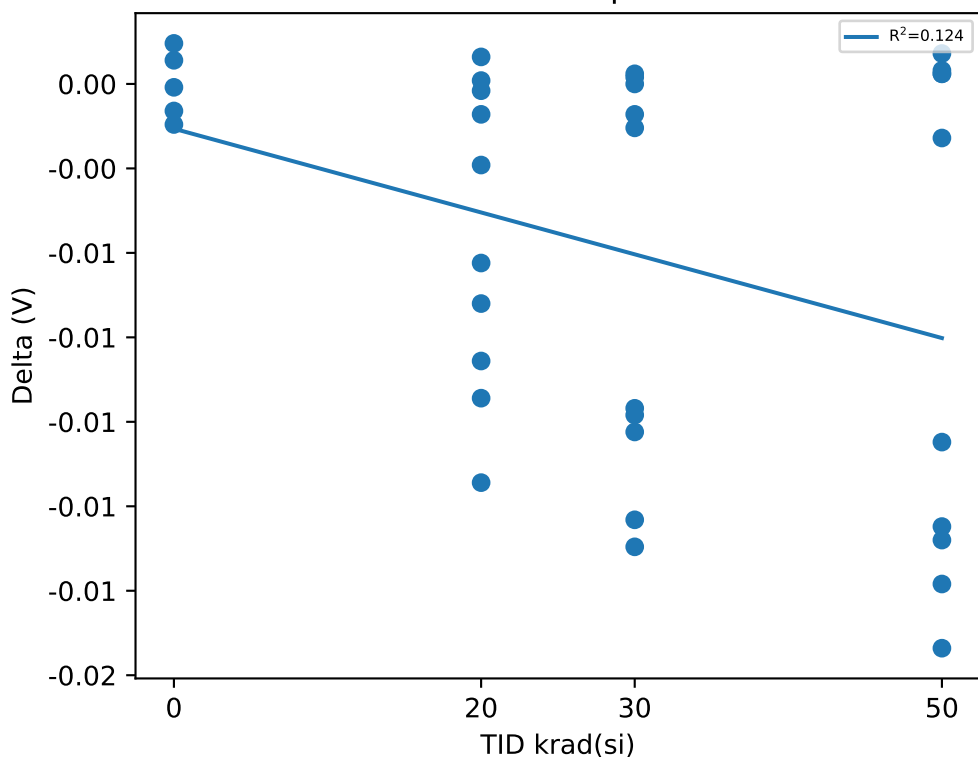
TID vs Result Stats



Test Results (Lower Limit = 0.555, Upper Limit = 0.655 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6071	0.6006	-0.0065
2	20	Biased	0.6075	0.5993	-0.0082
3	20	Biased	0.6015	0.5897	-0.0118
4	20	Biased	0.6119	0.6066	-0.0053
5	20	Biased	0.618	0.6087	-0.0093
6	20	Unbiased	0.6031	0.6022	-0.0009
7	20	Unbiased	0.6015	0.6013	-0.0002
8	20	Unbiased	0.5988	0.5996	0.0008
9	20	Unbiased	0.6168	0.6144	-0.0024
10	20	Unbiased	0.5987	0.5988	0.0001
11	30	Biased	0.6094	0.5965	-0.0129
12	30	Biased	0.6047	0.5944	-0.0103
13	30	Biased	0.6006	0.591	-0.0096
14	30	Biased	0.6022	0.5924	-0.0098
15	30	Biased	0.6134	0.5997	-0.0137
16	30	Unbiased	0.5926	0.5913	-0.0013
17	30	Unbiased	0.6099	0.6102	0.0003
18	30	Unbiased	0.6081	0.6081	0
19	30	Unbiased	0.6128	0.6119	-0.0009
20	30	Unbiased	0.5997	0.5999	0.0002
26	50	Unbiased	0.619	0.6199	0.0009
27	50	Unbiased	0.609	0.6094	0.0004
28	50	Unbiased	0.6066	0.605	-0.0016
29	50	Unbiased	0.5918	0.5921	0.0003
30	50	Unbiased	0.5944	0.5947	0.0003
88	50	Biased-84Hr-Anneal	0.5988	0.5821	-0.0167
89	50	Biased-84Hr-Anneal	0.6125	0.6019	-0.0106
90	50	Biased-84Hr-Anneal	0.6125	0.5994	-0.0131
91	50	Biased-84Hr-Anneal	0.611	0.5962	-0.0148
92	50	Biased-84Hr-Anneal	0.6032	0.5897	-0.0135
100	0	CORRELATION	0.61	0.6112	0.0012
101	0	CORRELATION	0.6231	0.6219	-0.0012
102	0	CORRELATION	0.6026	0.6018	-0.0008
103	0	CORRELATION	0.6132	0.6131	-0.0001
104	0	CORRELATION	0.6078	0.6085	0.0007

TID vs Post - Pre Exposure Delta

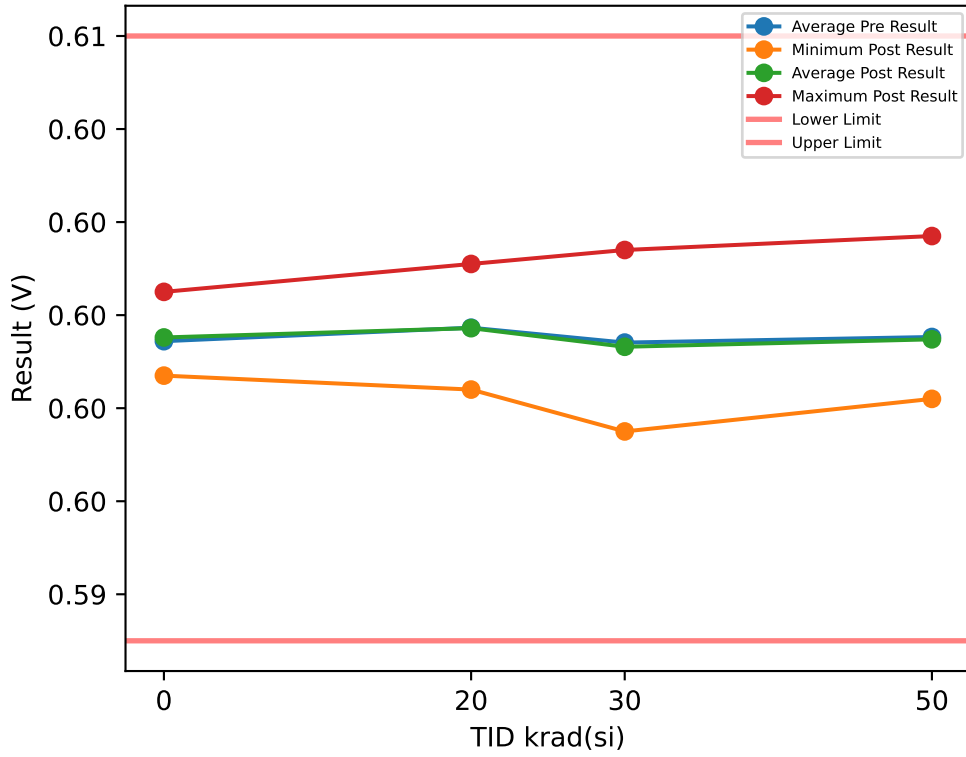


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6026	0.61134	0.6231	0.0076235	0.6018	0.6113	0.6219	0.0073092	-0.0012	-4e-05	0.0012	0.0010015
20	0.5987	0.60649	0.618	0.0070754	0.5897	0.60212	0.6144	0.0066394	-0.0118	-0.00437	0.0008	0.0044672
30	0.5926	0.60534	0.6134	0.0066027	0.591	0.59954	0.6119	0.0079394	-0.0137	-0.0058	0.0003	0.0059125
50	0.5918	0.60588	0.619	0.0087152	0.5821	0.59904	0.6199	0.010727	-0.0167	-0.00684	0.0009	0.0074536

Device Test: 17.14 LEVEL|STATIC/VSNSP/5////@VREF_INTERNAL

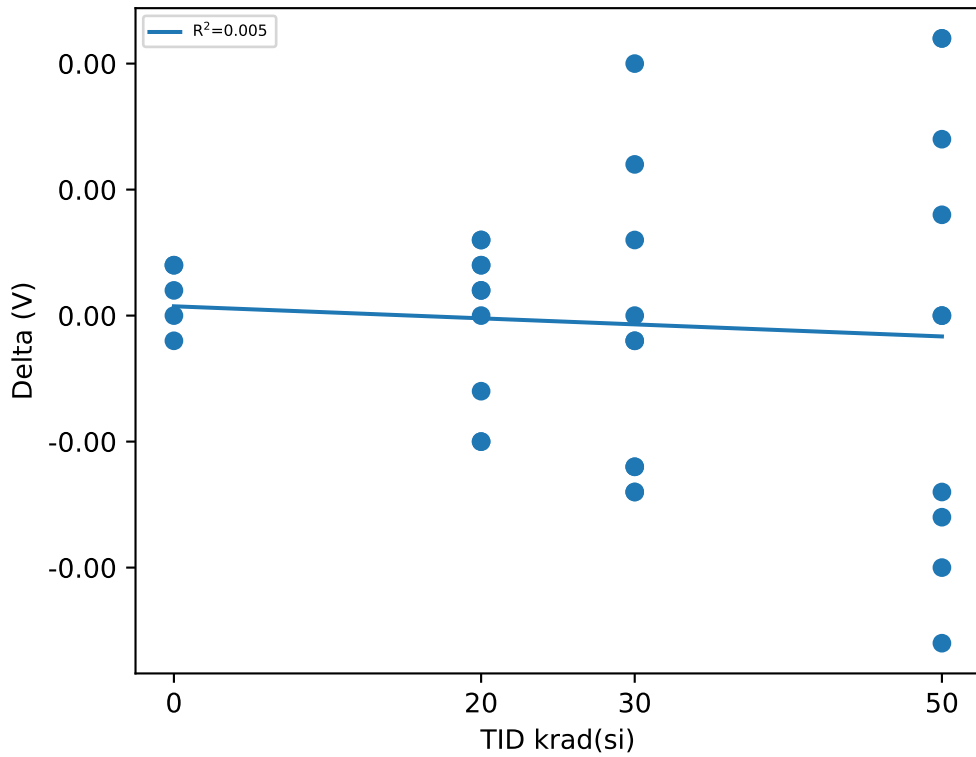
TID vs Result Stats



Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5999	0.6	0.0001
2	20	Biased	0.6004	0.6007	0.0003
3	20	Biased	0.5993	0.5988	-0.0005
4	20	Biased	0.6	0.6001	0.0001
5	20	Biased	0.5989	0.5984	-0.0005
6	20	Unbiased	0.6008	0.6011	0.0003
7	20	Unbiased	0.5996	0.5998	0.0002
8	20	Unbiased	0.5995	0.5997	0.0002
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.5989	0.5986	-0.0003
11	30	Biased	0.5995	0.5988	-0.0007
12	30	Biased	0.5994	0.5993	-0.0001
13	30	Biased	0.5999	0.5993	-0.0006
14	30	Biased	0.5994	0.6	0.0006
15	30	Biased	0.5981	0.5975	-0.0006
16	30	Unbiased	0.5988	0.5988	0
17	30	Unbiased	0.6002	0.6001	-0.0001
18	30	Unbiased	0.5994	0.5987	-0.0007
19	30	Unbiased	0.6004	0.6014	0.001
20	30	Unbiased	0.599	0.5993	0.0003
26	50	Unbiased	0.6006	0.6017	0.0011
27	50	Unbiased	0.5994	0.6005	0.0011
28	50	Unbiased	0.5984	0.5988	0.0004
29	50	Unbiased	0.6013	0.6005	-0.0008
30	50	Unbiased	0.5995	0.5988	-0.0007
88	50	Biased-84Hr-Anneal	0.5996	0.5996	0
89	50	Biased-84Hr-Anneal	0.5985	0.5985	0
90	50	Biased-84Hr-Anneal	0.5995	0.5982	-0.0013
91	50	Biased-84Hr-Anneal	0.5993	0.6	0.0007
92	50	Biased-84Hr-Anneal	0.5992	0.5982	-0.001
100	0	CORRELATION	0.6003	0.6005	0.0002
101	0	CORRELATION	0.5994	0.5993	-0.0001
102	0	CORRELATION	0.5993	0.5994	0.0001
103	0	CORRELATION	0.5985	0.5987	0.0002
104	0	CORRELATION	0.5997	0.5997	0

TID vs Post - Pre Exposure Delta

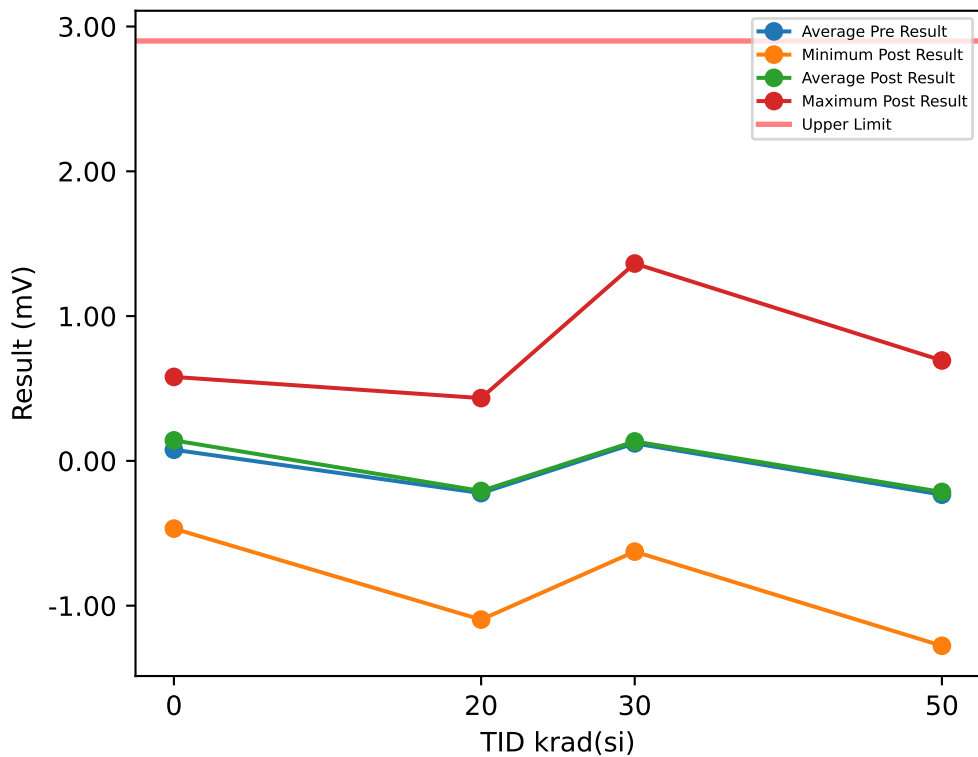


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5985	0.59944	0.6003	0.00065422	0.5987	0.59952	0.6005	0.00065727	-0.0001	8e-05	0.0002	0.00013038
20	0.5989	0.59973	0.6008	0.00061473	0.5984	0.59972	0.6011	0.00088292	-0.0005	-1e-05	0.0003	0.00031073
30	0.5981	0.59941	0.6004	0.00067569	0.5975	0.59932	0.6014	0.0010347	-0.0007	-9e-05	0.001	0.00058585
50	0.5984	0.59953	0.6013	0.00086929	0.5982	0.59948	0.6017	0.0011764	-0.0013	-5e-05	0.0011	0.00087337

Device Test: 17.15 LEVEL|STATIC/VSNSP/5////@EA_INPUT_OFFSET_V

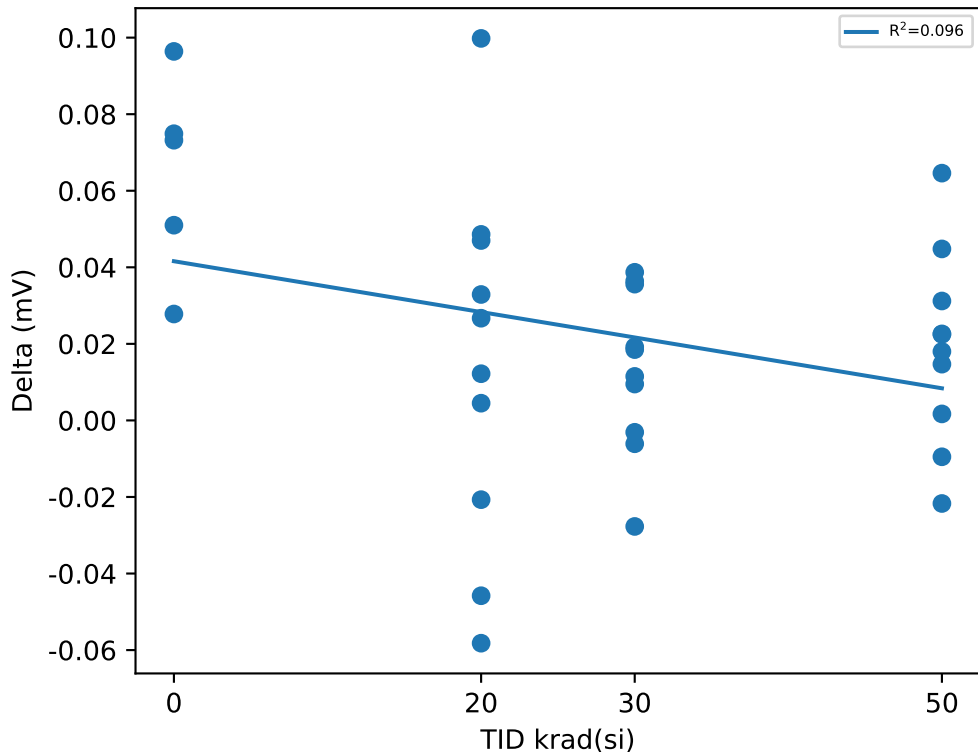
TID vs Result Stats



Test Results (Upper Limit = 2.9 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.4733	-0.5191	-0.0458
2	20	Biased	-0.485	-0.3852	0.0998
3	20	Biased	-0.1387	-0.1058	0.0329
4	20	Biased	-0.4912	-0.4426	0.0486
5	20	Biased	0.0214	-0.0368	-0.0582
6	20	Unbiased	-1.123	-1.0963	0.0267
7	20	Unbiased	0.4543	0.4336	-0.0207
8	20	Unbiased	-0.3116	-0.2646	0.047
9	20	Unbiased	0.0294	0.0416	0.0122
10	20	Unbiased	0.2925	0.297	0.0045
11	30	Biased	-0.0628	-0.0272	0.0356
12	30	Biased	0.3658	0.3381	-0.0277
13	30	Biased	-0.3303	-0.2916	0.0387
14	30	Biased	-0.117	-0.0978	0.0192
15	30	Biased	1.3662	1.3631	-0.0031
16	30	Unbiased	0.2502	0.2597	0.0095
17	30	Unbiased	-0.3165	-0.3226	-0.0061
18	30	Unbiased	-0.063	-0.0445	0.0185
19	30	Unbiased	-0.6382	-0.6267	0.0115
20	30	Unbiased	0.7563	0.7927	0.0364
26	50	Unbiased	-1.3417	-1.2771	0.0646
27	50	Unbiased	0.2596	0.2379	-0.0217
28	50	Unbiased	0.5022	0.5248	0.0226
29	50	Unbiased	-1.1786	-1.1881	-0.0095
30	50	Unbiased	-0.319	-0.2878	0.0312
88	50	Biased-84Hr-Anneal	-0.6332	-0.6152	0.018
89	50	Biased-84Hr-Anneal	0.6917	0.6934	0.0017
90	50	Biased-84Hr-Anneal	-0.3092	-0.2945	0.0147
91	50	Biased-84Hr-Anneal	-0.4847	-0.4399	0.0448
92	50	Biased-84Hr-Anneal	0.4781	0.5006	0.0225
100	0	CORRELATION	-0.5427	-0.4678	0.0749
101	0	CORRELATION	-0.0874	0.009	0.0964
102	0	CORRELATION	0.4864	0.5142	0.0278
103	0	CORRELATION	0.5289	0.5799	0.051
104	0	CORRELATION	-0.0003	0.0729	0.0732

TID vs Post - Pre Exposure Delta

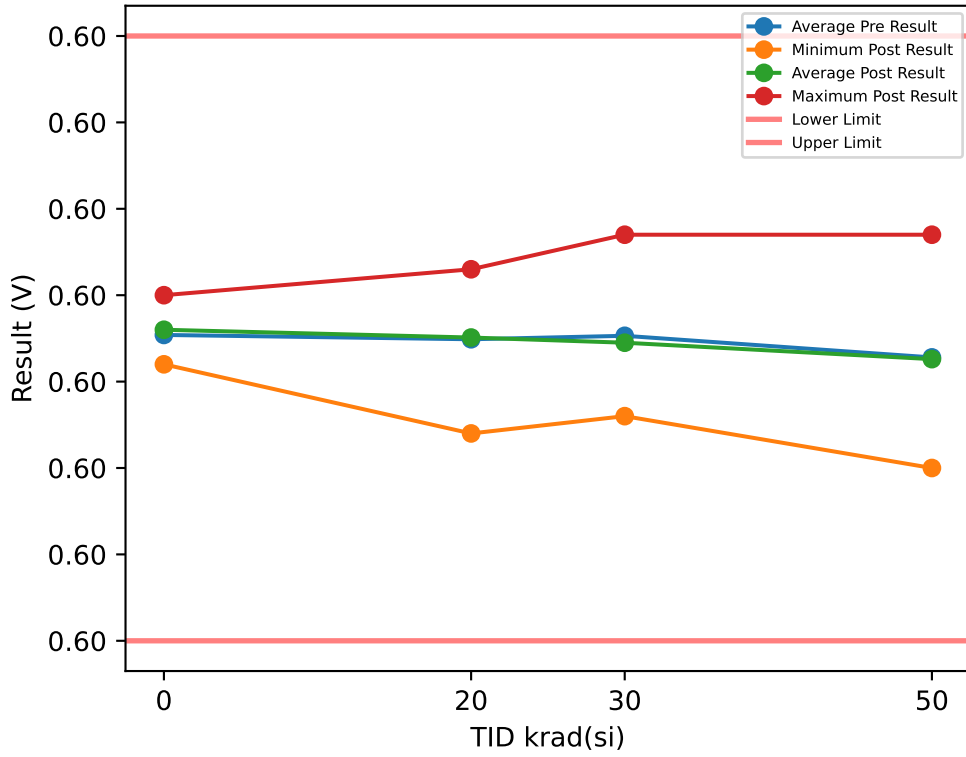


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.5427	0.07698	0.5289	0.44409	-0.4678	0.14164	0.5799	0.42562	0.0278	0.06466	0.0964	0.026127
20	-1.123	-0.22252	0.4543	0.45657	-1.0963	-0.20782	0.4336	0.44023	-0.0582	0.0147	0.0998	0.047432
30	-0.6382	0.12107	1.3662	0.5894	-0.6267	0.13432	1.3631	0.58518	-0.0277	0.01325	0.0387	0.021297
50	-1.3417	-0.23348	0.6917	0.70742	-1.2771	-0.21459	0.6934	0.69817	-0.0217	0.01889	0.0646	0.02518

Device Test: 17.16 LEVEL|STATIC/SS_TR/5////@VREF_25C

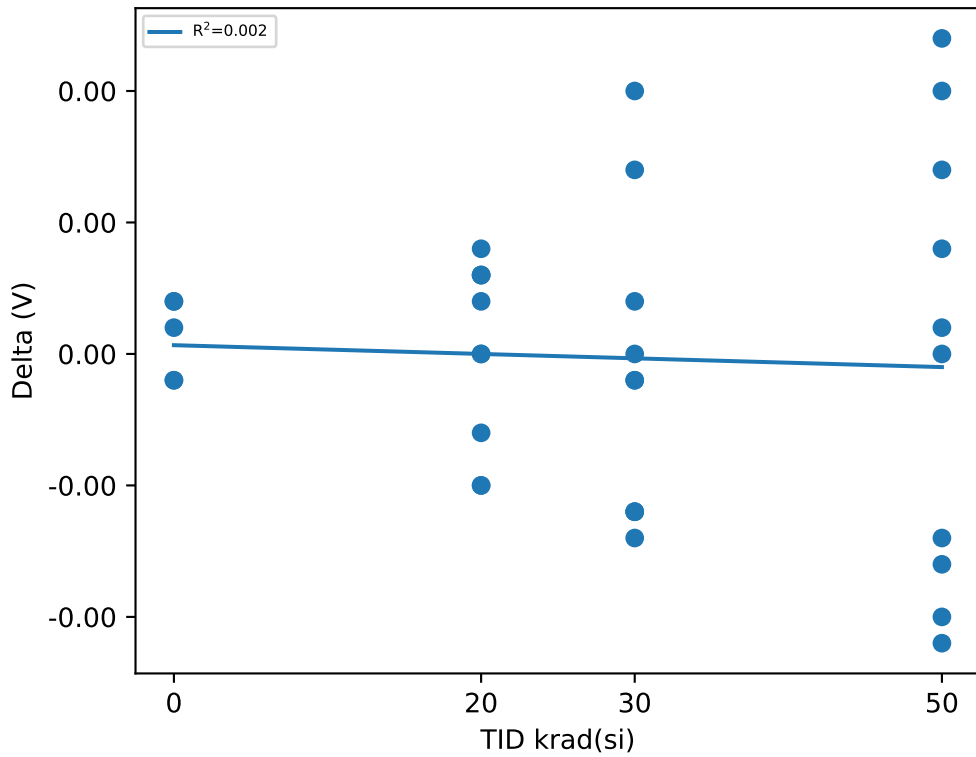
TID vs Result Stats



Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5994	0.5994	0
2	20	Biased	0.5999	0.6003	0.0004
3	20	Biased	0.5992	0.5987	-0.0005
4	20	Biased	0.5995	0.5997	0.0002
5	20	Biased	0.5989	0.5984	-0.0005
6	20	Unbiased	0.5997	0.6	0.0003
7	20	Unbiased	0.6	0.6003	0.0003
8	20	Unbiased	0.5991	0.5994	0.0003
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.5992	0.5989	-0.0003
11	30	Biased	0.5994	0.5988	-0.0006
12	30	Biased	0.5998	0.5997	-0.0001
13	30	Biased	0.5996	0.599	-0.0006
14	30	Biased	0.5992	0.5999	0.0007
15	30	Biased	0.5995	0.5989	-0.0006
16	30	Unbiased	0.5991	0.5991	0
17	30	Unbiased	0.5999	0.5998	-0.0001
18	30	Unbiased	0.5993	0.5986	-0.0007
19	30	Unbiased	0.5997	0.6007	0.001
20	30	Unbiased	0.5998	0.6	0.0002
26	50	Unbiased	0.5992	0.6004	0.0012
27	50	Unbiased	0.5997	0.6007	0.001
28	50	Unbiased	0.5989	0.5993	0.0004
29	50	Unbiased	0.6001	0.5993	-0.0008
30	50	Unbiased	0.5992	0.5985	-0.0007
88	50	Biased-84Hr-Anneal	0.5989	0.599	0.0001
89	50	Biased-84Hr-Anneal	0.5992	0.5992	0
90	50	Biased-84Hr-Anneal	0.5991	0.598	-0.0011
91	50	Biased-84Hr-Anneal	0.5988	0.5995	0.0007
92	50	Biased-84Hr-Anneal	0.5997	0.5987	-0.001
100	0	CORRELATION	0.5998	0.6	0.0002
101	0	CORRELATION	0.5993	0.5992	-0.0001
102	0	CORRELATION	0.5998	0.5999	0.0001
103	0	CORRELATION	0.599	0.5992	0.0002
104	0	CORRELATION	0.5998	0.5997	-0.0001

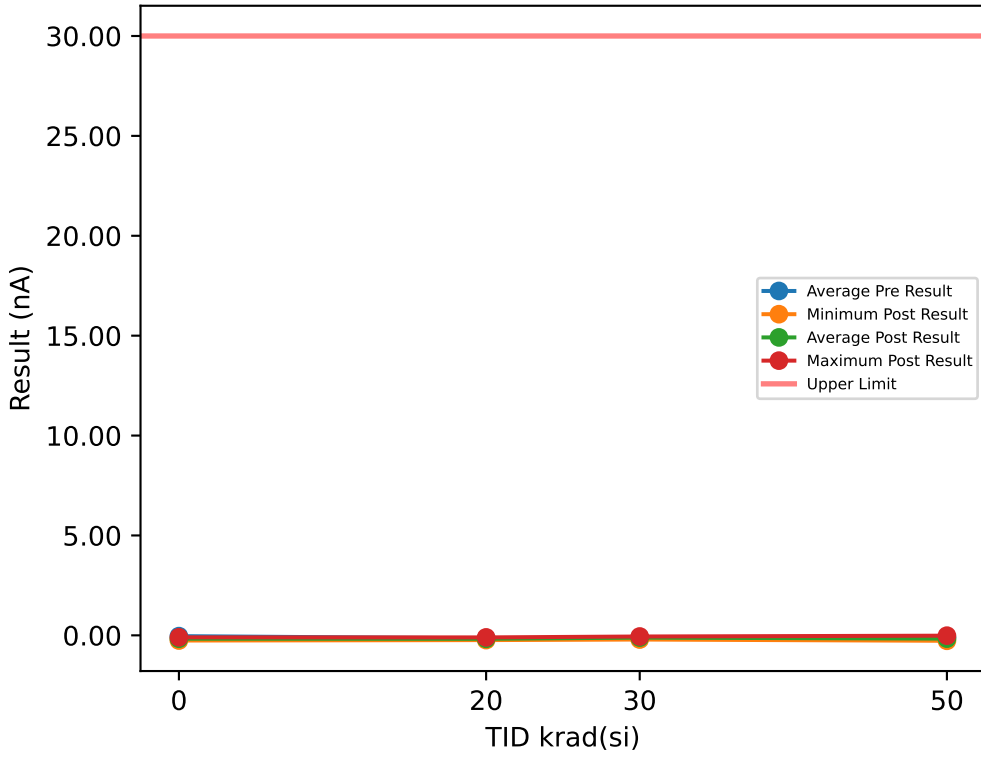
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.599	0.59954	0.5998	0.00037148	0.5992	0.5996	0.6	0.00038079	-0.0001	6e-05	0.0002	0.00015166
20	0.5989	0.59949	0.6	0.00039567	0.5984	0.59951	0.6003	0.00067074	-0.0005	2e-05	0.0004	0.00034254
30	0.5991	0.59953	0.5999	0.00027508	0.5986	0.59945	0.6007	0.00066875	-0.0007	-8e-05	0.001	0.00058271
50	0.5988	0.59928	0.6001	0.00042111	0.598	0.59926	0.6007	0.00081541	-0.0011	-2e-05	0.0012	0.00084564

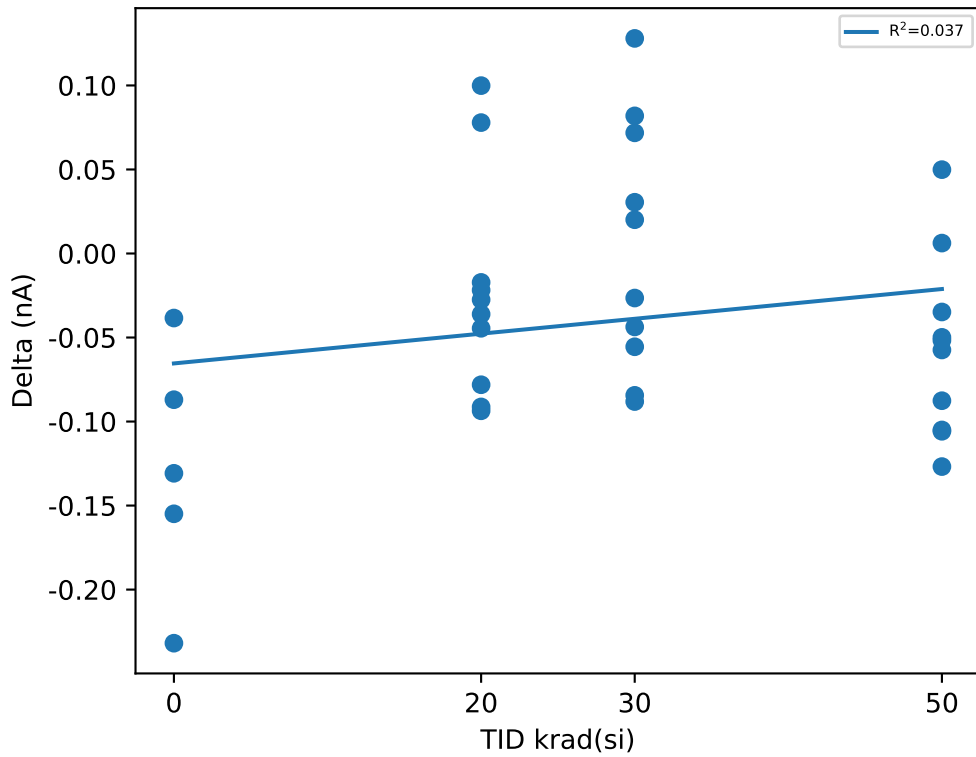
TID vs Result Stats



Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.2355	-0.1356	0.0999
2	20	Biased	-0.2416	-0.1637	0.0779
3	20	Biased	-0.1154	-0.1935	-0.0781
4	20	Biased	-0.1099	-0.2035	-0.0936
5	20	Biased	-0.1731	-0.1949	-0.0218
6	20	Unbiased	-0.148	-0.1841	-0.0361
7	20	Unbiased	-0.1466	-0.2379	-0.0913
8	20	Unbiased	-0.1317	-0.1762	-0.0445
9	20	Unbiased	-0.0857	-0.1029	-0.0172
10	20	Unbiased	-0.1105	-0.138	-0.0275
11	30	Biased	-0.0998	-0.1263	-0.0265
12	30	Biased	-0.0038	-0.0593	-0.0555
13	30	Biased	-0.1918	-0.1099	0.0819
14	30	Biased	-0.1105	-0.1949	-0.0844
15	30	Biased	-0.0218	-0.0655	-0.0437
16	30	Unbiased	-0.2285	-0.1567	0.0718
17	30	Unbiased	-0.1856	-0.0576	0.128
18	30	Unbiased	-0.1043	-0.0842	0.0201
19	30	Unbiased	-0.1217	-0.2098	-0.0881
20	30	Unbiased	-0.1099	-0.0794	0.0305
26	50	Unbiased	-0.0824	-0.17	-0.0876
27	50	Unbiased	-0.0967	-0.1466	-0.0499
28	50	Unbiased	-0.0662	-0.0163	0.0499
29	50	Unbiased	-0.1918	-0.1856	0.0062
30	50	Unbiased	-0.0793	-0.131	-0.0517
88	50	Biased-84Hr-Anneal	-0.168	-0.273	-0.105
89	50	Biased-84Hr-Anneal	-0.1399	-0.1747	-0.0348
90	50	Biased-84Hr-Anneal	-0.1368	-0.1942	-0.0574
91	50	Biased-84Hr-Anneal	-0.1243	-0.2511	-0.1268
92	50	Biased-84Hr-Anneal	0.006	-0.0998	-0.1058
100	0	CORRELATION	0.0122	-0.1186	-0.1308
101	0	CORRELATION	-0.0278	-0.2597	-0.2319
102	0	CORRELATION	-0.0837	-0.2386	-0.1549
103	0	CORRELATION	-0.0128	-0.0998	-0.087
104	0	CORRELATION	-0.0871	-0.1255	-0.0384

TID vs Post - Pre Exposure Delta

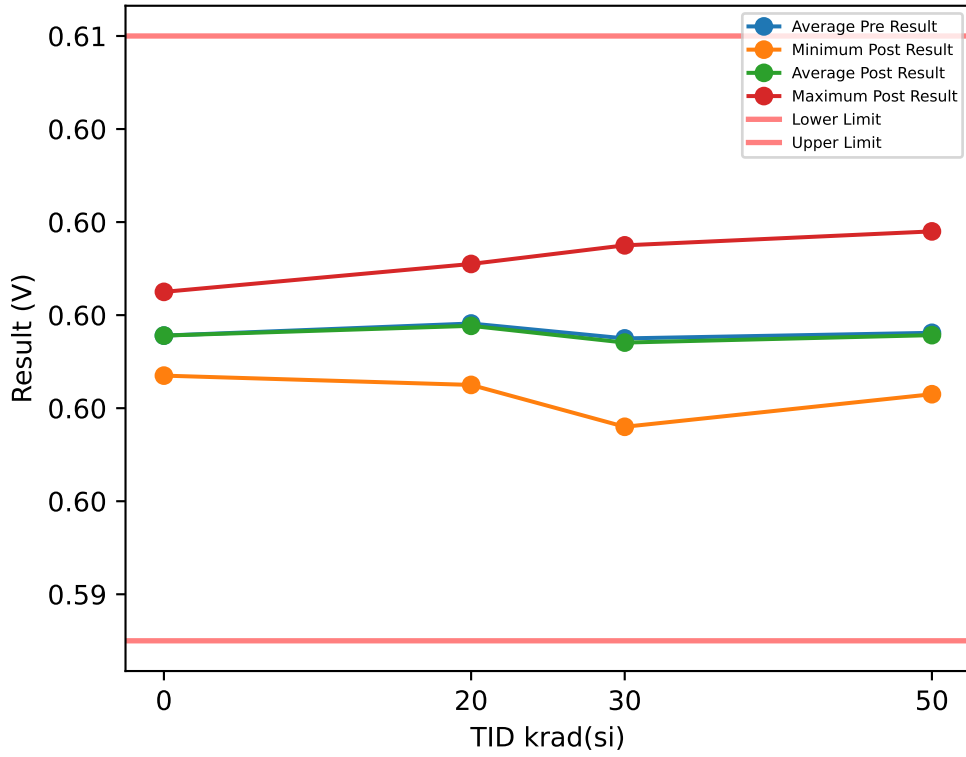


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.0871	-0.03984	0.0122	0.043993	-0.2597	-0.16844	-0.0998	0.074649	-0.2319	-0.1286	-0.0384	0.072859
20	-0.2416	-0.1498	-0.0857	0.052793	-0.2379	-0.17303	-0.1029	0.039158	-0.0936	-0.02323	0.0999	0.06554
30	-0.2285	-0.11777	-0.0038	0.070849	-0.2098	-0.11436	-0.0576	0.056098	-0.0881	0.00341	0.128	0.074567
50	-0.1918	-0.10794	0.006	0.056848	-0.273	-0.16423	-0.0163	0.073276	-0.1268	-0.05629	0.0499	0.054244

Device Test: 17.2 LEVEL|STATIC/VSNP/4.5////@VREF_INTERNAL

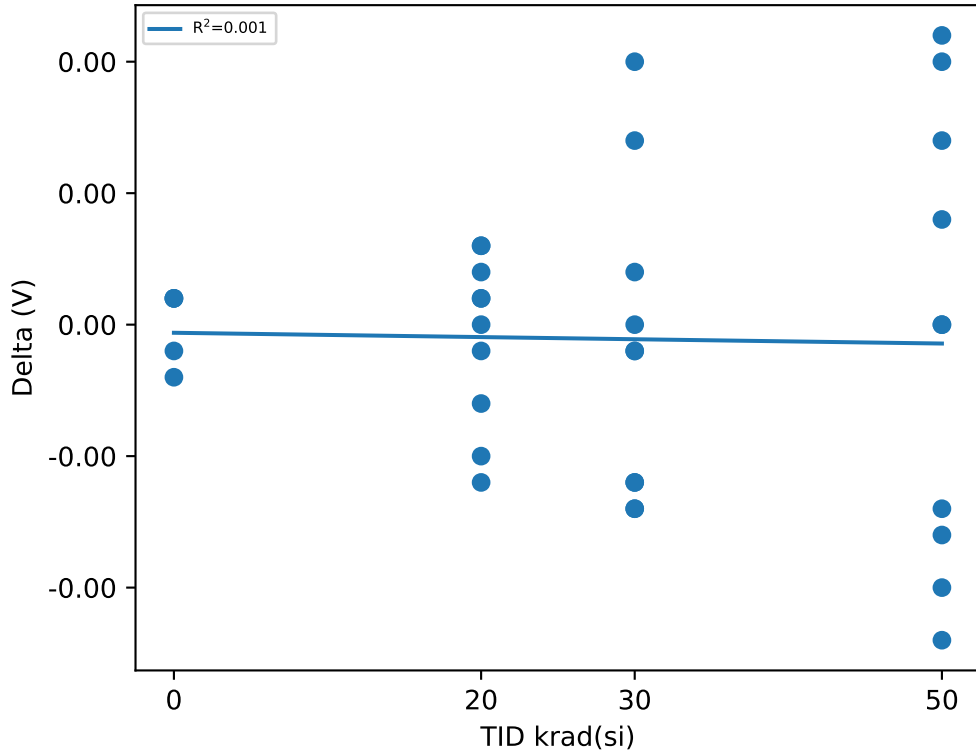
TID vs Result Stats



Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6005	0.6008	0.0003
3	20	Biased	0.5994	0.5988	-0.0006
4	20	Biased	0.6001	0.6002	0.0001
5	20	Biased	0.599	0.5985	-0.0005
6	20	Unbiased	0.6009	0.6011	0.0002
7	20	Unbiased	0.5996	0.5999	0.0003
8	20	Unbiased	0.5996	0.5997	0.0001
9	20	Unbiased	0.6001	0.6	-0.0001
10	20	Unbiased	0.599	0.5987	-0.0003
11	30	Biased	0.5995	0.5989	-0.0006
12	30	Biased	0.5995	0.5994	-0.0001
13	30	Biased	0.6001	0.5994	-0.0007
14	30	Biased	0.5994	0.6001	0.0007
15	30	Biased	0.5982	0.5976	-0.0006
16	30	Unbiased	0.5989	0.5989	0
17	30	Unbiased	0.6003	0.6002	-0.0001
18	30	Unbiased	0.5995	0.5988	-0.0007
19	30	Unbiased	0.6005	0.6015	0.001
20	30	Unbiased	0.5991	0.5993	0.0002
26	50	Unbiased	0.6007	0.6018	0.0011
27	50	Unbiased	0.5995	0.6005	0.001
28	50	Unbiased	0.5985	0.5989	0.0004
29	50	Unbiased	0.6014	0.6006	-0.0008
30	50	Unbiased	0.5996	0.5989	-0.0007
88	50	Biased-84Hr-Anneal	0.5997	0.5997	0
89	50	Biased-84Hr-Anneal	0.5986	0.5986	0
90	50	Biased-84Hr-Anneal	0.5995	0.5983	-0.0012
91	50	Biased-84Hr-Anneal	0.5994	0.6001	0.0007
92	50	Biased-84Hr-Anneal	0.5993	0.5983	-0.001
100	0	CORRELATION	0.6004	0.6005	0.0001
101	0	CORRELATION	0.5995	0.5993	-0.0002
102	0	CORRELATION	0.5994	0.5995	0.0001
103	0	CORRELATION	0.5986	0.5987	0.0001
104	0	CORRELATION	0.5999	0.5998	-0.0001

TID vs Post - Pre Exposure Delta

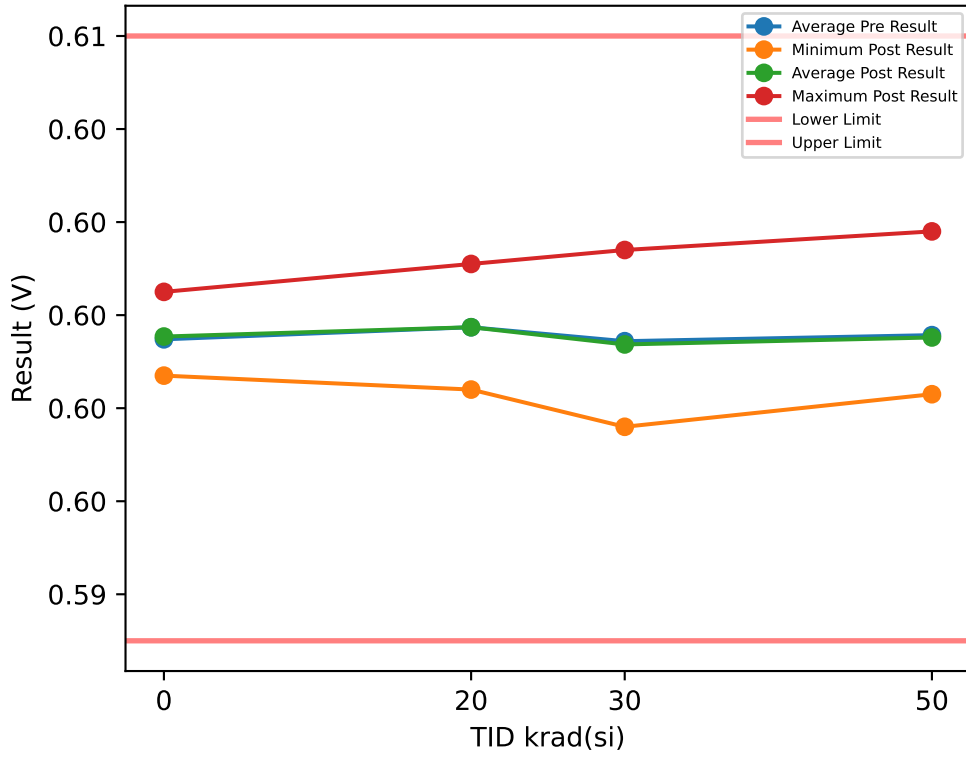


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5986	0.59956	0.6004	0.00066558	0.5987	0.59956	0.6005	0.00066182	-0.0002	0	0.0001	0.00014142
20	0.599	0.59982	0.6009	0.00061788	0.5985	0.59977	0.6011	0.00087184	-0.0006	-5e-05	0.0003	0.00032059
30	0.5982	0.5995	0.6005	0.00068475	0.5976	0.59941	0.6015	0.0010354	-0.0007	-9e-05	0.001	0.00059339
50	0.5985	0.59962	0.6014	0.00087025	0.5983	0.59957	0.6018	0.0011672	-0.0012	-5e-05	0.0011	0.0008436

Device Test: 17.26 LEVEL|STATIC/VSNP/12////@VREF_INTERNAL

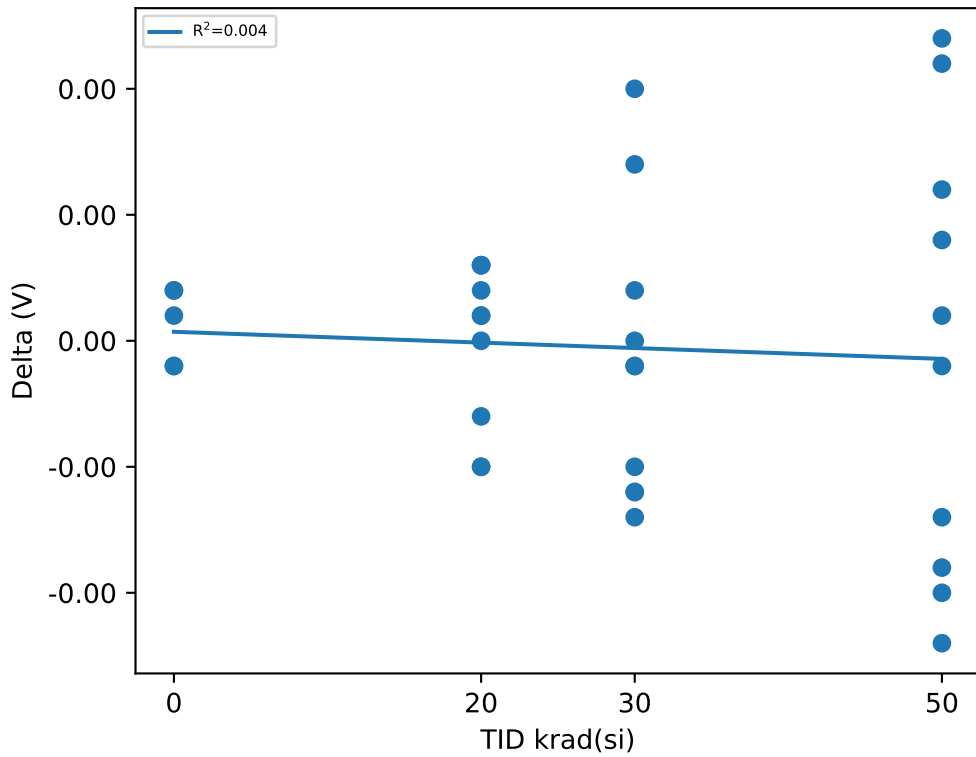
TID vs Result Stats



Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5999	0.6	0.0001
2	20	Biased	0.6004	0.6007	0.0003
3	20	Biased	0.5993	0.5988	-0.0005
4	20	Biased	0.6	0.6001	0.0001
5	20	Biased	0.5989	0.5984	-0.0005
6	20	Unbiased	0.6008	0.6011	0.0003
7	20	Unbiased	0.5996	0.5999	0.0003
8	20	Unbiased	0.5995	0.5997	0.0002
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.599	0.5987	-0.0003
11	30	Biased	0.5995	0.5989	-0.0006
12	30	Biased	0.5994	0.5993	-0.0001
13	30	Biased	0.6	0.5994	-0.0006
14	30	Biased	0.5994	0.6001	0.0007
15	30	Biased	0.5981	0.5976	-0.0005
16	30	Unbiased	0.5989	0.5989	0
17	30	Unbiased	0.6002	0.6001	-0.0001
18	30	Unbiased	0.5994	0.5987	-0.0007
19	30	Unbiased	0.6004	0.6014	0.001
20	30	Unbiased	0.5991	0.5993	0.0002
26	50	Unbiased	0.6006	0.6018	0.0012
27	50	Unbiased	0.5994	0.6005	0.0011
28	50	Unbiased	0.5984	0.5988	0.0004
29	50	Unbiased	0.6014	0.6005	-0.0009
30	50	Unbiased	0.5995	0.5988	-0.0007
88	50	Biased-84Hr-Anneal	0.5996	0.5997	0.0001
89	50	Biased-84Hr-Anneal	0.5986	0.5985	-0.0001
90	50	Biased-84Hr-Anneal	0.5995	0.5983	-0.0012
91	50	Biased-84Hr-Anneal	0.5994	0.6	0.0006
92	50	Biased-84Hr-Anneal	0.5993	0.5983	-0.001
100	0	CORRELATION	0.6003	0.6005	0.0002
101	0	CORRELATION	0.5994	0.5993	-0.0001
102	0	CORRELATION	0.5994	0.5995	0.0001
103	0	CORRELATION	0.5985	0.5987	0.0002
104	0	CORRELATION	0.5998	0.5997	-0.0001

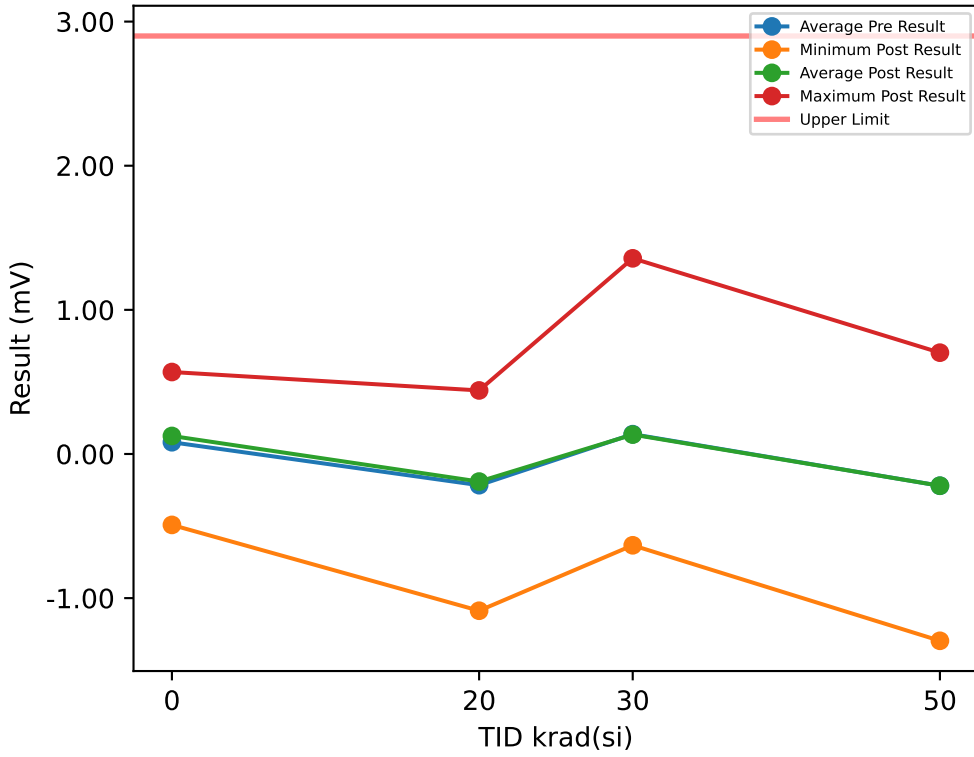
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5985	0.59948	0.6003	0.00066106	0.5987	0.59954	0.6005	0.00065422	-0.0001	6e-05	0.0002	0.00015166
20	0.5989	0.59974	0.6008	0.00060037	0.5984	0.59974	0.6011	0.00087076	-0.0005	-1.1102e-17	0.0003	0.00031972
30	0.5981	0.59944	0.6004	0.00066866	0.5976	0.59937	0.6014	0.0010122	-0.0007	-7e-05	0.001	0.00057359
50	0.5984	0.59957	0.6014	0.00087312	0.5983	0.59952	0.6018	0.0011755	-0.0012	-5e-05	0.0012	0.00087591

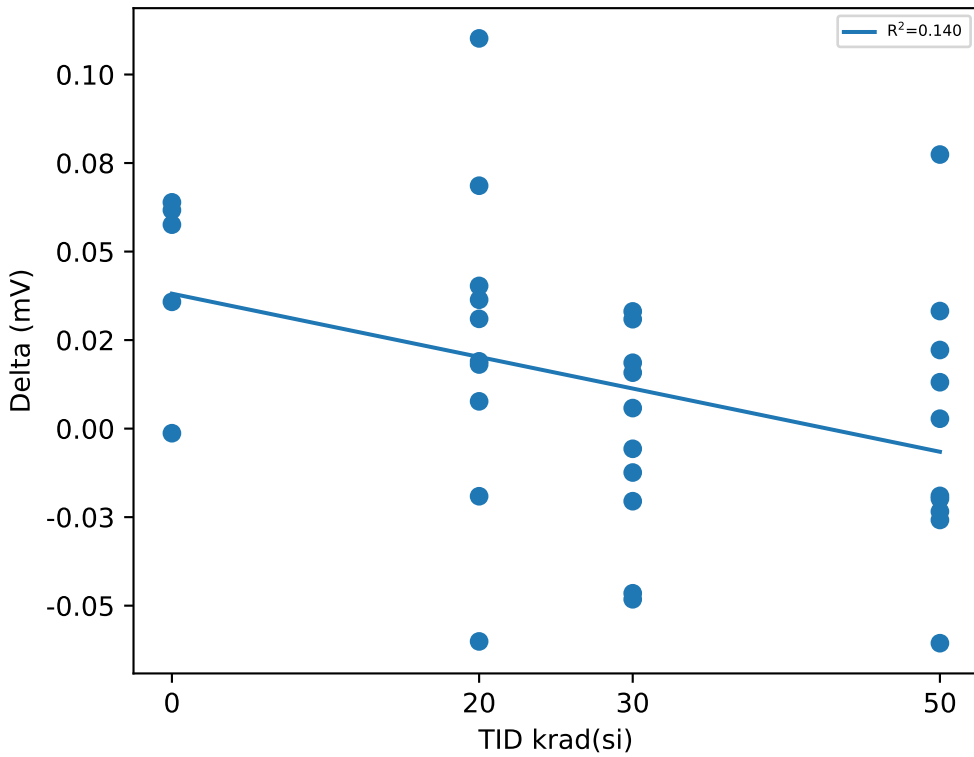
TID vs Result Stats



Test Results (Upper Limit = 2.9 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.4675	-0.4866	-0.0191
2	20	Biased	-0.4849	-0.3747	0.1102
3	20	Biased	-0.0919	-0.0729	0.019
4	20	Biased	-0.4713	-0.4636	0.0077
5	20	Biased	0.0294	-0.0307	-0.0601
6	20	Unbiased	-1.1239	-1.0875	0.0364
7	20	Unbiased	0.4228	0.4409	0.0181
8	20	Unbiased	-0.3171	-0.2485	0.0686
9	20	Unbiased	0.0309	0.0712	0.0403
10	20	Unbiased	0.3083	0.3393	0.031
11	30	Biased	-0.0443	-0.0285	0.0158
12	30	Biased	0.3784	0.4093	0.0309
13	30	Biased	-0.2761	-0.2575	0.0186
14	30	Biased	-0.147	-0.1139	0.0331
15	30	Biased	1.3699	1.3575	-0.0124
16	30	Unbiased	0.2637	0.258	-0.0057
17	30	Unbiased	-0.2856	-0.3321	-0.0465
18	30	Unbiased	-0.0747	-0.0689	0.0058
19	30	Unbiased	-0.613	-0.6335	-0.0205
20	30	Unbiased	0.8036	0.7554	-0.0482
26	50	Unbiased	-1.3293	-1.2961	0.0332
27	50	Unbiased	0.2865	0.2259	-0.0606
28	50	Unbiased	0.5195	0.5326	0.0131
29	50	Unbiased	-1.1601	-1.1791	-0.019
30	50	Unbiased	-0.301	-0.3208	-0.0198
88	50	Biased-84Hr-Anneal	-0.6354	-0.6612	-0.0258
89	50	Biased-84Hr-Anneal	0.6807	0.7029	0.0222
90	50	Biased-84Hr-Anneal	-0.2744	-0.2716	0.0028
91	50	Biased-84Hr-Anneal	-0.456	-0.4794	-0.0234
92	50	Biased-84Hr-Anneal	0.4664	0.5438	0.0774
100	0	CORRELATION	-0.5279	-0.4921	0.0358
101	0	CORRELATION	-0.0681	-0.0042	0.0639
102	0	CORRELATION	0.4836	0.4823	-0.0013
103	0	CORRELATION	0.5111	0.5687	0.0576
104	0	CORRELATION	0.0088	0.0705	0.0617

TID vs Post - Pre Exposure Delta

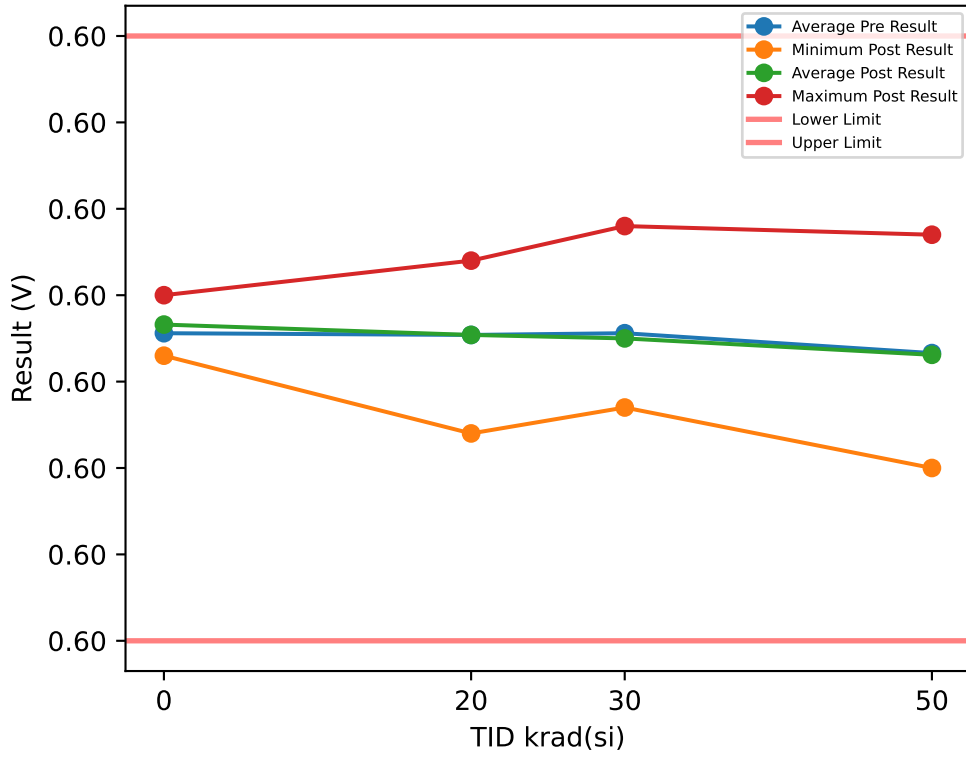


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.5279	0.0815	0.5111	0.43165	-0.4921	0.12504	0.5687	0.42574	-0.0013	0.04354	0.0639	0.027443
20	-1.1239	-0.21652	0.4228	0.45397	-1.0875	-0.19131	0.4409	0.44614	-0.0601	0.02521	0.1102	0.046103
30	-0.613	0.13749	1.3699	0.58773	-0.6335	0.13458	1.3575	0.58337	-0.0482	-0.00291	0.0331	0.029225
50	-1.3293	-0.22031	0.6807	0.70221	-1.2961	-0.2203	0.7029	0.71126	-0.0606	1e-05	0.0774	0.038592

Device Test: 17.28 LEVEL|STATIC/SS_TR/12////@VREF_25C

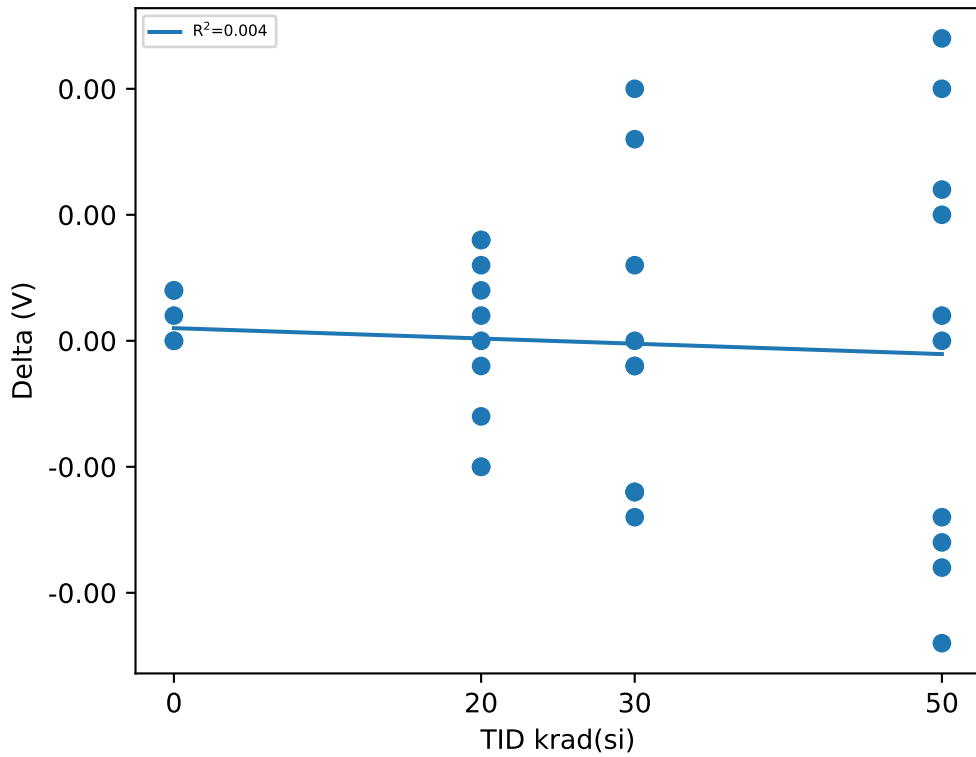
TID vs Result Stats



Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5995	0.5995	0
2	20	Biased	0.5999	0.6003	0.0004
3	20	Biased	0.5992	0.5987	-0.0005
4	20	Biased	0.5996	0.5997	0.0001
5	20	Biased	0.5989	0.5984	-0.0005
6	20	Unbiased	0.5997	0.6	0.0003
7	20	Unbiased	0.6	0.6004	0.0004
8	20	Unbiased	0.5992	0.5994	0.0002
9	20	Unbiased	0.6001	0.6	-0.0001
10	20	Unbiased	0.5993	0.599	-0.0003
11	30	Biased	0.5995	0.5988	-0.0007
12	30	Biased	0.5998	0.5997	-0.0001
13	30	Biased	0.5997	0.5991	-0.0006
14	30	Biased	0.5992	0.6	0.0008
15	30	Biased	0.5995	0.5989	-0.0006
16	30	Unbiased	0.5991	0.5991	0
17	30	Unbiased	0.5999	0.5998	-0.0001
18	30	Unbiased	0.5993	0.5987	-0.0006
19	30	Unbiased	0.5998	0.6008	0.001
20	30	Unbiased	0.5998	0.6001	0.0003
26	50	Unbiased	0.5993	0.6005	0.0012
27	50	Unbiased	0.5997	0.6007	0.001
28	50	Unbiased	0.5989	0.5994	0.0005
29	50	Unbiased	0.6002	0.5994	-0.0008
30	50	Unbiased	0.5992	0.5985	-0.0007
88	50	Biased-84Hr-Anneal	0.599	0.599	0
89	50	Biased-84Hr-Anneal	0.5992	0.5993	0.0001
90	50	Biased-84Hr-Anneal	0.5992	0.598	-0.0012
91	50	Biased-84Hr-Anneal	0.5989	0.5995	0.0006
92	50	Biased-84Hr-Anneal	0.5997	0.5988	-0.0009
100	0	CORRELATION	0.5998	0.6	0.0002
101	0	CORRELATION	0.5993	0.5993	0
102	0	CORRELATION	0.5998	0.5999	0.0001
103	0	CORRELATION	0.5991	0.5993	0.0002
104	0	CORRELATION	0.5998	0.5998	0

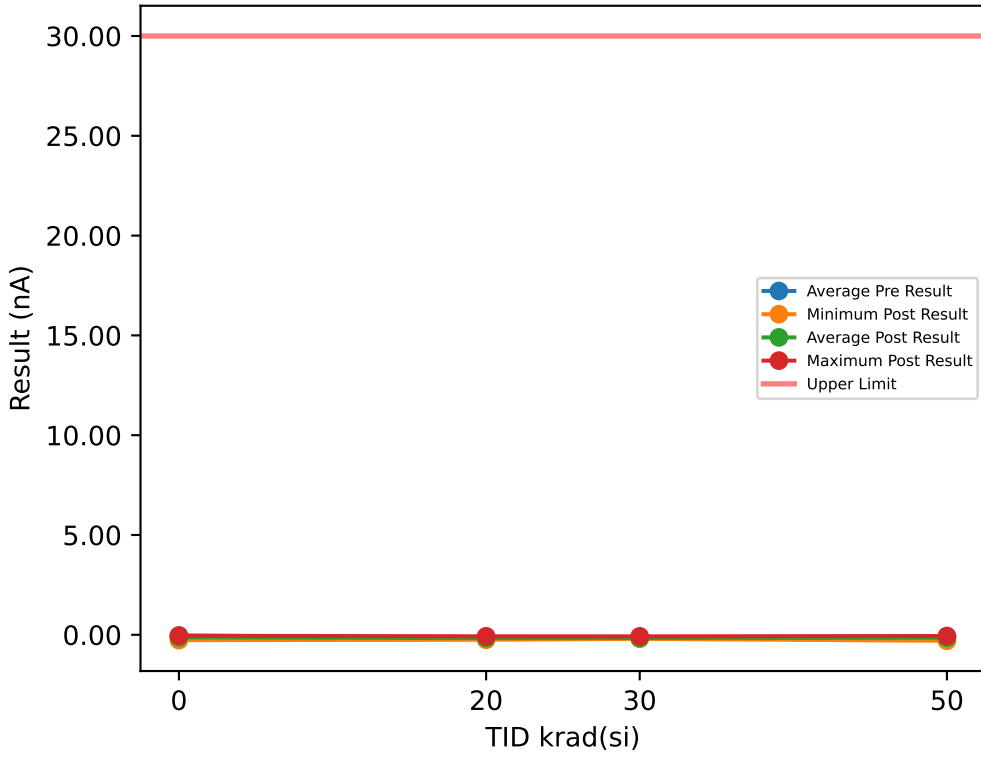
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5991	0.59956	0.5998	0.00033615	0.5993	0.59966	0.6	0.00033615	0	0.0001	0.0002	0.0001
20	0.5989	0.59954	0.6001	0.00039215	0.5984	0.59954	0.6004	0.00067363	-0.0005	1.1102e-17	0.0004	0.00034319
30	0.5991	0.59956	0.5999	0.00028363	0.5987	0.5995	0.6008	0.00068638	-0.0007	-6e-05	0.001	0.00060406
50	0.5989	0.59933	0.6002	0.00041647	0.598	0.59931	0.6007	0.00082523	-0.0012	-2e-05	0.0012	0.00084564

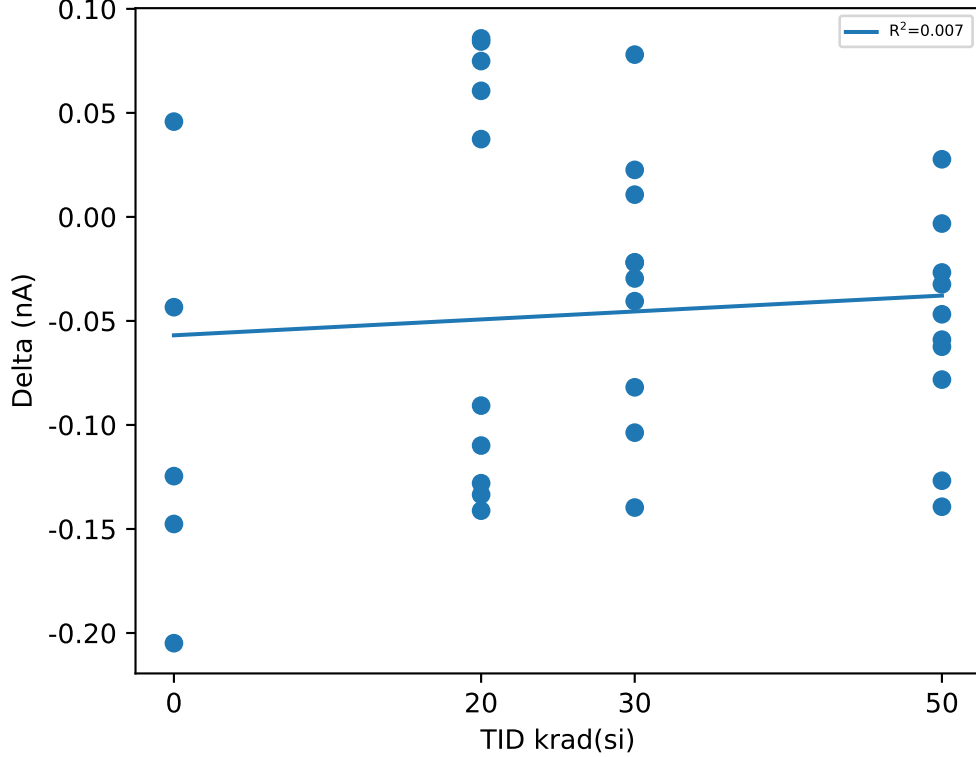
TID vs Result Stats



Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.2667	-0.1918	0.0749
2	20	Biased	-0.1292	-0.2199	-0.0907
3	20	Biased	-0.131	-0.0936	0.0374
4	20	Biased	-0.0381	-0.1661	-0.128
5	20	Biased	-0.1856	-0.1013	0.0843
6	20	Unbiased	-0.1355	-0.0749	0.0606
7	20	Unbiased	-0.1061	-0.216	-0.1099
8	20	Unbiased	-0.0787	-0.2199	-0.1412
9	20	Unbiased	-0.2262	-0.1404	0.0858
10	20	Unbiased	-0.1168	-0.2503	-0.1335
11	30	Biased	-0.131	-0.1606	-0.0296
12	30	Biased	-0.0225	-0.1622	-0.1397
13	30	Biased	-0.223	-0.2004	0.0226
14	30	Biased	-0.1698	-0.1918	-0.022
15	30	Biased	-0.1217	-0.1435	-0.0218
16	30	Unbiased	-0.163	-0.2035	-0.0405
17	30	Unbiased	-0.1606	-0.0826	0.078
18	30	Unbiased	-0.0887	-0.078	0.0107
19	30	Unbiased	-0.0842	-0.1879	-0.1037
20	30	Unbiased	-0.1068	-0.1887	-0.0819
26	50	Unbiased	-0.1448	-0.223	-0.0782
27	50	Unbiased	-0.0811	-0.1279	-0.0468
28	50	Unbiased	0.0024	-0.06	-0.0624
29	50	Unbiased	-0.1824	-0.1856	-0.0032
30	50	Unbiased	-0.0544	-0.0811	-0.0267
88	50	Biased-84Hr-Anneal	-0.0931	-0.2199	-0.1268
89	50	Biased-84Hr-Anneal	-0.1743	-0.1466	0.0277
90	50	Biased-84Hr-Anneal	-0.0338	-0.0662	-0.0324
91	50	Biased-84Hr-Anneal	-0.1618	-0.3011	-0.1393
92	50	Biased-84Hr-Anneal	-0.0346	-0.0936	-0.059
100	0	CORRELATION	-0.0346	-0.078	-0.0434
101	0	CORRELATION	-0.0403	-0.1879	-0.1476
102	0	CORRELATION	-0.065	-0.2699	-0.2049
103	0	CORRELATION	0.0497	-0.0749	-0.1246
104	0	CORRELATION	-0.0933	-0.0475	0.0458

TID vs Post - Pre Exposure Delta

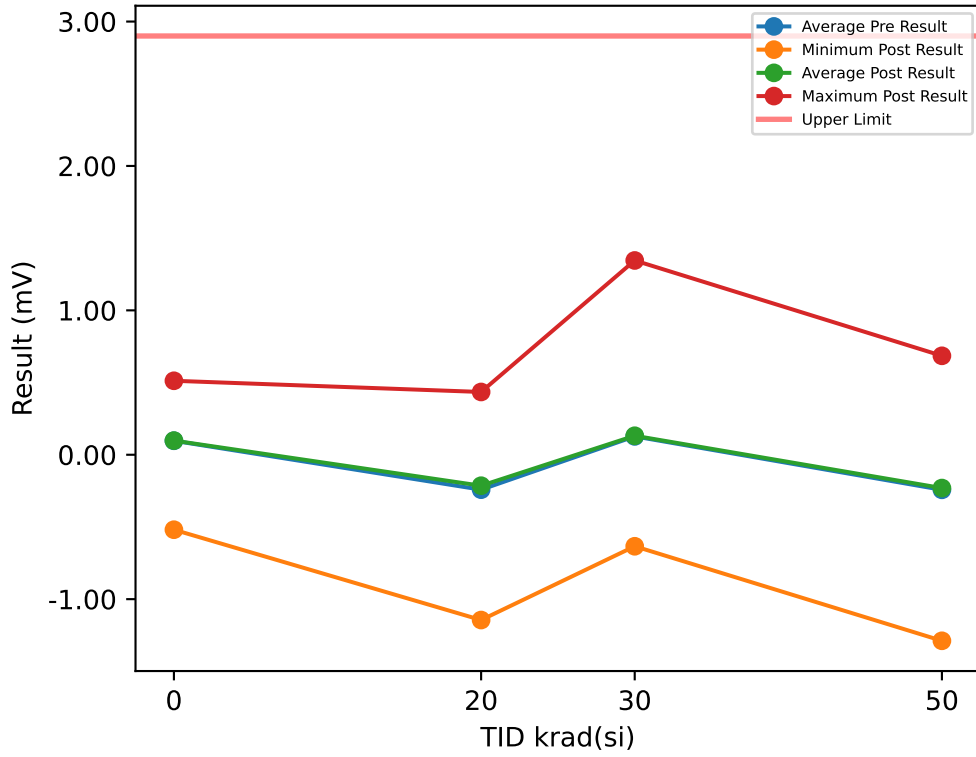


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.0933	-0.0367	0.0497	0.053588	-0.2699	-0.13164	-0.0475	0.09415	-0.2049	-0.09494	0.0458	0.097734
20	-0.2667	-0.14139	-0.0381	0.067979	-0.2503	-0.16742	-0.0749	0.061864	-0.1412	-0.02603	0.0858	0.10156
30	-0.223	-0.12713	-0.0225	0.05592	-0.2035	-0.15992	-0.078	0.046104	-0.1397	-0.03279	0.078	0.063605
50	-0.1824	-0.09579	0.0024	0.066323	-0.3011	-0.1505	-0.06	0.080182	-0.1393	-0.05471	0.0277	0.051393

Device Test: 17.3 LEVEL|STATIC/VSNSP/4.5////@EA_INPUT_OFFSET_V

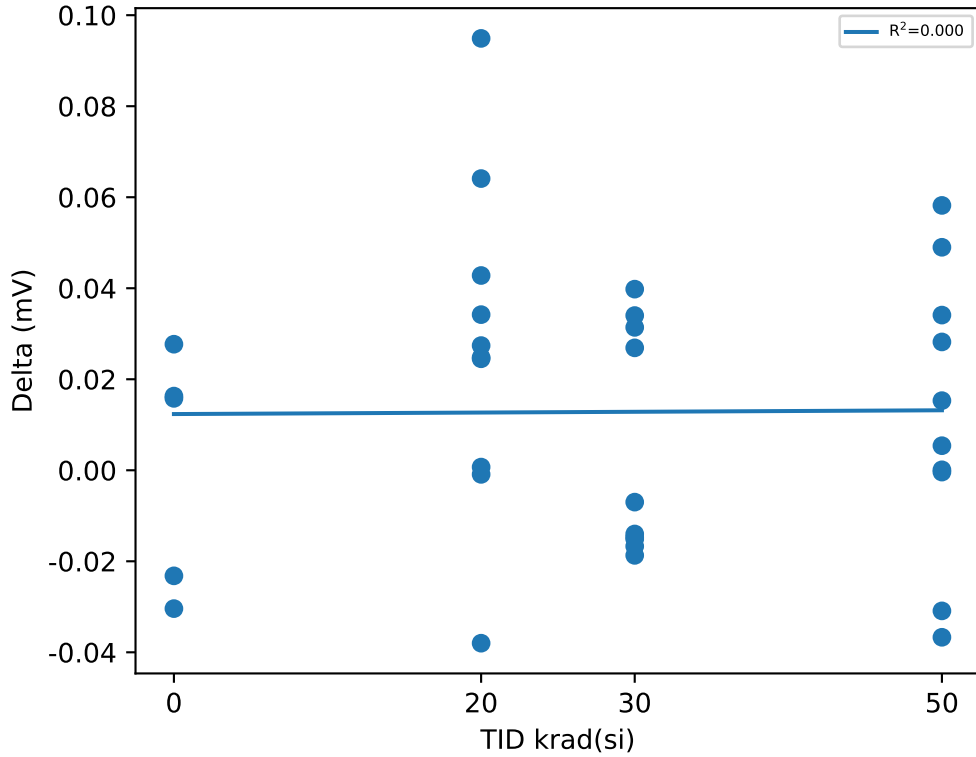
TID vs Result Stats



Test Results (Upper Limit = 2.9 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.4565	-0.4945	-0.038
2	20	Biased	-0.5159	-0.421	0.0949
3	20	Biased	-0.1311	-0.1063	0.0248
4	20	Biased	-0.5042	-0.4614	0.0428
5	20	Biased	-0.0292	-0.0285	0.0007
6	20	Unbiased	-1.1437	-1.1446	-0.0009
7	20	Unbiased	0.4103	0.4348	0.0245
8	20	Unbiased	-0.3412	-0.2771	0.0641
9	20	Unbiased	0.0127	0.0401	0.0274
10	20	Unbiased	0.2803	0.3145	0.0342
11	30	Biased	-0.0357	-0.0504	-0.0147
12	30	Biased	0.3612	0.3425	-0.0187
13	30	Biased	-0.2977	-0.2637	0.034
14	30	Biased	-0.1594	-0.1196	0.0398
15	30	Biased	1.3595	1.3455	-0.014
16	30	Unbiased	0.2707	0.2556	-0.0151
17	30	Unbiased	-0.3168	-0.2899	0.0269
18	30	Unbiased	-0.0742	-0.0428	0.0314
19	30	Unbiased	-0.6171	-0.6338	-0.0167
20	30	Unbiased	0.78	0.773	-0.007
26	50	Unbiased	-1.3466	-1.2884	0.0582
27	50	Unbiased	0.2547	0.218	-0.0367
28	50	Unbiased	0.4762	0.5103	0.0341
29	50	Unbiased	-1.1781	-1.209	-0.0309
30	50	Unbiased	-0.2993	-0.2992	0.0001
88	50	Biased-84Hr-Anneal	-0.6593	-0.644	0.0153
89	50	Biased-84Hr-Anneal	0.6798	0.6852	0.0054
90	50	Biased-84Hr-Anneal	-0.3053	-0.3057	-0.0004
91	50	Biased-84Hr-Anneal	-0.5028	-0.4538	0.049
92	50	Biased-84Hr-Anneal	0.452	0.4802	0.0282
100	0	CORRELATION	-0.5349	-0.5191	0.0158
101	0	CORRELATION	-0.0508	-0.0345	0.0163
102	0	CORRELATION	0.4589	0.4866	0.0277
103	0	CORRELATION	0.5355	0.5123	-0.0232
104	0	CORRELATION	0.0752	0.0448	-0.0304

TID vs Post - Pre Exposure Delta

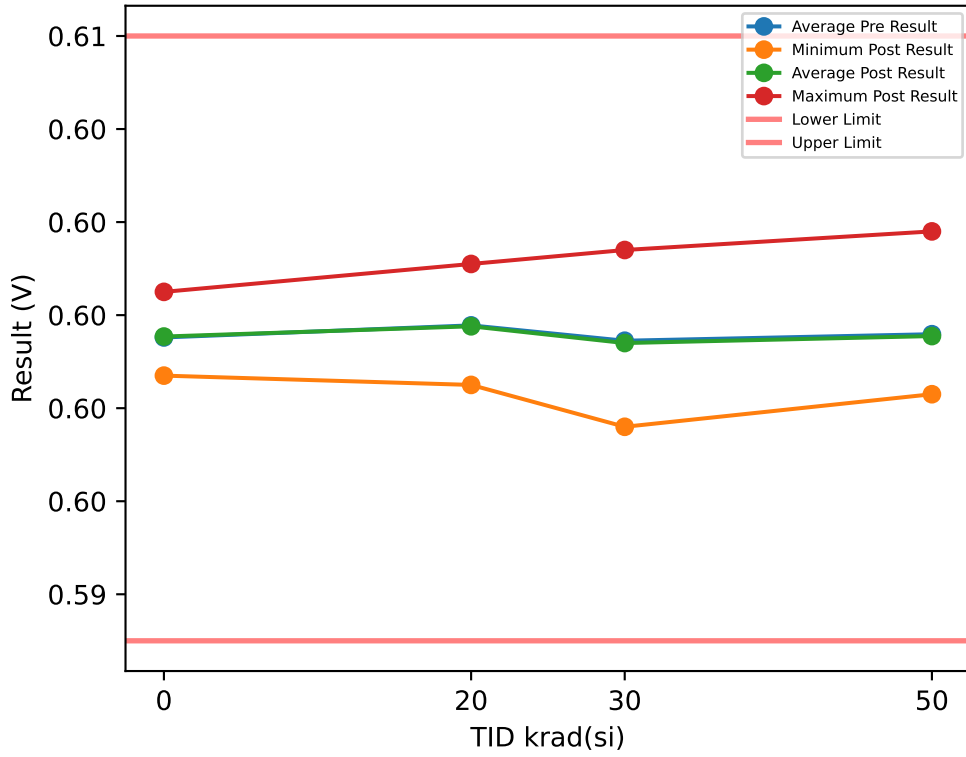


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.5349	0.09678	0.5355	0.43153	-0.5191	0.09802	0.5123	0.4254	-0.0304	0.00124	0.0277	0.02616
20	-1.1437	-0.24185	0.4103	0.45135	-1.1446	-0.2144	0.4348	0.45504	-0.038	0.02745	0.0949	0.036504
30	-0.6171	0.12705	1.3595	0.58698	-0.6338	0.13164	1.3455	0.5765	-0.0187	0.00459	0.0398	0.024848
50	-1.3466	-0.24287	0.6798	0.70236	-1.2884	-0.23064	0.6852	0.69931	-0.0367	0.01223	0.0582	0.031297

Device Test: 17.38 LEVEL|STATIC/VSNSP/14////@VREF_INTERNAL

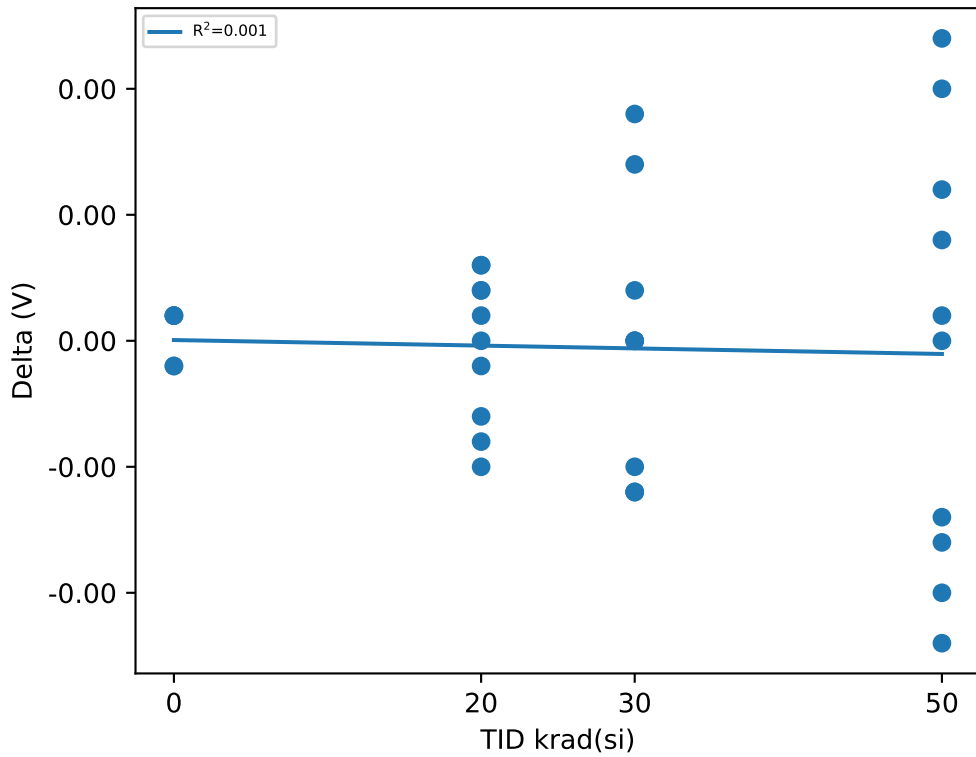
TID vs Result Stats



Test Results (Lower Limit = 0.593, Upper Limit = 0.606 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6004	0.6007	0.0003
3	20	Biased	0.5993	0.5988	-0.0005
4	20	Biased	0.6001	0.6002	0.0001
5	20	Biased	0.5989	0.5985	-0.0004
6	20	Unbiased	0.6009	0.6011	0.0002
7	20	Unbiased	0.5996	0.5999	0.0003
8	20	Unbiased	0.5995	0.5997	0.0002
9	20	Unbiased	0.6001	0.6	-0.0001
10	20	Unbiased	0.599	0.5987	-0.0003
11	30	Biased	0.5995	0.5989	-0.0006
12	30	Biased	0.5994	0.5994	0
13	30	Biased	0.6	0.5994	-0.0006
14	30	Biased	0.5994	0.6001	0.0007
15	30	Biased	0.5981	0.5976	-0.0005
16	30	Unbiased	0.5989	0.5989	0
17	30	Unbiased	0.6002	0.6002	0
18	30	Unbiased	0.5994	0.5988	-0.0006
19	30	Unbiased	0.6005	0.6014	0.0009
20	30	Unbiased	0.5991	0.5993	0.0002
26	50	Unbiased	0.6006	0.6018	0.0012
27	50	Unbiased	0.5995	0.6005	0.001
28	50	Unbiased	0.5984	0.5988	0.0004
29	50	Unbiased	0.6014	0.6006	-0.0008
30	50	Unbiased	0.5996	0.5989	-0.0007
88	50	Biased-84Hr-Anneal	0.5996	0.5997	0.0001
89	50	Biased-84Hr-Anneal	0.5986	0.5986	0
90	50	Biased-84Hr-Anneal	0.5995	0.5983	-0.0012
91	50	Biased-84Hr-Anneal	0.5994	0.6	0.0006
92	50	Biased-84Hr-Anneal	0.5993	0.5983	-0.001
100	0	CORRELATION	0.6004	0.6005	0.0001
101	0	CORRELATION	0.5994	0.5993	-0.0001
102	0	CORRELATION	0.5994	0.5995	0.0001
103	0	CORRELATION	0.5986	0.5987	0.0001
104	0	CORRELATION	0.5998	0.5997	-0.0001

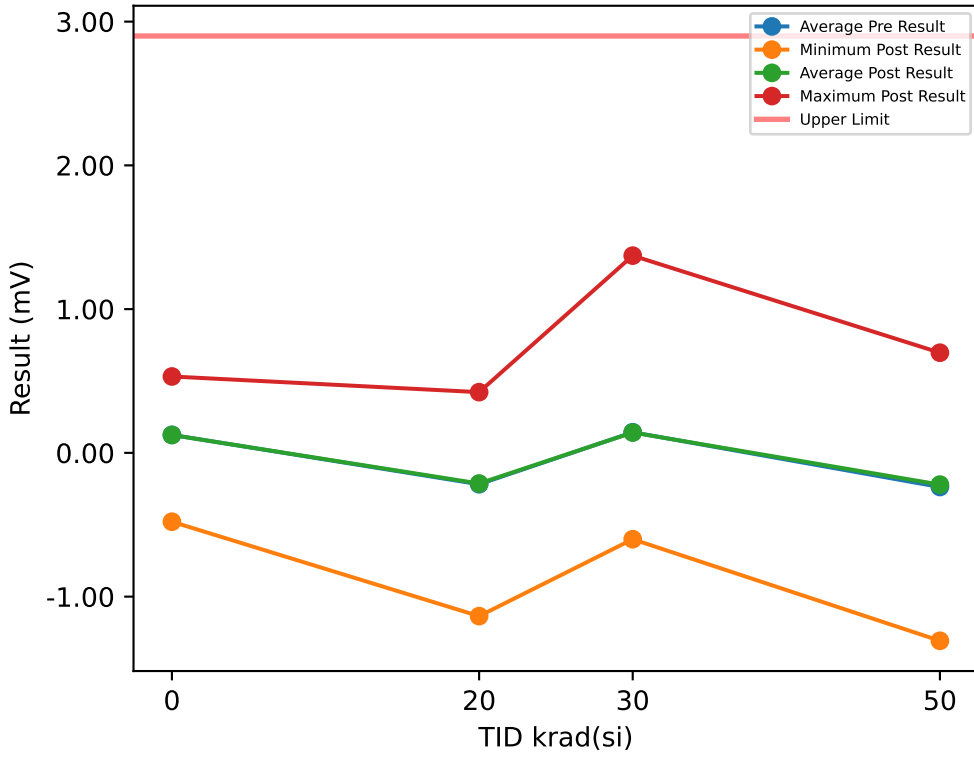
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5986	0.59952	0.6004	0.00065727	0.5987	0.59954	0.6005	0.00065422	-0.0001	2e-05	0.0001	0.00010954
20	0.5989	0.59978	0.6009	0.00063386	0.5985	0.59976	0.6011	0.0008592	-0.0005	-2e-05	0.0003	0.00029364
30	0.5981	0.59945	0.6005	0.00068516	0.5976	0.5994	0.6014	0.0010132	-0.0006	-5e-05	0.0009	0.00054212
50	0.5984	0.59959	0.6014	0.00087108	0.5983	0.59955	0.6018	0.0011693	-0.0012	-4e-05	0.0012	0.0008514

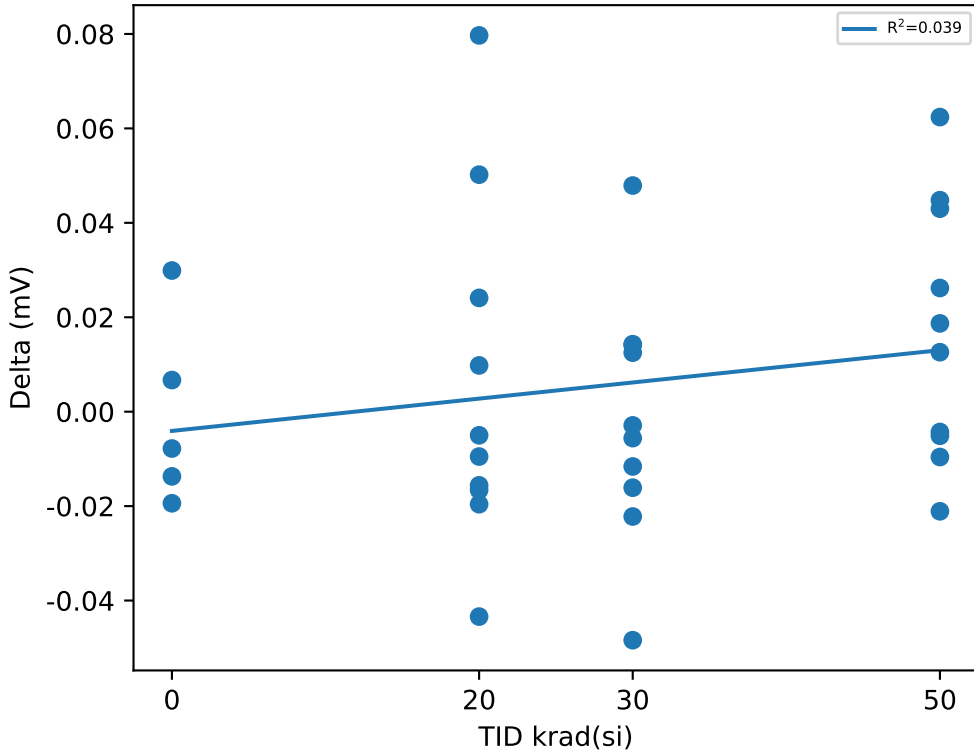
TID vs Result Stats



Test Results (Upper Limit = 2.9 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.4772	-0.427	0.0502
2	20	Biased	-0.4838	-0.4041	0.0797
3	20	Biased	-0.0881	-0.0976	-0.0095
4	20	Biased	-0.466	-0.4816	-0.0156
5	20	Biased	0.0139	-0.0295	-0.0434
6	20	Unbiased	-1.1161	-1.1357	-0.0196
7	20	Unbiased	0.439	0.4224	-0.0166
8	20	Unbiased	-0.2885	-0.2787	0.0098
9	20	Unbiased	-0.0042	-0.0092	-0.005
10	20	Unbiased	0.2867	0.3108	0.0241
11	30	Biased	-0.0119	-0.0341	-0.0222
12	30	Biased	0.4006	0.3522	-0.0484
13	30	Biased	-0.2853	-0.2712	0.0141
14	30	Biased	-0.1268	-0.0789	0.0479
15	30	Biased	1.3777	1.3721	-0.0056
16	30	Unbiased	0.2733	0.2704	-0.0029
17	30	Unbiased	-0.3031	-0.2888	0.0143
18	30	Unbiased	-0.0942	-0.0817	0.0125
19	30	Unbiased	-0.5891	-0.6007	-0.0116
20	30	Unbiased	0.7935	0.7774	-0.0161
26	50	Unbiased	-1.3697	-1.3073	0.0624
27	50	Unbiased	0.2456	0.2413	-0.0043
28	50	Unbiased	0.4898	0.5346	0.0448
29	50	Unbiased	-1.1596	-1.1807	-0.0211
30	50	Unbiased	-0.2917	-0.3013	-0.0096
88	50	Biased-84Hr-Anneal	-0.6432	-0.6483	-0.0051
89	50	Biased-84Hr-Anneal	0.6781	0.6968	0.0187
90	50	Biased-84Hr-Anneal	-0.3146	-0.2716	0.043
91	50	Biased-84Hr-Anneal	-0.4708	-0.4446	0.0262
92	50	Biased-84Hr-Anneal	0.4615	0.4741	0.0126
100	0	CORRELATION	-0.4856	-0.4789	0.0067
101	0	CORRELATION	0.0107	0.0029	-0.0078
102	0	CORRELATION	0.4723	0.5022	0.0299
103	0	CORRELATION	0.5508	0.5314	-0.0194
104	0	CORRELATION	0.0776	0.0639	-0.0137

TID vs Post - Pre Exposure Delta

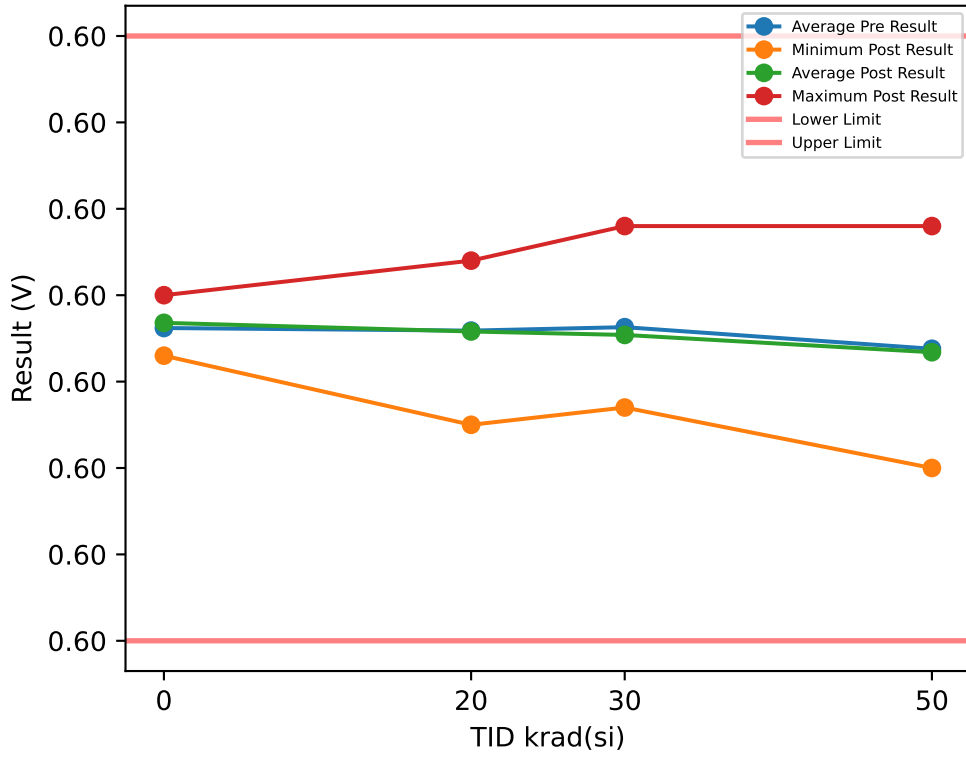


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.4856	0.12516	0.5508	0.41535	-0.4789	0.1243	0.5314	0.41556	-0.0194	-0.00086	0.0299	0.019749
20	-1.1161	-0.21843	0.439	0.4489	-1.1357	-0.21302	0.4224	0.44432	-0.0434	0.00541	0.0797	0.036755
30	-0.5891	0.14347	1.3777	0.58712	-0.6007	0.14167	1.3721	0.57882	-0.0484	-0.0018	0.0479	0.026014
50	-1.3697	-0.23746	0.6781	0.70311	-1.3073	-0.2207	0.6968	0.70339	-0.0211	0.01676	0.0624	0.02732

Device Test: 17.4 LEVEL|STATIC/SS_TR/4.5/////@VREF_25C

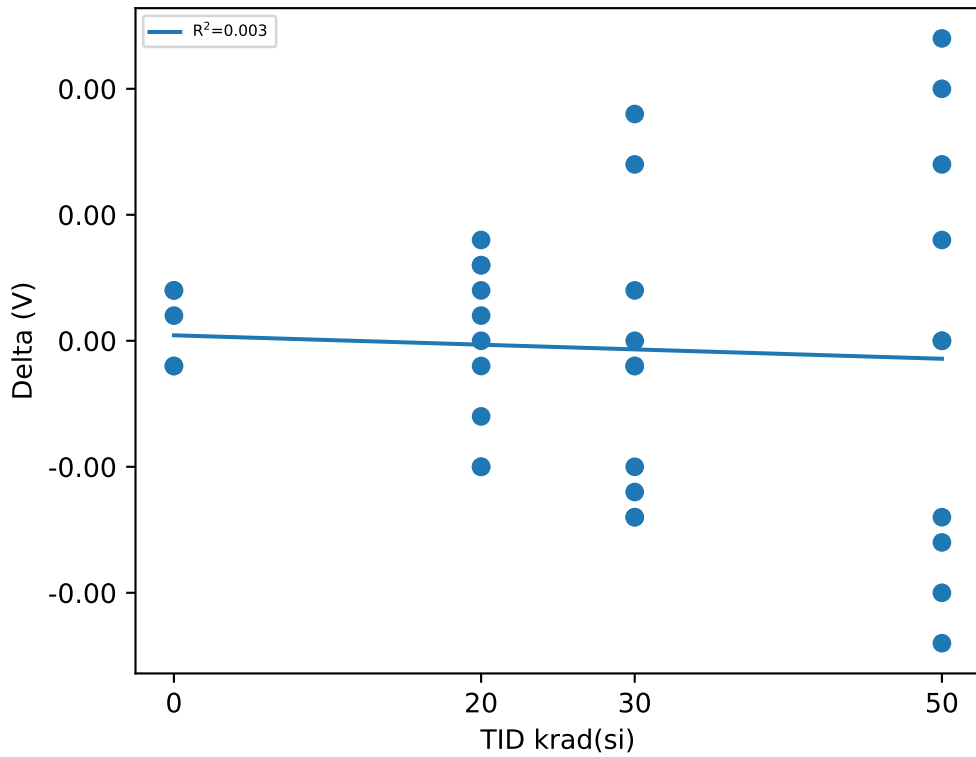
TID vs Result Stats



Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5996	0.5995	-0.0001
2	20	Biased	0.6	0.6003	0.0003
3	20	Biased	0.5993	0.5988	-0.0005
4	20	Biased	0.5996	0.5997	0.0001
5	20	Biased	0.599	0.5985	-0.0005
6	20	Unbiased	0.5998	0.6	0.0002
7	20	Unbiased	0.6	0.6004	0.0004
8	20	Unbiased	0.5992	0.5995	0.0003
9	20	Unbiased	0.6001	0.6001	0
10	20	Unbiased	0.5993	0.599	-0.0003
11	30	Biased	0.5995	0.5989	-0.0006
12	30	Biased	0.5998	0.5997	-0.0001
13	30	Biased	0.5998	0.5991	-0.0007
14	30	Biased	0.5993	0.6	0.0007
15	30	Biased	0.5995	0.599	-0.0005
16	30	Unbiased	0.5992	0.5992	0
17	30	Unbiased	0.6	0.5999	-0.0001
18	30	Unbiased	0.5994	0.5987	-0.0007
19	30	Unbiased	0.5999	0.6008	0.0009
20	30	Unbiased	0.5999	0.6001	0.0002
26	50	Unbiased	0.5993	0.6005	0.0012
27	50	Unbiased	0.5998	0.6008	0.001
28	50	Unbiased	0.599	0.5994	0.0004
29	50	Unbiased	0.6002	0.5994	-0.0008
30	50	Unbiased	0.5993	0.5986	-0.0007
88	50	Biased-84Hr-Anneal	0.599	0.599	0
89	50	Biased-84Hr-Anneal	0.5993	0.5993	0
90	50	Biased-84Hr-Anneal	0.5992	0.598	-0.0012
91	50	Biased-84Hr-Anneal	0.5989	0.5996	0.0007
92	50	Biased-84Hr-Anneal	0.5998	0.5988	-0.001
100	0	CORRELATION	0.5998	0.6	0.0002
101	0	CORRELATION	0.5994	0.5993	-0.0001
102	0	CORRELATION	0.5999	0.6	0.0001
103	0	CORRELATION	0.5991	0.5993	0.0002
104	0	CORRELATION	0.5999	0.5998	-0.0001

TID vs Post - Pre Exposure Delta

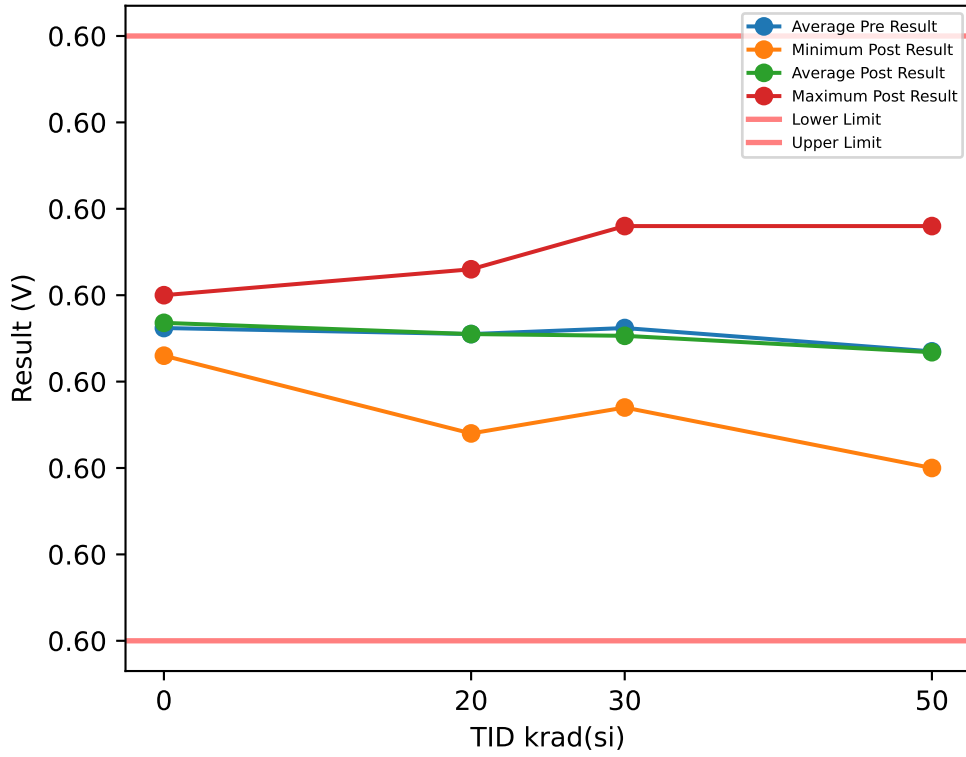


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5991	0.59962	0.5999	0.00035637	0.5993	0.59968	0.6	0.00035637	-0.0001	6e-05	0.0002	0.00015166
20	0.599	0.59959	0.6001	0.00038137	0.5985	0.59958	0.6004	0.00064773	-0.0005	-1e-05	0.0004	0.00033149
30	0.5992	0.59963	0.6	0.00028304	0.5987	0.59954	0.6008	0.00066533	-0.0007	-9e-05	0.0009	0.0005646
50	0.5989	0.59938	0.6002	0.00042111	0.598	0.59934	0.6008	0.00083693	-0.0012	-4e-05	0.0012	0.0008592

Device Test: 17.40 LEVEL|STATIC/SS_TR/14////@VREF_25C

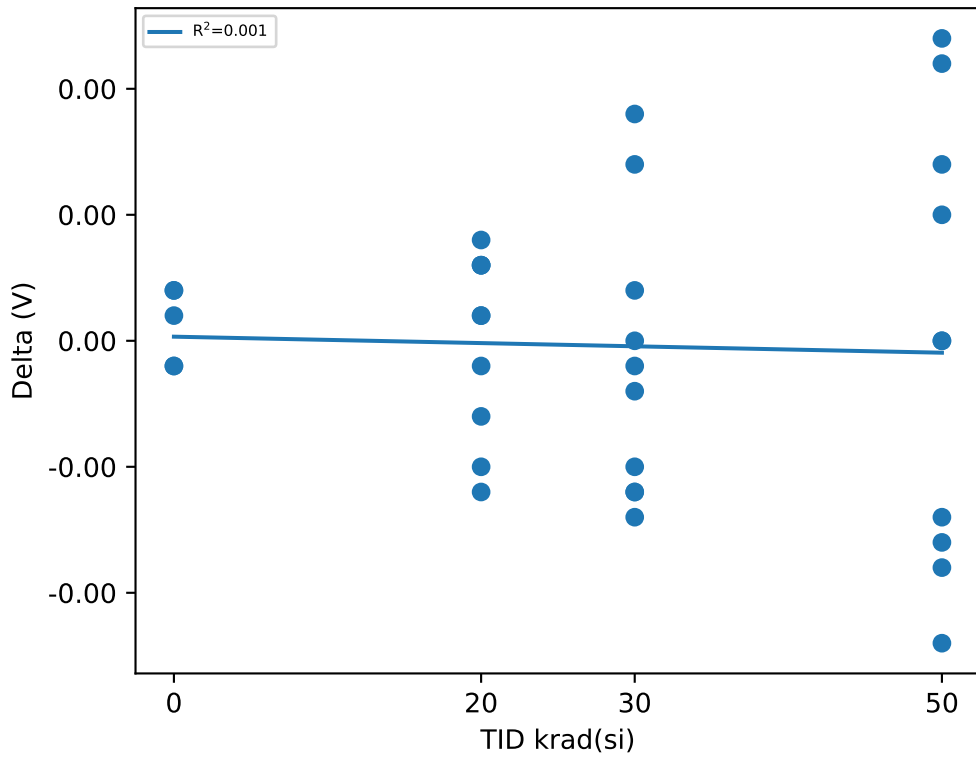
TID vs Result Stats



Test Results (Lower Limit = 0.596, Upper Limit = 0.603 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5995	0.5996	0.0001
2	20	Biased	0.5999	0.6003	0.0004
3	20	Biased	0.5992	0.5987	-0.0005
4	20	Biased	0.5996	0.5997	0.0001
5	20	Biased	0.599	0.5984	-0.0006
6	20	Unbiased	0.5997	0.6	0.0003
7	20	Unbiased	0.6	0.6003	0.0003
8	20	Unbiased	0.5992	0.5995	0.0003
9	20	Unbiased	0.6001	0.6	-0.0001
10	20	Unbiased	0.5993	0.599	-0.0003
11	30	Biased	0.5995	0.5989	-0.0006
12	30	Biased	0.5999	0.5997	-0.0002
13	30	Biased	0.5997	0.5991	-0.0006
14	30	Biased	0.5993	0.6	0.0007
15	30	Biased	0.5995	0.599	-0.0005
16	30	Unbiased	0.5992	0.5991	-0.0001
17	30	Unbiased	0.5999	0.5999	0
18	30	Unbiased	0.5994	0.5987	-0.0007
19	30	Unbiased	0.5999	0.6008	0.0009
20	30	Unbiased	0.5999	0.6001	0.0002
26	50	Unbiased	0.5993	0.6005	0.0012
27	50	Unbiased	0.5997	0.6008	0.0011
28	50	Unbiased	0.5989	0.5994	0.0005
29	50	Unbiased	0.6002	0.5994	-0.0008
30	50	Unbiased	0.5993	0.5986	-0.0007
88	50	Biased-84Hr-Anneal	0.599	0.599	0
89	50	Biased-84Hr-Anneal	0.5993	0.5993	0
90	50	Biased-84Hr-Anneal	0.5992	0.598	-0.0012
91	50	Biased-84Hr-Anneal	0.5989	0.5996	0.0007
92	50	Biased-84Hr-Anneal	0.5997	0.5988	-0.0009
100	0	CORRELATION	0.5999	0.6	0.0001
101	0	CORRELATION	0.5994	0.5993	-0.0001
102	0	CORRELATION	0.5998	0.6	0.0002
103	0	CORRELATION	0.5991	0.5993	0.0002
104	0	CORRELATION	0.5999	0.5998	-0.0001

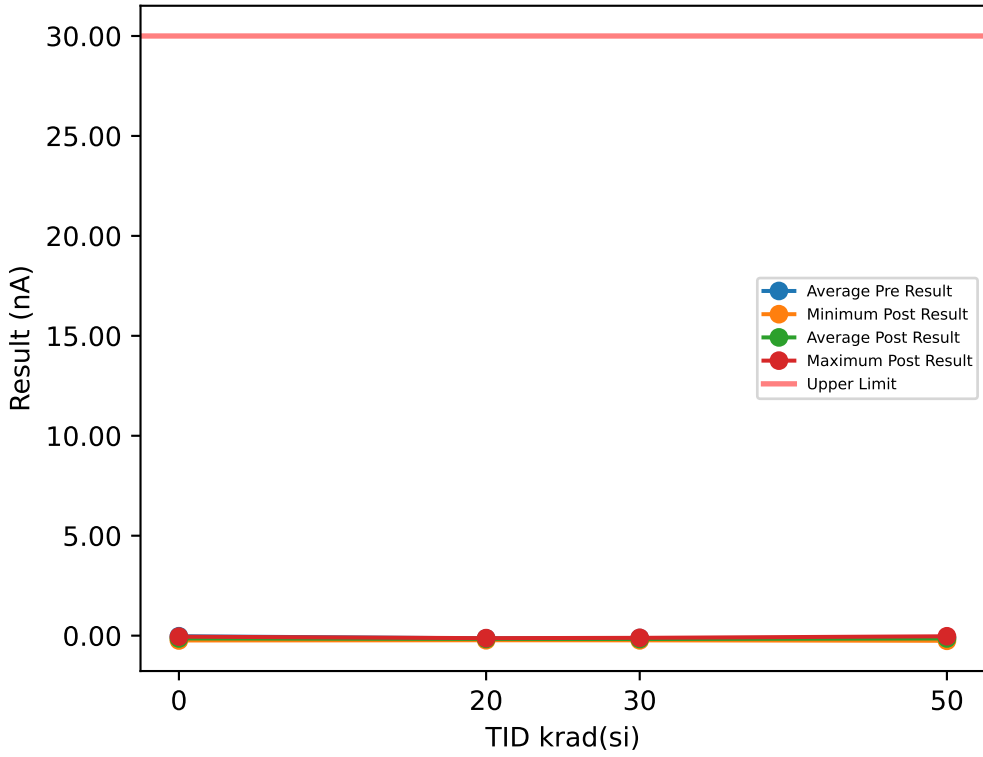
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.5991	0.59962	0.5999	0.00035637	0.5993	0.59968	0.6	0.00035637	-0.0001	6e-05	0.0002	0.00015166
20	0.599	0.59955	0.6001	0.00037491	0.5984	0.59955	0.6003	0.0006587	-0.0006	0	0.0004	0.00035901
30	0.5992	0.59962	0.5999	0.00027406	0.5987	0.59953	0.6008	0.00067173	-0.0007	-9e-05	0.0009	0.00055468
50	0.5989	0.59935	0.6002	0.00041164	0.598	0.59934	0.6008	0.00083693	-0.0012	-1e-05	0.0012	0.00086724

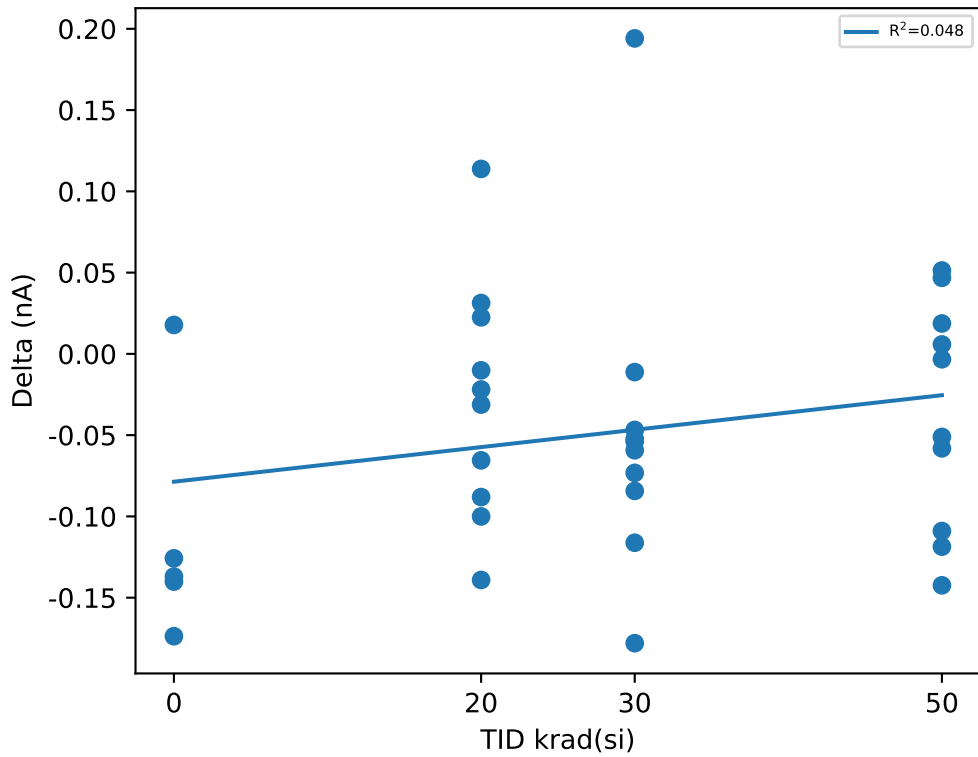
TID vs Result Stats



Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.1512	-0.1824	-0.0312
2	20	Biased	-0.0731	-0.1731	-0.1
3	20	Biased	-0.078	-0.1435	-0.0655
4	20	Biased	-0.1286	-0.1505	-0.0219
5	20	Biased	-0.2137	-0.1824	0.0313
6	20	Unbiased	-0.0918	-0.2309	-0.1391
7	20	Unbiased	-0.0624	-0.1505	-0.0881
8	20	Unbiased	-0.1349	-0.145	-0.0101
9	20	Unbiased	-0.2386	-0.1248	0.1138
10	20	Unbiased	-0.1761	-0.1536	0.0225
11	30	Biased	-0.078	-0.1512	-0.0732
12	30	Biased	-0.3127	-0.1186	0.1941
13	30	Biased	-0.0826	-0.1349	-0.0523
14	30	Biased	-0.0575	-0.2355	-0.178
15	30	Biased	-0.0624	-0.1092	-0.0468
16	30	Unbiased	-0.0818	-0.1661	-0.0843
17	30	Unbiased	-0.145	-0.2043	-0.0593
18	30	Unbiased	-0.1542	-0.1654	-0.0112
19	30	Unbiased	-0.1154	-0.2316	-0.1162
20	30	Unbiased	-0.1161	-0.17	-0.0539
26	50	Unbiased	-0.098	-0.1013	-0.0033
27	50	Unbiased	-0.078	-0.0593	0.0187
28	50	Unbiased	-0.0475	-0.1661	-0.1186
29	50	Unbiased	-0.2043	-0.1575	0.0468
30	50	Unbiased	-0.1823	-0.131	0.0513
88	50	Biased-84Hr-Anneal	-0.1056	-0.248	-0.1424
89	50	Biased-84Hr-Anneal	-0.115	-0.1092	0.0058
90	50	Biased-84Hr-Anneal	-0.0931	-0.1442	-0.0511
91	50	Biased-84Hr-Anneal	-0.1993	-0.2574	-0.0581
92	50	Biased-84Hr-Anneal	0.0778	-0.0312	-0.109
100	0	CORRELATION	0.0278	-0.1092	-0.137
101	0	CORRELATION	-0.0153	-0.1411	-0.1258
102	0	CORRELATION	-0.0681	-0.2418	-0.1737
103	0	CORRELATION	-0.019	-0.1591	-0.1401
104	0	CORRELATION	-0.0684	-0.0506	0.0178

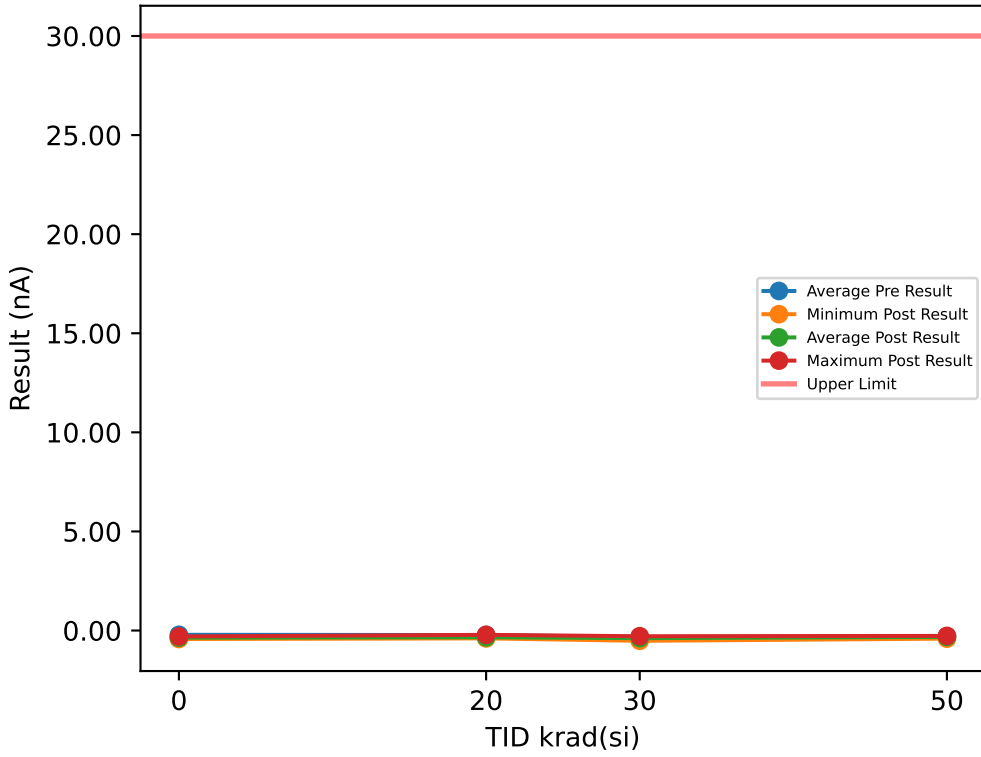
TID vs Post - Pre Exposure Delta



Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.0684	-0.0286	0.0278	0.040603	-0.2418	-0.14036	-0.0506	0.070124	-0.1737	-0.11176	0.0178	0.074598
20	-0.2386	-0.13484	-0.0624	0.060678	-0.2309	-0.16367	-0.1248	0.029861	-0.1391	-0.02883	0.1138	0.073847
30	-0.3127	-0.12057	-0.0575	0.075135	-0.2355	-0.16868	-0.1092	0.043722	-0.178	-0.04811	0.1941	0.096409
50	-0.2043	-0.10453	0.0778	0.083312	-0.2574	-0.14052	-0.0312	0.072515	-0.1424	-0.03599	0.0513	0.070297

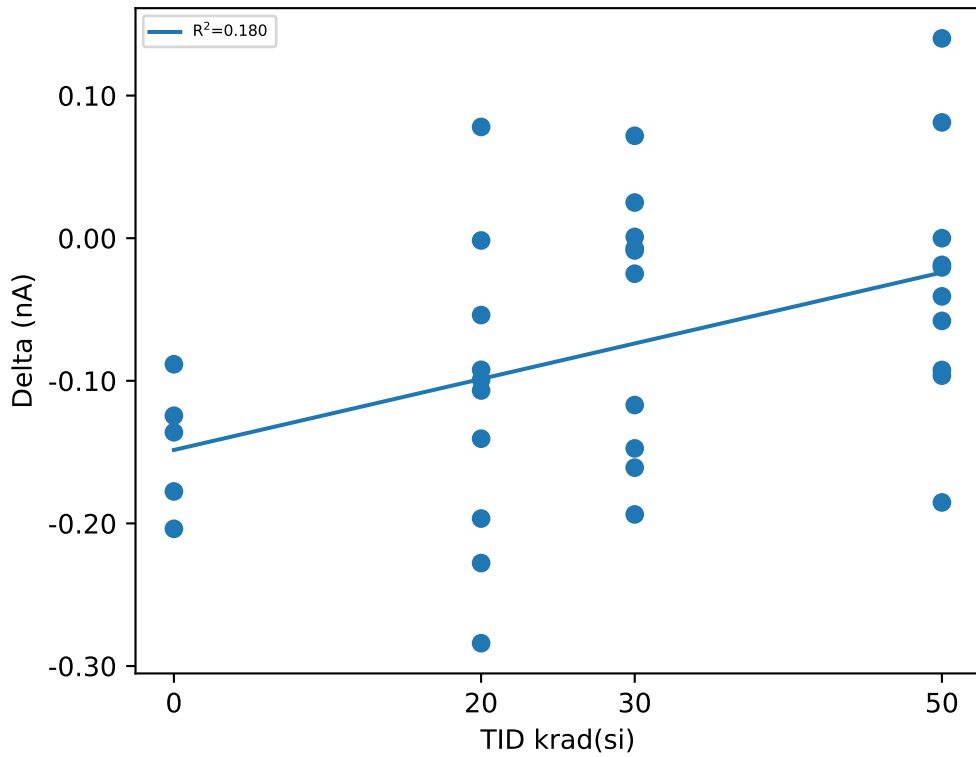
TID vs Result Stats



Test Results (Upper Limit = 30.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	-0.1887	-0.3853	-0.1966
2	20	Biased	-0.1573	-0.2979	-0.1406
3	20	Biased	0.0094	-0.2184	-0.2278
4	20	Biased	-0.0818	-0.3658	-0.284
5	20	Biased	-0.429	-0.351	0.078
6	20	Unbiased	-0.2322	-0.3245	-0.0923
7	20	Unbiased	-0.2902	-0.397	-0.1068
8	20	Unbiased	-0.3034	-0.3573	-0.0539
9	20	Unbiased	-0.3323	-0.3339	-0.0016
10	20	Unbiased	-0.2759	-0.3752	-0.0993
11	30	Biased	-0.259	-0.376	-0.117
12	30	Biased	-0.3315	-0.3401	-0.0086
13	30	Biased	-0.4322	-0.4313	0.0009
14	30	Biased	-0.1854	-0.3791	-0.1937
15	30	Biased	-0.3152	-0.3401	-0.0249
16	30	Unbiased	-0.5437	-0.5187	0.025
17	30	Unbiased	-0.3604	-0.2886	0.0718
18	30	Unbiased	-0.2385	-0.3994	-0.1609
19	30	Unbiased	-0.2527	-0.4001	-0.1474
20	30	Unbiased	-0.372	-0.3791	-0.0071
26	50	Unbiased	-0.2603	-0.3011	-0.0408
27	50	Unbiased	-0.3401	-0.3401	0
28	50	Unbiased	-0.2847	-0.3034	-0.0187
29	50	Unbiased	-0.3635	-0.2823	0.0812
30	50	Unbiased	-0.2541	-0.2746	-0.0205
88	50	Biased-84Hr-Anneal	-0.2961	-0.3541	-0.058
89	50	Biased-84Hr-Anneal	-0.4116	-0.2715	0.1401
90	50	Biased-84Hr-Anneal	-0.2211	-0.4064	-0.1853
91	50	Biased-84Hr-Anneal	-0.3179	-0.4103	-0.0924
92	50	Biased-84Hr-Anneal	-0.1876	-0.284	-0.0964
100	0	CORRELATION	-0.1938	-0.3183	-0.1245
101	0	CORRELATION	-0.2244	-0.4282	-0.2038
102	0	CORRELATION	-0.2492	-0.3853	-0.1361
103	0	CORRELATION	-0.122	-0.2996	-0.1776
104	0	CORRELATION	-0.2899	-0.3783	-0.0884

TID vs Post - Pre Exposure Delta

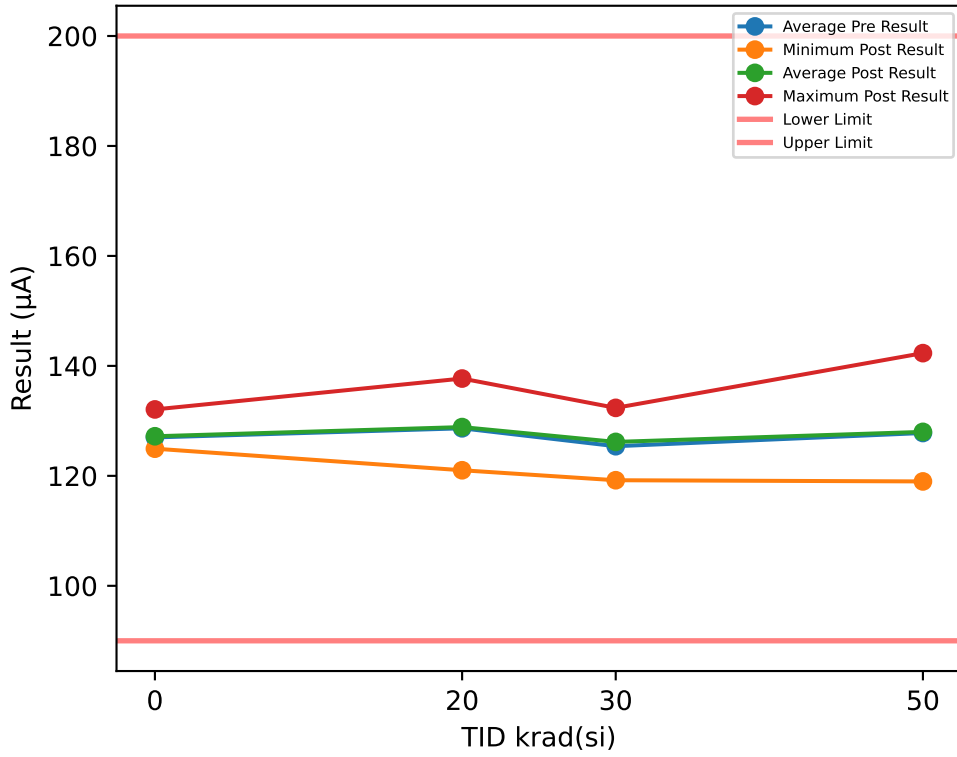


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	-0.2899	-0.21586	-0.122	0.063172	-0.4282	-0.36194	-0.2996	0.052427	-0.2038	-0.14608	-0.0884	0.045325
20	-0.429	-0.22814	0.0094	0.12799	-0.397	-0.34063	-0.2184	0.052131	-0.284	-0.11249	0.078	0.10709
30	-0.5437	-0.32906	-0.1854	0.10505	-0.5187	-0.38525	-0.2886	0.0614	-0.1937	-0.05619	0.0718	0.090539
50	-0.4116	-0.2937	-0.1876	0.067338	-0.4103	-0.32278	-0.2715	0.05257	-0.1853	-0.02908	0.1401	0.091731

Device Test: 18.10 ERROR_AMP|STATIC/COMP/5////@EA_SINK

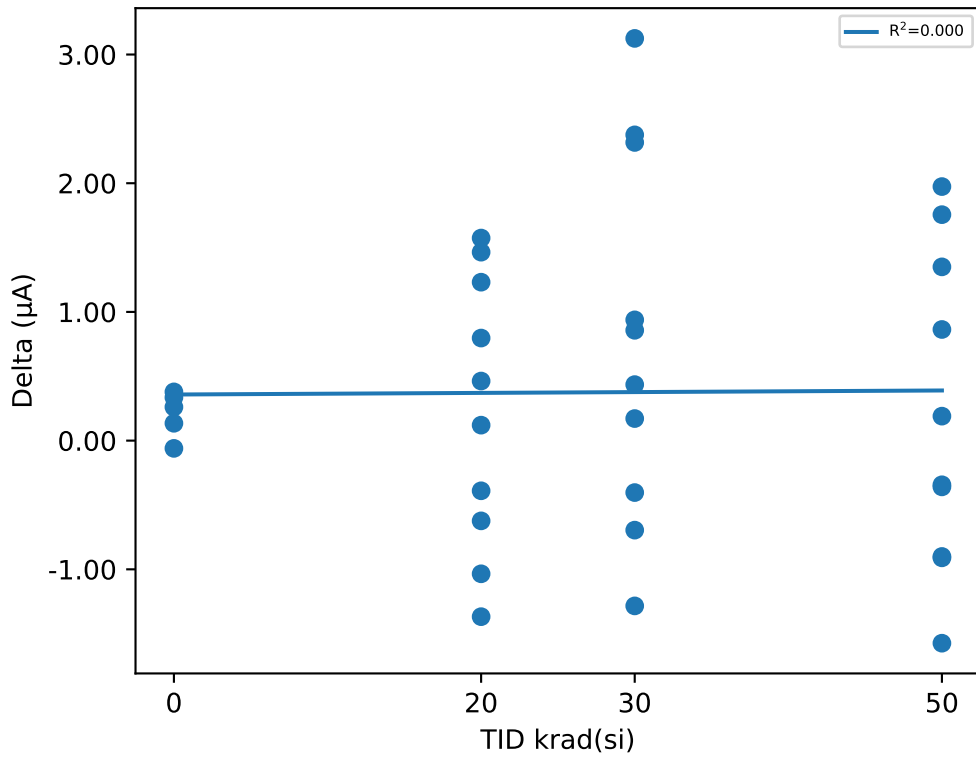
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	124.34	125.57	1.2311
2	20	Biased	124.5	123.46	-1.0348
3	20	Biased	120.22	121.02	0.797
4	20	Biased	138.09	137.7	-0.3898
5	20	Biased	130.62	132.19	1.574
6	20	Unbiased	130.6	129.24	-1.3679
7	20	Unbiased	128.28	128.75	0.463
8	20	Unbiased	127.51	126.89	-0.6235
9	20	Unbiased	130.32	131.78	1.4643
10	20	Unbiased	131.99	132.12	0.1202
11	30	Biased	129.42	131.8	2.3758
12	30	Biased	124.57	123.28	-1.2842
13	30	Biased	131.43	132.36	0.9384
14	30	Biased	129.06	129.49	0.4353
15	30	Biased	118.08	121.2	3.1253
16	30	Unbiased	119.03	119.2	0.1715
17	30	Unbiased	123.77	124.63	0.8572
18	30	Unbiased	123.28	125.6	2.3168
19	30	Unbiased	130.5	129.81	-0.6955
20	30	Unbiased	124.75	124.35	-0.4036
26	50	Unbiased	131.64	130.72	-0.9108
27	50	Unbiased	133.17	132.82	-0.3594
28	50	Unbiased	126.92	126.58	-0.3431
29	50	Unbiased	125.74	124.16	-1.574
30	50	Unbiased	120.06	120.25	0.1902
88	50	Biased-84Hr-Anneal	129.16	128.26	-0.9001
89	50	Biased-84Hr-Anneal	117.23	118.99	1.7558
90	50	Biased-84Hr-Anneal	128.62	129.48	0.8636
91	50	Biased-84Hr-Anneal	140.35	142.32	1.974
92	50	Biased-84Hr-Anneal	125.04	126.39	1.3501
100	0	CORRELATION	126.96	127.3	0.3354
101	0	CORRELATION	124.56	124.94	0.3787
102	0	CORRELATION	125.63	125.89	0.261
103	0	CORRELATION	131.95	132.08	0.1347
104	0	CORRELATION	125.84	125.78	-0.0602

TID vs Post - Pre Exposure Delta

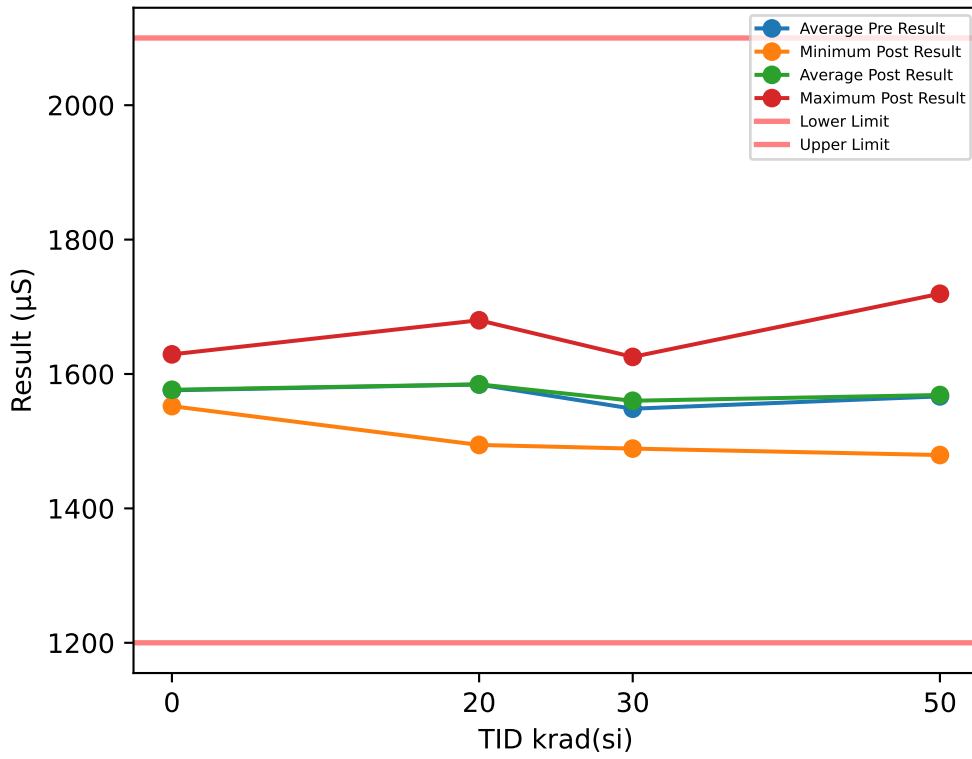


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.56	126.99	131.95	2.8987	124.94	127.2	132.08	2.8568	-0.0602	0.20992	0.3787	0.1771
20	120.22	128.65	138.09	4.9337	121.02	128.87	137.7	4.8747	-1.3679	0.22336	1.574	1.0533
30	118.08	125.39	131.43	4.6468	119.2	126.17	132.36	4.4955	-1.2842	0.7837	3.1253	1.4441
50	117.23	127.79	140.35	6.5638	118.99	128	142.32	6.6544	-1.574	0.20463	1.974	1.2261

Device Test: 18.14 EA|STATIC/COMP/12////@EA_GM_25C

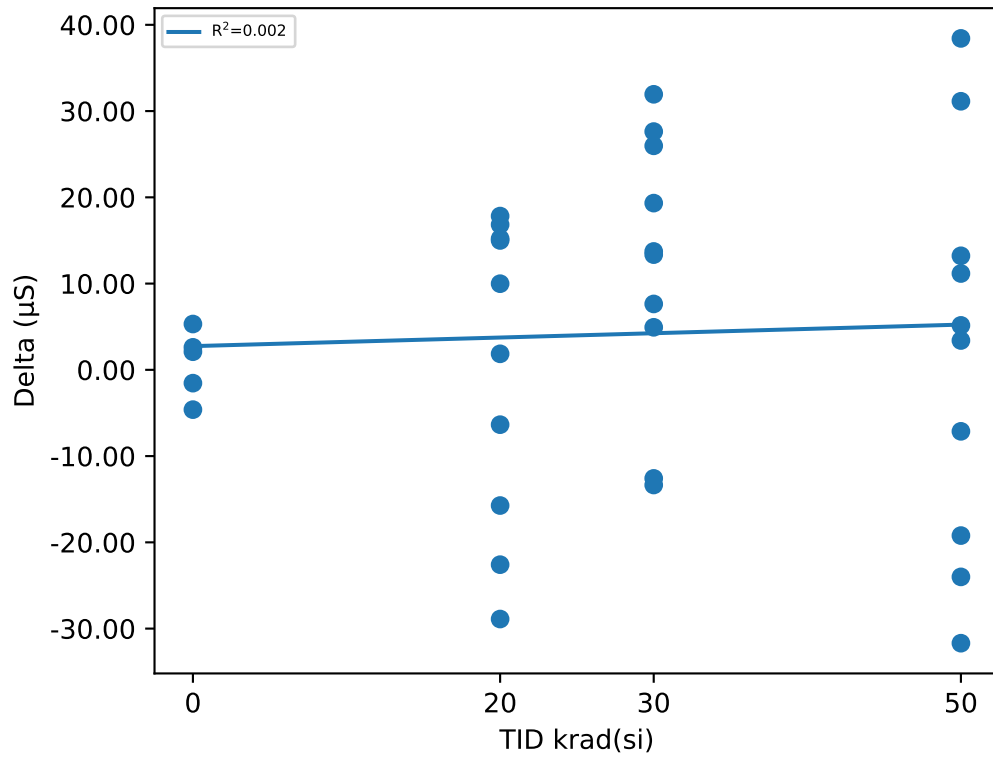
TID vs Result Stats



Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1529.1	1539.1	9.9877
2	20	Biased	1543.4	1520.8	-22.588
3	20	Biased	1479.2	1494.4	15.212
4	20	Biased	1695.7	1679.9	-15.731
5	20	Biased	1611.9	1629.8	17.828
6	20	Unbiased	1614	1585.1	-28.89
7	20	Unbiased	1578.1	1593.1	15.001
8	20	Unbiased	1568.1	1561.7	-6.3569
9	20	Unbiased	1603	1619.8	16.838
10	20	Unbiased	1620.7	1622.6	1.8573
11	30	Biased	1593.3	1619.3	25.973
12	30	Biased	1546.7	1533.3	-13.351
13	30	Biased	1611.7	1625.4	13.725
14	30	Biased	1577.1	1590.4	13.358
15	30	Biased	1471.8	1503.8	31.945
16	30	Unbiased	1469.7	1489	19.33
17	30	Unbiased	1533.3	1540.9	7.6398
18	30	Unbiased	1521.8	1549.5	27.625
19	30	Unbiased	1610.5	1615.4	4.9311
20	30	Unbiased	1547.5	1534.9	-12.586
26	50	Unbiased	1598	1601.4	3.4016
27	50	Unbiased	1623.6	1628.7	5.1541
28	50	Unbiased	1553.8	1567	13.222
29	50	Unbiased	1547.8	1523.8	-24.004
30	50	Unbiased	1498.6	1479.4	-19.214
88	50	Biased-84Hr-Anneal	1592.2	1560.5	-31.692
89	50	Biased-84Hr-Anneal	1450.9	1482	31.137
90	50	Biased-84Hr-Anneal	1582.2	1575	-7.1294
91	50	Biased-84Hr-Anneal	1681	1719.4	38.426
92	50	Biased-84Hr-Anneal	1538.9	1550.1	11.168
100	0	CORRELATION	1577.4	1572.8	-4.6139
101	0	CORRELATION	1549.6	1552.2	2.6092
102	0	CORRELATION	1571	1569.4	-1.5431
103	0	CORRELATION	1627.1	1629.2	2.1015
104	0	CORRELATION	1553.6	1559	5.3127

TID vs Post - Pre Exposure Delta

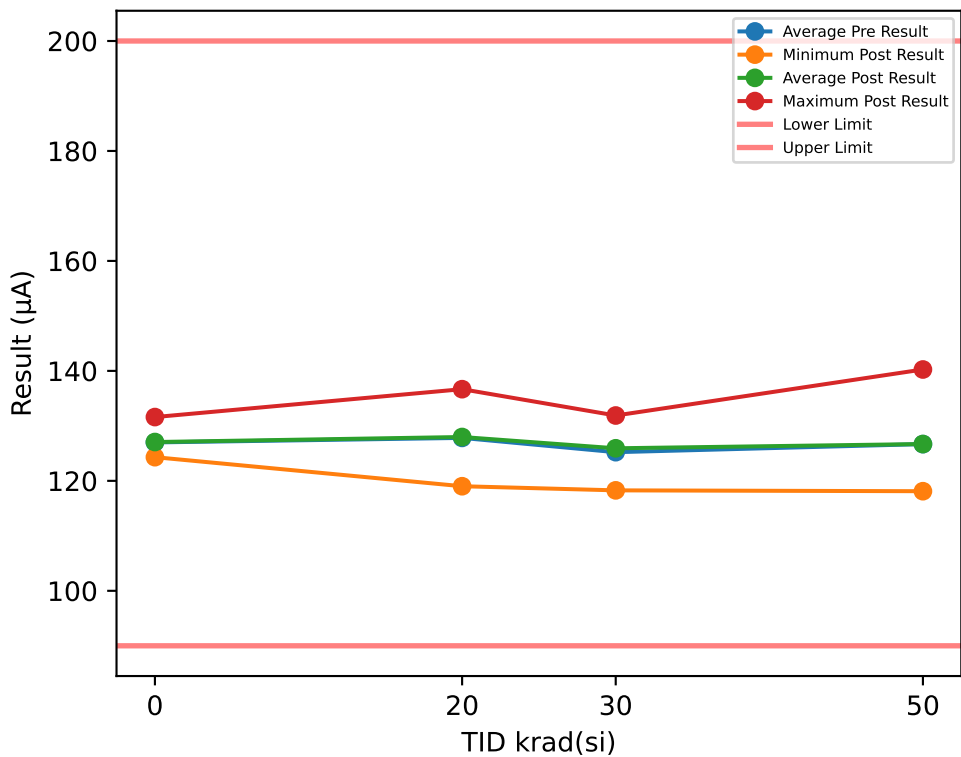


Test Statistics (µS)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1549.6	1575.7	1627.1	30.98	1552.2	1576.5	1629.2	30.588	-4.6139	0.77328	5.3127	3.8771
20	1479.2	1584.3	1695.7	59.429	1494.4	1584.6	1679.9	56.446	-28.89	0.31567	17.828	17.615
30	1469.7	1548.3	1611.7	51.316	1489	1560.2	1625.4	49.228	-13.351	11.859	31.945	15.676
50	1450.9	1566.7	1681	64.563	1479.4	1568.7	1719.4	70.988	-31.692	2.0469	38.426	22.955

Device Test: 18.15 ERROR_AMP|STATIC/COMP/12////@EA_SOURCE

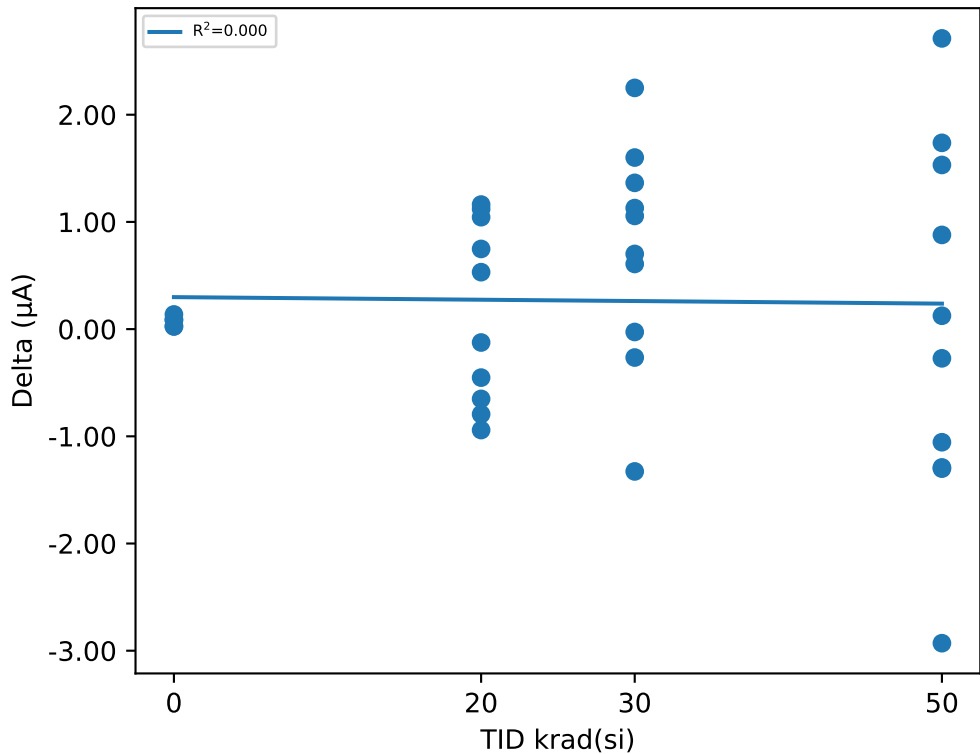
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	122.99	124.03	1.0442
2	20	Biased	124.28	123.49	-0.7937
3	20	Biased	118.49	119.02	0.5313
4	20	Biased	136.8	136.67	-0.1248
5	20	Biased	128.89	129.64	0.748
6	20	Unbiased	128.76	127.82	-0.9416
7	20	Unbiased	128.93	130.09	1.162
8	20	Unbiased	126.38	125.73	-0.6508
9	20	Unbiased	131.04	132.16	1.1208
10	20	Unbiased	131.54	131.09	-0.4524
11	30	Biased	128.62	130.22	1.6005
12	30	Biased	125.62	124.29	-1.3275
13	30	Biased	131.28	131.89	0.6078
14	30	Biased	127.78	129.14	1.3645
15	30	Biased	119.52	121.77	2.2502
16	30	Unbiased	118.54	118.27	-0.2651
17	30	Unbiased	123.1	123.8	0.7013
18	30	Unbiased	122.73	123.79	1.0559
19	30	Unbiased	129.74	130.87	1.1291
20	30	Unbiased	125.23	125.2	-0.0267
26	50	Unbiased	128.98	129.86	0.8787
27	50	Unbiased	133.09	134.62	1.5314
28	50	Unbiased	126.21	126.33	0.1248
29	50	Unbiased	125.04	122.11	-2.9299
30	50	Unbiased	119.17	118.12	-1.0552
88	50	Biased-84Hr-Anneal	127.23	125.93	-1.3016
89	50	Biased-84Hr-Anneal	116.88	118.62	1.7377
90	50	Biased-84Hr-Anneal	127.33	126.04	-1.2902
91	50	Biased-84Hr-Anneal	137.54	140.25	2.712
92	50	Biased-84Hr-Anneal	125.34	125.07	-0.2725
100	0	CORRELATION	126.45	126.54	0.0875
101	0	CORRELATION	124.28	124.31	0.0278
102	0	CORRELATION	126.52	126.6	0.087
103	0	CORRELATION	131.47	131.6	0.1369
104	0	CORRELATION	126.23	126.26	0.0244

TID vs Post - Pre Exposure Delta

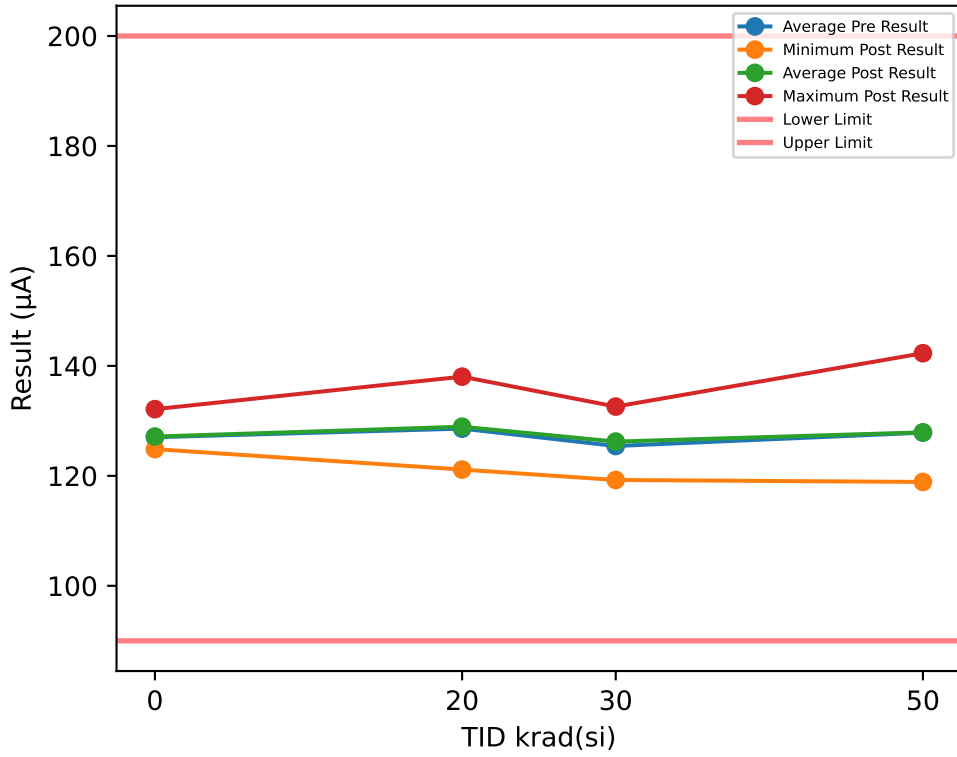


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.28	126.99	131.47	2.6679	124.31	127.06	131.6	2.7083	0.0244	0.07272	0.1369	0.047154
20	118.49	127.81	136.8	5.0893	119.02	127.97	136.67	5.0672	-0.9416	0.1643	1.162	0.84518
30	118.54	125.21	131.28	4.2586	118.27	125.92	131.89	4.4333	-1.3275	0.709	2.2502	1.0298
50	116.88	126.68	137.54	5.9831	118.12	126.7	140.25	6.8335	-2.9299	0.01352	2.712	1.7203

Device Test: 18.16 ERROR_AMP|STATIC/COMP/12////@EA_SINK

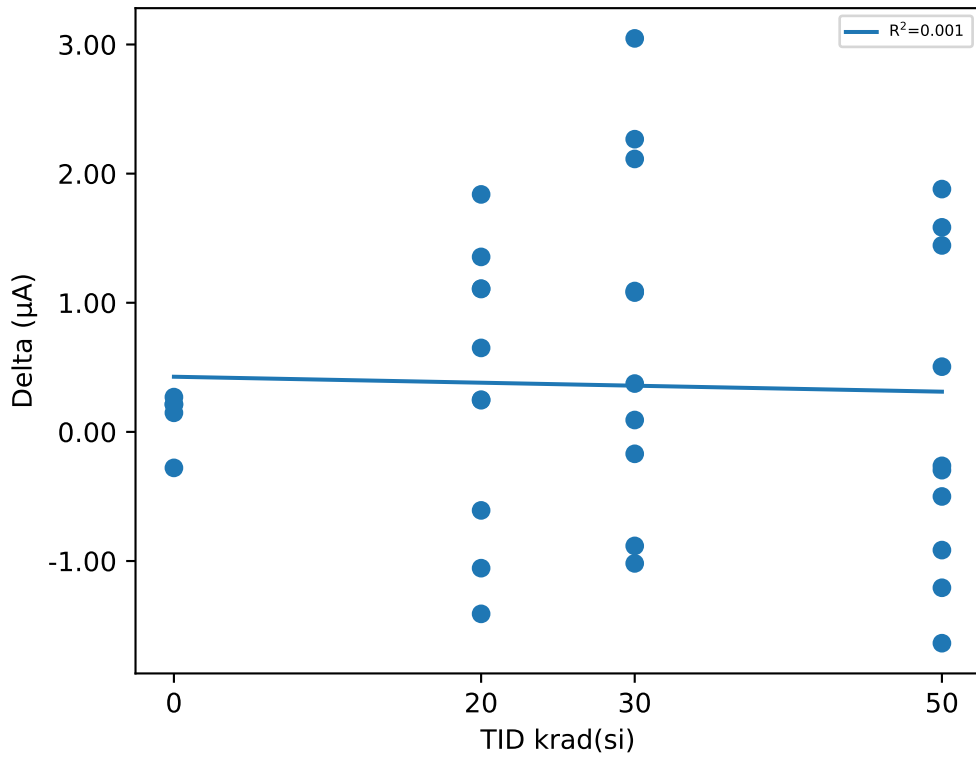
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	124.48	125.58	1.1065
2	20	Biased	124.65	123.24	-1.4091
3	20	Biased	120.03	121.14	1.1095
4	20	Biased	137.79	138.04	0.2495
5	20	Biased	130.49	132.33	1.839
6	20	Unbiased	130.64	129.58	-1.0553
7	20	Unbiased	128.22	128.87	0.6503
8	20	Unbiased	127.39	126.78	-0.6079
9	20	Unbiased	130.4	131.75	1.3551
10	20	Unbiased	131.81	132.05	0.2452
11	30	Biased	129.44	131.71	2.2667
12	30	Biased	124.63	123.61	-1.0184
13	30	Biased	131.52	132.6	1.0788
14	30	Biased	129.25	129.34	0.092
15	30	Biased	118.16	121.2	3.0472
16	30	Unbiased	118.88	119.25	0.3743
17	30	Unbiased	123.59	124.68	1.0909
18	30	Unbiased	123.37	125.49	2.1137
19	30	Unbiased	130.63	129.74	-0.8829
20	30	Unbiased	124.85	124.68	-0.1698
26	50	Unbiased	131.73	130.52	-1.2071
27	50	Unbiased	133.32	132.82	-0.5
28	50	Unbiased	127.11	126.81	-0.2963
29	50	Unbiased	125.83	124.2	-1.6363
30	50	Unbiased	120.28	120.02	-0.2629
88	50	Biased-84Hr-Anneal	129.01	128.09	-0.9153
89	50	Biased-84Hr-Anneal	117.31	118.89	1.584
90	50	Biased-84Hr-Anneal	128.57	129.07	0.5051
91	50	Biased-84Hr-Anneal	140.42	142.3	1.8803
92	50	Biased-84Hr-Anneal	124.98	126.42	1.4439
100	0	CORRELATION	127	127.14	0.1478
101	0	CORRELATION	124.59	124.86	0.2694
102	0	CORRELATION	125.71	125.92	0.214
103	0	CORRELATION	131.91	132.13	0.2128
104	0	CORRELATION	125.94	125.66	-0.2787

TID vs Post - Pre Exposure Delta

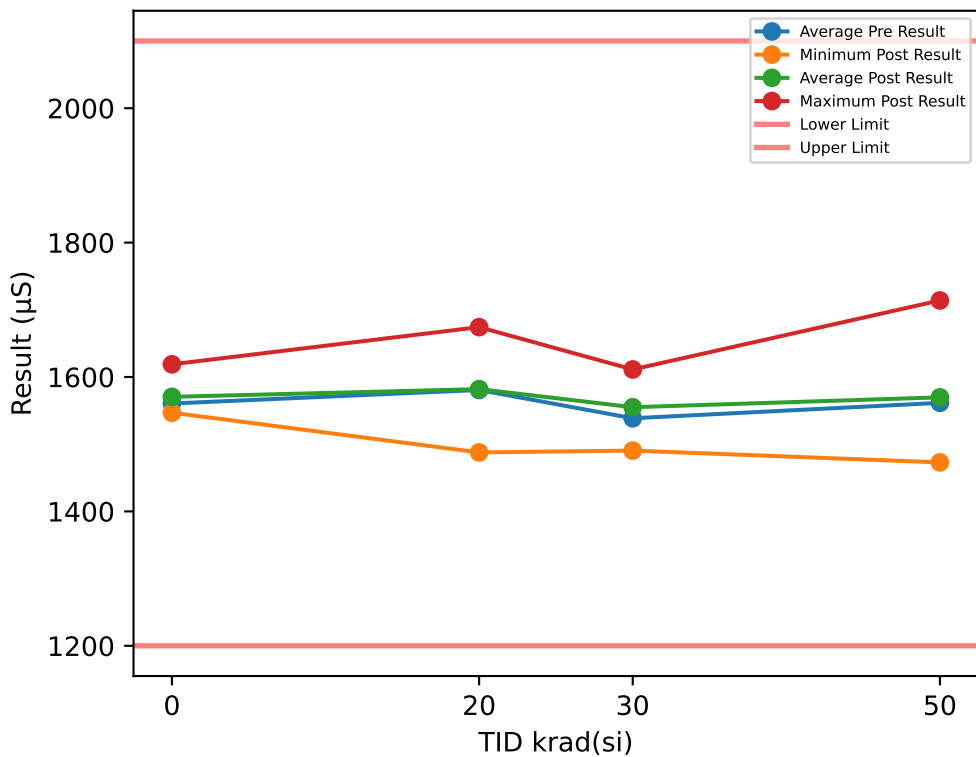


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.59	127.03	131.91	2.8605	124.86	127.14	132.13	2.9039	-0.2787	0.11306	0.2694	0.22319
20	120.03	128.59	137.79	4.8684	121.14	128.94	138.04	4.9611	-1.4091	0.34828	1.839	1.0788
30	118.16	125.43	131.52	4.7046	119.25	126.23	132.6	4.4568	-1.0184	0.79925	3.0472	1.3683
50	117.31	127.86	140.42	6.5504	118.89	127.91	142.3	6.6691	-1.6363	0.05954	1.8803	1.2351

Device Test: 18.2 EA|STATIC/COMP/4.5////@EA_GM_25C

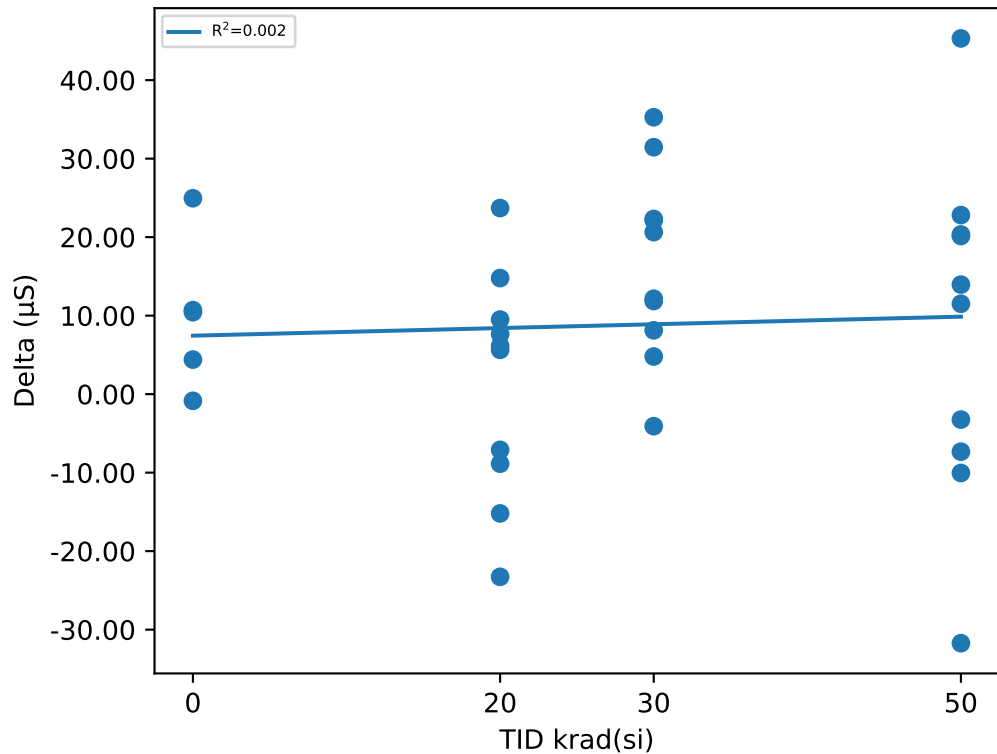
TID vs Result Stats



Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1530.9	1537.1	6.1644
2	20	Biased	1539.4	1524.2	-15.194
3	20	Biased	1478.3	1487.8	9.5044
4	20	Biased	1683.1	1674.2	-8.8595
5	20	Biased	1606.5	1621.2	14.786
6	20	Unbiased	1605	1581.7	-23.273
7	20	Unbiased	1571.8	1595.5	23.707
8	20	Unbiased	1559.2	1552.1	-7.0966
9	20	Unbiased	1613.7	1621.4	7.6493
10	20	Unbiased	1618.9	1624.6	5.6434
11	30	Biased	1571.4	1606.7	35.274
12	30	Biased	1541.4	1537.3	-4.0819
13	30	Biased	1588.9	1611.2	22.317
14	30	Biased	1572.4	1577.2	4.7895
15	30	Biased	1473.8	1505.3	31.459
16	30	Unbiased	1478.3	1490.5	12.155
17	30	Unbiased	1520.4	1532.3	11.859
18	30	Unbiased	1520.3	1540.9	20.638
19	30	Unbiased	1586.6	1608.8	22.16
20	30	Unbiased	1532	1540.1	8.1285
26	50	Unbiased	1602.2	1613.7	11.511
27	50	Unbiased	1622.2	1636.2	13.954
28	50	Unbiased	1552.2	1572.5	20.339
29	50	Unbiased	1544.7	1513	-31.728
30	50	Unbiased	1483	1472.9	-10.044
88	50	Biased-84Hr-Anneal	1579.2	1575.9	-3.2412
89	50	Biased-84Hr-Anneal	1455.2	1475.3	20.148
90	50	Biased-84Hr-Anneal	1578.8	1571.4	-7.3271
91	50	Biased-84Hr-Anneal	1668.6	1713.9	45.318
92	50	Biased-84Hr-Anneal	1529.3	1552.1	22.807
100	0	CORRELATION	1559.1	1563.5	4.4022
101	0	CORRELATION	1538.6	1549.3	10.699
102	0	CORRELATION	1548.9	1573.8	24.955
103	0	CORRELATION	1608.5	1618.9	10.438
104	0	CORRELATION	1547.7	1546.9	-0.849

TID vs Post - Pre Exposure Delta

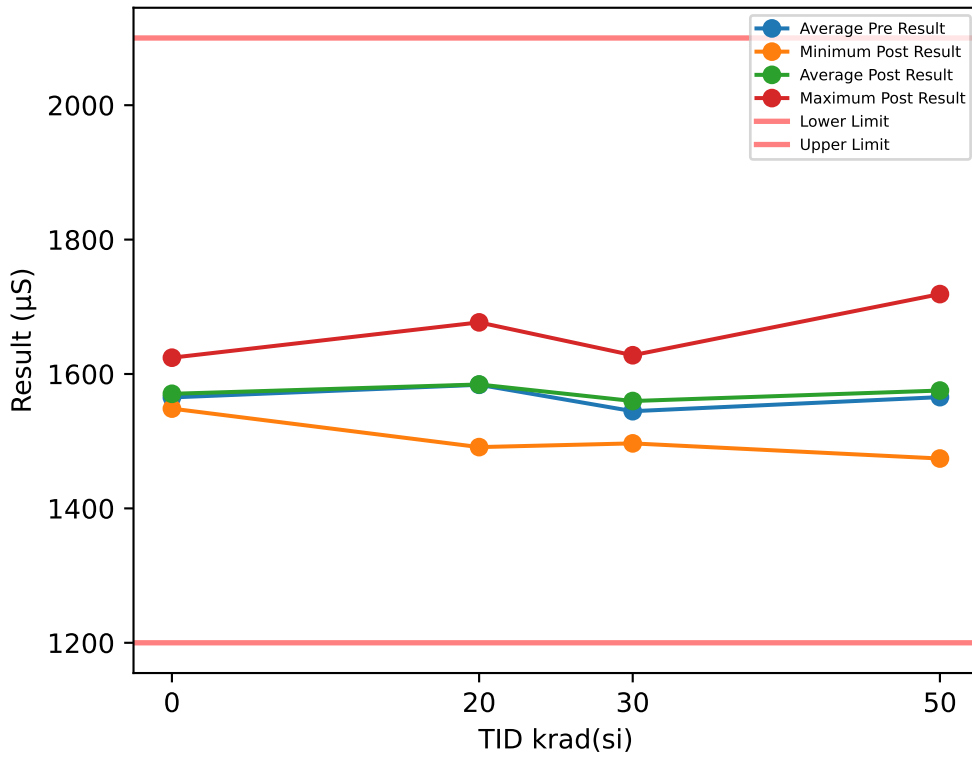


Test Statistics (µS)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1538.6	1560.6	1608.5	27.744	1546.9	1570.5	1618.9	29.195	-0.849	9.9289	24.955	9.6609
20	1478.3	1580.7	1683.1	57.251	1487.8	1582	1674.2	56.486	-23.273	1.3032	23.707	14.467
30	1473.8	1538.6	1588.9	41.631	1490.5	1555	1611.2	43.583	-4.0819	16.47	35.274	12.158
50	1455.2	1561.5	1668.6	63.512	1472.9	1569.7	1713.9	73.79	-31.728	8.1736	45.318	21.665

Device Test: 18.20 EA|STATIC/COMP/14////@EA_GM_25C

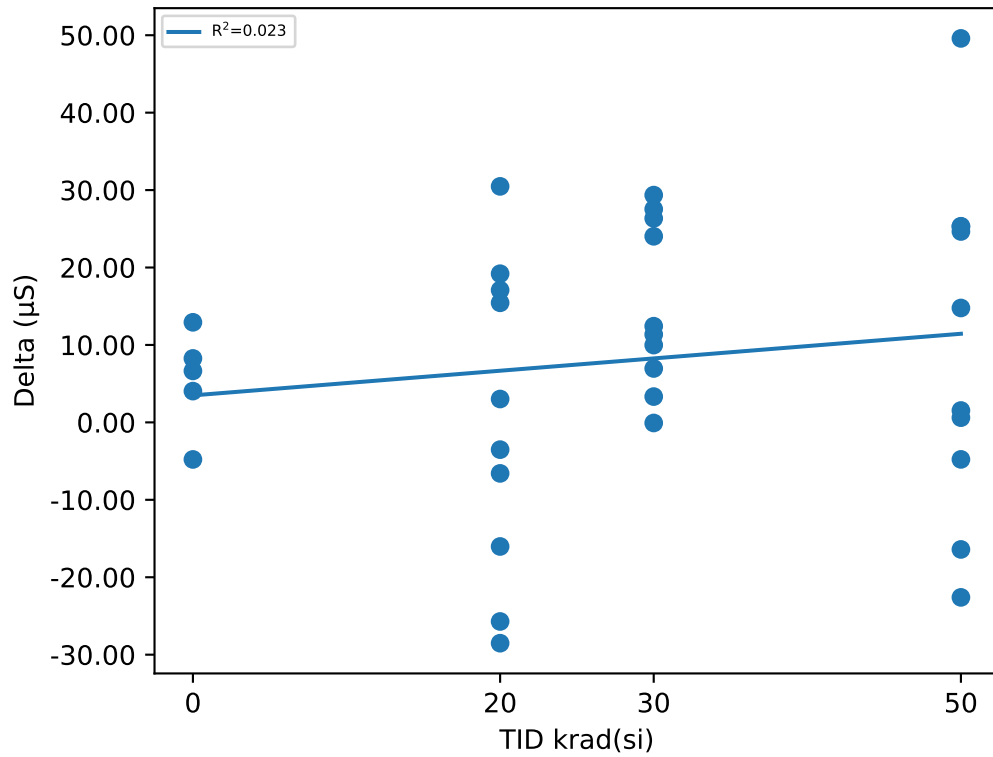
TID vs Result Stats



Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1538.7	1541.7	3.0188
2	20	Biased	1540.8	1524.8	-16.026
3	20	Biased	1472	1491.2	19.2
4	20	Biased	1702.5	1676.8	-25.712
5	20	Biased	1605.6	1621	15.443
6	20	Unbiased	1609.8	1581.3	-28.517
7	20	Unbiased	1574.9	1592	17.082
8	20	Unbiased	1572.3	1565.7	-6.5881
9	20	Unbiased	1595.6	1626	30.48
10	20	Unbiased	1627.2	1623.7	-3.5195
11	30	Biased	1582.4	1611.7	29.353
12	30	Biased	1537	1536.9	-0.0775
13	30	Biased	1617.9	1627.9	9.9844
14	30	Biased	1581.3	1588.3	6.9609
15	30	Biased	1476.8	1504.3	27.536
16	30	Unbiased	1470.4	1496.7	26.347
17	30	Unbiased	1527.1	1538.5	11.357
18	30	Unbiased	1519.5	1531.9	12.425
19	30	Unbiased	1590.3	1614.3	24.031
20	30	Unbiased	1543.8	1547.2	3.3315
26	50	Unbiased	1598.3	1613	14.775
27	50	Unbiased	1620.2	1644.9	24.654
28	50	Unbiased	1569.4	1570	0.6095
29	50	Unbiased	1552.7	1536.3	-16.408
30	50	Unbiased	1498.6	1476	-22.599
88	50	Biased-84Hr-Anneal	1591.5	1586.8	-4.7792
89	50	Biased-84Hr-Anneal	1448.9	1474.2	25.329
90	50	Biased-84Hr-Anneal	1576.9	1578.4	1.5354
91	50	Biased-84Hr-Anneal	1669.3	1718.9	49.59
92	50	Biased-84Hr-Anneal	1529.9	1555.2	25.286
100	0	CORRELATION	1573	1568.2	-4.786
101	0	CORRELATION	1540.2	1548.5	8.2595
102	0	CORRELATION	1559.1	1563.2	4.0385
103	0	CORRELATION	1611.3	1624.3	12.924
104	0	CORRELATION	1541.9	1548.5	6.6459

TID vs Post - Pre Exposure Delta

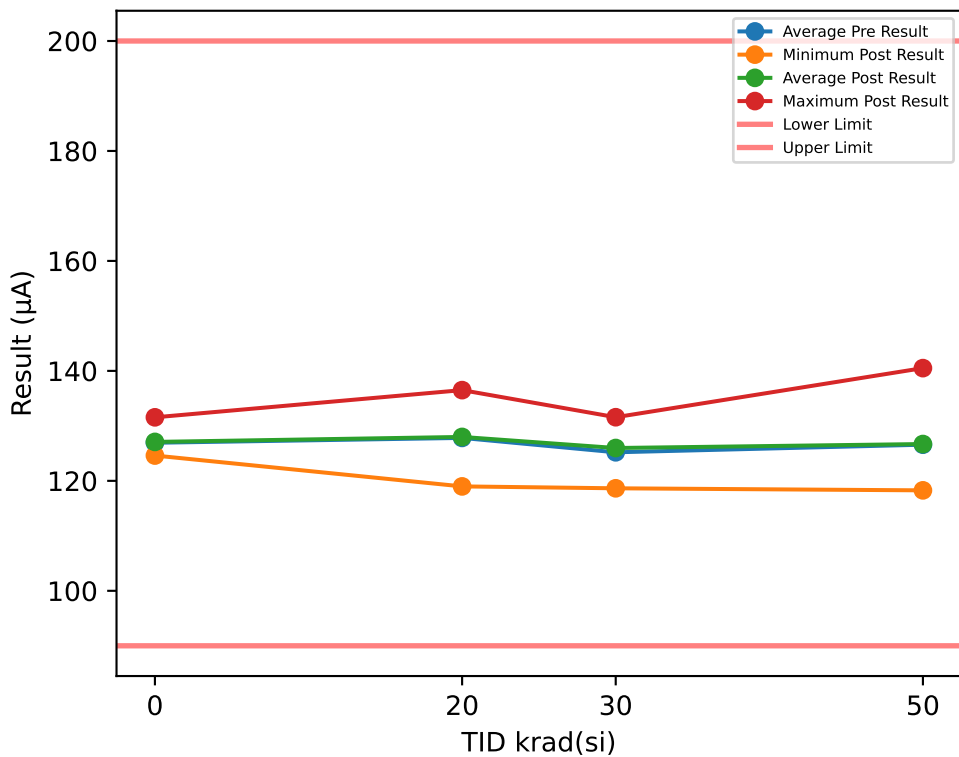


Test Statistics (µS)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1540.2	1565.1	1611.3	29.125	1548.5	1570.5	1624.3	31.288	-4.786	5.4164	12.924	6.5565
20	1472	1583.9	1702.5	61.339	1491.2	1584.4	1676.8	55.419	-28.517	0.48613	30.48	20.06
30	1470.4	1544.7	1617.9	48.684	1496.7	1559.8	1627.9	47.236	-0.0775	15.125	29.353	10.783
50	1448.9	1565.6	1669.3	62.512	1474.2	1575.4	1718.9	73.828	-22.599	9.7993	49.59	22.14

Device Test: 18.21 ERROR_AMP|STATIC/COMP/14////@EA_SOURCE

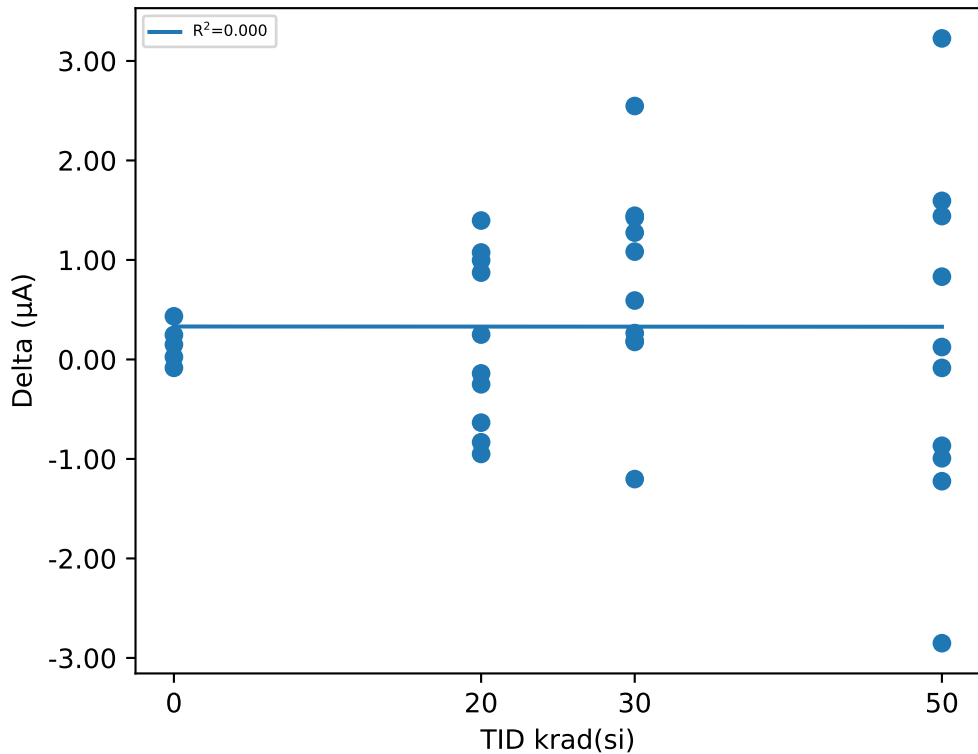
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	123.17	124.05	0.8728
2	20	Biased	124.37	123.42	-0.9498
3	20	Biased	118.74	118.99	0.25
4	20	Biased	136.64	136.5	-0.1403
5	20	Biased	128.74	129.81	1.0753
6	20	Unbiased	128.65	127.82	-0.8323
7	20	Unbiased	128.84	130.23	1.3961
8	20	Unbiased	126.29	125.65	-0.6352
9	20	Unbiased	131.15	132.15	0.9961
10	20	Unbiased	131.5	131.25	-0.2496
11	30	Biased	128.74	130.19	1.4443
12	30	Biased	125.6	124.4	-1.2025
13	30	Biased	131.31	131.57	0.2647
14	30	Biased	127.89	128.97	1.0838
15	30	Biased	119.38	121.93	2.5472
16	30	Unbiased	118.46	118.65	0.1872
17	30	Unbiased	123.11	123.7	0.5922
18	30	Unbiased	122.73	124.01	1.2747
19	30	Unbiased	129.63	131.06	1.4257
20	30	Unbiased	125.09	125.26	0.176
26	50	Unbiased	128.95	129.78	0.832
27	50	Unbiased	132.99	134.59	1.5939
28	50	Unbiased	126.07	126.19	0.1247
29	50	Unbiased	124.76	121.91	-2.8519
30	50	Unbiased	119.14	118.27	-0.8676
88	50	Biased-84Hr-Anneal	127.3	126.07	-1.2238
89	50	Biased-84Hr-Anneal	117.07	118.51	1.441
90	50	Biased-84Hr-Anneal	127.05	126.05	-0.9934
91	50	Biased-84Hr-Anneal	137.28	140.5	3.2268
92	50	Biased-84Hr-Anneal	125.16	125.07	-0.085
100	0	CORRELATION	126.53	126.45	-0.0843
101	0	CORRELATION	124.17	124.6	0.4335
102	0	CORRELATION	126.44	126.46	0.0248
103	0	CORRELATION	131.31	131.56	0.2461
104	0	CORRELATION	126.2	126.35	0.1492

TID vs Post - Pre Exposure Delta

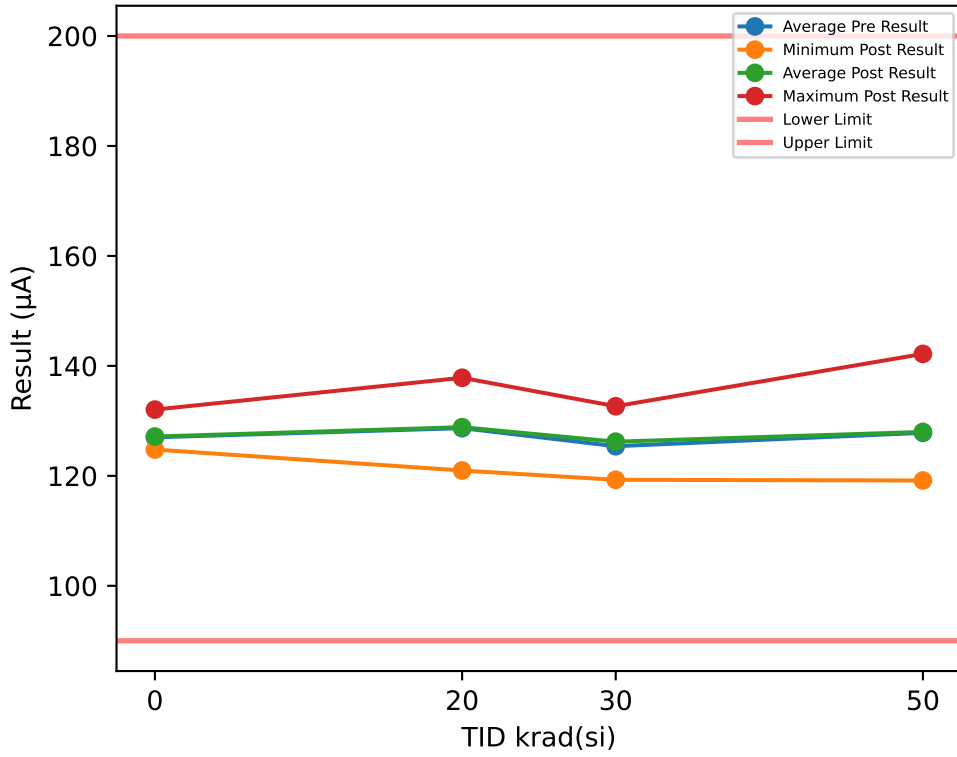


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.17	126.93	131.31	2.6332	124.6	127.08	131.56	2.6212	-0.0843	0.15386	0.4335	0.20007
20	118.74	127.81	136.64	4.9805	118.99	127.99	136.5	5.0725	-0.9498	0.17831	1.3961	0.8618
30	118.46	125.19	131.31	4.3032	118.65	125.97	131.57	4.2949	-1.2025	0.77933	2.5472	1.0146
50	117.07	126.58	137.28	5.9005	118.27	126.7	140.5	6.8883	-2.8519	0.11967	3.2268	1.7311

Device Test: 18.22 ERROR_AMP|STATIC/COMP/14////@EA_SINK

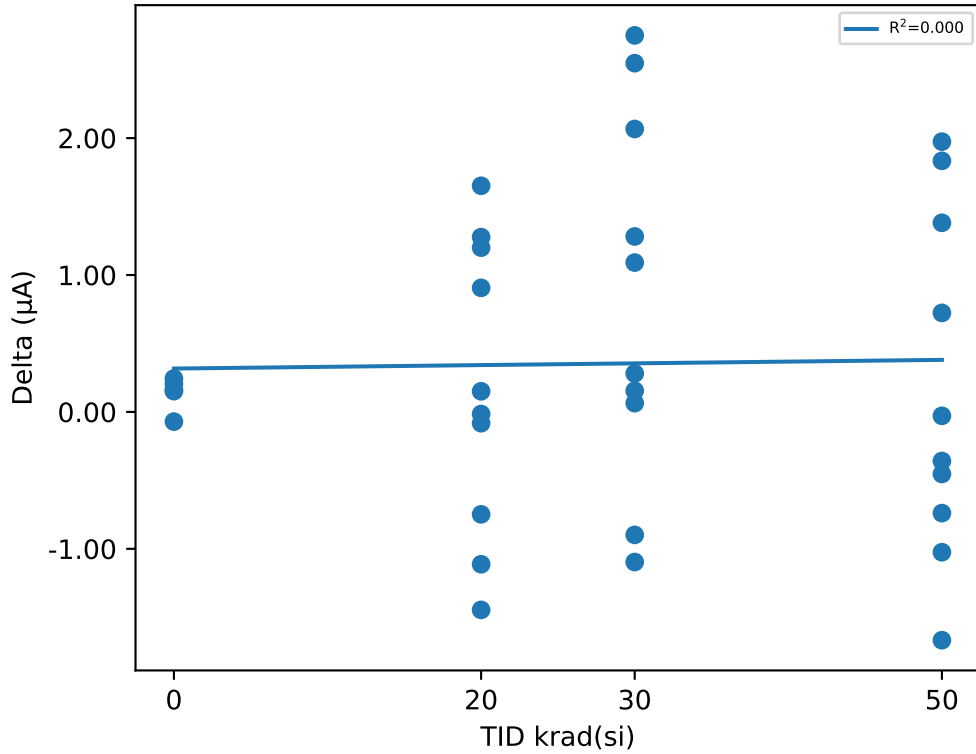
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	124.49	125.69	1.2
2	20	Biased	124.58	123.46	-1.1129
3	20	Biased	120.06	120.97	0.9063
4	20	Biased	137.85	137.84	-0.0156
5	20	Biased	130.8	132.45	1.6519
6	20	Unbiased	130.67	129.22	-1.4461
7	20	Unbiased	128.49	128.64	0.1507
8	20	Unbiased	127.53	126.78	-0.7482
9	20	Unbiased	130.37	131.64	1.2769
10	20	Unbiased	131.92	131.83	-0.0824
11	30	Biased	129.35	131.89	2.5474
12	30	Biased	124.65	123.55	-1.0965
13	30	Biased	131.38	132.66	1.2815
14	30	Biased	129.15	129.31	0.1546
15	30	Biased	118.28	121.03	2.7503
16	30	Unbiased	119	119.28	0.2807
17	30	Unbiased	123.7	124.79	1.0909
18	30	Unbiased	123.23	125.3	2.0668
19	30	Unbiased	130.53	129.64	-0.8983
20	30	Unbiased	124.63	124.69	0.0641
26	50	Unbiased	131.53	130.79	-0.7392
27	50	Unbiased	133.3	132.85	-0.4532
28	50	Unbiased	127.14	126.78	-0.3586
29	50	Unbiased	125.77	124.1	-1.6675
30	50	Unbiased	120.19	120.16	-0.0286
88	50	Biased-84Hr-Anneal	129.21	128.18	-1.0248
89	50	Biased-84Hr-Anneal	117.32	119.16	1.834
90	50	Biased-84Hr-Anneal	128.65	129.37	0.7233
91	50	Biased-84Hr-Anneal	140.21	142.18	1.9742
92	50	Biased-84Hr-Anneal	124.96	126.35	1.3814
100	0	CORRELATION	127.01	126.94	-0.0709
101	0	CORRELATION	124.63	124.79	0.1603
102	0	CORRELATION	125.76	125.91	0.1516
103	0	CORRELATION	131.81	132.05	0.2441
104	0	CORRELATION	125.86	126.06	0.2049

TID vs Post - Pre Exposure Delta

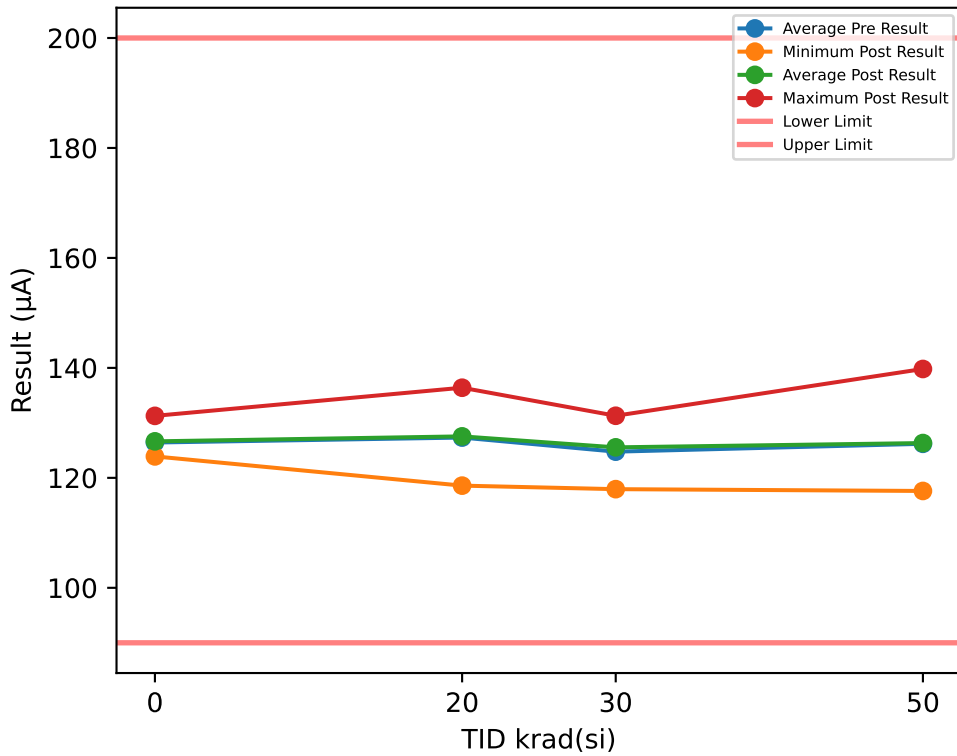


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.63	127.01	131.81	2.8096	124.79	127.15	132.05	2.8442	-0.0709	0.138	0.2441	0.12253
20	120.06	128.68	137.85	4.8981	120.97	128.85	137.84	4.8995	-1.4461	0.17806	1.6519	1.0658
30	118.28	125.39	131.38	4.6205	119.28	126.21	132.66	4.5005	-1.0965	0.82415	2.7503	1.3532
50	117.32	127.83	140.21	6.5067	119.16	127.99	142.18	6.6108	-1.6675	0.1641	1.9742	1.2532

Device Test: 18.3 ERROR_AMP|STATIC/COMP/4.5////@EA_SOURCE

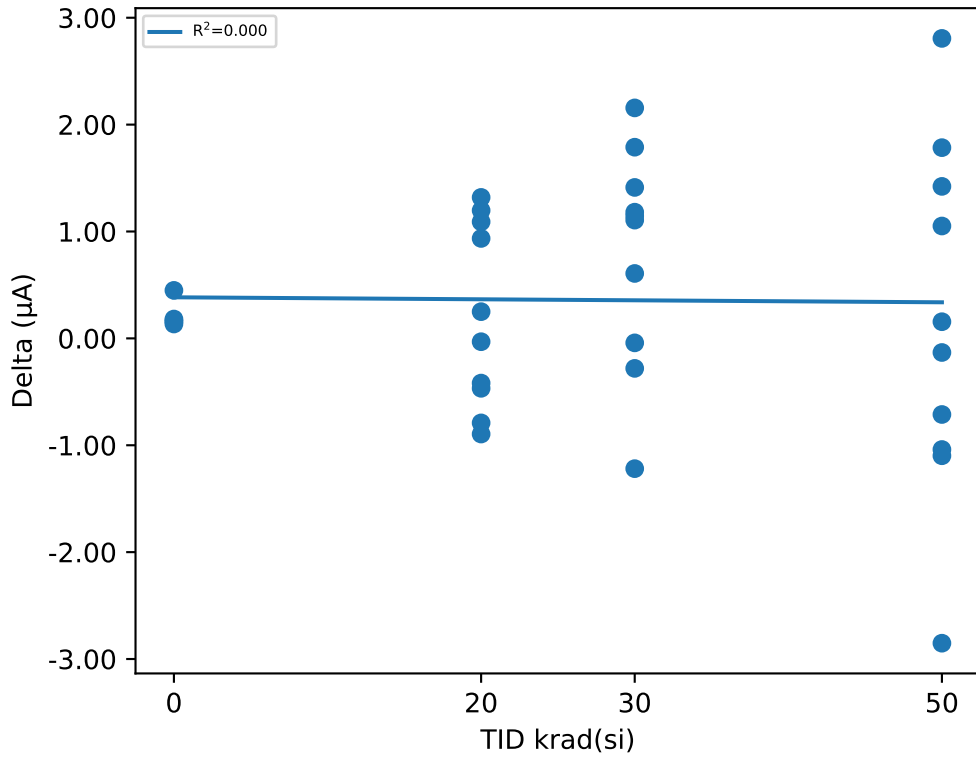
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	122.6	123.69	1.0909
2	20	Biased	123.64	123.22	-0.4182
3	20	Biased	118.33	118.58	0.25
4	20	Biased	136.42	136.39	-0.0312
5	20	Biased	128.36	129.3	0.9351
6	20	Unbiased	128.17	127.27	-0.895
7	20	Unbiased	128.41	129.73	1.319
8	20	Unbiased	125.9	125.11	-0.7908
9	20	Unbiased	130.37	131.57	1.1971
10	20	Unbiased	131.06	130.59	-0.4672
11	30	Biased	128.16	129.95	1.7887
12	30	Biased	125.23	124.01	-1.2189
13	30	Biased	130.69	131.29	0.6074
14	30	Biased	127.36	128.77	1.4123
15	30	Biased	119.1	121.26	2.1564
16	30	Unbiased	118.22	117.94	-0.2807
17	30	Unbiased	122.39	123.5	1.1065
18	30	Unbiased	122.3	123.48	1.1808
19	30	Unbiased	129.38	130.53	1.1454
20	30	Unbiased	124.81	124.76	-0.042
26	50	Unbiased	128.42	129.47	1.0514
27	50	Unbiased	132.73	134.15	1.4221
28	50	Unbiased	125.85	126.01	0.1559
29	50	Unbiased	124.44	121.58	-2.852
30	50	Unbiased	118.66	117.62	-1.0398
88	50	Biased-84Hr-Anneal	126.87	125.78	-1.0982
89	50	Biased-84Hr-Anneal	116.5	118.29	1.7845
90	50	Biased-84Hr-Anneal	126.62	125.91	-0.7121
91	50	Biased-84Hr-Anneal	137	139.8	2.8067
92	50	Biased-84Hr-Anneal	124.83	124.69	-0.132
100	0	CORRELATION	126.01	126.2	0.181
101	0	CORRELATION	123.75	123.9	0.1534
102	0	CORRELATION	125.84	126.01	0.1664
103	0	CORRELATION	130.82	131.27	0.4491
104	0	CORRELATION	125.68	125.82	0.1345

TID vs Post - Pre Exposure Delta

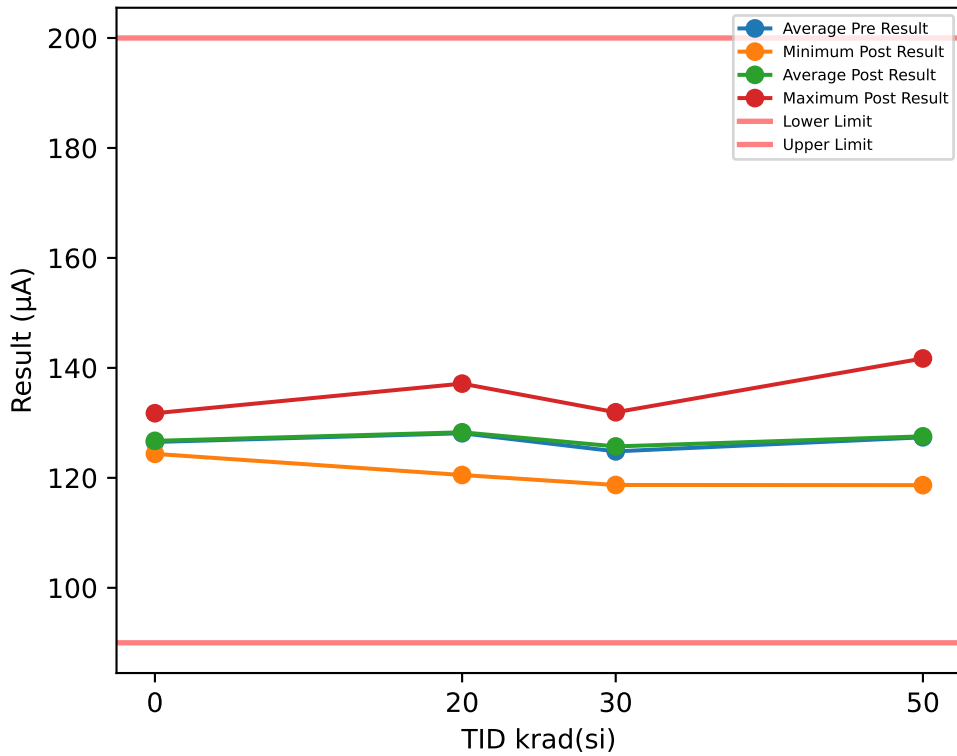


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	123.75	126.42	130.82	2.626	123.9	126.64	131.27	2.7498	0.1345	0.21688	0.4491	0.13094
20	118.33	127.33	136.42	5.0308	118.58	127.55	136.39	5.0717	-0.895	0.21897	1.319	0.85899
30	118.22	124.76	130.69	4.2353	117.94	125.55	131.29	4.4132	-1.2189	0.78559	2.1564	1.0295
50	116.5	126.19	137	5.9698	117.62	126.33	139.8	6.8222	-2.852	0.13865	2.8067	1.6656

Device Test: 18.4 ERROR_AMP|STATIC/COMP/4.5////@EA_SINK

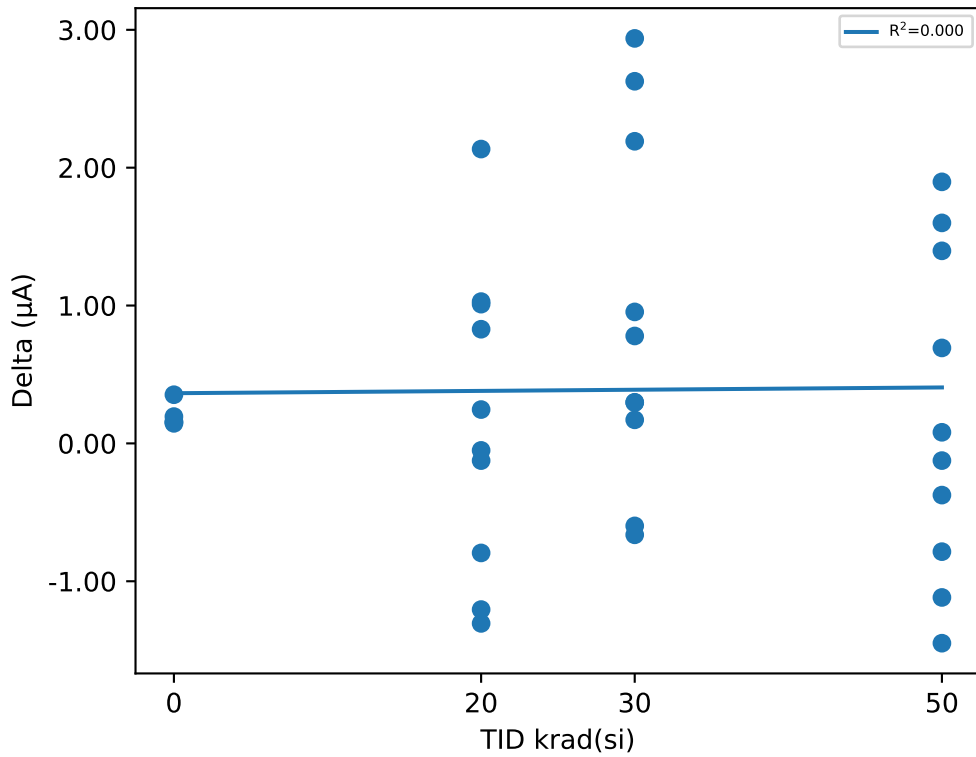
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	123.88	124.91	1.0286
2	20	Biased	124.09	122.89	-1.2053
3	20	Biased	119.69	120.52	0.8282
4	20	Biased	137.26	137.14	-0.1248
5	20	Biased	129.79	131.92	2.1351
6	20	Unbiased	130.04	128.74	-1.3057
7	20	Unbiased	127.92	128.17	0.2455
8	20	Unbiased	126.89	126.1	-0.7945
9	20	Unbiased	129.96	130.97	1.0101
10	20	Unbiased	131.57	131.52	-0.0507
11	30	Biased	128.81	131.44	2.6268
12	30	Biased	123.69	123.1	-0.5984
13	30	Biased	130.97	131.93	0.9538
14	30	Biased	128.79	128.96	0.171
15	30	Biased	117.66	120.6	2.9378
16	30	Unbiased	118.41	118.7	0.2963
17	30	Unbiased	123.31	124.09	0.7792
18	30	Unbiased	122.73	124.92	2.1915
19	30	Unbiased	129.88	129.21	-0.6631
20	30	Unbiased	123.91	124.21	0.2983
26	50	Unbiased	131.26	130.48	-0.7853
27	50	Unbiased	132.63	132.25	-0.375
28	50	Unbiased	126.27	126.14	-0.1247
29	50	Unbiased	125.24	123.79	-1.4493
30	50	Unbiased	119.69	119.77	0.0806
88	50	Biased-84Hr-Anneal	128.82	127.7	-1.1174
89	50	Biased-84Hr-Anneal	117.07	118.67	1.5995
90	50	Biased-84Hr-Anneal	128.33	129.03	0.6925
91	50	Biased-84Hr-Anneal	139.81	141.71	1.8972
92	50	Biased-84Hr-Anneal	124.57	125.97	1.3968
100	0	CORRELATION	126.53	126.72	0.1945
101	0	CORRELATION	124.22	124.36	0.1454
102	0	CORRELATION	125.15	125.3	0.1529
103	0	CORRELATION	131.4	131.75	0.3531
104	0	CORRELATION	125.34	125.5	0.159

TID vs Post - Pre Exposure Delta

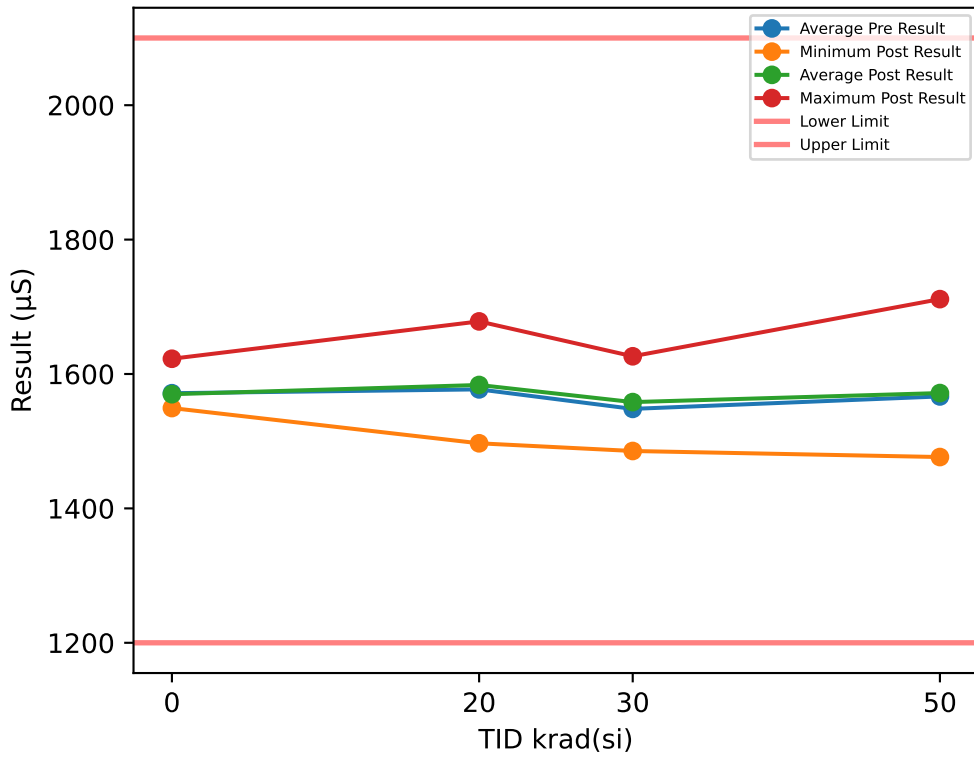


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.22	126.53	131.4	2.8446	124.36	126.73	131.75	2.9312	0.1454	0.20098	0.3531	0.0871
20	119.69	128.11	137.26	4.8554	120.52	128.29	137.14	4.8895	-1.3057	0.17665	2.1351	1.0994
30	117.66	124.82	130.97	4.6709	118.7	125.72	131.93	4.4965	-0.6631	0.89932	2.9378	1.2809
50	117.07	127.37	139.81	6.4919	118.67	127.55	141.71	6.5948	-1.4493	0.18149	1.8972	1.1732

Device Test: 18.8 EA|STATIC/COMP/5////@EA_GM_25C

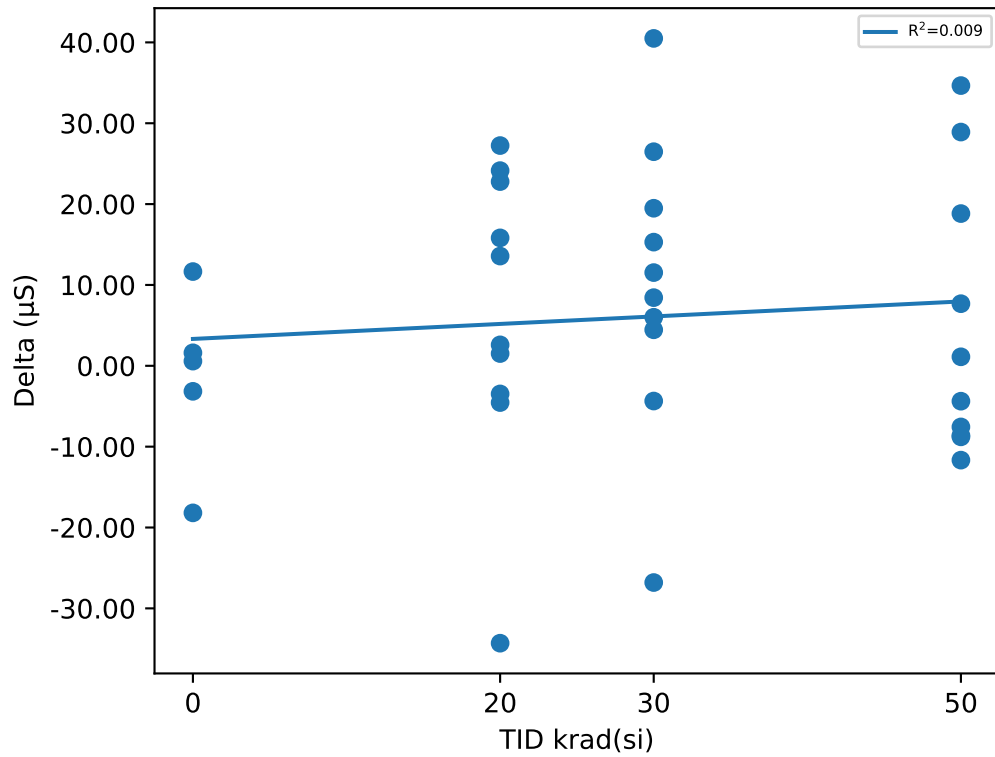
TID vs Result Stats



Test Results (Lower Limit = 1200.0, Upper Limit = 2100.0 (µS))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1523.6	1546.4	22.784
2	20	Biased	1523.4	1525	1.5162
3	20	Biased	1483.3	1496.9	13.572
4	20	Biased	1682.8	1678.3	-4.5451
5	20	Biased	1595.3	1622.6	27.24
6	20	Unbiased	1601.1	1566.8	-34.307
7	20	Unbiased	1576.4	1592.3	15.822
8	20	Unbiased	1570.2	1572.8	2.5907
9	20	Unbiased	1593.9	1618	24.141
10	20	Unbiased	1621.1	1617.6	-3.4778
11	30	Biased	1589.2	1604.5	15.297
12	30	Biased	1547.3	1520.5	-26.804
13	30	Biased	1617.9	1626.4	8.43
14	30	Biased	1575.8	1602.3	26.48
15	30	Biased	1469.1	1509.6	40.493
16	30	Unbiased	1473.9	1485.4	11.529
17	30	Unbiased	1531.3	1537.3	6.0054
18	30	Unbiased	1521.5	1540.9	19.487
19	30	Unbiased	1605.9	1610.3	4.4546
20	30	Unbiased	1549.1	1544.8	-4.3574
26	50	Unbiased	1589	1596.7	7.682
27	50	Unbiased	1633	1634.2	1.1135
28	50	Unbiased	1574.6	1567	-7.5596
29	50	Unbiased	1546.6	1534.9	-11.666
30	50	Unbiased	1485	1476.4	-8.6187
88	50	Biased-84Hr-Anneal	1586.4	1577.6	-8.7865
89	50	Biased-84Hr-Anneal	1446.2	1480.9	34.659
90	50	Biased-84Hr-Anneal	1579.8	1575.4	-4.3763
91	50	Biased-84Hr-Anneal	1692.6	1711.4	18.828
92	50	Biased-84Hr-Anneal	1532.9	1561.8	28.91
100	0	CORRELATION	1579.8	1561.6	-18.189
101	0	CORRELATION	1548.7	1549.3	0.5792
102	0	CORRELATION	1558.5	1555.3	-3.1569
103	0	CORRELATION	1621.1	1622.7	1.6071
104	0	CORRELATION	1548.9	1560.6	11.656

TID vs Post - Pre Exposure Delta

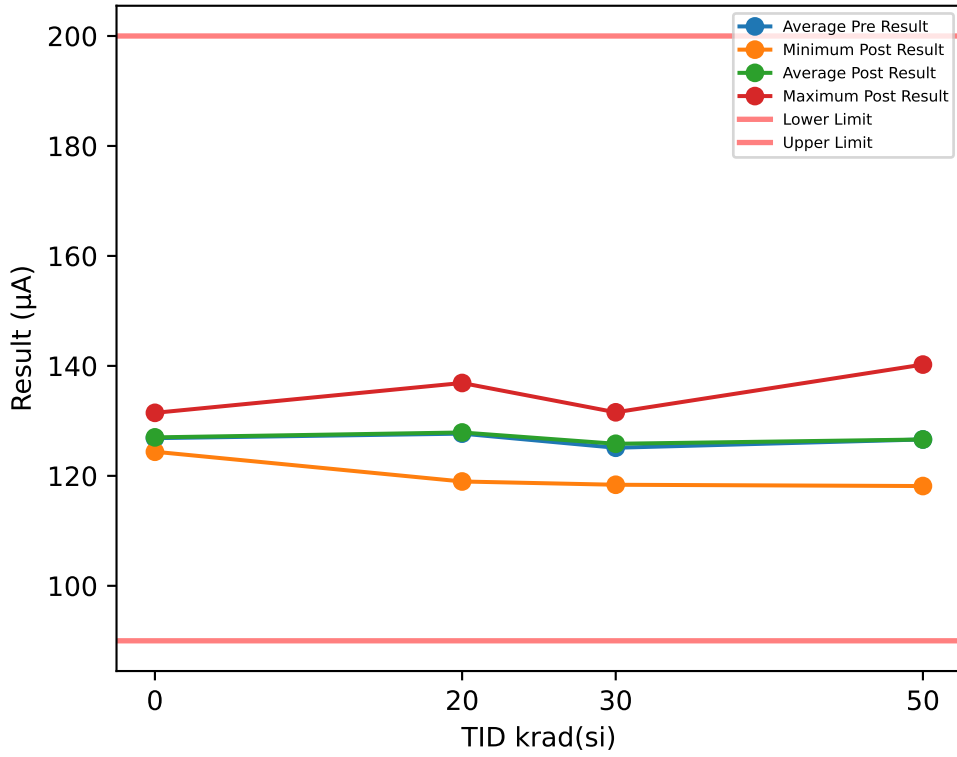


Test Statistics (µS)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1548.7	1571.4	1621.1	30.5	1549.3	1569.9	1622.7	29.901	-18.189	-1.5007	11.656	10.821
20	1483.3	1577.1	1682.8	56.659	1496.9	1583.7	1678.3	53.383	-34.307	6.5335	27.24	18.47
30	1469.1	1548.1	1617.9	51.009	1485.4	1558.2	1626.4	48.819	-26.804	10.101	40.493	18.048
50	1446.2	1566.6	1692.6	69.997	1476.4	1571.6	1711.4	69.033	-11.666	5.0186	34.659	16.878

Device Test: 18.9 ERROR_AMP|STATIC/COMP/5////@EA_SOURCE

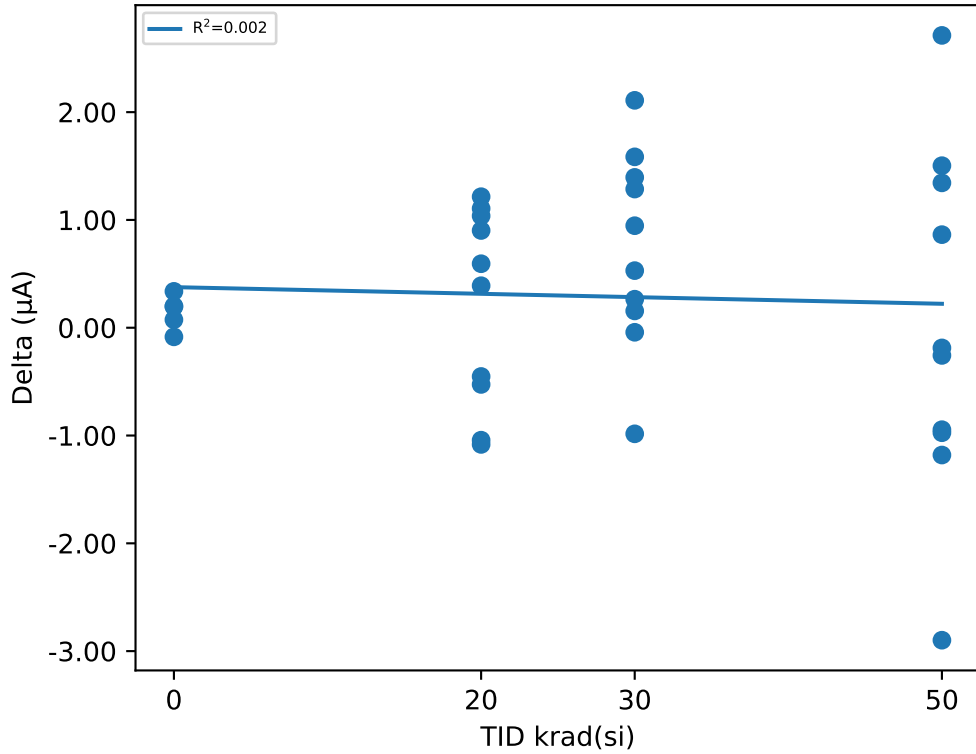
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 200.0 (µA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	123.06	124.17	1.1064
2	20	Biased	124.34	123.3	-1.0432
3	20	Biased	118.38	118.98	0.5938
4	20	Biased	136.5	136.89	0.3898
5	20	Biased	128.44	129.66	1.2156
6	20	Unbiased	128.57	127.49	-1.0824
7	20	Unbiased	128.88	129.92	1.0374
8	20	Unbiased	126.04	125.51	-0.5259
9	20	Unbiased	131.11	132.01	0.9022
10	20	Unbiased	131.43	130.98	-0.4522
11	30	Biased	128.49	130.08	1.5853
12	30	Biased	125.37	124.38	-0.9842
13	30	Biased	131.29	131.56	0.2647
14	30	Biased	127.82	129.11	1.2865
15	30	Biased	119.46	121.57	2.1096
16	30	Unbiased	118.22	118.38	0.156
17	30	Unbiased	123.05	123.58	0.5298
18	30	Unbiased	122.83	123.77	0.9466
19	30	Unbiased	129.55	130.95	1.3947
20	30	Unbiased	125.01	124.97	-0.0422
26	50	Unbiased	128.78	129.64	0.8636
27	50	Unbiased	133.02	134.37	1.3439
28	50	Unbiased	126.38	126.19	-0.1872
29	50	Unbiased	124.79	121.9	-2.8987
30	50	Unbiased	119.09	118.15	-0.9459
88	50	Biased-84Hr-Anneal	127.06	126.09	-0.974
89	50	Biased-84Hr-Anneal	116.97	118.48	1.5034
90	50	Biased-84Hr-Anneal	127.23	126.05	-1.1809
91	50	Biased-84Hr-Anneal	137.53	140.24	2.712
92	50	Biased-84Hr-Anneal	125.31	125.05	-0.2568
100	0	CORRELATION	126.37	126.71	0.3375
101	0	CORRELATION	124.18	124.38	0.1995
102	0	CORRELATION	126.23	126.43	0.1966
103	0	CORRELATION	131.39	131.46	0.0744
104	0	CORRELATION	126.09	126.01	-0.0845

TID vs Post - Pre Exposure Delta

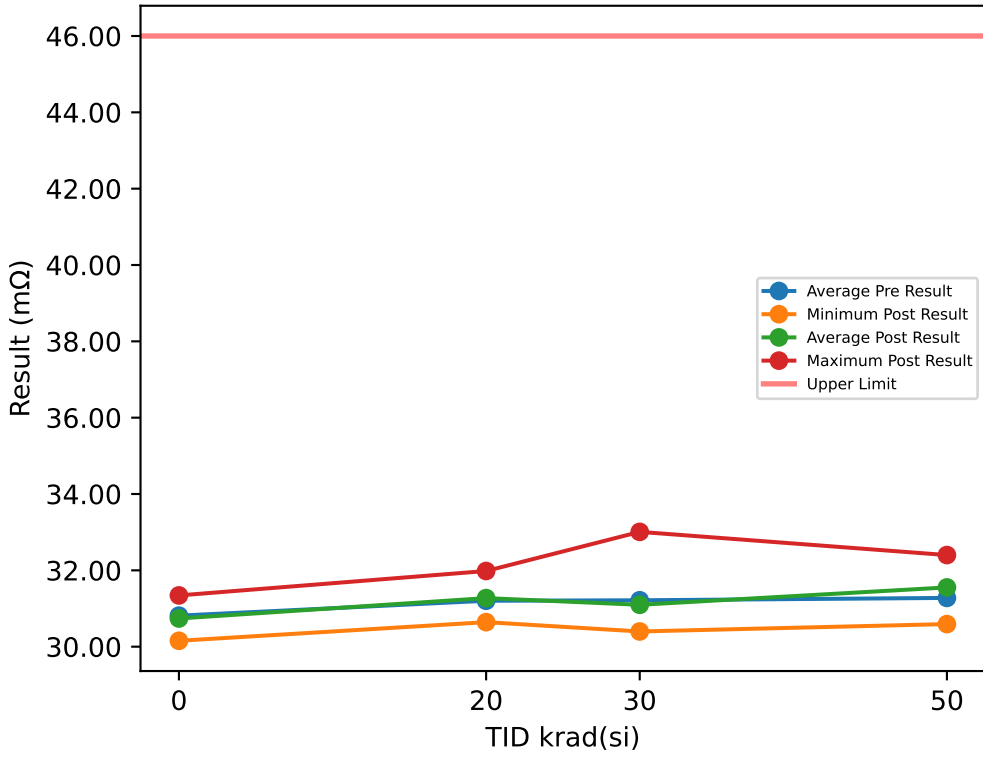


Test Statistics (µA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	124.18	126.85	131.39	2.6866	124.38	127	131.46	2.6524	-0.0845	0.1447	0.3375	0.15838
20	118.38	127.68	136.5	5.0339	118.98	127.89	136.89	5.1096	-1.0824	0.21415	1.2156	0.90547
30	118.22	125.11	131.29	4.2904	118.38	125.83	131.56	4.3921	-0.9842	0.72468	2.1096	0.91614
50	116.97	126.62	137.53	5.963	118.15	126.62	140.24	6.8174	-2.8987	-0.00206	2.712	1.6299

Device Test: 20.106 LEVEL|HIGH SIDE/SW/12/6///@R_HS_6A_25C_HTSSOP

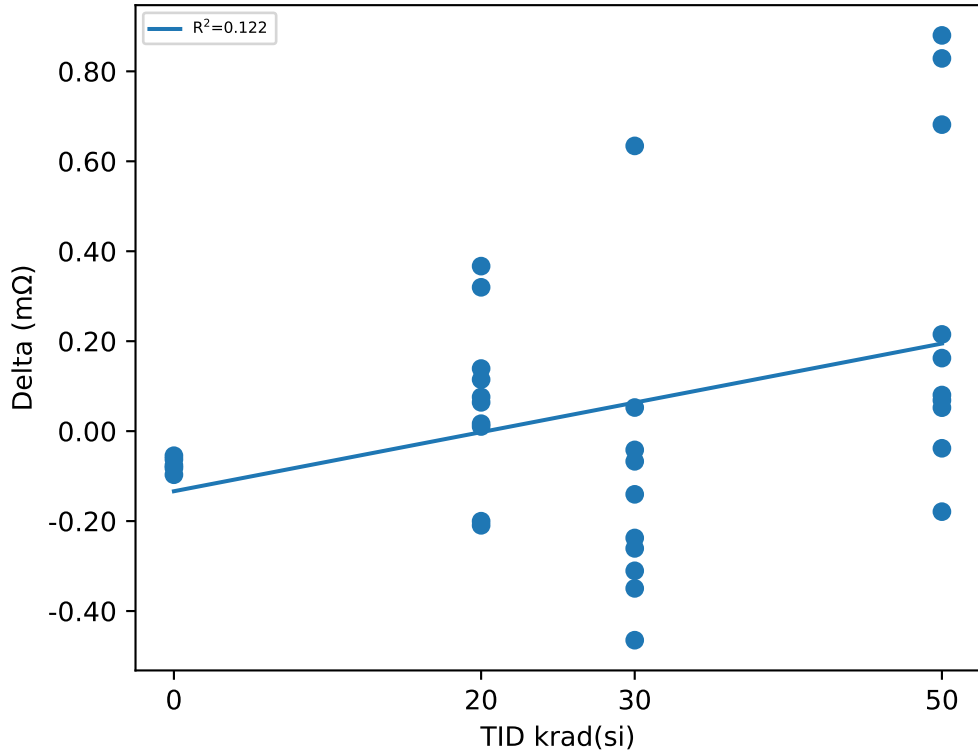
TID vs Result Stats



Test Results (Upper Limit = 46.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	31.335	31.655	0.3198
2	20	Biased	30.852	30.642	-0.2094
3	20	Biased	31.152	31.162	0.0103
4	20	Biased	30.903	30.92	0.0166
5	20	Biased	31.616	31.983	0.3669
6	20	Unbiased	31.268	31.408	0.1392
7	20	Unbiased	31.231	31.307	0.0759
8	20	Unbiased	31.264	31.379	0.1147
9	20	Unbiased	31.514	31.578	0.064
10	20	Unbiased	30.894	30.694	-0.2002
11	30	Biased	31.314	31.366	0.0525
12	30	Biased	31.316	31.274	-0.0417
13	30	Biased	31.004	30.864	-0.1405
14	30	Biased	30.943	30.479	-0.4648
15	30	Biased	30.969	30.619	-0.3496
16	30	Unbiased	31.265	30.954	-0.3105
17	30	Unbiased	30.659	30.398	-0.2607
18	30	Unbiased	31.178	30.94	-0.2375
19	30	Unbiased	31.137	31.07	-0.0671
20	30	Unbiased	32.374	33.008	0.6342
26	50	Unbiased	31.471	32.351	0.8799
27	50	Unbiased	31.057	31.137	0.0803
28	50	Unbiased	31.572	32.401	0.8287
29	50	Unbiased	31.186	31.238	0.0522
30	50	Unbiased	31.31	31.525	0.2151
88	50	Biased-84Hr-Anneal	31.559	32.24	0.6815
89	50	Biased-84Hr-Anneal	31.374	31.536	0.1624
90	50	Biased-84Hr-Anneal	31.511	31.58	0.0687
91	50	Biased-84Hr-Anneal	30.962	30.924	-0.0381
92	50	Biased-84Hr-Anneal	30.771	30.592	-0.179
100	0	CORRELATION	31.425	31.343	-0.082
101	0	CORRELATION	30.739	30.663	-0.0763
102	0	CORRELATION	30.821	30.724	-0.0969
103	0	CORRELATION	30.871	30.808	-0.0625
104	0	CORRELATION	30.209	30.154	-0.0546

TID vs Post - Pre Exposure Delta

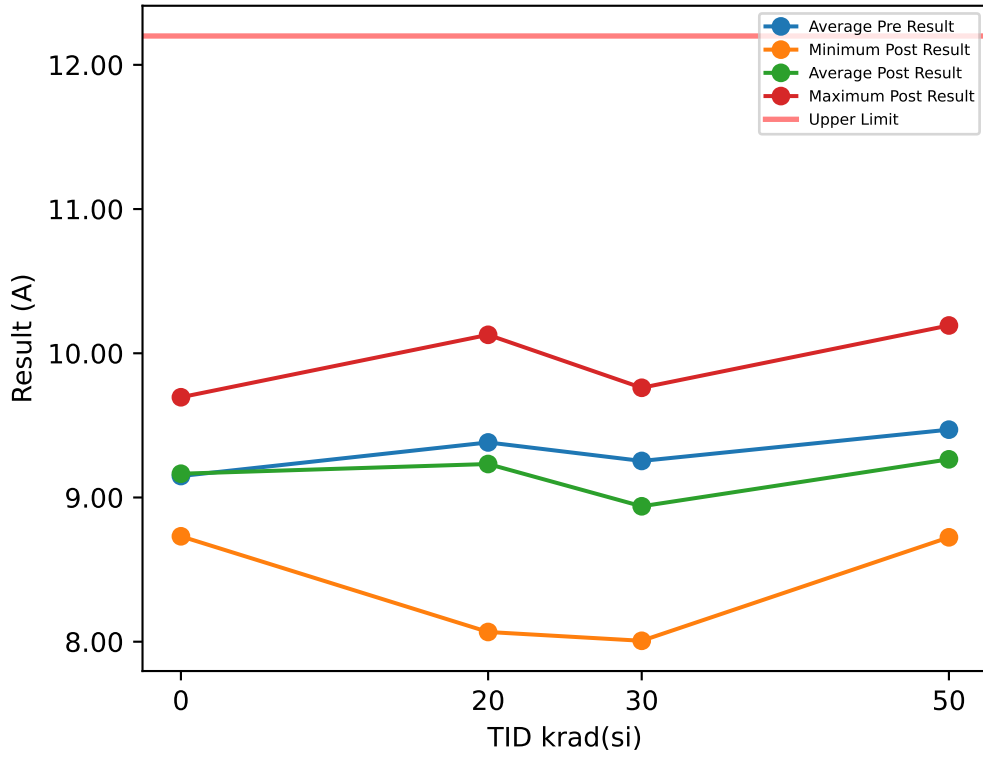


Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	30.209	30.813	31.425	0.43256	30.154	30.739	31.343	0.42355	-0.0969	-0.07446	-0.0546	0.016593
20	30.852	31.203	31.616	0.25915	30.642	31.273	31.983	0.42724	-0.2094	0.06978	0.3669	0.18705
30	30.659	31.216	32.374	0.45468	30.398	31.097	33.008	0.74198	-0.4648	-0.11857	0.6342	0.30721
50	30.771	31.277	31.572	0.27513	30.592	31.552	32.401	0.61643	-0.179	0.27517	0.8799	0.37834

Device Test: 20.107 THRESHOLD|RISE/SW/12////@HS_CURR_LIM_6A_HTSSOP

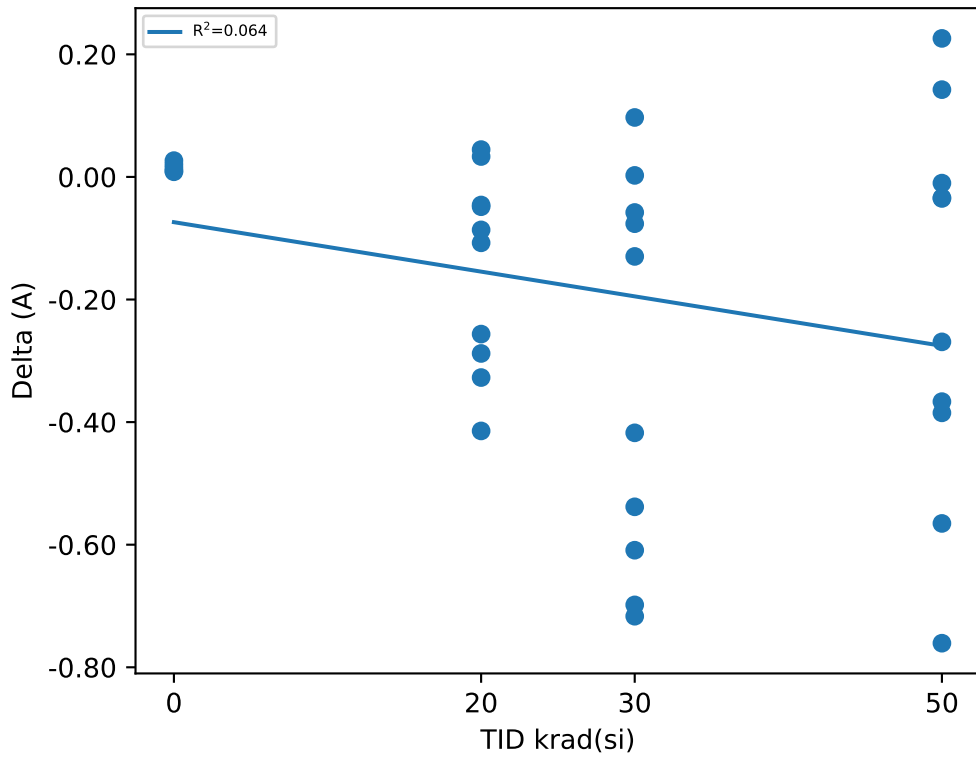
TID vs Result Stats



Test Results (Upper Limit = 12.2 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	9.5321	9.2441	-0.288
2	20	Biased	9.7222	9.3078	-0.4144
3	20	Biased	9.7688	9.4415	-0.3273
4	20	Biased	9.1298	8.8734	-0.2564
5	20	Biased	9.7334	9.647	-0.0864
6	20	Unbiased	9.3183	9.3516	0.0333
7	20	Unbiased	9.4274	9.3816	-0.0458
8	20	Unbiased	8.8344	8.879	0.0446
9	20	Unbiased	10.177	10.128	-0.0486
10	20	Unbiased	8.1749	8.0674	-0.1075
11	30	Biased	9.0667	8.6492	-0.4175
12	30	Biased	9.6843	9.1461	-0.5382
13	30	Biased	8.7045	8.0063	-0.6982
14	30	Biased	9.6067	8.89	-0.7167
15	30	Biased	8.9525	8.3435	-0.609
16	30	Unbiased	9.3187	9.189	-0.1297
17	30	Unbiased	8.9127	8.9152	0.0025
18	30	Unbiased	9.8187	9.7607	-0.058
19	30	Unbiased	8.8954	8.8191	-0.0763
20	30	Unbiased	9.5738	9.6708	0.097
26	50	Unbiased	9.7725	9.9985	0.226
27	50	Unbiased	9.2409	9.2069	-0.034
28	50	Unbiased	9.2846	9.427	0.1424
29	50	Unbiased	10.228	10.193	-0.0351
30	50	Unbiased	8.9925	8.9824	-0.0101
88	50	Biased-84Hr-Anneal	9.2231	8.954	-0.2691
89	50	Biased-84Hr-Anneal	9.9153	9.5304	-0.3849
90	50	Biased-84Hr-Anneal	9.241	8.8744	-0.3666
91	50	Biased-84Hr-Anneal	9.2891	8.7238	-0.5653
92	50	Biased-84Hr-Anneal	9.5169	8.7562	-0.7607
100	0	CORRELATION	8.7105	8.7309	0.0204
101	0	CORRELATION	8.7964	8.8048	0.0084
102	0	CORRELATION	9.6684	9.695	0.0266
103	0	CORRELATION	9.071	9.0857	0.0147
104	0	CORRELATION	9.4976	9.5075	0.0099

TID vs Post - Pre Exposure Delta

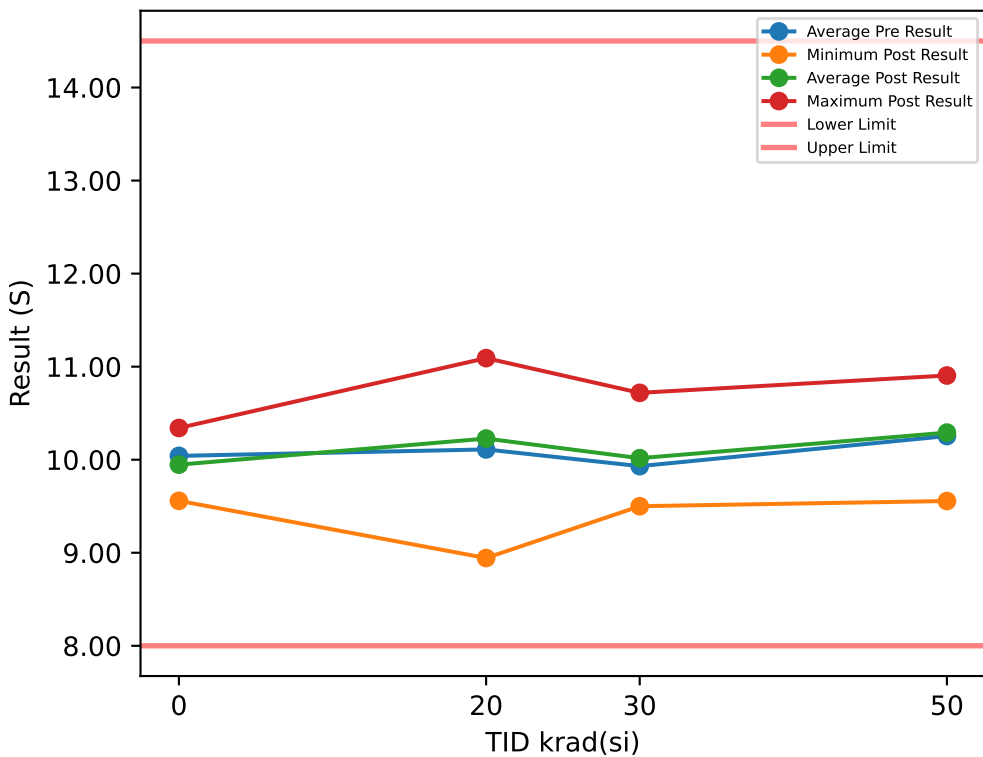


Test Statistics (A)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.7105	9.1488	9.6684	0.42249	8.7309	9.1648	9.695	0.42505	0.0084	0.016	0.0266	0.0075561
20	8.1749	9.3818	10.177	0.56465	8.0674	9.2321	10.128	0.54477	-0.4144	-0.14965	0.0446	0.15992
30	8.7045	9.2534	9.8187	0.39552	8.0063	8.939	9.7607	0.54181	-0.7167	-0.31441	0.097	0.3132
50	8.9925	9.4704	10.228	0.38404	8.7238	9.2646	10.193	0.51422	-0.7607	-0.20574	0.226	0.31688

Device Test: 20.109 GMPS|STATIC/SW/12////@EA_GMPS_9A_HTSSOP

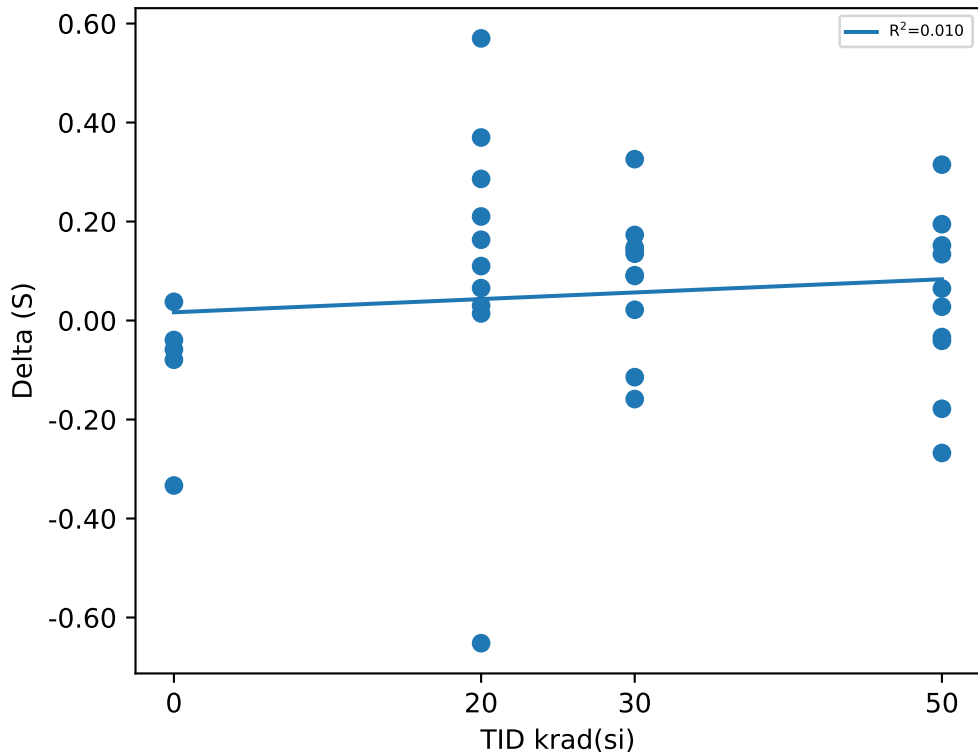
TID vs Result Stats



Test Results (Lower Limit = 8.0, Upper Limit = 14.5 (S))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	9.8384	10.408	0.57
2	20	Biased	10.421	10.435	0.0143
3	20	Biased	9.6246	9.8348	0.2102
4	20	Biased	9.5952	8.9433	-0.6519
5	20	Biased	10.806	11.092	0.2861
6	20	Unbiased	10.461	10.83	0.3698
7	20	Unbiased	10.531	10.695	0.1632
8	20	Unbiased	9.9905	10.021	0.0302
9	20	Unbiased	10.599	10.709	0.11
10	20	Unbiased	9.2384	9.3039	0.0655
11	30	Biased	9.5769	9.5986	0.0217
12	30	Biased	10.287	10.421	0.135
13	30	Biased	9.8122	9.6535	-0.1587
14	30	Biased	9.7082	9.8811	0.1729
15	30	Biased	10.147	10.239	0.0916
16	30	Unbiased	10.458	10.601	0.1432
17	30	Unbiased	9.6146	9.5002	-0.1144
18	30	Unbiased	9.5971	9.6871	0.09
19	30	Unbiased	9.5368	9.8628	0.326
20	30	Unbiased	10.571	10.719	0.1476
26	50	Unbiased	10.034	10.099	0.0647
27	50	Unbiased	10.451	10.273	-0.1783
28	50	Unbiased	10.458	10.653	0.1946
29	50	Unbiased	11.172	10.905	-0.2676
30	50	Unbiased	9.8253	9.7843	-0.041
88	50	Biased-84Hr-Anneal	10.322	10.637	0.3149
89	50	Biased-84Hr-Anneal	10.274	10.409	0.134
90	50	Biased-84Hr-Anneal	10.084	10.236	0.1518
91	50	Biased-84Hr-Anneal	10.393	10.36	-0.0334
92	50	Biased-84Hr-Anneal	9.5281	9.556	0.0279
100	0	CORRELATION	9.6165	9.558	-0.0585
101	0	CORRELATION	9.8178	9.8556	0.0378
102	0	CORRELATION	10.246	10.167	-0.0792
103	0	CORRELATION	10.145	9.8116	-0.3333
104	0	CORRELATION	10.38	10.341	-0.0393

TID vs Post - Pre Exposure Delta

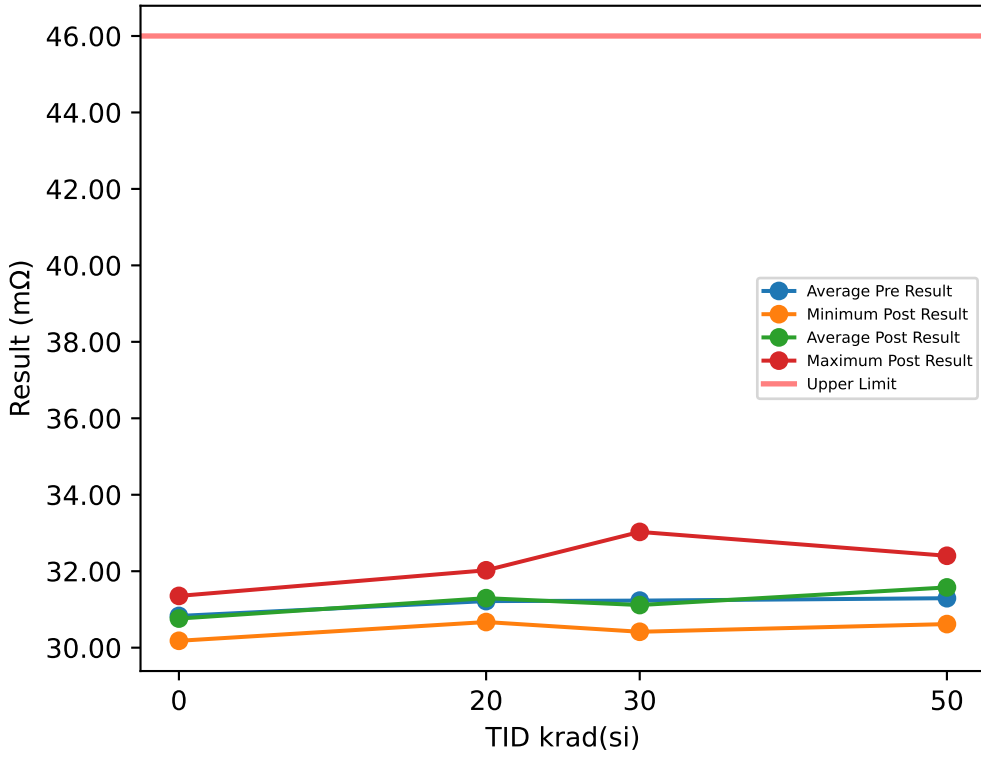


Test Statistics (S)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.6165	10.041	10.38	0.31547	9.558	9.9467	10.341	0.3089	-0.3333	-0.0945	0.0378	0.14063
20	9.2384	10.11	10.806	0.52371	8.9433	10.227	11.092	0.69405	-0.6519	0.11674	0.57	0.31981
30	9.5368	9.9308	10.571	0.3967	9.5002	10.016	10.719	0.44365	-0.1587	0.08549	0.326	0.14096
50	9.5281	10.254	11.172	0.43925	9.556	10.291	10.905	0.40595	-0.2676	0.03676	0.3149	0.17502

Device Test: 20.157 LEVEL|HIGH SIDE/SW/14/6///@R_HS_6A_25C_HTSSOP

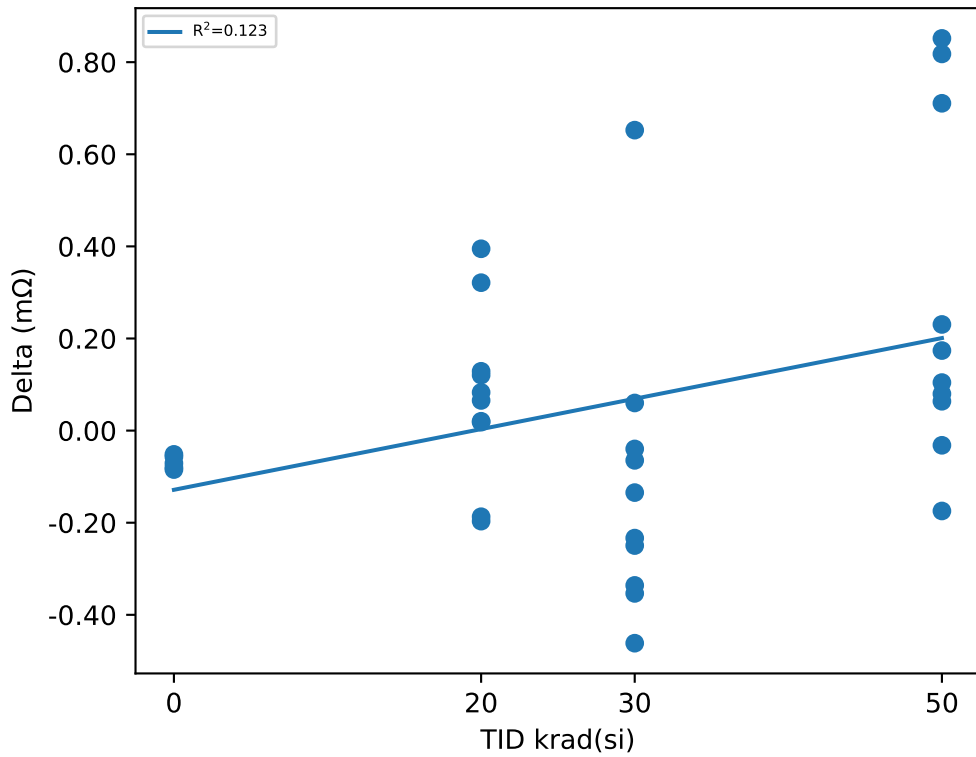
TID vs Result Stats



Test Results (Upper Limit = 46.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	31.349	31.67	0.3212
2	20	Biased	30.858	30.671	-0.187
3	20	Biased	31.173	31.191	0.0184
4	20	Biased	30.923	30.943	0.0203
5	20	Biased	31.629	32.024	0.3948
6	20	Unbiased	31.285	31.414	0.1288
7	20	Unbiased	31.239	31.322	0.0829
8	20	Unbiased	31.281	31.402	0.1205
9	20	Unbiased	31.53	31.595	0.0655
10	20	Unbiased	30.917	30.721	-0.1966
11	30	Biased	31.328	31.388	0.06
12	30	Biased	31.329	31.29	-0.0398
13	30	Biased	31.028	30.893	-0.1346
14	30	Biased	30.962	30.501	-0.4616
15	30	Biased	30.986	30.649	-0.3361
16	30	Unbiased	31.303	30.949	-0.3535
17	30	Unbiased	30.666	30.416	-0.2496
18	30	Unbiased	31.192	30.958	-0.2334
19	30	Unbiased	31.143	31.079	-0.0646
20	30	Unbiased	32.376	33.028	0.6524
26	50	Unbiased	31.483	32.335	0.8516
27	50	Unbiased	31.076	31.18	0.1043
28	50	Unbiased	31.586	32.404	0.8179
29	50	Unbiased	31.198	31.261	0.0637
30	50	Unbiased	31.326	31.557	0.2305
88	50	Biased-84Hr-Anneal	31.57	32.281	0.7107
89	50	Biased-84Hr-Anneal	31.383	31.557	0.1738
90	50	Biased-84Hr-Anneal	31.535	31.615	0.0798
91	50	Biased-84Hr-Anneal	30.987	30.955	-0.0319
92	50	Biased-84Hr-Anneal	30.792	30.617	-0.1745
100	0	CORRELATION	31.425	31.354	-0.071
101	0	CORRELATION	30.761	30.681	-0.08
102	0	CORRELATION	30.836	30.751	-0.0846
103	0	CORRELATION	30.897	30.84	-0.0567
104	0	CORRELATION	30.232	30.18	-0.0516

TID vs Post - Pre Exposure Delta

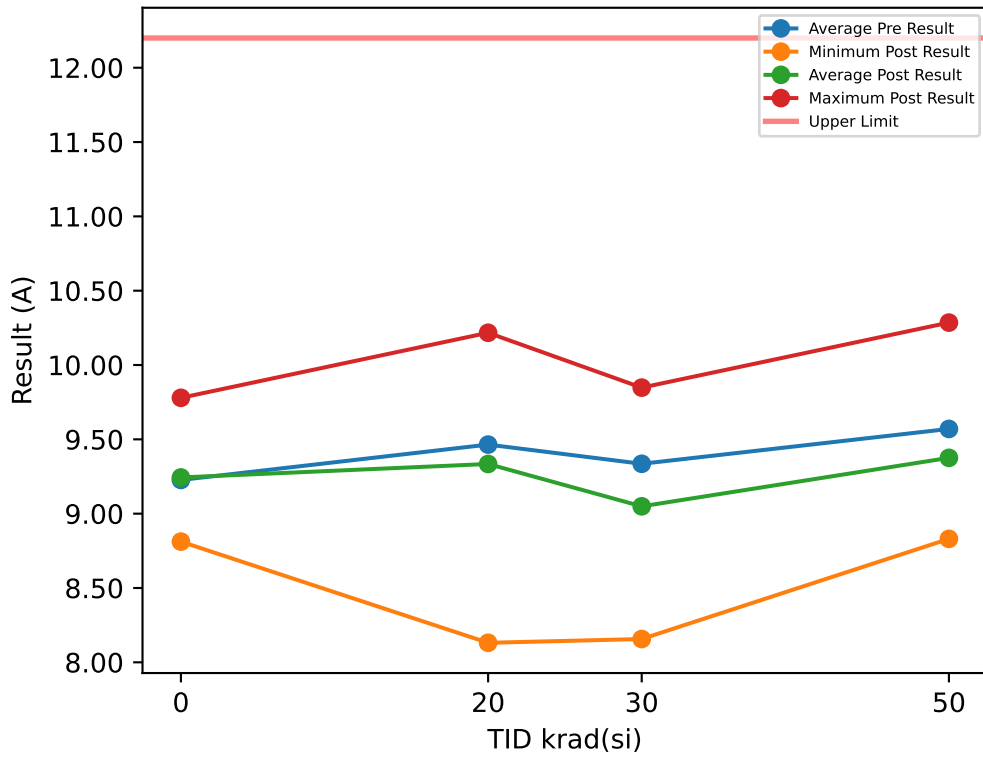


Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	30.232	30.83	31.425	0.42469	30.18	30.761	31.354	0.41894	-0.0846	-0.06878	-0.0516	0.014337
20	30.858	31.218	31.629	0.25856	30.671	31.295	32.024	0.4272	-0.1966	0.07688	0.3948	0.18755
30	30.666	31.231	32.376	0.45184	30.416	31.115	33.028	0.74167	-0.4616	-0.11608	0.6524	0.31378
50	30.792	31.294	31.586	0.27245	30.617	31.576	32.404	0.60749	-0.1745	0.28259	0.8516	0.37071

Device Test: 20.158 THRESHOLD|RISE/SW/14////@HS_CURR_LIM_6A_HTSSOP

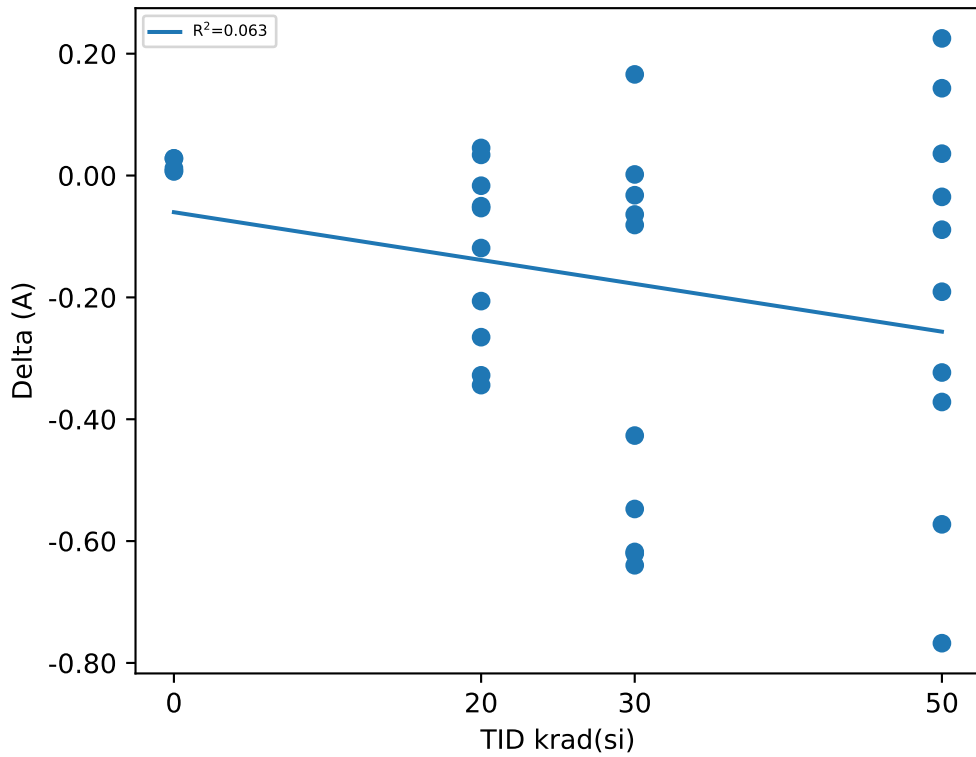
TID vs Result Stats



Test Results (Upper Limit = 12.2 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	9.6171	9.411	-0.2061
2	20	Biased	9.8141	9.4701	-0.344
3	20	Biased	9.8501	9.5222	-0.3279
4	20	Biased	9.2088	8.9435	-0.2653
5	20	Biased	9.8158	9.7991	-0.0167
6	20	Unbiased	9.3983	9.4322	0.0339
7	20	Unbiased	9.5146	9.4612	-0.0534
8	20	Unbiased	8.9101	8.9554	0.0453
9	20	Unbiased	10.267	10.217	-0.0503
10	20	Unbiased	8.2503	8.1313	-0.119
11	30	Biased	9.1482	8.7214	-0.4268
12	30	Biased	9.7741	9.2268	-0.5473
13	30	Biased	8.7772	8.1567	-0.6205
14	30	Biased	9.6925	9.0528	-0.6397
15	30	Biased	9.0308	8.413	-0.6178
16	30	Unbiased	9.3883	9.356	-0.0323
17	30	Unbiased	8.9986	9.0004	0.0018
18	30	Unbiased	9.9118	9.8479	-0.0639
19	30	Unbiased	8.9772	8.896	-0.0812
20	30	Unbiased	9.657	9.823	0.166
26	50	Unbiased	9.867	10.092	0.2251
27	50	Unbiased	9.3199	9.3558	0.0359
28	50	Unbiased	9.3652	9.5085	0.1433
29	50	Unbiased	10.32	10.285	-0.035
30	50	Unbiased	9.146	9.0571	-0.0889
88	50	Biased-84Hr-Anneal	9.3041	9.1134	-0.1907
89	50	Biased-84Hr-Anneal	10.008	9.6843	-0.3233
90	50	Biased-84Hr-Anneal	9.3184	8.9467	-0.3717
91	50	Biased-84Hr-Anneal	9.4532	8.8807	-0.5725
92	50	Biased-84Hr-Anneal	9.5981	8.8305	-0.7676
100	0	CORRELATION	8.7838	8.812	0.0282
101	0	CORRELATION	8.8728	8.8807	0.0079
102	0	CORRELATION	9.7513	9.7793	0.028
103	0	CORRELATION	9.1516	9.1583	0.0067
104	0	CORRELATION	9.5754	9.5876	0.0122

TID vs Post - Pre Exposure Delta

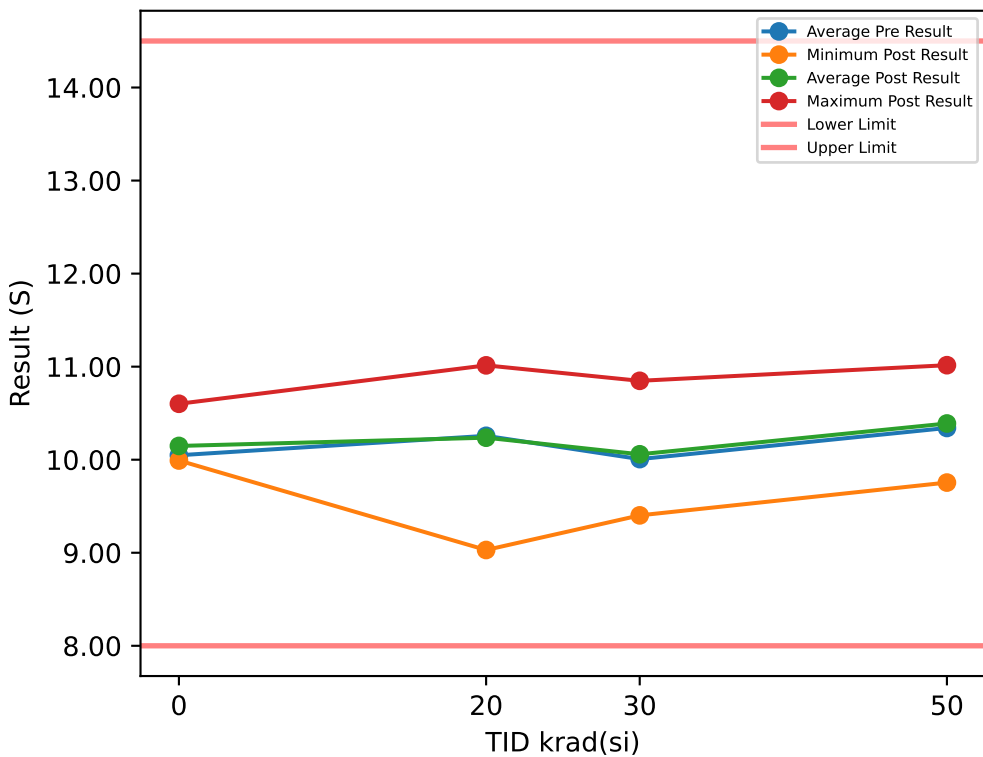


Test Statistics (A)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.7838	9.227	9.7513	0.42539	8.812	9.2436	9.7793	0.42736	0.0067	0.0166	0.0282	0.010696
20	8.2503	9.4647	10.267	0.56921	8.1313	9.3343	10.217	0.56016	-0.344	-0.13035	0.0453	0.14599
30	8.7772	9.3356	9.9118	0.39994	8.1567	9.0494	9.8479	0.54742	-0.6397	-0.28617	0.166	0.31233
50	9.146	9.57	10.32	0.37644	8.8305	9.3754	10.285	0.51104	-0.7676	-0.19454	0.2251	0.31608

Device Test: 20.160 GMPS|STATIC/SW/14////@EA_GMPS_9A_HTSSOP

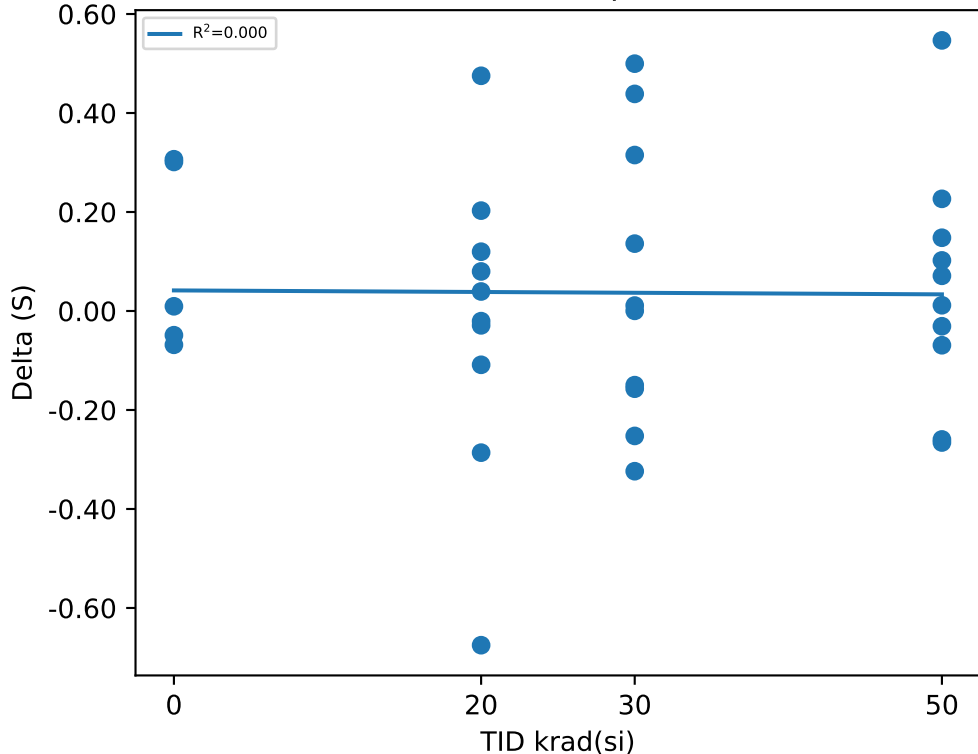
TID vs Result Stats



Test Results (Lower Limit = 8.0, Upper Limit = 14.5 (S))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	10.418	10.132	-0.2862
2	20	Biased	10.241	10.28	0.0394
3	20	Biased	9.6692	10.144	0.4752
4	20	Biased	9.7048	9.0296	-0.6752
5	20	Biased	10.811	11.014	0.2028
6	20	Unbiased	10.905	10.885	-0.0205
7	20	Unbiased	10.732	10.851	0.1198
8	20	Unbiased	9.9859	9.8772	-0.1087
9	20	Unbiased	10.833	10.912	0.0799
10	20	Unbiased	9.2679	9.2389	-0.029
11	30	Biased	9.8499	9.7001	-0.1498
12	30	Biased	10.406	10.249	-0.157
13	30	Biased	9.6981	9.8342	0.1361
14	30	Biased	9.8424	10.158	0.3151
15	30	Biased	10.148	10.149	0.0003
16	30	Unbiased	10.597	10.607	0.011
17	30	Unbiased	9.7255	9.4018	-0.3237
18	30	Unbiased	9.9317	9.6793	-0.2524
19	30	Unbiased	9.5177	9.9563	0.4386
20	30	Unbiased	10.348	10.848	0.4997
26	50	Unbiased	10.199	10.168	-0.0308
27	50	Unbiased	10.421	10.432	0.0116
28	50	Unbiased	10.533	10.635	0.1022
29	50	Unbiased	10.768	10.839	0.0711
30	50	Unbiased	10.033	10.26	0.2266
88	50	Biased-84Hr-Anneal	10.469	11.016	0.5467
89	50	Biased-84Hr-Anneal	10.422	10.162	-0.2595
90	50	Biased-84Hr-Anneal	10.293	10.027	-0.2657
91	50	Biased-84Hr-Anneal	10.45	10.598	0.148
92	50	Biased-84Hr-Anneal	9.8235	9.7543	-0.0692
100	0	CORRELATION	9.7609	10.062	0.3011
101	0	CORRELATION	10.066	9.9978	-0.0683
102	0	CORRELATION	9.7804	10.087	0.3066
103	0	CORRELATION	10.04	9.9914	-0.0489
104	0	CORRELATION	10.592	10.601	0.0095

TID vs Post - Pre Exposure Delta

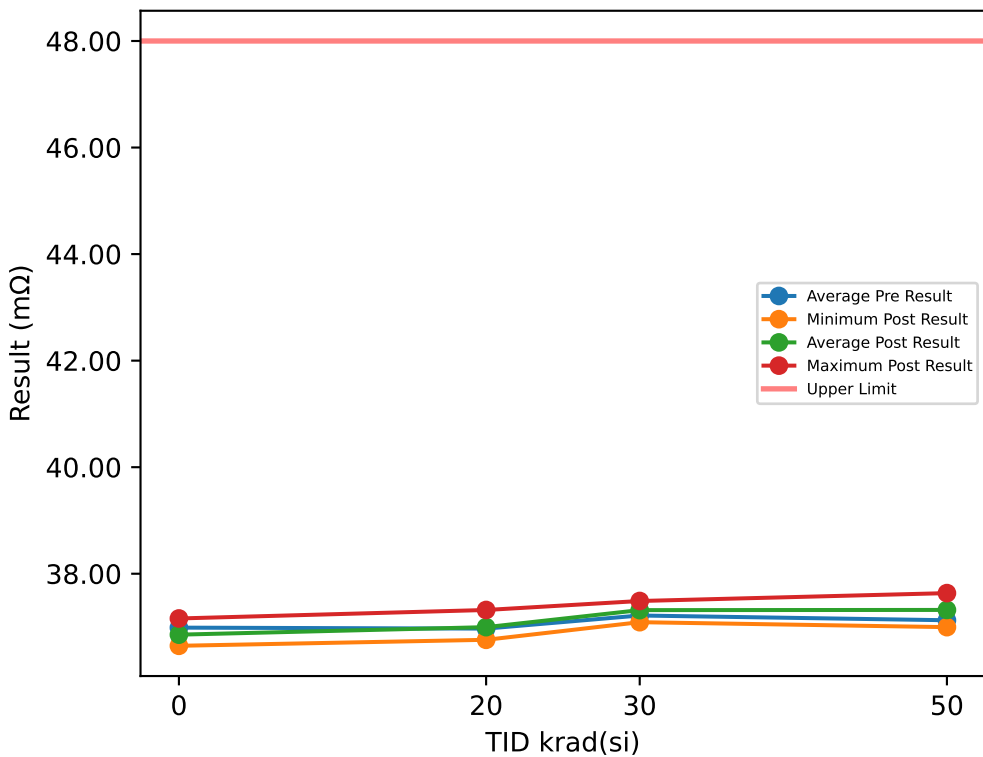


Test Statistics (S)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.7609	10.048	10.592	0.33538	9.9914	10.148	10.601	0.25666	-0.0683	0.1	0.3066	0.18829
20	9.2679	10.257	10.905	0.57853	9.0296	10.236	11.014	0.70412	-0.6752	-0.02025	0.4752	0.30478
30	9.5177	10.006	10.597	0.35195	9.4018	10.058	10.848	0.44007	-0.3237	0.05179	0.4997	0.28844
50	9.8235	10.341	10.768	0.26773	9.7543	10.389	11.016	0.38753	-0.2657	0.0481	0.5467	0.23765

Device Test: 20.4 LEVEL|HIGH|SIDE|SW|4.5|6|///@R_HS_6A_4V5_25C_HTSSOP

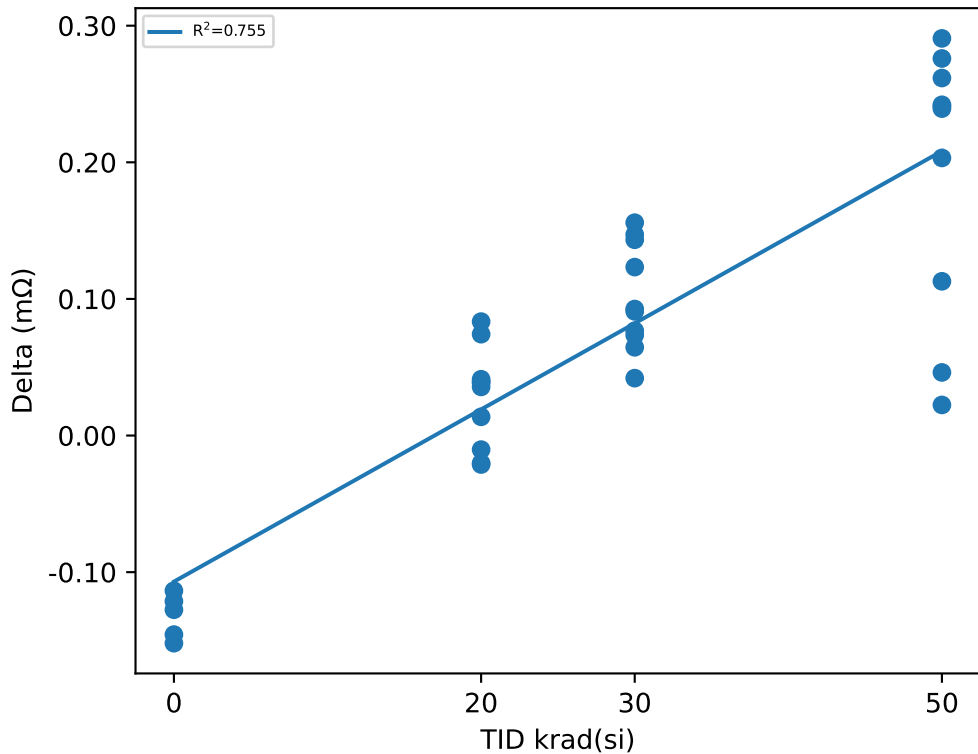
TID vs Result Stats



Test Results (Upper Limit = 48.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	37.231	37.306	0.0742
2	20	Biased	36.782	36.772	-0.0103
3	20	Biased	36.941	37.025	0.0834
4	20	Biased	36.983	37.022	0.0392
5	20	Biased	36.718	36.76	0.0412
6	20	Unbiased	37.15	37.189	0.0389
7	20	Unbiased	36.805	36.783	-0.0212
8	20	Unbiased	36.904	36.918	0.0137
9	20	Unbiased	37.284	37.319	0.0356
10	20	Unbiased	36.901	36.88	-0.0202
11	30	Biased	37.004	37.097	0.0926
12	30	Biased	37.338	37.481	0.1433
13	30	Biased	37.263	37.419	0.1558
14	30	Biased	37.247	37.394	0.1471
15	30	Biased	37.096	37.22	0.1233
16	30	Unbiased	37.414	37.488	0.0735
17	30	Unbiased	37.014	37.09	0.0767
18	30	Unbiased	37.247	37.338	0.0909
19	30	Unbiased	37.254	37.296	0.042
20	30	Unbiased	37.28	37.345	0.0646
26	50	Unbiased	37.395	37.636	0.2411
27	50	Unbiased	37.191	37.431	0.2393
28	50	Unbiased	37.26	37.536	0.276
29	50	Unbiased	36.994	37.236	0.2421
30	50	Unbiased	36.995	37.198	0.2032
88	50	Biased-84Hr-Anneal	37.258	37.371	0.1129
89	50	Biased-84Hr-Anneal	37.13	37.176	0.0462
90	50	Biased-84Hr-Anneal	37.291	37.313	0.0224
91	50	Biased-84Hr-Anneal	37.048	37.31	0.2617
92	50	Biased-84Hr-Anneal	36.707	36.997	0.2907
100	0	CORRELATION	36.886	36.764	-0.1213
101	0	CORRELATION	36.793	36.647	-0.1457
102	0	CORRELATION	36.934	36.782	-0.152
103	0	CORRELATION	37.274	37.16	-0.1136
104	0	CORRELATION	37.055	36.928	-0.1275

TID vs Post - Pre Exposure Delta

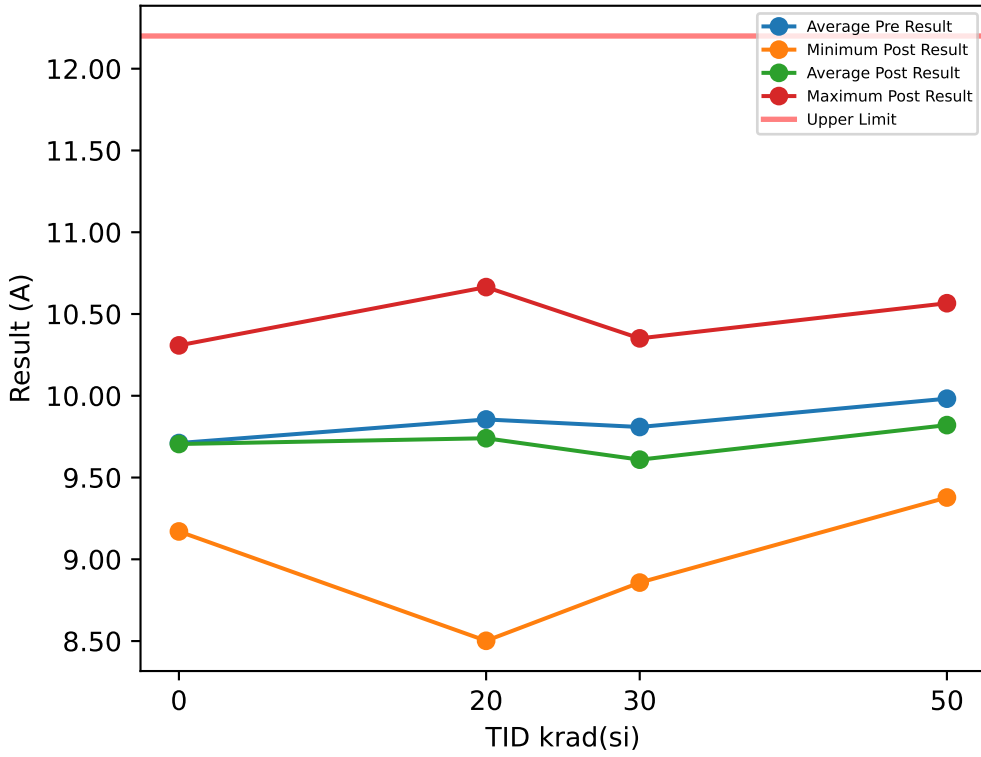


Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	36.793	36.988	37.274	0.1855	36.647	36.856	37.16	0.19693	-0.152	-0.13202	-0.1136	0.016286
20	36.718	36.97	37.284	0.193	36.76	36.997	37.319	0.2134	-0.0212	0.02745	0.0834	0.036655
30	37.004	37.216	37.414	0.13505	37.09	37.317	37.488	0.14285	0.042	0.10098	0.1558	0.039073
50	36.707	37.127	37.395	0.19873	36.997	37.32	37.636	0.185	0.0224	0.19356	0.2907	0.097293

Device Test: 20.5 THRESHOLD|RISE/SW/4.5/////@HS_CURR_LIM_6A_HTSSOP

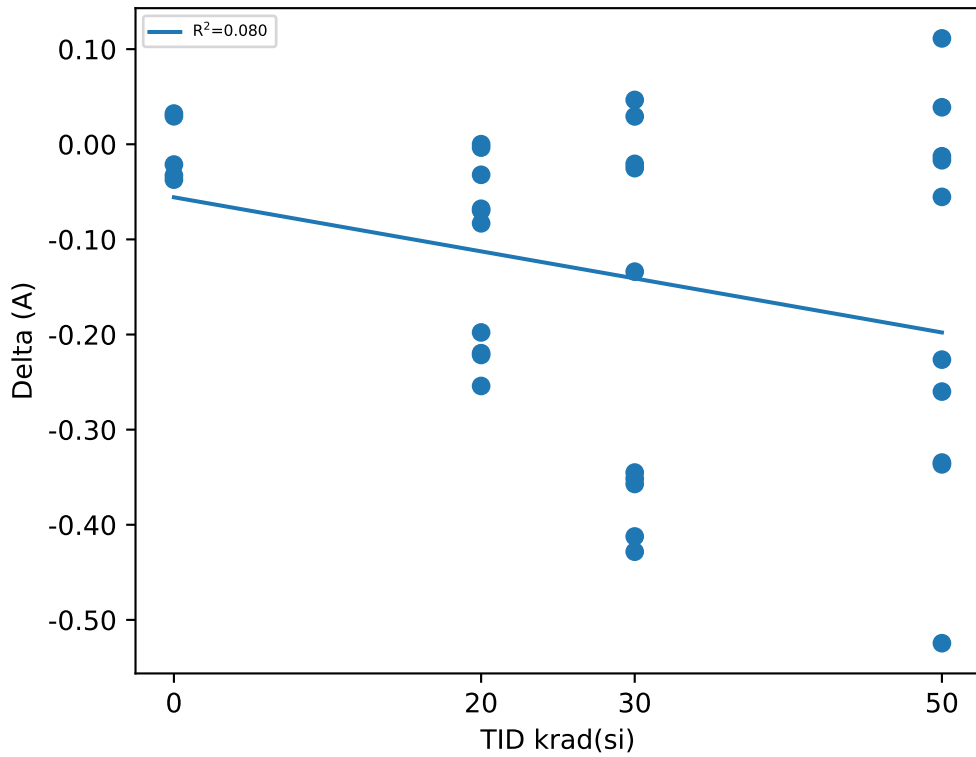
TID vs Result Stats



Test Results (Upper Limit = 12.2 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	10.036	9.8141	-0.2215
2	20	Biased	10.3	10.046	-0.2541
3	20	Biased	10.191	9.9709	-0.2196
4	20	Biased	9.5354	9.3376	-0.1978
5	20	Biased	10.198	10.115	-0.0831
6	20	Unbiased	9.865	9.7972	-0.0678
7	20	Unbiased	9.9188	9.9153	-0.0035
8	20	Unbiased	9.2412	9.2413	0.0001
9	20	Unbiased	10.697	10.665	-0.0321
10	20	Unbiased	8.5713	8.5017	-0.0696
11	30	Biased	9.4847	9.1333	-0.3514
12	30	Biased	10.235	9.8895	-0.3451
13	30	Biased	9.286	8.8577	-0.4283
14	30	Biased	10.332	9.9194	-0.4123
15	30	Biased	9.5186	9.1615	-0.3571
16	30	Unbiased	9.9055	9.8849	-0.0206
17	30	Unbiased	9.4212	9.3961	-0.0251
18	30	Unbiased	10.485	10.351	-0.1339
19	30	Unbiased	9.4109	9.4402	0.0293
20	30	Unbiased	10.012	10.059	0.0466
26	50	Unbiased	10.325	10.437	0.1113
27	50	Unbiased	9.9321	9.9153	-0.0168
28	50	Unbiased	9.7704	9.8093	0.0389
29	50	Unbiased	10.579	10.566	-0.0126
30	50	Unbiased	9.4825	9.4272	-0.0553
88	50	Biased-84Hr-Anneal	9.7263	9.4999	-0.2264
89	50	Biased-84Hr-Anneal	10.432	10.172	-0.26
90	50	Biased-84Hr-Anneal	9.7143	9.3778	-0.3365
91	50	Biased-84Hr-Anneal	9.852	9.5174	-0.3346
92	50	Biased-84Hr-Anneal	10.009	9.485	-0.5245
100	0	CORRELATION	9.2032	9.1704	-0.0328
101	0	CORRELATION	9.3537	9.3165	-0.0372
102	0	CORRELATION	10.072	10.051	-0.0213
103	0	CORRELATION	9.647	9.6793	0.0323
104	0	CORRELATION	10.279	10.308	0.0294

TID vs Post - Pre Exposure Delta

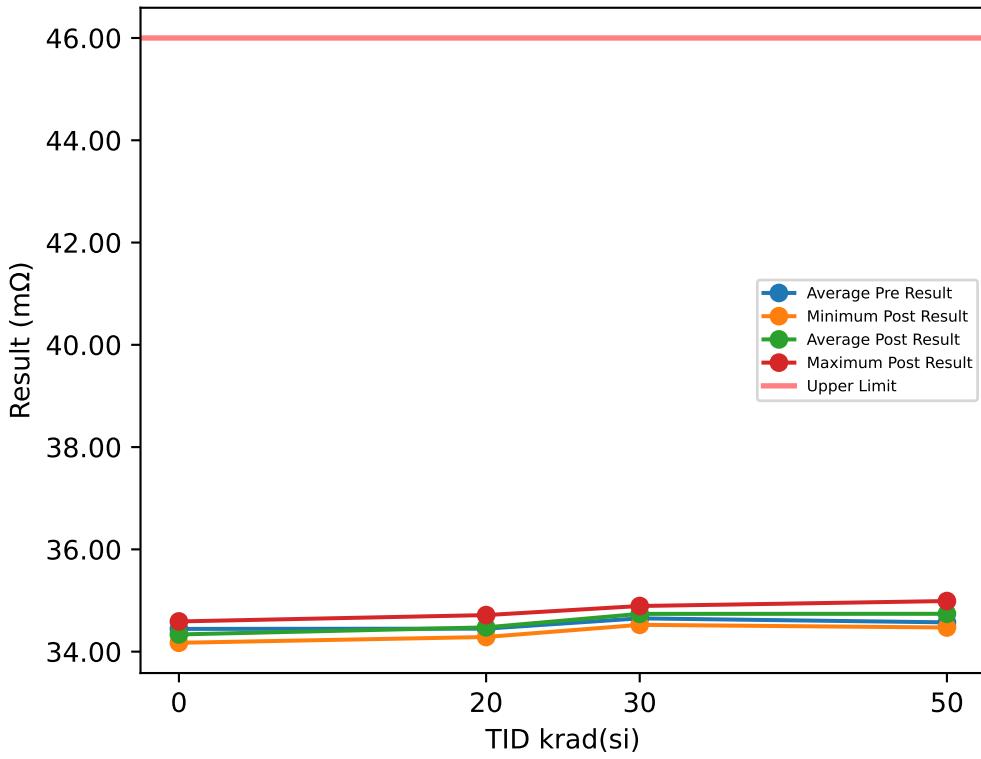


Test Statistics (A)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.2032	9.711	10.279	0.4589	9.1704	9.705	10.308	0.47978	-0.0372	-0.00592	0.0323	0.03408
20	8.5713	9.8552	10.697	0.6055	8.5017	9.7403	10.665	0.58928	-0.2541	-0.1149	0.0001	0.09795
30	9.286	9.8091	10.485	0.43892	8.8577	9.6093	10.351	0.47948	-0.4283	-0.19979	0.0466	0.19618
50	9.4825	9.9823	10.579	0.35395	9.3778	9.8206	10.566	0.43789	-0.5245	-0.16165	0.1113	0.20419

Device Test: 20.55 LEVEL|HIGH SIDE/SW/5/6///@R_HS_6A_25C_HTSSOP

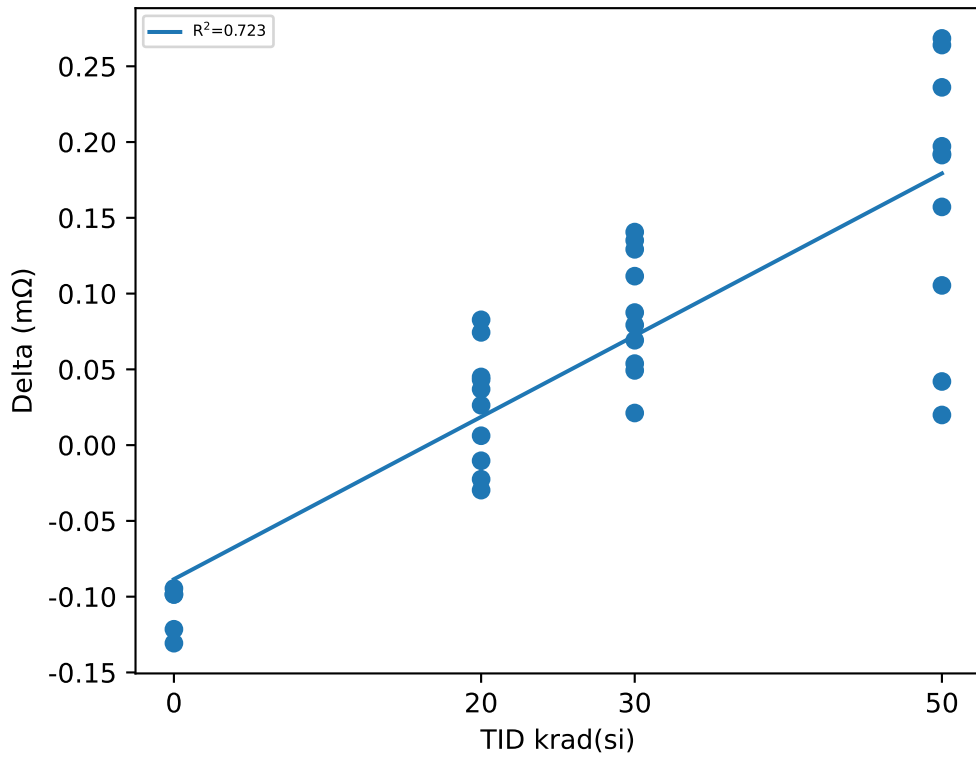
TID vs Result Stats



Test Results (Upper Limit = 46.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	34.64	34.715	0.0744
2	20	Biased	34.297	34.286	-0.0103
3	20	Biased	34.424	34.507	0.0827
4	20	Biased	34.463	34.506	0.0432
5	20	Biased	34.259	34.304	0.045
6	20	Unbiased	34.599	34.636	0.0369
7	20	Unbiased	34.312	34.29	-0.0225
8	20	Unbiased	34.409	34.415	0.0062
9	20	Unbiased	34.687	34.713	0.0263
10	20	Unbiased	34.404	34.374	-0.0297
11	30	Biased	34.466	34.545	0.0793
12	30	Biased	34.763	34.892	0.1292
13	30	Biased	34.657	34.798	0.1406
14	30	Biased	34.667	34.802	0.1351
15	30	Biased	34.543	34.654	0.1115
16	30	Unbiased	34.827	34.877	0.0493
17	30	Unbiased	34.471	34.524	0.0538
18	30	Unbiased	34.716	34.785	0.0692
19	30	Unbiased	34.688	34.709	0.0212
20	30	Unbiased	34.712	34.799	0.0875
26	50	Unbiased	34.792	34.99	0.1972
27	50	Unbiased	34.611	34.802	0.1914
28	50	Unbiased	34.682	34.946	0.264
29	50	Unbiased	34.471	34.663	0.1922
30	50	Unbiased	34.464	34.621	0.1572
88	50	Biased-84Hr-Anneal	34.7	34.806	0.1054
89	50	Biased-84Hr-Anneal	34.596	34.638	0.042
90	50	Biased-84Hr-Anneal	34.733	34.753	0.0199
91	50	Biased-84Hr-Anneal	34.472	34.708	0.2361
92	50	Biased-84Hr-Anneal	34.204	34.472	0.2684
100	0	CORRELATION	34.359	34.261	-0.0984
101	0	CORRELATION	34.294	34.173	-0.1215
102	0	CORRELATION	34.411	34.28	-0.1307
103	0	CORRELATION	34.685	34.591	-0.0946
104	0	CORRELATION	34.475	34.376	-0.0986

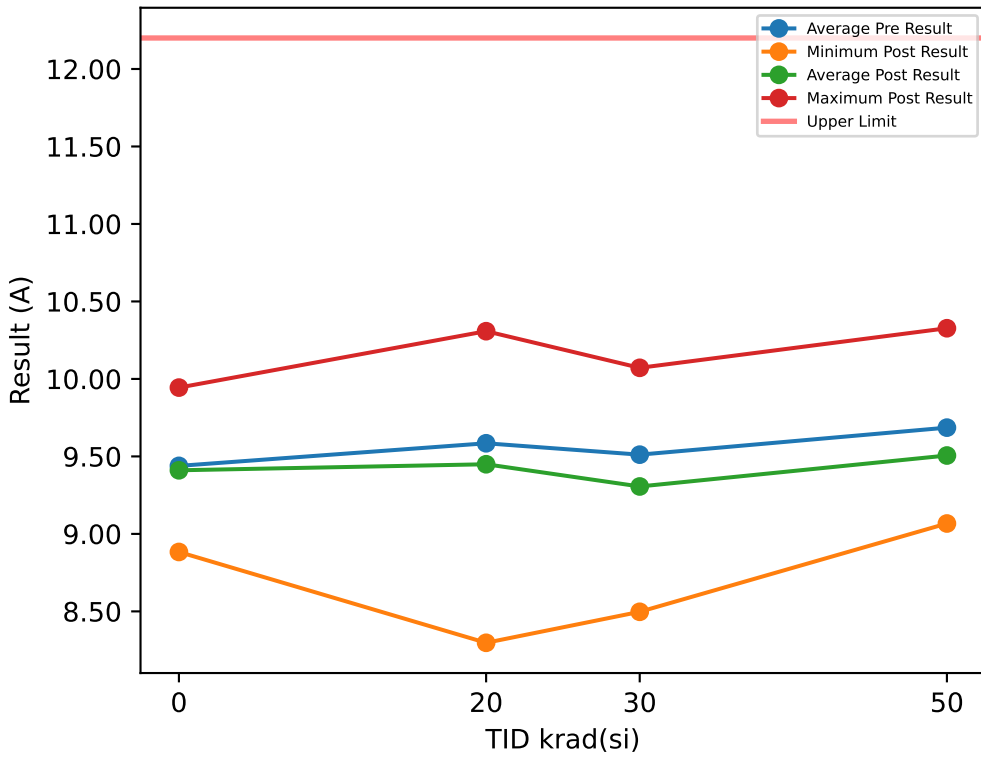
TID vs Post - Pre Exposure Delta



Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	34.294	34.445	34.685	0.14978	34.173	34.336	34.591	0.1595	-0.1307	-0.10876	-0.0946	0.016238
20	34.259	34.449	34.687	0.14836	34.286	34.475	34.715	0.16829	-0.0297	0.02522	0.0827	0.038718
30	34.466	34.651	34.827	0.12103	34.524	34.739	34.892	0.12798	0.0212	0.08767	0.1406	0.040542
50	34.204	34.573	34.792	0.17405	34.472	34.74	34.99	0.15503	0.0199	0.16738	0.2684	0.08677

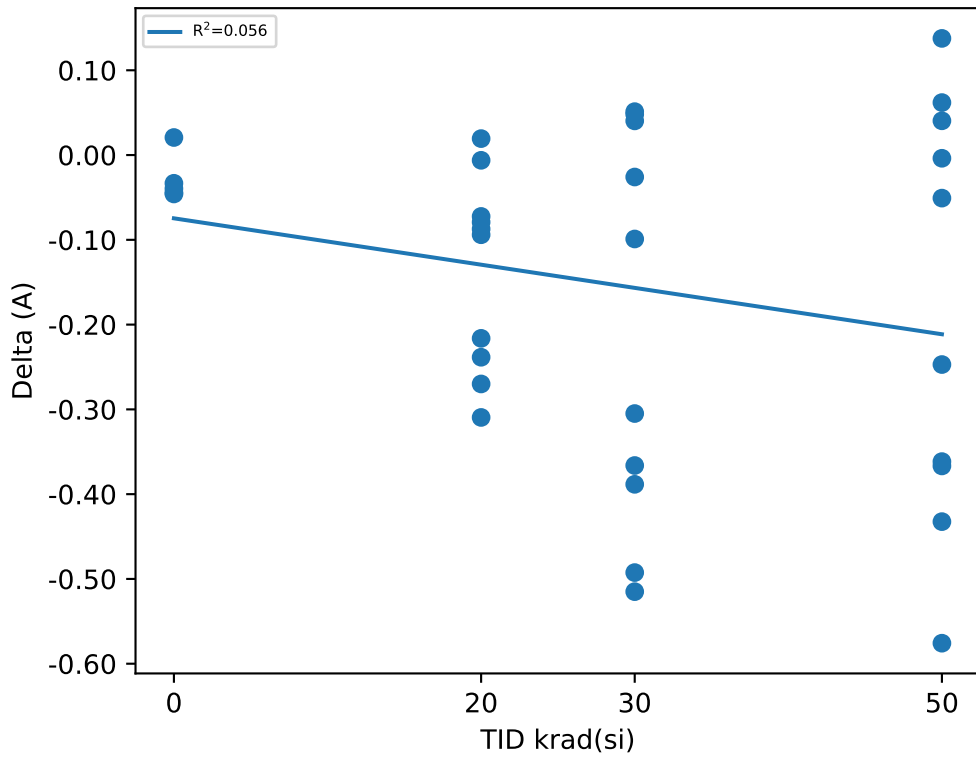
TID vs Result Stats



Test Results (Upper Limit = 12.2 (A))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	9.8037	9.4942	-0.3095
2	20	Biased	9.9775	9.7075	-0.27
3	20	Biased	9.9379	9.6994	-0.2385
4	20	Biased	9.2918	9.0756	-0.2162
5	20	Biased	9.8639	9.7699	-0.094
6	20	Unbiased	9.6018	9.5226	-0.0792
7	20	Unbiased	9.6386	9.6324	-0.0062
8	20	Unbiased	8.9676	8.987	0.0194
9	20	Unbiased	10.395	10.308	-0.0872
10	20	Unbiased	8.3697	8.2973	-0.0724
11	30	Biased	9.2467	8.8805	-0.3662
12	30	Biased	9.8738	9.5689	-0.3049
13	30	Biased	8.9898	8.4973	-0.4925
14	30	Biased	9.9814	9.4664	-0.515
15	30	Biased	9.2201	8.8317	-0.3884
16	30	Unbiased	9.5832	9.6313	0.0481
17	30	Unbiased	9.2478	9.2219	-0.0259
18	30	Unbiased	10.171	10.072	-0.099
19	30	Unbiased	9.1065	9.1468	0.0403
20	30	Unbiased	9.6932	9.7444	0.0512
26	50	Unbiased	10.007	10.145	0.1376
27	50	Unbiased	9.542	9.6039	0.0619
28	50	Unbiased	9.5049	9.5453	0.0404
29	50	Unbiased	10.331	10.327	-0.0038
30	50	Unbiased	9.1695	9.1187	-0.0508
88	50	Biased-84Hr-Anneal	9.3795	9.1324	-0.2471
89	50	Biased-84Hr-Anneal	10.153	9.7915	-0.3616
90	50	Biased-84Hr-Anneal	9.4338	9.0671	-0.3667
91	50	Biased-84Hr-Anneal	9.5939	9.1615	-0.4324
92	50	Biased-84Hr-Anneal	9.7423	9.1665	-0.5758
100	0	CORRELATION	8.9279	8.8834	-0.0445
101	0	CORRELATION	9.0873	9.0414	-0.0459
102	0	CORRELATION	9.8851	9.8518	-0.0333
103	0	CORRELATION	9.371	9.3314	-0.0396
104	0	CORRELATION	9.9234	9.9441	0.0207

TID vs Post - Pre Exposure Delta

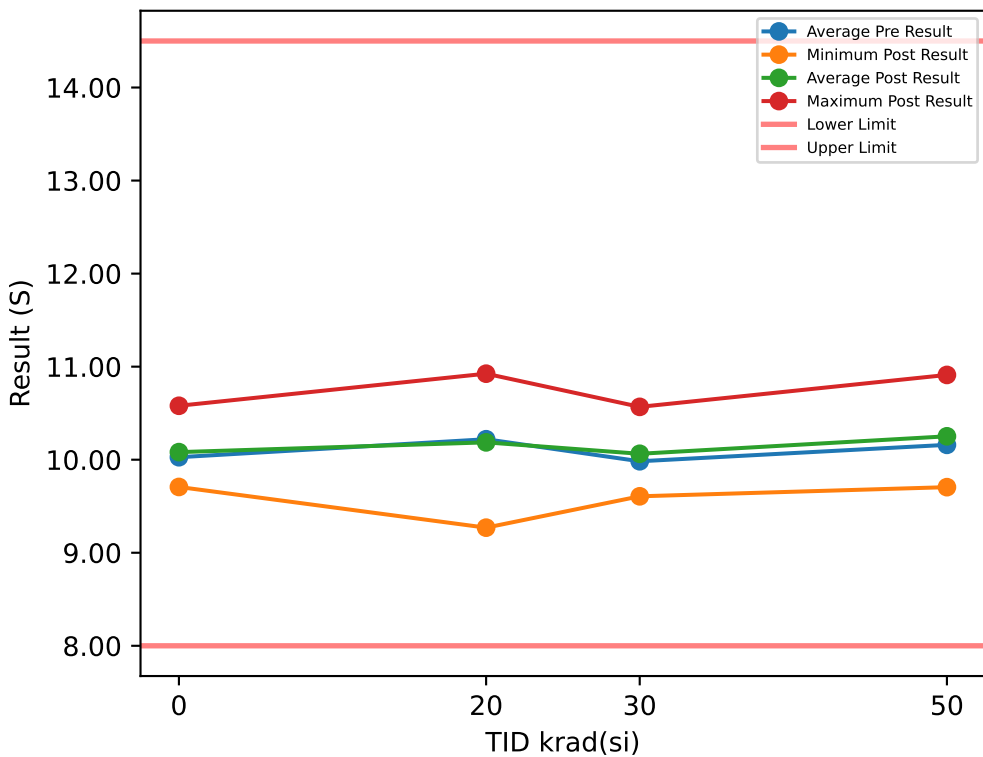


Test Statistics (A)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	8.9279	9.4389	9.9234	0.45365	8.8834	9.4104	9.9441	0.47429	-0.0459	-0.02852	0.0207	0.027954
20	8.3697	9.5848	10.395	0.57811	8.2973	9.4494	10.308	0.54678	-0.3095	-0.13538	0.0194	0.11422
30	8.9898	9.5113	10.171	0.40627	8.4973	9.3061	10.072	0.47977	-0.515	-0.20523	0.0512	0.23131
50	9.1695	9.6857	10.331	0.36918	9.0671	9.5059	10.327	0.45836	-0.5758	-0.17983	0.1376	0.24685

Device Test: 20.58 GMPS|STATIC/SW/5////@EA_GMPS_9A_HTSSOP

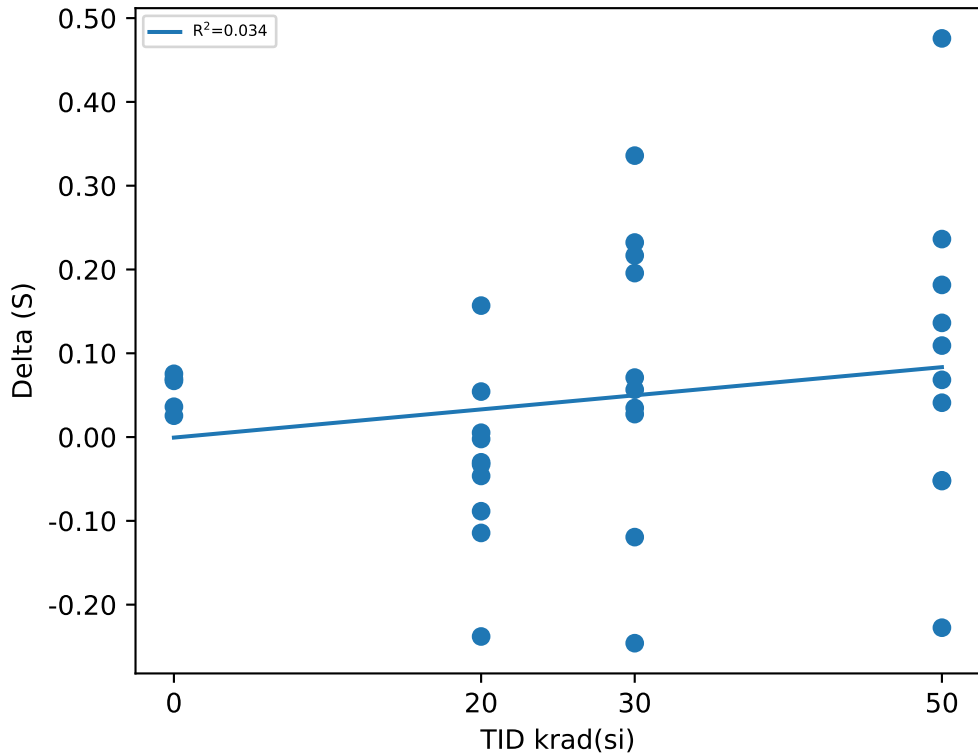
TID vs Result Stats



Test Results (Lower Limit = 8.0, Upper Limit = 14.5 (S))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	10.175	10.23	0.0543
2	20	Biased	10.223	10.38	0.1569
3	20	Biased	9.7905	9.5525	-0.238
4	20	Biased	9.8192	9.7048	-0.1144
5	20	Biased	10.957	10.925	-0.0327
6	20	Unbiased	10.744	10.714	-0.0301
7	20	Unbiased	10.655	10.653	-0.0023
8	20	Unbiased	9.8312	9.7427	-0.0885
9	20	Unbiased	10.74	10.694	-0.0464
10	20	Unbiased	9.2644	9.2696	0.0052
11	30	Biased	9.726	9.6066	-0.1194
12	30	Biased	10.161	10.497	0.3359
13	30	Biased	10.004	9.7577	-0.246
14	30	Biased	9.9884	10.221	0.2322
15	30	Biased	10.085	10.156	0.071
16	30	Unbiased	10.359	10.386	0.0274
17	30	Unbiased	9.7476	9.9643	0.2167
18	30	Unbiased	9.7293	9.764	0.0347
19	30	Unbiased	9.5201	9.7158	0.1957
20	30	Unbiased	10.511	10.568	0.0566
26	50	Unbiased	9.8417	10.023	0.1816
27	50	Unbiased	10.442	10.551	0.1092
28	50	Unbiased	10.395	10.343	-0.0525
29	50	Unbiased	10.843	10.911	0.0683
30	50	Unbiased	9.7152	9.8515	0.1363
88	50	Biased-84Hr-Anneal	10.01	10.486	0.4758
89	50	Biased-84Hr-Anneal	10.368	10.14	-0.2275
90	50	Biased-84Hr-Anneal	9.6836	9.9199	0.2363
91	50	Biased-84Hr-Anneal	10.543	10.584	0.041
92	50	Biased-84Hr-Anneal	9.7565	9.7049	-0.0516
100	0	CORRELATION	9.6316	9.7071	0.0755
101	0	CORRELATION	9.8314	9.901	0.0696
102	0	CORRELATION	10.151	10.187	0.0362
103	0	CORRELATION	9.9655	10.033	0.0671
104	0	CORRELATION	10.554	10.58	0.0255

TID vs Post - Pre Exposure Delta

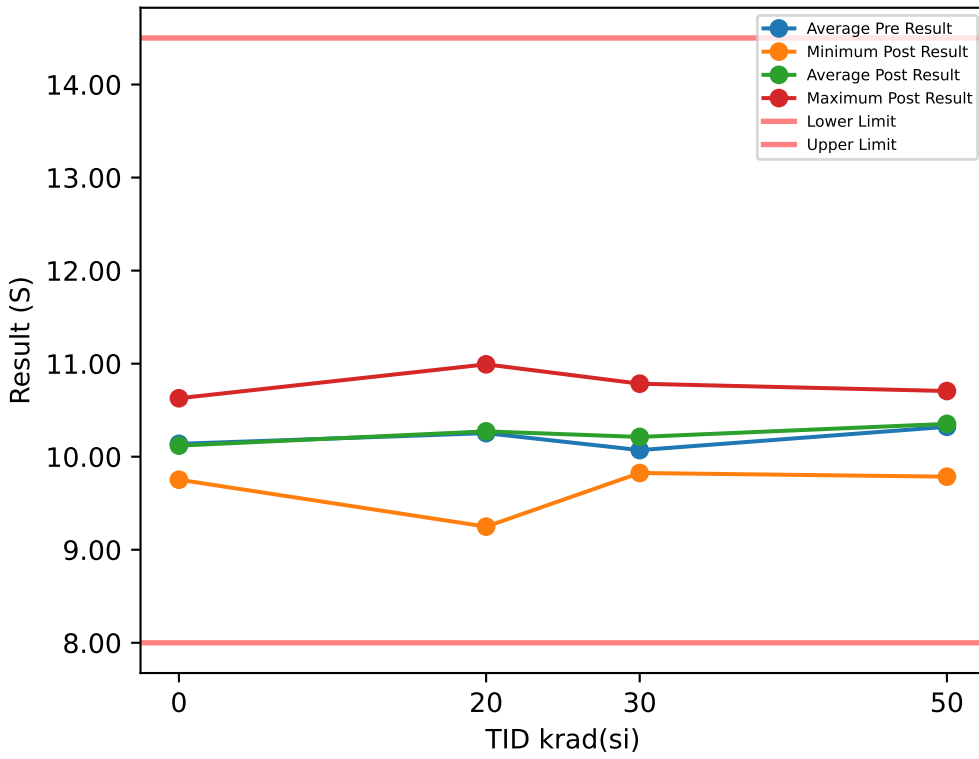


Test Statistics (S)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.6316	10.027	10.554	0.35055	9.7071	10.081	10.58	0.32954	0.0255	0.05478	0.0755	0.022379
20	9.2644	10.22	10.957	0.54662	9.2696	10.186	10.925	0.57813	-0.238	-0.0336	0.1569	0.10435
30	9.5201	9.9832	10.511	0.30967	9.6066	10.064	10.568	0.35001	-0.246	0.08048	0.3359	0.17391
50	9.6836	10.16	10.843	0.40853	9.7049	10.251	10.911	0.38463	-0.2275	0.09169	0.4758	0.19007

Device Test: 20.7 GMPS|STATIC/SW/4.5/////@EA_GMPS_9A_HTSSOP

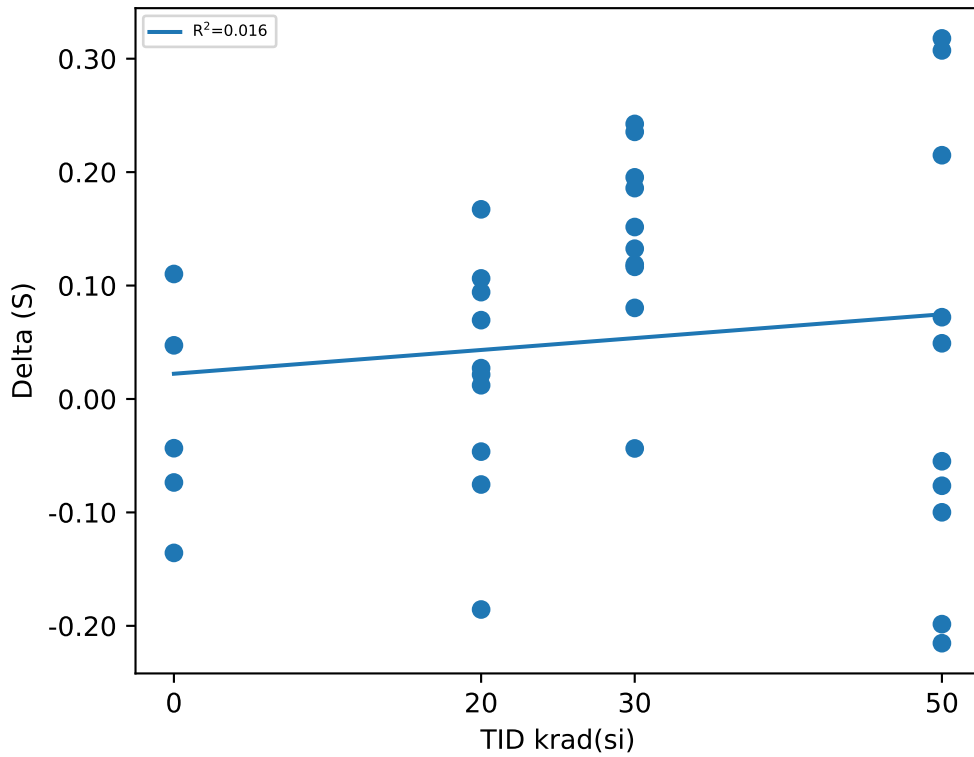
TID vs Result Stats



Test Results (Lower Limit = 8.0, Upper Limit = 14.5 (S))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	10.112	10.181	0.0695
2	20	Biased	10.601	10.768	0.1672
3	20	Biased	9.6086	9.5332	-0.0754
4	20	Biased	9.7242	9.8184	0.0942
5	20	Biased	10.981	10.993	0.0121
6	20	Unbiased	10.849	10.871	0.0215
7	20	Unbiased	10.678	10.784	0.1063
8	20	Unbiased	9.8187	9.7723	-0.0464
9	20	Unbiased	10.727	10.754	0.0272
10	20	Unbiased	9.4341	9.2485	-0.1856
11	30	Biased	9.8686	9.825	-0.0436
12	30	Biased	10.385	10.571	0.1859
13	30	Biased	9.8094	9.9259	0.1165
14	30	Biased	10.297	10.54	0.2425
15	30	Biased	10.039	10.275	0.2355
16	30	Unbiased	10.349	10.544	0.1954
17	30	Unbiased	9.7141	9.8327	0.1186
18	30	Unbiased	9.7614	9.913	0.1516
19	30	Unbiased	9.7811	9.9136	0.1325
20	30	Unbiased	10.704	10.785	0.0803
26	50	Unbiased	10.26	10.16	-0.0999
27	50	Unbiased	10.366	10.673	0.3073
28	50	Unbiased	10.335	10.653	0.3179
29	50	Unbiased	10.858	10.643	-0.2153
30	50	Unbiased	10.009	10.059	0.0491
88	50	Biased-84Hr-Anneal	10.35	10.565	0.2149
89	50	Biased-84Hr-Anneal	10.254	10.326	0.0721
90	50	Biased-84Hr-Anneal	10.158	9.9593	-0.1985
91	50	Biased-84Hr-Anneal	10.761	10.706	-0.0549
92	50	Biased-84Hr-Anneal	9.8618	9.7853	-0.0765
100	0	CORRELATION	9.7057	9.753	0.0473
101	0	CORRELATION	10.101	10.028	-0.0736
102	0	CORRELATION	10.263	10.127	-0.1357
103	0	CORRELATION	10.103	10.06	-0.0434
104	0	CORRELATION	10.518	10.628	0.1102

TID vs Post - Pre Exposure Delta

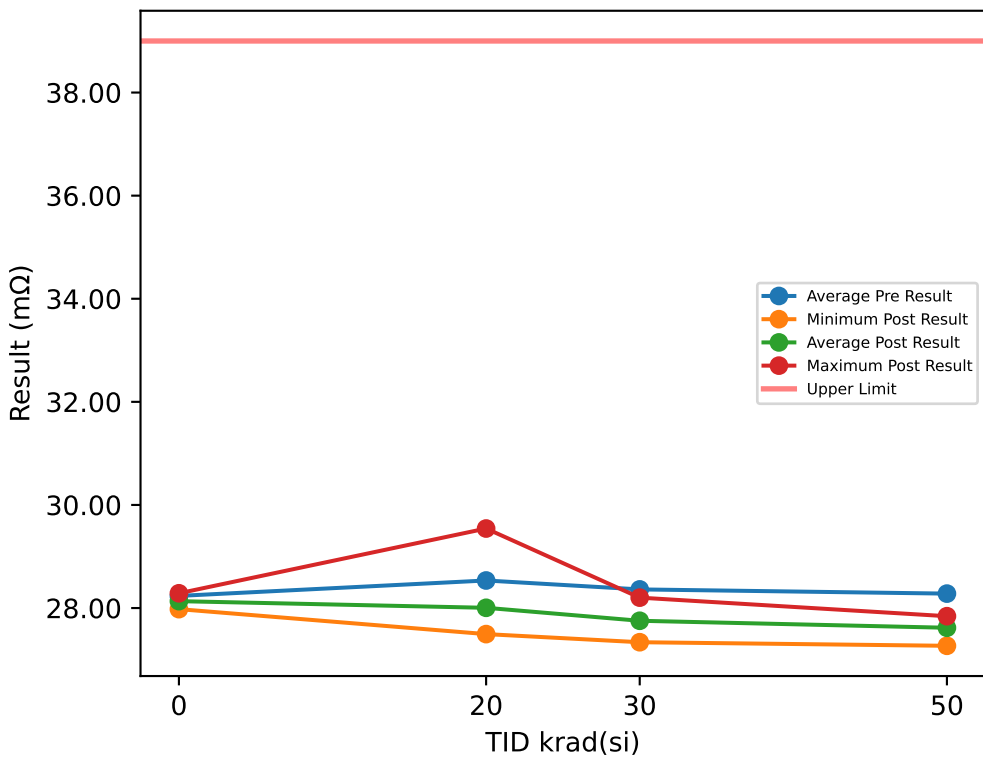


Test Statistics (S)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	9.7057	10.138	10.518	0.29551	9.753	10.119	10.628	0.31822	-0.1357	-0.01904	0.1102	0.097831
20	9.4341	10.253	10.981	0.57592	9.2485	10.272	10.993	0.63908	-0.1856	0.01906	0.1672	0.10163
30	9.7141	10.071	10.704	0.34083	9.825	10.212	10.785	0.36999	-0.0436	0.14152	0.2425	0.083834
50	9.8618	10.321	10.858	0.30331	9.7853	10.353	10.706	0.3412	-0.2153	0.03162	0.3179	0.19547

Device Test: 21.26 LEVEL|LOWSIDE/SW/4.5/6///@R_LS_6A_4V5_25C_HTSSOP

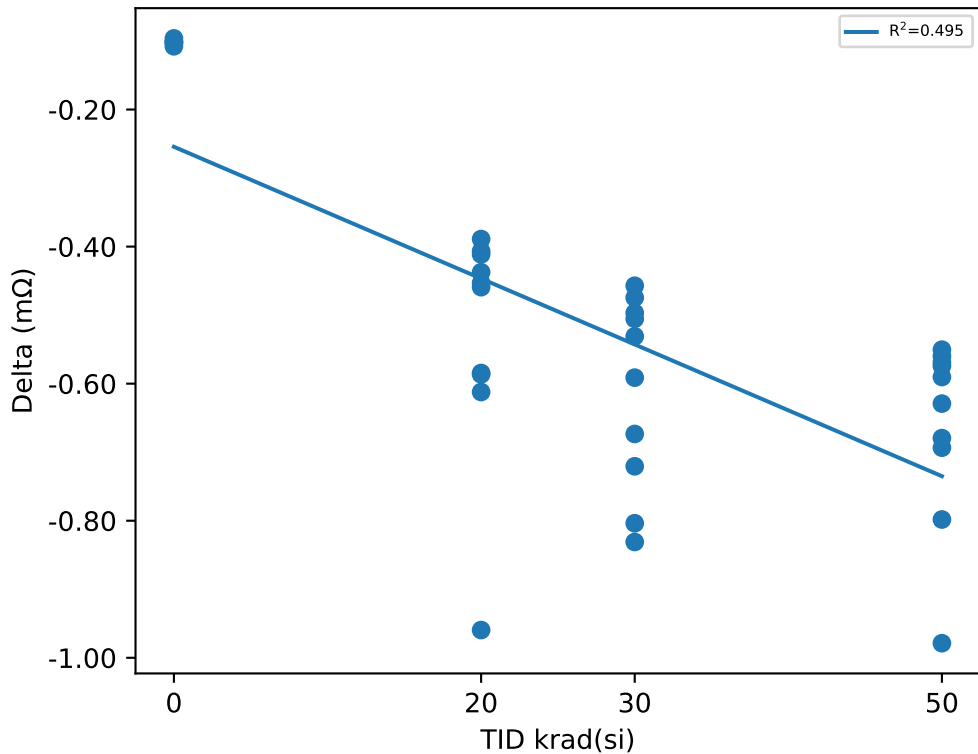
TID vs Result Stats



Test Results (Upper Limit = 39.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	28.224	27.612	-0.6122
2	20	Biased	28.55	27.966	-0.5844
3	20	Biased	28.454	27.494	-0.9595
4	20	Biased	28.272	27.686	-0.5864
5	20	Biased	28.452	27.999	-0.4529
6	20	Unbiased	30.002	29.543	-0.4592
7	20	Unbiased	28.703	28.292	-0.4114
8	20	Unbiased	28.173	27.784	-0.389
9	20	Unbiased	28.151	27.714	-0.4374
10	20	Unbiased	28.363	27.957	-0.4065
11	30	Biased	28.528	27.724	-0.8037
12	30	Biased	28.221	27.548	-0.6734
13	30	Biased	28.168	27.337	-0.831
14	30	Biased	28.195	27.474	-0.7206
15	30	Biased	28.311	27.72	-0.5912
16	30	Unbiased	28.17	27.695	-0.4745
17	30	Unbiased	28.518	28.012	-0.5054
18	30	Unbiased	28.733	28.202	-0.5309
19	30	Unbiased	28.401	27.904	-0.4968
20	30	Unbiased	28.371	27.914	-0.4571
26	50	Unbiased	28.358	27.784	-0.5743
27	50	Unbiased	28.432	27.842	-0.5903
28	50	Unbiased	28.209	27.658	-0.5504
29	50	Unbiased	28.165	27.605	-0.56
30	50	Unbiased	28.162	27.593	-0.5691
88	50	Biased-84Hr-Anneal	28.235	27.555	-0.6795
89	50	Biased-84Hr-Anneal	28.243	27.55	-0.6934
90	50	Biased-84Hr-Anneal	28.307	27.509	-0.7982
91	50	Biased-84Hr-Anneal	28.443	27.814	-0.6291
92	50	Biased-84Hr-Anneal	28.246	27.268	-0.9787
100	0	CORRELATION	28.394	28.286	-0.1077
101	0	CORRELATION	28.098	28.001	-0.0962
102	0	CORRELATION	28.266	28.165	-0.1012
103	0	CORRELATION	28.081	27.979	-0.1027
104	0	CORRELATION	28.339	28.237	-0.1017

TID vs Post - Pre Exposure Delta

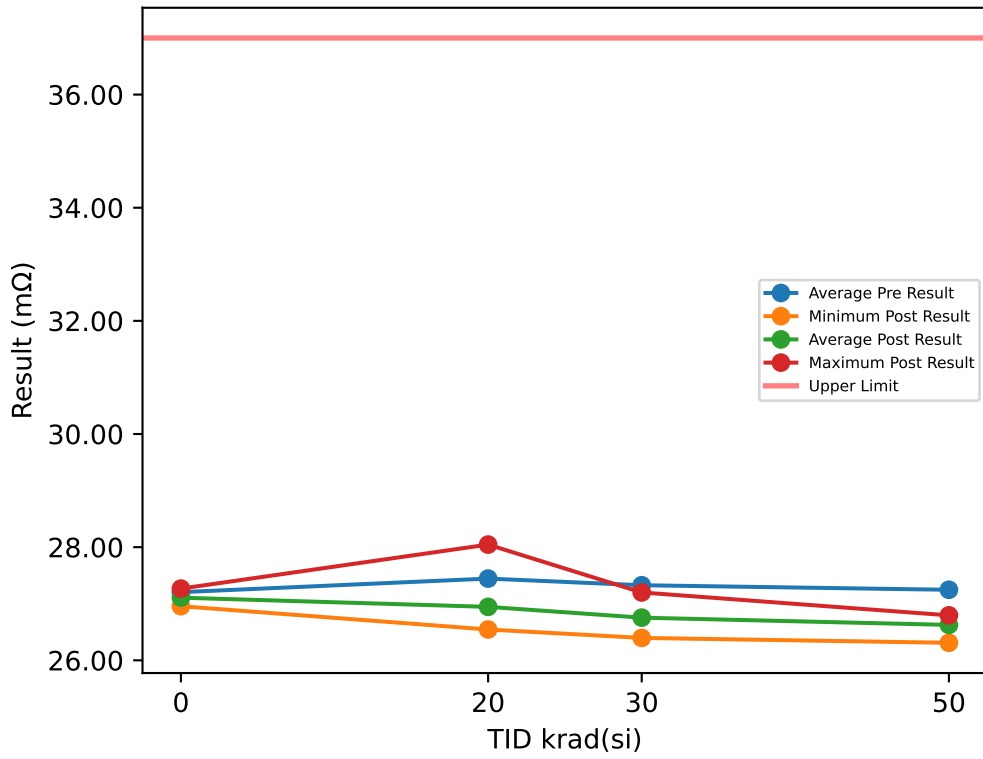


Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	28.081	28.236	28.394	0.14095	27.979	28.134	28.286	0.13825	-0.1077	-0.1019	-0.0962	0.0041018
20	28.151	28.535	30.002	0.54432	27.494	28.005	29.543	0.58696	-0.9595	-0.52989	-0.389	0.17195
30	28.168	28.362	28.733	0.1873	27.337	27.753	28.202	0.26152	-0.831	-0.60846	-0.4571	0.13932
50	28.162	28.28	28.443	0.10173	27.268	27.618	27.842	0.17044	-0.9787	-0.6623	-0.5504	0.13562

Device Test: 21.29 LEVEL|LOWSIDE/SW/5/6///@R_LS_6A_25C_HTSSOP

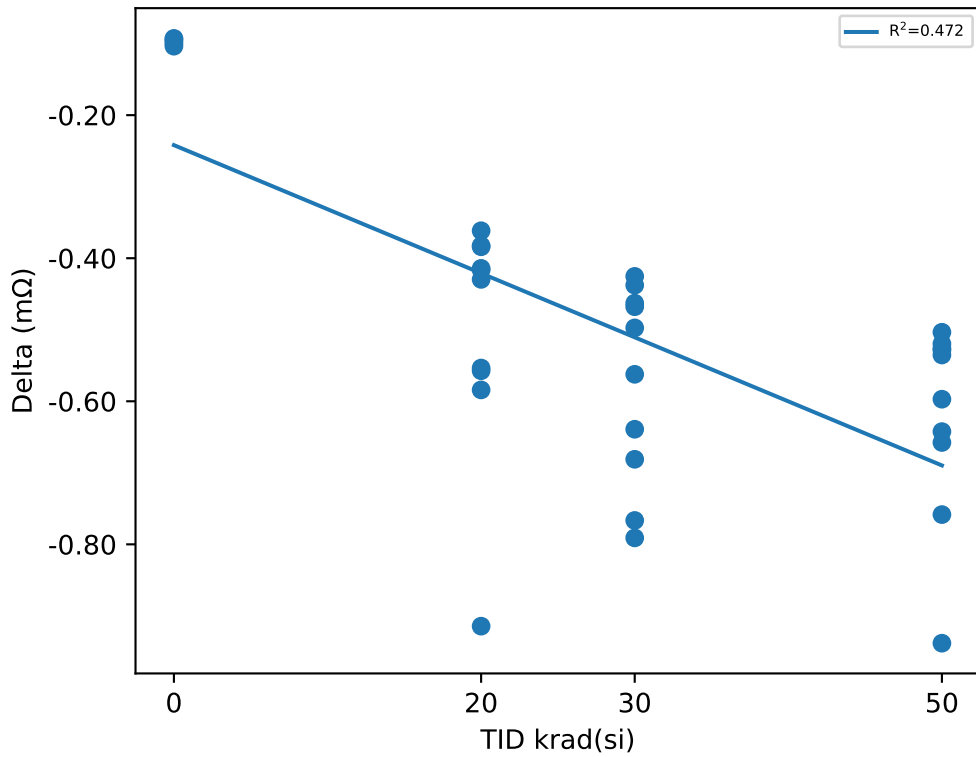
TID vs Result Stats



Test Results (Upper Limit = 37.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	27.194	26.61	-0.5841
2	20	Biased	27.513	26.959	-0.5535
3	20	Biased	27.459	26.545	-0.9144
4	20	Biased	27.251	26.694	-0.5573
5	20	Biased	27.377	26.947	-0.4296
6	20	Unbiased	28.462	28.046	-0.4165
7	20	Unbiased	27.59	27.206	-0.384
8	20	Unbiased	27.157	26.795	-0.3616
9	20	Unbiased	27.147	26.733	-0.4142
10	20	Unbiased	27.299	26.916	-0.3825
11	30	Biased	27.484	26.717	-0.7666
12	30	Biased	27.181	26.542	-0.6391
13	30	Biased	27.187	26.396	-0.791
14	30	Biased	27.168	26.486	-0.6811
15	30	Biased	27.252	26.69	-0.5623
16	30	Unbiased	27.129	26.691	-0.4377
17	30	Unbiased	27.465	26.998	-0.4678
18	30	Unbiased	27.697	27.2	-0.4974
19	30	Unbiased	27.388	26.925	-0.4628
20	30	Unbiased	27.321	26.896	-0.4254
26	50	Unbiased	27.299	26.773	-0.5261
27	50	Unbiased	27.33	26.795	-0.5353
28	50	Unbiased	27.17	26.666	-0.5035
29	50	Unbiased	27.173	26.653	-0.5196
30	50	Unbiased	27.165	26.637	-0.5284
88	50	Biased-84Hr-Anneal	27.22	26.577	-0.6424
89	50	Biased-84Hr-Anneal	27.225	26.568	-0.6576
90	50	Biased-84Hr-Anneal	27.263	26.505	-0.7584
91	50	Biased-84Hr-Anneal	27.376	26.779	-0.5971
92	50	Biased-84Hr-Anneal	27.248	26.31	-0.9382
100	0	CORRELATION	27.371	27.268	-0.1036
101	0	CORRELATION	27.086	26.992	-0.0938
102	0	CORRELATION	27.19	27.097	-0.0927
103	0	CORRELATION	27.057	26.957	-0.1
104	0	CORRELATION	27.321	27.224	-0.0968

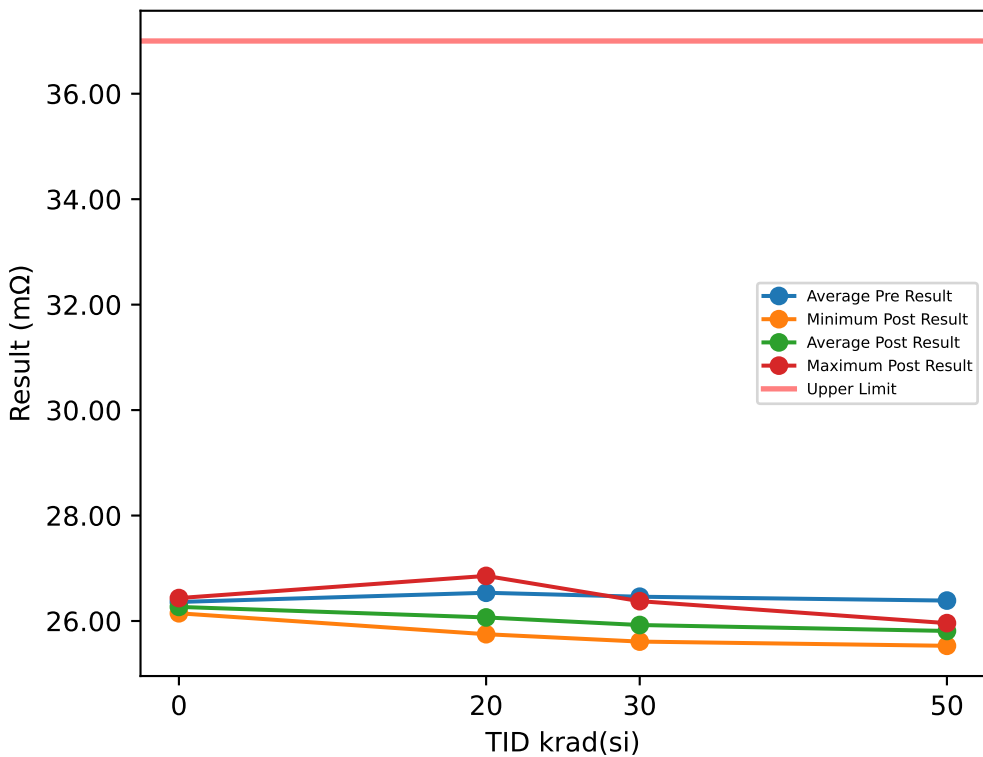
TID vs Post - Pre Exposure Delta



Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	27.057	27.205	27.371	0.13916	26.957	27.107	27.268	0.13728	-0.1036	-0.09738	-0.0927	0.0044891
20	27.147	27.445	28.462	0.3886	26.545	26.945	28.046	0.43253	-0.9144	-0.49977	-0.3616	0.16688
30	27.129	27.327	27.697	0.1812	26.396	26.754	27.2	0.24976	-0.791	-0.57312	-0.4254	0.13751
50	27.165	27.247	27.376	0.071401	26.31	26.626	26.795	0.14771	-0.9382	-0.62066	-0.5035	0.13779

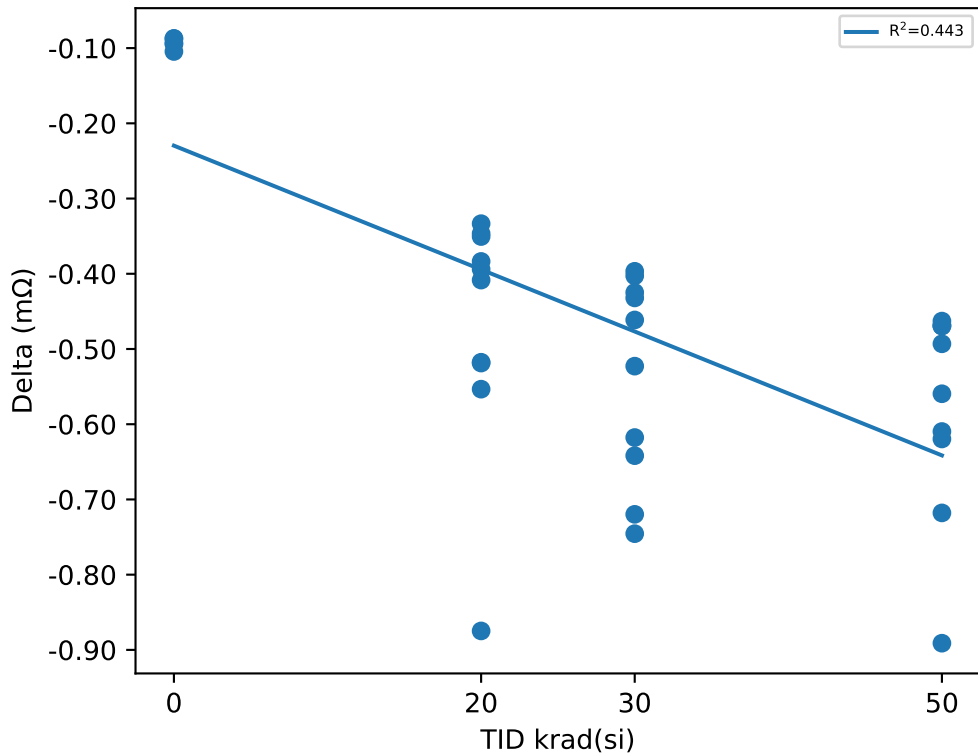
TID vs Result Stats



Test Results (Upper Limit = 37.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	26.328	25.774	-0.5534
2	20	Biased	26.629	26.112	-0.5176
3	20	Biased	26.624	25.75	-0.8748
4	20	Biased	26.375	25.856	-0.5187
5	20	Biased	26.455	26.046	-0.4084
6	20	Unbiased	27.239	26.855	-0.3836
7	20	Unbiased	26.665	26.314	-0.3505
8	20	Unbiased	26.314	25.981	-0.3334
9	20	Unbiased	26.297	25.903	-0.394
10	20	Unbiased	26.43	26.083	-0.3465
11	30	Biased	26.601	25.881	-0.7198
12	30	Biased	26.336	25.718	-0.6177
13	30	Biased	26.355	25.61	-0.7455
14	30	Biased	26.314	25.673	-0.6418
15	30	Biased	26.369	25.846	-0.5228
16	30	Unbiased	26.285	25.882	-0.4027
17	30	Unbiased	26.572	26.14	-0.4321
18	30	Unbiased	26.838	26.376	-0.4614
19	30	Unbiased	26.512	26.087	-0.4249
20	30	Unbiased	26.424	26.027	-0.3967
26	50	Unbiased	26.428	25.96	-0.4683
27	50	Unbiased	26.43	25.936	-0.4931
28	50	Unbiased	26.321	25.858	-0.4629
29	50	Unbiased	26.335	25.865	-0.4693
30	50	Unbiased	26.318	25.849	-0.4695
88	50	Biased-84Hr-Anneal	26.368	25.759	-0.6097
89	50	Biased-84Hr-Anneal	26.357	25.738	-0.6196
90	50	Biased-84Hr-Anneal	26.41	25.692	-0.7179
91	50	Biased-84Hr-Anneal	26.486	25.927	-0.5595
92	50	Biased-84Hr-Anneal	26.421	25.53	-0.8911
100	0	CORRELATION	26.54	26.435	-0.1045
101	0	CORRELATION	26.24	26.146	-0.0932
102	0	CORRELATION	26.31	26.223	-0.0875
103	0	CORRELATION	26.248	26.153	-0.0947
104	0	CORRELATION	26.468	26.381	-0.0871

TID vs Post - Pre Exposure Delta

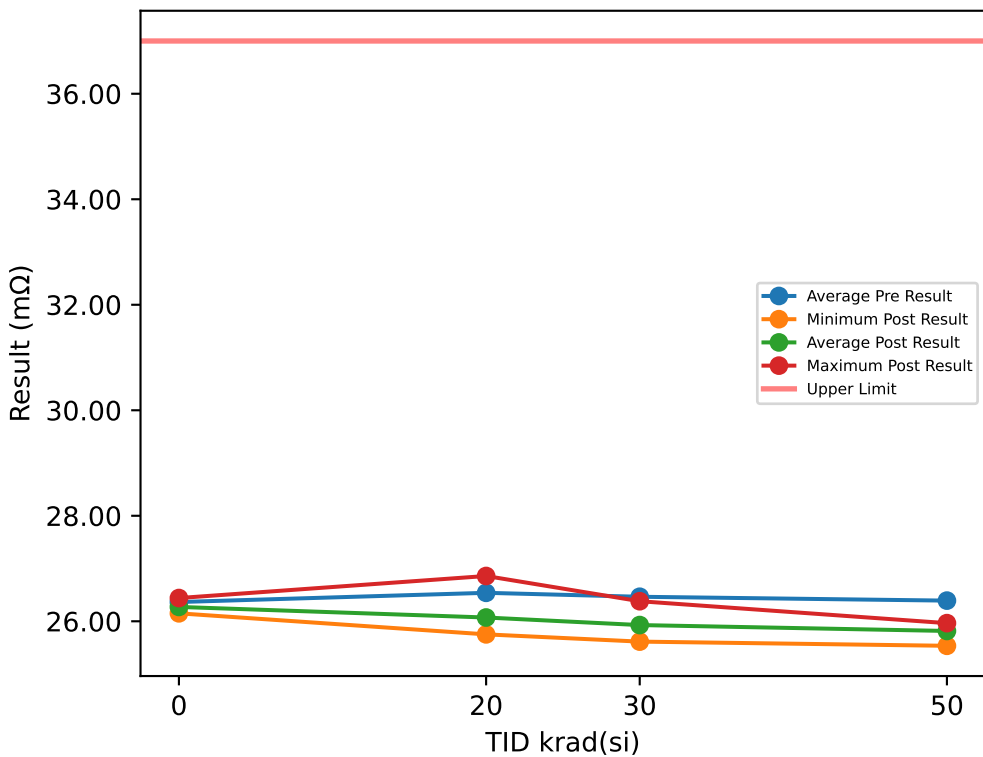


Test Statistics (mΩ)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	26.24	26.361	26.54	0.13543	26.146	26.268	26.435	0.13285	-0.1045	-0.0934	-0.0871	0.0070612
20	26.297	26.536	27.239	0.28295	25.75	26.068	26.855	0.32497	-0.8748	-0.46809	-0.3334	0.16352
30	26.285	26.461	26.838	0.17176	25.61	25.924	26.376	0.23631	-0.7455	-0.53654	-0.3967	0.13399
50	26.318	26.387	26.486	0.055822	25.53	25.811	25.96	0.13295	-0.8911	-0.57609	-0.4629	0.14013

Device Test: 21.35 LEVEL|LOWSIDE/SW/14/6///@R_LS_6A_25C_HTSSOP

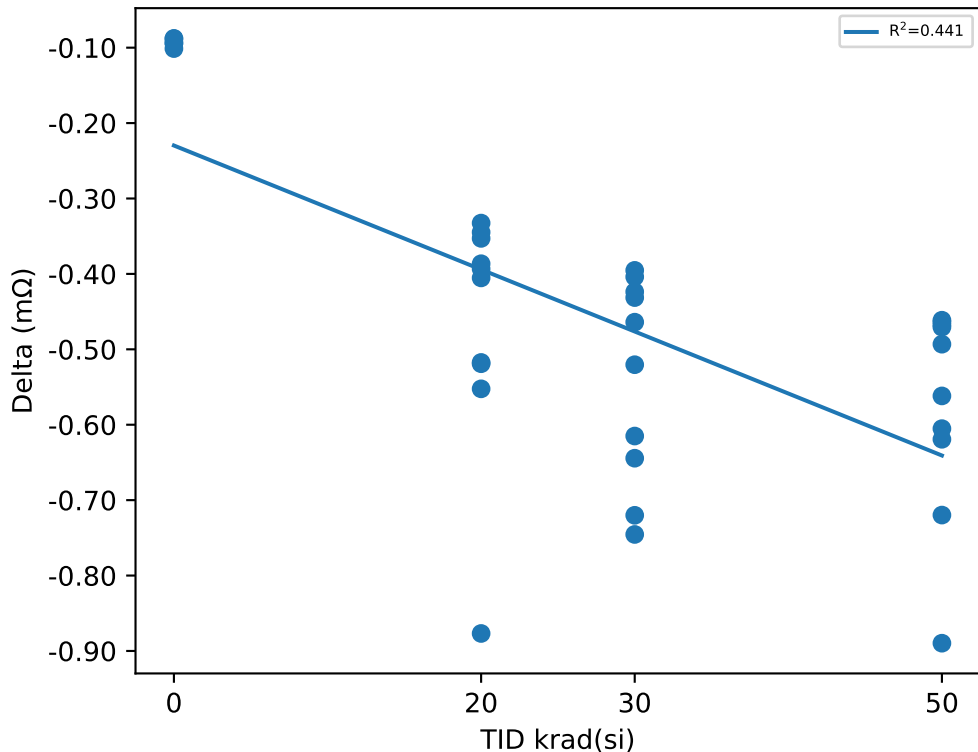
TID vs Result Stats



Test Results (Upper Limit = 37.0 (mΩ))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	26.334	25.781	-0.5524
2	20	Biased	26.634	26.114	-0.5191
3	20	Biased	26.629	25.752	-0.8768
4	20	Biased	26.377	25.859	-0.5174
5	20	Biased	26.456	26.051	-0.4053
6	20	Unbiased	27.245	26.858	-0.3865
7	20	Unbiased	26.67	26.317	-0.3529
8	20	Unbiased	26.317	25.985	-0.3326
9	20	Unbiased	26.301	25.908	-0.3934
10	20	Unbiased	26.433	26.088	-0.3448
11	30	Biased	26.605	25.885	-0.7201
12	30	Biased	26.34	25.724	-0.615
13	30	Biased	26.36	25.615	-0.7455
14	30	Biased	26.319	25.675	-0.6444
15	30	Biased	26.372	25.851	-0.5204
16	30	Unbiased	26.289	25.885	-0.4039
17	30	Unbiased	26.576	26.144	-0.4314
18	30	Unbiased	26.844	26.38	-0.464
19	30	Unbiased	26.515	26.091	-0.4237
20	30	Unbiased	26.428	26.033	-0.3953
26	50	Unbiased	26.435	25.965	-0.4706
27	50	Unbiased	26.434	25.941	-0.4932
28	50	Unbiased	26.325	25.863	-0.4614
29	50	Unbiased	26.337	25.873	-0.4637
30	50	Unbiased	26.321	25.853	-0.4676
88	50	Biased-84Hr-Anneal	26.372	25.767	-0.6052
89	50	Biased-84Hr-Anneal	26.362	25.742	-0.6193
90	50	Biased-84Hr-Anneal	26.415	25.695	-0.7198
91	50	Biased-84Hr-Anneal	26.492	25.931	-0.5618
92	50	Biased-84Hr-Anneal	26.425	25.535	-0.8897
100	0	CORRELATION	26.542	26.441	-0.1012
101	0	CORRELATION	26.245	26.151	-0.094
102	0	CORRELATION	26.315	26.227	-0.0883
103	0	CORRELATION	26.251	26.157	-0.0938
104	0	CORRELATION	26.472	26.385	-0.0877

TID vs Post - Pre Exposure Delta

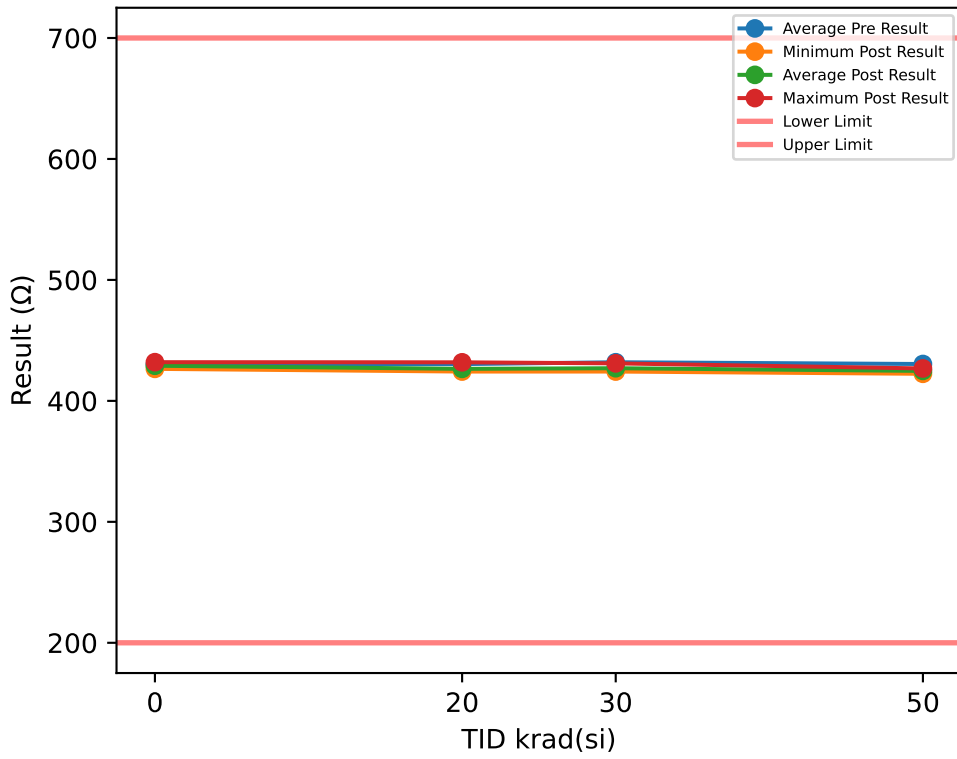


Test Statistics (mΩ)

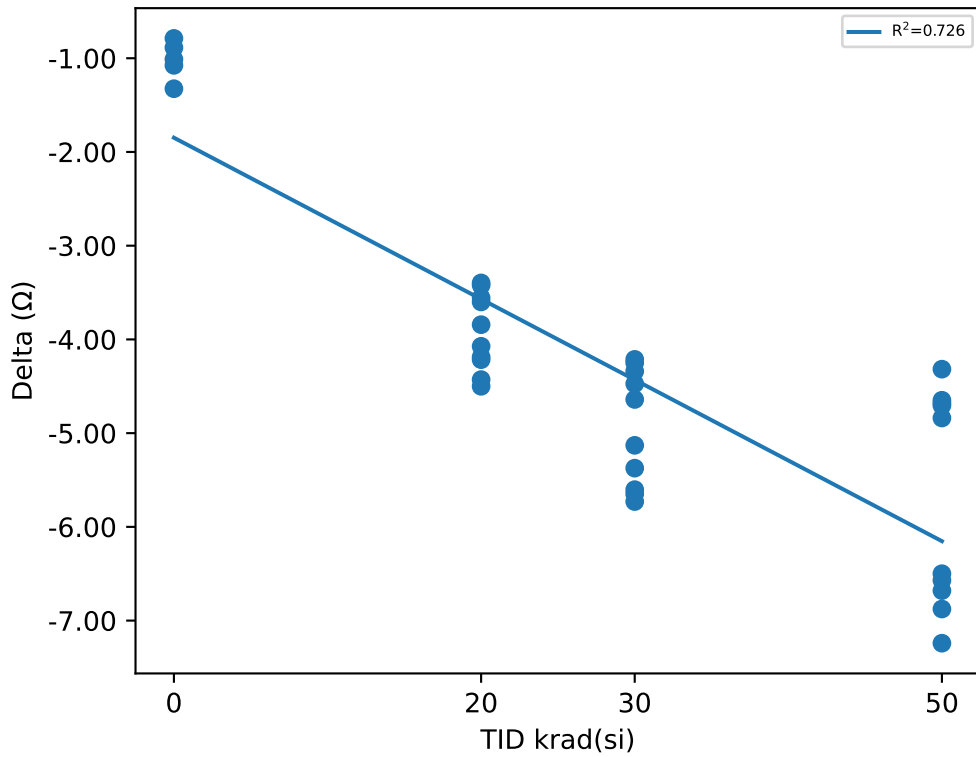
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	26.245	26.365	26.542	0.13473	26.151	26.272	26.441	0.13316	-0.1012	-0.093	-0.0877	0.0054557
20	26.301	26.54	27.245	0.2838	25.752	26.071	26.858	0.32456	-0.8768	-0.46812	-0.3326	0.16404
30	26.289	26.465	26.844	0.17229	25.615	25.928	26.38	0.23621	-0.7455	-0.53637	-0.3953	0.13416
50	26.321	26.392	26.492	0.057002	25.535	25.817	25.965	0.13286	-0.8897	-0.57523	-0.4614	0.14042

Device Test: 22.10 LEVEL|SINK/SS_TR/5////@R_SS_DISCHARGE

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (Ω))

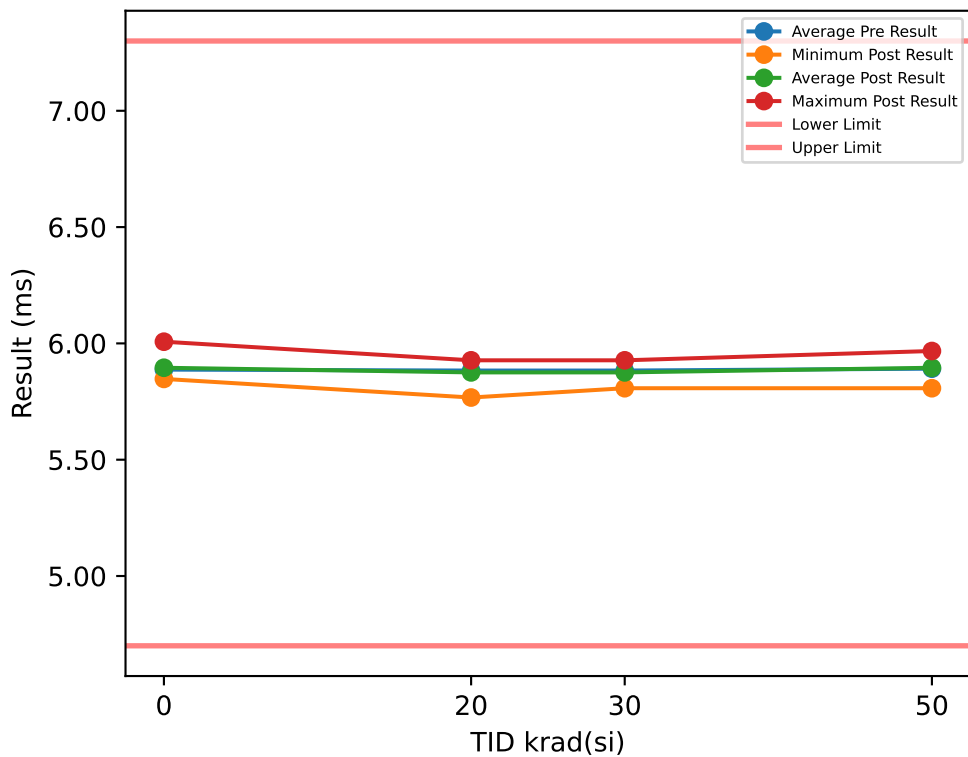
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	432.25	428.41	-3.8427
2	20	Biased	430.53	426.97	-3.5554
3	20	Biased	435.48	431.88	-3.6003
4	20	Biased	427.66	424.24	-3.4218
5	20	Biased	428.82	425.42	-3.3971
6	20	Unbiased	428.93	424.75	-4.1871
7	20	Unbiased	432.18	427.75	-4.4286
8	20	Unbiased	429.81	425.6	-4.2161
9	20	Unbiased	429.34	424.84	-4.5002
10	20	Unbiased	429.01	424.94	-4.0734
11	30	Biased	433.31	428.67	-4.6406
12	30	Biased	428.49	424.25	-4.2496
13	30	Biased	429.07	424.6	-4.4729
14	30	Biased	432.39	428.05	-4.3394
15	30	Biased	429.39	425.18	-4.2128
16	30	Unbiased	430.08	424.71	-5.3736
17	30	Unbiased	434.55	428.82	-5.7299
18	30	Unbiased	436.62	431.01	-5.6028
19	30	Unbiased	434.71	429.06	-5.6489
20	30	Unbiased	430.79	425.66	-5.13
26	50	Unbiased	429.52	422.84	-6.6799
27	50	Unbiased	430.32	423.44	-6.8764
28	50	Unbiased	428.89	422.39	-6.4996
29	50	Unbiased	431.5	424.26	-7.2411
30	50	Unbiased	431.28	424.71	-6.5707
88	50	Biased-84Hr-Anneal	431.31	426.66	-4.6489
89	50	Biased-84Hr-Anneal	428.7	423.87	-4.8386
90	50	Biased-84Hr-Anneal	430.91	426.23	-4.6808
91	50	Biased-84Hr-Anneal	431.29	426.59	-4.7052
92	50	Biased-84Hr-Anneal	431.13	426.82	-4.3174
100	0	CORRELATION	433.07	432	-1.0758
101	0	CORRELATION	432.4	431.51	-0.8863
102	0	CORRELATION	428.58	427.26	-1.3251
103	0	CORRELATION	427.48	426.47	-1.0109
104	0	CORRELATION	428.82	428.03	-0.7883

Test Statistics (Ω)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	427.48	430.07	433.07	2.496	426.47	429.05	432	2.5325	-1.3251	-1.0173	-0.7883	0.20482
20	427.66	430.4	435.48	2.3087	424.24	426.48	431.88	2.3508	-4.5002	-3.9223	-3.3971	0.41373
30	428.49	431.94	436.62	2.7844	424.25	427	431.01	2.3865	-5.7299	-4.94	-4.2128	0.62039
50	428.7	430.48	431.5	1.0685	422.39	424.78	426.82	1.6814	-7.2411	-5.7059	-4.3174	1.15

Device Test: 22.13 TIMING|STARTUP/SS_TR/5////@T_SS_22NF

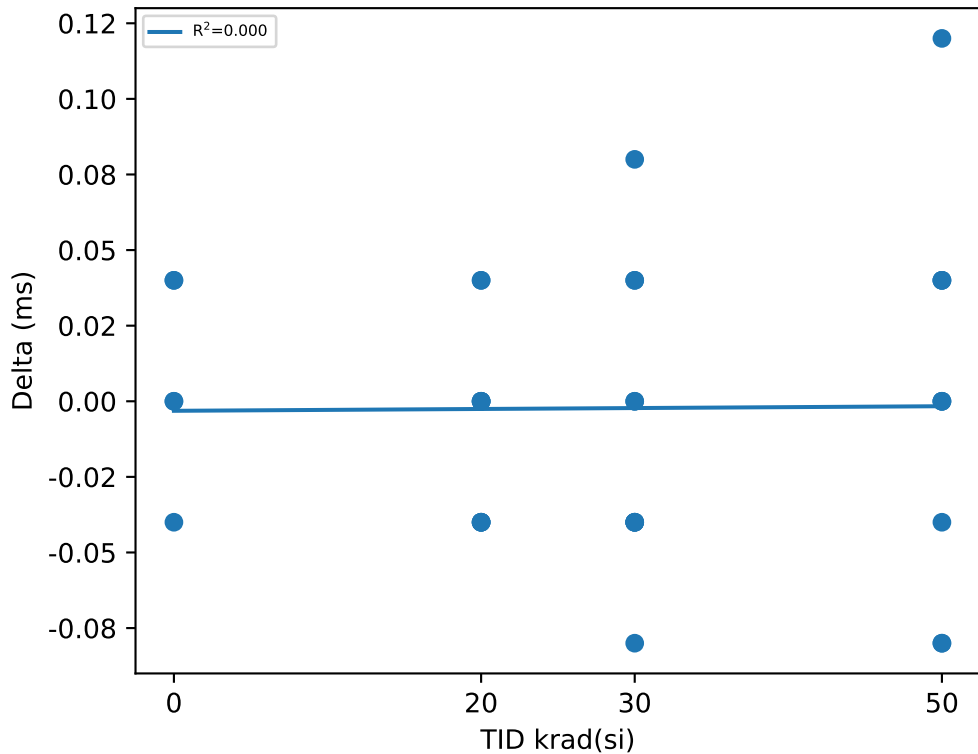
TID vs Result Stats



Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	5.8473	5.8873	0.04
2	20	Biased	5.8873	5.8473	-0.04
3	20	Biased	5.8873	5.9273	0.04
4	20	Biased	5.9673	5.9273	-0.04
5	20	Biased	5.9273	5.9273	0
6	20	Unbiased	5.8073	5.7673	-0.04
7	20	Unbiased	5.8473	5.8473	0
8	20	Unbiased	5.8873	5.8473	-0.04
9	20	Unbiased	5.8473	5.8473	0
10	20	Unbiased	5.9273	5.9273	0
11	30	Biased	5.8873	5.9273	0.04
12	30	Biased	5.8873	5.8473	-0.04
13	30	Biased	5.8073	5.8873	0.08
14	30	Biased	5.9273	5.8473	-0.08
15	30	Biased	5.9273	5.9273	0
16	30	Unbiased	5.8873	5.9273	0.04
17	30	Unbiased	5.8473	5.8473	0
18	30	Unbiased	5.9273	5.8873	-0.04
19	30	Unbiased	5.8473	5.8073	-0.04
20	30	Unbiased	5.8873	5.8473	-0.04
26	50	Unbiased	5.8873	5.8073	-0.08
27	50	Unbiased	5.8873	5.8073	-0.08
28	50	Unbiased	5.9273	5.9273	0
29	50	Unbiased	5.8873	5.9273	0.04
30	50	Unbiased	5.8873	5.8473	-0.04
88	50	Biased-84Hr-Anneal	5.8873	5.9273	0.04
89	50	Biased-84Hr-Anneal	5.8873	5.8873	0
90	50	Biased-84Hr-Anneal	5.8473	5.9673	0.12
91	50	Biased-84Hr-Anneal	5.8873	5.8873	0
92	50	Biased-84Hr-Anneal	5.9273	5.9673	0.04
100	0	CORRELATION	5.8873	5.8473	-0.04
101	0	CORRELATION	6.0073	6.0073	0
102	0	CORRELATION	5.8073	5.8473	0.04
103	0	CORRELATION	5.8873	5.9273	0.04
104	0	CORRELATION	5.8473	5.8473	0

TID vs Post - Pre Exposure Delta

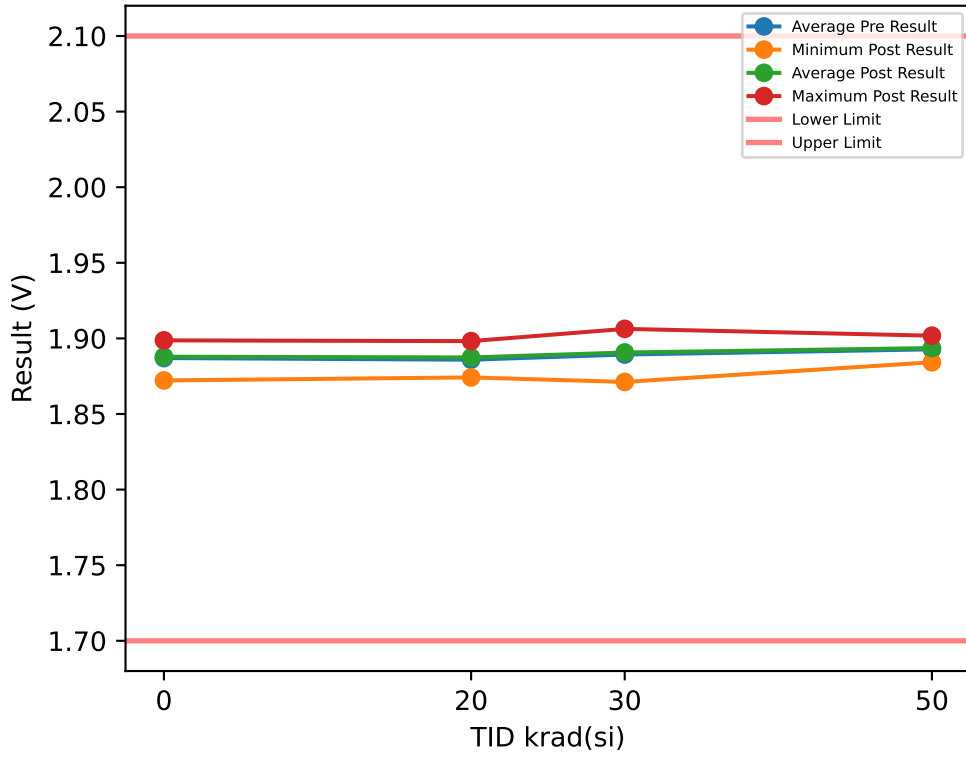


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.8073	5.8873	6.0073	0.074833	5.8473	5.8953	6.0073	0.071554	-0.04	0.008	0.04	0.033466
20	5.8073	5.8833	5.9673	0.047889	5.7673	5.8753	5.9273	0.0535	-0.04	-0.008	0.04	0.031552
30	5.8073	5.8833	5.9273	0.039777	5.8073	5.8753	5.9273	0.042374	-0.08	-0.008	0.08	0.049171
50	5.8473	5.8913	5.9273	0.022706	5.8073	5.8953	5.9673	0.059029	-0.08	0.004	0.12	0.060955

Device Test: 22.16 LEVEL|RISE/COMP/12////@COMP_SHDN

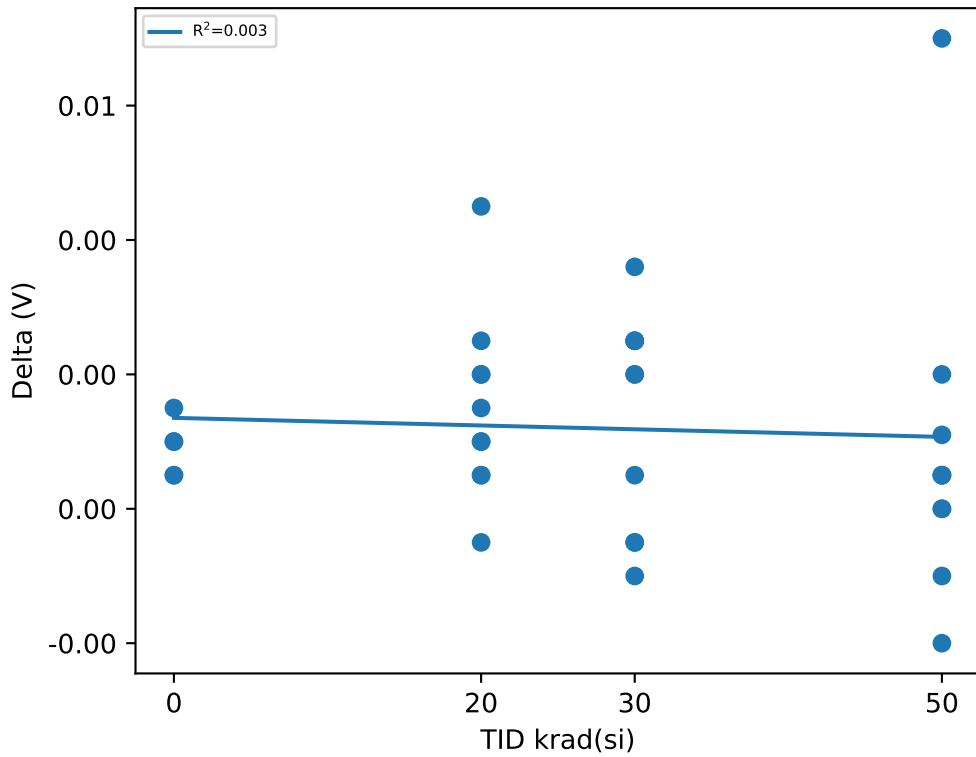
TID vs Result Stats



Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.8932	1.8937	0.0005
2	20	Biased	1.8832	1.8837	0.0005
3	20	Biased	1.8737	1.8747	0.001
4	20	Biased	1.8967	1.8982	0.0015
5	20	Biased	1.8722	1.8742	0.002
6	20	Unbiased	1.8932	1.8977	0.0045
7	20	Unbiased	1.8767	1.8787	0.002
8	20	Unbiased	1.8917	1.8912	-0.0005
9	20	Unbiased	1.8887	1.8912	0.0025
10	20	Unbiased	1.8897	1.8907	0.001
11	30	Biased	1.8882	1.8902	0.002
12	30	Biased	1.8887	1.8882	-0.0005
13	30	Biased	1.9007	1.9043	0.0036
14	30	Biased	1.8897	1.8887	-0.001
15	30	Biased	1.8982	1.9007	0.0025
16	30	Unbiased	1.9068	1.9063	-0.0005
17	30	Unbiased	1.8787	1.8812	0.0025
18	30	Unbiased	1.8707	1.8712	0.0005
19	30	Unbiased	1.8797	1.8822	0.0025
20	30	Unbiased	1.8917	1.8937	0.002
26	50	Unbiased	1.8977	1.8982	0.0005
27	50	Unbiased	1.8942	1.8942	0
28	50	Unbiased	1.9013	1.9018	0.0005
29	50	Unbiased	1.8887	1.8867	-0.002
30	50	Unbiased	1.8932	1.9002	0.007
88	50	Biased-84Hr-Anneal	1.8862	1.8882	0.002
89	50	Biased-84Hr-Anneal	1.8922	1.8912	-0.001
90	50	Biased-84Hr-Anneal	1.8982	1.8993	0.0011
91	50	Biased-84Hr-Anneal	1.8917	1.8922	0.0005
92	50	Biased-84Hr-Anneal	1.8842	1.8842	0
100	0	CORRELATION	1.8717	1.8722	0.0005
101	0	CORRELATION	1.8812	1.8822	0.001
102	0	CORRELATION	1.8912	1.8917	0.0005
103	0	CORRELATION	1.8932	1.8947	0.0015
104	0	CORRELATION	1.8977	1.8987	0.001

TID vs Post - Pre Exposure Delta

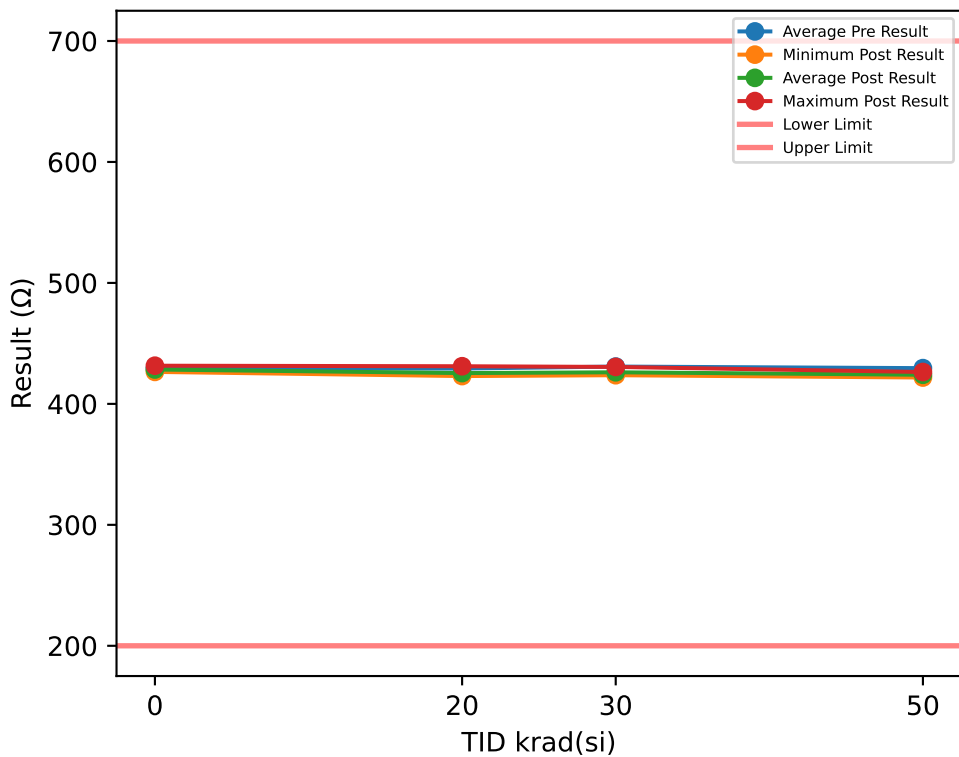


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8717	1.887	1.8977	0.010468	1.8722	1.8879	1.8987	0.010681	0.0005	0.0009	0.0015	0.00041833
20	1.8722	1.8859	1.8967	0.0088669	1.8742	1.8874	1.8982	0.0089883	-0.0005	0.0015	0.0045	0.0013744
30	1.8707	1.8893	1.9068	0.010921	1.8712	1.8907	1.9063	0.011008	-0.001	0.00136	0.0036	0.0015974
50	1.8842	1.8928	1.9013	0.0054101	1.8842	1.8936	1.9018	0.0061251	-0.002	0.00086	0.007	0.0024167

Device Test: 22.17 LEVEL|SINK/SS_TR/12////@R_SS_DISCHARGE

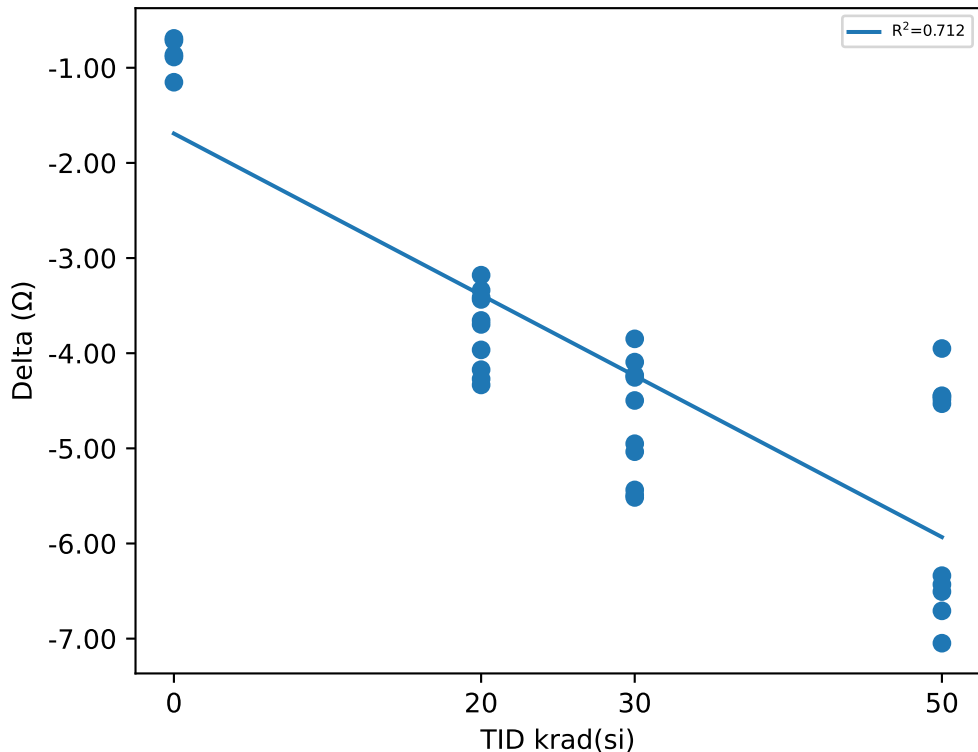
TID vs Result Stats



Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (Ω))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	431.06	427.4	-3.6556
2	20	Biased	429.27	425.85	-3.4138
3	20	Biased	434.55	431.12	-3.435
4	20	Biased	426.16	422.98	-3.1799
5	20	Biased	427.13	423.79	-3.3378
6	20	Unbiased	427.48	423.31	-4.1732
7	20	Unbiased	431.09	426.82	-4.2701
8	20	Unbiased	428.91	424.94	-3.9651
9	20	Unbiased	428.13	423.8	-4.3335
10	20	Unbiased	428.3	424.61	-3.6976
11	30	Biased	432.06	427.57	-4.4968
12	30	Biased	427.79	423.7	-4.0935
13	30	Biased	428.01	423.76	-4.2543
14	30	Biased	431.6	427.36	-4.2314
15	30	Biased	428.3	424.45	-3.8492
16	30	Unbiased	429.23	424.28	-4.9513
17	30	Unbiased	433.05	427.55	-5.4915
18	30	Unbiased	435.98	430.54	-5.437
19	30	Unbiased	433.26	427.75	-5.5161
20	30	Unbiased	429.27	424.24	-5.0351
26	50	Unbiased	428.71	422.28	-6.4308
27	50	Unbiased	429.4	422.69	-6.7079
28	50	Unbiased	428.11	421.78	-6.338
29	50	Unbiased	430.45	423.4	-7.0479
30	50	Unbiased	430.67	424.17	-6.5055
88	50	Biased-84Hr-Anneal	430.21	425.75	-4.4538
89	50	Biased-84Hr-Anneal	427.38	422.85	-4.5308
90	50	Biased-84Hr-Anneal	430.2	425.75	-4.4471
91	50	Biased-84Hr-Anneal	430.11	425.63	-4.4847
92	50	Biased-84Hr-Anneal	430.29	426.34	-3.9507
100	0	CORRELATION	432.42	431.56	-0.8642
101	0	CORRELATION	431.25	430.53	-0.7143
102	0	CORRELATION	427.6	426.45	-1.152
103	0	CORRELATION	427.32	426.44	-0.8871
104	0	CORRELATION	427.82	427.13	-0.6913

TID vs Post - Pre Exposure Delta

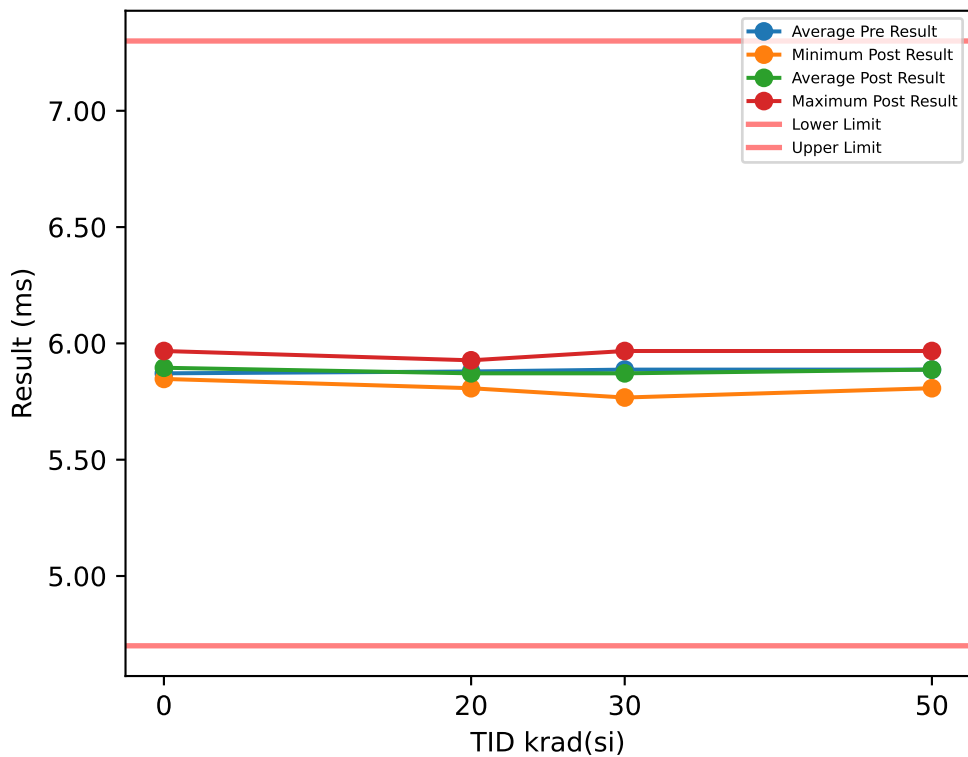


Test Statistics (Ω)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	427.32	429.28	432.42	2.3729	426.44	428.42	431.56	2.4392	-1.152	-0.86178	-0.6913	0.18418
20	426.16	429.21	434.55	2.4543	422.98	425.46	431.12	2.4749	-4.3335	-3.7462	-3.1799	0.41567
30	427.79	430.85	435.98	2.749	423.7	426.12	430.54	2.335	-5.5161	-4.7356	-3.8492	0.62802
50	427.38	429.55	430.67	1.1193	421.78	424.06	426.34	1.6848	-7.0479	-5.4897	-3.9507	1.2022

Device Test: 22.20 TIMING|STARTUP/SS_TR/12////@T_SS_22NF

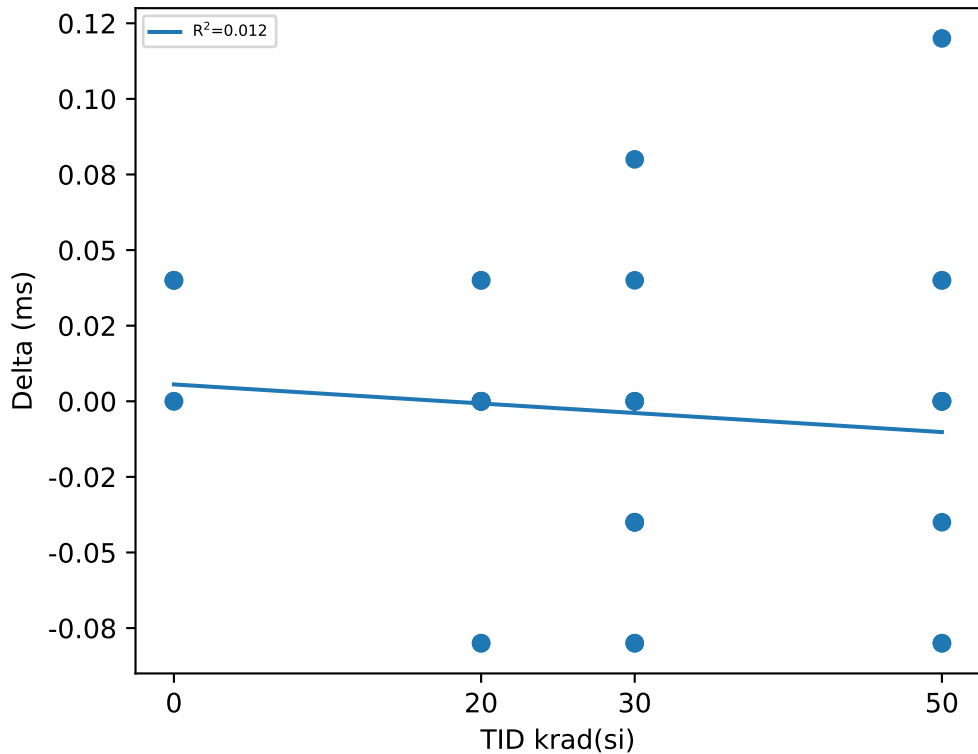
TID vs Result Stats



Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	5.8473	5.8473	0
2	20	Biased	5.8873	5.8073	-0.08
3	20	Biased	5.8873	5.9273	0.04
4	20	Biased	5.9273	5.9273	0
5	20	Biased	5.8873	5.9273	0.04
6	20	Unbiased	5.8073	5.8073	0
7	20	Unbiased	5.8473	5.8473	0
8	20	Unbiased	5.9273	5.8473	-0.08
9	20	Unbiased	5.8473	5.8473	0
10	20	Unbiased	5.9273	5.9273	0
11	30	Biased	5.8873	5.8873	0
12	30	Biased	5.8873	5.8473	-0.04
13	30	Biased	5.8073	5.8873	0.08
14	30	Biased	5.9273	5.8473	-0.08
15	30	Biased	5.9273	5.9673	0.04
16	30	Unbiased	5.9273	5.9273	0
17	30	Unbiased	5.8473	5.8473	0
18	30	Unbiased	5.9273	5.8873	-0.04
19	30	Unbiased	5.8473	5.7673	-0.08
20	30	Unbiased	5.8873	5.8473	-0.04
26	50	Unbiased	5.8873	5.8073	-0.08
27	50	Unbiased	5.8873	5.8073	-0.08
28	50	Unbiased	5.9273	5.9273	0
29	50	Unbiased	5.8873	5.9273	0.04
30	50	Unbiased	5.8873	5.8873	0
88	50	Biased-84Hr-Anneal	5.8873	5.8873	0
89	50	Biased-84Hr-Anneal	5.8873	5.8873	0
90	50	Biased-84Hr-Anneal	5.8473	5.9673	0.12
91	50	Biased-84Hr-Anneal	5.8873	5.8473	-0.04
92	50	Biased-84Hr-Anneal	5.8873	5.9273	0.04
100	0	CORRELATION	5.8473	5.8873	0.04
101	0	CORRELATION	5.9673	5.9673	0
102	0	CORRELATION	5.8073	5.8473	0.04
103	0	CORRELATION	5.8873	5.9273	0.04
104	0	CORRELATION	5.8473	5.8473	0

TID vs Post - Pre Exposure Delta

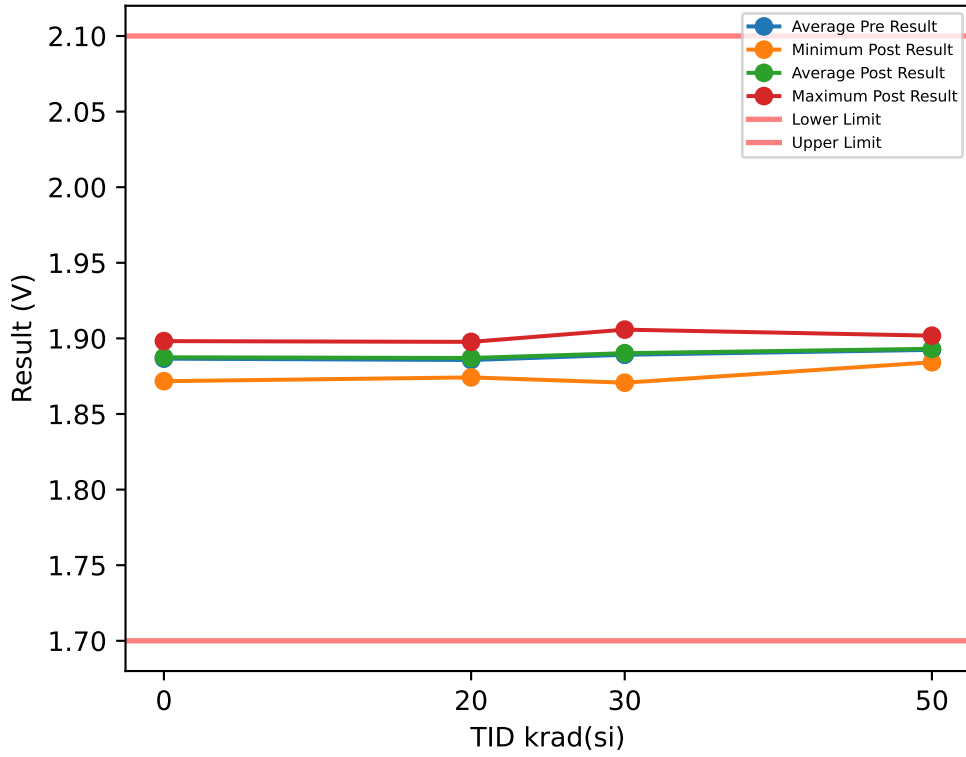


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.8073	5.8713	5.9673	0.060663	5.8473	5.8953	5.9673	0.052154	0	0.024	0.04	0.021909
20	5.8073	5.8793	5.9273	0.041312	5.8073	5.8713	5.9273	0.050596	-0.08	-0.008	0.04	0.041312
30	5.8073	5.8873	5.9273	0.042164	5.7673	5.8713	5.9673	0.053996	-0.08	-0.016	0.08	0.050596
50	5.8473	5.8873	5.9273	0.018856	5.8073	5.8873	5.9673	0.053333	-0.08	0	0.12	0.059628

Device Test: 22.23 LEVEL|RISE/COMP/14/////@COMP_SHDN

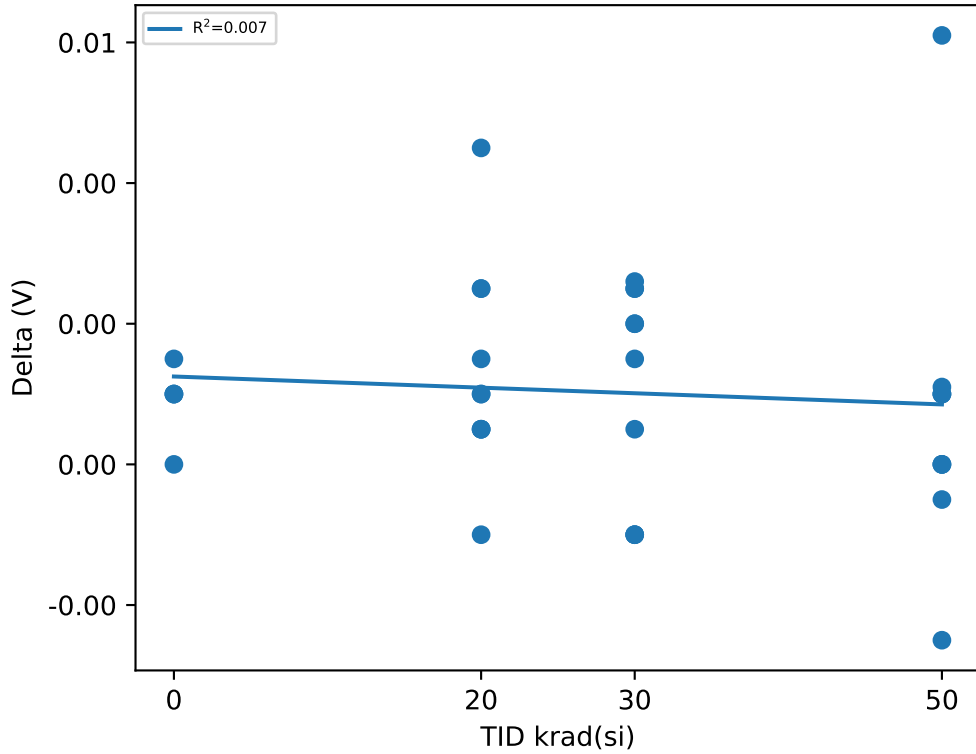
TID vs Result Stats



Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.8932	1.8937	0.0005
2	20	Biased	1.8832	1.8837	0.0005
3	20	Biased	1.8732	1.8742	0.001
4	20	Biased	1.8962	1.8972	0.001
5	20	Biased	1.8717	1.8742	0.0025
6	20	Unbiased	1.8932	1.8977	0.0045
7	20	Unbiased	1.8762	1.8777	0.0015
8	20	Unbiased	1.8917	1.8907	-0.001
9	20	Unbiased	1.8887	1.8912	0.0025
10	20	Unbiased	1.8897	1.8902	0.0005
11	30	Biased	1.8882	1.8902	0.002
12	30	Biased	1.8882	1.8872	-0.001
13	30	Biased	1.9007	1.9033	0.0026
14	30	Biased	1.8897	1.8887	-0.001
15	30	Biased	1.8977	1.9002	0.0025
16	30	Unbiased	1.9068	1.9058	-0.001
17	30	Unbiased	1.8787	1.8812	0.0025
18	30	Unbiased	1.8702	1.8707	0.0005
19	30	Unbiased	1.8797	1.8812	0.0015
20	30	Unbiased	1.8917	1.8937	0.002
26	50	Unbiased	1.8977	1.8972	-0.0005
27	50	Unbiased	1.8942	1.8942	0
28	50	Unbiased	1.9007	1.9018	0.0011
29	50	Unbiased	1.8887	1.8862	-0.0025
30	50	Unbiased	1.8932	1.8993	0.0061
88	50	Biased-84Hr-Anneal	1.8862	1.8872	0.001
89	50	Biased-84Hr-Anneal	1.8912	1.8912	0
90	50	Biased-84Hr-Anneal	1.8982	1.8982	0
91	50	Biased-84Hr-Anneal	1.8907	1.8917	0.001
92	50	Biased-84Hr-Anneal	1.8832	1.8842	0.001
100	0	CORRELATION	1.8707	1.8717	0.001
101	0	CORRELATION	1.8812	1.8822	0.001
102	0	CORRELATION	1.8907	1.8907	0
103	0	CORRELATION	1.8932	1.8947	0.0015
104	0	CORRELATION	1.8972	1.8982	0.001

TID vs Post - Pre Exposure Delta

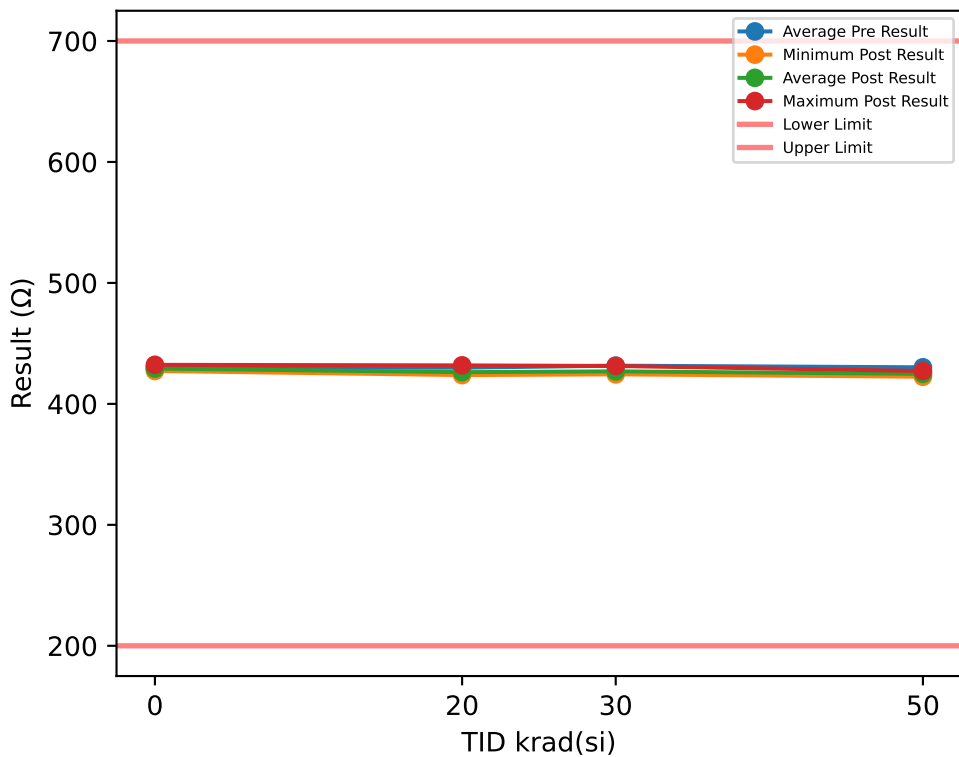


Test Statistics (V)

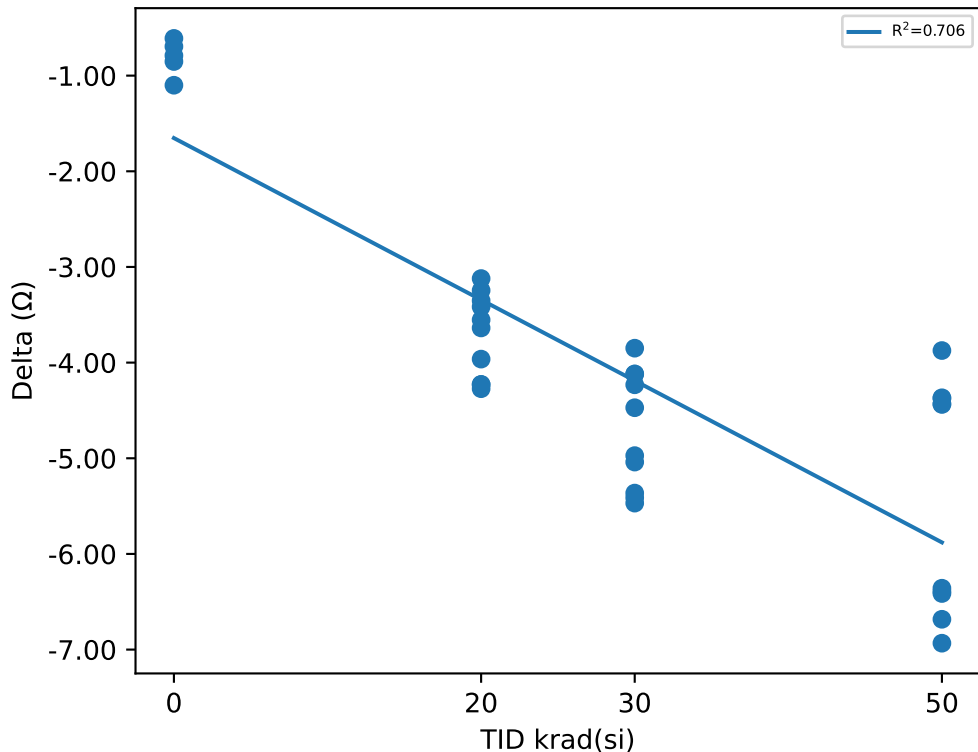
krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8707	1.8866	1.8972	0.010662	1.8717	1.8875	1.8982	0.010657	0	0.0009	0.0015	0.00054772
20	1.8717	1.8857	1.8962	0.0090216	1.8742	1.887	1.8977	0.0090063	-0.001	0.00135	0.0045	0.0015102
30	1.8702	1.8892	1.9068	0.010976	1.8707	1.8902	1.9058	0.010958	-0.001	0.00106	0.0026	0.0015465
50	1.8832	1.8924	1.9007	0.0055337	1.8842	1.8931	1.9018	0.0060125	-0.0025	0.00072	0.0061	0.0021791

Device Test: 22.24 LEVEL|SINK/SS_TR/14////@R_SS_DISCHARGE

TID vs Result Stats



TID vs Post - Pre Exposure Delta



Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (Ω))

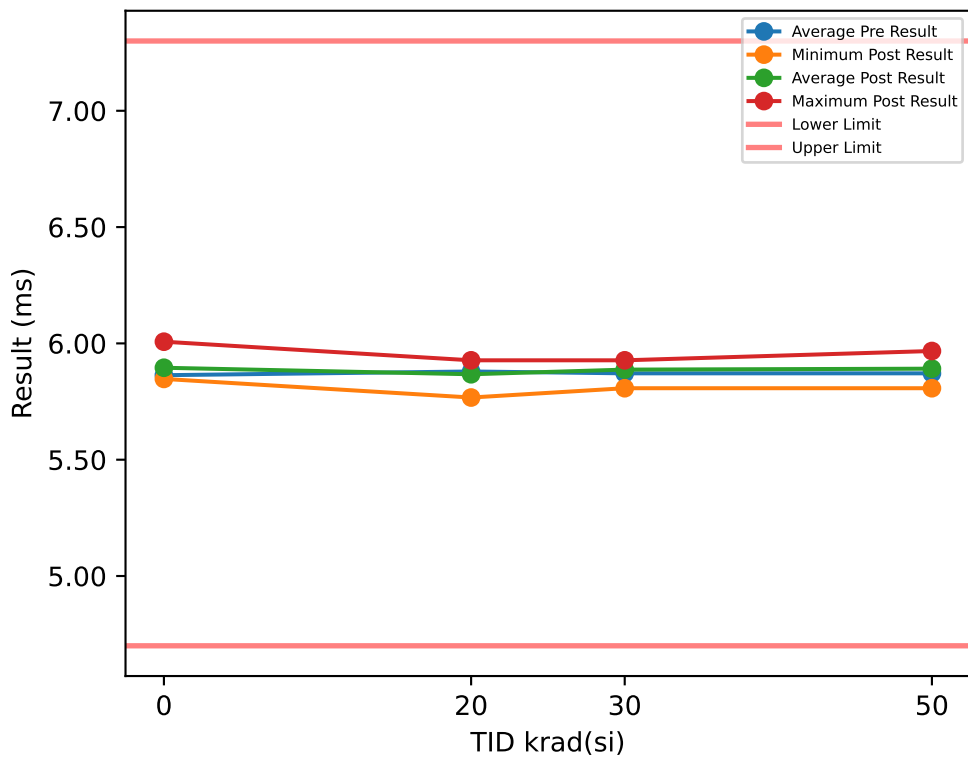
Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	431.73	428.18	-3.5528
2	20	Biased	429.99	426.64	-3.3515
3	20	Biased	435.25	431.83	-3.4168
4	20	Biased	426.92	423.8	-3.1213
5	20	Biased	427.8	424.56	-3.2453
6	20	Unbiased	428.21	423.98	-4.2294
7	20	Unbiased	431.81	427.54	-4.2728
8	20	Unbiased	429.63	425.67	-3.9634
9	20	Unbiased	428.82	424.59	-4.2281
10	20	Unbiased	429.02	425.38	-3.6375
11	30	Biased	432.82	428.35	-4.4717
12	30	Biased	428.55	424.43	-4.1191
13	30	Biased	428.73	424.5	-4.2319
14	30	Biased	432.34	428.22	-4.1194
15	30	Biased	429.08	425.23	-3.8492
16	30	Unbiased	430.02	424.98	-5.0398
17	30	Unbiased	433.85	428.38	-5.4689
18	30	Unbiased	436.74	431.33	-5.4123
19	30	Unbiased	433.93	428.56	-5.3639
20	30	Unbiased	429.82	424.85	-4.9723
26	50	Unbiased	429.4	423.01	-6.3929
27	50	Unbiased	430.1	423.42	-6.6831
28	50	Unbiased	428.81	422.45	-6.3585
29	50	Unbiased	431.09	424.15	-6.9332
30	50	Unbiased	431.38	424.96	-6.4137
88	50	Biased-84Hr-Anneal	430.88	426.45	-4.4311
89	50	Biased-84Hr-Anneal	428.07	423.63	-4.4373
90	50	Biased-84Hr-Anneal	430.84	426.47	-4.3678
91	50	Biased-84Hr-Anneal	430.83	426.46	-4.3734
92	50	Biased-84Hr-Anneal	431.03	427.16	-3.8738
100	0	CORRELATION	433.13	432.28	-0.8523
101	0	CORRELATION	432.01	431.31	-0.6953
102	0	CORRELATION	428.32	427.22	-1.1004
103	0	CORRELATION	428.06	427.27	-0.7902
104	0	CORRELATION	428.57	427.96	-0.6108

Test Statistics (Ω)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	428.06	430.02	433.13	2.3701	427.22	429.21	432.28	2.4048	-1.1004	-0.8098	-0.6108	0.18665
20	426.92	429.92	435.25	2.4448	423.8	426.22	431.83	2.4623	-4.2728	-3.7019	-3.1213	0.43786
30	428.55	431.59	436.74	2.759	424.43	426.88	431.33	2.3799	-5.4689	-4.7048	-3.8492	0.61449
50	428.07	430.24	431.38	1.1166	422.45	424.82	427.16	1.7068	-6.9332	-5.4265	-3.8738	1.2127

Device Test: 22.27 TIMING|STARTUP/SS_TR/14/////@T_SS_22NF

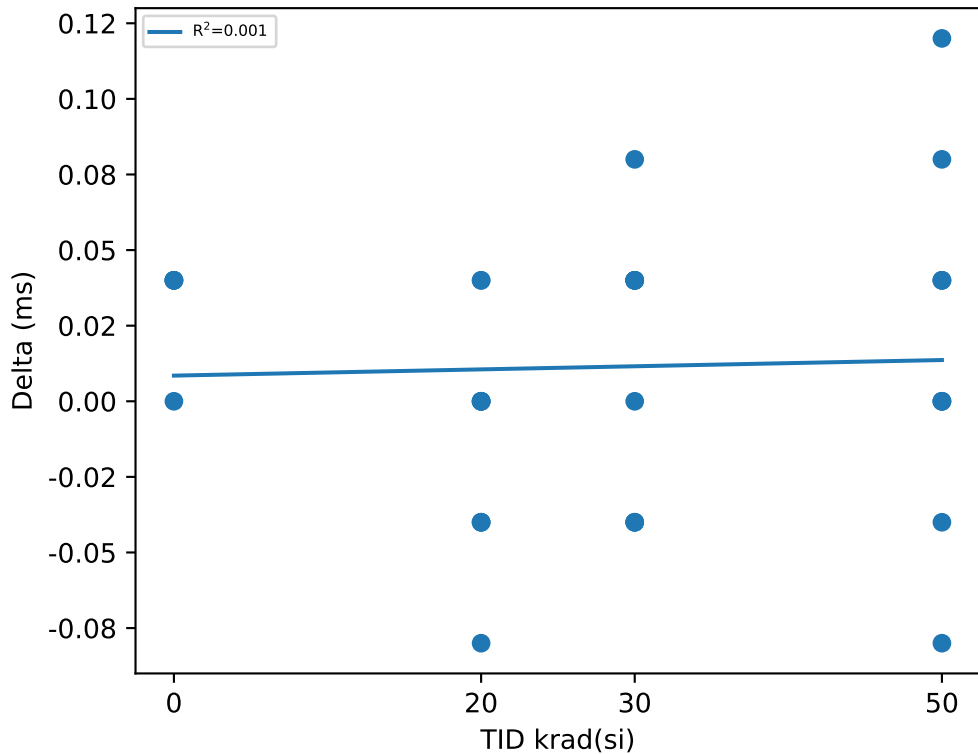
TID vs Result Stats



Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	5.8473	5.8473	0
2	20	Biased	5.8873	5.8073	-0.08
3	20	Biased	5.8873	5.9273	0.04
4	20	Biased	5.9673	5.9273	-0.04
5	20	Biased	5.8873	5.9273	0.04
6	20	Unbiased	5.8073	5.7673	-0.04
7	20	Unbiased	5.8473	5.8473	0
8	20	Unbiased	5.8873	5.8473	-0.04
9	20	Unbiased	5.8473	5.8473	0
10	20	Unbiased	5.9273	5.9273	0
11	30	Biased	5.8873	5.9273	0.04
12	30	Biased	5.8873	5.9273	0.04
13	30	Biased	5.8073	5.8873	0.08
14	30	Biased	5.8873	5.8473	-0.04
15	30	Biased	5.9273	5.9273	0
16	30	Unbiased	5.8873	5.9273	0.04
17	30	Unbiased	5.8073	5.8473	0.04
18	30	Unbiased	5.8873	5.9273	0.04
19	30	Unbiased	5.8473	5.8073	-0.04
20	30	Unbiased	5.8873	5.8473	-0.04
26	50	Unbiased	5.8873	5.8073	-0.08
27	50	Unbiased	5.8473	5.8073	-0.04
28	50	Unbiased	5.9273	5.9273	0
29	50	Unbiased	5.8873	5.9273	0.04
30	50	Unbiased	5.8873	5.8873	0
88	50	Biased-84Hr-Anneal	5.8473	5.8873	0.04
89	50	Biased-84Hr-Anneal	5.8473	5.8873	0.04
90	50	Biased-84Hr-Anneal	5.8473	5.9673	0.12
91	50	Biased-84Hr-Anneal	5.8873	5.8873	0
92	50	Biased-84Hr-Anneal	5.8473	5.9273	0.08
100	0	CORRELATION	5.8473	5.8473	0
101	0	CORRELATION	5.9673	6.0073	0.04
102	0	CORRELATION	5.8073	5.8473	0.04
103	0	CORRELATION	5.8873	5.9273	0.04
104	0	CORRELATION	5.8073	5.8473	0.04

TID vs Post - Pre Exposure Delta

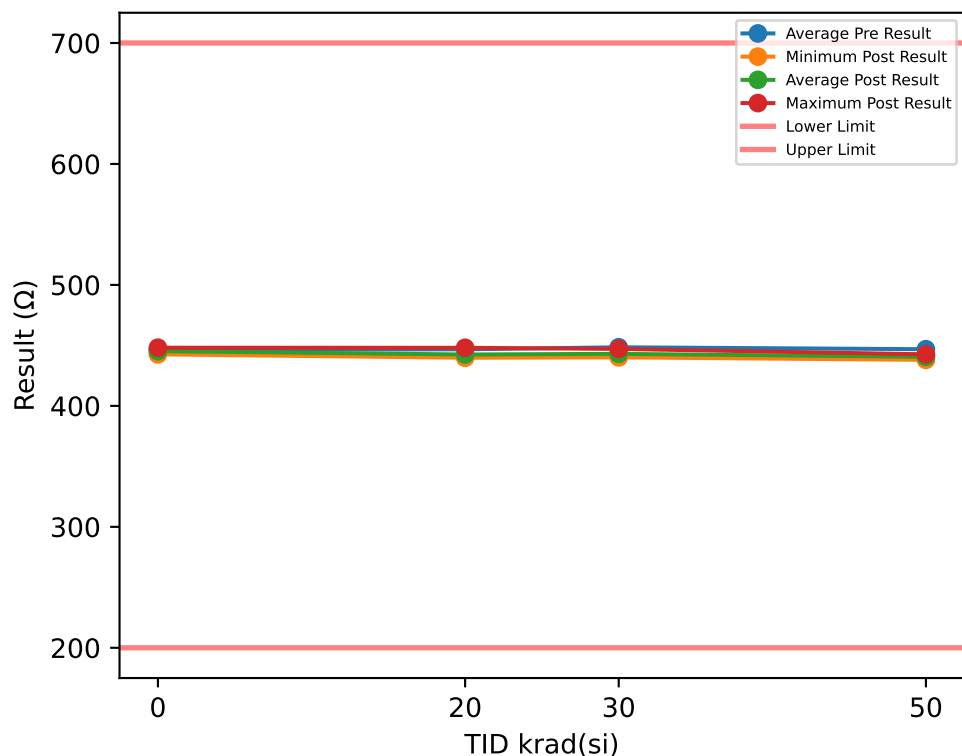


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.8073	5.8633	5.9673	0.066933	5.8473	5.8953	6.0073	0.071554	0	0.032	0.04	0.017889
20	5.8073	5.8793	5.9673	0.045412	5.7673	5.8673	5.9273	0.057349	-0.08	-0.012	0.04	0.037947
30	5.8073	5.8713	5.9273	0.038644	5.8073	5.8873	5.9273	0.046188	-0.04	0.016	0.08	0.042999
50	5.8473	5.8713	5.9273	0.027968	5.8073	5.8913	5.9673	0.051467	-0.08	0.02	0.12	0.057349

Device Test: 22.3 LEVEL|SINK/SS_TR/4.5////@R_SS_DISCHARGE

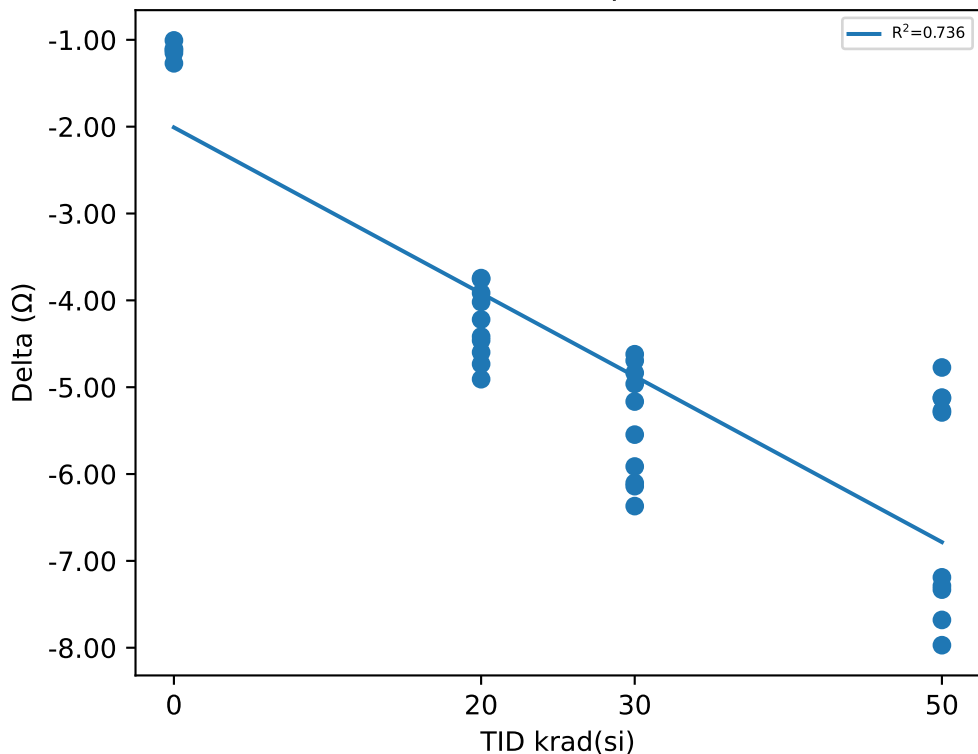
TID vs Result Stats



Test Results (Lower Limit = 200.0, Upper Limit = 700.0 (Ω))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	448.93	444.71	-4.2206
2	20	Biased	446.68	442.77	-3.9151
3	20	Biased	452.03	448.01	-4.0191
4	20	Biased	443.53	439.78	-3.7547
5	20	Biased	445.34	441.59	-3.7438
6	20	Unbiased	445.24	440.64	-4.5979
7	20	Unbiased	448.61	443.87	-4.733
8	20	Unbiased	446.08	441.62	-4.4604
9	20	Unbiased	445.73	440.83	-4.908
10	20	Unbiased	445.44	441.03	-4.4168
11	30	Biased	449.86	444.7	-5.1652
12	30	Biased	444.81	440.11	-4.694
13	30	Biased	445.62	440.66	-4.9624
14	30	Biased	449.04	444.2	-4.8353
15	30	Biased	445.8	441.18	-4.6204
16	30	Unbiased	446.63	440.71	-5.9132
17	30	Unbiased	451.17	444.8	-6.3691
18	30	Unbiased	453.17	447.07	-6.1027
19	30	Unbiased	451.26	445.12	-6.1396
20	30	Unbiased	447.12	441.58	-5.5461
26	50	Unbiased	445.84	438.51	-7.3309
27	50	Unbiased	446.94	439.26	-7.6798
28	50	Unbiased	445.22	438.03	-7.1894
29	50	Unbiased	447.55	439.58	-7.9708
30	50	Unbiased	447.77	440.48	-7.2878
88	50	Biased-84Hr-Anneal	447.75	442.62	-5.1261
89	50	Biased-84Hr-Anneal	444.95	439.66	-5.2907
90	50	Biased-84Hr-Anneal	447.36	442.09	-5.2707
91	50	Biased-84Hr-Anneal	447.7	442.58	-5.1199
92	50	Biased-84Hr-Anneal	447.38	442.6	-4.7729
100	0	CORRELATION	449.24	448.09	-1.1507
101	0	CORRELATION	448.63	447.63	-1.0066
102	0	CORRELATION	444.9	443.63	-1.2706
103	0	CORRELATION	443.7	442.59	-1.1026
104	0	CORRELATION	445.33	444.21	-1.1189

TID vs Post - Pre Exposure Delta

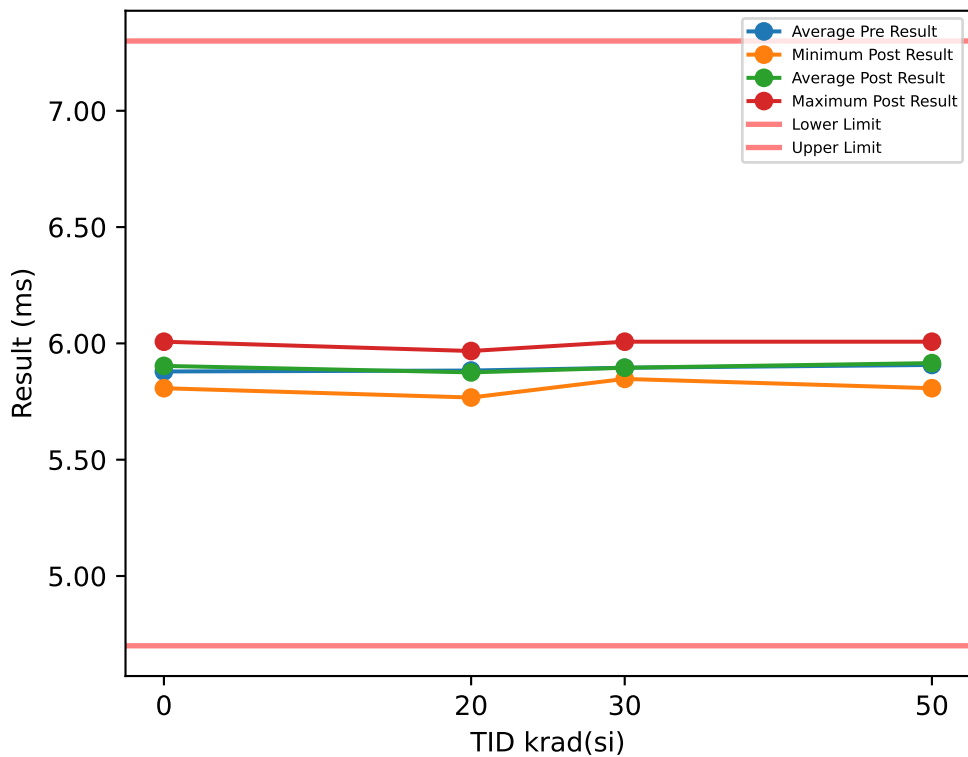


Test Statistics (Ω)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	443.7	446.36	449.24	2.4362	442.59	445.23	448.09	2.4728	-1.2706	-1.1299	-1.0066	0.095261
20	443.53	446.76	452.03	2.4472	439.78	442.48	448.01	2.4639	-4.908	-4.2769	-3.7438	0.41096
30	444.81	448.45	453.17	2.8542	440.11	443.01	447.07	2.427	-6.3691	-5.4348	-4.6204	0.66033
50	444.95	446.85	447.77	1.0902	438.03	440.54	442.62	1.7929	-7.9708	-6.3039	-4.7729	1.2783

Device Test: 22.6 TIMING|STARTUP/SS_TR/4.5////@T_SS_22NF

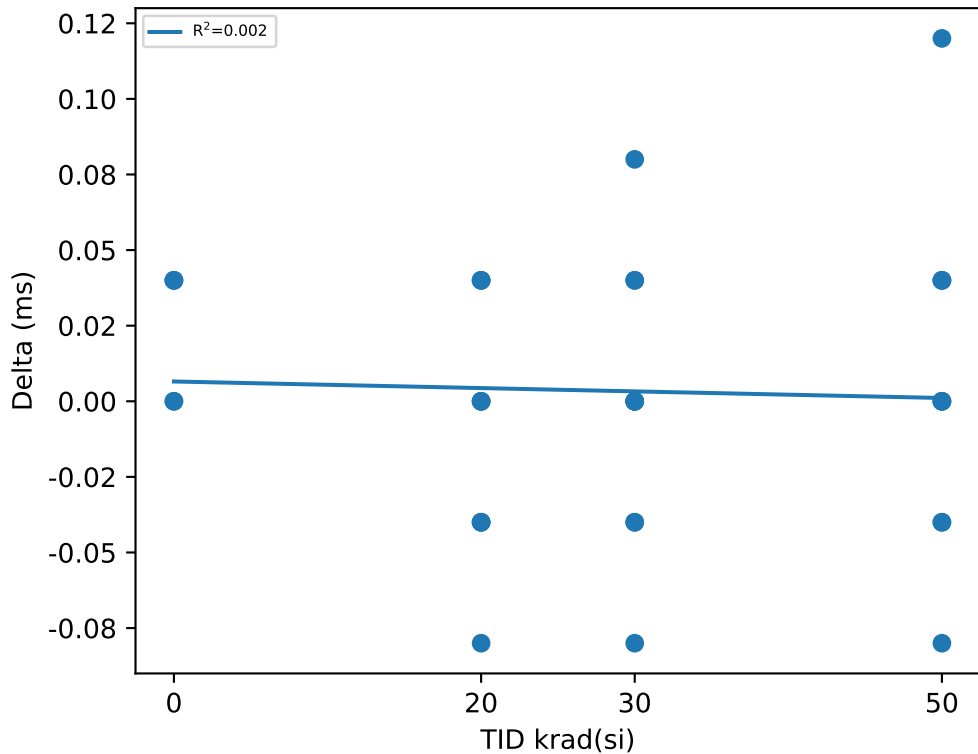
TID vs Result Stats



Test Results (Lower Limit = 4.7, Upper Limit = 7.3 (ms))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	5.8873	5.8873	0
2	20	Biased	5.8873	5.8073	-0.08
3	20	Biased	5.8873	5.9273	0.04
4	20	Biased	5.9273	5.9273	0
5	20	Biased	5.9273	5.9673	0.04
6	20	Unbiased	5.8073	5.7673	-0.04
7	20	Unbiased	5.8873	5.8473	-0.04
8	20	Unbiased	5.8873	5.8473	-0.04
9	20	Unbiased	5.8473	5.8473	0
10	20	Unbiased	5.8873	5.9273	0.04
11	30	Biased	5.8873	5.9273	0.04
12	30	Biased	5.9273	5.8873	-0.04
13	30	Biased	5.8473	5.8473	0
14	30	Biased	5.9673	5.8873	-0.08
15	30	Biased	5.9273	6.0073	0.08
16	30	Unbiased	5.8873	5.9273	0.04
17	30	Unbiased	5.8473	5.8473	0
18	30	Unbiased	5.8873	5.8873	0
19	30	Unbiased	5.8473	5.8473	0
20	30	Unbiased	5.9273	5.8873	-0.04
26	50	Unbiased	5.8873	5.8073	-0.08
27	50	Unbiased	5.8873	5.8473	-0.04
28	50	Unbiased	5.9673	5.9673	0
29	50	Unbiased	5.8873	5.9273	0.04
30	50	Unbiased	5.9273	5.8873	-0.04
88	50	Biased-84Hr-Anneal	5.8873	5.8873	0
89	50	Biased-84Hr-Anneal	5.9273	5.9673	0.04
90	50	Biased-84Hr-Anneal	5.8873	6.0073	0.12
91	50	Biased-84Hr-Anneal	5.8873	5.8873	0
92	50	Biased-84Hr-Anneal	5.9273	5.9673	0.04
100	0	CORRELATION	5.8473	5.8873	0.04
101	0	CORRELATION	5.9673	6.0073	0.04
102	0	CORRELATION	5.8073	5.8073	0
103	0	CORRELATION	5.8873	5.9273	0.04
104	0	CORRELATION	5.8873	5.8873	0

TID vs Post - Pre Exposure Delta

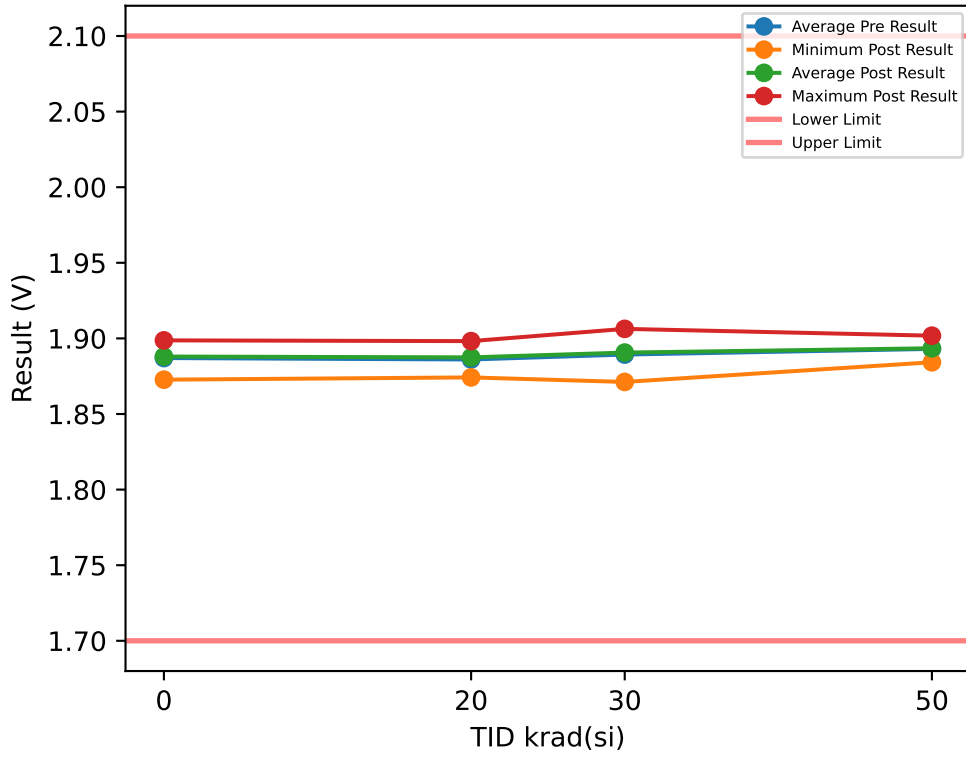


Test Statistics (ms)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	5.8073	5.8793	5.9673	0.05933	5.8073	5.9033	6.0073	0.072664	0	0.024	0.04	0.021909
20	5.8073	5.8833	5.9273	0.035024	5.7673	5.8753	5.9673	0.062681	-0.08	-0.008	0.04	0.041312
30	5.8473	5.8953	5.9673	0.041312	5.8473	5.8953	6.0073	0.049171	-0.08	0	0.08	0.046188
50	5.8873	5.9073	5.9673	0.028284	5.8073	5.9153	6.0073	0.062681	-0.08	0.008	0.12	0.055936

Device Test: 22.9 LEVEL|RISE/COMP/5////@COMP_SHDN

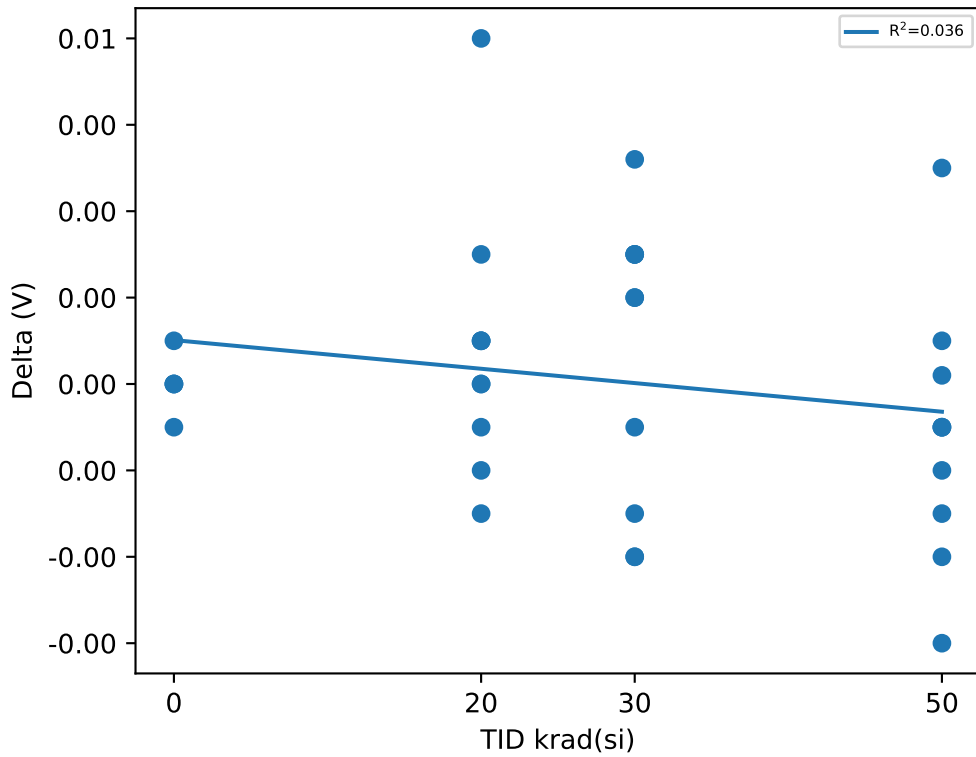
TID vs Result Stats



Test Results (Lower Limit = 1.7, Upper Limit = 2.1 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.8932	1.8937	0.0005
2	20	Biased	1.8842	1.8837	-0.0005
3	20	Biased	1.8737	1.8747	0.001
4	20	Biased	1.8967	1.8982	0.0015
5	20	Biased	1.8727	1.8742	0.0015
6	20	Unbiased	1.8932	1.8982	0.005
7	20	Unbiased	1.8767	1.8782	0.0015
8	20	Unbiased	1.8917	1.8917	0
9	20	Unbiased	1.8887	1.8912	0.0025
10	20	Unbiased	1.8897	1.8907	0.001
11	30	Biased	1.8882	1.8902	0.002
12	30	Biased	1.8887	1.8877	-0.001
13	30	Biased	1.9007	1.9043	0.0036
14	30	Biased	1.8897	1.8887	-0.001
15	30	Biased	1.8982	1.9007	0.0025
16	30	Unbiased	1.9068	1.9063	-0.0005
17	30	Unbiased	1.8787	1.8812	0.0025
18	30	Unbiased	1.8707	1.8712	0.0005
19	30	Unbiased	1.8797	1.8822	0.0025
20	30	Unbiased	1.8917	1.8937	0.002
26	50	Unbiased	1.8977	1.8972	-0.0005
27	50	Unbiased	1.8942	1.8942	0
28	50	Unbiased	1.9013	1.9018	0.0005
29	50	Unbiased	1.8887	1.8867	-0.002
30	50	Unbiased	1.8967	1.9002	0.0035
88	50	Biased-84Hr-Anneal	1.8862	1.8877	0.0015
89	50	Biased-84Hr-Anneal	1.8922	1.8912	-0.001
90	50	Biased-84Hr-Anneal	1.8982	1.8993	0.0011
91	50	Biased-84Hr-Anneal	1.8917	1.8922	0.0005
92	50	Biased-84Hr-Anneal	1.8837	1.8842	0.0005
100	0	CORRELATION	1.8717	1.8727	0.001
101	0	CORRELATION	1.8812	1.8822	0.001
102	0	CORRELATION	1.8907	1.8917	0.001
103	0	CORRELATION	1.8932	1.8947	0.0015
104	0	CORRELATION	1.8982	1.8987	0.0005

TID vs Post - Pre Exposure Delta

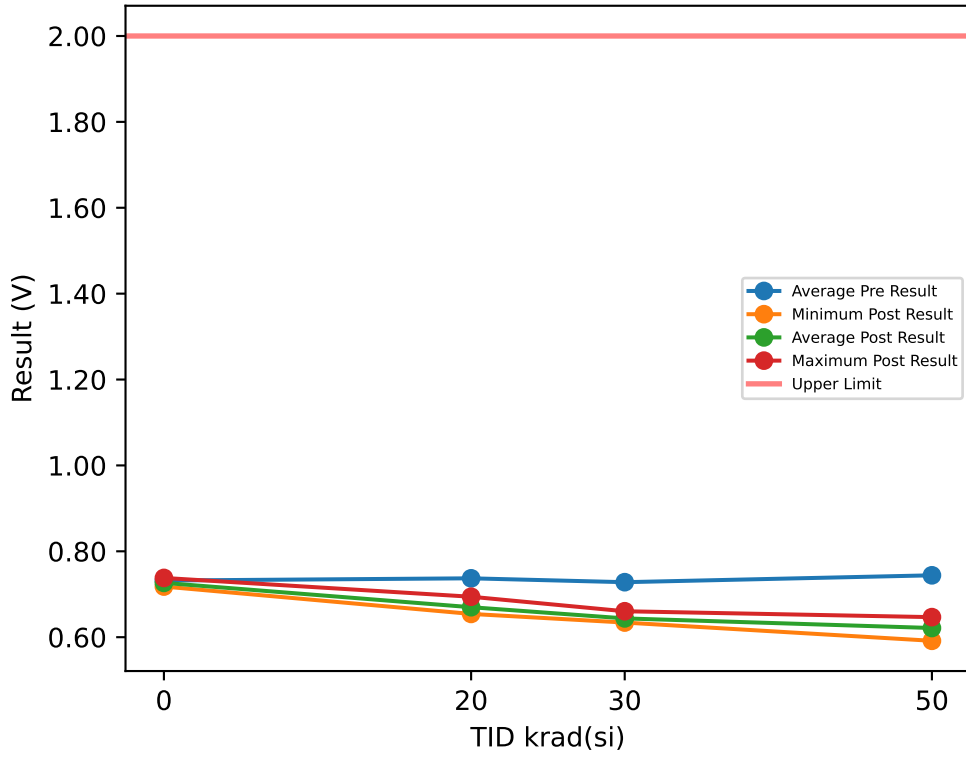


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.8717	1.887	1.8982	0.010551	1.8727	1.888	1.8987	0.010498	0.0005	0.001	0.0015	0.00035355
20	1.8727	1.8861	1.8967	0.0087529	1.8742	1.8875	1.8982	0.0091325	-0.0005	0.0014	0.005	0.0015239
30	1.8707	1.8893	1.9068	0.010921	1.8712	1.8906	1.9063	0.011021	-0.001	0.00131	0.0036	0.0016683
50	1.8837	1.8931	1.9013	0.0056437	1.8842	1.8935	1.9018	0.0061005	-0.002	0.00041	0.0035	0.0014918

Device Test: 23.1 VIN|VALID/PWRGD/0/////@MIN_VIN_FOR_PWRGD_OUTPUT

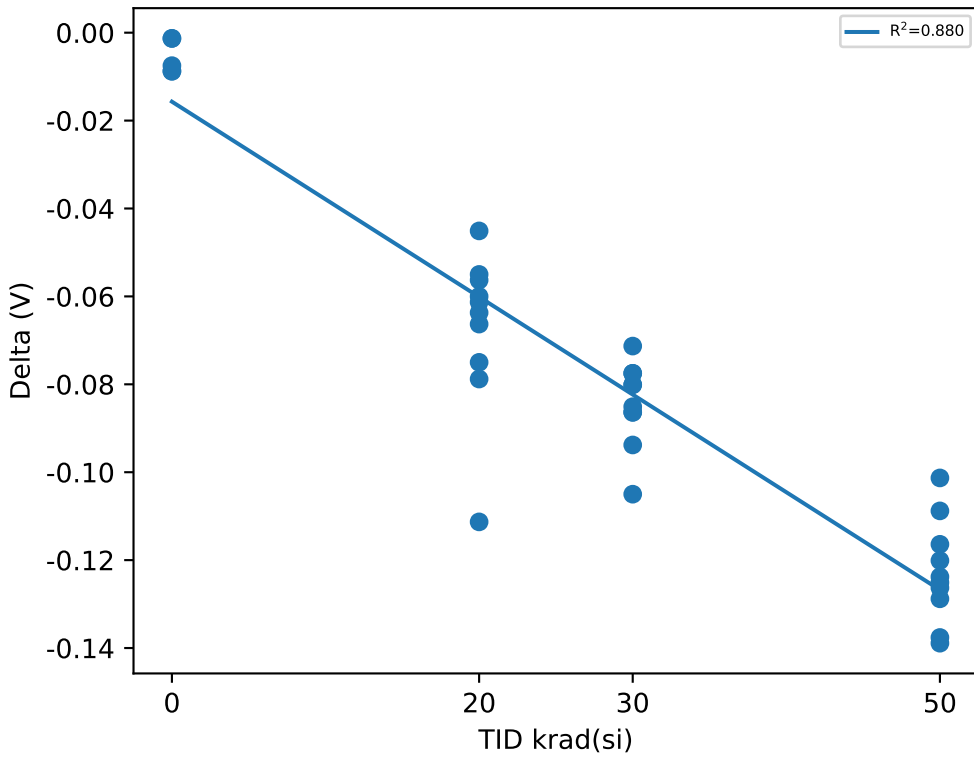
TID vs Result Stats



Test Results (Upper Limit = 2.0 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.7705	0.6592	-0.1113
2	20	Biased	0.753	0.6742	-0.0788
3	20	Biased	0.7605	0.6942	-0.0663
4	20	Biased	0.7255	0.6642	-0.0613
5	20	Biased	0.7442	0.6692	-0.075
6	20	Unbiased	0.7205	0.6642	-0.0563
7	20	Unbiased	0.7217	0.6667	-0.055
8	20	Unbiased	0.7179	0.6542	-0.0637
9	20	Unbiased	0.7367	0.6767	-0.06
10	20	Unbiased	0.7205	0.6754	-0.0451
11	30	Biased	0.7367	0.6429	-0.0938
12	30	Biased	0.7142	0.6341	-0.0801
13	30	Biased	0.7217	0.6366	-0.0851
14	30	Biased	0.7255	0.6391	-0.0864
15	30	Biased	0.7317	0.6604	-0.0713
16	30	Unbiased	0.7154	0.6379	-0.0775
17	30	Unbiased	0.7467	0.6417	-0.105
18	30	Unbiased	0.733	0.6529	-0.0801
19	30	Unbiased	0.7154	0.6379	-0.0775
20	30	Unbiased	0.7405	0.6542	-0.0863
26	50	Unbiased	0.7305	0.5916	-0.1389
27	50	Unbiased	0.7392	0.6104	-0.1288
28	50	Unbiased	0.7242	0.5991	-0.1251
29	50	Unbiased	0.733	0.6166	-0.1164
30	50	Unbiased	0.7142	0.6129	-0.1013
88	50	Biased-84Hr-Anneal	0.7667	0.6404	-0.1263
89	50	Biased-84Hr-Anneal	0.7492	0.6291	-0.1201
90	50	Biased-84Hr-Anneal	0.763	0.6254	-0.1376
91	50	Biased-84Hr-Anneal	0.7655	0.6417	-0.1238
92	50	Biased-84Hr-Anneal	0.7555	0.6467	-0.1088
100	0	CORRELATION	0.7455	0.738	-0.0075
101	0	CORRELATION	0.7392	0.7305	-0.0087
102	0	CORRELATION	0.733	0.7242	-0.0088
103	0	CORRELATION	0.723	0.7217	-0.0013
104	0	CORRELATION	0.7192	0.7179	-0.0013

TID vs Post - Pre Exposure Delta

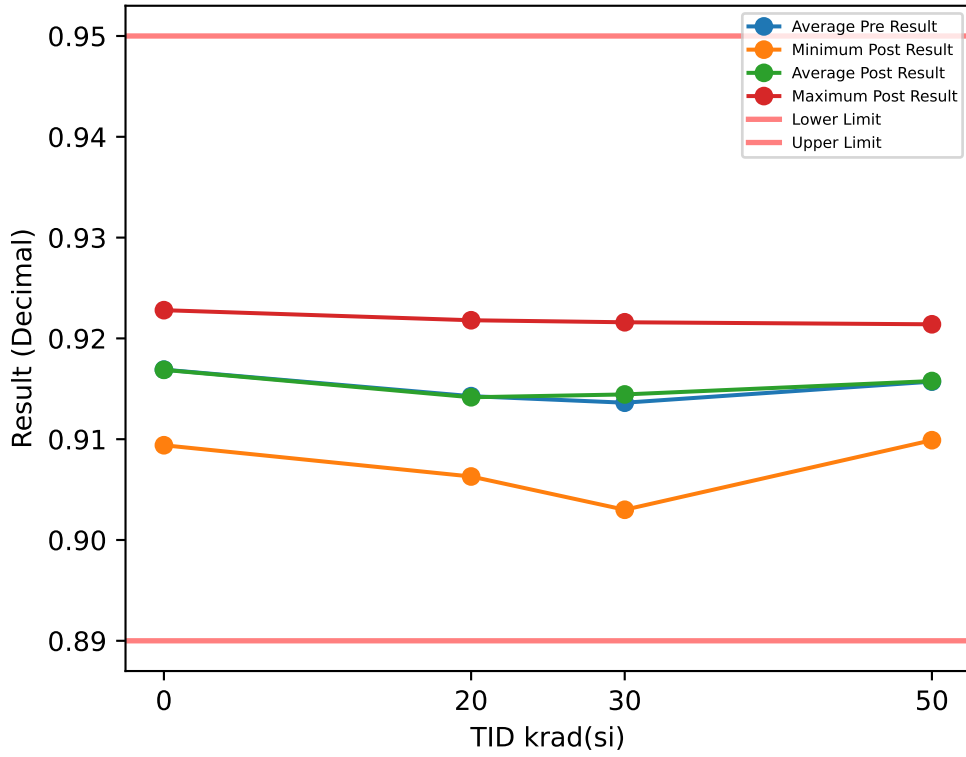


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.7192	0.73198	0.7455	0.010954	0.7179	0.72646	0.738	0.0079141	-0.0088	-0.00552	-0.0013	0.0038861
20	0.7179	0.7371	0.7705	0.019026	0.6542	0.66982	0.6942	0.011166	-0.1113	-0.06728	-0.0451	0.018245
30	0.7142	0.72808	0.7467	0.011422	0.6341	0.64377	0.6604	0.0088781	-0.105	-0.08431	-0.0713	0.0095717
50	0.7142	0.7441	0.7667	0.018571	0.5916	0.62139	0.6467	0.01853	-0.1389	-0.12271	-0.1013	0.011734

Device Test: 23.10 THRESHOLD|FALL/PWRGD/5////@VSENSE_VTH_FALLING_FAULT

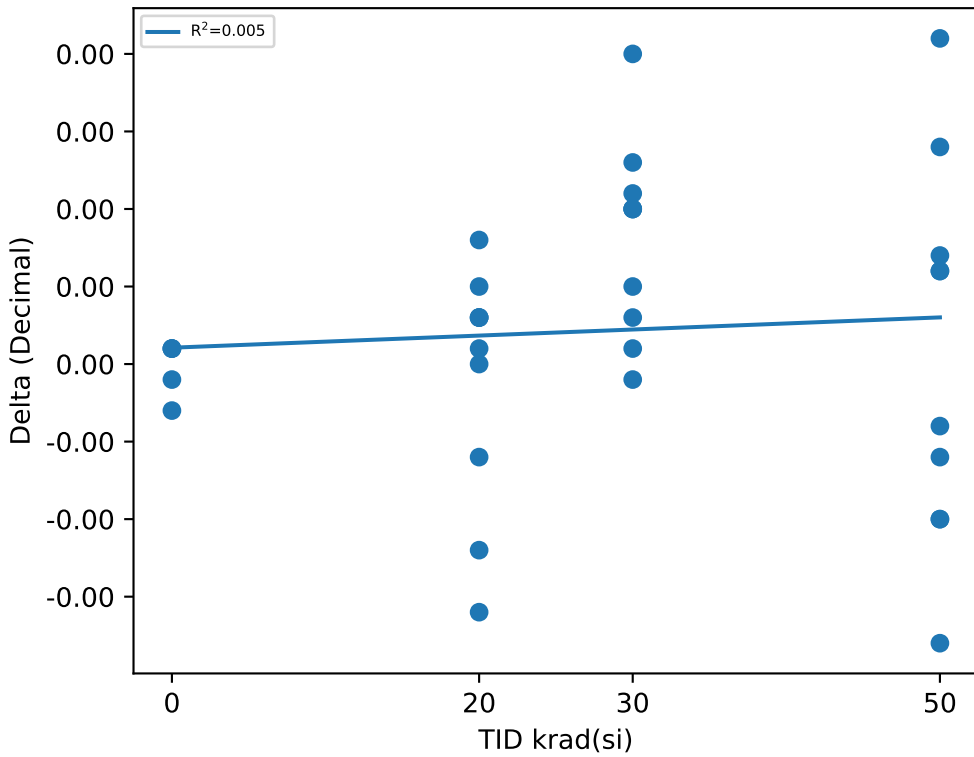
TID vs Result Stats



Test Results (Lower Limit = 0.89, Upper Limit = 0.95 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9169	0.9157	-0.0012
2	20	Biased	0.9151	0.9152	0.0001
3	20	Biased	0.91	0.9103	0.0003
4	20	Biased	0.9234	0.9218	-0.0016
5	20	Biased	0.91	0.9103	0.0003
6	20	Unbiased	0.9063	0.9063	0
7	20	Unbiased	0.9154	0.9162	0.0008
8	20	Unbiased	0.9183	0.9186	0.0003
9	20	Unbiased	0.9139	0.9144	0.0005
10	20	Unbiased	0.9134	0.9128	-0.0006
11	30	Biased	0.9189	0.9199	0.001
12	30	Biased	0.9146	0.9159	0.0013
13	30	Biased	0.9196	0.9216	0.002
14	30	Biased	0.9176	0.9186	0.001
15	30	Biased	0.9133	0.9143	0.001
16	30	Unbiased	0.9019	0.903	0.0011
17	30	Unbiased	0.91	0.9105	0.0005
18	30	Unbiased	0.9092	0.9093	0.0001
19	30	Unbiased	0.9165	0.9168	0.0003
20	30	Unbiased	0.9146	0.9145	-0.0001
26	50	Unbiased	0.9155	0.9137	-0.0018
27	50	Unbiased	0.918	0.917	-0.001
28	50	Unbiased	0.9167	0.9173	0.0006
29	50	Unbiased	0.9122	0.9118	-0.0004
30	50	Unbiased	0.9105	0.9099	-0.0006
88	50	Biased-84Hr-Anneal	0.9145	0.9151	0.0006
89	50	Biased-84Hr-Anneal	0.9193	0.9214	0.0021
90	50	Biased-84Hr-Anneal	0.9188	0.9195	0.0007
91	50	Biased-84Hr-Anneal	0.9157	0.9147	-0.001
92	50	Biased-84Hr-Anneal	0.9159	0.9173	0.0014
100	0	CORRELATION	0.9178	0.9179	0.0001
101	0	CORRELATION	0.9093	0.9094	0.0001
102	0	CORRELATION	0.9172	0.9169	-0.0003
103	0	CORRELATION	0.9229	0.9228	-0.0001
104	0	CORRELATION	0.9173	0.9174	0.0001

TID vs Post - Pre Exposure Delta

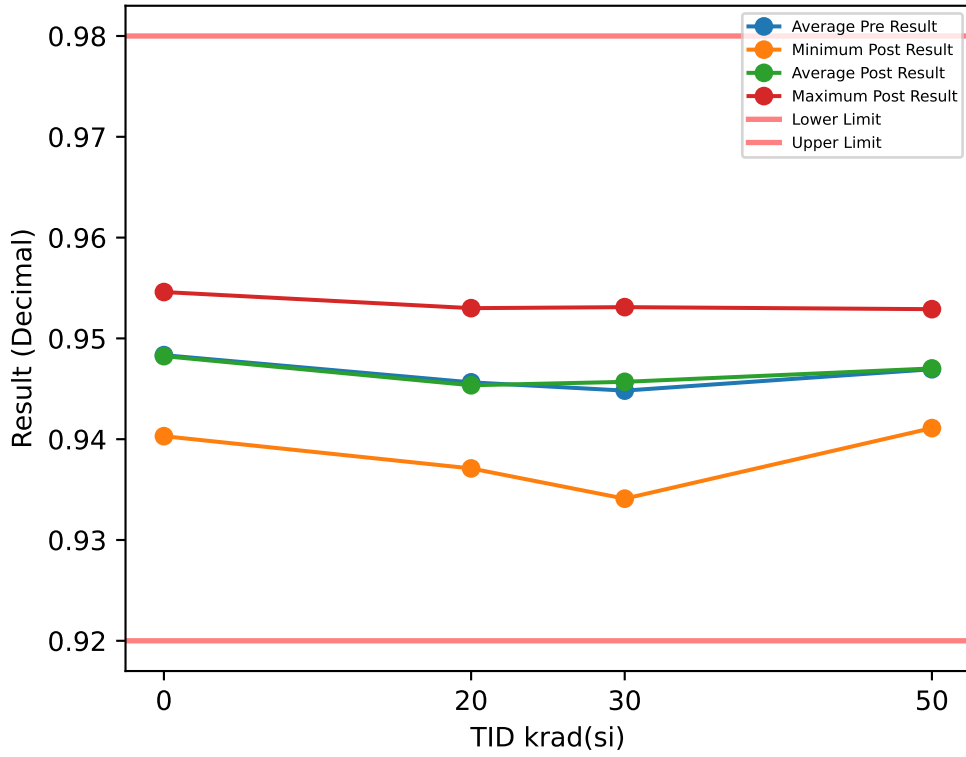


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9093	0.9169	0.9229	0.0048688	0.9094	0.91688	0.9228	0.0048039	-0.0003	-2e-05	0.0001	0.00017889
20	0.9063	0.91427	0.9234	0.0048231	0.9063	0.91416	0.9218	0.004462	-0.0016	-0.00011	0.0008	0.00077524
30	0.9019	0.91362	0.9196	0.0053727	0.903	0.91444	0.9216	0.005567	-0.0001	0.00082	0.002	0.00062681
50	0.9105	0.91571	0.9193	0.0027823	0.9099	0.91577	0.9214	0.0034625	-0.0018	6e-05	0.0021	0.0012158

Device Test: 23.11 THRESHOLD|RISE/PWRGD/5////@VSENSE_VTH_RISING_GOOD

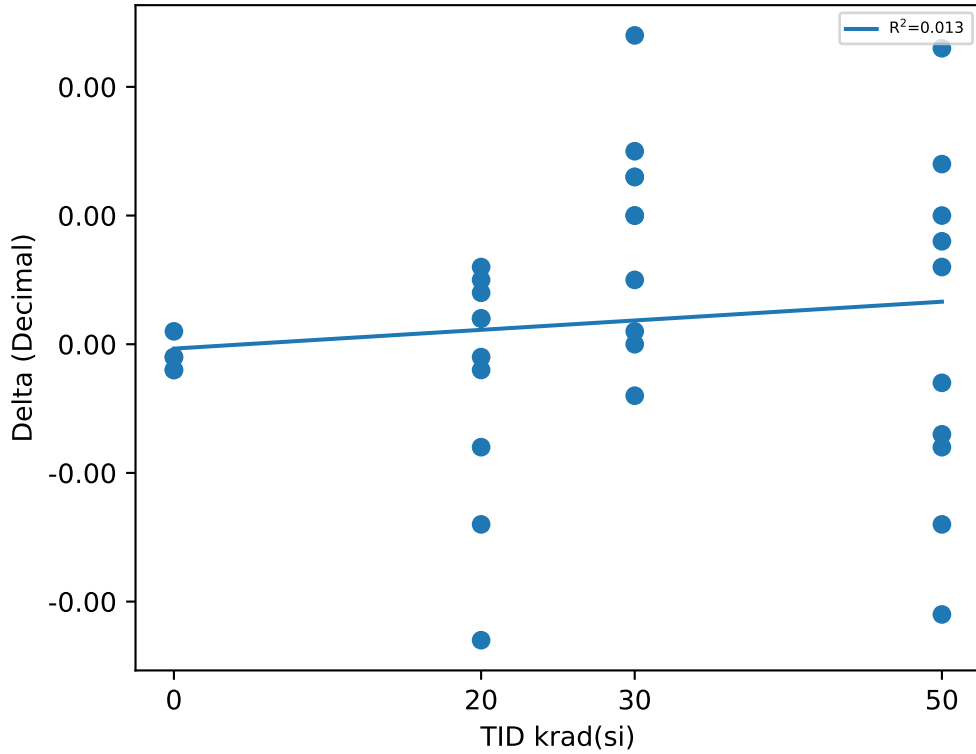
TID vs Result Stats



Test Results (Lower Limit = 0.92, Upper Limit = 0.98 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9484	0.947	-0.0014
2	20	Biased	0.9462	0.9464	0.0002
3	20	Biased	0.9413	0.9412	-0.0001
4	20	Biased	0.9553	0.953	-0.0023
5	20	Biased	0.9411	0.9415	0.0004
6	20	Unbiased	0.9373	0.9371	-0.0002
7	20	Unbiased	0.9471	0.9477	0.0006
8	20	Unbiased	0.9499	0.9501	0.0002
9	20	Unbiased	0.945	0.9455	0.0005
10	20	Unbiased	0.9448	0.944	-0.0008
11	30	Biased	0.9504	0.9517	0.0013
12	30	Biased	0.9459	0.9474	0.0015
13	30	Biased	0.9507	0.9531	0.0024
14	30	Biased	0.9489	0.9499	0.001
15	30	Biased	0.9444	0.9454	0.001
16	30	Unbiased	0.9328	0.9341	0.0013
17	30	Unbiased	0.9412	0.9413	0.0001
18	30	Unbiased	0.94	0.9405	0.0005
19	30	Unbiased	0.948	0.948	0
20	30	Unbiased	0.9459	0.9455	-0.0004
26	50	Unbiased	0.9466	0.9445	-0.0021
27	50	Unbiased	0.9492	0.9485	-0.0007
28	50	Unbiased	0.9478	0.9488	0.001
29	50	Unbiased	0.9433	0.9425	-0.0008
30	50	Unbiased	0.9414	0.9411	-0.0003
88	50	Biased-84Hr-Anneal	0.9456	0.9462	0.0006
89	50	Biased-84Hr-Anneal	0.9506	0.9529	0.0023
90	50	Biased-84Hr-Anneal	0.9505	0.9513	0.0008
91	50	Biased-84Hr-Anneal	0.9472	0.9458	-0.0014
92	50	Biased-84Hr-Anneal	0.9472	0.9486	0.0014
100	0	CORRELATION	0.9493	0.9492	-0.0001
101	0	CORRELATION	0.9404	0.9403	-0.0001
102	0	CORRELATION	0.9484	0.9482	-0.0002
103	0	CORRELATION	0.9548	0.9546	-0.0002
104	0	CORRELATION	0.9488	0.9489	0.0001

TID vs Post - Pre Exposure Delta

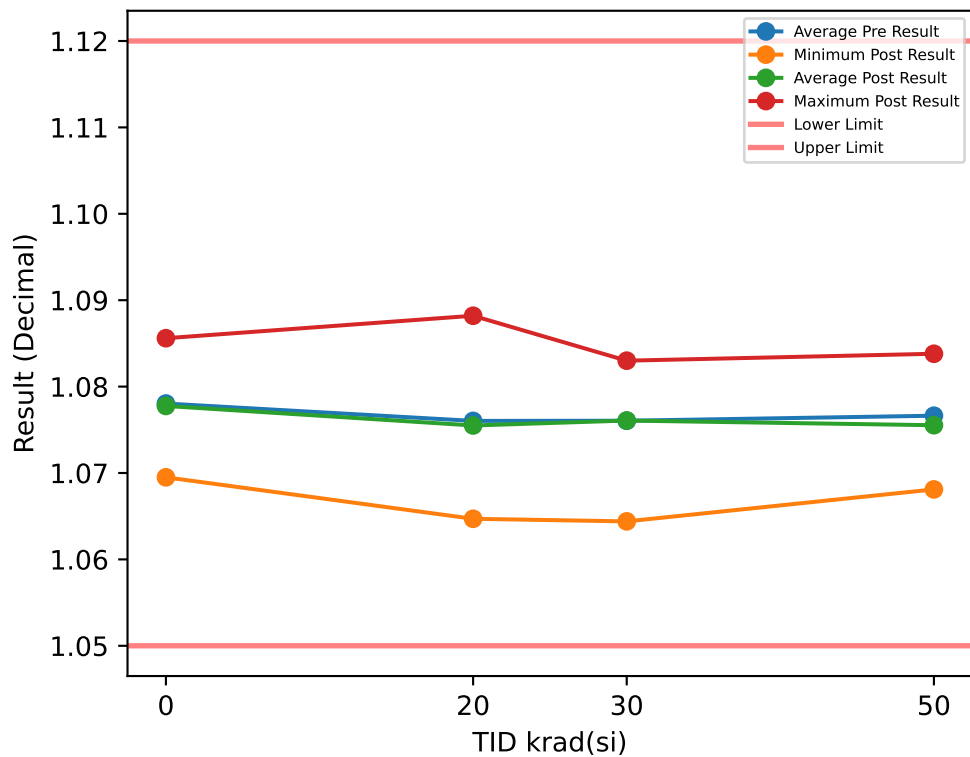


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9404	0.94834	0.9548	0.0051457	0.9403	0.94824	0.9546	0.0051199	-0.0002	-0.0001	0.0001	0.00012247
20	0.9373	0.94564	0.9553	0.0050733	0.9371	0.94535	0.953	0.0046234	-0.0023	-0.00029	0.0006	0.0009398
30	0.9328	0.94482	0.9507	0.0055357	0.9341	0.94569	0.9531	0.005751	-0.0004	0.00087	0.0024	0.00083273
50	0.9414	0.94694	0.9506	0.0029421	0.9411	0.94702	0.9529	0.0037228	-0.0021	8e-05	0.0023	0.0013653

Device Test: 23.12 THRESHOLD|RISE/PWRGD/5////@VSENSE_VTH_RISING_FAULT

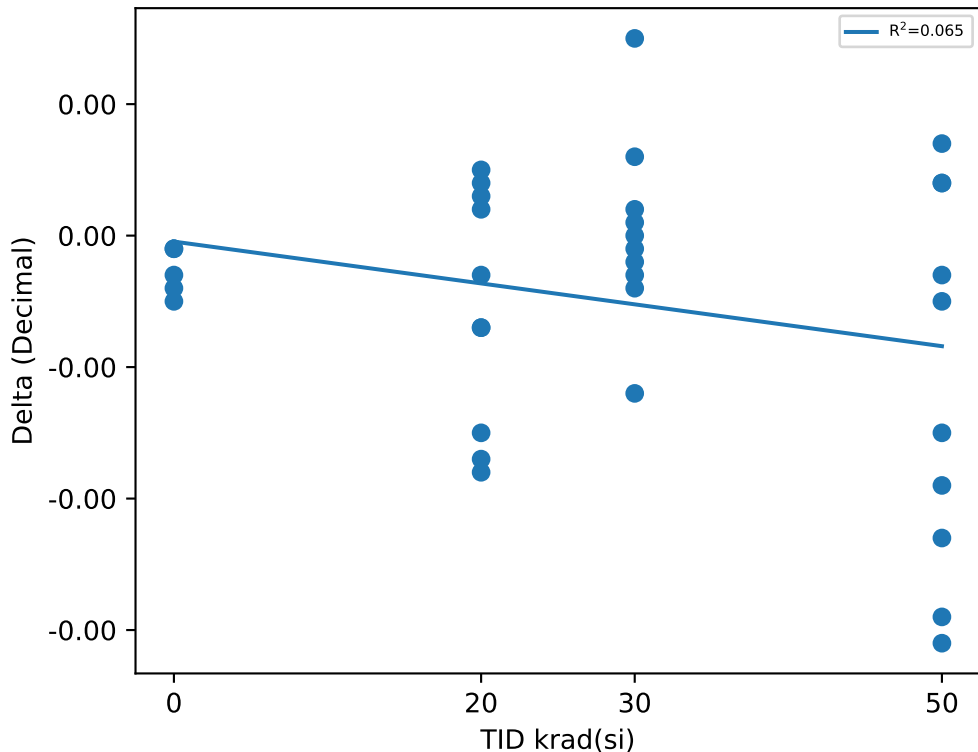
TID vs Result Stats



Test Results (Lower Limit = 1.05, Upper Limit = 1.12 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0777	1.0762	-0.0015
2	20	Biased	1.0775	1.0768	-0.0007
3	20	Biased	1.0722	1.0724	0.0002
4	20	Biased	1.0899	1.0882	-0.0017
5	20	Biased	1.0705	1.0698	-0.0007
6	20	Unbiased	1.065	1.0647	-0.0003
7	20	Unbiased	1.0747	1.0752	0.0005
8	20	Unbiased	1.0807	1.0811	0.0004
9	20	Unbiased	1.0763	1.0766	0.0003
10	20	Unbiased	1.0758	1.074	-0.0018
11	30	Biased	1.0831	1.0828	-0.0003
12	30	Biased	1.0746	1.0748	0.0002
13	30	Biased	1.0815	1.083	0.0015
14	30	Biased	1.0833	1.0829	-0.0004
15	30	Biased	1.0752	1.0751	-0.0001
16	30	Unbiased	1.0643	1.0644	0.0001
17	30	Unbiased	1.0715	1.0715	0
18	30	Unbiased	1.0698	1.0704	0.0006
19	30	Unbiased	1.0812	1.08	-0.0012
20	30	Unbiased	1.076	1.0758	-0.0002
26	50	Unbiased	1.0741	1.0718	-0.0023
27	50	Unbiased	1.0815	1.0796	-0.0019
28	50	Unbiased	1.0777	1.0784	0.0007
29	50	Unbiased	1.0725	1.0694	-0.0031
30	50	Unbiased	1.0696	1.0681	-0.0015
88	50	Biased-84Hr-Anneal	1.0768	1.0763	-0.0005
89	50	Biased-84Hr-Anneal	1.0834	1.0838	0.0004
90	50	Biased-84Hr-Anneal	1.081	1.0807	-0.0003
91	50	Biased-84Hr-Anneal	1.0759	1.073	-0.0029
92	50	Biased-84Hr-Anneal	1.0738	1.0742	0.0004
100	0	CORRELATION	1.0781	1.0778	-0.0003
101	0	CORRELATION	1.0696	1.0695	-0.0001
102	0	CORRELATION	1.0769	1.0764	-0.0005
103	0	CORRELATION	1.086	1.0856	-0.0004
104	0	CORRELATION	1.0796	1.0795	-0.0001

TID vs Post - Pre Exposure Delta

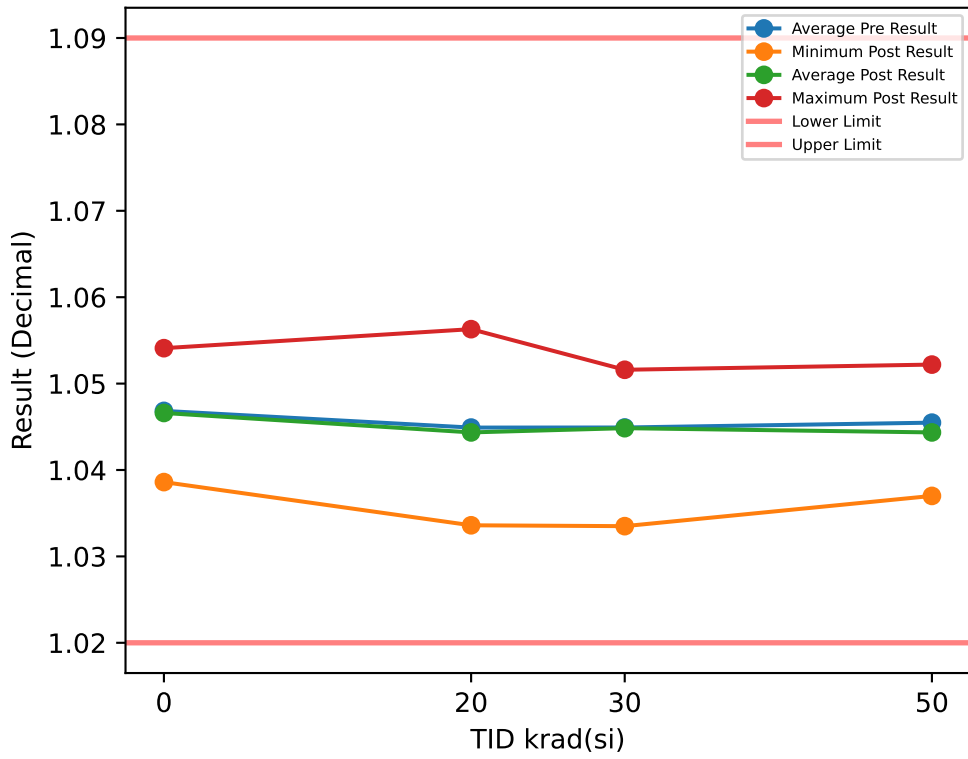


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0696	1.078	1.086	0.0058807	1.0695	1.0778	1.0856	0.0058003	-0.0005	-0.00028	-0.0001	0.00017889
20	1.065	1.076	1.0899	0.0065654	1.0647	1.0755	1.0882	0.0062992	-0.0018	-0.00053	0.0005	0.00089325
30	1.0643	1.076	1.0833	0.006317	1.0644	1.0761	1.083	0.0062116	-0.0012	2e-05	0.0015	0.00069889
50	1.0696	1.0766	1.0834	0.004362	1.0681	1.0755	1.0838	0.005114	-0.0031	-0.0011	0.0007	0.0014228

Device Test: 23.13 THRESHOLD|FALL/PWRGD/5////@VSENSE_VTH_FALLING_GOOD

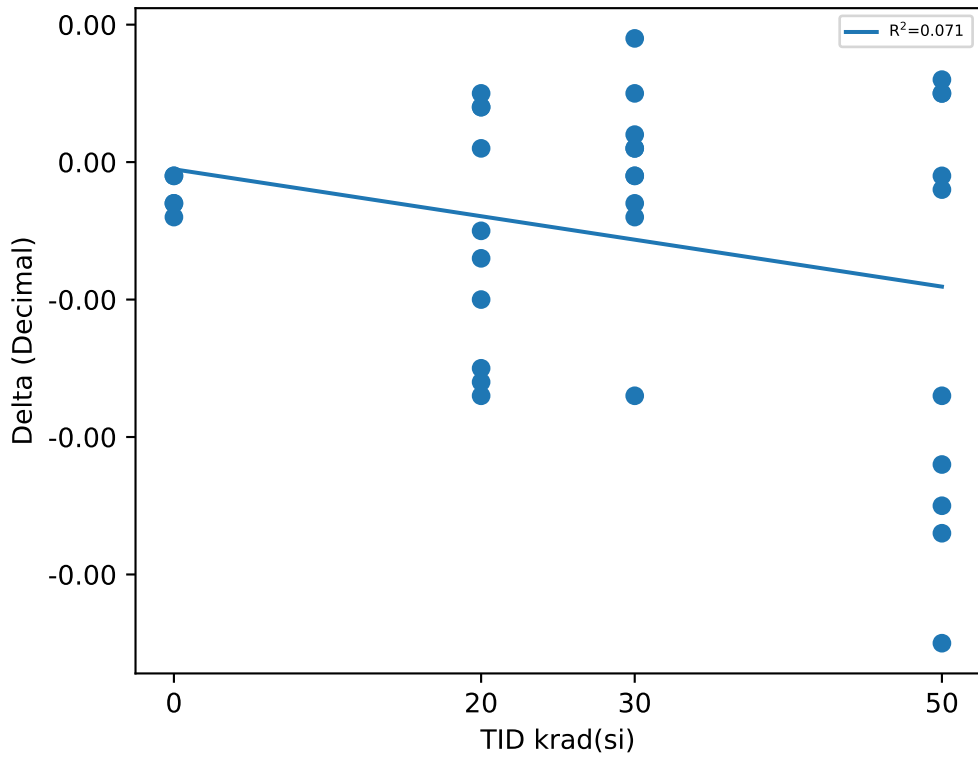
TID vs Result Stats



Test Results (Lower Limit = 1.02, Upper Limit = 1.09 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0466	1.0451	-0.0015
2	20	Biased	1.0463	1.0456	-0.0007
3	20	Biased	1.0409	1.0413	0.0004
4	20	Biased	1.058	1.0563	-0.0017
5	20	Biased	1.0396	1.0386	-0.001
6	20	Unbiased	1.0341	1.0336	-0.0005
7	20	Unbiased	1.0439	1.0443	0.0004
8	20	Unbiased	1.0498	1.0503	0.0005
9	20	Unbiased	1.0454	1.0455	0.0001
10	20	Unbiased	1.0445	1.0429	-0.0016
11	30	Biased	1.0516	1.0513	-0.0003
12	30	Biased	1.0431	1.0433	0.0002
13	30	Biased	1.0504	1.0513	0.0009
14	30	Biased	1.052	1.0516	-0.0004
15	30	Biased	1.0441	1.044	-0.0001
16	30	Unbiased	1.0334	1.0335	0.0001
17	30	Unbiased	1.0407	1.0408	0.0001
18	30	Unbiased	1.039	1.0395	0.0005
19	30	Unbiased	1.05	1.0483	-0.0017
20	30	Unbiased	1.0449	1.0448	-0.0001
26	50	Unbiased	1.0432	1.0407	-0.0025
27	50	Unbiased	1.0504	1.0482	-0.0022
28	50	Unbiased	1.0466	1.0471	0.0005
29	50	Unbiased	1.0418	1.0383	-0.0035
30	50	Unbiased	1.0387	1.037	-0.0017
88	50	Biased-84Hr-Anneal	1.0454	1.0452	-0.0002
89	50	Biased-84Hr-Anneal	1.0517	1.0522	0.0005
90	50	Biased-84Hr-Anneal	1.0497	1.0496	-0.0001
91	50	Biased-84Hr-Anneal	1.0448	1.0421	-0.0027
92	50	Biased-84Hr-Anneal	1.0425	1.0431	0.0006
100	0	CORRELATION	1.0468	1.0465	-0.0003
101	0	CORRELATION	1.0387	1.0386	-0.0001
102	0	CORRELATION	1.0458	1.0454	-0.0004
103	0	CORRELATION	1.0544	1.0541	-0.0003
104	0	CORRELATION	1.0485	1.0484	-0.0001

TID vs Post - Pre Exposure Delta

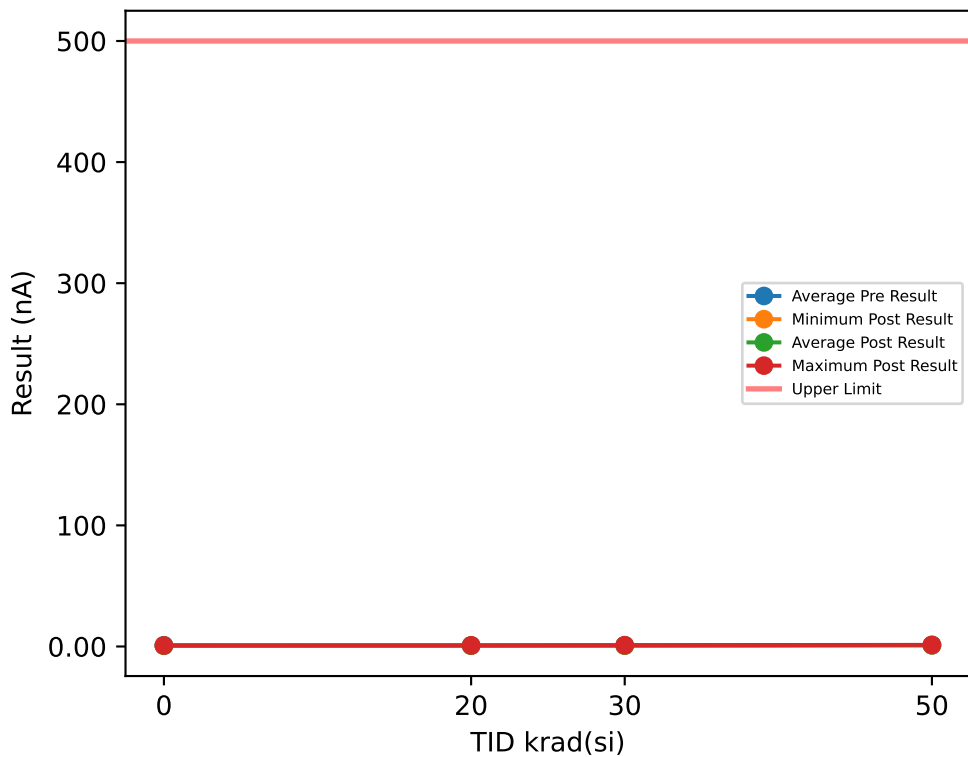


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0387	1.0468	1.0544	0.0056403	1.0386	1.0466	1.0541	0.0055888	-0.0004	-0.00024	-0.0001	0.00013416
20	1.0341	1.0449	1.058	0.0063474	1.0336	1.0444	1.0563	0.0061616	-0.0017	-0.00056	0.0005	0.00087458
30	1.0334	1.0449	1.052	0.0061476	1.0335	1.0448	1.0516	0.0059409	-0.0017	-8e-05	0.0009	0.00068443
50	1.0387	1.0455	1.0517	0.0041635	1.037	1.0444	1.0522	0.0049762	-0.0035	-0.00113	0.0006	0.0015514

Device Test: 23.14 LEAK|MAX/PWRGD/5////@PWRGD_OUTPUT_HIGH_LEAK

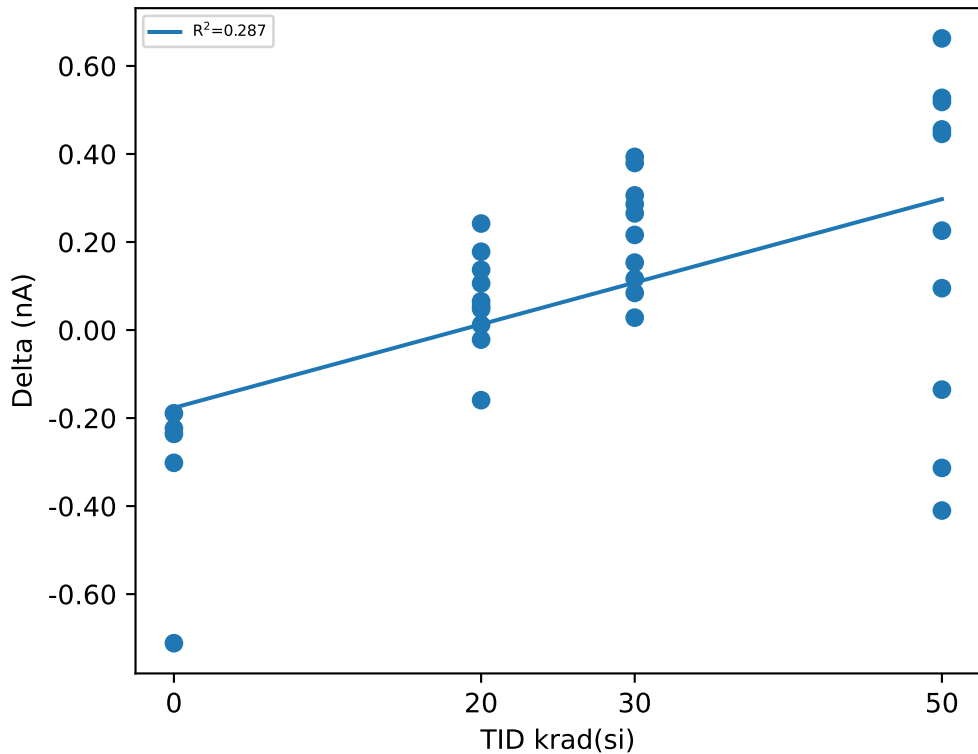
TID vs Result Stats



Test Results (Upper Limit = 500.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6394	0.7763	0.1369
2	20	Biased	0.7098	0.7576	0.0478
3	20	Biased	0.7159	0.822	0.1061
4	20	Biased	0.616	0.7939	0.1779
5	20	Biased	0.7172	0.7825	0.0653
6	20	Unbiased	0.8784	0.8907	0.0123
7	20	Unbiased	0.7783	0.7565	-0.0218
8	20	Unbiased	0.7814	0.8354	0.054
9	20	Unbiased	0.683	0.925	0.242
10	20	Unbiased	0.8128	0.6534	-0.1594
11	30	Biased	0.719	0.8354	0.1164
12	30	Biased	0.6191	1.0125	0.3934
13	30	Biased	0.711	0.9969	0.2859
14	30	Biased	0.816	0.9692	0.1532
15	30	Biased	0.7128	0.7409	0.0281
16	30	Unbiased	0.7252	0.8095	0.0843
17	30	Unbiased	0.515	0.8945	0.3795
18	30	Unbiased	0.816	1.0811	0.2651
19	30	Unbiased	0.6222	0.9282	0.306
20	30	Unbiased	0.6815	0.8976	0.2161
26	50	Unbiased	0.7879	1.2336	0.4457
27	50	Unbiased	0.8033	1.3215	0.5182
28	50	Unbiased	0.7034	1.1592	0.4558
29	50	Unbiased	0.5586	1.2212	0.6626
30	50	Unbiased	0.6317	1.1592	0.5275
88	50	Biased-84Hr-Anneal	1.1416	1.2367	0.0951
89	50	Biased-84Hr-Anneal	1.2883	1.1529	-0.1354
90	50	Biased-84Hr-Anneal	1.4163	1.0062	-0.4101
91	50	Biased-84Hr-Anneal	1.4194	1.1061	-0.3133
92	50	Biased-84Hr-Anneal	0.846	1.0718	0.2258
100	0	CORRELATION	1.0145	0.7128	-0.3017
101	0	CORRELATION	0.802	0.566	-0.236
102	0	CORRELATION	1.41	0.6985	-0.7115
103	0	CORRELATION	0.793	0.5692	-0.2238
104	0	CORRELATION	1.0206	0.8314	-0.1892

TID vs Post - Pre Exposure Delta

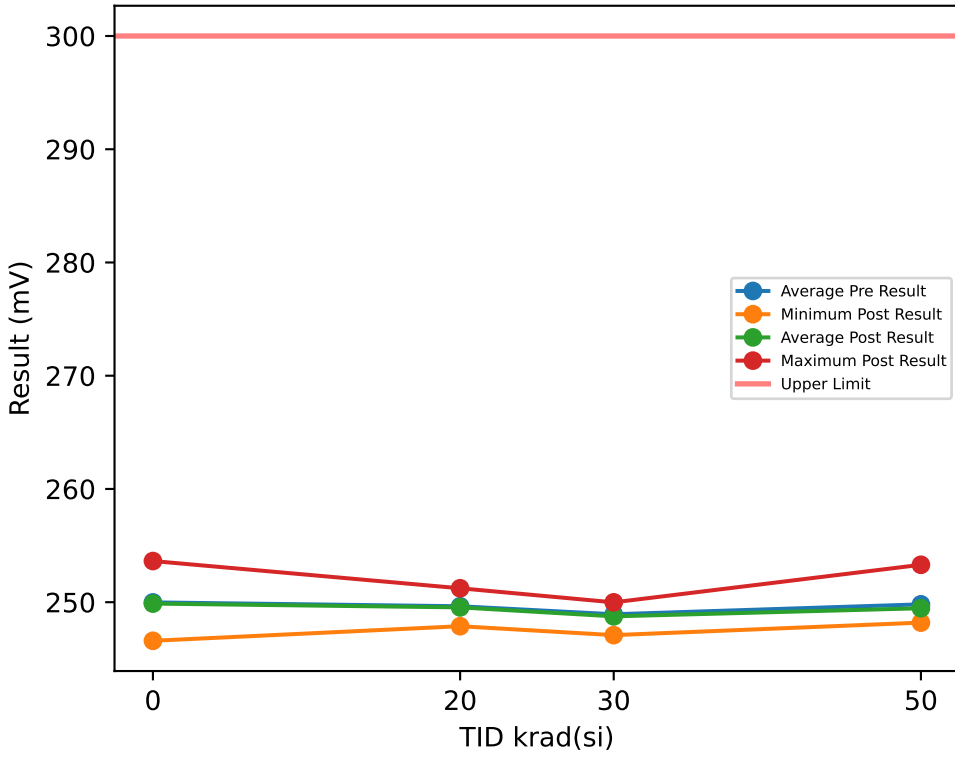


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.793	1.008	1.41	0.25023	0.566	0.67558	0.8314	0.11126	-0.7115	-0.33244	-0.1892	0.21578
20	0.616	0.73322	0.8784	0.080231	0.6534	0.79933	0.925	0.075771	-0.1594	0.06611	0.242	0.11156
30	0.515	0.69378	0.816	0.091269	0.7409	0.91658	1.0811	0.10295	0.0281	0.2228	0.3934	0.12457
50	0.5586	0.95965	1.4194	0.32693	1.0062	1.1668	1.3215	0.091318	-0.4101	0.20719	0.6626	0.38118

Device Test: 23.15 VOL|2mA/PWRGD/5////@PWRGD_OUTPUT_LOW

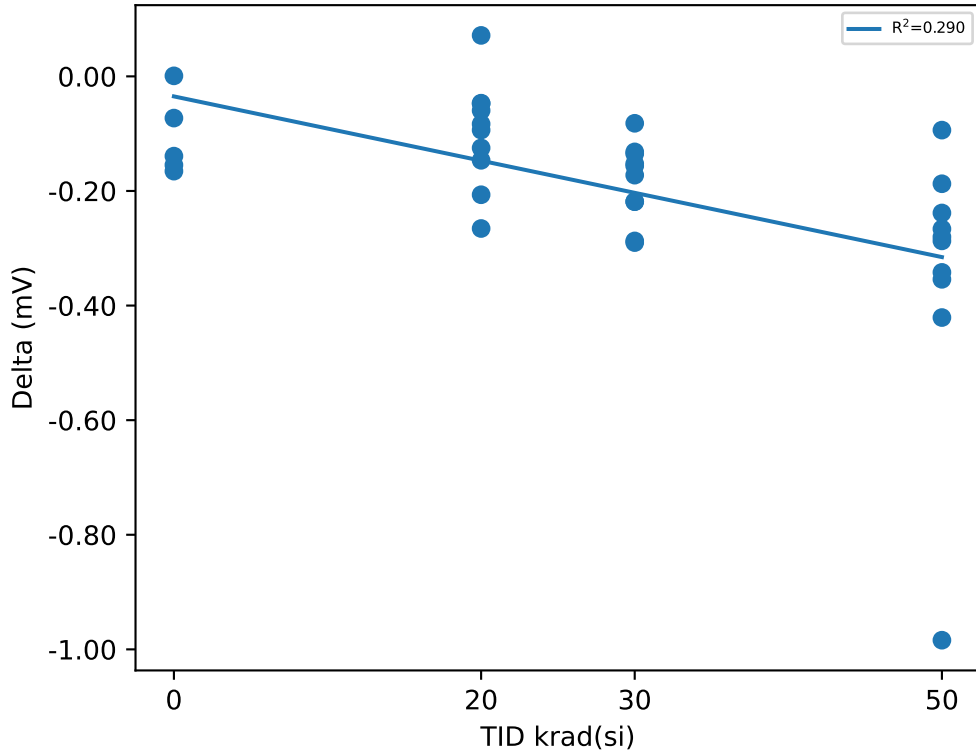
TID vs Result Stats



Test Results (Upper Limit = 300.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	248.54	248.41	-0.1249
2	20	Biased	250.09	250.04	-0.0475
3	20	Biased	250.97	250.88	-0.0937
4	20	Biased	251.28	251.23	-0.0468
5	20	Biased	249.99	249.73	-0.2655
6	20	Unbiased	248.03	247.88	-0.1465
7	20	Unbiased	249.72	249.79	0.0715
8	20	Unbiased	250.06	249.85	-0.2066
9	20	Unbiased	248.15	248.07	-0.0831
10	20	Unbiased	249.6	249.54	-0.0596
11	30	Biased	250.06	249.93	-0.1351
12	30	Biased	250.01	249.72	-0.2901
13	30	Biased	247.24	247.09	-0.1524
14	30	Biased	249.65	249.48	-0.1724
15	30	Biased	248.61	248.39	-0.2186
16	30	Unbiased	248.97	248.81	-0.1562
17	30	Unbiased	248.93	248.71	-0.2186
18	30	Unbiased	250.27	249.99	-0.2872
19	30	Unbiased	248.38	248.25	-0.1318
20	30	Unbiased	247.22	247.13	-0.0819
26	50	Unbiased	249.02	248.76	-0.2663
27	50	Unbiased	249.03	248.85	-0.1874
28	50	Unbiased	249.29	249.2	-0.0938
29	50	Unbiased	254.29	253.3	-0.984
30	50	Unbiased	248.59	248.3	-0.2871
88	50	Biased-84Hr-Anneal	248.62	248.2	-0.4209
89	50	Biased-84Hr-Anneal	249.65	249.41	-0.2384
90	50	Biased-84Hr-Anneal	250.08	249.73	-0.3542
91	50	Biased-84Hr-Anneal	248.77	248.49	-0.2802
92	50	Biased-84Hr-Anneal	250.75	250.41	-0.3421
100	0	CORRELATION	250.73	250.58	-0.1547
101	0	CORRELATION	253.8	253.63	-0.1654
102	0	CORRELATION	248.77	248.77	0.0009
103	0	CORRELATION	249.94	249.8	-0.1392
104	0	CORRELATION	246.66	246.59	-0.0728

TID vs Post - Pre Exposure Delta

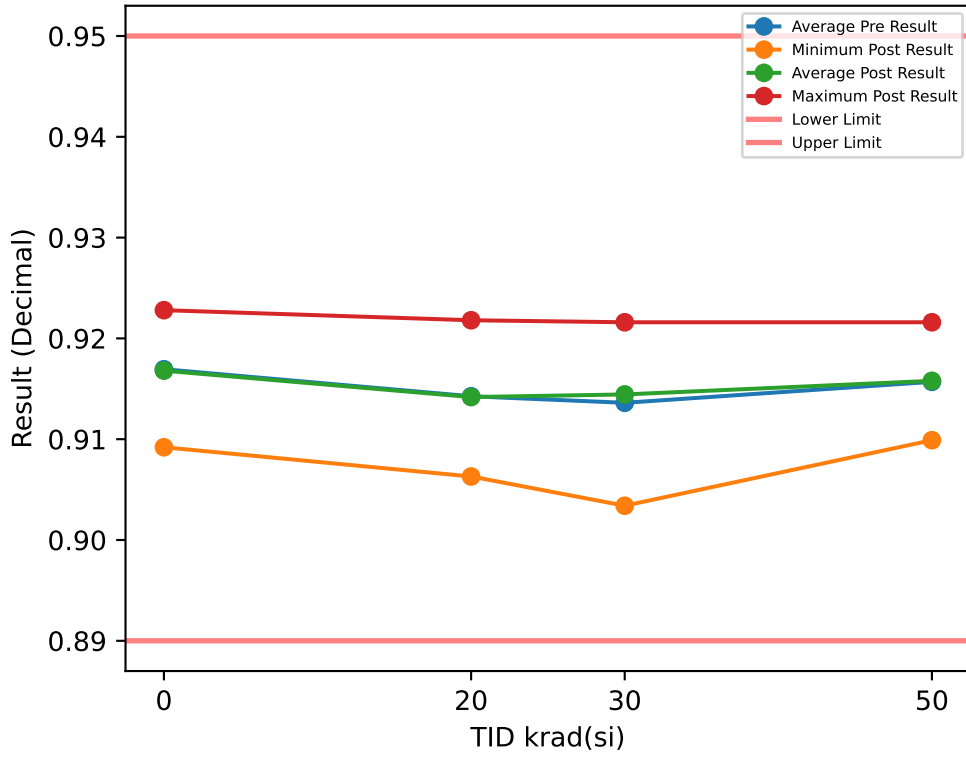


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	246.66	249.98	253.8	2.6275	246.59	249.88	253.63	2.5803	-0.1654	-0.10624	0.0009	0.069878
20	248.03	249.64	251.28	1.1053	247.88	249.54	251.23	1.1197	-0.2655	-0.10027	0.0715	0.093388
30	247.22	248.93	250.27	1.104	247.09	248.75	249.99	1.0615	-0.2901	-0.18443	-0.0819	0.068106
50	248.59	249.81	254.29	1.7163	248.2	249.46	253.3	1.5114	-0.984	-0.34544	-0.0938	0.24203

Device Test: 23.17 THRESHOLD|FALL/PWRGD/12////@VSENSE_VTH_FALLING_FAULT

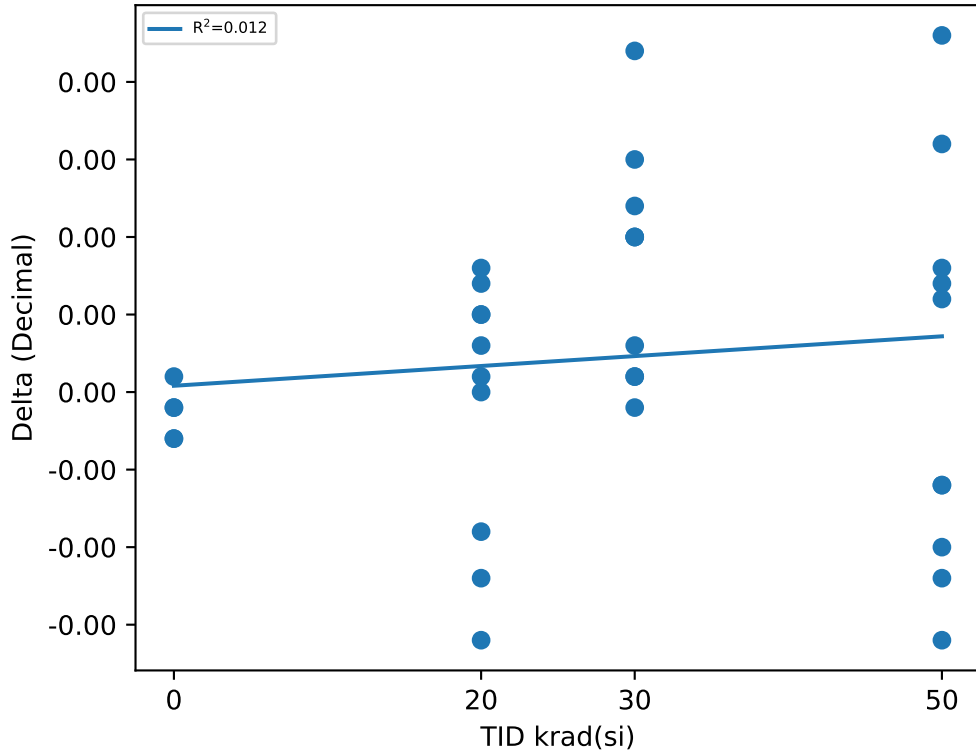
TID vs Result Stats



Test Results (Lower Limit = 0.89, Upper Limit = 0.95 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9169	0.9157	-0.0012
2	20	Biased	0.9149	0.9156	0.0007
3	20	Biased	0.9098	0.9103	0.0005
4	20	Biased	0.9234	0.9218	-0.0016
5	20	Biased	0.91	0.9101	0.0001
6	20	Unbiased	0.9063	0.9063	0
7	20	Unbiased	0.9154	0.9162	0.0008
8	20	Unbiased	0.9183	0.9186	0.0003
9	20	Unbiased	0.9139	0.9144	0.0005
10	20	Unbiased	0.9137	0.9128	-0.0009
11	30	Biased	0.9189	0.9199	0.001
12	30	Biased	0.9149	0.9159	0.001
13	30	Biased	0.9194	0.9216	0.0022
14	30	Biased	0.9176	0.9186	0.001
15	30	Biased	0.9131	0.9143	0.0012
16	30	Unbiased	0.9019	0.9034	0.0015
17	30	Unbiased	0.91	0.9101	0.0001
18	30	Unbiased	0.9092	0.9093	0.0001
19	30	Unbiased	0.9165	0.9168	0.0003
20	30	Unbiased	0.9146	0.9145	-0.0001
26	50	Unbiased	0.9155	0.9139	-0.0016
27	50	Unbiased	0.918	0.917	-0.001
28	50	Unbiased	0.9165	0.9173	0.0008
29	50	Unbiased	0.9122	0.9116	-0.0006
30	50	Unbiased	0.9105	0.9099	-0.0006
88	50	Biased-84Hr-Anneal	0.9145	0.9151	0.0006
89	50	Biased-84Hr-Anneal	0.9193	0.9216	0.0023
90	50	Biased-84Hr-Anneal	0.9188	0.9195	0.0007
91	50	Biased-84Hr-Anneal	0.9159	0.9147	-0.0012
92	50	Biased-84Hr-Anneal	0.9157	0.9173	0.0016
100	0	CORRELATION	0.9178	0.9177	-0.0001
101	0	CORRELATION	0.9093	0.9092	-0.0001
102	0	CORRELATION	0.9172	0.9169	-0.0003
103	0	CORRELATION	0.9231	0.9228	-0.0003
104	0	CORRELATION	0.9173	0.9174	0.0001

TID vs Post - Pre Exposure Delta

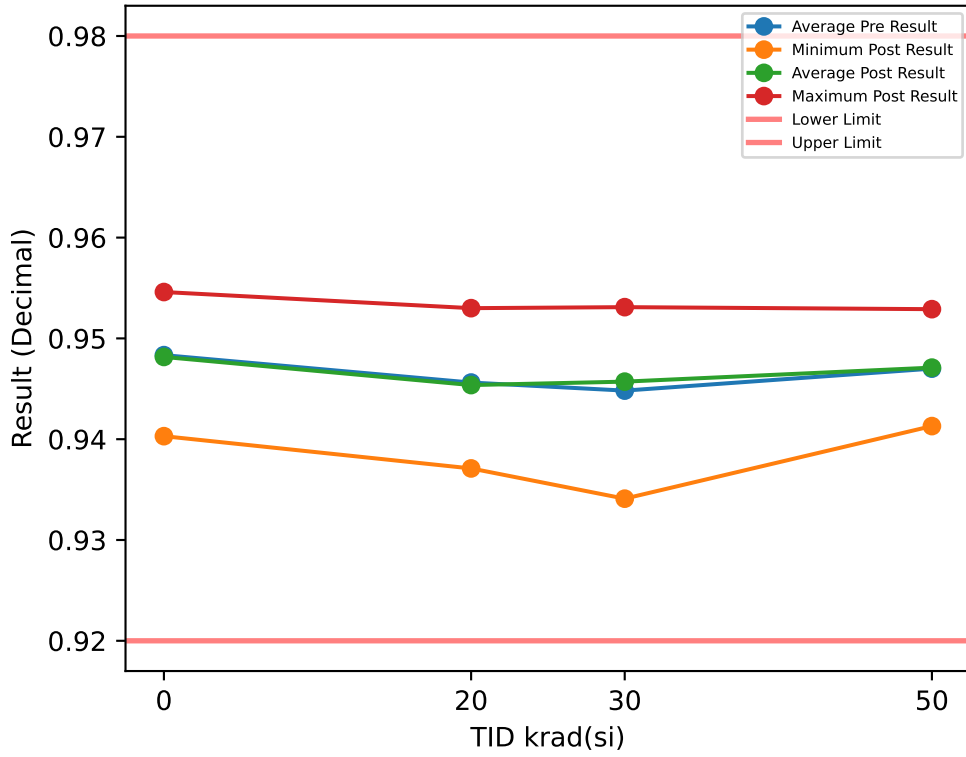


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9093	0.91694	0.9231	0.0049308	0.9092	0.9168	0.9228	0.0048719	-0.0003	-0.00014	0.0001	0.00016733
20	0.9063	0.91426	0.9234	0.0048349	0.9063	0.91418	0.9218	0.0044939	-0.0016	-8e-05	0.0008	0.00084827
30	0.9019	0.91361	0.9194	0.0053571	0.9034	0.91444	0.9216	0.00551	-0.0001	0.00083	0.0022	0.00072732
50	0.9105	0.91569	0.9193	0.0027751	0.9099	0.91579	0.9216	0.0035123	-0.0016	0.0001	0.0023	0.0012893

Device Test: 23.18 THRESHOLD|RISE/PWRGD/12////@VSENSE_VTH_RISING_GOOD

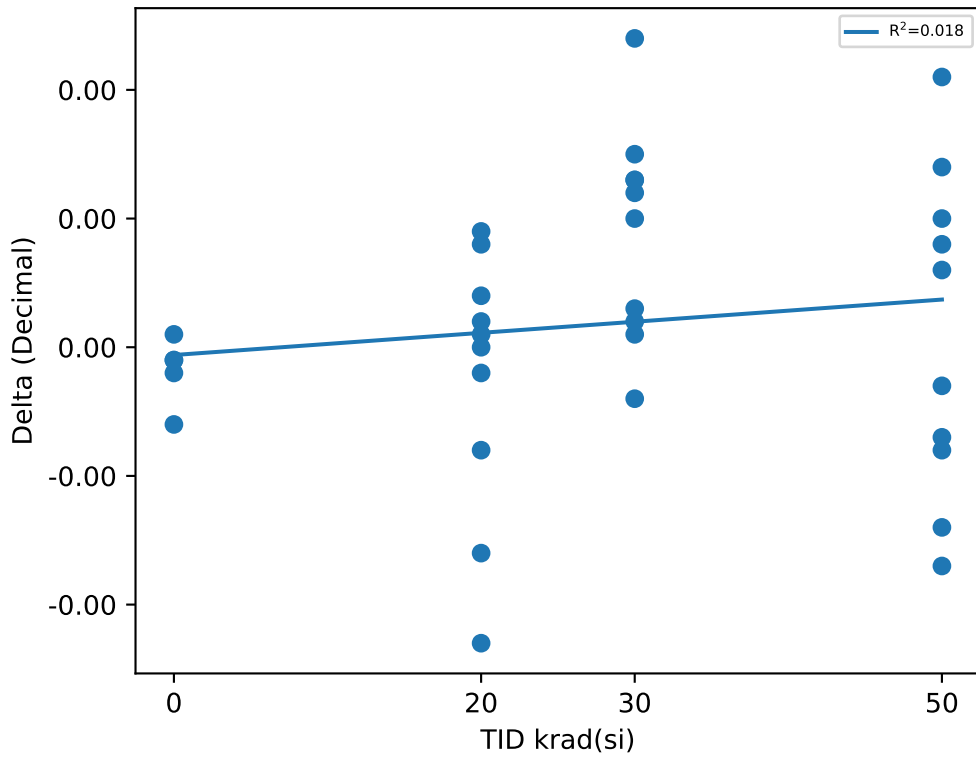
TID vs Result Stats



Test Results (Lower Limit = 0.92, Upper Limit = 0.98 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9484	0.9468	-0.0016
2	20	Biased	0.9462	0.9464	0.0002
3	20	Biased	0.9413	0.9414	0.0001
4	20	Biased	0.9553	0.953	-0.0023
5	20	Biased	0.9411	0.9415	0.0004
6	20	Unbiased	0.9373	0.9371	-0.0002
7	20	Unbiased	0.9469	0.9477	0.0008
8	20	Unbiased	0.9499	0.9499	0
9	20	Unbiased	0.945	0.9459	0.0009
10	20	Unbiased	0.9448	0.944	-0.0008
11	30	Biased	0.9504	0.9517	0.0013
12	30	Biased	0.9459	0.9474	0.0015
13	30	Biased	0.9507	0.9531	0.0024
14	30	Biased	0.9489	0.9499	0.001
15	30	Biased	0.9444	0.9456	0.0012
16	30	Unbiased	0.9328	0.9341	0.0013
17	30	Unbiased	0.9412	0.9413	0.0001
18	30	Unbiased	0.9402	0.9405	0.0003
19	30	Unbiased	0.9478	0.948	0.0002
20	30	Unbiased	0.9459	0.9455	-0.0004
26	50	Unbiased	0.9466	0.9449	-0.0017
27	50	Unbiased	0.9492	0.9485	-0.0007
28	50	Unbiased	0.9478	0.9488	0.001
29	50	Unbiased	0.9435	0.9427	-0.0008
30	50	Unbiased	0.9416	0.9413	-0.0003
88	50	Biased-84Hr-Anneal	0.9456	0.9462	0.0006
89	50	Biased-84Hr-Anneal	0.9508	0.9529	0.0021
90	50	Biased-84Hr-Anneal	0.9505	0.9513	0.0008
91	50	Biased-84Hr-Anneal	0.9472	0.9458	-0.0014
92	50	Biased-84Hr-Anneal	0.9472	0.9486	0.0014
100	0	CORRELATION	0.9493	0.9492	-0.0001
101	0	CORRELATION	0.9404	0.9403	-0.0001
102	0	CORRELATION	0.9484	0.9478	-0.0006
103	0	CORRELATION	0.9548	0.9546	-0.0002
104	0	CORRELATION	0.9488	0.9489	0.0001

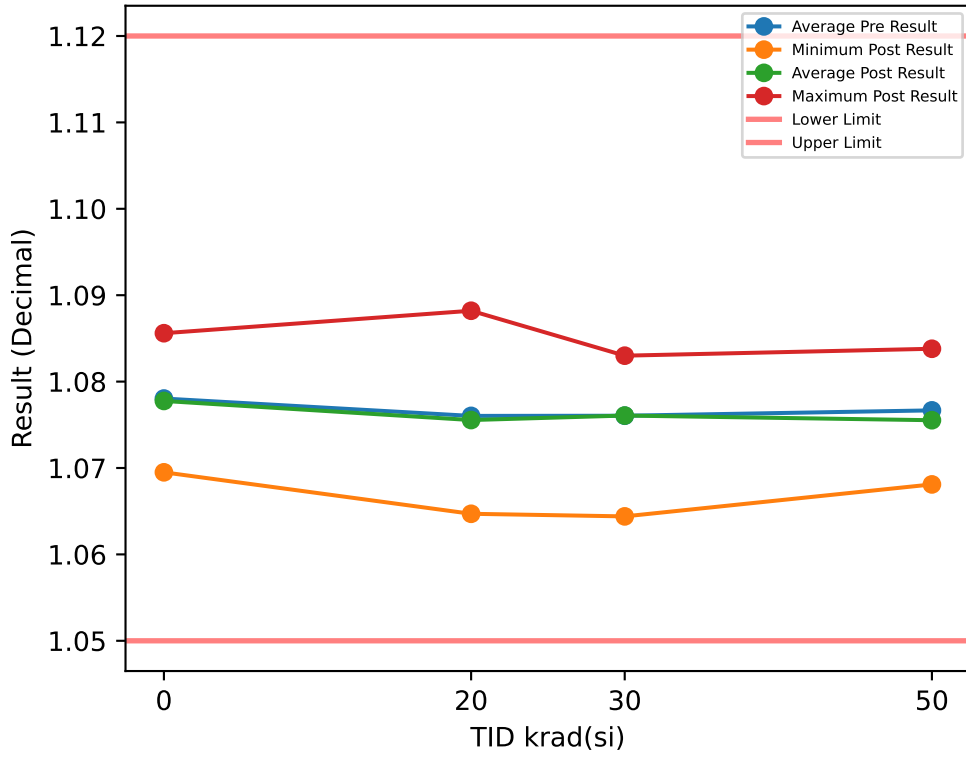
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9404	0.94834	0.9548	0.0051457	0.9403	0.94816	0.9546	0.0051238	-0.0006	-0.00018	0.0001	0.00025884
20	0.9373	0.94562	0.9553	0.0050673	0.9371	0.94537	0.953	0.0045773	-0.0023	-0.00025	0.0009	0.0010309
30	0.9328	0.94482	0.9507	0.0055043	0.9341	0.94571	0.9531	0.0057503	-0.0004	0.00089	0.0024	0.0008306
50	0.9416	0.947	0.9508	0.0029017	0.9413	0.9471	0.9529	0.003632	-0.0017	0.0001	0.0021	0.0012623

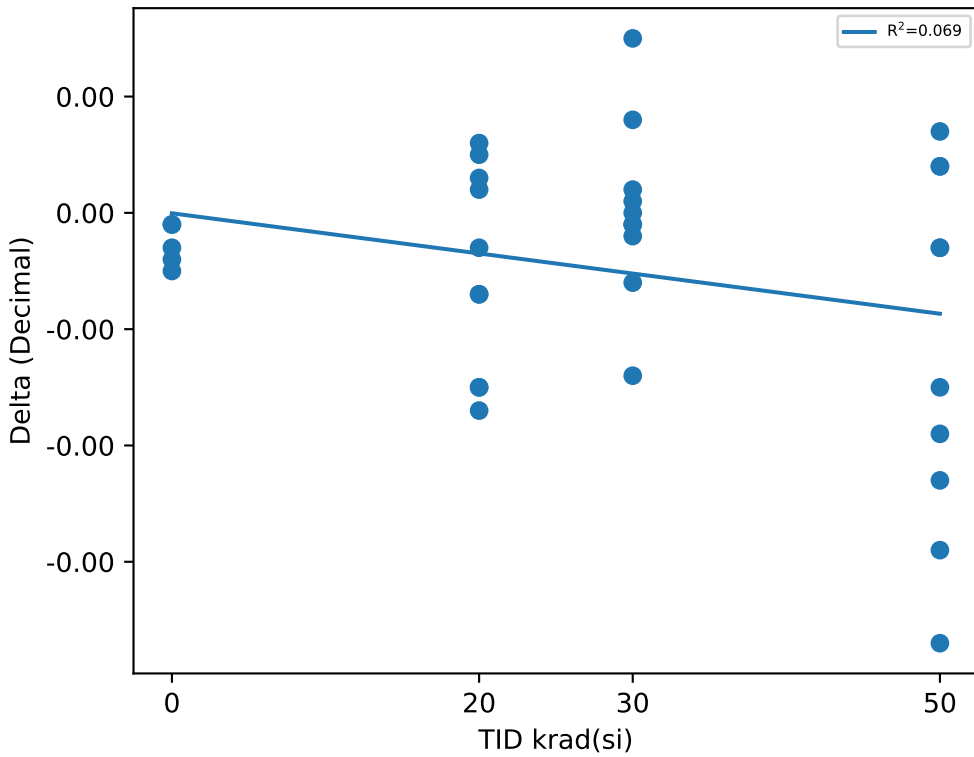
TID vs Result Stats



Test Results (Lower Limit = 1.05, Upper Limit = 1.12 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0777	1.0762	-0.0015
2	20	Biased	1.0775	1.0768	-0.0007
3	20	Biased	1.0722	1.0724	0.0002
4	20	Biased	1.0899	1.0882	-0.0017
5	20	Biased	1.0705	1.0698	-0.0007
6	20	Unbiased	1.065	1.0647	-0.0003
7	20	Unbiased	1.0747	1.0752	0.0005
8	20	Unbiased	1.0807	1.0813	0.0006
9	20	Unbiased	1.0763	1.0766	0.0003
10	20	Unbiased	1.0758	1.0743	-0.0015
11	30	Biased	1.0831	1.083	-0.0001
12	30	Biased	1.0746	1.0748	0.0002
13	30	Biased	1.0815	1.083	0.0015
14	30	Biased	1.0833	1.0827	-0.0006
15	30	Biased	1.0752	1.0751	-0.0001
16	30	Unbiased	1.0643	1.0644	0.0001
17	30	Unbiased	1.0715	1.0715	0
18	30	Unbiased	1.0698	1.0706	0.0008
19	30	Unbiased	1.0812	1.0798	-0.0014
20	30	Unbiased	1.076	1.0758	-0.0002
26	50	Unbiased	1.0741	1.0718	-0.0023
27	50	Unbiased	1.0815	1.0796	-0.0019
28	50	Unbiased	1.0777	1.0784	0.0007
29	50	Unbiased	1.0729	1.0692	-0.0037
30	50	Unbiased	1.0696	1.0681	-0.0015
88	50	Biased-84Hr-Anneal	1.0768	1.0765	-0.0003
89	50	Biased-84Hr-Anneal	1.0834	1.0838	0.0004
90	50	Biased-84Hr-Anneal	1.081	1.0807	-0.0003
91	50	Biased-84Hr-Anneal	1.0759	1.073	-0.0029
92	50	Biased-84Hr-Anneal	1.0738	1.0742	0.0004
100	0	CORRELATION	1.0781	1.0778	-0.0003
101	0	CORRELATION	1.0696	1.0695	-0.0001
102	0	CORRELATION	1.0769	1.0764	-0.0005
103	0	CORRELATION	1.086	1.0856	-0.0004
104	0	CORRELATION	1.0796	1.0795	-0.0001

TID vs Post - Pre Exposure Delta

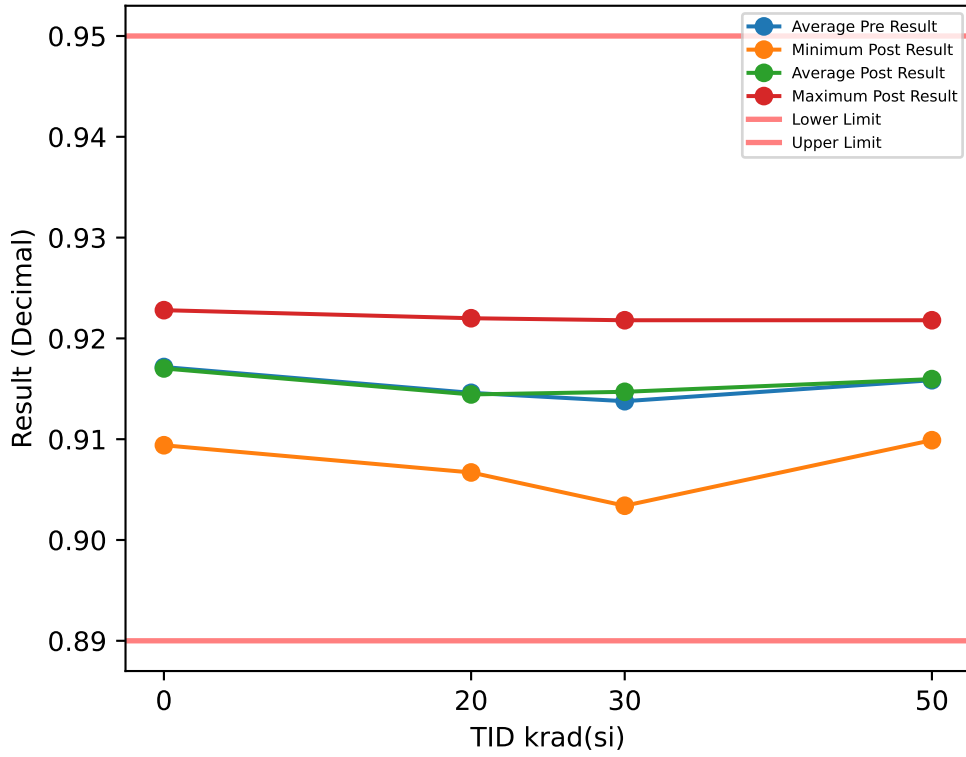


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0696	1.078	1.086	0.0058807	1.0695	1.0778	1.0856	0.0058003	-0.0005	-0.00028	-0.0001	0.00017889
20	1.065	1.076	1.0899	0.0065654	1.0647	1.0756	1.0882	0.0063119	-0.0017	-0.00048	0.0006	0.00087534
30	1.0643	1.076	1.0833	0.006317	1.0644	1.0761	1.083	0.0061783	-0.0014	2e-05	0.0015	0.00076855
50	1.0696	1.0767	1.0834	0.0043215	1.0681	1.0755	1.0838	0.0051448	-0.0037	-0.00114	0.0007	0.0015364

Device Test: 23.2 THRESHOLD|FALL/PWRGD/4.5////@VSENSE_VTH_FALLING_FAULT

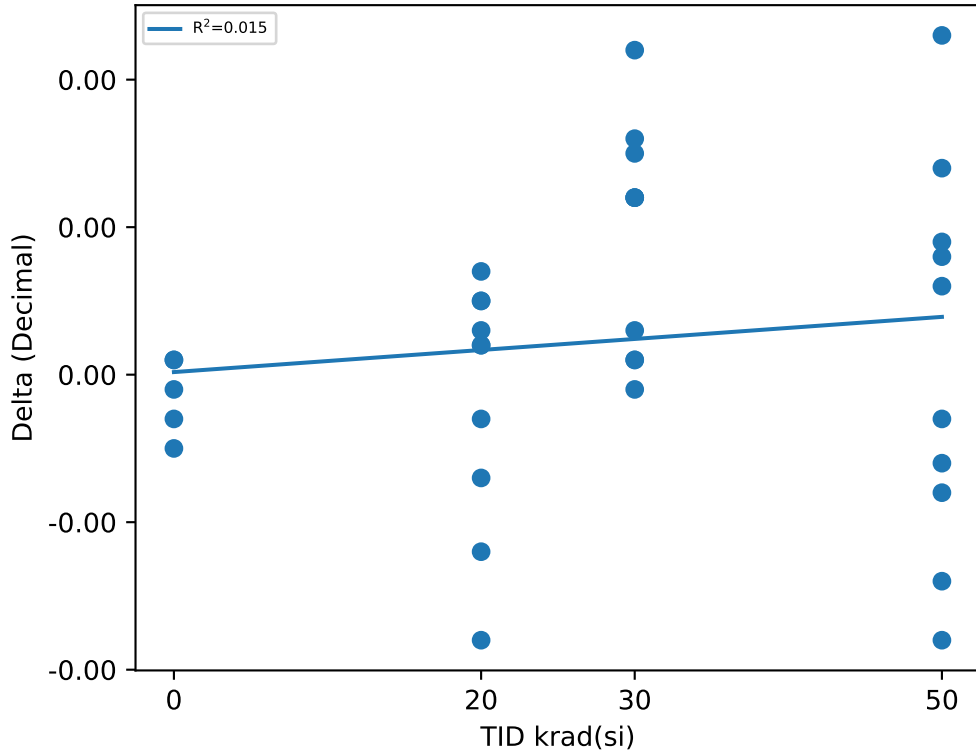
TID vs Result Stats



Test Results (Lower Limit = 0.89, Upper Limit = 0.95 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9173	0.9161	-0.0012
2	20	Biased	0.9151	0.9156	0.0005
3	20	Biased	0.91	0.9103	0.0003
4	20	Biased	0.9238	0.922	-0.0018
5	20	Biased	0.9106	0.9103	-0.0003
6	20	Unbiased	0.9065	0.9067	0.0002
7	20	Unbiased	0.9159	0.9166	0.0007
8	20	Unbiased	0.9188	0.919	0.0002
9	20	Unbiased	0.9143	0.9148	0.0005
10	20	Unbiased	0.9137	0.913	-0.0007
11	30	Biased	0.9191	0.9203	0.0012
12	30	Biased	0.9149	0.9165	0.0016
13	30	Biased	0.9196	0.9218	0.0022
14	30	Biased	0.9178	0.919	0.0012
15	30	Biased	0.9133	0.9145	0.0012
16	30	Unbiased	0.9019	0.9034	0.0015
17	30	Unbiased	0.9104	0.9105	0.0001
18	30	Unbiased	0.9092	0.9093	0.0001
19	30	Unbiased	0.9167	0.917	0.0003
20	30	Unbiased	0.9148	0.9147	-0.0001
26	50	Unbiased	0.9157	0.9139	-0.0018
27	50	Unbiased	0.918	0.9172	-0.0008
28	50	Unbiased	0.9167	0.9175	0.0008
29	50	Unbiased	0.9124	0.9121	-0.0003
30	50	Unbiased	0.9105	0.9099	-0.0006
88	50	Biased-84Hr-Anneal	0.9145	0.9151	0.0006
89	50	Biased-84Hr-Anneal	0.9195	0.9218	0.0023
90	50	Biased-84Hr-Anneal	0.9192	0.9201	0.0009
91	50	Biased-84Hr-Anneal	0.9161	0.9147	-0.0014
92	50	Biased-84Hr-Anneal	0.9159	0.9173	0.0014
100	0	CORRELATION	0.9182	0.9181	-0.0001
101	0	CORRELATION	0.9093	0.9094	0.0001
102	0	CORRELATION	0.9174	0.9169	-0.0005
103	0	CORRELATION	0.9231	0.9228	-0.0003
104	0	CORRELATION	0.9178	0.9179	0.0001

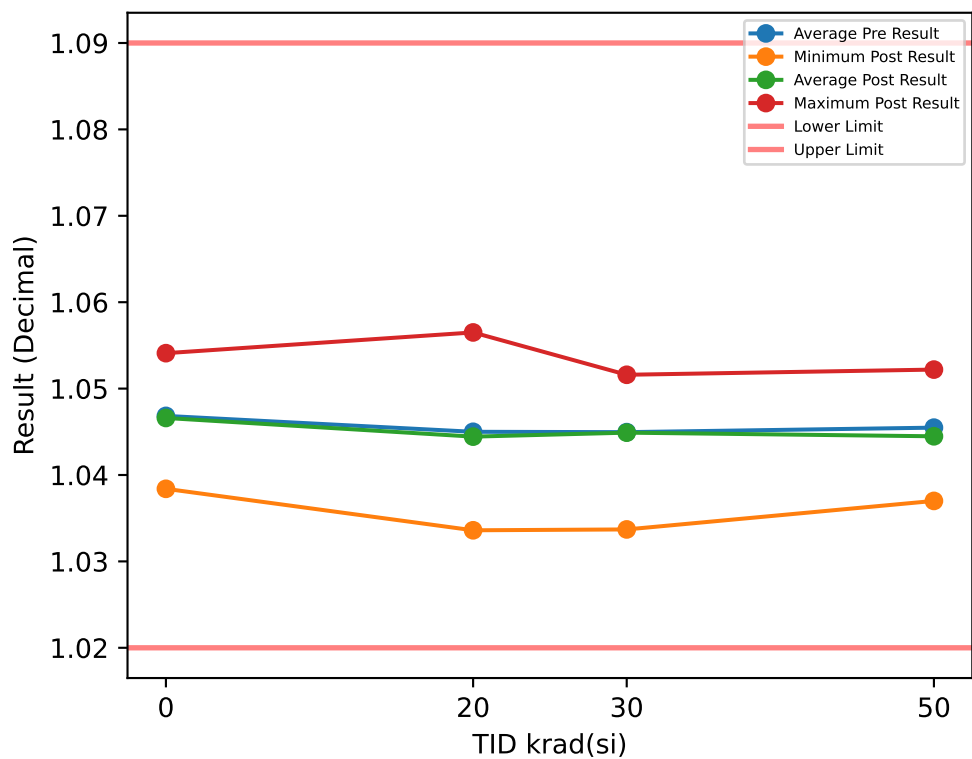
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9093	0.91716	0.9231	0.0049652	0.9094	0.91702	0.9228	0.0048329	-0.0005	-0.00014	0.0001	0.00026077
20	0.9065	0.9146	0.9238	0.0048897	0.9067	0.91444	0.922	0.0045105	-0.0018	-0.00016	0.0007	0.00082758
30	0.9019	0.91377	0.9196	0.0054049	0.9034	0.9147	0.9218	0.0056107	-0.0001	0.00093	0.0022	0.00077753
50	0.9105	0.91585	0.9195	0.0028348	0.9099	0.91596	0.9218	0.0035768	-0.0018	0.00011	0.0023	0.0013008

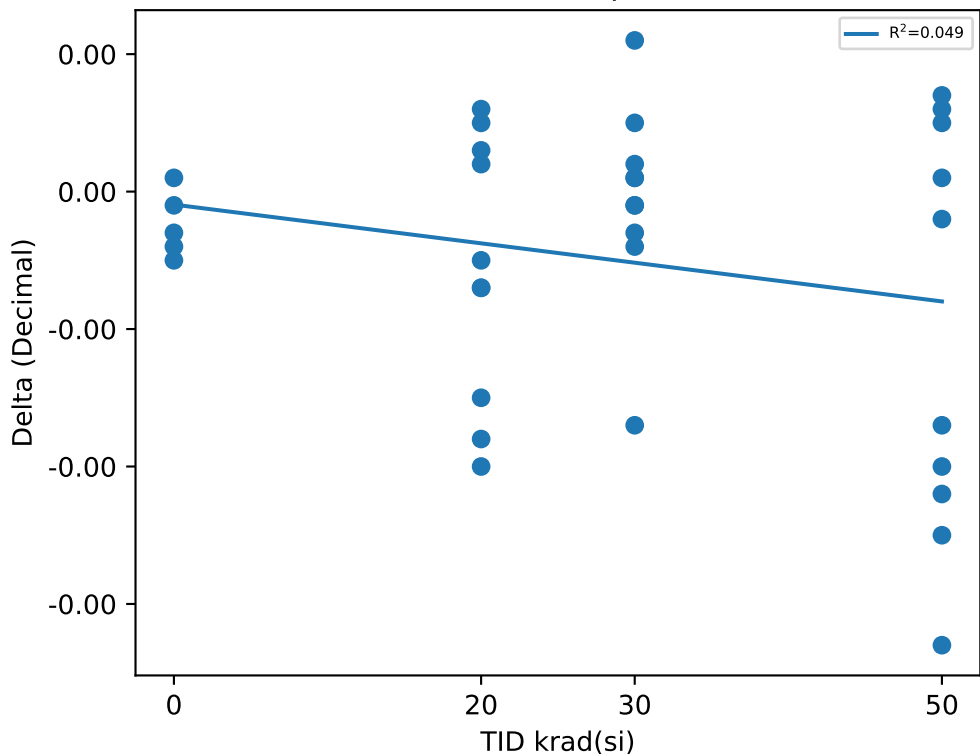
TID vs Result Stats



Test Results (Lower Limit = 1.02, Upper Limit = 1.09 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0471	1.0451	-0.002
2	20	Biased	1.0463	1.0456	-0.0007
3	20	Biased	1.0411	1.0413	0.0002
4	20	Biased	1.058	1.0565	-0.0015
5	20	Biased	1.0396	1.0389	-0.0007
6	20	Unbiased	1.0341	1.0336	-0.0005
7	20	Unbiased	1.0439	1.0445	0.0006
8	20	Unbiased	1.0498	1.0503	0.0005
9	20	Unbiased	1.0454	1.0457	0.0003
10	20	Unbiased	1.0447	1.0429	-0.0018
11	30	Biased	1.0518	1.0515	-0.0003
12	30	Biased	1.0431	1.0433	0.0002
13	30	Biased	1.0502	1.0513	0.0011
14	30	Biased	1.052	1.0516	-0.0004
15	30	Biased	1.0441	1.044	-0.0001
16	30	Unbiased	1.0336	1.0337	0.0001
17	30	Unbiased	1.0407	1.0408	0.0001
18	30	Unbiased	1.039	1.0395	0.0005
19	30	Unbiased	1.0502	1.0485	-0.0017
20	30	Unbiased	1.0449	1.0448	-0.0001
26	50	Unbiased	1.0432	1.041	-0.0022
27	50	Unbiased	1.0504	1.0484	-0.002
28	50	Unbiased	1.0466	1.0473	0.0007
29	50	Unbiased	1.0418	1.0385	-0.0033
30	50	Unbiased	1.0387	1.037	-0.0017
88	50	Biased-84Hr-Anneal	1.0454	1.0452	-0.0002
89	50	Biased-84Hr-Anneal	1.0517	1.0522	0.0005
90	50	Biased-84Hr-Anneal	1.0497	1.0498	0.0001
91	50	Biased-84Hr-Anneal	1.0448	1.0423	-0.0025
92	50	Biased-84Hr-Anneal	1.0425	1.0431	0.0006
100	0	CORRELATION	1.0468	1.0465	-0.0003
101	0	CORRELATION	1.0385	1.0384	-0.0001
102	0	CORRELATION	1.0458	1.0454	-0.0004
103	0	CORRELATION	1.0546	1.0541	-0.0005
104	0	CORRELATION	1.0485	1.0486	0.0001

TID vs Post - Pre Exposure Delta

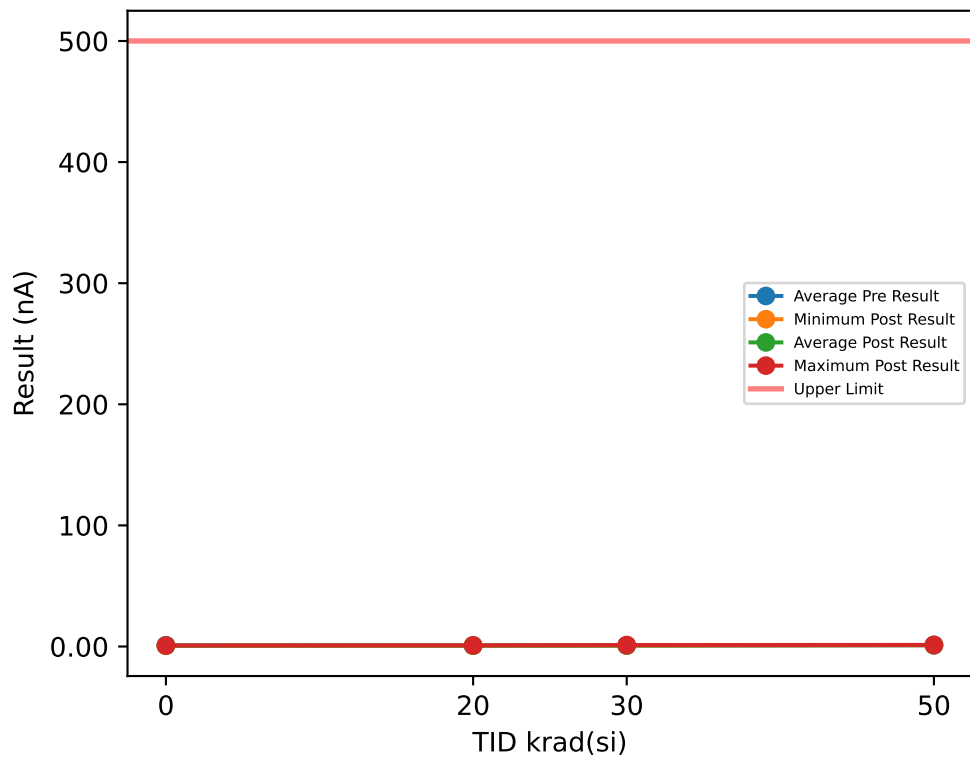


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0385	1.0468	1.0546	0.0057795	1.0384	1.0466	1.0541	0.0056776	-0.0005	-0.00024	0.0001	0.00024083
20	1.0341	1.045	1.058	0.0063489	1.0336	1.0444	1.0565	0.0061787	-0.002	-0.00056	0.0006	0.00096171
30	1.0336	1.045	1.052	0.0061299	1.0337	1.0449	1.0516	0.0059363	-0.0017	-6e-05	0.0011	0.00071833
50	1.0387	1.0455	1.0517	0.0041635	1.037	1.0445	1.0522	0.004969	-0.0033	-0.001	0.0007	0.0014915

Device Test: 23.21 LEAK|MAX/PWRGD/12////@PWRGD_OUTPUT_HIGH_LEAK

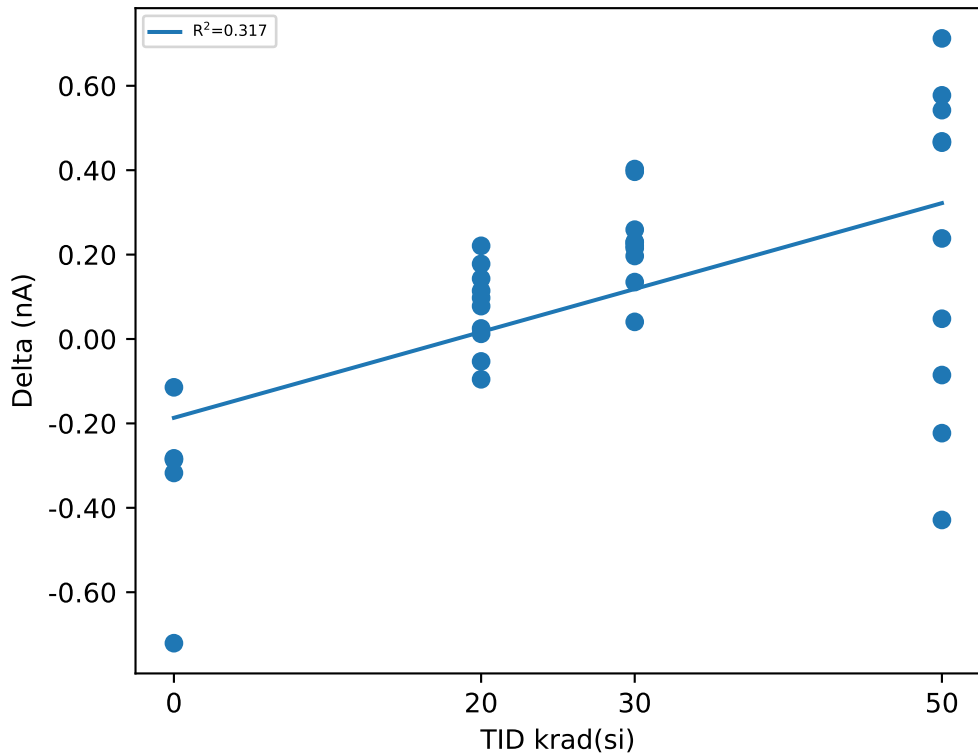
TID vs Result Stats



Test Results (Upper Limit = 500.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5617	0.7825	0.2208
2	20	Biased	0.7972	0.7017	-0.0955
3	20	Biased	0.7783	0.8033	0.025
4	20	Biased	0.5723	0.7502	0.1779
5	20	Biased	0.6425	0.7856	0.1431
6	20	Unbiased	0.8628	0.9407	0.0779
7	20	Unbiased	0.8751	0.822	-0.0531
8	20	Unbiased	0.8095	0.907	0.0975
9	20	Unbiased	0.767	0.8813	0.1143
10	20	Unbiased	0.7879	0.8002	0.0123
11	30	Biased	0.7596	0.8945	0.1349
12	30	Biased	0.6316	1.0343	0.4027
13	30	Biased	0.8168	1.0374	0.2206
14	30	Biased	0.8285	1.0438	0.2153
15	30	Biased	0.7346	0.7752	0.0406
16	30	Unbiased	0.7596	0.9563	0.1967
17	30	Unbiased	0.5243	0.7545	0.2302
18	30	Unbiased	0.8035	1.1998	0.3963
19	30	Unbiased	0.7502	1.0093	0.2591
20	30	Unbiased	0.6784	0.907	0.2286
26	50	Unbiased	0.7722	1.3145	0.5423
27	50	Unbiased	0.8657	1.3309	0.4652
28	50	Unbiased	0.7377	1.206	0.4683
29	50	Unbiased	0.5897	1.302	0.7123
30	50	Unbiased	0.7067	1.2841	0.5774
88	50	Biased-84Hr-Anneal	1.2852	1.3332	0.048
89	50	Biased-84Hr-Anneal	1.3195	1.2341	-0.0854
90	50	Biased-84Hr-Anneal	1.4662	1.0374	-0.4288
91	50	Biased-84Hr-Anneal	1.4225	1.1994	-0.2231
92	50	Biased-84Hr-Anneal	0.8959	1.1342	0.2383
100	0	CORRELATION	1.0114	0.694	-0.3174
101	0	CORRELATION	0.8676	0.5848	-0.2828
102	0	CORRELATION	1.4069	0.6861	-0.7208
103	0	CORRELATION	0.7898	0.6753	-0.1145
104	0	CORRELATION	1.1205	0.8345	-0.286

TID vs Post - Pre Exposure Delta

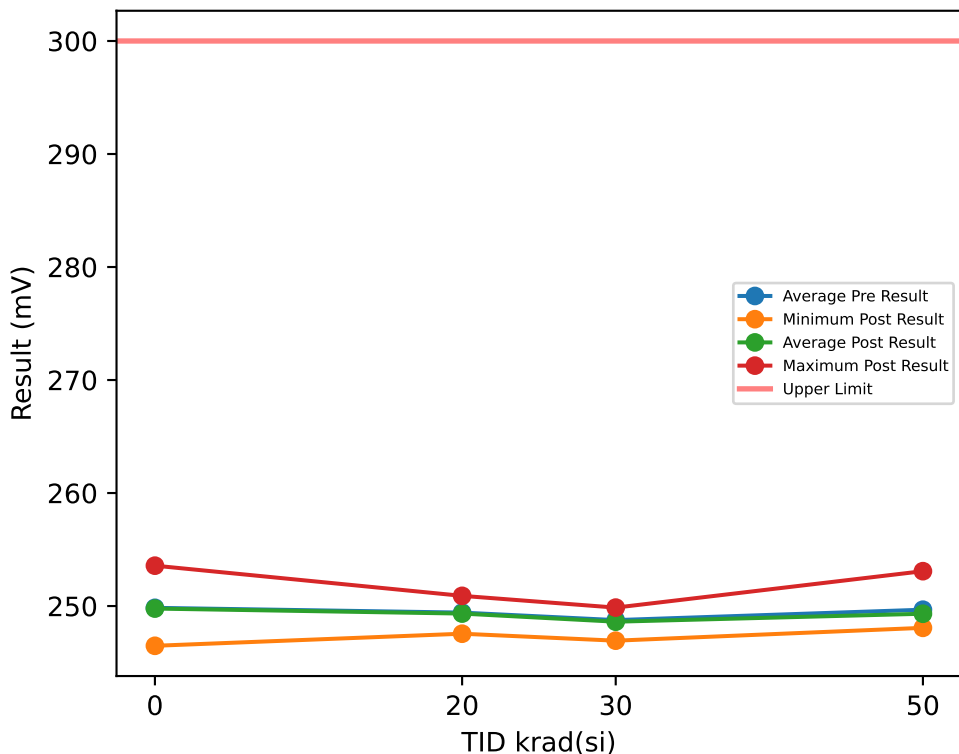


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.7898	1.0392	1.4069	0.24199	0.5848	0.69494	0.8345	0.089544	-0.7208	-0.3443	-0.1145	0.22498
20	0.5617	0.74543	0.8751	0.11306	0.7017	0.81745	0.9407	0.073	-0.0955	0.07202	0.2208	0.1002
30	0.5243	0.72871	0.8285	0.093963	0.7545	0.96121	1.1998	0.13414	0.0406	0.2325	0.4027	0.1078
50	0.5897	1.0061	1.4662	0.33046	1.0374	1.2376	1.3332	0.096211	-0.4288	0.23145	0.7123	0.38513

Device Test: 23.22 VOL|2mA/PWRGD/12/////@PWRGD_OUTPUT_LOW

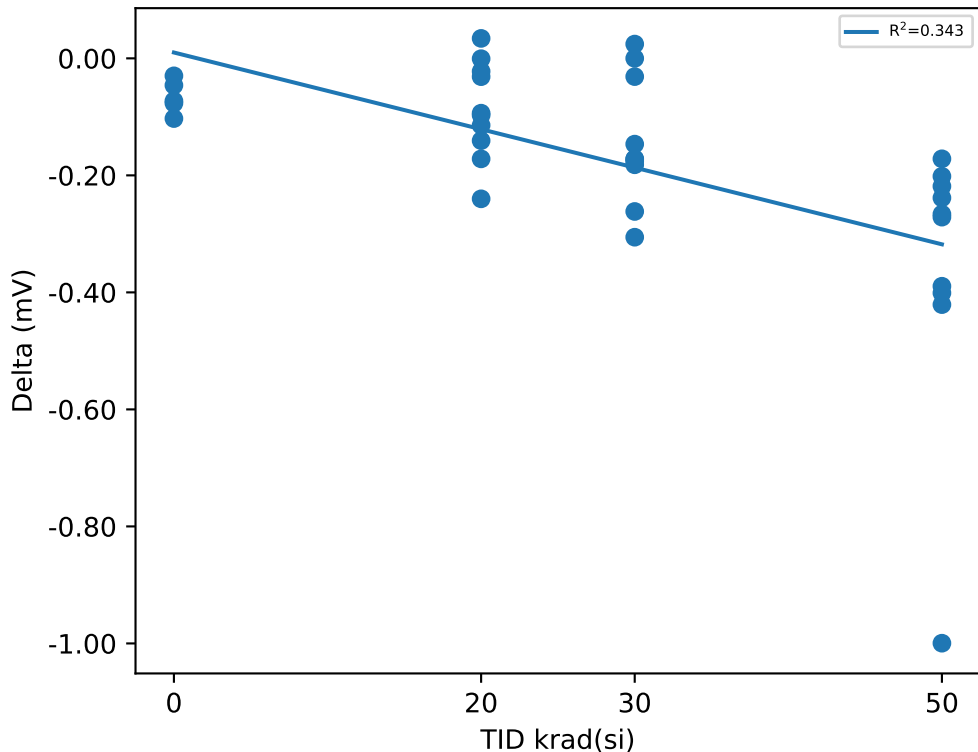
TID vs Result Stats



Test Results (Upper Limit = 300.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	248.43	248.26	-0.1718
2	20	Biased	249.84	249.84	-0.0006
3	20	Biased	250.78	250.64	-0.1406
4	20	Biased	251	250.9	-0.0937
5	20	Biased	249.65	249.62	-0.0313
6	20	Unbiased	247.79	247.55	-0.2401
7	20	Unbiased	249.52	249.5	-0.0222
8	20	Unbiased	249.82	249.73	-0.0972
9	20	Unbiased	247.98	247.86	-0.1143
10	20	Unbiased	249.4	249.43	0.0341
11	30	Biased	249.94	249.76	-0.1819
12	30	Biased	249.84	249.53	-0.3057
13	30	Biased	247.2	246.93	-0.2617
14	30	Biased	249.56	249.38	-0.1724
15	30	Biased	248.35	248.32	-0.0312
16	30	Unbiased	248.75	248.75	0
17	30	Unbiased	248.6	248.43	-0.1718
18	30	Unbiased	250.01	249.86	-0.1466
19	30	Unbiased	248.19	248.22	0.0244
20	30	Unbiased	247.14	246.96	-0.1756
26	50	Unbiased	248.87	248.6	-0.2663
27	50	Unbiased	248.89	248.68	-0.2186
28	50	Unbiased	249.2	249.03	-0.1717
29	50	Unbiased	254.08	253.08	-0.9996
30	50	Unbiased	248.46	248.19	-0.2714
88	50	Biased-84Hr-Anneal	248.49	248.07	-0.4209
89	50	Biased-84Hr-Anneal	249.41	249.17	-0.2384
90	50	Biased-84Hr-Anneal	250.07	249.67	-0.401
91	50	Biased-84Hr-Anneal	248.68	248.29	-0.3895
92	50	Biased-84Hr-Anneal	250.59	250.39	-0.2016
100	0	CORRELATION	250.56	250.49	-0.0766
101	0	CORRELATION	253.68	253.57	-0.1029
102	0	CORRELATION	248.59	248.54	-0.046
103	0	CORRELATION	249.83	249.8	-0.0299
104	0	CORRELATION	246.55	246.48	-0.0728

TID vs Post - Pre Exposure Delta

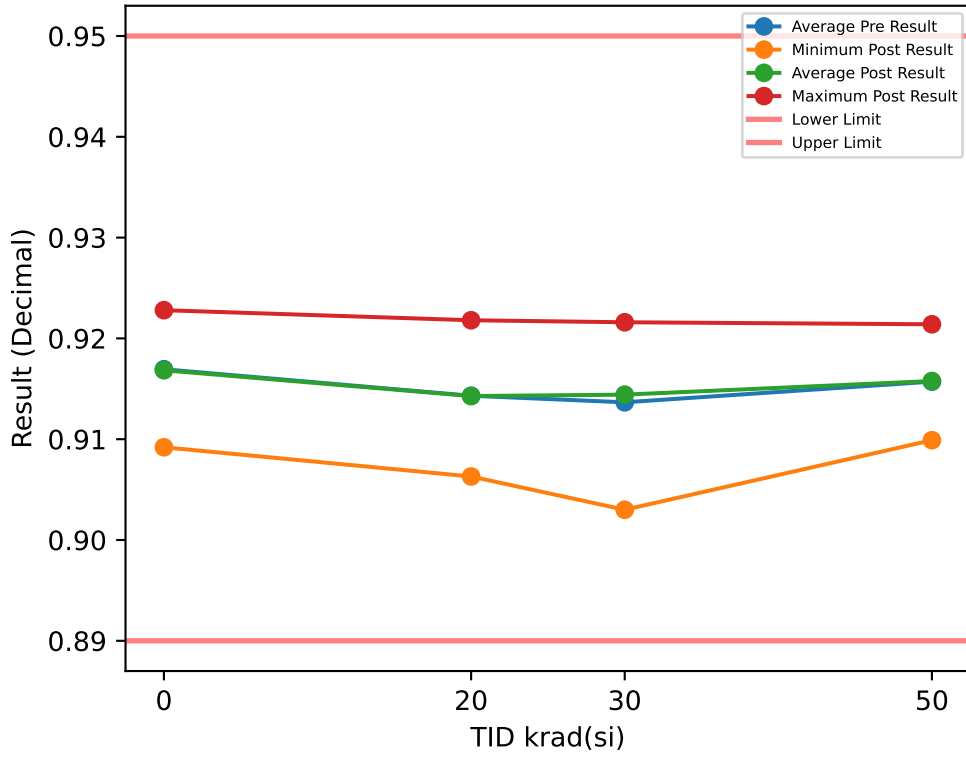


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	246.55	249.84	253.68	2.6266	246.48	249.78	253.57	2.6122	-0.1029	-0.06564	-0.0299	0.028385
20	247.79	249.42	251	1.0777	247.55	249.33	250.9	1.1151	-0.2401	-0.08777	0.0341	0.084211
30	247.14	248.76	250.01	1.0721	246.93	248.61	249.86	1.062	-0.3057	-0.14225	0.0244	0.10843
50	248.46	249.68	254.08	1.695	248.07	249.32	253.08	1.5047	-0.9996	-0.3579	-0.1717	0.24204

Device Test: 23.24 THRESHOLD|FALL/PWRGD/14////@VSENSE_VTH_FALLING_FAULT

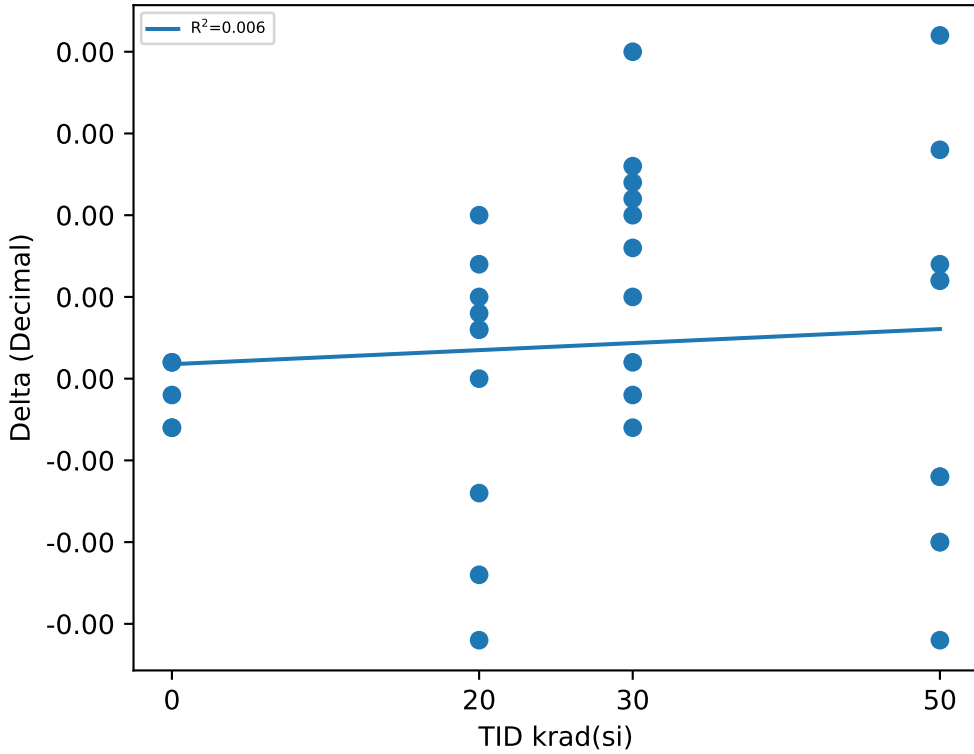
TID vs Result Stats



Test Results (Lower Limit = 0.89, Upper Limit = 0.95 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9169	0.9157	-0.0012
2	20	Biased	0.9149	0.9156	0.0007
3	20	Biased	0.91	0.9103	0.0003
4	20	Biased	0.9234	0.9218	-0.0016
5	20	Biased	0.91	0.9103	0.0003
6	20	Unbiased	0.9063	0.9063	0
7	20	Unbiased	0.9154	0.9164	0.001
8	20	Unbiased	0.9186	0.919	0.0004
9	20	Unbiased	0.9139	0.9144	0.0005
10	20	Unbiased	0.9137	0.913	-0.0007
11	30	Biased	0.9189	0.9201	0.0012
12	30	Biased	0.9146	0.9159	0.0013
13	30	Biased	0.9196	0.9216	0.002
14	30	Biased	0.9178	0.9186	0.0008
15	30	Biased	0.9133	0.9143	0.001
16	30	Unbiased	0.9019	0.903	0.0011
17	30	Unbiased	0.9104	0.9101	-0.0003
18	30	Unbiased	0.9092	0.9093	0.0001
19	30	Unbiased	0.9163	0.9168	0.0005
20	30	Unbiased	0.9146	0.9145	-0.0001
26	50	Unbiased	0.9155	0.9139	-0.0016
27	50	Unbiased	0.918	0.917	-0.001
28	50	Unbiased	0.9167	0.9173	0.0006
29	50	Unbiased	0.9122	0.9116	-0.0006
30	50	Unbiased	0.9105	0.9099	-0.0006
88	50	Biased-84Hr-Anneal	0.9145	0.9151	0.0006
89	50	Biased-84Hr-Anneal	0.9193	0.9214	0.0021
90	50	Biased-84Hr-Anneal	0.9188	0.9195	0.0007
91	50	Biased-84Hr-Anneal	0.9157	0.9147	-0.001
92	50	Biased-84Hr-Anneal	0.9159	0.9173	0.0014
100	0	CORRELATION	0.9178	0.9179	0.0001
101	0	CORRELATION	0.9093	0.9092	-0.0001
102	0	CORRELATION	0.9172	0.9169	-0.0003
103	0	CORRELATION	0.9231	0.9228	-0.0003
104	0	CORRELATION	0.9173	0.9174	0.0001

TID vs Post - Pre Exposure Delta

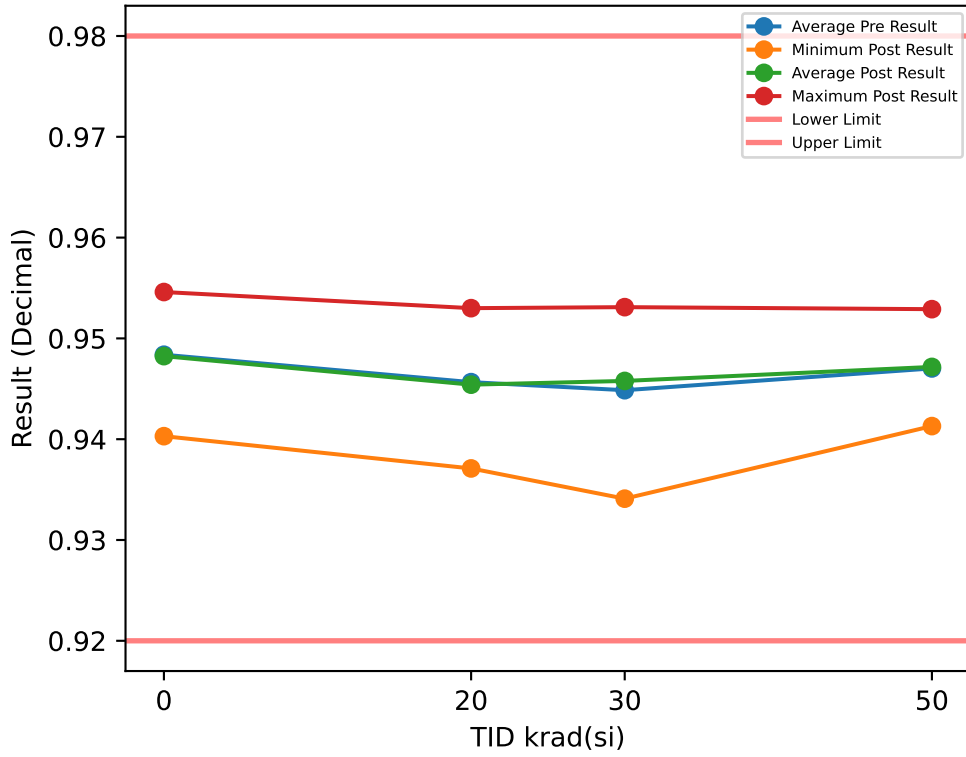


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9093	0.91694	0.9231	0.0049308	0.9092	0.91684	0.9228	0.0048819	-0.0003	-0.0001	0.0001	0.0002
20	0.9063	0.91431	0.9234	0.0048434	0.9063	0.91428	0.9218	0.0045227	-0.0016	-3e-05	0.001	0.00085381
30	0.9019	0.91366	0.9196	0.0053496	0.903	0.91442	0.9216	0.0056219	-0.0003	0.00076	0.002	0.00071212
50	0.9105	0.91571	0.9193	0.0027823	0.9099	0.91577	0.9214	0.003476	-0.0016	6e-05	0.0021	0.0011937

Device Test: 23.25 THRESHOLD|RISE/PWRGD/14////@VSENSE_VTH_RISING_GOOD

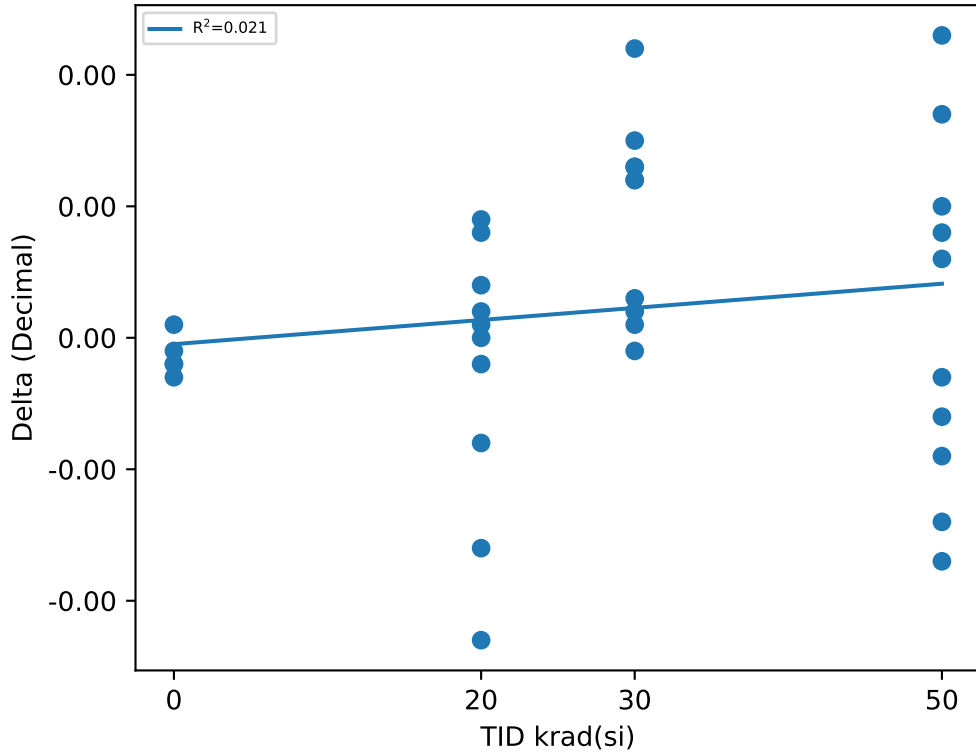
TID vs Result Stats



Test Results (Lower Limit = 0.92, Upper Limit = 0.98 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9484	0.9468	-0.0016
2	20	Biased	0.9462	0.9464	0.0002
3	20	Biased	0.9413	0.9414	0.0001
4	20	Biased	0.9553	0.953	-0.0023
5	20	Biased	0.9411	0.9415	0.0004
6	20	Unbiased	0.9373	0.9371	-0.0002
7	20	Unbiased	0.9471	0.9479	0.0008
8	20	Unbiased	0.9501	0.9501	0
9	20	Unbiased	0.945	0.9459	0.0009
10	20	Unbiased	0.9448	0.944	-0.0008
11	30	Biased	0.9504	0.9517	0.0013
12	30	Biased	0.9459	0.9474	0.0015
13	30	Biased	0.9509	0.9531	0.0022
14	30	Biased	0.9489	0.9501	0.0012
15	30	Biased	0.9444	0.9456	0.0012
16	30	Unbiased	0.9328	0.9341	0.0013
17	30	Unbiased	0.9412	0.9413	0.0001
18	30	Unbiased	0.9402	0.9405	0.0003
19	30	Unbiased	0.948	0.9482	0.0002
20	30	Unbiased	0.9459	0.9458	-0.0001
26	50	Unbiased	0.9466	0.9449	-0.0017
27	50	Unbiased	0.9494	0.9485	-0.0009
28	50	Unbiased	0.9478	0.9488	0.001
29	50	Unbiased	0.9437	0.9431	-0.0006
30	50	Unbiased	0.9416	0.9413	-0.0003
88	50	Biased-84Hr-Anneal	0.9456	0.9462	0.0006
89	50	Biased-84Hr-Anneal	0.9506	0.9529	0.0023
90	50	Biased-84Hr-Anneal	0.9505	0.9513	0.0008
91	50	Biased-84Hr-Anneal	0.9472	0.9458	-0.0014
92	50	Biased-84Hr-Anneal	0.9472	0.9489	0.0017
100	0	CORRELATION	0.9495	0.9492	-0.0003
101	0	CORRELATION	0.9404	0.9403	-0.0001
102	0	CORRELATION	0.9484	0.9482	-0.0002
103	0	CORRELATION	0.9548	0.9546	-0.0002
104	0	CORRELATION	0.9488	0.9489	0.0001

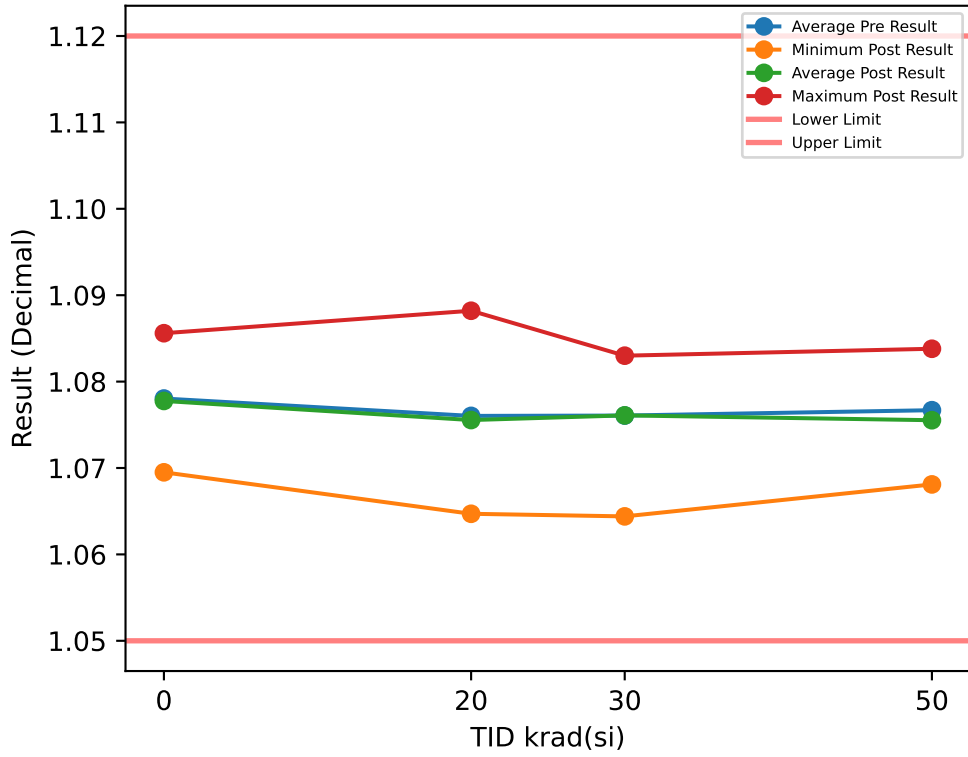
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9404	0.94838	0.9548	0.0051558	0.9403	0.94824	0.9546	0.0051199	-0.0003	-0.00014	0.0001	0.00015166
20	0.9373	0.94566	0.9553	0.0050923	0.9371	0.94541	0.953	0.0046112	-0.0023	-0.00025	0.0009	0.0010309
30	0.9328	0.94486	0.9509	0.0055406	0.9341	0.94578	0.9531	0.0057752	-0.0001	0.00092	0.0022	0.00074803
50	0.9416	0.94702	0.9506	0.0028647	0.9413	0.94717	0.9529	0.0035948	-0.0017	0.00015	0.0023	0.001336

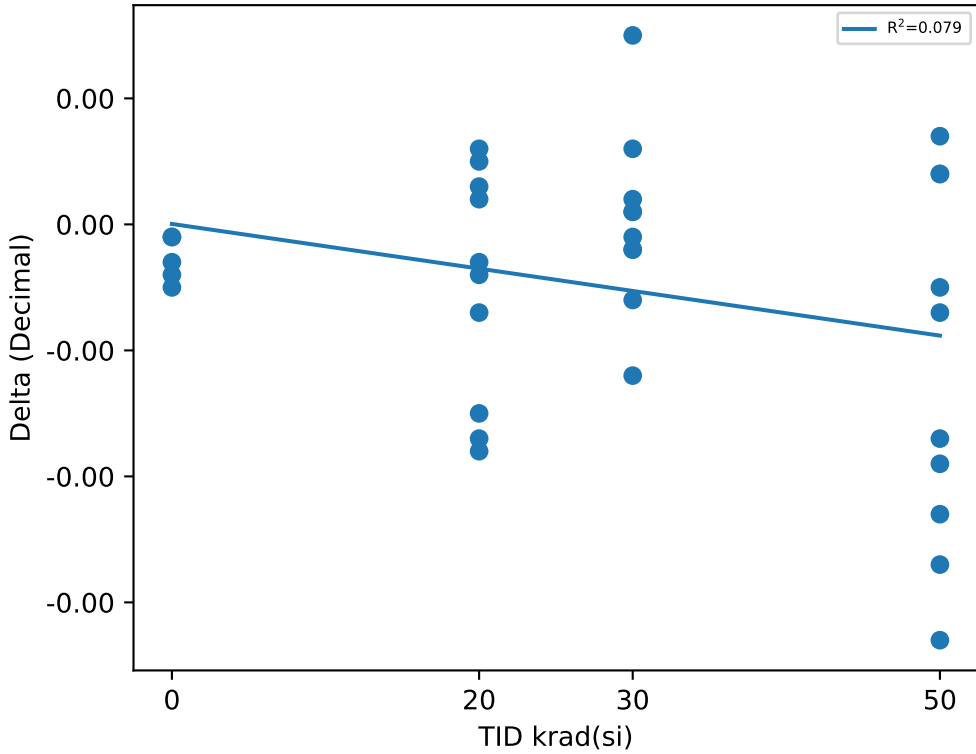
TID vs Result Stats



Test Results (Lower Limit = 1.05, Upper Limit = 1.12 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0777	1.0762	-0.0015
2	20	Biased	1.0775	1.0771	-0.0004
3	20	Biased	1.0722	1.0724	0.0002
4	20	Biased	1.0899	1.0882	-0.0017
5	20	Biased	1.0705	1.0698	-0.0007
6	20	Unbiased	1.065	1.0647	-0.0003
7	20	Unbiased	1.0747	1.0752	0.0005
8	20	Unbiased	1.0807	1.0813	0.0006
9	20	Unbiased	1.0763	1.0766	0.0003
10	20	Unbiased	1.0758	1.074	-0.0018
11	30	Biased	1.0831	1.083	-0.0001
12	30	Biased	1.0746	1.0748	0.0002
13	30	Biased	1.0815	1.083	0.0015
14	30	Biased	1.0833	1.0827	-0.0006
15	30	Biased	1.0752	1.0753	0.0001
16	30	Unbiased	1.0643	1.0644	0.0001
17	30	Unbiased	1.0717	1.0715	-0.0002
18	30	Unbiased	1.0698	1.0704	0.0006
19	30	Unbiased	1.0812	1.08	-0.0012
20	30	Unbiased	1.076	1.0758	-0.0002
26	50	Unbiased	1.0741	1.0718	-0.0023
27	50	Unbiased	1.0815	1.0796	-0.0019
28	50	Unbiased	1.0777	1.0784	0.0007
29	50	Unbiased	1.0725	1.0692	-0.0033
30	50	Unbiased	1.0698	1.0681	-0.0017
88	50	Biased-84Hr-Anneal	1.077	1.0763	-0.0007
89	50	Biased-84Hr-Anneal	1.0834	1.0838	0.0004
90	50	Biased-84Hr-Anneal	1.0812	1.0807	-0.0005
91	50	Biased-84Hr-Anneal	1.0759	1.0732	-0.0027
92	50	Biased-84Hr-Anneal	1.0738	1.0742	0.0004
100	0	CORRELATION	1.0781	1.0778	-0.0003
101	0	CORRELATION	1.0696	1.0695	-0.0001
102	0	CORRELATION	1.0769	1.0764	-0.0005
103	0	CORRELATION	1.086	1.0856	-0.0004
104	0	CORRELATION	1.0796	1.0795	-0.0001

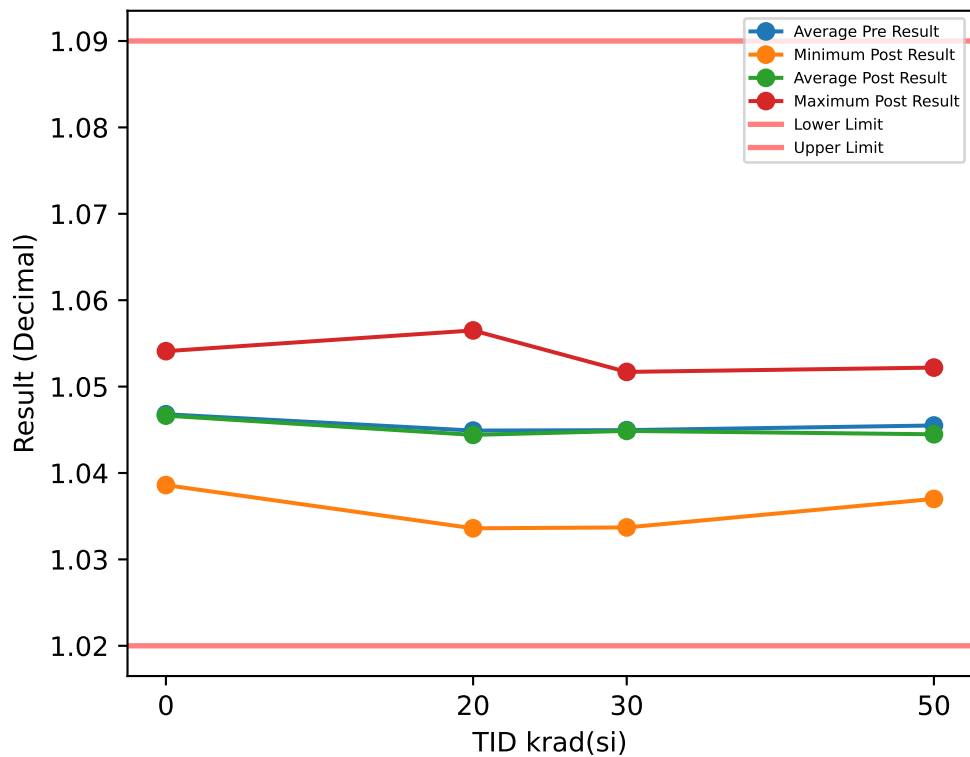
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0696	1.078	1.086	0.0058807	1.0695	1.0778	1.0856	0.0058003	-0.0005	-0.00028	-0.0001	0.00017889
20	1.065	1.076	1.0899	0.0065654	1.0647	1.0756	1.0882	0.0063267	-0.0018	-0.00048	0.0006	0.00091627
30	1.0643	1.0761	1.0833	0.0063013	1.0644	1.0761	1.083	0.0062089	-0.0012	2e-05	0.0015	0.00071149
50	1.0698	1.0767	1.0834	0.0043503	1.0681	1.0755	1.0838	0.0051305	-0.0033	-0.00116	0.0007	0.0014167

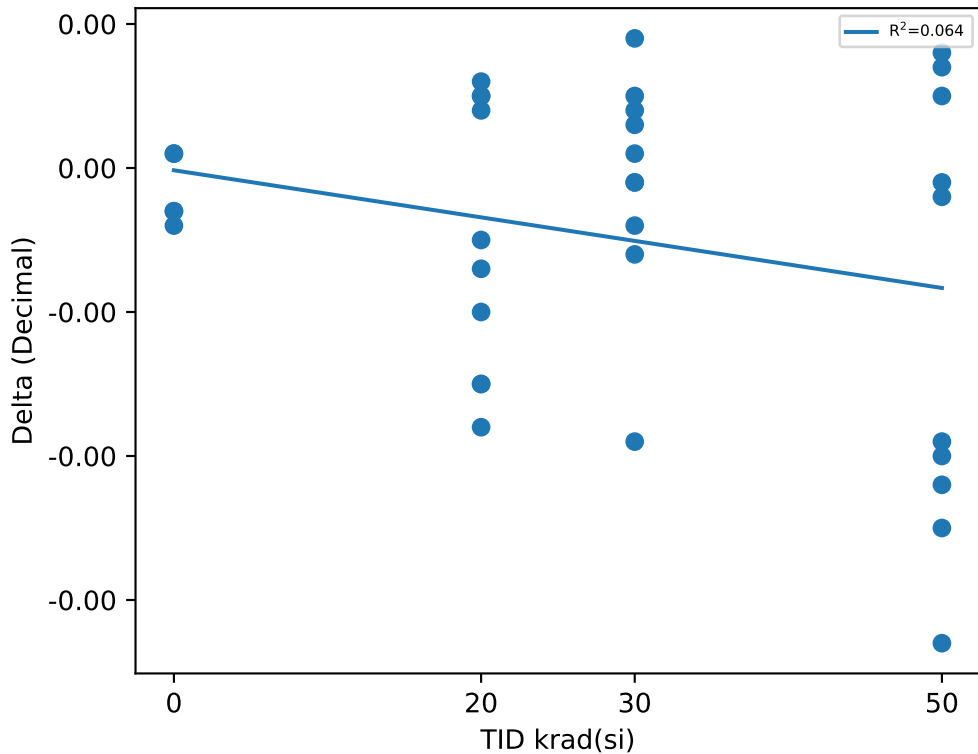
TID vs Result Stats



Test Results (Lower Limit = 1.02, Upper Limit = 1.09 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0466	1.0451	-0.0015
2	20	Biased	1.0463	1.0456	-0.0007
3	20	Biased	1.0409	1.0413	0.0004
4	20	Biased	1.058	1.0565	-0.0015
5	20	Biased	1.0396	1.0386	-0.001
6	20	Unbiased	1.0341	1.0336	-0.0005
7	20	Unbiased	1.0439	1.0445	0.0006
8	20	Unbiased	1.0498	1.0503	0.0005
9	20	Unbiased	1.0452	1.0457	0.0005
10	20	Unbiased	1.0447	1.0429	-0.0018
11	30	Biased	1.0518	1.0517	-0.0001
12	30	Biased	1.0431	1.0435	0.0004
13	30	Biased	1.0504	1.0513	0.0009
14	30	Biased	1.052	1.0514	-0.0006
15	30	Biased	1.0441	1.044	-0.0001
16	30	Unbiased	1.0334	1.0337	0.0003
17	30	Unbiased	1.0407	1.0408	0.0001
18	30	Unbiased	1.039	1.0395	0.0005
19	30	Unbiased	1.0502	1.0483	-0.0019
20	30	Unbiased	1.0449	1.0445	-0.0004
26	50	Unbiased	1.0432	1.041	-0.0022
27	50	Unbiased	1.0504	1.0484	-0.002
28	50	Unbiased	1.0466	1.0473	0.0007
29	50	Unbiased	1.0418	1.0385	-0.0033
30	50	Unbiased	1.0389	1.037	-0.0019
88	50	Biased-84Hr-Anneal	1.0454	1.0452	-0.0002
89	50	Biased-84Hr-Anneal	1.0517	1.0522	0.0005
90	50	Biased-84Hr-Anneal	1.0497	1.0496	-0.0001
91	50	Biased-84Hr-Anneal	1.0448	1.0423	-0.0025
92	50	Biased-84Hr-Anneal	1.0425	1.0433	0.0008
100	0	CORRELATION	1.0468	1.0465	-0.0003
101	0	CORRELATION	1.0385	1.0386	0.0001
102	0	CORRELATION	1.0458	1.0454	-0.0004
103	0	CORRELATION	1.0544	1.0541	-0.0003
104	0	CORRELATION	1.0485	1.0486	0.0001

TID vs Post - Pre Exposure Delta

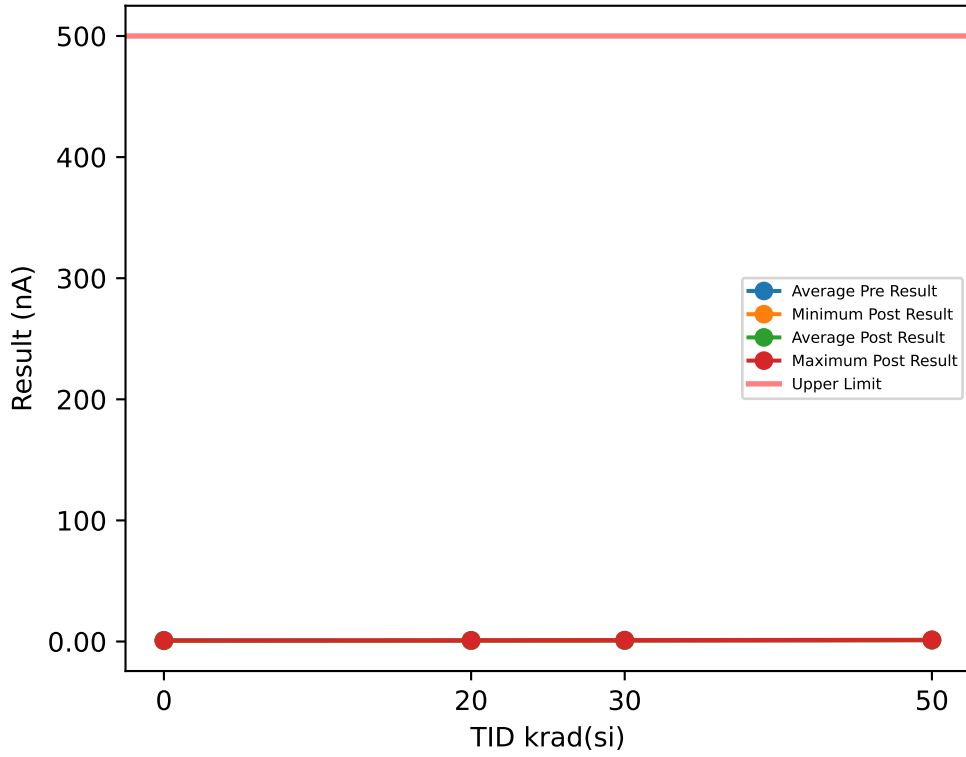


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0385	1.0468	1.0544	0.0057127	1.0386	1.0466	1.0541	0.0056056	-0.0004	-0.00016	0.0001	0.00024083
20	1.0341	1.0449	1.058	0.006345	1.0336	1.0444	1.0565	0.0062092	-0.0018	-0.0005	0.0006	0.00094281
30	1.0334	1.045	1.052	0.0061905	1.0337	1.0449	1.0517	0.0059193	-0.0019	-9e-05	0.0009	0.00077381
50	1.0389	1.0455	1.0517	0.0041277	1.037	1.0445	1.0522	0.0049398	-0.0033	-0.00102	0.0008	0.0015135

Device Test: 23.28 LEAK|MAX/PWRGD/14////@PWRGD_OUTPUT_HIGH_LEAK

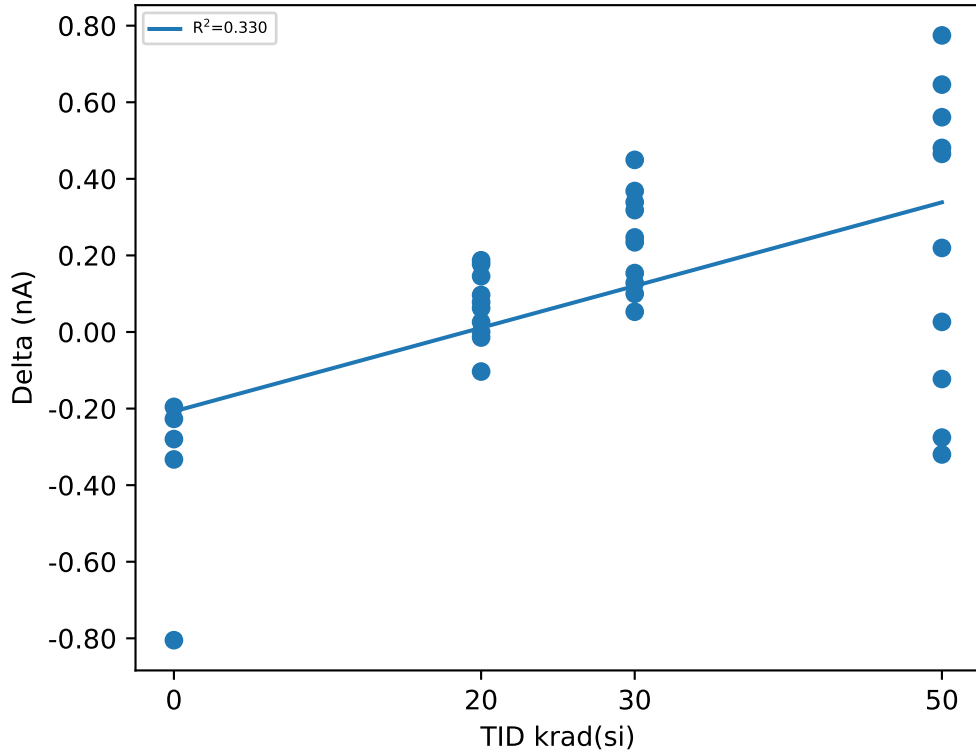
TID vs Result Stats



Test Results (Upper Limit = 500.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6363	0.8136	0.1773
2	20	Biased	0.7566	0.7421	-0.0145
3	20	Biased	0.7221	0.8189	0.0968
4	20	Biased	0.5567	0.744	0.1873
5	20	Biased	0.7265	0.7888	0.0623
6	20	Unbiased	0.9534	0.8501	-0.1033
7	20	Unbiased	0.9126	0.9906	0.078
8	20	Unbiased	0.8002	0.8261	0.0259
9	20	Unbiased	0.7794	0.925	0.1456
10	20	Unbiased	0.7847	0.7846	-0.0001
11	30	Biased	0.7377	0.9847	0.247
12	30	Biased	0.6597	1.1092	0.4495
13	30	Biased	0.7421	1.0811	0.339
14	30	Biased	0.7847	1.103	0.3183
15	30	Biased	0.6972	0.7971	0.0999
16	30	Unbiased	0.7752	0.9032	0.128
17	30	Unbiased	0.7514	0.8043	0.0529
18	30	Unbiased	0.8097	1.1779	0.3682
19	30	Unbiased	0.694	0.9282	0.2342
20	30	Unbiased	0.6815	0.8354	0.1539
26	50	Unbiased	0.7691	1.33	0.5609
27	50	Unbiased	0.9625	1.4277	0.4652
28	50	Unbiased	0.7252	1.206	0.4808
29	50	Unbiased	0.599	1.3736	0.7746
30	50	Unbiased	0.6348	1.2809	0.6461
88	50	Biased-84Hr-Anneal	1.2383	1.2647	0.0264
89	50	Biased-84Hr-Anneal	1.4069	1.2841	-0.1228
90	50	Biased-84Hr-Anneal	1.4287	1.1529	-0.2758
91	50	Biased-84Hr-Anneal	1.4787	1.1589	-0.3198
92	50	Biased-84Hr-Anneal	0.9178	1.1373	0.2195
100	0	CORRELATION	0.9677	0.7721	-0.1956
101	0	CORRELATION	0.8801	0.6004	-0.2797
102	0	CORRELATION	1.4568	0.6519	-0.8049
103	0	CORRELATION	0.8398	0.6129	-0.2269
104	0	CORRELATION	1.1486	0.8158	-0.3328

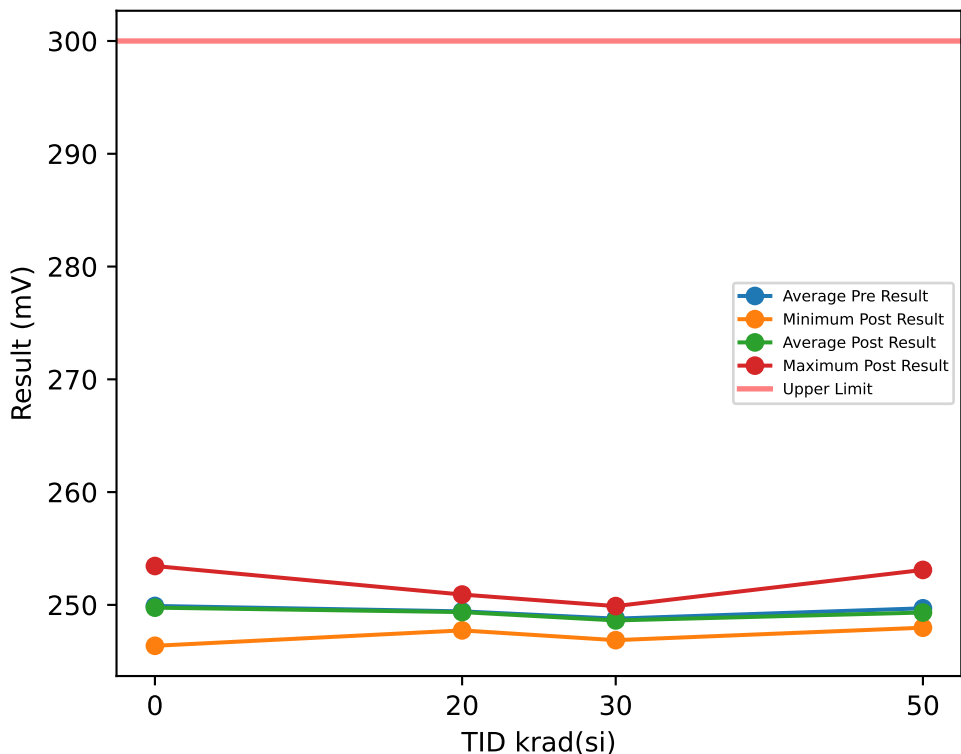
TID vs Post - Pre Exposure Delta



Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.8398	1.0586	1.4568	0.25232	0.6004	0.69062	0.8158	0.097453	-0.8049	-0.36798	-0.1956	0.24977
20	0.5567	0.76285	0.9534	0.11663	0.7421	0.82838	0.9906	0.077806	-0.1033	0.06553	0.1873	0.091689
30	0.6597	0.73332	0.8097	0.048998	0.7971	0.97241	1.1779	0.13923	0.0529	0.23909	0.4495	0.1295
50	0.599	1.0161	1.4787	0.34381	1.1373	1.2616	1.4277	0.098096	-0.3198	0.24551	0.7746	0.3971

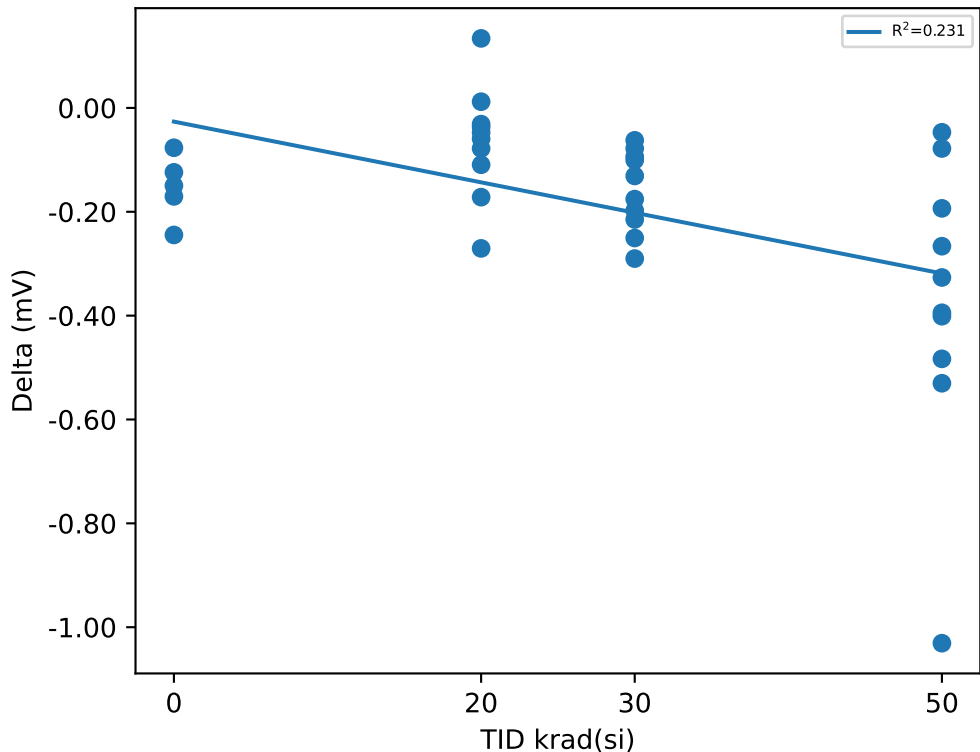
TID vs Result Stats



Test Results (Upper Limit = 300.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	248.41	248.24	-0.1718
2	20	Biased	249.96	249.91	-0.0475
3	20	Biased	250.78	250.67	-0.1094
4	20	Biased	251	250.92	-0.0781
5	20	Biased	249.6	249.57	-0.0312
6	20	Unbiased	247.78	247.74	-0.0372
7	20	Unbiased	249.52	249.65	0.1339
8	20	Unbiased	249.75	249.76	0.012
9	20	Unbiased	248.01	247.74	-0.2705
10	20	Unbiased	249.46	249.4	-0.0595
11	30	Biased	249.89	249.7	-0.1976
12	30	Biased	249.86	249.57	-0.2901
13	30	Biased	247.09	246.87	-0.2148
14	30	Biased	249.63	249.38	-0.2505
15	30	Biased	248.44	248.38	-0.0624
16	30	Unbiased	248.79	248.72	-0.0781
17	30	Unbiased	248.59	248.49	-0.0937
18	30	Unbiased	250.02	249.89	-0.131
19	30	Unbiased	248.32	248.22	-0.1005
20	30	Unbiased	247.18	247.01	-0.1756
26	50	Unbiased	248.95	248.68	-0.2663
27	50	Unbiased	248.83	248.78	-0.0469
28	50	Unbiased	249.12	249.04	-0.0781
29	50	Unbiased	254.13	253.1	-1.0308
30	50	Unbiased	248.49	248.3	-0.1934
88	50	Biased-84Hr-Anneal	248.51	247.98	-0.5302
89	50	Biased-84Hr-Anneal	249.54	249.14	-0.3945
90	50	Biased-84Hr-Anneal	249.99	249.59	-0.4011
91	50	Biased-84Hr-Anneal	248.77	248.29	-0.4832
92	50	Biased-84Hr-Anneal	250.64	250.31	-0.3265
100	0	CORRELATION	250.61	250.53	-0.0767
101	0	CORRELATION	253.6	253.45	-0.1498
102	0	CORRELATION	248.77	248.65	-0.124
103	0	CORRELATION	249.94	249.77	-0.1704
104	0	CORRELATION	246.62	246.37	-0.2446

TID vs Post - Pre Exposure Delta

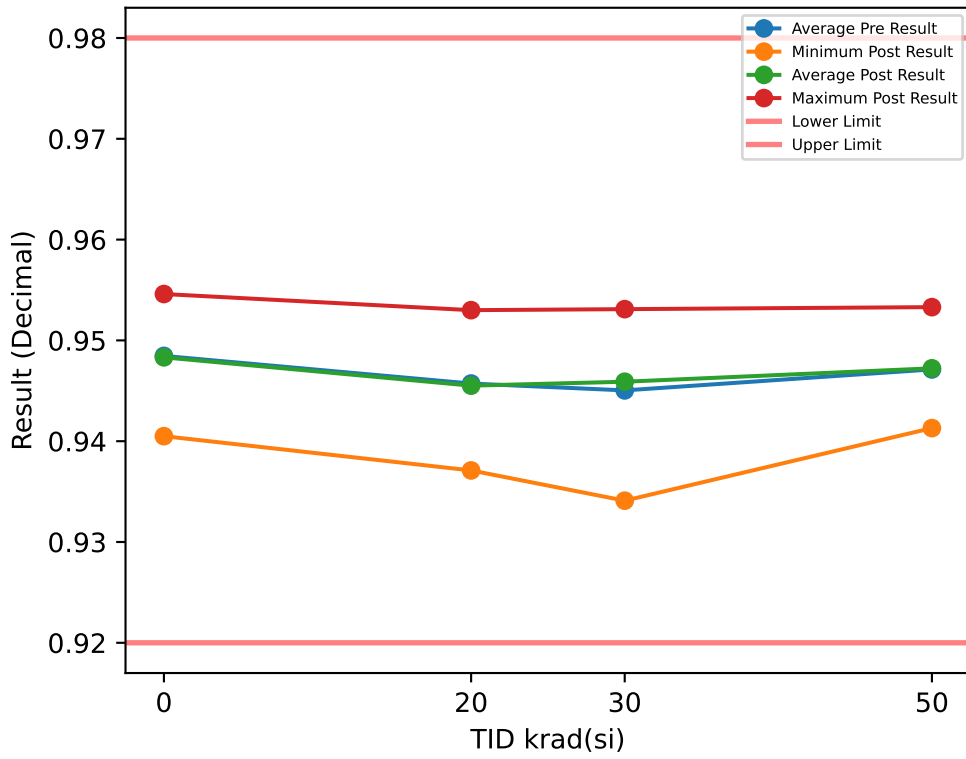


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	246.62	249.91	253.6	2.5603	246.37	249.75	253.45	2.5934	-0.2446	-0.1531	-0.0767	0.06198
20	247.78	249.43	251	1.0796	247.74	249.36	250.92	1.1183	-0.2705	-0.06593	0.1339	0.10724
30	247.09	248.78	250.02	1.0776	246.87	248.62	249.89	1.0619	-0.2901	-0.15943	-0.0624	0.07802
50	248.49	249.7	254.13	1.7005	247.98	249.32	253.1	1.493	-1.0308	-0.3751	-0.0469	0.28085

Device Test: 23.3 THRESHOLD|RISE/PWRGD/4.5////@VSENSE_VTH_RISING_GOOD

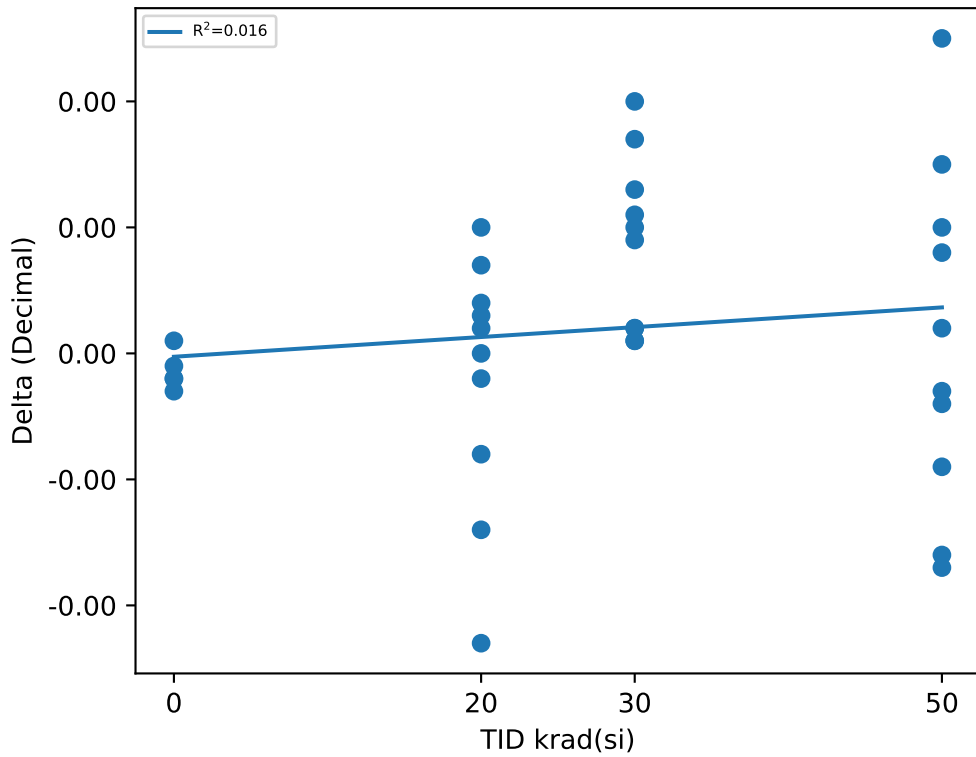
TID vs Result Stats



Test Results (Lower Limit = 0.92, Upper Limit = 0.98 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.9486	0.9472	-0.0014
2	20	Biased	0.9462	0.9464	0.0002
3	20	Biased	0.9413	0.9416	0.0003
4	20	Biased	0.9553	0.953	-0.0023
5	20	Biased	0.9411	0.9415	0.0004
6	20	Unbiased	0.9373	0.9371	-0.0002
7	20	Unbiased	0.9471	0.9481	0.001
8	20	Unbiased	0.9501	0.9501	0
9	20	Unbiased	0.9454	0.9461	0.0007
10	20	Unbiased	0.9448	0.944	-0.0008
11	30	Biased	0.9506	0.9519	0.0013
12	30	Biased	0.9459	0.9476	0.0017
13	30	Biased	0.9511	0.9531	0.002
14	30	Biased	0.9494	0.9503	0.0009
15	30	Biased	0.9446	0.9456	0.001
16	30	Unbiased	0.933	0.9341	0.0011
17	30	Unbiased	0.9412	0.9413	0.0001
18	30	Unbiased	0.9405	0.9407	0.0002
19	30	Unbiased	0.9482	0.9484	0.0002
20	30	Unbiased	0.9459	0.946	0.0001
26	50	Unbiased	0.9466	0.9449	-0.0017
27	50	Unbiased	0.9494	0.9485	-0.0009
28	50	Unbiased	0.948	0.949	0.001
29	50	Unbiased	0.9433	0.9429	-0.0004
30	50	Unbiased	0.9416	0.9413	-0.0003
88	50	Biased-84Hr-Anneal	0.9462	0.9464	0.0002
89	50	Biased-84Hr-Anneal	0.9508	0.9533	0.0025
90	50	Biased-84Hr-Anneal	0.9505	0.9513	0.0008
91	50	Biased-84Hr-Anneal	0.9474	0.9458	-0.0016
92	50	Biased-84Hr-Anneal	0.9474	0.9489	0.0015
100	0	CORRELATION	0.9495	0.9492	-0.0003
101	0	CORRELATION	0.9406	0.9405	-0.0001
102	0	CORRELATION	0.9484	0.9482	-0.0002
103	0	CORRELATION	0.9548	0.9546	-0.0002
104	0	CORRELATION	0.949	0.9491	0.0001

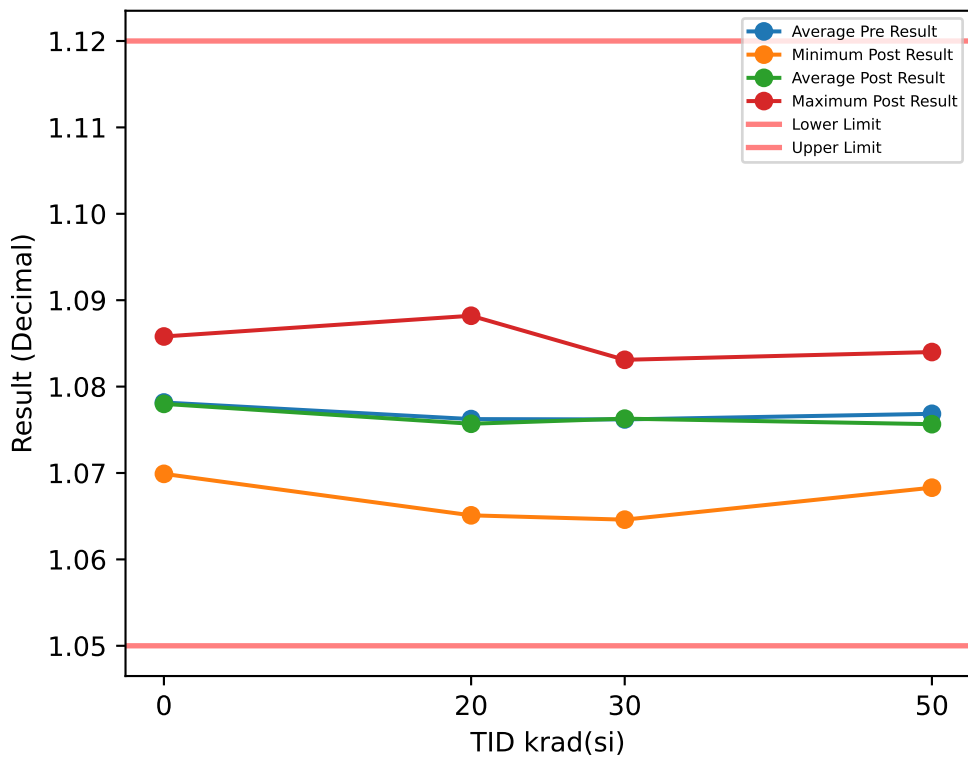
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.9406	0.94846	0.9548	0.0050831	0.9405	0.94832	0.9546	0.0050495	-0.0003	-0.00014	0.0001	0.00015166
20	0.9373	0.94572	0.9553	0.0051003	0.9371	0.94551	0.953	0.0046218	-0.0023	-0.00021	0.001	0.0010148
30	0.933	0.94504	0.9511	0.005564	0.9341	0.9459	0.9531	0.0058107	0.0001	0.00086	0.002	0.00069154
50	0.9416	0.94712	0.9508	0.0029302	0.9413	0.94723	0.9533	0.0036972	-0.0017	0.00011	0.0025	0.0013568

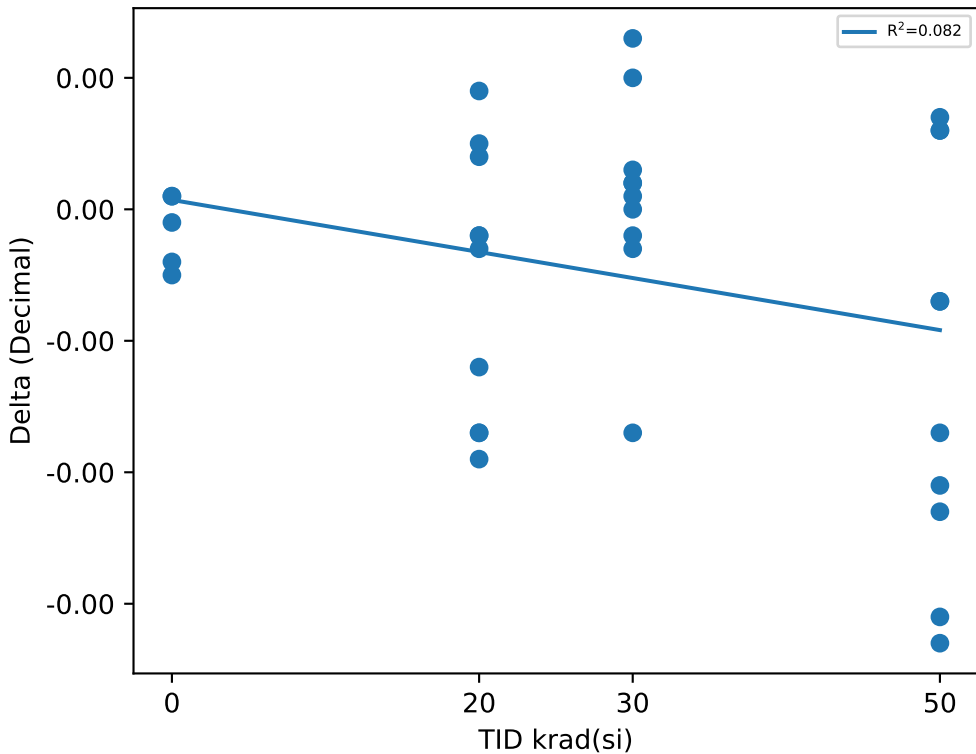
TID vs Result Stats



Test Results (Lower Limit = 1.05, Upper Limit = 1.12 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0781	1.0762	-0.0019
2	20	Biased	1.0775	1.0773	-0.0002
3	20	Biased	1.0726	1.0724	-0.0002
4	20	Biased	1.0899	1.0882	-0.0017
5	20	Biased	1.071	1.0698	-0.0012
6	20	Unbiased	1.0654	1.0651	-0.0003
7	20	Unbiased	1.0747	1.0756	0.0009
8	20	Unbiased	1.0809	1.0813	0.0004
9	20	Unbiased	1.0763	1.0768	0.0005
10	20	Unbiased	1.076	1.0743	-0.0017
11	30	Biased	1.0833	1.083	-0.0003
12	30	Biased	1.0746	1.0748	0.0002
13	30	Biased	1.0817	1.083	0.0013
14	30	Biased	1.0833	1.0831	-0.0002
15	30	Biased	1.0754	1.0757	0.0003
16	30	Unbiased	1.0645	1.0646	0.0001
17	30	Unbiased	1.0717	1.0719	0.0002
18	30	Unbiased	1.0698	1.0708	0.001
19	30	Unbiased	1.0817	1.08	-0.0017
20	30	Unbiased	1.076	1.076	0
26	50	Unbiased	1.0741	1.0718	-0.0023
27	50	Unbiased	1.0819	1.0798	-0.0021
28	50	Unbiased	1.0777	1.0784	0.0007
29	50	Unbiased	1.0727	1.0694	-0.0033
30	50	Unbiased	1.07	1.0683	-0.0017
88	50	Biased-84Hr-Anneal	1.0772	1.0765	-0.0007
89	50	Biased-84Hr-Anneal	1.0834	1.084	0.0006
90	50	Biased-84Hr-Anneal	1.0814	1.0807	-0.0007
91	50	Biased-84Hr-Anneal	1.0763	1.0732	-0.0031
92	50	Biased-84Hr-Anneal	1.0738	1.0744	0.0006
100	0	CORRELATION	1.0781	1.078	-0.0001
101	0	CORRELATION	1.0698	1.0699	0.0001
102	0	CORRELATION	1.0771	1.0766	-0.0005
103	0	CORRELATION	1.0862	1.0858	-0.0004
104	0	CORRELATION	1.0796	1.0797	0.0001

TID vs Post - Pre Exposure Delta

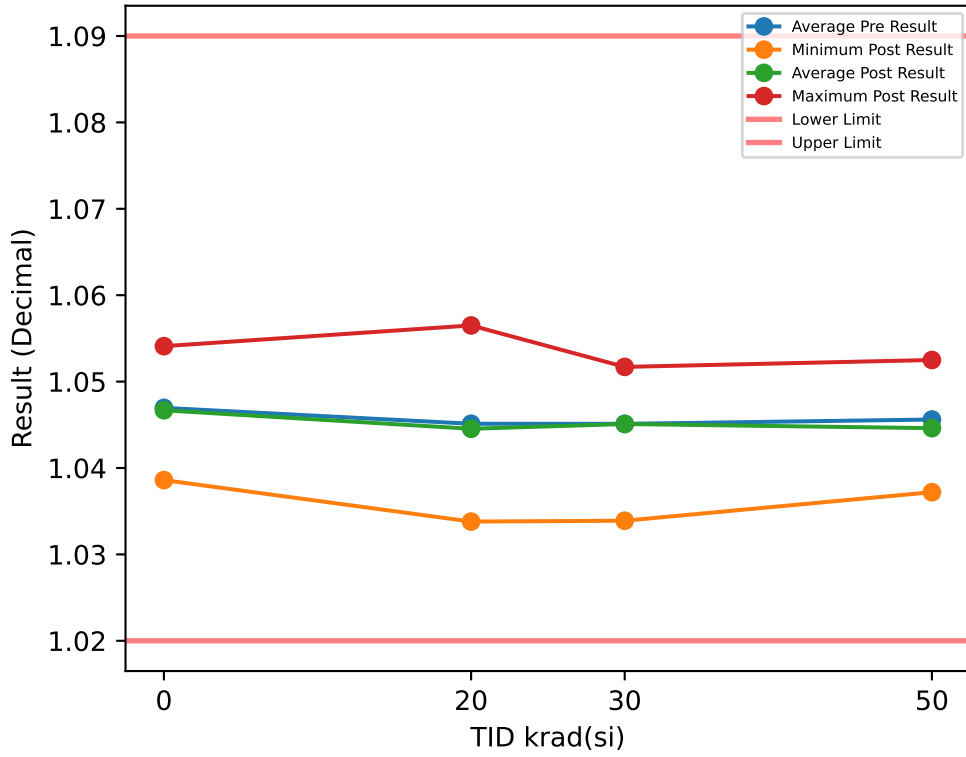


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0698	1.0782	1.0862	0.005868	1.0699	1.078	1.0858	0.0057293	-0.0005	-0.00016	0.0001	0.00027928
20	1.0654	1.0762	1.0899	0.0064464	1.0651	1.0757	1.0882	0.0062509	-0.0019	-0.00054	0.0009	0.0010167
30	1.0645	1.0762	1.0833	0.0063479	1.0646	1.0763	1.0831	0.0061365	-0.0017	9e-05	0.0013	0.0008034
50	1.07	1.0768	1.0834	0.0043623	1.0683	1.0756	1.084	0.005123	-0.0033	-0.0012	0.0007	0.0015232

Device Test: 23.5 THRESHOLD|FALL/PWRGD/4.5////@VSENSE_VTH_FALLING_GOOD

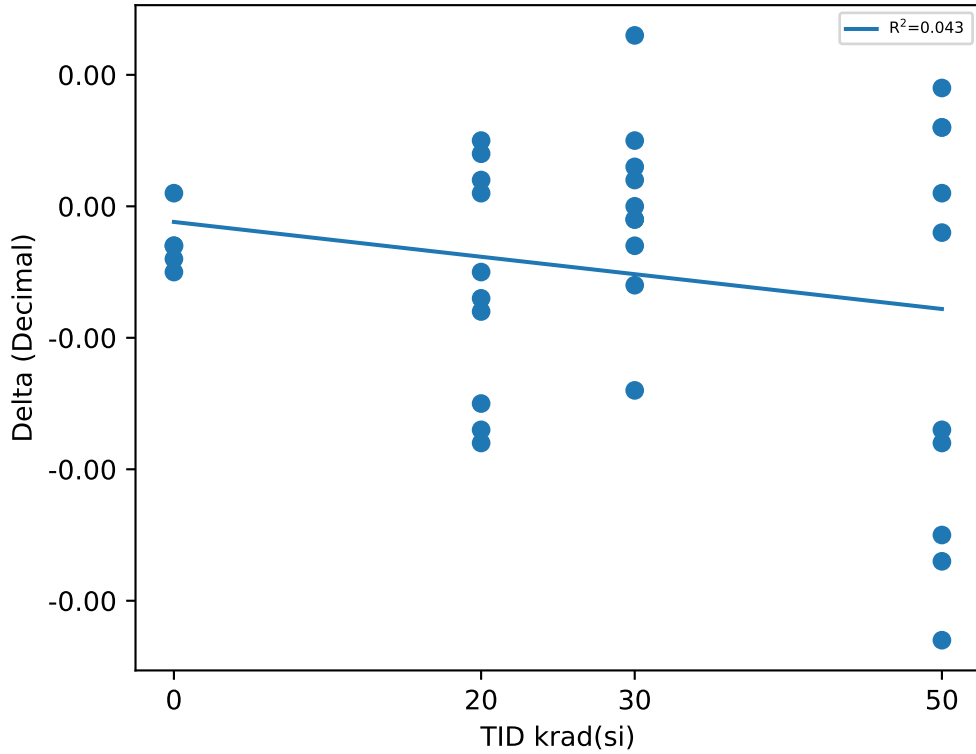
TID vs Result Stats



Test Results (Lower Limit = 1.02, Upper Limit = 1.09 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.0468	1.0453	-0.0015
2	20	Biased	1.0463	1.0458	-0.0005
3	20	Biased	1.0411	1.0413	0.0002
4	20	Biased	1.0582	1.0565	-0.0017
5	20	Biased	1.0399	1.0391	-0.0008
6	20	Unbiased	1.0345	1.0338	-0.0007
7	20	Unbiased	1.0441	1.0445	0.0004
8	20	Unbiased	1.0498	1.0503	0.0005
9	20	Unbiased	1.0456	1.0457	0.0001
10	20	Unbiased	1.0449	1.0431	-0.0018
11	30	Biased	1.0518	1.0517	-0.0001
12	30	Biased	1.0433	1.0435	0.0002
13	30	Biased	1.0504	1.0517	0.0013
14	30	Biased	1.0522	1.0516	-0.0006
15	30	Biased	1.0443	1.044	-0.0003
16	30	Unbiased	1.0339	1.0339	0
17	30	Unbiased	1.0409	1.0412	0.0003
18	30	Unbiased	1.0392	1.0397	0.0005
19	30	Unbiased	1.0502	1.0488	-0.0014
20	30	Unbiased	1.0449	1.0448	-0.0001
26	50	Unbiased	1.0435	1.041	-0.0025
27	50	Unbiased	1.0504	1.0486	-0.0018
28	50	Unbiased	1.0466	1.0475	0.0009
29	50	Unbiased	1.0418	1.0385	-0.0033
30	50	Unbiased	1.0389	1.0372	-0.0017
88	50	Biased-84Hr-Anneal	1.0456	1.0454	-0.0002
89	50	Biased-84Hr-Anneal	1.0519	1.0525	0.0006
90	50	Biased-84Hr-Anneal	1.0497	1.0498	0.0001
91	50	Biased-84Hr-Anneal	1.045	1.0423	-0.0027
92	50	Biased-84Hr-Anneal	1.0427	1.0433	0.0006
100	0	CORRELATION	1.047	1.0467	-0.0003
101	0	CORRELATION	1.0389	1.0386	-0.0003
102	0	CORRELATION	1.0458	1.0454	-0.0004
103	0	CORRELATION	1.0546	1.0541	-0.0005
104	0	CORRELATION	1.0485	1.0486	0.0001

TID vs Post - Pre Exposure Delta

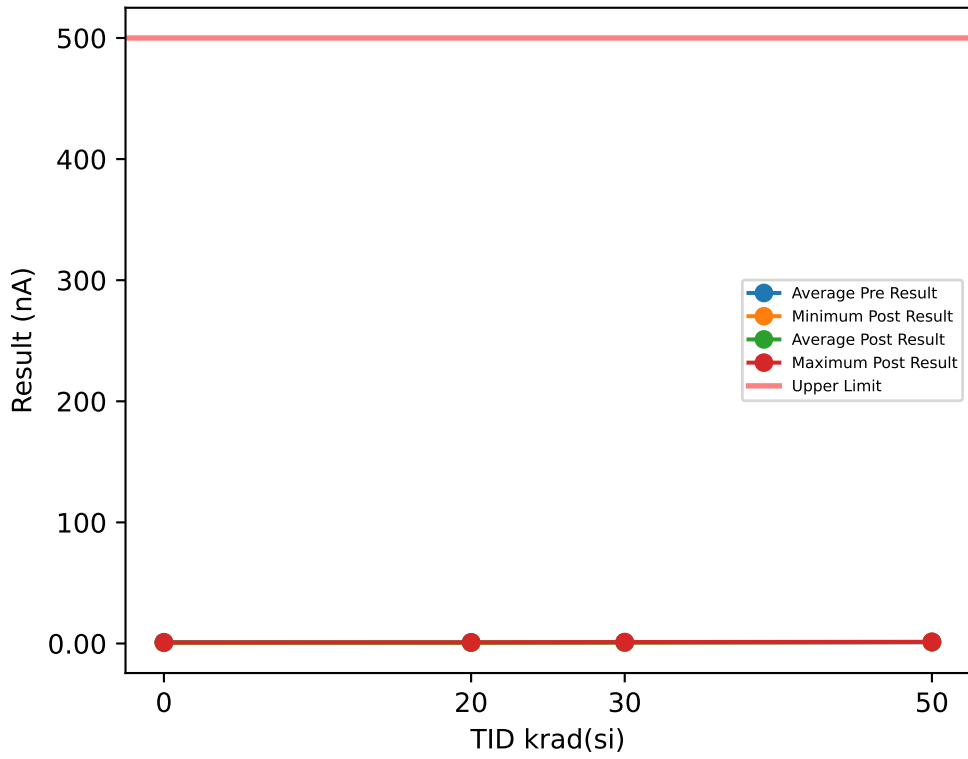


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.0389	1.047	1.0546	0.0056359	1.0386	1.0467	1.0541	0.0056051	-0.0005	-0.00028	0.0001	0.00022804
20	1.0345	1.0451	1.0582	0.006278	1.0338	1.0445	1.0565	0.0061214	-0.0018	-0.00058	0.0005	0.0008728
30	1.0339	1.0451	1.0522	0.0060664	1.0339	1.0451	1.0517	0.0059323	-0.0014	-2e-05	0.0013	0.00070679
50	1.0389	1.0456	1.0519	0.0041238	1.0372	1.0446	1.0525	0.0050156	-0.0033	-0.001	0.0009	0.0015684

Device Test: 23.6 LEAK|MAX/PWRGD/4.5////@PWRGD_OUTPUT_HIGH_LEAK

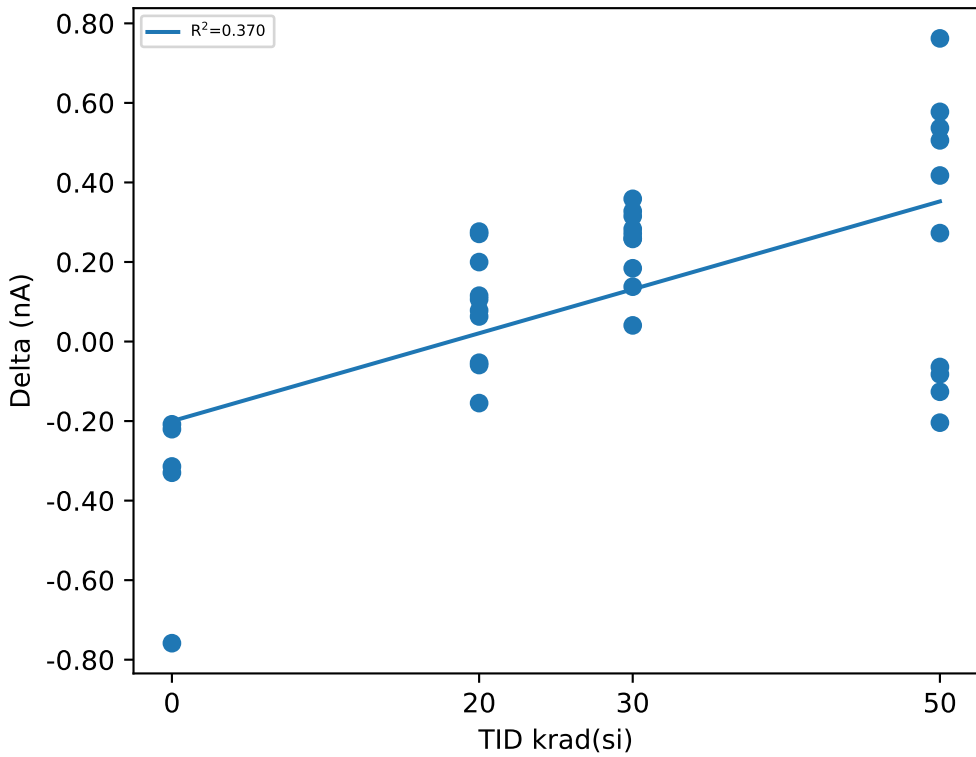
TID vs Result Stats



Test Results (Upper Limit = 500.0 (nA))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.5834	0.8541	0.2707
2	20	Biased	0.8378	0.683	-0.1548
3	20	Biased	0.7377	0.8158	0.0781
4	20	Biased	0.616	0.8158	0.1998
5	20	Biased	0.851	0.7919	-0.0591
6	20	Unbiased	0.8503	0.9656	0.1153
7	20	Unbiased	0.8127	0.9188	0.1061
8	20	Unbiased	0.8564	0.9194	0.063
9	20	Unbiased	0.6705	0.9469	0.2764
10	20	Unbiased	0.841	0.7877	-0.0533
11	30	Biased	0.822	0.9599	0.1379
12	30	Biased	0.6659	0.9812	0.3153
13	30	Biased	0.7763	1.0343	0.258
14	30	Biased	0.7254	1.0532	0.3278
15	30	Biased	0.7596	0.8002	0.0406
16	30	Unbiased	0.8033	0.9875	0.1842
17	30	Unbiased	0.6892	0.9723	0.2831
18	30	Unbiased	0.841	1.1998	0.3588
19	30	Unbiased	0.7128	0.9844	0.2716
20	30	Unbiased	0.6878	0.9474	0.2596
26	50	Unbiased	0.8659	1.2834	0.4175
27	50	Unbiased	0.8938	1.3996	0.5058
28	50	Unbiased	0.6566	1.2341	0.5775
29	50	Unbiased	0.4683	1.2305	0.7622
30	50	Unbiased	0.6879	1.2247	0.5368
88	50	Biased-84Hr-Anneal	1.2945	1.2305	-0.064
89	50	Biased-84Hr-Anneal	1.41	1.206	-0.204
90	50	Biased-84Hr-Anneal	1.357	1.2747	-0.0823
91	50	Biased-84Hr-Anneal	1.3008	1.1745	-0.1263
92	50	Biased-84Hr-Anneal	0.9303	1.2029	0.2726
100	0	CORRELATION	0.9958	0.7877	-0.2081
101	0	CORRELATION	0.8551	0.6347	-0.2204
102	0	CORRELATION	1.5317	0.7732	-0.7585
103	0	CORRELATION	0.9115	0.5816	-0.3299
104	0	CORRELATION	1.1892	0.8751	-0.3141

TID vs Post - Pre Exposure Delta

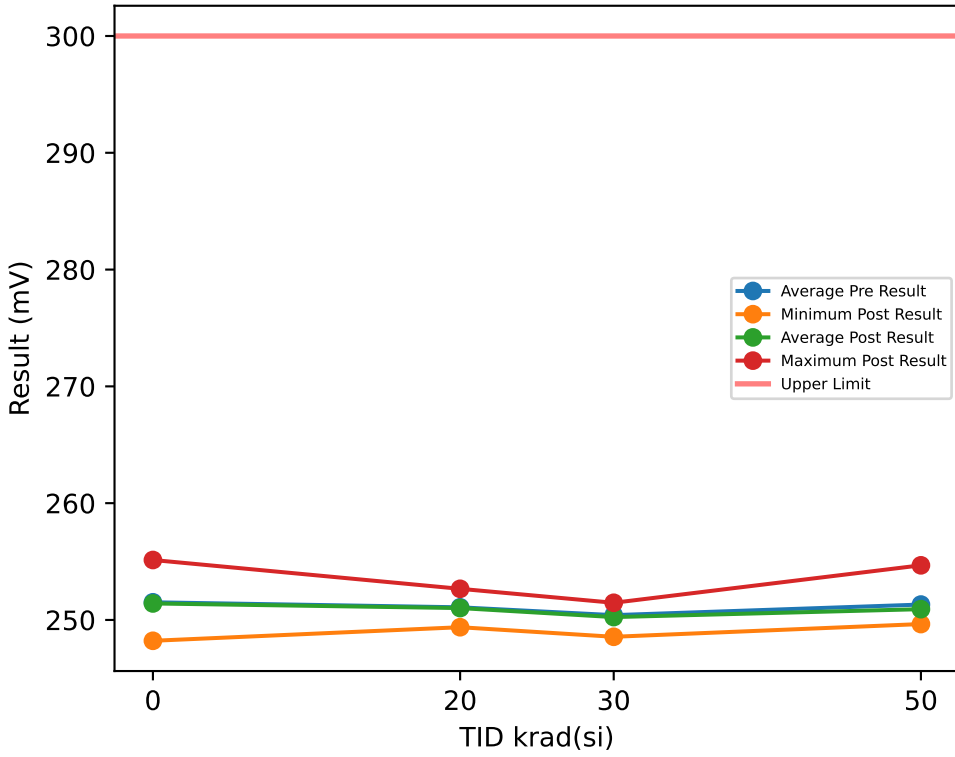


Test Statistics (nA)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.8551	1.0967	1.5317	0.27415	0.5816	0.73046	0.8751	0.11974	-0.7585	-0.3662	-0.2081	0.22593
20	0.5834	0.76568	0.8564	0.10605	0.683	0.8499	0.9656	0.088069	-0.1548	0.08422	0.2764	0.14282
30	0.6659	0.74833	0.841	0.061182	0.8002	0.99202	1.1998	0.099502	0.0406	0.24369	0.3588	0.096735
50	0.4683	0.98651	1.41	0.33385	1.1745	1.2461	1.3996	0.06277	-0.204	0.25958	0.7622	0.34987

Device Test: 23.7 VOL|2mA/PWRGD/4.5////@PWRGD_OUTPUT_LOW

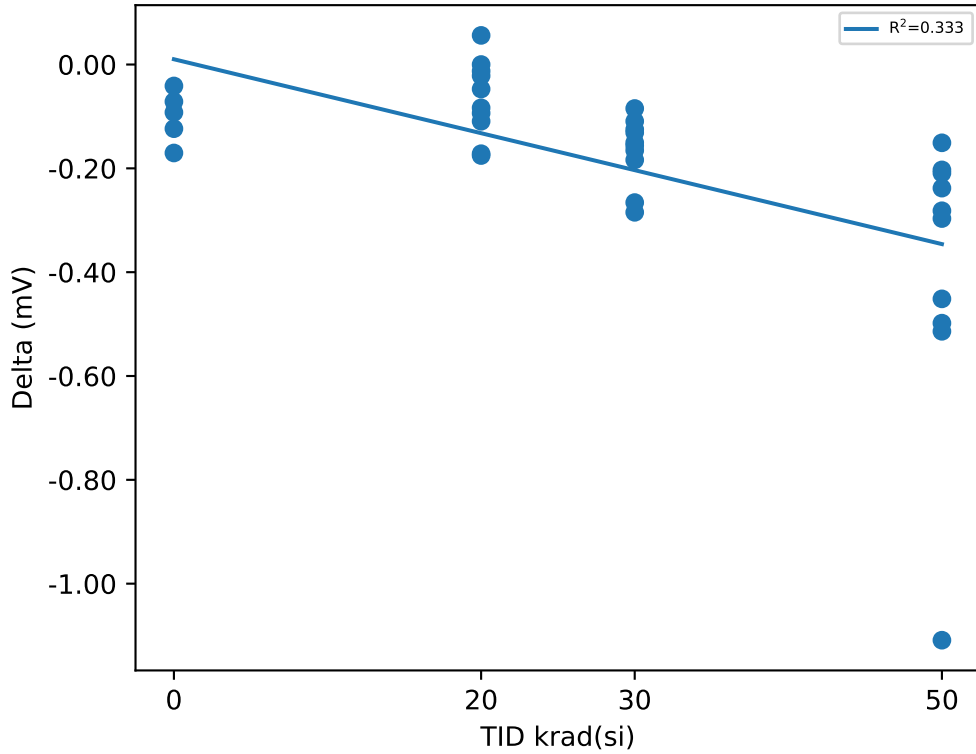
TID vs Result Stats



Test Results (Upper Limit = 300.0 (mV))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	250.04	249.93	-0.1093
2	20	Biased	251.49	251.44	-0.0472
3	20	Biased	252.36	252.36	0
4	20	Biased	252.76	252.67	-0.0937
5	20	Biased	251.38	251.21	-0.1718
6	20	Unbiased	249.4	249.38	-0.0217
7	20	Unbiased	251.24	251.29	0.0561
8	20	Unbiased	251.48	251.3	-0.1753
9	20	Unbiased	249.62	249.53	-0.0834
10	20	Unbiased	251.07	251.06	-0.0126
11	30	Biased	251.55	251.4	-0.1504
12	30	Biased	251.35	251.19	-0.1654
13	30	Biased	248.74	248.56	-0.1838
14	30	Biased	251.2	250.93	-0.2659
15	30	Biased	250.05	249.94	-0.1093
16	30	Unbiased	250.43	250.28	-0.1562
17	30	Unbiased	250.32	250.2	-0.125
18	30	Unbiased	251.6	251.47	-0.1311
19	30	Unbiased	249.96	249.87	-0.0847
20	30	Unbiased	248.92	248.63	-0.2847
26	50	Unbiased	250.45	250.16	-0.2817
27	50	Unbiased	250.5	250.3	-0.203
28	50	Unbiased	250.82	250.53	-0.2967
29	50	Unbiased	255.79	254.68	-1.1089
30	50	Unbiased	250.02	249.81	-0.2091
88	50	Biased-84Hr-Anneal	250.16	249.65	-0.5139
89	50	Biased-84Hr-Anneal	251.18	250.94	-0.2381
90	50	Biased-84Hr-Anneal	251.51	251.35	-0.1508
91	50	Biased-84Hr-Anneal	250.44	249.95	-0.4982
92	50	Biased-84Hr-Anneal	252.31	251.86	-0.4514
100	0	CORRELATION	252.17	252	-0.1704
101	0	CORRELATION	255.21	255.13	-0.0714
102	0	CORRELATION	250.4	250.3	-0.0922
103	0	CORRELATION	251.53	251.41	-0.1236
104	0	CORRELATION	248.26	248.22	-0.0413

TID vs Post - Pre Exposure Delta

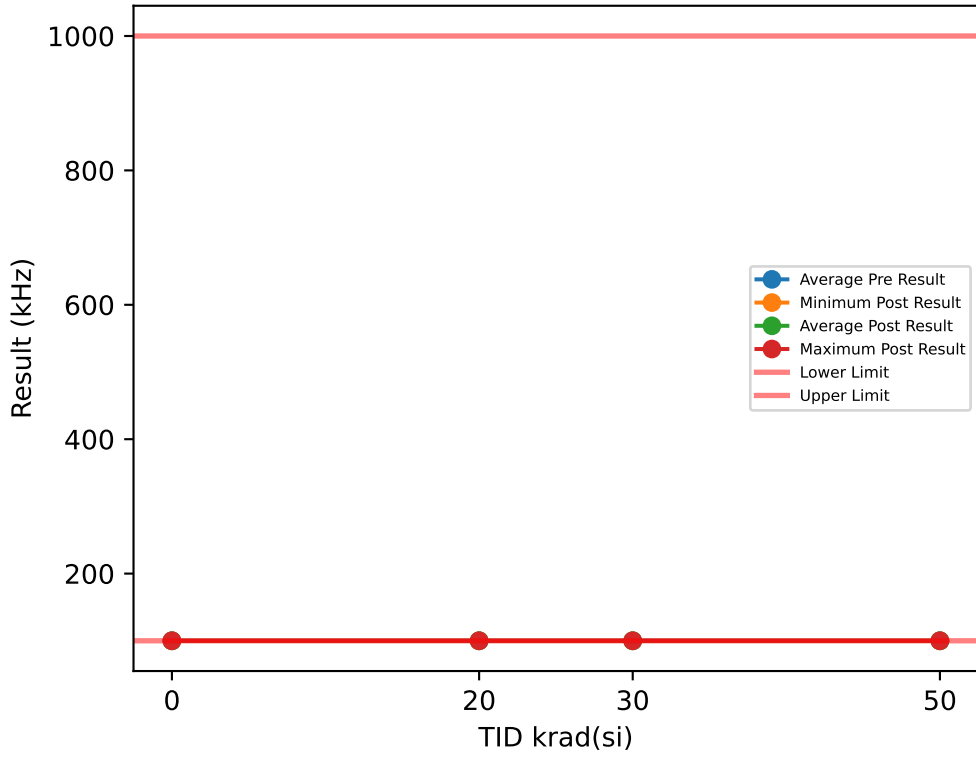


Test Statistics (mV)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	248.26	251.51	255.21	2.5454	248.22	251.41	255.13	2.532	-0.1704	-0.09978	-0.0413	0.049592
20	249.4	251.08	252.76	1.1032	249.38	251.02	252.67	1.1042	-0.1753	-0.06589	0.0561	0.07492
30	248.74	250.41	251.6	1.0314	248.56	250.25	251.47	1.047	-0.2847	-0.16565	-0.0847	0.064506
50	250.02	251.32	255.79	1.7145	249.65	250.92	254.68	1.4942	-1.1089	-0.39518	-0.1508	0.28202

Device Test: 24.1 FREQ|100kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE

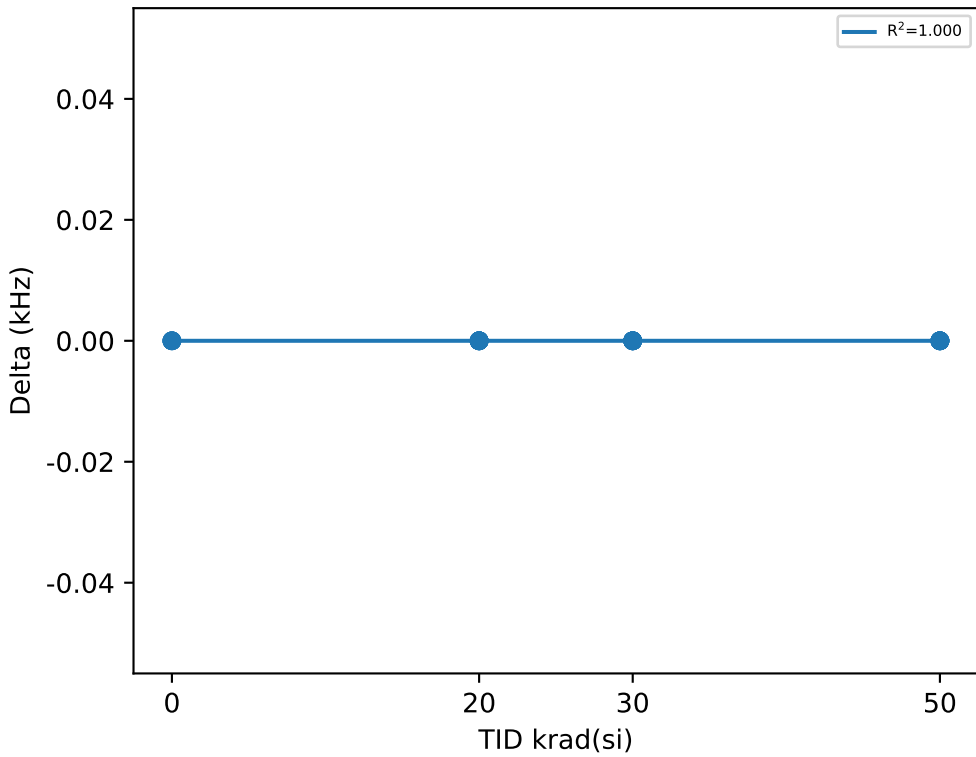
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	100	100	0
2	20	Biased	100	100	0
3	20	Biased	100	100	0
4	20	Biased	100	100	0
5	20	Biased	100	100	0
6	20	Unbiased	100	100	0
7	20	Unbiased	100	100	0
8	20	Unbiased	100	100	0
9	20	Unbiased	100	100	0
10	20	Unbiased	100	100	0
11	30	Biased	100	100	0
12	30	Biased	100	100	0
13	30	Biased	100	100	0
14	30	Biased	100	100	0
15	30	Biased	100	100	0
16	30	Unbiased	100	100	0
17	30	Unbiased	100	100	0
18	30	Unbiased	100	100	0
19	30	Unbiased	100	100	0
20	30	Unbiased	100	100	0
26	50	Unbiased	100	100	0
27	50	Unbiased	100	100	0
28	50	Unbiased	100	100	0
29	50	Unbiased	100	100	0
30	50	Unbiased	100	100	0
88	50	Biased-84Hr-Anneal	100	100	0
89	50	Biased-84Hr-Anneal	100	100	0
90	50	Biased-84Hr-Anneal	100	100	0
91	50	Biased-84Hr-Anneal	100	100	0
92	50	Biased-84Hr-Anneal	100	100	0
100	0	CORRELATION	100	100	0
101	0	CORRELATION	100	100	0
102	0	CORRELATION	100	100	0
103	0	CORRELATION	100	100	0
104	0	CORRELATION	100	100	0

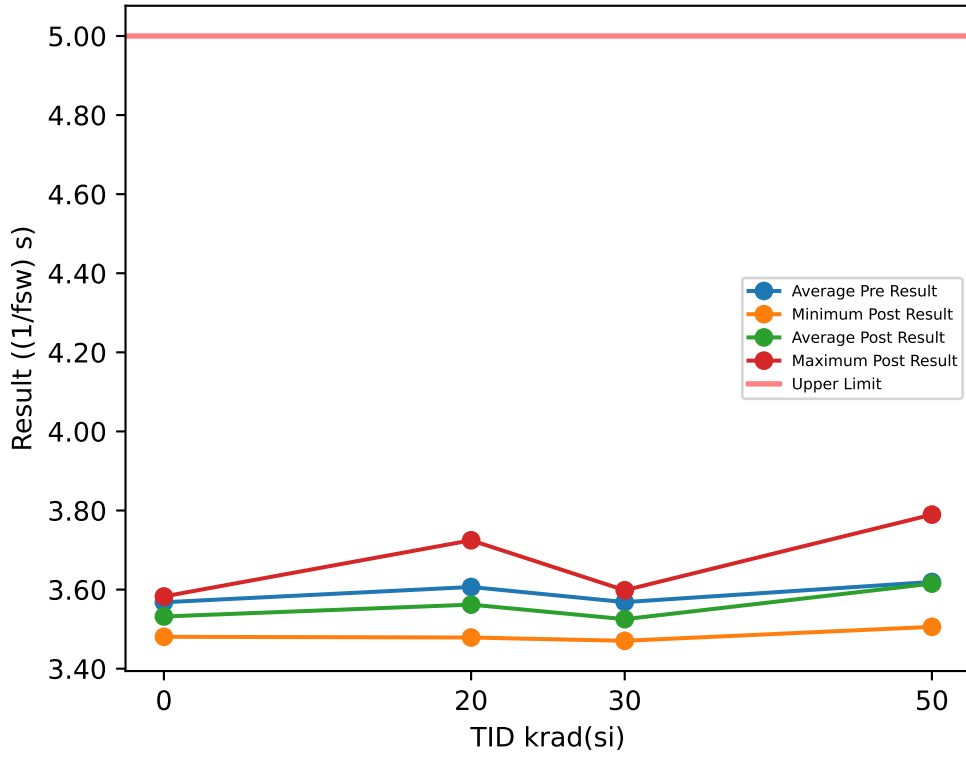
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100	0	100	100	100	0	0	0	0	0
20	100	100	100	0	100	100	100	0	0	0	0	0
30	100	100	100	0	100	100	100	0	0	0	0	0
50	100	100	100	0	100	100	100	0	0	0	0	0

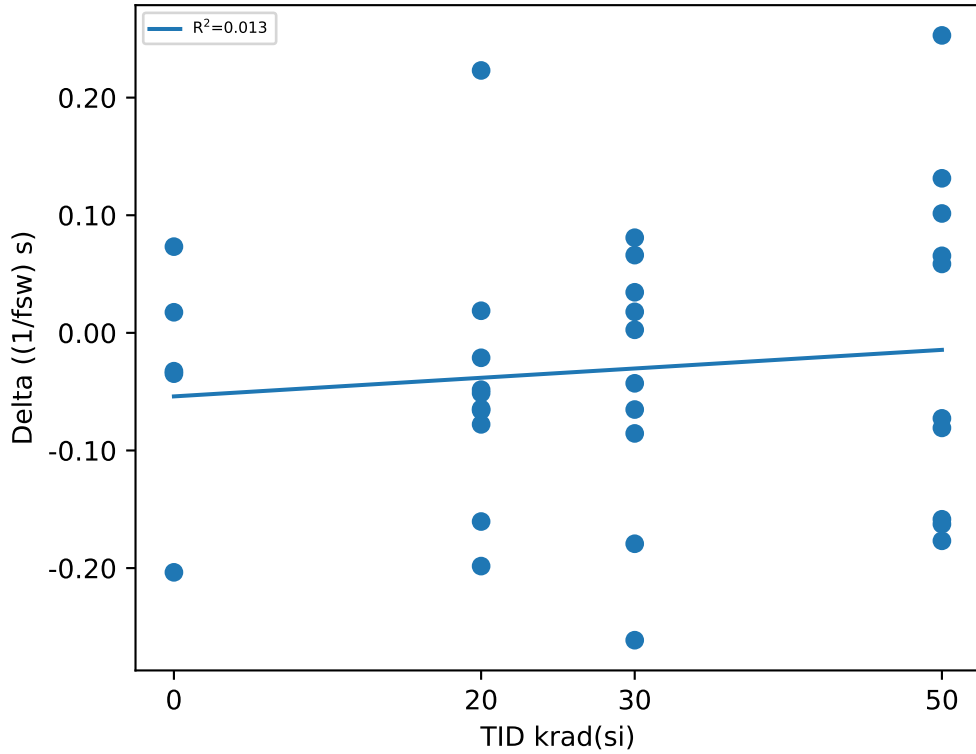
TID vs Result Stats



Test Results (Upper Limit = 5.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.5562	3.575	0.0188
2	20	Biased	3.562	3.4974	-0.0646
3	20	Biased	3.633	3.5818	-0.0512
4	20	Biased	3.6771	3.4788	-0.1983
5	20	Biased	3.5837	3.5354	-0.0483
6	20	Unbiased	3.5909	3.5131	-0.0778
7	20	Unbiased	3.6303	3.5644	-0.0659
8	20	Unbiased	3.5016	3.7247	0.2231
9	20	Unbiased	3.6155	3.5943	-0.0212
10	20	Unbiased	3.7153	3.5549	-0.1604
11	30	Biased	3.5731	3.5079	-0.0652
12	30	Biased	3.7477	3.4864	-0.2613
13	30	Biased	3.4872	3.4898	0.0026
14	30	Biased	3.4697	3.5358	0.0661
15	30	Biased	3.436	3.4705	0.0345
16	30	Unbiased	3.6887	3.5094	-0.1793
17	30	Unbiased	3.496	3.5769	0.0809
18	30	Unbiased	3.5804	3.5983	0.0179
19	30	Unbiased	3.6075	3.522	-0.0855
20	30	Unbiased	3.5973	3.5544	-0.0429
26	50	Unbiased	3.5486	3.6072	0.0586
27	50	Unbiased	3.6981	3.5213	-0.1768
28	50	Unbiased	3.7891	3.6265	-0.1626
29	50	Unbiased	3.5253	3.6567	0.1314
30	50	Unbiased	3.7201	3.5616	-0.1585
88	50	Biased-84Hr-Anneal	3.5367	3.7896	0.2529
89	50	Biased-84Hr-Anneal	3.6035	3.669	0.0655
90	50	Biased-84Hr-Anneal	3.7071	3.6344	-0.0727
91	50	Biased-84Hr-Anneal	3.4776	3.5791	0.1015
92	50	Biased-84Hr-Anneal	3.5866	3.5058	-0.0808
100	0	CORRELATION	3.6173	3.5826	-0.0347
101	0	CORRELATION	3.49	3.5075	0.0175
102	0	CORRELATION	3.5614	3.5288	-0.0326
103	0	CORRELATION	3.4869	3.5602	0.0733
104	0	CORRELATION	3.6842	3.4806	-0.2036

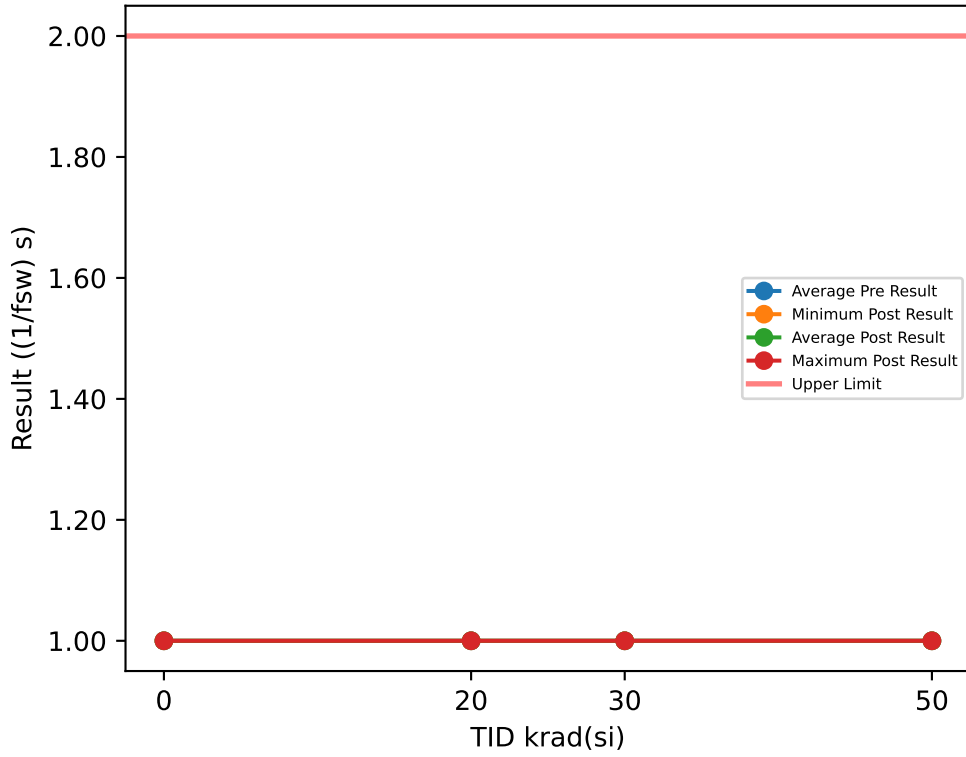
TID vs Post - Pre Exposure Delta



Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.4869	3.568	3.6842	0.084613	3.4806	3.5319	3.5826	0.040645	-0.2036	-0.03602	0.0733	0.10358
20	3.5016	3.6066	3.7153	0.061868	3.4788	3.562	3.7247	0.068578	-0.1983	-0.04458	0.2231	0.11317
30	3.436	3.5684	3.7477	0.099027	3.4705	3.5251	3.5983	0.041219	-0.2613	-0.04322	0.0809	0.10933
50	3.4776	3.6193	3.7891	0.10272	3.5058	3.6151	3.7896	0.082026	-0.1768	-0.00415	0.2529	0.14671

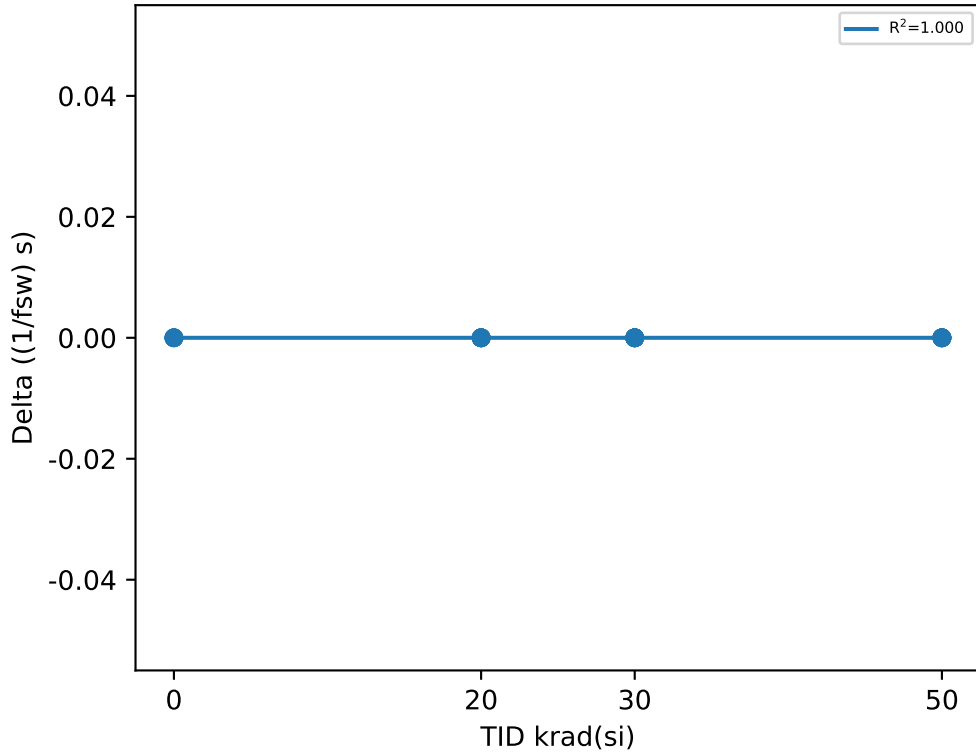
TID vs Result Stats



Test Results (Upper Limit = 2.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1	1	0
2	20	Biased	1	1	0
3	20	Biased	1	1	0
4	20	Biased	1	1	0
5	20	Biased	1	1	0
6	20	Unbiased	1	1	0
7	20	Unbiased	1	1	0
8	20	Unbiased	1	1	0
9	20	Unbiased	1	1	0
10	20	Unbiased	1	1	0
11	30	Biased	1	1	0
12	30	Biased	1	1	0
13	30	Biased	1	1	0
14	30	Biased	1	1	0
15	30	Biased	1	1	0
16	30	Unbiased	1	1	0
17	30	Unbiased	1	1	0
18	30	Unbiased	1	1	0
19	30	Unbiased	1	1	0
20	30	Unbiased	1	1	0
26	50	Unbiased	1	1	0
27	50	Unbiased	1	1	0
28	50	Unbiased	1	1	0
29	50	Unbiased	1	1	0
30	50	Unbiased	1	1	0
88	50	Biased-84Hr-Anneal	1	1	0
89	50	Biased-84Hr-Anneal	1	1	0
90	50	Biased-84Hr-Anneal	1	1	0
91	50	Biased-84Hr-Anneal	1	1	0
92	50	Biased-84Hr-Anneal	1	1	0
100	0	CORRELATION	1	1	0
101	0	CORRELATION	1	1	0
102	0	CORRELATION	1	1	0
103	0	CORRELATION	1	1	0
104	0	CORRELATION	1	1	0

TID vs Post - Pre Exposure Delta

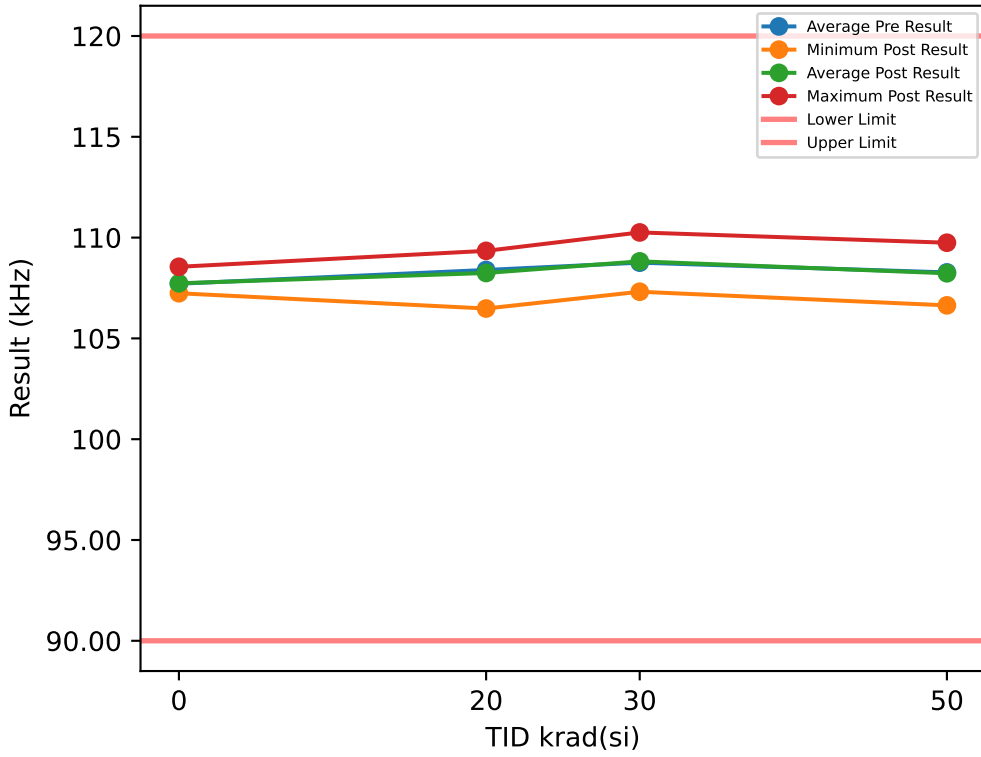


Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1	0	1	1	1	0	0	0	0	0
20	1	1	1	0	1	1	1	0	0	0	0	0
30	1	1	1	0	1	1	1	0	0	0	0	0
50	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.101 FREQ|100kHz/SYNC1/12//511k//@EXT_SET_FREQ_100kHz

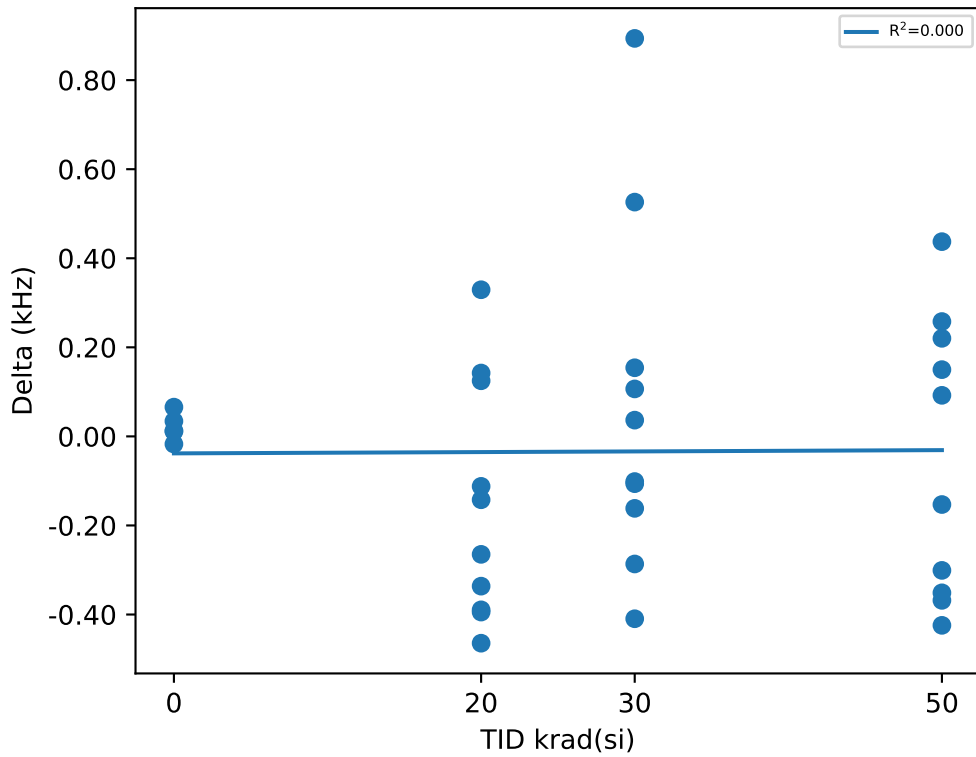
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	107.08	107.22	0.1423
2	20	Biased	107.02	106.62	-0.3945
3	20	Biased	109.32	109.05	-0.2649
4	20	Biased	109.06	108.95	-0.1122
5	20	Biased	108.56	108.68	0.1249
6	20	Unbiased	106.82	106.48	-0.3363
7	20	Unbiased	109.07	108.68	-0.3895
8	20	Unbiased	108.8	109.12	0.3293
9	20	Unbiased	109.48	109.34	-0.1423
10	20	Unbiased	108.75	108.28	-0.4644
11	30	Biased	108.53	108.56	0.0365
12	30	Biased	108.12	108.27	0.1541
13	30	Biased	106.79	107.31	0.5261
14	30	Biased	108.14	107.85	-0.2865
15	30	Biased	109.66	109.55	-0.1014
16	30	Unbiased	108.78	108.88	0.1066
17	30	Unbiased	109.71	109.3	-0.4095
18	30	Unbiased	110.36	110.26	-0.1062
19	30	Unbiased	109.48	109.32	-0.1616
20	30	Unbiased	108.01	108.91	0.8937
26	50	Unbiased	108.71	108.56	-0.153
27	50	Unbiased	107.21	107.47	0.2579
28	50	Unbiased	106.42	106.64	0.2202
29	50	Unbiased	108.11	107.76	-0.3513
30	50	Unbiased	109.2	108.83	-0.3682
88	50	Biased-84Hr-Anneal	107.22	107.66	0.4373
89	50	Biased-84Hr-Anneal	108.91	109.06	0.1499
90	50	Biased-84Hr-Anneal	108.47	108.05	-0.4243
91	50	Biased-84Hr-Anneal	108.82	108.52	-0.3009
92	50	Biased-84Hr-Anneal	109.65	109.75	0.0922
100	0	CORRELATION	107.23	107.24	0.0126
101	0	CORRELATION	108.11	108.12	0.0112
102	0	CORRELATION	108.57	108.55	-0.0172
103	0	CORRELATION	107.42	107.48	0.0657
104	0	CORRELATION	107.24	107.27	0.0342

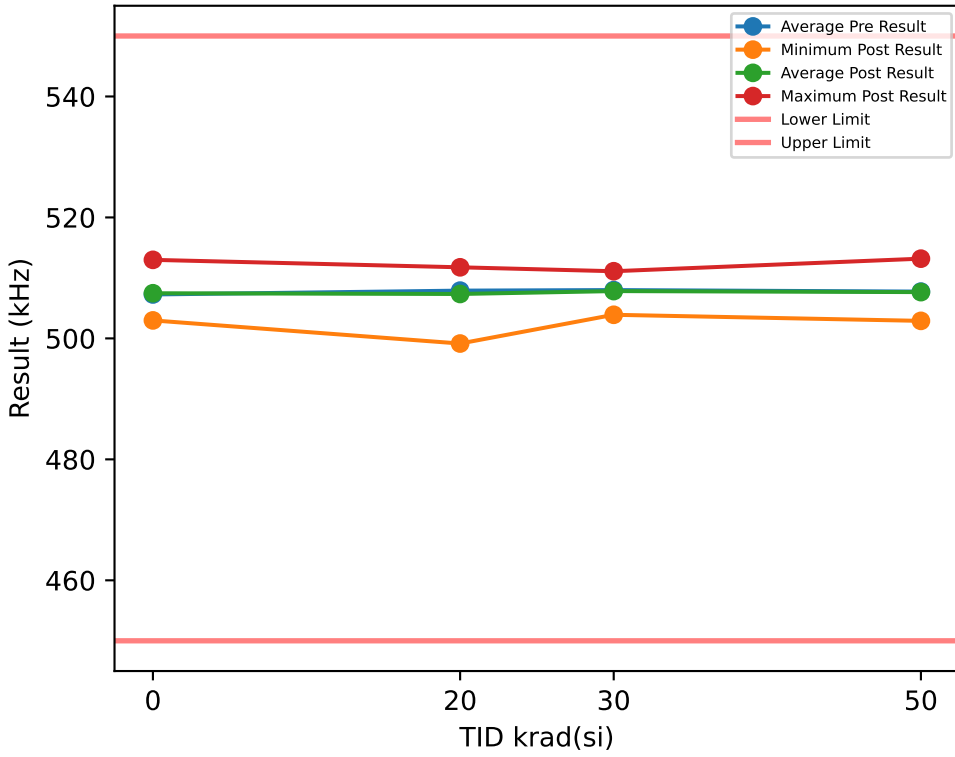
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.23	107.71	108.57	0.60088	107.24	107.73	108.55	0.57961	-0.0172	0.0213	0.0657	0.030813
20	106.82	108.39	109.48	1.0197	106.48	108.24	109.34	1.0693	-0.4644	-0.15076	0.3293	0.27
30	106.79	108.76	110.36	1.059	107.31	108.82	110.26	0.86063	-0.4095	0.06518	0.8937	0.38971
50	106.42	108.27	109.65	1.0228	106.64	108.23	109.75	0.89735	-0.4243	-0.04402	0.4373	0.31105

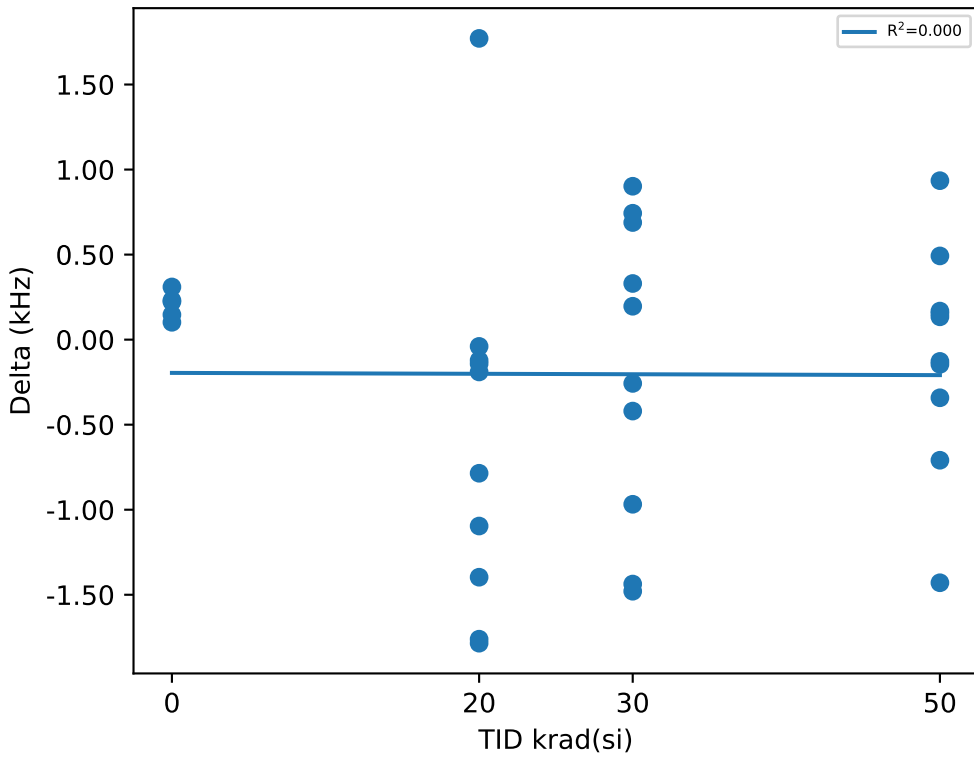
TID vs Result Stats



Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	503.83	505.6	1.7712
2	20	Biased	507.63	505.86	-1.7612
3	20	Biased	508.68	506.9	-1.7848
4	20	Biased	512.85	511.76	-1.0959
5	20	Biased	510.95	510.83	-0.1217
6	20	Unbiased	500.55	499.15	-1.3968
7	20	Unbiased	507.98	507.94	-0.0397
8	20	Unbiased	509.42	509.23	-0.19
9	20	Unbiased	511.08	510.3	-0.7856
10	20	Unbiased	506.02	505.88	-0.1419
11	30	Biased	506.5	506.69	0.1963
12	30	Biased	509.73	508.3	-1.437
13	30	Biased	503	503.9	0.9019
14	30	Biased	505.18	504.76	-0.42
15	30	Biased	507.99	507.02	-0.968
16	30	Unbiased	510.33	510.07	-0.2574
17	30	Unbiased	511.3	509.82	-1.4793
18	30	Unbiased	510.78	511.11	0.3302
19	30	Unbiased	508.92	509.61	0.6886
20	30	Unbiased	506.2	506.94	0.7432
26	50	Unbiased	510.38	510.55	0.1679
27	50	Unbiased	505.38	505.87	0.4922
28	50	Unbiased	501.96	502.9	0.9347
29	50	Unbiased	509.05	508.92	-0.1279
30	50	Unbiased	507.54	507.2	-0.3418
88	50	Biased-84Hr-Anneal	504.1	503.39	-0.7091
89	50	Biased-84Hr-Anneal	508.74	508.88	0.1342
90	50	Biased-84Hr-Anneal	511.05	509.62	-1.4294
91	50	Biased-84Hr-Anneal	505.85	506.01	0.1534
92	50	Biased-84Hr-Anneal	513.33	513.18	-0.1453
100	0	CORRELATION	507.11	507.34	0.2308
101	0	CORRELATION	512.76	512.99	0.223
102	0	CORRELATION	506.27	506.37	0.102
103	0	CORRELATION	502.67	502.97	0.3098
104	0	CORRELATION	507.51	507.66	0.1465

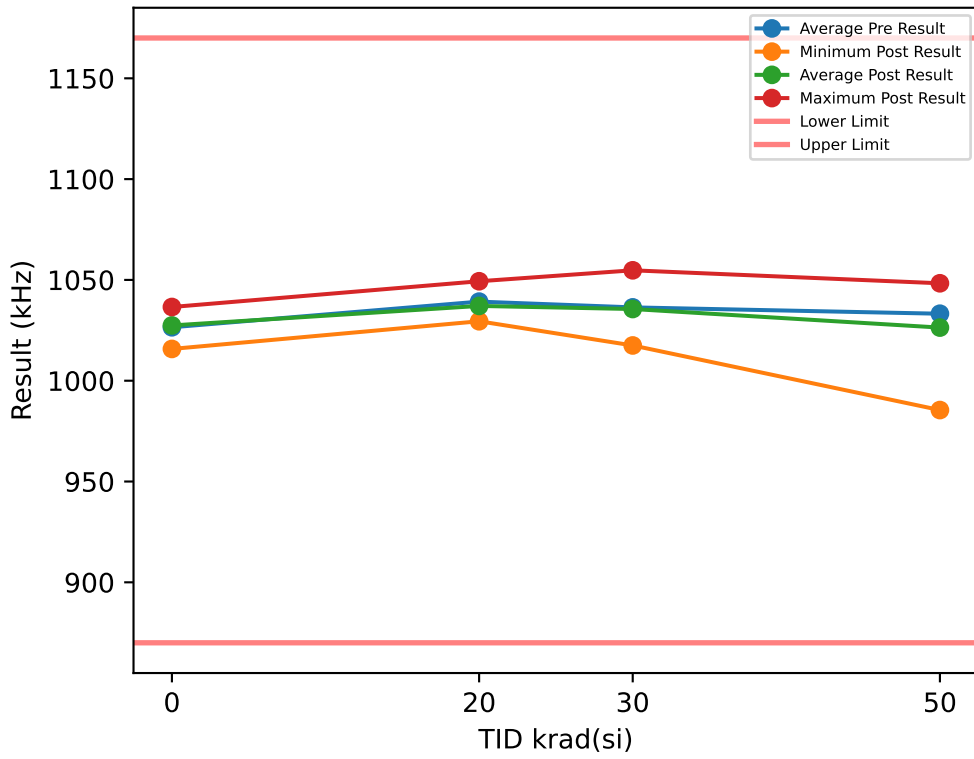
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	502.67	507.26	512.76	3.6221	502.97	507.46	512.99	3.6024	0.102	0.20242	0.3098	0.080577
20	500.55	507.9	512.85	3.6681	499.15	507.34	511.76	3.6349	-1.7848	-0.55464	1.7712	1.0641
30	503	507.99	511.3	2.7148	503.9	507.82	511.11	2.3731	-1.4793	-0.17015	0.9019	0.89013
50	501.96	507.74	513.33	3.4585	502.9	507.65	513.18	3.2113	-1.4294	-0.08711	0.9347	0.65065

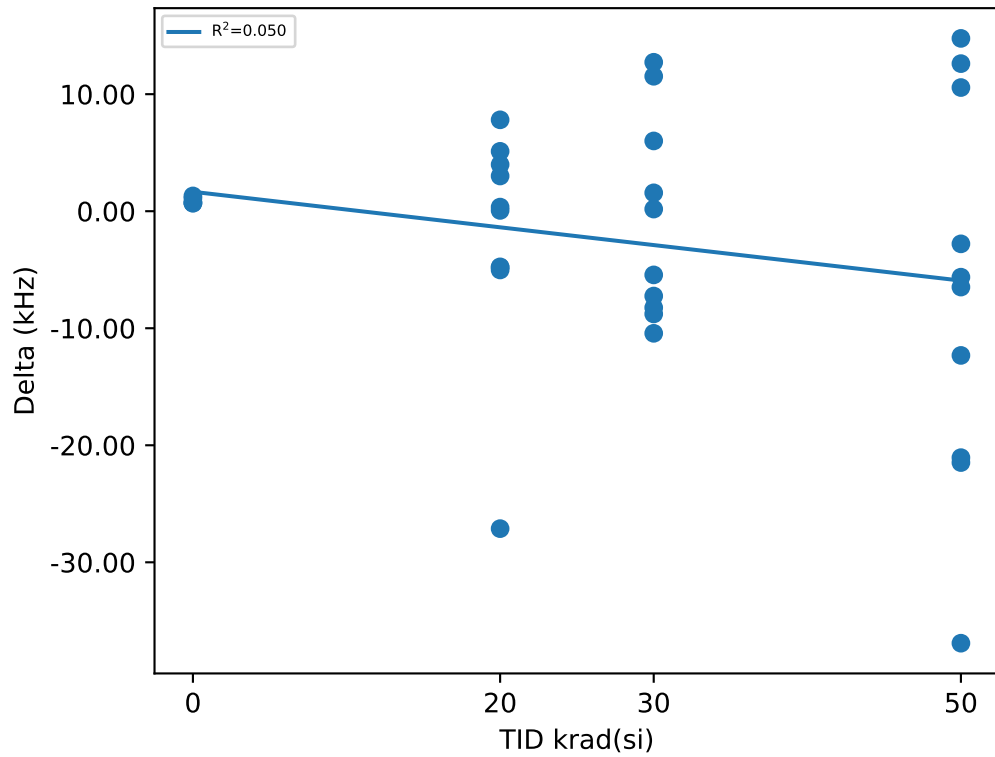
TID vs Result Stats



Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1033.3	1033.4	0.0683
2	20	Biased	1034.5	1029.5	-5.0205
3	20	Biased	1076.5	1049.3	-27.123
4	20	Biased	1036.5	1031.8	-4.756
5	20	Biased	1038.9	1039.2	0.3517
6	20	Unbiased	1023.5	1031.4	7.8092
7	20	Unbiased	1041.6	1036.8	-4.801
8	20	Unbiased	1038.1	1041.1	3.0085
9	20	Unbiased	1037.3	1041.2	3.9869
10	20	Unbiased	1032.2	1037.3	5.1167
11	30	Biased	1040.4	1033.2	-7.248
12	30	Biased	1028.1	1019.3	-8.7793
13	30	Biased	1017.3	1017.5	0.1822
14	30	Biased	1034.9	1036.5	1.5704
15	30	Biased	1033.7	1039.7	6.0041
16	30	Unbiased	1029.2	1020.9	-8.2411
17	30	Unbiased	1042	1054.8	12.727
18	30	Unbiased	1054.7	1044.3	-10.434
19	30	Unbiased	1047.8	1042.4	-5.4422
20	30	Unbiased	1035.7	1047.2	11.53
26	50	Unbiased	1031.4	1009.9	-21.477
27	50	Unbiased	1020.4	999.3	-21.058
28	50	Unbiased	1022.4	985.45	-36.913
29	50	Unbiased	1047.6	1042	-5.6366
30	50	Unbiased	1035.7	1048.3	12.611
88	50	Biased-84Hr-Anneal	1029.3	1044.1	14.766
89	50	Biased-84Hr-Anneal	1034.7	1031.9	-2.789
90	50	Biased-84Hr-Anneal	1032.8	1020.5	-12.322
91	50	Biased-84Hr-Anneal	1036.1	1046.7	10.567
92	50	Biased-84Hr-Anneal	1041.9	1035.5	-6.4825
100	0	CORRELATION	1029.4	1030.7	1.3053
101	0	CORRELATION	1035.5	1036.6	1.0982
102	0	CORRELATION	1027.1	1027.8	0.6795
103	0	CORRELATION	1025.5	1026.2	0.7147
104	0	CORRELATION	1015	1015.8	0.7376

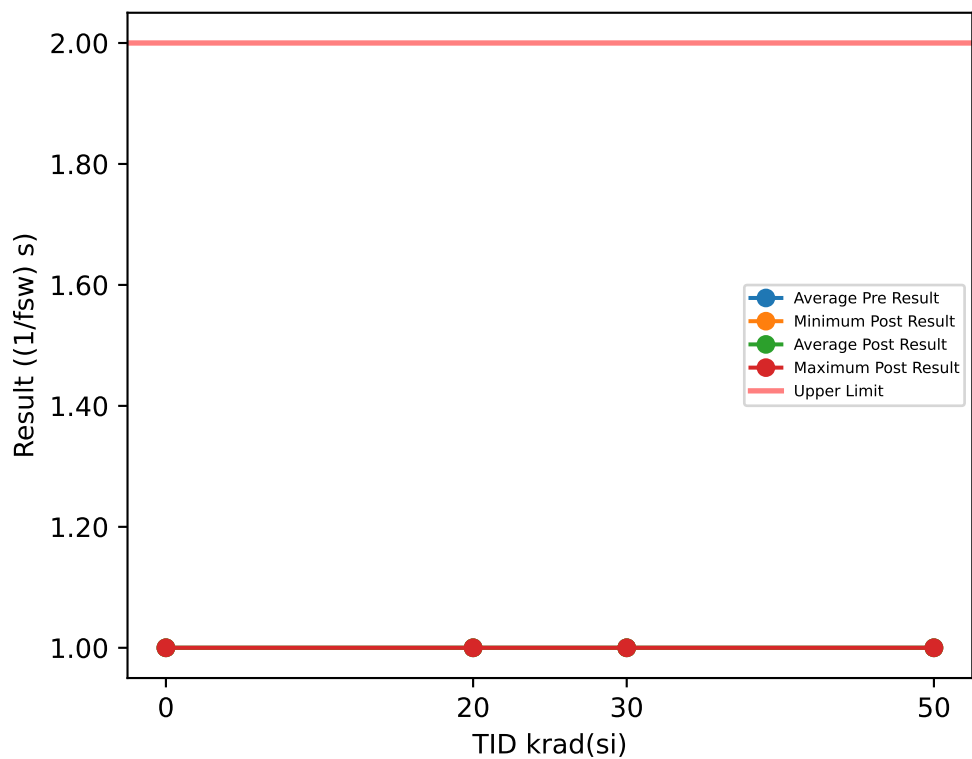
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1015	1026.5	1035.5	7.4493	1015.8	1027.4	1036.6	7.6162	0.6795	0.90706	1.3053	0.27957
20	1023.5	1039.2	1076.5	13.971	1029.5	1037.1	1049.3	5.9693	-27.123	-2.136	7.8092	9.8498
30	1017.3	1036.4	1054.7	10.588	1017.5	1035.6	1054.8	12.714	-10.434	-0.81309	12.727	8.5821
50	1020.4	1033.2	1047.6	8.1828	985.45	1026.4	1048.3	21.811	-36.913	-6.8733	14.766	16.723

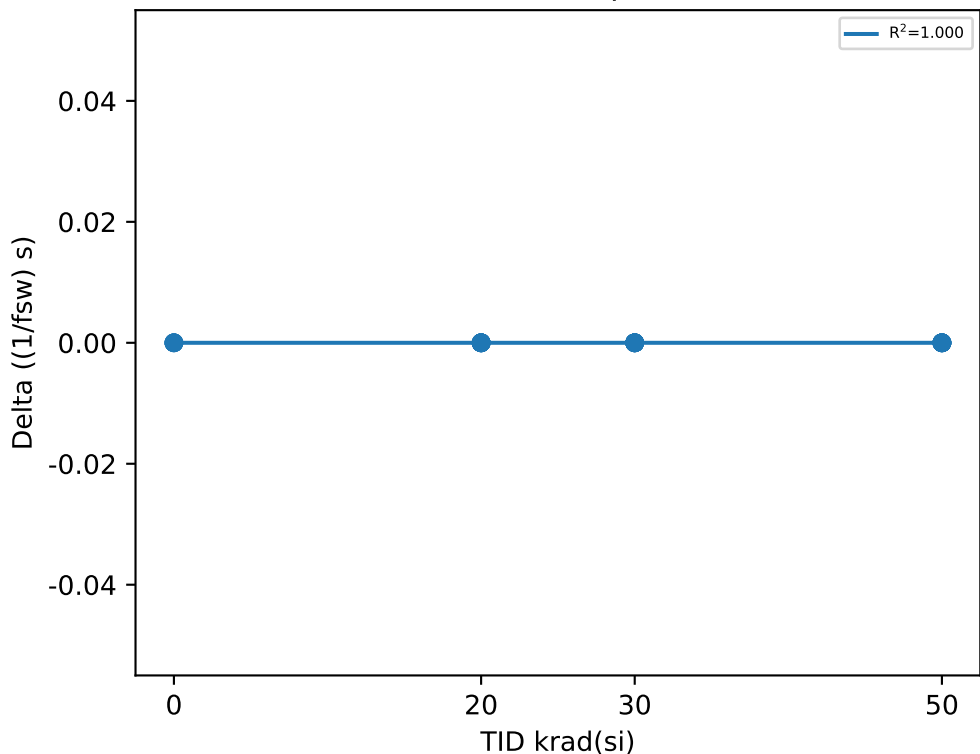
TID vs Result Stats



Test Results (Upper Limit = 2.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1	1	0
2	20	Biased	1	1	0
3	20	Biased	1	1	0
4	20	Biased	1	1	0
5	20	Biased	1	1	0
6	20	Unbiased	1	1	0
7	20	Unbiased	1	1	0
8	20	Unbiased	1	1	0
9	20	Unbiased	1	1	0
10	20	Unbiased	1	1	0
11	30	Biased	1	1	0
12	30	Biased	1	1	0
13	30	Biased	1	1	0
14	30	Biased	1	1	0
15	30	Biased	1	1	0
16	30	Unbiased	1	1	0
17	30	Unbiased	1	1	0
18	30	Unbiased	1	1	0
19	30	Unbiased	1	1	0
20	30	Unbiased	1	1	0
26	50	Unbiased	1	1	0
27	50	Unbiased	1	1	0
28	50	Unbiased	1	1	0
29	50	Unbiased	1	1	0
30	50	Unbiased	1	1	0
88	50	Biased-84Hr-Anneal	1	1	0
89	50	Biased-84Hr-Anneal	1	1	0
90	50	Biased-84Hr-Anneal	1	1	0
91	50	Biased-84Hr-Anneal	1	1	0
92	50	Biased-84Hr-Anneal	1	1	0
100	0	CORRELATION	1	1	0
101	0	CORRELATION	1	1	0
102	0	CORRELATION	1	1	0
103	0	CORRELATION	1	1	0
104	0	CORRELATION	1	1	0

TID vs Post - Pre Exposure Delta

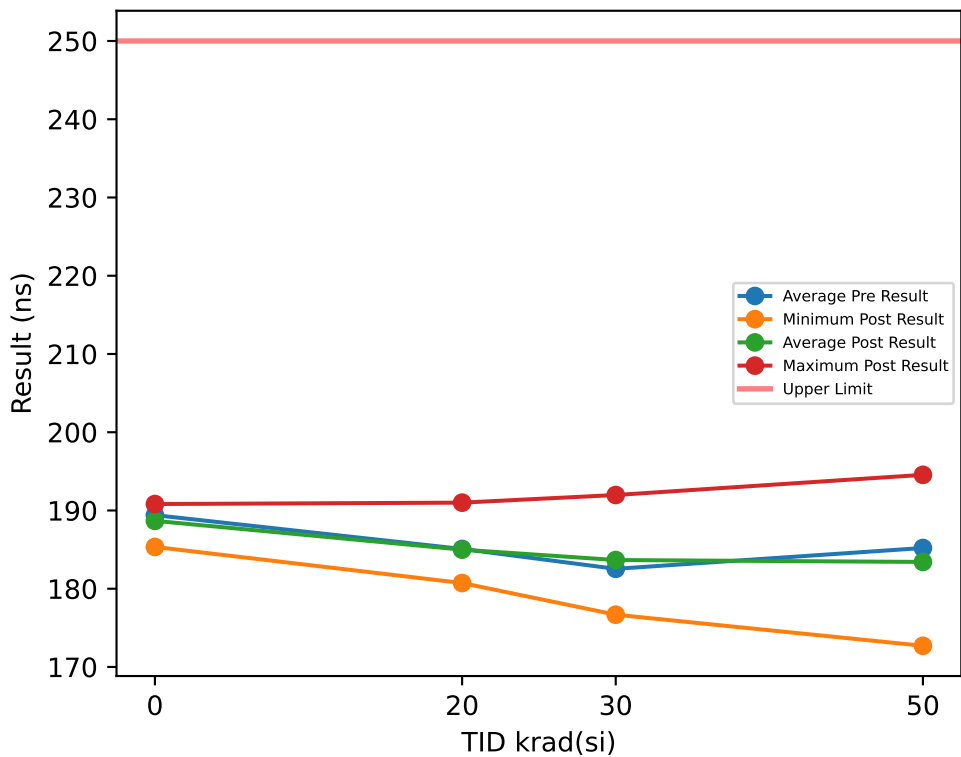


Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1	0	1	1	1	0	0	0	0	0
20	1	1	1	0	1	1	1	0	0	0	0	0
30	1	1	1	0	1	1	1	0	0	0	0	0
50	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.111 TIMING|MINON/SW/12//511k//@ON_TIME_MIN_12V

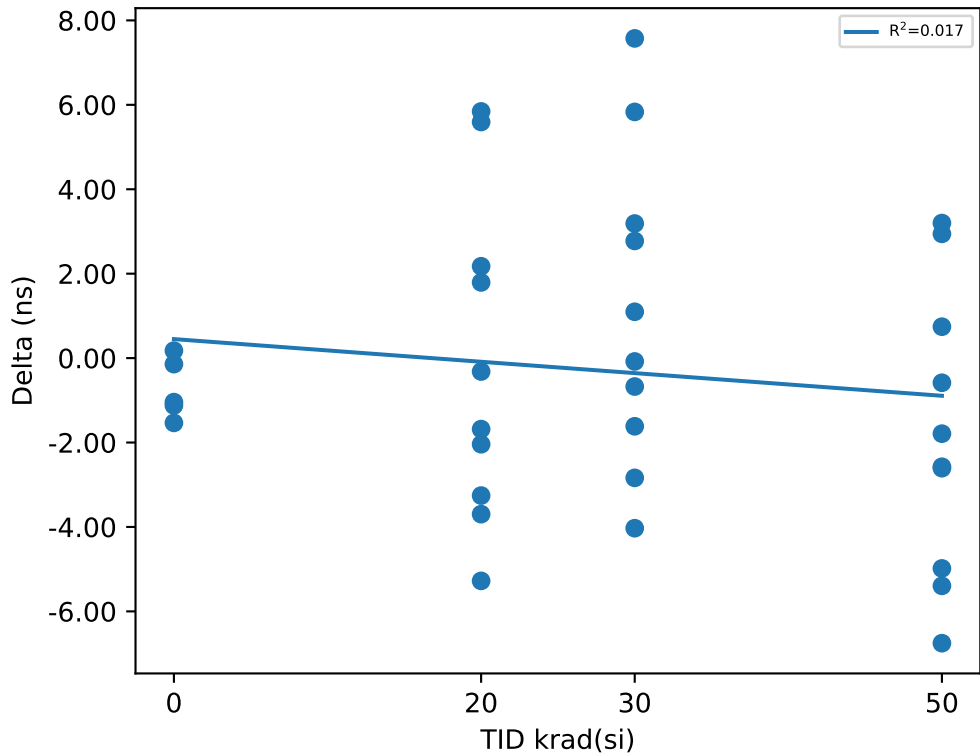
TID vs Result Stats



Test Results (Upper Limit = 250.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	184.42	180.73	-3.6966
2	20	Biased	179.71	185.3	5.5929
3	20	Biased	183.31	181.27	-2.0407
4	20	Biased	184.94	183.26	-1.6818
5	20	Biased	190.95	187.7	-3.2565
6	20	Unbiased	182.34	188.19	5.8435
7	20	Unbiased	193.97	188.7	-5.2775
8	20	Unbiased	180.14	181.93	1.793
9	20	Unbiased	191.32	191	-0.3177
10	20	Unbiased	179.71	181.89	2.1756
11	30	Biased	178.3	176.68	-1.6153
12	30	Biased	182.39	185.58	3.188
13	30	Biased	182.62	178.59	-4.0297
14	30	Biased	180.56	186.4	5.832
15	30	Biased	186.64	185.97	-0.6733
16	30	Unbiased	189.2	191.98	2.7755
17	30	Unbiased	185.37	185.3	-0.0793
18	30	Unbiased	179.33	186.91	7.5737
19	30	Unbiased	185.01	182.17	-2.8371
20	30	Unbiased	176	177.1	1.0975
26	50	Unbiased	183.35	186.55	3.1995
27	50	Unbiased	193.81	194.55	0.7441
28	50	Unbiased	184.4	179.42	-4.9825
29	50	Unbiased	188.05	187.47	-0.5839
30	50	Unbiased	181.72	184.66	2.9435
88	50	Biased-84Hr-Anneal	179.46	172.71	-6.7537
89	50	Biased-84Hr-Anneal	180.94	178.36	-2.5735
90	50	Biased-84Hr-Anneal	181.07	175.68	-5.3953
91	50	Biased-84Hr-Anneal	189.83	187.22	-2.6077
92	50	Biased-84Hr-Anneal	189.4	187.61	-1.7903
100	0	CORRELATION	190.97	190.82	-0.1426
101	0	CORRELATION	191.66	190.13	-1.5347
102	0	CORRELATION	190.21	190.39	0.1775
103	0	CORRELATION	187.81	186.69	-1.1214
104	0	CORRELATION	186.38	185.34	-1.0428

TID vs Post - Pre Exposure Delta

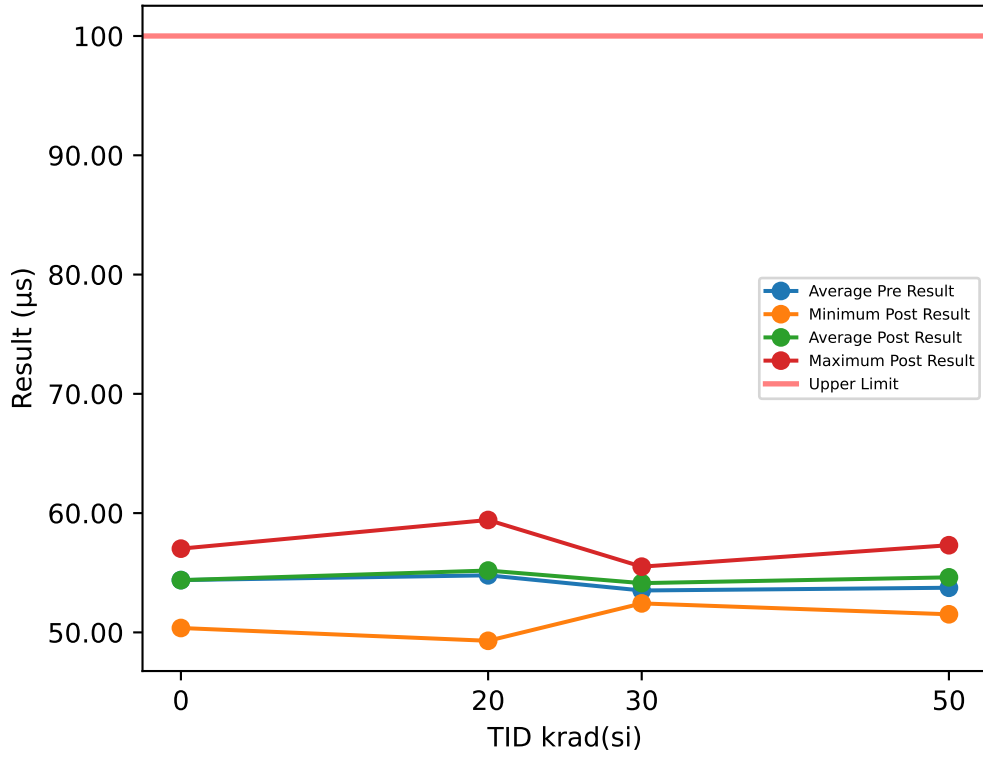


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	186.38	189.41	191.66	2.2295	185.34	188.67	190.82	2.4875	-1.5347	-0.7328	0.1775	0.71888
20	179.71	185.08	193.97	5.2256	180.73	184.99	191	3.6744	-5.2775	-0.08658	5.8435	3.8372
30	176	182.54	189.2	4.0865	176.68	183.67	191.98	4.9276	-4.0297	1.1232	7.5737	3.7295
50	179.46	185.2	193.81	4.78	172.71	183.42	194.55	6.6666	-6.7537	-1.78	3.1995	3.404

Device Test: 24.112 TIMING|DELAY/EN/12//511k//@T_EN_DELAY

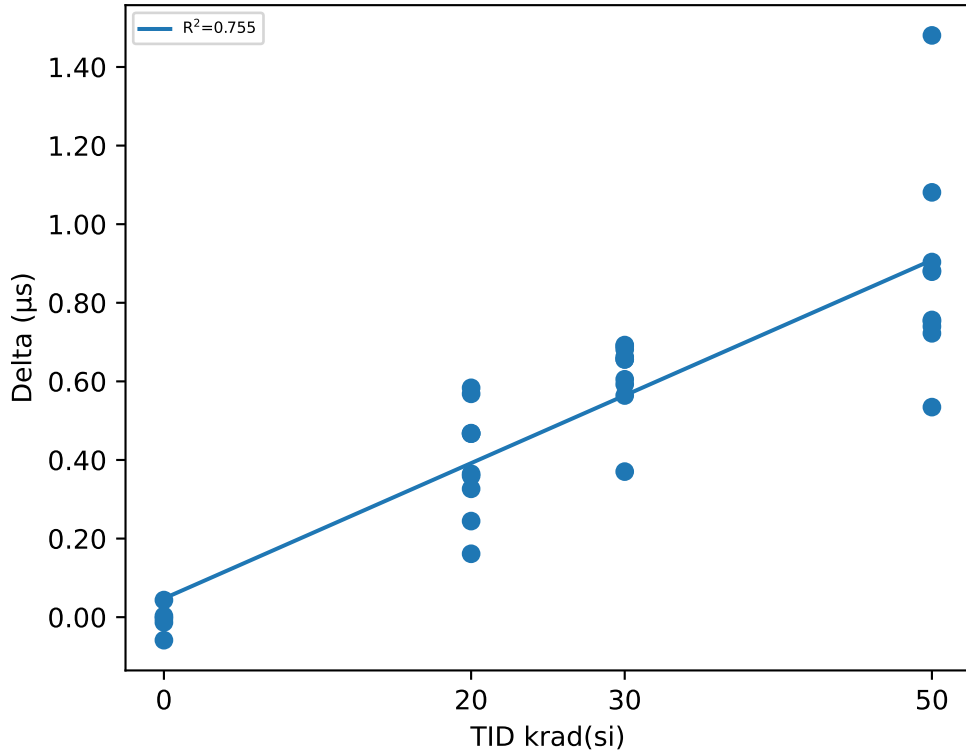
TID vs Result Stats



Test Results (Upper Limit = 100.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	53.358	53.717	0.3595
2	20	Biased	48.931	49.296	0.3649
3	20	Biased	57.335	57.497	0.1613
4	20	Biased	57.816	58.283	0.467
5	20	Biased	51.589	51.915	0.3266
6	20	Unbiased	58.856	59.424	0.5683
7	20	Unbiased	55.519	55.987	0.4683
8	20	Unbiased	55.415	55.999	0.5836
9	20	Unbiased	52.374	52.841	0.4671
10	20	Unbiased	56.658	56.902	0.2445
11	30	Biased	52.649	53.33	0.6814
12	30	Biased	53.505	54.195	0.6895
13	30	Biased	54.733	55.395	0.6625
14	30	Biased	54.688	55.059	0.3704
15	30	Biased	54.855	55.511	0.6563
16	30	Unbiased	54.37	54.934	0.564
17	30	Unbiased	51.776	52.431	0.6557
18	30	Unbiased	53.517	54.11	0.5925
19	30	Unbiased	51.842	52.534	0.6924
20	30	Unbiased	53.206	53.811	0.6053
26	50	Unbiased	50.983	51.518	0.5345
27	50	Unbiased	55.828	57.309	1.4804
28	50	Unbiased	53.49	54.243	0.7528
29	50	Unbiased	54.997	55.901	0.9037
30	50	Unbiased	53.94	55.021	1.081
88	50	Biased-84Hr-Anneal	51.644	52.523	0.8791
89	50	Biased-84Hr-Anneal	54.073	54.955	0.8818
90	50	Biased-84Hr-Anneal	55.148	55.888	0.7399
91	50	Biased-84Hr-Anneal	54.108	54.864	0.7563
92	50	Biased-84Hr-Anneal	53.215	53.938	0.7223
100	0	CORRELATION	50.382	50.369	-0.0133
101	0	CORRELATION	54.919	54.963	0.0435
102	0	CORRELATION	55.893	55.896	0.0029
103	0	CORRELATION	57.024	57.021	-0.0032
104	0	CORRELATION	53.709	53.651	-0.0586

TID vs Post - Pre Exposure Delta

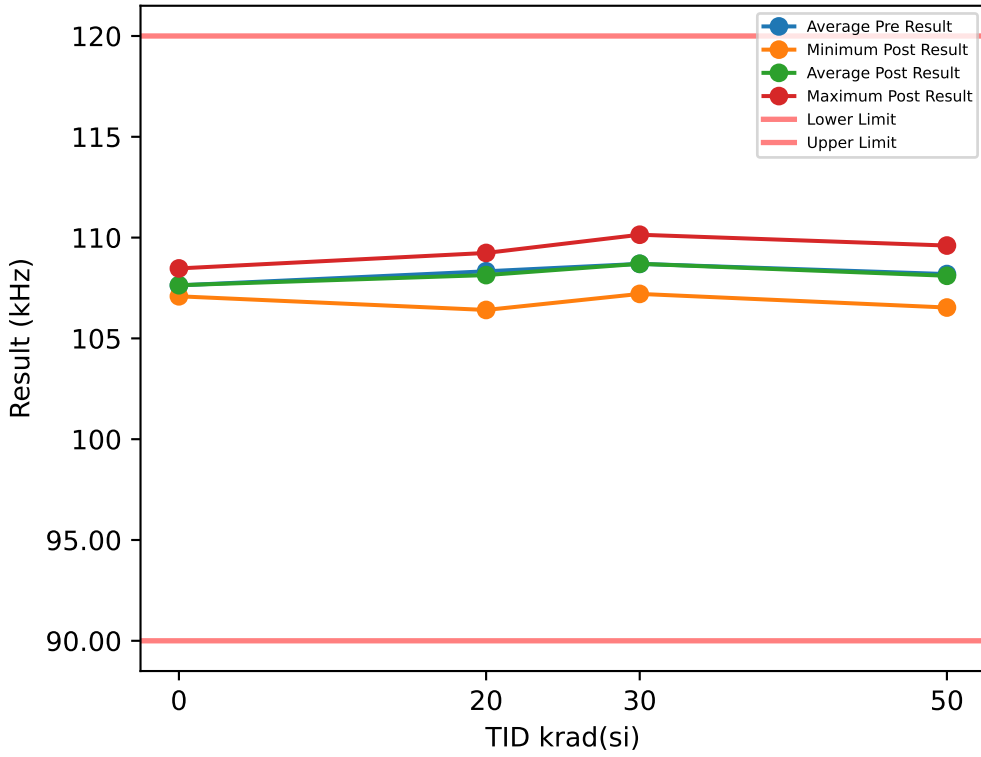


Test Statistics (µs)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	50.382	54.386	57.024	2.5497	50.369	54.38	57.021	2.5609	-0.0586	-0.00574	0.0435	0.036596
20	48.931	54.785	58.856	3.1454	49.296	55.186	59.424	3.1656	0.1613	0.40111	0.5836	0.13544
30	51.776	53.514	54.855	1.1575	52.431	54.131	55.511	1.1154	0.3704	0.617	0.6924	0.09693
50	50.983	53.743	55.828	1.5107	51.518	54.616	57.309	1.6812	0.5345	0.87318	1.4804	0.25741

Device Test: 24.12 FREQ|100kHz/SYNC1/4.5//511k//@EXT_SET_FREQ_100kHz

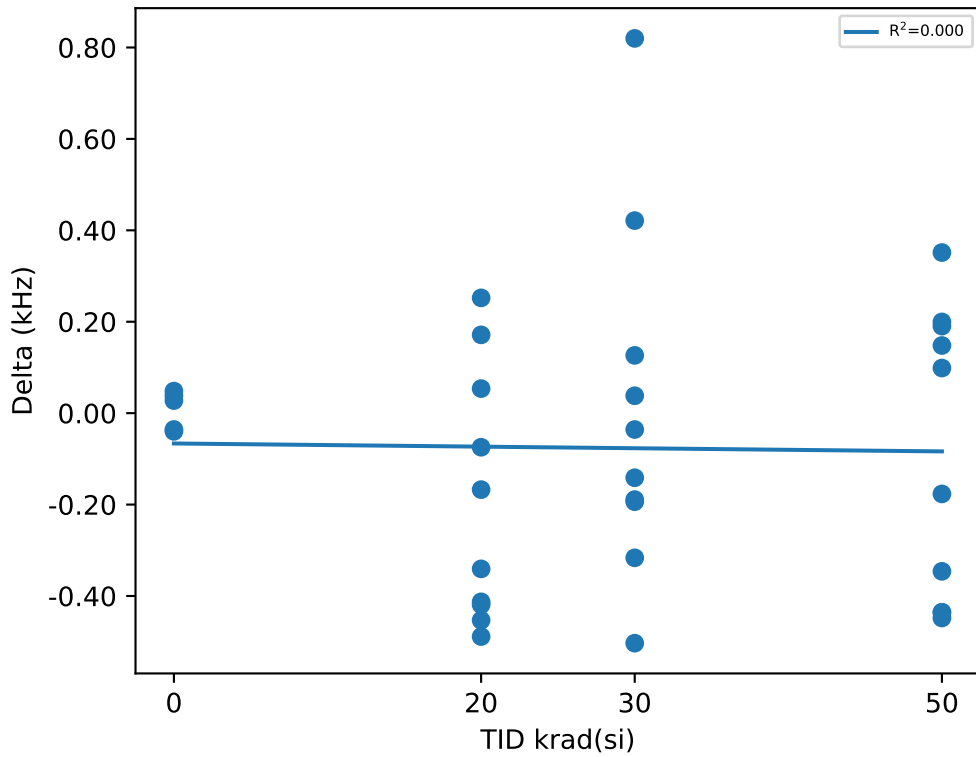
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	106.92	107.09	0.1713
2	20	Biased	106.99	106.58	-0.4191
3	20	Biased	109.23	108.89	-0.3407
4	20	Biased	109.04	108.87	-0.1673
5	20	Biased	108.55	108.6	0.0537
6	20	Unbiased	106.82	106.41	-0.4128
7	20	Unbiased	108.99	108.54	-0.453
8	20	Unbiased	108.76	109.01	0.2522
9	20	Unbiased	109.31	109.24	-0.0746
10	20	Unbiased	108.66	108.17	-0.4888
11	30	Biased	108.43	108.4	-0.0358
12	30	Biased	108.1	108.14	0.0381
13	30	Biased	106.79	107.21	0.4213
14	30	Biased	108.09	107.77	-0.3165
15	30	Biased	109.57	109.38	-0.1891
16	30	Unbiased	108.7	108.82	0.1264
17	30	Unbiased	109.69	109.19	-0.5033
18	30	Unbiased	110.28	110.14	-0.1413
19	30	Unbiased	109.38	109.19	-0.1937
20	30	Unbiased	107.94	108.76	0.8199
26	50	Unbiased	108.64	108.47	-0.1767
27	50	Unbiased	107.19	107.34	0.148
28	50	Unbiased	106.33	106.53	0.1996
29	50	Unbiased	108.11	107.66	-0.4482
30	50	Unbiased	109.12	108.68	-0.4357
88	50	Biased-84Hr-Anneal	107.17	107.52	0.3514
89	50	Biased-84Hr-Anneal	108.79	108.98	0.1904
90	50	Biased-84Hr-Anneal	108.36	107.93	-0.4358
91	50	Biased-84Hr-Anneal	108.69	108.35	-0.3461
92	50	Biased-84Hr-Anneal	109.51	109.61	0.0987
100	0	CORRELATION	107.05	107.09	0.0383
101	0	CORRELATION	107.97	108.02	0.0483
102	0	CORRELATION	108.51	108.47	-0.0357
103	0	CORRELATION	107.41	107.37	-0.0398
104	0	CORRELATION	107.21	107.24	0.0275

TID vs Post - Pre Exposure Delta

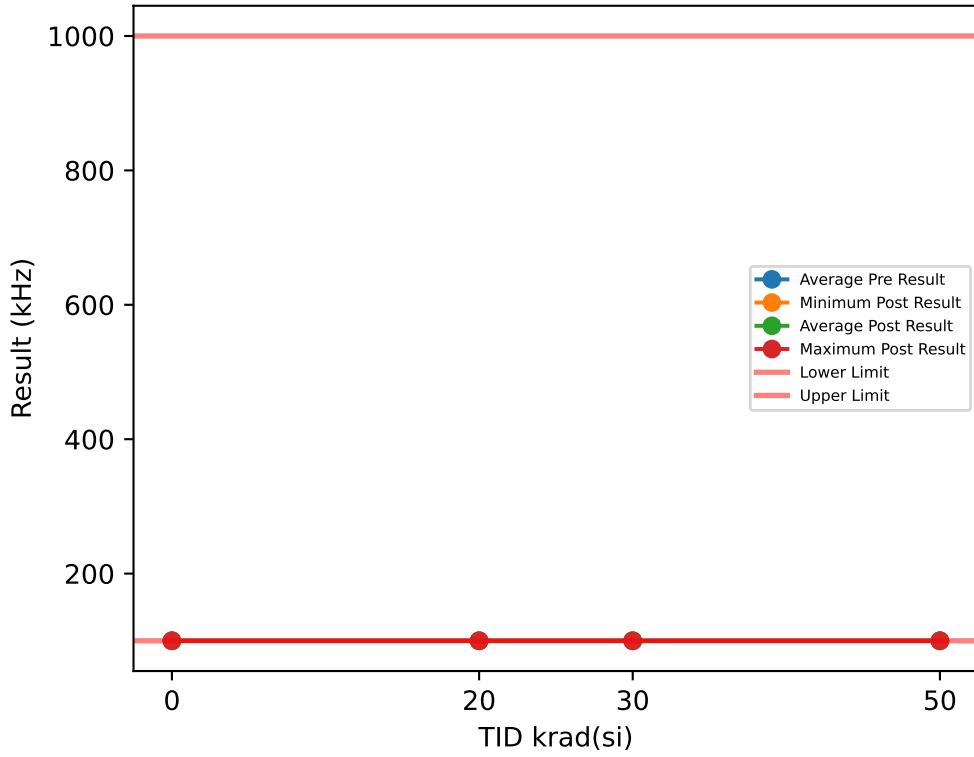


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.05	107.63	108.51	0.60068	107.09	107.64	108.47	0.58547	-0.0398	0.00772	0.0483	0.04218
20	106.82	108.33	109.31	1.0057	106.41	108.14	109.24	1.0528	-0.4888	-0.18791	0.2522	0.27539
30	106.79	108.7	110.28	1.0408	107.21	108.7	110.14	0.85152	-0.5033	0.0026	0.8199	0.38226
50	106.33	108.19	109.51	0.99666	106.53	108.11	109.61	0.89269	-0.4482	-0.08544	0.3514	0.31444

Device Test: 24.133 FREQ|100kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE

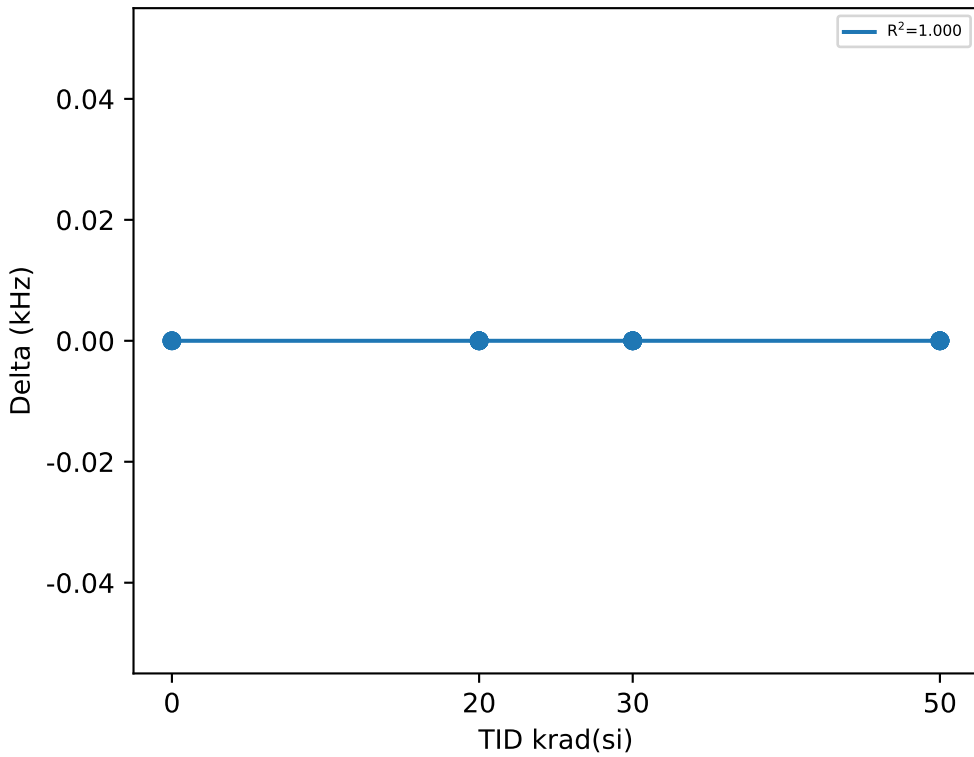
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	100	100	0
2	20	Biased	100	100	0
3	20	Biased	100	100	0
4	20	Biased	100	100	0
5	20	Biased	100	100	0
6	20	Unbiased	100	100	0
7	20	Unbiased	100	100	0
8	20	Unbiased	100	100	0
9	20	Unbiased	100	100	0
10	20	Unbiased	100	100	0
11	30	Biased	100	100	0
12	30	Biased	100	100	0
13	30	Biased	100	100	0
14	30	Biased	100	100	0
15	30	Biased	100	100	0
16	30	Unbiased	100	100	0
17	30	Unbiased	100	100	0
18	30	Unbiased	100	100	0
19	30	Unbiased	100	100	0
20	30	Unbiased	100	100	0
26	50	Unbiased	100	100	0
27	50	Unbiased	100	100	0
28	50	Unbiased	100	100	0
29	50	Unbiased	100	100	0
30	50	Unbiased	100	100	0
88	50	Biased-84Hr-Anneal	100	100	0
89	50	Biased-84Hr-Anneal	100	100	0
90	50	Biased-84Hr-Anneal	100	100	0
91	50	Biased-84Hr-Anneal	100	100	0
92	50	Biased-84Hr-Anneal	100	100	0
100	0	CORRELATION	100	100	0
101	0	CORRELATION	100	100	0
102	0	CORRELATION	100	100	0
103	0	CORRELATION	100	100	0
104	0	CORRELATION	100	100	0

TID vs Post - Pre Exposure Delta

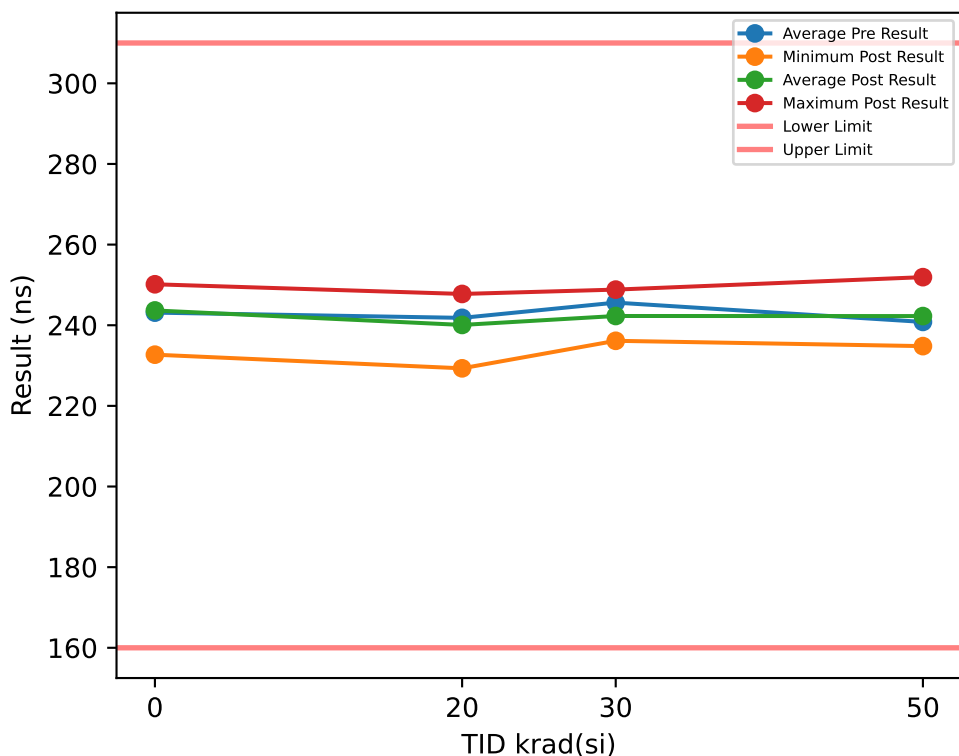


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100	0	100	100	100	0	0	0	0	0
20	100	100	100	0	100	100	100	0	0	0	0	0
30	100	100	100	0	100	100	100	0	0	0	0	0
50	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.135 TIMING|DELAY/SYNC1/14//OPEN//@SYNC1_SW_DELAY_INV

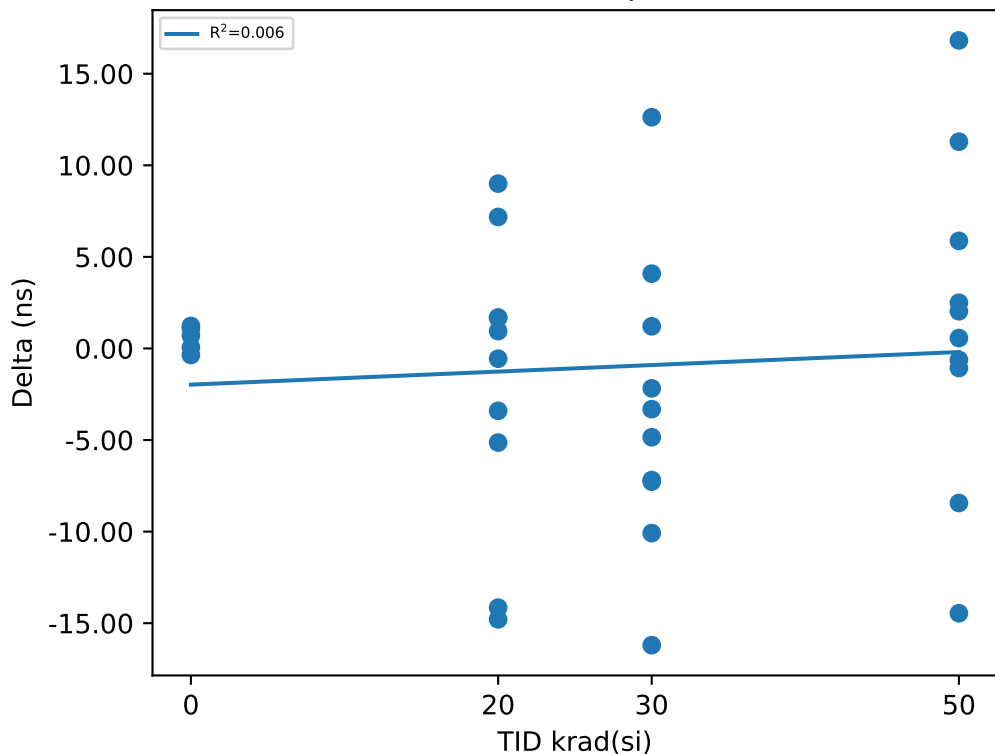
TID vs Result Stats



Test Results (Lower Limit = 160.0, Upper Limit = 310.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	237.06	238.01	0.9468
2	20	Biased	247.66	232.87	-14.789
3	20	Biased	245.26	244.71	-0.5595
4	20	Biased	239.44	241.12	1.6833
5	20	Biased	227.96	229.64	1.6773
6	20	Unbiased	251.99	246.85	-5.1394
7	20	Unbiased	238.06	245.24	7.1806
8	20	Unbiased	243.47	229.31	-14.153
9	20	Unbiased	236.23	245.24	9.0007
10	20	Unbiased	251.17	247.76	-3.4059
11	30	Biased	245.3	238.03	-7.2714
12	30	Biased	241.02	236.17	-4.8482
13	30	Biased	236.14	248.76	12.624
14	30	Biased	255.03	238.83	-16.202
15	30	Biased	240.14	241.35	1.2094
16	30	Unbiased	248.07	244.76	-3.3149
17	30	Unbiased	238.32	236.14	-2.178
18	30	Unbiased	251.49	244.3	-7.1879
19	30	Unbiased	244.75	248.84	4.085
20	30	Unbiased	255.83	245.75	-10.081
26	50	Unbiased	249.28	234.82	-14.458
27	50	Unbiased	242.59	241.52	-1.0695
28	50	Unbiased	248.25	250.28	2.0309
29	50	Unbiased	235.75	236.31	0.5666
30	50	Unbiased	251.7	243.26	-8.4388
88	50	Biased-84Hr-Anneal	237	242.88	5.8735
89	50	Biased-84Hr-Anneal	233.43	244.72	11.29
90	50	Biased-84Hr-Anneal	235.1	251.92	16.819
91	50	Biased-84Hr-Anneal	232.74	235.24	2.4961
92	50	Biased-84Hr-Anneal	242.4	241.78	-0.6224
100	0	CORRELATION	249.07	250.16	1.0864
101	0	CORRELATION	247.78	247.42	-0.3585
102	0	CORRELATION	231.47	232.7	1.2278
103	0	CORRELATION	244.43	245.13	0.7008
104	0	CORRELATION	242.88	242.95	0.0631

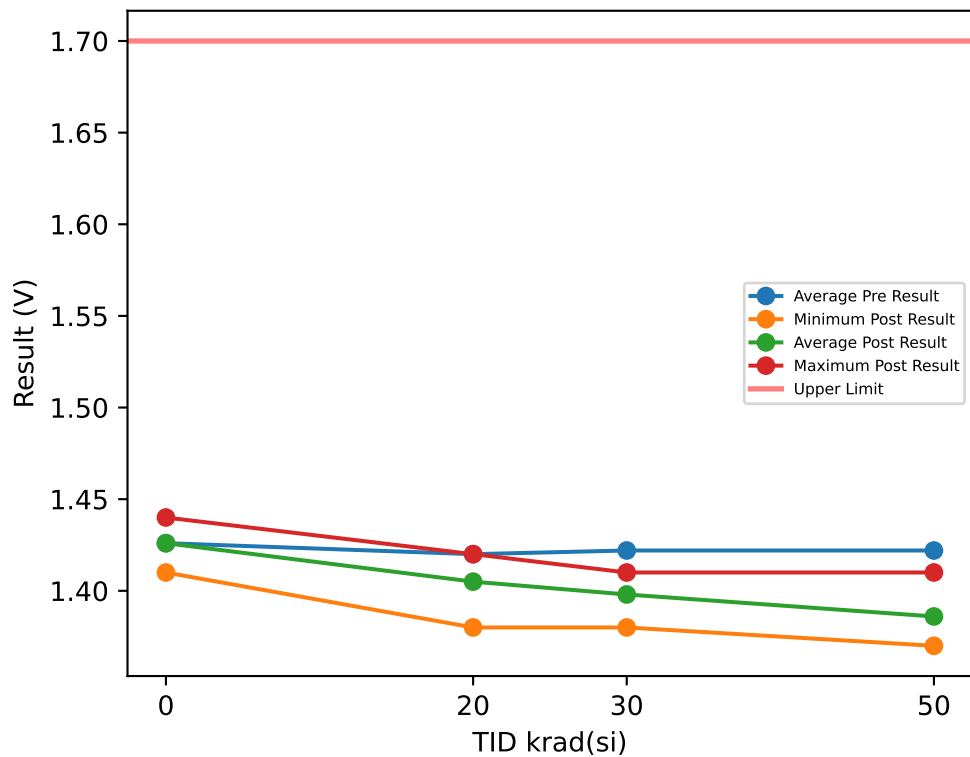
TID vs Post - Pre Exposure Delta



Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	231.47	243.13	249.07	6.9739	232.7	243.67	250.16	6.692	-0.3585	0.54392	1.2278	0.67678
20	227.96	241.83	251.99	7.4917	229.31	240.07	247.76	7.1612	-14.789	-1.7558	9.0007	7.9277
30	236.14	245.61	255.83	6.9012	236.14	242.29	248.84	4.8665	-16.202	-3.3165	12.624	7.996
50	232.74	240.82	251.7	7.0203	234.82	242.27	251.92	5.83	-14.458	1.4487	16.819	8.9213

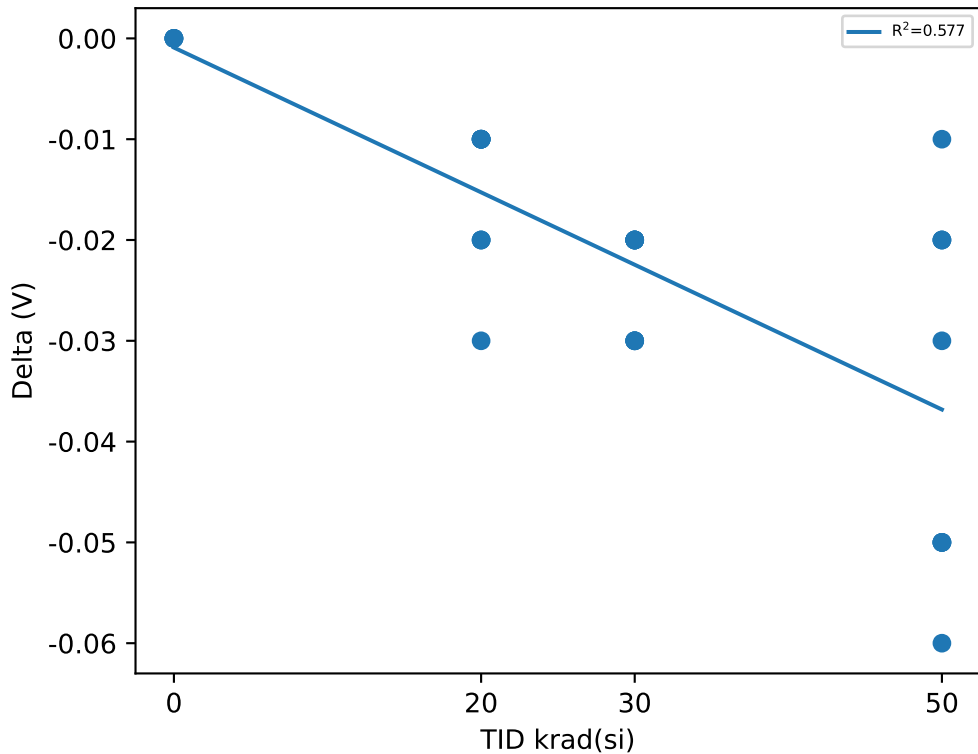
TID vs Result Stats



Test Results (Upper Limit = 1.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.42	1.4	-0.02
2	20	Biased	1.42	1.41	-0.01
3	20	Biased	1.41	1.4	-0.01
4	20	Biased	1.42	1.41	-0.01
5	20	Biased	1.42	1.41	-0.01
6	20	Unbiased	1.43	1.42	-0.01
7	20	Unbiased	1.41	1.38	-0.03
8	20	Unbiased	1.42	1.41	-0.01
9	20	Unbiased	1.42	1.4	-0.02
10	20	Unbiased	1.43	1.41	-0.02
11	30	Biased	1.42	1.4	-0.02
12	30	Biased	1.43	1.41	-0.02
13	30	Biased	1.42	1.4	-0.02
14	30	Biased	1.42	1.4	-0.02
15	30	Biased	1.43	1.41	-0.02
16	30	Unbiased	1.43	1.4	-0.03
17	30	Unbiased	1.42	1.39	-0.03
18	30	Unbiased	1.42	1.39	-0.03
19	30	Unbiased	1.41	1.38	-0.03
20	30	Unbiased	1.42	1.4	-0.02
26	50	Unbiased	1.42	1.37	-0.05
27	50	Unbiased	1.43	1.37	-0.06
28	50	Unbiased	1.43	1.38	-0.05
29	50	Unbiased	1.43	1.38	-0.05
30	50	Unbiased	1.43	1.38	-0.05
88	50	Biased-84Hr-Anneal	1.41	1.39	-0.02
89	50	Biased-84Hr-Anneal	1.44	1.41	-0.03
90	50	Biased-84Hr-Anneal	1.42	1.4	-0.02
91	50	Biased-84Hr-Anneal	1.41	1.39	-0.02
92	50	Biased-84Hr-Anneal	1.4	1.39	-0.01
100	0	CORRELATION	1.41	1.41	0
101	0	CORRELATION	1.43	1.43	0
102	0	CORRELATION	1.44	1.44	0
103	0	CORRELATION	1.42	1.42	0
104	0	CORRELATION	1.43	1.43	0

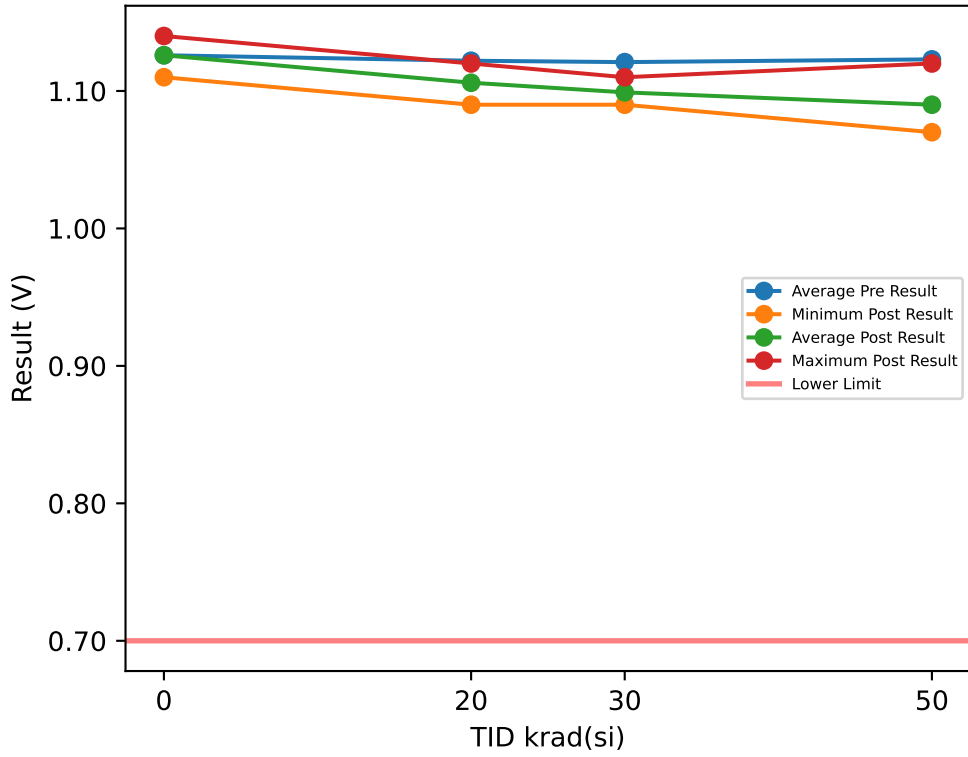
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.41	1.426	1.44	0.011402	1.41	1.426	1.44	0.011402	0	0	0	0
20	1.41	1.42	1.43	0.0066667	1.38	1.405	1.42	0.010801	-0.03	-0.015	-0.01	0.0070711
30	1.41	1.422	1.43	0.0063246	1.38	1.398	1.41	0.0091894	-0.03	-0.024	-0.02	0.005164
50	1.4	1.422	1.44	0.012293	1.37	1.386	1.41	0.012649	-0.06	-0.036	-0.01	0.017764

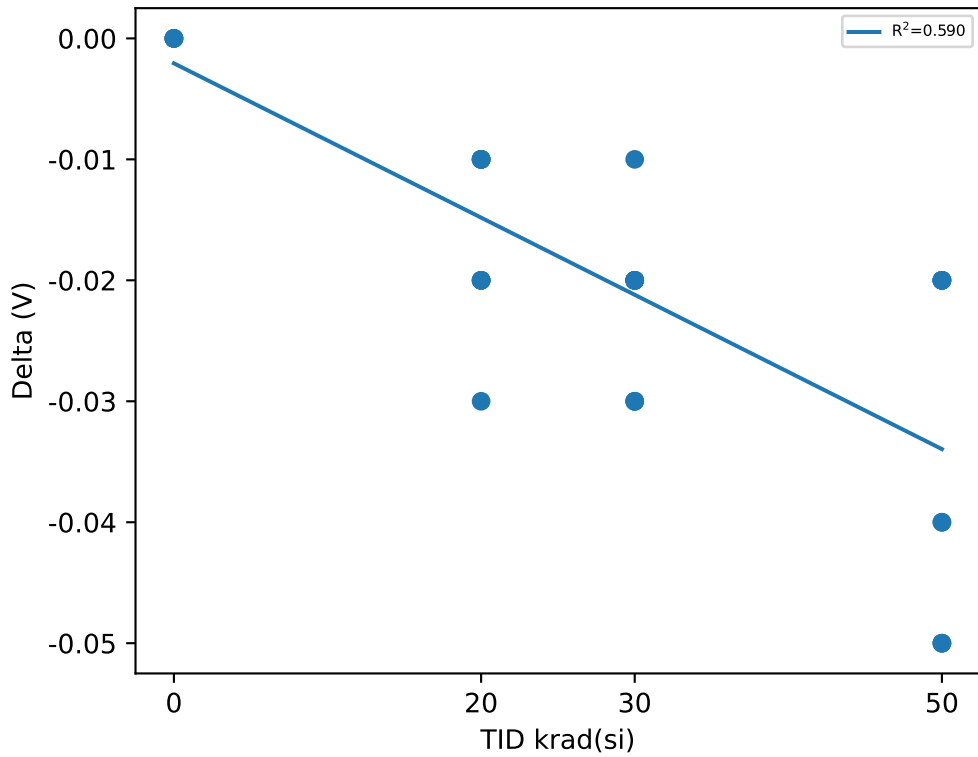
TID vs Result Stats



Test Results (Lower Limit = 0.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.11	1.1	-0.01
2	20	Biased	1.12	1.11	-0.01
3	20	Biased	1.11	1.1	-0.01
4	20	Biased	1.12	1.11	-0.01
5	20	Biased	1.12	1.11	-0.01
6	20	Unbiased	1.14	1.12	-0.02
7	20	Unbiased	1.11	1.09	-0.02
8	20	Unbiased	1.13	1.11	-0.02
9	20	Unbiased	1.13	1.1	-0.03
10	20	Unbiased	1.13	1.11	-0.02
11	30	Biased	1.11	1.1	-0.01
12	30	Biased	1.13	1.11	-0.02
13	30	Biased	1.12	1.1	-0.02
14	30	Biased	1.12	1.1	-0.02
15	30	Biased	1.13	1.11	-0.02
16	30	Unbiased	1.13	1.1	-0.03
17	30	Unbiased	1.12	1.09	-0.03
18	30	Unbiased	1.12	1.09	-0.03
19	30	Unbiased	1.11	1.09	-0.02
20	30	Unbiased	1.12	1.1	-0.02
26	50	Unbiased	1.12	1.07	-0.05
27	50	Unbiased	1.12	1.08	-0.04
28	50	Unbiased	1.13	1.08	-0.05
29	50	Unbiased	1.14	1.09	-0.05
30	50	Unbiased	1.13	1.09	-0.04
88	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
89	50	Biased-84Hr-Anneal	1.14	1.12	-0.02
90	50	Biased-84Hr-Anneal	1.12	1.1	-0.02
91	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
92	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
100	0	CORRELATION	1.11	1.11	0
101	0	CORRELATION	1.13	1.13	0
102	0	CORRELATION	1.14	1.14	0
103	0	CORRELATION	1.12	1.12	0
104	0	CORRELATION	1.13	1.13	0

TID vs Post - Pre Exposure Delta

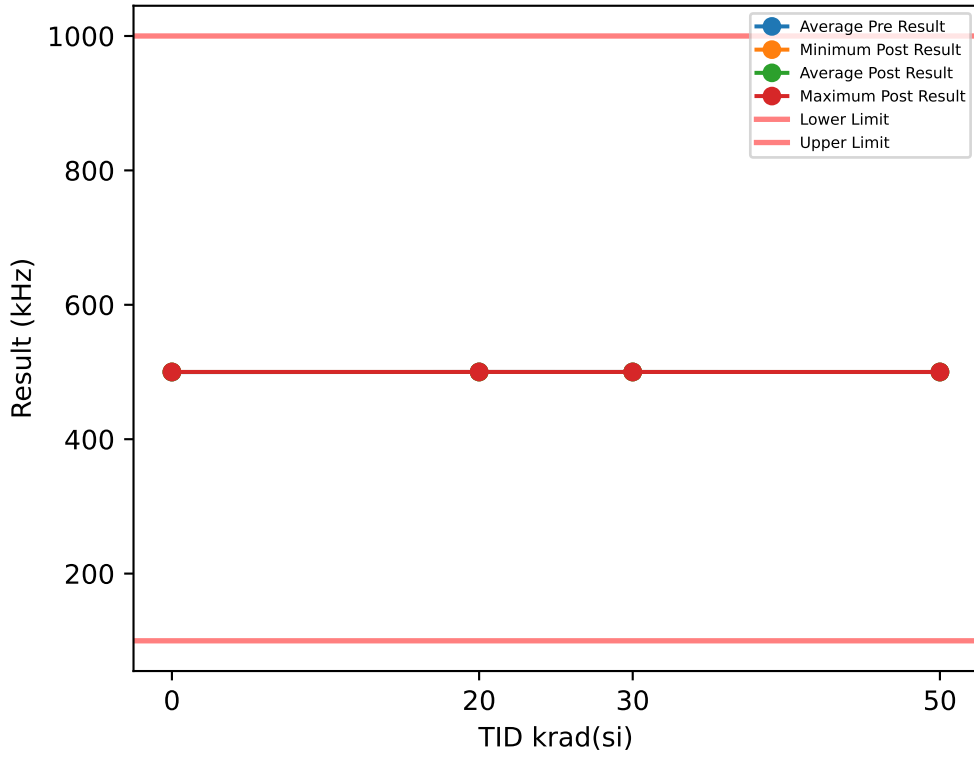


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.11	1.126	1.14	0.011402	1.11	1.126	1.14	0.011402	0	0	0	0
20	1.11	1.122	1.14	0.010328	1.09	1.106	1.12	0.0084327	-0.03	-0.016	-0.01	0.0069921
30	1.11	1.121	1.13	0.0073786	1.09	1.099	1.11	0.0073786	-0.03	-0.022	-0.01	0.0063246
50	1.11	1.123	1.14	0.011595	1.07	1.09	1.12	0.013333	-0.05	-0.033	-0.02	0.014181

Device Test: 24.138 FREQ|500kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE

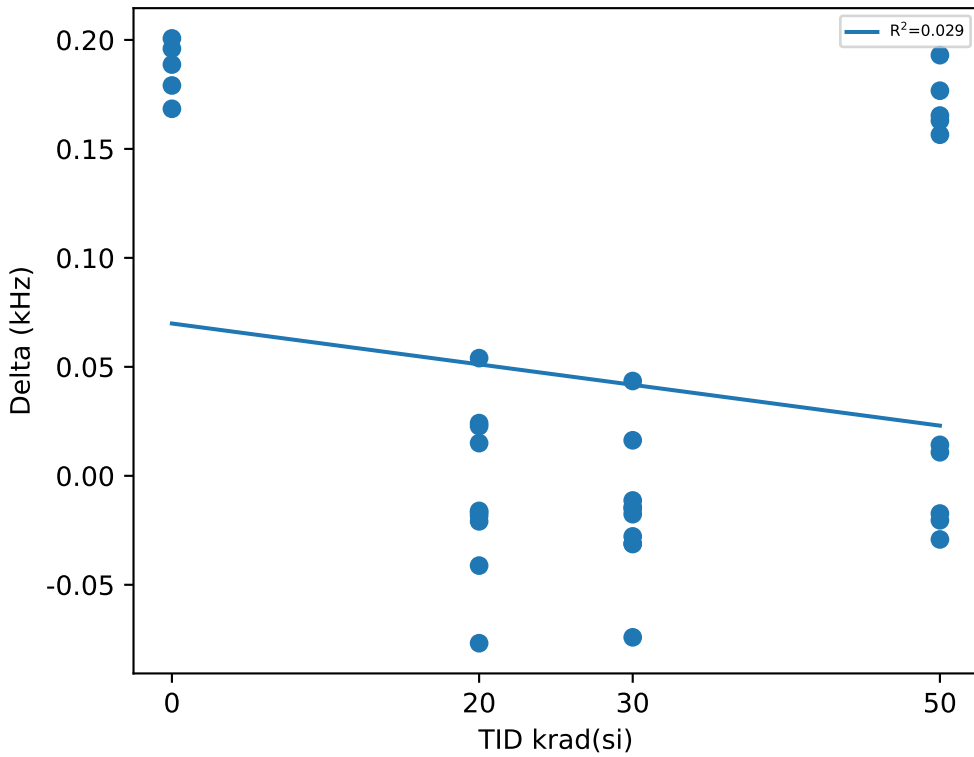
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	500.02	500.04	0.0228
2	20	Biased	500.05	500.01	-0.0412
3	20	Biased	500.07	500.05	-0.0161
4	20	Biased	500.06	500.04	-0.0183
5	20	Biased	500.02	500.04	0.0242
6	20	Unbiased	500.06	500.03	-0.0209
7	20	Unbiased	500.03	500.04	0.015
8	20	Unbiased	500.08	500	-0.0768
9	20	Unbiased	500.03	500.09	0.054
10	20	Unbiased	500.05	500.03	-0.0168
11	30	Biased	500.04	500.01	-0.0313
12	30	Biased	500.04	500.03	-0.0113
13	30	Biased	500.02	500.03	0.0163
14	30	Biased	500.05	500.03	-0.0176
15	30	Biased	500.04	500.03	-0.0143
16	30	Unbiased	500.01	500.05	0.0435
17	30	Unbiased	500.06	500.03	-0.0278
18	30	Unbiased	500.06	500.04	-0.0151
19	30	Unbiased	500.08	500.01	-0.0741
20	30	Unbiased	500.04	500.01	-0.0311
26	50	Unbiased	500.05	500.02	-0.0292
27	50	Unbiased	500.03	500.04	0.0142
28	50	Unbiased	500.04	500.03	-0.0173
29	50	Unbiased	500	500.01	0.0108
30	50	Unbiased	500.05	500.03	-0.0204
88	50	Biased-84Hr-Anneal	499.84	500.01	0.163
89	50	Biased-84Hr-Anneal	499.85	500.05	0.193
90	50	Biased-84Hr-Anneal	499.84	500.02	0.1767
91	50	Biased-84Hr-Anneal	499.83	499.99	0.1565
92	50	Biased-84Hr-Anneal	499.86	500.02	0.1653
100	0	CORRELATION	499.85	500.06	0.2007
101	0	CORRELATION	499.85	500.02	0.1684
102	0	CORRELATION	499.82	500	0.1791
103	0	CORRELATION	499.88	500.08	0.196
104	0	CORRELATION	499.86	500.05	0.1887

TID vs Post - Pre Exposure Delta

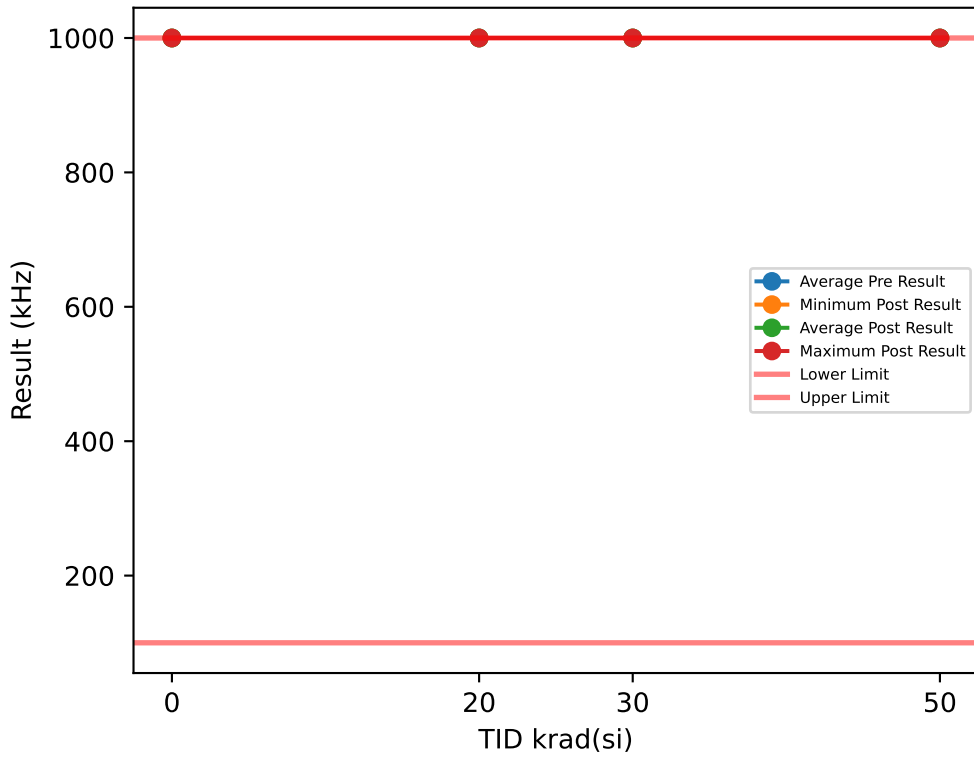


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.82	499.85	499.88	0.022418	500	500.04	500.08	0.031234	0.1684	0.18658	0.2007	0.013029
20	500.02	500.04	500.08	0.020457	500	500.04	500.09	0.023836	-0.0768	-0.00741	0.054	0.037426
30	500.01	500.04	500.08	0.021714	500.01	500.03	500.05	0.012837	-0.0741	-0.01628	0.0435	0.030891
50	499.83	499.94	500.05	0.10056	499.99	500.02	500.05	0.017619	-0.0292	0.08126	0.193	0.095865

Device Test: 24.139 FREQ|1000kHz/SYNC1/14//OPEN//@SYNC_FREQ_RANGE

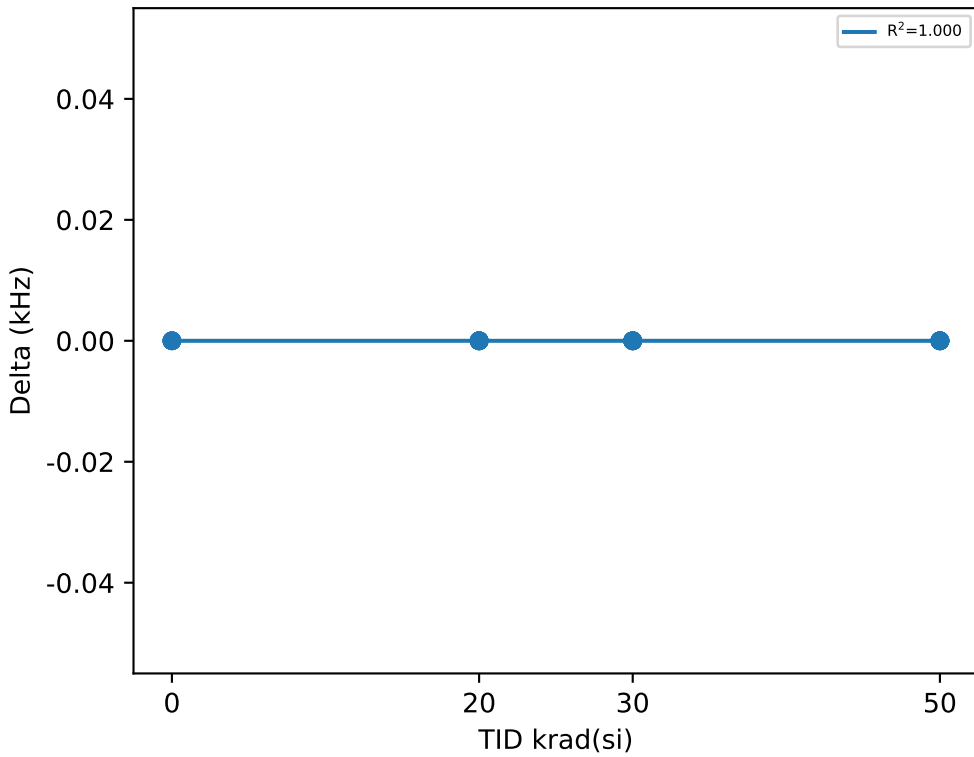
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1000	1000	0
2	20	Biased	1000	1000	0
3	20	Biased	1000	1000	0
4	20	Biased	1000	1000	0
5	20	Biased	1000	1000	0
6	20	Unbiased	1000	1000	0
7	20	Unbiased	1000	1000	0
8	20	Unbiased	1000	1000	0
9	20	Unbiased	1000	1000	0
10	20	Unbiased	1000	1000	0
11	30	Biased	1000	1000	0
12	30	Biased	1000	1000	0
13	30	Biased	1000	1000	0
14	30	Biased	1000	1000	0
15	30	Biased	1000	1000	0
16	30	Unbiased	1000	1000	0
17	30	Unbiased	1000	1000	0
18	30	Unbiased	1000	1000	0
19	30	Unbiased	1000	1000	0
20	30	Unbiased	1000	1000	0
26	50	Unbiased	1000	1000	0
27	50	Unbiased	1000	1000	0
28	50	Unbiased	1000	1000	0
29	50	Unbiased	1000	1000	0
30	50	Unbiased	1000	1000	0
88	50	Biased-84Hr-Anneal	1000	1000	0
89	50	Biased-84Hr-Anneal	1000	1000	0
90	50	Biased-84Hr-Anneal	1000	1000	0
91	50	Biased-84Hr-Anneal	1000	1000	0
92	50	Biased-84Hr-Anneal	1000	1000	0
100	0	CORRELATION	1000	1000	0
101	0	CORRELATION	1000	1000	0
102	0	CORRELATION	1000	1000	0
103	0	CORRELATION	1000	1000	0
104	0	CORRELATION	1000	1000	0

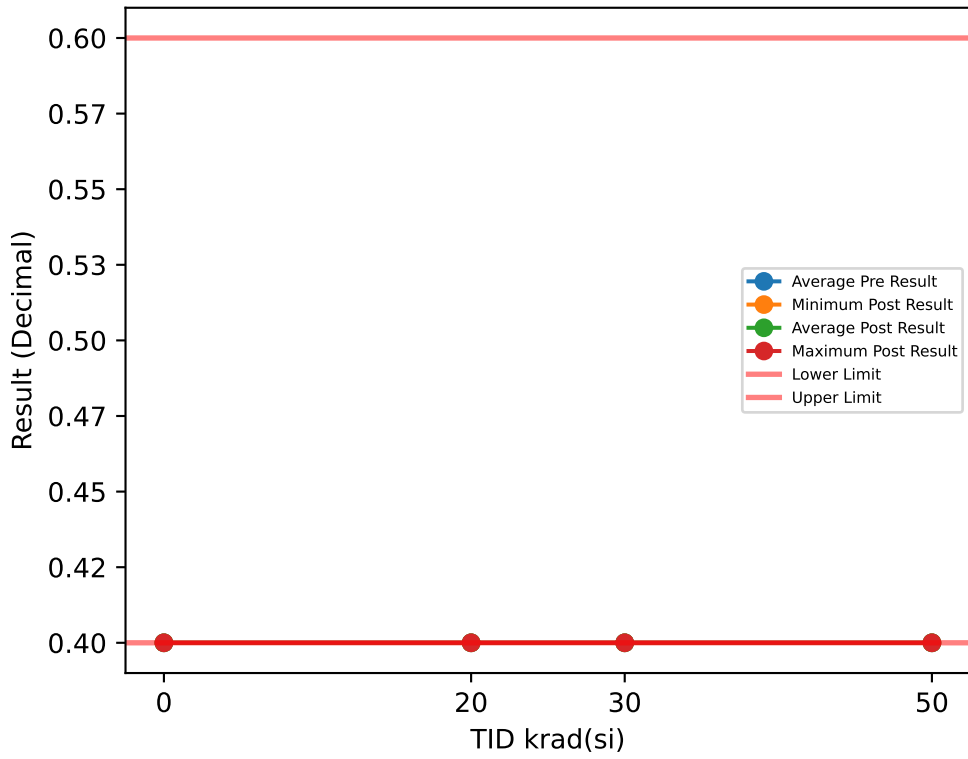
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
20	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
30	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
50	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

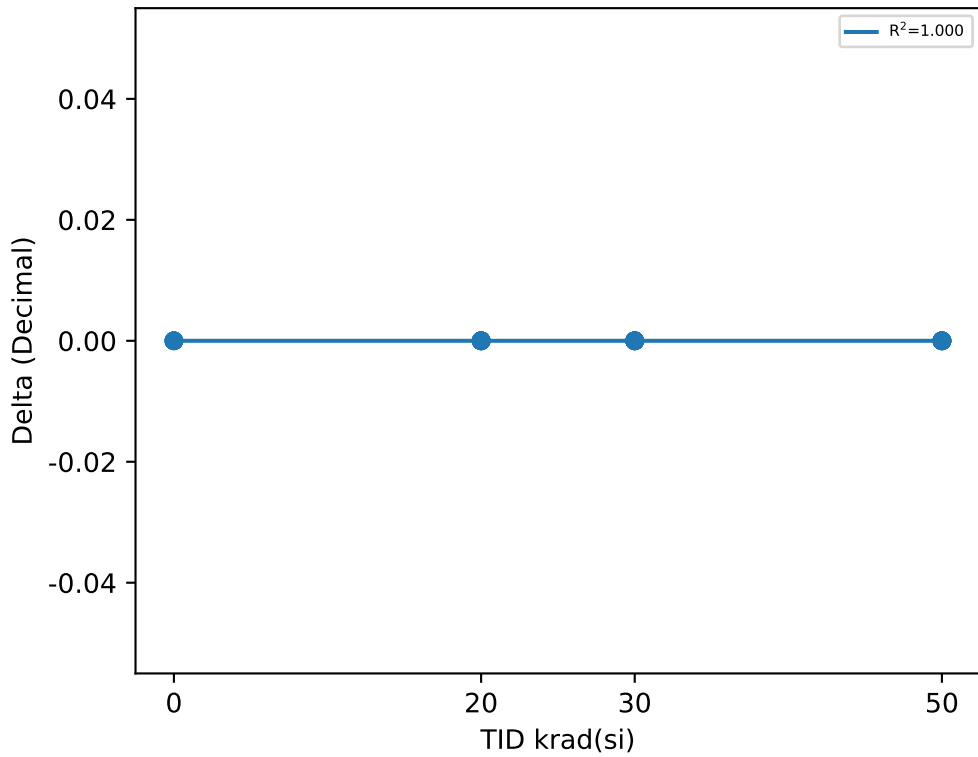
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.4	0.4	0
2	20	Biased	0.4	0.4	0
3	20	Biased	0.4	0.4	0
4	20	Biased	0.4	0.4	0
5	20	Biased	0.4	0.4	0
6	20	Unbiased	0.4	0.4	0
7	20	Unbiased	0.4	0.4	0
8	20	Unbiased	0.4	0.4	0
9	20	Unbiased	0.4	0.4	0
10	20	Unbiased	0.4	0.4	0
11	30	Biased	0.4	0.4	0
12	30	Biased	0.4	0.4	0
13	30	Biased	0.4	0.4	0
14	30	Biased	0.4	0.4	0
15	30	Biased	0.4	0.4	0
16	30	Unbiased	0.4	0.4	0
17	30	Unbiased	0.4	0.4	0
18	30	Unbiased	0.4	0.4	0
19	30	Unbiased	0.4	0.4	0
20	30	Unbiased	0.4	0.4	0
26	50	Unbiased	0.4	0.4	0
27	50	Unbiased	0.4	0.4	0
28	50	Unbiased	0.4	0.4	0
29	50	Unbiased	0.4	0.4	0
30	50	Unbiased	0.4	0.4	0
88	50	Biased-84Hr-Anneal	0.4	0.4	0
89	50	Biased-84Hr-Anneal	0.4	0.4	0
90	50	Biased-84Hr-Anneal	0.4	0.4	0
91	50	Biased-84Hr-Anneal	0.4	0.4	0
92	50	Biased-84Hr-Anneal	0.4	0.4	0
100	0	CORRELATION	0.4	0.4	0
101	0	CORRELATION	0.4	0.4	0
102	0	CORRELATION	0.4	0.4	0
103	0	CORRELATION	0.4	0.4	0
104	0	CORRELATION	0.4	0.4	0

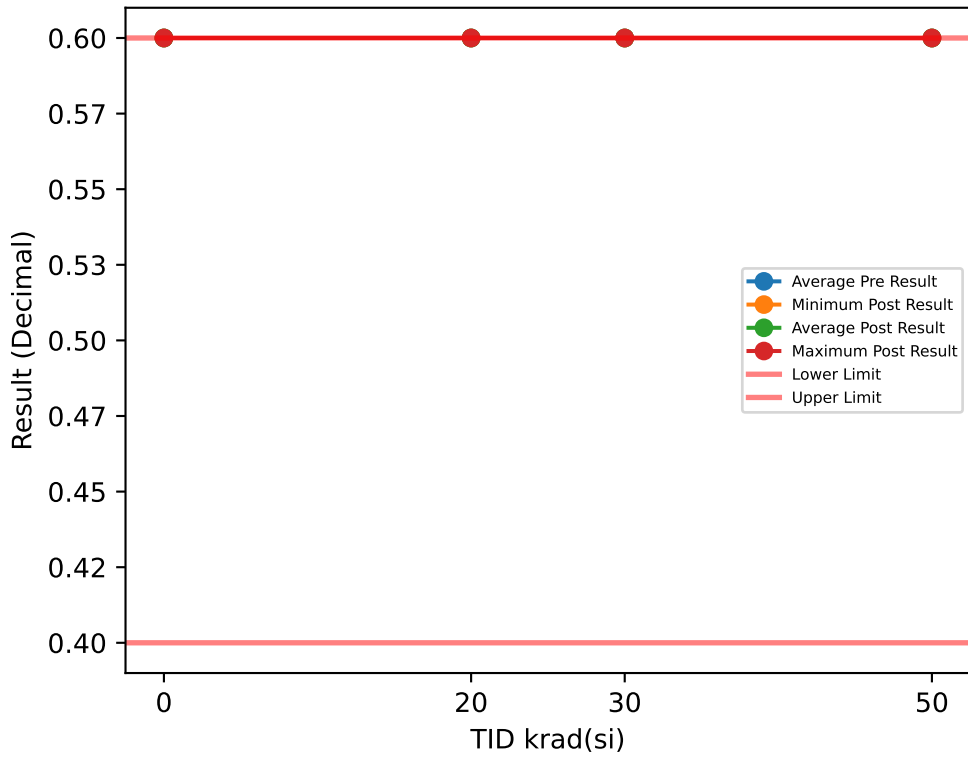
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
20	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
30	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
50	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

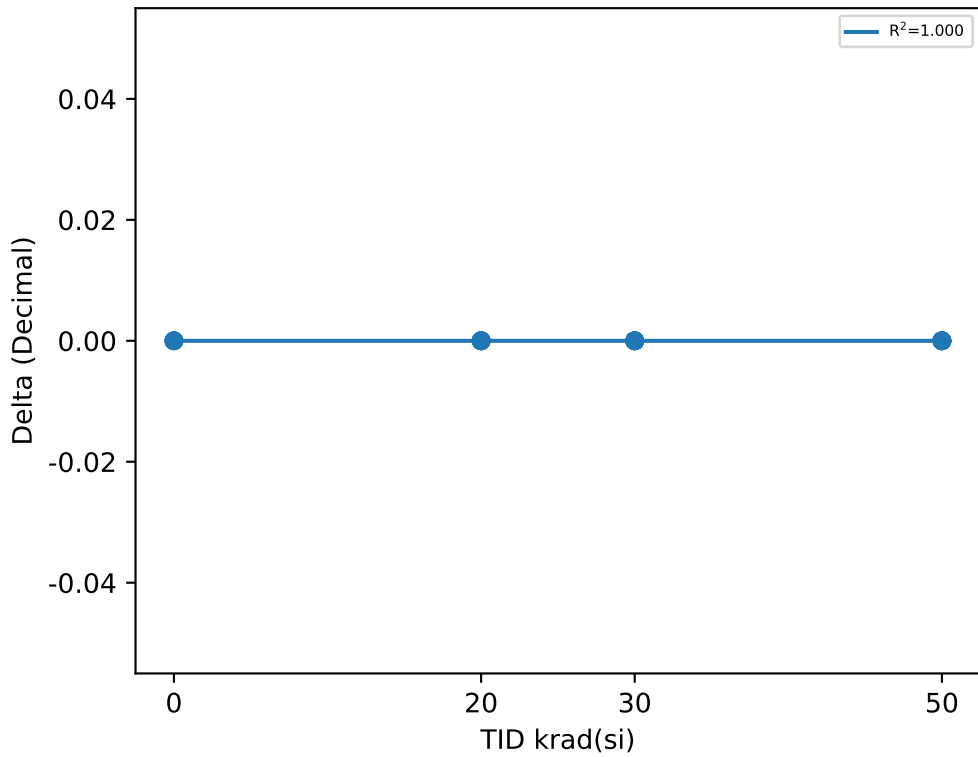
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6	0.6	0
3	20	Biased	0.6	0.6	0
4	20	Biased	0.6	0.6	0
5	20	Biased	0.6	0.6	0
6	20	Unbiased	0.6	0.6	0
7	20	Unbiased	0.6	0.6	0
8	20	Unbiased	0.6	0.6	0
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.6	0.6	0
11	30	Biased	0.6	0.6	0
12	30	Biased	0.6	0.6	0
13	30	Biased	0.6	0.6	0
14	30	Biased	0.6	0.6	0
15	30	Biased	0.6	0.6	0
16	30	Unbiased	0.6	0.6	0
17	30	Unbiased	0.6	0.6	0
18	30	Unbiased	0.6	0.6	0
19	30	Unbiased	0.6	0.6	0
20	30	Unbiased	0.6	0.6	0
26	50	Unbiased	0.6	0.6	0
27	50	Unbiased	0.6	0.6	0
28	50	Unbiased	0.6	0.6	0
29	50	Unbiased	0.6	0.6	0
30	50	Unbiased	0.6	0.6	0
88	50	Biased-84Hr-Anneal	0.6	0.6	0
89	50	Biased-84Hr-Anneal	0.6	0.6	0
90	50	Biased-84Hr-Anneal	0.6	0.6	0
91	50	Biased-84Hr-Anneal	0.6	0.6	0
92	50	Biased-84Hr-Anneal	0.6	0.6	0
100	0	CORRELATION	0.6	0.6	0
101	0	CORRELATION	0.6	0.6	0
102	0	CORRELATION	0.6	0.6	0
103	0	CORRELATION	0.6	0.6	0
104	0	CORRELATION	0.6	0.6	0

TID vs Post - Pre Exposure Delta

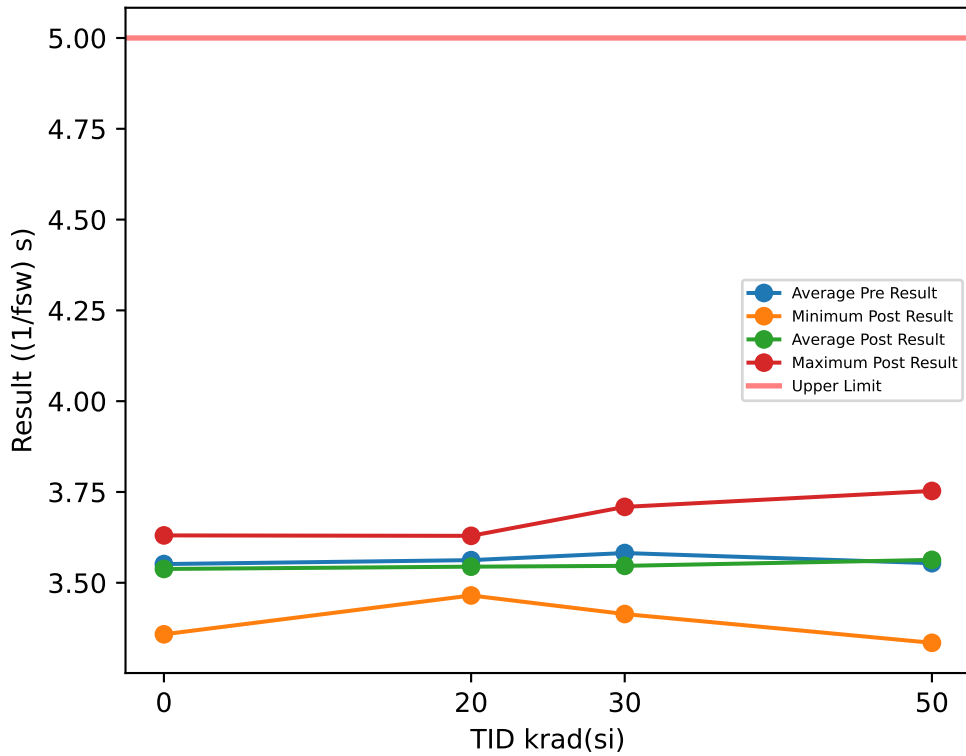


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
20	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
30	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
50	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.142 TIMING|CLKDETECT/SYNC1/14//511k//@T_CLOCK_DET

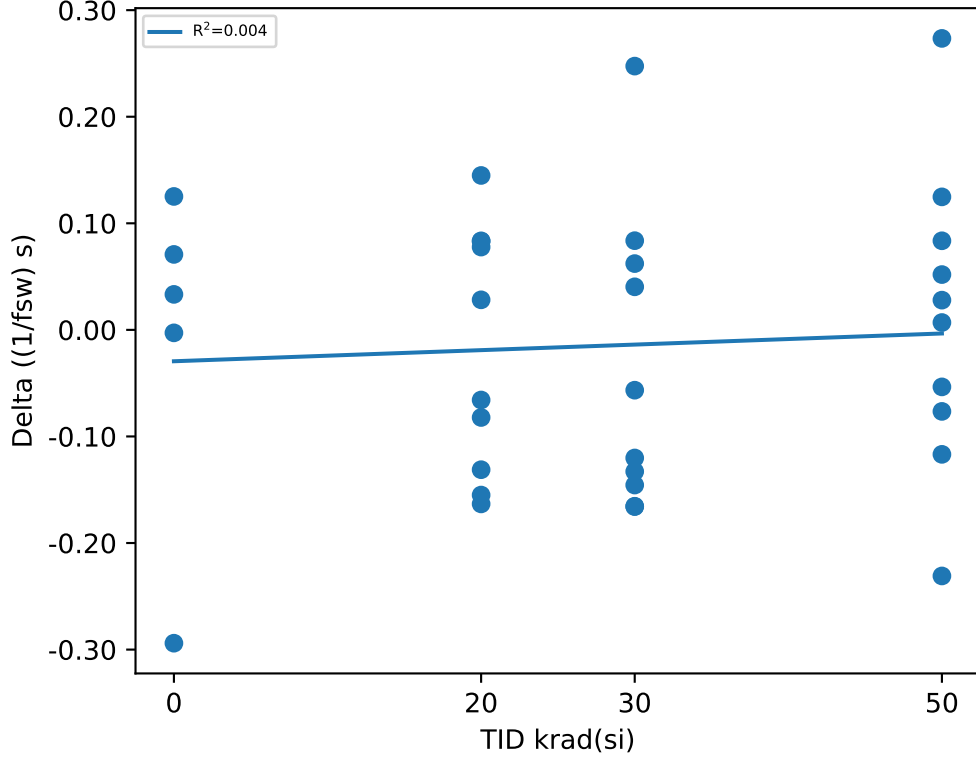
TID vs Result Stats



Test Results (Upper Limit = 5.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.5064	3.5896	0.0832
2	20	Biased	3.5703	3.4881	-0.0822
3	20	Biased	3.6412	3.4779	-0.1633
4	20	Biased	3.5962	3.465	-0.1312
5	20	Biased	3.5515	3.6292	0.0777
6	20	Unbiased	3.6152	3.5494	-0.0658
7	20	Unbiased	3.5249	3.6084	0.0835
8	20	Unbiased	3.5729	3.6011	0.0282
9	20	Unbiased	3.4229	3.5678	0.1449
10	20	Unbiased	3.6216	3.4666	-0.155
11	30	Biased	3.572	3.6342	0.0622
12	30	Biased	3.5794	3.4139	-0.1655
13	30	Biased	3.6606	3.515	-0.1456
14	30	Biased	3.65	3.5934	-0.0566
15	30	Biased	3.6757	3.5428	-0.1329
16	30	Unbiased	3.45	3.4904	0.0404
17	30	Unbiased	3.6312	3.4654	-0.1658
18	30	Unbiased	3.4614	3.7089	0.2475
19	30	Unbiased	3.4977	3.5814	0.0837
20	30	Unbiased	3.6403	3.5201	-0.1202
26	50	Unbiased	3.6787	3.4478	-0.2309
27	50	Unbiased	3.5854	3.6133	0.0279
28	50	Unbiased	3.6278	3.5743	-0.0535
29	50	Unbiased	3.5464	3.6712	0.1248
30	50	Unbiased	3.6496	3.5731	-0.0765
88	50	Biased-84Hr-Anneal	3.5008	3.5844	0.0836
89	50	Biased-84Hr-Anneal	3.4793	3.7528	0.2735
90	50	Biased-84Hr-Anneal	3.482	3.5339	0.0519
91	50	Biased-84Hr-Anneal	3.5375	3.5444	0.0069
92	50	Biased-84Hr-Anneal	3.4515	3.3347	-0.1168
100	0	CORRELATION	3.5307	3.564	0.0333
101	0	CORRELATION	3.3985	3.5237	0.1252
102	0	CORRELATION	3.6332	3.6304	-0.0028
103	0	CORRELATION	3.543	3.6138	0.0708
104	0	CORRELATION	3.6521	3.3581	-0.294

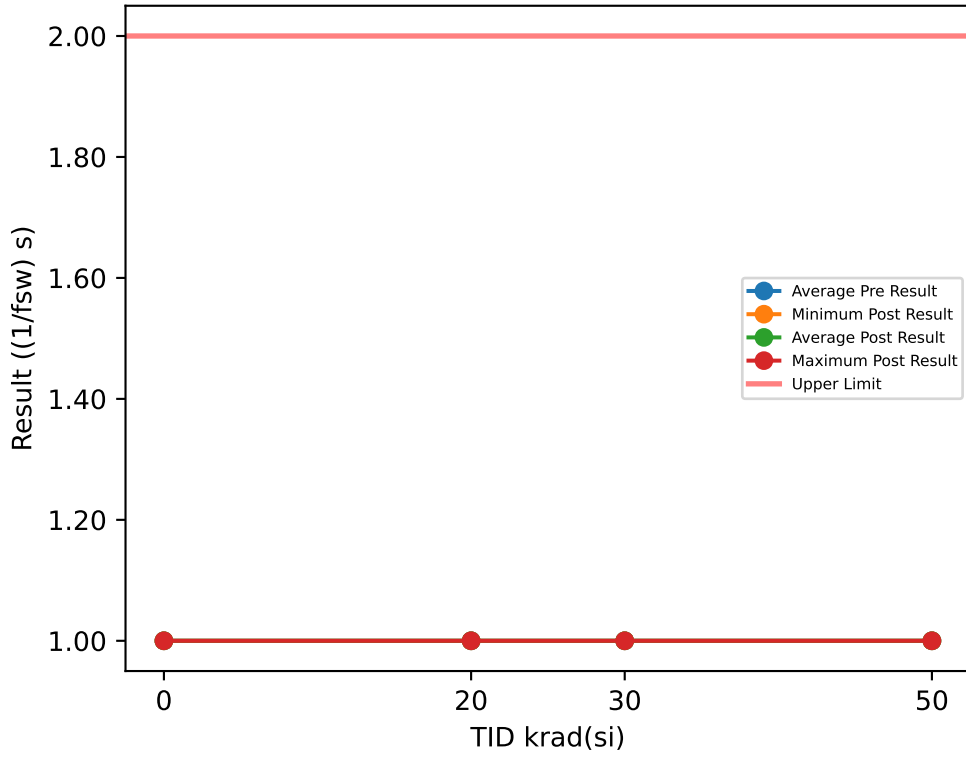
TID vs Post - Pre Exposure Delta



Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.3985	3.5515	3.6521	0.10088	3.3581	3.538	3.6304	0.109	-0.294	-0.0135	0.1252	0.16381
20	3.4229	3.5623	3.6412	0.064926	3.465	3.5443	3.6292	0.064176	-0.1633	-0.018	0.1449	0.11425
30	3.45	3.5818	3.6757	0.08471	3.4139	3.5465	3.7089	0.085954	-0.1658	-0.03528	0.2475	0.13853
50	3.4515	3.5539	3.6787	0.078565	3.3347	3.563	3.7528	0.11428	-0.2309	0.00909	0.2735	0.13973

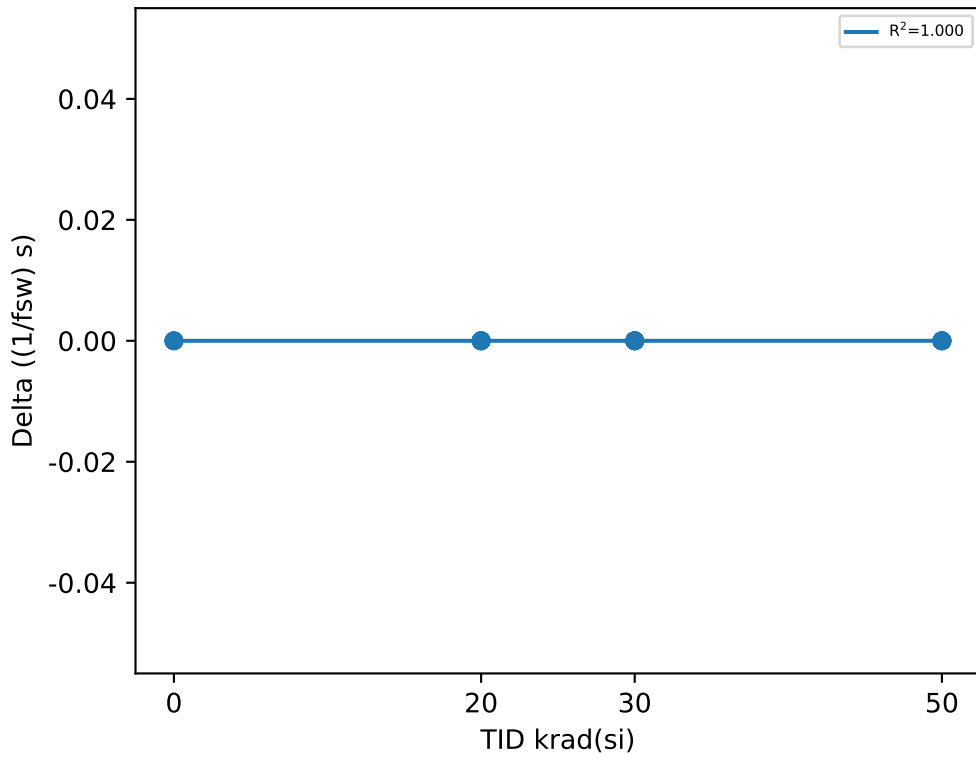
TID vs Result Stats



Test Results (Upper Limit = 2.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1	1	0
2	20	Biased	1	1	0
3	20	Biased	1	1	0
4	20	Biased	1	1	0
5	20	Biased	1	1	0
6	20	Unbiased	1	1	0
7	20	Unbiased	1	1	0
8	20	Unbiased	1	1	0
9	20	Unbiased	1	1	0
10	20	Unbiased	1	1	0
11	30	Biased	1	1	0
12	30	Biased	1	1	0
13	30	Biased	1	1	0
14	30	Biased	1	1	0
15	30	Biased	1	1	0
16	30	Unbiased	1	1	0
17	30	Unbiased	1	1	0
18	30	Unbiased	1	1	0
19	30	Unbiased	1	1	0
20	30	Unbiased	1	1	0
26	50	Unbiased	1	1	0
27	50	Unbiased	1	1	0
28	50	Unbiased	1	1	0
29	50	Unbiased	1	1	0
30	50	Unbiased	1	1	0
88	50	Biased-84Hr-Anneal	1	1	0
89	50	Biased-84Hr-Anneal	1	1	0
90	50	Biased-84Hr-Anneal	1	1	0
91	50	Biased-84Hr-Anneal	1	1	0
92	50	Biased-84Hr-Anneal	1	1	0
100	0	CORRELATION	1	1	0
101	0	CORRELATION	1	1	0
102	0	CORRELATION	1	1	0
103	0	CORRELATION	1	1	0
104	0	CORRELATION	1	1	0

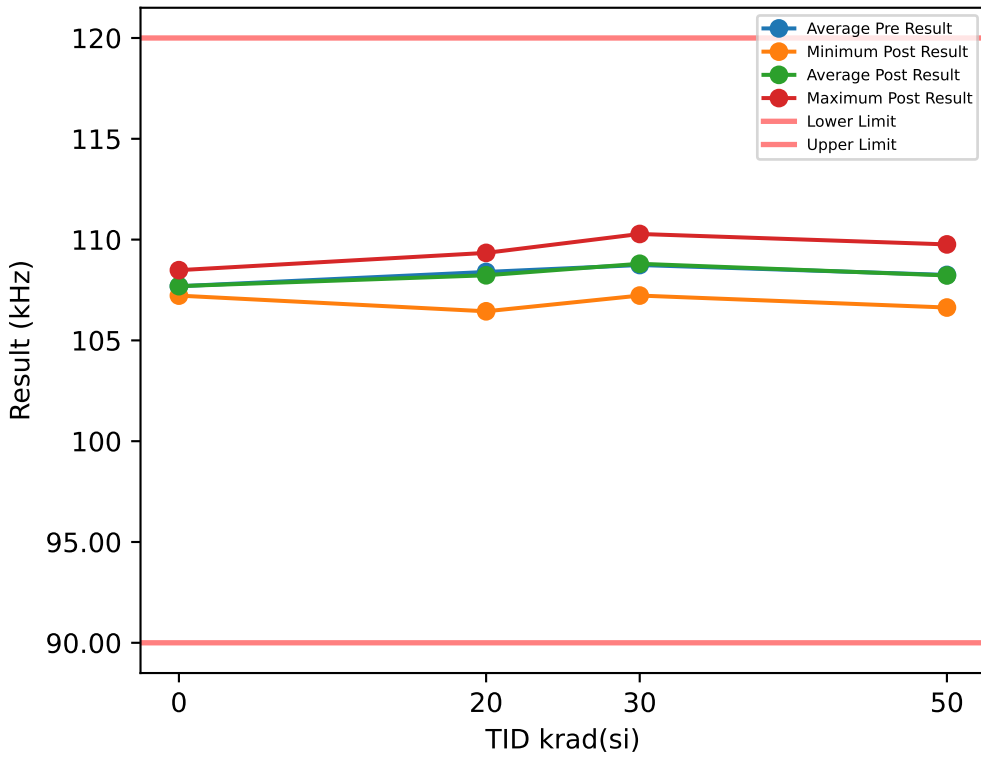
TID vs Post - Pre Exposure Delta



Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1	0	1	1	1	0	0	0	0	0
20	1	1	1	0	1	1	1	0	0	0	0	0
30	1	1	1	0	1	1	1	0	0	0	0	0
50	1	1	1	0	1	1	1	0	0	0	0	0

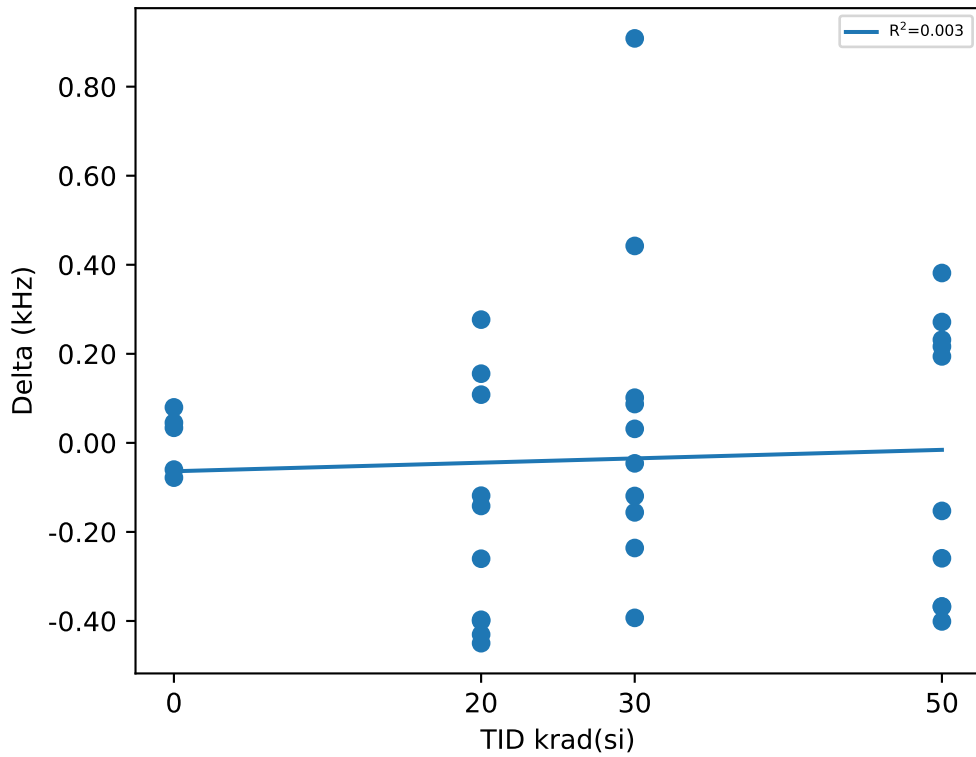
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	107.06	107.22	0.1554
2	20	Biased	107.02	106.62	-0.3973
3	20	Biased	109.29	109.03	-0.2602
4	20	Biased	109.06	108.92	-0.1417
5	20	Biased	108.58	108.68	0.1083
6	20	Unbiased	106.84	106.44	-0.3997
7	20	Unbiased	109.12	108.67	-0.4499
8	20	Unbiased	108.82	109.09	0.2768
9	20	Unbiased	109.46	109.34	-0.1186
10	20	Unbiased	108.7	108.27	-0.4304
11	30	Biased	108.51	108.54	0.0315
12	30	Biased	108.14	108.22	0.0872
13	30	Biased	106.78	107.22	0.4423
14	30	Biased	108.11	107.87	-0.2361
15	30	Biased	109.65	109.53	-0.1193
16	30	Unbiased	108.79	108.89	0.1015
17	30	Unbiased	109.67	109.28	-0.393
18	30	Unbiased	110.33	110.28	-0.046
19	30	Unbiased	109.44	109.28	-0.1561
20	30	Unbiased	107.98	108.89	0.9084
26	50	Unbiased	108.72	108.57	-0.1528
27	50	Unbiased	107.17	107.44	0.2714
28	50	Unbiased	106.4	106.63	0.2315
29	50	Unbiased	108.13	107.77	-0.3673
30	50	Unbiased	109.18	108.81	-0.3681
88	50	Biased-84Hr-Anneal	107.22	107.6	0.3815
89	50	Biased-84Hr-Anneal	108.85	109.07	0.2165
90	50	Biased-84Hr-Anneal	108.44	108.04	-0.401
91	50	Biased-84Hr-Anneal	108.8	108.54	-0.2592
92	50	Biased-84Hr-Anneal	109.57	109.76	0.1942
100	0	CORRELATION	107.14	107.22	0.0797
101	0	CORRELATION	108.03	108.07	0.0339
102	0	CORRELATION	108.54	108.48	-0.06
103	0	CORRELATION	107.39	107.44	0.0453
104	0	CORRELATION	107.32	107.24	-0.0781

TID vs Post - Pre Exposure Delta

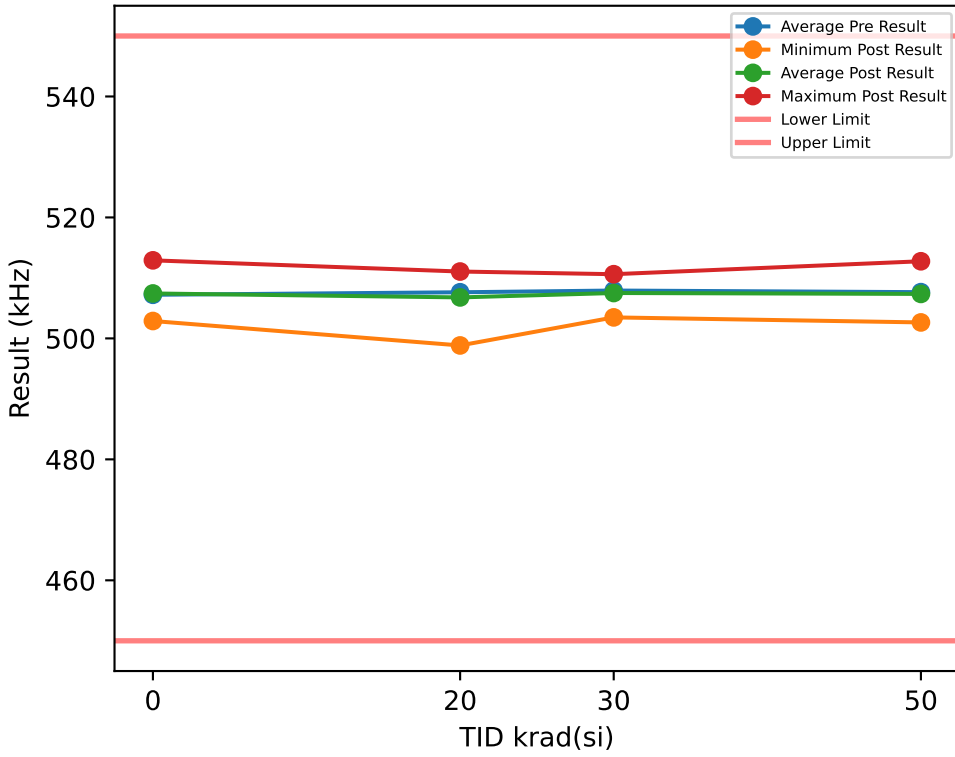


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.14	107.69	108.54	0.58606	107.22	107.69	108.48	0.5608	-0.0781	0.00416	0.0797	0.069222
20	106.84	108.4	109.46	1.0158	106.44	108.23	109.34	1.0697	-0.4499	-0.16573	0.2768	0.26769
30	106.78	108.74	110.33	1.0506	107.22	108.8	110.28	0.87903	-0.393	0.06204	0.9084	0.373
50	106.4	108.25	109.57	1.0096	106.63	108.22	109.76	0.90753	-0.401	-0.02533	0.3815	0.3114

Device Test: 24.151 FREQ|500kHz/SYNC1/14//90.9k//@EXT_SET_FREQ_500kHz

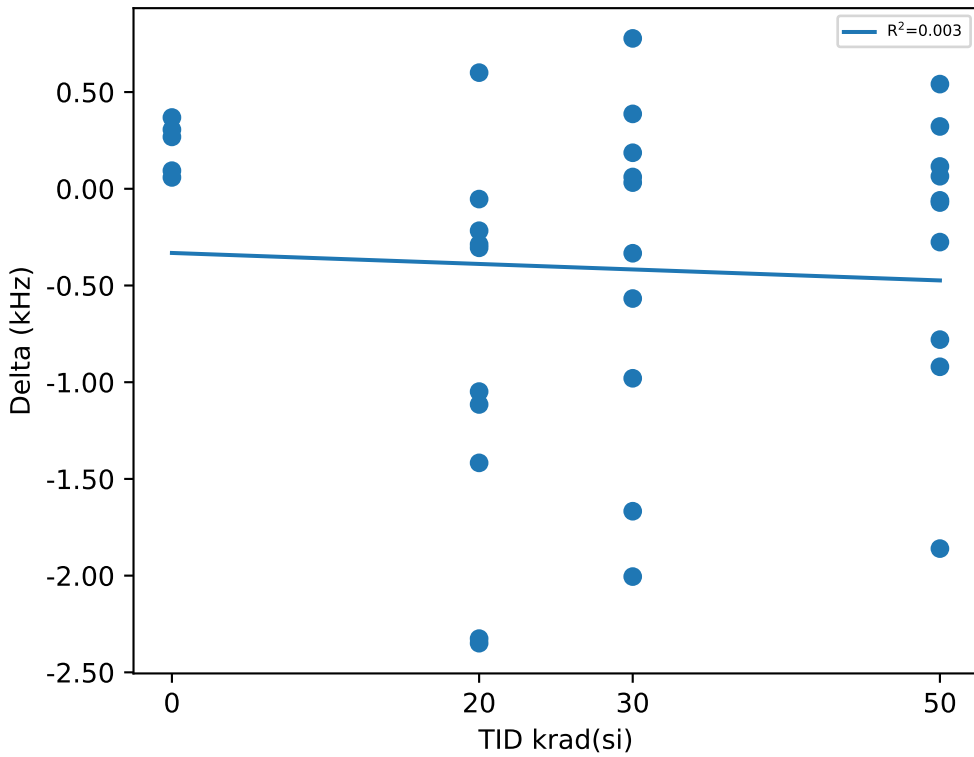
TID vs Result Stats



Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	503.88	504.49	0.6005
2	20	Biased	507.86	505.51	-2.3493
3	20	Biased	508.94	506.61	-2.3256
4	20	Biased	512.1	511.06	-1.0484
5	20	Biased	510.8	510.51	-0.2871
6	20	Unbiased	500.25	498.84	-1.417
7	20	Unbiased	508.01	507.7	-0.3052
8	20	Unbiased	508.29	508.07	-0.2168
9	20	Unbiased	510.97	509.85	-1.1151
10	20	Unbiased	505.17	505.12	-0.0532
11	30	Biased	506.32	506.38	0.061
12	30	Biased	508.53	507.96	-0.5674
13	30	Biased	502.7	503.47	0.7775
14	30	Biased	505.54	504.56	-0.9797
15	30	Biased	508.4	506.73	-1.667
16	30	Unbiased	510.21	509.87	-0.3333
17	30	Unbiased	511.39	509.39	-2.0049
18	30	Unbiased	510.58	510.61	0.0319
19	30	Unbiased	509.05	509.24	0.1863
20	30	Unbiased	506.42	506.81	0.3872
26	50	Unbiased	510.54	510.48	-0.0598
27	50	Unbiased	505.59	505.91	0.3222
28	50	Unbiased	502.1	502.64	0.5412
29	50	Unbiased	508.71	507.79	-0.9202
30	50	Unbiased	507.55	507.48	-0.0712
88	50	Biased-84Hr-Anneal	503.01	503.12	0.1154
89	50	Biased-84Hr-Anneal	508.49	508.55	0.0648
90	50	Biased-84Hr-Anneal	511.27	509.41	-1.8602
91	50	Biased-84Hr-Anneal	505.68	505.4	-0.2756
92	50	Biased-84Hr-Anneal	513.53	512.75	-0.7798
100	0	CORRELATION	507.02	507.33	0.3061
101	0	CORRELATION	512.64	512.91	0.2683
102	0	CORRELATION	506.06	506.12	0.0587
103	0	CORRELATION	502.78	502.88	0.0937
104	0	CORRELATION	507.55	507.92	0.3686

TID vs Post - Pre Exposure Delta

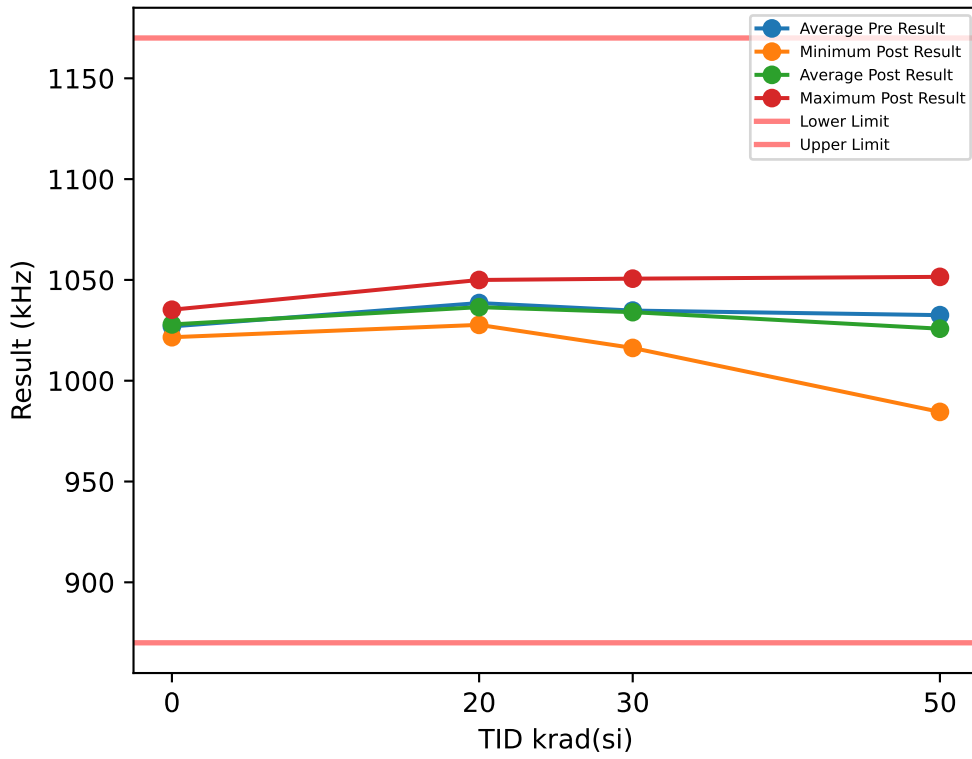


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	502.78	507.21	512.64	3.5549	502.88	507.43	512.91	3.6299	0.0587	0.21908	0.3686	0.13582
20	500.25	507.63	512.1	3.6218	498.84	506.78	511.06	3.6049	-2.3493	-0.85172	0.6005	0.97808
30	502.7	507.91	511.39	2.667	503.47	507.5	510.61	2.3403	-2.0049	-0.41084	0.7775	0.90045
50	502.1	507.65	513.53	3.6267	502.64	507.35	512.75	3.1759	-1.8602	-0.29232	0.5412	0.71177

Device Test: 24.152 FREQ|1MHz/SYNC1/14//34.8k//@EXT_SET_FREQ_1000kHz

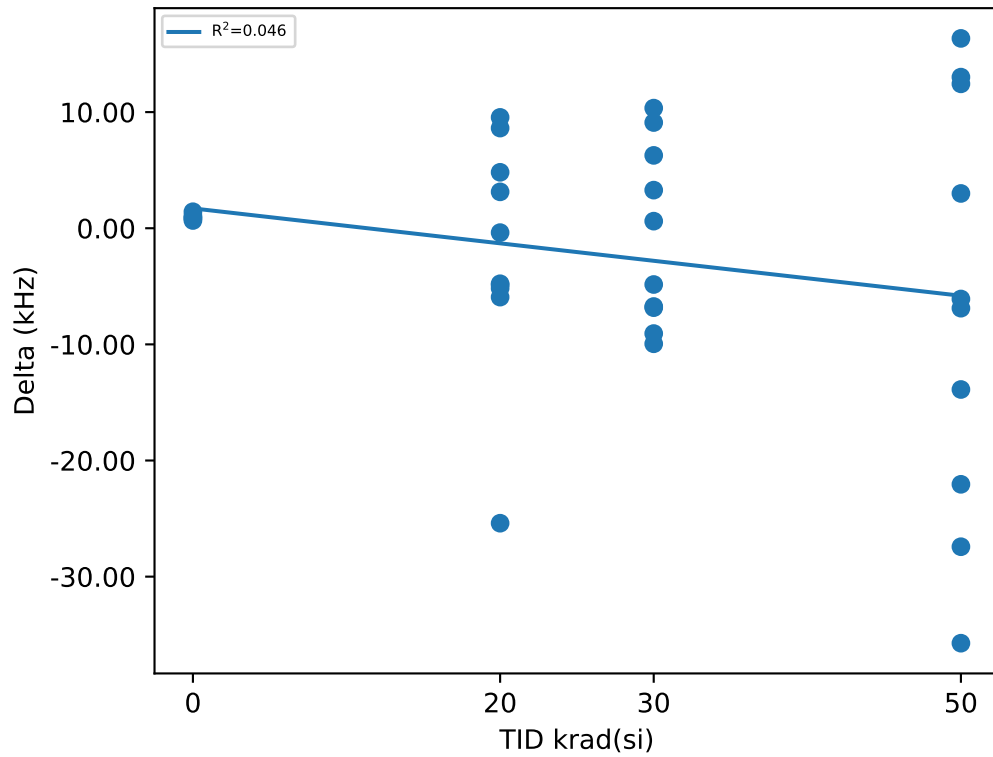
TID vs Result Stats



Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1031.8	1041.3	9.5452
2	20	Biased	1032.6	1027.7	-4.8772
3	20	Biased	1075.4	1050	-25.399
4	20	Biased	1037	1031	-5.9304
5	20	Biased	1038.5	1038.1	-0.3766
6	20	Unbiased	1020.9	1029.6	8.6246
7	20	Unbiased	1040.4	1035.6	-4.7805
8	20	Unbiased	1039.2	1042.3	3.133
9	20	Unbiased	1036.3	1041.1	4.8164
10	20	Unbiased	1033.4	1028.2	-5.169
11	30	Biased	1039.3	1032.4	-6.8396
12	30	Biased	1027.3	1018.3	-9.0682
13	30	Biased	1015.6	1016.3	0.6096
14	30	Biased	1033.1	1036.3	3.2813
15	30	Biased	1031.7	1038	6.2731
16	30	Unbiased	1026.7	1019.9	-6.7404
17	30	Unbiased	1041.5	1050.6	9.1027
18	30	Unbiased	1053.4	1043.4	-9.9485
19	30	Unbiased	1045.8	1040.9	-4.8447
20	30	Unbiased	1033.6	1043.9	10.344
26	50	Unbiased	1031.2	1003.8	-27.423
27	50	Unbiased	1021.9	999.83	-22.049
28	50	Unbiased	1020.3	984.53	-35.731
29	50	Unbiased	1043.8	1046.8	2.9955
30	50	Unbiased	1033.4	1045.8	12.433
88	50	Biased-84Hr-Anneal	1029	1042	13.012
89	50	Biased-84Hr-Anneal	1036.3	1030.2	-6.0929
90	50	Biased-84Hr-Anneal	1033.3	1019.4	-13.885
91	50	Biased-84Hr-Anneal	1035.2	1051.5	16.347
92	50	Biased-84Hr-Anneal	1041.1	1034.2	-6.8841
100	0	CORRELATION	1028	1029.4	1.4207
101	0	CORRELATION	1034.1	1035.2	1.0706
102	0	CORRELATION	1026.9	1027.6	0.6666
103	0	CORRELATION	1025	1025.8	0.8351
104	0	CORRELATION	1020.7	1021.6	0.9128

TID vs Post - Pre Exposure Delta

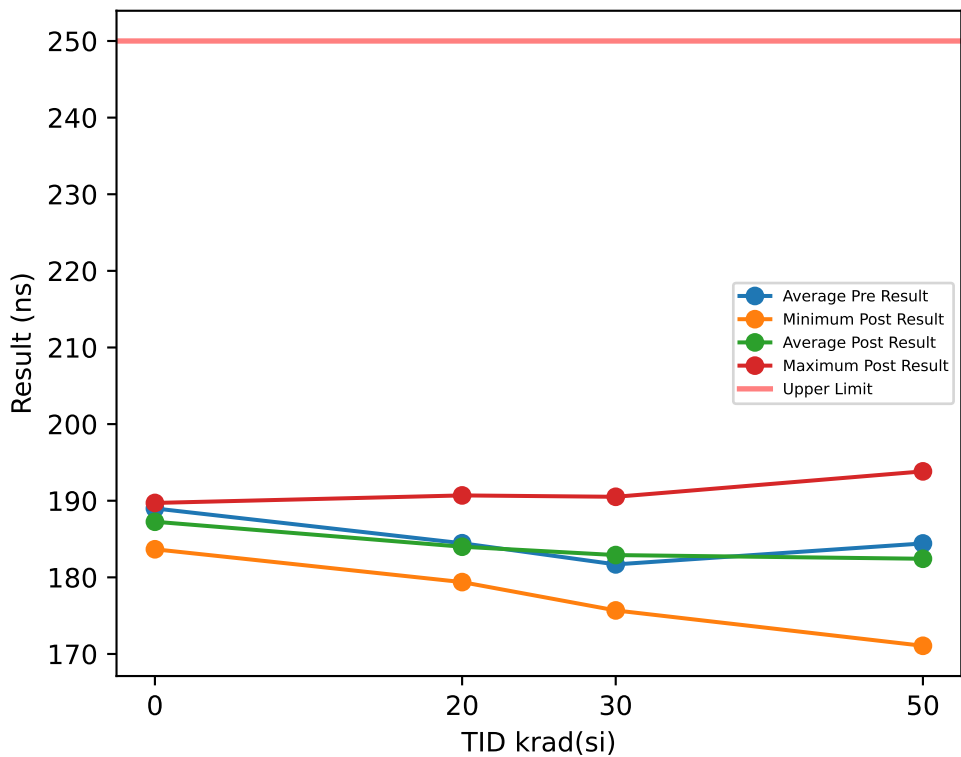


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1020.7	1026.9	1034.1	4.904	1021.6	1027.9	1035.2	5.0047	0.6666	0.98116	1.4207	0.28555
20	1020.9	1038.5	1075.4	14.085	1027.7	1036.5	1050	7.355	-25.399	-2.0414	9.5452	10.059
30	1015.6	1034.8	1053.4	10.713	1016.3	1034	1050.6	11.995	-9.9485	-0.78309	10.344	7.6819
50	1020.3	1032.5	1043.8	7.4565	984.53	1025.8	1051.5	22.997	-35.731	-6.7278	16.347	18.073

Device Test: 24.154 TIMING|MINON/SW/14//511k//@ON_TIME_MIN_14V

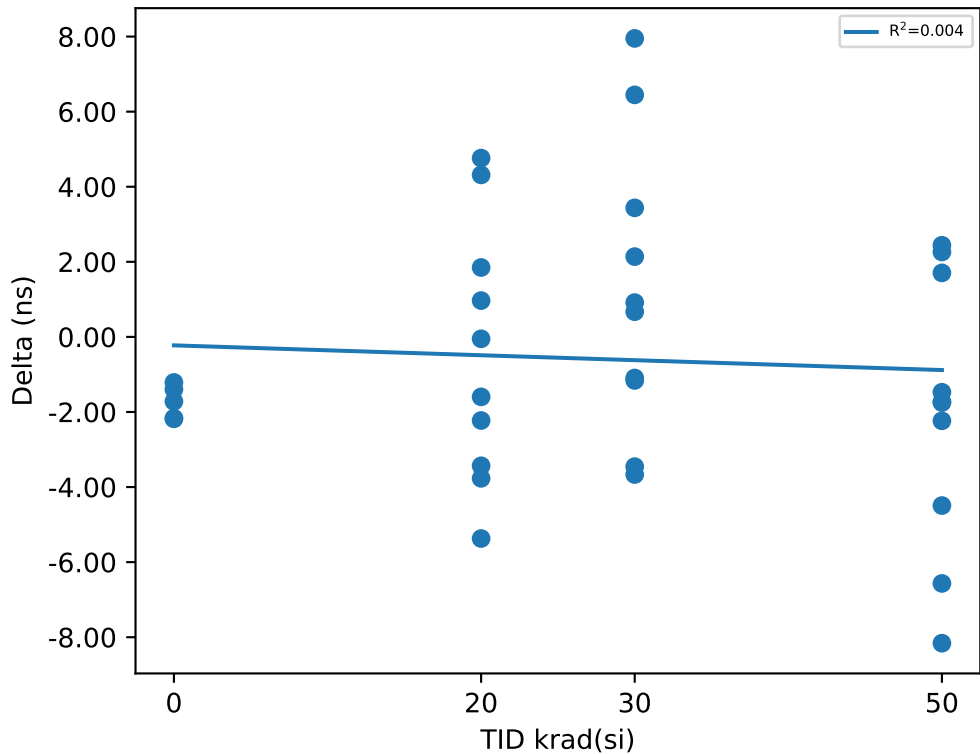
TID vs Result Stats



Test Results (Upper Limit = 250.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	183.15	179.38	-3.7677
2	20	Biased	179.34	184.1	4.7627
3	20	Biased	182.33	180.1	-2.2272
4	20	Biased	184.64	183.04	-1.5976
5	20	Biased	189.81	186.38	-3.434
6	20	Unbiased	182.15	186.46	4.3151
7	20	Unbiased	193.13	187.76	-5.3712
8	20	Unbiased	179.62	181.47	1.8488
9	20	Unbiased	190.74	190.69	-0.0509
10	20	Unbiased	179.63	180.59	0.9671
11	30	Biased	177.32	176.16	-1.1606
12	30	Biased	181.13	184.57	3.4375
13	30	Biased	181.55	178.09	-3.4565
14	30	Biased	179.57	186.02	6.4471
15	30	Biased	186.67	185.57	-1.0945
16	30	Unbiased	188.38	190.51	2.1385
17	30	Unbiased	185.06	185.73	0.6708
18	30	Unbiased	178.24	186.19	7.9514
19	30	Unbiased	184.23	180.56	-3.6664
20	30	Unbiased	174.77	175.68	0.9138
26	50	Unbiased	182.45	184.71	2.2624
27	50	Unbiased	192.13	193.83	1.7048
28	50	Unbiased	183.18	178.68	-4.4928
29	50	Unbiased	187.64	185.41	-2.2349
30	50	Unbiased	181.08	183.52	2.4411
88	50	Biased-84Hr-Anneal	179.23	171.07	-8.1594
89	50	Biased-84Hr-Anneal	179.63	177.9	-1.73
90	50	Biased-84Hr-Anneal	181.55	174.98	-6.5671
91	50	Biased-84Hr-Anneal	188.5	186.76	-1.7484
92	50	Biased-84Hr-Anneal	188.88	187.4	-1.4743
100	0	CORRELATION	191.11	189.71	-1.3984
101	0	CORRELATION	191.3	189.12	-2.1825
102	0	CORRELATION	190.31	188.14	-2.1663
103	0	CORRELATION	186.88	185.66	-1.214
104	0	CORRELATION	185.38	183.66	-1.7182

TID vs Post - Pre Exposure Delta

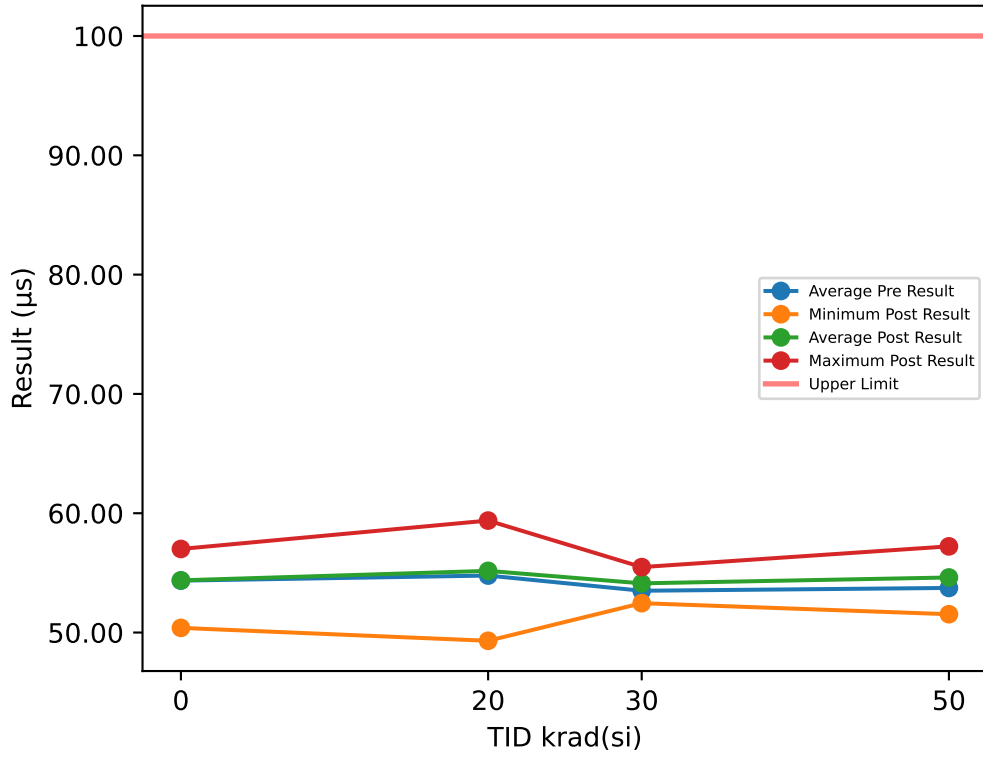


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	185.38	188.99	191.3	2.6945	183.66	187.26	189.71	2.5355	-2.1825	-1.7359	-1.214	0.43912
20	179.34	184.45	193.13	5.0333	179.38	184	190.69	3.744	-5.3712	-0.45549	4.7627	3.4308
30	174.77	181.69	188.38	4.3593	175.68	182.91	190.51	4.9732	-3.6664	1.2181	7.9514	3.881
50	179.23	184.43	192.13	4.4857	171.07	182.43	193.83	6.7319	-8.1594	-1.9999	2.4411	3.607

Device Test: 24.155 TIMING|DELAY/EN/14//511k//@T_EN_DELAY

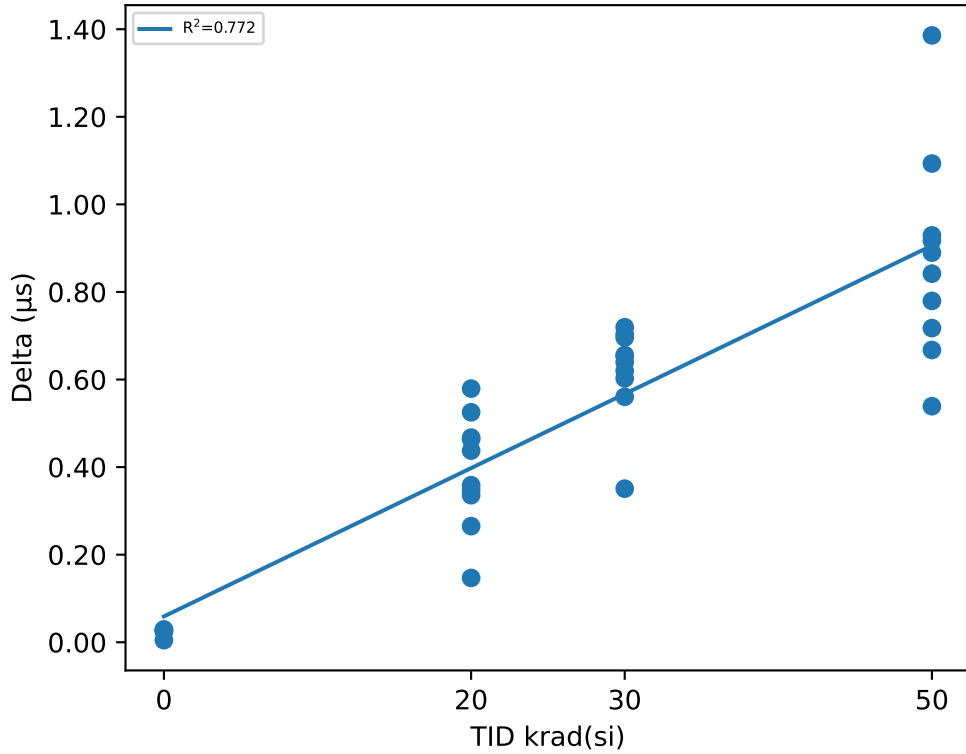
TID vs Result Stats



Test Results (Upper Limit = 100.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	53.367	53.703	0.3358
2	20	Biased	48.96	49.308	0.3477
3	20	Biased	57.303	57.45	0.1469
4	20	Biased	57.811	58.249	0.4377
5	20	Biased	51.54	51.899	0.3587
6	20	Unbiased	58.859	59.384	0.5252
7	20	Unbiased	55.511	55.975	0.4636
8	20	Unbiased	55.414	55.993	0.5793
9	20	Unbiased	52.387	52.855	0.4673
10	20	Unbiased	56.608	56.873	0.2652
11	30	Biased	52.662	53.358	0.6959
12	30	Biased	53.497	54.137	0.6398
13	30	Biased	54.737	55.393	0.656
14	30	Biased	54.681	55.031	0.3508
15	30	Biased	54.831	55.485	0.6536
16	30	Unbiased	54.346	54.949	0.6027
17	30	Unbiased	51.758	52.462	0.7031
18	30	Unbiased	53.482	54.102	0.62
19	30	Unbiased	51.817	52.537	0.7194
20	30	Unbiased	53.216	53.777	0.5607
26	50	Unbiased	50.997	51.536	0.539
27	50	Unbiased	55.837	57.223	1.3859
28	50	Unbiased	53.463	54.305	0.8418
29	50	Unbiased	54.979	55.908	0.9292
30	50	Unbiased	53.911	55.005	1.0933
88	50	Biased-84Hr-Anneal	51.622	52.512	0.8898
89	50	Biased-84Hr-Anneal	54.046	54.963	0.9172
90	50	Biased-84Hr-Anneal	55.13	55.847	0.7174
91	50	Biased-84Hr-Anneal	54.136	54.804	0.6674
92	50	Biased-84Hr-Anneal	53.255	54.035	0.7795
100	0	CORRELATION	50.362	50.39	0.0276
101	0	CORRELATION	54.896	54.919	0.0235
102	0	CORRELATION	55.842	55.871	0.0293
103	0	CORRELATION	57.001	57.006	0.0047
104	0	CORRELATION	53.657	53.684	0.0275

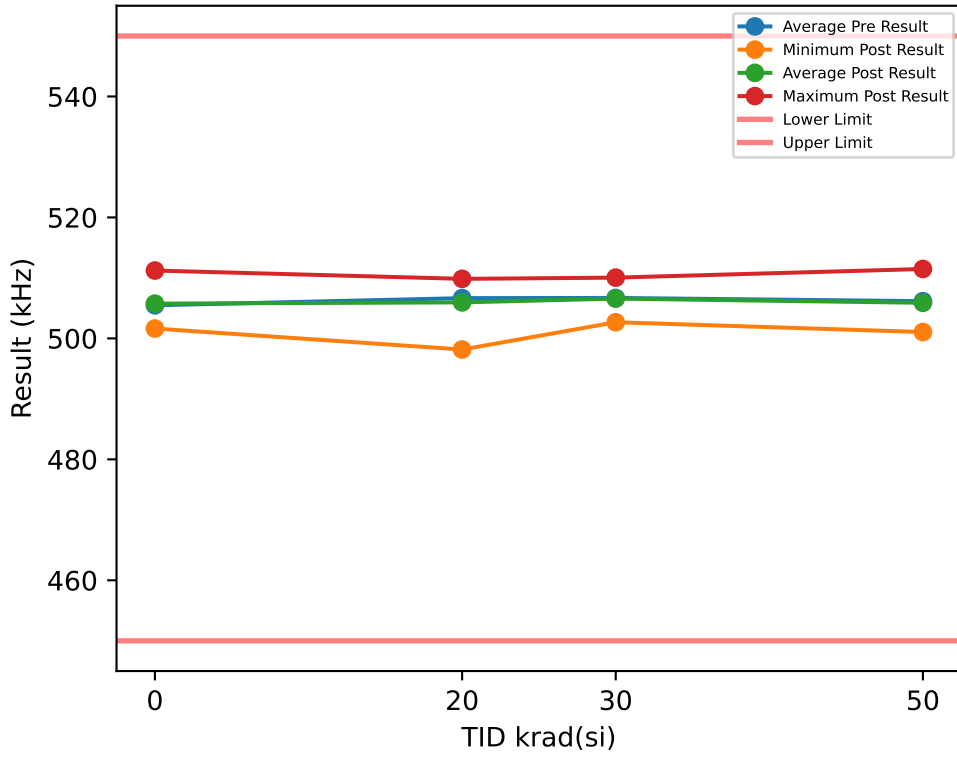
TID vs Post - Pre Exposure Delta



Test Statistics (µs)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	50.362	54.352	57.001	2.5462	50.39	54.374	57.006	2.5403	0.0047	0.02252	0.0293	0.010187
20	48.96	54.776	58.859	3.1368	49.308	55.169	59.384	3.1489	0.1469	0.39274	0.5793	0.12827
30	51.758	53.503	54.831	1.1576	52.462	54.123	55.485	1.1034	0.3508	0.6202	0.7194	0.10627
50	50.997	53.738	55.837	1.508	51.536	54.614	57.223	1.6545	0.539	0.87605	1.3859	0.2368

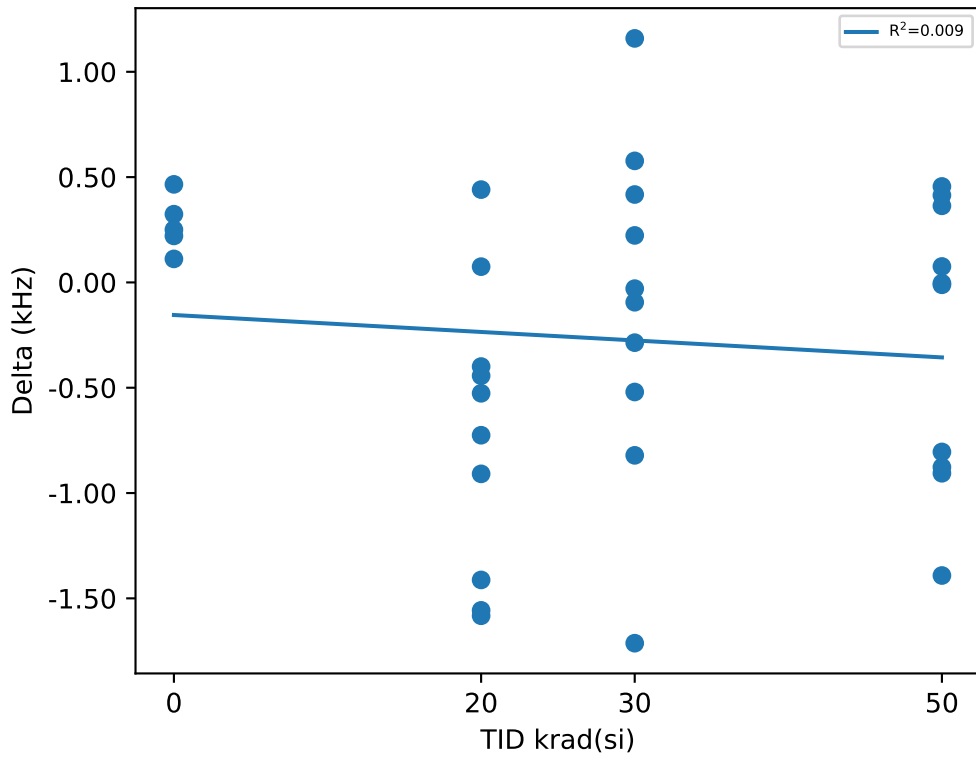
TID vs Result Stats



Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	502.75	503.19	0.4407
2	20	Biased	505.82	504.41	-1.4125
3	20	Biased	508.42	506.87	-1.557
4	20	Biased	510.57	509.85	-0.7255
5	20	Biased	509.78	509.26	-0.5264
6	20	Unbiased	499.74	498.16	-1.5826
7	20	Unbiased	507.12	506.67	-0.443
8	20	Unbiased	507.86	507.46	-0.3994
9	20	Unbiased	509.65	508.74	-0.9089
10	20	Unbiased	504.88	504.95	0.0749
11	30	Biased	505.7	505.93	0.2232
12	30	Biased	507.33	506.81	-0.5202
13	30	Biased	501.51	502.67	1.1586
14	30	Biased	504.1	504.07	-0.0295
15	30	Biased	506.9	506.08	-0.821
16	30	Unbiased	508.57	508.28	-0.286
17	30	Unbiased	509.86	508.15	-1.7129
18	30	Unbiased	510.14	510.05	-0.0941
19	30	Unbiased	507.89	508.31	0.4174
20	30	Unbiased	504.88	505.45	0.5771
26	50	Unbiased	508.28	508.27	-0.0113
27	50	Unbiased	503.52	503.93	0.4137
28	50	Unbiased	500.59	501.05	0.4557
29	50	Unbiased	507.99	506.6	-1.3915
30	50	Unbiased	506.45	505.54	-0.9061
88	50	Biased-84Hr-Anneal	502.12	502.19	0.0758
89	50	Biased-84Hr-Anneal	507.13	507.5	0.3637
90	50	Biased-84Hr-Anneal	509.1	508.23	-0.8772
91	50	Biased-84Hr-Anneal	504.89	504.09	-0.8048
92	50	Biased-84Hr-Anneal	511.48	511.48	-0.0036
100	0	CORRELATION	504.89	505.22	0.324
101	0	CORRELATION	510.76	511.22	0.4656
102	0	CORRELATION	504.89	505.11	0.2208
103	0	CORRELATION	501.52	501.63	0.1117
104	0	CORRELATION	505.31	505.57	0.2504

TID vs Post - Pre Exposure Delta

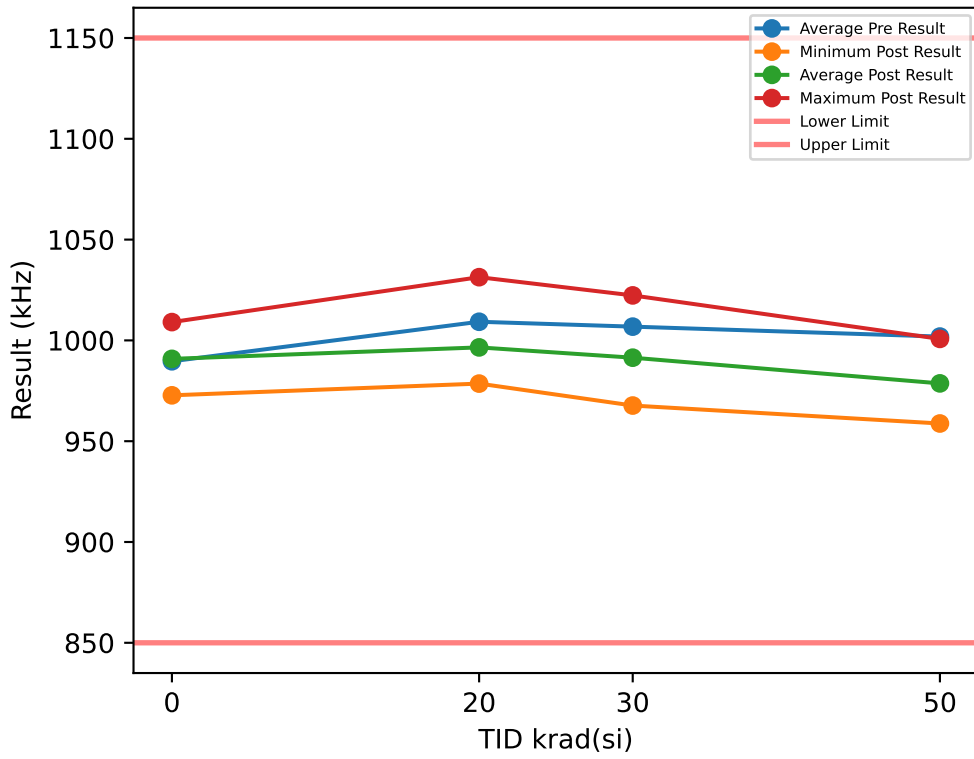


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	501.52	505.48	510.76	3.3263	501.63	505.75	511.22	3.4513	0.1117	0.2745	0.4656	0.13128
20	499.74	506.66	510.57	3.4287	498.16	505.96	509.85	3.484	-1.5826	-0.70397	0.4407	0.67933
30	501.51	506.69	510.14	2.691	502.67	506.58	510.05	2.2098	-1.7129	-0.10874	1.1586	0.7994
50	500.59	506.16	511.48	3.3623	501.05	505.89	511.48	3.1572	-1.3915	-0.26856	0.4557	0.66418

Device Test: 24.20 FREQ|1MHz/SYNC1/4.5//34.8k//@EXT_SET_FREQ_1000kHz_4V5

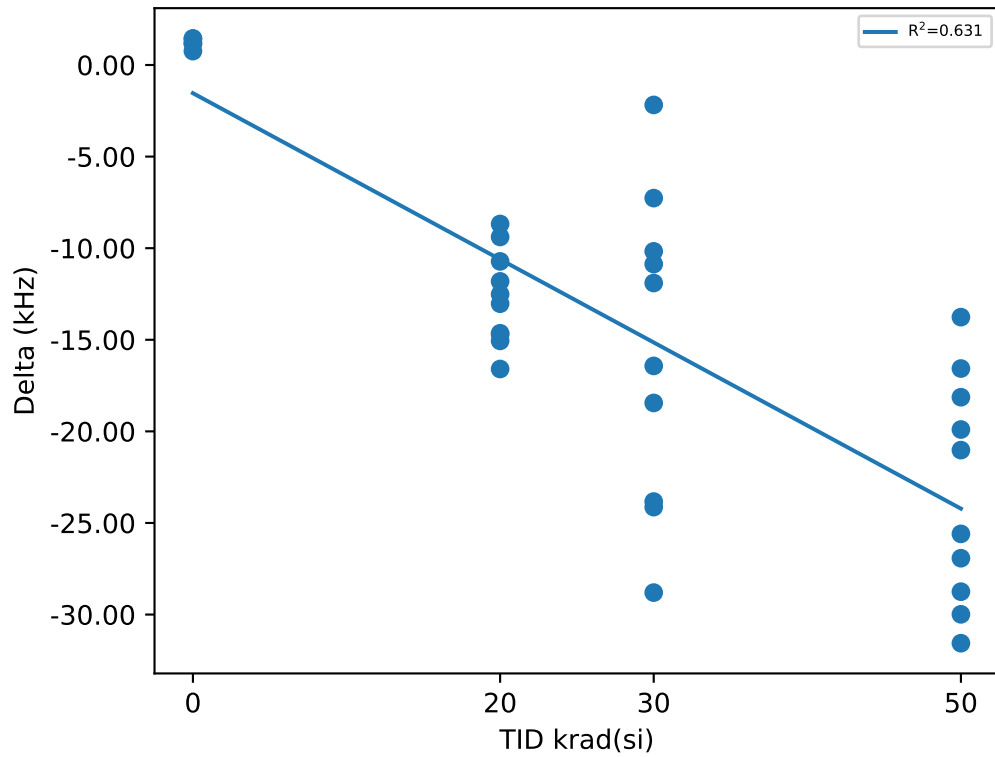
TID vs Result Stats



Test Results (Lower Limit = 850.0, Upper Limit = 1150.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1011.7	997.03	-14.644
2	20	Biased	995.31	980.6	-14.708
3	20	Biased	1044.4	1031.4	-13.03
4	20	Biased	989.29	978.57	-10.721
5	20	Biased	1002	990.18	-11.812
6	20	Unbiased	1000.4	985.29	-15.061
7	20	Unbiased	1019.2	1010.6	-8.6787
8	20	Unbiased	1017.5	1000.9	-16.595
9	20	Unbiased	998.76	986.24	-12.517
10	20	Unbiased	1013.9	1004.5	-9.3872
11	30	Biased	1017.9	999.48	-18.449
12	30	Biased	981.71	969.81	-11.902
13	30	Biased	969.87	967.69	-2.1799
14	30	Biased	1015.6	986.76	-28.802
15	30	Biased	1010.9	987.06	-23.832
16	30	Unbiased	981.87	971.69	-10.173
17	30	Unbiased	1020.9	996.75	-24.136
18	30	Unbiased	1033.2	1022.3	-10.868
19	30	Unbiased	1024.6	1017.4	-7.2665
20	30	Unbiased	1011.7	995.31	-16.427
26	50	Unbiased	985.83	964.81	-21.024
27	50	Unbiased	976.92	958.78	-18.135
28	50	Unbiased	985.96	960.36	-25.596
29	50	Unbiased	1024.9	994.87	-29.988
30	50	Unbiased	1016.1	987.38	-28.751
88	50	Biased-84Hr-Anneal	1007.3	980.41	-26.925
89	50	Biased-84Hr-Anneal	1012.2	980.61	-31.564
90	50	Biased-84Hr-Anneal	987.77	971.2	-16.57
91	50	Biased-84Hr-Anneal	1014.5	1000.7	-13.764
92	50	Biased-84Hr-Anneal	1007.5	987.62	-19.898
100	0	CORRELATION	986.4	987.58	1.1739
101	0	CORRELATION	987.83	989.28	1.452
102	0	CORRELATION	994.73	995.49	0.7584
103	0	CORRELATION	1007.7	1009.1	1.411
104	0	CORRELATION	971.58	972.76	1.1721

TID vs Post - Pre Exposure Delta

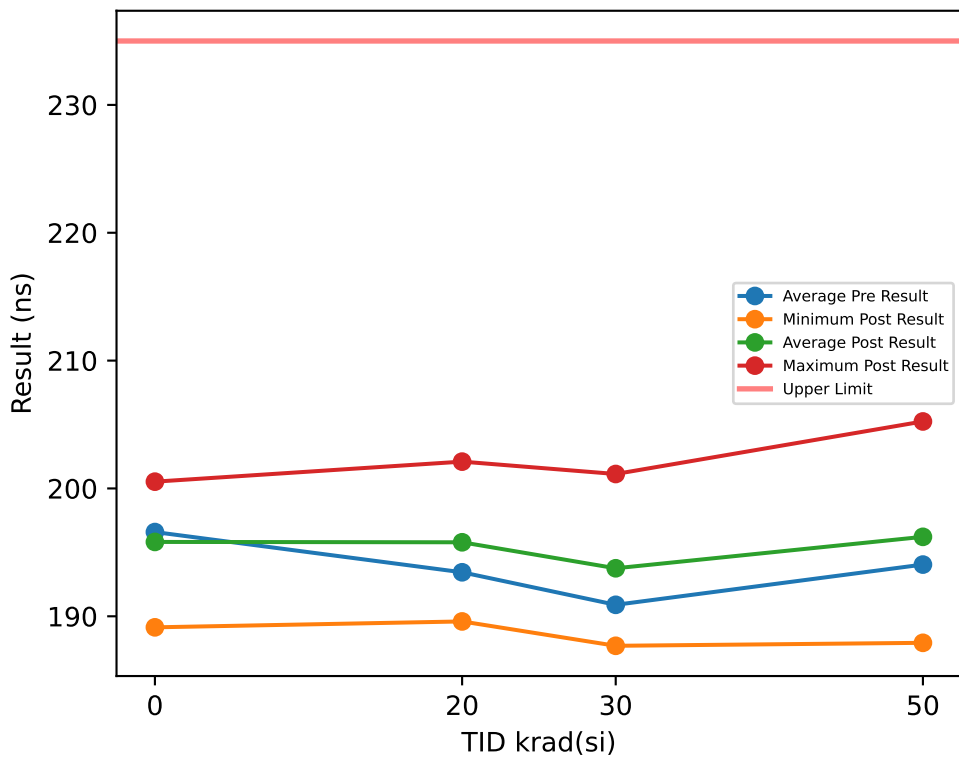


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	971.58	989.64	1007.7	13.141	972.76	990.84	1009.1	13.176	0.7584	1.1935	1.452	0.27581
20	989.29	1009.2	1044.4	15.864	978.57	996.53	1031.4	16.133	-16.595	-12.715	-8.6787	2.5938
30	969.87	1006.8	1033.2	21.263	967.69	991.42	1022.3	18.844	-28.802	-15.403	-2.1799	8.422
50	976.92	1001.9	1024.9	16.3	958.78	978.68	1000.7	14.496	-31.564	-23.222	-13.764	6.1529

Device Test: 24.22 TIMING|MINON/SW/4.5//511k//@ON_TIME_MIN_4V5

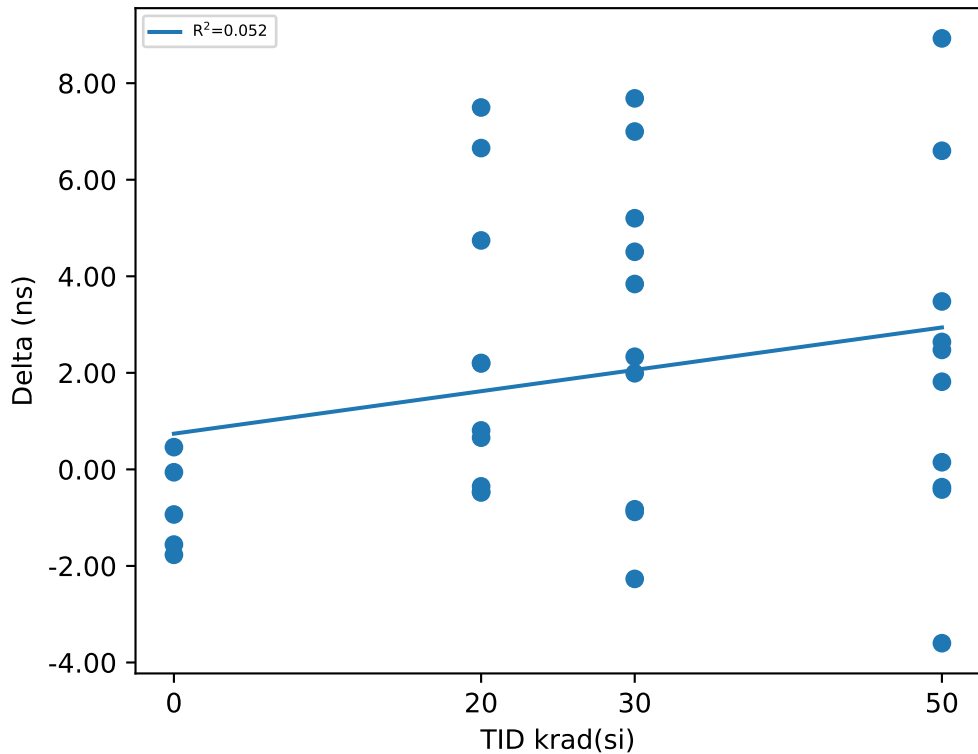
TID vs Result Stats



Test Results (Upper Limit = 235.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	192.63	193.44	0.8074
2	20	Biased	187.74	194.4	6.6559
3	20	Biased	190.4	189.94	-0.4632
4	20	Biased	192.47	193.13	0.657
5	20	Biased	201.7	201.35	-0.3516
6	20	Unbiased	191.86	199.36	7.4967
7	20	Unbiased	202.58	202.1	-0.4782
8	20	Unbiased	188.07	192.82	4.7426
9	20	Unbiased	199.57	201.78	2.2052
10	20	Unbiased	187.4	189.6	2.1944
11	30	Biased	187.03	189.36	2.3337
12	30	Biased	190.32	195.52	5.2023
13	30	Biased	189.96	187.69	-2.2685
14	30	Biased	189.1	193.61	4.5076
15	30	Biased	194.97	194.14	-0.8259
16	30	Unbiased	197.29	201.13	3.84
17	30	Unbiased	190.35	192.34	1.9909
18	30	Unbiased	187.58	195.27	7.6855
19	30	Unbiased	192.55	191.67	-0.8799
20	30	Unbiased	189.83	196.83	6.9988
26	50	Unbiased	192.8	201.73	8.9278
27	50	Unbiased	201.76	205.24	3.4788
28	50	Unbiased	193.68	196.32	2.6398
29	50	Unbiased	195.81	198.29	2.4749
30	50	Unbiased	189.99	196.59	6.6002
88	50	Biased-84Hr-Anneal	189.92	189.5	-0.418
89	50	Biased-84Hr-Anneal	191.31	193.13	1.8161
90	50	Biased-84Hr-Anneal	191.52	187.92	-3.6003
91	50	Biased-84Hr-Anneal	197.45	197.6	0.1479
92	50	Biased-84Hr-Anneal	196.2	195.83	-0.3681
100	0	CORRELATION	200.59	200.53	-0.0593
101	0	CORRELATION	198.72	197.78	-0.934
102	0	CORRELATION	197.34	197.8	0.461
103	0	CORRELATION	195.39	193.84	-1.5573
104	0	CORRELATION	190.91	189.14	-1.7695

TID vs Post - Pre Exposure Delta

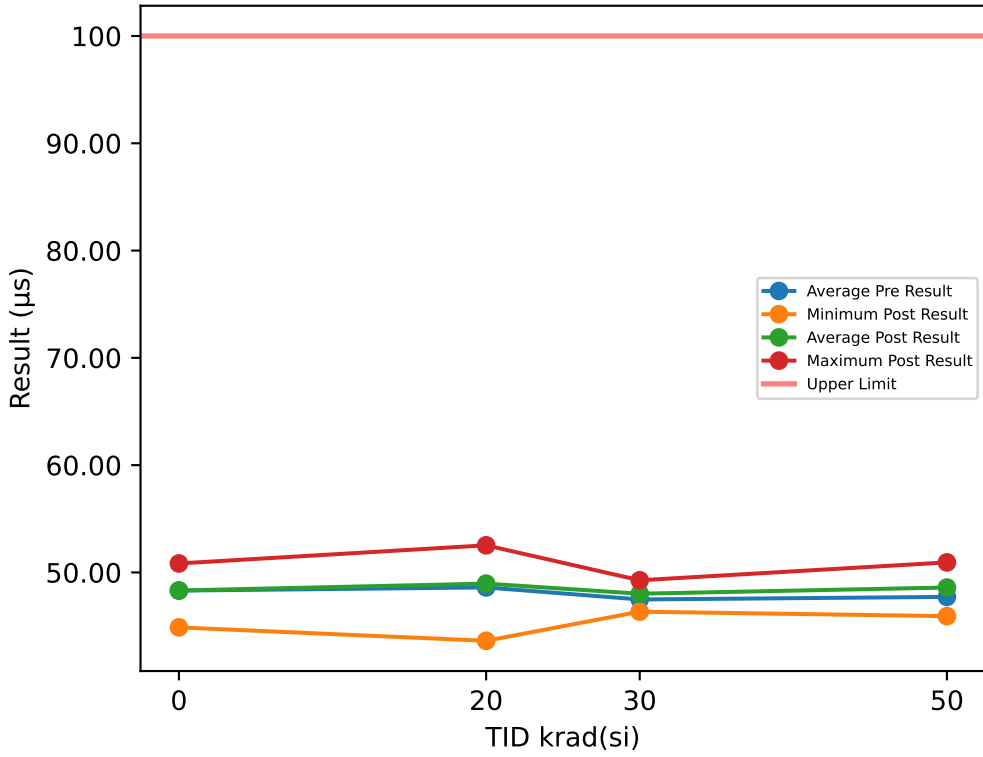


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	190.91	196.59	200.59	3.7021	189.14	195.82	200.53	4.4319	-1.7695	-0.77182	0.461	0.95736
20	187.4	193.44	202.58	5.7765	189.6	195.79	202.1	4.8902	-0.4782	2.3466	7.4967	2.9675
30	187.03	190.9	197.29	3.1966	187.69	193.76	201.13	3.8274	-2.2685	2.8585	7.6855	3.4072
50	189.92	194.04	201.76	3.7695	187.92	196.21	205.24	5.1824	-3.6003	2.1699	8.9278	3.6205

Device Test: 24.23 TIMING|DELAY/EN/4.5//511k//@T_EN_DELAY

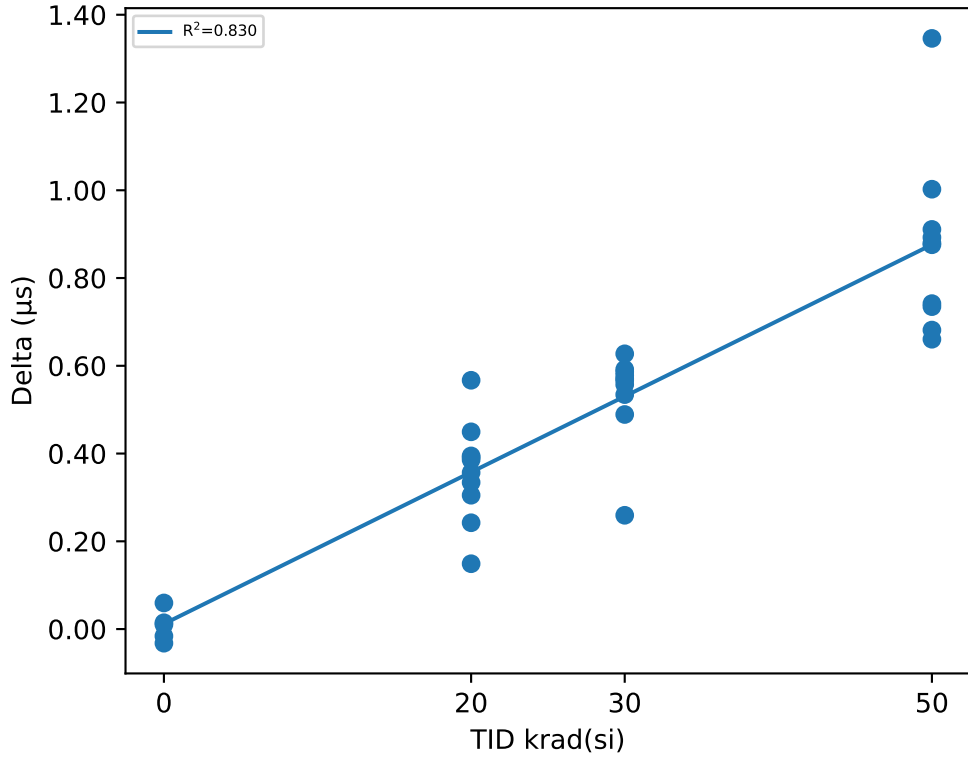
TID vs Result Stats



Test Results (Upper Limit = 100.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	47.342	47.698	0.3565
2	20	Biased	43.295	43.629	0.3342
3	20	Biased	50.952	51.101	0.1489
4	20	Biased	51.162	51.547	0.3857
5	20	Biased	45.702	46.007	0.305
6	20	Unbiased	52.08	52.529	0.4495
7	20	Unbiased	49.35	49.741	0.3914
8	20	Unbiased	49.258	49.825	0.567
9	20	Unbiased	46.481	46.876	0.3946
10	20	Unbiased	50.403	50.645	0.2423
11	30	Biased	46.713	47.28	0.5672
12	30	Biased	47.652	48.186	0.5343
13	30	Biased	48.495	49.081	0.5861
14	30	Biased	48.55	48.809	0.2593
15	30	Biased	48.678	49.27	0.5919
16	30	Unbiased	48.368	48.857	0.489
17	30	Unbiased	45.766	46.344	0.5782
18	30	Unbiased	47.584	48.154	0.5702
19	30	Unbiased	45.834	46.461	0.6273
20	30	Unbiased	47.178	47.735	0.5572
26	50	Unbiased	45.265	45.925	0.6605
27	50	Unbiased	49.59	50.936	1.3461
28	50	Unbiased	47.584	48.464	0.8798
29	50	Unbiased	48.764	49.656	0.8925
30	50	Unbiased	48.018	49.02	1.0024
88	50	Biased-84Hr-Anneal	45.822	46.733	0.9108
89	50	Biased-84Hr-Anneal	47.904	48.78	0.8758
90	50	Biased-84Hr-Anneal	48.998	49.733	0.7348
91	50	Biased-84Hr-Anneal	47.909	48.651	0.7417
92	50	Biased-84Hr-Anneal	47.357	48.039	0.6814
100	0	CORRELATION	44.896	44.88	-0.016
101	0	CORRELATION	48.736	48.75	0.0144
102	0	CORRELATION	49.537	49.596	0.0595
103	0	CORRELATION	50.87	50.837	-0.0322
104	0	CORRELATION	47.508	47.519	0.0103

TID vs Post - Pre Exposure Delta

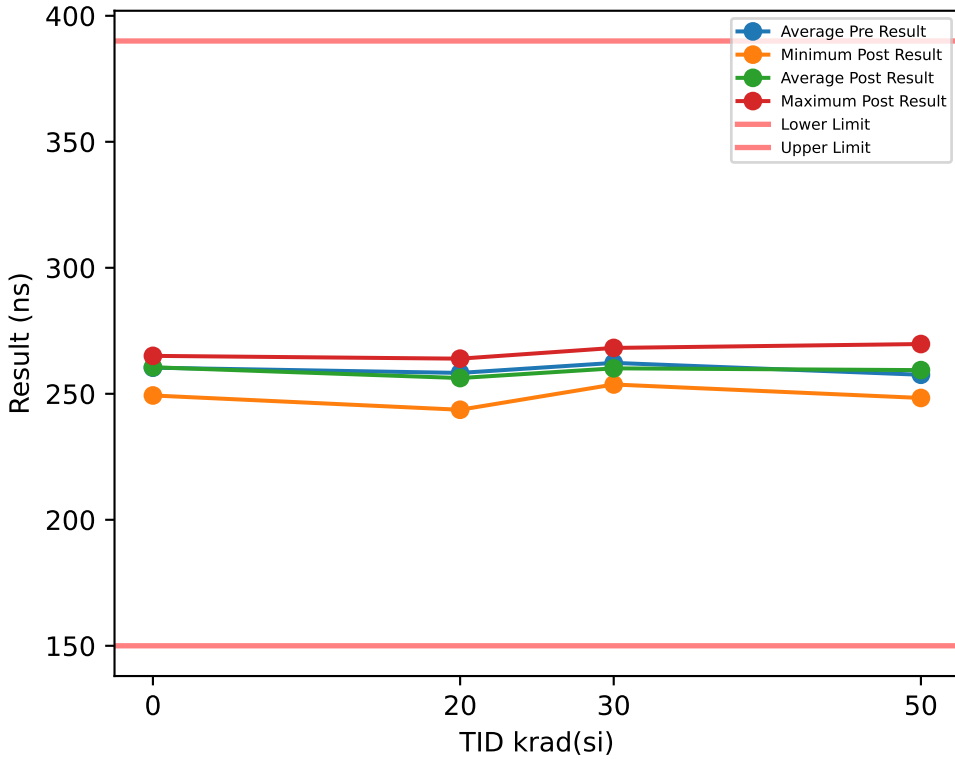


Test Statistics (µs)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	44.896	48.309	50.87	2.2657	44.88	48.317	50.837	2.2707	-0.0322	0.0072	0.0595	0.034955
20	43.295	48.602	52.08	2.8099	43.629	48.96	52.529	2.8144	0.1489	0.35751	0.567	0.11341
30	45.766	47.482	48.678	1.0938	46.344	48.018	49.27	1.0501	0.2593	0.53607	0.6273	0.10388
50	45.265	47.721	49.59	1.3399	45.925	48.594	50.936	1.4545	0.6605	0.87258	1.3461	0.20018

Device Test: 24.3 TIMING|DELAY/SYNC1/4.5//OPEN//@SYNC1_SW_DELAY_INV_4V5

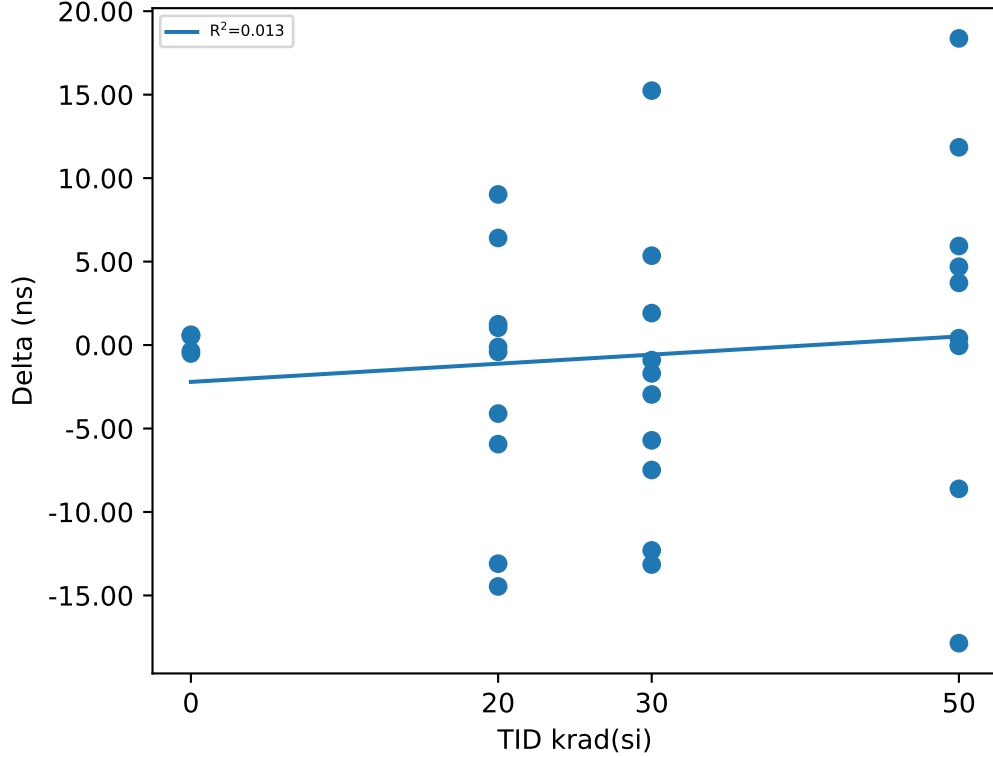
TID vs Result Stats



Test Results (Lower Limit = 150.0, Upper Limit = 390.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	254.54	254.13	-0.408
2	20	Biased	263.82	250.73	-13.096
3	20	Biased	262.86	262.74	-0.1157
4	20	Biased	256.7	257.95	1.2482
5	20	Biased	243.89	244.92	1.0357
6	20	Unbiased	269.69	263.76	-5.9355
7	20	Unbiased	254.32	260.74	6.4142
8	20	Unbiased	258.12	243.66	-14.461
9	20	Unbiased	250.87	259.9	9.0226
10	20	Unbiased	268.05	263.94	-4.1045
11	30	Biased	259.4	253.7	-5.7072
12	30	Biased	258.95	255.99	-2.9608
13	30	Biased	252.96	268.2	15.241
14	30	Biased	272.67	259.52	-13.149
15	30	Biased	258.09	260.01	1.9145
16	30	Unbiased	266.39	264.69	-1.6979
17	30	Unbiased	255.31	254.41	-0.903
18	30	Unbiased	268.89	261.41	-7.485
19	30	Unbiased	261.38	266.74	5.3538
20	30	Unbiased	268.63	256.33	-12.302
26	50	Unbiased	266.21	248.35	-17.86
27	50	Unbiased	260.65	260.6	-0.0437
28	50	Unbiased	264.43	264.85	0.4137
29	50	Unbiased	251.63	251.6	-0.0307
30	50	Unbiased	268.68	260.07	-8.6137
88	50	Biased-84Hr-Anneal	251.71	257.64	5.9334
89	50	Biased-84Hr-Anneal	249.52	261.37	11.846
90	50	Biased-84Hr-Anneal	251.38	269.75	18.37
91	50	Biased-84Hr-Anneal	251.36	256.05	4.6918
92	50	Biased-84Hr-Anneal	259.99	263.72	3.7248
100	0	CORRELATION	263.27	263.85	0.5845
101	0	CORRELATION	265.41	265.05	-0.3607
102	0	CORRELATION	248.72	249.34	0.6155
103	0	CORRELATION	262.35	262.89	0.5432
104	0	CORRELATION	262.04	261.53	-0.5069

TID vs Post - Pre Exposure Delta

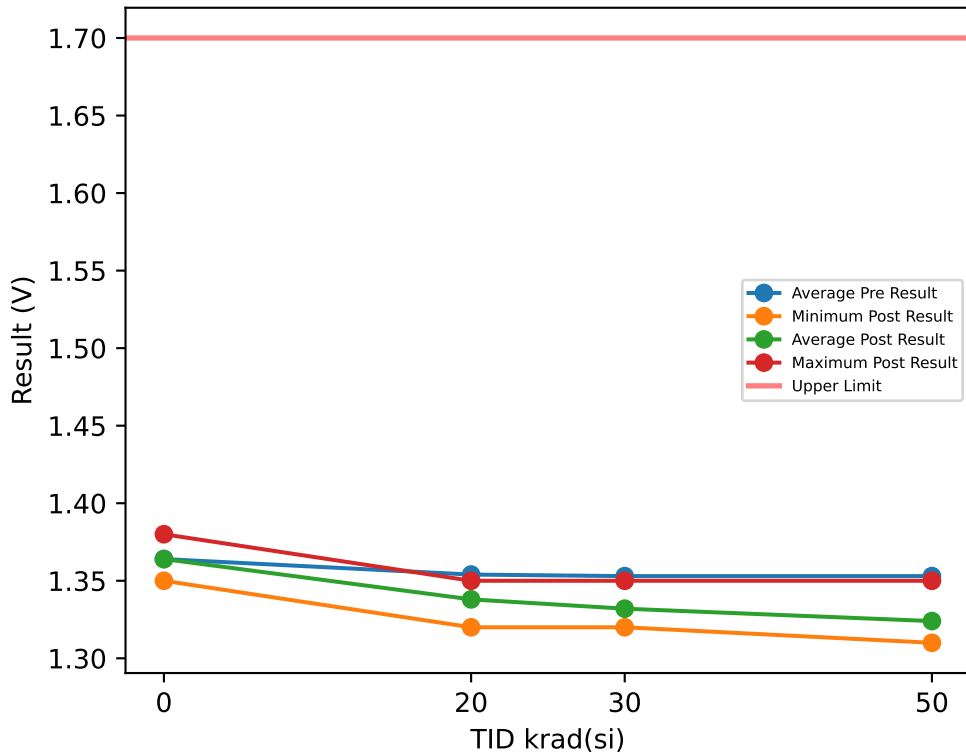


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	248.72	260.36	265.41	6.6362	249.34	260.53	265.05	6.3893	-0.5069	0.17512	0.6155	0.55885
20	243.89	258.29	269.69	7.9685	243.66	256.25	263.94	7.5696	-14.461	-2.04	9.0226	7.5751
30	252.96	262.27	272.67	6.5145	253.7	260.1	268.2	5.1359	-13.149	-2.1695	15.241	8.4514
50	249.52	257.56	268.68	7.2417	248.35	259.4	269.75	6.3113	-17.86	1.8432	18.37	10.046

Device Test: 24.4 THRESHOLD|RISE/SYNC1/4.5//OPEN//@SYNC1_VIH

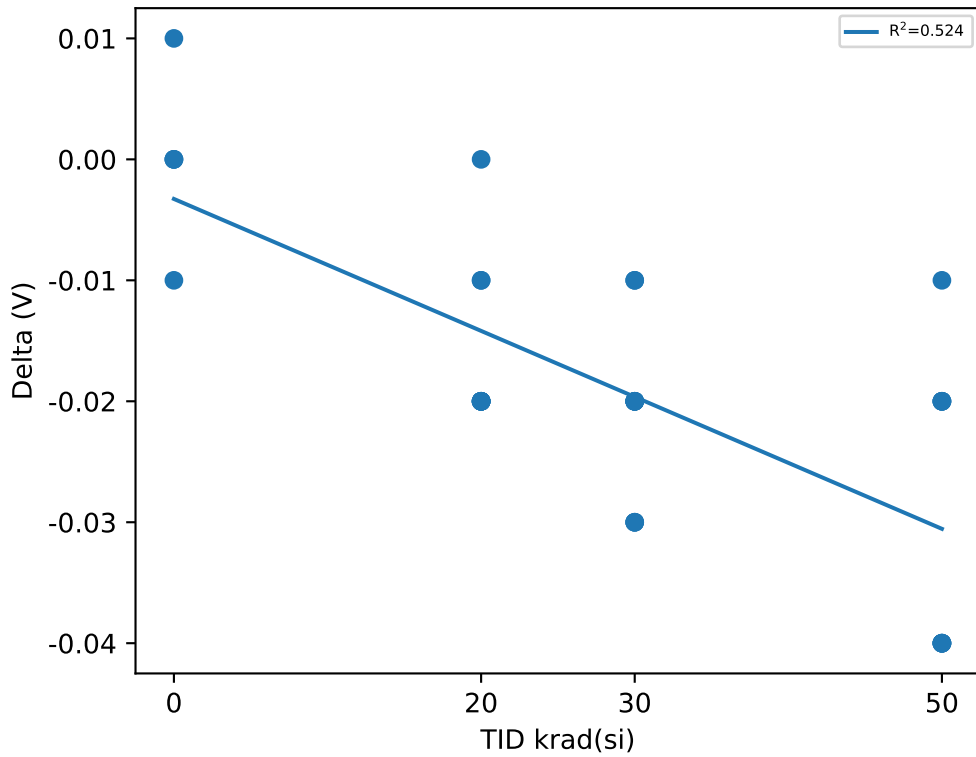
TID vs Result Stats



Test Results (Upper Limit = 1.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.35	1.34	-0.01
2	20	Biased	1.35	1.34	-0.01
3	20	Biased	1.35	1.33	-0.02
4	20	Biased	1.36	1.34	-0.02
5	20	Biased	1.35	1.35	0
6	20	Unbiased	1.36	1.34	-0.02
7	20	Unbiased	1.34	1.32	-0.02
8	20	Unbiased	1.36	1.34	-0.02
9	20	Unbiased	1.36	1.34	-0.02
10	20	Unbiased	1.36	1.34	-0.02
11	30	Biased	1.34	1.33	-0.01
12	30	Biased	1.37	1.34	-0.03
13	30	Biased	1.35	1.33	-0.02
14	30	Biased	1.36	1.34	-0.02
15	30	Biased	1.36	1.35	-0.01
16	30	Unbiased	1.36	1.34	-0.02
17	30	Unbiased	1.35	1.32	-0.03
18	30	Unbiased	1.35	1.32	-0.03
19	30	Unbiased	1.34	1.32	-0.02
20	30	Unbiased	1.35	1.33	-0.02
26	50	Unbiased	1.35	1.31	-0.04
27	50	Unbiased	1.35	1.31	-0.04
28	50	Unbiased	1.36	1.32	-0.04
29	50	Unbiased	1.36	1.32	-0.04
30	50	Unbiased	1.36	1.32	-0.04
88	50	Biased-84Hr-Anneal	1.34	1.32	-0.02
89	50	Biased-84Hr-Anneal	1.37	1.35	-0.02
90	50	Biased-84Hr-Anneal	1.35	1.34	-0.01
91	50	Biased-84Hr-Anneal	1.35	1.33	-0.02
92	50	Biased-84Hr-Anneal	1.34	1.32	-0.02
100	0	CORRELATION	1.35	1.35	0
101	0	CORRELATION	1.36	1.37	0.01
102	0	CORRELATION	1.38	1.38	0
103	0	CORRELATION	1.36	1.36	0
104	0	CORRELATION	1.37	1.36	-0.01

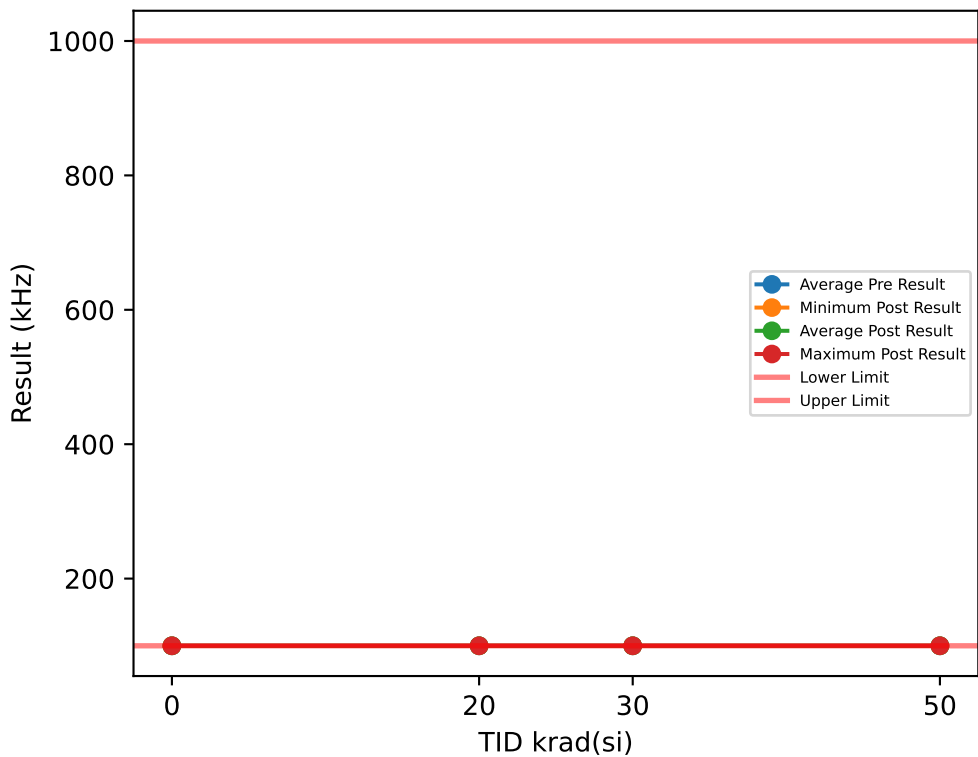
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.35	1.364	1.38	0.011402	1.35	1.364	1.38	0.011402	-0.01	0	0.01	0.0070711
20	1.34	1.354	1.36	0.0069921	1.32	1.338	1.35	0.0078881	-0.02	-0.016	0	0.0069921
30	1.34	1.353	1.37	0.0094868	1.32	1.332	1.35	0.010328	-0.03	-0.021	-0.01	0.0073786
50	1.34	1.353	1.37	0.0094868	1.31	1.324	1.35	0.012649	-0.04	-0.029	-0.01	0.011972

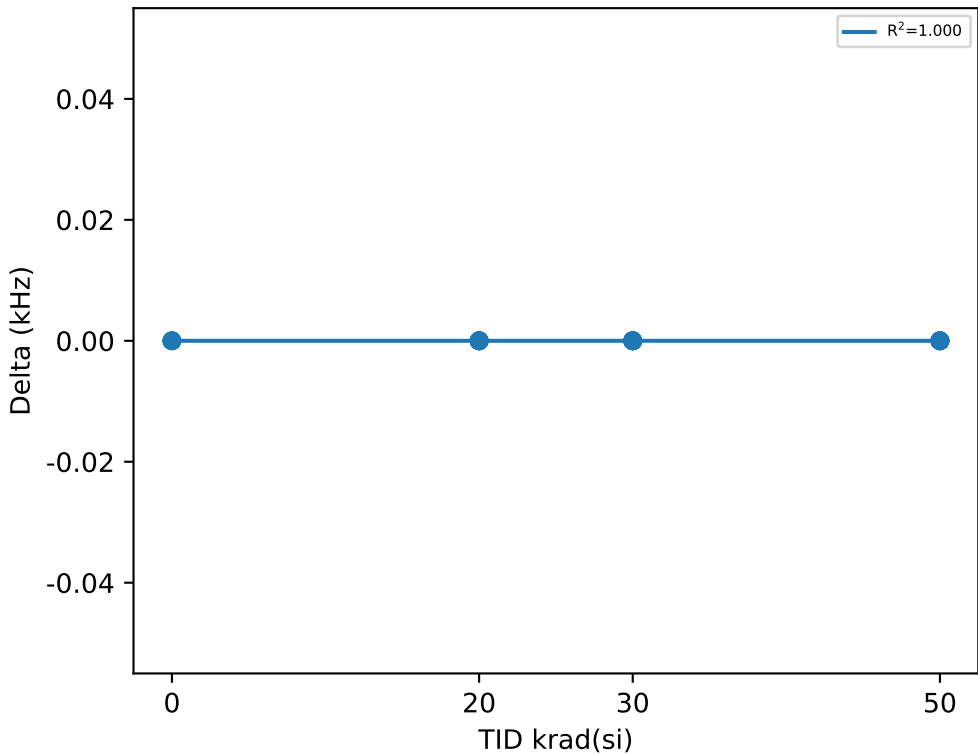
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	100	100	0
2	20	Biased	100	100	0
3	20	Biased	100	100	0
4	20	Biased	100	100	0
5	20	Biased	100	100	0
6	20	Unbiased	100	100	0
7	20	Unbiased	100	100	0
8	20	Unbiased	100	100	0
9	20	Unbiased	100	100	0
10	20	Unbiased	100	100	0
11	30	Biased	100	100	0
12	30	Biased	100	100	0
13	30	Biased	100	100	0
14	30	Biased	100	100	0
15	30	Biased	100	100	0
16	30	Unbiased	100	100	0
17	30	Unbiased	100	100	0
18	30	Unbiased	100	100	0
19	30	Unbiased	100	100	0
20	30	Unbiased	100	100	0
26	50	Unbiased	100	100	0
27	50	Unbiased	100	100	0
28	50	Unbiased	100	100	0
29	50	Unbiased	100	100	0
30	50	Unbiased	100	100	0
88	50	Biased-84Hr-Anneal	100	100	0
89	50	Biased-84Hr-Anneal	100	100	0
90	50	Biased-84Hr-Anneal	100	100	0
91	50	Biased-84Hr-Anneal	100	100	0
92	50	Biased-84Hr-Anneal	100	100	0
100	0	CORRELATION	100	100	0
101	0	CORRELATION	100	100	0
102	0	CORRELATION	100	100	0
103	0	CORRELATION	100	100	0
104	0	CORRELATION	100	100	0

TID vs Post - Pre Exposure Delta

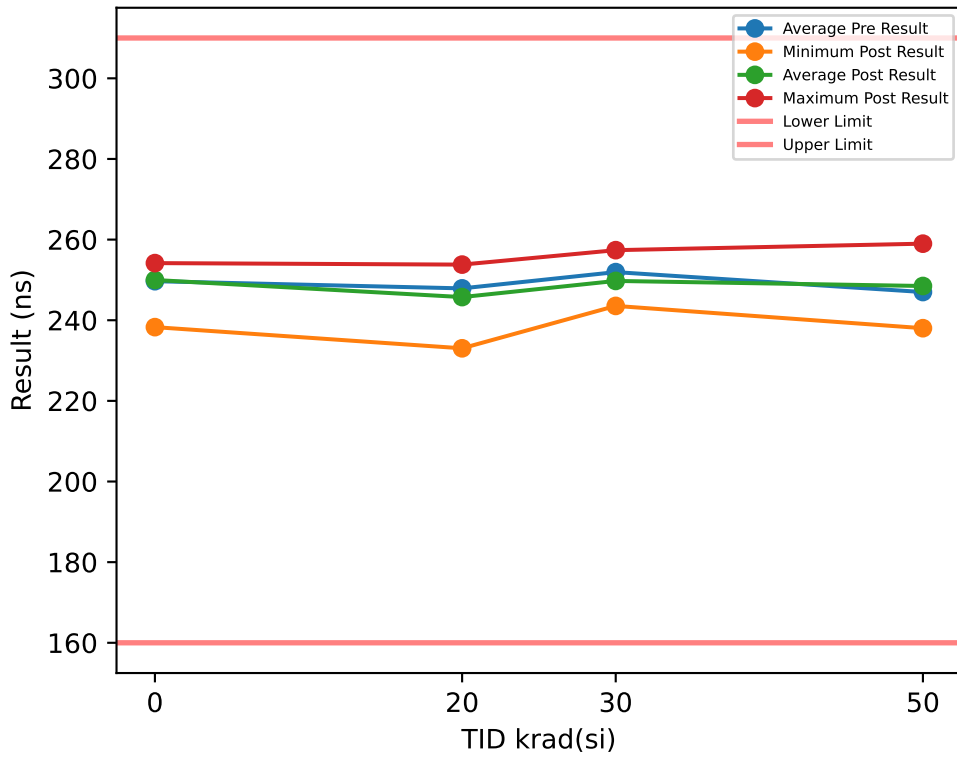


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100	0	100	100	100	0	0	0	0	0
20	100	100	100	0	100	100	100	0	0	0	0	0
30	100	100	100	0	100	100	100	0	0	0	0	0
50	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.49 TIMING|DELAY/SYNC1/5//OPEN//@SYNC1_SW_DELAY_INV

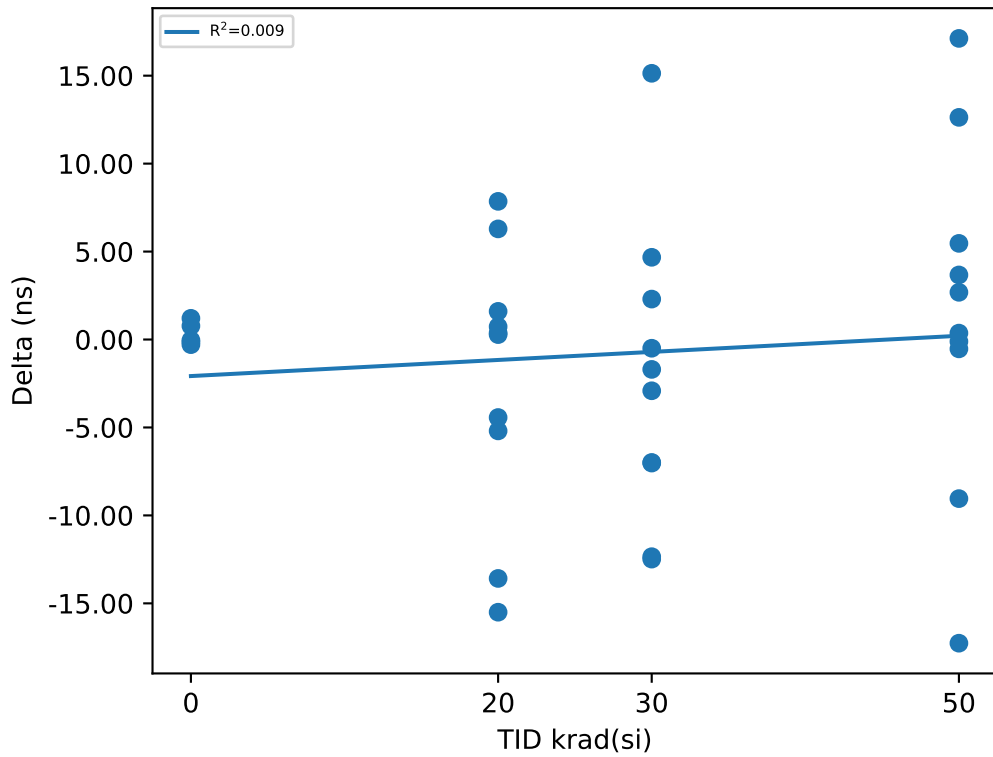
TID vs Result Stats



Test Results (Lower Limit = 160.0, Upper Limit = 310.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	243.8	244.17	0.3742
2	20	Biased	253.22	239.63	-13.583
3	20	Biased	252.26	252.54	0.2797
4	20	Biased	246.09	247.69	1.6011
5	20	Biased	232.75	233.48	0.7316
6	20	Unbiased	258.83	253.64	-5.1951
7	20	Unbiased	243.84	250.13	6.2893
8	20	Unbiased	248.54	233.04	-15.503
9	20	Unbiased	241.47	249.32	7.8548
10	20	Unbiased	258.23	253.8	-4.4342
11	30	Biased	250.58	243.55	-7.0244
12	30	Biased	247.68	244.76	-2.9139
13	30	Biased	242.24	257.38	15.135
14	30	Biased	262.56	250.08	-12.484
15	30	Biased	246.9	249.2	2.299
16	30	Unbiased	255.52	253.83	-1.6987
17	30	Unbiased	245.36	244.87	-0.4957
18	30	Unbiased	258.97	251.98	-6.9889
19	30	Unbiased	251.34	256.01	4.6742
20	30	Unbiased	258.18	245.83	-12.347
26	50	Unbiased	255.29	238.03	-17.265
27	50	Unbiased	249.43	248.9	-0.5316
28	50	Unbiased	253.56	253.93	0.3642
29	50	Unbiased	241.25	241.13	-0.1123
30	50	Unbiased	257.96	248.92	-9.0451
88	50	Biased-84Hr-Anneal	242.39	247.85	5.4657
89	50	Biased-84Hr-Anneal	238.45	251.08	12.63
90	50	Biased-84Hr-Anneal	241.87	258.99	17.119
91	50	Biased-84Hr-Anneal	240.72	244.39	3.6709
92	50	Biased-84Hr-Anneal	249.03	251.72	2.6836
100	0	CORRELATION	253.14	253.91	0.7737
101	0	CORRELATION	254.46	254.17	-0.2912
102	0	CORRELATION	238.43	238.29	-0.1431
103	0	CORRELATION	251.25	252.46	1.2054
104	0	CORRELATION	251.13	251.09	-0.0381

TID vs Post - Pre Exposure Delta

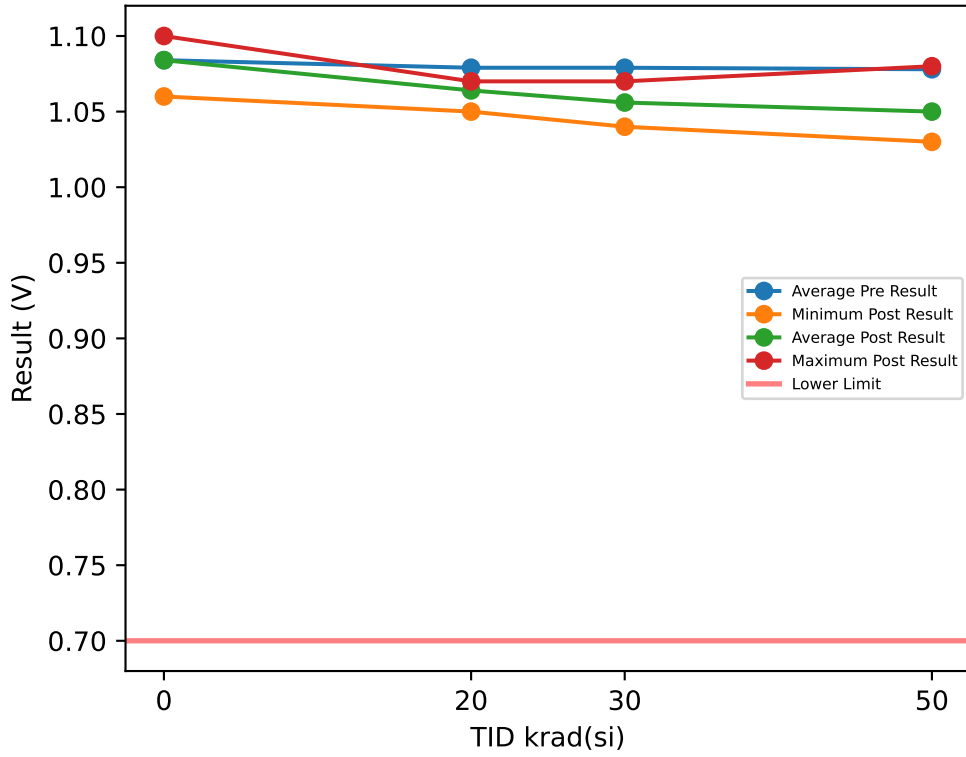


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	238.43	249.68	254.46	6.4396	238.29	249.98	254.17	6.6527	-0.2912	0.30134	1.2054	0.65274
20	232.75	247.9	258.83	8.0381	233.04	245.74	253.8	7.8937	-15.503	-2.1584	7.8548	7.67
30	242.24	251.93	262.56	6.643	243.55	249.75	257.38	4.966	-12.484	-2.1845	15.135	8.344
50	238.45	247	257.96	6.9554	238.03	248.49	258.99	6.1296	-17.265	1.498	17.119	9.7811

Device Test: 24.5 THRESHOLD|FALL/SYNC1/4.5//OPEN//@SYNC1_VIL

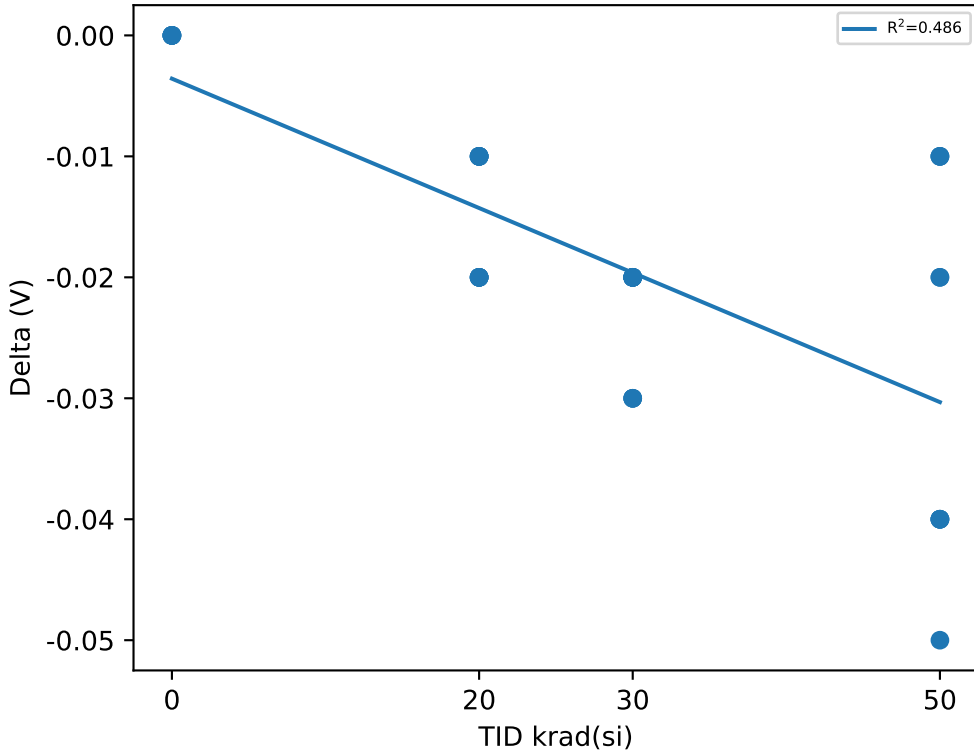
TID vs Result Stats



Test Results (Lower Limit = 0.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.07	1.06	-0.01
2	20	Biased	1.08	1.06	-0.02
3	20	Biased	1.07	1.06	-0.01
4	20	Biased	1.08	1.07	-0.01
5	20	Biased	1.08	1.07	-0.01
6	20	Unbiased	1.09	1.07	-0.02
7	20	Unbiased	1.07	1.05	-0.02
8	20	Unbiased	1.08	1.07	-0.01
9	20	Unbiased	1.08	1.06	-0.02
10	20	Unbiased	1.09	1.07	-0.02
11	30	Biased	1.07	1.05	-0.02
12	30	Biased	1.09	1.07	-0.02
13	30	Biased	1.08	1.06	-0.02
14	30	Biased	1.08	1.06	-0.02
15	30	Biased	1.09	1.07	-0.02
16	30	Unbiased	1.09	1.06	-0.03
17	30	Unbiased	1.07	1.05	-0.02
18	30	Unbiased	1.07	1.05	-0.02
19	30	Unbiased	1.07	1.04	-0.03
20	30	Unbiased	1.08	1.05	-0.03
26	50	Unbiased	1.08	1.03	-0.05
27	50	Unbiased	1.08	1.04	-0.04
28	50	Unbiased	1.08	1.04	-0.04
29	50	Unbiased	1.09	1.05	-0.04
30	50	Unbiased	1.09	1.05	-0.04
88	50	Biased-84Hr-Anneal	1.07	1.05	-0.02
89	50	Biased-84Hr-Anneal	1.09	1.08	-0.01
90	50	Biased-84Hr-Anneal	1.08	1.06	-0.02
91	50	Biased-84Hr-Anneal	1.06	1.05	-0.01
92	50	Biased-84Hr-Anneal	1.06	1.05	-0.01
100	0	CORRELATION	1.06	1.06	0
101	0	CORRELATION	1.09	1.09	0
102	0	CORRELATION	1.1	1.1	0
103	0	CORRELATION	1.08	1.08	0
104	0	CORRELATION	1.09	1.09	0

TID vs Post - Pre Exposure Delta

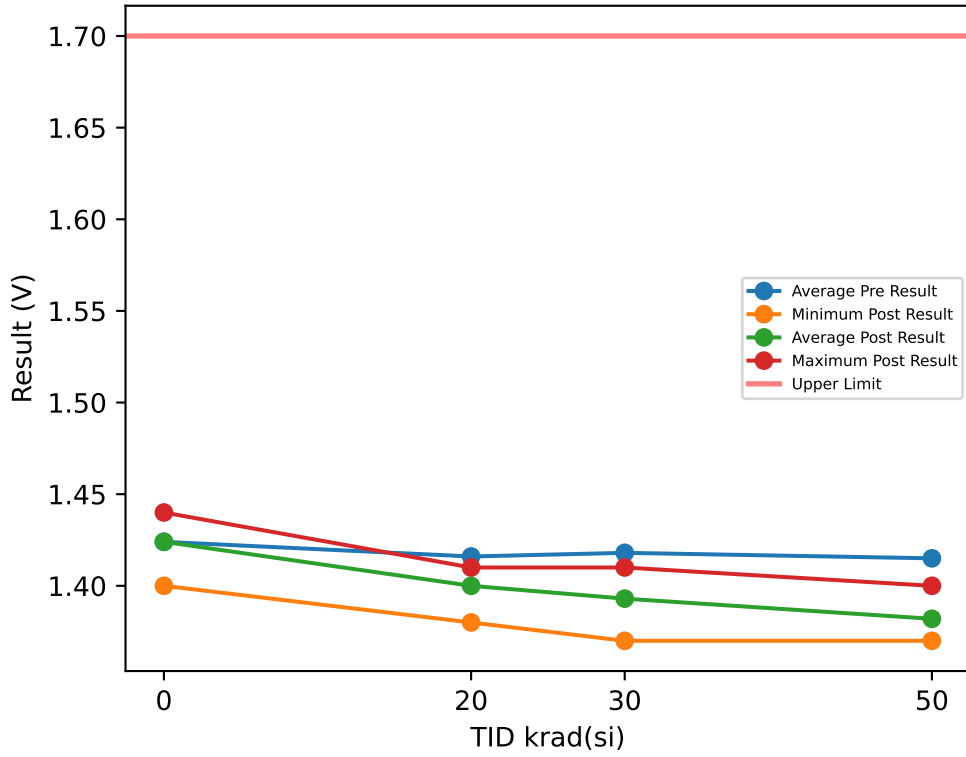


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.06	1.084	1.1	0.015166	1.06	1.084	1.1	0.015166	0	0	0	0
20	1.07	1.079	1.09	0.0073786	1.05	1.064	1.07	0.0069921	-0.02	-0.015	-0.01	0.0052705
30	1.07	1.079	1.09	0.008756	1.04	1.056	1.07	0.0096609	-0.03	-0.023	-0.02	0.0048305
50	1.06	1.078	1.09	0.011353	1.03	1.05	1.08	0.013333	-0.05	-0.028	-0.01	0.015492

Device Test: 24.50 THRESHOLD|RISE/SYNC1/5//OPEN//@SYNC1_VIH

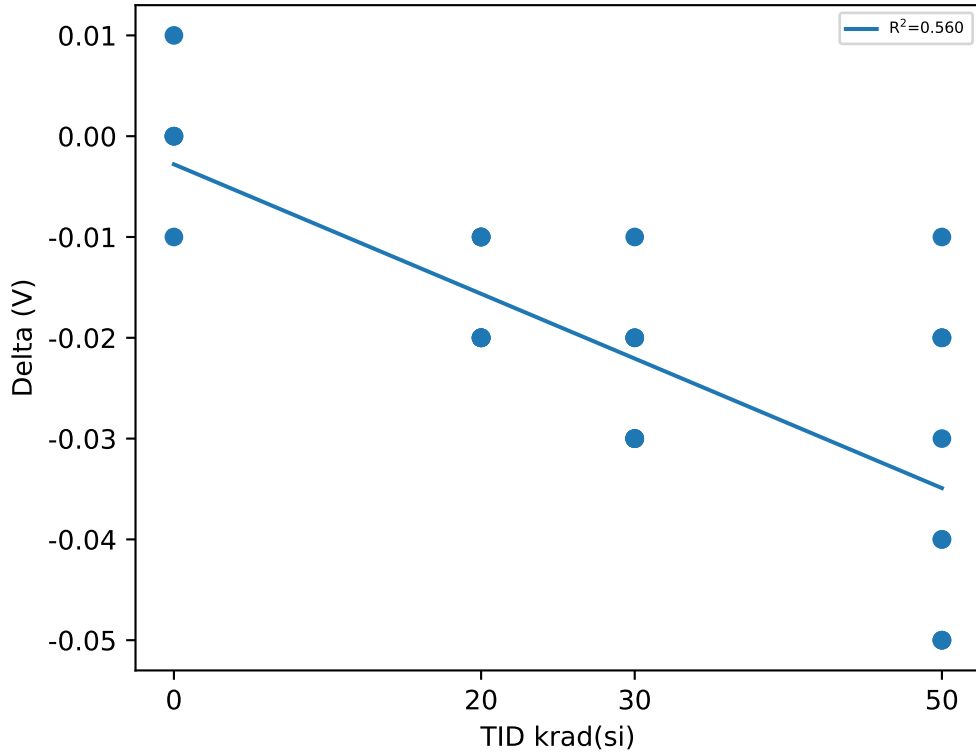
TID vs Result Stats



Test Results (Upper Limit = 1.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.41	1.4	-0.01
2	20	Biased	1.41	1.4	-0.01
3	20	Biased	1.41	1.4	-0.01
4	20	Biased	1.42	1.41	-0.01
5	20	Biased	1.42	1.4	-0.02
6	20	Unbiased	1.43	1.41	-0.02
7	20	Unbiased	1.4	1.38	-0.02
8	20	Unbiased	1.42	1.4	-0.02
9	20	Unbiased	1.42	1.4	-0.02
10	20	Unbiased	1.42	1.4	-0.02
11	30	Biased	1.41	1.4	-0.01
12	30	Biased	1.43	1.4	-0.03
13	30	Biased	1.42	1.39	-0.03
14	30	Biased	1.42	1.4	-0.02
15	30	Biased	1.43	1.41	-0.02
16	30	Unbiased	1.43	1.4	-0.03
17	30	Unbiased	1.41	1.38	-0.03
18	30	Unbiased	1.41	1.38	-0.03
19	30	Unbiased	1.4	1.37	-0.03
20	30	Unbiased	1.42	1.4	-0.02
26	50	Unbiased	1.41	1.37	-0.04
27	50	Unbiased	1.42	1.37	-0.05
28	50	Unbiased	1.42	1.37	-0.05
29	50	Unbiased	1.42	1.38	-0.04
30	50	Unbiased	1.43	1.38	-0.05
88	50	Biased-84Hr-Anneal	1.4	1.39	-0.01
89	50	Biased-84Hr-Anneal	1.43	1.4	-0.03
90	50	Biased-84Hr-Anneal	1.42	1.4	-0.02
91	50	Biased-84Hr-Anneal	1.4	1.38	-0.02
92	50	Biased-84Hr-Anneal	1.4	1.38	-0.02
100	0	CORRELATION	1.41	1.4	-0.01
101	0	CORRELATION	1.43	1.43	0
102	0	CORRELATION	1.44	1.44	0
103	0	CORRELATION	1.42	1.42	0
104	0	CORRELATION	1.42	1.43	0.01

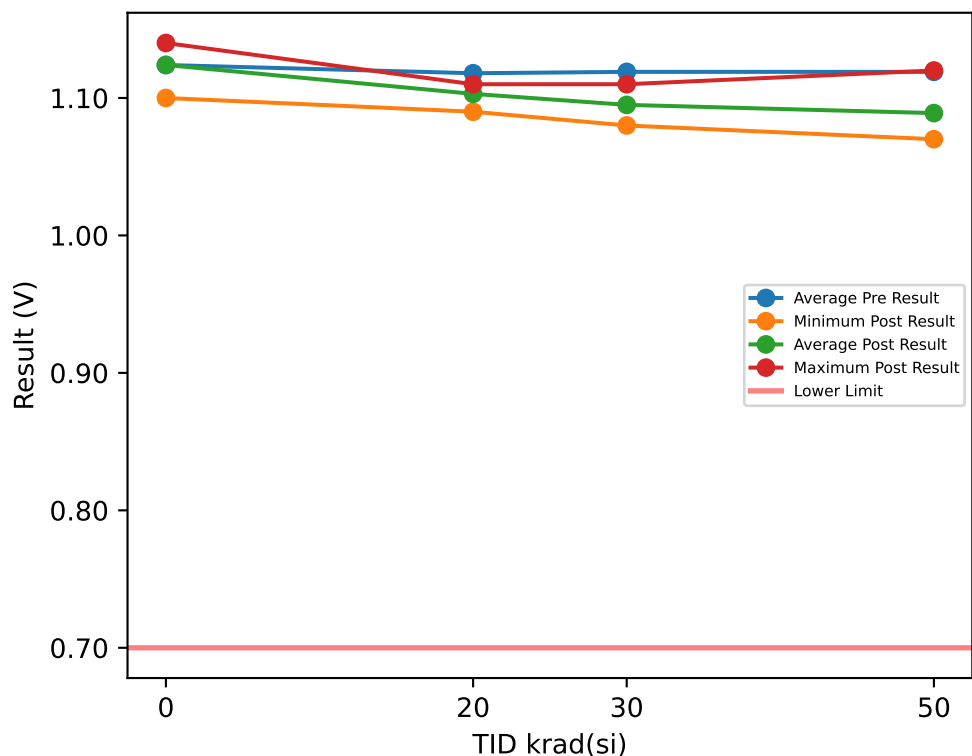
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.41	1.424	1.44	0.011402	1.4	1.424	1.44	0.015166	-0.01	0	0.01	0.0070711
20	1.4	1.416	1.43	0.0084327	1.38	1.4	1.41	0.008165	-0.02	-0.016	-0.01	0.005164
30	1.4	1.418	1.43	0.010328	1.37	1.393	1.41	0.012517	-0.03	-0.025	-0.01	0.0070711
50	1.4	1.415	1.43	0.011785	1.37	1.382	1.4	0.011353	-0.05	-0.033	-0.01	0.014944

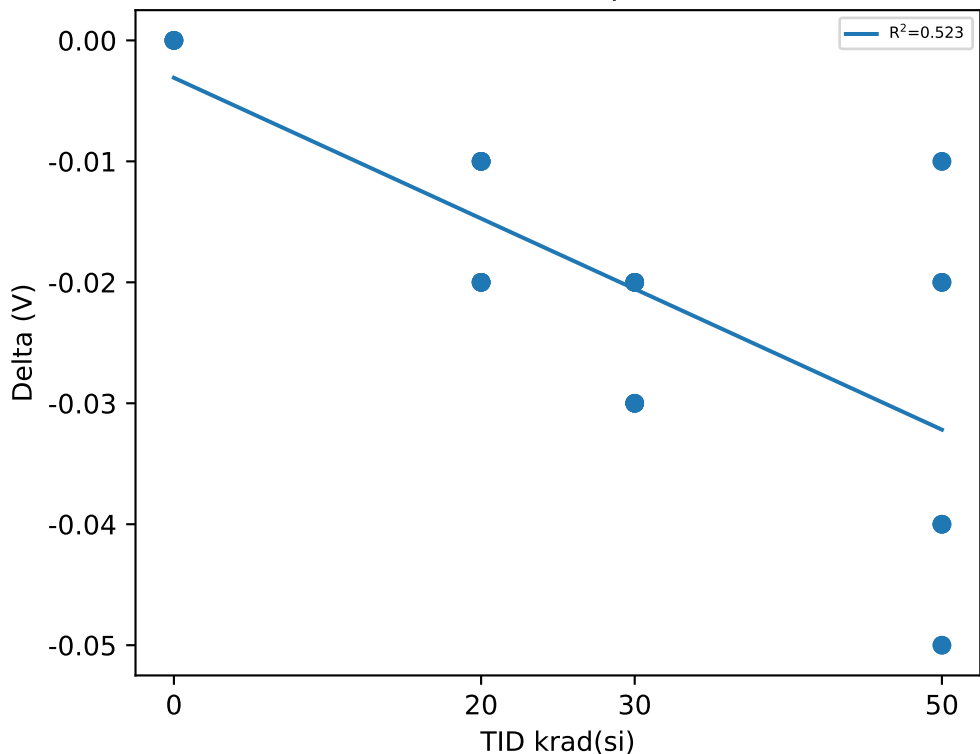
TID vs Result Stats



Test Results (Lower Limit = 0.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.11	1.1	-0.01
2	20	Biased	1.11	1.1	-0.01
3	20	Biased	1.11	1.09	-0.02
4	20	Biased	1.12	1.11	-0.01
5	20	Biased	1.12	1.11	-0.01
6	20	Unbiased	1.13	1.11	-0.02
7	20	Unbiased	1.1	1.09	-0.01
8	20	Unbiased	1.13	1.11	-0.02
9	20	Unbiased	1.12	1.1	-0.02
10	20	Unbiased	1.13	1.11	-0.02
11	30	Biased	1.11	1.09	-0.02
12	30	Biased	1.13	1.11	-0.02
13	30	Biased	1.12	1.1	-0.02
14	30	Biased	1.12	1.1	-0.02
15	30	Biased	1.13	1.11	-0.02
16	30	Unbiased	1.13	1.1	-0.03
17	30	Unbiased	1.11	1.08	-0.03
18	30	Unbiased	1.11	1.09	-0.02
19	30	Unbiased	1.11	1.08	-0.03
20	30	Unbiased	1.12	1.09	-0.03
26	50	Unbiased	1.12	1.07	-0.05
27	50	Unbiased	1.12	1.07	-0.05
28	50	Unbiased	1.12	1.08	-0.04
29	50	Unbiased	1.13	1.09	-0.04
30	50	Unbiased	1.13	1.09	-0.04
88	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
89	50	Biased-84Hr-Anneal	1.13	1.12	-0.01
90	50	Biased-84Hr-Anneal	1.12	1.1	-0.02
91	50	Biased-84Hr-Anneal	1.1	1.09	-0.01
92	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
100	0	CORRELATION	1.1	1.1	0
101	0	CORRELATION	1.13	1.13	0
102	0	CORRELATION	1.14	1.14	0
103	0	CORRELATION	1.12	1.12	0
104	0	CORRELATION	1.13	1.13	0

TID vs Post - Pre Exposure Delta

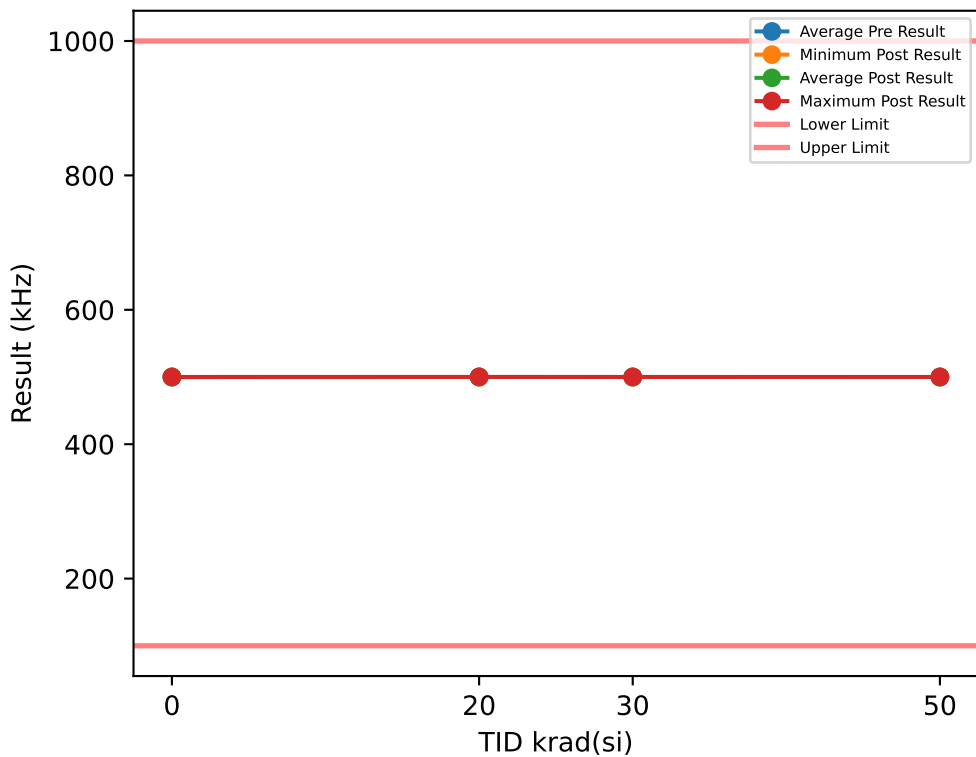


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1	1.124	1.14	0.015166	1.1	1.124	1.14	0.015166	0	0	0	0
20	1.1	1.118	1.13	0.010328	1.09	1.103	1.11	0.0082327	-0.02	-0.015	-0.01	0.0052705
30	1.11	1.119	1.13	0.008756	1.08	1.095	1.11	0.010801	-0.03	-0.024	-0.02	0.005164
50	1.1	1.119	1.13	0.0099443	1.07	1.089	1.12	0.014491	-0.05	-0.03	-0.01	0.015635

Device Test: 24.52 FREQ|500kHz/SYNC1/5//OPEN//@SYNC_FREQ_RANGE

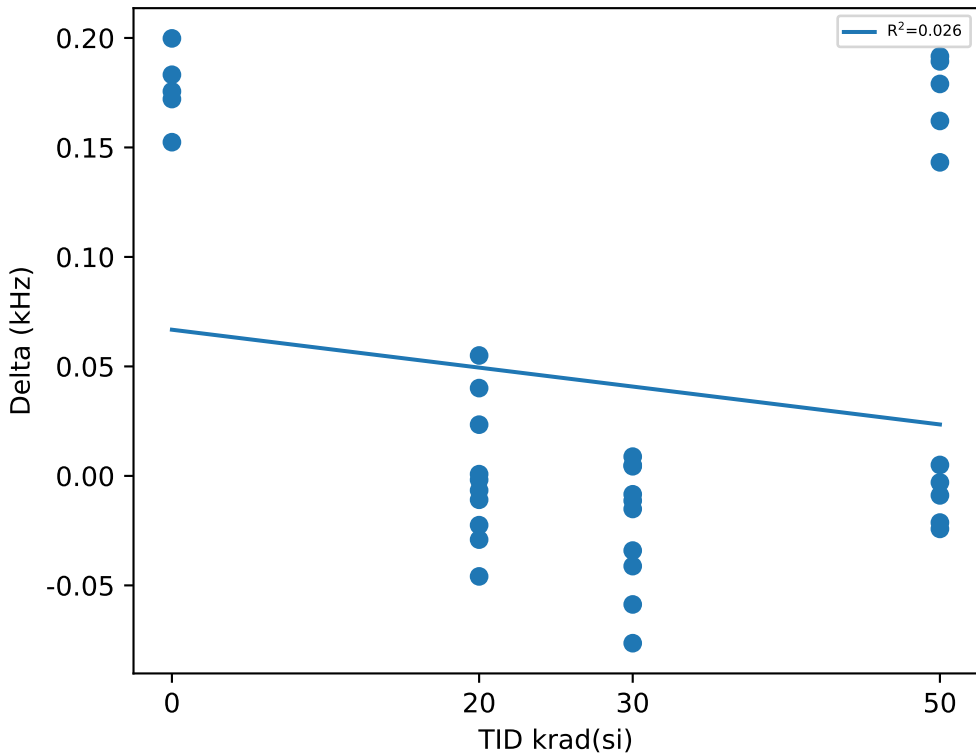
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	499.99	500.03	0.0401
2	20	Biased	500.08	500.03	-0.0459
3	20	Biased	500.06	500.05	-0.0066
4	20	Biased	500.05	500.04	-0.0109
5	20	Biased	500.04	500.02	-0.0225
6	20	Unbiased	500.01	500.01	0.0008
7	20	Unbiased	500.06	500.09	0.0234
8	20	Unbiased	500.04	500.01	-0.0291
9	20	Unbiased	500.01	500.06	0.055
10	20	Unbiased	500.05	500.05	-0.0018
11	30	Biased	500.04	500.03	-0.0084
12	30	Biased	500.07	500.01	-0.0587
13	30	Biased	500.02	500.01	-0.0151
14	30	Biased	500.05	500.02	-0.0341
15	30	Biased	500.03	500.03	0.0088
16	30	Unbiased	500.03	500.03	0.0044
17	30	Unbiased	500.01	500.02	0.0049
18	30	Unbiased	500.06	500.01	-0.0412
19	30	Unbiased	500.04	500.03	-0.0113
20	30	Unbiased	500.07	500	-0.0764
26	50	Unbiased	500.05	500.03	-0.0242
27	50	Unbiased	500.07	500.05	-0.0213
28	50	Unbiased	500.04	500.03	-0.0089
29	50	Unbiased	500.03	500.02	-0.003
30	50	Unbiased	500.03	500.03	0.005
88	50	Biased-84Hr-Anneal	499.85	500.01	0.1621
89	50	Biased-84Hr-Anneal	499.84	500.03	0.1916
90	50	Biased-84Hr-Anneal	499.86	500.04	0.179
91	50	Biased-84Hr-Anneal	499.82	500.01	0.1893
92	50	Biased-84Hr-Anneal	499.89	500.03	0.1432
100	0	CORRELATION	499.85	500.03	0.1756
101	0	CORRELATION	499.85	500.02	0.1721
102	0	CORRELATION	499.86	500.01	0.1524
103	0	CORRELATION	499.84	500.04	0.1998
104	0	CORRELATION	499.85	500.03	0.1832

TID vs Post - Pre Exposure Delta

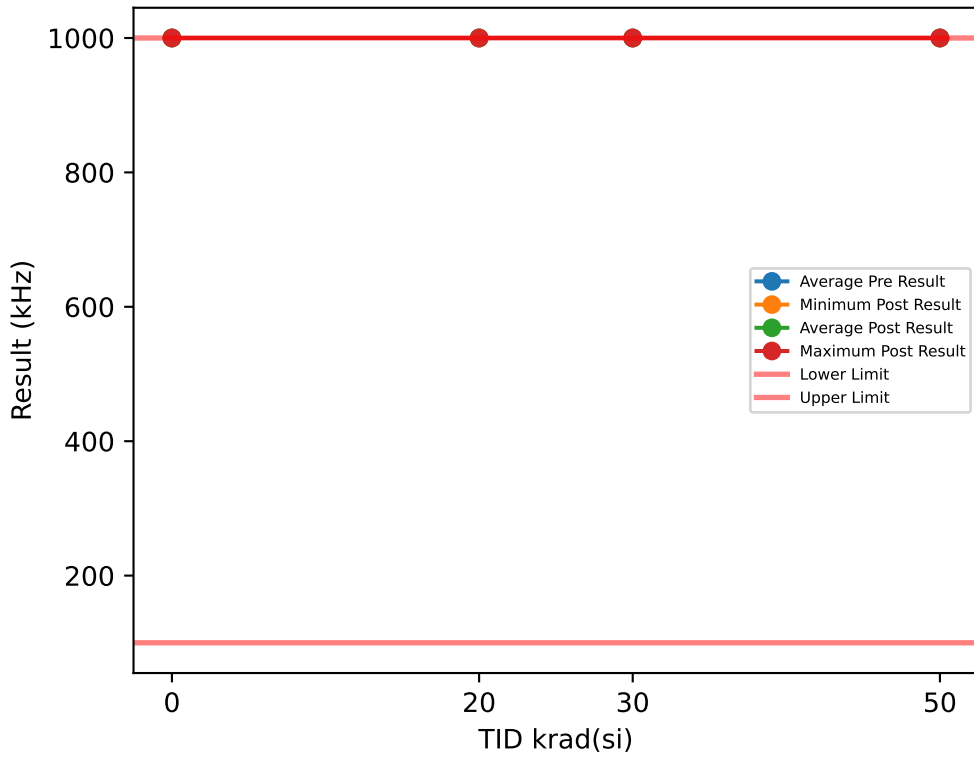


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.84	499.85	499.86	0.0053765	500.01	500.03	500.04	0.012244	0.1524	0.17662	0.1998	0.017239
20	499.99	500.04	500.08	0.028607	500.01	500.04	500.09	0.023982	-0.0459	0.00025	0.055	0.03128
30	500.01	500.04	500.07	0.020564	500	500.02	500.03	0.012231	-0.0764	-0.02271	0.0088	0.02893
50	499.82	499.95	500.07	0.10345	500.01	500.03	500.05	0.012277	-0.0242	0.08128	0.1916	0.098012

Device Test: 24.53 FREQ|1000kHz/SYNC1/5//OPEN//@SYNC_FREQ_RANGE

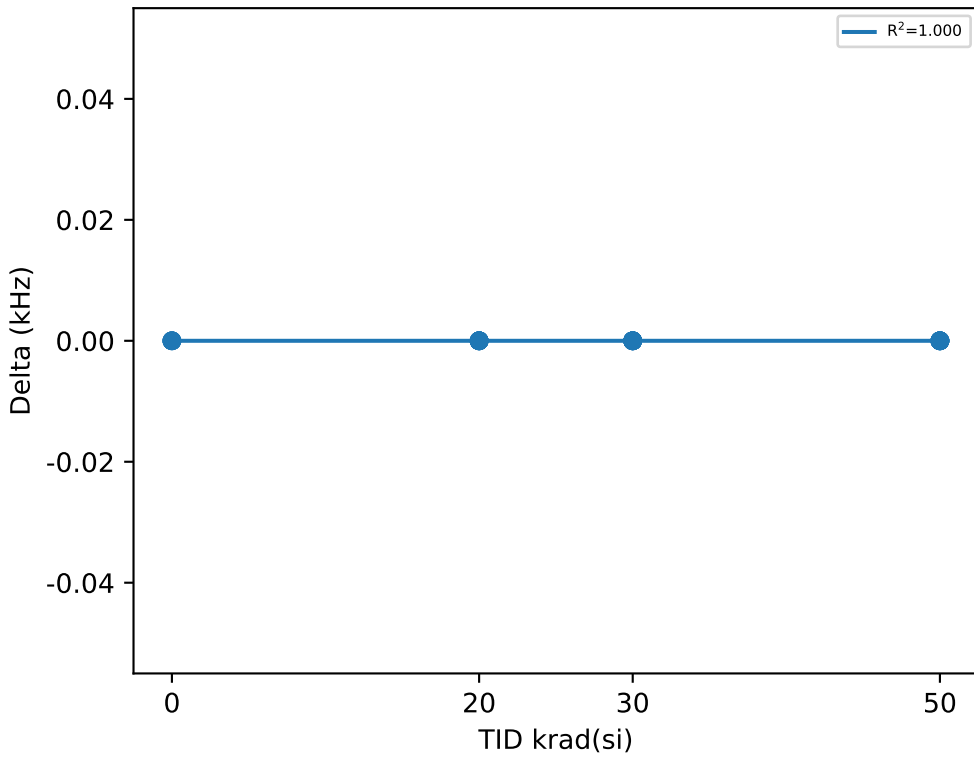
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1000	1000	0
2	20	Biased	1000	1000	0
3	20	Biased	1000	1000	0
4	20	Biased	1000	1000	0
5	20	Biased	1000	1000	0
6	20	Unbiased	1000	1000	0
7	20	Unbiased	1000	1000	0
8	20	Unbiased	1000	1000	0
9	20	Unbiased	1000	1000	0
10	20	Unbiased	1000	1000	0
11	30	Biased	1000	1000	0
12	30	Biased	1000	1000	0
13	30	Biased	1000	1000	0
14	30	Biased	1000	1000	0
15	30	Biased	1000	1000	0
16	30	Unbiased	1000	1000	0
17	30	Unbiased	1000	1000	0
18	30	Unbiased	1000	1000	0
19	30	Unbiased	1000	1000	0
20	30	Unbiased	1000	1000	0
26	50	Unbiased	1000	1000	0
27	50	Unbiased	1000	1000	0
28	50	Unbiased	1000	1000	0
29	50	Unbiased	1000	1000	0
30	50	Unbiased	1000	1000	0
88	50	Biased-84Hr-Anneal	1000	1000	0
89	50	Biased-84Hr-Anneal	1000	1000	0
90	50	Biased-84Hr-Anneal	1000	1000	0
91	50	Biased-84Hr-Anneal	1000	1000	0
92	50	Biased-84Hr-Anneal	1000	1000	0
100	0	CORRELATION	1000	1000	0
101	0	CORRELATION	1000	1000	0
102	0	CORRELATION	1000	1000	0
103	0	CORRELATION	1000	1000	0
104	0	CORRELATION	1000	1000	0

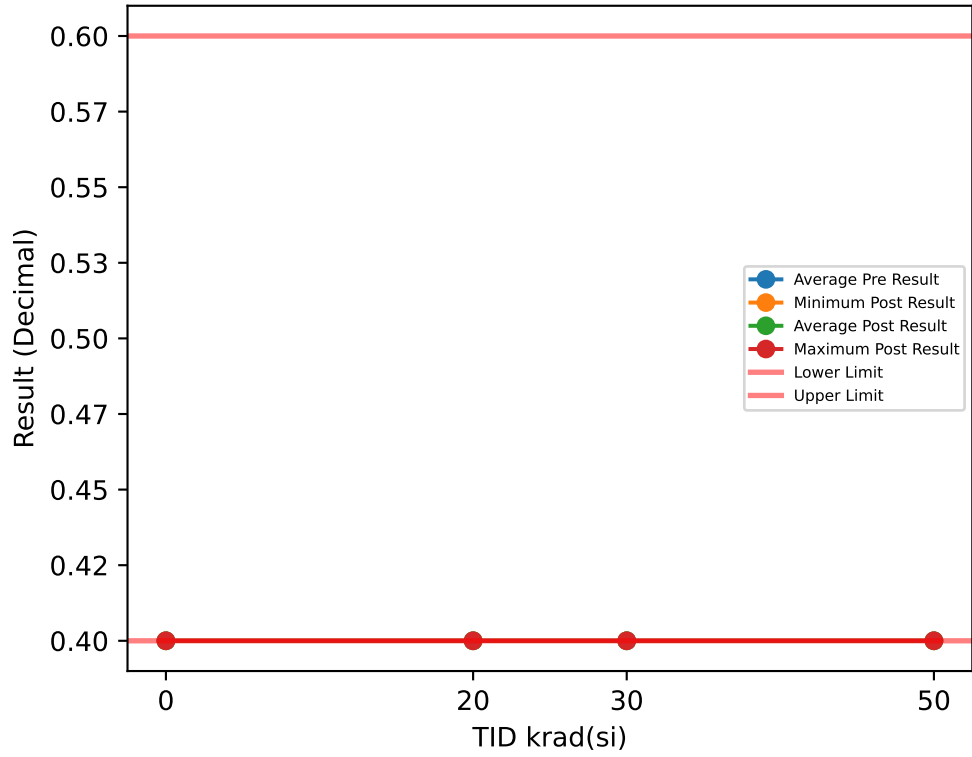
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
20	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
30	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
50	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

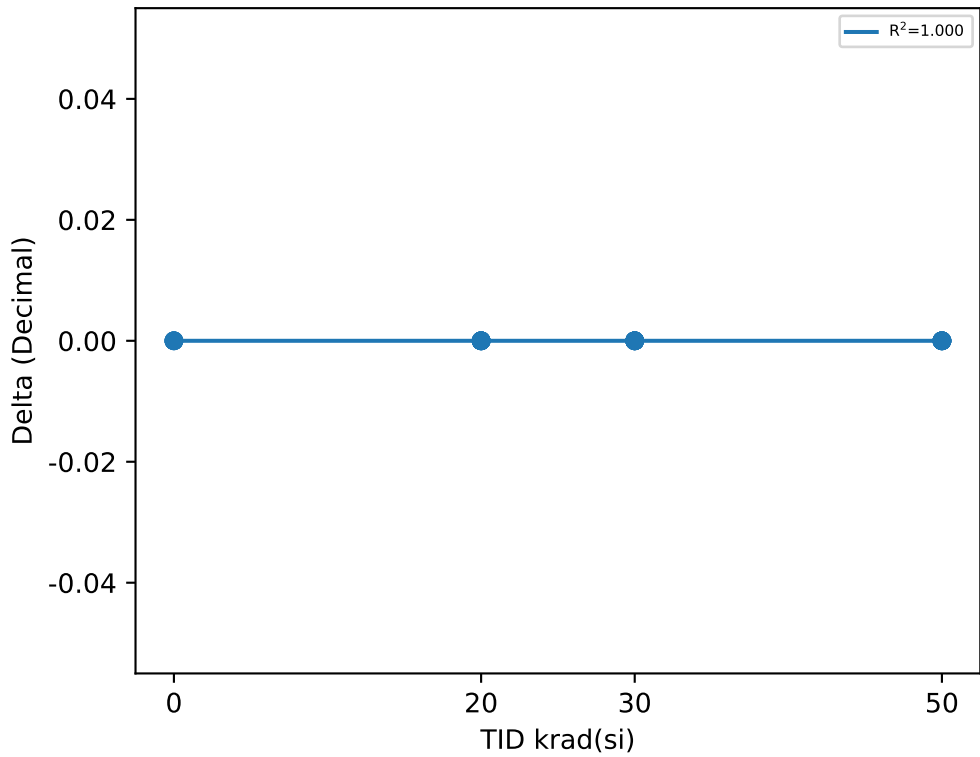
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.4	0.4	0
2	20	Biased	0.4	0.4	0
3	20	Biased	0.4	0.4	0
4	20	Biased	0.4	0.4	0
5	20	Biased	0.4	0.4	0
6	20	Unbiased	0.4	0.4	0
7	20	Unbiased	0.4	0.4	0
8	20	Unbiased	0.4	0.4	0
9	20	Unbiased	0.4	0.4	0
10	20	Unbiased	0.4	0.4	0
11	30	Biased	0.4	0.4	0
12	30	Biased	0.4	0.4	0
13	30	Biased	0.4	0.4	0
14	30	Biased	0.4	0.4	0
15	30	Biased	0.4	0.4	0
16	30	Unbiased	0.4	0.4	0
17	30	Unbiased	0.4	0.4	0
18	30	Unbiased	0.4	0.4	0
19	30	Unbiased	0.4	0.4	0
20	30	Unbiased	0.4	0.4	0
26	50	Unbiased	0.4	0.4	0
27	50	Unbiased	0.4	0.4	0
28	50	Unbiased	0.4	0.4	0
29	50	Unbiased	0.4	0.4	0
30	50	Unbiased	0.4	0.4	0
88	50	Biased-84Hr-Anneal	0.4	0.4	0
89	50	Biased-84Hr-Anneal	0.4	0.4	0
90	50	Biased-84Hr-Anneal	0.4	0.4	0
91	50	Biased-84Hr-Anneal	0.4	0.4	0
92	50	Biased-84Hr-Anneal	0.4	0.4	0
100	0	CORRELATION	0.4	0.4	0
101	0	CORRELATION	0.4	0.4	0
102	0	CORRELATION	0.4	0.4	0
103	0	CORRELATION	0.4	0.4	0
104	0	CORRELATION	0.4	0.4	0

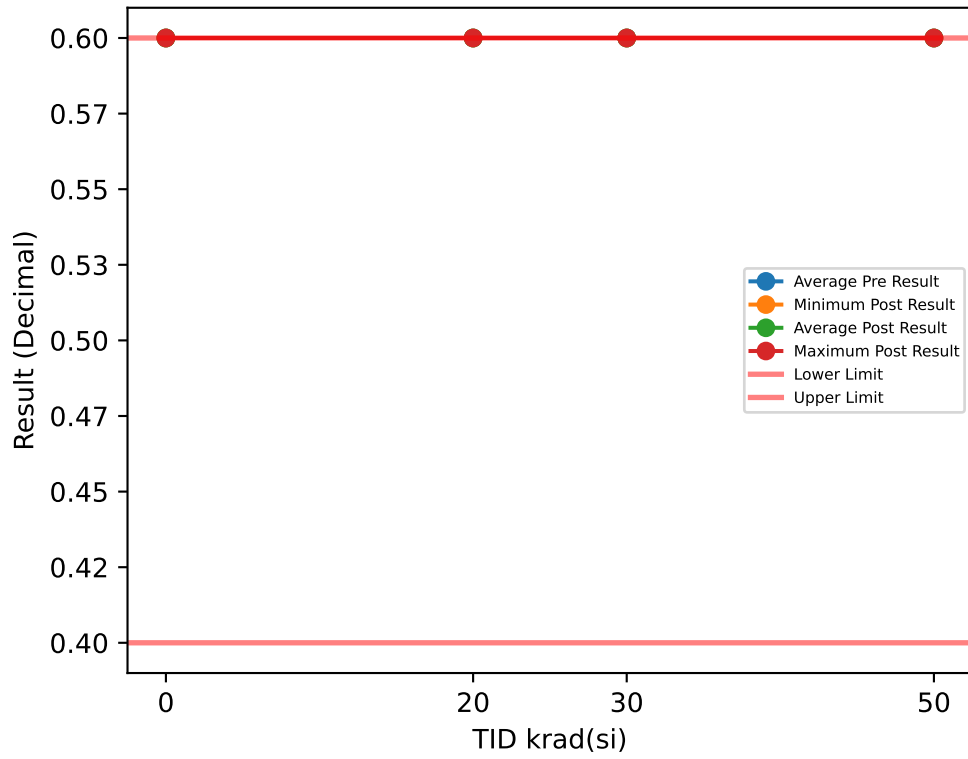
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
20	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
30	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
50	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

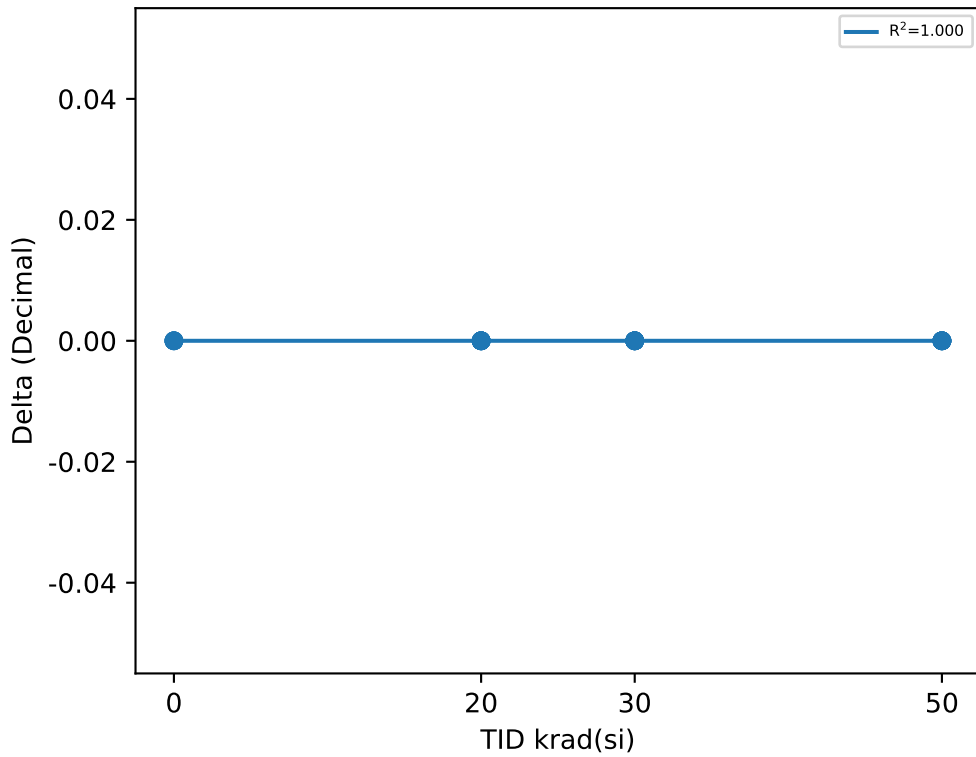
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6	0.6	0
3	20	Biased	0.6	0.6	0
4	20	Biased	0.6	0.6	0
5	20	Biased	0.6	0.6	0
6	20	Unbiased	0.6	0.6	0
7	20	Unbiased	0.6	0.6	0
8	20	Unbiased	0.6	0.6	0
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.6	0.6	0
11	30	Biased	0.6	0.6	0
12	30	Biased	0.6	0.6	0
13	30	Biased	0.6	0.6	0
14	30	Biased	0.6	0.6	0
15	30	Biased	0.6	0.6	0
16	30	Unbiased	0.6	0.6	0
17	30	Unbiased	0.6	0.6	0
18	30	Unbiased	0.6	0.6	0
19	30	Unbiased	0.6	0.6	0
20	30	Unbiased	0.6	0.6	0
26	50	Unbiased	0.6	0.6	0
27	50	Unbiased	0.6	0.6	0
28	50	Unbiased	0.6	0.6	0
29	50	Unbiased	0.6	0.6	0
30	50	Unbiased	0.6	0.6	0
88	50	Biased-84Hr-Anneal	0.6	0.6	0
89	50	Biased-84Hr-Anneal	0.6	0.6	0
90	50	Biased-84Hr-Anneal	0.6	0.6	0
91	50	Biased-84Hr-Anneal	0.6	0.6	0
92	50	Biased-84Hr-Anneal	0.6	0.6	0
100	0	CORRELATION	0.6	0.6	0
101	0	CORRELATION	0.6	0.6	0
102	0	CORRELATION	0.6	0.6	0
103	0	CORRELATION	0.6	0.6	0
104	0	CORRELATION	0.6	0.6	0

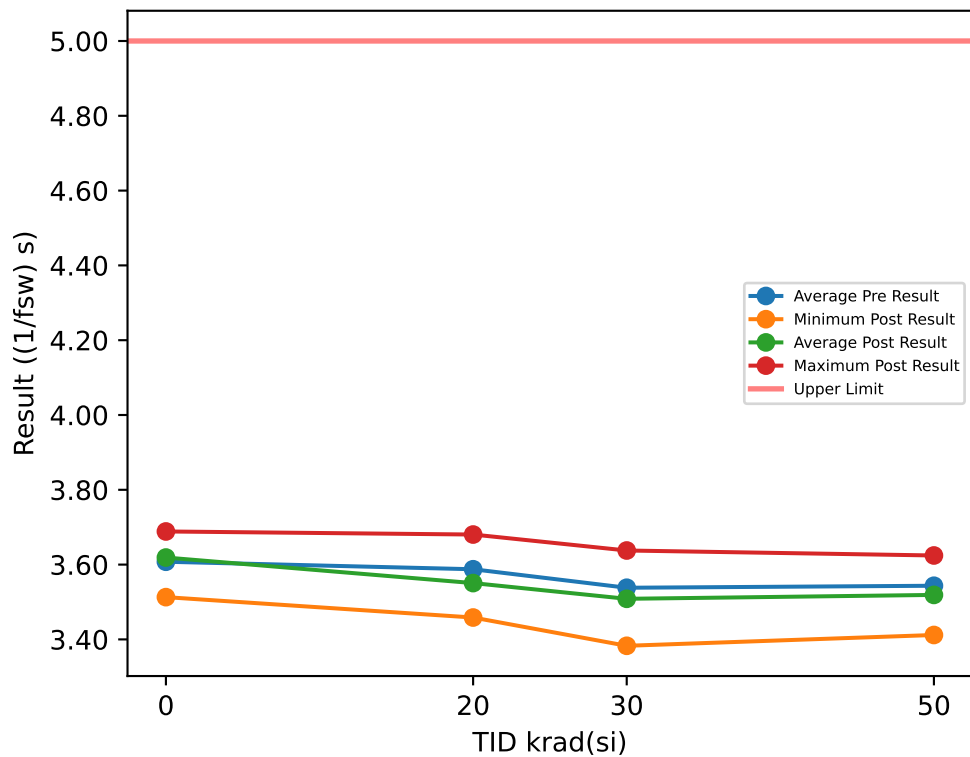
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
20	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
30	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
50	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

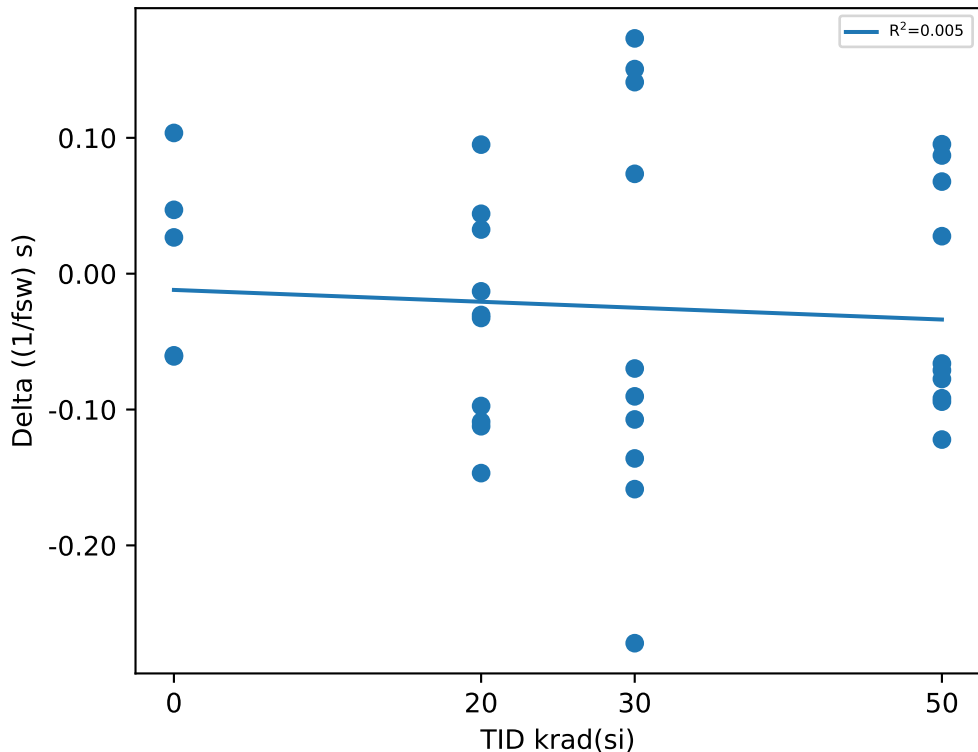
TID vs Result Stats



Test Results (Upper Limit = 5.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.6053	3.4585	-0.1468
2	20	Biased	3.5465	3.579	0.0325
3	20	Biased	3.5058	3.4732	-0.0326
4	20	Biased	3.6521	3.5398	-0.1123
5	20	Biased	3.5247	3.5688	0.0441
6	20	Unbiased	3.6394	3.5304	-0.109
7	20	Unbiased	3.5975	3.5001	-0.0974
8	20	Unbiased	3.666	3.6356	-0.0304
9	20	Unbiased	3.5531	3.5401	-0.013
10	20	Unbiased	3.5854	3.6804	0.095
11	30	Biased	3.4871	3.6377	0.1506
12	30	Biased	3.4732	3.3829	-0.0903
13	30	Biased	3.4923	3.5658	0.0735
14	30	Biased	3.7147	3.4427	-0.272
15	30	Biased	3.6151	3.4791	-0.136
16	30	Unbiased	3.6232	3.4646	-0.1586
17	30	Unbiased	3.5177	3.4104	-0.1073
18	30	Unbiased	3.4273	3.5683	0.141
19	30	Unbiased	3.4202	3.5934	0.1732
20	30	Unbiased	3.6104	3.5406	-0.0698
26	50	Unbiased	3.4403	3.5356	0.0953
27	50	Unbiased	3.5181	3.5859	0.0678
28	50	Unbiased	3.7019	3.6244	-0.0775
29	50	Unbiased	3.4827	3.5103	0.0276
30	50	Unbiased	3.5339	3.4118	-0.1221
88	50	Biased-84Hr-Anneal	3.509	3.596	0.087
89	50	Biased-84Hr-Anneal	3.5422	3.4711	-0.0711
90	50	Biased-84Hr-Anneal	3.5322	3.4405	-0.0917
91	50	Biased-84Hr-Anneal	3.6299	3.5638	-0.0661
92	50	Biased-84Hr-Anneal	3.5443	3.4501	-0.0942
100	0	CORRELATION	3.517	3.6206	0.1036
101	0	CORRELATION	3.5775	3.6042	0.0267
102	0	CORRELATION	3.5739	3.513	-0.0609
103	0	CORRELATION	3.7282	3.6681	-0.0601
104	0	CORRELATION	3.6416	3.6886	0.047

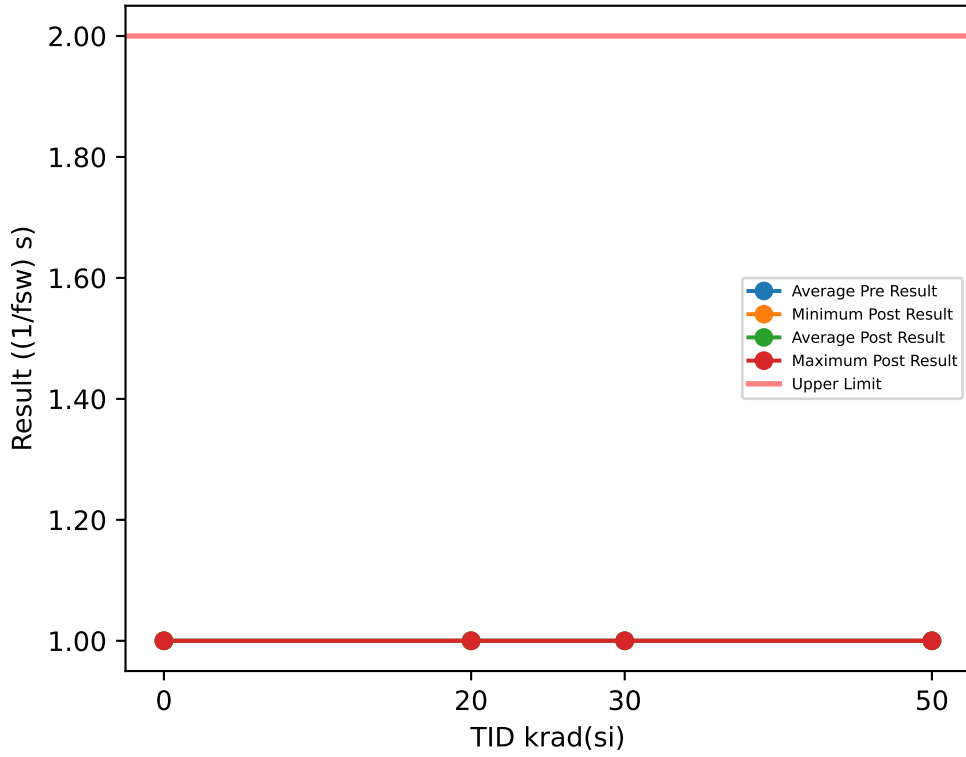
TID vs Post - Pre Exposure Delta



Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.517	3.6076	3.7282	0.080546	3.513	3.6189	3.6886	0.068397	-0.0609	0.01126	0.1036	0.071312
20	3.5058	3.5876	3.666	0.054705	3.4585	3.5506	3.6804	0.069016	-0.1468	-0.03699	0.095	0.078901
30	3.4202	3.5381	3.7147	0.097234	3.3829	3.5085	3.6377	0.084532	-0.272	-0.02957	0.1732	0.15326
50	3.4403	3.5434	3.7019	0.073756	3.4118	3.519	3.6244	0.07346	-0.1221	-0.0245	0.0953	0.084082

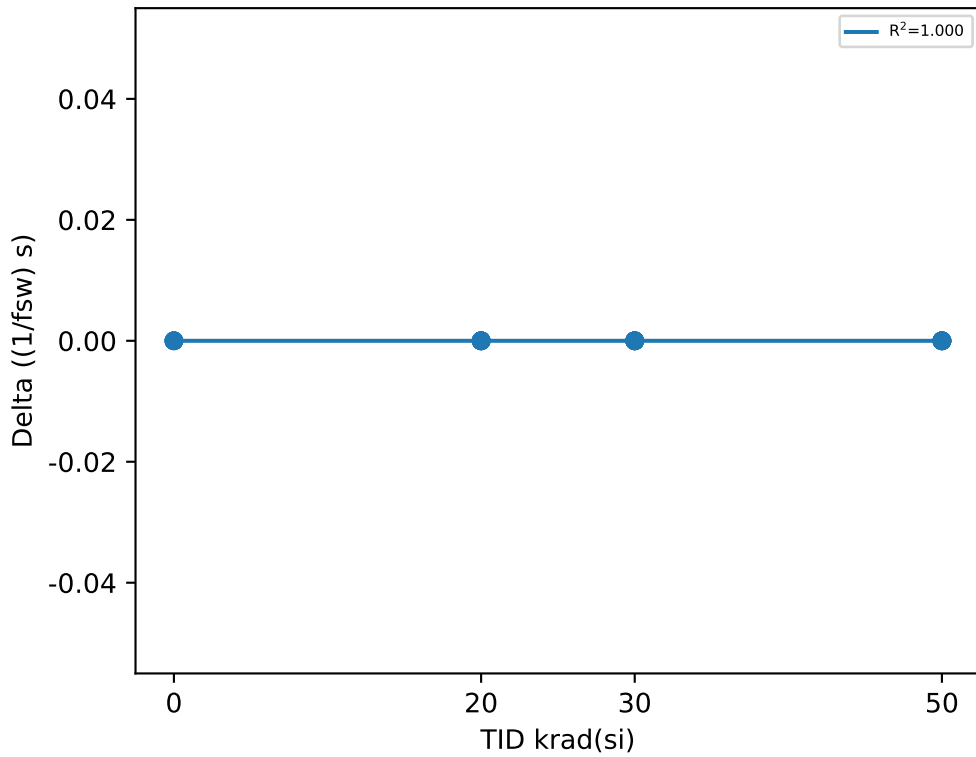
TID vs Result Stats



Test Results (Upper Limit = 2.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1	1	0
2	20	Biased	1	1	0
3	20	Biased	1	1	0
4	20	Biased	1	1	0
5	20	Biased	1	1	0
6	20	Unbiased	1	1	0
7	20	Unbiased	1	1	0
8	20	Unbiased	1	1	0
9	20	Unbiased	1	1	0
10	20	Unbiased	1	1	0
11	30	Biased	1	1	0
12	30	Biased	1	1	0
13	30	Biased	1	1	0
14	30	Biased	1	1	0
15	30	Biased	1	1	0
16	30	Unbiased	1	1	0
17	30	Unbiased	1	1	0
18	30	Unbiased	1	1	0
19	30	Unbiased	1	1	0
20	30	Unbiased	1	1	0
26	50	Unbiased	1	1	0
27	50	Unbiased	1	1	0
28	50	Unbiased	1	1	0
29	50	Unbiased	1	1	0
30	50	Unbiased	1	1	0
88	50	Biased-84Hr-Anneal	1	1	0
89	50	Biased-84Hr-Anneal	1	1	0
90	50	Biased-84Hr-Anneal	1	1	0
91	50	Biased-84Hr-Anneal	1	1	0
92	50	Biased-84Hr-Anneal	1	1	0
100	0	CORRELATION	1	1	0
101	0	CORRELATION	1	1	0
102	0	CORRELATION	1	1	0
103	0	CORRELATION	1	1	0
104	0	CORRELATION	1	1	0

TID vs Post - Pre Exposure Delta

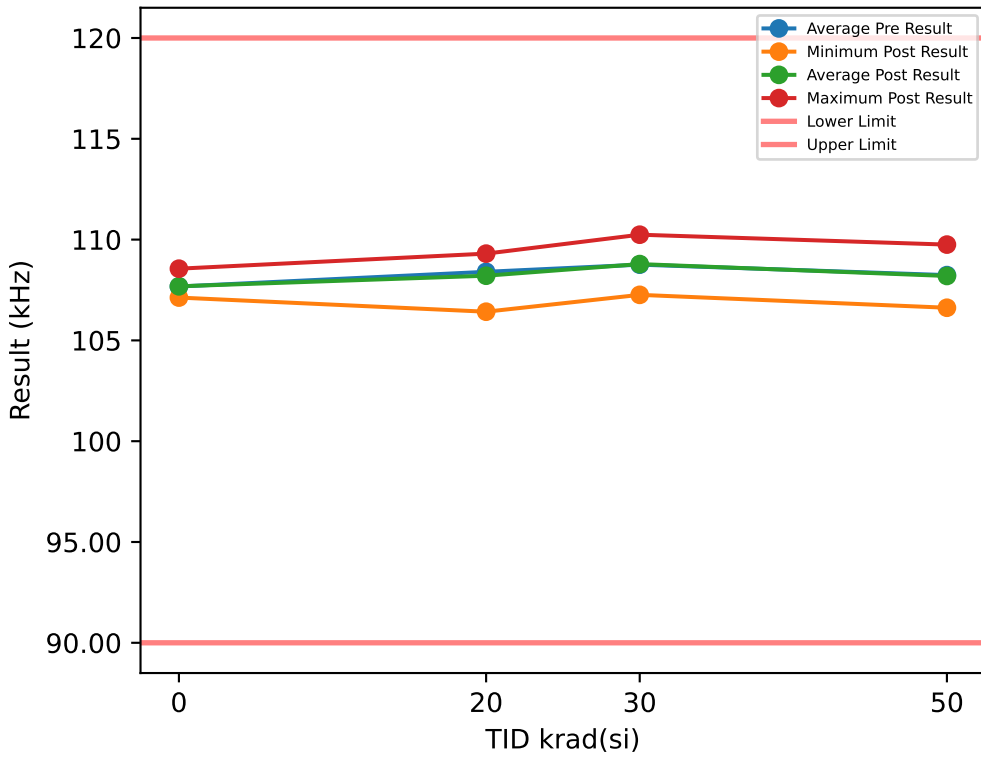


Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1	1	1	0	1	1	1	0	0	0	0	0
20	1	1	1	0	1	1	1	0	0	0	0	0
30	1	1	1	0	1	1	1	0	0	0	0	0
50	1	1	1	0	1	1	1	0	0	0	0	0

Device Test: 24.58 FREQ|100kHz/SYNC1/5//511k//@EXT_SET_FREQ_100kHz

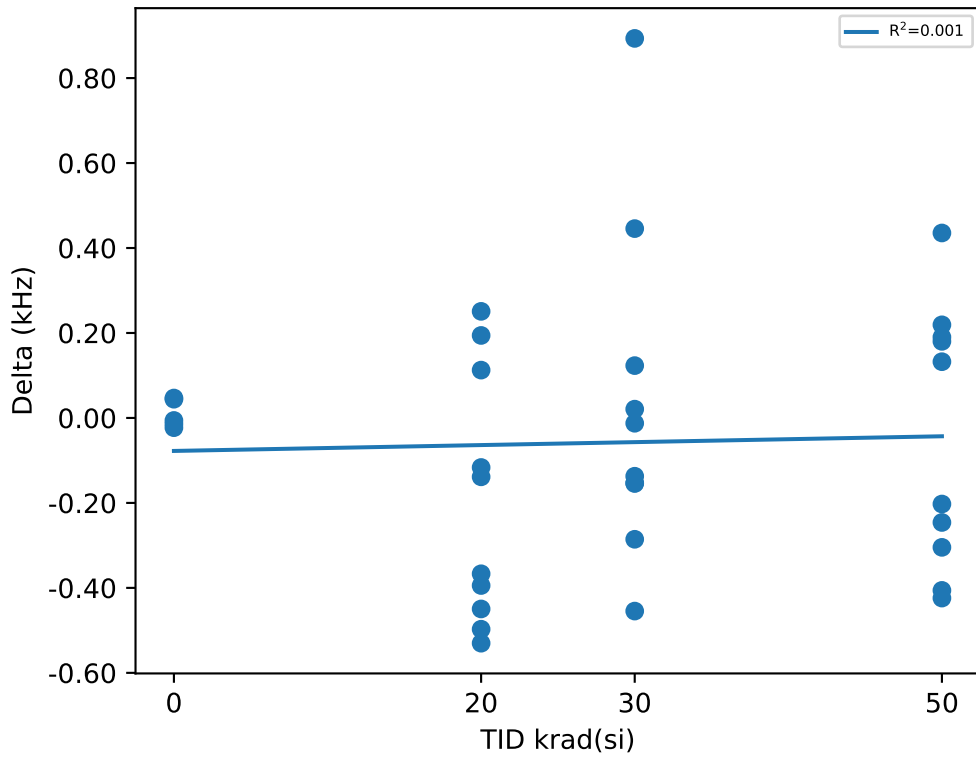
TID vs Result Stats



Test Results (Lower Limit = 90.0, Upper Limit = 120.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	107.04	107.23	0.1942
2	20	Biased	107.03	106.5	-0.5302
3	20	Biased	109.37	108.98	-0.3944
4	20	Biased	109.08	108.94	-0.1386
5	20	Biased	108.57	108.68	0.1126
6	20	Unbiased	106.87	106.42	-0.4496
7	20	Unbiased	109.04	108.68	-0.3668
8	20	Unbiased	108.85	109.1	0.2509
9	20	Unbiased	109.42	109.3	-0.1166
10	20	Unbiased	108.74	108.24	-0.4973
11	30	Biased	108.51	108.49	-0.0125
12	30	Biased	108.17	108.19	0.0207
13	30	Biased	106.81	107.26	0.4457
14	30	Biased	108.12	107.84	-0.2856
15	30	Biased	109.64	109.49	-0.1543
16	30	Unbiased	108.77	108.89	0.1232
17	30	Unbiased	109.73	109.28	-0.4546
18	30	Unbiased	110.38	110.24	-0.1372
19	30	Unbiased	109.44	109.28	-0.1529
20	30	Unbiased	108	108.89	0.8934
26	50	Unbiased	108.75	108.55	-0.2026
27	50	Unbiased	107.21	107.35	0.1324
28	50	Unbiased	106.43	106.62	0.1902
29	50	Unbiased	108.06	107.76	-0.3046
30	50	Unbiased	109.18	108.78	-0.4059
88	50	Biased-84Hr-Anneal	107.17	107.6	0.4354
89	50	Biased-84Hr-Anneal	108.84	109.03	0.1803
90	50	Biased-84Hr-Anneal	108.45	108.03	-0.424
91	50	Biased-84Hr-Anneal	108.75	108.5	-0.246
92	50	Biased-84Hr-Anneal	109.53	109.75	0.2192
100	0	CORRELATION	107.14	107.12	-0.0142
101	0	CORRELATION	108.03	108.08	0.0469
102	0	CORRELATION	108.51	108.56	0.0441
103	0	CORRELATION	107.44	107.42	-0.0229
104	0	CORRELATION	107.24	107.23	-0.0059

TID vs Post - Pre Exposure Delta

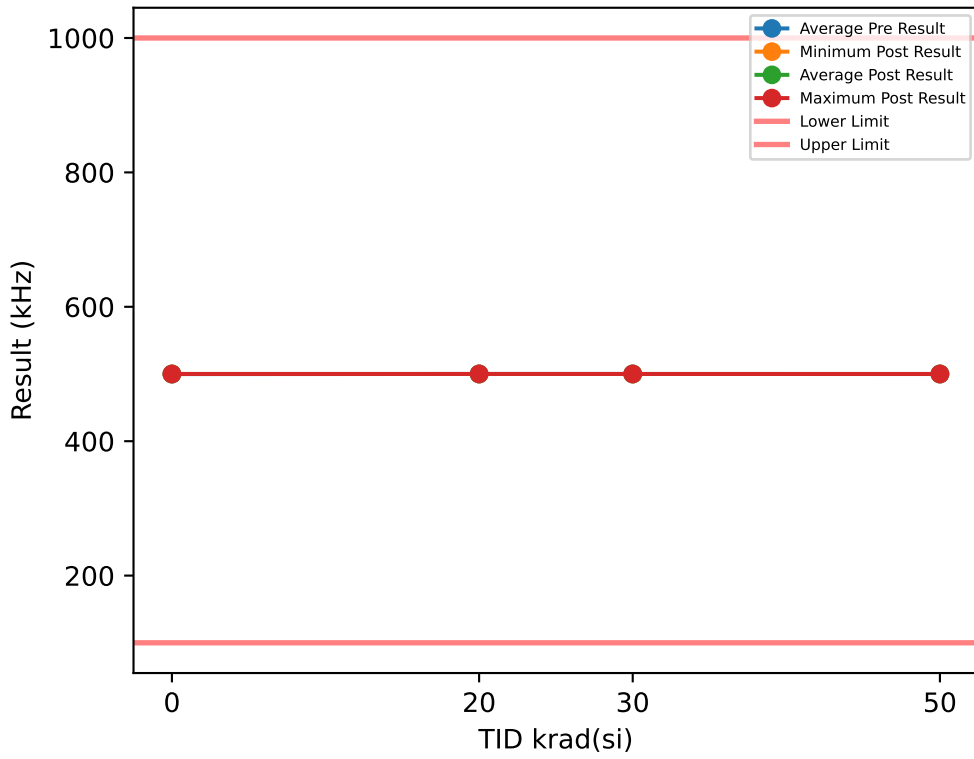


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	107.14	107.67	108.51	0.58428	107.12	107.68	108.56	0.61418	-0.0229	0.0096	0.0469	0.033333
20	106.87	108.4	109.42	1.0147	106.42	108.21	109.3	1.0863	-0.5302	-0.19358	0.2509	0.29666
30	106.81	108.76	110.38	1.054	107.26	108.79	110.24	0.86923	-0.4546	0.02859	0.8934	0.38854
50	106.43	108.24	109.53	1.0001	106.62	108.2	109.75	0.90944	-0.424	-0.04256	0.4354	0.30634

Device Test: 24.6 FREQ|500kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE

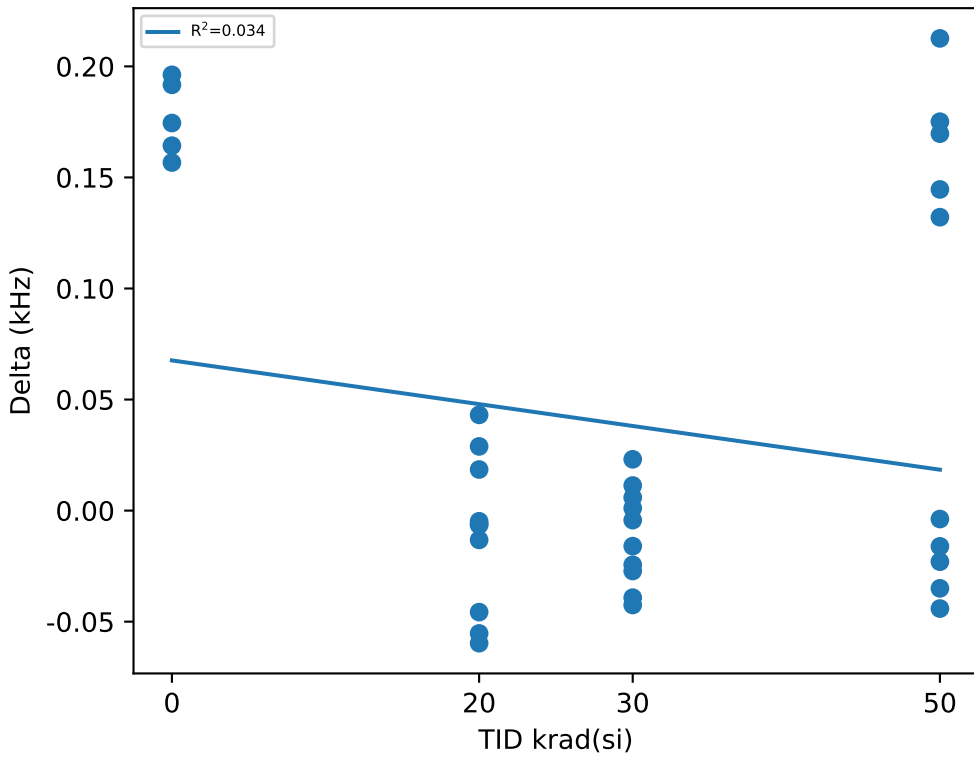
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	500.03	500.02	-0.0132
2	20	Biased	500.05	499.99	-0.0553
3	20	Biased	500.04	500.06	0.0185
4	20	Biased	500.03	500.02	-0.0065
5	20	Biased	500.02	500.02	-0.006
6	20	Unbiased	500.09	500.03	-0.0597
7	20	Unbiased	500.03	500.06	0.0289
8	20	Unbiased	500.05	500.01	-0.0457
9	20	Unbiased	500.02	500.06	0.0431
10	20	Unbiased	500.06	500.06	-0.0048
11	30	Biased	500.05	500.01	-0.0392
12	30	Biased	500.04	500.04	-0.0043
13	30	Biased	500.02	500.04	0.0231
14	30	Biased	500.05	500.03	-0.0272
15	30	Biased	500.03	500.04	0.0113
16	30	Unbiased	500.04	500.05	0.0059
17	30	Unbiased	500.01	499.99	-0.0244
18	30	Unbiased	500.05	500.03	-0.016
19	30	Unbiased	500.05	500.05	0.0011
20	30	Unbiased	500.05	500.01	-0.0425
26	50	Unbiased	500.05	500.03	-0.0161
27	50	Unbiased	500.06	500.03	-0.035
28	50	Unbiased	500.06	500.04	-0.023
29	50	Unbiased	500.06	500.02	-0.0441
30	50	Unbiased	500.05	500.05	-0.0038
88	50	Biased-84Hr-Anneal	499.84	500.01	0.1751
89	50	Biased-84Hr-Anneal	499.84	500.05	0.2126
90	50	Biased-84Hr-Anneal	499.9	500.03	0.1321
91	50	Biased-84Hr-Anneal	499.85	499.99	0.1446
92	50	Biased-84Hr-Anneal	499.86	500.02	0.1697
100	0	CORRELATION	499.85	500.05	0.1962
101	0	CORRELATION	499.84	500.03	0.1917
102	0	CORRELATION	499.85	500.01	0.1643
103	0	CORRELATION	499.86	500.03	0.1745
104	0	CORRELATION	499.88	500.04	0.1567

TID vs Post - Pre Exposure Delta

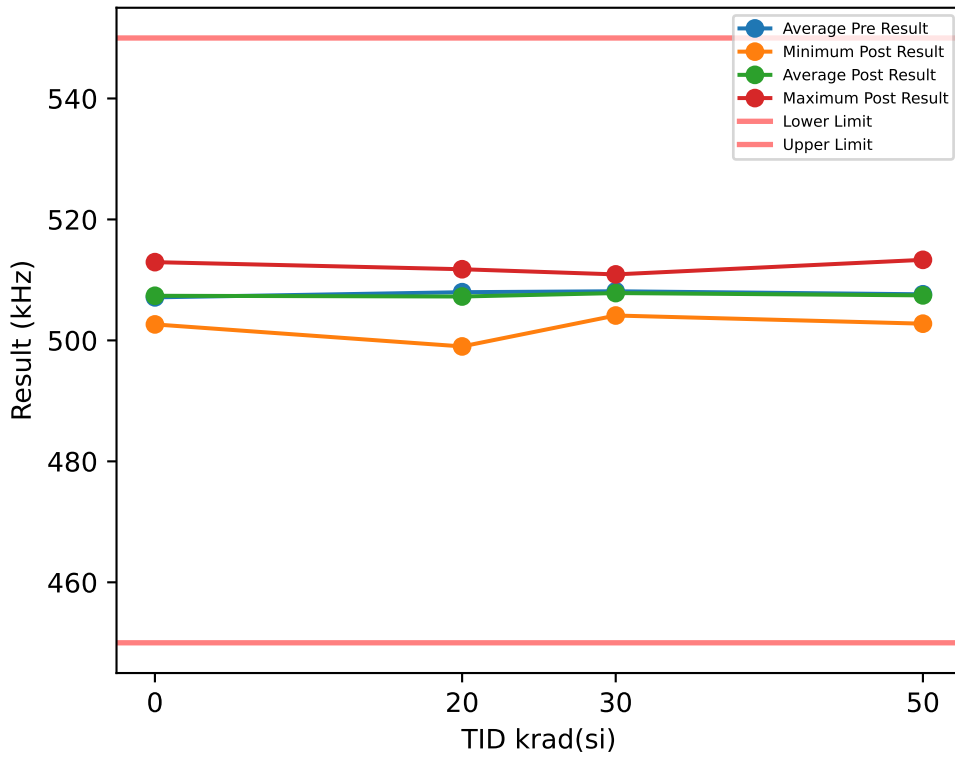


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.84	499.86	499.88	0.014656	500.01	500.03	500.05	0.012976	0.1567	0.17668	0.1962	0.017058
20	500.02	500.04	500.09	0.020185	499.99	500.03	500.06	0.025269	-0.0597	-0.01007	0.0431	0.034972
30	500.01	500.04	500.05	0.01438	499.99	500.03	500.05	0.019113	-0.0425	-0.01122	0.0231	0.022088
50	499.84	499.96	500.06	0.10823	499.99	500.03	500.05	0.017987	-0.0441	0.07121	0.2126	0.10343

Device Test: 24.65 FREQ|500kHz/SYNC1/5//90.9k//@EXT_SET_FREQ_500kHz

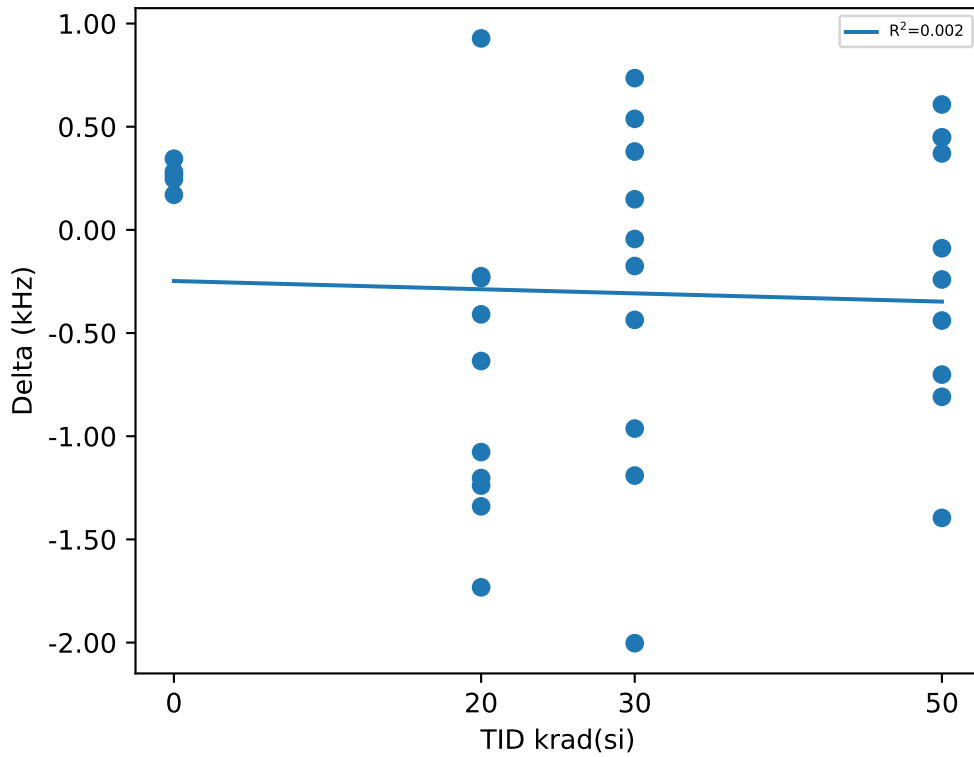
TID vs Result Stats



Test Results (Lower Limit = 450.0, Upper Limit = 550.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	503.86	504.79	0.928
2	20	Biased	507.52	506.44	-1.0768
3	20	Biased	508.67	507.33	-1.3398
4	20	Biased	512.97	511.77	-1.2027
5	20	Biased	511.04	510.63	-0.4094
6	20	Unbiased	500.73	499	-1.7323
7	20	Unbiased	508.05	507.83	-0.2245
8	20	Unbiased	509.52	508.88	-0.6355
9	20	Unbiased	511.3	510.06	-1.2392
10	20	Unbiased	506.07	505.84	-0.2336
11	30	Biased	506.85	506.68	-0.1752
12	30	Biased	509.49	508.3	-1.1907
13	30	Biased	503.38	504.11	0.7355
14	30	Biased	505.31	505.46	0.1484
15	30	Biased	507.95	506.99	-0.9629
16	30	Unbiased	510.56	510.13	-0.4362
17	30	Unbiased	511.21	509.21	-2.003
18	30	Unbiased	510.96	510.91	-0.0441
19	30	Unbiased	509.1	509.48	0.3797
20	30	Unbiased	506.43	506.97	0.5381
26	50	Unbiased	510.42	510.18	-0.2403
27	50	Unbiased	505.45	505.9	0.4481
28	50	Unbiased	502.16	502.76	0.6078
29	50	Unbiased	509.15	507.76	-1.3958
30	50	Unbiased	507.68	506.87	-0.8088
88	50	Biased-84Hr-Anneal	503.45	503.37	-0.089
89	50	Biased-84Hr-Anneal	508.46	508.91	0.448
90	50	Biased-84Hr-Anneal	510.76	510.05	-0.7013
91	50	Biased-84Hr-Anneal	505.77	505.33	-0.4393
92	50	Biased-84Hr-Anneal	512.95	513.32	0.3705
100	0	CORRELATION	506.95	507.2	0.2463
101	0	CORRELATION	512.67	512.94	0.2654
102	0	CORRELATION	506.07	506.42	0.345
103	0	CORRELATION	502.47	502.64	0.1701
104	0	CORRELATION	507.41	507.69	0.2818

TID vs Post - Pre Exposure Delta

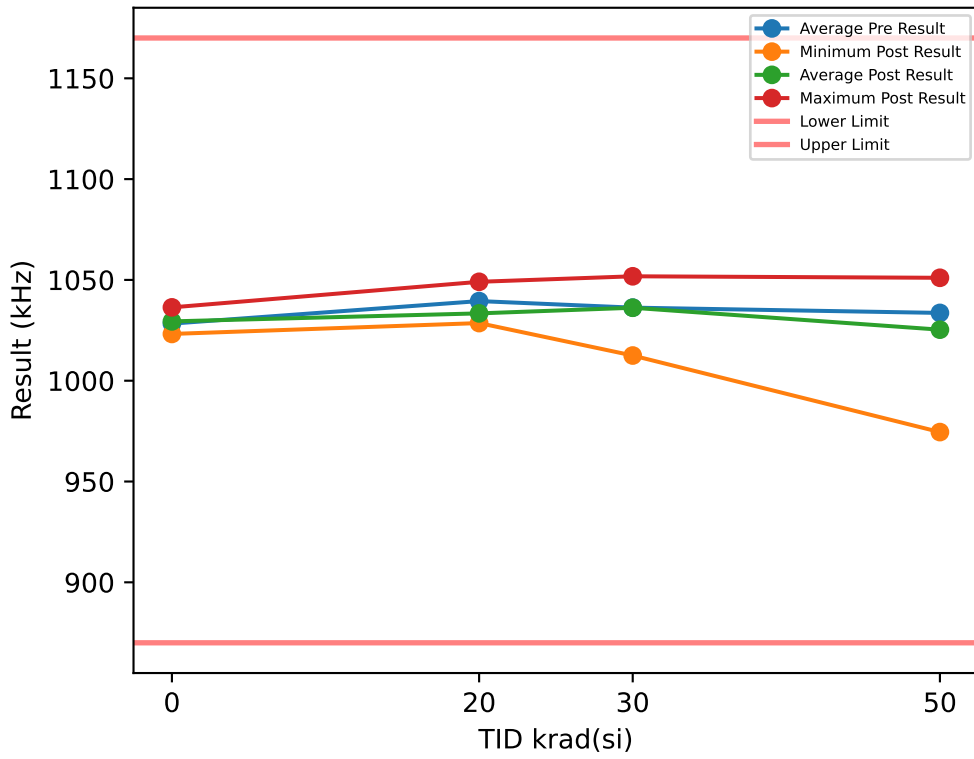


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	502.47	507.12	512.67	3.6622	502.64	507.38	512.94	3.6878	0.1701	0.26172	0.345	0.063215
20	500.73	507.97	512.97	3.6723	499	507.26	511.77	3.6422	-1.7323	-0.71658	0.928	0.7703
30	503.38	508.12	511.21	2.6095	504.11	507.82	510.91	2.156	-2.003	-0.30104	0.7355	0.8609
50	502.16	507.62	512.95	3.4065	502.76	507.44	513.32	3.2791	-1.3958	-0.18001	0.6078	0.6614

Device Test: 24.66 FREQ|1MHz/SYNC1/5//34.8k//@EXT_SET_FREQ_1000kHz

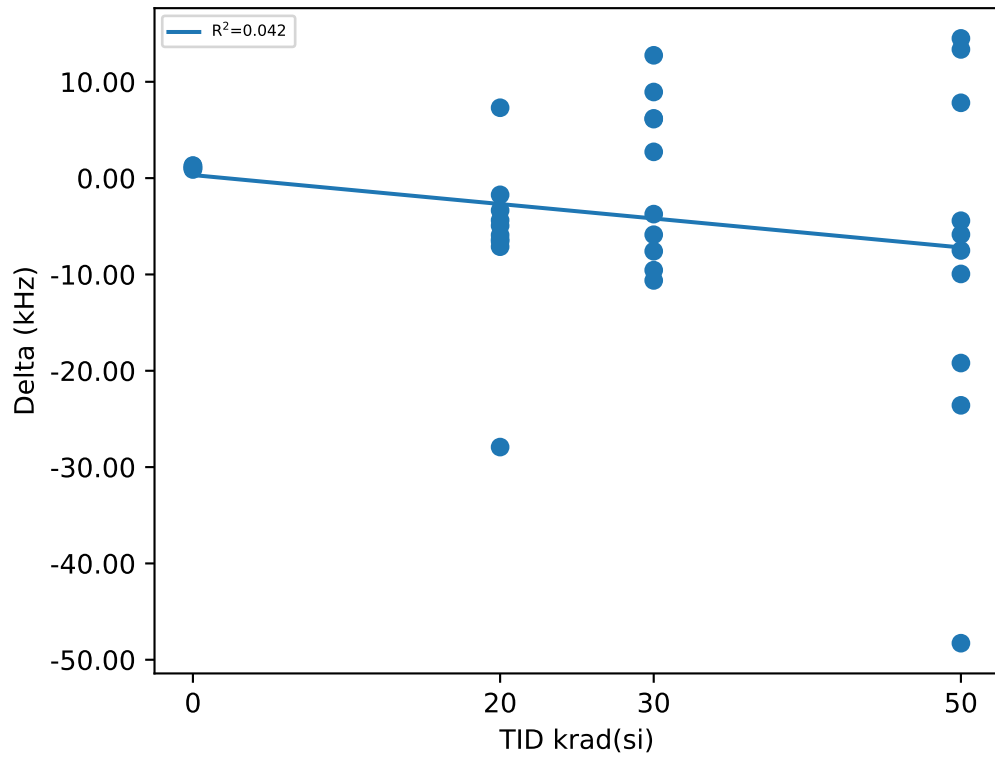
TID vs Result Stats



Test Results (Lower Limit = 870.0, Upper Limit = 1170.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1033.5	1029.1	-4.3725
2	20	Biased	1035.2	1028.6	-6.5582
3	20	Biased	1077	1049.1	-27.921
4	20	Biased	1036.2	1029	-7.1183
5	20	Biased	1038	1036.3	-1.7337
6	20	Unbiased	1022.9	1030.2	7.3065
7	20	Unbiased	1041.7	1035.8	-5.9102
8	20	Unbiased	1039.5	1033.1	-6.356
9	20	Unbiased	1037.5	1034.1	-3.3508
10	20	Unbiased	1033.7	1028.7	-4.9407
11	30	Biased	1038.7	1051.4	12.75
12	30	Biased	1028.9	1021.3	-7.5879
13	30	Biased	1016.2	1012.5	-3.7361
14	30	Biased	1035.8	1038.5	2.7273
15	30	Biased	1033.5	1039.7	6.2033
16	30	Unbiased	1030.4	1020.8	-9.5549
17	30	Unbiased	1042.9	1051.8	8.9406
18	30	Unbiased	1054.6	1044	-10.622
19	30	Unbiased	1046.9	1041.1	-5.8749
20	30	Unbiased	1034.7	1040.9	6.1251
26	50	Unbiased	1033.2	1009.6	-23.586
27	50	Unbiased	1023.3	1004.1	-19.197
28	50	Unbiased	1022.8	974.52	-48.281
29	50	Unbiased	1047	1042.6	-4.4221
30	50	Unbiased	1036.6	1051.1	14.506
88	50	Biased-84Hr-Anneal	1028.2	1041.5	13.362
89	50	Biased-84Hr-Anneal	1034.6	1028.8	-5.8506
90	50	Biased-84Hr-Anneal	1032.8	1022.9	-9.947
91	50	Biased-84Hr-Anneal	1035.3	1043.1	7.8197
92	50	Biased-84Hr-Anneal	1042.6	1035.1	-7.5116
100	0	CORRELATION	1029.2	1030.3	1.0454
101	0	CORRELATION	1035.1	1036.4	1.2592
102	0	CORRELATION	1029.1	1030	0.8937
103	0	CORRELATION	1026.2	1027.3	1.0289
104	0	CORRELATION	1021.9	1023.2	1.3065

TID vs Post - Pre Exposure Delta

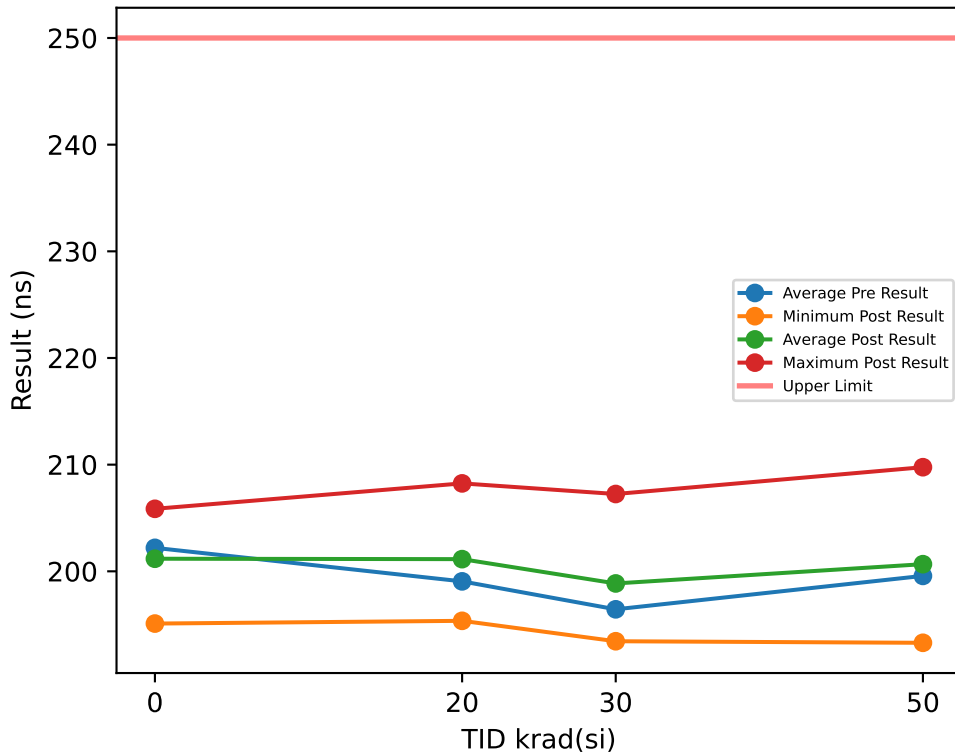


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1021.9	1028.3	1035.1	4.8329	1023.2	1029.4	1036.4	4.8197	0.8937	1.1067	1.3065	0.17201
20	1022.9	1039.5	1077	14.111	1028.6	1033.4	1049.1	6.2569	-27.921	-6.0955	7.3065	8.7444
30	1016.2	1036.3	1054.6	10.536	1012.5	1036.2	1051.8	13.415	-10.622	-0.06287	12.75	8.4068
50	1022.8	1033.6	1047	7.6555	974.52	1025.3	1051.1	23.408	-48.281	-8.3108	14.506	18.928

Device Test: 24.68 TIMING|MINON/SW/5//511k//@ON_TIME_MIN_5V

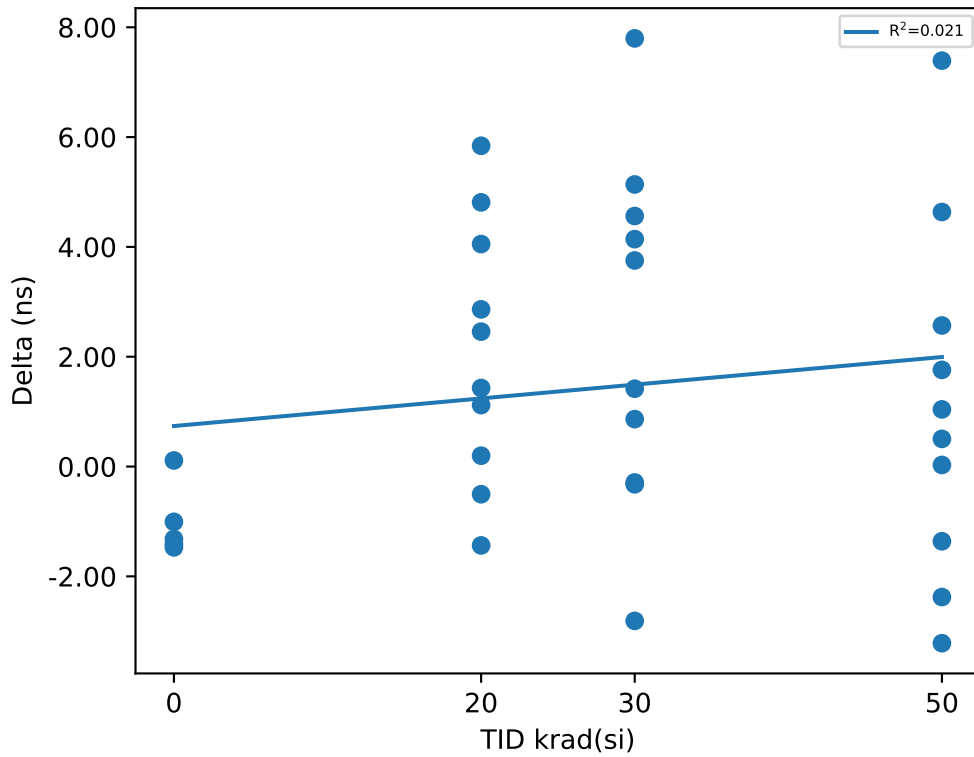
TID vs Result Stats



Test Results (Upper Limit = 250.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	199.15	197.72	-1.4365
2	20	Biased	193.51	198.32	4.8117
3	20	Biased	196.22	195.72	-0.5043
4	20	Biased	198.31	199.43	1.1194
5	20	Biased	206.1	207.53	1.4304
6	20	Unbiased	197.62	203.46	5.8424
7	20	Unbiased	208.05	208.24	0.198
8	20	Unbiased	194.06	198.11	4.0522
9	20	Unbiased	204.67	207.53	2.8631
10	20	Unbiased	192.9	195.36	2.4572
11	30	Biased	192.21	193.62	1.4171
12	30	Biased	196.39	200.53	4.1414
13	30	Biased	196.25	193.44	-2.8107
14	30	Biased	194.5	199.06	4.5625
15	30	Biased	199.6	199.31	-0.2893
16	30	Unbiased	203.49	207.25	3.7532
17	30	Unbiased	196.32	197.19	0.8636
18	30	Unbiased	192.07	199.87	7.7974
19	30	Unbiased	197.81	197.49	-0.3233
20	30	Unbiased	195.72	200.86	5.1374
26	50	Unbiased	197.91	205.31	7.3925
27	50	Unbiased	207.19	209.76	2.5694
28	50	Unbiased	199.72	201.48	1.7606
29	50	Unbiased	201.55	202.59	1.0406
30	50	Unbiased	196.77	201.4	4.6357
88	50	Biased-84Hr-Anneal	194.98	193.62	-1.361
89	50	Biased-84Hr-Anneal	195.9	196.4	0.5038
90	50	Biased-84Hr-Anneal	196.52	193.3	-3.2171
91	50	Biased-84Hr-Anneal	203.3	200.93	-2.3766
92	50	Biased-84Hr-Anneal	201.87	201.89	0.029
100	0	CORRELATION	205.75	205.86	0.1112
101	0	CORRELATION	205.44	204.03	-1.4121
102	0	CORRELATION	203.7	202.38	-1.3198
103	0	CORRELATION	200.01	198.54	-1.472
104	0	CORRELATION	196.11	195.1	-1.0066

TID vs Post - Pre Exposure Delta

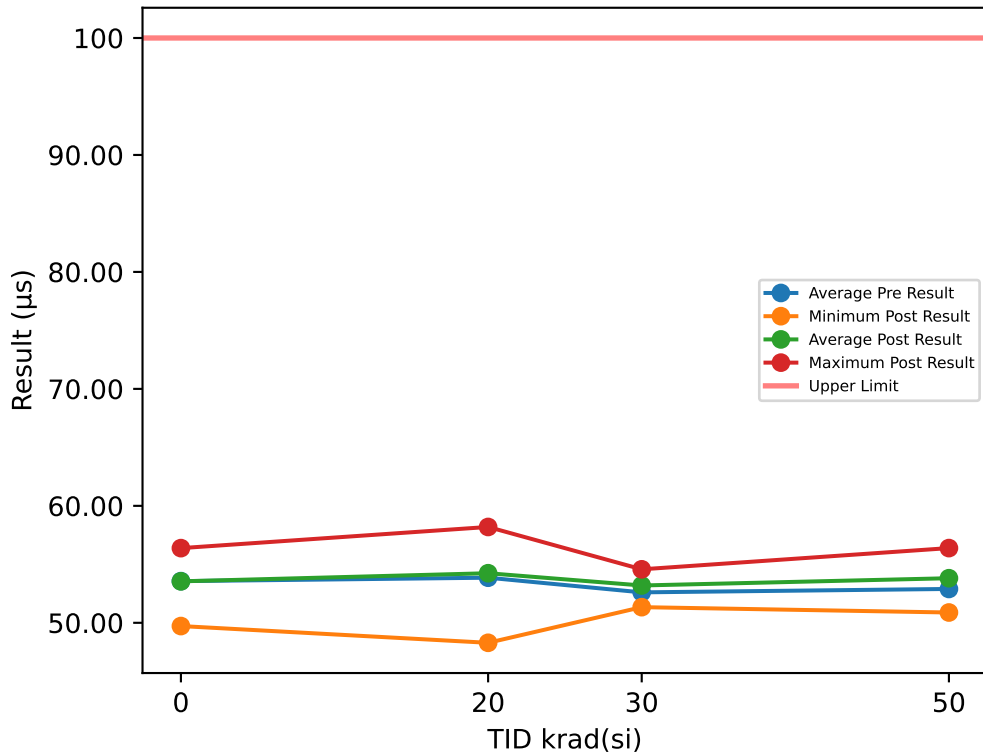


Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	196.11	202.2	205.75	4.0999	195.1	201.18	205.86	4.3409	-1.472	-1.0199	0.1112	0.65721
20	192.9	199.06	208.05	5.4389	195.36	201.14	208.24	5.0792	-1.4365	2.0834	5.8424	2.3616
30	192.07	196.44	203.49	3.3828	193.44	198.86	207.25	3.9418	-2.8107	2.4249	7.7974	3.1848
50	194.98	199.57	207.19	3.8831	193.3	200.67	209.76	5.0864	-3.2171	1.0977	7.3925	3.2142

Device Test: 24.69 TIMING|DELAY/EN/5//511k//@T_EN_DELAY

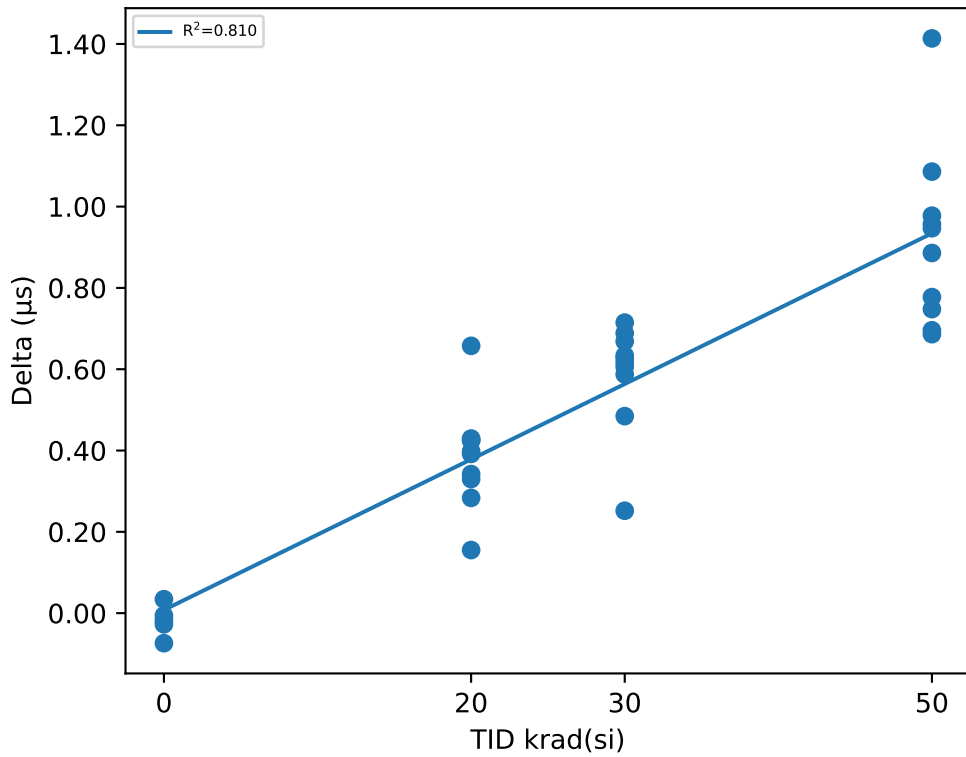
TID vs Result Stats



Test Results (Upper Limit = 100.0 (µs))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	52.436	52.828	0.3917
2	20	Biased	47.949	48.291	0.342
3	20	Biased	56.467	56.623	0.1552
4	20	Biased	56.707	57.136	0.4295
5	20	Biased	50.566	50.964	0.3983
6	20	Unbiased	57.767	58.194	0.4267
7	20	Unbiased	54.737	55.066	0.3298
8	20	Unbiased	54.549	55.206	0.6575
9	20	Unbiased	51.532	51.957	0.4242
10	20	Unbiased	55.841	56.125	0.2835
11	30	Biased	51.72	52.409	0.6886
12	30	Biased	52.794	53.428	0.6336
13	30	Biased	53.754	54.382	0.6279
14	30	Biased	53.803	54.055	0.2519
15	30	Biased	53.967	54.573	0.6059
16	30	Unbiased	53.603	54.088	0.4846
17	30	Unbiased	50.721	51.338	0.6167
18	30	Unbiased	52.595	53.31	0.7147
19	30	Unbiased	50.805	51.474	0.6686
20	30	Unbiased	52.268	52.856	0.5873
26	50	Unbiased	50.195	50.881	0.6862
27	50	Unbiased	54.974	56.388	1.4137
28	50	Unbiased	52.727	53.613	0.8859
29	50	Unbiased	54.032	54.978	0.9468
30	50	Unbiased	53.228	54.314	1.086
88	50	Biased-84Hr-Anneal	50.789	51.767	0.9777
89	50	Biased-84Hr-Anneal	53.046	54.003	0.9573
90	50	Biased-84Hr-Anneal	54.328	55.106	0.7774
91	50	Biased-84Hr-Anneal	53.161	53.857	0.6957
92	50	Biased-84Hr-Anneal	52.459	53.206	0.7478
100	0	CORRELATION	49.796	49.722	-0.0739
101	0	CORRELATION	53.977	54.012	0.0343
102	0	CORRELATION	54.976	54.949	-0.0274
103	0	CORRELATION	56.39	56.385	-0.0058
104	0	CORRELATION	52.674	52.656	-0.0182

TID vs Post - Pre Exposure Delta

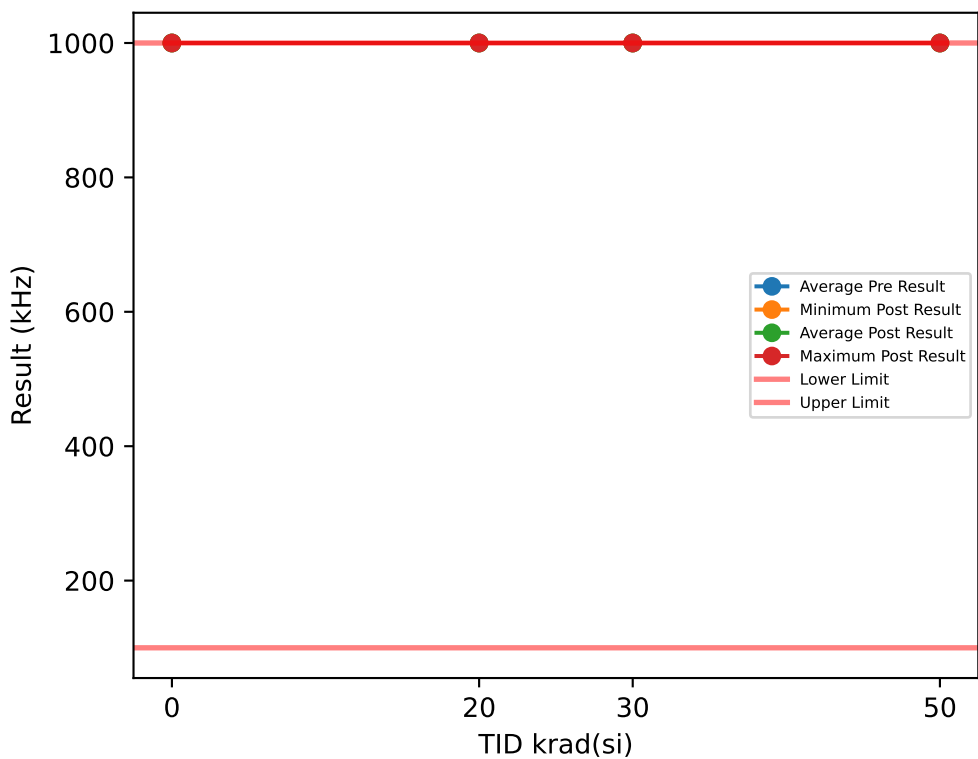


Test Statistics (µs)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	49.796	53.563	56.39	2.5073	49.722	53.545	56.385	2.5328	-0.0739	-0.0182	0.0343	0.039042
20	47.949	53.855	57.767	3.1372	48.291	54.239	58.194	3.1305	0.1552	0.38384	0.6575	0.12812
30	50.721	52.603	53.967	1.2169	51.338	53.191	54.573	1.1574	0.2519	0.58798	0.7147	0.13381
50	50.195	52.894	54.974	1.4838	50.881	53.811	56.388	1.6034	0.6862	0.91745	1.4137	0.21929

Device Test: 24.7 FREQ|1000kHz/SYNC1/4.5//OPEN//@SYNC_FREQ_RANGE

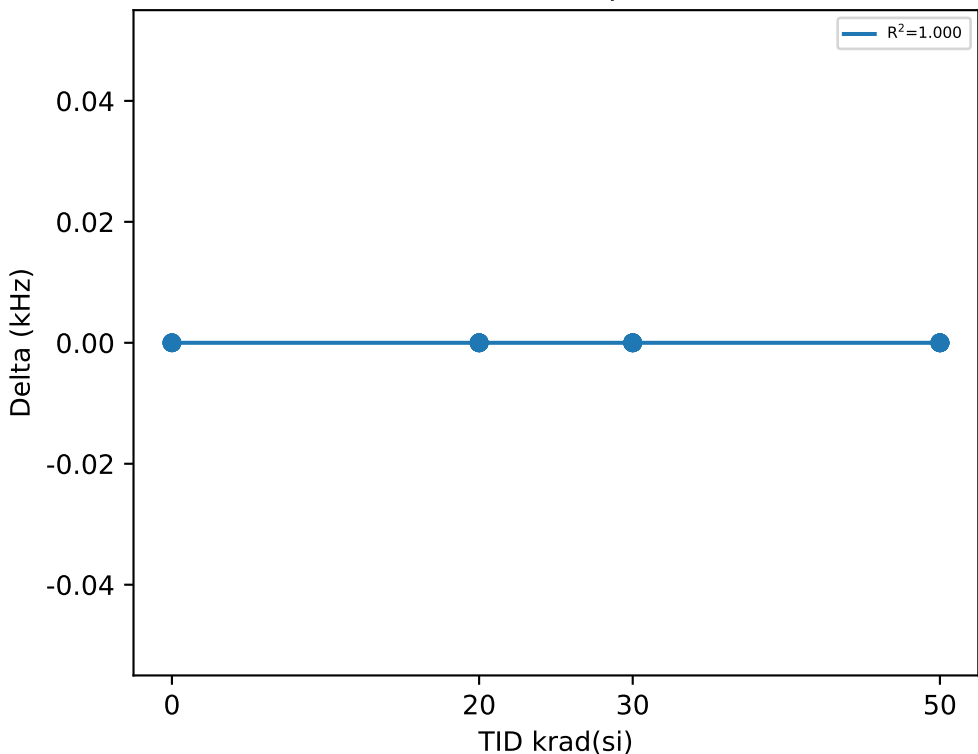
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1000	1000	0
2	20	Biased	1000	1000	0
3	20	Biased	1000	1000	0
4	20	Biased	1000	1000	0
5	20	Biased	1000	1000	0
6	20	Unbiased	1000	1000	0
7	20	Unbiased	1000	1000	0
8	20	Unbiased	1000	1000	0
9	20	Unbiased	1000	1000	0
10	20	Unbiased	1000	1000	0
11	30	Biased	1000	1000	0
12	30	Biased	1000	1000	0
13	30	Biased	1000	1000	0
14	30	Biased	1000	1000	0
15	30	Biased	1000	1000	0
16	30	Unbiased	1000	1000	0
17	30	Unbiased	1000	1000	0
18	30	Unbiased	1000	1000	0
19	30	Unbiased	1000	1000	0
20	30	Unbiased	1000	1000	0
26	50	Unbiased	1000	1000	0
27	50	Unbiased	1000	1000	0
28	50	Unbiased	1000	1000	0
29	50	Unbiased	1000	1000	0
30	50	Unbiased	1000	1000	0
88	50	Biased-84Hr-Anneal	1000	1000	0
89	50	Biased-84Hr-Anneal	1000	1000	0
90	50	Biased-84Hr-Anneal	1000	1000	0
91	50	Biased-84Hr-Anneal	1000	1000	0
92	50	Biased-84Hr-Anneal	1000	1000	0
100	0	CORRELATION	1000	1000	0
101	0	CORRELATION	1000	1000	0
102	0	CORRELATION	1000	1000	0
103	0	CORRELATION	1000	1000	0
104	0	CORRELATION	1000	1000	0

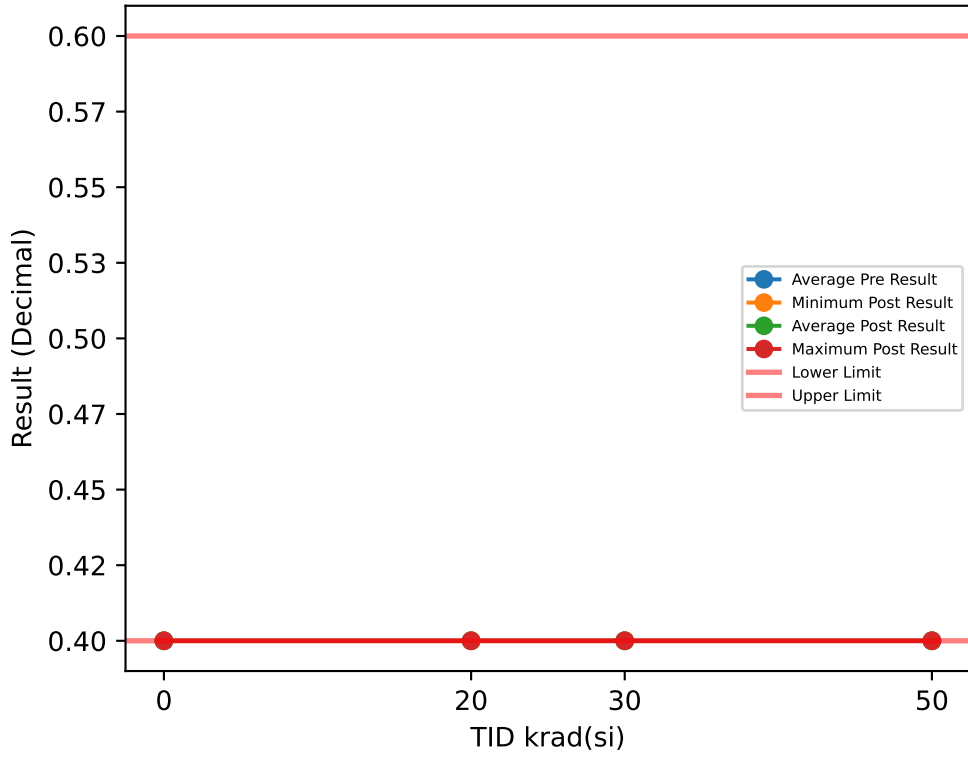
TID vs Post - Pre Exposure Delta



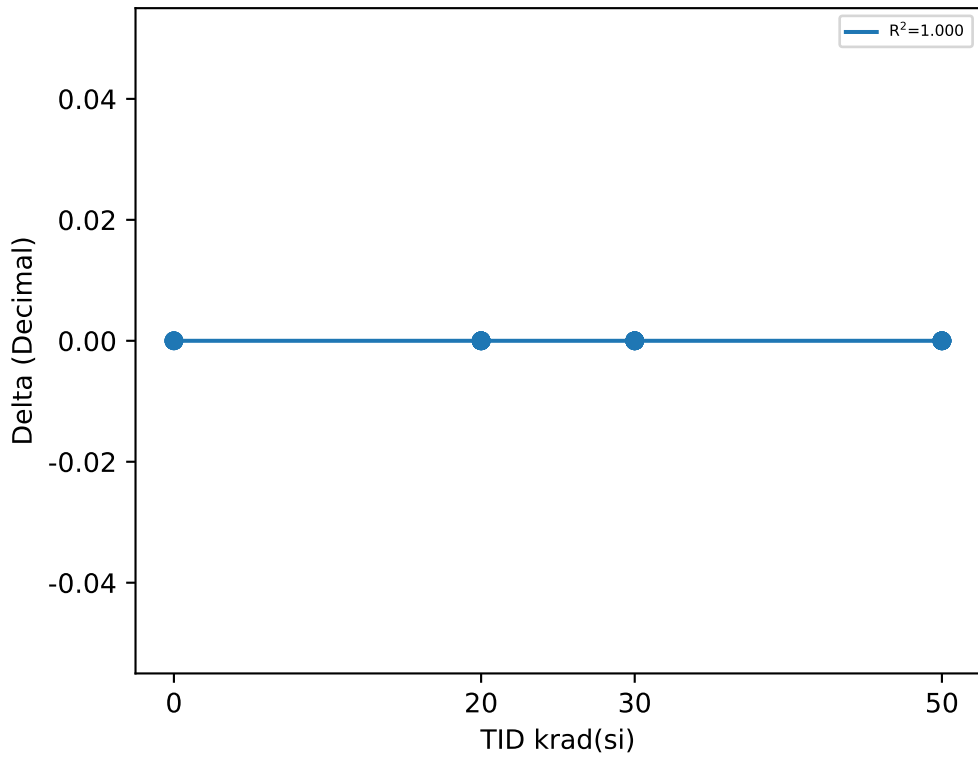
Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
20	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
30	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
50	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

TID vs Result Stats



TID vs Post - Pre Exposure Delta



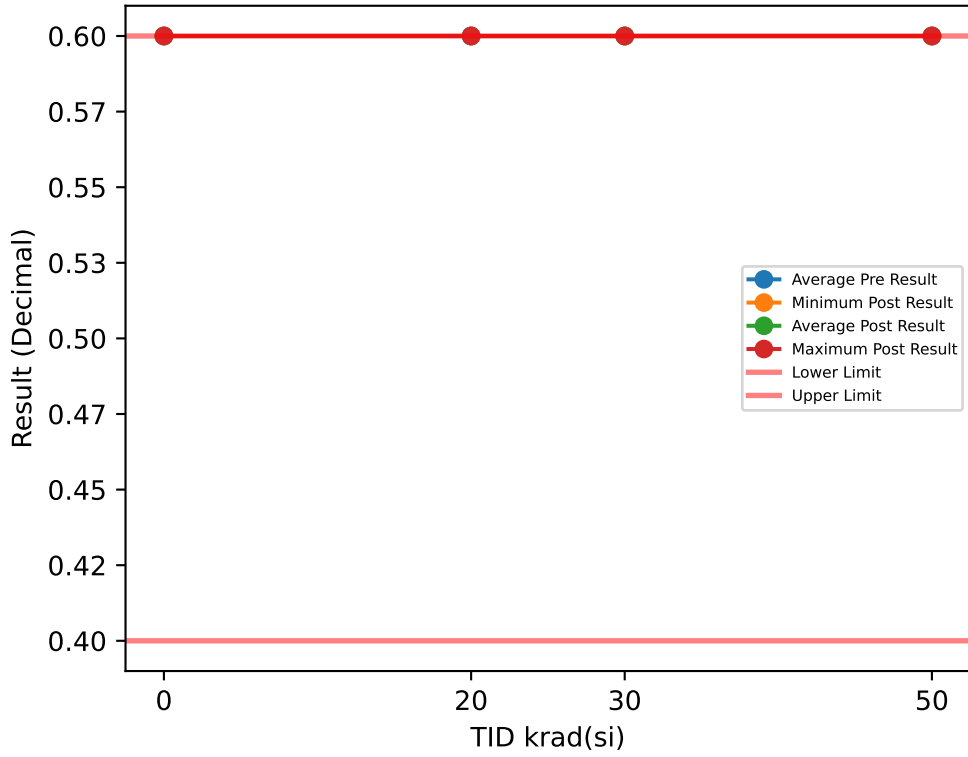
Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.4	0.4	0
2	20	Biased	0.4	0.4	0
3	20	Biased	0.4	0.4	0
4	20	Biased	0.4	0.4	0
5	20	Biased	0.4	0.4	0
6	20	Unbiased	0.4	0.4	0
7	20	Unbiased	0.4	0.4	0
8	20	Unbiased	0.4	0.4	0
9	20	Unbiased	0.4	0.4	0
10	20	Unbiased	0.4	0.4	0
11	30	Biased	0.4	0.4	0
12	30	Biased	0.4	0.4	0
13	30	Biased	0.4	0.4	0
14	30	Biased	0.4	0.4	0
15	30	Biased	0.4	0.4	0
16	30	Unbiased	0.4	0.4	0
17	30	Unbiased	0.4	0.4	0
18	30	Unbiased	0.4	0.4	0
19	30	Unbiased	0.4	0.4	0
20	30	Unbiased	0.4	0.4	0
26	50	Unbiased	0.4	0.4	0
27	50	Unbiased	0.4	0.4	0
28	50	Unbiased	0.4	0.4	0
29	50	Unbiased	0.4	0.4	0
30	50	Unbiased	0.4	0.4	0
88	50	Biased-84Hr-Anneal	0.4	0.4	0
89	50	Biased-84Hr-Anneal	0.4	0.4	0
90	50	Biased-84Hr-Anneal	0.4	0.4	0
91	50	Biased-84Hr-Anneal	0.4	0.4	0
92	50	Biased-84Hr-Anneal	0.4	0.4	0
100	0	CORRELATION	0.4	0.4	0
101	0	CORRELATION	0.4	0.4	0
102	0	CORRELATION	0.4	0.4	0
103	0	CORRELATION	0.4	0.4	0
104	0	CORRELATION	0.4	0.4	0

Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
20	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
30	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
50	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

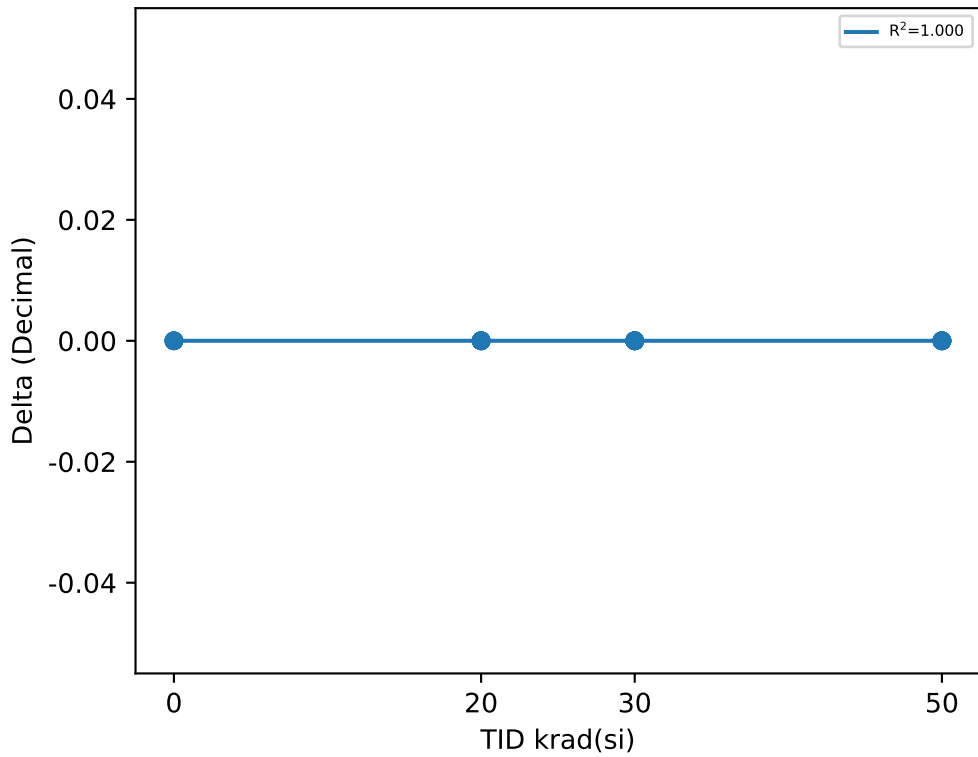
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6	0.6	0
3	20	Biased	0.6	0.6	0
4	20	Biased	0.6	0.6	0
5	20	Biased	0.6	0.6	0
6	20	Unbiased	0.6	0.6	0
7	20	Unbiased	0.6	0.6	0
8	20	Unbiased	0.6	0.6	0
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.6	0.6	0
11	30	Biased	0.6	0.6	0
12	30	Biased	0.6	0.6	0
13	30	Biased	0.6	0.6	0
14	30	Biased	0.6	0.6	0
15	30	Biased	0.6	0.6	0
16	30	Unbiased	0.6	0.6	0
17	30	Unbiased	0.6	0.6	0
18	30	Unbiased	0.6	0.6	0
19	30	Unbiased	0.6	0.6	0
20	30	Unbiased	0.6	0.6	0
26	50	Unbiased	0.6	0.6	0
27	50	Unbiased	0.6	0.6	0
28	50	Unbiased	0.6	0.6	0
29	50	Unbiased	0.6	0.6	0
30	50	Unbiased	0.6	0.6	0
88	50	Biased-84Hr-Anneal	0.6	0.6	0
89	50	Biased-84Hr-Anneal	0.6	0.6	0
90	50	Biased-84Hr-Anneal	0.6	0.6	0
91	50	Biased-84Hr-Anneal	0.6	0.6	0
92	50	Biased-84Hr-Anneal	0.6	0.6	0
100	0	CORRELATION	0.6	0.6	0
101	0	CORRELATION	0.6	0.6	0
102	0	CORRELATION	0.6	0.6	0
103	0	CORRELATION	0.6	0.6	0
104	0	CORRELATION	0.6	0.6	0

TID vs Post - Pre Exposure Delta

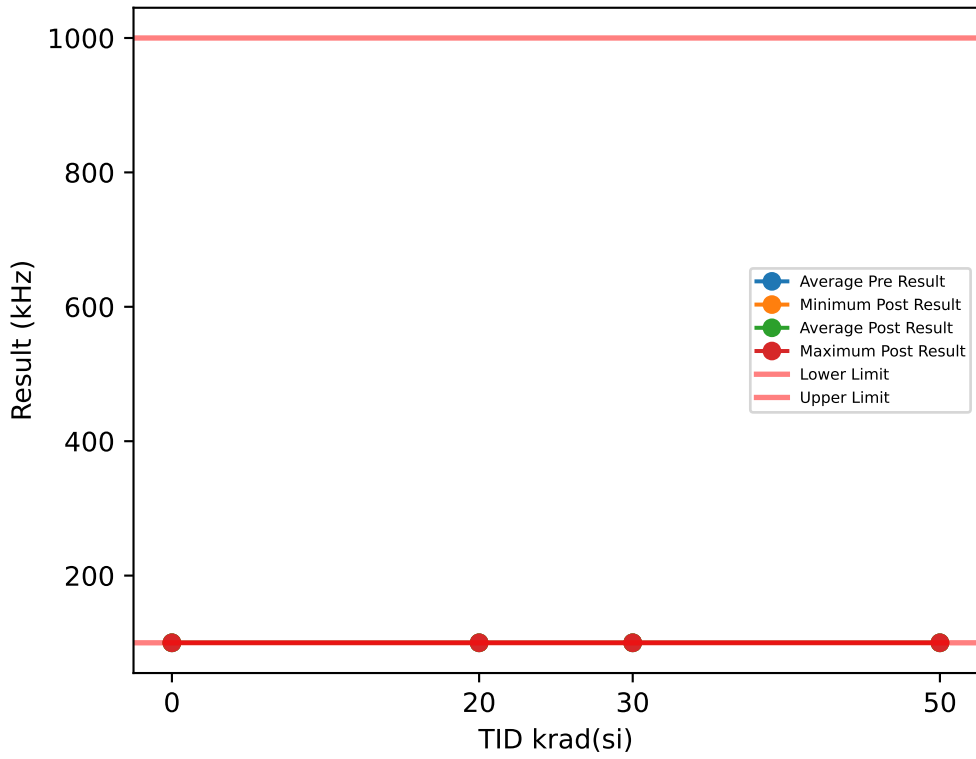


Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
20	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
30	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
50	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

Device Test: 24.90 FREQ|100kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE

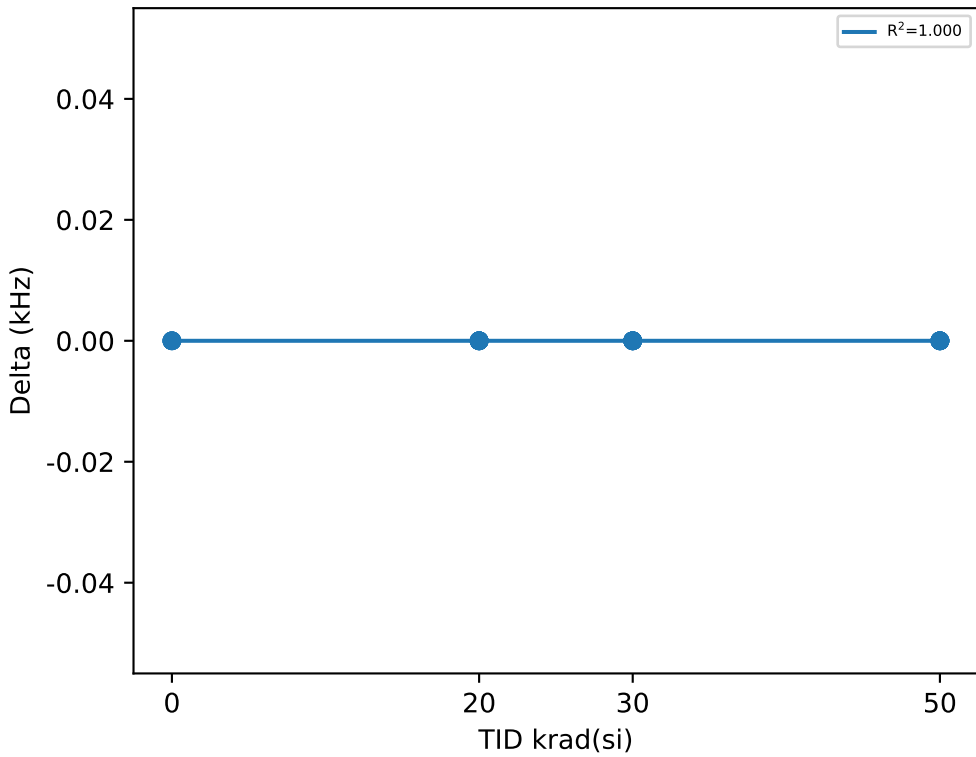
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	100	100	0
2	20	Biased	100	100	0
3	20	Biased	100	100	0
4	20	Biased	100	100	0
5	20	Biased	100	100	0
6	20	Unbiased	100	100	0
7	20	Unbiased	100	100	0
8	20	Unbiased	100	100	0
9	20	Unbiased	100	100	0
10	20	Unbiased	100	100	0
11	30	Biased	100	100	0
12	30	Biased	100	100	0
13	30	Biased	100	100	0
14	30	Biased	100	100	0
15	30	Biased	100	100	0
16	30	Unbiased	100	100	0
17	30	Unbiased	100	100	0
18	30	Unbiased	100	100	0
19	30	Unbiased	100	100	0
20	30	Unbiased	100	100	0
26	50	Unbiased	100	100	0
27	50	Unbiased	100	100	0
28	50	Unbiased	100	100	0
29	50	Unbiased	100	100	0
30	50	Unbiased	100	100	0
88	50	Biased-84Hr-Anneal	100	100	0
89	50	Biased-84Hr-Anneal	100	100	0
90	50	Biased-84Hr-Anneal	100	100	0
91	50	Biased-84Hr-Anneal	100	100	0
92	50	Biased-84Hr-Anneal	100	100	0
100	0	CORRELATION	100	100	0
101	0	CORRELATION	100	100	0
102	0	CORRELATION	100	100	0
103	0	CORRELATION	100	100	0
104	0	CORRELATION	100	100	0

TID vs Post - Pre Exposure Delta

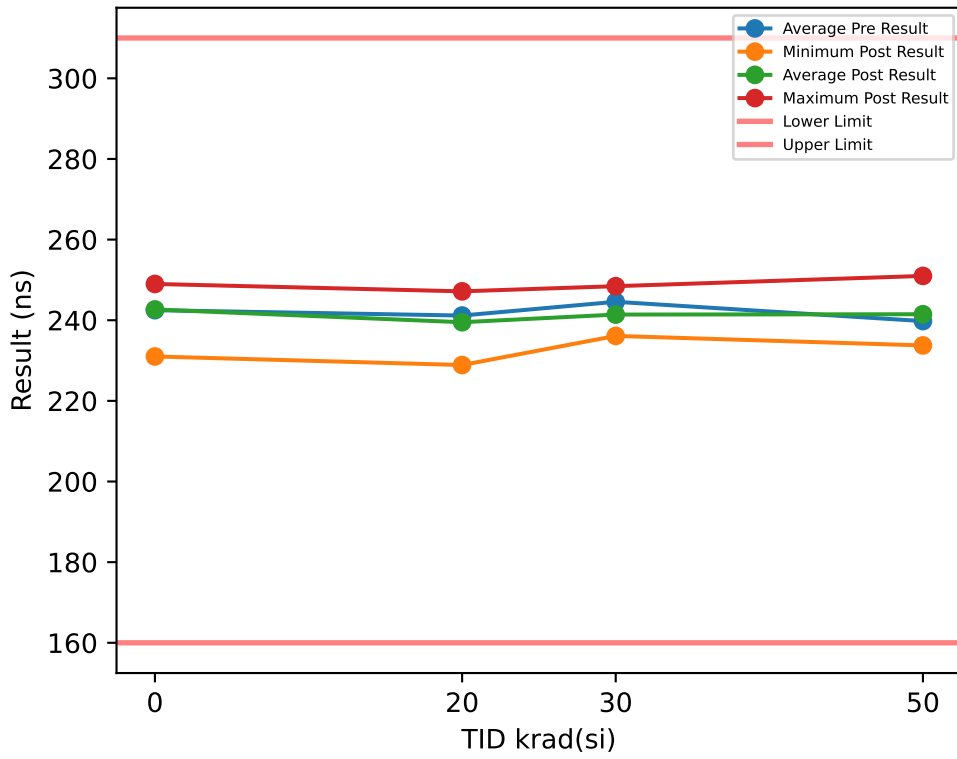


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	100	100	100	0	100	100	100	0	0	0	0	0
20	100	100	100	0	100	100	100	0	0	0	0	0
30	100	100	100	0	100	100	100	0	0	0	0	0
50	100	100	100	0	100	100	100	0	0	0	0	0

Device Test: 24.92 TIMING|DELAY/SYNC1/12//OPEN//@SYNC1_SW_DELAY_INV

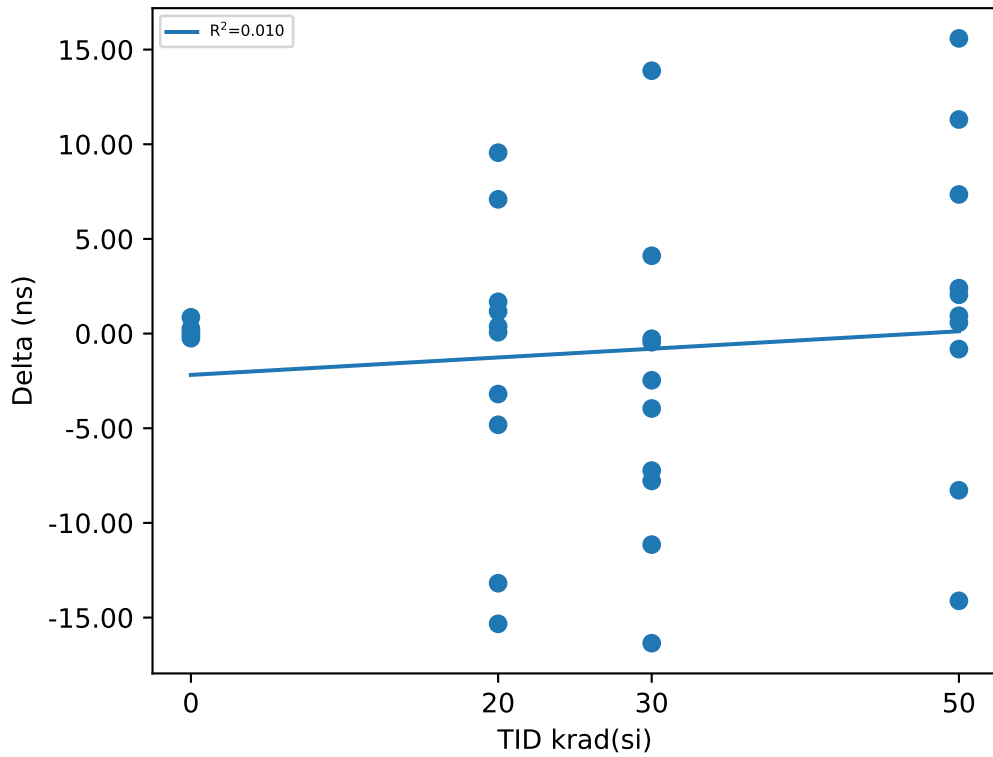
TID vs Result Stats



Test Results (Lower Limit = 160.0, Upper Limit = 310.0 (ns))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	237.33	237.71	0.3833
2	20	Biased	247.17	231.84	-15.33
3	20	Biased	244.69	244.76	0.0717
4	20	Biased	238.93	240.1	1.1707
5	20	Biased	227.21	228.89	1.6789
6	20	Unbiased	251.12	246.3	-4.817
7	20	Unbiased	237.33	244.42	7.0901
8	20	Unbiased	242.48	229.29	-13.185
9	20	Unbiased	235.06	244.61	9.5551
10	20	Unbiased	250.36	247.17	-3.1934
11	30	Biased	244.11	236.33	-7.783
12	30	Biased	240.34	236.39	-3.9567
13	30	Biased	234.37	248.25	13.886
14	30	Biased	254.13	237.78	-16.353
15	30	Biased	240.25	239.8	-0.4575
16	30	Unbiased	247.05	244.58	-2.4675
17	30	Unbiased	236.39	236.11	-0.2742
18	30	Unbiased	250.23	243	-7.234
19	30	Unbiased	244.33	248.45	4.1109
20	30	Unbiased	254.53	243.39	-11.146
26	50	Unbiased	247.87	233.75	-14.116
27	50	Unbiased	241.21	240.39	-0.8192
28	50	Unbiased	247.38	249.78	2.3999
29	50	Unbiased	234.02	234.96	0.939
30	50	Unbiased	250.89	242.62	-8.2767
88	50	Biased-84Hr-Anneal	235.1	242.45	7.3483
89	50	Biased-84Hr-Anneal	232.63	243.94	11.307
90	50	Biased-84Hr-Anneal	235.4	250.99	15.591
91	50	Biased-84Hr-Anneal	232.11	234.16	2.0486
92	50	Biased-84Hr-Anneal	241.26	241.84	0.5788
100	0	CORRELATION	248.73	249	0.2661
101	0	CORRELATION	246.85	246.6	-0.2446
102	0	CORRELATION	230.16	231.02	0.8604
103	0	CORRELATION	244.71	244.83	0.1209
104	0	CORRELATION	242.02	241.95	-0.0708

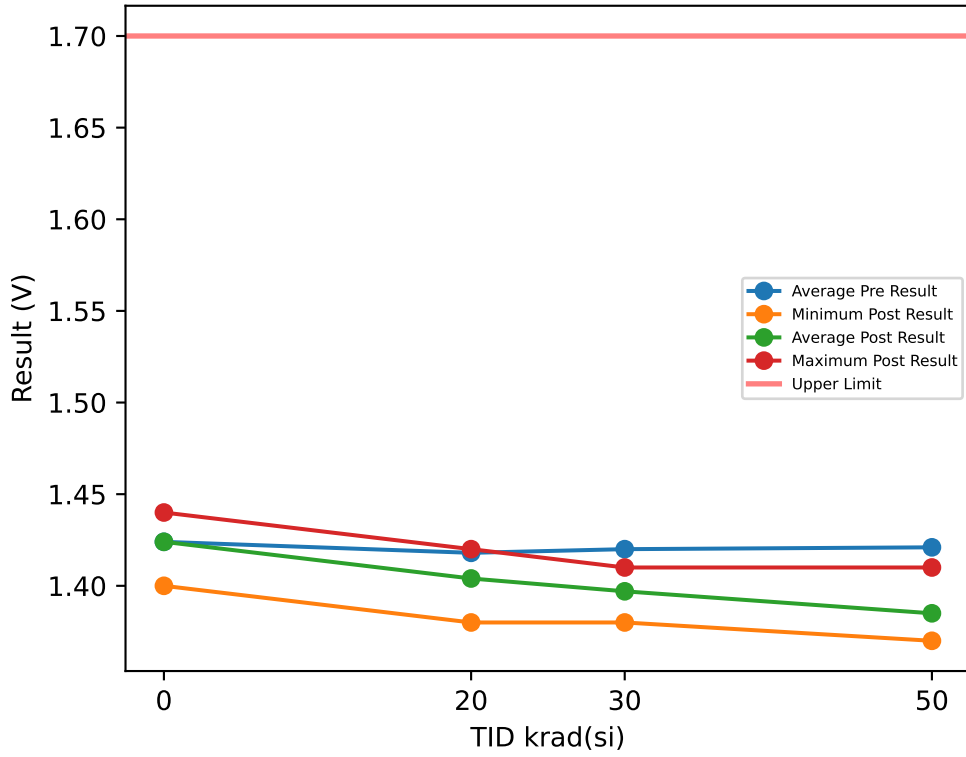
TID vs Post - Pre Exposure Delta



Test Statistics (ns)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	230.16	242.49	248.73	7.3353	231.02	242.68	249	7.0091	-0.2446	0.1864	0.8604	0.42333
20	227.21	241.17	251.12	7.455	228.89	239.51	247.17	7.1646	-15.33	-1.6575	9.5551	7.8929
30	234.37	244.57	254.53	6.9661	236.11	241.41	248.45	4.804	-16.353	-3.1676	13.886	8.4062
50	232.11	239.79	250.89	6.953	233.75	241.49	250.99	6.0067	-14.116	1.7001	15.591	8.6643

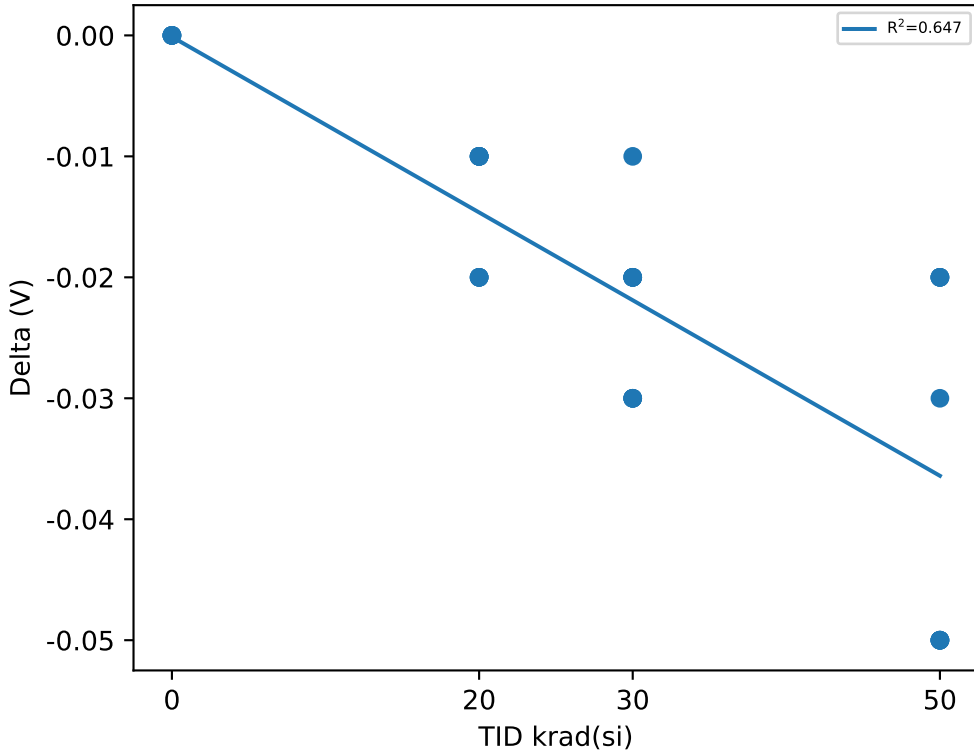
TID vs Result Stats



Test Results (Upper Limit = 1.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.41	1.4	-0.01
2	20	Biased	1.42	1.41	-0.01
3	20	Biased	1.41	1.4	-0.01
4	20	Biased	1.42	1.41	-0.01
5	20	Biased	1.42	1.41	-0.01
6	20	Unbiased	1.43	1.42	-0.01
7	20	Unbiased	1.4	1.38	-0.02
8	20	Unbiased	1.42	1.4	-0.02
9	20	Unbiased	1.42	1.4	-0.02
10	20	Unbiased	1.43	1.41	-0.02
11	30	Biased	1.41	1.4	-0.01
12	30	Biased	1.43	1.41	-0.02
13	30	Biased	1.42	1.4	-0.02
14	30	Biased	1.42	1.4	-0.02
15	30	Biased	1.43	1.41	-0.02
16	30	Unbiased	1.43	1.4	-0.03
17	30	Unbiased	1.41	1.38	-0.03
18	30	Unbiased	1.42	1.39	-0.03
19	30	Unbiased	1.41	1.38	-0.03
20	30	Unbiased	1.42	1.4	-0.02
26	50	Unbiased	1.42	1.37	-0.05
27	50	Unbiased	1.42	1.37	-0.05
28	50	Unbiased	1.43	1.38	-0.05
29	50	Unbiased	1.43	1.38	-0.05
30	50	Unbiased	1.43	1.38	-0.05
88	50	Biased-84Hr-Anneal	1.41	1.39	-0.02
89	50	Biased-84Hr-Anneal	1.44	1.41	-0.03
90	50	Biased-84Hr-Anneal	1.42	1.4	-0.02
91	50	Biased-84Hr-Anneal	1.41	1.39	-0.02
92	50	Biased-84Hr-Anneal	1.4	1.38	-0.02
100	0	CORRELATION	1.4	1.4	0
101	0	CORRELATION	1.43	1.43	0
102	0	CORRELATION	1.44	1.44	0
103	0	CORRELATION	1.42	1.42	0
104	0	CORRELATION	1.43	1.43	0

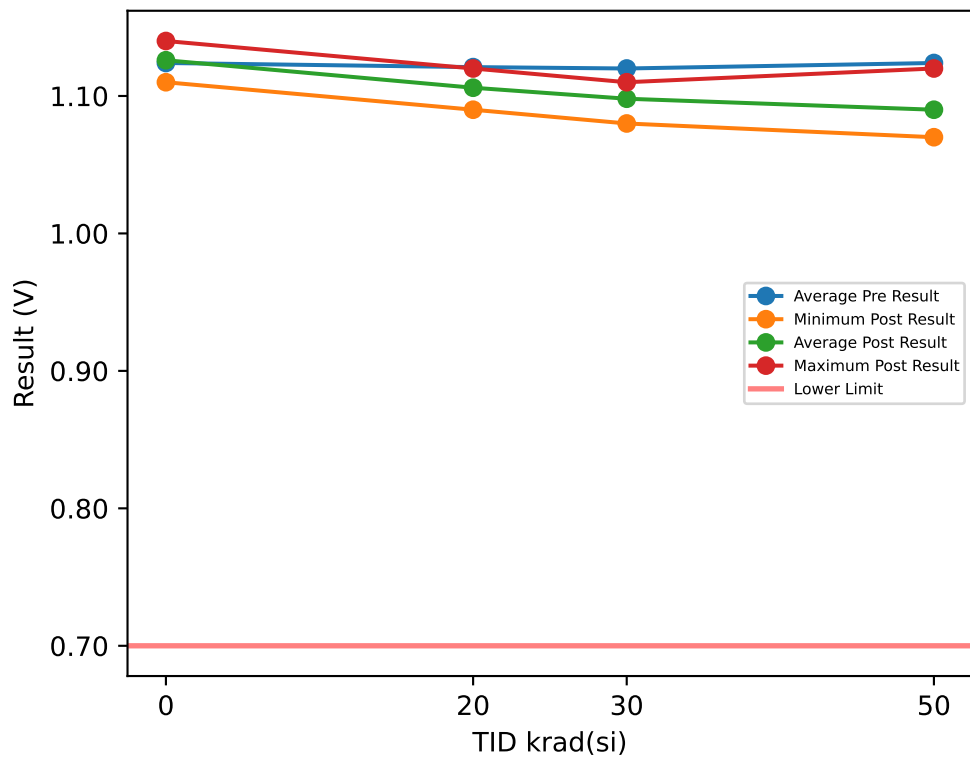
TID vs Post - Pre Exposure Delta



Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.4	1.424	1.44	0.015166	1.4	1.424	1.44	0.015166	0	0	0	0
20	1.4	1.418	1.43	0.0091894	1.38	1.404	1.42	0.01075	-0.02	-0.014	-0.01	0.005164
30	1.41	1.42	1.43	0.008165	1.38	1.397	1.41	0.010593	-0.03	-0.023	-0.01	0.0067495
50	1.4	1.421	1.44	0.011972	1.37	1.385	1.41	0.012693	-0.05	-0.036	-0.02	0.015055

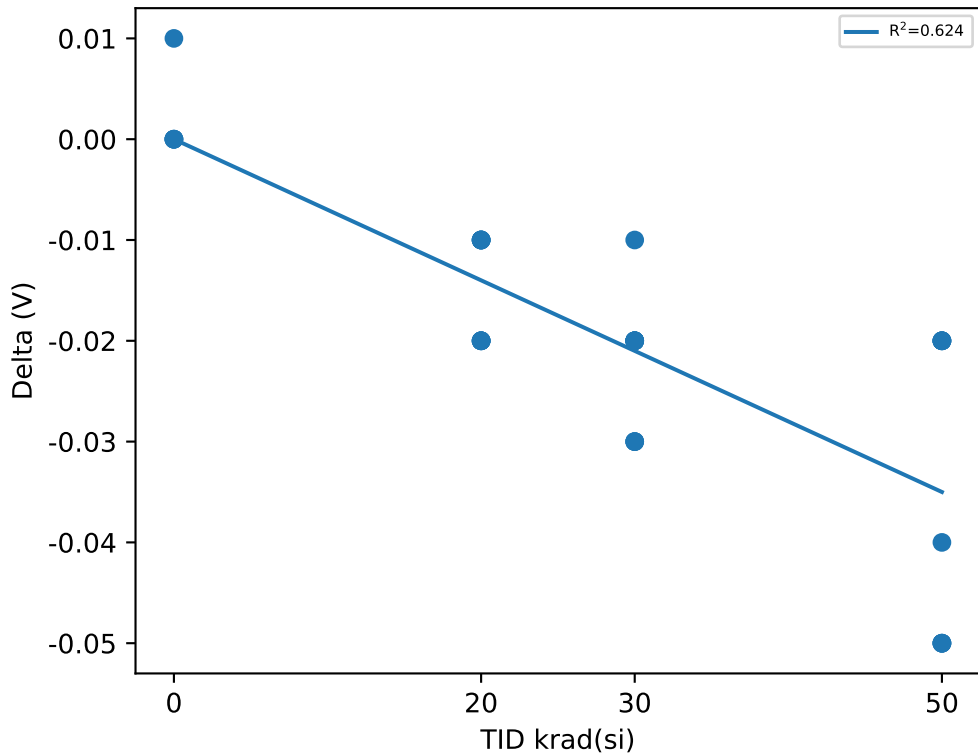
TID vs Result Stats



Test Results (Lower Limit = 0.7 (V))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1.11	1.1	-0.01
2	20	Biased	1.12	1.11	-0.01
3	20	Biased	1.11	1.1	-0.01
4	20	Biased	1.12	1.11	-0.01
5	20	Biased	1.12	1.11	-0.01
6	20	Unbiased	1.14	1.12	-0.02
7	20	Unbiased	1.11	1.09	-0.02
8	20	Unbiased	1.13	1.11	-0.02
9	20	Unbiased	1.12	1.1	-0.02
10	20	Unbiased	1.13	1.11	-0.02
11	30	Biased	1.11	1.1	-0.01
12	30	Biased	1.13	1.11	-0.02
13	30	Biased	1.12	1.1	-0.02
14	30	Biased	1.12	1.1	-0.02
15	30	Biased	1.13	1.11	-0.02
16	30	Unbiased	1.13	1.1	-0.03
17	30	Unbiased	1.11	1.09	-0.02
18	30	Unbiased	1.12	1.09	-0.03
19	30	Unbiased	1.11	1.08	-0.03
20	30	Unbiased	1.12	1.1	-0.02
26	50	Unbiased	1.12	1.07	-0.05
27	50	Unbiased	1.13	1.08	-0.05
28	50	Unbiased	1.13	1.08	-0.05
29	50	Unbiased	1.14	1.09	-0.05
30	50	Unbiased	1.13	1.09	-0.04
88	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
89	50	Biased-84Hr-Anneal	1.14	1.12	-0.02
90	50	Biased-84Hr-Anneal	1.12	1.1	-0.02
91	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
92	50	Biased-84Hr-Anneal	1.11	1.09	-0.02
100	0	CORRELATION	1.1	1.11	0.01
101	0	CORRELATION	1.13	1.13	0
102	0	CORRELATION	1.14	1.14	0
103	0	CORRELATION	1.12	1.12	0
104	0	CORRELATION	1.13	1.13	0

TID vs Post - Pre Exposure Delta

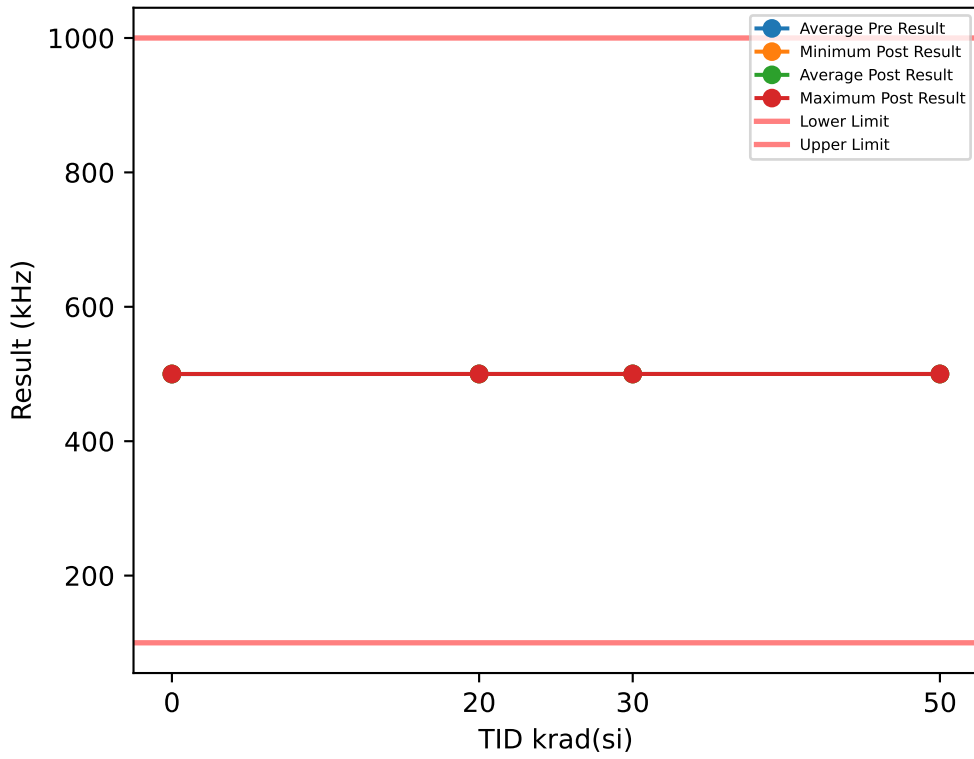


Test Statistics (V)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1.1	1.124	1.14	0.015166	1.11	1.126	1.14	0.011402	0	0.002	0.01	0.0044721
20	1.11	1.121	1.14	0.0099443	1.09	1.106	1.12	0.0084327	-0.02	-0.015	-0.01	0.0052705
30	1.11	1.12	1.13	0.008165	1.08	1.098	1.11	0.0091894	-0.03	-0.022	-0.01	0.0063246
50	1.11	1.124	1.14	0.011738	1.07	1.09	1.12	0.013333	-0.05	-0.034	-0.02	0.015055

Device Test: 24.95 FREQ|500kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE

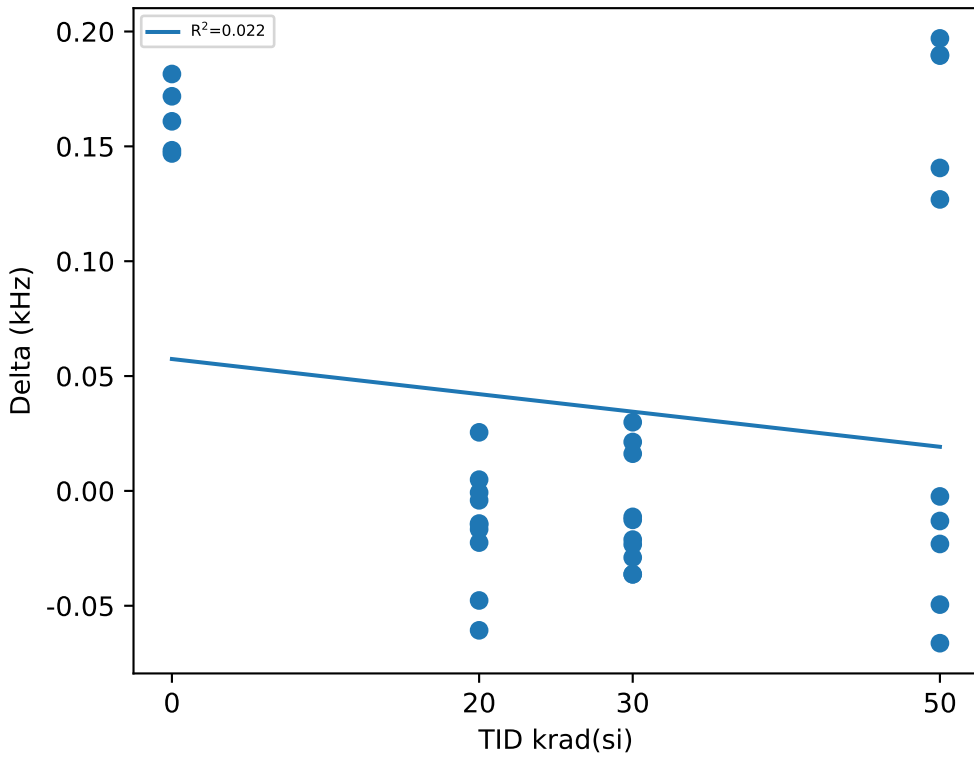
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	500.02	500.01	-0.0147
2	20	Biased	500.08	500.01	-0.0607
3	20	Biased	500.05	500.05	-0.0007
4	20	Biased	500.04	500.02	-0.0167
5	20	Biased	500.04	500.01	-0.0225
6	20	Unbiased	500.04	500.03	-0.0041
7	20	Unbiased	500.03	500.04	0.0049
8	20	Unbiased	500.03	500.01	-0.0142
9	20	Unbiased	500.02	500.04	0.0255
10	20	Unbiased	500.06	500.01	-0.0477
11	30	Biased	500.05	500.02	-0.0363
12	30	Biased	500.02	500.04	0.0162
13	30	Biased	500.02	500.04	0.0213
14	30	Biased	500.05	500.02	-0.029
15	30	Biased	500.04	500.02	-0.0212
16	30	Unbiased	500.01	500.04	0.0299
17	30	Unbiased	500.02	500.01	-0.0126
18	30	Unbiased	500.06	500.05	-0.0113
19	30	Unbiased	500.05	500.02	-0.0363
20	30	Unbiased	500.04	500.01	-0.0233
26	50	Unbiased	500.07	500.02	-0.0495
27	50	Unbiased	500.05	500.04	-0.0131
28	50	Unbiased	500.04	500.04	-0.0024
29	50	Unbiased	500.04	499.97	-0.0663
30	50	Unbiased	500.05	500.03	-0.0231
88	50	Biased-84Hr-Anneal	499.87	500	0.1269
89	50	Biased-84Hr-Anneal	499.84	500.03	0.1898
90	50	Biased-84Hr-Anneal	499.85	500.03	0.1895
91	50	Biased-84Hr-Anneal	499.86	500	0.1406
92	50	Biased-84Hr-Anneal	499.86	500.06	0.197
100	0	CORRELATION	499.88	500.04	0.1609
101	0	CORRELATION	499.85	500.03	0.1718
102	0	CORRELATION	499.84	499.99	0.1483
103	0	CORRELATION	499.88	500.03	0.1469
104	0	CORRELATION	499.84	500.02	0.1815

TID vs Post - Pre Exposure Delta

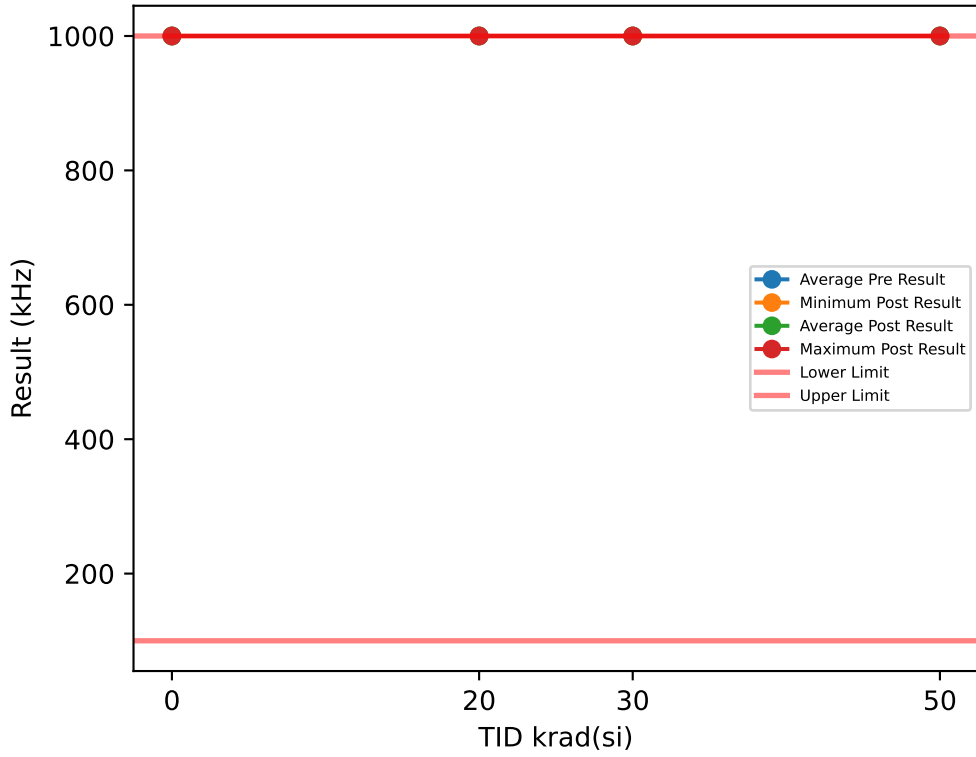


Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	499.84	499.86	499.88	0.019407	499.99	500.02	500.04	0.018217	0.1469	0.16188	0.1815	0.014943
20	500.02	500.04	500.08	0.017791	500.01	500.02	500.05	0.014064	-0.0607	-0.01509	0.0255	0.024893
30	500.01	500.04	500.06	0.018239	500.01	500.03	500.05	0.01498	-0.0363	-0.01026	0.0299	0.024296
50	499.84	499.95	500.07	0.10292	499.97	500.02	500.06	0.026041	-0.0663	0.06894	0.197	0.10886

Device Test: 24.96 FREQ|1000kHz/SYNC1/12//OPEN//@SYNC_FREQ_RANGE

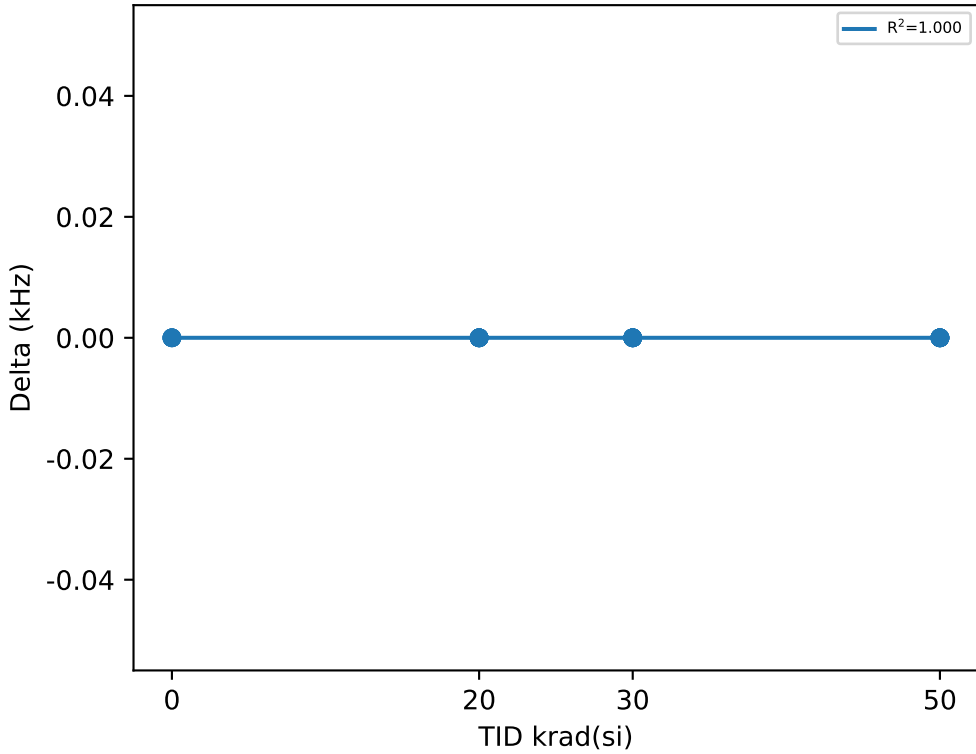
TID vs Result Stats



Test Results (Lower Limit = 100.0, Upper Limit = 1000.0 (kHz))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	1000	1000	0
2	20	Biased	1000	1000	0
3	20	Biased	1000	1000	0
4	20	Biased	1000	1000	0
5	20	Biased	1000	1000	0
6	20	Unbiased	1000	1000	0
7	20	Unbiased	1000	1000	0
8	20	Unbiased	1000	1000	0
9	20	Unbiased	1000	1000	0
10	20	Unbiased	1000	1000	0
11	30	Biased	1000	1000	0
12	30	Biased	1000	1000	0
13	30	Biased	1000	1000	0
14	30	Biased	1000	1000	0
15	30	Biased	1000	1000	0
16	30	Unbiased	1000	1000	0
17	30	Unbiased	1000	1000	0
18	30	Unbiased	1000	1000	0
19	30	Unbiased	1000	1000	0
20	30	Unbiased	1000	1000	0
26	50	Unbiased	1000	1000	0
27	50	Unbiased	1000	1000	0
28	50	Unbiased	1000	1000	0
29	50	Unbiased	1000	1000	0
30	50	Unbiased	1000	1000	0
88	50	Biased-84Hr-Anneal	1000	1000	0
89	50	Biased-84Hr-Anneal	1000	1000	0
90	50	Biased-84Hr-Anneal	1000	1000	0
91	50	Biased-84Hr-Anneal	1000	1000	0
92	50	Biased-84Hr-Anneal	1000	1000	0
100	0	CORRELATION	1000	1000	0
101	0	CORRELATION	1000	1000	0
102	0	CORRELATION	1000	1000	0
103	0	CORRELATION	1000	1000	0
104	0	CORRELATION	1000	1000	0

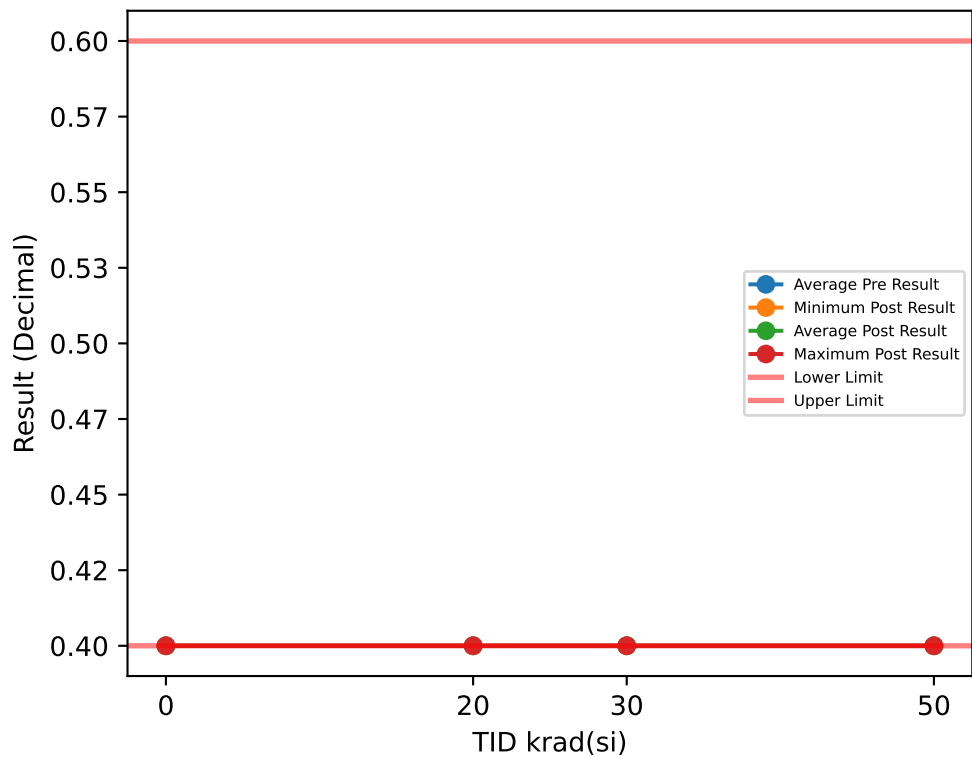
TID vs Post - Pre Exposure Delta



Test Statistics (kHz)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
20	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
30	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0
50	1000	1000	1000	0	1000	1000	1000	0	0	0	0	0

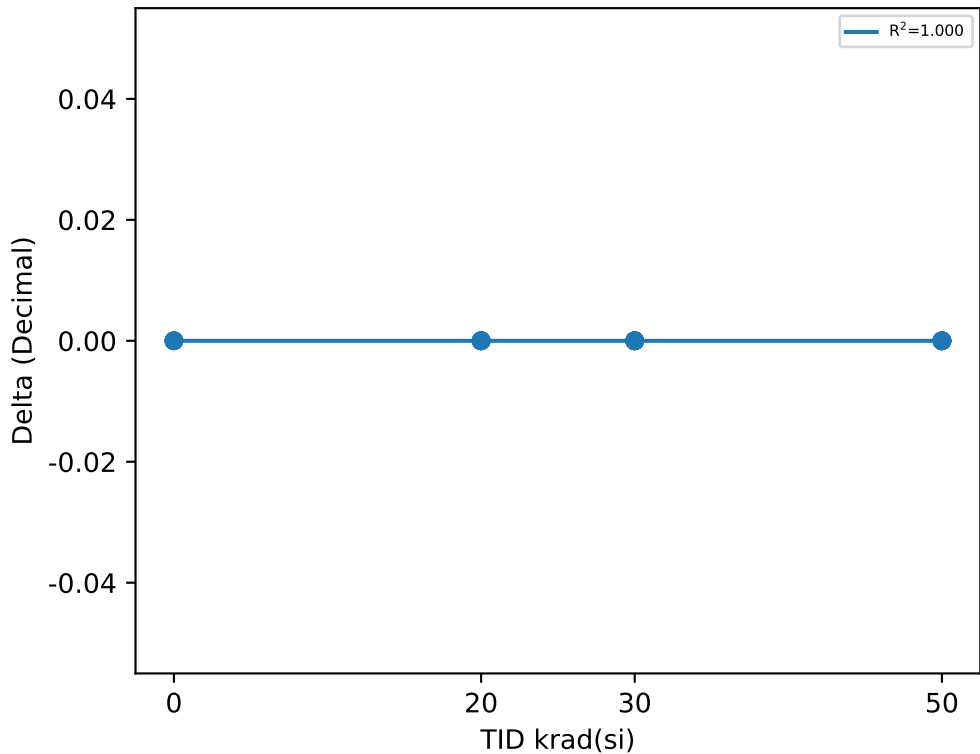
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.4	0.4	0
2	20	Biased	0.4	0.4	0
3	20	Biased	0.4	0.4	0
4	20	Biased	0.4	0.4	0
5	20	Biased	0.4	0.4	0
6	20	Unbiased	0.4	0.4	0
7	20	Unbiased	0.4	0.4	0
8	20	Unbiased	0.4	0.4	0
9	20	Unbiased	0.4	0.4	0
10	20	Unbiased	0.4	0.4	0
11	30	Biased	0.4	0.4	0
12	30	Biased	0.4	0.4	0
13	30	Biased	0.4	0.4	0
14	30	Biased	0.4	0.4	0
15	30	Biased	0.4	0.4	0
16	30	Unbiased	0.4	0.4	0
17	30	Unbiased	0.4	0.4	0
18	30	Unbiased	0.4	0.4	0
19	30	Unbiased	0.4	0.4	0
20	30	Unbiased	0.4	0.4	0
26	50	Unbiased	0.4	0.4	0
27	50	Unbiased	0.4	0.4	0
28	50	Unbiased	0.4	0.4	0
29	50	Unbiased	0.4	0.4	0
30	50	Unbiased	0.4	0.4	0
88	50	Biased-84Hr-Anneal	0.4	0.4	0
89	50	Biased-84Hr-Anneal	0.4	0.4	0
90	50	Biased-84Hr-Anneal	0.4	0.4	0
91	50	Biased-84Hr-Anneal	0.4	0.4	0
92	50	Biased-84Hr-Anneal	0.4	0.4	0
100	0	CORRELATION	0.4	0.4	0
101	0	CORRELATION	0.4	0.4	0
102	0	CORRELATION	0.4	0.4	0
103	0	CORRELATION	0.4	0.4	0
104	0	CORRELATION	0.4	0.4	0

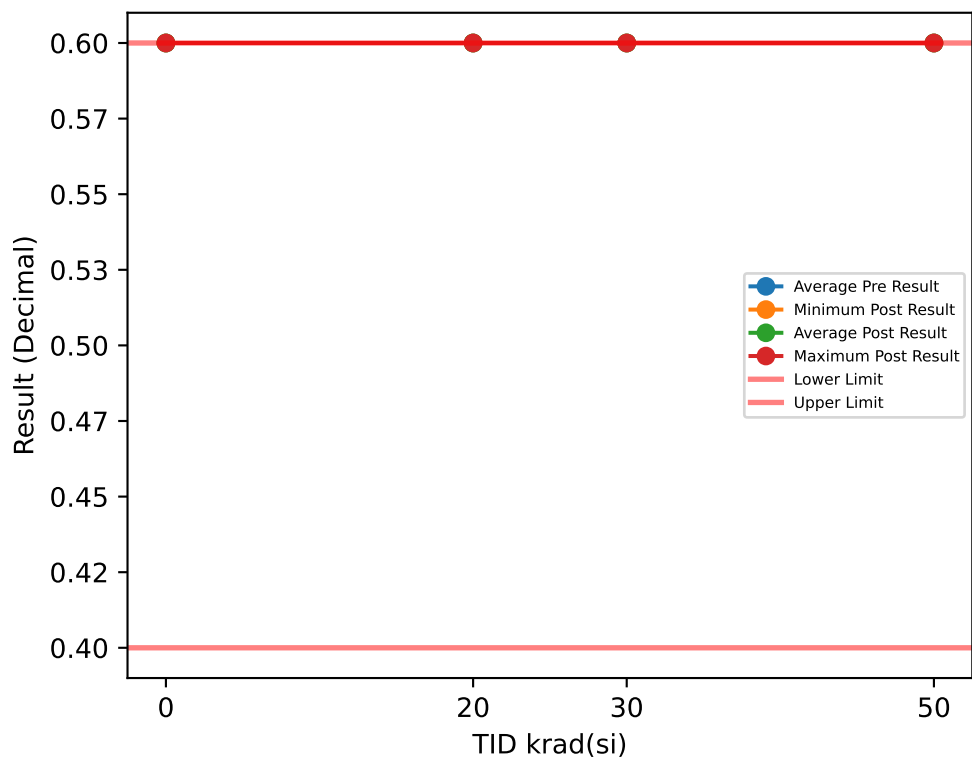
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
20	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
30	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0
50	0.4	0.4	0.4	0	0.4	0.4	0.4	0	0	0	0	0

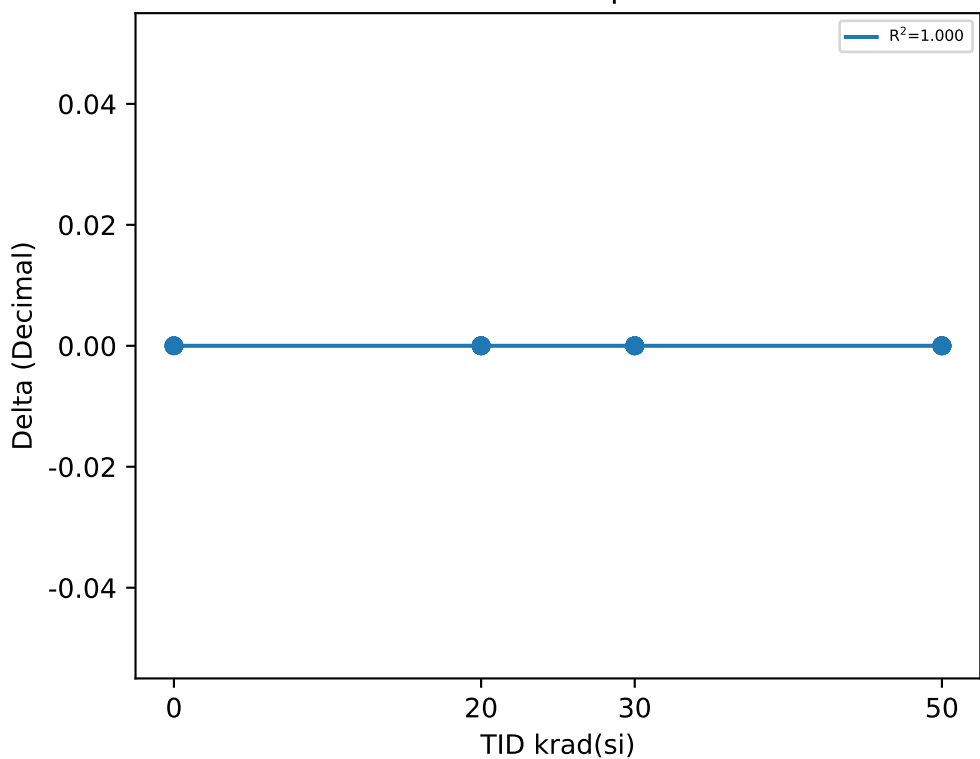
TID vs Result Stats



Test Results (Lower Limit = 0.4, Upper Limit = 0.6 (Decimal))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	0.6	0.6	0
2	20	Biased	0.6	0.6	0
3	20	Biased	0.6	0.6	0
4	20	Biased	0.6	0.6	0
5	20	Biased	0.6	0.6	0
6	20	Unbiased	0.6	0.6	0
7	20	Unbiased	0.6	0.6	0
8	20	Unbiased	0.6	0.6	0
9	20	Unbiased	0.6	0.6	0
10	20	Unbiased	0.6	0.6	0
11	30	Biased	0.6	0.6	0
12	30	Biased	0.6	0.6	0
13	30	Biased	0.6	0.6	0
14	30	Biased	0.6	0.6	0
15	30	Biased	0.6	0.6	0
16	30	Unbiased	0.6	0.6	0
17	30	Unbiased	0.6	0.6	0
18	30	Unbiased	0.6	0.6	0
19	30	Unbiased	0.6	0.6	0
20	30	Unbiased	0.6	0.6	0
26	50	Unbiased	0.6	0.6	0
27	50	Unbiased	0.6	0.6	0
28	50	Unbiased	0.6	0.6	0
29	50	Unbiased	0.6	0.6	0
30	50	Unbiased	0.6	0.6	0
88	50	Biased-84Hr-Anneal	0.6	0.6	0
89	50	Biased-84Hr-Anneal	0.6	0.6	0
90	50	Biased-84Hr-Anneal	0.6	0.6	0
91	50	Biased-84Hr-Anneal	0.6	0.6	0
92	50	Biased-84Hr-Anneal	0.6	0.6	0
100	0	CORRELATION	0.6	0.6	0
101	0	CORRELATION	0.6	0.6	0
102	0	CORRELATION	0.6	0.6	0
103	0	CORRELATION	0.6	0.6	0
104	0	CORRELATION	0.6	0.6	0

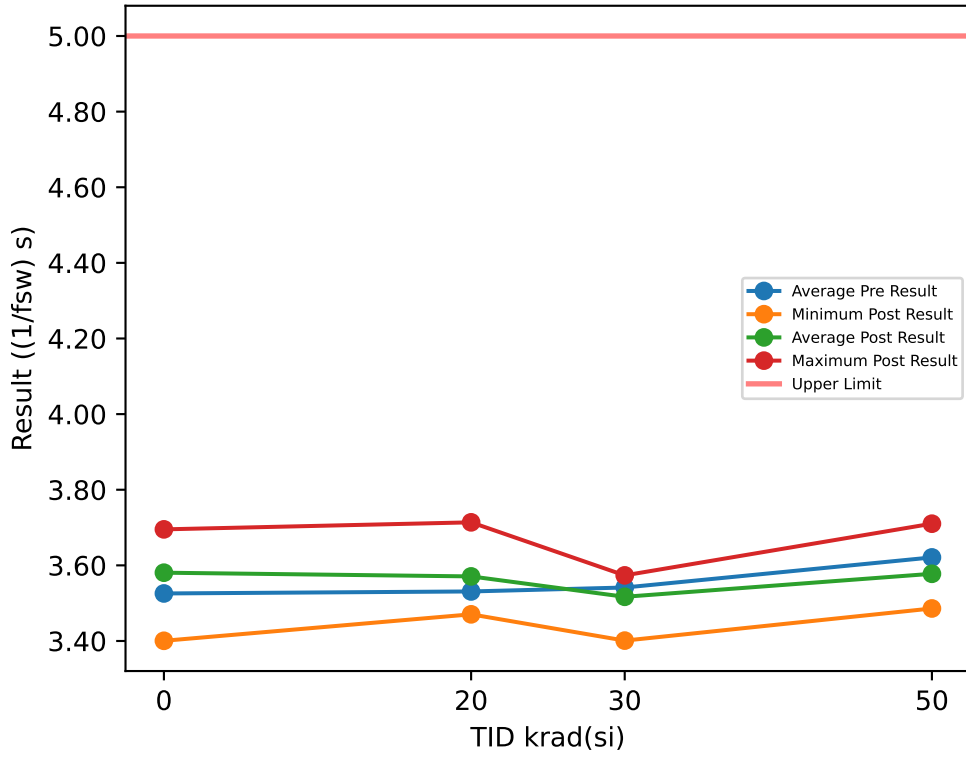
TID vs Post - Pre Exposure Delta



Test Statistics (Decimal)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
20	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
30	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0
50	0.6	0.6	0.6	0	0.6	0.6	0.6	0	0	0	0	0

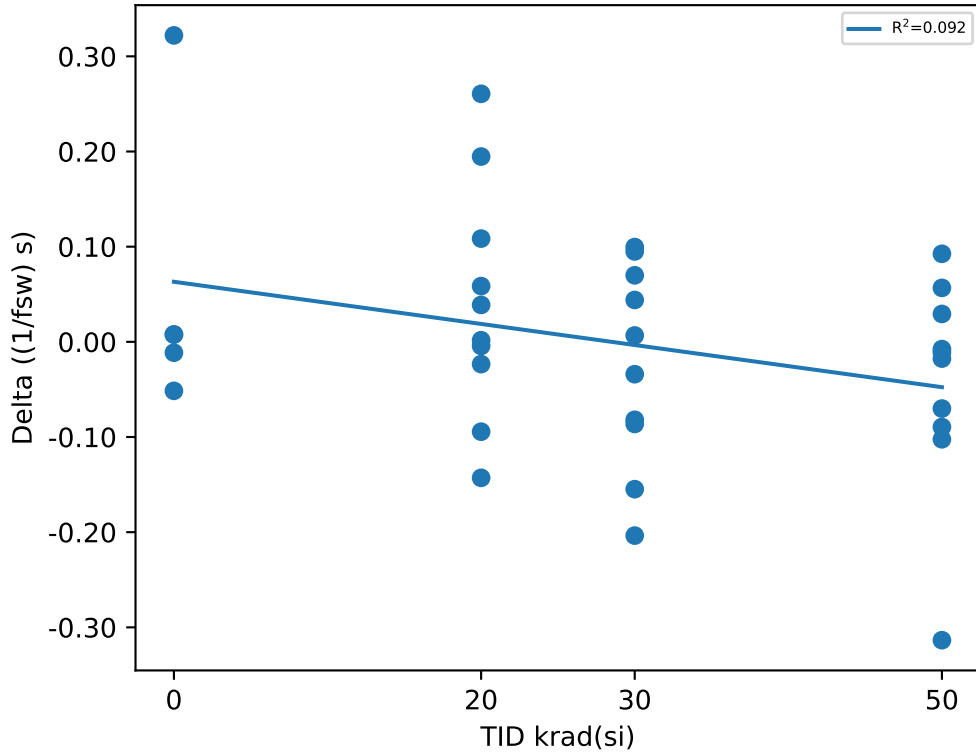
TID vs Result Stats



Test Results (Upper Limit = 5.0 ((1/fsw) s))

Serial #	krad(si)	Exposure Conditions	Pre Result	Post Result	Delta
1	20	Biased	3.4236	3.6842	0.2606
2	20	Biased	3.4484	3.5569	0.1085
3	20	Biased	3.5191	3.7138	0.1947
4	20	Biased	3.5635	3.6023	0.0388
5	20	Biased	3.5511	3.5528	0.0017
6	20	Unbiased	3.5773	3.573	-0.0043
7	20	Unbiased	3.4229	3.4815	0.0586
8	20	Unbiased	3.6272	3.4843	-0.1429
9	20	Unbiased	3.4939	3.4705	-0.0234
10	20	Unbiased	3.6831	3.5887	-0.0944
11	30	Biased	3.6511	3.4475	-0.2036
12	30	Biased	3.4356	3.5352	0.0996
13	30	Biased	3.6598	3.5735	-0.0863
14	30	Biased	3.6325	3.5506	-0.0819
15	30	Biased	3.5558	3.401	-0.1548
16	30	Unbiased	3.4715	3.5414	0.0699
17	30	Unbiased	3.5456	3.5523	0.0067
18	30	Unbiased	3.4991	3.5431	0.044
19	30	Unbiased	3.44	3.535	0.095
20	30	Unbiased	3.5231	3.4891	-0.034
26	50	Unbiased	3.5237	3.5161	-0.0076
27	50	Unbiased	3.5248	3.6173	0.0925
28	50	Unbiased	3.6559	3.5535	-0.1024
29	50	Unbiased	3.7995	3.486	-0.3135
30	50	Unbiased	3.6905	3.601	-0.0895
88	50	Biased-84Hr-Anneal	3.7803	3.7102	-0.0701
89	50	Biased-84Hr-Anneal	3.5041	3.4865	-0.0176
90	50	Biased-84Hr-Anneal	3.5867	3.6434	0.0567
91	50	Biased-84Hr-Anneal	3.5181	3.5474	0.0293
92	50	Biased-84Hr-Anneal	3.6266	3.6156	-0.011
100	0	CORRELATION	3.6137	3.6214	0.0077
101	0	CORRELATION	3.4119	3.4005	-0.0114
102	0	CORRELATION	3.6555	3.604	-0.0515
103	0	CORRELATION	3.3732	3.6952	0.322
104	0	CORRELATION	3.5742	3.5819	0.0077

TID vs Post - Pre Exposure Delta



Test Statistics ((1/fsw) s)

krad(si)	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	3.3732	3.5257	3.6555	0.12565	3.4005	3.5806	3.6952	0.1093	-0.0515	0.0549	0.322	0.15126
20	3.4229	3.531	3.6831	0.086637	3.4705	3.5708	3.7138	0.082098	-0.1429	0.03979	0.2606	0.1232
30	3.4356	3.5414	3.6598	0.083708	3.401	3.5169	3.5735	0.054328	-0.2036	-0.02454	0.0996	0.10568
50	3.5041	3.621	3.7995	0.10928	3.486	3.5777	3.7102	0.072606	-0.3135	-0.04332	0.0925	0.11355

7 Revision History

NOTE: Page numbers for previous revisions may differ from page numbers in the current version.

Changes from Revision A (December 2025) to Revision B (June 2026) Page

- Updated [Figure 2-1](#) TPS7H4012-SEP Bias Diagram.....4
 - Added the test number column to [Table 4-1](#)6
-

Changes from Revision * (November 2025) to Revision A (December 2025) Page

- Corrected device information.....2
 - Updated appendix data..... 12
-

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