

# TPS7H6101 Neutron Displacement Damage (NDD) Characterization Report



## ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7H6101-SEP device. The units were subjected to a total fluence of up to  $1 \times 10^{13}$  n/cm<sup>2</sup>(1MeV(Si) equivalent). The results obtained provide characterization data relevant to the evaluated conditions. A sample size of twelve units were exposed following MIL-STD-883, Method 1017 as guidance for Neutron Irradiation. An additional four devices were used as control units which were not irradiated. Electrical testing was performed at Texas Instruments before and after neutron irradiation using the production test program for TPS7H6101-SEP.

## Table of Contents

<b>1 Device Information</b> .....	2
1.1 Product Description.....	2
1.2 Device Details.....	2
<b>2 Neutron Displacement Test Setup</b> .....	3
2.1 Test Overview.....	3
2.2 Test Facility.....	3
2.3 Test Setup Details.....	4
<b>3 Test Results</b> .....	5
3.1 TPS7H6101-SEP Data Sheet Electrical Parameters.....	5
<b>4 Applicable and Reference Documents</b> .....	9
4.1 Applicable Documents.....	9
4.2 Reference Documents.....	9
<b>A Appendix: NDD Report Data</b> .....	9

## List of Figures

Figure 2-1. TPS7H6101-SEP Device.....	3
---------------------------------------	---

## List of Tables

Table 1-1. Device Details.....	2
Table 2-1. Neutron Irradiation Details.....	4
Table 3-1. Electrical Characteristics Table.....	5

## Trademarks

All trademarks are the property of their respective owners.

## 1 Device Information

### 1.1 Product Description

The TPS7H6101-SEP is a radiation-tolerant 200V e-mode GaN power-FET half bridge with integrated gate driver. Integration of the e-mode GaN FETs and gate driver simplifies design, reduces component count, and reduces board space. The LGA package is 12mm by 9mm.

### 1.2 Device Details

**Table 1-1. Device Details**

TI Device	TPS7H6101-SEP
TI Part Number	TPS7H6101MNPRTSEPM
Package	64-pin LGA (NPR)
Technology	Linear BiCMOS 7 (LBC7) and GaN
Quantity Tested	4 devices each level (12 devices total)
Exposure Facility	VPT Rad
Neutron Fluence (1-MeV equivalent)	Up to $1.0 \times 10^{13}$ n/cm <sup>2</sup>
Irradiation Temperature	Room temperature

## 2 Neutron Displacement Test Setup

### 2.1 Test Overview

The TPS7H6101-SEP was electrically pre- and post-tested using the production automated test equipment program.

General test procedures adhered to MIL-STD-883, Method 1017 for Neutron Irradiation of TPS7H6101-SEP. The units were irradiated up to  $1 \times 10^{13}$  n/cm<sup>2</sup> in unbiased conditions. See the details in the following table.



**Figure 2-1. TPS7H6101-SEP Device**

### 2.2 Test Facility

VPT Rad performs all neutron displacement damage irradiations in a Low-Enriched, open-pool, water moderated, thermal neutron reactor. VPT Rad uses flat-plate type fuel, and having a maximum thermal energy output of up to 1MW. The Fast Neutron Irradiator (FNI) faces one side of the reactor core, the design produces a geometrical planar beam of fast neutrons that is approximately uniform over an area of 12in × 20in. Lead and thermal neutron absorbing compounds are combined to filter out both fission gammas and thermal neutrons. The ratio of fast-to-thermal neutrons is approximately 400:1, with a gamma exposure of less than 150rad (Si) for a 1E12 n/cm<sup>2</sup> (1MeV Si equivalent) exposure. The FNI can accommodate a sample or samples with size up to 30cm in diameter and 15 cm thick including packaging materials. The minimum neutron fluence rate is 1E6 n/cm<sup>2</sup>-s. The maximum neutron fluence rate is approximately 1.0 E11 n/cm<sup>2</sup>-s. Both values are 1MeV Si equivalent.

The neutron fluence rate is determined using the previously measured neutron radiation field for the FNI, performed in accordance with ASTM standards (ASTM F1190), and correlated to the measured reactor power level. The neutron dose is timed to meet the customer-specified fluence for the irradiation. Neutron dosimetry meeting ASTM standards (ASTM E265) is used to track and verify irradiations meet the required minimum. The facility retains source-suitability with the Defense Logistics Agency (DLA) Laboratory Suitability Program for ASTM Test Method 1017. The DUTS are typically irradiation in an unbiased condition as per TM1017. If

bias conditions are required, the conditions can be maintained through dry thimbles connected to the irradiation volume.

### 2.3 Test Setup Details

Devices were irradiated at three fluence levels in unbiased conditions:  $1 \times 10^{12}$  n / cm<sup>2</sup> ,  $5 \times 10^{12}$  n / cm<sup>2</sup> and  $1 \times 10^{13}$  n / cm<sup>2</sup> .

**Table 2-1. Neutron Irradiation Details**

Group	Sample Quantity	Neutron Fluence (n/cm <sup>2</sup> )	BIAS
A	4	$1 \times 10^{12}$	Unbiased
B	4	$5 \times 10^{12}$	Unbiased
C	4	$1 \times 10^{13}$	Unbiased
Correlation	4	0	N/A

### 3 Test Results

The data presented below represent the measured parameter values recorded throughout the test. All of the parameters passed the functional tests and remained within the specified limits. The full parameter list is shown in [Section 3.1](#) and the related data can be found in [Appendix A](#).

Specifications are at ambient temperature  $T_A = 25^\circ\text{C}$ . Parameters that are typical are omitted from the table.

#### 3.1 TPS7H6101-SEP Data Sheet Electrical Parameters

**Table 3-1. Electrical Characteristics Table**

PARAMETER	TEST CONDITION	MIN	TYP	MAX	UNIT	TEST NUMBERS	
<b>GAN POWER FETs</b>							
$R_{DS(on)}$ (ls)	Drain-source on resistance - low side	$V_{PWM\_LI} = 5V$ $I_D = 2A$	$T_A = 25^\circ\text{C}$		16	m $\Omega$ 14.3	
$V_{SD(ls)}$	Low side source-drain (GND to SW_LS) third quadrant voltage	$I_D = -0.5A$			1.8	V 14.7	
		$I_D = -1A$			2	V 14.9	
$I_{DSS(ls)}$	Low side drain (SW_LS to GND) leakage current	$V_{DS(ls)} = 150V$ $V_{PWM\_LI} = 0V$	$T_A = 25^\circ\text{C}$		15	150 $\mu\text{A}$ 14.20	
$R_{DS(on)}$ (hs)	Drain-source on resistance - high side	$V_{EN\_HI} = 5V$ $I_D = 2A$	$T_A = 25^\circ\text{C}$		16	m $\Omega$ 14.6	
$V_{SD(hs)}$	Low side source-drain (SW_HS to HVIN) third quadrant voltage	$I_D = -0.5A$			1.8	V 14.11	
		$I_D = -1A$			2	V 14.13	
$I_{DSS(hs)}$	Low side drain (SW_HS to HVIN) leakage current		$T_A = 25^\circ\text{C}$		15	150 $\mu\text{A}$ 14.27	
<b>SUPPLY CURRENTS</b>							
$I_{Q\_LS}$	Low side shut down current	EN = 0V, VIN = 12V, BOOT = 10V	MODE = PWM		5	6.8	mA 12.1 12.9, 12.17
			MODE = IIM		5	8	mA 12.25, 12.33, 12.41, 12.49, 12.57, 12.65
$I_{Q\_HS}$	High side shut down current	EN = 0V, VIN = 12V, BOOT = 10V	MODE = PWM		5	6.3	mA 12.2, 12.10, 12.18
			MODE = IIM		5	6.3	mA 12.26, 12.34, 12.42, 12.50, 12.58, 12.66
$I_{OP\_LS}$	Low side operating current	MODE = PWM	f = 500kHz		9	12	mA 12.3, 12.11, 12.19
			f = 1Mhz		13	16	mA 12.5, 12.13, 12.21
			f = 2Mhz		21	25	mA 12.7, 12.15, 12.23
		MODE = IIM	f = 500kHz		9	12	mA 12.27, 12.35, 12.43, 12.51, 12.59, 12.67
			f = 1Mhz		13	16	mA 12.29, 12.37, 12.45, 12.53, 12.61, 12.69
			f = 2Mhz		21	25	mA 12.31, 12.39, 12.47, 12.55, 12.63, 12.71

**Table 3-1. Electrical Characteristics Table (continued)**

PARAMETER		TEST CONDITION		MIN	TYP	MAX	UNIT	TEST NUMBERS
I <sub>OP_HS</sub>	High side operating current	MODE = PWM	f = 500kHz		9	12	mA	12.4, 12.12, 12.20
			f = 1Mhz		13	16	mA	12.6, 12.14, 12.22
			f = 2Mhz		21	25	mA	12.8, 12.16, 12.24
		MODE = IIM	f = 500kHz		9	12	mA	12.28, 12.36, 12.44
			f = 1Mhz		13	16	mA	12.30, 12.38, 12.46, 12.54, 12.62, 12.70
			f = 2Mhz		21	25	mA	12.32, 12.40, 12.48, 12.56, 12.64, 12.72
<b>INTERNAL REGULATORS</b>								
V <sub>BP5L</sub>	Low side 5V regulator output voltage	C <sub>BP5L</sub> = 1μF		4.75	5.0	5.175	V	16.1, 16.2, 16.3
V <sub>BP5H</sub>	High side 5V regulator output voltage	C <sub>BP5H</sub> = 1μF		4.75	5.0	5.175	V	16.7, 16.8, 16.9
V <sub>BP7L</sub>	7V regulator output voltage	C <sub>BP7L</sub> = 1μF		6.65	7.0	7.35	V	16.4, 16.5, 16.6
<b>UNDERVOLTAGE PROTECTION</b>								
BP5H <sub>R</sub>	BP5H UVLO rising threshold	C <sub>BP5H</sub> = 1μF			4.1		V	15.25, 15.28, 15.31
BP5H <sub>F</sub>	BP5H UVLO falling threshold				3.9		V	15.26, 15.29, 15.32
BP5H <sub>H</sub>	BP5H UVLO hysteresis				0.25		V	15.27, 15.30, 15.33
BP5L <sub>R</sub>	BP5L UVLO rising threshold	C <sub>BP5L</sub> = 1μF			4.1		V	15.7, 15.10, 15.13
BP5L <sub>F</sub>	BP5L UVLO falling threshold				3.9		V	15.8, 15.11, 15.14
BP5L <sub>H</sub>	BP5L UVLO hysteresis				0.25		V	15.9, 15.12, 15.15
BP7L <sub>R</sub>	BP7L UVLO rising threshold	C <sub>BP7L</sub> = 1μF			6.4		V	15.16, 15.19, 15.22
BP7L <sub>F</sub>	BP7L UVLO falling threshold				6.1		V	15.17, 15.20, 15.23
BP7L <sub>H</sub>	BP7L UVLO hysteresis				0.3		V	15.18, 15.21, 15.24
VIN <sub>R</sub>	VIN UVLO rising threshold			8.0	8.6	9.0	V	15.1
VIN <sub>F</sub>	VIN UVLO falling threshold			7.5	8.1	8.5	V	15.2
<b>VIN<sub>H</sub></b>	<b>VIN UVLO hysteresis</b>				<b>0.5</b>		<b>V</b>	<b>15.3</b>
BOOT <sub>R</sub>	BOOT UVLO rising threshold			6.6	7.1	7.4	V	15.4
BOOT <sub>F</sub>	BOOT UVLO falling threshold			6.2	6.65	7.0	V	15.5
BOOT <sub>H</sub>	BOOT UVLO hysteresis				0.45		V	15.6

**Table 3-1. Electrical Characteristics Table (continued)**

PARAMETER	TEST CONDITION		MIN	TYP	MAX	UNIT	TEST NUMBERS	
<b>INPUT PINS</b>								
$V_{IR}$	Input rising edge threshold		1.85		2.85	V	17.1, 17.4, 17.11, 17.14, 17.21, 17.24	
$V_{IF}$	Input falling edge threshold		0.95		1.95	V	17.2, 17.5, 17.12, 17.15, 17.22, 17.25	
$V_{IHYS}$	Input hysteresis			0.7		V	17.3, 17.6, 17.13, 17.16, 17.23, 17.26	
$R_{PD}$	Input pull-down resistance <sup>ev</sup>	V = 2.15V applied at input (EN_HI or PWM_LI)	100		400	k $\Omega$	17.7, 17.8, 17.17, 17.18, 17.27, 17.28	
<b>PROGRAMMABLE DEAD TIME</b>								
$t_{DLH}$	Dead time low side falling to high side	MODE = PWM From $V_{LSG}$ = 0.48V to $V_{HSG}$ = 0.48V 100kHz < f $\leq$ 2MHz	RLH = 35.7k $\Omega$	20	30	39	ns	19.1, 19.3, 19.5, 19.7, 19.9, 19.11, 19.13, 19.15, 19.17, 19.19, 19.21, 19.23
$t_{DHL}$	Dead time high side falling to low side	MODE = PWM From $V_{HSG}$ = 0.48V to $V_{LSG}$ = 0.48V 100kHz < f $\leq$ 2MHz	RLH = 57.6k $\Omega$	36	44	55	ns	19.2, 19.4, 19.6, 19.8, 19.10, 19.12, 19.14, 19.16, 19.18, 19.20, 19.22, 19.24
<b>BOOTSTRAP DIODE SWITCH</b>								
$R_{BST\_SW}$	Bootstrap diode switch resistance	$I_{BST\_SW}$ = 100mA		0.3			$\Omega$	17.9, 17.19, 17.29
	Bootstrap diode switch parallel resistance	$I_{BST\_RP}$ = 1mA	0.8	1	1.2		k $\Omega$	17.10, 17.20, 17.30
<b>POWER GOOD</b>								
$V_{PG\_OL}$	Logic-low output	$I_{FLT}$ = 1mA			0.4		V	18.1
$R_{PG}$	PGOOD internal resistance	BP5L = 5V, BP7L = 7V, VIN = 12V	0.6	1	1.8		M $\Omega$	18.3, 18.4, 18.5
$V_{BP7L\_MIN\_PG}$	Minimum BP7L voltage for valid PGOOD			3	3.6		V	18.2
<b>GATE DRIVE TIMING</b>								
$t_{p(off)(ls)}$	Low side turn-off propagation delay	From $V_{PWM\_LI}$ = $V_{IR}$ to $V_{LSG}$ = 2.5V $I_D$ = 400mA	Mode = PWM		41	51	ns	19.25, 19.31, 19.37
		From $V_{PWM\_LI}$ = $V_{IF}$ to $V_{LSG}$ = 2.5V $I_D$ = 400mA	Mode = IIM		33	42	ns	19.44, 19.54, 19.64, 19.74, 19.84, 19.94

**Table 3-1. Electrical Characteristics Table (continued)**

PARAMETER		TEST CONDITION		MIN	TYP	MAX	UNIT	TEST NUMBERS
$t_{p(on)(ls)}$	Low side turn-on gate drive propagation delay	From $V_{PWM\_LI} = V_{IR}$ to $V_{LSG} = 2.5V$ $I_D = 400mA$	Mode = IIM		33	42	ns	19.43, 19.53, 19.63, 19.73, 19.83, 19.93
$t_{p(off)(hs)}$	High side turn-off propagation delay	From $V_{PWM\_LI} = V_{IF}$ to $V_{HSG} = 2.5V$ $I_D = 400mA$	Mode = PWM		35	50	ns	19.26, 19.32, 19.38
		From $V_{EN\_LI} = V_{IF}$ to $V_{HSG} = 2.5V$ $I_D = 400mA$	Mode = IIM		35	45	ns	19.46, 19.56, 19.66, 19.76, 19.86, 19.96
$t_{p(on)(hs)}$	High side turn-on propagation delay	From $V_{EN\_HI} = V_{IR}$ to $V_{HSG} = 2.5V$ $I_D = 400mA$	Mode = IIM		35	50	ns	19.45, 19.55, 19.65, 19.75, 19.85, 19.95
$t_{d(on)(ls)}$	Low side turn-on delay	From $V_{PWM\_LI} = V_{IF}$ to $V_{DS(ls)} = 4V$ $I_D = 400mA$	Mode = PWM		45	60	ns	19.27, 19.33, 19.39
		From $V_{PWM\_LI} = V_{IR}$ to $V_{DS(ls)} = 4V$ $I_D = 400mA$	Mode = IIM		45	60	ns	19.47, 19.57, 19.67, 19.77, 19.87, 19.97
$t_{d(off)(ls)}$	Low side turn-off delay	From $V_{PWM\_LI} = V_{IR}$ to $V_{DS(ls)} = 1V$ $I_D = 400mA$	Mode = PWM		51	79	ns	19.28, 19.34, 19.40
		From $V_{PWM\_LI} = V_{IF}$ to $V_{DS(ls)} = 1V$ $I_D = 400mA$	Mode = IIM		45	60	ns	19.48, 19.58, 19.68, 19.78, 19.88, 19.98
$t_{d(on)(hs)}$	High side turn-on delay	From $V_{PWM\_LI} = V_{IR}$ to $V_{DS(hs)} = 1V$ $I_D = 400mA$	Mode = PWM		39	65	ns	19.29, 19.35, 19.41
		From $V_{EN\_HI} = V_{IR}$ to $V_{DS(hs)} = 1V$ $I_D = 400mA$	Mode = IIM		39	65	ns	19.49, 19.59, 19.69, 19.79, 19.89, 19.99
$t_{d(off)(hs)}$	High side turn-off delay	From $V_{PWM\_LI} = V_{IF}$ to $V_{DS(hs)} = 4V$ $I_D = 400mA$	Mode = PWM		45	65	ns	19.30, 19.36, 19.42
		From $V_{PWM\_LI} = V_{IF}$ to $V_{DS(hs)} = 4V$ $I_D = 400mA$	Mode = IIM		45	65	ns	19.50, 19.60, 19.70, 19.80, 19.90, 19.100

**Table 3-1. Electrical Characteristics Table (continued)**

PARAMETER		TEST CONDITION		MIN	TYP	MAX	UNIT	TEST NUMBERS
$t_{MON}$	Delay matching low side on and high side off		MODE = IIM		5	8	ns	19.51, 19.61, 19.71, 19.81, 19.91, 19.101
$t_{MOFF}$	Delay matching low side off and high side on		MODE = IIM		5	8	ns	19.52, 19.62, 19.72, 19.82, 19.92, 19.102
$t_{PW(IIM)}$	Minimum input pulse width (turn-on)		MODE = IIM		5	8	ns	19.103, 19.105, 19.107, 19.109, 19.111, 19.113
$t_{PW(IIM)}$ (OFF)	Minimum input pulse width (turn-off)		MODE = IIM		12	16	ns	19.104, 19.106, 19.108, 19.110, 19.112, 19.114

## 4 Applicable and Reference Documents

### 4.1 Applicable Documents

- Texas Instruments, [TPS7H6101-SEP 200V, 10A GaN Half Bridge Power Stage](#) Datasheet
- Texas Instruments, [TPS7H6101-SEP Evaluation Module](#) EVM User's Guide
- Texas Instruments, [TPS7H6101-SEP Single Event Effects \(SEE\) Report](#) Radiation Report

### 4.2 Reference Documents

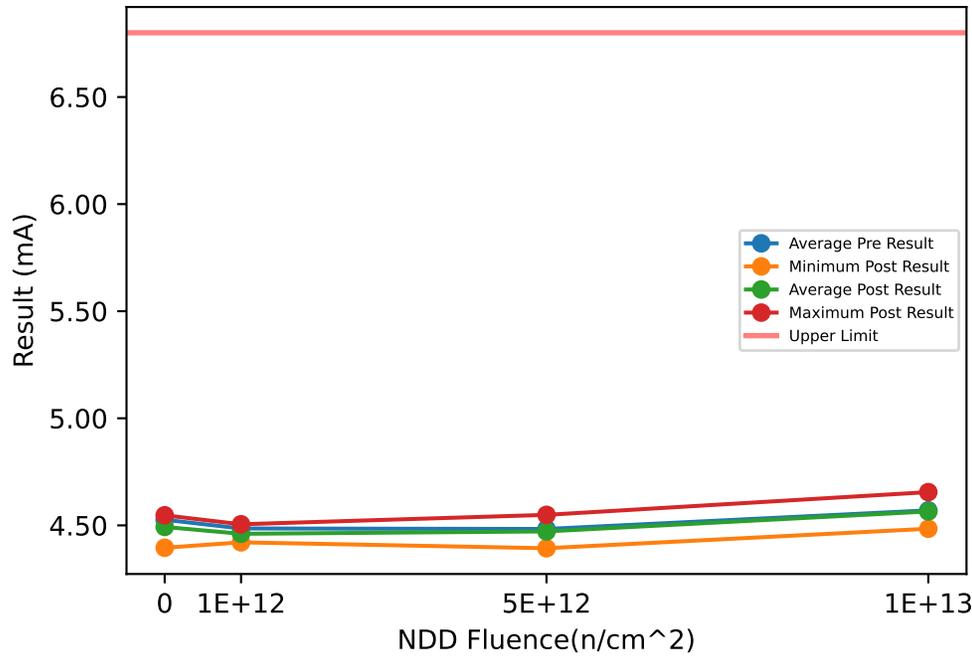
Texas Instruments neutron irradiation test follow the guideline from MIL-STD-883 TM 1017. The document is available in Defense Logistic Agency's website.

## A Appendix: NDD Report Data

This appendix contains the detailed NDD test results.

# Device Test: 12.1 IQ|PWM/VIN/10/8///0MHz/@IQ\_LS\_PWM

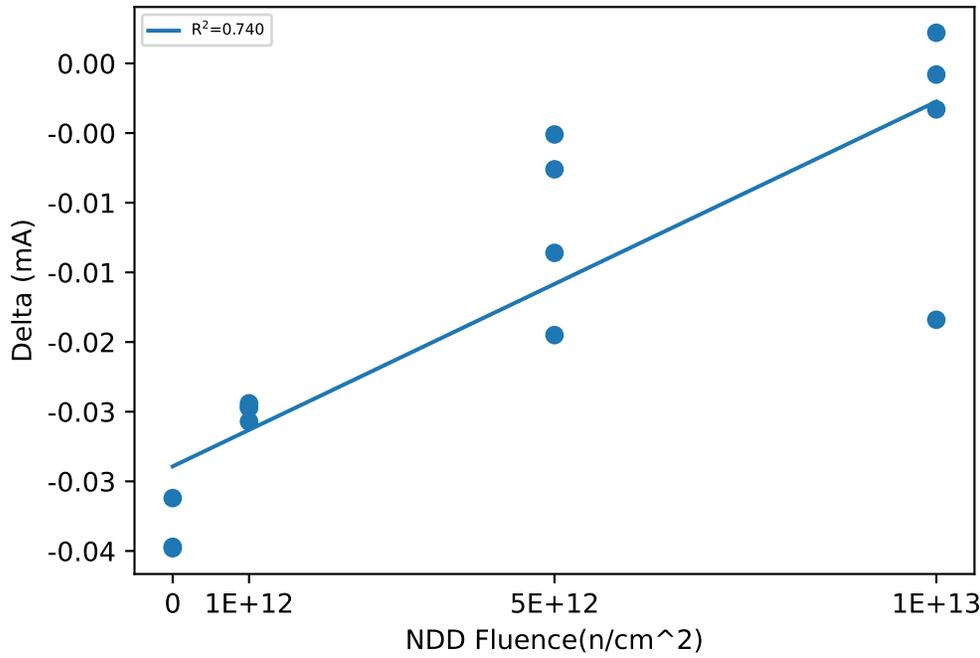
## NDD vs Result Stats



## Test Results (Upper Limit = 6.8 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.5819	4.5471	-0.0348
42	0	CORRELATION	4.4302	4.3955	-0.0347
43	0	CORRELATION	4.5668	4.5356	-0.0312
51	1e+12	NDD	4.5298	4.5051	-0.0247
52	1e+12	NDD	4.4465	4.4208	-0.0257
53	1e+12	NDD	4.4758	4.4511	-0.0247
54	1e+12	NDD	4.49	4.4656	-0.0244
55	5e+12	NDD	4.5686	4.5491	-0.0195
56	5e+12	NDD	4.4009	4.3933	-0.0076
57	5e+12	NDD	4.4112	4.4061	-0.0051
58	5e+12	NDD	4.5522	4.5386	-0.0136
59	1e+13	NDD	4.5391	4.5358	-0.0033
60	1e+13	NDD	4.656	4.6552	-0.0008
61	1e+13	NDD	4.5822	4.5844	0.0022
62	1e+13	NDD	4.5027	4.4843	-0.0184

## NDD vs Post - Pre Exposure Delta

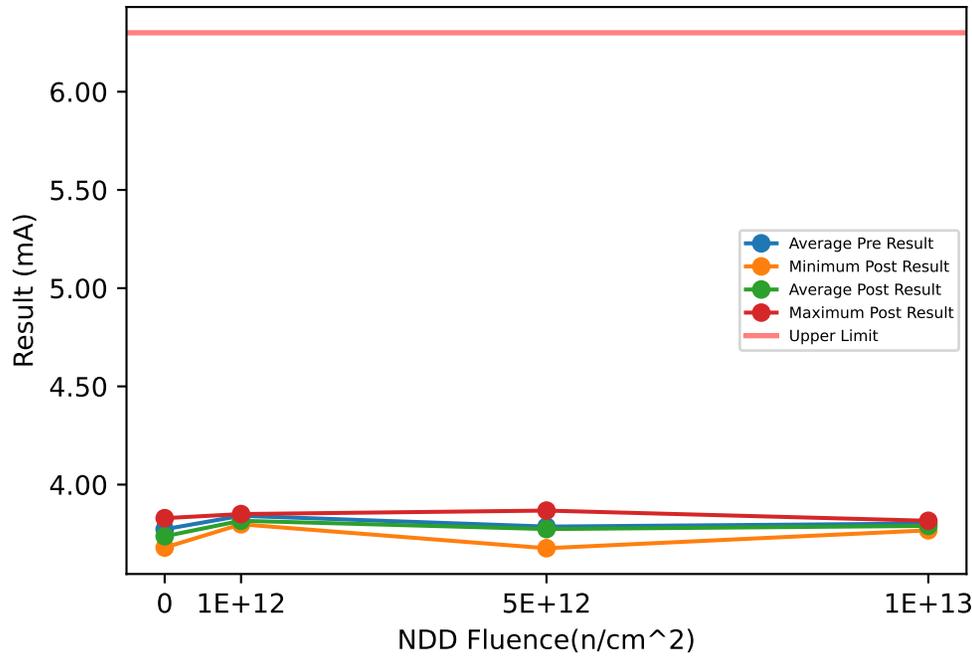


## Test Statistics (mA)

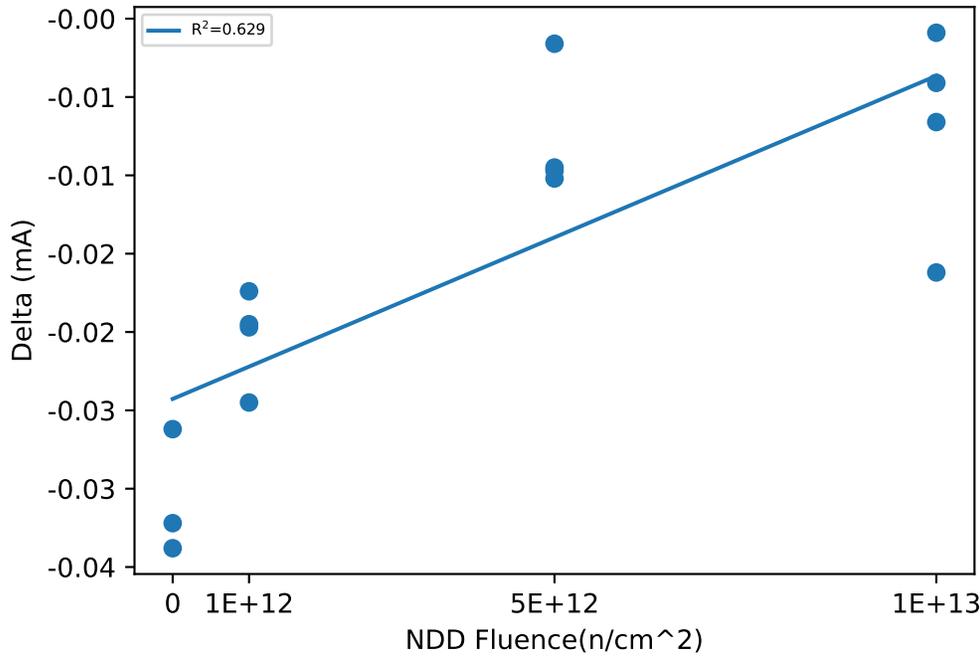
Fluence(n/cm <sup>2</sup> )	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	4.4302	4.5263	4.5819	0.083567	4.3955	4.4927	4.5471	0.084403	-0.0348	-0.033567	-0.0312	0.0020502
1e+12	4.4465	4.4855	4.5298	0.034631	4.4208	4.4607	4.5051	0.035022	-0.0257	-0.024875	-0.0244	0.00056789
5e+12	4.4009	4.4832	4.5686	0.089464	4.3933	4.4718	4.5491	0.083499	-0.0195	-0.01145	-0.0051	0.0064439
1e+13	4.5027	4.57	4.656	0.065901	4.4843	4.5649	4.6552	0.07275	-0.0184	-0.005075	0.0022	0.0091635

# Device Test: 12.10 IQ|PWM/BOOT/12/10///0MHz/@IQ\_HS\_PWM

## NDD vs Result Stats



## NDD vs Post - Pre Exposure Delta



## Test Results (Upper Limit = 6.3 (mA))

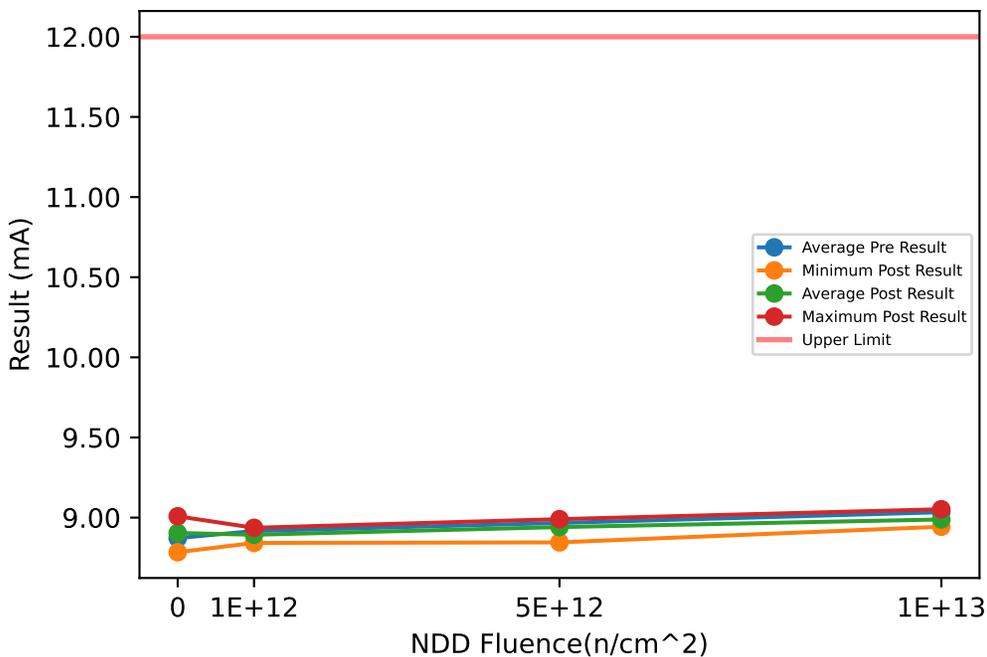
Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.7166	3.6794	-0.0372
42	0	CORRELATION	3.868	3.8292	-0.0388
43	0	CORRELATION	3.7339	3.7027	-0.0312
51	1e+12	NDD	3.8726	3.8502	-0.0224
52	1e+12	NDD	3.831	3.8015	-0.0295
53	1e+12	NDD	3.8225	3.798	-0.0245
54	1e+12	NDD	3.8391	3.8144	-0.0247
55	5e+12	NDD	3.7379	3.7313	-0.0066
56	5e+12	NDD	3.6909	3.6762	-0.0147
57	5e+12	NDD	3.8338	3.8193	-0.0145
58	5e+12	NDD	3.883	3.8678	-0.0152
59	1e+13	NDD	3.7885	3.7673	-0.0212
60	1e+13	NDD	3.8051	3.796	-0.0091
61	1e+13	NDD	3.8218	3.8159	-0.0059
62	1e+13	NDD	3.7915	3.7799	-0.0116

## Test Statistics (mA)

Fluence(n/cm^2)	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	3.7166	3.7728	3.868	0.082869	3.6794	3.7371	3.8292	0.080607	-0.0388	-0.035733	-0.0312	0.0040067
1e+12	3.8225	3.8413	3.8726	0.02194	3.798	3.816	3.8502	0.02385	-0.0295	-0.025275	-0.0224	0.0030026
5e+12	3.6909	3.7864	3.883	0.087656	3.6762	3.7736	3.8678	0.086097	-0.0152	-0.01275	-0.0066	0.0041106
1e+13	3.7885	3.8017	3.8218	0.015208	3.7673	3.7898	3.8159	0.021007	-0.0212	-0.01195	-0.0059	0.0065932

Device Test: 12.11 IOP|PWM/VIN/12/10///0.5MHz/@I\_OP\_LS\_PWM\_500KHZ

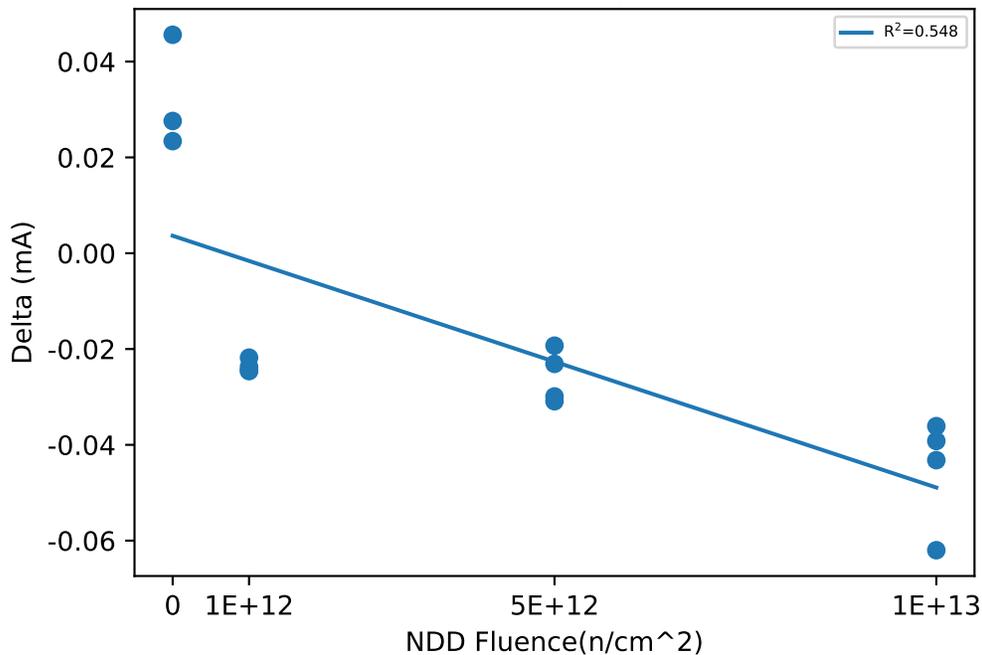
NDD vs Result Stats



Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.9627	9.0083	0.0456
42	0	CORRELATION	8.7607	8.7841	0.0234
43	0	CORRELATION	8.8931	8.9207	0.0276
51	1e+12	NDD	8.931	8.9064	-0.0246
52	1e+12	NDD	8.9113	8.8868	-0.0245
53	1e+12	NDD	8.8659	8.8422	-0.0237
54	1e+12	NDD	8.9583	8.9365	-0.0218
55	5e+12	NDD	9.0113	8.9804	-0.0309
56	5e+12	NDD	8.8686	8.8455	-0.0231
57	5e+12	NDD	9.0097	8.9904	-0.0193
58	5e+12	NDD	8.9772	8.9473	-0.0299
59	1e+13	NDD	9.0395	8.9963	-0.0432
60	1e+13	NDD	9.0914	9.0522	-0.0392
61	1e+13	NDD	8.9983	8.9622	-0.0361
62	1e+13	NDD	9.0051	8.9431	-0.062

NDD vs Post - Pre Exposure Delta

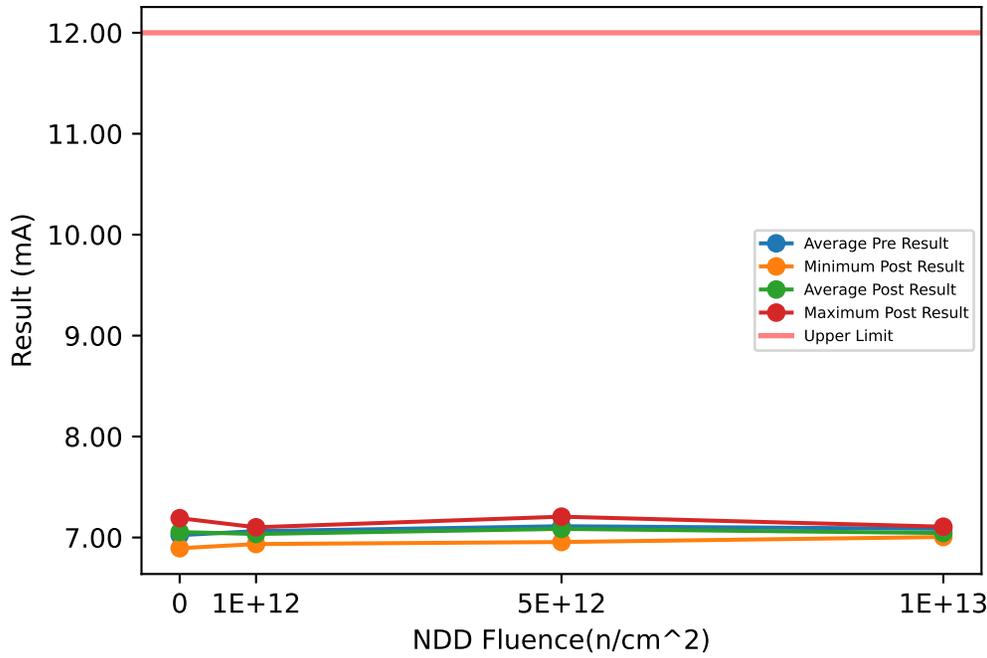


Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	8.7607	8.8722	8.9627	0.10261	8.7841	8.9044	9.0083	0.11299	0.0234	0.0322	0.0456	0.011793
1e+12	8.8659	8.9166	8.9583	0.038922	8.8422	8.893	8.9365	0.039543	-0.0246	-0.02365	-0.0218	0.0012974
5e+12	8.8686	8.9667	9.0113	0.067261	8.8455	8.9409	8.9904	0.066213	-0.0309	-0.0258	-0.0193	0.0055486
1e+13	8.9983	9.0336	9.0914	0.04256	8.9431	8.9885	9.0522	0.047859	-0.062	-0.045125	-0.0361	0.011619

# Device Test: 12.12 IOP|PWM/BOOT/12/10///0.5MHz/@I\_OP\_HS\_PWM\_500KHZ

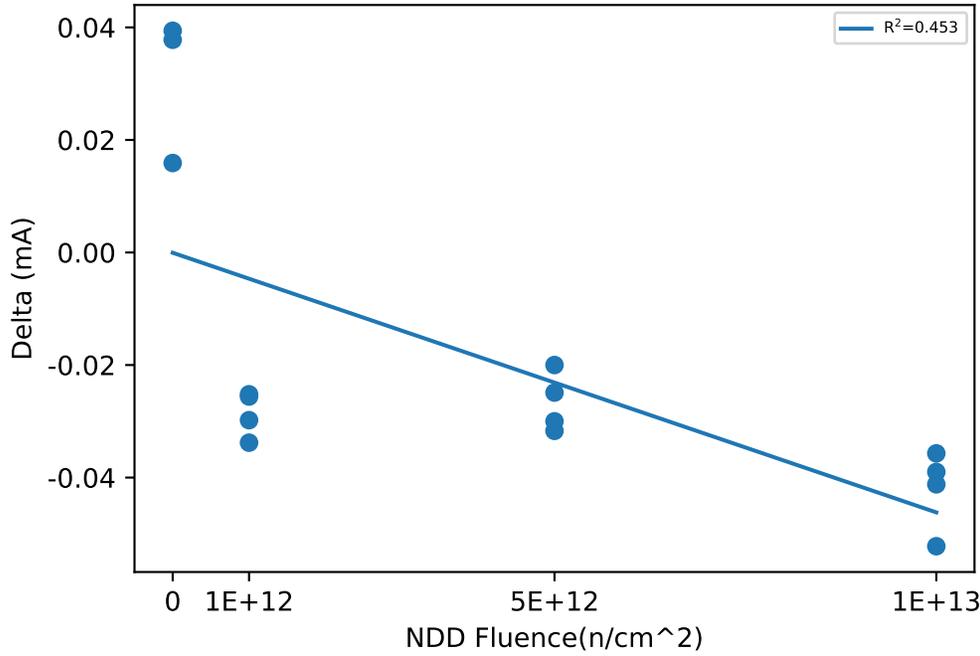
## NDD vs Result Stats



## Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.878	6.8939	0.0159
42	0	CORRELATION	7.1539	7.1917	0.0378
43	0	CORRELATION	7.0378	7.0772	0.0394
51	1e+12	NDD	7.0459	7.0203	-0.0256
52	1e+12	NDD	6.969	6.9352	-0.0338
53	1e+12	NDD	7.1266	7.1014	-0.0252
54	1e+12	NDD	7.1118	7.082	-0.0298
55	5e+12	NDD	7.0255	7.0055	-0.02
56	5e+12	NDD	6.9854	6.9554	-0.03
57	5e+12	NDD	7.2314	7.2065	-0.0249
58	5e+12	NDD	7.2061	7.1744	-0.0317
59	1e+13	NDD	7.0618	7.0096	-0.0522
60	1e+13	NDD	7.0962	7.055	-0.0412
61	1e+13	NDD	7.1429	7.1072	-0.0357
62	1e+13	NDD	7.0441	7.0051	-0.039

## NDD vs Post - Pre Exposure Delta

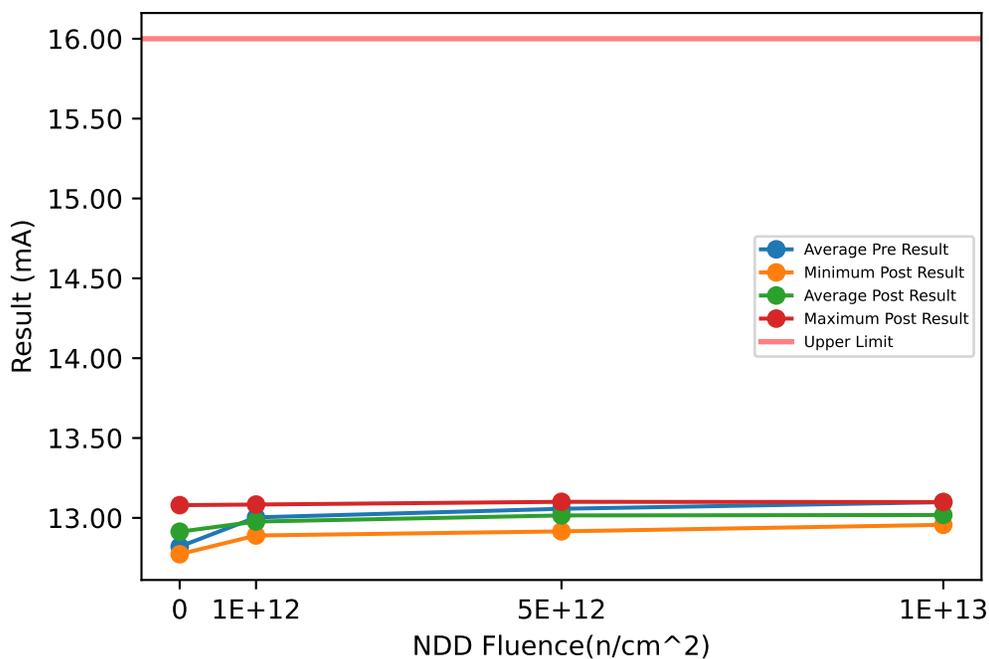


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	6.878	7.0232	7.1539	0.13853	6.8939	7.0543	7.1917	0.15022	0.0159	0.031033	0.0394	0.01313
1e+12	6.969	7.0633	7.1266	0.072006	6.9352	7.0347	7.1014	0.074819	-0.0338	-0.0286	-0.0252	0.0040431
5e+12	6.9854	7.1121	7.2314	0.12466	6.9554	7.0854	7.2065	0.12365	-0.0317	-0.02665	-0.02	0.0052918
1e+13	7.0441	7.0862	7.1429	0.043523	7.0051	7.0442	7.1072	0.04765	-0.0522	-0.042025	-0.0357	0.00715

# Device Test: 12.13 IOP|PWM/VIN/12/10///1MHz/@I\_OP\_LS\_PWM\_1MHZ

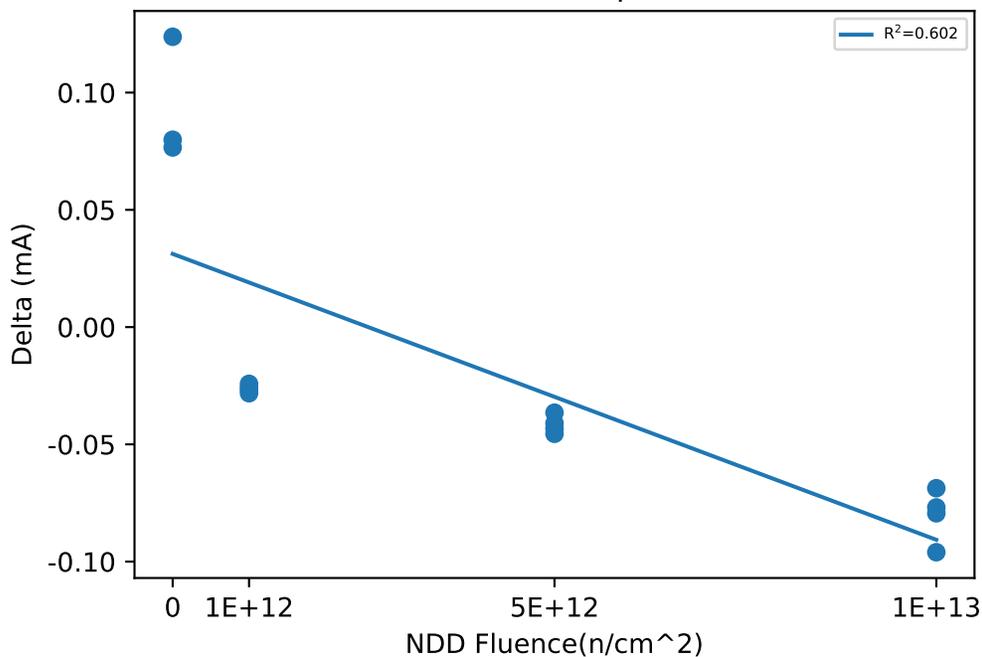
## NDD vs Result Stats



## Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	12.956	13.08	0.1238
42	0	CORRELATION	12.693	12.772	0.0799
43	0	CORRELATION	12.812	12.888	0.0766
51	1e+12	NDD	13.018	12.99	-0.0282
52	1e+12	NDD	12.971	12.944	-0.0268
53	1e+12	NDD	12.914	12.89	-0.0242
54	1e+12	NDD	13.109	13.084	-0.0258
55	5e+12	NDD	13.092	13.049	-0.0433
56	5e+12	NDD	12.957	12.915	-0.041
57	5e+12	NDD	13.137	13.101	-0.0365
58	5e+12	NDD	13.042	12.996	-0.0455
59	1e+13	NDD	13.075	12.996	-0.0794
60	1e+13	NDD	13.176	13.099	-0.0769
61	1e+13	NDD	13.025	12.957	-0.0687
62	1e+13	NDD	13.117	13.021	-0.096

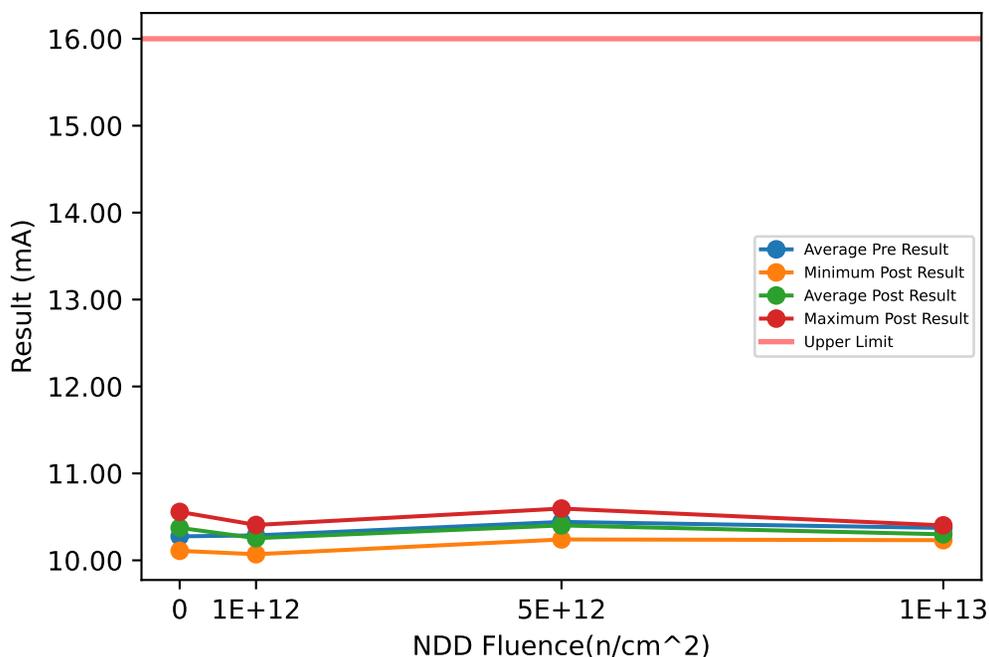
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	12.693	12.82	12.956	0.13184	12.772	12.913	13.08	0.15513	0.0766	0.093433	0.1238	0.02635
1e+12	12.914	13.003	13.109	0.08262	12.89	12.977	13.084	0.082045	-0.0282	-0.02625	-0.0242	0.0016842
5e+12	12.957	13.057	13.137	0.077467	12.915	13.015	13.101	0.079043	-0.0455	-0.041575	-0.0365	0.00385
1e+13	13.025	13.098	13.176	0.06389	12.957	13.018	13.099	0.060134	-0.096	-0.08025	-0.0687	0.011451

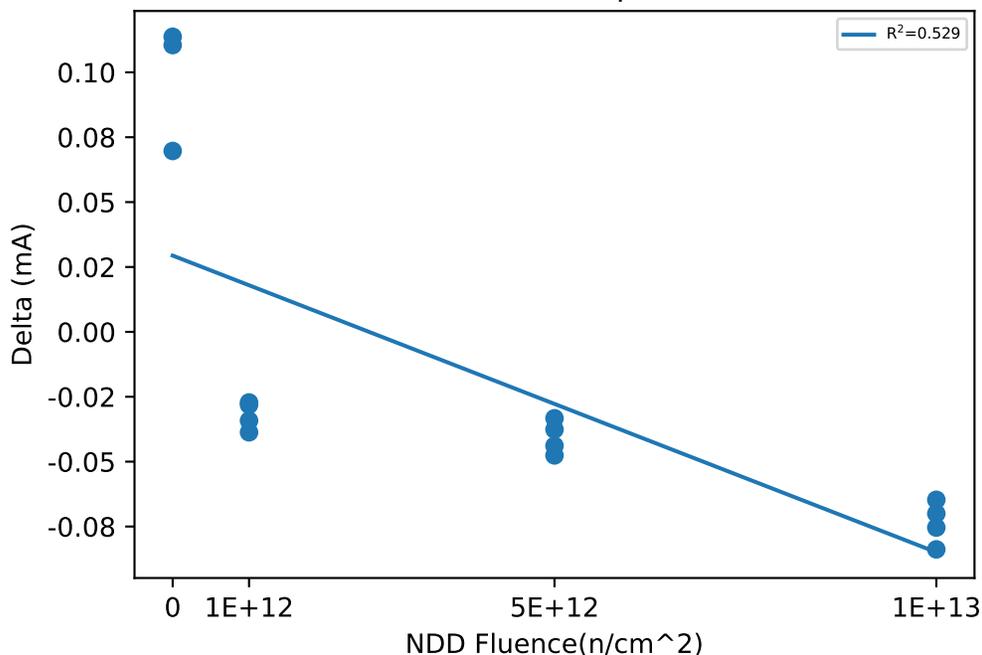
NDD vs Result Stats



Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	10.04	10.109	0.0697
42	0	CORRELATION	10.444	10.557	0.1137
43	0	CORRELATION	10.345	10.455	0.1105
51	1e+12	NDD	10.218	10.19	-0.0281
52	1e+12	NDD	10.109	10.07	-0.0387
53	1e+12	NDD	10.434	10.407	-0.0272
54	1e+12	NDD	10.386	10.352	-0.0342
55	5e+12	NDD	10.314	10.281	-0.0333
56	5e+12	NDD	10.284	10.24	-0.0439
57	5e+12	NDD	10.633	10.596	-0.0376
58	5e+12	NDD	10.537	10.489	-0.0476
59	1e+13	NDD	10.334	10.25	-0.0838
60	1e+13	NDD	10.389	10.314	-0.0754
61	1e+13	NDD	10.467	10.402	-0.0647
62	1e+13	NDD	10.302	10.232	-0.07

NDD vs Post - Pre Exposure Delta

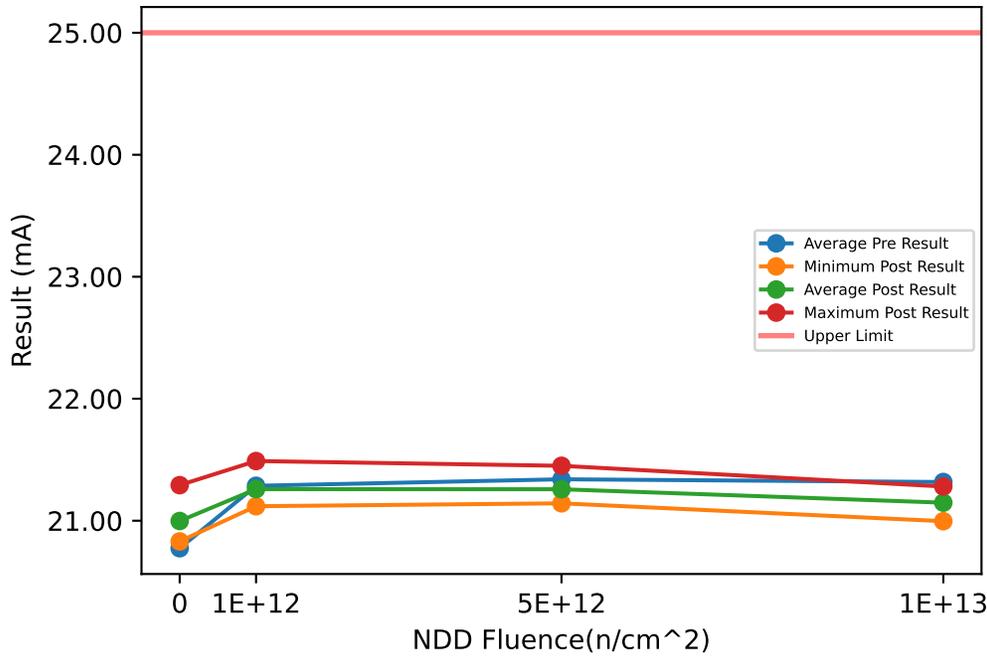


Test Statistics (mA)

Fluence(n/cm^2)	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	10.04	10.276	10.444	0.21062	10.109	10.374	10.557	0.23483	0.0697	0.097967	0.1137	0.024532
1e+12	10.109	10.287	10.434	0.15056	10.07	10.255	10.407	0.15375	-0.0387	-0.03205	-0.0272	0.0054151
5e+12	10.284	10.442	10.633	0.17011	10.24	10.402	10.596	0.16925	-0.0476	-0.0406	-0.0333	0.0063817
1e+13	10.302	10.373	10.467	0.07241	10.232	10.3	10.402	0.077093	-0.0838	-0.073475	-0.0647	0.0081525

# Device Test: 12.15 IOP|PWM/VIN/12/10///2MHz/@I\_OP\_LS\_PWM\_2MHZ

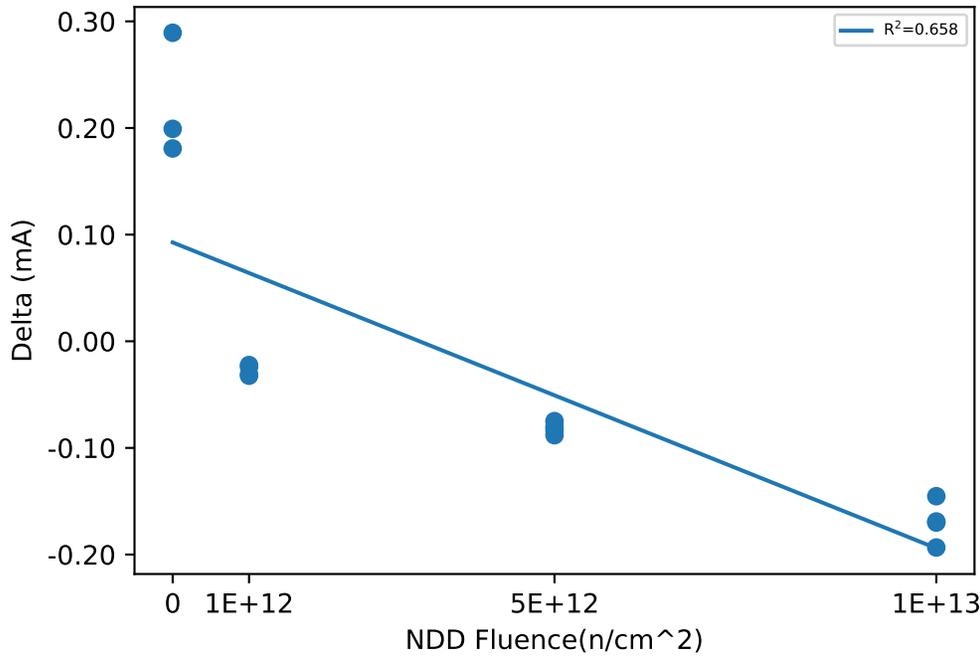
## NDD vs Result Stats



## Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	21.002	21.292	0.2893
42	0	CORRELATION	20.631	20.831	0.1992
43	0	CORRELATION	20.69	20.871	0.1808
51	1e+12	NDD	21.262	21.231	-0.0311
52	1e+12	NDD	21.221	21.197	-0.024
53	1e+12	NDD	21.141	21.119	-0.0223
54	1e+12	NDD	21.521	21.489	-0.0323
55	5e+12	NDD	21.345	21.27	-0.0749
56	5e+12	NDD	21.231	21.143	-0.0881
57	5e+12	NDD	21.53	21.45	-0.0803
58	5e+12	NDD	21.253	21.17	-0.0836
59	1e+13	NDD	21.242	21.072	-0.17
60	1e+13	NDD	21.412	21.243	-0.169
61	1e+13	NDD	21.142	20.996	-0.1453
62	1e+13	NDD	21.474	21.28	-0.1934

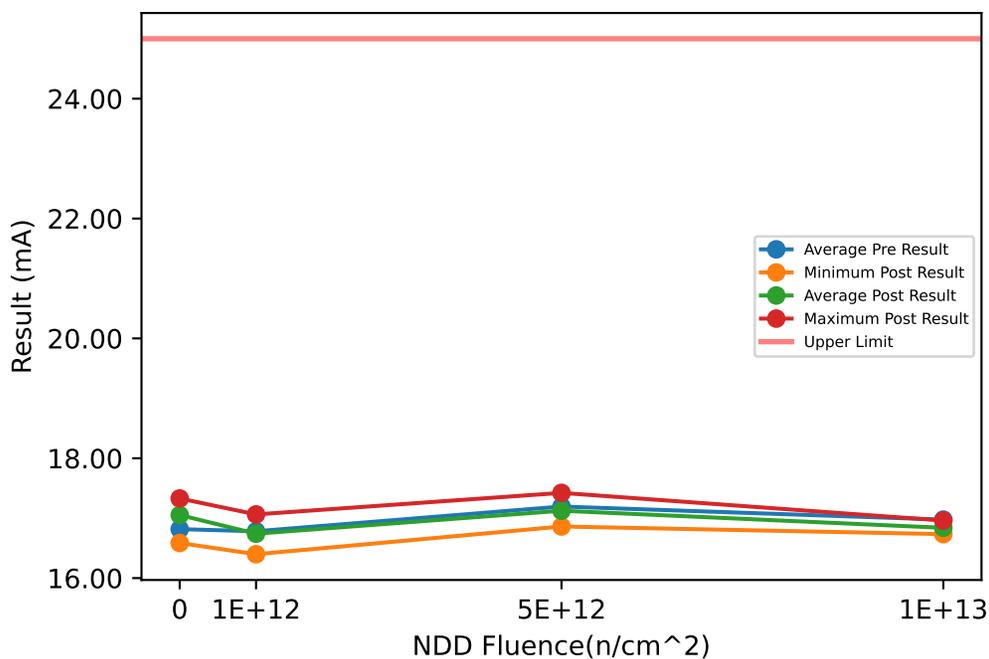
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	20.631	20.775	21.002	0.19948	20.831	20.998	21.292	0.25544	0.1808	0.2231	0.2893	0.058064
1e+12	21.141	21.286	21.521	0.16459	21.119	21.259	21.489	0.16052	-0.0323	-0.027425	-0.0223	0.0050089
5e+12	21.231	21.34	21.53	0.13632	21.143	21.258	21.45	0.13924	-0.0881	-0.081725	-0.0749	0.0055608
1e+13	21.142	21.317	21.474	0.15295	20.996	21.148	21.28	0.13604	-0.1934	-0.16942	-0.1453	0.019641

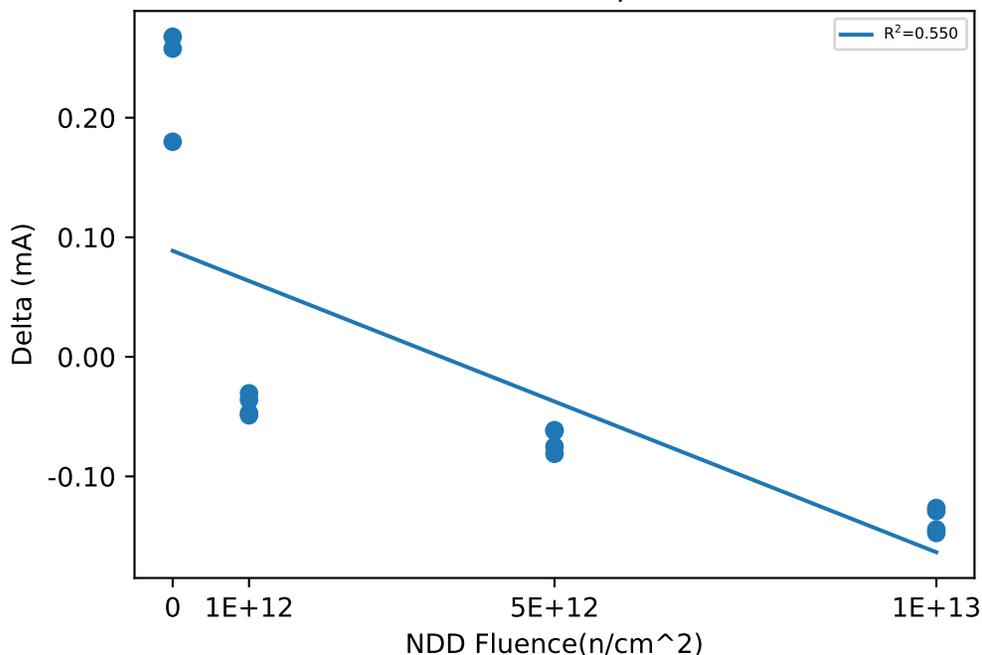
NDD vs Result Stats



Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	16.406	16.586	0.1799
42	0	CORRELATION	17.062	17.329	0.2677
43	0	CORRELATION	16.984	17.242	0.2578
51	1e+12	NDD	16.607	16.571	-0.0359
52	1e+12	NDD	16.447	16.398	-0.0489
53	1e+12	NDD	17.093	17.063	-0.0305
54	1e+12	NDD	16.979	16.932	-0.047
55	5e+12	NDD	16.941	16.879	-0.062
56	5e+12	NDD	16.936	16.861	-0.075
57	5e+12	NDD	17.483	17.422	-0.0613
58	5e+12	NDD	17.417	17.336	-0.0811
59	1e+13	NDD	16.927	16.78	-0.1473
60	1e+13	NDD	17.027	16.882	-0.1444
61	1e+13	NDD	17.087	16.96	-0.1264
62	1e+13	NDD	16.863	16.734	-0.129

NDD vs Post - Pre Exposure Delta

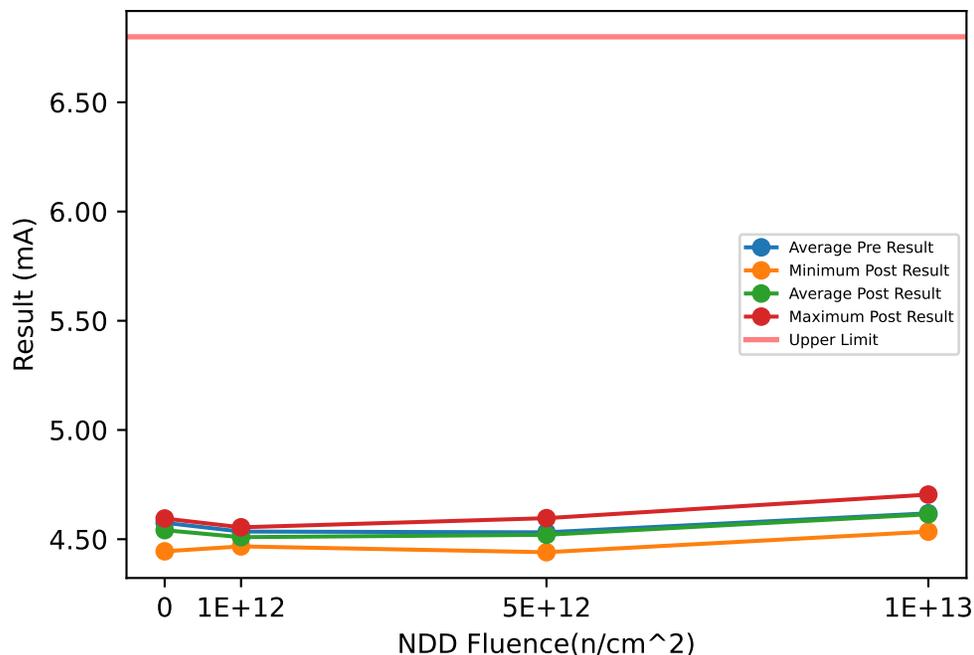


Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	16.406	16.817	17.062	0.35815	16.586	17.052	17.329	0.40624	0.1799	0.23513	0.2677	0.048089
1e+12	16.447	16.782	17.093	0.30448	16.398	16.741	17.063	0.30878	-0.0489	-0.040575	-0.0305	0.0088308
5e+12	16.936	17.194	17.483	0.2967	16.861	17.125	17.422	0.29608	-0.0811	-0.06985	-0.0613	0.0097947
1e+13	16.863	16.976	17.087	0.099857	16.734	16.839	16.96	0.10171	-0.1473	-0.13677	-0.1264	0.010599

# Device Test: 12.17 IQ|PWM/VIN/14/14///0MHz/@IQ\_LS\_PWM

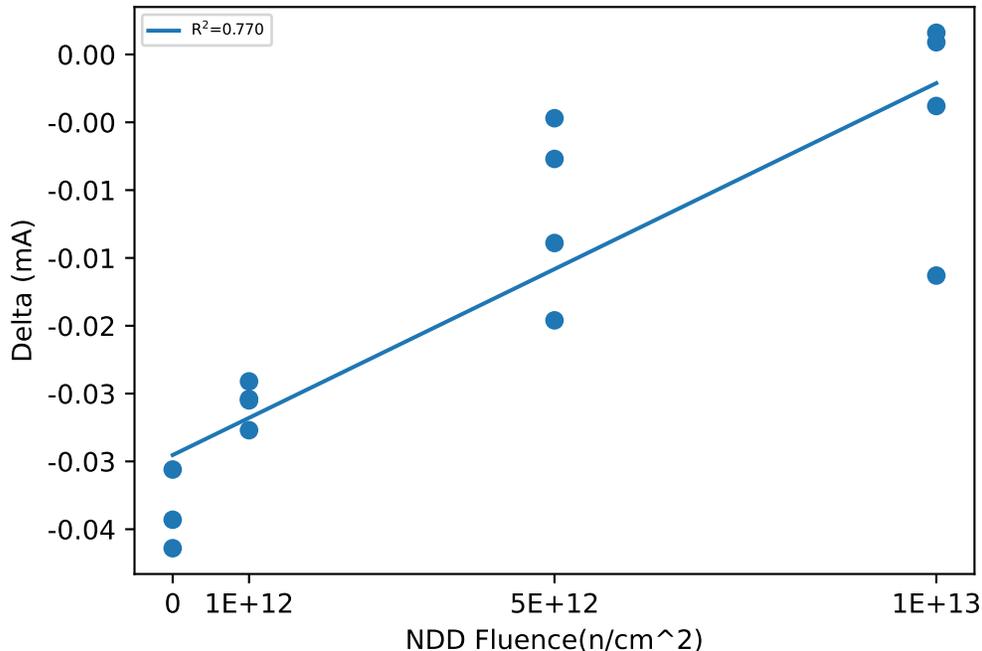
## NDD vs Result Stats



## Test Results (Upper Limit = 6.8 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.6312	4.5948	-0.0364
42	0	CORRELATION	4.4789	4.4446	-0.0343
43	0	CORRELATION	4.6157	4.5851	-0.0306
51	1e+12	NDD	4.58	4.5545	-0.0255
52	1e+12	NDD	4.4948	4.4671	-0.0277
53	1e+12	NDD	4.5257	4.5003	-0.0254
54	1e+12	NDD	4.5393	4.5152	-0.0241
55	5e+12	NDD	4.6159	4.5963	-0.0196
56	5e+12	NDD	4.4481	4.4404	-0.0077
57	5e+12	NDD	4.4604	4.4557	-0.0047
58	5e+12	NDD	4.6017	4.5878	-0.0139
59	1e+13	NDD	4.588	4.5842	-0.0038
60	1e+13	NDD	4.7033	4.7042	0.0009
61	1e+13	NDD	4.6317	4.6333	0.0016
62	1e+13	NDD	4.5509	4.5346	-0.0163

## NDD vs Post - Pre Exposure Delta

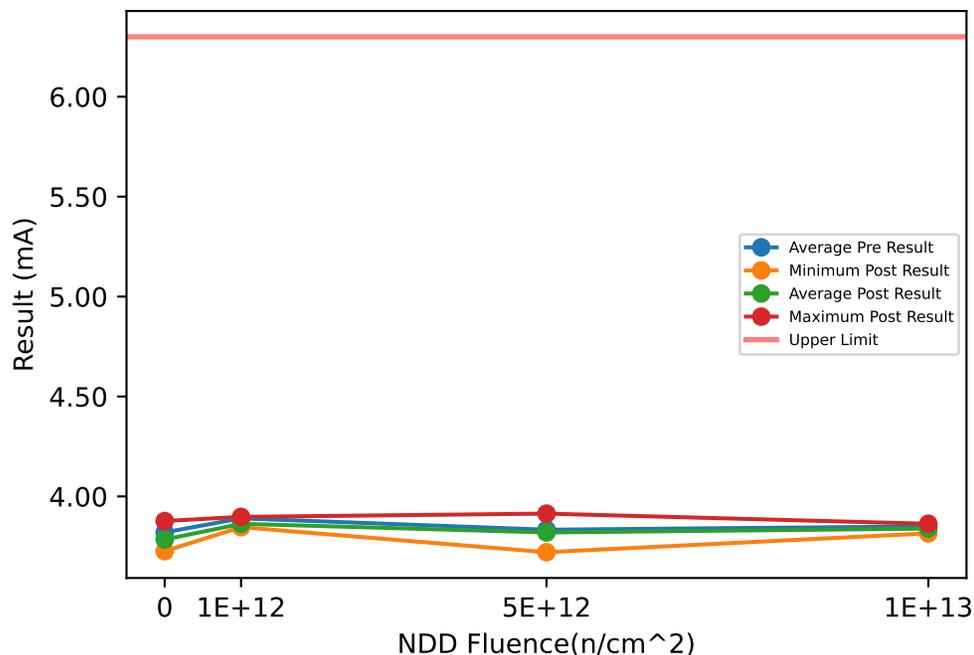


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	4.4789	4.5753	4.6312	0.083815	4.4446	4.5415	4.5948	0.084058	-0.0364	-0.033767	-0.0306	0.0029366
1e+12	4.4948	4.535	4.58	0.035337	4.4671	4.5093	4.5545	0.036239	-0.0277	-0.025675	-0.0241	0.001493
5e+12	4.4481	4.5315	4.6159	0.089558	4.4404	4.5201	4.5963	0.083445	-0.0196	-0.011475	-0.0047	0.0066344
1e+13	4.5509	4.6185	4.7033	0.065486	4.5346	4.6141	4.7042	0.072344	-0.0163	-0.0044	0.0016	0.0082877

# Device Test: 12.18 IQ|PWM/BOOT/14/14///0MHz/@IQ\_HS\_PWM

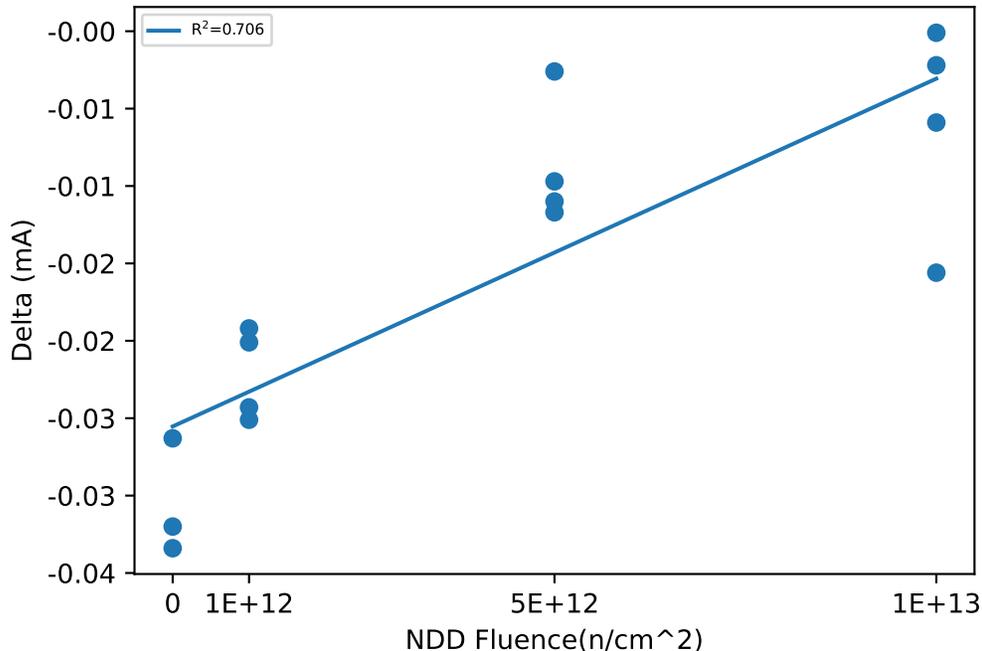
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.7633	3.7263	-0.037
42	0	CORRELATION	3.9153	3.8769	-0.0384
43	0	CORRELATION	3.7814	3.7501	-0.0313
51	1e+12	NDD	3.927	3.8977	-0.0293
52	1e+12	NDD	3.8775	3.8474	-0.0301
53	1e+12	NDD	3.8703	3.8461	-0.0242
54	1e+12	NDD	3.8857	3.8606	-0.0251
55	5e+12	NDD	3.7846	3.777	-0.0076
56	5e+12	NDD	3.7375	3.7208	-0.0167
57	5e+12	NDD	3.8815	3.8668	-0.0147
58	5e+12	NDD	3.93	3.914	-0.016
59	1e+13	NDD	3.836	3.8154	-0.0206
60	1e+13	NDD	3.8534	3.8483	-0.0051
61	1e+13	NDD	3.8703	3.8631	-0.0072
62	1e+13	NDD	3.8397	3.8288	-0.0109

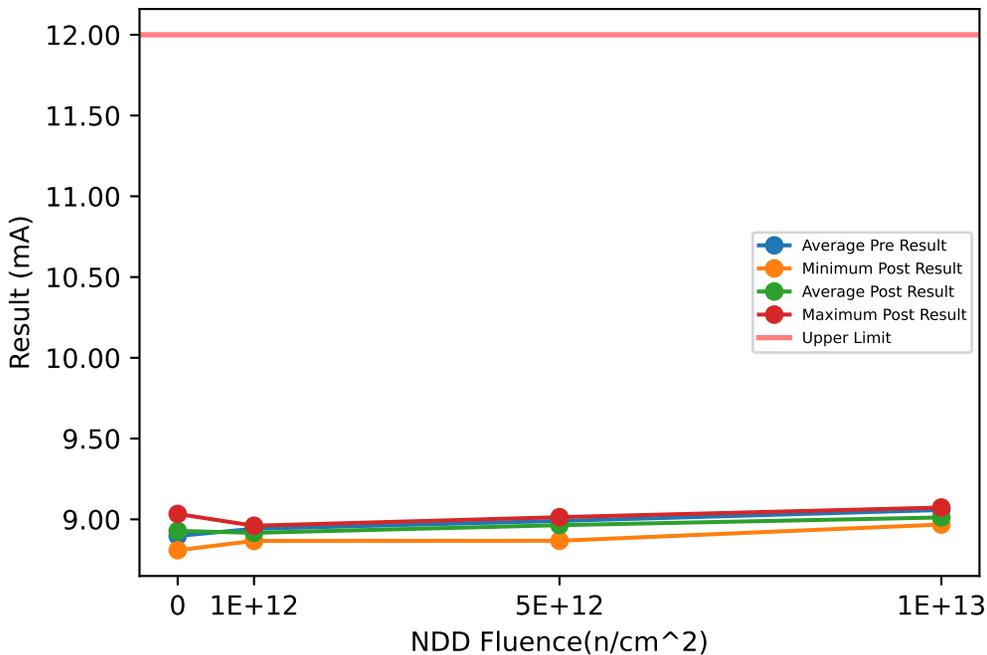
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	3.7633	3.82	3.9153	0.083027	3.7263	3.7844	3.8769	0.080958	-0.0384	-0.035567	-0.0313	0.0037608
1e+12	3.8703	3.8901	3.927	0.025376	3.8461	3.8629	3.8977	0.024075	-0.0301	-0.027175	-0.0242	0.0029568
5e+12	3.7375	3.8334	3.93	0.087984	3.7208	3.8197	3.914	0.087016	-0.0167	-0.01375	-0.0076	0.0041829
1e+13	3.836	3.8498	3.8703	0.015553	3.8154	3.8389	3.8631	0.021042	-0.0206	-0.01095	-0.0051	0.0068656

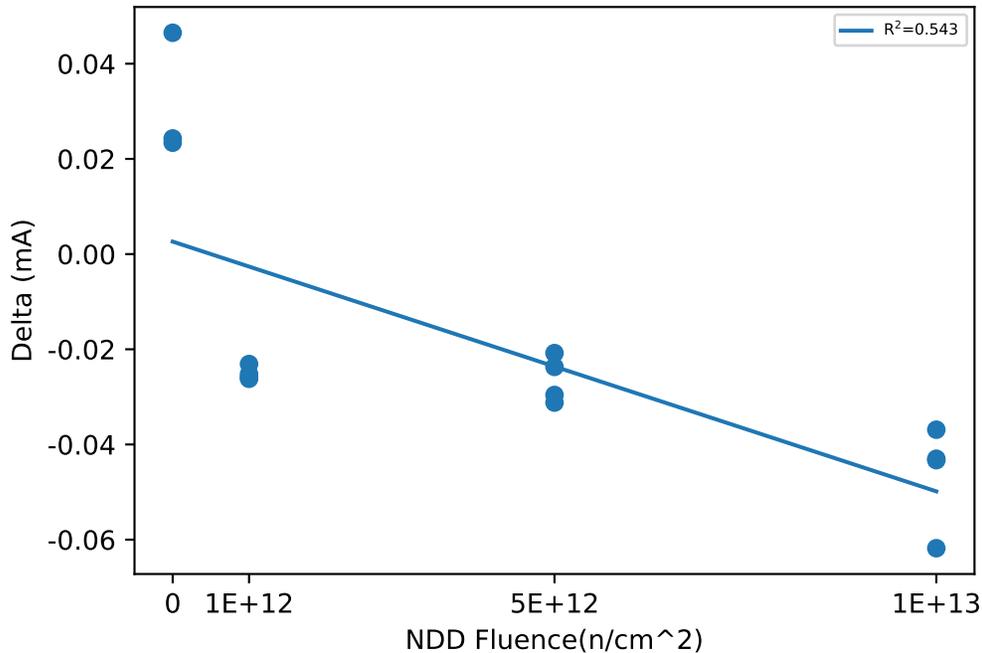
NDD vs Result Stats



Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.9869	9.0334	0.0465
42	0	CORRELATION	8.7854	8.8088	0.0234
43	0	CORRELATION	8.9192	8.9435	0.0243
51	1e+12	NDD	8.956	8.9301	-0.0259
52	1e+12	NDD	8.9339	8.9087	-0.0252
53	1e+12	NDD	8.8897	8.8666	-0.0231
54	1e+12	NDD	8.9865	8.9603	-0.0262
55	5e+12	NDD	9.0344	9.0032	-0.0312
56	5e+12	NDD	8.8911	8.8674	-0.0237
57	5e+12	NDD	9.0342	9.0134	-0.0208
58	5e+12	NDD	9.0008	8.9712	-0.0296
59	1e+13	NDD	9.0624	9.0194	-0.043
60	1e+13	NDD	9.1165	9.0732	-0.0433
61	1e+13	NDD	9.0232	8.9863	-0.0369
62	1e+13	NDD	9.0296	8.9678	-0.0618

NDD vs Post - Pre Exposure Delta

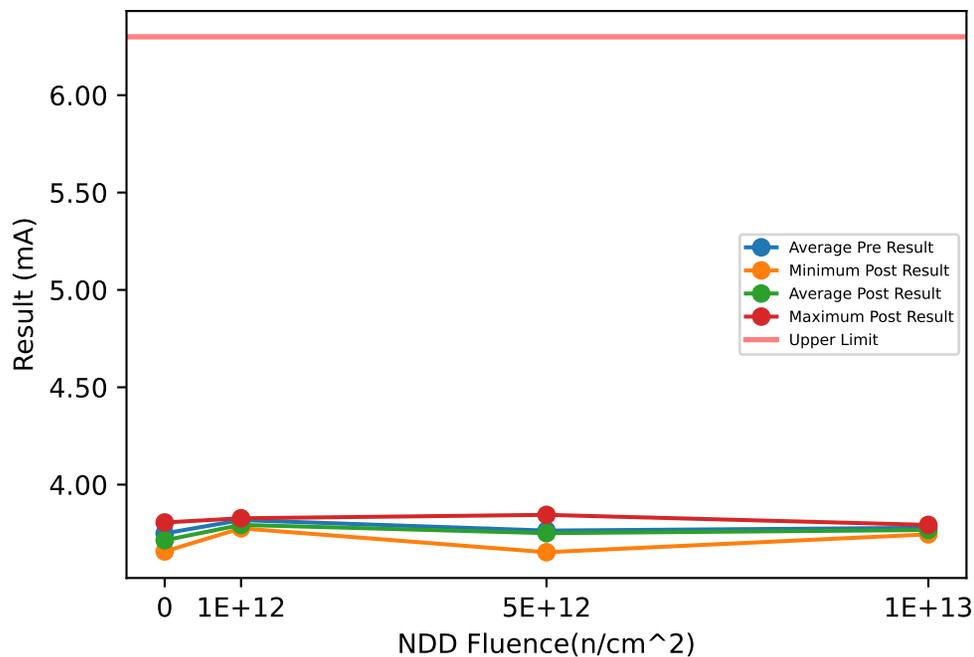


Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	8.7854	8.8972	8.9869	0.10254	8.8088	8.9286	9.0334	0.11304	0.0234	0.0314	0.0465	0.013085
1e+12	8.8897	8.9415	8.9865	0.040728	8.8666	8.9164	8.9603	0.039388	-0.0262	-0.0251	-0.0231	0.0013976
5e+12	8.8911	8.9901	9.0344	0.067879	8.8674	8.9638	9.0134	0.066734	-0.0312	-0.026325	-0.0208	0.0048958
1e+13	9.0232	9.0579	9.1165	0.042658	8.9678	9.0117	9.0732	0.046238	-0.0618	-0.04625	-0.0369	0.010778

# Device Test: 12.2 IQ|PWM/BOOT/10/8///0MHz/@IQ\_HS\_PWM

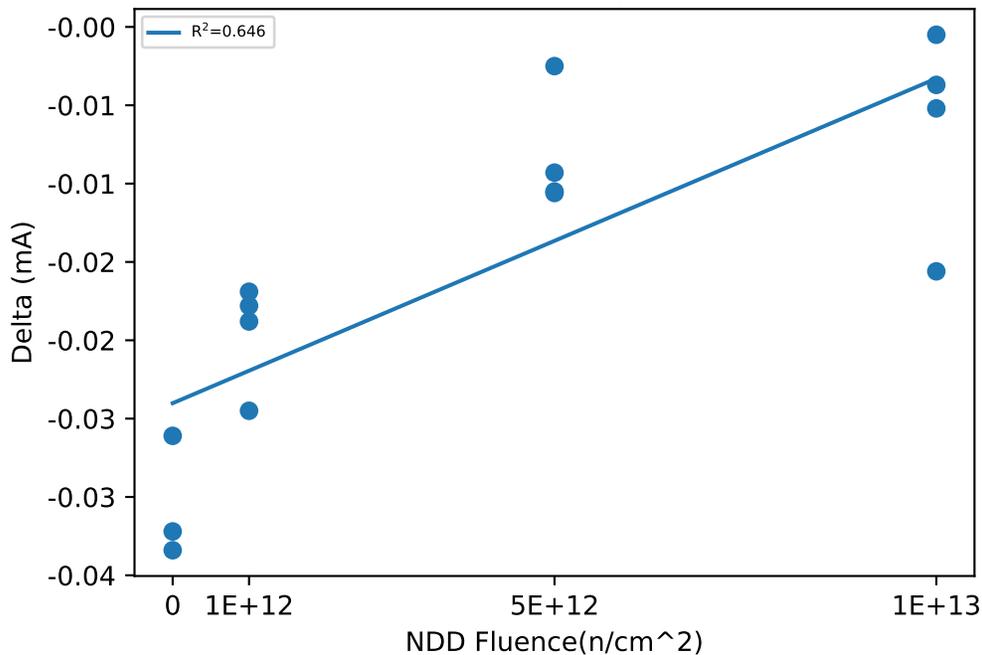
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.6941	3.6569	-0.0372
42	0	CORRELATION	3.8441	3.8057	-0.0384
43	0	CORRELATION	3.7109	3.6798	-0.0311
51	1e+12	NDD	3.8491	3.8272	-0.0219
52	1e+12	NDD	3.808	3.7785	-0.0295
53	1e+12	NDD	3.7985	3.7757	-0.0228
54	1e+12	NDD	3.8155	3.7917	-0.0238
55	5e+12	NDD	3.7165	3.709	-0.0075
56	5e+12	NDD	3.6685	3.6529	-0.0156
57	5e+12	NDD	3.8106	3.7963	-0.0143
58	5e+12	NDD	3.8603	3.8448	-0.0155
59	1e+13	NDD	3.7653	3.7447	-0.0206
60	1e+13	NDD	3.7811	3.7724	-0.0087
61	1e+13	NDD	3.7987	3.7932	-0.0055
62	1e+13	NDD	3.7678	3.7576	-0.0102

## NDD vs Post - Pre Exposure Delta

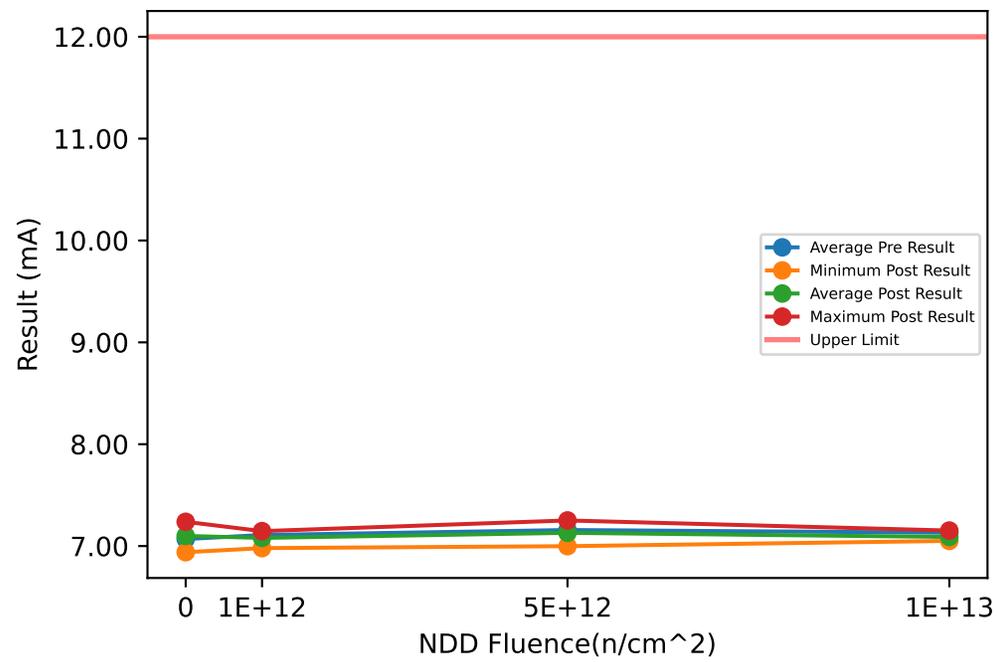


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	3.6941	3.7497	3.8441	0.082183	3.6569	3.7141	3.8057	0.080121	-0.0384	-0.035567	-0.0311	0.0039145
1e+12	3.7985	3.8178	3.8491	0.022011	3.7757	3.7933	3.8272	0.023668	-0.0295	-0.0245	-0.0219	0.0034225
5e+12	3.6685	3.764	3.8603	0.08722	3.6529	3.7508	3.8448	0.086097	-0.0156	-0.013225	-0.0075	0.0038621
1e+13	3.7653	3.7782	3.7987	0.01531	3.7447	3.767	3.7932	0.020827	-0.0206	-0.01125	-0.0055	0.0065343

# Device Test: 12.20 IOP|PWM/BOOT/14/14///0.5MHz/@I\_OP\_HS\_PWM\_500KHZ

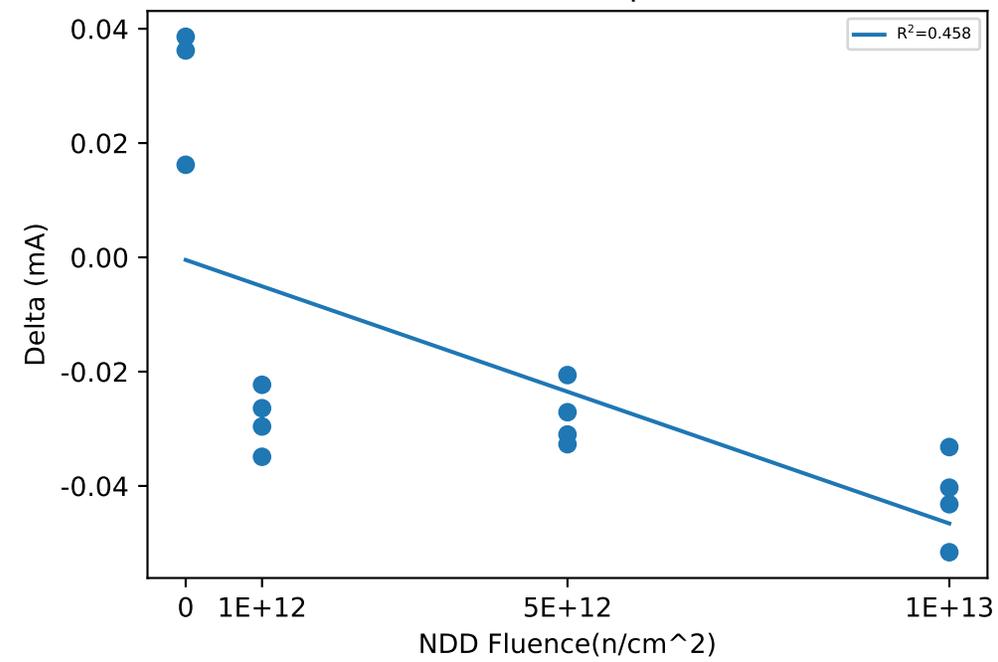
### NDD vs Result Stats



### Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.9233	6.9395	0.0162
42	0	CORRELATION	7.1995	7.2381	0.0386
43	0	CORRELATION	7.0848	7.121	0.0362
51	1e+12	NDD	7.0879	7.0656	-0.0223
52	1e+12	NDD	7.015	6.9801	-0.0349
53	1e+12	NDD	7.173	7.1466	-0.0264
54	1e+12	NDD	7.1574	7.1278	-0.0296
55	5e+12	NDD	7.0698	7.0492	-0.0206
56	5e+12	NDD	7.03	6.999	-0.031
57	5e+12	NDD	7.2786	7.2515	-0.0271
58	5e+12	NDD	7.2522	7.2195	-0.0327
59	1e+13	NDD	7.1077	7.0561	-0.0516
60	1e+13	NDD	7.1423	7.0991	-0.0432
61	1e+13	NDD	7.1855	7.1523	-0.0332
62	1e+13	NDD	7.0911	7.0508	-0.0403

### NDD vs Post - Pre Exposure Delta

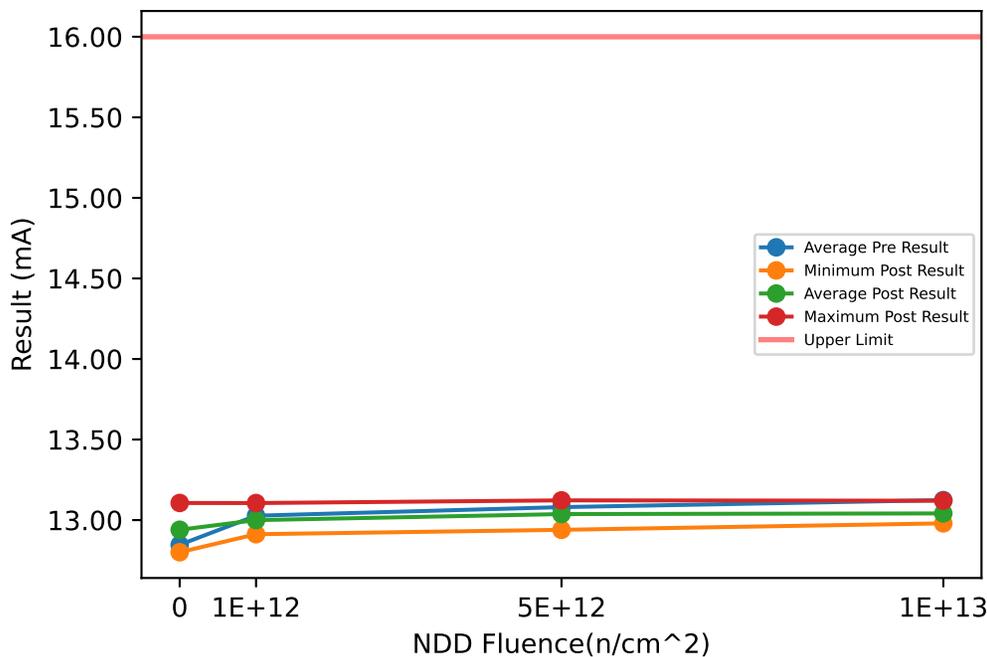


### Test Statistics (mA)

Fluence(n/cm^2)	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	6.9233	7.0692	7.1995	0.13876	6.9395	7.0995	7.2381	0.15045	0.0162	0.030333	0.0386	0.012299
1e+12	7.015	7.1083	7.173	0.072383	6.9801	7.08	7.1466	0.075073	-0.0349	-0.0283	-0.0223	0.0053185
5e+12	7.03	7.1577	7.2786	0.12594	6.999	7.1298	7.2515	0.12445	-0.0327	-0.02785	-0.0206	0.0053718
1e+13	7.0911	7.1317	7.1855	0.041758	7.0508	7.0896	7.1523	0.047079	-0.0516	-0.042075	-0.0332	0.0076137

# Device Test: 12.21 IOP|PWM/VIN/14/14///1MHz/@I\_OP\_LS\_PWM\_1MHZ

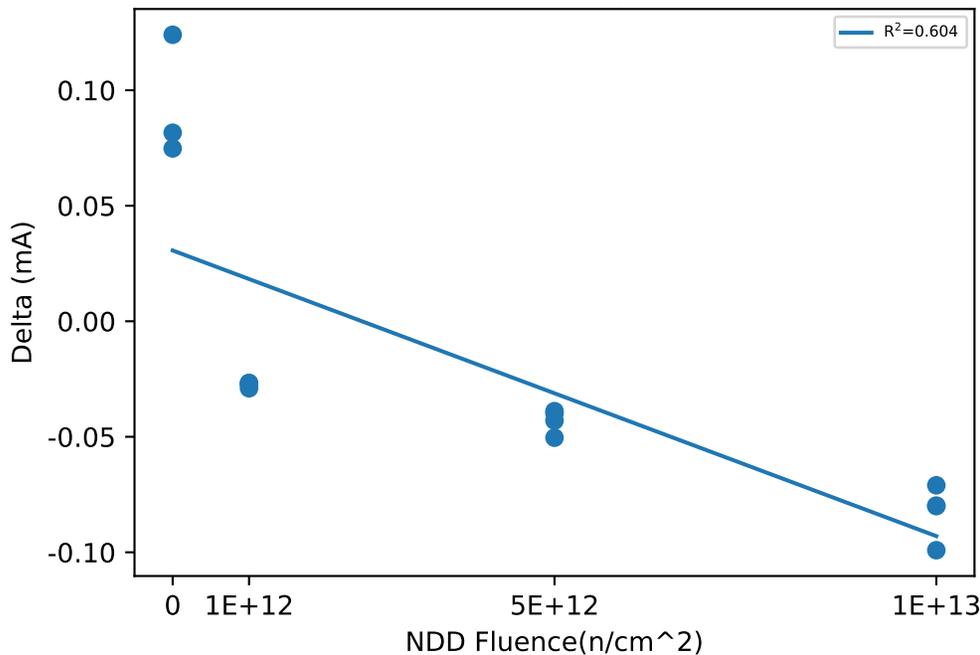
## NDD vs Result Stats



## Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	12.982	13.106	0.124
42	0	CORRELATION	12.719	12.801	0.0816
43	0	CORRELATION	12.838	12.913	0.0748
51	1e+12	NDD	13.042	13.014	-0.0274
52	1e+12	NDD	12.993	12.967	-0.0268
53	1e+12	NDD	12.939	12.912	-0.0267
54	1e+12	NDD	13.135	13.106	-0.029
55	5e+12	NDD	13.115	13.072	-0.043
56	5e+12	NDD	12.979	12.94	-0.0399
57	5e+12	NDD	13.161	13.123	-0.0389
58	5e+12	NDD	13.066	13.015	-0.0504
59	1e+13	NDD	13.099	13.019	-0.0798
60	1e+13	NDD	13.2	13.12	-0.08
61	1e+13	NDD	13.051	12.98	-0.071
62	1e+13	NDD	13.146	13.047	-0.0991

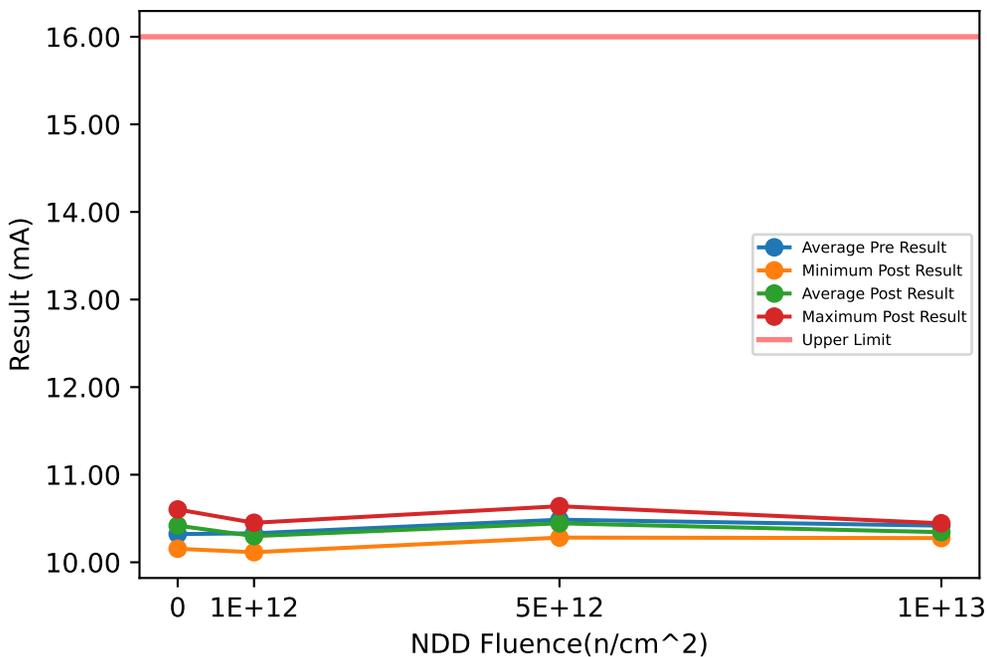
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	12.719	12.847	12.982	0.13184	12.801	12.94	13.106	0.15462	0.0748	0.093467	0.124	0.02666
1e+12	12.939	13.027	13.135	0.08305	12.912	13	13.106	0.082031	-0.029	-0.027475	-0.0267	0.0010626
5e+12	12.979	13.081	13.161	0.077831	12.94	13.037	13.123	0.078547	-0.0504	-0.04305	-0.0389	0.0052016
1e+13	13.051	13.124	13.2	0.063981	12.98	13.041	13.12	0.059285	-0.0991	-0.082475	-0.071	0.011851

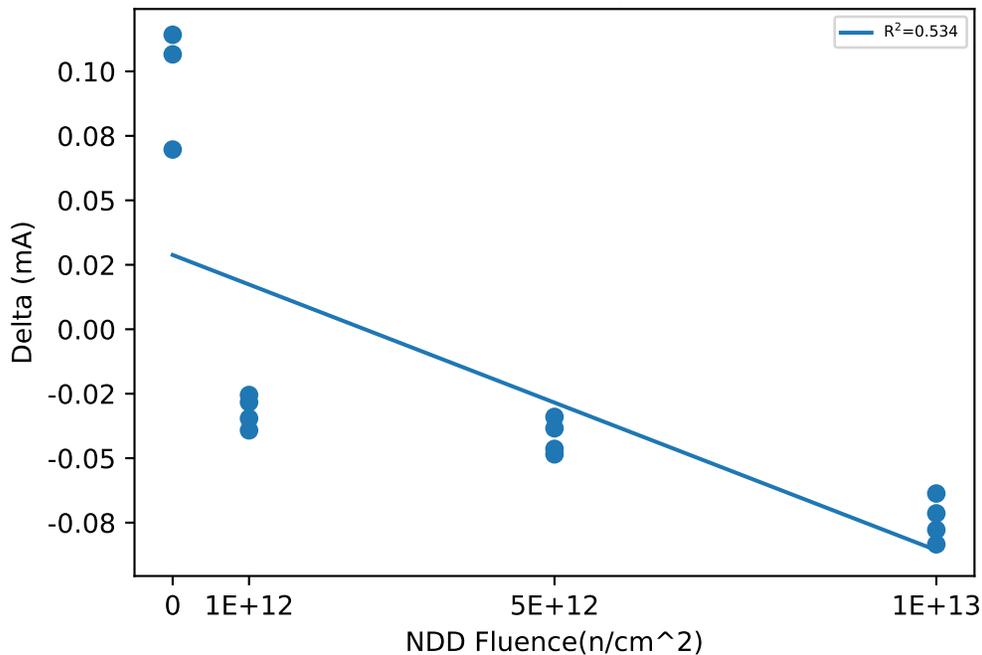
NDD vs Result Stats



Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	10.085	10.155	0.0697
42	0	CORRELATION	10.489	10.603	0.1142
43	0	CORRELATION	10.393	10.499	0.1066
51	1e+12	NDD	10.259	10.233	-0.0255
52	1e+12	NDD	10.154	10.115	-0.0392
53	1e+12	NDD	10.479	10.451	-0.0283
54	1e+12	NDD	10.431	10.396	-0.0346
55	5e+12	NDD	10.357	10.323	-0.034
56	5e+12	NDD	10.328	10.282	-0.0464
57	5e+12	NDD	10.678	10.64	-0.0384
58	5e+12	NDD	10.581	10.533	-0.0485
59	1e+13	NDD	10.38	10.297	-0.0834
60	1e+13	NDD	10.435	10.357	-0.0778
61	1e+13	NDD	10.509	10.445	-0.0637
62	1e+13	NDD	10.348	10.276	-0.0714

NDD vs Post - Pre Exposure Delta

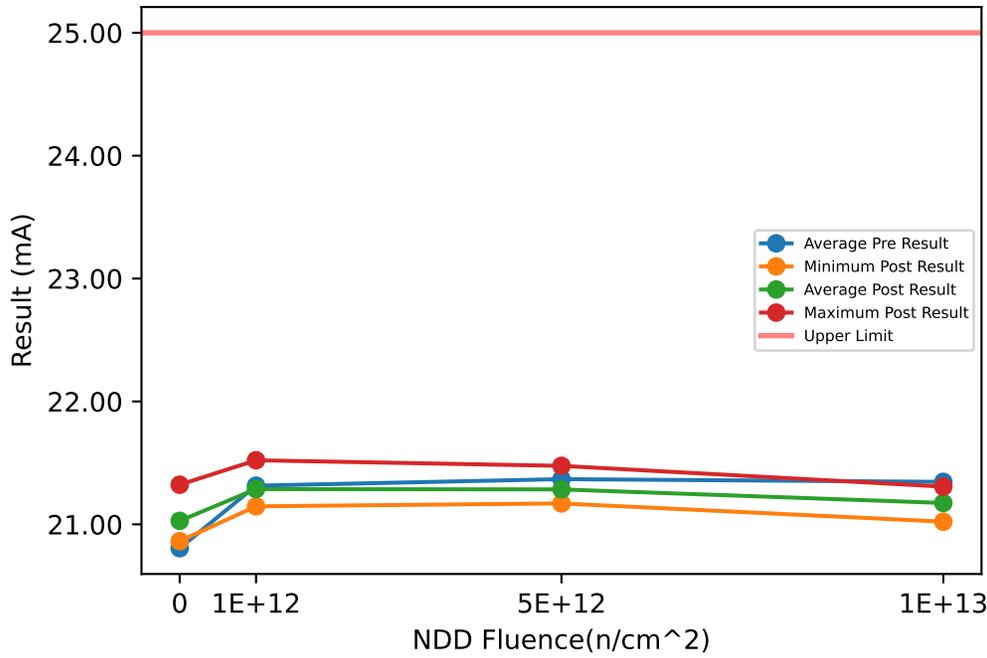


Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	10.085	10.322	10.489	0.21107	10.155	10.419	10.603	0.23482	0.0697	0.096833	0.1142	0.023803
1e+12	10.154	10.331	10.479	0.15106	10.115	10.299	10.451	0.15359	-0.0392	-0.0319	-0.0255	0.0061779
5e+12	10.328	10.486	10.678	0.17087	10.282	10.445	10.64	0.17049	-0.0485	-0.041825	-0.034	0.0067933
1e+13	10.348	10.418	10.509	0.070547	10.276	10.344	10.445	0.075801	-0.0834	-0.074075	-0.0637	0.008478

# Device Test: 12.23 IOP|PWM/VIN/14/14///2MHz/@I\_OP\_LS\_PWM\_2MHZ

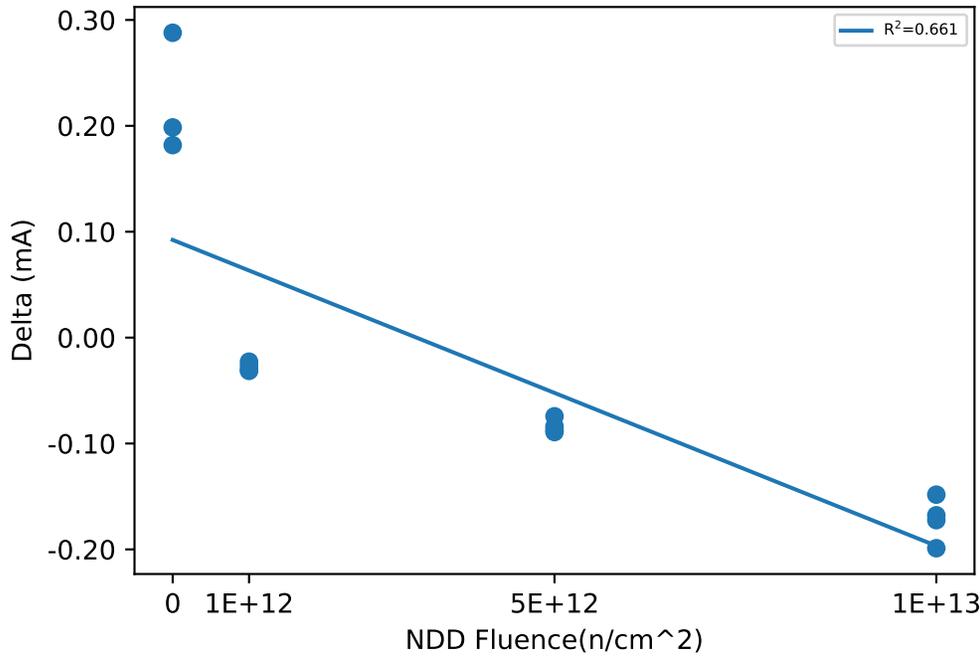
## NDD vs Result Stats



## Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	21.035	21.323	0.2879
42	0	CORRELATION	20.665	20.863	0.1985
43	0	CORRELATION	20.718	20.9	0.1818
51	1e+12	NDD	21.289	21.258	-0.0314
52	1e+12	NDD	21.249	21.222	-0.0269
53	1e+12	NDD	21.169	21.147	-0.0227
54	1e+12	NDD	21.552	21.521	-0.0306
55	5e+12	NDD	21.371	21.297	-0.0743
56	5e+12	NDD	21.259	21.17	-0.0892
57	5e+12	NDD	21.56	21.476	-0.0838
58	5e+12	NDD	21.282	21.195	-0.0871
59	1e+13	NDD	21.271	21.099	-0.1724
60	1e+13	NDD	21.436	21.268	-0.1678
61	1e+13	NDD	21.17	21.022	-0.1483
62	1e+13	NDD	21.506	21.307	-0.1989

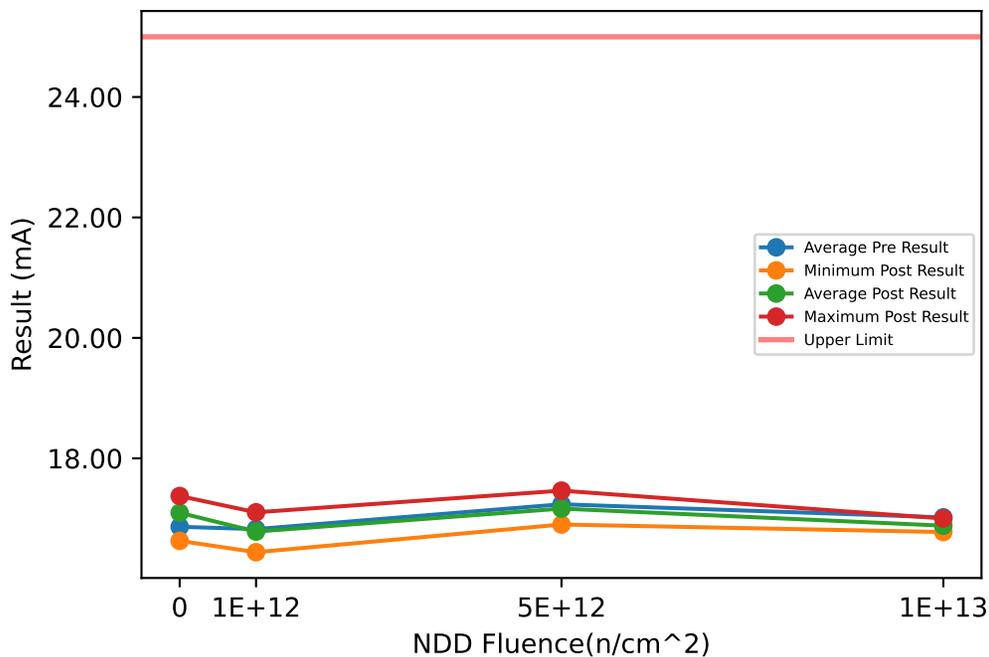
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	20.665	20.806	21.035	0.19991	20.863	21.029	21.323	0.25523	0.1818	0.22273	0.2879	0.05705
1e+12	21.169	21.315	21.552	0.16587	21.147	21.287	21.521	0.16313	-0.0314	-0.0279	-0.0227	0.0039825
5e+12	21.259	21.368	21.56	0.13667	21.17	21.284	21.476	0.139	-0.0892	-0.0836	-0.0743	0.0065863
1e+13	21.17	21.346	21.506	0.15294	21.022	21.174	21.307	0.13583	-0.1989	-0.17185	-0.1483	0.020841

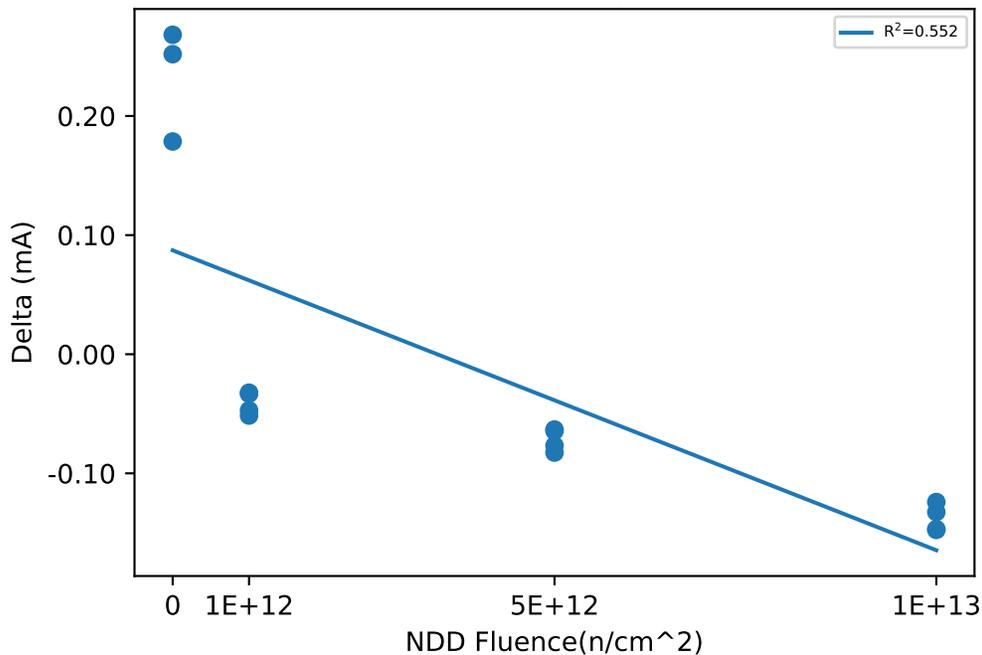
NDD vs Result Stats



Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	16.451	16.63	0.1786
42	0	CORRELATION	17.107	17.375	0.2682
43	0	CORRELATION	17.032	17.284	0.2519
51	1e+12	NDD	16.646	16.614	-0.0323
52	1e+12	NDD	16.493	16.441	-0.0515
53	1e+12	NDD	17.137	17.104	-0.0332
54	1e+12	NDD	17.024	16.977	-0.0471
55	5e+12	NDD	16.983	16.92	-0.0632
56	5e+12	NDD	16.978	16.901	-0.0767
57	5e+12	NDD	17.528	17.464	-0.0644
58	5e+12	NDD	17.461	17.378	-0.0826
59	1e+13	NDD	16.973	16.825	-0.1475
60	1e+13	NDD	17.073	16.926	-0.1468
61	1e+13	NDD	17.125	17.001	-0.1241
62	1e+13	NDD	16.909	16.777	-0.1325

NDD vs Post - Pre Exposure Delta

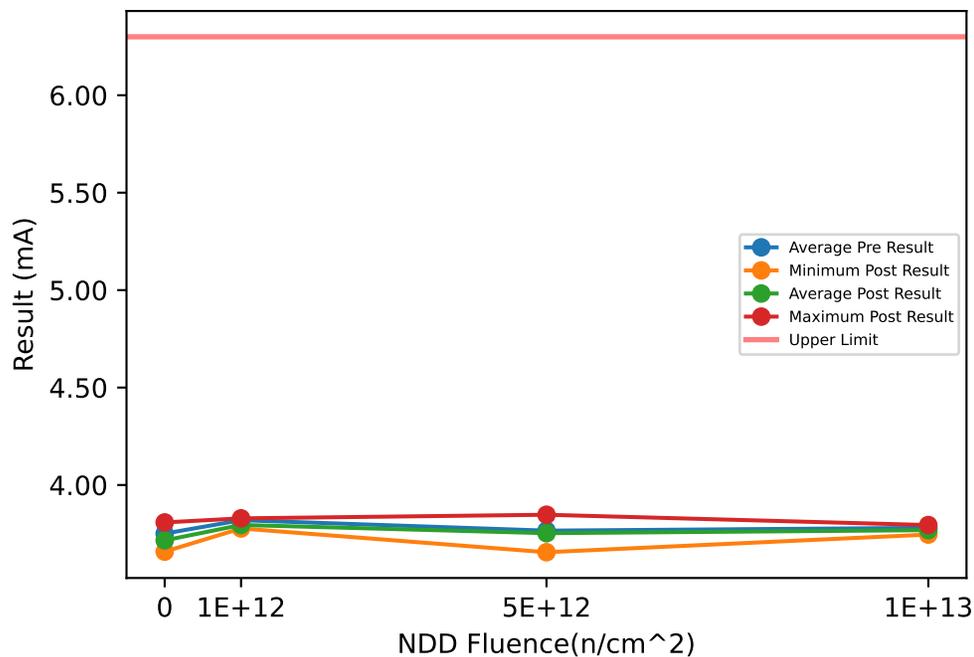


Test Statistics (mA)

Fluence(n/cm^2)	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	16.451	16.863	17.107	0.35869	16.63	17.096	17.375	0.40632	0.1786	0.2329	0.2682	0.047726
1e+12	16.493	16.825	17.137	0.30509	16.441	16.784	17.104	0.30867	-0.0515	-0.041025	-0.0323	0.0097295
5e+12	16.978	17.237	17.528	0.2979	16.901	17.166	17.464	0.29673	-0.0826	-0.071725	-0.0632	0.0094754
1e+13	16.909	17.02	17.125	0.097298	16.777	16.882	17.001	0.10078	-0.1475	-0.13773	-0.1241	0.011414

# Device Test: 12.26 IQ|IIM\_EN/BOOT/10/8///0MHz/@IQ\_HS\_IIM

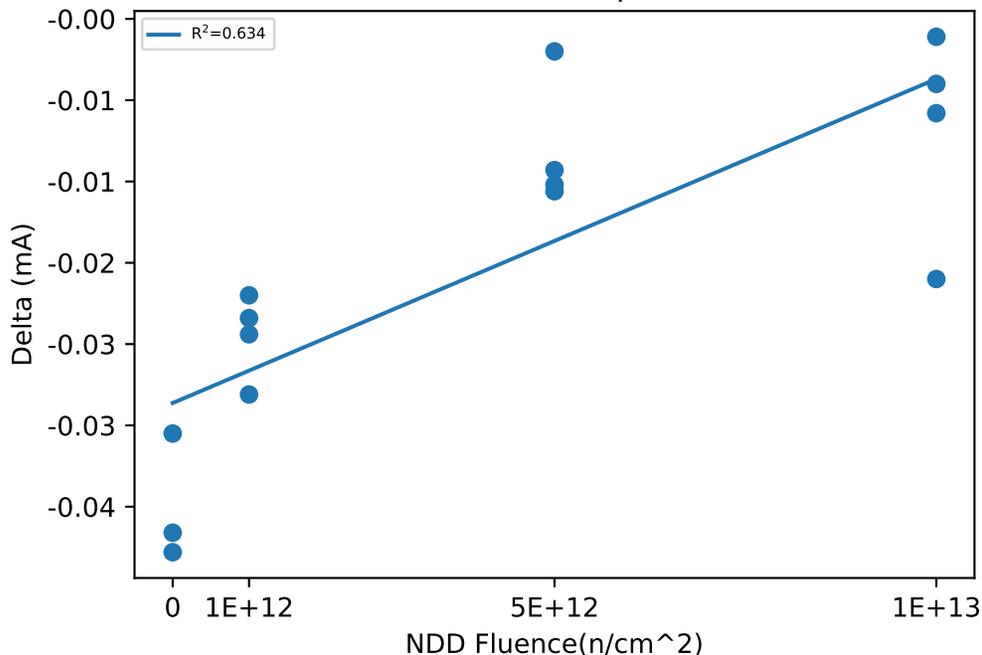
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.6947	3.6581	-0.0366
42	0	CORRELATION	3.8458	3.808	-0.0378
43	0	CORRELATION	3.712	3.6815	-0.0305
51	1e+12	NDD	3.8509	3.8289	-0.022
52	1e+12	NDD	3.8087	3.7806	-0.0281
53	1e+12	NDD	3.8005	3.7771	-0.0234
54	1e+12	NDD	3.8175	3.7931	-0.0244
55	5e+12	NDD	3.7177	3.7107	-0.007
56	5e+12	NDD	3.6707	3.6551	-0.0156
57	5e+12	NDD	3.8125	3.7982	-0.0143
58	5e+12	NDD	3.8626	3.8474	-0.0152
59	1e+13	NDD	3.7667	3.7457	-0.021
60	1e+13	NDD	3.7835	3.7745	-0.009
61	1e+13	NDD	3.8006	3.7945	-0.0061
62	1e+13	NDD	3.7696	3.7588	-0.0108

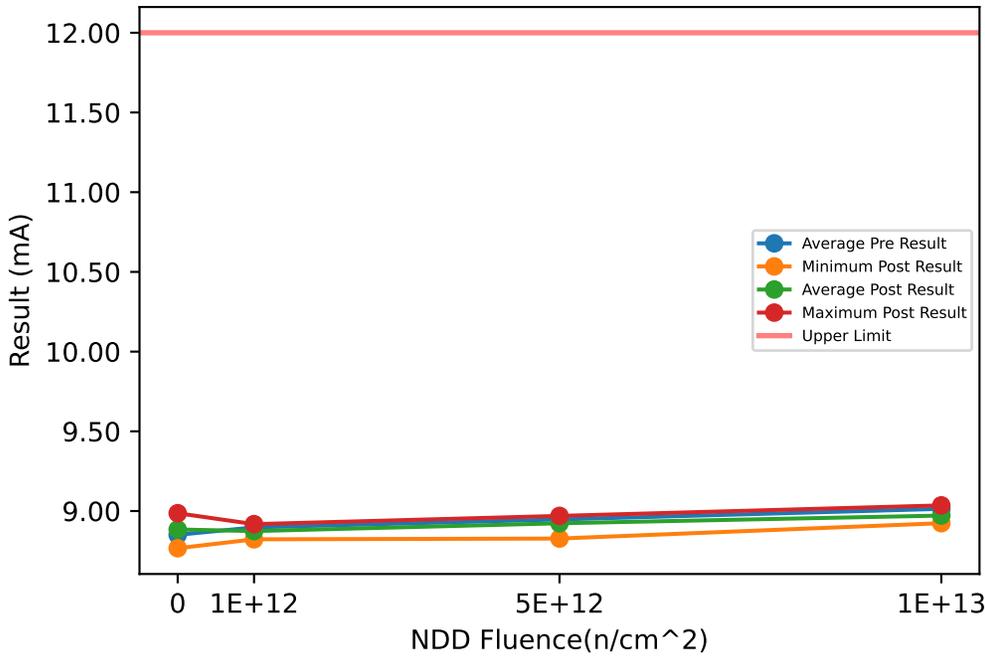
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	3.6947	3.7508	3.8458	0.082697	3.6581	3.7159	3.808	0.080643	-0.0378	-0.034967	-0.0305	0.0039145
1e+12	3.8005	3.8194	3.8509	0.022118	3.7771	3.7949	3.8289	0.023668	-0.0281	-0.024475	-0.022	0.0026094
5e+12	3.6707	3.7659	3.8626	0.087386	3.6551	3.7529	3.8474	0.086271	-0.0156	-0.013025	-0.007	0.0040533
1e+13	3.7667	3.7801	3.8006	0.015509	3.7457	3.7684	3.7945	0.021023	-0.021	-0.011725	-0.0061	0.0064794

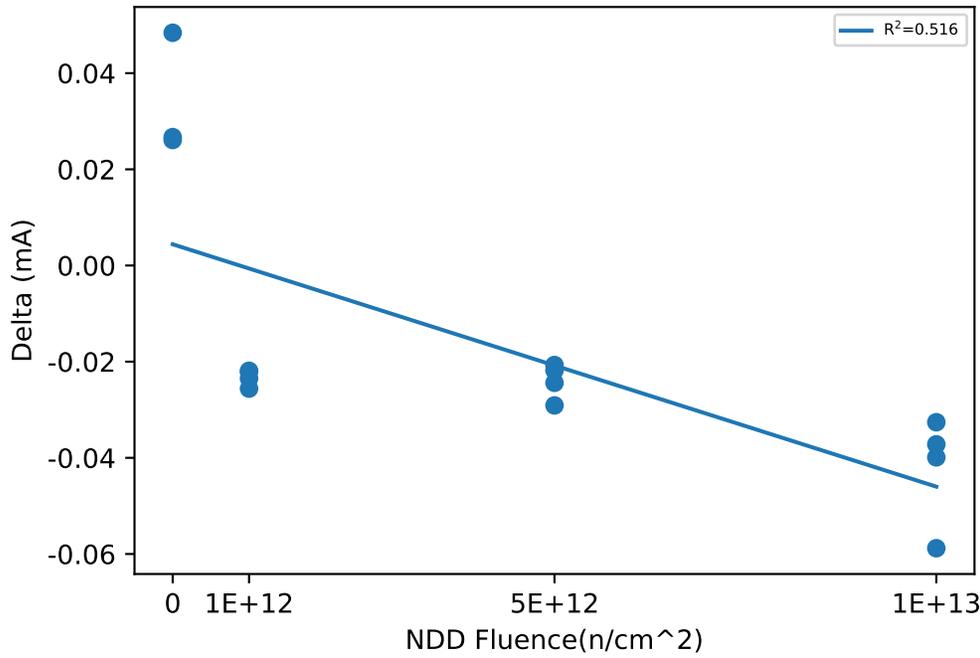
NDD vs Result Stats



Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.9379	8.9863	0.0484
42	0	CORRELATION	8.7406	8.7667	0.0261
43	0	CORRELATION	8.8734	8.9001	0.0267
51	1e+12	NDD	8.911	8.8854	-0.0256
52	1e+12	NDD	8.8945	8.871	-0.0235
53	1e+12	NDD	8.8447	8.8226	-0.0221
54	1e+12	NDD	8.9396	8.9177	-0.0219
55	5e+12	NDD	8.9915	8.9624	-0.0291
56	5e+12	NDD	8.8492	8.8274	-0.0218
57	5e+12	NDD	8.9902	8.9695	-0.0207
58	5e+12	NDD	8.9579	8.9335	-0.0244
59	1e+13	NDD	9.0215	8.9816	-0.0399
60	1e+13	NDD	9.0726	9.0354	-0.0372
61	1e+13	NDD	8.9778	8.9452	-0.0326
62	1e+13	NDD	8.9826	8.9238	-0.0588

NDD vs Post - Pre Exposure Delta

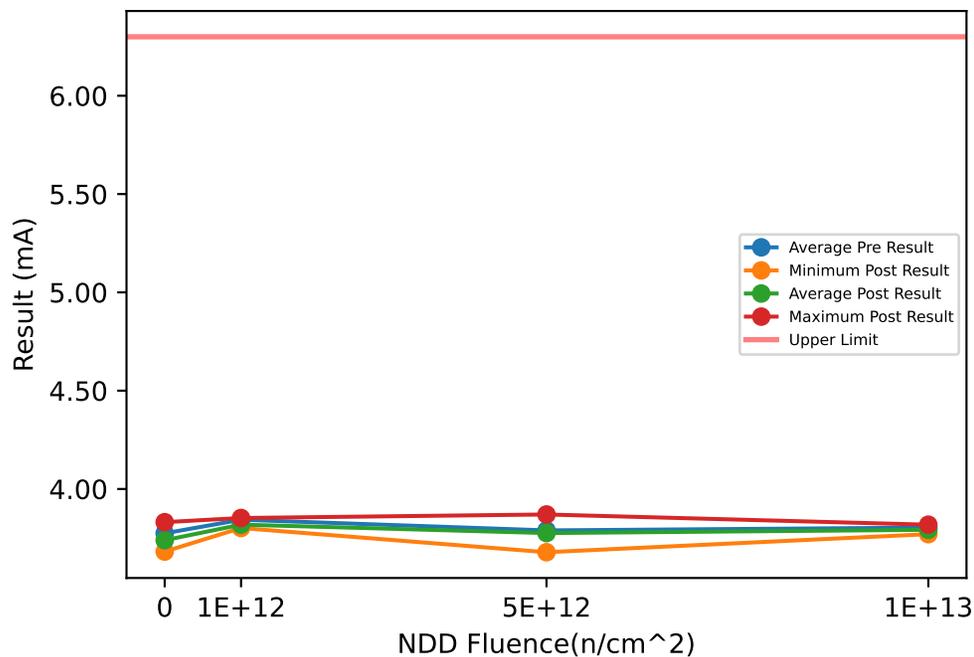


Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	8.7406	8.8506	8.9379	0.1006	8.7667	8.8844	8.9863	0.11064	0.0261	0.033733	0.0484	0.012705
1e+12	8.8447	8.8974	8.9396	0.039797	8.8226	8.8742	8.9177	0.039541	-0.0256	-0.023275	-0.0219	0.0017056
5e+12	8.8492	8.9472	8.9915	0.067156	8.8274	8.9232	8.9695	0.065737	-0.0291	-0.024	-0.0207	0.0037372
1e+13	8.9778	9.0136	9.0726	0.043917	8.9238	8.9715	9.0354	0.048827	-0.0588	-0.042125	-0.0326	0.011518

# Device Test: 12.34 IQ|IIM\_EN/BOOT/12/10///0MHz/@IQ\_HS\_IIM

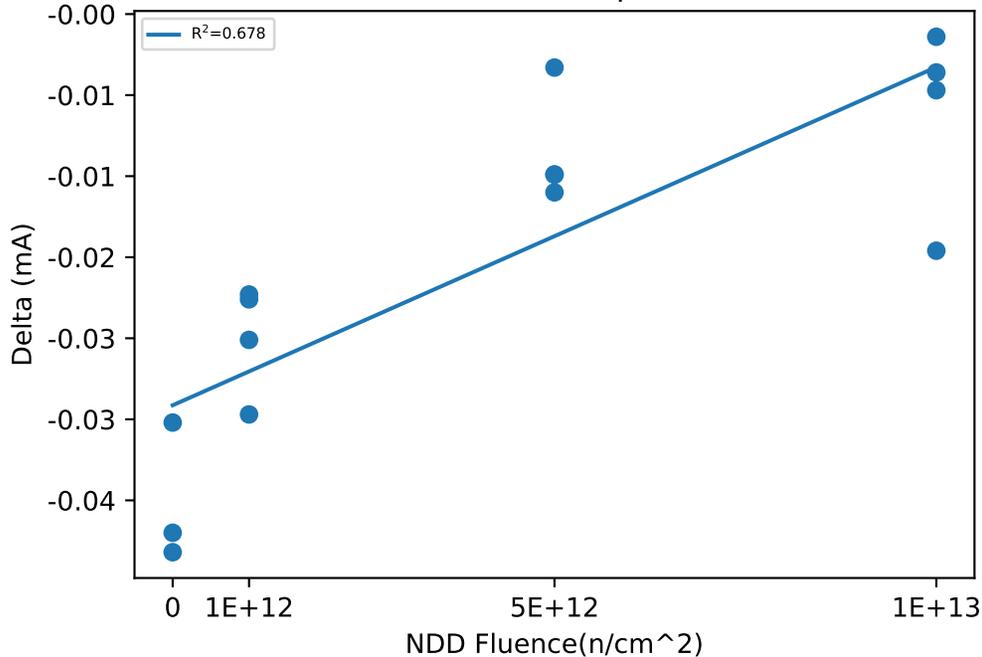
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.7186	3.6816	-0.037
42	0	CORRELATION	3.8694	3.8312	-0.0382
43	0	CORRELATION	3.7355	3.7053	-0.0302
51	1e+12	NDD	3.8747	3.8524	-0.0223
52	1e+12	NDD	3.8333	3.8036	-0.0297
53	1e+12	NDD	3.8241	3.8015	-0.0226
54	1e+12	NDD	3.8418	3.8167	-0.0251
55	5e+12	NDD	3.7417	3.7334	-0.0083
56	5e+12	NDD	3.6932	3.6783	-0.0149
57	5e+12	NDD	3.8361	3.8212	-0.0149
58	5e+12	NDD	3.8863	3.8703	-0.016
59	1e+13	NDD	3.7898	3.7702	-0.0196
60	1e+13	NDD	3.8068	3.7982	-0.0086
61	1e+13	NDD	3.8247	3.8183	-0.0064
62	1e+13	NDD	3.7925	3.7828	-0.0097

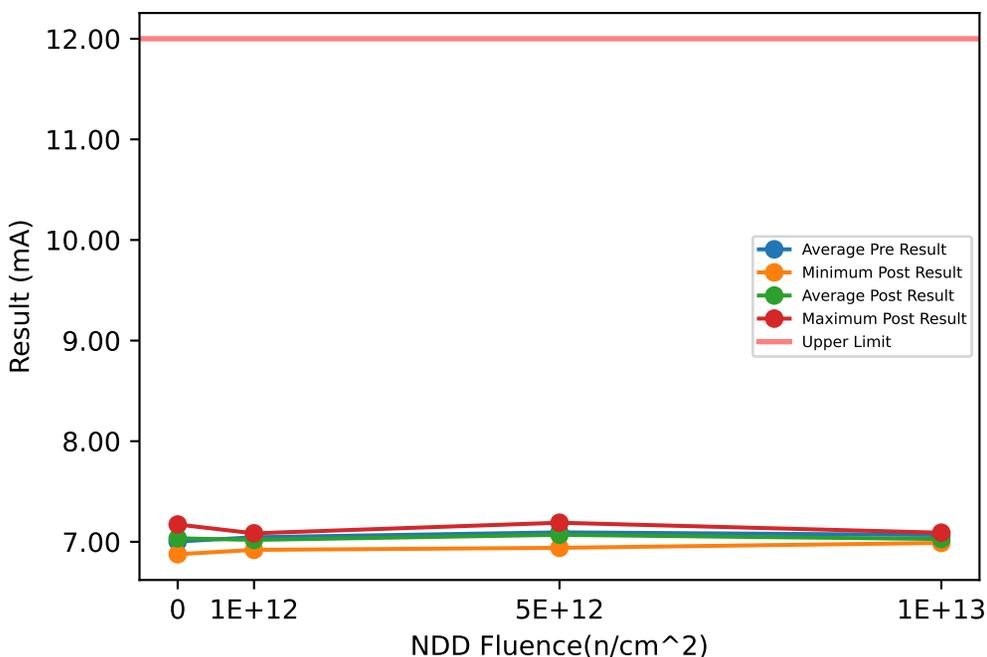
## NDD vs Post - Pre Exposure Delta



## Test Statistics (mA)

Fluence(n/cm^2)	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	3.7186	3.7745	3.8694	0.082619	3.6816	3.7394	3.8312	0.080408	-0.0382	-0.035133	-0.0302	0.0043143
1e+12	3.8241	3.8435	3.8747	0.022036	3.8015	3.8186	3.8524	0.023547	-0.0297	-0.024925	-0.0223	0.0034219
5e+12	3.6932	3.7893	3.8863	0.08775	3.6783	3.7758	3.8703	0.086208	-0.016	-0.013525	-0.0083	0.0035217
1e+13	3.7898	3.8034	3.8247	0.016011	3.7702	3.7924	3.8183	0.020732	-0.0196	-0.011075	-0.0064	0.0058466

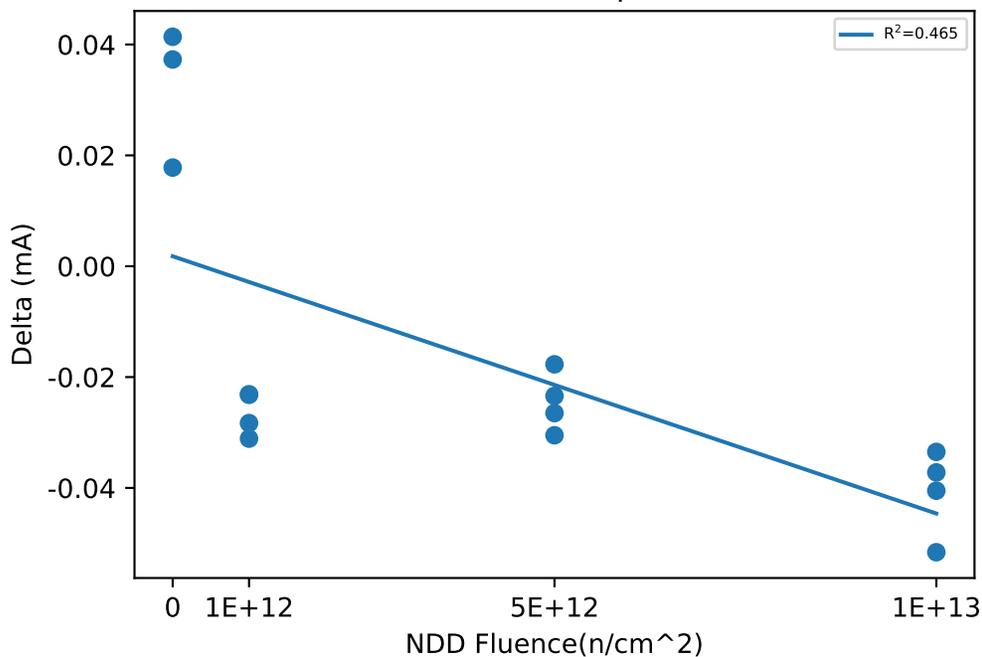
NDD vs Result Stats



Test Results (Upper Limit = 12.0 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.8588	6.8766	0.0178
42	0	CORRELATION	7.1349	7.1722	0.0373
43	0	CORRELATION	7.0151	7.0565	0.0414
51	1e+12	NDD	7.0283	7.0051	-0.0232
52	1e+12	NDD	6.951	6.9199	-0.0311
53	1e+12	NDD	7.1073	7.0842	-0.0231
54	1e+12	NDD	7.0945	7.0662	-0.0283
55	5e+12	NDD	7.008	6.9903	-0.0177
56	5e+12	NDD	6.9667	6.9402	-0.0265
57	5e+12	NDD	7.2131	7.1897	-0.0234
58	5e+12	NDD	7.1878	7.1573	-0.0305
59	1e+13	NDD	7.0438	6.9922	-0.0516
60	1e+13	NDD	7.0788	7.0383	-0.0405
61	1e+13	NDD	7.124	7.0905	-0.0335
62	1e+13	NDD	7.0261	6.9889	-0.0372

NDD vs Post - Pre Exposure Delta

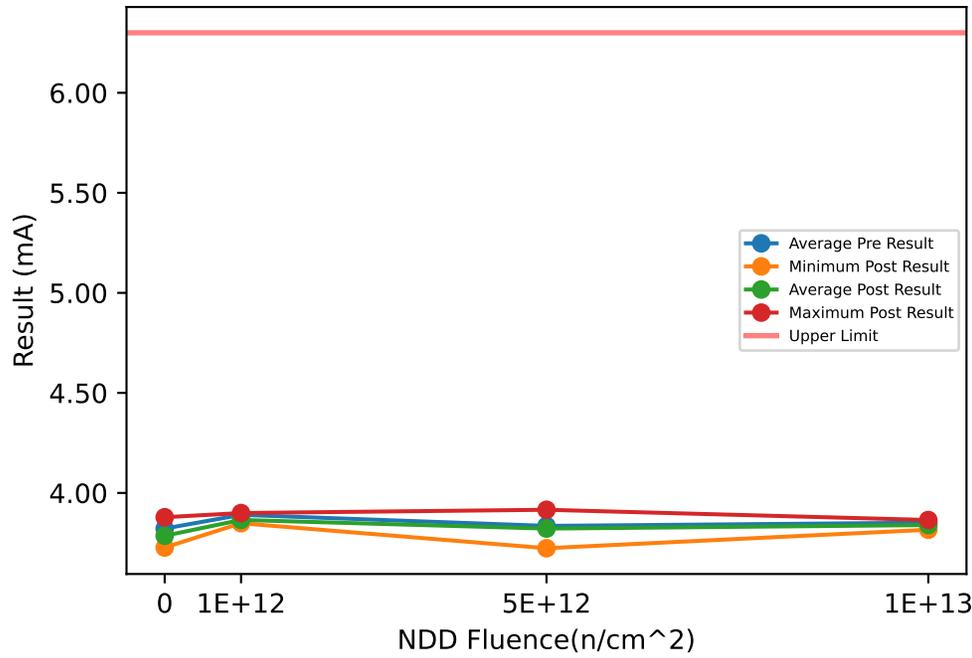


Test Statistics (mA)

Fluence(n/cm^2)	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	6.8588	7.0029	7.1349	0.13845	6.8766	7.0351	7.1722	0.14896	0.0178	0.032167	0.0414	0.01261
1e+12	6.951	7.0453	7.1073	0.071755	6.9199	7.0189	7.0842	0.074146	-0.0311	-0.026425	-0.0231	0.0039508
5e+12	6.9667	7.0939	7.2131	0.12461	6.9402	7.0694	7.1897	0.12268	-0.0305	-0.024525	-0.0177	0.005399
1e+13	7.0261	7.0682	7.124	0.043181	6.9889	7.0275	7.0905	0.047685	-0.0516	-0.0407	-0.0335	0.007809

# Device Test: 12.42 IQ|IIM\_EN/BOOT/14/14///0MHz/@IQ\_HS\_IIM

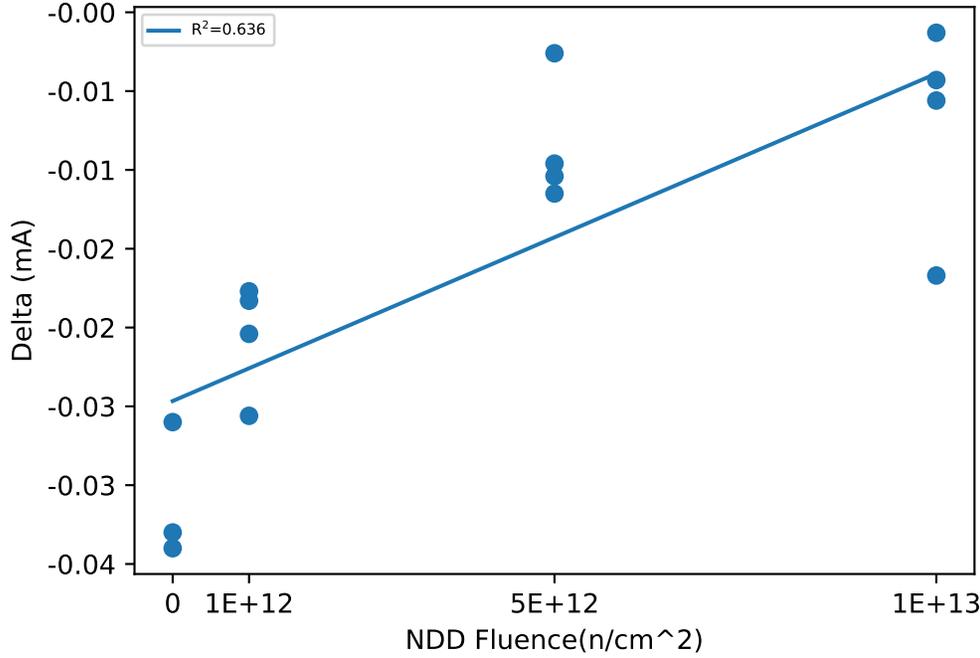
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.765	3.727	-0.038
42	0	CORRELATION	3.9176	3.8786	-0.039
43	0	CORRELATION	3.783	3.752	-0.031
51	1e+12	NDD	3.9222	3.8995	-0.0227
52	1e+12	NDD	3.8799	3.8493	-0.0306
53	1e+12	NDD	3.8718	3.8485	-0.0233
54	1e+12	NDD	3.8876	3.8622	-0.0254
55	5e+12	NDD	3.7862	3.7786	-0.0076
56	5e+12	NDD	3.739	3.7236	-0.0154
57	5e+12	NDD	3.8833	3.8687	-0.0146
58	5e+12	NDD	3.9323	3.9158	-0.0165
59	1e+13	NDD	3.8377	3.816	-0.0217
60	1e+13	NDD	3.8553	3.846	-0.0093
61	1e+13	NDD	3.871	3.8647	-0.0063
62	1e+13	NDD	3.8411	3.8305	-0.0106

## NDD vs Post - Pre Exposure Delta

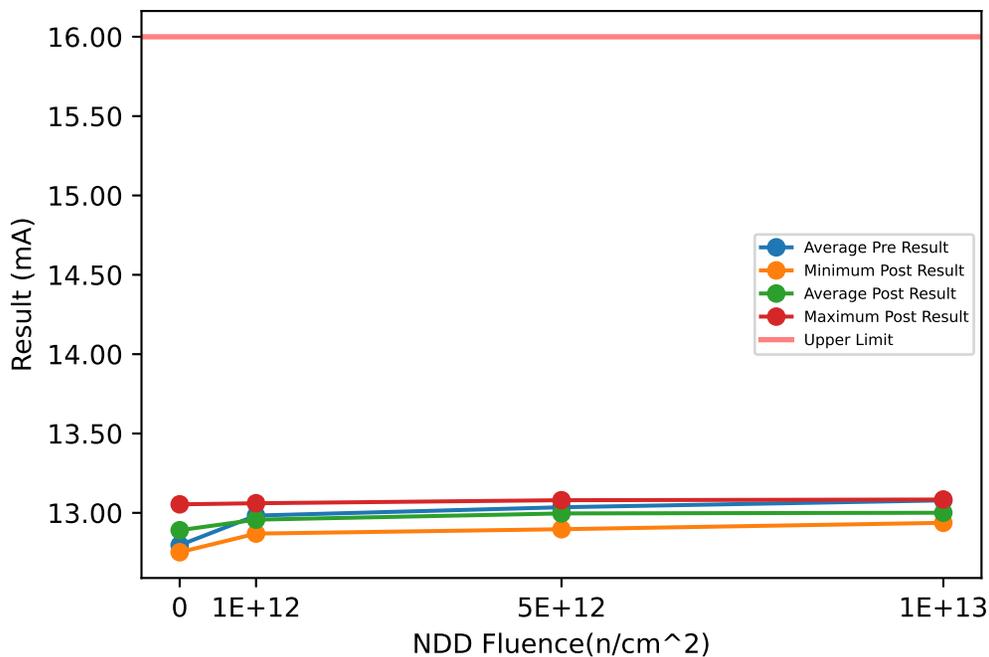


## Test Statistics (mA)

Fluence(n/cm^2)	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	3.765	3.8219	3.9176	0.083395	3.727	3.7859	3.8786	0.081276	-0.039	-0.036	-0.031	0.0043589
1e+12	3.8718	3.8904	3.9222	0.022176	3.8485	3.8649	3.8995	0.023922	-0.0306	-0.0255	-0.0227	0.0035917
5e+12	3.739	3.8352	3.9323	0.088313	3.7236	3.8217	3.9158	0.086689	-0.0165	-0.013525	-0.0076	0.0040261
1e+13	3.8377	3.8513	3.871	0.0152	3.816	3.8393	3.8647	0.0209	-0.0217	-0.011975	-0.0063	0.0067287

# Device Test: 12.5 IOP|PWM/VIN/10/8///1MHz/@I\_OP\_LS\_PWM\_1MHZ

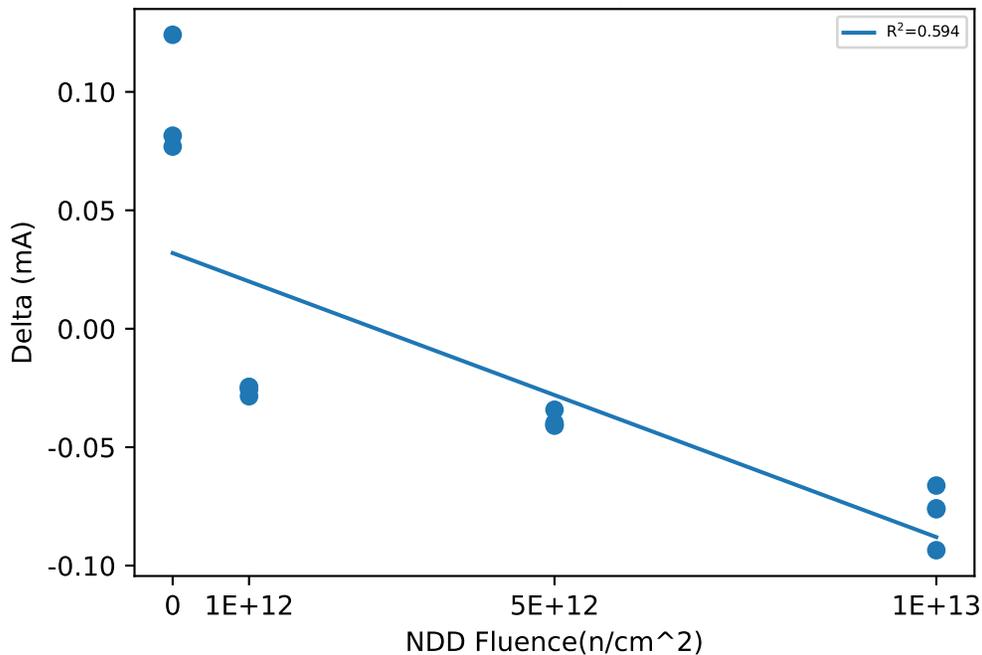
## NDD vs Result Stats



## Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	12.93	13.054	0.1241
42	0	CORRELATION	12.67	12.752	0.0815
43	0	CORRELATION	12.79	12.866	0.0769
51	1e+12	NDD	12.998	12.969	-0.0285
52	1e+12	NDD	12.954	12.929	-0.0246
53	1e+12	NDD	12.894	12.869	-0.0246
54	1e+12	NDD	13.086	13.06	-0.0256
55	5e+12	NDD	13.071	13.03	-0.0409
56	5e+12	NDD	12.938	12.897	-0.0407
57	5e+12	NDD	13.114	13.08	-0.0342
58	5e+12	NDD	13.018	12.979	-0.0398
59	1e+13	NDD	13.056	12.979	-0.0762
60	1e+13	NDD	13.16	13.084	-0.0758
61	1e+13	NDD	13.003	12.937	-0.0662
62	1e+13	NDD	13.095	13.002	-0.0935

## NDD vs Post - Pre Exposure Delta

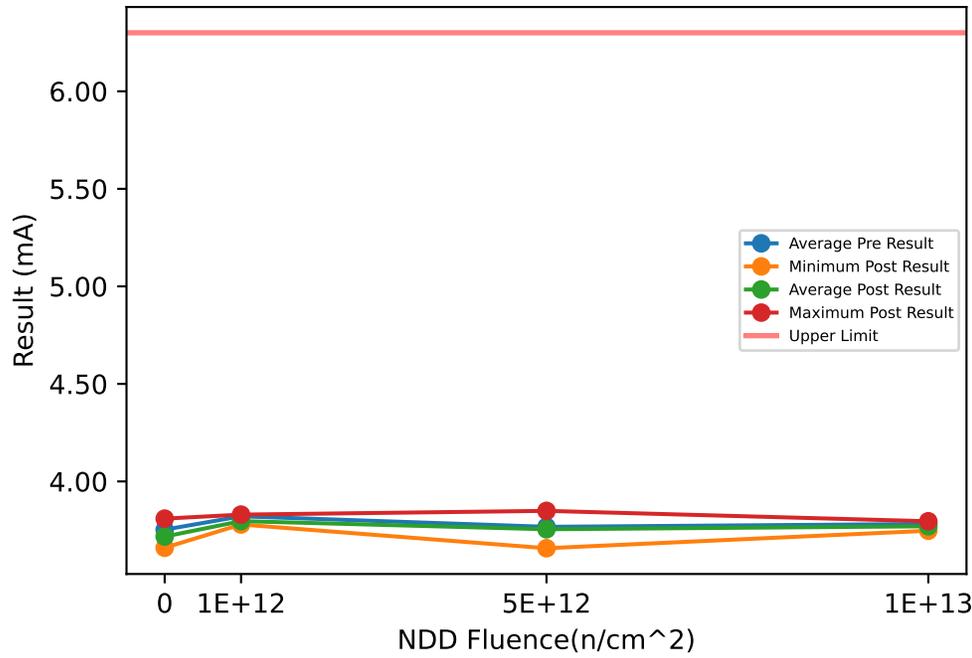


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	12.67	12.796	12.93	0.12969	12.752	12.891	13.054	0.1523	0.0769	0.094167	0.1241	0.026025
1e+12	12.894	12.983	13.086	0.080936	12.869	12.957	13.06	0.080289	-0.0285	-0.025825	-0.0246	0.0018446
5e+12	12.938	13.035	13.114	0.075918	12.897	12.996	13.08	0.078099	-0.0409	-0.0389	-0.0342	0.0031696
1e+13	13.003	13.079	13.16	0.065999	12.937	13.001	13.084	0.061727	-0.0935	-0.077925	-0.0662	0.011366

# Device Test: 12.50 IQ|IIM\_DIS/BOOT/10/8///0MHz/@IQ\_HS\_IIM

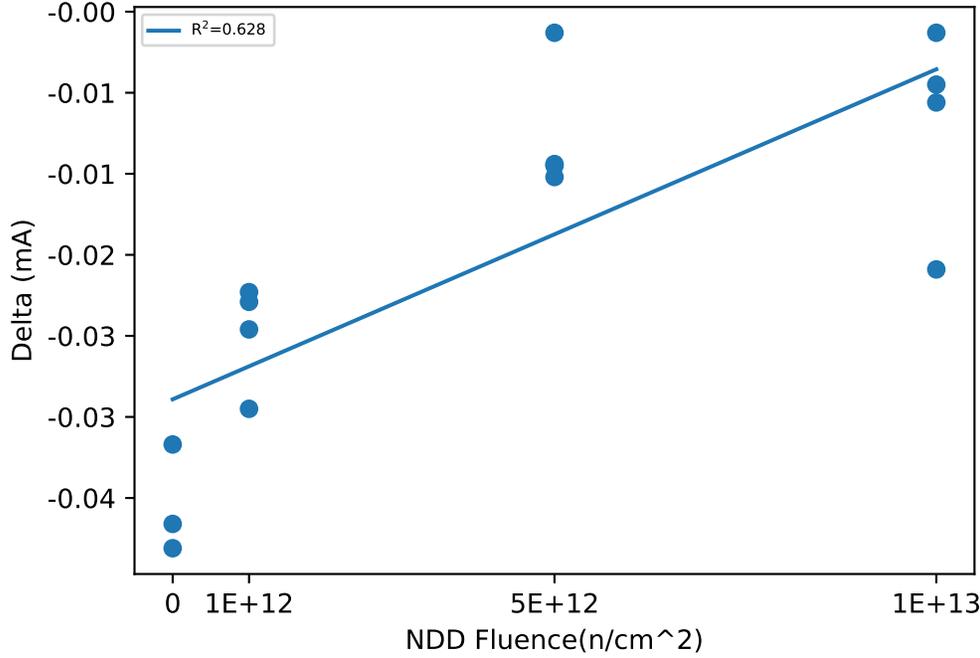
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.6966	3.66	-0.0366
42	0	CORRELATION	3.8474	3.8093	-0.0381
43	0	CORRELATION	3.7145	3.6828	-0.0317
51	1e+12	NDD	3.8528	3.8299	-0.0229
52	1e+12	NDD	3.8113	3.7818	-0.0295
53	1e+12	NDD	3.8016	3.7793	-0.0223
54	1e+12	NDD	3.8194	3.7948	-0.0246
55	5e+12	NDD	3.7192	3.7129	-0.0063
56	5e+12	NDD	3.672	3.6576	-0.0144
57	5e+12	NDD	3.8139	3.7994	-0.0145
58	5e+12	NDD	3.8643	3.8491	-0.0152
59	1e+13	NDD	3.7682	3.7473	-0.0209
60	1e+13	NDD	3.7854	3.7759	-0.0095
61	1e+13	NDD	3.8021	3.7958	-0.0063
62	1e+13	NDD	3.7717	3.7611	-0.0106

## NDD vs Post - Pre Exposure Delta

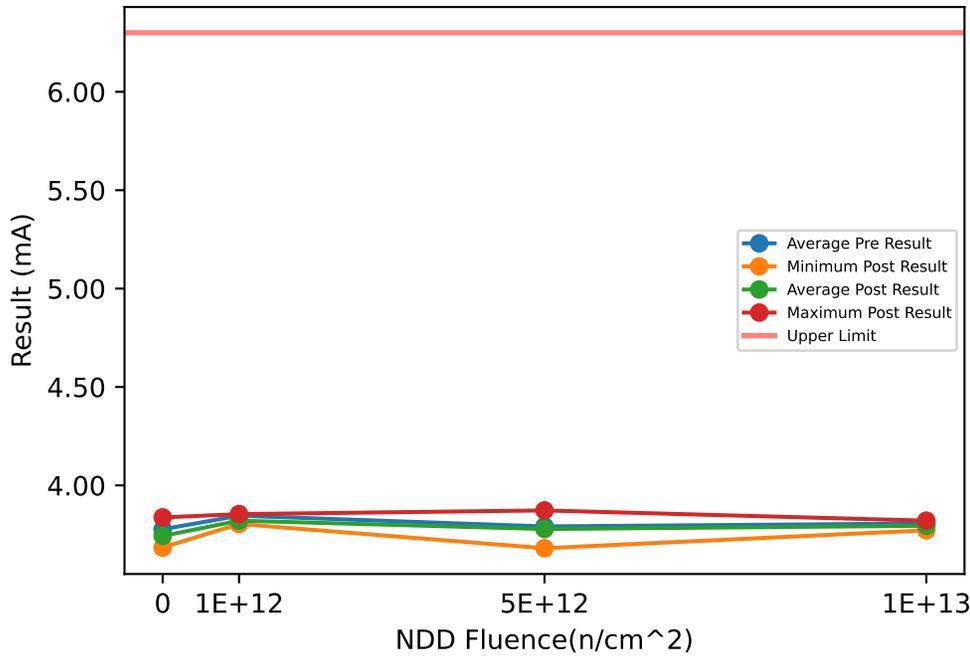


## Test Statistics (mA)

Fluence(n/cm^2)	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	3.6966	3.7528	3.8474	0.082385	3.66	3.7174	3.8093	0.080429	-0.0381	-0.035467	-0.0317	0.0033471
1e+12	3.8016	3.8213	3.8528	0.022241	3.7793	3.7965	3.8299	0.023312	-0.0295	-0.024825	-0.0223	0.0032653
5e+12	3.672	3.7673	3.8643	0.087514	3.6576	3.7548	3.8491	0.0858	-0.0152	-0.0126	-0.0063	0.0042151
1e+13	3.7682	3.7818	3.8021	0.015406	3.7473	3.77	3.7958	0.020776	-0.0209	-0.011825	-0.0063	0.006319

# Device Test: 12.58 IQ|IIM\_DIS/BOOT/12/10///0MHz/@IQ\_HS\_IIM

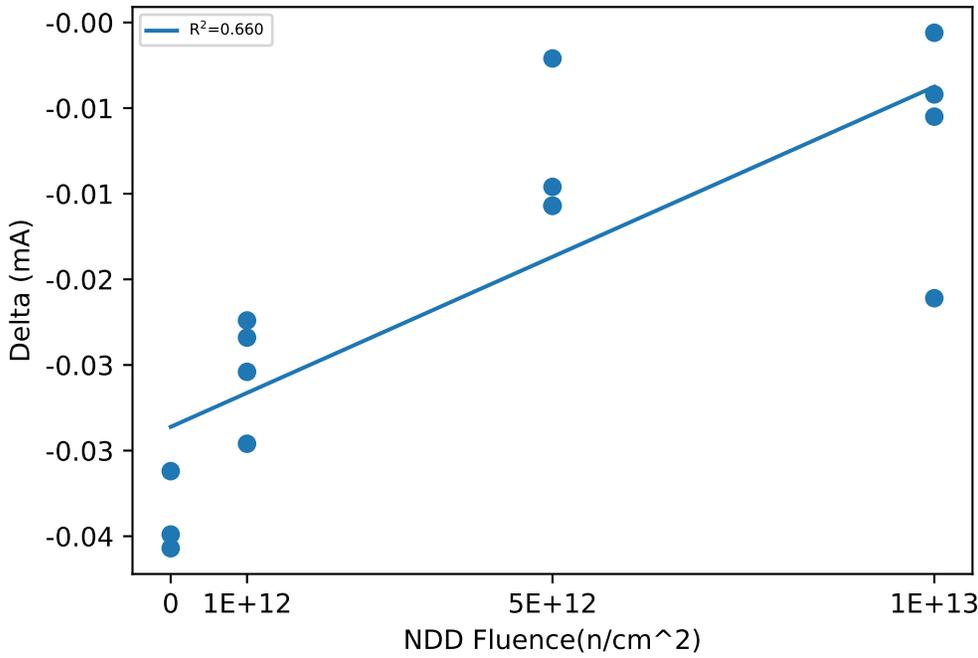
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.7199	3.6842	-0.0357
42	0	CORRELATION	3.872	3.8371	-0.0349
43	0	CORRELATION	3.7388	3.7076	-0.0312
51	1e+12	NDD	3.8773	3.8539	-0.0234
52	1e+12	NDD	3.8357	3.8061	-0.0296
53	1e+12	NDD	3.8261	3.8037	-0.0224
54	1e+12	NDD	3.844	3.8186	-0.0254
55	5e+12	NDD	3.7423	3.7352	-0.0071
56	5e+12	NDD	3.6963	3.6806	-0.0157
57	5e+12	NDD	3.8385	3.8239	-0.0146
58	5e+12	NDD	3.8884	3.8727	-0.0157
59	1e+13	NDD	3.7929	3.7718	-0.0211
60	1e+13	NDD	3.8103	3.8011	-0.0092
61	1e+13	NDD	3.8261	3.8205	-0.0056
62	1e+13	NDD	3.7956	3.7851	-0.0105

## NDD vs Post - Pre Exposure Delta

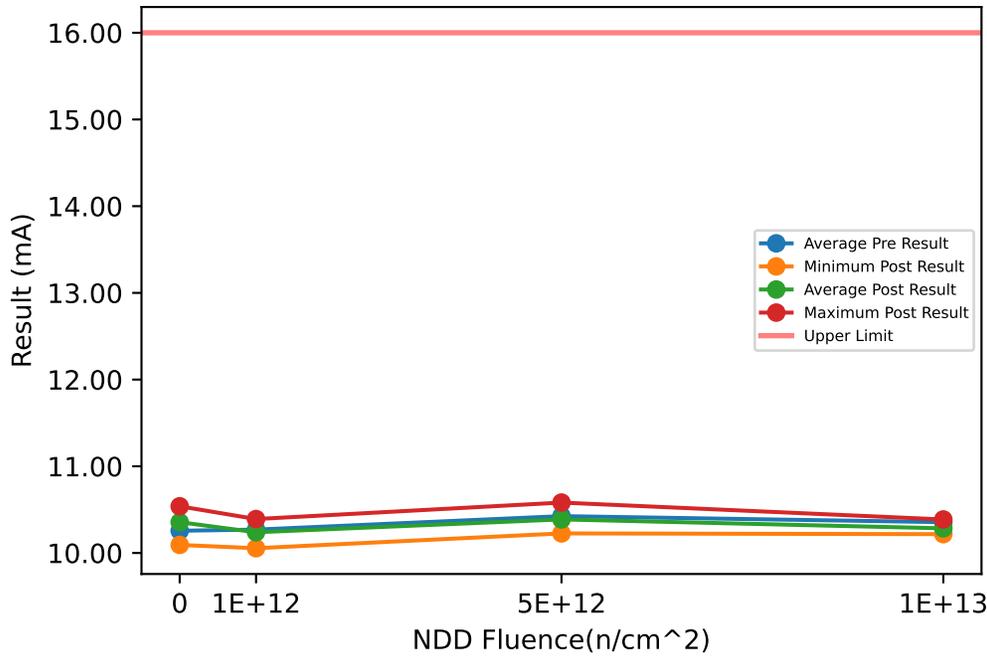


## Test Statistics (mA)

Fluence(n/cm^2)	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	3.7199	3.7769	3.872	0.082899	3.6842	3.743	3.8371	0.082357	-0.0357	-0.033933	-0.0312	0.0024007
1e+12	3.8261	3.8458	3.8773	0.022253	3.8037	3.8206	3.8539	0.023157	-0.0296	-0.0252	-0.0224	0.0031875
5e+12	3.6963	3.7914	3.8884	0.087716	3.6806	3.7781	3.8727	0.086397	-0.0157	-0.013275	-0.0071	0.0041492
1e+13	3.7929	3.8062	3.8261	0.015298	3.7718	3.7946	3.8205	0.021001	-0.0211	-0.0116	-0.0056	0.0066638

# Device Test: 12.6 IOP|PWM/BOOT/10/8///1MHz/@I\_OP\_HS\_PWM\_1MHZ

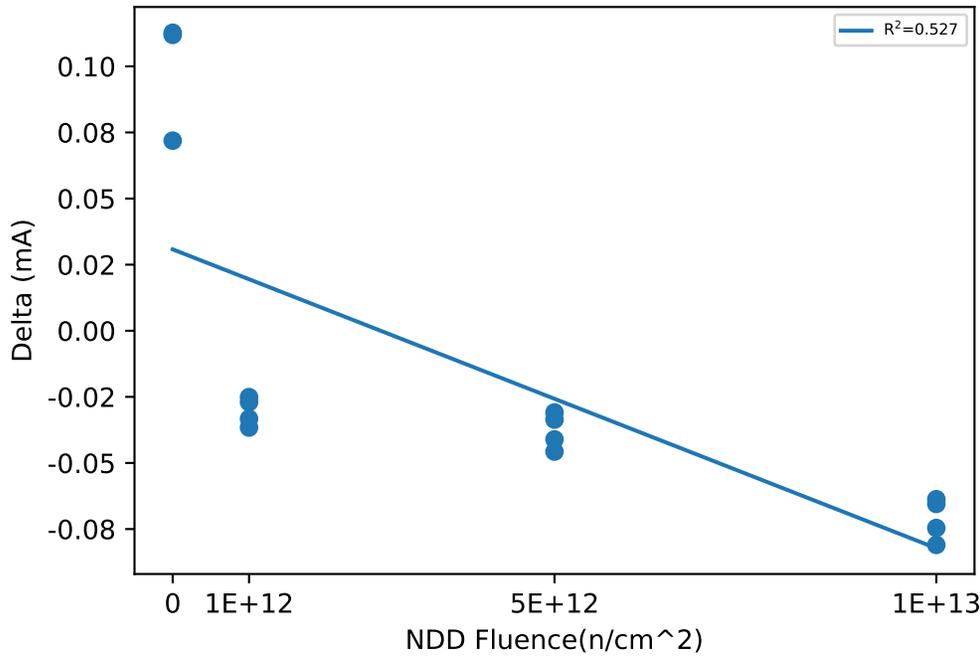
## NDD vs Result Stats



## Test Results (Upper Limit = 16.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	10.021	10.093	0.0719
42	0	CORRELATION	10.426	10.538	0.1127
43	0	CORRELATION	10.322	10.434	0.1119
51	1e+12	NDD	10.202	10.175	-0.027
52	1e+12	NDD	10.091	10.055	-0.0366
53	1e+12	NDD	10.416	10.391	-0.0251
54	1e+12	NDD	10.368	10.335	-0.0333
55	5e+12	NDD	10.298	10.268	-0.0309
56	5e+12	NDD	10.267	10.226	-0.0411
57	5e+12	NDD	10.615	10.581	-0.0336
58	5e+12	NDD	10.52	10.474	-0.0457
59	1e+13	NDD	10.316	10.235	-0.081
60	1e+13	NDD	10.373	10.299	-0.0746
61	1e+13	NDD	10.45	10.386	-0.0637
62	1e+13	NDD	10.283	10.217	-0.0655

## NDD vs Post - Pre Exposure Delta

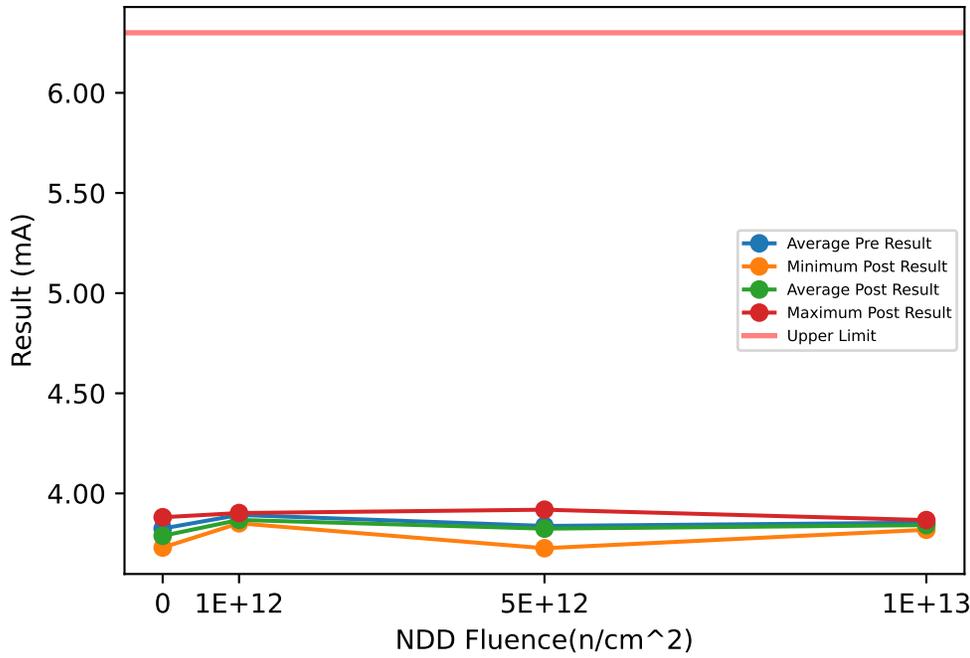


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	10.021	10.256	10.426	0.21028	10.093	10.355	10.538	0.23305	0.0719	0.098833	0.1127	0.023328
1e+12	10.091	10.269	10.416	0.15012	10.055	10.239	10.391	0.15322	-0.0366	-0.0305	-0.0251	0.0053684
5e+12	10.267	10.425	10.615	0.16945	10.226	10.387	10.581	0.16899	-0.0457	-0.037825	-0.0309	0.0067958
1e+13	10.283	10.355	10.45	0.073449	10.217	10.284	10.386	0.076665	-0.081	-0.0712	-0.0637	0.0080899

# Device Test: 12.66 IQ|IIM\_DIS/BOOT/14/14///0MHz/@IQ\_HS\_IIM

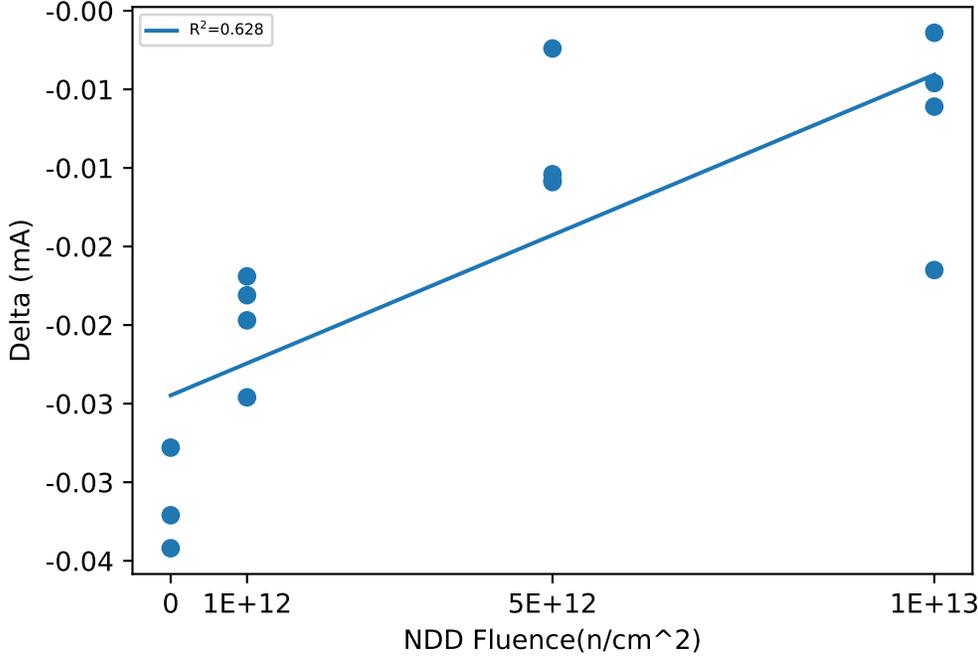
## NDD vs Result Stats



## Test Results (Upper Limit = 6.3 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.7668	3.7297	-0.0371
42	0	CORRELATION	3.9203	3.8811	-0.0392
43	0	CORRELATION	3.7868	3.754	-0.0328
51	1e+12	NDD	3.9239	3.902	-0.0219
52	1e+12	NDD	3.8819	3.8523	-0.0296
53	1e+12	NDD	3.8738	3.8507	-0.0231
54	1e+12	NDD	3.8899	3.8652	-0.0247
55	5e+12	NDD	3.7881	3.7807	-0.0074
56	5e+12	NDD	3.7417	3.7263	-0.0154
57	5e+12	NDD	3.886	3.8701	-0.0159
58	5e+12	NDD	3.9345	3.9187	-0.0158
59	1e+13	NDD	3.8399	3.8184	-0.0215
60	1e+13	NDD	3.8582	3.8486	-0.0096
61	1e+13	NDD	3.8732	3.8668	-0.0064
62	1e+13	NDD	3.8436	3.8325	-0.0111

## NDD vs Post - Pre Exposure Delta

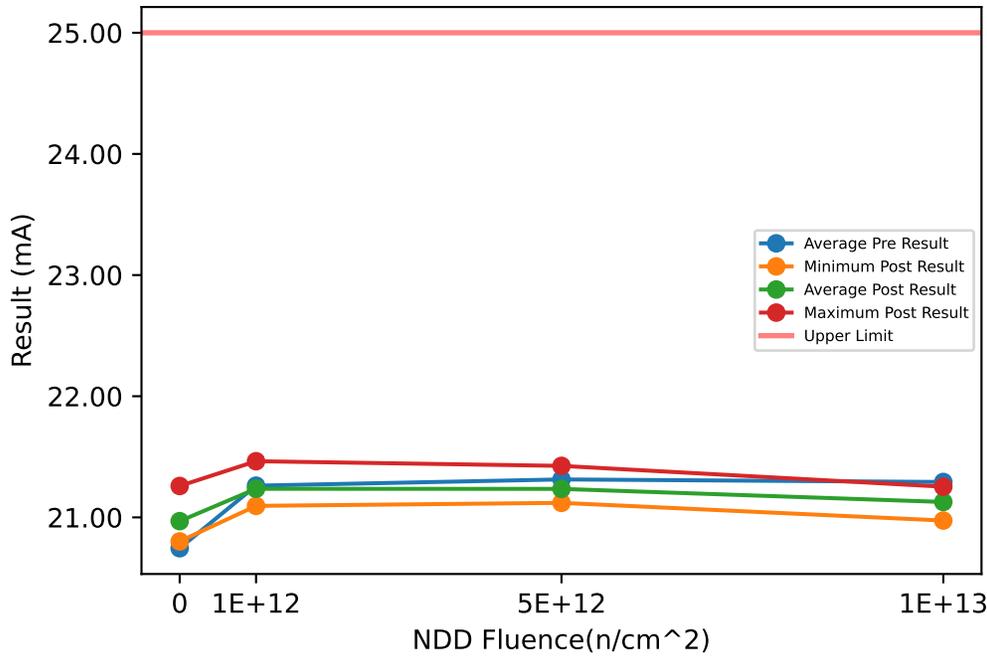


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	3.7668	3.8246	3.9203	0.083451	3.7297	3.7883	3.8811	0.081309	-0.0392	-0.036367	-0.0328	0.0032624
1e+12	3.8738	3.8924	3.9239	0.022021	3.8507	3.8676	3.902	0.023866	-0.0296	-0.024825	-0.0219	0.0033837
5e+12	3.7417	3.8376	3.9345	0.088278	3.7263	3.8239	3.9187	0.086628	-0.0159	-0.013625	-0.0074	0.0041556
1e+13	3.8399	3.8537	3.8732	0.015198	3.8184	3.8416	3.8668	0.020857	-0.0215	-0.01215	-0.0064	0.0065343

# Device Test: 12.7 IOP|PWM/VIN/10/8///2MHz/@I\_OP\_LS\_PWM\_2MHZ

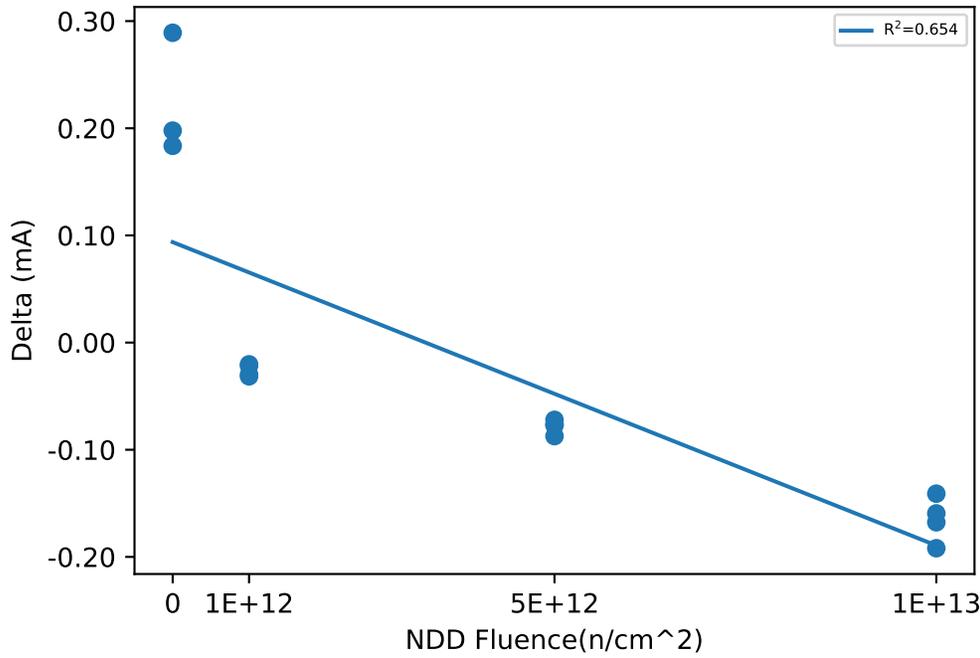
## NDD vs Result Stats



## Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	20.97	21.259	0.2891
42	0	CORRELATION	20.604	20.802	0.1978
43	0	CORRELATION	20.662	20.846	0.1836
51	1e+12	NDD	21.239	21.207	-0.0315
52	1e+12	NDD	21.2	21.178	-0.0216
53	1e+12	NDD	21.115	21.095	-0.0203
54	1e+12	NDD	21.493	21.464	-0.0298
55	5e+12	NDD	21.319	21.246	-0.0721
56	5e+12	NDD	21.207	21.12	-0.0873
57	5e+12	NDD	21.502	21.425	-0.0765
58	5e+12	NDD	21.226	21.149	-0.0771
59	1e+13	NDD	21.22	21.052	-0.1677
60	1e+13	NDD	21.389	21.23	-0.1594
61	1e+13	NDD	21.115	20.974	-0.141
62	1e+13	NDD	21.445	21.253	-0.1919

## NDD vs Post - Pre Exposure Delta

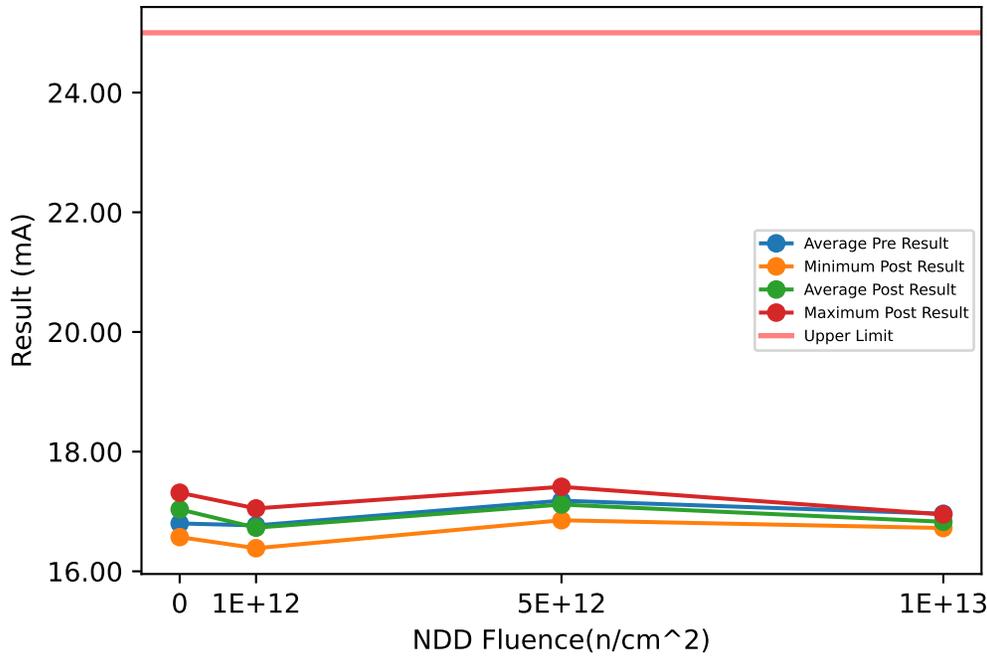


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	20.604	20.745	20.97	0.19671	20.802	20.969	21.259	0.25231	0.1836	0.2235	0.2891	0.057253
1e+12	21.115	21.262	21.493	0.16277	21.095	21.236	21.464	0.15901	-0.0315	-0.0258	-0.0203	0.005668
5e+12	21.207	21.313	21.502	0.13457	21.12	21.235	21.425	0.13771	-0.0873	-0.07825	-0.0721	0.006432
1e+13	21.115	21.292	21.445	0.15212	20.974	21.127	21.253	0.13602	-0.1919	-0.165	-0.141	0.021121

# Device Test: 12.8 IOP|PWM/BOOT/10/8///2MHz/@I\_OP\_HS\_PWM\_2MHZ

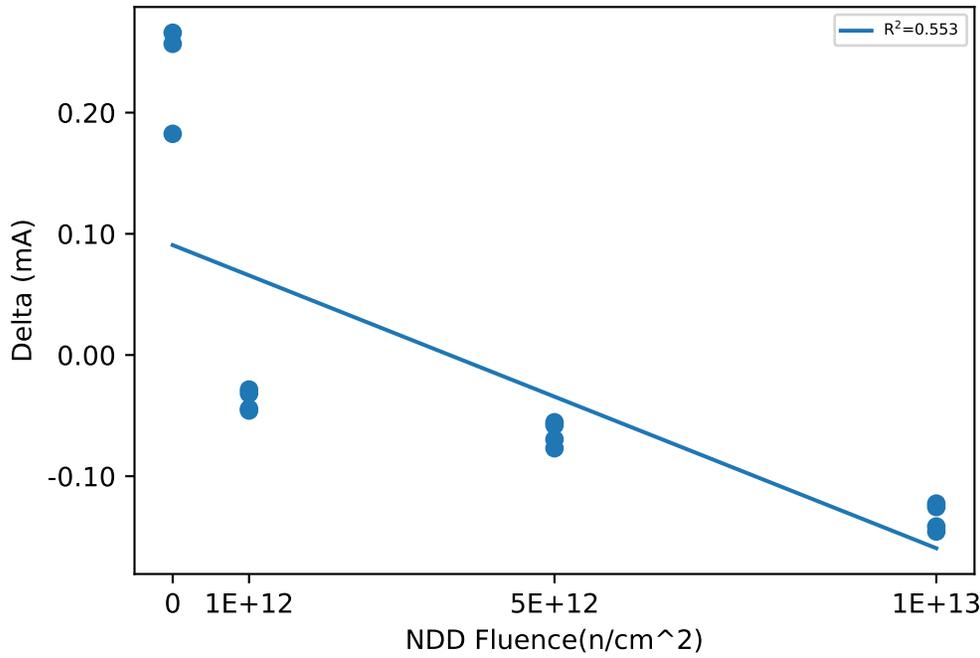
## NDD vs Result Stats



## Test Results (Upper Limit = 25.0 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	16.389	16.572	0.1825
42	0	CORRELATION	17.047	17.313	0.2659
43	0	CORRELATION	16.963	17.22	0.2568
51	1e+12	NDD	16.594	16.562	-0.0317
52	1e+12	NDD	16.431	16.386	-0.0458
53	1e+12	NDD	17.079	17.051	-0.0285
54	1e+12	NDD	16.962	16.918	-0.0444
55	5e+12	NDD	16.929	16.871	-0.0579
56	5e+12	NDD	16.922	16.853	-0.0696
57	5e+12	NDD	17.468	17.412	-0.0555
58	5e+12	NDD	17.403	17.326	-0.0769
59	1e+13	NDD	16.912	16.766	-0.1456
60	1e+13	NDD	17.013	16.872	-0.1415
61	1e+13	NDD	17.073	16.95	-0.1226
62	1e+13	NDD	16.849	16.723	-0.1254

## NDD vs Post - Pre Exposure Delta

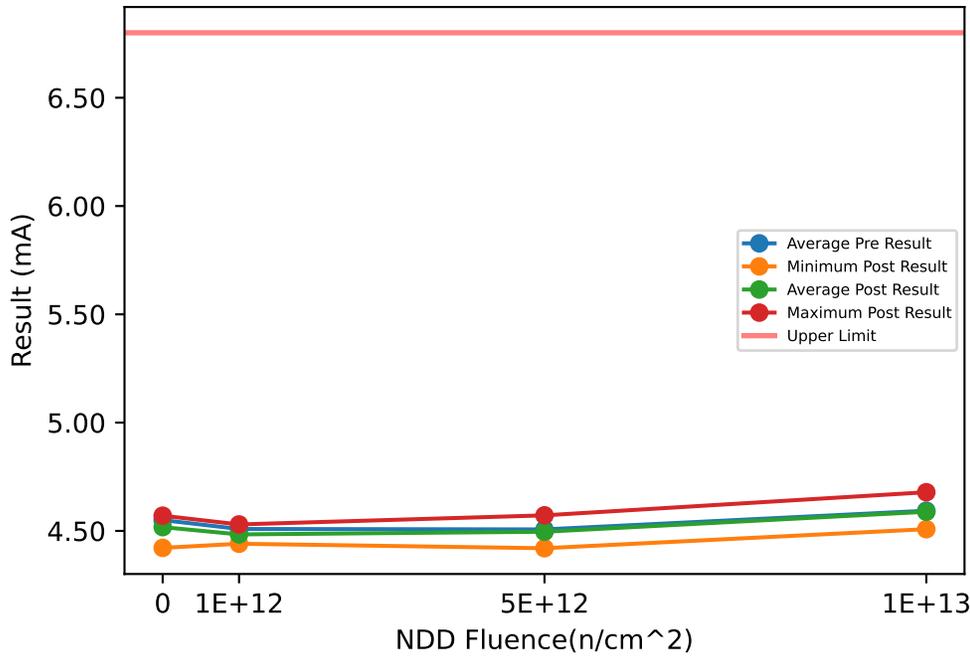


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	16.389	16.8	17.047	0.35829	16.572	17.035	17.313	0.40404	0.1825	0.23507	0.2659	0.045751
1e+12	16.431	16.767	17.079	0.30452	16.386	16.729	17.051	0.30818	-0.0458	-0.0376	-0.0285	0.0087769
5e+12	16.922	17.181	17.468	0.29549	16.853	17.116	17.412	0.29507	-0.0769	-0.064975	-0.0555	0.010057
1e+13	16.849	16.962	17.073	0.10045	16.723	16.828	16.95	0.1027	-0.1456	-0.13378	-0.1226	0.011468

# Device Test: 12.9 IQ|PWM/VIN/12/10///0MHz/@IQ\_LS\_PWM

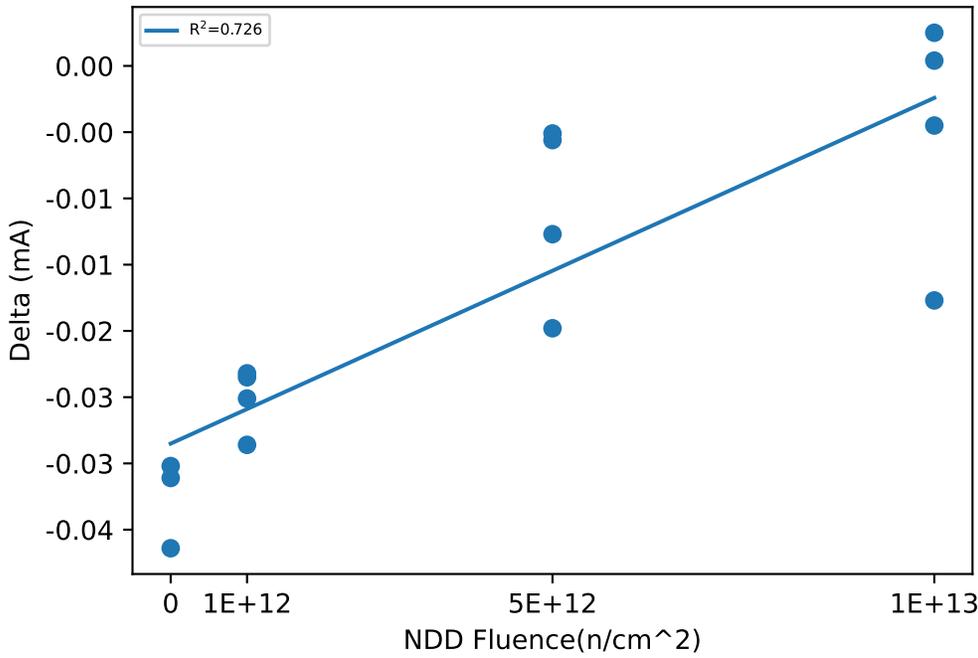
## NDD vs Result Stats



## Test Results (Upper Limit = 6.8 (mA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.6067	4.5703	-0.0364
42	0	CORRELATION	4.4529	4.4218	-0.0311
43	0	CORRELATION	4.5906	4.5604	-0.0302
51	1e+12	NDD	4.5531	4.5299	-0.0232
52	1e+12	NDD	4.4694	4.4408	-0.0286
53	1e+12	NDD	4.4996	4.4745	-0.0251
54	1e+12	NDD	4.5139	4.4904	-0.0235
55	5e+12	NDD	4.5917	4.5719	-0.0198
56	5e+12	NDD	4.4257	4.4201	-0.0056
57	5e+12	NDD	4.4353	4.4302	-0.0051
58	5e+12	NDD	4.5753	4.5626	-0.0127
59	1e+13	NDD	4.5635	4.559	-0.0045
60	1e+13	NDD	4.6782	4.6786	0.0004
61	1e+13	NDD	4.6054	4.6079	0.0025
62	1e+13	NDD	4.5258	4.5081	-0.0177

## NDD vs Post - Pre Exposure Delta

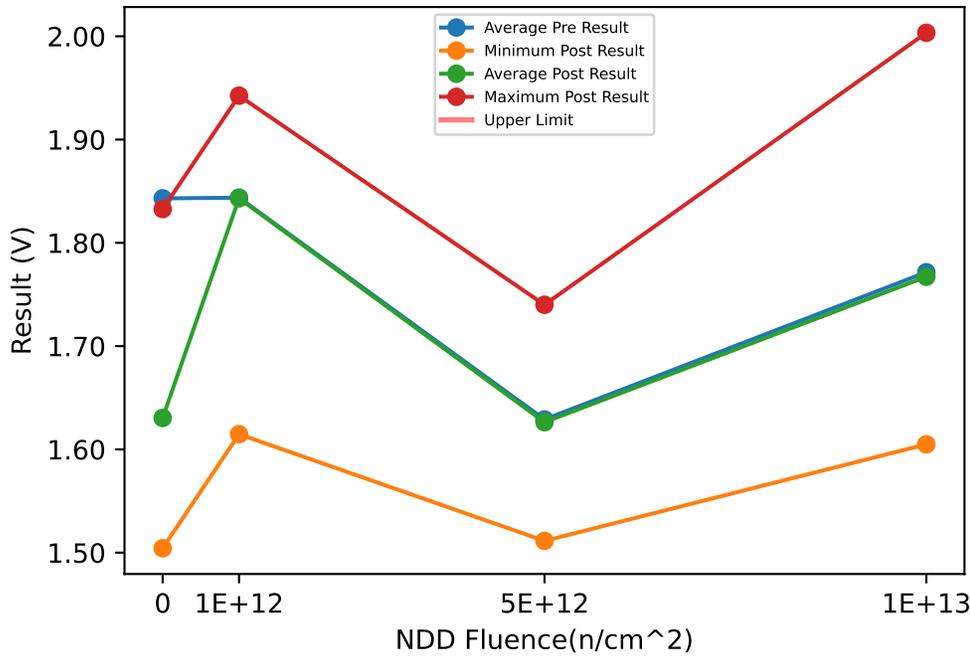


## Test Statistics (mA)

Fluence(n/cm <sup>2</sup> )	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	4.4529	4.5501	4.6067	0.084533	4.4218	4.5175	4.5703	0.083026	-0.0364	-0.032567	-0.0302	0.0033501
1e+12	4.4694	4.509	4.5531	0.034763	4.4408	4.4839	4.5299	0.036987	-0.0286	-0.0251	-0.0232	0.0024779
5e+12	4.4257	4.507	4.5917	0.088675	4.4201	4.4962	4.5719	0.082233	-0.0198	-0.0108	-0.0051	0.0069316
1e+13	4.5258	4.5932	4.6782	0.065316	4.5081	4.5884	4.6786	0.072638	-0.0177	-0.004825	0.0025	0.0090706

# Device Test: 14.11 GAN|3Q/HVIN///0p5A///@HS\_VSD\_0p5A

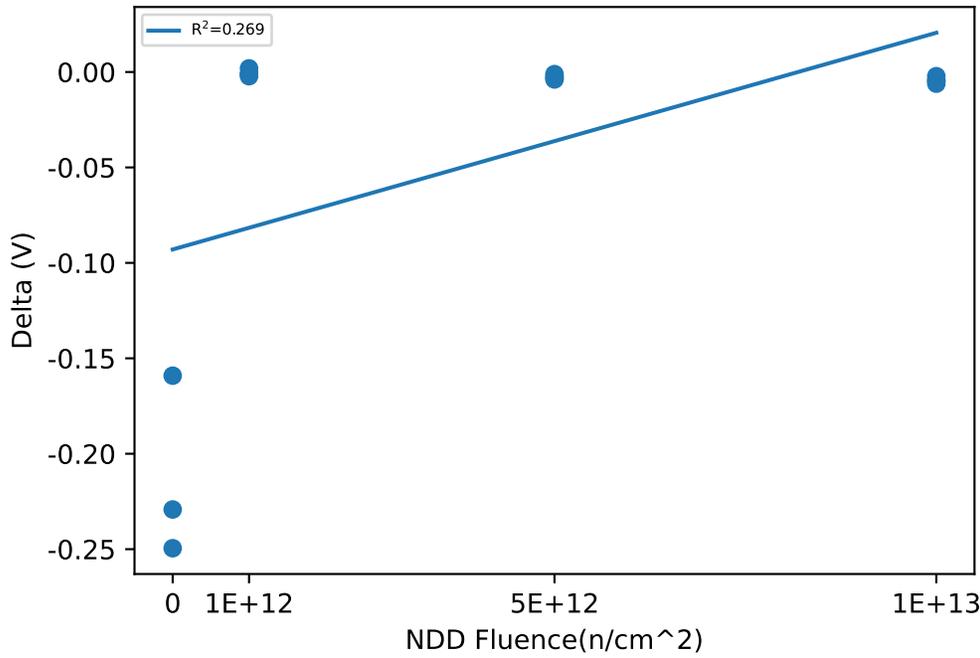
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.9918	1.8327	-0.1591
42	0	CORRELATION	1.7538	1.5043	-0.2495
43	0	CORRELATION	1.7836	1.5544	-0.2292
51	1e+12	NDD	1.8778	1.8756	-0.0022
52	1e+12	NDD	1.9436	1.9425	-0.0011
53	1e+12	NDD	1.6128	1.6147	0.0019
54	1e+12	NDD	1.9407	1.9398	-0.0009
55	5e+12	NDD	1.7423	1.74	-0.0023
56	5e+12	NDD	1.5147	1.5114	-0.0033
57	5e+12	NDD	1.6072	1.6033	-0.0039
58	5e+12	NDD	1.6517	1.6506	-0.0011
59	1e+13	NDD	2.0056	2.0034	-0.0022
60	1e+13	NDD	1.7705	1.766	-0.0045
61	1e+13	NDD	1.6094	1.6049	-0.0045
62	1e+13	NDD	1.7005	1.6944	-0.0061

## NDD vs Post - Pre Exposure Delta

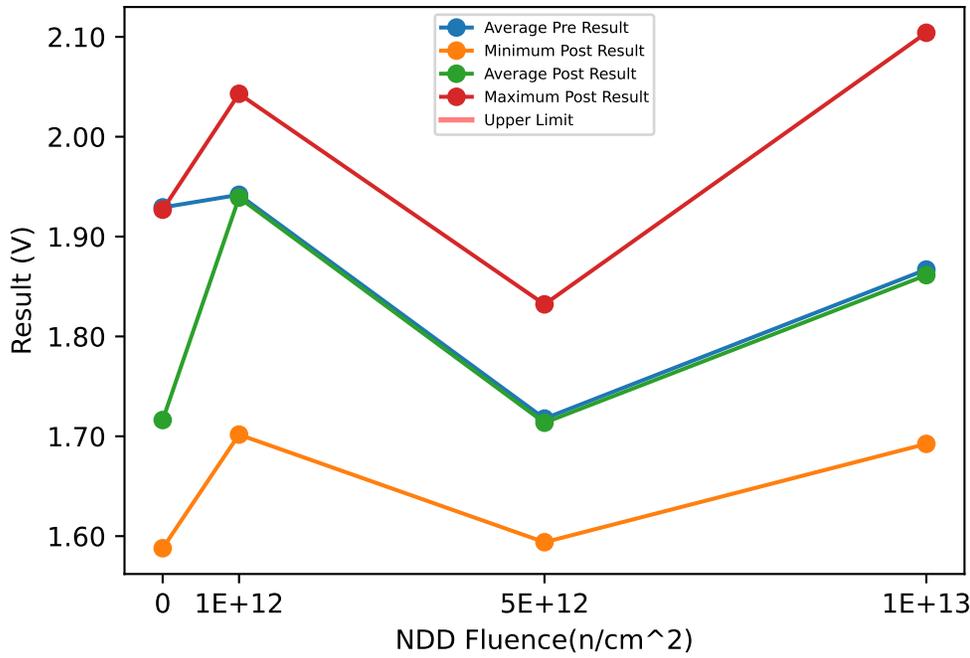


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	1.7538	1.8431	1.9918	0.12967	1.5043	1.6305	1.8327	0.17692	-0.2495	-0.2126	-0.1591	0.047431
1e+12	1.6128	1.8437	1.9436	0.15691	1.6147	1.8432	1.9425	0.15541	-0.0022	-0.000575	0.0019	0.0017462
5e+12	1.5147	1.629	1.7423	0.094678	1.5114	1.6263	1.74	0.095305	-0.0039	-0.00265	-0.0011	0.0012261
1e+13	1.6094	1.7715	2.0056	0.16943	1.6049	1.7672	2.0034	0.17072	-0.0061	-0.004325	-0.0022	0.0016049

# Device Test: 14.13 GAN|3Q/HVIN///1A///@HS\_VSD\_1p0A

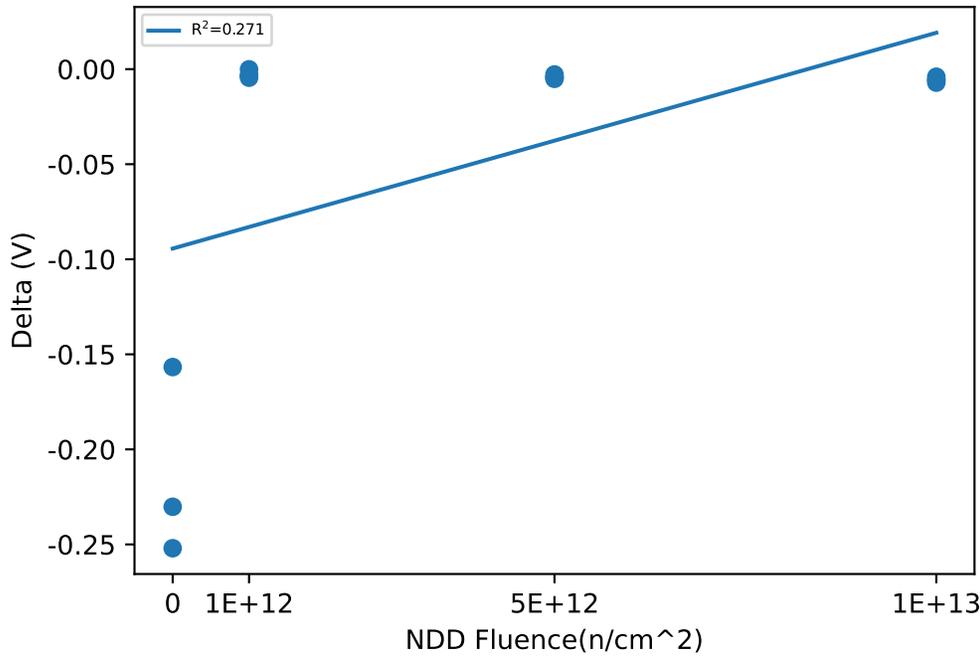
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	2.0836	1.9269	-0.1567
42	0	CORRELATION	1.8399	1.5879	-0.252
43	0	CORRELATION	1.8642	1.634	-0.2302
51	1e+12	NDD	1.978	1.9735	-0.0045
52	1e+12	NDD	2.0464	2.043	-0.0034
53	1e+12	NDD	1.7018	1.7017	-0.0001
54	1e+12	NDD	2.0412	2.038	-0.0032
55	5e+12	NDD	1.8362	1.8321	-0.0041
56	5e+12	NDD	1.5985	1.5939	-0.0046
57	5e+12	NDD	1.6925	1.6874	-0.0051
58	5e+12	NDD	1.7437	1.7409	-0.0028
59	1e+13	NDD	2.1081	2.1041	-0.004
60	1e+13	NDD	1.8692	1.8635	-0.0057
61	1e+13	NDD	1.6981	1.6924	-0.0057
62	1e+13	NDD	1.7926	1.7855	-0.0071

## NDD vs Post - Pre Exposure Delta

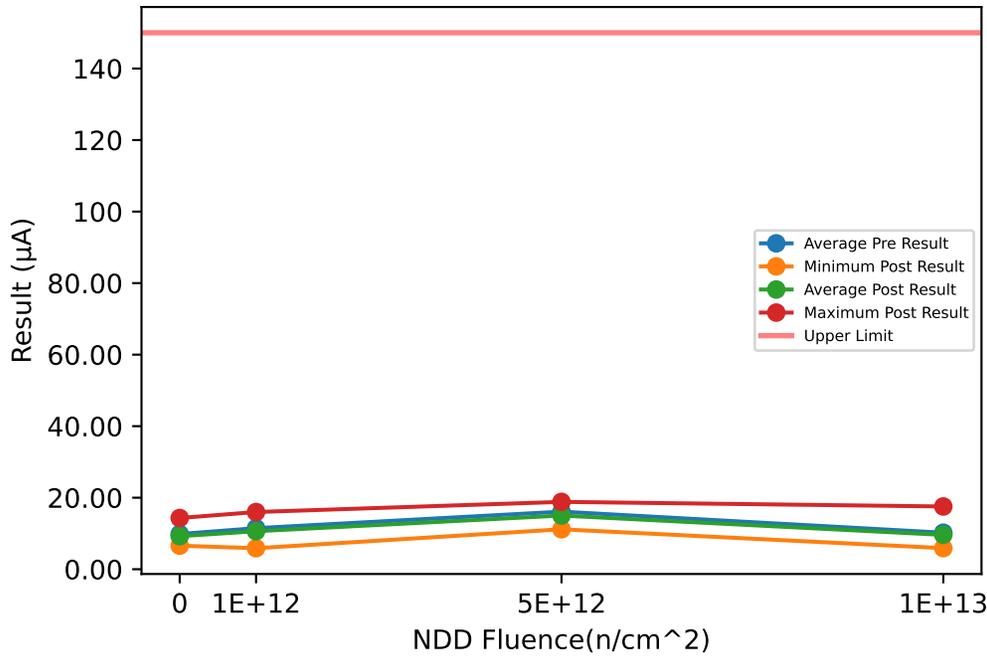


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	1.8399	1.9292	2.0836	0.13424	1.5879	1.7163	1.9269	0.18386	-0.252	-0.21297	-0.1567	0.049933
1e+12	1.7018	1.9419	2.0464	0.16303	1.7017	1.939	2.043	0.16137	-0.0045	-0.0028	-0.0001	0.0018886
5e+12	1.5985	1.7177	1.8362	0.099267	1.5939	1.7136	1.8321	0.09967	-0.0051	-0.00415	-0.0028	0.00098826
1e+13	1.6981	1.867	2.1081	0.17531	1.6924	1.8614	2.1041	0.17629	-0.0071	-0.005625	-0.004	0.0012685

# Device Test: 14.20 GAN|HVLEAK/SW\_LS////150V//@LS\_IDSS\_25C

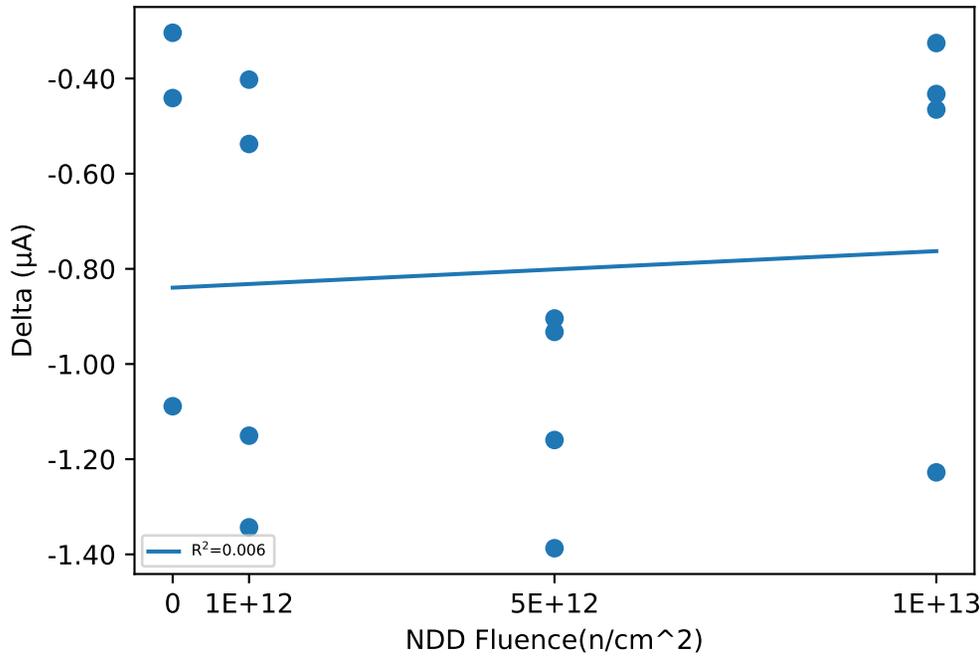
## NDD vs Result Stats



## Test Results (Upper Limit = 150.0 (µA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	15.412	14.323	-1.0887
42	0	CORRELATION	7.0285	6.5874	-0.4411
43	0	CORRELATION	7.0999	6.796	-0.3039
51	1e+12	NDD	15.533	14.382	-1.1506
52	1e+12	NDD	6.7772	6.2396	-0.5376
53	1e+12	NDD	6.2745	5.8721	-0.4024
54	1e+12	NDD	17.337	15.993	-1.3432
55	5e+12	NDD	13.525	12.621	-0.9043
56	5e+12	NDD	18.799	17.412	-1.3871
57	5e+12	NDD	19.993	18.833	-1.1597
58	5e+12	NDD	12.102	11.17	-0.9325
59	1e+13	NDD	8.2351	7.8025	-0.4326
60	1e+13	NDD	7.6191	7.1538	-0.4653
61	1e+13	NDD	6.2208	5.8953	-0.3255
62	1e+13	NDD	18.774	17.546	-1.2277

## NDD vs Post - Pre Exposure Delta

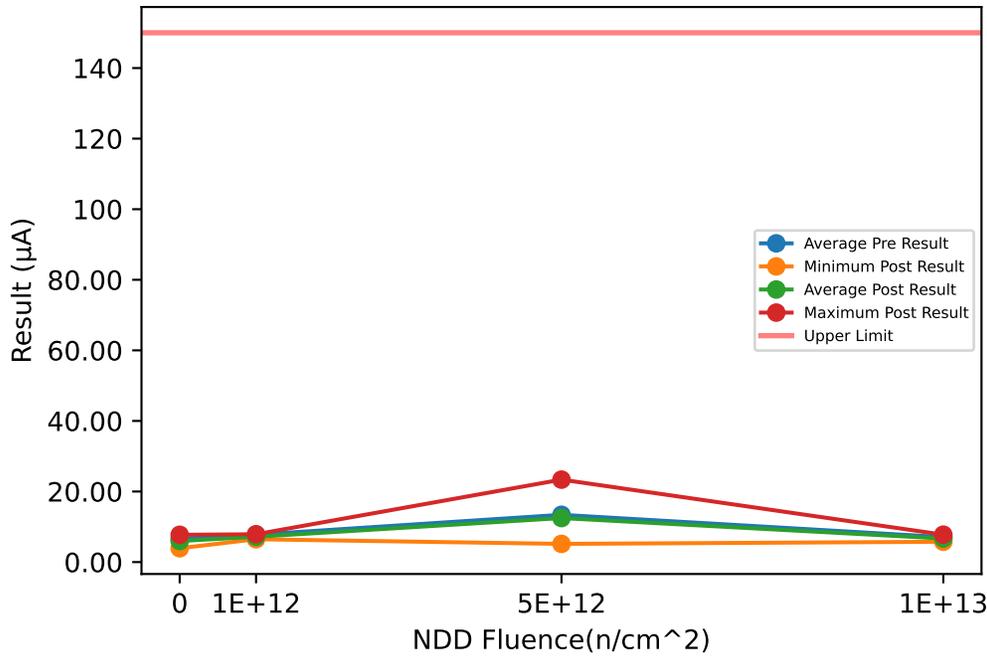


## Test Statistics (µA)

Fluence(n/cm <sup>2</sup> )	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	7.0285	9.8467	15.412	4.8196	6.5874	9.2355	14.323	4.4072	-1.0887	-0.61123	-0.3039	0.41915
1e+12	6.2745	11.48	17.337	5.7717	5.8721	10.622	15.993	5.3153	-1.3432	-0.85845	-0.4024	0.45872
5e+12	12.102	16.105	19.993	3.8749	11.17	15.009	18.833	3.6894	-1.3871	-1.0959	-0.9043	0.2253
1e+13	6.2208	10.212	18.774	5.7697	5.8953	9.5995	17.546	5.3567	-1.2277	-0.61278	-0.3255	0.41428

# Device Test: 14.27 GAN|HVLEAK/HVIN////150V//@HS\_IDSS\_25C

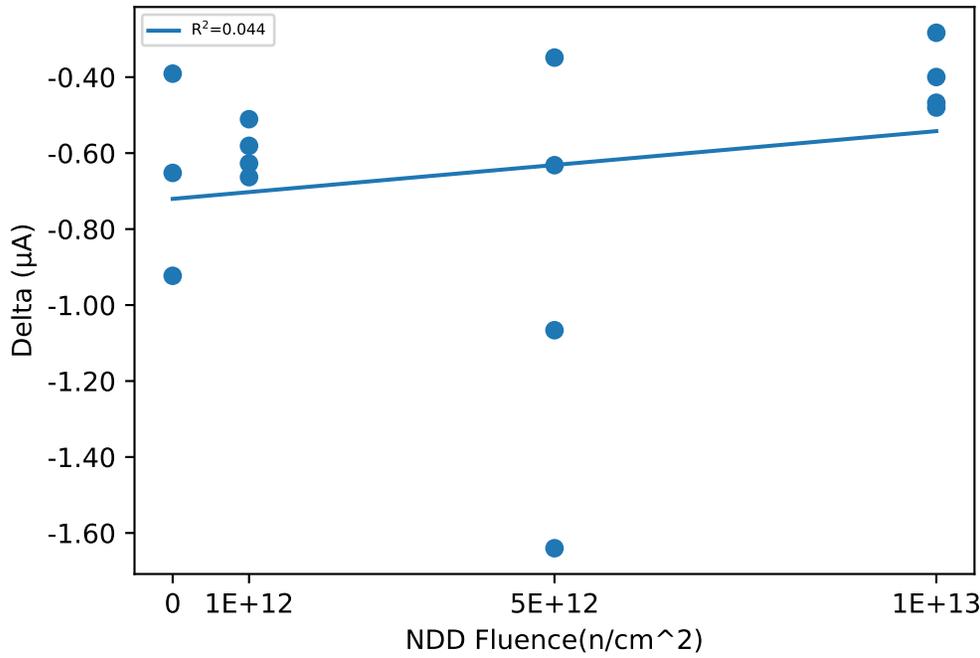
## NDD vs Result Stats



## Test Results (Upper Limit = 150.0 (µA))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.3833	7.7312	-0.6521
42	0	CORRELATION	7.1529	6.2299	-0.923
43	0	CORRELATION	4.3178	3.927	-0.3908
51	1e+12	NDD	7.0549	6.4741	-0.5808
52	1e+12	NDD	8.022	7.3948	-0.6272
53	1e+12	NDD	8.5492	7.886	-0.6632
54	1e+12	NDD	7.3975	6.8868	-0.5107
55	5e+12	NDD	13.489	12.422	-1.0662
56	5e+12	NDD	5.5068	5.1582	-0.3486
57	5e+12	NDD	25.007	23.367	-1.6401
58	5e+12	NDD	9.5948	8.963	-0.6318
59	1e+13	NDD	7.2077	6.7403	-0.4674
60	1e+13	NDD	8.2455	7.7654	-0.4801
61	1e+13	NDD	6.8159	6.4162	-0.3997
62	1e+13	NDD	6.045	5.7618	-0.2832

## NDD vs Post - Pre Exposure Delta

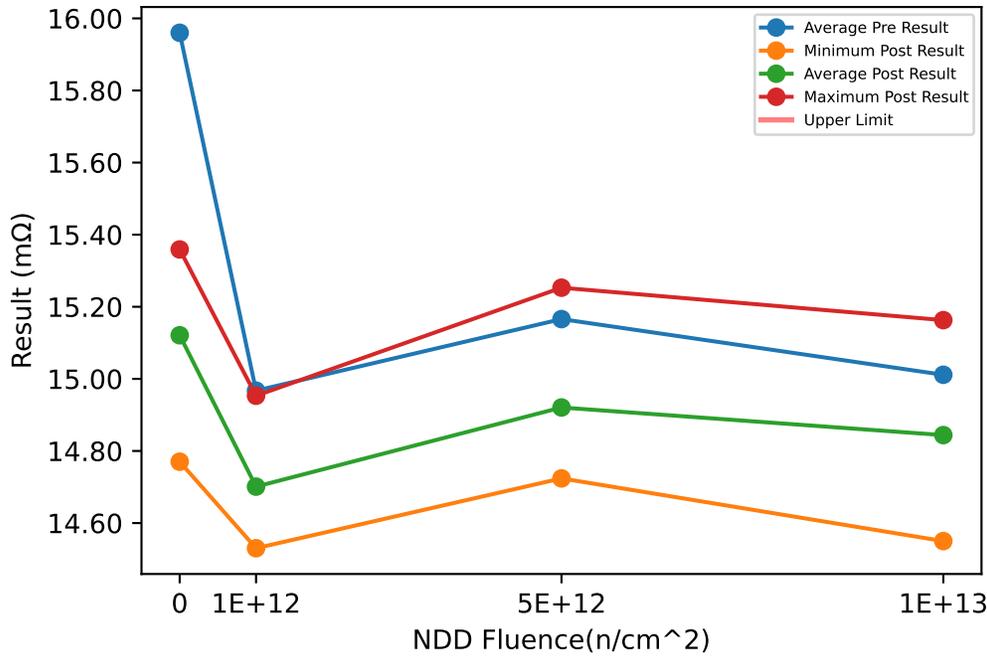


## Test Statistics (µA)

Fluence(n/cm <sup>2</sup> )	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	4.3178	6.618	8.3833	2.0849	3.927	5.9627	7.7312	1.9161	-0.923	-0.6553	-0.3908	0.26611
1e+12	7.0549	7.7559	8.5492	0.66332	6.4741	7.1604	7.886	0.613	-0.6632	-0.59548	-0.5107	0.065816
5e+12	5.5068	13.399	25.007	8.3967	5.1582	12.478	23.367	7.8424	-1.6401	-0.92168	-0.3486	0.56257
1e+13	6.045	7.0785	8.2455	0.91573	5.7618	6.6709	7.7654	0.83548	-0.4801	-0.4076	-0.2832	0.09013

# Device Test: 14.3 GAN|RDSON/SW\_LS/12/10/////@LS\_RDSON\_25C

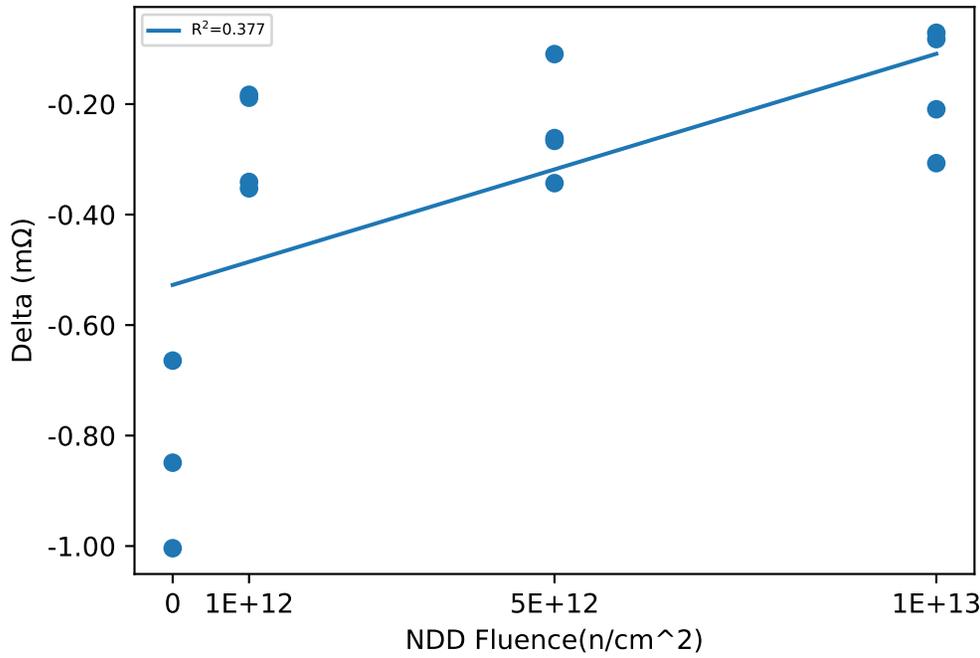
## NDD vs Result Stats



## Test Results (No Limits Specified (mΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	15.774	14.77	-1.0039
42	0	CORRELATION	16.083	15.234	-0.8491
43	0	CORRELATION	16.023	15.359	-0.6643
51	1e+12	NDD	14.938	14.75	-0.1885
52	1e+12	NDD	14.912	14.571	-0.3409
53	1e+12	NDD	14.713	14.53	-0.1832
54	1e+12	NDD	15.306	14.953	-0.3525
55	5e+12	NDD	14.991	14.724	-0.2666
56	5e+12	NDD	15.514	15.253	-0.2615
57	5e+12	NDD	14.833	14.724	-0.1095
58	5e+12	NDD	15.324	14.981	-0.3431
59	1e+13	NDD	15.245	15.163	-0.0824
60	1e+13	NDD	15.003	14.696	-0.3069
61	1e+13	NDD	14.621	14.55	-0.0709
62	1e+13	NDD	15.177	14.967	-0.2094

## NDD vs Post - Pre Exposure Delta

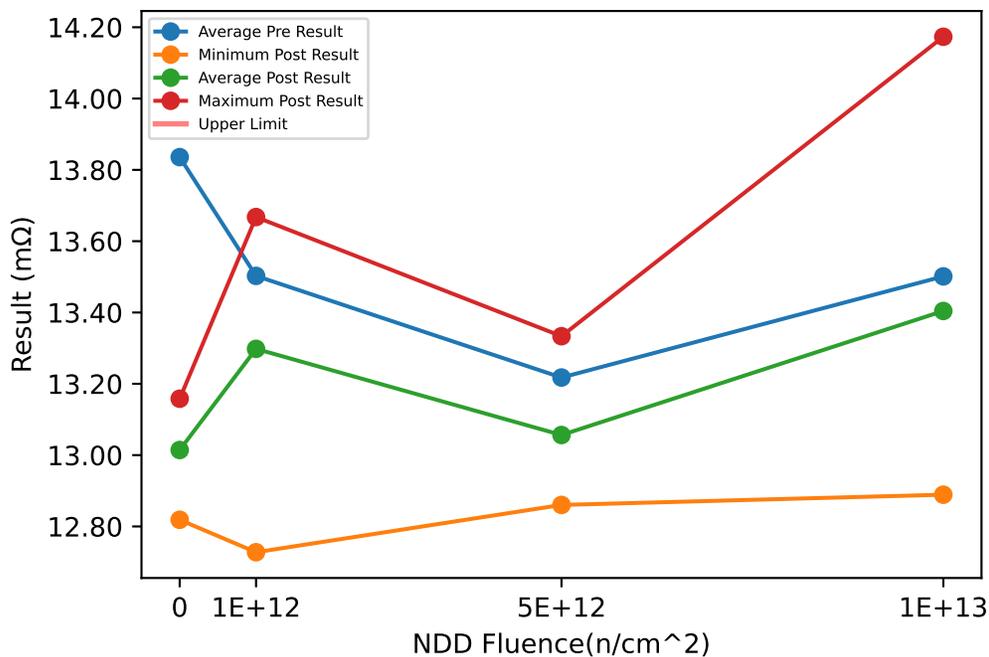


## Test Statistics (mΩ)

Fluence(n/cm <sup>2</sup> )	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	15.774	15.96	16.083	0.16381	14.77	15.121	15.359	0.31018	-1.0039	-0.8391	-0.6643	0.17002
1e+12	14.713	14.967	15.306	0.24692	14.53	14.701	14.953	0.19335	-0.3525	-0.26627	-0.1832	0.093013
5e+12	14.833	15.166	15.514	0.30969	14.724	14.921	15.253	0.25252	-0.3431	-0.24518	-0.1095	0.097848
1e+13	14.621	15.011	15.245	0.27962	14.55	14.844	15.163	0.27403	-0.3069	-0.1674	-0.0709	0.11219

# Device Test: 14.6 GAN|RDSON/HVIN/12/10////@HS\_RDSON\_25C

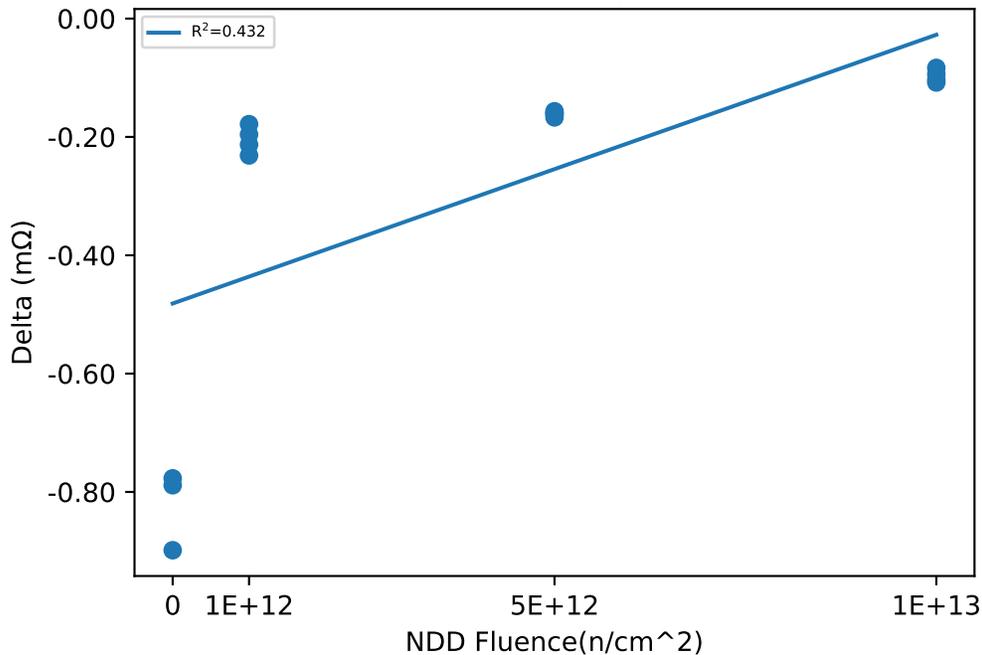
## NDD vs Result Stats



## Test Results (No Limits Specified (mΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	13.935	13.158	-0.777
42	0	CORRELATION	13.717	12.819	-0.8985
43	0	CORRELATION	13.855	13.066	-0.7887
51	1e+12	NDD	13.495	13.282	-0.2131
52	1e+12	NDD	13.746	13.515	-0.2313
53	1e+12	NDD	12.906	12.728	-0.1784
54	1e+12	NDD	13.864	13.668	-0.1959
55	5e+12	NDD	13.495	13.334	-0.1614
56	5e+12	NDD	13.209	13.042	-0.167
57	5e+12	NDD	13.146	12.99	-0.1566
58	5e+12	NDD	13.02	12.86	-0.1599
59	1e+13	NDD	14.257	14.173	-0.0833
60	1e+13	NDD	13.275	13.172	-0.1032
61	1e+13	NDD	12.983	12.889	-0.0939
62	1e+13	NDD	13.491	13.383	-0.108

## NDD vs Post - Pre Exposure Delta

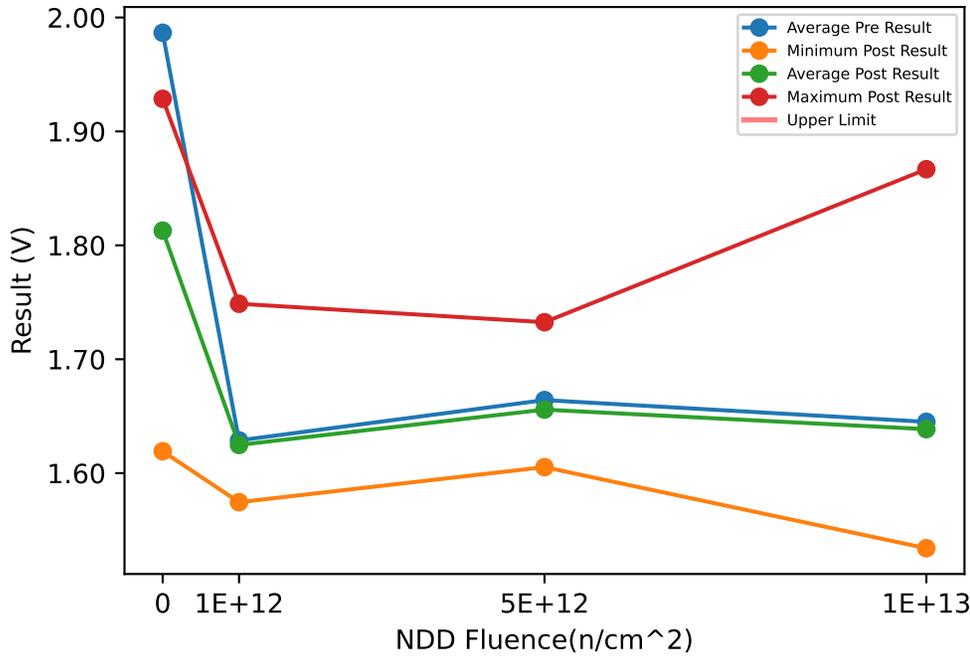


## Test Statistics (mΩ)

Fluence(n/cm <sup>2</sup> )	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	13.717	13.836	13.935	0.11026	12.819	13.014	13.158	0.1756	-0.8985	-0.8214	-0.777	0.067026
1e+12	12.906	13.503	13.864	0.42641	12.728	13.298	13.668	0.41198	-0.2313	-0.20467	-0.1784	0.02271
5e+12	13.02	13.218	13.495	0.20085	12.86	13.056	13.334	0.19991	-0.167	-0.16122	-0.1566	0.0043408
1e+13	12.983	13.501	14.257	0.5448	12.889	13.404	14.173	0.55115	-0.108	-0.0971	-0.0833	0.010904

# Device Test: 14.7 GAN|3Q/SW\_LS///0p5A///@LS\_VSD\_0p5A

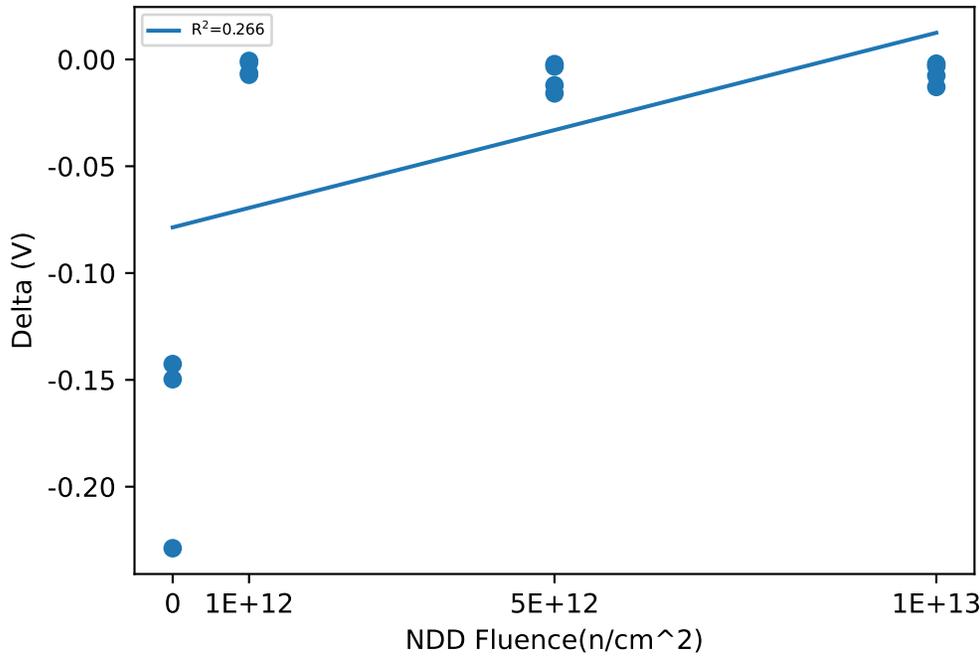
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.848	1.6192	-0.2288
42	0	CORRELATION	2.0406	1.8909	-0.1497
43	0	CORRELATION	2.0712	1.9286	-0.1426
51	1e+12	NDD	1.5812	1.5747	-0.0065
52	1e+12	NDD	1.6019	1.6012	-0.0007
53	1e+12	NDD	1.5817	1.5745	-0.0072
54	1e+12	NDD	1.7502	1.7487	-0.0015
55	5e+12	NDD	1.6212	1.6053	-0.0159
56	5e+12	NDD	1.6791	1.6769	-0.0022
57	5e+12	NDD	1.6206	1.6085	-0.0121
58	5e+12	NDD	1.7358	1.7325	-0.0033
59	1e+13	NDD	1.8744	1.8668	-0.0076
60	1e+13	NDD	1.5428	1.5396	-0.0032
61	1e+13	NDD	1.547	1.5341	-0.0129
62	1e+13	NDD	1.616	1.614	-0.002

## NDD vs Post - Pre Exposure Delta

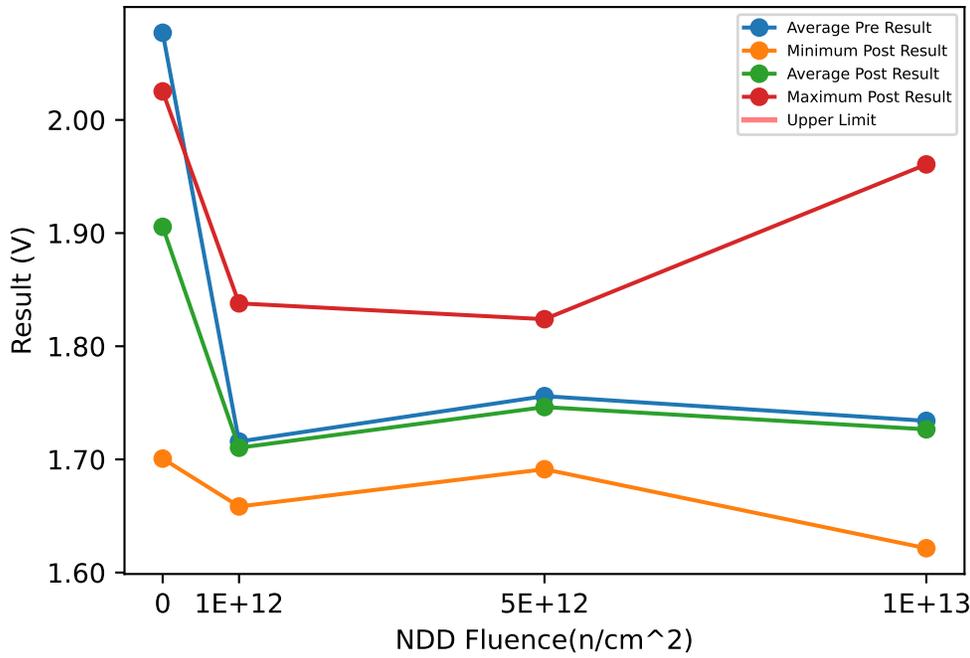


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	1.848	1.9866	2.0712	0.121	1.6192	1.8129	1.9286	0.1688	-0.2288	-0.1737	-0.1426	0.04785
1e+12	1.5812	1.6288	1.7502	0.081539	1.5745	1.6248	1.7487	0.083563	-0.0072	-0.003975	-0.0007	0.003348
5e+12	1.6206	1.6642	1.7358	0.055071	1.6053	1.6558	1.7325	0.06087	-0.0159	-0.008375	-0.0022	0.006693
1e+13	1.5428	1.645	1.8744	0.15654	1.5341	1.6386	1.8668	0.15642	-0.0129	-0.006425	-0.002	0.0049426

# Device Test: 14.9 GAN|3Q/SW\_LS///1A///@LS\_VSD\_1p0A

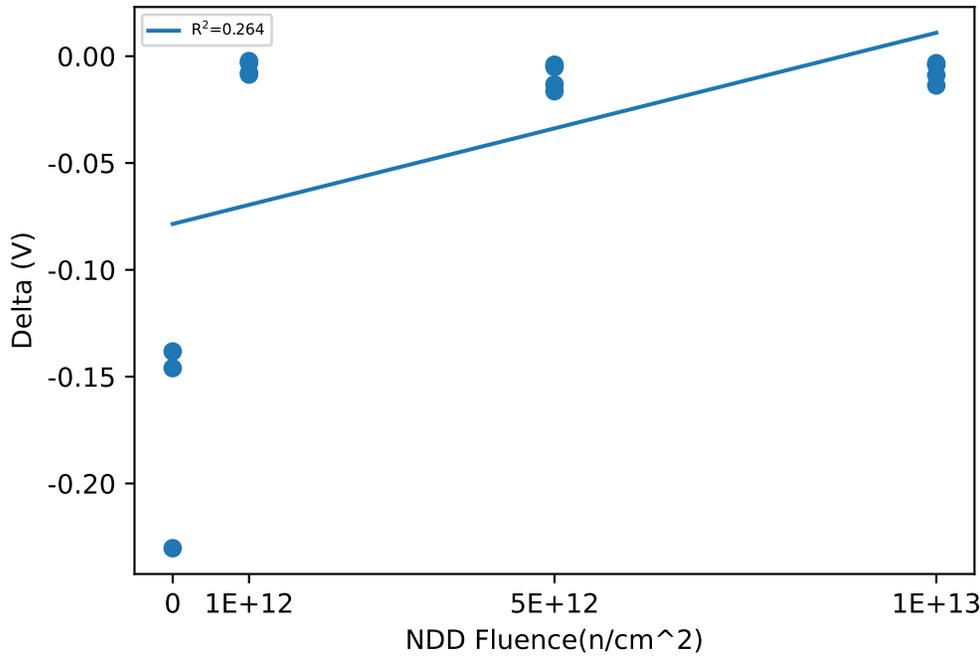
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.931	1.7007	-0.2303
42	0	CORRELATION	2.1367	1.9907	-0.146
43	0	CORRELATION	2.1634	2.0252	-0.1382
51	1e+12	NDD	1.6663	1.6584	-0.0079
52	1e+12	NDD	1.6882	1.6859	-0.0023
53	1e+12	NDD	1.6676	1.659	-0.0086
54	1e+12	NDD	1.8411	1.8379	-0.0032
55	5e+12	NDD	1.7192	1.7028	-0.0164
56	5e+12	NDD	1.771	1.767	-0.004
57	5e+12	NDD	1.7045	1.6913	-0.0132
58	5e+12	NDD	1.829	1.8239	-0.0051
59	1e+13	NDD	1.9696	1.9607	-0.0089
60	1e+13	NDD	1.6273	1.6232	-0.0041
61	1e+13	NDD	1.6352	1.6215	-0.0137
62	1e+13	NDD	1.7042	1.7009	-0.0033

## NDD vs Post - Pre Exposure Delta

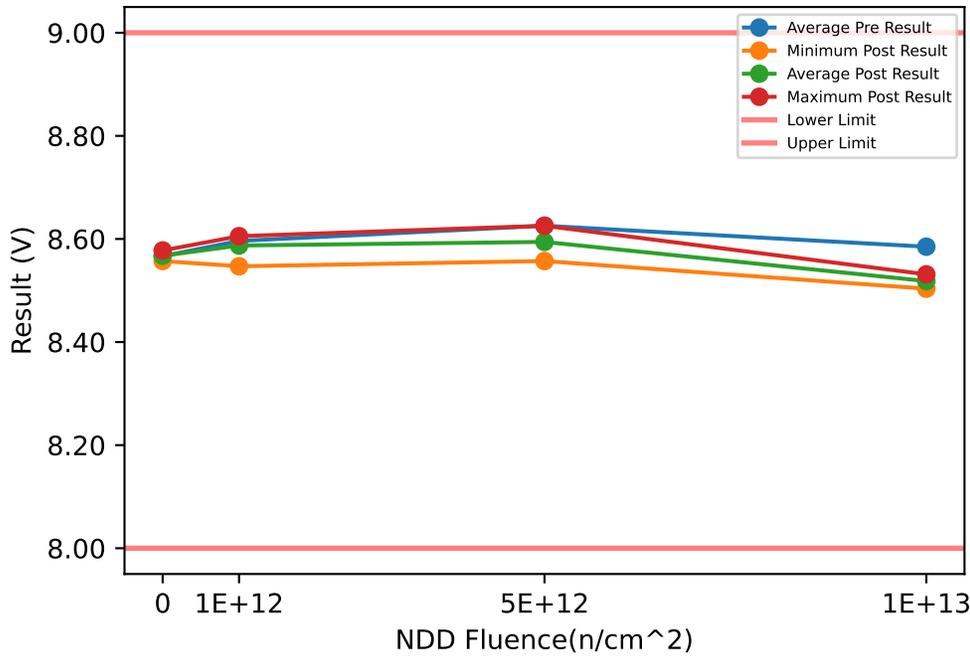


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	1.931	2.077	2.1634	0.12717	1.7007	1.9055	2.0252	0.17823	-0.2303	-0.1715	-0.1382	0.051071
1e+12	1.6663	1.7158	1.8411	0.084134	1.6584	1.7103	1.8379	0.086028	-0.0086	-0.0055	-0.0023	0.0032094
5e+12	1.7045	1.7559	1.829	0.056452	1.6913	1.7463	1.8239	0.061556	-0.0164	-0.009675	-0.004	0.0060769
1e+13	1.6273	1.7341	1.9696	0.16077	1.6215	1.7266	1.9607	0.16042	-0.0137	-0.0075	-0.0033	0.0048166

# Device Test: 15.1 THRESHOLD|RISE/VIN//10////@V\_IN\_TH\_RISE

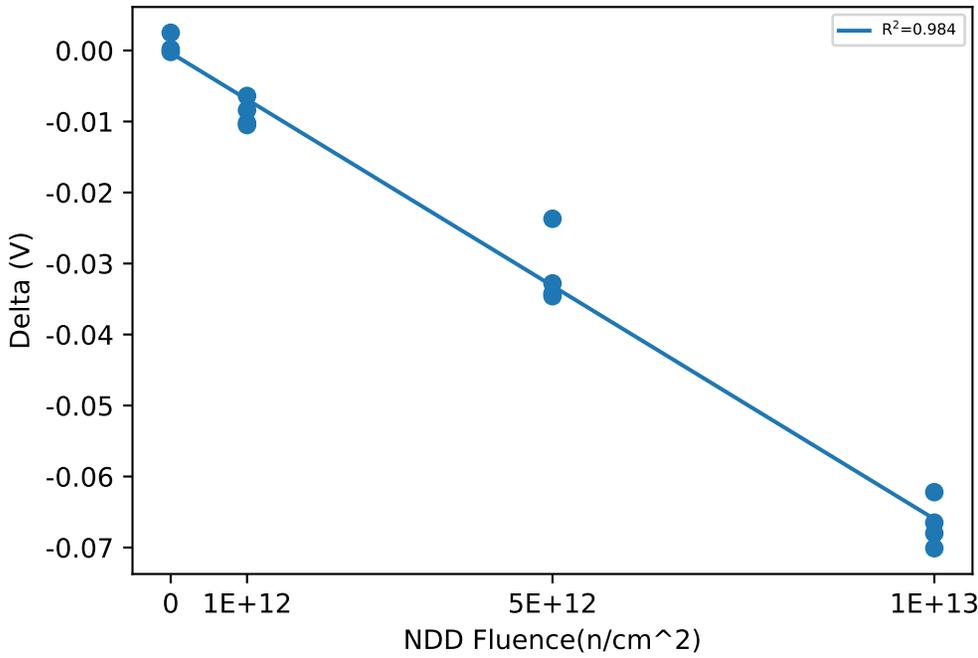
## NDD vs Result Stats



## Test Results (Lower Limit = 8.0, Upper Limit = 9.0 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.5752	8.5777	0.0025
42	0	CORRELATION	8.5574	8.5572	-0.0002
43	0	CORRELATION	8.5672	8.5674	0.0002
51	1e+12	NDD	8.6057	8.5955	-0.0102
52	1e+12	NDD	8.6117	8.6012	-0.0105
53	1e+12	NDD	8.6138	8.6054	-0.0084
54	1e+12	NDD	8.5534	8.547	-0.0064
55	5e+12	NDD	8.6493	8.6256	-0.0237
56	5e+12	NDD	8.5899	8.5571	-0.0328
57	5e+12	NDD	8.6338	8.5992	-0.0346
58	5e+12	NDD	8.6294	8.5952	-0.0342
59	1e+13	NDD	8.5978	8.5313	-0.0665
60	1e+13	NDD	8.5931	8.523	-0.0701
61	1e+13	NDD	8.5715	8.5035	-0.068
62	1e+13	NDD	8.5775	8.5153	-0.0622

## NDD vs Post - Pre Exposure Delta

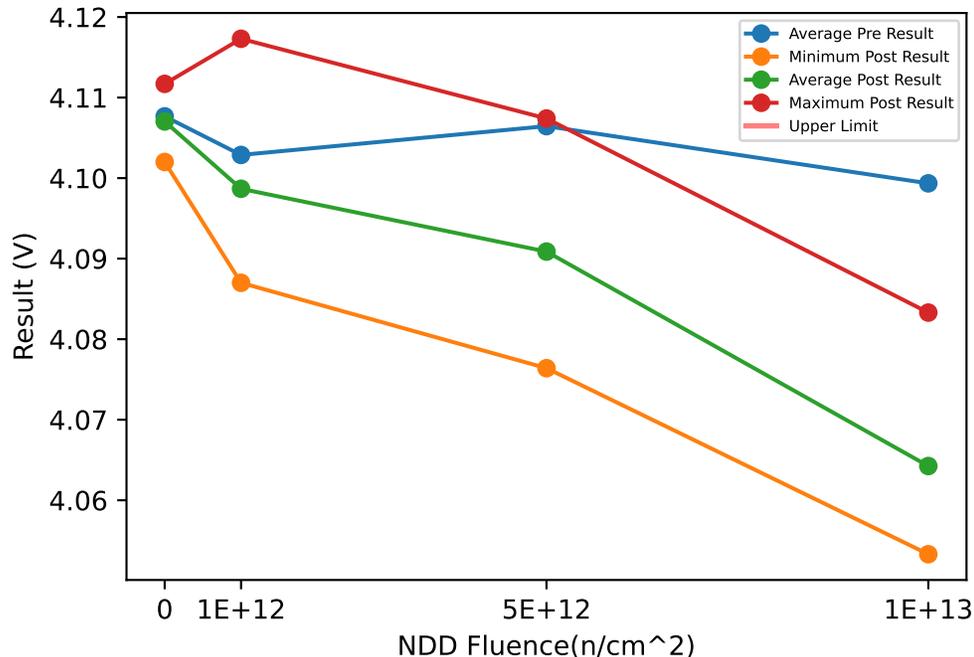


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	8.5574	8.5666	8.5752	0.0089152	8.5572	8.5674	8.5777	0.01025	-0.0002	0.00083333	0.0025	0.0014572
1e+12	8.5534	8.5961	8.6138	0.028706	8.547	8.5873	8.6054	0.027155	-0.0105	-0.008875	-0.0064	0.0018927
5e+12	8.5899	8.6256	8.6493	0.025284	8.5571	8.5943	8.6256	0.028216	-0.0346	-0.031325	-0.0237	0.0051416
1e+13	8.5715	8.585	8.5978	0.012489	8.5035	8.5183	8.5313	0.01182	-0.0701	-0.0667	-0.0622	0.0033437

# Device Test: 15.10 THRESHOLD|RISE/BP5L/12/10/////@V\_BP5L\_TH\_RISE

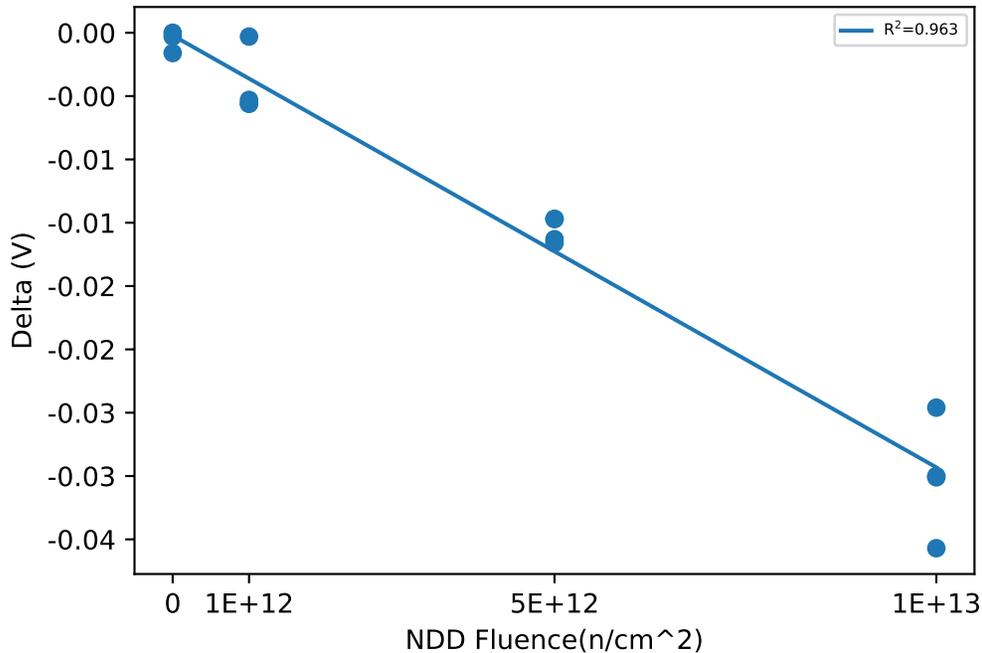
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.1117	4.1117	0
42	0	CORRELATION	4.109	4.1074	-0.0016
43	0	CORRELATION	4.1023	4.102	-0.0003
51	1e+12	NDD	4.0923	4.087	-0.0053
52	1e+12	NDD	4.0933	4.0877	-0.0056
53	1e+12	NDD	4.1176	4.1173	-0.0003
54	1e+12	NDD	4.1083	4.1027	-0.0056
55	5e+12	NDD	4.093	4.0764	-0.0166
56	5e+12	NDD	4.1221	4.1074	-0.0147
57	5e+12	NDD	4.093	4.0767	-0.0163
58	5e+12	NDD	4.1177	4.103	-0.0147
59	1e+13	NDD	4.0923	4.0627	-0.0296
60	1e+13	NDD	4.094	4.0533	-0.0407
61	1e+13	NDD	4.0927	4.0577	-0.035
62	1e+13	NDD	4.1184	4.0833	-0.0351

## NDD vs Post - Pre Exposure Delta

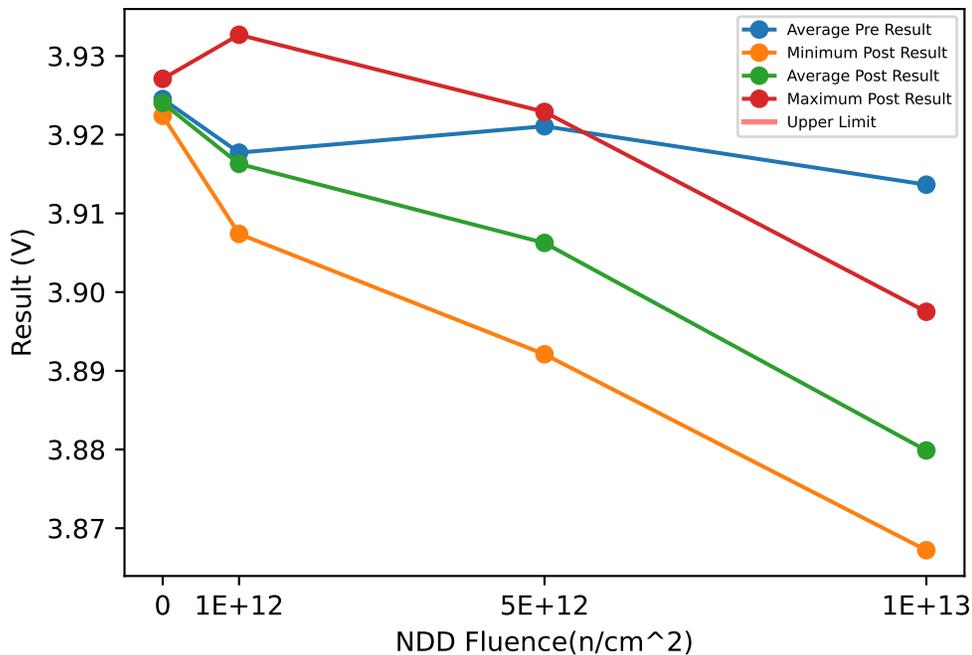


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.1023	4.1077	4.1117	0.0048398	4.102	4.107	4.1117	0.0048604	-0.0016	-0.00063333	0	0.00085049
1e+12	4.0923	4.1029	4.1176	0.012244	4.087	4.0987	4.1173	0.014374	-0.0056	-0.0042	-0.0003	0.0026038
5e+12	4.093	4.1064	4.1221	0.015634	4.0764	4.0909	4.1074	0.016639	-0.0166	-0.015575	-0.0147	0.0010178
1e+13	4.0923	4.0994	4.1184	0.012721	4.0533	4.0643	4.0833	0.013268	-0.0407	-0.0351	-0.0296	0.0045321

Device Test: 15.11 THRESHOLD|FALL/BP5L/12/10/////@V\_BP5L\_TH\_FALL

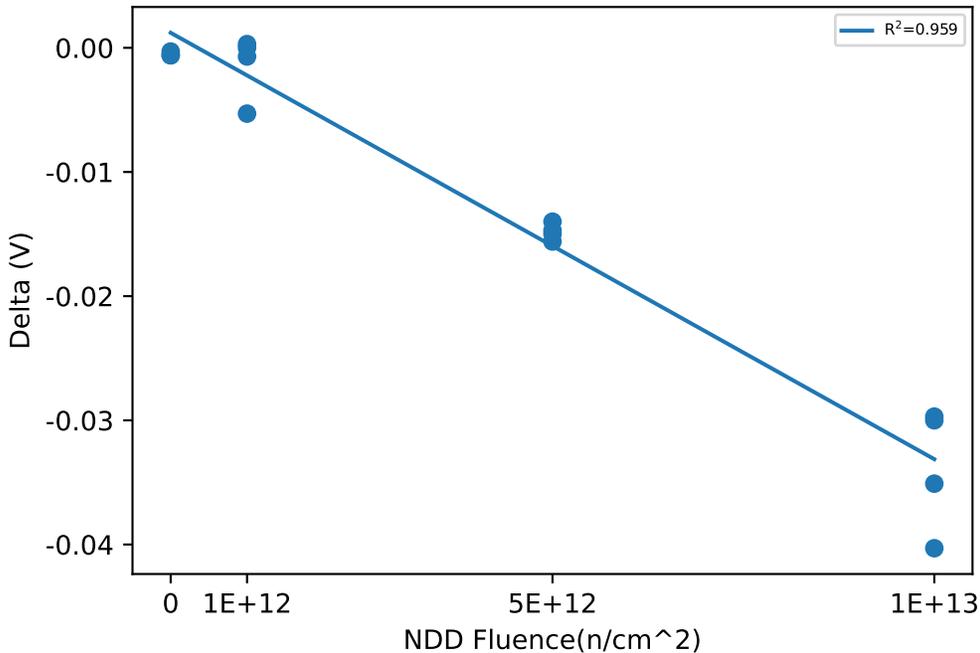
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9277	3.9271	-0.0006
42	0	CORRELATION	3.9229	3.9226	-0.0003
43	0	CORRELATION	3.923	3.9224	-0.0006
51	1e+12	NDD	3.9074	3.9074	0
52	1e+12	NDD	3.9082	3.9075	-0.0007
53	1e+12	NDD	3.9324	3.9327	0.0003
54	1e+12	NDD	3.9229	3.9176	-0.0053
55	5e+12	NDD	3.9077	3.8921	-0.0156
56	5e+12	NDD	3.9369	3.9229	-0.014
57	5e+12	NDD	3.9124	3.8974	-0.015
58	5e+12	NDD	3.9273	3.9126	-0.0147
59	1e+13	NDD	3.9068	3.8771	-0.0297
60	1e+13	NDD	3.9075	3.8672	-0.0403
61	1e+13	NDD	3.9077	3.8777	-0.03
62	1e+13	NDD	3.9326	3.8975	-0.0351

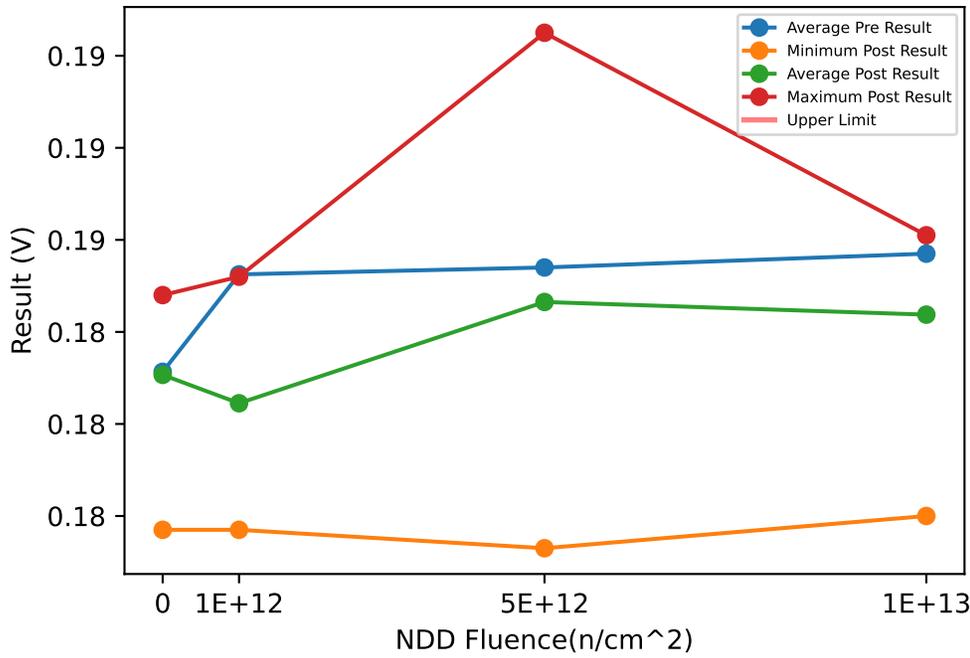
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9229	3.9245	3.9277	0.0027429	3.9224	3.924	3.9271	0.0026577	-0.0006	-0.0005	-0.0003	0.00017321
1e+12	3.9074	3.9177	3.9324	0.012103	3.9074	3.9163	3.9327	0.011935	-0.0053	-0.001425	0.0003	0.0026171
5e+12	3.9077	3.9211	3.9369	0.013458	3.8921	3.9062	3.9229	0.014096	-0.0156	-0.014825	-0.014	0.00066521
1e+13	3.9068	3.9137	3.9326	0.012639	3.8672	3.8799	3.8975	0.012698	-0.0403	-0.033775	-0.0297	0.0050062

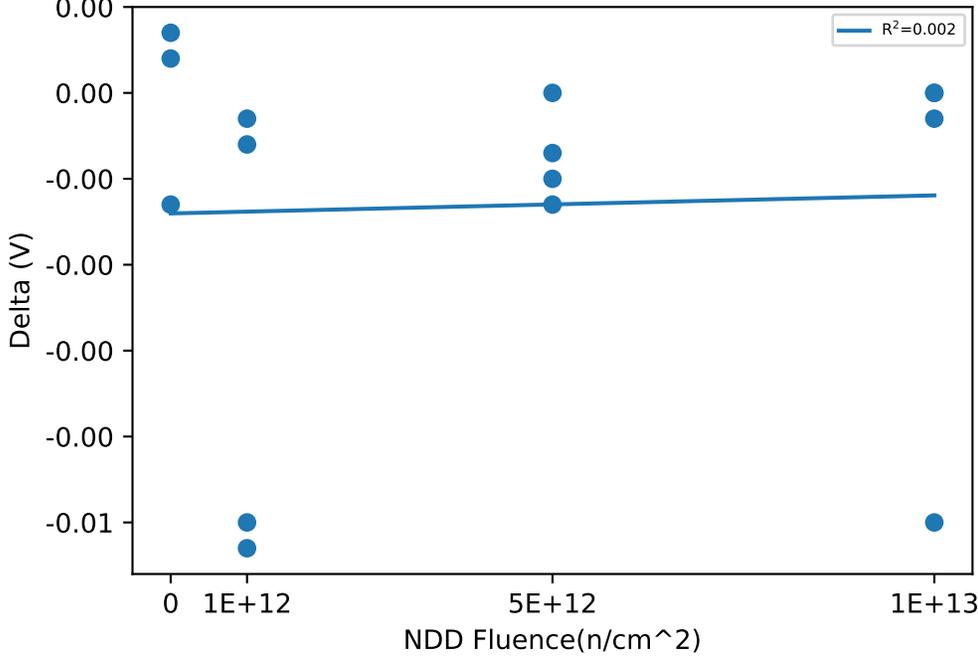
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.184	0.1847	0.0007
42	0	CORRELATION	0.1861	0.1848	-0.0013
43	0	CORRELATION	0.1793	0.1797	0.0004
51	1e+12	NDD	0.185	0.1797	-0.0053
52	1e+12	NDD	0.1852	0.1802	-0.005
53	1e+12	NDD	0.1853	0.1847	-0.0006
54	1e+12	NDD	0.1855	0.1852	-0.0003
55	5e+12	NDD	0.1853	0.1843	-0.001
56	5e+12	NDD	0.1852	0.1845	-0.0007
57	5e+12	NDD	0.1806	0.1793	-0.0013
58	5e+12	NDD	0.1905	0.1905	0
59	1e+13	NDD	0.1856	0.1856	0
60	1e+13	NDD	0.1864	0.1861	-0.0003
61	1e+13	NDD	0.185	0.18	-0.005
62	1e+13	NDD	0.1858	0.1858	0

NDD vs Post - Pre Exposure Delta

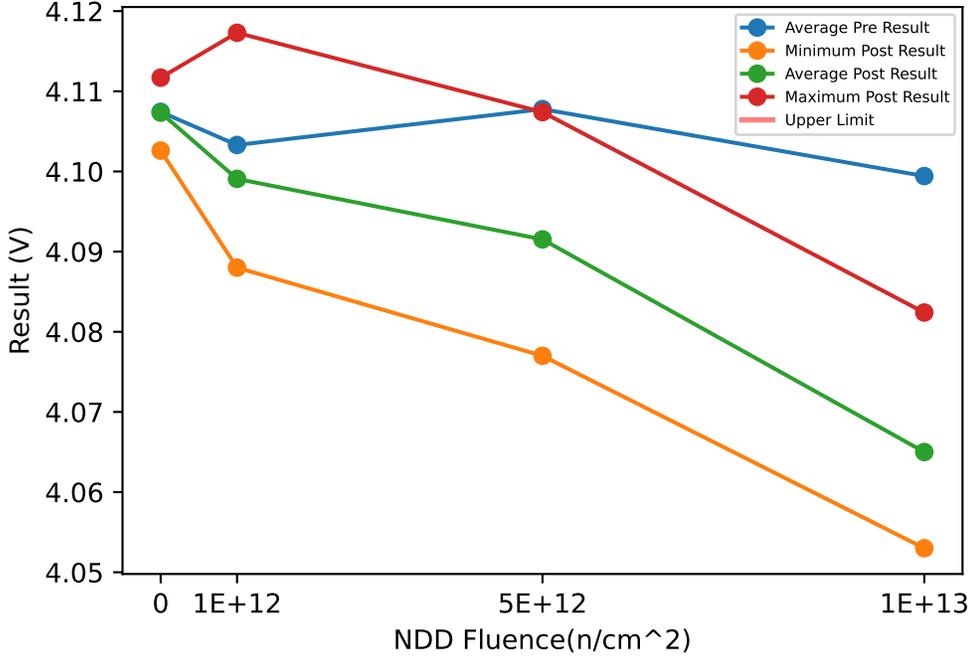


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.1793	0.18313	0.1861	0.0034819	0.1797	0.18307	0.1848	0.002916	-0.0013	-6.6667e-05	0.0007	0.0010786
1e+12	0.185	0.18525	0.1855	0.00020817	0.1797	0.18245	0.1852	0.0029011	-0.0053	-0.0028	-0.0003	0.0027191
5e+12	0.1806	0.1854	0.1905	0.0040456	0.1793	0.18465	0.1905	0.0045822	-0.0013	-0.00075	0	0.00055678
1e+13	0.185	0.1857	0.1864	0.00057735	0.18	0.18437	0.1861	0.0029239	-0.005	-0.001325	0	0.0024541

# Device Test: 15.13 THRESHOLD|RISE/BP5L/14/14/////@V\_BP5L\_TH\_RISE

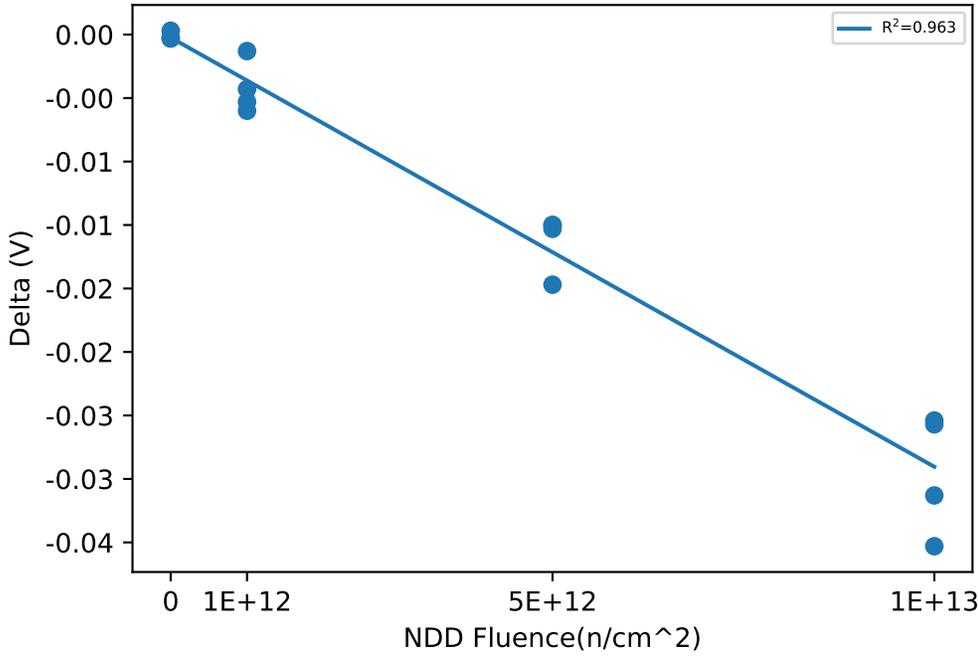
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.112	4.1117	-0.0003
42	0	CORRELATION	4.108	4.1077	-0.0003
43	0	CORRELATION	4.1023	4.1026	0.0003
51	1e+12	NDD	4.0923	4.088	-0.0043
52	1e+12	NDD	4.0936	4.0883	-0.0053
53	1e+12	NDD	4.1186	4.1173	-0.0013
54	1e+12	NDD	4.1087	4.1027	-0.006
55	5e+12	NDD	4.092	4.077	-0.015
56	5e+12	NDD	4.1227	4.1074	-0.0153
57	5e+12	NDD	4.0977	4.078	-0.0197
58	5e+12	NDD	4.1187	4.1037	-0.015
59	1e+13	NDD	4.093	4.0623	-0.0307
60	1e+13	NDD	4.0933	4.053	-0.0403
61	1e+13	NDD	4.0927	4.0623	-0.0304
62	1e+13	NDD	4.1187	4.0824	-0.0363

## NDD vs Post - Pre Exposure Delta

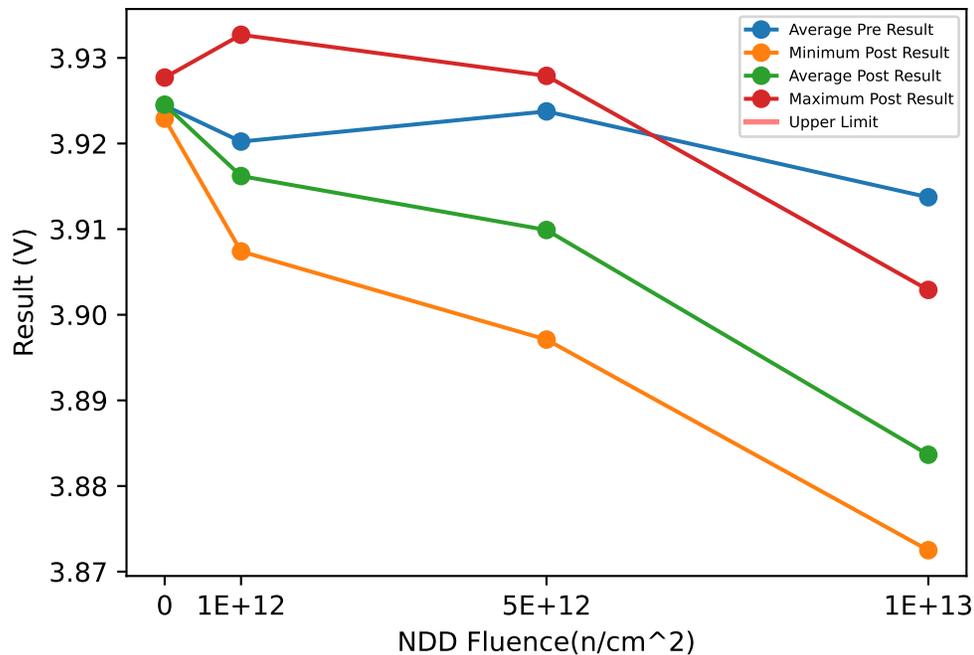


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.1023	4.1074	4.112	0.0048748	4.1026	4.1073	4.1117	0.0045611	-0.0003	-0.0001	0.0003	0.00034641
1e+12	4.0923	4.1033	4.1186	0.012627	4.088	4.0991	4.1173	0.013953	-0.006	-0.004225	-0.0013	0.002071
5e+12	4.092	4.1078	4.1227	0.015193	4.077	4.0915	4.1074	0.01627	-0.0197	-0.01625	-0.015	0.0023043
1e+13	4.0927	4.0994	4.1187	0.012852	4.053	4.065	4.0824	0.012401	-0.0403	-0.034425	-0.0304	0.0047647

Device Test: 15.14 THRESHOLD|FALL/BP5L/14/14/////@V\_BP5L\_TH\_FALL

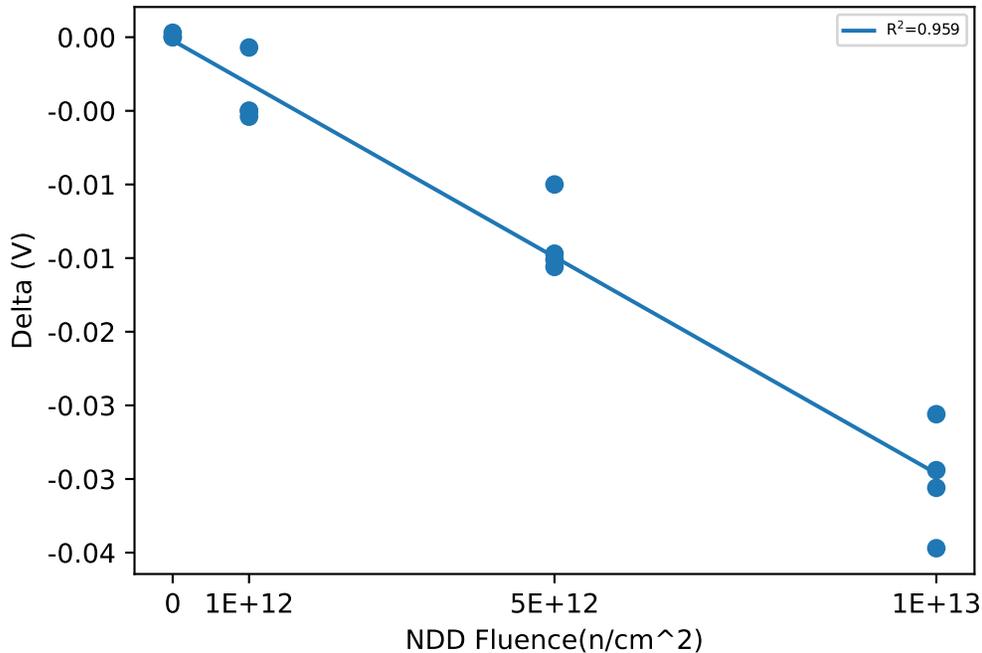
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9277	3.9277	0
42	0	CORRELATION	3.9229	3.9229	0
43	0	CORRELATION	3.9227	3.923	0.0003
51	1e+12	NDD	3.9124	3.9074	-0.005
52	1e+12	NDD	3.9082	3.9075	-0.0007
53	1e+12	NDD	3.9377	3.9327	-0.005
54	1e+12	NDD	3.9226	3.9172	-0.0054
55	5e+12	NDD	3.9127	3.8971	-0.0156
56	5e+12	NDD	3.9379	3.9279	-0.01
57	5e+12	NDD	3.9121	3.8974	-0.0147
58	5e+12	NDD	3.9323	3.9172	-0.0151
59	1e+13	NDD	3.9074	3.8818	-0.0256
60	1e+13	NDD	3.9072	3.8725	-0.0347
61	1e+13	NDD	3.908	3.8774	-0.0306
62	1e+13	NDD	3.9323	3.9029	-0.0294

NDD vs Post - Pre Exposure Delta

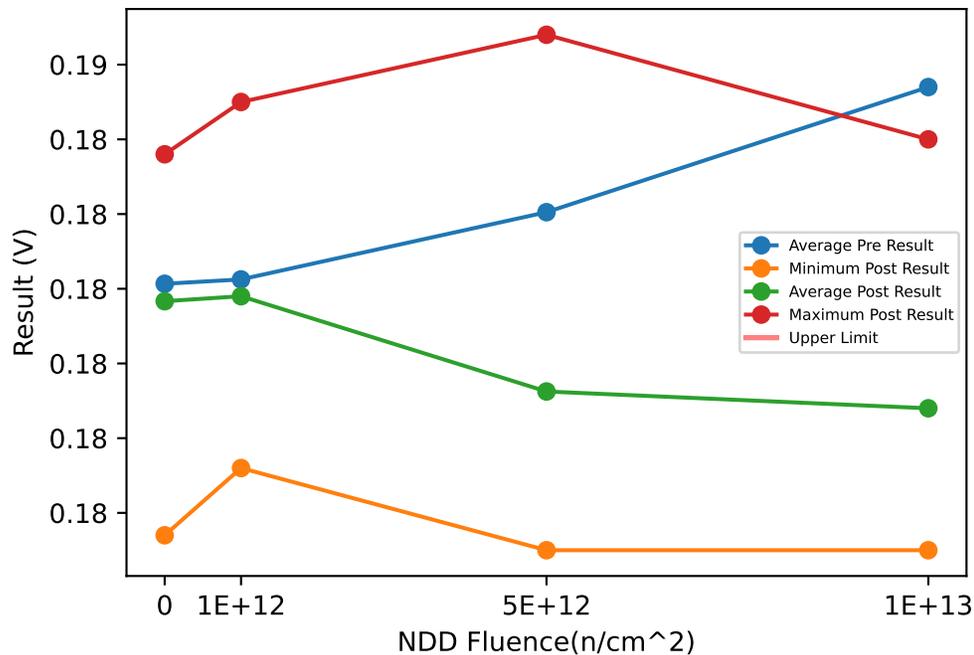


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9227	3.9244	3.9277	0.0028308	3.9229	3.9245	3.9277	0.0027429	0	0.0001	0.0003	0.00017321
1e+12	3.9082	3.9202	3.9377	0.013126	3.9074	3.9162	3.9327	0.011922	-0.0054	-0.004025	-0.0007	0.0022247
5e+12	3.9121	3.9238	3.9379	0.013306	3.8971	3.9099	3.9279	0.015247	-0.0156	-0.01385	-0.01	0.0025929
1e+13	3.9072	3.9137	3.9323	0.012388	3.8725	3.8837	3.9029	0.013384	-0.0347	-0.030075	-0.0256	0.0037482

Device Test: 15.15 THRESHOLD|HYST/BP5L/14/14/////@V\_BP5L\_TH\_HYST

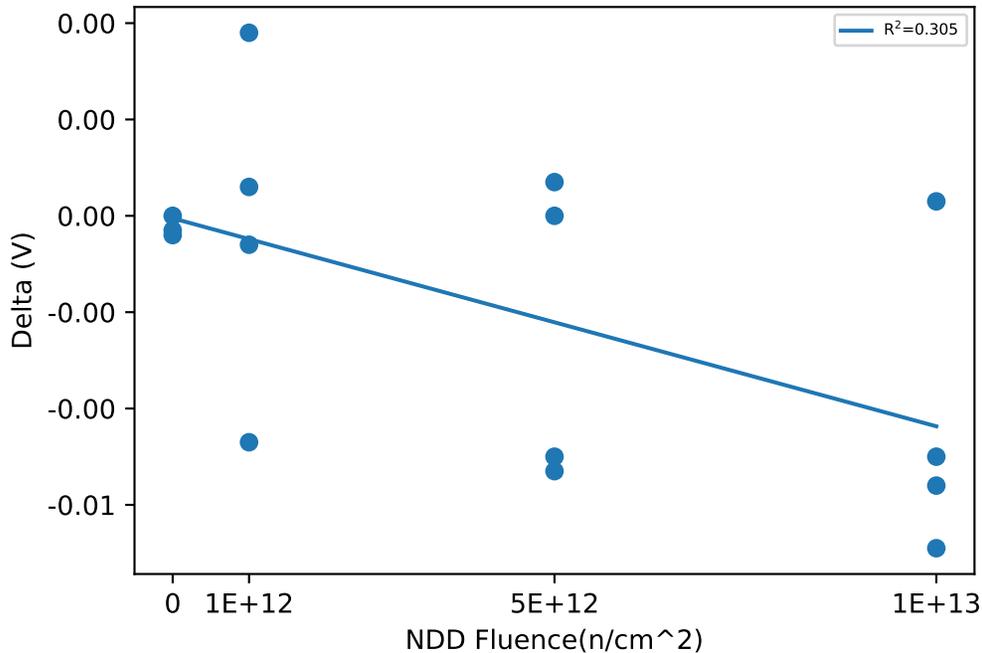
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.1843	0.184	-0.0003
42	0	CORRELATION	0.1852	0.1848	-0.0004
43	0	CORRELATION	0.1797	0.1797	0
51	1e+12	NDD	0.18	0.1806	0.0006
52	1e+12	NDD	0.1855	0.1808	-0.0047
53	1e+12	NDD	0.1809	0.1847	0.0038
54	1e+12	NDD	0.1861	0.1855	-0.0006
55	5e+12	NDD	0.1793	0.18	0.0007
56	5e+12	NDD	0.1848	0.1795	-0.0053
57	5e+12	NDD	0.1856	0.1806	-0.005
58	5e+12	NDD	0.1864	0.1864	0
59	1e+13	NDD	0.1856	0.1806	-0.005
60	1e+13	NDD	0.1861	0.1805	-0.0056
61	1e+13	NDD	0.1847	0.185	0.0003
62	1e+13	NDD	0.1864	0.1795	-0.0069

NDD vs Post - Pre Exposure Delta

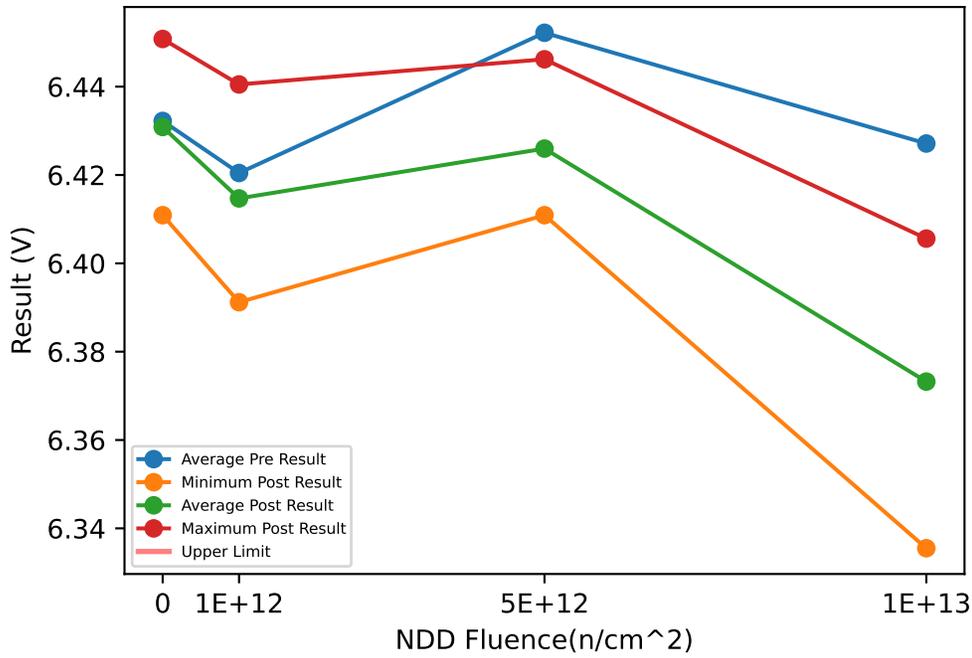


Test Statistics (V)

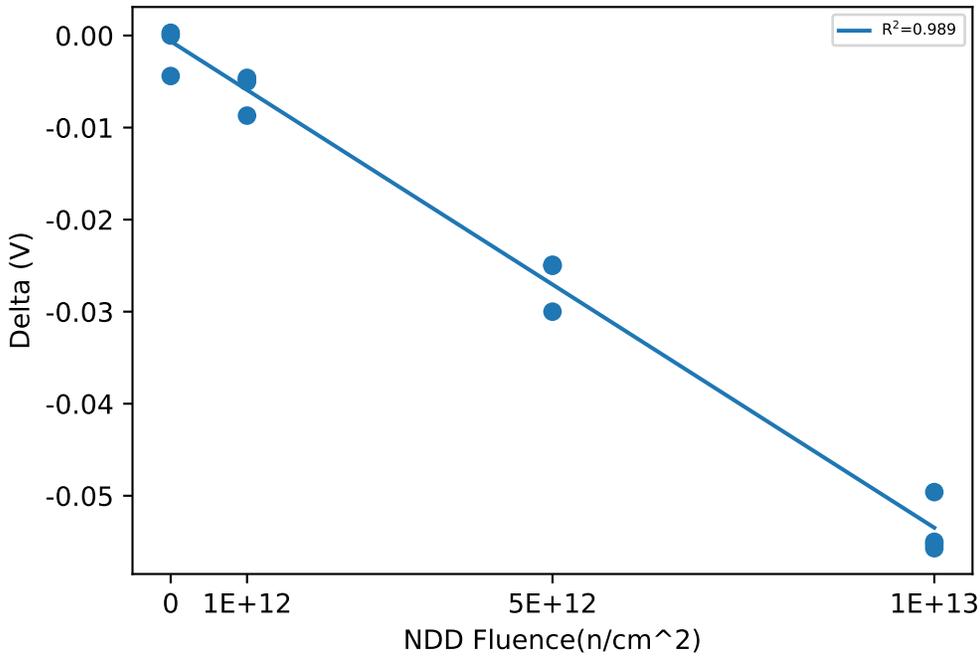
Fluence(n/cm <sup>2</sup> )	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.1797	0.18307	0.1852	0.0029501	0.1797	0.18283	0.1848	0.0027429	-0.0004	-0.00023333	0	0.00020817
1e+12	0.18	0.18312	0.1861	0.0031202	0.1806	0.1829	0.1855	0.0025626	-0.0047	-0.000225	0.0038	0.0035141
5e+12	0.1793	0.18402	0.1864	0.003217	0.1795	0.18163	0.1864	0.0032149	-0.0053	-0.0024	0.0007	0.0031906
1e+13	0.1847	0.1857	0.1864	0.00074386	0.1795	0.1814	0.185	0.0024509	-0.0069	-0.0043	0.0003	0.0031675

# Device Test: 15.16 THRESHOLD|RISE/BP7L/10/8////@V\_BP7L\_TH\_RISE

## NDD vs Result Stats



## NDD vs Post - Pre Exposure Delta



## Test Results (No Limits Specified (V))

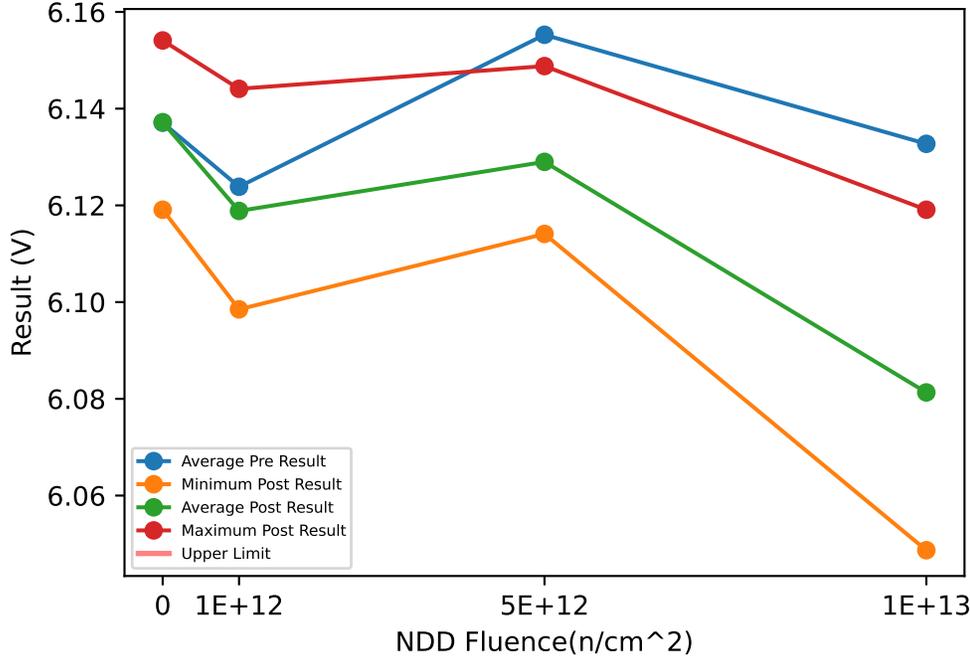
Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.4508	6.4508	0
42	0	CORRELATION	6.4353	6.4309	-0.0044
43	0	CORRELATION	6.4106	6.4109	0.0003
51	1e+12	NDD	6.3999	6.3912	-0.0087
52	1e+12	NDD	6.4005	6.3959	-0.0046
53	1e+12	NDD	6.4455	6.4405	-0.005
54	1e+12	NDD	6.4359	6.4312	-0.0047
55	5e+12	NDD	6.4359	6.4109	-0.025
56	5e+12	NDD	6.4459	6.4209	-0.025
57	5e+12	NDD	6.4508	6.4259	-0.0249
58	5e+12	NDD	6.4762	6.4462	-0.03
59	1e+13	NDD	6.4552	6.4056	-0.0496
60	1e+13	NDD	6.3912	6.3355	-0.0557
61	1e+13	NDD	6.4309	6.3756	-0.0553
62	1e+13	NDD	6.4312	6.3762	-0.055

## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.4106	6.4322	6.4508	0.020275	6.4109	6.4309	6.4508	0.01995	-0.0044	-0.0013667	0.0003	0.0026312
1e+12	6.3999	6.4204	6.4455	0.02371	6.3912	6.4147	6.4405	0.02479	-0.0087	-0.00575	-0.0046	0.001974
5e+12	6.4359	6.4522	6.4762	0.017159	6.4109	6.426	6.4462	0.014856	-0.03	-0.026225	-0.0249	0.0025171
1e+13	6.3912	6.4271	6.4552	0.026518	6.3355	6.3732	6.4056	0.028785	-0.0557	-0.0539	-0.0496	0.002881

# Device Test: 15.17 THRESHOLD|FALL/BP7L/10/8/////@V\_BP7L\_TH\_FALL

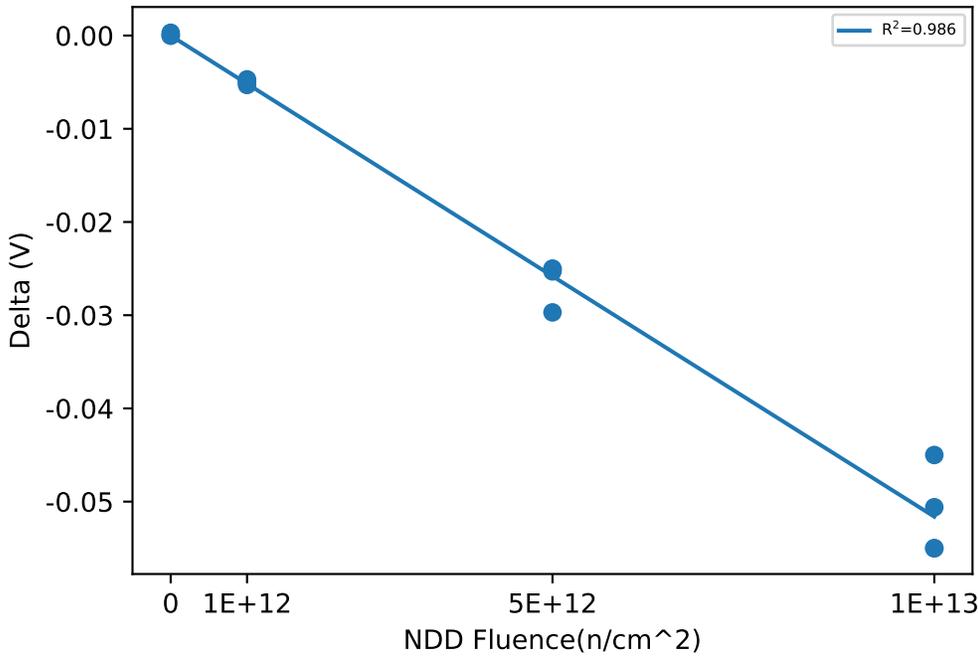
### NDD vs Result Stats



### Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.1541	6.1541	0
42	0	CORRELATION	6.1384	6.1384	0
43	0	CORRELATION	6.1188	6.1191	0.0003
51	1e+12	NDD	6.1038	6.0985	-0.0053
52	1e+12	NDD	6.1087	6.1037	-0.005
53	1e+12	NDD	6.1488	6.1441	-0.0047
54	1e+12	NDD	6.1341	6.1291	-0.005
55	5e+12	NDD	6.1438	6.1141	-0.0297
56	5e+12	NDD	6.1491	6.124	-0.0251
57	5e+12	NDD	6.1541	6.1291	-0.025
58	5e+12	NDD	6.1741	6.1488	-0.0253
59	1e+13	NDD	6.1641	6.1191	-0.045
60	1e+13	NDD	6.0993	6.0487	-0.0506
61	1e+13	NDD	6.1338	6.0788	-0.055
62	1e+13	NDD	6.1337	6.0787	-0.055

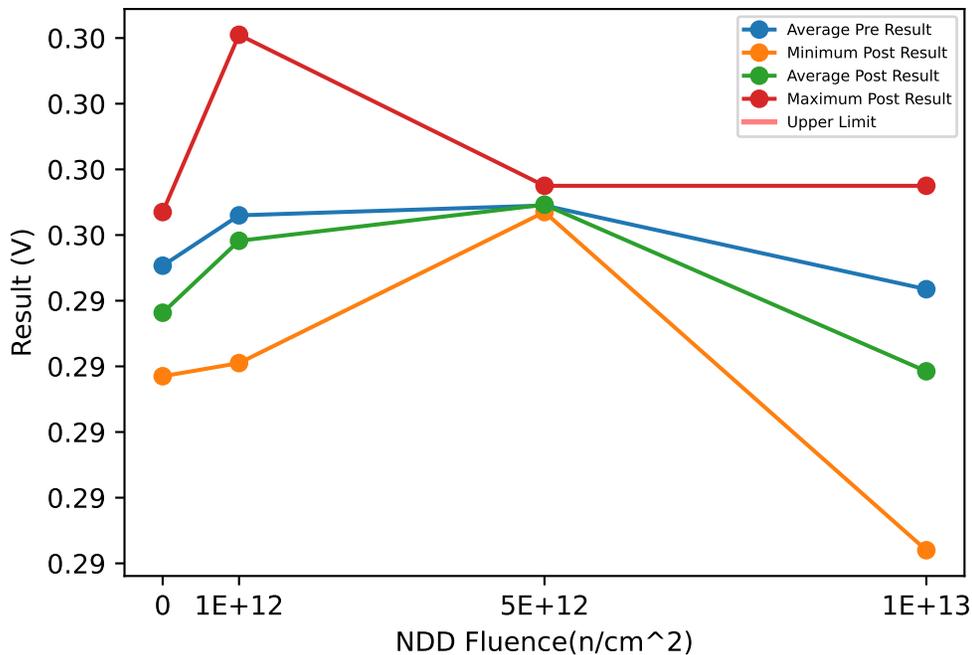
### NDD vs Post - Pre Exposure Delta



### Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.1188	6.1371	6.1541	0.017686	6.1191	6.1372	6.1541	0.017531	0	0.0001	0.0003	0.00017321
1e+12	6.1038	6.1239	6.1488	0.021285	6.0985	6.1189	6.1441	0.021496	-0.0053	-0.005	-0.0047	0.00024495
5e+12	6.1438	6.1553	6.1741	0.013236	6.1141	6.129	6.1488	0.014595	-0.0297	-0.026275	-0.025	0.0022867
1e+13	6.0993	6.1327	6.1641	0.026481	6.0487	6.0813	6.1191	0.028894	-0.055	-0.0514	-0.045	0.0047441

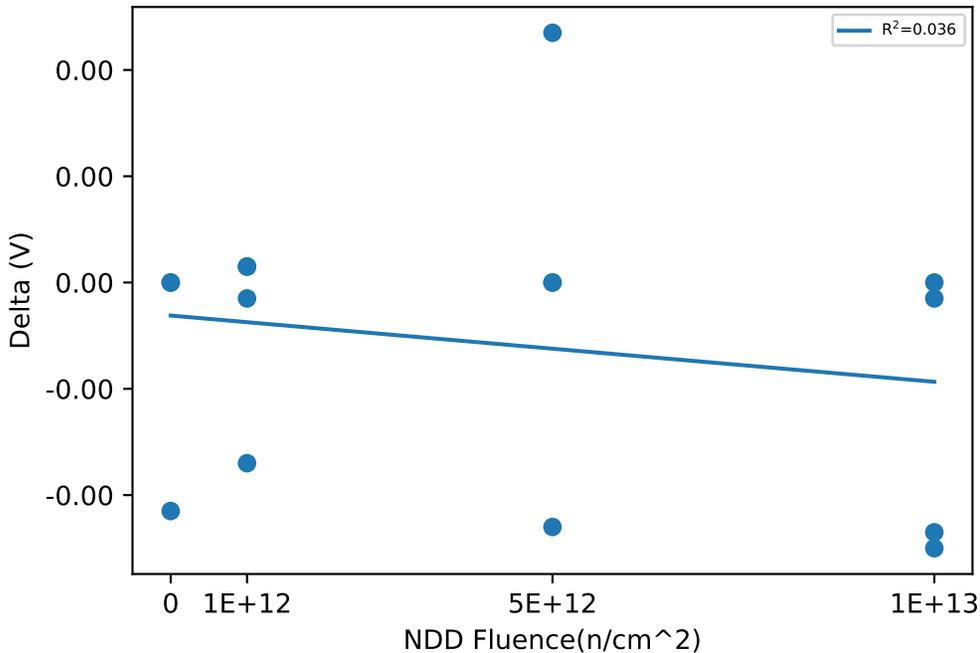
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.2967	0.2967	0
42	0	CORRELATION	0.2968	0.2925	-0.0043
43	0	CORRELATION	0.2917	0.2917	0
51	1e+12	NDD	0.2961	0.2927	-0.0034
52	1e+12	NDD	0.2918	0.2921	0.0003
53	1e+12	NDD	0.2967	0.2964	-0.0003
54	1e+12	NDD	0.3018	0.3021	0.0003
55	5e+12	NDD	0.292	0.2967	0.0047
56	5e+12	NDD	0.2968	0.2968	0
57	5e+12	NDD	0.2967	0.2967	0
58	5e+12	NDD	0.3021	0.2975	-0.0046
59	1e+13	NDD	0.2911	0.2864	-0.0047
60	1e+13	NDD	0.2918	0.2868	-0.005
61	1e+13	NDD	0.297	0.2967	-0.0003
62	1e+13	NDD	0.2975	0.2975	0

NDD vs Post - Pre Exposure Delta

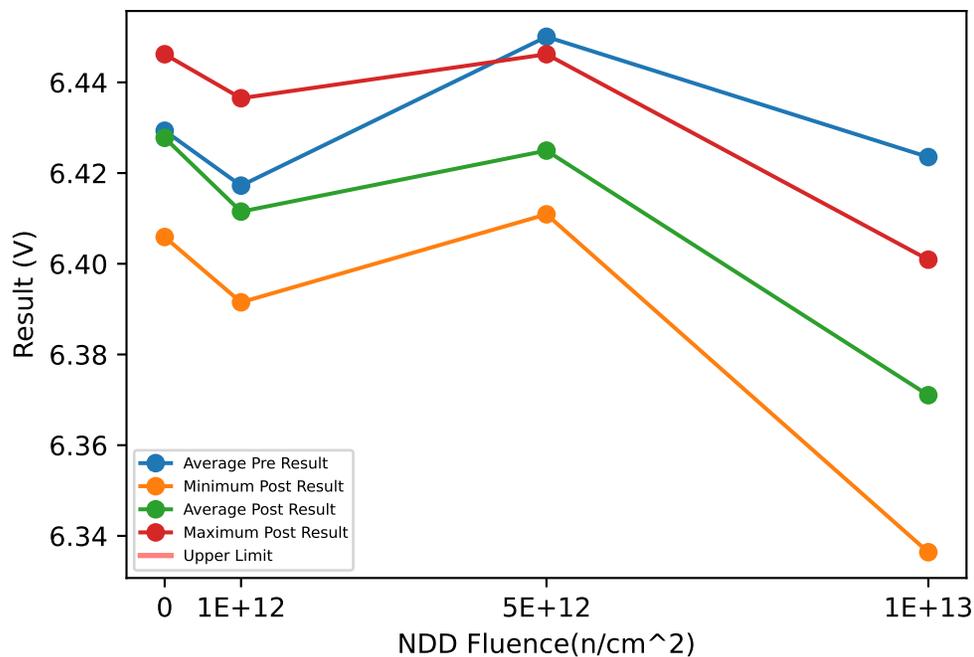


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.2917	0.29507	0.2968	0.002916	0.2917	0.29363	0.2967	0.0026858	-0.0043	-0.0014333	0	0.0024826
1e+12	0.2918	0.2966	0.3018	0.0040963	0.2921	0.29583	0.3021	0.0045952	-0.0034	-0.000775	0.0003	0.0017727
5e+12	0.292	0.2969	0.3021	0.0041271	0.2967	0.29692	0.2975	0.00038622	-0.0046	2.5e-05	0.0047	0.0037968
1e+13	0.2911	0.29435	0.2975	0.003367	0.2864	0.29185	0.2975	0.0060732	-0.005	-0.0025	0	0.0027191

# Device Test: 15.19 THRESHOLD|RISE/BP7L/12/10/////@V\_BP7L\_TH\_RISE

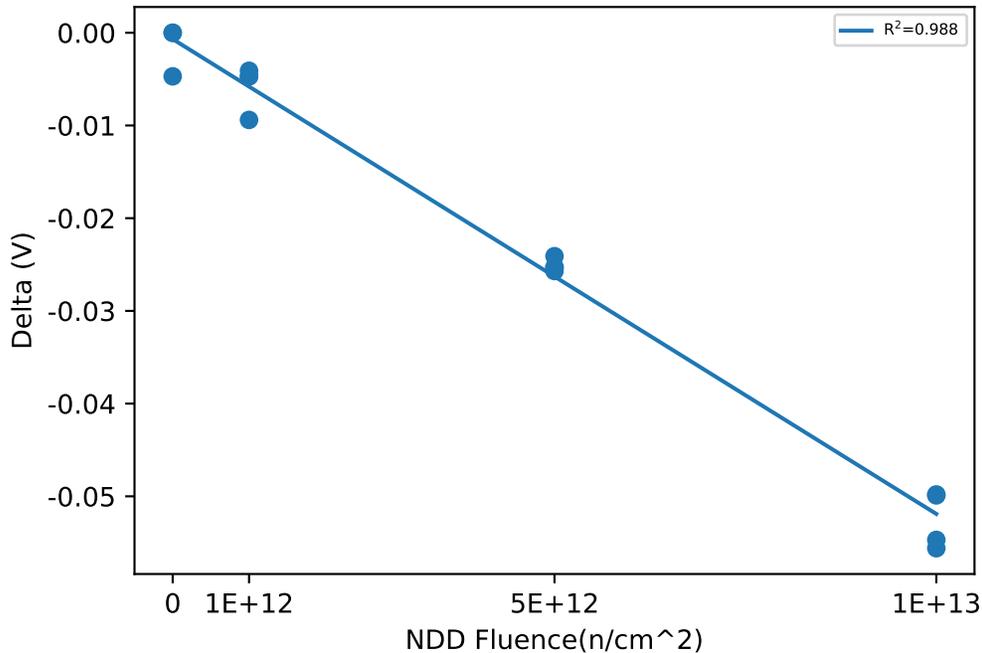
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.4462	6.4462	0
42	0	CORRELATION	6.4312	6.4312	0
43	0	CORRELATION	6.4106	6.4059	-0.0047
51	1e+12	NDD	6.3956	6.3915	-0.0041
52	1e+12	NDD	6.4009	6.3915	-0.0094
53	1e+12	NDD	6.4412	6.4365	-0.0047
54	1e+12	NDD	6.4312	6.4265	-0.0047
55	5e+12	NDD	6.4362	6.4109	-0.0253
56	5e+12	NDD	6.4409	6.4168	-0.0241
57	5e+12	NDD	6.4512	6.4259	-0.0253
58	5e+12	NDD	6.4719	6.4462	-0.0257
59	1e+13	NDD	6.4508	6.4009	-0.0499
60	1e+13	NDD	6.3862	6.3364	-0.0498
61	1e+13	NDD	6.4262	6.3706	-0.0556
62	1e+13	NDD	6.4309	6.3762	-0.0547

## NDD vs Post - Pre Exposure Delta

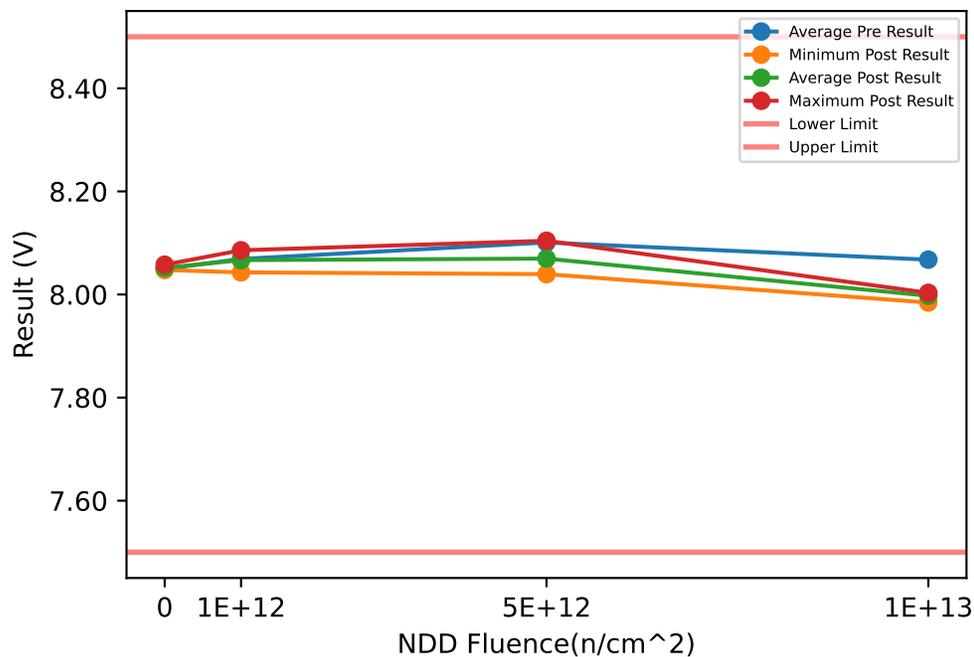


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.4106	6.4293	6.4462	0.017873	6.4059	6.4278	6.4462	0.020368	-0.0047	-0.0015667	0	0.0027135
1e+12	6.3956	6.4172	6.4412	0.022392	6.3915	6.4115	6.4365	0.023452	-0.0094	-0.005725	-0.0041	0.0024663
5e+12	6.4362	6.4501	6.4719	0.015857	6.4109	6.4249	6.4462	0.015452	-0.0257	-0.0251	-0.0241	0.00069282
1e+13	6.3862	6.4235	6.4508	0.027072	6.3364	6.371	6.4009	0.026573	-0.0556	-0.0525	-0.0498	0.0030822

# Device Test: 15.2 THRESHOLD|FALL/VIN//10////@V\_IN\_TH\_FALL

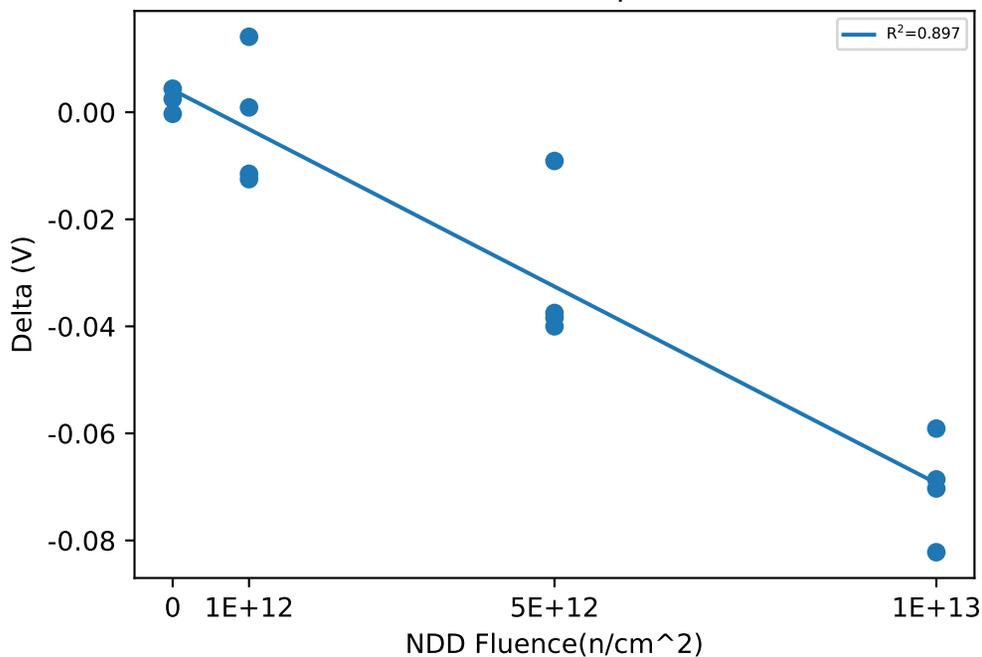
## NDD vs Result Stats



## Test Results (Lower Limit = 7.5, Upper Limit = 8.5 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	8.0581	8.0578	-0.0003
42	0	CORRELATION	8.0451	8.0476	0.0025
43	0	CORRELATION	8.0453	8.0497	0.0044
51	1e+12	NDD	8.0669	8.0678	0.0009
52	1e+12	NDD	8.0973	8.0858	-0.0115
53	1e+12	NDD	8.0828	8.0703	-0.0125
54	1e+12	NDD	8.0288	8.0429	0.0141
55	5e+12	NDD	8.1134	8.1043	-0.0091
56	5e+12	NDD	8.0779	8.0395	-0.0384
57	5e+12	NDD	8.0984	8.0609	-0.0375
58	5e+12	NDD	8.1139	8.0739	-0.04
59	1e+13	NDD	8.0591	8	-0.0591
60	1e+13	NDD	8.0854	8.0032	-0.0822
61	1e+13	NDD	8.0547	7.9844	-0.0703
62	1e+13	NDD	8.0711	8.0025	-0.0686

## NDD vs Post - Pre Exposure Delta

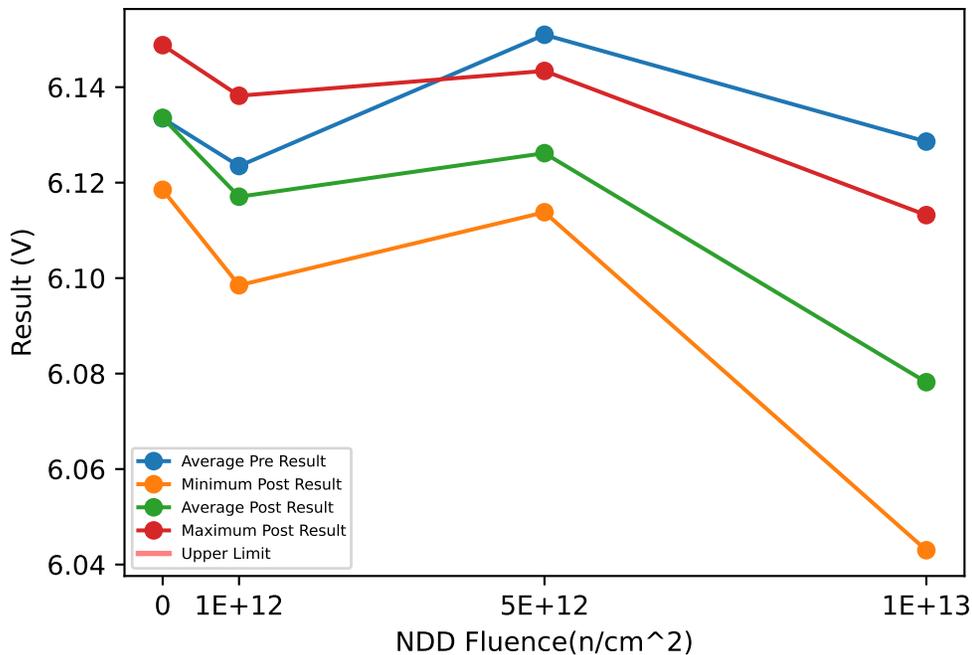


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	8.0451	8.0495	8.0581	0.0074485	8.0476	8.0517	8.0578	0.0053861	-0.0003	0.0022	0.0044	0.0023643
1e+12	8.0288	8.069	8.0973	0.029506	8.0429	8.0667	8.0858	0.017752	-0.0125	-0.00225	0.0141	0.012488
5e+12	8.0779	8.1009	8.1139	0.016936	8.0395	8.0696	8.1043	0.027106	-0.04	-0.03125	-0.0091	0.014803
1e+13	8.0547	8.0676	8.0854	0.013757	7.9844	7.9975	8.0032	0.0088572	-0.0822	-0.07005	-0.0591	0.0094814

Device Test: 15.20 THRESHOLD|FALL/BP7L/12/10/////@V\_BP7L\_TH\_FALL

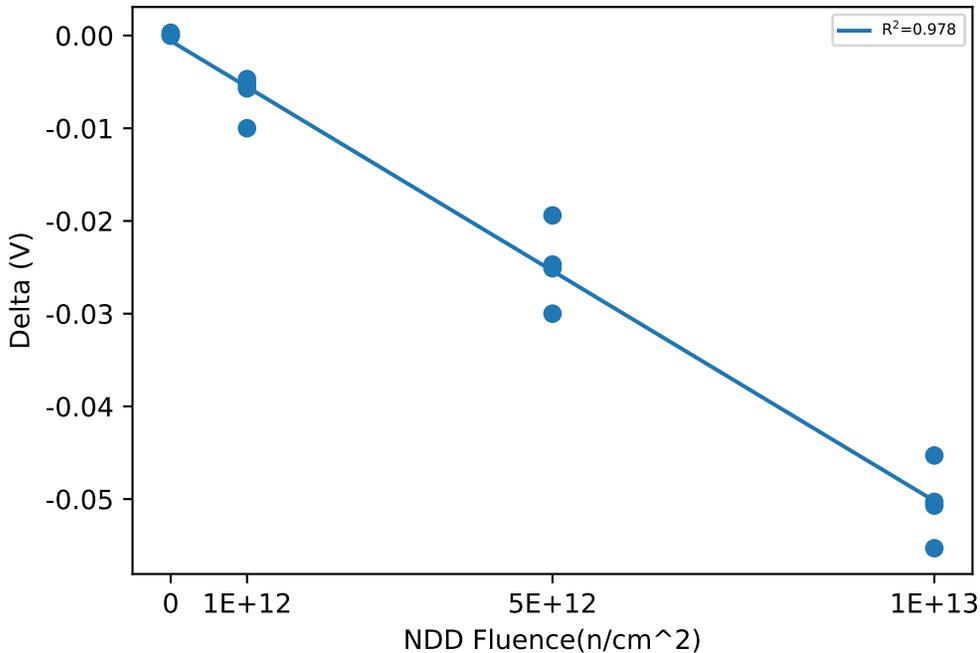
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.1485	6.1488	0.0003
42	0	CORRELATION	6.1334	6.1334	0
43	0	CORRELATION	6.1185	6.1185	0
51	1e+12	NDD	6.1032	6.0985	-0.0047
52	1e+12	NDD	6.1084	6.1031	-0.0053
53	1e+12	NDD	6.1482	6.1382	-0.01
54	1e+12	NDD	6.1341	6.1284	-0.0057
55	5e+12	NDD	6.1385	6.1138	-0.0247
56	5e+12	NDD	6.1431	6.1237	-0.0194
57	5e+12	NDD	6.1538	6.1238	-0.03
58	5e+12	NDD	6.1685	6.1434	-0.0251
59	1e+13	NDD	6.1585	6.1132	-0.0453
60	1e+13	NDD	6.0937	6.043	-0.0507
61	1e+13	NDD	6.1285	6.0782	-0.0503
62	1e+13	NDD	6.1337	6.0784	-0.0553

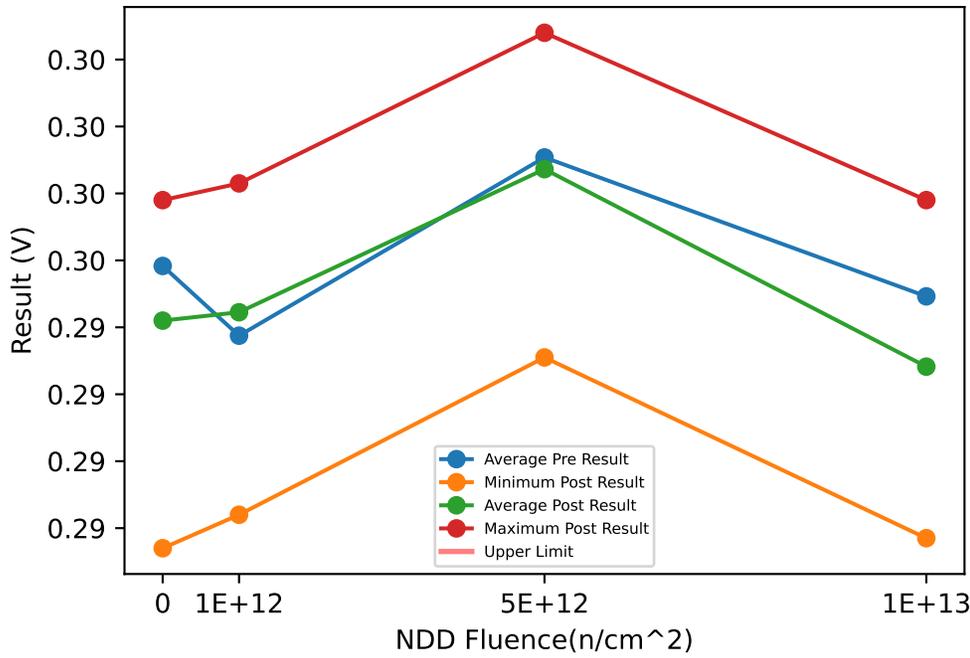
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.1185	6.1335	6.1485	0.015	6.1185	6.1336	6.1488	0.015151	0	0.0001	0.0003	0.00017321
1e+12	6.1032	6.1235	6.1482	0.021312	6.0985	6.117	6.1382	0.019277	-0.01	-0.006425	-0.0047	0.0024185
5e+12	6.1385	6.151	6.1685	0.013326	6.1138	6.1262	6.1434	0.012404	-0.03	-0.0248	-0.0194	0.0043321
1e+13	6.0937	6.1286	6.1585	0.026696	6.043	6.0782	6.1132	0.028659	-0.0553	-0.0504	-0.0453	0.0040874

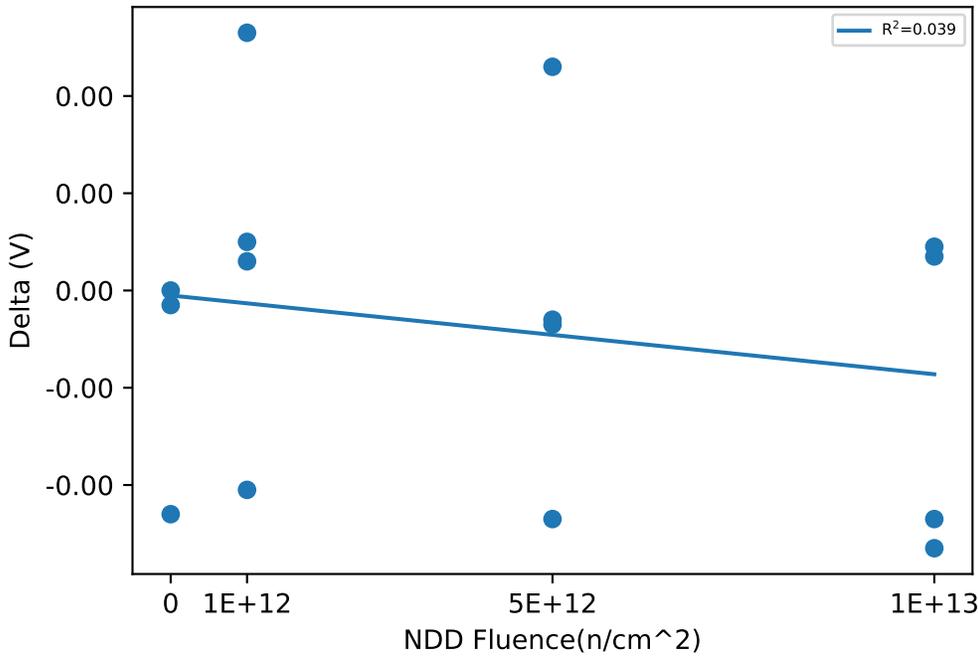
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.2977	0.2974	-0.0003
42	0	CORRELATION	0.2978	0.2978	0
43	0	CORRELATION	0.292	0.2874	-0.0046
51	1e+12	NDD	0.2924	0.293	0.0006
52	1e+12	NDD	0.2925	0.2884	-0.0041
53	1e+12	NDD	0.293	0.2983	0.0053
54	1e+12	NDD	0.2971	0.2981	0.001
55	5e+12	NDD	0.2977	0.297	-0.0007
56	5e+12	NDD	0.2978	0.2931	-0.0047
57	5e+12	NDD	0.2974	0.302	0.0046
58	5e+12	NDD	0.3034	0.3028	-0.0006
59	1e+13	NDD	0.2924	0.2877	-0.0047
60	1e+13	NDD	0.2925	0.2934	0.0009
61	1e+13	NDD	0.2977	0.2924	-0.0053
62	1e+13	NDD	0.2971	0.2978	0.0007

NDD vs Post - Pre Exposure Delta

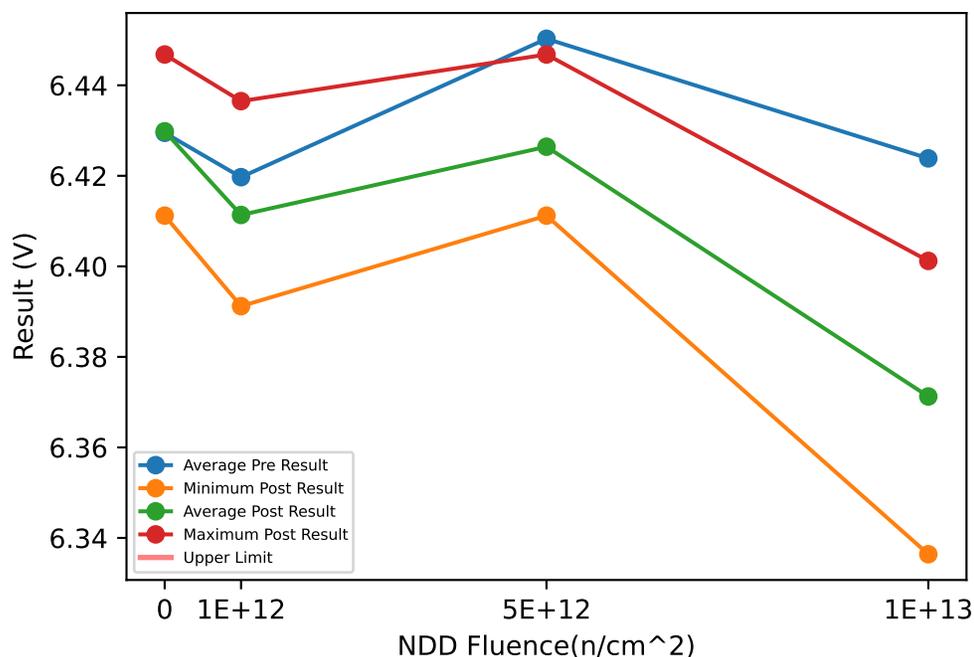


Test Statistics (V)

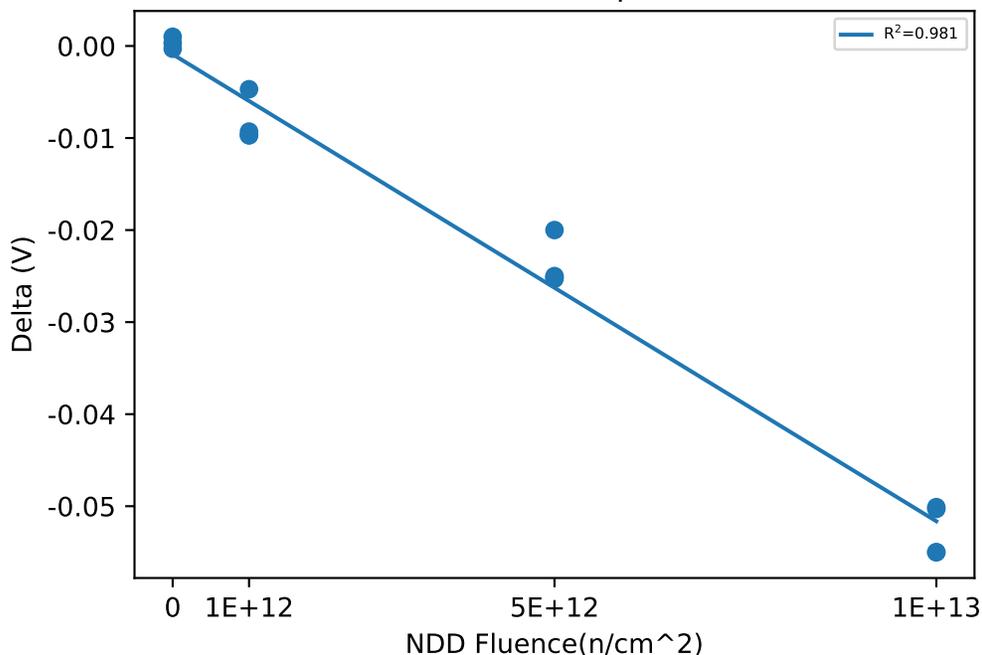
Fluence(n/cm <sup>2</sup> )	Pre Exposure Min	Pre Exposure Avg	Pre Exposure Max	Pre Exposure Std	Post Exposure Min	Post Exposure Avg	Post Exposure Max	Post Exposure Std	Min Delta	Avg Delta	Max Delta	Std Delta
0	0.292	0.29583	0.2978	0.0033201	0.2874	0.2942	0.2978	0.0058924	-0.0046	-0.0016333	0	0.0025736
1e+12	0.2924	0.29375	0.2971	0.0022487	0.2884	0.29445	0.2983	0.0047205	-0.0041	0.0007	0.0053	0.0038427
5e+12	0.2974	0.29907	0.3034	0.0028883	0.2931	0.29873	0.3028	0.0045441	-0.0047	-0.00035	0.0046	0.0038127
1e+13	0.2924	0.29492	0.2977	0.0028687	0.2877	0.29283	0.2978	0.0041444	-0.0053	-0.0021	0.0009	0.0033586

# Device Test: 15.22 THRESHOLD|RISE/BP7L/14/14/////@V\_BP7L\_TH\_RISE

## NDD vs Result Stats



## NDD vs Post - Pre Exposure Delta



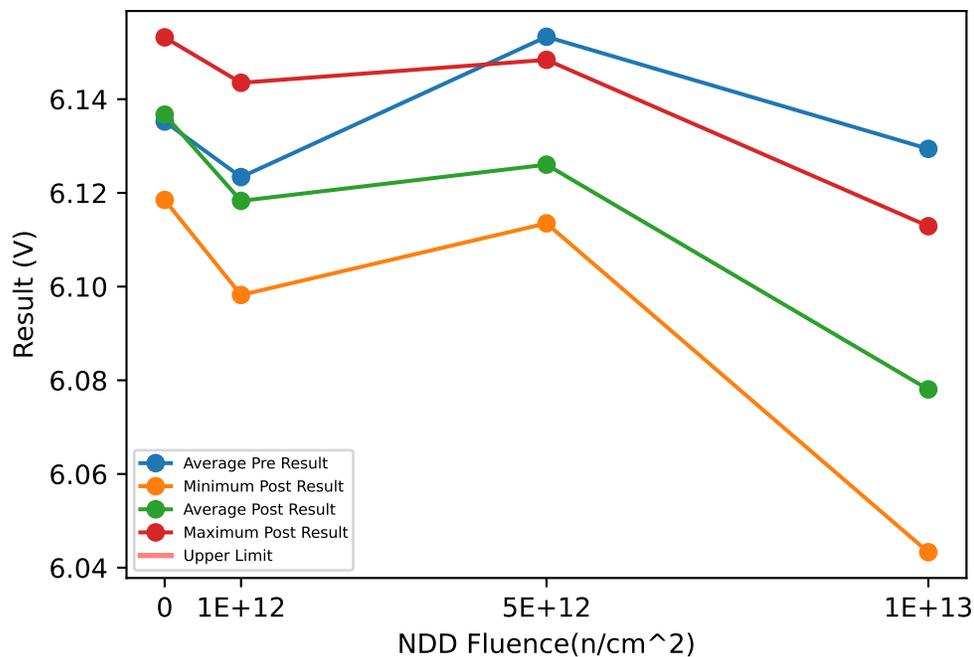
## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.4458	6.4468	0.001
42	0	CORRELATION	6.4318	6.4315	-0.0003
43	0	CORRELATION	6.4109	6.4112	0.0003
51	1e+12	NDD	6.3959	6.3912	-0.0047
52	1e+12	NDD	6.4012	6.3915	-0.0097
53	1e+12	NDD	6.4458	6.4365	-0.0093
54	1e+12	NDD	6.4359	6.4262	-0.0097
55	5e+12	NDD	6.4365	6.4112	-0.0253
56	5e+12	NDD	6.4415	6.4215	-0.02
57	5e+12	NDD	6.4512	6.4262	-0.025
58	5e+12	NDD	6.4719	6.4468	-0.0251
59	1e+13	NDD	6.4515	6.4012	-0.0503
60	1e+13	NDD	6.3865	6.3364	-0.0501
61	1e+13	NDD	6.4262	6.3712	-0.055
62	1e+13	NDD	6.4312	6.3762	-0.055

## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.4109	6.4295	6.4458	0.017563	6.4112	6.4298	6.4468	0.017858	-0.0003	0.00033333	0.001	0.00065064
1e+12	6.3959	6.4197	6.4458	0.024848	6.3912	6.4113	6.4365	0.023474	-0.0097	-0.00835	-0.0047	0.0024406
5e+12	6.4365	6.4503	6.4719	0.015655	6.4112	6.4264	6.4468	0.014958	-0.0253	-0.02385	-0.02	0.0025697
1e+13	6.3865	6.4238	6.4515	0.027197	6.3364	6.3712	6.4012	0.026684	-0.055	-0.0526	-0.0501	0.0027725

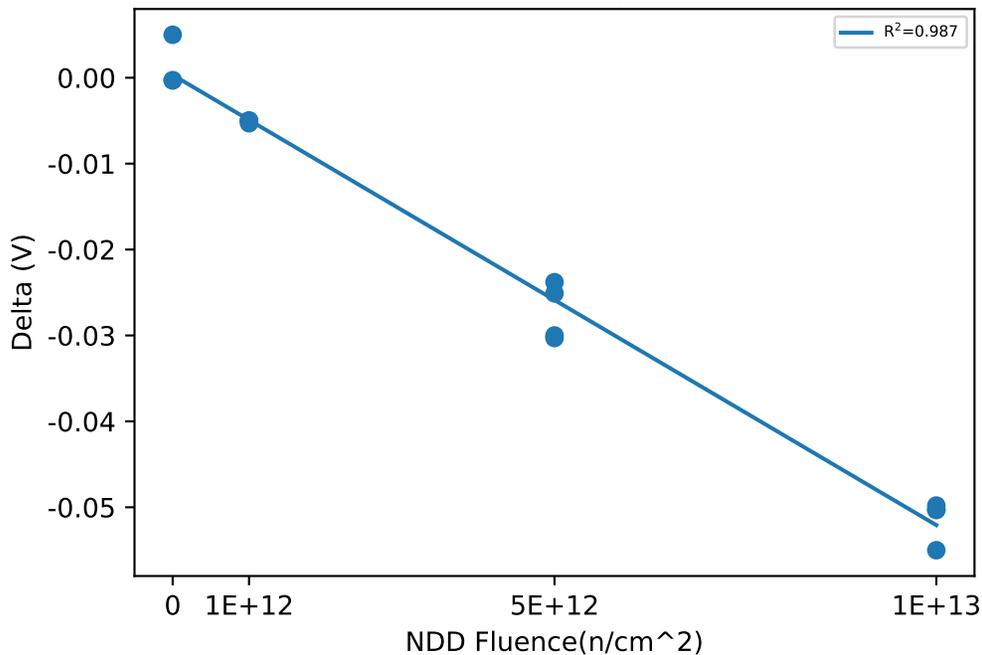
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.1535	6.1532	-0.0003
42	0	CORRELATION	6.1387	6.1384	-0.0003
43	0	CORRELATION	6.1135	6.1185	0.005
51	1e+12	NDD	6.1032	6.0982	-0.005
52	1e+12	NDD	6.1084	6.1034	-0.005
53	1e+12	NDD	6.1485	6.1435	-0.005
54	1e+12	NDD	6.1334	6.1281	-0.0053
55	5e+12	NDD	6.1435	6.1135	-0.03
56	5e+12	NDD	6.1428	6.119	-0.0238
57	5e+12	NDD	6.1535	6.1232	-0.0303
58	5e+12	NDD	6.1735	6.1484	-0.0251
59	1e+13	NDD	6.1632	6.1129	-0.0503
60	1e+13	NDD	6.0931	6.0433	-0.0498
61	1e+13	NDD	6.1332	6.0782	-0.055
62	1e+13	NDD	6.1281	6.0778	-0.0503

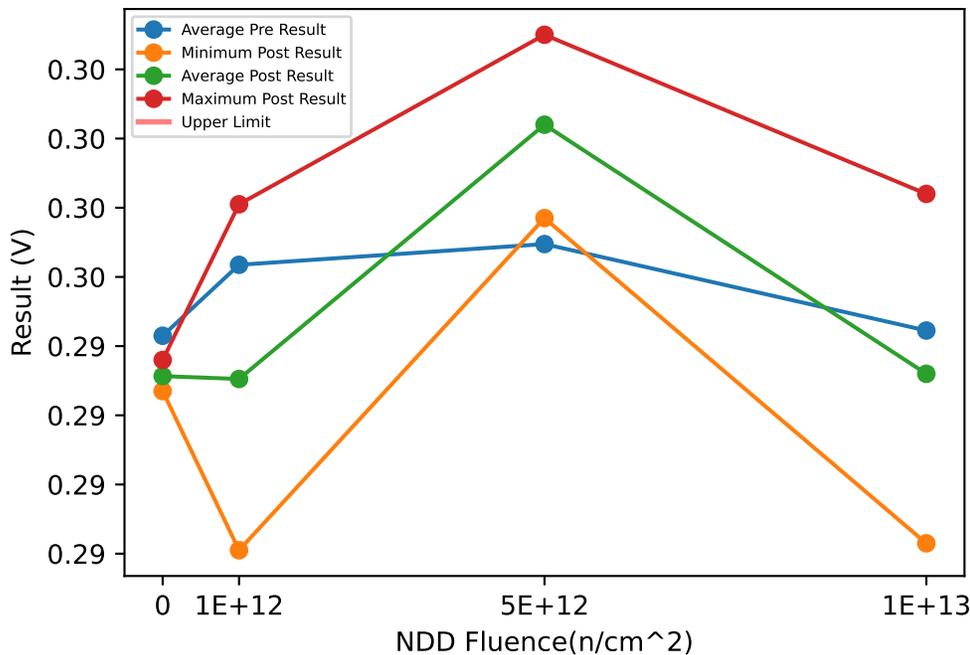
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.1135	6.1352	6.1535	0.020224	6.1185	6.1367	6.1532	0.017412	-0.0003	0.0014667	0.005	0.00306
1e+12	6.1032	6.1234	6.1485	0.021315	6.0982	6.1183	6.1435	0.021269	-0.0053	-0.005075	-0.005	0.00015
5e+12	6.1428	6.1533	6.1735	0.01431	6.1135	6.126	6.1484	0.015436	-0.0303	-0.0273	-0.0238	0.0033357
1e+13	6.0931	6.1294	6.1632	0.02873	6.0433	6.0781	6.1129	0.028415	-0.055	-0.05135	-0.0498	0.0024447

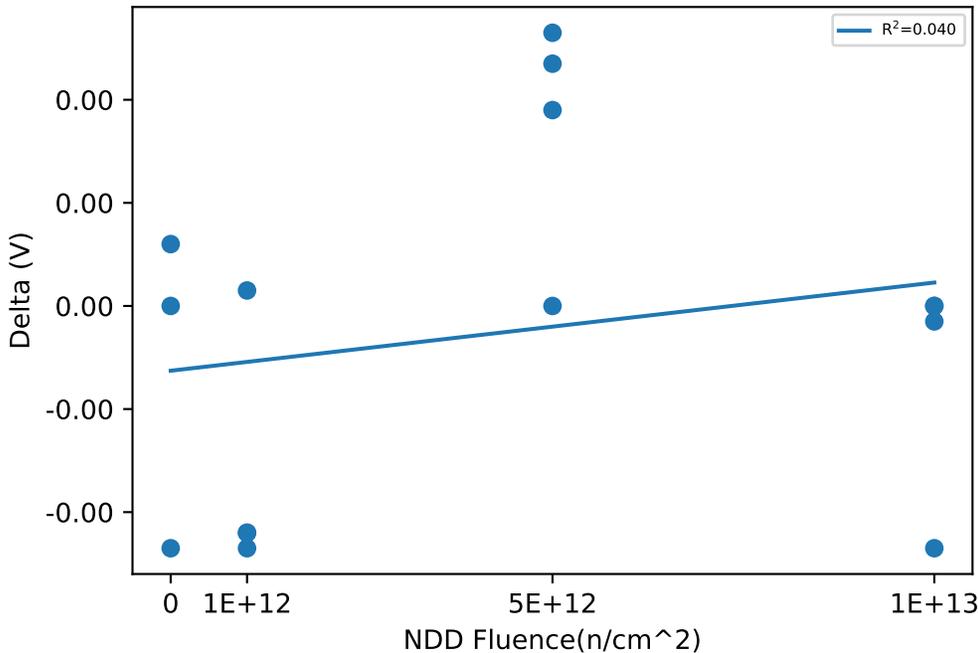
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.2924	0.2936	0.0012
42	0	CORRELATION	0.2931	0.2931	0
43	0	CORRELATION	0.2974	0.2927	-0.0047
51	1e+12	NDD	0.2927	0.293	0.0003
52	1e+12	NDD	0.2928	0.2881	-0.0047
53	1e+12	NDD	0.2974	0.293	-0.0044
54	1e+12	NDD	0.3025	0.2981	-0.0044
55	5e+12	NDD	0.293	0.2977	0.0047
56	5e+12	NDD	0.2987	0.3025	0.0038
57	5e+12	NDD	0.2977	0.303	0.0053
58	5e+12	NDD	0.2984	0.2984	0
59	1e+13	NDD	0.2883	0.2883	0
60	1e+13	NDD	0.2934	0.2931	-0.0003
61	1e+13	NDD	0.293	0.293	0
62	1e+13	NDD	0.3031	0.2984	-0.0047

NDD vs Post - Pre Exposure Delta

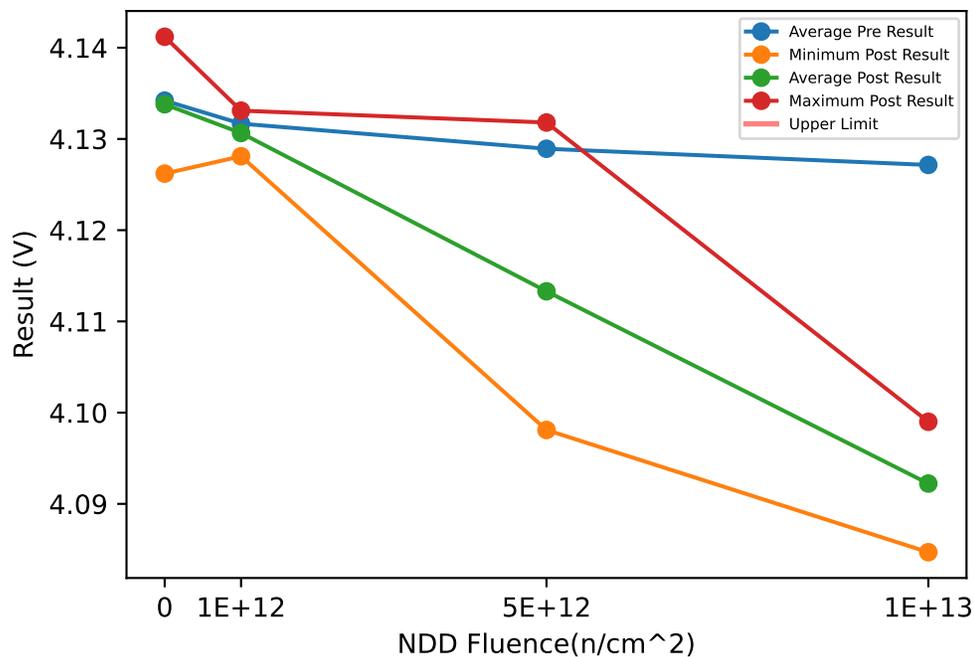


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.2924	0.2943	0.2974	0.0027074	0.2927	0.29313	0.2936	0.00045092	-0.0047	-0.0011667	0.0012	0.0031182
1e+12	0.2927	0.29635	0.3025	0.0046494	0.2881	0.29305	0.2981	0.0040829	-0.0047	-0.0033	0.0003	0.0024042
5e+12	0.293	0.29695	0.2987	0.0026665	0.2977	0.3004	0.303	0.0027362	0	0.00345	0.0053	0.0023812
1e+13	0.2883	0.29445	0.3031	0.0062142	0.2883	0.2932	0.2984	0.0041271	-0.0047	-0.00125	0	0.0023043

# Device Test: 15.25 THRESHOLD|RISE/BP5H/10/8////@V\_BP5H\_TH\_RISE

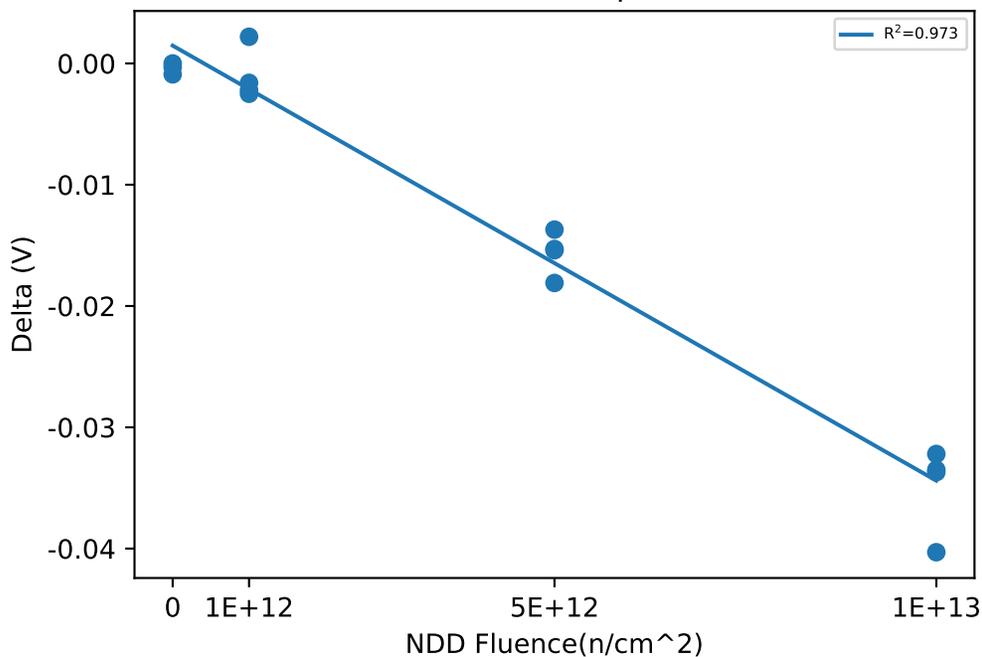
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.134	4.134	0
42	0	CORRELATION	4.1415	4.1412	-0.0003
43	0	CORRELATION	4.1271	4.1262	-0.0009
51	1e+12	NDD	4.1309	4.1331	0.0022
52	1e+12	NDD	4.1349	4.1324	-0.0025
53	1e+12	NDD	4.1306	4.129	-0.0016
54	1e+12	NDD	4.1303	4.1281	-0.0022
55	5e+12	NDD	4.1365	4.1184	-0.0181
56	5e+12	NDD	4.1118	4.0981	-0.0137
57	5e+12	NDD	4.1203	4.1049	-0.0154
58	5e+12	NDD	4.1471	4.1318	-0.0153
59	1e+13	NDD	4.1327	4.099	-0.0337
60	1e+13	NDD	4.1256	4.0934	-0.0322
61	1e+13	NDD	4.1253	4.0918	-0.0335
62	1e+13	NDD	4.125	4.0847	-0.0403

## NDD vs Post - Pre Exposure Delta

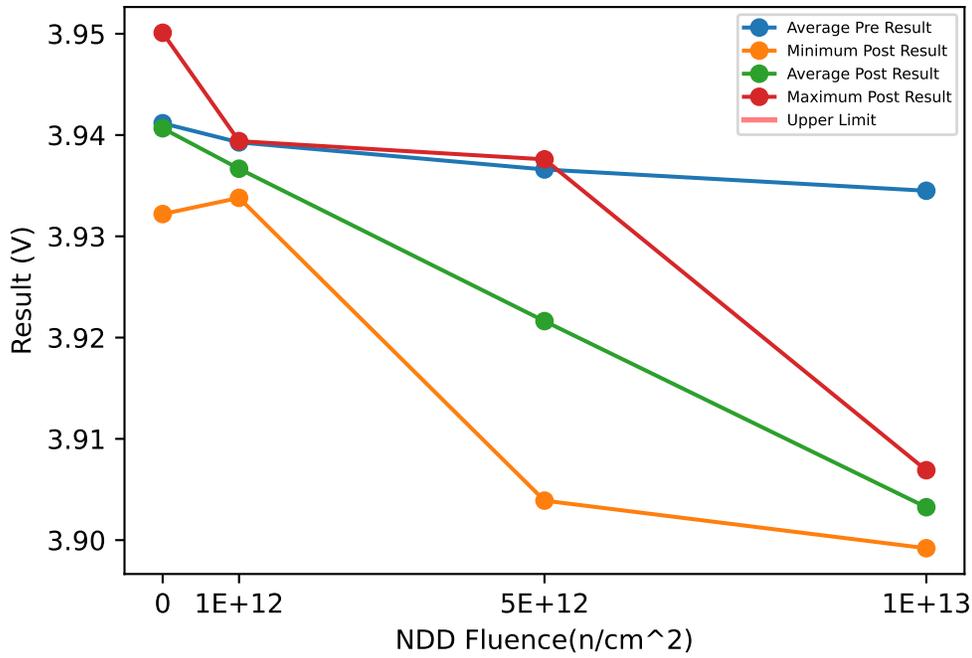


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.1271	4.1342	4.1415	0.0072021	4.1262	4.1338	4.1412	0.007502	-0.0009	-0.0004	0	0.00045826
1e+12	4.1303	4.1317	4.1349	0.0021639	4.1281	4.1306	4.1331	0.0024691	-0.0025	-0.001025	0.0022	0.0021823
5e+12	4.1118	4.1289	4.1471	0.015868	4.0981	4.1133	4.1318	0.014943	-0.0181	-0.015625	-0.0137	0.0018246
1e+13	4.125	4.1272	4.1327	0.0037081	4.0847	4.0922	4.099	0.0058903	-0.0403	-0.034925	-0.0322	0.0036445

# Device Test: 15.26 THRESHOLD|FALL/BP5H/10/8/////@V\_BP5H\_TH\_FALL

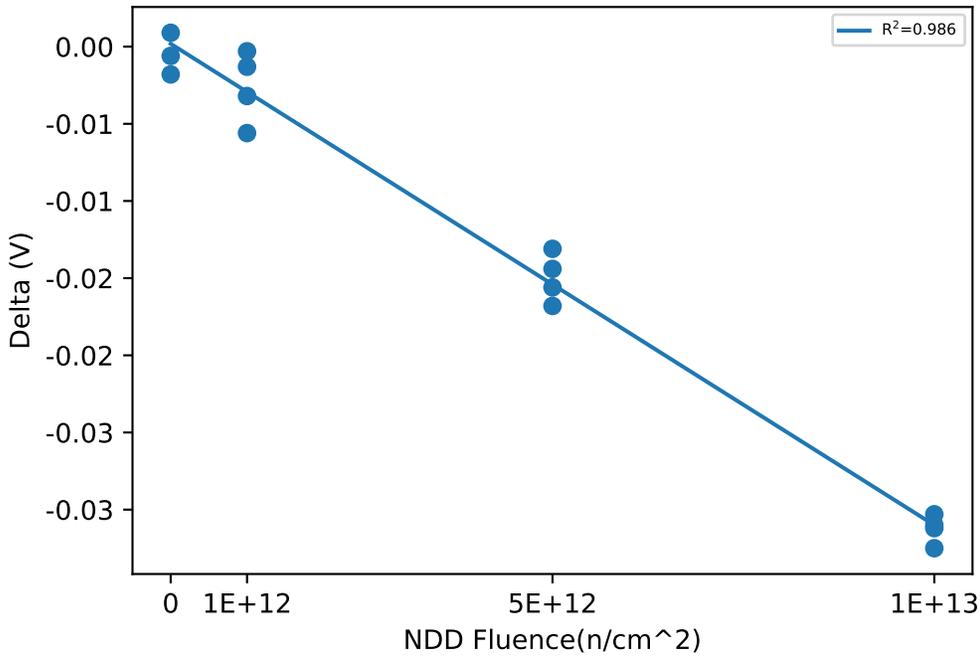
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9403	3.9397	-0.0006
42	0	CORRELATION	3.9519	3.9501	-0.0018
43	0	CORRELATION	3.9313	3.9322	0.0009
51	1e+12	NDD	3.9397	3.9394	-0.0003
52	1e+12	NDD	3.9404	3.9391	-0.0013
53	1e+12	NDD	3.94	3.9344	-0.0056
54	1e+12	NDD	3.937	3.9338	-0.0032
55	5e+12	NDD	3.9462	3.9294	-0.0168
56	5e+12	NDD	3.9195	3.9039	-0.0156
57	5e+12	NDD	3.93	3.9156	-0.0144
58	5e+12	NDD	3.9507	3.9376	-0.0131
59	1e+13	NDD	3.9394	3.9069	-0.0325
60	1e+13	NDD	3.9338	3.9035	-0.0303
61	1e+13	NDD	3.9344	3.9034	-0.031
62	1e+13	NDD	3.9304	3.8992	-0.0312

## NDD vs Post - Pre Exposure Delta

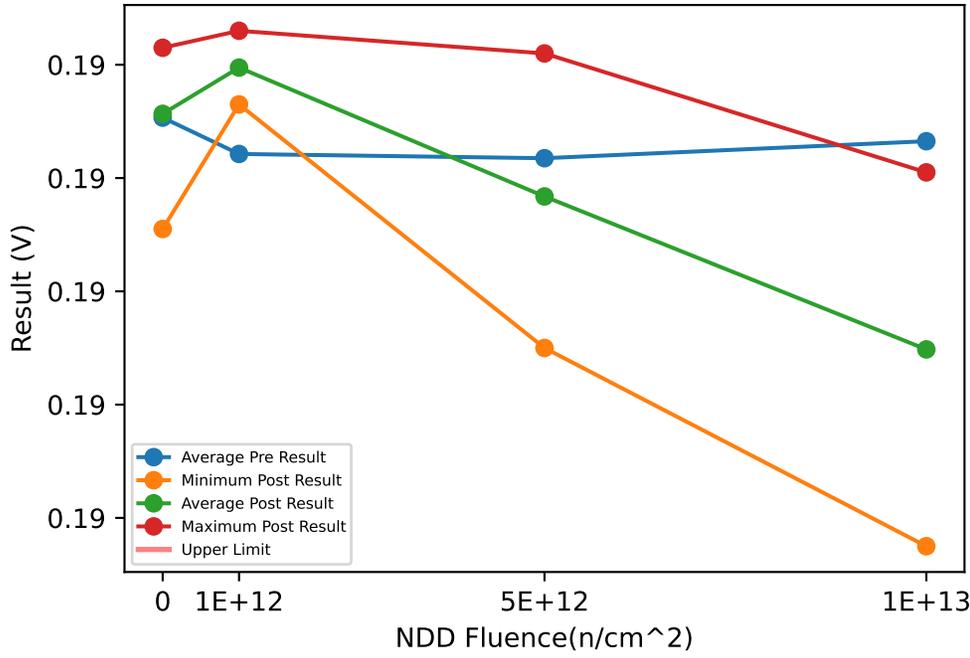


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9313	3.9412	3.9519	0.010327	3.9322	3.9407	3.9501	0.0089891	-0.0018	-0.0005	0.0009	0.0013528
1e+12	3.937	3.9393	3.9404	0.0015435	3.9338	3.9367	3.9394	0.0029859	-0.0056	-0.0026	-0.0003	0.0023338
5e+12	3.9195	3.9366	3.9507	0.014456	3.9039	3.9216	3.9376	0.014901	-0.0168	-0.014975	-0.0131	0.0015882
1e+13	3.9304	3.9345	3.9394	0.0037112	3.8992	3.9032	3.9069	0.0031522	-0.0325	-0.03125	-0.0303	0.00091833

Device Test: 15.27 THRESHOLD|HYST/BP5H/10/8////@V\_BP5H\_TH\_HYST

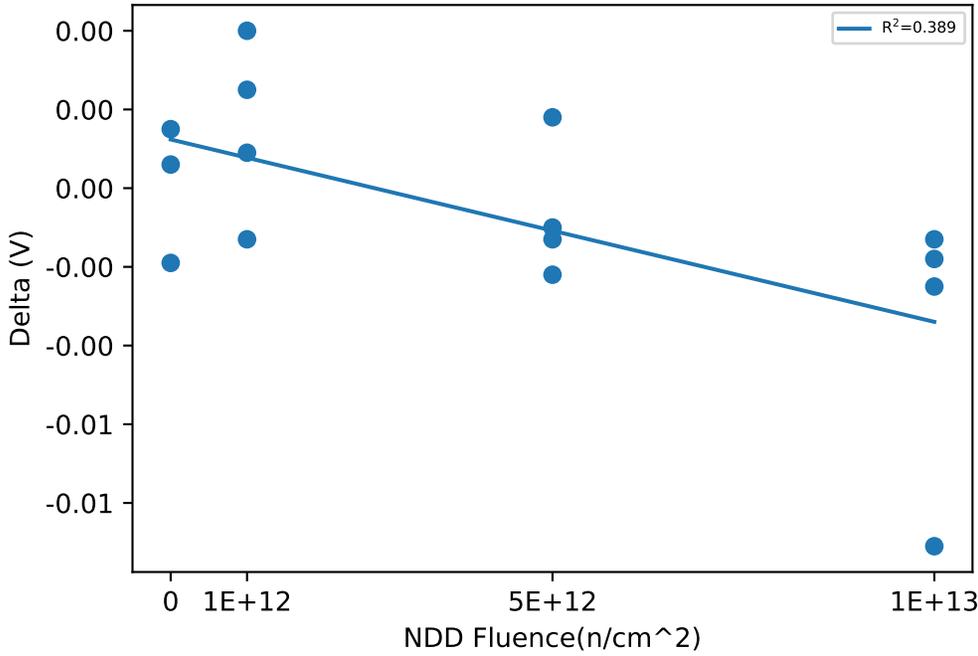
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.1937	0.1943	0.0006
42	0	CORRELATION	0.1896	0.1911	0.0015
43	0	CORRELATION	0.1959	0.194	-0.0019
51	1e+12	NDD	0.1912	0.1937	0.0025
52	1e+12	NDD	0.1946	0.1933	-0.0013
53	1e+12	NDD	0.1906	0.1946	0.004
54	1e+12	NDD	0.1933	0.1942	0.0009
55	5e+12	NDD	0.1903	0.189	-0.0013
56	5e+12	NDD	0.1924	0.1942	0.0018
57	5e+12	NDD	0.1903	0.1893	-0.001
58	5e+12	NDD	0.1964	0.1942	-0.0022
59	1e+13	NDD	0.1934	0.1921	-0.0013
60	1e+13	NDD	0.1917	0.1899	-0.0018
61	1e+13	NDD	0.1909	0.1884	-0.0025
62	1e+13	NDD	0.1946	0.1855	-0.0091

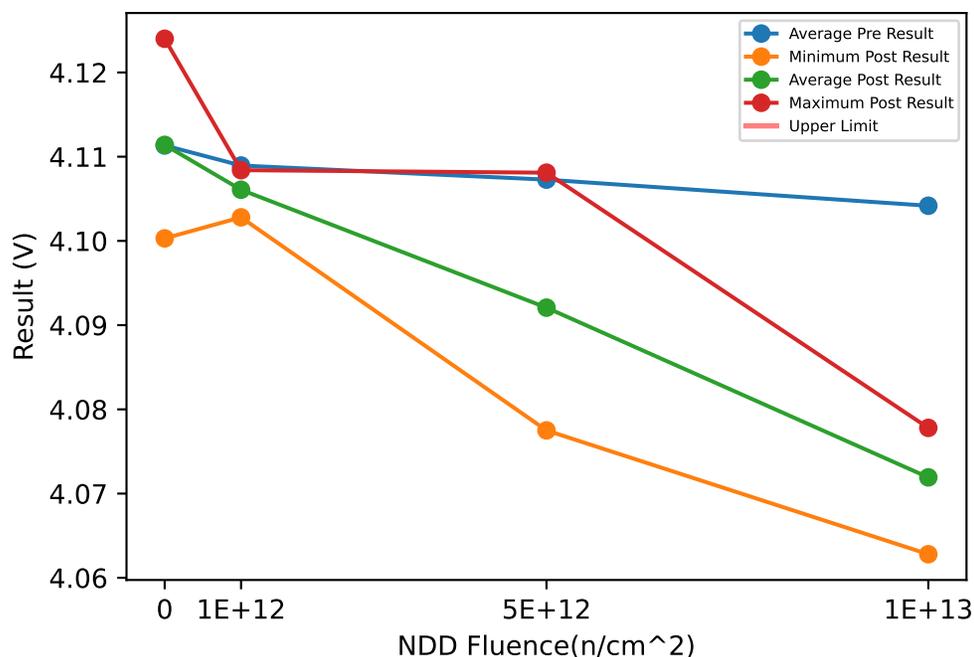
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm^2)	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	0.1896	0.19307	0.1959	0.0031974	0.1911	0.19313	0.1943	0.0017673	-0.0019	6.6667e-05	0.0015	0.0017616
1e+12	0.1906	0.19243	0.1946	0.0018554	0.1933	0.19395	0.1946	0.00056862	-0.0013	0.001525	0.004	0.0022692
5e+12	0.1903	0.19235	0.1964	0.0028758	0.189	0.19168	0.1942	0.0029182	-0.0022	-0.000675	0.0018	0.001727
1e+13	0.1909	0.19265	0.1946	0.0016663	0.1855	0.18898	0.1921	0.0027705	-0.0091	-0.003675	-0.0013	0.00365

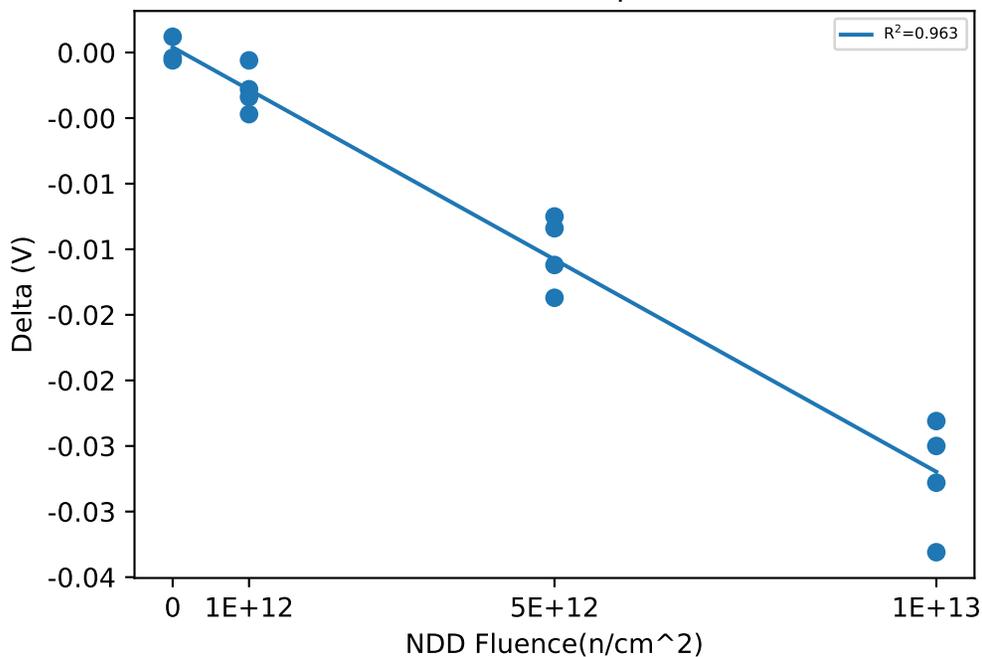
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.1103	4.1099	-0.0004
42	0	CORRELATION	4.1228	4.124	0.0012
43	0	CORRELATION	4.1009	4.1003	-0.0006
51	1e+12	NDD	4.1131	4.1084	-0.0047
52	1e+12	NDD	4.1103	4.1075	-0.0028
53	1e+12	NDD	4.1062	4.1056	-0.0006
54	1e+12	NDD	4.1062	4.1028	-0.0034
55	5e+12	NDD	4.1118	4.0993	-0.0125
56	5e+12	NDD	4.0937	4.0775	-0.0162
57	5e+12	NDD	4.1021	4.0834	-0.0187
58	5e+12	NDD	4.1215	4.1081	-0.0134
59	1e+13	NDD	4.1059	4.0778	-0.0281
60	1e+13	NDD	4.1031	4.0731	-0.03
61	1e+13	NDD	4.1068	4.074	-0.0328
62	1e+13	NDD	4.1009	4.0628	-0.0381

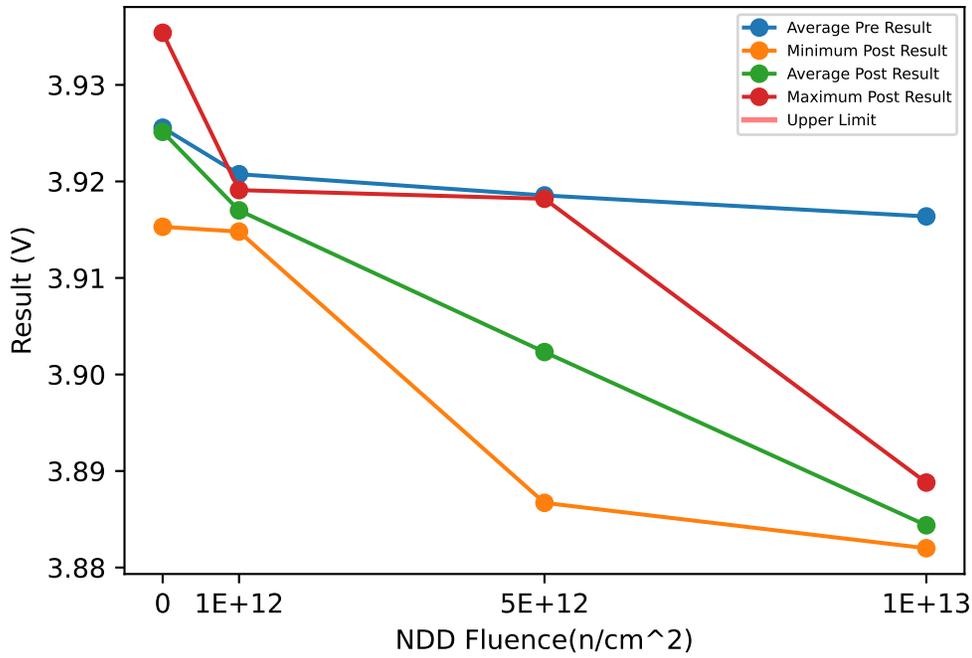
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.1009	4.1113	4.1228	0.010987	4.1003	4.1114	4.124	0.011921	-0.0006	6.6667e-05	0.0012	0.00098658
1e+12	4.1062	4.109	4.1131	0.0033749	4.1028	4.1061	4.1084	0.0024757	-0.0047	-0.002875	-0.0006	0.0017115
5e+12	4.0937	4.1073	4.1215	0.012026	4.0775	4.0921	4.1081	0.014103	-0.0187	-0.0152	-0.0125	0.0028154
1e+13	4.1009	4.1042	4.1068	0.0026924	4.0628	4.0719	4.0778	0.0064153	-0.0381	-0.03225	-0.0281	0.0043516

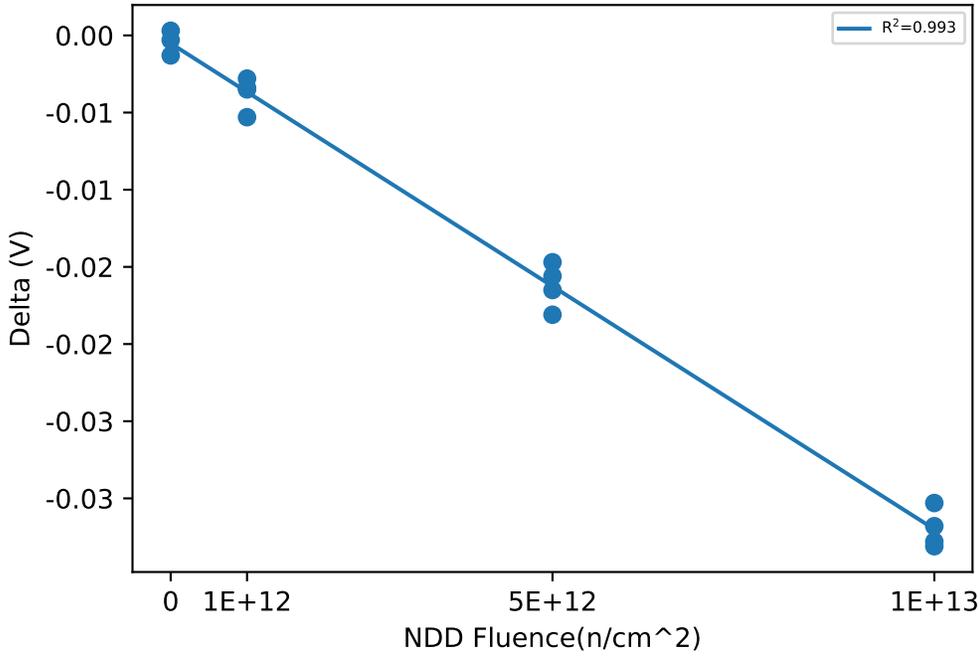
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9244	3.9247	0.0003
42	0	CORRELATION	3.9357	3.9354	-0.0003
43	0	CORRELATION	3.9166	3.9153	-0.0013
51	1e+12	NDD	3.9219	3.9191	-0.0028
52	1e+12	NDD	3.9238	3.9185	-0.0053
53	1e+12	NDD	3.9191	3.9156	-0.0035
54	1e+12	NDD	3.9182	3.9148	-0.0034
55	5e+12	NDD	3.9247	3.9091	-0.0156
56	5e+12	NDD	3.9032	3.8867	-0.0165
57	5e+12	NDD	3.9134	3.8953	-0.0181
58	5e+12	NDD	3.9329	3.9182	-0.0147
59	1e+13	NDD	3.9216	3.8888	-0.0328
60	1e+13	NDD	3.9135	3.8832	-0.0303
61	1e+13	NDD	3.9166	3.8835	-0.0331
62	1e+13	NDD	3.9138	3.882	-0.0318

NDD vs Post - Pre Exposure Delta

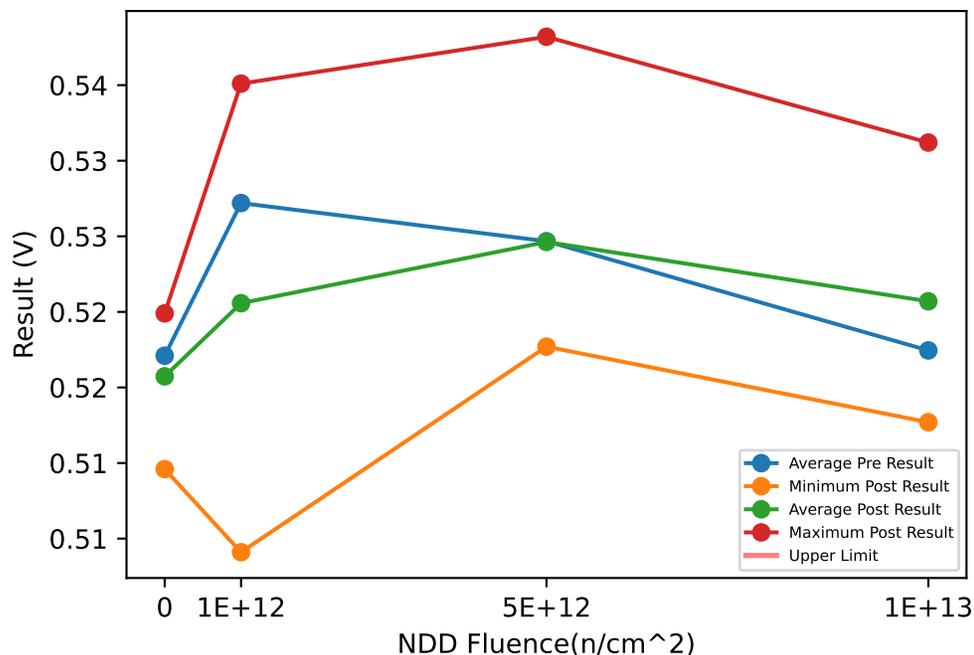


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9166	3.9256	3.9357	0.0096033	3.9153	3.9251	3.9354	0.010057	-0.0013	-0.00043333	0.0003	0.00080829
1e+12	3.9182	3.9207	3.9238	0.0025723	3.9148	3.917	3.9191	0.0021182	-0.0053	-0.00375	-0.0028	0.0010786
5e+12	3.9032	3.9186	3.9329	0.012986	3.8867	3.9023	3.9182	0.014041	-0.0181	-0.016225	-0.0147	0.00145
1e+13	3.9135	3.9164	3.9216	0.0037527	3.882	3.8844	3.8888	0.0030203	-0.0331	-0.032	-0.0303	0.0012623

# Device Test: 15.3 THRESHOLD|HYST/VIN//10////@V\_IN\_TH\_HYST

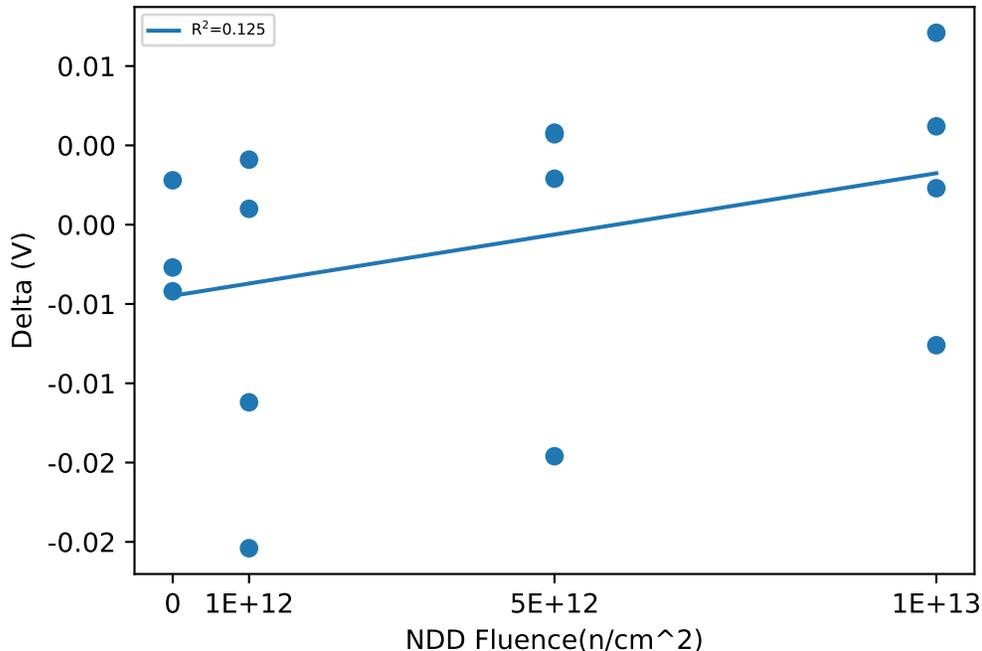
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.5171	0.5199	0.0028
42	0	CORRELATION	0.5123	0.5096	-0.0027
43	0	CORRELATION	0.5219	0.5177	-0.0042
51	1e+12	NDD	0.5389	0.5277	-0.0112
52	1e+12	NDD	0.5144	0.5154	0.001
53	1e+12	NDD	0.531	0.5351	0.0041
54	1e+12	NDD	0.5245	0.5041	-0.0204
55	5e+12	NDD	0.5359	0.5213	-0.0146
56	5e+12	NDD	0.512	0.5177	0.0057
57	5e+12	NDD	0.5353	0.5382	0.0029
58	5e+12	NDD	0.5155	0.5213	0.0058
59	1e+13	NDD	0.5388	0.5312	-0.0076
60	1e+13	NDD	0.5077	0.5198	0.0121
61	1e+13	NDD	0.5168	0.5191	0.0023
62	1e+13	NDD	0.5065	0.5127	0.0062

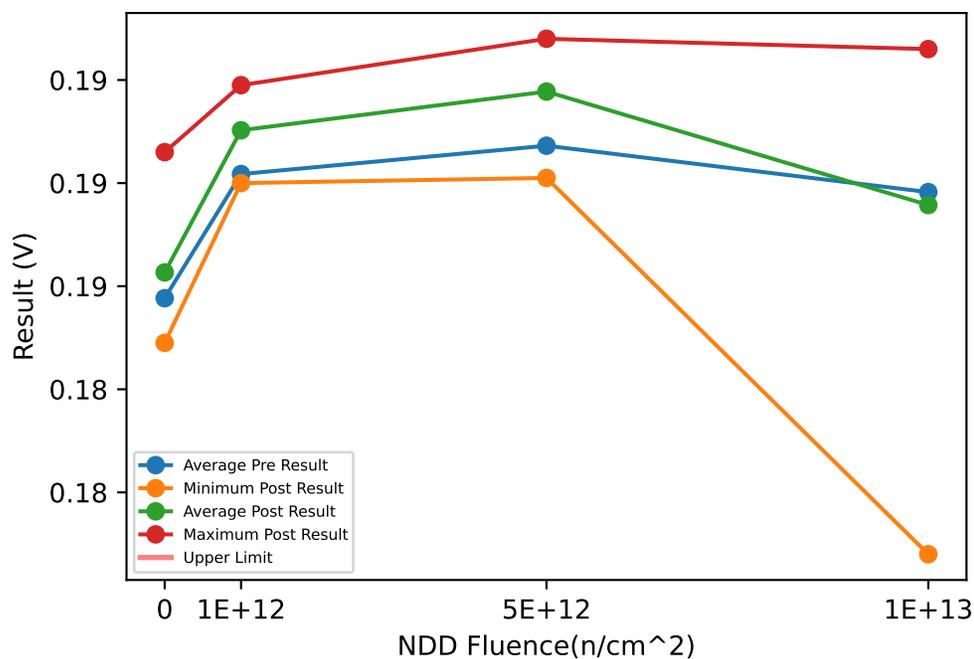
## NDD vs Post - Pre Exposure Delta



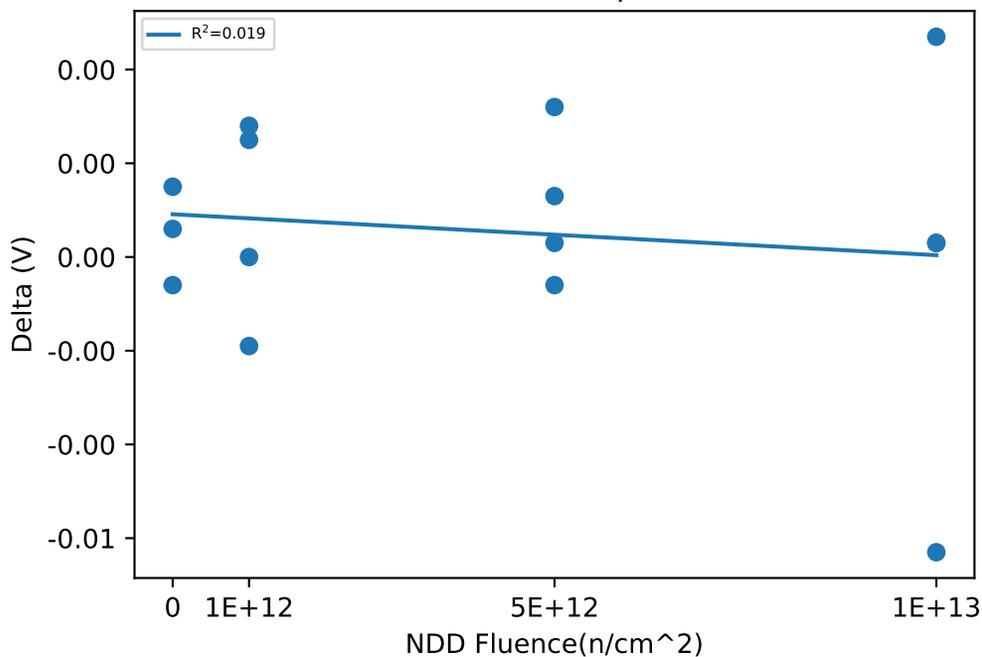
## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.5123	0.5171	0.5219	0.0048	0.5096	0.51573	0.5199	0.0054243	-0.0042	-0.0013667	0.0028	0.0036856
1e+12	0.5144	0.5272	0.5389	0.010368	0.5041	0.52058	0.5351	0.013662	-0.0204	-0.006625	0.0041	0.011311
5e+12	0.512	0.52468	0.5359	0.012698	0.5177	0.52463	0.5382	0.0092077	-0.0146	-5e-05	0.0058	0.0097927
1e+13	0.5065	0.51745	0.5388	0.014958	0.5127	0.5207	0.5312	0.0076946	-0.0076	0.00325	0.0121	0.0082795

NDD vs Result Stats



NDD vs Post - Pre Exposure Delta



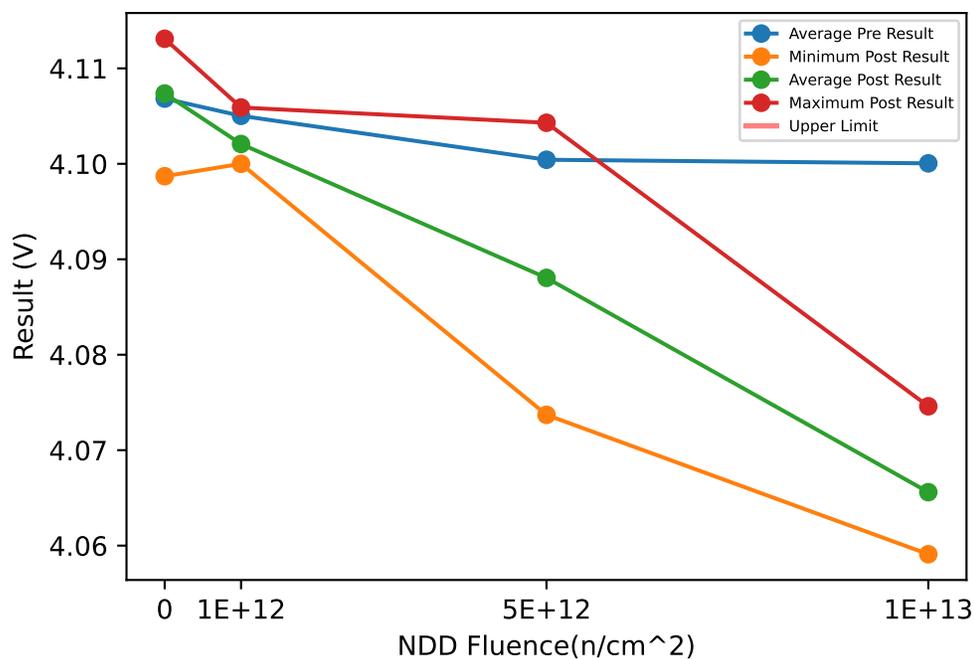
Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.1859	0.1853	-0.0006
42	0	CORRELATION	0.1871	0.1886	0.0015
43	0	CORRELATION	0.1843	0.1849	0.0006
51	1e+12	NDD	0.1912	0.1893	-0.0019
52	1e+12	NDD	0.1864	0.1889	0.0025
53	1e+12	NDD	0.1871	0.1899	0.0028
54	1e+12	NDD	0.188	0.188	0
55	5e+12	NDD	0.1871	0.1903	0.0032
56	5e+12	NDD	0.1905	0.1908	0.0003
57	5e+12	NDD	0.1887	0.1881	-0.0006
58	5e+12	NDD	0.1886	0.1899	0.0013
59	1e+13	NDD	0.1843	0.189	0.0047
60	1e+13	NDD	0.1896	0.1899	0.0003
61	1e+13	NDD	0.1903	0.1906	0.0003
62	1e+13	NDD	0.1871	0.1808	-0.0063

Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.1843	0.18577	0.1871	0.0014048	0.1849	0.18627	0.1886	0.0020306	-0.0006	0.0005	0.0015	0.0010536
1e+12	0.1864	0.18818	0.1912	0.0021203	0.188	0.18902	0.1899	0.00079739	-0.0019	0.00085	0.0028	0.0022219
5e+12	0.1871	0.18873	0.1905	0.0013913	0.1881	0.18977	0.1908	0.0011758	-0.0006	0.00105	0.0032	0.0016299
1e+13	0.1843	0.18782	0.1903	0.002722	0.1808	0.18757	0.1906	0.0045639	-0.0063	-0.00025	0.0047	0.0045354

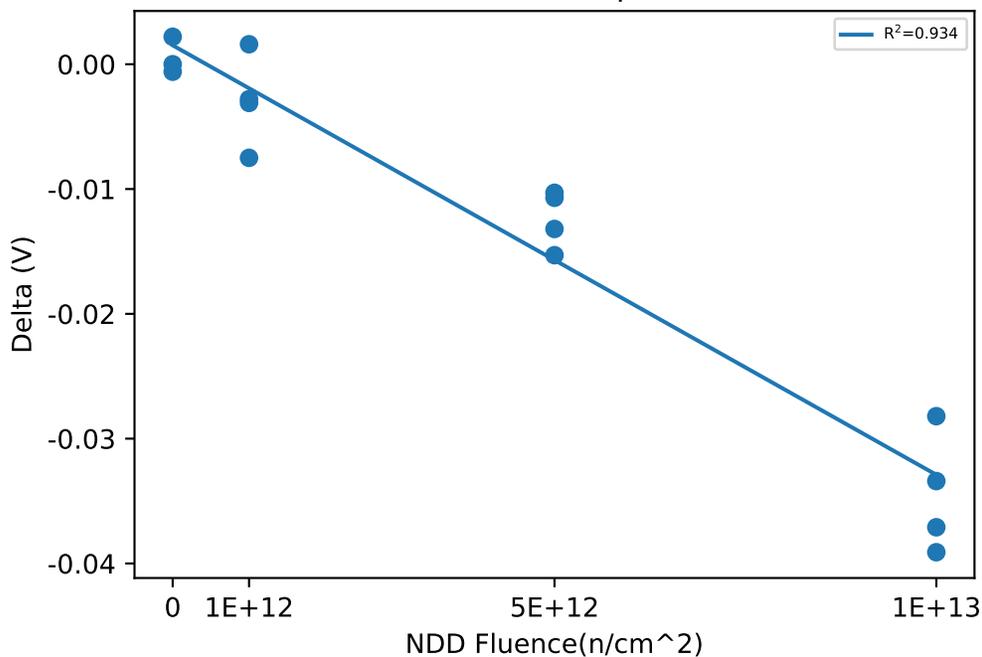
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.1103	4.1103	0
42	0	CORRELATION	4.1137	4.1131	-0.0006
43	0	CORRELATION	4.0965	4.0987	0.0022
51	1e+12	NDD	4.1093	4.1018	-0.0075
52	1e+12	NDD	4.1043	4.1059	0.0016
53	1e+12	NDD	4.1034	4.1006	-0.0028
54	1e+12	NDD	4.1031	4.1	-0.0031
55	5e+12	NDD	4.1074	4.0921	-0.0153
56	5e+12	NDD	4.084	4.0737	-0.0103
57	5e+12	NDD	4.0953	4.0821	-0.0132
58	5e+12	NDD	4.115	4.1043	-0.0107
59	1e+13	NDD	4.1028	4.0746	-0.0282
60	1e+13	NDD	4.0975	4.0641	-0.0334
61	1e+13	NDD	4.1037	4.0646	-0.0391
62	1e+13	NDD	4.0962	4.0591	-0.0371

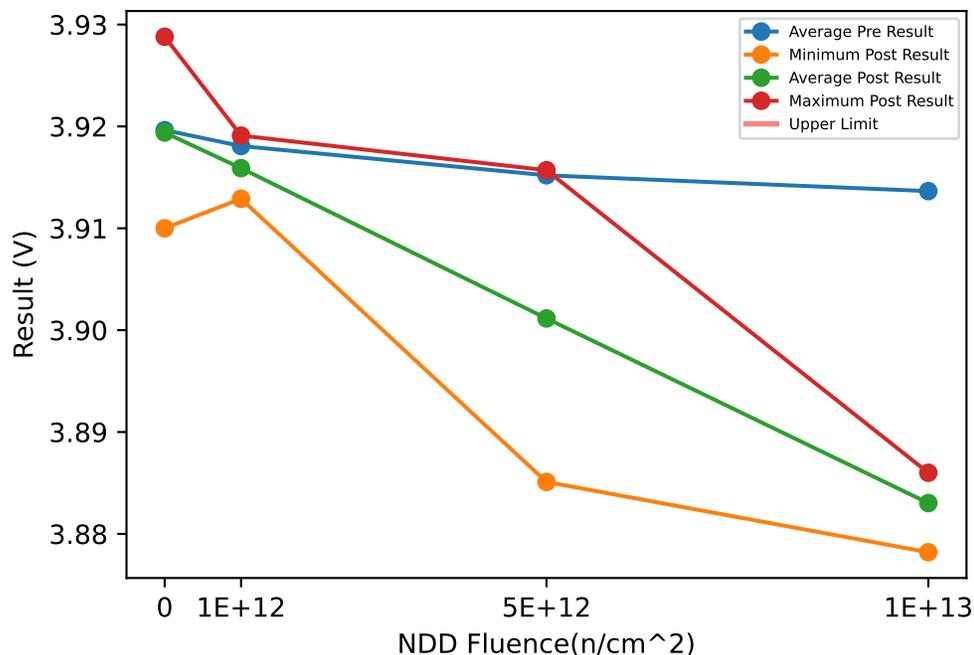
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.0965	4.1068	4.1137	0.009109	4.0987	4.1074	4.1131	0.007635	-0.0006	0.00053333	0.0022	0.0014742
1e+12	4.1031	4.105	4.1093	0.0028953	4.1	4.1021	4.1059	0.0026575	-0.0075	-0.00295	0.0016	0.0037171
5e+12	4.084	4.1004	4.115	0.013628	4.0737	4.088	4.1043	0.013188	-0.0153	-0.012375	-0.0103	0.0023343
1e+13	4.0962	4.1	4.1037	0.003751	4.0591	4.0656	4.0746	0.0064936	-0.0391	-0.03445	-0.0282	0.0047892

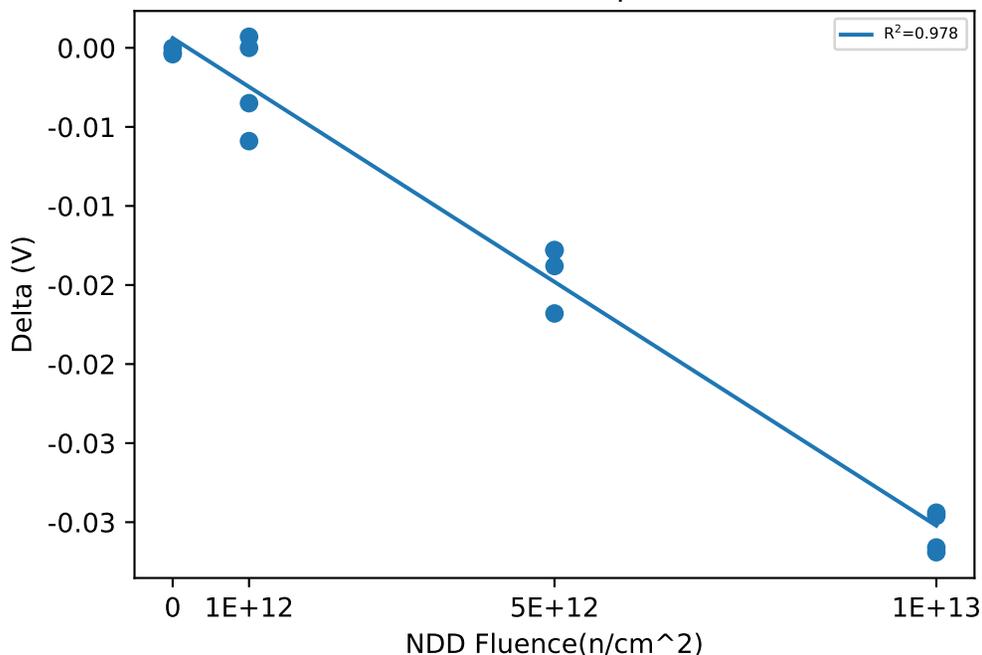
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9194	3.9194	0
42	0	CORRELATION	3.9292	3.9288	-0.0004
43	0	CORRELATION	3.9103	3.91	-0.0003
51	1e+12	NDD	3.9184	3.9191	0.0007
52	1e+12	NDD	3.9185	3.9185	0
53	1e+12	NDD	3.9166	3.9131	-0.0035
54	1e+12	NDD	3.9188	3.9129	-0.0059
55	5e+12	NDD	3.9231	3.9103	-0.0128
56	5e+12	NDD	3.8989	3.8851	-0.0138
57	5e+12	NDD	3.9103	3.8935	-0.0168
58	5e+12	NDD	3.9285	3.9157	-0.0128
59	1e+13	NDD	3.9156	3.886	-0.0296
60	1e+13	NDD	3.9148	3.8829	-0.0319
61	1e+13	NDD	3.9144	3.885	-0.0294
62	1e+13	NDD	3.9098	3.8782	-0.0316

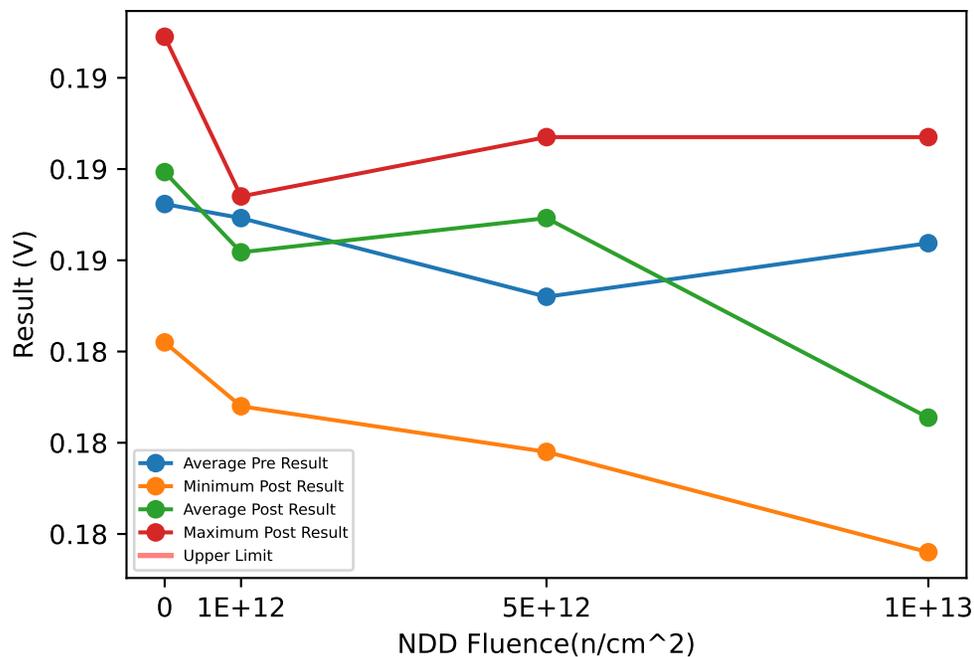
NDD vs Post - Pre Exposure Delta



Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9103	3.9196	3.9292	0.0094522	3.91	3.9194	3.9288	0.0094	-0.0004	-0.00023333	0	0.00020817
1e+12	3.9166	3.9181	3.9188	0.00099791	3.9129	3.9159	3.9191	0.0033586	-0.0059	-0.002175	0.0007	0.0030891
5e+12	3.8989	3.9152	3.9285	0.013279	3.8851	3.9011	3.9157	0.014278	-0.0168	-0.01405	-0.0128	0.001893
1e+13	3.9098	3.9137	3.9156	0.0026147	3.8782	3.883	3.886	0.0034664	-0.0319	-0.030625	-0.0294	0.0013074

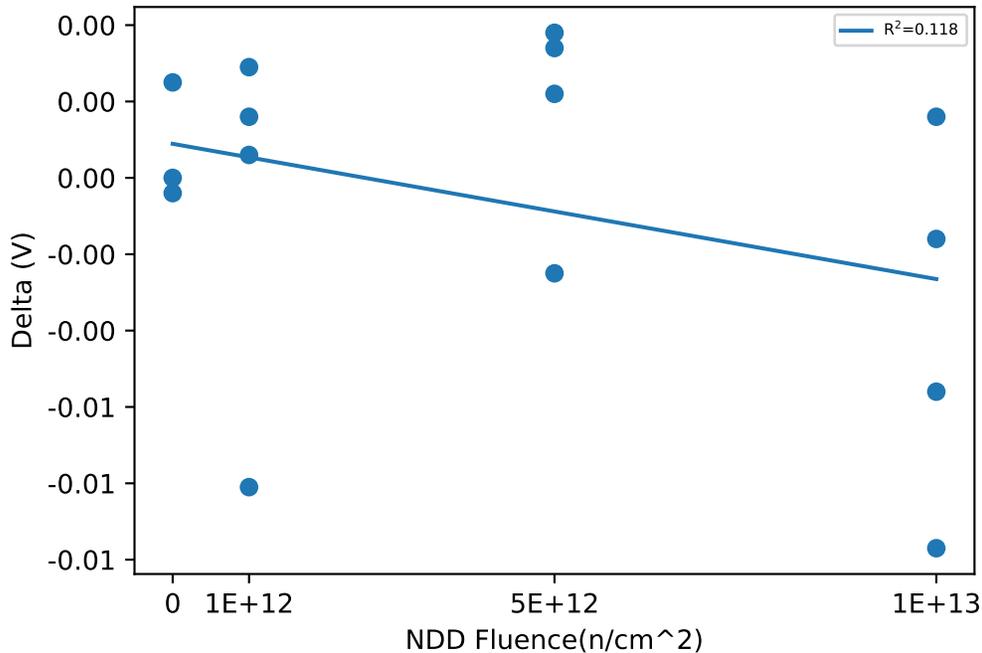
NDD vs Result Stats



Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.1909	0.1909	0
42	0	CORRELATION	0.1846	0.1842	-0.0004
43	0	CORRELATION	0.1862	0.1887	0.0025
51	1e+12	NDD	0.1909	0.1828	-0.0081
52	1e+12	NDD	0.1858	0.1874	0.0016
53	1e+12	NDD	0.1868	0.1874	0.0006
54	1e+12	NDD	0.1842	0.1871	0.0029
55	5e+12	NDD	0.1843	0.1818	-0.0025
56	5e+12	NDD	0.1852	0.1886	0.0034
57	5e+12	NDD	0.1849	0.1887	0.0038
58	5e+12	NDD	0.1864	0.1886	0.0022
59	1e+13	NDD	0.1871	0.1887	0.0016
60	1e+13	NDD	0.1827	0.1811	-0.0016
61	1e+13	NDD	0.1893	0.1796	-0.0097
62	1e+13	NDD	0.1864	0.1808	-0.0056

NDD vs Post - Pre Exposure Delta

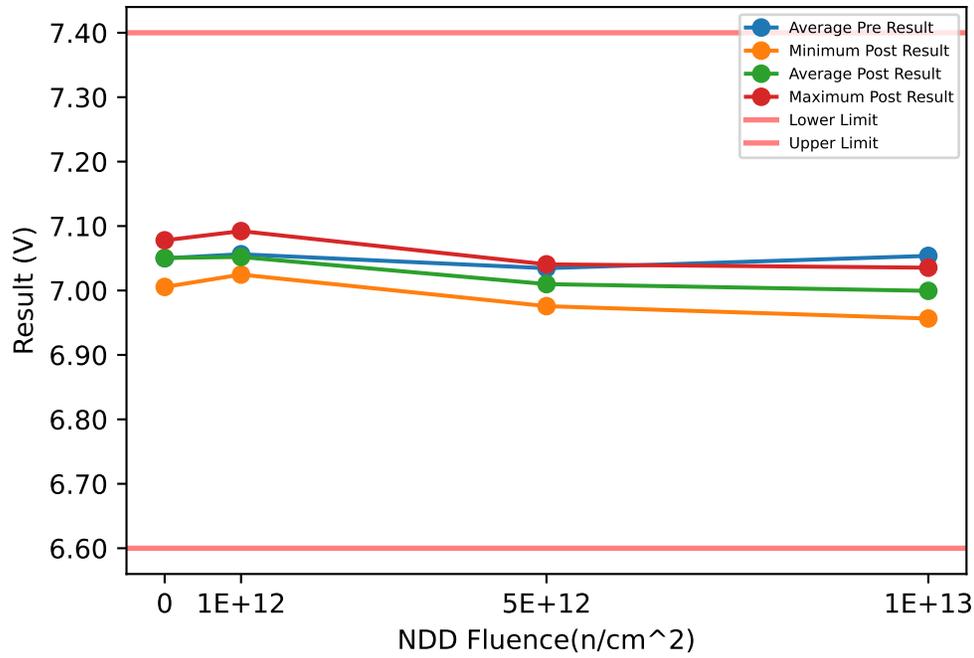


Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.1846	0.18723	0.1909	0.0032747	0.1842	0.18793	0.1909	0.0034152	-0.0004	0.0007	0.0025	0.0015716
1e+12	0.1842	0.18693	0.1909	0.0028582	0.1828	0.18618	0.1874	0.0022544	-0.0081	-0.00075	0.0029	0.0049897
5e+12	0.1843	0.1852	0.1864	0.00088318	0.1818	0.18693	0.1887	0.003417	-0.0025	0.001725	0.0038	0.0028976
1e+13	0.1827	0.18638	0.1893	0.0027439	0.1796	0.18255	0.1887	0.0041509	-0.0097	-0.003825	0.0016	0.0049006

# Device Test: 15.4 THRESHOLD|RISE/BOOT/12/////@V\_BOOT\_TH\_RISE

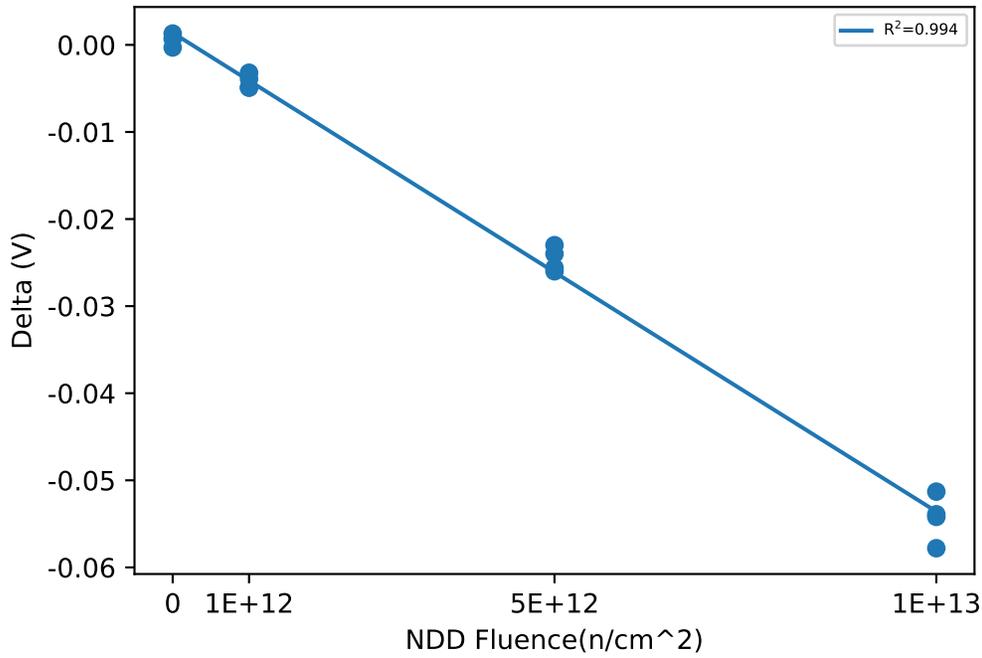
## NDD vs Result Stats



## Test Results (Lower Limit = 6.6, Upper Limit = 7.4 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	7.0042	7.0055	0.0013
42	0	CORRELATION	7.0675	7.0682	0.0007
43	0	CORRELATION	7.0782	7.0779	-0.0003
51	1e+12	NDD	7.0662	7.0623	-0.0039
52	1e+12	NDD	7.0296	7.0247	-0.0049
53	1e+12	NDD	7.0321	7.0289	-0.0032
54	1e+12	NDD	7.0971	7.0922	-0.0049
55	5e+12	NDD	7.0217	6.9961	-0.0256
56	5e+12	NDD	7.0666	7.0406	-0.026
57	5e+12	NDD	7.0513	7.0273	-0.024
58	5e+12	NDD	6.9987	6.9757	-0.023
59	1e+13	NDD	7.0331	6.9818	-0.0513
60	1e+13	NDD	7.0782	7.024	-0.0542
61	1e+13	NDD	7.0932	7.0354	-0.0578
62	1e+13	NDD	7.0104	6.9565	-0.0539

## NDD vs Post - Pre Exposure Delta

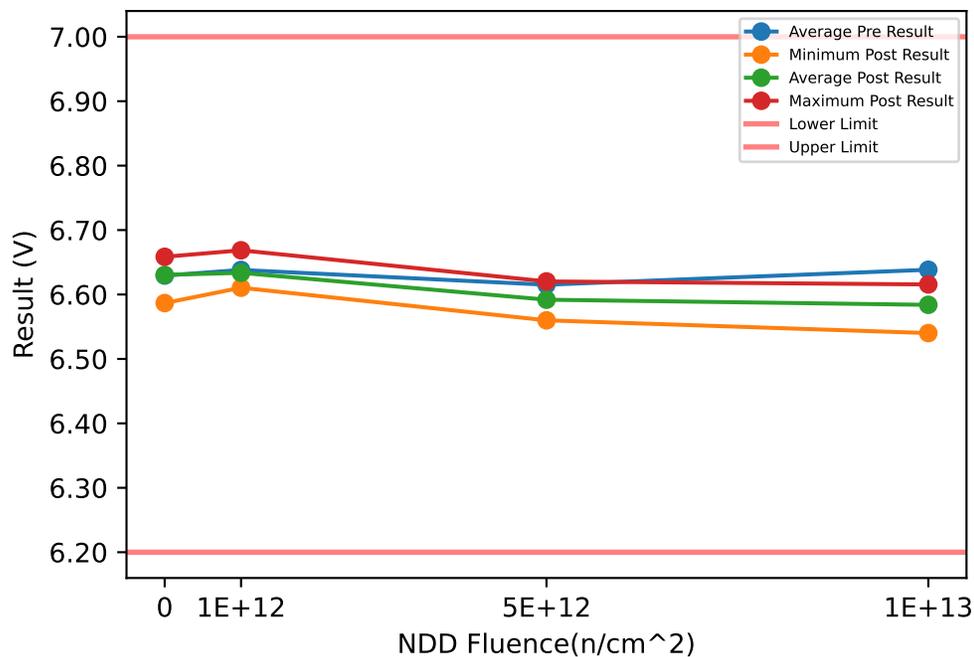


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	7.0042	7.05	7.0782	0.039995	7.0055	7.0505	7.0779	0.0393	-0.0003	0.00056667	0.0013	0.00080829
1e+12	7.0296	7.0563	7.0971	0.031944	7.0247	7.052	7.0922	0.031628	-0.0049	-0.004225	-0.0032	0.00083016
5e+12	6.9987	7.0346	7.0666	0.030321	6.9757	7.0099	7.0406	0.029469	-0.026	-0.02465	-0.023	0.0013988
1e+13	7.0104	7.0537	7.0932	0.038556	6.9565	6.9994	7.0354	0.036748	-0.0578	-0.0543	-0.0513	0.0026721

# Device Test: 15.5 THRESHOLD|FALL/BOOT/12/////@V\_BOOT\_TH\_FALL

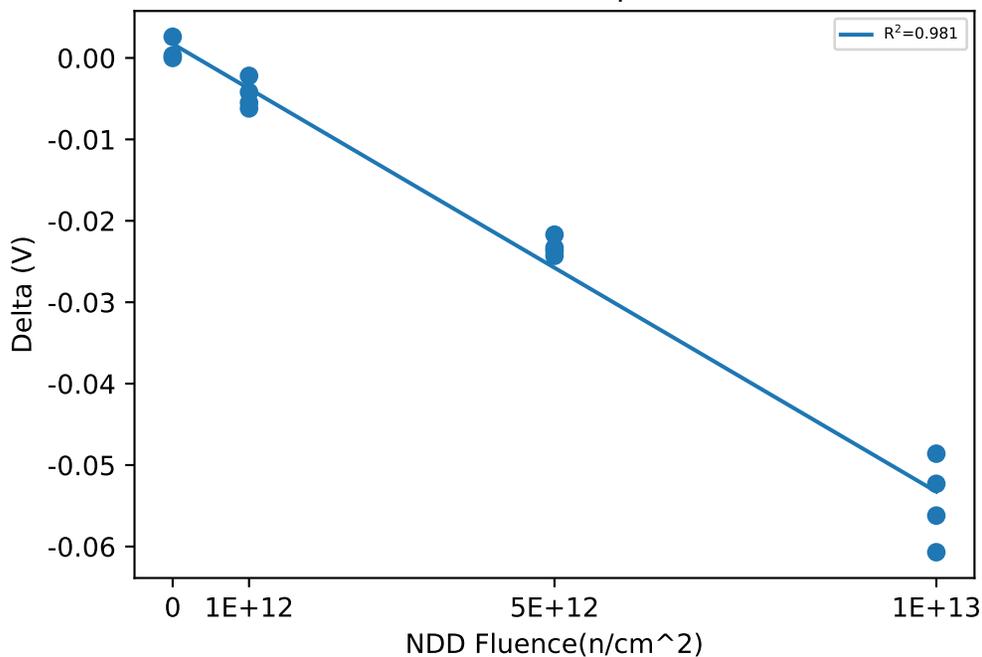
## NDD vs Result Stats



## Test Results (Lower Limit = 6.2, Upper Limit = 7.0 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	6.5867	6.5867	0
42	0	CORRELATION	6.6456	6.6459	0.0003
43	0	CORRELATION	6.6559	6.6585	0.0026
51	1e+12	NDD	6.6461	6.6419	-0.0042
52	1e+12	NDD	6.6167	6.6105	-0.0062
53	1e+12	NDD	6.6156	6.6134	-0.0022
54	1e+12	NDD	6.6741	6.6686	-0.0055
55	5e+12	NDD	6.6052	6.5815	-0.0237
56	5e+12	NDD	6.6436	6.6203	-0.0233
57	5e+12	NDD	6.6302	6.6059	-0.0243
58	5e+12	NDD	6.5816	6.5599	-0.0217
59	1e+13	NDD	6.6198	6.5712	-0.0486
60	1e+13	NDD	6.6612	6.6089	-0.0523
61	1e+13	NDD	6.6763	6.6156	-0.0607
62	1e+13	NDD	6.5963	6.5401	-0.0562

## NDD vs Post - Pre Exposure Delta

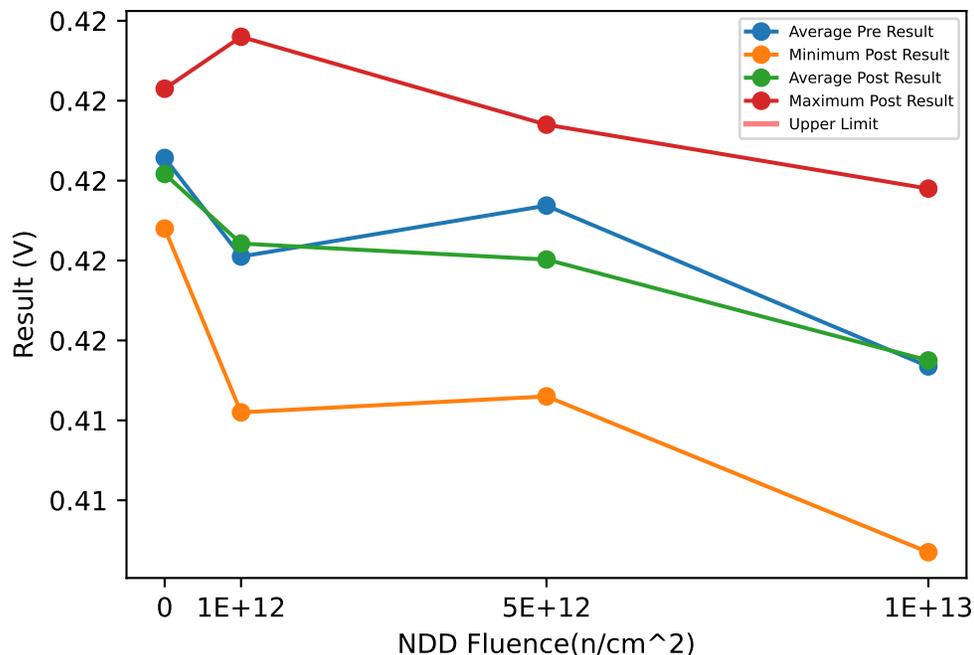


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	6.5867	6.6294	6.6559	0.037336	6.5867	6.6304	6.6585	0.038338	0	0.00096667	0.0026	0.0014224
1e+12	6.6156	6.6381	6.6741	0.027834	6.6105	6.6336	6.6686	0.027298	-0.0062	-0.004525	-0.0022	0.0017576
5e+12	6.5816	6.6151	6.6436	0.02745	6.5599	6.5919	6.6203	0.026675	-0.0243	-0.02325	-0.0217	0.0011121
1e+13	6.5963	6.6384	6.6763	0.036854	6.5401	6.5839	6.6156	0.035164	-0.0607	-0.05445	-0.0486	0.0051952

# Device Test: 15.6 THRESHOLD|HYST/BOOT/12/////@V\_BOOT\_TH\_HYST

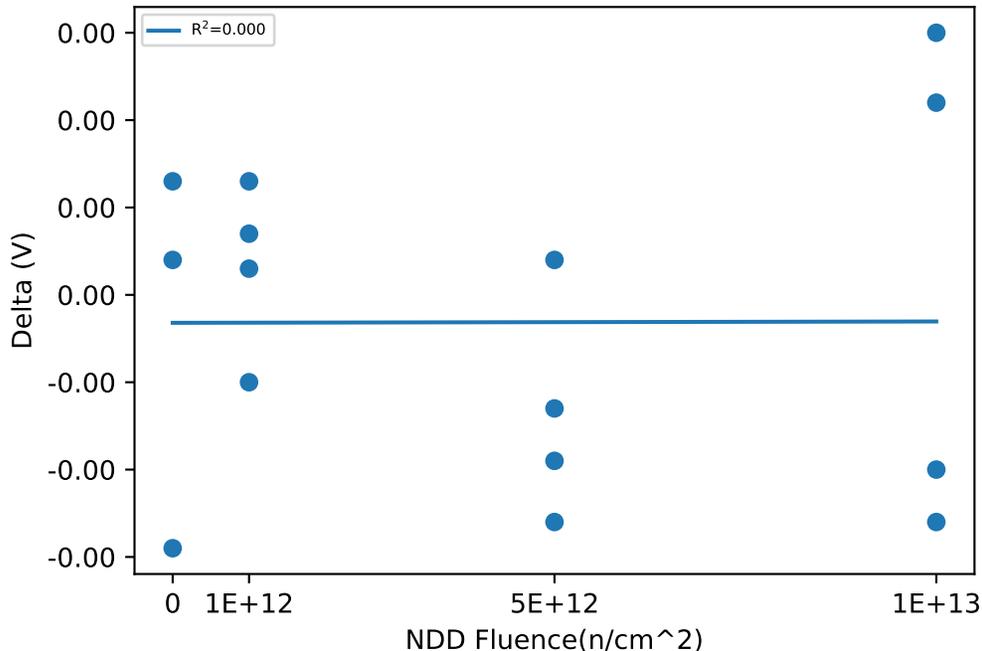
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.4175	0.4188	0.0013
42	0	CORRELATION	0.4219	0.4223	0.0004
43	0	CORRELATION	0.4223	0.4194	-0.0029
51	1e+12	NDD	0.4201	0.4204	0.0003
52	1e+12	NDD	0.4129	0.4142	0.0013
53	1e+12	NDD	0.4165	0.4155	-0.001
54	1e+12	NDD	0.4229	0.4236	0.0007
55	5e+12	NDD	0.4165	0.4146	-0.0019
56	5e+12	NDD	0.4229	0.4203	-0.0026
57	5e+12	NDD	0.421	0.4214	0.0004
58	5e+12	NDD	0.4171	0.4158	-0.0013
59	1e+13	NDD	0.4133	0.4107	-0.0026
60	1e+13	NDD	0.4171	0.4151	-0.002
61	1e+13	NDD	0.4168	0.4198	0.003
62	1e+13	NDD	0.4142	0.4164	0.0022

## NDD vs Post - Pre Exposure Delta

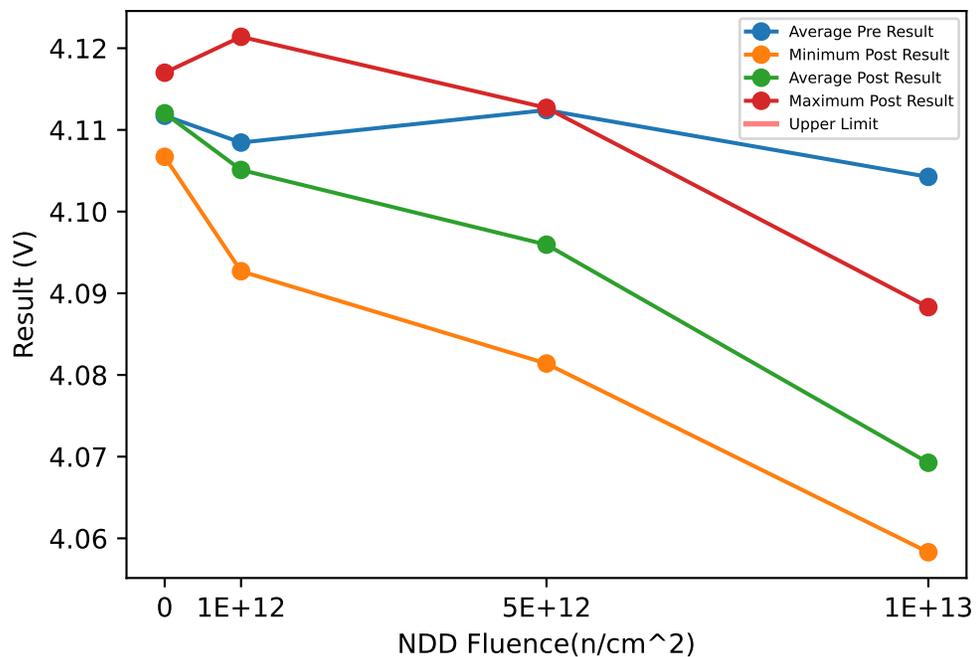


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.4175	0.42057	0.4223	0.0026633	0.4188	0.42017	0.4223	0.0018717	-0.0029	-0.0004	0.0013	0.0022113
1e+12	0.4129	0.4181	0.4229	0.0043451	0.4142	0.41842	0.4236	0.0043622	-0.001	0.000325	0.0013	0.00097425
5e+12	0.4165	0.41937	0.4229	0.0030826	0.4146	0.41802	0.4214	0.003329	-0.0026	-0.00135	0.0004	0.0012819
1e+13	0.4133	0.41535	0.4171	0.0018877	0.4107	0.4155	0.4198	0.0037639	-0.0026	0.00015	0.003	0.0028583

# Device Test: 15.7 THRESHOLD|RISE/BP5L/10/8////@V\_BP5L\_TH\_RISE

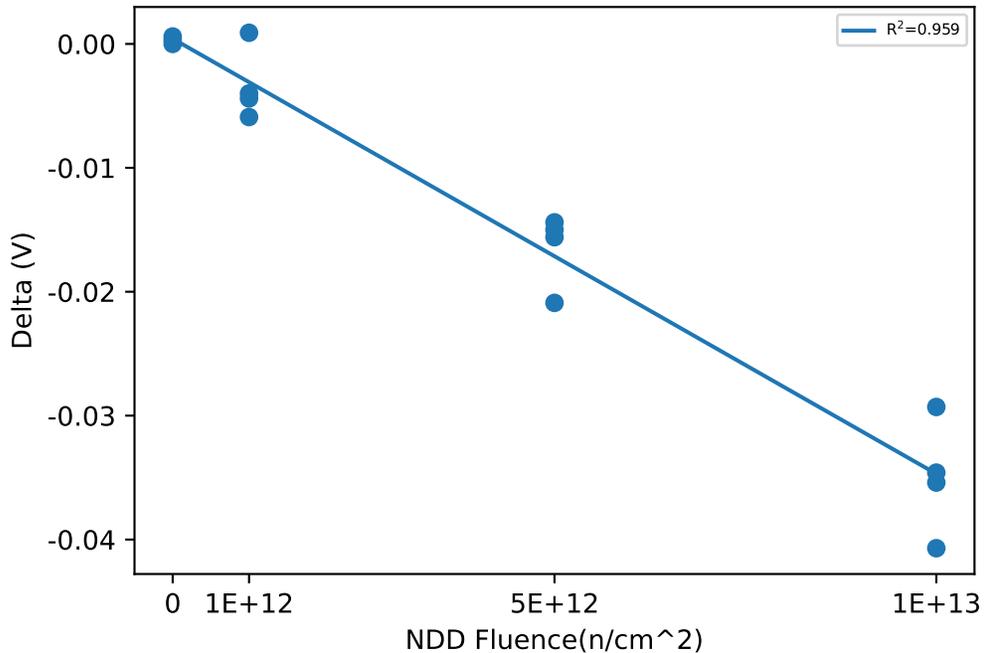
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.1164	4.117	0.0006
42	0	CORRELATION	4.1124	4.1124	0
43	0	CORRELATION	4.1064	4.1067	0.0003
51	1e+12	NDD	4.0967	4.0927	-0.004
52	1e+12	NDD	4.0977	4.0986	0.0009
53	1e+12	NDD	4.1273	4.1214	-0.0059
54	1e+12	NDD	4.1121	4.1077	-0.0044
55	5e+12	NDD	4.097	4.0814	-0.0156
56	5e+12	NDD	4.1277	4.1127	-0.015
57	5e+12	NDD	4.1023	4.0814	-0.0209
58	5e+12	NDD	4.1227	4.1083	-0.0144
59	1e+13	NDD	4.097	4.0677	-0.0293
60	1e+13	NDD	4.099	4.0583	-0.0407
61	1e+13	NDD	4.0973	4.0627	-0.0346
62	1e+13	NDD	4.1237	4.0883	-0.0354

## NDD vs Post - Pre Exposure Delta

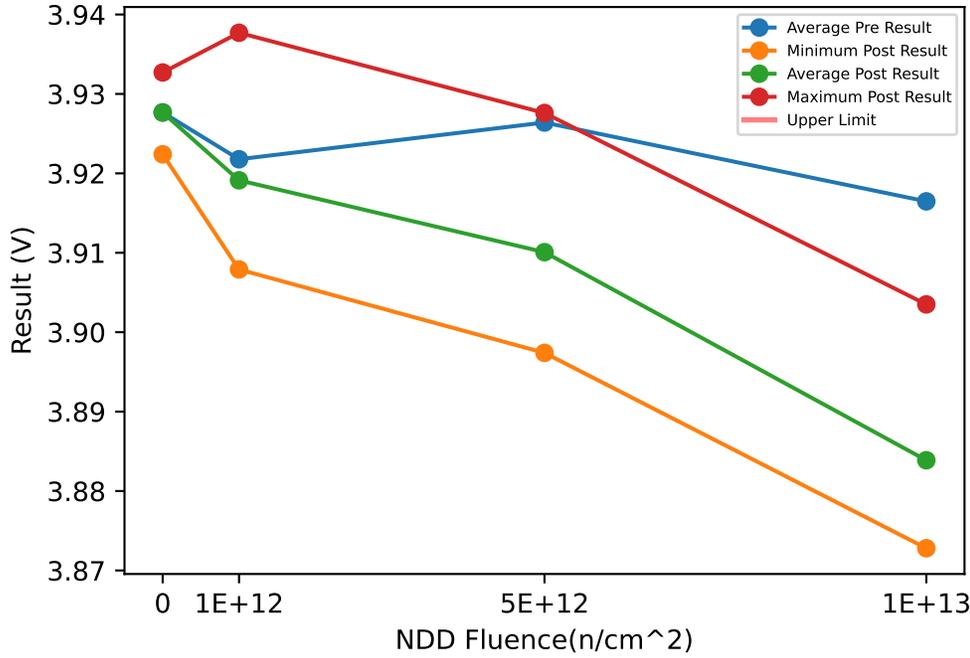


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.1064	4.1117	4.1164	0.0050332	4.1067	4.112	4.117	0.0051598	0	0.0003	0.0006	0.0003
1e+12	4.0967	4.1084	4.1273	0.014402	4.0927	4.1051	4.1214	0.012496	-0.0059	-0.00335	0.0009	0.002949
5e+12	4.097	4.1124	4.1277	0.015048	4.0814	4.096	4.1127	0.016897	-0.0209	-0.016475	-0.0144	0.0029904
1e+13	4.097	4.1043	4.1237	0.012997	4.0583	4.0693	4.0883	0.013268	-0.0407	-0.035	-0.0293	0.0046655

# Device Test: 15.8 THRESHOLD|FALL/BP5L/10/8////@V\_BP5L\_TH\_FALL

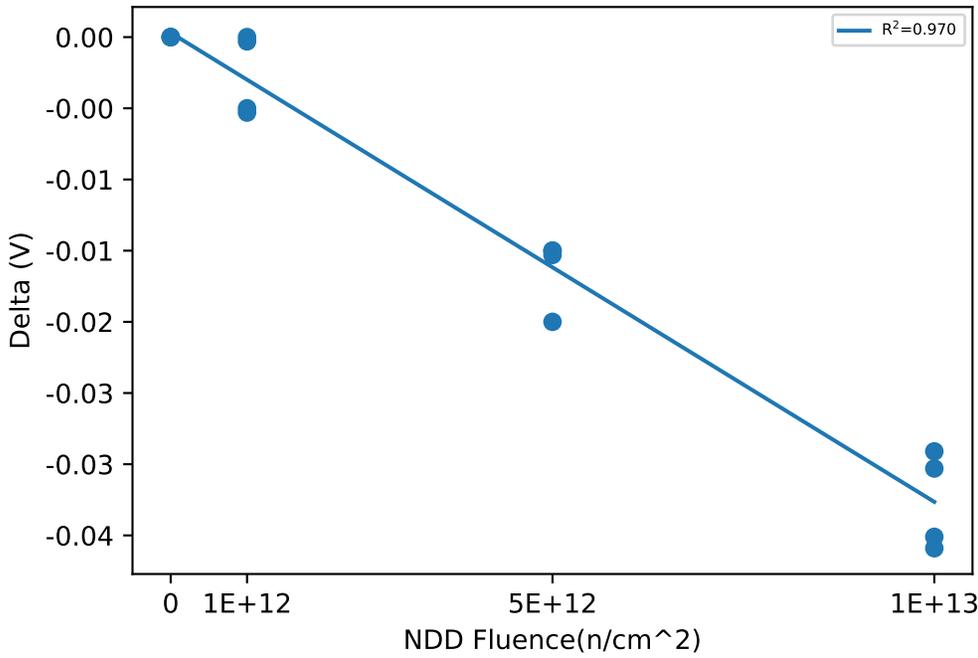
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.9327	3.9327	0
42	0	CORRELATION	3.9279	3.9279	0
43	0	CORRELATION	3.9224	3.9224	0
51	1e+12	NDD	3.913	3.908	-0.005
52	1e+12	NDD	3.9132	3.9079	-0.0053
53	1e+12	NDD	3.9377	3.9377	0
54	1e+12	NDD	3.9232	3.9229	-0.0003
55	5e+12	NDD	3.9124	3.8974	-0.015
56	5e+12	NDD	3.9429	3.9276	-0.0153
57	5e+12	NDD	3.9177	3.8977	-0.02
58	5e+12	NDD	3.9326	3.9176	-0.015
59	1e+13	NDD	3.9124	3.8821	-0.0303
60	1e+13	NDD	3.9079	3.8728	-0.0351
61	1e+13	NDD	3.913	3.8771	-0.0359
62	1e+13	NDD	3.9326	3.9035	-0.0291

## NDD vs Post - Pre Exposure Delta

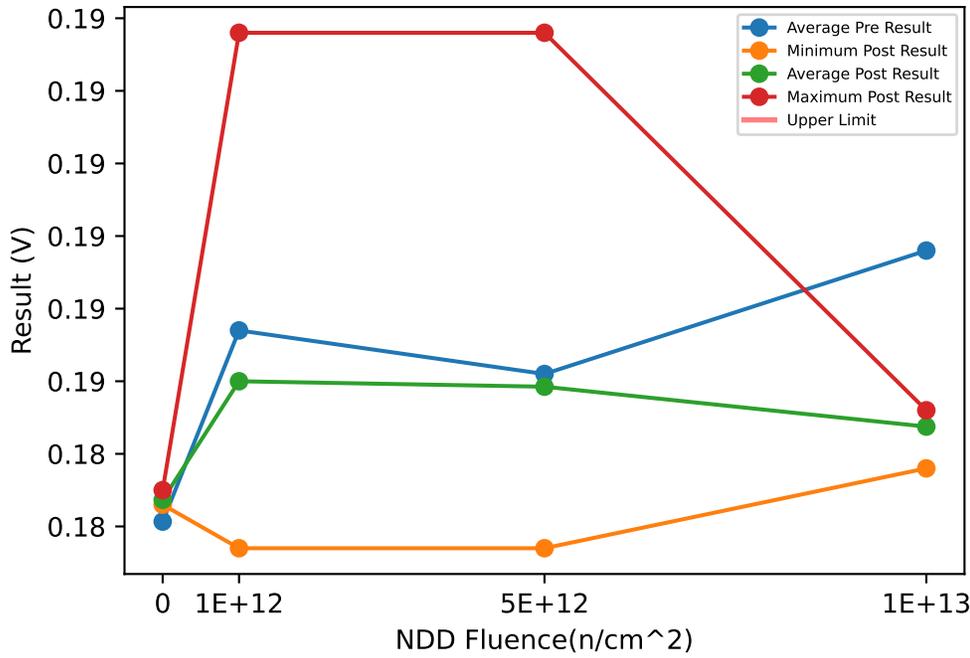


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.9224	3.9277	3.9327	0.005154	3.9224	3.9277	3.9327	0.005154	0	0	0	0
1e+12	3.913	3.9218	3.9377	0.011636	3.9079	3.9191	3.9377	0.014248	-0.0053	-0.00265	0	0.0028919
5e+12	3.9124	3.9264	3.9429	0.013933	3.8974	3.9101	3.9276	0.015028	-0.02	-0.016325	-0.015	0.0024541
1e+13	3.9079	3.9165	3.9326	0.010988	3.8728	3.8839	3.9035	0.013624	-0.0359	-0.0326	-0.0291	0.0034

# Device Test: 15.9 THRESHOLD|HYST/BP5L/10/8////@V\_BP5L\_TH\_HYST

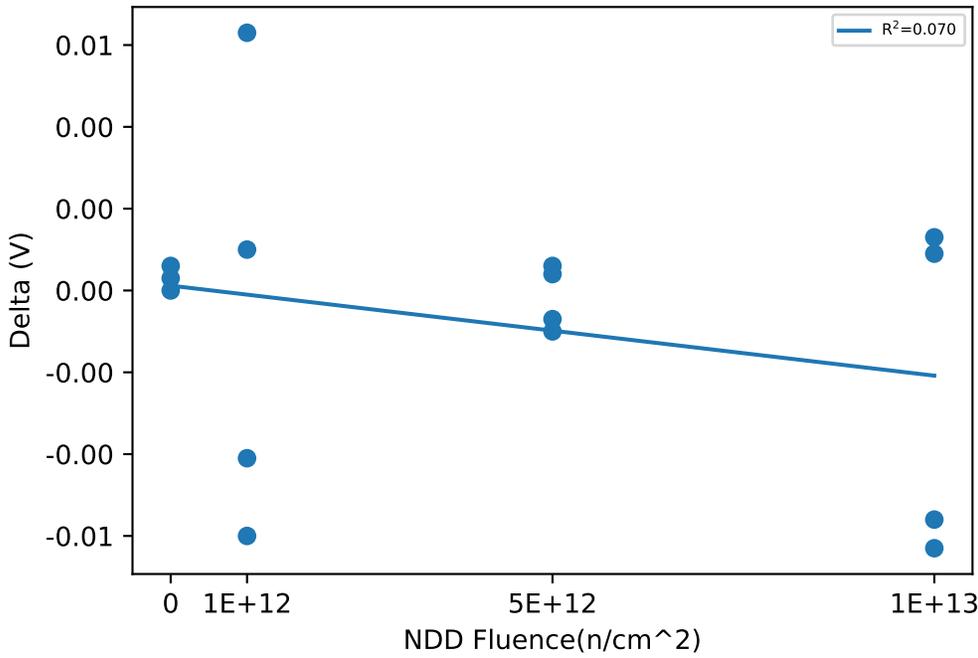
## NDD vs Result Stats



## Test Results (No Limits Specified (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.1837	0.1843	0.0006
42	0	CORRELATION	0.1845	0.1845	0
43	0	CORRELATION	0.184	0.1843	0.0003
51	1e+12	NDD	0.1837	0.1847	0.001
52	1e+12	NDD	0.1845	0.1908	0.0063
53	1e+12	NDD	0.1897	0.1837	-0.006
54	1e+12	NDD	0.1889	0.1848	-0.0041
55	5e+12	NDD	0.1847	0.184	-0.0007
56	5e+12	NDD	0.1848	0.1852	0.0004
57	5e+12	NDD	0.1847	0.1837	-0.001
58	5e+12	NDD	0.1902	0.1908	0.0006
59	1e+13	NDD	0.1847	0.1856	0.0009
60	1e+13	NDD	0.1911	0.1855	-0.0056
61	1e+13	NDD	0.1843	0.1856	0.0013
62	1e+13	NDD	0.1911	0.1848	-0.0063

## NDD vs Post - Pre Exposure Delta

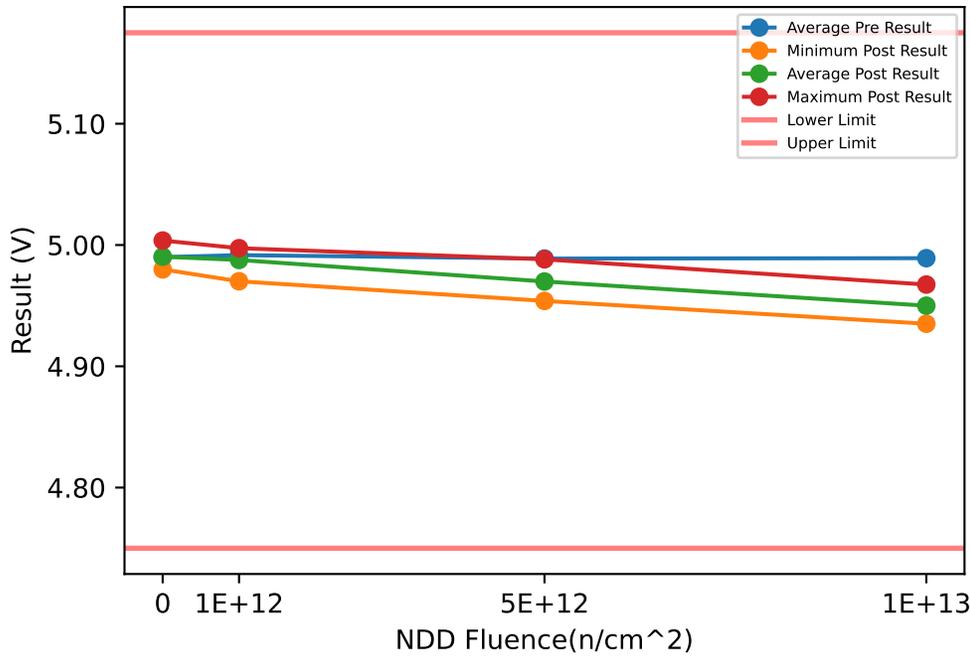


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	0.1837	0.18407	0.1845	0.00040415	0.1843	0.18437	0.1845	0.00011547	0	0.0003	0.0006	0.0003
1e+12	0.1837	0.1867	0.1897	0.0030375	0.1837	0.186	0.1908	0.0032383	-0.006	-0.0007	0.0063	0.0055239
5e+12	0.1847	0.1861	0.1902	0.0027337	0.1837	0.18593	0.1908	0.003314	-0.001	-0.000175	0.0006	0.0007932
1e+13	0.1843	0.1878	0.1911	0.003814	0.1848	0.18537	0.1856	0.00038622	-0.0063	-0.002425	0.0013	0.0040836

# Device Test: 16.1 LEVEL|OUT/BP5L/10/8////@V\_BP5L

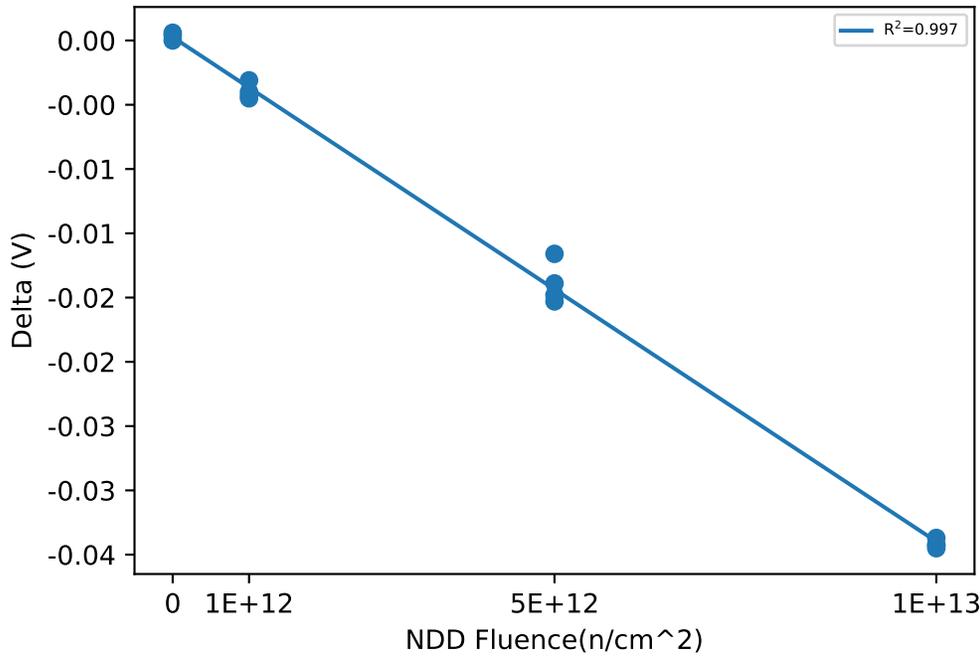
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9795	4.9799	0.0004
42	0	CORRELATION	5.0031	5.0037	0.0006
43	0	CORRELATION	4.9875	4.9875	0
51	1e+12	NDD	4.9744	4.9701	-0.0043
52	1e+12	NDD	5.0005	4.9974	-0.0031
53	1e+12	NDD	4.9977	4.9932	-0.0045
54	1e+12	NDD	4.994	4.99	-0.004
55	5e+12	NDD	5.0048	4.9882	-0.0166
56	5e+12	NDD	4.9737	4.9539	-0.0198
57	5e+12	NDD	4.9765	4.9562	-0.0203
58	5e+12	NDD	5.0003	4.9814	-0.0189
59	1e+13	NDD	5.0061	4.9674	-0.0387
60	1e+13	NDD	4.9826	4.9431	-0.0395
61	1e+13	NDD	4.9743	4.9351	-0.0392
62	1e+13	NDD	4.9936	4.9543	-0.0393

## NDD vs Post - Pre Exposure Delta

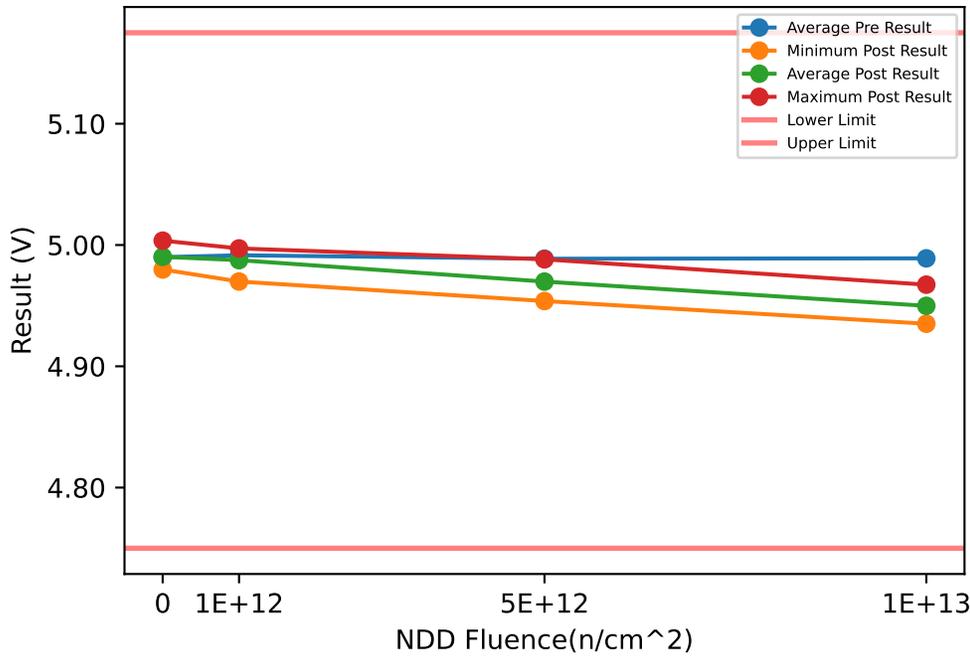


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9795	4.99	5.0031	0.012002	4.9799	4.9904	5.0037	0.012156	0	0.00033333	0.0006	0.00030551
1e+12	4.9744	4.9916	5.0005	0.011804	4.9701	4.9877	4.9974	0.012102	-0.0045	-0.003975	-0.0031	0.00061847
5e+12	4.9737	4.9888	5.0048	0.015995	4.9539	4.9699	4.9882	0.017424	-0.0203	-0.0189	-0.0166	0.0016391
1e+13	4.9743	4.9892	5.0061	0.01379	4.9351	4.95	4.9674	0.014034	-0.0395	-0.039175	-0.0387	0.00034034

# Device Test: 16.2 LEVEL|OUT/BP5L/12/10////@V\_BP5L

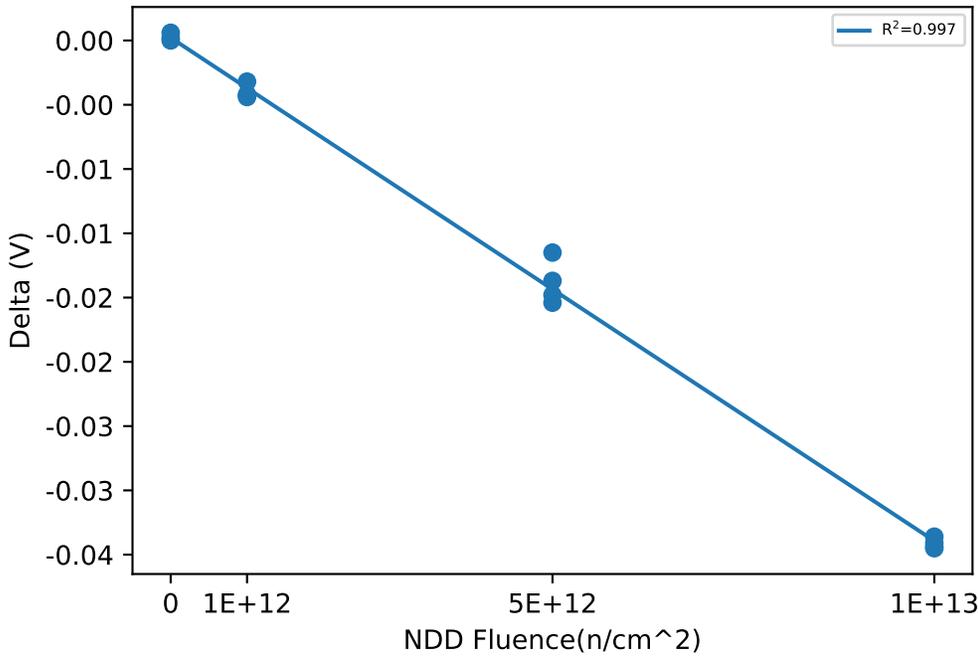
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9796	4.9798	0.0002
42	0	CORRELATION	5.003	5.0036	0.0006
43	0	CORRELATION	4.9874	4.9874	0
51	1e+12	NDD	4.9742	4.9699	-0.0043
52	1e+12	NDD	5.0004	4.9972	-0.0032
53	1e+12	NDD	4.9976	4.9932	-0.0044
54	1e+12	NDD	4.994	4.9898	-0.0042
55	5e+12	NDD	5.0047	4.9882	-0.0165
56	5e+12	NDD	4.9736	4.9538	-0.0198
57	5e+12	NDD	4.9764	4.956	-0.0204
58	5e+12	NDD	5.0001	4.9814	-0.0187
59	1e+13	NDD	5.0059	4.9673	-0.0386
60	1e+13	NDD	4.9825	4.943	-0.0395
61	1e+13	NDD	4.9742	4.9351	-0.0391
62	1e+13	NDD	4.9934	4.954	-0.0394

## NDD vs Post - Pre Exposure Delta

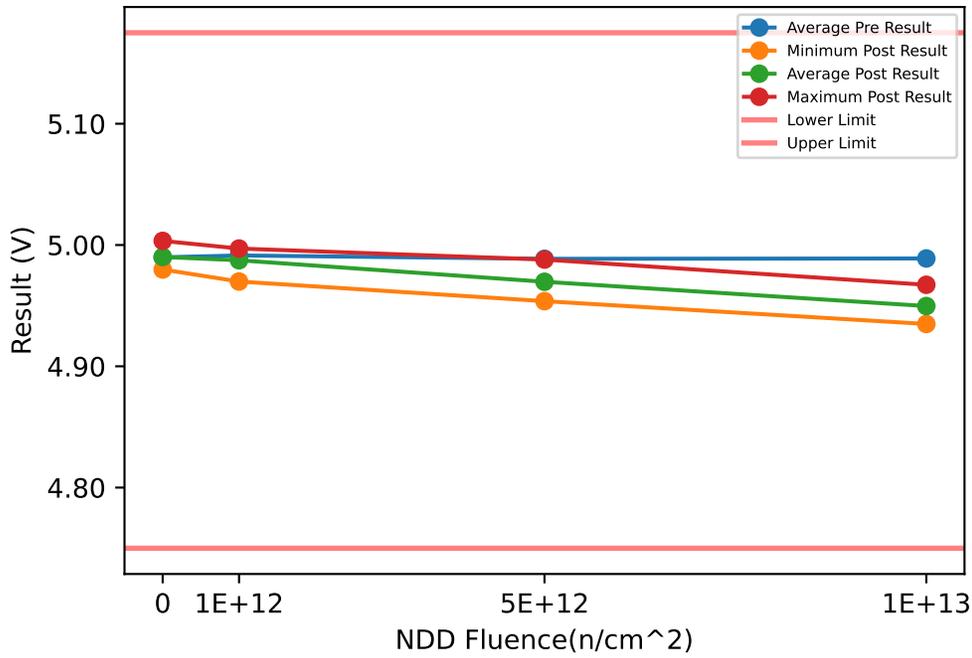


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9796	4.99	5.003	0.011915	4.9798	4.9903	5.0036	0.012156	0	0.00026667	0.0006	0.00030551
1e+12	4.9742	4.9916	5.0004	0.01186	4.9699	4.9875	4.9972	0.012133	-0.0044	-0.004025	-0.0032	0.00055603
5e+12	4.9736	4.9887	5.0047	0.015971	4.9538	4.9699	4.9882	0.017508	-0.0204	-0.01885	-0.0165	0.0017176
1e+13	4.9742	4.989	5.0059	0.013739	4.9351	4.9498	4.9673	0.013979	-0.0395	-0.03915	-0.0386	0.00040415

# Device Test: 16.3 LEVEL|OUT/BP5L/14/14////@V\_BP5L

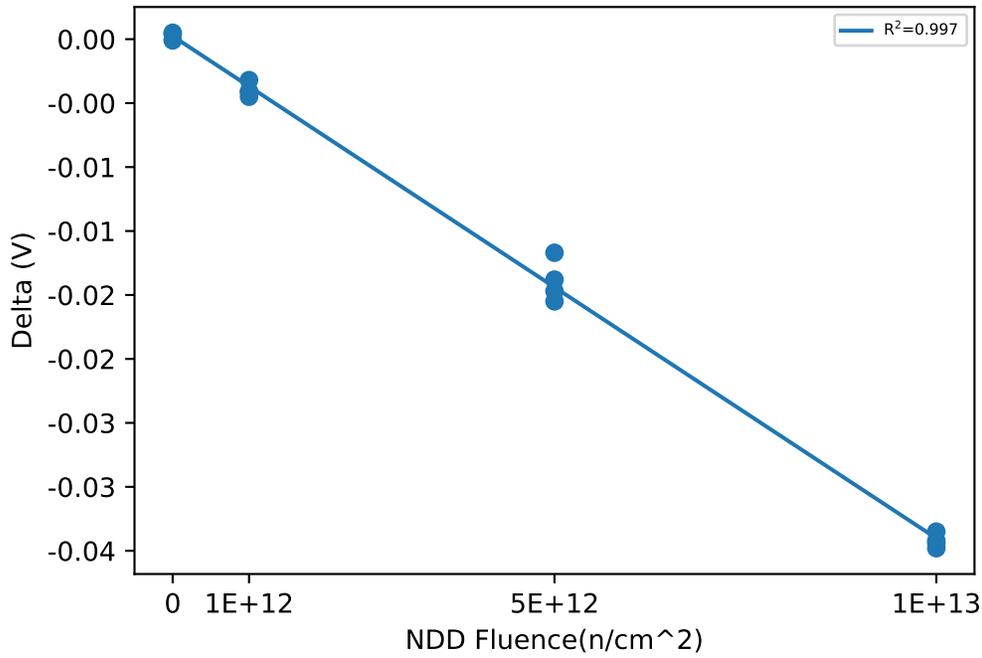
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9794	4.9798	0.0004
42	0	CORRELATION	5.0029	5.0034	0.0005
43	0	CORRELATION	4.9873	4.9872	-0.0001
51	1e+12	NDD	4.974	4.9699	-0.0041
52	1e+12	NDD	5.0003	4.9971	-0.0032
53	1e+12	NDD	4.9975	4.993	-0.0045
54	1e+12	NDD	4.9938	4.9897	-0.0041
55	5e+12	NDD	5.0047	4.988	-0.0167
56	5e+12	NDD	4.9734	4.9537	-0.0197
57	5e+12	NDD	4.9764	4.9559	-0.0205
58	5e+12	NDD	5	4.9812	-0.0188
59	1e+13	NDD	5.0057	4.9672	-0.0385
60	1e+13	NDD	4.9825	4.9427	-0.0398
61	1e+13	NDD	4.9741	4.9349	-0.0392
62	1e+13	NDD	4.9933	4.9539	-0.0394

## NDD vs Post - Pre Exposure Delta

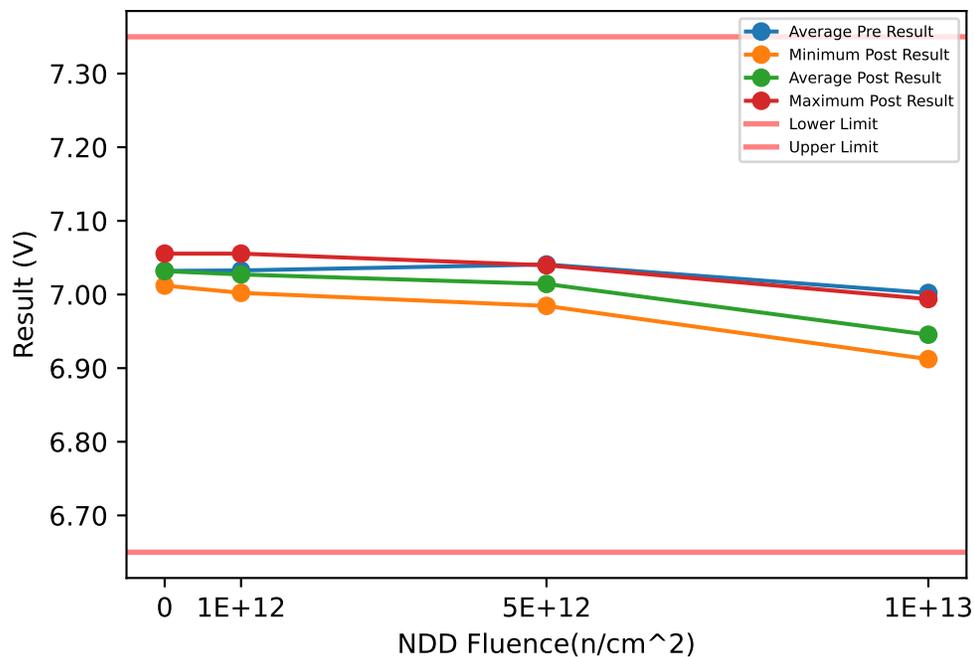


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9794	4.9899	5.0029	0.011958	4.9798	4.9901	5.0034	0.01207	-0.0001	0.00026667	0.0005	0.00032146
1e+12	4.974	4.9914	5.0003	0.011902	4.9699	4.9874	4.9971	0.012069	-0.0045	-0.003975	-0.0032	0.00055
5e+12	4.9734	4.9886	5.0047	0.016011	4.9537	4.9697	4.988	0.017451	-0.0205	-0.018925	-0.0167	0.0016378
1e+13	4.9741	4.9889	5.0057	0.013682	4.9349	4.9497	4.9672	0.014047	-0.0398	-0.039225	-0.0385	0.00054391

# Device Test: 16.4 LEVEL|OUT/BP7L/10/8////@V\_BP7L

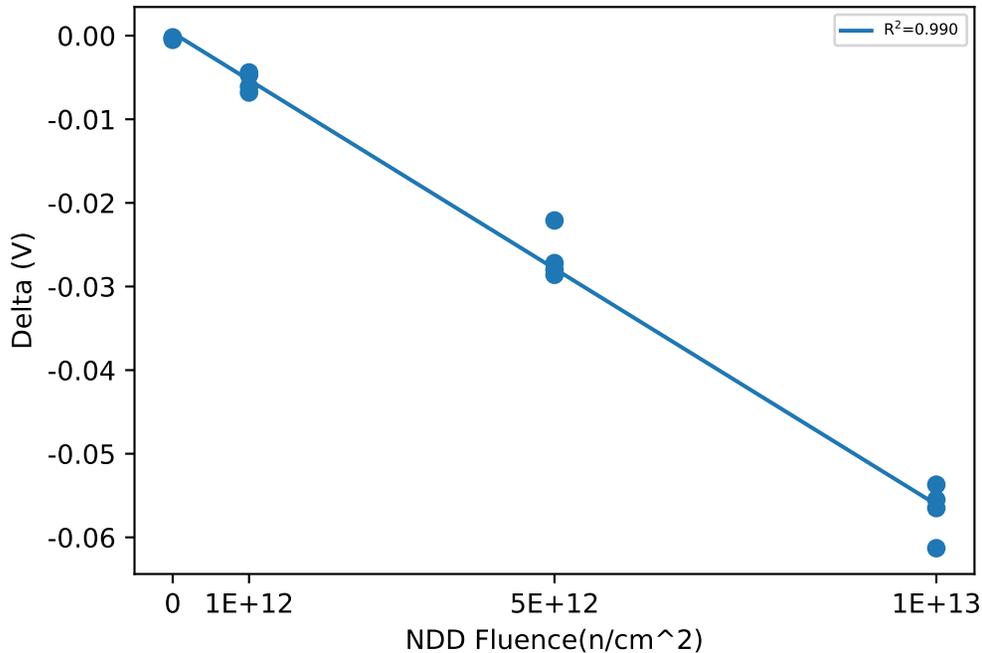
## NDD vs Result Stats



## Test Results (Lower Limit = 6.65, Upper Limit = 7.35 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	7.0558	7.0555	-0.0003
42	0	CORRELATION	7.0281	7.0276	-0.0005
43	0	CORRELATION	7.0123	7.0121	-0.0002
51	1e+12	NDD	7.0419	7.0372	-0.0047
52	1e+12	NDD	7.0599	7.0555	-0.0044
53	1e+12	NDD	7.0199	7.0138	-0.0061
54	1e+12	NDD	7.009	7.0022	-0.0068
55	5e+12	NDD	7.0243	7.0022	-0.0221
56	5e+12	NDD	7.058	7.0308	-0.0272
57	5e+12	NDD	7.0125	6.9845	-0.028
58	5e+12	NDD	7.0683	7.0397	-0.0286
59	1e+13	NDD	6.9781	6.9226	-0.0555
60	1e+13	NDD	6.9735	6.9122	-0.0613
61	1e+13	NDD	7.0503	6.9938	-0.0565
62	1e+13	NDD	7.0066	6.9529	-0.0537

## NDD vs Post - Pre Exposure Delta

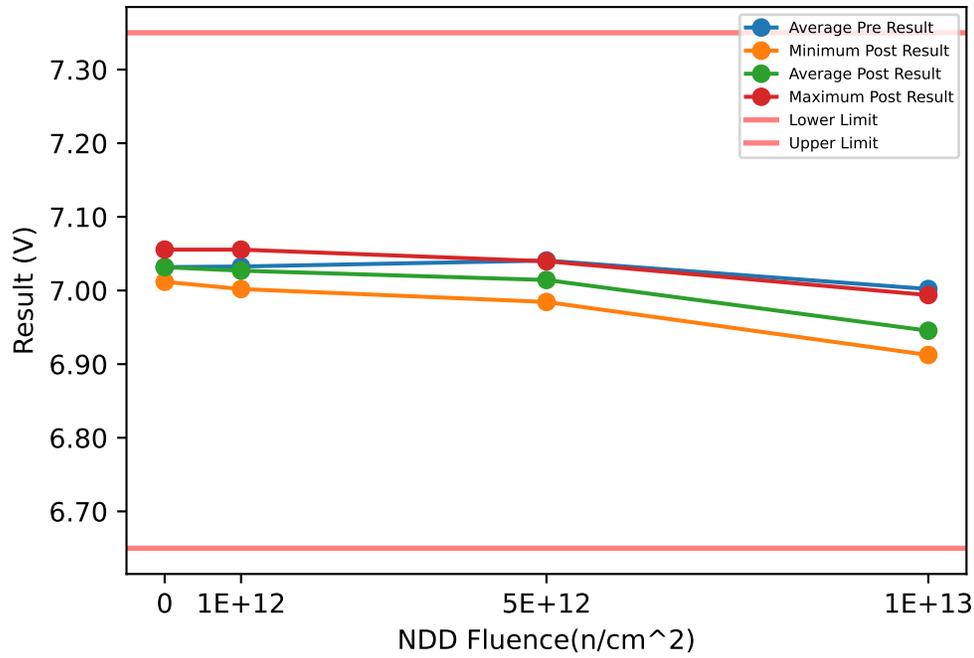


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	7.0123	7.0321	7.0558	0.02202	7.0121	7.0317	7.0555	0.021993	-0.0005	-0.00033333	-0.0002	0.00015275
1e+12	7.009	7.0327	7.0599	0.02273	7.0022	7.0272	7.0555	0.023843	-0.0068	-0.0055	-0.0044	0.0011402
5e+12	7.0125	7.0408	7.0683	0.026616	6.9845	7.0143	7.0397	0.025507	-0.0286	-0.026475	-0.0221	0.0029725
1e+13	6.9735	7.0021	7.0503	0.035296	6.9122	6.9454	6.9938	0.03661	-0.0613	-0.05675	-0.0537	0.003247

# Device Test: 16.5 LEVEL|OUT/BP7L/12/10////@V\_BP7L

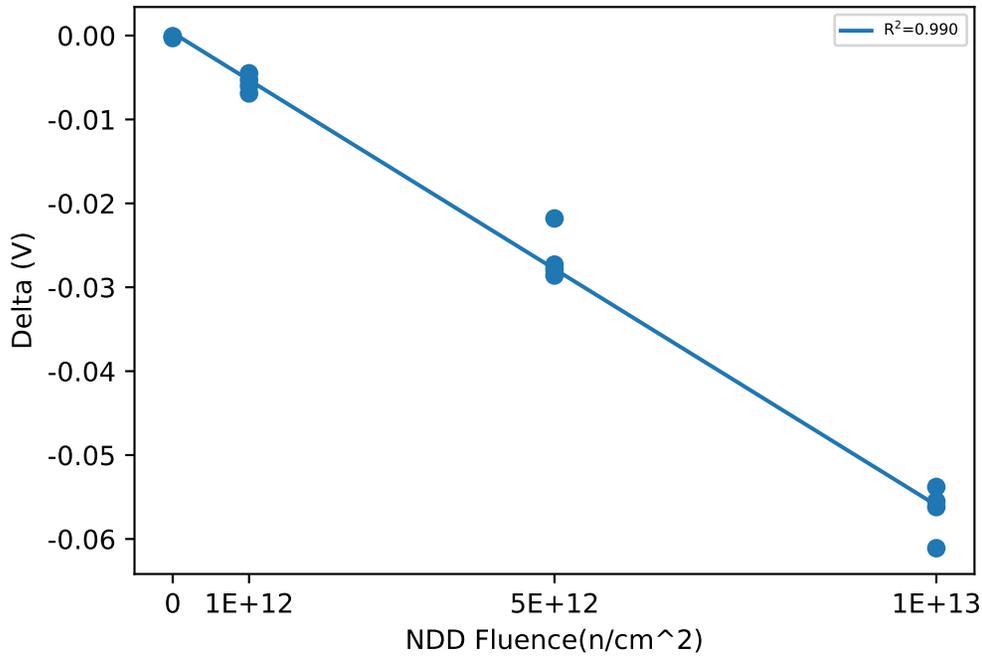
## NDD vs Result Stats



## Test Results (Lower Limit = 6.65, Upper Limit = 7.35 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	7.0556	7.0555	-0.0001
42	0	CORRELATION	7.0279	7.0276	-0.0003
43	0	CORRELATION	7.0119	7.0118	-0.0001
51	1e+12	NDD	7.042	7.0367	-0.0053
52	1e+12	NDD	7.06	7.0555	-0.0045
53	1e+12	NDD	7.0195	7.0135	-0.006
54	1e+12	NDD	7.0089	7.002	-0.0069
55	5e+12	NDD	7.024	7.0022	-0.0218
56	5e+12	NDD	7.0581	7.0308	-0.0273
57	5e+12	NDD	7.0123	6.9844	-0.0279
58	5e+12	NDD	7.0683	7.0397	-0.0286
59	1e+13	NDD	6.9779	6.9224	-0.0555
60	1e+13	NDD	6.9735	6.9124	-0.0611
61	1e+13	NDD	7.05	6.9938	-0.0562
62	1e+13	NDD	7.0067	6.9529	-0.0538

## NDD vs Post - Pre Exposure Delta

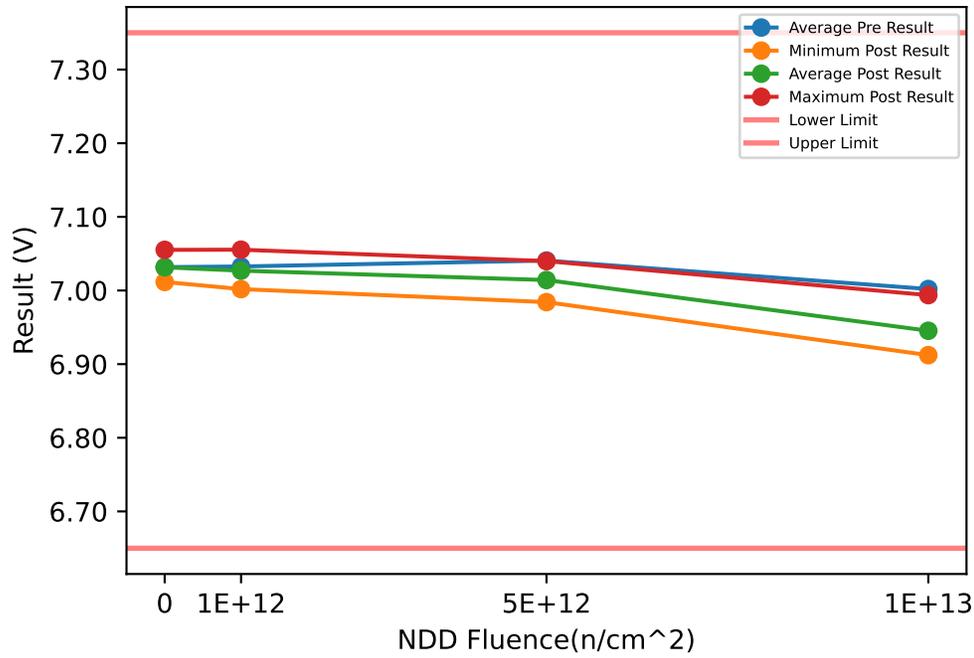


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	7.0119	7.0318	7.0556	0.02211	7.0118	7.0316	7.0555	0.022127	-0.0003	-0.00016667	-0.0001	0.00011547
1e+12	7.0089	7.0326	7.06	0.022894	7.002	7.0269	7.0555	0.0239	-0.0069	-0.005675	-0.0045	0.001021
5e+12	7.0123	7.0407	7.0683	0.02677	6.9844	7.0143	7.0397	0.025546	-0.0286	-0.0264	-0.0218	0.0031123
1e+13	6.9735	7.002	7.05	0.03521	6.9124	6.9454	6.9938	0.036591	-0.0611	-0.05665	-0.0538	0.0031332

# Device Test: 16.6 LEVEL|OUT/BP7L/14/14////@V\_BP7L

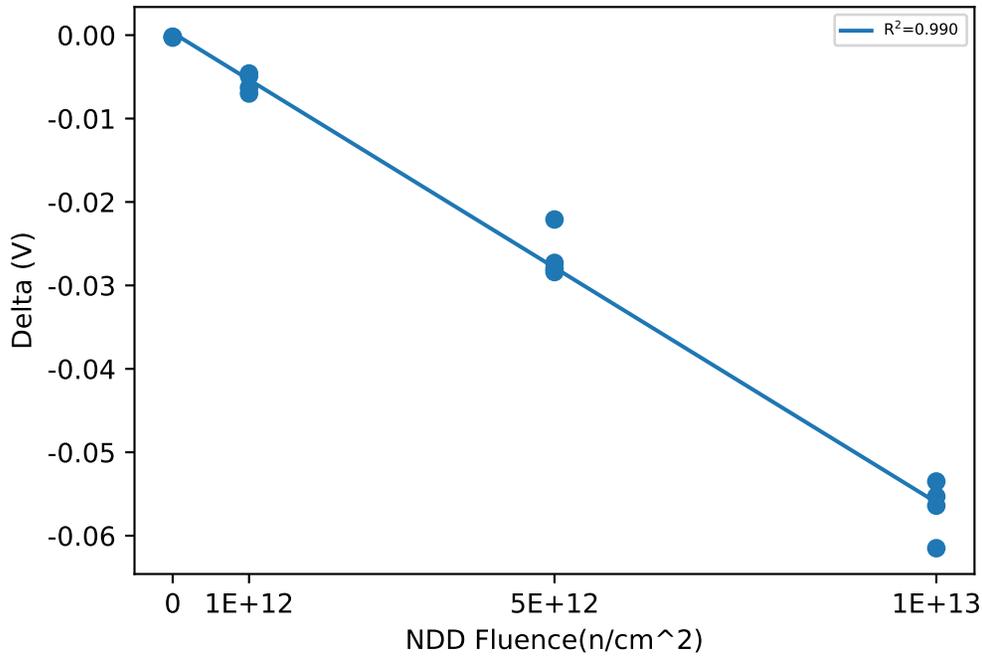
## NDD vs Result Stats



## Test Results (Lower Limit = 6.65, Upper Limit = 7.35 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	7.0555	7.0552	-0.0003
42	0	CORRELATION	7.0279	7.0277	-0.0002
43	0	CORRELATION	7.0118	7.0116	-0.0002
51	1e+12	NDD	7.0419	7.037	-0.0049
52	1e+12	NDD	7.06	7.0554	-0.0046
53	1e+12	NDD	7.0197	7.0134	-0.0063
54	1e+12	NDD	7.0089	7.0019	-0.007
55	5e+12	NDD	7.024	7.0019	-0.0221
56	5e+12	NDD	7.0581	7.0308	-0.0273
57	5e+12	NDD	7.0122	6.9842	-0.028
58	5e+12	NDD	7.0683	7.0399	-0.0284
59	1e+13	NDD	6.9777	6.9224	-0.0553
60	1e+13	NDD	6.9737	6.9122	-0.0615
61	1e+13	NDD	7.0501	6.9937	-0.0564
62	1e+13	NDD	7.0065	6.953	-0.0535

## NDD vs Post - Pre Exposure Delta

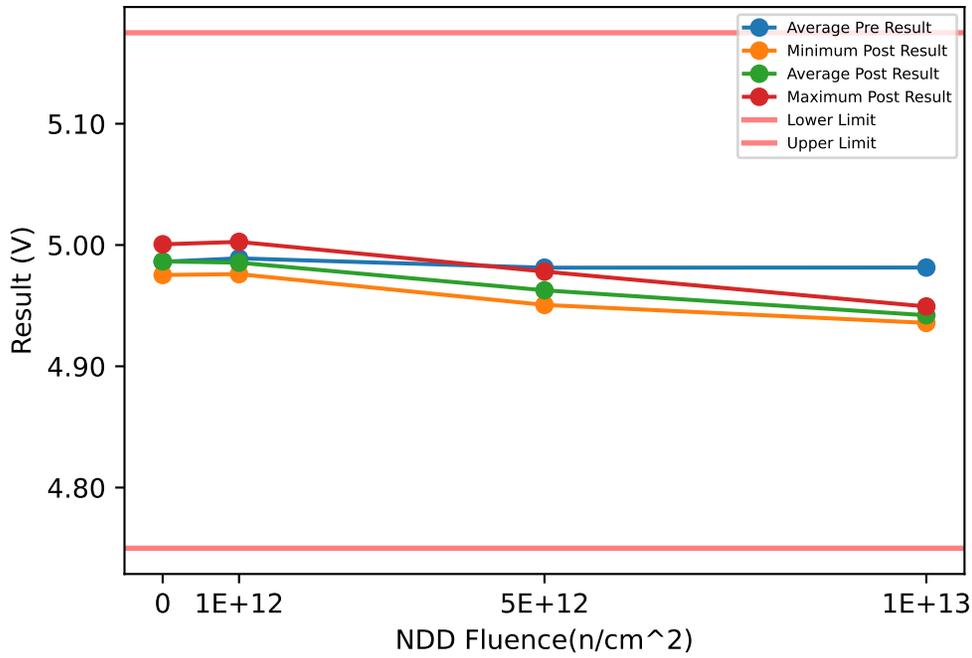


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	7.0118	7.0317	7.0555	0.022101	7.0116	7.0315	7.0552	0.022047	-0.0003	-0.00023333	-0.0002	5.7735e-05
1e+12	7.0089	7.0326	7.06	0.022843	7.0019	7.0269	7.0554	0.023955	-0.007	-0.0057	-0.0046	0.0011402
5e+12	7.0122	7.0406	7.0683	0.026806	6.9842	7.0142	7.0399	0.025738	-0.0284	-0.02645	-0.0221	0.0029354
1e+13	6.9737	7.002	7.0501	0.035238	6.9122	6.9453	6.9937	0.036615	-0.0615	-0.056675	-0.0535	0.0034316

# Device Test: 16.7 LEVEL|OUT/BP5H/10/8////@V\_BP5H

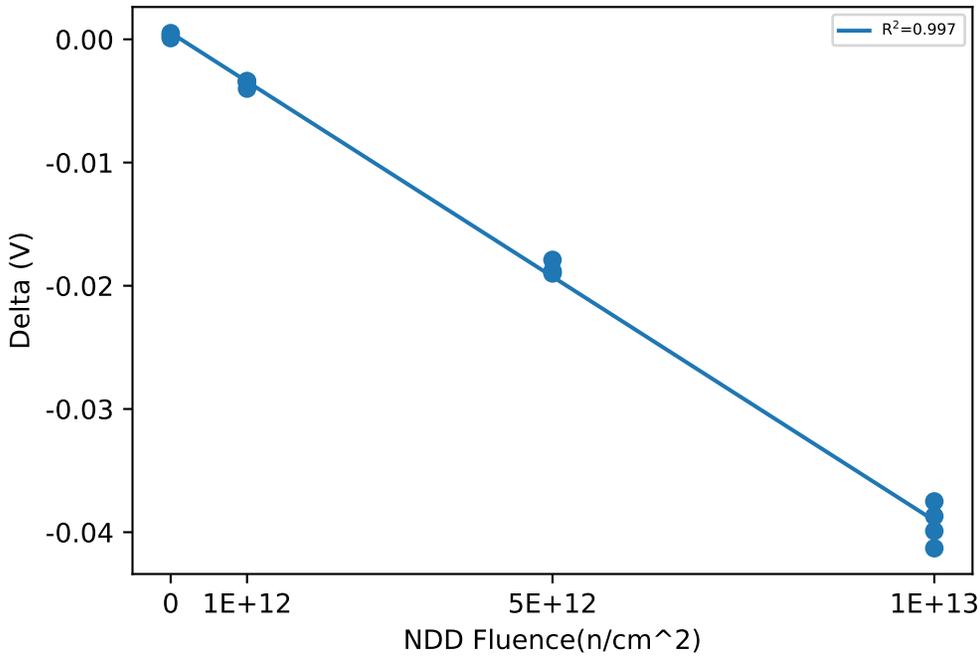
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9748	4.9753	0.0005
42	0	CORRELATION	5.0005	5.0006	0.0001
43	0	CORRELATION	4.9833	4.9836	0.0003
51	1e+12	NDD	4.9826	4.9786	-0.004
52	1e+12	NDD	4.988	4.9846	-0.0034
53	1e+12	NDD	5.006	5.0026	-0.0034
54	1e+12	NDD	4.9795	4.976	-0.0035
55	5e+12	NDD	4.9695	4.9506	-0.0189
56	5e+12	NDD	4.9823	4.9633	-0.019
57	5e+12	NDD	4.9765	4.9586	-0.0179
58	5e+12	NDD	4.9969	4.9781	-0.0188
59	1e+13	NDD	4.988	4.9493	-0.0387
60	1e+13	NDD	4.9786	4.9373	-0.0413
61	1e+13	NDD	4.9757	4.9358	-0.0399
62	1e+13	NDD	4.9834	4.9459	-0.0375

## NDD vs Post - Pre Exposure Delta

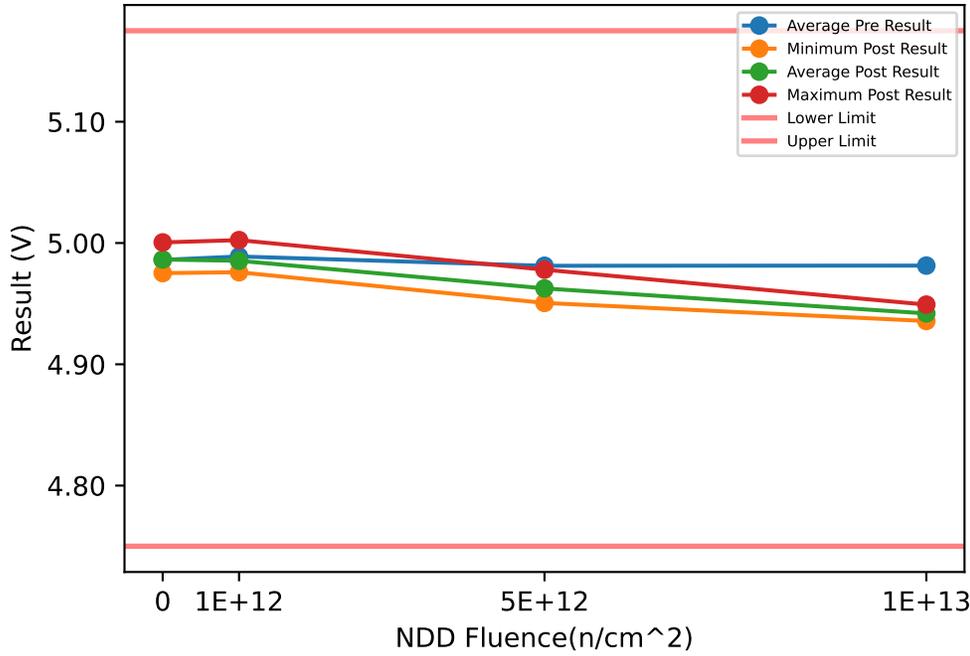


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9748	4.9862	5.0005	0.013093	4.9753	4.9865	5.0006	0.012897	0.0001	0.0003	0.0005	0.0002
1e+12	4.9795	4.989	5.006	0.011849	4.976	4.9855	5.0026	0.011987	-0.004	-0.003575	-0.0034	0.00028723
5e+12	4.9695	4.9813	4.9969	0.011642	4.9506	4.9627	4.9781	0.011558	-0.019	-0.01865	-0.0179	0.00050662
1e+13	4.9757	4.9814	4.988	0.0054126	4.9358	4.9421	4.9493	0.0065576	-0.0413	-0.03935	-0.0375	0.0016279

# Device Test: 16.8 LEVEL|OUT/BP5H/12/10////@V\_BP5H

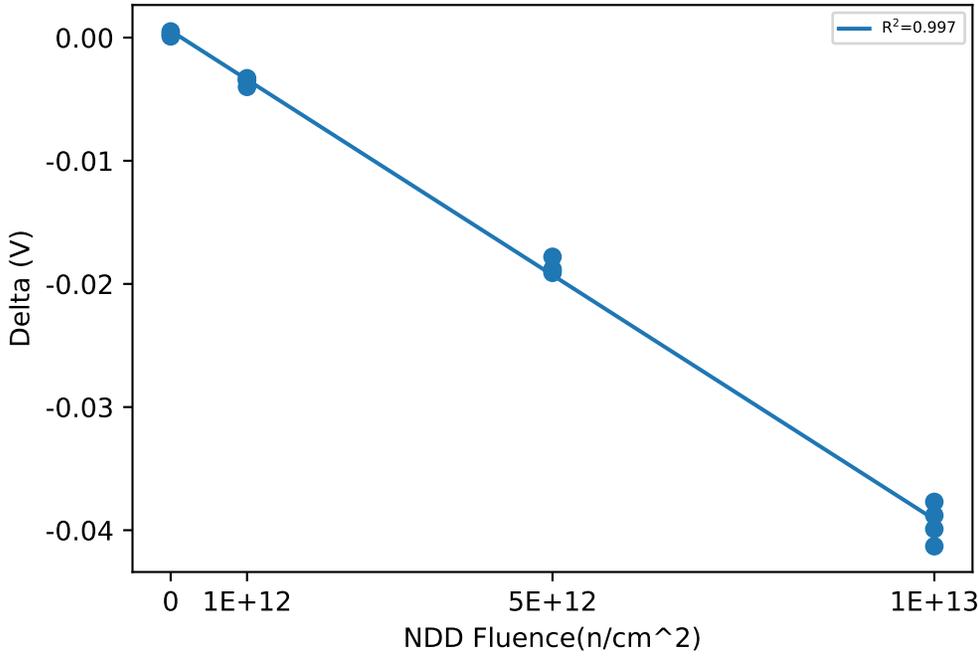
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9747	4.9752	0.0005
42	0	CORRELATION	5.0004	5.0005	0.0001
43	0	CORRELATION	4.9832	4.9835	0.0003
51	1e+12	NDD	4.9825	4.9785	-0.004
52	1e+12	NDD	4.9879	4.9846	-0.0033
53	1e+12	NDD	5.0058	5.0024	-0.0034
54	1e+12	NDD	4.9794	4.9759	-0.0035
55	5e+12	NDD	4.9695	4.9506	-0.0189
56	5e+12	NDD	4.9822	4.9631	-0.0191
57	5e+12	NDD	4.9764	4.9586	-0.0178
58	5e+12	NDD	4.9968	4.978	-0.0188
59	1e+13	NDD	4.988	4.9492	-0.0388
60	1e+13	NDD	4.9785	4.9372	-0.0413
61	1e+13	NDD	4.9756	4.9357	-0.0399
62	1e+13	NDD	4.9834	4.9457	-0.0377

## NDD vs Post - Pre Exposure Delta

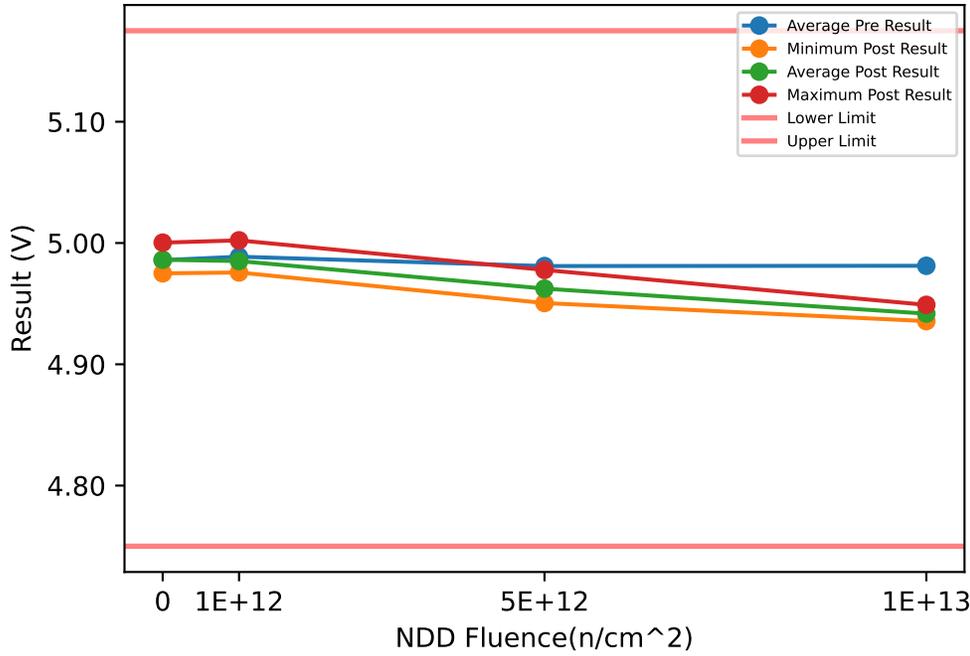


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9747	4.9861	5.0004	0.013093	4.9752	4.9864	5.0005	0.012897	0.0001	0.0003	0.0005	0.0002
1e+12	4.9794	4.9889	5.0058	0.011801	4.9759	4.9854	5.0024	0.011937	-0.004	-0.00355	-0.0033	0.00031091
5e+12	4.9695	4.9812	4.9968	0.011609	4.9506	4.9626	4.978	0.01151	-0.0191	-0.01865	-0.0178	0.00058023
1e+13	4.9756	4.9814	4.988	0.0054653	4.9357	4.942	4.9492	0.0065383	-0.0413	-0.039425	-0.0377	0.0015392

# Device Test: 16.9 LEVEL|OUT/BP5H/14/14////@V\_BP5H

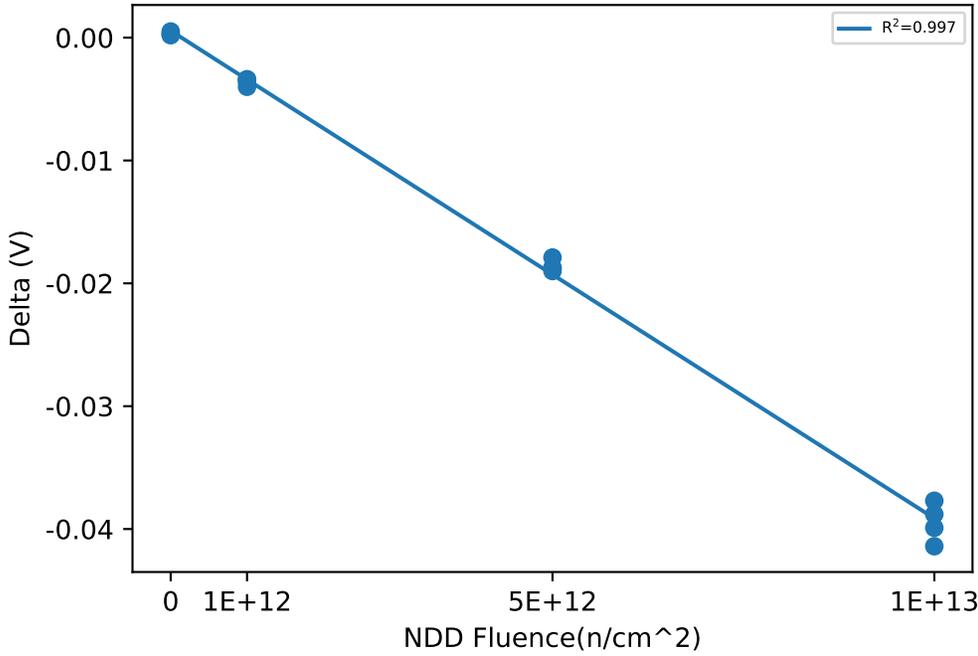
## NDD vs Result Stats



## Test Results (Lower Limit = 4.75, Upper Limit = 5.175 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	4.9745	4.975	0.0005
42	0	CORRELATION	5.0001	5.0003	0.0002
43	0	CORRELATION	4.983	4.9833	0.0003
51	1e+12	NDD	4.9822	4.9782	-0.004
52	1e+12	NDD	4.9878	4.9844	-0.0034
53	1e+12	NDD	5.0056	5.0022	-0.0034
54	1e+12	NDD	4.9793	4.9757	-0.0036
55	5e+12	NDD	4.9692	4.9505	-0.0187
56	5e+12	NDD	4.982	4.963	-0.019
57	5e+12	NDD	4.9762	4.9583	-0.0179
58	5e+12	NDD	4.9966	4.9778	-0.0188
59	1e+13	NDD	4.9878	4.949	-0.0388
60	1e+13	NDD	4.9784	4.937	-0.0414
61	1e+13	NDD	4.9755	4.9356	-0.0399
62	1e+13	NDD	4.9832	4.9455	-0.0377

## NDD vs Post - Pre Exposure Delta

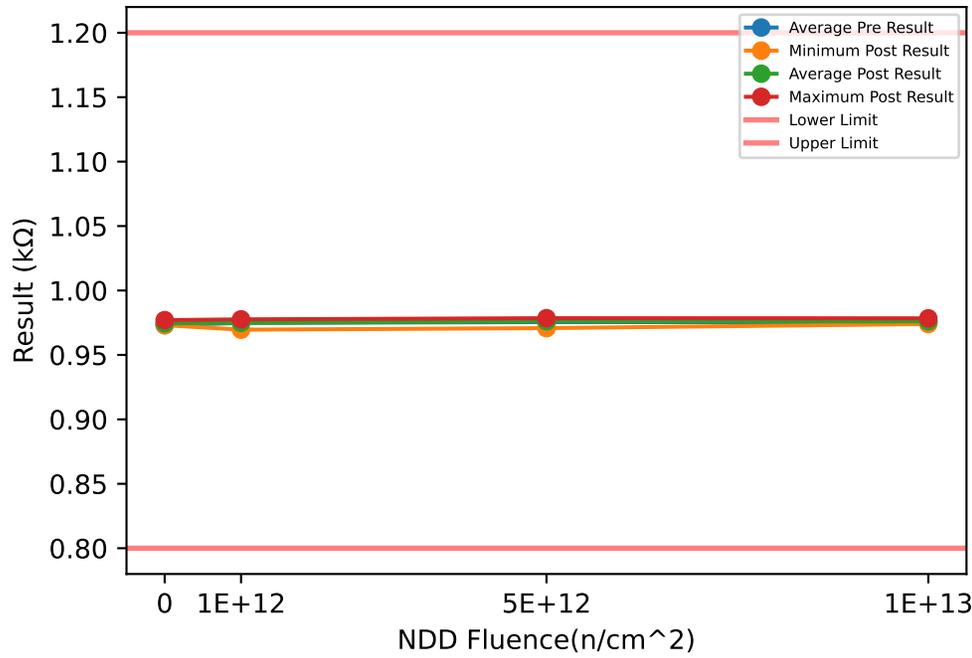


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	4.9745	4.9859	5.0001	0.013039	4.975	4.9862	5.0003	0.012897	0.0002	0.00033333	0.0005	0.00015275
1e+12	4.9793	4.9887	5.0056	0.01179	4.9757	4.9851	5.0022	0.011956	-0.004	-0.0036	-0.0034	0.00028284
5e+12	4.9692	4.981	4.9966	0.011642	4.9505	4.9624	4.9778	0.011488	-0.019	-0.0186	-0.0179	0.00048305
1e+13	4.9755	4.9812	4.9878	0.0054126	4.9356	4.9418	4.949	0.0065066	-0.0414	-0.03945	-0.0377	0.0015801

# Device Test: 17.10 BST|RES/BST/10/8////@R\_BST\_SW\_PARALLEL

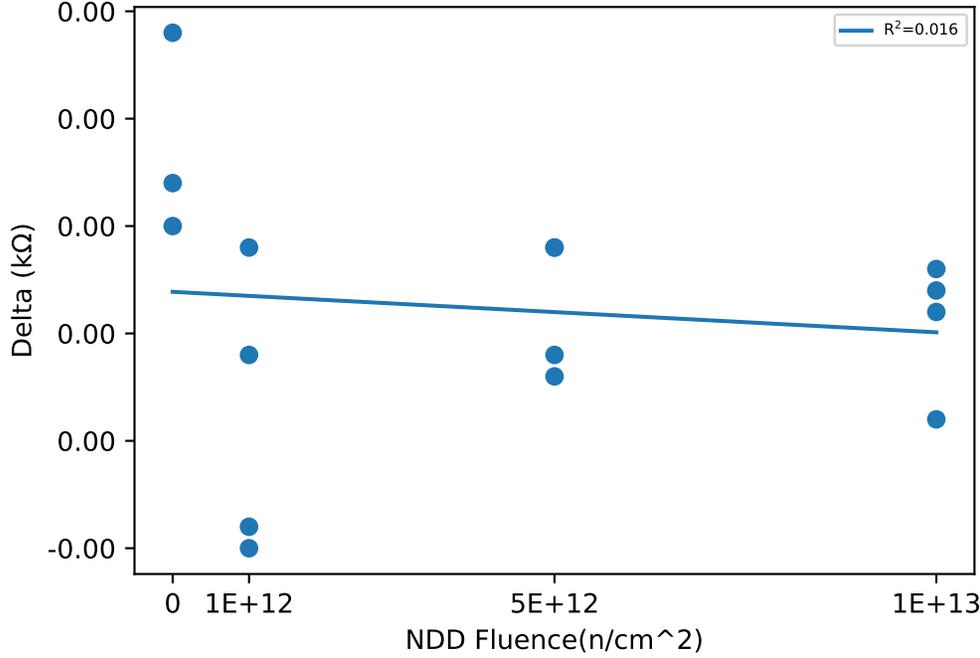
## NDD vs Result Stats



## Test Results (Lower Limit = 0.8, Upper Limit = 1.2 (kΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.9758	0.977	0.0012
42	0	CORRELATION	0.9715	0.9734	0.0019
43	0	CORRELATION	0.9721	0.9731	0.001
51	1e+12	NDD	0.9753	0.9762	0.0009
52	1e+12	NDD	0.9701	0.9696	-0.0005
53	1e+12	NDD	0.9759	0.9763	0.0004
54	1e+12	NDD	0.978	0.9776	-0.0004
55	5e+12	NDD	0.9776	0.9785	0.0009
56	5e+12	NDD	0.9777	0.978	0.0003
57	5e+12	NDD	0.9699	0.9708	0.0009
58	5e+12	NDD	0.9767	0.9771	0.0004
59	1e+13	NDD	0.9732	0.974	0.0008
60	1e+13	NDD	0.9734	0.9741	0.0007
61	1e+13	NDD	0.977	0.9776	0.0006
62	1e+13	NDD	0.9783	0.9784	0.0001

## NDD vs Post - Pre Exposure Delta

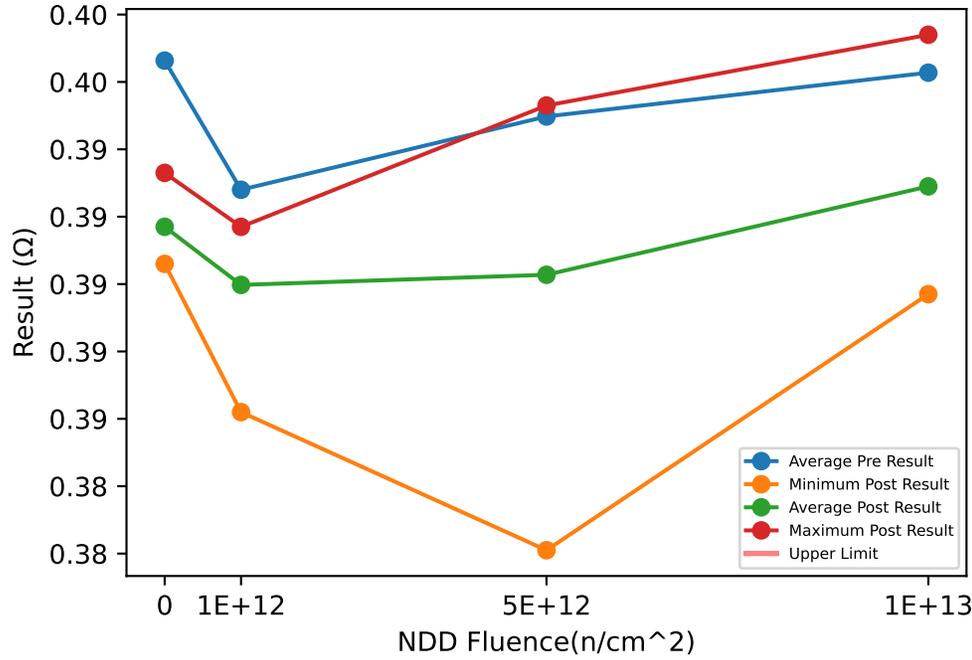


## Test Statistics (kΩ)

Fluence(n/cm <sup>2</sup> )	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	0.9715	0.97313	0.9758	0.0023288	0.9731	0.9745	0.977	0.0021703	0.001	0.0013667	0.0019	0.00047258
1e+12	0.9701	0.97482	0.978	0.003356	0.9696	0.97493	0.9776	0.0036068	-0.0005	0.0001	0.0009	0.00066833
5e+12	0.9699	0.97547	0.9777	0.0037438	0.9708	0.9761	0.9785	0.0035805	0.0003	0.000625	0.0009	0.00032016
1e+13	0.9732	0.97547	0.9783	0.0025682	0.974	0.97603	0.9784	0.0023042	0.0001	0.00055	0.0008	0.00031091

# Device Test: 17.19 BST|RES/BST/12/10/////@R\_BST\_SW

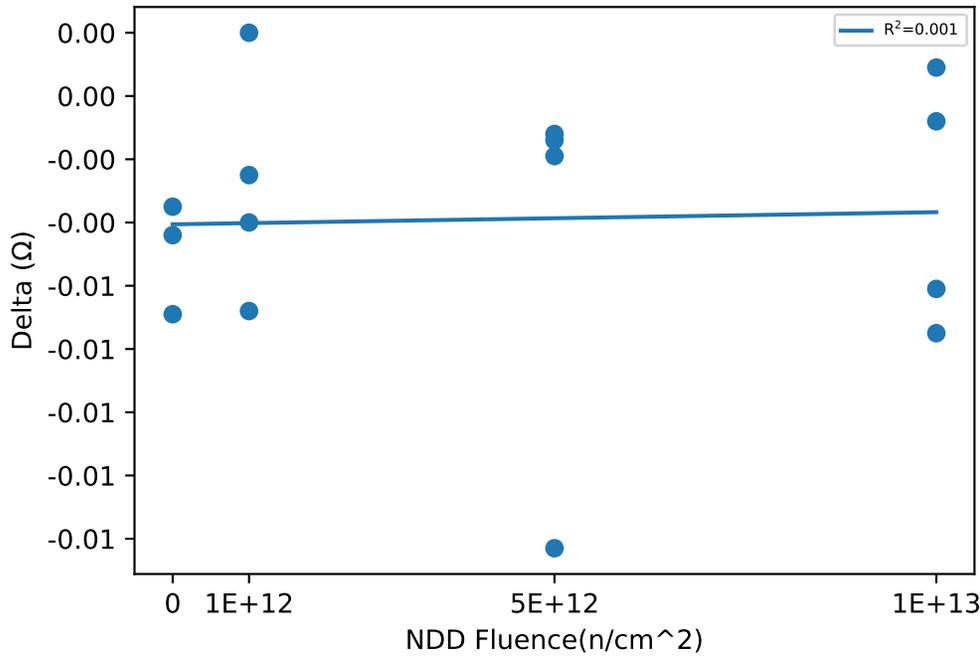
## NDD vs Result Stats



## Test Results (No Limits Specified (Ω))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.3941	0.3906	-0.0035
42	0	CORRELATION	0.4002	0.3933	-0.0069
43	0	CORRELATION	0.3956	0.3912	-0.0044
51	1e+12	NDD	0.395	0.391	-0.004
52	1e+12	NDD	0.389	0.391	0.002
53	1e+12	NDD	0.3942	0.3917	-0.0025
54	1e+12	NDD	0.393	0.3862	-0.0068
55	5e+12	NDD	0.3908	0.3889	-0.0019
56	5e+12	NDD	0.3964	0.3821	-0.0143
57	5e+12	NDD	0.3962	0.3948	-0.0014
58	5e+12	NDD	0.3965	0.3953	-0.0012
59	1e+13	NDD	0.3888	0.3897	0.0009
60	1e+13	NDD	0.4035	0.3974	-0.0061
61	1e+13	NDD	0.3924	0.3916	-0.0008
62	1e+13	NDD	0.4004	0.3929	-0.0075

## NDD vs Post - Pre Exposure Delta

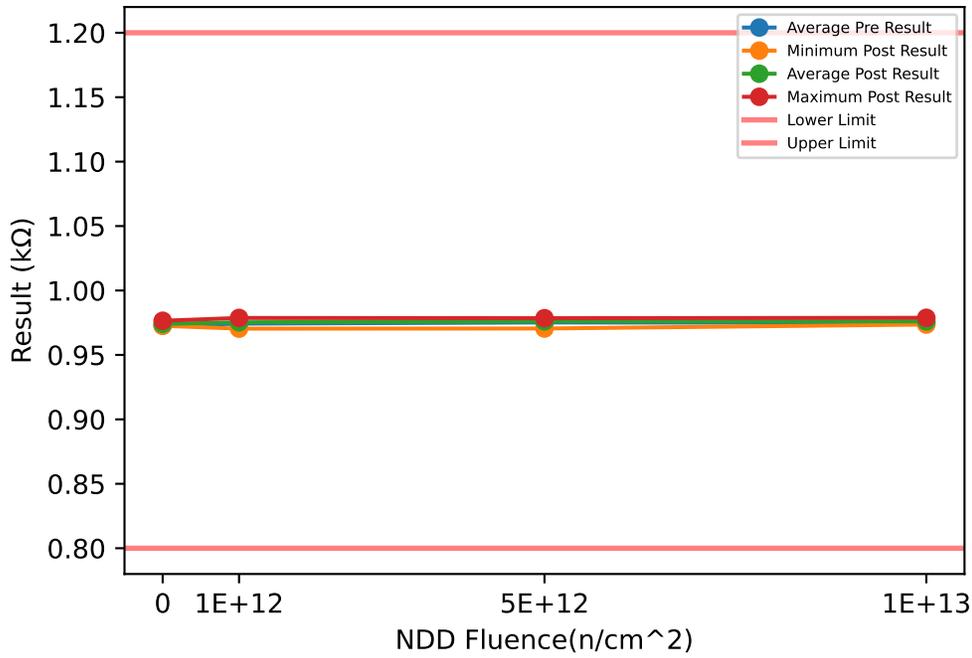


## Test Statistics (Ω)

Fluence(n/cm <sup>2</sup> )	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	0.3941	0.39663	0.4002	0.0031786	0.3906	0.3917	0.3933	0.0014177	-0.0069	-0.0049333	-0.0035	0.0017616
1e+12	0.389	0.3928	0.395	0.0026633	0.3862	0.38998	0.3917	0.0025382	-0.0068	-0.002825	0.002	0.0036773
5e+12	0.3908	0.39497	0.3965	0.0027861	0.3821	0.39027	0.3953	0.0061765	-0.0143	-0.0047	-0.0012	0.0064068
1e+13	0.3888	0.39627	0.4035	0.0068339	0.3897	0.3929	0.3974	0.0032752	-0.0075	-0.003375	0.0009	0.0040558

# Device Test: 17.20 BST|RES/BST/12/10////@R\_BST\_SW\_PARALLEL

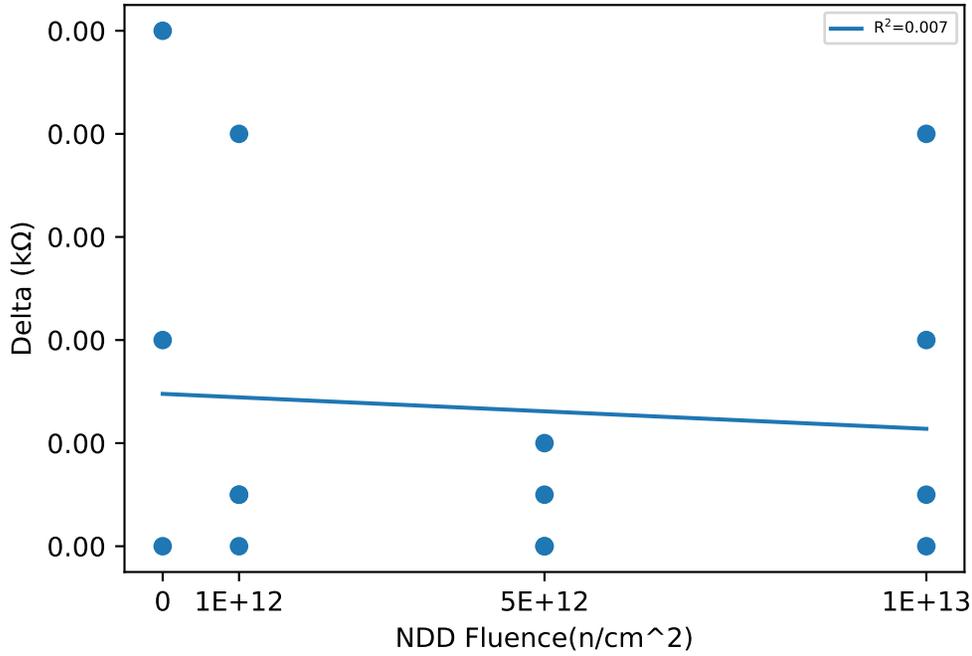
## NDD vs Result Stats



## Test Results (Lower Limit = 0.8, Upper Limit = 1.2 (kΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.9753	0.9765	0.0012
42	0	CORRELATION	0.9713	0.9731	0.0018
43	0	CORRELATION	0.9718	0.9726	0.0008
51	1e+12	NDD	0.9751	0.976	0.0009
52	1e+12	NDD	0.9688	0.9704	0.0016
53	1e+12	NDD	0.9753	0.9762	0.0009
54	1e+12	NDD	0.9779	0.9787	0.0008
55	5e+12	NDD	0.9773	0.9783	0.001
56	5e+12	NDD	0.9777	0.9785	0.0008
57	5e+12	NDD	0.9697	0.9705	0.0008
58	5e+12	NDD	0.9761	0.977	0.0009
59	1e+13	NDD	0.9727	0.9736	0.0009
60	1e+13	NDD	0.9733	0.9745	0.0012
61	1e+13	NDD	0.9765	0.9773	0.0008
62	1e+13	NDD	0.9772	0.9788	0.0016

## NDD vs Post - Pre Exposure Delta

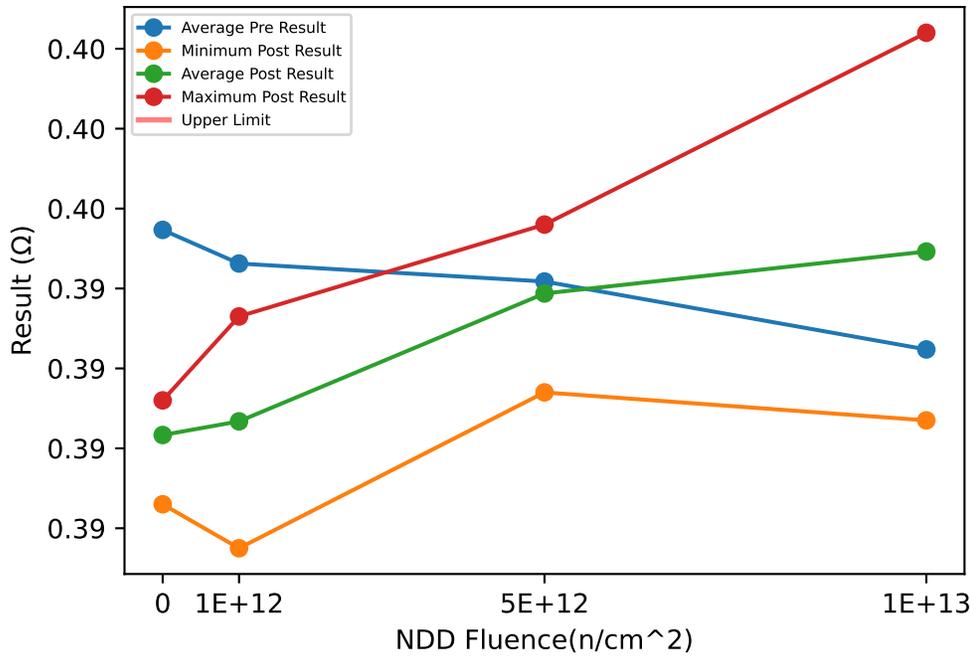


## Test Statistics (kΩ)

Fluence(n/cm <sup>2</sup> )	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	0.9713	0.9728	0.9753	0.0021794	0.9726	0.97407	0.9765	0.0021221	0.0008	0.0012667	0.0018	0.00050332
1e+12	0.9688	0.97428	0.9779	0.0038664	0.9704	0.97532	0.9787	0.0035056	0.0008	0.00105	0.0016	0.00036968
5e+12	0.9697	0.9752	0.9777	0.0037292	0.9705	0.97608	0.9785	0.0037757	0.0008	0.000875	0.001	9.5743e-05
1e+13	0.9727	0.97493	0.9772	0.0022544	0.9736	0.97605	0.9788	0.0024173	0.0008	0.001125	0.0016	0.0003594

# Device Test: 17.29 BST|RES/BST/14/14/////@R\_BST\_SW

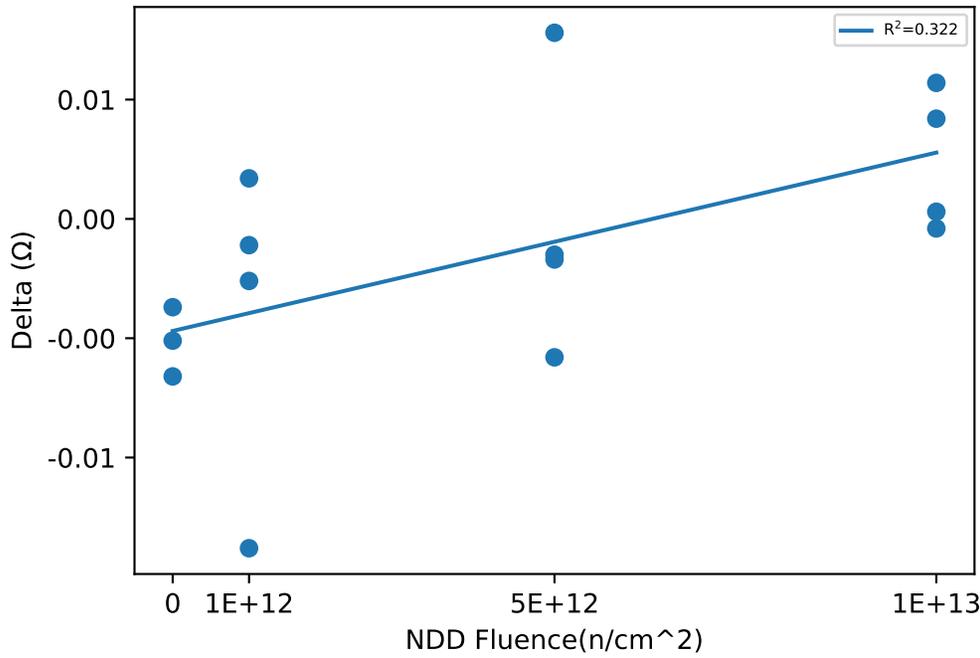
## NDD vs Result Stats



## Test Results (No Limits Specified (Ω))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.3949	0.3912	-0.0037
42	0	CORRELATION	0.3952	0.3886	-0.0066
43	0	CORRELATION	0.3963	0.3912	-0.0051
51	1e+12	NDD	0.3944	0.3933	-0.0011
52	1e+12	NDD	0.388	0.3897	0.0017
53	1e+12	NDD	0.3948	0.3922	-0.0026
54	1e+12	NDD	0.4013	0.3875	-0.0138
55	5e+12	NDD	0.3931	0.3914	-0.0017
56	5e+12	NDD	0.387	0.3948	0.0078
57	5e+12	NDD	0.3971	0.3956	-0.0015
58	5e+12	NDD	0.3995	0.3937	-0.0058
59	1e+13	NDD	0.3904	0.3907	0.0003
60	1e+13	NDD	0.3947	0.4004	0.0057
61	1e+13	NDD	0.3936	0.3932	-0.0004
62	1e+13	NDD	0.3912	0.3954	0.0042

## NDD vs Post - Pre Exposure Delta

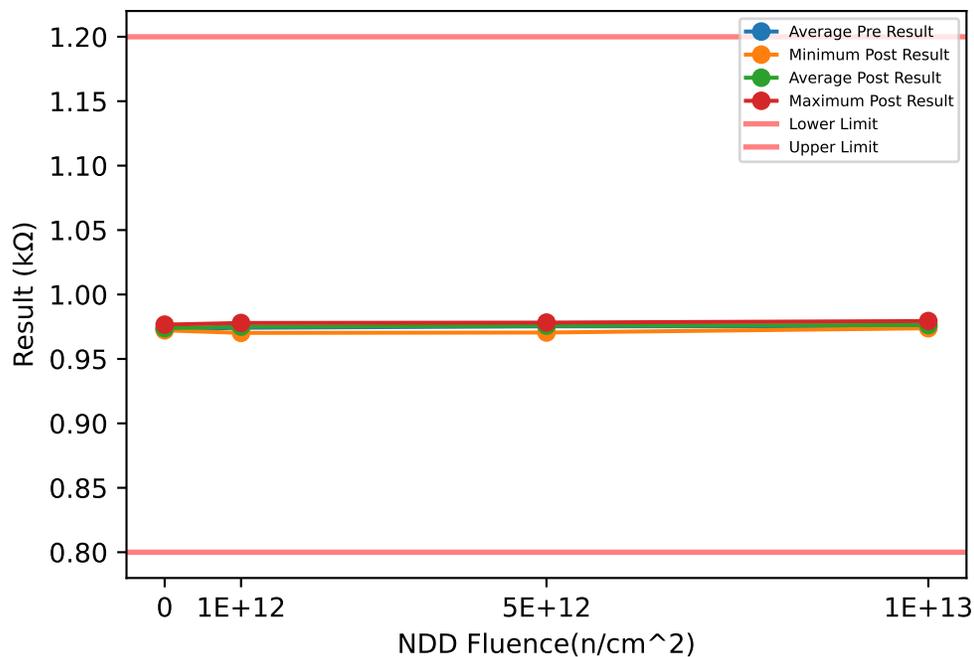


## Test Statistics (Ω)

Fluence(n/cm <sup>2</sup> )	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	0.3949	0.39547	0.3963	0.00073711	0.3886	0.39033	0.3912	0.0015011	-0.0066	-0.0051333	-0.0037	0.0014503
1e+12	0.388	0.39463	0.4013	0.0054322	0.3875	0.39067	0.3933	0.0025979	-0.0138	-0.00395	0.0017	0.0068042
5e+12	0.387	0.39417	0.3995	0.0054634	0.3914	0.39387	0.3956	0.0018246	-0.0058	-0.0003	0.0078	0.0057521
1e+13	0.3904	0.39248	0.3947	0.0020123	0.3907	0.39492	0.4004	0.0041242	-0.0004	0.00245	0.0057	0.0029648

# Device Test: 17.30 BST|RES/BST/14/14////@R\_BST\_SW\_PARALLEL

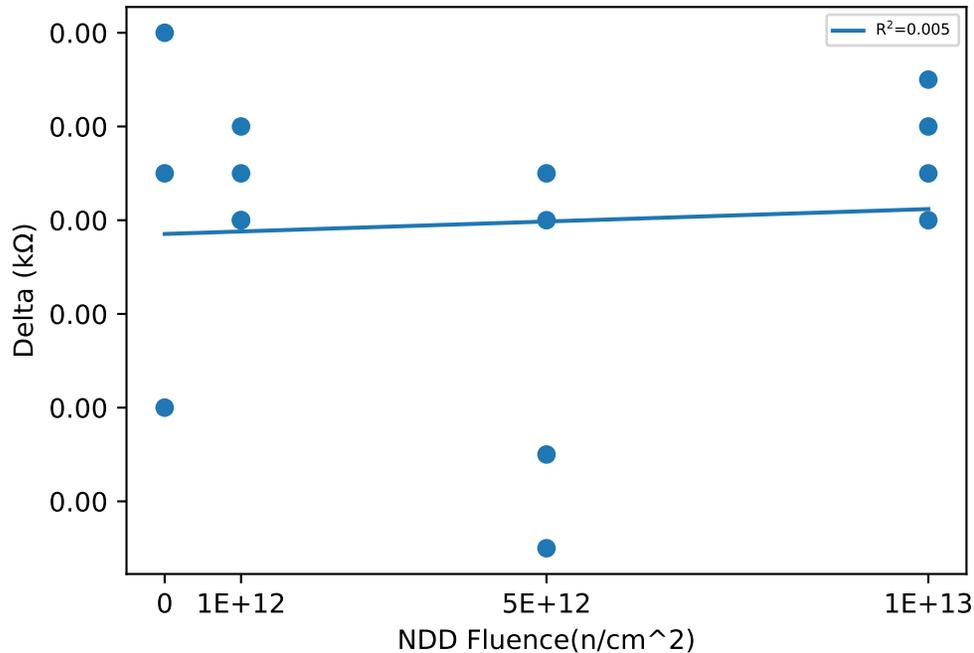
## NDD vs Result Stats



## Test Results (Lower Limit = 0.8, Upper Limit = 1.2 (kΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.9754	0.9766	0.0012
42	0	CORRELATION	0.9718	0.9722	0.0004
43	0	CORRELATION	0.9718	0.9727	0.0009
51	1e+12	NDD	0.9751	0.9759	0.0008
52	1e+12	NDD	0.9692	0.9702	0.001
53	1e+12	NDD	0.9753	0.9762	0.0009
54	1e+12	NDD	0.9771	0.9779	0.0008
55	5e+12	NDD	0.9773	0.9782	0.0009
56	5e+12	NDD	0.9779	0.9782	0.0003
57	5e+12	NDD	0.9697	0.9705	0.0008
58	5e+12	NDD	0.9763	0.9764	0.0001
59	1e+13	NDD	0.9728	0.9738	0.001
60	1e+13	NDD	0.9735	0.9746	0.0011
61	1e+13	NDD	0.9765	0.9773	0.0008
62	1e+13	NDD	0.9785	0.9794	0.0009

## NDD vs Post - Pre Exposure Delta

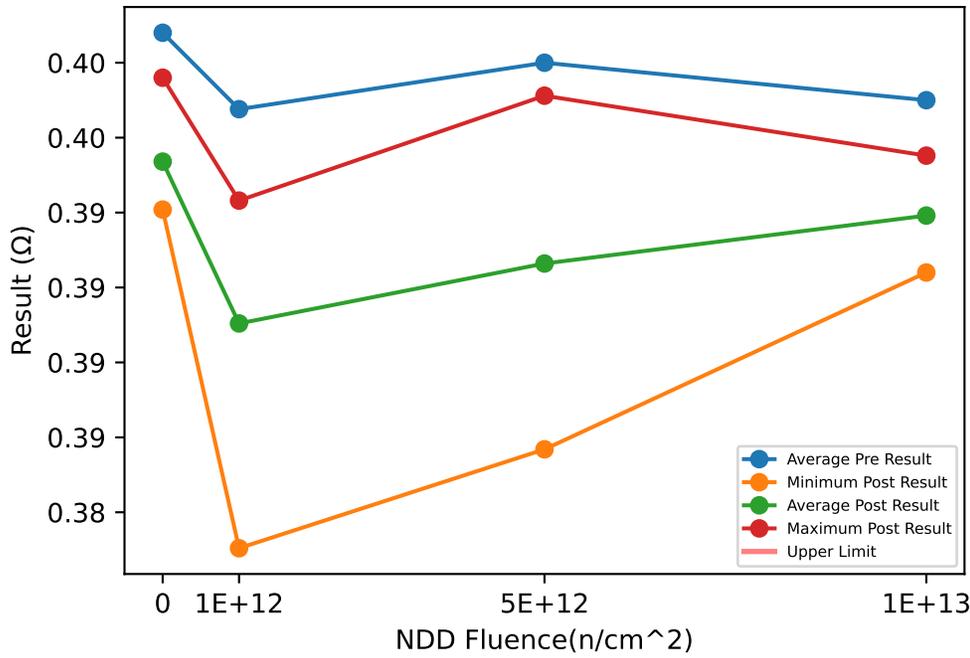


## Test Statistics (kΩ)

Fluence(n/cm <sup>2</sup> )	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	0.9718	0.973	0.9754	0.0020785	0.9722	0.97383	0.9766	0.002409	0.0004	0.00083333	0.0012	0.00040415
1e+12	0.9692	0.97418	0.9771	0.0034364	0.9702	0.97505	0.9779	0.0033511	0.0008	0.000875	0.001	9.5743e-05
5e+12	0.9697	0.9753	0.9779	0.0037912	0.9705	0.97582	0.9782	0.00365	0.0001	0.000525	0.0009	0.00038622
1e+13	0.9728	0.97532	0.9785	0.0026563	0.9738	0.97628	0.9794	0.0025656	0.0008	0.00095	0.0011	0.0001291

# Device Test: 17.9 BST|RES/BST/10/8////@R\_BST\_SW

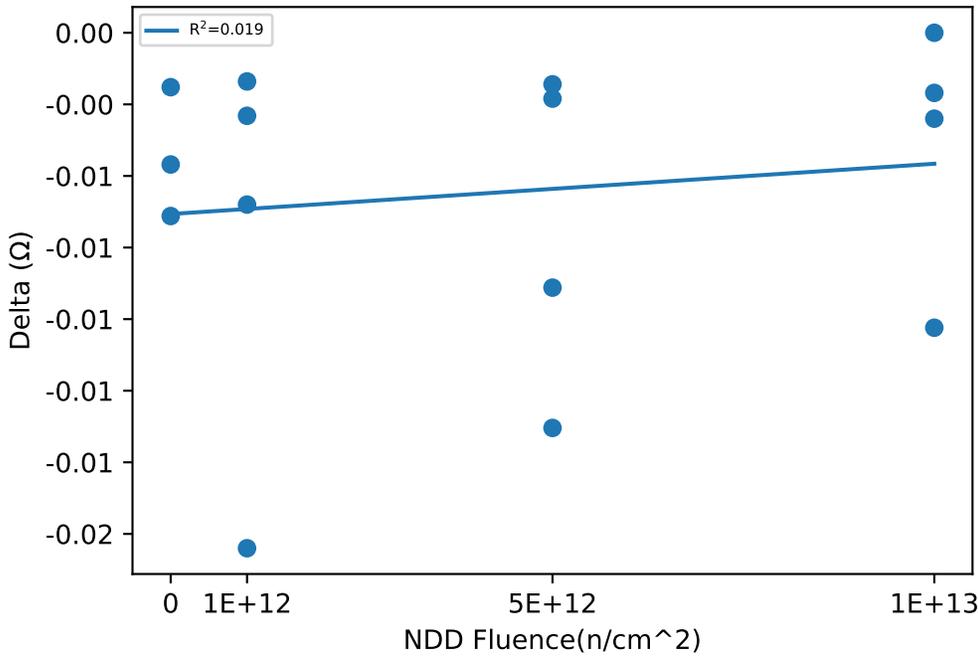
## NDD vs Result Stats



## Test Results (No Limits Specified (Ω))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.3949	0.393	-0.0019
42	0	CORRELATION	0.4034	0.397	-0.0064
43	0	CORRELATION	0.3972	0.3926	-0.0046
51	1e+12	NDD	0.3953	0.3924	-0.0029
52	1e+12	NDD	0.3993	0.3813	-0.018
53	1e+12	NDD	0.3946	0.3929	-0.0017
54	1e+12	NDD	0.3946	0.3886	-0.006
55	5e+12	NDD	0.3926	0.3903	-0.0023
56	5e+12	NDD	0.3984	0.3846	-0.0138
57	5e+12	NDD	0.3982	0.3964	-0.0018
58	5e+12	NDD	0.4008	0.3919	-0.0089
59	1e+13	NDD	0.3905	0.3905	0
60	1e+13	NDD	0.4047	0.3944	-0.0103
61	1e+13	NDD	0.3947	0.3926	-0.0021
62	1e+13	NDD	0.3951	0.3921	-0.003

## NDD vs Post - Pre Exposure Delta

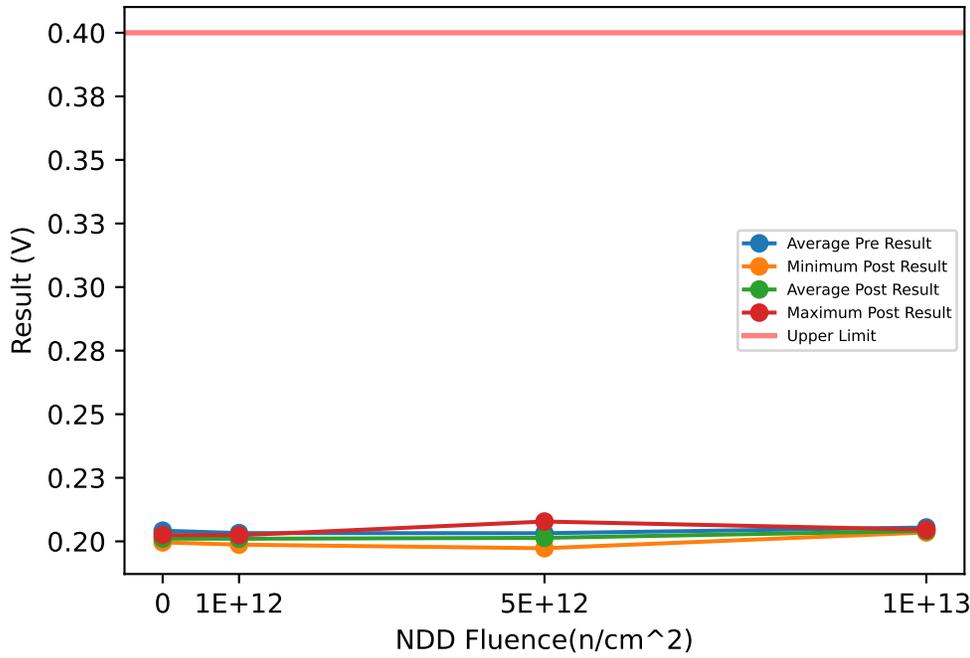


## Test Statistics (Ω)

Fluence(n/cm <sup>2</sup> )	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	0.3949	0.3985	0.4034	0.0043966	0.3926	0.3942	0.397	0.0024331	-0.0064	-0.0043	-0.0019	0.002265
1e+12	0.3946	0.39595	0.3993	0.0022576	0.3813	0.3888	0.3929	0.005356	-0.018	-0.00715	-0.0017	0.0074568
5e+12	0.3926	0.3975	0.4008	0.0034737	0.3846	0.3908	0.3964	0.0048737	-0.0138	-0.0067	-0.0018	0.0057335
1e+13	0.3905	0.39625	0.4047	0.0060053	0.3905	0.3924	0.3944	0.0016062	-0.0103	-0.00385	0	0.00448

# Device Test: 18.1 LEVEL|VOL/PGOOD/7.5/////@V\_PGOOD\_OL

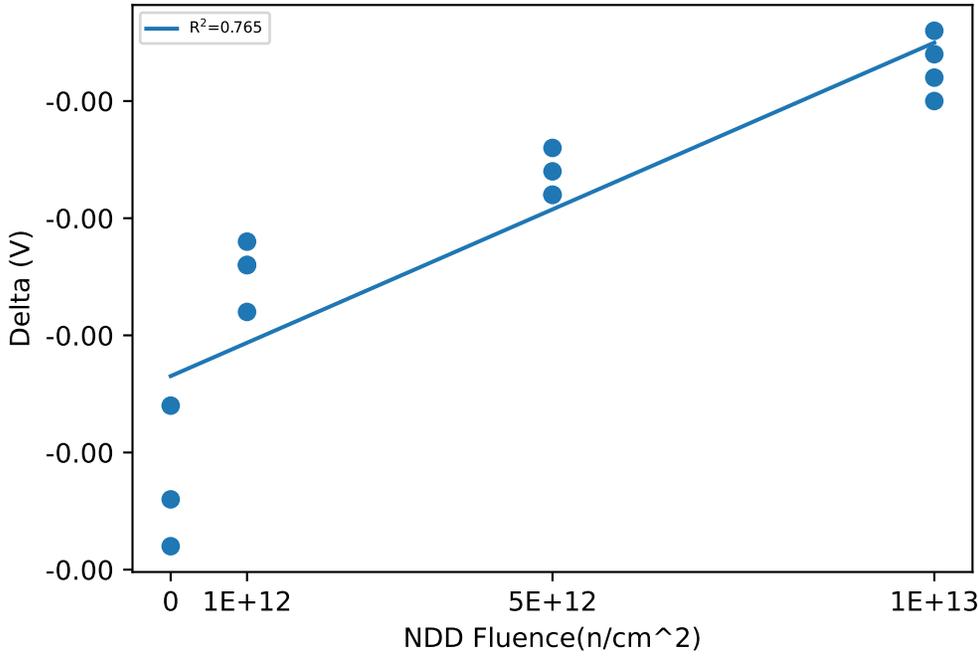
## NDD vs Result Stats



## Test Results (Upper Limit = 0.4 (V))

Serial #	Fluence(n/cm^2)	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	0.203	0.1996	-0.0034
42	0	CORRELATION	0.2057	0.2025	-0.0032
43	0	CORRELATION	0.2039	0.2011	-0.0028
51	1e+12	NDD	0.2046	0.2024	-0.0022
52	1e+12	NDD	0.2032	0.2008	-0.0024
53	1e+12	NDD	0.2043	0.2022	-0.0021
54	1e+12	NDD	0.2009	0.1987	-0.0022
55	5e+12	NDD	0.1992	0.1973	-0.0019
56	5e+12	NDD	0.2014	0.1995	-0.0019
57	5e+12	NDD	0.2095	0.2078	-0.0017
58	5e+12	NDD	0.2027	0.2009	-0.0018
59	1e+13	NDD	0.2055	0.2043	-0.0012
60	1e+13	NDD	0.2055	0.204	-0.0015
61	1e+13	NDD	0.2048	0.2035	-0.0013
62	1e+13	NDD	0.206	0.2046	-0.0014

## NDD vs Post - Pre Exposure Delta

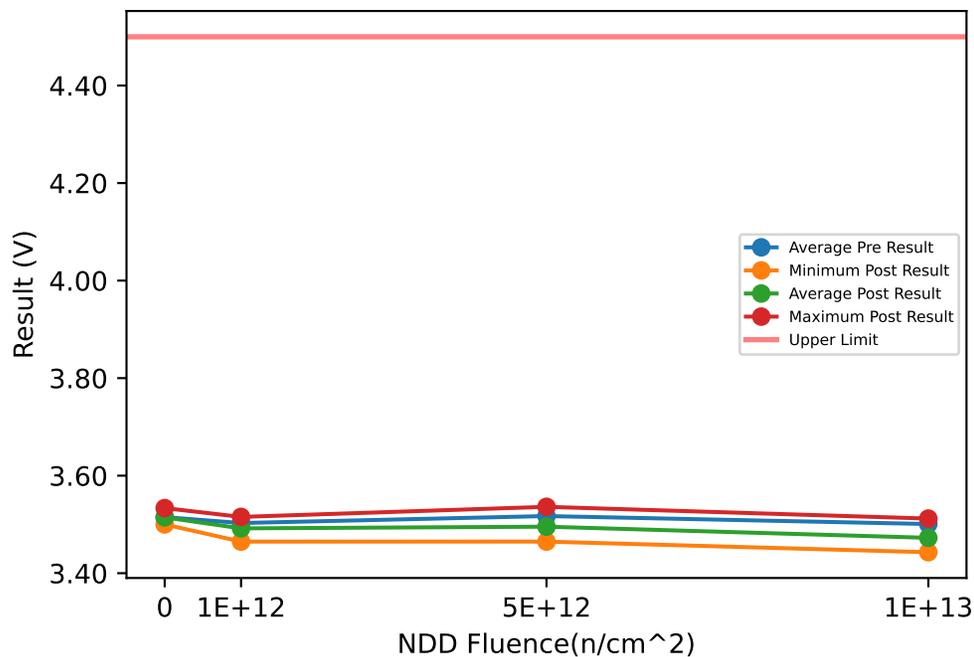


## Test Statistics (V)

Fluence(n/cm^2)	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	0.203	0.2042	0.2057	0.0013748	0.1996	0.20107	0.2025	0.0014503	-0.0034	-0.0031333	-0.0028	0.00030551
1e+12	0.2009	0.20325	0.2046	0.0016783	0.1987	0.20103	0.2024	0.0017056	-0.0024	-0.002225	-0.0021	0.00012583
5e+12	0.1992	0.2032	0.2095	0.0044415	0.1973	0.20137	0.2078	0.0045324	-0.0019	-0.001825	-0.0017	9.5743e-05
1e+13	0.2048	0.20545	0.206	0.00049329	0.2035	0.2041	0.2046	0.00046904	-0.0015	-0.00135	-0.0012	0.0001291

# Device Test: 18.2 THRESHOLD|MINBP7L/PGOOD/////@V\_BP7L\_MIN\_FOR\_PGOOD

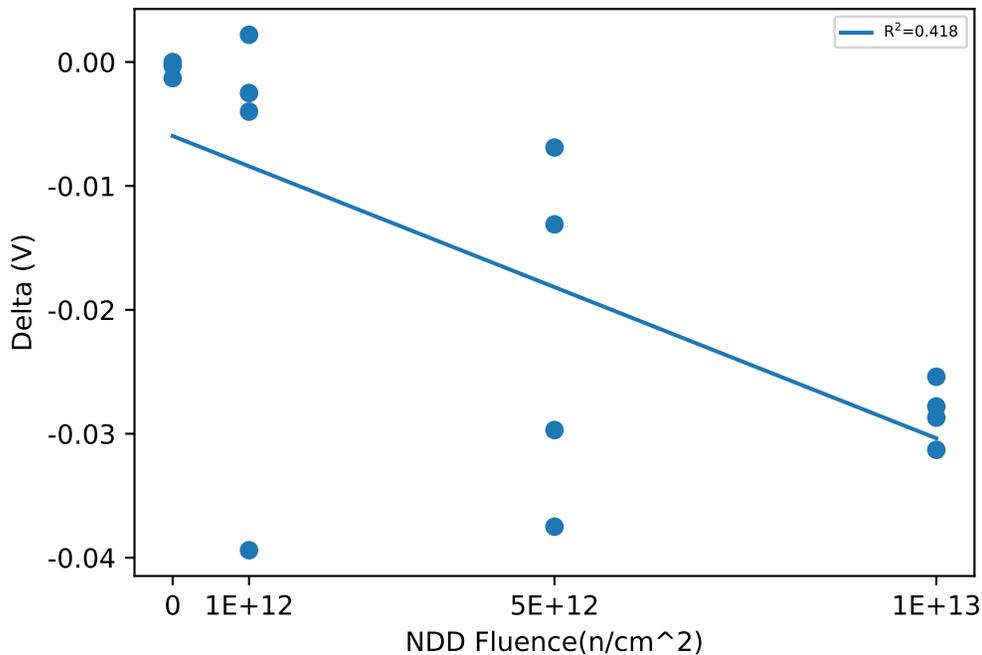
## NDD vs Result Stats



## Test Results (Upper Limit = 4.5 (V))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	3.5348	3.5335	-0.0013
42	0	CORRELATION	3.5004	3.5001	-0.0003
43	0	CORRELATION	3.5098	3.5098	0
51	1e+12	NDD	3.5064	3.5039	-0.0025
52	1e+12	NDD	3.5132	3.5154	0.0022
53	1e+12	NDD	3.4876	3.4836	-0.004
54	1e+12	NDD	3.5042	3.4648	-0.0394
55	5e+12	NDD	3.5195	3.4898	-0.0297
56	5e+12	NDD	3.5023	3.4648	-0.0375
57	5e+12	NDD	3.5039	3.4908	-0.0131
58	5e+12	NDD	3.543	3.5361	-0.0069
59	1e+13	NDD	3.4708	3.443	-0.0278
60	1e+13	NDD	3.4826	3.4513	-0.0313
61	1e+13	NDD	3.5407	3.512	-0.0287
62	1e+13	NDD	3.5092	3.4838	-0.0254

## NDD vs Post - Pre Exposure Delta

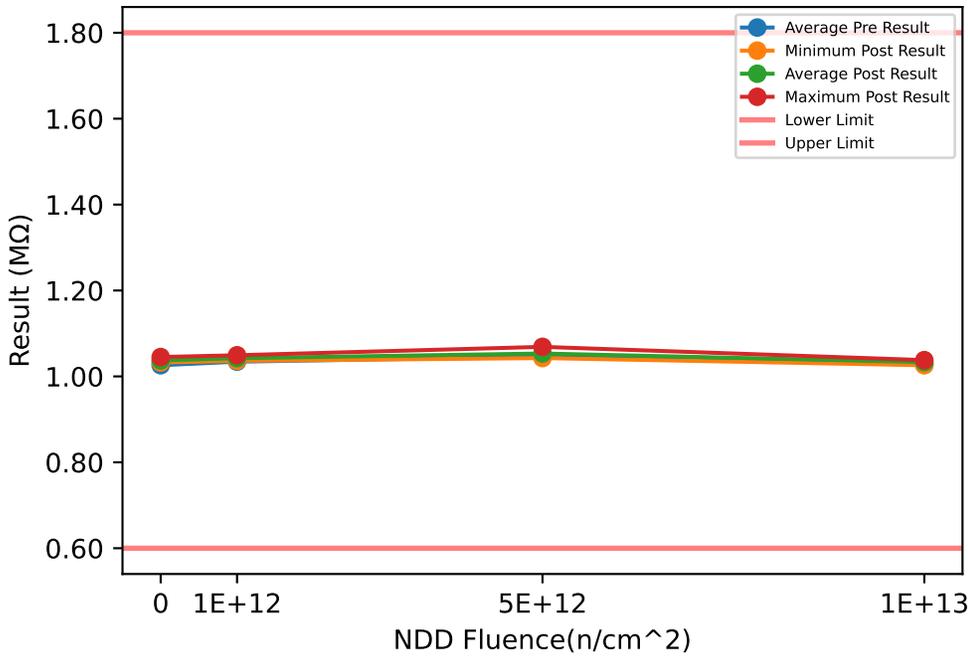


## Test Statistics (V)

Fluence(n/cm <sup>2</sup> )	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	3.5004	3.515	3.5348	0.01778	3.5001	3.5145	3.5335	0.017182	-0.0013	-0.00053333	0	0.00068069
1e+12	3.4876	3.5029	3.5132	0.010864	3.4648	3.4919	3.5154	0.022357	-0.0394	-0.010925	0.0022	0.019166
5e+12	3.5023	3.5172	3.543	0.018884	3.4648	3.4954	3.5361	0.029695	-0.0375	-0.0218	-0.0069	0.01422
1e+13	3.4708	3.5008	3.5407	0.031058	3.443	3.4725	3.512	0.031663	-0.0313	-0.0283	-0.0254	0.0024372

# Device Test: 18.3 LEVEL|RES/PGOOD/10/8////@I\_PGOOD\_PD\_RES

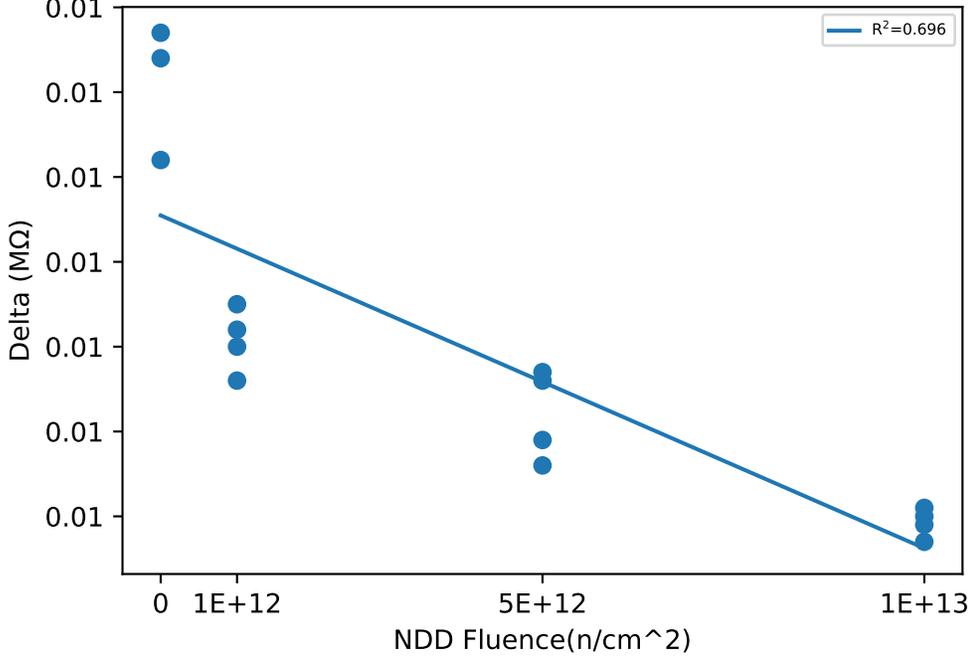
## NDD vs Result Stats



## Test Results (Lower Limit = 0.6, Upper Limit = 1.8 (MΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.0334	1.0451	0.0117
42	0	CORRELATION	1.0209	1.0323	0.0114
43	0	CORRELATION	1.0238	1.034	0.0102
51	1e+12	NDD	1.0311	1.0393	0.0082
52	1e+12	NDD	1.0363	1.0448	0.0085
53	1e+12	NDD	1.0286	1.0362	0.0076
54	1e+12	NDD	1.0412	1.0492	0.008
55	5e+12	NDD	1.0612	1.0688	0.0076
56	5e+12	NDD	1.0487	1.0564	0.0077
57	5e+12	NDD	1.0361	1.0427	0.0066
58	5e+12	NDD	1.0384	1.0453	0.0069
59	1e+13	NDD	1.0319	1.0379	0.006
60	1e+13	NDD	1.0199	1.026	0.0061
61	1e+13	NDD	1.031	1.0367	0.0057
62	1e+13	NDD	1.0269	1.0328	0.0059

## NDD vs Post - Pre Exposure Delta

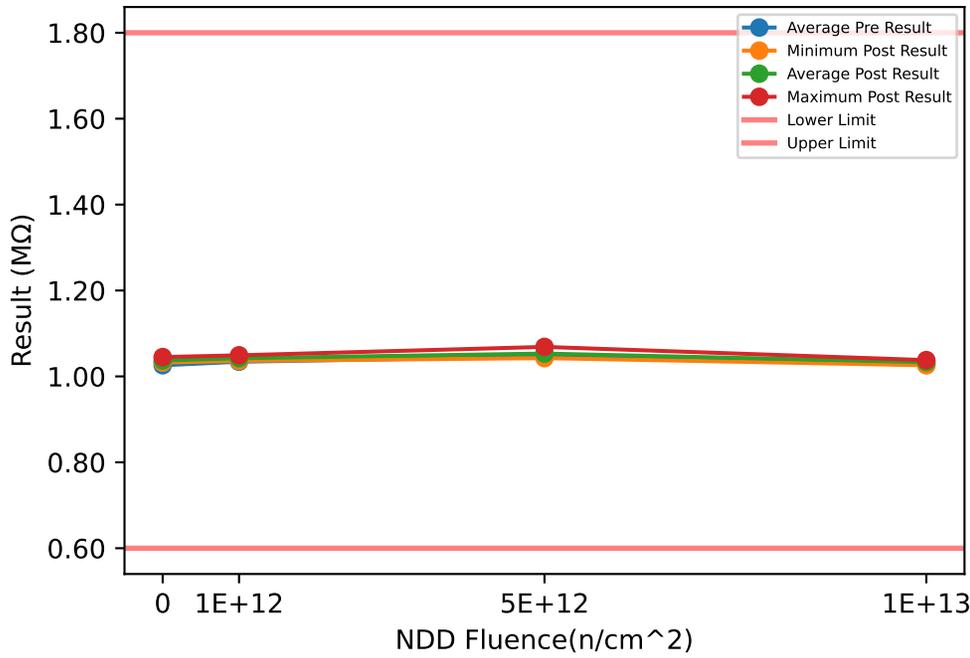


## Test Statistics (MΩ)

Fluence(n/cm <sup>2</sup> )	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	1.0209	1.026	1.0334	0.0065424	1.0323	1.0371	1.0451	0.0069515	0.0102	0.0111	0.0117	0.00079373
1e+12	1.0286	1.0343	1.0412	0.0056077	1.0362	1.0424	1.0492	0.0057749	0.0076	0.008075	0.0085	0.00037749
5e+12	1.0361	1.0461	1.0612	0.011461	1.0427	1.0533	1.0688	0.011919	0.0066	0.0072	0.0077	0.00053541
1e+13	1.0199	1.0274	1.0319	0.0054683	1.026	1.0333	1.0379	0.0053619	0.0057	0.005925	0.0061	0.00017078

# Device Test: 18.4 LEVEL|RES/PGOOD/12/10////@I\_PGOOD\_PD\_RES

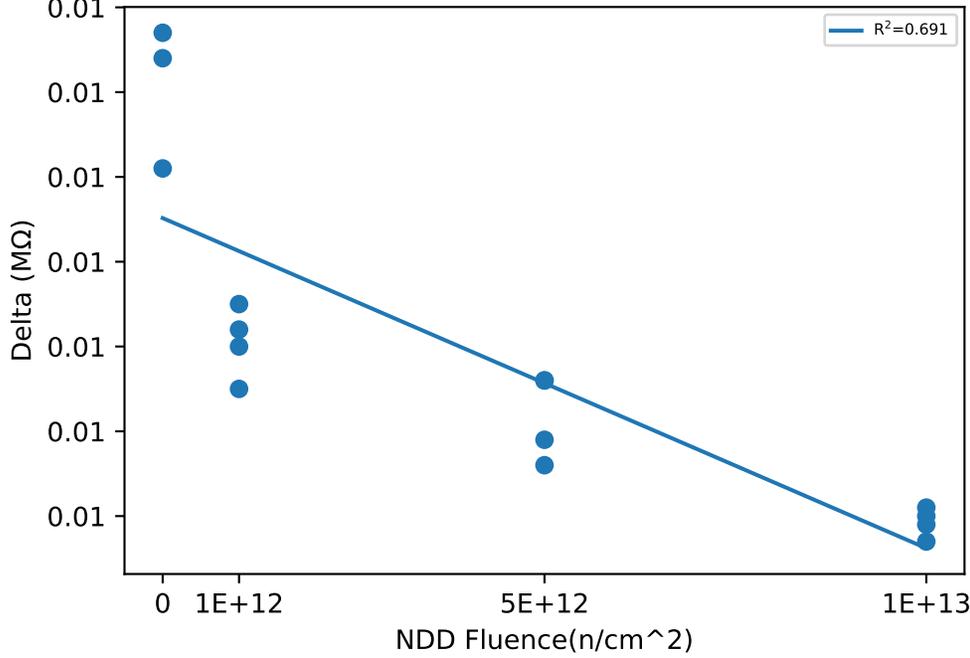
## NDD vs Result Stats



## Test Results (Lower Limit = 0.6, Upper Limit = 1.8 (MΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.0333	1.045	0.0117
42	0	CORRELATION	1.0208	1.0322	0.0114
43	0	CORRELATION	1.0238	1.0339	0.0101
51	1e+12	NDD	1.031	1.0392	0.0082
52	1e+12	NDD	1.0362	1.0447	0.0085
53	1e+12	NDD	1.0286	1.0361	0.0075
54	1e+12	NDD	1.0411	1.0491	0.008
55	5e+12	NDD	1.0611	1.0687	0.0076
56	5e+12	NDD	1.0487	1.0563	0.0076
57	5e+12	NDD	1.036	1.0426	0.0066
58	5e+12	NDD	1.0383	1.0452	0.0069
59	1e+13	NDD	1.0319	1.0379	0.006
60	1e+13	NDD	1.0198	1.0259	0.0061
61	1e+13	NDD	1.0309	1.0366	0.0057
62	1e+13	NDD	1.0268	1.0327	0.0059

## NDD vs Post - Pre Exposure Delta

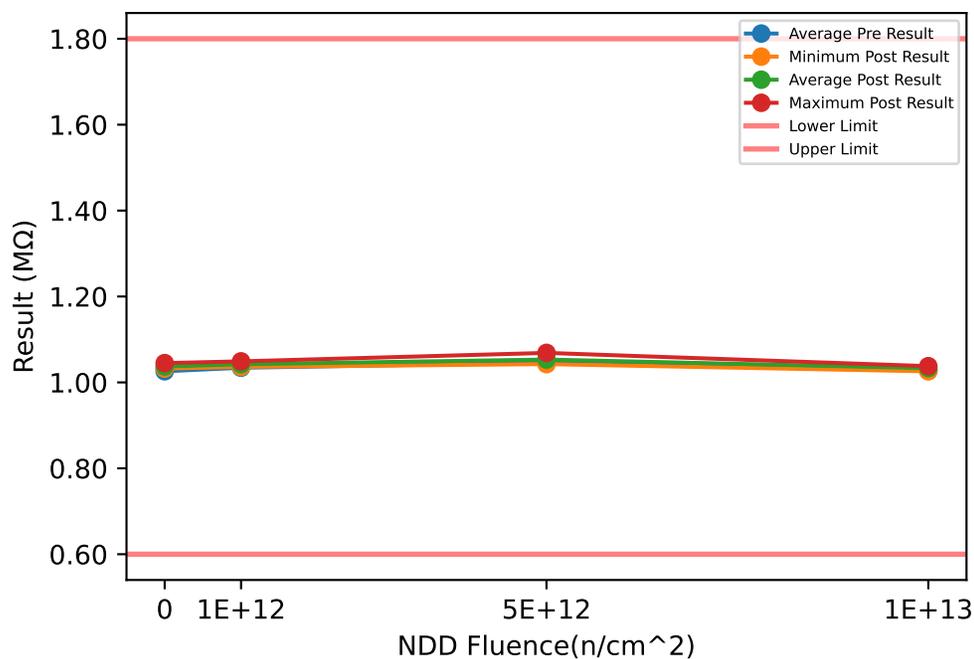


## Test Statistics (MΩ)

Fluence(n/cm <sup>2</sup> )	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	1.0208	1.026	1.0333	0.0065256	1.0322	1.037	1.045	0.0069515	0.0101	0.011067	0.0117	0.00085049
1e+12	1.0286	1.0342	1.0411	0.005574	1.0361	1.0423	1.0491	0.0057749	0.0075	0.00805	0.0085	0.00042032
5e+12	1.036	1.046	1.0611	0.011469	1.0426	1.0532	1.0687	0.011919	0.0066	0.007175	0.0076	0.0005058
1e+13	1.0198	1.0273	1.0319	0.0054958	1.0259	1.0333	1.0379	0.0053903	0.0057	0.005925	0.0061	0.00017078

# Device Test: 18.5 LEVEL|RES/PGOOD/14/14////@I\_PGOOD\_PD\_RES

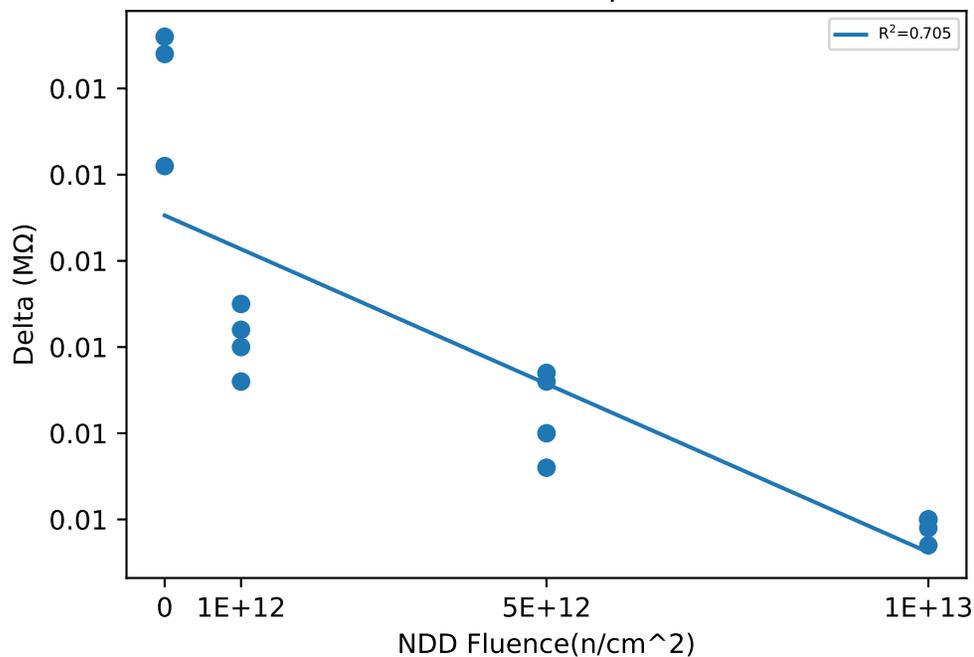
## NDD vs Result Stats



## Test Results (Lower Limit = 0.6, Upper Limit = 1.8 (MΩ))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	1.0333	1.0449	0.0116
42	0	CORRELATION	1.0208	1.0322	0.0114
43	0	CORRELATION	1.0237	1.0338	0.0101
51	1e+12	NDD	1.031	1.0392	0.0082
52	1e+12	NDD	1.0361	1.0446	0.0085
53	1e+12	NDD	1.0285	1.0361	0.0076
54	1e+12	NDD	1.041	1.049	0.008
55	5e+12	NDD	1.0611	1.0687	0.0076
56	5e+12	NDD	1.0486	1.0563	0.0077
57	5e+12	NDD	1.036	1.0426	0.0066
58	5e+12	NDD	1.0382	1.0452	0.007
59	1e+13	NDD	1.0318	1.0378	0.006
60	1e+13	NDD	1.0198	1.0258	0.006
61	1e+13	NDD	1.0309	1.0366	0.0057
62	1e+13	NDD	1.0267	1.0326	0.0059

## NDD vs Post - Pre Exposure Delta

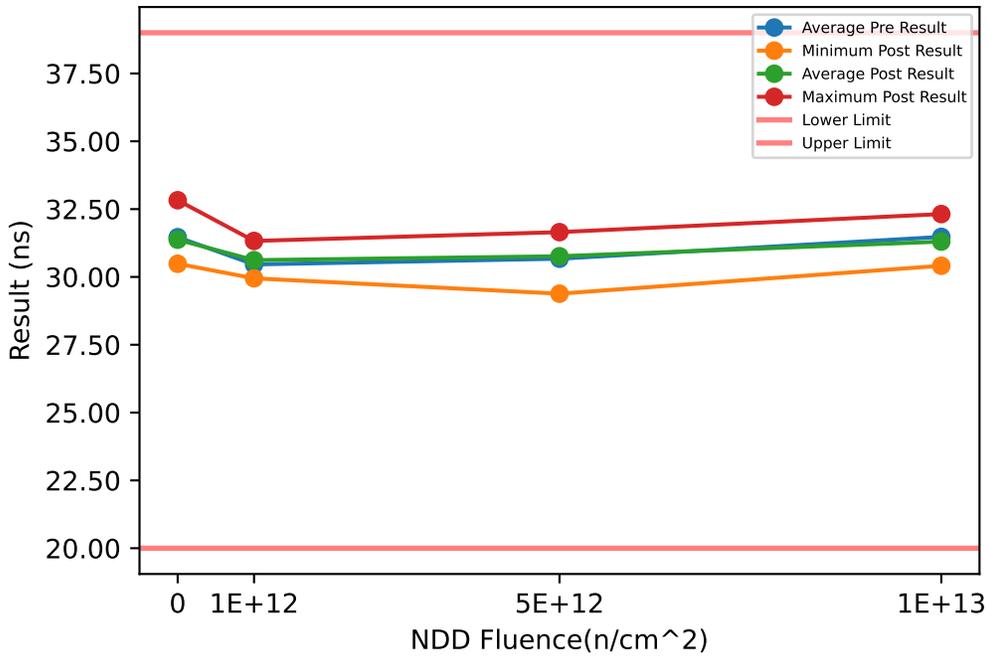


## Test Statistics (MΩ)

Fluence(n/cm <sup>2</sup> )	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	1.0208	1.0259	1.0333	0.0065424	1.0322	1.037	1.0449	0.0069169	0.0101	0.011033	0.0116	0.00081445
1e+12	1.0285	1.0341	1.041	0.0055549	1.0361	1.0422	1.049	0.0057215	0.0076	0.008075	0.0085	0.00037749
5e+12	1.036	1.046	1.0611	0.011483	1.0426	1.0532	1.0687	0.011919	0.0066	0.007225	0.0077	0.00051881
1e+13	1.0198	1.0273	1.0318	0.0054717	1.0258	1.0332	1.0378	0.0054111	0.0057	0.0059	0.006	0.00014142

# Device Test: 19.1 PWM|DEADTIME/GATE/10/8///0MHz/@T\_RLH

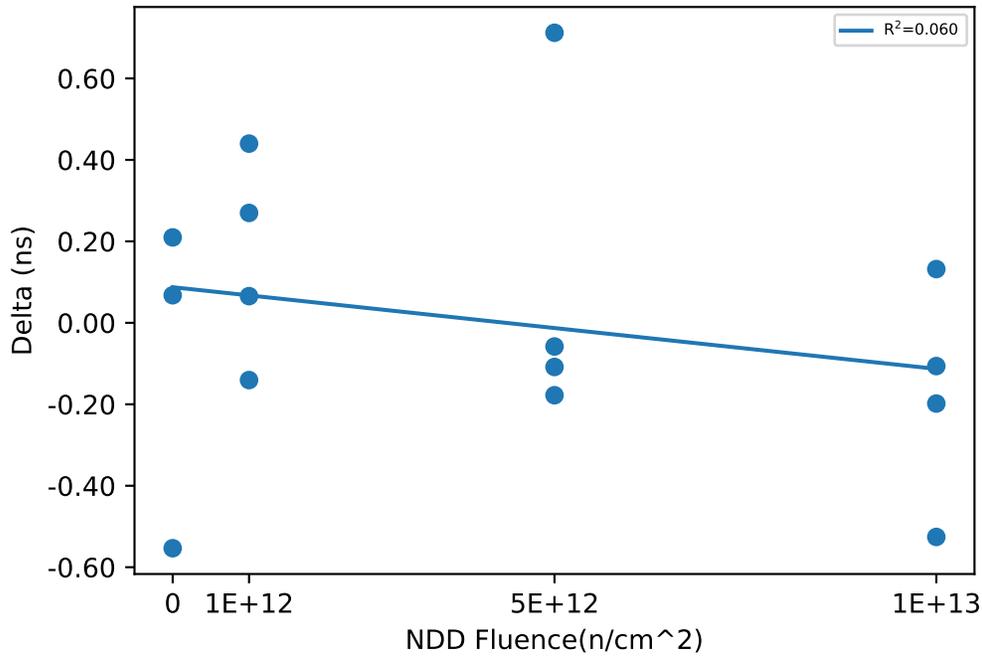
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.595	30.804	0.2097
42	0	CORRELATION	30.417	30.485	0.0677
43	0	CORRELATION	33.381	32.827	-0.5534
51	1e+12	NDD	29.509	29.949	0.44
52	1e+12	NDD	30.48	30.34	-0.1406
53	1e+12	NDD	30.589	30.859	0.2698
54	1e+12	NDD	31.262	31.327	0.0655
55	5e+12	NDD	30.701	31.413	0.7121
56	5e+12	NDD	30.663	30.605	-0.0581
57	5e+12	NDD	29.49	29.382	-0.1084
58	5e+12	NDD	31.829	31.651	-0.1778
59	1e+13	NDD	32.115	31.589	-0.5257
60	1e+13	NDD	32.185	32.317	0.1319
61	1e+13	NDD	31.088	30.89	-0.1982
62	1e+13	NDD	30.518	30.412	-0.1062

## NDD vs Post - Pre Exposure Delta

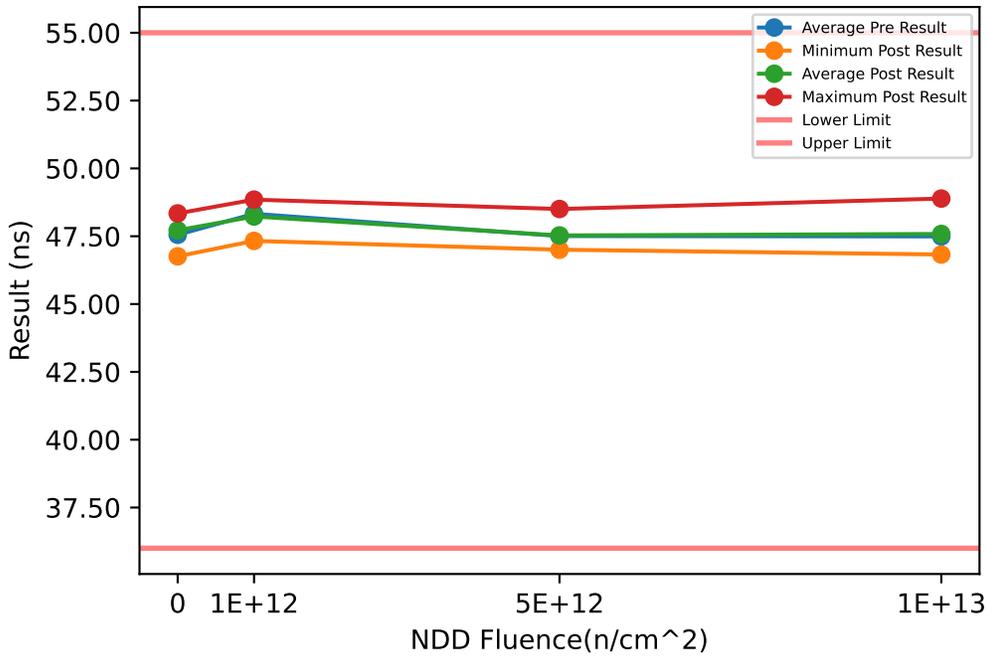


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.417	31.464	33.381	1.6621	30.485	31.372	32.827	1.2702	-0.5534	-0.092	0.2097	0.40584
1e+12	29.509	30.46	31.262	0.72206	29.949	30.619	31.327	0.60168	-0.1406	0.15867	0.44	0.25149
5e+12	29.49	30.671	31.829	0.95494	29.382	30.763	31.651	1.0237	-0.1778	0.09195	0.7121	0.41634
1e+13	30.518	31.477	32.185	0.81237	30.412	31.302	32.317	0.83179	-0.5257	-0.17455	0.1319	0.2723

# Device Test: 19.10 PWM|DEADTIME/GATE/12/10///0MHz/@T\_RHL

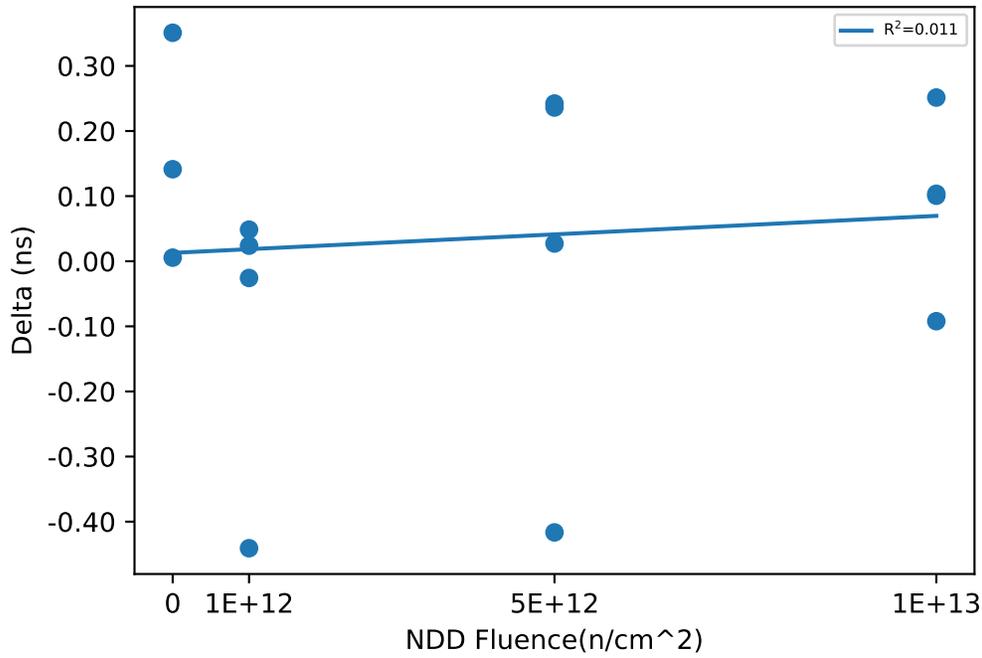
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.754	46.759	0.0055
42	0	CORRELATION	48.2	48.342	0.1413
43	0	CORRELATION	47.706	48.057	0.3509
51	1e+12	NDD	48.777	48.336	-0.4408
52	1e+12	NDD	48.825	48.849	0.0239
53	1e+12	NDD	47.354	47.328	-0.0257
54	1e+12	NDD	48.353	48.401	0.0485
55	5e+12	NDD	47.12	47.147	0.0272
56	5e+12	NDD	47.226	47.462	0.2361
57	5e+12	NDD	48.921	48.504	-0.4165
58	5e+12	NDD	46.762	47.004	0.2422
59	1e+13	NDD	47.693	47.601	-0.0921
60	1e+13	NDD	46.77	47.022	0.2514
61	1e+13	NDD	46.726	46.826	0.1006
62	1e+13	NDD	48.785	48.889	0.1036

## NDD vs Post - Pre Exposure Delta

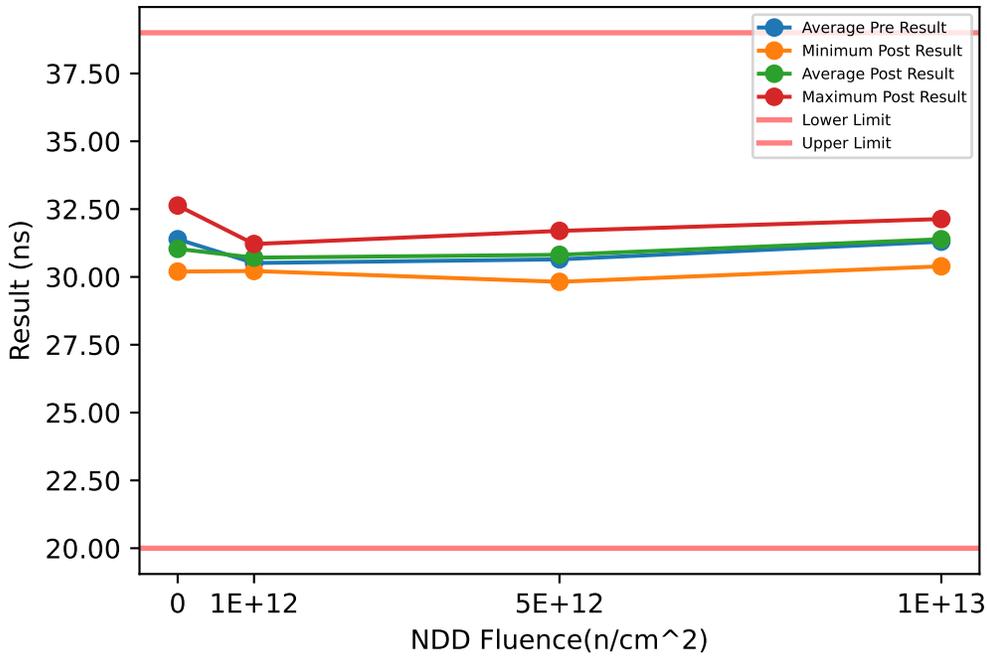


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.754	47.553	48.2	0.73545	46.759	47.719	48.342	0.84373	0.0055	0.1659	0.3509	0.17401
1e+12	47.354	48.327	48.825	0.68248	47.328	48.229	48.849	0.64201	-0.4408	-0.098525	0.0485	0.23026
5e+12	46.762	47.507	48.921	0.96326	47.004	47.529	48.504	0.67763	-0.4165	0.02225	0.2422	0.3091
1e+13	46.726	47.493	48.785	0.96984	46.826	47.584	48.889	0.9299	-0.0921	0.090875	0.2514	0.14084

# Device Test: 19.11 PWM|DEADTIME/GATE/12/10///0.5MHz/@T\_RLH

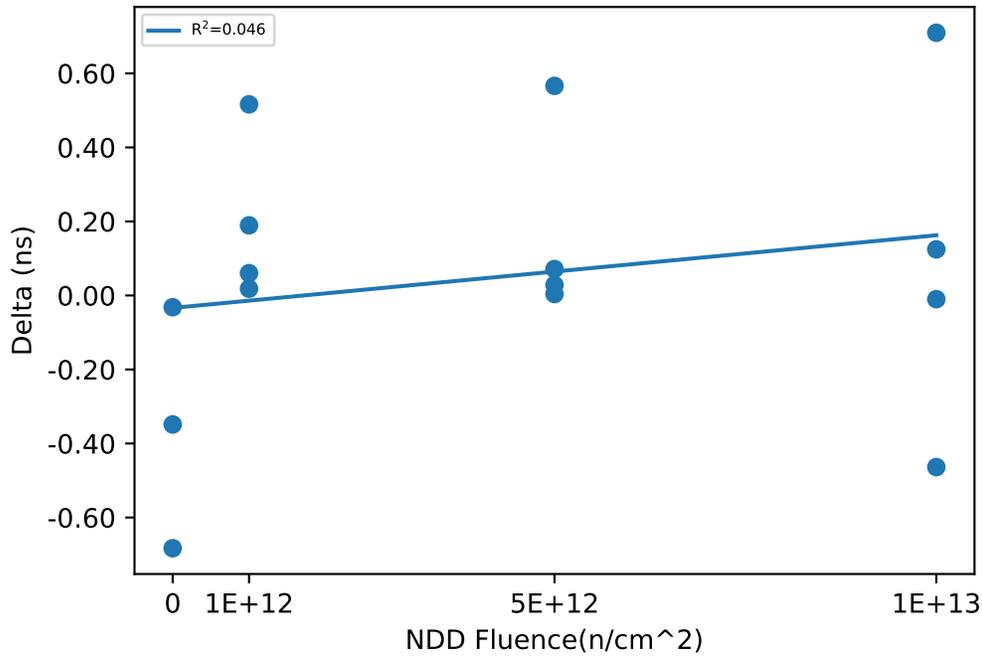
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.546	30.198	-0.3486
42	0	CORRELATION	30.309	30.277	-0.0318
43	0	CORRELATION	33.315	32.632	-0.683
51	1e+12	NDD	30.029	30.219	0.1894
52	1e+12	NDD	30.261	30.279	0.0182
53	1e+12	NDD	30.612	31.128	0.5163
54	1e+12	NDD	31.154	31.214	0.0602
55	5e+12	NDD	31.202	31.206	0.0039
56	5e+12	NDD	30.51	30.538	0.0282
57	5e+12	NDD	29.253	29.819	0.5663
58	5e+12	NDD	31.626	31.698	0.0714
59	1e+13	NDD	32.111	31.648	-0.4638
60	1e+13	NDD	32.145	32.134	-0.0101
61	1e+13	NDD	30.675	31.385	0.7098
62	1e+13	NDD	30.266	30.39	0.1246

## NDD vs Post - Pre Exposure Delta

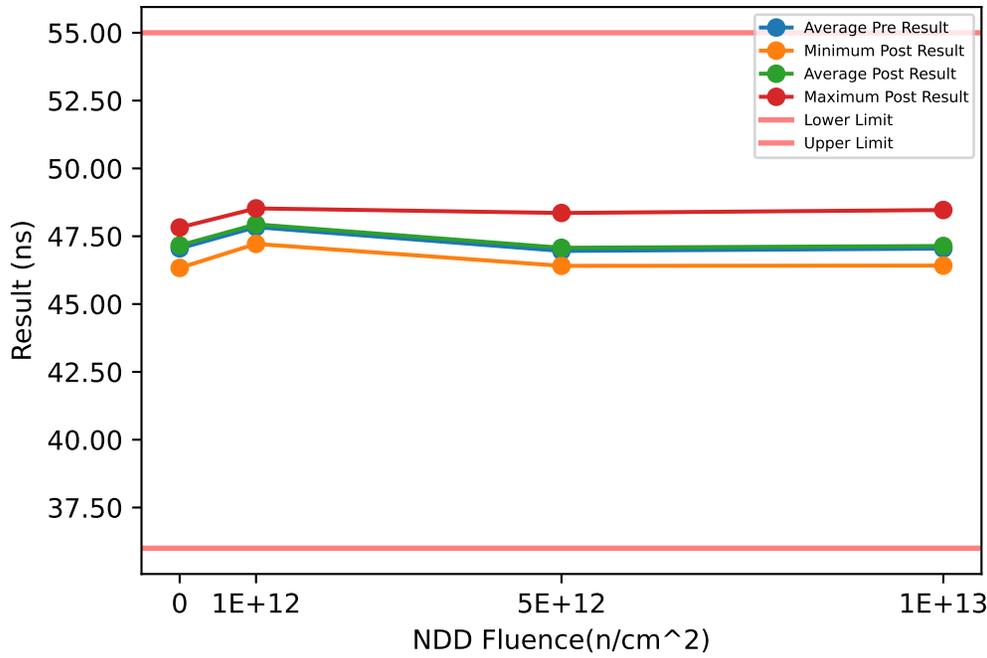


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.309	31.39	33.315	1.6715	30.198	31.036	32.632	1.3833	-0.683	-0.35447	-0.0318	0.32564
1e+12	30.029	30.514	31.154	0.48916	30.219	30.71	31.214	0.53419	0.0182	0.19603	0.5163	0.2256
5e+12	29.253	30.648	31.626	1.0375	29.819	30.815	31.698	0.81648	0.0039	0.16745	0.5663	0.26736
1e+13	30.266	31.299	32.145	0.97152	30.39	31.389	32.134	0.73474	-0.4638	0.090125	0.7098	0.48376

# Device Test: 19.12 PWM|DEADTIME/GATE/12/10///0.5MHz/@T\_RHL

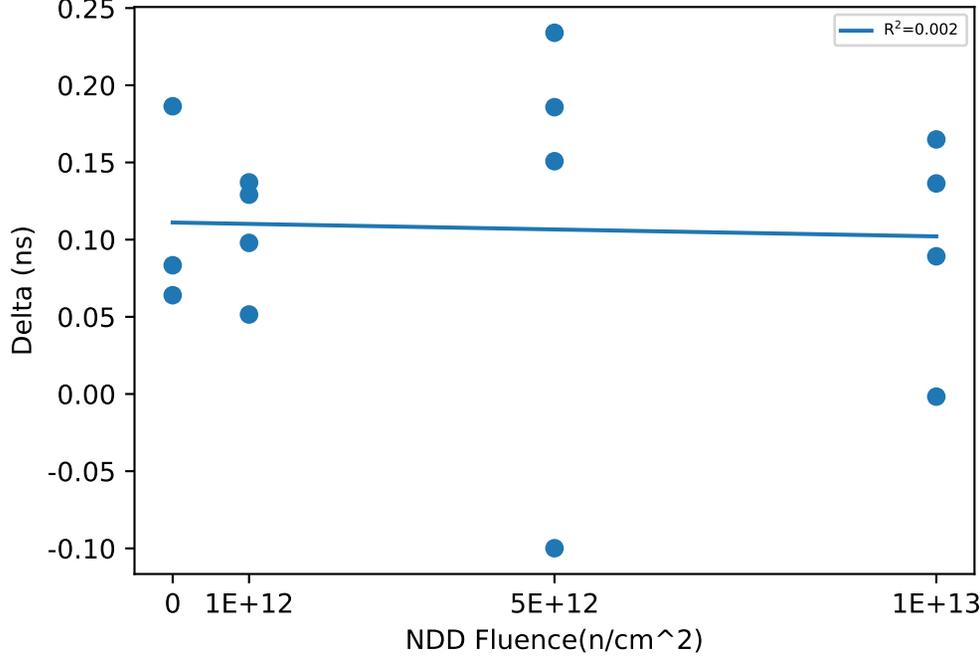
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.267	46.331	0.064
42	0	CORRELATION	47.739	47.822	0.0834
43	0	CORRELATION	47.149	47.335	0.1864
51	1e+12	NDD	48.001	48.13	0.1291
52	1e+12	NDD	48.475	48.527	0.0515
53	1e+12	NDD	47.081	47.218	0.1371
54	1e+12	NDD	47.784	47.882	0.0979
55	5e+12	NDD	46.4	46.634	0.234
56	5e+12	NDD	46.715	46.901	0.1858
57	5e+12	NDD	48.458	48.358	-0.0999
58	5e+12	NDD	46.259	46.409	0.1508
59	1e+13	NDD	46.998	47.134	0.1364
60	1e+13	NDD	46.458	46.548	0.0892
61	1e+13	NDD	46.419	46.418	-0.0017
62	1e+13	NDD	48.302	48.467	0.1649

## NDD vs Post - Pre Exposure Delta

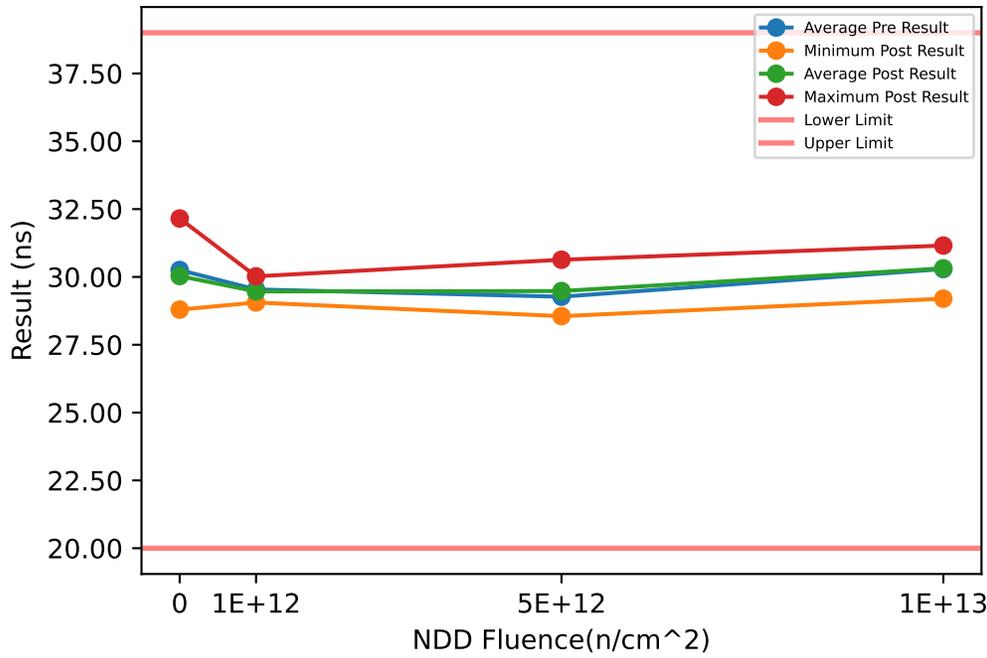


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.267	47.052	47.739	0.74049	46.331	47.163	47.822	0.76018	0.064	0.11127	0.1864	0.065786
1e+12	47.081	47.835	48.475	0.57993	47.218	47.939	48.527	0.54933	0.0515	0.1039	0.1371	0.038812
5e+12	46.259	46.958	48.458	1.0181	46.409	47.075	48.358	0.87832	-0.0999	0.11767	0.234	0.14901
1e+13	46.419	47.044	48.302	0.87894	46.418	47.142	48.467	0.93687	-0.0017	0.0972	0.1649	0.07295

# Device Test: 19.13 PWM|DEADTIME/GATE/12/10///1MHz/@T\_RLH

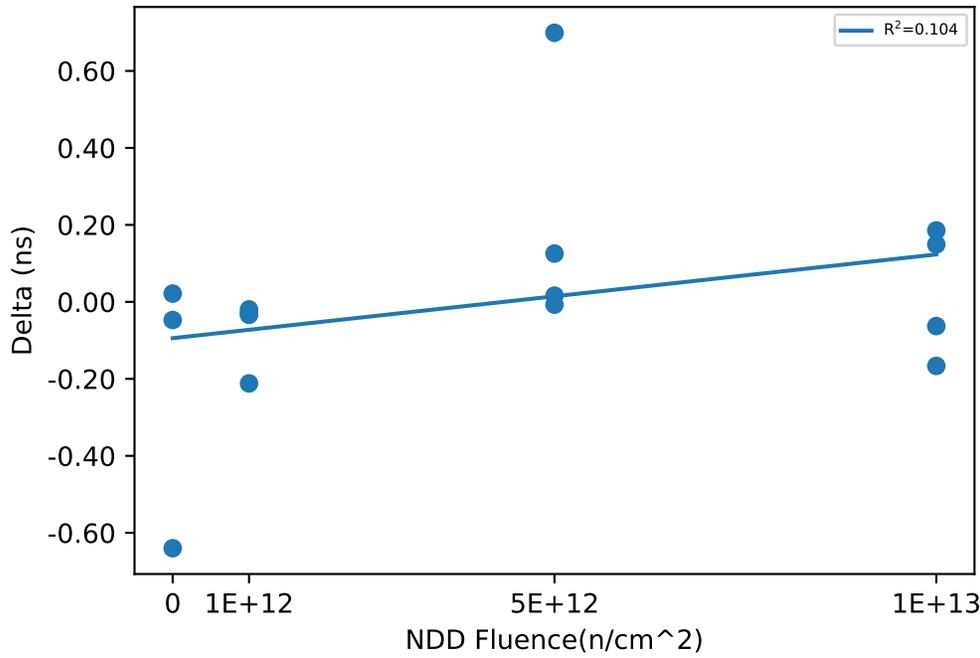
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	29.435	28.795	-0.64
42	0	CORRELATION	29.195	29.147	-0.0471
43	0	CORRELATION	32.133	32.154	0.0215
51	1e+12	NDD	29.088	29.058	-0.0307
52	1e+12	NDD	29.234	29.2	-0.0337
53	1e+12	NDD	29.791	29.579	-0.2118
54	1e+12	NDD	30.041	30.022	-0.0195
55	5e+12	NDD	29.402	29.418	0.0162
56	5e+12	NDD	29.32	29.313	-0.0072
57	5e+12	NDD	27.854	28.553	0.6991
58	5e+12	NDD	30.508	30.634	0.1254
59	1e+13	NDD	30.901	31.087	0.1856
60	1e+13	NDD	31.007	31.156	0.1492
61	1e+13	NDD	29.992	29.826	-0.1664
62	1e+13	NDD	29.261	29.198	-0.0629

## NDD vs Post - Pre Exposure Delta

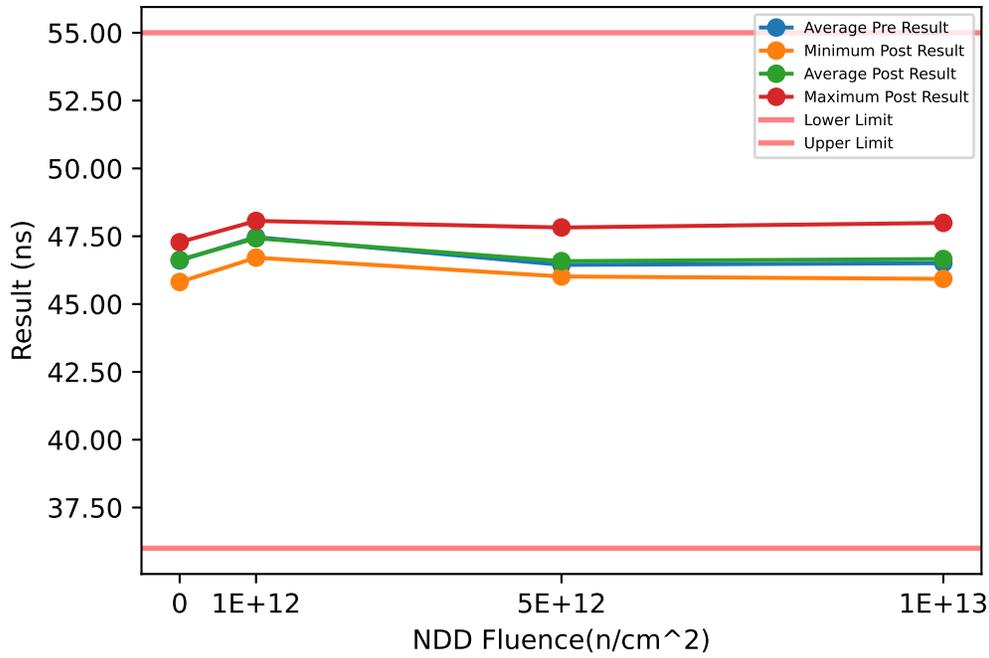


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	29.195	30.254	32.133	1.6315	28.795	30.032	32.154	1.8463	-0.64	-0.22187	0.0215	0.36373
1e+12	29.088	29.539	30.041	0.45171	29.058	29.465	30.022	0.43179	-0.2118	-0.073925	-0.0195	0.09212
5e+12	27.854	29.271	30.508	1.089	28.553	29.48	30.634	0.86049	-0.0072	0.20837	0.6991	0.33221
1e+13	29.261	30.29	31.007	0.82358	29.198	30.317	31.156	0.96431	-0.1664	0.026375	0.1856	0.16889

# Device Test: 19.14 PWM|DEADTIME/GATE/12/10///1MHz/@T\_RHL

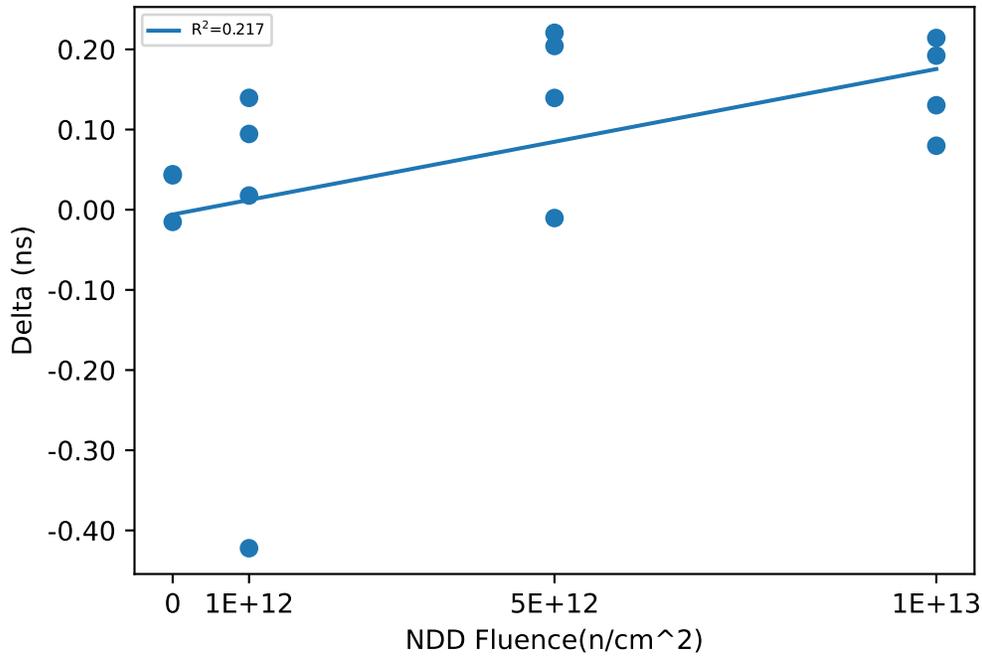
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	45.829	45.813	-0.0152
42	0	CORRELATION	47.236	47.28	0.0443
43	0	CORRELATION	46.757	46.8	0.0429
51	1e+12	NDD	47.437	47.576	0.1395
52	1e+12	NDD	47.971	48.065	0.0945
53	1e+12	NDD	47.132	46.71	-0.4222
54	1e+12	NDD	47.336	47.353	0.0177
55	5e+12	NDD	45.883	46.087	0.2042
56	5e+12	NDD	46.264	46.403	0.1394
57	5e+12	NDD	47.833	47.822	-0.0104
58	5e+12	NDD	45.796	46.017	0.2207
59	1e+13	NDD	46.438	46.63	0.1922
60	1e+13	NDD	45.962	46.093	0.1303
61	1e+13	NDD	45.848	45.928	0.0798
62	1e+13	NDD	47.777	47.991	0.2142

## NDD vs Post - Pre Exposure Delta

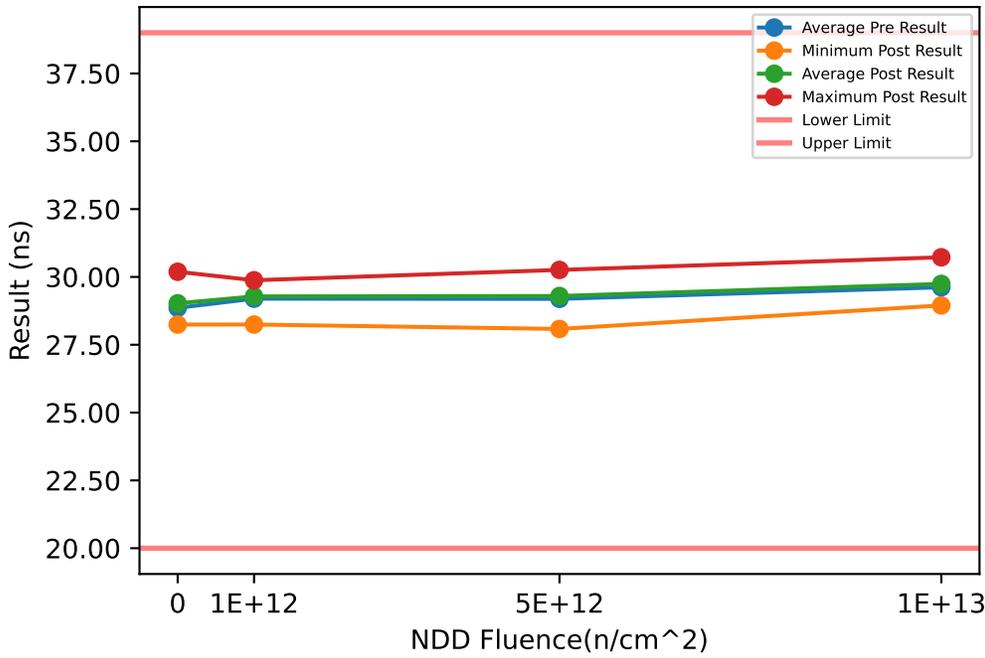


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	45.829	46.607	47.236	0.71534	45.813	46.631	47.28	0.74764	-0.0152	0.024	0.0443	0.033955
1e+12	47.132	47.469	47.971	0.35765	46.71	47.426	48.065	0.56239	-0.4222	-0.042625	0.1395	0.258
5e+12	45.796	46.444	47.833	0.94808	46.017	46.582	47.822	0.84371	-0.0104	0.13847	0.2207	0.10527
1e+13	45.848	46.506	47.777	0.88485	45.928	46.661	47.991	0.93654	0.0798	0.15413	0.2142	0.060966

# Device Test: 19.15 PWM|DEADTIME/GATE/12/10///2MHz/@T\_RLH

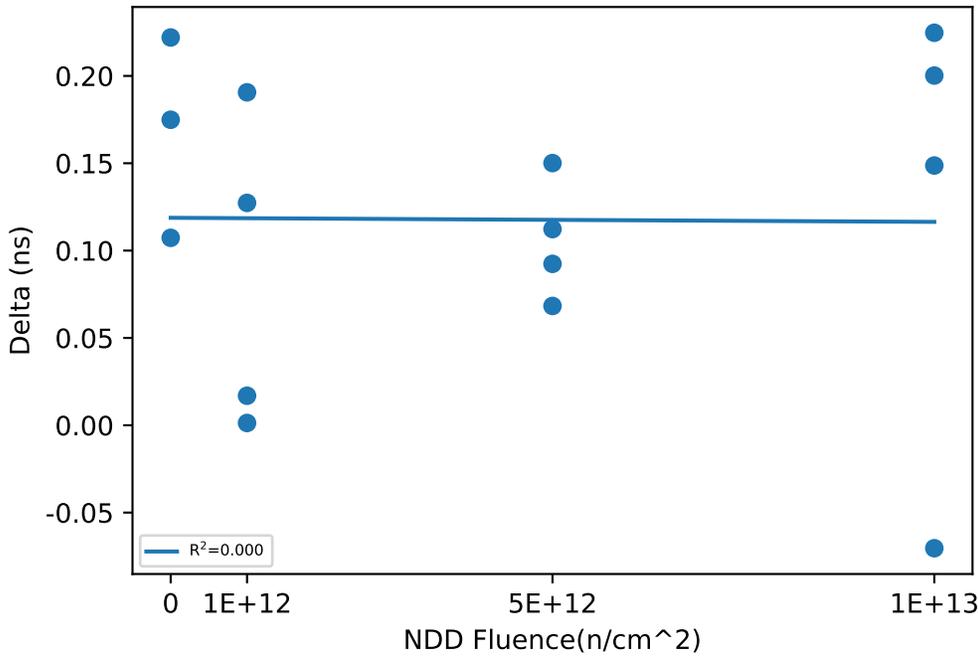
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	28.022	28.244	0.222
42	0	CORRELATION	28.474	28.649	0.1749
43	0	CORRELATION	30.083	30.191	0.1073
51	1e+12	NDD	28.055	28.245	0.1906
52	1e+12	NDD	29.363	29.364	0.0013
53	1e+12	NDD	29.514	29.641	0.1273
54	1e+12	NDD	29.86	29.877	0.0169
55	5e+12	NDD	29.664	29.776	0.1123
56	5e+12	NDD	29.005	29.073	0.0683
57	5e+12	NDD	27.932	28.082	0.1501
58	5e+12	NDD	30.166	30.258	0.0924
59	1e+13	NDD	29.755	29.98	0.2247
60	1e+13	NDD	30.575	30.724	0.1487
61	1e+13	NDD	29.12	29.32	0.2002
62	1e+13	NDD	29.02	28.949	-0.0704

## NDD vs Post - Pre Exposure Delta

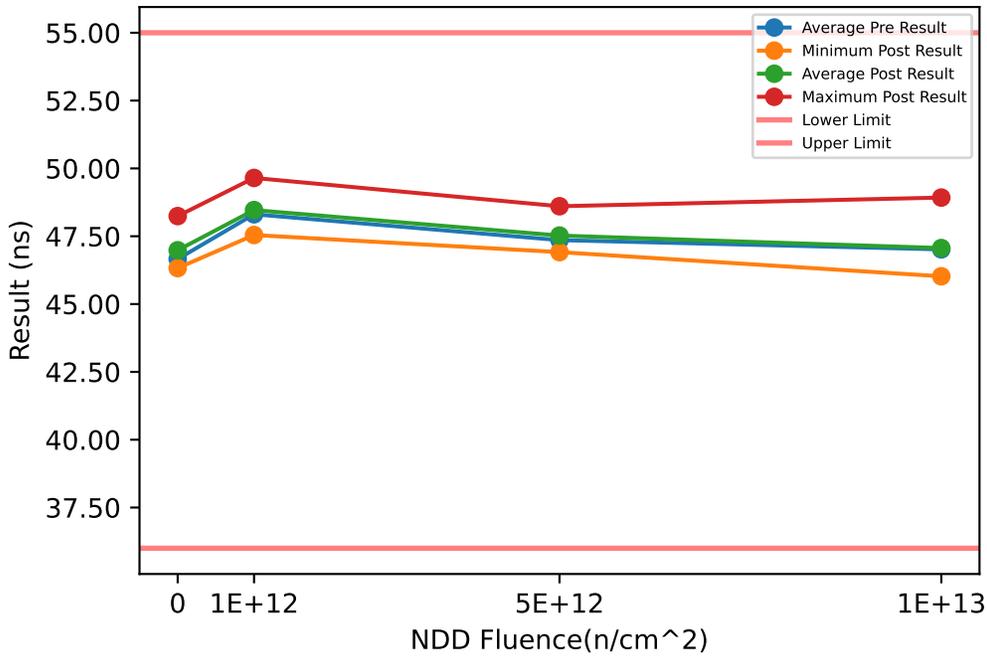


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	28.022	28.86	30.083	1.0834	28.244	29.028	30.191	1.0271	0.1073	0.16807	0.222	0.057655
1e+12	28.055	29.198	29.86	0.79017	28.245	29.282	29.877	0.72229	0.0013	0.084025	0.1906	0.090517
5e+12	27.932	29.192	30.166	0.96495	28.082	29.297	30.258	0.94506	0.0683	0.10578	0.1501	0.034596
1e+13	29.02	29.618	30.575	0.71657	28.949	29.743	30.724	0.78026	-0.0704	0.1258	0.2247	0.13458

# Device Test: 19.16 PWM|DEADTIME/GATE/12/10///2MHz/@T\_RHL

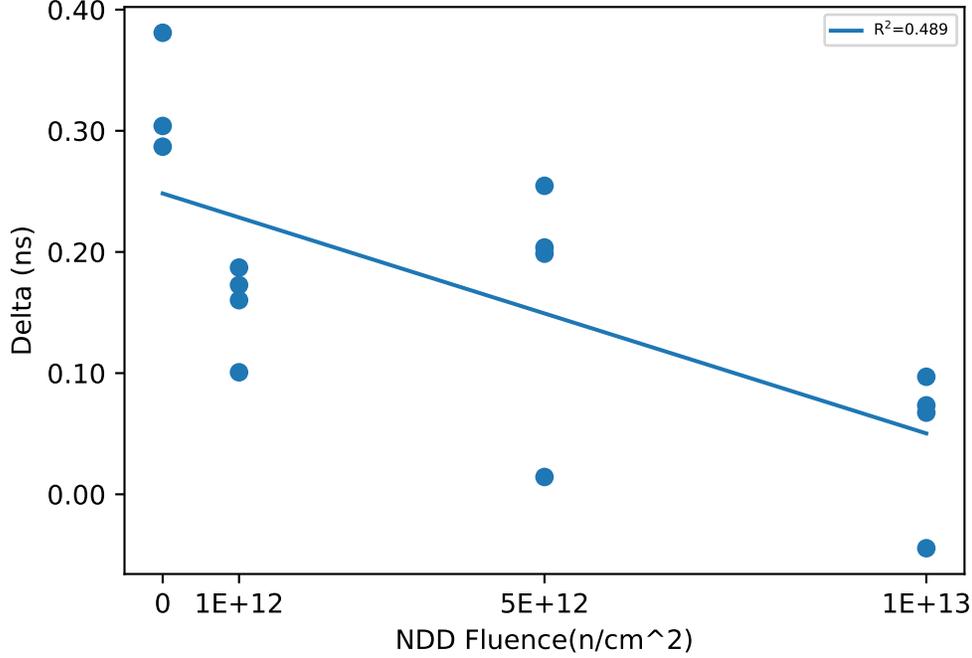
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	45.999	46.38	0.3809
42	0	CORRELATION	47.956	48.243	0.2869
43	0	CORRELATION	46.022	46.325	0.304
51	1e+12	NDD	47.918	48.09	0.1727
52	1e+12	NDD	49.489	49.65	0.1602
53	1e+12	NDD	47.358	47.545	0.1871
54	1e+12	NDD	48.473	48.574	0.1007
55	5e+12	NDD	46.716	46.915	0.1986
56	5e+12	NDD	47.082	47.336	0.2546
57	5e+12	NDD	48.592	48.606	0.0143
58	5e+12	NDD	47.038	47.242	0.2037
59	1e+13	NDD	46.526	46.593	0.0674
60	1e+13	NDD	46.618	46.715	0.097
61	1e+13	NDD	45.95	46.023	0.0734
62	1e+13	NDD	48.97	48.925	-0.0445

## NDD vs Post - Pre Exposure Delta

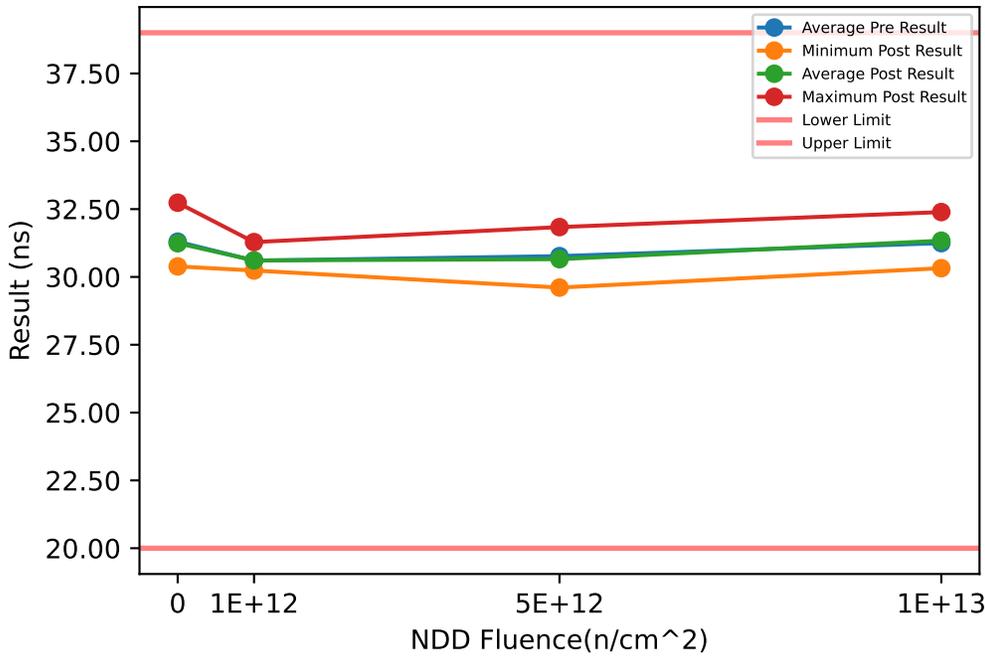


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	45.999	46.659	47.956	1.1235	46.325	46.983	48.243	1.0917	0.2869	0.32393	0.3809	0.05007
1e+12	47.358	48.309	49.489	0.90882	47.545	48.465	49.65	0.89475	0.1007	0.15517	0.1871	0.037943
5e+12	46.716	47.357	48.592	0.83911	46.915	47.525	48.606	0.74307	0.0143	0.1678	0.2546	0.10541
1e+13	45.95	47.016	48.97	1.3357	46.023	47.064	48.925	1.2768	-0.0445	0.048325	0.097	0.063188

# Device Test: 19.17 PWM|DEADTIME/GATE/14/14///0MHz/@T\_RLH

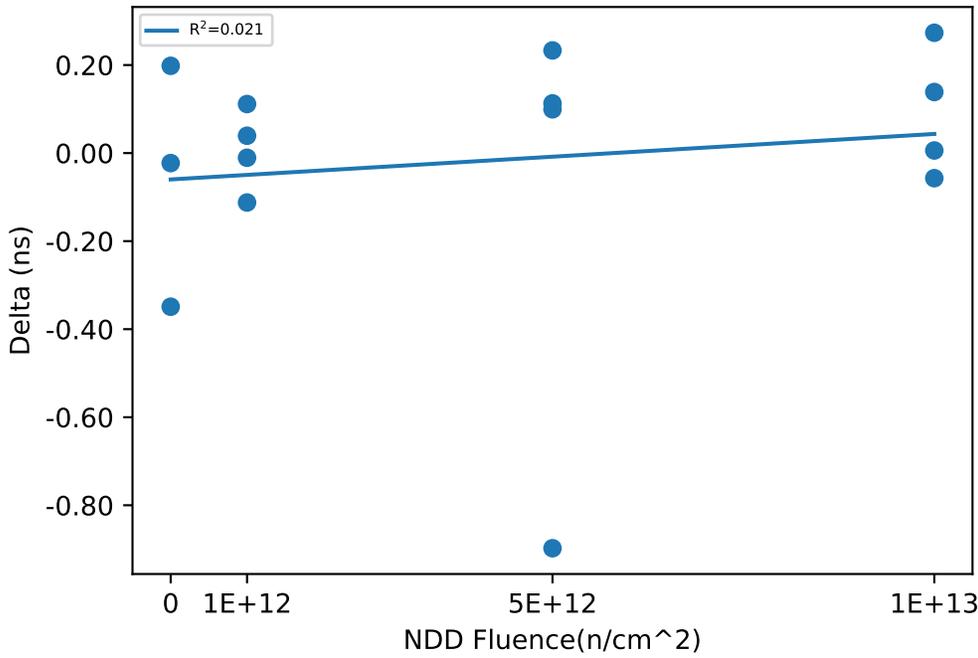
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.406	30.604	0.1982
42	0	CORRELATION	30.41	30.387	-0.0227
43	0	CORRELATION	33.084	32.736	-0.349
51	1e+12	NDD	30.125	30.236	0.1114
52	1e+12	NDD	30.34	30.329	-0.0106
53	1e+12	NDD	30.696	30.584	-0.1123
54	1e+12	NDD	31.245	31.284	0.0394
55	5e+12	NDD	31.425	30.528	-0.8976
56	5e+12	NDD	30.545	30.645	0.0994
57	5e+12	NDD	29.495	29.608	0.1129
58	5e+12	NDD	31.605	31.838	0.2332
59	1e+13	NDD	31.681	31.687	0.0059
60	1e+13	NDD	32.252	32.391	0.1387
61	1e+13	NDD	30.672	30.945	0.2733
62	1e+13	NDD	30.379	30.322	-0.057

## NDD vs Post - Pre Exposure Delta

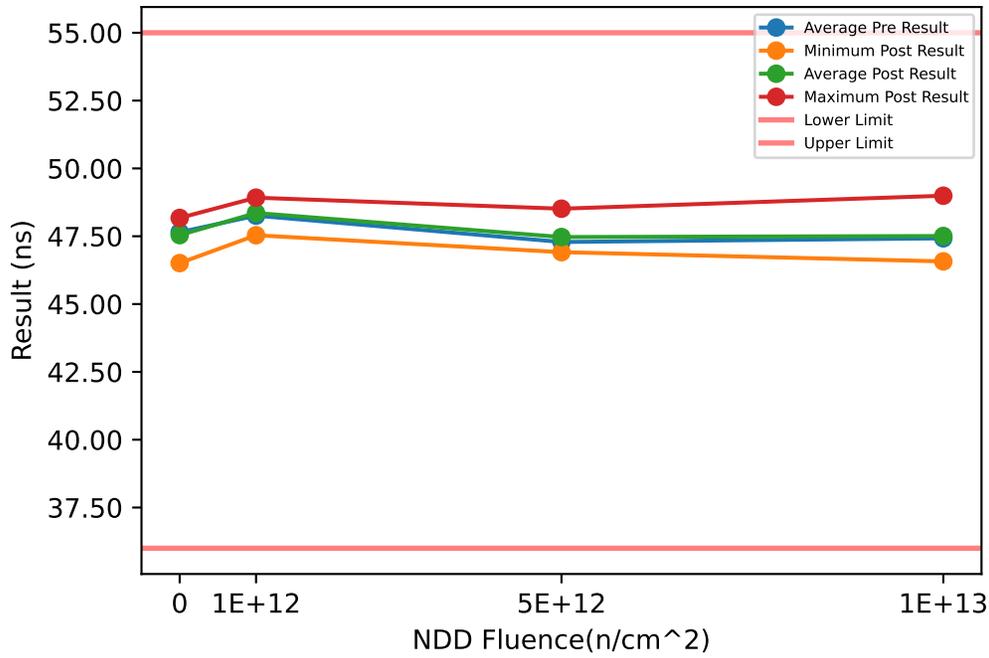


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.406	31.3	33.084	1.5453	30.387	31.242	32.736	1.2977	-0.349	-0.057833	0.1982	0.27529
1e+12	30.125	30.601	31.245	0.48924	30.236	30.608	31.284	0.47376	-0.1123	0.006975	0.1114	0.093971
5e+12	29.495	30.767	31.605	0.96669	29.608	30.654	31.838	0.9152	-0.8976	-0.11302	0.2332	0.5265
1e+13	30.379	31.246	32.252	0.87241	30.322	31.336	32.391	0.89766	-0.057	0.090225	0.2733	0.1468

# Device Test: 19.18 PWM|DEADTIME/GATE/14/14///0MHz/@T\_RHL

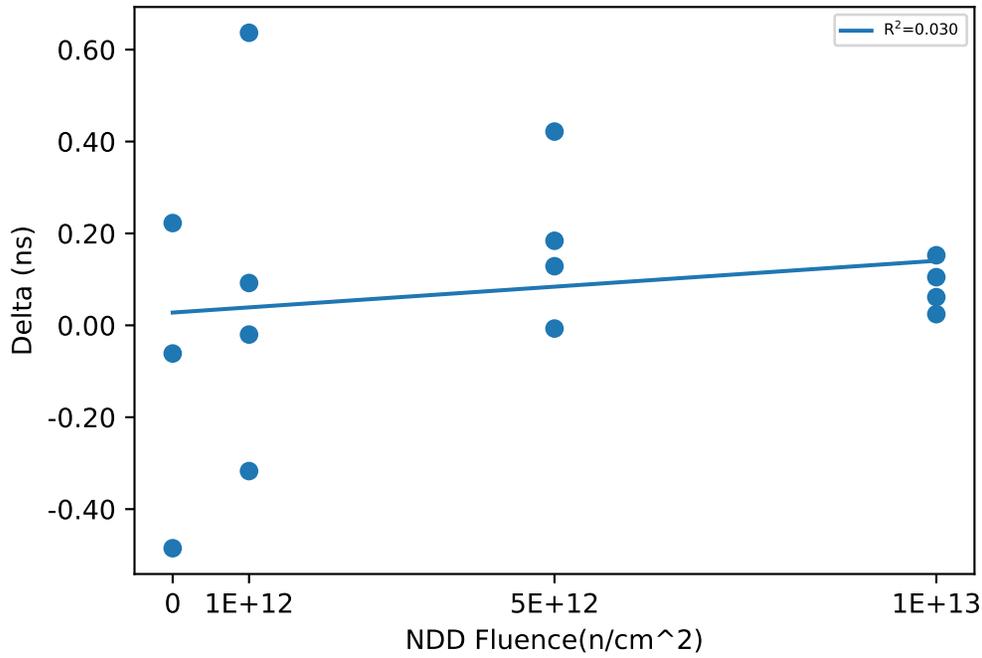
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.996	46.511	-0.4851
42	0	CORRELATION	48.236	48.174	-0.0613
43	0	CORRELATION	47.719	47.941	0.2226
51	1e+12	NDD	47.987	48.624	0.6367
52	1e+12	NDD	48.83	48.922	0.0921
53	1e+12	NDD	47.854	47.536	-0.3172
54	1e+12	NDD	48.363	48.343	-0.0201
55	5e+12	NDD	46.632	47.054	0.4217
56	5e+12	NDD	47.27	47.399	0.1286
57	5e+12	NDD	48.522	48.515	-0.007
58	5e+12	NDD	46.729	46.913	0.184
59	1e+13	NDD	47.418	47.479	0.0613
60	1e+13	NDD	46.885	46.989	0.1048
61	1e+13	NDD	46.548	46.572	0.0243
62	1e+13	NDD	48.841	48.993	0.1525

## NDD vs Post - Pre Exposure Delta

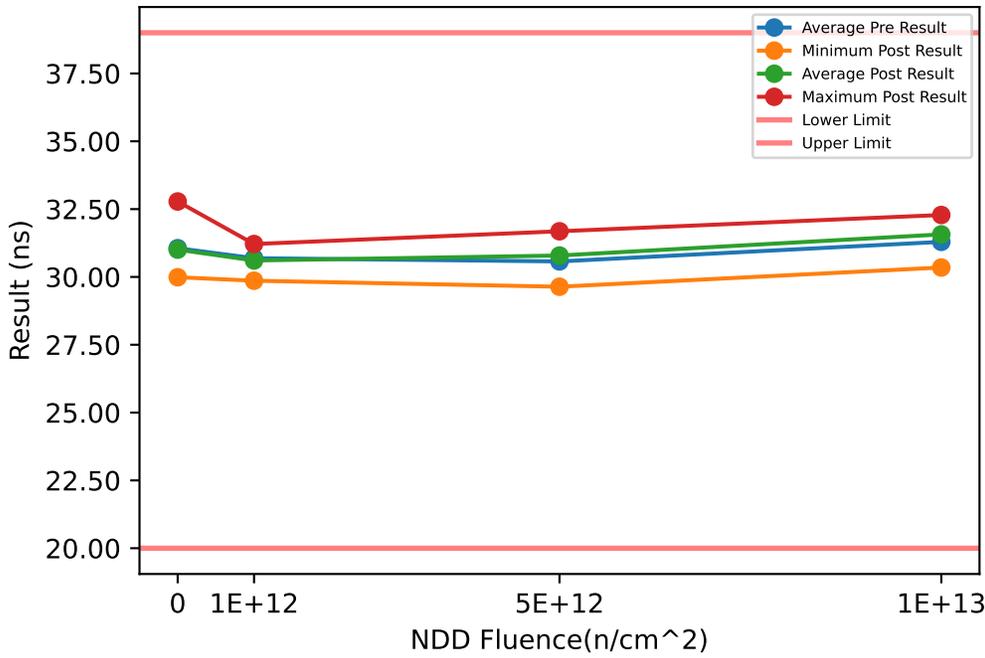


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.996	47.65	48.236	0.6229	46.511	47.542	48.174	0.90096	-0.4851	-0.10793	0.2226	0.35615
1e+12	47.854	48.258	48.83	0.43764	47.536	48.356	48.922	0.59553	-0.3172	0.097875	0.6367	0.39857
5e+12	46.632	47.288	48.522	0.86901	46.913	47.47	48.515	0.72579	-0.007	0.18183	0.4217	0.17892
1e+13	46.548	47.423	48.841	1.0109	46.572	47.509	48.993	1.057	0.0243	0.085725	0.1525	0.055355

# Device Test: 19.19 PWM|DEADTIME/GATE/14/14///0.5MHz/@T\_RLH

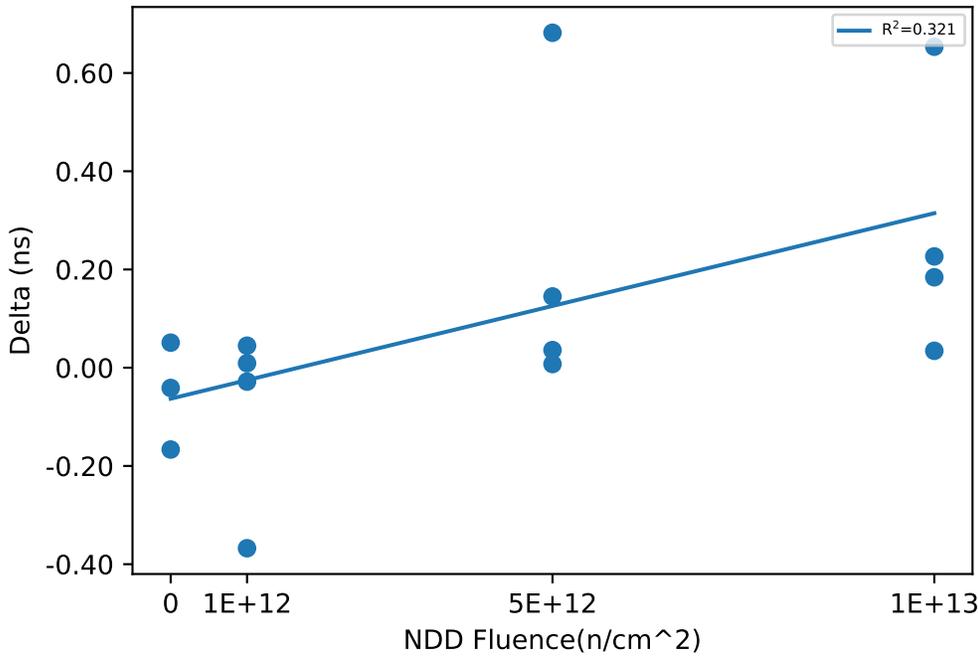
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.155	29.988	-0.1666
42	0	CORRELATION	30.292	30.251	-0.0412
43	0	CORRELATION	32.73	32.781	0.051
51	1e+12	NDD	30.228	29.861	-0.3675
52	1e+12	NDD	30.28	30.252	-0.0283
53	1e+12	NDD	31.054	31.099	0.0448
54	1e+12	NDD	31.204	31.213	0.0092
55	5e+12	NDD	30.584	31.266	0.6819
56	5e+12	NDD	30.423	30.569	0.1451
57	5e+12	NDD	29.631	29.638	0.0075
58	5e+12	NDD	31.647	31.683	0.0359
59	1e+13	NDD	31.63	32.284	0.6535
60	1e+13	NDD	32.018	32.245	0.2266
61	1e+13	NDD	31.212	31.396	0.1841
62	1e+13	NDD	30.313	30.347	0.0344

## NDD vs Post - Pre Exposure Delta

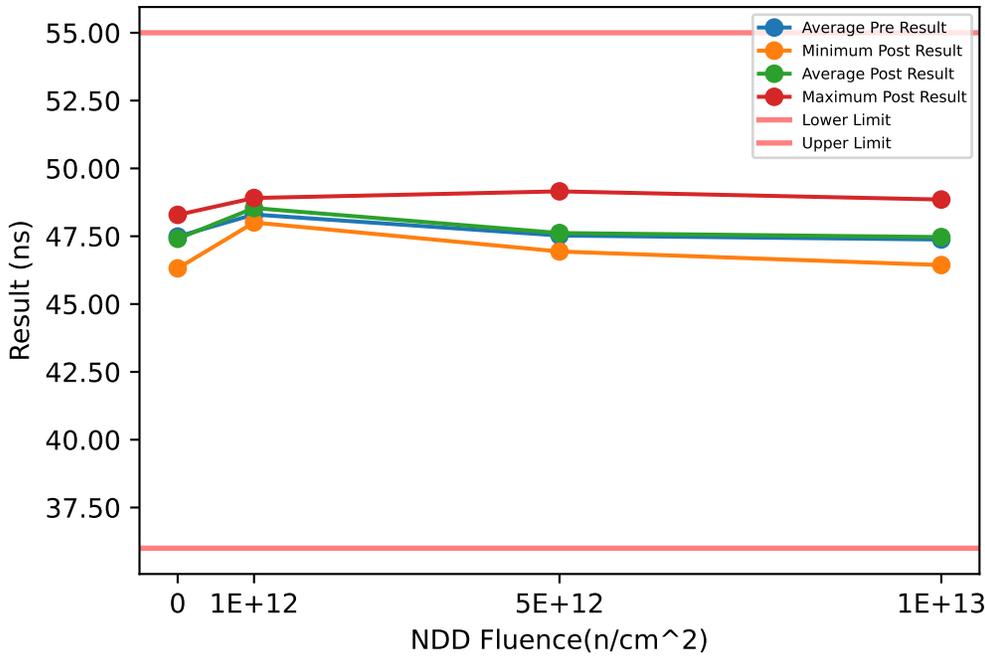


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.155	31.059	32.73	1.4485	29.988	31.007	32.781	1.5419	-0.1666	-0.052267	0.051	0.10922
1e+12	30.228	30.692	31.204	0.50922	29.861	30.606	31.213	0.65639	-0.3675	-0.08545	0.0448	0.19039
5e+12	29.631	30.571	31.647	0.82932	29.638	30.789	31.683	0.89428	0.0075	0.2176	0.6819	0.31517
1e+13	30.313	31.293	32.018	0.73193	30.347	31.568	32.284	0.91113	0.0344	0.27465	0.6535	0.26568

# Device Test: 19.2 PWM|DEADTIME/GATE/10/8///0MHz/@T\_RHL

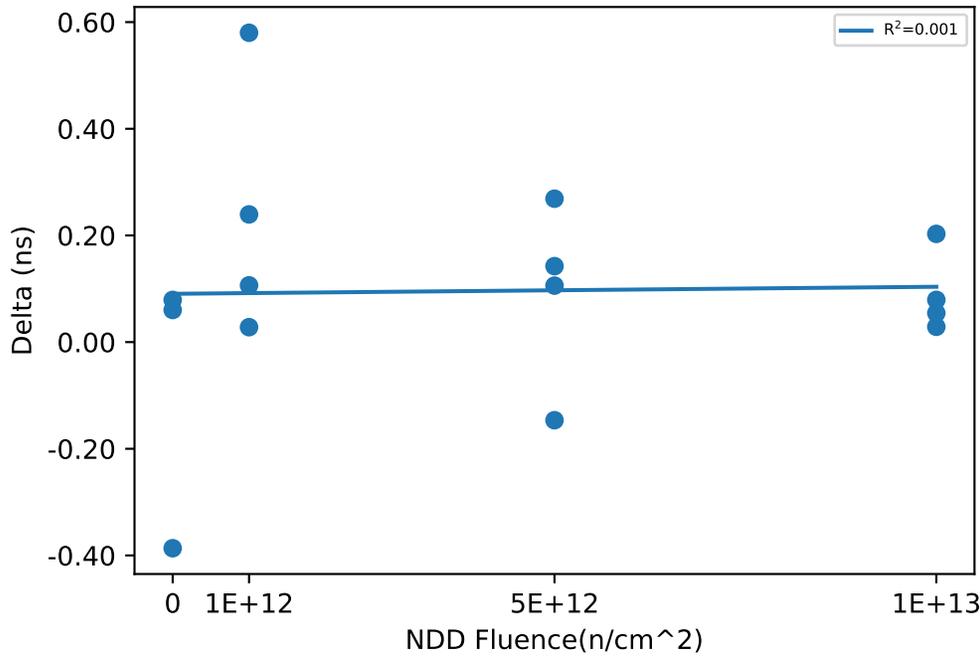
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.702	46.315	-0.3865
42	0	CORRELATION	48.209	48.288	0.0791
43	0	CORRELATION	47.555	47.615	0.0602
51	1e+12	NDD	48.621	48.86	0.2394
52	1e+12	NDD	48.882	48.91	0.028
53	1e+12	NDD	47.427	48.007	0.58
54	1e+12	NDD	48.273	48.38	0.1064
55	5e+12	NDD	46.705	46.974	0.2689
56	5e+12	NDD	47.303	47.409	0.1059
57	5e+12	NDD	49.301	49.155	-0.1465
58	5e+12	NDD	46.795	46.937	0.1424
59	1e+13	NDD	47.418	47.497	0.0792
60	1e+13	NDD	46.889	47.092	0.2029
61	1e+13	NDD	46.383	46.437	0.0544
62	1e+13	NDD	48.824	48.853	0.0287

## NDD vs Post - Pre Exposure Delta

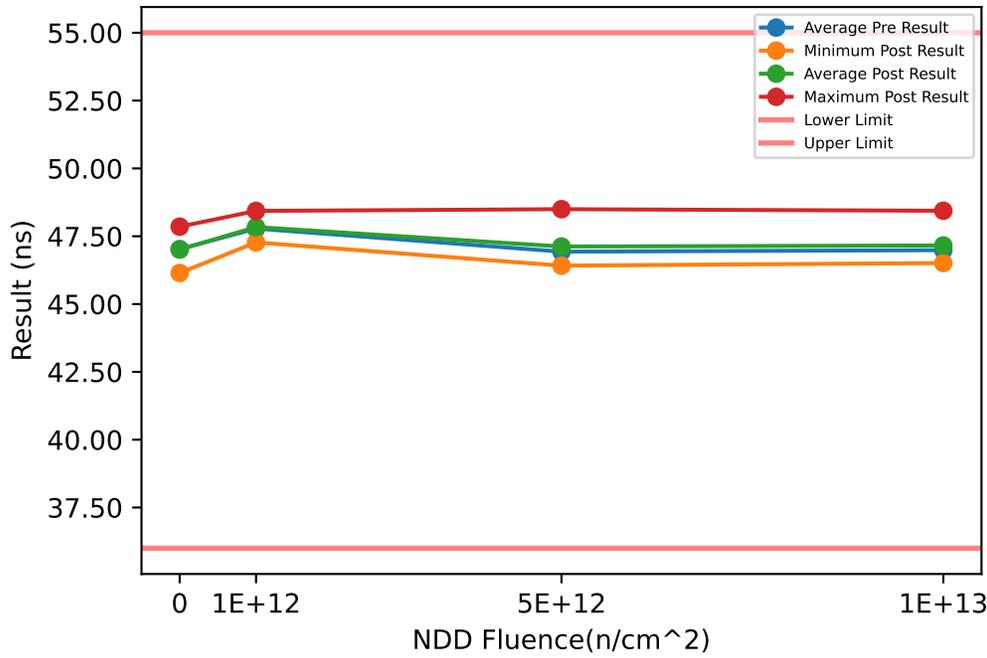


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.702	47.489	48.209	0.75565	46.315	47.406	48.288	1.0027	-0.3865	-0.0824	0.0791	0.26353
1e+12	47.427	48.301	48.882	0.63373	48.007	48.539	48.91	0.42798	0.028	0.23845	0.58	0.24385
5e+12	46.705	47.526	49.301	1.2123	46.937	47.619	49.155	1.046	-0.1465	0.092675	0.2689	0.17408
1e+13	46.383	47.379	48.824	1.0524	46.437	47.47	48.853	1.0203	0.0287	0.0913	0.2029	0.077204

# Device Test: 19.20 PWM|DEADTIME/GATE/14/14///0.5MHz/@T\_RHL

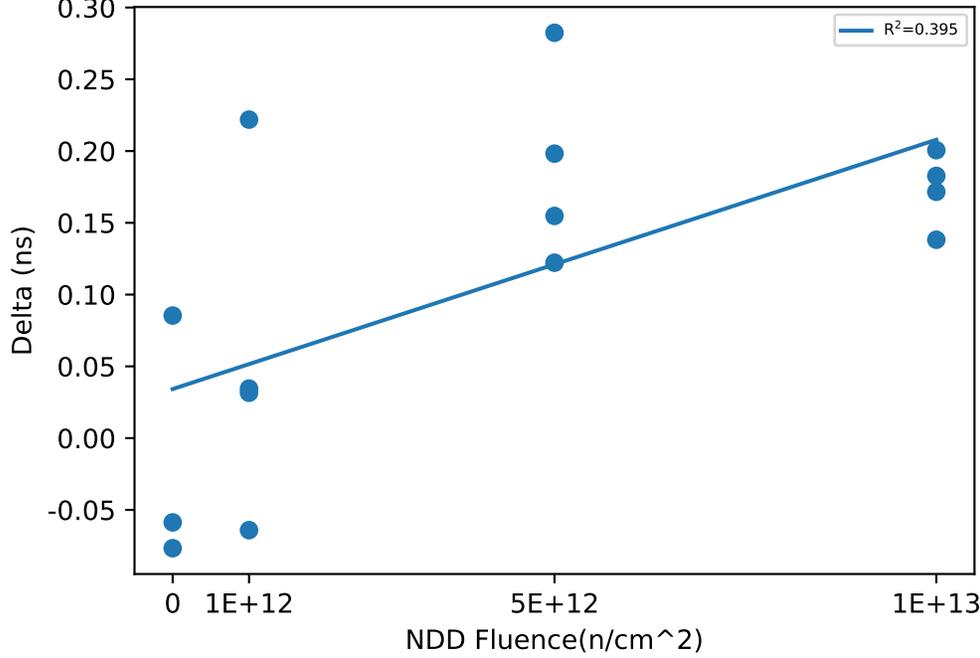
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.222	46.146	-0.0767
42	0	CORRELATION	47.767	47.853	0.0854
43	0	CORRELATION	47.084	47.026	-0.0587
51	1e+12	NDD	47.872	47.808	-0.0641
52	1e+12	NDD	48.4	48.434	0.0345
53	1e+12	NDD	47.052	47.273	0.2219
54	1e+12	NDD	47.808	47.839	0.0316
55	5e+12	NDD	46.488	46.643	0.1548
56	5e+12	NDD	46.731	46.929	0.1982
57	5e+12	NDD	48.215	48.497	0.2824
58	5e+12	NDD	46.294	46.416	0.1222
59	1e+13	NDD	46.96	47.131	0.1716
60	1e+13	NDD	46.417	46.555	0.1382
61	1e+13	NDD	46.312	46.513	0.2006
62	1e+13	NDD	48.257	48.439	0.1827

## NDD vs Post - Pre Exposure Delta

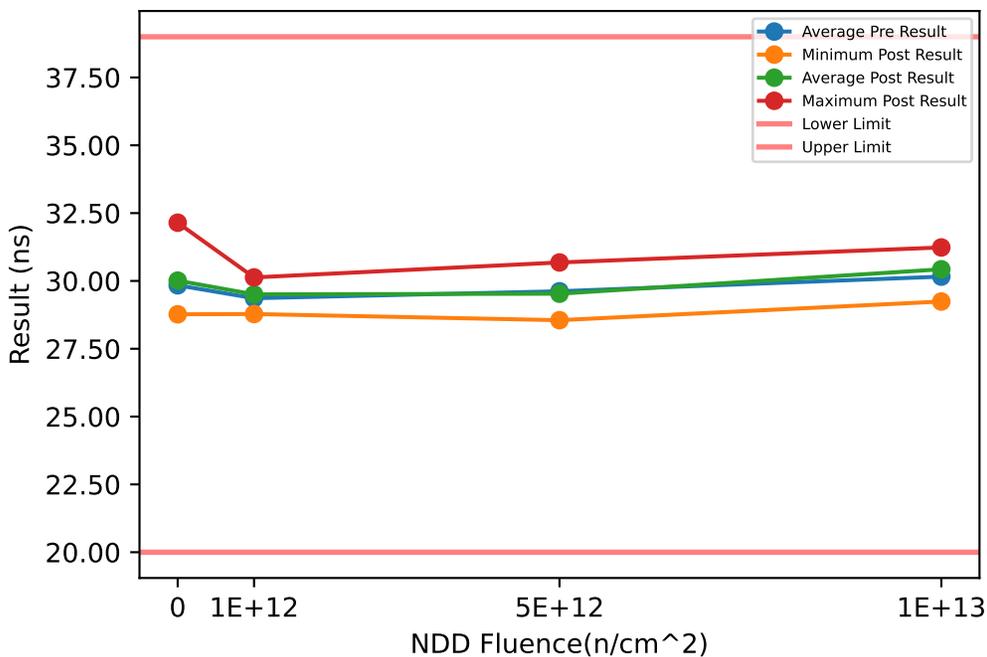


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.222	47.025	47.767	0.77423	46.146	47.008	47.853	0.85369	-0.0767	-0.016667	0.0854	0.088849
1e+12	47.052	47.783	48.4	0.55491	47.273	47.839	48.434	0.47435	-0.0641	0.055975	0.2219	0.11973
5e+12	46.294	46.932	48.215	0.87384	46.416	47.121	48.497	0.94107	0.1222	0.1894	0.2824	0.069377
1e+13	46.312	46.986	48.257	0.89296	46.513	47.16	48.439	0.89839	0.1382	0.17327	0.2006	0.026259

# Device Test: 19.21 PWM|DEADTIME/GATE/14/14///1MHz/@T\_RLH

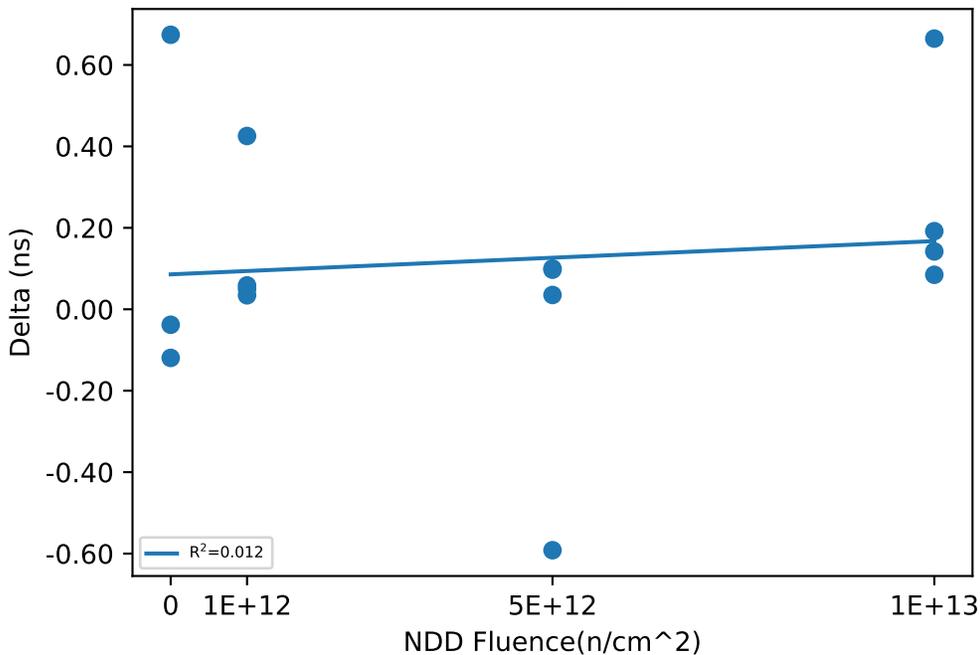
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	28.89	28.77	-0.1194
42	0	CORRELATION	29.155	29.117	-0.038
43	0	CORRELATION	31.472	32.146	0.6741
51	1e+12	NDD	28.354	28.78	0.4255
52	1e+12	NDD	29.155	29.189	0.0343
53	1e+12	NDD	29.863	29.922	0.0586
54	1e+12	NDD	30.079	30.129	0.0497
55	5e+12	NDD	30.068	29.476	-0.5917
56	5e+12	NDD	29.371	29.406	0.0351
57	5e+12	NDD	28.456	28.553	0.0972
58	5e+12	NDD	30.58	30.68	0.1002
59	1e+13	NDD	30.897	31.039	0.142
60	1e+13	NDD	31.042	31.234	0.1918
61	1e+13	NDD	29.539	30.203	0.6647
62	1e+13	NDD	29.156	29.241	0.0847

## NDD vs Post - Pre Exposure Delta

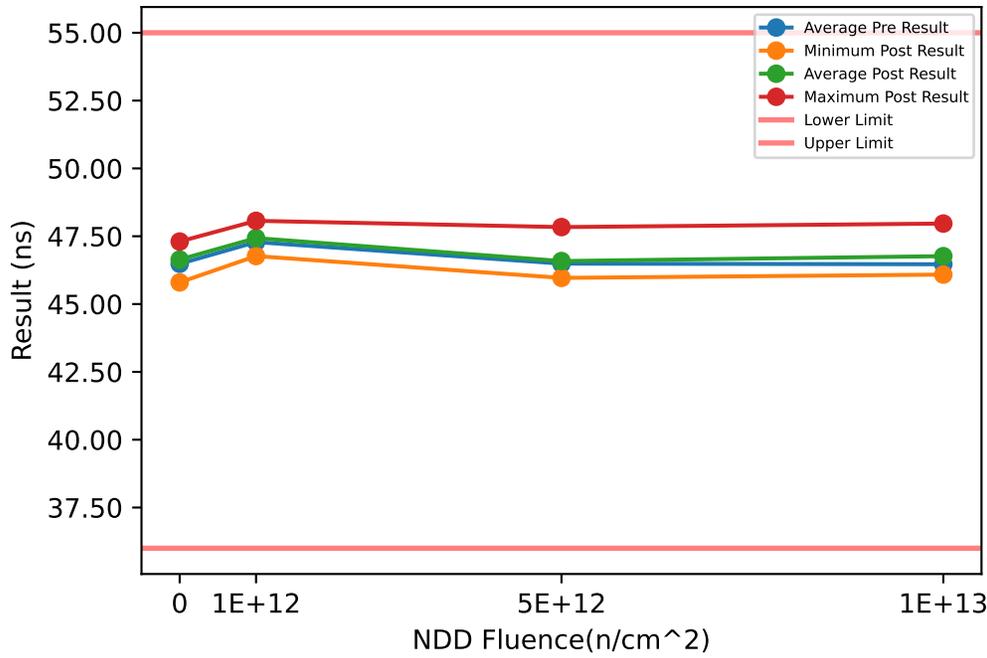


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	28.89	29.839	31.472	1.4206	28.77	30.011	32.146	1.8571	-0.1194	0.17223	0.6741	0.43653
1e+12	28.354	29.363	30.079	0.77976	28.78	29.505	30.129	0.62947	0.0343	0.14203	0.4255	0.18925
5e+12	28.456	29.619	30.58	0.92018	28.553	29.529	30.68	0.87492	-0.5917	-0.0898	0.1002	0.33594
1e+13	29.156	30.158	31.042	0.95144	29.241	30.429	31.234	0.90983	0.0847	0.2708	0.6647	0.26622

# Device Test: 19.22 PWM|DEADTIME/GATE/14/14///1MHz/@T\_RHL

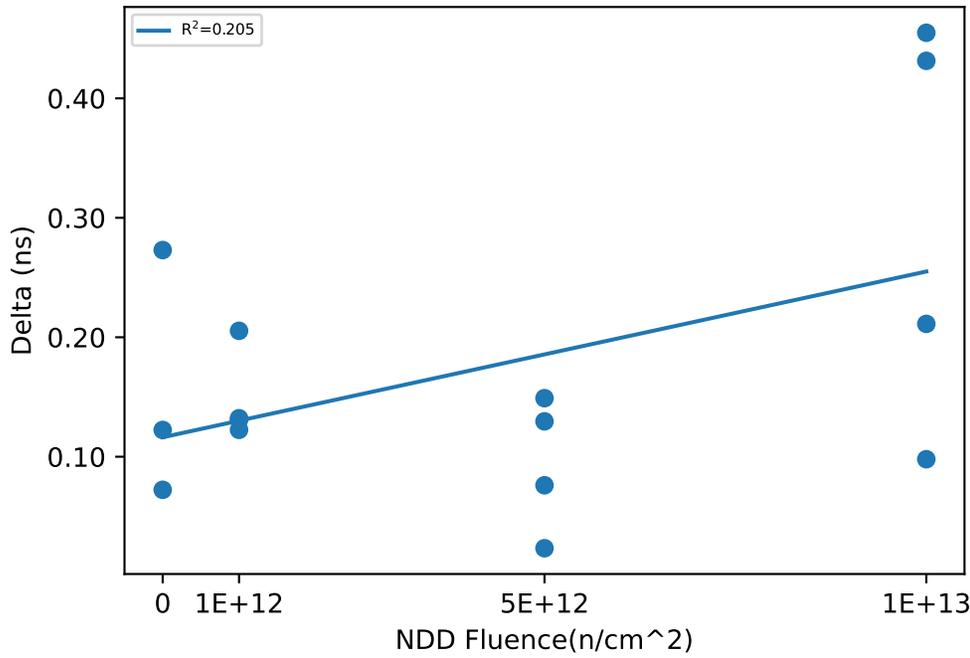
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	45.727	45.799	0.0723
42	0	CORRELATION	47.182	47.304	0.1224
43	0	CORRELATION	46.544	46.817	0.273
51	1e+12	NDD	47.389	47.52	0.1309
52	1e+12	NDD	47.937	48.069	0.1322
53	1e+12	NDD	46.564	46.769	0.2054
54	1e+12	NDD	47.248	47.371	0.1225
55	5e+12	NDD	46.029	46.105	0.0761
56	5e+12	NDD	46.304	46.433	0.1296
57	5e+12	NDD	47.814	47.837	0.0234
58	5e+12	NDD	45.816	45.965	0.149
59	1e+13	NDD	46.372	46.803	0.4314
60	1e+13	NDD	45.988	46.086	0.0979
61	1e+13	NDD	45.752	46.207	0.4549
62	1e+13	NDD	47.756	47.967	0.2112

## NDD vs Post - Pre Exposure Delta

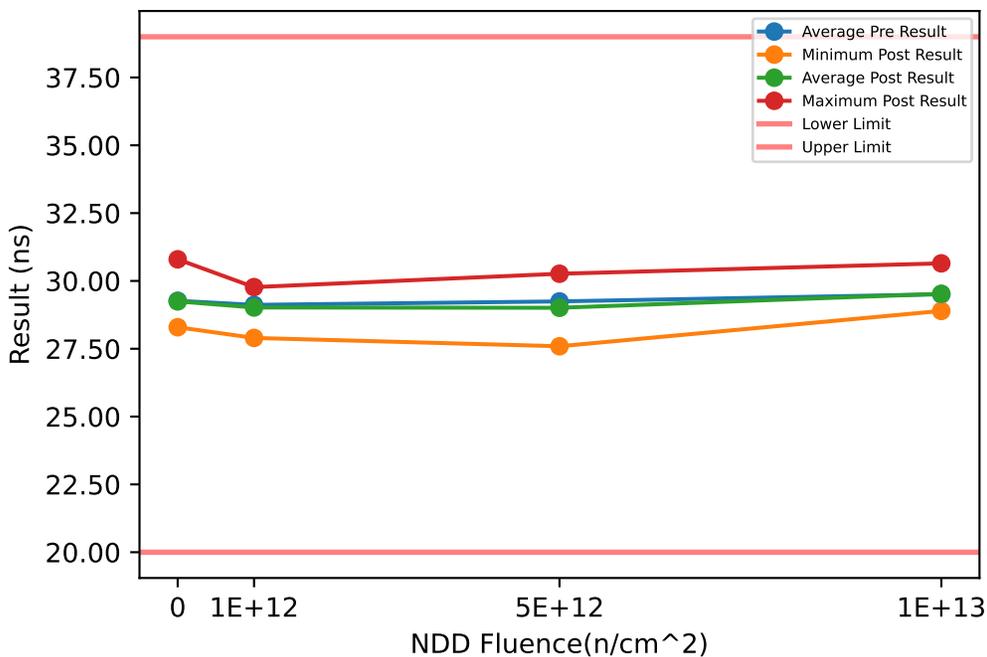


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	45.727	46.484	47.182	0.72946	45.799	46.64	47.304	0.76814	0.0723	0.1559	0.273	0.10446
1e+12	46.564	47.284	47.937	0.56479	46.769	47.432	48.069	0.53428	0.1225	0.14775	0.2054	0.038673
5e+12	45.816	46.49	47.814	0.90472	45.965	46.585	47.837	0.85776	0.0234	0.094525	0.149	0.056557
1e+13	45.752	46.467	47.756	0.89636	46.086	46.766	47.967	0.85995	0.0979	0.29885	0.4549	0.17319

# Device Test: 19.23 PWM|DEADTIME/GATE/14/14///2MHz/@T\_RLH

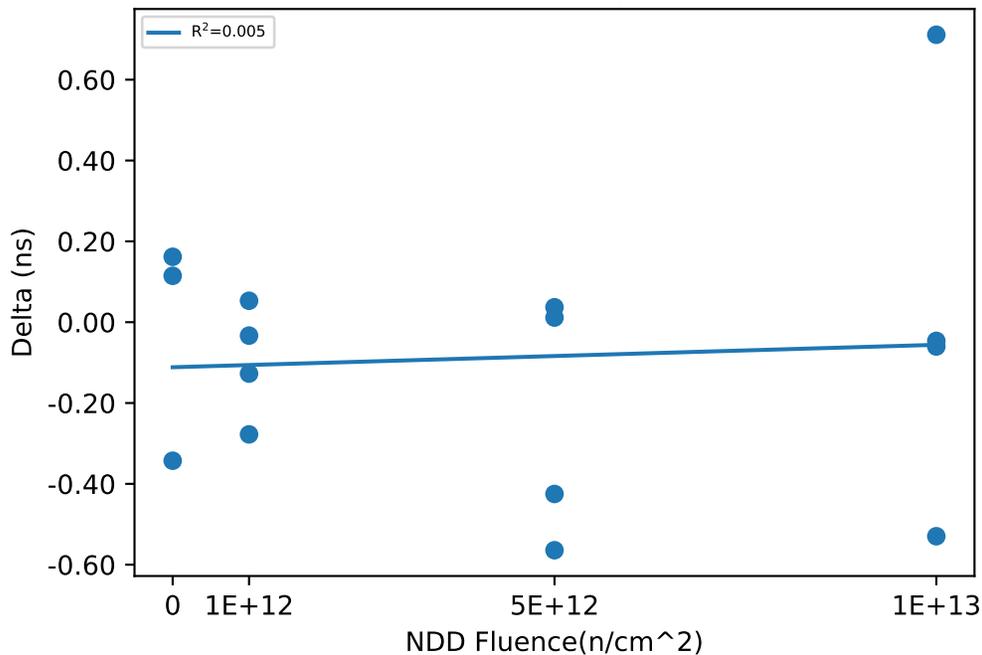
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	28.637	28.294	-0.3428
42	0	CORRELATION	28.485	28.647	0.1618
43	0	CORRELATION	30.682	30.797	0.1147
51	1e+12	NDD	28.176	27.899	-0.2776
52	1e+12	NDD	29.358	29.411	0.053
53	1e+12	NDD	29.131	29.004	-0.1272
54	1e+12	NDD	29.805	29.772	-0.0332
55	5e+12	NDD	29.672	29.108	-0.5642
56	5e+12	NDD	29.063	29.075	0.0114
57	5e+12	NDD	28.017	27.592	-0.425
58	5e+12	NDD	30.228	30.265	0.0369
59	1e+13	NDD	29.851	29.321	-0.5296
60	1e+13	NDD	30.694	30.648	-0.0462
61	1e+13	NDD	28.527	29.238	0.7111
62	1e+13	NDD	28.954	28.894	-0.0601

## NDD vs Post - Pre Exposure Delta

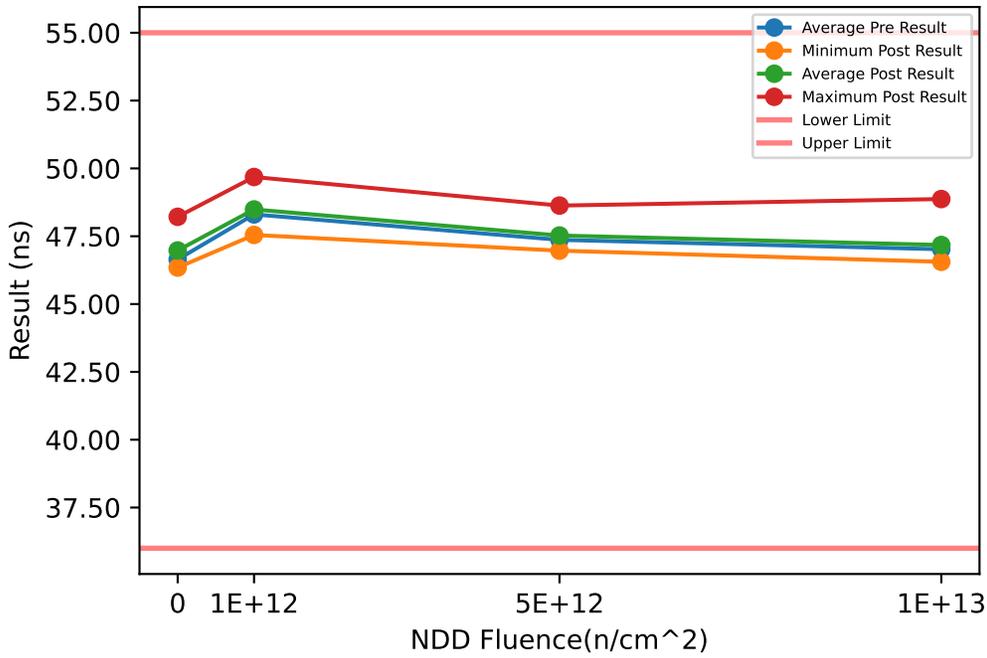


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	28.485	29.268	30.682	1.2271	28.294	29.246	30.797	1.3548	-0.3428	-0.0221	0.1618	0.27873
1e+12	28.176	29.118	29.805	0.6871	27.899	29.021	29.772	0.81147	-0.2776	-0.09625	0.053	0.14154
5e+12	28.017	29.245	30.228	0.94689	27.592	29.01	30.265	1.0953	-0.5642	-0.23522	0.0369	0.30502
1e+13	28.527	29.507	30.694	0.96483	28.894	29.525	30.648	0.77069	-0.5296	0.0188	0.7111	0.51331

# Device Test: 19.24 PWM|DEADTIME/GATE/14/14///2MHz/@T\_RHL

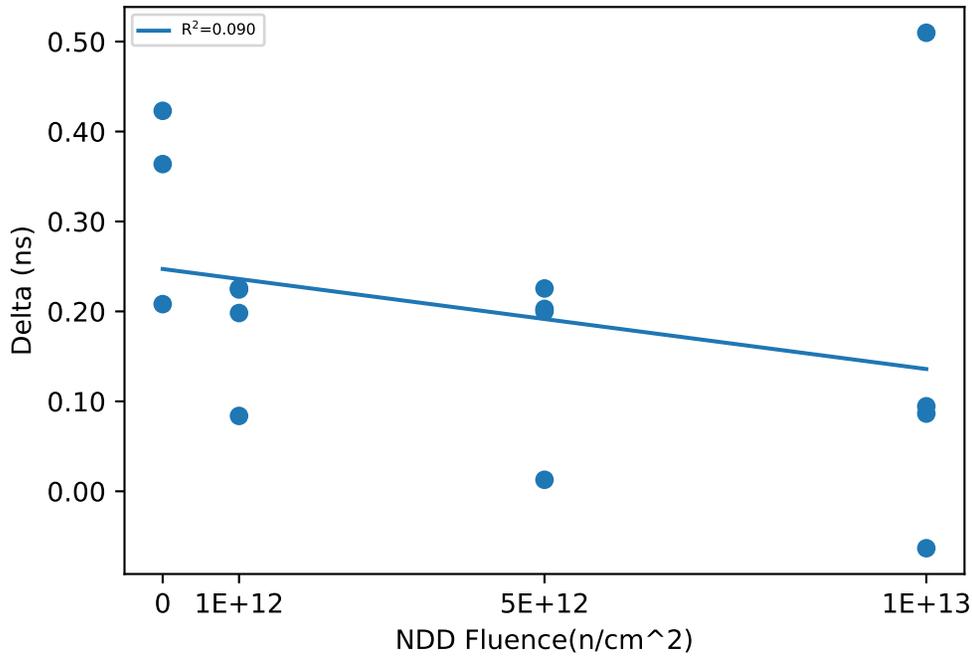
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	45.94	46.363	0.423
42	0	CORRELATION	48.009	48.217	0.2081
43	0	CORRELATION	45.981	46.345	0.3638
51	1e+12	NDD	47.907	48.133	0.2257
52	1e+12	NDD	49.486	49.684	0.1982
53	1e+12	NDD	47.324	47.548	0.2244
54	1e+12	NDD	48.502	48.586	0.0838
55	5e+12	NDD	46.743	46.968	0.2255
56	5e+12	NDD	47.08	47.283	0.2028
57	5e+12	NDD	48.618	48.631	0.0128
58	5e+12	NDD	47.026	47.226	0.2
59	1e+13	NDD	46.509	46.604	0.0945
60	1e+13	NDD	46.591	46.678	0.0864
61	1e+13	NDD	46.048	46.558	0.5098
62	1e+13	NDD	48.934	48.871	-0.0633

## NDD vs Post - Pre Exposure Delta

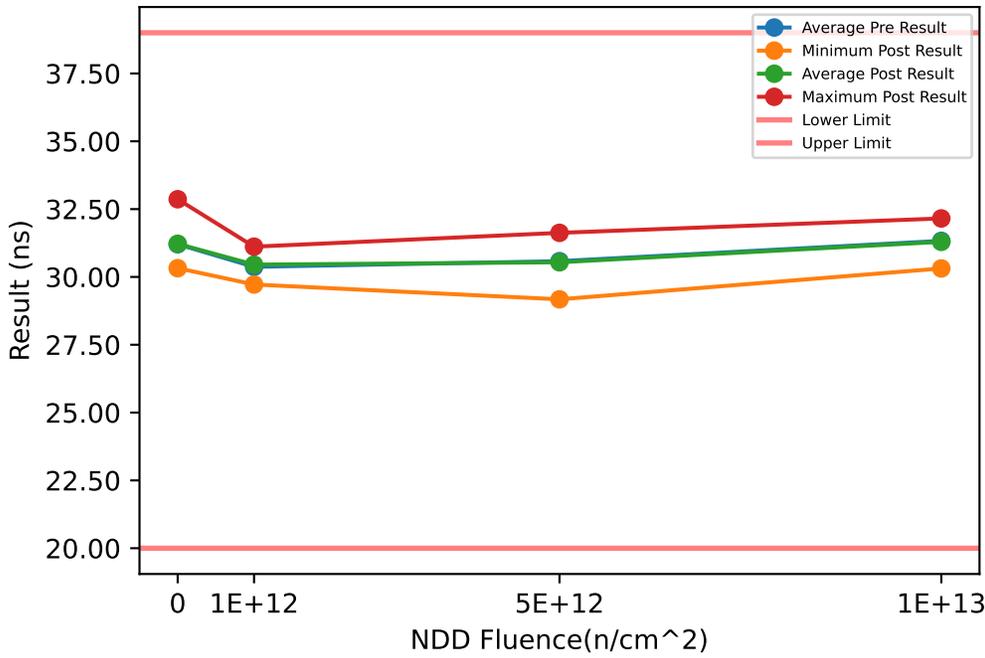


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	45.94	46.643	48.009	1.1826	46.345	46.975	48.217	1.0754	0.2081	0.33163	0.423	0.111
1e+12	47.324	48.305	49.486	0.92262	47.548	48.488	49.684	0.90348	0.0838	0.18302	0.2257	0.067352
5e+12	46.743	47.367	48.618	0.84732	46.968	47.527	48.631	0.74861	0.0128	0.16028	0.2255	0.098977
1e+13	46.048	47.021	48.934	1.2981	46.558	47.178	48.871	1.1302	-0.0633	0.15685	0.5098	0.24623

# Device Test: 19.3 PWM|DEADTIME/GATE/10/8///0.5MHz/@T\_RLH

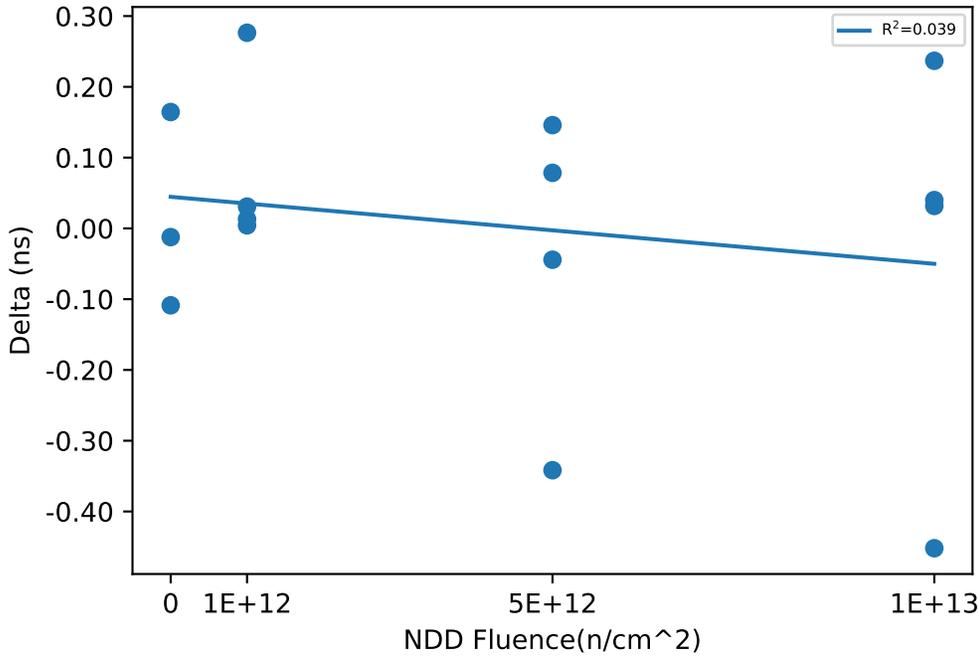
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.583	30.474	-0.1087
42	0	CORRELATION	30.335	30.323	-0.0123
43	0	CORRELATION	32.7	32.864	0.1644
51	1e+12	NDD	29.708	29.721	0.0132
52	1e+12	NDD	30.221	30.225	0.0043
53	1e+12	NDD	30.475	30.751	0.2764
54	1e+12	NDD	31.085	31.115	0.0308
55	5e+12	NDD	31.236	30.894	-0.3417
56	5e+12	NDD	30.511	30.467	-0.0443
57	5e+12	NDD	29.028	29.174	0.1459
58	5e+12	NDD	31.547	31.625	0.0785
59	1e+13	NDD	32.055	31.603	-0.4519
60	1e+13	NDD	32.125	32.156	0.0317
61	1e+13	NDD	30.865	31.102	0.2368
62	1e+13	NDD	30.273	30.313	0.04

## NDD vs Post - Pre Exposure Delta

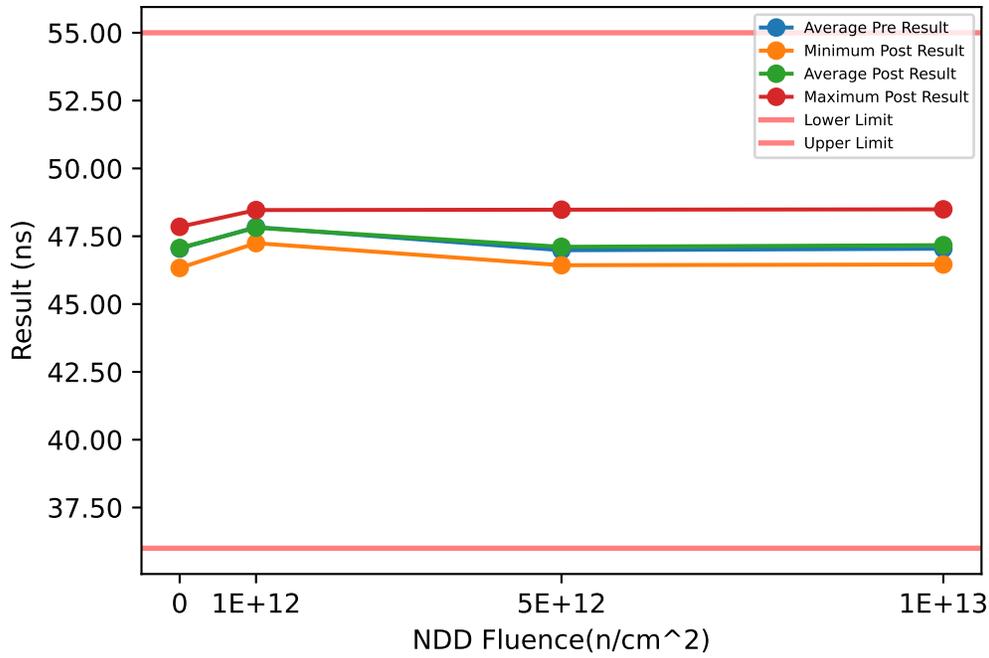


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.335	31.206	32.7	1.2997	30.323	31.221	32.864	1.4256	-0.1087	0.014467	0.1644	0.1385
1e+12	29.708	30.372	31.085	0.57226	29.721	30.453	31.115	0.60977	0.0043	0.081175	0.2764	0.13061
5e+12	29.028	30.581	31.547	1.122	29.174	30.54	31.625	1.0285	-0.3417	-0.0404	0.1459	0.21575
1e+13	30.273	31.329	32.125	0.9111	30.313	31.293	32.156	0.78289	-0.4519	-0.03585	0.2368	0.29312

# Device Test: 19.4 PWM|DEADTIME/GATE/10/8///0.5MHz/@T\_RHL

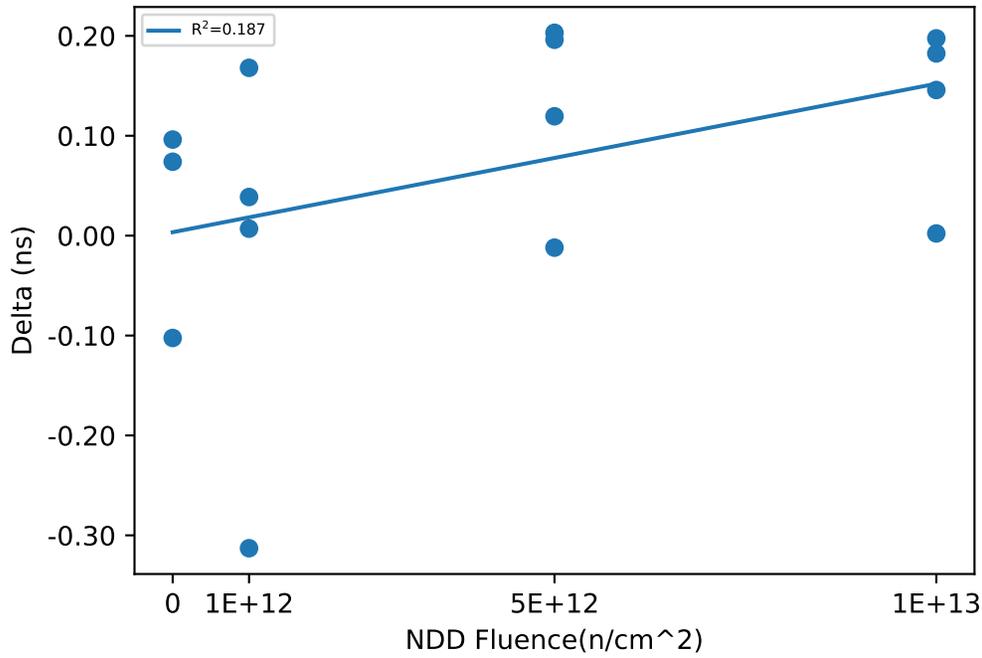
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	46.257	46.331	0.074
42	0	CORRELATION	47.752	47.848	0.0962
43	0	CORRELATION	47.126	47.024	-0.1024
51	1e+12	NDD	47.996	47.684	-0.3129
52	1e+12	NDD	48.458	48.465	0.007
53	1e+12	NDD	47.078	47.246	0.168
54	1e+12	NDD	47.818	47.856	0.0387
55	5e+12	NDD	46.453	46.656	0.2031
56	5e+12	NDD	46.754	46.874	0.1195
57	5e+12	NDD	48.491	48.479	-0.012
58	5e+12	NDD	46.236	46.432	0.1961
59	1e+13	NDD	46.948	47.146	0.1975
60	1e+13	NDD	46.445	46.591	0.1458
61	1e+13	NDD	46.456	46.458	0.0022
62	1e+13	NDD	48.31	48.492	0.1824

## NDD vs Post - Pre Exposure Delta

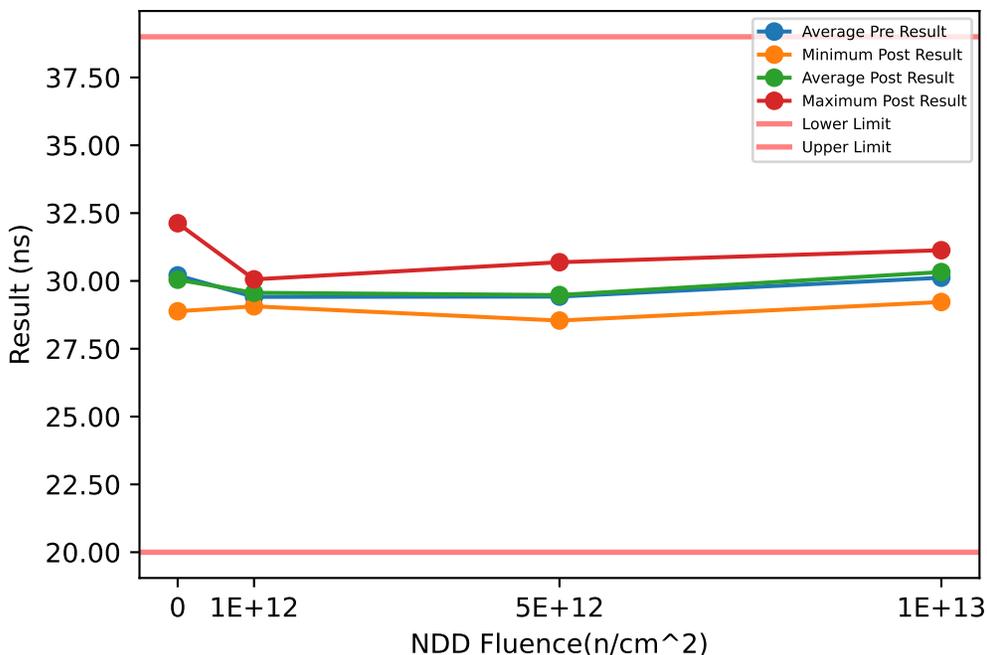


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	46.257	47.045	47.752	0.75087	46.331	47.067	47.848	0.75958	-0.1024	0.0226	0.0962	0.10882
1e+12	47.078	47.837	48.458	0.57386	47.246	47.813	48.465	0.50517	-0.3129	-0.0248	0.168	0.2043
5e+12	46.236	46.984	48.491	1.0271	46.432	47.11	48.479	0.93011	-0.012	0.12668	0.2031	0.099905
1e+13	46.445	47.04	48.31	0.87861	46.458	47.172	48.492	0.92933	0.0022	0.13197	0.1975	0.089198

# Device Test: 19.5 PWM|DEADTIME/GATE/10/8///1MHz/@T\_RLH

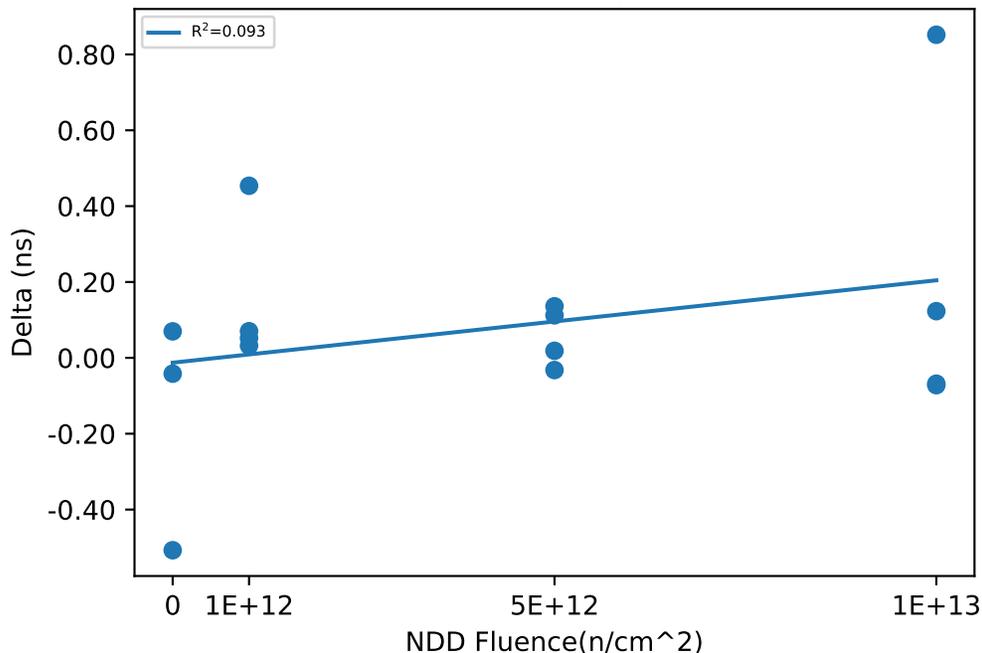
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	29.389	28.882	-0.5072
42	0	CORRELATION	29.167	29.125	-0.0417
43	0	CORRELATION	32.058	32.127	0.0699
51	1e+12	NDD	28.994	29.064	0.0702
52	1e+12	NDD	29.186	29.219	0.0323
53	1e+12	NDD	29.46	29.913	0.4537
54	1e+12	NDD	30.006	30.058	0.0523
55	5e+12	NDD	29.385	29.403	0.0186
56	5e+12	NDD	29.323	29.291	-0.0322
57	5e+12	NDD	28.403	28.539	0.1359
58	5e+12	NDD	30.577	30.689	0.1121
59	1e+13	NDD	30.178	31.03	0.8518
60	1e+13	NDD	31.009	31.132	0.1231
61	1e+13	NDD	29.992	29.924	-0.0681
62	1e+13	NDD	29.295	29.223	-0.072

## NDD vs Post - Pre Exposure Delta



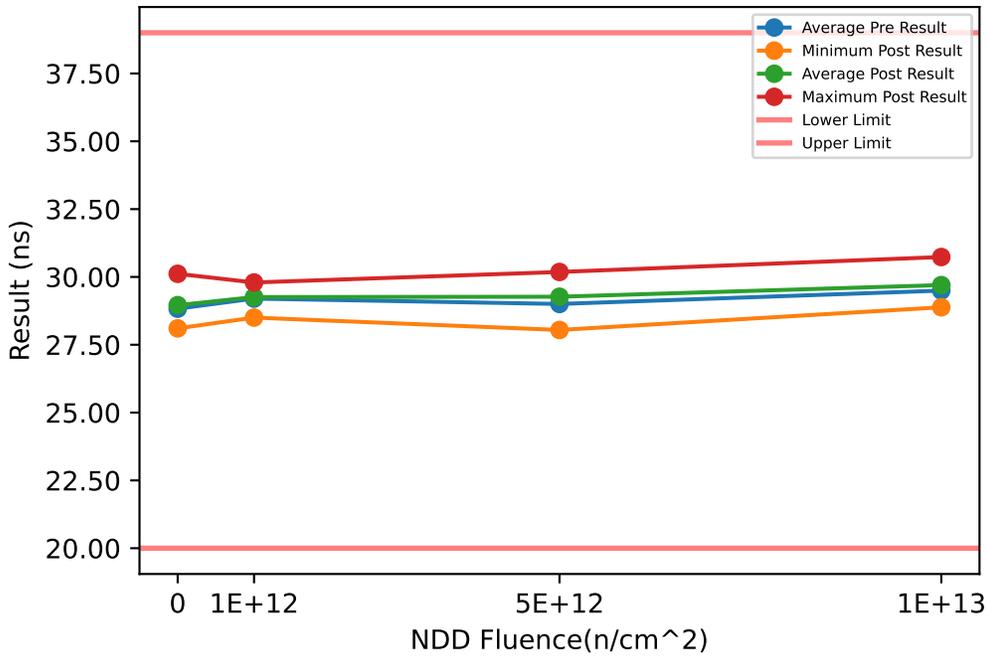
## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	29.167	30.204	32.058	1.6088	28.882	30.045	32.127	1.8078	-0.5072	-0.15967	0.0699	0.3061
1e+12	28.994	29.411	30.006	0.43988	29.064	29.564	30.058	0.49503	0.0323	0.15212	0.4537	0.20165
5e+12	28.403	29.422	30.577	0.89151	28.539	29.481	30.689	0.89256	-0.0322	0.0586	0.1359	0.078914
1e+13	29.295	30.118	31.009	0.7048	29.223	30.327	31.132	0.91714	-0.072	0.2087	0.8518	0.4383



# Device Test: 19.7 PWM|DEADTIME/GATE/10/8///2MHz/@T\_RLH

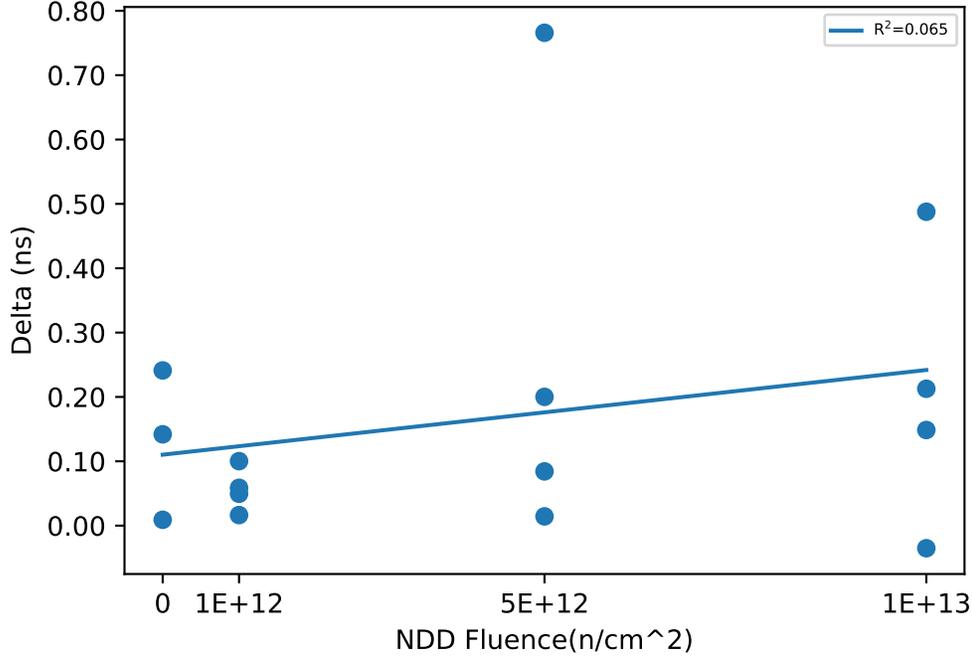
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	27.962	28.104	0.1419
42	0	CORRELATION	28.418	28.659	0.2412
43	0	CORRELATION	30.106	30.115	0.0091
51	1e+12	NDD	28.401	28.501	0.1002
52	1e+12	NDD	29.373	29.423	0.0495
53	1e+12	NDD	29.253	29.311	0.0588
54	1e+12	NDD	29.778	29.795	0.0164
55	5e+12	NDD	28.962	29.728	0.7659
56	5e+12	NDD	28.924	29.124	0.2001
57	5e+12	NDD	27.961	28.045	0.0843
58	5e+12	NDD	30.168	30.183	0.0144
59	1e+13	NDD	29.72	29.932	0.2127
60	1e+13	NDD	30.585	30.733	0.1486
61	1e+13	NDD	28.763	29.251	0.4878
62	1e+13	NDD	28.916	28.881	-0.0351

## NDD vs Post - Pre Exposure Delta

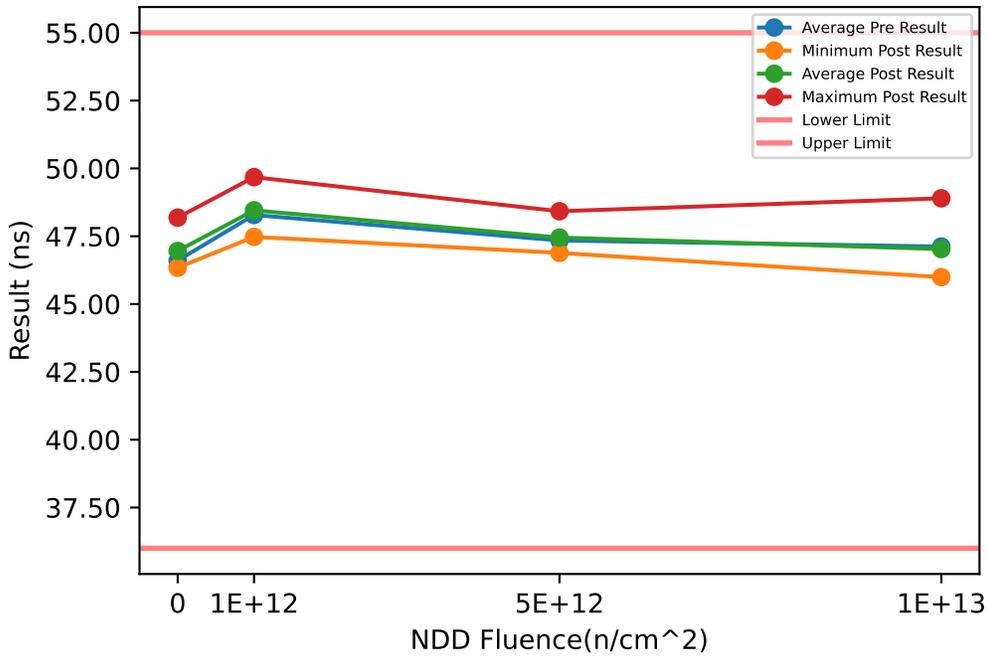


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	27.962	28.829	30.106	1.1292	28.104	28.959	30.115	1.0384	0.0091	0.13073	0.2412	0.11645
1e+12	28.401	29.201	29.778	0.5789	28.501	29.258	29.795	0.54484	0.0164	0.056225	0.1002	0.034505
5e+12	27.961	29.004	30.168	0.90412	28.045	29.27	30.183	0.92465	0.0144	0.26618	0.7659	0.34184
1e+13	28.763	29.496	30.585	0.8384	28.881	29.699	30.733	0.81535	-0.0351	0.2035	0.4878	0.21668

# Device Test: 19.8 PWM|DEADTIME/GATE/10/8///2MHz/@T\_RHL

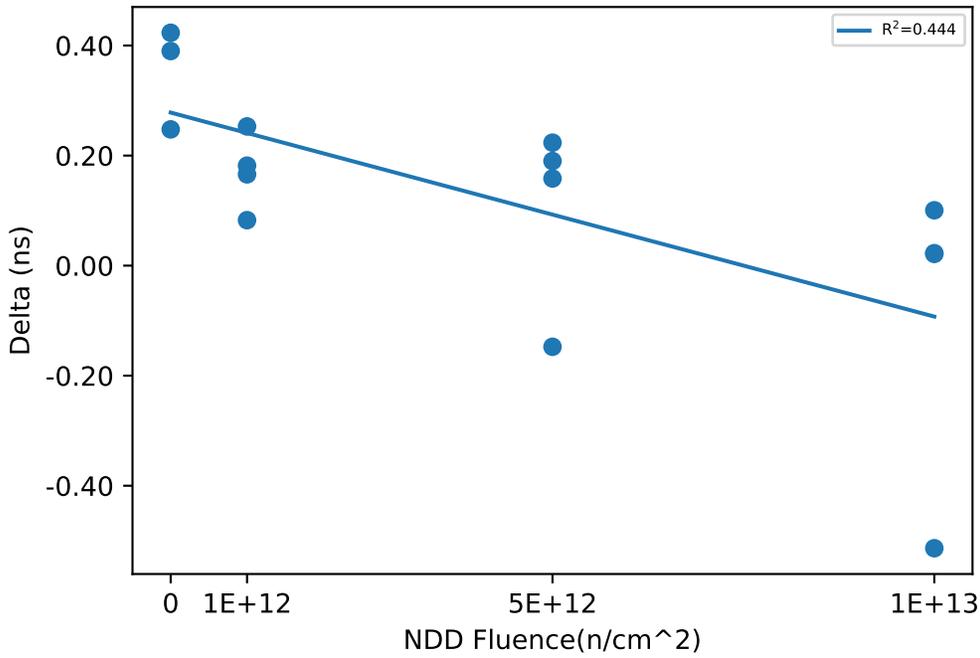
## NDD vs Result Stats



## Test Results (Lower Limit = 36.0, Upper Limit = 55.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	45.919	46.342	0.4232
42	0	CORRELATION	47.938	48.186	0.2476
43	0	CORRELATION	45.95	46.34	0.39
51	1e+12	NDD	47.927	48.093	0.1659
52	1e+12	NDD	49.425	49.678	0.253
53	1e+12	NDD	47.295	47.476	0.1817
54	1e+12	NDD	48.49	48.572	0.0826
55	5e+12	NDD	46.728	46.886	0.1584
56	5e+12	NDD	47.097	47.287	0.1901
57	5e+12	NDD	48.57	48.422	-0.1475
58	5e+12	NDD	46.984	47.208	0.2235
59	1e+13	NDD	46.524	46.547	0.0226
60	1e+13	NDD	46.57	46.671	0.1006
61	1e+13	NDD	46.506	45.993	-0.5136
62	1e+13	NDD	48.877	48.898	0.0213

## NDD vs Post - Pre Exposure Delta

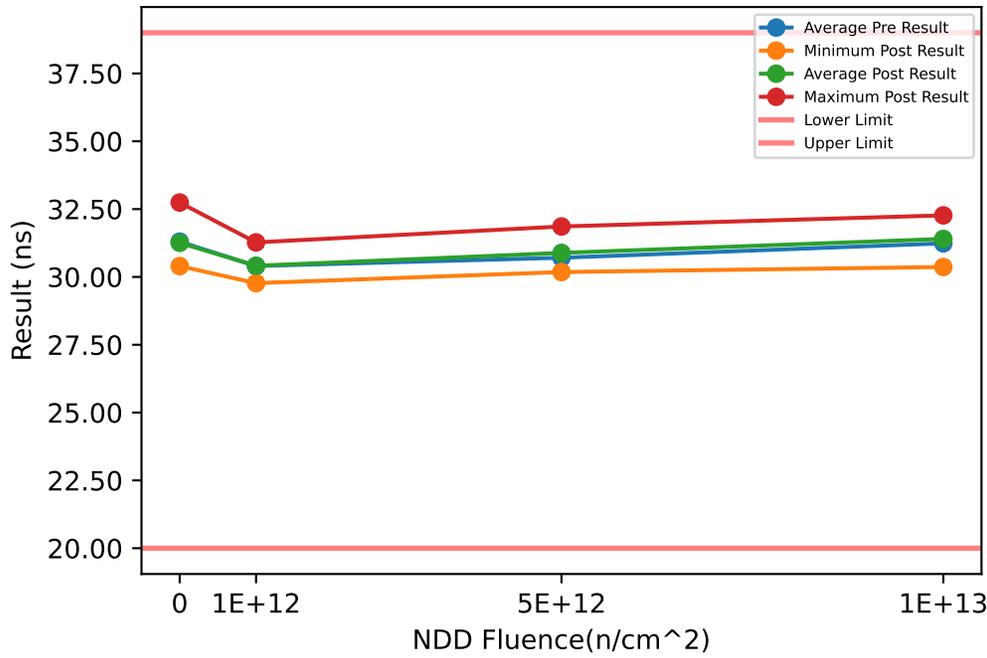


## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	45.919	46.603	47.938	1.157	46.34	46.956	48.186	1.0651	0.2476	0.3536	0.4232	0.093288
1e+12	47.295	48.284	49.425	0.90375	47.476	48.455	49.678	0.93063	0.0826	0.1708	0.253	0.06995
5e+12	46.728	47.345	48.57	0.83113	46.886	47.451	48.422	0.67035	-0.1475	0.10613	0.2235	0.17116
1e+13	46.506	47.12	48.877	1.1721	45.993	47.027	48.898	1.2819	-0.5136	-0.092275	0.1006	0.28332

# Device Test: 19.9 PWM|DEADTIME/GATE/12/10///0MHz/@T\_RLH

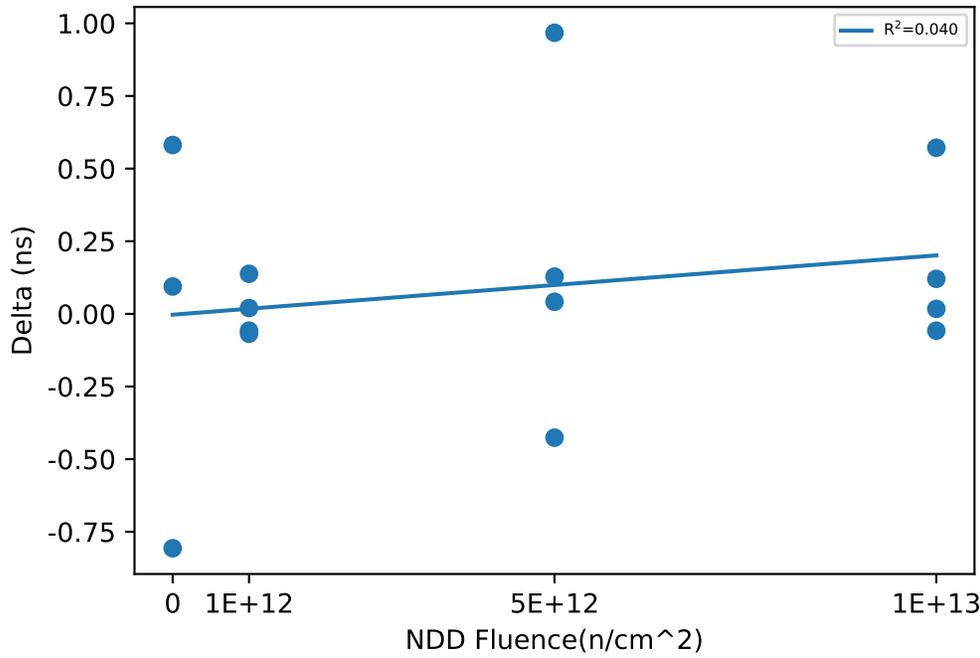
## NDD vs Result Stats



## Test Results (Lower Limit = 20.0, Upper Limit = 39.0 (ns))

Serial #	Fluence(n/cm <sup>2</sup> )	Exposure Conditions	Pre Result	Post Result	Delta
41	0	CORRELATION	30.049	30.63	0.5813
42	0	CORRELATION	30.305	30.399	0.0942
43	0	CORRELATION	33.55	32.743	-0.8066
51	1e+12	NDD	29.752	29.771	0.02
52	1e+12	NDD	30.238	30.375	0.1379
53	1e+12	NDD	30.29	30.222	-0.0682
54	1e+12	NDD	31.331	31.273	-0.0577
55	5e+12	NDD	31.327	30.901	-0.4261
56	5e+12	NDD	30.559	30.6	0.0417
57	5e+12	NDD	29.213	30.181	0.9675
58	5e+12	NDD	31.732	31.86	0.1282
59	1e+13	NDD	31.51	31.527	0.0172
60	1e+13	NDD	32.149	32.269	0.1205
61	1e+13	NDD	30.871	31.443	0.5718
62	1e+13	NDD	30.424	30.366	-0.0578

## NDD vs Post - Pre Exposure Delta



## Test Statistics (ns)

Fluence(n/cm <sup>2</sup> )	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	30.049	31.301	33.55	1.9514	30.399	31.258	32.743	1.2916	-0.8066	-0.0437	0.5813	0.70415
1e+12	29.752	30.402	31.331	0.66464	29.771	30.41	31.273	0.62958	-0.0682	0.008	0.1379	0.095116
5e+12	29.213	30.708	31.732	1.1088	30.181	30.886	31.86	0.71376	-0.4261	0.17783	0.9675	0.58003
1e+13	30.424	31.238	32.149	0.75313	30.366	31.401	32.269	0.78394	-0.0578	0.16292	0.5718	0.28221

## IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you fully indemnify TI and its representatives against any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#), [TI's General Quality Guidelines](#), or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products. Unless TI explicitly designates a product as custom or customer-specified, TI products are standard, catalog, general purpose devices.

TI objects to and rejects any additional or different terms you may propose.

Copyright © 2026, Texas Instruments Incorporated

Last updated 10/2025