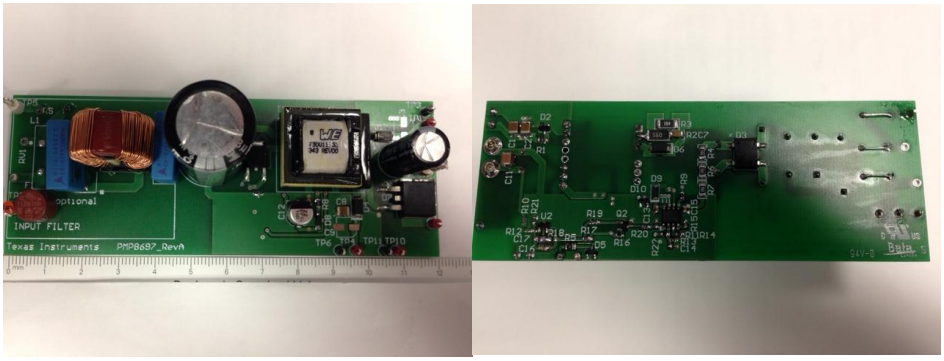
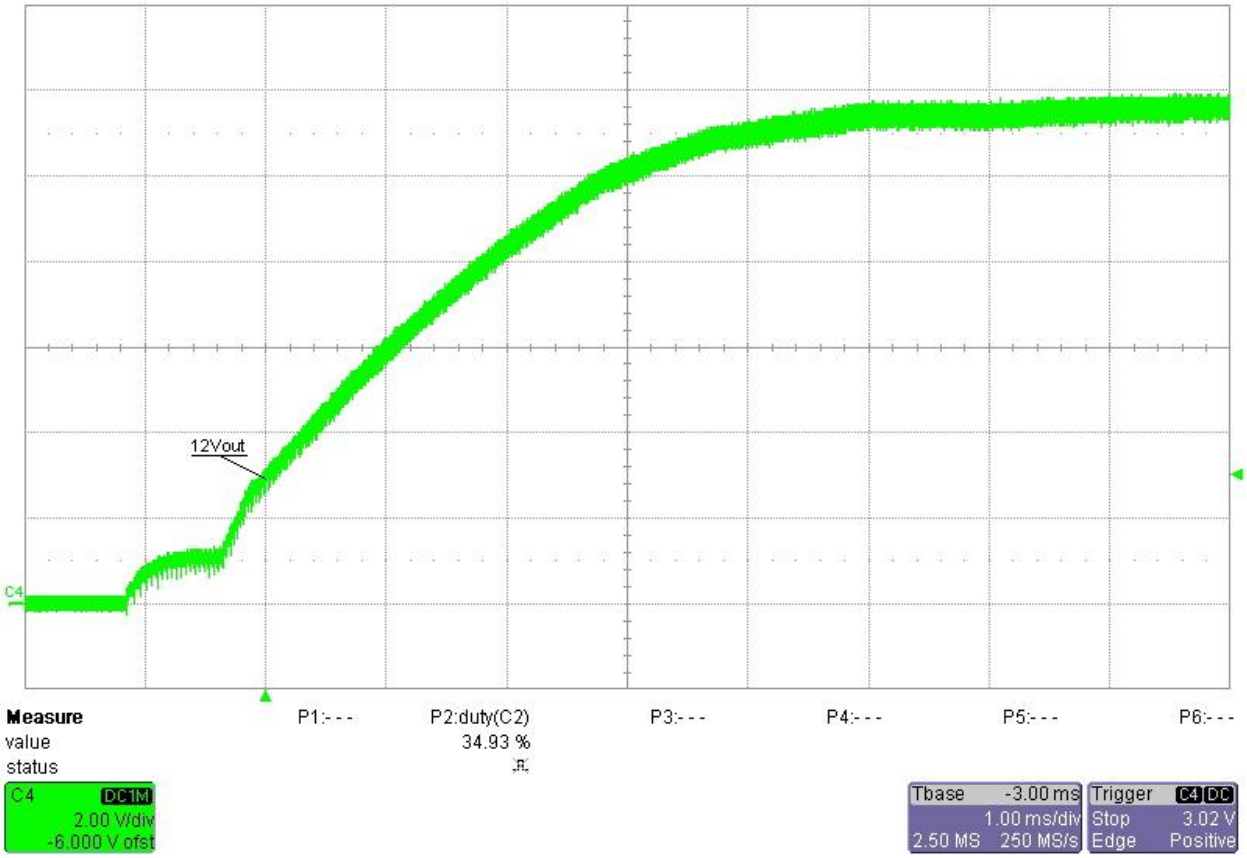


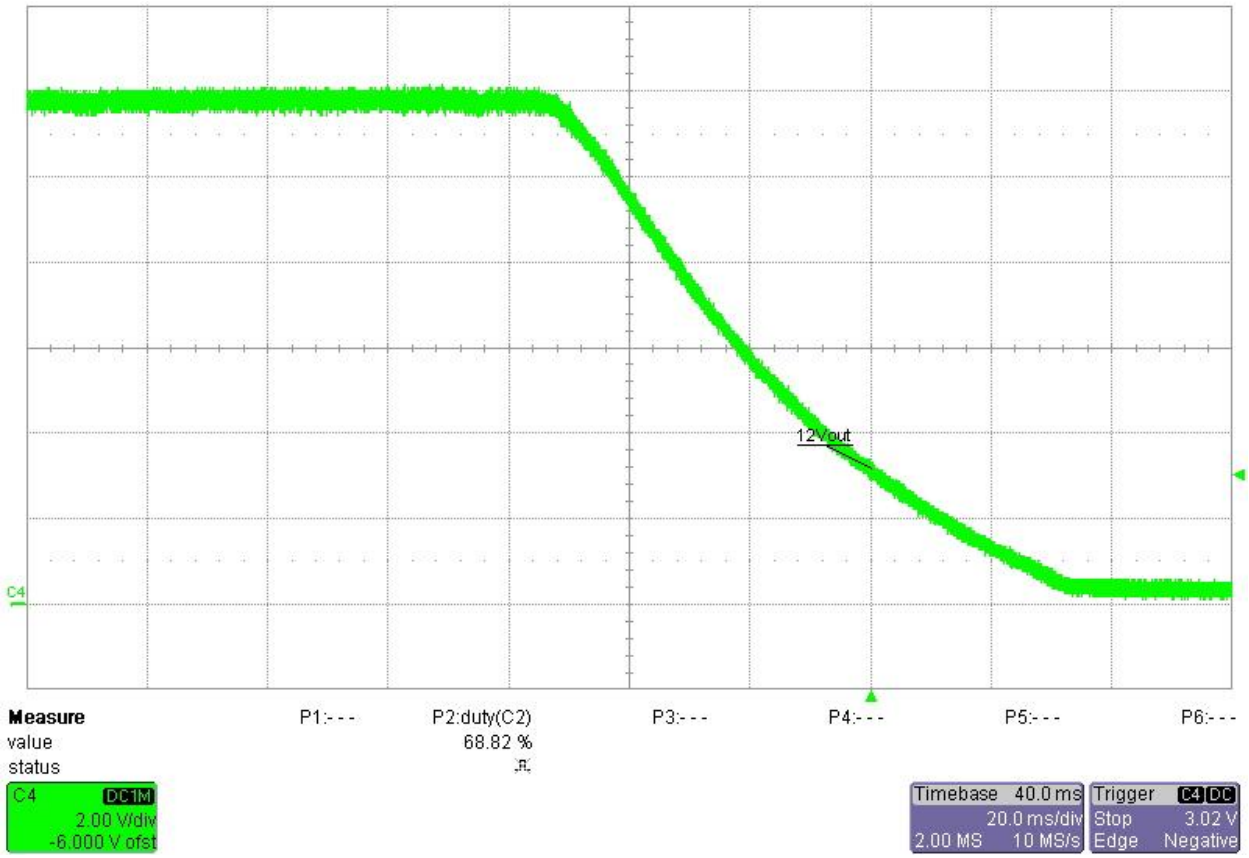
1 Startup

Input voltage = 230VDC
Load current = full load (31.53W)

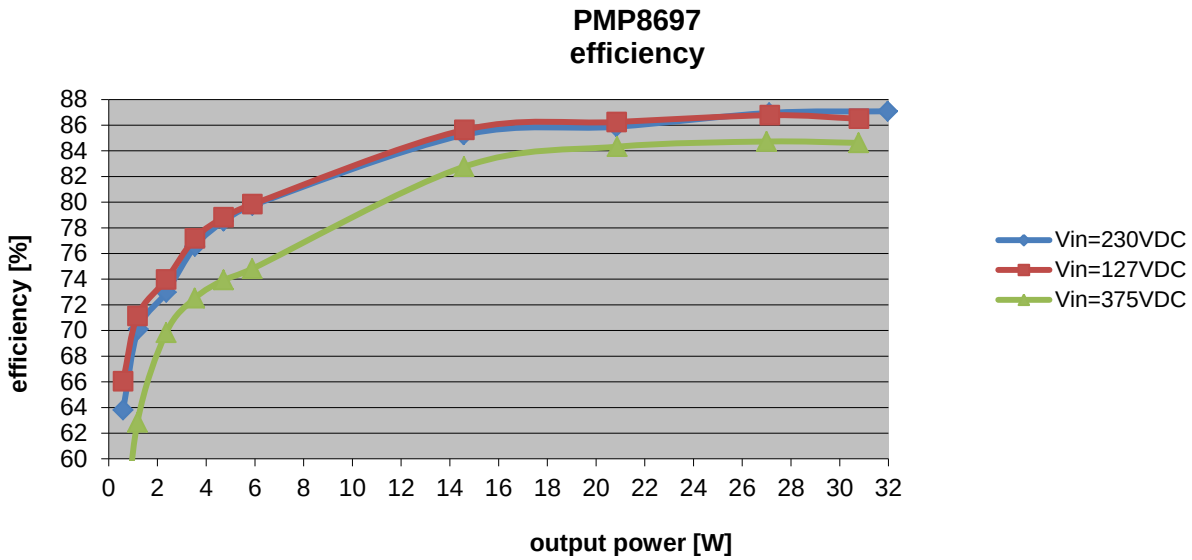


2 Shutdown

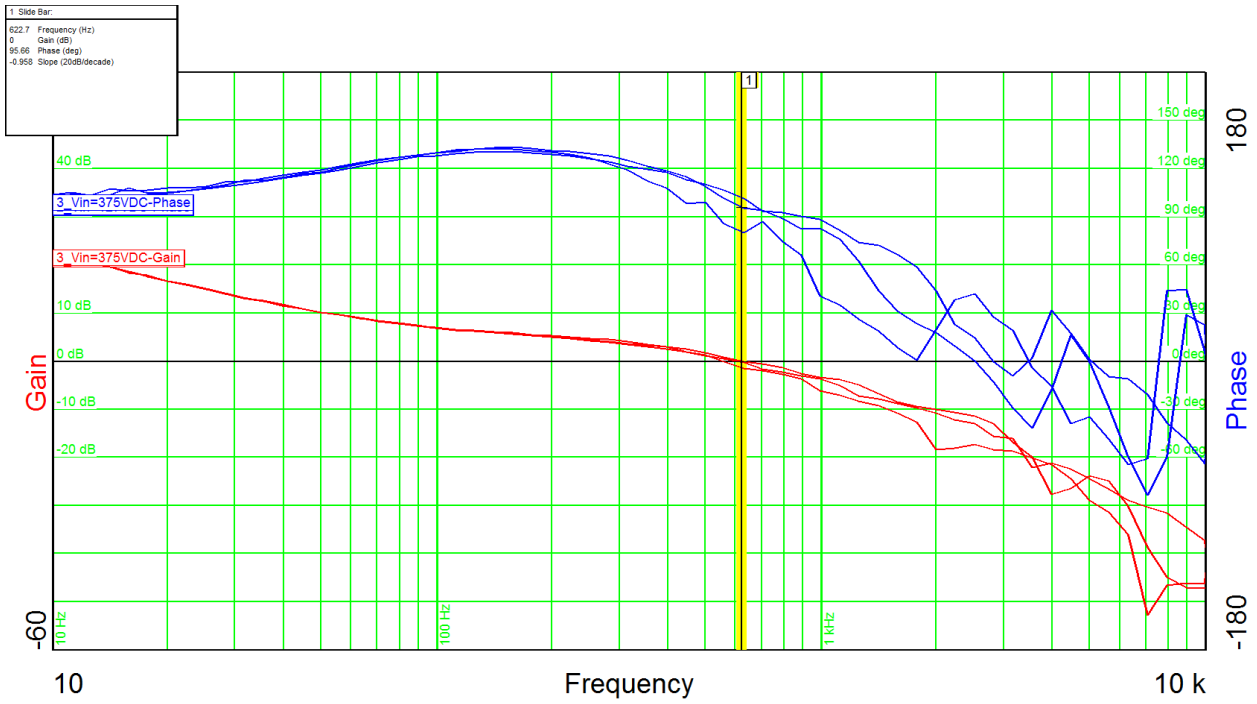
Input voltage = 230VDC
Load current = full load (31.53W)



3 Efficiency



4 Control Loop Frequency Response



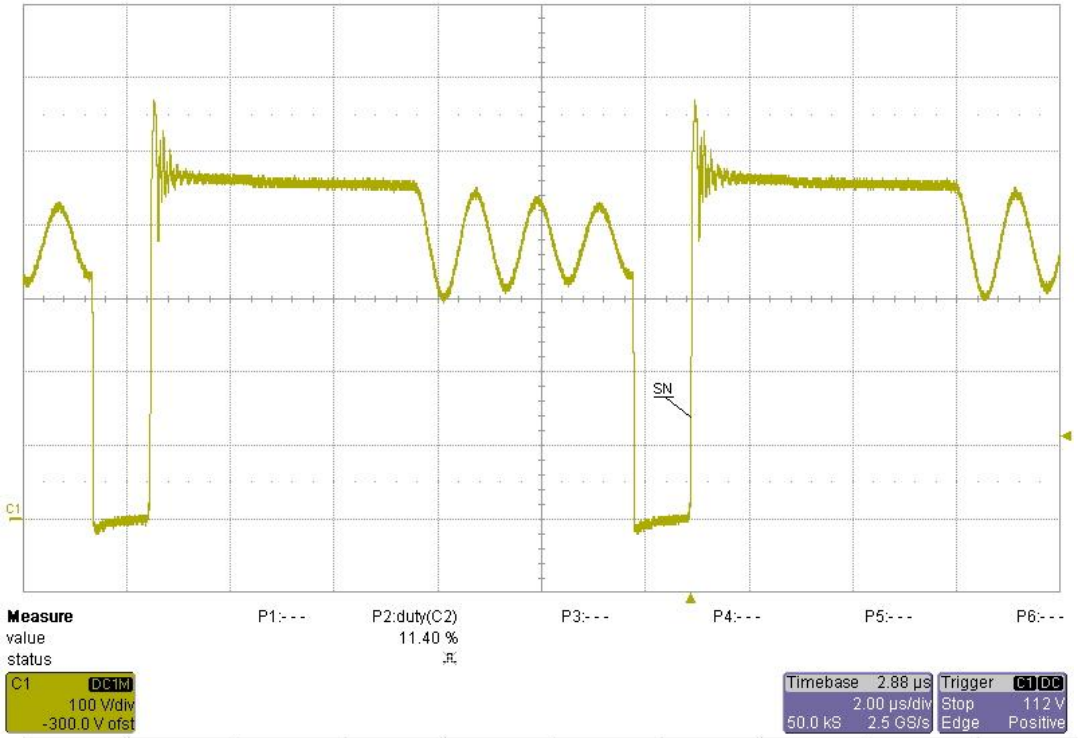
Output power = full load (31.53W)
Input voltage = 127VDC
Phase margin = 103°
Bandwidth = 0.60kHz

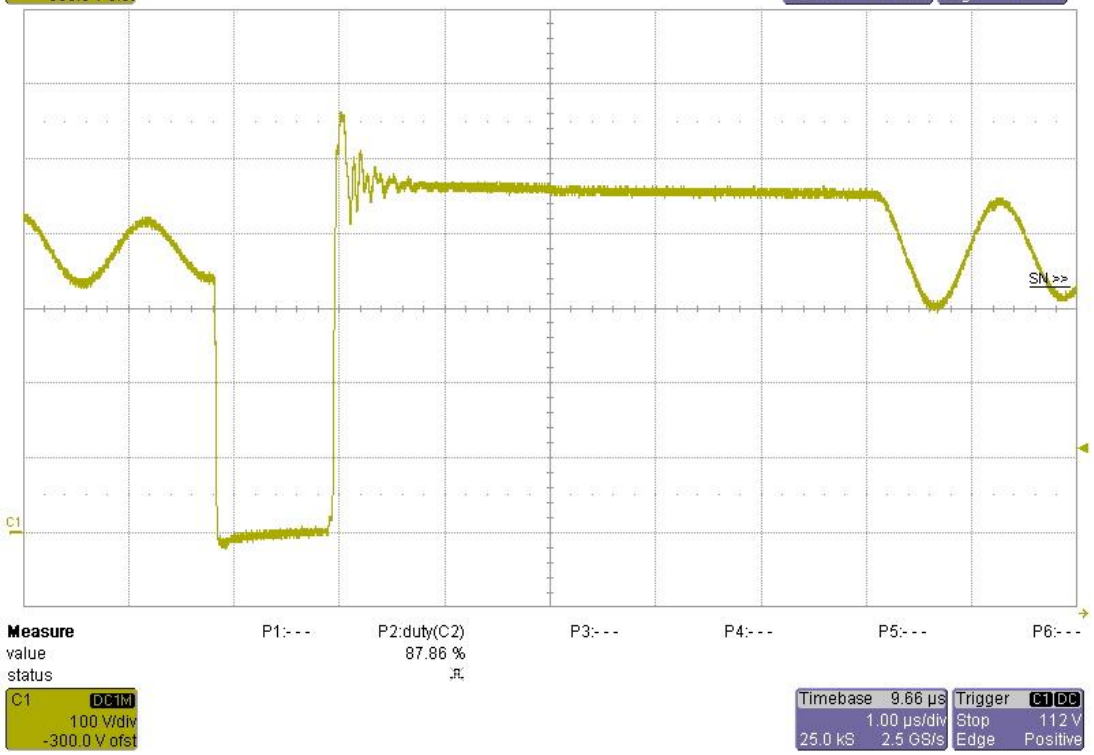
Output power = full load (31.53W)
Input voltage = 230VDC
Phase margin = 96°
Bandwidth = 0.62kHz

Output power = full load (31.53W)
Input voltage = 375VDC
Phase margin = 87°
Bandwidth = 0.55kHz

5 Switch Node

Input voltage = 375VDC
Load current = full load (31.53W)

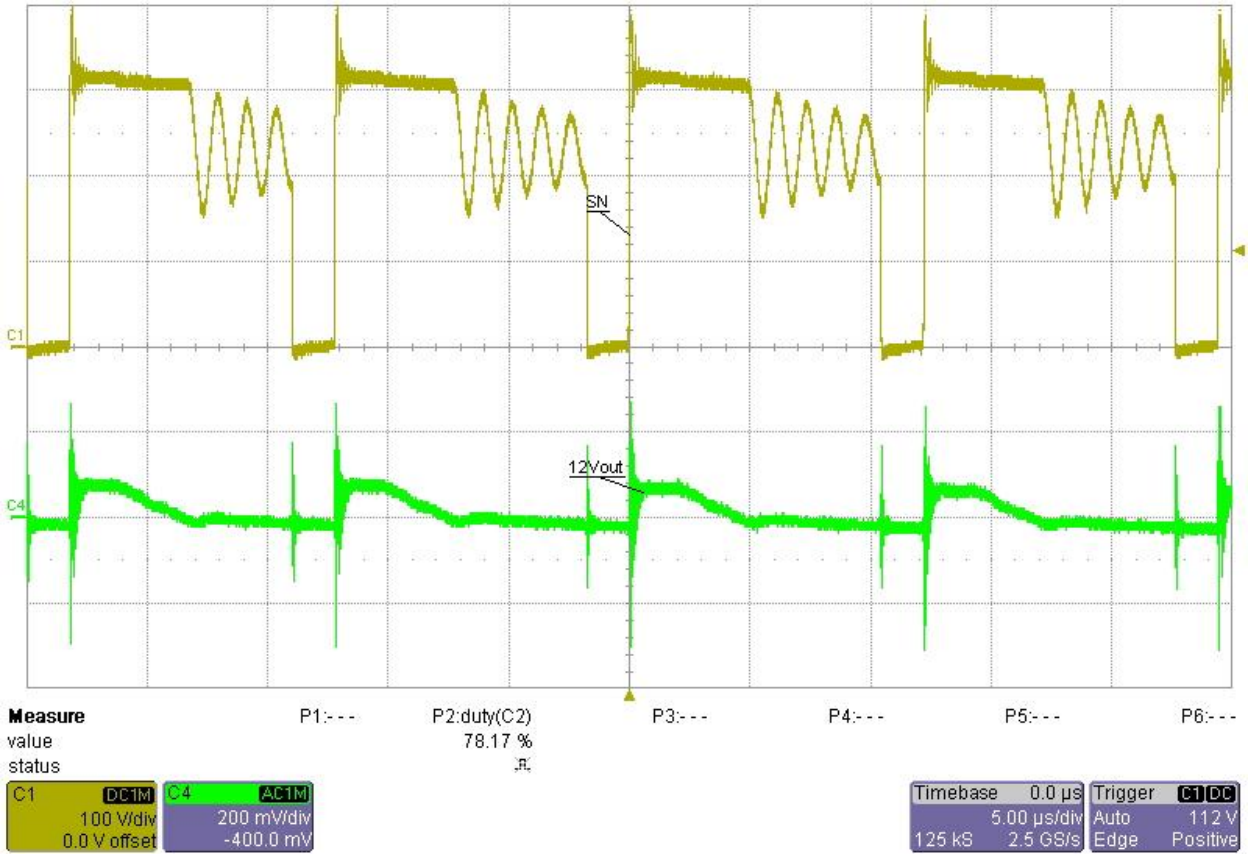




6 Output ripple voltage

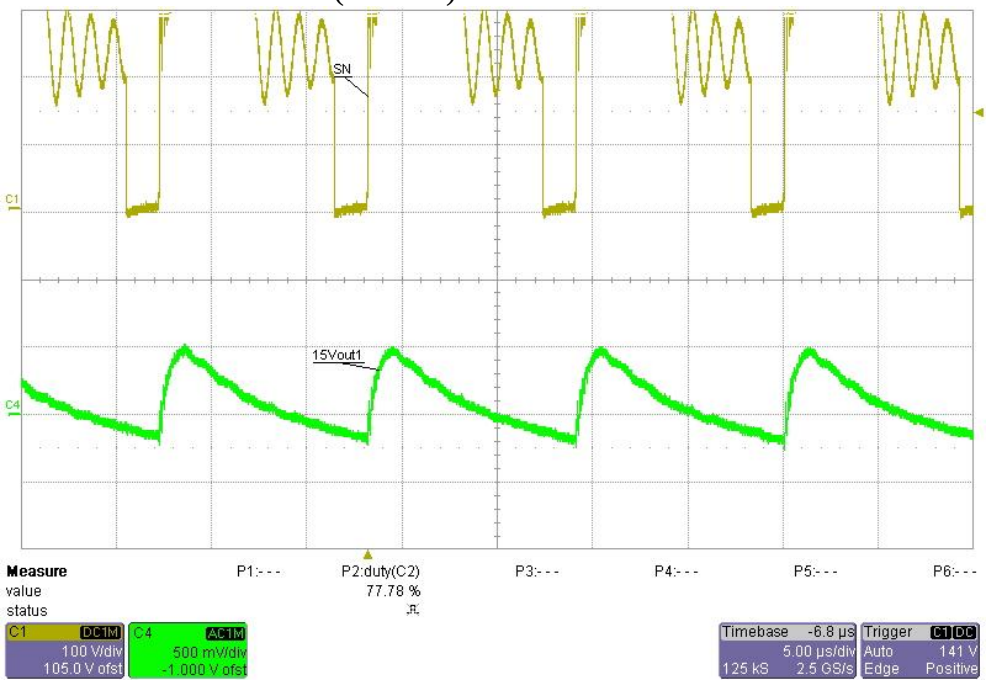
6.1 12V output

Input voltage = 230VDC
Load current = full load (31.53W)



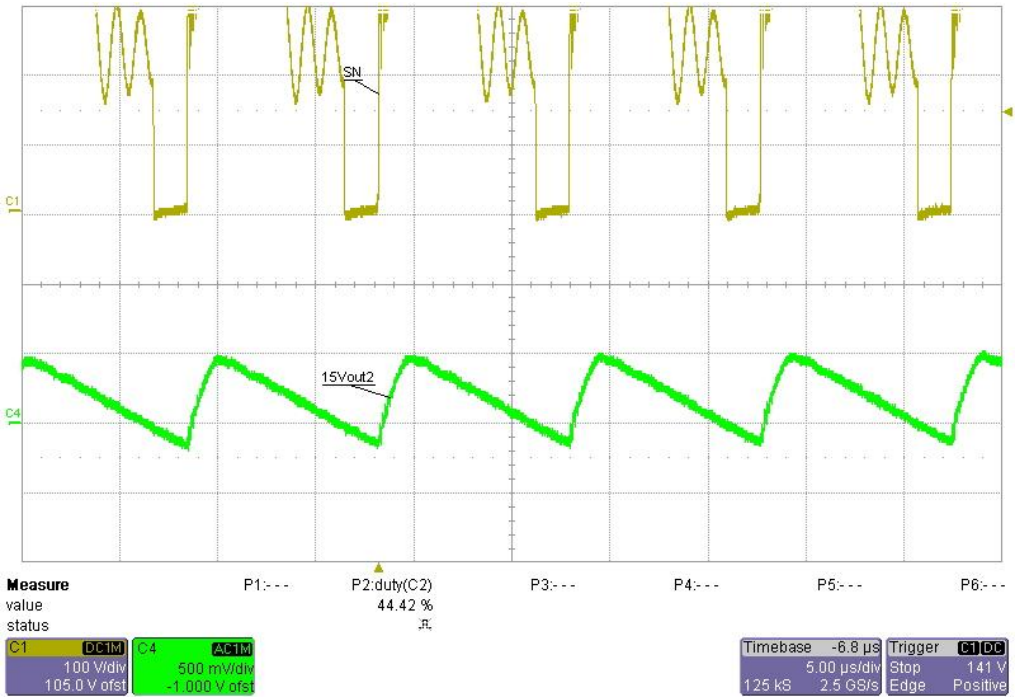
6.2 15V output1 (non isolated)

Input voltage = 230VDC
Load current = full load (31.53W)



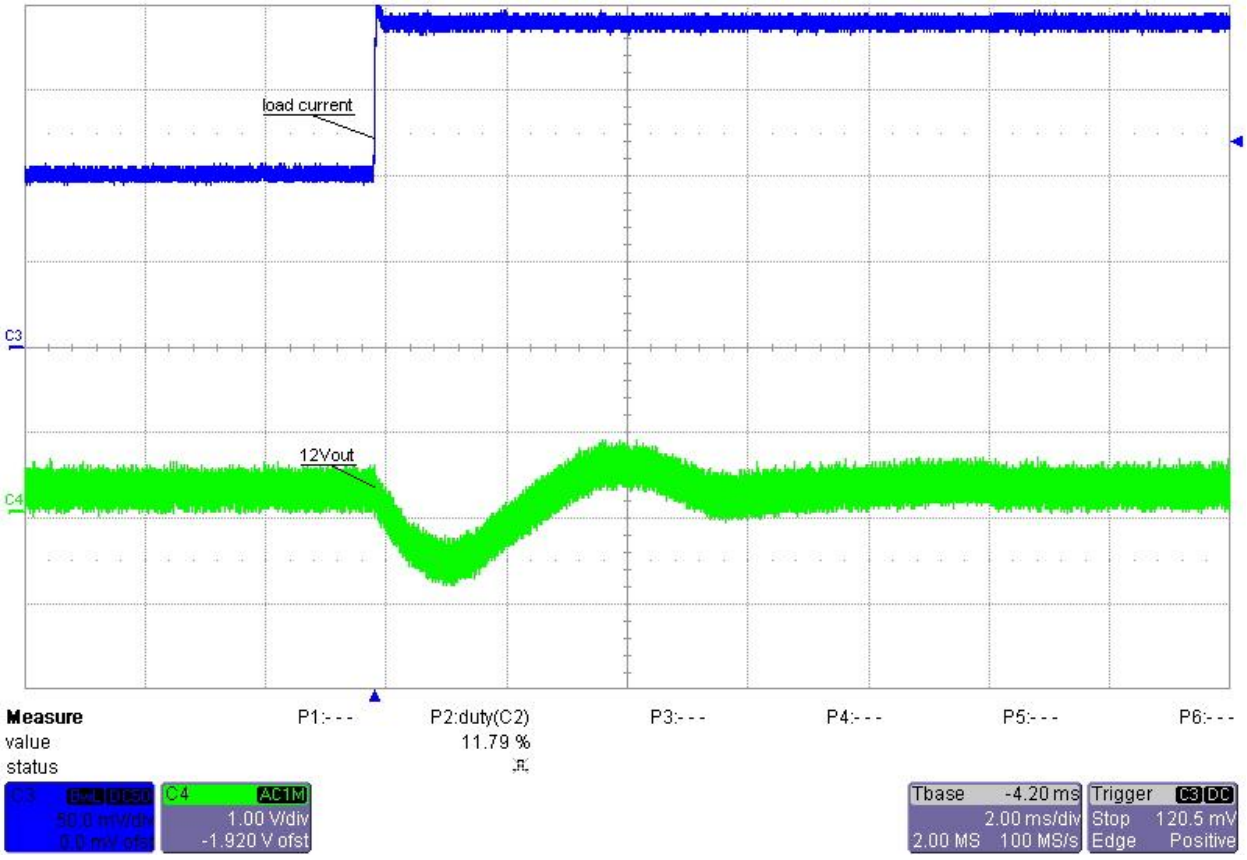
6.3 15V output2 (isolated)

Input voltage = 230VDC
Load current = full load (31.53W)



7 Load Transients

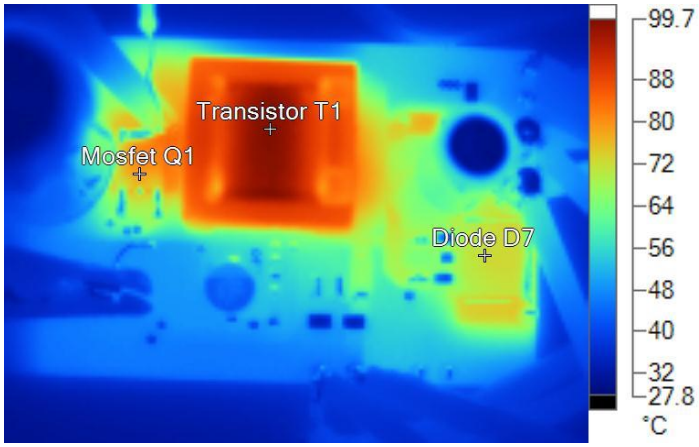
Input voltage = 230VDC
Load current = 0.9A to 1.9A



8 Thermal Analysis

The image below shows the infrared image taken from the FlexCam after 15min at full load (31.53W).

Input voltage = 375VDC
Output power = 31.53W
Ambient temperature = 25°C



Name	Temperature	
Transistor T1	99.4°C	
Mosfet Q1	79.1°C	
Diode D7	72.0°C	

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2. You have full and exclusive responsibility to assure the safety and compliance of your products with all such laws and other applicable regulatory requirements, and also to assure the safety of any activities to be conducted by you and/or your employees, affiliates, contractors or designees, using the EVM. Further, you are responsible to assure that any interfaces (electronic and/or mechanical) between the EVM and any human body are designed with suitable isolation and means to safely limit accessible leakage currents to minimize the risk of electrical shock hazard.
3. Since the EVM is not a completed product, it may not meet all applicable regulatory and safety compliance standards (such as UL, CSA, VDE, CE, RoHS and WEEE) which may normally be associated with similar items. You assume full responsibility to determine and/or assure compliance with any such standards and related certifications as may be applicable. You will employ reasonable safeguards to ensure that your use of the EVM will not result in any property damage, injury or death, even if the EVM should fail to perform as described or expected.

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Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265