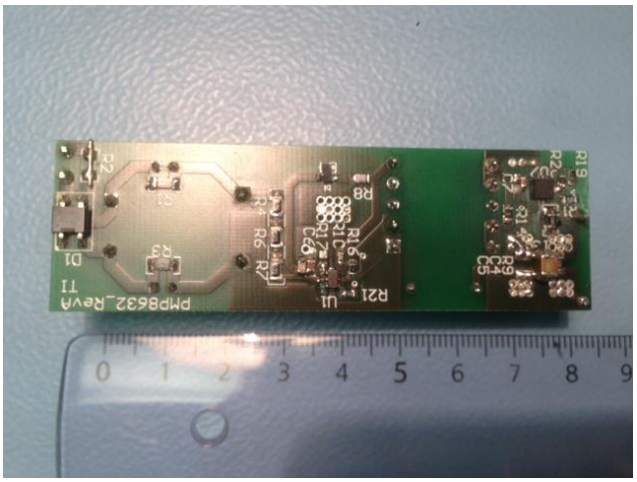
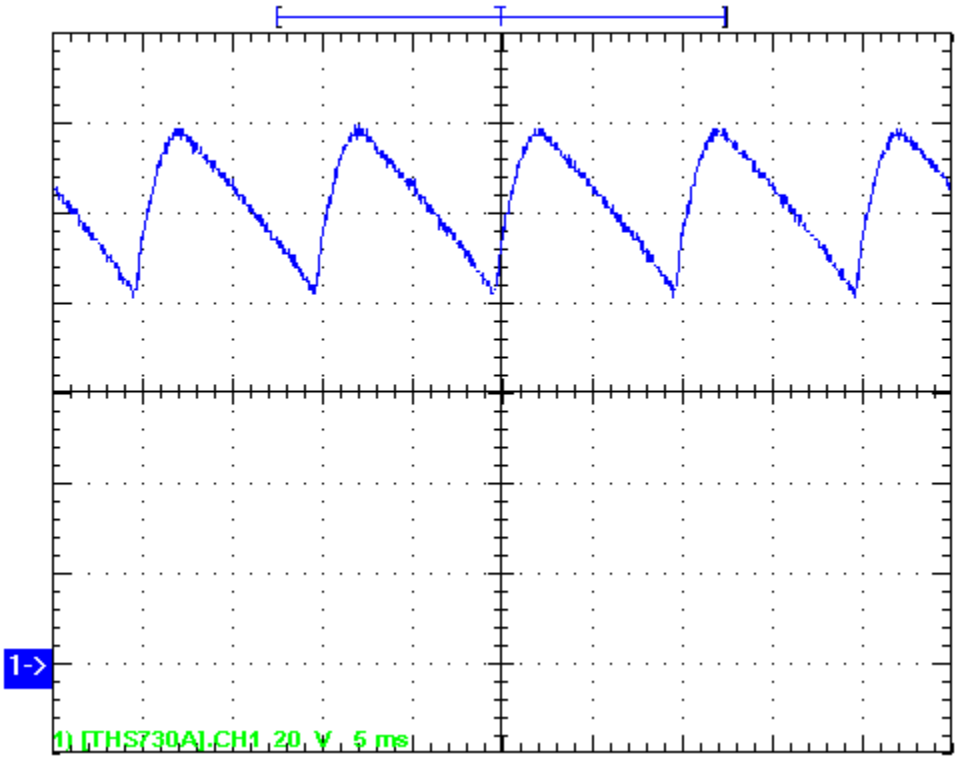


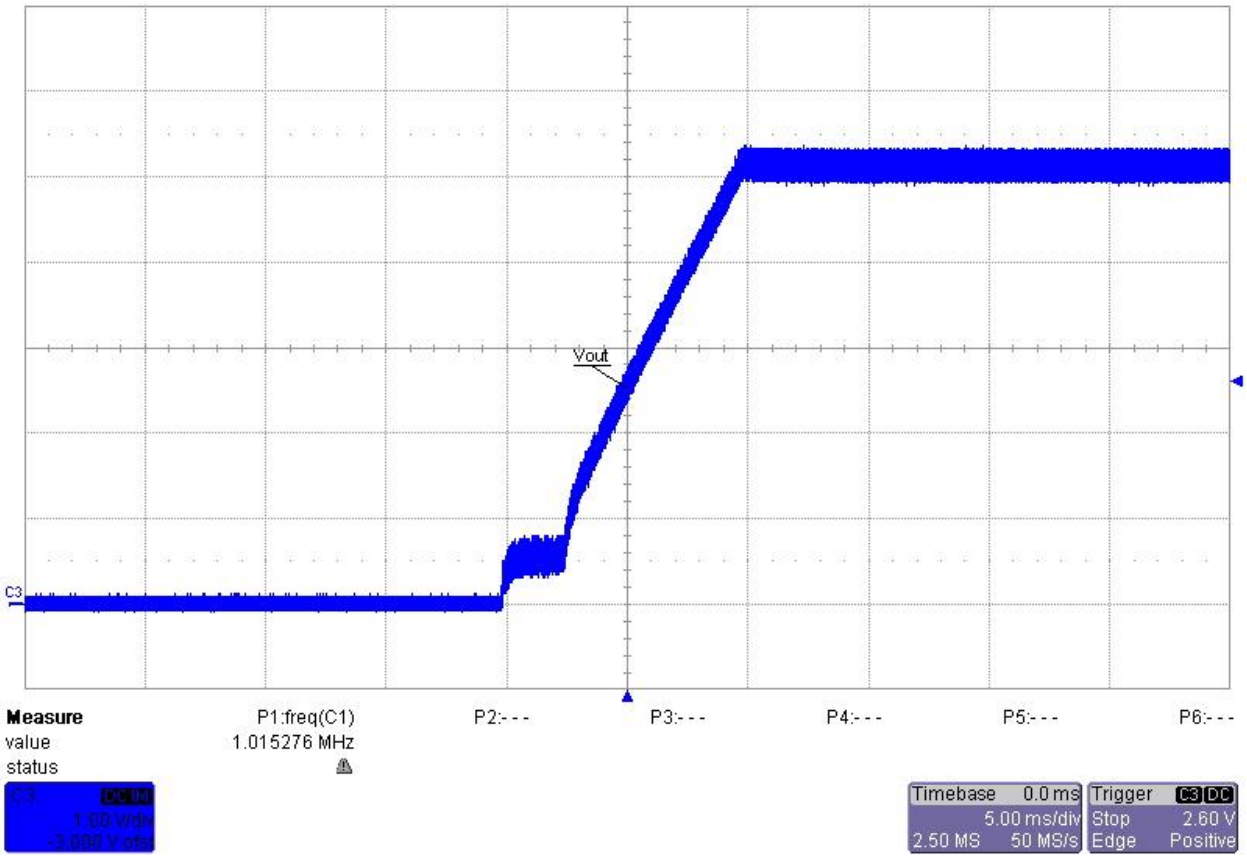
1 Input voltage ripple

Input voltage = 85VAC
Load current = 1.6A



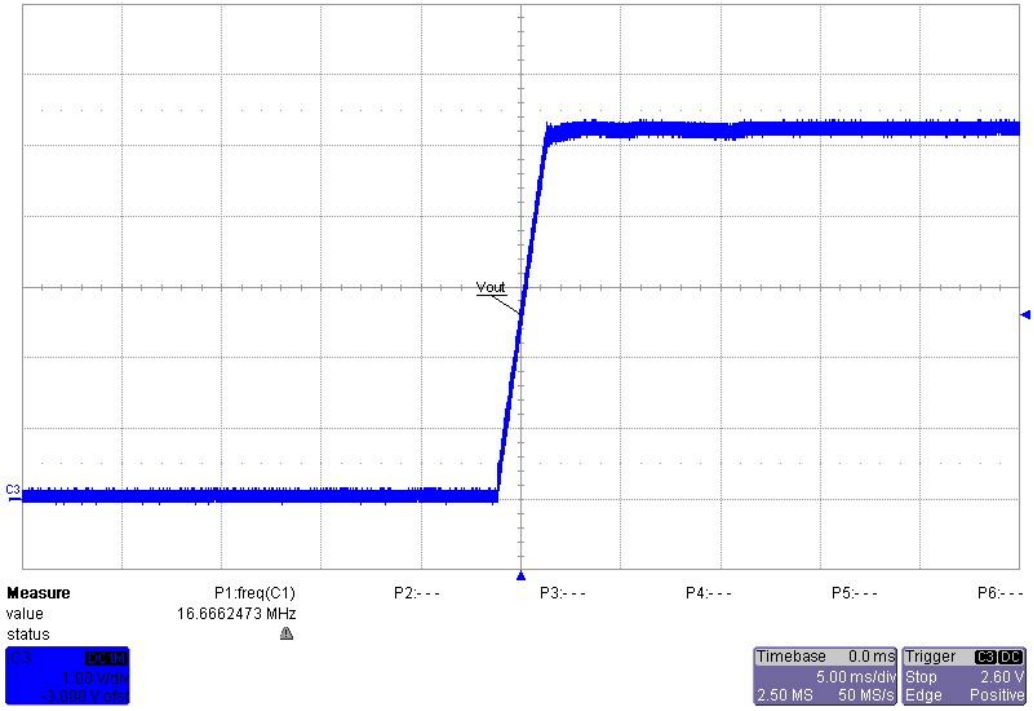
2 Startup

Input voltage = 85VAC
Load current = 1.6A



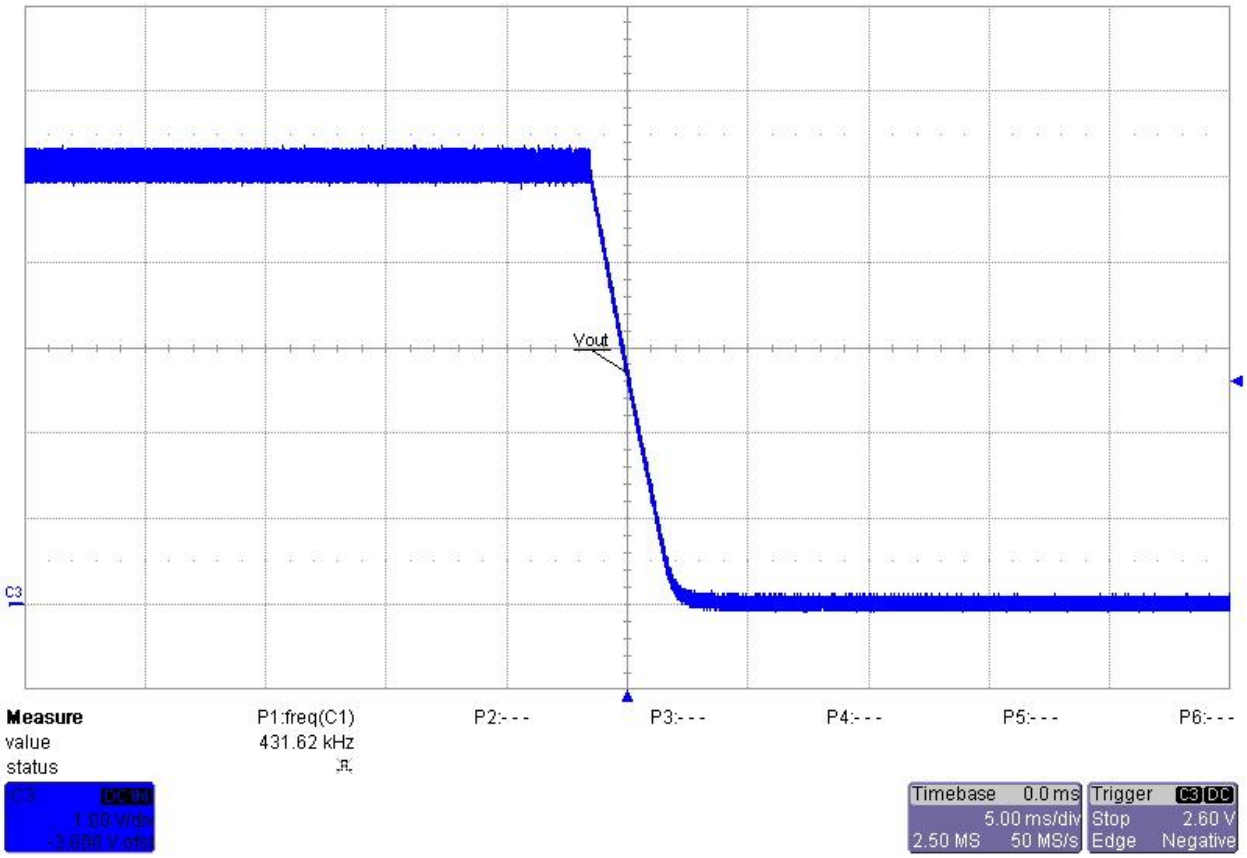
Input voltage = 135VAC
Load current = 1.6A

Input voltage = 85VAC
Load current = 0A



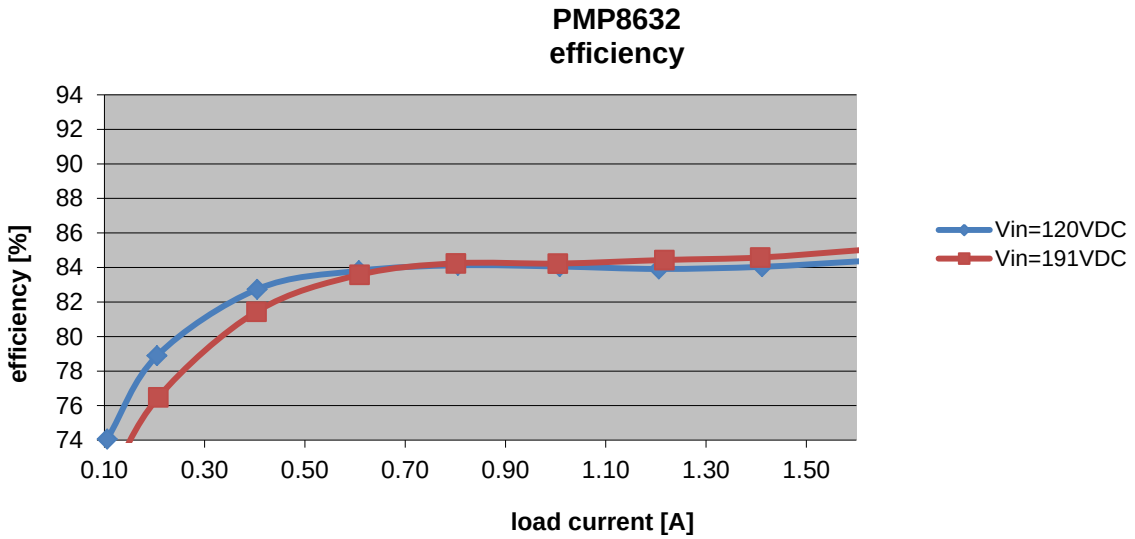
3 Shutdown

Input voltage = 85VAC
Load current = 1.6A



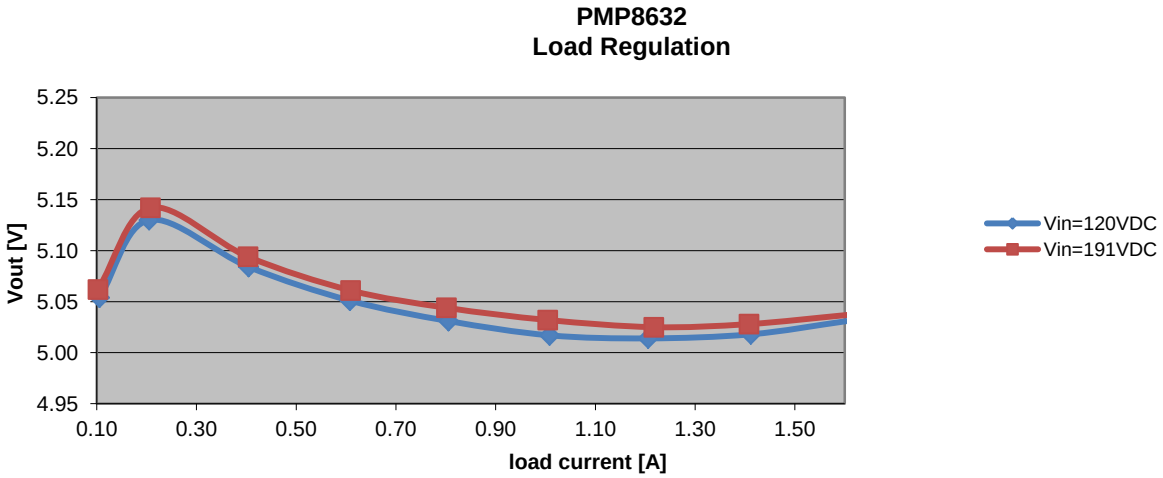
4 Efficiency

Measurements are done with a DC input voltage.



5 Load regulation

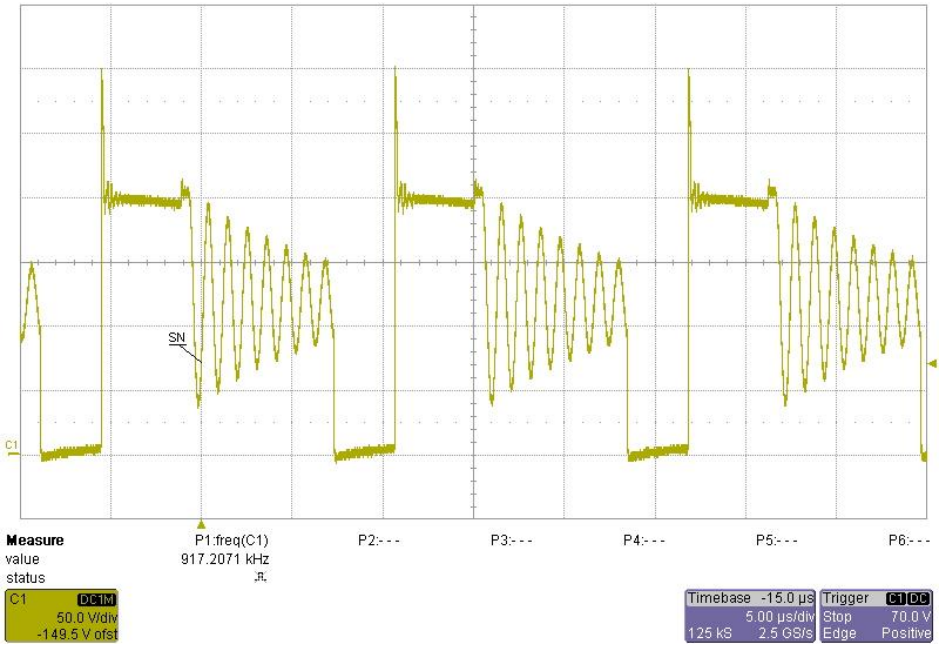
Measurements are done with a DC input voltage.



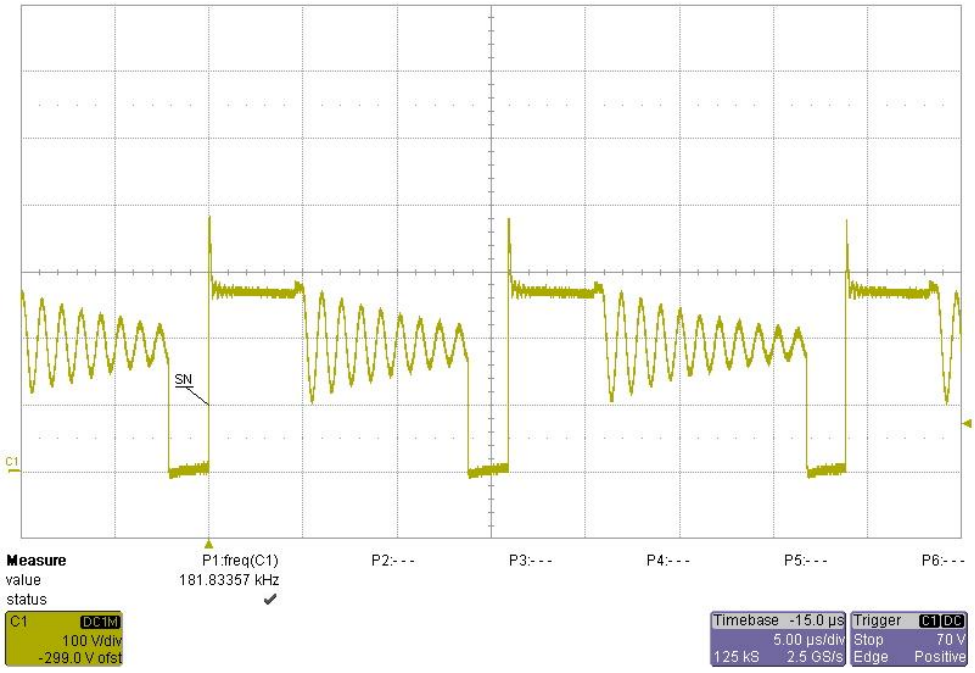
6 Switch Node

Measurements are done with a DC input voltage.

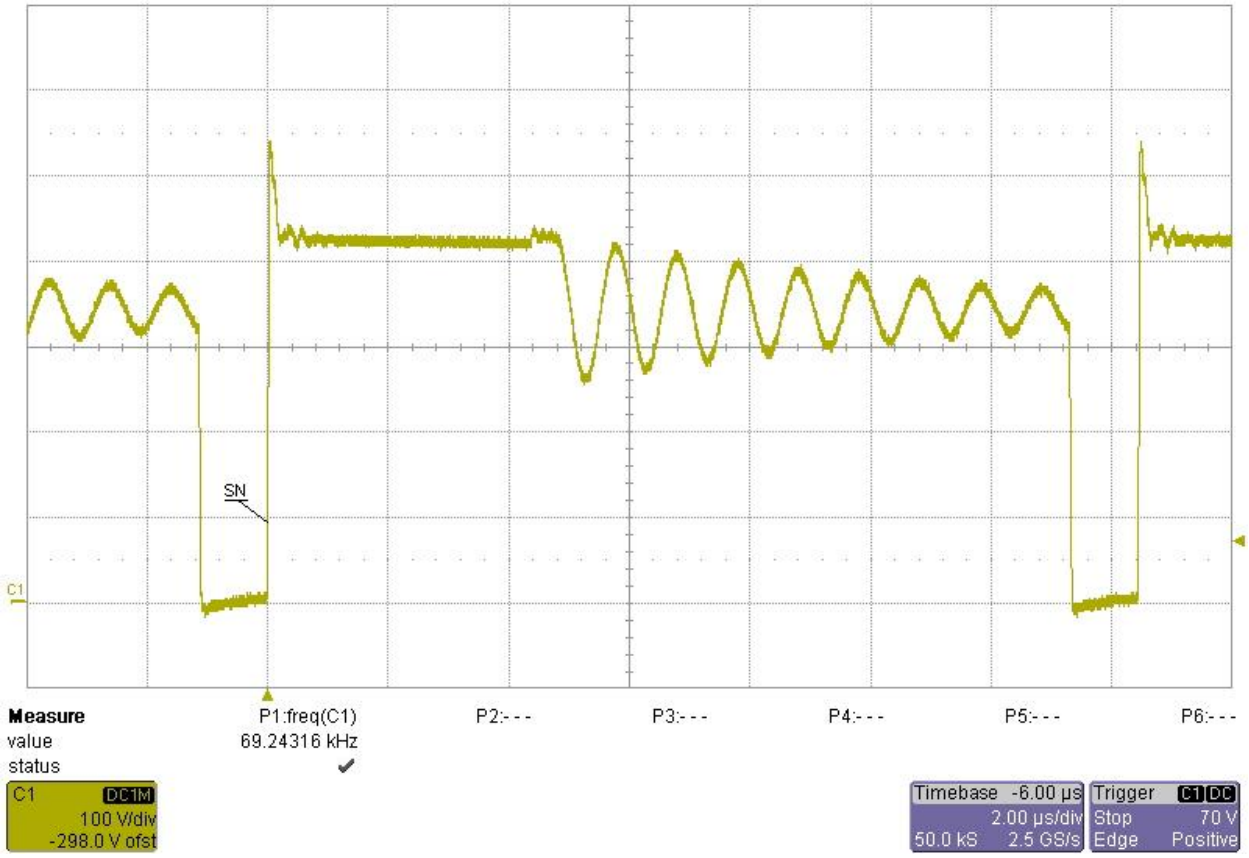
Input voltage = 120VDC
Load current = 1.6A



Input voltage = 191VDC
Load current = 1.6A

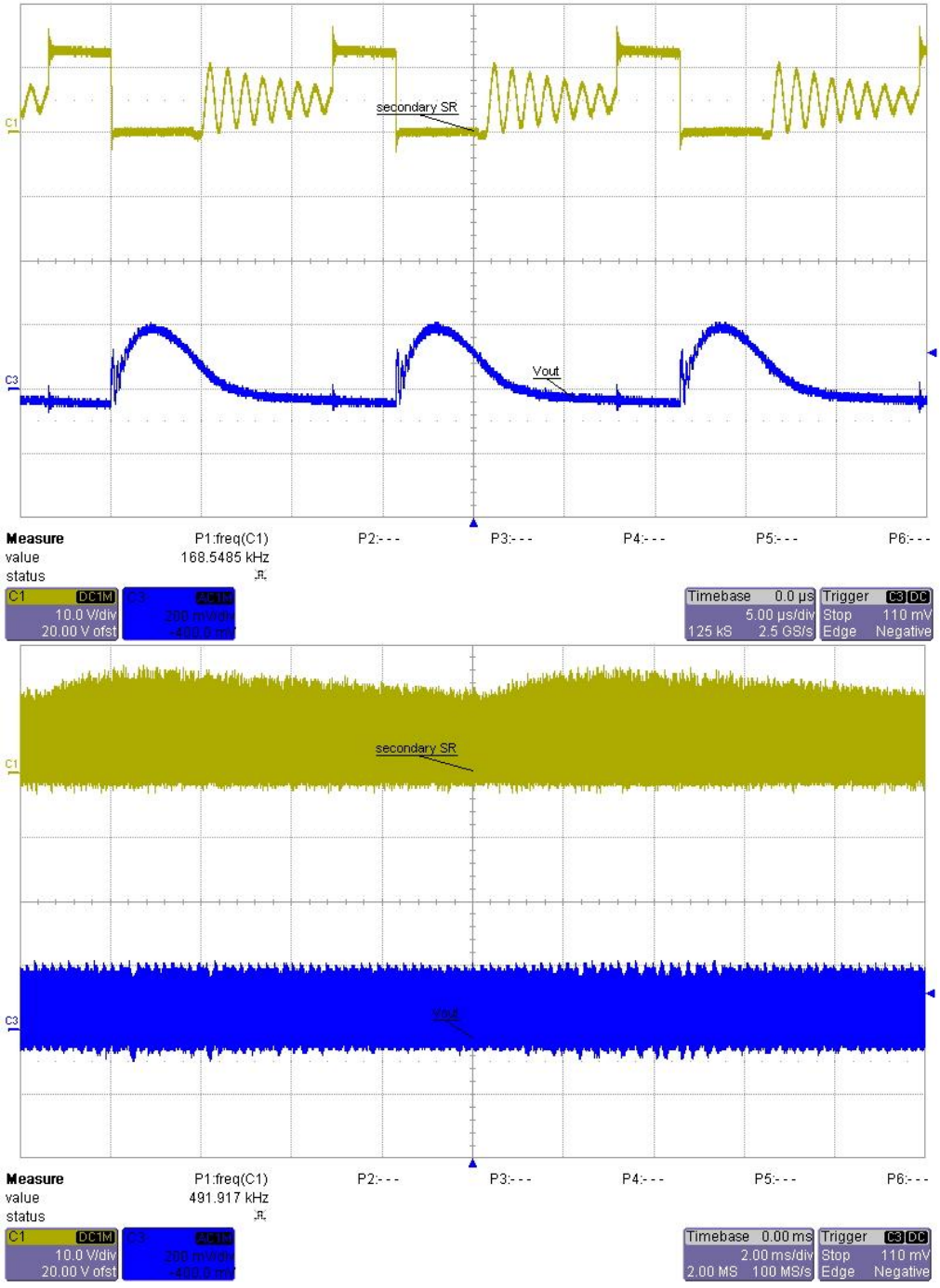


Input voltage = 340VDC
Load current = 1.6A

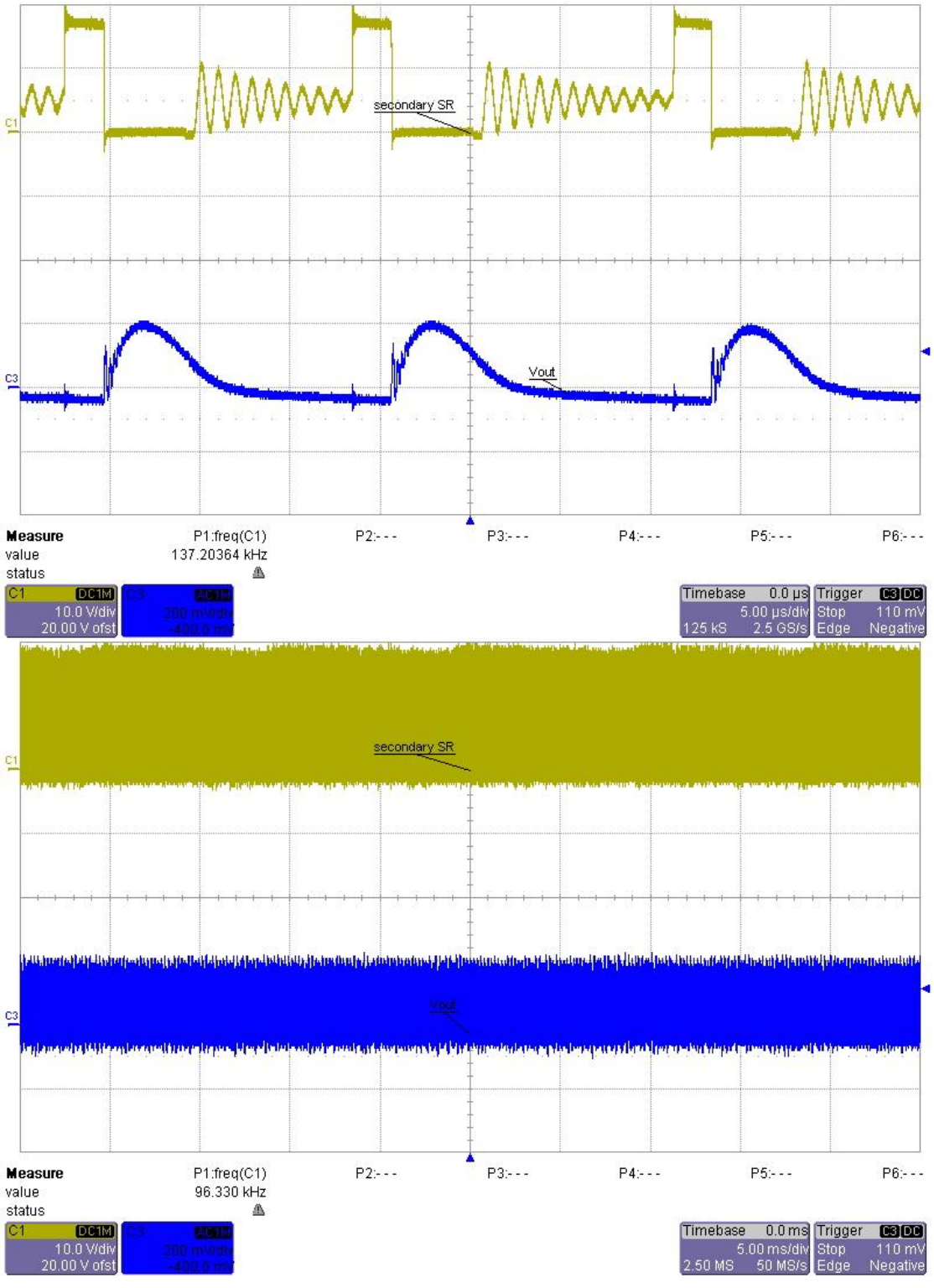


7 Output ripple voltage

Input voltage = 85VAC
Load current = 1.6A

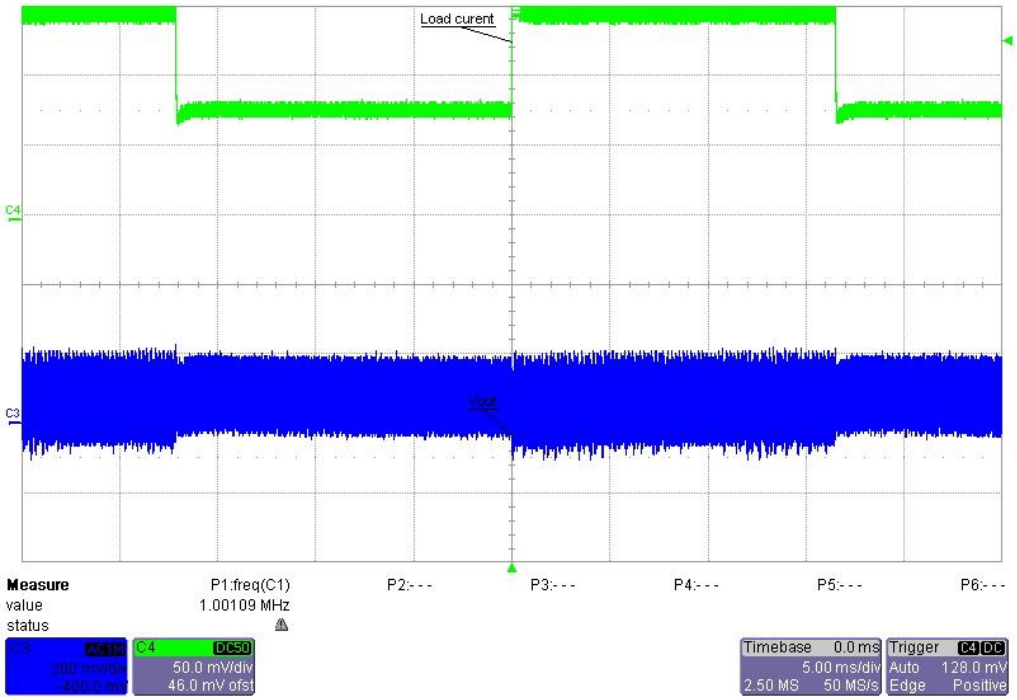


Input voltage = 135VAC
Load current = 1.6A

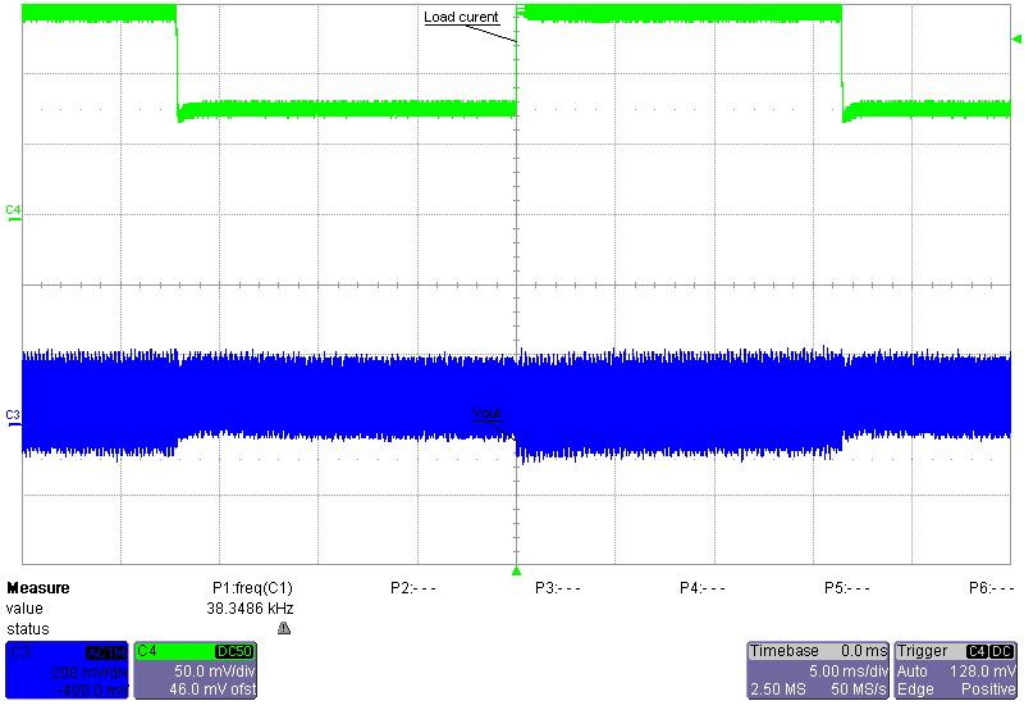


8 Load Transients

Input voltage = 85VAC
Load current = 0.8A to 1.6A



Input voltage = 135VAC
Load current = 0.8A to 1.6A

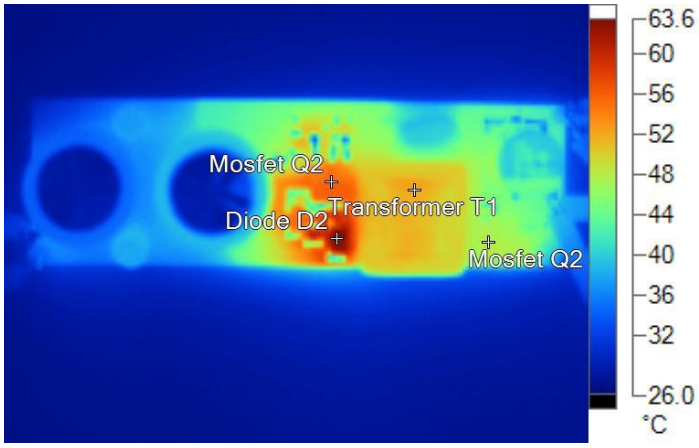


9 Thermal Analysis

The images below show the infrared images taken from the FlexCam after 15min at full load (8W).

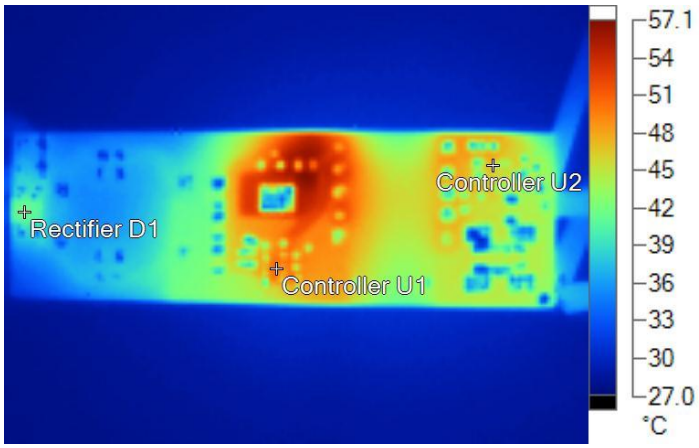
All measurements are done without airflow!

Input voltage = 85VAC
Output power = 8W
Ambient temperature = 25°C:



Name	Temperature	
Diode D2	63.6°C	
Mosfet Q2	55.7°C	
Mosfet Q2	47.8°C	
Transformer T1	52.1°C	

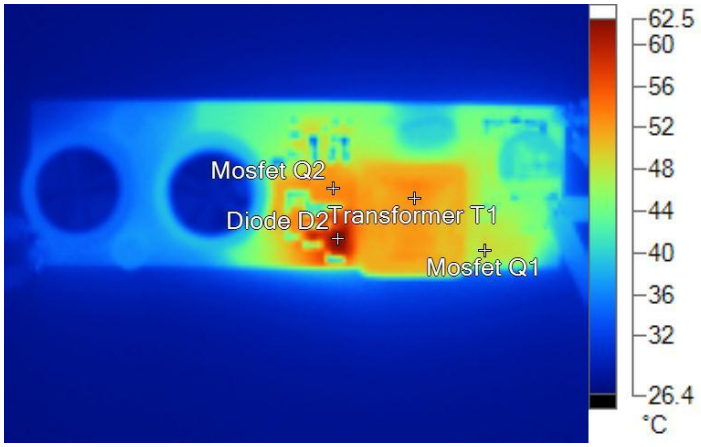
Vin=85VAC I=1.6A Top_0304.is2



Name	Temperature	
Rectifier D1	41.2°C	
Controller U1	50.0°C	
Controller U2	46.1°C	

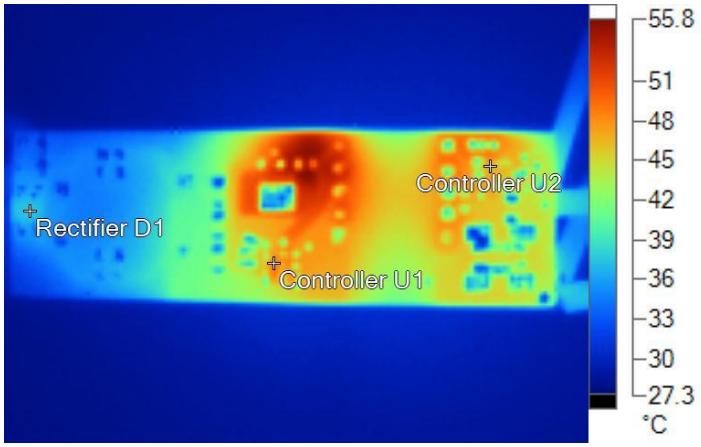
Vin=85VAC I=1.6A Bottom_0306.is2

Input voltage = 135VAC
Output power = 8W
Ambient temperature = 25°C:



Name	Temperature
Diode D2	62.5°C
Mosfet Q2	53.0°C
Transformer T1	52.6°C
Mosfet Q1	48.9°C

Vin=135AC I=1.6A Top_0305.is2



Name	Temperature	
Rectifier D1	37.2°C	
Controller U1	48.7°C	
Controller U2	47.6°C	

Vin=135VAC I=1.6A Bottom_0307.is2

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1. You have unique knowledge concerning Federal, State and local regulatory requirements (including but not limited to Food and Drug Administration regulations, if applicable) which relate to your products and which relate to your use (and/or that of your employees, affiliates, contractors or designees) of the EVM for evaluation, testing and other purposes.
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