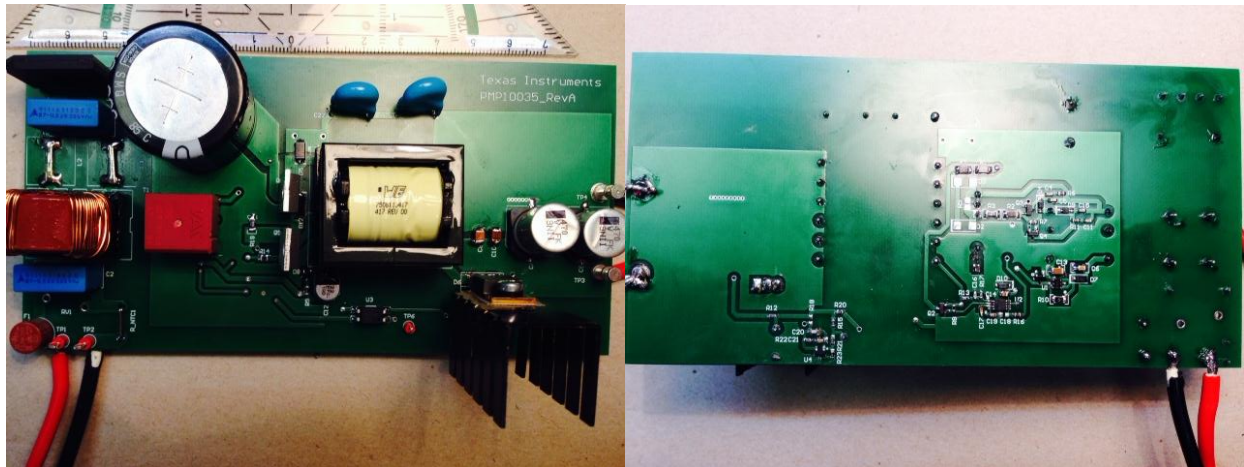
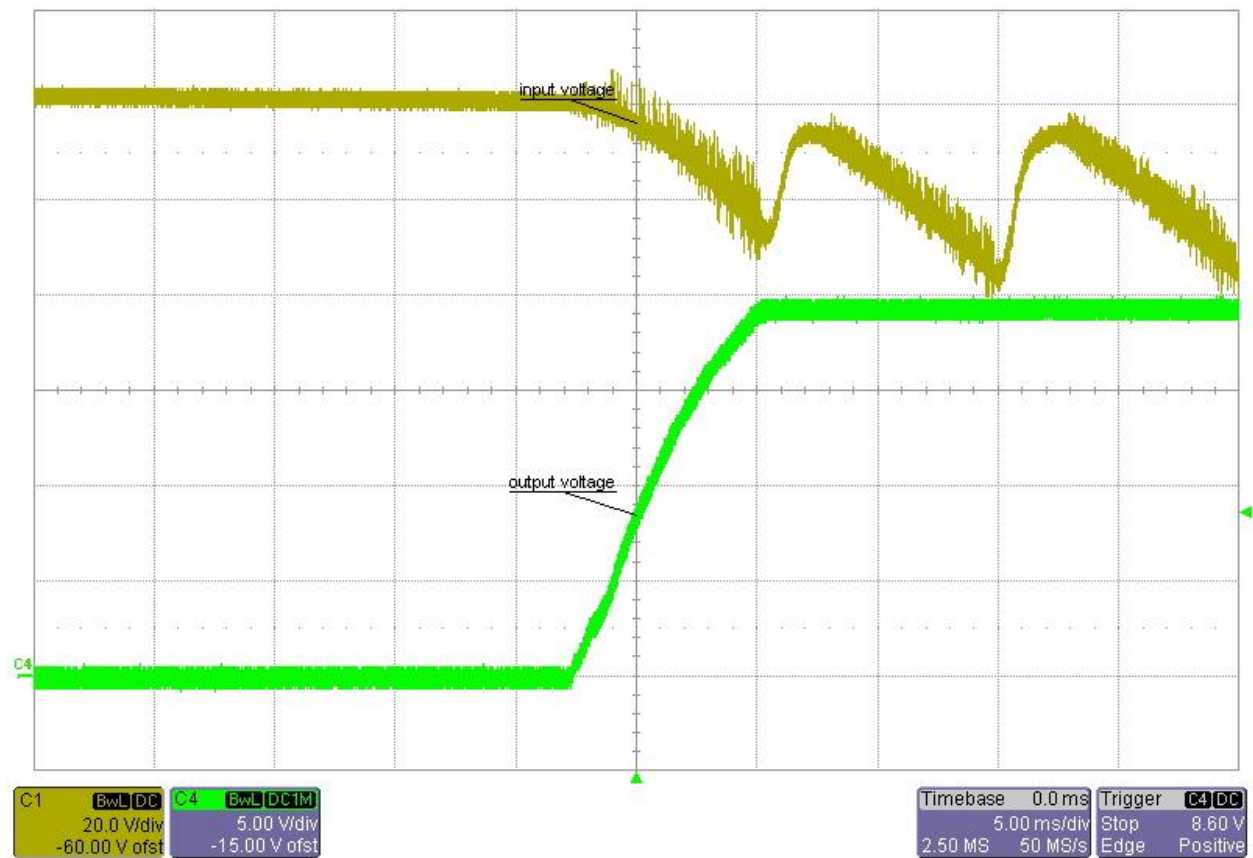




1 Startup

Input voltage = 85VAC

Load current = full load (3.84A)

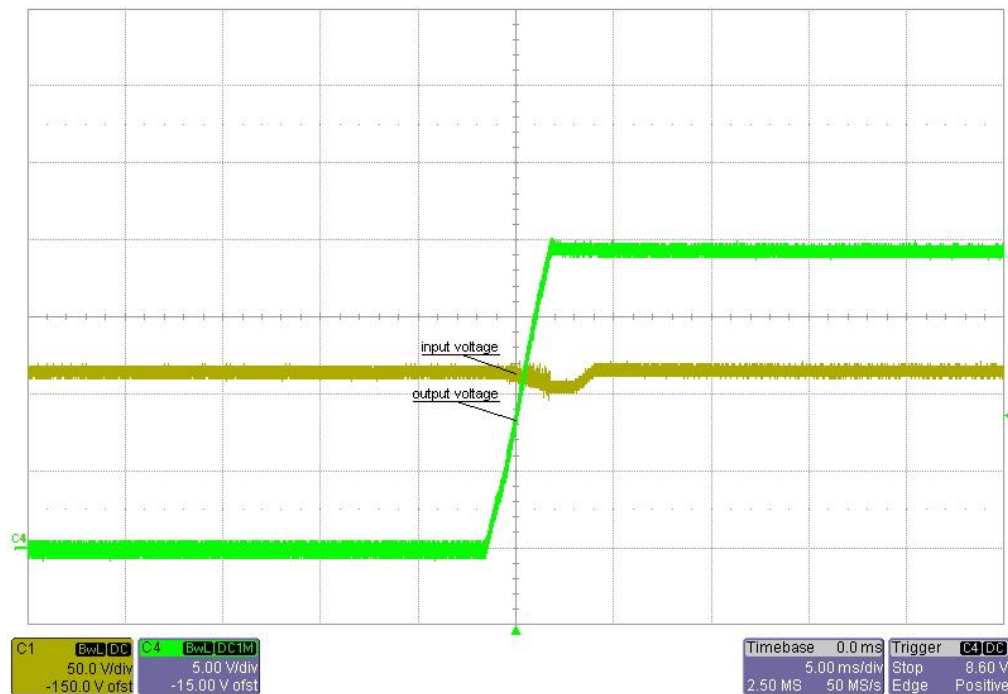


PMP10035_RevC Test Results



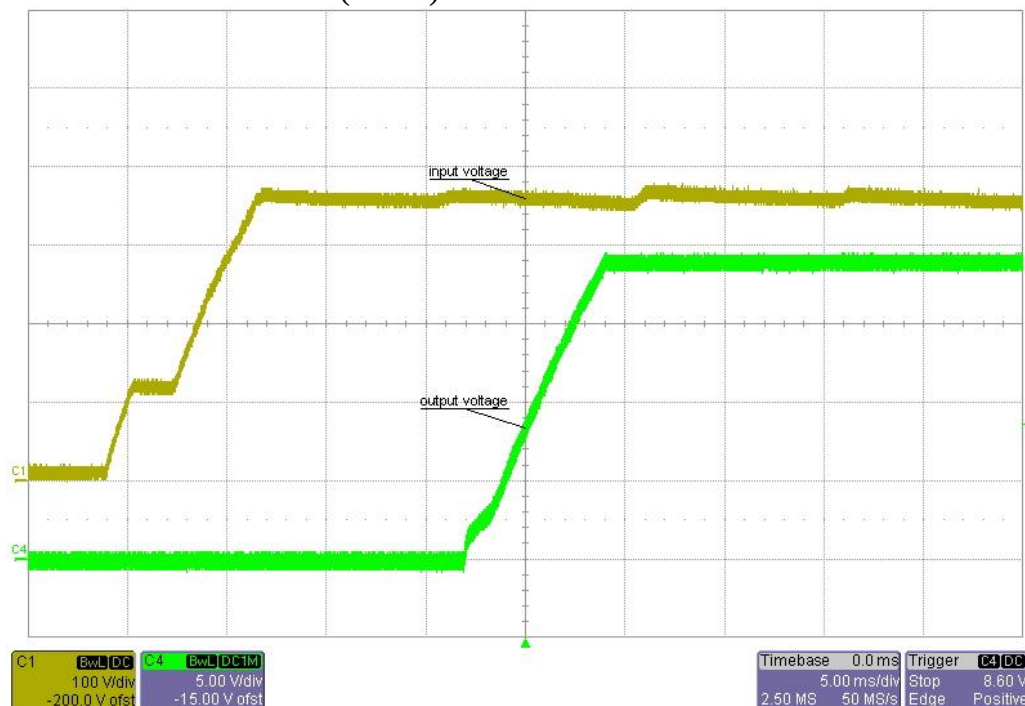
Input voltage = 85VAC

Load current = no load



Input voltage = 265VAC

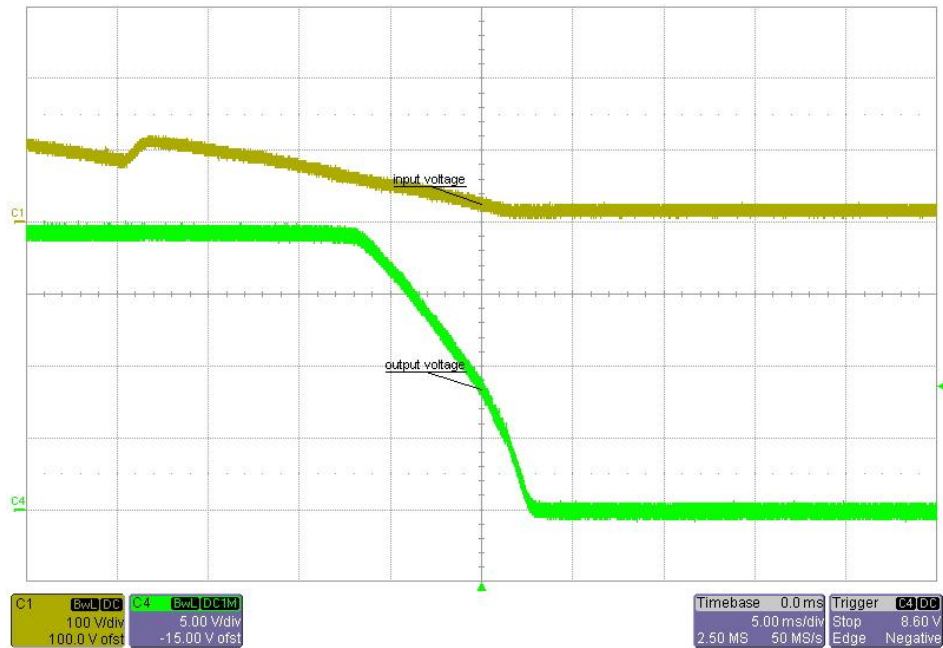
Load current = full load (3.84A)



2 Shutdown

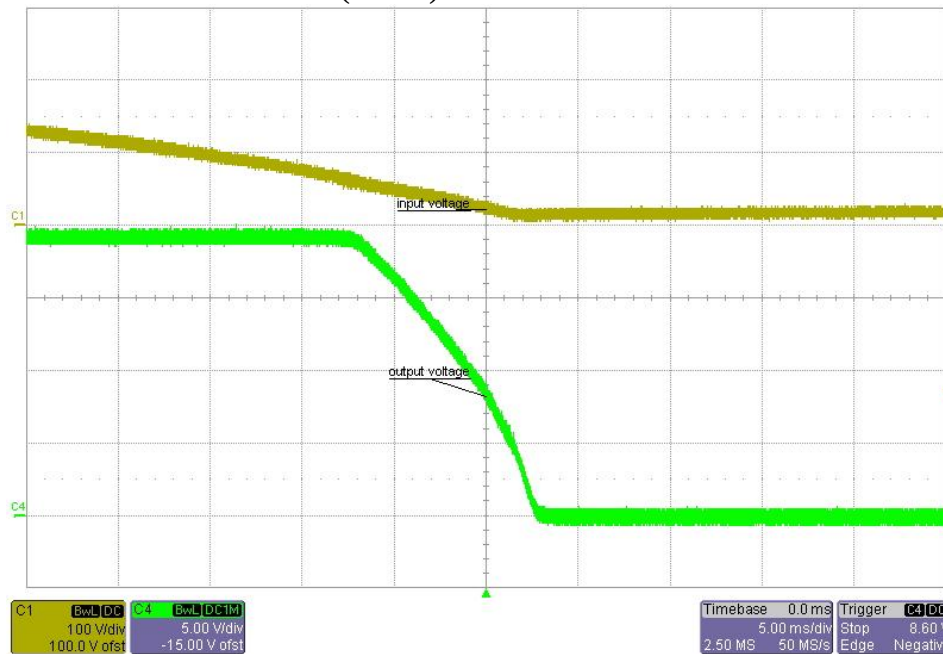
Input voltage = 85VAC

Load current = full load (3.84A)

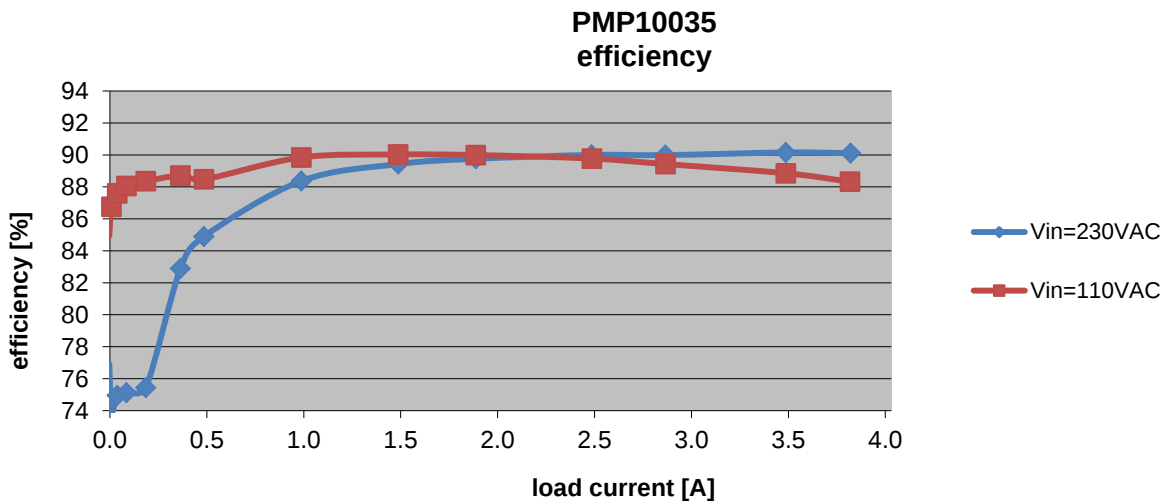


Input voltage = 265VAC

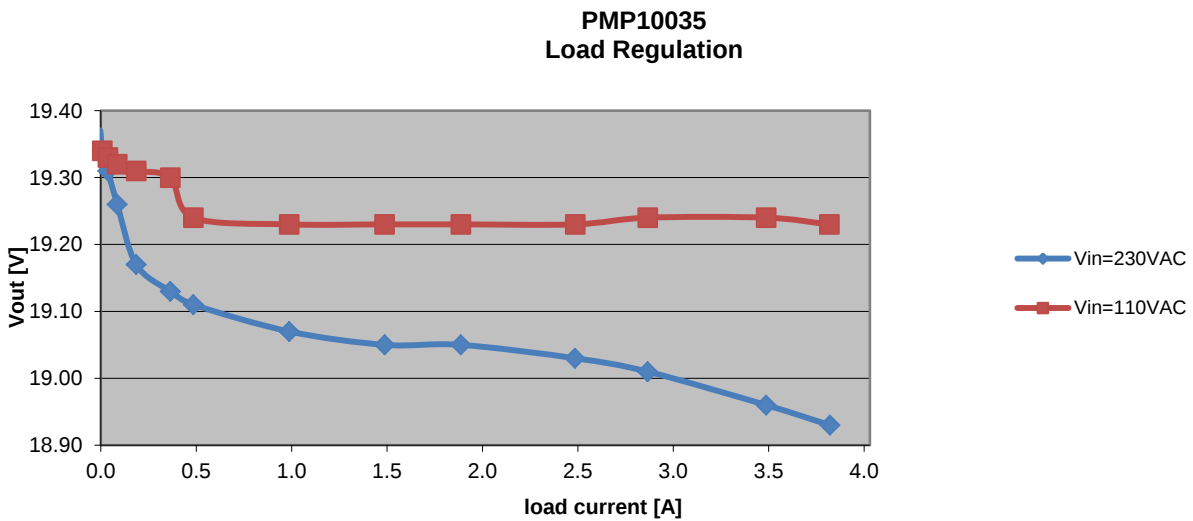
Load current = full load (3.84A)



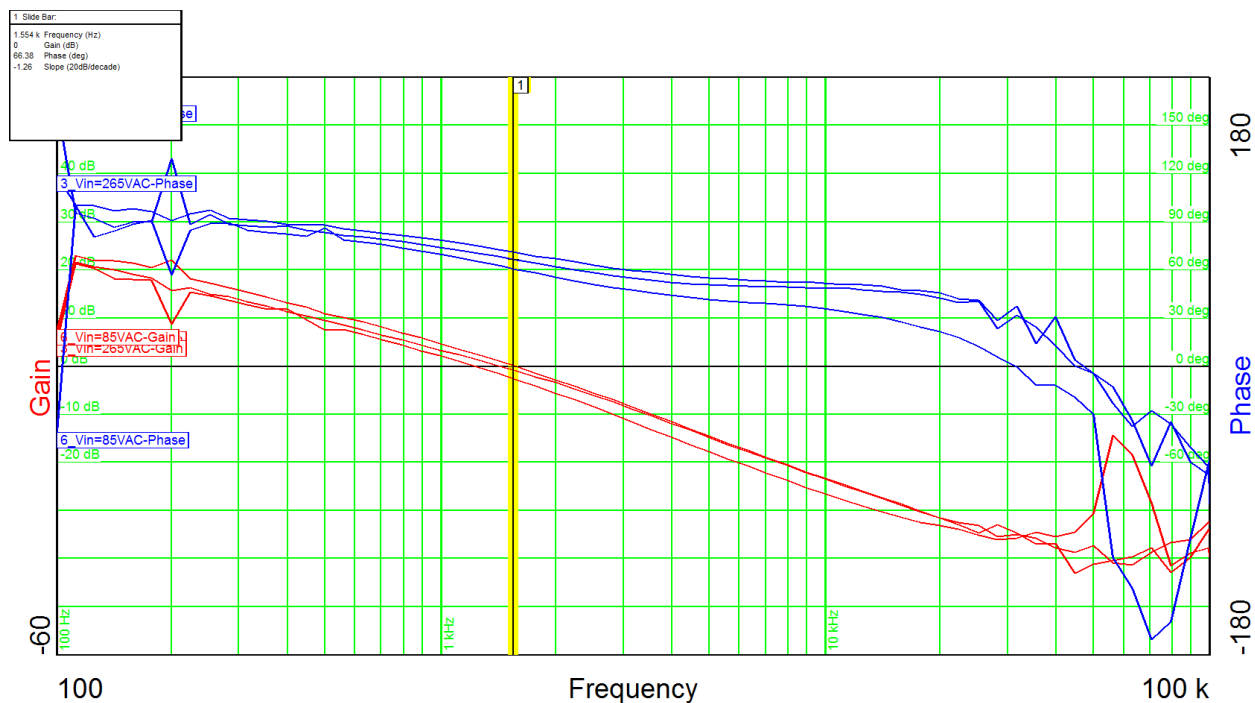
3 Efficiency



4 Load regulation



Control Loop Frequency Response



Output power = 19.5V@3.84A
Input voltage = 85VAC
Phase margin = 66°
Bandwidth = 1.2kHz

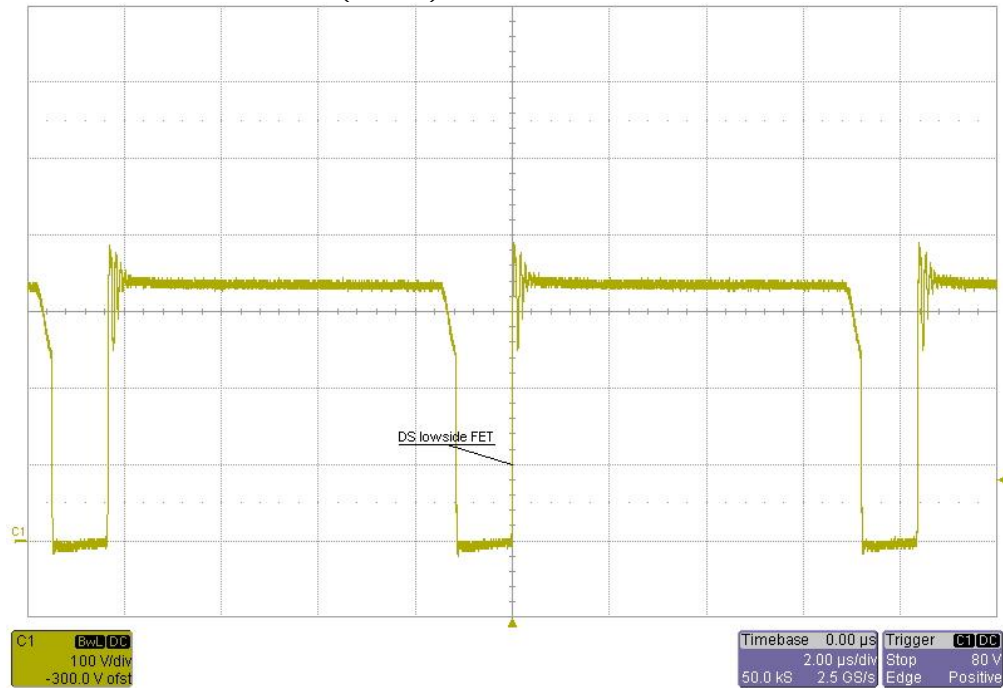
Output power = 19.5V@3.84A
Input voltage = 230VAC
Phase margin = 66°
Bandwidth = 1.6kHz

Output power = 19.5V@3.84A
Input voltage = 265VAC
Phase margin = 73°
Bandwidth = 1.4kHz

5 Switch Node

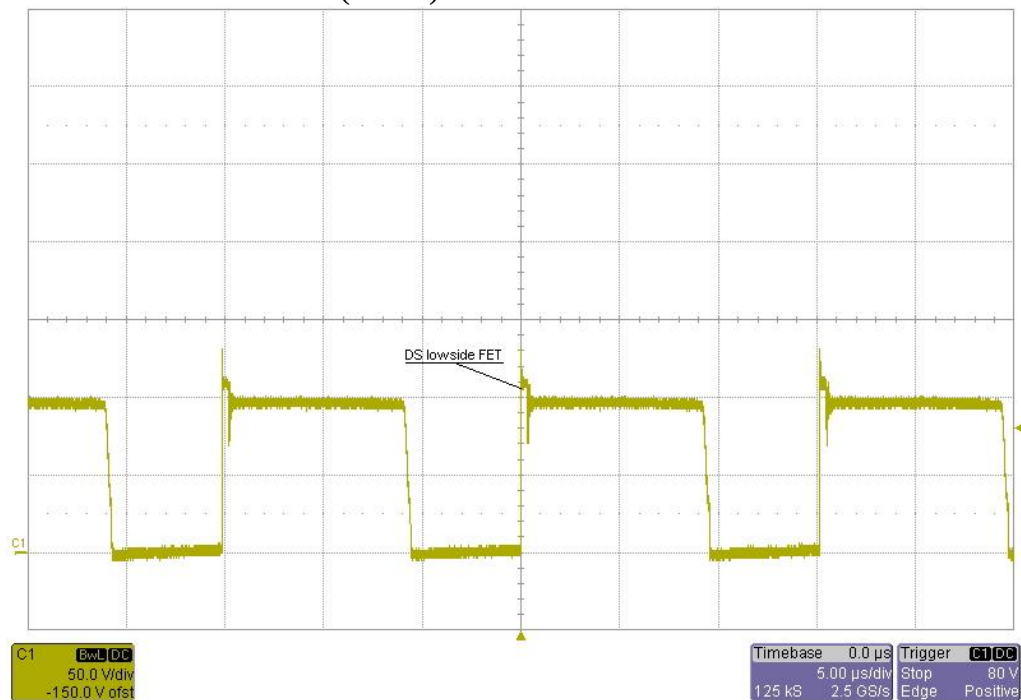
Input voltage = 265VAC

Load current = full load (3.84A)



Input voltage = 85VAC

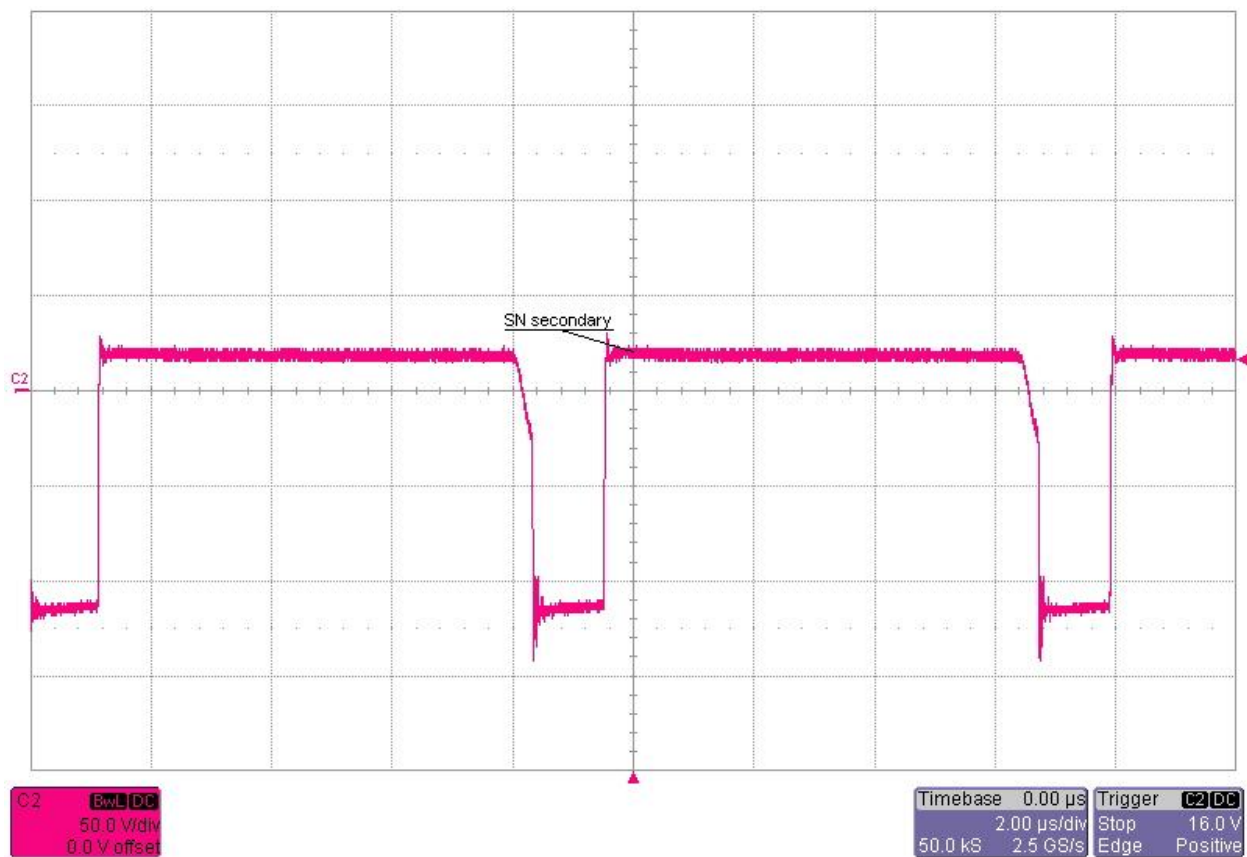
Load current = full load (3.84A)



6 Switch Node secondary side

Input voltage = 265VAC

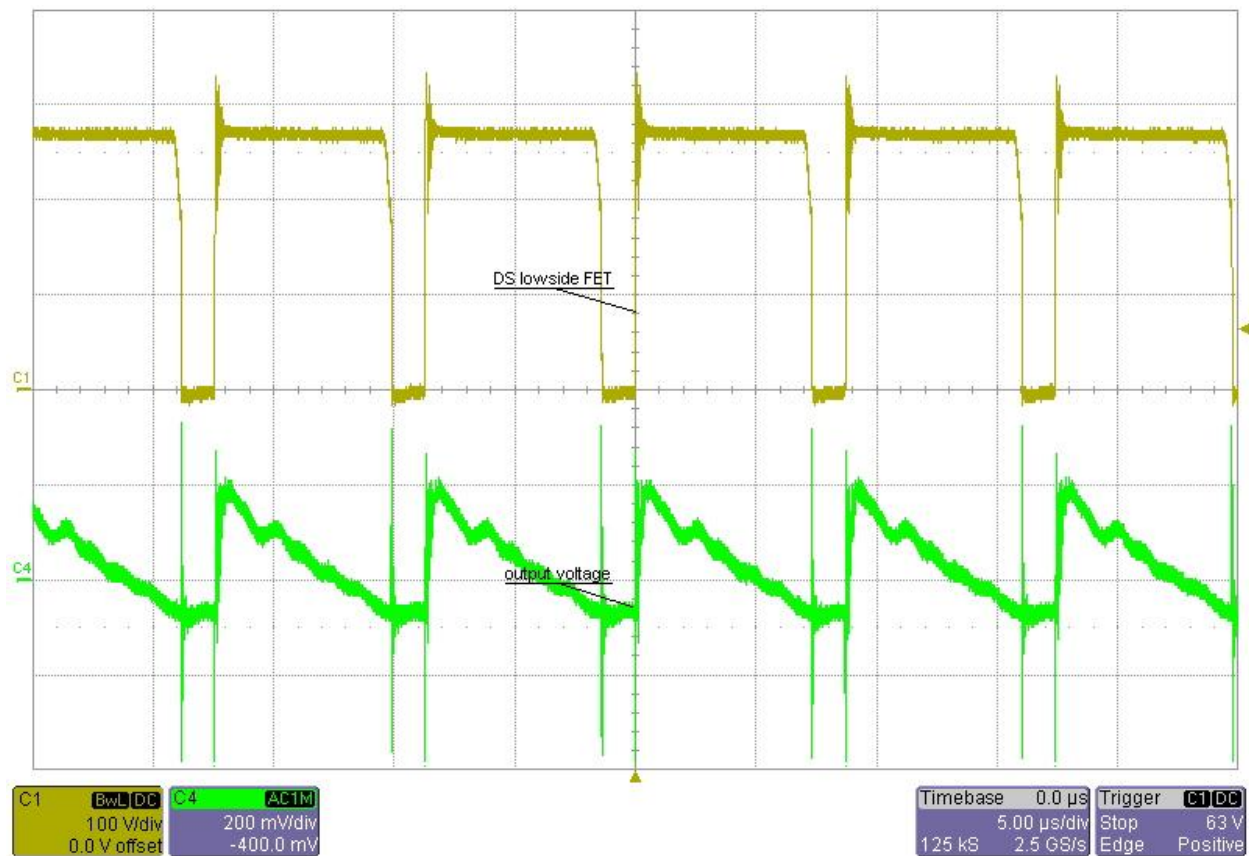
Load current = full load (3.84A)



7 Output ripple voltage

Input voltage = 230VAC

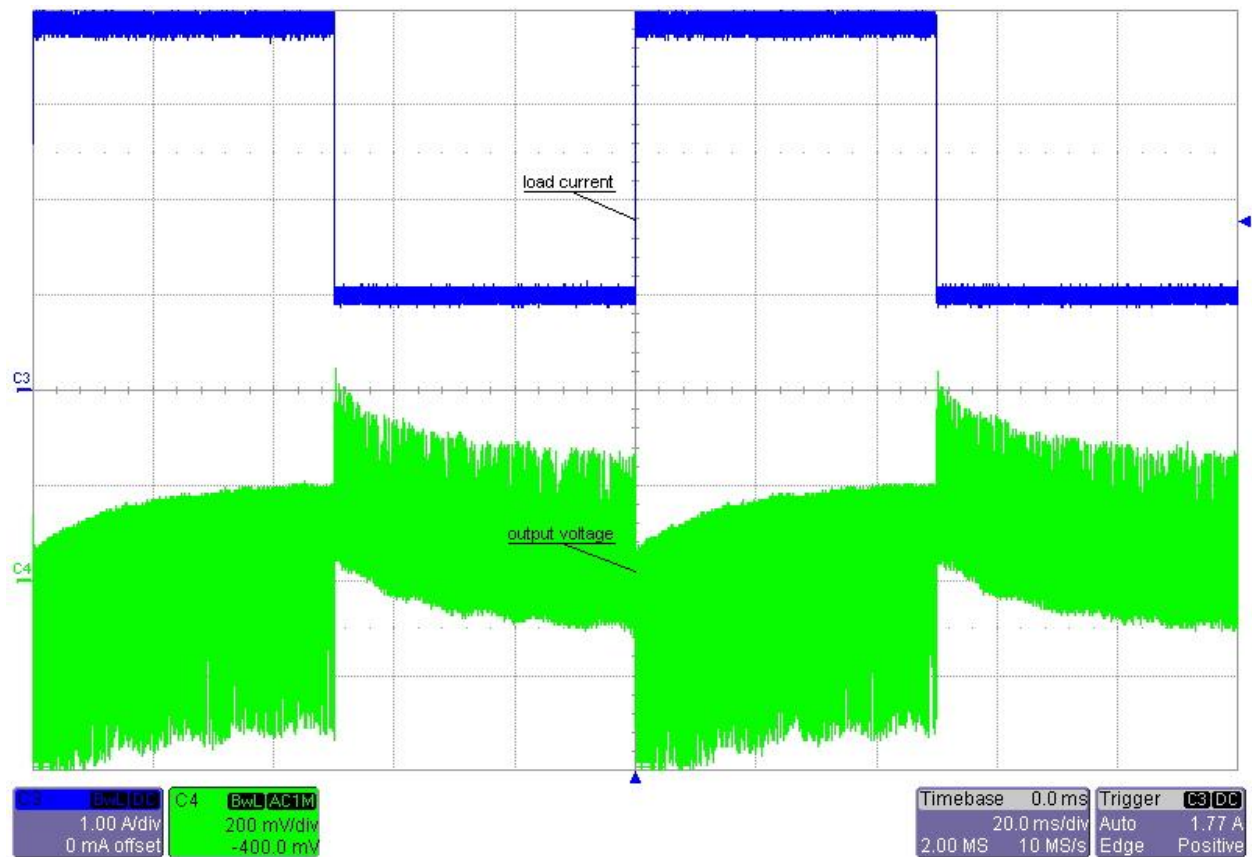
Load current = full load (3.84A)



8 Load Transients

Input voltage = 230VAC

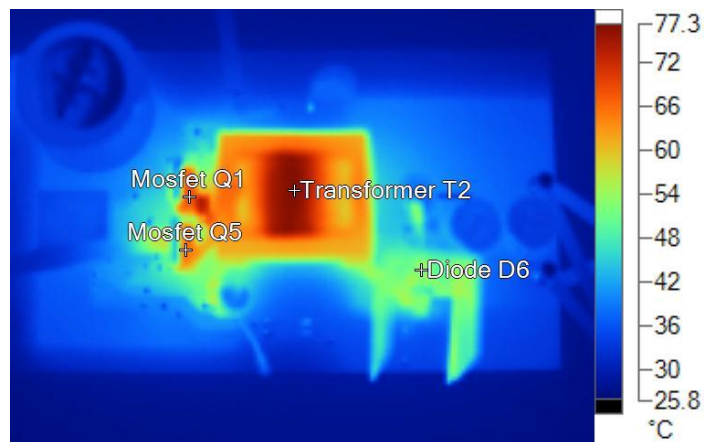
Load current = 1A to 4A



9 Thermal Analysis

The images below show the infrared images taken from the FlexCam after 15min at full load (19.5V@3.84A).

Input voltage = 325VDC
Output power = 75W
Ambient temperature = 25°C
No heatsink, no airflow



IR20140918_0500 325VDC I=3.84A.is2

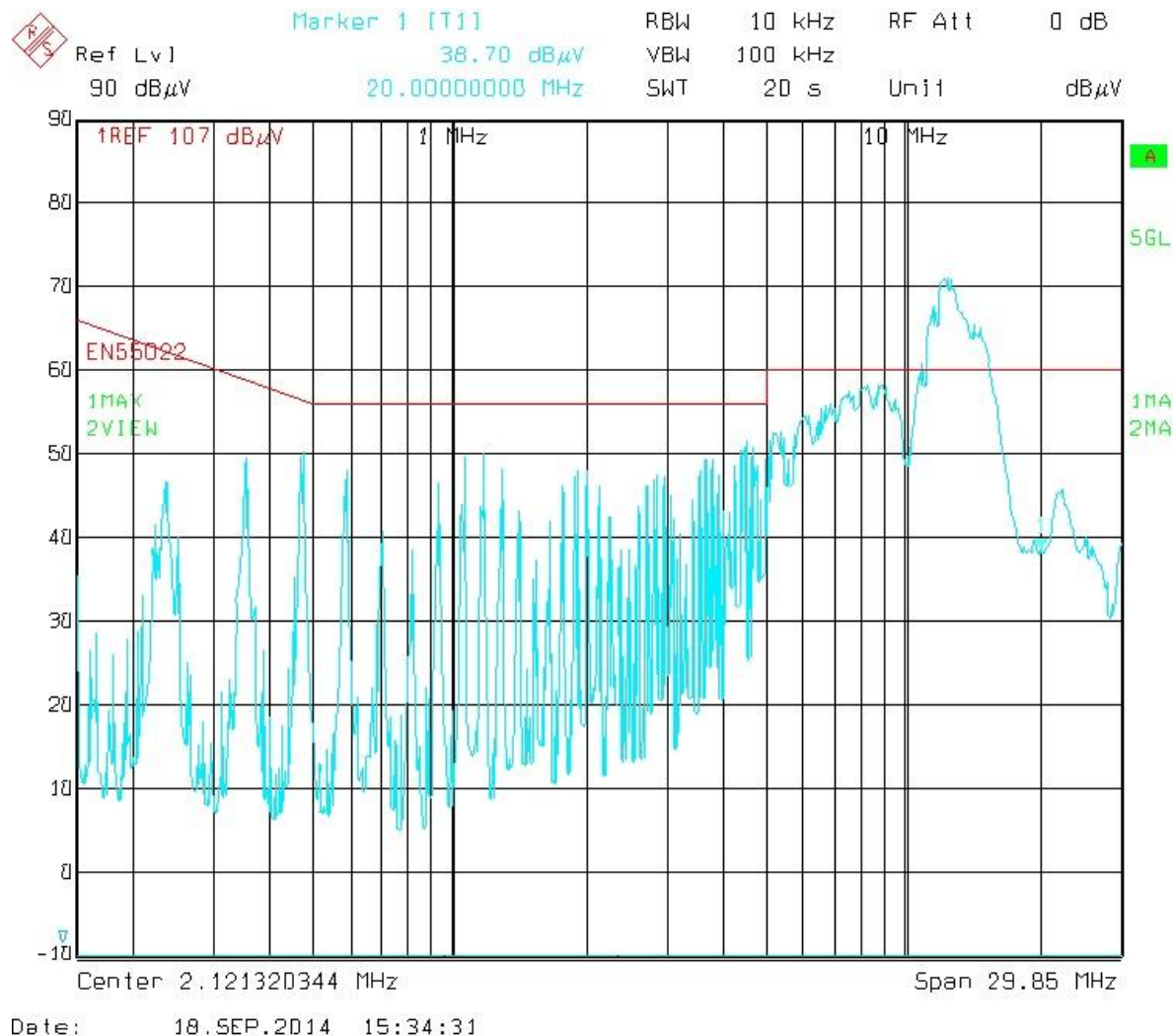
Name	Temperature	
Transformer T2	77.1°C	
Diode D6	53.6°C	
Mosfet Q1	67.6°C	
Mosfet Q5	65.9°C	

10 EMI Measurement

The graph below shows the conducted emission EMI noise and the EN55022 Class-B Quasi-Peak limits (measurement from the worst case line). The load was connected to a LISN and an isolation transformer; the load was a power resistor. The receiver was set to Quasi-peak detector, 10 KHz bandwidth. The negative terminal of the converter has been connected to the ground of the LISN.

Input voltage = 265VAC

Load current = 3.84A

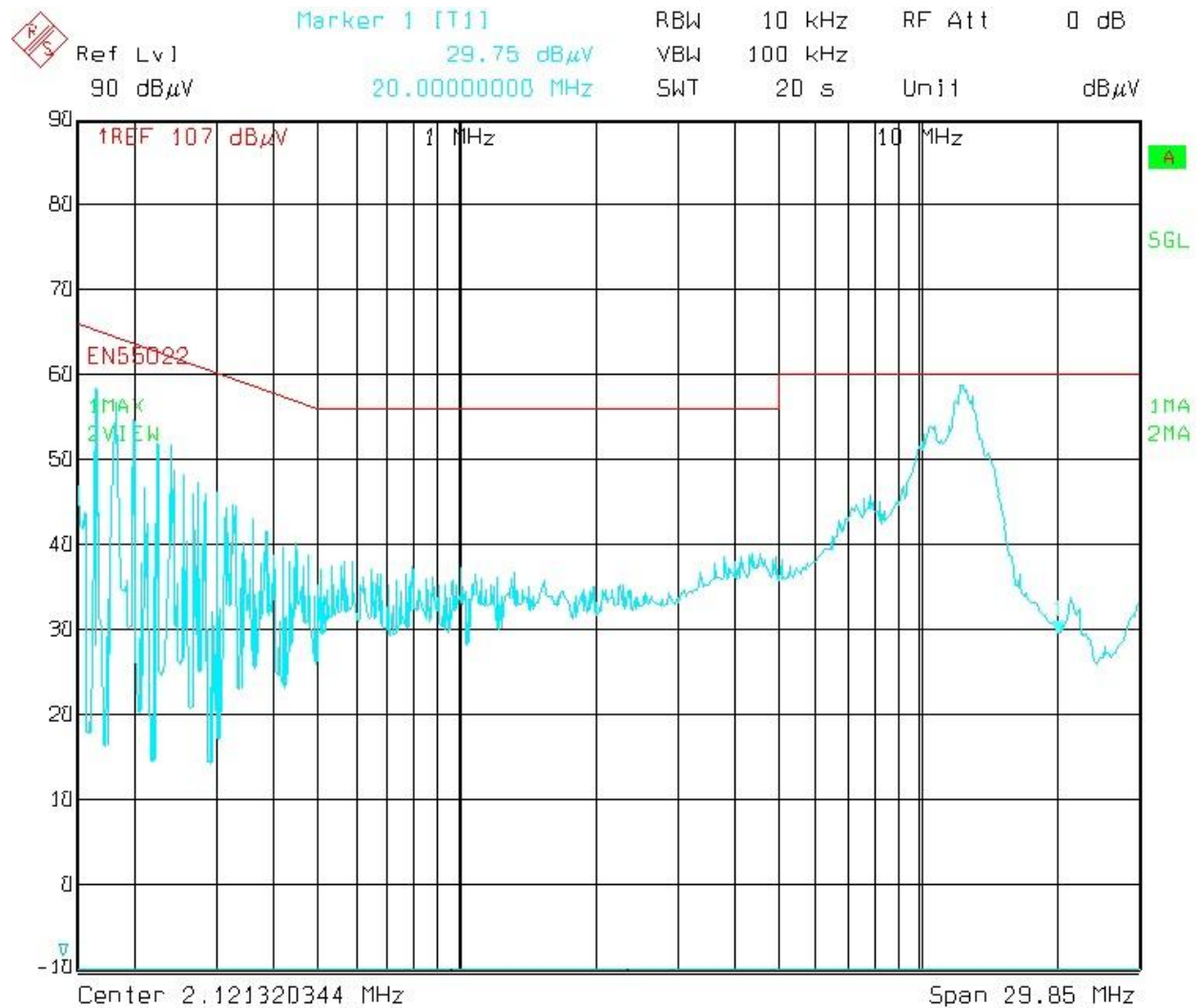


PMP10035_RevC Test Results



Input voltage = 85VAC

Load current = 3.84A



Date: 18.SEP.2014 15:24:35

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