PMP8001

PMP8001 Test Results



SNOU017

PMP8001

Experimental Results

Non-dimming performance

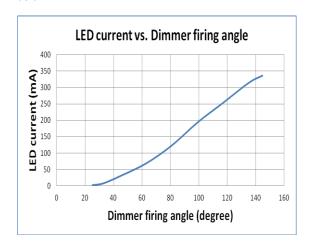
The driver steady state performance for an LED string consisting of 7 series LEDs without using a triac dimmer is summarized in the following table.

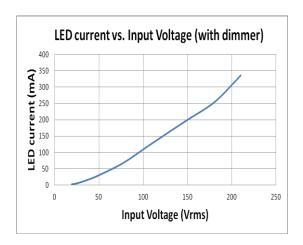
Measured efficiency and line regulation data (without dimmer)

Vin(VRMS)	P _{IN (W)}	V _{OUT (V)}	I _{OUT (A)}	P _{OUT (W)}	Efficiency (%)	PF
198.2	8.73	20.61	0.324	6.67	76.4	0.760
200.2	8.82	20.61	0.327	6.75	76.5	0.759
210.2	9.24	20.66	0.342	7.07	76.5	0.753
220.3	9.58	20.70	0.356	7.36	76.8	0.746
230.3	9.89	20.72	0.366	7.59	76.7	0.739
240.3	10.10	20.75	0.375	7.78	77.0	0.732
250.3	10.29	20.76	0.381	7.90	76.8	0.724
264.3	10.37	20.76	0.384	7.98	77.0	0.713

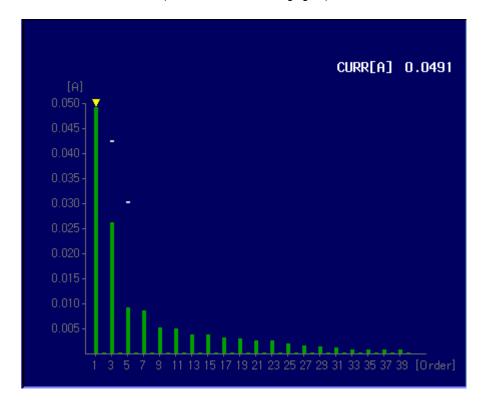
DIMMING PERFORMANCE

By varying the firing angle of the TRIAC dimmer and measuring the corresponding input and output parameters, the dimming performance of the demonstration board driving 7 LEDs is summarized in the graph below.





Power Factor and Total Harmonics current Performance
The LED driver is fulfill residential requirement of Energy Star (PF < 0.7). And The design meets the requirement of the IEC 61000-3-2 Class –C Standard (As shown in the following figure)



MEASURED INPUT VOLTAGE AND OUTPUT CURRENT

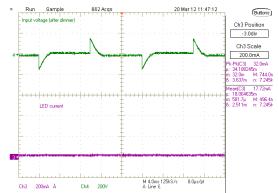


Figure 1 - Lower dimmer firing angle

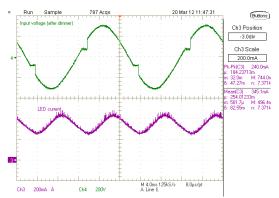


Figure 3 - maximum dimmer firing angle

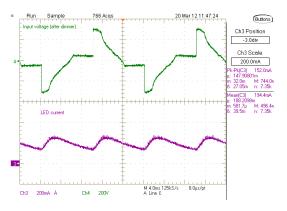


Figure 2 - 90° dimmer firing angle

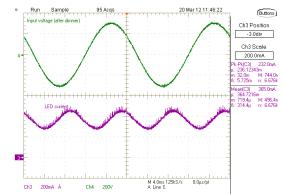


Figure 4 - Without Dimmer

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