PMP8004

PMP8004 Test Results

Literature Number:SNVU128

Experimental Results

Electrical Performance

The performances of the LED driver for driving 11 LEDs in series at steady state operation are summarized in the following table.

V_{IN} (VAC)	I_{IN} (A)	f_{LINE} (Hz)	P_{IN} (W)	PF	V_{OUT} (V)	I_{OUT} (A)	P_{OUT} (W)	η_{SYS} (%)
198	0.079	50	14.89	0.957	32.86	0.398	13.08	87.8
200	0.078	50	14.92	0.957	32.85	0.398	13.08	87.7
210	0.075	50	14.95	0.950	32.85	0.399	13.12	87.7
220	0.072	50	14.99	0.945	32.84	0.400	13.15	87.7
230	0.070	50	15.02	0.938	32.84	0.402	13.19	87.8
240	0.067	50	15.08	0.932	32.84	0.403	13.23	87.7
250	0.065	50	15.12	0.925	32.84	0.404	13.27	87.7
264	0.063	50	15.21	0.916	32.84	0.406	13.32	87.6

Table 1. Electrical performance

Normal Operation Waveforms

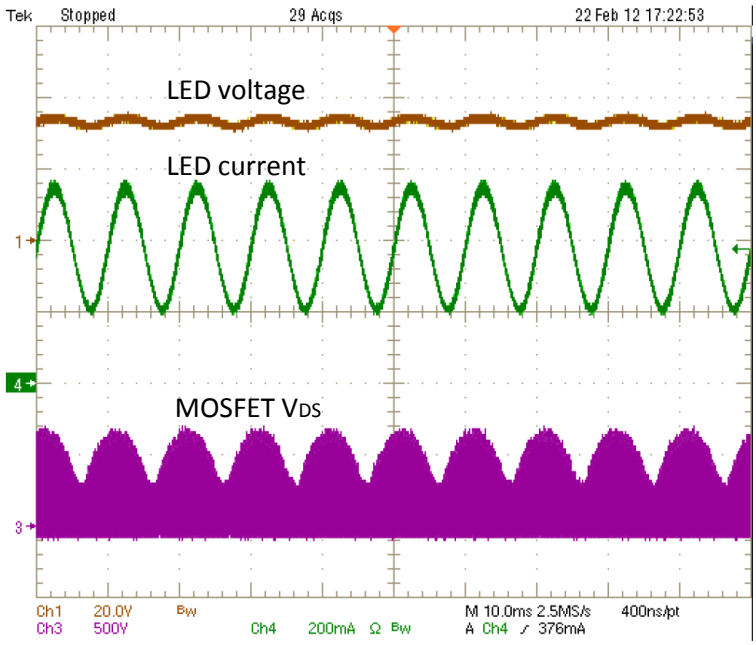


Figure 1. Waveforms at 230VAC input voltage and 50Hz line frequency with 10ms/div time base

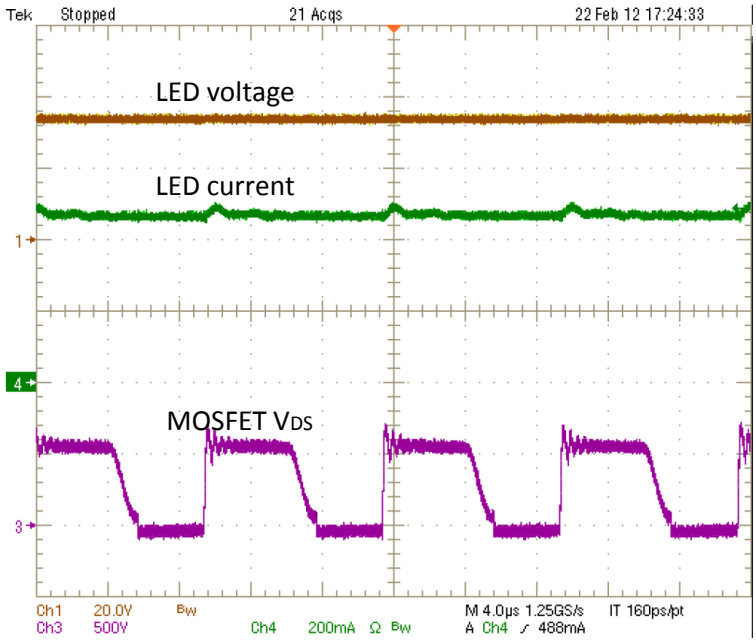


Figure 2. Waveforms at 230VAC input voltage and 50Hz line frequency with 4us/div time base

E-FIELD

Test Spec./ Std EN55015

Ant. Pol./ h/ Range HORIZONTAL/ HEIGHT=3.0M / RANGE=10.0M

Operation Condition

LIGHT ON MODE; 230V 50Hz

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 300 MHz
Detector: Trace 1: MAX PEAK
Transducer: E_30_300

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	300.000000 MHz	30.00 kHz	120.00 kHz	100 µs	Auto	20 dB	INPUT1

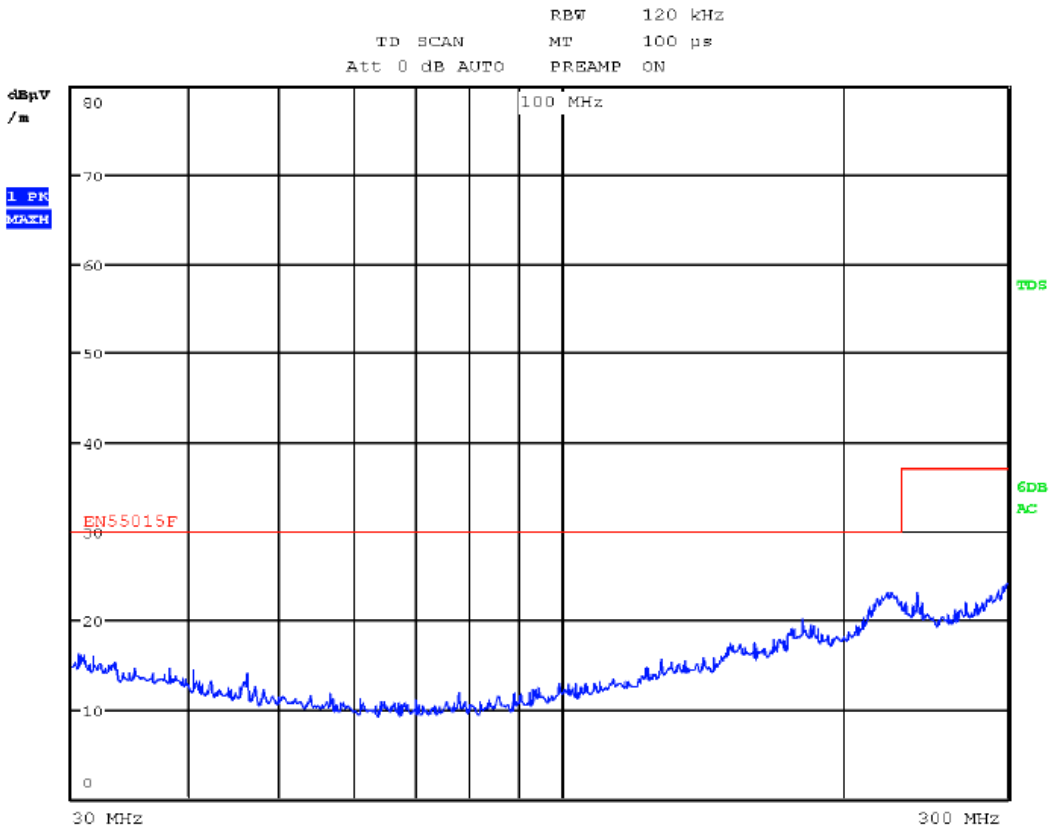


Figure 3. Test result with horizontal antenna Pol.

E-FIELD

Test Spec./ Std EN55015

Ant. Pol./ h/ Range VERTICAL/ HEIGHT=1.0M / RANGE=10.0M

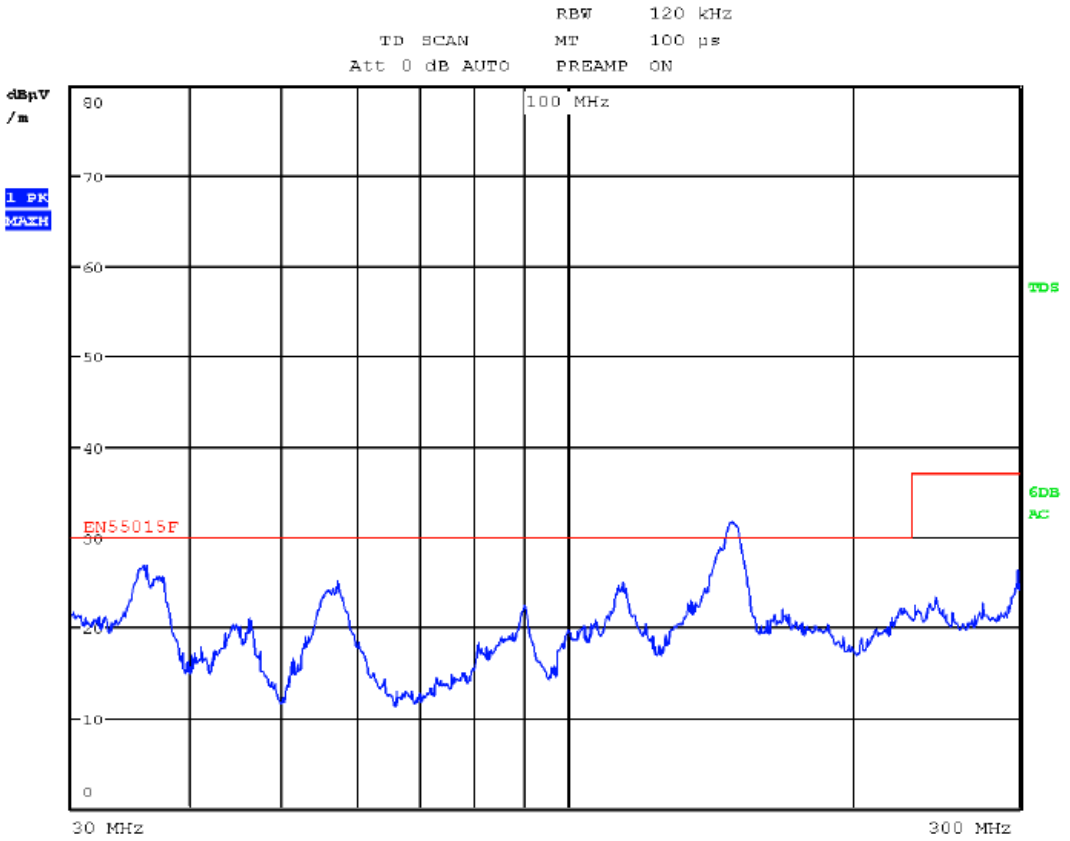
Operation Condition

LIGHT ON MODE; 230V 50Hz

Time Domain Scan (1 Range)

Scan Start: 30 MHz
Scan Stop: 300 MHz
Detector: Trace 1: MAX PEAK
Transducer: E_30_300

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	300.000000 MHz	30.00 kHz	120.00 kHz	100 µs	Auto	20 dB	INPUT1



Frequency	Antenna Pol.	Antenna Height	Quasi-peak Amplitude	Quasi-peak Limit
149.07MHz	Vertical	1m	28.4 dBuV/m	30 dBuV/m

Figure 4. Test result with vertical antenna Pol.

Current Harmonic Performance Vs. EN/IEC61000-3-2 Class C limits

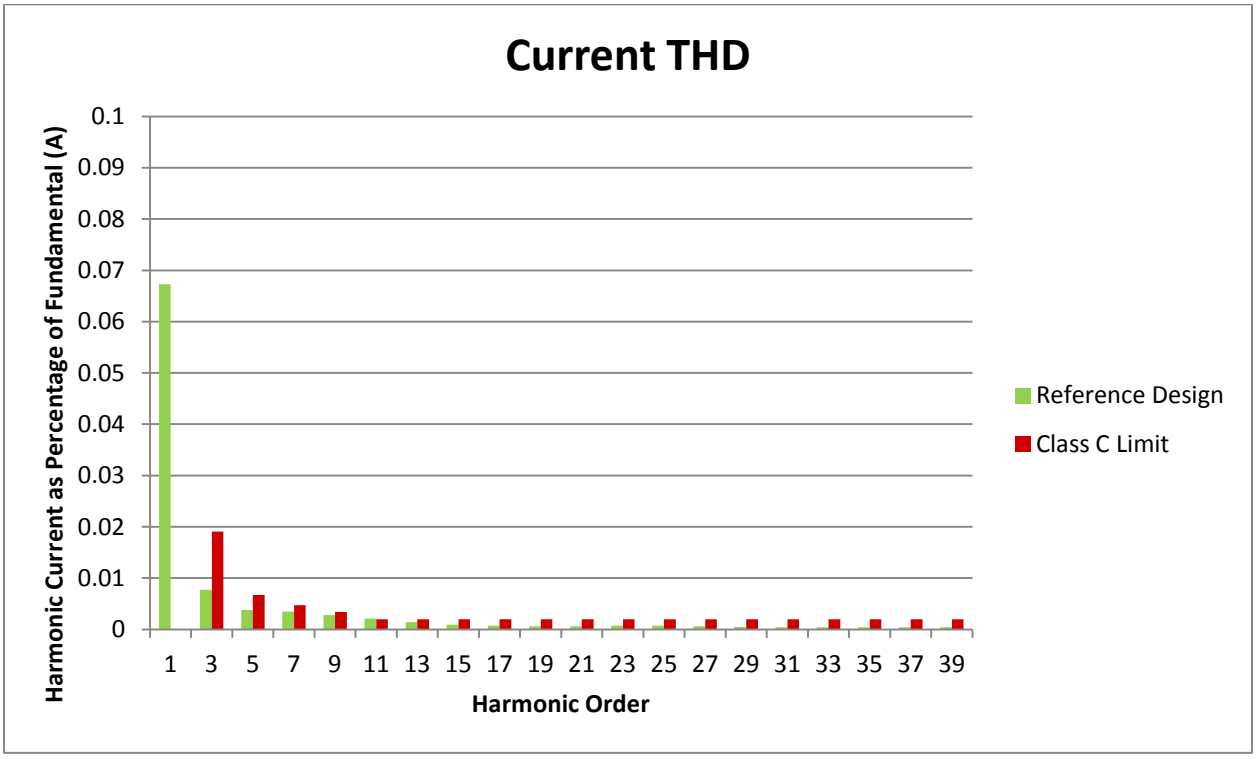


Figure 5. Current THD at 230VAC input voltage and 50Hz line frequency

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