

Experimental Results

Specifications

- Input Power $\approx 21\text{W}$
- Output Power $\approx 19\text{W}$
- Line Voltage = $198\text{VAC} \sim 264\text{VAC}$
- Line Frequency = 50Hz
- LED Forward Voltage = 110V to 130V
- LED Current $\approx 160\text{mA}$
- Efficiency $\approx 92\%$
- Power Factor ≥ 0.9
- Topology: Single-stage buck-boost
- Solution size: $203.5\text{mm(L)} \times 18\text{mm(W)} \times 11\text{mm(H)}$

Test Conditions

- Line Voltage = $220\text{VAC}/50\text{Hz}$ unless otherwise specified
- LED Forward Voltage $\approx 120\text{V}$
- LED Current $\approx 160\text{mA}$
- Ambient Temperature $\approx 25^\circ\text{C}$

Electrical Performance

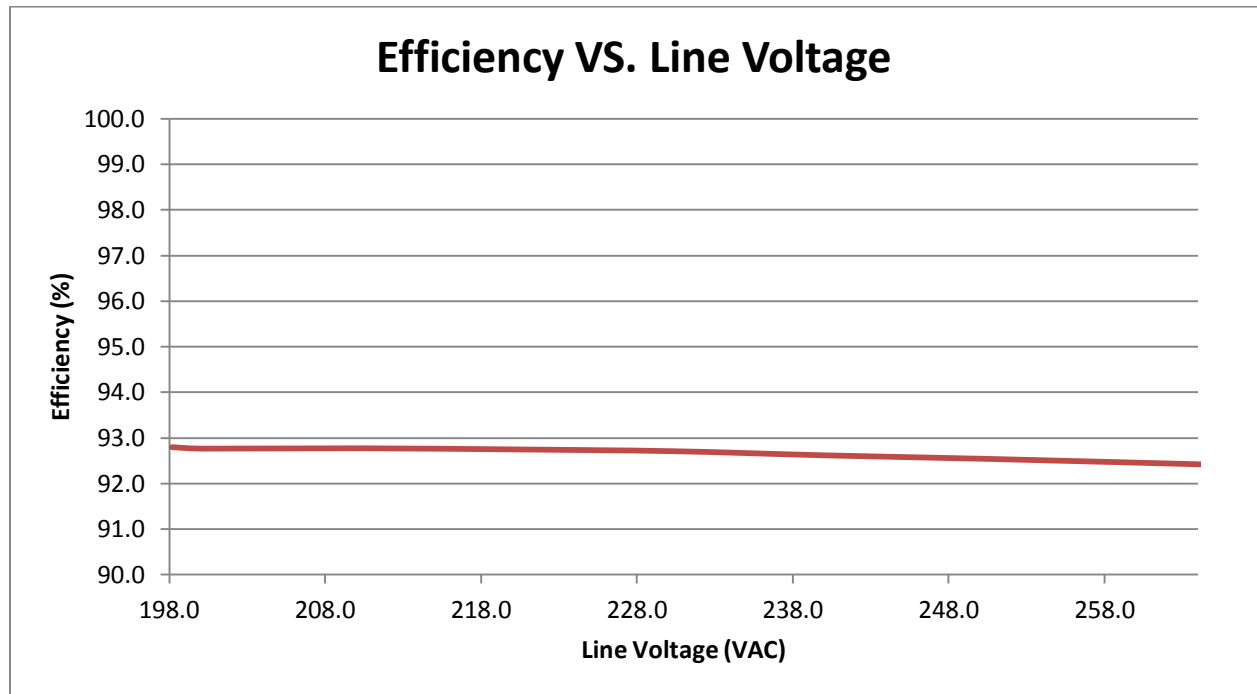


FIGURE 1. Efficiency vs. Line Voltage from 198VAC to 264VAC/50Hz

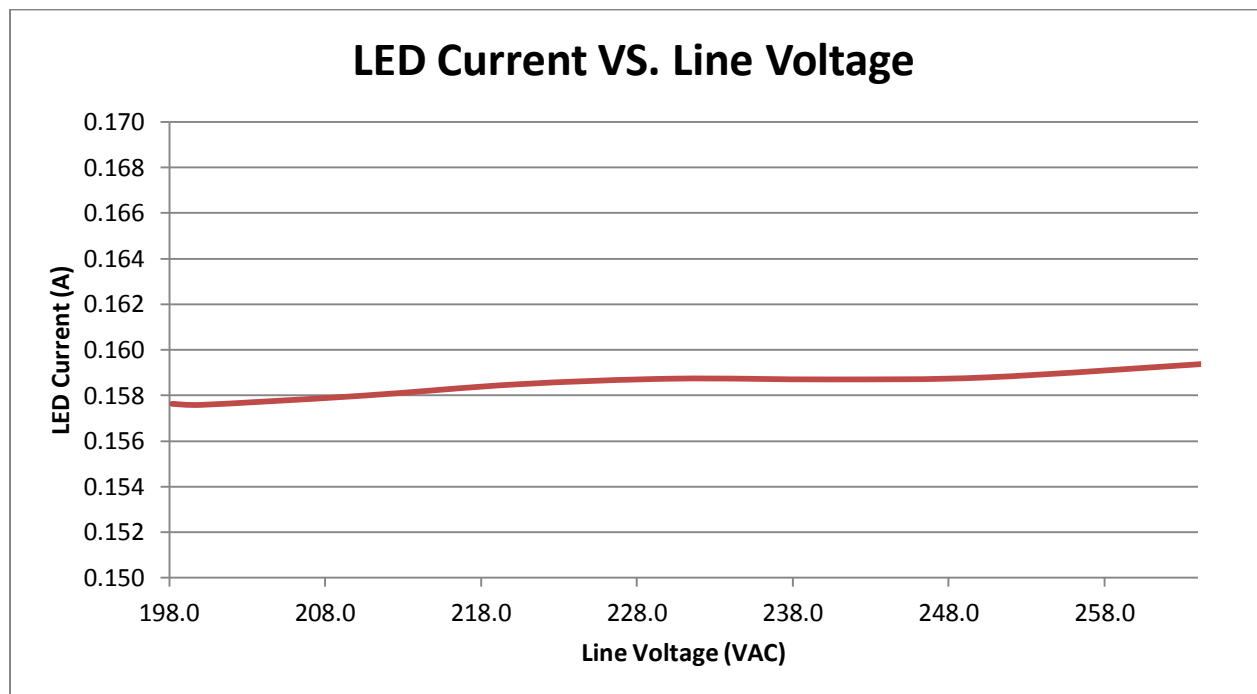


FIGURE 2. LED Current vs. Line Voltage from 198VAC to 264VAC/50Hz

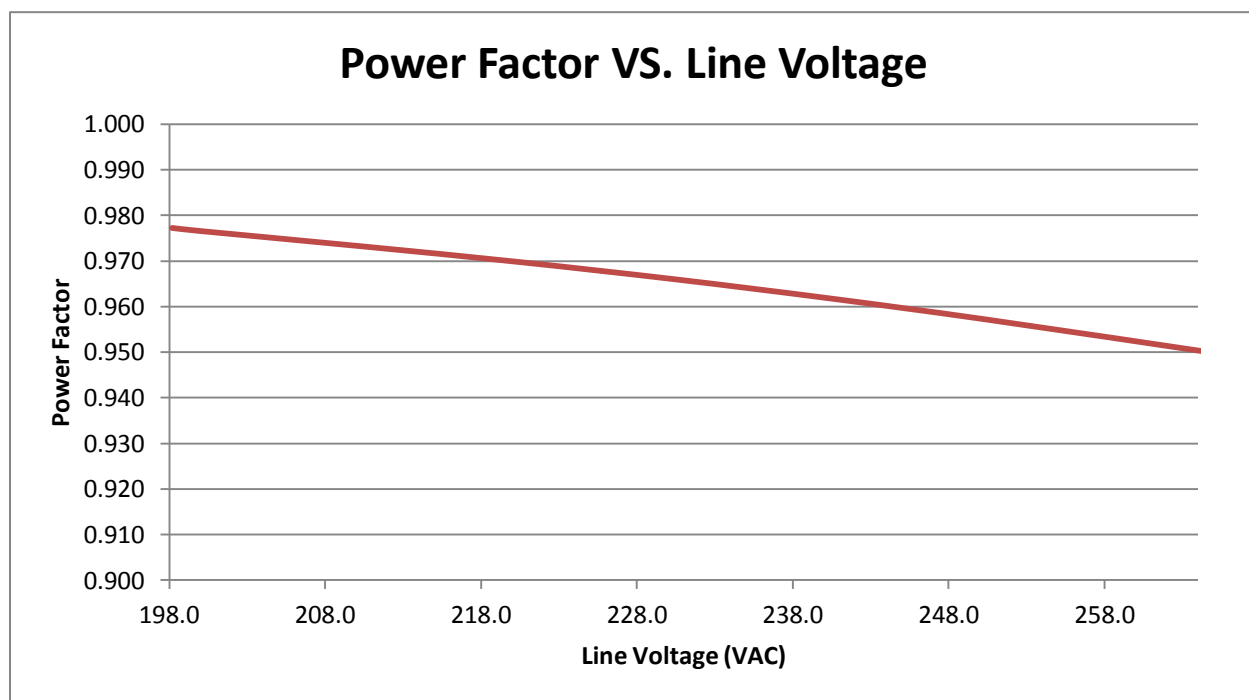


FIGURE 3. Power Factor vs. Line Voltage from 198VAC to 264VAC/50Hz

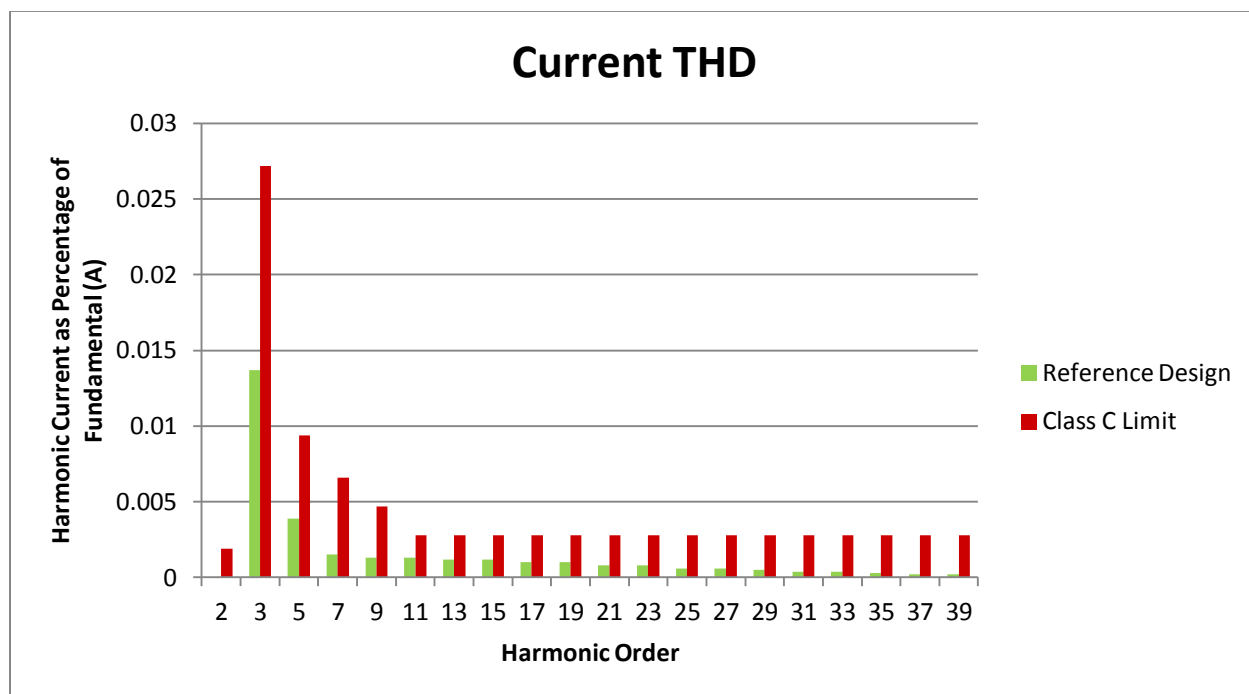


FIGURE 4. Current Harmonic Performance vs. EN/IEC61000-3-2 Class C Limits at 220VAC/50Hz

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