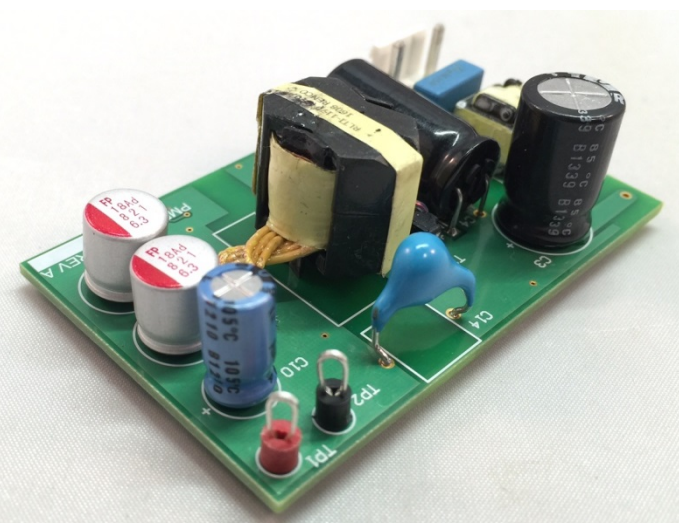
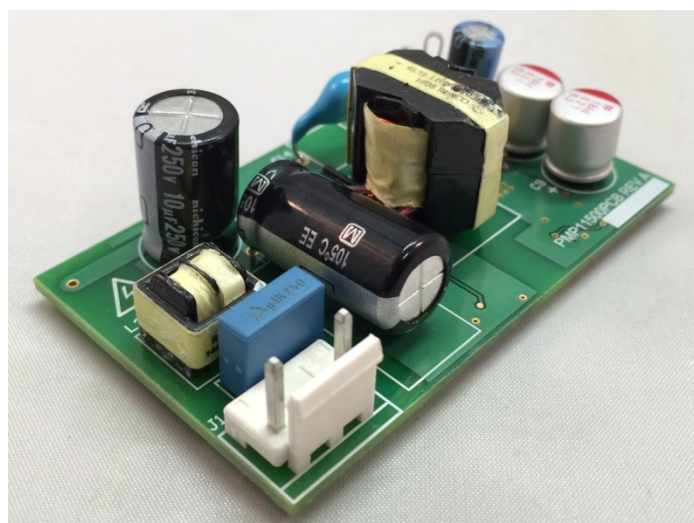
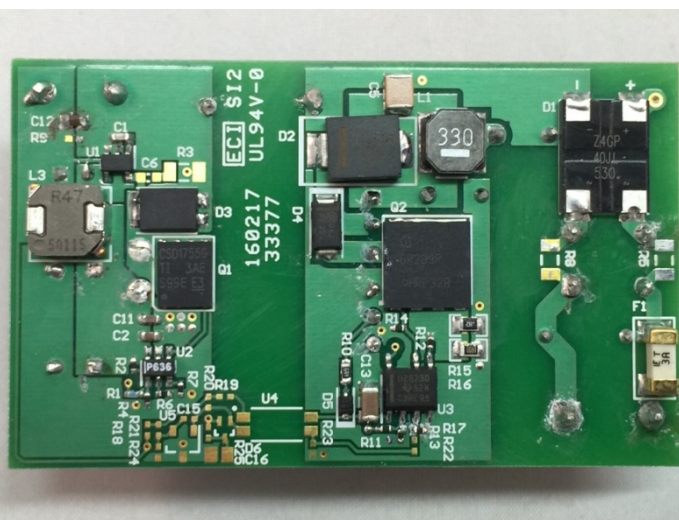
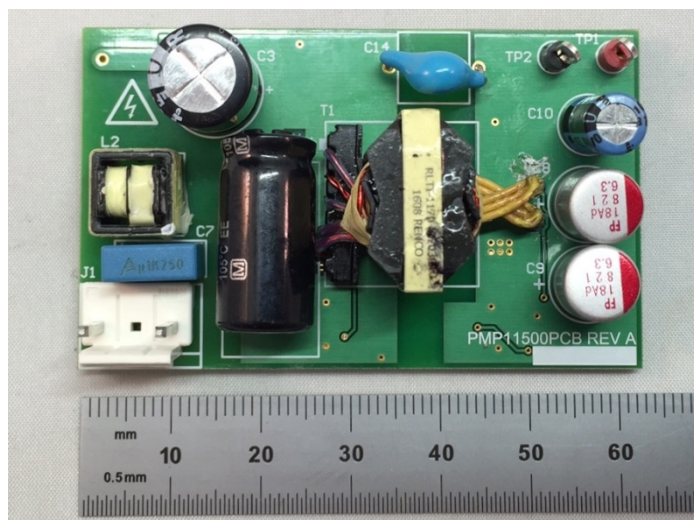


## 1 Photos

The photographs below show the PMP11500 Rev A prototype assembly.

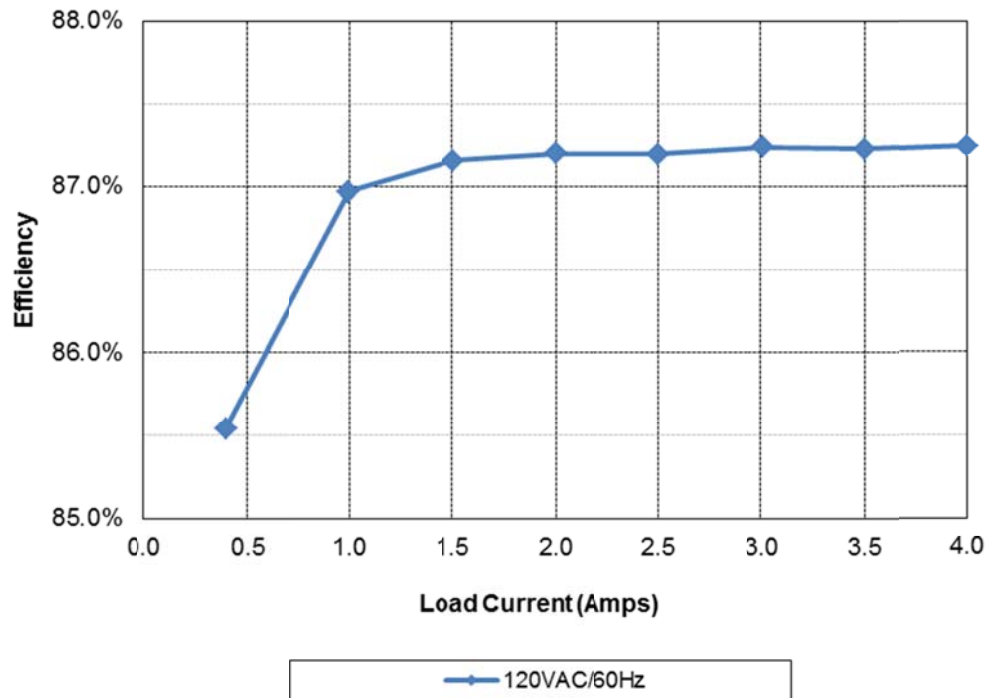


## 2 Standby Power (No Load)

| Input Voltage | Input Power |
|---------------|-------------|
| 120VAC/60Hz   | 21.8mW      |

### 3 Efficiency

#### 3.1 Chart



#### 3.2 Average Efficiency

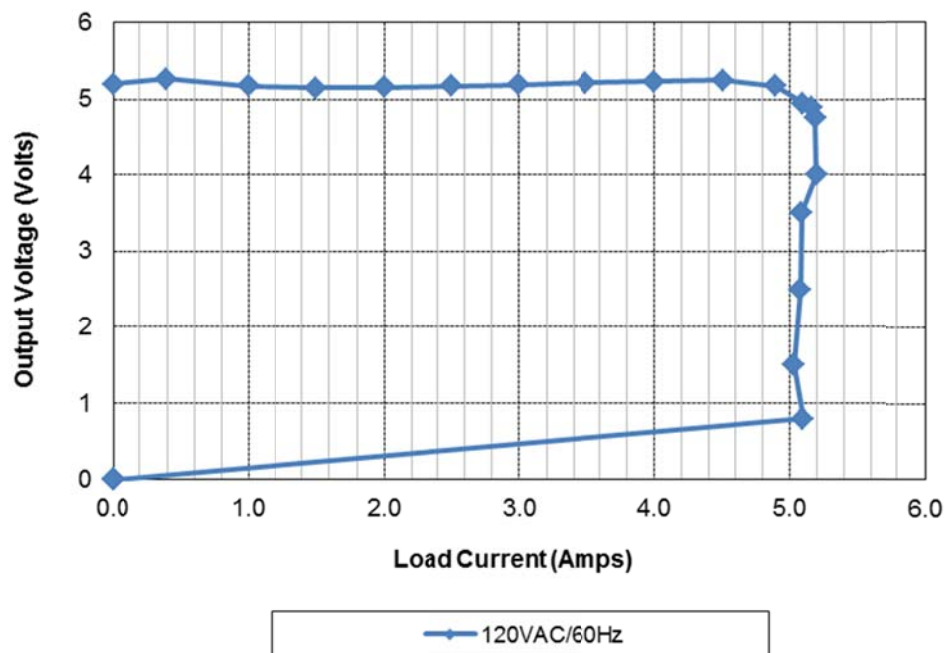
| Vin                | Pin   | Vout | Iout  | Load | Efficiency | Avg. Eff.     |
|--------------------|-------|------|-------|------|------------|---------------|
| <b>120VAC/60Hz</b> | 2.47  | 5.31 | 0.398 | 10%  | 85.54%     | <b>87.16%</b> |
|                    | 5.98  | 5.21 | 0.998 | 25%  | 86.97%     |               |
|                    | 11.92 | 5.20 | 2.000 | 50%  | 87.20%     |               |
|                    | 18.04 | 5.23 | 3.008 | 75%  | 87.24%     |               |
|                    | 24.17 | 5.27 | 4.000 | 100% | 87.25%     |               |

#### 3.3 Efficiency Data

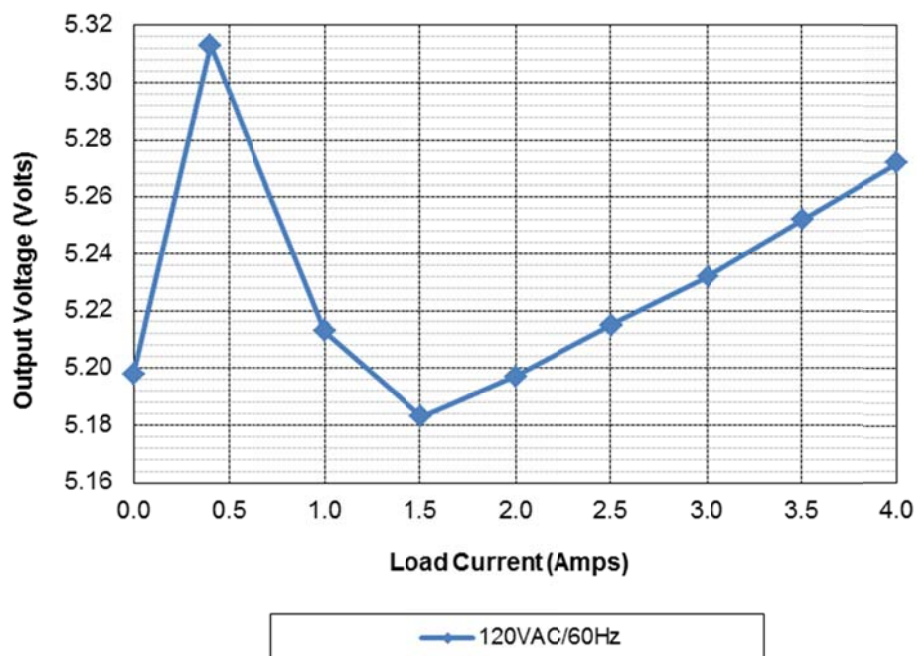
| Iout  | Vout  | Vin   | Iin     | Pin    | PF    | Pout  | Losses | Efficiency |
|-------|-------|-------|---------|--------|-------|-------|--------|------------|
| 0.000 | 5.198 | 119.9 | 0.00504 | 0.0218 |       | 0.00  | 0.0218 | 0.0%       |
| 0.398 | 5.313 | 119.9 | 0.0611  | 2.472  | 0.333 | 2.11  | 0.36   | 85.5%      |
| 0.998 | 5.213 | 119.9 | 0.123   | 5.982  | 0.401 | 5.20  | 0.78   | 87.0%      |
| 1.505 | 5.183 | 119.9 | 0.167   | 8.95   | 0.438 | 7.80  | 1.15   | 87.2%      |
| 2.000 | 5.197 | 119.9 | 0.209   | 11.92  | 0.465 | 10.39 | 1.53   | 87.2%      |
| 2.503 | 5.215 | 119.9 | 0.250   | 14.97  | 0.488 | 13.05 | 1.92   | 87.2%      |
| 3.008 | 5.232 | 119.9 | 0.290   | 18.04  | 0.507 | 15.74 | 2.30   | 87.2%      |
| 3.501 | 5.252 | 119.9 | 0.330   | 21.08  | 0.523 | 18.39 | 2.69   | 87.2%      |
| 4.000 | 5.272 | 119.9 | 0.369   | 24.17  | 0.536 | 21.09 | 3.08   | 87.2%      |

## 4 Regulation

### 4.1 V-I Curve



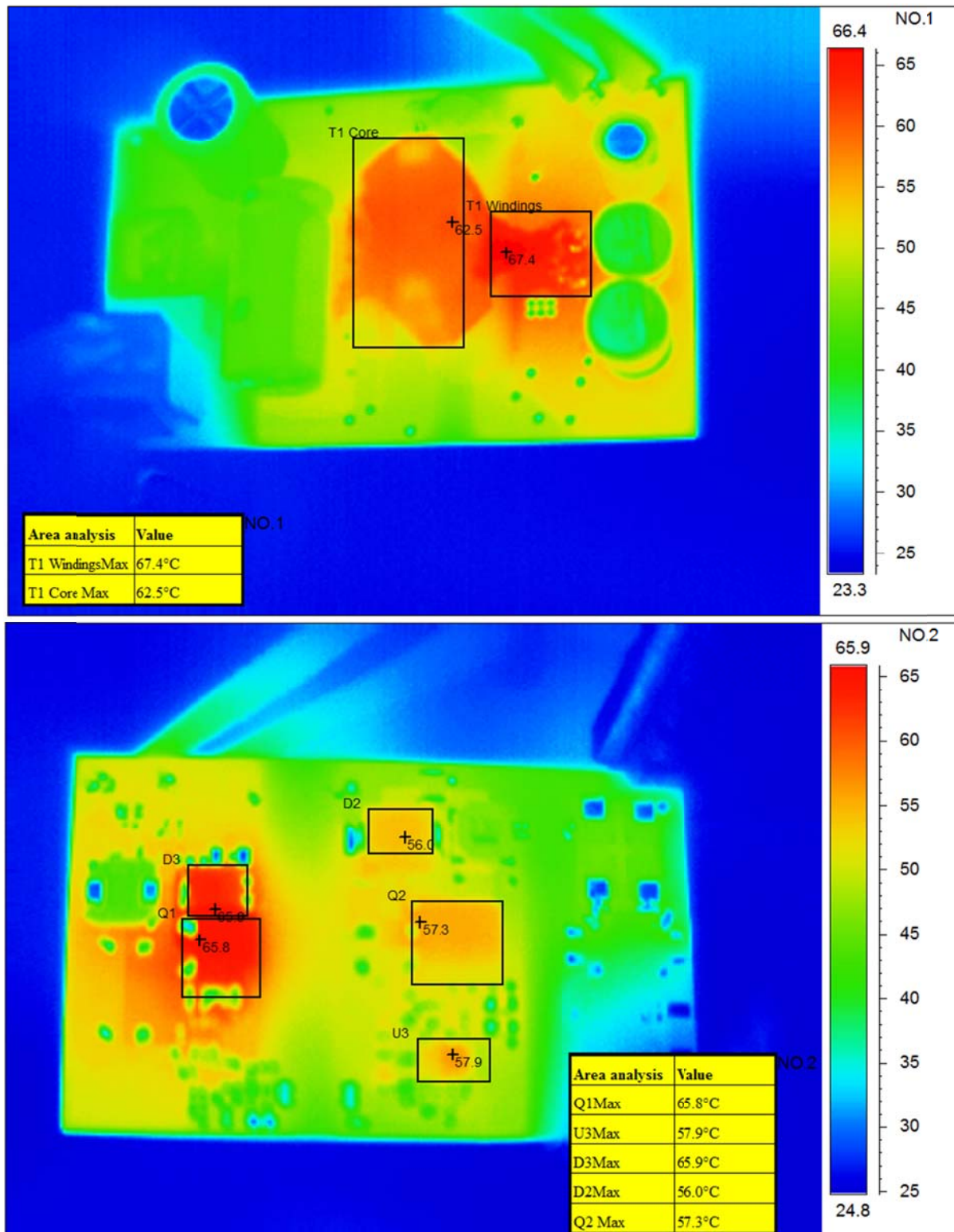
### 4.2 CV Mode





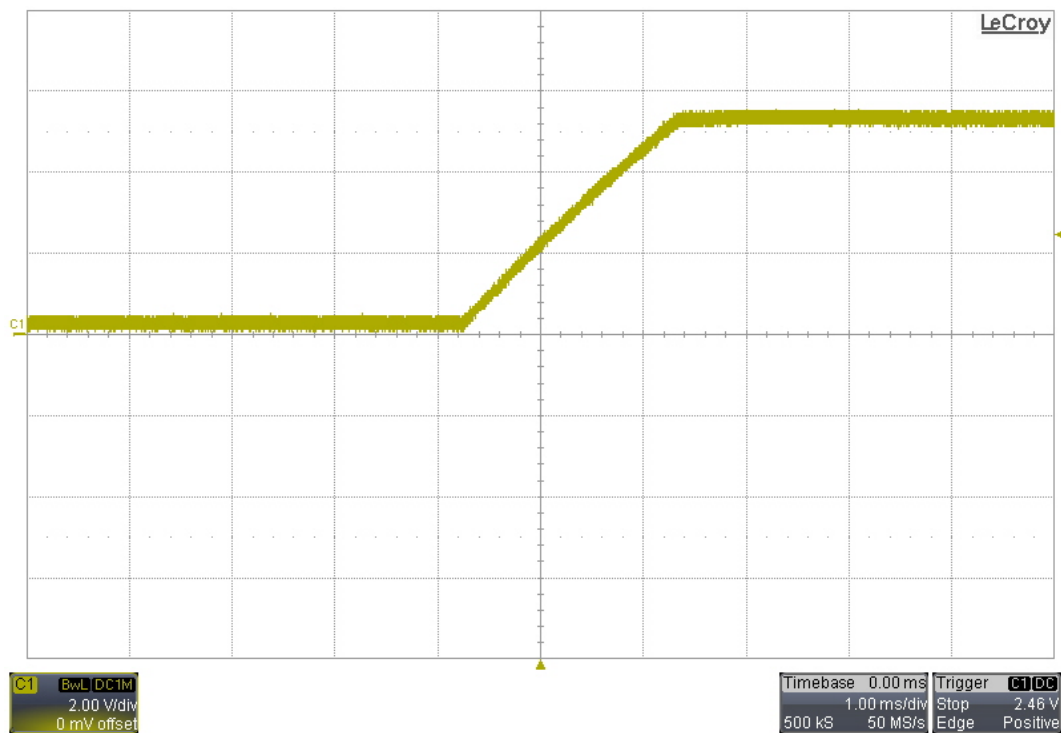
## 5 Thermal Images

The thermal images below show the assembly with loaded with 4A with a 120VAC/60Hz input. The ambient temperature was 25°C, with no forced air flow.

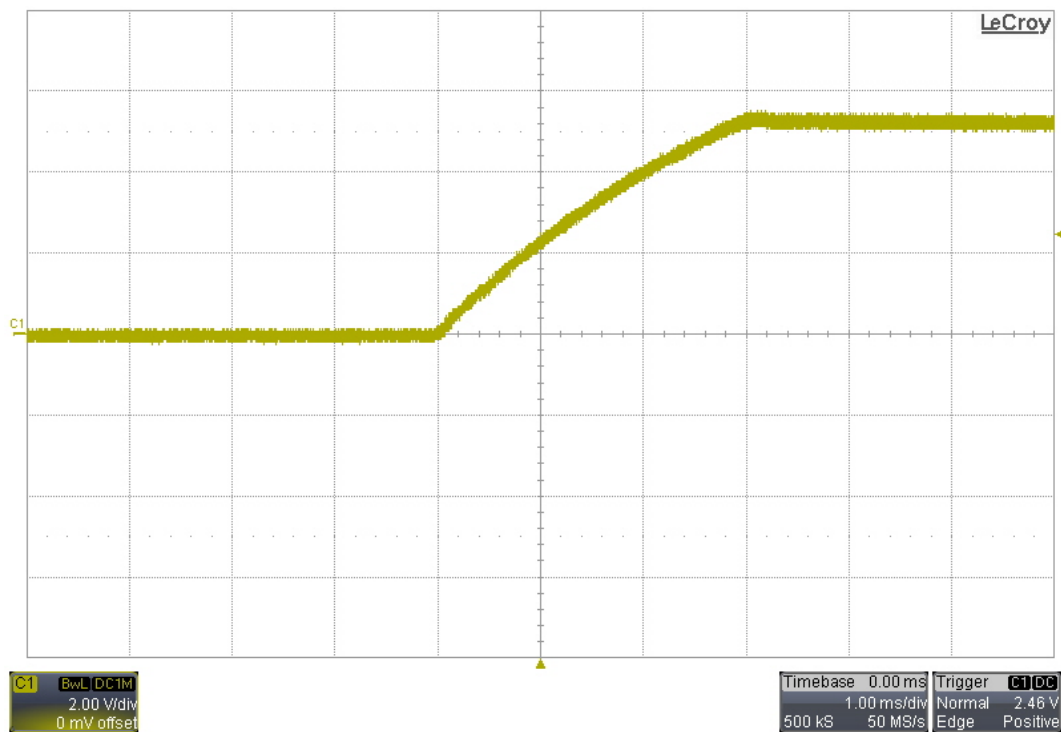


## 6 Startup

### 6.1 120VAC/60Hz –0A Load

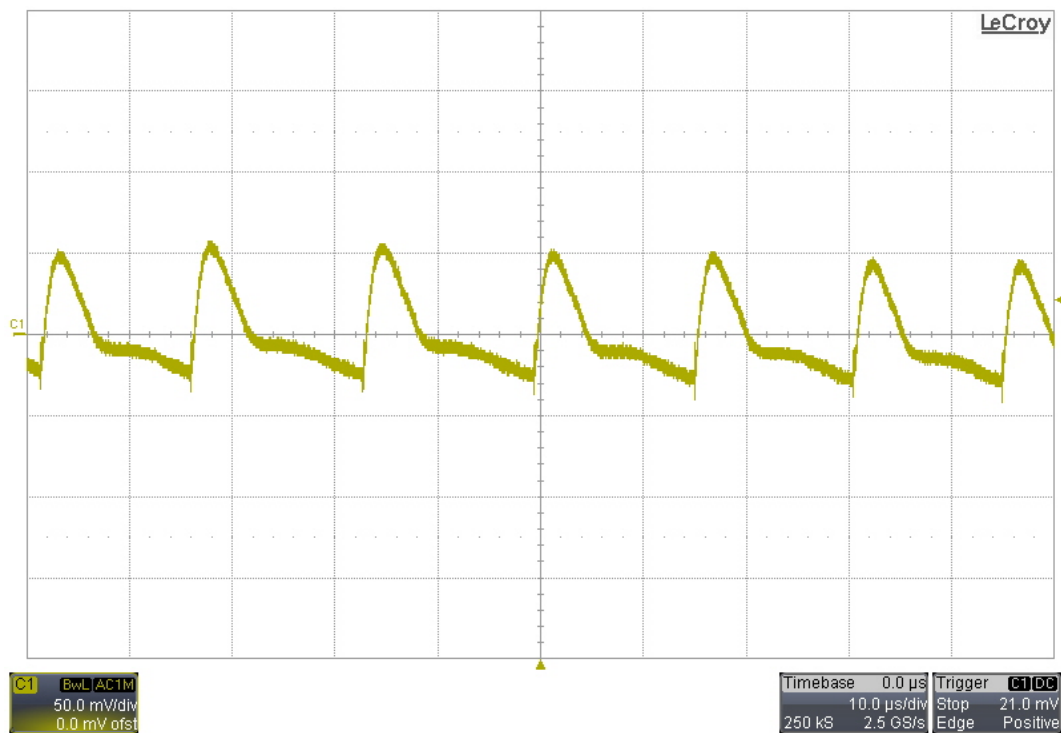


### 6.2 120VAC/60Hz –2Ω Load



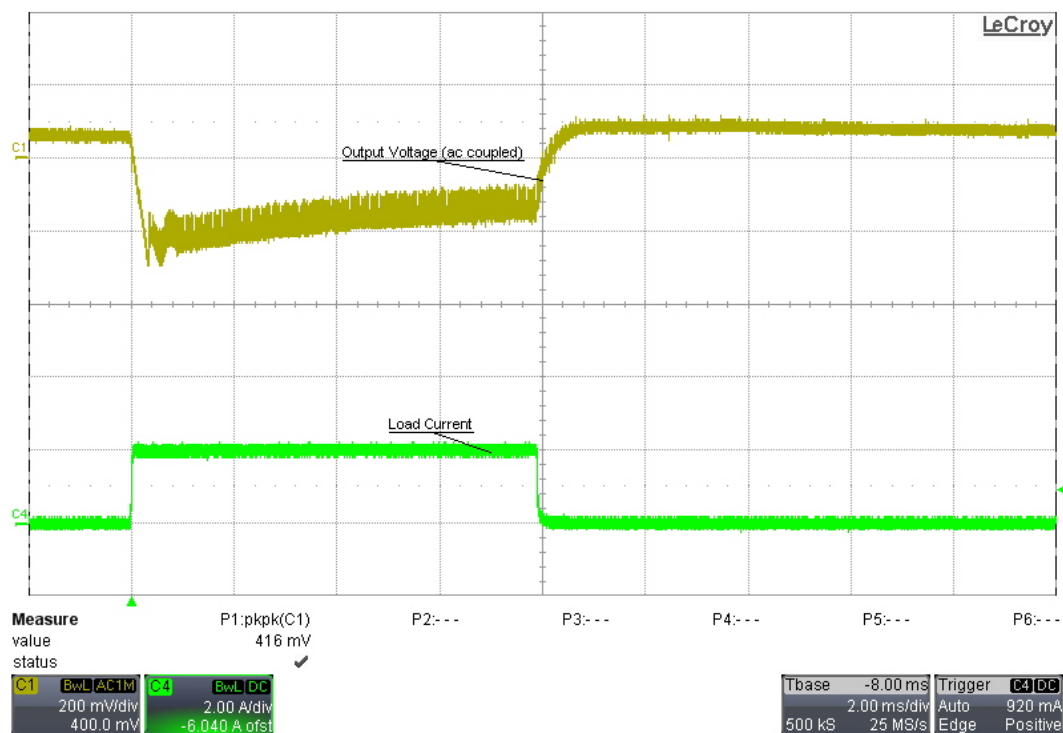
## 7 Output Ripple Voltage

### 7.1 120VAC/60Hz –4A Load

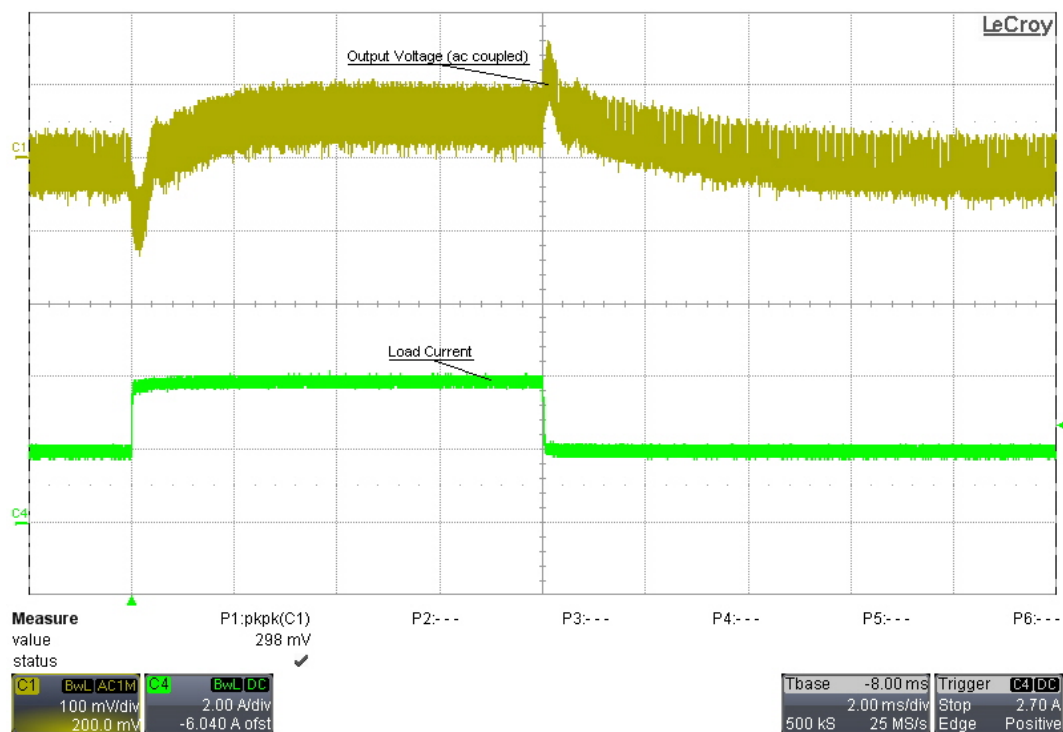


## 8 Load Transients

### 8.1 0A to 2A Transient; 120VAC/60Hz Input



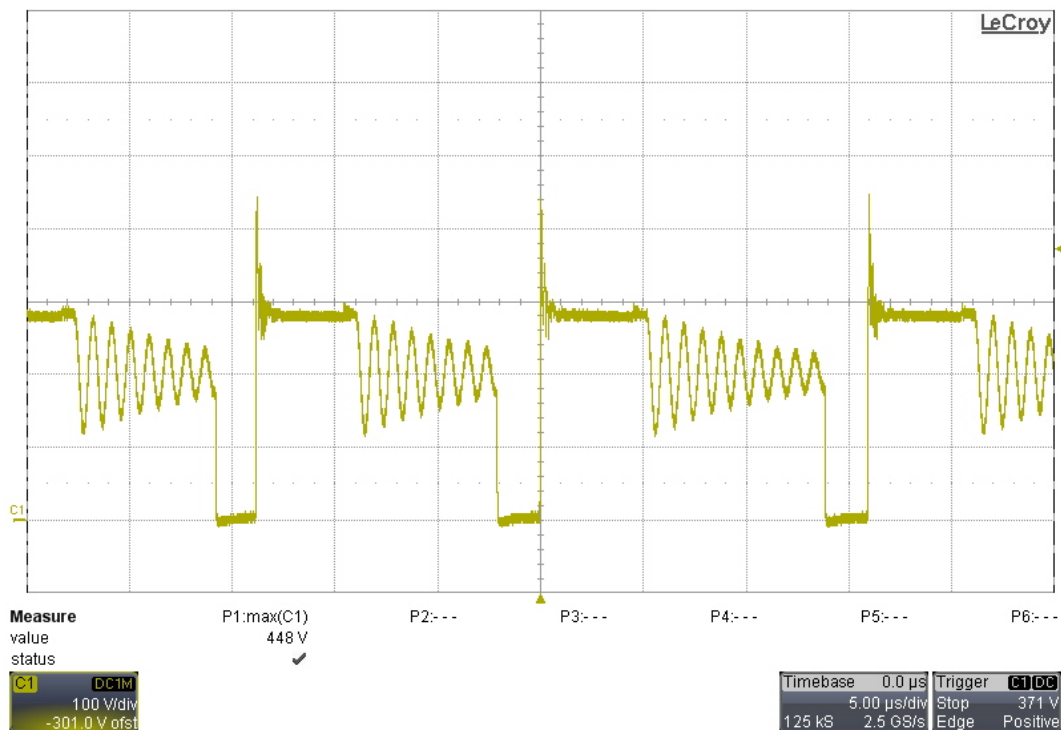
### 8.2 2A to 4A Transient; 120VAC/60Hz Input



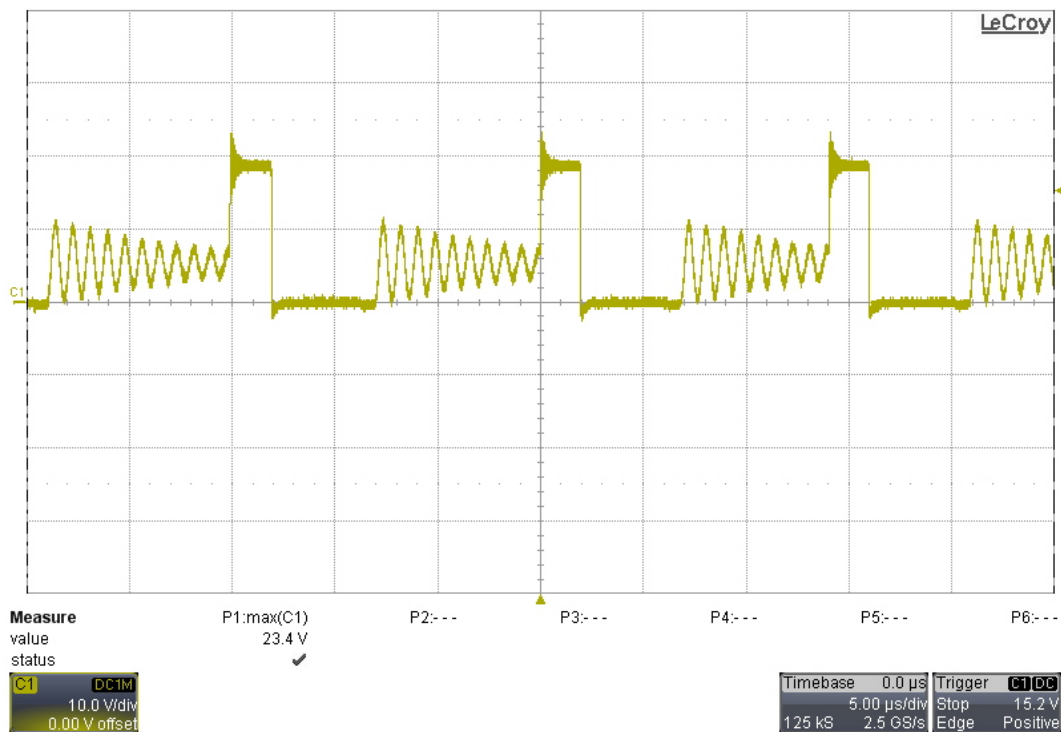
## 9 Switching Waveforms

The input was 145VAC/60Hz, and the output was loaded with 4A.

### 9.1 Drain of Primary FET – Q2

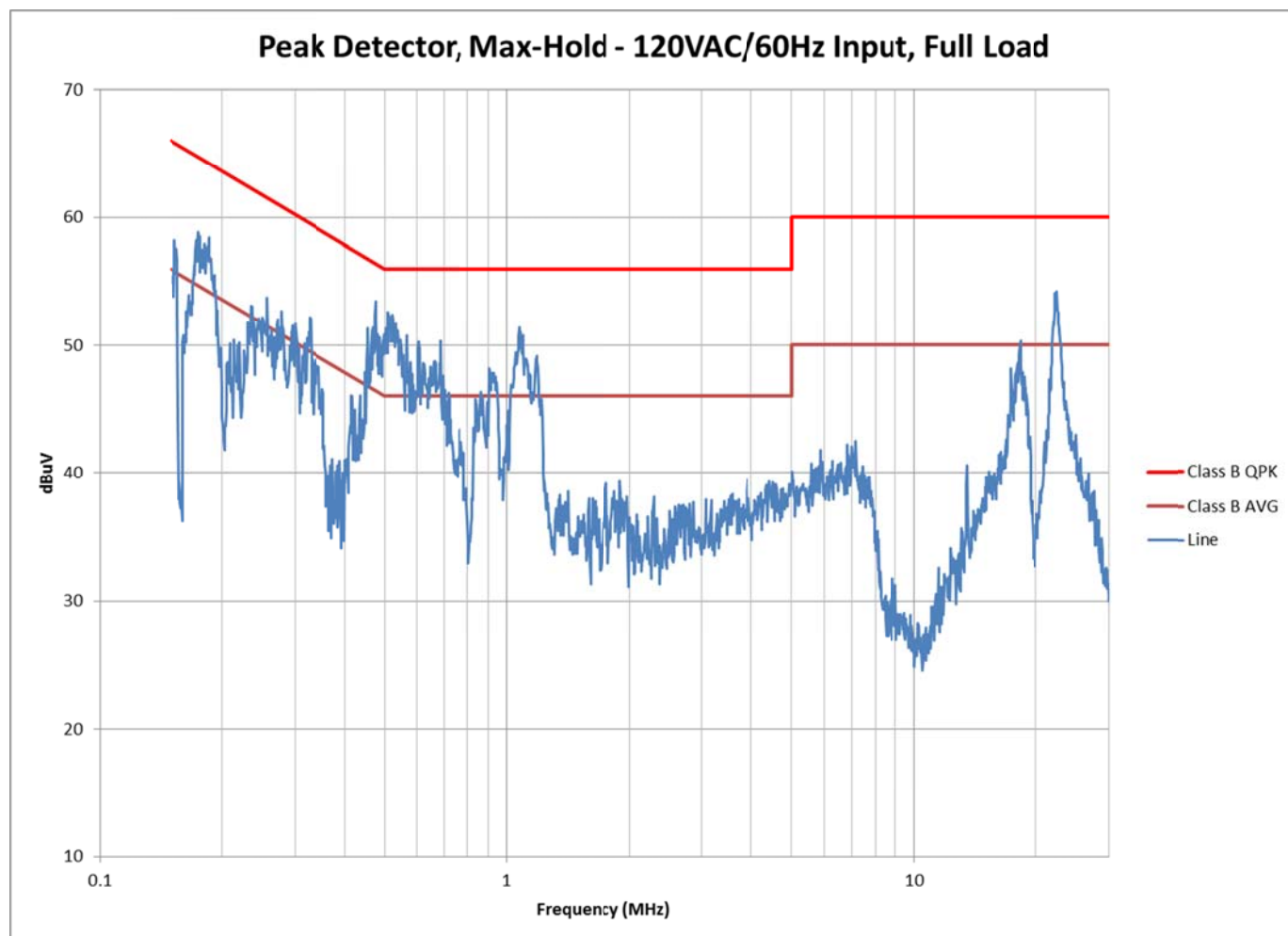


### 9.2 Drain of Synchronous Rectifier – Q1





## 10 Conducted Emissions



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