1 GENERAL

1.1 PURPOSE
To provide detailed data for evaluating and verifying the PMP4362.

1.2 REFERENCE DOCUMENTATION
Schematic: PMP4362_SCH_RevA
Assembly: PMP4362_PCB_RevA
BOM

1.3 TEST EQUIPMENTS
Power-meter: YOKOGAWA WT210
Multi-meter(current): Fluke 3345A
Multi-meter(voltage): Fluke 187
AC Source: Chroma 61530
LED load: Chroma 63110A module

2 INPUT CHARACTERISTICS
Otherwise Specified, the test is under the condition With LED electric Load (Chroma 63310A, 120V, 0.23A).

2.1 POWER FACTOR
Pass/Fail criteria: 0.9 minimum at 100% load.

<table>
<thead>
<tr>
<th>Vin(Vac)</th>
<th>Freq(Hz)</th>
<th>PF</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>198</td>
<td>50</td>
<td>0.964</td>
<td>Pass</td>
</tr>
<tr>
<td>220</td>
<td>50</td>
<td>0.952</td>
<td>Pass</td>
</tr>
<tr>
<td>240</td>
<td>50</td>
<td>0.940</td>
<td>Pass</td>
</tr>
<tr>
<td>264</td>
<td>50</td>
<td>0.924</td>
<td>Pass</td>
</tr>
</tbody>
</table>
2.2 EFFICIENCY

Pass/Fail criteria: 90% minimum at 100% load.

<table>
<thead>
<tr>
<th>Vin(Vac)</th>
<th>Freq(Hz)</th>
<th>Pin(W)</th>
<th>Vo(V)</th>
<th>Io(A)</th>
<th>Eff(%)</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>198</td>
<td>50</td>
<td>28.77</td>
<td>119.7</td>
<td>0.224</td>
<td>93.2</td>
<td>Pass</td>
</tr>
<tr>
<td>220</td>
<td>50</td>
<td>28.81</td>
<td>119.7</td>
<td>0.225</td>
<td>93.5</td>
<td>Pass</td>
</tr>
<tr>
<td>240</td>
<td>50</td>
<td>28.93</td>
<td>119.7</td>
<td>0.225</td>
<td>93.1</td>
<td>Pass</td>
</tr>
<tr>
<td>264</td>
<td>50</td>
<td>29.09</td>
<td>119.8</td>
<td>0.226</td>
<td>93.1</td>
<td>Pass</td>
</tr>
</tbody>
</table>
2.3 **INPUT CURRENT**

<table>
<thead>
<tr>
<th>Vin (Vac)</th>
<th>Freq (Hz)</th>
<th>Iin (A)</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>220</td>
<td>50</td>
<td>0.137</td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>50</td>
<td>0.128</td>
<td></td>
</tr>
</tbody>
</table>

3 **OUTPUT CHARACTERISTICS**

3.1 **RIPPLE CURRENT**

<table>
<thead>
<tr>
<th>CONDITIONS</th>
<th>Ripple current (A)</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vin (Vac)</td>
<td>Load</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>Full load</td>
<td>0.136</td>
</tr>
<tr>
<td>240</td>
<td>Full load</td>
<td>0.134</td>
</tr>
</tbody>
</table>
Vin: 220 Vac  Io: LED Lamp load
Ch1: LED ripple voltage 5V/div
Ch4: LED current 100mA/div

Vin: 240 Vac  Io: LED Lamp load
Ch1: LED ripple voltage 5V/div
3.2 OUTPUT OVER VOLTAGE AND NO LOAD PROTECTION

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Protection voltage (V)</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vin (Vac)</td>
<td>230</td>
<td>138</td>
</tr>
</tbody>
</table>

Vin: 230 Vac  From full load to no load
Ch2: VCC, 10V/div  
Ch3: LED voltage, 50V/div  
Ch4: LED current, 100mA/div

3.3 LINE REGULATION CURVE

<table>
<thead>
<tr>
<th>Vin(Vac)</th>
<th>Freq(Hz)</th>
<th>Io(A)</th>
<th>Pass/Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>198</td>
<td>50</td>
<td>0.224</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>50</td>
<td>0.225</td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>50</td>
<td>0.225</td>
<td></td>
</tr>
<tr>
<td>264</td>
<td>50</td>
<td>0.226</td>
<td></td>
</tr>
</tbody>
</table>
4 EMI Test

Vin: 220Vac  Io: LED lamp load

5 Thermal Test
Test condition: Room Temperature
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