



Test Report: IDLC-65-1400

65W Constant Current Mode LED Driver

■ DESIGN VERIFY TEST

Output Function Test

Input Function Test

Protection Function Test

Component Stress Test

■ SAFETY & E.M.C. TEST

Safety Test

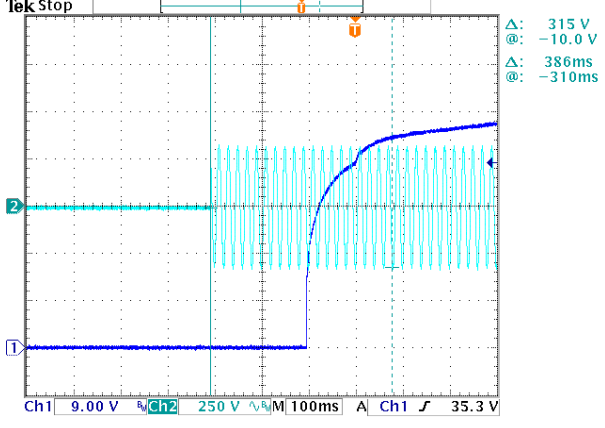
E.M.C. Test

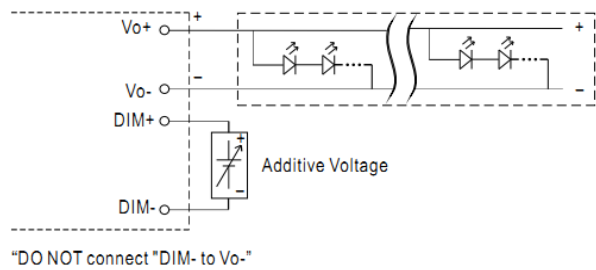
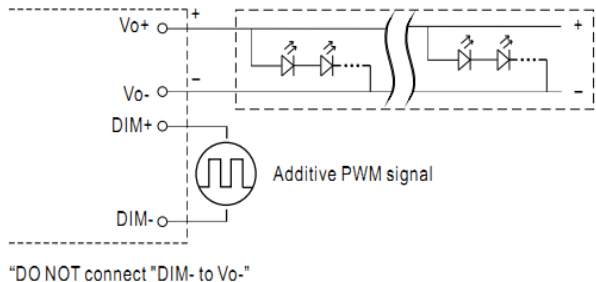
■ RELIABILITY TEST

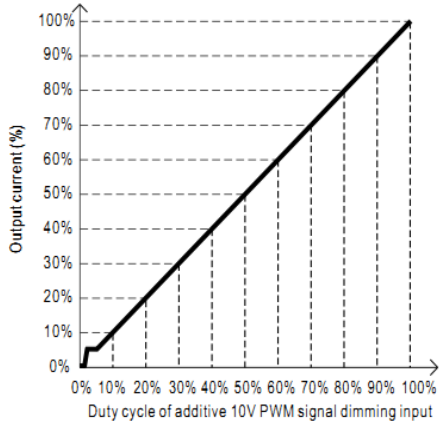
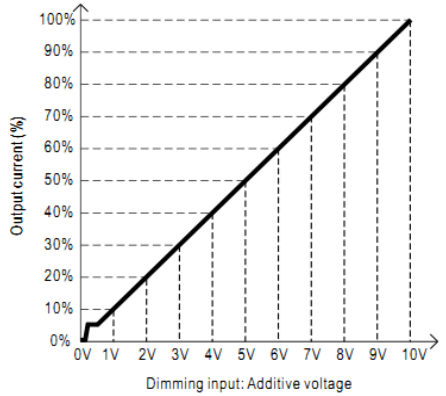
Environment Test

DESIGN VERIFY TEST

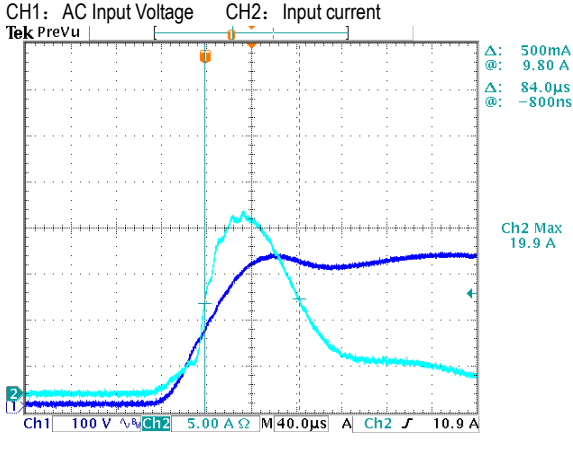
OUTPUT FUNCTION TEST

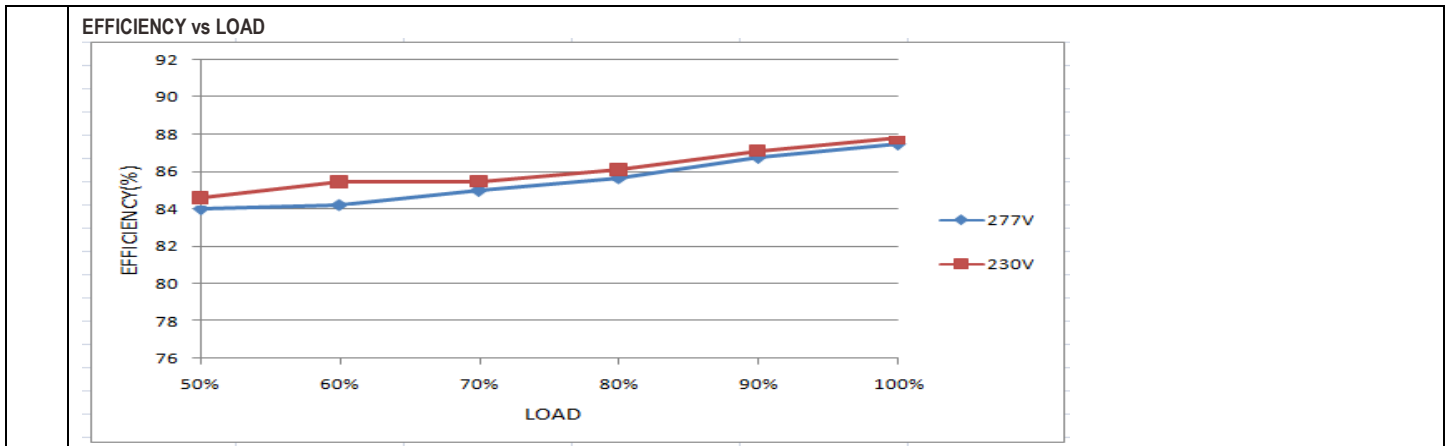
| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|---|---------------------------------------|---|---|---------------|
| 1 | CONSTANT CURRENT REGION | 34V~46V | I/P: 230VAC O/P: LED MODE Ta: 25°C | 28 V~46 V |
| 2 | CURRENT RIPPLE | 5% max@rated current | I/P: 230VAC O/P: FULL/MIN LOAD Ta: 25°C | 4.05% |
| 3 | CURRENT TOLERANCE | ±7% | I/P: 230VAC O/P: FULL/MIN LOAD Ta: 25°C | ±2.24% |
| 4 | OPEN CIRCUIT VOLTAGE (max) | 60V | I/P: 230VAC O/P: NO LOAD Ta: 25°C | 59.5 V |
| 5 | OVER/UNDERSHOOT TEST | <±5 % | I/P: 230VAC O/P: FULL LOAD Ta: 25°C | <5 % |
| 6 | SET UP TIME | 500ms/230VAC | I/P: 230 VAC O/P: FULL LOAD Ta: 25°C | 386 ms/230VAC |
| <p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: Output Voltage CH2: AC Input Voltage</p>  | | | | |
| 7 | AUXILIARY DC OUTPUT (For A-Type only) | Nominal 12V (deviation 11.4~12.6) @50mA | I/P: 230 VAC O/P: FULL LOAD | 11.94 V |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|-----|---|----------------|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---|------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|----------------|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <p>8 DIMMING TEST (For Blank -Type)</p> | <ul style="list-style-type: none"> Output constant current level can be adjusted by applying one of the two methodologies between DIM+ and DIM-: 0 ~ 10Vdc, or 10V PWM signal. Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers. <p>◎ Applying additive 0 ~ 10VDC</p>  <p>◎ Applying additive 10V PWM signal (frequency range 300Hz ~ 3KHz):</p>  <p>Note : 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 8%. 2. The output current could drop down to 0% when dimming input is about 0Vdc or 10V PWM signal with 0% duty cycle.</p> <p>I/P: 230 VAC O/P: DIMMING TEST Ta: 25°C</p> <table border="1" data-bbox="295 1361 1492 1765"> <tr> <td></td> <td>V</td> <td>0V</td> <td>1V</td> <td>2V</td> <td>3V</td> <td>4V</td> <td>5V</td> <td>6V</td> <td>7V</td> <td>8V</td> <td>9V</td> <td>10V</td> </tr> <tr> <td rowspan="2">1</td> <td>Output Current</td> <td>0A</td> <td>0.1720A</td> <td>0.3060A</td> <td>0.4360A</td> <td>0.5716A</td> <td>0.7039A</td> <td>0.8415A</td> <td>0.9769A</td> <td>1.1048A</td> <td>1.2398A</td> <td>1.3718A</td> </tr> <tr> <td>%</td> <td>0.00%</td> <td>12.29%</td> <td>21.86%</td> <td>31.14%</td> <td>40.83%</td> <td>50.28%</td> <td>60.11%</td> <td>69.78%</td> <td>78.91%</td> <td>88.56%</td> <td>97.99%</td> </tr> <tr> <td rowspan="3">2</td> <td>PWM(100Hz)</td> <td>0%</td> <td>10%</td> <td>20%</td> <td>30%</td> <td>40%</td> <td>50%</td> <td>60%</td> <td>70%</td> <td>80%</td> <td>90%</td> <td>100%</td> </tr> <tr> <td>Output Current</td> <td>0A</td> <td>0.1680A</td> <td>0.3000A</td> <td>0.4320A</td> <td>0.5680A</td> <td>0.7000A</td> <td>0.8400A</td> <td>0.9769A</td> <td>1.1000A</td> <td>1.2400A</td> <td>1.3759A</td> </tr> <tr> <td>%</td> <td>0.00%</td> <td>12.00%</td> <td>21.43%</td> <td>30.86%</td> <td>40.57%</td> <td>50.00%</td> <td>60.00%</td> <td>69.78%</td> <td>78.57%</td> <td>88.57%</td> <td>98.28%</td> </tr> </table> <p>TEST RESULT: OK</p> | | V | 0V | 1V | 2V | 3V | 4V | 5V | 6V | 7V | 8V | 9V | 10V | 1 | Output Current | 0A | 0.1720A | 0.3060A | 0.4360A | 0.5716A | 0.7039A | 0.8415A | 0.9769A | 1.1048A | 1.2398A | 1.3718A | % | 0.00% | 12.29% | 21.86% | 31.14% | 40.83% | 50.28% | 60.11% | 69.78% | 78.91% | 88.56% | 97.99% | 2 | PWM(100Hz) | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | Output Current | 0A | 0.1680A | 0.3000A | 0.4320A | 0.5680A | 0.7000A | 0.8400A | 0.9769A | 1.1000A | 1.2400A | 1.3759A | % | 0.00% | 12.00% | 21.43% | 30.86% | 40.57% | 50.00% | 60.00% | 69.78% | 78.57% | 88.57% | 98.28% |
| | V | 0V | 1V | 2V | 3V | 4V | 5V | 6V | 7V | 8V | 9V | 10V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Output Current | 0A | 0.1720A | 0.3060A | 0.4360A | 0.5716A | 0.7039A | 0.8415A | 0.9769A | 1.1048A | 1.2398A | 1.3718A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | % | 0.00% | 12.29% | 21.86% | 31.14% | 40.83% | 50.28% | 60.11% | 69.78% | 78.91% | 88.56% | 97.99% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | PWM(100Hz) | 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Output Current | 0A | 0.1680A | 0.3000A | 0.4320A | 0.5680A | 0.7000A | 0.8400A | 0.9769A | 1.1000A | 1.2400A | 1.3759A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | % | 0.00% | 12.00% | 21.43% | 30.86% | 40.57% | 50.00% | 60.00% | 69.78% | 78.57% | 88.57% | 98.28% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>9 DALI DIMMING OPERATION (primary side: for DA-Type)</p> | <p>※DALI Interface ·Apply DALI signal between DA+ and DA-. ·DALI protocol comprises 16 groups and 64 addresses. ·Firse step is fixed at 8% of output.</p> <p>I/P: 230 VAC O/P: DIMMING TEST Ta: 25°C TEST RESULT: OK</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

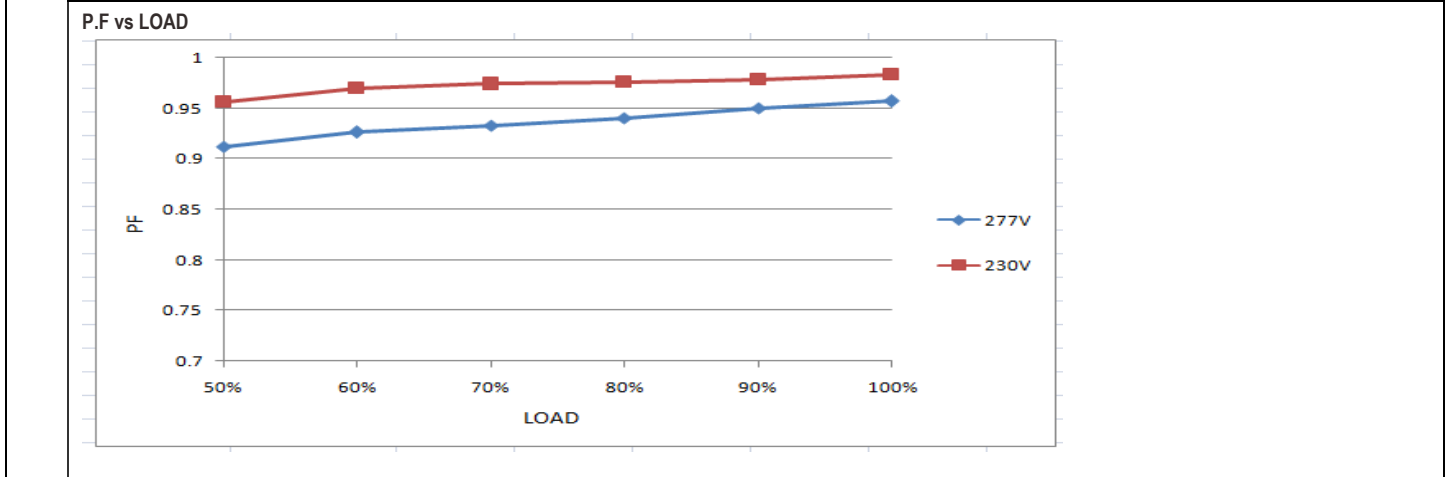


INPUT FUNCTION TEST

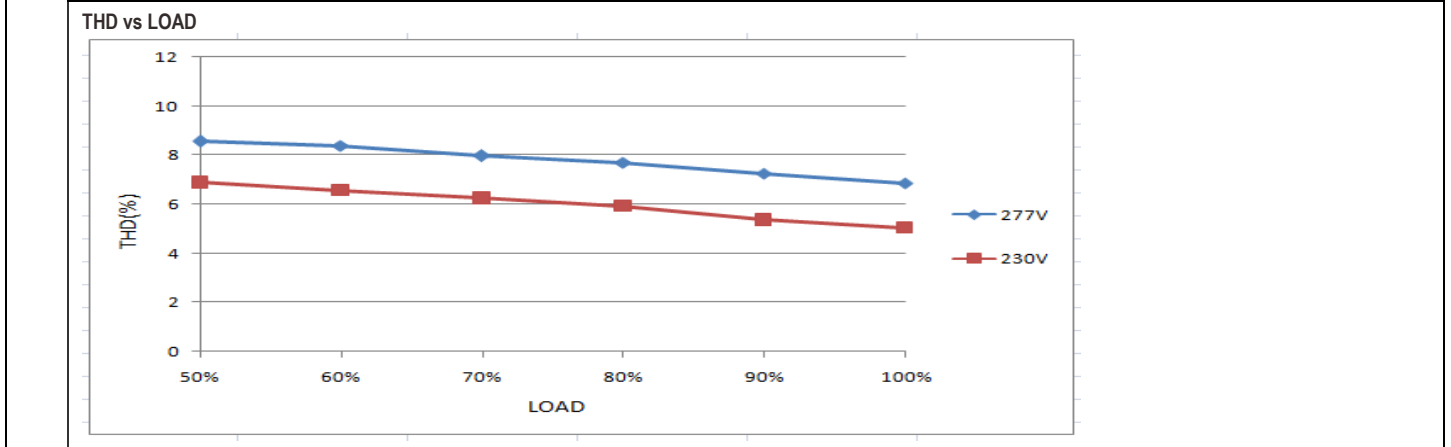
| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|--|---------------------------|--|--|--|
| 1 | INPUT VOLTAGE RANGE | 180VAC~295VAC | I/P: TESTING O/P: 80%/FULL LOAD Ta: 25°C | 177V~305V |
| | | | I/P: (1)LOW-LINE-3V=177 V HIGH-LINE+10V=305 V O/P: 80%/FULL/MIN LOAD ON: 30 Sec OFF: 30 Sec 10MIN (2)230VAC ON: 0.5 Sec OFF: 0.5 Sec 20MIN (POWER ON/OFF NO DAMAGE) | TEST: OK |
| 2 | INPUT FREQUENCY RANGE | 47HZ ~63 HZ NO DAMAGE | I/P: 180 VAC ~295 VAC O/P: FULL~MIN LOAD Ta: 25°C | TEST: OK |
| 3 | AC CURRENT | 0.4A/230VAC 0.3A/277VAC | I/P: 230 VAC I/P: 277 VAC O/P: FULL LOAD Ta: 25°C | I =0.313A/ 230VAC I =0.251A/ 277VAC |
| 4 | LEAKAGE CURRENT | < 0.75mA / 277VAC | I/P: 277 VAC O/P: NO LOAD Ta: 25°C | L-CASE: 0.0029 mA N-CASE: 0.0029 mA |
| 5 | NO LOAD POWER CONSUMPTION | < 0.5W for Blank-Type < 1.2W for A-Type < 0.5W for DA-Type | I/P: 230VAC O/P: NO LOAD Ta: 25°C | 0.388W for Blank-Type 0.582W for A-Type 0.442W for DA-Type |
| 6 | INRUSH CURRENT(Typ) | 230V/ 30A Twidth =100 us measured at 50% Ipeak COLD START | I/P: 230 VAC O/P: FULL LOAD Ta: 25°C | I =19.9A/ 230VAC Twidth =84.0 us |
| <p>INPUT=230VAC/50HZ @ FULL LOAD</p> <p>CH1: AC Input Voltage CH2: Input current</p>  <p>Tek PreVu</p> <p>Ch1 100 V Ch2 5.00 A M 40.0µs A Ch2 10.9 A</p> <p>40.8000µs</p> | | | | |
| 7 | EFFICIENCY(Typ) | 86% | I/P: 230VAC O/P: FULL LOAD Ta: 25°C | 87.75% |



| | | | | |
|---|--------------|------------------------------|--|--------------------------------------|
| 8 | POWER FACTOR | 0.95/ 230VAC 0.90/ 277VAC | I/P: 230 VAC I/P: 277 VAC O/P: FULL LOAD Ta: 25°C | PF=0.984/ 230VAC PF=0.954/ 277VAC |
|---|--------------|------------------------------|--|--------------------------------------|



| | | | | |
|---|---------------------------|--|--|--|
| 9 | TOTAL HARMONIC DISTORTION | THD < 20% (@load ≥ 75% 230VAC; @load ≥ 75% 277VAC) | I/P: 230 VAC/75% LOAD I/P: 277 VAC/75% LOAD Ta: 25°C | THD=6.10% @75% load /230VAC THD=7.92% @75% load /277VAC |
|---|---------------------------|--|--|--|



PROTECTION FUNCTION TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|--------------------------|--|--|--|
| 1 | SHORT CIRCUIT PROTECTION | SHORT EVERY OUTPUT 1 HOUR NO DAMAGE | I/P: 180VAC I/P: 295VAC O/P: 80%/FULL LOAD Ta: 25°C | NO DAMAGE Hiccup mode, auto-recovery after fault condition is removed for DA type; Hiccup mode, re-power on to recovery for other type |

COMPONENT STRESS TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|------------------------|--|-------------------------------------|
| 1 | PWM Power Transistor | Q 1 Rated 800V/9A | I/P: High-Line +3V =298V O/P: (1) Full Load Turn on (2) Output Short (3) Full load continue Ta: 25°C | (1) 690V (2) 644V (3) 680V |
| 2 | O/P Diode (MOSFET) | D100 Rated 16A/400V | I/P: High-Line +3V =298V O/P: (1) Full Load Turn on (2) Output Short (3) Full load continue Ta: 25°C | (1) 260V (2) 268V (3) 204V |
| 3 | Control IC | U1 Rated 35V (MAX) | I/P: High-Line +3V =298V O/P: (1) FULL LOAD (2) Output Short (3) Low Line No Load Ta: 25°C | (1) 15.8V (2) 14.5V (3) 15.5V |
| 4 | Clamp Diode | D 1 Rated 800V/2A | I/P: High-Line +3V = 298V O/P: (1) Full Load input on/off (2) Output Short Ta: 25°C | (1) 540V (2) 484V |

SAFETY TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|----------------------|-----------------------|-------------------------------------|--------------------------------|
| 1 | WITHSTAND VOLTAGE | I/P-O/P: 3.75KVAC/min | I/P-O/P: 4.2 KVAC/min Ta: 25°C | I/P-O/P: 1.662 mA NO DAMAGE |
| 2 | ISOLATION RESISTANCE | I/P-O/P: 500VDC>100MΩ | I/P-O/P: 500 VDC Ta: 25°C/70% RH | I/P-O/P: > 9999 MΩ |

E.M.C TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT |
|----|---|---|---|-------------------------------|
| 1 | HARMONIC | EN61000-3-2 CLASS C | I/P: 230 VAC/50HZ O/P: FULL/75% LOAD Ta: 25°C | PASS |
| 2 | CONDUCTION | EN55015 | I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS Test by certified Lab |
| 3 | RADIATION | EN55015 | I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C | PASS Test by certified Lab |
| 4 | E.S.D | EN61000-4-2 LIGHT INDUSTRY AIR: 8KV Contact: 4KV | I/P: 230 VAC/50HZ O/P: FULL LOAD Ta: 25°C | CRITERIA A |
| 5 | E.F.T | EN61000-4-4 LIGHT INDUSTRY INPUT: 1KV | I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C | CRITERIA A |
| 6 | SURGE | EN61000-4-5 LIGHT INDUSTRY L-N: 1KV | I/P: 230VAC/50HZ O/P: FULL LOAD Ta: 25°C | CRITERIA A |
| 7 | Test by certified Lab & Test Report Prepare | | | |

■ **RELIABILITY TEST**

ENVIRONMENT TEST

| NO | TEST ITEM | SPECIFICATION | TEST CONDITION | RESULT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|--|---|--|----|----------|-------------------------|------------------------|---|-----|-------|--------|---|----|-------|--------|---|----|-------|--------|---|----|-------|--------|---|----|-------|-------|---|----|-------|--------|---|-----|-------|--------|---|------|-------|--------|---|------|-------|-------|----|------|-------|--------|----|------|-------|-------|----|------|-------|-------|----|------|-------|-------|----|----|-------|-------|
| 1 | TEMPERATURE RISE TEST | MODEL: IDLC-65-1050 1. ROOM AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta= 27.3℃ 2. HIGH AMBIENT BURN-IN: 2 HRS I/P: 230VAC O/P: FULL LOAD Ta= 42.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 27.3 ℃</th> <th>HIGH AMBIENT Ta=42.3 ℃</th> </tr> </thead> <tbody> <tr><td>1</td><td>BD1</td><td>89.6℃</td><td>104.0℃</td></tr> <tr><td>2</td><td>C8</td><td>85.9℃</td><td>100.5℃</td></tr> <tr><td>3</td><td>Q1</td><td>92.0℃</td><td>106.3℃</td></tr> <tr><td>4</td><td>D1</td><td>90.9℃</td><td>106.5℃</td></tr> <tr><td>5</td><td>U1</td><td>82.8℃</td><td>97.2℃</td></tr> <tr><td>6</td><td>T1</td><td>93.9℃</td><td>108.2℃</td></tr> <tr><td>7</td><td>RG1</td><td>92.6℃</td><td>101.5℃</td></tr> <tr><td>8</td><td>D100</td><td>86.1℃</td><td>100.5℃</td></tr> <tr><td>9</td><td>Q100</td><td>82.8℃</td><td>97.3℃</td></tr> <tr><td>10</td><td>L100</td><td>89.2℃</td><td>103.4℃</td></tr> <tr><td>11</td><td>C106</td><td>76.8℃</td><td>91.2℃</td></tr> <tr><td>12</td><td>C110</td><td>63.6℃</td><td>78.2℃</td></tr> <tr><td>13</td><td>U100</td><td>82.4℃</td><td>96.4℃</td></tr> <tr><td>14</td><td>TC</td><td>76.6℃</td><td>90.5℃</td></tr> </tbody> </table> | NO | Position | ROOM AMBIENT Ta= 27.3 ℃ | HIGH AMBIENT Ta=42.3 ℃ | 1 | BD1 | 89.6℃ | 104.0℃ | 2 | C8 | 85.9℃ | 100.5℃ | 3 | Q1 | 92.0℃ | 106.3℃ | 4 | D1 | 90.9℃ | 106.5℃ | 5 | U1 | 82.8℃ | 97.2℃ | 6 | T1 | 93.9℃ | 108.2℃ | 7 | RG1 | 92.6℃ | 101.5℃ | 8 | D100 | 86.1℃ | 100.5℃ | 9 | Q100 | 82.8℃ | 97.3℃ | 10 | L100 | 89.2℃ | 103.4℃ | 11 | C106 | 76.8℃ | 91.2℃ | 12 | C110 | 63.6℃ | 78.2℃ | 13 | U100 | 82.4℃ | 96.4℃ | 14 | TC | 76.6℃ | 90.5℃ |
| NO | Position | ROOM AMBIENT Ta= 27.3 ℃ | HIGH AMBIENT Ta=42.3 ℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | BD1 | 89.6℃ | 104.0℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | C8 | 85.9℃ | 100.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Q1 | 92.0℃ | 106.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | D1 | 90.9℃ | 106.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | U1 | 82.8℃ | 97.2℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | T1 | 93.9℃ | 108.2℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | RG1 | 92.6℃ | 101.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | D100 | 86.1℃ | 100.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Q100 | 82.8℃ | 97.3℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | L100 | 89.2℃ | 103.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | C106 | 76.8℃ | 91.2℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | C110 | 63.6℃ | 78.2℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | U100 | 82.4℃ | 96.4℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | TC | 76.6℃ | 90.5℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | LOW TEMPERATURE TURN ON TEST | TURN ON AFTER 2 HOUR | I/P: 295VAC/180VAC O/P: FULL/80% LOAD Ta= -25℃ | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | HIGH HUMIDITY HIGH TEMPERATURE HIGH VOLTAGE TURN ON TEST | AFTER 12 HOURS IN CHAMBER ON CONTROL 40 ℃ NO DAMAGE | I/P: 305VAC O/P: FULL LOAD Ta=40 ℃ HUMIDITY= 95 %R.H | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | TEMPERATURE COEFFICIENT | ±0.03 %/℃(0~40℃) | I/P: 230 VAC O/P: FULL LOAD | ±0.0023%/℃ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | STORAGE TEMPERATURE TEST | 1. Thermal shock Temperature: -45℃~ +85℃ 2. Temperature change rate : 25℃ / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle: 5 CYCLE 5. Input/Output condition: AC OFF STATIC | | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | THERMAL SHOCK TEST | 1. Thermal shock Temperature: Tcase=-25℃~ +85℃ 2. Temperature change rate : 25℃ / MIN 3. Dwell time low and high temperature : 30 MIN/EACH 4. Total test cycle: 16 CYCLE 5. Input/Output condition: 230VAC/Full Load AC ON/OFF TEST AC on 3 sec/AC off 1 sec TEST | | TEST: OK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | | | |
|----|-----------------------------|--|--|
| 7 | VIBRATION TEST | 1 Carton & 1 Set (1) Waveform: Sine Wave (2) Frequency: 10~500Hz (3) Sweep Time: 10min/sweep cycle (4) Acceleration: 2G (5) Test Time: 60min in each axis (X.Y.Z) (6) Ta: 25°C | TEST: OK |
| 8 | CAPACITOR LIFE CYCLE | IDLC-65-1050: SUPPOSE C106 IS THE MOST CRITICAL COMPONENT (1) I/P: 230VAC O/P: FULL LOAD Ta= 25 °C LIFE TIME (2) I/P: 230VAC O/P: FULL LOAD Ta= 40 °C LIFE TIME (3) I/P: 230VAC O/P: MIN LOAD Ta= 40 °C LIFE TIME | (1) 279460 HRS (2) 103015 HRS (3) 124645 HRS |
| 9 | MTBF | Conducted by Parts Stress Analysis Prediction 4389.9K hrs min. Telcordia SR-332 (Bellcore) ; 405.7K hrs min. MIL-HDBK-217F (25°C) | |
| 10 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure(Expected Life) : 30,000 hours @ Tcase 80°C ; 50,000 hours @ Tcase 70°C | |

| TEST RESULT | TESTER | REVIEW | APPROVAL |
|-------------|-----------------|--------|----------|
| PASS | Carychen/ZHUOKB | SKY | LIUWY |