



# Test Report: IDLV-65-36

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65W PWM Output 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   | PWM FREQUENCY                            | 1KHz (±20%)                                | I/P: 230 VAC<br>O/P: FULL LOAD<br>Ta: 25°C               | 912Hz            |
| 2   | VOLTAGE TOLERANCE                        | ±10%                                       | I/P: 180 VAC / 295 VAC<br>O/P: FULL/ NO LOAD<br>Ta: 25°C | -1.094% ~ 0.603% |
| 3   | OVER/UNDERSHOOT TEST                     | <±10 %                                     | I/P: 230VAC<br>O/P: FULL LOAD<br>Ta: 25°C                | <±10%            |
| 4   | SET UP TIME(Max)                         | 500ms/230VAC                               | I/P: 230 VAC<br>O/P: FULL LOAD<br>Ta: 25°C               | 272ms/230VAC     |
| <p>INPUT=230VAC/50HZ @ FULL LOAD<br/>           CH1: Output Voltage CH2: AC Input Voltage</p> |  |  |  |                  |
| 5   | AUXILIARY DC OUTPUT<br>(For A-Type only) | Nominal 12V (deviation 11.4~12.6)<br>@50mA | I/P: 230 VAC<br>O/P: FULL LOAD                           | 11.90V           |

6 DIMMING TEST

※ **Dimming principle for PWM style output**  
 Dimming is achieved by varying the duty cycle of the output current.

Duty cycle(%) =  $\frac{T_{ON}}{T} \times 100\%$

Output PWM frequency : 1KHz(±20%)

※ **2 in 1 dimming function**

Ⓞ Applying additive 0 ~ 10VDC

"DO NOT connect "DIM- to Vo-"

Ⓞ Applying additive 10V PWM signal (frequency range 300~3000Hz):

"DO NOT connect "DIM- to Vo-"

Note : 1. Min. duty cycle of output current is about 8% and the output current is not defined when 0% < Iout < 8%.  
 2. The duty cycle of output current could drop down to 0% when dimming input is about 0Vdc or 10V PWM signal with 0% duty cycle.

I/P: 230 VAC  
 O/P: DIMMING TEST  
 Ta: 25°C

|   |                              |    |       |       |       |       |       |       |       |       |       |       |       |
|---|------------------------------|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | Dimming voltage              | 0V | 1V    | 2V    | 3V    | 4V    | 5V    | 6V    | 7V    | 8V    | 9V    | 10V   | OPEN  |
|   | Output Current               | 0  | 0.16A | 0.35A | 0.52A | 0.70A | 0.87A | 1.06A | 1.24A | 1.42A | 1.60A | 1.78A | 1.78A |
|   | Duty cycle of output current | 0% | 8.9%  | 19.4% | 28.9% | 38.9% | 48.3% | 58.9% | 68.9% | 78.9% | 88.9% | 98.9% | 98.9% |
| 2 | Dimming Duty cycle           | 0% | 10%   | 20%   | 30%   | 40%   | 50%   | 60%   | 70%   | 80%   | 90%   | 100%  | OPEN  |
|   | Output Current               | 0  | 0.16A | 0.34A | 0.52A | 0.70A | 0.88A | 1.06A | 1.25A | 1.43A | 1.61A | 1.78A | 1.79A |
|   | Duty cycle of output current | 0% | 8.9%  | 18.9% | 28.9% | 38.9% | 48.9% | 58.9% | 69.4% | 79.4% | 89.4% | 98.9% | 99.4% |

TEST RESULT: OK

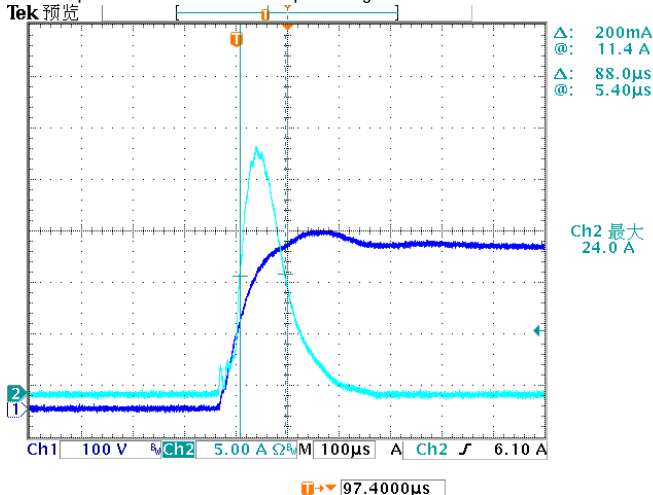


**INPUT FUNCTION TEST**

| NO | TEST ITEM                 | SPECIFICATION  | TEST CONDITION  | RESULT                                       |
|----|---------------------------|--|---|--|
| 1  | INPUT VOLTAGE RANGE       | 180VAC-295VAC  | I/P: TESTING<br>O/P: FULL LOAD<br>Ta: 25°C  | 177V-305V                                    |
|    |                           |  | I/P:<br>(1)LOW-LINE-3V=177 V<br>HIGH-LINE+10V=305 V<br>O/P: FULL/NO LOAD<br>ON: 30 Sec OFF: 30 Sec 10MIN<br>(2)230VAC<br>ON: 0.5 Sec OFF: 0.5 Sec 20MIN<br>(POWER ON/OFF NO DAMAGE) | TEST: OK                                     |
| 2  | INPUT FREQUENCY RANGE     | 47HZ ~63 HZ<br>NO DAMAGE   | I/P: 180 VAC ~295 VAC<br>O/P: FULL-NO LOAD<br>Ta: 25°C  | TEST: OK                                     |
| 3  | AC CURRENT                | 0.4A/230VAC<br>0.3A/277VAC                                       | I/P: 230 VAC<br>I/P: 277 VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | I = 0.322A/ 230VAC<br>I = 0.273A/ 277VAC     |
| 4  | LEAKAGE CURRENT           | < 0.75mA / 277VAC  | I/P: 277 VAC<br>O/P: NO LOAD<br>Ta: 25°C  | L-FG: 0.0028 mA<br>N-FG: 0.0027 mA           |
| 5  | NO LOAD POWER CONSUMPTION | < 0.5W for Blank-Type<br>< 1.2W for A-Type                       | I/P: 230VAC<br>O/P: NO LOAD<br>Ta: 25°C   | 0.425 W for Blank-Type<br>0.498 W for A-Type |
| 6  | INRUSH CURRENT(Typ)       | COLD START 30A/230VAC<br>Twidth =270 us measured at 50%<br>Ipeak | I/P: 230 VAC<br>O/P: FULL LOAD<br>Ta: 25°C  | I= 24A/ 230VAC<br>Twidth = 88us              |

INPUT=230VAC/50HZ @ FULL LOAD

CH2: Input current CH1: AC Input Voltage



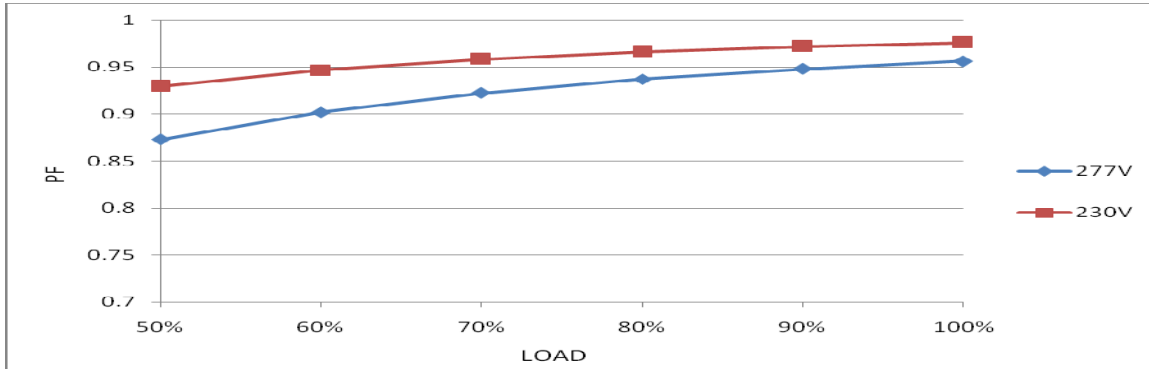


65W PWM Output LED Driver

IDLV-65 series

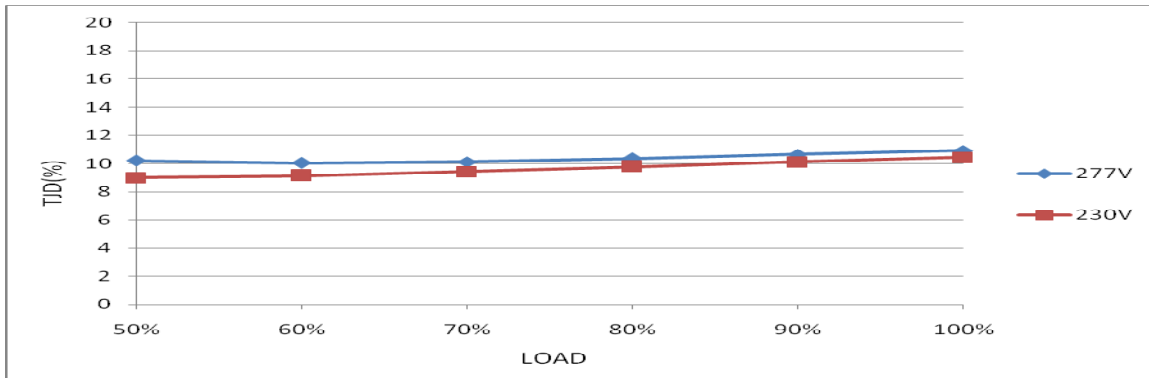
|   |              |                             |  |                                      |
|---|--------------|-----------------------------|--|--------------------------------------|
| 7 | POWER FACTOR | 0.95/ 230VAC<br>0.9/ 277VAC | I/P: 230 VAC<br>I/P: 277 VAC<br>O/P: FULL LOAD<br>Ta: 25°C | PF=0.976 /230VAC<br>PF=0.956 /277VAC |
|---|--------------|-----------------------------|--|--------------------------------------|

PF vs LOAD



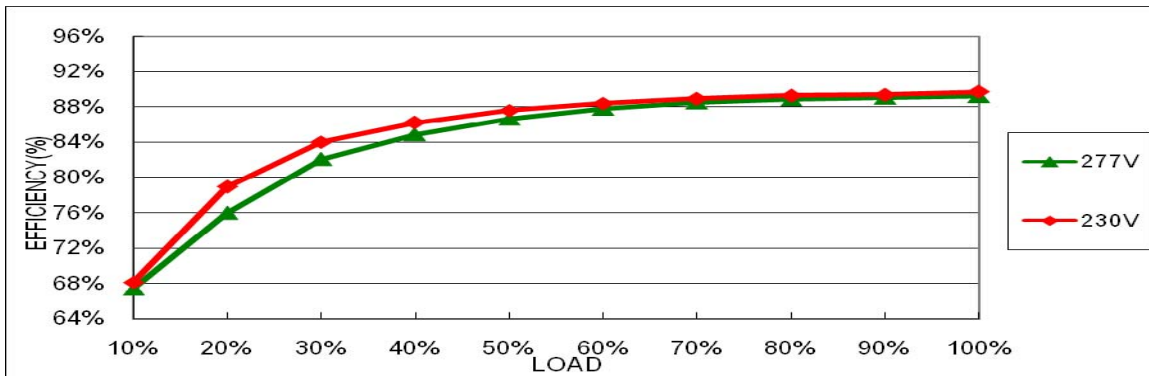
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|---|---------------------------|--|---|---|
| 8 | TOTAL HARMONIC DISTORTION | THD<20%<br>(@load≥60%/230VAC;<br>@load≥75%/277VAC) | I/P: 230 VAC<br>I/P: 277 VAC<br>O/P: 60%/75% LOAD<br>Ta: 25°C | THD=9.17% @60% load /230VAC<br>THD=10.23% @75% load /277VAC |
|---|---------------------------|--|---|---|

THD vs LOAD



|   |                 |     |   |        |
|---|-----------------|-----|---|--------|
| 9 | EFFICIENCY(Typ) | 88% | I/P: 230VAC<br>O/P: FULL LOAD<br>Ta: 25°C | 89.54% |
|---|-----------------|-----|---|--------|

EFFICIENCY vs LOAD





## PROTECTION FUNCTION TEST

| NO | TEST ITEM               | SPECIFICATION                          | TEST CONDITION  | RESULT   |
|----|-------------------------|--|---|--|
| 1  | OVER CURRENT PROTECTION | 105 %- 115 %                           | I/P: 200VAC<br>I/P: 230VAC<br>I/P: 295VAC<br>O/P: TESTING<br>Ta: 25°C | 111.6%/ 200VAC<br>111.6%/ 230VAC<br>111.6%/ 295VAC<br>Hiccup mode, recovers automatically after fault condition is removed |
| 2  | SHORT PROTECTION        | SHORT EVERY OUTPUT<br>1 HOUR NO DAMAGE | I/P: 180VAC<br>I/P: 295VAC<br>O/P: 80%/FULL LOAD<br>Ta: 25°C          | NO DAMAGE<br>Shut down O/P voltage, re-power on to recovery  |

## COMPONENT STRESS TEST

| NO | TEST ITEM   | SPECIFICATION          | TEST CONDITION  | RESULT                              |
|----|---|------------------------|---|-------------------------------------|
| 1  | PWM Transistor<br>(D to S) or (C to E) Peak Voltage | Q1 Rated<br>9A/800V    | I/P: High-Line +3V =298V<br>O/P: (1) Full Load Turn on<br>(2) Output Short<br>(3) Full load continue<br>Ta: 25°C                      | (1) 682V<br>(2) 700V<br>(3) 684V    |
| 2  | Diode Peak Voltage                                  | D100 Rated<br>20A/300V | I/P: High-Line +3V =298V<br>O/P: (1) Full Load Turn on<br>(2) Output Short<br>(3) Full load continue<br>Ta: 25°C                      | (1) 177V<br>(2) 244V<br>(3) 176V    |
| 3  | Control IC Voltage Test                             | U1 Rated<br>35V        | I/P: High-Line +3V =298V<br>O/P: (1) Full Load input on/off<br>(2) NO load input on /Off<br>(3) Full Load /NO load Change<br>Ta: 25°C | (1) 15.2V<br>(2) 15.1V<br>(3) 15.1V |



## SAFETY TEST

| NO | TEST ITEM            | SPECIFICATION         | TEST CONDITION                   | RESULT                        |
|----|----------------------|-----------------------|----------------------------------|-------------------------------|
| 1  | WITHSTAND VOLTAGE    | I/P-O/P: 3.75KVAC/min | I/P-O/P: 4.2KVAC/min<br>Ta: 25°C | I/P-O/P: 1.922mA<br>NO DAMAGE |
| 2  | ISOLATION RESISTANCE | I/P-O/P: 500VDC>100MΩ | I/P-O/P: 500VDC<br>Ta: 25°C      | I/P-O/P: >9999MΩ              |

## E.M.C TEST

| NO | TEST ITEM                                   | SPECIFICATION   | TEST CONDITION                                      | RESULT |
|----|---|---|---|--------|
| 1  | HARMONIC                                    | EN61000-3-2<br>CLASS C                                    | I/P: 230VAC/50HZ<br>O/P: FULL /60% LOAD<br>Ta: 25°C | PASS   |
| 2  | CONDUCTION                                  | EN55015   | I/P: 230 VAC/50HZ<br>O/P: FULL LOAD<br>Ta: 25°C     | PASS   |
| 3  | RADIATION                                   | EN55015   | I/P: 230 VAC/50HZ<br>O/P: FULL LOAD<br>Ta: 25°C     | PASS   |
| 4  | E.S.D                                       | EN61000-4-2<br>LIGHT INDUSTRY<br>Air: 8KV<br>Contact: 4KV | I/P: 230 VAC/50HZ<br>O/P: FULL LOAD<br>Ta: 25°C     | PASS   |
| 5  | E.F.T                                       | EN61000-4-4<br>LIGHT INDUSTRY<br>INPUT: 1KV               | I/P: 230VAC/50HZ<br>O/P: FULL LOAD<br>Ta: 25°C      | PASS   |
| 6  | SURGE                                       | EN61000-4-5<br>LIGHT INDUSTRY<br>L-N: 1KV                 | I/P: 230VAC/50HZ<br>O/P: FULL LOAD<br>Ta: 25°C      | PASS   |
| 7  | Test by certified Lab & Test Report Prepare |   |   |        |

■ **RELIABILITY TEST**

**ENVIRONMENT TEST**

| NO | TEST ITEM   | SPECIFICATION   | TEST CONDITION   | RESULT              |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
|----|---|---|--|---------------------|-------------------------|------------------------|---|-----|--------|---------|---|----|--------|---------|---|----|--------|---------|---|----|---------|---------|---|----|--------|---------|---|----|--------|--------|---|-----|---------|---------|---|----|--------|---------|---|------|--------|---------|----|------|--------|--------|----|------|--------|--------|----|-----|--------|--------|----|------|--------|--------|----|------|--------|--------|----|----|--------|--------|--|--|
| 1  | TEMPERATURE RISE TEST   | MODEL: IDLV-65-36<br>1. ROOM AMBIENT BURN-IN: 2 HRS<br>I/P: 230VAC O/P: FULL LOAD Ta= 28.4°C<br>2. HIGH AMBIENT BURN-IN: 2 HRS<br>I/P: 230VAC O/P: FULL LOAD Ta= 43.3°C   |  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
|    |   | <table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>ROOM AMBIENT Ta= 28.4°C</th> <th>HIGH AMBIENT Ta=43.3°C</th> </tr> </thead> <tbody> <tr><td>1</td><td>BD1</td><td>89.9°C</td><td>106.6°C</td></tr> <tr><td>2</td><td>C8</td><td>85.2°C</td><td>102.2°C</td></tr> <tr><td>3</td><td>C6</td><td>86.4°C</td><td>104.0°C</td></tr> <tr><td>4</td><td>D1</td><td>108.7°C</td><td>126.6°C</td></tr> <tr><td>5</td><td>Q1</td><td>91.7°C</td><td>109.8°C</td></tr> <tr><td>6</td><td>U1</td><td>81.6°C</td><td>99.7°C</td></tr> <tr><td>7</td><td>R19</td><td>119.1°C</td><td>135.6°C</td></tr> <tr><td>8</td><td>T1</td><td>93.7°C</td><td>111.9°C</td></tr> <tr><td>9</td><td>D100</td><td>91.1°C</td><td>107.0°C</td></tr> <tr><td>10</td><td>Q100</td><td>66.5°C</td><td>82.8°C</td></tr> <tr><td>11</td><td>U100</td><td>69.5°C</td><td>87.1°C</td></tr> <tr><td>12</td><td>RG1</td><td>68.8°C</td><td>85.4°C</td></tr> <tr><td>13</td><td>C105</td><td>67.0°C</td><td>82.8°C</td></tr> <tr><td>14</td><td>C107</td><td>57.2°C</td><td>73.2°C</td></tr> <tr><td>15</td><td>TC</td><td>69.6°C</td><td>87.1°C</td></tr> </tbody> </table> | NO   | Position            | ROOM AMBIENT Ta= 28.4°C | HIGH AMBIENT Ta=43.3°C | 1 | BD1 | 89.9°C | 106.6°C | 2 | C8 | 85.2°C | 102.2°C | 3 | C6 | 86.4°C | 104.0°C | 4 | D1 | 108.7°C | 126.6°C | 5 | Q1 | 91.7°C | 109.8°C | 6 | U1 | 81.6°C | 99.7°C | 7 | R19 | 119.1°C | 135.6°C | 8 | T1 | 93.7°C | 111.9°C | 9 | D100 | 91.1°C | 107.0°C | 10 | Q100 | 66.5°C | 82.8°C | 11 | U100 | 69.5°C | 87.1°C | 12 | RG1 | 68.8°C | 85.4°C | 13 | C105 | 67.0°C | 82.8°C | 14 | C107 | 57.2°C | 73.2°C | 15 | TC | 69.6°C | 87.1°C |  |  |
| NO | Position  | ROOM AMBIENT Ta= 28.4°C   | HIGH AMBIENT Ta=43.3°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 1  | BD1   | 89.9°C  | 106.6°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 2  | C8  | 85.2°C  | 102.2°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 3  | C6  | 86.4°C  | 104.0°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 4  | D1  | 108.7°C   | 126.6°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 5  | Q1  | 91.7°C  | 109.8°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 6  | U1  | 81.6°C  | 99.7°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 7  | R19   | 119.1°C   | 135.6°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 8  | T1  | 93.7°C  | 111.9°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 9  | D100  | 91.1°C  | 107.0°C  |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 10 | Q100  | 66.5°C  | 82.8°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 11 | U100  | 69.5°C  | 87.1°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 12 | RG1   | 68.8°C  | 85.4°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 13 | C105  | 67.0°C  | 82.8°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 14 | C107  | 57.2°C  | 73.2°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 15 | TC  | 69.6°C  | 87.1°C   |                     |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 2  | LOW TEMPERATURE TURN ON TEST                                      | TURN ON AFTER 2 HOUR  | I/P: 295VAC/200VAC<br>O/P: FULL LOAD<br>Ta= -25°C              | TEST: OK            |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 3  | HIGH HUMIDITY<br>HIGH TEMPERATURE<br>HIGH VOLTAGE<br>TURN ON TEST | AFTER 12 HOURS<br>IN CHAMBER ON<br>CONTROL 40 °C<br>NO DAMAGE   | I/P: 305VAC<br>O/P: FULL LOAD<br>Ta=40 °C<br>HUMIDITY= 95% R.H | TEST: OK            |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 4  | TEMPERATURE COEFFICIENT   | ±0.03%/°C (0-40°C)  | I/P: 230 VAC<br>O/P: FULL LOAD                                 | ±0.002%/°C (0-40°C) |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 5  | STORAGE TEMPERATURE TEST  | 1. Thermal shock Temperature: -45°C ~ +85°C<br>2. Temperature change rate : 25°C / MIN<br>3. Dwell time low and high temperature : 30 MIN/EACH<br>4. Total test cycle: 5 CYCLE<br>5. Input/Output condition: STATIC   |  | TEST: OK            |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |
| 6  | THERMAL SHOCK TEST  | 1. Thermal shock Temperature: -25°C ~ +45°C<br>2. Temperature change rate : 25°C / MIN<br>3. Dwell time low and high temperature : 30 MIN/EACH<br>4. Total test cycle: 10 CYCLE<br>5. Input/Output condition: 230VAC/Full Load AC ON/OFF TEST<br>AC on 3 sec/AC off 1 sec TEST  |  | TEST: OK            |                         |                        |   |     |        |         |   |    |        |         |   |    |        |         |   |    |         |         |   |    |        |         |   |    |        |        |   |     |         |         |   |    |        |         |   |      |        |         |    |      |        |        |    |      |        |        |    |     |        |        |    |      |        |        |    |      |        |        |    |    |        |        |  |  |





## 65W PWM Output LED Driver

## IDLV-65 series

|    |                             |   |   |
|----|-----------------------------|---|---|
| 7  | VIBRATION TEST              | 1 Carton & 1 Set<br>(1) Waveform: Sine Wave<br>(2) Frequency: 10-500Hz<br>(3) Sweep Time: 10min/sweep cycle<br>(4) Acceleration: 2G<br>(5) Test Time: 60min in each axis (X.Y.Z)<br>(6) Ta: 25°C  | TEST: OK  |
| 8  | CAPACITOR LIFE CYCLE        | IDLV-65-36: SUPPOSE C105 IS THE MOST CRITICAL COMPONENT<br>(1) I/P: 230VAC O/P: FULL LOAD Ta= 25 °C LIFE TIME<br>(2) I/P: 230VAC O/P: FULL LOAD Ta= 40 °C LIFE TIME<br>(3) I/P: 230VAC O/P: 75% LOAD Ta= 40 °C LIFE TIME<br>(4) I/P: 230VAC O/P: 50% LOAD Ta= 40 °C LIFE TIME | (1) 257750 HRS<br>(2) 85673 HRS<br>(3) 131596 HRS<br>(4) 201872 HRS |
| 9  | MTBF                        | Conducted by Parts Stress Analysis Prediction<br>398.7K hrs min MIL-HDBK-217F (25°C)  |   |
| 10 | DMTBF/Accelerated Life Test | Demonstration Mean Time Between Failure(Expected Life) :<br>30,000 hours @ Tcase 80°C; 50,000 hours @ Tcase 70°C  |   |

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