Test Report: SPWM-75-24

75W Constant Voltage PWM Output LED Drive

■ 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

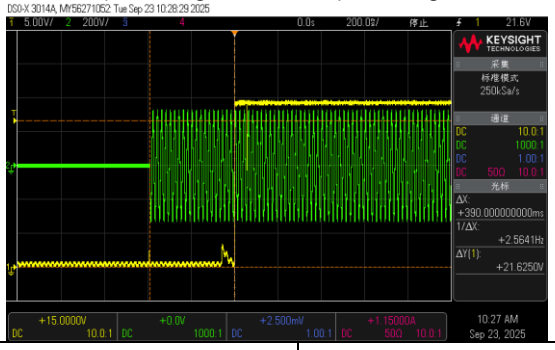
ENVIRONMENT TEST

■ DESIGN VERIFY TEST

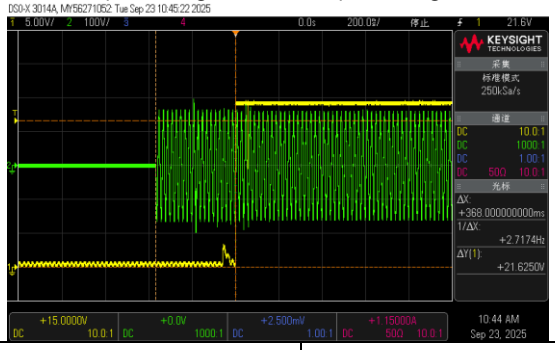
OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	DIMMING RANGE	0~100%	I/P: 230 VAC I/P:115VAC O/P:FULL LOAD Ta:25℃	0.2%~ 100% / 3.2KHz
2	VOLTAGE ADJ. RANGE	23 V ~ 26 V	I/P: 230 VAC I/P:115VAC O/P:NO LOAD Ta:25℃	Test : 22.54 V~ 26.98V/ 230V 22.54 V~ 26.98V/115V
3	OVER/UNDERSHOOT TEST	< ± 5%	I/P: 230 VAC O/P:FULL LOAD Ta:25℃	TEST: 1.17%
4	SET UP TIME (Max)	230VAC/ 500ms 115VAC/ 1200ms	I/P: 230 VAC I/P: 11VAC O/P:FULL LOAD Ta:25℃	230VAC/ 390ms 115VAC/ 368ms

INPUT=230VAC/50HZ @ FULL LOAD
CH1 : Output Voltage CH2 : AC Input Voltage

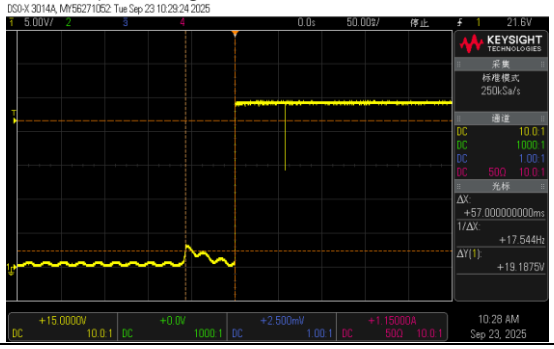


INPUT=115VAC/60HZ @ FULL LOAD
CH1 : Output Voltage CH2 : AC Input Voltage

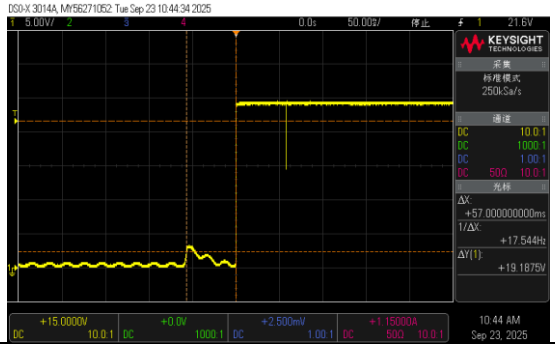


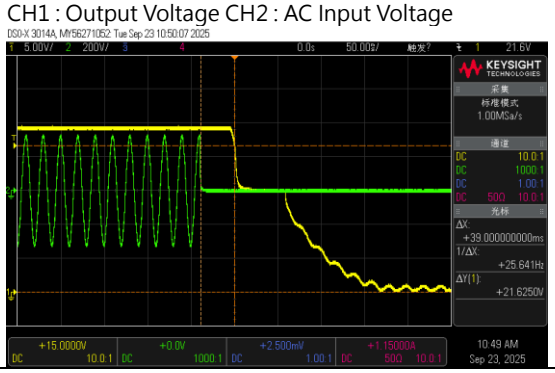
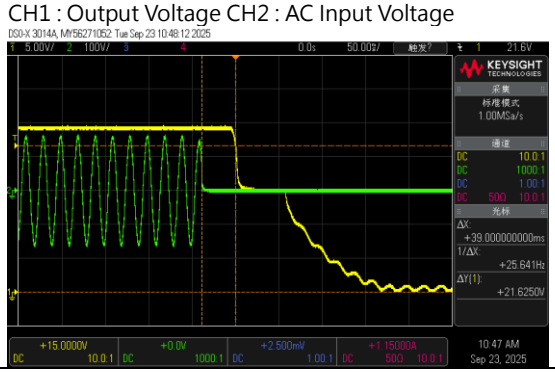
5	RISE TIME (Max)	230VAC/ 80ms 115VAC/ 80ms	I/P: 230 VAC I/P: 11VAC O/P:FULL LOAD Ta:25℃	230 VAC/ 57ms 115 VAC/ 57ms

INPUT=230VAC/50HZ @ FULL LOAD
CH1 : Output Voltage



INPUT=115VAC/60HZ @ FULL LOAD
CH1 : Output Voltage



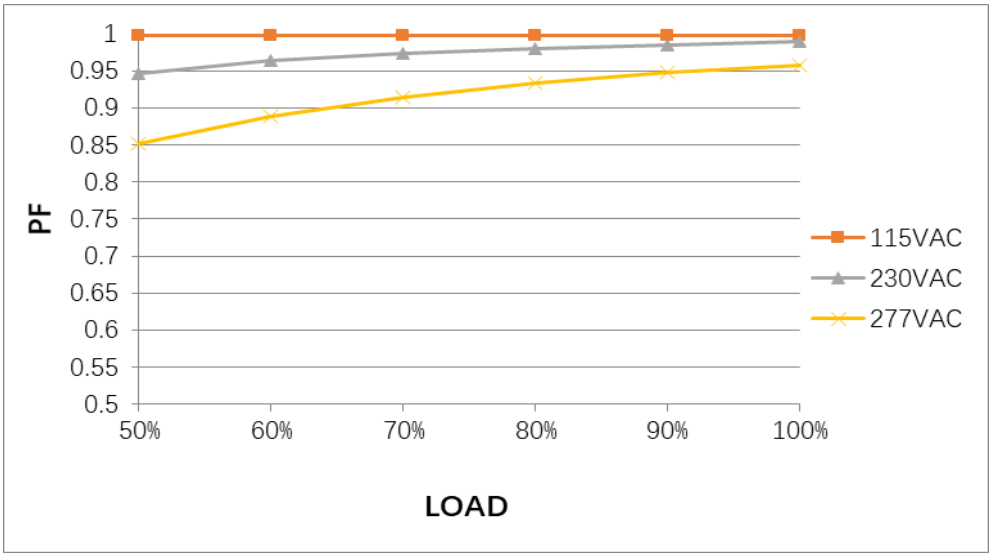
6	HOLD UP TIME (Typ.)	230VAC/ 10 ms 115VAC/ 10 ms	I/P: 230 VAC I/P: 11VAC O/P:FULL LOAD Ta:25℃	230VAC/ 39ms 115 VAC/39ms
	INPUT=230VAC/50HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 		INPUT=115VAC/60HZ @ FULL LOAD CH1 : Output Voltage CH2 : AC Input Voltage 	

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	INPUT VOLTAGE RANGE	100VAC~305 VAC 156VDC~410VDC	(1) I/P:TESTING O/P:FULL LOAD (2) I/P:DC TESTING(L:+ N:-) O/P: FULL / 50% LOAD (3) I/P:DC TESTING(L:- N:+) O/P: FULL / 50% LOAD (4) I/P: LOW-LINE=156VDC HIGH-LINE=410VDC O/P: Dimming on/off Ta:25℃	(1) 97 V~ 308 V (2)153Vdc ~ 410Vdc/FULL LOAD 153Vdc~410Vdc/50% LOAD (3)153Vdc~410Vdc/FULL LOAD 153Vdc~410Vdc/50% LOAD (4) OK
			I/P: LOW-LINE-3V=97V HIGH-LINE+10V=315V O/P:FULL/MIN LOAD (PLEASE CHECK DERATING CURVE) ON: 30 Sec OFF: 30 Sec 10MIN (POWER ON/OFF NO DAMAGE)	TEST: OK
2	INPUT FREQUENCY RANGE	47HZ ~63 HZ NO DAMAGE	I/P: 100 VAC ~305VAC O/P:FULL~MIN LOAD Ta:25℃	OK
3	INPUT CURRENT (TYP)	277 VAC/ 0.38 A 230 VAC/ 0.45 A 115 VAC/ 0.90 A	I/P: 277VAC I/P: 230VAC I/P: 115VAC O/P:FULL LOAD Ta:25℃	I = 0.33 A/ 277VAC I = 0.37 A/ 230VAC I = 0.75 A/115VAC

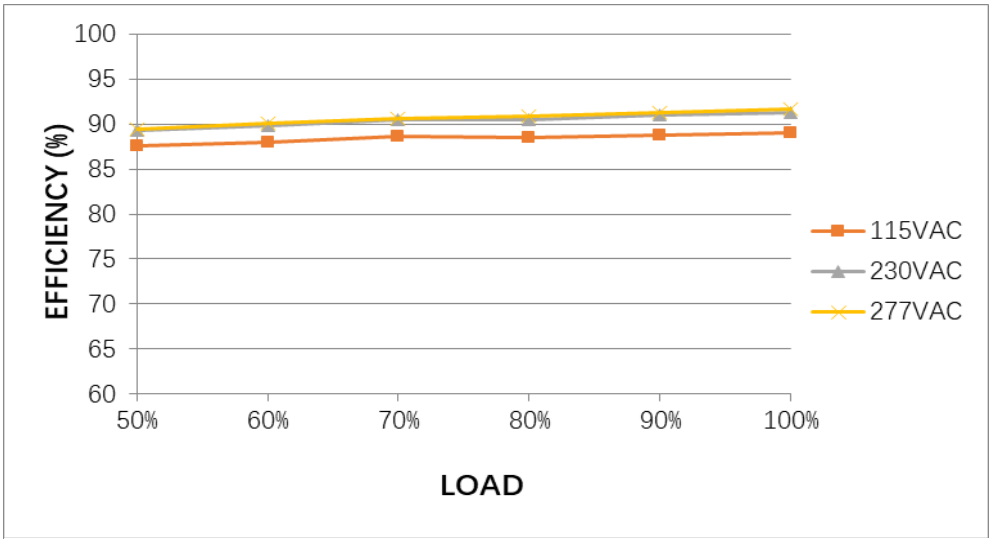
4	LEAKAGE CURRENT	< 0.25mA / 277 VAC	I/P： 277 VAC O/P：Min LOAD Ta：25℃	L-FG: 0.012mA N-FG: 0.012 mA
5	STANDBY POWER CONSUMPTION	<0.5W (Dimming off)	I/P: 230VAC O/P：DIM OFF Ta：25℃	0.432W/230VAC
6	POWER FACTOR(TYP)	0.92 /277 VAC 0.95 /230 VAC 0.97 /115 VAC	I/P: 277VAC I/P: 230VAC I/P: 115VAC O/P: FULL LOAD Ta:25℃	PF= 0.942/277VAC PF= 0.980 /230VAC PF= 0.998/115VAC

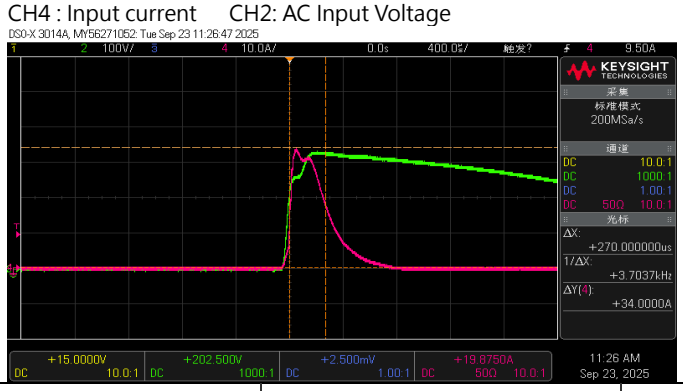
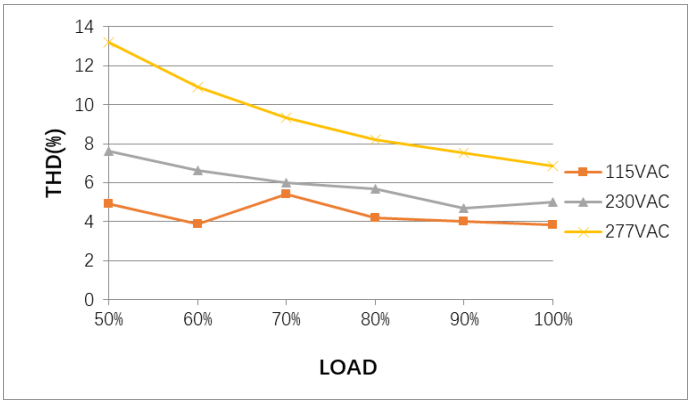
P.F vs LOAD



7	EFFICIENCY (TYP)	90%	I/P: 230 VAC O/P:FULL LOAD Ta:25℃	91.3%

EFFICIENCY vs LOAD



8	INRUSH CURRENT (TYP)	230 V/ 50 A COLD START (twidth=500us measured at 50% Ipeak) COLD START	I/P: 230 VAC O/P:FULL LOAD Ta:25℃	I = 34 A/ 230VAC T50=270 us
	INPUT=230VAC/50HZ @ FULL LOAD CH4 : Input current CH2: AC Input Voltage 			
9	TOTAL HARMONIC DISTORTION	THD<10% @load≧ 50%/115VAC, 230VAC; @load≧ 75%/277VAC	I/P：115VAC /230VAC/277VAC O/P：75% LOAD 50% LOAD Ta：25℃	THD： 4.94 %/115VAC*50%load THD： 7.61 %/230VAC*50%load THD： 8.56 %/277VAC*75%load
	THD&LOAD 			

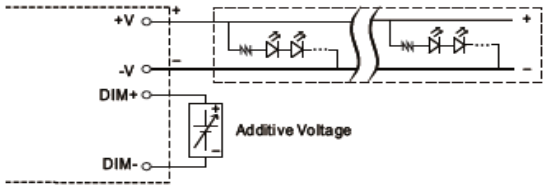
PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	OVER LOAD PROTECTION	105 % ~ 135 %	I/P: 305VAC I/P: 230VAC I/P: 100VAC O/P:TESTING Ta:25℃	122.81%/ 305VAC 122.81%/ 230VAC 122.81%/ 100VAC Protection type : Hiccup mode, recovers automatically after fault condition is removed.
2	OVER VOLTAGE PROTECTION	V1: 27 V~ 36 V	I/P: 305VAC I/P: 230VAC I/P: 100VAC O/P:MIN LOAD Ta:25℃	30.7V/ 305VAC 30.7V/ 230VAC 30.9V/ 100VAC Protection type : Shut down O/P voltage, re-power on to recover after fault condition is removed
3	OVER TEMPERATURE PROTECTION	NO DAMAGE	I/P: 305 VAC I/P: 100 VAC O/P:FULL LOAD	O.T.P Active Protection type : Shut down O/P voltage, re-power on to recover after fault condition is removed
4	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P: 305VAC I/P: 100 VAC O/P: FULL LOAD Ta:25℃	NO DAMAGE Protection type : 【For Blank type】: Shut down O/P voltage, re-power on to recover after fault condition is removed. 【For DA2/DA2Q type】: Hiccup mode, recovers automatically after fault condition is removed.

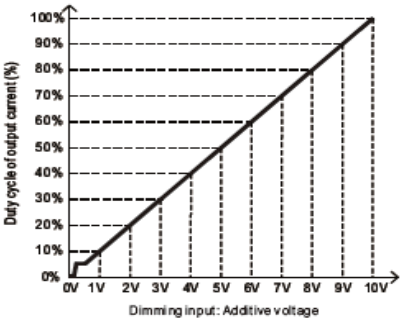
CONTROL FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	DIMMING OPERATION (Blank Type)	※ 3 in 1 dimming function • Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 0 ~ 10VDC, or 10V PWM signal or resistance. • Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers. • Dimming source current from power supply: 100 μA (typ.)		

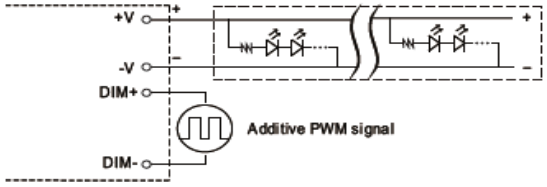
◎ Applying additive 0 ~ 10VDC



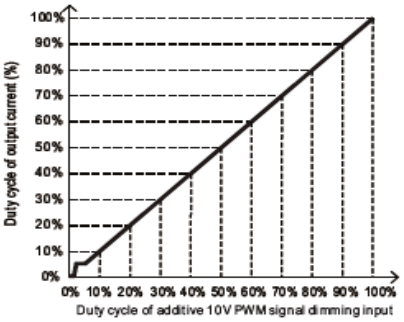
"DO NOT connect "DIM- to -V"



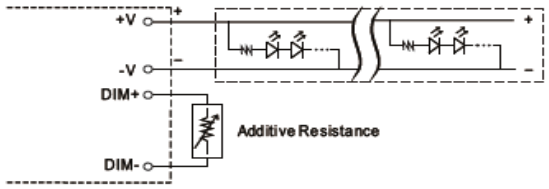
◎ Applying additive 10V PWM signal (frequency range 300Hz~3KHz):



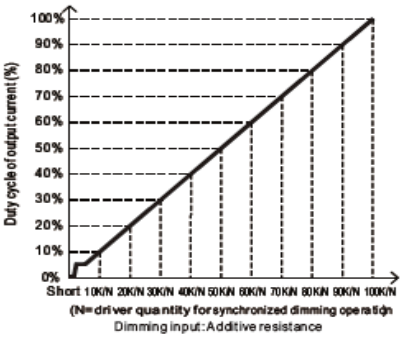
"DO NOT connect "DIM- to -V"



◎ Applying additive resistance: 0~100k Ω



"DO NOT connect "DIM- to -V"



Note : 1. Min. dimming level is about 6% and the output current is not defined when 0% < Iout < 6%.
2. The output current could drop down to 0% when dimming input is about 0kΩ or 0Vdc, or 10V PWM signal with 0% duty cycle.

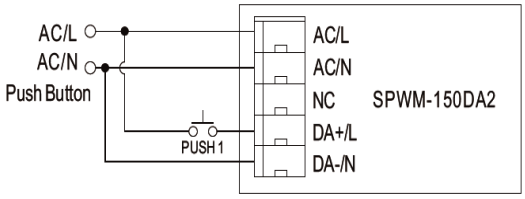
I/P : 230 VAC ; O/P : DIMMING TEST ;Ta : 25℃

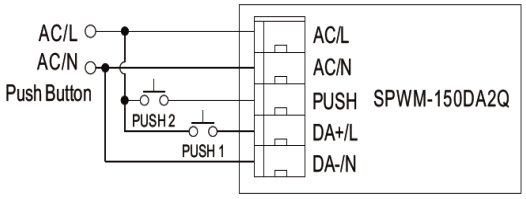
	Resistance value	Short	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K	OPEN
1	Output Current	0	0.380 A	0.707 A	1.030 A	1.350 A	1.680 A	2.010 A	2.350 A	2.700 A	3.010 A	3.140A	3.140 A
	Output Current duty	0%	11.88 %	22.09 %	32.19 %	42.19 %	52.50 %	62.81 %	73.44 %	84.38 %	94.06 %	98.13 %	98.13 %
2	Dimming value	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
	Output Current	0	0.370 A	0.670 A	0.967 A	1.260 A	1.600 A	1.920 A	2.240 A	2.560 A	2.880 A	3.130A	3.140 A
	Output Current duty	0%	11.56 %	20.94 %	30.22 %	39.38 %	50.00 %	60.00 %	70.00 %	80.00 %	90.00 %	97.81 %	98.13 %
3	Duty value	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
	Output Current	0	0.378 A	0.691 A	0.985 A	1.280 A	1.620 A	1.930 A	2.260 A	2.580 A	2.890 A	3.140A	3.140 A
	Output Current duty	0%	11.81 %	21.59 %	30.78 %	40.00 %	50.63 %	60.31 %	70.63 %	80.63 %	90.31 %	98.13 %	98.13 %

2 PUSH DIMMING OPERATION (DA2/DA2Q Type)

※PUSH dimming (primary side), for DA2/DA2Q Model

• Intput wiring diagram





- The factory default dimming level is at 100%.
- Up to 10 drivers can perform the PUSH dimming at the same time when utilizing one common push button.
- The maximum length of the cable from the push button to the last driver is 20 meters.

Action	Action duration
Short Push	0.1~1s
Long Push	>1s

Push Button functionally

Model	Application	Dip Switch 1	2	3	Push 1 for brightness	Push 2 for colour
DA2 Type	1 logic unit of LED (DT6,Brightness Dimming)				Short Push : ON/OFF Long Push : Dim up/down. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	**This model does not feature this button.**
DA2Q Type	1 logic unit of LED (DT6,Brightness Dimming)	ON	ON	ON	Short Push : ON/OFF Long Push : Dim up/down. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	Short Push : no response Long Push : no response
	4 logic unit of LED (DT6,Brightness Dimming)	ON	ON	OFF	**4 control gears are synchronously controlled** Short Push : ON/OFF Long Push : Dim up/down. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	Short Push : no response Long Push : no response
	1 logic unit of colourtype RGBW (DT8, RGBW colour control) (factory default)	OFF	OFF	OFF	Short Push : ON/OFF Long Push : Dim up/down. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	Short Push : Switch to "W channel control" or "RGB color control". Long Push : Dimming "W channel control" or "RGB color control". -W channel control: Long press to dim up stop at maximum. Long press to dim down stop at minimum(0). -RGB color control: Long press to change RGB color.
	1 logic unit of colour type Tc (DT8, Tunable white control)	ON	OFF	OFF	Short Push : ON/OFF Long Push : Dim up/down - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	Short Push : ON/OFF Long Push : Dim2Warm - The color temperature warms up while the brightness dims, and the color temperature cools down while the brightness brightens. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change (up,cooler/down,warmer) - dim up possible even if when unit is OFF

Model		Dip Switch 1	2	3	PUSH 1 for brightness	PUSH 2 for colour
DA2Q Type	2 logic units of colour type Tc (DT8. Tunable white control)	OFF	ON	OFF	**2 control gears are synchronously controlled** Short Push : ON/OFF Long Push : Dim up/down - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	**2 control gears are synchronously controlled** Short Push : ON/OFF Long Push : Dim2Warm - The color temperature warms up while the brightness dims, and the color temperature cools down while the brightness brightens. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change (up,cooler/down,warmer) - dim up possible even if when unit is OFF
	2 logic units (1 logic unit of DT6) (1 logic unit of colour type Tc)	OFF	OFF	ON	**Only the DT6 device responds** Short Push : ON/OFF Long Push : Dim up/down - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change(up/down) - dim up possible even if when unit is OFF	**Only the DT8 device responds** Short Push : ON/OFF Long Push : Dim2Warm - The color temperature warms up while the brightness dims, and the color temperature cools down while the brightness brightens. - dim up stop at maximum; dim down stop at minimum dim (not dim off) - with next push, direction change (up,cooler/down,warmer) - dim up possible even if when unit is OFF

I/P : 230 VAC

O/P : DIMMING TEST

Ta : 25℃

TEST RESULT : OK

COMPONENT STRESS TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	PWM Transistor (D to S) or (C to E) **Peak Voltage**	Q2 Rated 7A/800V	AC ON/OFF I/P:High-Line +3V =308V O/P: (1)Full Load input (2)Output Short (3)Dimming off (4)OLP (5) No Load VDS: I/P:Low-Line -3V = 97V O/P: (1)Full Load input (2)Output Short (3)Dimming off (4)OLP (5) No Load Ta:25℃	 VDS: (1) 608V (2) 596V (3) 596V (4) 620V (5) 596V VDS: (1) 604V (2) 600V (3) 604V (4) 616V (5) 604V

2	P.F.C Transistor (D to S) or (C to E) **Peak Voltage**	Q1 Rated 12A/650V	AC ON/OFF I/P:High-Line +3V =308 V O/P: (1)Full Load input (2)Output Short (3)Dimming off (4)OLP (5) No Load I/P:Low-Line -3V = 97V O/P: (1)Full Load input (2)Output Short (3)Dimming off (4)OLP (5) No Load Ta:25℃	 VDS: (1) 495V (2) 475V (3) 459V (4) 463V (5) 459V VDS: (1) 512V (2) 512V (3) 512V (4) 512V (5) 512V
3	P.F.C DIODE	D5 Rated 8A/600V	AC ON/OFF I/P:High-Line +3V =308 V O/P: (1)Full Load input (2)Output Short (3)Dimming off (4)OLP (5) No Load I/P: Low-Line -3V = 97V O/P: (1)Full Load (2)Output Short (3)Dimming off (4)OLP (5) No Load Ta:25℃	 (1) 463V (2) 459V (3) 459V (4) 459V (5) 459V (1) 463V (2) 459V (3) 459V (4) 459V (5) 459V
4	Diode Peak **Voltage**	Q100 Rated 50A/150V	AC ON/OFF I/P: High-Line +3V =308 V O/P: (1)Full Load (2)Output Short (3) Dimming off (4) OLP (5).NO LOAD Ta:25℃	 VDS: (1) 135V (2) 135V (3) 135V (4) 135V (5) 133V
5	**Input Capacitor Voltage**	C5 Rated: 33μ /450V Surge voltage: 560 V	I/P:High-Line +3V =308V O/P: (1)Full Load input on/off (2) Min load input on /Off (3)Full Load /Min load Change (4)Full load continue Ta:25℃	 (1) 491V (2) 451V (3) 451V (4) 443V

6	**Control IC Voltage Test**	PWM IC U2Rated 9V~28V PFC IC U1 Rated -0.3 V~ 27V MCU IC U602 Rated 1.7 V~ 3.6 V	AC ON/OFF I/P:High-Line +3V =308 V O/P:(1) Full Load (2) Output Short (3) O.L.P (4) O.V.P. (5) No Load VR min (Low Line) (6) DIM OFF Ta:25℃	U2 (1) 17.1V (2) 17.1V (3) 17.1V (4) 17.3V (5) 12.9V (6) 12.9V U1 (1) 17.1V (2) 17.1V (3) 17.1V (4) 17.3V (5) 12.9V (6) 12.9V U602 (1) 3.30V (2) 3.30V (3) 3.30V (4) 3.31V (5) 3.30V (6) 3.30V
7	DIMMING MOS (DA2Q type)	Q110/ Q113 : Rated： 68A/60V	AC ON/OFF I/P：High-Line +3V = 308 V O/P：(1) Full Load (2) Output Short (3) Dim on/off Ta：25℃	Q110 (1) 19.3V (2) 25.0V (3) 12.3V Q113 (1) 19.3V (2) 25.0V (3) 12.1V

■ SAFETY & EMC TEST REPORT

SAFETY TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT
1	WITHSTAND VOLTAGE	I/P-O/P: 3.75 K VAC/min	I/P-O/P: 4.125 KVAC/min Ta:25℃	I/P-O/P: 1.03 mA NO DAMAGE
2	ISOLATION RESISTANCE	I/P-O/P: 500 VDC>100MΩ	I/P-O/P: 500 VDC Ta:25℃	I/P-O/P: >9999 MΩ NO DAMAGE

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 LOAD Ta:25℃	PASS
2	CONDUCTION	EN55015 CLASS B	I/P: 230 VAC /50HZ O/P:FULL/50% LOAD Ta:25℃	PASS Test by certified Lab
3	RADIATION	EN55015 CLASS B	I/P: 230 VAC /50HZ O/P:FULL LOAD Ta:25℃	PASS Test by certified Lab
4	E.S.D	EN61000-4-2 AIR : 8KV / Contact : 4KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A/ Blank type CRITERIA B/ DA2&DA2Q
5	E.F.T	EN61000-4-4 INPUT: 1KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
6	SURGE	IEC61000-4-5 L-N :2KV	I/P: 230 VAC/50HZ O/P:FULL LOAD Ta:25℃	CRITERIA A
7	Test by certified Lab & Test Report Prepare Any contradictions of the test results, please refer to the latest EMC test report			

■ RELIABILITY TEST

ENVIRONMENT TEST

<table>
<tr><th>NO</th><th>TEST ITEM</th><th>SPECIFICATION</th><th>TEST CONDITION</th><th>RESULT</th></tr>
<tr><td>1</td><td>TEMPERATURE RISE TEST</td><td colspan="3">MODEL： SPWM-75-24DA2Q
1. ROOM AMBIENT BURN-IN：2 HRS
I/P： 230VAC O/P： FULL LOAD Ta=32.5 ℃
2. HIGH AMBIENT BURN-IN：2 HRS
I/P： 230VAC O/P： FULL LOAD Ta=53.3 ℃
<table>
<tr><th>NO</th><th>Position</th><th>ROOM AMBIENT Ta=32.5℃</th><th>HIGH AMBIENT Ta=53.3 ℃</th></tr>
<tr><td>1</td><td>BD1</td><td>67.6℃</td><td>87.2℃</td></tr>
<tr><td>2</td><td>C1</td><td>55.7℃</td><td>76.4℃</td></tr>
<tr><td>3</td><td>R7</td><td>78.3℃</td><td>97.7℃</td></tr>
<tr><td>4</td><td>Q1</td><td>87.2℃</td><td>106.2℃</td></tr>
<tr><td>5</td><td>L2</td><td>75.5℃</td><td>95.9℃</td></tr>
<tr><td>6</td><td>D5</td><td>84.4℃</td><td>103.7℃</td></tr>
<tr><td>7</td><td>C5</td><td>70.9℃</td><td>89.6℃</td></tr>
<tr><td>8</td><td>Q2</td><td>93.2℃</td><td>111.5℃</td></tr>
<tr><td>9</td><td>C62</td><td>84.3℃</td><td>103.3℃</td></tr>
<tr><td>10</td><td>U2</td><td>83.0℃</td><td>101.2℃</td></tr>
<tr><td>11</td><td>T1</td><td>89.8℃</td><td>108.9℃</td></tr>
<tr><td>12</td><td>T1</td><td>90.1℃</td><td>108.9℃</td></tr>
<tr><td>13</td><td>Q100</td><td>82.0℃</td><td>100.3℃</td></tr>
<tr><td>14</td><td>C104</td><td>79.7℃</td><td>99.8℃</td></tr>
<tr><td>15</td><td>Q110</td><td>54.3℃</td><td>75.5℃</td></tr>
<tr><td>16</td><td>RTH2</td><td>77.8℃</td><td>95.7℃</td></tr>
<tr><td>17</td><td>TC</td><td>66.1℃</td><td>87.5℃</td></tr>
</table></td></tr>
<tr><td>2</td><td>OVER LOAD BURN-IN TEST</td><td>NO DAMAGE
1 HOUR (MIN)</td><td>I/P： 230 VAC
O/P：119%LOAD
Ta：25℃</td><td>TEST：OK</td></tr>
<tr><td>3</td><td>LOW TEMPERATURE
TURN ON TEST</td><td>TURN ON AFTER 2 HOUR</td><td>I/P： 305VAC/100VAC
O/P： 100/90%LOAD
Ta= -25℃</td><td>TEST：OK</td></tr>
<tr><td>4</td><td>HIGH HUMIDITY
HIGH TEMPERATURE
HIGH VOLTAGE
TURN ON TEST</td><td>AFTER 12 HOURS
IN CHAMBER ON
CONTROL 50℃
NO DAMAGE</td><td>I/P： 315 VAC
O/P：FULL LOAD
Ta=50℃
HUMIDITY= 95%R.H</td><td>TEST：OK</td></tr>
<tr><td>5</td><td>TEMPERATURE
COEFFICIENT</td><td>±0.03%(0~50℃)</td><td>I/P： 230 VAC
O/P：FULL LOAD</td><td>±0.006%(0~50℃)</td></tr>
<tr><td>6</td><td>STORAGE TEMPERATURE
TEST</td><td>-40~+80℃</td><td colspan="2">1. Thermal shock Temperature： -45℃~ +90℃
2. Temperature change rate ：25℃ / MIN
3. Dwell time low and high temperature ： 30 MIN/EACH
4. Total test cycle：10CYCLE
5. Input/output condition： STATIC
TEST：OK</td></tr>
</table>

7	THERMAL SHOCK TEST	-20~+50℃	1. Thermal shock Temperature： -25℃~ +55℃ 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： 15cycle:230V/ FULL LOAD AC ON 3sec/AC OFF 1sec TEST 1cycle:230V/ FULL LOAD Burn In Test
8	VIBRATION TEST	5 ~ 100Hz, 2G 12min./1cycle, 72min. each along X, Y, Z axes	1 Carton & 1 Set (1) Waveform： Sine Wave (2) Frequency：5~100Hz (3) Sweep Time：12min/sweep cycle (4) Acceleration：3G (5) Test Time：180min in each axis (X.Y.Z) (6) Ta：25℃
9	CAPACITOR LIFE CYCLE	SUPPOSE C105 IS THE MOST CRITICAL COMPONENT (1) I/P： 230VAC O/P：FULL LOAD Ta=25 ℃ LIFE TIME (2) I/P： 230VAC O/P：FULL LOAD Ta=50 ℃ LIFE TIME (3) I/P： 230VAC O/P：75% LOAD Ta =50 ℃ LIFE TIME (4) I/P： 230VAC O/P：50% LOAD Ta =50 ℃ LIFE TIME	 (1) 1746063HRS (2) 106429HRS (3) 310499HRS (4) 1140407HRS
10	MTBF	Conducted by Parts Stress Analysis Prediction 2396.9K hrs min. Telcordia SR-332 (Bellcore) ; 205.7K hrs min. MIL-HDBK-217F (25℃)	
11	Ongoing Reliability Test	I/P：230VAC O/P：FULL LOAD TA=50℃ Demonstration Mean Time Between Failure : 50,000 hours	

TEST RESULT	TESTER	REVIEW	APPROVAL
PASS	WUWQIN/ZHOUBIAO	WENF	WUWQ

2020.10.1 TAG-QA-009