

1.0 Reference and Address					
Report Number	14080949HKG-001	Original Issued	21-Nov-2014	Revised	1-Mar-2024
Standard(s)	Luminaires [UL 1598:2021 Ed.5+R:15Jun2021]				
	Luminaires [CSA C22.2#250.0:2021 Ed.5+U1]				
Applicant	Universelite Co., Ltd.		Manufacturer	Universelite Co., Ltd.	
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2.0 Product Description	
Product	LED Fixed Lamp
Brand name	UNIVERSELITE CO., LTD
Application	These products covered by this report are LED fixed luminaires installed for damp/wet location, provided with leads for field wiring supply connection.
Models	<p>LEDGC followed by 50, 80, 100, 120 or 150; followed by W00; followed by 4 or 5.</p> <p>LEDBG followed by 13, 18, 22, 30 or 42; followed by W001.</p> <p>LEDYZ followed by 40, 85, 100 or 120; followed by W001; may be followed by -D.</p> <p>LEDFD20W001 may be followed by -120V, -240V, -208V or -277V.</p> <p>LEDFB12W00 followed by 1, 2 or 3.</p> <p>LEDBG followed by 30W, 40W, 50W, 60W, 80W, 100W, 120W or 135W, followed by 003 or 002B; may be followed by S or L, may be followed by P; may be followed by -27K, -30K, -35K, -40K, -50K, -57K or -65K; may be followed by -70, -80 or -90; may be followed by -PR, -PT or -MS.</p> <p>LEDGC followed by 50, 60, 80, 100, 120, 150, 180, 200 or 240, followed by W015H; may be followed by -27K, -30K, -35K, -40K, -50K, -57K or -65K; may be followed by -70, -80 or -90; may be followed by -; may be followed by two characters; may be followed by -MS, -ZB or -EM.</p> <p>LEDGC followed by 150 or 200; followed by W015BSHV; may be followed by -27K, -30K, -35K, -40K, -50K, -57K or -65K; may be followed by -70, -80 or -90; may be followed by -; may be followed by two characters, may be followed by -MS or -ZB.</p> <p>LEDGC followed by 80, 100, 120, 150, 180, 200 or 240, followed by W019; may be followed by A; may be followed by -SS, -SP, or -DS; may be followed by three to six characters; may be followed by -; may be followed by two numbers; may be followed by two to three numbers; may be followed by 0, 1, 2 or 3.</p> <p>LEDBG followed by 30, 60 or 90; followed by W004; may be followed by -; may be followed by two characters; may be followed by -; may be followed by six characters; may be followed by -; may be followed by two characters; may be followed by -; may be followed by 0, 1 or 2.</p>

2.0 Product Description

The products had same electrical construction, differences among them are outlook/ size, power and mounting.
 For model LEDFD20W001, no suffix, -120V, -204V, -208V and -277V represents no sensor, sensor JL-103A, sensor JL-103B, sensor JL-103C and sensor JL-103D respectively.
 For YZ series, LEDYZ**W001 represent ceiling mounted, LEDYZ**W001-D represent pendant mounted.
 Y: Blank or P represents different Lamp Housing Cover.
 CT: 27K, 30K, 35K, 40K, 50K, 57K or 65K represents color temperature.
 CRI: 70, 80 or 90 represents CRI.
 ZZ: PT=with photocell sensor, MS=with motion sensor, PRI=with infrared sensors.

Group 1: LEDGCW00Y series**

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDGC150W005	40	Ø330mm x 441mm	Pendant	Damp	5.15kg
LEDGC120W008	36	Ø330mm x 441mm	Pendant	Damp	5.17kg
LEDGC150W004	40	Ø330mm x 219mm	Pendant	Damp	5.02kg
LEDGC120W004	36	Ø330mm x 219mm	Pendant	Damp	5.33kg
LEDGC100W006	30	Ø260mm x 431mm	Pendant	Damp	4.42kg
LEDGC80W006	22	Ø260mm x 431mm	Pendant	Damp	4.17kg
LEDGC60W006	16	Ø260mm x 431mm	Pendant	Damp	4.00kg
LEDGC100W004	30	Ø260mm x 209mm	Pendant	Damp	4.48kg
LEDGC80W004	22	Ø260mm x 209mm	Pendant	Damp	4.07kg
LEDGC60W004	16	Ø260mm x 209mm	Pendant	Damp	3.91kg

Group 2: LEDBGW001 series**

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDBG42W001	18	257mm x 140mm x 160mm	Wall	Wet	2.28kg
LEDBG30W001	12	257mm x 140mm x 160mm	Wall	Wet	2.32kg
LEDBG22W001	9	208.5mm x 134mm x 122mm	Wall	Wet	1.63kg
LEDBG18W001	7	208.5mm x 134mm x 122mm	Wall	Wet	1.64kg
LEDBG13W001	5	208.5mm x 134mm x 122mm	Wall	Wet	1.63kg

Group 3: LEDYZW001 series**

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDYZ120W001	36	343mm x 343mm x 113mm	Ceiling	Wet	5.76kg
LEDYZ100W001	30	343mm x 343mm x 113mm	Ceiling	Wet	5.77kg
LEDYZ85W001	25	343mm x 343mm x 113mm	Ceiling	Wet	5.58kg
LEDYZ40W001	9	226mm x 226mm x 105mm	Ceiling	Wet	2.80kg
LEDYZ120W001-D	36	343mm x 343mm x 113mm	Pendant	Damp	6.16kg
LEDYZ100W001-D	30	343mm x 343mm x 113mm	Pendant	Damp	5.82kg
LEDYZ85W001-D	25	343mm x 343mm x 113mm	Pendant	Damp	5.81kg
LEDYZ40W001-D	9	226mm x 226mm x 105mm	Pendant	Damp	3.08kg

Group 4: LEDFD20W001

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDFD20W001, LEDFD20W001-120V, LEDFD20W001-240V, LEDFD20W001-208V, LEDFD20W001-277V	12	278mm x 174mm x 135mm	Wall	Wet	1.7kg

Group 5: LEDFB12W00Z series

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDFB12W001	1	Ø132mm x 262.5mm	Ceiling	Wet	1.64kg
LEDFB12W002	1	132mm x 186.5mm x 281mm	Wall	Wet	1.78kg
LEDFB12W003	1	Ø132mm x 265mm	NPT Conduit	Wet	1.45kg

2.0 Product Description

Group 6: LEDBG series						
Model	No. of LED	Overall dimension	Mounting	Location	Weight	
LEDBG30W003SY-CT-CRI-ZZ	80	Y=Blank: 361mm x 230mm x 181mm Y=P: 361mm x 230mm x 141mm	Wall	Wet	3.1kg	Model Similarity
LEDBG40W003SY-CT-CRI-ZZ	104		Wall	Wet	3.1kg	
LEDBG50W003SY-CT-CRI-ZZ	128		Wall	Wet	3.1kg	
LEDBG60W003SY-CT-CRI-ZZ	160		Wall	Wet	3.1kg	
LEDBG80W003SY-CT-CRI-ZZ	208		Wall	Wet	3.3kg	
LEDBG100W003SY-CT-CRI-ZZ	256		Wall	Wet	3.3kg	
LEDBG100W003LY-CT-CRI-ZZ	256	Y=Blank: 463mm x 230mm x 200mm Y=P: 463mm x 230mm x 141mm	Wall	Wet	4.2kg	
LEDBG120W003LY-CT-CRI-ZZ	312		Wall	Wet	4.2kg	
LEDBG135W003LY-CT-CRI-ZZ	360		Wall	Wet	4.3kg	
LEDBG30W002BSY-CT-CRI-ZZ	80	Y=Blank: 361mm x 230mm x 217mm Y=P: 361mm x 230mm x 178.5mm	Wall	Wet	4.7kg	
LEDBG40W002BSY-CT-CRI-ZZ	104		Wall	Wet	4.7kg	
LEDBG50W002BSY-CT-CRI-ZZ	128		Wall	Wet	4.7kg	
LEDBG60W002BSY-CT-CRI-ZZ	160		Wall	Wet	4.7kg	
LEDBG80W002BSY-CT-CRI-ZZ	208		Wall	Wet	4.8kg	
LEDBG100W002BSY-CT-CRI-ZZ	256		Wall	Wet	4.8kg	
LEDBG120W002BSY-CT-CRI-ZZ	312	Y=Blank: 463mm x 230mm x 235.8mm Y=P: 463mm x 230mm x 178.6mm	Wall	Wet	4.9kg	
LEDBG100W002BLY-CT-CRI-ZZ	256		Wall	Wet	5.7kg	
LEDBG120W002BLY-CT-CRI-ZZ	312		Wall	Wet	5.7kg	
LEDBG135W002BLY-CT-CRI-ZZ	360	Wall	Wet	5.8kg		
Model nomenclature: For Group 7 and 8 series models, 1. "W": represents wattage; 2. CT: 27K, 30K, 35K, 40K, 50K, 57K or 65K represents color temperature; 3. CR: 70, 80 or 90 represents CRI 4. BA: Any two characters represent beam angle. For Group 7 series models, 5. ZZ: Blank or "MS"=with motion sensor, "ZB"=with Zigbee sensor module, "EM"= with back-up battery function and motion sensor For Group 8 series models, 5a. ZZ: Blank or "MS"=with motion sensor, "ZB"=with Zigbee sensor module						
Group 7: LEDGC**W015H-CT-CR-BA-ZZ series						
Model	No. of LED	Overall dimension	Mounting	Location	Weight	
LEDGC50W015H-CT-CR-BA-ZZ	120	Ø230mm x 206mm	Pendant	Wet	4.4kg	
LEDGC60W015H-CT-CR-BA-ZZ	120	Ø230mm x 206mm	Pendant	Wet	4.4kg	

2.0 Product Description						
LEDGC80W015H-CT-CR-BA-ZZ	192	Ø230mm x 206mm	Pendant	Wet	4.4kg	
LEDGC100W015H-CT-CR-BA-ZZ	192	Ø230mm x 206mm	Pendant	Wet	4.4kg	
LEDGC120W015H-CT-CR-BA-ZZ	264	Ø270mm x 211mm	Pendant	Wet	5.4kg	
LEDGC150W015H-CT-CR-BA-ZZ	288	Ø270mm x 211mm	Pendant	Wet	5.4kg	
LEDGC180W016H-CT-CR-BA-ZZ	408	Ø320mm x 213mm	Pendant	Wet	5.8kg	
LEDGC200W015H-CT-CR-BA-ZZ	408	Ø320mm x 213mm	Pendant	Wet	5.8kg	
LEDGC240W015H-CT-CR-BA-ZZ	408	Ø360mm x 233mm	Pendant	Wet	6.0kg	
Group 8: LEDGC***W015BSHV-CT-CR-BA-ZZ series						
<u>Model</u>	<u>No. of LED</u>	<u>Overall dimension</u>	<u>Mounting</u>	<u>Location</u>	<u>Weight</u>	
LEDGC150W015BSHV-CT-CR-BA-ZZ	290	Ø270mm x 166mm	Pendant	Wet	3.0kg	
LEDGC200W015BSHV-CT-CR-BA-ZZ	410	Ø320mm x 166mm	Pendant	Wet	5.8kg	
Group 9: LEDGC***W019-MD-CCT-CRI-BA-ZZ series and LEDGC***W019A-MD-CCT-CRI-BA-ZZ series						
<u>Model</u>	<u>No. of LED</u>	<u>Overall dimension</u>	<u>Mounting</u>	<u>Location</u>	<u>Weight</u>	
LEDGC80W019-MD-CCT-CRI-BA-ZZ	208 416	Ø240mm x 119mm	Pendant	Wet	1.74	
LEDGC80W019A-MD-CCT-CRI-BA-ZZ	208 416					
LEDGC100W019-MD-CCT-CRI-BA-ZZ	208 416	Ø240mm x 119mm	Pendant	Wet	1.74	
LEDGC100W019A-MD-CCT-CRI-BA-ZZ	208 416					
LEDGC120W019-MD-CCT-CRI-BA-ZZ	270 540	Ø270mm x 119mm	Pendant	Wet	1.63	
LEDGC120W019A-MD-CCT-CRI-BA-ZZ	270 540					
LEDGC150W019-MD-CCT-CRI-BA-ZZ	270 540	Ø270mm x 119mm	Pendant	Wet	1.93	
LEDGC150W019A-MD-CCT-CRI-BA-ZZ	270 540					
LEDGC180W019-MD-CCT-CRI-BA-ZZ	378 756	Ø320mm x 118mm	Pendant	Wet	2.40	
LEDGC180W019A-MD-CCT-CRI-BA-ZZ	378 756					
LEDGC200W019-MD-CCT-CRI-BA-ZZ	378 756	Ø320mm x 118mm	Pendant	Wet	2.40	
LEDGC200W019A-MD-CCT-CRI-BA-ZZ	378 756					
LEDGC240W019-MD-CCT-CRI-BA-ZZ	378 756	Ø320mm x 123mm	Pendant	Wet	2.77	
LEDGC240W019A-MD-CCT-CRI-BA-ZZ	378 756					

2.0 Product Description

Model nomenclature:
 For Group 9 series models,
 1. The first character A, means the driver of product is made by Shenzhen Sosen Electronics Co., Ltd. models name without A, means driver is made by Universelife Co., Ltd.
 2. MD, Represents DLC version, SS=Single CCT Standard version, SP=Single CCT Premium version, DS=Double CCT Standard version
 3. CCT, Represents color temperature, for example, 30K represents single CCT 3000K, 30/50K represents is double CCT 3000K or 5000K, can be adjust by CCT switch; ect
 4. CRI, Represents CRI, for example, 70 represents CRI=Ra70, ect
 5. BA, Represents Beam Angle; for example, 90 represents beam angle is 90°, 120 represents beam angle is 120°, ect
 6. ZZ, Represents optional dimming and CCT adjustable module, 0 represents without this module, 1 represents with sensor unmounter only, 2 represents with sensor connector and power switch only, 3 represents with sensor connector, CCT switch and power switch.

Group 10: LEDBGW004-BR-CCT-CRI-ZZ series**

Model	No. of LED	Overall dimension	Mounting	Location	Weight
LEDBG30W004-BR-CCT-CRI-ZZ	64	L 163*W 165*H 112	Wall	Wet	1.28
LEDBG60W004-BR-CCT-CRI-ZZ	128	L 214*W 165*H 133	Wall	Wet	1.95
LEDBG90W004-BR-CCT-CRI-ZZ	192	L 300*W 165*H 133	Wall	Wet	2.53

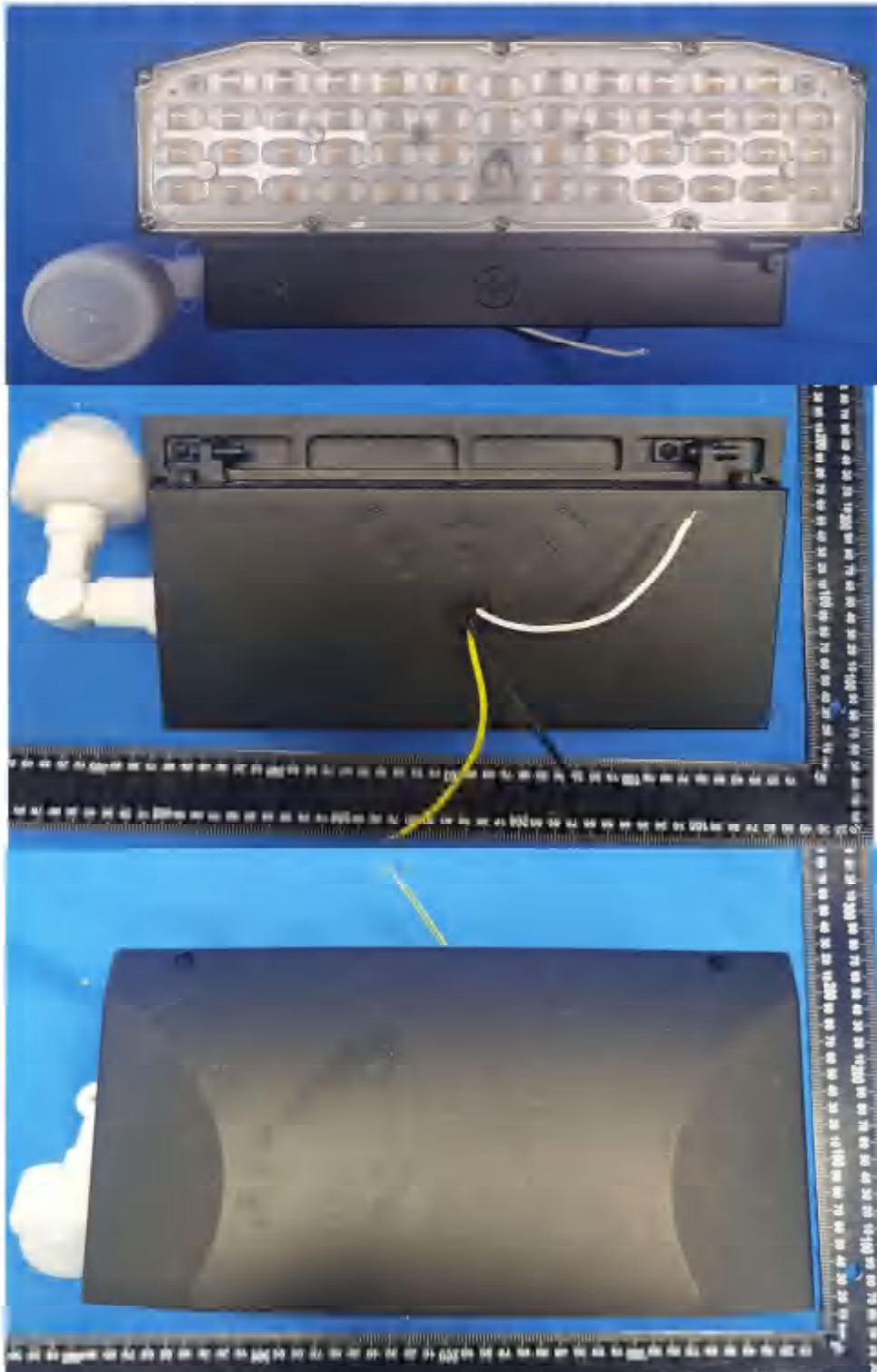
Model nomenclature:
 For Group 10 series models,
 1. **: represents wattage: 30,60,90;
 2. BR, Optional represents distribution.
 3. CCT, Optional, represents color temperature, for example, 30/50K represents is double CCT 3000K or 5000K, can be adjust by CCT switch; ect.
 4. CRI, Optional, represents CRI, for example, 70 represents CRI=Ra70, ect.
 5. ZZ, Optional, the first Z represents function module: 0 represents with dimming and CCT switch, 1 represents with dimming, CCT switch and photocell sensor, 2 represents with wall dimming, CCT switch and motion sensor; the second Z represents driver model: 1 represents with suffix DST, 2 represents with suffix D12ST, 3 represents with suffix DGM, 4 represents with suffix D12GM.

Ratings Refer to illustration 45 of sec.7.0 for details.

Other Ratings LEDBG series: Ta=45°C
 Group 7, Group 8, Group 9 and Group 10 models: Ta=45°C
 Other models: Ta=25°C

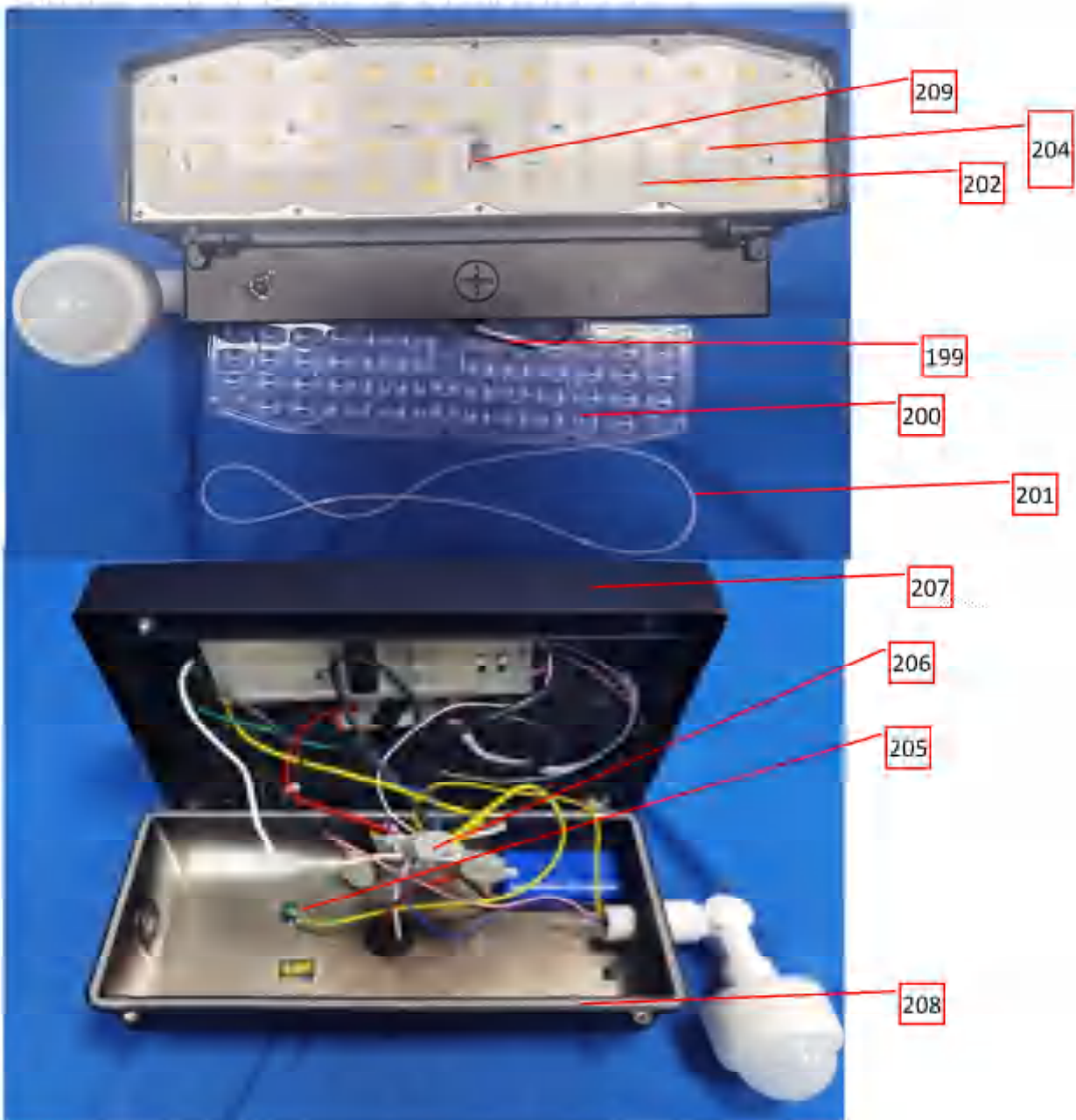
3.0 Product Photographs

Photo 89 - External View of model LEDBG90W004-BR-CCT-CRI-ZZ



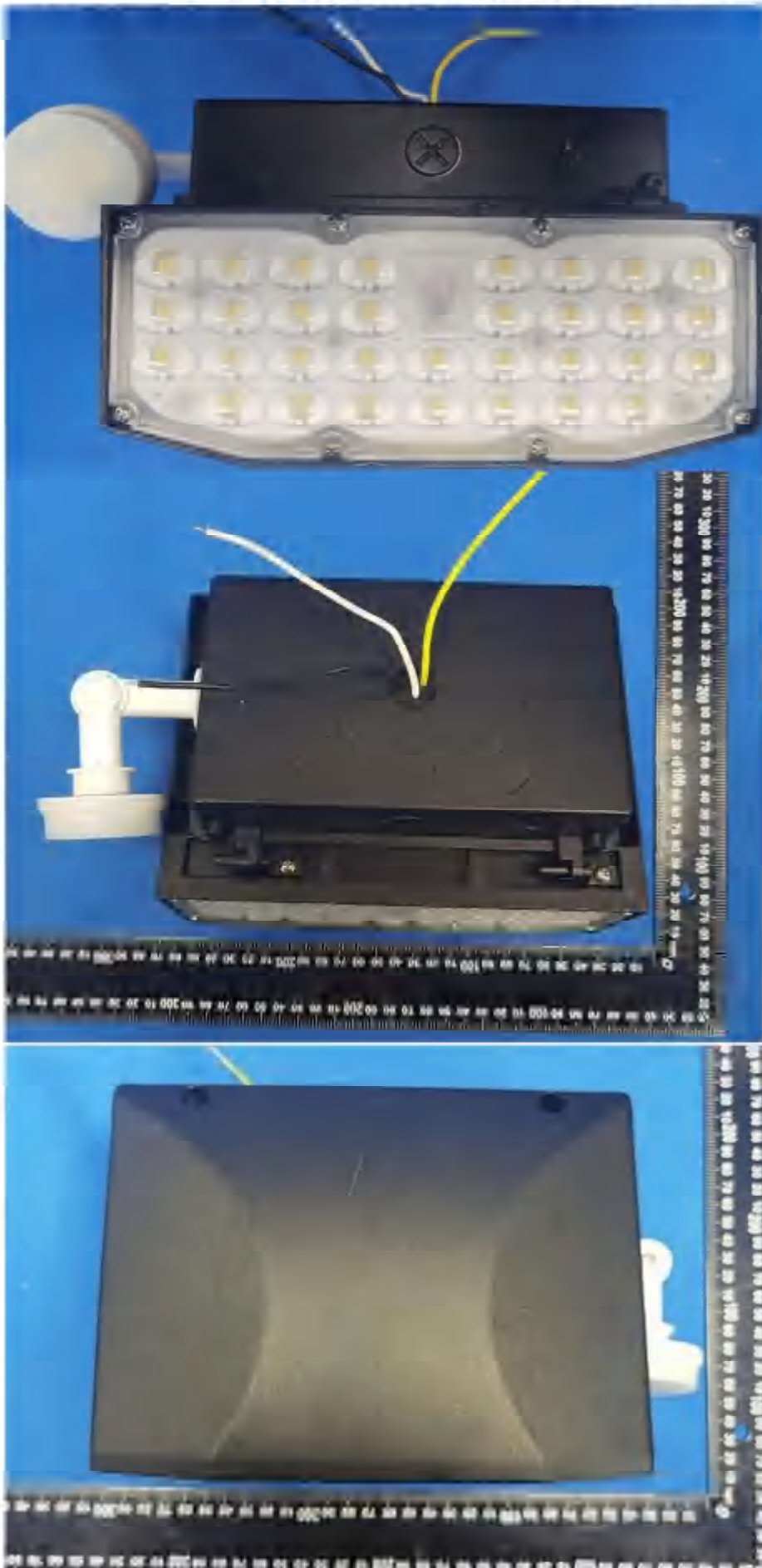
3.0 Product Photographs

Photo 90 - Internal view of model LEDBG90W004-BR-CCT-CRI-ZZ



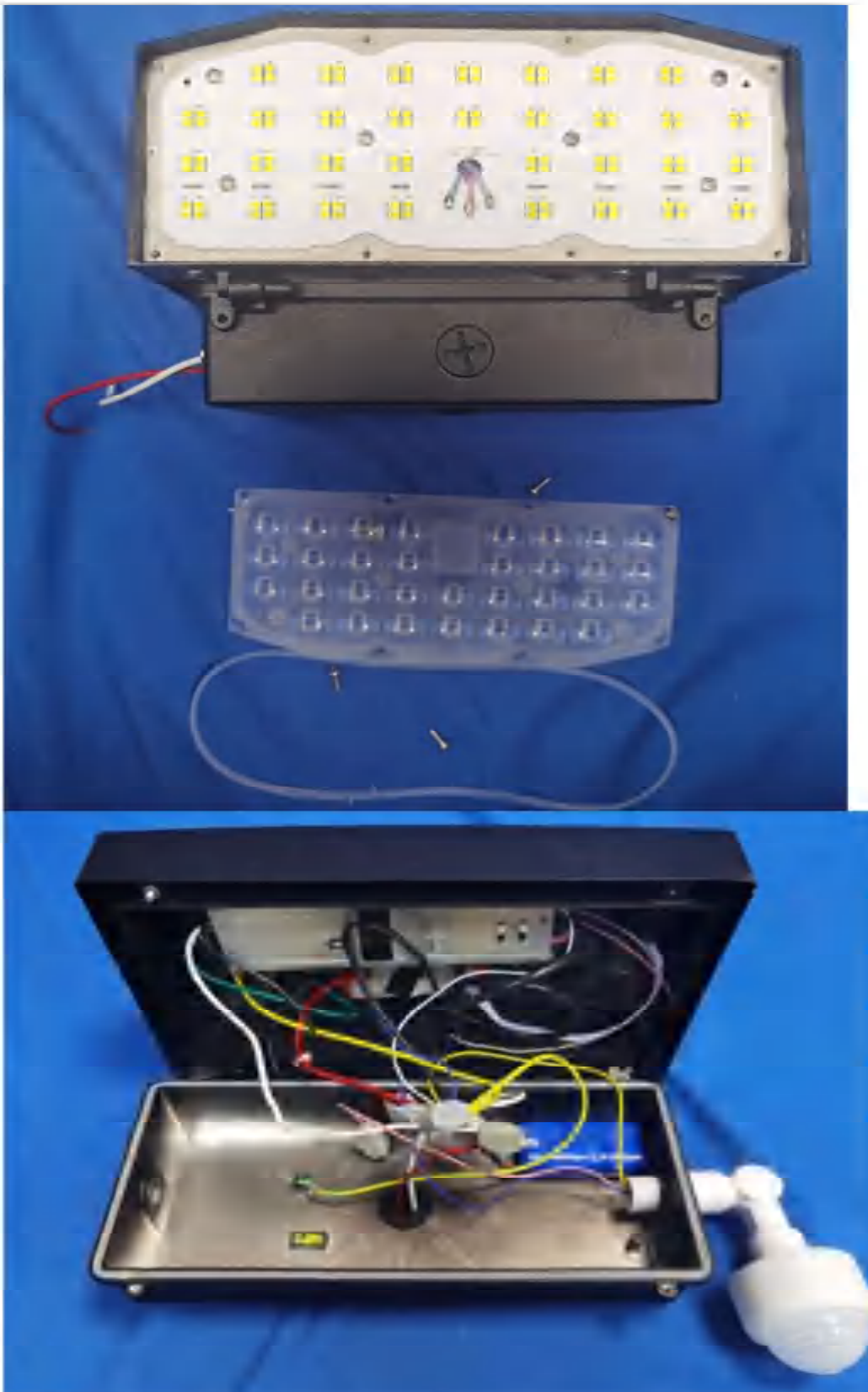
3.0 Product Photographs

Photo 91 - External View of model LEDBG60W004-BR-CCT-CRI-ZZ



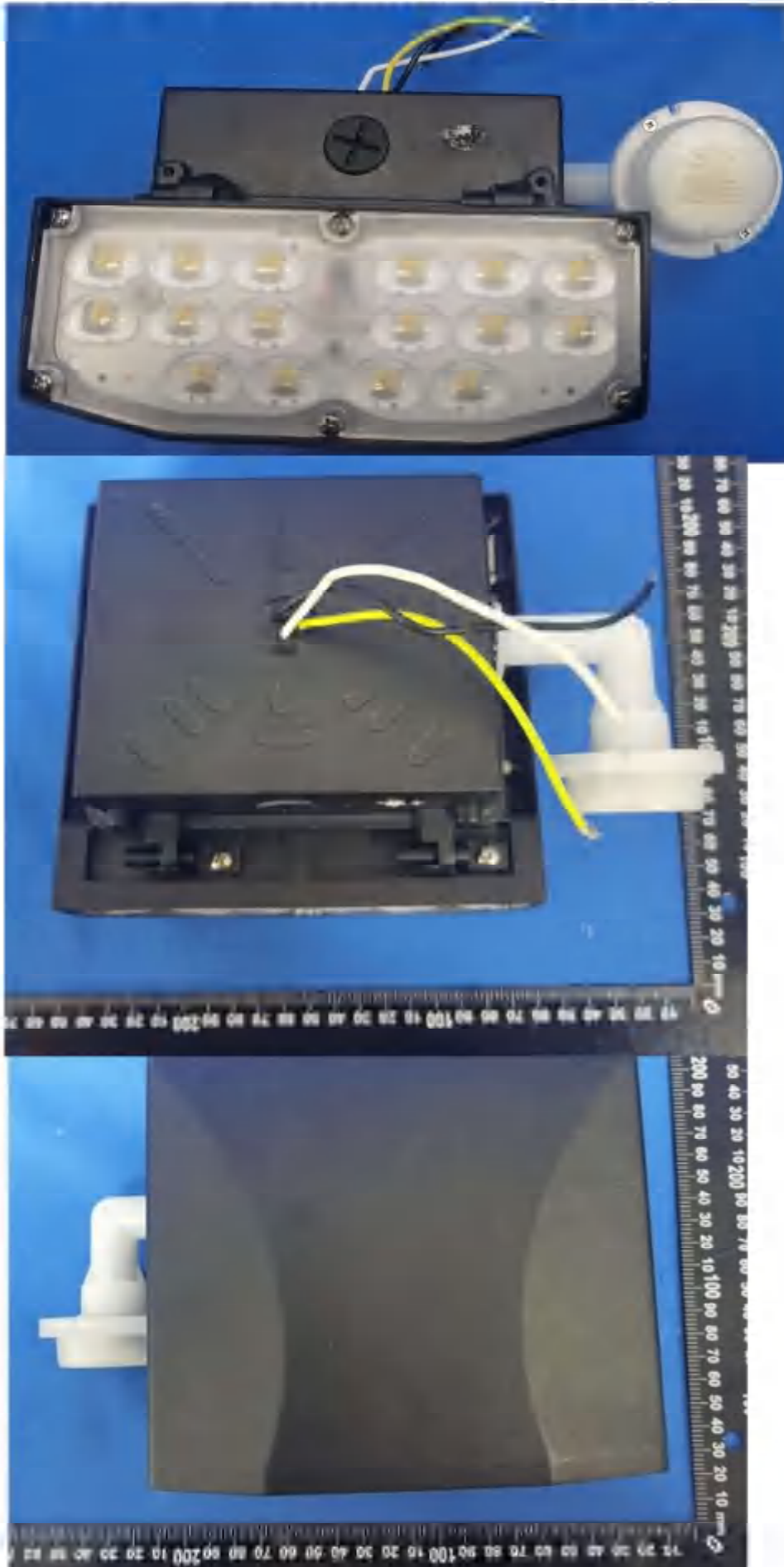
3.0 Product Photographs

Photo 92 - Internal view of model LEDBG60W004-BR-CCT-CRI-ZZ



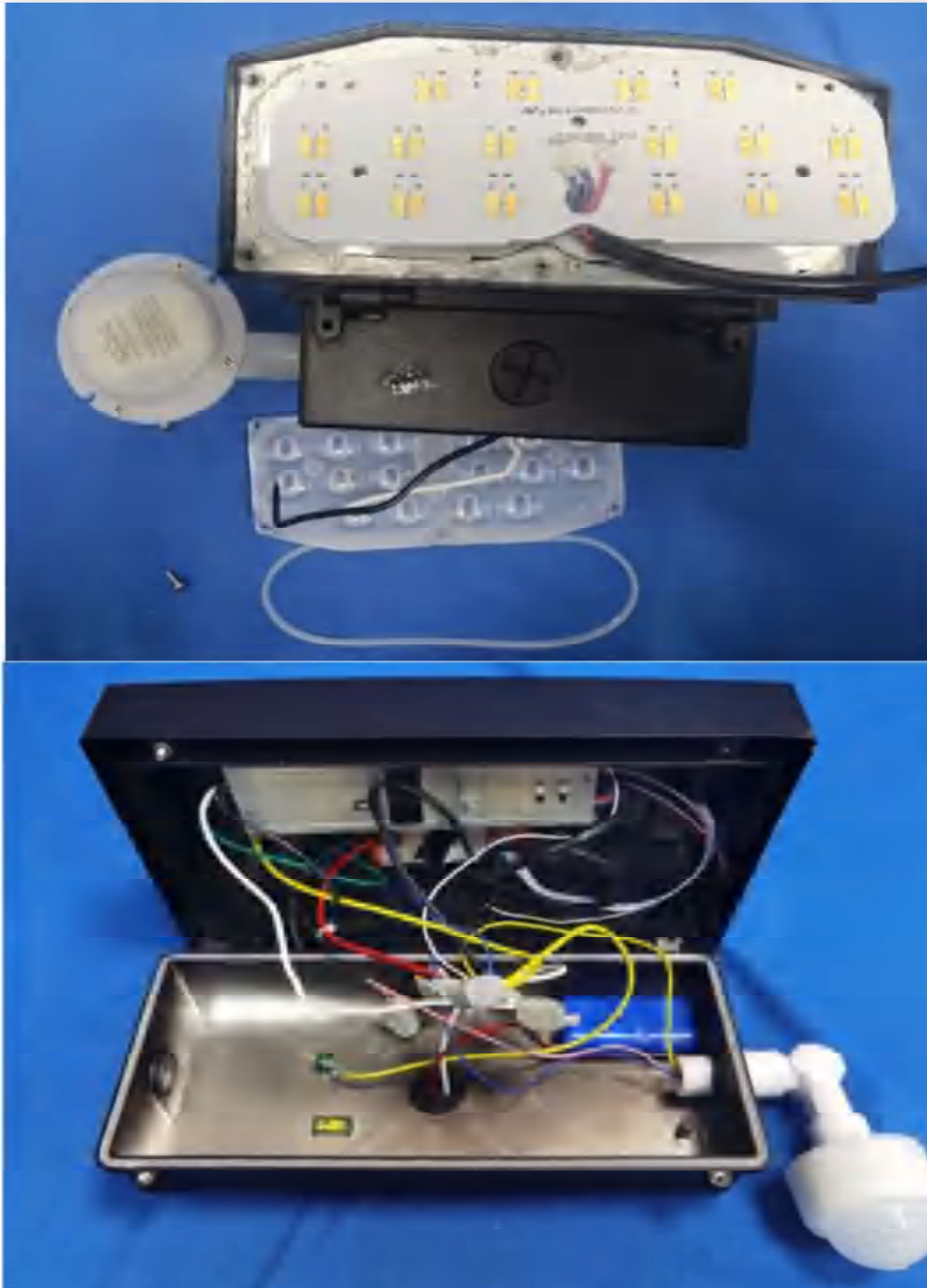
3.0 Product Photographs

Photo 93 - External View of model LEDBG30W004-BR-CCT-CRI-ZZ



3.0 Product Photographs

Photo 94 - Internal view of model LEDBG30W004-BR-CCT-CRI-ZZ



3.0 Product Photographs

Photo 94a - Microwave sensor (Optional) for all models



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3.0 Product Photographs

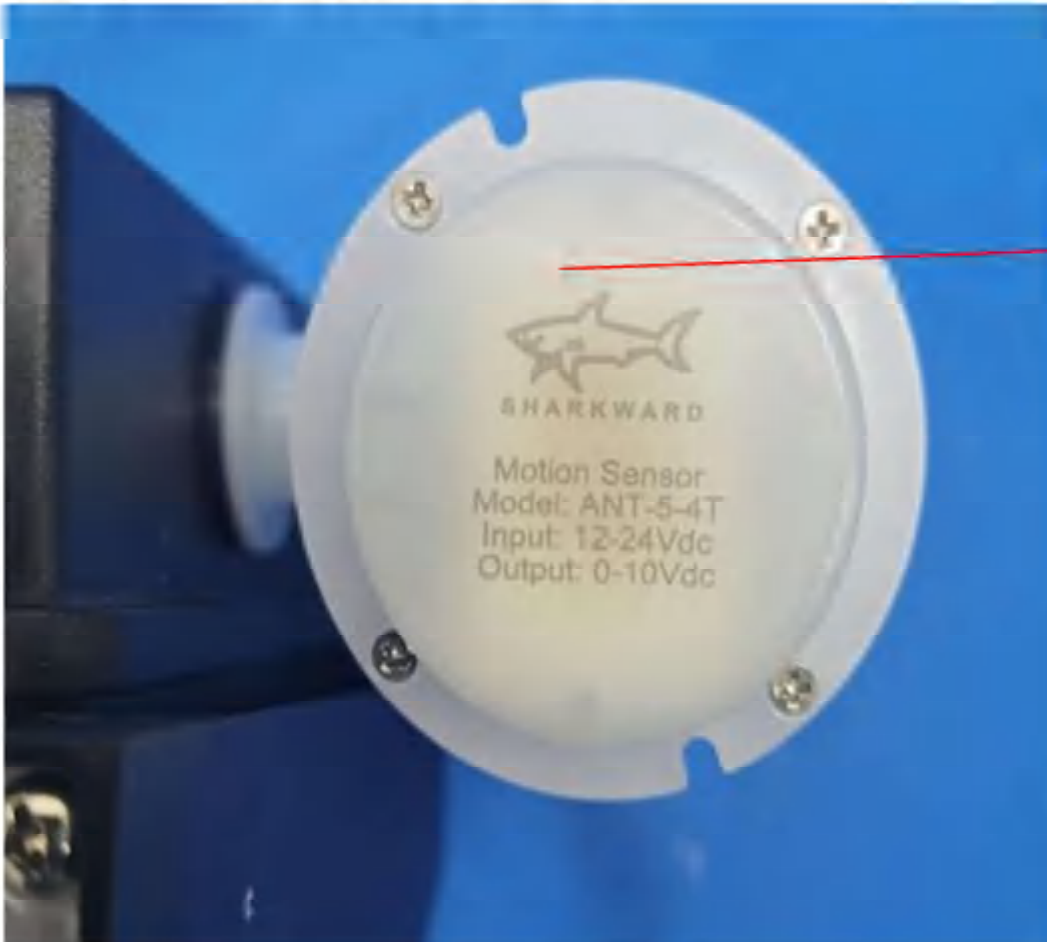
Photo 94b - Microwave sensor (Optional) for all models



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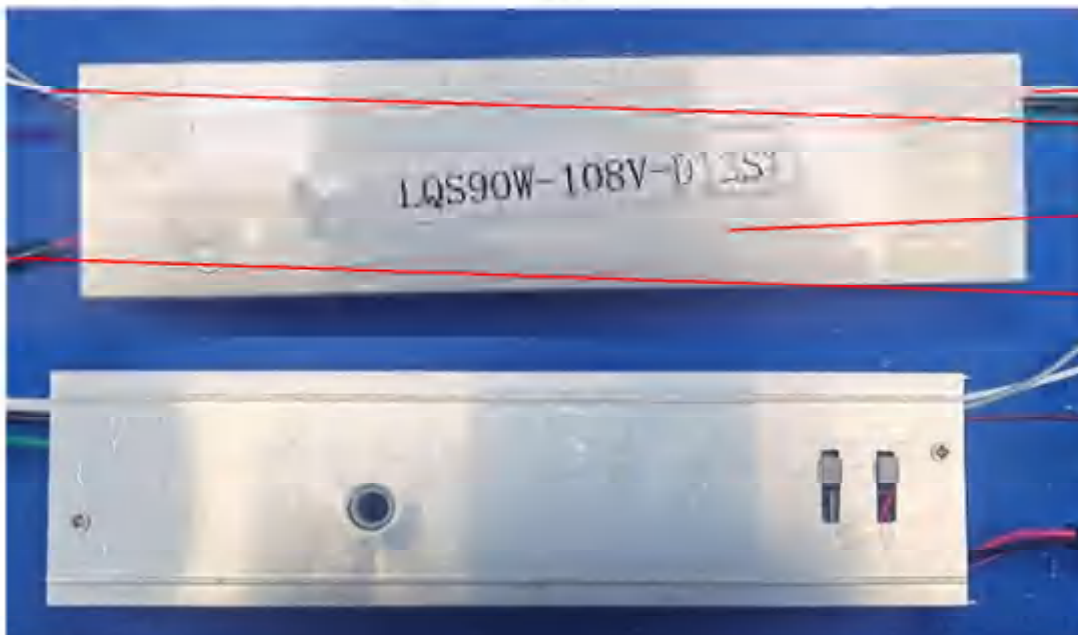
3.0 Product Photographs

Photo 94c - Motion sensor (Optional) for all models



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Photo 95 - LED Driver UVL-LQS90-108V-D12ST



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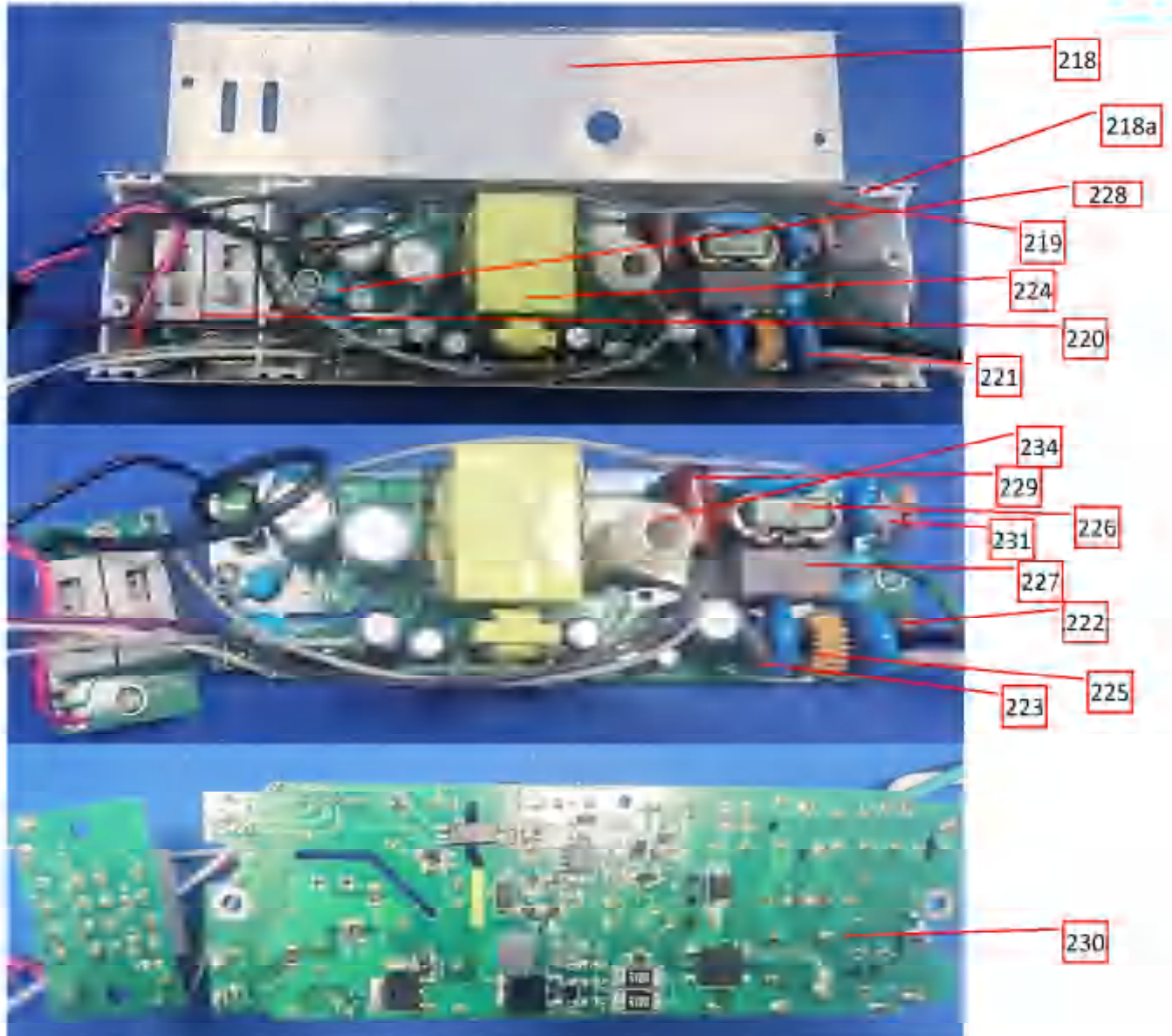
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3.0 Product Photographs

Photo 96 - LED Driver UVL-LQS90-108V-D12ST



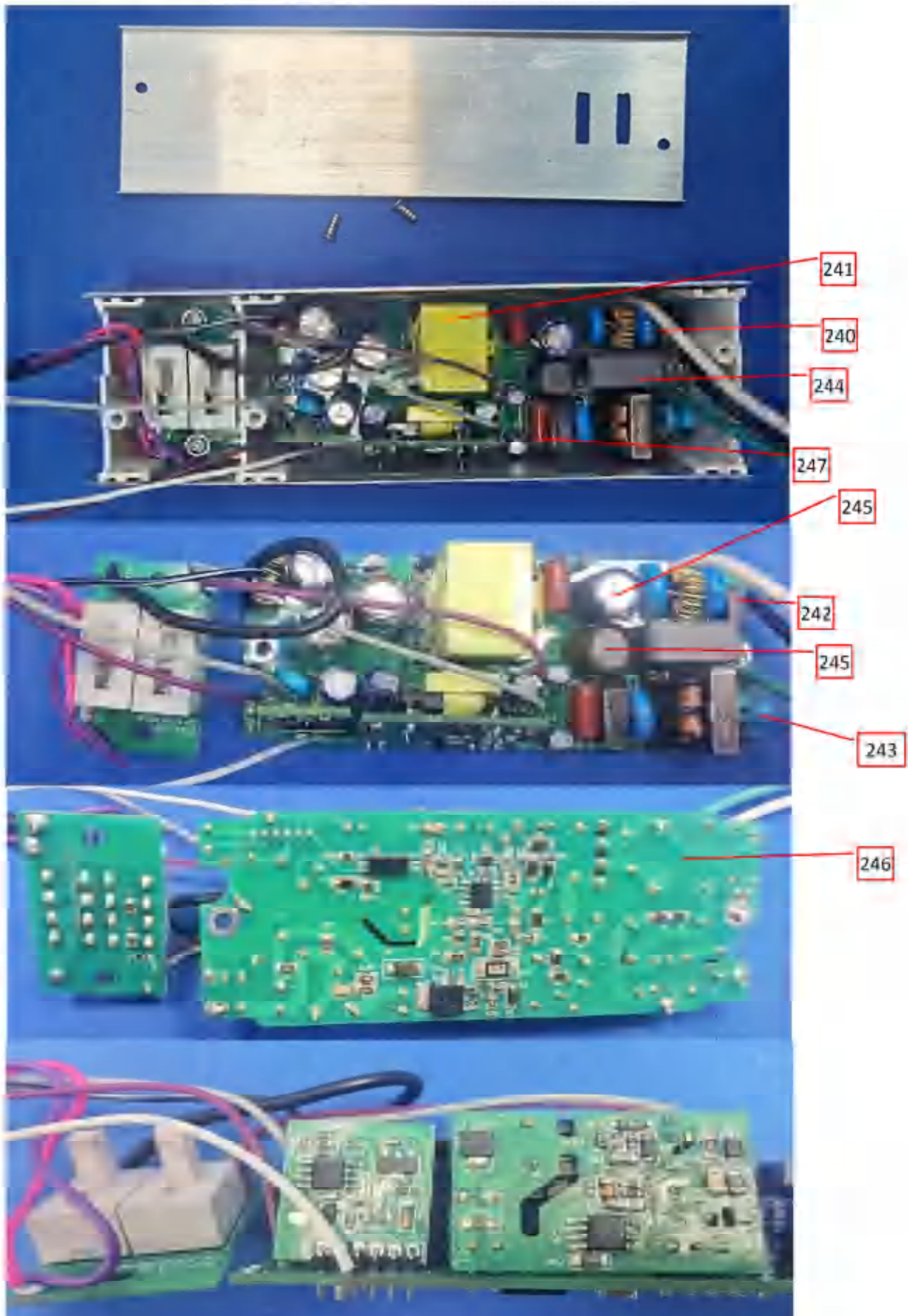
3.0 Product Photographs

Photo 97 - LED Driver UVL-LQS60-72V-D12ST



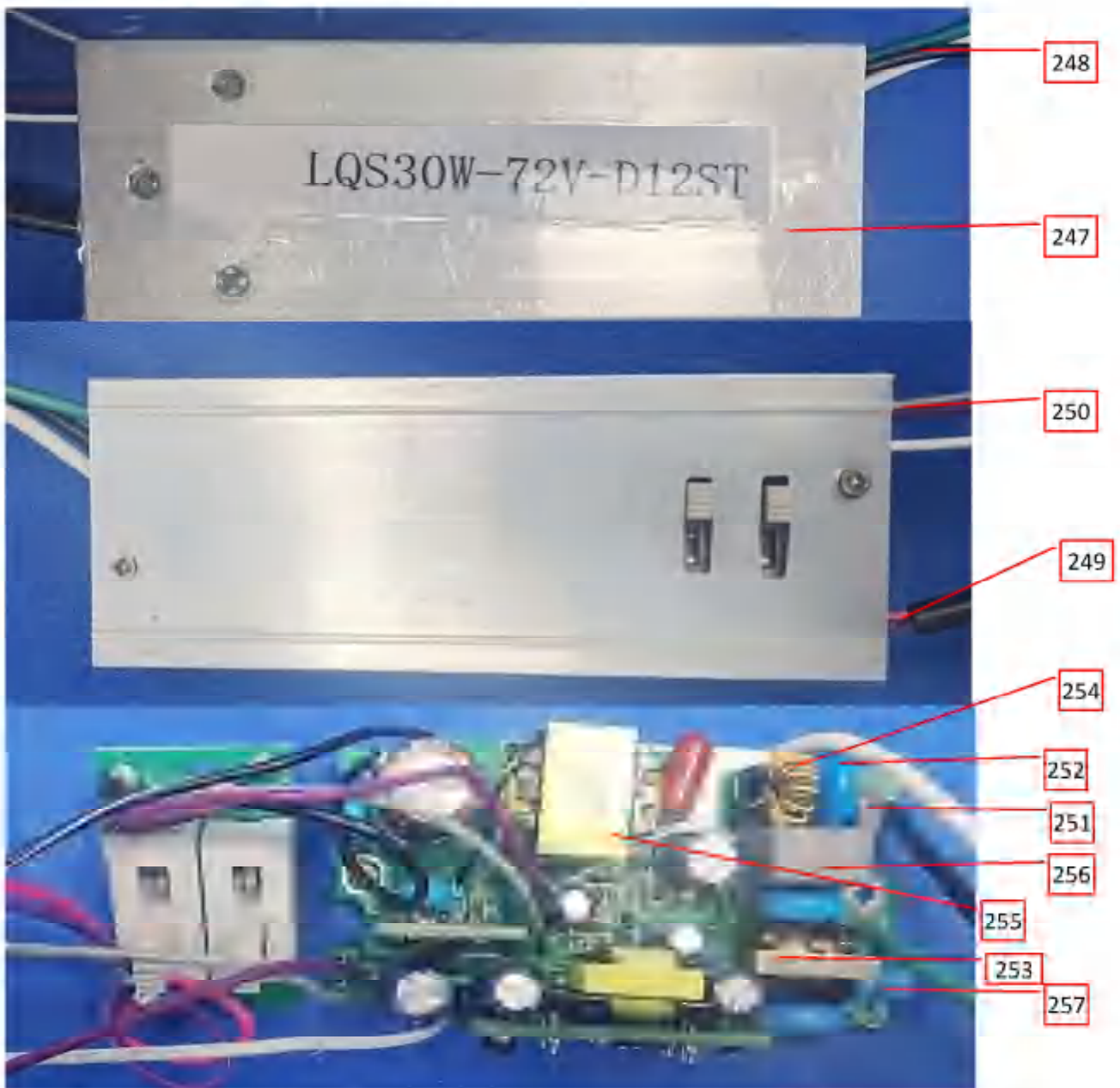
3.0 Product Photographs

Photo 98 - LED Driver UVL-LQS60-72V-D12ST



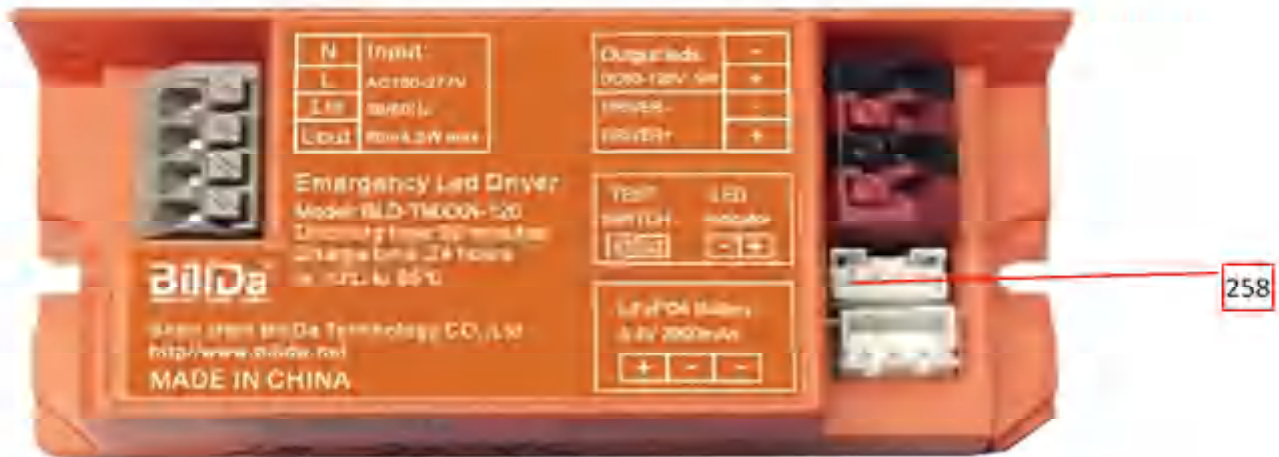
3.0 Product Photographs

Photo 99 - LED Driver UVL-LQS30-72V-D12ST



3.0 Product Photographs

Photo 100 - LED Emergency Driver, suitable for Group 10 models



4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1-2	1	Mounting frame	Various	Various	Painted steel, 2.0 mm thick min., two parts provided, secured to each other by screws, see illustration 1 for dimension detail. (For LEDGC***W005)	NR
1-2	2	Mounting frame	Various	Various	Painted steel, 2.0 mm thick min., two parts provided, secured to each other by screws, see illustration 2 for dimension detail. (For LEDGC***W004)	NR
1, 9	3	Connectors	SHENZHEN CHOGORI TECHNOLOGY CO LTD	23002221-02/ 23002321-02	Two provided, 300V, 20A, 85°C. IP67, suitable for $\phi 6.5\text{mm}$ $\phi 9.5\text{mm}$ OD of the wire.	cURus
2, 10	4	Wire Connector	Various	Various	Two poles, 600V, 20A, 105°C, suitable for 28-12AWG. Installed for class 2 LED driver connection.	cULus
2, 10	4a	Twisted pair connectors I	Various	Various	600V, 105°C, Suitable size: 22-14 AWG. Installed for class 2 LED driver connection.	UR, CSA
1-4	5	Mounting hook	Various	Various	Die-cast Aluminum, secured to Mounting frame by thread and nut, see illustration 3 for dimension detail.	NR
1-4	6	Heat sink	Various	Various	Die-cast Aluminum, 2.0 mm thick min., two parts provided, secured to each other by screw., see illustration 4 for dimension detail.	NR
1-4	7	Flexible cord	Various	SVT	2x18AWG, 300V 60°C, connected for LED module. Red for "+", black for "-".	cURus
5-8	8	Lens	Various	Various	Glass, 2.11mm thick min., secured with frame by screws.	NR
5-8	9	Welding cover	Various	Various	Rated min. HB, 85°C, 1.5 mm thick, for all models.	cURus
3-4	10	Metal Shade	Various	Various	Aluminum; measured 1.2 mm thick, secured to Mounting frame by screw, see illustration 5 for dimension detail. (For LEDGC***W004)	NR
1-8	11	LED PCB I	Various	Various	Metal base, rated min. 105°C, 1.5 mm thick.	UR
3-8	12	LED package I	Various	Various	Max. 2.8-3.4V, 1.5Amax., Junction temperature 98°C min. For models 150W, 120W, 110W, 90W only.	NR
3-8	12a	LED package II	Various	Various	Max. 5.6-7.0V, 200mA max., Junction temperature 98°C min., For LEDGC50W004 and LEDGC50W005	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
1, 3	13	LED driver	MEAN WELL ENTERPRISES CO LTD	HLG-150H-30A	Non-Class 2, input 100-277V 50/60Hz; 0.7-1.7A; 150W, output 27-33Vdc, 3-5A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC150W004, LEDGC150W005)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SHC150- 4200SW	Non-class 2, input 100-277V 50/60Hz, 1.65A, 150W; output 21- 36V, 4.2A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC150W004, LEDGC150W005)	cURus
1, 3	14	LED driver	MEAN WELL ENTERPRISES CO LTD	HLG-120H-30A	Non-class 2, input 100-277V 50/60Hz, 0.55-1.4A, 120W, output 27-33V, 2.4A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC120W004, LEDGC120W005)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SHC150- 4200SW	Non-class 2, input 100-277V 50/60Hz, 1.35A, 150W; output 19- 31V, 3.85A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC120W004, LEDGC120W005)	cURus
2, 4	15	LED driver	MEAN WELL ENTERPRISES CO LTD	HLG-100H-30A	Class 2, input 100-277V 50/60Hz, 0.5-1.2A, 100W; output 27-33V, 2- 3.2A. Provided with input leads and grounding lead, 18AWG, VW 1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC100W004, LEDGC100W005)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SHC120- 2800SW	Class 2, input 100-277V 50/60Hz, 1.38A, output 27-45Vdc, 2.8A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC100W004, LEDGC100W005)	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
2, 4	16	LED driver	MEAN WELL ENTERPRISES CO LTD	HLG-100H-30A	Class 2, input 100-277V 50/60Hz, 0.4-0.85A, 80W; Output 21.6-36Vdc, 1.38-2.3A. Provided with input leads, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC80W004, LEDGC80W005)	cURus
2, 4	16a	LED driver	SHINELIGHT TECHNOLOGY CO LTD	SHC075-2100SW	Class 2, input 100-277V 50/60Hz, 0.9A, 75W; output 21-36Vdc, 2.1A. Provided with input leads, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC80W004, LEDGC80W005) (Cont'd)	cURus
2, 4	17	LED driver	MEAN WELL ENTERPRISES CO LTD	HLG-60H-30A	Class 2, input 100-277V 50/60Hz, 0.3-0.64A, 60W; output 27-33Vdc, 1.2-2A. Provided with input leads, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC50W004, LEDGC50W005)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SHC060-1400SW	Class 2, input 100-277V 50/60Hz, 0.58A, 50W; output 21-36Vdc, 1.4A. Provided with input leads and grounding lead, 18AWG, VW-1, 600V, 105°C, and output leads, 18AWG, VW-1, 600V, 105°C. (For LEDGC50W004, LEDGC50W005)	cURus
1-4	18	Label system I (Not shown)	Various	Various	70°C min. Suitable surface for steel. Comply with UL909.	UR
11, 12	19	Metal Housing	Various	Various	Die-cast Aluminum, 2.0 mm thick min., see illustration 6 for dimension detail.	NR
11, 12	20	Metal plate	Various	Various	Painted steel, 1.0 mm thick, secured in metal housing by screws, see illustration 7 for dimension detail.	NR
13, 14	21	Mounting plate	Various	Various	Painted steel with mounting holes, 1.5 mm thick min., secured in metal housing by driver mounting plate and two no head screws, see illustration 8 for dimension detail.	NR
13, 14	22	Driver mounting plate	Various	Various	Painted steel, 1.5 mm thick min., secured to Lamp shade by screws, see illustration 9 for dimension detail.	NR
13, 14	23	Twist-on connector I	Various	Various	Three provided, 600V, 105°C, Suitable size : 22-14 AWG.	UR, CSA

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
13, 14	24	Lead wires	Various	Various	Copper conductors, rated min. 24AWG, 300V, 85°C. Red for "+", Black for "-". Connected for LED module.	cURus
13, 14	25	Grounding wire	Various	Various	Copper conductor, Green-yellow, 18AWG, 600V, 85°C, secured in metal housing by lug terminal.	UR
13, 14	26	LED driver	INVENTRONICS (HANGZHOU) INC	EUC-042S070DS	Class 2, input 100-277V, 0.45A, 40W, output 28-56V, 0.7A, Vo max. 59Vdc. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG42W001, LEDBG30W001)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SLC0M0-0700SW	Class 2, input 100-277V, 0.45A, 40W, output 34-57V, 0.7A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG42W001, LEDBG30W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-042S070PS	Class 2, input 100-277V, 0.45A, 42W, output 28-56V, 0.7A, Vo max. 59Vdc. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG42W001, LEDBG30W001)	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
15, 16	27	LED driver	INVENTRONICS (HANGZHOU) INC	EUC-026S070DS	Class 2, dimmable, input 100-277Vac, 50/60Hz, 0.3A, 26W; output 19-37Vdc, 0.7A, Vo max. 42Vdc, to 90°C. Provided with 2 input leads(black and white), 18AWG, VW-1, 600V, 105°C. and 2 output leads(red and black), 18AWG, VW-1, 300V, 80°C, and 3 dimming leads(yellow, grey and purple), 22AWG, 600V 105°C. Such wires were closed by heat shrinkable tube. (For LEDBG22W001, LEDBG18W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-026S070PS	Class 2, input 100-277Vac, 50/60Hz, 0.3A, 26W, output 19-37Vdc, 0.7A, Vo max. 42Vdc. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG22W001, LEDBG18W001)	cURus
15, 16	28	LED driver	INVENTRONICS (HANGZHOU) INC	EUC-025S070DS	Class 2, input 100-277Vac, 50/60Hz, 0.28A, 25W, output 12-36Vdc, 0.7A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG13W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-025S070PS	Class 2, input 100-277Vac, 50/60Hz, 0.28A, 25W, output 12-36Vdc, 0.7A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDBG13W001)	cURus
15, 16	29	LED PCB I)	Various	Various	Single side, Metal base, rated min. 105°C, 1.5 mm thick	UR
15, 16	30	LED package II)	Various	Various	Max. 2.8-3.4V, 1.5A max., Junction temperature 90°C min.	NR
15, 16	31	Diffuser I	Various	Various	PC, Rated min. HB, 85°C, fl., secured between LED PCB and metal plate physically.	UR
15, 16	32	Gasket (above LED PCB)	Various	Various	Silicone, 105°C, Measured 1.5 mm thick. Fully covered between LED PCB and diffuser mounting plate.	UR
11, 12	33	Label system II (Not shown)	Various	Various	80°C min., Outdoor use. Suitable surface for steel. Comply with UL96H.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
17, 18	34	Metal Housing	Various	Various	Die-cast Aluminum, 2.0 mm thick, see ILL. 10 for dimension detail.	NR
17, 18	35	Diffuser	SABIC INNOVATIVE PLASTICS B V	357M(f1)	PC, Rated 5VA, f1, 120°C, min 2.5mm thick, secured to Metal Housing by screws, see ILL. 11 for dimension details. (For LEDYZ120W001)	cURus
17, 18	36	Diffuser II	SABIC INNOVATIVE PLASTICS B V	357M(f1)	PC, Rated V-0, f1, 120°C, min. 1.5 mm thick, secured to Metal Housing by screws, see ILL. 11 for dimension details. For models using class 2 LED driver.	cURus
			BAYER MATERIALSCIENCE AG	2407 + (z)(f1)	Same as above except rated min. HB, 120°C, min 1.6 mm thick.	cURus
19, 20	37	Back cover of Metal Housing	Various	Various	Die-cast Aluminum, 2.0 mm thick, secured to Metal Housing by screws, see ILL. 12 for dimension detail.	NR
19, 20	38	Mounting plate	Various	Various	Painted steel, 2.0 mm thick, secured to Back cover of Metal Housing by screws and Mounting bar, see ILL. 13 for dimension detail. (for LEDYZ120W001, LEDYZ100W001, LEDYZ85W001, LEDYZ40W001)	NR
19a, 20a	38a	Mounting plate	Various	Various	Painted steel, 2.0 mm thick, secured to Back cover of Metal Housing by screws, see ILL. 13A for dimension detail. (for LEDYZ120W001-D, LEDYZ100W001-D, LEDYZ85W001-D, LEDYZ40W001-D)	NR
19, 20	39	Mounting bar	Various	Various	Painted steel, 2.0 mm thick, secured to Back cover of Metal Housing by screws, see ILL. 14 for dimension detail. (for LEDYZ120W001, LEDYZ100W001, LEDYZ85W001, LEDYZ40W001)	NR
19a, 20a	39a	Mounting tube	Various	Various	Painted steel, Secured to mounting plate by nuts, see ILL. 14A for dimension detail. (for LEDYZ120W001-D, LEDYZ100W001-D, LEDYZ85W001-D, LEDYZ40W001-D)	NR
19, 20	40	Input wires	Various	Various	Copper conductor, color black and white 18AWG, 600V, VW-1, 105°C.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ⁴	Type / model ²	Technical data and securement means	Mark(s) of conformity ²
19, 20	41	Bushing	Various	Various	Silicone, measured min. 2.0 mm thick, secured in Back cover of metal housing by physically fitting.	NR
21, 22	42	LED PCB III	Various	Various	Single side, Metal base, rated min. 105°C, 1.5 mm thick	UR
21, 22	43	LED package IV	Various	Various	Max. 2.8-3.4V, max. Junction temperature 98°C min.	NR
21, 22	44	Gasket I	Various	Various	Silicone, measured min. 3.5 mm thick, secured in slot of metal housing	NR
21, 22	45	Glue	Various	Various	90°C, For secured the lead wires for LED module	UR
23, 24	46	Grounding and bonding wires	Various	Various	Green-yellow, 18AWG, 105°C, installed for back cover and metal housing by lug terminal.	cURus
23, 24	47	Twist-on connectors II	Various	Various	Three provided, 600V, 105°C, Suitable size : 22-14 AWG.	UR/CSA
23, 24	48	Gasket II	Various	Various	Silicone, measured min. 3.5 mm thick, Secured in slot of back cover of metal Housing.	NR
23, 24	49	Lead wire for LED Module	Various	Various	Copper conductor, Rated min. 34AWG, 105°C	cURus
23, 24	50	LED driver	SHINELIGHT TECHNOLOGY CO.LTD	SHC150-4200SW	Non-Class 2, input 100-277Vac, 50/60Hz, 1.35A@100Vac, 160W; Output 19-31dc, 4.2A. Provided with input cord, SJTW, 3x18AWG, VW-1, 300V, 105°C, and output cord, SJTW, 2x18AWG, VW-1, 300V, 105°C. (For LEDYZ120W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-120S350DT	Non-Class 2, input 100-277Vac, 50/60Hz, 1.5A@100Vac, 120W; Output 20-34dc, 3.5A. Provided with input lead, 18AWG, VW-1, 300V, 105°C, and output leads, 18AWG, VW-1, 300V, 105°C. (For LEDYZ120W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-120S350GT	Non-Class 2, input 100-277Vac, 50/60Hz, 1.5A@100Vac, 120W; Output 20-34dc, 3.5A. Provided with input lead, 18AWG, VW-1, 300V, 105°C, and output leads, 18AWG, VW-1, 300V, 105°C. (For LEDYZ120W001)	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
23, 24	51	LED driver	SHINELIGHT TECHNOLOGY CO LTD	SHC120- 2800SW	Non-Class 2, input 100-277Vac, 50/60Hz, 1.38A@100Vac, 120W; Output 27-45Vdc, 2.8A. Provided with input cord, 5JTW, 3x18AWG, VW-1, 300V, 105°C, and output cord, 5JTW, 2x18AWG, VW-1, 300V, 105°C. (For LEDYZ100W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC- 096S280DT	Class 2, input 100-277Vac, 50/60Hz, 1.2A@100Vac, 96W; Output 17-34.2Vdc, 2.8A. Provided with input lead, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDYZ100W001)	cURus
23, 24	51a	LED driver	INVENTRONICS (HANGZHOU) INC	EUC- 096S280DT	Class 2, input 100-277Vac, 50/60Hz, 1.2A@100Vac, 96W; Output 17-34.2Vdc, 2.8A. Provided with input lead, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDYZ100W001)	cURus
23, 24	52	LED driver	INVENTRONICS (HANGZHOU) INC	EUC- 085S105ST, EUC- 085S105DS	Non-Class 2, input 100-277Vac, 50/60Hz, 0.99A@100Vac, 85W; Output 40-91Vdc, 1.05A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, 18AWG, VW-1, 300V, 105°C. (For LEDYZ85W001)	cURus
			SHINELIGHT TECHNOLOGY CO LTD	SHC075- 1050SW	Non-Class 2, input 100-277, 0.99A@100Vac, 75W output 60- 80V, 1.05A. Provided with input cord, 5JTW, 3x18AWG, VW-1, 300V, 105°C, and output cord, 5JTW, 2x18AWG, VW-1, 300V, 105°C. (For LEDYZ85W001)	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
23, 24	53	LED driver	INVENTRONICS (HANGZHOU) INC	EUC-042S128DS	Class 2, input 100-277Vac, 50/60Hz, 0.45A@100Vac, 45W, output 17-32Vdc, 1.28A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDYZ40W001)	cURus
			INVENTRONICS (HANGZHOU) INC	EUC-042S128PS	Class 2, input 100-277Vac, 50/60Hz, 0.45A@100Vac, 45W, output 17-32Vdc, 1.28A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDYZ40W001)	cURus
			SHINELIGHT TECHNOLOGY CO. LTD	SLC040-1280SW	Class 2, input 100-277Vac, 50/60Hz, 0.45A@100Vac, 40W, output 19-31Vdc, 1.28A. Provided with input leads, 18AWG, VW-1, 300V, 105°C, and output leads, min. 24AWG, VW-1, 300V, 105°C. (For LEDYZ40W001)	cURus
17, 18	54	Label system III (Not shown)	Various	Various	80°C min., Outdoor use. Suitable surface for steel. Comply with UL969.	UR
25	55	Plastic enclosure	SABIC INNOVATIVE PLASTICS B.V	357M(I1)	PC. Rated 5VA, 120°C, min. 2.5mm thick, two color material mould together, secured to metal enclosure by screws, see ILL. 15 for dimension details.	cURus
28	56	Metal Base	Various	Various	Die-cast Aluminum, 1.5mm thick min., provided with mounting holes, see ILL. 16 for dimension details.	NR
26	57	Gasket III	Various	Various	Silicone rubber. Measured 3.5 mm thick, Adhered on Metal base.	NR
25	58	Grounding wire I	Various	Various	Green-yellow, copper, 18AWG, 600V, 105°C, secured in metal base by lug terminal.	cURus
26	59	Fiber glass sleeve	Various	Various	0.25mm thick min, covered to input leads of LED driver from metal opening.	UR
27	60	Twist-on connectors III	Various	Various	600V, 105°C, Suitable size: 22-14 AWG, two provided, for LED PCB connection, and three provided for Opto-sensor(if provided).	UR, CSA
27	61	LED Driver housing	Various	Various	Painted steel. Measured 0.5 mm thick, secured to Metal base by 2 screws, see ILL. 17 for dimension details.	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ ¹ trademark ²	Type / model ³	Technical data and securement means	Mark(s) of conformity ²
27	62	Reflective sheet	Various	Various	PET. Rated min. HB, 105°C, 0.3 mm thick, secured to LED mounting base by 4 screws. See ILL. 18 for dimension details.	cURus
27	63	Internal wires	Various	Various	Copper, rated min. 24AWG, 300V, 105°C, for LED PCB connection.	cURus
27	64	LED PCB IV	Various	Various	Single side, Metal base, rated min. 105°C, 1.5 mm thick, four provided. Secured on the heat sink.	UR
27	65	LED package V	Various	Various	Max 2.8-3.4Vdc, 1.5Amax, Junction temperature 98°C min.	NR
27	66	Gasket IV	Various	Various	Silicone rubber. Measured min. 2.0 mm thick, secured on metal base by 8 protruding parts fitting.	NR
28	67	Opto-sensor (optional)	Various	Various	Enclosed, nonindustrial photoelectric switches, rated 50/60Hz, 500W, 120Vac for LEDFD20W001-120V, 208Vac for LEDFD20W001-208V, 240Vac for LEDFD20W001-240V, 277Vac for LEDFD20W001-277V, provided with 18AWG lead wires connected in supply circuit.	cULus
28	68	Heatsink I	Various	Various	Aluminum, measured 1.7 mm thick min, secured to Heatsink mounting bracket by screw. See ILL. 19 for dimension detail.	NR
28	69	Heat sink mounting bracket	Various	Various	Aluminum, measured 2.0 mm thick, secured to Metal enclosure by screw, see ILL. 20 for dimension details.	NR
27	70	LED driver	INVENTRONICS (HANGZHOU) INC	EUC-025S045DS	Input 100-277Vac, 50/60Hz, 0.32A@100Vac; Output 18-56Vdc, 0.09-0.45A, Provided with supply leads, 2x18AWG(black and white), VW-1, 600V, 105°C, Output leads, 2x18AWG(red and black), VW-1, 300V, 80°C, and dimming leads, 3x18AWG(purple, yellow and green), VW-1, 300V, 80°C. Such wires were closed by heat shrinkable. (For LEDFD20W001)	cURus
28	71	Label system IV (Not shown)	Various	Various	80°C min., Outdoor use, Suitable-surface for steel. Comply with UL969.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
30-31	72	Wire compartments	Various	Various	Cast Aluminum, 2.4 mm thick min., four openings were sealed by closure screw. Only one opening provided for conduit connection. Secured to Heatsink by screw(For model LEDFB12W001), secured to Extra arm by screw(For model LEDFB12W002). See ILL. 21 for dimension details. (For LEDFB12W001, LEDFB12W002)	NR
30-32	73	Heatsink II	Various	Various	Cast Aluminum, 2.4 mm thick min., see ILL. 22 for dimension details.	NR
32	74	Heatsink cover	Various	Various	Cast Aluminum, 2.4 mm thick min., provided with conduit opening, the dimensions for the unthreaded opening for conduit connection was 22.2mm. Secured to Heatsink by screw. See ILL. 23 for dimension details. (For LEDFB12W003)	NR
30-32	75	Diffuser III	Various	Various	Glass, measured 4.0 mm thick, secured to Heatsink by thread, see ILL. 25 for dimension detail.	NR
30-31	76	Closure screws	Various	Various	Same material as Wire compartments, installed with gasket by its thread.	NR
30-31	77	Gasket rings (Not shown)	Various	Various	Silicone rubber, suitable to fit to thread of Closure screws.	NR
30-32	78	Diffuser guard	Various	Various	Cast Aluminum, measured 3 mm thick, secured to Heatsink by screw, see ILL. 25 for dimension details.	NR
31	79	Extra arm	Various	Various	Cast Aluminum, measured 3 mm thick minimum, secured to Heatsink by screw, see ILL. 26 for dimension details. (For model LEDFB12W002)	NR
30-32	80	Supply Wire	Various	Various	Copper conductor, color black and white, 18AWG, 600V, VW-1, 105°C.	UR
30-32	81	Grounding wire II	Various	Various	Copper conductor, green-yellow, 18AWG, 600V, 105°C, secured to wire compartments of LEDFB12W001, LEDFB12W002 by lugs and screw. Secured to heat sink cover of LEDFB12W003 by lugs and screw.	UR
33-35	82	Gasket rings	Various	Various	Silicone rubber, Measured 4.8 mm thick, suitable to fit to thread of diffuser.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
33-35	83	Gasket V	Various	Various	Silicone rubber, Measured 3.5 mm thick, secured between Wire compartments and Heatsink for models LEDFB12W001 and LEDFB12W002, secured between Heatsink cover and Heatsink for model LEDFB12W003.	UR
33-35	84	LED mounting sheet	Various	Various	Rated min. HB, 95°C, measured 1.0 mm thick, secured the LED package to Heatsink by screw.	UR
33-35	85	LED package VI	Various	Various	COB type, ceramic base material rated 37Vdc, 800mA. Installed in LVLE circuit.	NR
33-35	86	Gasket VI	Various	Various	Silicone rubber, UV rated. Measured 3.0 mm thick minimum, secured by diffuser inside heatsink.	NR
36-38	87	Twisted on connectors II	Various	Various	Fair provided, 600V, 105°C, Suitable size : 22-14 AWG.	UR, CSA
30-38	88	Internal wire	Various	Various	Rated min. 24AWG, 105°C, used by LED package connection.	cURus
30-38	89	LED driver	SHENZHEN YIQIANG TECHNOLOGY CO LTD	LF12W-48-C0250	Input 90-305Vac, 50/60Hz, 0.18A max., output 29-48Vdc, 250mA, 12W, pf≥0.92, Provided with input leads(black and white), 18AWG, VW-1, 600V, 105°C, and output leads(red and black), 24AWG, VW-1, 300V, 105°C, secured inside Driver mounting box by screws.	cURus
30-38	90	Marking labels (Not shown)	Various	Various	80°C min., Outdoor use. Suitable surface for steel. Comply with UL969.	UR
38	91	Lamp housing	Various	Various	Die-cast Aluminum, reinforced, measured 1.6mm thick.	NR
39	92	PIR sensor	NINGBO SHARKWARD ELECTRONICS CO LTD	BR1823-X-D	Optional, Rated 120/277Vac, 5A. Suitable for wet location use.	cULus
			THE WATT STOPPER INC.	FSP-221B-D	Optional, Rated 100-347Vac. Suitable for wet location use.	cULus
39	93	Lamp Cover	Various	Various	Die-cast Aluminum, reinforced, measured 1.6mm thick.	NR
40	94	Diffuser fixed ring	Various	Various	Painted steel, min. 1.5mm thick. Secured to Lamp housing by screws.	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
40	96	Diffuser IV	Various	Various	For LEDBG series with suffix 002B Glass, min.3.2mm thick. Secured to Lamp housing by Diffuser fixed ring with screws.	NR
			SABIC INNOVATIVE PLASTICS B V	357M(F1)	For LEDBG series with suffix 003. PC. Rated V-0, fl. 120°C, min.1.5mm thick.	cURus
40	96	Grounding lead	Various	Various	AWM, 18AWG, min.300V min.105°C.	cURus
40	97	Connector	Various	Various	Rated 300V, 105°C.	cULus
			Various	Various	Rated 300V, 105°C.	cURus
40	98	Gasket VII	Various	Various	Silicone rubber, 1.0mm thick minimum.	cURus
40	99	Gasket VIII	Various	Various	Silicone rubber, 1.0mm thick minimum.	cURus
40	100	Input Lead	Various	Various	Min.18AWG, Rated 300V, 105°C, AWM, VW-1.	cURus
41	101	Reflector	Various	Various	PC, Rated 0.4mm thick, 105°C.	cURus
41	102	LED PWB	Various	Various	Single layer Aluminum base, Rated V-0, 130°C, min.1.2mm thick. Secured to Lamp housing by screws. Min.3.2mm between current-carrying part and dead-metal part.	cURus
41	103	LED	GREE	JK2835 9-V	Rated 9V, min.100mA.	NR
41	104	Output Lead	Various	Various	Min.22AWG, Rated 300V, 106°C, AWM, VW-1.	cURus
48	105	Photocell sensor	SHANGHAI LONG JOIN INTELLIGENT TECHNOLOGY INC	JL-403C	Optional, Rated 120-277Vac, min.300W.	cULus
				JL-413C	Located inside the product.	cULus
49	106	Motion sensor	ULTRANIK INTELLIGENT TECHNOLOGY CO LTD	UM05	Optional. Min.300V, 105°C. Located inside the product.	cULus
			ULTRANIK INTELLIGENT TECHNOLOGY CO LTD	UM05+SAM5	Optional, Rated 120-277Vac, min.300W. Located inside the product.	cETLus Listed
50	107	Dimming Cord	Various	Various	Min.22AWG, Rated 300V, 80°C, AWM, VW-1.	cURus
50	108	Output Cord	Various	Various	Min.18AWG, Rated 300V 105°C, AWM, VW-1.	cURus
50	109	LED Driver	UNIVERSELITE CO., LTD	UVLLE40-36V-D	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.13-0.5A, 44W; Output: 30-42Vdc, 0.66-1.1A, (For LEDBG30W003SY-CT-CRI-ZZ, LEDBG40W003SY-CT-CRI-ZZ, LEDBG30W002BSY-CT-CRI-ZZ, LEDBG40W002BSY-CT-CRI-ZZ)	See 5.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
50	109 a	LED Driver	UNIVERSELITE CO., LTD	UVL-LE60-96V- D	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.2- 0.75A, 66W; Output: 30-42Vdc, 0.8-1.65A (For LEDBG50W003SY-CT-CRI- ZZ, LEDBG60W003SY-CT-CRI- ZZ, LEDBG50W002BSY-CT-CRI- ZZ, LEDBG60W002BSY-CT-CRI- ZZ)	See 5.0
50	109 b	LED Driver	UNIVERSELITE CO., LTD	UVL-LE80-38V- D	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.25- 1A, 88W; Output: 30-42Vdc, 1.1-2.2A, (For LEDBG80W003SY-CT-CRI- ZZ, LEDBG80W002BSY-CT-CRI- ZZ)	See 5.0
50	109 c	LED Driver	UNIVERSELITE CO., LTD	UVL-LA120-36V- D	Isolated output. Input: 100-277Vac, 50/60Hz, 1.16- 0.49A/132W; Output: 25-42V, 2600-3400mA, 118.8W, Tc=90°C (For LEDBG100W003SY-CT-CRI- ZZ, LEDBG100W003LY-CT-CRI- ZZ, LEDBG120W003LY-CT-CRI- ZZ, LEDBG100W002BSY-CT-CRI- ZZ, LEDBG120W002BSY-CT-CRI- ZZ, LEDBG100W002BLY-CT-CRI- ZZ, LEDBG120W002BLY-CT-CRI- ZZ)	cURus
50	109 d	LED Driver	UNIVERSELITE CO., LTD	UVL-LA180-36V- D	Isolated output. Input: 100-277Vac, 50/60Hz, 1.98- 0.69A/198W; Output: 26-42V, 3000-5300mA, 172.8W Tc=90°C; (For LEDBG135W003LY-CT-CRI- ZZ, LEDBG135W002BLY-CT-CRI- ZZ)	cURus
50	110	Input Core	Various	Various	Min. 18AWG, Rated 300V, 105°C, AWM, VW-1.	cURus
50	111	Driver Enclosure	Various	Various	Four pieces construction, Aluminum, reinforced, min. 1.5mm thick.	NR
50	112	Insulation Sheet	Various	Various	PET, minimum 0.2mm thick, rated 105°C minimum, provided as insulation between PWB assembly and enclosure. Fully potting provided between PWB assembly and the sheet.	cURus
51	113	Opticalcoupler I	EVERLIGHT ELECTRONICS CO.LTD	EL817B	U3, Double protection optical isolator, providing 5000Vac isolation.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
51	114	Transformer T1 I	Haining Toptech Electronics Co., Ltd. Haining Xinyi Electronics Co., Ltd.	LT-0094	0.4mH, Refer to illustration 28 for assembly drawing. Included item 114a-114e.	NR
51	114 a	Bobbin (not shown)	Various	Various	Phenolic, rated 94V-0, 150°C, min. \pm 2mm thick.	cURus
51	114 b	Insulating Tape (not shown)	Various	Various	rated 130°C	UR
51	114 c	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat min. 155°C.	UR
51	114 d	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat min. 130°C.	UR
51	114 e	Tubing (not shown)	Various	Various	Rated min. 300V, 200°C.	UR
51	115	X-Capacitor I	Various	Various	CX1, CX2: X2 type, rated 10nF, min. 300V, 105°C.	cURus
51	118	Y-Capacitor I	Various	Various	CY1, CY2, CY3, CY4, CY5: Y1 type, Rated 2.2nF, min. 400V, 105°C.	cURus
51	117	Gas tube I	BRIGHTKING (SHENZHEN) CO LTD	2R(&)3600L-	VZ1, 500Vac, -40 – +105°C.	cURus
51	118	Varistor I	Various	Various	RV1, RV2, RV3, RV4, RV5: Rated 560V, 105°C.	cURus
51	119	Fuse I	Various	MST	F I, Rated 2A/300V.	cURus
51	120	Printed Wiring Board I	Various	Various	Rated min. V-0, 130°C, min. 1.6mm thick, completely encased in potting compound.	cURus
52	121	Opticalcoupler II	EVERLIGHT ELECTRONICS CO LTD	ELB17B	U3 Double protection optical isolators, providing 500Vvac isolation.	cURus
52	122	Y-Capacitor II	Various	Various	CY1, CY2, CY3, CY4, Y1 type, Rated 2.2nF, min. 400V, 105°C.	cURus
52	123	Transformer T1 II	Haining Toptech Electronics Co., Ltd. Haining Xinyi Electronics Co., Ltd.	LT-0096	0.3mH, Refer to illustration 28a for assembly drawing. Included item 123a-123e.	NR
52	123 a	Bobbin (not shown)	Various	Various	Phenolic, rated 94V-0, 150°C, min. \pm 2mm thick.	cURus
52	123 b	Insulating Tape (not shown)	Various	Various	rated 130°C.	UR
52	123 c	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat min. 155°C.	UR
52	123 d	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat min. 130°C.	UR
52	123 e	Tubing (not shown)	Various	Various	Rated min. 300V, 200°C.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
52	124	X-Capacitor II	Various	Various	CX1, CX2: X2 type, CX1: Rated 10nF, min.300V, 105°C, CX2: Rated 22nF, min.300V, 105°C.	cURus
52	125	Gas tube II	BRIGHTKING (SHENZHEN) CO LTD	2R(8)3000L	VZ1: 500Vac, -40 ~ +105°C	cURus
52	126	Varistor II	Various	Various	RV1, RV2, RV3, RV4, RV5: Rated 560V, 105°C.	cURus
52	127	Fuse II	Various	MST	F1: Rated 9, 15A/300V.	cURus
52	128	Printed Wiring Board II	Various	Various	Rated min.V-0, 130°C, min. 1.6mm thick, completely enclosed in potting compound.	cURus
51	129	Potting Compound (Not shown)	SHENZHEN SHENKANGTAI SILICONE MATERIAL CO LTD	HC-670-1A/B	Rated V-0, 150°C, fully cover all components of LED Driver UVL LE40-36V-D, UVI-LE60-36V-D, UVL-LE80-36V-D.	cURus
54, 54a , 71	130	Mounting hook	Various	Various	Stainless steel, min. 6 mm thick.	NR
53, 53a , 73	131	Metal barrier and Heat sink	Various	Various	Painted or plated steel, min. 1.2 mm thick.	NR
54a	132	EM buck and battery box	LG Chem (Guangzhou) Engineering Plastics Co Ltd	LUPOY GP- 1006F(f1) LUPOY GP- 1006F(m)(#)(f1)	PC, rated 11, 5VA, min. 110°C, min. 2.5mm thick.	cURus
65	132 a	The support of EM box and battery box	Various	Various	Painted or plated steel, min. 1.0 mm thick.	NR
55, 72	133	Diffuser	LG Chem (Guangzhou) Engineering Plastics Co Ltd	LUPOY GP- 1006F(f1) LUPOY GP- 1006F(m)(#)(f1)	PC, rated 11, 5VA, min. 110°C, min. 2.5mm thick. The compartment of sensor: Ø 41.6mm ± min. 9.20mm.	cURus
55, 67a	134	Gasket	Various	Various	Silicone rubber, min. 0.5 mm thick.	NR
60c	134 b	Gasket 2	Various	Various	Silicone rubber, rated 11, min. 90°C, Overall dimension: min. Ø6.0 mm ± min. 0.5mm. Used for Ø7.9mm opening on Driver Enclosure.	cURus
57, 69	135	LED	Various	Various	I _f : 110mA, V _f : 8.8-10.0Vdc.	NR
57, 69	136	LED PCB	Various	Various	Single layer aluminum base, rated V-0, 130°C, min. 1.0 mm thick, CTI≥3, Complied with UL 796.	cURus
60	137	Driver Enclosure	Various	Various	Painted or plated cast malleable iron, min.2.4 mm thick.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
60	138	Poling Compound	SHENZHEN SHENGKANGTAI SILICONE MATERIAL CO. LTD	HC-620-3A/B	Silicone, rated V-0, 150°C.	cURus
54, 54a	139	Supply cord	Various	SJTW SJOW	3 × Min. 18AWG, min. 300V, min. 90°C, VW-1. At least 150mm extend into the outlet box.	cURus
56	139 a	Output cord and dimming cord	Various	Various	2 × Min. 18 AWG for Output cord, 3 × Min. 22 AWG for dimming cord, min. 300V, min. 105°C, VW-1.	cURus
54, 54a	140	Gland	BEISIT ELECTRIC TECH (HANGZHOU) CO. LTD	P1110X P1110XL	Liquid-Tight Flexible Cable Connectors, PC, rated min. 80°C. Overall dimensions: refer to illustration 42.	cURus
54a 68, 68a	140 a	Gland 2	Various	Various	Stainless steel, Provided with a silicone rubber for waterproof function and silica gel inside for holding the lead wire. Overall dimensions: refer to illustration 43. Suitable for min. 24AWG.	NR
58	141	Bushing	Various	Various	Silicone rubber, rated min. 100°C, min. 1.2mm thick.	UR
61	142	LED driver 1 (not shown)	Universelite Co., Ltd.	UVL-LM60-102V-D	Non-isolated output for LED module; Isolated LVLE output for sensor, Input: 100-277Vac, 50/60Hz, 0.2-0.7A, 80W. Output for LED module: 90-120Vac, 0.53A. Output for sensor: 12Vdc, 200mA. For corresponding models, refer to illustration 29.	See 5.0
61	142 a	LED driver 2 (not shown)	Universelite Co., Ltd.	UVL-LM80-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor, Input: 100-277Vac, 50/60Hz, 0.26-0.9A, 80W. Output for LED module: 90-120Vdc, 0.76mA. Output for sensor: 12Vdc, 200mA. For corresponding models, refer to illustration 29.	See 5.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
61	142 b	LED driver 3	Universelife Co., Ltd.	UVL-LM100-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.34-1.1A, 100W. Output for LED module: 90-120Vdc, 0.89A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0
62	142 c	LED driver 4 (not shown)	Universelife Co., Ltd.	UVL-LM120-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.43-1.3A, 120W. Output for LED module: 90-120Vdc, 1.1A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0
62	142 d	LED driver 5	Universelife Co., Ltd.	UVL-LM150-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.51-1.65A, 150W. Output for LED module: 90-120Vdc, 1.4A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0
63	142 e	LED driver 6 (not shown)	Universelife Co., Ltd.	UVL-LM180-108V-D	Non-isolated output for LED module; Isolated output for sensor. Input: 100-277Vac, 50/60Hz, 0.65-1.9A, 180W. Output for LED module: 90-120Vdc, 1.54A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0
63	142 f	LED driver 7	Universelife Co., Ltd.	UVL-LM200-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.68-2.2A, 200W. Output for LED module: 90-120Vdc, 1.63A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
64	142g	LED driver 8	Universelle Co., Ltd.	UVL-LM240-108V-D	Non-isolated output for LED module; Isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.86-2.5A, 240W. Output for LED module: 90-120Vdc, 1.98A. Output for sensor: 12Vdc, 200mA. For corresponding models: refer to illustration 29.	See 5.0
70	142h	LED driver 9 (not shown)	Shenzhen Sosen Electronics Co.Ltd	SS-150SA-56BH	Class P, isolated output, constant current. Input: 277-480Vac, 50/60Hz, 0.8A, 185W.. Output: 22-56Vdc, 2.1-4.2A, 151.2W.. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV: 12V, 0.3A. Suitable for wet locations. Input cord: 3 × Min. 18AWG, 600V, min. 90°C, VW-1. Output cord: 2 × Min. 22 AWG min. 300V, min. 105°C, VW-1 Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. For corresponding models: refer to illustration 29.	cULus
			Various	Various		
70	142i	LED driver 10	Shenzhen Sosen Electronics Co.Ltd	SS-240SA-56BH	Class P, isolated output, constant current, Input: 277-480Vac, 50/60Hz, 1.2A, 285W.. Output: 32-56Vdc, 3.3-6.7A, 241.2W.. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV: 12V, 0.3A. Suitable for wet locations. Input cord: 3 × Min. 18AWG, 600V, min. 90°C, VW-1. Output cord: 2 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1 Included item 139 and 139a. For corresponding models: refer to illustration 29.	cULus
			Various	Various		

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
61	143	Fuse 1	CONQUER ELECTRONICS CO LTD	MST	300Vac, 3.15A.	cURus
			SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP		cURus
62	143 a	Fuse 2	CONQUER ELECTRONICS CO LTD	MST	300Vac, 5A.	cURus
			SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP		cURus
63	143 b	Fuse 3	CONQUER ELECTRONICS CO LTD	MST	300Vac, 6.3A.	cURus
			SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP		cURus
64	143 c	Fuse 4	CONQUER ELECTRONICS CO LTD	MST	300Vac, 8A	cURus
			SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP		cURus
61, 62, 63, 64	144	Varistor	Various	Various	Type 5, min. 350Vac, min. 560Vdc, min. 125°C.	cURus
61, 62, 63, 64	145	X capacitor(CX1, CX2)	Various	Various	Type X2, 305/310Vac, 0.1/0.22/0.47µF, 110°C.	cURus
61, 62, 63, 64	146	Y capacitor	Various	Various	Type Y1, 400Vac, 100pF/470pF, 125°C.	cURus
61	147	Transformer 1	Haining Xinyi Electronics Co., Ltd.	LI-DT07-REV2	240µH. Refer to illustration 3D for assembly drawing. Included item 147a-147f.	NR
61	147 a	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
61	147 b	Primary winding (not shown)	Various	Various	Polyurethane, min. 155°C.	UR
61	147 c	Secondary winding (not shown)	Various	Various	Reinforced insulation, min. 130°C.	UR
61	147 d	Tape (not shown)	Various	Various	Polyethylene terephthalate film insulating tapes, yellow, min. 130°C, 0.025 mm thick per layer;	UR
61	147 e	Tubing (not shown)	Various	Various	Min. 300V, min. 125°C, VW-1.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
61	147f	Varnish (not shown)	Various	Various	Min. 130°C.	UR
62	148	Transformer 2	Haining Xinyi Electronics Co., Ltd	LT-0114-REV0	170µH. Refer to illustration 21 for assembly drawing. Included item 148a-148f	NR
62	148 a	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
62	148 b	Primary winding (not shown)	Various	Various	Polyurethane, min. 155°C	UR
62	148 c	Secondary winding (not shown)	Various	Various	Reinforced insulation, min. 130°C.	UR
62	148 d	Tape (not shown)	Various	Various	Polyethylene terephthalate film insulating tapes, yellow, min. 130°C, 0.025 mm thick per layer.	UR
62	148 e	Tubing (not shown)	Various	Various	Min. 300V, min. 125°C, VW-1.	UR
62	148f	Varnish (not shown)	Various	Various	Min. 130°C.	UR
63	149	Transformer 3	Haining Xinyi Electronics Co., Ltd	LI-D113-REV0	160µH. Refer to illustration 32 for assembly drawing. Included item 149a-149f	NR
63	149 a	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
63	149 b	Primary winding (not shown)	Various	Various	Polyurethane, min. 155°C	UR
63	149 c	Secondary winding (not shown)	Various	Various	Reinforced insulation, min. 130°C.	UR
63	149 d	Tape (not shown)	Various	Various	Polyethylene terephthalate film insulating tapes, yellow, min. 130°C, 0.025 mm thick per layer.	UR
63	149 e	Tubing (not shown)	Various	Various	Min. 300V, min. 125°C, VW-1.	UR
63	149f	Varnish (not shown)	Various	Various	Min. 130°C.	UR
64	150	Transformer 4	Haining Xinyi Electronics Co., Ltd	LI-D123-REV0	140µH. Refer to illustration 33 for assembly drawing. Included item 150a-150f	NR
64	150 a	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
64	150 b	Primary winding (not shown)	Various	Various	Polyurethane, min. 155°C.	UR
64	150 c	Secondary winding (not shown)	Various	Various	Reinforced insulation, min. 130°C.	UR
64	150 d	Tape (not shown)	Various	Various	Polyethylene terephthalate film insulating tapes, yellow, min. 130°C, 0.025 mm thick per layer.	UR
64	150 e	Tubing (not shown)	Various	Various	Min. 300V, min. 125°C, VW-1.	UR
64	150f	Varnish (not shown)	Various	Various	Min. 130°C.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
61, 62, 63, 64	151	Transformer 5	Haining Xinyi Electronics Co., Ltd	LT-D115-REV0	3.5mH. Refer to illustration 33a for assembly drawing. Included item 151a-151f.	NR
61, 62, 63, 64	151 a	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
61, 62, 63, 64	151 b	Primary winding (not shown)	Various	Various	Polyurethane, min. 155°C.	UR
61, 62, 63, 64	151 c	Secondary winding (not shown)	Various	Various	Reinforced insulation, min. 130°C.	UR
61, 62, 63, 64	151 d	Tape (not shown)	Various	Various	Polyethylene terephthalate film insulating tapes, yellow, min. 130°C, 0.025 mm thick per layer.	UR
61, 62, 63, 64	151 e	Tubing (not shown)	Various	Various	Min. 300V, min. 125°C, VW-1.	UR
61, 62, 63, 64	151f	Varnish (not shown)	Various	Various	Min. 130°C.	UR
61, 62	152	Inductor 1	Haining Xinyi Electronics Co., Ltd	TD1918-20mH	Min. 20mH. N1: 1->2, 69 Turns. N2: 4->3, 63 Turns. Included item 152b-152c.	NR
63, 64	152 a	Inductor 1a	Haining Xinyi Electronics Co., Ltd	TD1918-10mH	Min. 10mH. N1: 1->2, 50 Turns. N2: 4->3, 50 Turns. Included item 152b-152c.	NR
61, 62, 63, 64	152 b	Bobbin (not shown)	Various	Various	V-0, min. 150°C, min. 0.7 mm thick.	cURus
61, 62, 63, 64	152 c	Magnet wire (Not shown)	Various	Various	Min. 130°C.	UR
61	153	Inductor 2	Haining Xinyi Electronics Co., Ltd	LI-0020	Min. 1.0mH. N1: 1->2, 15 Turns. N2: 4->3, 15 Turns. Included item 153d-153e.	NR
62	153 a	Inductor 2a	Haining Xinyi Electronics Co., Ltd	LI-0019	Min. 50uH N1: 1->2, 4 Turns. N2: 4->3, 4 Turns. Included item 153d.	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
63	153 b	Inductor 2b	Haining Xinyi Electronics Co., Ltd.	LI-0025	Min. 250uH. N1: 1->2, 8 Turns. N2: 4->3, 8 Turns. Included item 153d.	NR
64	153 c	Inductor 2c	Haining Xinyi Electronics Co., Ltd.	LI-0032-REV0	Min. 100uH. N1: 1->2, 6 Turns. N2: 4->3, 6 Turns. Included item 153d-153e.	NR
61, 62, 63, 64	153 d	Magnetic wire (Not shown)	Various	Various	Min. 130°C.	UR
61, 62, 63, 64	153 e	Triple insulated wire (Not shown)	Various	Various	Min. 130°C.	UR
61, 62, 63, 64	154	Inductor 3	Haining Xinyi Electronics Co., Ltd.	LT-0005	Min. 5.5mH. N1: 1->2, 18 Turns. N2: 4->3, 18 Turns Included item 154a-154b.	NR
61, 62, 63, 64	154 a	Magnetic wire (Not shown)	Various	Various	Min. 130°C.	UR
61, 62, 63, 64	154 b	Triple insulated wire (Not shown)	Various	Various	Min. 130°C.	UR
61, 62, 63, 64	155	Inductor 4	Haining Xinyi Electronics Co., Ltd.	LI-0031-REV0	Min. 5.5mH. N1: 1->2, 56 Turns. Included item 155a.	NR
61, 62, 63, 64	155 a	Magnetic wire (Not shown)	Various	Various	Min. 130°C.	UR
61a 62a 63a 64a	156	Driver PCB	Various	Various	Multilayer printed wiring boards. V-D, 130°C. min. 1.0mm thickness. CTI≤3. Complied with UL 796.	UR
61, 62, 63, 64	157	Heat sink	Various	Various	Stainless steel, min. 3.00 mm thick.	NR
06	168	Emergency LED Driver	Helpower Technology (Shenzhen) Co Ltd.	EMB08YY-ZZZ	Input: 100-277V, 50/60Hz, 100mA max., 7W max.. Output: 81Vdc-156Vdc, max. 20W. Charge Time, min. 24Hrs. Discharge Time, 1.5Hrs. Included battery: Li-ion, 7.2Vdc, 2600mAh, 8W. Suitable for use in damp locations.	cULus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
66	159	Internal wire in EM box	Various	Various	min. 18AWG, 90°C, min. 300V, VW-1.	cURus
67	159 a	Signal wire in EM box	Various	Various	min. 18AWG, 90°C, min. 300V, VW-1.	cURus
66, 68	159 b	Cord between EM box and battery box	Various	STJW	18AWG, 90°C, min. 300V, VW-1.	cURus
66a, 68	160	Closed-end connector	Various	Various	300V, 105°C. Suitable for 14-22 AWG wire Enclosed by Heat shrinkable tube.	cULus
66, 68	160 a	Heat shrinkable tube	Various	Various	min. 300V, min. 125°C, VW-1	cURus
58, 66, 68, 69	161	Adhesive	DOW CHEMICAL SILICONES KOREA LTD	DOWSIL 7091 (F2)	Silicone "Room Temperature Vulcanizing" (RTV), min. 105°C, min. 0.73 mm thick.	cURus
58, 69	162	Sensor PCB	Various	Various	Multilayer printed wiring boards, V-0, 130°C, min. 1.0mm thickness, CTI<3, Complied with UL 796.	UR
59	163	Signal indicator	Various	Various	3Vdc, 10mA.	NR
59	164	Sensor	Various	Various	3Vdc, 10mA.	UR
58	165	Plastic barrier	Various	Various	Silica gel, rated min. HB, min. 100°C, min. 1.0mm thick.	cURus
69	166	Coil in Sensor PCB	Various	Various	4.7µH. Included item 166a.	NR
69	166 a	Magnetic wire (Not shown)	Various	Various	Min. 130°C.	UR
70	167	Metal Sheet	Various	Various	Painted or plated steel, min. 1.5 mm thick.	cURus
60a with	167 a	Driver insulation	Various	Various	PET, min. 105°C, min. 0.19mm thick. Totally cover the Driver Enclosure, except the latching point for grounding function and gasket.	cURus
67, 67a	168	Test switch	Various	Various	36Vdc, 1A.	cURus
58, 70	169	Chain	Various	Various	Stainless steel. Each ring in chain is 2.0mm thick min., each ring is closed by welding. Total 50cm long.	NR
53, 53a	170	Marking labels (Not shown)	Various	Various	80°C min., Outdoor use, Suitable surface for steel. Comply with UL689.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171	LED driver 11	Shenzhen Sosen Electronics Co Ltd	SS-120CNL-E26UBH	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 120-277Vac, 50/60Hz, 1.2A, 144W Max. Output: 180-260Vdc, 0.4-0.6A, 120W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations Input cord: 3 × Min. 17AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 17 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. For models LEDGC80W019A-MD-CCT-CRI-BA-ZZ, LEDGC100W019A-MD-CCT-CRI-BA-ZZ and LEDGC120W019A-MD-CCT-CRI-BA-ZZ.	ULR _{CS}
72	171a	LED driver 12 (Not shown)	Shenzhen Sosen Electronics Co Ltd	SS-150CNL-F26UBH	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 120-277Vac, 50/60Hz, 1.5A, 180W Max. Output: 180-260Vdc, 0.52-0.75A, 150W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. Input cord: 3 × Min. 17AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 17 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. For model LEDGC150W019A-MD-CCT-CRI-BA-ZZ.	ULR _{CS}

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171 b	LED driver 13 (Not shown)	Shenzhen Sosen Electronics Co.Ltd	SS-200CNL-E260BH	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 120-277Vac, 50/60Hz, 2A, 240W Max. Output: 180-260Vdc, 0.7-1.0A, 200W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux). CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min. 17AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 17 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. For models LEDGC180W019A-MD-CCT-CRI-BA-ZZ and LEDGC200W019A-MD-CCT-CRI-BA-ZZ.	cURus
72	171 c	LED driver 14 (Not shown)	Shenzhen Sosen Electronics Co.Ltd	SS-240GNL-E260BH	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 120-277Vac, 50/60Hz, 2.4A, 288W Max. Output: 180-260Vdc, 0.84-1.2A, 240W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE. Suitable for wet locations. Input cord: 3 × Min. 17AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 17 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. For model LEDGC240W019A-MD-CCT-CRI-BA-ZZ.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171 c	LED driver 15 (Not shown)	Universelife Co., Ltd.	UVL-LS100- 260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.0A, 110W Max. Output: 180-260Vdc, 0.35-0.55A, 100W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min. 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC100W019-MD-CCT-CRI-BA-ZZ.	See 5.0
72	171 e	LED driver 16 (Not shown)	Universelife Co. Ltd.	UVL-LS150- 260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.5A, 165W Max. Output: 180-260Vdc, 0.52-0.75A, 150W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC150W019-MD-CCT-CRI-BA-ZZ.	See 5.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171f	LED driver 17 (Not shown)	Universelife Co., Ltd.	UVL-LS200-260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 2.0A, 220W Max. Output: 180-260Vdc, 0.7-1.0A, 200W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min. 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC200W019-MD-CCT-CRI-BA-ZZ.	See 5.0
72	171g	LED driver 18 (Not shown)	Universelife Co., Ltd.	UVL-LS240-260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 2.4A, 264W Max. Output: 180-260Vdc, 0.84-1.2A, 240W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC240W019-MD-CCT-CRI-BA-ZZ.	See 5.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171 #	LED driver 18 (Not shown)	Universelife Co., Ltd.	UVL-LS80-260V- D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 0.8A, 88W Max. Output: 180-260Vdc, 0.28-0.44A, 80W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) 0V, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min. 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC80W019-MD-CCT-CRI-BA-ZZ.	See 5.0
72	171#	LED driver 20 (Not shown)	Universelife Co. Ltd.	UVL-LS120- 260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.2A, 132W Max. Output: 180-260Vdc, 0.4-0.6A, 120W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) 0V, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC120W019-MD-CCT-CRI-BA-ZZ.	See 6.0

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
72	171	LED driver 21 (Not shown)	Universelife Co., Ltd.	UVL-LS180- 260V-D12	Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.8A, 198W Max. Output: 180-260Vdc, 0.63-0.9A, 180W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux) CV, 12V, 0.2A, LVLE Suitable for wet locations. Input cord: 3 × Min. 18AWG, 300V, min. 105°C, VW-1. Output cord: 2 × Min. 18 AWG min. 300V, min. 105°C, VW-1. Dimming cord: 3 × Min. 22 AWG min. 300V, min. 105°C, VW-1. Consist of item 177 to 193. For model LEDGC180W019-MD-CCT-CRI-BA-ZZ.	See 5.0
76	172	LED I	Samsung	LM283B+	Rated I=100mA, Vf=9Vdc.	NR
77a	173	CCT Switch	Dangguan Haotong Electronics Co Ltd	H25-0323SC	Optional. Rated 250V, 6A, 115°C. Used to control the CCT of LEDs. Suitable for Group 9 series models. Measured max. working voltage: 234.4V.	cURus
77a	174	Power Switch	Various	Various	Optional. Connect to LED Driver class 2 or LVLE dimming leads. Rated min. 50V, min. 1A, 105°C. Used to control the dimming level of LED Driver.	NR
77a	175	Sensor Connector	Various	Various	Optional, Copper, located after LED Driver class 2 or LVLE dimming output.	NR
77a	176	Control PCB	Various	Various	Optional: Multilayer printed wiring boards. V-0, 130°C, min. 1.0mm thickness. CTI≥3. Complied with UL 796.	UR
77 84	177	Top Driver Enclosure	Various	Various	Die-cast Aluminum, reinforced, min. 1.5mm thick.	NR
84	178	Bottom Driver Enclosure	Various	Various	Steel sheet metal, min. 0.66mm thick.	NR
77, 84	179	Gasket 1	Various	Various	Silicone rubber, rated F1, min. 90°C. Secured to openings of Driver Enclosure by snap fit and further filled with glue	cURus
86	180	Potting Compound	SHENZHEN SHENGLKANGTAL SILICONE MATERIAL CO. LTD	HC-820-3A/B	Rated V-0, 150°C, fully cover all components of LED Driver UVL-LS100-260V-D12, UVL-LS150-260V-D12, UVL-LS200-260V-D12, UVL-LS240-260V-D12.	cURus
86	181	Cord Bushing	Various	Various	Rated min. HB, 85°C, 1.2 mm thick.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
86	182	Insulation Sheet	Various	Various	PET, minimum 0.18mm thick, rated 105°C minimum, provided as insulation between PWB assembly and enclosure. Fully potting provided between PWB assembly and the sheet.	cURus
86	183	Dimming Cord	Various	Various	Min 22AWG, Rated 300V, 105°C, AWM, VW-1 External use, suitable for wet location	cURus
86	184	Output Cord	Various	SJOW SJTW	2 x Min. 18AWG, rated min.300V, 105°C, VW-1	cULus
86	185	Input Cord	Various	SJOW SJTW	3 x Min. 18AWG, rated min.300V, 105°C, VW-1.	cULus
87	188	Fuse (F101)	SHANGHAI FULLNESS ELECTRICAL CO LTD Various	TSP Various	Rated 6.3A, 300V, 125°C	cULus
87	187	Thermistor (RT101)	NANJING KE MIN ELECTRONICS CO LTD	NSP102R55	Rated 240Vac, 5A. Measured working Voltage: 3Vpeak. 0.94Vrms. As the temperature rises, the voltage will slowly decrease.	cURus
87	188	Varistor (MOV101, MOV102, MOV103, MOV104)	Various	Various	Rated min. 560V, 105°C.	cURus
87	189	X-Capacitor (CX101)	Various	Various	X2 type, rated min: 0.47uF, min.300V, 100°C.	cURus
87	190	Gas tube (FDG101)	BESTBRIGHT ELECTRONICS CO LTD	2R(@)1400L-	Rated 500Vac, 105°C.	cURus
87	191	Transformer (T1)	JIANGSU HUAXING ELECTRONIC CO.,LTD	EE10-T10308	Class B, Rated 2.0mH, input 100-277V, 50/60Hz; output 12V. Refer to illustration 47 for assembly drawing. Consist of item 191a-191g.	NR
88	191 a	Transformer insulation system (not shown)	JIANGSU HUAXING ELECTRONIC CO.,LTD	HUAXING-130	Class 130(B) Electrical Insulation Systems	UR
88	191 b	Core (not shown)	Various	Various	Ferrite	NR
88	191 c	Baldern (not shown)	CHANG CHUN PLASTICS CO LTD	T395HF	Phenolic Molding Compound (PMC), rated 04V-0, 150°C, min. 0.71mm thick.	cURus
88	191 d	Insulating Tape (not shown)	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT-280B	rated 130°C.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
88	191 e	Primary winding (not shown)	ZHEJIANG HONGBO TECHNOLOGY CO LTD	xUEW/155- QA-x/155	Polyurethane basecoat 155°C	UR
	191 f	Secondary winding (not shown)	WUHU DULY ELECTRONICS CO LTD	DLTIW-B*	Triple insulated wire, Polyurethane basecoat min. 130°C.	UR
88	191 g	Varnish (not shown)	SUZHOU TAIHU ELECTRIC ADVANCED MATERIAL CO LTD	T-4260(a)	155°C.	UR
87	192	Y-Capacitor (CY1, CY2, CY8, CY28)	Various	Various	Y1 Type, rated min. 2.2nF. min.400V, 105°C.	cURus
87	193	Driver PCB	Various	Various	Single printed wiring boards: V-0, 130°C, min. 1.0mm thickness, completely encased in potting compound,CTI≤3. Complied with UL 796.	UR
76, 77, 77a	194	Gasket 2	Various	Various	Silicone rubber, min. 90°C.	cURus
72	195	Permanent Tag	Various	Various	Rated min. 90°C attached on flexible cord surface Suitable for outdoor used, for Group 9 series models, Complied with UL 969.	cURus
77	196	fish paper	Various	Various	V-0, min. 150°C, min. 0.1 mm thick.	cURus
67	197	Optoisolator	EVERLIGHT ELECTRONICS CO LTD	EL317B	Double protection optical isolators providing 5000Vac isolation.	cURus
77	198	Center Cover	SABIC INNOVATIVE PLASTICS B V	357M(f1)	PBT/PC, Rated 5VA, 120°C, min. 2.5mm thick HWI=3, HA=0, CTI=3.	cURus
90	199	Input Lead	Various	Various	Min 18AWG, Rated 300V, 105°C, AWM, VW-1.	cURus
90	200	Diffuser	LG Chem (Guangzhou) Engineering Plastics Co Ltd	LUPOY GP-1006F(f1) LUPOY GP-1006F(m)(#)(f1)	PC, rated f1, 5VA, min. 110°C, min. 2.5mm thick, secured to Metal Housing by screws	cURus
90	201	Gasket	Various	Various	Silicone rubber, 105°C, UV rated, Measured 2.0 mm thick minimum, secured by diffuser inside.	NR
90	202	LED-1	CREE	JK2835 LWT 9-V*	Vf=9V, If=100mA. For Group 10 series	NR
90	203	LED-2*	Lumileds	2835R 9V	Vf=9V, If=100mA. For Group 10 series	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ ¹ trademark ²	Type / model ³	Technical data and securement means	Mark(s) of conformity ⁴
90	204	LED PCB	Various	Various	Single layer Aluminum base. Rated V-0, 130°C. min. 1.2 mm thick. Secured to Lamp housing by screws.	cURus
90	205	Grounding lead	Various	Various	Green-yellow, copper, 18AWG. 600V, 105°C, secured in metal base by lug terminal.	cURus
90	206	Wire Connector	Various	Various	Two poles, 600V, 20A, 105°C, suitable for 2B-12AWG.	cURus
90	207	Lamp housing	Various	Various	Die-cast Aluminum, reinforced, measured 1.6mm thick.	NR
90	208	Heat sink	Various	Various	Die-cast Aluminum, reinforced, measured 1.6mm thick.	NR
90	209	Output Lead	Various	Various	Min. 18AWG. Rated 300V, 105°C, AWM, VW-1	cURus
90	210	Marking labels (Not shown)	Various	Various	60°C min., Outdoor use, Suitable surface for steel. Comply with UL969.	LR
94a	211	Microwave sensor I	Shenzhen HAISEN Technology Co., Ltd.	HD09VR-MH-1	Optional, IP65, Min. 10Vdc, 70°C. Located side the product.	cURus
94b	212	Microwave sensor II	ShenZhen Merrytek Technology Co. Ltd	MC079D RC DI	Optional, IP65, 12Vdc, 70°C. Located side the product.	cURus
94c	213	Motion sensor	Ningbo Sharkward Electronics Co., Ltd	ANT-5-4T	Optional, IP65, Min 12Vdc, 60°C. Located side the product.	cURus
95	214	Driver Input wire	Various	Various	Min. 18AWG. Rated 600V, 105°C, VW-1.	cURus
95	215	Driver Output wire	Various	Various	Min. 18AWG. Rated 600V, 105°C, VW-1	cURus
95	216	Driver Dimming wire	Various	Various	FEP, Min 22AWG, VW-1.	cURus
95	217	LED driver 22	UNIVERSELITE CO., LTD	UVL-L0S90-108V-D125T	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.33-1.0A, 90W. Output: 85-120Vdc, 0.75-1.18A. (For LEDBG90W004-BR-CCT-CRI-ZZ)	See 5.0
95	217 a	LED driver 22(Not shown)	UNIVERSELITE CO., LTD	UVL-L0S90-108V-DTS	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.33-1.0A, 90W. Output: 85-120Vdc, 0.75-1.18A. (For LEDBG90W004-BR-CCT-CRI-ZZ)	NR
95	217 b	LED driver 22(Not shown)	UNIVERSELITE CO., LTD	UVL-L0390-108V-DGM	LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.33-1.0A, 90W. Output: 85-120Vdc, 0.75-1.18A. (For LEDBG90W004-BR-CCT-CRI-ZZ)	NR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
95	217 c	LED driver Z2(Not shown)	UNIVERSELITE CO., LTD	UVL-LQ390-108V-D12GM	LYLE, Isolated output, Input: 100-277Vac, 50/60Hz, 0.33-1.0A, 30W; Output: 85-120Vdc, 0.75-1.16A (For LEDBG60W004-BR-CCT-CRI-ZZ)	NR
96, 98, 99	218	Driver Enclosure	Various	Various	Two pieces construction Aluminum, reinforced, min.0.43mm thick.	NR
96, 98, 99	218 a	End cap	TEIJIN LIMITED RESIN AND PLASTIC	MM-4805Z(V)	Parlite, Rated min V-0, min 1.5mm thick 125°C. Secured to Driver Enclosure by screws	cURus
96, 98, 99	219	Insulation Sheet	Various	Various	PET, minimum 0.2mm thick, rated 105°C minimum, provided as insulation between PWB assembly and enclosure. Fully potting provided between PWB assembly and the sheet.	cURus
96, 98, 99	220	CCT Switch	Various	Various	PC, 3A, 250VAC, Suitabel for Group 1(i) series models.	cURus
96, 98, 99	220 a	Power Switch	Various	Various	PC, 3A, 250VAC, Suitabel for Group 1(i) series models.	cURus
96	221	Varistor I	Various	Various	RV1, RV2, RV3. Rated 560V, 105°C	cURus
96	221 a	Varistor II	Various	Various	RV5, RV6. Rated 560V, 105°C	cURus
96	222	Fuse F1	SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP	Rated 10A, 300V, 90°C, 8.5*4*8.1 mm	cULus
			CONQUER ELECTRONICS CO LTD	MST	Rated 6.3A, 300V, 90°C, 8.35*43*7.7 mm	cULus
96	223	Thermistor (RT11)	Various	Various	Min 105°C Rated 240Vac, 5A. Measured working Voltage: 3Vpeak, 0.84Vrms. As the temperature rises, the voltage will slowly decrease.	cURus
96	224	Transformer T1 III	Various	Various	Rated 220uH, 130°C. Refer to illustration 5B for details. Included item 224a-224e.	NR
96	224 a	Bobbin (not shown)	Various	Various	Phenolic, Rated V-0, 150°C, min. 2.2mm thick.	cURus
96	224 b	Insulating Tape (not shown)	Various	Various	Polyethylene isophthalate film tapes. Rated min. 130°C, 0.04mm thick per layer.	UR
96	224 c	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat, min. 155°C.	UR
96	224 d	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat, min. 130°C	UR
96	224 e	Tubing (not shown)	Various	Various	Polytetrafluoroethylene (PTFE) tubing. Rated min. 300V, 200°C.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
96	225	Inductance(L3)	Various	Various	10*6*5mm.Refer to illustration 58a for details. included item 225a-225c	NR
96	225 a	Core(not shown)	Various	Various	Copper conductor, green-yellow	cURus
96	225 b	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat. min. 155°C.	UR
96	225 c	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat. min. 130°C.	UR
96	225 d	Inductance(L6)	Various	Various	Refer to illustration 58c for details. Included item 225e-225f	NR
96	225 e	Core (not shown)	Various	Various	Copper conductor, green-yellow	cURus
96	225f	Winding (Not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat. min. 155°C.	cURus
96	226	Inductance(LF2)	Various	Various	Rated 30mH,Refer to illustration 58b for details. included item 226a-226c.	NR
96	226 a	Bobbin (not shown)	Various	Various	Phenolic, Rated V-0, 150°C, min. 2.2mm thick.	NR
96	226 b	Core (not shown)	Various	Various	PC44, 1.2mm REF	cURus
96	226 c	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat. min. 155°C.	cURus
96	227	X capacitor(CX1)	Various	Various	CX1 type, Rated 310VAC,0.22µF,110°C	cURus
96	228	Y capacitor	Various	Various	CY1, CY2, CY20, CY21, Y1 type, Rated 2.2nF, min.400V, 105°C.	cURus
96	229	Capacitance (C02)	Various	Various	0.88µF,630V	UR
96	230	Printed Wiring Board II)	Various	Various	Rated min.V-0, 130°C, min.1.3mm thick, completely encased in potting compound.	cURus
96	231	Gas discharge tube I)	Various	Various	VZ1, 500Vap, 105°C	cURus
96	232	Dimming module (M1)	Various	Various	Optional. Refer to illustration 61 for details.	cURus
96	233	Module (M2)	Various	Various	Optional. Refer to illustration 61 for details.	cURus
96	234 a	adjustable resistor(not shown)	Various	Various	Adjustable by screws and protected by a plastic tube.For LEDBG00W004-BR-CCT-CRI-22	cURus
96	234	adjustable resistor housing	CHI MEI CORPORATION(UL E56070)	PG-1 (01)	PC, rated V-2,125°C HWI=2, HAI=4, CTI=2. Minimum 1.08 mm thick. Secured together by snap fitting.	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
80	235	Potting Compound (Not shown)	SHENZHEN SHENGKANGTAI SILICONE MATERIAL CO LTD	HC620-XA	Rated V-0, 150°C, fully cover all components of LED Driver UVL- LOS90-108V-D129T, UVL-LOS90- 108V-DTS, UVL-LOS90-108V- DGM, UVL-LOS90-108V-D12GM	URus
				HC620-XB		
87	230	LED driver 23	UNIVERSELITE CO., LTD	UVL-LOS80- 72V-D12ST	Input: 100-277Vac, 50/60Hz, 0.2- 0.6A, 60W; Output: 50-80Vdc, 0.72-1.08A (For LEDBG60W004-BR-CCT- CRI-ZZ)	See 5.0
87	236 a	LED driver 23 (Not shown)	UNIVERSELITE CO., LTD	UVL-LOS80- 72V-DTS	Input: 100-277Vac, 50/60Hz, 0.2- 0.6A, 60W; Output: 50-80Vdc, 0.72-1.08A (For LEDBG60W004-BR-CCT- CRI-ZZ)	NR
87	238 b	LED driver 23 (Not shown)	UNIVERSELITE CO., LTD	UVL-LOS80- 72V-DGM	Input: 100-277Vac, 50/60Hz, 0.2- 0.6A, 60W; Output: 50-80Vdc, 0.72-1.08A (For LEDBG60W004-BR-CCT- CRI-ZZ)	NR
87	236 c	LED driver 23 (Not shown)	UNIVERSELITE CO., LTD	UVL-LOS80- 72V-D12GM	Input: 100-277Vac, 50/60Hz, 0.2- 0.6A, 60W; Output: 50-80Vdc, 0.72-1.08A (For LEDBG60W004-BR-CCT- CRI-ZZ)	NR
87	237	Input wire	Various	Various	Min 18AWG, Rated 600V, 105°C, VW-1.	cURus
87	238	Output wire	Various	Various	Min 18AWG, Rated 600V, 105°C, VW-1.	cURus
87	239	Dimming wire	Various	Various	FEP, Min 22AWG, VW-1.	cURus
98	240	Variator	Various	Various	FV1, RVZ RV3, Rated 500V, 105°C	cURus
98	241	Transformer T1 IV	Various	Various	230uH, 130°C. Refer to illustration 59 for details. Included item 241a- 241d	NR
98	241 a	Core (not shown)	Various	Various	Copper conductor, green-yellow	cURus
98	241 b	Bobbin (not shown)	Various	Various	Phenolic, Rated V-0, 150°C, min 2.2mm thick.	cURus
98	241 c	Magnet wire (Not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat, min. 155°C.	UR
98	241 d	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat, min. 130°C.	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
98	242	Fuse F1	SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP	Rated 10A, 300V, 90°C, 8.5*4*8.1 mm	cULus
			CONQUER ELECTRONICS CO LTD	MST	Rated 6.3A, 300V, 90°C, 8.35*43*7.7 mm	cULus
98	243	Y capacitor I	Various	Various	CY1, CY2 type, Rated 2.2nF min.400V, 105°C	cURus
98	243 a	Y capacitor II(Not shown)	Various	Various	CY3, CY4 type, Rated 2.2nF, min.400V, 105°C	cURus
98	244	X capacitor(CX1)	Various	Various	CX1 type, Rated 310VAC, 0.22µF, 110°C	cURus
98	245	Inductance(L01)	Various	Various	Refer to illustration 59a for details. Included item 244a-244c	NR
98	245 a	Core (not shown)	Various	Various	toreyite	cURus
98	245 b	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat, min. 155°C	UR
98	245 c	Tubing (not shown)	Various	Various	Polytetrafluoroethylene (PTFE) tubing, min. 125°C, 300V	cURus
98	245	Printed Wiring Board III	Various	Various	Rated min. V-0, 130°C, min 1.6mm thick, completely encased in potting compound.	cURus
98	247	LED driver 24	UNIVERSELITE CO., LTD	UVL-LQ630- 72V-D12ST	Input: 100-277Vac, 50/60Hz, 0.1- 0.3A, 30W; Output: 50-80Vdc, 0.36-0.54A (For LEDBG30W004-BR-CCT- CRI-ZZ)	Sec 5.0
99	247 a	LED driver 24(Not shown)	UNIVERSELITE CO., LTD	UVL-LQS30- 72V-DTS	Input: 100-277Vac, 50/60Hz, 0.1- 0.3A, 30W; Output: 50-80Vdc, 0.36-0.54A (For LEDBG30W004-BR-CGT- CRI-ZZ)	NR
99	247 b	LED driver 24(Not shown)	UNIVERSELITE CO., LTD	UVL-LQ630- 72V-DGM	Input: 100-277Vac, 50/60Hz, 0.1- 0.3A, 30W; Output: 50-80Vdc, 0.36-0.54A (For LEDBG30W004-BR-CCT- CRI-ZZ)	NR
99	247 c	LED driver 24(Not shown)	UNIVERSELITE CO., LTD	UVL-LQS30- 72V-D12GM	Input: 100-277Vac, 50/60Hz, 0.1- 0.3A, 30W; Output: 50-80Vdc, 0.36-0.54A (For LEDBG30W004-BR-CCT- CRI-ZZ)	NR
98	247 d	Potting Compound	SHENZHEN SHENGKANGTAL	RC620-XA RC620-XB	Rated V-0, 150°C, fully cover all components of LED Driver I/II	cURus
97	248	Input wire	Various	Various	Min. 18AWG, Rated 600V, 105°C, VW-1.	cURus
97	249	Output wire	Various	Various	.Min. 18AWG, Rated 600V, 105°C, VW-1.	cURus
97	250	Drumming wire	Various	Various	FEP:Min.22AWG, VW-1	cURus

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
99	251	Fuse F1	SHANGHAI FULLNESS ELECTRICAL CO LTD	TSP	Rated 10A, 300V, 90°C. 8.5*4*8.1 mm	cULus
			CONQUER ELECTRONICS CO LTD	MST	Rated 6.3A, 300V, 90°C, 8.35*4.3*7.7 mm	cULus
99	252	Varistor 1	Various	Various	RV1, RV2 RV3, Rated 580V, 105°C.	cURus
99	253	Inductance(L2)	Various	Various	Refer to illustration 60 for details. Included item 253a-253c	NR
99	253 a	Core (not shown)	Various	Various	Ferrites	cURus
99	253 b	Magnet wire (Not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat. min. 155°C	UR
99	253 c	Bobbin (not shown)	Various	Various	Phenolic, Rated V-0, 150°C, min. 2.2mm thick.	cURus
99	254	Inductance(L3)	Various	Various	Refer to illustration 60a for details. Included item 254a-254c	cURus
99	254 a	Core (not shown)	Various	Various	Ferrites	cURus
99	254 b	Primary winding (not shown)	Various	Various	Enamel copper wire, Polyurethane basecoat. min. 155°C.	UR
99	254 c	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat. min. 130°C.	UR
99	255	Transformer T1 V	Various	Various	Refer to illustration 60b for details Included item 255a-255e	NR
99	255 a	Core (not shown)	Various	Various	Copper conductor, green-yellow.	cULus
99	255 b	Bobbin (not shown)	Various	Various	Phenolic, rated 94V-0, 150°C, min. 2.2mm thick.	cURus
99	255 c	Magnet wire (Not shown)	Various	Various	Copper wire, 155°C	UR

4.0 Critical Components						
Photo #	Item no.	Name	Manufacturer/ trademark ¹	Type / model ²	Technical data and securement means	Mark(s) of conformity ³
99	255 d	Gas tube	Various	Various	Rated 500Vac, 105°C.	cURus
99	255 e	Secondary winding (not shown)	Various	Various	Triple insulated wire, Polyurethane basecoat, min. 130°C.	UR
99	256	X capacitor(CX1)	Various	Various	CX1 type, rated 310VAC(P=10mm, T=7.6), 110°C	cURus
99	257	Y-Capacitor (CY1)	Various	Various	CY1, CY3, CY4 type, Rated 12BH, min 400V	cURus
100	258	Emergency LED Driver	Shen zhen Eilida Technology Co., Ltd.	ELED-1MXN-120	Input: 100-277Vac, 50/60Hz, 0.08A, 5W; Output: 60-120Vdc, 5W; ta: 10°C to 55°C, suitable for Group 10 models Secured to driver bracket by screws.	cURus
97	259	Potting Compound (Not shown)	SHENZHEN SHENGKANGTAI SILICONE MATERIAL CO. LTD.	HC620-XA HC620-XB	Rated V-0, 150°C, fully cover all components of LED Driver UVL-LQS60-72V-D128T, UVL-LQS60-72V-DTS, UVL-LQS60-72V-DGM, UVL-LQS60-72V-D12GM	cURus

NOTES:

- Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- "Various" means any type from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.
- 3) Indicates specific means to be verified, which assures the secured level of cybersecurity for the component. "UR" - indicates Unintentional (only visual) examination is necessary. "See 5.0" indicates Unintentional components or assemblies to be evaluated periodically (refer to section 5.0 for details).

5.0 Critical Unlisted CEC Components

SUBASSEMBLY

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
50	109	LED Driver	UNIVERSELITE CO., LTD	UVL-LE40-36V-D
Electrical Rating:			LVLE, isolated output. Input: 100-277Vac, 50/60Hz, 0.13-0.5A, 44W; Output: 30-42Vdc, 0.55-1.1A.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed 2+R:22Aug2018 CSA G22 2#250.13:2017 Ed 3 +E1	

COMPONENTS LIST

Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
50	107	50	108	50	110	50	111	50	112
51	113	51	114	51	115	51	116	51	117
51	118	51	119	51	120	50	129		

VERIFICATION PROCESS

Frequency: Annual	Test Site: CEC	Number of samples to test: 1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY

Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
50	109a	LED Driver	UNIVERSELITE CO., LTD	UVL-LE60-36V-D
Electrical Rating:			LVLE, isolated output. Input: 100-277Vac, 50/60Hz, 0.2-0.75A, 66W; Output: 30-42Vdc, 0.8-1.65A.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed 2+R:22Aug2018	

COMPONENTS LIST

Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
50	107	50	108	50	110	50	111	50	112
51	113	51	114	51	115	51	116	51	117
51	118	51	119	51	120	50	129		

VERIFICATION PROCESS

Frequency: Annual	Test Site: CEC	Number of samples to test: 1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
50	109b	LED Driver	UNIVERSELITE CO., LTD	UVL-LE80-36V-D
Electrical Rating:			Insulation class: NA	
LVLE, Isolated output. Input: 100-277Vac, 50/60Hz, 0.25-1A, 88W; Output: 30-42Vdc, 1.1-2.2A.				
Component Standard used:			UL 8750:2015 Ed.2+R.22Aug2018 CSA C22.2#250.13:2017 Ed.3 +E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
50	107	50	108	50	110	50	111	50	112
52	121	52	122	52	123	52	124	52	125
52	126	52	127	52	128	50	129		

VERIFICATION PROCESS		
Test Name	Test Parameters	Number of samples to test
Frequency: Annual	Test Site: CEC	1
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
61	142	LED driver 1 (not shown)	Universelite Co., Ltd.	UVL-LA60-108V-D
Electrical Rating:			Insulation class: NA	
non-isolated output for LED module Isolated output for sensor. Input: 100-277Vac, 50/60Hz, 6.2-0.7A, 60W. Output for LED module: 90-120Vdc, 0.53A. Output for sensor: 12Vdc, 200mA.				
Component Standard used:			UL 8750:2015 Ed.2+R.11Oct2019 CSA C22.2#250.13:2017 Ed.3 +E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	60	139a	54, 54a	140
66	141	61	143	61	144	61	145	61	146
61	147	61	151	61	152	61	153	61	154
61	155	61a	156	61	157	60a	167a		

VERIFICATION PROCESS		
Test Name	Test Parameters	Number of samples to test
Frequency: Annual	Test Site: CEC	1
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
61	142a	LED driver 2 (not shown)	UniverseLife Co., Ltd.	UVL-LM80-108V-D
Electrical Rating:		Non-isolated output for LED module; isolated output for sensor. Input: 100-277Vac, 50/60Hz, 0.26-0.9A, 80W. Output for LED module: 90-120Vdc, 0.76mA. Output for sensor: 12Vdc, 200mA.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed 2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed 3+E1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	61	143	61	144	61	145	61	146
61	147	61	151	61	152	61	153	61	154
61	166	61a	156	61	167	61a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
61	142b	LED driver 3	UniverseLife Co., Ltd.	UVL-LM100-108V-D
Electrical Rating:		Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.34-1.1A, 100W. Output for LED module: 90-120Vdc, 0.89A. Output for sensor: 12Vdc, 200mA.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed 2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed 3+E1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	61	143	61	144	61	145	61	146
61	147	61	151	61	152	61	153	61	154
61	166	61a	156	61	167	60a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
62	142c	LED driver 4 (not shown)	Universelife Co., Ltd.	UVL-LM120-108V-D
Electrical Rating:			Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.43-1.3A, 120W, Output for LED module: 90-120Vdc, 1.1A. Output for sensor: 12Vdc, 200mA.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed 2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed 3+E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	62	143a	62	144	62	145	62	146
62	148	62	151	62	152	62	153	62	154
62	166	62a	156	62	167	60a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
62	142d	LED driver 5	Universelife Co., Ltd.	UVL-LM150-108V-D
Electrical Rating:			Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.51-1.65A, 150W, Output for LED module: 90-120Vdc, 1.4A. Output for sensor: 12Vdc, 200mA.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed.2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed.3+E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	62	143a	62	144	62	145	62	146
62	145	62	151	62	152	62	153	62	154
62	163	62a	156	62	167	60a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
63	142e	LED driver 6 (not shown)	UniverseLife Co., Ltd.	UVL-LM180-108V-D
Electrical Rating:			Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.65-1.9A, 180W, Output for LED module: 90-120Vdc, 1.54A. Output for sensor: 12Vdc, 200mA.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed 2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed 3+E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	63	143b	63	144	63	145	63	146
63	149	63	151	63	152	63	153	63	154
63	165	63a	156	63	167	60a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
63	142f	LED driver 7	UniverseLife Co., Ltd.	UVL-LM200-108V-D
Electrical Rating:			Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.65-2.2A, 200W, Output for LED module: 90-120Vdc, 1.63A. Output for sensor: 12Vdc, 200mA.	Insulation class: NA
Component Standard used:			UL 8750:2015 Ed 2+R-11 Oct 2019 CSA C22.2#250.13:2017 Ed 3+E1	

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	54, 54a	139	56	139a	54, 54a	140
56	141	63	143b	63	144	63	145	63	146
63	149	63	151	63	152	63	153	63	154
63	165	63a	156	63	167	60a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name:	Test Parameters:	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
64	142g	LED driver 8	Universelle Co., Ltd.	UVL-LM240-108V-D
Electrical Rating:	Non-isolated output for LED module; isolated LVLE output for sensor. Input: 100-277Vac, 50/60Hz, 0.86-2.5A, 240W, Output for LED module: 90-120Vdc, 1.88A. Output for sensor: 12Vdc, 200mA.			Insulation class: NA
Component Standard used:		UL 8750:2015 Ed 2+R-11Oct2019 CSA C22.2#250.13:2017 Ed 3+E1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
60	137	60	138	64, 64a	139	66	139a	64, 64a	140
66	141	64	143b	64	144	64	145	64	146
64	150	64	151	64	152	64	153	64	154
64	165	64a	156	64	167	64a	167a		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171d	LED driver 15 (Not shown)	Universelle Co., Ltd.	UVL-LS100-260V-D12
Electrical Rating:	Non-isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.0A, 110W Max. Output: 180-260Vdc, 0.35-0.55A, 100W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. For model LEDGC100W/19- MD-CCT-CRI-8A-ZZ.			Insulation class: NA
Component Standard used:		UL 8750:2015 Ed 2+R-23Sep2021 CSA C22.2#250.13:2020 Ed 4+U1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171d	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	86	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171a	LED driver 1f (Not shown)	Universelife Co., Ltd.	UVL-LS150-260V-D12
Electrical Rating:		Non-Isolated output for LED Module, constant current. Ia:50°C, Ic:90°C. Input: 100-277Vac, 50/60Hz, 1.5A, 165W Max. Output: 180-260Vdc, 0.52-0.75A, 150W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. For model LEDGC150W019- MD-CCT-CRI-BA-ZZ.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed.2+R.23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171a	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	86	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171f	LED driver 1f (Not shown)	Universelife Co., Ltd.	UVL-LS200-260V-D12
Electrical Rating:		Non-Isolated output for LED Module, constant current. Ia:50°C, Ic:90°C. Input: 100-277Vac, 50/60Hz, 2.0A, 220W Max. Output: 180-260Vdc, 0.7-1.0A, 200W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. For model LEDGC200W019- MD-CCT-CRI-BA-ZZ.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed.2+R.23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171f	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	86	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171g	LED driver 18 (Not shown)	Universelife Co., Ltd.	UVL-LS240-280V-D12
Electrical Rating:				Insulation class: NA
Non-Isolated output for LED Module, constant current, Ia:50°C, Ic:90°C. Input: 100-277Vac, 50/60Hz, 2.4A, 264W Max. Output: 180-260Vdc, 0.84-1.2A, 240W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. For model LEDGC240W019- MD-CCT-CRI-BA-ZZ.				
Component Standard used: UL 8750:2015 Ed.2+R-23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1				

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171g	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	86	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171h	LED driver 19	Universelife Co., Ltd.	UVL-LS80-260V-D12
Electrical Rating:				Insulation class: NA
Non-Isolated output for LED Module, constant current, Ia:50°C, Ic:90°C. Input: 100-277Vac, 50/60Hz, 0.8A, 80W Max. Output: 180-260Vdc, 0.28-0.44A, 80W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE. Suitable for wet locations. For model LEDGC80W019-MD-CCT-CRI-BA-ZZ.				
Component Standard used: UL 8750:2015 Ed.2+R-23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1				

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171h	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	86	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171i	LED driver 20	Universelife Co., Ltd.	UVL-LS120-260V-D12
Electrical Rating		Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.2A, 132W Max. Output: 180-260Vdc, 0.4-0.6A, 120W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE, Suitable for wet locations. For model LEDGC120W019- MD-CCT-CRI-BA-ZZ.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed.2+R:23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171i	84	177	84	178	84	179	86	180
86	181	86	182	86	183	88	184	88	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
72	171j	LED driver 21	Universelife Co., Ltd.	UVL-LS150-260V-D12
Electrical Rating:		Non-Isolated output for LED Module, constant current, ta:50°C, tc:90°C. Input: 100-277Vac, 50/60Hz, 1.8A, 198W Max. Output: 180-260Vdc, 0.63-0.9A, 180W Max. Provided 0-10V/PWM/Resistor Dimming Function with assistant output (Aux): CV, 12V, 0.2A, LVLE, Suitable for wet locations. For model LEDGC180W010- MD-CCT-CRI-BA-ZZ.		Insulation class: NA
Component Standard used:		UL 8750:2015 Ed.2+R:23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1		

COMPONENTS LIST									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
72	171j	84	177	84	178	84	179	86	180
86	181	86	182	86	183	86	184	88	185
87	186	87	187	87	188	87	189	87	190
87	191	87	192	87	193	87	197		

VERIFICATION PROCESS		
Frequency:	Test Site:	Number of samples to test:
Annual	CEC	1
Test Name	Test Parameters	
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
95	217	LED driver 22	UNIVERSELITE CO., LTD	UVL-LG990-108V-D12ST
Electrical Rating:			Insulation class: NA	
LVLE, isolated output Input: 100-277Vac, 50/60Hz, 0.33-1.0A, 90W Output: 85-120Vdc, 0.75-1.18A (For LEDBG90W004-BR-CCT-CRI-ZZ)				
Component Standard used: UL 8750:2015 Ed.2+R:23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1				

COMPONENTS LIST (refer to illustration for assembly drawing)									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
95	214	95	215	95	216	96	217	96	218
96	219	96	220	96	221	96	222	96	223
96	224	96	225	96	226	96	227	96	228

VERIFICATION PROCESS		
Test Name	Test Parameters	
Frequency: Annual	Test Site: CEC	Number of samples to test: 1
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components				
SUBASSEMBLY				
Photo #	Item no.	Name	Manufacturer/Trademark	Type / model
97	236	LED driver 23	UNIVERSELITE CO., LTD	UVL-LQ360-72V-D128T
Electrical Rating:			Insulation class: NA	
Input: 100-277Vac, 50/60Hz, 0.2-0.6A, 60W; Output: 50-80Vdc, 0.72-1.08A (For LEDBG60W004-BR-CCT-CRI-ZZ)				
Component Standard used: UL 8750:2015 Ed.2+R:23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1				

COMPONENTS LIST (refer to illustration for assembly drawing)									
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.
97	236	97	237	97	238	97	239	98	240
98	241	98	242	98	243	98	244	98	245
98	246								

VERIFICATION PROCESS		
Test Name	Test Parameters	
Frequency: Annual	Test Site: CEC	Number of samples to test: 1
Verify Construction	Per the component descriptions noted above	

5.0 Critical Unlisted CEC Components										
SUBASSEMBLY										
Photo #	Item no.	Name	Manufacturer / Trademark				Type / model			
99	247	LED driver 24	UNIVERSELITE CO., LTD				UVL-LGS30-72V-D12ST			
Electrical Rating		Input: 100-277Vac, 50/60Hz, 0.1-0.8A, 30W, Output: 50-80Vdc, 0.36-0.54A, (For LEDBG30W004-BR-CCT-CRI-ZZ)					Insulation class: NA			
Component Standard used:		UL 8750:2015 Ed.2+R.23Sep2021 CSA C22.2#250.13:2020 Ed.4+U1								
COMPONENTS LIST (refer to illustration / or assembly drawing)										
Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	Photo #	Item no.	
99	257	99	248	99	249	99	250	99	251	
99	252	99	253	99	254	99	255	99	256	
99	257									
VERIFICATION PROCESS										
Frequency: Annual		Test Site: CEC				Number of samples to test: 1				
Test Name		Test Parameters								
Verify Construction		Per the component descriptions noted above								

6.0 Critical Features

Recognized Component - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

Listed Component - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

Unlisted Component - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

Critical Features/Components - An essential part, material, subassembly, system, software, or accessory of a product that has a direct bearing on the product's conformance to applicable requirements of the product standard.

Construction Details - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply:

1. **Spacing** - For models rated 100V, in primary circuits, 3.2 mm minimum spacing are maintained through air and 0.4 mm over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts or low voltage isolated circuits.

For models rated 100-277V, in primary circuits, 6.4 mm minimum spacing are maintained through air and 0.5 mm over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts or low voltage isolated circuits.

For models rated 277-480V, in primary circuits, 9.5 mm minimum spacing are maintained through air and 0.5 mm over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts or low voltage isolated circuits.
2. **Mechanical Assembly** - Components such as switches, switches, connectors, wiring terminals and display lamps are mounted and prevented from shifting or rotating by the use of lockwashers, starwashers, or other mounting format that prevents turning of the component.
3. **Corrosion Protection** - All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
4. **Grounding** - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed to contact during any servicing operation are to be connected to the grounding lead and connected to the equipment grounding terminal.
5. **Accessibility of Live Parts** - All uninsulated live parts in primary circuitry are housed within a metal enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
6. **Isolated Connection** - This product is provided with a polarized power supply connection. All circuit breaker switches and fuses are connected only to the ungrounded supply circuit conductor.
7. **Internal Wiring** - Internal wiring is routed away from sharp or moving parts. Internal wiring leads terminating in soldered connections are made mechanically secure prior to soldering. Recognized Component evaluable (quick disconnect) connectors of the positive detent type, closed loop connectors, or other types specifically described in the text of this report are also acceptable as internal wiring terminals. At points where internal wiring passes through metal walls or partitions, the wiring insulation is protected against abrasion or damage by plastic bushings or grommets.
8. **Markings** - The product is marked on a labeling system item 18, 33, 54, 71, 80, 170 of Section 4.0 as follows:
(Refer to item 12 for format designation of marking.)
b) Applicant Name or Brand Name (S16-L2)
c) Model number (S16-L2)
d) Date code of at least the month and year of manufacture (S16-L2)
e) Input rating in volts(V), hertz(HZ), and total amperes(A) or watts(W) (S16-L3)

6.0 Critical Features

9. **Cautionary Markings** - The following are required as below:
The product is marked on a labeling system as described in (item no. 1B, 33, 54, 7), 9D, 17II of Section 4.0.
- Warning markings for location use - (See Sec. 2.C of this report)
- Units for wet location use: **"SUITABLE FOR WET LOCATIONS"** and **"CONVIENT AUX EMPLACEMENTS MOUILLÉS"** (S16-L2, Verbatim)
 - Units for damp location use: **"SUITABLE FOR DAMP LOCATIONS"** & **"CONVIENT AUX EMPLACEMENTS HUMIDES"** (S16L2, Verbatim)
 - units for ceiling-mounted: **"COVERED CEILING MOUNT ONLY"** and **"INSTALLATION SUR PLAFOND COUVERT SEULEMENT"** (S16-L2)
- Warning markings for mounting -
- For wall mount unit: **"WALL MOUNT ONLY"** & **"INSTALLATION MURALE SEULEMENT"** (S16-L2, Verbatim)
 - For wall mount unit: **"MOUNTING ORIENTATION - (Such as this end up)"** & **"SENS DE MONTAGE (par exemple, cette extrémité vers le haut)"** (S16-L2)
 - **"MIN 90 °C SUPPLY CONDUCTORS"** and **"LES FILS D'ALIMENTATION 90 °C MIN"** (S16-L3),(S32-L4)
- Warning markings for ambient temperature -
- For models with $T_a=45^{\circ}\text{C}$:
"SUITABLE FOR OPERATION IN AMBIENT NOT EXCEEDING 45°C" &
"PEUT ÊTRE UTILISÉ À UNE TEMPÉRATURE AMBIANTE N'EXCÉDANT PAS 45°C" (S16-L2)
- Warning markings for Emergency battery packs -
- For models with EM Lighting Battery Packs:
"THIS LUMINAIRE IS PROVIDED WITH A FACTORY INSTALLED EMERGENCY LIGHTING BATTERY PACK" &
"CE LUMINAIRE EST ÉQUIPÉ EN USINE D'UNE BATTERIE DES LUMIÈRES D'URGENCE". (S16L2)
- Warning markings for polarity -
- For neutral conductor: **"N"**, **"NEUTRAL"**, **"W"** or **"WHITE"** (S16-L3) if may be indicated by white wire for neutral supply wire connection.
 - For grounding conductor and terminal: **"G"**, **"GR"**, **"GRD"**, **"GND"**, **"GRND"**, **"GROUND"** or grounding symbol (refer to illustration 44) (S16-L3)
10. **Installation, Operating and Safety Instructions** - Instructions for installation and use of this product are provided by the manufacturer.
The instruction manual shall contain the following information:
1. **INSTALLATION OR ASSEMBLY INSTRUCTIONS**
Wiring instructions that specify the proper method of connecting the grounding member and maintaining polarity shall be included with the luminaire in a manner that will require the installer to handle the instructions during installation. (S16-L5)
11. **Carton Marking** - The carton or container shall be marked with the installation warning on the outside of product carton except bottom side, refer to illustration No. 26 for details. (S34-L4)
13. **Schematics** - Refer to Illustration No(s). 27, 27a, 34-41, 46, 54 for schematics requiring verification during Field Representative Inspection Audits.
1. Illustration No(s). 27, 27a, 34-37 - Verify whether the circuit diagram are identical as the products.
2. Illustration No(s). 27, 27a, 38-41 - Verify whether the position of critical components which specified in table 4.0, are identical as the products.
14. **Transformer** - Supplier records must be provided that indicate the received shipment of transformers (Section 4.0, Item 14, 120, 147-151, 191, 224, 241, 255) was constructed as indicated in illustration 24, 28a, 30-33, 35a-47, 58,59, 60. These records must be available at the factory for inspection on every received shipment.

7.0 Illustrations

Illustration 45 - Ratings

Model No.	Voltage	Frequency	Wattage
LEDGC150W004, LEDGC150W005	100-240V/277V	50/60Hz	150W
LEDGC120W004, LEDGC120W005	100-240V/277V	50/60Hz	120W
LEDGC100W004, LEDGC100W005	100-240V/277V	50/60Hz	100W
LEDGC80W004, LEDGC80W005	100-240V/277V	50/60Hz	80W
LEDGC50W004, LEDGC50W005	100-240V/277V	50/60Hz	50W
LEDBG42W001	100-240V/277V	50/60Hz	42W
LEDBG30W001	100-240V/277V	50/60Hz	30W
LEDBG22W001	100-240V/277V	50/60Hz	22W
LEDBG18W001	100-240V/277V	50/60Hz	18W
LEDBG13W001	100-240V/277V	50/60Hz	13W
LEDYZ120W001, LEDYZ120W001-D	100-240V/277V	50/60Hz	120W
LEDYZ100W001, LEDYZ100W001-D	100-240V/277V	50/60Hz	100W
LEDYZ85W001, LEDYZ85W001-D	100-240V/277V	50/60Hz	85W
LEDYZ40W001, LEDYZ40W001-D	100-240V/277V	50/60Hz	40W
LEDFO20W001	100-240V/277V	50/60Hz	20W
LEDFO30W001-120V	120V	50/60Hz	20W
LEDFO20W001-240V	240V	50/60Hz	20W
LEDFO30W001-208V	208V	50/60Hz	20W
LEDFO30W001-277V	277V	50/60Hz	20W
LEDFO12W001, LEDFO12W002,	100-240V/277V	50/60Hz	12W
LEDBG30W003SY-CT-CRI-ZZ	100-277V	50/60Hz	30W
LEDBG40W003SY-CT-CRI-ZZ	100-277V	50/60Hz	40W
LEDBG50W003SY-CT-CRI-ZZ	100-277V	50/60Hz	50W
LEDBG60W003SY-CT-CRI-ZZ	100-277V	50/60Hz	60W
LEDBG80W003SY-CT-CRI-ZZ	100-277V	50/60Hz	80W
LEDBG100W003SY-CT-CRI-ZZ	100-277V	50/60Hz	100W
LEDBG120W003LY-CT-CRI-ZZ	100-277V	50/60Hz	120W
LEDBG135W003LY-CT-CRI-ZZ	100-277V	50/60Hz	135W
LEDGC50W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	50W
LEDGC60W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	60W
LEDGC80W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	80W
LEDGC100W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	100W
LEDGC120W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	120W
LEDGC150W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	150W
LEDGC180W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	180W
LEDGC200W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	200W
LEDGC240W015H-CT-CR-BA-ZZ	100-277V	50/60Hz	240W
LEDGC150W015B3HV-CT-CR-BA-ZZ	277-480V	50/60Hz	150W
LEDGC200W015B3HV-CT-CR-BA-ZZ	277-480V	50/60Hz	200W
LEDGC80W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	80W
LEDGC100W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	100W
LEDGC120W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	120W
LEDGC150W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	150W
LEDGC180W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	180W
LEDGC200W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	200W
LEDGC240W019-MD-CCT-CRI-BA-ZZ	100-277V	50/60Hz	240W
LEDGC80W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	80W
LEDGC100W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	100W
LEDGC120W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	120W
LEDGC150W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	150W
LEDGC180W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	180W
LEDGC200W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	200W
LEDGC240W019A-MD-CCT-CRI-BA-ZZ	120-277V	50/60Hz	240W
LEDBG30W004-BR-CCT-CRI-ZZ	100-277V	50/60Hz	30W
LEDBG60W004-BR-CCT-CRI-ZZ	100-277V	50/60Hz	60W
LEDBG90W004-BR-CCT-CRI-ZZ	100-277V	50/60Hz	90W

7.2 Illustrations

Illustration 56 - Circuit diagram of Control Module for models LEDBG90W004-BR-CCT-CRI-ZZ

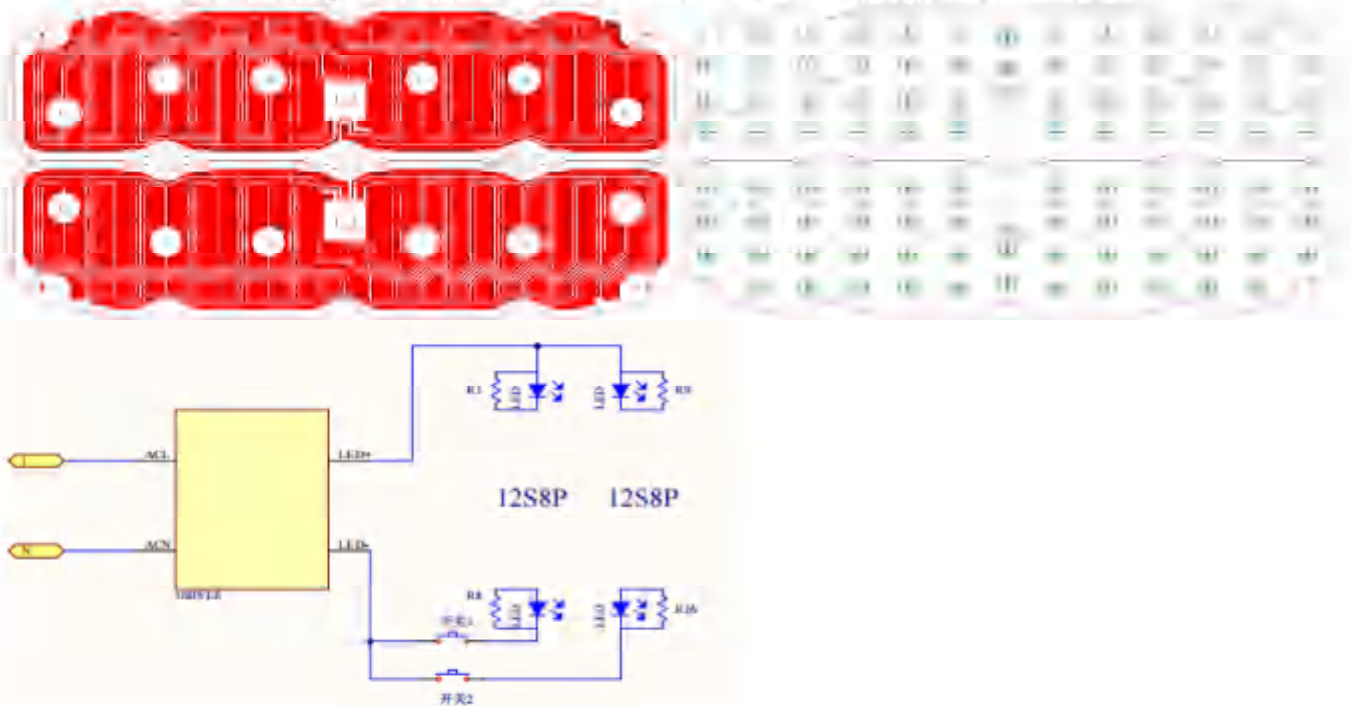
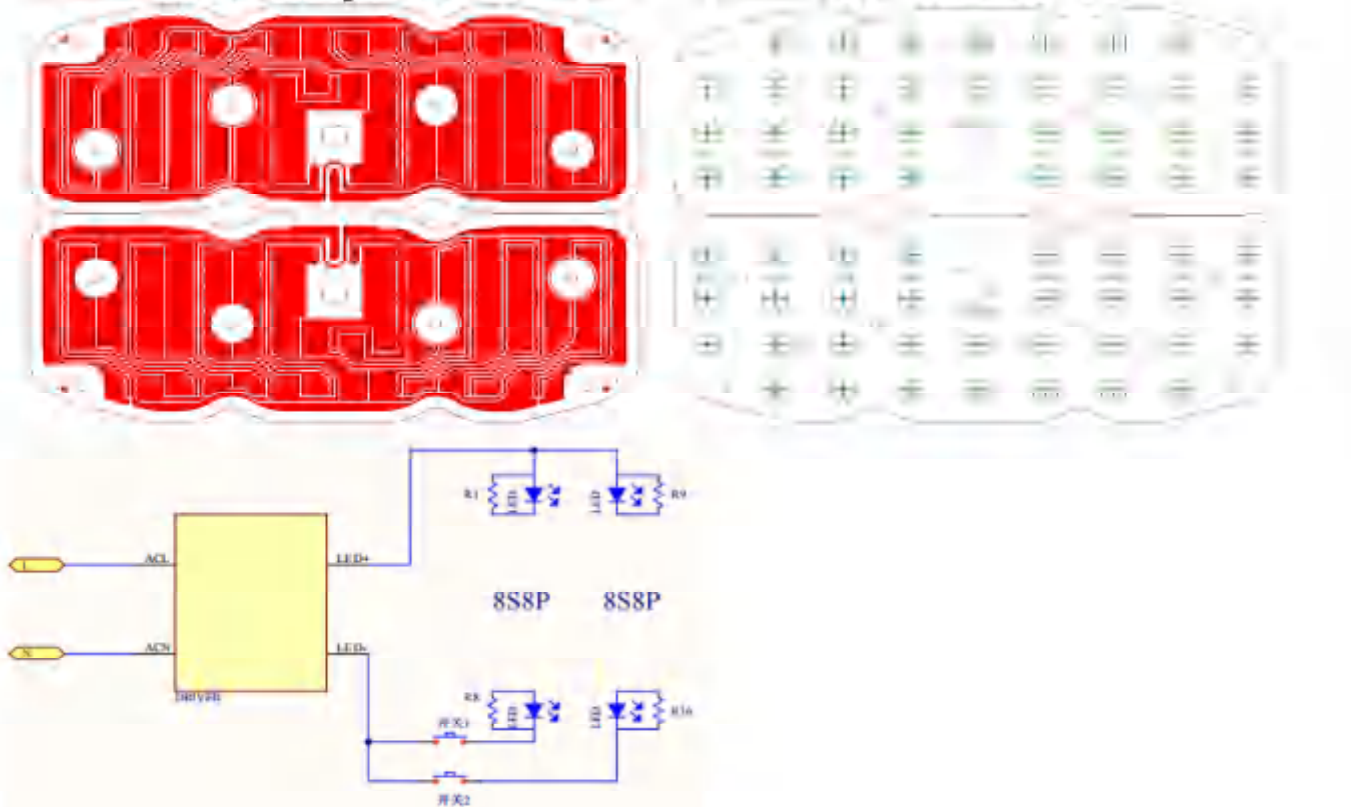


Illustration 56a - Circuit diagram of Control Module for models LEDBG60W004-BR-CCT-CRI-ZZ



7.2 Illustrations

Illustration 56b - Circuit diagram of Control Module for models LEDBG30W004-BR-CCT-CRI-ZZ

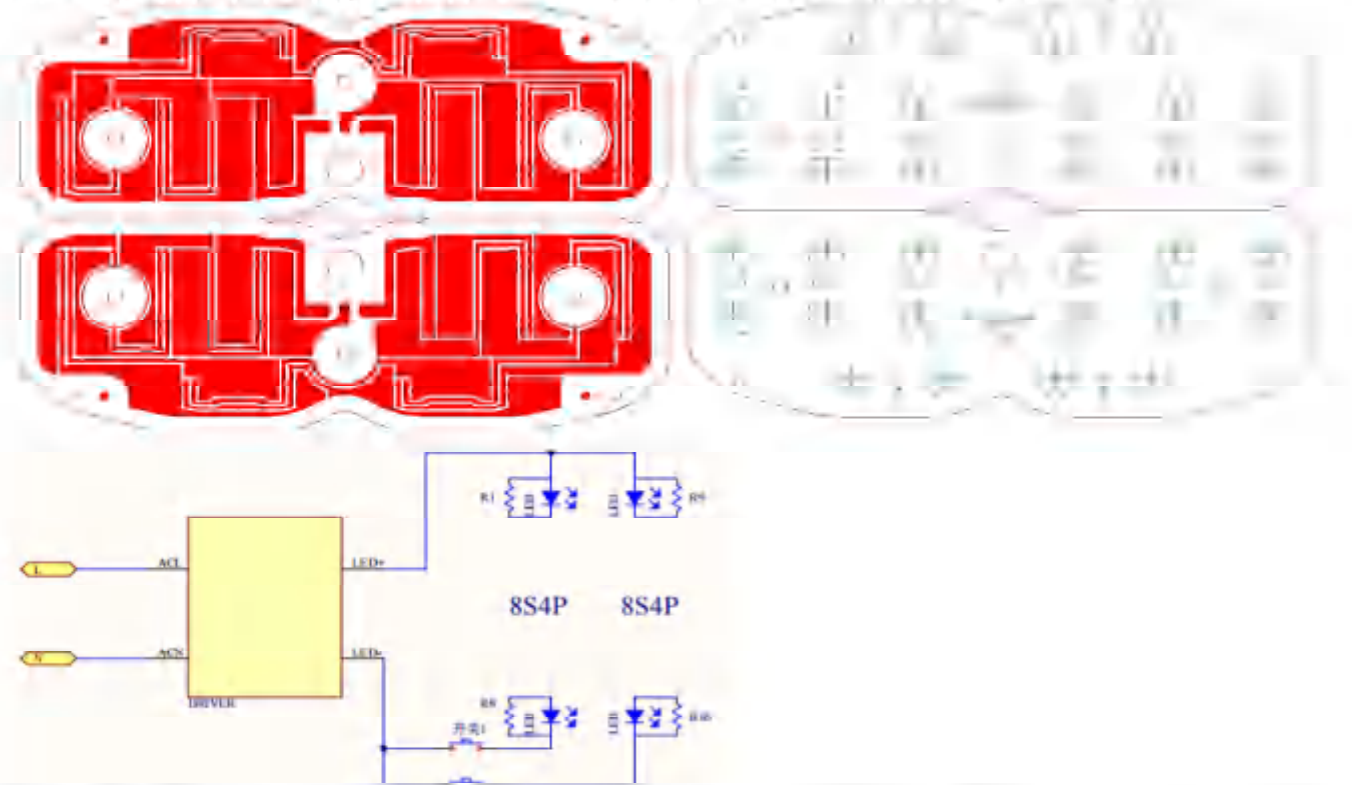
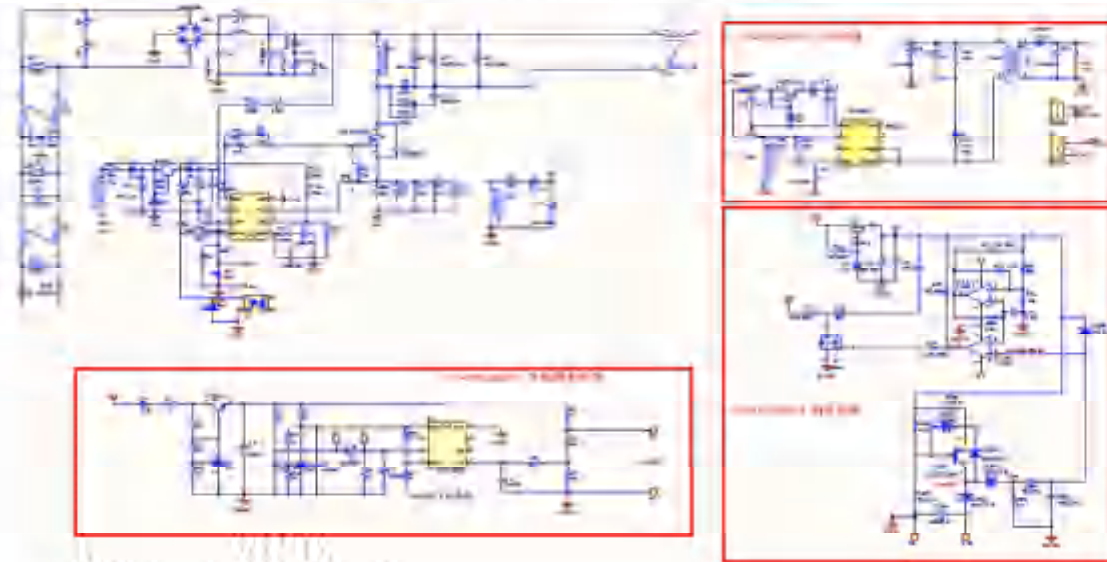
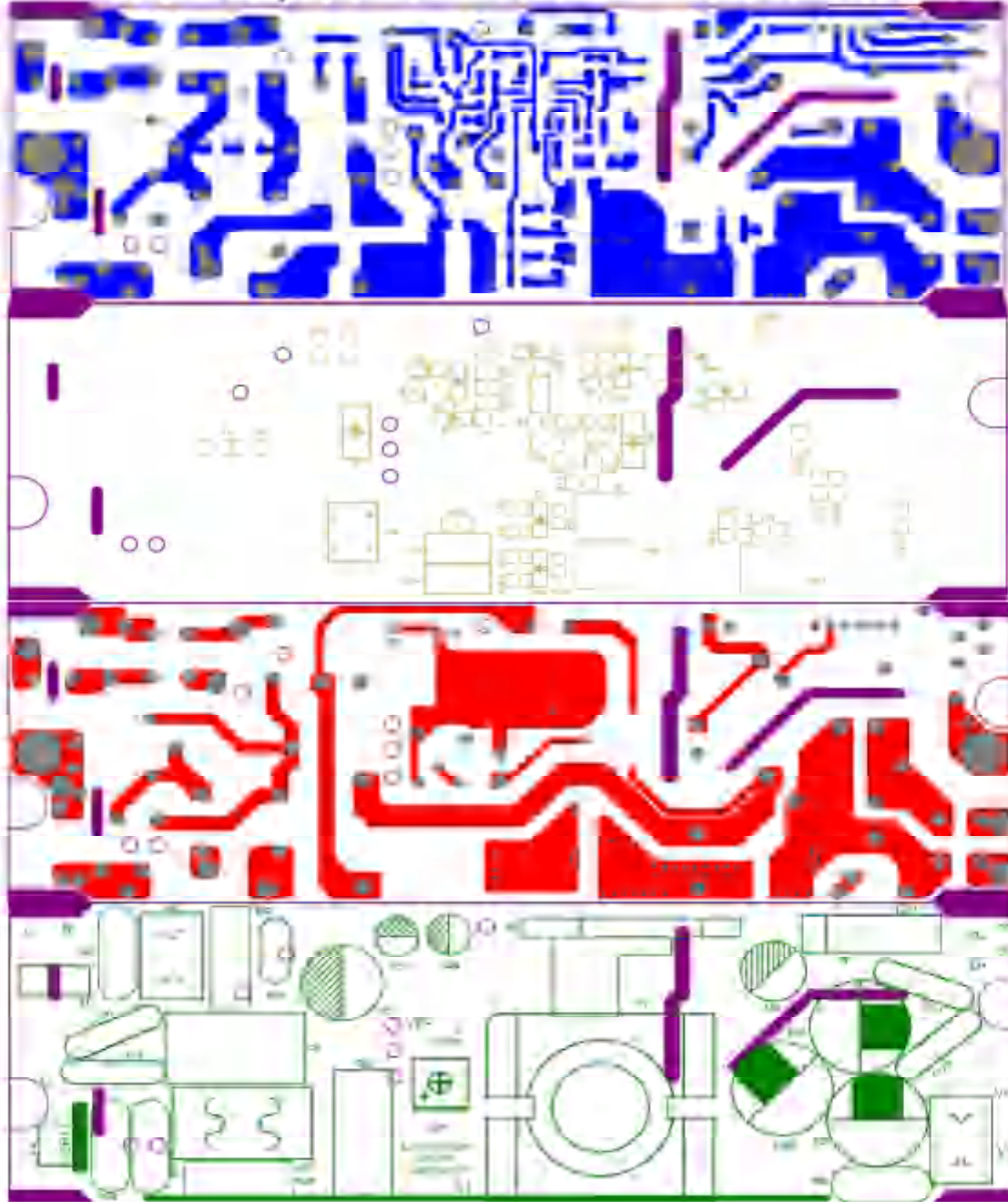


Illustration 57 - Circuit diagram of Control Module for Driver models LOS90W-108V-D12ST, also represent models LQS60W-72V-D12ST and models LQS30W-72V-D12ST,



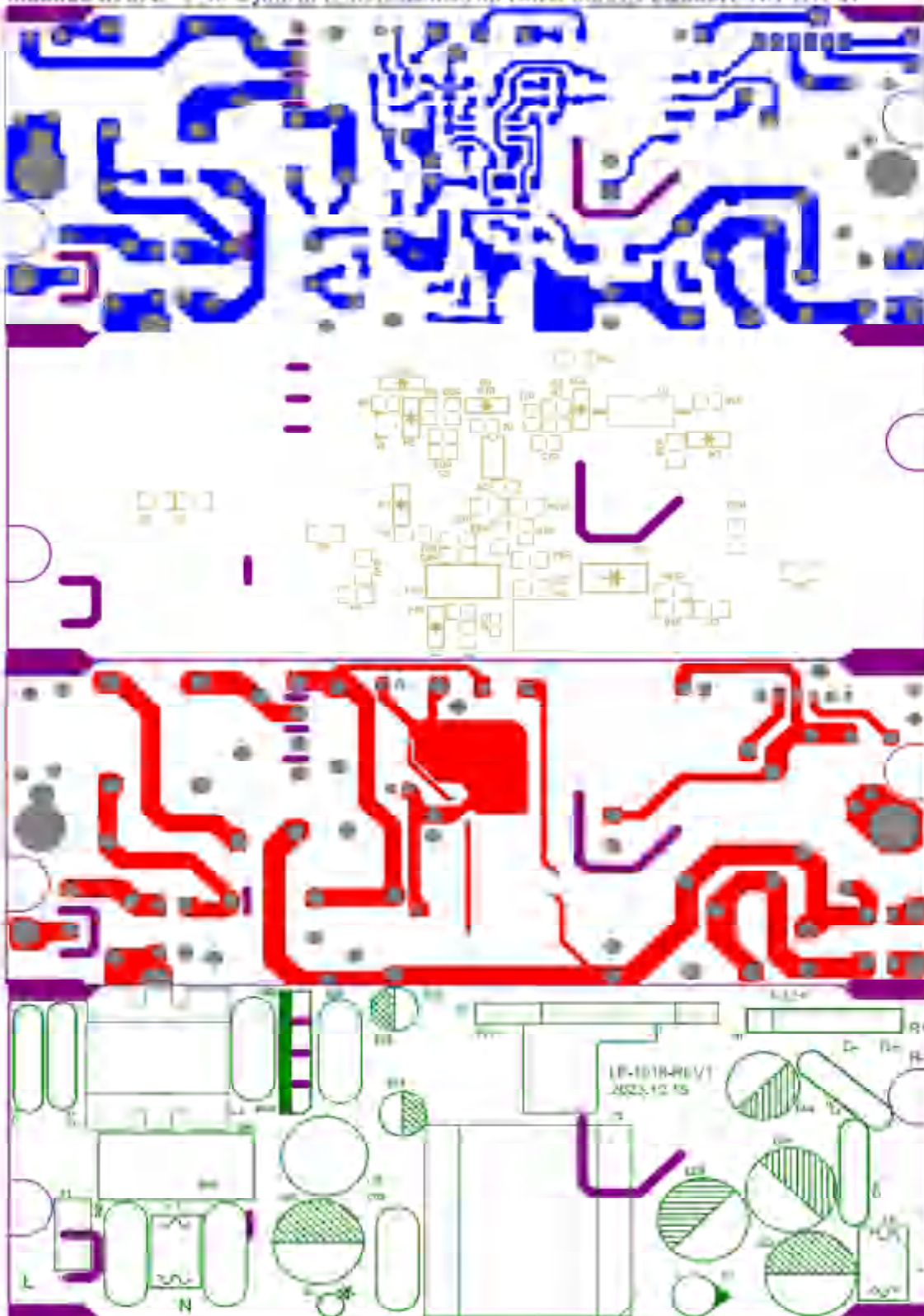
7.0 Illustrations

Illustration 57a - PCB layout of Control Module for Driver models LQS90W-1D8V-D12ST



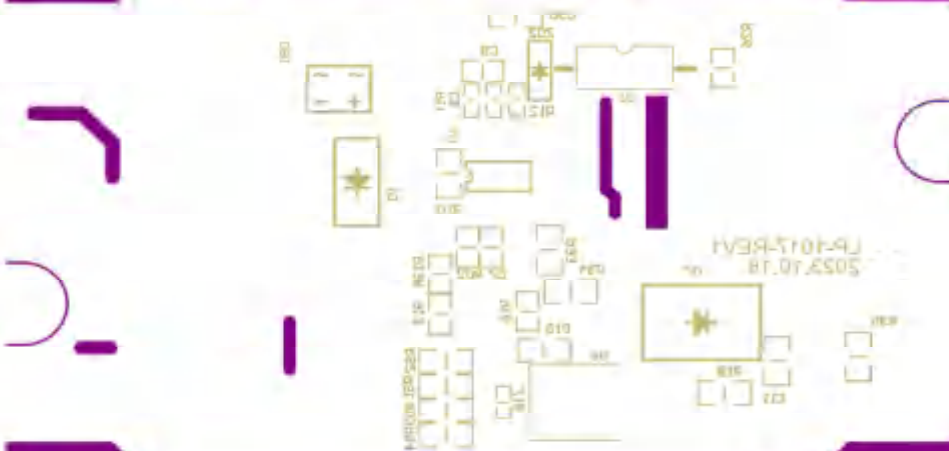
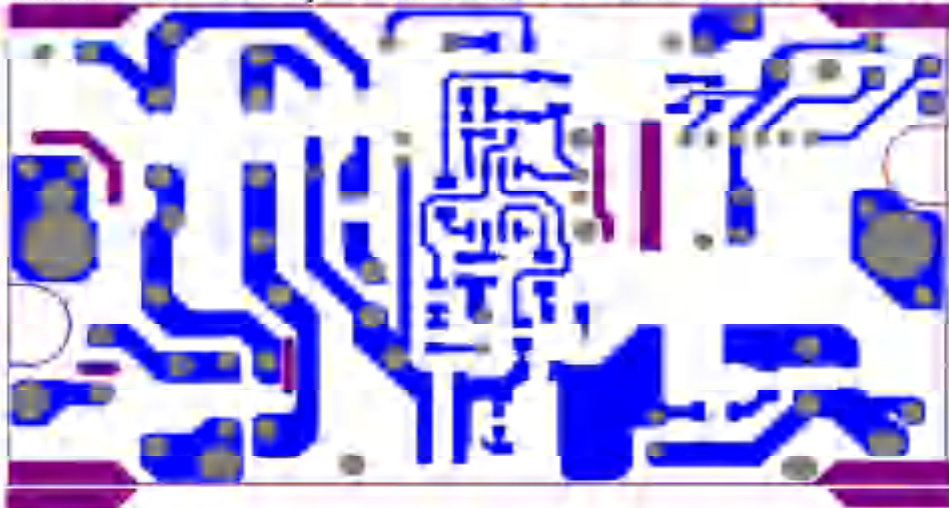
7.0 Illustrations

Illustration 57b - PCB layout of Control Module for Driver models LOS60W-72V-D12ST



7.0 Illustrations

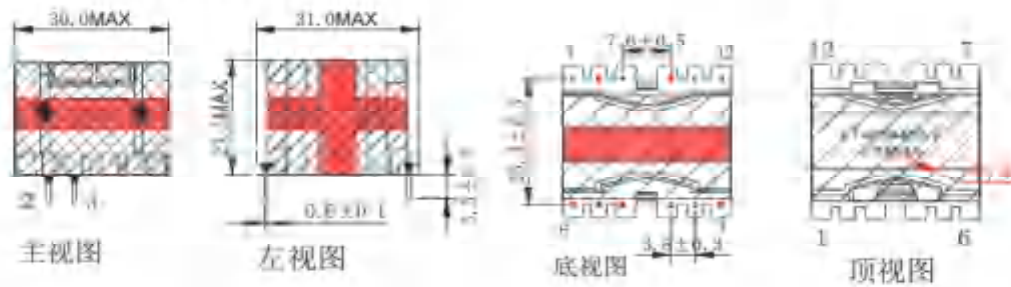
Illustration 57c - PCB layout of Control Module for Driver models LQS30W-72V-D12ST



7.0 Illustrations

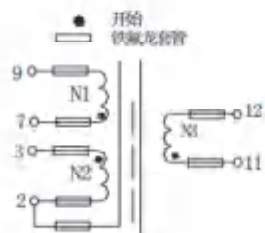
Illustration 58 - Specification of Transformer T1 III for LED driver 22

1. 尺寸图: (※无公差尺寸为参考值)

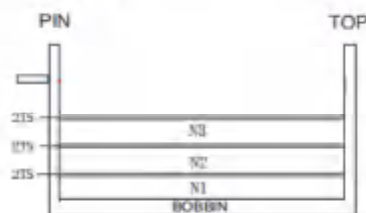


备注: 磁芯接口处内侧点胶4点 拔掉PIN 1,4,5,6,8,10脚

3. 电气连接图:



4. 结构图



5. 绕线表

线组	起末端				线规格	铁氟龙套管		圈数	胶带	绕线方法
	开始	槽	结束	槽		开始	结束			
N1	7		9		DSTC QA-1 Φ0.14mm±0.01	≥ 15mm	≥ 10mm	50	0.025*10.0mm±0.1	沿槽 加层间胶带
N2	4		12		FFB-B Φ0.20mm	≥ 15mm	≥ 10mm	16	0.025*10.0mm±0.1	沿槽
N3	11		12		FFB-B Φ0.20mm	≥ 15mm	≥ 10mm	15	0.025*16.0mm±0.1	均绕
沿磁芯方向包胶带									0.025*7.0mm±0.1	
铜箔2 沿磁芯方向包										
铜箔: 沿绕线方向包过2槽接PIN2脚										可互换, 但保证两者与磁芯相套
沿绕线方向包胶带									0.025*14.0mm±0.1	
沿磁芯方向包胶带									0.025*20.0mm±0.1	

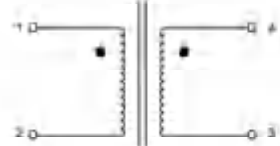
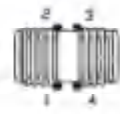
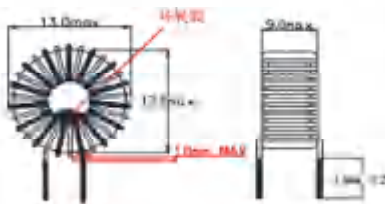
备注: 套管长度按实际套情况, 按原图尺寸输入。

7.0 Illustrations

Illustration 58a - Specification of Transformer L3 for LED driver 22

1. 尺寸图: (※无公差尺寸为参考值)

2. 电气原理图



绕线表

起末端	材料规格	圈数(T)
1-2	TK1-B $\phi 0.50/130^{\circ}\text{C}$	15
4-3	QA-1 $\phi 0.50/155^{\circ}\text{C}$	15

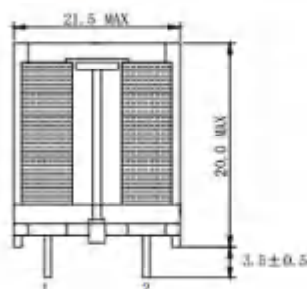
先绕二层绝缘线, 在绕漆包线

主要技术参数

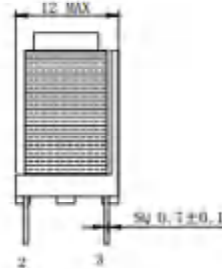
项目名称	测试端	技术要求	测试条件	测试仪器
电感	1-2	$\geq 1.0\text{mH}$	1kHz, 0.3V (内阻: 30Ω)	HG2810

Illustration 58b - Specification of Transformer LP2 for LED driver 22

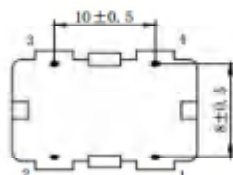
DIMENSION: (UNIT:mm)



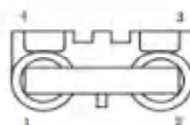
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



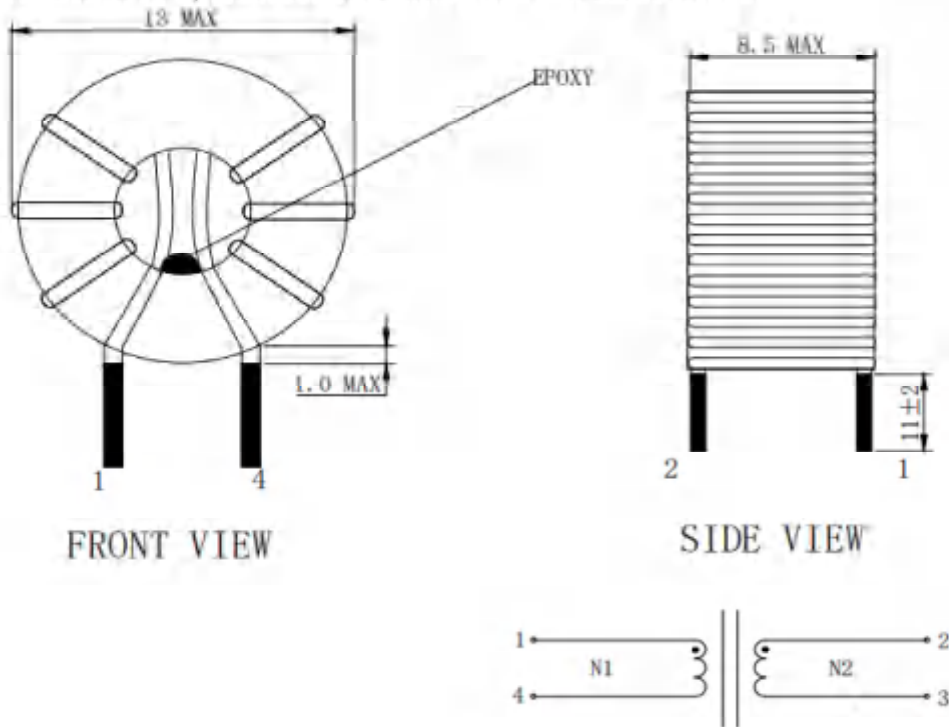
TOP VIEW

WINDING STRUCTURE:

绕组	开始/结束	圈数	线号/铜箔	绝缘材料	外层绝缘胶布	绕线槽	绕线方式
N1	1-4	57REF	0.13*1.0 2UEW				紧密绕
N2	2-3	57REF	0.13*1.0 2UEW				紧密绕

7.0 Illustrations

Illustration 58c - Specification of Transformer L6 for LED driver 22



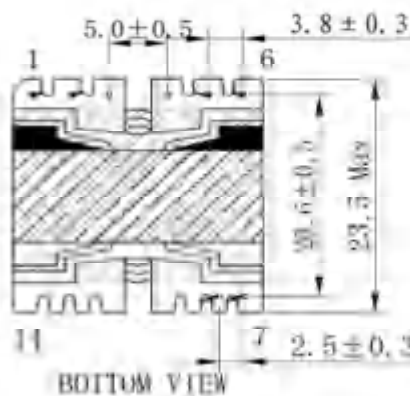
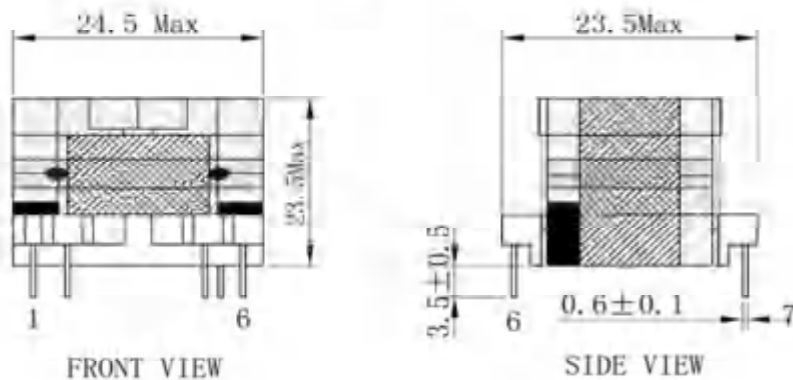
BOTTOM VIEW

WINDING STRUCTURE:

绕组	开始/结束	圈数	线号/规格	绝缘漆包	外层绝缘漆包	绕线槽	绕线方式
N1	1-4	4	0.7ΦQA-1				
N2	2-3	4	0.7ΦQA-1				

7.0 Illustrations

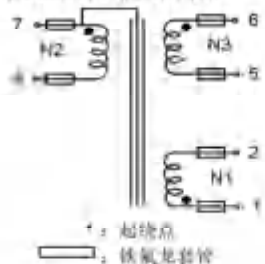
Illustration 59 - Specification of Transformer T1 IV for LED driver 23



说明:

1. 骨架拔除 Pin3/4/9/10/11/12 脚;
2. 磁芯接缝处点四点黑胶;
3. Pin1-6 脚侧磁芯用 0.025*16*2L 淡黄色胶带两层;
4. 线包方向先用 0.025*12 胶布包满层, 再用宽 5mm*0.025 自粘铜箔包一圈, 焊点在 1-12 脚侧, 并接地线到 7 脚, 最后再 15*0.025 胶带再外包 2 层;
5. 产品真空浸漆, 并烘干;
6. 产品顶部标识, 字脚朝 Pin1-6 脚侧;

4.1 电气原理图和线圈结构图



(线圈结构图)

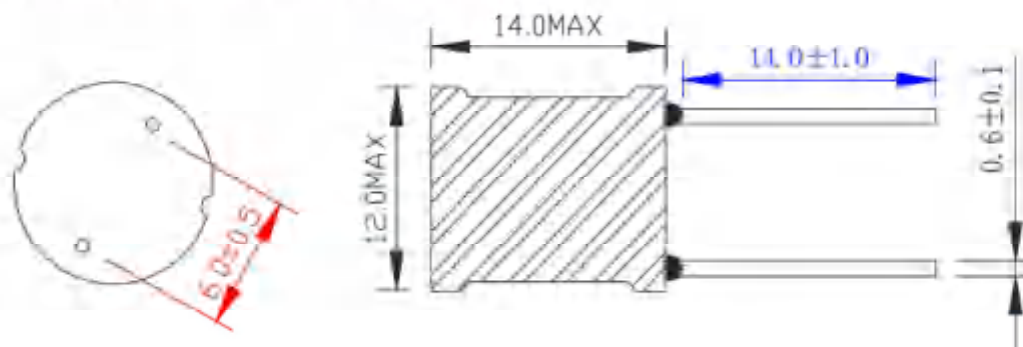
4.2 线圈参数

No	绕组 序号	通断顺序 (S-F)	绕组规格	圈数	组间 绝缘	排线 方式	绕线		空管	
							PIN	TOP	S	F
1	N1	3-2	2UEW00.10mm*20*1F	60	2	密绕	—	—	19#	19#
2	N2	7-8	2U03V00.25mm*1F	27	2	密绕	—	—	24#	24#
3	N3	6-5	—层绝缘线 Ø0.18mm	27	3	密绕	—	—	22#	22#
1-6 脚侧磁芯用 0.025*16mm*2Ls 淡黄										
沿线包方向外包 12mm*0.025 淡黄色胶带 2 层										
沿线包方向外包 0.025*5mm 自粘铜箔一层, 焊点在 1-12 脚侧, 并接 7 脚										
沿磁包方向外包 15mm*0.025 淡黄色胶带 2 层										
沿磁芯方向外包 15mm*0.025*2L 淡黄色胶带 1 层										

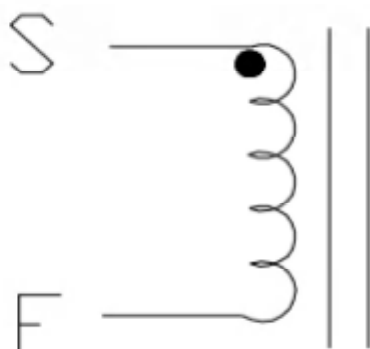
7.0 Illustrations

Illustration 59a - Specification of Transformer L01 for LED driver 23

1. 尺寸图：（※无公差尺寸为参考值）



电气连接图：



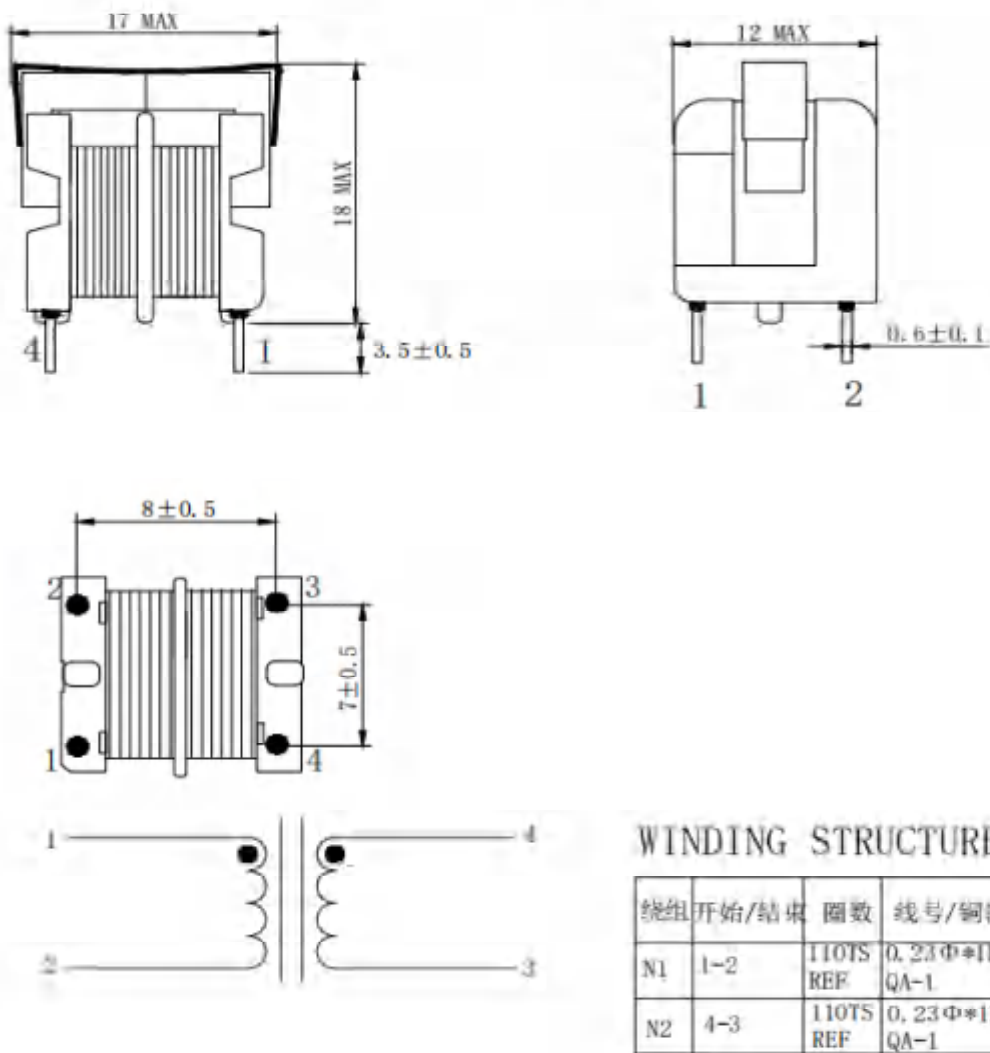
4. 绕线表

起末端	材料规格	圈数	绕线方法
S-F	QA-1 $\phi 0.31$ 155 $^{\circ}$ C	152 (REF)	密绕

*缠脚高度不大于1.0mm

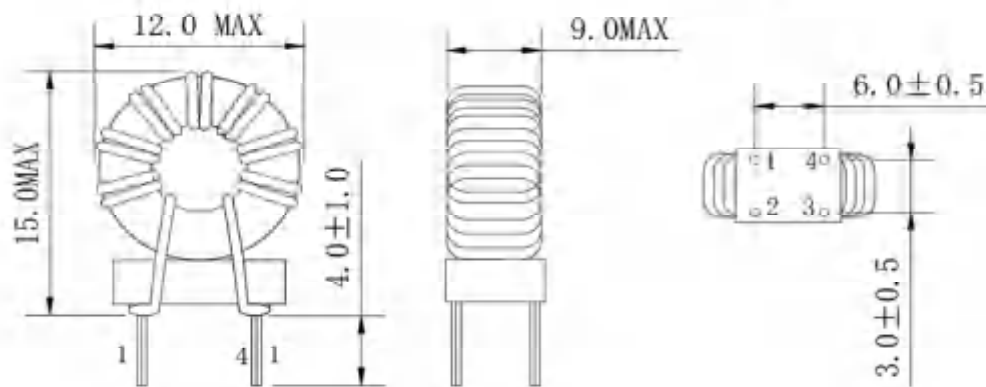
7.0 Illustrations

Illustration 60 - Specification of Transformer L2 for LED driver 24



7.0 Illustrations

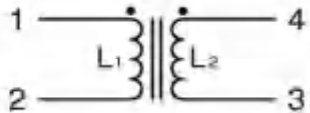
Illustration 60a - Specification of Transformer L3 for LED driver 24



说明:

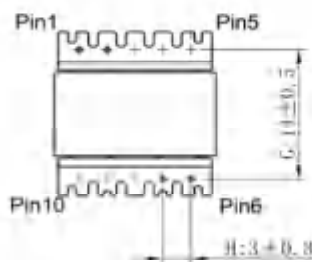
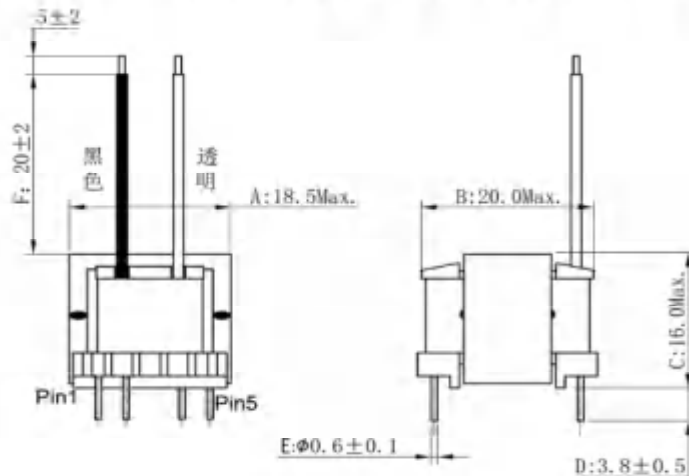
- 1、2UEW-0.30mm 漆包线与 TIW-0.30mm 三层绝缘线双线并绕 9.5 圈;
- 2、产品加底座, 脚间距 3.0*6mm.
- 3、产品要求符合 RoHS 指令要求。

电气特性

No.	项目	性能要求	测试条件
1	电原理图	 <p>N1=N2=9.5 圈 0.3mm 漆包线、三层绝缘线</p>	
2	电感量	L1=L2=400-1000uH	LCR 电桥, f=10KHz 0.3V +25℃
3	直流电阻	R ₂₋₁ = R ₃₋₄ =80mΩ max.	TH2511 直流低电阻器 +20℃
4	耐电压	无击穿, 飞弧现象	线圈与线圈间 AC1200V 2mA 1Min
5	绝缘电阻	DC500V 100MΩ MIN	线圈与线圈间

7.0 Illustrations

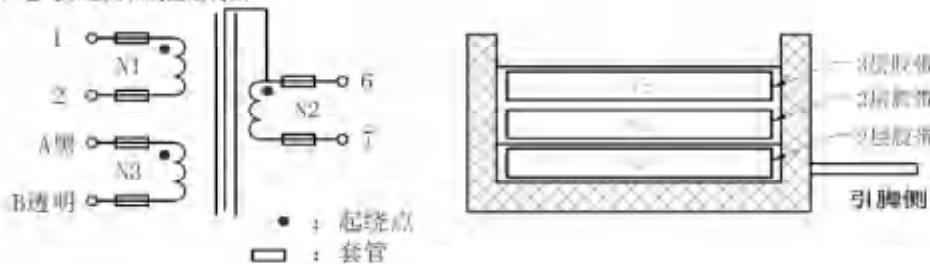
Illustration 60b - Specification of Transformer T1 V for LED driver 24



说明:

1. 骨架按除 Pin3/4/5/8/9/10 脚;
2. 磁芯接缝处点四点黑胶;
3. 6 脚绕磁芯后外包 3 层胶带;
4. 飞线套管长 20 (从磁芯量起, 不含上锡部分), 上锡线头长 5;
5. 产品真空浸漆;
6. 产品顶部标识, 字脚朝 Pin1-5 脚侧;
标识内容: LT-0150-REV0 KT 年/周

4.1 电气原理图和线圈结构图



4.2 线圈参数

No	绕组层号	绕组脚位 (S-F)	线材规格	匝数	相间绝缘	绕线方式	档墙		套管		
							PIN	TOP	S	F	
1	N1	1-2	线径 Ø0.10*12 股 1P	36	2	密绕	---	---	20#*10	20#*10	
2	N2	6-7	2UEWØ0.15mm² 1P	31	2	密绕	---	---	25#*12	35#*12	
3	N3	A-8 → B-9	绝缘径 Ø.15mm² 1P	31	3	密绕	---	---	25#*10	25#*10	
注: A, Pin1-5 磁芯侧端部引出线, 套管长度以磁芯长度为准, 不含线上锡部分											
沿磁芯方向包胶带							0.025*10mm*3Ts 淡黄				

Illustration 61 - The differences in suffix for driver model

DTS	D128T	DGM	D128M
Without 12V, With CCT and power adjust	With 12V, With CCT and power adjust	Without 12V, With CCT, power adjust and sensor	Without 12V, With CCT, power adjust and sensor
M1 :LP-1012-REV0	M1 :LP-1012-REV0	M1 :LP-10161-REV0	M1 :LP-10161-REV0
M2 :Blank	M2 :LQS12Vmodule	M2 :Blank	M2 :LQS12Vmodule

8.0 Test Summary				
Evaluation Period	25-Aug-2014 to 25-Oct-2014		Project No	HK14080949
Summary Rpt. Date	10-Oct-2014	Environment	Prototype	Sample ID #1408
Test Location	CityWay Electronic technology CO Ltd. (11 CAIPIN RD, BLK B, 10TH FL GUANGZHOU SCIENCE CITY TIANHE 510663 GUANGDONG CHINA)			
Test Procedure	Testing Lab			
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.				
The following tests were performed				
Test Description			UL 1598 and CSA C22.2 No. 250.0-08 3rd edition, issued 17 Sep, 2008, rev. 17 Oct, 2012	
			Clause	
Normal Temperature Test - Surface ceiling luminaires			14.2	
Normal Temperature Test - Surface wall luminaires			14.3	
Mold stress relief			16.4	
Wet locations - Rain			16.5.2	
Wet locations - Sprinkler			16.5.3	
Loading			16.15	
Strain Relief			16.21	
Polymeric impact			16.41	
Dielectric Voltage-withstand			17.1	
Bonding Circuit Impedance			17.2	
Articulate Probe			17.4	
Test Description			UL 8750, 1st edition, rev. May 22, 2014	CAN/CSA C22.2 No. 250.13-14, rev. July, 2014
			Clause	Clause
Input Test			8.2	9.2
Temperature Test			8.3	9.3
Dielectric Voltage-Withstand Test			8.4	9.4
Environmental Tests - Humidity Exposure			9.12.1	9.12.1

8.0 Test Summary					
Evaluation Period	22-Jul-2019 ~ 7-Aug-2019		Project No	190800220HZH	
Simul. Rpt. Date	22-Jul-2019	Condition	Prototype	Project ID	11911722-01-***
Test Location	Intertek Testing Services Hangzhou				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance in the relevant test criteria.					
The following tests were performed:					
Test Description	UL 1598:2018 Ed.4		CSA C22.2#250.0:2018 Ed.4		
Electrical spacings	6.11		6.11		
Normal temperature test	15		15		
Mold stress relief	17.4		17.4		
Wet locations	17.5		17.5		
Loading	17.15		17.15		
Polymeric impact	17.41		17.41		
Dielectric voltage-withstand	18.1		18.1		
Bonding circuit impedance	18.2		18.2		
Test Description	UL 8750:2015 Ed.2+R:22Aug2018		CSA C22.2#250.13:2017 Ed.3 +E1		
Input test	8.2		9.2		
Temperature test	8.3		9.3		
Dielectric voltage withstand test	8.6		9.4		
Abnormal test	8.7		9.5		
Leakage current measurement test	8.9		9.7		
Environmental tests	8.14		9.12		
Determination of low-voltage, limited-energy circuit status	8.16		Annex A		

8.0 Test Summary					
Evaluation Period	28-Apr-2020 ~ 25-Aug-2020		Project No	HK20070543 HK21070544	
Sample Ref. Date	28-Apr-2020	Construction	Prototype	Sample ID	5063038
Test Location	Intertek Testing Services Hong Kong Ltd (Address: 2/F, Garment Centre, 575 Castle Peak Road, Kowloon, Hong Kong SAR, China)				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
				UL 1598:2018 Ed.4 & CSA C22.2#250.0:20 18 Ed.4	
Test Description				Clause	
Normal Temperature Test – Surface ceiling luminaire				15.2	
Mold stress relief				17.4	
Wet locations – Rain test				17.5.2	
Loading				17.15	
Strain relief				17.21	
Polymeric impact				17.41	
Dielectric voltage-withstand				18.1	
Bonding circuit impedance				18.2	
Articulate probe				18.4	
				UL 8750:2015 Ed.2+R:11Oct20 19 CSA C22.2#250.13:2 017 Ed.3+E1	
Test Description				Clause	Clause
Input Test				8.2	9.2
Temperature test				8.3	9.3
Dielectric Voltage-withstand				8.6	9.4
Component failure test				8.7.2	9.5.2
Output loading test				8.7.3	9.5.3
Leakage current measurement test				8.9	9.7
Humidity exposure				8.14.1	9.12.1
Water exposure				8.14.2	9.12.2
Determination of low-voltage, limited-energy circuit status				8.16	A.6-A.9

8.0 Test Summary

Exam. Period:	73 Feb-2023 - 2 Mar-2023		Project No:	23020D199H2H	
Sample Rec. Date:	8-Feb-2023	Condition:	Prototype	Sample ID:	1230208-01-***
Test Location:	Interek Testing Services Zhejiang Ltd, Hangzhou branch 4th floor, Building 4#, No.22, 22nd Street, Qiantang District, Hangzhou, China 310018				
Test Procedure:	Testing Lab				

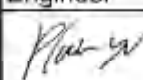
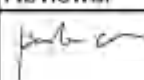
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.

The following tests were performed:

Test Description	UL 1598:2021 Ed.5+R:18Jun2021 & CSA C22.2#250.0:2021 Ed.5+U1 Clause
Normal Temperature Test	15
Mold stress relief	17.4
Wet locations - Rain test	17.5.2
Wet locations - Sprinkler test	17.5.3
Loading	17.15
Strain relief	17.21
Polymetric impact	17.41
Metal strength tests for reduced spacings	17.42
Dielectric voltage-withstand	18.1
Bonding circuit impedance	18.2

Test Description	UL 8750:2015 Ed.2+R:23Sep2021 Clause	CSA C22.2#250.13:2020 Ed.4+U1 Clause
Input Test	8.2	9.2
Temperature test	8.3	9.3
Dielectric Voltage-withstand	8.6	9.4
Component failure test	8.7.2	9.5.2
Output loading test	8.7.3	9.5.3
Leakage current measurement test	8.9	9.7
Humidity exposure	8.14.1	9.12.1
Determination of low-voltage, limited-energy circuit status	8.16	A.8-A.9

8.0 Test Summary					
Evaluation Period	8-Jan-2024 ~ 24-Jan-2024		Project No	231200125H2H	
Summary Rpt. Date	8-Jan-2024	Configuration	Prototype	Project ID	1231205-01-***
Test Location	Intertek Testing Services Zhejiang Ltd, Hangzhou branch 4th floor, Building 4#, No.22, 22nd Street, Qiantang District, Hangzhou, China 311018				
Test Procedure	Testing Lab				
Determination of the result includes consideration of measurement uncertainty from the test equipment and methods. The product was tested as indicated below with results in conformance to the relevant test criteria.					
The following tests were performed:					
			UL 1598:2021		
			Ed.5+R:18Jun20		
			21		
			& CSA		
			C22.2#250.0:20		
			21 Ed.5+U1		
			Clause		
Test Description					
Normal Temperature Test				15	
Mold stress relief				17.4	
Wet locations - Rain test				17.5.2	
Wet locations - Sprinkler test				17.5.3	
Loading				17.15	
Polymeric impact				17.41	
Metal strength tests for reduced spacings				17.42	
Dielectric voltage-withstand				18.1	
Bonding circuit impedance				18.2	
			UL 8750:2015	CSA	
			Ed.2+R:23Sep2	C22.2#250.13:2	
			021	020 Ed.4+U1	
Test Description			Clause	Clause	
Input Test			8.2	9.2	
Temperature test			8.3	9.3	
Dielectric Voltage-withstand			8.6	9.4	
Component failure test			8.7.2	9.5.2	
Output loading test			8.7.3	9.5.3	
Leakage current measurement test			8.9	9.7	
Humidity exposure			9.14.1	9.12.1	
Determination of low-voltage, limited-energy circuit status			8.16	A.6-A.9	

8.1 Signatures			
A representative sample of the product covered by this report has been evaluated and found to comply with the applicable requirements of the standards indicated in Section 1.0.			
Compared by:	Pluto Yu	Reviewed by:	Patrick Chen
Title:	Engineer	Title:	Reviewer
Signature:		Signature:	

9.0 Correlation Page For Multiple Listings

The following products, which are identical to those identified in this report except for model number and Listee name, are authorized to bear the ETL label under provisions of the Intersect Multiple Listing Program.

BASIC LISTEE	UniverseLife Co., Ltd.
Address	Kuaji Cun Industrial Zone, Pingshui Town, KEQIAO DISTRICT, Zhejiang Province 312051
Country	China
Product	LED Fixed Lamp

MULTIPLE LISTEE 1	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 1 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 2	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 2 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 3	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 3 MODELS	BASIC LISTEE MODELS

MULTIPLE LISTEE 4	None
Address	
Country	
Brand Name	

ASSOCIATED MANUFACTURER	
Address	
Country	

MULTIPLE LISTEE 4 MODELS	BASIC LISTEE MODELS

10.0 General Information

The Applicant and Manufacturer have agreed to produce, test and label ETL Listed products in accordance with the requirements of this Report. The Manufacturer has also agreed to notify Intertek and to request authorization prior to using alternate parts, components or materials.

COMPONENTS

Components used shall be those itemized in this Intertek report covering the product, including any amendments and/or revisions.

LISTING MARK

The ETL Listing mark applied to the products shall either be separable in form, such as labels purchased from Intertek, or on a product nameplate or other media only as specifically authorized by Intertek. Use of the mark is subject to the control of Intertek.

The mark must include the following four items:

- 1) applicable country identifiers "US" and/or "G" or "US", "G" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issued by Intertek
- 4) a product descriptor that identifies the standards used for certification. Example:

For US standards, the words, "Conforms to" shall appear with the standard number along with the words, "Standard" or "Std." Example: "Conforms to ANSI/UL Std. XX."

For Canadian standards, the words "Certified to CAN/CSA Standard CXX No. XX," shall be used, or abbreviated, "Cert. to CAN/CSA Std. CXX No. XX."

Can be used together when both standards are used.

If all standards on the ATM have the same standard title, the shared title or its abbreviation may be used in place of the examples above. Example: "Medical Electrical Equipment" or "MEE"; "Information Technology Equipment" or "ITE"; "Audio/Video Information and Communication Technology Equipment" or "A/V ICTE".

Note: A facsimile must be submitted to Intertek, Attn: Follow-up Services for approval prior to use.

The facsimile need not have a control number. A control number will be issued **after signed Certification Agreements** have been received by the Follow-up Services office, approval of the facsimile of your proposed Listing Mark, satisfactory completion of the Listing Report, and scheduling of a factory assessment in your facility.

MANUFACTURING AND PRODUCTION TESTS

Manufacturing and Production Tests shall be performed as required in this Report.

FOLLOW-UP SERVICE

Periodic unannounced audits of the manufacturing facility (and any locations authorized to apply the mark) shall be scheduled by Intertek. An audit report shall be issued after each visit. Special attention will be given to the following:

1. Conformance of the manufactured product to the descriptions in this Report.
2. Conformance of the use of the ETL mark with the requirements of this Report and the Certification Agreement.
3. Manufacturing changes.
4. Performance of specified Manufacturing and Production Tests.

In the event that the Intertek representative identifies non-conformance(s) to any provision of this Report, the Applicant shall take one or more of the following actions:

1. Correct the non-conformance.
2. Remove the ETL Mark from non-conforming product.
3. Contact the issuing product safety evaluation center for instructions.

15.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.9 require testing and/or evaluation as indicated.

The Applicant will be notified, in writing, via the applicable contact methods, as defined in Section 1.11, when these components must be selected and sent to Component Evaluation Center (CEC) for re-evaluation.

Due to particular testing requirements, some components may be requested to be shipped to specific labs. Thus, specific shipment destination(s) for each sample will be provided in the written notification.

Managing CEC Location:
Intertek Testing Services Shanghai Limited
ETL Component Evaluation Center
Building No. 86, 1198 Qinzhou Road (North)
Shanghai 200233, China
Attn: Ms. Emiliana Zhou

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

The manufacturer agrees to conduct the following Manufacturing and Production Tests as specified:

Required Tests

- Dielectric Voltage Withstand Test
- Grounding Continuity
- Strain Relief Test

11.1 Dielectric Voltage Withstand Test

Method

One hundred percent (100%) of production of the products covered by this Report shall be subjected to a routine production line dielectric withstand test.

The test shall be conducted on products, which are fully assembled. Prior to applying the test potential, all switches, connectors, relays, etc. should be closed so that all primary circuits are energized by the test potential. If all primary circuits cannot be tested at one time, then separate applications of the test potential shall be made.

The test voltage specified below shall be applied between primary circuits and accessible dead-metal parts. The test voltage may be gradually increased to the specified value but must be maintained at the specified value for one second or one minute as required.

Test Equipment

The test equipment shall incorporate a transformer with an essentially sinusoidal output, a means to indicate the applied test potential, and an audible and/or visual indicator of dielectric breakdown.

The test equipment shall incorporate a voltmeter in the output circuit to indicate directly the applied test potential if the rated output of the test equipment is less than 500VA.

If the rated output of the test equipment is 500VA or more, the applied test potential may be indicated by either:

- 1 - a voltmeter in the primary circuit;
- 2 - a selector switch marked to indicate the test potential; or
- 3 - a marking in a readily visible location to indicate the test potential for test equipment having a single test potential output.

In cases 2 and 3, the test equipment shall include a lamp or other visual means to indicate that the test potential is present at the test equipment output. All test equipment shall be maintained at current calibration.

Test Record

Test records shall be retained for a period of at least six months, and include test quantity, test dates, voltage, model numbers, test results, and disposition of any non-complying products.

Products Requiring Dielectric Voltage Withstand Test:

Product	Test Voltage	Test Time
All products covered by this Report	1200VAC	1 second
One sample from each shipment of Transformer (refer to Sec. 6.0, item 114, 123, 147-151, 191, 224, 241, 255):		
Between primary circuit and core	1554VAC	1 minute
Between primary circuit and secondary circuit	1554VAC	1 minute
Between secondary circuit and core	500VAC	1 minute

11.2 Grounding Continuity Test

Method

All luminaires shall be subjected to test at least once per quarter per design. The test shall be performed on luminaires with non-current-carrying metal parts that may become energized and are accessible during user maintenance or snap-in lampholders with integral grounding means.

Test Equipment:

An ac or dc power supply of approximately 12V providing a current of 30A through the bonding means being evaluated. Alternatively, it may be determined by an ohmmeter or similar indicating instrument.

Test Record

Test records shall be retained for a period of at least six months, and include test quantity, test dates, catalog or model numbers, test results, and disposition of any non-complying products.

Products Requiring Grounding Continuity Test:

Product	Resistance
All products covered by this Report.	Not exceed 0.1 ohm

11.3 Strain Relief Test

Method

One sample of each luminaire design with a power supply cord shall be tested at least once per quarter to determine compliance with the strain-relief test for flexible cords. (LEDGIC®WIDV series models)

A pull force of 156 N (35 lb) shall be applied for 1 min to the flexible cord in a direction perpendicular to the plane of the entrance into the luminaire.

Test results shall be acceptable if there is no:

- (a) movement of the flexible cord of more than 1.6 mm (0.063 in), and
- (b) breaking of the conductor or loosening of the wiring connections inside the enclosure of the luminaire.

Test Record

Test records shall be retained for a period of at least six months, and include test quantity, test dates, catalog or model numbers, test results, and disposition of any non-complying products.

Products Requiring Strain Relief Test:

All products (pendant lamp) covered by this Report.