

1.0 Reference and Address			
Report Number	190520059SZN-001	Original Issued: 4-Jul-2019	Revised: None
Standard(s)	Luminares [UL 1598:2008 Ed.3 +R:17Oct2012] Luminares (R2013) [CSA C22.2#250.0:2008 Ed.3 +G1;G2]		
Applicant	<u>Guang Dong Queendom Group Technology Co., Ltd.</u>	Manufacturer	<u>Guang Dong Queendom Group Technology Co., Ltd.</u>
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<b>2.0 Product Description</b>	
Product	LED Panel Light
Brand name	
Description	The products covered by this report are LED Panel Light suitable for damp location use, which is intended to type IC recessed mounted.
Models	<p>JS-EP followed by 14 or 22; followed by -30- or -40-; may be followed by four numbers.</p> <p>JS-EP24; followed by -40-, - 50- or -60-; may be followed by four numbers.</p> <p>JS-BP followed by 14 or 22; followed by -30- or -40-; may be followed by four numbers.</p> <p>JS-BP24; followed by -40-, - 50- or -60-; may be followed by four numbers.</p>
Model Similarity	<p>The products covered by this report have similar electrical and mechanical construction, except outline dimension, shape, LED type, LED driver and wattage.</p> <p>JS-EP series and JS-BP series are similar models, except the position of LED modules, LED types and back enclosure.</p> <p>For 14, 22 or 24 in models name denotes the product having different dimensions.</p> <p>For 30, 40, 50 or 60 in models name denotes rated power, e.g. 30 = 30W, 40 = 40W, 50 = 50W, 60 = 60W.</p> <p>The followed by four numbers in models name can be any integers from 2700 to 6500 which denotes CCT of the products. e.g. 2700 = 2700 K.</p> <p>Other model similarity refer to ill. 3 of Sec. 7.0</p>
Ratings	100-277Vac or 120-347Vac, 50/60Hz, Non-replaceable LED, Other ratings refer to ill. 3 of Sec. 7.0
Other Ratings	NA

### 3.0 Product Photographs

**Photo 1** - External view of models JS-BP24-40-, JS-BP24-50- and JS-BP24-60- (the left one), JS-BP14-30- and JS-BP14-40- (the middle one), JS-BP22-30- and JS-BP22-40- (the right one).

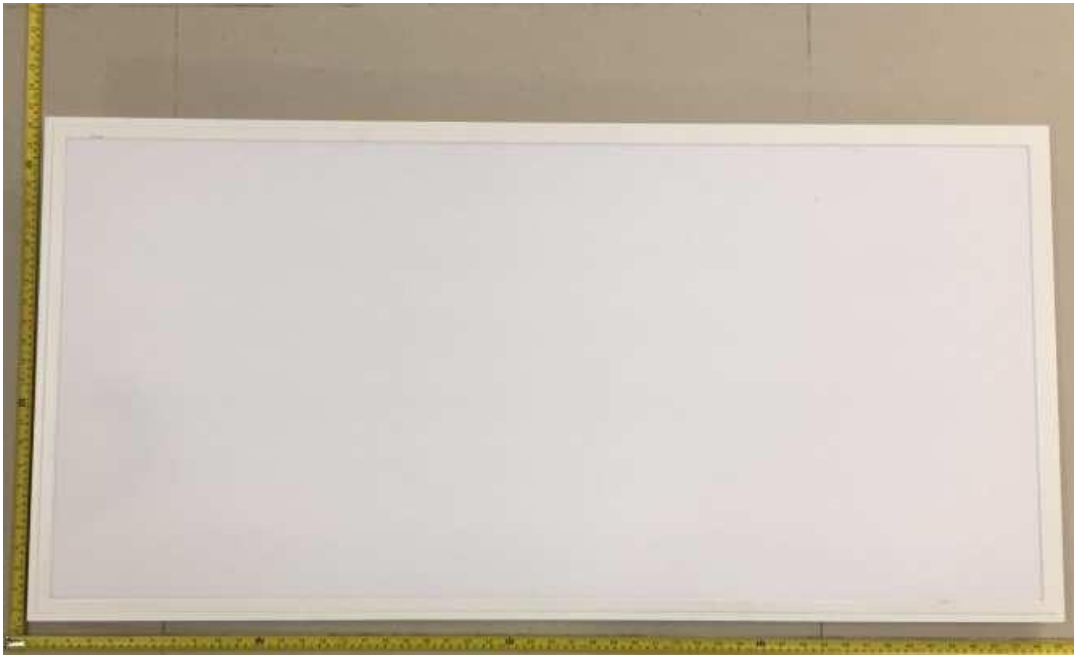


**Photo 2** - Rear view of models JS-BP24-40-, JS-BP24-50- and JS-BP24-60- (the left one), JS-BP14-30- and JS-BP14-40- (the middle one), JS-BP22-30- and JS-BP22-40- (the right one).

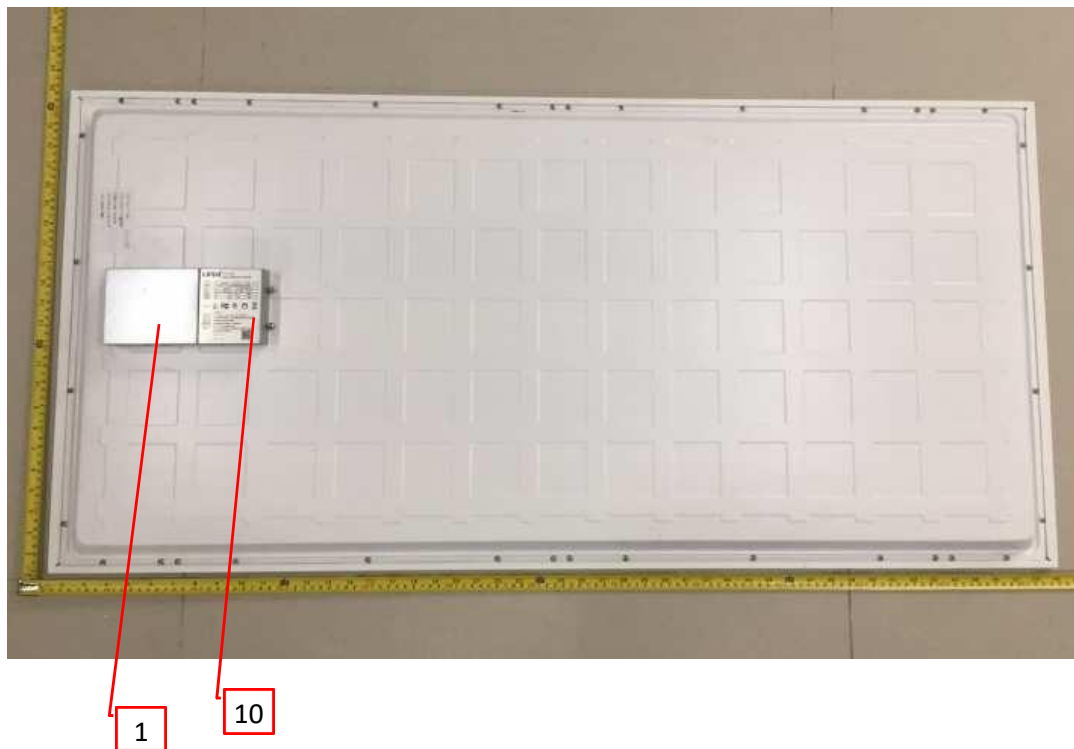


### 3.0 Product Photographs

**Photo 3** - Detail front view, model JS-BP24-60- as representative, only the dimension is different with other models



**Photo 4** - Detail rear view, model JS-BP24-60- as representative, only the dimension is different with other models

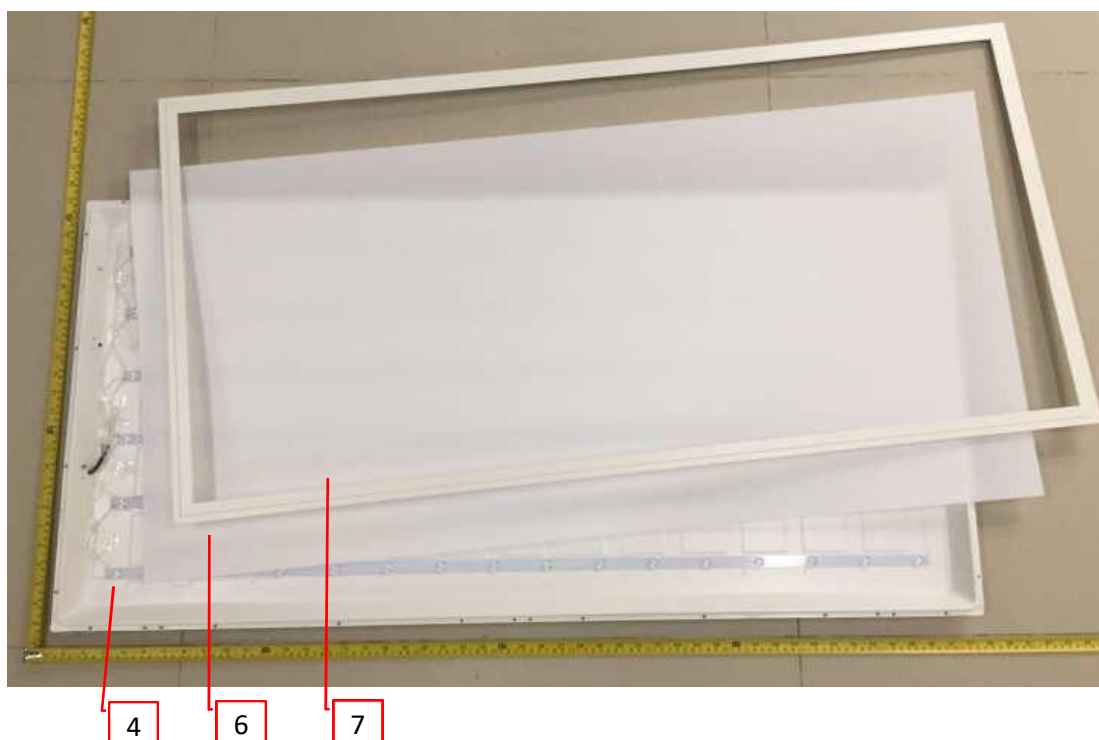


### 3.0 Product Photographs

**Photo 5**-Internal view, model JS-BP24-60- as representative, only the dimension is different with other models

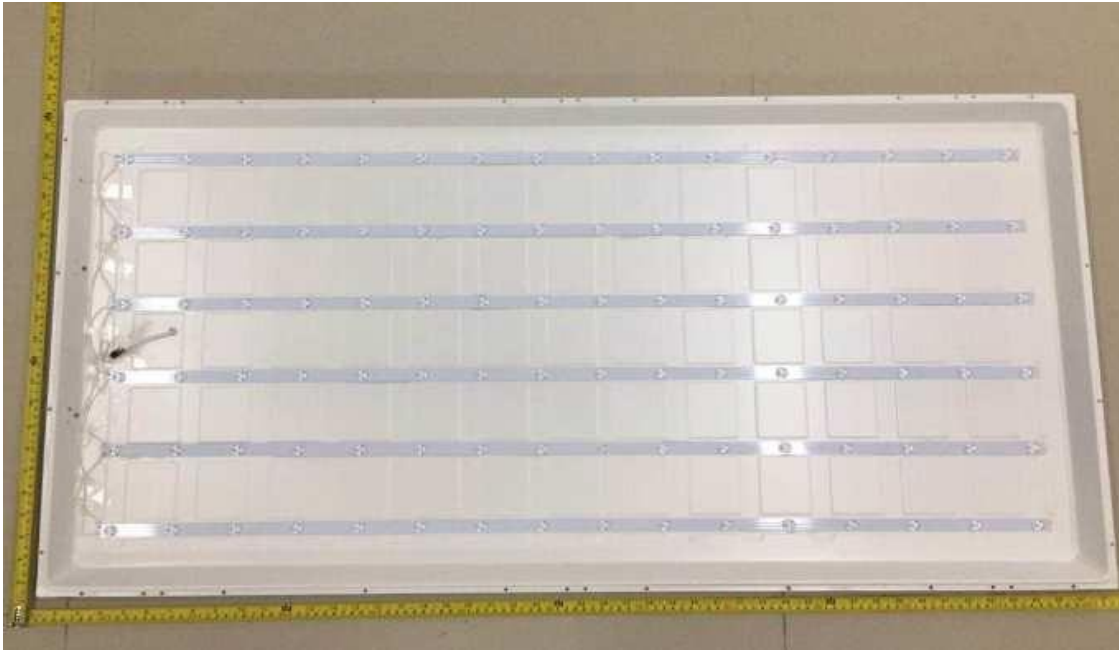


**Photo 6** -Internal view, model JS-BP24-60- as representative, only the dimension is different with other models

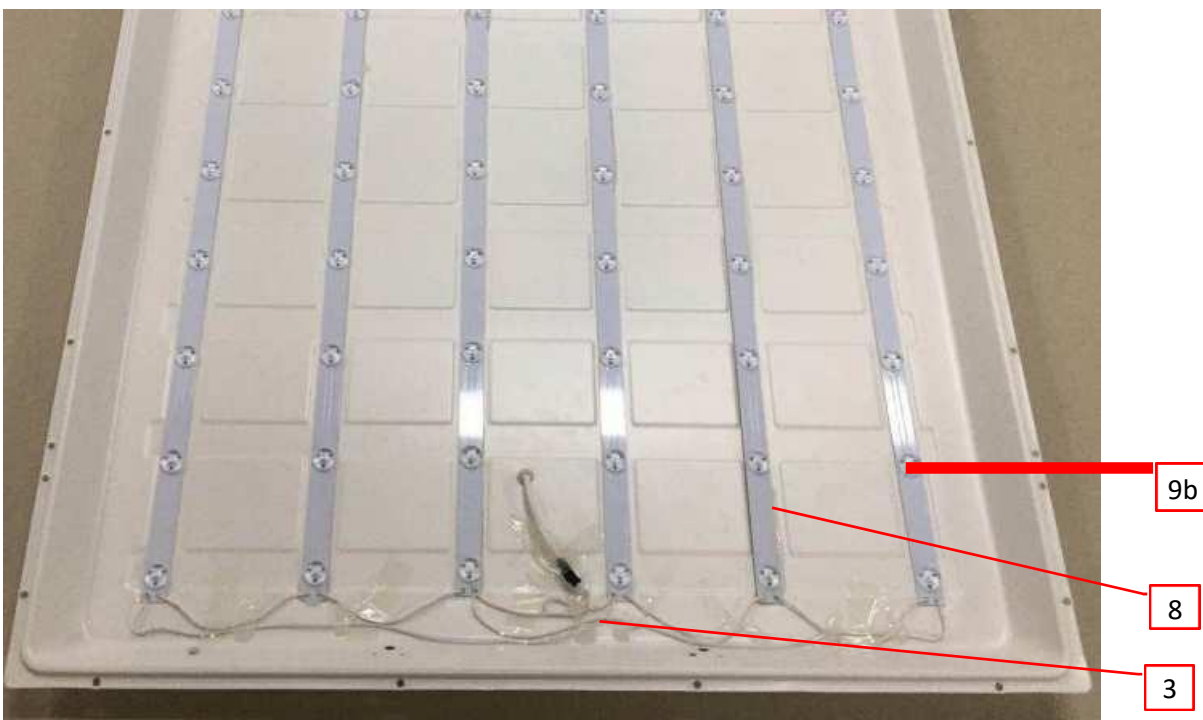


### 3.0 Product Photographs

**Photo 7** - Internal view, model JS-BP24-60-, JS-BP24-50-, JS-BP24-40-.

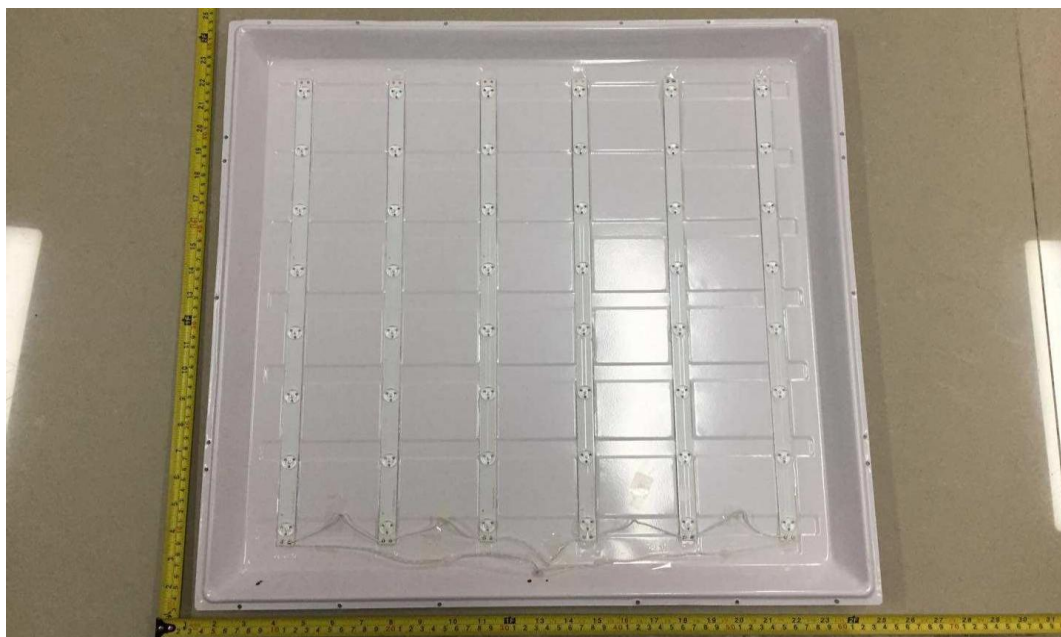


**Photo 8**-LED PWB view, model JS-BP24-60- as representative, only the dimension is different with other models



### 3.0 Product Photographs

**Photo 8a**-LED PWB view, model JS-BP22-40-, JS-BP22-30-.



**Photo 8b**-LED PWB view, model JS-BP14-40-, JS-BP14-30-.

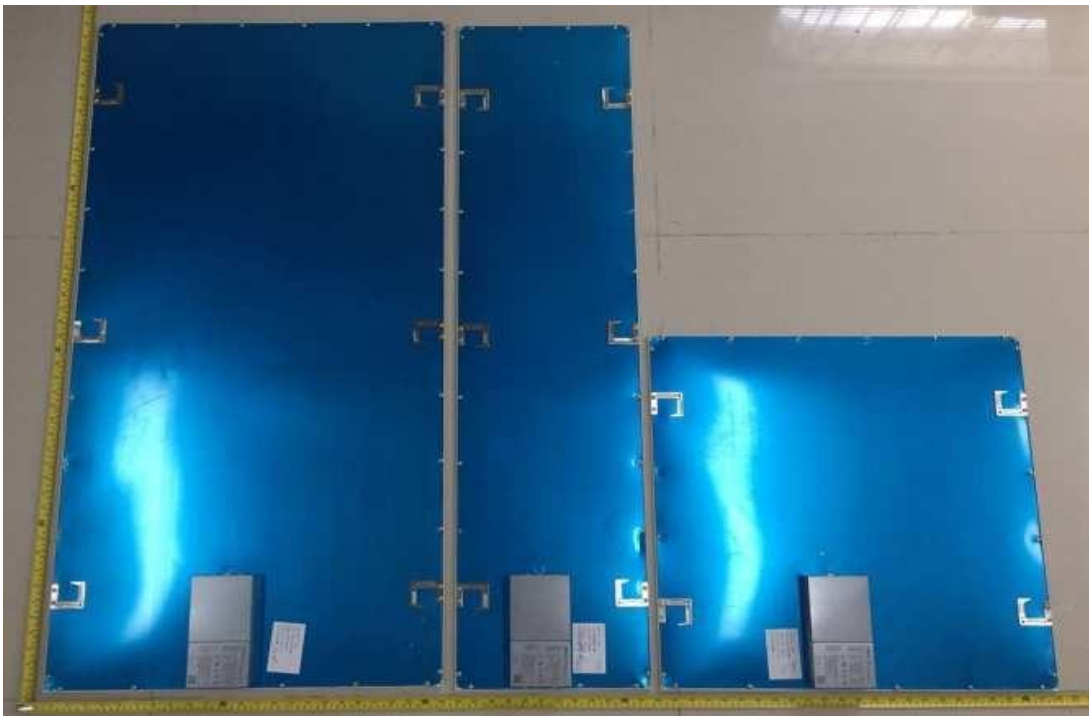


### 3.0 Product Photographs

**Photo 9-** External view, models JS-EP14-30-, JS-EP14-40-, JS-EP22-30-, JS-EP22-40-, JS-EP24-40-, JS-EP24-50- and JS-EP24-60-.



**Photo 10 -** Rear view of models JS-EP24-40-, JS-EP24-50- and JS-EP24-60- (the left one), JS-EP14-30- and JS-EP14-40- (the mid one), JS-EP22-30- and JS-EP22-40- (the right one).

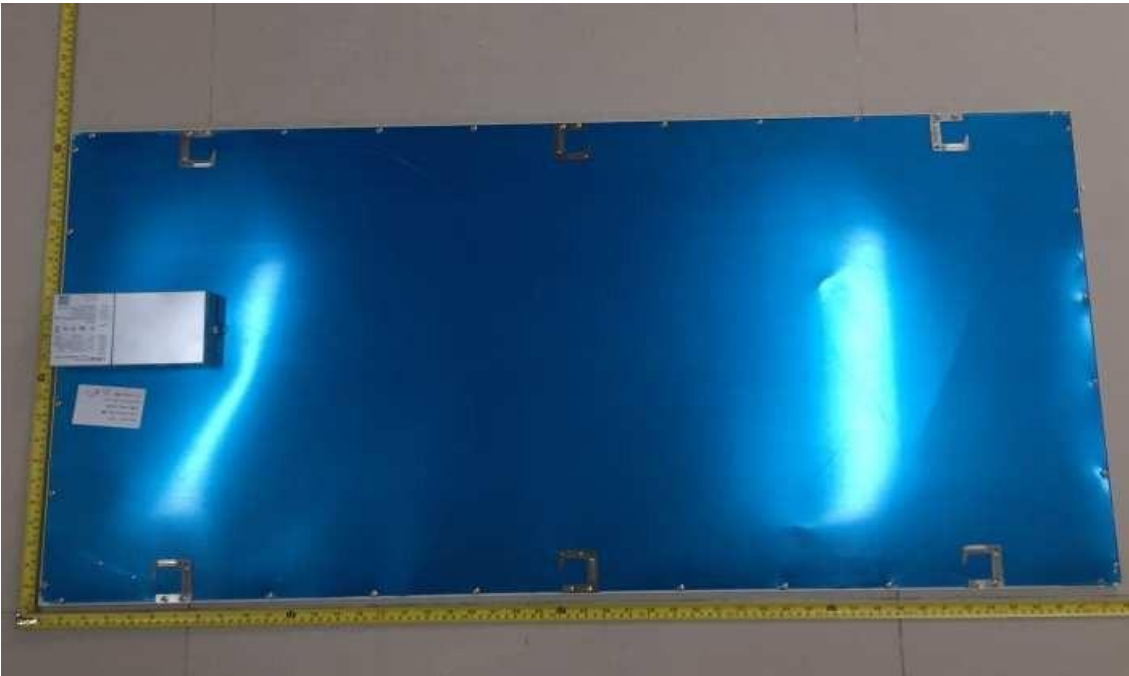


### 3.0 Product Photographs

**Photo 11** - Detail front view, model JS-EP24-60- as representative, only the dimension is different with other models



**Photo 12** - Detail Back view, model JS-EP24-60- as representative, only the dimension is different with other models

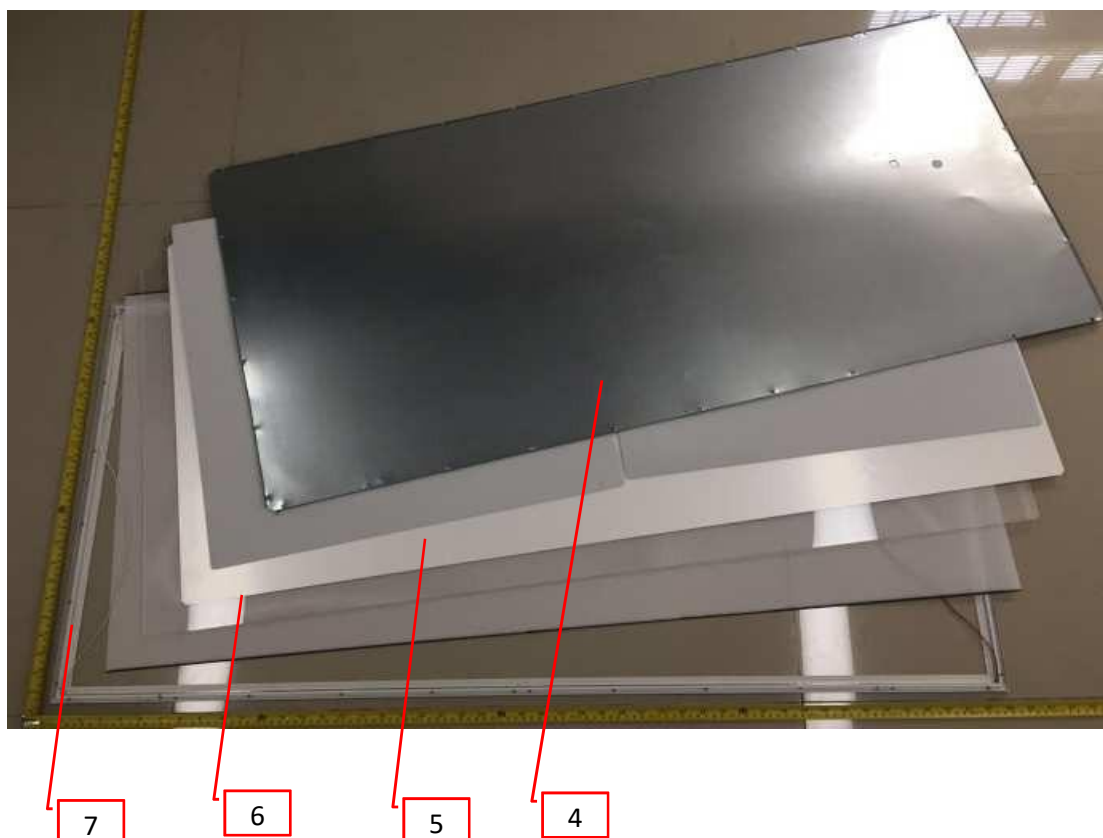


### 3.0 Product Photographs

**Photo 13** -Internal view, model JS-EP24-60- as representative, only the dimension is different with other models

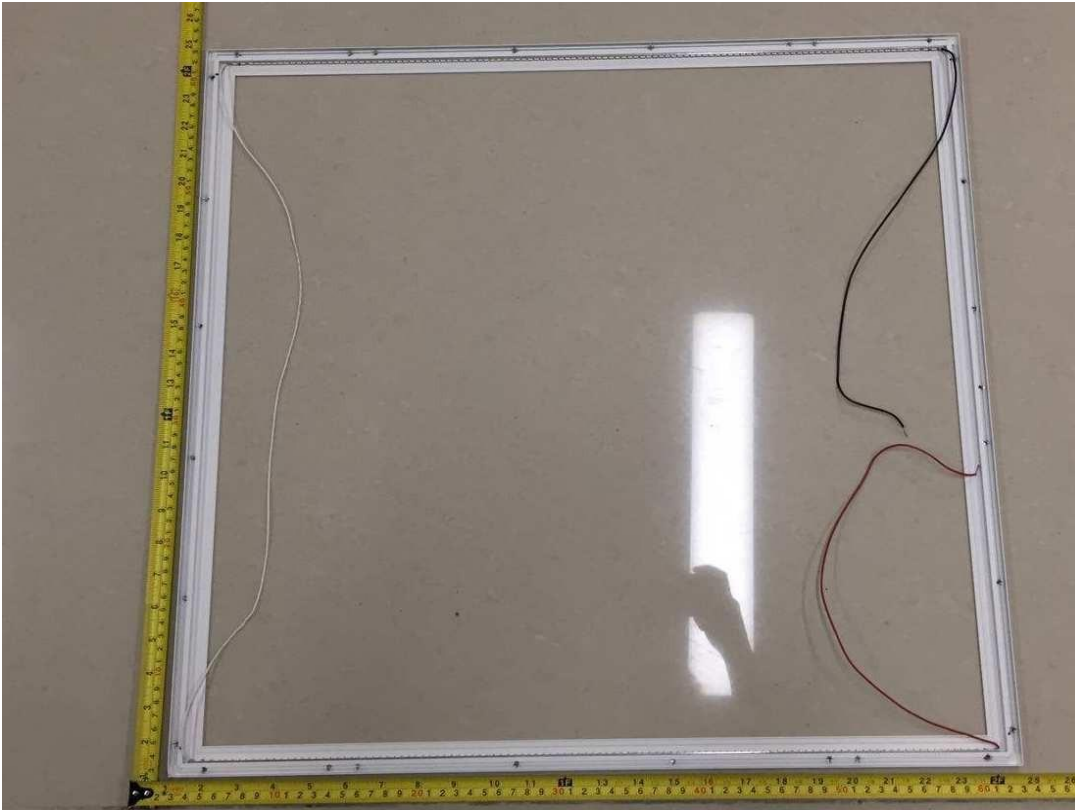


**Photo 14** - Internal view, model JS-EP24-60- as representative, only the dimension is different with other models



### 3.0 Product Photographs

**Photo 15** - Internal view, JS-EP22-40-, JS-EP22-30-.

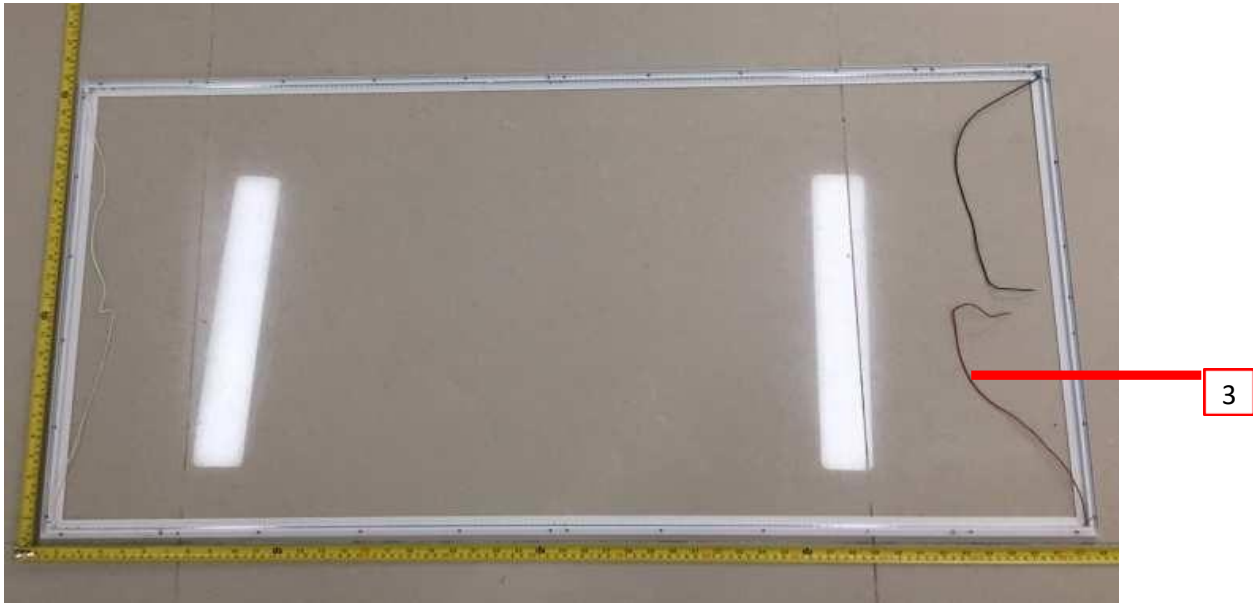


**Photo 15a** - Internal view, model JS-EP14-40-, JS-EP14-30-.



### 3.0 Product Photographs

**Photo 15b** - Internal view, model JS-EP24-60-, JS-EP24-50-, JS-EP24-40-.



**Photo 16** - LED PWB view, LED type 4014, model JS-EP24-60- as representative, only the LED quantity is different with other models



### 3.0 Product Photographs

**Photo 17** - LED PWB view, LED type 2835, model JS-EP24-60- as representative, only the LED quantity is different with other models



**Photo 18** - LED driver view, Model XZ-PN50B-420090, XZ-PK30B-420070-W and LF-GMD035YSIV(P)0700U, represented for all other models.



4.0 Critical Components						
Photo #	Item no.1	Name	Manufacturer/ trademark <sup>2</sup>	Type / model <sup>2</sup>	Technical data and securement means	Mark(s) of conformity <sup>3</sup>
4, 18	1	LED driver -1	LIFUD TECHNOLOGY CO LTD	LF-GMD035YSIV(P)0700U	Damp, 0-10V dimmable, tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.4A, 40W; output:25-42 Vdc, 700mA. Isolated. Constant current, Class 2. Class P, Not evaluated Supplement SF, For use models JS-EP22-30-, JS-EP14-30-, JS-BP22-30- and JS-BP14-30-.	cULus
18	1a	LED driver -2 (not shown)	LIFUD TECHNOLOGY CO LTD	LF-GMD045YSIV(P)1000U	Damp, 0-10V dimmable, tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.55A, 54W; output:25-42 Vdc, 1000mA. Isolated. Constant current, Class 2. Class P. Not evaluated Supplement SF, For use models JS-EP22-40-, JS-EP24-40-, JS-EP14-40-, JS-BP22-40-, JS-BP24-40- and JS-BP14-40-.	cULus
18	1b	LED driver -3 (not shown)	LIFUD TECHNOLOGY CO LTD (E338140)	LF-GMD055YSIV(P)1150U	Damp, 0-10V dimmable, tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.7A, 68W; output:25-42 Vdc, 1150mA, Not evaluated Supplement SF, Isolated. Class 2. Class P. For use models JS-EP24-50- and JS-BP24-50- .	cULus
18	1c	LED driver -4 (not shown)	LIFUD TECHNOLOGY CO LTD	LF-GMD055YSIV(P)1300U	Damp, 0-10V dimmable, tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.7A; output:25-42 Vdc, 1300mA. Isolated. Class 2. Class P, Not evaluated Supplement SF,. For use models JS-EP24-60- and JS-BP24-60-.	cULus
18	1d	LED driver -5	Shenzhen Xiezhen Electronics Co Ltd	XZ-PK30B-420070-W	Damp, 0-10V dimmable, ta: 50°C,tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.41A; output:27-42 Vdc, 700mA. Isolated. Class 2. Class P, Not evaluated Supplement SF,. For use models JS-EP22-30-, JS-EP14-30-, JS-BP22-30- and JS-BP14-30-.	cULus
18	1e	LED driver -6 (not shown)	Shenzhen Xiezhen Electronics Co Ltd	XZ-PN50B-420070	Damp, 0-10V dimmable, ta: 50°C,tc: 90°C, Input:120-347 Vac, 50/60Hz, 0.5A max.; output:27-42 Vdc, 700mA. Isolated. Class 2. Class P, evaluated Supplement SF, For use models JS-EP22-30- , JS-EP14-30- , JS-BP22-30- and JS-BP14-30- .	cULus

4.0 Critical Components						
18	1f	LED driver -7 (not shown)	Shenzhen Xiezhen Electronics Co Ltd	XZ-PK50B-420090-W	Damp, ta: 50 °C, Input:100-277 Vac, 50/60Hz, 0.65A; output:27-42 Vdc, 900mA. Isolated. Class 2. Class P, Not evaluated Supplement SF. For use models JS-EP22-40-, JS-EP14-40-, JS-BP22-40- and JS-BP14-40-.	cULus
18	1g	LED driver -8	Shenzhen Xiezhen Electronics Co Ltd	XZ-PN50B-420090	Damp,ta: 50 °C, Input:120-347Vac, 50/60Hz, 0.65A max.; output:27-42 Vdc, 900mA. Isolated. Class 2. Class P, evaluated Supplement SF. For use models JS-EP22-40-, JS-EP24-40-, JS-EP14-40-, JS-BP22-40-, JS-BP14-40- and JS-BP24-40-.	cULus
18	1h	LED driver -9 (not shown)	Shenzhen Xiezhen Electronics Co Ltd	XZ-PK50B-420115-W	Damp, 0-10V dimmable, ta: 50°C,tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.65A max.; output:27-42 Vdc, 1150mA. Isolated. Class 2. Class P, Not evaluated Supplement SF. For use models JS-BP24-50- and JS-BP24-50-.	cULus
18	1i	LED driver -10 (not shown)	Shenzhen Xiezhen Electronics Co Ltd	XZ-PN50B-420115	Damp, 0-10V dimmable, ta: 50°C,tc: 90°C, Input:120-347 Vac, 50/60Hz, 0.65A max.; output:27-42 Vdc, 1150mA, evaluated Supplement SF, Isolated. Class 2. Class P. For use models JS-EP24-50- and JS-BP24-50-.	cULus
18	1j	LED driver -11(not shown)	Shenzhen Xiezhen Electronics Co Ltd	XZ-PK60B-420135-W	Damp, 0-10V dimmable, ta: 50°C,tc: 90°C, Input:100-277 Vac, 50/60Hz, 0.8A max.; output:27-42 Vdc, 1350mA, Not evaluated Supplement SF. Isolated. Class 2. Class P. For use models JS-EP24-60- and JS-BP24-60-.	cULus
5	2	Grounding wire	Various	Various	Insulated green grounding wire. AWM, VW-1, 18AWG, 300V, 105°C min, min.length:150mm. For all models.	cURus
5,8,15b	3	Output wire to LED	Various	Various	AWM, Rated minimum 24AWG, VW-1, 300V, 80°C. For all models.	cURus
6,14	4	Back cover	Various	Various	Aluminum sheet or Steel sheet, min 0.71 mm thick. For all models.	NR

4.0 Critical Components						
14	5	Reflector	Various	Various	Rated min. HB, PMMA, min. 80°C, min. 0.15 mm thick. Only for models JS-EP series	UR
6,1 4	6	Diffuser	Various	Various	PC, Rated, min. HB, min. 80°C, min. 1.0 mm thick. For all models.	UR
6,1 4	7	Frame	Various	Various	Aluminum sheet or Steel sheet, min 0.71 mm thick. For all models.	NR
8, 16, 17	8	LED PCB	Various	Various	Metal base PCB, Rated minimum V-0, 105°C. Measured 1.0 mm. comply with UL 796, For all models.	UR
16	9	LED -1	Various	Various	SMD type, soldered on the PCB. Each rated VF: 2.8-3.3V, IF:60mA. Size: 4.0 x 1.4 x 0.65mm. 280pcs for JS-EP14-30- and JS-EP14-40- , 224pcs for JS-EP22-30- and JS-EP22-40- , 350pcs for JS-EP24-40- , JS-EP24-50- and JS-EP24-60- .	NR
17	9a	LED -2	Various	Various	SMD type, soldered on the PCB. Each rated VF: 2.8-3.2V, IF:60mA. Size: 3.5 x 2.8 x 0.70mm 280pcs for JS-EP14-30- and JS-EP14-40- , 252pcs for JS-EP22-30- and JS-EP22-40- , 364pcs for JS-EP24-40- , JS-EP24-50- and JS-EP24-60- .	NR
8	9b	LED -3	Various	Various	SMD type, soldered on the PCB. Each rated VF: 8.7-9.6V, IF:100mA. Size: 3.0 x 3.2 x 0.65mm. 48pcs for JS-BP14-30- and JS-BP14-40- , 48pcs for JS-BP22-30- and JS-BP22-40- , 96pcs for JS-BP24-40- , JS-BP24-50- and JS-BP24-60- .	NR
4	10	Driver Fixed plate	Various	Various	Aluminum sheet or Steel sheet, min 0.71 mm thick. For all models.	NR
1	11	Labels (Not Shown)	Various	Various	Rated 70°C when affixed on the surface. Comply with UL 969. For all models.	UR

## NOTES:

- 1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.
- 2) "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 marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates Unlisted and only visual examination is necessary. "See 5.0" indicates Unlisted components or assemblies to be evaluated periodically refer to section 5.0 for details.

## **5.0 Critical Unlisted CEC Components**

No Unlisted CEC components are used in this report.

**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 - In primary circuits, 9.5mm minimum spacing are maintained through air and 9.5mm over surfaces of insulating material between current-carrying parts of opposite polarity and between such current-carrying parts and dead-metal parts.
2. Mechanical Assembly - Components such as switches, fuseholders, 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. Accessibility of Live Parts - All uninsulated live parts in primary circuitry are housed within a non-metallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
5. Grounding - All exposed dead-metal parts and all dead-metal parts within the enclosure that are exposed are connected to the grounding lead of the power supply cord or the equipment grounding terminal.
6. Polarized Connection - This product is provided with a polarized power supply connection. All 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 separable (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. All wiring refer to 4.0.
8. Markings - The product is marked by marking and labelling system of item 11 in section 4.0 as follows:
  - Applicant's name, trade name or trade mark
  - model number
  - date of manufacture
  - electrical ratings (volts, amperes & frequency)
9. Cautionary Markings - The following are required: refer to Illustration 1 and 1a for details
10. Installation, Operating and Safety Instructions - Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration 2 - Instruction for details.

**7.0 Illustrations****Illustration 1 - Cautionary Markings**

<b>Model No.</b>		<b>Item</b>
JS-EP followed by 14 or 22; followed by -30- or -40-; may be followed by four numbers. JS-EP24; followed by -40-, - 50- or -60-; may be followed by four numbers. JS-BP followed by 14 or 22; followed by -30- or -40-; may be followed by four numbers. JS-BP24; followed by -40-, - 50- or -60-; may be followed by four numbers.		2.2, 2.23, 2.24, 2.7, 1.14, 3.11
<b>Item</b>	<b>Marking</b>	<b>Text / Format</b>
2.2	SUITABLE FOR DAMP LOCATIONS CONVIENT AUX EMPLACEMENTS HUMIDES	S24-L2
2.23	TYPE IC RECESSED TYPE IC ENCASTRÉ	S24-L3
2.24	INHERENTLY PROTECTED INHÉRITEMENT PROTÉGÉ	S24-L3
2.7	ACCESS ABOVE CEILING REQUIRED ACCÈS AU-DESSUS DU PLAFOND REQUIS	S24-L2
1.14	VAPOR BARRIER MUST BE SUITABLE FOR 90 °C LE PARE-VAPEUR DOIT CONVENIR POUR 90 °C	S24-L2
3.11	BLINKING LIGHT OF THIS THERMALLY PROTECTED LUMINAIRE MAY INDICATE OVERHEATING SI L'AMPOULE DE CE LUMINAIRE À PROTECTION THERMIQUE CLIGNOTE, CELA PEUT SIGNIFIER UNE SURCHAUFFE	S24-L1

**Format minimum size designation for marking height and typeface (clause 20.1.3)**

Size Designation	Letter Height		Font Size	Font typeface, upper case
	( mm )	( in )	(points)	
S16	1.6	0.062	6	Not specified
S24	2.4	0.094	10	Univers bold, Arial bold, Helvetica bold, Zurich BT bold
S32	3.2	0.125	12	Not specified
S48	4.8	0.188	19	Univers bold, Arial bold, Helvetica bold, Zurich BT Bold

**7.0 Illustrations****Illustration 1a - Cautionary Markings (continued)**

The table of the format location designation (L\_\_) for marking is at below:

Format Location Designation for Marking

Location Designation	Description	Label exposed to a dry/damp environment	Label exposed to a wet environment
L1	Visible during relamping, after installation	Type P	Type P
L2	Visible during installation	Type N	Type P
L3	Visible during installation and inspection of wire connections, located near the supply connections	Type N	Type P
L4	On the smallest unit package or carton	Type T	Type T
L5	On an instruction sheet or tag	Type T	Type T
L6	Visible during component replacement	Type P	Type P

Note:

Type P – Permanent label or nameplate

A label that is intended to remain in the applied position for the lifetime of the luminaire under conditions of intended use.

Uses: Information required for user maintenance over the expected life of the product.

Material: Metal, plastic, or other suitable material with an adhesive suitable for the temperature involved and

Type N – Non-permanent label or nameplate

A label that is intended to remain in place only for the purpose of installation.

Uses: Certification mark, manufacturer's identification, product identification.

Material: Paper with an adhesive suitable for the temperature involved.

Type T – Temporary label or instruction sheet

A label, instruction sheet, or tag that is not required after installation.

Uses: Installation instructions, and information not required after installation.

Material: Printed matter with or without adhesive and/or attachment, intended to be included with or attached to

**7.0 Illustrations****Illustration 2 - Instruction**

The instruction shall include the following information:

Proper installation method.

Wiring instructions that specify the proper method of connecting the grounding means and maintaining Polarity shall be included with the luminaire in a manner that will require the installer to handle the instructions during installation.

Proper normal maintenance and use method.

Proper mounting environment.

Other warning that will not lead to misuse.


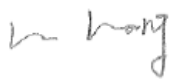
Both English and French instruction should be provided.

**7.0 Illustrations****Illustration 3 - Models Similarity and ratings**

Model No.	Max. Wattage (W)	LED type	Size(L*W*H)(mm) /weight(kg)	No. of LEDs (4014/2835)	LED driver
JS-EP22-30-	30W	4014 or 2835	603X603X10 /3.2	14S*16P /14S*18 P	LF-GMD035YSIV(P)0700U, XZ-PK30B-420070-W or XZ-PN50B-420070
JS-EP22-40-	40W			14S*16P /14S*18 P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090
JS-EP24-40-	40W		603X1213X10 /5.8	14S*25P /14S*26 P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090
JS-EP24-50-	50W			14S*25P /14S*26 P	LF-GMD055YSIV(P)1150U, XZ-PK50B-420115-W or XZ-PN50B-420115
JS-EP24-60-	60W			14S*25P /14S*26 P	LF-GMD055YSIV(P)1300U or XZ-PK60B-420135-W
JS-EP14-30-	30W		300X1213X10 /3.1	14S*16P /14S*18 P	LF-GMD035YSIV(P)0700U, XZ-PK30B-420070-W or XZ-PN50B-420070
JS-EP14-40-	40W			14S*16P /14S*18 P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090
JS-BP22-30-	30W	3030	603X603X30 /1.8	12S*4P	LF-GMD035YSIV(P)0700U, XZ-PK30B-420070-W or XZ-PN50B-420070
JS-BP22-40-	40W			12S*4P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090
JS-BP24-40-	40W		603X1213X30 /4.4	12S*8P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090
JS-BP24-50-	50W			12S*8P	LF-GMD055YSIV(P)1150U, XZ-PK50B-420115-W or XZ-PN50B-420115
JS-BP24-60-	60W			12S*8P	LF-GMD055YSIV(P)1300U or XZ-PK60B-420135-W
JS-BP14-30-	30W		300*1213*30 /2.1	12S*4P	LF-GMD035YSIV(P)0700U, XZ-PK30B-420070-W or XZ-PN50B-420070
JS-BP14-40-	40W			12S*4P	LF-GMD045YSIV(P)1000U, XZ-PK50B-420090-W or XZ-PN50B-420090

**Remark:**

- For models equipped with XZ-PN series LED driver: 120-347Vac, other models: 100-277Vac.
- All models can be dimmable by 0-10V dimmer.

8.0 Test Summary			
Evaluation Period	20-May-2019 to 25-Jun-2019		Project No. 190520059SZN
Sample Rec. Date	20-May-2019	Condition	Prototype
			Sample ID. Z190520059-001~062
Test Location	Intertek Testing Services Shenzhen Ltd. Longhua Branch 101, 102, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, Guanhu Subdistrict, LongHua District, Shenzhen, 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	Luminaires [UL 1598:2008 Ed.3 +R:17Oct2012] / Clause	Luminaires (R2013) [CSA C22.2#250.0:2008 Ed.3 +G1;G2] / Clause	--
Normal temperature test	14	14	--
Conduit Knockout And Twistout Test	16.13	16.13	--
Loading Test	16.15	16.15	--
Junction Box Rigidity Test	16.31	16.31	--
Splice Inspection Test	16.32	16.32	--
Dielectric Voltage-Withstand Test	17.1	17.1	--
Bonding Impedance Test	17.2	17.2	--
Test Description	Light Emitting Diode (LED) Equipment For Use In Lighting Products <Expires: 01May2020> [UL 8750:2015 Ed.2+R:23Nov2016] / Clause	Light Emitting Diode (LED) Equipment For Lighting Applications [CSA C22.2#250.13:2014 Ed.2] / Clause	--
Input test	8.2	9.2	--
Temperature test	8.3	9.3	--
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.			
Completed by:	Rock Li	Reviewed by:	Lean Wang
Title:	Project Engineer	Title:	Project Engineer
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 Intertek Multiple Listing Program.

BASIC LISTEE	Guang Dong Xianglong New Energy Co Ltd.
Address	LongJi Science &Technology Park, BaoZanRoad, KengKou, TingShan Management District, HouJie Town,Dongguan, Guangdong Province
Country	CHINA
Product	LED Panel Light

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

**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 "C" or "US", "C" and "EU"
- 2) the word "Listed" or "Classified" or "Recognized Component" (whichever is appropriate)
- 3) a control number issue 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 word, "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.

**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.

**10.1 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 5.0 require testing and/or evaluation as indicated.

**Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation**

Ship the samples to:

Intertek Testing Services Shenzhen Ltd. Longhua Branch

ETL Component Evaluation Center

101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu

Subdistrict, LongHua District

Shenzhen, China

Attn: Joey Kuang

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 Test

**11.1 Dielectric Voltage Withstand Test****Method**

One hundred percent 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, contactors, 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 in current calibration.

**Products Requiring Dielectric Voltage Withstand Test:**

<b><u>Product</u></b>	<b><u>Test Voltage</u></b>	<b><u>Test Time</u></b>
All products covered by this Report.	1000V	60 s
	or	
	1200V	1 s

**11.2 Grounding Continuity Test**Method:

Each product listed below shall be subjected to a test to determine that there is continuity between accessible

If all accessible dead metal is connected, only a single test need be performed. A visual or audible device (ohmmeter, buzzer, etc.) may be used to indicate grounding continuity.

Test Equipment:

The grounding continuity test apparatus shall consist of an indicating instrument and an ac or dc power supply of approximately 12 V providing a current of 30A though the bonding means being evaluated.

**Products Requiring Grounding Continuity Test:**

At least Once per quarter for all products covered by this report.

Test locationAllowable value

Between the point of grounding means and any dead metal part

< 0.10 ohm

