

APPLICATION FOR TEST REPORT
UL 1598
On Behalf of

Prepared For : DENCREST LIMITED
Address : RM 1502-F7 EASEY COMM BLDG 253-261 HENNESSY RD
WANCHAI HONG KONG CHINA
Product Name : White frame 110*60 hall light endless dimming wide voltage (with remote control)
Model : HG-HJWJL-2301
Trade Mark : N/A
Manufacturer : DENCREST LIMITED
Address : RM 1502-F7 EASEY COMM BLDG 253-261 HENNESSY RD WANCHAI
HONG KONG CHINA
Prepared By : RED Laboratories Inc.
Room 101, Building A, ZhengTailai Hi-Tech Innovation Park, No. 221, Gonghe Industrial Road.Xixiang Street, Bao'an District, Shenzhen, China
Test Date : September 23, 2024 to September 30, 2024
Date of Report : September 30, 2024
Report No. : RED240930026159ED-BM

UL 1598 TEST REPORT

Standard: UL 1598 and CSA C22.2 No. 250.0-24 2 nd			
Report No.:	RED240930026159ED-BM	Client:	DENCREST LIMITED
Product:	White frame 110*60 hall light endless dimming wide voltage (with remote control)	Rated input	4A 24V 100W
Project Engineer:	Hank Chen	Rated output	N/A
Test Engineer:	Jace Wang	Protection class	Class II
Application Date	September 23, 2024	Protection against moisture:	Class II
Requested Date	September 30, 2024	Construction:	--
Re-test		Operation mode	Contentious
Full-test		Weight:	<1Kg
Model/ type reference:	HG-HJWJL-2301		
Should the heating test be done in heating oven?	Yes 35°C No		
Altitude during operation (m)	Up to 2000		
Altitude of test laboratory (m)	below 2000 No		
Other information:.....	Outdoor use		

Lab Use Only

Lab Start Date	September 23, 2024	Lab Finish Date	September 30, 2024
Ambient Temperature, °C	24.4	Relative Humidity, %	49

Remarks:

Tested by: 

Checked by: 



****Modified History****

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	2024/09/30	Hank Chen

Clause	Requirements	Remarks	Results
14	Normal Temperature Test		
14.1	General	—	Pass
14.2	Surface ceiling luminaire		Pass
14.3	Surface wall luminaire		N/A
14.4	Under-cabinet luminaire		N/A
14.5	Type Non-IC recessed luminaire		N/A
14.6	Type Non-IC marked spacing		N/A
14.7	Type IC recessed luminaire		N/A
14.8	Type IC inherently protected recessed luminaire		N/A
14.9	Recessed luminaires for use in poured concrete		N/A
14.10	Through-wiring junction box temperature		N/A
14.11	Raceway temperature		N/A
14.12	(MEX) Temperature rise		Pass
15	Abnormal Operation Test		
15.1	General		Pass
15.2	Type Non-IC recessed lumin		N/A
15.3	Type Non-IC marked spacings in andescent and HID recessed luminaire	aire	N/A
15.4	Type IC incandescent recessed luminaires		N/A
15.5	Abnormal overlamping operation test for incandescent luminaires with polymeric housings or enclosure		Pass
16	Mechanical Tests		
16.1	Barrier strength		Pass
16.2	Metal thickness equivalency		N/A
16.3	Five-inch flame		N/A
16.4	Mold stress relief		Pass
16.5	Wet locations		Pass
16.6	Hot-wire ignition (HWI)		N/A
16.7	Glow-wire end product		Pass
16.8	High-current arc ignition (HAI)		N/A
16.9	End-product arc resistance		N/A
16.10	Polymeric support		Pass
16.11	Metallized polymeric parts coating adhesion		N/A
16.12	Flaming oil		N/A

Clause	Requirements	Remarks	Results
16.13	Conduit knockout and twistout		N/A
16.14	Self-threading screw torque		N/A
16.15	Loading		N/A
16.16	Snap-in or tab-mounted parts pull test without conduit opening		N/A
16.17	Snap-in or tab-mounted parts pull test with conduit		Pass
16.18	Suspended-ceiling luminaires – security of clips		N/A
16.19	Movable joint rotation		N/A
16.20	Swivel torsion and pull		N/A
16.21	Strain relief		Pass
16.22	Tempered glass impact		N/A
16.23	Glass support adhesive		N/A
16.24	Glass support		N/A
16.25	Horizontal burning flame		Pass
16.26	Vertical burning flame		Pass
16.27	Needle flame		Pass
16.28	Lamp containment barrier thermal shock		N/A
16.29	Polymeric lamp containment barrier melt-through		Pass
16.30	Polymeric connector loading		Pass
16.31	Junction box rigidity		Pass
16.32	Splice inspection		N/A
16.33	Lampholder mounting torque		N/A
16.34	Lampholder pull		N/A
16.35	Lampholder mounting bracket stop test		N/A
16.36	(MEX) Thermal shock		N/A
16.37	(MEX) Resistance to load		N/A
16.38	Lampholder lead pull		N/A
16.39	Ground-screw assembly strength		N/A
16.40	Cable pull test		Pass
16.41	Polymeric impact		Pass
17	Electrical tests		
17.1	Dielectric voltage-withstand		Pass
17.2	Bond impedance		N/A
17.3	Interlock switch endurance		N/A

Clause	Requirements	Remarks	Results
17.4	Articulate probe		N/A
17.5	(MEX) insulation resistance		N/A

NORMAL TEMPERATURE TESTS

Input : 110V

UL 1598 and CSA
C22.2 No. 250.0-24 2nd Edition, Clause 14

Result:

Thermocouple Location				Limit
Room Ambient	23.6			--
PWB	35.3			130
Temperature Probe	25.6			--
Directly Above Lamp on Ceiling	--			--
Mounting Surface Closest to LED	28.2			--
	--			--
<input type="checkbox"/> Polymeric Enclosure, Nearest LED <input type="checkbox"/> Polymeric Lens, Nearest LED	--			--
<input type="checkbox"/> Back of Reflector Where Wiring Can Contact	--			--
<input checked="" type="checkbox"/> Wiring Compartment Wall, Adjacent to LED	33.2			80
<input checked="" type="checkbox"/> Wiring In Stem, Adjacent to LED	28.6			80
<input checked="" type="checkbox"/> Wire Connector <input type="checkbox"/> Switch Body	42.1			70
<input type="checkbox"/> Bushing <input type="checkbox"/> Gasket	--			--
<input type="checkbox"/> Photo Control - Interior Body	--			--
<input type="checkbox"/> Photo Control - Gasket	--			--

The luminaire (complied / ~~did not complied~~) with dielectric volatge witstand test after normal temperature test.

Overall Comment : (Complied / did not complied)
Result: Pass

ABNORMAL TEMPERATURE TEST (OVERLAMPING)

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
15.4.2

Method:

The luminaire was operated as specified in the normal temperature test(25±5oC) for 7.5 hours with the largest possible wattage lamp it accommodated.

Result :

Ambient temperature : 24.1 °C
Test voltage : 110V
Test lamp(s) : LED

There (was / was no) ignition of the polymeric material and exposure of live parts.

Overall Comments :

Complied / Did not comply
Result: Pass

UL 1598 and CSA C22.2
No. 250.0-24 2nd Edition,
Clause 16.1

Barrier Strength

Method :

The barrier of luminaire was mounted as intended. A force of 44.5N (10 lb) over an area of 6.45cm² (1 in²) was applied to the barrier for 1 minute.

Results

- (resulted / did not result) in permanent distortion of a metal barrier
- (resulted / did not result) in temporary or permanent reduction of electrical spacings
- (resulted / did not result) in breaking or cracking of a nonmetallic barrier

Overall Comments:

Complied / Did Not Comply
Result: Pass

Compression

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.2.2

Method :

The luminaire was placed on a flat horizontal surface and applied a 111N force, using a rod with a 25.4mm diameter face, to the center of the surface being test for 1 min.

Results

After the test, the electrical spacings (complied / did not comply) with clause 6.11, and accessibility of uninsulated live parts (complied / did not comply) with Clause 6.13.2.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Impact

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
16.2.3

Method :

The luminaire was held in place and subjected to a single 7J impact, using the impact test apparatus, falling through a vertical height of 1.29m on surface being tested.

Results

After the test, the electrical spacings (complied / ~~did not comply~~) with clause 6.11, and accessibility of uninsulated live parts (complied / ~~did not comply~~) with Clause 6.13.2.

Overall Comments:

Complied / Did Not Comply
Result: Pass

Five inch flame

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause 16.3

Methods:

The sample of the complete luminaire or enclosure specimens was positioned to simulate intended usage, with a layer of surgical cotton located 300mm below the point of test flame application.

The burner was applied at an angle of approximately 20° from the vertical to three different locations on each of three samples, in the following area.

- any interior portion of the enclosure judged as likely to be ignited
- the outside enclosure of encapsulated portions
- the outside enclosure, if the flame cannot be applied to the interior

The flame was applied for 5s and removed for 5s. This cycle was repeated 5 times at each location.

Results

Conditioning test temperature before flame test : °C

- The material (continued / did not continue) to burn more than 1 min. after the fifth flame application at any of the location.
- There (were / were no) flaming drops or glowing particles that ignite the surgical cotton below the sample.
- The material (was / was not) destroyed to such an extent that the integrity of the enclosure was affected with regard to containment of fire.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Mold stress relief

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
16.4

Methods:

The sample of the complete thermoplastic enclosure was placed in a full draft circulating-air oven maintain at a temperature 10 °C higher than the max. temperature measured on the enclosure during normal temperature test, but no less than 70°C, for a period of 7 hours.

Results

Test temperature : 70 °C .

After the sample had cooled to room temperature, the sample (complied / did not comply) with the applicable requirements.

Overall Comments:

Complied / Did Not Comply
Result: Pass



Rain Test

UL 1598 and CSA C22.2 No. 250.0-24
2nd Edition, Clause 16.5.2

Methods:

The unit was positioned in the focal area of the three spray heads such that the greatest quantity of water was likely to enter the unit. The water pressure at each spray head was maintained at 5 psi.

Condition:

- a) Test sample : (Being operated for at least 30 min.
- b) Rings, frames, lamps and other replaceable parts serving to compress gaskets and bushings were removed and then reinstalled.
- c) Installed in accordance with instruction sheet :

Test duration

Test duration (hrs)	Test Period (hrs)	Lamp	Water
0 to 1.0	1.0	On	Off
1 to 1.5	0.5	Off	On
1.5 to 3.5	2.0	On	On
3.5 to 4.0	0.5	Off	On

Results:

- Immediately after the test, the luminaire :
 - (withstood / did not withstand) dielectric v
 - (could / could not) prevent water to enter of the luminaire or to create a hazard.
 - (could / could not) prevent water to con condition.

thstand test in section 17.1.
mulate in quantities sufficient to interfere with operation
ectrical parts, except lamps or components suitable for the

Overall Comment :

Complied / Did Not Comply
Result: Pass

Sprinkler test

UL 1598 and CSA C22.2 No. 250.0 3rd Edition, Clause 16.5.3

Method

A luminaire that was subject to the sprinkler test shall be conditioned by performing the normal temperature test of Clause 14 or by being operated for at least 30 min.

After the conditioning, rings, frames, lamps, and other replaceable parts of the luminaire serving to compress gaskets and bushings were removed and then reinstalled.

The luminaire was installed in accordance with the manufacturer's instructions. The mounting simulated the intended mounting method, and only the surfaces exposed to the elements were subjected to the sprinkler test.

A (ceiling-mounted / wall-mounted) luminaire was installed with the vertical axis of the luminaire 910 mm away from the vertical plane of the spray head and positioned with the dimensional center of the luminaire on a line projected from the centerline of the spray head.

Condition:

Table 16.5.3.1
Sprinkler test operating sequence
(See Clause 16.5.3.7.)

Test duration, h	Test period, h	Lamp	Water
0 – 1.0	1.0	On	Off
1.0 – 1.5	0.5	Off	On
1.5 – 3.5	2.0	On	On
3.5 – 4.0	0.5	Off	On

Results:

Immediately after the test, the luminaire was removed from the water and subjected to the dielectric voltage-withstand test of Clause 17.1. There (did / did not) no dielectric breakdown, and (water / no water) entered the luminaire interfere with operation of the luminaire or to create a hazard and contact electrical parts.

Overall Comments:

Complied / Did Not Comply

Result: Pass

Immersion

UL 1598 and CSA C22.2 No.
250.0 3rd Edition, Clause
16.5.4

Method

A luminaire was subjected to the immersion test in accordance with below Table, (with / without) an auxiliary well form, and mounted face-up, with the screws that attach the face torqued to the manufacturer's recommended values.(i.e. _____ Nm)

Test duration, h	Test period, h	Lamp	Location
0 – 3.5	3.5	On	Dry
3.5 – 7.5	4.0	Off	Submerged
7.5 – 24.0	16.5	Off	Dry
24.0 – 27.5	3.5	On	Dry
27.5 – 31.5	4.0	Off	Submerged
31.5 – 48.0	16.5	Off	Dry
48.0 – 51.5	3.5	On	Dry
51.5 – 55.5	4.0	Off	Submerged

Condition:

1. The luminaire was conditioned by being on a dry location at room temperature for 3.5 h.y submerged under at
2. The luminaire shall be de-energized and placed in a dry location at room temperature for at least 300 mm (12 in) of water. The temperature of the water before submergence shall be 5 °C or lower. The luminaire remain under water for at least 4 h and then be removed for
3. The procedure of above procedure 1 and 2 shall be conducted three times. Before the second sequence and the third sequence, the luminaire shall be conditioned by placing it in a dry location at room temperature for approximately 16.5 h.

Results:

Immediately following the third sequence, the luminaire was removed from the water and subjected to the dielectric voltage-withstand test of Clause 17.1. There (did / did not) no dielectric breakdown, and (water / no water) shall have entered the luminaire.

Overall Comments:

Complied / Did Not Comply

Result: N/A

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Impact conditioning

UL 1598 and CSA C22.2
No. 250.0 3rd Edition,
Clause 16.5.7

Method

A sample of the water shield was mounted on the luminaire for impact conditioning. The sample was subjected to a 4.1 J (3 ft-lb) impact from the steel sphere from a vertical distance of 775 mm (30.5 in) on any surface of the water shield that was exposed and that can be subjected to an impact during its intended use.

The horizontal or top surface of the water shield was subjected to an impact from the steel sphere. Other surfaces of the water shield was subjected to an impact from the steel sphere suspended by a cord.

Results:

Refer to (rain-test / sprinkler test / immersion test)

Overall Comments:

Complied / Did Not Comply

Result: Pass

Polymeric support

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.10

Method :

A polymeric part was supported for 1 minute four times the weight of the part it was relied upon to suspend in its intended application. Test was performed in an oven maintained at 10°C higher than the maximum normal operating temperature of the polymeric part measured during the normal temperature test of Clause 14.

Results

Part	Supported weight (kg)	Test temperature (°C)	Distortion
Enclosure of LED	0.1Kg	50	(Yes / No)
			(Yes / No)
			(Yes / No)
			(Yes / No)

Overall Comments:

Complied / Did Not Comply]
Result: Pass

Conduit knockout and twistout

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
16.13

Method :

Sample was securely held in place using the test apparatus described in Clause 19.23. A force of 44N (10lb) was applied to a knockout for 1 minute by means of a 6.4 mm (0.250 in) diameter mandrel with a flat end. The force was applied to the exterior surface of the knockout in a direction perpendicular to the plane of the knockout, and at the point most likely to result in movement.

Results

The knockout (remain / did not remain) in place. The clearance between the knockout and the opening (was no /was) more than 1.6mm (0.063 in) when measured after the force has been removed.

Overall Comments:

Complied / Did Not Comply
Result:N/A

Self-threading screw torque

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
16.14

Method :

The self-threading or sheet metal screw is tightened with a torque of 3.39N.m (30 lb.in) and if the part or the assembly supported by the screw withstands for 1 minute a force equal to four times the mass of the part or assembly, applied in a direction coincident with the axis of the screw.

Results

The thread (was / was not) stripped after the test.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Loading

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.15

Method :

A support device will support for 1 hour a load equal to four time the total mass to be supported under intended operating condition. Load will be applied in the direction of actual loading condition.

- a) Full load will be applied to each support part if part supported are no more than 11.3 kg (25 lb).
- b) The distribution of the load will be similar to that encountered in the field if the parts supported are more than 11.3 kg (25 lb).

Results

Total mass of luminaire = _____(kg)

Part of support	Supported weight (kg)	Deflection	Reduced spacing
Switch		(Yes / No)	(Yes / No)
		(Yes / No)	(Yes / No)
		(Yes / No)	(Yes / No)
		(Yes / No)	(Yes / No)

The unit (compromised / did not compromise) safety after the test.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Snap-In or Tab-Mounted Parts Pull Test Without Conduit Opening

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.16

Method:

An uneven distributed 44.5N (10 lb) force was applied for 1 minute in the direction most likely to dislodge the part being tested.

Grounding Continuity Test (Cl. 18.2) was conducted before and after the above test.

Results

The part (remained/ did not remain) attached to the luminaire.

Permanent deformation of the luminaire or its parts (exceeded / did not exceed) 3.2mm. (Permanent deformation = _____mm)

The luminaire (complied / did not comply) Grounding Continuity Test before and after the test.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Suspended - ceiling luminaires - security of clips

UL 1598 and CSA C22.2 No.
250.0-24 2nd Edition, Clause
16.18

Method :

A luminaire provided with integral suspended ceiling clips was mounted as intended to a representative ceiling grid.

The ceiling grid was inverted so that the total weight of the luminaire was applied normal to the luminaire mounting plate for a period of 1 min.

Results

The luminaire (remained / did not remain) attached to the ceiling grid by the mounting clips.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Movable Joint Rotation

UL 1598 and CSA C22.2 No. 250.0-24
2nd Edition, Clause 16.19

Methods:

A movable joint was subjected 6000 cycles of motion, linear or rotational, one cycle was consist of moving the part to the maximum extent possible in one direction and back again, then to the maximum extent possible in the opposite direction.

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Results

Jacket or the insulation of the conductors (was / was not) damaged after the test.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Movable Joint Torsion And Pull

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.20

Methods:

A movable joint shall withstand the following for 1 minute:

- a) a torsion of 2.26 ± 0.56 N-m (20 ± 0.5 lb-in); and
- b) a straight pull applied by a mass of 16 Kg (35 lb) or four times the maximum weight recommended by the manufacturer, whichever is greater.

Results

Test Weight: _____ kg

The swivel joint (withstood / did not withstand) the applied torsion and pull for 1 minute. The swivel joint (remained / did not remain) intact and operable.

Overall Comments:

Complied / Did Not Comply

Result: N/A

STRAIN RELIEF

UL 1598 and CSA C22.2 No. 250.0-
24 2nd Edition, Clause 16.21

Method: Test 1 - Strain relief for flexible cord

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

Results

- a) Movement of the flexible cord = 0.7mm (Limit : $\leq 1/16$ inch (1.6mm))
- b) There (~~was~~ / was no) breaking of the conductor or loosening of the wiring connections inside the enclosure of the luminaire.

Method: Test 2 - Strain relief for conductors

A pull force of 89N shall be applied for 1 min. to the conductor in a direction perpendicular to the plane of the entrance to the conductor connectin.

Results

There (~~was~~ / was no) breaking of the conductor or loosening of the conductor connections.

Overall Comments:

Complied / Did Not Comply
Result: Pass

Glass Support By Friction Or Adhesive

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.24

Method

Glass is tested as follows:

- a) Weight the diffuser.
- b) Pour an amount of granular material, such as sand, equal to four times the weight of the diffuser into the diffuser, distributing it evenly; and
- c) Mount the diffuser as intended.

Results

Weight of diffuser : _____ kg

The diffuser was (stayed / not stayed) in place for 1 minute.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Junction box rigidity

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.31

Method :

A junction box intended for pulling conductors was tested as follows:

- a) the luminaire was secured on a 12.7mm thick wood panel so that it was rigidly affixed to the panel, and the panel extended beyond the junction box;
- b) all junction box covers were removed;
- c) the weight specified in the below table was attached by a wire or cord that did not contact any surface of the junction box, to a conduit fitting installed to the box so that the force was applied from inside the junction box at the point most likely to result in deformation; and
- d) after 2 min, the weights were removed and any permanent deformation from the original was measured.

No. of conductors in or out	Force in pounds, lb	
	12 AWG	14 AWG
1 or 2	15	14
More than 2	30	16

Results

Parts	Measured permanent deformation to the luminaire (mm)	
Junction box		No change
Its hardware		
Its attachment		

Limit : $\leq 3.2\text{mm}$

Overall Comments:

Complied / Did Not Comply
Result:N/A

Splice Inspection

UL 1598 and CSA C22.2 No. 250.0-
24 2nd Edition Clause 16.32

Method :

A short length of No. 14AWG or larger wire was connected to the luminaire leads in the junction box or wiring compartment. The luminaire was mounted in the manner intended.

A visual inspection of the splices in the wiring compartment was conducted from the room side of the luminaire.

Results

The connections to the branch circuit supply, including the ground, (was / was not) visible through the luminaire access opening.

All parts that were required to be remove to gain access to the splices (was / was not) easily removed and replaced from the room side of the luminaire.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Lampholder mounting torque

UL 1598 and CSA C22.2 No. 250.0-
24 2nd Edition, Clause 16.33

Method :

A torque of 2.26Nm (20lb.in) was gradually applied to a medium base screwshell type lampholder and held for 1 minute using the test apparatus of Clause 19.27.

Results

- a) The lampholder (remained / did not remain) in place.
- b) There (was / was no) permanent deformation of the polymeric housing.
- c) Electrical spacings (complied / did not comply) with clause 6.11

Overall Comments:

Complied / Did Not Comply
Result: N/A

Lampholder pull

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 16.34

Method :

A force of 89 N (20 lb) was gradually applied to the screwshell of a medium base lampholder in a straight down direction and held for 1 minute.

Results

There (was / was no) permanent deformation of the polymeric housing, and electrical spacings (complied / did not comply) with Clause 6.11.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Lampholder mounting bracket stop test

UL 1598 and CSA C22.2 No. 250.0-
24 2nd Edition, Clause 16.35

Method :

The bracket that supporting the lampholder was adjusted so that it contacted the stops. A force of 4.5kg was applied to the lampholder support bracket for 2 minutes, and the displacement of the stop from the original was measured.

Results

The displacement of any stop (exceeded / did not exceed) 3.2mm from its original position. The lampholder support bracket (was / was not) displaced past any stop.

Overall Comments:

Complied / Did Not Comply
Result:N/A

Lampholder lead pull

UL 1598 and CSA C22.2 No. 250.0
3rd Edition, Clause 16.38

Method :

A pull force of 89 N (20 lbf) shall be applied for 1 min to each conductor terminating at the lampholder in any direction permitted by the luminaire construction.

Results

No uninsulated live parts shall be made accessible as a result of the application of the test force.

Overall Comments:

Complied / Did Not Comply
Result:N/A

Ground-screw assembly strength

UL 1598 and CSA C22.2 No. 250.0
3rd Edition, Clause 16.39

Method :

A 12 AWG (3.3 mm²) solid-copper, insulated conductor shall be stripped to a length of 2.5 cm (1 inch) minimum. The wire shall be wrapped around the screw under the screw head so that it makes a minimum 180° turn. The conductor shall be seated to follow any wire guides or dimples provided to align the conductor with the mating surface. The ground screw shall be tightened with a calibrated torque screwdriver to 1.6 N·m (14 lb-in).

Results

There shall not be:

- (a) damage to the head of the ground screw which would prevent the 1.6 N·m (14 lb-in) of tightening torque to be achieved; or
- (b) stripping of the ground screw assembly.

Overall Comments:

Complied / Did Not Comply
Result:N/A

Polymeric impact

UL 1598 and CSA C22.2 No. 250.0
3rd Edition, Clause 16.41

Method :

The sample luminaires shall be held in place and subjected to a single 7 J (5 ft-lb) impact, using the impact test apparatus described in Clause 19.21, falling through a vertical height of 1.29 m (4.24 ft), on surfaces being tested. The test samples shall be conditioned by placing them in a conditioning environment in accordance with table below for at least 3 h prior to the test.

Location marking	Preconditioning temperature
<input type="checkbox"/> Dry	23 ± 2.0°C
<input type="checkbox"/> Damp	0.0 ± 2.0°C
<input type="checkbox"/> Wet	-35 ± 2.0°C

Please the appropriate preconditioning.

Results

Test results shall be acceptable if the enclosure is capable of complying with all the applicable requirements of this standard.

Overall Comments:

Complied / Did Not Comply
Result: Pass

DIELECTRIC VOLTAGE-WITHSTAND

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 17.1

Test voltage

1000V 60Hz for incandescent-type luminaires / 1000V 60Hz (non-incandescent-type luminaires)

Method

The test voltage was applied for 1 minute between live parts and accessible non-current-carrying metal parts, including parts accessible only during relamping.

Results

During the above test, (no breakdown /breakdown) occurred.

Overall Comments:

Complied / Did Not Comply
Result: Pass

Bond Impedance

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 17.2

Method

The measured resistance between the point of connection of the branch circuit equipment grounding conductor and any non-current carrying metal parts of the luminaire were measured by ohmmeter and recorded in the below table.

Location	Resistance (Ω)

If the resistance measured in above exceeds 0.10 the following test shall be conducted.

A 30A current, provided by an ac or dc power supply of approximately 12V, was passed from a part to be grounded to the grounding terminal means for 2 minutes. The potential drop between them was measured at the end of this period.

- The resulting voltage drop (exceeded / did not exceed) 4V
- There (was / was no) melting of any metal in the bond
- There (was / was no) heating or burning which would likely to create a fire hazard.

Overall Comments:

Complied / Did Not Comply
Result: N/A

Interlock switch endurance

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 17.3

Method

A luminaire was connected to a supply circuit and operated at rated lamp voltage, wattage, and frequency, (___ V, ___ Hz, ___ W) with the switch contacts connected in the ungrounded conductor.

Accessible non-current-carrying metal parts of the luminaire was connected to the grounded conductor of the supply circuit through a 3 A quick-acting plug-type fuse.

The switch was operated by means of the interlocking mechanism provided in the luminaire for 500 cycles at a rate not exceeding 6 cycles per min.

The test voltage was applied for 1 minute between live parts and accessible non-current-carrying metal parts, including parts accessible only during relamping.

Results

There

(was / was no) electrical or mechanical malfunction of the switch;

(was / was no) fault indicated by opening of the fuse; and

(was / was no) dielectric breakdown when subjected to the dielectric voltage-withstand test of Clause 17.1.

Overall Comments:

Complied / Did Not Comply

Result: N/A

Articulate Probe

UL 1598 and CSA C22.2 No. 250.0-24 2nd Edition, Clause 17.4

Method

Method

The articulate probe was inserted through any openings in the enclosure in every possible position.

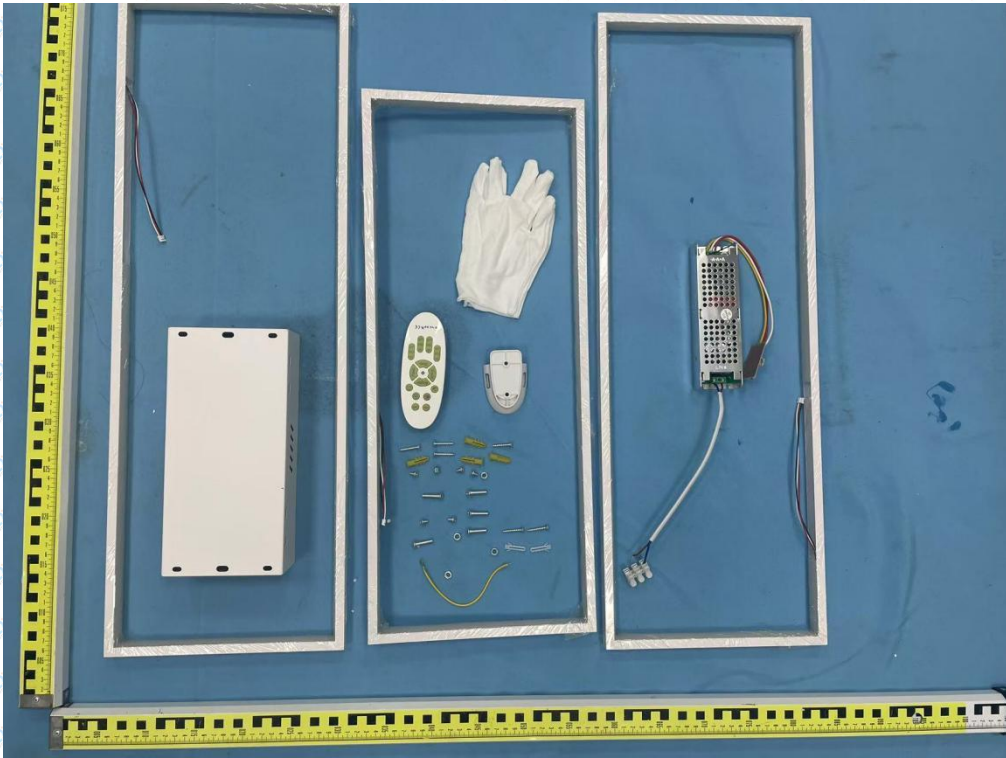
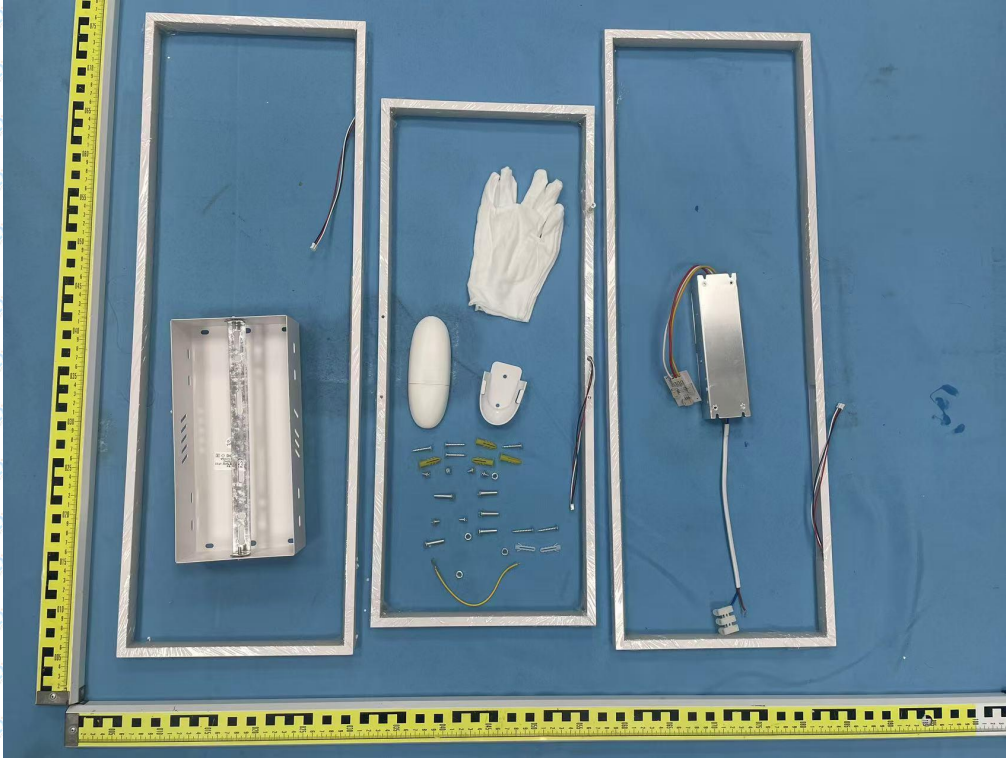
Result

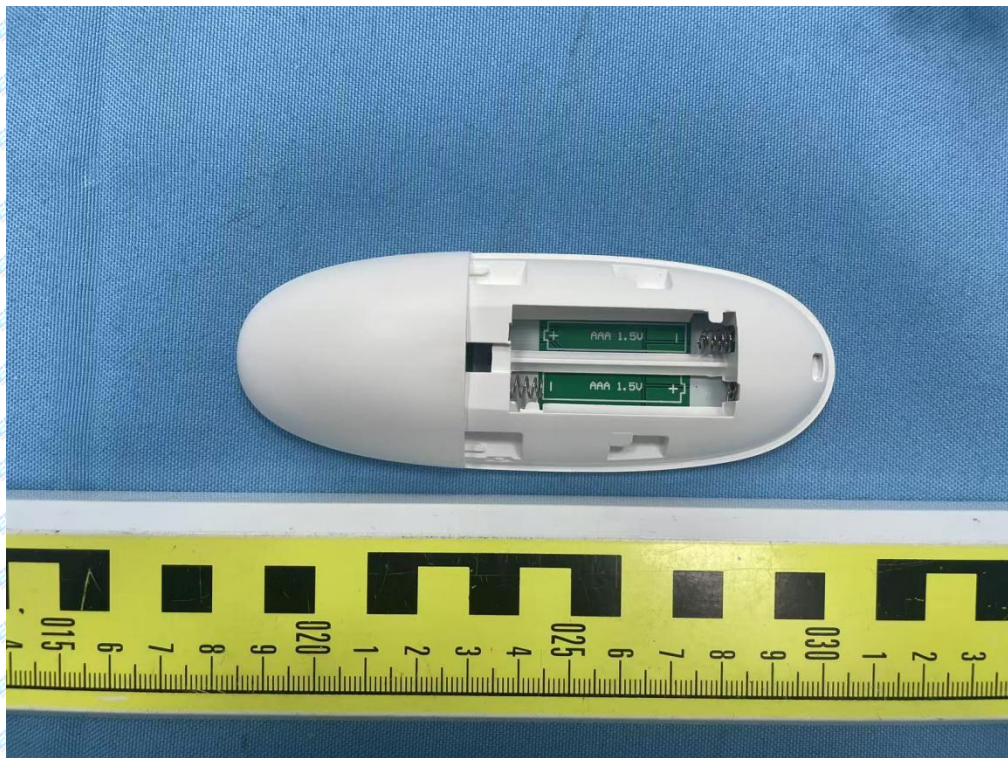
The articulate probe (~~contacted~~ / did not contact) live parts.

Overall Comments:

Complied / Did Not Comply
Result: Pass

Photo documentation





.....End of Report.....