

| 1.0 Reference and Address | | | | | | | | | |
|---------------------------|--|------------------|--------------|---|--|--|--|--|--|
| Report Number | 200609014GZU- 001 | Original Issued: | 12-Oct-2020 | Revised: None | | | | | |
| Standard(s) | Luminaires>Valid without technical revision: 30Oct2021< [UL 1598:2008 Ed.3+R:17Oct2012] | | | | | | | | |
| | Luminaires (R2013)>Valid without technical revision: 30Oct2021< [CSA C22.2#250.0:2008 Ed.3+G1;G2] | | | | | | | | |
| Applicant | Zhongshan Jumei Lighting Co., Ltd. | | Manufacturer | Zhongshan Jumei Lighting Co., Ltd. | | | | | |
| Address | No. 36 of Lefeng 6 Road, Henglan Town, ZHONGSHAN Guangdong | | Address | No. 36 of Lefeng 6 Road, Henglan Town, ZHONGSHAN Guangdong | | | | | |
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| 2.0 Product Description | | | | | | | | |
|-------------------------|--|---|--|--|--|--|--|--|
| Product | Type IC recessed luminaire | | | | | | | |
| Brand name | | ART light (Rigart light) | | | | | | |
| Description | The products covered by this report are type IC LED recessed luminaires with connection box. They are suitable for dry location use and dimmable. | | | | | | | |
| Models | VMWA004201A008, VMCL004601A008, VMCL004601B012, VMCL004701A008, VMCL004101A008, VMDL004101A008, VMDL000601A003, VMDL000603A009, VMDL000605A012, VMDL000610A024, VMDL000605E012, VMDL000610E024, VMDL000603C009, VMDL000605C012, VMDL000610C024, VMCL000605D012, VMCL000605E012, VMCL000701A020, VMDL000701A020, VMDL003001A007, VMDL003001B012, VMCL001901A012, VMCL001901B012, VMCL001901C020, VMCL001901D020; followed by up to four characters. MDL0006-01A-003(U01A), MDL0006-03C-009(U01A), MDL0006-03A-009(U01A), MDL0006-10E-024(U01A), MDL0006-05E-012(U01A), MDL0006-10C-024(U01A), MDL0006-05D-012(U01A), MCL0006-05E-012(U01A), MDL0007-01A-020(U01A), MDL0006-05D-012(U01A), MCL0006-05E-012(U01A), MCL0007-01A-020(U01A), MDL0007-01A-020(U01A), MDL0030-01A-007(U01A), MDL0030-01B-012(U01A), MCL0019-01A-012(U01A), MCL0019-01B-012(U01A), MCL0019-01C-020(U01A), MCL0019-01B-012(U01A), MCL0019-01C-020(U01A), MCL0046-01A-008(U01A), MCL0046-01A-012(U01A), MCL0047-01A-008(U01A), MCL0041-01A-008(U01A), MDL0041-01A-008(U01A), MDL0041-01A-008(U01A), | | | | | | | |
| Model Similarity | them are shape, LED quantity, color and | mechanical construction, main difference among wattage. as VMCL004101A008XXXX, XXXX denotes body Alternative Model No. MWA0042-01A-008(U01A) MCL0046-01A-008(U01A) MCL0046-01A-008(U01A) MCL0047-01A-008(U01A) MCL0047-01A-008(U01A) MCL0041-01A-008(U01A) MDL0041-01A-008(U01A) MDL0041-01A-008(U01A) MDL006-01A-003(U01A) MDL0006-05A-012(U01A) MDL0006-05A-012(U01A) MDL0006-05E-012(U01A) MDL0006-05E-012(U01A) MDL0006-05C-012(U01A) MDL0006-05C-012(U01A) MDL0006-05E-012(U01A) MDL0006-05E-012(U01A) MDL0006-05E-012(U01A) MDL0006-05E-012(U01A) MDL0006-05E-012(U01A) MDL0007-01A-020(U01A) MDL0007-01A-020(U01A) MDL0003-01B-012(U01A) MDL0030-01B-012(U01A) MDL0030-01B-012(U01A) MDL0019-01A-012(U01A) MDL0019-01A-012(U01A) | | | | | | |

| 2.0 Product Des | scription | 2.0 Product Description | | | | | | | | |
|-----------------|---|-------------------------|---------|----------------------------|---------------|--|--|--|--|--|
| | Model No. | Input voltage | Wattage | LED driver/LED module type | Dimensions/mm | | | | | |
| | VMWA004201A008 | | 8W | LED module-1 * 2pcs | 105.6*80*34 | | | | | |
| | VMCL004601A008 | | 8W | LED module-2 | Ф80*48 | | | | | |
| Ratings | VMCL004601B012 | 120V, 60Hz | 12W | LED module-3 | Ф110*80 | | | | | |
| | VMCL004701A008 | | 8W | LED module-2 | Ф134*75.5 | | | | | |
| | VMCL004101A008 | | 8W | LED module-2 | Φ70*160 | | | | | |
| | VMDL004101A008 | | 8W | LED module-2 | Φ70*185 | | | | | |
| | VMDL000601A003 | | 3.3W | LED driver-1 | 45*45*55 | | | | | |
| | VMDL000603A009 | | 8.6W | LED driver-2 | 105*45*55 | | | | | |
| | VMDL000605A012 | | 12W | LED driver-3 | 165*45*55 | | | | | |
| | VMDL000610A024 | | 23.8W | LED driver-5 | 315*45*55 | | | | | |
| | VMDL000605E012 | | 11.5W | LED driver-4 | 165*45*55 | | | | | |
| | VMDL000610E024 | | 24W | LED driver-9 | 315*45*55 | | | | | |
| | VMDL000603C009 | | 8.6W | LED driver-2 | 125*65*55 | | | | | |
| | VMDL000605C012 | | 12W | LED driver-3 | 185*65*55 | | | | | |
| | VMDL000610C024 | 400 0771/ | 24W | LED driver-5 | 335*65*55 | | | | | |
| | VMCL000605D012 | 120-277V, | 12W | LED driver-3 | 157*37*95 | | | | | |
| | VMCL000605E012 | - 60Hz | 11W | LED driver-4 | 157*37*95 | | | | | |
| | VMCL000701A020 | | 20W | LED driver-6 | Ф110*195 | | | | | |
| | VMDL000701A020 | | 20W | LED driver-6 | Φ110*108 | | | | | |
| | VMDL003001A007 | - | 6W | LED driver-7 | Φ75*122 | | | | | |
| | VMDL003001B012 | | 12W | LED driver-8 | Ф95*122 | | | | | |
| | VMCL001901A012 | | 12W | LED driver-8 | Ф90*100 | | | | | |
| | VMCL001901B012 | | 12W | LED driver-8 | 80*80*100 | | | | | |
| | VMCL001901C020 | | 20W | LED driver-6 | Φ110*120 | | | | | |
| | VMCL001901D020 | | 20W | LED driver-6 | 100*100*120 | | | | | |
| | | Dimmable type | | | | | | | | |
| | VMWA004201A008,M | | | | | | | | | |
| | VMCL004601A008,M0 | Triac dimmer | | | | | | | | |
| | VMCL004601B012,M0 | | | | | | | | | |
| | VMCL004701A008,M0 | | | | | | | | | |
| | VMCL004101A008,M0 | | | | | | | | | |
| | VMDL004101A008, M | | | | | | | | | |
| Other Ratings | VMDL000601A003, M MDL0006-03A-009(U0 VMDL000610A024, M MDL0006-05E-012(U0 VMDL000603C009, M MDL0006-05C-012(U0 VMCL000605D012, M MCL0006-05E-012(U0 VMDL000701A020, M MDL0030-01A-007(U0 VMCL001901A012, M MCL0019-01B-012(U0 VMCL001901D020, M | 0-10Vdc | | | | | | | | |

Photo 1 - External view of VMWA004201A008

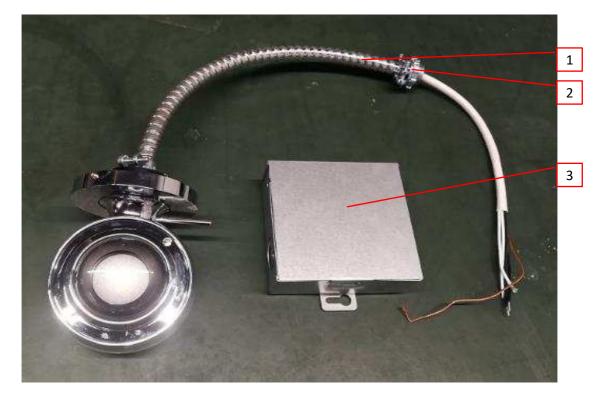


Photo 2 - Back view of VMWA004201A008

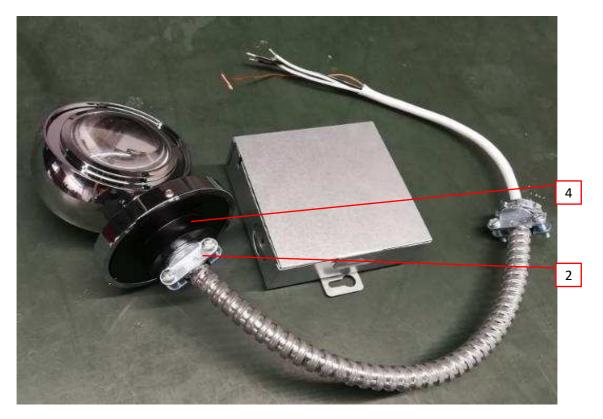


Photo 3 - Internal view of VMWA004201A008

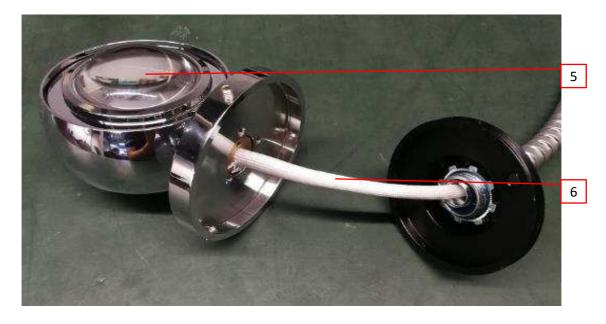


Photo 4 - LED module view of VMWA004201A008



Photo 5 - External view of VMCL004601A008

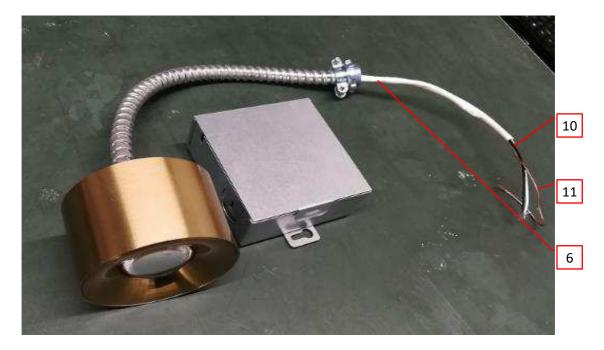


Photo 6 - Internal view of VMCL004601A008



Photo 7 - LED module view of VMCL004601A008

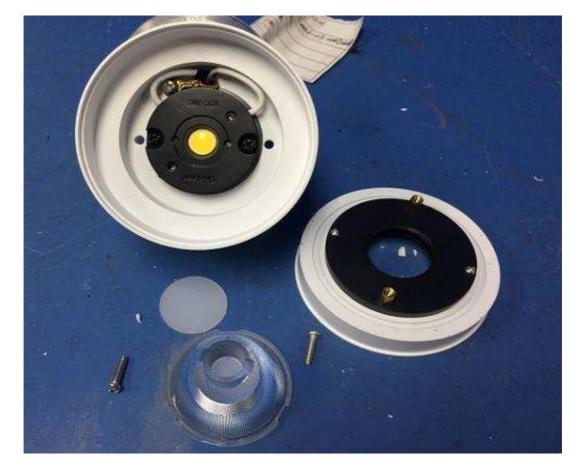


Photo 8 - External view of VMCL004701A008



Photo 9 - Internal view of VMCL004701A008



Photo 10 - Adjustable joints view of VMCL004701A008

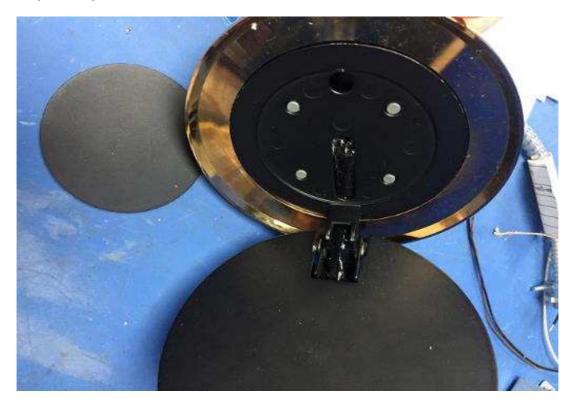


Photo 11 - Internal view of VMCL004701A008



Photo 12 - External view of VMCL004101A008



Photo 13 - Internal view of VMCL004101A008



Photo 14 - External view of VMDL004101A008



Photo 15 - Back view of VMDL004101A008



Photo 16 - Grounding terminal view of VMDL004101A008, VMCL004101A008



Photo 17 - Internal view of VMDL004101A008, VMCL004101A008

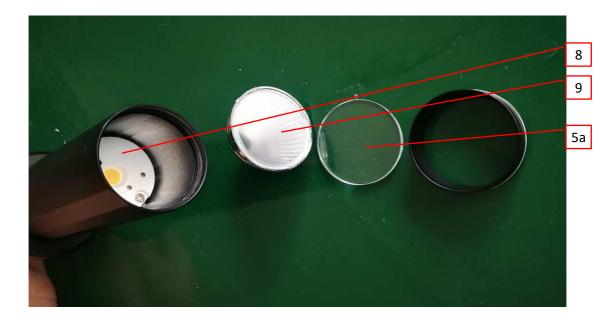


Photo 18 - LED module view of VMDL004101A008, VMCL004101A008, VMCL004701A008, VMCL004601A008



Photo 19 - External view of VMCL004601B012



Photo 20 - Back view of VMCL004601B012



Photo 21 - Internal view of VMCL004601B012



Photo 22 - LED module view of VMCL004601B012



Photo 23 - LED module view of VMCL004601B012



Photo 24 - Internal junction box view of VMWA004201A008, VMCL004601A008, VMCL004601B012, VMCL004701A008, VMCL004101A008, VMDL004101A008

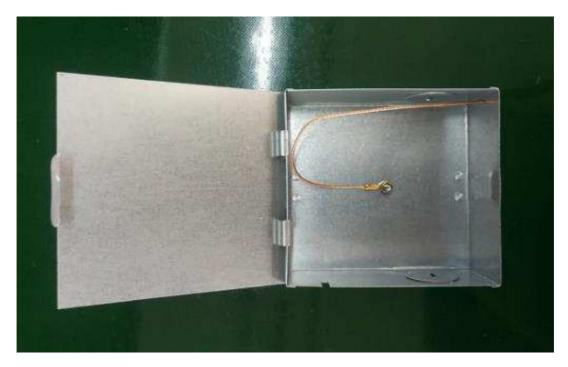


Photo 25 - External view of VMDL000601A003

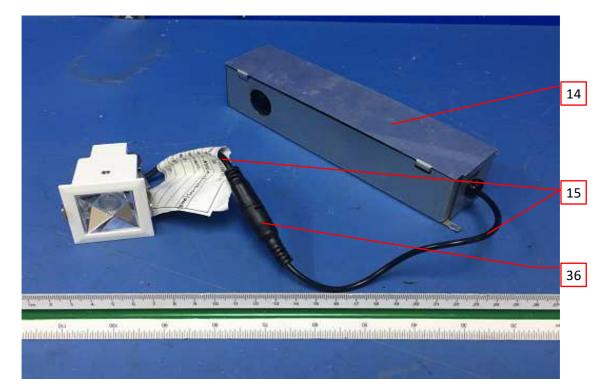


Photo 26 - Back view of VMDL000601A003

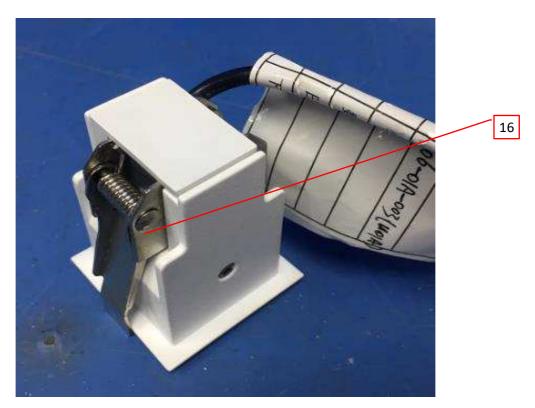


Photo 27 - External view of VMDL000603A009



Photo 28 -Back view of VMDL000603A009



Photo 29 -External view of VMDL000603C009

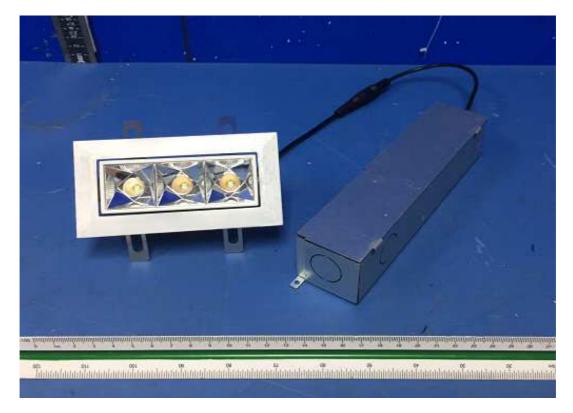


Photo 30 -Back view of VMDL000603C009

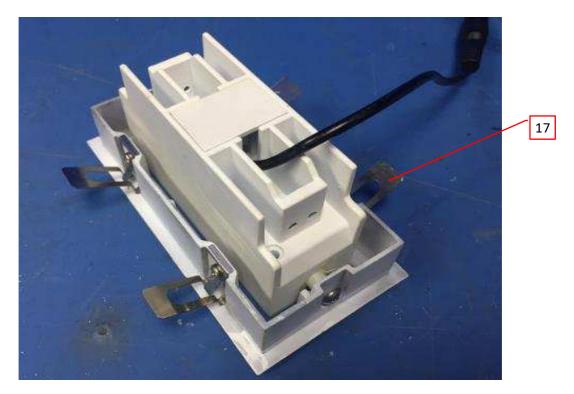






Photo 32 -External view of VMDL000610A024

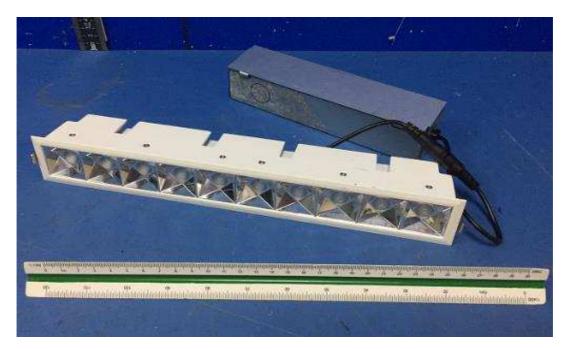


Photo 33 -Back view of VMDL000610A024

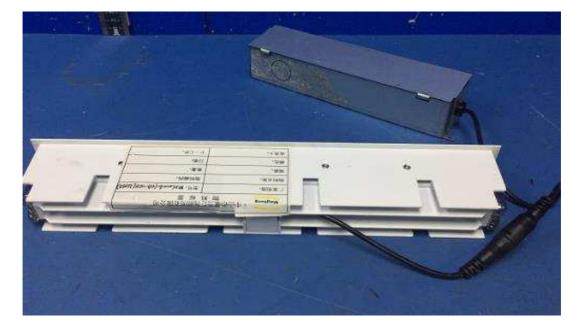


Photo 34 -External view of VMDL000610C024



Photo 35 - Back view of VMDL000610C024

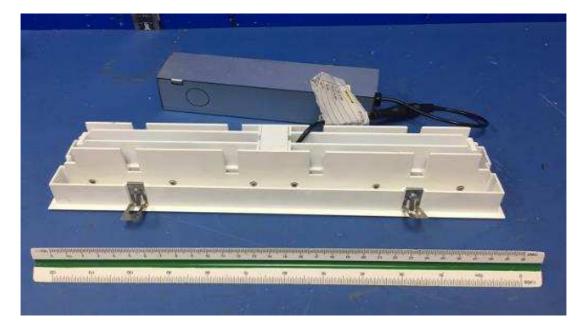


Photo 36 - LED view of VMDL000610C024, VMDL000610A024



Photo 37 - External view of VMDL000610E024

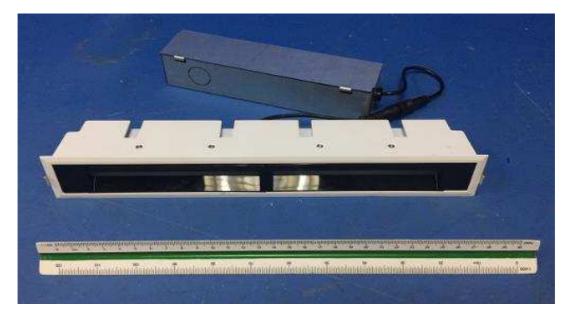


Photo 38 - Back view of VMDL000610E024

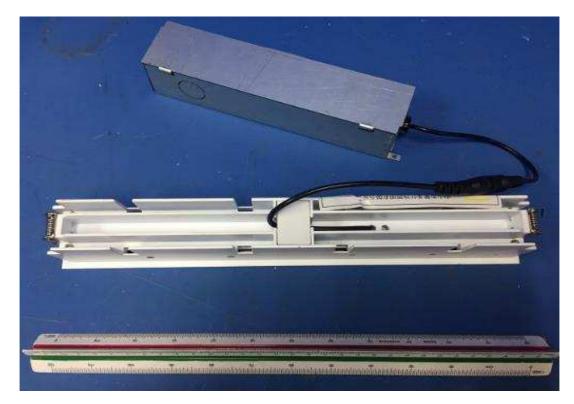


Photo 39 - LED view of VMDL000610E024



Photo 40 - External view of VMDL000605E012

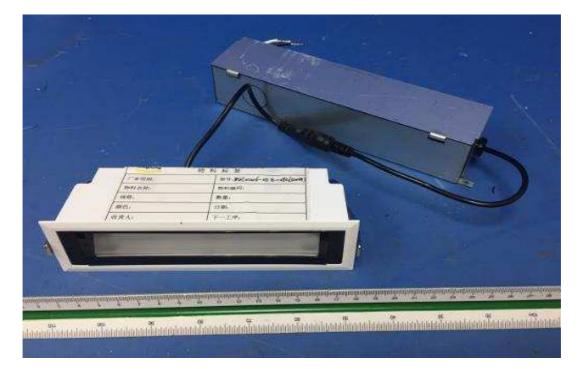


Photo 41 - Back view of VMDL000605E012

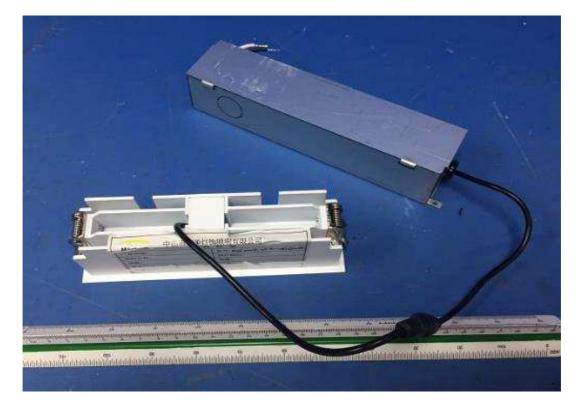


Photo 42 - LED view of VMDL000605E012



Photo 43 - External view of VMDL000605A012

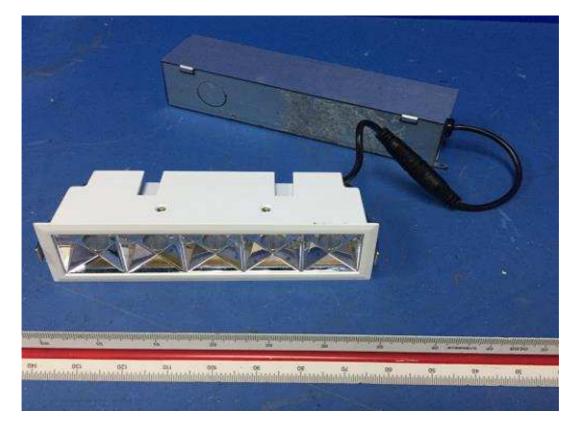


Photo 44 - Back view of VMDL000605A012



Photo 45 - External view of VMDL000605C012



Photo 46 - Back view of VMDL000605C012



Photo 47 - External view of VMCL000605D012



Photo 48 - Back view of VMCL000605D012



Photo 49 - LED view of VMCL000605D012, VMDL000605A012, VMDL000605C012



Photo 50 - External view of VMCL000605E012

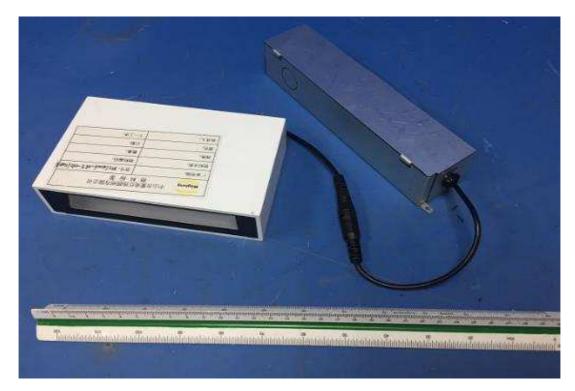


Photo 51 - Internal view of VMCL000605E012, VMCL000605D012

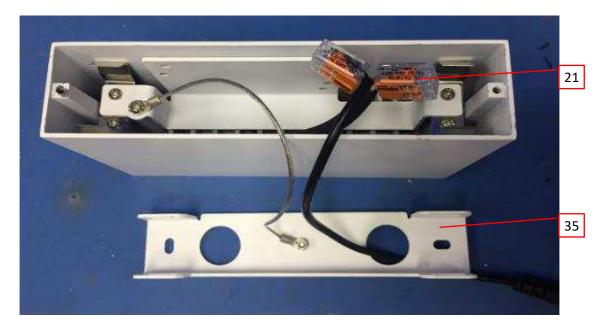


Photo 52 - LED view of VMCL000605E012

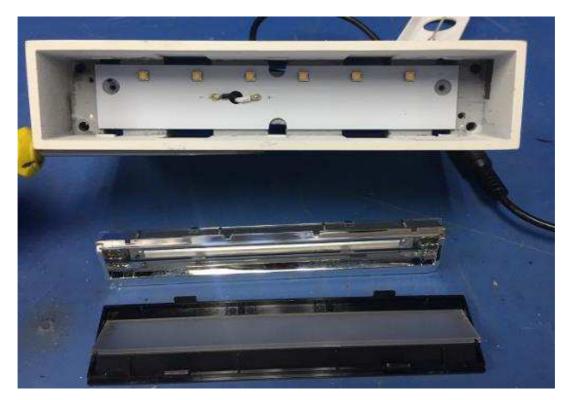


Photo 53 - External view of VMCL000701A020



Photo 54 - Back view of VMCL000701A020



Photo 55 - External view of VMDL000701A020

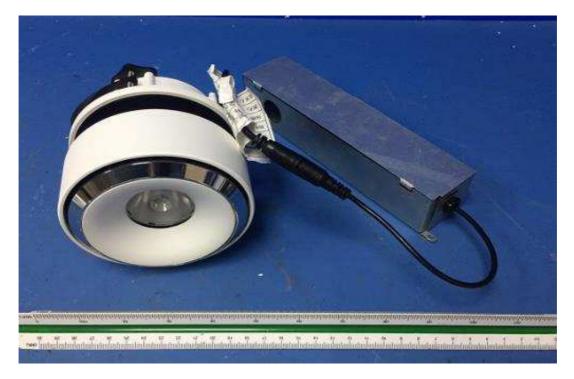


Photo 56 - External view of VMDL000701A020



Photo 57 - Adjustable joints view of VMDL000701A020, VMCL000701A020



Photo 58 - LED module view of VMDL000701A020, VMCL000701A020

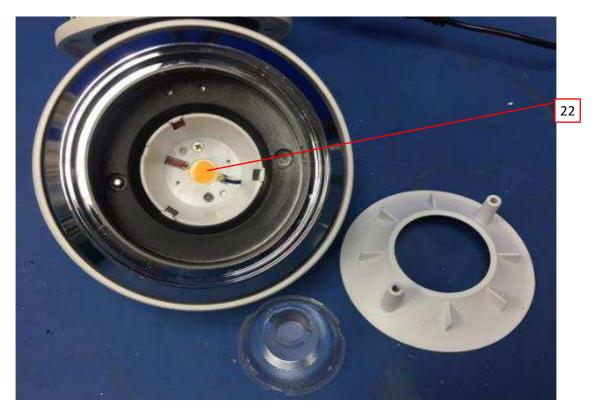


Photo 59 - External view of VMDL003001A007

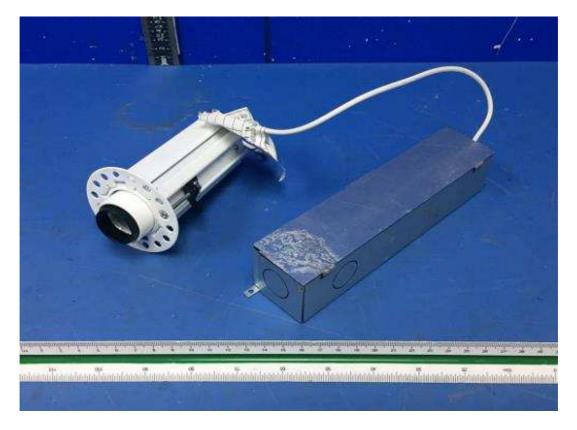


Photo 59a - Alternative structure view of quick connecter for VMDL003001A007



Photo 60 - Adjustable lamphead view of VMDL003001A007

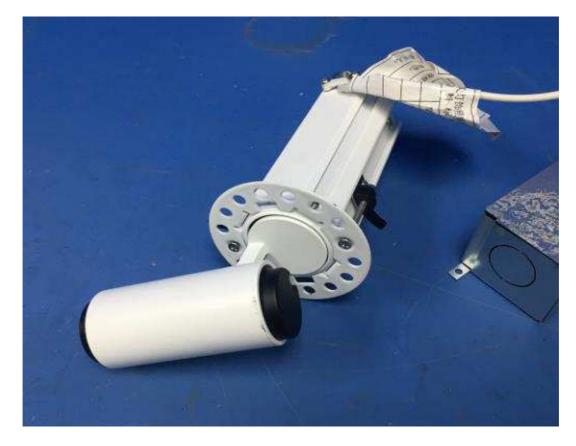


Photo 61 - External view of VMDL003001B012



Photo 61a - Alternative structure view of quick connector for VMDL003001B012



Photo 62 - Adjustable lamphead view of VMDL003001B012



Photo 63 - Mounting means view of VMDL003001B012, VMDL003001A007



Photo 64 - Back view of VMDL003001B012, VMDL003001A007



Photo 65 - LED view of VMDL003001B012, VMDL003001A007

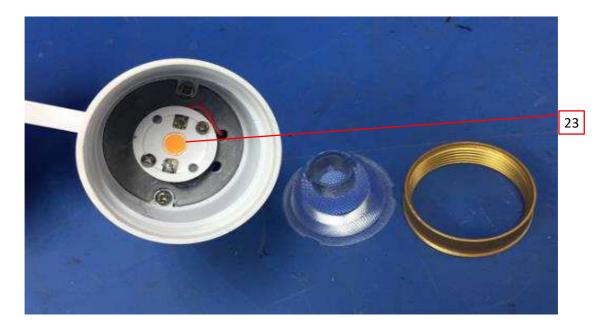


Photo 66 - External view of VMCL001901A012



Photo 67 - Back view of VMCL001901A012



Photo 68 - External view of VMCL001901C020

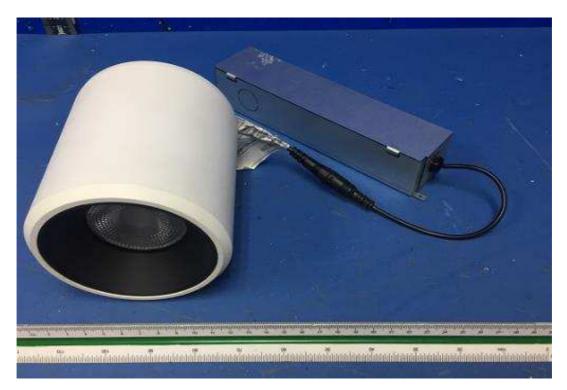


Photo 69 - Back view of VMCL001901C020



Photo 70 - LED view of VMCL001901C020, VMCL001901A012



Photo 71 - External view of VMCL001901D020

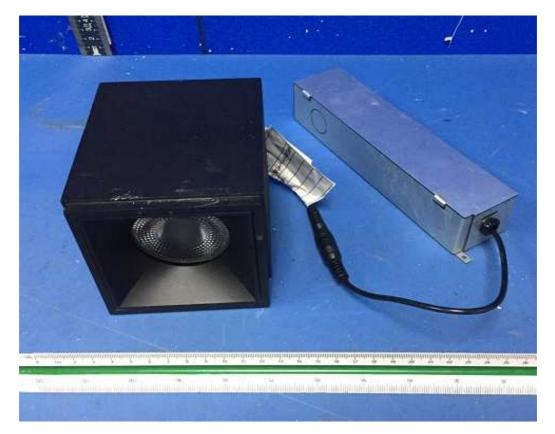


Photo 72 - Back view of VMCL001901D020



Photo 73 - External view of VMCL001901B012

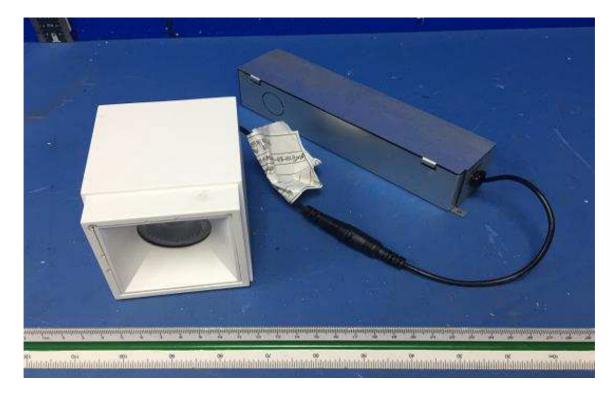


Photo 74 - Back view of VMCL001901B012

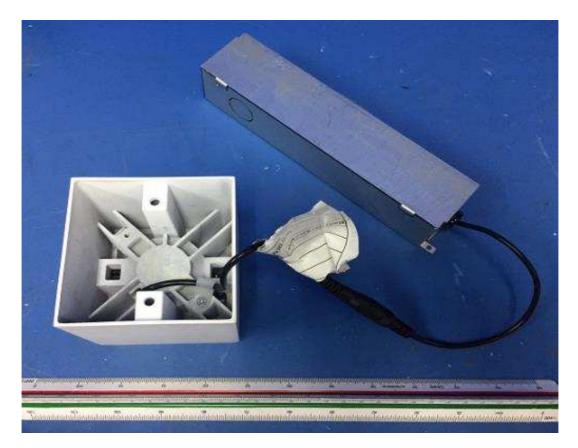


Photo 75 - LED view of VMCL001901B012, VMCL001901D020



Photo 76 - Internal junction box view for VMDL000601A003, VMDL003001A007



Photo 77 - Internal junction box view for VMDL000610C024, VMDL000610E024, VMDL000610A024



Photo 78 - Internal junction box view for VMDL000603A009, VMDL000605A012, VMDL000605E012, VMDL000603C009, VMDL000605C012, VMCL000605D012, VMCL000605E012, VMDL003001B012, VMCL001901A012, VMCL001901B012

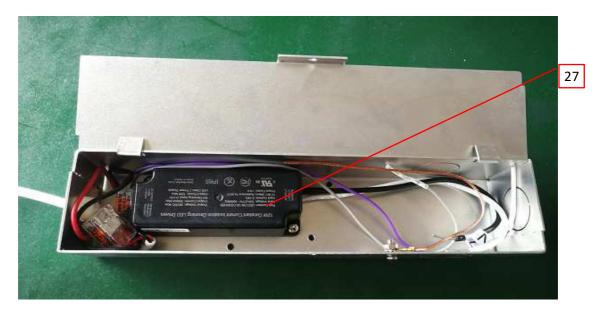
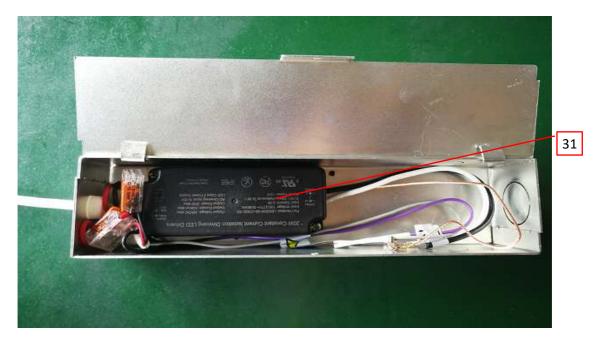


Photo 79 - Internal junction box view for VMCL000701A020, VMDL000701A020, VMCL001901C020, VMCL001901D020



| 4.0 0 | .0 Critical Components | | | | | | |
|----------|--------------------------|-------------------------|---|----------------------------------|--|--|--|
| Photo # | ltem no. ¹ | Name | Manufacturer/ trademark ² | Type / model ² | Technical data and securement means | Mark(s) of conformity ³ | |
| 1 | 1 | Metal conduit | Various | Various | 3/8", Made of metal and suitable length and diameter for actual use. | cULus | |
| 1, 2 | 2 | Conduit fitting | Various | Various | 3/8", secured by integrated screw ring. | cULus | |
| 1 | 3 | Junction box-1 | Various | Various | Sheet aluminum with min. 0.66mm thick. Size: 34*88*87mm For models refer to ill. 2. | NR | |
| 2 | 4 | Mounting plate | Various | Various | Sheet aluminum with min.1.2mm thick. For models refer to ill. 2. | NR | |
| 3 | 5 | Glass lens-1 | Various | Various | Glass material with min. 2.0mm thick, secured by mechanical means that can't be removed by hand. For models refer to ill. 2. | NR | |
| 17 | 5a | Glass lens-2 | Various | Various | Glass material with min. 2.1mm thick, secured by mechanical means that can't be removed by hand. For models refer to ill. 2. | NR | |
| 3, 5 | 6 | Glass fibre sleeving | Various | Various | min. 0.25mm thick, severed as mechanical protection. | NR | |
| 4 | 7 | LED module-1 | LUMENS CO LTD | EDC_38C_4W_ XXX_120V_B00 1 | 120V, 60Hz, 4W, 1 COB LED. For models refer to ratings of sec. 2.0. | cURus | |
| 4, 17 | 8 | Plastic part | TEIJIN CHEMICALS PLASTIC COMPOUNDS SHANGHAI LTD | L-1225U(f1) series | PC material, V-2, min. 1.45mm thick, RTI:115. secured by screws and used to secure LED module. For models refer to ill. 2. | cURus | |
| 4, 17 | 9 | Plastic diffuser | TEIJIN CHEMICALS PLASTIC COMPOUNDS SHANGHAI LTD | L-1225U(f1) series | PC material, V-2, min. 0.75mm thick, RTI:115. secured by screws and used to secure LED module. For models refer to ill. 2. | cURus | |
| 5 | 10 | Supply wire | Various | Various | AWM, min. 300V, min. 105°C, min. 18AWG, connected to LED module. For models refer to .ill. 2 | cURus or cETLus recognized | |
| 5 | 11 | Grounding wire | Various | Various | Bare copper wiring with min. 18AWG. | NR | |
| 18 | 12 | LED module-2 | LUMENS CO LTD | EDC_38C_8W_ XXX_120V_B00 1 | 120V, 60Hz, 8W, 1 COB LED. For models refer to ratings of sec. 2.0. | cURus | |
| 23 | 13 | LED module-3 | LUMENS CO LTD | | 120V, 60Hz, 12W, 1 COB LED. For models refer to ratings of sec. 2.0. | cURus | |
| 25 | 14 | Junction box-2 | Various | Various | Sheet steel metal with min.1.1mm thick. Size: L196*H40*W45mm. For models refer to ill. 2. | NR | |
| 25 | 15 | Power limited cable | Various | СМР | Power-limited circuit cable, 22AWG x 2C, 300V, 80°C. Used as LED driver output wire and LED PCB input wire. For model details refer to ill. 2. | cULus | |

| 4.0 0 | Critic | al Components | | | | |
|---------|--------------|----------------------|---|---------------------------|--|--|
| Photo # | Item no.1 | Name | Manufacturer/ trademark ² | Type / model ² | Technical data and securement means | Mark(s) of conformity ³ |
| 26 | 16 | Clips-1 | Various | Various | Sheet steel with 1.0mm thick, integrated with spring of diameter 1.1mm. For models refer to ill. 2. | NR |
| 30 | 17 | Clips-2 | Various | Various | Sheet steel metal with 0.66mm thick. For model details refer to ill. 2. | NR |
| 31 | 18 | LED-1 | CREE | XPG2 | If=max. 1500mA, Vf=2.8-3.15Vdc, size: 3.45*3.45*2.26mm. For model details refer to ill. 2. | NR |
| 31 | 19 | LED PCB | Various | Various | Single layer aluminum base, 1.2mm thick. Min. 90°C. for models details refer to ill. 2. | cURus |
| 39 | 20 | LED wire | Various | Various | AWM, min. 300V, min. 105°C, min. 22AWG, connected to LED module. For models refer to .ill. 2 | cURus or cETLus recognized |
| 51 | 21 | Quick connector | Various | Various | Min. 300V, min. 105°C, suitable for 24~18AWG conductor. | cULus or cETLus |
| 58 | 22 | LED-2 | CITILED | CLU028- 1203C4 | VF=34V, If=max. 690mA, 13.5*13.5*1.4mm, emitting area Φ 9.8mm. For models VMCL000701A020, VMDL000701A020. | NR |
| 65 | 23 | LED-3 | EDISION | 2PHM10xWxxP 55020 | Vf=8.7-9.5V, If= max. 1050mA, size: L13.5*W13.5*T1.4mm, emitting area Φ3.5/5.1*T0.5mm. For models VMDL003001A007. | NR |
| 70 | 24 | LED-4 | CITILED | CLU701- 1002C4 | Vf= 31.3V, If= max. 460mA, size: 13.5*13.5*1.4mm, Emitting area Φ 6mm, for models VMCL001901A012, VMCL001901B012, VMDL003001B012. | NR |
| 70 | 25 | LED-5 (not shown) | CITILED | CLU028- 1204C4 | Vf=34V, If= max. 720mA, size: 13.5*13.5*1.4mm, Emitting area Φ 9.8mm, for models VMCL001901C020, VMCL001901D020. | NR |
| 76 | 26 | LED driver-1 | E-DRIVER CO LTD | LB5W-08- C0700-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.08A, output: 8V DC, CC 700mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 78 | 27 | LED driver-2 | E-DRIVER CO LTD | LBS12W-12- C0700-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.18A, output: 12VDC, CC 700mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |

| 4.0 0 | 4.0 Critical Components | | | | | |
|-----------|-------------------------|-----------------------------------|---|---------------------------|--|--|
| Photo # | Item no.1 | Name | Manufacturer/ trademark ² | Type / model ² | Technical data and securement means | Mark(s) of conformity ³ |
| 78 | 28 | LED driver-3 (not shown) | E-DRIVER CO LTD | LBS12W-16- C0580-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.18A, output: 16VDC, CC 580mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 78 | 29 | LED driver-4 (not shown) | E-DRIVER CO LTD | LBS12W-24- C0500-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.18A, output: 24VDC, CC 500mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 77 | 30 | LED driver-5 | E-DRIVER CO LTD | LBS30W-42- C0700-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.41A, output: 42VDC, CC 700mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 79 | 31 | LED driver-6 | E-DRIVER CO LTD | LBS20W-42- C0500-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.3A, output: 42VDC, CC 500mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 76 | 32 | LED driver-7 (not shown) | E-DRIVER CO LTD | LB5W-10- C0500-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.08A, output: 10V DC, CC 500mA, 0- 10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 78 | 33 | LED driver-8 (not shown) | E-DRIVER CO LTD | LBS12W-36- C0315-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.18A, output: 36VDC, CC 315mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus |
| 1 | 34 | Label (not shown) | Various | Various | Min. 90°C and suitable for metal surface. Comply with UL969. | UR |
| 51, 54 | 35 | Mounting plate-2 | Various | Various | Sheet steel metal with min.1.1mm thick. For model details refer to ill. 2. | NR |
| 25 | 36 | Low voltage connector | Various | Various | It consist of male connector and female connector. Each of them combines items 36a, 36b. Located at output circuit of LED driver. | NR |
| 25 | 36a | Plastic material(not shown) | Various | Various | PVC material. | NR |
| 25 | 36b | Current carrying part (not shown) | Various | Various | copper material with min. 0.1mm thick. | NR |

| 4.0 0 | 4.0 Critical Components | | | | | | |
|---------|--------------------------|-----------------------------|---|---------------------------|--|--|--|
| Photo # | Item no. ¹ | Name | Manufacturer/ trademark ² | Type / model ² | Technical data and securement means | Mark(s) of conformity ³ | |
| 77 | 37 | LED driver-9 (not shown) | E-DRIVER CO LTD | LBS30W-42- C0570-RD | Class 2, suitable for damp location. Input:100-277V, 50/60Hz, 0.41A, output: 42VDC, CC 570mA, 0-10V dimming. Tc:90. For model details refer to ratings at sec. 2.0. | cURus | |
| | | | | | - | | |

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

<u>Recognized Component</u> - 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.

<u>Listed Component</u> - 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.

<u>Unlisted Component</u> - 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.

<u>Critical Features/Components</u> - 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.

<u>Construction Details</u> - 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. <u>Spacing</u> In primary circuits, 3.2 mm minimum spacing are maintained through air and 6.4 mm minimum 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.
- 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. <u>Corrosion Protection</u> All ferrous metal parts are protected against corrosion by painting, plating or the equivalent.
- 4. <u>Accessibility of Live Parts</u> All uninsulated live parts in primary circuitry are housed within a metal or nonmetallic enclosure constructed with no openings other than those specifically described in Sections 4 and 5.
- 5. <u>Grounding</u> 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. <u>Polarized Connection</u> This product is provided with a polarized power supply connection. All single pole 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 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 sec. 4.0.
- Markings The product is marked on a labeling system as described in item no. 34 of Section 4.0 as follows:
 applicant's name or brand name
 - model number
 - date of manufacturer,
 - electrical ratings

<u>Cautionary Markings</u> - The following are required: refer to ill. 1-1a for cautionary marking text and format.
 <u>Installation, Operating and Safety Instructions</u> - Instructions for installation and use of this product are provided by the manufacturer. The instruction shall include below information:
 Proper assembly method of the luminaire.

7.0 Illustrations

Illustration 1 - Cautionary Markings

| Model No. | ltem |
|--|-----------------------|
| MCL0046-01A-008(U01A), MCL0046-01A-012(U01A), MCL0047-01A-008(U01A), | |
| MCL0041-01A-008(U01A), MDL0041-01A-008(U01A). | 1.3, 1.14, 2.1, 2.7, |
| VMCL004601A008, VMCL004601B012, VMCL004701A008, VMCL004101A008, | 2.23, 2.24 |
| VMDL004101A008; followed by up to four characters. | |
| MWA0042-01A-008(U01A). | 1.3, 1.14, 2.1, 2.8, |
| VMWA004201A008; followed by up to four characters. | 2.23, 2.24 |
| MDL0006-01A-003(U01A), MDL0030-01A-007(U01A) | 1.3, 1.14, 2.1, 2.7, |
| VMDL000601A003, VMDL003001A007; followed by up to four characters. | 2.23, 2.24, 2.25 |
| MDL0006-03C-009(U01A), MDL0006-03A-009(U01A), MDL0006-05A-012(U01A), | |
| MDL0006-05E-012(U01A), MDL0006-10A-024(U01A), MDL0006-10E-024(U01A), | |
| MDL0006-05C-012(U01A), MDL0006-10C-024(U01A), MCL0006-05D-012(U01A), | |
| MCL0006-05E-012(U01A), MCL0007-01A-020(U01A), MDL0007-01A-020(U01A), | |
| MDL0030-01B-012(U01A), MCL0019-01A-012(U01A), MCL0019-01B-012(U01A), | 1.1, 1.3, 1.14, 2.1, |
| MCL0019-01C-020(U01A), MCL0019-01D-020(U01A). | |
| VMDL000603A009, VMDL000605A012, VMDL000610A024, VMDL000605E012, | 2.7, 2.23, 2.24, 2.25 |
| VMDL000610E024, VMDL000603C009, VMDL000605C012, VMDL000610C024, | |
| VMCL000605D012, VMCL000605E012, VMCL000701A020, VMDL000701A020, | |
| VMDL003001B012, VMCL001901A012, VMCL001901B012, VMCL001901C020, | |
| VMCL001901D020; followed by up to four characters. | |

| Item | Marking | Text / Format |
|------|--|---------------------|
| 1.1 | MIN 90°C SUPPLY CONDUCTORS | Verbatim S24-L3 and |
| 1.1 | LES FILS D'ALIMENTATION 90°C MIN | S32-L4 |
| 1.3 | VOLTS WATTS HERTZ or | S24-L3 |
| 1.0 | VOLTS WATTS HERTZ | 024 20 |
| 1.14 | VAPOR BARRIER MUST BE SUITABLE FOR 90 °C | S24-L2 |
| 1.14 | LE PARE-VAPEUR DOIT CONVENIR POUR 90 °C | |
| 2.1 | DRY LOCATIONS ONLY | Verbatim S24-L2 |
| 2.1 | POUR EMPLACEMENTS SECS SEULEMENT | |
| 2.7 | ACCESS ABOVE CEILING REQUIRED | Verbatim S24-L2 |
| 2.1 | ACCÈS REQUIS AU-DESSUS DU PLAFOND | |
| 2.8 | ACCESS BEHIND WALL REQUIRED | Verbatim S24-L2 |
| 2.0 | ACCÈS REQUIS DERRIÈRE LE MUR | |
| 2.23 | TYPE IC | S24-L3 |
| 2.20 | TYPE IC | 02 1 20 |
| 2.24 | INHERENTLY PROTECTED | S24-L3 |
| 2.21 | PROTECTION INHÉRENTE | 02 1 20 |
| | Class 1 wiring only | S24-L3 & attached |
| 2.25 | | on 0-10V dimming |
| | Câblage de classe 1 uniquement | wiring |

7.0 Illustrations

Illustration 1a - Marking text and format

| Size Designation | Letter | Height | Font Size | Font typeface, upper case |
|------------------|--------|--------|-----------|---|
| Size Designation | (mm) | (in) | (points) | i oni typerace, upper case |
| S16 | 1.6 | 0.062 | 6 | Not specified |
| S24 | 2.4 | 0.094 | 10 | Univers bold, Arial bold, Helvetica bold, |
| 524 | 2.4 | 0.094 | 10 | Zurich BT bold |
| S32 | 3.2 | 0.125 | 12 | Not specified |
| S48 | 4.8 | 0.188 | 19 | Univers bold, Arial bold, Helvetica bold, |
| 540 | 4.0 | 0.100 | 19 | Zurich BT Bold |

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

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 comply with Clause 20.1.7.

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 the product.

Only Pressure-sensitive labels and nameplates of the permanent type (Type P) that are secured by adhesive shall be in accordance with CSA C22.2 No. 0.15 or UL 969.

7.0 Illustrations

Illustration 2 - Component details

| R | Refer to sec. 4.0 | Model no. |
|------|---------------------|--|
| Item | Component name | |
| 3 | Junction box-1 | VMWA004201A008, VMCL004601A008, VMCL004601B012, |
| | Maunting plate | VMCL004701A008, VMCL004101A008, VMDL004101A008 |
| 4 | Mounting plate | VMWA004201A008, VMCL004601A008, VMCL004101A008, |
| 5 | Glass lens-1 | VMWA004201A008, VMCL004601A008, VMCL004701A008, VMCL004601B012, |
| 50 | Glass lens-2 | VMDL004101A008, VMCL004101A008 |
| 5a | Glass lens-z | VMWA004201A008, VMCL004601A008, VMCL004701A008, |
| 8 | Plastic part | VMCL004601B012, |
| | | VMWA004201A008, VMCL004601A008, VMCL004701A008, |
| 9 | Plastic diffusser | VMCL004601B012, |
| | | VMWA004201A008, VMCL004601A008, VMCL004601B012, |
| 10 | Supply wire | VMCL004701A008, VMCL004001A008, VMCL004001B012, |
| | | VMDL000601A003, VMDL000603A009, VMDL000605A012, |
| | | VMDL000610A024, VMDL000605E012, VMDL000610E024, |
| | | VMDL000603C009, VMDL000605C012, VMDL000610C024, |
| | lunction have 0 | VMCL000605D012, VMCL000605E012, VMCL000701A020, |
| 14 | Junction box-2 | |
| | | VMDL000701A020, VMDL003001A007, VMDL003001B012, |
| | | VMCL001901A012, VMCL001901B012, VMCL001901C020, |
| | | VMCL001901D020. |
| | | VMDL000601A003, VMDL000603A009, VMDL000605A012, VMDL000610A024, VMDL000605E012, VMDL000610E024, |
| | | |
| 45 | Power limited cable | VMDL000603C009, VMDL000605C012, VMDL000610C024, |
| 15 | | VMCL000605D012, VMCL000605E012, VMCL000701A020, |
| | | VMDL000701A020, VMDL003001A007, VMDL003001B012, |
| | | VMCL001901A012, VMCL001901B012, VMCL001901C020, |
| | | VMCL001901D020. |
| 16 | Clips-1 | VMDL000601A003, VMDL000603A009, VMDL000610A024, |
| 47 | | VMDL000610E024, VMDL000605E012, VMDL000605A012 |
| 17 | Clips-2 | VMDL000603C009, VMDL000610C024, VMDL000605C012 |
| | | VMDL000601A003, VMDL000603C009, VMDL000603A009, VMDL000610C024, VMDL000610A024, VMDL000610E024, |
| 18 | LED-1 | |
| | | VMDL000605E012, VMCL000605D012, VMDL000605A012, |
| | | VMDL000605C012, VMCL000605E012 |
| | | VMDL000601A003, VMDL000603C009, VMDL000603A009, |
| 19 | LED PCB | VMDL000610C024, VMDL000610A024, VMDL000610E024, |
| | | VMDL000605E012, VMCL000605D012, VMDL000605A012, |
| | | VMDL000605C012, VMCL000605E012 |
| 20 | LED wire | VMDL000610E024 |
| 35 | Mounting plate-2 | VMCL000605E012, VMCL000605D012, VMCL000701A020 |

| 8.0 Test Summary | | | | | | |
|------------------------|---------------------|--|---------------------|--------------------|------------------------|--|
| Evaluation Period | 9-Jun-2020 to 27 | 7-Sep-2020 | | Project No. | 200609014GZU | |
| Sample Rec. Date | 9-Jun-2020 | Condition | Prototype | Sample ID. | S200609014-001- 024 | |
| | Intertek Testing | Services Shenzhen | Ltd. Guangzhou Br | ranch | | |
| Test Location | | E201/E301/E401/E ience City, GETDD, | | | 8/F., No. 7-2, | |
| Test Procedure | Testing Lab | | | | | |
| Determination of the r | esult includes co | nsideration of meas | urement uncertaint | y from the test ea | uipment and | |
| methods. The produc | ct was tested as in | ndicated below with | results in conforma | ance to the releva | int test criteria. | |
| The following tests we | ere performed: | | | | | |
| | | | | [CSA | | |
| | | | | C22.2#250.0:2 | | |
| | | | [UL 1598:2008 | 008 Ed.3 + | | |
| | | | Ed.3+R:17Oct201 | G1;G2] / | | |
| Test Description | | | 2] / Clause | Clause | / | |
| Normal Temperature | | | 14 | 14 | / | |
| Mold Stress Relief Te | | | 16.4 | 16.4 | / | |
| Conduit Knockout And | d Twistout Test | | 16.13 | 16.13 | / | |
| Loading Test | | | 16.15 | 16.15 | / | |
| Movable Joint Torsion | | | 16.2 | 16.2 | / | |
| Junction Box Rigidity | | | 16.31 | 16.31 | / | |
| Splice Inspection Tes | t | | 16.32 | 16.32 | / | |
| Metal Strength Tests | | | 16.42 | 16.42 | / | |
| Dielectric Voltage-Wit | | | 17.1 | 17.1 | / | |
| Bonding Impedance T | ſest | | 17.2 | 17.2 | / | |
| | | | | CSA | | |
| | | | UL 8750:2015 | C22.2#250.13: | | |
| | | | | 2017 Ed.3 / | | |
| Test Description | | | 9/ Clause | 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: | Luca Lin | | Gerry Wu |
|---------------|------------------|------------|-------------------|
| Title: | Project Engineer | Title: | Assistant Manager |
| Signature: | Lucalin | Signature: | (Jernf nu |

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 | Zhongshan Jumei Lighting Co., Ltd. | |
|--------------|--|--|
| Address | No. 36 of Lefeng 6 Road, Henglan Town, ZHONGSHAN Guangdong | |
| Country | Country China | |
| Product | Type IC recessed luminaire | |

| 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 Limited Guangzhou Branch ETL Component Evaluation Center Room 02, &101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2, Caipin Road, Science City GETDD Guangzhou, Guangdong, China Attn: Ms. 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, switches, contractors, relays, etc., should be closed so that all primary circuits are energized by the test all 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 wiring, including connected components, and accessible dead metal parts of a portable luminaire that are likely to become energized, including those parts that are accessible only during relamping. 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: | | |
|---|--------------|-----------|
| PRODUCT | Test Voltage | Test Time |
| All products covered by this report. | 1200V | 1 second |

11.2 Grounding Continuity Test

Method:

Each product listed below shall be subjected to a test to determine that there is continuity between accessible dead-metal parts of the product and the grounding pin or blade of the attachment plug.

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 ground continuity test apparatus shall be an ohmmeter or similar indicating instrument capable of measuring 0.10Ω .

Products Requiring Grounding Continuity Test:

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

Test location

Between the point of grounding means and any dead metal part

Allowable value

< 0.10 ohm

| 12.0 Revision | Summary | 12.0 Revision Summary | | | |
|--|------------------------------|-----------------------|------|-----------------------|--|
| The following changes are in compliance with the declaration of Section 8.1: Date/ Project Handler/ Section Item Description of Change | | | | | |
| Date/ Proj # Site ID | Project Handler/ Reviewer | Section | Item | Description of Change | |
| | | | | None | |
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