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# **Certificate of Compliance**

Report Reference Issue Date

Certificate Number 20111026 - E322586 E322586 - 2008 November 11 2011 October 26



Issued to: MULTIPANEL UK LTD UNIT 6 SITE 2 OAK BUSINESS UNITS THORVERTON ROAD MATFORD **EXETER, DEVON EX2 8FS UNITED KINGDOM** 

This is to certify that representative samples of	Sign Accessories - Component
	Structural Panel, is a non-electrical enclosure rated material for use in electric sign components, designated: "ALUPANEL" with thickness of 2mm, 3mm and 4mm.
	Have been investigated by Underwriters Laboratories in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	ANSI/UL 879, "Electric Sign Components" and CAN/CSA-C22.2 No. 207, "Portable and Stationary Electric Signs and Displays."

Additional Information: See UL On-line Certification Directory at WWW.UL.COM for additional information.

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: Nu may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UI. Directory preceding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada: 🔊 and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

# Look for the UL Recognized Component Mark on the product

# William R. Carney

Underwriters Laboratories Inc.

**Director, North American Certification Programs** 

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.

For questions, please contact a local UL Customer Service Representative at http://www.ul.com/elobal/eng/pages/corporate/contactus

- 4. These products are not required to be enclosed or protected from the weather in the end product.
- 5. These products may be secured in place in the end product by any means available.
- 6. When these products are used in applications other than signs or outline lighting, the need to conduct a temperature test shall be considered.

# MICRALUX INC 1162 N REESE DR PROVO, UT 84601

Class 2 LED Module, Cat. Nos. LED Strips

1. These products are only suitable for connection to a UL Listed or Recognized Class 2, 12 volt DC power source.

- 2. These products have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited supplies.
- 3. When these units are connected to a Class 2 circuit, they are not to draw a total wattage of greater than the secondary or output rating of the Class 2 supply.
- 4. These products are suitable for use in dry, damp and wet locations.

5. These products are not required to be enclosed or protected from weather.

#### LED Power Converter, Class 2, Cat. Nos. PS24.

- 1. These products are suitable for use in dry and damp location. In wet location Signs, these products are to be installed where protected from rain, snow and water spray by water shield or sign body.
- 2. These products are intended for use only connected to a Class 2 circuit power.
- 3. Each output of this product complies with Class 2 requirements.

# MIMAKI ELECTRONIC COMPONENTS CO LTD 1382-1 OTSU, SHIGENO

# TOMI-SHI, NAGANO-KEN 389-0512 JAPAN

Class 2 LED Module, Class 2 LED Modules (Narrow Flex Strip Light), YFL32XX-3600-DC24 Series, where XX may be A, B, G, SR, W, CW, DW1, WW1 and WW2.

- 1. These products are only suitable for connection to a Class 2 power source rated 24 Volt DC or less.
- 2. These products have not been evaluated for use when connected to a power source that is other than Class 2.
- 3. These products are each rated max. 28 watts per module.
- 4. These products are suitable for use in dry, damp and wet locations with supply sources rated at 24 Volts DC or less.
- 5. These products are not required to be enclosed or protected from the weather in the end product.

## MITSUBISHI CHEMICAL FP AMERICA INC COMPOSITE MATERIALS DIV E318 401 VOLVO PKY CHESAPEAKE, VA 23320

Structural Panels, Models AP44(#2)(#4), AP33(#1)(#3), LT23(#1)(#5), LT24(#2)(#5), LT33(#1)(#6), LT34(#2)(#6), LT43(#1)(#7), LT44(#2)(#7).

- 1. Instructions shall be provided that illustrate the proper cutting, pointing, installation and securement to a building surface of a structural panel.
- 2. Acceptable for use in dry, damp and wet locations.
- 3. Structural panels are suitable for supporting enclosures, plastic faces, and moldings that are reliably secured to the panel.
- 4. Structural panels are not suitable for use as the enclosure of bare live parts or wiring.
- 5. Components other that neon standoffs or small decorative parts must be secured to the panel by bolts, nuts and washers of minimum 7/16 (11mm) diameter.
- 6. All exposed edges of a structural panel, including drilled holes, etc. shall be treated with two coats of outdoor paint or wood coating.
- 7. These structural panels did not comply with the component Support test. Therefore, sheet metal screws shall not be used to fasten components to these panels.
- 8. A letter made from a structural panel shall have at least two points of support and shall have no point more than 10 (254mm) from a point of support.
- 9. The metal faces shall be grounded in accordance with the Standard for Electric Signs (UL 48). Separate grounding straps shall be used when necessary.
- 10. Water exclusion of the end-product shall be determined in the end product
- 11. Minimum 5 cm (2 in) spacing from heat producing components required
- 12. Suitable for the connection and support of conduit.

13. All metal surfaces exposed to contact during normal use or routine maintenance shall be bonded and/or grounded in accordance with UL 48.

# MULTIPANEL UK LTD UNIT 6 SITE 2

# OAK BUSINESS UNITS THORVERTON ROAD MATFORD EXETER, DEVON EX2 8FS UNITED KINGDOM

Structural panel, Cat. Nos. designated "ALUPANEL".

- 1. Illustrate the proper cutting, pointing, installation, component securement and securement to a building surface of a structural panel.
- 2. Structural panels have been evaluated for wet location with 50°C ambient.
- 3. Structural panels may be employed as external decorative faces and are acceptable for support of complete electrical enclosures, plastic faces, and moldings that are reliably secured to the panel.

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4. Structural panels are not suitable to be used as the enclosure of bare live parts or wiring.

5. Nuts and bolts must be used when fastening a ballast or transformer weighing more than 7-1/2 lbs (3.4 kg); and

6. A letter made from a structural panel shall have at least two points of support and shall have no point more than 10 in. from a point of support.

# NC LED CO LTD 16-17 GAGOK-RI HWADO-EUP NAMYANGJU-SI, GYEONGGI-DO 472-841 REPUBLIC OF KOREA

Sign Accessories, Class 2 LED Modules: HLC1, HLC2S, HLC2, HLC3S, HLC3, HLC4, OMX-L4, OMX-L3, OMX-M3, OMX-M2, OMX-S2, OMX-N1, CC-IP-04, CC-IP-03L, CC-IP-03, CC-IP-02L, CC-IP-02, CC-IP-01, ELW4, ELW3L, ELW3, ELW2L, ELW2, ELW1, CCL4S, CCL3L, CCL3, CCL2L, CCL2, CCL1, LX-HLC4, LX-HLC3S, LX-HLC2S, ECO1, ECO2S, ECO3, ECO3, ECO3, ECO4, EC-IP-04, EC-IP-03L, EC-IP-03, EC-IP-02L, EC-IP-02, EC-IP-01, eco max OMX-L4, eco max OMX-L3, eco max OMX-M3, eco max OMX-M2, eco max OMX-S2, eco max OMX-N1, LX-ECO4, LX-ECO3S, LX-ECO2S, NCP1, NCP2S, NCP2, NCP3S, NCP3, NCP4, CCL4, NCC3, NCC35, NCC2, NCC25, NCC1, LX-HLC4, LX-HLC35, LX-HLC25, LX-ECO4, LX-ECO35, LX-ECO2S.

- 1. These products are only suitable for connection to a Class 2 power source rated 12 Volt DC or less.
- 2. These products are intended for use only when connected to a power source that complies with Class 2 voltage and energy limited circuit and is rated greater than 12 V DC.
- 3. When these units are connected to a Class 2 circuit, they are not to draw a total wattage of greater than the secondary or output rating of the Class 2 supply.
- 4. These products are suitable for use in dry, damp and wet locations with supply sources rated at 12 Volts DC or less.
- 5. These products are not required to be enclosed or protected from the weather in the end product.
- 6. These products may be secured in place in the end product by any means .

# **NEO-NEON LED LIGHTING INTERNATIONAL LTD** G FL & BASEMENT LEVEL 1 OF NEW EAST OCEAN CENTRE **9 SCIENCE MUSEUM RD** TSIM SHA TSUI EAST, KOWLOON HONG KONG

LED String System Cat. Nos. LED vertical PCB, Model LC-BL-300-12V-\*\*. LED vertical PCB, Model LC-BL-300-12V-\*\*. LED horizontal PCB, Model LC-BL-110S-12V-\*\*. LED horizontal PCB, Model LC-BL-110S-12V-\*\*. LED horizontal PCB string, Model LC-BL-24V-6-TYPE A-\*\*. LED horizontal PCB string, Model LC-BL-24V-6-TYPE A-\*\*. LED horizontal PCB string, Model LC-BL-24V-6-TYPE B-\*\*. LED horizontal PCB edge lite, Model LBLU-10x88-6-12V-\*\*. LED horizontal PCB edge lite, Model LBLU-10x88-6-12V-\*\*. LED vertical flex PCB, Model LBLU(FX)-V-6.25\'-12V-\*\*. LED flexible listel light, Model FLF-99-1M-12V-\*\*. LED tubes, Models LN-MN-300-24V-M(W), LN-MN-600-24V-M(W), LN-MN-1000-24V-M(W), and LED tube controller, Model SRC-181-24V. LED back light string, Model LBLS-PL-2P-12V-\*\*, LBLS-AL-2P-12V-\*\*, and LF(V)-A-1-12V-\*\*. LED high power back light, Model LBLS-AL-CC350-\*\*, and LBLS-PL-CC350-\*\*. LED linear flex, Model LBLU(FX)-H-10x420-10-24V-\*\*.

\*\* can be replaced by additional letters or numbers to indicate color.

- LED's may be supplied by a UL Listed or Recognized Component Sign Accessory UYMR2, Class 2, 24 VDC maximum 1. output power source.
- 2. LED's were evaluated for connection to a UL Listed or Recognized Component Sign Accessory - UYMR2, Class 2 source.
- 3. These products have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limiting requirements.
- 4 These products are not to draw a total wattage greater than the secondary or output rating of the Class 2 supply per Class 2 circuit.
- 5. Certain products described in this section may be cut into segments through a cutting line provided on the printed wiring board. No other cut across the board is permitted.
- Units may be provided with UYMR2, 3M type 4950 double sided adhesive tape.

LED Outline Lighting, Rectifier for 6VDC and 12V DC Class 2 Circuit, Model No. MLF(H)-2W-5X8\*a\*b\*c, may have suffixes a, b or c (a = 3Ft - 132Ft.; b = 6Vdc or 12Vdc; c = R, Y, W, G, B (LED lamp color)).

- Note: 3Ft 120Ft for 6V DC. 3Ft 132Ft for 12VDC
- These products are only suitable for connection to a UL Recognized (UYMR2) Class 2 Power supply with a continuous 1. output of 6 Vdc or 12 Vdc.
- 2 These products may be connected to a 6V or 12 V AC, UL Recognized (UYMR2) Class 2 power source when provided with optional rectifier.
- These products are rated to draw 4.5 Amps at 12Vdc at a 132Ft maximum and 4 Amps at 6 Vdc at 120Ft maximum. Each 3. unit shall be connected so as to not exceed the output current and power rating of the power supply.
- These products, when connected to a UL Recognized (UYMR2), Class 2 Power supply with a continuous output of 6 Vdc or 4. 12 Vdc, are suitable for installation in wet, damp and dry locations.
- 5. These products described in this section may be cut into segments only through a cutting mark symbol provided on the LED strip.
- Units may be provided with UYMR2, 3M type 4950 double-sided adhesive tape. Tape must be utilized per UYMR2 6. "Conditions of Use" as defined in the Sign Components Manual.
- Mounting Clips may be used on walls, pillars doorframes or the like places.

LED Modules, Component Sign Accessories, Class 2 Powered LED Module, Cat. No. LP-PIXDOT-Ø30-5V or LS-DIA34-5V-M, where each Cat. No. may be optionally followed by a letter from A to Z or by a number from 0 to 9.

- 1. These products are only suitable for connection to a Class 2 power source, rated 12 Volt DC or less.
- 2. These products have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited circuit.

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