File E466937

#### Project 4787022807

### September 29, 2015

# REPORT

on

COMPONENT - Drivers for Light-Emitting Diodes Arrays, Modules and Controllers

OSRAM SPA Via Castagnole 65/A I-31100, Treviso

# Copyright © 2015 UL LLC

UL LLC authorizes the above named company to reproduce this Report only for purposes as described in the Conclusion. The Report should be reproduced in its entirety; however to protect confidential product information, the Construction Details Descriptive pages may be excluded.

File E466937	Vol. 1	Sec. 3	Page 1	Issued:	2015-09-29
and Report					

DESCRIPTION

PRODUCT COVERED:

USR, CNR- Component LED Driver, see electrical ratings table for models.

USR - Recognition for United States. CNR - Recognition for Canada.

ELECTRICAL RATINGS:

		INPUT			OUTPUT (*)	
		VOLTAGE	FREQ.	CURRENT	VOLTAGE	CURRENT (A)
MODEL NO.		VAC	(HZ)	(A)	(VDC)	POWER (W)
	OT 110/120-277/1A4 2DIMLT2 P	120/277	50/60	1.06 A	35-85	0.60-1.4 A Max 110 W
	OT 100/120-277/800 2DIMLT2 P	120/277	50/60	0 875 7	50-186	0.35-0.80 A
	01 100/120-2///000 2DIMLIZ P	120/2//	50700	0.075 A	30-100	Max 100 W

(\*) See the operating area graphs in the next page for details on each model.

These products been evaluated for the following characteristics.

Model No.		Input type	Output type Environm	ent HL TL
	DT 110/120-277/1A4 2DIMLT2 P	Branch Circuit (Mains)	CC Isolated Dry, Dam	р Ио Ио
	DT 100/120-277/800 2DIMLT2 P	Branch Circuit (Mains)	CC Isolated Dry, Dam	ир Ио Ио





File E466937 Vol. 1

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USR - Indicates investigation to the United States Standards for Light Emitting Diode (LED) Light Equipment for Use in Lighting Products, UL 8750.

CNR - Indicates investigation to the Canadian Standard for: Light emitting Diode (LED) Equipment for Lighting Applications, CAN/CSA-C22.2 No. 250.13.

#### DIFFERENCES BETWEEN MODELS:

The differences are limited to the output characteristics. Both the models use the same PWB. Some components have different values and there are no visible differences (for more details see the BOM files, where differences are highlighted in green).

File E466937	Vol. 1	Sec. 3	Page 4	Issued:	2015-09-29
and Report					

Conditions of Acceptability:

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by UL LLC.

- Rated output loading for these products was achieved using LED loads together to a variable resistance used for fine adjustment to obtain rated output current.
- 2. The temperature tests were performed at nominal 50°C and 55°C ambient depending on supply voltage, as specified in a) and b) for each model. The 50°C or 55°C maximum ambient temperature rating was then calculated based on temperatures observed during testing and temperature ratings of the integral components including the electrical insulation system. During the normal temperature test of the end product, the temperature at Tc indicated from manufacturer was monitored as indicated in a) and b). a) Unit "OT 110/120-277/1A4 2DIMLT2 P" meets 85°C at tc point at 40°C
  - a) Unit "Of 110/120-277/1A4 2DIMLT2 P" meets 85 C at to point at 40 C ambient when supplied at 120V 60Hz and 55°C ambient when supplied at 277V 60 Hz.
  - b) Unit "OT 100/120-277/800 2DIMLT2 P" meets 85°C at tc point at 45°C ambient when supplied at 120V 60Hz and 50°C ambient when supplied at 277V 60 Hz.
- 3. These products utilize a Class F (155) electrical insulation system.
- 4. These products are intended for building in. The enclosure does not meet minimum thickness requirements and, therefore, an enclosure shall be provided when installed in the end product. The enclosure for these products have no openings. Acceptability of the LED driver with respect to mounting, spacing, casualty, temperature and segregation is to be determined as part of the end device evaluation.
- 5. The Leakage Current test was conducted for these models. Based on end use requirements and the construction presented, this test may need to be performed as part of the end product evaluation.
- 6. These products are provided with 18 AWG, solid leads, rated 90°C, 600 V minimum for input and output connections.
- 7. These products are dimmable using a low voltage 0-10 V. The interface circuit has been evaluated for isolation from primary (input) and secondary (output) circuits with spacings based on the maximum rated branch supply, 277 Vac.
- 8. These products are marked suitable for dry/damp locations. Additional considerations will be necessary as these LED drivers are integrated into wet rated end devices (i.e. input and output supply connection means, accessibility of the output based on maximum voltage restrictions for wet rated Class 2 circuits, acceptability of markings, etc.).