

File E466937

Project 4786774103

April 15, 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.

## DESCRIPTION

## PRODUCT COVERED:

USR, CNR - Component LED Driver, Models No. OT 50/120-277/1A2 2DIMLT2 P, and OT 50/120-277/800 2DIMLT2 P.

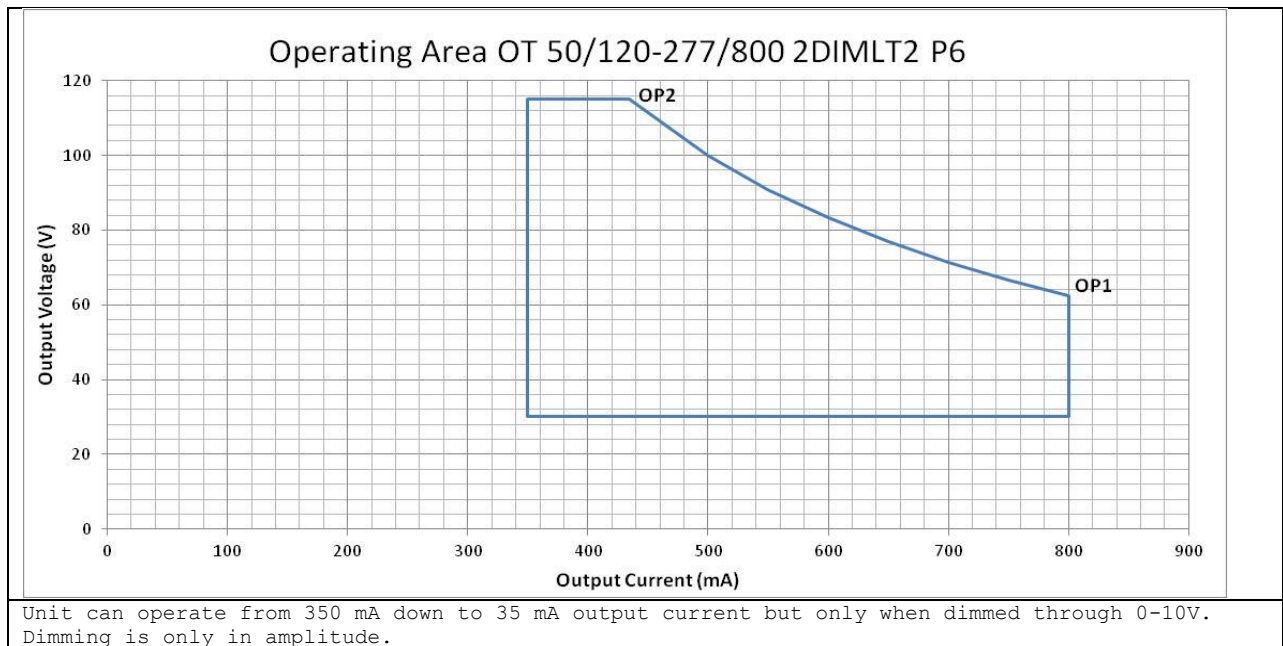
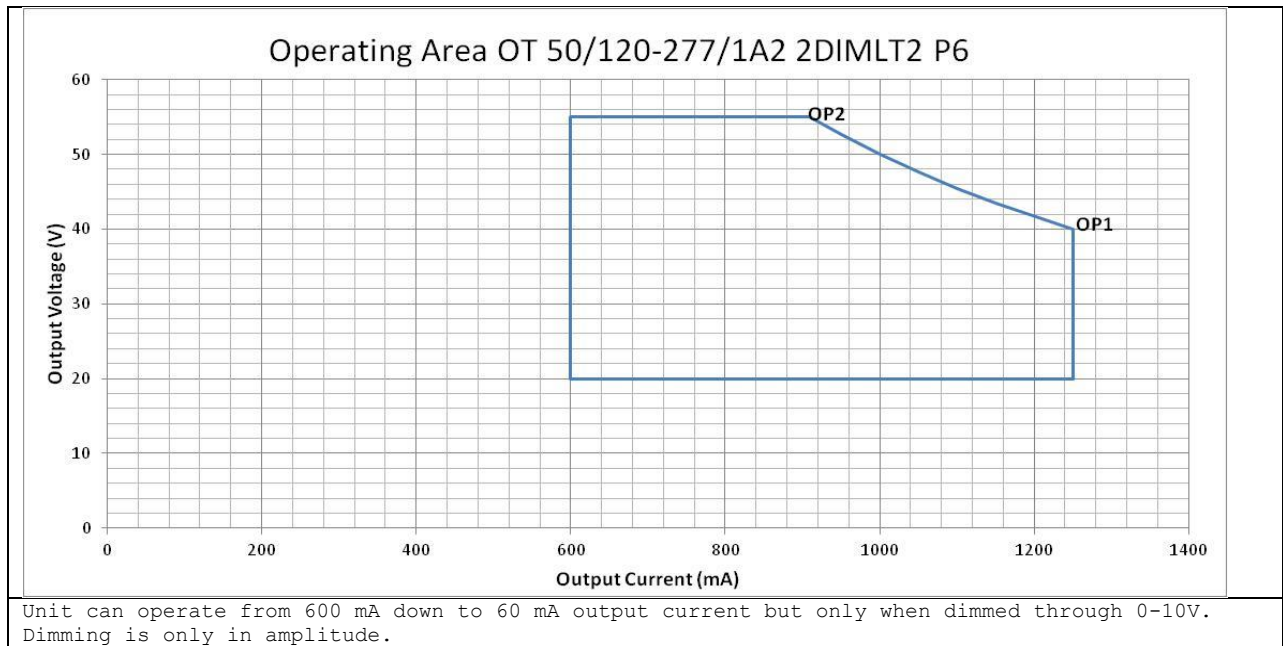
USR - Recognition for United States.

CNR - Recognition for Canada.

## ELECTRICAL RATINGS:

MODEL NO.	INPUT			OUTPUT (*)	
	VOLTAGE VAC	FREQ. (HZ)	CURRENT (A) POWER (W)	VOLTAGE (VDC)	CURRENT (A) POWER (W)
OT 50/120-277/1A2 2DIMLT2 P	120/277	50/60	0.5 A 59.5 W	20-55	0.60-1.25 A Max 50 W
OT 50/120-277/800 2DIMLT2 P	120/277	50/60	0.5 A 59.5 W	30-115	0.35-0.80 A Max 50 W

(\*) See the operating area graph in the next page for details.



## 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. The output of model "OT 50/120-277/1A2 2DIMLT2 P" has been evaluated as Class 2, Clause 7.12.1

CNR - Indicates investigation to the Canadian Standard for: Light emitting Diode (LED) Equipment for Lighting Applications, CAN/CSA-C22.2 No. 250.13. The output of model "OT 50/120-277/1A2 2DIMLT2 P" has been evaluated as LED Class 2, Annex A

## DIFFERENCES BETWEEN MODELS:

The differences are limited to the output characteristics, as described in the Electrical ratings table. Both the models use the same PWB. Some components have different values and the main visible difference are shown in Fig. 5.

## Conditions of Acceptability:

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

1. These products been evaluated for the following characteristics.

Model No.	Input type	Output type	Product is rated
OT 50/120-277/1A2 2DIMLT2 P	Branch (Mains)	CC Class 2 (a) LED Class 2 (b)	Dry, Damp
OT 50/120-277/800 2DIMLT2 P	Branch (Mains)	CC Isolated	Dry, Damp

a- As defined in UL 8750, Clause 7.12.1; b- As defined in CAN/CSA-C22.2 No. 250.13, Annex A

2. 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.

3. 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 50/120-277/1A2 2DIMLT2 P meets 80°C at Tc point at 50°C ambient when supplied at 120V 60Hz and 80°C at Tc point 55°C ambient when supplied at 277V 60 Hz.

b) Unit OT 50/120-277/800 2DIMLT2 P meets 85°C at Tc point at 50°C ambient when supplied at 120V 60Hz and 85°C at Tc point 55°C ambient when supplied at 277V 60 Hz.

5. These products are intended for building in. The enclosures 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.

6. 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.

7. These products are dimmable using a low voltage 0-10 V interface. This interface is a source, since the product provides the source of supply for the interface.

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.).

9. For model OT 50/120-277/1A2 2DIMLT2 P, based on maximum voltage restrictions for Class 2 circuits in the Canadian Electrical Code, the output cannot be accessible. The output terminals of the end product should be evaluated to confirm compliance with this accessibility requirement, either based on output terminal design or based on manufacturer specifications for its use in restricted access areas only. The latter option will require markings on the end product as well as the installation manual.

10. These products are provided with 18 AWG, solid leads, rated 105°C, 600 V minimum for input and output connections.