File E338769
Project 12CA32870

August 15, 2012

REPORT

On

COMPONENTS - DRIVERS FOR LIGHT-EMITTING-DIODE ARRAYS, MODULES AND CONTROLLERS

Astec International Ltd - Philippines Branch
Metro Manila 1110, Philippines

DESCRIPTION

PRODUCT COVERED:

USR, CNR – Component, LED Driver, Isolated NEC Class 2 output, Model LDS100-48-H.

GENERAL:

The product covered by this Report is a LED driver. The unit consists of a switch mode power transformer and other related electronic circuitry. The unit is provided with leads for input and output connections.

USR indicates investigation to the United States requirements for Light Emitting Diode (LED) Equipment For Use In Lighting Products, UL 8750, First Edition, and the Standard for Class 2 Power Units, UL 1310, Sixth Edition.

CNR indicates investigation to the Canadian Standard for General Use Power Supplies, CAN/CSA C22.2 No. 107.1, Third Edition.

ELECTRICAL RATINGS:

	Input, 50/60 Hz		Output (Red-Black)	
Model	Voltage, Vac	Current, A	Voltage, Vdc	Current, A
LDS100-48-H	100	**1.5**	48	1.734
	120-277	**1.5**	48	2.04

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

Use – For use only with complete equipment where the acceptability of the combination is determined by UL LLC.

This component has been judged on the basis of the required spacings in the Standard for Light Emitting Diode Equipment for Use in Lighting, UL 8750, 1st Edition, , and the Canadian Standard for Specialty Power Supply, CAN/CSA C22.2 No. 107.1, 3rd edition, which should cover the component itself if submitted for unrestricted Listing.

Condition of Acceptability - The following items are to be considered when evaluating the power unit in the end-use product:

1. The unit shall be installed in compliance with the enclosure, mounting, spacing, casualty, and segregation requirements of the ultimate application.

2. The suitability of input and output connections shall be determined in end-use application. The driver was provided with AWM leads for supply and load connections.

3. The unit shall be used within Recognized ratings as specified above.

4. The suitability of grounding means shall be determined in end-use application.

5. Transformer employs Class 155(F) insulation system.

6. The unit is intended to be connected to a maximum 20 A branch circuit.

7. The suitability of field wring shall be determined in end product use.

8. The Daughter Board with output leads (Purple-Gray) is for dimming function, which have not been evaluated and shall be determined by end product. The dimmer interface was isolated from the primary circuit and directly connected to the secondary circuit of the driver.

9. The unit is suitable for use in dry and damp locations.

10. Output (Red-Black) has been identified as inherently limited Class 2 under UL 1310.

11. The unit was subjected to the Temperature Test in a Tc rating 90°C with 100% loading under input 120 V and 277 V and 85% loading under input 100V. It has been conducted using resistive loading. **At 60 Hz, the maximum Ta ratings are 51.4, 50.3 and 55.4 C under input 100, 120 and 277 V**. The necessity of repeated Temperature Test shall be determined in each end use application.

12. The leakage current from enclosure exceeds the required 0.75 MIU. The acceptability shall be determined in each end-use application.