

Project Name:	
Type:	

ESL1048 iPOP

High Power Constant Current
LED Driver | 48 Watts Max.

PRODUCT FEATURE

- Universal Input range from 110VAC~304VAC, 50/60Hz
- Linear design and compact size maximizes design flexibility.
- Size: 11.80" (L) x 1.31" (W) x 1.06" (H)
- Fully potted, suitable for dry and damp location applications
- Standard 0-10V dimming; compatible with fluorescent dimmers
- Intelligent Window® GUI interface for programming
- Output current and voltage programmable maximize performance



SPECIFICATIONS

INPUT RANGE:	100 ~ 277VAC
POWER FACTOR:	> 0.92 at 65% to 100% load, 115VAC or 230VAC
INPUT CURRENT:	0.6 Amps max at 115VAC
OUTPUT CURRENT REGULATION:	±5%
PROTECTION:	OCP, SCP, OLP - Auto Recovery
DIMMING METHOD:	0-10V dimmer/ Fluorescent dimmer
HOLD UP TIME:	Half cycle min. at 120VAC and 80% rated load
FREQUENCY:	47 to 63Hz
INRUSH CURRENT:	50.0 Amps max. at 230VAC, cold start 25°C
EFFICIENCY:	83% Typical full load
MAXIMUM POWER:	48W
LEAKAGE CURRENT:	300uA typ.
DIMENSION:	11.80" x 1.31 x 1.06 (LxWxH)
REGULATION COMPLIANCE:	UL8750 or EN61347, EN55015, EN61547

WARRANTY

- See [Limited Warranty Policy](#) for more additional information

ENVIRONMENTAL

OPERATING TEMPERATURE:	-30 to +50°C, Tc: 80°C
STORAGE TEMPERATURE:	-40 to +85°C
HUMIDITY (Non-Condensing):	5% to 95%
COOLING:	Convection
VIBRATION FREQUENCY:	5 to 50Hz
MTBF:	>100,000 hours at full load and 25°C ambient conditions (MIL-217F)

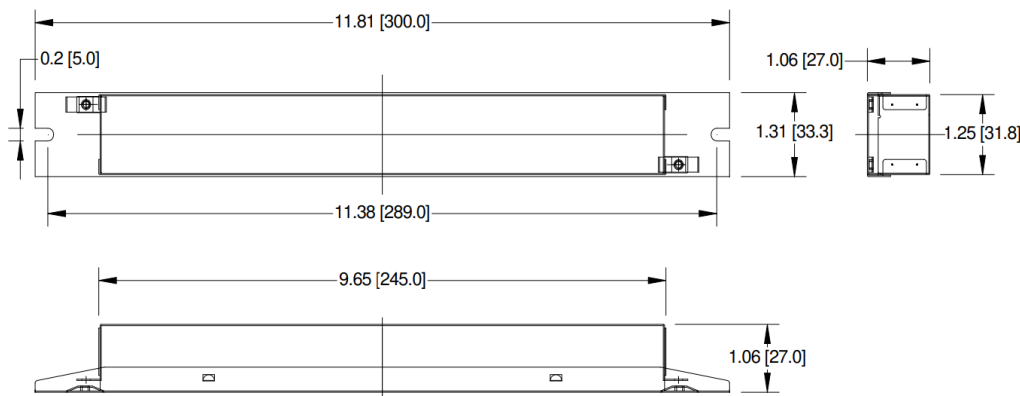
MODEL SELECTION

MODEL	OUTPUT CHARACTERISTICS				
	DIMMING	DIMMING RANGE	OUTPUT RANGE (mA)	V RANGE (DC)	MAX. WATTS
ESL1048-24-C2500 iPOP®	1 – 10V	8 – 100%	2500 – 520	14 – 15	48
ESL1048-36-C1600 iPOP®	1 – 10V	8 – 100%	1660 – 350	24 – 36	48
ESL1048-48-C1250 iPOP®	1 – 10V	8 – 100%	1200 – 260	30 – 50	48
ESL1048-72-C0830 iPOP®	1 – 10V	8 – 100%	830 – 350	40 – 72	48

MECHANICAL SPECIFICATION

NOTE 1: The combination of output current and voltage cannot exceed maximum rated power.

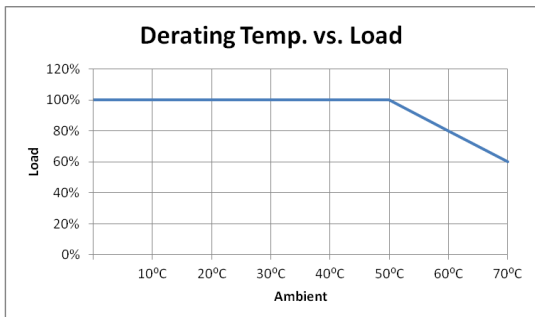
NOTE 2: It is recommended to keep a minimum of 65% of rated load to maintain electrical characteristics.



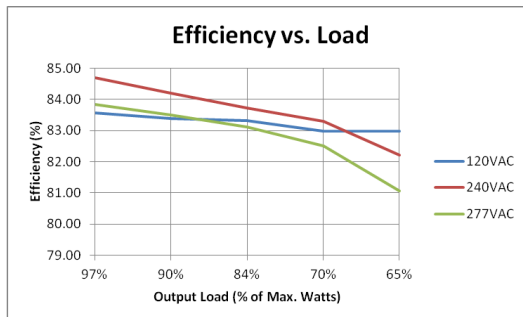
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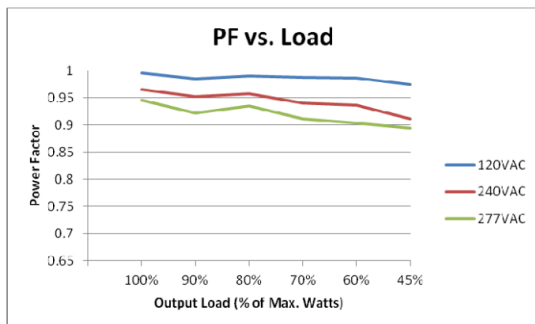
DE-RATING TEMP. VS LOAD



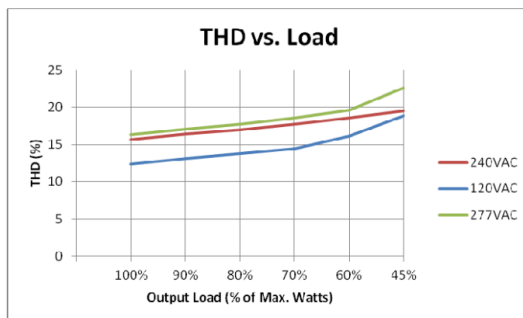
EFFICIENCY VS LOAD



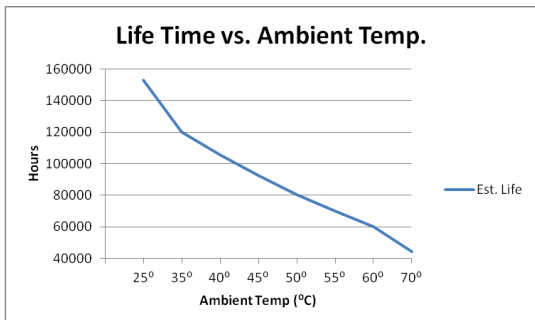
POWER FACTOR VS LOAD



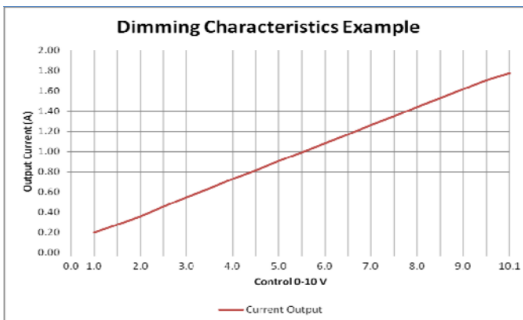
THD VS LOAD



LIFE TIME VS AMBIENT TEMP.



DIMMING CHARACTERISTICS EXAMPLE



DIMMING WIRING DIAGRAM

For general operation and networking purposes where an OFF mode condition is required, our LED Driver dimming models (ESS & ESL) operate with 1-10V control input, where 1V is minimum dim and less than 1V is OFF.

