



Technical Data Sheet

LED Traffic Signal Module

Red

Features

- Meets ITE and/or CALTRANS requirements
- Energy Star Compliant
- Reduces energy cost by 90%
- Reduces maintenance cost
 - Long operating life up to 10 years
 - Minimizes emergency bulb-out calls
- Sealed module fits standard signal head
- High efficiency power supply
 - Power factor (PF) >0.9
 - Total harmonic distortion (THD) <20%
- Increased safety
 - Maintains working signal even with partial loss of LEDs
 - Maintains constant light intensity if supply voltage fluctuates

R12BEPR



Device Selection Guide

LEDs		Cover
Chips		Color
Material	Emitted Color	
AlInGaP	Red	Water Clear

Optical Characteristics at $T_A=25$ (typical values unless otherwise stated)

Parameter	Symbol	12 inch	Units
Beam		Compliant with ITE	
Minimum Initial Intensity ⁽¹⁾	I _v	339	cd
Maximum Initial Intensity ⁽¹⁾	I _v	800	cd
Dominant Wavelength		624 ± 5	nm
Temperature Coefficient of Dominant Wavelength		+0.05	nm/°C
Luminance Uniformity ⁽²⁾		< 10	L _{max} /L _{min}

Notes:(1) measured at center of beam

(2) measured at an aperture of 25 mm

Electrical Characteristics at $T_A=25$ (typical values unless otherwise stated)

Parameter	Symbol	12 inch	Units
Power Consumption	P	11	W
Maximum Power Consumption	P _{max}	14.3	W
Voltage ⁽³⁾	V	120	V
Voltage Range	V	80 (min.) to 135 (max.)	V _{AC}
Power Factor minimum		0.9	
THD maximum		0.2	
Insulation Class		II IEC 598-1 Section 1.23	
EMC		Acc to FCC p.15, class A	
Transient Protection		NEMA TS-2, Sec2.1.6, 1992	

Note:(3)Nominal value at 60Hz.



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Thermal Characteristics

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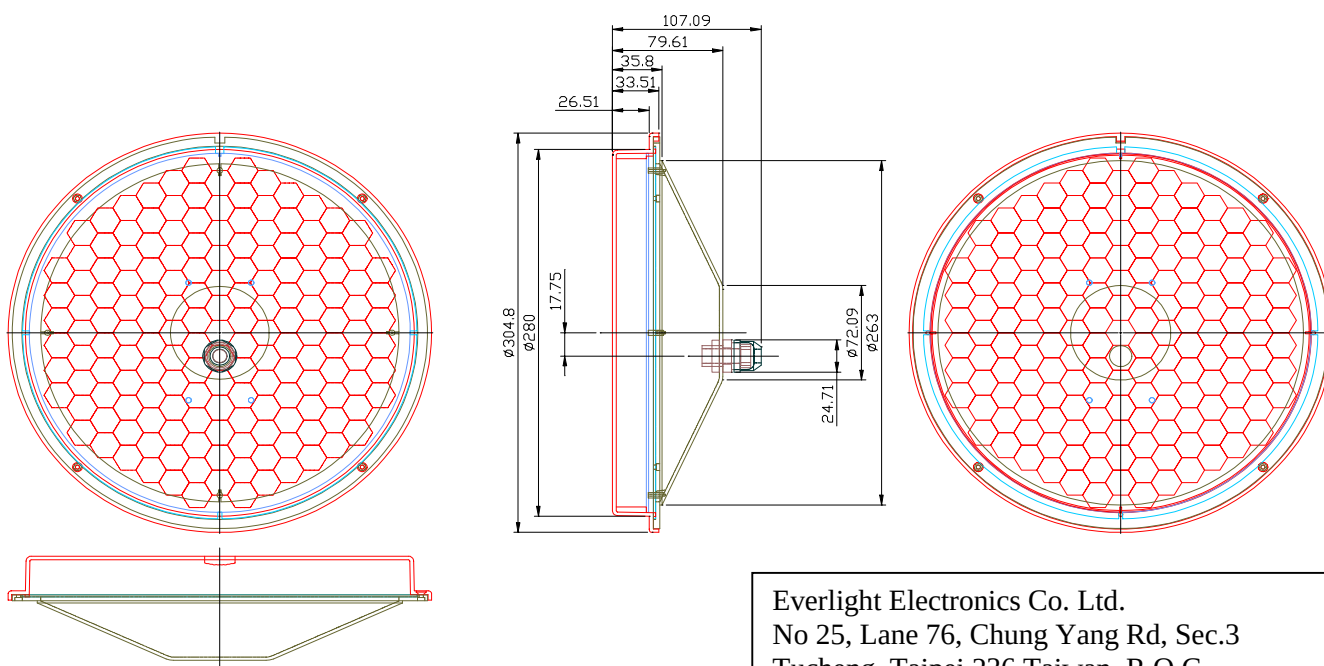
Parameter	Symbol	12 inch	Units
Temperature Rating	T	-40 to 74	°C
Thermal Resistance, Junction to Ambient ⁽⁴⁾	$R\theta_{J-A}$	1.15	°C/W

Notes: (4)At 74°C based on total dissipated system power.

Mechanical Data

Parameter	12 inch	Units
Dimensions	305	mm
Weight	1.53	Kg
Vibrations	According to ITE specification, Section 6.4.5 (MIL-STD-883)	
Relative Humidity	Up to 95%	
Minimum Cable Length Outside of Housing	1	m

Package Dimensions



- Notes:**
- 1.All dimensions are in millimeters
 - 2.Tolerances Unless Specified = $\pm 5\text{mm}$
 - 3.Angle tolerances = $\pm 0.5^\circ$

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