

# 110VDC LED 2D Lamp



## **Product Overview**

- Rolling Stock Compliant
- Replaces 28W 2D Fluorescent lamp
- High reliability LED and driver technology
- Built in drive electronics for direct connection to power source.
- Significant energy savings
- Maintenance free
- Flicker free lighting with instant start
- No mercury content, environmentally friendly

### Safety Specifications

The 2D Series comes equipped with the following protection circuitry:

- DC input voltage reversal (Non destructive)
- Input transient protection
- Under voltage protection
- Built in multiple LED circuit redundancy
- Protected against power supply interruptions EN50155 Class S2 and C2)

#### **Technical Overview**

Size		190x190x32mm
Input Voltage Range		67 - 140VDC
Input Current at Nominal Supply		0.114mA ±5%
Input Power at Nominal Supply		14W
Line Regulation (Percentage Illuminance change oversupply range 67 - 140VDC)		±5%
Colour Temperature	Warm White	3000K ±5%
	Natural White	4000K ±5%
	Cool White	6000K ±5%
CRI		>80
Beam Angle		200°
Operating Temperature Range		-25 to 55°C
Storage Temperature Range		-25 to 55°C
Operating Humidity Range		10% - 80%
Lumen Maintenance (time to 70% of the initial light output)		50,000 hours
MTBF MIL-HDBK-217F (40°C) (hrs)		100,000 hours
Sealing Rating		IP40
Switch Cycles		>100,000 (UIC555)
Connector		GR10Q
Weight		166g

#### **Mechanical Details**





Unit Dimensions			
A	В	С	
190mm	190mm	32mm	

#### Compliance

The 1084 Series product complies with the following standards and directives:

EN61373:2010 Rolling stock equipment. Shock and vibration EN50121-3-2:2015 Rolling stock equipment. Electromagnetic compatibility

EN50155:2007 Electronic equipment used on rolling stock. EN45545 Fire protection on railway vehicles.

EN62031 with EN62471: Photobiological Safety of Lamps

ROHS Restriction of Hazardous Substances

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