

Direction type Route indicator



Position type Shunt Signal



Calling On Signal



RDSO Specification: RDSO/SPN/153/2004

Efftronics Shunt, Route and Calling on LED Lighting units are available in 110V AC.

FEATURES:

- ❖ Interchangeable with Standard Shunt, Route & Calling on bulb Signals suitable for electrified and Non electrified Area's.
- ❖ High efficiency AllnGaP & InGaN LEDs.
- ❖ Constant uniform intensity over wide input voltage range typically 88 to 132 Volts.
- ❖ Chromaticity as per BS 1376 Standard.
- ❖ High Strength hermetically sealed units made in ABS material for better immunity.

DESIGN COMPLIANCE:

- Product Compliance : Research Design Standards Organization.
RDSO/SPN 153/2004 Rev3.0 (Draft)
- Environmental : IS: 9000 (relevant clauses)
- Ingress Protection : IP 54
- Chromaticity : LUNAR WHITE Class 'C' of BS 1376;
YELLOW Class 'B' of BS 1376
- Safety : EN50129, EN50126

OPERATING SPECIFICATIONS:

- Operating Temperature : -10°C to +70°C
- Operating Voltage : 110V + 20%
- AC Immunity : > 60V AC

LAMP PROVING:

Compatible with traditional Lamp proving circuits and can also be made compatible with specific requirements.

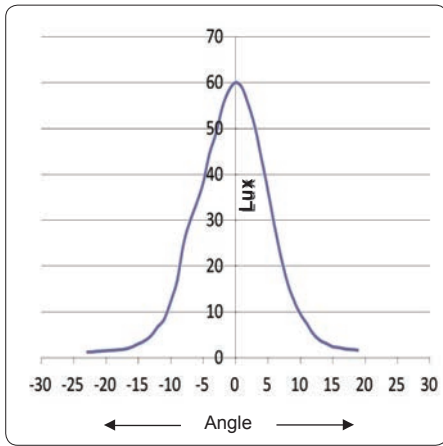
PRODUCT SPECIFICATION

Type	Aspect Color	Chromaticity	No. of LEDs	Intensity	Operating voltage (volts)	Operating Current (mA)	Viewing Angles (50% peak intensity)
Shunt Lighting Unit	Lunar White	Class 'C'	13	>27 LUX	110 + / -20%	55 + / -5%	15° H / V
Route Lighting Unit	Lunar White	Class 'C'	16	>45 LUX	110 + / -20%	25 + / - 5%	10° H / V
Calling On Unit	Yellow	Class 'B'	32	45-70 LUX	110 + / -20%	150 +10% _ 20%	6° H / V

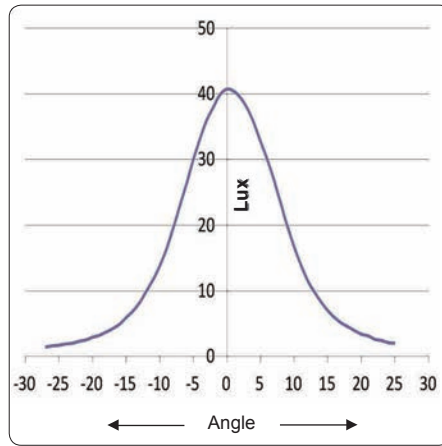
SHUNT ROUTE CALLING ON LED SIGNAL LIGHTING UNITS FOR RAILWAY SIGNALING

LED LIGHTING UNITS DISPERSION

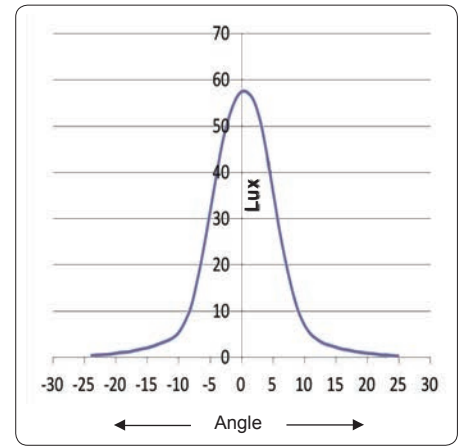
Calling On Signal



Shunt Signal

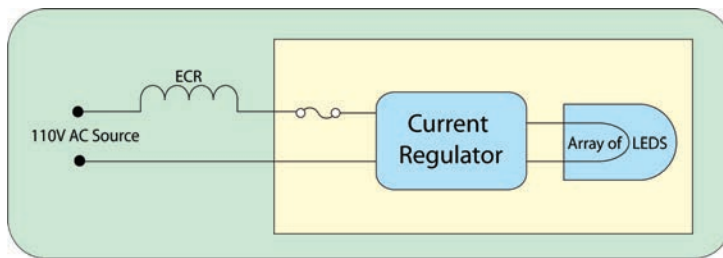


Route Signal

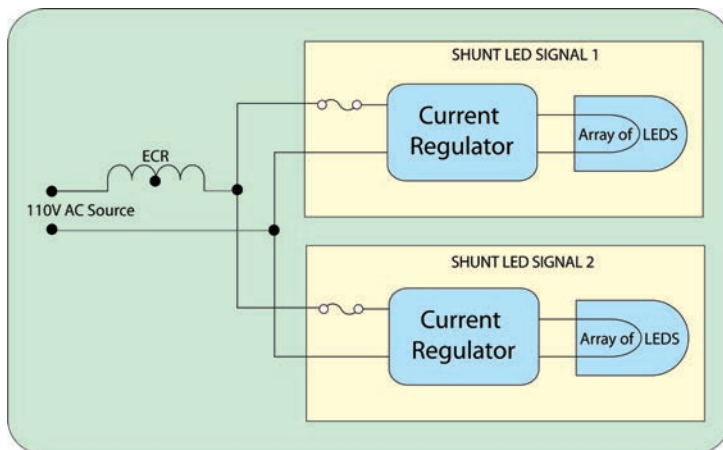


SYSTEM BLOCK DIAGRAMS

Calling On LED Signal Lighting Unit



Position Light Shunt Signal



Junction Type Route Indicator

