

### Bid Document

Bid Details	
Bid End Date/Time	01-10-2019 11:00:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Railways
Department Name	Na
Organisation Name	N/a
Office Name	Southern Railway
Total Quantity	20
Item Category	LED Luminaire (for Flood Light)
MSE Exemption For Years Of Experience And Turnover	Yes
Startup Exemption For Years Of Experience And Turnover	Yes
Bid to RA enabled	No

### LED Luminaire (for Flood Light) ( 20 pieces )

#### Technical Specifications

[\\* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
STANDARDS	LED Luminaire conformity to IS:10322/Part 5/Section 5/2012 latest and IS: 16107 (Part 2/Sec 1):2012 latest	Yes	*
	Photo biological safety of LEDs used shall be as per IS:16108/2012 (exempt group)	Yes	*
	Types of LED Luminaire as per the IS: 16107(Part-2/	Type B	*

	Sec.-1)/2012		
	Types of LED Modules as per the IS: 16103(Part-2)/2012	Type 3	*
	<b>LED Rating/System Wattage/Rated Power</b>	100W	100W
	Luminaire System Efficacy (Lumen/watt)	>= 100 Lm/Watt	*
	<b>Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest</b>	IP66	IP66
	Mounting brackets (included)	Adjustable	*
	<b>Warranty for free replacement (in Years)</b>	5	5
ELECTRICAL EFFICIENCY	Input operating Voltage range and frequency	90 to 300 V olts AC at 50 Hz+/-2 Hz	*
	Automatic Higher Cut off voltage above 300 volt	Yes	*
	Rated voltage	230 V AC 50 Hz	*
	AC Power Factor at full load	≥ 0.95	*
	Driver Efficiency (in %age)	≥85	*
	Total Harmonics Distortion (in %age)	≤ 10	*
	"The total circuit power shall not be more than 110 percent of the value declared by the manufacturer"	Yes	*
OPTICAL	LED chip Efficacy	≥130 Lm/Watt	*
	Colour temperature (+/-500K)	6000K	*
	Working life for LED (Minimum 50,000 burning hours as per LM-80 report)	Yes	*
	Colour Rendering Index(CRI)	≥70	*
	Beam Angle	≥120	*
	Optic lense material (UV stabilised) (Write NA for	NA	*

	without optic lense supply)		
THERMAL MANAGEMENT	Heat sink should be die-cast aluminium along with sufficient heat sink fins to dissipate heat effectively	Yes	*
	Capacitor shall be rated for a temperature of 105 deg. celsius or better	Yes	*
	Junction temperature	< 85 degC	*
	Operating temperature range	-10 deg C to +50 deg C	*
	Operating Humidity Range	10 % to 95% RH	*
PROTECTION	Short circuit Protection	Yes	*
	Over load protecton	Yes	*
	Over Voltage protection	Yes	*
	Reverse polarity	Yes	*
	High voltage test (1.5 KV for one minute between supply terminals and body of the unit)	Yes	*
	Insulation resistance between earth and current carrying part	>100 M ohm	*
	The luminaire shall be protected against surges and transients ( Internal)	>/=5KV	*
	The luminaire shall be protected against surges and transients of >/=10KV (External)	Yes	*
CONSTRUCTIONAL	The Luminaires casing/housing (single piece housing) shall be pressure die casted aluminium alloy with higher thermal conductivity	Yes	*
	The luminaire body must be corrosion resistant epoxy powder coated	Yes	*
	All fastners must be of stainless steel	Yes	*

The entire housing (both LED section and driver section) shall be dust and water proof having IP 66 protection as per IS:10322 (Part 1):1982 latest	Yes	*
Extruded silicon loop gasket shall be provided in the lantern body to ensure a weather proof seal between the UV Glass cover and the metal housing to exclude the entry of the dust, water, insects etc.,	Yes	*
Luminaries light transparency should be of Toughened glass	Yes	*
Toughened transparent glass cover thickness	>=4 mm	*
Toughened Glass shall not get discoloured shall not suffer degradation due to heat and ageing within warranty period	Yes	*
<b>Number of electronic control gear (power supplies)</b>	2 Nos.	2 Nos.
Driver components shall be industrial grade or above	Yes	*
PCB shall be FR4 grade minimum 0.8 to 1.0 mm thick or more	Yes	*
The Luminaires works on single phase three wires system (Phase, Neutral and Earth)	Yes	*
Suitable connector shall be provided for LED connection between driver output and LED	Yes	*
Length of ISI marked three core wire (shall be provided along with supply of material)	50 cm	*
Light Source	SMD LED Chip as per	*

		LM 80/IS16106	
MARKING	"Manufactures Name and and brand on the aluminium die cast body	Engraved/Embossed	*
	Manufacturer's name, model number, serial number	Yes	*
	Date of manufacture (month-year), and lot number as identification mark inside each unit and the outside of each packaging box	Yes	*
	The operation characteristics voltage and power be marked inside of each LED luminaire unit	Yes	*
REPORTS AND CERTIFICATIONS	LED Make	OSRAM / NICHIA/CREE / SAMSUNG / SEOUL / LUMILED / PHILIPS / EDISON / SYSKA / LUMENMAX / EVERLIGHT / BRIDGELUX / NATIONSTAR / REFOND	*
	System must have EMI/EMC compliance as applicable (Test reports shall be furnish on demand by buyer/consignee)	Yes	*
	LM 79 (Photometry) (Ref.IS:16106:2012) report from Central Government lab/NABL/ILAC accredited lab. Reports shall be furnish on demany by buyer (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)	Yes	*
	LM 80 & TM 21 (Part of LM 80) (Ref. IS:16105:2012) Reports and Photo biological report for LED report from Central	Yes	*

	Government lab /NABL/ILAC accredited lab. Reports shall be furnish on demany by buyer (LM-80 report shall haveand the Pohoto Biological report of the LED Chip being used in the luminaire)		
	Availability of test Report from Central Government lab/NABL/ILAC accredited lab to Indian Standrad IS:10322/part 5/sec-5/2012 and IS 16107 (Part 2/Sec 1) : 2012	Yes	*
	Seller has to furnish Type test report on demand by buyer/consignee	Yes	*
	DC or AC supplied electronic control gear for LED Module shall complpy as per IS:15885 (Part 2/Sec.13)	Yes	*
	LED Luminaire for Flood Light shall comply with Complusory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 5): 2012 as applicable on the date	Yes	*

\* Bold specifications are the golden parameters.

\* Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement ( allowed Values) by the Buyer.

#### Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Hathee Ram B	631001,Office of the Senior Materials Manager Electric Loco Stores Depot Arakkonam - 631001	20	30

#### EMD Detail

Required	No
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**ePBG Detail**

Required	No
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**Splitting**

Bid splitting not applied.

**Buyer Specific Additional Terms and Conditions**

1. Scope of supply (Bid price to include all cost components) : Only supply of Goods

[This Bid is also governed by the General Terms and Conditions](#)

**---Thank You---**