



**Bid Document** 

Bid Document			
Bid Details			
27-07-2020 18:00:00			
27-07-2020 18:30:00			
90 (Days)			
60 (Days)			
Ministry Of Railways			
Na			
N/a			
Secr			
200			
LED Luminaire (for Flood Light)			
No			

#### **EMD Detail**

LIRequired	l No

#### ePBG Detail

Required   No	
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### Splitting

Bid splitting not applied.

## **LED Luminaire (for Flood Light) ( 200 pieces )**

#### **Technical Specifications**

#### \* As per GeM Category Specification

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
	LED Luminaire conformity to IS:10322/Part 5/Section 5/2012 latest and IS: 16107	Yes	*

	(Part 2/Sec 1):2012 latest		
	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/Sec1)/2012	Туре В	*
	Types of LED Modules as per the IS: 16103(Part-2)/2012	Type 3	*
	LED Rating/System Wattage/Rated Power	200W	200W
	Luminaire System Efficacy (Lumen/watt)	>/= 100 Lm/Watt	*
	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP66	IP66
	Mounting brackets (included)	Adjustable	*
	Warranty for free replacement (in Years)	3	3
ELECTRICAL EFFICIENCY	Input operating Voltage range and frequency	90 to 300 V olts AC at 50 Hz+/-2 Hz	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	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	6000K
	Working life for LED (Minimum 50,000 burning hours as per LM-80 report)	Yes	Yes
	Colour Rendering Index(CRI)	≥70	*
	Beam Angle	≥120	*
	Optic lense materal (UV stabilised) (Write NA for without optic lense supply)	Poly carbonate lense	*
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.	Yes	*

	celsius or better		
	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	*
	Toughned transparent glass cover thickness	>/=4 mm	*
	Toughned Glass shall not get discoloured shall not suffer degration due to heat and ageing within warranty	Yes	*

	period		
	Number of electronic control gear (power supplies)	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 accrediated 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 Government lab /NABL/ILAC accrediated 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)	Yes	*
	Availability of test Report from Central Government lab/NABL/ILAC accrediated 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 comlpy as per IS:15885 (Part 2/Sec.13)	Yes	*
* Considerations highlighted	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	*

#### **Additional Specification Documents**

#### **Consignees/Reporting Officer and Quantity**

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Manish B Wankhede	492008,NEAR URKURA RAILWAY STATION POST W.R.S COLONY	100	60
2	Lokesh Kumar Sharma	495004,Divisional stores depot , next to State bank of india, TItli chowk	100	60

# **Bid 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---

<sup>\*</sup> Specifications highlighted in bold 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.