

### Bid Document

Bid Details	
Bid End Date/Time	28-07-2020 10:00:00
Bid Opening Date/Time	28-07-2020 10:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	70 (Days)
Ministry/State Name	Ministry Of Railways
Department Name	Na
Organisation Name	N/a
Office Name	Southern Railway
Total Quantity	96
Item Category	LED Luminaire (For Road and Street Lights)
Experience Criteria	1 Year (s)
MSE Exemption for Years Of Experience	Yes
Startup Exemption for Years Of Experience	Yes
Document required from seller	Experience Criteria *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	No
Inspection Required	No

### EMD Detail

Required	No
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### ePBG Detail

Required	No
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### Splitting

Bid splitting not applied.

1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of years as indicated in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the category of primary product having highest value should meet this criterion.

## LED Luminaire (For Road And Street Lights) ( 96 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 3/2012 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/ Sec.-1)/2012	Type B	*
	Types of LED Modules as per the IS:IS: 16103(Part-2)/2012	Type 3	*
	<b>LED Rating (in Watts)/System Wattage/Rated Power</b>	45W	45W
	Luminaire System Efficacy (Lumen/watt)	>= 100 Lm/Watt	*
	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP67	*
	<b>Warranty for free replacement (in years)</b>	5	5
ELECTRICAL EFFICIENCY	Input operating Voltage range and frequency	140 to 270 V olts AC at 50 Hz+/-2 with auto cutt off at below 120V	*
	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) Upto 100W: ≥85%, Above 100W: >=90%	Yes	*
	Total Harmonics Distortion	≤ 10	*
	"The total circuit power shall not be more than 110 percent of the value declared by the manufacturer (as per Cl. 8 of IS:16104:2012 lates)"	Yes	*
OPTICAL	LED chip Efficacy	≥130 Lm/Watt	*
	Colour temperature	6000+/-500K	*
	Working life for LED (Minimum 50,000 burning hours as per LM-80 and LM 21 reports)	Yes	*

		Colour Rendering Index(CRI)	≥70	*
		LED Beam Angle	≥120	*
		Optic lense materal (UV stabilised)	Poly carbonate lense	*
	THERMAL MANAGEMENT	Heat sink should be die-cast aluminium along with sufficient heat sink fins to dissipate heat effectively	Yes	*
		Junctiojn / Soldering point temperature shall not exceed 85 deg.c as per LM 80 report	Yes	*
		Capacitor shall be rated for a temperature of 105 deg. celsius or better	Yes	*
		<b>Operating temperature range</b>	-10 deg C to +55 deg C	-10 deg C to +55 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 powder coated	Yes	*
		All fastners must be of stainless steel	Yes	*
		Protection of the entire housing (both LED section and driver section) as per IS:10322 (Part 1):1982 latest	IP66	*
		Extruded silicon loop gasket shall be provided in the lantern body to ensure a weather proof seal between	Yes	*

	the UV Glass cover and the metal housing to exclude the entry of the dust, water, insects etc.,		
	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>	1 No.	1 No.
	Light Source	SMD LED Chip as per LM 80/IS16106	*
	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	*
	<b>Length of ISI marked three core wire (shall be provided along with supply of material)</b>	100 cm	100 cm
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	*
	Diameter of pole Luminiare suitable for: (upto 45W Pole OD: shall be 40mm), (>45W<120W Pole OD: Shall be 50 mm), (above 120W: OD shall be 60 mm for which luminiare is suitable	Yes	*

REPORTS AND CERTIFICATIONS	LED Make	OSRAM / NICHIA / CREE / SAMSUNG / SEOUL / LUMILEDS / PHILIPS / SYSKA / LUMENMAX / EVERLIGHT / EDISON / BRIDGELUX / NATIONSTAR / REFOND	*
	System must have EMI/EMC compliance as applicable (Test reports shall be furnish to the buyer / consignee on demand)	Yes	*
	LM 79 (Photometry) (Ref.IS:16106:2012) report from Central Government Lab /NABL/ILAC accredited lab. Reports shall be furnish to the buyer / consignee on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)	Yes	*
	LM 80 & TM 21 (Ref. IS:16105:2012) Report and Photo biological report for LED report from Central Government Lab /NABL/ILAC accredited lab. Reports shall be furnish to the buyer / consignee on demand (LM-80 report shall have the Photo Biological report of the LED Chip being used in the luminaire)	Yes	*
	Availability of test Report from Central Government Lab /NABL/ILAC accredited lab to Indian Standrad IS:10322/part 5/sec-3/2012 and IS 16107 (Part 2/Sec 1) : 2012	Yes	*
	Seller shall furnish the Type test reports to the buyer / consignee on demand	Yes	*
	DC or AC supplied electronic control gear for LED Module shall comply as per IS:15885 (Part 2/Sec.13)	Yes	*
	LED Luminaire for road and street lighting shall comply with Compulsory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 3): 2012 as applicable on date	Yes	*

\* 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.

#### Additional Specification Documents

#### Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Narayan N	625010,Office of the Deputy Chief Engineer Construction Unit Madurai	96	15

### **Bid Specific Additional Terms and Conditions**

- 1.Scope of supply (Bid price to include all cost components) : Only supply of Goods
- 2.Bid reserved for Make In India products: Procurement under this bid is reserved for purchase from Class 1 local suppliers as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a class 1 local supplier is denoted in the bid document 50%. All bidders must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which the bid is liable to be rejected. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020 . In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.
- 3.Availability of Service Centres: Bidder/OEM must have a Functional Service Centre in the State of each Consignee's Location in case of carry-in warranty. (Not applicable in case of goods having on-site warranty). If service center is not already there at the time of bidding, successful bidder / OEM shall have to establish one within 30 days of award of contract. Payment shall be released only after submission of documentary evidence of having Functional Service Centre.
- 4.Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.
- 5.Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.

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

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