



Dated: 17-10-2019

#### **Bid Document**

Bid Document		
Bid Details		
Bid End Date/Time	28-10-2019 20:00:00	
Bid Life Cycle (From Publish Date)	90 (Days)	
Bid Offer Validity (From End Date)	60 (Days)	
Ministry/State Name	Ministry Of Railways	
Department Name	Na	
Organisation Name	N/a	
Office Name	lcf/stores	
Total Quantity	300	
Item Category	LED Luminaire (for Flood Light)	
MSE Exemption For Years Of Experience And Turnover	No	
Startup Exemption For Years Of Experience And Turnover	No	
Document required from seller	OEM Authorization Certificate	
Bid to RA enabled	No	

# LED Luminaire (for Flood Light) ( 300 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	Туре В	*

	as per the IS: 16107(Part-2/ Sec1)/2012		
	Types of LED Modules as per the IS: 16103(Part-2)/2012	Type 3	*
	LED Rating/System Wattage/Rated Power	100W	100W
	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)	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 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. celsius or better	Yes	*
	Junction temperature	< 85 degC	*
	Operating temperature range	-20 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 period	Yes	*
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	100 cm	*

	supply of material)		
	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	Other than 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	Yes	*

rep fro Go /N/ lab fur bu sha Po of	nd Photo biological port for LED report om Central overnment lab ABL/ILAC accrediated b. Reports shall be rnish on demany by uyer (LM-80 report tall haveand the bhoto Biological report the LED Chip being sed in the luminaire)		
Re Go lab acc Inc IS: 5/s 16	vailability of test eport from Central evernment b/NABL/ILAC ccrediated lab to dian Standrad :10322/part sec-5/2012 and IS 5107 (Part 2/Sec 1):	Yes	*
Ty de	eller has to furnish ope test report on emand by uyer/consignee	Yes	*
ele for co	C or AC supplied ectronic control gear r LED Module shall omlpy as per IS:15885 art 2/Sec.13)	Yes	*
Lig Co Re BIS 10 5):	ED Luminaire for Flood ght shall comply with emplusory egistration(CRS) of S for safety as per IS 0322 (Part 5/Section : 2012 as applicable on the date	Yes	*

<sup>\*</sup> Specifications highlighted in bold are the Golden Parameters.

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

S.No.	Consignee/Reporti ng Officer	Address	Quantity	Delivery Days
1	M Rajendran	600038,INTEGRAL COACH FACTORY MINISTRY OF RAILWAYS CHENNAI - 38	300	30

#### **EMD Detail**

<sup>\*</sup> 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.

Required	No
ePBG Detail	
Required	No

### **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---