

### Bid Document

Bid Details	
Bid End Date/Time	28-09-2019 11:00:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Coal
Department Name	Materials Management
Organisation Name	Nlc
Office Name	Materials Management
Total Quantity	100
Item Category	LED Luminaire (For Road and Street Lights)
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 Road And Street Lights) ( 100 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:	Type B	*

	16107(Part-2/ Sec.-1)/2012		
	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>	120W	120W
	Luminaire System Efficacy (Lumen/watt)	$\geq 100$ Lm/Watt	*
	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP66	*
	<b>Warranty for free replacement (in years)</b>	5	5
ELECTRICAL EFFICIENCY	Input operating Voltage range and frequency	90 to 300 Volts AC at 50 Hz $\pm$ 2	*
	Automatic Higher Cut off voltage above 300 volt	Yes	*
	Rated voltage	230 V AC 50 Hz	*
	AC Power Factor at full load	$\geq 0.95$	*
	Driver Efficiency (in %) Upto 100W: $\geq 85\%$ , Above 100W: $\geq 90\%$	Yes	*
	Total Harmonics Distortion	$\leq 10$	*
	"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 latest)"	Yes	*
OPTICAL	LED chip Efficacy	$\geq 130$ Lm/Watt	*
	Colour temperature	6000 $\pm$ 500K	*
	Working life for LED (Minimum 50,000 burning hours as per LM-80 and LM 21 reports)	Yes	*
	Colour Rendering Index(CRI)	$\geq 70$	*
	LED Beam Angle	$\geq 120$	*

	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 +50 deg C	-20 deg. C to +50 deg. C, -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	Yes	*

resistant powder coated		
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 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	*
<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>	50 cm	50 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 Luminaire 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 luminaire 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 /	Yes	*

consignee on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)		
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 Pohoto 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 complpy as per IS:15885 (Part 2/Sec.13)	Yes	*
LED Luminaire for road and street lighting shall comply with Complusory Registration(CRS) of BIS for safety as per IS 10322 (Part 5/Section 3): 2012 as applicable on 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	SRINIVASAN KALIYAPERUMAL	607807,PERMANENT CENTRAL STORES, NLC INDIA LIMITED, NEYVELI 607807	100	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---**