

### 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   | 50   |
| 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) ( 50 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/<br>Sec.-1)/2012  |                                    |     |
|                          | Types of LED Modules<br>as per the IS:IS:<br>16103(Part-2)/2012  | Type 3                             | *   |
|                          | <b>LED Rating (in<br/>Watts)/System<br/>Wattage/Rated<br/>Power</b>  | 25W                                | 25W |
|                          | Luminaire System<br>Efficacy (Lumen/watt)  | >= 100 Lm/Watt                     | *   |
|                          | Ingress Protection (IP<br>Rating) as per IS:10322<br>(Part 1):1982 latest  | IP67                               | *   |
|                          | <b>Warranty for free<br/>replacement (in<br/>years)</b>  | 2                                  | 2   |
| ELECTRICAL<br>EFFICIENCY | Input operating Voltage<br>range and frequency   | 90 to 300 Volts AC at<br>50 Hz+/-2 | *   |
|                          | Automatic Higher Cut<br>off voltage above 300<br>volt  | Yes                                | *   |
|                          | Rated voltage  | 230 V AC 50 Hz                     | *   |
|                          | AC Power Factor at full<br>load  | ≥ 0.95                             | *   |
|                          | Driver Efficiency (in<br>%) Upto 100W:<br>≥85%, Above 100W:<br>>=90%   | Yes                                | *   |
|                          | Total Harmonics<br>Distortion  | ≤ 10                               | *   |
|                          | "The total circuit power<br>shall not be more than<br>110 percent of the<br>value declared by the<br>manufacturer (as per<br>Cl. 8 of IS:16104:2012<br>lates)" | Yes                                | *   |
| OPTICAL                  | LED chip Efficacy  | ≥130 Lm/Watt                       | *   |
|                          | Colour temperature   | 6000+/-500K                        | *   |
|                          | Working life for LED<br>(Minimum 50,000<br>burning hours as per<br>LM-80 and LM 21<br>reports)   | Yes                                | *   |
|                          | Colour Rendering<br>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>   | -20 deg. C to +50 deg. C | -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 powder  | Yes                      | *                        |

|   |                                   |       |
|---|-----------------------------------|-------|
| 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<br>KALIYAPERUMAL | 607807,PERMANENT<br>CENTRAL STORES, NLC<br>INDIA LIMITED, NEYVELI<br>607807 | 50       | 30            |

#### EMD Detail

|          |    |
|----------|----|
| 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---**