

Bid Number: GEM/2020/B/710207

Dated: 14-07-2020

## **Bid Document**

| Dia Document   |  |  |  |  |
|--|--|--|--|--|
| Bid Details  |  |  |  |  |
| Bid End Date/Time                                      | 24-07-2020 17:00:00  |  |  |  |
| Bid Opening Date/Time                                  | 24-07-2020 17:30:00  |  |  |  |
| Bid Life Cycle (From Publish Date)                     | 90 (Days)  |  |  |  |
| Bid Offer Validity (From End Date)                     | 30 (Days)  |  |  |  |
| Ministry/State Name                                    | Ministry Of Railways   |  |  |  |
| Department Name  | Na   |  |  |  |
| Organisation Name                                      | N/a  |  |  |  |
| Office Name  | South Central Railway  |  |  |  |
| Total Quantity   | 40   |  |  |  |
| Item Category  | LED Luminaire (for Flood Light)  |  |  |  |
| Experience Criteria                                    | 3 Year (s)   |  |  |  |
| MSE Exemption for Years of Experience and Turnover     | No   |  |  |  |
| Startup Exemption for Years of Experience and Turnover | No   |  |  |  |
| 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 |
|----------|----|
| required | 1  |

# ePBG Detail

| Required | No |
|----------|----|
|----------|----|

# 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 Flood Light) (40 pieces)

#### **Technical Specifications**

#### \* As per GeM Category Specification

| Specification | Specification Name  | Values                  | Bid Requirement<br>(Allowed Values) |
|---------------|---|-------------------------|-------------------------------------|
| STANDARDS     | LED Luminaire<br>conformity to<br>IS:10322/Part 5/Section<br>5/2012 latest and IS:<br>16107 (Part 2/Sec<br>1):2012 latest | Yes                     | *                                   |
|               | Photo biological safety<br>of LEDs used shall be<br>as per IS:16108/2012<br>(exempt group)                                | Yes                     | *                                   |
|               | Types of LED Luminaire as per the IS: 16107(Part-2/Sec1)/2012   | Type B                  | *                                   |
|               | Types of LED Modules as per the IS: 16103(Part-2)/2012  | Type 3                  | *                                   |
|               | LED Rating/System<br>Wattage/Rated<br>Power   | 100W                    | 100W                                |
|               | Luminaire System<br>Efficacy (Lumen/watt)   | >/= 100 Lm/Watt         | *                                   |
|               | Ingress Protection<br>(IP Rating) as per<br>IS:10322 (Part<br>1):1982 latest  | IP66                    | IP66                                |
|               | Mounting brackets (included)  | Adjustable              | *                                   |
|               | Warranty for free replacement (in Years)  | 5                       | 5                                   |
| ELECTRICAL    | Input operating   | 140 to 270 V olts AC at | 140 to 270 V olts AC at             |

| EFFICIENCY            | Voltage range and frequency  | 50 Hz+/-2 Hz with auto cutt off at below 120V | 50 Hz+/-2 Hz with auto cutt off at below 120V |
|-----------------------|--|---|---|
|                       | Automatic Higher Cut<br>off voltage above 300<br>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<br>Distortion (in %age)  | ≤ 10  | *   |
|                       | "The total circuit power<br>shall not be more than<br>110 percent of the<br>value declared by the<br>manufacturer" | Yes   | *   |
| OPTICAL               | LED chip Efficacy  | ≥130 Lm/Watt                                  | *   |
|                       | Colour temperature (+/-500K)   | 6000K   | 6000K   |
|                       | Working life for LED<br>(Minimum 50,000<br>burning hours as per<br>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<br>MANAGEMENT | Heat sink should be diecast 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  | -10 deg C to +50 deg C                        | *   |
|                       | Operating Humidity<br>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<br>between earth and<br>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<br>must be corrosion<br>resistant epoxy powder<br>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<br>gasket shall be<br>provided in the lantern<br>body to ensure a<br>weather proof seal<br>between the UV Glass<br>cover and the metal<br>housing to exclude the<br>entry of the dust,<br>water, insects etc., | Yes        | * |
|                | Luminaries light<br>transparency should be<br>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)   | 1 No.                                | 1 No. |
|         | Driver components shall be industrial grade or above   | Yes                                  | *     |
|         | PCB shall be FR4 grade<br>minimum 0.8 to 1.0<br>mm thick or more   | Yes                                  | *     |
|         | The Luminaires works<br>on single phase three<br>wires system (Phase,<br>Neutral and Earth)  | Yes                                  | *     |
|         | Suitable connector<br>shall be provided for<br>LED connection<br>between driver output<br>and LED  | Yes                                  | *     |
|         | Length of ISI marked<br>three core wire (shall<br>be provided along with<br>supply of material)  | 100 cm                               | *     |
|         | Light Source   | SMD LED Chip as per<br>LM 80/IS16106 | *     |
| MARKING | "Manufactures Name<br>and and brand on the<br>aluminium die cast<br>body   | Engraved/Embossed                    | *     |
|         | Manufacturer's name,<br>model number, serial<br>number   | Yes                                  | *     |
|         | Date of manufacture<br>(month-year), and lot<br>number as<br>identification mark<br>inside each unit and<br>the outside of each<br>packaging box | Yes                                  | *     |
|         | The operation characteristics voltage and power be marked inside of each LED luminaire unit  | Yes                                  | *     |

|                               | 1   |  |   |
|-------------------------------|---|--|---|
| REPORTS AND<br>CERTIFICATIONS | LED Make  | OSRAM / NICHIA/CREE /<br>SAMSUNG / SEOUL /<br>LUMILED / PHILIPS /<br>EDISON / SYSKA /<br>LUMENMAX /<br>EVERLIGHT /<br>BRIDGELUX /<br>NATIONSTAR / REFOND | * |
|                               | System must have<br>EMI/EMC compliance as<br>applicable (Test reports<br>shall be furnish on<br>demand by<br>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<br>Type test report on  | Yes  | * |

| demand by<br>buyer/consignee   |     |   |
|--|-----|---|
| DC or AC supplied<br>electronic control gear<br>for LED Module shall<br>comlpy as per IS:15885<br>(Part 2/Sec.13)  | Yes | * |
| LED Luminaire for Flood<br>Light shall comply with<br>Complusory<br>Registration(CRS) of<br>BIS for safety as per IS<br>10322 (Part 5/Section<br>5): 2012 as applicable<br>on the date |     | * |

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

## **Additional Specification Documents**

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

| S.No. | Consignee/Reporti<br>ng Officer | Address   | Quantity | Delivery Days |
|-------|---------------------------------|---|----------|---------------|
| 1     | VALLE SUNDARA<br>RAMUNAIDU      | 504251,Office of Senior<br>Section Engineer Electrical<br>Maintenance, Platform No.1,<br>Beside RPF office,<br>Bellampalli Railway Station,<br>Bellampalli, Mancherial<br>District, Pincode- 504251.<br>Ph- 9701371338. | 40       | 15            |

# **Bid Specific Additional Terms and Conditions**

1. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods

This Bid is also governed by the General Terms and Conditions

---Thank You---

<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.