

RA Document

RA Details	
RA Technical End Date/Time	10-01-2019 18:00:00
RA Life Cycle (From Publish Date)	90 (Days)
RA Offer Validity (From End Date)	15 (Days)
Ministry/State Name	Ministry Of Defence
Department Name	Department Of Defence Research & Development
Organisation Name	Defence Research And Development Organisation (drdo)
Office Name	Cce(r&d) East, Kolkata
Total Quantity	27
Item Category	LED Luminaire (For Road and Street Lights)
Average Turn Over of Last 3 Years	5 Lakh (s)
Experience with Gov. Required	3 Year (s)
MSE Exemption For Years Of Experience And Turnover	Yes

LED Luminaire (For Road And Street Lights) (27)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	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	*
	LED Rating (in Watts)/System Wattage/Rated Power	90W	110W, 90W
	Luminaire System Efficacy (Lumen/watt)	>/= 100 Lm/Watt	*
	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest	IP66	*
	Warranty for free replacement (in years)	2	2, 3
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	Poly carbonate lense	*

	stabilised)		
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	*
	Operating temperature range	-10 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)	>/=4KV	*
	The luminaire shall be protected against surges and transients of >/=10KV (External)	No	*
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 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)	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	*
Length of ISI marked three core wire	50 cm	50 cm

	(shall be provided along with supply of material)		
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 / consignee on demand (LM-79 report shall	Yes	*

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 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 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.

Consignee/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days	
1	Bidhan Debnath	713420,PMU Panagarh,	27	15	N/A

	Army Base, PO- Muraipur, Dist- Burdwan, Pin- 713420			
--	--	--	--	--

EMD Detail

Required	No
----------	----

ePBG Detail

Required	No
----------	----

Splitting

RA splitting not applied.

Buyer Specific Additional Terms and Conditions

- 1. Scope of supply (Bid price to include all cost components) :** Supply Installation Testing and Commissioning of Goods
- 2. Availability of service Centres :** Bidder /OEM must have Service Centre In the District of each Consignee's Location

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

---Thank You---