

Bid Document

Bid Details	
Bid End Date/Time	27-07-2020 15:00:00
Bid Opening Date/Time	27-07-2020 15:30:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	30 (Days)
Ministry/State Name	Ministry Of Defence
Department Name	Department Of Defence Production
Organisation Name	Bharat Electronics Limited (bel)
Office Name	*****
Total Quantity	100
Item Category	LED Luminaire (Recessed Luminaire)
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Bid to RA enabled	No
Inspection Required	No

EMD Detail

Required	No
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ePBG Detail

Required	No
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Splitting

Bid splitting not applied.

LED Luminaire (Recessed Luminaire) (100 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
STANDARDS	Conformity to Indian Standard	IS:10322/part 5/sec-2/2012 and IS 16107 (Part 2/Sec 1) : 2012 for Recess type	*

	Photo biological safety of LEDs used shall be as per IS:16108/2012 (exempt group)	Yes	*
	DC or AC supplied electronic control gear for LED Module shall comply as per IS:15885 (Part 2/Sec.13)	Yes	*
	Luminaire Class (as per Cl. 2.1 Section 2 of IS: 10322 (Part-1))	Class I	*
	Types of LED Modules as per the IS: 16103(Part-2)/2012	Type 3	*
	Rating of Recess type LED Luminaire/System Wattage/Rated Power	36W	36W
	Light Intensity(System Lumens) 80 Lm/Watt for 3000 deg K, 90 Lm/Watt for 4000 deg K, 100 Lm/Watt for 6000 deg K	Yes	*
	Color temperature (+/- 500 K)	3000 deg K	*
	Type of fixture (in feet)	2x2(30W to 48W)	2x2(30W to 48W)
CONSTRUCTIONAL	Ingress Protection (IP Rating) as per IS:10322 (Part 1):1982 latest (Minimum)	IP20	*
	Mounting type	Recess type	*
	Diffuser material	Poly carbonate (UV stabilised)	*
	The luminaire body must be corrosion resistant epoxy powder coated / anodizing	Yes	*
	All fasteners must be of nickel/chrome plated	Yes	*
	Number of electronic control gear (power supplies)	1	*
	Light Source	SMD LED Chip as per LM 80/IS16106	*
	Warranty for free replacement	3 Years	*
ELECTRICAL EFFICIENCY MANAGEMENT	Operating Voltage and frequency range	140V to 280 V at 50 Hz AC	*
	Rated voltage	230 V AC 50 Hz	*
	AC Power Factor	≥ 0.90	*
	Driver Efficiency	≥85	*
	Total Harmonics Distortion (≤ 20% (for upto 20W) (< /=10% (for above 20W)	Yes	*
	The total circuit power shall not be more than 110 percent of the value declared by the manufacturer (as per Cl 8 of	Yes	*

	IS:16104:2012 (latest)		
OPTICAL MANAGEMENT	LED chip Efficacy (≥ 130 Lm/Watt for 6000 deg K, ≥ 120 Lm/Watt for 4000 deg K, ≥ 110 Lm/Watt for 3000 deg K)	Yes	Yes, Yes, with higher efficacy ≥ 140 Lm/Watt
	Working life for LED : (Minimum 50,000 burning hours as per LM-80 report)	Yes	*
	Colour Rendering Index(CRI)	≥ 80	*
	Beam Angle	≥ 120	*
	Reflector type	Diffuser	*
THERMAL MANAGEMENT	Fixture / Luminaire should be die-cast aluminium /CRCA/Extruded aluminium	Yes	*
	Capacitor shall be rated for a temperature of 105 deg. celsius or better	Yes	*
	Junction temperature / soldering temperature	< 85 deg C	*
	Operating temperature range	-10 deg. C to +50 deg. C	*
	Humidity Range	10 % to 95% RH	*
PROTECTION	Short circuit Protection	Yes	*
	Over load protection	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 of ≥ 2.5 KV	Yes	*
MARKING	Manufactures Name and brand shall be available on the body of the Luminaire	Engraved/Embossed	*
	Each LED luminaire shall have the manufacturer's name, model number, serial number, 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 such as rated voltage and rated power in watts shall be marked inside each LED luminaire unit	Yes	*
REPORTS AND CERTIFICATIONS	LED Make	EVERLIGHT / EDISON / BRIDGELUX / NATIONSTAR / SEOUL / SAMSUNG / OSRAM / REFOND / NICHIA / CREE /	*

	LUMILEDS / PHILIPS / SYSKA / LUMENMAX	
LM 79 (Photometry) (Ref.IS:16106:2012) report from Central Government LAB /NABL/ILAC accredited lab. Reports shall be furnish to the buyer on demand (LM-79 report shall have total lumen output, power, PF, Current in Amps, CRI & CCT etc.,)	Yes	*
LM 80 & TM21 (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 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 Standard IS:10322/part 5/sec-2/2012 and IS 16107 (Part 2/Sec 1) : 2012	Yes	*
Seller has to furnish Type test report to the buyer 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 recess type shall comply with Compulsory Registration (CRS) of BIS for safety as per IS 10322 (Part 5/Section 2): 2012 as applicable on date	Yes	*

* Specifications highlighted in bold 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.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	*****	*****GHAZIABAD	100	15

Bid Specific Additional Terms and Conditions

1.OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent at the time of placement of contract. The purchaser also reserves the right to increase the ordered

quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates.
Bidders are bound to accept the orders accordingly.
2.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---