



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM:: HYDERABAD – 502 032

Ref: HY/M&S/P&C/SPECS/HB-LED
Rev: 01
Dt:13/06/2018
Page: 1/7

SPECIFICATIONS OF LED HIGH BAY LUMINARIES

PROCUREMENT OF LED HIGH BAY LUMINARIES FOR BHEL Hyderabad.

1. OBJECTIVE:

To procure high bay LED luminaries for BHEL, Hyderabad.

2. BRIEF DESCRIPTION:

2.1 LED High Bay Luminaries for BHEL Hyderabad, fixed at height 14 meters, to be used for lighting purpose at Shop Floors in BHEL Hyderabad.

2.2 Existing High bay lighting details are as under:

High bay MH/MV/SV 400w luminaries at 14 meter height.

DETAILED SCOPE AND GENERAL TERMS & CONDITIONS FOR PROCUREMENT OF LED HIGH BAY LUMINARIES

Specifications	Vender Specify / Confirm	Supplier's confirmation	Deviations if any /Remarks
3 PRE-QUALIFICATION REQUIREMENT			
3.1 The scope includes Supply, Erection of LED Highbay Lighting Luminaire, including Removal & the Buyback of the existing MH/MV/SV Luminaires.	CONFIRM		

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Dt:13/06/2018

Page: 2/7

SPECIFICATIONS OF LED HIGH BAY LUMINARIES

3.2	Supplier should be Original manufacturer of LED luminaries or Authorised dealer of the original manufacturer of LED Luminaries. Supporting documents should be submitted.	CONFIRM		
3.2	The vendor should have executed at least two orders for supply of Industrial Purpose LED Lights of minimum 120 W. PO copies, completion /performance certificates for the same should be submitted along with technical bid.	CONFIRM		
4. TECHNICAL SPECIFICATIONS				
4.1	LED high bay luminaries consisting of in built electronic control gear (Constant current drive) and wiring up to terminals.	CONFIRM		
4.2	Input Voltage range shall be 1 phase, 180-250 Volts AC, 50 Hz.	CONFIRM		
4.3	LED high bay luminaries should be with SMD (Surface Mount Device) LEDs only .Chip on board (COB) not acceptable.	CONFIRM		
4.4	LEDs used in manufacturing of Luminaries should be of Cree, Nichia, Seoul, Samsung, Lumileds and OSRAM	CONFIRM & SPECIFY THE		

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Dt:13/06/2018
Page: 3/7

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	makes only. <i>Purchase order (less than one year old) of LED chip for offered make should be enclosed along with technical bid.</i>	MAKE			
4.5	High power LED with luminous efficacy shall be greater than 130	CONFIRM & SPECIFY THE VALUE			
	Lumens per watt (luminous efficacy) for the Luminaries shall be greater than 90.	CONFIRM & SPECIFY THE VALUE			
4.6	Total Lumen output from Luminaries should be greater than 13500 Lumens	CONFIRM & SPECIFY THE LUMENS			
4.7	Total Wattage of Luminaries should not be more than 160w	CONFIRM & SPECIFY THE WATTAGE			
4.8	LM79 test report from NABL accredited laboratory for the Luminaries offered should be <i>attached along with technical bid.</i>	CONFIRM			
4.9	LM80 test report of LED's from Manufacturer should be <i>attached along with technical bid.</i>	CONFIRM			
4.10	Ingress Protection IP54 or greater supporting test report for the luminaries should be <i>attached along</i>	CONFIRM			

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Dt:13/06/2018

Page: 4/7

SPECIFICATIONS OF LED HIGH BAY LUMINARIES

	<i>with technical bid.</i>			
4.11	Color Rendering Index (CRI) should be greater than 70	CONFIRM		
4.12	P.F (Power Factor) should be greater than 0.95 <i>Supporting test report should be attached along with technical bid.</i>	CONFIRM		
4.13	THD (Total Harmonic Distortion) should be less than 10%. <i>Supporting test report should be attached along with technical bid.</i>	CONFIRM		
4.14	Surge Protection for the luminaries for at least 5KV should be provided.	CONFIRM		
4.15	LED colour temperature should be between 5000K to 6500K	CONFIRM		
4.16	Lamp Housing Pressure Die cast aluminium housing with heat Resistant toughened glass and efficient heat sinking material.	CONFIRM		
4.17	Roof Mounting with Single Point Mounting arrangement with Eye Bolt & S-Hook etc. The vendor should supply all items required for mounting.	CONFIRM		
4.18	MAKE & MODEL of Luminaries offered	SPECIFY		

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Page: 5/7

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5. OTHER TERMS AND CONDITIONS:

5.1	Supplier shall provide Detailed Catalogues of the offered LED Luminaries, along with technical bid.	CONFIRM		
5.2	Removal of existing luminaries, handing over them to indenting dept. and Erecting and commissioning of the new (LED) Luminaries at location specified by indenter is in the scope of supplier.	CONFIRM		
5.3	Supplier shall confirm availability of spares and their replace-ability for the independent parts of the luminaries for the purpose of repair or replacing the luminaries, in case of any fault within 72 hours of complaint during 5 years guarantee period. Vendor shall repair the luminaries INSITU. Vendor to provide service Engineer contact mobile no /land line no. after placement of purchase order. <i>If the Supplier fails to keep luminaries in working condition within 72hours from the date (time) of call from BHEL through e-mail/Phone, rate of penalty applicable is 0.5% of cost of fittings under breakdown per week or part thereof. (Total penalty during Maintenance period is Max. 10% of total P.O. Value).</i>	CONFIRM		

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Page: 6/7

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5.4	The standard guarantee for complete fitting will be 60 months from the date of commissioning. Supplier shall confirm five years free maintenance of LED luminaries including materials and Lumens as per LM70 even at 5th year.	CONFIRM		
5.5	The vendors have to submit Performance Bank Guarantee of 10% of Purchase order value for 63 months from the date of commissioning i.e 60months for warranty period and 3months for releasing period.	CONFIRM		
5.6	BHEL reserves the right to do PDI (Pre Dispatch Inspection) at manufacturing unit of the Supplier. Manufacturer/Dealer should have own testing facilities to witness all declared parameters in tender document and test reports. Note: Dealer can use Manufacturer's testing facilities.	CONFIRM		
5.7	Supplier has to quote Separate Price for Supply, Installation and Buy Back cost of the existing luminaires. However, L1 is decided based overall/total value.	CONFIRM		

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Page: 7/7

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5.8	100% payment against completion of total work i.e Supply, Installation and buyback of the removed materials. Note: <i>Material should be taken out from BHEL factory</i>	CONFIRM			
5.9	All above points should be confirmed/accepted otherwise it will lead to technical disqualification	CONFIRM			

OK

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