

250W Energy-efficient Industrial Highbay Luminaire and lamp

Sl.No.	Description for BHEL Requirement	Specified / To be confirmed by Bidder	Bidder Comments
Supply of 250W High Performance, Integral, Industrial, High Bay, closed version Luminaire with control gear box, reflector and induction lamp as specified below:			
1.0	Luminaire Suitability	Integrated luminary and ballast suitable for high bay.	
1.1	Housing	Made out of die cast aluminium and powder coated in black/ grey and to ensure IP54 ingress protection. Eyebolt with anti-vibration rubber bushing provided on housing for suspension. All Fasteners shall have locking provision to avoid getting loosen due to vibration.	
1.2	Reflector construction	Parabolic, anodized and electrochemically brightened reflector for enhanced lumen output and made of aluminium. To be provided with heat-resistant and toughened glass with gasket to ensure IP54 ingress protection.	
1.3	Reflector suitability	Reflector suitable for high bay wide angle application.	
1.4	Input power supply	1 phase, 50 Hz. A.C power supply. The fitting should operate in a voltage range of 180-250V. Vendor to confirm.	
1.5	Control Gear	Electronic Control gear with power factor improvement, mains connector etc., all prewired upto terminal block and mounted on a gear tray/ base for ease of maintenance. Control gear housing should be die cast aluminium body.	
1.6	HF generator output frequency	less than 275 kHz. Bidder to confirm. HF generator frequency shall not interfere with Electrical lines, Electronic drives, CNC/PLC machines, Pacemakers, Telecom networks, IT networks etc.,	
1.7	Maximum operating temperature	50 to 60 degC. Vendor to specify	
1.8	Safety chain	Safety chain of length 2 mtr from luminary to the roof hook and other essential items required for installation. Separate chains from protective glass to dome also to be secured through hooks. All screws, bolts and nuts shall be locked with appropriate spring washers / locking pins.	
1.9	Access for Maintenance	Access to gear compartment shall be provided to facilitate easy maintenance, replacement and connection	
1.10	Dimensional details and net weight	bidder to specify	
1.11	Rated life of the luminaire	Approx. 1,00,000 hours. Bidder to specify	
1.12	Nominal Power factor, THD, CRI	P.F> 0.95; THD <10%; CRI>=80	
1.13	Mains current	Bidder to specify	

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1.14	Technical catalogue/ drawing	bidder to furnish with the offer	
2.0	Specification for lamp	Circular shaped, externally coupled Induction lamp suitable for 180-250V, 50Hz, 1 phase supply. The assembly shall be of a low pressure mercury discharge vessel and an inductive power coupler. Inner coating should be pure form of phosphor. Lumen output: 80 lumen per watt	
2.1	Reference Standards	IEC 62532:2011/equivalent for safety specifications and IEC 62639:2012/equivalent for performance specification.	
2.2	Insulating Materials	Insulating materials of lamps shall be resistant to abnormal heat and to fire	
3.0	Make of the luminaire and lamp	Only reputed makes acceptable to BHEL based on test reports and certificates. Bidder to specify	
3.1	Type no. /Model No. offered	bidder to specify	
3.2	Product Certification	Product certification by CPRI / ETDC / NABL approved labs for power, power factor, operating voltage and THD should be submitted.	
3.3	Warranty	Replacement Warranty for trouble free operation of the lamp & all sub assemblies for a minimum period of five years after acceptance of material at BHEL.	
4.0	Pre-qualification criteria:		
	The BIDDER has to compulsorily meet all the following requirements and supporting documents should be furnished with out which the offer will not be considered for technical evaluation.		
4.1	The bidder should have directly supplied 100 nos (minimum) of induction lighting system of min 250W rating to any PSU / Government / Semi Government Organization / Joint Venture company of PSUs or Govt. Organization or both / Private sector company registered under Companies Act 1956, in the last five (05) years from the date of NIT. *Copy of purchase order in the name of the bidder is required to be submitted in support of above.	Bidder to confirm. Attach relevant copies	
4.2	The bidder should be an OEM or an authorised dealer. In case of a dealer, authorisation letter from the OEM to be submitted along with the offer.	Attach copies	