

<u>Tender for Supply & Installation of sports lighting for</u> <u>various grounds in Walmi campus at IIT-Dharwad.</u>

Tender No: IITDH/MMD/IPS/EE/2021-22/04

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

Tender No: IITDH/MMD/IPS/EE/2021-22/04

Name of the work:	Tender for Supply & Installation of sports lighting for various grounds in Indian Institute of Technology Dharwad at WALMI Campus				
Type of Tender:	Open Tender Enquiry				
Estimate Value:	Rs.8.25 Lakhs approximately				
Cost of tender documents	Free of cost				
EMD:	Nil				
Issue of tender:	05 th March 2022				
Last date for submission of tender:	Date: 28 th March 2022				
	Time: 10:00 AM				
Opening of tender:	Date: 28 th March 2022				
	Time: 10:30 AM				
Contacting Authority:	The Executive Engineer, Near High Court, P B Road Dharwad-580011 E-mail: <u>ee.ips@iitdh.ac.in</u> . Telephone: 91-836-2212-839				

NOTICE INVITING TENDER

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

Tender No: IITDH/IPS/EE/2021-22/04

1. GENERAL CONDITIONS OF CONTRACT

Sealed tenders are hereby invited on behalf of the Indian Institute of Technology, (IIT) Dharwad, for Supply & Installation of Floodlight for various grounds to Indian Institute of Technology Dharwad at WALMI Campus, Karnataka.

2. QUALIFICATION CRITERIA:

Only those bidders fulfilling the following Eligibility Criteria should participate in the tender: -

- 2.1 Bidders should be registered Government Contractor of Class I and above or should be in the business of providing lighting installations of supply and service of large external lighting for 3 years or more (i.e., the firm must be in the business since March 2019 or earlier).
- 2.2 The Bidder must have carried out at least one similar work of minimum Rs.8 lakhs in reputed organizations/IITs/IIMs/Govt. offices/PSUs/Central Universities etc. during a period of last 3-5 years (i.e., must have successfully completed the work during March 2017 till date). Completion certificates/Final Bills/relevant documents establishing his work completion etc. to this effect are required to be enclosed.
- 2.3 A Certificate/Undertaking on the letter head of the Company to the effect that the bidder has not been blacklisted anywhere in India or abroad by any organization. A self-certification to this effect is required to be enclosed.
- 2.4 The Bidder should be registered with concerned statutory authorities for GST/Income Tax etc. The bidder should furnish relevant GST registration documents and PAN/TAN copies along with the bank details of the firm.

Any prospective bidder, not satisfying any of the above-mentioned qualification criteria shall be disqualified on technical grounds and the price bid of such disqualified bidder will not be considered for this tender.

3. Tender documents can be obtained from IIT Dharwad website: http://www.iitdh.ac.in/announcements worktenders.php

4. Tenders are to be submitted in a serially numbered & bounded manner. Tender should be placed in sealed cover super-scribed with the name of the work and the same will be put in the tender box by the tenderer kept in Office of Executive Engineer(IPS) up to 10:00 AM on or before last date and time of bid submission as mentioned in Notice Inviting Tender (NIT) and will be opened by Executive Engineer or his authorized representatives in his office / any other place in the Institute on date and time of tender opening as mentioned in NIT, in the presence of such tenderers who desire to attend.

5. Tenders must be submitted in sealed covers and should be addressed to The Executive Engineer (IPS), Indian Institute of Technology Dharwad, Near High Court, PB Road Dharwad 580011. The name of the tenderer and the name of the work must be noted on the above.

6. Income Tax, PAN number & GST registration number is to be submitted along-with the bid.

7. The tenderers should write in figures as well as in words for the rates quoted by them on the proper form of the tender. All corrections / over writings must be attested by the dated initials of the contractor. The tenderer is advised to avoid offering discount /rebate in the covering page or at the end of the schedule. Instead, the same can be incorporated in the unit rate by reducing the unit rates. If at all offered, the discount / rebate percentage offered is to be written in words such as Five percent / point Five percent etc.

8. The rates quoted shall be exclusive of GST. The contractor shall quote for all the items whose rates are asked and not leave any blanks. All taxes including GST shall be borne by the contractor.

9. The offer should be valid for 90 days from the date of opening for the purpose of issue of acceptance letter. The amount quoted herein after referred to as base rate must be firm and inclusive of all charges of any kind and inclusive of any kind of liability from / to any authority. GST shall be mentioned separately and must not form part of base price. There will be no extra payment or payment of escalation in the amount under any circumstances whatsoever. Statutory taxes will be deducted at source from the payment against the bill amount.

10. No extra item or substitute item shall be allowed out without prior approval in writing.

11. Work has to be carried out in consultation with the representative as authorized by IIT Dharwad.

12. The contractor whose tender is accepted will be required to furnish security deposit for the due fulfillment of his contract. Security deposit shall be deducted from each running account (RA) bill @5% (Five percent) of the amount of work executed and claimed in the bill.

13. No part of the contract shall be sublet without written permission of IIT Dharwad nor shall transfer be made to power of Attorney authorizing others to receive payment on contractor's behalf.

14. **Process for execution of Sports Lighting Works:** The successful contractor shall execute the Sports Lighting work only upon receipt of the written approval. No work shall be commenced without obtaining written sanction from the representative of IIT Dharwad (Office of Dean-IPS). The written approval shall form the basis of execution of work at site and must be enclosed with the RA bills for the purpose of measurement of work carried out and settlement of bills. Failure to obtain written permission to carry out the work and non-submission of approvals with the bills may result in deduction of final payment.

15. IIT Dharwad reserves the right to reject any tender or all the tenders without assigning any reason therefore.

16. The Contractor shall comply with the provisions of all Acts, Statutes, Rules, Regulations etc. of the Central and State Government as the case may be that may apply to his case and if necessary, get himself duly registered as required by the said Acts, Statutes, Rules, Regulations etc.

17. The contractor for the work shall be liable to pay applicable tax (including Taxes on works contract to state Government) if any that may be levied by the State or Union Government. Any request contrary to this will not be accepted.

18. Completion period: As per the details mentioned in the written approval issued prior to execution of work.

19. Terms of payment:

- a) The contractor shall submit his monthly bill along with the details of the work executed with certification of site engineer. The payments shall be released after the completion of work and no advance /part payment shall not be released against the supply of material.
- b) The payment shall be released through NEFT/RTGS payment system only in the bank account of the contractor after necessary deduction of statutory dues.
- c) TDS and other Statutory taxes shall be deducted at the source from the monthly bills.

20. It shall be open to the Institute to abandon or give up at any stage of the construction of any of the said works or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement, the Contractor shall be paid up to the work performed by then.

21. DEVIATION, EXTRA ITEMS & APPROVALS FOR PRICING:

In case of execution of any extra items(s), apart from the BOQ, contractor must intimate the office of Dean (IPS) to obtain prior sanction for carrying out the work along with the quantities & rates. Thereafter, the contractor may submit the bills as per the usual practice of submission of RA bills.

In case of contract items not mentioned in BOQ and required for completion of the work shall be executed at the same proportionate rate W.R.T to DSR as followed in tender process. In case of any deviation to extra quantities required for completion of said job shall be executed at the same rate with approval of Dean (IPS).

22. **Termination of contract:** If the Contractor fails to perform any of its obligations under this agreement or if Institute is dissatisfied with the services of the Contractor, Institute may issue seven days' written notice intimating the Contractor of their failures or deficiencies and calling upon Contractor to rectify within such time as may be specified in the notice and if the Contractor fails to perform such obligation or make good such deficiencies as pointed out to the Contractor in the notice, Institute may terminate the services of Contractor under this agreement. Institute may also terminate the Contract hereunder:

- i) if the firm is adjudged bankrupt or
- ii) if they make a general assignment for the benefit of their creditors or
- iii) if a receiver is appointed on account of their insolvency or
- iv) they disregard law, ordinances, rules, regulations or orders of any public authority having jurisdiction on the works.

The termination shall be without prejudice to all rights, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on account of such termination. In such case, the Contractor shall not be entitled to receive any further payment, if due, until the loss, damage or expense incurred by Institute due to breach of this agreement by Contractor have been settled.

In case the Contractor abandons the work during the course of the project, the Institute reserves the right to appoint an alternate Contractor or make an arrangement for carrying out the work of Contractor, at the risk and cost of the Contractor. Traveling / daily allowances shall not be payable

to the Contractor, its representatives, officials and consultants engaged by it for their visit to construction site, offices of local authorities, Employer's office or any other place in Dharwad.

The scope of work broadly described herein and assigned to Contractor, as their area of responsibility is inclusive of all consultancy and other services required in connection with the completion of work whether specifically mentioned herein or not and rendering such constancy services will not entitle the Contractor to charge any additional fees in as much as the same are included in the overall professional fees payable to them.

23. Liquidated Damages Clause:

If any delay in execution of the works is attributable to the acts or omissions and commissions of Contractor, Institute shall be entitled to recover liquidated damages at the rate of 0.5% of the total fees for each week of delay limited to maximum of 10% of the total actual fees payable.

24. **Professional indemnity:** Contractor warrants that it shall exercise high degree of care and diligence in rendering the services pursuant to this agreement and that; such services shall be of a quality and standard satisfactory to Institute. The Contractor shall indemnify Institute from any damage or loss arising from such lack of care and diligence or arising out of any unsatisfactory performance of service by Contractor. The contractor is required to obtain a Contractor All Risk (CAR) policy for successful and safe completion of project. Contractor shall provide a copy of this policy to Institute showing that such insurance has been taken and being maintained and that all the premia thereon have been paid. A certified copy of such insurance policy shall be deposited with Institute.

25. **Dispute Settlement:** In case of any dispute or difference arise between the parties during the progress of or after construction of this contract or touching or relating either to the said buildings or works, or to any other matter or thing arising directly or indirectly under this contract, then and in such an event the same shall be referred to Director, IIT Dharwad as the SOLE ARBITRATOR who shall alone consider and determine the same, whose decision / award shall be binding and conclusive upon both the said parties and this clause shall be deemed a submission within the meaning of Arbitration and Conciliation Act 1996 or Statutory modification or re-enactment thereof. It is specifically agreed that the Contractor shall continue to render its services provided herein with all the due diligence, professional skill and tact not withstanding that any matter, question or dispute has been referred to arbitration. The venue of Arbitration proceedings shall be Dharwad. It is further agreed between the parties as hereto that the Dharwad Courts alone shall have the exclusive jurisdiction.

26. Site: The contractor shall remove all surplus materials, debris etc. out of the IIT Campus from the site of work on completion work and will hand over the site clean before the bill is processed for final payment. Dismantled materials if any (declared by In-charge of the work) shall be returned to the Estate/ Electrical stores by the contractor at his own cost. The disposal of material shall be done in environmentally friendly way and complying with the local rules and regulations.

27. Security

A. Movement of contractor's materials:

Any materials which are removed from the site of work and are required to be taken out from the IIT campus, the contractor should follow the following procedure:

The contractor shall apply in writing to the In-charge of the work the details of the materials to be removed including which are rejected etc. This application shall be endorsed by the In-charge of work or his authorized representatives. The materials shall only be allowed to go out of IIT campus after counter signature of the security officer and checked at the gate. No materials/tools will be allowed to be brought on holidays/Saturdays/Sundays inside the campus. Contractors can bring the materials/tools/between 0900 hours and 1700 hours on

any working day (Monday to Friday). This may please be noted.

B. Search:

Thorough search of all persons and transport shall be carried out at each gate and for as many times as gate is used for entry or exit and may also be carried out at any time or any number of times at the works site within the restricted area.

C. Labor Law:

The work will be executed strictly following the Labor Laws of Central Govt & State Govt as may be applicable.

28. Scope of Work:

The Scope of work includes supplying of specified material, erection and commissioning of the sports facilities at various grounds of Walmi campus. The scope of work includes laying of main cable including trench excavation and backfilling, supplying and laying of distribution cable, supply and erection of distribution boards, supply and erection of erection of poles, mounting of lighting fixtures, earth pit, protection system as per scope specified.

29. Evaluation criteria

<u>The L-1 will be decided on the Grand total rate quoted for the work.</u> All levies/taxes (i.e., GST etc.) must be clearly mentioned in the row provided for the purpose (as per format of commercial bid).

However, the decision of the Competent authority will be final and binding in awarding the order.

In case of any clarification required, the same can be clarified from IIT Dharwad before submission of the bids.

Declaration: I/We do hereby accept all the terms and conditions laid down in the tender document for the above said work/supply. I/We also agree to the condition that the right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by the Competent authority of the Institute without any obligation or liability whatsoever.

Signature of the Bidder with date and seal

<u>Annexure-1</u>

Bidder Information

1.	Name of the Bidder	
2.	Address of the Bidder	
3.	Government Registration Class	
4.	PAN No.	
5.	GSTN No.	
6.	State of GST Registration	
7.	E-mail	
8.	Contact Person's Name & Designation	
9.	Mobile No.	

Signature of the Bidder with date and seal

Annexure-2

LIST OF APPROVED MAKE/MODEL

- A. All material shall confirm to relevant technical specification. The material shall be further subjected to tests in the recognized laboratories at the sole discretion of the Engineer-in- Charge and shall be at contractor's cost.
- B. Material bearing appropriate IS marking and having valid license for the last 3 years shall be given preference while selecting for the work
- C. In the case of material which are not widely available with IS marking in the market but confirm to the technical specification mentioned in the tender documents, the same shall be procured from any of the manufacturer listed below after prior approval of the EIC.
- D. EIC can approve any other brand subject to verification of the adherence to the relevant technical specification.

Sl. No.	MATERIALS	MAKE /BRAND					
1	Rigid FR PVC conduit Pipe and accessories	Avon plast, wireman, Nihir, precision, Polycab					
2	Copper wire /Conductor	Finolex, Polycab, RR cable, Havells,					
3	Modular type	Mk, Legrand, anchor, Havells					
4	MCB / ELCB/ RCCB	Legrand, ABB, Schindler L&T,					
5	MCCB/ ACB	Legrand, ABB, Schindler L&T,					
6	Lighting fixtures & Lamps	Philips, Wipro					
7	PVC tape	Steel grip, anchor, Jonson					
8	Distribution board	Havells, Siemens, L&T					
9	UG 1.1kv LT cables	Finolex, Polycab,					
10	PVC casing capping and accessories	Modi, Polycab,					
11	Selector switch	L&T, Hpl, Cummins, Havells or equivalent					
12	Cable lugs	Dowell's, Johnson,					
13	Cable jointing kit	Raychem, Denson, m-seal					
14	Indicating led lamp	Siemens, ABB, L&T, Wipro					
15	Protection relay	L&T, Siemens, ABB,					

Annexure-3

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD

Near High Court, PB Road, Dharwad-580011

TEL NO: +91 836 2212 839

Tender no.: IITDH/IPS/EE/2021-22/004

SCHEDULE OF WORK / BOQ / PRICE BID

(To be quoted on the letter head of the bidder)

BOQ FOR SUPPLY,INSTALLATION,TESTING,COMMISSIONING FOR SPORTS LIGHTING SYSTEM FOR DIFFRENT SPORTS FACILITIES, Walmi Campus, IIT Dharwad.						
Sl No	Item Code	Item Name	Unit	Quantity	Rate (INR)	Total (INR)
1	1	Digging of Pits 1.8 mtr depth for errection of 9 to 10 mtr Long Steel/RCC/PSC supports as per approved Drawing.				
	1.1.2	Hard soil	No	12		
		RCC Pole - 9 Mtr Long, 145 Kg WL (Dwg No. BESCOM/GM/QS&S/02				
2		Dtd 24.11.2018) as per IS-785 and Erection of RCC/PSC poles 9 to 10 mtr long but in a pit of 1.8 mtr depth	No	12		
3	4.7	Supplying, and fixing of M.S.Bracket Head frame Structure suitable for required number of out door luminaries and mounted on RCC pole using necessary bolts, nuts etc., complete.	No	12		
4	6.1	Earthing: Supplying and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board using 40mm dia 2.90mm thick GI pipe 2.5mtr long burried in a pit, The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts, nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (PWD SR P.No. 40. No. 6.1)	No	2		
5	6.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 (P.NO 40 I. NO 6.4.1)				
	6.4.6	4 core 35 sqmm	Rmtr	50		
	6.4.4	4 core 16 sqmm	Rmtr	528		
6	6.5	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct.				
	6.5.1	6 sqmm to 16 sqmm	Mtr	518		
	6.5.2	25 sqmm to 75 sqmm	Mtr	43		
		On wall /Structure		1		
	6.5.6	6 sqmm to 16 sqmm	Mtr	20		
	6.5.7	25 sqmm to 75 sqmm	Mtr	7		
7	6.6	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) In soil (hard)	Rmtr	518		
8	7.2	Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/Tees/Bends/End-caps of same materials in existing trench as per IS 14930 part -II suitable for drawing underground cables.				
]	7.20.3	63mm OD / 50mm ID	Mtr	40		
	7.20.1	40mm OD / 32mm ID	Mtr	518		
9	6.9	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.				
	6.9.1	40mm	Mtr	6		L

			1		r	1
10	6.11	Supplying and fixing of heavy duty cable glands suitable for UG cable of	Nos	24		
10	0.11	1.1 KV class (metal only) 19/20mm	1105	21		
11	6.10	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class				
11	0.10	UG cable filled with necessary bitumen/insulating compound complete				
		with terminals, clamps, bolts, nuts and washers etc.				
	6.10.4	35Sqmm	Nos	2		
12	(12)					
12	6.13	Supplying Bitumen Compound and covering the cable joint/ pot heads	Per KG	2		
1.2	6.1.4					
13	6.14	Supplying Epoxy Resin and covering the cable joint.	Per KG	2		
		Supplying tinned copper lugs and crimping and wiring to terminal point				
14	6.17	for wire of the following sizes.				
	6.17.8	35 sqmm Long Barrel	Each	16		
	6.17.6		Each	80		
	011710		Luon	00		
		Supply and Installation / Fixing / Provision of Pole box with HRC Fuse /				
		MCB provision and suitable connector / terminal for 3 Ph / 1 Ph				
15	5.43	connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm				
15	5.75	3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC				
		Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which				
		should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof,				
		water proof having Internally Embedded Gasket with provision for cable				
		entry through IP65 Thermoplastic, polyamide glands and/or grommets.				
-	5.43.2	260mmx210mmx116mm	Each	8		
	5.45.2	200111112101111111011111	Each	8		
16	5.6	Supply and fixing polished wood board made of not less than 15mm thick				
		plank on both sides of not more than 2 pieces and fixing the same to the				
		wall using tapered inverted wooden plugs screws.				
	5.6.6	20"x20"x2.5"	No	2		
17	5.7	Supplying & fixing of Porcelain fuse channel with cut out on existing				
		wooden/panel using necessary nuts, bolts and washers. 100Amps				
-	5.7.2	32Amps	Each	16		
-	5.7.3	63Amps	No	6		
-	5.7.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting	INU	0		
18	14.5	over existing pole / wall ceiling including clamps, bolts, nuts	Nos	16		
10	14.5	and wiring using suitable capacity wires.	INOS	10		
		and wiring using suitable capacity wires.				
19	5.41	Supplying and fixing angle iron frame work fabricated out of M.S. angle				
		iron and M.S. flat with bolts, washers etc., and painted with 2 coats of				
		red oxide and then two coats of approved paint.				
	5.41.1	40x40x6mm	Mtr	20		
		Fabricating supplying and mounting MS box made out SWG suitable				
		for floor / wall mounting, fully weather proof with provision for better				
20	5.42	heat dissipation, provided with hinged front cover, equipped with tamper				
-	=	proof locking arrangements, with suitable size clamps with necessary				
		cable entry pipe with gland and box should be finished with 7tanks				
		treatment with powder coated paint and finally finished with approved				
	E 40 1	colour etc., complete.		(121)		
	5.42.1	14SWG	sq.cms	61316		
21	5.38	Supplying and fixing of LED type panel board indicating lamp with	Each	6		
		required colour suitable for 230/440v A.C. 50 Hz 12/24v D.C.		5		
		Supplying and fixing miniature circuit breakers on existing MCB				
22	5.17	distribution boards using necessary fixing materials and 'C' Type curve,				
		indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of				
		10K and complete wiring as required confirming to IEC 60898.				
	5.17.1	6-32Amps SP	Each	4		
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	5.17.4	6-32 Amps DP	Each	8	
	5.17.7	6-32 Amps D1 6-32 Amps TPN	Each	2	
	5.17.9	50-63Amps TPN	Each	2	
	5.17.5	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker	Lucii	-	
23	5.20	(ELMCB) 240/450V up to 300mA sensitivity on existing wood/panel			
25	5.20	board.			
-	5.20.4	63 Amps 4 pole	Each	2	
	0.12011	Supplying and drawing Flexible Multicore Cable manufactured with	Luon	-	
		electrolytic grade flexible copper with low conductor confirming to			
24	2.5	IS:8130-1984 and (Virgin) PVC insulation sheathed suitable for working			
		voltage upto 1100Volts as per IS-694:1990			
	2.5.2	3C X 1.5Sq.mm	Mtr	384	
		L. L			
25	5.22	Supplying, fixing and wiring 0 to 600Volts 96x96mm AC Voltmeter on	Each	2	
		existing panel/wood board.			
26	5.25	Supplying, fixing and wiring 0 to 100amps Direct Reading AC analog	Each	2	
20	5.25	type Ammeter	Luch	2	
27	5.35	Supplying, fixing and wiring Electronic Trivector Meter (ETV) 5 to 32/63	Each	2	
		Amps three phase 4 wire whole current class-1 Accuracy Energy Meter.			
28	5.34	Supplying, fixing and wiring 50/5 to 400/5Amps 5VA burden Current	Each	6	
20	5.54	Transformer. Class 0.5 accuracy with Tape Wound.	Each	6	
		Supply of LED floodlight luminaire with pressure die cast aluminium			
		housing body for optimal thermal dissipation. Lamp compartment			
		comprising of anti glare clear diffuser with Injection moulded			
		polycarbonate/clear glass material, delivering superior light output. Rated			
		life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, CCT > 5500K,			
		IP 66 optical and electrical compartment & impact resistance of complete			
		luminaire > IK08. Power Factor >0.9 with mains, Surge Protection-Min			
		5KV along with Over voltage/ Overload, short circuit/ miss-wiring			
		protection. Compatible for pole mouting with outer dia of 40mm to 50mm.			
		Universal Voltage driver to operate wide voltage range from 100V to			
		270V 50/60Hz application. Compliance to IS 10322/ IEC 60598, LM 79			
		& LM 80 Adherence with RoHS. UL approved MCPCB. Top access			
		street light with single screw to ensure ease of maintenance at the sight site			
29		location with minimized minimal tools. LED Light fixture with 400 W			
		System Power consumption. LED Efficiency>130lm/w, nominal CRI>75.			
		Luminaire manufacturer should have in-house facility accredited by			
		NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier			
		word mark /name shall be Engraved / Embossing on the die cast housing/			
		Body part. Warranty of 2 Years against any manufacturing defect working			
		under standard electrical conditions as mentioned above should be given			
		by LED Manufacturer and as per the approval of Engineer-in- charge.			
		LED SPORTS LIGHTING OF MODEL NO: BVP485 LED510 CW			
		NB PSU SPD GR OF PHILIPS Make with Pressure die cast			
		housing/IP66/IK08/L70@50k hours LED life with 400 W wattage and			
		51000 Lumens with Lumen efficiency of > 125 Lm/W and surge	No	12	
		protection of 20 Kv and THD <10% with Potted driver protection of 440V	110	14	
		(P2P) protection for 8 Hrs, High Cut off @ 325+/-15V Auto Restart.			
		Total			0.0
		GST 12%		12%	0.0
		Grand Total			0.0