

Schedule of work

Name of Work:- SITC of LED fittings, BLDC fan & split type air conditioning system for office building (G+2) at CGST & Central Excise, Datala Road, Chandrapur.

SN	Description of item	QTY	UNIT	RATE	AMOUNT	Remark
1	LED Down lighter (SMD Type) (System lumen efficacy $\geq 120 < 135$ lm/Watt) Supplying, installation, Testing & Commissioning of LED Recessed/surface Down lighter (Round/ square/ Rectangular) SMD type of following body material with PMMA and prismatic diffuser and construction as per IS : 10322 with driver as per the requirement with Driver efficiency $> 85\%$, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -5°C to 40°C centigrade, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD $< 10\%$, P. F. ≥ 0.95, IP20, CRI > 80, UGR (Unified Glare Rating) < 19, Flicker free (flicker should be below 5 %), life time (LED, Driver & electrical circuitry), life time of minimum 50000 Burning Hours with 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K / 5700°K / 6500°K (As per ANSI Bin), SDCM(Standard Deviation Color Matching) < 3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard. Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing Complete in all respect i/c external connections with 1.5 sq mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy $\geq 120 < 135$ lm/Watt output . LM79 & LM80 Test report and all testing required for LED fixtures as per BIS shall be submitted.. Shape size and CCT shall be as approved by Engineer-in- Charge as per requirement. (Thermal management: heat sink of aluminium housing such that LED junction temperature shall not rise above 90°C). Powder coated die cast /Extruded aluminium Body including trim					
1	18 watt	60.00	Each	942.00	56520.00	8.2.4
2	LED Batten light (System lumen efficacy $\geq 120 < 135$ lm/Watt) Supplying, installation, Testing & Commissioning of LED surface mounted Batten light of following body material and construction as per IS : 10322 with driver (Replaceable) as per the requirement with Driver efficiency $> 85\%$, Operating voltage AC 140- 270 Volt, frequency 50/60 hz, Operating temp range -5°C to 40°C, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD $< 10\%$, P. F. ≥ 0.95, IP20, CRI > 80, Flicker free (flicker should be below 5 %), life time (LED,Driver & electrical circuitry), of minimum 50000 Burning Hours with 70% of initial Lumen maintained till life ends, CCT 3000°K / 4000°K / 5700°K / 6500°K (As per ANSI Bin), SDCM(Standard Deviation Colour Matching) < 3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard.					

SN	Description of item	QTY	UNIT	RATE	AMOUNT	Remark
	Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. complete in all respect i/c external connections with 1.5 sq.mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy ≥ 120 <135 lm/Watt output LM79 & LM80 Test report and all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineer-in-Charge as per requirement. (Thermal management: heat sink of aluminium housing such that LED junction temperature shall not rise above 90°C). Powder coated die cast /Extruded aluminium Body (Thickness > 1.20 mm)					
2.1	40 Watt	80.00	Each	779.00	62320.00	8.10.4
3	Supply, installation, testing and commissioning of Fancy wall bracket fitting , champagne gold finish fixture with plastic body including 9 W LED Bulb , B22/E27 base lamp suitable for 240V single phase 50Hz power supply, i/c fixing arrangement on ceiling/ wall, connections with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. complete as required.	20.00	Each	1282.00	25640.00	MR
4	Supplying, installation, testing and commissioning of surface mounted 1'x4' LED luminaire made of CRCA white powder coated / extruded aluminium white powder quoted housing on ceiling / wall having system lumens output not less than 3600 lumens and power consumption not exceeding 36 watt, CCT not less than 5700K, CRI not less than 80 complete with electronic driver and built-in surge protector of not less than 2 KV and all accessories i/c connections with 3 x 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	150.00	Each	4220.00	633000.00	MR
5	Brush Less Direct Current (BLDC) Fan without Remote Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal(Aluminium alloy) blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, steel/Al body Power Factor not less than 0.9, Service Value (CM/M/W) minimum as below, 350 RPM (tolerance as per IS : 374-2019), THD (Total Harmonic Distortion) less than 10%, suitable for operation with regulator for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 0C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC supply, Ceiling Fan compliant to IS 374:2019 fan i/c external connections with 1.5 sq.mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required.					
5.1	1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 210 CM/Min (Minimum)	80.00	Each	2695.00	215600.00	9.2.3
6	Supplying, Installation, testing & commissioning of 300 mm sweep exhaust fan , metal body, approximate Airflow 1050 cub Mtr. /hr (cmh), Speed 1325 rpm approximate, 3 Nos. blade with grill in the existing opening etc. as required.	15.00	Each	2256.00	33840.00	MR
	HI - WALL SPLIT SYSTEMS					

SN	Description of item	QTY	UNIT	RATE	AMOUNT	Remark
7	Supplying , Installation, Testing and Commissioning of Air Cooled Hi Wall split type Air conditioners complete with Indoor unit(IDU), Out door unit (ODU), surface / concealed copper Refrigerant piping with insulation (closed cell elastomeric nitrile rubber tubular pipe section) upto 3 Mtr (IDU to ODU), copper power cable upto 3.5 Mtr (IDU to ODU) i/c drain pipe R-32/R-410/ R-407 Green Refrigerant, wireless Remote control, suitable for working between 180-260V with low & high voltage cutoff and 50 hz ,1 phase AC supply capable of performing cooling, dehumidification, air circulation of following capacity with Scroll / rotary compressor. The system shall be able to deliver 100% of the rated capacity upto 42 0C. Min 5 year Original Equipment Manufacturer (OEM) warranty both compressor and Printed Circuit Board (PCB). Must comply : Electrical cable IS 694 or IS 9968 temperature sensing control IS/International Electrotechnical Commission (IEC) 60730, hermetic compressor IS 10617, heat exchanger IS 11329, capacitor IS 2993 and motor IS 12615. Complete as per CPWD specification and IS : 1391 Part II 2023. The system shall be able to operate up to 50 0C (out door ambient temperature).					
	Inverter Type - Cooling only					
7.1	1.5 TR with 5 Star BEE Rating	1.00	Each	43539.00	43539.00	32.2.3
7.2	2.0 TR with 5 Star BEE Rating	6.00	Each	57396.00	344376.00	32.2.4
				Total	1414835.00	
				Say	1414835.00	

**Executive Engineer (E),
NED, CPWD, Nagpur**