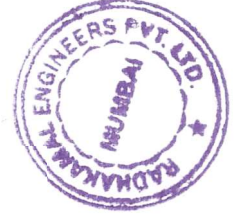




<b>Outgoing Switchgears - 1</b> (Sunset to 23 Hrs. IST ON) & Week End (OFF)	25A,FP,10KA,30mA, RCCB	1 No	L&T/ABB
	10A/16A/20A/25A,SP,10KA,C Curve, MCB	8 Nos.	L&T/ABB
	18A,4P,AC3 Duty Contactor for Lighting Load Switching	1 Nos.	L&T/ABB
	POWER Wiring MCB to Terminal	1 Set	Polycab/RR
	4 mm <sup>2</sup> Clip On Terminals for Each Outgoing including - P,N & Earthing	1 Set	Connectwell/Elmex
<b>Outgoing Switchgears - 2</b> (Sunset to 23 Hrs. IST ON) & Week End (OFF)	25A,FP,10KA,30mA, RCCB	1 No	L&T/ABB
	10A/16A/20A/25A,SP,10KA,C Curve, MCB	8 Nos.	L&T/ABB
	18A,4P,AC3 Duty Contactor for Lighting Load Switching	1 Nos.	L&T/ABB
	POWER Wiring MCB to Terminal	1 Set	Polycab/RR
	4 mm <sup>2</sup> Clip On Terminals for Each Outgoing including - P,N & Earthing	1 Set	Connectwell/Elmex
<b>Outgoing Switchgears - 3</b> (Dark Area Lighting & Emergency Lighting)	25A,FP,10KA,30mA, RCCB	1 No	L&T/ABB
	20A,SP,10KA,C Curve, MCB	8 Nos.	L&T/ABB
	POWER Wiring MCB to Terminal	1 Set	Polycab/RR
	4 mm <sup>2</sup> Clip On Terminals for Each Outgoing including - P,N & Earthing	1 Set	Connectwell/Elmex
<b>Busbar</b>	63A,4P,E91E grade Aluminium Busbar with 1A/mm <sup>2</sup> Current Density with RYBN colour coded Sleeve	1 Set	
<b>Earthing</b>	25 x 6 mm E91E grade Aluminium Busbar for Earthing with Green Sleeve	1 Set	
<b>Support</b>	SMC / DMC Supports as per requirements	1 Set	
<b>Control Wiring</b>	1.5mm <sup>2</sup> / 1 mm <sup>2</sup> Based on Terminal Size & Drawing Approval	1 Set	Polycab/RR
<b>Neutral Link</b>		1 Set	



Sr no	
	<b>important notes for the bidders for LED Fittings</b>
1	Product technical data and installation sheets of Ligman and Unilamp for all products enclosed for Contractor use and consideration as per project needs during bidding, supply and installation. All accessories for the floodlights given in the technical data sheet are from the Ligman or Unilamp as per the product offered by the Contractor and not from other makes or brands or third party directly to be used and are not allowed with the above light fittings in the project
2	Alternative another additional make that could be considered in the project for any single item or all above light fittings shall be from 'we-ef' make only but meeting minimum above technical specification and application only
3	Technical data and Installation for above listed light fittings are part of tender documents and same have to be submitted with stamp and signature of the manufacturer towards compliance and confirmation. If any alternatives are to be offered by Ligman or Unilamp or by 'we-ef' then product technical data and installation sheets with IES lighting design files to be submitted as a part of technical bid for consideration (IES files for lighting design can be submitted by email to IIT for evaluation separately with email printout and reference for evaluation)
4	Samples of the above lights can be asked by IIT any time during the tender to the bidding contractor and during execution of the project to the successful Contractor for project requirements without any extra cost on returnable basis
5	Product performance Warranty shall be given by the light fitting manufacturers for complete product on IP, IK, lighting performance, Driver performance for min. 5 yrs to max 7 yrs from the date of supply required in the project
6	COB makes needed are NICHIA, CREE, OSRAM
7	SMD LED makes needed are NICHIA, CREE, OSRAM
8	LED driver makes is it Ligman brand or local makes as BIS certification is required for both integral and remote driver in CV and CC types
9	Accessories like connector, etc makes if the supplies are made by your distributor or they are factory fitted
10	FTC Factory test certificate and BIS certification reference numbers for individual or family of products
11	<b>In event of alternatives asked by Tender , Contractor will quote for Higher Wattage fitting with same specification. Client / Consultant has right to select any of the fitting based on final design.</b>
12	Product details *(refer enclosed product data sheet of each light fitting with installation sheet for reference and workings in the tender and project site installation works)
	<b>Light fitting General Compliances</b>
	IEC 60598 Luminaires – Part 1+2: general requirements, specific requirements and tests
	IEC 62031 LED modules for general lighting – safety requirements
	IEC 62471 Photobiological safety of lamps and lamp systems
	EN13032-4 Light and lighting – measurement and representation of photometric data
	CIE 13 Method of measuring and specifying colour rendering properties of light sources
	BIS certification for all items required and to be submitted with technical bids for reference
	LM79, LM80 product test certificates for each light fitting used in the project shall be submitted during the supply

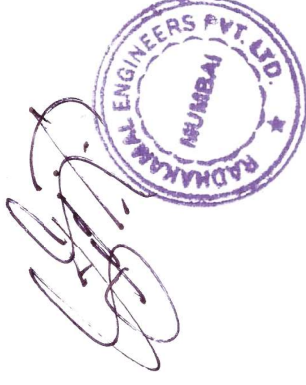


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	<b>Contact Details</b>
<b>Manufacturer</b>	<b>Contact No. / E mail No.</b>
<b>Ligman / Unilamp / LED Linear / We-ef</b>	Contact details of Ligman and Unilamp and we-ef are given below for reference and interaction for the bidders and the Contractors
	<b><u>Ligman Lighting Contact details</u></b>
	Mr Kashyap / Mr. Pratik / Mr. Mohanraj MD / Manager West / Sr Manager South location Mumbai / Mumbai / Bangalore
	Contact no 99205 31244 / 9167831555 / 95595 79479
	kashyap.b@ligman.co.in pratik.c@lightkrafts.com mohanraj.m@ligman.co.in
	<b><u>Unilamp Lighting Contact details</u></b>
	Mr Deepanshu Biswas / Mr. Aakash / Mr. Ravichandra Head India and SAARC / Business Manager West / Sr Business Manager South
	location New Delhi / Mumbai / Bangalore Contact no 98711 355550 / 82752 70486 / 95389 98132
	deepanshu_b@unilamp.co.th akash@unilamp.co.th ravi@unilamp.co.th
	<b><u>LED Linear Lighting India Contact details</u></b>
	Mr. Sandeep Kothari
	Country head 96548 66056 sandeep.kothari@led-linear.com
	<b><u>WE-EF LEUCHTEN GmbH</u></b>
	Tobias Bilmoser 00 49 51 94 9090 / 00 49 51 94909 259
	t.bilmoser@we-ef.com info.germany@we-ef.com Töpingen Straße 16 29646 Bispingen, Germany
	Somchai Supakulworakul, we-ef Thailand for Asia operations somchai.s@we-ef.com 00 66 2738 9610
	<b>Partners of we-ef in India LIGHT SOURCE INTERNATIONAL LLP Mr. Akash / 011 3362 0700 / akash@lsiindia.com</b>
	New Delhi / Mumbai



List of Contact Person for Product Selection						
Sr no	Make	Company Name	Name	Designation	Contact number	email ID
2	Regent	Regent Lighting Asia Pvt Ltd www.regent.ch	Gaurav Parikh Sandeep Singh	Sales Manager - West National Head India Noida	99676 24177 85888 50496	<a href="mailto:gaurav.parikh@regent-lighting.in">gaurav.parikh@regent-lighting.in</a> <a href="mailto:sandeep.singh@regent-lighting.in">sandeep.singh@regent-lighting.in</a>
5		Reliance Switchgears	Mr. Rammarayan Yadav Y.I. Zagraal	Partner Partner	82860 60603 99301 32040	<a href="mailto:rel_swg@hotmail.com">rel_swg@hotmail.com</a>



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Sr.No.		From	To	Cable Size / Type	R1	Y1	B1	R2	Y2	B2	R3	Y3
					CKT	CKT	CKT	CKT	CKT	CKT	CKT	CKT
					M	M	M	M	M	M	M	M
					Cable Schedule							
ITF - Main Building - External Lighting												
OUT DOOR PANEL - WEST												
ODP- WEST												
WEST SIDE												
West Side of Building - Upper Elevation												
Ground Floor												
1	ODPW	Wall Wash Flood Light- FL-1			R1	Y1						
2	ODPW	Wall Wash Flood Light- FL-2			R1-LOOP	Y1-LOOP						
3	FL-1	Wall Wash Flood Light- FL-3			R1-LOOP	Y1-LOOP						
4	FL-2	Wall Wash Flood Light- FL-4			R1-LOOP	Y1-LOOP						
5	FL-3	Wall Wash Flood Light- FL-5			R1-LOOP	Y1-LOOP						
6	FL-4	Wall Wash Flood Light- FL-6			R1-LOOP	Y1-LOOP						
7	FL-5	Wall Wash Flood Light- FL-7			R1-LOOP	Y1-LOOP						
8	FL-6	Wall Wash Flood Light- FL-8			R1-LOOP	Y1-LOOP						
9	FL-7	Wall Wash Flood Light- FL-9			R1-LOOP	Y1-LOOP						
10	FL-8	Wall Wash Flood Light- FL-10			R1-LOOP	Y1-LOOP						
11	FL-9	Wall Wash Flood Light- FL-11			R1-LOOP	Y1-LOOP						
Lower Ground Floor												
12	FL-10	Wall Wash Flood Light- FL-12			R1-LOOP	Y1-LOOP						
13	FL-11	Wall Wash Flood Light- FL-13			R1-LOOP	Y1-LOOP						
14	FL-12	Wall Wash Flood Light- FL-14			R1-LOOP	Y1-LOOP						
15	FL-13	Wall Wash Flood Light- FL-15			R1-LOOP	Y1-LOOP						
16	FL-14	Wall Wash Flood Light- FL-16			R1-LOOP	Y1-LOOP						
17	FL-15	Wall Wash Flood Light- FL-17			R1-LOOP	Y1-LOOP						
18	FL-16	Wall Wash Flood Light- FL-18			R1-LOOP	Y1-LOOP						
West Side of Building - Upper Elevation												
Ground Floor												
1	ODPW	Column Façade ODESSA 6-1					B1	15				
2	ODPW	Column Façade ODESSA 6-2					B1-LOOP	15				
3	ODESSA 6-1	Column Façade ODESSA 6-3					B1-LOOP	15				
4	ODESSA 6-2	Column Façade ODESSA 6-4					B1-LOOP	16				
5	ODESSA 6-3	Column Façade ODESSA 6-5					B1-LOOP	15				
6	ODESSA 6-4	Column Façade ODESSA 6-6					B1-LOOP	15				
7	ODESSA 6-5	Column Façade ODESSA 6-7					B1-LOOP	15				
8	ODESSA 6-6	Column Façade ODESSA 6-8					B1-LOOP	15				
9	ODESSA 6-7	Column Façade ODESSA 6-9					B1-LOOP	9				
10	ODESSA 6-8	Column Façade ODESSA 6-10					B1-LOOP	15				
11	ODESSA 6-9	Column Façade ODESSA 6-11					B1-LOOP	15				
12	ODESSA 6-10	Column Façade ODESSA 6-12					B1-LOOP	9				
13	ODESSA 6-11	Column Façade ODESSA 6-13					B1-LOOP	15				
14	ODESSA 6-12	Column Façade ODESSA 6-14					B1-LOOP	15				
15	ODESSA 6-13	Column Façade ODESSA 6-15					B1-LOOP	15				
16	ODESSA 6-14	Column Façade ODESSA 6-16					B1-LOOP	15				
17	ODESSA 6-15	Column Façade ODESSA 6-17					B1-LOOP	17				
18	ODESSA 6-16	Column Façade ODESSA 6-18					B1-LOOP	17				
19	ODESSA 6-17	Column Façade ODESSA 6-19					B1-LOOP	17				
20	ODESSA 6-18	Column Façade ODESSA 6-20					B1-LOOP	17				
21	ODESSA 6-19	Column Façade ODESSA 6-21							Y2	37		
22	ODESSA 6-20	Column Façade ODESSA 6-22							Y2-LOOP	20	B2	42
23	ODESSA 6-21	Column Façade ODESSA 6-23							Y2-LOOP	15	B2-LOOP	25
24	ODESSA 6-22	Column Façade ODESSA 6-24							Y2-LOOP	15	B2-LOOP	15
25	ODESSA 6-23	Column Façade ODESSA 6-25							Y2-LOOP	15	B2-LOOP	15
26	ODESSA 6-24	Column Façade ODESSA 6-26							Y2-LOOP	15	B2-LOOP	15
27	ODESSA 6-25	Column Façade ODESSA 6-27							Y2-LOOP	15	B2-LOOP	15
28	ODESSA 6-26	Column Façade ODESSA 6-28							Y2-LOOP	15	B2-LOOP	15
29	ODESSA 6-27	Column Façade ODESSA 6-29							Y2-LOOP	15	B2-LOOP	15
30	ODESSA 6-28	Column Façade ODESSA 6-30							Y2-LOOP	15	B2-LOOP	15
31	ODESSA 6-29	Column Façade ODESSA 6-31							Y2-LOOP	15	B2-LOOP	15
32	ODESSA 6-30	Column Façade ODESSA 6-32							Y2-LOOP	15	B2-LOOP	15



Sr.No.		From	To	Cable Size / Type	R1	Y1	B1	R2	Y2	B2	R3	Y3	
					CKT	M	CKT	M	CKT	M	CKT	M	
IIT - Main Building - External Lighting													
OUT DOOR PANEL - WEST													
ODP- WEST													
Cable Schedule													
1	ODPW	Light Talk -1		3C X 2.5MM <sup>2</sup> VVY									
2	Light Talk -1	Light Talk -2											
3	Light Talk -2	Light Talk -3											
4	Light Talk -3	Light Talk -4											
5	Light Talk -4	Light Talk -5											
6	Light Talk -5	Light Talk -6											
7	Light Talk -6	Light Talk -7											
8	Light Talk -7	Light Talk -8											
9	Light Talk -8	Light Talk -9											
Street Light Pole will carry existing cable. No Change of Cable. The Fitting will be changed													
<b>Total</b>					104	87	147	147	117	127	119.2	213	
					14	12	20	20	12	12	20	10	

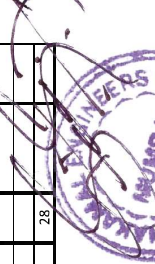


IIT - Main Building - External Lighting		ODP EAST																	
ODP EAST		ELECTRICAL LOAD																	
Sr.No.	TO	Catalogue No.		R1		Y1		B1		R2		Y2		B2		M			
		CKT	W	CKT	W	CKT	W	CKT	W	CKT	W	CKT	W	CKT	W	CKT	W		
	<b>East Side of Building</b>																		
	<b>Ground Floor</b>																		
1	Wall Wash Flood Light- FL-19																		
2	Wall Wash Flood Light- FL-20																		
3	Wall Wash Flood Light- FL-21																		
4	Wall Wash Flood Light- FL-22																		
5	Wall Wash Flood Light- FL-23																		
6	Wall Wash Flood Light- FL-24																		
7	Wall Wash Flood Light- FL-25																		
8	Wall Wash Flood Light- FL-26																		
9	Wall Wash Flood Light- FL-27																		
10	Wall Wash Flood Light- FL-28																		
	<b>East Side of Building - Upper Elevation</b>																		
	<b>Ground Floor</b>																		
1	Column Façade -OD-33																		
2	Column Façade -OD-34																		
3	Column Façade -OD-35																		
4	Column Façade -OD-36																		
5	Column Façade -OD-37																		
6	Column Façade -OD-38																		
7	Column Façade -OD-39																		
8	Column Façade -OD-40																		
9	Column Façade -OD-41																		
10	Column Façade -OD-42																		
11	Column Façade -OD-43																		
12	Column Façade -OD-44																		
13	Column Façade -OD-45																		
14	Column Façade -OD-46																		
15	Column Façade -OD-47																		
16	Column Façade -OD-48																		

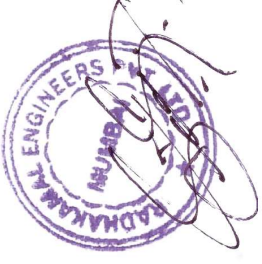




IIT - Main Building - External Lighting													
ODP- WEST													
ELECTRICAL LOAD													
Sr.No.	Item	Catalogue No.	Cable Size / Type	R1	Y1	B1	R2	Y2	B2	R3	Y3	W	
				CKT	W	CKT	W	CKT	W	CKT	W	CKT	W
	<b>WEST SIDE</b>												
	<b>West Side of Building - Upper Elevation</b>												
	<b>Ground Floor</b>												
1	Wall Wash Flood Light- FL-1		3C X 2.5MM2 YWY	R1	269								
2	Wall Wash Flood Light- FL-2		3C X 2.5MM2 YWY		269								
3	Wall Wash Flood Light- FL-3		3C X 2.5MM2 YWY	R1-LOOP	269								
4	Wall Wash Flood Light- FL-4		3C X 2.5MM2 YWY	R1-LOOP	269								
5	Wall Wash Flood Light- FL-5		3C X 2.5MM2 YWY	R1-LOOP	269								
6	Wall Wash Flood Light- FL-6	QUANTUM	3C X 2.5MM2 YWY	R1-LOOP	269								
7	Wall Wash Flood Light- FL-7		3C X 2.5MM2 YWY	R1-LOOP	269								
8	Wall Wash Flood Light- FL-8		3C X 2.5MM2 YWY	R1-LOOP	269								
9	Wall Wash Flood Light- FL-9		3C X 2.5MM2 YWY	R1-LOOP	269								
10	Wall Wash Flood Light- FL-10		3C X 2.5MM2 YWY	R1-LOOP	269								
11	Wall Wash Flood Light- FL-11		3C X 2.5MM2 YWY	R1-LOOP	269								
	<b>Lower Ground Floor</b>												
12	Wall Wash Flood Light- FL-12		3C X 2.5MM2 YWY	R1-LOOP	269								
13	Wall Wash Flood Light- FL-13		3C X 2.5MM2 YWY		269								
14	Wall Wash Flood Light- FL-14		3C X 2.5MM2 YWY		269								
15	Wall Wash Flood Light- FL-15		3C X 2.5MM2 YWY		269								
16	Wall Wash Flood Light- FL-16	QUANTUM	3C X 2.5MM2 YWY		269								
17	Wall Wash Flood Light- FL-17		3C X 2.5MM2 YWY		269								
18	Wall Wash Flood Light- FL-18		3C X 2.5MM2 YWY		269								
	<b>West Side of Building - Upper Elevation</b>												
	<b>Ground Floor</b>												
1	Column Façade ODESSA 6-1		3C X 2.5MM2 YWY			B1	27						
2	Column Façade ODESSA 6-2		3C X 2.5MM2 YWY			B1-LOOP	27			R2	27		
3	Column Façade ODESSA 6-3		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
4	Column Façade ODESSA 6-4		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
5	Column Façade ODESSA 6-5		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
6	Column Façade ODESSA 6-6		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
7	Column Façade ODESSA 6-7		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
8	Column Façade ODESSA 6-8		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
9	Column Façade ODESSA 6-9		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
10	Column Façade ODESSA 6-10		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
11	Column Façade ODESSA 6-11	ODESSA 6	3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
12	Column Façade ODESSA 6-12		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
13	Column Façade ODESSA 6-13		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
14	Column Façade ODESSA 6-14		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
15	Column Façade ODESSA 6-15		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
16	Column Façade ODESSA 6-16		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
17	Column Façade ODESSA 6-17		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
18	Column Façade ODESSA 6-18		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
19	Column Façade ODESSA 6-19		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
20	Column Façade ODESSA 6-20		3C X 2.5MM2 YWY			B1-LOOP	27			R2-LOOP	27		
21	Column Façade ODESSA 6-21		3C X 2.5MM2 YWY			B1-LOOP	27	Y2	27				
22	Column Façade ODESSA 6-22		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2	27
23	Column Façade ODESSA 6-23		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
24	Column Façade ODESSA 6-24		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
25	Column Façade ODESSA 6-25		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
26	Column Façade ODESSA 6-26		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
27	Column Façade ODESSA 6-27	ODESSA 6	3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
28	Column Façade ODESSA 6-28		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
29	Column Façade ODESSA 6-29		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
30	Column Façade ODESSA 6-30		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
31	Column Façade ODESSA 6-31		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
32	Column Façade ODESSA 6-32		3C X 2.5MM2 YWY			B1-LOOP	27	Y2-LOOP	27			B2-LOOP	27
1	Garden Path Lighting	Light Talk -1	3C X 2.5MM2 YWY									R3	28







IIT - Main Building - External Lighting										
<u>Incoming Cable Schedule</u>										
Cable Schedule										
Sr.No.	From	To	Load Watts	Current Amp	Derating	Derated Current Amp	Cable Current Amp	Cable Size	Length M	Glands Nos.
1	Main LDB	ODP-West	5986	10.7748	0.7	15.39	80	4C x 25 mm <sup>2</sup> AYFY	300	2
2	Main LDB	ODP-East	3287	5.9166	0.7	8.45	80	4C x 25 mm <sup>2</sup> AYFY	300	2
								<b>Total</b>	<b>600</b>	<b>4</b>