

## Technical Specifications of Energy Efficient LED based Luminaries for Outdoor & Indoor application (Western Railway)

### 1. FOREWORD :

At present conventional type luminaries are being provided for Indoor lighting offices, street lights & platform lighting. By introduction of white high power lights emitting diode, LED having more than 50,000 working hours. It is possible to use LED lamps in place of existing fluorescent T-8/T-5/HVSV/Metal halide. LED lights are almost maintenance free and as a result total power saving is expecting to be more than 50% keeping in view energy conservation, increased life and recurring savings on account of maintenance, use of environment friendly energy efficient LED base luminaire is being considered for indoor & outdoor lighting.

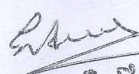
### 2. DETAILS OF EXISTING & PROPOSED FITTINGS –

Sr. No.	Type of Existing fitting	Wattage of existing fitting.	Proposed fittings	Maximum wattage of LED fitting	Minimum Initial Lumen Output	Application
A	For Outdoor: Street light, High Mast & Platform open area.					
i) a.	HPSV/ HPMV	70W	LED	50W	4000	Circulating area. Outdoor Lighting, Yard Lighting, High Mast.
b.		150W	LED	100W	8000	
c.		250W	LED	170W	13500	
d.		400W	LED	260W	20000	
ii)a.	Metal Halide	70W	LED	50W	4000	Circulating area. Outdoor Lighting, Yard Lighting, High Mast.
b.		150	LED	100W	8000	
c.		250W	LED	190W	15000	
iii)a.	FTL	1X40W	LED	30W	2400	Street Lighting
b.		2X40W	LED	60W	4800	
iv)	Platform Lighting : (for cover sheds)					
a.	FTL	1X40W	LED	30W	2400	Platform Lighting
b.		2X40W	LED	60W	4800	
c.		1X28W	LED	18W	1440	
B	For Indoor : Offices, Service Buildings etc.					
v)	T-5/T-8 Fitting 4 ft. size	28/36W	LED	18/20W	1440/ 1600	Office & Service building
vi)	CFL Lamps	11W	LED Lamps	7W	560	Office & Service building
vii)	Recess mounting fitting 2 x 2 ft. size	2X14W	LED	2X9W	1440	Office & Service building
viii)	Down lighter	70/150W	LED	40X80W	3200/ 6400	Office & Service building
ix)	4 ft. Tube light	28W	LED	18/20W	1440/ 1600	Office & Service building
ia.	Metal Halide	70W	LED	50W	4000	
x)	2 ft. Tube light	20W	LED	10W	800	Bulkhead LED down lighter.

### 3. SCOPE

The scope includes design, development, manufacturing, testing and supply of energy efficient luminaire complete with all accessories, LED lamps with suitable current control driver circuit including mounting arrangement for street light, platform light, recessed type & ceiling mounting arrangements etc. The luminaire shall be suitable for rugged service under the operational and environmental conditions.

Each type of luminaire shall be supplied with associated driver circuit and required optics.

  
 28/02/2018  
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