

SPECIFICATION**1. General**

Seal quotations are invited for the Supply of 15 Nos. LED Street Light fittings to Sri Lanka Ports Authority. The basic details of the Luminaires and its arrangement are described in this specification.

The manufacturer shall have at least three (03) years proven experience and shall have obtained relevant quality system certificate for the design and manufacture of LED Light fittings, from an internationally reputed Testing Authority.

2. System Parameters

Nominal Voltage - 400 / 230 V
System Frequency - 50 Hz

3. Service Condition

The Light fitting shall be designed and manufactured to suit for installation in a highly humid environment of 95% RH, 40°C maximum ambient temperature, and containing corrosive salt vapour in abundance. Operating altitude is not more than 20m above mean sea level.

4. Applicable Standards

BS EN 60598-1 Luminaires. General requirements and tests
BS EN 60598-2-3 Luminaires - Part 2-3: Particular requirements - Luminaires for road and street lighting

5. LED Street Light Fitting**5.1 General**

IP Rating - Not less than IP 65
Housing - Di-casted or Extruded aluminium body of elliptical shape with sufficient space for heat dissipation
Finish - Powder coated
Cover glass - Toughened high transparency (>90%) glass
Rated Operating time - 50 000 hrs.

5.2 Electrical Requirement

Driver Efficiency - Not less than 85%
Power Factor - Not less than 98%
Total Harmonic Distortion - Less than 10%
Total system wattage - Max. 120W
Operating voltage - 200-260V
Protection - Surge protection shall be available in driver

5.3 LED Lamps

- | | | |
|---------------------------------|---|--|
| LED Arrangement | - | 2/3 individually replaceable modules with separate drivers |
| Color | - | White |
| Efficacy | - | Not less than 150 lumens/W |
| Junction Temperature difference | - | Less than 10°C from ambient temp. |

5.3 Photometric Requirement

Basic details of the road, lamp post and lamp post configuration are given in the drawing. Luminaire shall meet the average illumination level of 8Lux at ground level and uniformity (Avg./Min.) shall not be less than 0.50. Maintenance factor shall be considered as 0.8. Supplier shall submit a report confirming those requirements and photometric data of the offered luminaire and LM-79 & LM80 test data of the LED.

6. Warranty

The manufacturer shall provide a written copy of the warranty showing that the warrants for luminaire minimum of two (02) years from the date of acceptance.

7. Documents furnished with the offer

- The catalogues (in English version) of the luminaire confirming the technical details.
- Photometric data sheet of the luminaire
- IES LM-79 and LM-80 test data
- Calculated data to conform the required illumination level
- Previous supply records
- Warranty certificate
- Certificates to conform the quality of the luminaire

APPENDIX A
TECHNICAL SCHEDULE OF THE LIGHT FITTING

ITEM	DESCRIPTION	DATA
1	Luminaire	
(a)	Make	
(b)	Country of origin	
(c)	Housing	
(d)	Finish	
(e)	IP No.	
(f)	Cover Glass	
(g)	Weight	
(2)	LED Lamps	
(a)	Make	
(b)	Country of origin	
(c)	Compliance with Relevant Standard	
(d)	Wattage / LED Lamp	
(e)	No. of LEDs per fitting	
(f)	Total wattage	
(g)	AC input voltage	
(h)	AC Input Frequency	
(i)	Operating temperature	
(j)	Lumen output	
(k)	Color	
(l)	Life time	
(m)	Junction temperature	
(n)	Lamp Lumen Deterioration factor	

Signature of Supplier:

Name & Address of Supplier:

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Date: