# TECHNICAL SPECIFICATION FOR LED TYPE LUMINAIRE (BOQ ITEM NO. 1)

### 1. SCOPE:

The scope of the work covers the Supply, Installation, testing and commissioning of energy efficient Highbay LED Light.

## 2. STANDARDS / CODES / REGULATIONS TO BE FOLLOWED:

BIS 16101 Terms & Definitions

BIS 16102 (Pat 1 & 2) Not applicable to LED Linear

BIS 16103 (Pat 1 & 2) Complied -LED

BIS 15885 Complied - Control gear

BIS 16104 Complied - Control gear

BIS 16105/IEC-LM80 LED Linear complies to BIS 16105:2012.

BIS 16106/IEC-LM79 LED Linear complies to BIS 16106:2012

BIS 16107 (Part 1 & 2) / LED Linear complies to BIS 16107:2012,

IECPAS 62722-2-1 luminaries performance part 1 &2.

BIS 16108/IEC62471 LED Linear complies to BIS 16107:2012,

Luminaries performance part 2.

## 3. TERMINOLOGY

Terms and definitions shall be as specified in IS 16101: 2012.

## 4. GENERAL

The LED Highbay luminaries shall be powder coated die-cast aluminum housing with frame, heat resistant clear toughened glass fixed to the frame with IP 65 or higher protection.

Supply of LED light luminaries having LED Array as light source where individual LED source should be provided with suitable optics, distribution lens, which should ensure that the uniform light distribution of the luminaries and suitable for external lighting applications as applicable. Heat dissipation should be managed

through a built-in /external heat sink. The fixture should be impact resistant with suitable protection LED's with potted drivers. For safer operations the power driver unit should be provided with Surge protection, Short circuit & Overload protection. Luminaire should be tested as per relevant and applicable IS standards and Type Test Certificates with test Reports should be submitted to meet particular technical specification and each BOQ items. Also records of all routine tests conducted as applicable standards at manufacturer's works etc shall be submitted along with the material with Guarantee Card during supply.

#### 5. PARTICULAR SPECIFICATION

The technical parameters of LED fixtures BOQ Item wise are listed as per TSC-1 for compliance. The agency must go through the Special conditions of contract, Particular Specifications, BOQ and submit the duly filled and signed Annexure TD for each type of fitting BOQ Items wise in Envelope –II through E-Tender portal before quoting the rates in Env.-III (Fin. Bid).

<u>Note:</u>- Separate duly filled and signed technical data sheet **TS-178 of Annexure –TD** shall be submitted for each type of fitting as mentioned in BOQ in Envelope –II through e tender portal failing which tender application will be summarily rejected.