



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
**MATERIALS MANAGEMENT DIVISION**  
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**Technical Specifications of Light Soaker**  
**RFx No. 6100001103 (Reference No. 1000024093)**

**Specifications:**

System information: The system should be capable of performing light soaking for perovskite solar cells and modules. The same system should also be capable for using as an alternate solar simulator for performing perovskite solar cell measurements (current-voltage).

**Specifications:**

**Light source:**

- (a) Lifetime: 40,000 hrs or more
- (b) Illumination area: uniformity or Class B or better over 70 cm X 70 cm or more
- (c) Spectra: Class A as per the IEC standard
- (d) Irradiance temporal stability: Class A as per IEC standard
- (e) Irradiance intensity: controllable from 700-1200 W/m<sup>2</sup>
- (f) No spectrum shift or light flux reduction over longer operation time

**Sample stage:**

- (a) Should be as a retractable drawer under the light source
- (b) The sample stage should be thermostated under illumination that can maintain constant temperature (+/- 2°C) and can be varied between 20°C and 50°C.
- (c) Needed temperature controller and accessories for the temperature control should be provided.
- (d) Vacuum chuck for the sample holder with the pump should be provided.

- A. The said system should be self-sustained and floor standing. Users' manual should be provided and installation should be done on site by the trained personnel. Additional desktop or laptop computer should be provided for offline/online data and process analysis.
- B. Needed power requirements should be compatible for Indian standard, 220V AC.
- C. Warranty period of the supplied products shall be 1 years from the date of final acceptance of goods.
- D. Training for 3 people for 5 days. Preferably at buyer's location or may be online will be in seller's scope.
- E. Installation, Commissioning, Testing, Configuration, (if any, is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller at buyer's location without any superfluous cost.