Training Programme on Testing and Quality Assurance of Solar Lighting Systems as per IEC/TS 62257-9-5:2013

Dates: 23rd - 27th Feb 2015
Organized by: The Energy and Resources Institute (TERI)
Venue: TERI University, Vasant Kunj, New Delhi

Key Objective of the Programme

- The 5-day training programme is designed to impart both theoretical and practical training to professionals involved with Manufacturing, Testing and Distribution of Stand-alone Lighting Systems
- Specify quality assurance strategies and in-depth understanding
- Make the right choice and get maximum value from your investments

This training programme is beneficial for,

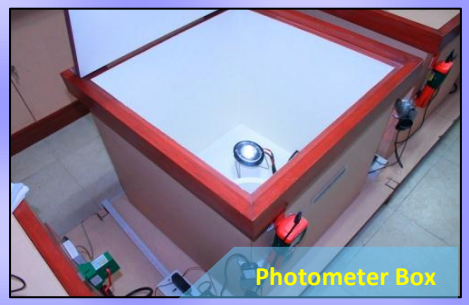
- **Laboratory professionals** who are involved with quality check and testing of stand-alone lighting products
- **Manufacturers and distributors** who need to verify the quality and performance of products from different batches and for potential business partners
- **Lighting program coordinators** who support the off-grid lighting market with financing, consumer education, awareness and other services
- **Research professionals** who study market trend and are involved with preparing policies for off-grid electrification

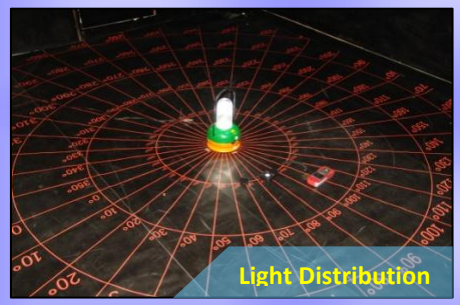
Programme Contents

- Different types of Stand-alone Lighting System batteries and their applications
- Instrumentation for testing of Stand-alone Lighting System in laboratory
- Various factors affecting the performance of a Stand-alone Lighting System
- Hands-on session for test method and analysis of test data
- Calculation of battery capacity and efficiency for various batteries
- Performance analysis of Solar PV modules using Sun Simulator
- Calculation the autonomy for different charging mechanism, such as solar charging, grid charging and mechanical charging
- Measurement of Light distribution parameter such as full width half maximum (FWHM) angles and illumination on a surface
- Perform light output test to measure luminous flux, colour correlation temperature and colour rendering index using the Integrating Sphere


Integrating Sphere


Sun Simulator


Photometer Box


Light Distribution

Programme Fee and Participation

Fee per person for the course is Rs 25,000 (including Service tax at 12.36%). This will include tea/coffee, lunch, and training material. Please note that payments should be made Online or through Demand Draft/Cheque in favour of TERI at least 5 days prior to the commencement of the programme and should be sent to the contact details mentioned.

About TERI's Solar Lighting Laboratory

TERI has established a Solar Lighting Laboratory, a first of its kind in South Asia, to provide a platform for quality testing of off-grid lighting products, adhering to international standards.

The laboratory is supported by the Ministry of New and Renewable Energy (MNRE) and International Financial Corporation (IFC) and is currently accredited to quality procedures, as laid down by the National Accreditation Board for Laboratories (NABL). The ability of the laboratory to cater to the testing needs of both rural as well as urban lighting infrastructure makes it stand out from other laboratories.

The laboratory can test products in accordance with methods specified by the International Electrotechnical Commission's (IEC) 62257-9-5:2013 standard for evaluating off-grid lighting products.

Previous Experience

A hands-on training programme on IEC/TS 62257-9-5 was organized during the month of October 2014 at TERI University, Vasant Kunj, New Delhi, to build the capacity of Ethiopian Conformity Assessment Enterprise's (ECAE) laboratory professional.

Hands-on session with ECAE lab professional

Contact Details

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