

# IES 1000 INTENSITY/IRRADIANCE CALIBRATION LAMP STANDARD

On-site, reliable calibrations for spectral irradiance and spectral intensity systems



## IES 1000 INTENSITY/IRRADIANCE CALIBRATION LAMP STANDARD

### EASY-TO-USE

Labsphere's IES 1000 is a tungsten halogen based point source calibration standard of spectral intensity and spectral irradiance. It is used to calibrate the spectral response of spectral irradiance, and spectral intensity optical heads, including the E 1000 irradiance head, and the I 1000 and I 2000 intensity heads.

The lamp standard is cylindrical in design and inserts into Labsphere's intensity heads at a prefixed distance. A backlit 3.2 mm diffuser creates the uniform point source for this application. The housing is designed for repeatability alignment, essential to reproducible calibration results. The base has a 1/4-20 tapped hole for bench-top use and optical rail mounting for spectral irradiance calibration applications.

### FEATURES:

- Rated life of 2000 hours
- NIST traceable calibration
- Rugged design
- Spectral intensity (W/sr-nm)
- Spectral irradiance (W/cm<sup>2</sup>-nm)

### KEY APPLICATION:

On-site calibration and validation of your Labsphere light measurement packages

### ACCURATE

Labsphere's IES 1000 is calibrated for spectral intensity and spectral irradiance at 50 cm from the source. The IES 1000 includes the lamp standard, 1 m power cable, calibration data with certificate, CD-ROM and a manual. Data on the CD-ROM is provided from 300 to 1050 nm in 1 nm intervals. The NIST traceable calibrations are quickly executed with Labsphere's LightMtrX software.

### VALUE

The IES 1000 integral design allows for fast, repeatable calibrations of Labsphere's spectral irradiance and spectral intensity systems without having to return them to Labsphere, allowing for easy, on-site calibrations. The compact design allows for a clutter-free workspace, while the rugged design allows for multiple uses in the toughest of environments. The IES 1000 provides a practical means for determining product performance in a variety of environments, including research and development, and production.



IES 1000 WITH INTENSITY HEADS AND IRRADIANCE RECEIVER

# Specifications

| Part Name                                       | Order Number |
|---|--------------|
| IES Spectral Intensity/Irradiance lamp Standard | AS-02700-602 |

## Preliminary Component Properties and Performance

|                       |  |
|-----------------------|--|
|                       | <b>IES 1000</b>  |
| Spectral Intensity    | 300 to 1050 nm   |
| Spectral Irradiance   | 300 to 1050 nm at 50 cm  |
| CCT                   | 2950K  |
| Operating Current     | 1.67 Amp   |
| Cable length          | 3 m  |
| Mating Connector Type | TYCO/AMP #211398-1 compatible with Labsphere LPS 100 0167 power supply |
| Exitance Area         | 7.9 mm <sup>2</sup>  |
| Mounting              | ¼-20 tapped female   |
| Finish                | Black Anodized   |
| Weight                | 0.5 lbs (0.23 kg)  |
| Dimensions (L x D)    | 4.32 x 1.73 in (11 x 4.4 cm)   |

|                                |              |
|--------------------------------|--------------|
| <b>Optional Component</b>      |              |
| LPS-100-0167 Lamp Power Supply | AS-02600-167 |