

Inphora's IPR-DES2 series of standard light sources incorporate a reference LED with a built-in controller unit ensuring thermal stability at the optimum current without the need for additional controllers.

## IPR-DES2



Inphora Inc., Institute for Photometry and Radiometry, is a worldwide supplier of high-precision photometric, colorimetric and radiometric instruments. We design and manufacture parts for optical measuring systems where extreme precision and stability is a must. We also offer a range of standard instruments for the most challenging measuring or calibration applications.

Inphora specializes in designing and building reference quality light sources for use as laboratory calibration standards. The IPR-DES2 is a self-contained LED light source consisting of a temperature-stabilized LED and a high-stability, precision current supply. The standard LEDs are individually selected after a burn-in period of several hundred hours to ensure consistent performance over the life of the standard. The internal controller is optimized for operation above room temperature which results in extremely stable and reproducible light output in any laboratory. Inphora LED Standards are RoHS compliant.

### SPECIFICATIONS:

LED Current: 20mA +/- .01%

Light Output: 3-5 Lumens

- Spectral content of the light output supplied for each unit
- Light output controlled +/- .1%

LED Uniformity:

- Change in intensity over 100 hours is less than .5%
- Change in LED spectral content is less than .5%
- Intensity stability over one hour is .01% (std dev)

Calibration Period: 100 hours

- Unit should be recalibrated after 100 hours

LED Temperature Control: +/- .1°C

Operating Temperature Range:

- 15°C to 30°C
- 20% to 90% relative humidity

Storage Temperature Range: -10°C to 50°C

Power Requirements: 110V to 240V AC, 50-60Hz, 3W

Mounting: Via standard 25mm diameter tube

### OPERATION:

Plug 12V power supply into nearby AC power source and insert the 12V connector from the power supply into the LED Standard 12V DC in. Allow 15 minutes for the LED to reach stable operation and calibrated output levels prior to use.

Do not attempt to open, modify or replace elements of the LED Standard. Do not look at LED output directly. Safety UV blocking glasses should be worn when using the white and blue LEDs. Do not drop the device. Sudden impacts may effect calibration.