



OL 459

Tunable LED Source

The OL 459 is a state-of-the-art tunable LED source and the latest integrating sphere source from Gooch & Housego. It was designed for replication of spectra to enable calibration of cameras and other optical instruments.

The OL 459 consists of a separate optics head and a power supply, which allows for remote location of either unit, facilitating alignment or positioning of the source with respect to an instrument.

The optics head has a single input source with five individually controlled channels. The base model has a blue, green, orange, red and infrared channel. The five channels consist of LED continua and phosphors to achieve a smooth profile across the visible range and in to the infrared. The sources illuminate the 6-inch diameter integrating sphere coated with our proprietary Optolon2 material, providing highly diffuse reflectance over the VIS/NIR wavelength range.

The OL 459 can be customized for your needs, including larger sphere sizes and custom LED wavelengths.

The analog current supply runs on 48 Volts DC supplied by the provided AC adapter.



Key Features

- LED-based source
- Five individually tunable channels
- Integrated monitor detector
- High uniformity output exit port
- USB connection for remote control
- Internal hour meter tracks usage
- Includes software and SDK package

Applications

- Camera calibrations
- Blackbody color temperature replication
- Customizable spectra for R&D

General

Sphere Size	6.0 inches (15.2 cm) diameter
Exit Port Aperture Size	1.50 inches (38.1 mm) diameter
Luminance Uncertainty	
Color Temperature Uncertainty	
Luminance Stability	
Long Term	
Short Term	
Uniformity	
Sphere Coating	Optolon 2 (> 98% reflectivity)
Wavelength Range	380 to 780 nm
Sphere Luminance Monitor (built-in)	High accuracy silicon detector with filtered CIE photopic response _temperature stabilized)
Operating Temperature	46°F to 104°F
Source Power Input	48 VDC, 5.84 Amps
AC Power Input	100-240 VAC, 50/60 Hz, 4.5 Amps
Communications Interface	USB
Dimensions	10.50 in L x 7.46 in W x 10.50 in H 26.7 cm L x 18.9 cm W x 26.7 cm H
Weight	12.5 lbs.

For further information

E: orlandosales@goochandhousego.com

www.ghinstruments.com

