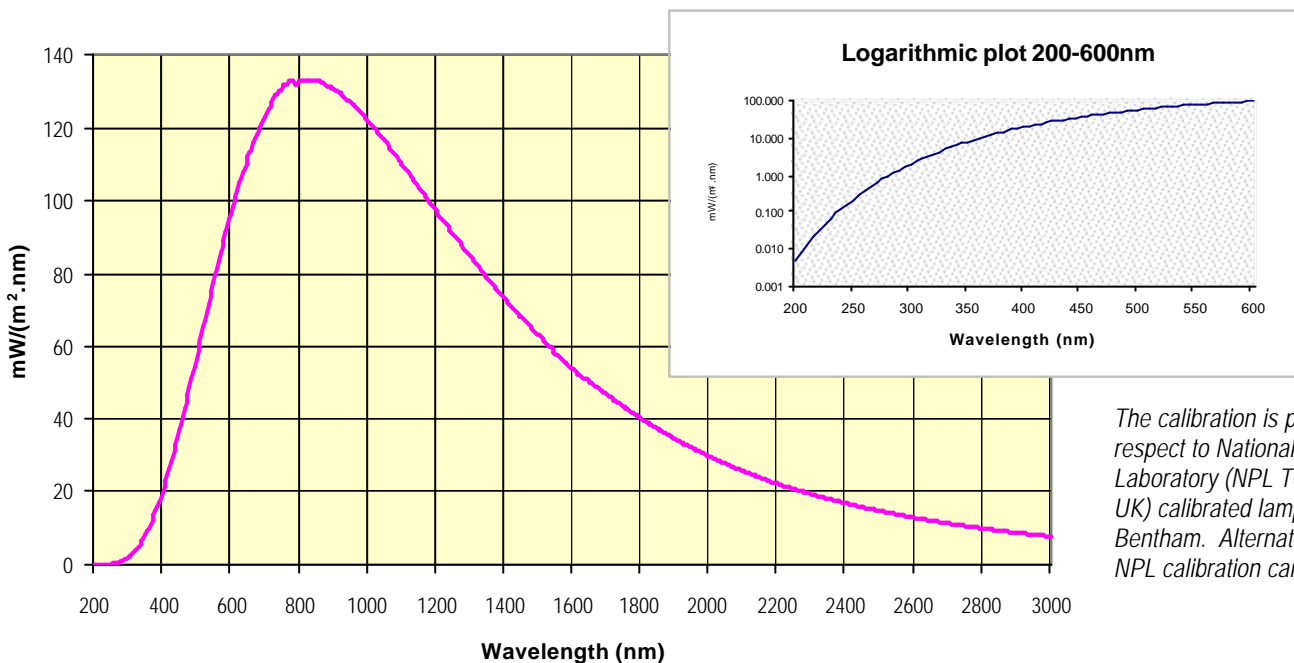




## CL6 Enclosed Spectral Irradiance 200-3000nm

The CL6 is a fully enclosed spectral irradiance standard lamp that greatly simplifies the calibration of spectroradiometers, lux meters and radiometers. It removes the need for a dark room, precision optical bench, and alignment tools associated with conventional calibration lamps.

Interchangeable adapters accommodate all Bentham's diffusers, photometric detectors and integrating spheres as well as many other devices. The system to be calibrated is simply 'plugged in' to a very reproducible location alleviating the need for any other positioning or alignment.



The calibration is performed with respect to National Physical Laboratory (NPL Teddington, UK) calibrated lamps held by Bentham. Alternatively, direct NPL calibration can be offered.

Typical Photometric Values for CL6	
Measurement type	Spectral Irradiance
Wavelength range	200nm—3000nm
Wavelength interval	5nm
Peak spectral irradiance	140 (mW/m <sup>2</sup> .nm)
Peak wavelength	770 nm
Integrated irradiance (300-800nm)	40 (W/m <sup>2</sup> )
Tristimulus X, Y, Z	X: 6600 Y: 6325 Z: 3050
Illuminance	6300 Lux
Chromaticity coordinates, CIE 1931 & 1976	x = 0.414 y = 0.396 u' = 0.239 v' = 0.515
Correlated colour temperature	3360 K

## Options

**CL6-H**



Enclosed spectral irradiance 200-3000nm  
horizontal mount  
(for use with DARx Adapter Ring,  
see selection table)

**CL6-V**



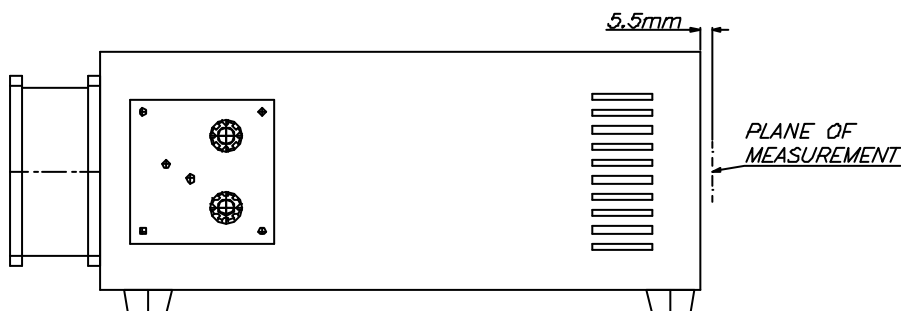
Enclosed spectral irradiance 200-3000nm  
vertical mount  
(for use with RSB Rotating Shadow Band)



Diffuser Mounting Ring type	To mount CL6-H to...
DAR1	BENTHAM D1 diffuser
DAR2	Gigahertz-Optik 37-Series detectors
DAR3	Gigahertz-Optik Dome diffuser
DAR4	BENTHAM D1-HORIZ diffuser
DAR5	BENTHAM D5 diffuser
DAR6	BENTHAM D6 precision diffuser
DAR7	BENTHAM D6-HORIZ precision diffuser
DAR-IS	BENTHAM Integrating Sphere spacer
DAR-X	Custom adapter

The CL6 is fitted with a 150W quartz halogen lamp. It requires a precision constant current dc power supply at 6.300A.

### CL6 Schematic drawing



Overall dimensions (excl. feet and connectors) : 290mm x 100mm x 100mm

Bentham offers two variants of a 250W rated constant current p.s.u. for use with calibration lamps, models 605 and 607. The latter includes a current ramping facility for lamp switch on and off.

