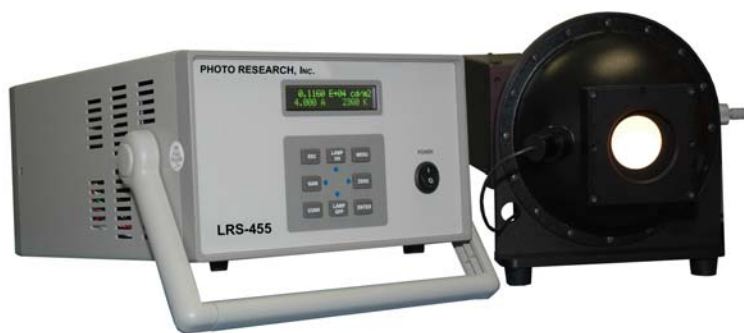


LRS-455 Calibration Standard

The LRS-455 is a NIST traceable, highly stable, self-contained luminance / correlated color temperature / spectral radiance calibration standard. It is an ideal tool for checking or calibrating photometers and spectroradiometers.

The LRS-455 system includes an integrating sphere containing a quartz halogen lamp and photopically corrected detector. The measuring port of the sphere is extremely uniform assuring accurate results regardless of the sampling size of the measuring instrument.



The sphere assembly features a built-in filter holder capable of hold 81.3 mm x 64.8 mm x 13.7 mm filters making measurements of transmissive media quick and easy.

The system controller contains a highly stable lamp power supply and photometer. To help extend the life of the lamp, the power supply ramps up slowly when the system is turned on, and ramps down slowly when the power is turned off.

The luminance can be varied while maintaining a constant color temperature, and inversely, the color temperature can be varied while keeping the luminance constant.

LRS-455 Specifications

Luminance Uncertainty (@ 2856K, 90% max. luminance) ..± 0.5% relative to NIST	
Color Temperature Range	2000 to 3000 K
Color Temperature Uncertainty	±25 K
Source Stability @ 2856 K Short Term	±0.5%
Long Term	±2% 100 hours/1 year
Spectral Radiance Uncertainty @ 550 nm	±2% relative to NIST
Sphere Coating (reflectance)	>99% (350 to 1100 nm)
Variable Aperture	Micrometer Controlled
Shutter	Open / Closed

LUMINANCE LEVELS (nominal)

Sphere Diameter	Port Diameter	Uniformity	Maximum Luminance		Display Resolution
			@2856 K	@3000 K	
6"	1½"	±0.5%	12,000 fL	20,000 fL	0.0001 fL
12"	3"	±0.5%	4,000 fL	6,400 fL	0.0001 fL



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