

GS-1290-NVIS Spectroradiometer



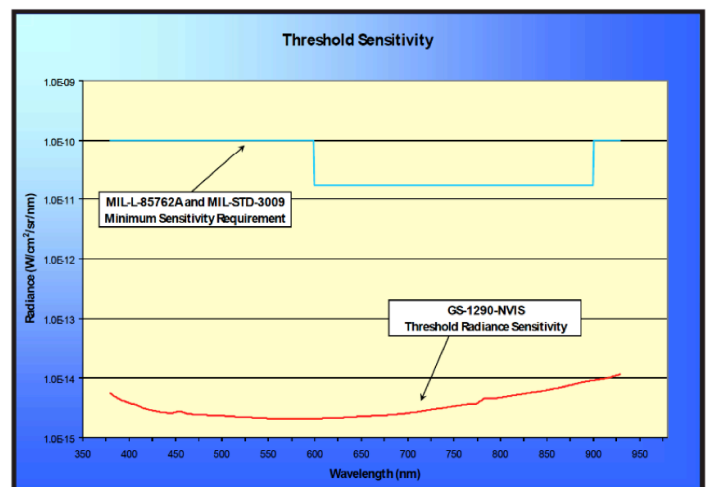
The GS-1290-NVIS is an advanced, high-speed spectroradiometer that combines the leading-edge sensitivity of backside-thinned CCD detector technology with the industry-renown RadOMacam radiometric telescope from Gamma Scientific.

Configured for NVIS testing of displays and associated lighting, the instrument exceeds all requirements outlined in MIL-L-85762A and MIL-STD-3009, covering the range of 360-930nm with six different field-of-view apertures.

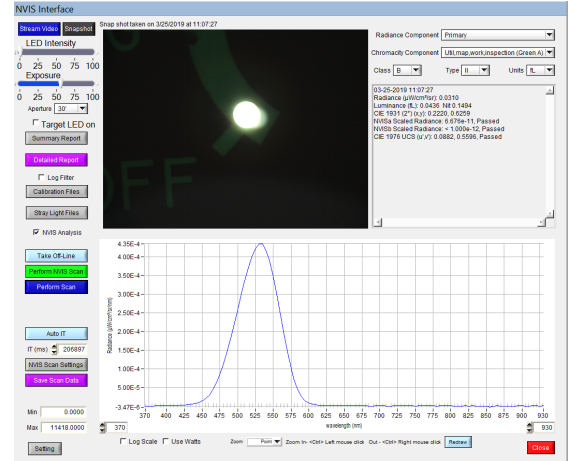
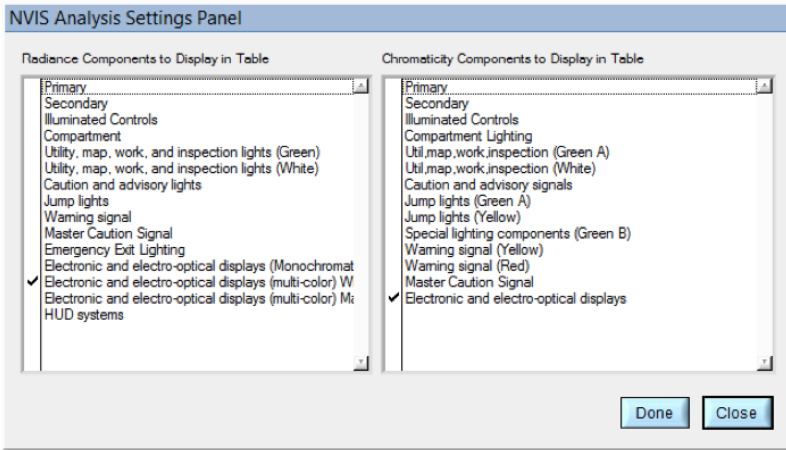
Original system calibration is performed in our ISO/IEC 17025 accredited laboratory by NVLAP (NVLAP lab code 200823-0). Users with a known calibration standard can perform in-house calibration, reducing system down time.

Exceptional Sensitivity & Speed For NVIS Test & Characterization

- Measurements to 1.5×10^{-4} cd/m² with a 100:1 SNR
- Resolution of 0.6 nm per pixel with backside-thinned CCD detector technology
- Wavelength range options of 360-950nm or 360-1100nm
- Aperture settings from 0.1° to 5°
- Internal LED spot projector and digital viewfinder indication and recording of precise measurement location
- USB 2.0 Interface and Windows-based LightTouch NVIS Software
- Pass / Fail Report generator per MIL-STD
- Direct Excel export of data and reports
- Can be user-calibrated with known standard



Threshold sensitivity curve obtained using 5 degree field-of-view



Detector and Wavelength Specifications

Wavelength Range	GS-1290-NVISSYS-1: 380-950 nm GS-1290-NVISSYS-2: 380-1100 nm
Wavelength Resolution	GS-1290-NVISSYS-1: 0.6 nm GS-1290-NVISSYS-2: 0.9 nm
Half-power Bandwidth	10 nm
Wavelength Repeatability	0.02 nm
Wavelength Accuracy	± 0.25 nm
Stray Light @ 633nm	< 1.0 x 10 ⁻⁵
Polarization Error	< 1%
Electrical Resolution	16-bit
Aperture Sizes	5°, 2°, 1°, 0.5°, 0.3°, 0.1°
Viewing System	Integrated video with imaged measurement aperture

General Specifications

Lens	180 mm macro or fixed focus
Fiber Optic Coupler	2 meter (included)
Computer Interface	USB 2.0 with LightTouch for Windows®
Calibration Report	Per ISO/IEC 17025
Operating Temperature	20 ± 4° C
Relative Humidity	< 70% (non-condensing)
Dimensions	30 cm H x 15 cm W x 31 cm L Weight 4.6 kg

Aperture	Lumiance Range	Chromaticity Accuracy	Measurement Spot Size @ 279mm Working Distance
5.0°	1.5 x 10 ⁻⁵ to 3.6 x 10 ⁴ cd/m ²	x,y: ± 0.002	10.49 mm
2.0°	2.2 x 10 ⁻⁵ to 5.4 x 10 ⁴ cd/m ²	x,y: ± 0.002	4.20 mm
1.0°	9.0 x 10 ⁻⁵ to 2.2 x 10 ⁵ cd/m ²	x,y: ± 0.0025	2.08 mm
0.5°	3.4 x 10 ⁻⁴ to 8.3 x 10 ⁵ cd/m ²	x,y: ± 0.0025	1.02 mm
0.3°	1.6 x 10 ⁻⁴ to 3.9 x 10 ⁶ cd/m ²	x,y: ± 0.0025	0.64 mm
0.1°	9.0 x 10 ⁻³ to 2.2 x 10 ⁷ cd/m ²	x,y: ± 0.0025	0.17 mm

Specifications are subject to change without notice.