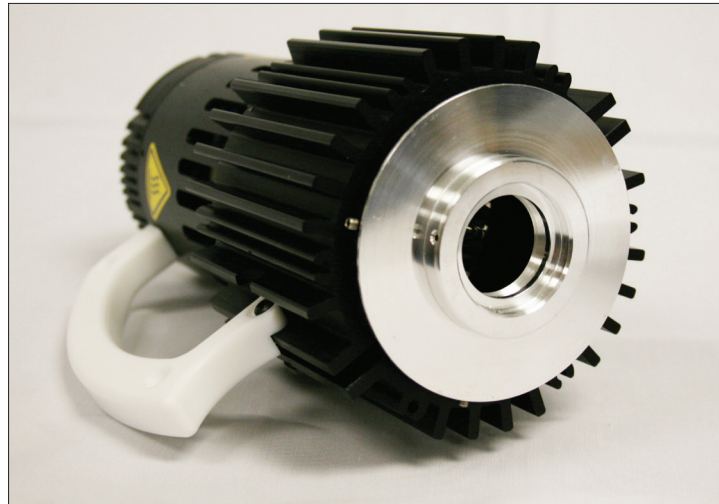


Calibrated Forward Spectral Flux Standard

NIST traceable standards for light measurement systems



Confidence

Labsphere's Lamp Standards of Forward Spectral Flux are selected for their stability and reproducibility. Each standard has been carefully screened, seasoned, and calibrated at our manufacturing facility under the guidelines recommended by the NVLAP accredited ISO 17025 practices for the high degree of confidence.

Labsphere's Lamp Standards of Forward Spectral Flux provide an exceptional artifact for calibrating integrating sphere spectrometers for total spectral radiant flux responsivity from 350 to 1050 nm. All of Labsphere's standard lamps are first seasoned for 1% of their rated life and then screened for stability and repeatable performance before they are selected for calibration.

The selected lamps are then calibrated directly to the NIST spectral flux reference, for a calibration result you can rely on. All calibration certificates include a complete uncertainty analysis.

Easy to use

All lamp standards include a calibration certificate and spectral flux data in W/nm and total luminous flux. The spectral flux data is provided for uploading into Labsphere's spectral light measurement software included with our world leading light measurement systems.

Value

- NIST traceable total forward spectral flux
- Screened and seasoned
- ISO 9001:2008 Registered Company
- NVLAP Lab Code 200951-0 Accredited Product (ISO/IEC 17025:2005)

Applications

- Lasers
- Laser diodes
- Laser diode modules
- Divergent monochromatic sources



Specifications and Ordering Information

| Model Number | Order Number | Number of Lamps | Approximate Luminous Flux (lumens) | Lamp Current (amps) | Rated Voltage (volts) | Rated Life (hrs) |
|--------------|--------------|-----------------|------------------------------------|---------------------|-----------------------|------------------|
| FFS-100-400 | AS-02768-100 | 1 | 300 | 4.167 | 12 | 2000 |
| FFS-100-1000 | AS-02768-200 | 1 | 650 | 8.333 | 12 | 2000 |

Spectral Results

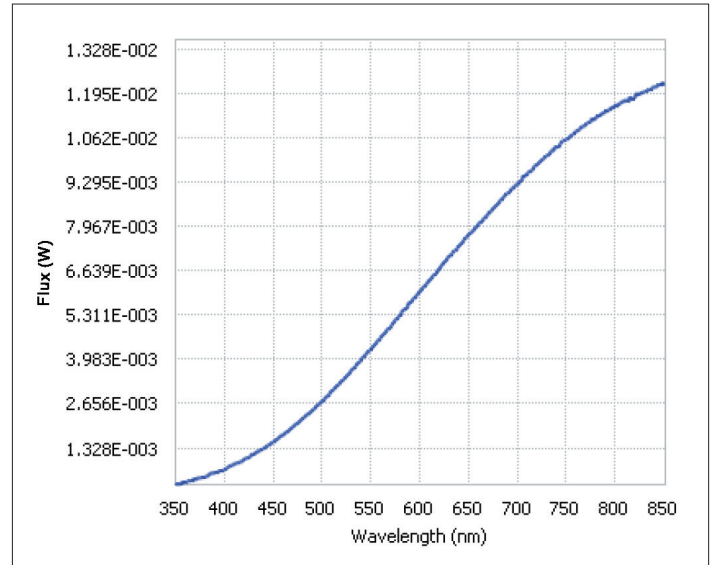
| Name | Value |
|---------------|--------------|
| Radiant Flux | 3.03 Watts |
| Luminous Flux | 3.411 Lumens |
| Chrom x | 0.4494 |
| Chrom y | 0.4076 |
| Chrom u | 0.2570 |
| Chrom v | 0.3497 |
| CCT | 2828 K |

Typical Data for FFS-400

Spectral Data Chart

| Wavelength (nm) | Spectral Radiant Flux (Watt,nm) |
|-----------------|---------------------------------|
| 350 | 2.85E-04 |
| 360 | 2.96E-04 |
| 370 | 3.82E-04 |
| 380 | 4.62E-04 |
| 390 | 5.84E-04 |
| 400 | 6.77E-04 |
| 410 | 8.34E-04 |
| 420 | 9.84E-04 |
| 430 | 1.13E-03 |
| 440 | 1.30E-03 |
| 450 | 1.51E-03 |
| 460 | 1.71E-03 |
| 470 | 1.94E-03 |
| 480 | 2.19E-03 |
| 490 | 2.46E-03 |
| 500 | 2.72E-03 |
| 510 | 3.03E-03 |
| 520 | 3.32E-03 |
| 530 | 3.65E-03 |
| 540 | 3.96E-03 |
| 550 | 4.27E-03 |
| 560 | 4.64E-03 |
| 570 | 4.95E-03 |
| 580 | 5.29E-03 |
| 590 | 5.66E-03 |
| 600 | 6.01E-03 |
| 610 | 6.34E-03 |
| 620 | 6.71E-03 |
| 630 | 7.04E-03 |
| 640 | 7.36E-03 |
| 650 | 7.71E-03 |
| 660 | 8.00E-03 |
| 670 | 8.31E-03 |
| 680 | 8.66E-03 |
| 690 | 8.95E-03 |
| 700 | 9.21E-03 |
| 710 | 9.53E-03 |
| 720 | 9.81E-03 |
| 730 | 1.01E-02 |
| 740 | 1.03E-02 |
| 750 | 1.06E-02 |
| 760 | 1.08E-02 |
| 770 | 1.10E-02 |
| 780 | 1.12E-02 |
| 790 | 1.14E-02 |
| 800 | 1.16E-02 |
| 810 | 1.17E-02 |
| 820 | 1.18E-02 |
| 830 | 1.20E-02 |
| 840 | 1.21E-02 |
| 850 | 1.22E-02 |

Spectral Flux Graph



Chromaticity Diagram CIE 1931, 2 DEGREE

