

# Calibrated Forward Spectral Flux Standard

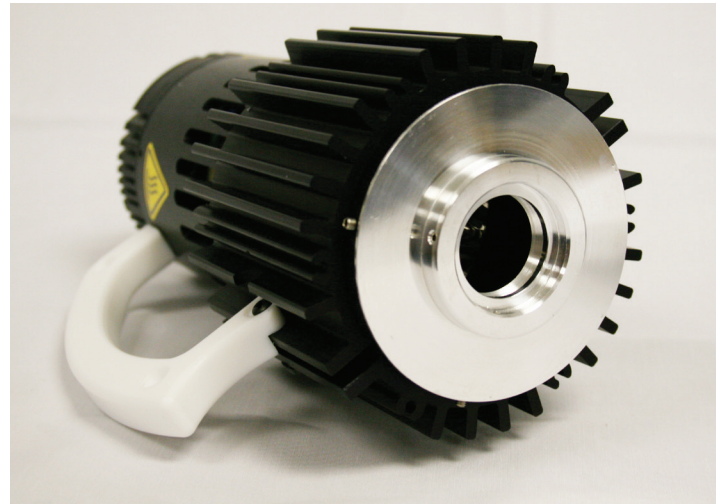
## Calibrating integrating sphere spectroradiometers for $2\pi$ geometry

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 17025:2017 practices for the high degree of confidence.

Our Lamp standards of forward spectral flux provide an exceptional artifact for calibrating integrating sphere spectroradiometers 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.

All lamp standards include a calibration certificate and spectral flux data in W/nm and total luminous flux. The spectral flux data can be uploaded to Labsphere's Integral® Software.



### Value:

- NIST-traceable total forward spectral flux calibration
- NVLAP Lab Code 200951-0
- Screened and seasoned lamp
- Meets requirements for LM-79  $2\pi$  Measurement

### Measure:

- Calibrating spectral flux measurement systems
- Calibrating luminous flux measurement systems
- Maintaining and verifying consistent calibrations

# Specifications and Ordering Information

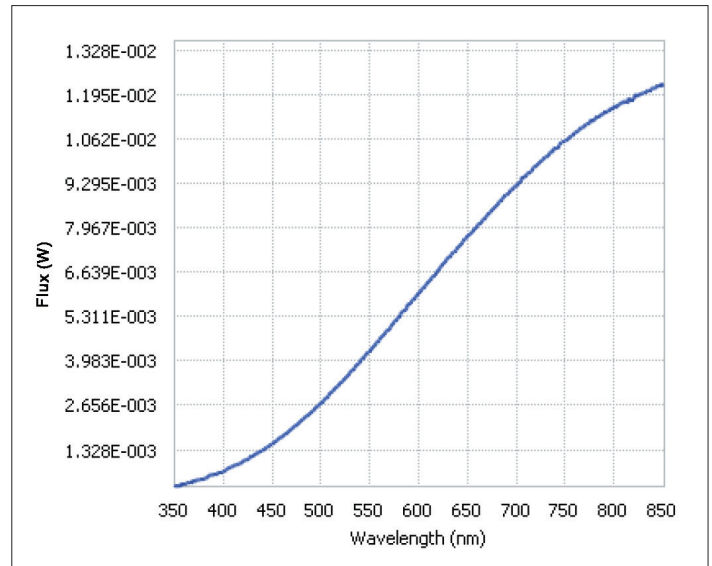
Model Number	Order Number	Number of Lamps	Approximate Luminous Flux (lumens)	Lamp Current (amps)	Rated Voltage (volts)	Rated Life (hrs)
FFS-100-400	AS-02768-100	1	300	4.167	12	2000
FFS-100-1000	AS-02768-200	1	650	8.333	12	2000

## Typical Data for FFS-400

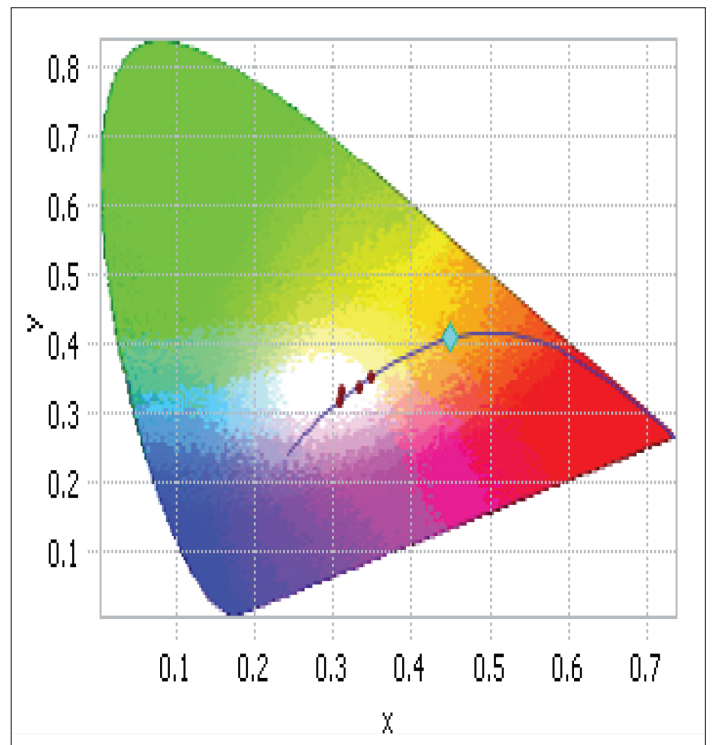
### Spectral Data Chart

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