

COMPARISON OF INTEGRATING SPHERES

MODEL		OL 426	OL 455	OL 462	OL 466
Description		Low-Light-Level Integrating Sphere Calibration Standards	Integrating Sphere Calibration Source	Automated Integrating Sphere Calibration Standard	Automated Low-Light-Level Integrating Sphere Calibration Standard
Controller Model		OL 400-C	OL 400-C	OL 462-C	OL 462-C
Luminance Uncertainty <i>(Relative to NIST)</i>		± 2%	± 2%	± 2%	± 2%
Color temperature Uncertainty		± 25K	± 25K	± 25K	± 25K
Color Temperature Range		2000 - 3000K	2000 - 3000K	2000 - 3000K	2000 - 3000K
Source Stability @ 2866K	Long Term	±2% 100 hours/yr	± 2% 100 hours/yr	± 2% 100 hours/yr	± 2% 100 hours/yr
	Short Term	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Spectral Radiance Uncertainty @ 550 nm		± 2% Relative to NIST	± 2% Relative to NIST	± 2% Relative to NIST	± 2% Relative to NIST
Sphere Coating <i>(Reflectance)</i>		> 99% <i>(350-1100 nm)</i>	> 99% <i>(350-1100 nm)</i>	> 99% <i>(350-1100 nm)</i>	> 99% <i>(350-1100 nm)</i>
Variable Aperture		Manual Micrometer Controlled	Manual Micrometer Controlled	Automated Micrometer Controlled	Automated Micrometer Controlled
Shutter		Manual Open/Close	Manual Open/Close	Automated Open/Close	Automated Open/Close
Luminance Display		Programmable	Programmable	Programmable	Programmable
Luminance Display Ranges		1E-8 to 50,000 fL Auto-ranging	0.0001 to 50,000 fL Auto-ranging	0.0001 to 50,000 fL Auto-ranging	1E-8 to 50,000 fL Auto-ranging
Lamp Current	Display	4.5 Digits	4.5 Digits	4 Digits	4 Digits
	Range	0 to 6.6A DC	0 to 6.6A DC	0 to 6.5A DC	0 to 6.5A DC
	Power Cycle	60 s Ramp	60 s Ramp	60 s Ramp	60 s Ramp
	Accuracy	± 0.02% @ 6.5A	± 0.02% @ 6.5A	± 0.05% @ 6.5A	± 0.05% @ 6.5A
	Regulation	± 0.01% for 10% Line Variation	± 0.01% for 10% Line Variation	± 0.01% for 10% Line Variation	± 0.01% for 10% Line Variation
	Temperature Regulation	± 0.025%/ 10°C	± 0.025%/ 10°C	± 0.025%/ 10°C	± 0.025%/ 10°C
	Lamp Timer	0 to 1000 Hours	0 to 1000 Hours	0 to 1000 Hours	0 to 1000 Hours
Operating Temperature Range		15-35°C	15-35°C	15-35°C	15-35°C
Operating Humidity Range		10 to 85% <i>(Non-condensing)</i>	10 to 85% <i>(Non-condensing)</i>	10 to 85% <i>(Non-condensing)</i>	10 to 85% <i>(Non-condensing)</i>
Power		100/115 or 230 VAC ±10%, 50/60 Hz	100/115 or 230 VAC ±10%, 50/60 Hz	100/115 or 230 VAC ±10%, 50/60 Hz	100/115 or 230 VAC ±10%, 50/60 Hz
Size		12" x 9.8" x 5.38"	12" x 9.8" x 5.38"	18" x 18" x 5¼"	18" x 18" x 5¼"
Weight		17 lbs	17 lbs	39 lbs	39 lbs

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Maximum Luminance @ 2856 K					
Sphere Dia	Exit Port Dia	Uniformity is $\pm 1.0\%$ for all Sphere Except 18" which is $\pm 2.0\%$			
4"	1"	80 fL	22000 fL	22000 fL	80 fL
6"	1.5"	40 fL	12000 fL	12000 fL	40 fL
8"	2"	29 fL	9000 fL	9000 fL	29 fL
12"	3"	14 fL	4000 fL	4000 fL	14 fL
18"	6"	4 fL	700 fL	700 fL	4 fL
Maximum Luminance @ 3000 K					
Sphere Dia	Exit Port Dia	Uniformity is $\pm 1.0\%$ for II Sphere Except 18" which is $\pm 2.0\%$			
4"	1"	130 fL	35000 fL	35000 fL	130 fL
6"	1.5"	70 fL	20000 fL	20000 fL	70 fL
8"	2"	40 fL	13000 fL	13000 fL	40 fL
12"	3"	23 fL	6400 fL	6400 fL	23 fL
18"	6"	7 fL	1100 fL	1100 fL	7 fL
Calibration Options		Luminance, Color Temperature, Spectral Radiance and Uncalibrated	Luminance, Color Temperature, Spectral Radiance and Uncalibrated	Luminance, Color Temperature, Spectral Radiance and Uncalibrated	Luminance, Color Temperature, Spectral Radiance and Uncalibrated



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As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.