

V Family: Variable Modular

Model Number	USLR-V20F-NMNN	USLR-V12F-NMNN	USLR-V08F-NMNN
Smart Part Number	V5NM-NNNN-NNSL-NS00-0000	V3NM-NNNN-NNSL-NS00-0000	V1NM-NNNN-NNSL-NS00-0000
OPTICAL PERFORMANCE SPECIFICATIONS			
Spatial Luminance Uniformity over Exit Port (f/4) - All Lamps On	+/-1%	+/-1%	+/-1%
Angular Uniform FOV (Full Angle) - Degrees / F# / NA - All Lamps On	+/-2.0% - 35° / 0.85 / 0.6	+/-2.0% - 35° / 0.85 / 0.6	+/-2.0% - 35° / 0.85 / 0.6
Expected Maximum Luminance Output: cd/m ²	4,200	14,000	28,000
Expected Maximum Illuminance at Port: lux	13,200	44,000	88,000
Peak Radiance: W/m ² -sr-um @ 0.95 um	105	350	700
Peak Irradiance @ Port: Photons/s-m ² -um @ 0.95um	4.50E+20	1.50E+21	3.00E+21
Minimum Resolution: lux	2.64E-01	8.80E-01	1.76E+00
Number of Steps in System Range	1.00E+04	1.00E+04	1.00E+04
Dynamic Range/Bits/dB	5.00E+04/15/93	5.00E+04/15/93	5.00E+04/15/93
Approximate Correlated Color Temperature (QTH)	3000K +/-50K	3000K +/-50K	3000K +/-50K
Typical Lamp Lifetimes (hrs)	>500	>500	>500
Est. Lamp Degradation Over Lifetime (% & CCT Shift)	-10% & +/-200K	-10% & +/-200K	-10% & +/-200K
Est. Output Degradation over 50hrs (% & CCT Shift)	-1.0% & +/-20K	-1.0% & +/-20K	-1.0% & +/-20K
INTEGRATING SPHERE			
Coating / Material	Spectrafect®	Spectrafect	Spectrafect
Sphere Internal Diameter: Inches (Meters)	20 (0.5)	12 (0.3)	8 (0.2)
Frame Type	20 in Cage	12 in Cage	8 in Cage
Output Port Size: Inches (Meters)	8 (0.2)	4 (0.1)	2 (0.05)
SYSTEM COMPONENTS			
QTH Lamps Internal (# , Wattage)	None	None	None
QTH Lamps External (#, Wattage)	(1) 150	(1) 150	(1) 100
Power Supplies (# - Model)	(1) - LPS-400	(1) - LPS-400	(1) - LPS-400
Variable Attenuator	VA-MM	VA-MM	VA-MM
Monitor Detector(s)	SD-S1	SD-S1	SD-S1
Detector Filters (in Filter Holder)	Photopic	Photopic	Photopic
System Software	HELIOsense	HELIOsense	HELIOsense
Cube Computer	Optional	Optional	Optional
STANDARD SYSTEM CALIBRATIONS (NIST Traceable)			
Luminance	Yes	Yes	Yes
Correlated Color Temp (All lamps matched & w/VA position)	Yes	Yes	Yes
Spectral Radiance (350-2400nm)	No	No	No
Exit Port Spatial Uniformity	Yes	Yes	Yes
Exit port Angular Uniformity	Yes	Yes	Yes
Operational Duration of Calibration	50 hrs	50 hrs	50 hrs