

LED Solar Simulator Type VK- SS-50

Innovative Solar Simulator Design Utilizing LED Light Sources

- Variable Output Adjustment from 0.0001 to 1.0 Sun
- User Settable Spectral Control
- Self Calibrating with Built-in Intensity Measurements
- More Than 20,000 Hours LED Lifetime
- Motorized sample mounting stage
- 30 mm × 30 mm Output Beam Size
- **Energy Efficient Design**

Specifications A (JIS C8912) Simulator Class Independent LED Control Independently drives multiple LEDs at 22 individual wavelengths spaced over the spectrum from 370 nm to 1030 nm Spectral Matching Within ± 5% of AM 1.5 G spectral characteristics in the range of 370 to 1030nm (at irradiance of 735.8 W / m²) 50 mm × 50 mm and 200 mm Illumination Area and Distance Irradiation Intensity 70 mW/cm² (integrated irradiance at 370 to 1030 nm) Illuminance Stability within ± 1% / h (after 30 minutes of lighting) Illuminance Distribution within ± 5% (within effective irradiation area of 25mm x 25mm) within ± 2% (within effective irradiation area of 10mm x 10mm) Irradiation Direction Downward irradiation Software Communication with the PC by Bluetooth The irradiation light spectrum can be adjusted by changing all 22 LEDs individually. Cooling method Forced air cooling Single phase 100 V ± 5% 50/60 Hz Input voltage Dimensions Light unit: 400 (W) x 400 (D) x 550 (H) mm Control box: 320 (W) x 450 (D) x 150 (H) mm ~ 20 kg Weight



	Wavelength Range (nm)	Power AM1.5G (W/m²/nm)	Power AM1.5G (%)	Power VK-SS-50 (W/m²/nm)	Power VK-SS-50 (%)	Degree of Matching	Percent Difference (%)
•	370-450	82.4424	11.2043	82.5578	11.2232	1.00	0.00
	450-550	154.1913	20.9554	152.7672	20.7678	0.99	-1.00
	550-650	146.6344	19.9283	147.2784	20.0216	1.00	0.00
	650-750	127.2821	17.2983	127.8516	17.3806	1.00	0.00
	750-850	101.8767	13.8456	101.9647	13.8615	1.00	0.00
	850-950	72.4349	9.8443	72.4977	9.8556	1.00	0.00
	950-1030	50.9464	6.9239	50.6806	6.8897	1.00	0.00
	Total	735.8082	100.000	735.5980	100.000		

Save

ReCalculate

SPD Laboratory, Inc. 2-35-1 Johoku, Hamamatsu, 432-8011, JAPAN

Tel: +81-53-474-7901 Fax: +81-53-401-7080 Email: ing@spd-lab.com

Web: http://www.spdlab.com/English/VK-PA-25.html