

PSS 35

Solar Simulator Device

READY FOR
IEC 60904-1-1: 2017-05
New Filter & Lamp Design
Extended Illumination
Time & Area



Spectral match better than $\pm 1\%$ for multi-junction applications.
Available as AM 1.5 version for large area terrestrial modules and AM 0 version for space applications.

BERGER
Lichttechnik

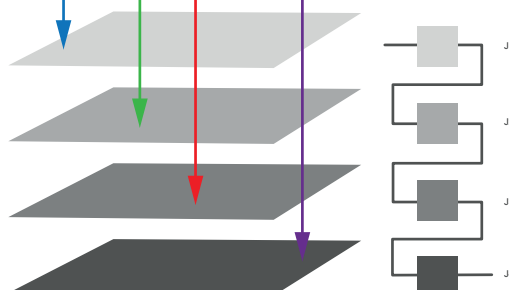
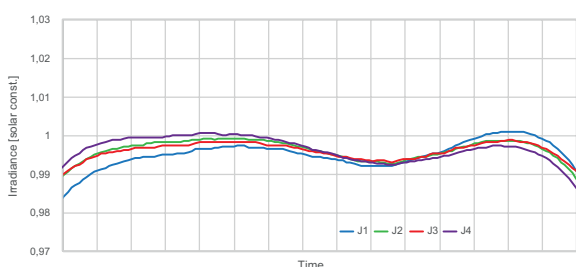
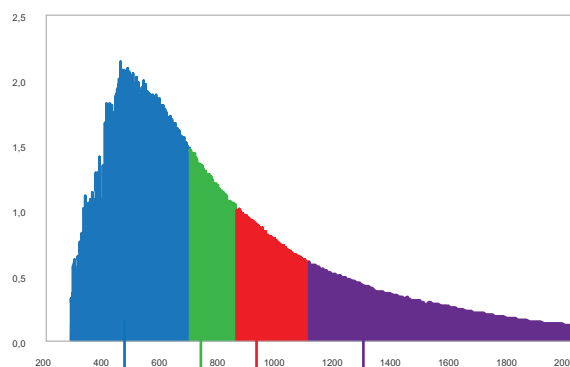
PSS 35

Solar Simulator Device

The PSS 35 is designed for large area solar simulation. The light curve is generated without any feedback. The PSS 35 is available for terrestrial use (AM 1.5, 1000 W/m²) as well as for space applications (AM 0, 1366 W/m²) for 3 and 4 junction technologies. The maximum test area for the AM 0 version is 1.8 x 1.4 m, while the AM 1.5 version can test up to 3 x 3 m.

Product Specification

- › Spectral match better than $\pm 1\%$ for multi-junction applications
- › 12 ms pulse time
- › Stable irradiance level over pulse time
- › Uniformity constant over lamp life time
- › Versions available for AM 0 or AM 1.5
- › Clean room compatible
- › Optional filter systems for Multi Junction and R & D applications
- › 30 test cycles per hour



Technical Data

Mechanical Data

Weight: 250 kg
Dimensions: 1140 x 570 x 1410 (H x W x L in mm)
Max. lamp height: 1800 mm
Housing: Steel frame on heavy duty castors
Lamp housing optionally on separate tripod

Electrical Data

Voltage: 230 V or 120 V
Frequency: 50 Hz or 60 Hz
Power: 3300 W

General Specification AM 1.5

Ambient temperature: +10 °C to +35 °C
Spectrum: AM 1.5
Irradiance: 1000 W/m² at a distance of 9 m
Rate of repetition: 30 test cycles per hour
Uniformity: < 1% at 2.6 x 2.8 m
Total pulse time: 12 ms
Measurement time: 9 ms

Communication

Fiber optic cable (PFO)

General Specification AM 0

Ambient temperature: +10 °C to +35 °C
Spectrum: AM 0 according to ECSS-E-ST-20-08C_Rev1
Irradiance: 1366 W/m² at a distance of 6 m
Rate of repetition: 30 test cycles per hour
Uniformity: < 1% at 1.8 x 1.4 m
Total pulse time: 12 ms
Measurement time: 9 ms

Communication

Fiber optic cable (PFO)