

CHAPTER 1 TEST-MEASUREMENT

High Power Solar Simulators

Sciencetech's solar simulators can be modified to suit your specific needs. The total irradiance on the target plane depends on the power of the arc lamp, the size of the illuminated target and the distance to the target. Our engineering department has an excellent working knowledge of the technical trade-offs related to these parameters and they can customize a solar simulator to fulfill almost every requirement. The patented design of the fully reflective solar simulators allows for ASTM Class A performance with higher intensity and efficiency than competing solar simulators. Class A standards can be achieved with the Collimated, Fresnel lens and Pulse solar simulators. Again these parameters depend on lamp power, target area and distance, please specify your requirements when submitting a request for quote.

Note This section of our product database is under construction, not all of Sciencetech's Solar Simulator accessories and software programs are listed here, please download the Solar Simulator Brochure from our brochures page or contact us for a printed copy.

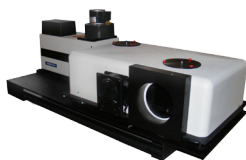
Model	Illuminated Target Size (Diameter) for 1 Sun *	Illuminated Target Size (Square) for 1 Sun*	Collimation	AM Spectral Match (ASTM Class)**	Spatial Uniformity (ASTM Class)	Temporal Stability (ASTM Class)
SF300W	2.5cm 1.0"	1.8 x 1.8cm 0.7 x 0.7"	1°	A	A	A
SF150W	5cm 2.0"	3.6 x 3.6cm 1.4 x 1.4"	1°	A	B,C	A
SS150W	5cm 2.0"	4x4cm 1.6x1.6"	5°	A	A	A
SS0.5KW	7.5cm 3.0"	5.7x5.7cm 2.3x2.3"	5°	A	A	A
SS1.0KW	12.7cm 5.0"	8.6x8.6cm 3.4x3.4"	5°	A	A	A
SS1.6KW	16.5cm 6.5"	11x11cm 4.2x4.2"	5°	A	A	A
SS2.5KW	20.3cm 8.0"	15x15cm 6x6"	5°	A	A	A
SS7.5KW	43.2cm 17.0"	30x30cm 12x12"	7°	A	A	A
SS1.6KXeFR	23cm 9.0"	16x16cm 6.4x6.4"	0.7°	A	B	A
SS2.4KXeFR	30.cm 12.0"	21x21cm 8.4x8.4"	0.7°	A	B	A
PSS1	1.0m 4.2'	1x1m (4 Suns)	45°	A	A	A
PSS2	20.m 8.4'	2x2m (4 suns)	45°	A	A	A

*Air Mass Filter AM1.0D

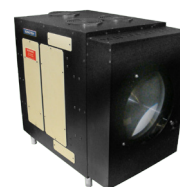
**Illumination for UV systems: UVA 12mW/cm2; UVA+B 14 mW/cm2



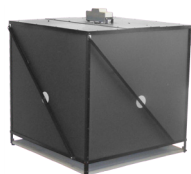
Collimated Small Beam Solar Simulator



Fully Reflective Solar Simulators/UV



Fresnel Lens Solar Simulators



Flash Solar Simulators



Accessories



Flash Solar Simulator Concentrators