

3.5.6A WB-I: Wide Beam Imager

The Ophir Wide Beam Imager accessory provides a way to measure both size and power distribution of a divergence and large diameter sources as LED, VCSEL, and fiber laser.

It employs a diffuse optic on to which the beam from the light source is impinged.

The diffuser provides a 48mm diameter clear aperture from which the laser beam or light source is measured.

The accessory can be provided as a complete solution that includes BeamGage Professional imaging and analysis software, and high-resolution camera.

The product provides a solution for the measurement of divergence or large beams with moderate spatial resolution.



Specifications

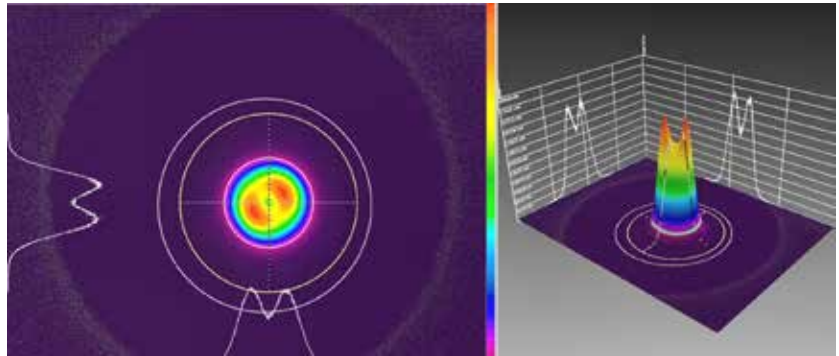
Spectral response ⁽¹⁾	350-1100nm
Active area ⁽²⁾	Ø 48mm
Beam sizes ^{(2), (3)}	10mm– 45mm
Angle of incidence	<70°
Minimum detail ^{(4), (5)}	0.5mm
Lowest measurable signal ⁽⁶⁾	100µW/cm ²
Maximum power exposure CW ⁽⁷⁾	200W unlimited, 1000W for 1 minute
CCD recess supported	4.5mm CCD recess camera
Dimensions	L=258mm X Ø57mm
Weight (with camera and support)	0.5 kg (0.7 kg)
Compliance	RoHS2021
Part Number	SP90553

Notes:

- (1) Same as for camera used; under 350nm beam image will be displayed as fluorescence
- (2) Limited to 43 mm in Y direction by camera sensor
- (3) 5mm possible with reduced accuracy
- (4) For low contrast artefacts, due to blur effect (~0.8mm)
- (5) Small diameter evaluation error is < 5%, decreases proportionally with increased diameter
- (6) With two ND1 filters mounted on camera
- (7) System absorbs 20% power (80% is back diffused)



WB-I with Camera



2D and 3D far field VCSEL beam profiling

Wide Beam Imager

