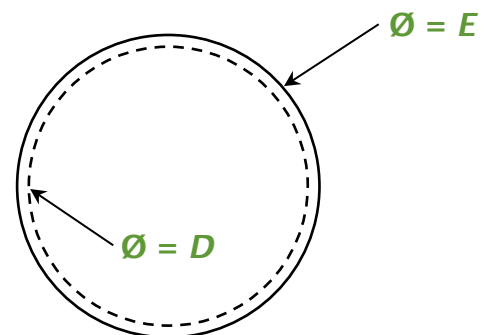
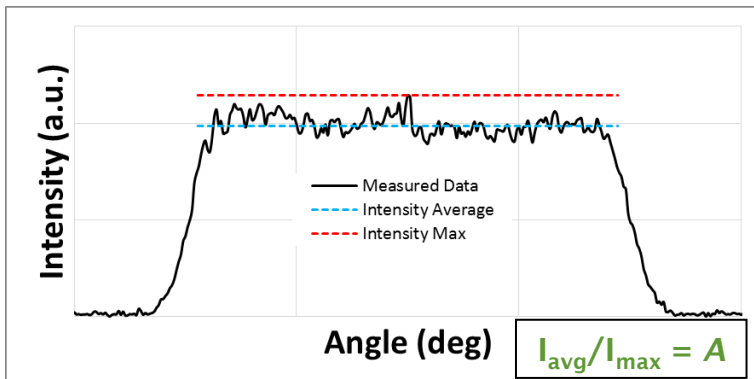
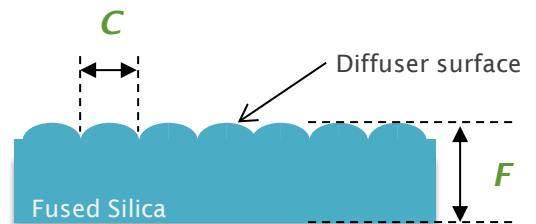
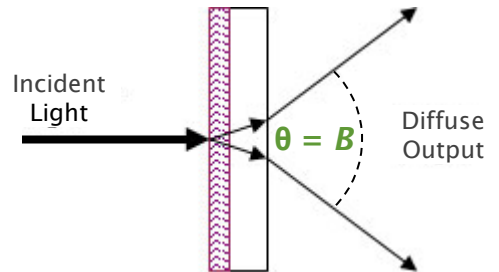
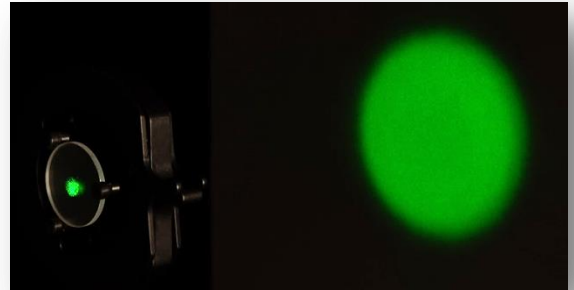


# EDC-G Series: Fact Sheet

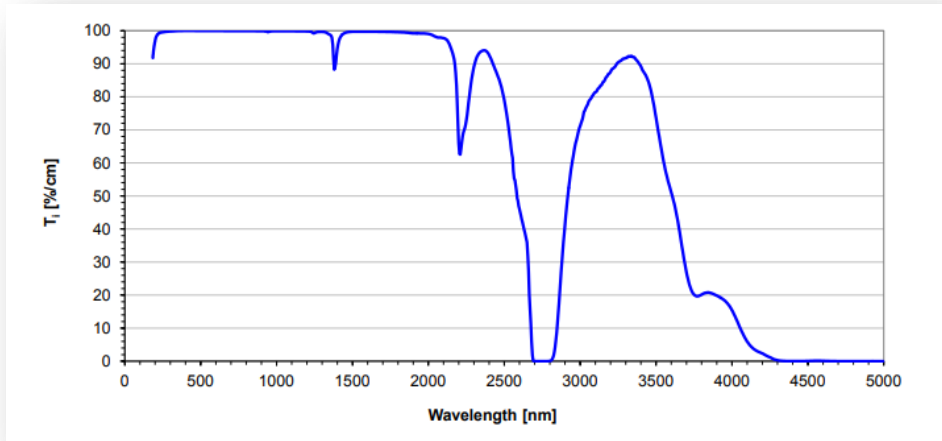
## Model: EDC-0.5-G-1R

Optical Properties	
Diffuser type	Refractive, bandlimited
Diffuser pattern	Circle, Flat Top*
*Flatness factor (A)	$\geq 0.70$
Divergence angle (B)	$0.50^\circ \pm 0.05^\circ$ FWHM
Transmission spectrum	See next page
Operating spectrum	193 - 2000 nm
Index of refraction	1.457 @ 633 nm
Diffuser feature size (C)	100 $\mu\text{m}$ (typical)
Clear aperture (D)	Center 23.4 mm
Efficiency	90% (uncoated)
AR Coating	Uncoated
Mechanical Properties	
Material	Corning 7980 HPFS
Diameter (E)	$25.4 \pm 0.1$ mm dia.
Thickness (F)	$1.0 \text{ mm} \pm 0.1 \text{ mm}$
Mount	Unmounted

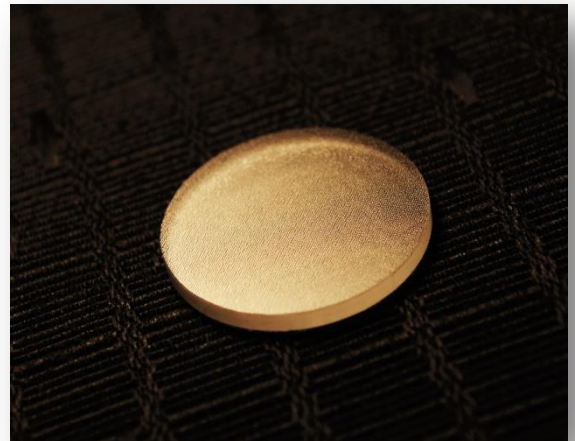


Example data. Actual intensity profile may differ.  
See ISO 13694:2000, section 3.2.9.

### Transmission spectrum



- Diffuser angles measured in the far-field @ 633nm. Input beam size ~5mm, detector subtense 0.25°. Actual angles may vary depending on wavelength or degree of collimation.
- For best uniformity, input beam should be many times larger than diffuser feature size.
- When used with coherent sources the diffuser produces speckle.
- Handle with gloves by edges and avoid touching diffuser surface. Blow with air/N<sub>2</sub> to clean. The plano side may be cleaned by wiping with an alcohol wipe.
- Edges are “fire polished” quality.
- Information subject to change without notice.



### Contact Us

For additional information, technical inquiries, and availability, please contact [info@rpcphotonics.com](mailto:info@rpcphotonics.com).