

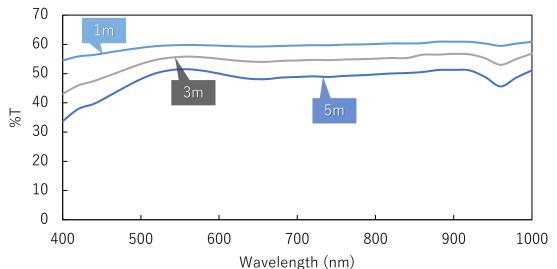
Having a similar NA to the silica fiber, SOG-35C multi-component glass optical fibers have a narrow opening angle and project light into a tight area.

Optimum for directional lighting, optical sensors, and illumination for small areas. RoHS compliant. Free of harmful substances like lead and arsenic. Suitable for medical application.

Technical Data		
Fiber Type	A multimode/step index optical fiber	
Numerical Aperture	0.31	@587nm
Opening angle	35° (	@587nm
Optical Attenuation *Reference value	0.60 dB/m @400nm 0.35 dB/m @550nm	
Heat Resistance	< 200 °C	
Single Fiber Diameter	$30$ μm, $50$ μm $\pm 3$ μm	
Chemical Resistance	Core Glass	Cladding Glass
Acid Resistance	2 *	2 *
Water Resistance	1 *	1 *

<sup>\*</sup> Class according to JOGIS (Japanese Optical Glass Industrial Standard)



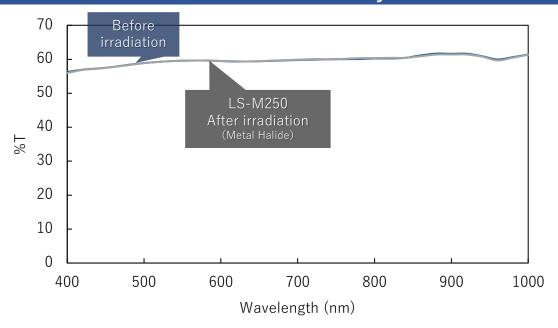


### Measurement conditions

Light guide bundle with 5 mm diameter (Single fiber diameter:  $50 \mu$  m)



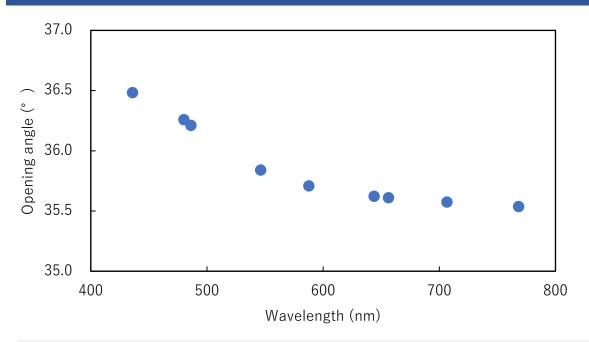
## **Solarization Stability**



#### Measurement conditions

A light guide bundle with 5 mm diameter of 1 m length is exposed to Metal Halide Lamp (400 nm Cut Longpass Filter) for 100 hours.

# Wavelength dependence of opening angle (calculated from the refractive index)



#### Measurement conditions

The opening angle varies with wavelength, depending on the wavelength dispersion of the core and cladding glass materials. In the plot above, the opening angle calculated from the refractive indices of the core and cladding glass materials is plotted for each wavelength.