SOG-15

Visible

Multi-component glass

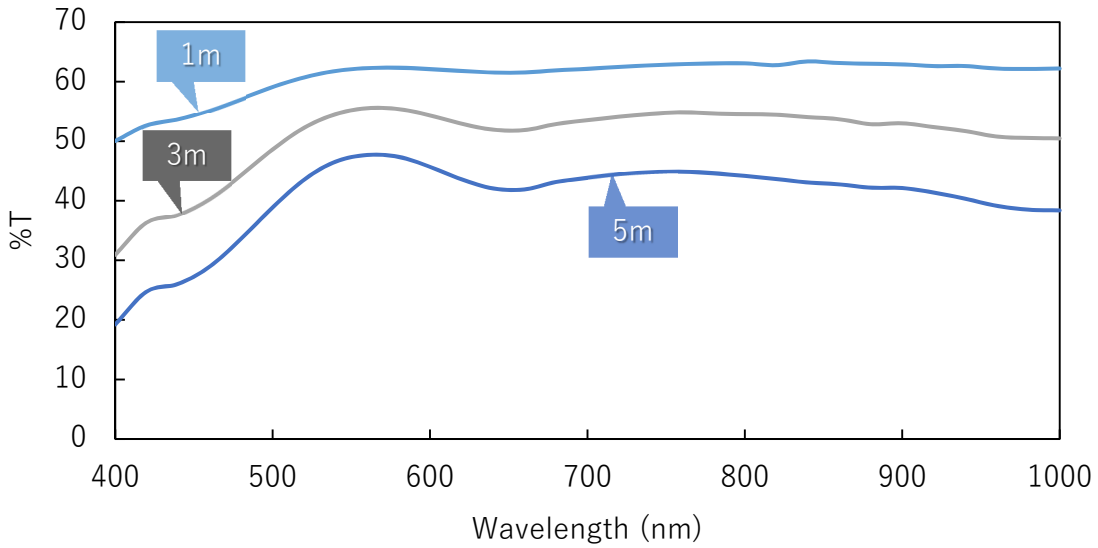
SOG-15 multi-component glass optical fibers have a lower NA than silica optical fibers.

Ideal for lighting a specified area precisely (e.g. optical sensors).
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	0.14 @587nm	
Opening angle	16° @587nm	
Optical Attenuation	1.28 dB/m @400nm 0.34 dB/m @550nm	
Heat Resistance	< 200 °C	
Single Fiber Diameter	30 μm, 50 μm ±3 μm	
Chemical Resistance	Core Glass	Cladding Glass
Acid Resistance	1 *	1 *
Water Resistance	2 *	2 *

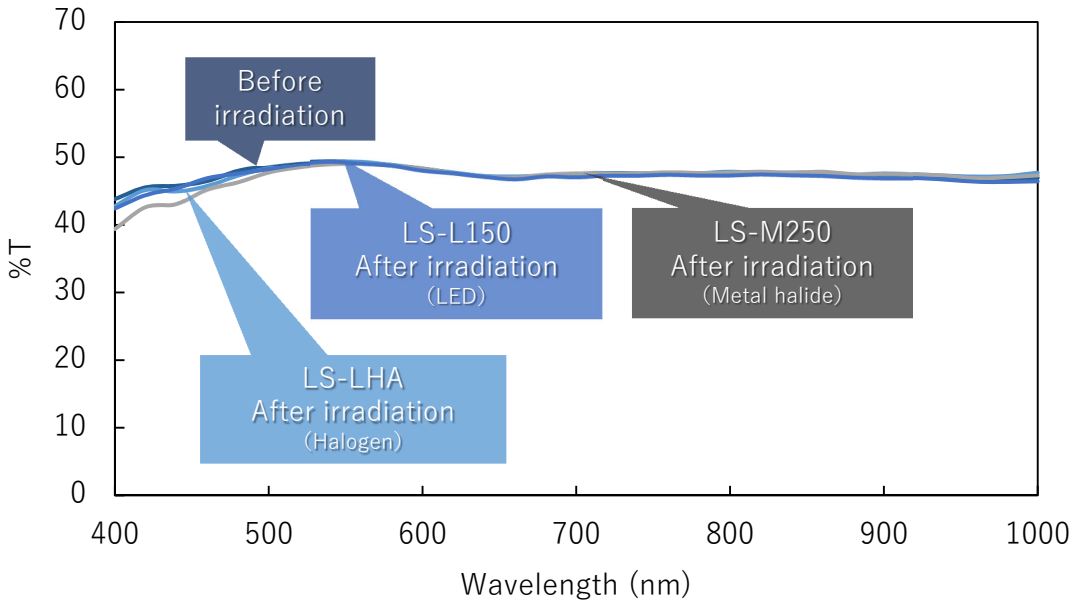
＊Class according to JOGIS (Japanese Optical Glass Industrial Standard)

Transmittance



Measurement conditions
Light guide bundle with 5 mm diameter (Single fiber diameter: 50 μm)

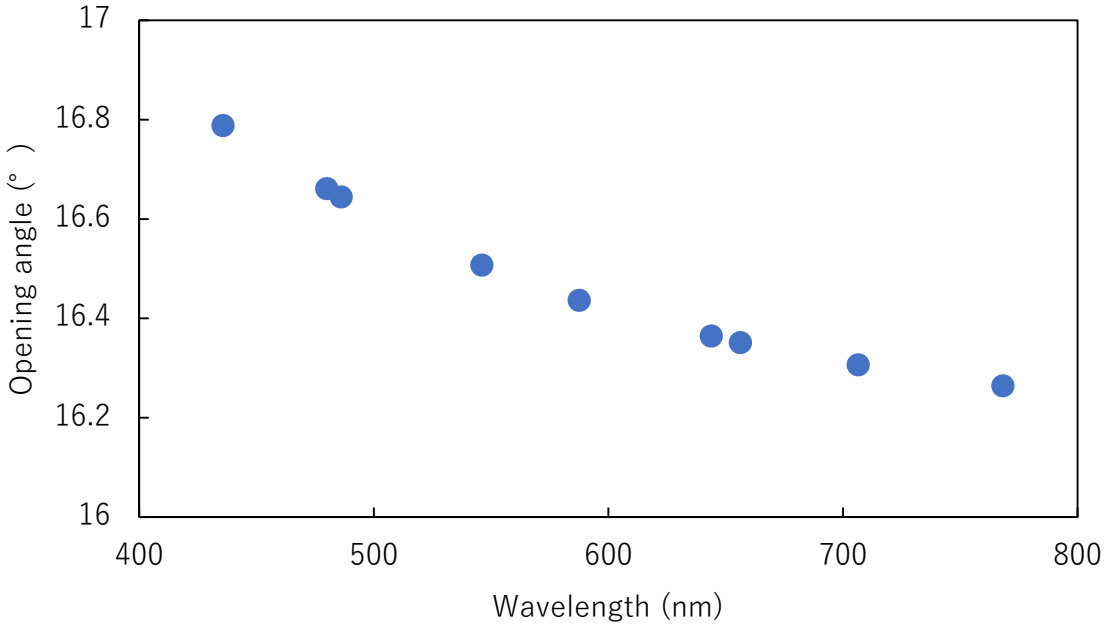
Solarization Stability



Measurement conditions

Light guide bundles with 5 mm diameter of 1 m length are exposed to several light sources for 300 hours.
Light sources: Halogen, Metal halide, White LED

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.

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