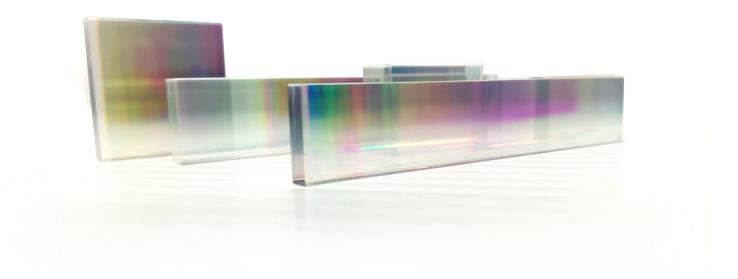
ULTRA BROADBAND DIFFRACTION GRATING FOR VIS-NIR

T-900-VIS-NIR Series

The T-900-VIS-NIR series lithographically patterned transmission diffraction grating is designed to be used in demanding medical, industrial, and scientific applications (including flow cytometry and general spectroscopy). It is characterized by high efficiency and low polarization sensitivity maintained over a broad spectral range. Gratings produced by Coherent undergo extensive quality assurance reviews, have a proven reliability track record, and are competitively priced.



PRODUCT KEY

T - 900 - VIS - NIR - 25x25 - 65

Min. Efficiency, % Width x Height, mm

Groove || to Height

Wavelength Range, nm

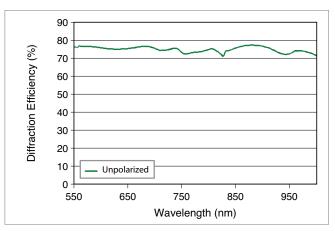
Grooves/mm

Transmission



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The polarization-independent transmission diffraction grating has 900 lines/mm and is designed to operate from 550 to 1000 nm at 16° angle of incidence (AOI).



* Simulated performance shown (for guidance only)

Typical absolute diffraction efficiency at AOI 16°*

Specification	Minimum
Line Density (lines/mm)	900.090
Line Density Uniformity (lines/mm)	0.001
Angle of Incidence (AOI)	16 ±1
Wavelength Range (nm)	550 to 1000
Optimal Polarization ¹	Any
Diffraction Efficiency ² (%)	>65 (unpolarized source, at central AOI, full wavelength range)
Dimension Tolerances	±0.2 for grating size and width
Substrate Thickness	0.95 ±0.050 mm
Material	Fused silica, dielectric layers, no polymers
Scratch/Dig ³	60/40 standard, 40/20, and 20/10 custom

Notes:

1. S-polarization: electric field vector is parallel to the grating lines.

2. Worst case in the operational wavelength range for average polarization.

3. As per MIL-PRF-1380B in the clear aperture; no requirements outside of the clear aperture.

