Agilent Innovative Spectral Solutions for Leaders in Technology

Telecommunications Applications

www.agilent.com/cm/diffract

Agilent Technologies

Agilent's planar and aberration-corrected convex/concave gratings cover a broad spectral range (UV-IR) for applications in telecommunications, life sciences, and analytical markets. In addition, we specialize in the alignment and packaging of these gratings to enable robust spectral modules and integrated solutions for demanding and/or custom photonic applications.

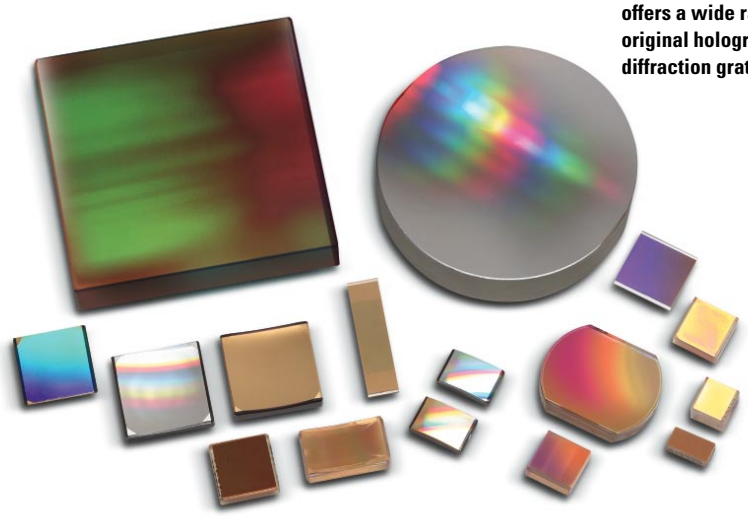
Agilent is the world's largest manufacturer of original holographic diffraction gratings.

Agilent Technologies is a leading provider of innovative technologies for communications and life sciences. Agilent delivers a wide range of solutions and services, including semiconductors, test and measurement, and chemical analysis, for the leading corporations around the world.

Agilent's communications solutions include leading-edge components, test, monitoring, management, and sub-systems. Agilent has an extremely broad range of technology and system expertise to help customers stay ahead in the fast-moving communications industry.

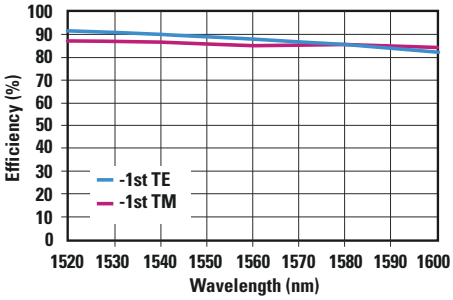
Agilent's component solutions include fiber optic and IC products for networking, radio frequency and infrared devices for mobile communications, image sensors and processors for cameras and optical computer mice, storage area network devices, holographic gratings, and application specific ICs for select networking and imaging applications.

Our Holographic Gratings Operation (HGO) leverages Agilent's long history of high quality, high volume manufacturing. We produce our gratings and spectral modules in a modern 20,000 square foot facility and an expansive production cleanroom outfitted with the latest in automated equipment. Our manufacturing excellence results in higher quality products, and the ability to meet high-volume customer requirements.

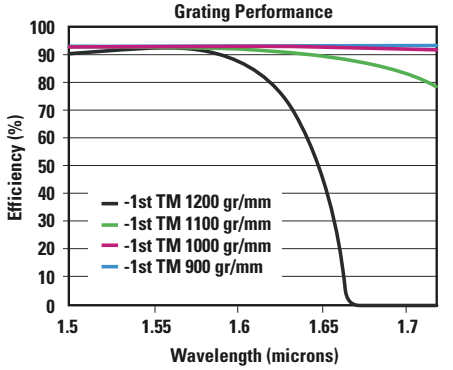


Agilent Technologies' offers a wide range of original holographic diffraction gratings.

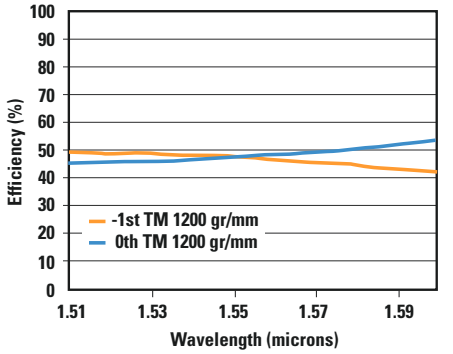
Representative Data of LPDL600 Grating Design



Representative High Efficiency/Low Loss Grating Performance



Representative Littman Metcalf Performance Optimized for C band 1200 gr/mm; 85° Angle of Incident; Au Coated



Innovative Spectral Solutions for Leaders in Technology

- Accurate Modeling of Grating Performance
- Rapid Prototyping Capabilities
- Collaborative Product Design Services
- Optical System Expertise (25+ years)

Agilent Technologies offers a wide range of precision Spectral Modules.

Original Holographic Diffraction Gratings

Agilent discovered that the highest performance originates from mastering fabrication techniques. We have refined our process to mass produce and exclusively deliver "original" gratings. Our novel approach and proprietary technologies result in both High Efficiency and Low Polarization Dependent Loss performance in a single component.

Our flexible holographic technique permits the recording of gratings on planar, as well as spherical/aspherical surfaces without limitation to groove density. We have pioneered the development of aberration-corrected concave gratings and continue to enhance our designs to deliver the best optical performance with the fewest components. We believe this technology will continue to enable new designs that are simpler to develop and more cost effective to manufacture.

Key Benefits of "Original" Grating Technology

- Accurate Recording
  -High Efficiency and Low PDL
- Environmentally Stable Materials
  -Telcordia compliant
- Very Low Stray Light
  -Enhanced spectral fidelity and low cross-talk

Precision Spectral Modules

Agilent also supplies high performance spectral modules for OEM photonic applications. Our compact modules are cost-effective, prealigned optical systems that are easily integrated into systems to save development cost and speed time to market. Our HyperSpec VS15 is an unparalleled imaging spectrograph with extremely high spectral/spatial resolution, and we offer spectral models with both single- and dual-beam designs.

Agilent's Holographic Gratings Operation (HGO) offers performance and manufacturing in holographic gratings that is second to none. For more information on how we can help you with your next design project, please visit http://www.agilent.com/cm/diffract/.

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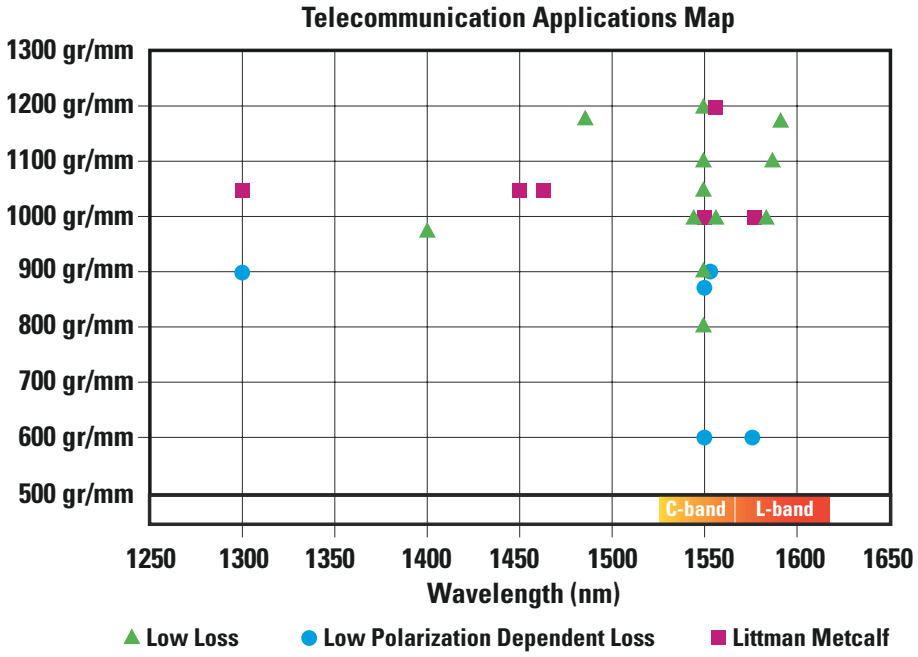

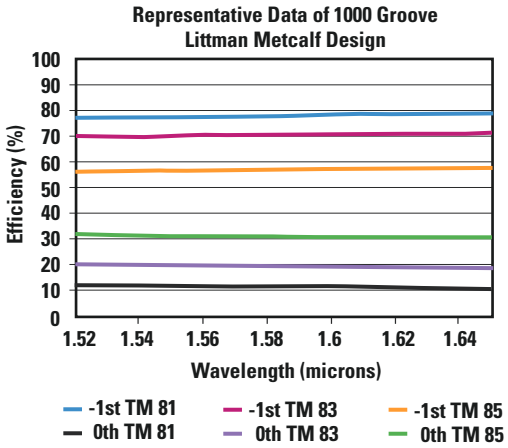

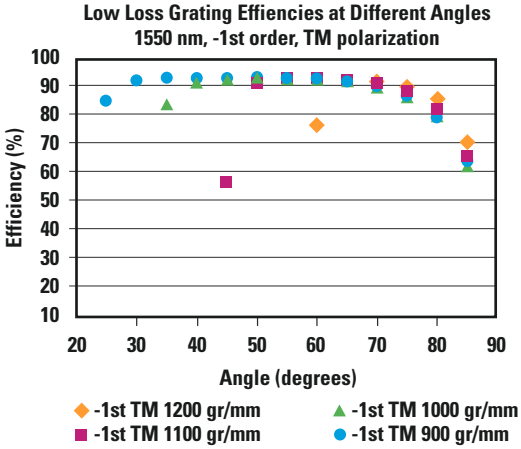

Applications

- Dynamic Gain Equalizer
- Multiplexer/Demultiplexer
- Optical Add/Drop Multiplexer
- Optical Spectrum Analyzer
- Tunable Laser Source

For product information please go to our web site.

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Data subject to change.

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