Richardson Gratings™ 600 Grooves, 12.7 x 12.7mm, 500nm, Plane Ruled Reflection Grating

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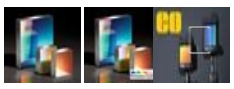
Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings



Stock **#15-763** **20+ In Stock**

- 1 + **C$198**.86

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SPECIFICATIONS

General

Type:

Reflective Diffraction Grating

Master Reference:
1267

Physical & Mechanical Properties

Dimensions (mm):
12.7 x 12.7 ±0.1

Clear Aperture (%):
>90

Construction:
Ruled Grating

Length (mm):
12.70

Thickness (mm):
6.00 ±0.5

Width (mm):
12.70

Centering of Ruled Area on Substrate (mm):
±1

Alignment of Grooves to Edge (°):
±0.15

Groove Spacing Tolerance (%):
<0.05

Optical Properties

Groove Density (grooves/mm):
600

Wavelength Range (nm):
350 - 800

Blaze Wavelength (nm):
500 ±25

Blaze Angle (°):
8.6

Peak Efficiency, Typical (%):
69

Coating:
Aluminium

Substrate:
Float Glass

Reflected Wavefront, RMS:
λ/4

Polarization:
S, P and Average

Spectral Order (m):
1

Regulatory Compliance

Certificate of Conformance:
View

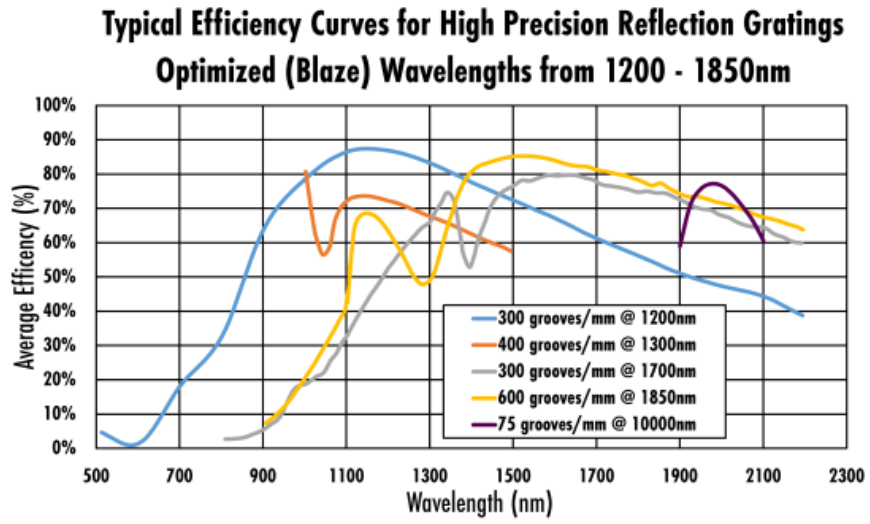
PRODUCT DETAILS

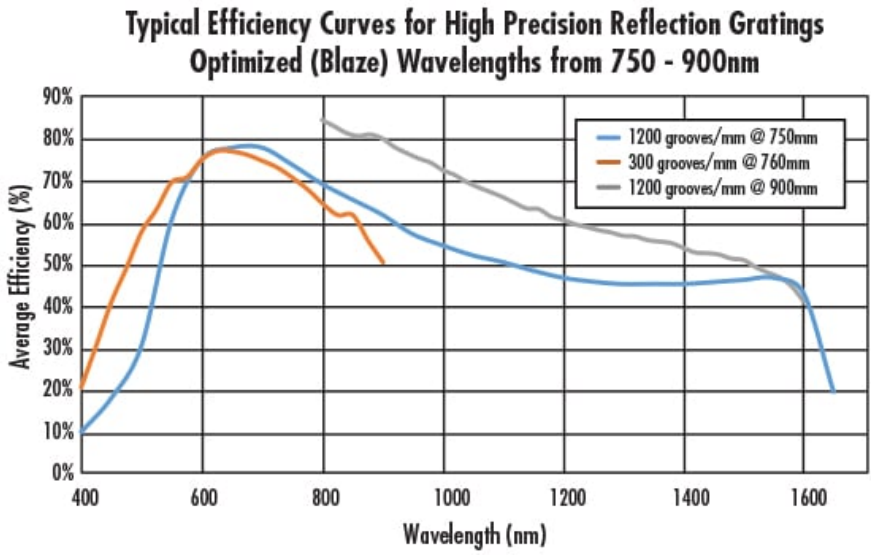
- Excellent Efficiency at Blaze Wavelength and Blaze Angle
- Superior Dimensional Tolerances
- Ideally Suited for Spectroscopic Applications
- Custom Sizes Available

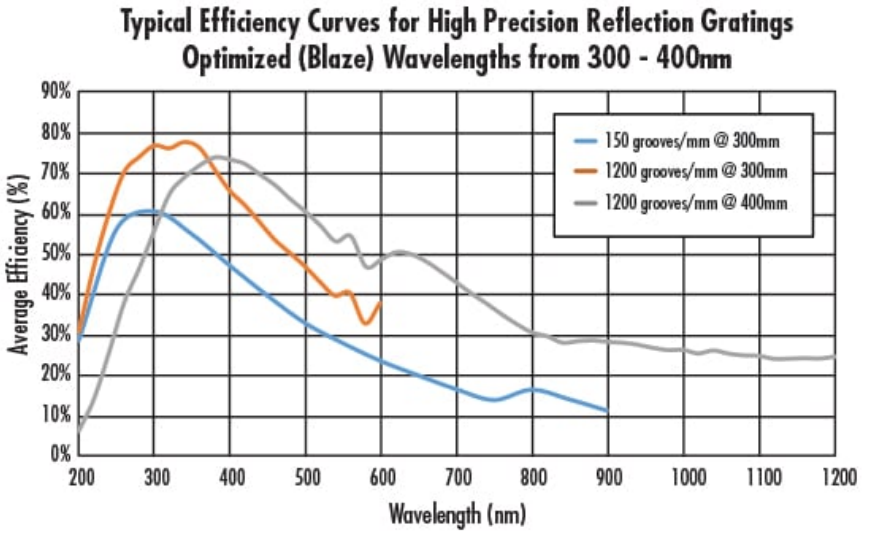
Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings are designed for consistent, predictable performance. The gratings are manufactured from highly accurate masters to provide a high level of repeatability to simplify OEM system designs by reducing the need for tedious alignment adjustments. With λ/4 reflected wavefronts and up to 90% diffraction efficiency, these gratings are specified to meet the needs of the most demanding applications such as high-resolution spectroscopy. Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings feature bare aluminum coatings, allowing for options that range from 250 to 10,000nm with excellent peak efficiencies. Custom sizes available on request.

Note: The surface of these gratings is very sensitive and should never be touched when handling the optic. If cleaning is required to remove dust particles, non-contact cleaning using clean compressed air is recommended.

TECHNICAL INFORMATION







SPECIAL HANDLING

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

Component Handling Tools

CUSTOM

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our **custom manufacturing capabilities** or submit an inquiry **here.**