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# Richardson Gratings™ 600 Grooves, 12.7 x 12.7mm, Plane Ruled Gold Reflection Grating

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Richardson Gratings™ High Precision Plane Reflective Gold Diffraction Gratings



Stock #15-778 **13 In Stock**

⊖ 1 ⊕ £136<sup>00</sup>

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Qty 10-24	£122.00 each
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## Product Downloads

### General

Reflective Diffraction Grating **Type:**

520R **Master Reference:**

## Physical & Mechanical Properties

12.7 x 12.7 ±0.1      **Dimensions (mm):**

>90      **Clear Aperture (%):**

Ruled Grating      **Construction:**

12.70      **Length (mm):**

6.00 ±0.5      **Thickness (mm):**

12.70      **Width (mm):**

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

±0.15      **Alignment of Grooves to Edge (°):**

<0.05      **Groove Spacing Tolerance (%):**

## Optical Properties

600      **Groove Density (grooves/mm):**

700 - 1600      **Wavelength Range (nm):**

1000      **Blaze Wavelength (nm):**

17.5      **Blaze Angle (°):**

Gold      **Coating:**

Float Glass      **Substrate:**

λ/4      **Reflected Wavefront, RMS:**

S, P and Average      **Polarization:**

1      **Spectral Order (m):**

## Regulatory Compliance

[View](#)      **Certificate of Conformance:**

## Product Details

- Optimized for use from 350-800nm (500nm) or 700-1600nm (1000nm)
- Available in standard sizes 12.7 x 12.7, 25 x 25 and 30 x 30mm
- Groove Spacing Tolerance <0.05%
- Custom Sizes Available

Richardson Gratings™ High Precision Plane Reflective Gold Diffraction Gratings are gold coated versions of the Richardson Gratings™ High Precision Plane Ruled Reflective Diffraction Gratings. They are available with blaze wavelengths 500nm or 1000nm and optimized for use at 350-800nm or 700-1600nm respectively. These ruled gratings are characterized by a superior efficiency at their design wavelength compared with holographic gratings. Richardson Gratings™ High Precision Plane Reflective Gold Diffraction Gratings are an excellent choice for spectroscopy setups using silicon detectors or fiber-optic telecommunication applications for which higher reflectivity in NIR/IR spectral regions is required. Custom sizes are 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, i.e. to remove dust particles, non-contact cleaning using clean compressed air is recommended.