

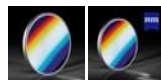
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## 2400 Grooves/mm, 50mm Dia., 180nm Rowland Circle Concave Diffraction Grating

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ZEISS Concave Diffraction Gratings



Stock #11-539 **2 In Stock**

- 1 + £556.<sup>00</sup>

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### Volume Pricing

Qty 1-9	£556.00 each
Qty 10-24	£500.40 each
Need More?	<a href="#">Request Quote</a>

Prices shown are exclusive of VAT/local taxes

### Product Downloads

#### General

Rowland Circle **Type:**

#### Physical & Mechanical Properties

Diameter (mm):

50.00

**Groove Profile:**

Sinusoidal

**Edge Thickness ET (mm):**

9.3

**Optical Properties**

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

2400 ±3

**Blaze Wavelength (nm):**

180

**Coating:**

Bare Aluminum

**Substrate:** □

N-ZK7

**Diffraction Efficiency (%):**

≥40 @ 215nm  
≥33 @ 275nm  
≥28 @ 375nm

**Radius of Curvature (mm):**

398.83

**Angle of Incidence,  $\alpha$  (°):**

-40

**Diffraction Angle,  $\beta$  @ 200nm (°):**

9.4

**Diffraction Angle,  $\beta$  @ 300nm (°):**

-4.4

**Object Distance,  $l_a$  @ 200nm:**

305.5

**Focal Distance,  $l_b$  @ 200nm:**

393.5

**Diffraction Area Diameter (mm):**

≥44

**Regulatory Compliance**

**Certificate of Conformance:**

[View](#)

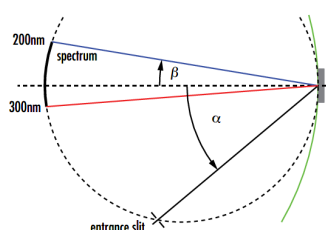
**Product Details**

- High Grating Efficiency and Low Stray Light
- Holographically Produced to Minimize Aberrations
- Rowland Circle or Polychromator Mounting Configurations

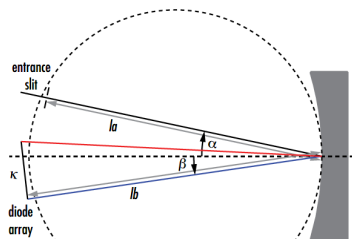
ZEISS Concave Diffraction Gratings combine dispersive and imaging properties into a single optical component for integration into spectroscopic systems. These concave gratings are produced holographically, optimizing the focal plane and minimizing aberrations over the wavelength range of the grating. ZEISS Concave Diffraction Gratings are designed to have high grating efficiency and minimized stray light, improving the spectral resolution and signal to noise ratios of spectrometers. Diffraction gratings with Rowland Circle or polychromator mounting configurations are available. Rowland Circle gratings are ideal for spectroscopic systems designed on a Rowland Circle while polychromator gratings are optimized for setups with a fixed arrangement of the entrance slit, grating, and plane sensor.

**Technical Information**

**Rowland Circle Configuration**



**Polychromator Configuration**



**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

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