

## 12,700 Lines/Inch, 2" Square Card, 15/Pack, Holographic Diffraction Grating Film



Holographic Diffraction Grating Film (2" Square Card)

Stock #54-510 **20+ In Stock**

⊖ 1 ⊕ £22.<sup>00</sup>

**ADD TO CART**

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | £22.00 each                   |
| Qty 10-24      | £19.80 each                   |
| Need More?     | <a href="#">Request Quote</a> |

ⓘ Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Transmission Diffraction Grating **Type:**

15 Cards **Quantity:**

### Physical & Mechanical Properties

50.80 x 50.80 **Dimensions (mm):**

|                              |  |
|------------------------------|--|
| 2 x2                         | <b>Dimensions (inches):</b>                |
| Holographic Grating          | <b>Construction:</b>                       |
| 50.80                        | <b>Length (mm):</b>                        |
| 0.003                        | <b>Thickness (inches):</b>                 |
| 50.80                        | <b>Width (mm):</b>                         |
| <b>Optical Properties</b>    |  |
| 500                          | <b>Groove Density (grooves/mm):</b>        |
| 12,700.00                    | <b>Groove Density (grooves/inch):</b>      |
| 400 - 700                    | <b>Wavelength Range (nm):</b>              |
| 19                           | <b>Dispersion Angle (°):</b>               |
| Clear Polyester Film         | <b>Substrate:</b> <input type="checkbox"/> |
| <b>Regulatory Compliance</b> |  |
| <a href="#">Compliant</a>    | <b>RoHS 2015:</b>                          |
| <a href="#">View</a>         | <b>Certificate of Conformance:</b>         |
| <a href="#">Compliant</a>    | <b>Reach 233:</b>                          |

## Product Details

- Ideal for Spectroscopy
- Two Groove Spacing Options
- 6" x 12" Sheets and 200 Foot Rolls Available

Holographic Diffraction Grating Film is used to break up white light into all the colors of the spectrum. It is an ideal choice for spectroscopy experiments since holographic gratings exhibit significantly sharper diffraction orders than their ruled counterparts by reducing the amount of stray light produced. This results in an increased ability to view absorption and emission lines with higher spatial frequency gratings (1000 lines/mm). Holographic Diffraction Grating Film comes in two different groove spacing options: 12,700 lines/inch (500 lines/mm) and 25,400 lines/inch (1000 lines/mm). By increasing the number of grooves per unit area, the angular dispersion of diffraction orders will be increased. Therefore, the 25,400 lines/inch grating should be used in applications that require the spectrum to be spread over a broader area, while the 12,700 lines/inch are effective when more diffraction orders are needed for viewing. Each variety of holographic grating is available in 6" x 12" sheets and 200-foot rolls. It is also available in 2" square cards, with a 1" square area of exposed grating. Rolled gratings are 6" wide with breaks every 12" in length.

**Note:** Groove orientation is linear and parallel to the shortest dimension.

**Handling Gratings:** Gratings require special handling, making them prone to fingerprints and aerosols. Gratings should only be handled by the edges. Before attempting to clean a grating, please [contact us](#).

## 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