Send this filled out form to [**info@inprentus.com**](mailto:info@inprentus.com) for more information

**Information for this form**

This form is meant as a place to capture and define all the specifications related to the diffraction grating you require. Inprentus will review the specifications and reply to you after we receive them. A dimensioned drawing of the diffraction grating and substrate will be helpful in understanding your needs.

# Grating Application: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (*laser, spectrometer, etc.)*

# Diffraction Grating Specifications

|  |  |  |  |
| --- | --- | --- | --- |
| **Substrate Specifications** |  | | ***Examples*** |
| Substrate Material |  | | *Silicon crystal, fused silica, Etc.* |
| Substrate Geometry |  | | *Planar – Cylindrical – Spherical – Toroidal* |
| Substrate Dimensions |  | | *150 mm x 40 mm x 40 mm* |
| Clear Aperture |  | | *120 mm x 20 mm (centered)* |
| Other |  | | |
| **Grating Specifications** |  | | |
| Grating Center Coordinates |  | | *(0,0)* |
| Groove Orientation |  | | *perpendicular to long side* |
| Blaze Angle |  | | *3.0 +/-0.2 deg* |
| Grating Size (ruled area) |  | | *120 mm x 20 mm (centered)* |
| Line Density |  | | *300 lpmm* |
| *For Variable line spacing only*  Groove Density (*w*)  = a0 + a1\**w* + a2\**w*2 + a3\**w*3 | *a0 (l/mm)* |  | *50* |
| *a1 (l/mm^2)* |  | *(101± 1.6) E-5, best effort* |
| *a2 (l/mm^3)* |  | *(0 ± 2) E-7, best effort* |
| Energy/Wavelength Range |  | | *\_\_\_\_\_\_\_to \_\_\_\_\_\_\_ eV* |
| Design Energy/Wavelength |  | | *\_\_\_\_\_\_ eV* |
| Other |  | | |
| **Coating Specifications** |  | | |
| Coating Area |  | | *150 mm x 28 mm;* |
| Ruling Coating Material | Sputtered Au over Cr sticking layer | | *Sputtered Au over 5 nm Cr* |
| Grating Over-Coating |  | | *Al, B4C, Pt, Ni Etc.* |
| Other |  | | |

Note: A dimensioned drawing of the diffraction grating will be helpful in reviewing these specifications.

DRAWING: