|  |  |  |
| --- | --- | --- |
| **AUTHOR(S)** | DATE | Document Change Notice, Release or Approval |
| J**. Richardson** | **3** **June** 2020 | v2 – for AS2 pickoff |

# Description

25.4 mm (1”) Ø pickoff mirror @ 1064 nm

# Material

Corning HPFS 7980 (high purity fused silica, UV grade)

Grade 0F or better

# Dimensions

**Diameter**: 25.4 mm +0.0/-0.1 mm

**Thickness** (edge): 6.35 mm ± 0.2 mm

**Wedge**: 2.0° ± 0.1°

Plano / Plano (|R| > 500 m)

# **Surface Roughness & Quality**

**Side 1:**

**Super-polished**

< 5 Å RMS over central 80% of diameter

10-5 scratch-dig

**Side 2:**

**Commercial polish**

< 10 Å RMS over central 80% of diameter

# **Surface Figure**

**Side 1:**

Flat < λ/10 PV at 632.8 nm over central 80% of diameter

**Side 2:**

Flat < λ/4 PV at 632.8 nm over central 80% of diameter

# **Coating**

Ion Beam Sputtered (IBS) coatings

Wavelength: **1064 nm**

Polarization: **p-polarization**

Angle of incidence: 45°– 48°

**Side 1:**

T = 10% ± 1%

**Side 2:**

AR coating

R < 0.2%

# **Serial numbers and marks**

Each optic shall be laser engraved on the barrel for in-vacuum use—**no pencil marks shall be present**

Each barrel shall be inscribed as follows:

* Label centered on the thickest location:

**E2000229-v2 SN0x**

* + - with “**x**” starting at **1**
* Arrow at the thinnest location pointing towards Side 1