Window 2 – NOT ITAR
Quantity 1
1. Material: Fused Silica - Corning 7980 0F grade (or equivalent)
2. Diameter: 355.6 mm + 0.0 mm/ -0.5
3. Thickness: 25.0 mm +/- 0.3 mm (low side of wedge)
4. Wedge: less than 1 min.
5. Transmitted wavefront error: < ¼ wave at 633 nm
6. Clear Aperture: >/= 325 mm
7. Surface quality within clear aperture shall be 60-40 IAW mil-prf-13830b as applied to scratches and
digs.
8. Chamfer edges 0.5 mm minimum face width, 1.5 mm maximum
9. Edge chip width not to exceed 0.5 mm intrusion of polished surface from chamfer edge.
Total length of edge chips not to exceed 5% of perimeter. All visible edge chips shall be stoned or polished smooth.
10. Fine grind all non-optical surfaces
11. Anti-reflection coat clear apertures of surfaces s1 and s2 as follows:
A. Wavelengths: 0.355, 0.532 and 1.064 microns
B. The coatings shall withstand exposure to the humidity, salt spray fog, moderate abrasion,
and adhesion tests of mil-prf-13830b in the sequence listed herein and shall conform to the
requirements of section c.3.4 (coating quality), c.3.4.1 (physical), c.3.4.3 (spatter and holes),
and c.3.4.4 (surface defects – scratch and dig).
C. Transmittance, environmental, and durability tests may be performed on a witness sample
not less than 1 inch in diameter and 0.040 inch thick of the same material and coated with the
deliverable hardware. The reflectance sample may be a like part which has been rejected for
reasons not affecting the coating.
D. Transmittance and reflectance traces and one witness sample to accompany the hardware
from each coating run.
E. The material used in the manufacture of these coatings shall not contain thorium or other
radioactive materials.
F. Average reflectance per surface < 1.5% at wavelengths specified for angles of incidence
between 0 and 20 degrees
G. Coating shall withstand cleaning with reagent grade ethanol, methanol, acetone, or distilled
water.
12. Each delivered part shall be accompanied with the following:

A. Spectral reflectance and transmittance curves showing compliance with note 11.
B. All witness samples used for verification of note 11 requirements.
C. Copies of test reports showing actual measured values verifying all dimensions and
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compliance with all drawing requirements for each part delivered.
D. Certification of material compliance
13. Temperature performance
A. Operational: all of the requirements specified herein shall be met over a temperature range
of –40 to +30 Degrees C
B. Storage: all of the requirements specified herein shall be met after exposure to temperatures within the Range of –80 to +71 degrees C