

**LASER DAMAGE THRESHOLD SPECIFICATION SHEET
AND CERTIFICATE OF COMPLIANCE**

DATE: June 28, 2018

CUSTOMER: Northrop Grumman Synoptics

P.O. NUMBER: 545894

ADDRESS: 1201 Continental Blvd.
Charlotte, NC 28273

PART ID: 19-124-1-FS

ATTN: Tri Tiet

LOT NUMBER: Not specified

TEST TYPE: Laser Damage Threshold

QUANTITY: 1

TEST LOG NUMBER: 59628

SUBSTRATE MATERIAL: Fused Silica

SAMPLE SIZE: ~

TEST PREP: None

COATING TYPE: Not specified

INCIDENCE ANGLE: 0°

TEST WAVELENGTH: 1064 nm

PRF: 10 Hz

POLARIZATION: Random

TEST BEAM PROFILE: TEM₀₀

PULSEWIDTH (FWHM): 7 ns

AXIAL MODES: Multiple

SPOT DIAMETER (1/e²): 545 μm

NUMBER OF SITES: 75

TEST METHOD: Least Fluence Failure

EXPOSURE DURATION: 200 shots/site

DAMAGE DEFINITION: Plasma, increased He-Ne scatter. Visible damage as observed with 150x Nomarski brightfield microscope.

COMMENTS: Laser damage measured as 72.00 J/cm², peak fluence. Part irradiated at 72.00 J/cm² with no damage in 10 sites. See page 2.

Spica Technologies certifies that this sample has been exposed to the conditions described above. All test and calibration data are maintained on file. All instrument calibration is traceable to NIST.

Test conducted by

A handwritten signature in black ink, appearing to be "W. J. ...", is written over a horizontal line.