

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

DATE: March 7, 2013

CUSTOMER: IOS Optics

ADDRESS: 3150 Molinaro Street  
Santa Clara, CA 95054

ATTN: Gener Gatmaitan

TEST TYPE: Laser Damage Threshold

TEST LOG NUMBER: 43794

SAMPLE SIZE: ~

COATING TYPE: HR

TEST WAVELENGTH: 1064 nm

POLARIZATION: Random

PULSEWIDTH (FWHM): 1 ns

SPOT DIAMETER ( $1/e^2$ ): 841  $\mu\text{m}$

TEST METHOD: Least Fluence Failure

P.O. Number: Q2261

PART NUMBER: 105-0002

RUN NUMBER: 02143C2-1

QUANTITY: 1

SUBSTRATE MATERIAL: BK-7

TEST PREP: None

INCIDENCE ANGLE: 45°

PRF: 50 Hz

TEST BEAM PROFILE: TEM<sub>00</sub>

AXIAL MODES: Multiple

NUMBER OF SITES: 50

SHOT/SITE: 300

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

COMMENTS: Laser damage threshold measured as 9.00 J/cm<sup>2</sup>, peak fluence. Part irradiated at 9.00 J/cm<sup>2</sup> with no damage in 10 sites. See data on page 2. Sample tested at 3 ns, irradiance scaled to 1 ns using "root  $\tau$ " method. Sample tested within 20 mm central diameter.

**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 "L. Gatmaitan", is written over a horizontal line.