



# **INSPECTION REPORT**

CPO # 39-S139373  
PN # SEMD-O-CA1 RevA

ISP Optics ORDER CO- 102120 PO- 31887.4 Part ID: CAF2-L-59.0-1  
TYPE: Lens MATERIAL: CaF2  
LOT Qty: 2 TESTED Qty: 1

Date 12-Jul-12  
LOT # 50-CF-17145

| N  | PARAMETER                                   | SPECIFICATIONS |                         |         | ACTUAL (MEASURED) DATA |       |
|----|---|----------------|-------------------------|---------|------------------------|-------|
|    |   | NOM            | Lower limit/Upper limit |         | 1                      | Notes |
| 1  | Diameter, mm                                | 59.000         | 58.975                  | 59.000  | 58.967                 |       |
| 2  | Cylindricity, inch                          |                |                         |         |                        |       |
| 3  | Center Thickness, mm                        | 17.200         | 17.150                  | 17.250  | 17.240                 |       |
| 4  | Full Thickness, inch                        |                |                         |         |                        |       |
| 5  | Radius S1, mm                               | cx 88.5740     | 88.5597                 | 88.5883 | 88.5742                |       |
| 6  | SAG S1, inch                                |                |                         |         |                        |       |
| 7  | Radius S2, mm                               | cc 77.8420     | 77.8312                 | 77.8528 | 77.8388                |       |
| 8  | SAG S2, inch                                |                |                         |         |                        |       |
| 9  | Chamfer S1/S2,mm                            | 0.50           | 0.00                    | 0.50    | 0.30/0.30              |       |
| 10 | Chamfer S1/S2 Leg, inch                     |                |                         |         |                        |       |
| 11 | Clear Aperture S1/S2, inch                  |                | 55.00/55.00             |         | 55.00/55.00            |       |
| 12 | TIR, mm                                     |                | 0.01                    |         | 0.0080                 |       |
| 13 | Circular Runout S1-OD, inch                 |                |                         |         |                        |       |
| 14 | Circular Runout S2-OD, inch                 |                |                         |         |                        |       |
| 15 | Circular Runout S2-Flat bevel S2, inch      |                |                         |         |                        |       |
| 16 | Wedge, min                                  |                |                         |         |                        |       |
| 17 | Flat Bevel Perpendicularity, mm             |                |                         |         |                        |       |
| 18 | Surface Quality S1, S/D                     |                | 60/40                   |         | 60/40                  |       |
| 19 | Surface Roughness S1 RMS, nm                |                | 2                       |         | 1.134                  |       |
| 20 | Flatness S1, fr./λ @ 633 nm                 |                |                         |         |                        |       |
| 21 | Power S1, fr./λ @ 633 nm                    |                |                         |         |                        |       |
| 22 | Irregularity S1, fr. @ 633 nm               |                | 0.5                     |         | 0.45                   |       |
| 23 | Surface Quality S2, S/D                     |                | 60/40                   |         | 60/40                  |       |
| 24 | Surface Roughness S2 RMS, nm                |                | 2                       |         | 1.402                  |       |
| 25 | Flatness S2, fr./λ @ 633 nm                 |                |                         |         |                        |       |
| 26 | Power S2, fr./λ @ 633 nm                    |                |                         |         |                        |       |
| 27 | Irregularity S2 (center zone), fr. @ 633 nm |                | 0.5                     |         | 0.47                   |       |
| 28 | Irregularity S2 (edge zone), fr. @ 633 nm   |                | 0.50                    |         | 0.35                   |       |
| 29 | Edge Chips out CA, mm                       |                |                         |         |                        |       |
| 30 | Edge Finish                                 |                |                         |         |                        |       |

QC Inspector Savastyuk, Zaytseva/R-12-Jul-2012