

**NOTES:**

1. SUBSTRATE: GRADE A FINE ANNEALED  
ZEONEX E48R
2. COATING:  
S1: NONE  
S2: NONE

3. EDGES: FINE GROUND

4. ASPHERIC SURFACE DESCRIBED BY:

$$Z_{ASPH}(Y) = \frac{(\frac{1}{RADIUS}) * Y^2}{1 + \sqrt{1 - (1+k) * (\frac{1}{RADIUS})^2 * Y^2}} + D * Y^2 + E * Y^4 + F * Y^6 + G * Y^8 + H * Y^{10} + J * Y^{12} + L * Y^{14}$$

6. SURFACE PROFILE CHANGE DUE TO DIFFRACTIVE PATTERN DEFINED BY:

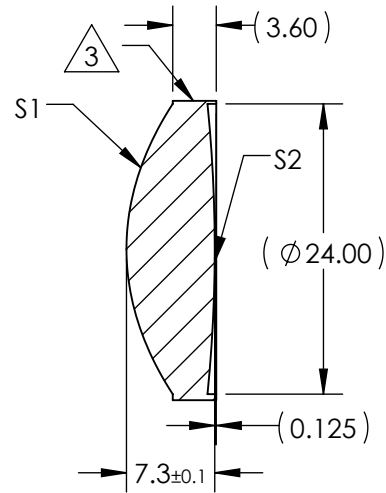
WHERE:

$$STEP \quad \_ \quad HEIGHT \quad = \quad \frac{\lambda}{nd - 1}$$

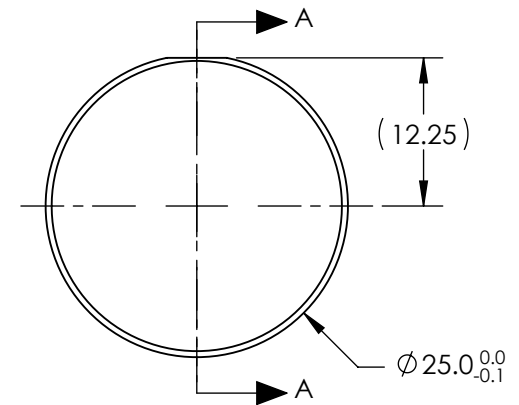
$$Z_{DIFF}(Y) = \frac{1}{(nd - 1)} * (Z_2 * Y^2 + Z_4 * Y^4) + (STEP \_ HEIGHT) * \left[ INT \left( \frac{1}{\lambda} * (Z_2 * Y^2 + Z_4 * Y^4) \right) \right]$$

**FOR INFORMATION ONLY:  
DO NOT MANUFACTURE  
PARTS TO THIS DRAWING**


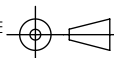
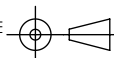
| COEFFICIENT TABLE |                |
|-------------------|----------------|
| COEFFICIENT       | S1             |
| $\lambda$         | 0.587 MICRONS  |
| $Z_2$             | -9.0934891E-4  |
| $Z_4$             | -2.9217142E-7  |
| $k$               | -0.52          |
| $D$               | 0              |
| $E$               | -4.5472262E-6  |
| $F$               | -1.0144672E-8  |
| $G$               | -1.5372192E-11 |
| $H$               | 0              |
| $J$               | 0              |
| $L$               | 0              |



SECTION A-A



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE DIMENSIONS ARE FOR REFERENCE ONLY

|                 |                      |                      |   |       |  |   |  |
|-----------------|----------------------|----------------------|---|-------|--|---|--|
| REV. A          | S1                   | S2                   | EFL<br>(@ 587.6nm)  | 30    |  Edmund Optics® |   |  |
| SHAPE           | CONVEX               | CONVEX               | BFL<br>(@ 587.6nm)  | 25.82 |  |   |  |
| RADIUS          | 19.2                 | 120.0                |  |       | TITLE  | 25mm DIA. X 30mm FL, UNCOATED, HYBRID ASPHERE |  |
| SURFACE QUALITY | 60 - 40              | 60 - 40              |   |       |  |   |  |
| CLEAR APERTURE  | Ø 23.0               | Ø 23.0               |  |       | DWG NO   | 65993   |  |
| BEVEL MAX       | PROTECTIVE AS NEEDED | PROTECTIVE AS NEEDED |   |       |  |   |  |
|                 |                      |                      | ALL DIMS IN   | mm    |  | SHEET<br>1 OF 1                               |  |