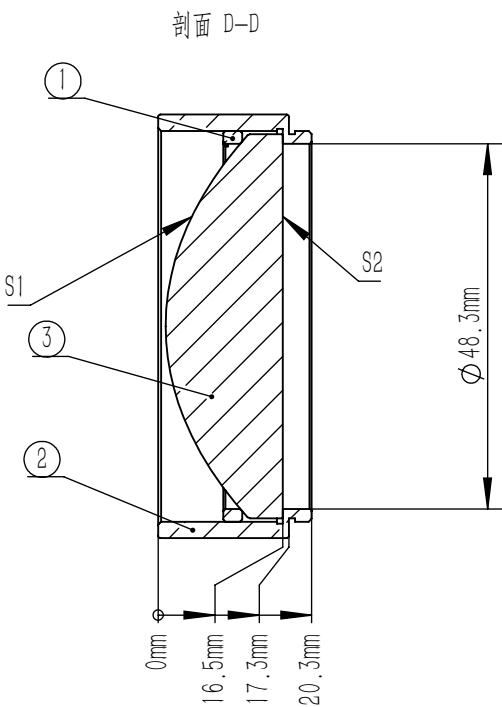
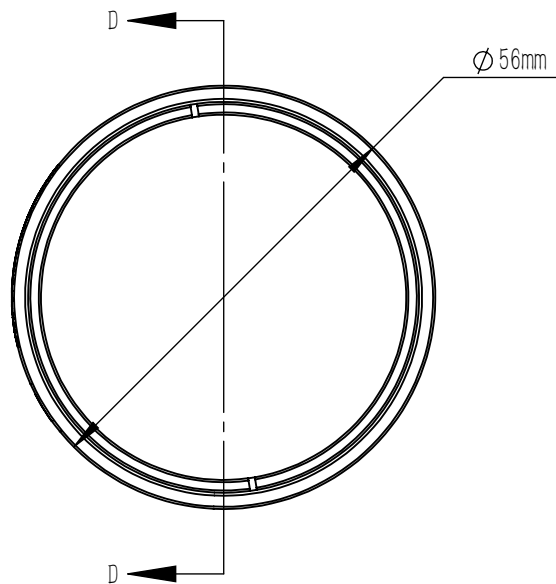


| ASPHERIC COEFFICIENTS | R | K | A4 | A6 | A8 | A10 | A12 | A14 | A16 |
|-----------------------|--------|--------|-----------|------------|------------|------------|-----------|-----------|------------|
| S1 | 31.075 | -0.744 | 4.367e-07 | -2.271e-10 | -1.704e-13 | -3.681e-17 | 8.944e-21 | 1.850e-23 | -6.270e-27 |
| S2 | ∞ | - | - | - | - | - | | | |

| | Part Description | Material |
|---|------------------|---------------------------------|
| ① | SM2R | ANODIZED ALUMINUM |
| ② | SM2-16.5A | ANODIZED ALUMINUM |
| ③ | AC7807 | S-LAH64 or Equivalent Materials |

ASPHERIC LENS EQUATION

$$Z = \frac{Y^2}{R(1 + \sqrt{1 - (1 + K)Y^2 / R^2})} + A_4Y^4 + A_6Y^6 + A_8Y^8 + A_{10}Y^{10} + A_{12}Y^{12} + A_{14}Y^{14} + A_{16}Y^{16}$$



NOTES

- DESIGN WAVELENGTH: 780.0 nm
- NUMERICAL APERTURE: 0.50
- FOCAL LENGTH: 40.0 mm $\pm 1\%$
- BACK FOCAL LENGTH(REF): 31.3 mm
- CLEAR APERTURE: $>90\%$ CA
- DIAMETER TOLERANCE: $+0.0/-0.1$ mm
- THICKNESS TOLERANCE: ± 0.1 mm
- CHAMFER: 0.2 mm, 45°
- WAVEFRONT ERROR(RMS): $< 0.5 \mu\text{m}$
- SURFACE POWER(S1): $\pm 7.5 \mu\text{m}$
- SURFACE IRREGULARITY(S1): < 3 FRINGES
- SURFACE FLATNESS(S2): $\lambda/4@633$ nm
- SURFACE QUALITY(S1, S2): 60/40 (S/D)
- CENTRATION: < 3 arcmin
- AR COATING(S1, S2): UNCOATED

| | | | | | | |
|--|--------|--------------|---------------|---------|-------|-----|
| DRAWING PROJECTION | | | LBTEK | | | |
| NAME | DATE | MAC7807 | | | | |
| DRAWN | ZLIN | NOV./15th/25 | ASPHERIC LENS | | | |
| APPROVAL | WCHENG | NOV./15th/25 | MATERIAL | WEIGHT | SCALE | REV |
| FOR INFORMATION ONLY NOT FOR MANUFACTURING PURPOSES | | | S-LAH64 | 32.64 g | 1:1 | A |