

## 8A003 LENS SPECIFICATION

| DMD Specifications       |                                         |                                                                                                                           |
|--------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1                        | DMD type                                | 0.47" 1080P 1920x1080                                                                                                     |
| 2                        | Pixel size                              | 5.4um                                                                                                                     |
| 3                        | Cover glass material, thickness         | B1063(Nd=1.50998 @587.56nm), 1.1 ± 0.05 mm                                                                                |
| 4                        | Gap between cover glass & active area   | 0.303+/-0.05 mm                                                                                                           |
| Lens Specifications      |                                         |                                                                                                                           |
| 5                        | Offset                                  | Max. 2.916 (100%)                                                                                                         |
| 6                        | Image circle                            | Max. 15.606 mm                                                                                                            |
| 7                        | Throw Ratio                             | 0.495 (90" @1.0m)                                                                                                         |
| 8                        | Zoom Ratio                              | Fix                                                                                                                       |
| 9                        | Effective focal length                  | 5.36 mm                                                                                                                   |
| 10                       | Working F/#                             | 1.75                                                                                                                      |
| 11                       | Exit Pupil Position                     | -501 mm                                                                                                                   |
| 12                       | Focus Range                             | 60" ~ 140"                                                                                                                |
| 13                       | Back focal length<br>(available for 4k) | 3.5mm(Air)+2.0mm(Actuator,B270)+2.2(Air)<br>+13.2mm(TIR,H-ZBAF52)+0.697mm(Air)+<br>1.1mm(Cover glass, B1063)+0.303mm(Air) |
| Design Performance (90") |                                         |                                                                                                                           |
| 14                       | Wavelength weighting                    | 450nm : 550nm : 630nm = 1 : 2 : 2                                                                                         |
| 15                       | MTF @ 93lp/mm                           | W 71.9%, R 76.1% , G 74.0% , B 63.9%                                                                                      |
| 16                       | Relative Illumination                   | 60.0%                                                                                                                     |
| 17                       | TV Distortion                           | < 0.50%                                                                                                                   |
| 18                       | Lateral color                           | R/G < 0.37pixel , G/B < 0.24pixel , R/B < 0.34pixel                                                                       |

2D outline

