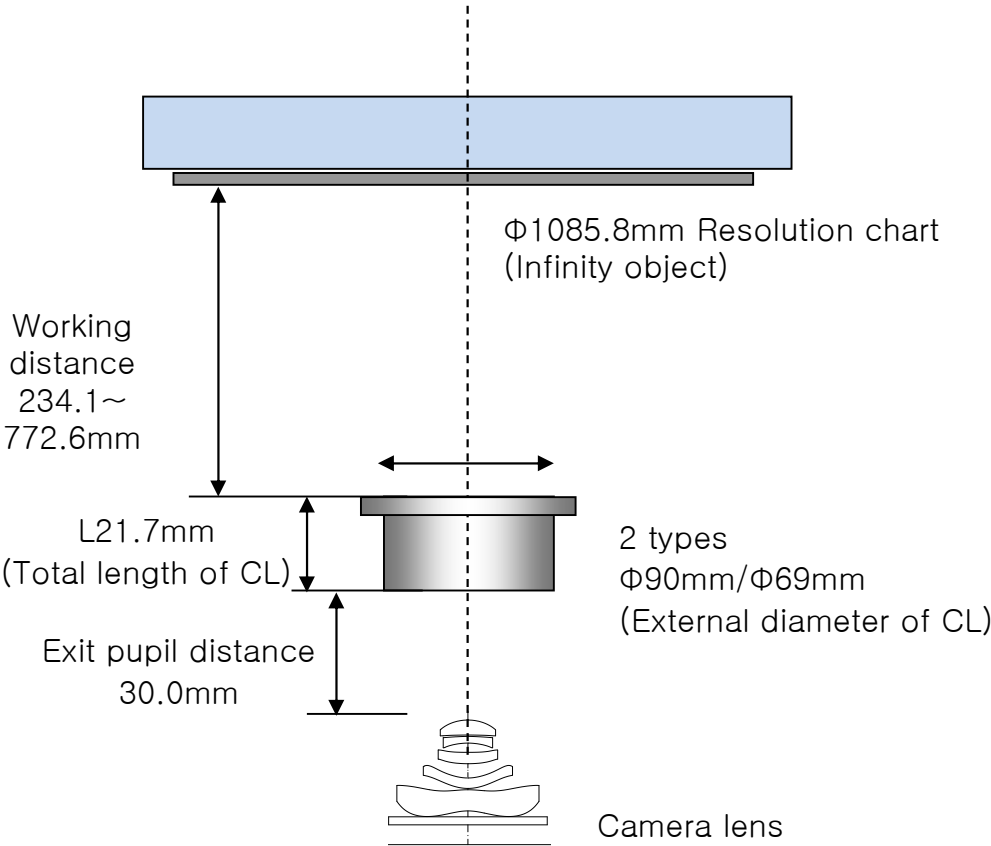


CL-730 Collimating Lens Spec.

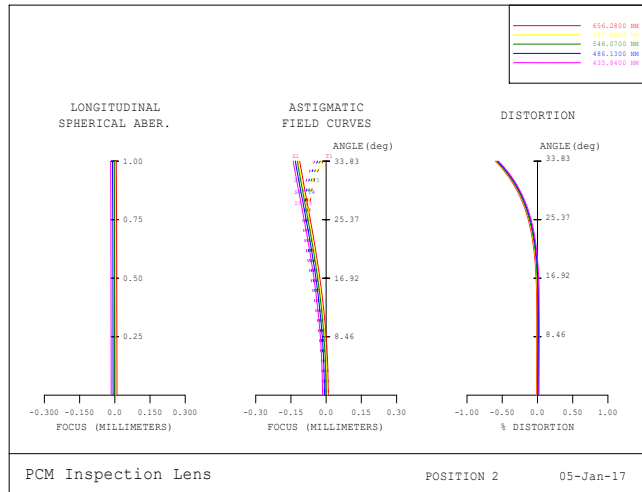
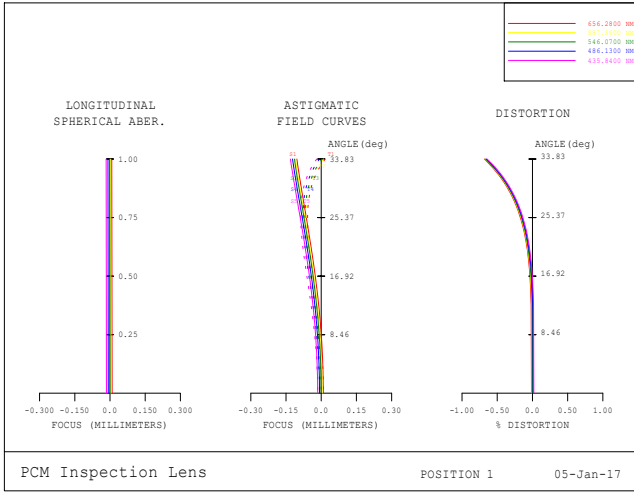
2020-06-17
OneStone

Model name	CL-730 (Designed by OneStone)
Characteristic of CL-730	Suitable for testing the camera lens with long EFL.
EFL	799.3mm
Inspectable FOV of CCM	68°
Ass'y Size (2 types)	Φ90mm X L21.7mm, 0.2kg Φ69mm X L21.7mm, 0.18kg
Exit Pupil Size	Φ5.0mm
Exit Pupil Position	30.0mm (Distance from camera lens to CL)
Working Distance (from CL 1st Lens R1 surface to chart)	772.6mm at Object Distance Infinity Chart Size : Φ1085.8mm

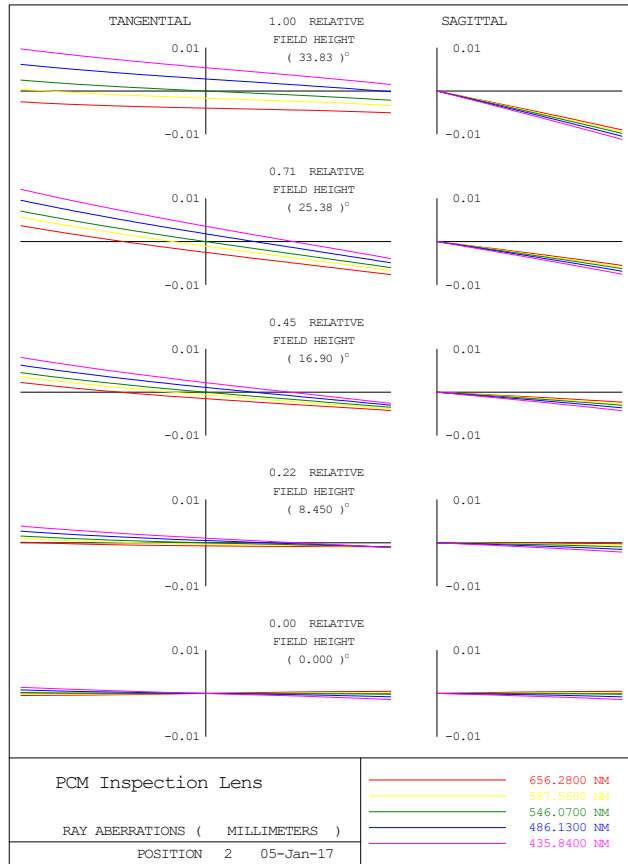
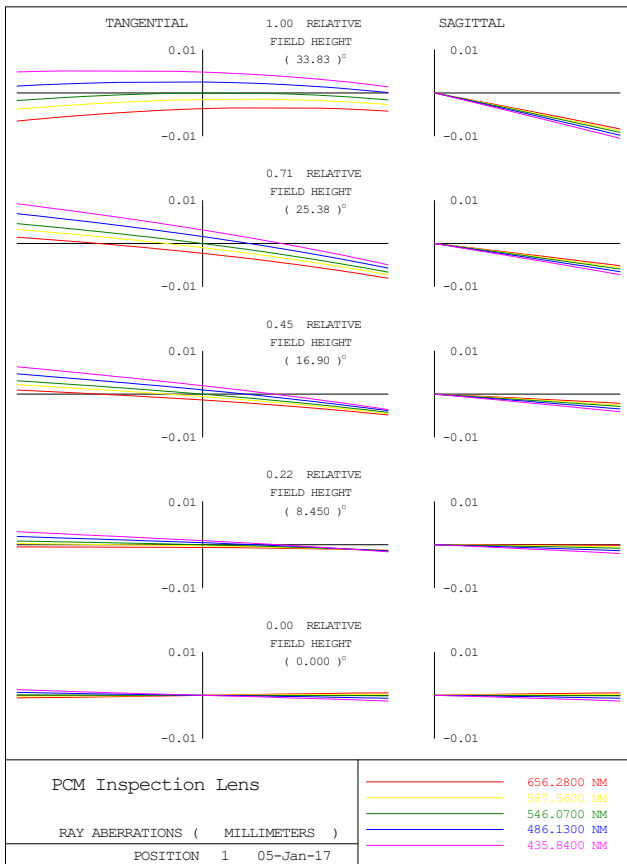


Optical performance of CL-730 Lens (10m, 2m at 68°)

Aberration Scale : $\pm 0.3 \pm 0.3 \pm 1.5\%$



Aberration Scale : ± 0.01



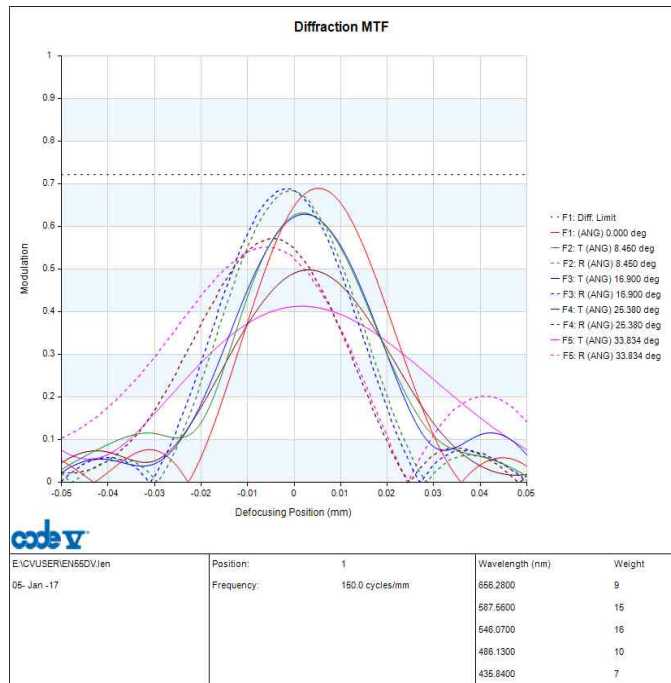
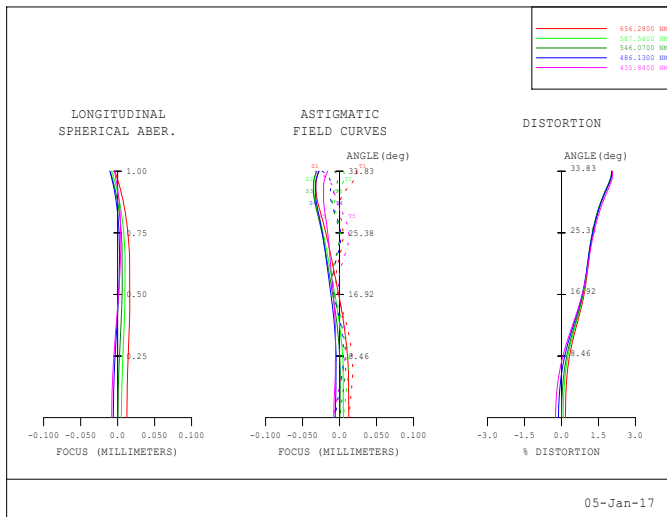
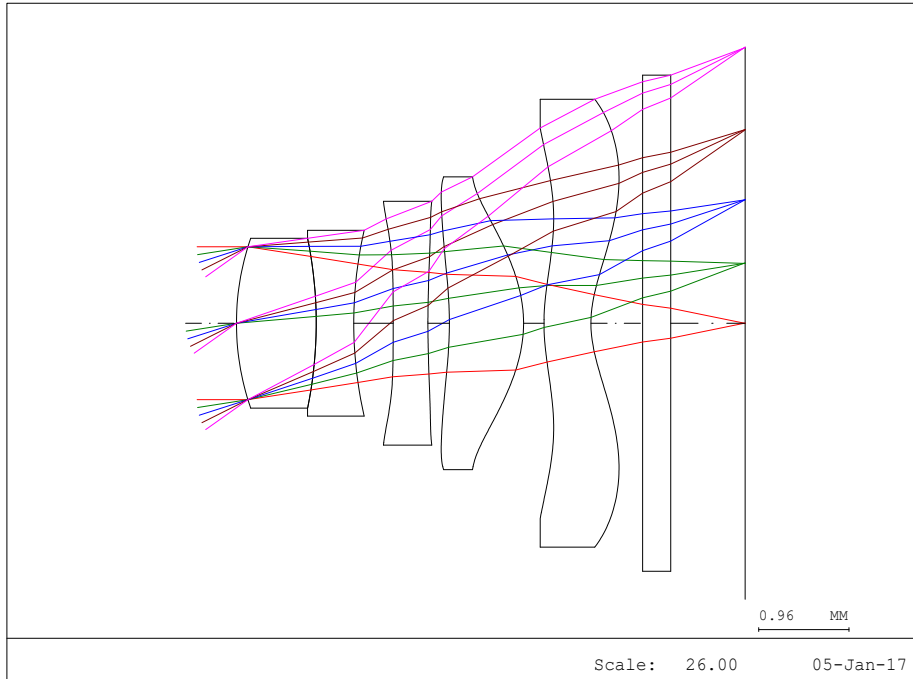
MTF Analysis for FOV 68° Lens of A company

e_{fl} = 4.06mm

F_{no} = 2.64

Object Distance 10m, Through Focus MTF(150lp/mm)

Fields = 0.0F, 0.22F, 0.45F, 0.7F, 1.0F



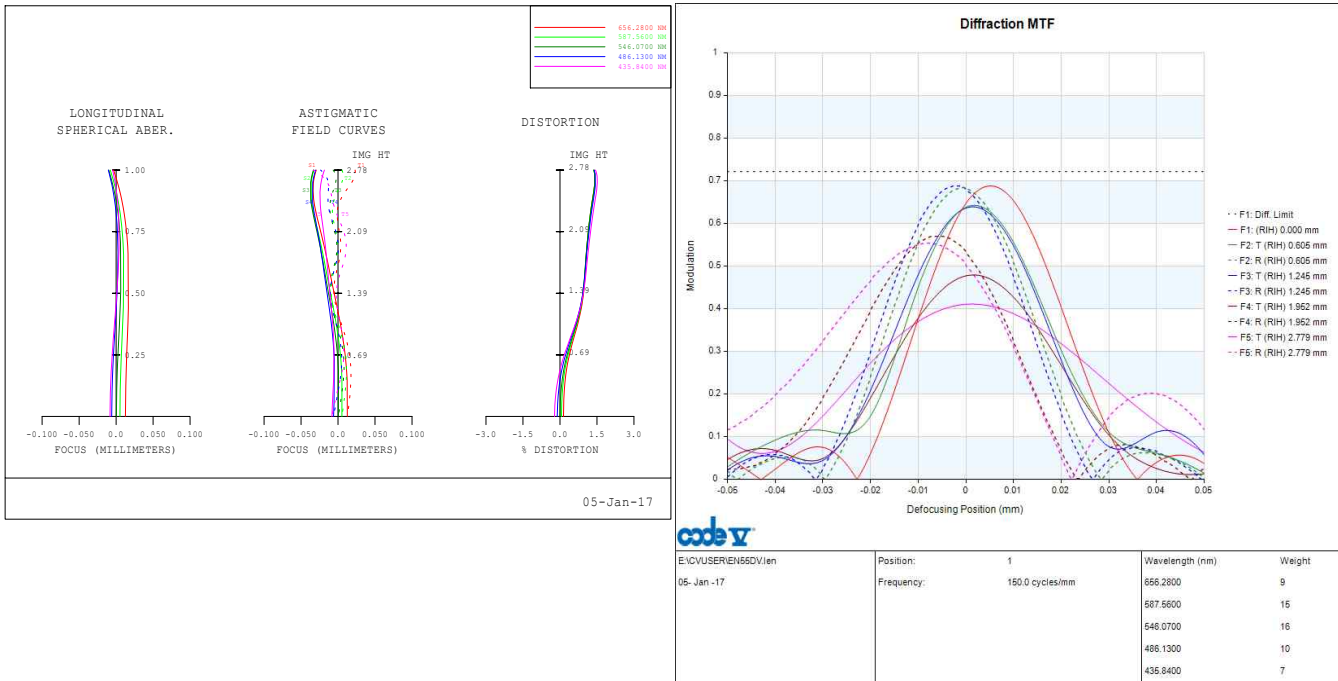
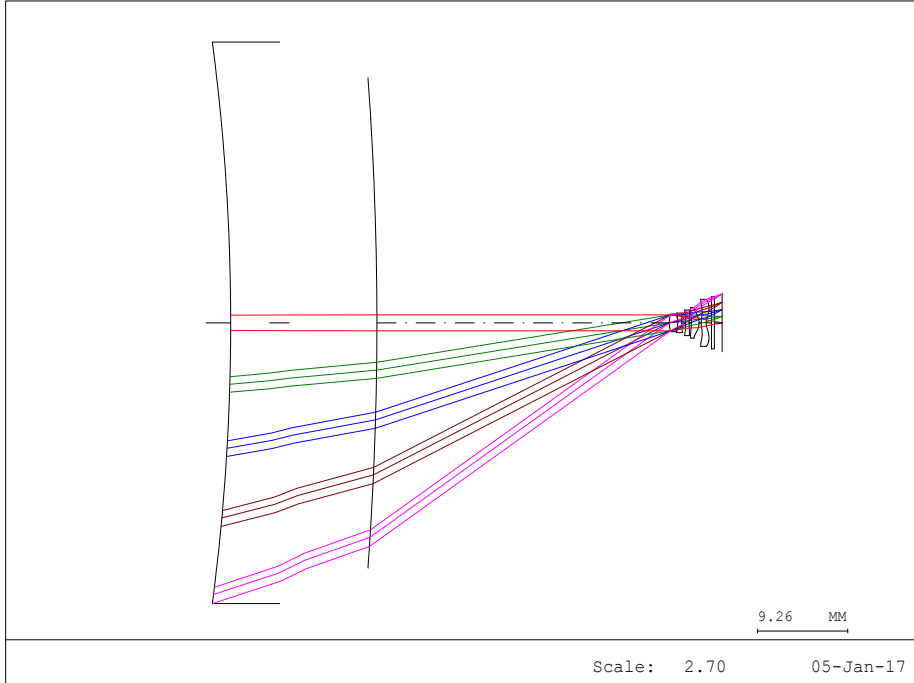
MTF Analysis for (CL-730 + FOV 68° Lens of A company)

efl (of synthesized)= 0.5163mm

Fno = 2.085

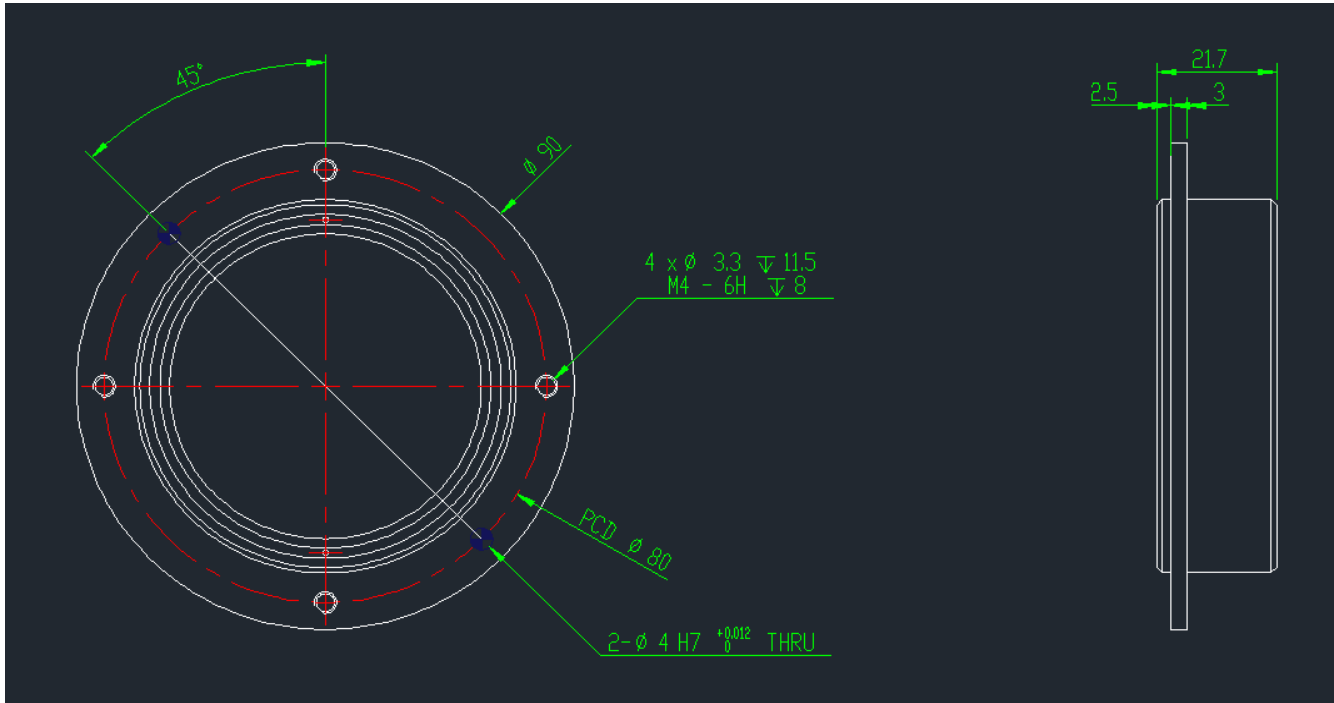
Object Distance 10m, Through Focus MTF(150lp/mm)

Fields = 0.0F, 0.22F, 0.45F, 0.7F, 1.0F

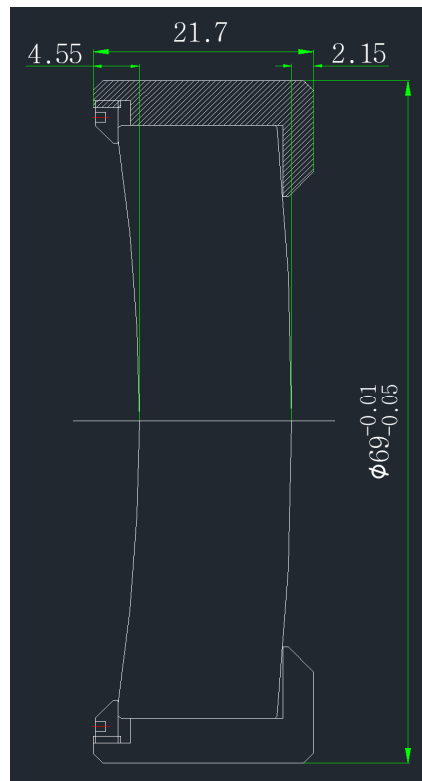


CL Drawings (2 types)

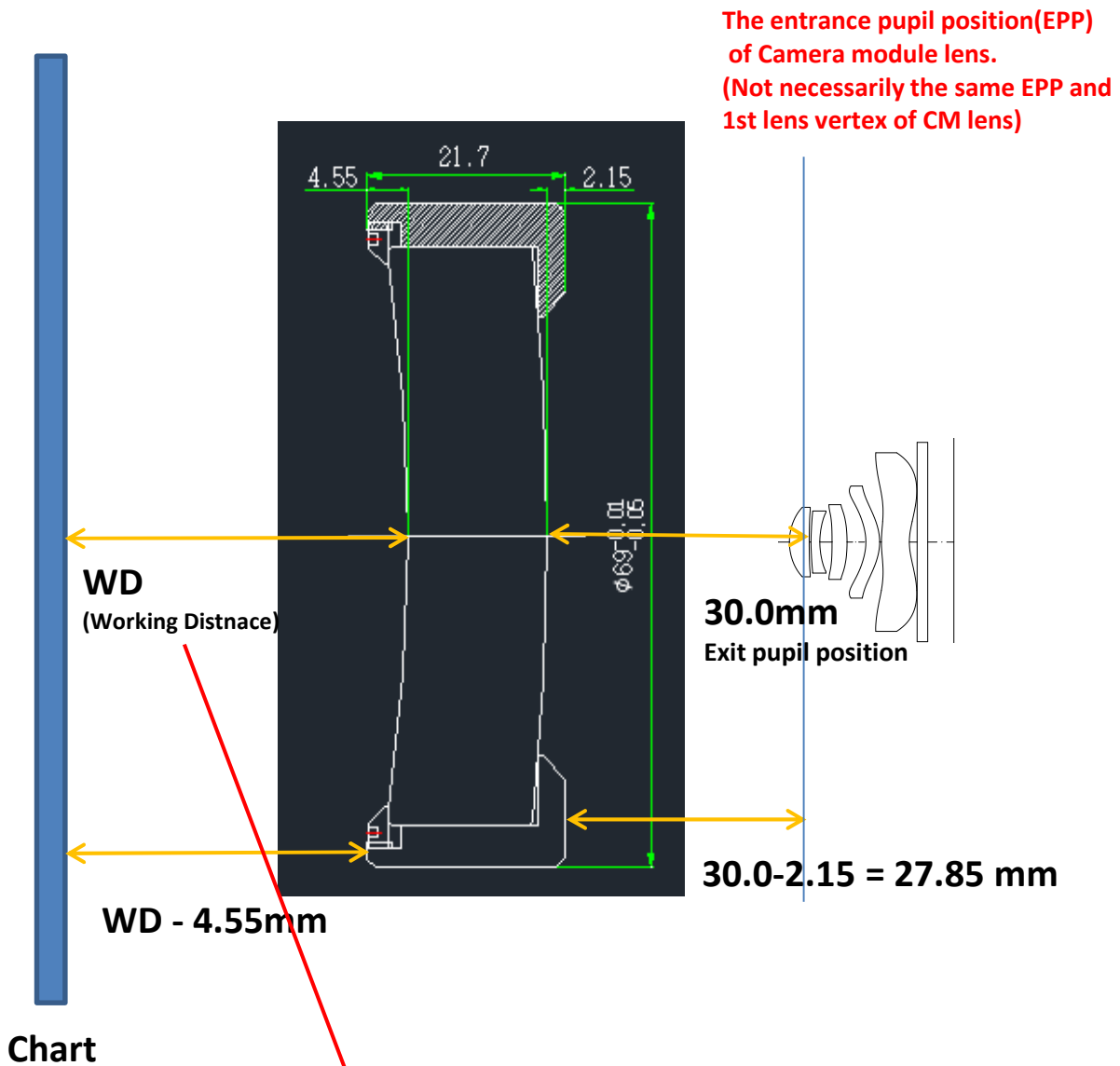
1) $\Phi 90\text{mm}$ X L21.7mm



2) $\Phi 69\text{mm}$ X L21.7mm



How to set Collimator Lens



The chart size of CL-730 (Whole Sub Lens is available)

04-Jan-2017

OneStone

Object Distance(mm) : Real shooting distance with camera.

Working Distance(mm) : Distance from 1st lens R1 vertex of CL to chart.

** This table is based on the FOV of camera lens.

The FOV of camera lens : 68.00

Object Distance (Object~PCM)	Sub Lens (recomanded)	Working Distance (Chart - CL vertex)	Chart Size(Dia)
1.00e+100	0.00D	772.55	1085.8
5.00e+004	0.00D	759.97	1068.9
4.00e+004	0.00D	756.89	1064.8
2.00e+004	0.00D	741.81	1044.6

The chart size of CL-730 (Whole Sub Lens is available)

04-Jan-2017

OneStone

Object Distance(mm) : Real shooting distance with camera.

Working Distance(mm) : Distance from 1st lens R1 vertex of CL to chart.

** This table is based on the FOV of camera lens.

The FOV of camera lens : 68.00

Object Distance (Object~PCM)	Sub Lens (recomanded)	Working Distance (Chart~ CL vertex)	Chart Size(Dia)
1.00e+100	0.00D	772.55	1085.8
5.00e+004	0.00D	759.97	1068.9
4.00e+004	0.00D	756.89	1064.8
2.00e+004	0.00D	741.81	1044.6
1.00e+004	0.00D	713.32	1006.4
8.00e+003	0.00D	699.83	988.3
5.00e+003	0.00D	662.13	937.8
4.50e+003	0.00D	651.69	923.8
4.00e+003	0.00D	639.07	906.9
3.50e+003	0.00D	623.50	886.0
3.00e+003	0.00D	603.82	859.6
2.50e+003	0.00D	578.15	825.2
2.00e+003	0.00D	543.27	778.4
1.90e+003	0.00D	534.73	767.0
1.80e+003	0.00D	525.54	754.7
1.70e+003	0.00D	515.60	741.3
1.60e+003	0.00D	504.84	726.9
1.50e+003	0.00D	493.13	711.2
1.40e+003	0.00D	480.35	694.1
1.30e+003	0.00D	466.35	675.3
1.20e+003	0.00D	450.94	654.6
1.10e+003	0.00D	433.89	631.8
1.00e+003	0.00D	414.94	606.4
9.00e+002	0.00D	393.73	578.0
8.00e+002	0.00D	369.86	546.0
7.00e+002	0.00D	342.77	509.6
6.50e+002	0.00D	327.82	489.6
6.00e+002	0.00D	311.78	468.1
5.65e+002	0.00D	299.85	452.1
5.00e+002	0.00D	275.97	420.1
4.50e+002	0.00D	255.89	393.2
4.00e+002	0.00D	234.12	364.0

Lens Pictures

