

MY23F Specification

MY23F/SY23F lens specifications

Focal length	2.3 mm
Image circle	Ø9.0mm
Resolution	5+ megapixel (> 200 lp/mm center, > 125 lp/mm 80% Field)
F/#	F/2.2 Fixed aperture
Focus Range	0.1m to infinity
IR Correction	Day/Night 430nm to 940nm
Lens length	60.84mm - 63.34mm depending on focus position
Back focal length	8.1mm (in air)
CRA	< 18°
Distortion	< 0.5%
Relative illumination	>23% at Ø9.0mm
Lens transmission	>80%
Weight	83 grams
Operating Temperature range	-20°C to 70°C

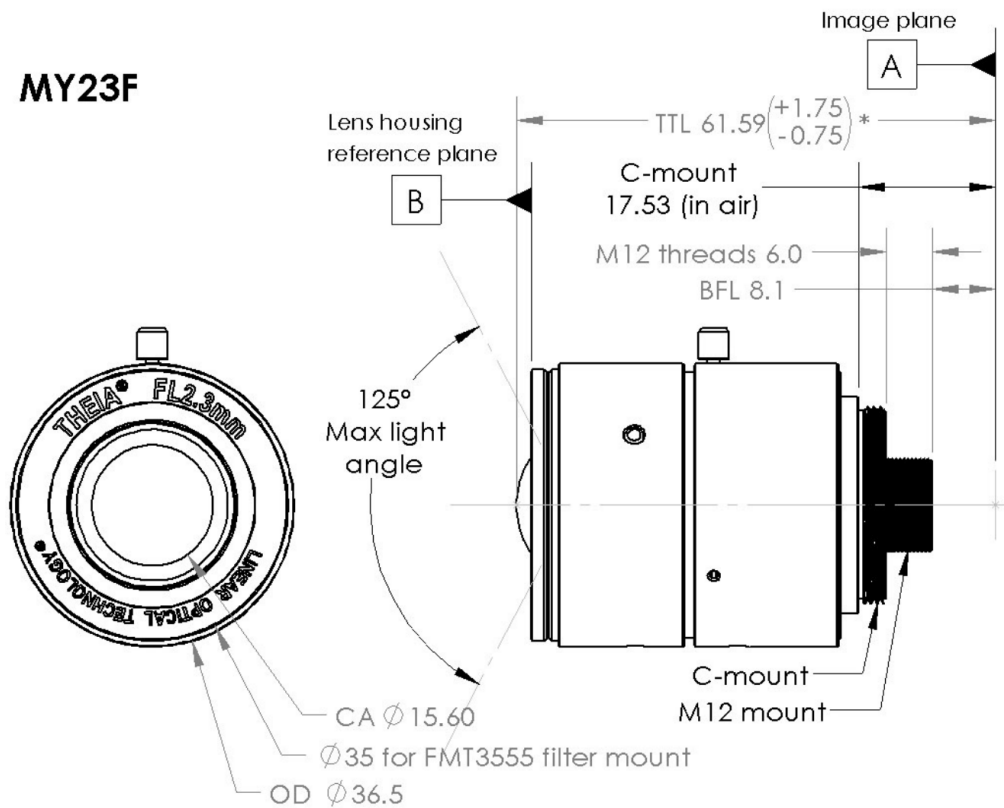
Field of view for sensor sizes

Sensor size	1/2.7"	1/2.5"	1/2.3"	1/1.8"
Horizontal	97°	102°	110°	116°
Vertical	80°	86°	84°	95°
Diagonal	109°	114°	119°	126°

MY23F Mechanical

Lens drawing

Note: MY23F has both C-mount and M12 mount threads

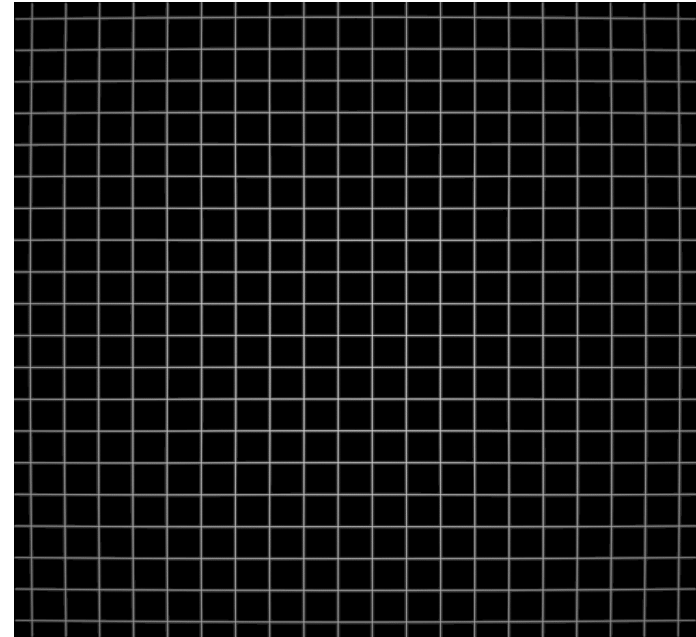
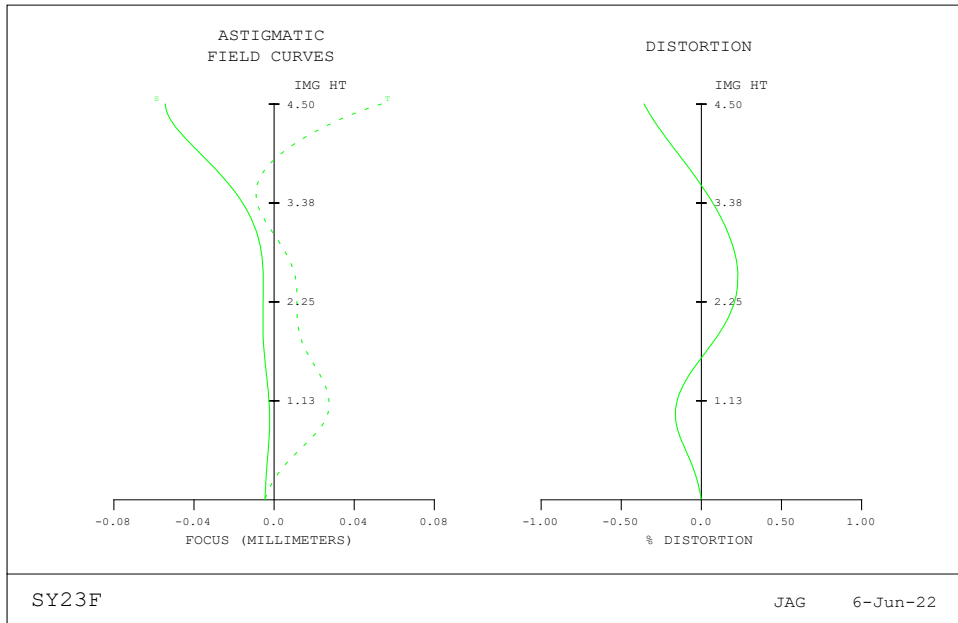


*Depending on focus distance, infinite focus shown BFL changes by the same amount

230105 MP

MY23F Distortion

Max Distortion



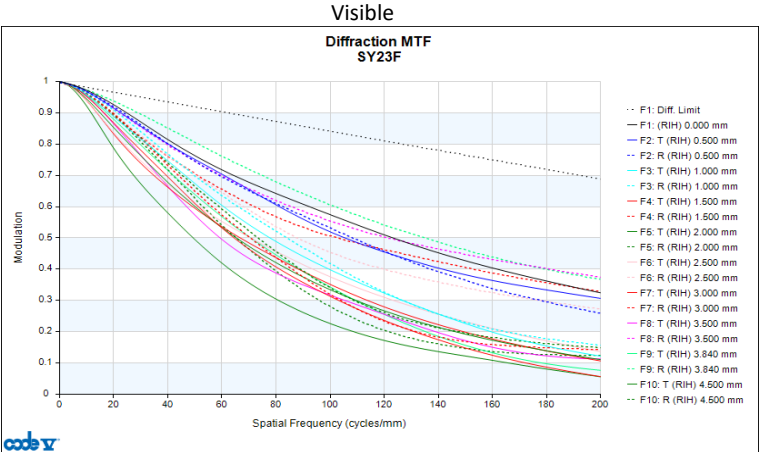
RELATIVE Image
FIELD HEIGHT DISTORTION

0	0	0
0.1	0.45	-0.0702
0.2	0.9	-0.15999
0.3	1.35	-0.09939
0.4	1.8	0.07585
0.5	2.25	0.20662
0.6	2.7	0.22043
0.7	3.15	0.13845
0.8	3.6	-0.00925
0.9	4.05	-0.19313
1	4.5	-0.35718
	4.6	-0.38301

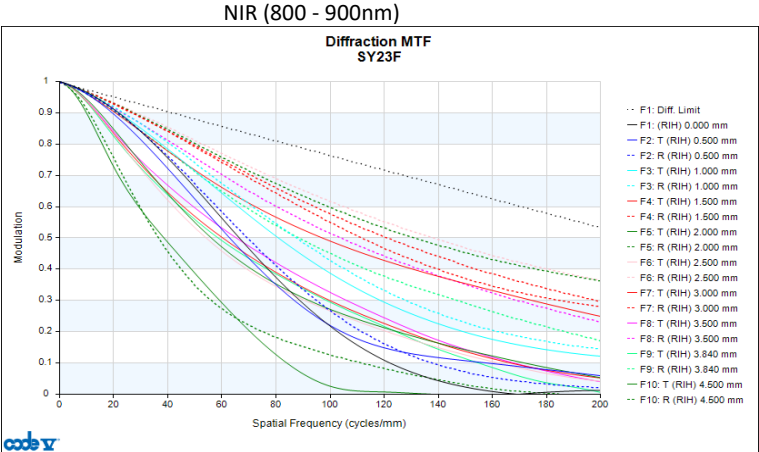
4.6mm is maximum image height

MY23F Resolution (MTF)

2.3mm



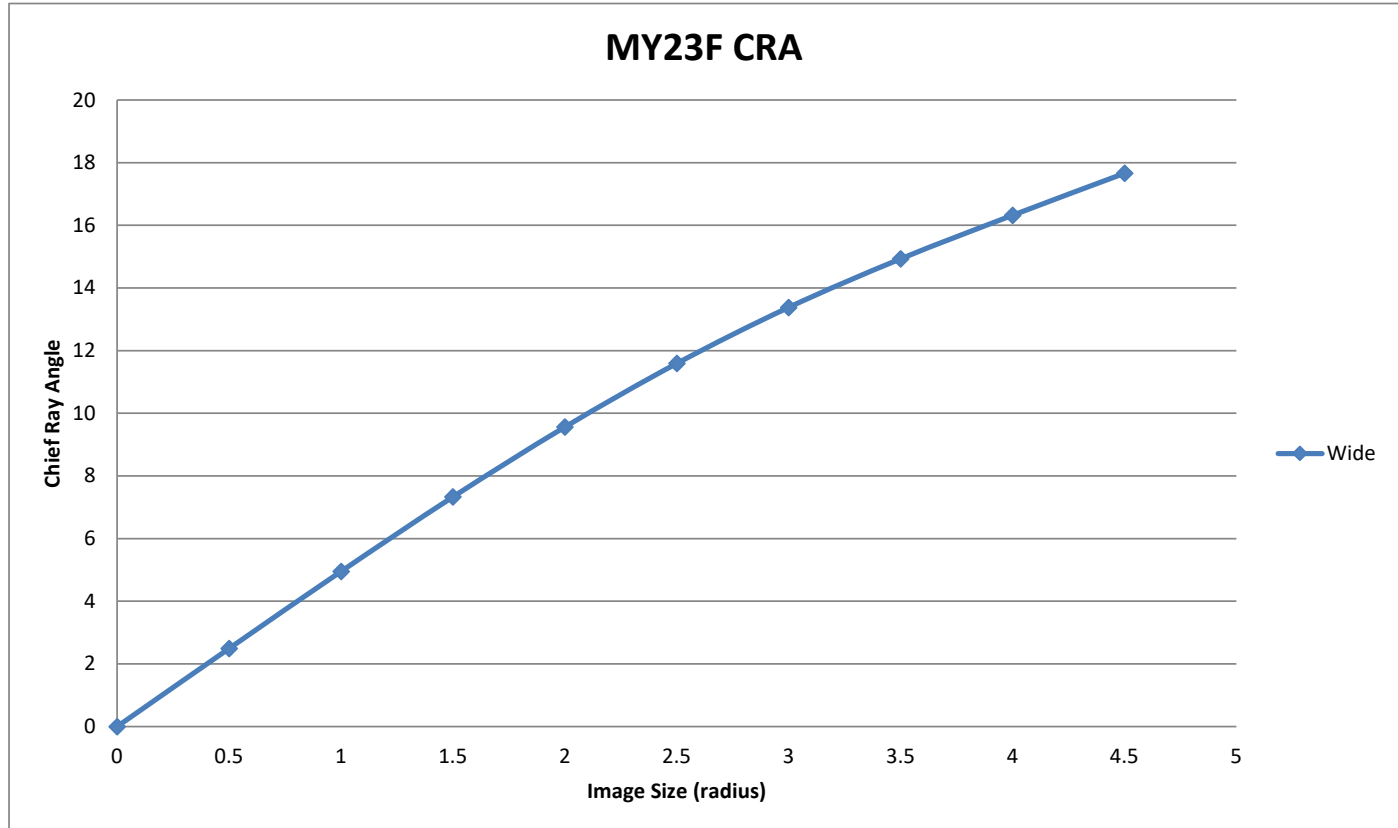
2.3mm



MY23F Cheif Ray Angle

MY23F Chief Ray Angle (CRA)

Image Size	Wide
0	0
0.5	2.49
1	4.95
1.5	7.33
2	9.56
2.5	11.59
3	13.38
3.5	14.93
4	16.32
4.5	17.66



MY23F

Entrance Pupil and BFL

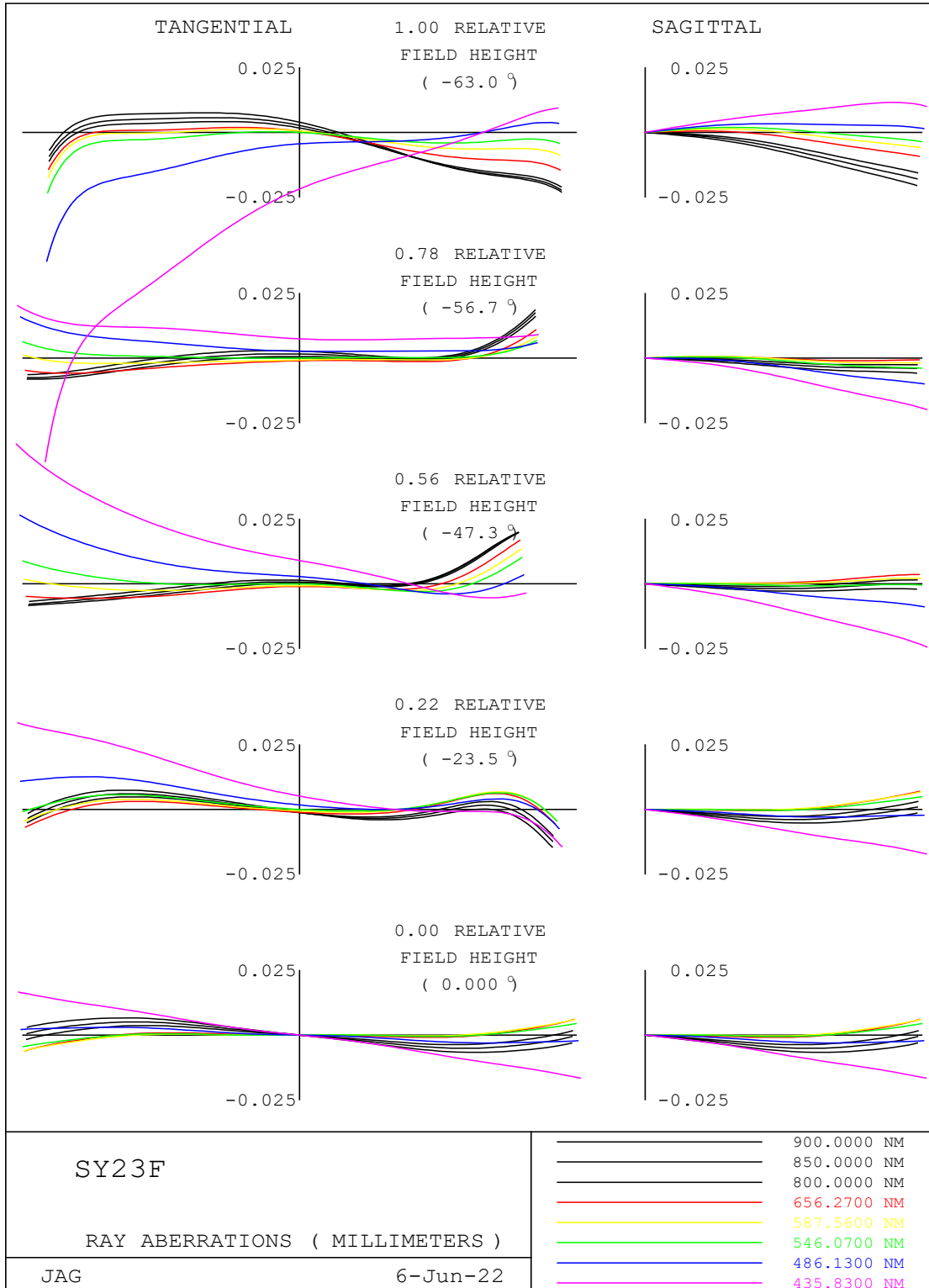
Entrance Pupil Position (mm measured from front lens vertex)

Focal length	<u>Infinity</u>	<u>2m</u>	<u>1m</u>	<u>0.5m</u>	<u>0.1m</u>
Pupil Position (mm)	4.430	4.430	4.430	4.430	4.430

Back Focal Length (mm distance between rear lens element vertex and sensor plane in air)

<u>Infinity</u>	<u>2m</u>	<u>1m</u>	<u>0.5m</u>	<u>0.1m</u>
10.115	10.120	10.124	10.133	10.203

MY23F Rays



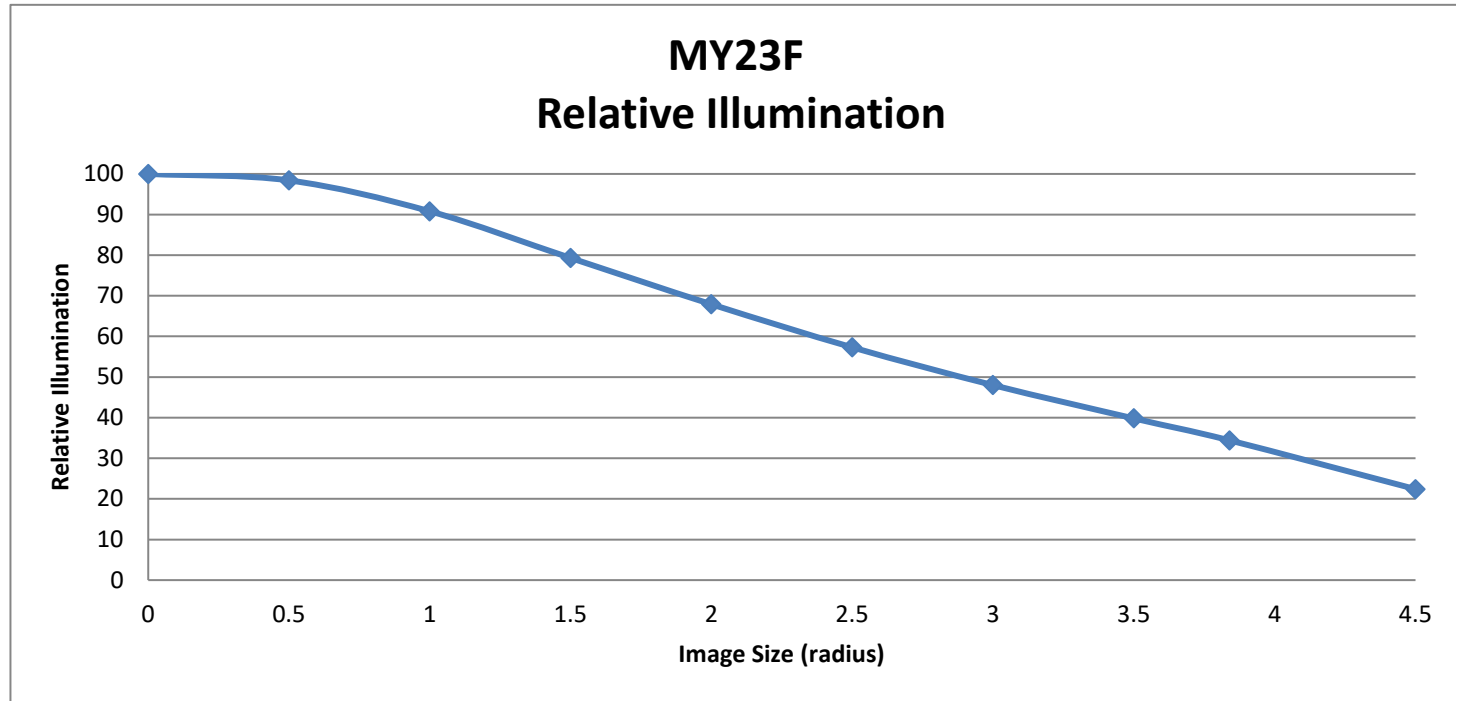
MY23F Relative Illumination

F number 2.2

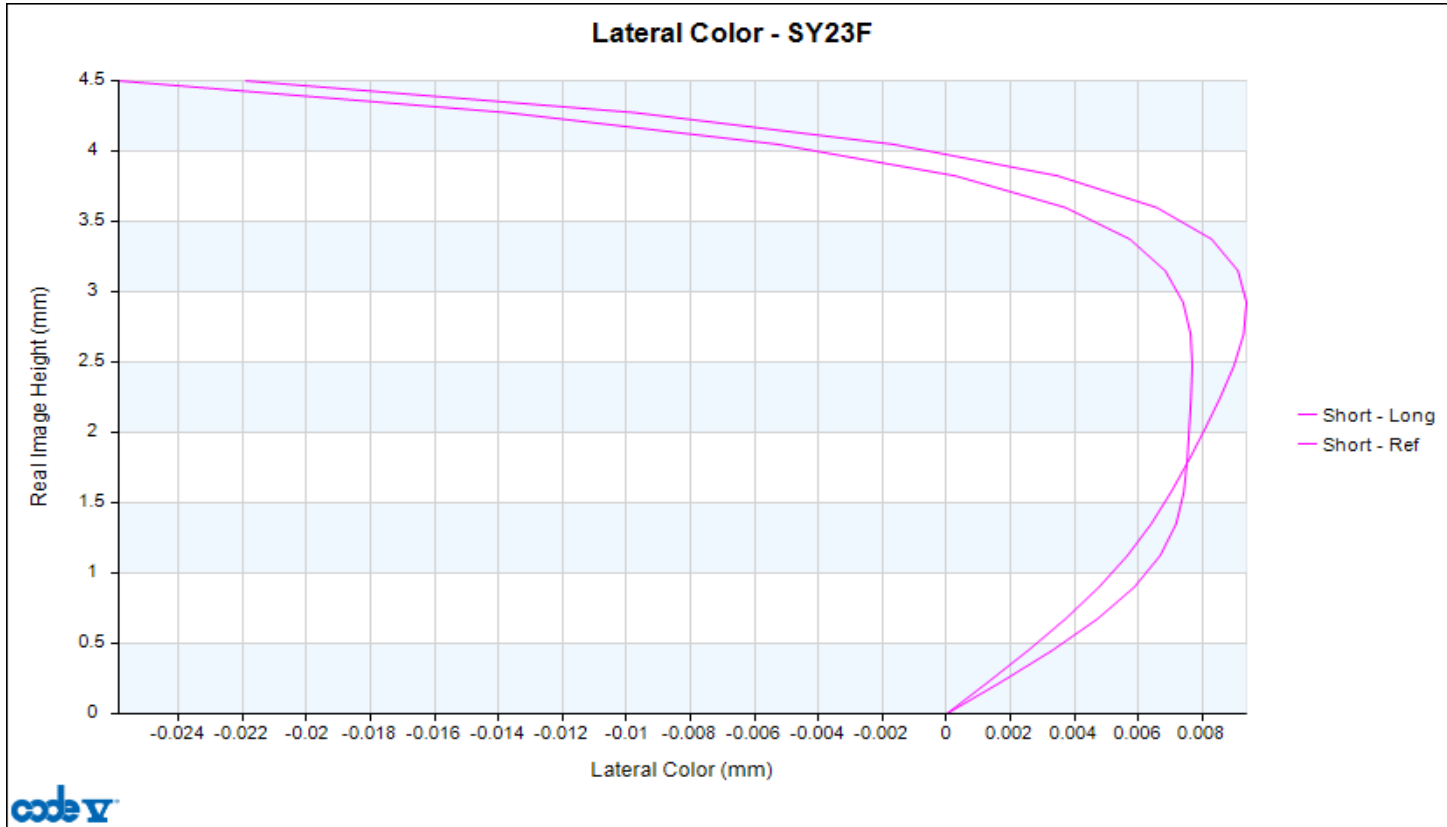
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MY23F Relative Illumination

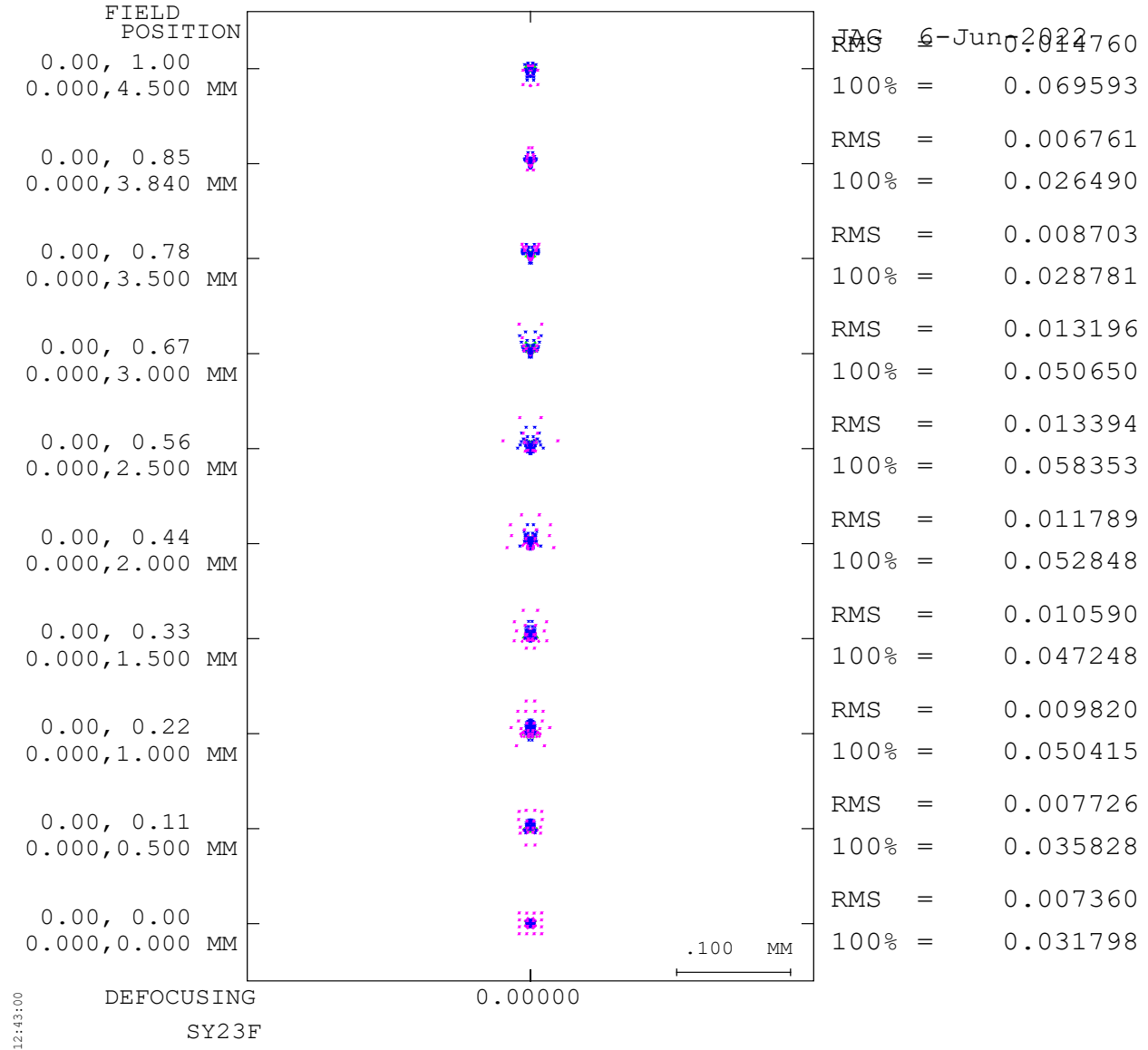
Image Size	Wide
0	100
0.5	98.4
1	90.8
1.5	79.3
2	67.9
2.5	57.3
3	48
3.5	39.8
3.84	34.4
4.5	22.4



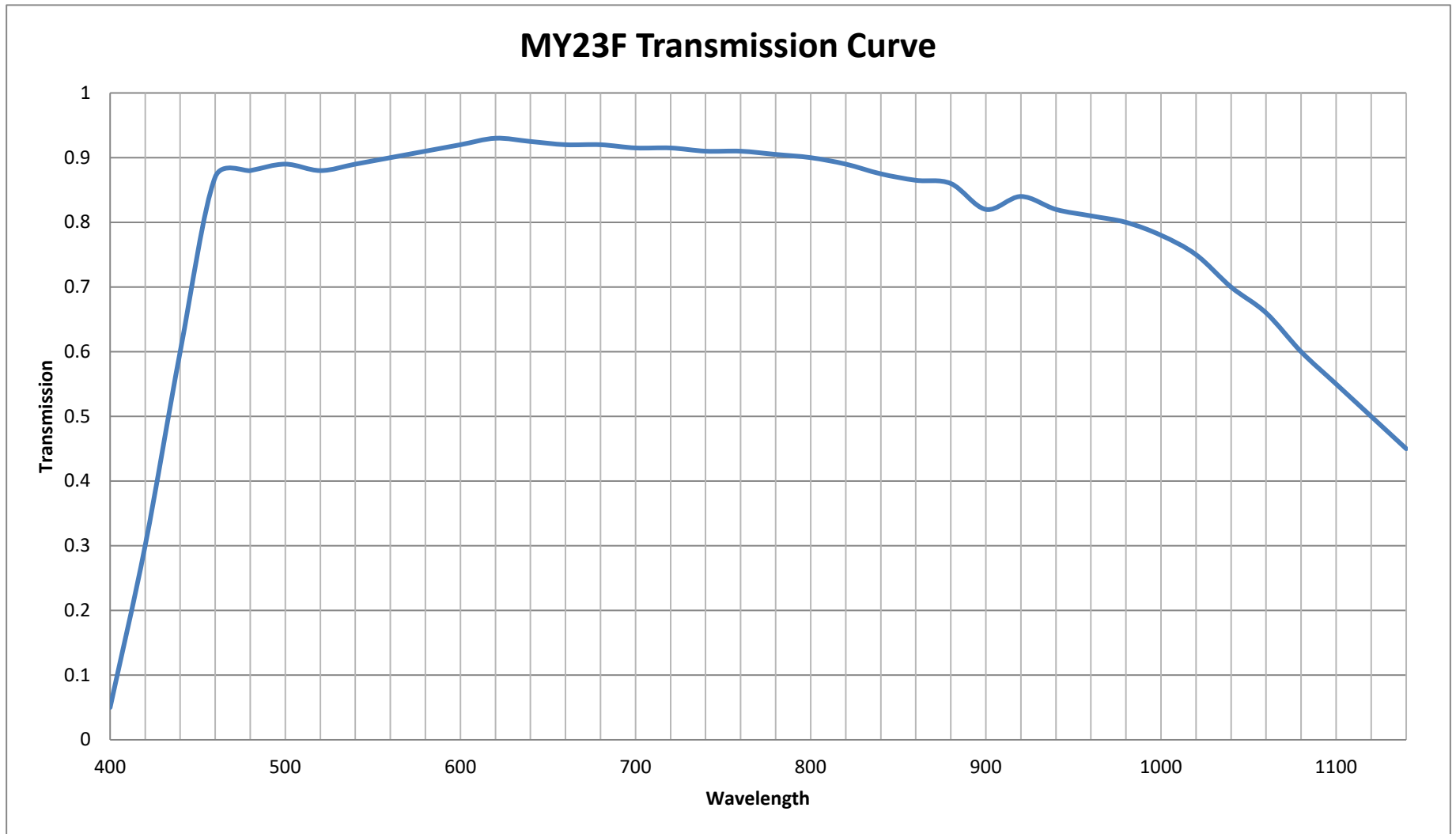
MY23F Lateral Color



MY23F Spot Size



MY23F Transmittance



MY23F Temp Focus Shift

Starting temp is 20°C

Temp	'focus shift (μm)
-20	-2
0	-1
20	0
40	1
60	2
80	3

