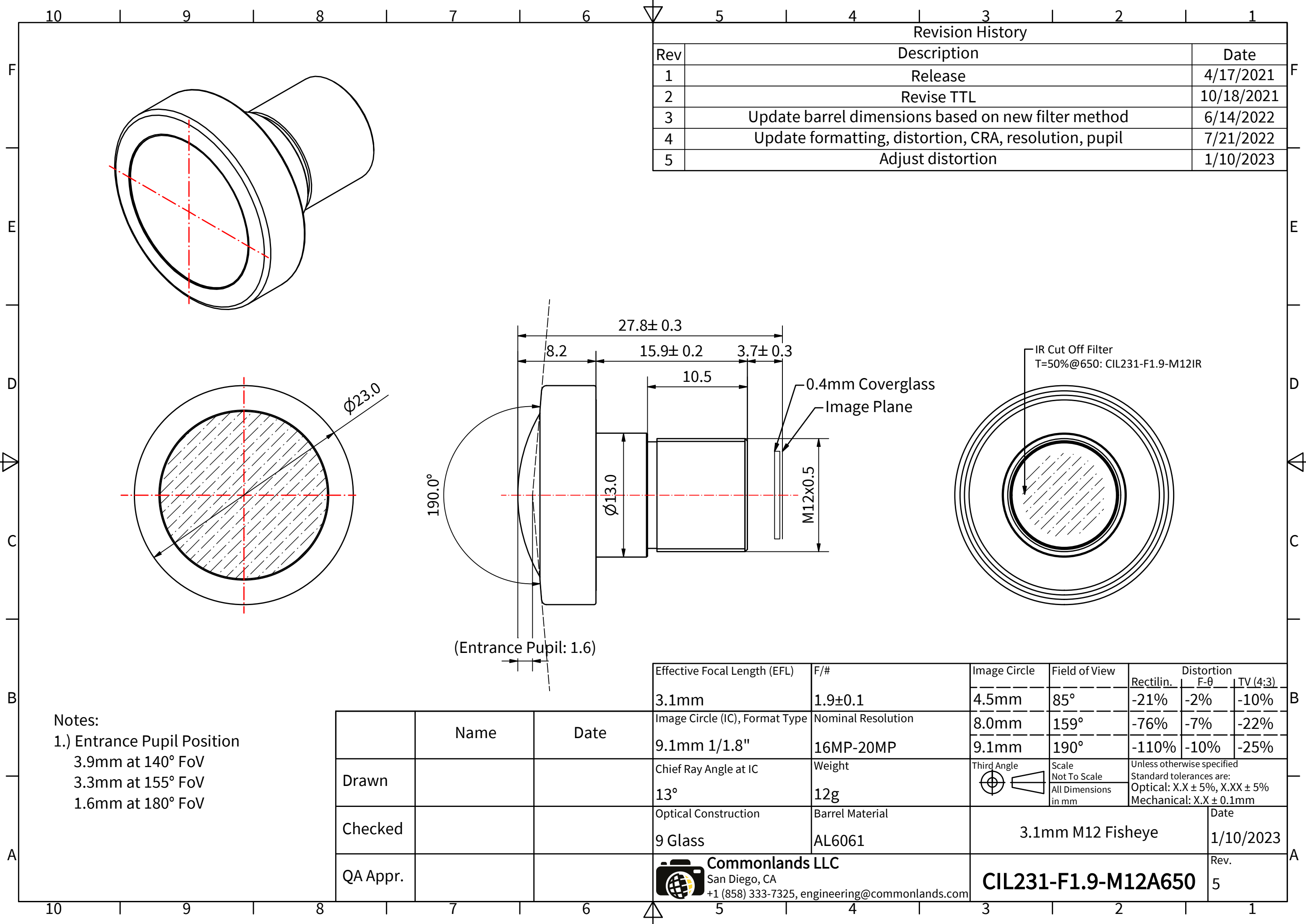
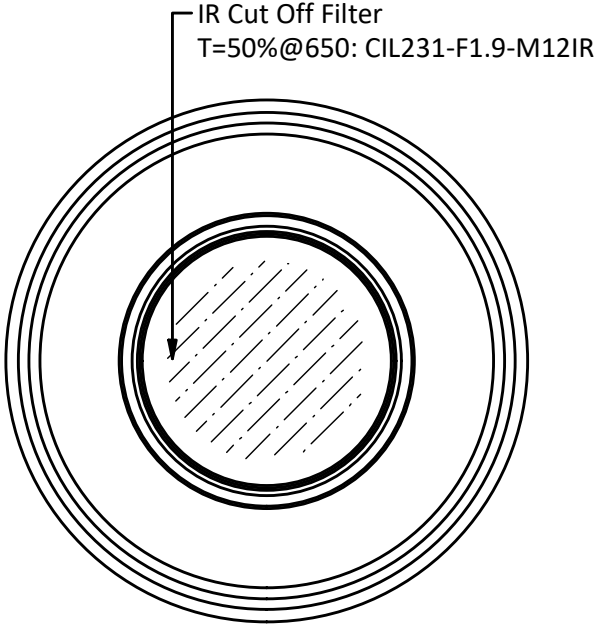




Revision History		
Rev	Description	Date
1	Release	4/17/2021
2	Revise TTL	10/18/2021
3	Update barrel dimensions based on new filter method	6/14/2022
4	Update formatting, distortion, CRA, resolution, pupil	7/21/2022
5	Adjust distortion	1/10/2023



Notes:
1.) Entrance Pupil Position
3.9mm at 140° FoV
3.3mm at 155° FoV
1.6mm at 180° FoV

	Name	Date	Effective Focal Length (EFL)	F/#	Image Circle	Field of View	Distortion		
			3.1mm	1.9±0.1	4.5mm	85°	Rectilin.	F-θ	TV (4:3)
			Image Circle (IC), Format Type	Nominal Resolution	8.0mm	159°	-76%	-7%	-22%
			9.1mm 1/1.8"	16MP-20MP	9.1mm	190°	-110%	-10%	-25%
Drawn			Chief Ray Angle at IC	Weight		Scale	Unless otherwise specified Standard tolerances are: Optical: X.X ± 5%, X.XX ± 5% Mechanical: X.X ± 0.1mm		
			13°	12g		Not To Scale			
Checked			Optical Construction	Barrel Material	3.1mm M12 Fisheye				Date
			9 Glass	AL6061					1/10/2023
QA Appr.			Commonlands LLC San Diego, CA +1 (858) 333-7325, engineering@commonlands.com			CIL231-F1.9-M12A650			Rev.
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