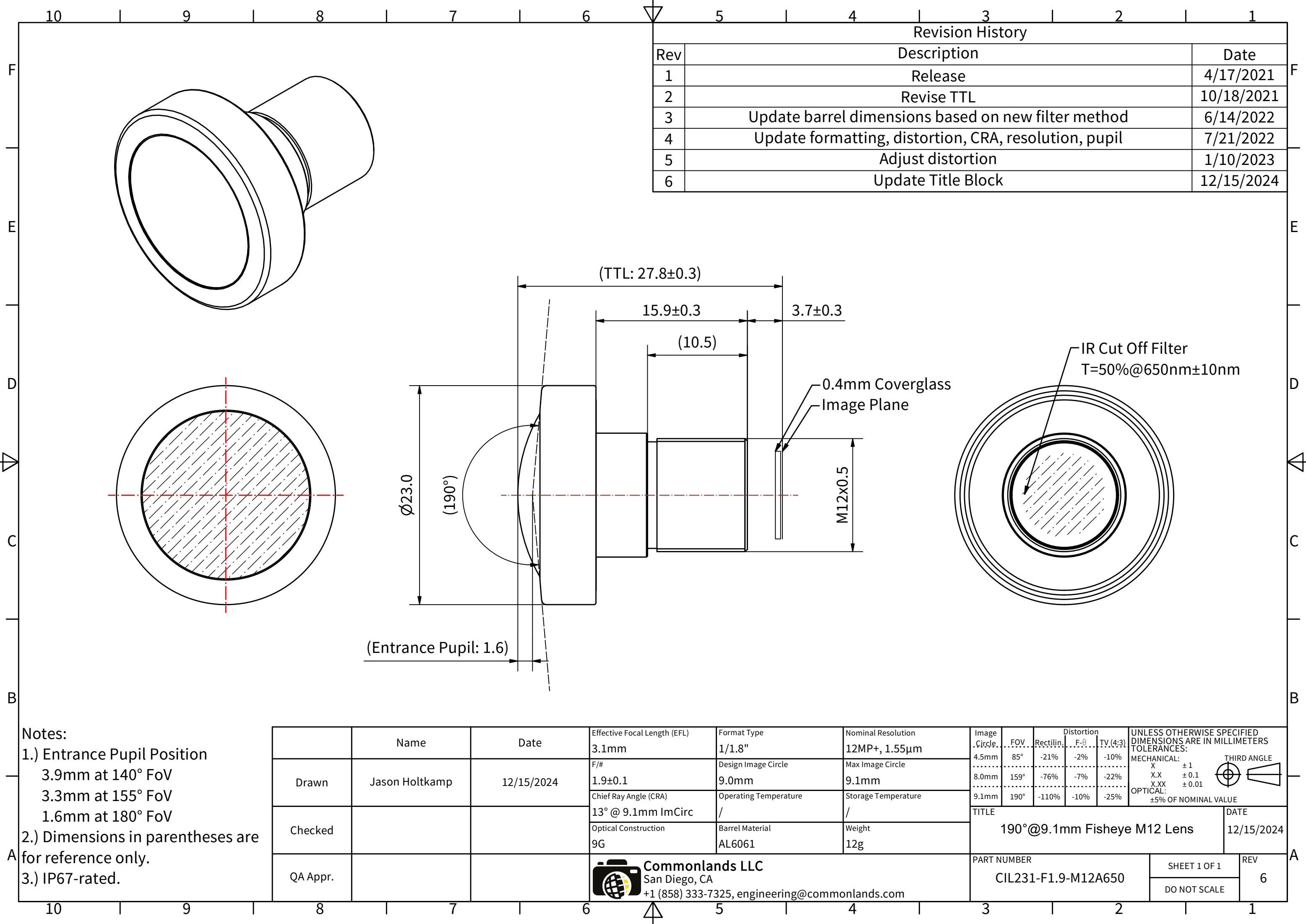




Revision History		
Rev	Description	Date
1	Release	4/17/2021
2	Revise TTL	10/18/2021
3	Update barrel dimensions based on new filter method	6/14/2022
4	Update formatting, distortion, CRA, resolution, pupil	7/21/2022
5	Adjust distortion	1/10/2023
6	Update Title Block	12/15/2024

Notes:

- Entrance Pupil Position
3.9mm at 140° FoV
3.3mm at 155° FoV
1.6mm at 180° FoV
- Dimensions in parentheses are for reference only.
- IP67-rated.

	Name	Date	Effective Focal Length (EFL) 3.1mm	Format Type 1/1.8"	Nominal Resolution 12MP+, 1.55µm	Image Circle 4.5mm	FOV 85°	Rectilin. -21%	Distortion F-θ -2%	TV (4:3) -10%	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES: MECHANICAL: X ± 1 X.X ± 0.1 X.XX ± 0.01 OPTICAL: ±5% OF NOMINAL VALUE			THIRD ANGLE 	
Drawn	Jason Holtkamp	12/15/2024	F/# 1.9±0.1	Design Image Circle 9.0mm	Max Image Circle 9.1mm	8.0mm	159°	-76%	-7%	-22%					
Checked			Chief Ray Angle (CRA) 13° @ 9.1mm ImCirc	Operating Temperature /	Storage Temperature /	9.1mm	190°	-110%	-10%	-25%	TITLE 190°@9.1mm Fisheye M12 Lens			DATE 12/15/2024	
			Optical Construction 9G	Barrel Material AL6061	Weight 12g										
QA Appr.			 Commonlands LLC San Diego, CA +1 (858) 333-7325, engineering@commonlands.com			PART NUMBER CIL231-F1.9-M12A650					SHEET 1 OF 1 DO NOT SCALE		REV 6		