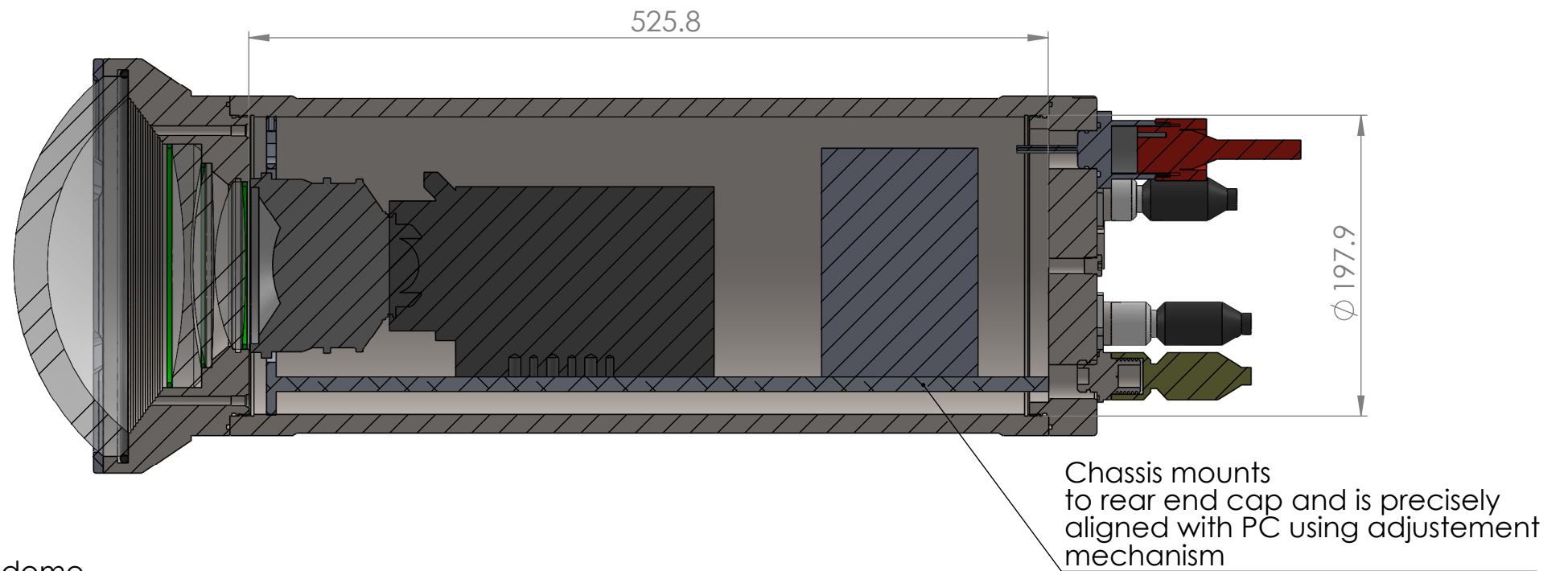
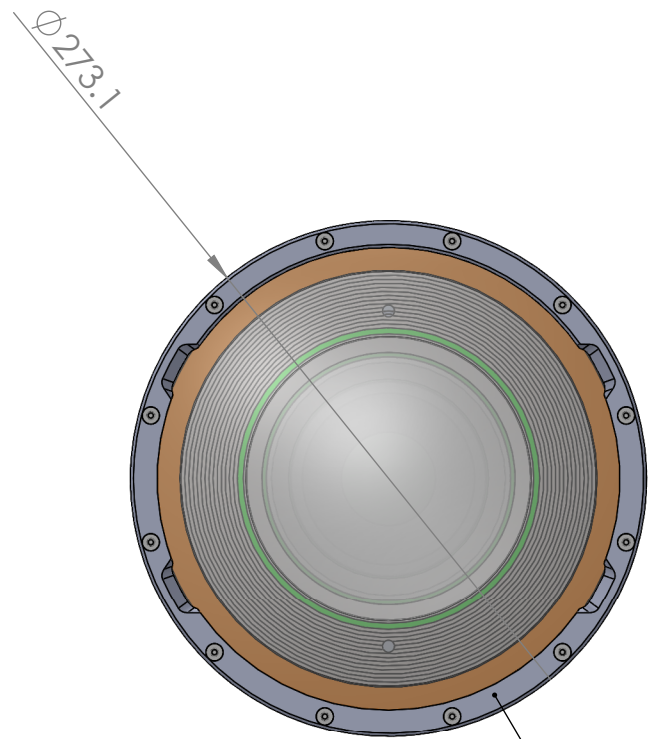
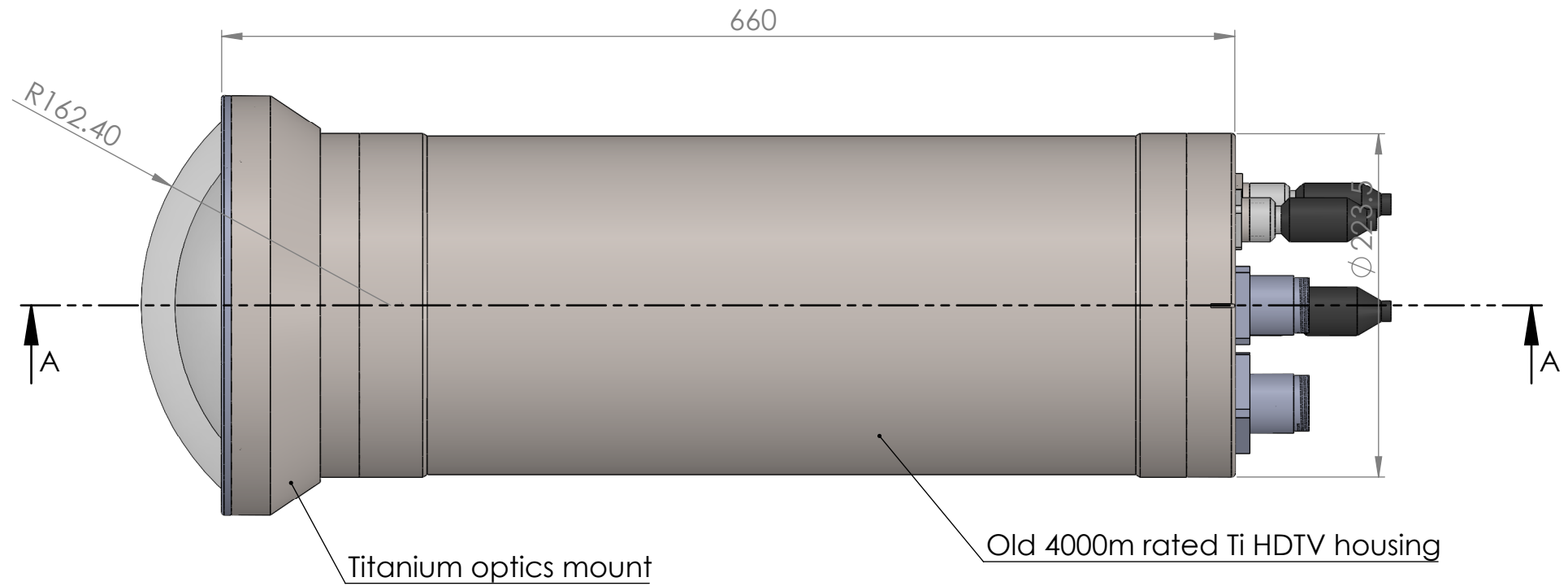


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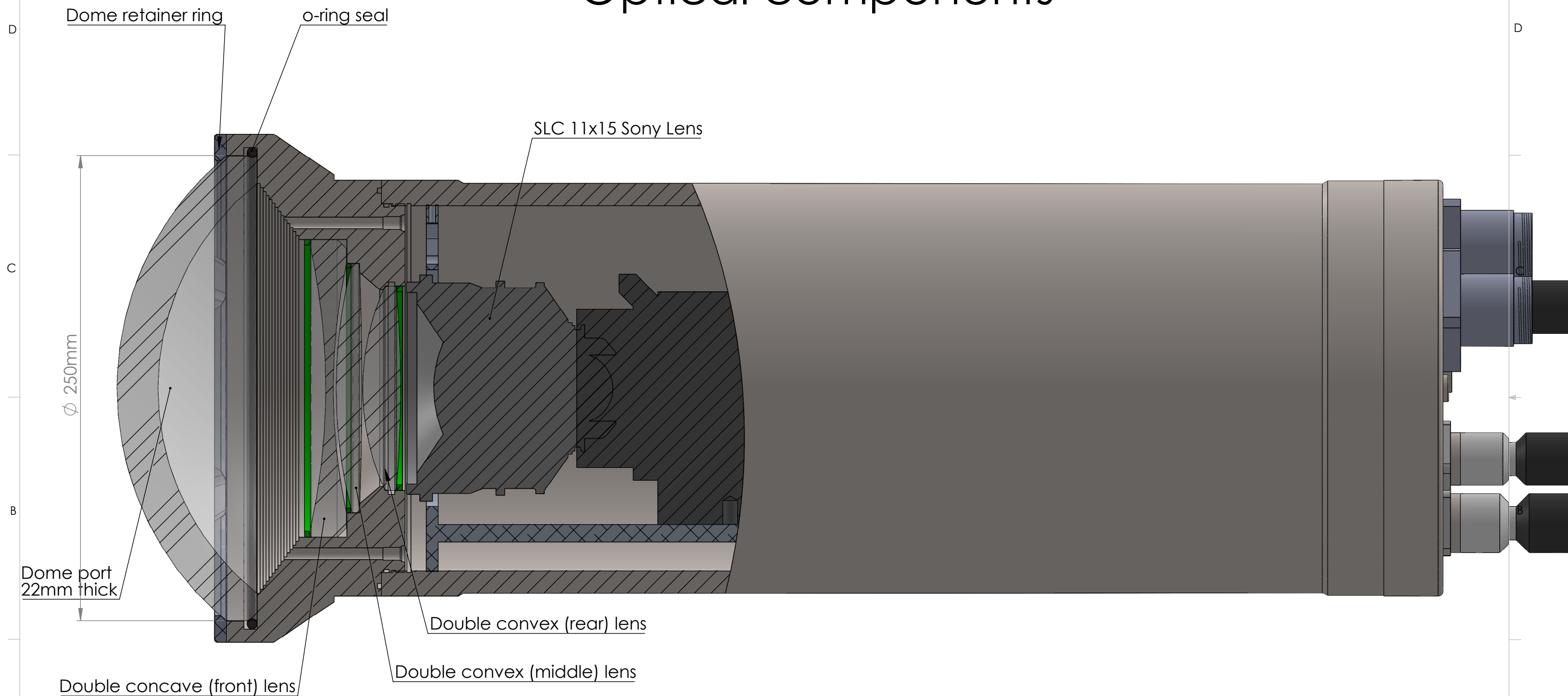


Mass = 102 lb

SECTION A-A
SCALE 1 : 4

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute		
1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .02$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$	DRAWN				
1. DIMENSIONS ARE IN INCHES				ENGINEER	Francois Cazenave	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700		
2. DIMENSION LIMITS HELD AFTER PLATING.				CHECKED	Francois Cazenave			
3. REMOVE BURRS AND SHARP EDGES .015 MAX.				PROJECT NO.		I2Map_Camera_Housing_Assembly		
4. MACHINED FILLET RADII .0150-.030.				PROJECT				
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005						SIZE B	DWG. NO.	REV.
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.						SCALE 1:5		SHEET 1 OF 5
DO NOT SCALE DRAWING				WEIGHT 100.36 lb.				

Optical components



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700		
1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Francois Cazenave				
1. DIMENSIONS ARE IN INCHES				ENGINEER Francois Cazenave		I2Map_Camera_Housing_Assembly		
2. DIMENSION LIMITS HELD AFTER PLATING.				CHECKED				
3. REMOVE BURRS AND SHARP EDGES .015 MAX.				PROJECT NO.		SIZE B		
4. MACHINED FILLET RADII .0150-.030.				PROJECT				
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005						SCALE 1:5		
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.								
DO NOT SCALE DRAWING				WEIGHT 100.36 lb.		REV.		
						SHEET 2 OF 5		

3/16" EPDM o-ring.
A70 durometer.
Seals and centers dome
The o-ring is placed so that hydrostatic pressure is exerted to the edge of the port, helping reduce deformation of dome and of titanium retainer. This position also prevents o-ring extrusion.

Chamfer is intentionally small to avoid reducing contact area between dome and kapton ring, and to minimize o-ring deformation.

Clearance is large enough to avoid metal to glass contact during deformation, even at 2200 PSI (1500m)

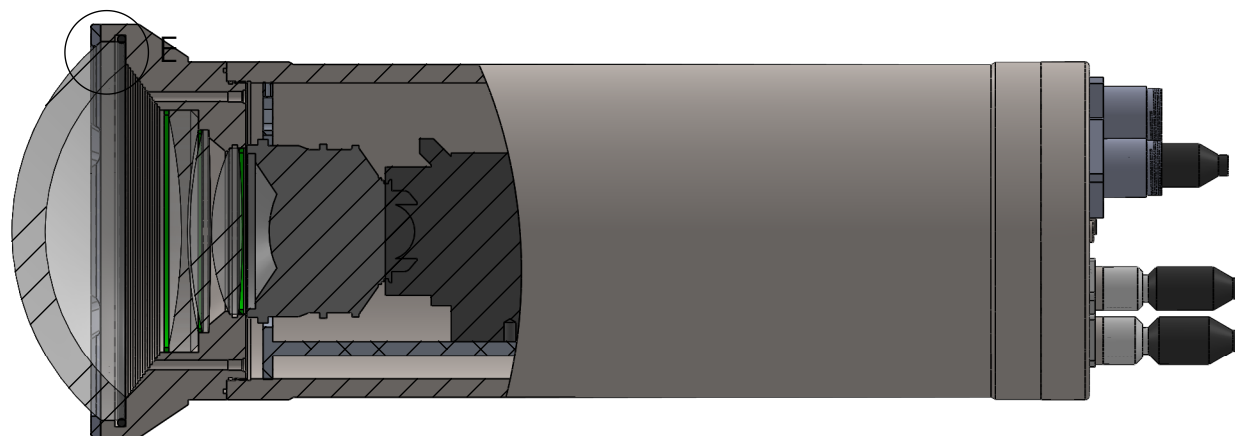
5 mil Kapton (polyimide) ring (possibly adhesive backed).
Helps distribute load between glass and metal

Retainer is held by 12 screws
and can be used to insert dome in position

Contact pressure at 1500m depth: 10KSI assuming even distribution. Pressure will likely be higher on inner edge.

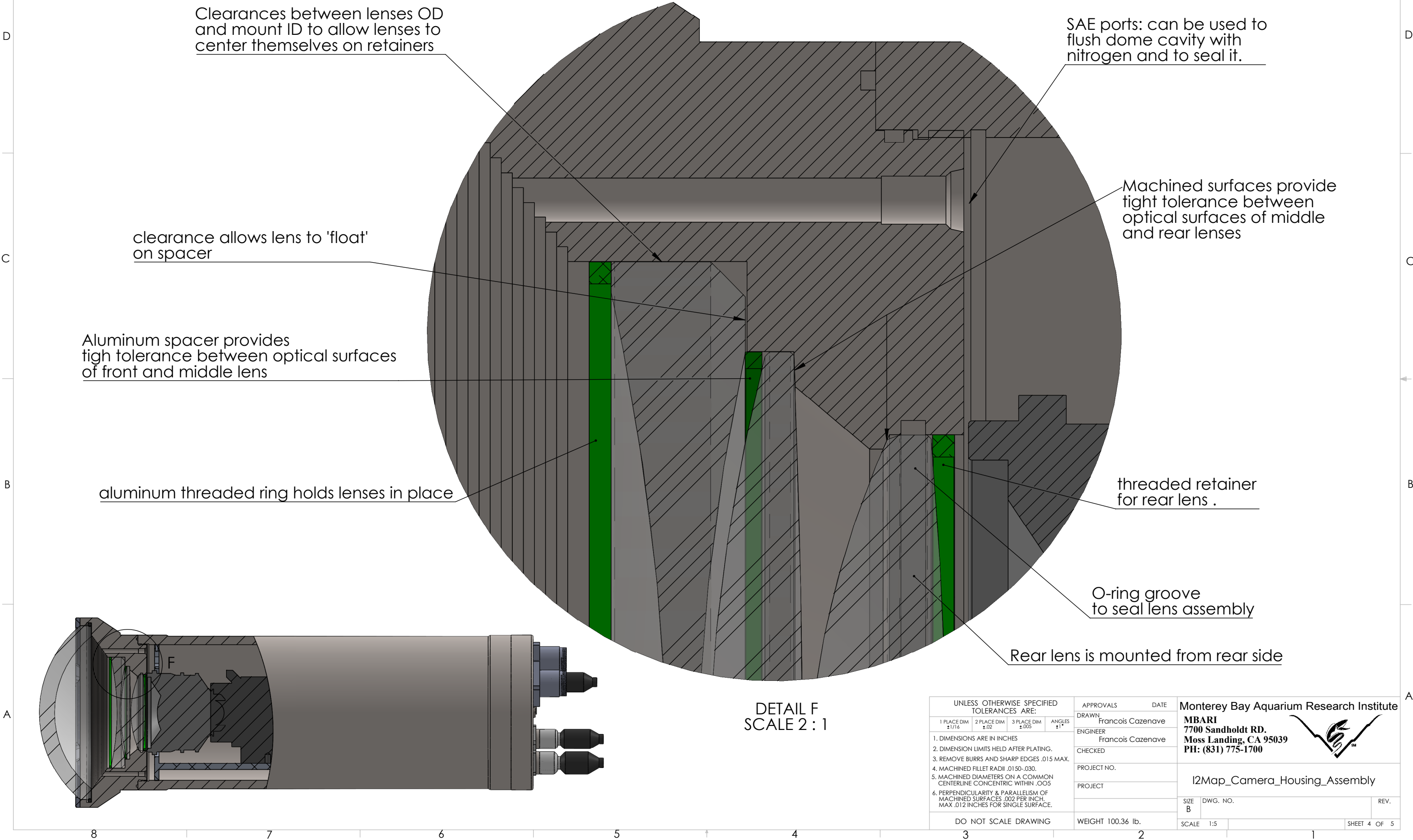
DETAIL E
SCALE 2 : 1

Dome port seal details



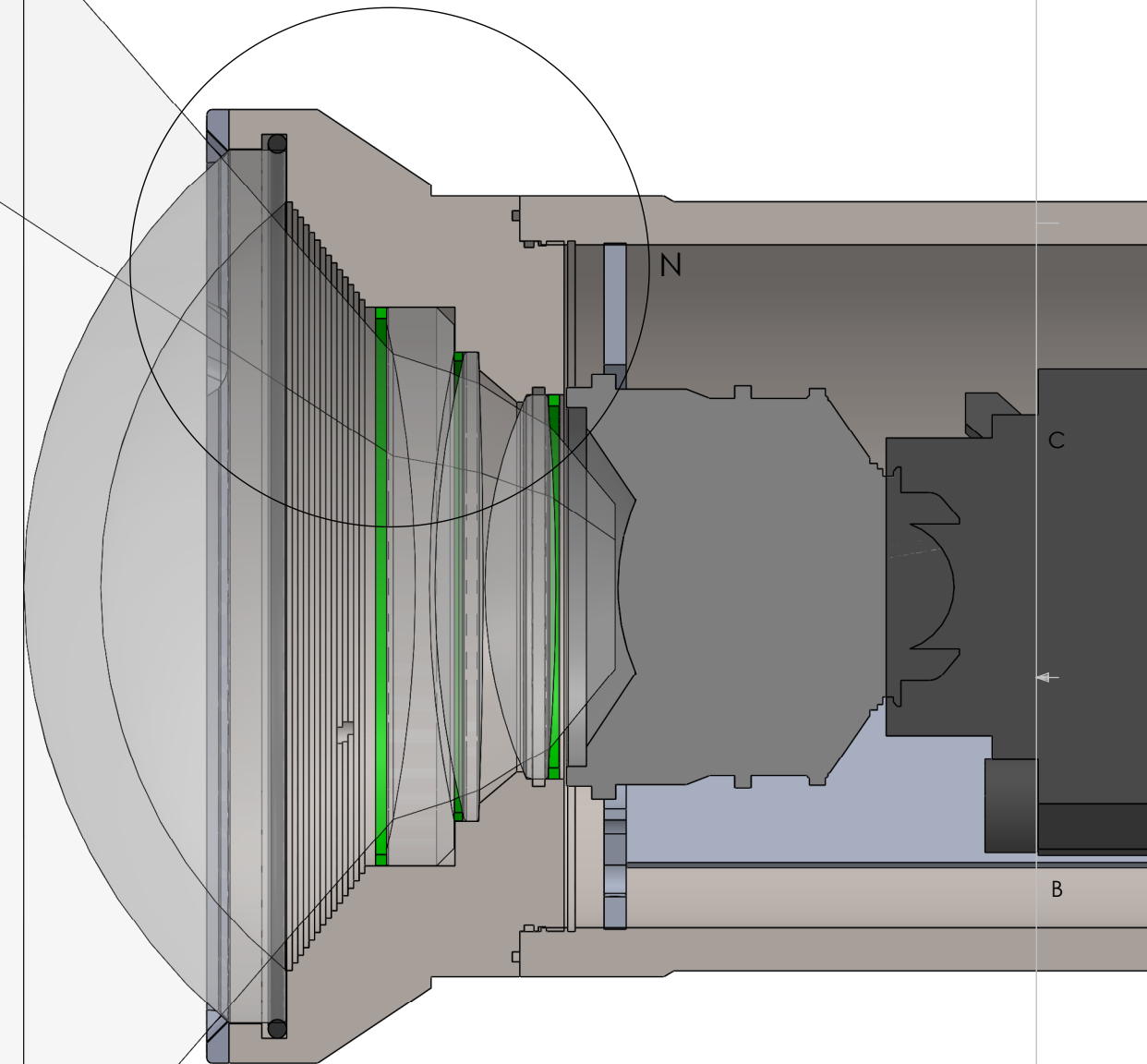
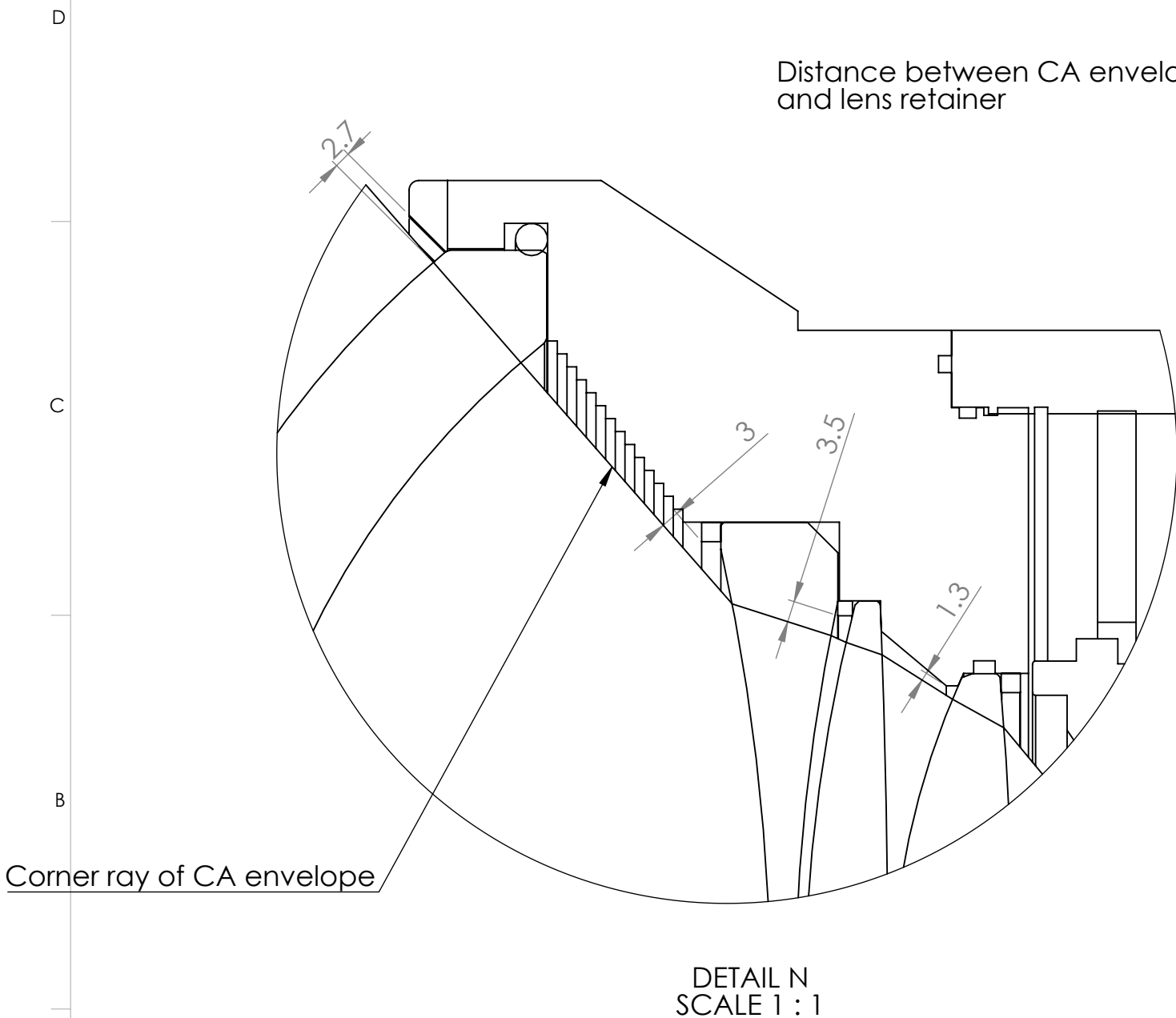
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute		
1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Francois Cazenave		MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700		
1. DIMENSIONS ARE IN INCHES				ENGINEER Francois Cazenave				
2. DIMENSION LIMITS HELD AFTER PLATING.				CHECKED		I2Map_Camera_Housing_Assembly		
3. REMOVE BURRS AND SHARP EDGES .015 MAX.				PROJECT NO.				
4. MACHINED FILLET RADII .0150-.030.				PROJECT		SIZE B	DWG. NO.	REV.
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005						SCALE 1:5		
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.								
DO NOT SCALE DRAWING				WEIGHT 100.36 lb.				SHEET 3 OF 5

Panoramic converter details



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS	DATE	Monterey Bay Aquarium Research Institute		
1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN	Francois Cazenave	MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700		
1. DIMENSIONS ARE IN INCHES				ENGINEER	Francois Cazenave			
2. DIMENSION LIMITS HELD AFTER PLATING.				CHECKED		I2Map_Camera_Housing_Assembly		
3. REMOVE BURRS AND SHARP EDGES .015 MAX.				PROJECT NO.				
4. MACHINED FILLET RADII .0150-.030.				PROJECT		SIZE B		
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005								
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.						SCALE 1:5	DWG. NO.	REV.
DO NOT SCALE DRAWING				WEIGHT 100.36 lb.		SHEET 4 OF 5		

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Clear aperture details Section view on field of view diagonal

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1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Francois Cazenave				
1. DIMENSIONS ARE IN INCHES				ENGINEER Francois Cazenave		I2Map_Camera_Housing_Assembly		
2. DIMENSION LIMITS HELD AFTER PLATING.				CHECKED				
3. REMOVE BURRS AND SHARP EDGES .015 MAX.				PROJECT NO.		SIZE B		
4. MACHINED FILLET RADII .0150-.030.				PROJECT				
5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005						SCALE	DWG. NO.	REV.
6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.						1:5		
DO NOT SCALE DRAWING				WEIGHT 100.36 lb.		SHEET 5 OF 5		