

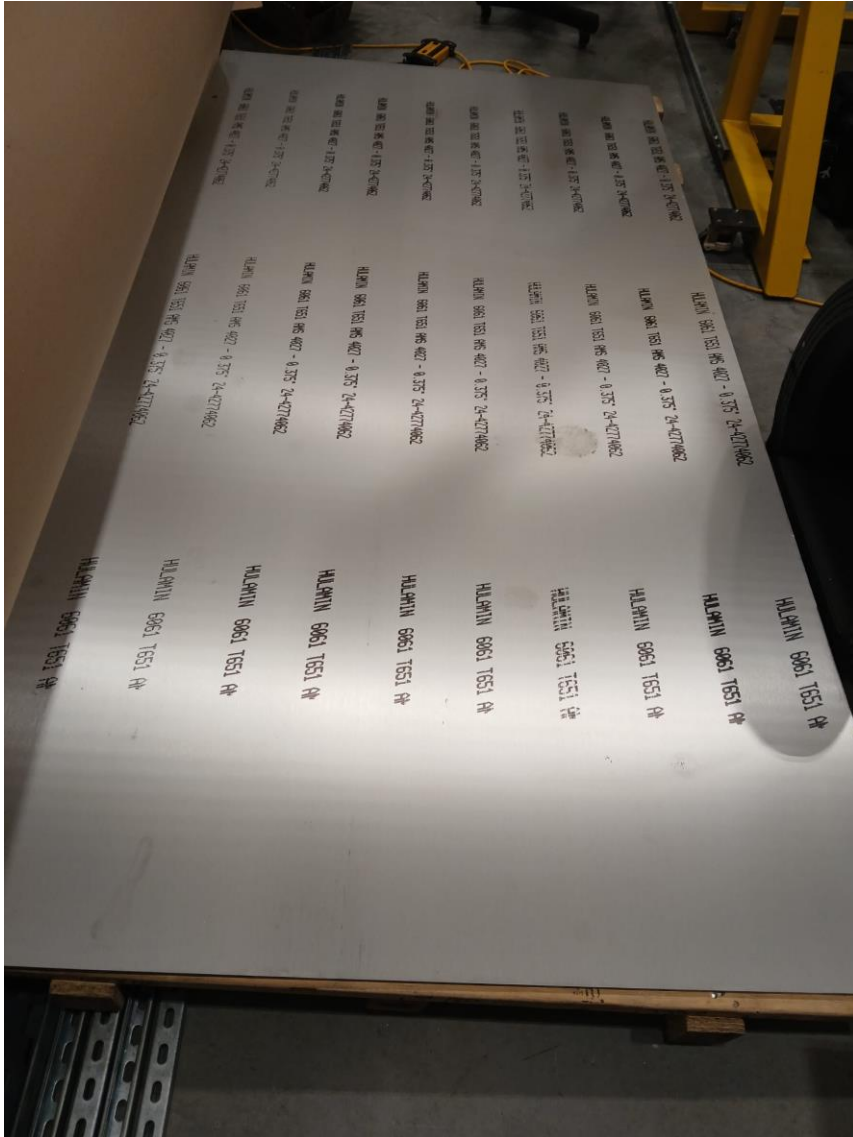
pfRICH Sensor Plate Prototype

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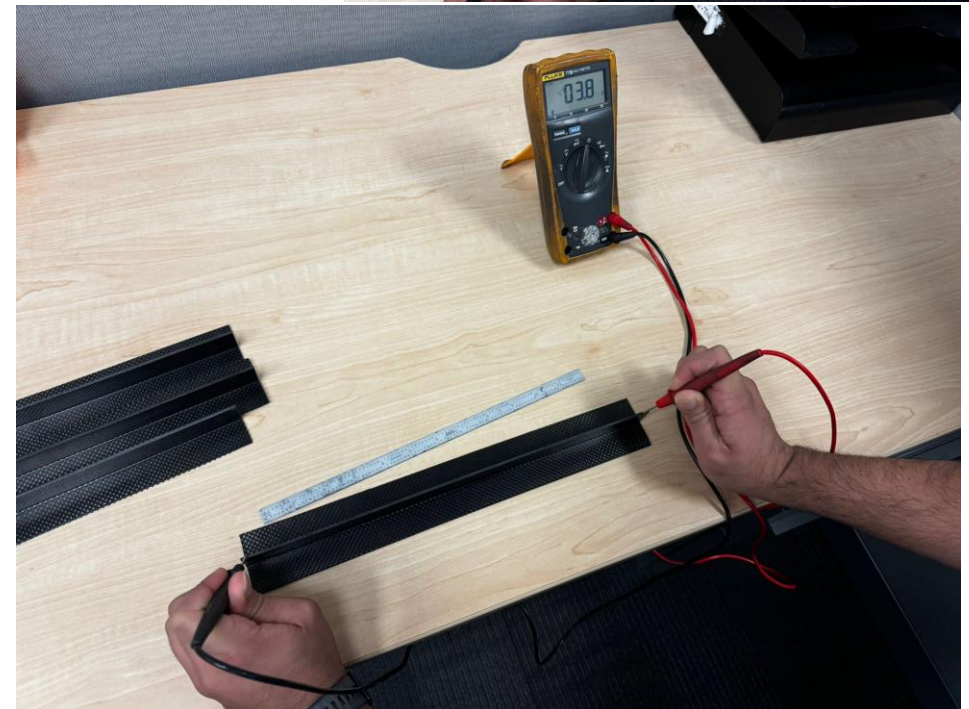
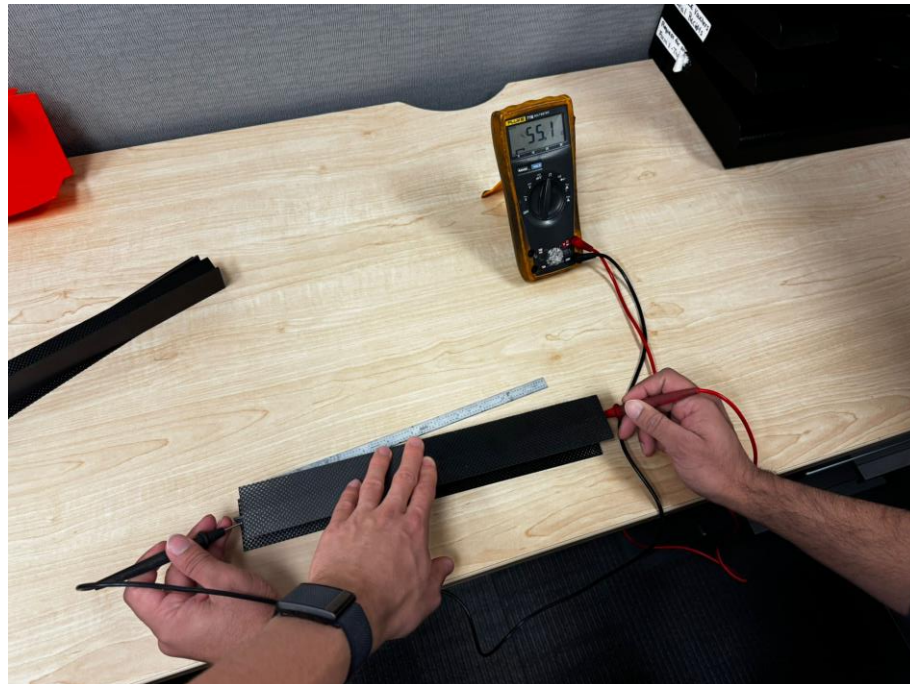
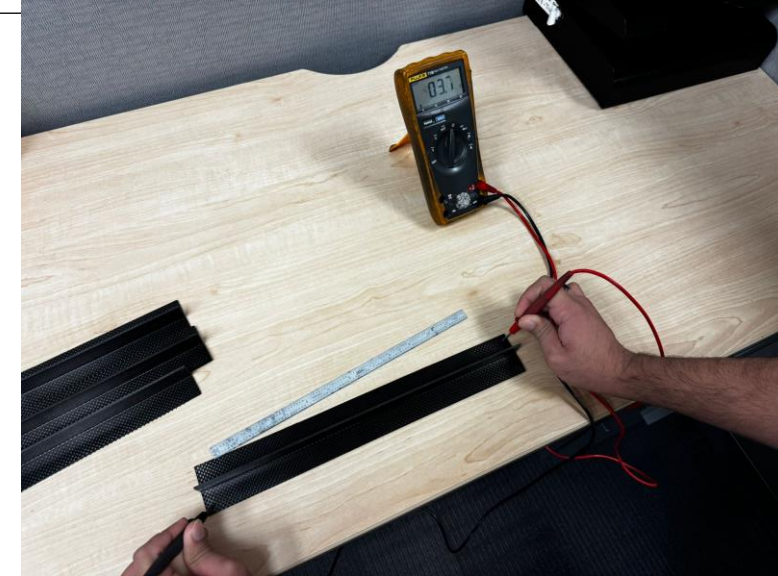
- ⬠ Resin printed standoffs are too brittle
- ⬠ Broke during support removal and thread testing
- ⬠ Neither 3D-printed thermoplastic or thermoset standoffs are strong enough to achieve gasket sealing pressure
- ⬠ Need design iteration with Alex





- ◈ 0.375" Aluminum 6061 T-6 flat sheet procured for base tool for flat plate layup.
- ◈ Tool cleaning and tool prep with Mold Sealer and Mold Release under way
- ◈ Test layup for seeing what is the flatness we can achieve for the aerogel plane support

- Simple resistance measurements for a t-beam layup with and without connections from another beam
- The resistance across a 12-inch-long sample was on the order of 3 to 4 ohms
- When two connected beams were measured (case similar to end ring to face sheet interface) a 12-inch-long connected section was on the order of 50 – 60 ohms with just contact pressure connection





#	<u>Sub task</u>	<u>Next steps / on-going activities</u>
1.	End Ring	a. Machining end ring with procedure listed last week
		b. Metrology and shipping to SBU
2.	Sensor Plane	a. FEA simulation for new web/flange design
		b. Sealing test for picture frame (stand off design change)
		c. Prototyping of full plane
3.	Aerogel Plane	a. Tests for flatness of large scale layups / blanks for machining
4.	Inner and Outer Mirror	a. Procedure for tool design is ready – waiting on final go ahead after the evaporation tests on curved substrates
5.	Electrical Grounding	a. Possible to integrate on both sensor plane / aerogel plane as well as the vessel.
		b. Single ply stand-off from sensor plane able to hold services and act as a faraday cage