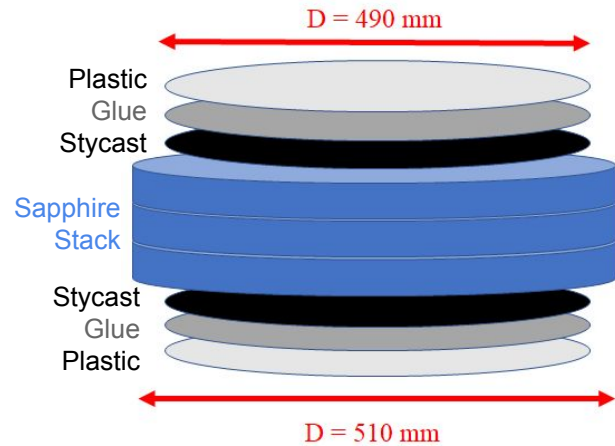
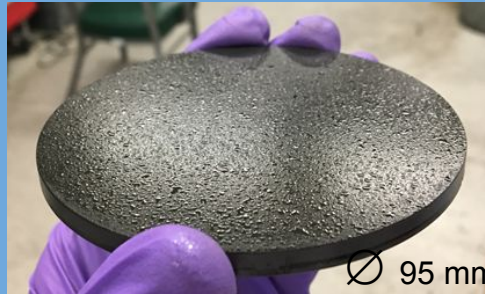


Sapphire AR coatings for PB2 and SO CHWPs

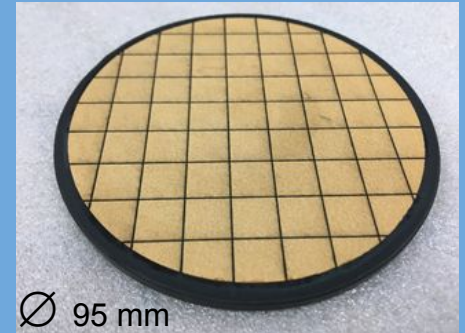


*Bottom AR layer: Stycast 2850 (epoxy, $n = 2.3$)
Glue layer: EpoTek 301-2 (epoxy, $n = 1.7$)*



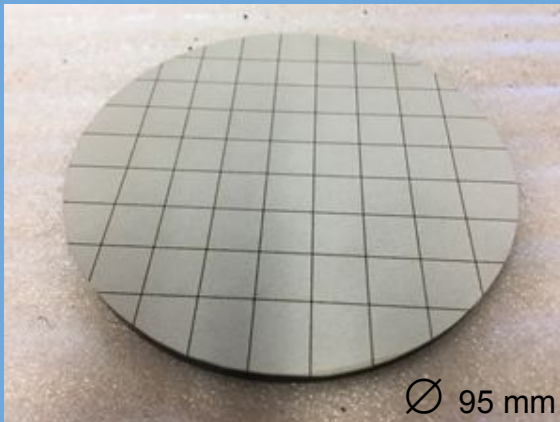
Aerosolized, cryogenically robust glue layer with 5 ~ 10 μm bond line

Plastic #1: Vespel 0940 (Polyimide foam, tunable $n = 1.1 \sim 1.5$)



Testing ongoing

Plastic #2: Rogers Duroid 5880LZ (loaded PTFE, $n = 1.4$)



- * Transmission on Al_2O_3 (Dick Plambeck)
- Red points** = warm data
- Red line** = warm expectation
- Blue line** = reflection only



- * < 1% reflection in each band
- * Epoxy Loss suppressed by $\sim 10\times$ between 300 K and 77 K
- * Cryo measurements ongoing at UM

