The cavity ring-down technique was used to measure the decay time constant of a TEM00 mode transmitted through Items 1 and 2 assembled into a linear cavity configuration at room temperature. The median cavity finesse was **269,000** at 1550 nm and was determined from the measured decay times and cavity length of **121 mm**. Assuming identical losses for each optic, we infer a total loss of **11.7 ppm** per mirror, which consists of **5 ppm** in transmission, and a best estimate of **6.7 ppm** scattering + absorption losses. Details on methodology, data analysis, and raw data available on request.