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7 APPENDIX

Supplemental Table 1: White light interferometry data comparison for 3D printed lenses and glass lenses.

Lens ID	Nominal Radius of Curvature (mm)	Software-calculated Radius of Curvature (mm)	Peak-to-valley (nm)	Root mean squared (nm)	Ra (nm)
3247	38.76	38.81	5	1	1
A_01 (1)		33.94	125	20	16
A_01 (2)		34.60	112	22	18
A_01 (3)		34.43	96	23	18
3296	31.01	31.01	7	1	1
A_02 (1)		30.99	27	6	5
A_02 (2)		31.10	39	11	10
A_02 (3)		31.14	30	11	10
3297	77.52	77.34	7	1	1
A_03 (1)		63.89	68	19	16
A_03 (2)		74.27	50	13	11
A_03 (3)		73.65	48	14	12
LA1207	51.5	51.47	5	1	1
B_01 (1)		44.95	43	8	6
B_01 (2)		45.79	44	11	10
B_01 (3)		44.84	46	10	9
LA1304	20.6	20.58	7	1	1
B_02 (1)		19.32	108	20	16
B_02 (2)		19.19	44	8	6
B_02 (3)		19.28	47	10	9
6353	14.88	14.96	10	2	2

BiConvexLens_01 (1)		14.74	85	18	15
BiConvexLens_01 (2)		14.72	37	6	6
BiConvexLens_01 (3)		14.77	62	14	12

Supplemental Table 2: Fizeau data comparison for Luxexcel lenses against corresponding Edmund Optics/Thorlabs lenses. Radius of Curvature measurements were taken three times for each lens.

Lens ID	Nominal RoC (mm)	Fizeau Measured RoC (mm)	Peak-to-valley (wave)	Root mean squared (wave)	Astigmatism Magnitude (wave)	Coma Magnitude (wave)
32479	38.76	1.38.765 2.38.765 3.38.771	0.637	0.012	0.011	0.037
A_01 (1)		1.34.203 2.34.261 3.34.279	7.224	1.620	7.755	1.045
A_01 (2)		1.34.877 2.34.834 3.34.862	8.074	1.744	8.434	1.016
A_01 (3)		1.34.691 2.34.699 3.34.701	7.853	1.731	8.319	1.231
32962	31.01	1.31.023 2.31.023 3.31.024	0.080	0.007	0.012	0.024
A_02 (1)		1.31.013 2.30.948 3.31.011	4.692	0.760	3.554	1.009
A_02 (2)		1.30.876 2.30.882 3.30.881	12.383	2.382	11.695	0.876
A_02 (3)		1.31.049 2.31.049 3.31.044	5.724	0.937	4.366	1.112
32974	77.52	1.77.467 2.77.457 3.77.456	0.079	0.008	0.024	0.029
A_03 (1)		1.68.352 2.68.360 3.68.369	7.258	1.652	7.917	0.432
A_03 (2)		1.73.277 2.73.272	8.236	1.768	8.575	1.041

		3.73.271				
A_03 (3)		1.74.102 2.74.101 3.74.098	7.169	1.620	7.743	0.826
LA1207	51.5	1.51.282 2.51.279 3.51.286	0.135	0.016	0.029	0.008
B_01 (1)		1.44.902 2.44.925 3.44.897	2.096	0.328	1.432	0.679
B_01 (2)		1.45.624 2.45.629 3.45.632	1.908	0.301	1.275	0.767
B_01 (3)		1.45.203 2.45.210 3.45.206	2.140	0.379	1.580	0.724
LA1304	20.6	1.20.584 2.20.595 3.20.595	0.140	0.014	0.033	0.016
B_02 (1)		4.19.305 5.19.312 6.19.309	2.291	0.398	1.852	0.679
B_02(2)		1.19.104 2.19.099 3.19.101	2.232	0.385	1.481	0.767
B_02 (3)		1.19.132 2.19.128 3.19.127	2.753	0.441	2.389	0.545
63536	14.88	1.14.881 2.14.879 3.14.881	0.127	0.016	0.034	0.056
BiConvexLens_01 (1)		1.14.779 2.14.870 3.14.698	7.553	1.616	2.223	3.022
BiConvexLens_01 (2)		1.14.695 2.14.689 3.14.686	8.027	1.692	3.022	2.678
BiConvexLens_01 (3)		1.14.702 2.14.696 3.14.711	7.995	1.664	2.723	2.874