

**Table S.3** – Stiffness parameters for lenses of set  $\mathcal{G}$  calculated from test B (1000 rpm) using support constraint F. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L021A	$7.52 \times 10^2$	$4.11 \times 10^2$	$1.21 \times 10^3$	$1.71 \times 10^2$	$1.51 \times 10^3$	
L022B	$1.80 \times 10^2$	$7.40 \times 10^1$	$4.15 \times 10^2$	$3.02 \times 10^1$	$4.45 \times 10^2$	•
L027A	$1.06 \times 10^3$	$7.54 \times 10^2$	$1.47 \times 10^3$	$4.34 \times 10^2$	$1.65 \times 10^3$	
L027B	$9.04 \times 10^2$	$7.46 \times 10^2$	$1.17 \times 10^3$	$4.72 \times 10^2$	$1.34 \times 10^3$	
L029A	$2.06 \times 10^3$	$3.30 \times 10^3$	$9.77 \times 10^2$	$1.22 \times 10^4$	$6.21 \times 10^2$	
L029B	$2.28 \times 10^3$	$3.07 \times 10^3$	$1.53 \times 10^3$	$5.69 \times 10^3$	$1.31 \times 10^3$	
L030B	$3.30 \times 10^3$	$8.41 \times 10^3$	$1.07 \times 10^3$	$1.34 \times 10^5$	$3.30 \times 10^2$	
L033A	$1.49 \times 10^2$	$5.88 \times 10^1$	$2.70 \times 10^2$	$1.42 \times 10^1$	$3.67 \times 10^2$	•
L037A	$1.80 \times 10^2$	$6.44 \times 10^1$	$3.50 \times 10^2$	$7.41 \times 10^0$	$5.38 \times 10^2$	•
L038A	$4.37 \times 10^2$	$8.89 \times 10^1$	$9.77 \times 10^2$	$1.97 \times 10^1$	$1.55 \times 10^3$	
L039B	$1.22 \times 10^3$	$1.09 \times 10^3$	$1.42 \times 10^3$	$8.81 \times 10^2$	$1.52 \times 10^3$	
L040A	$1.76 \times 10^2$	$7.05 \times 10^1$	$3.86 \times 10^2$	$1.60 \times 10^1$	$5.16 \times 10^2$	•
L040B	$1.85 \times 10^2$	$5.50 \times 10^1$	$3.90 \times 10^2$	$8.79 \times 10^0$	$5.91 \times 10^2$	•
L043A	$1.62 \times 10^2$	$6.43 \times 10^1$	$2.68 \times 10^2$	$9.93 \times 10^0$	$4.26 \times 10^2$	•
L043B	$1.46 \times 10^2$	$4.52 \times 10^1$	$2.82 \times 10^2$	$8.26 \times 10^0$	$4.17 \times 10^2$	•
L044B	$8.72 \times 10^2$	$4.14 \times 10^2$	$1.66 \times 10^3$	$1.45 \times 10^2$	$2.13 \times 10^3$	
L047B	$1.25 \times 10^3$	$7.83 \times 10^2$	$1.97 \times 10^3$	$3.87 \times 10^2$	$2.33 \times 10^3$	
L050A	$2.26 \times 10^3$	$2.73 \times 10^3$	$1.74 \times 10^3$	$3.72 \times 10^3$	$1.63 \times 10^3$	
L050B	$2.19 \times 10^3$	$2.69 \times 10^3$	$1.58 \times 10^3$	$3.79 \times 10^3$	$1.51 \times 10^3$	
L051A	$6.71 \times 10^2$	$3.77 \times 10^2$	$1.15 \times 10^3$	$1.68 \times 10^2$	$1.35 \times 10^3$	
L052B	$4.52 \times 10^2$	$1.14 \times 10^2$	$9.87 \times 10^2$	$2.76 \times 10^1$	$1.52 \times 10^3$	
L053A	$3.02 \times 10^3$	$1.38 \times 10^4$	$8.61 \times 10^2$	$1.55 \times 10^5$	$3.36 \times 10^2$	
L054A	$2.81 \times 10^3$	$3.63 \times 10^3$	$1.90 \times 10^3$	$5.47 \times 10^3$	$1.73 \times 10^3$	
L054B	$2.71 \times 10^3$	$4.71 \times 10^3$	$1.48 \times 10^3$	$1.02 \times 10^4$	$1.21 \times 10^3$	
L055A	$1.98 \times 10^3$	$3.59 \times 10^3$	$8.47 \times 10^2$	$1.13 \times 10^4$	$6.28 \times 10^2$	
L055B	$1.94 \times 10^3$	$3.58 \times 10^3$	$8.99 \times 10^2$	$1.11 \times 10^4$	$6.82 \times 10^2$	
L056A	$3.31 \times 10^3$	$6.03 \times 10^3$	$1.19 \times 10^3$	$3.61 \times 10^4$	$6.97 \times 10^2$	
L056B	$3.19 \times 10^3$	$6.60 \times 10^3$	$1.06 \times 10^3$	$3.90 \times 10^4$	$6.42 \times 10^2$	
L057B	$3.64 \times 10^3$	$7.29 \times 10^3$	$1.16 \times 10^3$	$3.90 \times 10^4$	$7.43 \times 10^2$	

Generated on the 25th of February 2012.

**Table S.4** – Stiffness parameters calculated for some lenses of set  $\mathcal{G}$  from test A (700 rpm) using support constraint F. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L022B	$1.54 \times 10^2$	$5.42 \times 10^1$	$2.93 \times 10^2$	$6.08 \times 10^0$	$5.77 \times 10^2$	•
L033A	$1.31 \times 10^2$	$5.24 \times 10^1$	$2.45 \times 10^2$	$1.13 \times 10^1$	$3.54 \times 10^2$	•
L037A	$1.45 \times 10^2$	$4.39 \times 10^1$	$2.81 \times 10^2$	$5.04 \times 10^0$	$4.12 \times 10^2$	•
L038A	$2.97 \times 10^2$	$8.79 \times 10^1$	$7.99 \times 10^2$	$2.54 \times 10^1$	$1.09 \times 10^3$	
L040A	$1.69 \times 10^2$	$5.68 \times 10^1$	$3.36 \times 10^2$	$7.56 \times 10^0$	$5.37 \times 10^2$	•
L040B	$1.66 \times 10^2$	$4.78 \times 10^1$	$3.19 \times 10^2$	$6.34 \times 10^0$	$5.08 \times 10^2$	•
L043A	$1.28 \times 10^2$	$3.93 \times 10^1$	$2.55 \times 10^2$	$9.30 \times 10^0$	$3.19 \times 10^2$	•
L043B	$1.19 \times 10^2$	$4.21 \times 10^1$	$2.33 \times 10^2$	$8.89 \times 10^0$	$3.32 \times 10^2$	•
L052B	$2.92 \times 10^2$	$5.78 \times 10^0$	$1.22 \times 10^3$	$1.90 \times 10^1$	$1.18 \times 10^3$	

**Table S.5** – Stiffness parameters calculated for some lenses of set  $\mathcal{G}$  from test C (1400 rpm) using support constraint F. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L029A	$2.17 \times 10^3$	$2.96 \times 10^3$	$1.30 \times 10^3$	$8.79 \times 10^3$	$8.92 \times 10^2$	
L029B	$2.21 \times 10^3$	$2.90 \times 10^3$	$1.44 \times 10^3$	$5.09 \times 10^3$	$1.27 \times 10^3$	
L030B	$3.95 \times 10^3$	$7.14 \times 10^3$	$1.35 \times 10^3$	$5.76 \times 10^5$	$2.20 \times 10^2$	
L047B	$1.27 \times 10^3$	$7.46 \times 10^2$	$2.13 \times 10^3$	$3.17 \times 10^2$	$2.65 \times 10^3$	
L050A	$2.41 \times 10^3$	$2.99 \times 10^3$	$1.64 \times 10^3$	$4.47 \times 10^3$	$1.55 \times 10^3$	
L050B	$2.33 \times 10^3$	$2.67 \times 10^3$	$1.86 \times 10^3$	$3.30 \times 10^3$	$1.83 \times 10^3$	
L051A	$7.67 \times 10^2$	$4.09 \times 10^2$	$1.38 \times 10^3$	$1.62 \times 10^2$	$1.70 \times 10^3$	
L053A	$2.96 \times 10^3$	$1.35 \times 10^4$	$8.56 \times 10^2$	$1.53 \times 10^5$	$3.31 \times 10^2$	
L054A	$2.71 \times 10^3$	$4.33 \times 10^3$	$1.44 \times 10^3$	$9.77 \times 10^3$	$1.15 \times 10^3$	
L054B	$2.88 \times 10^3$	$5.68 \times 10^3$	$1.45 \times 10^3$	$1.35 \times 10^4$	$1.16 \times 10^3$	
L055A	$2.10 \times 10^3$	$3.92 \times 10^3$	$8.86 \times 10^2$	$1.33 \times 10^4$	$6.38 \times 10^2$	
L055B	$2.12 \times 10^3$	$3.98 \times 10^3$	$9.36 \times 10^2$	$1.29 \times 10^4$	$6.99 \times 10^2$	
L056A	$3.48 \times 10^3$	$6.02 \times 10^3$	$1.15 \times 10^3$	$3.49 \times 10^4$	$7.18 \times 10^2$	
L056B	$3.36 \times 10^3$	$6.32 \times 10^3$	$1.18 \times 10^3$	$3.33 \times 10^4$	$7.58 \times 10^2$	
L057B	$3.67 \times 10^3$	$7.55 \times 10^3$	$1.20 \times 10^3$	$4.98 \times 10^4$	$6.86 \times 10^2$	

**Table S.6** – Stiffness parameters for lenses of set  $\mathcal{G}$  calculated from test B (1000 rpm) using support constraint S. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L021A	$8.11 \times 10^2$	$6.53 \times 10^2$	$1.06 \times 10^3$	$4.65 \times 10^2$	$1.15 \times 10^3$	•
L022B	$2.38 \times 10^2$	$2.02 \times 10^2$	$3.27 \times 10^2$	$1.80 \times 10^2$	$2.98 \times 10^2$	
L027A	$1.13 \times 10^3$	$1.08 \times 10^3$	$1.26 \times 10^3$	$9.77 \times 10^2$	$1.28 \times 10^3$	•
L027B	$1.01 \times 10^3$	$9.50 \times 10^2$	$1.12 \times 10^3$	$8.72 \times 10^2$	$1.11 \times 10^3$	•
L029A	$2.17 \times 10^3$	$4.02 \times 10^3$	$8.98 \times 10^2$	$1.74 \times 10^4$	$5.53 \times 10^2$	•
L029B	$2.50 \times 10^3$	$3.70 \times 10^3$	$1.37 \times 10^3$	$8.84 \times 10^3$	$1.09 \times 10^3$	•
L030B	$3.55 \times 10^3$	$9.59 \times 10^3$	$1.03 \times 10^3$	$1.41 \times 10^5$	$3.30 \times 10^2$	•
L033A	$1.80 \times 10^2$	$2.02 \times 10^2$	$1.57 \times 10^2$	$3.23 \times 10^2$	$1.38 \times 10^2$	
L037A	$2.21 \times 10^2$	$2.11 \times 10^2$	$2.36 \times 10^2$	$2.79 \times 10^2$	$1.95 \times 10^2$	
L038A	$4.75 \times 10^2$	$1.92 \times 10^2$	$9.33 \times 10^2$	$6.19 \times 10^1$	$1.27 \times 10^3$	•
L039B	$1.33 \times 10^3$	$1.28 \times 10^3$	$1.41 \times 10^3$	$1.23 \times 10^3$	$1.40 \times 10^3$	•
L040A	$2.41 \times 10^2$	$1.91 \times 10^2$	$3.16 \times 10^2$	$1.67 \times 10^2$	$2.92 \times 10^2$	
L040B	$2.30 \times 10^2$	$1.96 \times 10^2$	$2.72 \times 10^2$	$2.19 \times 10^2$	$2.54 \times 10^2$	
L043A	$1.87 \times 10^2$	$2.16 \times 10^2$	$1.57 \times 10^2$	$3.70 \times 10^2$	$1.36 \times 10^2$	
L043B	$1.79 \times 10^2$	$2.18 \times 10^2$	$1.36 \times 10^2$	$3.63 \times 10^2$	$1.28 \times 10^2$	
L044B	$9.45 \times 10^2$	$7.34 \times 10^2$	$1.40 \times 10^3$	$5.13 \times 10^2$	$1.46 \times 10^3$	•
L047B	$1.34 \times 10^3$	$1.10 \times 10^3$	$1.76 \times 10^3$	$7.13 \times 10^2$	$1.99 \times 10^3$	•
L050A	$2.55 \times 10^3$	$3.34 \times 10^3$	$1.53 \times 10^3$	$5.87 \times 10^3$	$1.36 \times 10^3$	•
L050B	$2.36 \times 10^3$	$3.25 \times 10^3$	$1.38 \times 10^3$	$6.05 \times 10^3$	$1.22 \times 10^3$	•
L051A	$7.14 \times 10^2$	$5.13 \times 10^2$	$1.11 \times 10^3$	$3.01 \times 10^2$	$1.20 \times 10^3$	•
L052B	$4.81 \times 10^2$	$2.29 \times 10^2$	$9.30 \times 10^2$	$8.28 \times 10^1$	$1.23 \times 10^3$	•
L053A	$3.50 \times 10^3$	$1.84 \times 10^4$	$8.30 \times 10^2$	$2.01 \times 10^5$	$3.13 \times 10^2$	•
L054A	$3.02 \times 10^3$	$4.45 \times 10^3$	$1.63 \times 10^3$	$8.41 \times 10^3$	$1.42 \times 10^3$	•
L054B	$2.89 \times 10^3$	$6.04 \times 10^3$	$1.29 \times 10^3$	$1.57 \times 10^4$	$9.97 \times 10^2$	•
L055A	$2.14 \times 10^3$	$4.27 \times 10^3$	$7.96 \times 10^2$	$1.48 \times 10^4$	$5.74 \times 10^2$	•
L055B	$2.08 \times 10^3$	$4.06 \times 10^3$	$8.60 \times 10^2$	$1.56 \times 10^4$	$5.95 \times 10^2$	•
L056A	$3.61 \times 10^3$	$7.23 \times 10^3$	$1.10 \times 10^3$	$5.31 \times 10^4$	$6.15 \times 10^2$	•
L056B	$3.57 \times 10^3$	$7.48 \times 10^3$	$1.07 \times 10^3$	$5.96 \times 10^4$	$5.54 \times 10^2$	•
L057B	$3.98 \times 10^3$	$8.19 \times 10^3$	$1.12 \times 10^3$	$5.16 \times 10^4$	$6.76 \times 10^2$	•

**Table S.7** – Stiffness parameters calculated for some lenses of set  $\mathcal{G}$  from test A (700 rpm) using support constraint S. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L022B	$2.11 \times 10^2$	$1.69 \times 10^2$	$2.72 \times 10^2$	$2.06 \times 10^2$	$2.15 \times 10^2$	
L033A	$1.56 \times 10^2$	$1.92 \times 10^2$	$1.13 \times 10^2$	$3.38 \times 10^2$	$1.07 \times 10^2$	
L037A	$1.60 \times 10^2$	$1.61 \times 10^2$	$1.63 \times 10^2$	$3.75 \times 10^2$	$1.08 \times 10^2$	
L038A	$3.47 \times 10^2$	$1.77 \times 10^2$	$8.27 \times 10^2$	$9.13 \times 10^0$	$1.93 \times 10^3$	•
L040A	$1.98 \times 10^2$	$1.56 \times 10^2$	$2.63 \times 10^2$	$1.47 \times 10^2$	$2.27 \times 10^2$	
L040B	$1.90 \times 10^2$	$1.65 \times 10^2$	$2.18 \times 10^2$	$2.41 \times 10^2$	$1.65 \times 10^2$	
L043A	$1.41 \times 10^2$	$1.77 \times 10^2$	$1.06 \times 10^2$	$5.00 \times 10^2$	$7.96 \times 10^1$	
L043B	$1.41 \times 10^2$	$2.30 \times 10^2$	$6.50 \times 10^1$	$3.80 \times 10^2$	$8.88 \times 10^1$	
L052B	$3.53 \times 10^2$	$2.12 \times 10^2$	$8.32 \times 10^2$	$4.68 \times 10^1$	$1.36 \times 10^3$	•

**Table S.8** – Stiffness parameters calculated for some lenses of set  $\mathcal{G}$  from test C (1400 rpm) using support constraint S. If this is the preferred constraint for a given lens it is marked in that column.

	model H	model D		model E		preferred constraint
	$G$ (Pa)	$G_N$ (Pa)	$G_C$ (Pa)	$G_0$ (Pa)	$G_1$ (Pa)	
L029A	$2.38 \times 10^3$	$3.39 \times 10^3$	$1.19 \times 10^3$	$1.51 \times 10^4$	$7.03 \times 10^2$	•
L029B	$2.39 \times 10^3$	$3.58 \times 10^3$	$1.26 \times 10^3$	$8.06 \times 10^3$	$1.04 \times 10^3$	•
L030B	$4.35 \times 10^3$	$8.26 \times 10^3$	$1.29 \times 10^3$	$1.03 \times 10^6$	$1.81 \times 10^2$	•
L047B	$1.35 \times 10^3$	$9.35 \times 10^2$	$2.21 \times 10^3$	$5.01 \times 10^2$	$2.57 \times 10^3$	•
L050A	$2.65 \times 10^3$	$3.56 \times 10^3$	$1.46 \times 10^3$	$6.68 \times 10^3$	$1.31 \times 10^3$	•
L050B	$2.55 \times 10^3$	$3.26 \times 10^3$	$1.61 \times 10^3$	$5.32 \times 10^3$	$1.49 \times 10^3$	•
L051A	$8.23 \times 10^2$	$5.36 \times 10^2$	$1.43 \times 10^3$	$2.82 \times 10^2$	$1.60 \times 10^3$	•
L053A	$3.19 \times 10^3$	$1.77 \times 10^4$	$8.28 \times 10^2$	$2.09 \times 10^5$	$3.02 \times 10^2$	•
L054A	$2.89 \times 10^3$	$5.32 \times 10^3$	$1.27 \times 10^3$	$1.32 \times 10^4$	$1.04 \times 10^3$	•
L054B	$3.10 \times 10^3$	$7.00 \times 10^3$	$1.33 \times 10^3$	$1.90 \times 10^4$	$1.01 \times 10^3$	•
L055A	$2.28 \times 10^3$	$4.62 \times 10^3$	$8.38 \times 10^2$	$1.72 \times 10^4$	$5.86 \times 10^2$	•
L055B	$2.32 \times 10^3$	$4.50 \times 10^3$	$9.06 \times 10^2$	$1.69 \times 10^4$	$6.38 \times 10^2$	•
L056A	$3.86 \times 10^3$	$6.41 \times 10^3$	$1.14 \times 10^3$	$5.80 \times 10^4$	$5.92 \times 10^2$	•
L056B	$3.74 \times 10^3$	$7.35 \times 10^3$	$1.16 \times 10^3$	$4.99 \times 10^4$	$6.64 \times 10^2$	•
L057B	$4.04 \times 10^3$	$8.84 \times 10^3$	$1.14 \times 10^3$	$7.73 \times 10^4$	$5.88 \times 10^2$	•