

Sheet1

Student data from labs (with 6mm grid size)

printed FL mm	horizontal plate scale			vertical plate scale			distance m
	theory "/px	measured "/px	ratio	theory "/px	measured "/px	ratio	
709	2.500	2.277	0.098	2.420	2.143	0.129	33.975
400	4.430	3.758	0.179	4.280	3.617	0.183	5.277
400	4.430	3.708	0.195	4.280	3.600	0.189	4.971
400	4.430	3.708	0.195	4.280	3.634	0.178	5.87
1000	1.774	1.745	0.017	1.712	1.681	0.018	21.527
600	2.960	2.770	0.069	2.850	2.590	0.100	12.696

$$25.4 \times 0.25 / 6 =$$

1.058

1.058

Corrected for grid size and actual focus distance

724.111	2.450	2.410	0.017	2.364	2.268	0.042
432.807	4.099	3.978	0.030	3.956	3.828	0.033
435.003	4.078	3.924	0.039	3.936	3.810	0.033
429.250	4.133	3.924	0.053	3.988	3.846	0.037
1048.716	1.691	1.745	-0.031	1.632	1.681	-0.029
629.762	2.817	2.932	-0.039	2.718	2.741	-0.008