

	Numerator length of interval (unit: pixel)	Denominator length of dots (unit: pixel)	length (mm)	a (mm)	unit: mm
slit					stdev 0.000576637
red	43	53	6.409433962	4.95E-02	mean 5.01E-02
green	95	143	5.248251748	5.07E-02	
blue	73	143	4.032867133	5.02E-02	
wire					stdev 0.000771256
red	273	164	13.15060976	2.41E-02	mean 2.45E-02
green	176	125	11.1232	2.39E-02	
blue	181	179	7.988268156	2.53E-02	
hair					stdev 0.002640462
red	103	206	3.95	8.04E-02	mean 7.85E-02
green	76	173	3.470520231	7.66E-02	
gratings					stdev 3.1803E-05
red	755	187	31.89572193	9.95E-03	mean 9.9656E-03
green	630	186	26.75806452	9.94E-03	
blue	387	151	20.24701987	1.00E-02	

unit: mm	
L	500
red lam	6.35E-04
blue lam	5.32E-04
green lam	4.05E-04
dot	7.90E+00

λ	632.8 nm					
n	1.5216					
h	2 "					
r	4 mm	=	0.1574803 "			
cover glass		0	0.25			
x	x0 - x	θ	θ		m	θ_1
0.072	0.344	9.828	9.828		4	9.782
0.125	0.291	8.329	8.329		3	8.275
0.199	0.217	6.222	6.222		2	6.425
0.277	0.139	3.99	3.99		1	3.752
0.544	-0.128	-3.649	-3.649		1	-3.752
0.636	-0.22	-6.247	-6.247		2	-6.425
0.71	-0.294	-8.312	-8.312		3	-8.275
0.766	-0.35	-9.857	-9.857		4	-9.782
x0	0.416 "				Δ	0.152
	dcover	0.2228 mm				
	ϕ cover	0.111				

microscope slide		0	0.25			
x	x0 - x	θ	θ		m	θ_1
0.334	0.196	5.608	5.608		4	5.489
0.363	0.167	4.778	4.778		3	4.735
0.396	0.134	3.832	3.832		2	3.836
0.441	0.089	2.542	2.542		1	2.647
0.624	-0.094	-2.697	-2.697		1	-2.647
0.669	-0.139	-3.976	-3.976		2	-3.836
0.693	-0.163	-4.655	-4.655		3	-4.735
0.717	-0.187	-5.333	-5.333		4	-5.489
x0	0.53 "				Δ	0.0798
dcover	0.7864 mm					
ϕ cover	2.5716					