



Optical Surfaces Ltd

Tool and Testplate list

March 2005

*To aid customers wishing to design lens or mirrors for manufacture
Using one of our 500 existing tools and testplates saves you money!*

Where possible, we prefer designers to work to the testplate radius.
If a tool exists without a testplate, we will make one for you of the correct
diameter and radius.

Please also check that the tool diameter is larger than your job

Before finalising a design, all testplates are remeasured and calibrated.

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
474	5.73	20		
471	5.82	20		
166	6.22	14		
118	6.37	13	6.370	13
165	6.63	14	6.620	13
473	7.50	20		
475	8.58	20		
451	8.58	15	8.590	15
470	8.89	25		
117	8.86	18	8.890	13
94	9.17	16	9.190	13
469	11.13	35		
452	11.37	15	11.365	16
	11.37	20		
115	11.76	23	11.750	19
168	12.12	19	12.120	19
320	12.14	25		
472	13.95	35		
384	14.50	51	14.500	25
107	14.73	30	14.730	25
			16.120	25
260	16.51	38	16.520	21
239	16.78	32	16.773	32
138	17.68	35	17.680	32
			19.200	30
119	20.00	38	20.024	38
			20.190	25
			21.010	28
161	21.51	41	21.530	38
449	22.36	35	22.355	35
404	22.45	44		
47	22.81	44	22.833	32
			22.860	
450	23.36	40	23.360	35
448	23.86	40	23.860	35
137	24.18	44	24.210	32
1	24.66	51	24.600	44
447	24.86	40	24.855	35
220	25.60	51	25.580	38
430	25.98	51	25.980	38
124	26.69	51	26.720	38
0			27.100	45
370	28.17	51		
2	27.94	51	28.570	38
204	28.73	57	28.740	51
385	28.96	57	28.992	25
301	29.50	56	29.500	63
134	29.62	57	29.640	38

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
205	29.79	57	29.780	51
116	30.48	61	30.330	25
246	31.06	51	31.060	44
309	31.19	70	31.110	51
465	31.18	75		
	31.19	62		
466	31.19	75		
346	31.34	76	31.340	51
163	32.53	63	32.568	41
206	33.05	63	33.070	51
357	33.55	63		
181	33.92	57	33.920	51
371	34.19	63		
356	34.90	57	35.048	38
113	35.10	70	35.050	38
			36.600	44
			36.770	51
345	37.03	63	37.040	63
110	37.16	63	37.150	51
369	37.93	66		
			37.930	102
368	38.61	66	38.612	51
432	39.00	76	38.990	51
207	39.52	76	39.560	51
167	39.98	76	39.920	38
4	40.13	76	40.150	38
286	40.49	79	40.460	38
245	41.25	81	41.260	70
396	41.25	102	41.280	51
284	41.61	82	41.580	51
228	42.00	76	41.975	53
	42.28	85		
454	42.28	100		
310	42.57	51	42.520	51
251	42.54	84	42.540	51
391	42.62	81	42.550	51
229	42.98	86	42.920	32
5	43.22	89	43.330	51
392	43.84	81	43.790	76
132	44.04	86	44.020	51
372	45.01	86	45.050	63
490	45.63	80		
122	46.15	91	46.180	51
208	47.42	89	47.407	76
209	48.13	89	48.130	76
433	48.28	76	48.280	51
85	48.74	76	48.720	38
405		114	49.400	
328	49.99	99	50.000	52
			50.320	30

TOOLS**TESTPLATES**

Tool N°	Radius	Diameter	Radius	Diameter
6	50.80	95	50.874	63
427	51.07	102	51.070	51
315	51.56	102	51.610	38
281	51.99	102	51.995	60
			52.220	51
378	53.09	102		
136	53.34	102	53.360	76
324	54.10	76	54.100	76
133	55.17	109	55.170	51
285	56.11	112	56.080	51
			56.390	38
7	56.84	76	56.749	51
			58.160	102
9	58.72	114	58.643	51
250	59.49	114	59.100	76
294	59.21	112	59.250	76
259	60.27	112	60.254	38
93	61.19	102	61.140	76
			61.980	38
193	62.20	122	62.190	51
344	63.72	127	63.720	102
105	64.10	127	64.000	76
			64.000	50
241	64.34	127	64.355	76
			64.770	38
245	65.20	55	65.200	33
420	65.99	129	65.990	76
318	66.54	112	66.590	76
293	67.13	140	67.150	76
265	67.51	135	67.560	76
174	68.40	70	68.400	70
419	68.50	135	68.500	76
437	69.00	51	68.990	51
421	70.00	140	70.009	76
217	70.18	133	70.180	76
343	70.35	112	70.330	102
327	70.51	142	70.480	51
261	70.74	140	70.800	63
10	71.58	140	71.550	76
164	72.36	140	72.350	76
226	74.75	147	74.810	76
330	75.00	145	75.000	76
441	75.40	146	75.400	102
88	76.86	127	76.860	76
			78.150	76
342	78.25	152	78.250	102
307	78.31	152	78.280	76
			78.300	76

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
			78.440	76
411	78.51	152	78.490	76
377	79.15	152	79.585	75
240	79.58	152	79.590	76
			79.720	50
			79.790	75
410	80.01	152	79.980	76
442	81.00	171	81.000	102
123	82.40	162	82.330	44
			82.380	114
73	82.49	152	82.490	76
106	83.76	152	83.560	76
256	83.56	160	83.610	76
11	83.82	102		
			84.400	70
227	84.99	152	85.000	76
268	87.45	165	85.600	42
			87.590	68
			90.420	70
388	90.42	152	90.450	76
230	91.31	178	91.280	102
			92.070	76
125	92.61	185	92.610	76
92	92.63	152		
			93.290	76
277	93.40	178	93.450	51
12	93.55	76	93.775	48
216	94.03	152	94.030	76
128	95.32	190	95.480	76
225	96.16	178	96.100	102
			96.700	51
72	96.82	183	96.850	76
292	97.10	190	97.160	102
319	97.79	152		
264	98.53	152	98.470	76
			99.140	76
			99.590	47
			99.800	47
13	100.00	152	100.060	76
			100.350	70
14	101.60	203	101.565	102
408	102.05	152		
257	102.36	152	102.420	70
15	102.73	152		
16	103.17	178	103.118	66
338	103.25	152	103.200	102
382	104.01	152	103.910	76
17	104.39	152	104.700	104
96	105.64	152	105.675	75

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
339	105.92	152	105.920	102
269	106.50	152	106.500	100
			106.515	98
			107.387	75
317	107.75	152	107.950	50
			107.965	60
313	117.35	152	108.300	102
187	108.71	203	108.710	102
			108.810	70
			109.920	75
			109.930	51
75	109.98	152	110.010	76
			111.680	102
244	111.96	152	111.970	76
243	112.04	152	112.055	102
82	113.54	178	113.460	76
71	114.30	102	114.350	76
			114.850	127
			114.870	76
196	114.91	178	114.930	76
355	116.78	152		
350	117.50	178	117.485	102
			119.000	102
249	120.14	152	120.210	51
			120.570	76
18	121.51	203	121.510	76
175	122.81	244	121.890	76
			122.580	76
			122.625	75
312	125.22	152		
120	127.00	229	126.924	50
316	128.50	152		
242	129.06	152	129.040	76
19	130.00	152	129.820	47
	134.63	150	133.100	51
467	134.63	150	134.633	105
314	135.74	152		
340	136.88	229	136.880	102
	137.16	250		
459	137.16	228		
276	139.27	229	139.120	76
331	140.05	229	140.000	102
			140.160	51
			140.560	70
434	143.62	152	143.600	44
139	144.78	229		
148	144.86	229	144.910	76
20	145.16	152	145.260	76

TOOLS**TESTPLATES**

Tool N°	Radius	Diameter	Radius	Diameter
142	145.62	229	145.640	76
			146.278	104
303	146.56	229	146.580	76
21	147.01	229	146.840	76
361	148.11	229	148.180	76
			148.590	60
126	149.86	229	150.000	102
			150.000	130
374	155.60	229	156.090	100
22	156.21	152	156.160	102
23	156.82	229		
24	157.48	229	157.480	76
			157.710	102
247	159.44	229	159.265	53
			159.890	76
			159.970	71
84	160.27	216	160.340	102
25	160.02	152	160.500	47
			160.530	35
			160.580	76
			161.980	76
295	162.51	229	162.410	102
188	164.92	229	164.909	102
291	165.96	229	165.990	102
			166.550	41
			167.130	44
			169.670	35
99	170.36	152	170.430	76
306	170.94	203	170.890	76
67	171.68	152	171.750	76
103	172.21	229	172.160	76
			174.350	51
			174.700	76
97	175.34	229	175.260	102
89	176.43	229		
			177.290	76
189	178.03	229	178.030	102
121	177.80	229	178.030	76
98	179.83	229	179.780	76
383	182.65	137	182.600	76
			183.015	40
401	184.30	229	185.120	76
			187.900	102
			191.510	100
114	191.52	229	191.670	102
352	192.15	229	192.200	102
26	192.99	254	192.940	76
			195.700	102

TOOLS**TESTPLATES**

Tool N°	Radius	Diameter	Radius	Diameter
185	197.51	229	197.530	102
100	197.76	152	197.680	51
			197.680	76
27	200.00	152	199.950	47
194	200.00	229	200.070	102
210	200.48	229	200.520	102
387	201.42	229	201.490	102
341	201.98	229	201.980	102
145	202.34	229	202.310	102
28	203.02	254	202.740	76
			202.890	47
274	203.63	229	203.580	102
334	203.81	229	203.860	102
431	206.84	229		
69	207.62	229	207.495	95
429	208.53	229	208.460	102
192	210.00	229	210.310	76
102	217.17	229	217.180	76
			217.960	51
333	219.98	229	219.990	102
290	220.52	229	220.470	102
347	221.51	229	221.510	102
			224.360	38
29	224.74	152	224.660	102
190	226.59	229	226.600	102
350	227.08	229	227.030	76
253	228.57	229	228.420	95
353	230.12	229	229.990	51
79	230.78	152	230.710	70
30	235.00	152	235.130	76
373	235.46	229	235.530	102
298	237.49	229	237.570	102
300	238.28	229	238.380	102
			241.760	51
335	241.91	229	241.990	76
462	242.94	228		
31	244.42	229	244.370	114
191	245.85	229	245.850	102
			245.940	114
308	247.14	229	247.120	102
236	247.60	229	247.600	102
			248.470	97
248	248.51	229	248.550	95
332	250.01	229	249.990	102
150	254.00	305	254.020	102
32	254.46	152	254.580	95
151	260.32	254	260.440	102
104	261.67	229	261.630	102
			262.820	104

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
146	263.65	229	263.730	102
347	264.03	305	264.030	254
			265.350	104
33	266.70	152	266.850	91
34	267.46	102		
262	268.60	229	268.700	104
			271.550	75
362	271.30	229	271.670	76
101	276.12	152	275.800	95
70	279.90	127	278.560	60
			278.870	60
154	281.00	305	280.640	102
35	282.60	152	281.580	35
311	286.13	229	286.080	102
367	292.81	229	292.780	76
36	296.42	152	296.670	152
			296.770	102
			298.470	63
91	300.00	229	300.000	76
			303.050	75
80	303.05	152	303.100	76
			306.200	104
329	306.17	229	306.250	102
304	307.09	229	306.980	76
37	308.76	229	308.760	104
0			308.760	104
144	314.32	229	314.300	102
270	315.98	229	316.090	104
			316.095	104
457	318.35	150		
			321.250	55
426	324.28	229	323.000	104
			325.400	152
395	327.51	229	327.560	75
			334.360	152
235	335.23	229	335.460	104
359	344.75	229	344.750	102
0			344.770	153
38	350.52	102		
39	354.00	229	354.150	76
299	358.88	229	358.880	102
			362.350	102
74	368.30	229	369.570	152
336	370.99	229	370.950	102
40	371.60	102		
438	373.82	229	374.135	75
325	374.34	229	374.290	102
			381.300	76
461	384.00	228		

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
348	388.03	305	388.030	102
41	388.62	152	388.680	152
156	389.00	229	389.080	76
213	390.91	229	390.960	102
152	391.00	229		
212	392.94	229	392.800	102
0			396.565	205
42	400.05	152	400.050	76
289	403.00	229	403.000	102
			407.280	100
			407.490	102
			409.570	47
439	412.25	152	412.200	102
358	420.31	229	420.300	152
43	426.97	229	426.540	51
305	429.77	229	429.820	100
44	434.34	229	434.490	76
			435.360	70
491	445.17	229	445.165	205
			454.000	104
231	456.59	229	456.610	102
127	456.77	229	456.630	102
			459.480	76
95	461.77	229	461.640	76
76	464.82	229	464.700	76
			465.050	104
81	469.90	152		
446	473.49	154		
			475.030	152
			476.000	101
354	476.45	229	478.810	54
45	480.34	229	480.290	108
			480.700	104
46	482.09	102		
90	495.30	305	495.300	102
180	500.00	229	499.950	102
			500.020	100
403	503.00	229	500.225	104
184	509.00	229	508.890	102
386	514.99	229	511.680	76
406	521.23	229	521.060	102
417	524.00	229	524.000	102
416	525.50	229	525.470	102
273	532.00	229	531.900	102
			536.600	102
415	538.23	229	538.170	102
418	539.70	229	539.700	102
271	544.58	229	544.650	102
143	558.80	229	558.490	76

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
203	572.52	254	572.770	102
			572.770	254
287	579.50	229	579.520	102
			583.690	102
68	583.77	229	583.970	95
282	595.99	229		
48	599.95	152	600.100	76
			600.380	76
			608.520	104
176	608.58	229	608.580	95
283	611.99	229		
			617.450	104
49	619.76	216		
66	622.30	330	622.700	146
50	638.81	152	638.520	77
			639.920	220
0			640.100	200
0			651.420	200
326	651.99	229		
296	659.41	229	659.350	102
			672.000	104
			672.000	100
211	690.37	229	691.720	102
			700.000	104
254	697.23	152	700.000	100
51	711.20	229	710.720	76
476	714.00	228		
480	720.14	228		
215	723.90	229	724.520	102
214	727.71	229	728.570	102
			734.980	
			735.000	104
86	754.38	229	753.110	76
263	759.30	229	758.980	102
486	763.56	300	765.600	102
147	767.59	229	767.770	102
			768.090	76
			769.030	229
267	777.49	229	777.490	102
233	788.67	229	795.985	155
52	795.02	152	797.560	54
337	798.73	229	798.700	102
			801.100	102
455	806.00	150		
			816.090	104
53	831.11	152	831.110	70
			831.580	102
			834.450	155
			837.300	104

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
479	840.77	228		
380	854.20	229	852.680	76
			859.790	47
376	861.00	229	860.200	102
			875.700	152
54	881.63	102		
272	884.43	229	884.280	102
			890.300	76
266	900.00	229		
430	901.21	229	901.200	152
278	916.94	229	916.940	102
			932.280	54
0			933.000	55
489	934.00	330		
55	944.63	152	944.630	152
56		102	998.220	
135	1000.00	330	1000.010	102
135	1000.00	152	1000.230	47
232	1007.19	229	1007.140	102
407	1013.00	229	1012.950	104
87	1016.00	229	1013.000	102
458	1029.00	229	1029.850	104
57	1041.00	229	1040.800	152
			1044.200	75
			1053.590	108
			1058.000	152
			1058.000	127
			1067.000	152
398	1096.77	229	1093.190	104
			1116.480	127
360	1140.00	229	1143.000	104
	1170.80	229	1170.800	104
302	1175.74	229	1175.400	155
			1199.500	104
58	1219.20	229	1216.450	102
141	1219.20	330		
	1249.36	229	1260.500	104
59	1265.78	152	1270.000	102
60	1283.46	152	1276.680	102
			1293.880	102
172	1319.78	229	1315.970	102
			1334.300	152
0			1334.800	153
0			1334.800	64
435	1360.00	229	1359.910	76
197	1385.06	330	1385.900	102
78	1401.57	229		
422	1431.19	229	1431.190	76
			1431.350	75

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
			1431.350	75
	1436.50	229	1445.610	152
397	1448.00	229	1457.580	102
279	1473.20	229	1473.200	229
485	1487.90	228	1487.900	100
149	1500.00	229	1500.280	104
487	1522.04	300	1522.050	100
178	1531.62	229		
399	1556.99	229	1556.180	102
488	1561.00	300		
275	1565.99	229	1568.480	102
237	1585.52	229	1590.070	102
			1597.050	51
351	1605.28	229	1607.480	102
177	1628.14	229		
224	1633.22	330		
			1657.350	229
61	1676.40	152	1680.970	89
483	1724.50	300		
288	1728.01	229	1727.990	102
436	1774.00	152	1773.930	102
			1795.770	63
173	1799.84	229	1798.000	152
484	1808.00	300	1809.500	102
375	1818.00	229		
			1834.050	102
			1858.810	90
392	1858.77	229	1858.810	152
0			1863.000	90
170	1869.44	229		
140	1895.00	330		
482	1911.00	300		
255	1935.99	229	1938.000	104
62	1971.04	152	1971.040	76
108	2000.00	229	1998.400	104
468	1999.00	300		
400	2023.01	229	2025.650	102
			2027.930	102
			2032.000	44
63	2056.13	152	2057.390	57
424	2063.00	229	2063.000	102
393	2150.01	229	2149.600	102
297	2158.00	229	2149.980	104
			2161.840	90
394	2211.83	229	2212.850	102
179	2260.60	229	2268.220	102
390	2268.98	229	2269.980	111
			2366.600	203
171	2387.60	229	2376.600	229

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
			2393.950	104
169	2400.30	305	2400.300	152
492	2432.50	229		
402	2574.80	229	2581.900	104
			2616.190	152
83	2674.62	229	2647.950	76
			2698.600	75
222	2884.93	330	2877.490	102
202	2948.94	330	2950.900	115
64	2988.30	152	2988.300	102
195	3000.00	229	3006.000	102
234	3082.52	229	3087.670	102
			3238.250	152
186	3250.00	229	3248.700	102
389	3349.00	229	3349.800	75
			3353.310	75
			3495.500	146
			3509.010	63
481	3523.00	228		
111	3657.60	229	3657.600	102
111	3657.60	330	3657.600	102
112	4000.00	229	4000.000	102
			4013.190	76
280	4058.92	229	4051.300	229
			4206.230	76
			4273.500	152
			4306.000	152
			4370.000	152
			4394.200	152
			4477.000	76
182	4500.00	229	4488.300	152
219	4775.20	330	4773.000	104
			5004.970	57
			5202.000	102
			5551.900	80
			6000.000	115
			6000.000	104
258	6476.99	229	6475.000	70
198	6515.10	330		
464	6600.00	228		
0			6640.000	104
			7619.000	102
223	8073.90	330	8072.120	102
221	8912.86	330	8595.300	102
199	8610.60	330	8595.300	229
252	9715.50	229	9709.000	146
409	10033.00	229	10007.600	152
			10728.950	102
			11958.300	102
381	12023.09	229	11960.000	102

TOOLS

TESTPLATES

Tool N°	Radius	Diameter	Radius	Diameter
			12971.750	102
425	15531.00	229	15531.000	152
423	15601.00	229		
423	15601.00			
0			19999.900	140
			20000.000	136
			21310.600	136
			25450.000	104
379	28000.00	229	27999.900	102
			50470.000	102