



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.
www.bellingeel.com

Tel:0755-21038430

Address:Rm. 108, No.1 Building, Meibaohe industrial park, No.14 Shilongzi Road, Dalang street, Longhua district, Shenzhen, China

Client:

LumCAT:

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.09

LampCAT:

Current(A): 0.3340

Lamp flux(lm): -1.0

Power (W): 39.99

Number of Lamps: 1

PF: 0.9960

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 6456.15, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 161.46

Central intensity(cd): 2321.111, Maximum intensity(cd): 2552.847

Angle of maximum intensity: C=337.5 γ =10.0

Beam Angle(50%Imax): [C0/180]Total=108.8

[C90/270]Total=99.7

Field angle(10%Imax): [C0/180]Total=153.7

[C90/270]Total=156.8

Maximum s/h(1/2): C0_180=1.17 C90_270=1.27

Maximum s/h(1/4): C0_180=1.23 C90_270=1.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 2.44%

Down flux rate of LUM(%): 97.56%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 77.259%

Zonal flux distribution table

Appendix Page: 2 Total:9

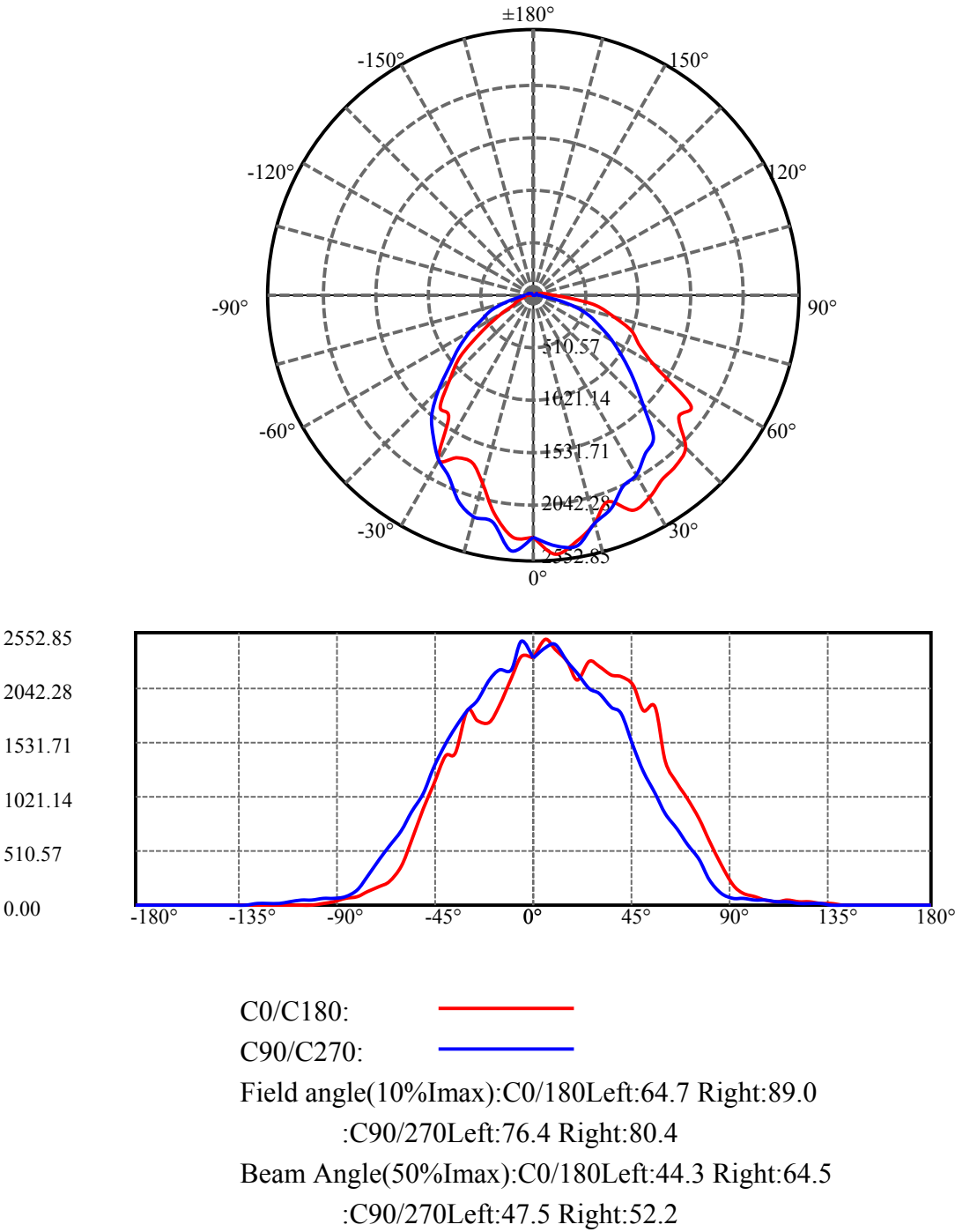
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2321.111	0.000	0	0.00%	0.00%
5.0	2231.155	54.421	54.421	0.00%	0.84%
10.0	2249.848	160.300	214.721	0.00%	3.33%
15.0	2064.606	255.930	470.651	0.00%	7.29%
20.0	2006.397	335.508	806.159	0.00%	12.49%
25.0	1992.206	419.380	1225.539	0.00%	18.98%
30.0	1862.328	487.794	1713.333	0.00%	26.54%
35.0	1786.688	537.343	2250.676	0.00%	34.86%
40.0	1631.318	570.269	2820.945	0.00%	43.69%
45.0	1529.776	585.302	3406.247	0.00%	52.76%
50.0	1372.505	586.448	3992.695	0.00%	61.84%
55.0	1107.744	539.289	4531.984	0.00%	70.20%
60.0	864.795	455.947	4987.931	0.00%	77.26%
65.0	696.466	379.546	5367.477	0.00%	83.14%
70.0	537.810	312.527	5680.003	0.00%	87.98%
75.0	397.194	244.395	5924.399	0.00%	91.76%
80.0	269.719	178.447	6102.846	0.00%	94.53%
85.0	172.466	120.152	6222.998	0.00%	96.39%
90.0	104.721	75.896	6298.894	0.00%	97.56%
95.0	67.958	47.281	6346.175	0.00%	98.30%
100.0	47.486	31.369	6377.544	0.00%	98.78%
105.0	33.660	21.712	6399.256	0.00%	99.12%
110.0	23.211	14.865	6414.121	0.00%	99.35%
115.0	19.986	10.938	6425.059	0.00%	99.52%
120.0	15.453	8.615	6433.674	0.00%	99.65%
125.0	11.620	6.258	6439.932	0.00%	99.75%
130.0	8.077	4.283	6444.215	0.00%	99.82%
135.0	6.038	2.852	6447.067	0.00%	99.86%
140.0	4.563	1.963	6449.03	0.00%	99.89%
145.0	4.639	1.535	6450.566	0.00%	99.91%
150.0	4.776	1.386	6451.952	0.00%	99.93%
155.0	4.974	1.234	6453.186	0.00%	99.95%
160.0	5.050	1.051	6454.237	0.00%	99.97%
165.0	5.004	0.829	6455.066	0.00%	99.98%
170.0	5.035	0.595	6455.661	0.00%	99.99%
175.0	5.156	0.365	6456.026	0.00%	100.00%
180.0	5.383	0.126	6456.152	0.00%	100.00%

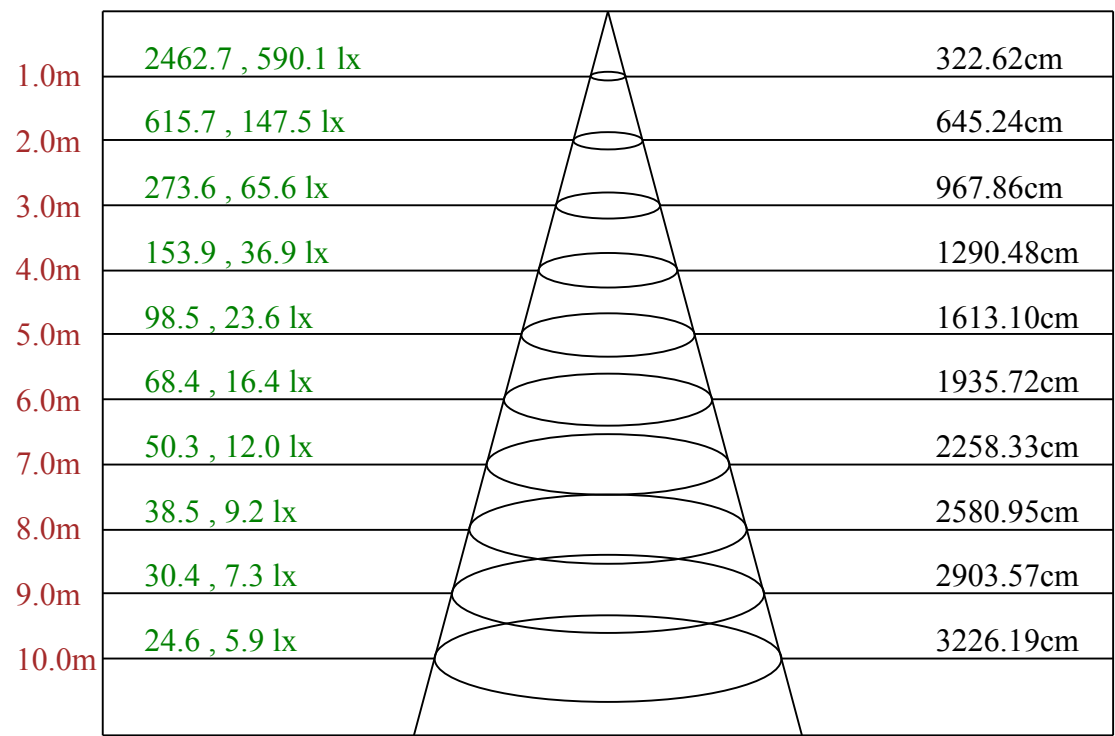
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1713.33	N.A.	26.54%
0-40	2820.94	N.A.	43.69%
0-60	4987.93	N.A.	77.26%
0-90	6298.89	N.A.	97.56%
0-120	6433.67	N.A.	99.65%
0-180	6456.15	N.A.	100.00%
60-90	1310.96	N.A.	20.31%
90-120	134.78	N.A.	2.09%
90-130	145.32	N.A.	2.25%
90-150	153.06	N.A.	2.37%
90-180	157.13	N.A.	2.43%
0-62.33	5164.92	N.A.	80.00%

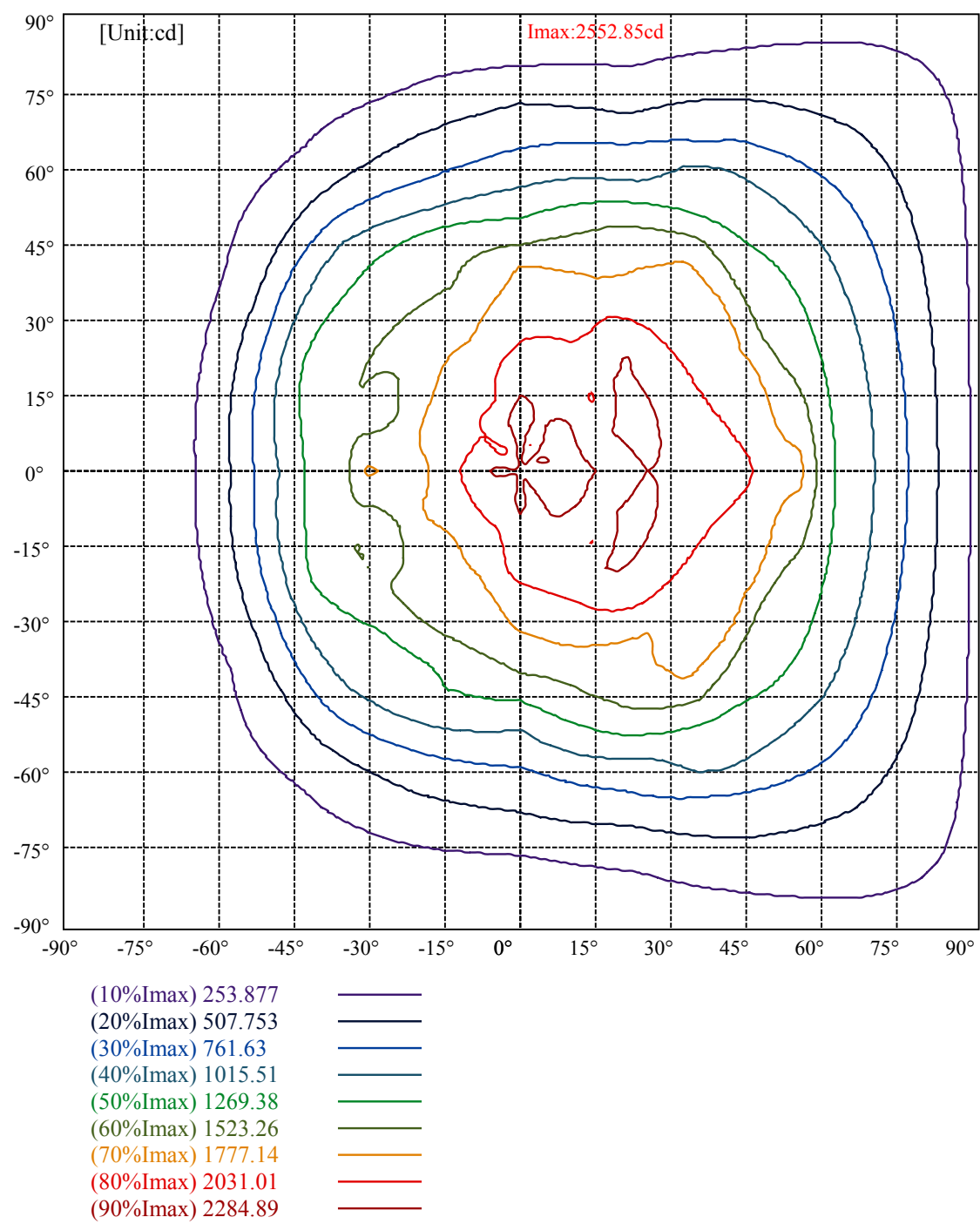
ZONAL LUMEN SUMMARY

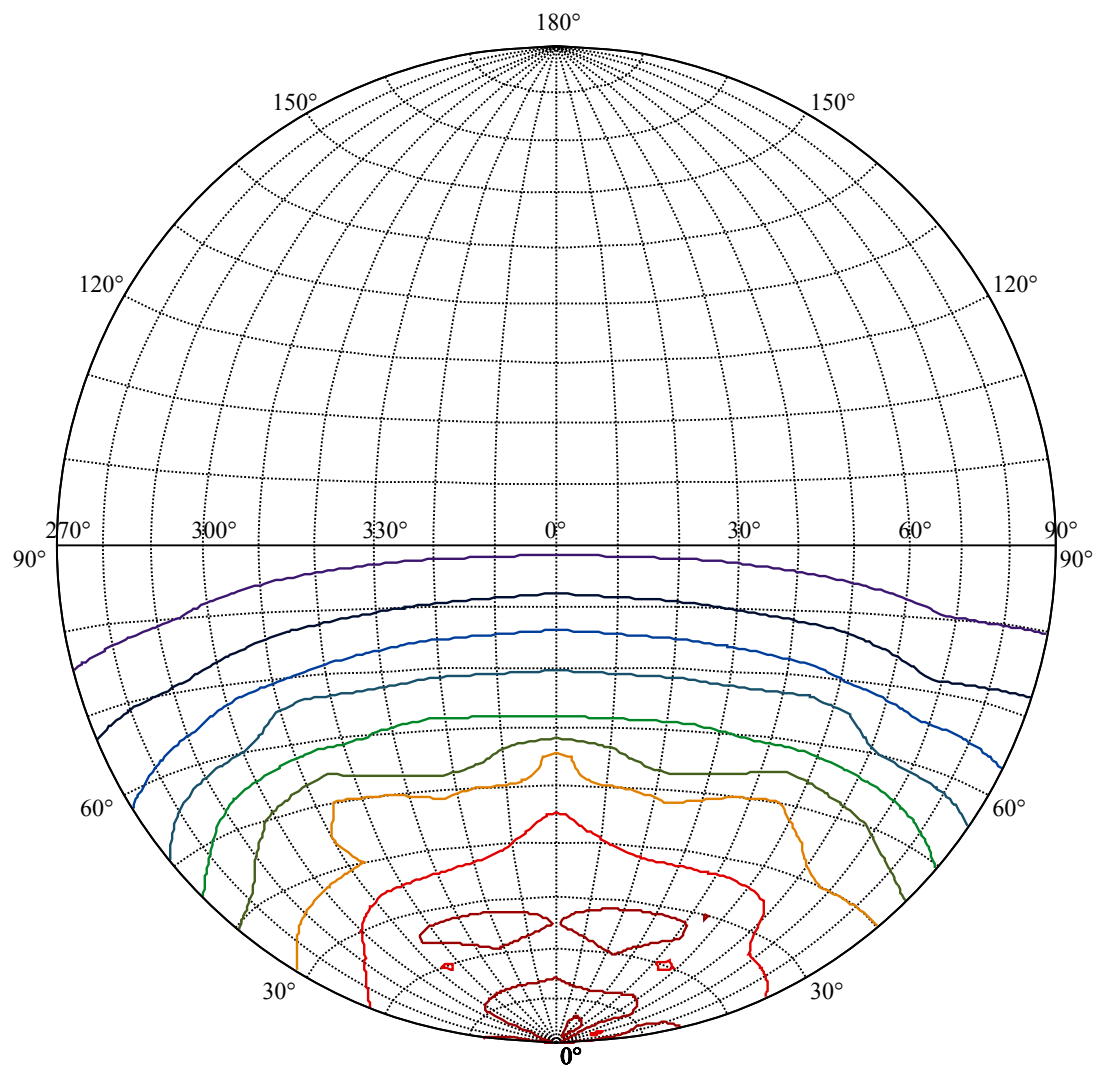
0-10	214.72
10-20	591.44
20-30	907.17
30-40	1107.61
40-50	1171.75
50-60	995.24
60-70	692.07
70-80	422.84
80-90	196.05
90-100	78.65
100-110	36.58
110-120	19.55
120-130	10.54
130-140	4.82
140-150	2.92
150-160	2.29
160-170	1.42
170-180	0.36





Max , Ave Beam angle of C337.5 plane 116.41





House

[Unit:cd]

Road

I _{max} :2552.85	
(10%I _{max}) 254.94	—
(20%I _{max}) 509.879	—
(30%I _{max}) 764.819	—
(40%I _{max}) 1019.76	—
(50%I _{max}) 1274.7	—
(60%I _{max}) 1529.64	—
(70%I _{max}) 1784.58	—
(80%I _{max}) 2039.52	—
(90%I _{max}) 2294.46	—

Intensity data(cd)

Appendix Page: 8 Total:9

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2321.11	2491.03	2397.58	2279.31	2111.39	2283.69	2228.45	2162.01	2136.70
22.5	2321.11	2232.59	2446.26	2080.97	2305.35	2531.67	2191.46	2126.48	1961.00
45.0	2321.11	2331.15	2453.80	2212.39	1988.01	2259.84	2300.24	2132.32	1876.06
67.5	2321.11	1988.01	2213.12	2226.01	2264.22	2094.36	1951.75	1946.64	1781.88
90.0	2321.11	2414.38	2436.03	2278.34	2174.91	2035.22	1985.82	1862.68	1786.75
112.5	2321.11	2052.74	2210.44	1990.69	1932.28	1847.10	1699.38	1602.28	1482.55
135.0	2321.11	1989.23	2029.62	1980.71	1839.56	1753.17	1682.59	1598.15	1405.89
157.5	2321.11	2171.02	2051.28	1783.59	1832.99	1610.31	1304.17	1523.43	1443.86
180.0	2321.11	2327.50	2130.13	1867.06	1718.37	1721.29	1819.60	1419.52	1398.83
202.5	2321.11	2235.99	2104.33	1785.05	1799.40	1591.82	1266.69	1538.52	1397.13
225.0	2321.11	2072.45	2082.43	1873.14	1731.75	1642.68	1653.88	1500.07	1288.59
247.5	2321.11	2041.06	2120.15	1912.57	1838.34	1680.16	1550.69	1540.47	1279.34
270.0	2321.11	2469.86	2208.74	2203.14	2110.66	1923.52	1829.82	1667.75	1512.48
292.5	2321.11	2091.92	2167.36	2285.15	2188.78	2082.92	1951.26	1841.02	1633.19
315.0	2321.11	2408.29	2393.45	2129.64	2014.05	2309.00	2246.46	2021.11	1793.81
337.5	2321.11	2381.28	2552.85	2145.95	2252.30	2508.56	2135.00	2104.58	1923.03
360.0	2321.11	2491.03	2397.58	2279.31	2111.39	2283.69	2228.45	2162.01	2136.70

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	2058.83	1828.36	1848.81	1355.27	1136.74	1006.78	814.77	606.70	376.72
22.5	1828.36	1747.33	1340.18	1333.61	1114.10	979.04	754.66	540.50	339.00
45.0	1882.63	1805.73	1540.23	1197.09	1154.26	830.59	636.63	414.69	259.18
67.5	1674.32	1534.39	1275.21	967.60	807.47	558.27	401.79	263.07	158.43
90.0	1497.15	1248.68	1044.99	858.09	719.62	574.33	425.88	244.33	108.30
112.5	1440.69	1261.09	927.45	728.62	578.95	429.29	279.13	197.12	162.81
135.0	1326.80	1230.92	991.45	673.38	419.31	271.10	195.18	137.01	95.64
157.5	1377.66	1086.12	763.91	457.03	267.45	208.07	149.67	101.97	66.44
180.0	1120.92	902.38	600.13	365.04	223.16	172.79	122.17	81.53	57.19
202.5	1296.14	1020.41	711.59	431.23	250.90	200.77	146.75	104.16	66.92
225.0	1167.16	1110.70	893.62	618.38	400.57	261.86	193.47	139.69	100.75
247.5	1266.93	1123.59	895.81	650.50	513.00	370.39	246.04	181.79	149.67
270.0	1280.80	1043.77	877.31	696.01	561.92	430.26	268.91	138.72	78.85
292.5	1584.76	1443.61	1215.83	944.72	746.14	544.40	381.83	242.39	152.59
315.0	1847.35	1806.95	1511.51	1187.84	1122.62	788.97	591.61	395.95	254.07
337.5	1825.93	1766.06	1285.91	1372.31	1127.24	978.06	746.63	525.90	332.92
360.0	2058.83	1828.36	1848.81	1355.27	1136.74	1006.78	814.77	606.70	376.72

C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	198.10	115.11	79.58	54.76	26.04	42.35	33.34	28.23	19.47
22.5	184.95	105.86	77.15	51.84	28.96	31.39	30.42	25.55	15.82
45.0	151.61	100.51	72.04	51.84	40.40	32.85	26.77	12.90	6.08
67.5	95.40	63.03	45.75	36.26	27.01	19.96	14.36	10.46	7.54
90.0	61.33	56.95	54.27	47.70	36.99	26.28	16.79	11.93	8.52
112.5	127.76	88.34	56.46	36.26	23.85	16.55	11.44	7.79	5.35
135.0	63.76	39.67	21.42	14.36	9.98	6.81	4.87	3.89	3.89
157.5	41.37	23.12	7.06	2.68	2.68	2.92	3.16	3.41	3.89
180.0	32.37	18.74	6.81	2.19	2.43	2.92	3.16	3.65	4.14
202.5	42.35	22.88	7.79	2.68	2.68	2.68	3.41	3.65	3.89
225.0	67.90	43.08	25.31	15.33	11.44	8.27	5.84	4.62	4.14
247.5	115.84	76.90	51.11	34.31	24.34	18.50	12.66	9.73	7.30
270.0	63.52	61.08	53.05	40.40	29.69	20.44	14.12	10.22	7.54
292.5	95.88	66.68	51.11	41.62	31.64	23.36	15.33	10.71	7.54
315.0	151.13	97.83	72.77	55.49	42.59	34.07	22.88	14.12	6.57
337.5	182.28	107.57	78.12	50.86	30.66	30.42	28.72	25.07	17.52
360.0	198.10	115.11	79.58	54.76	26.04	42.35	33.34	28.23	19.47

C/ $\gamma(^{\circ})$	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	13.14	4.38	4.38	4.62	4.87	4.62	4.87	4.87	5.11
22.5	8.03	4.14	4.38	4.38	4.62	5.11	4.87	4.87	5.35
45.0	4.87	4.62	4.38	4.62	4.87	5.11	5.11	4.87	5.60
67.5	5.84	4.62	4.87	4.62	5.11	5.11	5.11	5.11	5.35
90.0	6.81	5.11	4.38	4.38	4.62	4.87	4.62	4.87	4.87
112.5	4.14	4.14	4.38	4.38	4.62	4.62	4.62	4.62	5.11
135.0	4.14	4.14	4.38	4.62	4.87	4.62	4.62	4.87	4.87
157.5	4.14	4.62	4.87	5.11	5.11	5.11	5.11	4.87	4.87
180.0	4.62	4.87	5.11	5.11	5.11	5.35	5.11	5.11	4.87
202.5	4.38	4.62	5.11	5.35	5.60	5.35	5.35	5.35	5.11
225.0	4.62	4.62	5.11	5.11	5.35	5.35	5.35	5.35	5.11
247.5	5.60	4.62	4.62	4.87	4.87	5.35	5.11	5.11	5.11
270.0	5.84	5.35	5.11	5.35	5.35	5.60	5.60	5.60	5.60
292.5	5.60	4.87	4.38	4.62	4.87	4.87	5.11	4.87	5.35
315.0	5.11	4.14	4.38	4.62	4.87	4.87	4.87	5.11	5.11
337.5	9.73	4.14	4.38	4.62	4.87	4.87	4.62	5.11	5.11
360.0	13.14	4.38	4.38	4.62	4.87	4.62	4.87	4.87	5.11

C/ $\gamma(^{\circ})$	180.0
0.0	5.38
22.5	5.38
45.0	5.38
67.5	5.38
90.0	5.38
112.5	5.38
135.0	5.38
157.5	5.38
180.0	5.38
202.5	5.38
225.0	5.38
247.5	5.38
270.0	5.38
292.5	5.38
315.0	5.38
337.5	5.38
360.0	5.38