



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-1551-A
Luminaire: 92.76.374.00
Report No: NATA0100
Test No: 2017011920
LampCAT: BRIDGELUX VERO SE 13B
Lamp flux(lm): 3154.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 36.0000
Current(A): 0.6500
Power (W): 23.4000
PF: 0.0000
Ballast type:
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 2927.36
Efficiency(%): 92.81%
Lumens(lm)/Power(W): 128.01
Central intensity(cd): 11848.140
Maximum intensity(cd): 11848.140
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=24.0
[C90/270]Total=24.0
Field angle(10%Imax): [C0/180]Total=46.6
[C90/270]Total=46.6
Maximum s/h(1/2): C0_180=0.41 C90_270=0.41
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 94.97%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.461%

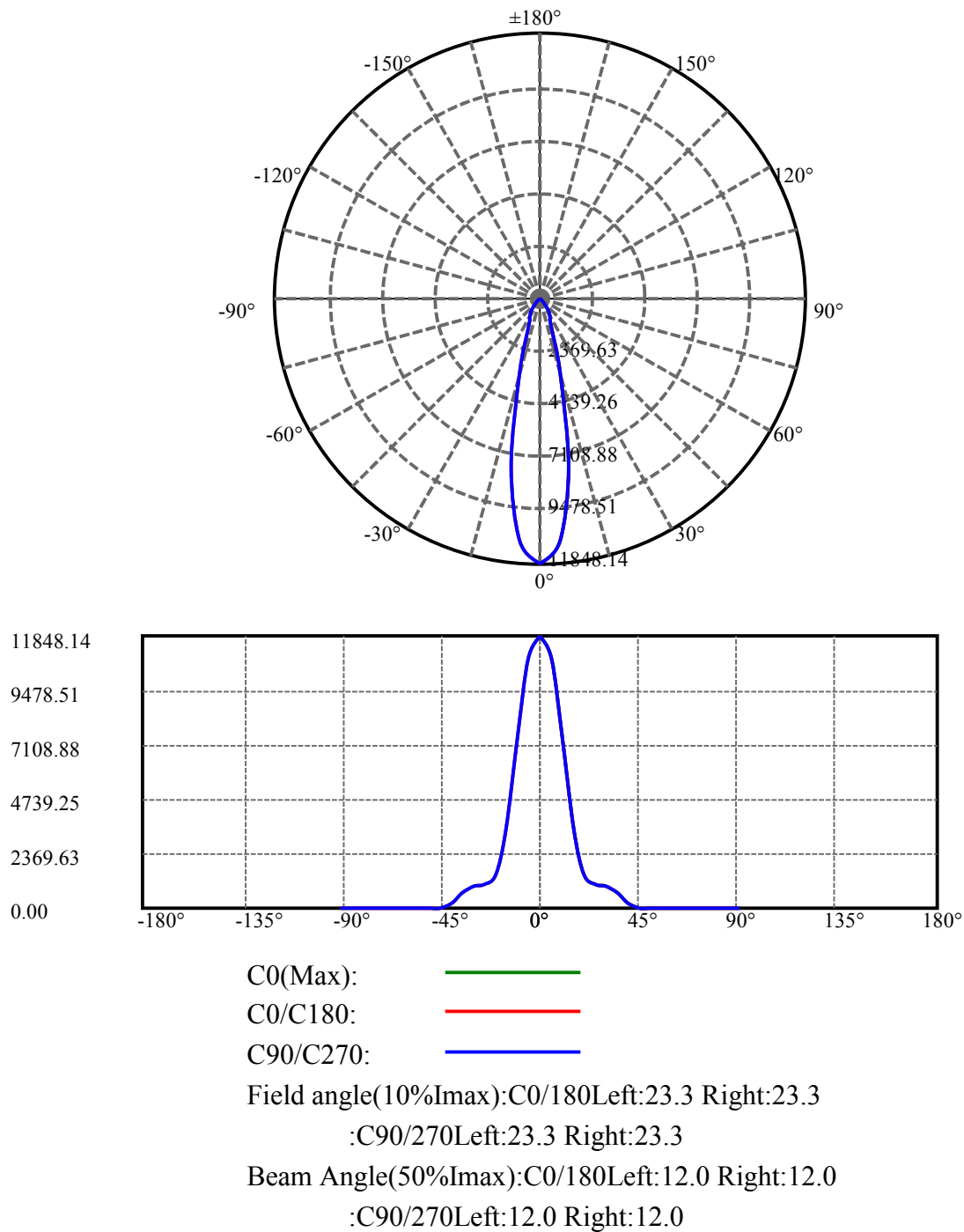
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11848.137	70.854	70.854	2.246%	2.420%
5.0	10819.477	516.882	587.737	16.388%	20.077%
10.0	7579.133	721.405	1309.142	22.873%	44.721%
15.0	3436.070	487.470	1796.611	15.456%	61.373%
20.0	1441.789	270.298	2066.909	8.570%	70.607%
25.0	1051.233	243.521	2310.431	7.721%	78.926%
30.0	976.687	267.679	2578.11	8.487%	88.070%
35.0	683.511	214.895	2793.005	6.813%	95.411%
40.0	197.535	69.599	2862.604	2.207%	97.788%
45.0	18.465	7.157	2869.761	.227%	98.033%
50.0	15.333	6.438	2876.199	.204%	98.252%
55.0	14.500	6.511	2882.71	.206%	98.475%
60.0	14.136	6.710	2889.42	.213%	98.704%
65.0	13.819	6.865	2896.285	.218%	98.939%
70.0	13.454	6.930	2903.215	.220%	99.175%
75.0	13.103	6.938	2910.153	.220%	99.412%
80.0	12.835	6.928	2917.081	.220%	99.649%
85.0	12.574	6.866	2923.947	.218%	99.884%
90.0	12.436	3.408	2927.355	.108%	100.000%

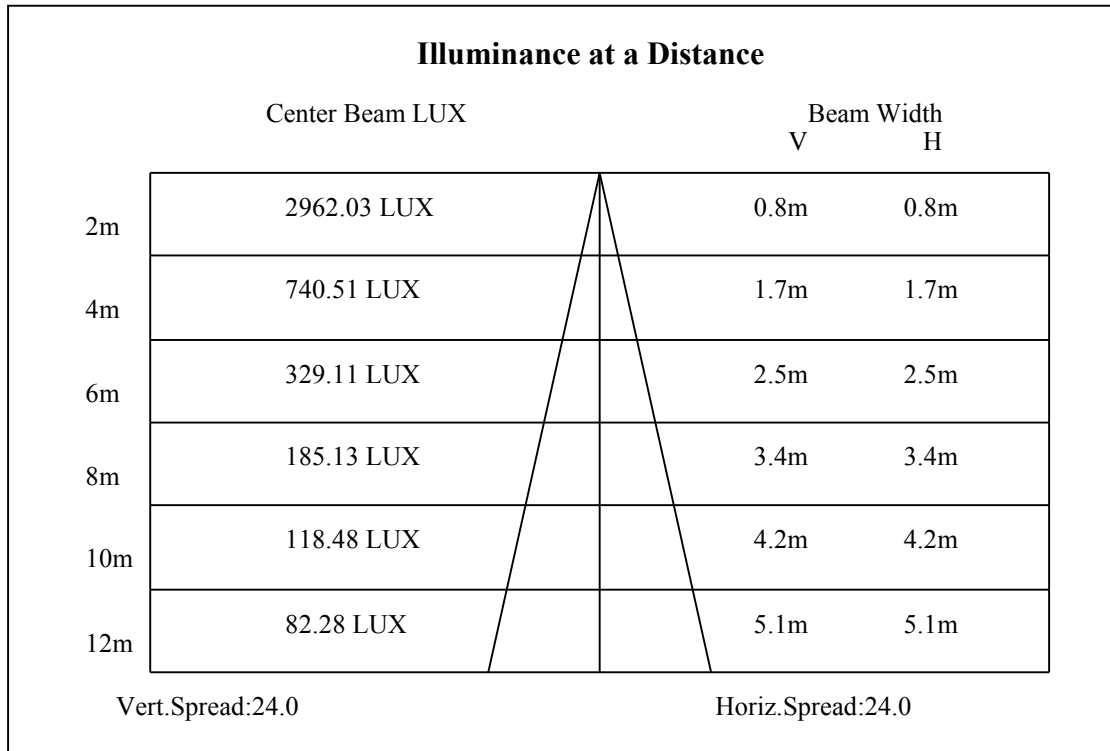
ZONAL LUMEN SUMMARY

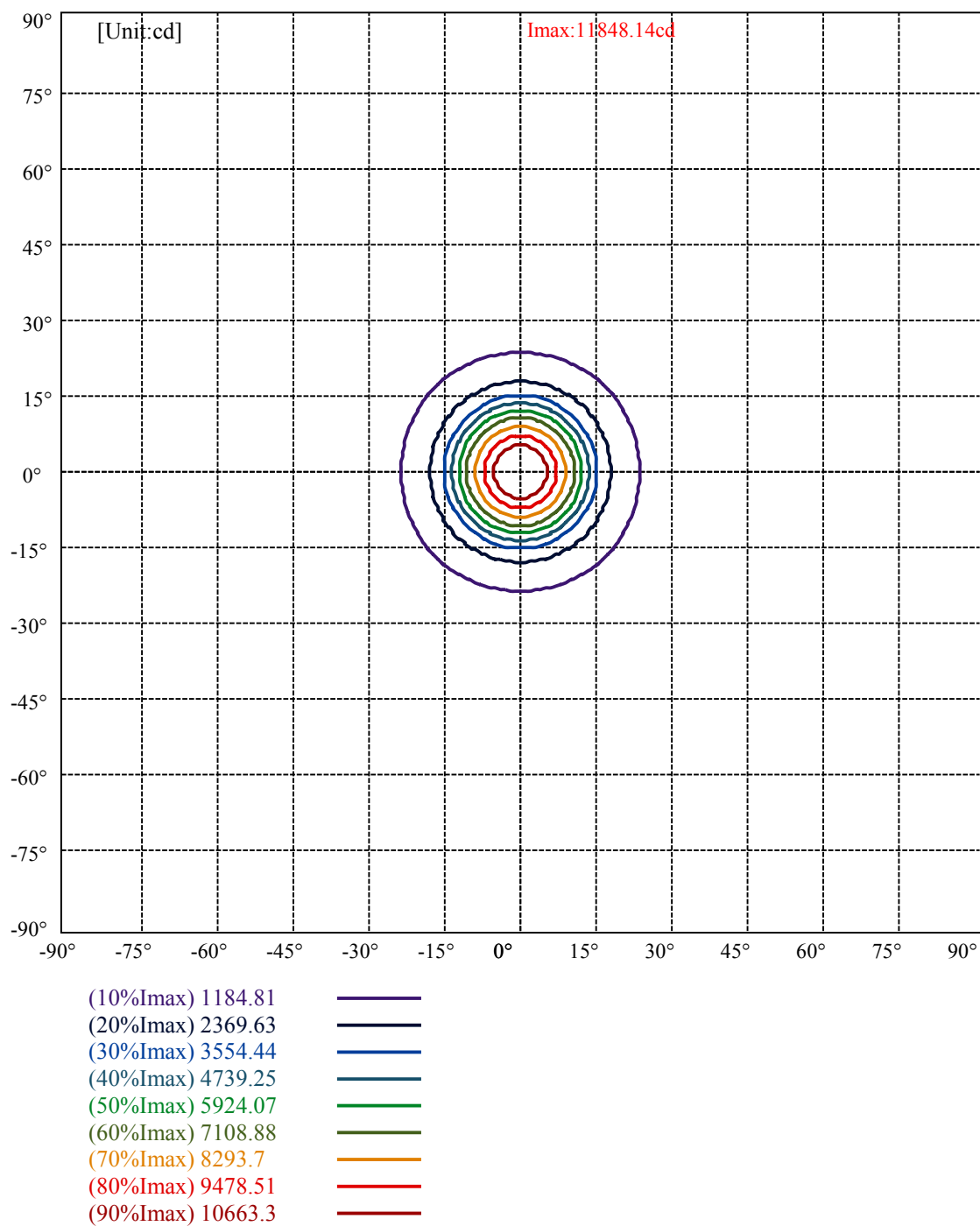
Zone	Lumens	%Lamp	%Fixt
0-30	2578.11	81.74%	88.07%
0-40	2862.60	90.76%	97.79%
0-60	2889.42	91.61%	98.70%
0-90	2923.95	92.71%	99.88%
0-120	2923.95	92.71%	99.88%
0-180	2927.36	92.81%	100.00%
60-90	41.24	1.31%	1.41%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.59	2341.88	74.25%	80.00%

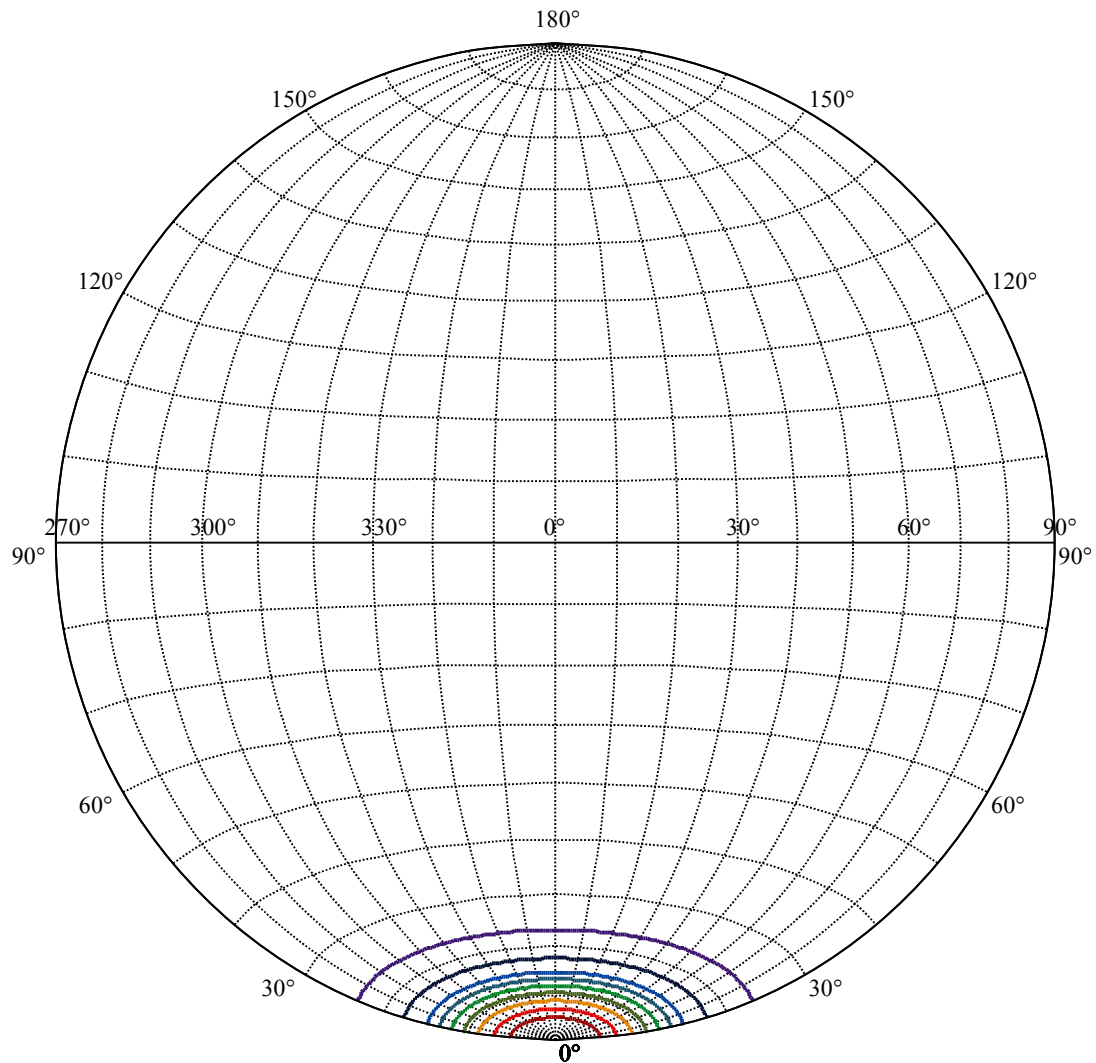
ZONAL LUMEN SUMMARY

0-10	1309.14
10-20	757.77
20-30	511.20
30-40	284.49
40-50	13.60
50-60	13.22
60-70	13.80
70-80	13.87
80-90	6.87
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00









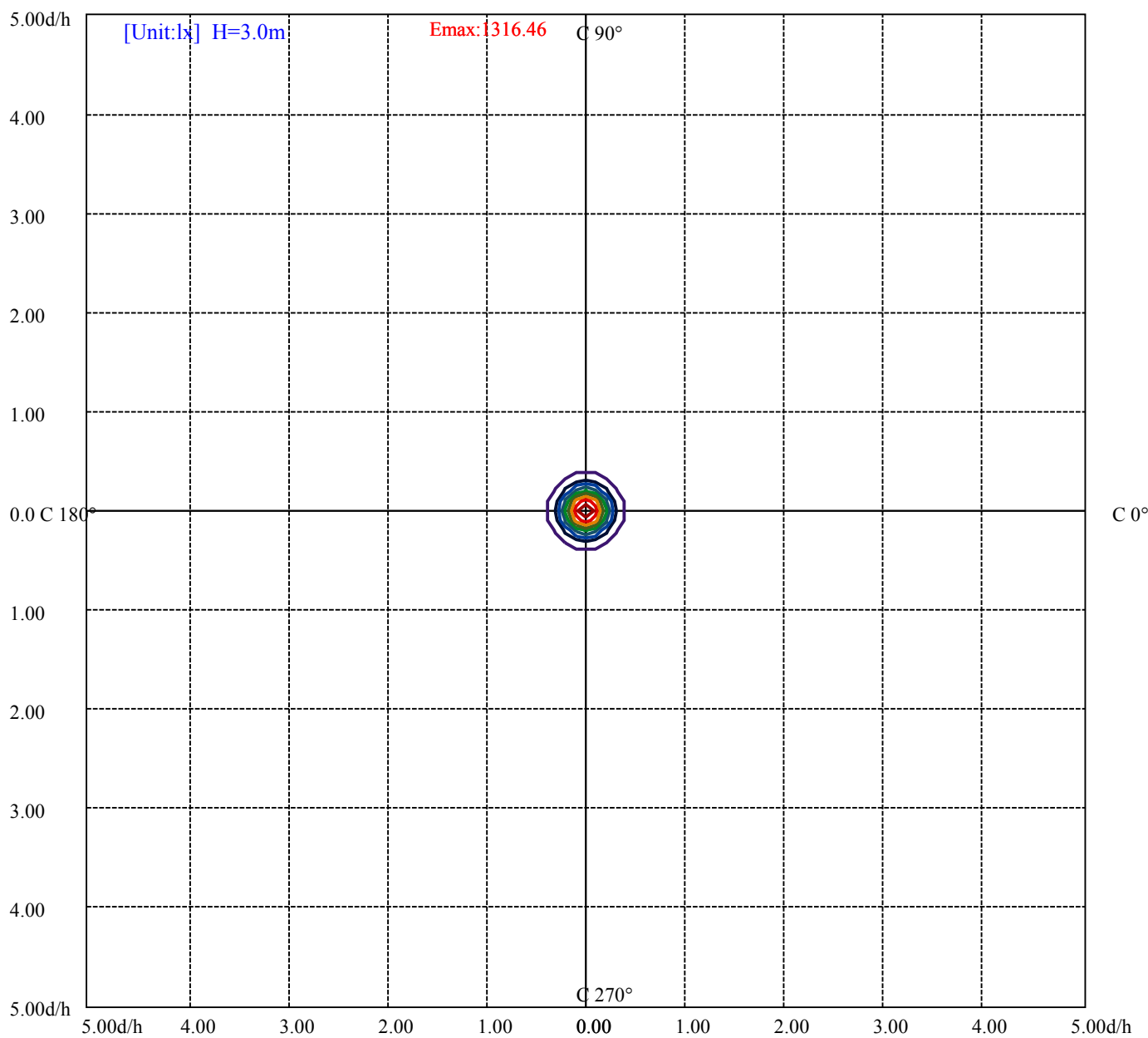
House

[Unit:cd]

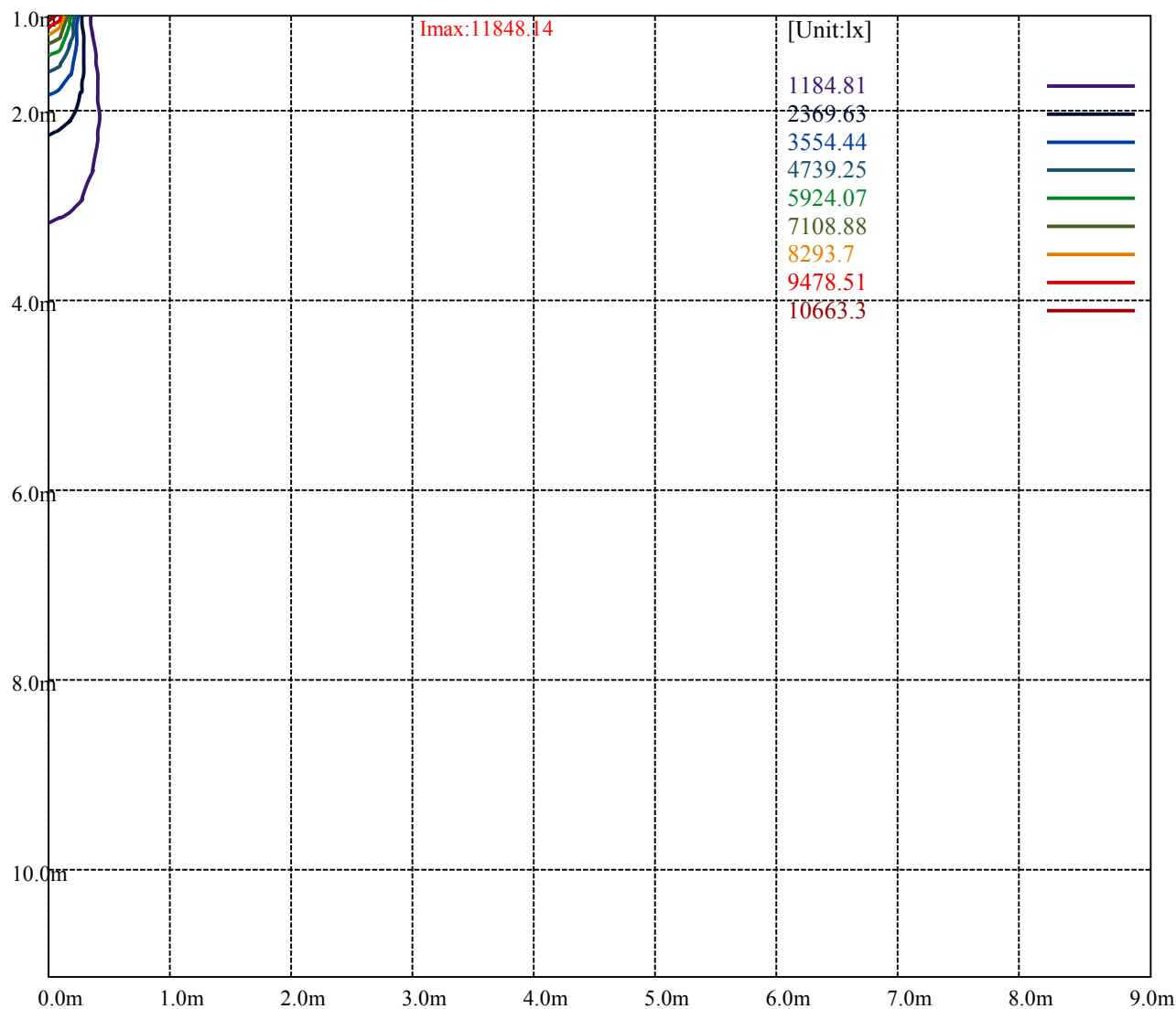
Road

Imax:11848.14

(10%Imax)	1184.81	—
(20%Imax)	2369.63	—
(30%Imax)	3554.44	—
(40%Imax)	4739.25	—
(50%Imax)	5924.07	—
(60%Imax)	7108.88	—
(70%Imax)	8293.7	—
(80%Imax)	9478.51	—
(90%Imax)	10663.3	—



(10%Emax)	131.6456	—
(20%Emax)	263.2911	—
(30%Emax)	394.9366	—
(40%Emax)	526.5823	—
(50%Emax)	658.2278	—
(60%Emax)	789.8733	—
(70%Emax)	921.5189	—
(80%Emax)	1053.165	—
(90%Emax)	1184.811	—



Luminance Table

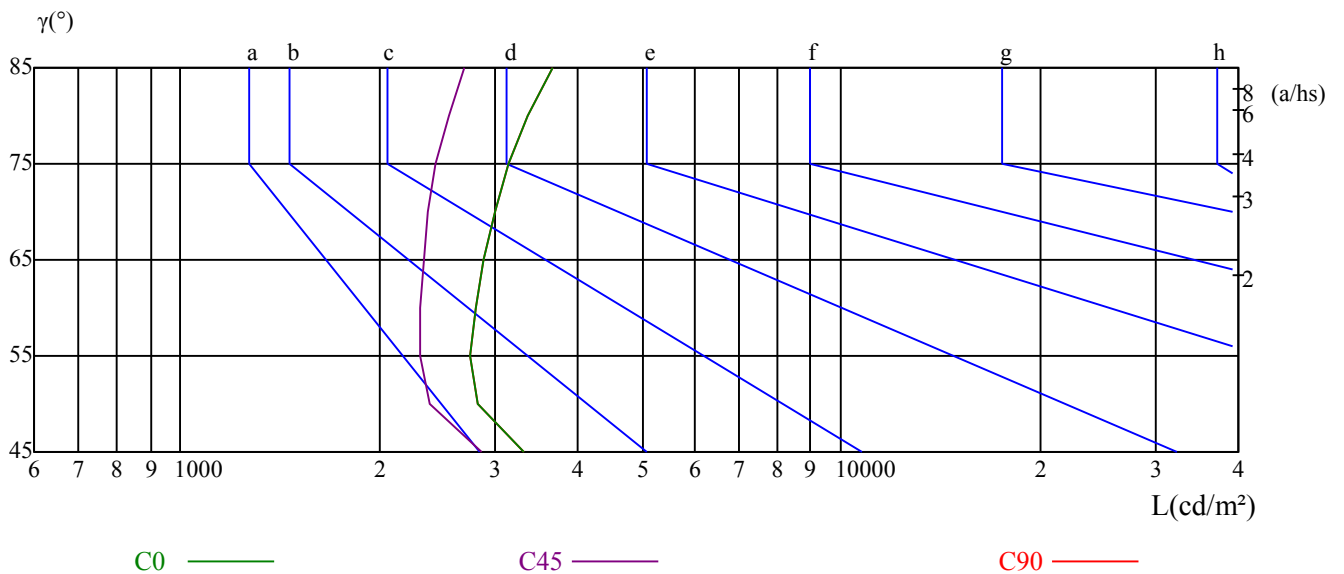
γ	45	50	55	60	65	70	75	80	85
C0	3301	2811	2748	2795	2880	2987	3138	3364	3670
C45	2852	2392	2303	2304	2331	2370	2436	2545	2694
C90	3301	2811	2748	2795	2880	2987	3138	3364	3670

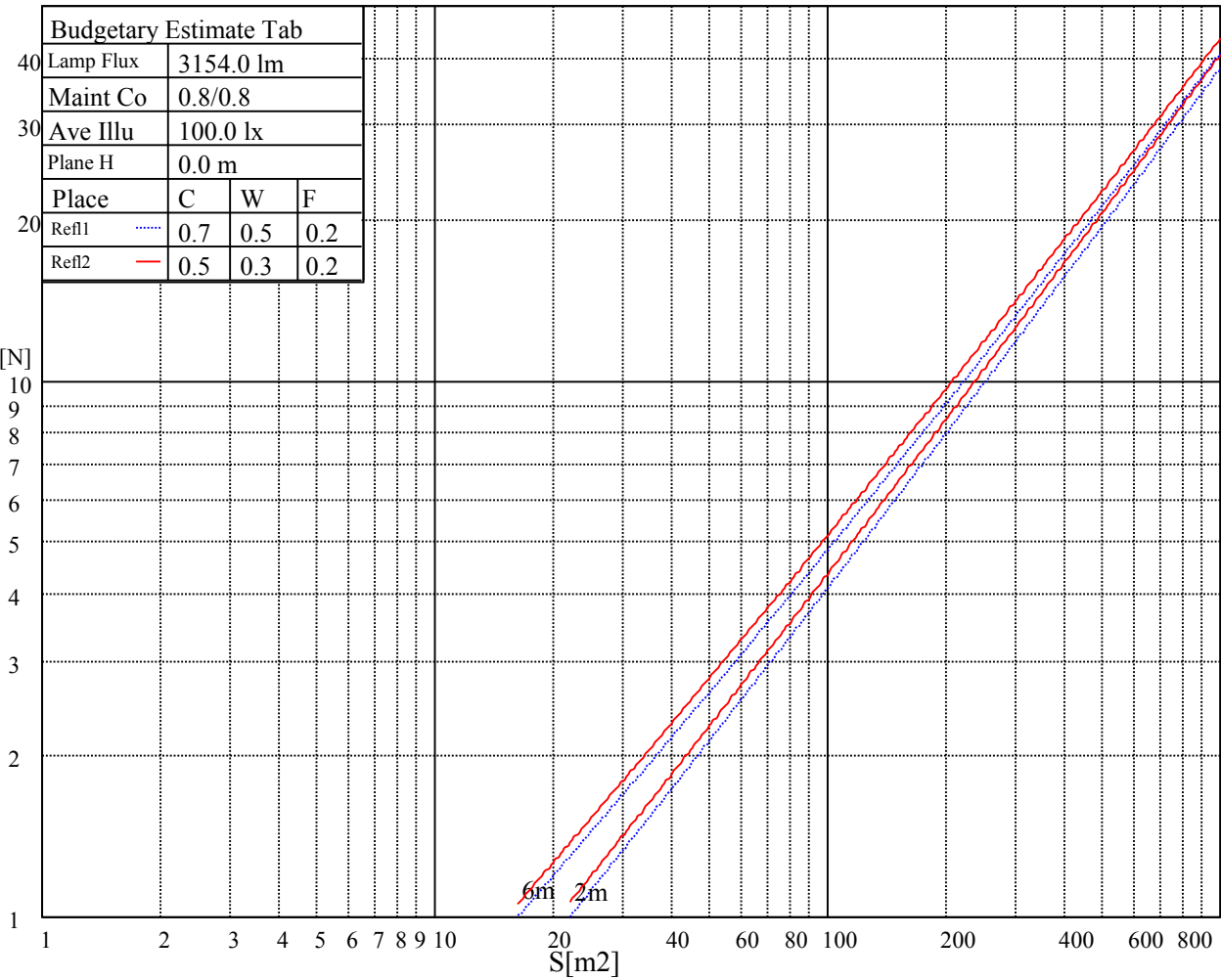
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6673	6673	6673	10332	10332	10332	29442	29442	29442

Glare Table

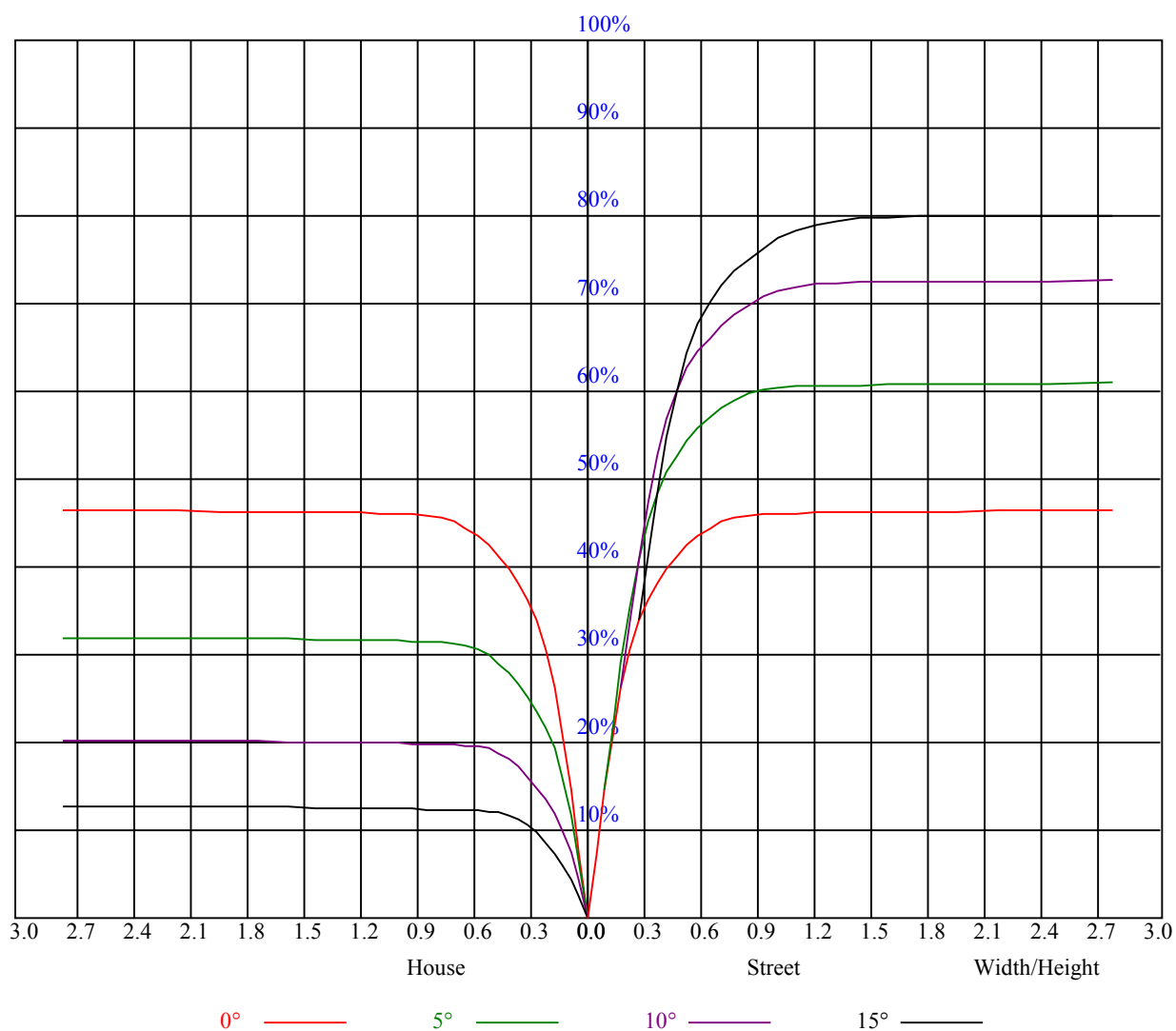
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.13	1.13	1.13	1.10	1.10	1.10	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.04	1.01	0.99	1.02	0.99	0.97	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.87
2	0.99	0.95	0.92	0.97	0.94	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.85	0.84
3	0.94	0.90	0.87	0.93	0.89	0.86	0.90	0.87	0.85	0.88	0.85	0.83	0.86	0.84	0.82	0.81
4	0.90	0.86	0.82	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.78
5	0.87	0.82	0.79	0.86	0.82	0.78	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.79	0.76	0.75
6	0.83	0.79	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.73
7	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
8	0.78	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.70	0.69
9	0.76	0.72	0.69	0.75	0.71	0.69	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.68	0.67
10	0.74	0.70	0.67	0.73	0.69	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.72	0.68	0.66	0.65



Intensity data(cd)

C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	11820.61	11418.70	8720.93	4542.15	1737.58	1091.22	1000.93	847.87	293.45
45.0	11815.10	11259.03	8517.23	4140.24	1690.78	1086.26	998.17	806.58	296.75
90.0	11859.15	10530.09	7254.78	3053.43	1270.15	1038.03	968.72	601.22	95.69
135.0	11897.69	10873.64	7388.57	3072.15	1395.13	1045.52	975.60	617.18	298.41
180.0	11820.61	10120.47	6214.22	2376.23	1225.00	1026.09	957.49	533.39	51.31
225.0	11815.10	10336.84	6501.61	2689.51	1248.13	1022.29	960.07	570.00	63.37
270.0	11859.15	11110.38	8032.73	3826.42	1492.03	1057.08	980.00	760.88	300.61
315.0	11897.69	10906.67	8003.00	3788.43	1475.51	1043.37	972.52	730.98	180.70
360.0	11820.61	11418.70	8720.93	4542.15	1737.58	1091.22	1000.93	847.87	293.45

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	25.44	16.96	15.53	14.81	14.20	13.82	13.54	13.27	12.94
45.0	18.77	15.58	14.65	14.15	13.76	13.49	13.21	12.94	12.61
90.0	15.47	14.20	13.71	13.60	13.43	12.99	12.61	12.50	12.39
135.0	16.19	14.87	14.31	14.15	13.87	13.43	12.99	12.72	12.55
180.0	17.84	15.97	15.09	14.53	14.04	13.76	13.43	13.05	12.61
225.0	17.34	15.36	14.48	14.09	13.76	13.49	13.16	12.88	12.50
270.0	18.28	14.65	13.93	13.71	13.65	13.21	12.77	12.55	12.44
315.0	18.39	15.09	14.31	14.04	13.82	13.43	13.10	12.77	12.55
360.0	25.44	16.96	15.53	14.81	14.20	13.82	13.54	13.27	12.94

C/ γ (°)	90.0
0.0	12.55
45.0	12.39
90.0	12.33
135.0	12.44
180.0	12.50
225.0	12.39
270.0	12.44
315.0	12.44
360.0	12.55