



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: 3-1939-M

Luminaire:

Report No: NATA0100

Test No: GC20190905

LampCAT: TRIDONIC SLE G7 22MM

Lamp flux(lm): 1837.0

Number of Lamps: 1

Length(mm): 78

Phm Type: C

Voltage(V): 33.7300

Current(A): 0.6470

Power (W): 21.8000

PF: 0.0000

Ballast type: DC

Width(mm): 78

Height(mm): 0

Photometric Results

Lumens(lm): 1593.83

Efficiency(%): 86.76%

Lumens(lm)/Power(W): 73.11

Central intensity(cd): 4176.844

Maximum intensity(cd): 4176.844

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=32.2

[C90/270]Total=32.2

Field angle(10%Imax): [C0/180]Total=64.2

[C90/270]Total=64.2

Maximum s/h(1/2): C0_180=0.54 C90_270=0.54

Maximum s/h(1/4): C0_180=0.50 C90_270=0.50

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.76%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.936%

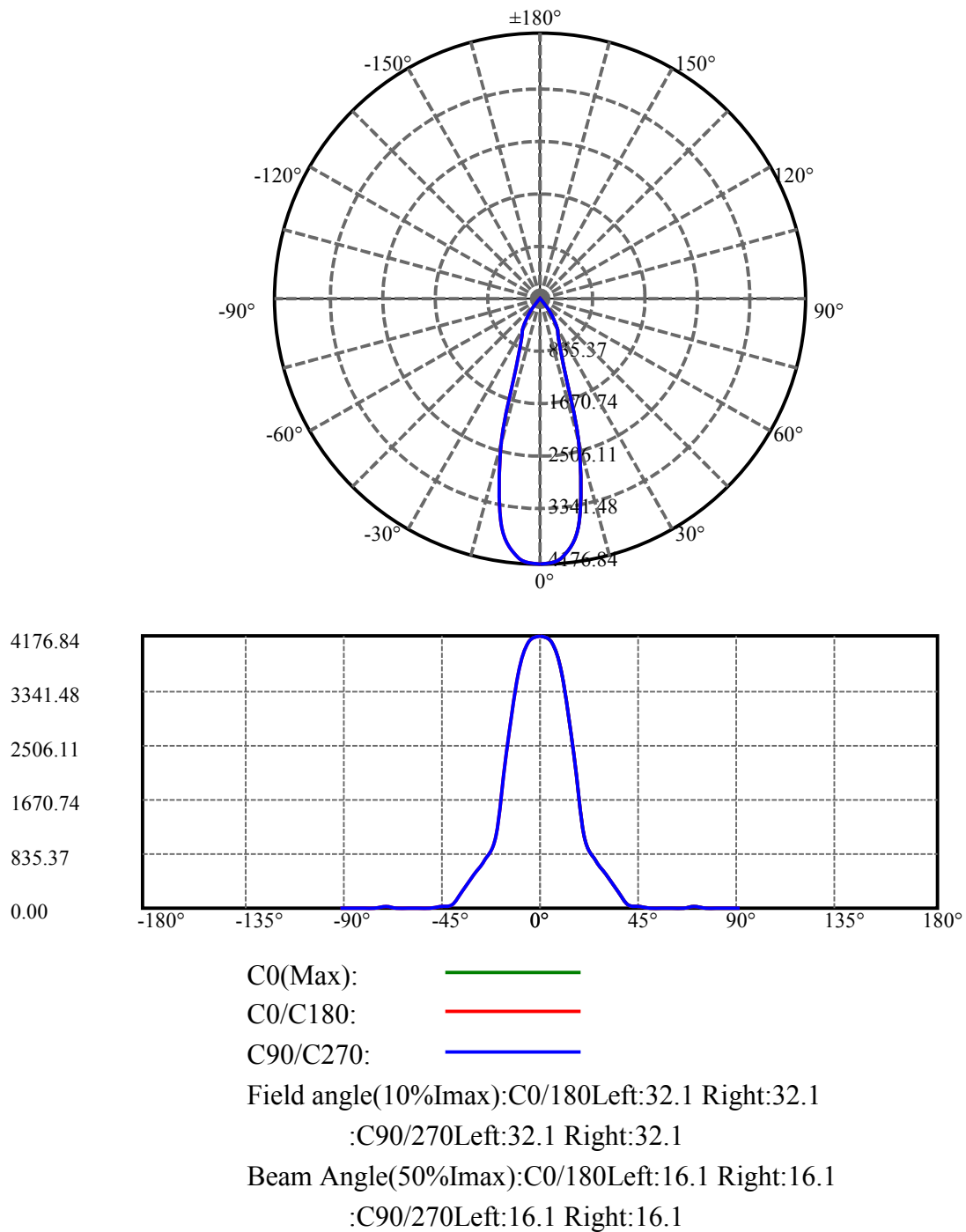
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4176.844	0.000	0	.000%	.000%
5.0	4082.414	98.737	98.737	5.375%	6.195%
10.0	3587.695	274.384	373.121	14.937%	23.410%
15.0	2365.523	353.141	726.262	19.224%	45.567%
20.0	1118.517	287.134	1013.396	15.631%	63.582%
25.0	717.870	192.603	1205.999	10.485%	75.667%
30.0	524.081	157.170	1363.169	8.556%	85.528%
35.0	270.098	116.949	1480.117	6.366%	92.865%
40.0	47.173	52.934	1533.052	2.882%	96.186%
45.0	16.530	11.795	1544.847	.642%	96.927%
50.0	12.860	5.939	1550.786	.323%	97.299%
55.0	11.194	5.230	1556.016	.285%	97.627%
60.0	10.062	4.913	1560.929	.267%	97.936%
65.0	11.468	5.234	1566.163	.285%	98.264%
70.0	13.620	6.352	1572.515	.346%	98.662%
75.0	12.565	6.844	1579.359	.373%	99.092%
80.0	8.684	5.685	1585.045	.309%	99.449%
85.0	8.156	4.576	1589.621	.249%	99.736%
90.0	7.228	4.212	1593.833	.229%	100.000%

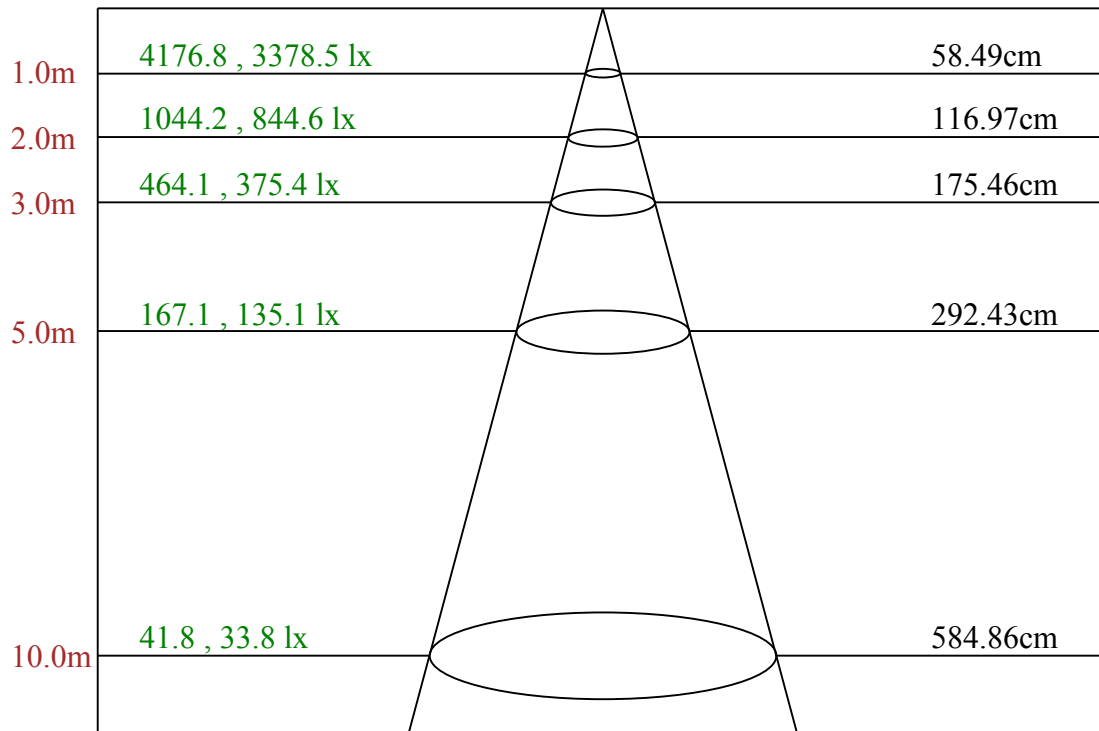
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1363.17	74.21%	85.53%
0-40	1533.05	83.45%	96.19%
0-60	1560.93	84.97%	97.94%
0-90	1589.62	86.53%	99.74%
0-120	1589.62	86.53%	99.74%
0-180	1593.83	86.76%	100.00%
60-90	33.60	1.83%	2.11%
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%
0-27.20	1275.07	69.41%	80.00%

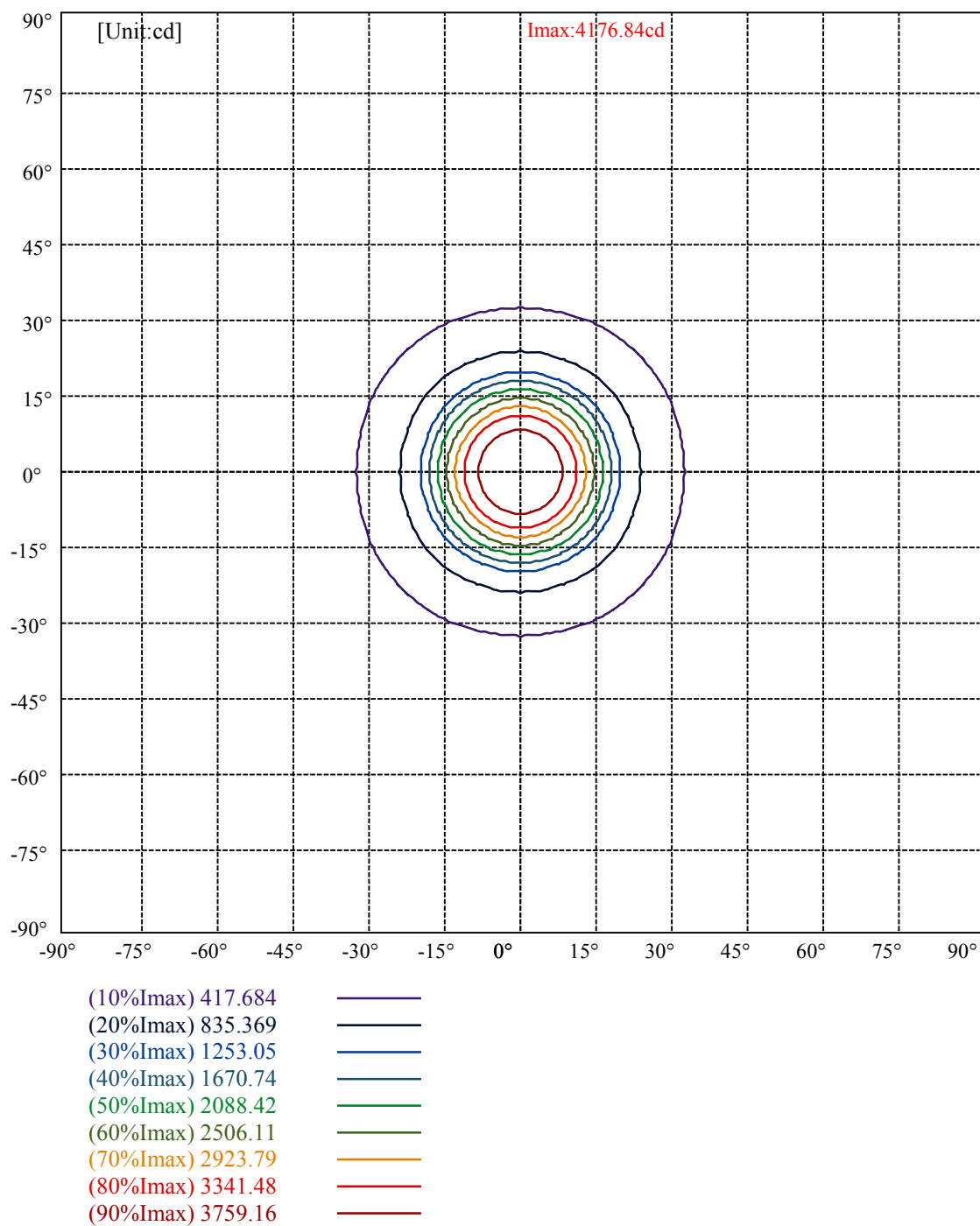
ZONAL LUMEN SUMMARY

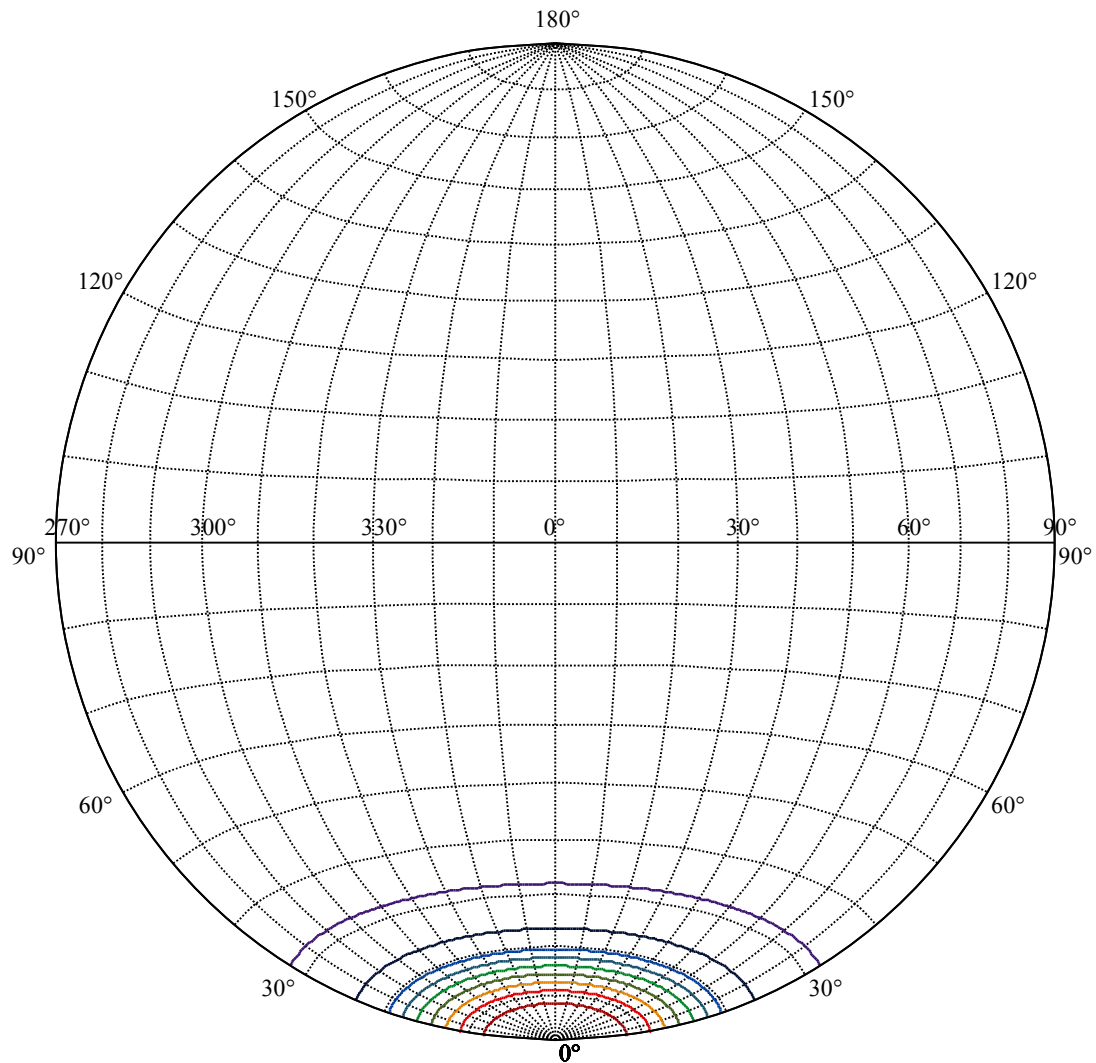
0-10	373.12
10-20	640.27
20-30	349.77
30-40	169.88
40-50	17.73
50-60	10.14
60-70	11.59
70-80	12.53
80-90	4.58
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00





Max , Ave Beam angle of C0 plane 32.60





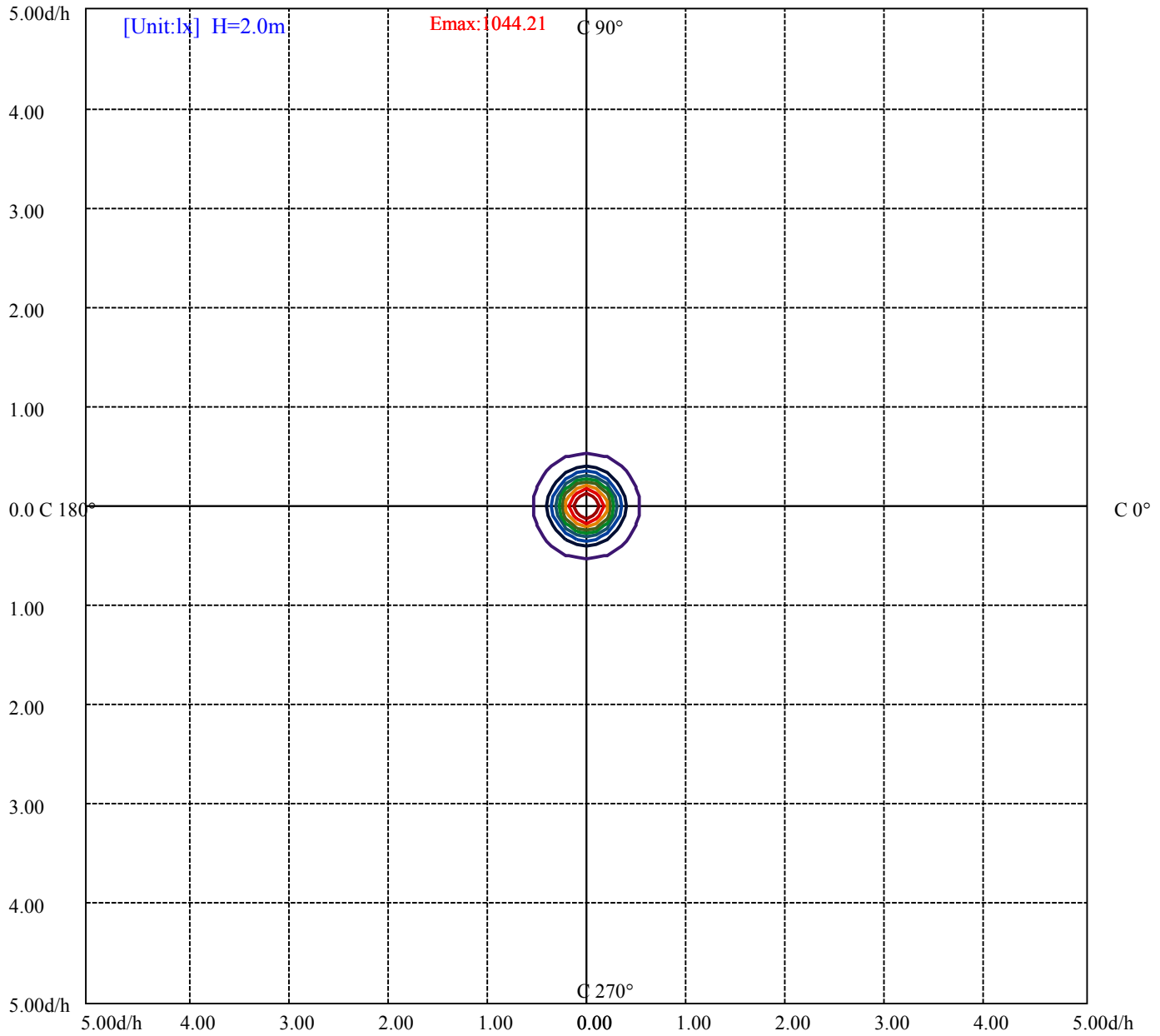
House

[Unit:cd]

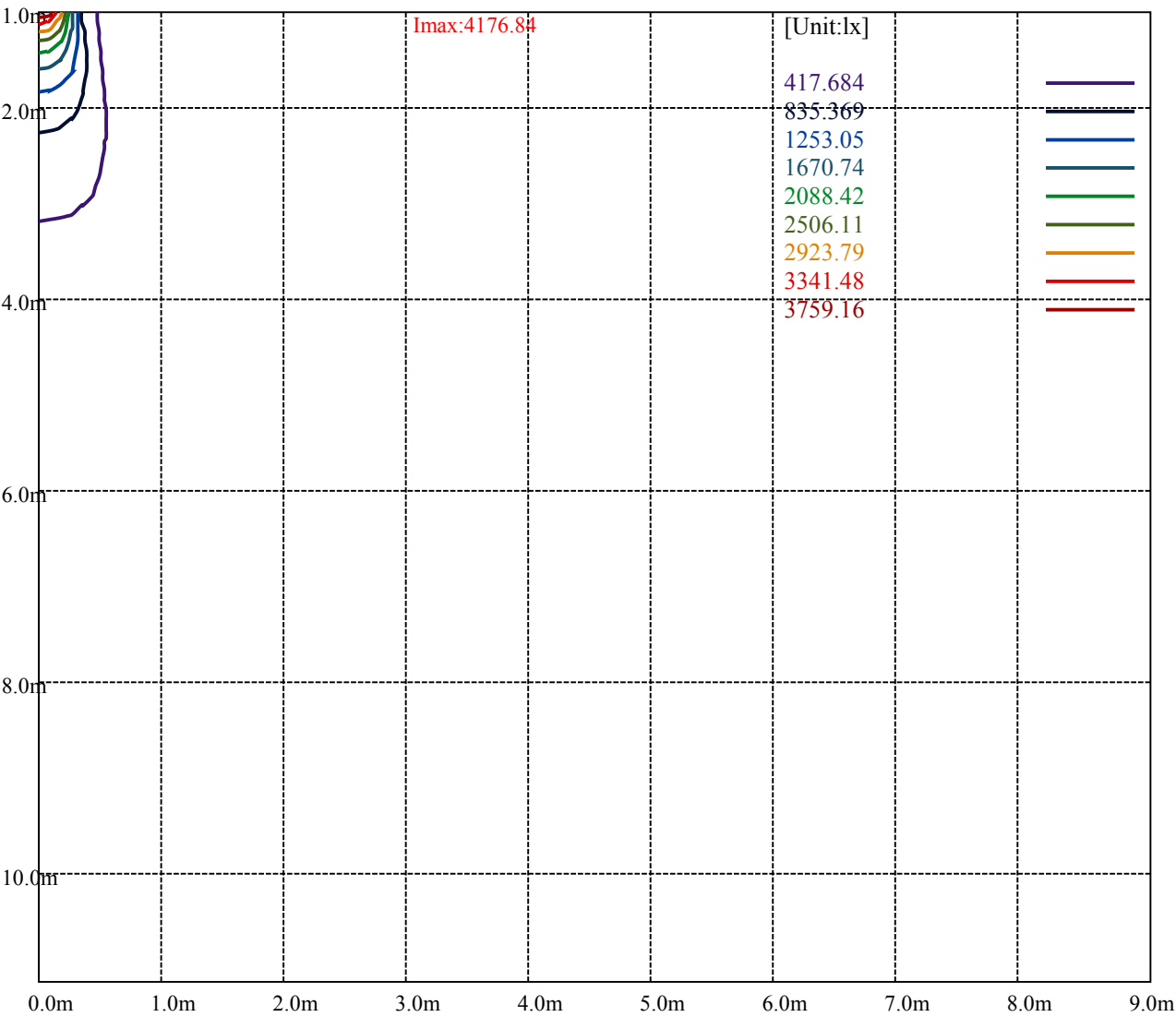
Road

Imax:4176.84

(10%Imax)	417.684	—
(20%Imax)	835.369	—
(30%Imax)	1253.05	—
(40%Imax)	1670.74	—
(50%Imax)	2088.42	—
(60%Imax)	2506.11	—
(70%Imax)	2923.79	—
(80%Imax)	3341.48	—
(90%Imax)	3759.16	—



(10%Emax) 104.421	—
(20%Emax) 208.842	—
(30%Emax) 313.2625	—
(40%Emax) 417.685	—
(50%Emax) 522.105	—
(60%Emax) 626.525	—
(70%Emax) 730.9475	—
(80%Emax) 835.3675	—
(90%Emax) 939.79	—



Luminance Table

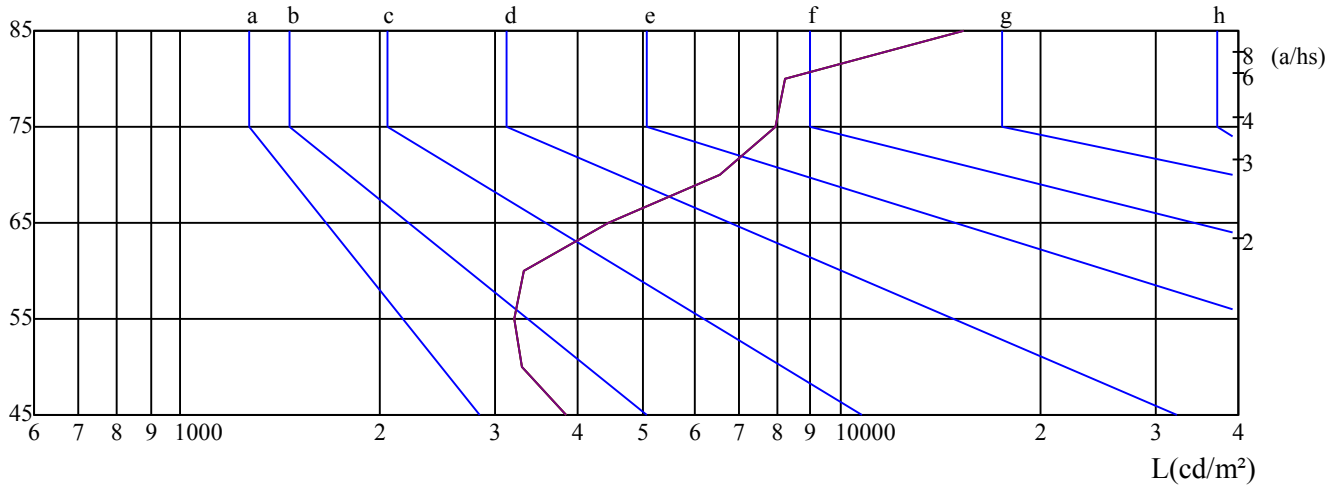
γ	45	50	55	60	65	70	75	80	85
C0	3842	3288	3208	3308	4460	6545	7979	8219	15382
C45	3842	3288	3208	3308	4460	6545	7979	8219	15382
C90	3842	3288	3208	3308	4460	6545	7979	8219	15382

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4460	4460	4460	7979	7979	7979	15382	15382	15382

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

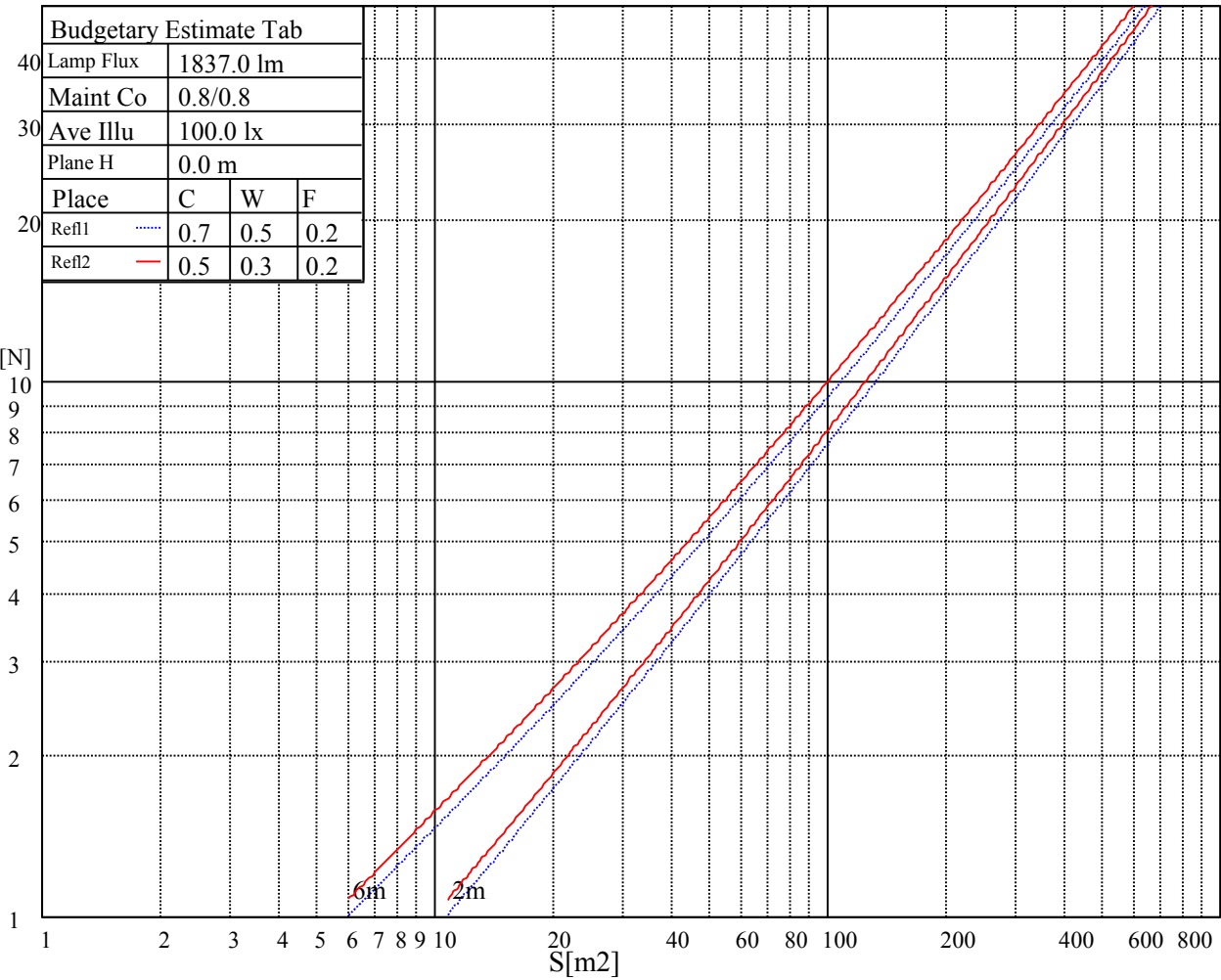
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

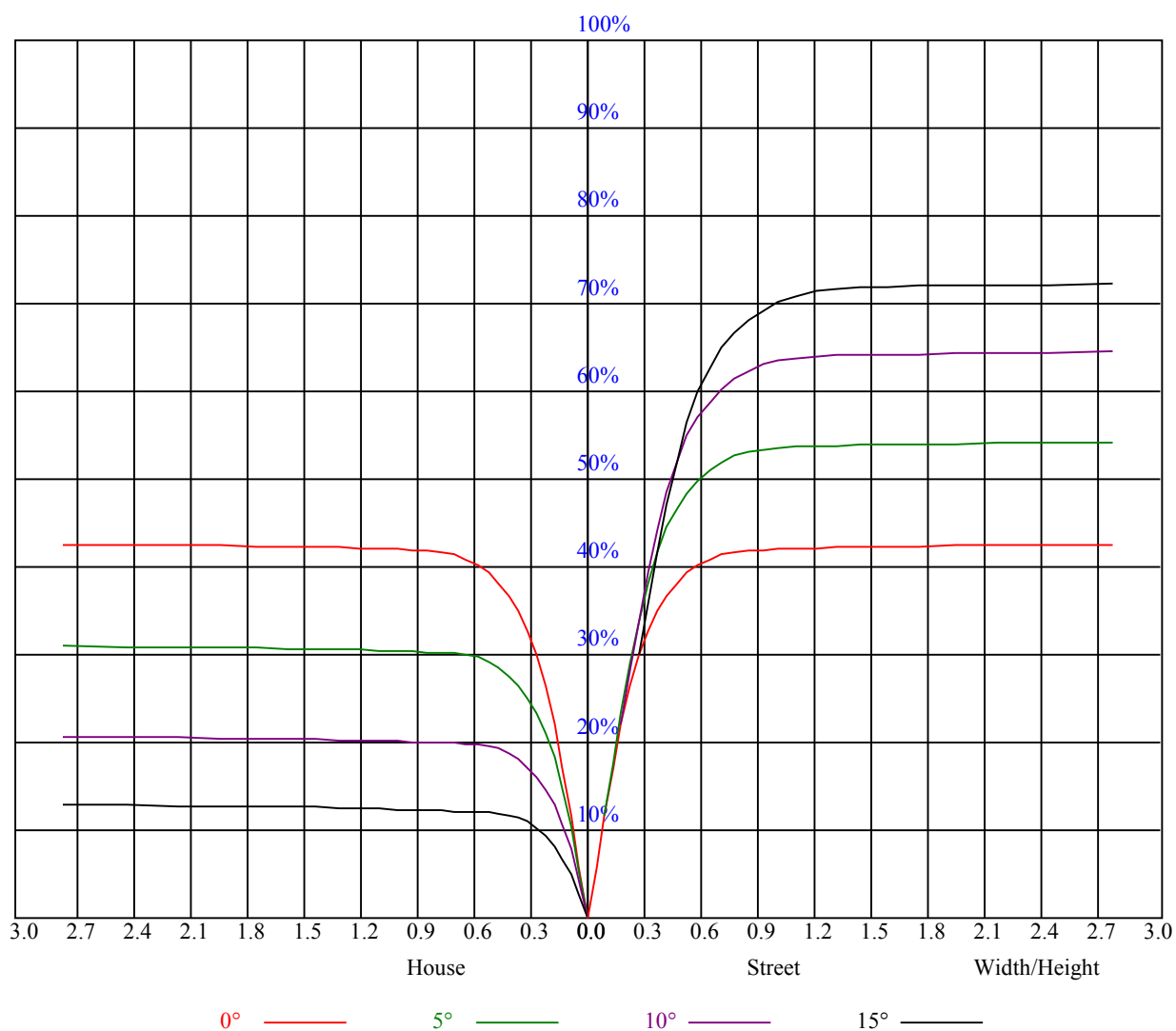
C0 ———

C45 ———

C90 ———



RHOC	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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.89	0.89	0.89	0.87
1	0.97	0.95	0.93	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.82
2	0.91	0.88	0.85	0.90	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.81	0.82	0.81	0.79	0.78
3	0.86	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.75	0.74
4	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.71
5	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.73	0.71	0.69	0.68
6	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
7	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.68	0.65	0.63	0.62
8	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.66	0.63	0.61	0.60
9	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.57	0.63	0.59	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.61	0.58	0.56	0.55



Intensity data(cd)										Appendix Page: 14 Total:14
C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	
0.0	4163.63	4053.38	3499.31	2143.69	1087.88	699.75	487.13	297.00	28.46	
45.0	4192.31	4069.13	3618.00	2406.94	1126.69	711.56	533.25	290.25	39.04	
90.0	4180.50	4029.75	3471.75	2302.31	1061.66	694.74	511.93	232.37	37.91	
135.0	4170.94	4121.44	3797.44	2736.56	1406.25	762.75	586.13	324.56	91.69	
180.0	4163.63	4111.88	3691.13	2620.69	1084.44	730.58	557.38	282.21	64.86	
225.0	4192.31	4122.56	3627.00	2451.38	1099.01	734.06	528.92	255.83	42.13	
270.0	4180.50	4116.38	3668.63	2435.63	1145.81	735.75	542.25	291.38	48.94	
315.0	4170.94	4034.81	3328.31	1827.00	936.39	673.76	445.67	187.20	24.36	
360.0	4163.63	4053.38	3499.31	2143.69	1087.88	699.75	487.13	297.00	28.46	
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	
0.0	16.37	13.11	11.70	10.74	16.03	19.46	17.27	9.90	8.89	
45.0	17.38	13.73	11.93	10.58	15.64	21.21	18.79	9.56	8.66	
90.0	16.76	12.77	11.14	9.96	10.01	11.03	10.24	8.04	7.88	
135.0	17.83	12.94	11.14	9.96	9.17	8.66	8.27	8.04	7.88	
180.0	16.03	12.88	11.19	10.07	10.74	15.02	14.23	9.00	8.04	
225.0	16.93	12.88	11.14	9.90	12.21	16.09	14.68	8.78	8.16	
270.0	16.71	12.54	10.80	9.73	9.00	8.83	8.66	7.93	7.59	
315.0	14.23	12.04	10.52	9.56	8.94	8.66	8.38	8.21	8.16	
360.0	16.37	13.11	11.70	10.74	16.03	19.46	17.27	9.90	8.89	
C/ γ (°)	90.0									
0.0	7.14									
45.0	7.20									
90.0	7.20									
135.0	7.31									
180.0	7.20									
225.0	7.26									
270.0	7.20									
315.0	7.31									
360.0	7.14									