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Nata

Client:

LumCAT: 1679-S

Luminaire: 92.70.043.00

Report No:

Voltage(V): 31.5600

Test No: GC20190824010

Current(A): 0.1970

LampCAT: XICATO XOB LES 6MM

Power (W): 6.2200

Lamp flux(lm): 658.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 22

Width(mm): 22

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 593.57, Efficiency(%): 90.21% , Luminous Efficacy(lm/W): 95.43

Central intensity(cd): 591.384, Maximum intensity(cd): 591.384

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=63.4

[C90/270]Total=63.4

Field angle(10%Imax): [C0/180]Total=89.0

[C90/270]Total=89.0

Maximum s/h(1/2): C0_180=0.94 C90_270=0.94

Maximum s/h(1/4): C0_180=0.95 C90_270=0.95

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.21%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.029%

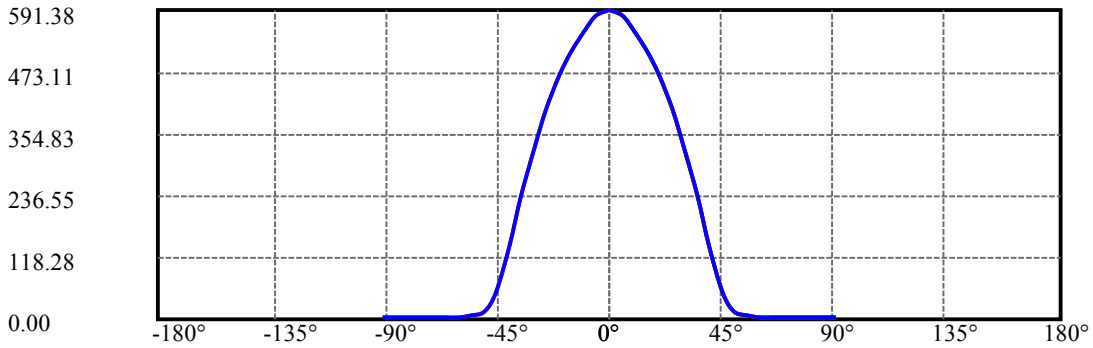
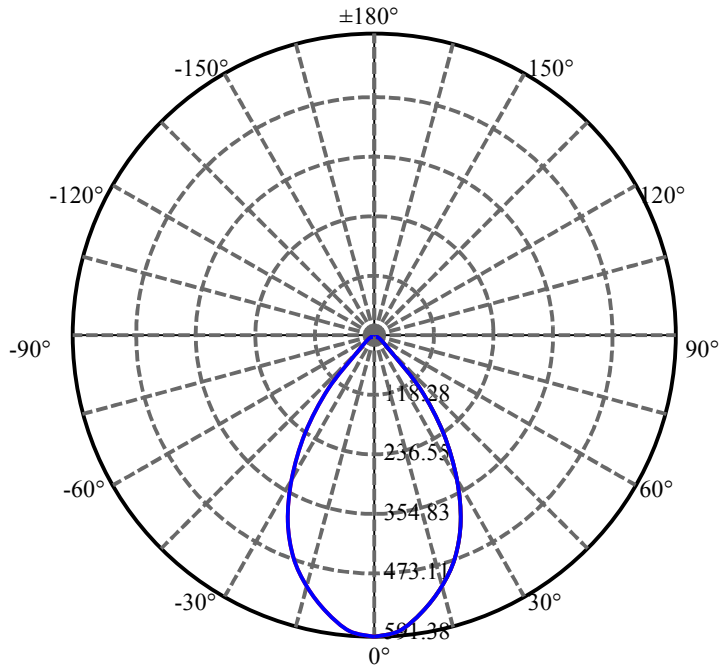
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	591.384	0.000	0	.000%	.000%
5.0	580.978	14.015	14.015	2.130%	2.361%
10.0	550.941	40.492	54.508	6.154%	9.183%
15.0	510.722	62.977	117.485	9.571%	19.793%
20.0	465.173	80.427	197.912	12.223%	33.343%
25.0	401.133	90.860	288.772	13.808%	48.650%
30.0	326.236	92.049	380.821	13.989%	64.158%
35.0	236.222	82.826	463.647	12.588%	78.112%
40.0	139.992	62.768	526.415	9.539%	88.686%
45.0	49.964	35.172	561.587	5.345%	94.612%
50.0	14.597	13.045	574.633	1.983%	96.810%
55.0	6.525	4.593	579.225	.698%	97.583%
60.0	4.908	2.643	581.868	.402%	98.029%
65.0	4.310	2.241	584.109	.341%	98.406%
70.0	3.980	2.099	586.208	.319%	98.760%
75.0	3.698	2.007	588.215	.305%	99.098%
80.0	3.452	1.913	590.128	.291%	99.420%
85.0	3.185	1.804	591.932	.274%	99.724%
90.0	2.798	1.638	593.57	.249%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	380.82	57.88%	64.16%
0-40	526.42	80.00%	88.69%
0-60	581.87	88.43%	98.03%
0-90	591.93	89.96%	99.72%
0-120	591.93	89.96%	99.72%
0-180	593.57	90.21%	100.00%
60-90	12.71	1.93%	2.14%
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%
0-35.89	474.86	72.17%	80.00%

ZONAL LUMEN SUMMARY

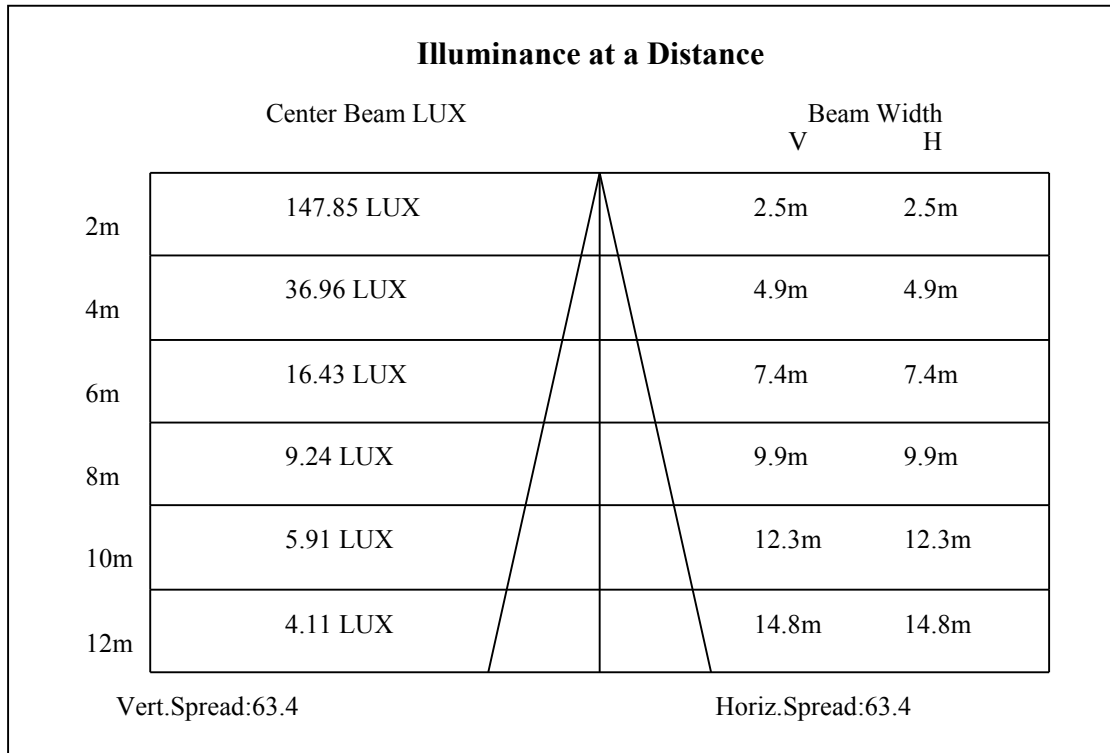
0-10	54.51
10-20	143.40
20-30	182.91
30-40	145.59
40-50	48.22
50-60	7.24
60-70	4.34
70-80	3.92
80-90	1.80
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

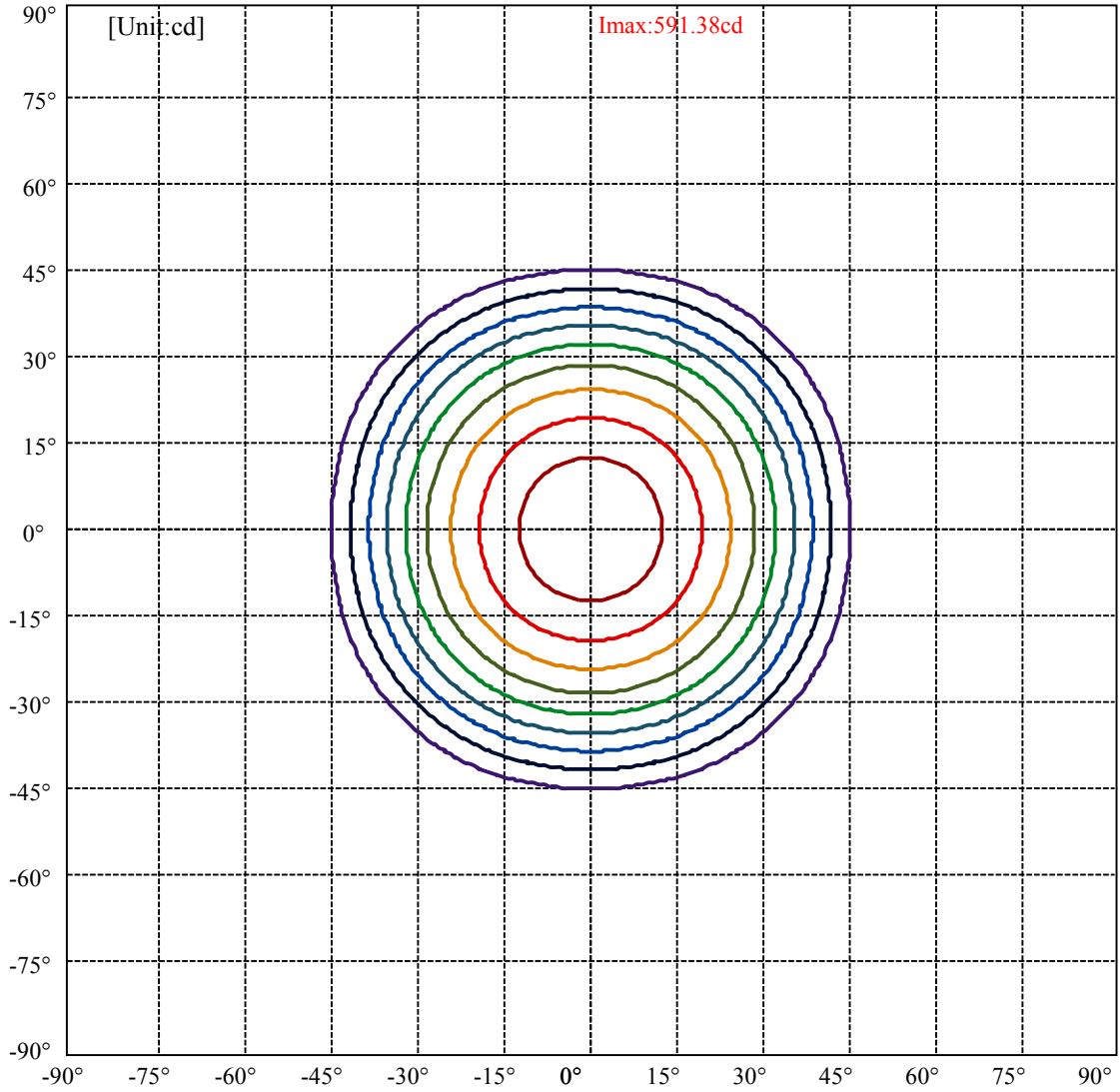


C0(Max): ———
C0/C180: ———
C90/C270: ———

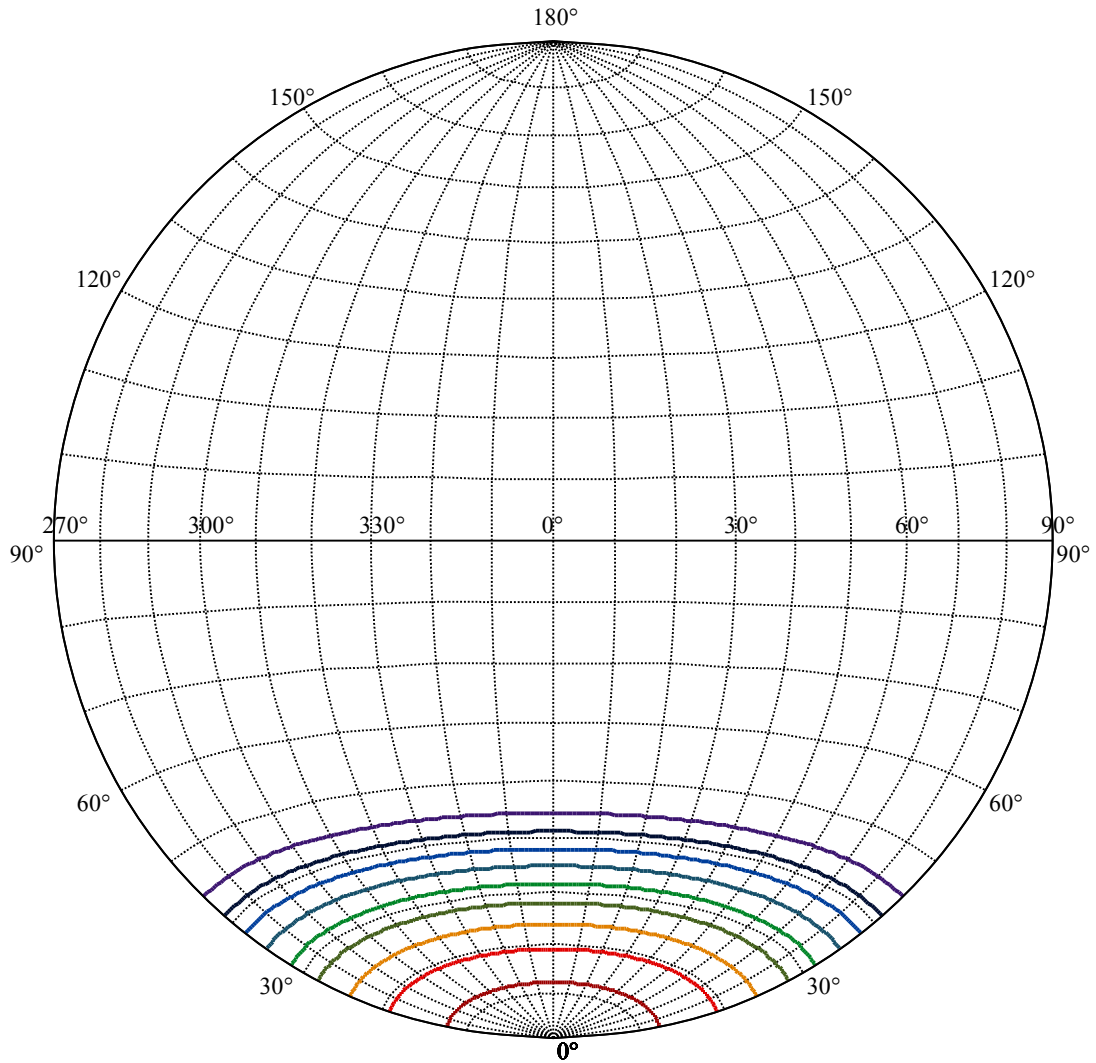
Field angle(10%Imax):C0/180Left:44.5 Right:44.5
:C90/270Left:44.5 Right:44.5

Beam Angle(50%Imax):C0/180Left:31.7 Right:31.7
:C90/270Left:31.7 Right:31.7





(10%Imax) 59.1384	—
(20%Imax) 118.277	—
(30%Imax) 177.415	—
(40%Imax) 236.554	—
(50%Imax) 295.692	—
(60%Imax) 354.831	—
(70%Imax) 413.969	—
(80%Imax) 473.108	—
(90%Imax) 532.246	—



House

[Unit:cd]

Road

I_{max}:591.38

(10%I_{max}) 59.1384

(20%I_{max}) 118.277

(30%I_{max}) 177.415

(40%I_{max}) 236.554

(50%I_{max}) 295.692

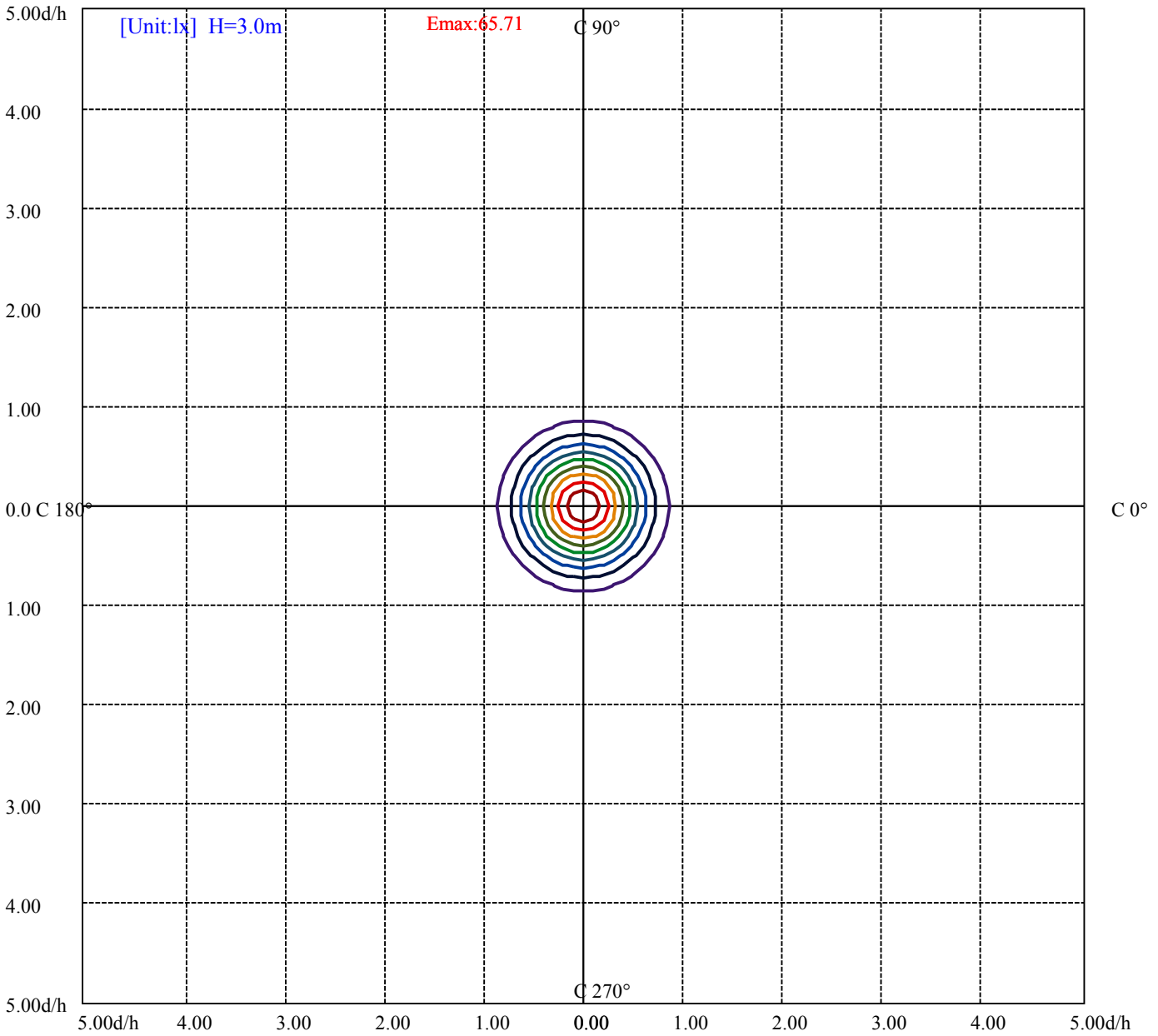
(60%I_{max}) 354.831

(70%I_{max}) 413.969

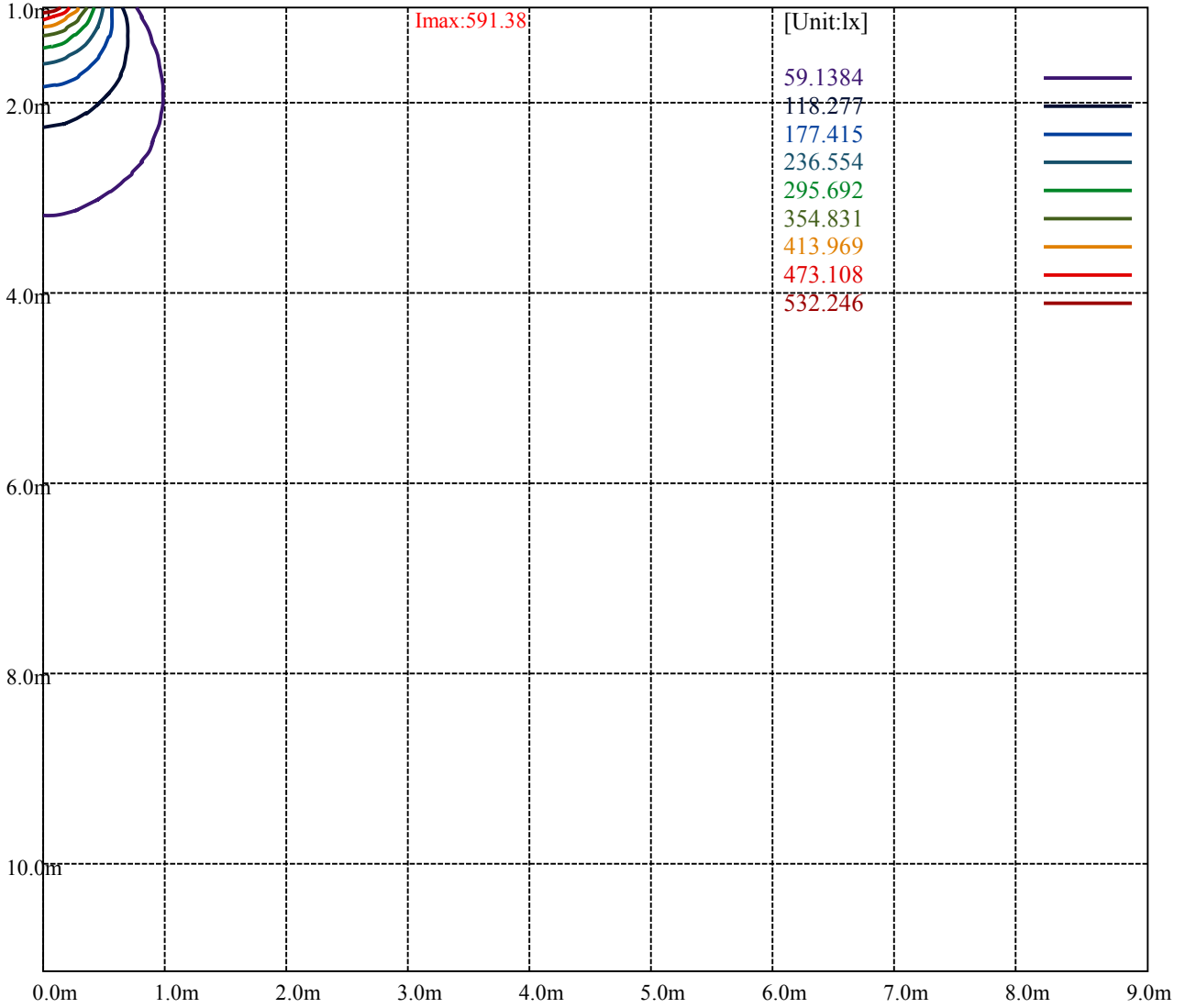
(80%I_{max}) 473.108

(90%I_{max}) 532.246





- (10%Emax) 6.570933
- (20%Emax) 13.14189
- (30%Emax) 19.71278
- (40%Emax) 26.28378
- (50%Emax) 32.85466
- (60%Emax) 39.42555
- (70%Emax) 45.99656
- (80%Emax) 52.56744
- (90%Emax) 59.13844



Luminance Table

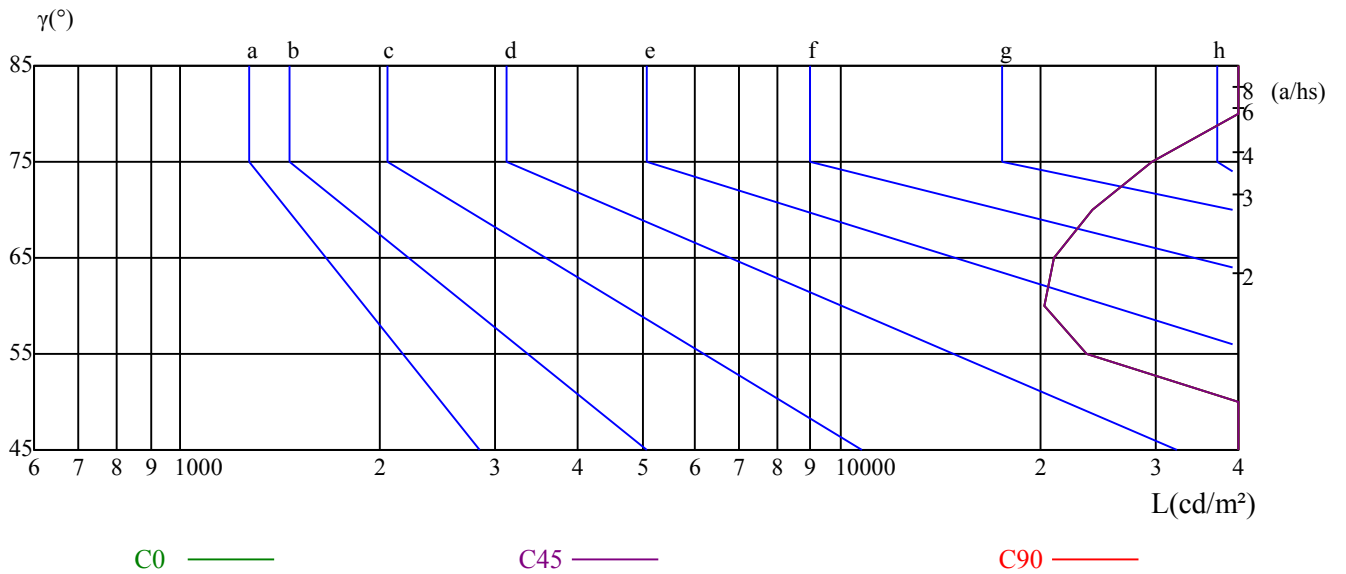
γ	45	50	55	60	65	70	75	80	85
C0	145992	46919	23504	20280	21072	24041	29524	41077	75507
C45	145992	46919	23504	20280	21072	24041	29524	41077	75507
C90	145992	46919	23504	20280	21072	24041	29524	41077	75507

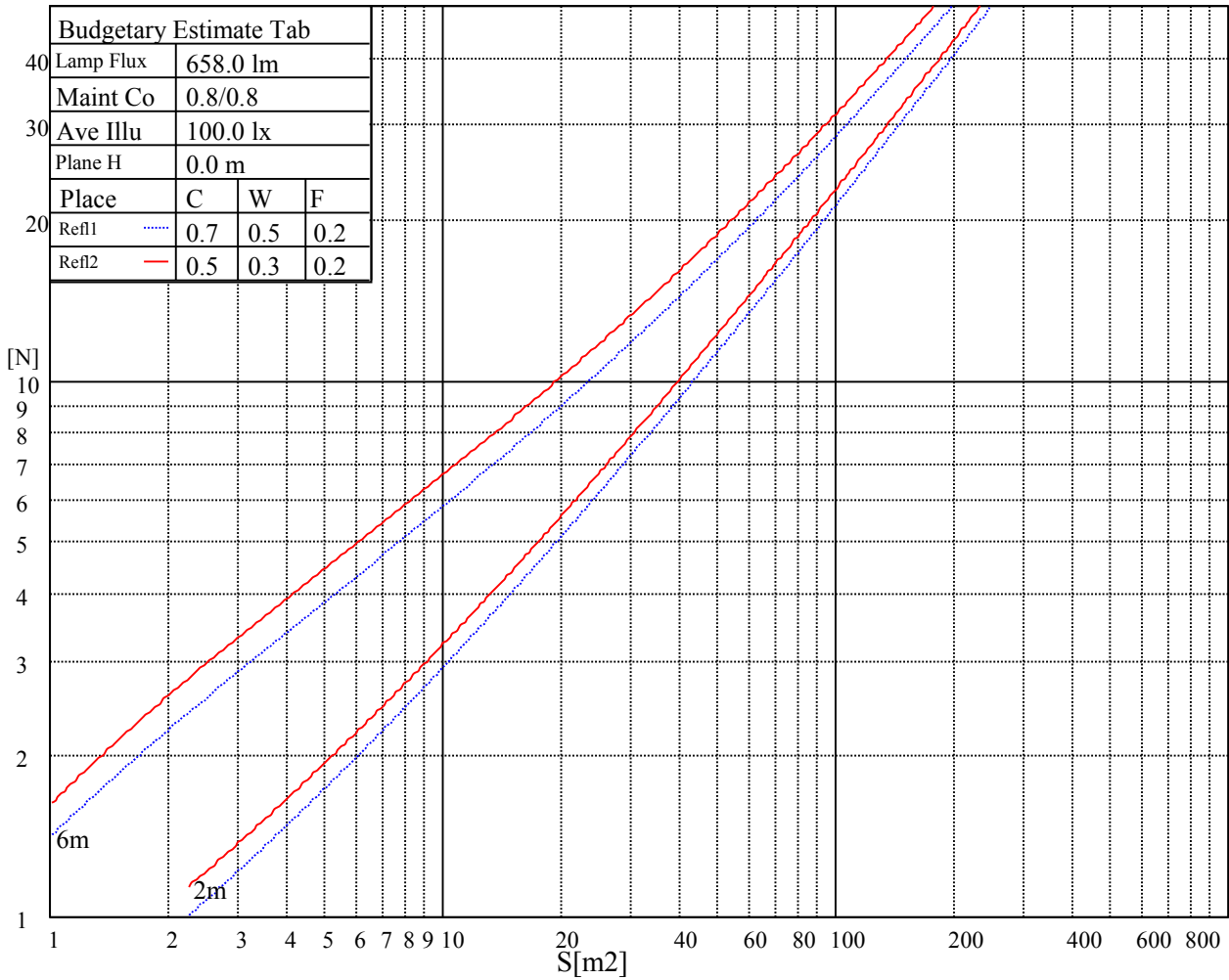
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
21072	21072	21072	29524	29524	29524	75507	75507	75507

Glare Table

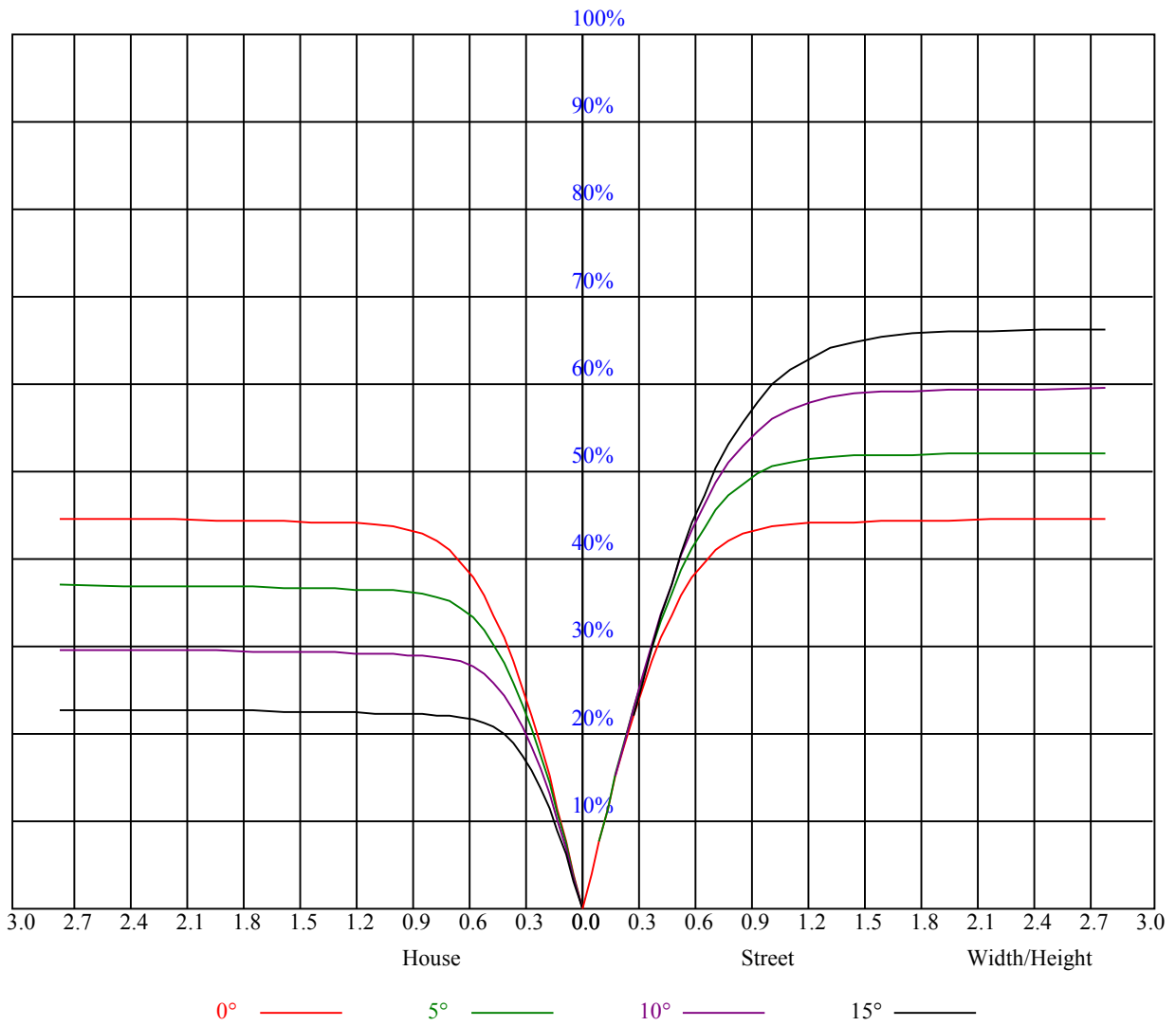
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

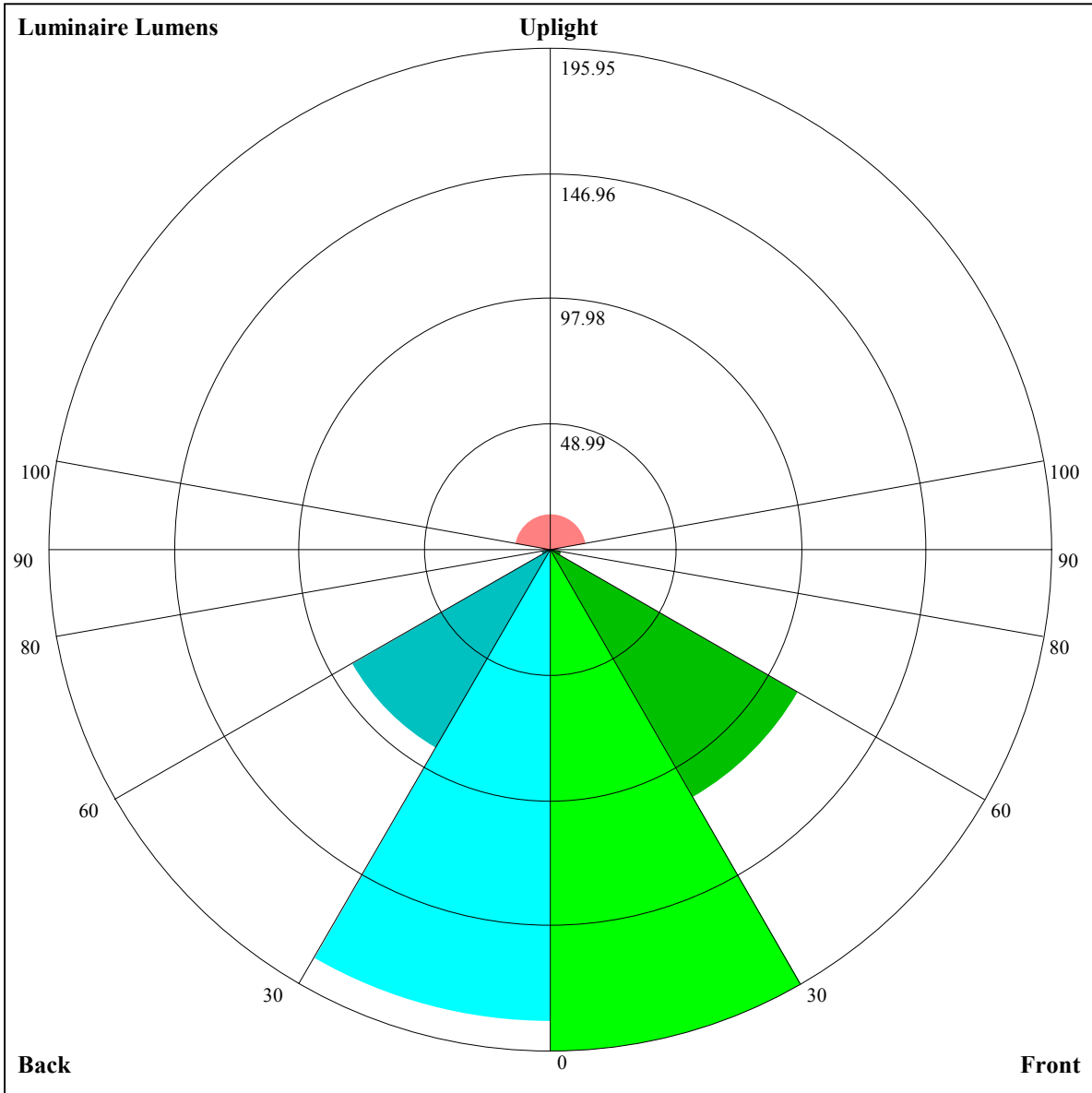
Luminance Limiting Curve





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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	0.99	0.97	0.95	0.97	0.95	0.93	0.94	0.92	0.90	0.90	0.89	0.87	0.87	0.86	0.85	0.83
2	0.92	0.88	0.85	0.90	0.87	0.84	0.87	0.84	0.82	0.85	0.82	0.80	0.82	0.80	0.78	0.77
3	0.85	0.80	0.76	0.84	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.73	0.77	0.75	0.72	0.71
4	0.79	0.74	0.70	0.78	0.73	0.69	0.76	0.72	0.68	0.74	0.71	0.68	0.73	0.69	0.67	0.65
5	0.74	0.68	0.64	0.73	0.68	0.64	0.71	0.67	0.63	0.70	0.66	0.63	0.68	0.65	0.62	0.61
6	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.56
7	0.64	0.59	0.55	0.64	0.58	0.55	0.63	0.58	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.52
8	0.60	0.55	0.51	0.60	0.54	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.49
9	0.57	0.51	0.47	0.56	0.51	0.47	0.55	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.46
10	0.53	0.48	0.44	0.53	0.48	0.44	0.52	0.47	0.44	0.52	0.47	0.44	0.51	0.47	0.44	0.43





Luminaire Lumens:

FL=195.95,FM=112.1,FH=4.36,FVH=1.83

BL=184.61,BM=89.51,BH=4.13,BVH=1.76

UL=3.05,UH=14.53

BUG Rating:B1-U2-G0

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	592.48	593.04	573.58	541.18	497.25	433.35	353.14	272.53	174.04
45.0	588.66	599.23	582.58	550.46	501.41	442.29	362.87	271.29	181.13
90.0	592.31	592.43	569.76	528.58	484.09	419.12	339.30	255.71	151.99
135.0	592.09	588.77	562.78	517.05	465.98	394.03	318.38	232.09	133.76
180.0	592.48	569.76	539.55	489.38	433.69	357.98	277.88	173.08	90.90
225.0	588.66	562.28	521.16	474.36	425.03	352.29	278.49	183.26	94.39
270.0	592.31	569.42	524.14	489.43	453.60	403.76	340.76	245.36	138.54
315.0	592.09	572.91	533.98	495.34	460.35	406.24	339.08	256.44	155.19
360.0	592.48	593.04	573.58	541.18	497.25	433.35	353.14	272.53	174.04

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	77.51	22.50	8.16	5.46	4.44	3.94	3.54	3.26	2.98
45.0	82.35	20.53	7.76	5.12	4.22	3.88	3.60	3.32	3.09
90.0	50.91	13.84	5.79	4.44	3.99	3.77	3.60	3.38	3.09
135.0	38.53	11.42	5.57	4.39	3.94	3.66	3.43	3.26	2.81
180.0	23.23	8.32	5.18	4.33	3.88	3.60	3.32	3.04	2.93
225.0	23.96	9.17	5.40	4.39	3.99	3.60	3.26	3.04	2.81
270.0	48.60	15.30	7.48	6.02	5.63	5.34	5.18	5.01	4.73
315.0	54.62	15.69	6.86	5.12	4.39	4.05	3.66	3.32	3.04
360.0	77.51	22.50	8.16	5.46	4.44	3.94	3.54	3.26	2.98

C/γ(°)	90.0
0.0	2.64
45.0	2.76
90.0	2.64
135.0	2.48
180.0	2.42
225.0	2.42
270.0	4.16
315.0	2.87
360.0	2.64