
Client:

LumCAT: 2-1682-M

Luminaire: 92.70.123.00

Report No: GC2019091909

Test No: GC2019121611

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 830.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.8700

Current(A): 0.1970

Power (W): 6.8600

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 739.00, Efficiency(%): 89.04% , Luminous Efficacy(lm/W): 107.73

Central intensity(cd): 1817.578, Maximum intensity(cd): 1817.578

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=32.8

[C90/270]Total=32.8

Field angle(10%Imax): [C0/180]Total=67.0

[C90/270]Total=67.0

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

Maximum s/h(1/4): C0_180=0.56 C90_270=0.56

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 89.04%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.464%

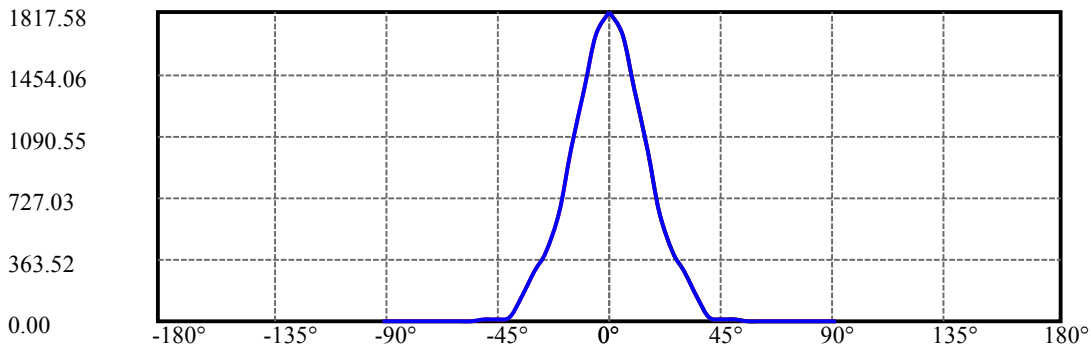
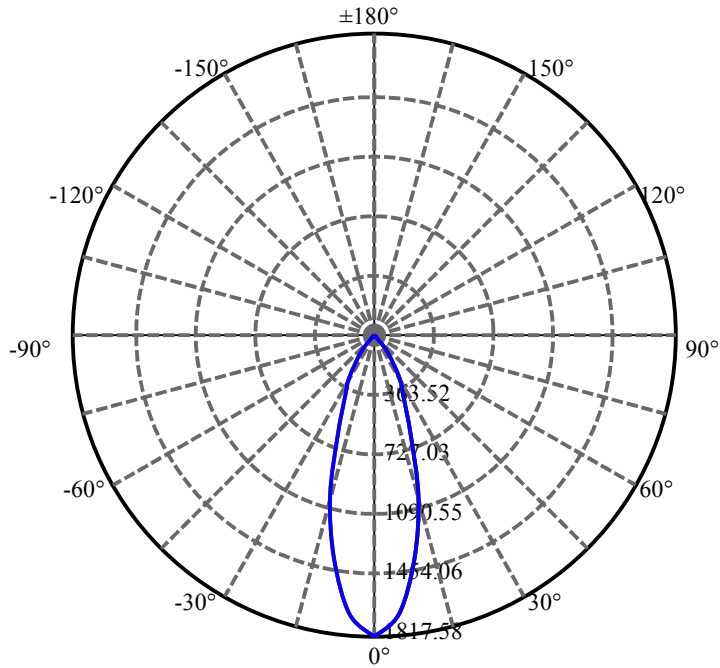
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1817.578	0.000	0	.000%	.000%
5.0	1686.586	41.891	41.891	5.047%	5.669%
10.0	1366.875	109.232	151.123	13.160%	20.450%
15.0	1009.561	140.969	292.092	16.984%	39.525%
20.0	645.258	136.380	428.472	16.431%	57.980%
25.0	401.063	109.740	538.212	13.222%	72.829%
30.0	296.599	88.290	626.501	10.637%	84.776%
35.0	133.650	63.357	689.859	7.633%	93.350%
40.0	17.255	25.177	715.036	3.033%	96.757%
45.0	8.571	4.782	719.818	.576%	97.404%
50.0	6.511	3.048	722.865	.367%	97.816%
55.0	5.238	2.555	725.42	.308%	98.162%
60.0	4.416	2.231	727.651	.269%	98.464%
65.0	3.867	2.014	729.665	.243%	98.736%
70.0	3.593	1.889	731.554	.228%	98.992%
75.0	3.452	1.842	733.396	.222%	99.241%
80.0	3.452	1.848	735.243	.223%	99.491%
85.0	3.459	1.878	737.121	.226%	99.745%
90.0	3.417	1.883	739.004	.227%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	626.50	75.48%	84.78%
0-40	715.04	86.15%	96.76%
0-60	727.65	87.67%	98.46%
0-90	737.12	88.81%	99.75%
0-120	737.12	88.81%	99.75%
0-180	739.00	89.04%	100.00%
60-90	11.70	1.41%	1.58%
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%
0-28.00	591.20	71.23%	80.00%

ZONAL LUMEN SUMMARY

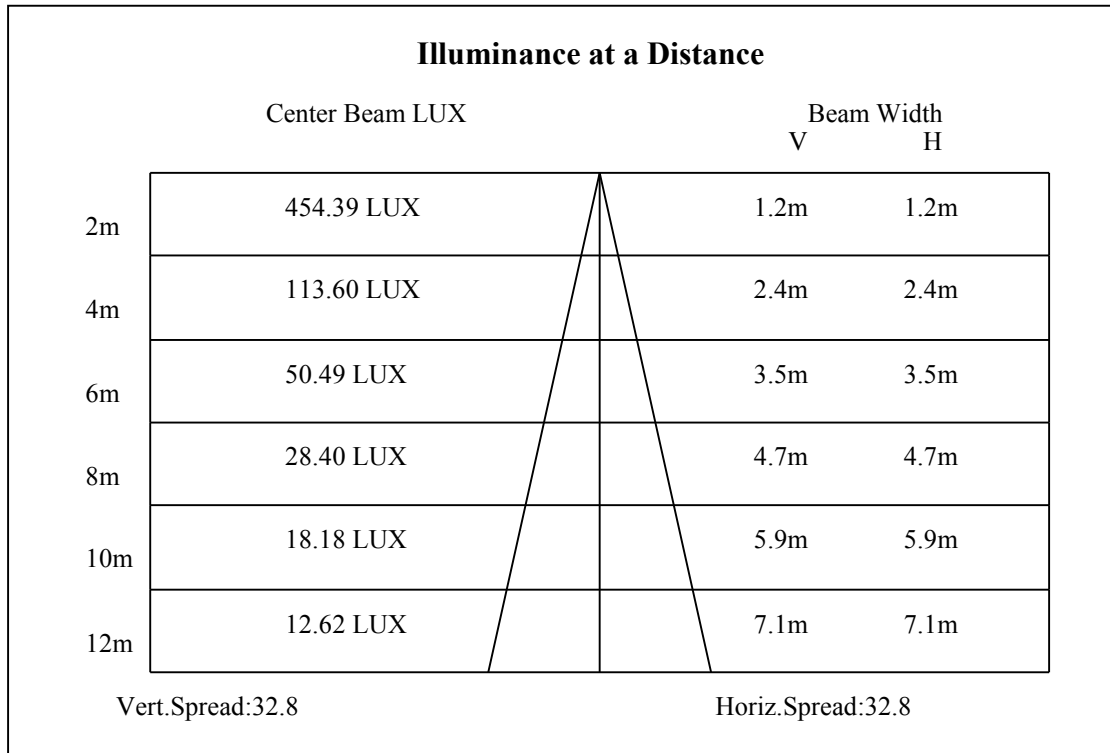
0-10	151.12
10-20	277.35
20-30	198.03
30-40	88.53
40-50	7.83
50-60	4.79
60-70	3.90
70-80	3.69
80-90	1.88
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

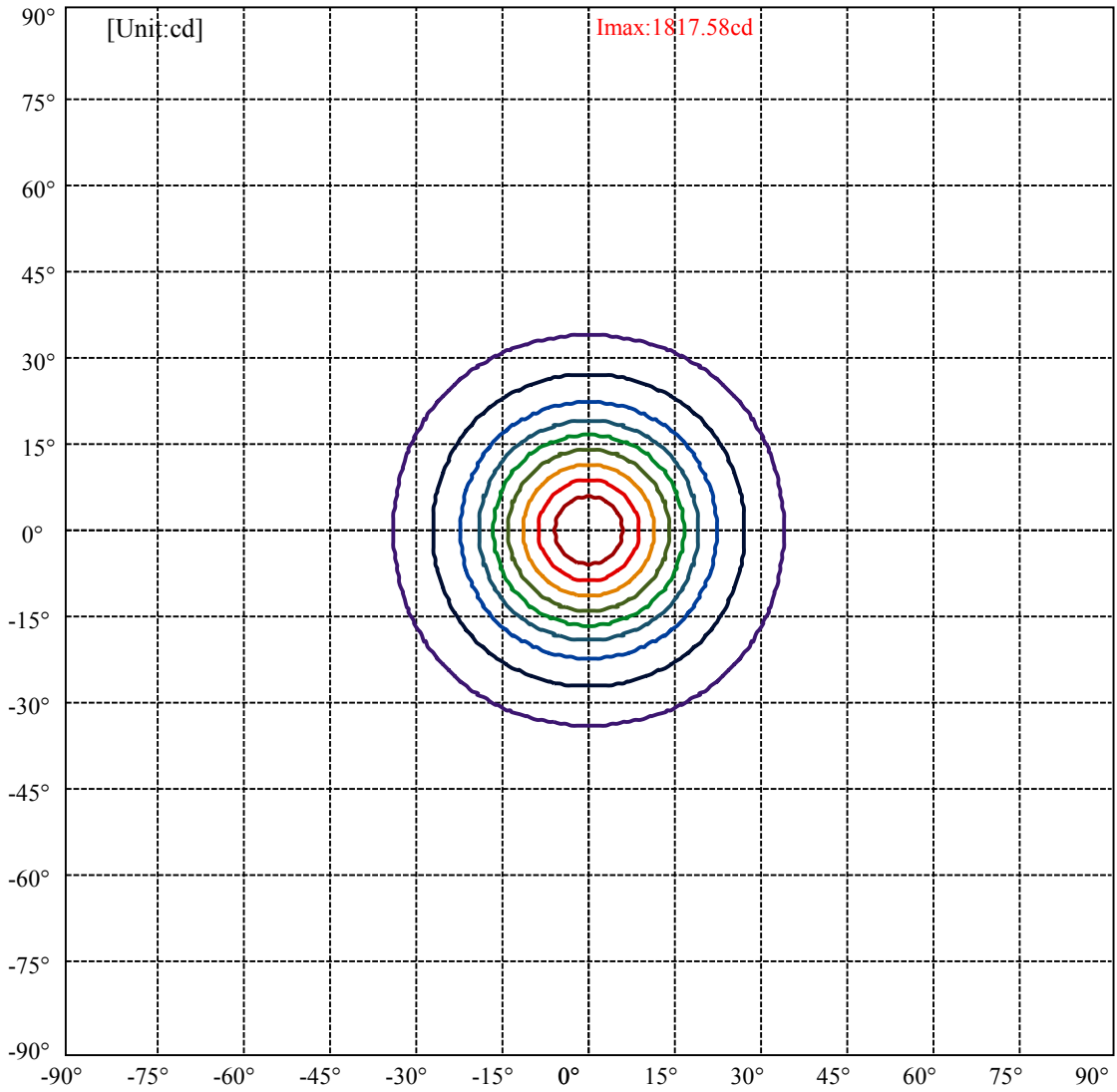


C0(Max): ———
C0/C180: ———
C90/C270: ———

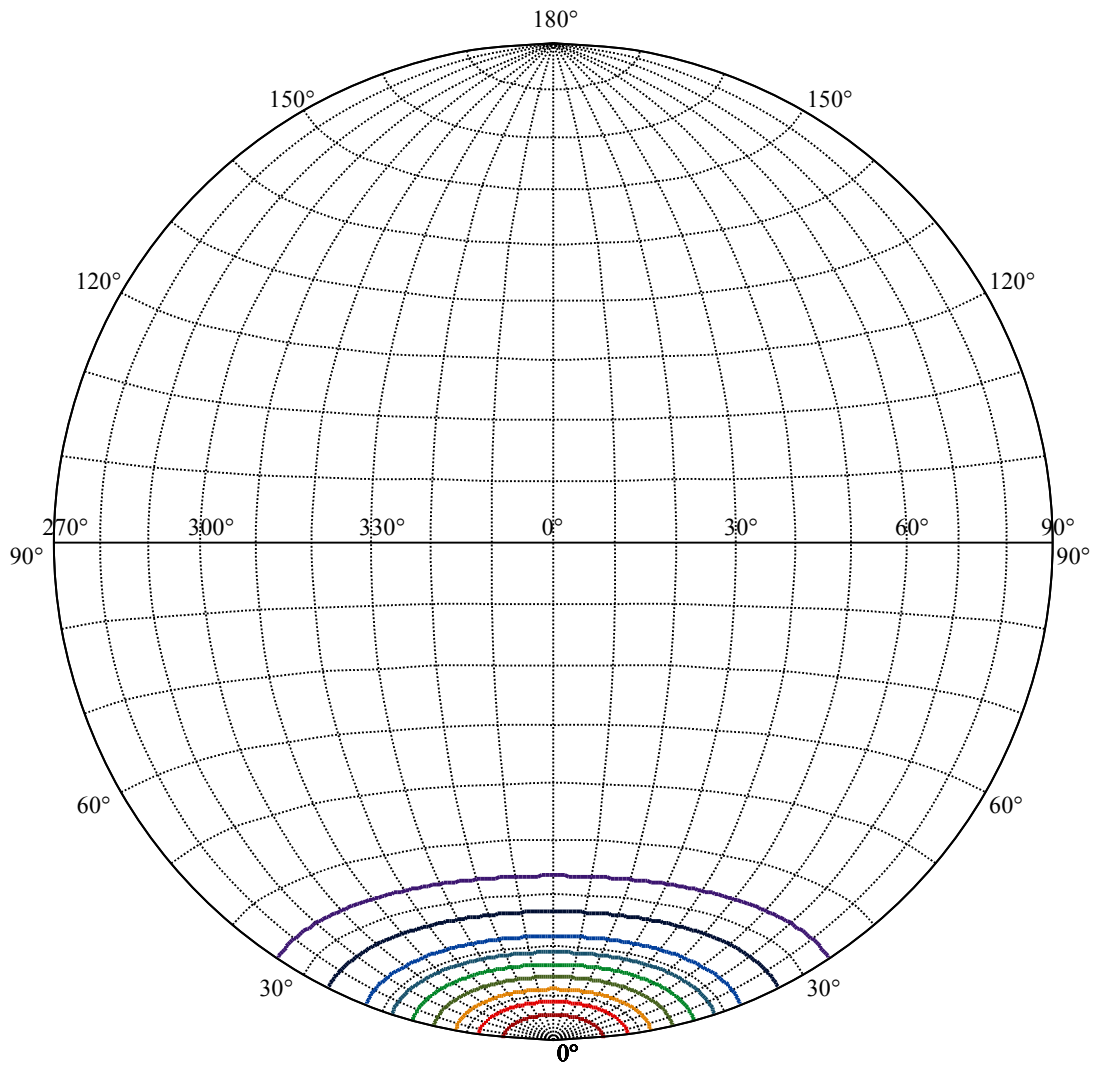
Field angle(10%Imax):C0/180Left:33.5 Right:33.5
:C90/270Left:33.5 Right:33.5

Beam Angle(50%Imax):C0/180Left:16.4 Right:16.4
:C90/270Left:16.4 Right:16.4





(10%Imax) 181.758	—
(20%Imax) 363.516	—
(30%Imax) 545.273	—
(40%Imax) 727.031	—
(50%Imax) 908.789	—
(60%Imax) 1090.55	—
(70%Imax) 1272.3	—
(80%Imax) 1454.06	—
(90%Imax) 1635.82	—



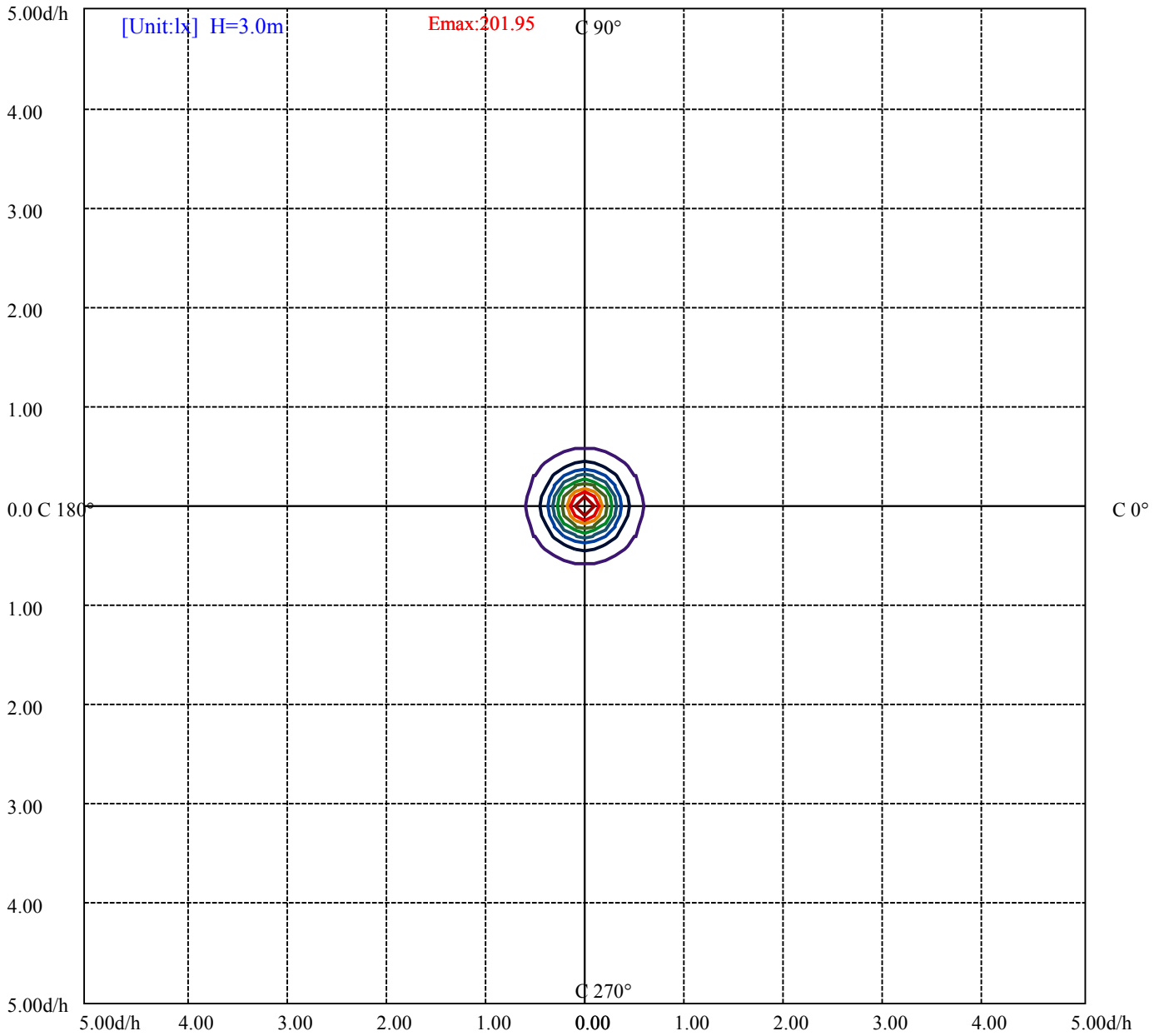
House

[Unit:cd]

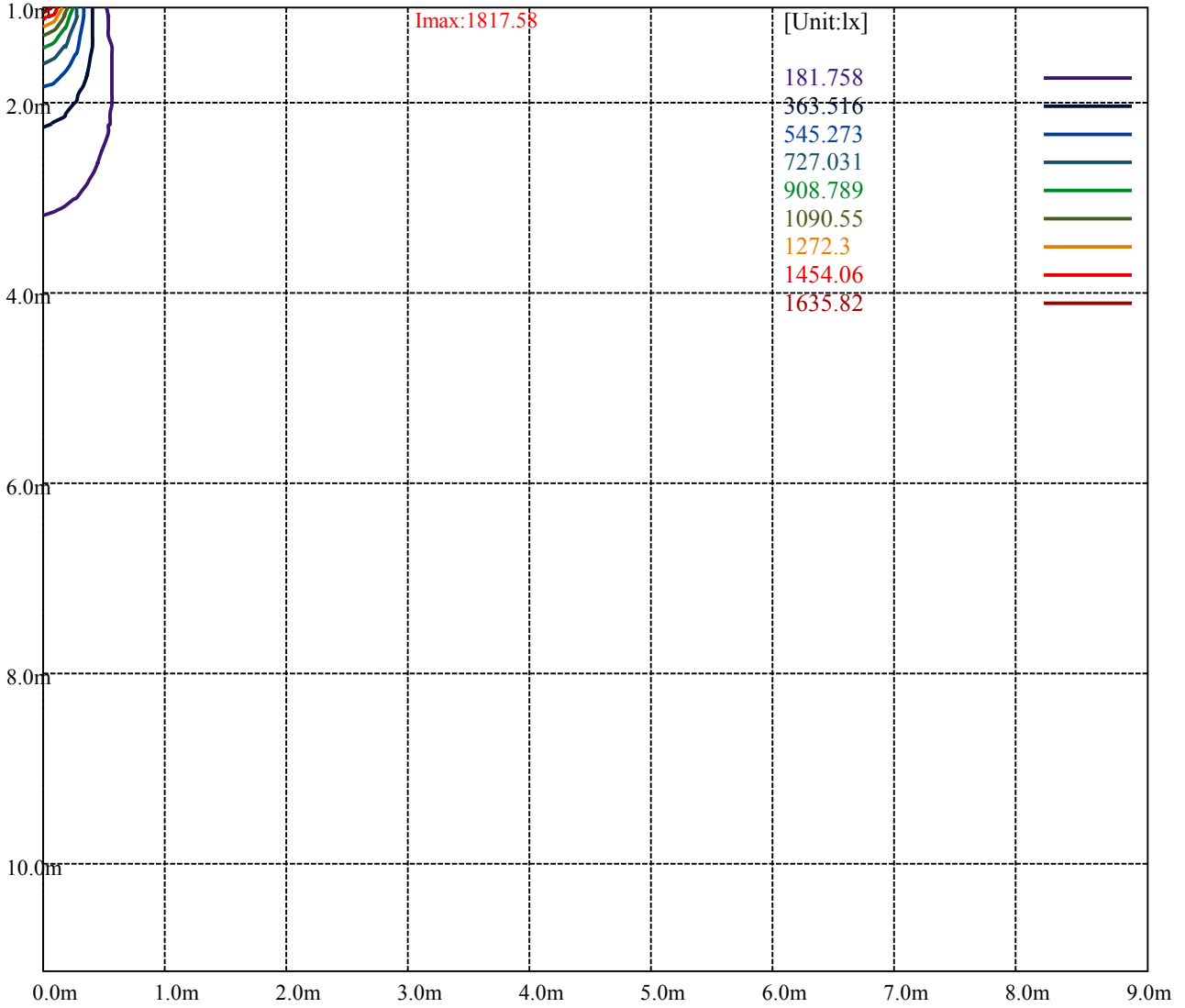
Road

Imax:1817.58

(10%Imax)	181.758	—
(20%Imax)	363.516	—
(30%Imax)	545.273	—
(40%Imax)	727.031	—
(50%Imax)	908.789	—
(60%Imax)	1090.55	—
(70%Imax)	1272.3	—
(80%Imax)	1454.06	—
(90%Imax)	1635.82	—



(10%Emax) 20.19522	—
(20%Emax) 40.39056	—
(30%Emax) 60.58577	—
(40%Emax) 80.78111	—
(50%Emax) 100.9763	—
(60%Emax) 121.1711	—
(70%Emax) 141.3667	—
(80%Emax) 161.5622	—
(90%Emax) 181.7578	—



Luminance Table

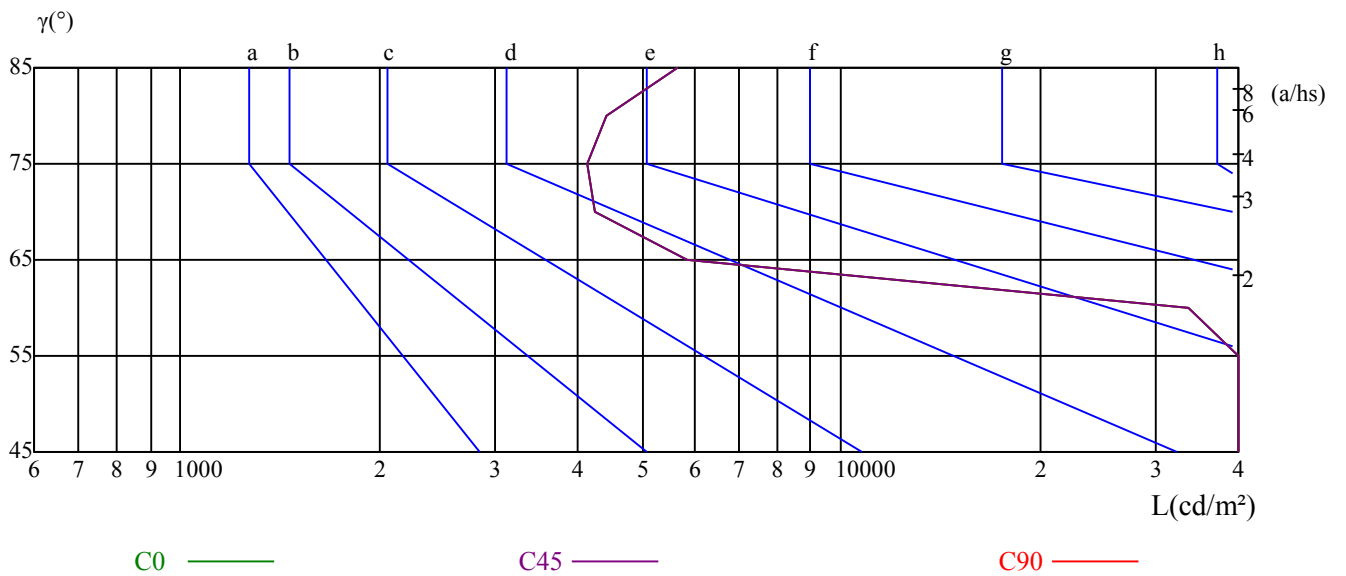
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

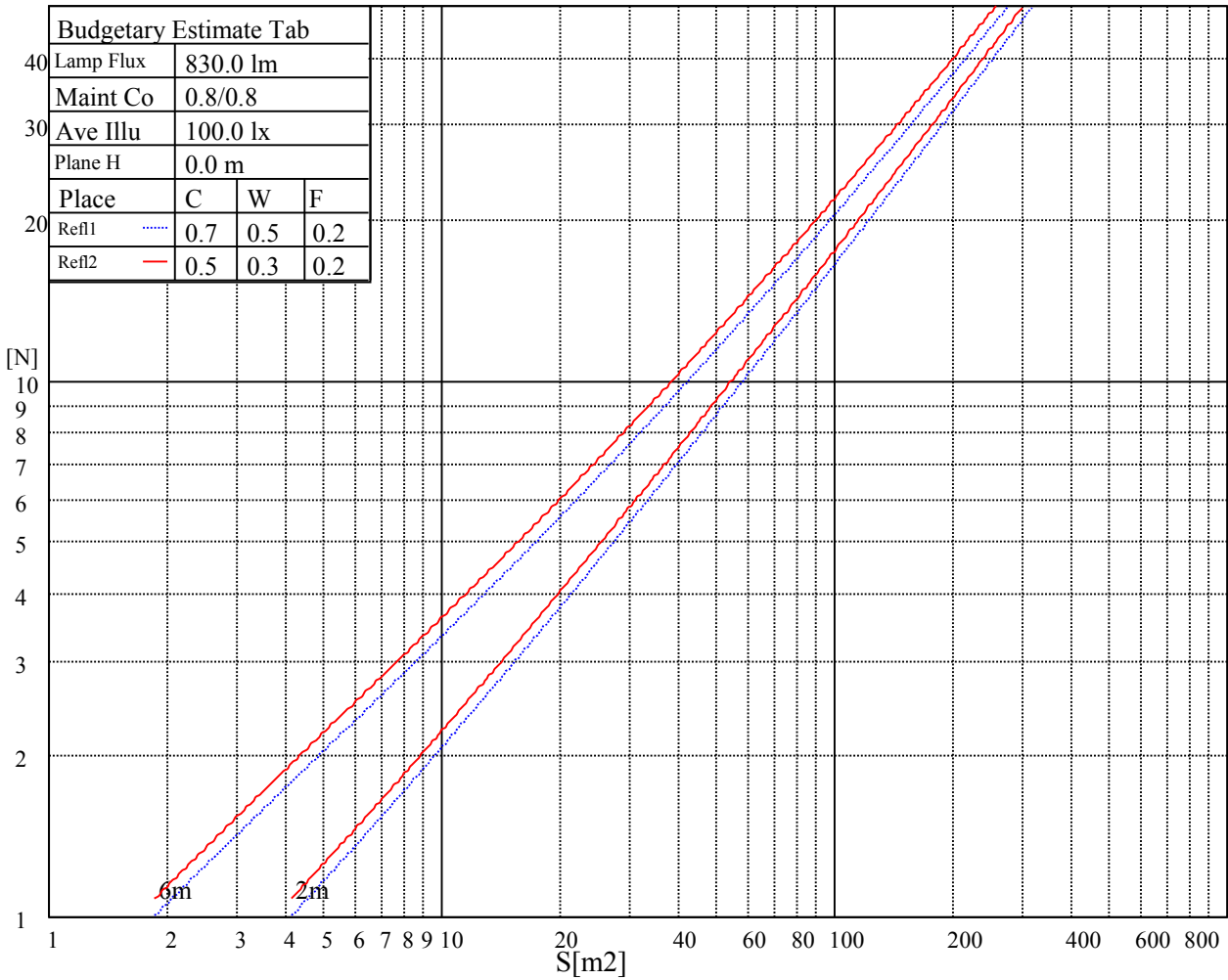
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

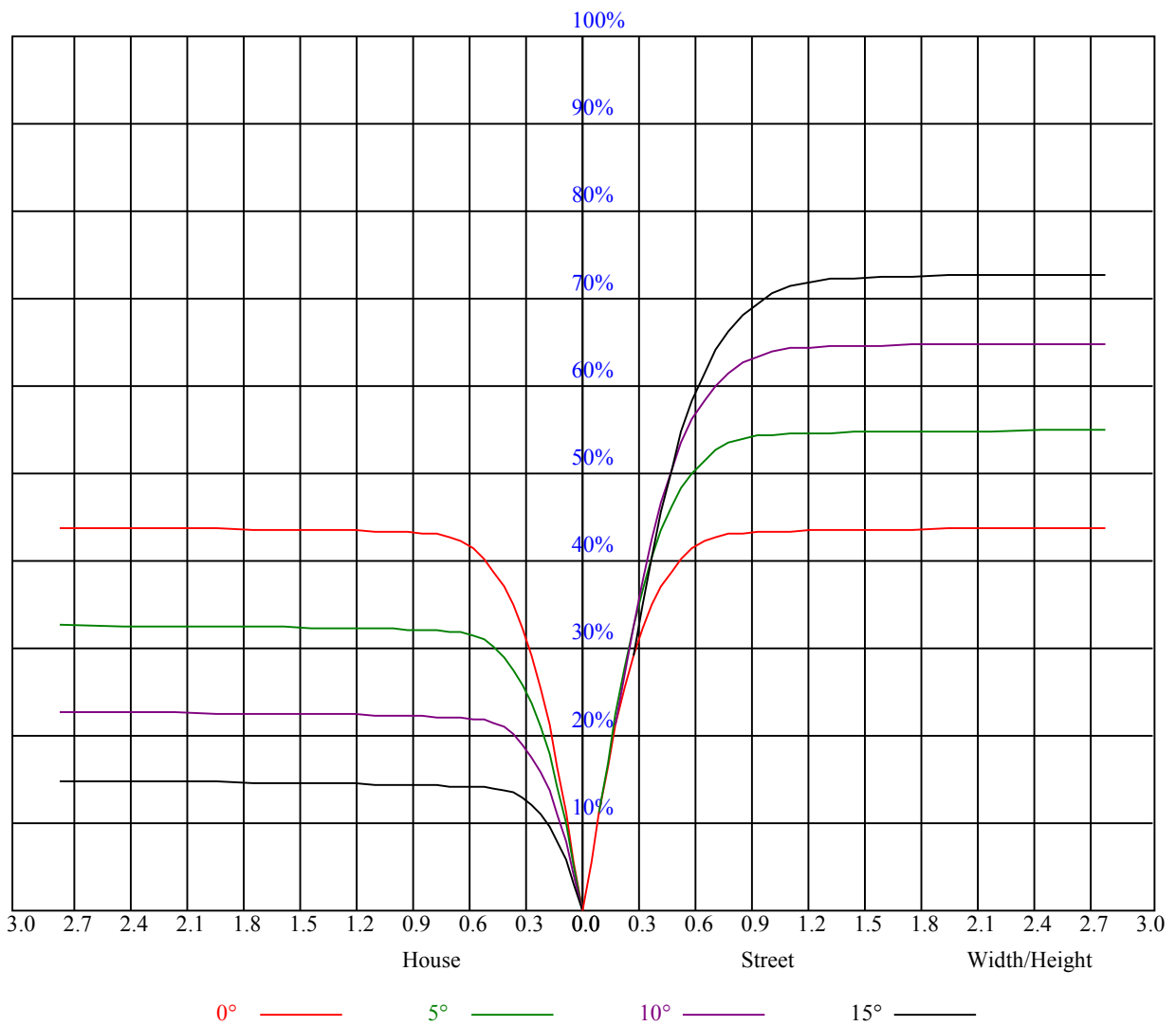
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

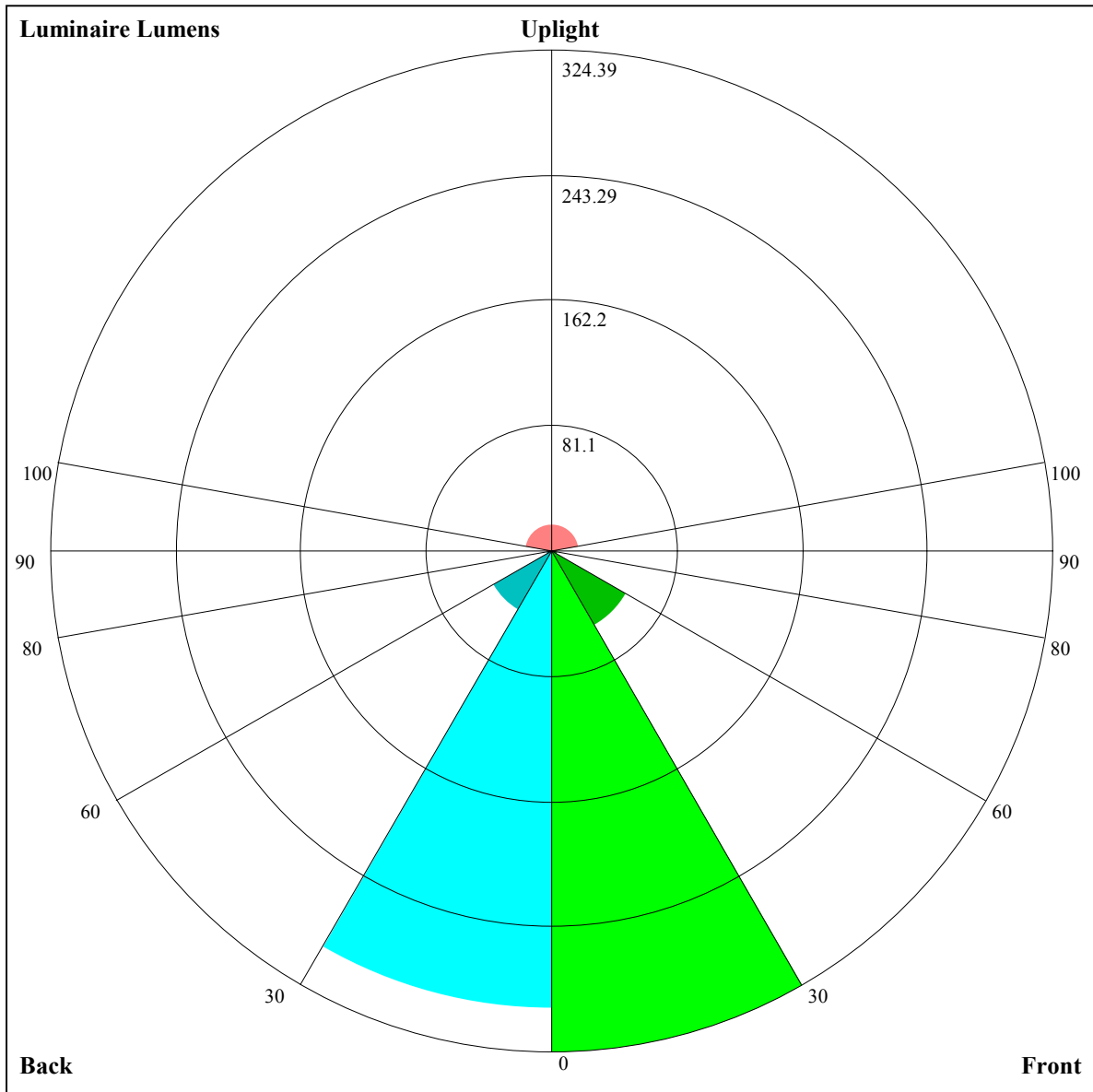
Luminance Limiting Curve





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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	0.99	0.97	0.95	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.84
2	0.93	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.85	0.86	0.84	0.83	0.84	0.82	0.81	0.80
3	0.88	0.84	0.81	0.87	0.83	0.81	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
4	0.84	0.79	0.76	0.83	0.79	0.76	0.81	0.77	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.72
5	0.79	0.75	0.72	0.79	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.74	0.72	0.69	0.68
6	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.71	0.69	0.66	0.65
7	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.62
8	0.69	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.59
9	0.66	0.62	0.59	0.66	0.61	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57
10	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55





Luminaire Lumens:

FL=324.39,FM=55.45,FH=3.84,FVH=1.88

BL=296.36,BM=44.69,BH=3.76,BVH=1.89

UL=3.73,UH=17.74

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	1817.44	1757.25	1473.75	1137.94	756.56	453.38	327.94	199.07	26.49
45.0	1815.19	1731.94	1457.44	1107.00	704.81	439.88	316.13	170.55	21.77
90.0	1810.69	1644.75	1311.19	954.73	591.41	376.43	284.96	107.83	14.57
135.0	1827.00	1693.69	1343.81	975.94	599.63	375.19	287.44	110.42	14.51
180.0	1817.44	1602.00	1213.88	867.21	531.73	355.39	262.18	71.83	13.33
225.0	1815.19	1625.06	1288.69	926.49	570.99	362.48	283.33	90.51	13.50
270.0	1810.69	1729.13	1434.38	1067.06	726.75	431.44	309.38	163.74	17.38
315.0	1827.00	1708.88	1411.88	1040.12	680.18	414.34	301.44	155.25	16.48
360.0	1817.44	1757.25	1473.75	1137.94	756.56	453.38	327.94	199.07	26.49
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	10.07	7.03	5.63	4.78	4.05	3.66	3.49	3.43	3.43
45.0	9.62	7.14	5.68	4.73	3.99	3.66	3.43	3.43	3.43
90.0	8.33	6.64	5.23	4.39	3.88	3.66	3.49	3.49	3.54
135.0	7.93	6.30	5.06	4.28	3.83	3.54	3.43	3.43	3.43
180.0	7.82	6.13	4.95	4.16	3.71	3.49	3.43	3.49	3.43
225.0	7.54	5.96	4.84	4.16	3.77	3.54	3.43	3.43	3.43
270.0	8.77	6.41	5.23	4.39	3.83	3.66	3.49	3.49	3.54
315.0	8.49	6.47	5.29	4.44	3.88	3.54	3.43	3.43	3.43
360.0	10.07	7.03	5.63	4.78	4.05	3.66	3.49	3.43	3.43
C/ γ (°)	90.0								
0.0	3.43								
45.0	3.43								
90.0	3.38								
135.0	3.43								
180.0	3.43								
225.0	3.43								
270.0	3.38								
315.0	3.43								
360.0	3.43								