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Nata

Client:

LumCAT: LM01D08538BK

Luminaire: 92.70.065.00

Report No:

Voltage(V): 32.9700

Test No: GC2019072204

Current(A): 0.2970

LampCAT: LUMINUS CXM-14

Power (W): 9.7900

Lamp flux(lm): 1570.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 85

Width(mm): 85

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1360.69, Efficiency(%): 86.67% , Luminous Efficacy(lm/W): 138.99

Central intensity(cd): 2225.391, Maximum intensity(cd): 2225.391

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Field angle(10%Imax): [C0/180]Total=72.6

[C90/270]Total=72.6

Maximum s/h(1/2): C0_180=0.61 C90_270=0.61

Maximum s/h(1/4): C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.67%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 91.720%

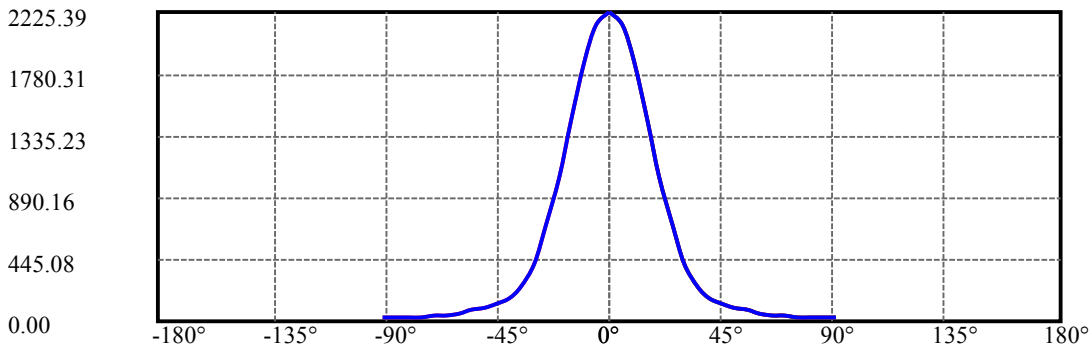
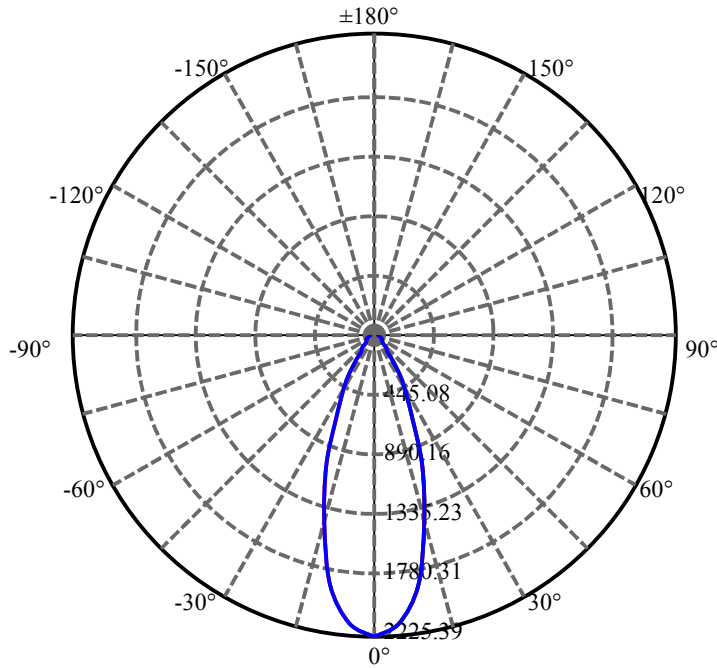
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2225.391	0.000	0	.000%	.000%
5.0	2129.977	52.067	52.067	3.316%	3.827%
10.0	1864.688	142.902	194.969	9.102%	14.329%
15.0	1436.906	195.848	390.817	12.474%	28.722%
20.0	1033.207	203.572	594.389	12.966%	43.683%
25.0	684.612	180.167	774.557	11.476%	56.924%
30.0	414.028	139.034	913.59	8.856%	67.142%
35.0	244.280	96.940	1010.531	6.175%	74.266%
40.0	163.420	68.022	1078.553	4.333%	79.265%
45.0	125.093	53.421	1131.973	3.403%	83.191%
50.0	99.513	45.385	1177.358	2.891%	86.527%
55.0	77.681	38.528	1215.886	2.454%	89.358%
60.0	61.369	32.141	1248.027	2.047%	91.720%
65.0	46.758	26.286	1274.313	1.674%	93.652%
70.0	37.083	21.229	1295.542	1.352%	95.212%
75.0	31.275	17.868	1313.41	1.138%	96.525%
80.0	29.623	16.295	1329.704	1.038%	97.723%
85.0	29.665	16.110	1345.814	1.026%	98.907%
90.0	24.666	14.876	1360.69	.948%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	913.59	58.19%	67.14%
0-40	1078.55	68.70%	79.27%
0-60	1248.03	79.49%	91.72%
0-90	1345.81	85.72%	98.91%
0-120	1345.81	85.72%	98.91%
0-180	1360.69	86.67%	100.00%
60-90	129.93	8.28%	9.55%
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%
0-40.94	1088.55	69.33%	80.00%

ZONAL LUMEN SUMMARY

0-10	194.97
10-20	399.42
20-30	319.20
30-40	164.96
40-50	98.81
50-60	70.67
60-70	47.51
70-80	34.16
80-90	16.11
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: —————

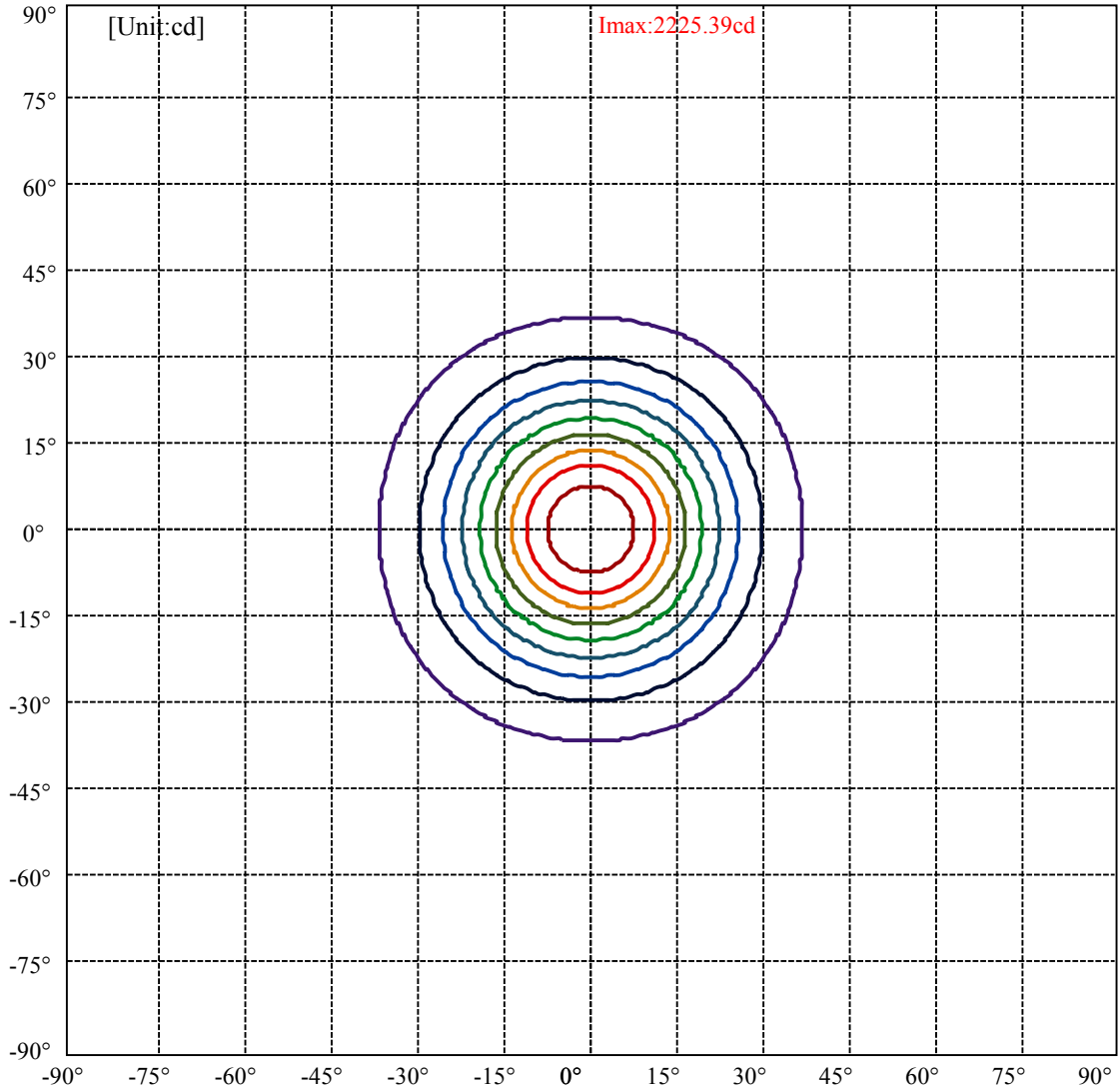
C90/C270: —————

Field angle(10%Imax):C0/180Left:36.3 Right:36.3

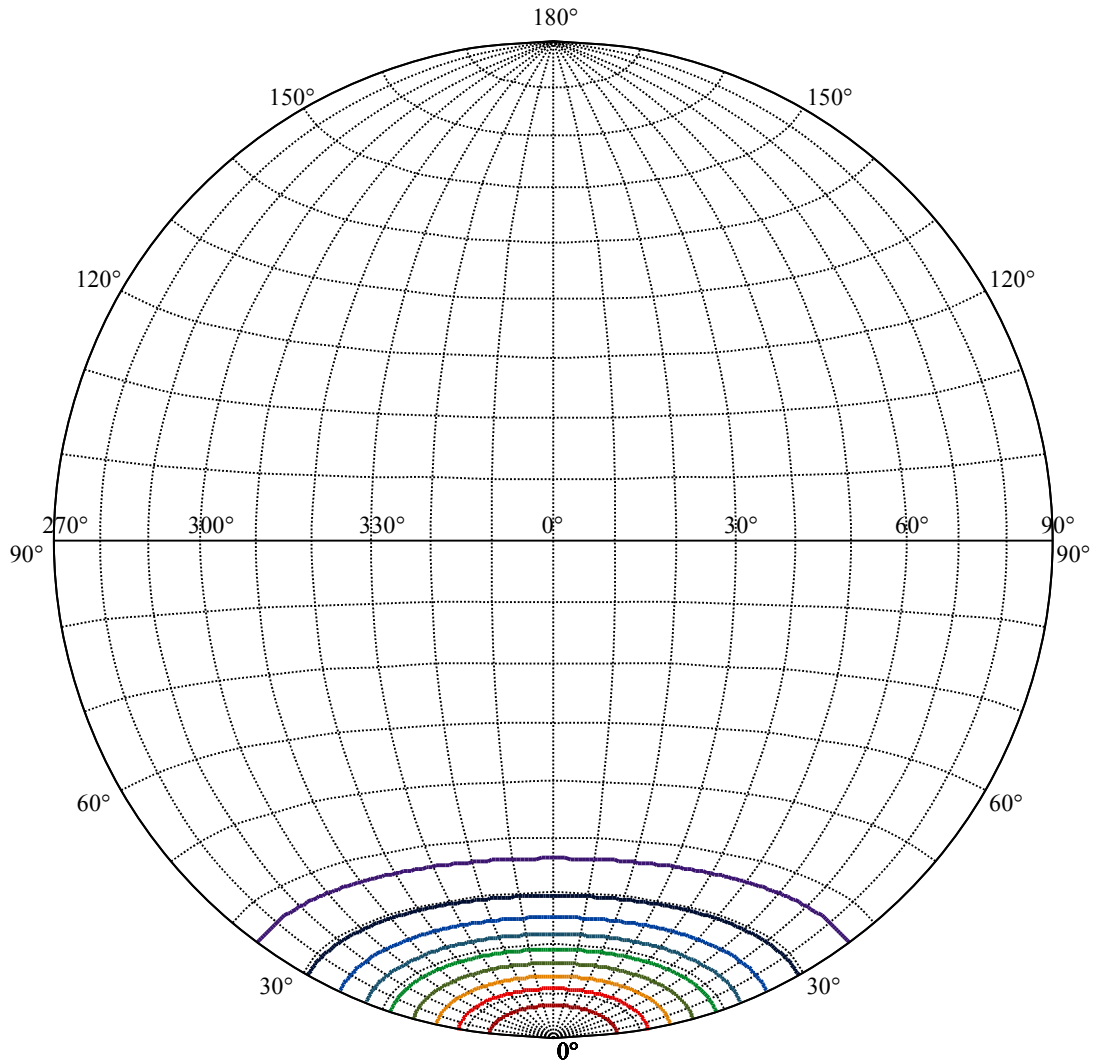
:C90/270Left:36.3 Right:36.3

Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0

:C90/270Left:19.0 Right:19.0



(10%Imax) 222.539	—
(20%Imax) 445.078	—
(30%Imax) 667.617	—
(40%Imax) 890.156	—
(50%Imax) 1112.7	—
(60%Imax) 1335.23	—
(70%Imax) 1557.77	—
(80%Imax) 1780.31	—
(90%Imax) 2002.85	—



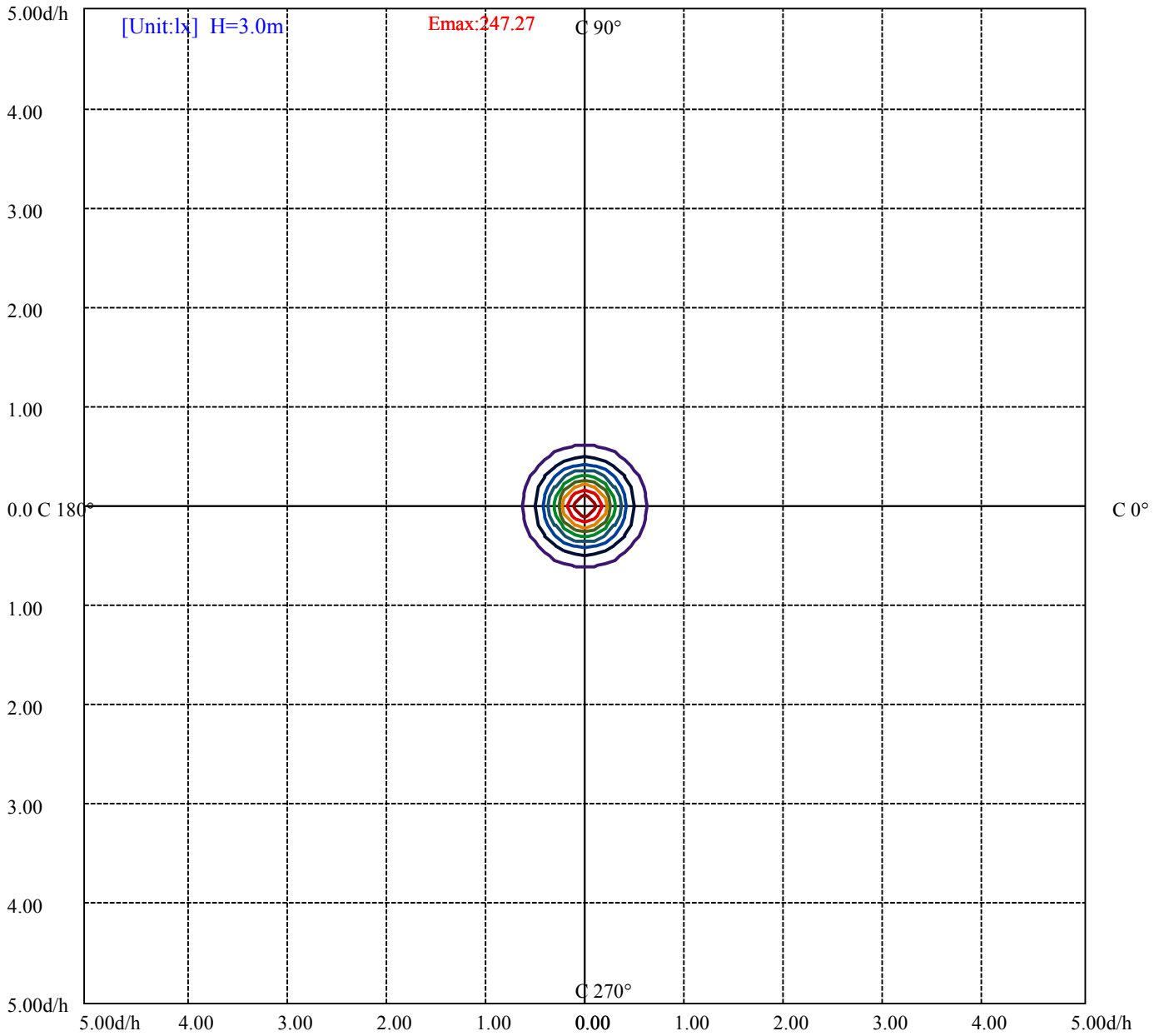
House

[Unit:cd]

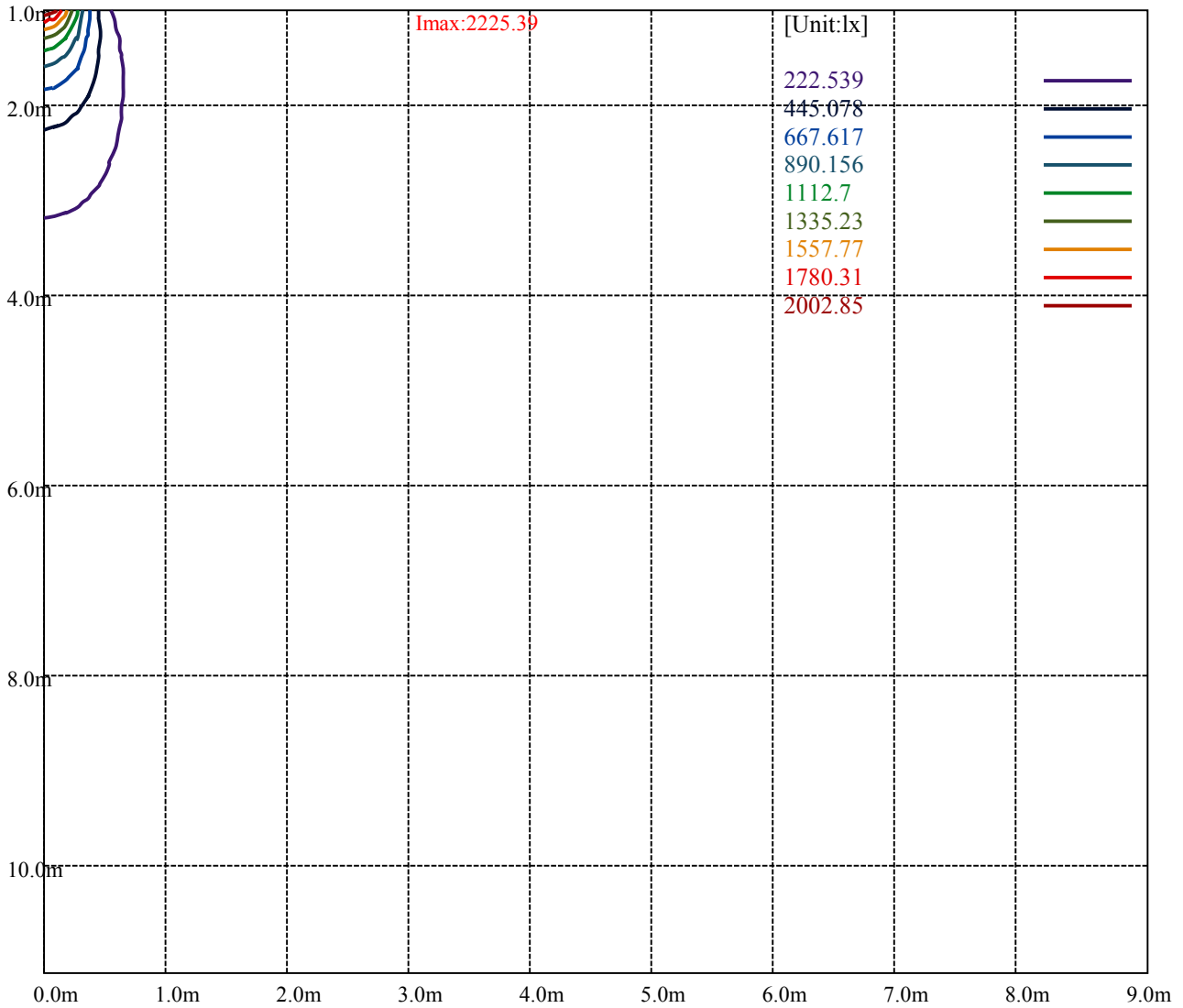
Road

Imax:2225.39

(10%Imax)	222.539	—
(20%Imax)	445.078	—
(30%Imax)	667.617	—
(40%Imax)	890.156	—
(50%Imax)	1112.7	—
(60%Imax)	1335.23	—
(70%Imax)	1557.77	—
(80%Imax)	1780.31	—
(90%Imax)	2002.85	—



- (10%Emax) 24.72655 ———
- (20%Emax) 49.45311 ———
- (30%Emax) 74.17956 ———
- (40%Emax) 98.90611 ———
- (50%Emax) 123.6322 ———
- (60%Emax) 148.3589 ———
- (70%Emax) 173.0856 ———
- (80%Emax) 197.8122 ———
- (90%Emax) 222.5389 ———



Luminance Table

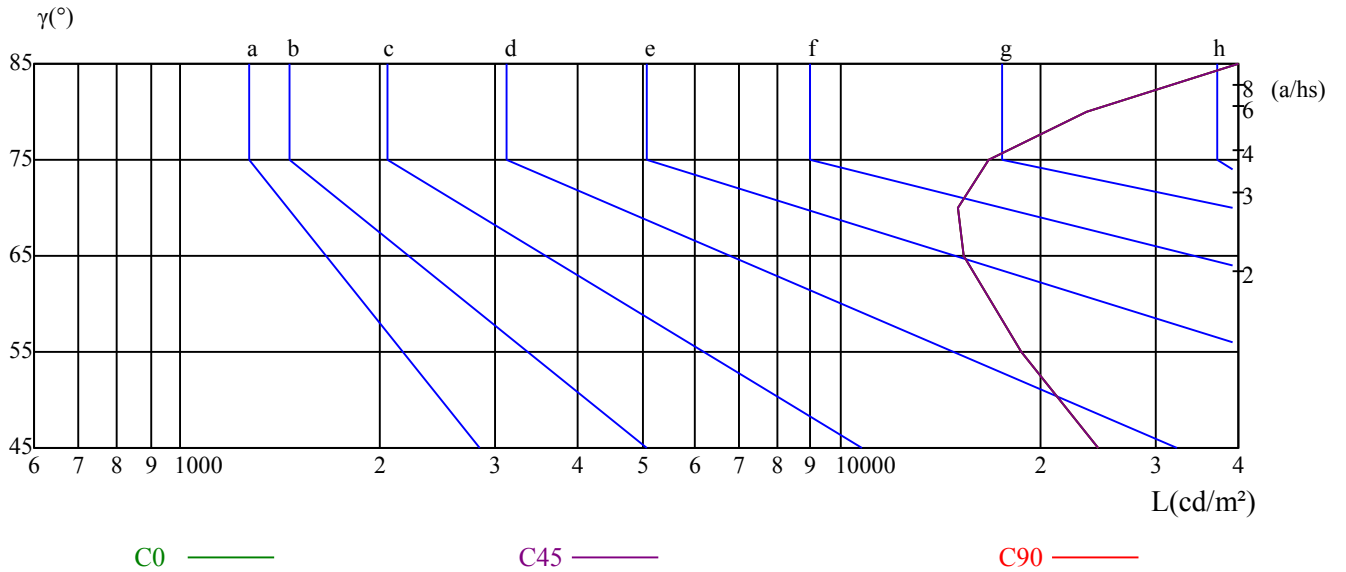
γ	45	50	55	60	65	70	75	80	85
C0	24486	21428	18745	16988	15313	15007	16725	23611	47109
C45	24486	21428	18745	16988	15313	15007	16725	23611	47109
C90	24486	21428	18745	16988	15313	15007	16725	23611	47109

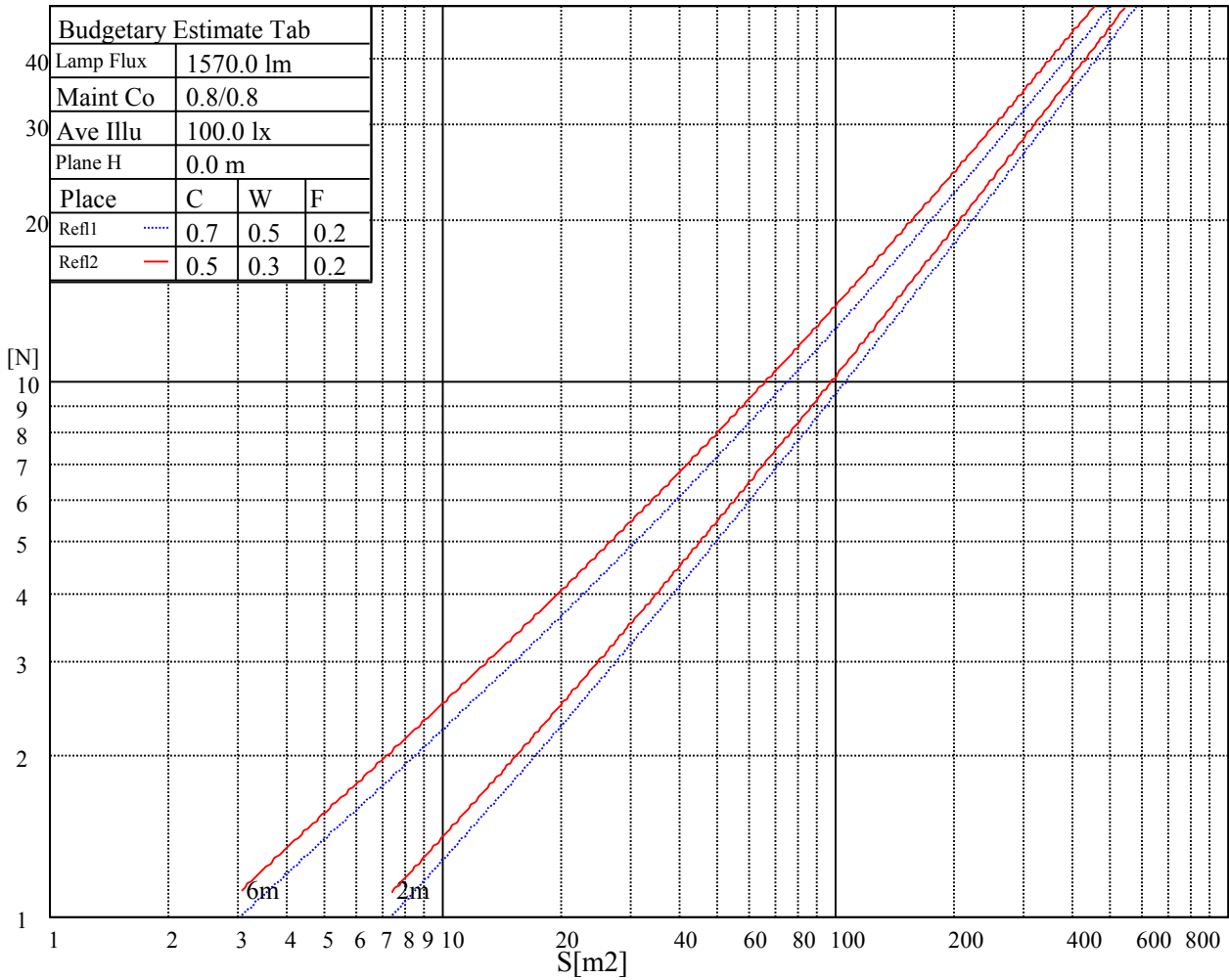
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
15313	15313	15313	16725	16725	16725	47109	47109	47109

Glare Table

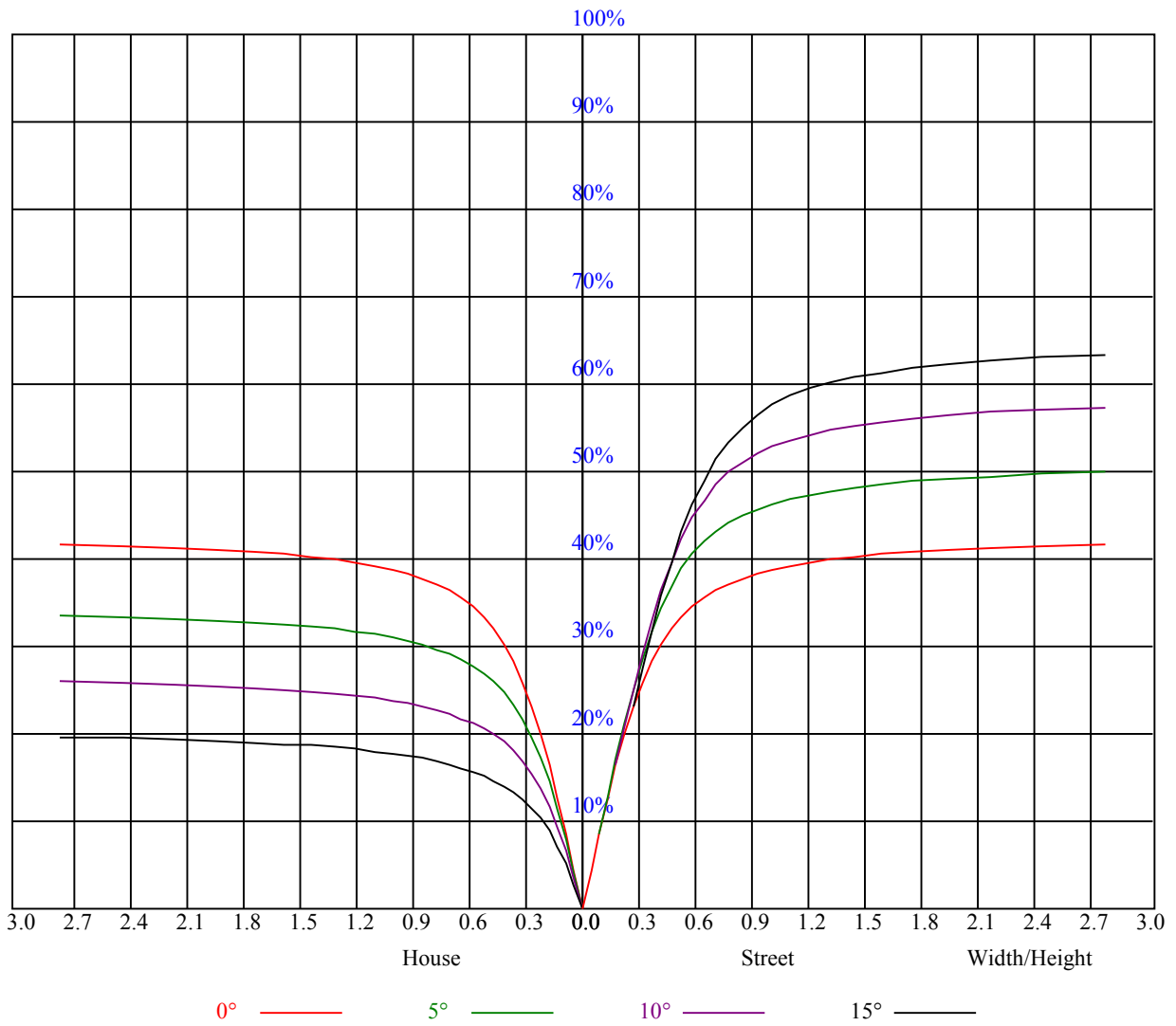
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

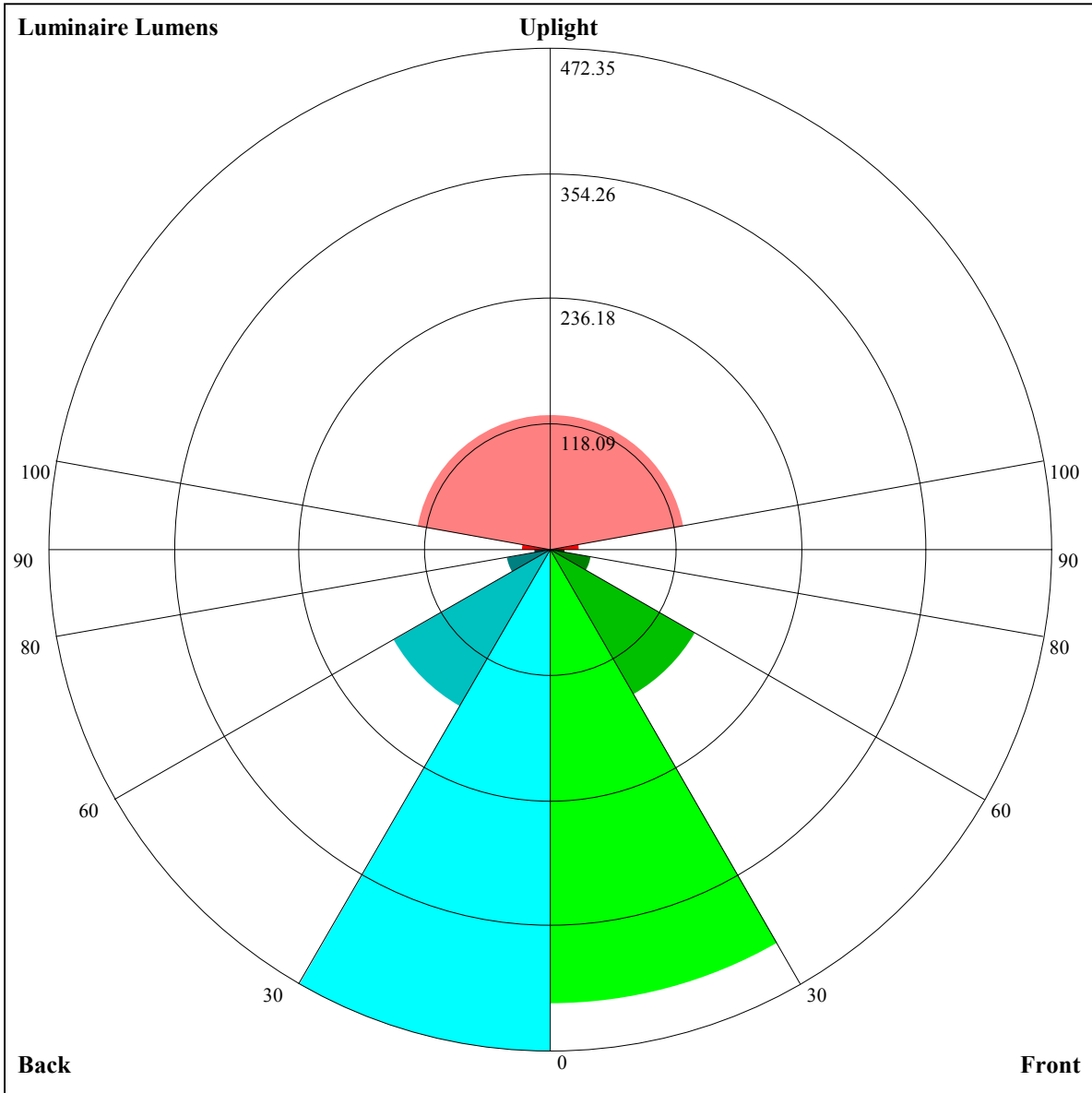
Luminance Limiting Curve





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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.87
1	0.94	0.91	0.89	0.92	0.90	0.87	0.88	0.87	0.85	0.85	0.84	0.82	0.82	0.81	0.80	0.78
2	0.86	0.82	0.79	0.85	0.81	0.78	0.82	0.79	0.76	0.79	0.77	0.75	0.77	0.75	0.73	0.71
3	0.80	0.75	0.71	0.79	0.74	0.71	0.76	0.73	0.69	0.74	0.71	0.68	0.72	0.70	0.67	0.66
4	0.75	0.69	0.65	0.74	0.69	0.65	0.72	0.67	0.64	0.70	0.66	0.63	0.68	0.65	0.62	0.61
5	0.70	0.64	0.60	0.69	0.64	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.64	0.61	0.58	0.57
6	0.66	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.53
7	0.62	0.56	0.53	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.54	0.52	0.50
8	0.59	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.49	0.55	0.52	0.49	0.47
9	0.56	0.50	0.47	0.55	0.50	0.47	0.54	0.50	0.46	0.54	0.49	0.46	0.53	0.49	0.46	0.45
10	0.53	0.48	0.44	0.53	0.48	0.44	0.52	0.47	0.44	0.51	0.47	0.44	0.50	0.47	0.44	0.43





Luminaire Lumens:

FL=427.55,FM=158.2,FH=38.78,FVH=14.83

BL=472.35,BM=170.86,BH=41.76,BVH=15.79

UL=26.91,UH=128.07

BUG Rating:B1-U3-G1

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	2236.50	2052.56	1758.38	1345.50	970.31	622.69	376.88	225.28	158.40
45.0	2230.88	2116.69	1844.44	1431.00	1041.75	680.63	423.56	288.00	175.95
90.0	2223.00	2145.38	1857.38	1429.88	997.99	649.29	384.81	221.91	159.69
135.0	2211.19	2230.88	2055.94	1683.00	1247.06	871.31	519.19	287.44	188.83
180.0	2236.50	2241.00	2022.75	1653.19	1100.98	798.47	473.01	250.93	169.88
225.0	2230.88	2155.50	1888.31	1456.31	1049.46	662.40	390.66	233.38	165.04
270.0	2223.00	2093.63	1803.38	1392.75	975.94	628.88	394.31	245.59	157.39
315.0	2211.19	2004.19	1686.94	1103.63	882.17	563.23	349.82	201.71	132.19
360.0	2236.50	2052.56	1758.38	1345.50	970.31	622.69	376.88	225.28	158.40
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	114.86	84.54	64.58	50.12	38.93	32.91	29.03	27.51	25.59
45.0	132.81	107.33	82.01	63.68	47.53	36.68	29.31	29.03	27.79
90.0	113.40	90.56	73.18	58.50	44.78	35.38	29.64	27.79	28.46
135.0	139.78	112.56	88.37	70.54	52.37	40.67	34.59	32.91	32.63
180.0	133.93	113.40	89.89	70.65	54.00	42.58	36.23	33.24	33.47
225.0	129.38	103.84	80.38	61.71	45.73	36.23	30.71	28.52	30.32
270.0	119.93	88.31	66.60	54.39	43.31	34.48	28.35	27.34	28.07
315.0	116.66	95.57	76.44	61.37	47.42	37.74	32.34	30.66	30.99
360.0	114.86	84.54	64.58	50.12	38.93	32.91	29.03	27.51	25.59
C/ γ (°)	90.0								
0.0	20.70								
45.0	25.93								
90.0	20.31								
135.0	27.84								
180.0	26.21								
225.0	23.57								
270.0	25.37								
315.0	27.39								
360.0	20.70								