
Client:

LumCAT: 1698-M

Luminaire: 92.70.123.00

Report No: nt0100

Test No: GC2019121607

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 830.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.8600

Current(A): 0.1970

Power (W): 6.8600

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 750.03, Efficiency(%): 90.37% , Luminous Efficacy(lm/W): 109.33

Central intensity(cd): 691.777, Maximum intensity(cd): 691.777

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=67.4

[C90/270]Total=67.4

Field angle(10%Imax): [C0/180]Total=92.6

[C90/270]Total=92.6

Maximum s/h(1/2): C0_180=0.92 C90_270=0.92

Maximum s/h(1/4): C0_180=1.01 C90_270=1.01

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.37%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.442%

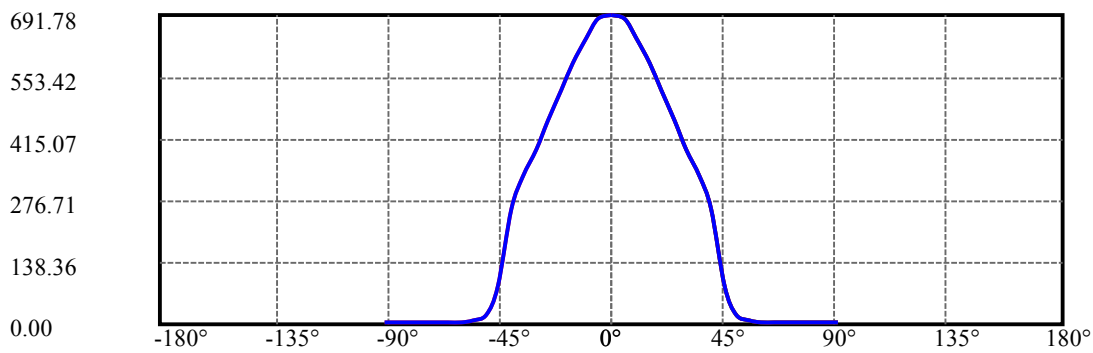
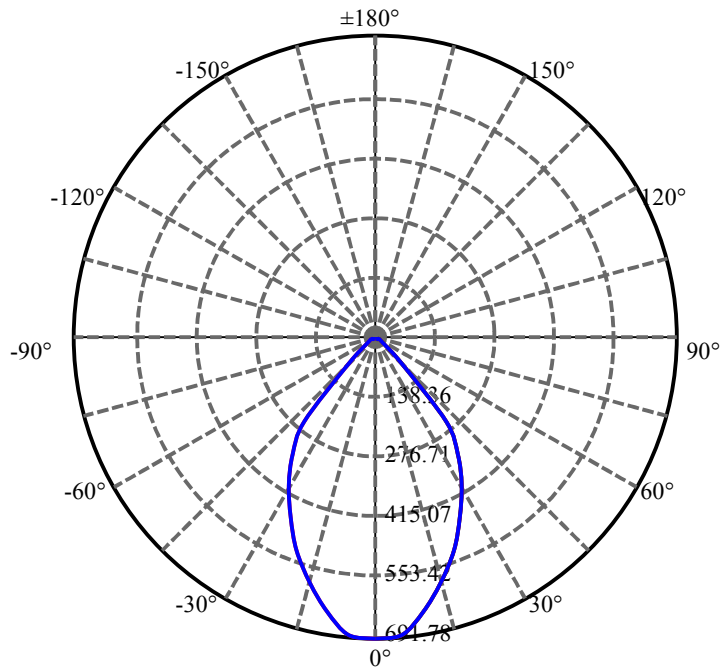
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	691.777	0.000	0	.000%	.000%
5.0	683.438	16.440	16.44	1.981%	2.192%
10.0	640.821	47.373	63.813	5.708%	8.508%
15.0	586.132	72.782	136.595	8.769%	18.212%
20.0	522.682	91.382	227.977	11.010%	30.396%
25.0	456.905	102.741	330.718	12.378%	44.094%
30.0	392.716	107.520	438.238	12.954%	58.429%
35.0	329.449	106.344	544.582	12.813%	72.608%
40.0	255.874	97.657	642.239	11.766%	85.628%
45.0	85.823	63.268	705.507	7.623%	94.063%
50.0	22.099	21.807	727.314	2.627%	96.971%
55.0	10.575	7.104	734.419	.856%	97.918%
60.0	6.427	3.930	738.348	.473%	98.442%
65.0	4.570	2.673	741.022	.322%	98.798%
70.0	3.762	2.110	743.131	.254%	99.080%
75.0	3.326	1.853	744.984	.223%	99.327%
80.0	3.129	1.727	746.711	.208%	99.557%
85.0	3.023	1.672	748.383	.201%	99.780%
90.0	3.009	1.652	750.035	.199%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	438.24	52.80%	58.43%
0-40	642.24	77.38%	85.63%
0-60	738.35	88.96%	98.44%
0-90	748.38	90.17%	99.78%
0-120	748.38	90.17%	99.78%
0-180	750.03	90.37%	100.00%
60-90	13.96	1.68%	1.86%
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%
0-37.84	600.03	72.29%	80.00%

ZONAL LUMEN SUMMARY

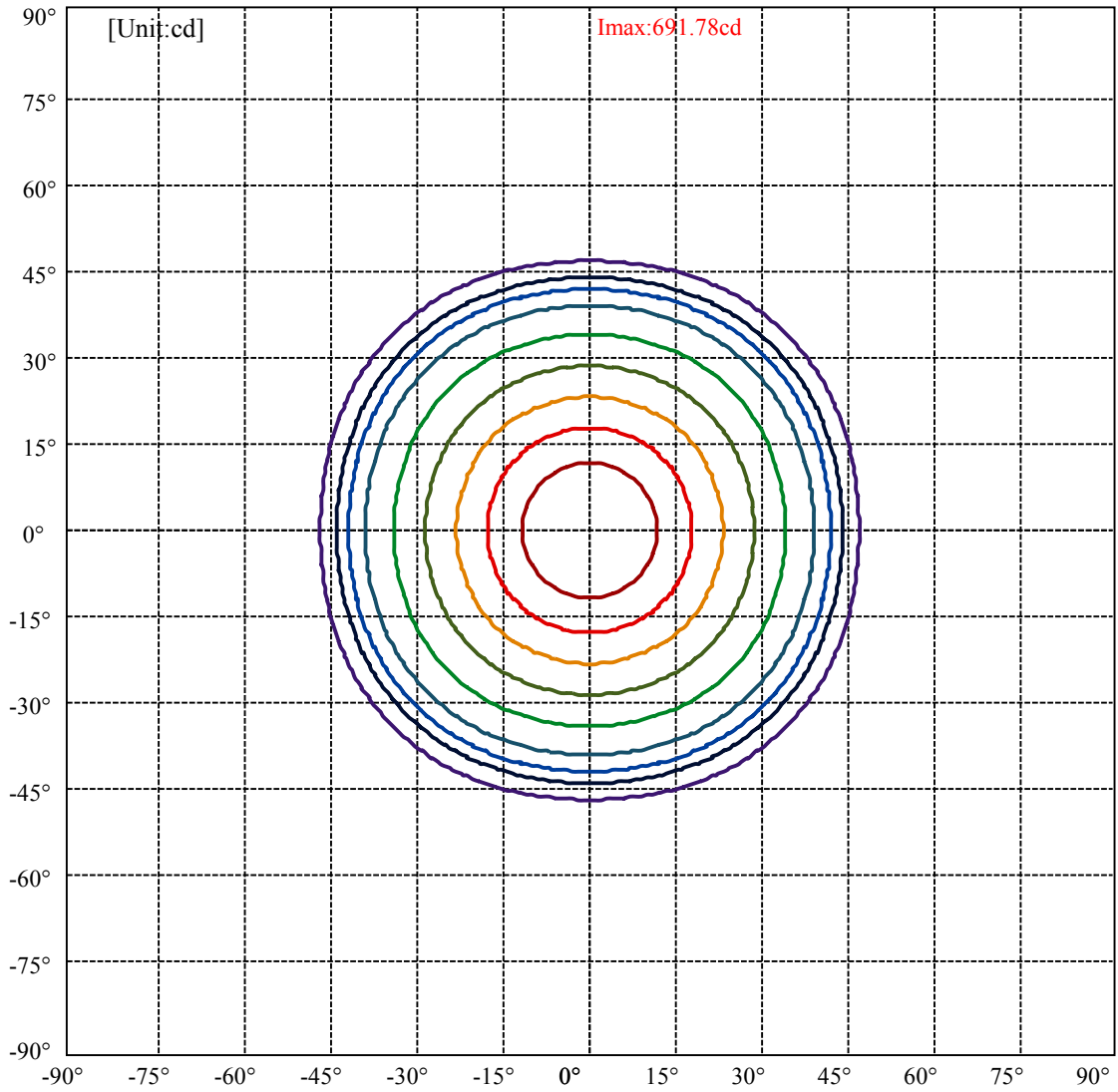
0-10	63.81
10-20	164.16
20-30	210.26
30-40	204.00
40-50	85.08
50-60	11.03
60-70	4.78
70-80	3.58
80-90	1.67
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



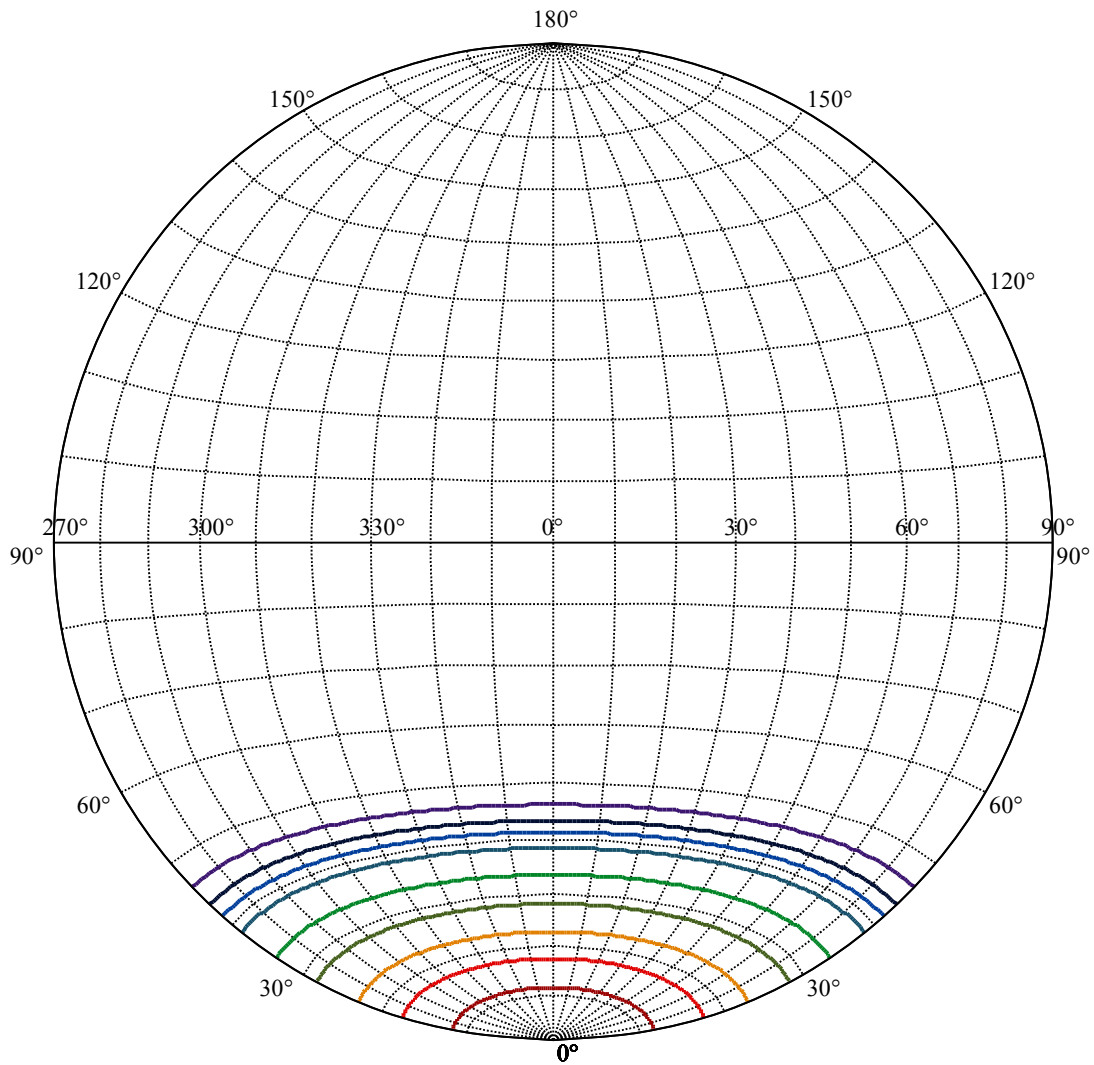
C0(Max): —————
 C0/C180: —————
 C90/C270: —————

Field angle(10%Imax):C0/180Left:46.3 Right:46.3
 :C90/270Left:46.3 Right:46.3

Beam Angle(50%Imax):C0/180Left:33.7 Right:33.7
 :C90/270Left:33.7 Right:33.7



(10%Imax) 69.1777	—
(20%Imax) 138.355	—
(30%Imax) 207.533	—
(40%Imax) 276.711	—
(50%Imax) 345.888	—
(60%Imax) 415.066	—
(70%Imax) 484.244	—
(80%Imax) 553.421	—
(90%Imax) 622.599	—



House

[Unit:cd]

Road

Imax:691.78

(10%Imax) 69.1777

(20%Imax) 138.355

(30%Imax) 207.533

(40%Imax) 276.711

(50%Imax) 345.888

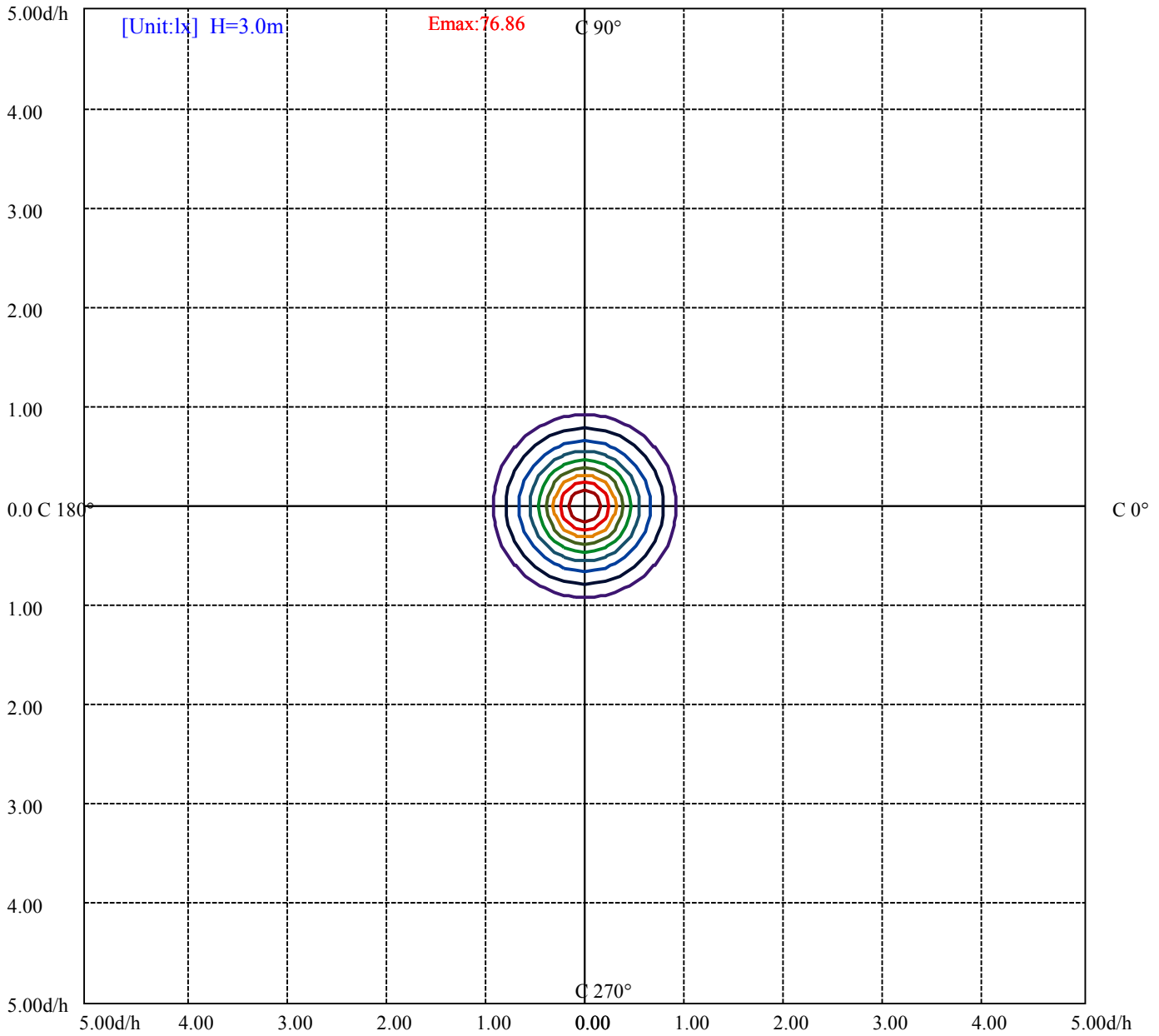
(60%Imax) 415.066

(70%Imax) 484.244

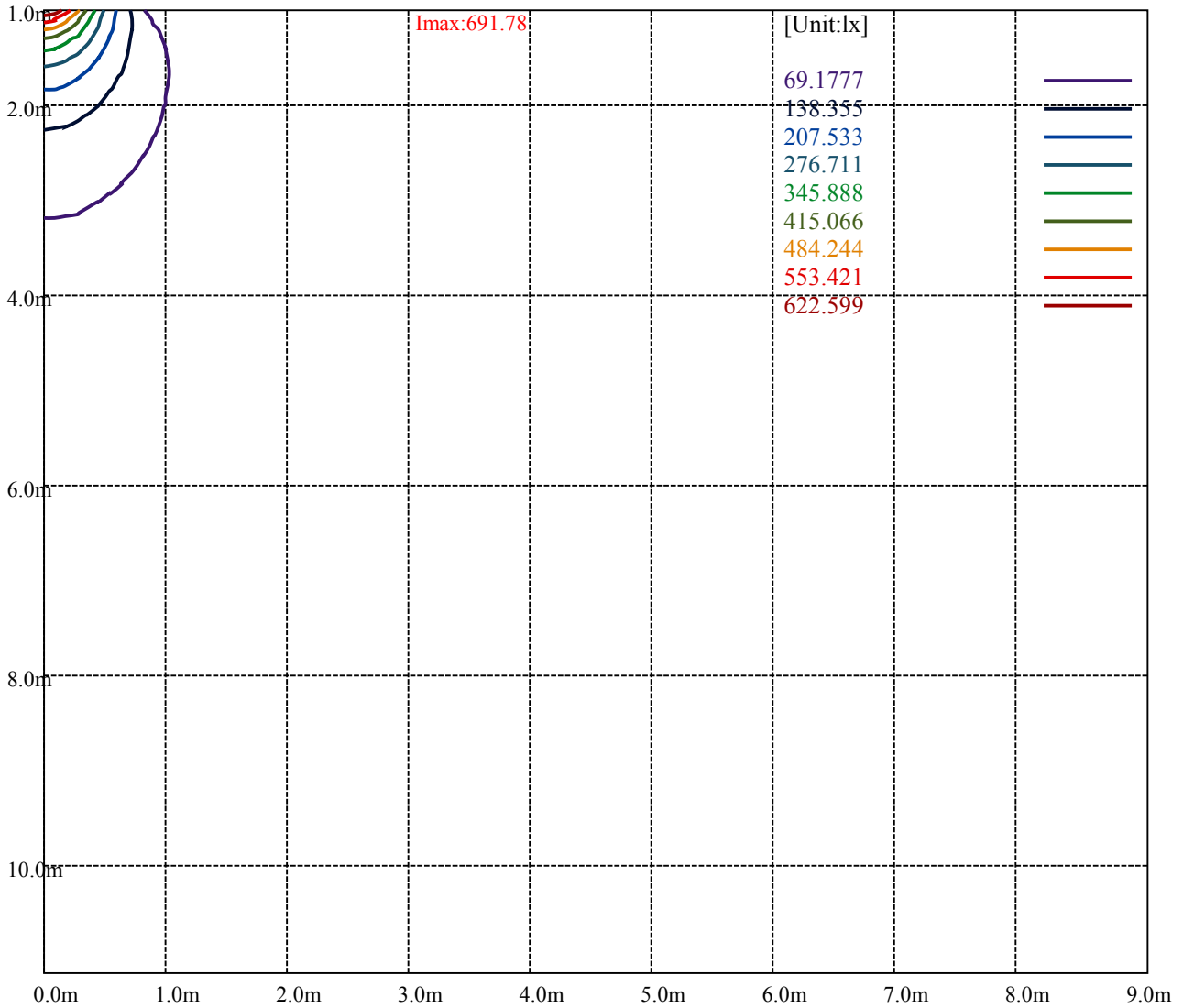
(80%Imax) 553.421

(90%Imax) 622.599





(10%Emax) 7.686399	—
(20%Emax) 15.37278	—
(30%Emax) 23.05922	—
(40%Emax) 30.74567	—
(50%Emax) 38.432	—
(60%Emax) 46.11845	—
(70%Emax) 53.80478	—
(80%Emax) 61.49123	—
(90%Emax) 69.17767	—



Luminance Table

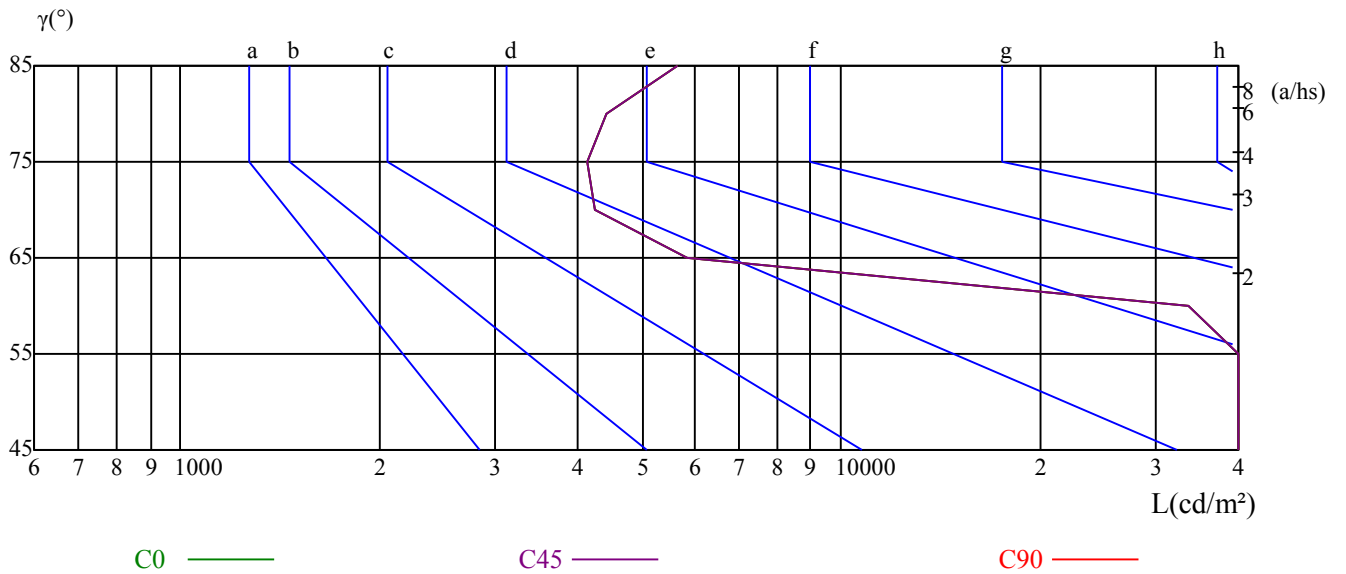
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

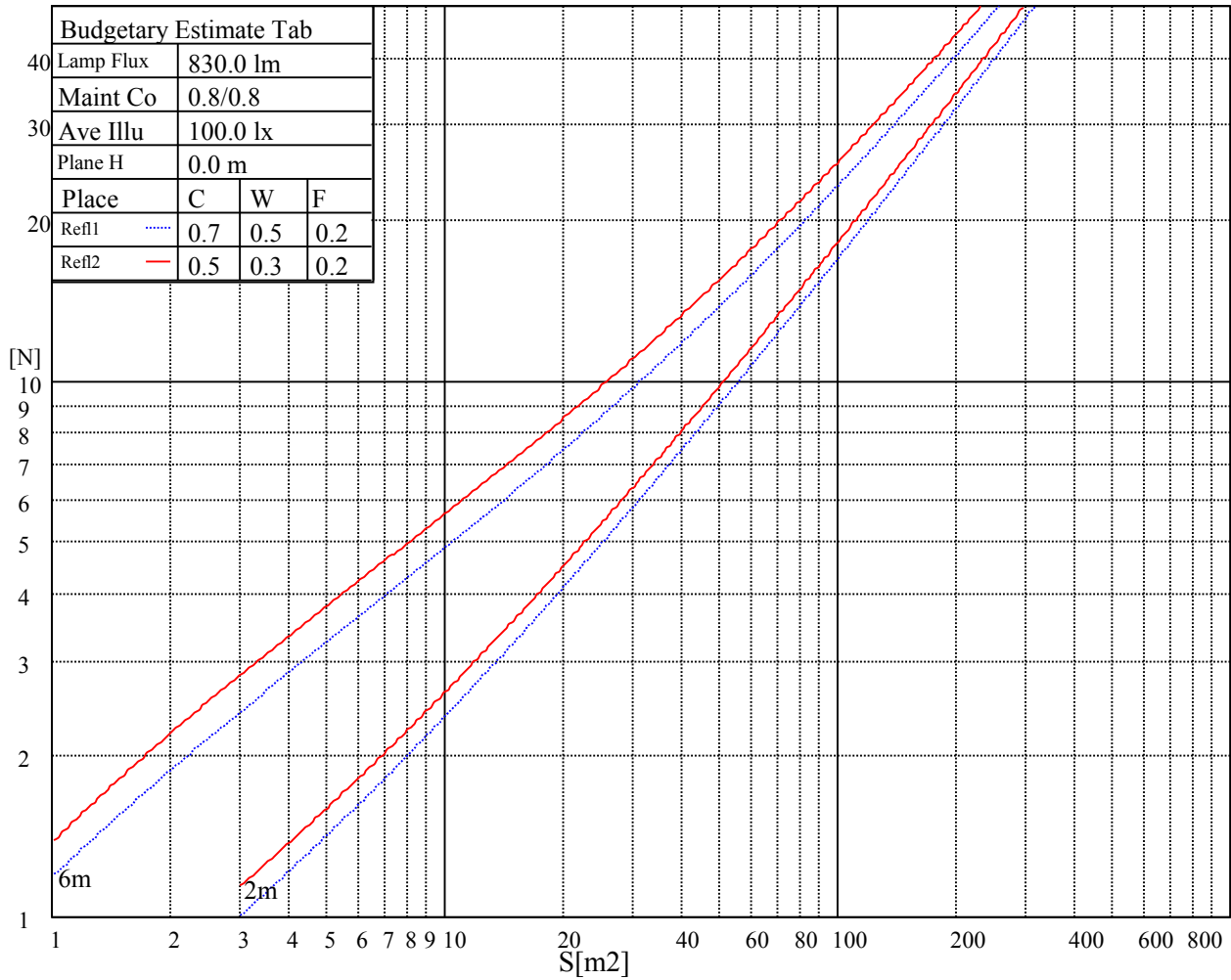
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

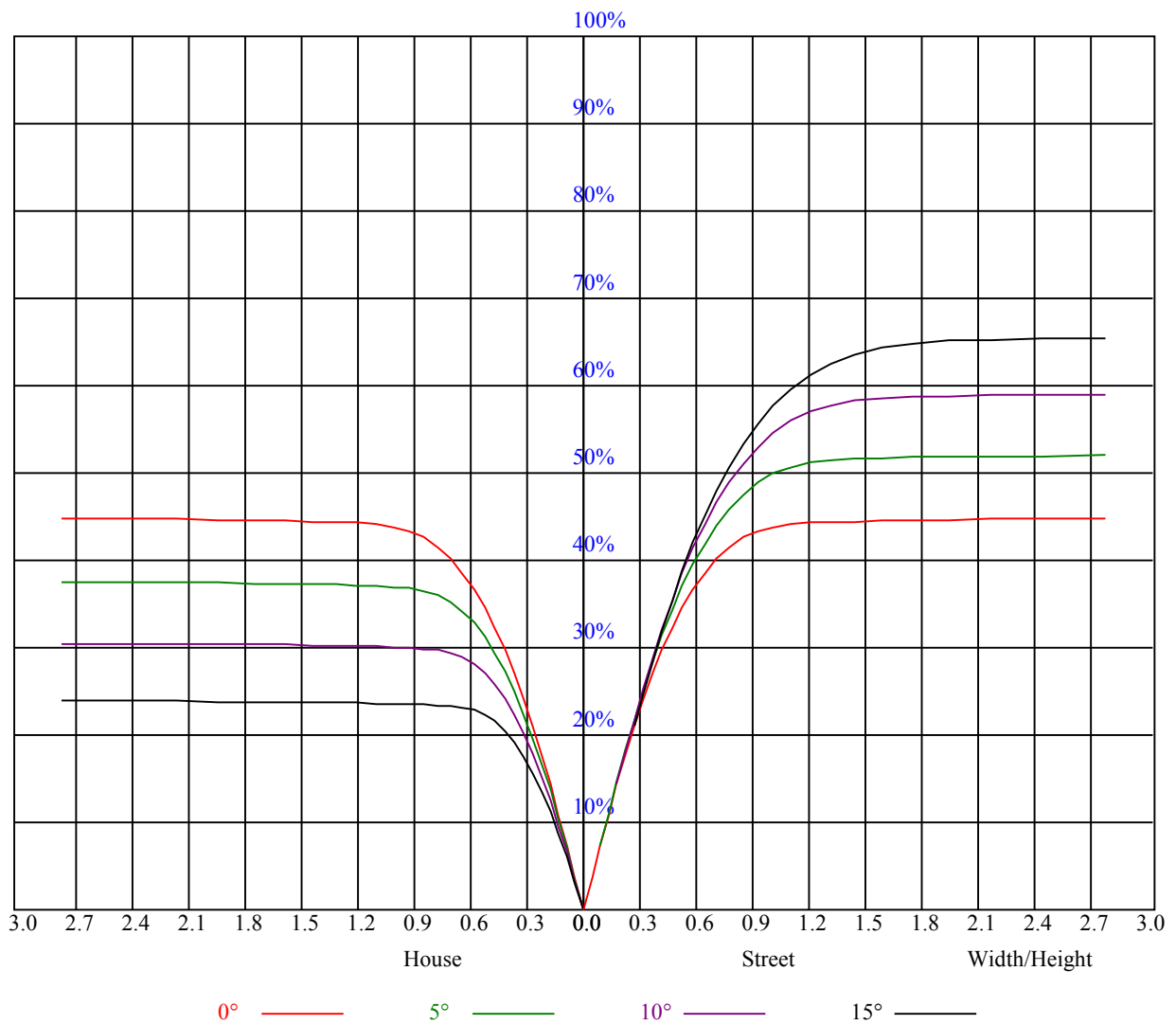
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

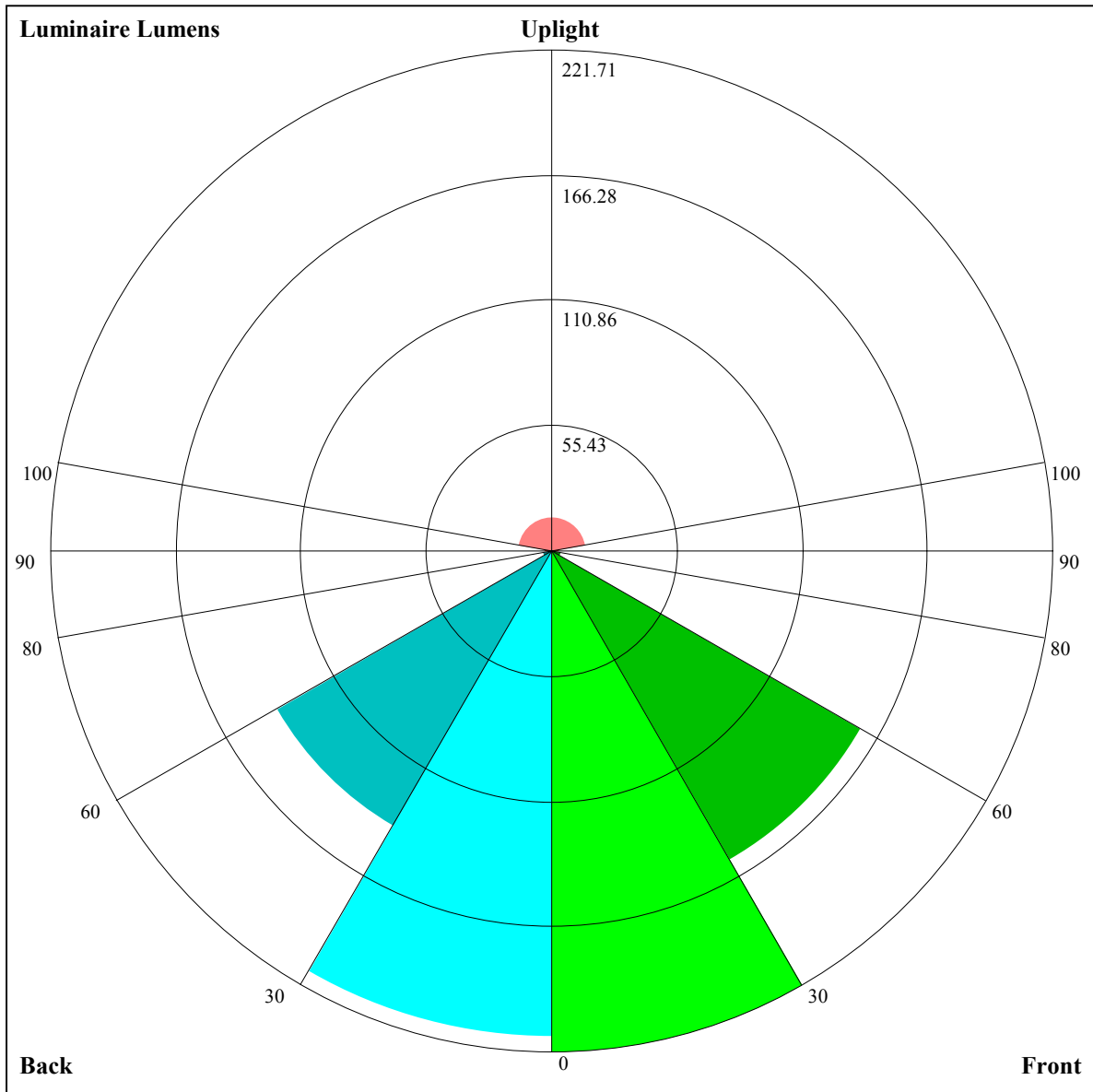
Luminance Limiting Curve





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	1.08	1.08	1.08	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	0.84	0.90	0.86	0.83	0.87	0.84	0.81	0.84	0.82	0.80	0.82	0.80	0.78	0.76
3	0.85	0.80	0.76	0.83	0.79	0.75	0.81	0.77	0.74	0.79	0.75	0.73	0.77	0.74	0.72	0.70
4	0.78	0.73	0.69	0.77	0.72	0.68	0.75	0.71	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.64
5	0.73	0.67	0.63	0.72	0.66	0.62	0.70	0.65	0.62	0.69	0.64	0.61	0.67	0.64	0.61	0.59
6	0.68	0.62	0.58	0.67	0.61	0.57	0.65	0.61	0.57	0.64	0.60	0.56	0.63	0.59	0.56	0.55
7	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.56	0.53	0.60	0.56	0.52	0.59	0.55	0.52	0.51
8	0.59	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.55	0.51	0.48	0.47
9	0.55	0.49	0.46	0.55	0.49	0.45	0.54	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.44
10	0.52	0.46	0.42	0.51	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.41





Luminaire Lumens:

FL=221.71,FM=157.77,FH=4.21,FVH=1.68

BL=215.31,BM=140.88,BH=4.2,BVH=1.66

UL=3.28,UH=15.63

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	692.16	692.44	663.53	606.60	545.57	481.56	416.93	355.56	293.46
45.0	690.19	692.10	662.40	608.12	539.21	483.92	415.24	347.57	289.01
90.0	688.11	679.11	635.29	590.23	524.76	457.88	393.24	325.01	250.37
135.0	696.26	686.31	640.52	587.48	532.63	458.72	388.97	320.91	252.68
180.0	692.94	677.53	625.95	568.01	505.41	434.14	369.17	307.52	208.80
225.0	690.19	669.99	616.73	560.98	498.21	433.46	377.66	316.07	221.34
270.0	688.11	682.48	639.79	583.48	522.34	458.83	393.86	330.98	267.13
315.0	696.26	687.54	642.38	584.16	513.34	446.74	386.66	331.99	264.21
360.0	692.16	692.44	663.53	606.60	545.57	481.56	416.93	355.56	293.46

C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	131.29	26.27	11.93	6.69	4.61	3.83	3.38	3.15	2.98
45.0	123.41	23.01	9.73	5.85	4.33	3.66	3.32	3.15	3.04
90.0	69.92	18.90	8.78	5.68	4.33	3.71	3.38	3.15	3.09
135.0	76.84	20.31	10.41	6.36	4.61	3.88	3.32	3.09	2.98
180.0	45.22	19.13	9.79	6.36	4.44	3.71	3.26	3.04	2.98
225.0	56.64	20.42	10.07	6.41	4.50	3.60	3.26	3.04	2.98
270.0	94.39	24.47	12.71	7.59	5.18	4.05	3.43	3.26	3.15
315.0	88.88	24.30	11.19	6.47	4.56	3.66	3.26	3.15	2.98
360.0	131.29	26.27	11.93	6.69	4.61	3.83	3.38	3.15	2.98

C/ γ (°)	90.0
0.0	2.98
45.0	3.04
90.0	3.04
135.0	3.04
180.0	2.98
225.0	2.98
270.0	3.04
315.0	2.98
360.0	2.98