
Client:

LumCAT: 1536-E

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019121811

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.7800

Current(A): 0.1970

Power (W): 6.8500

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 706.65, Efficiency(%): 85.86% , Luminous Efficacy(lm/W): 103.16

Central intensity(cd): 785.714, Maximum intensity(cd): 785.714

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=58.0

[C90/270]Total=58.0

Field angle(10%Imax): [C0/180]Total=85.8

[C90/270]Total=85.8

Maximum s/h(1/2): C0_180=0.88 C90_270=0.88

Maximum s/h(1/4): C0_180=0.89 C90_270=0.89

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.86%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.395%

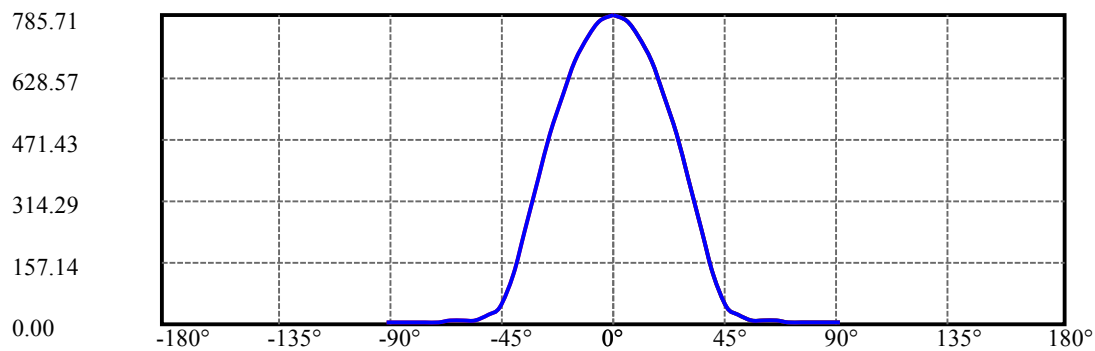
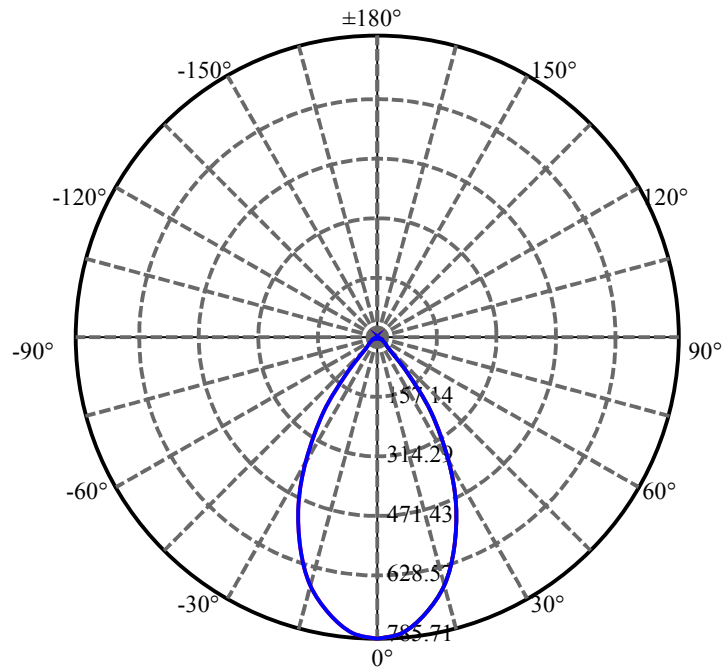
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	785.714	0.000	0	.000%	.000%
5.0	771.518	18.616	18.616	2.262%	2.634%
10.0	733.936	53.855	72.471	6.544%	10.256%
15.0	667.519	83.133	155.604	10.101%	22.020%
20.0	583.207	103.077	258.682	12.525%	36.607%
25.0	482.822	111.807	370.489	13.585%	52.429%
30.0	371.559	108.123	478.611	13.138%	67.729%
35.0	241.116	90.221	568.832	10.962%	80.497%
40.0	126.028	61.255	630.087	7.443%	89.165%
45.0	44.993	31.666	661.753	3.848%	93.646%
50.0	23.393	13.818	675.571	1.679%	95.602%
55.0	12.164	7.731	683.303	.939%	96.696%
60.0	9.204	4.939	688.242	.600%	97.395%
65.0	7.664	4.101	692.342	.498%	97.975%
70.0	6.715	3.641	695.983	.442%	98.490%
75.0	5.829	3.279	699.262	.398%	98.954%
80.0	5.210	2.954	702.216	.359%	99.372%
85.0	4.029	2.510	704.726	.305%	99.728%
90.0	3.002	1.925	706.651	.234%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	478.61	58.15%	67.73%
0-40	630.09	76.56%	89.17%
0-60	688.24	83.63%	97.39%
0-90	704.73	85.63%	99.73%
0-120	704.73	85.63%	99.73%
0-180	706.65	85.86%	100.00%
60-90	21.42	2.60%	3.03%
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%
0-34.81	565.32	68.69%	80.00%

ZONAL LUMEN SUMMARY

0-10	72.47
10-20	186.21
20-30	219.93
30-40	151.48
40-50	45.48
50-60	12.67
60-70	7.74
70-80	6.23
80-90	2.51
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: —————

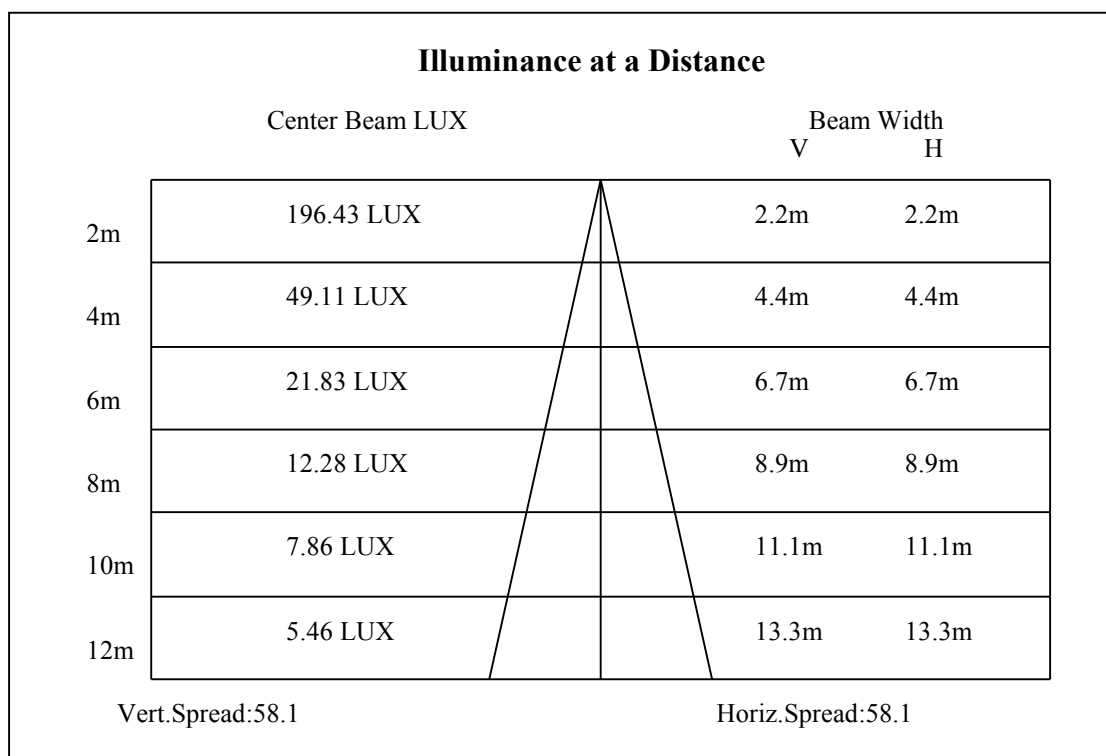
C90/C270: —————

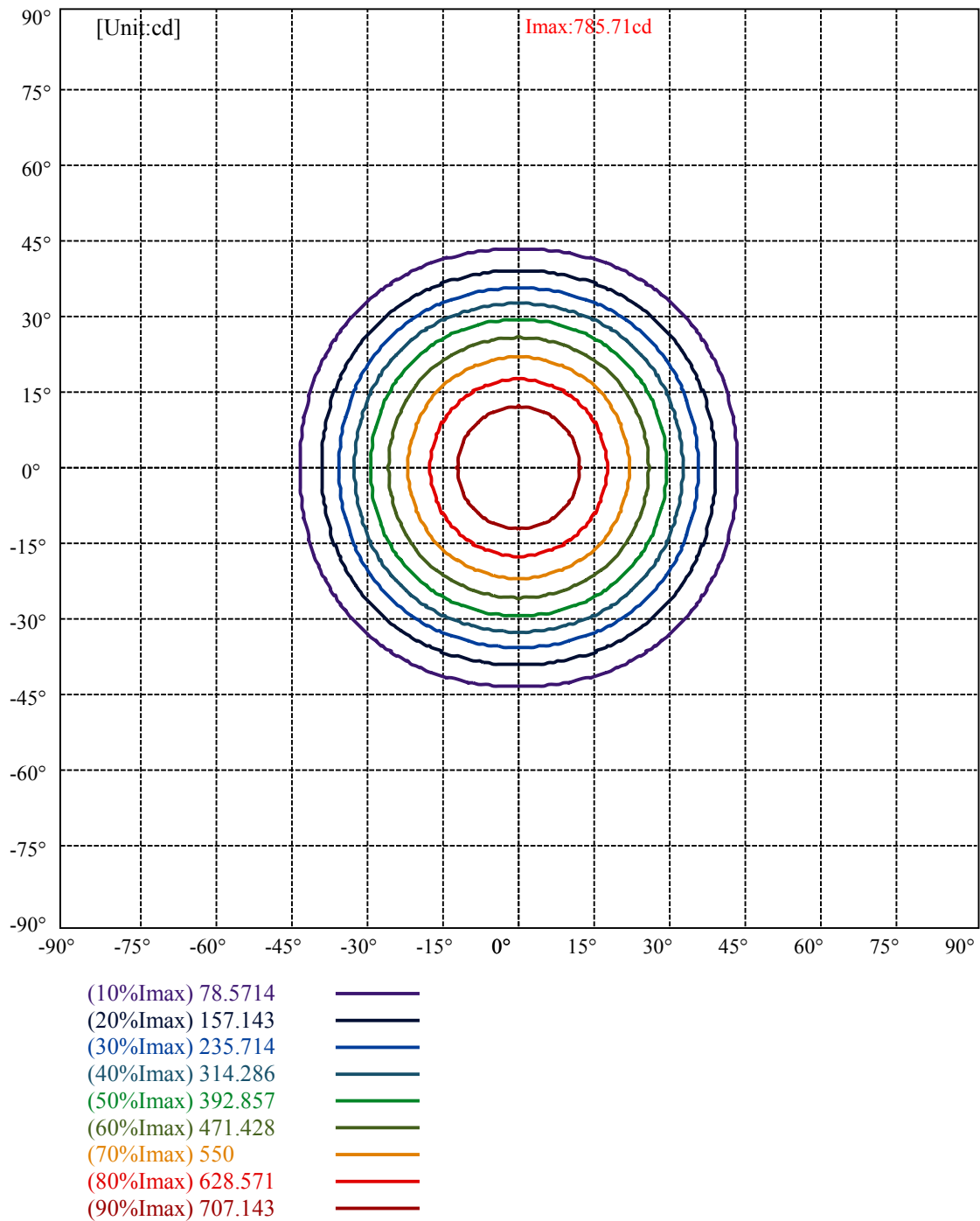
Field angle(10%Imax):C0/180Left:42.9 Right:42.9

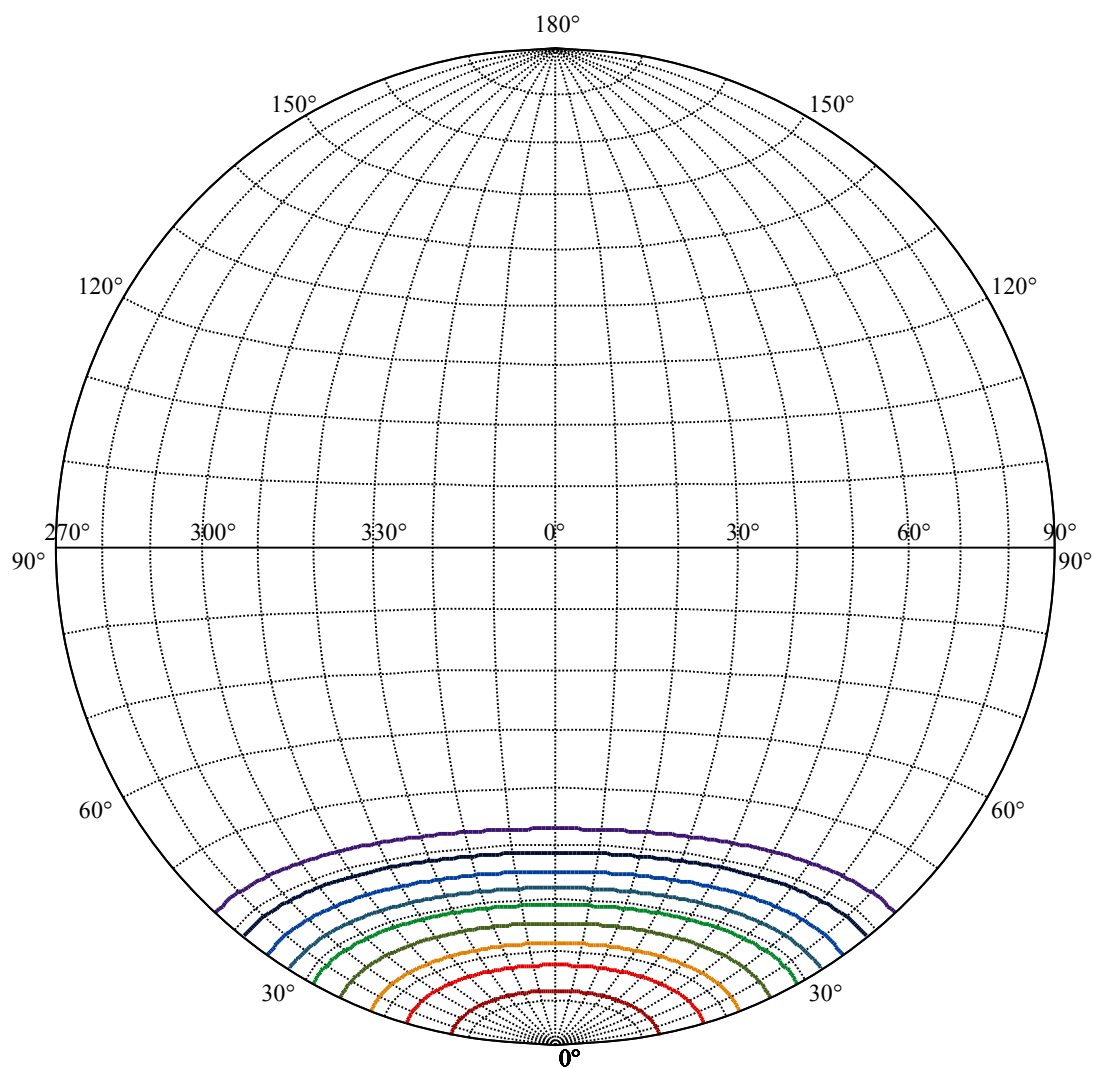
:C90/270Left:42.9 Right:42.9

Beam Angle(50%Imax):C0/180Left:29.0 Right:29.0

:C90/270Left:29.0 Right:29.0







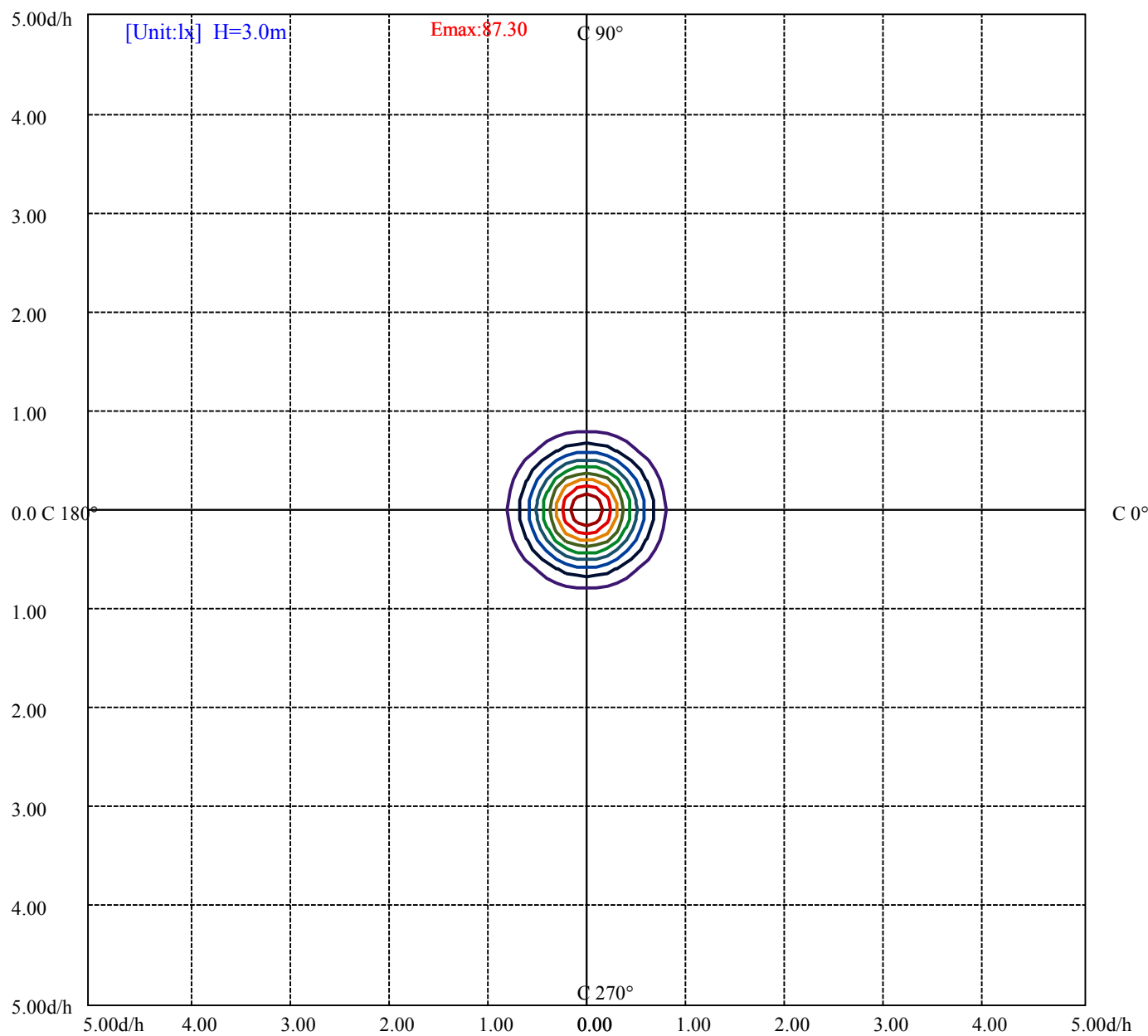
House

[Unit:cd]

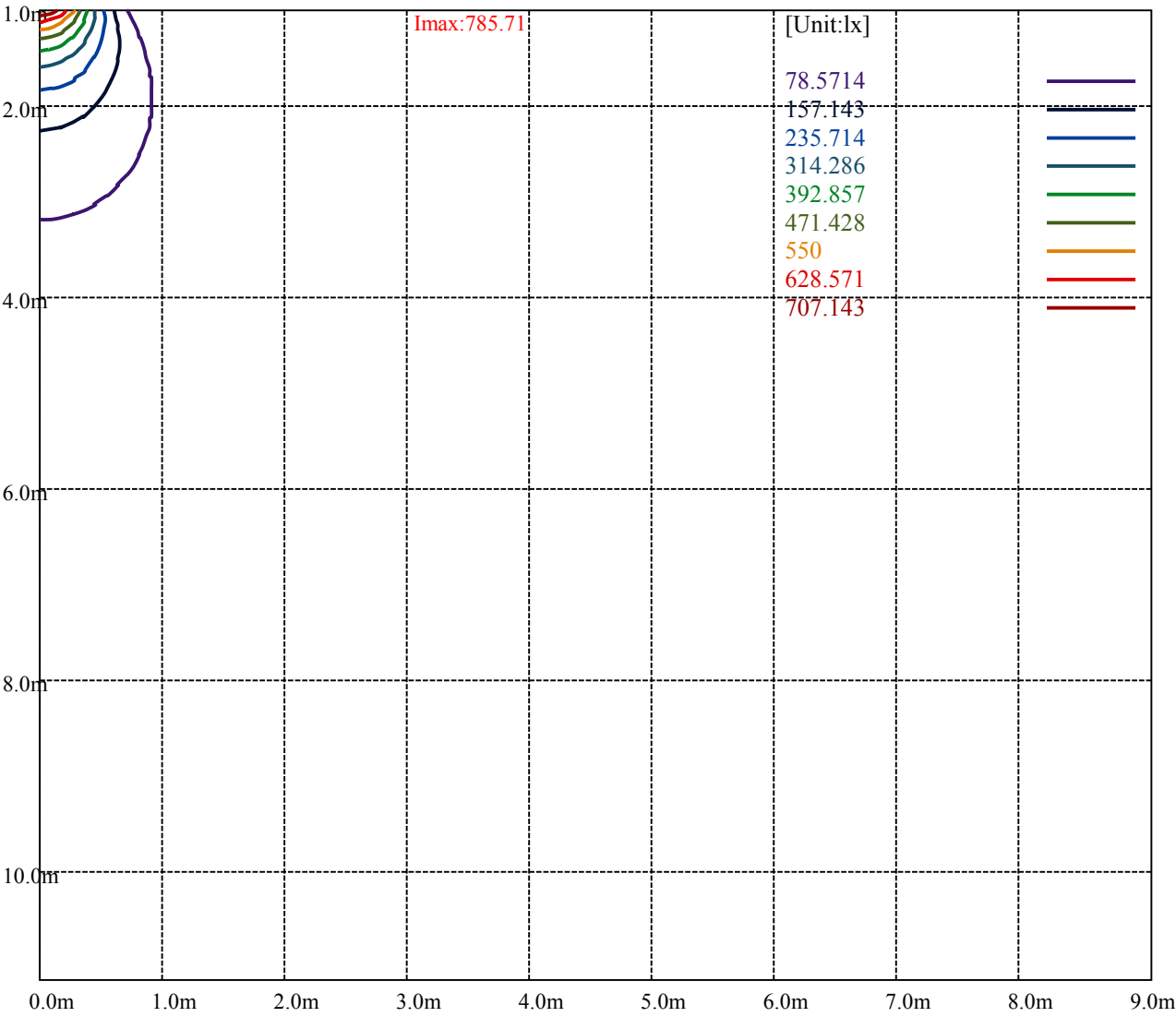
Road

Imax:785.71
(10%Imax) 78.5714
(20%Imax) 157.143
(30%Imax) 235.714
(40%Imax) 314.286
(50%Imax) 392.857
(60%Imax) 471.428
(70%Imax) 550
(80%Imax) 628.571
(90%Imax) 707.143





(10%E _{max}) 8.730156	—
(20%E _{max}) 17.46033	—
(30%E _{max}) 26.19044	—
(40%E _{max}) 34.92056	—
(50%E _{max}) 43.65078	—
(60%E _{max}) 52.38089	—
(70%E _{max}) 61.11111	—
(80%E _{max}) 69.84122	—
(90%E _{max}) 78.57133	—



Luminance Table

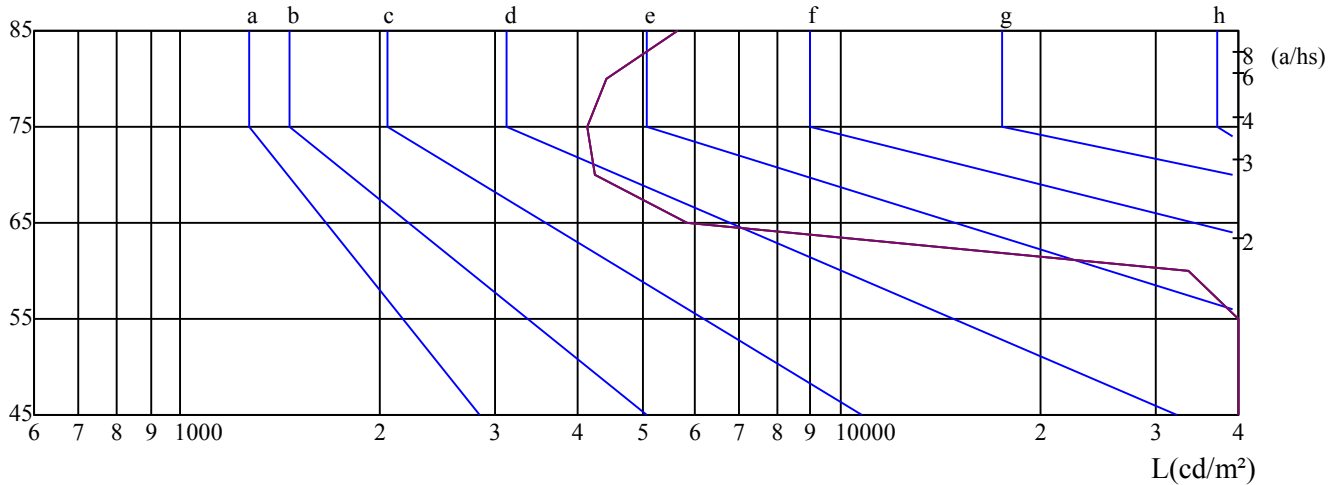
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

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

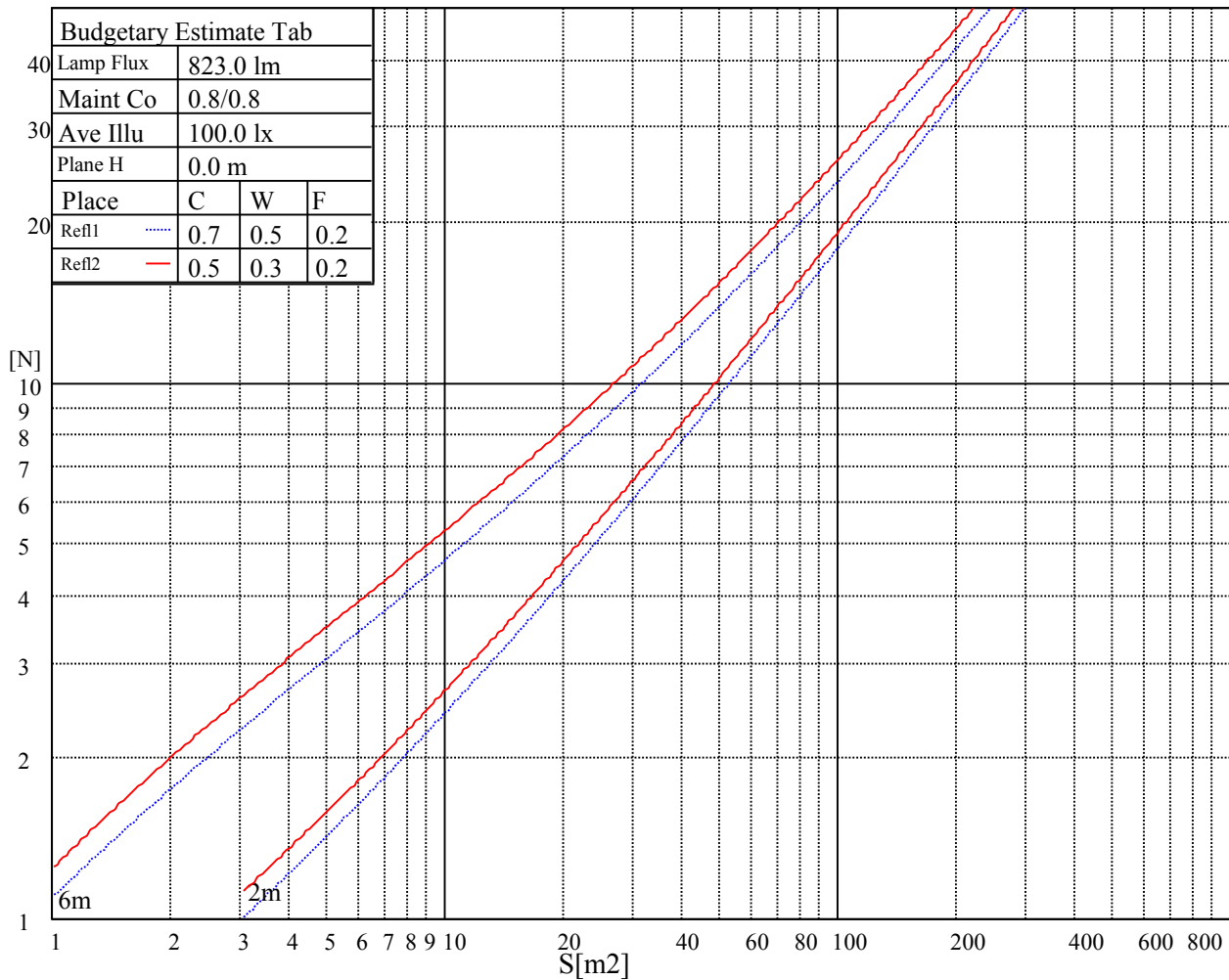
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

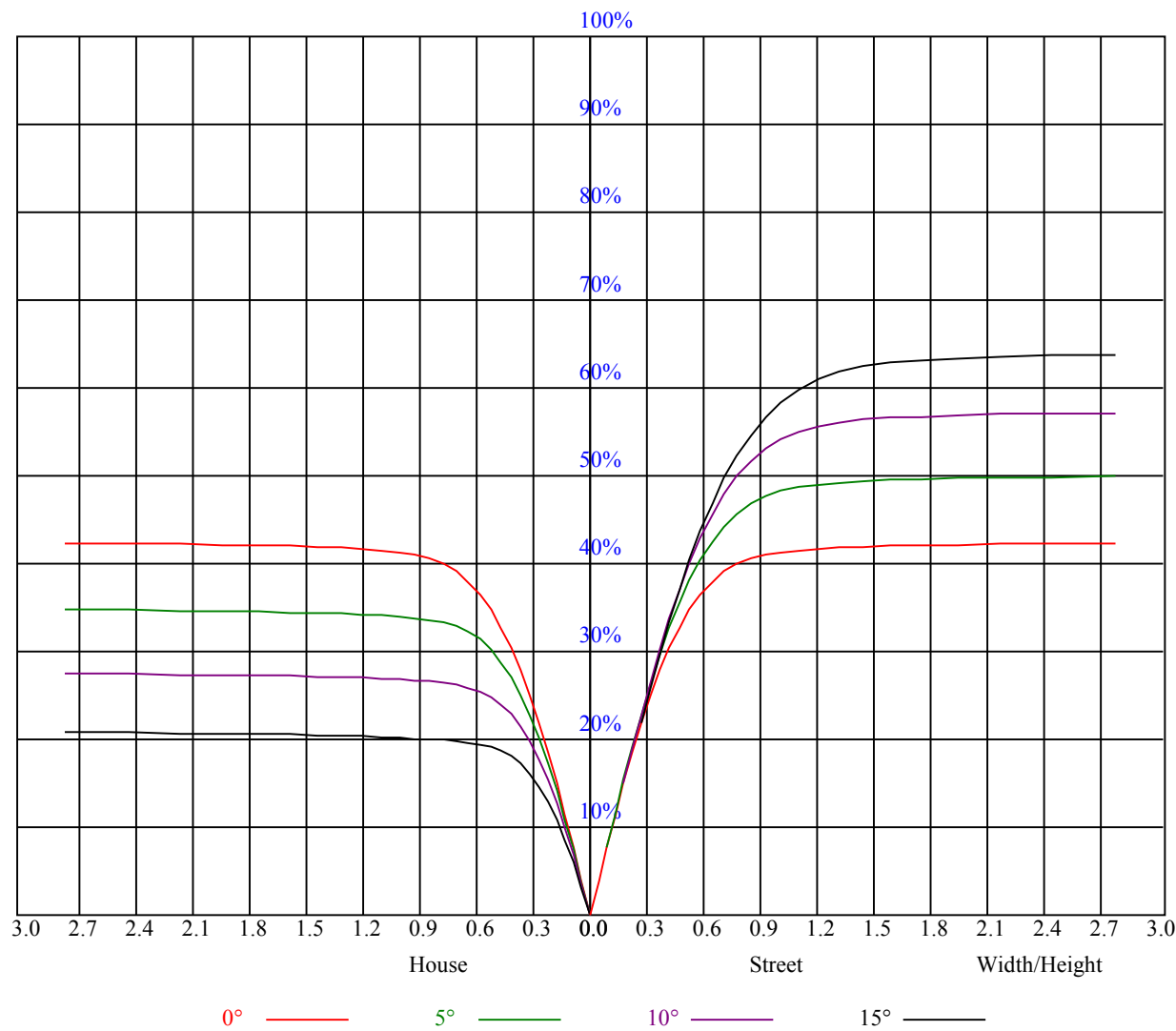
C0 ———

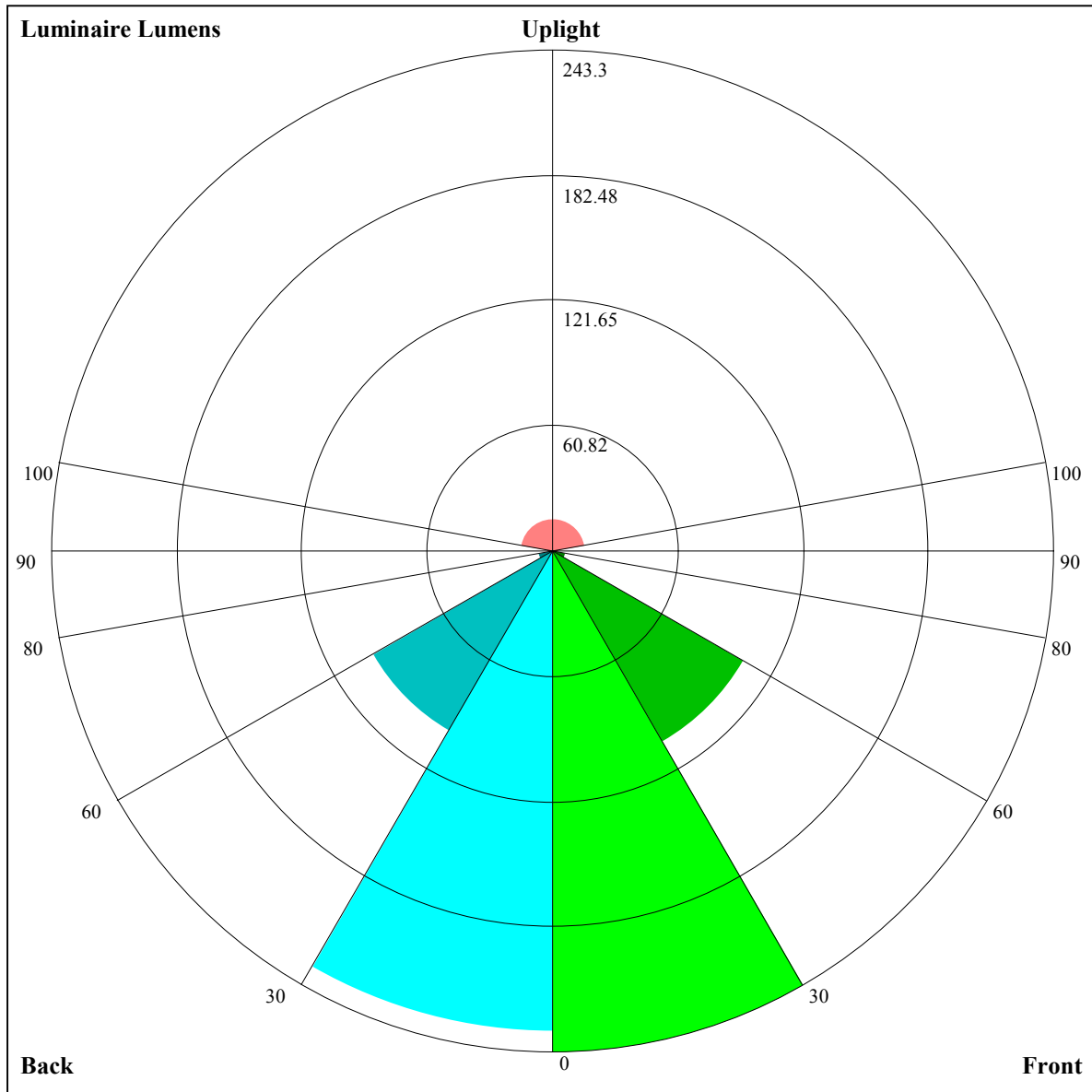
C45 ———

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	1.02	1.02	1.02	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.88	0.88	0.88	0.86
1	0.94	0.92	0.90	0.93	0.90	0.89	0.89	0.87	0.86	0.86	0.85	0.83	0.83	0.82	0.81	0.79
2	0.87	0.84	0.81	0.86	0.83	0.80	0.83	0.80	0.78	0.81	0.78	0.76	0.78	0.76	0.75	0.73
3	0.81	0.77	0.73	0.80	0.76	0.73	0.78	0.74	0.71	0.76	0.73	0.70	0.74	0.71	0.69	0.68
4	0.76	0.71	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.71	0.68	0.65	0.69	0.67	0.64	0.63
5	0.71	0.66	0.62	0.70	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.62	0.60	0.58
6	0.66	0.61	0.57	0.66	0.61	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.62	0.58	0.56	0.54
7	0.62	0.57	0.53	0.62	0.57	0.53	0.60	0.56	0.53	0.59	0.55	0.52	0.58	0.55	0.52	0.51
8	0.59	0.53	0.50	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.49	0.55	0.52	0.49	0.48
9	0.55	0.50	0.46	0.55	0.50	0.46	0.54	0.49	0.46	0.53	0.49	0.46	0.52	0.49	0.46	0.45
10	0.52	0.47	0.44	0.52	0.47	0.44	0.51	0.47	0.43	0.50	0.46	0.43	0.50	0.46	0.43	0.42





Luminaire Lumens:

FL=243.3,FM=107.18,FH=6.74,FVH=2.16

BL=233.42,BM=100.74,BH=7.2,BVH=2.29

UL=3.28,UH=15.59

BUG Rating:B1-U2-G0

Intensity data(cd)

Appendix Page: 15 Total:15

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	782.72	774.68	752.79	703.58	615.88	514.18	411.13	277.82	146.64
45.0	787.39	792.23	775.74	721.91	631.35	512.66	396.23	261.62	164.19
90.0	789.81	787.89	757.29	686.19	599.79	497.98	382.39	246.83	127.01
135.0	782.94	776.76	742.67	680.23	599.06	495.79	396.45	283.78	156.71
180.0	782.72	760.89	710.33	633.88	549.90	455.96	341.49	211.50	110.03
225.0	787.39	755.66	696.09	621.96	535.73	436.95	322.31	189.06	83.25
270.0	789.81	761.12	709.88	641.98	560.70	468.00	362.31	230.91	114.19
315.0	782.94	762.92	726.69	650.42	573.24	481.05	360.17	227.42	106.20
360.0	782.72	774.68	752.79	703.58	615.88	514.18	411.13	277.82	146.64

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	46.24	22.67	10.29	8.10	7.03	6.30	5.68	5.63	3.66
45.0	60.86	29.03	13.33	10.01	8.44	7.37	6.30	5.01	3.66
90.0	52.14	25.59	12.83	8.83	6.75	5.63	4.84	4.28	3.71
135.0	51.75	28.41	12.26	8.66	6.98	6.13	5.18	4.73	4.22
180.0	37.97	20.31	13.33	10.13	8.44	7.31	5.96	5.23	4.56
225.0	39.71	21.83	14.01	11.14	9.45	8.10	6.86	5.57	4.39
270.0	38.42	21.83	11.93	9.51	8.27	7.54	6.75	6.41	4.44
315.0	32.85	17.49	9.34	7.26	5.96	5.34	5.06	4.84	3.60
360.0	46.24	22.67	10.29	8.10	7.03	6.30	5.68	5.63	3.66

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