
Client:

LumCAT: 1567-E

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019121810

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.7900

Current(A): 0.1970

Power (W): 6.8500

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 710.70, Efficiency(%): 86.35% , Luminous Efficacy(lm/W): 103.75

Central intensity(cd): 438.736, Maximum intensity(cd): 450.900

Angle of maximum intensity: C=0.0 γ =15.0

Beam Angle(50%Imax): [C0/180]Total=81.8

[C90/270]Total=81.8

Field angle(10%Imax): [C0/180]Total=105.0

[C90/270]Total=105.0

Maximum s/h(1/2): C0_180=1.25 C90_270=1.25

Maximum s/h(1/4): C0_180=1.18 C90_270=1.18

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.35%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.419%

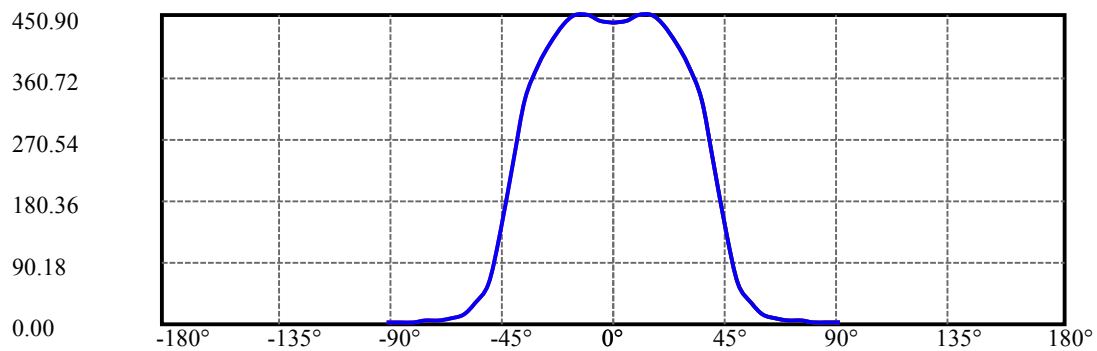
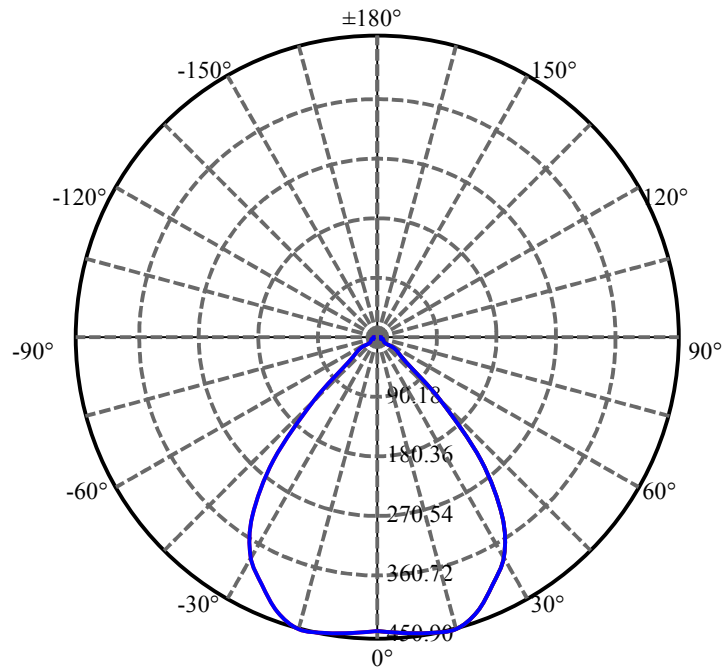
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	438.736	0.000	0	.000%	.000%
5.0	443.728	10.550	10.55	1.282%	1.484%
10.0	450.429	31.987	42.536	3.887%	5.985%
15.0	450.900	53.466	96.003	6.497%	13.508%
20.0	436.739	73.154	169.157	8.889%	23.801%
25.0	407.545	88.550	257.706	10.759%	36.261%
30.0	379.273	99.572	357.279	12.099%	50.271%
35.0	327.340	104.054	461.333	12.643%	64.912%
40.0	239.217	94.526	555.858	11.486%	78.213%
45.0	132.089	68.750	624.609	8.354%	87.886%
50.0	57.656	38.341	662.949	4.659%	93.281%
55.0	30.115	19.084	682.034	2.319%	95.966%
60.0	14.548	10.324	692.357	1.254%	97.419%
65.0	8.311	5.557	697.914	.675%	98.201%
70.0	6.202	3.675	701.589	.446%	98.718%
75.0	4.999	2.928	704.517	.356%	99.130%
80.0	4.170	2.453	706.97	.298%	99.475%
85.0	3.410	2.060	709.03	.250%	99.765%
90.0	2.693	1.671	710.701	.203%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	357.28	43.41%	50.27%
0-40	555.86	67.54%	78.21%
0-60	692.36	84.13%	97.42%
0-90	709.03	86.15%	99.76%
0-120	709.03	86.15%	99.76%
0-180	710.70	86.35%	100.00%
60-90	27.00	3.28%	3.80%
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%
0-40.92	568.56	69.08%	80.00%

ZONAL LUMEN SUMMARY

0-10	42.54
10-20	126.62
20-30	188.12
30-40	198.58
40-50	107.09
50-60	29.41
60-70	9.23
70-80	5.38
80-90	2.06
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: —————

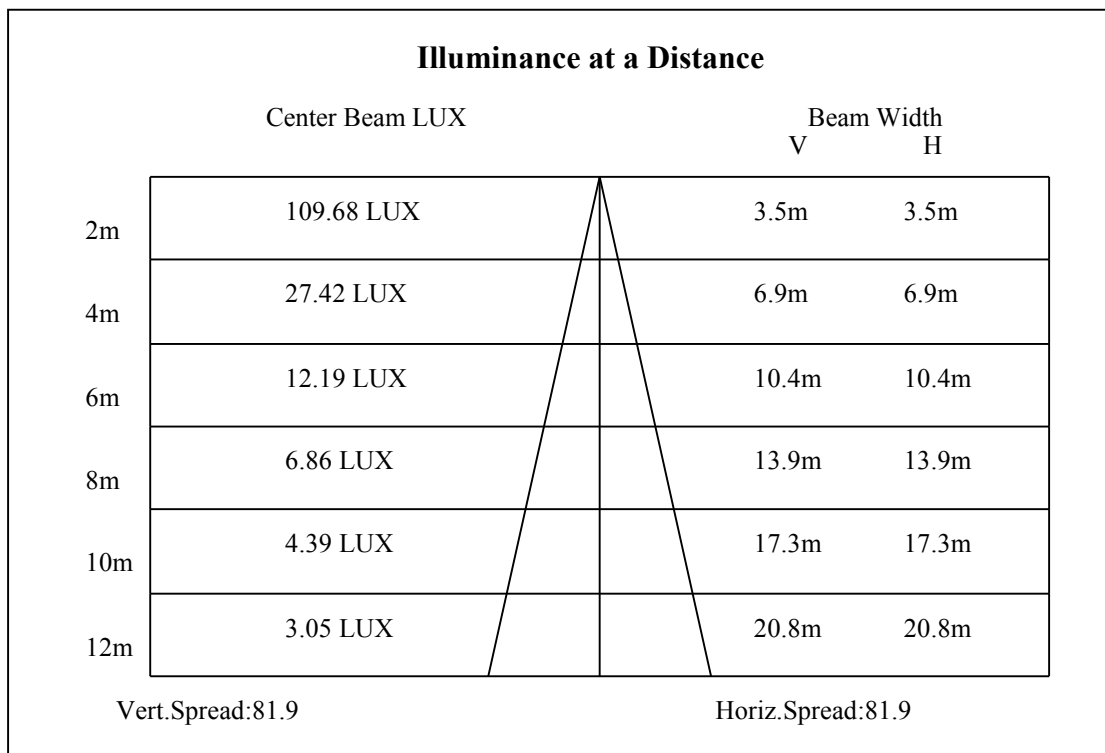
C90/C270: —————

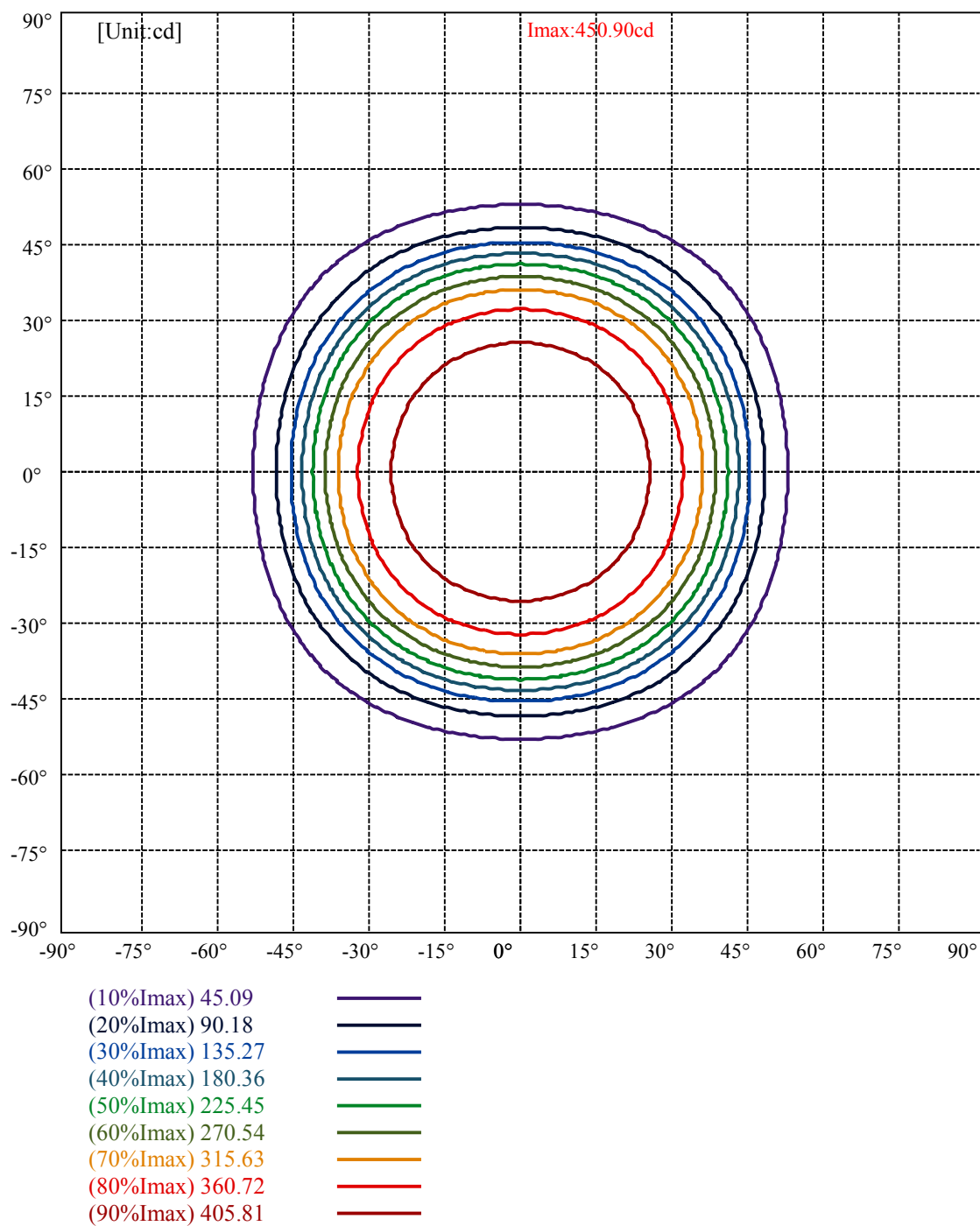
Field angle(10%Imax):C0/180Left:52.5 Right:52.5

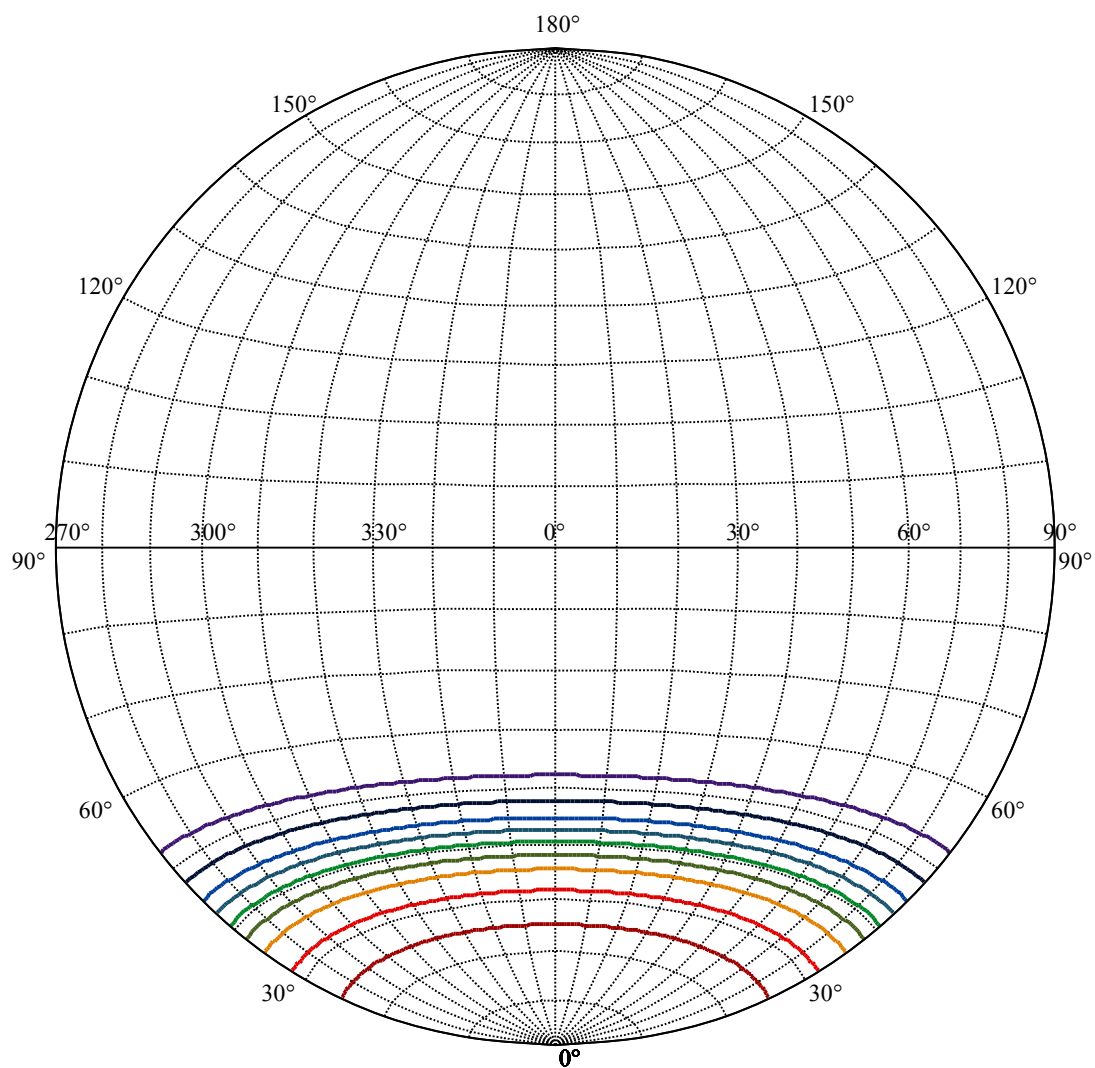
:C90/270Left:52.5 Right:52.5

Beam Angle(50%Imax):C0/180Left:40.9 Right:40.9

:C90/270Left:40.9 Right:40.9







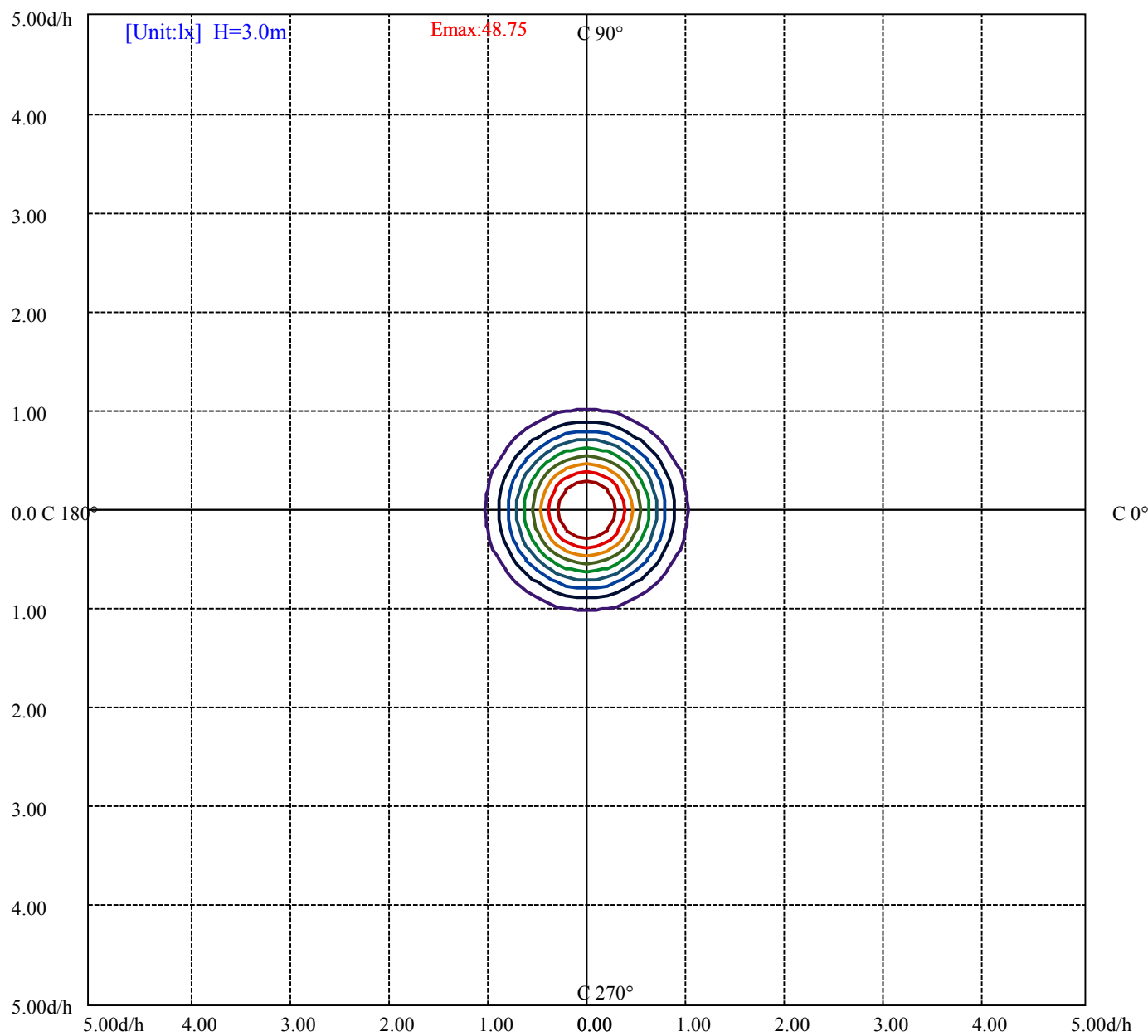
House

[Unit:cd]

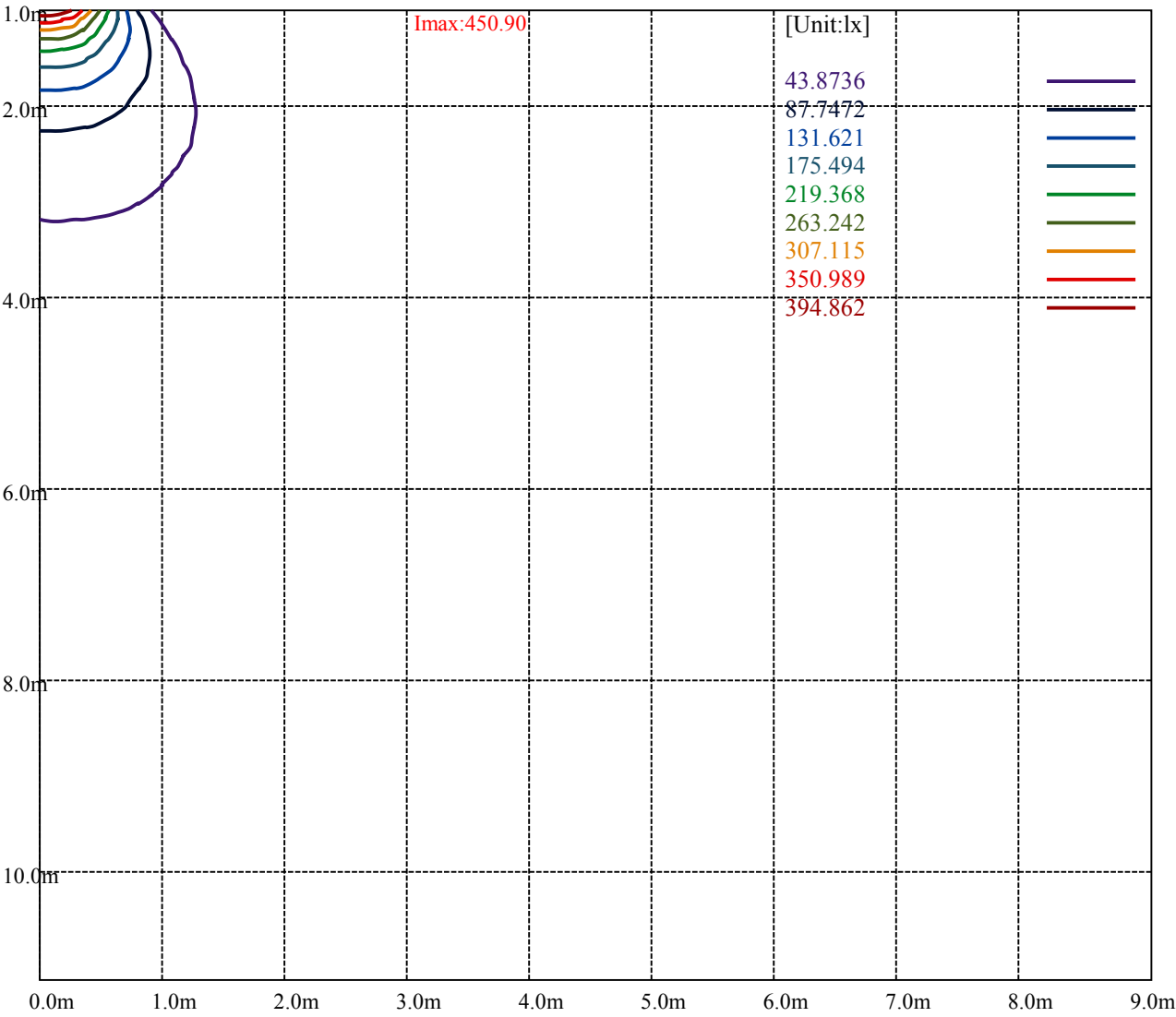
Road

Imax:450.90

(10%Imax)	45.09	
(20%Imax)	90.18	
(30%Imax)	135.27	
(40%Imax)	180.36	
(50%Imax)	225.45	
(60%Imax)	270.54	
(70%Imax)	315.63	
(80%Imax)	360.72	
(90%Imax)	405.81	



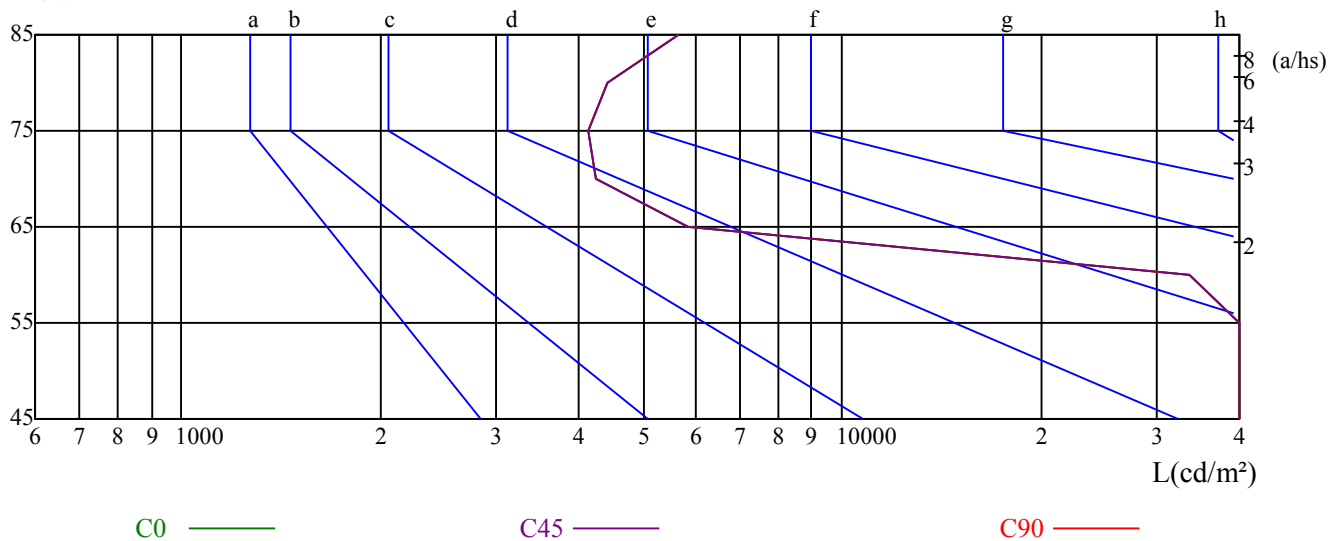
(10%E _{max}) 4.874845	—
(20%E _{max}) 9.749689	—
(30%E _{max}) 14.62456	—
(40%E _{max}) 19.49933	—
(50%E _{max}) 24.37422	—
(60%E _{max}) 29.24911	—
(70%E _{max}) 34.12389	—
(80%E _{max}) 38.99878	—
(90%E _{max}) 43.87355	—

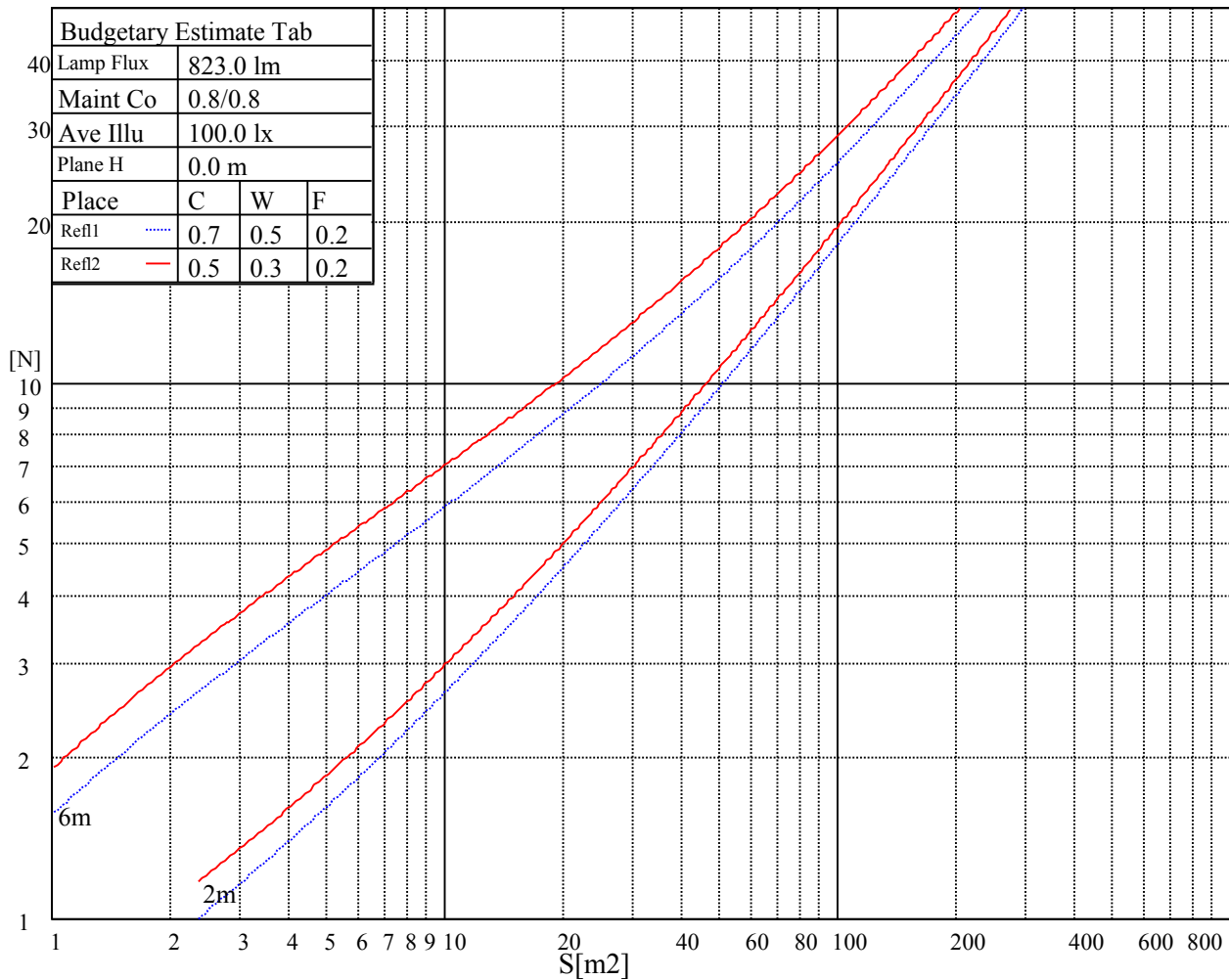


γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

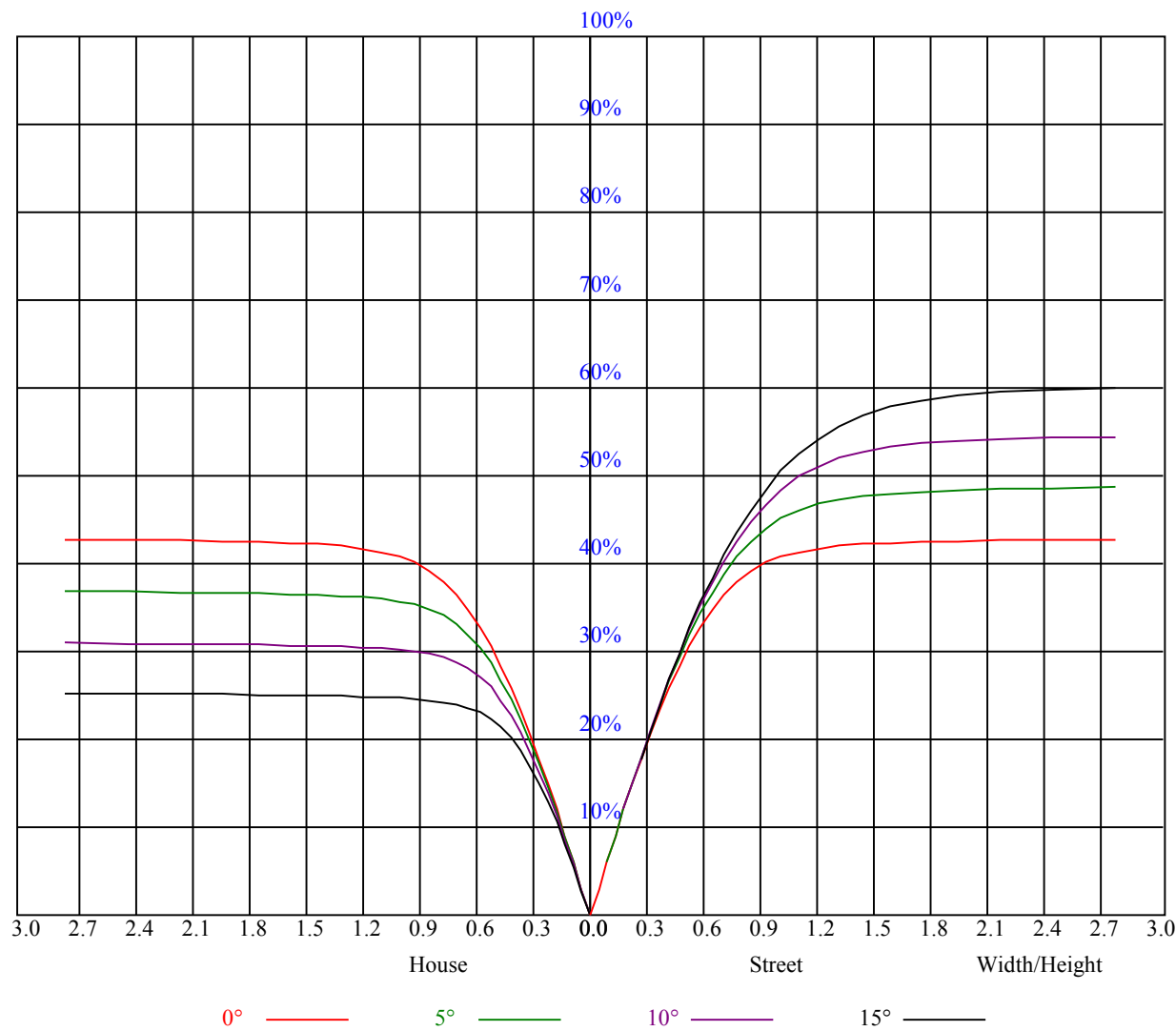
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

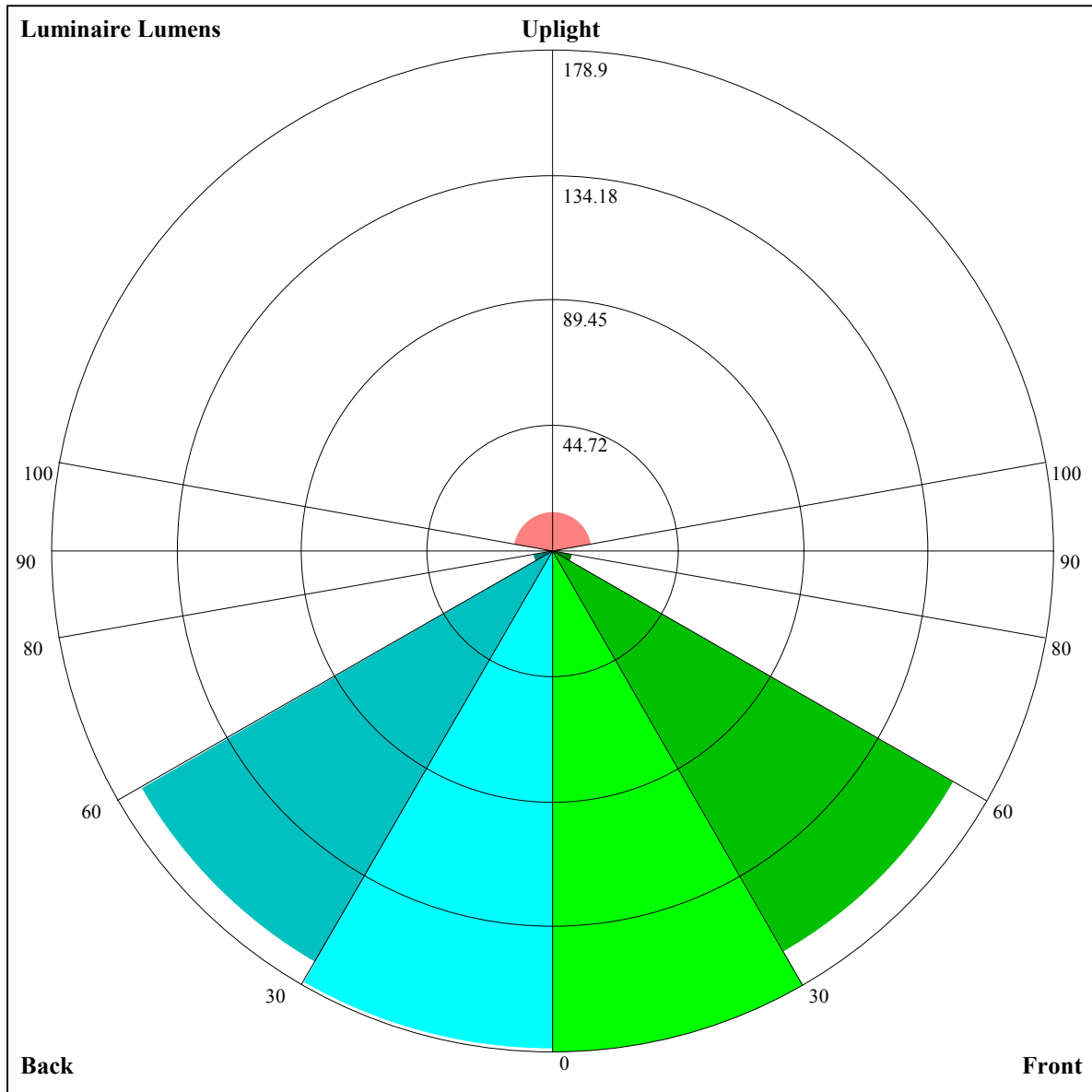
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

 $\gamma(^{\circ})$ 



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	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.86
1	0.94	0.92	0.89	0.92	0.90	0.88	0.89	0.87	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
2	0.86	0.82	0.78	0.85	0.81	0.78	0.82	0.79	0.76	0.79	0.76	0.74	0.77	0.75	0.73	0.71
3	0.79	0.74	0.70	0.78	0.73	0.69	0.75	0.71	0.68	0.73	0.70	0.67	0.71	0.68	0.66	0.64
4	0.72	0.67	0.62	0.71	0.66	0.62	0.69	0.65	0.61	0.68	0.64	0.60	0.66	0.63	0.60	0.58
5	0.67	0.61	0.56	0.66	0.60	0.56	0.64	0.59	0.55	0.63	0.58	0.55	0.61	0.57	0.54	0.53
6	0.61	0.55	0.51	0.61	0.55	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.48
7	0.57	0.51	0.46	0.56	0.50	0.46	0.55	0.50	0.46	0.54	0.49	0.46	0.53	0.49	0.46	0.44
8	0.53	0.47	0.43	0.52	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.40
9	0.49	0.43	0.39	0.49	0.43	0.39	0.48	0.42	0.39	0.47	0.42	0.39	0.46	0.42	0.39	0.37
10	0.46	0.40	0.36	0.45	0.40	0.36	0.45	0.39	0.36	0.44	0.39	0.36	0.43	0.39	0.36	0.34





Luminaire Lumens:

FL=178.9,FM=165.35,FH=7.27,FVH=1.87

BL=177.97,BM=169.69,BH=7.26,BVH=1.86

UL=2.94,UH=13.98

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	440.66	440.83	449.72	455.63	444.49	415.13	383.18	326.98	232.71
45.0	440.78	442.86	450.23	447.24	430.65	401.96	377.44	324.56	234.34
90.0	432.11	437.46	445.67	444.26	425.98	396.73	370.18	304.09	212.68
135.0	441.39	443.03	443.25	440.44	428.57	403.09	367.76	313.20	233.89
180.0	440.66	446.46	454.33	452.42	439.65	403.82	369.90	318.83	230.34
225.0	440.78	447.36	453.04	452.81	440.10	411.75	386.66	349.14	262.58
270.0	432.11	443.48	454.39	458.61	443.93	414.96	388.86	357.08	277.88
315.0	441.39	448.37	452.81	455.79	440.55	412.93	390.21	324.84	229.33
360.0	440.66	440.83	449.72	455.63	444.49	415.13	383.18	326.98	232.71

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	127.80	56.25	27.90	15.30	8.66	6.36	5.06	4.22	3.43
45.0	123.69	49.50	25.54	12.99	7.76	5.91	4.78	4.11	3.43
90.0	107.66	43.82	25.48	11.76	7.20	5.68	4.67	3.99	3.26
135.0	130.56	63.90	34.09	15.75	8.72	6.47	5.18	4.28	3.38
180.0	127.18	59.12	32.91	14.34	8.38	6.36	5.06	4.11	3.32
225.0	151.26	61.82	34.48	13.22	8.04	6.02	4.95	4.16	3.38
270.0	172.24	71.89	32.40	17.49	8.77	6.30	5.18	4.28	3.60
315.0	116.33	54.96	28.13	15.53	8.94	6.53	5.12	4.22	3.49
360.0	127.80	56.25	27.90	15.30	8.66	6.36	5.06	4.22	3.43

C/γ(°)	90.0
0.0	2.70
45.0	2.70
90.0	2.70
135.0	2.64
180.0	2.64
225.0	2.76
270.0	2.70
315.0	2.70
360.0	2.70