
Client:

LumCAT: 1681-S

Luminaire: 92.70.123.00

Report No: nt0100

Test No: GC2019121807

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 830.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.4300

Current(A): 0.1970

Power (W): 6.7800

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 698.75, Efficiency(%): 84.19% , Luminous Efficacy(lm/W): 103.06

Central intensity(cd): 960.497, Maximum intensity(cd): 960.497

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=55.0

[C90/270]Total=55.0

Field angle(10%Imax): [C0/180]Total=75.6

[C90/270]Total=75.6

Maximum s/h(1/2): C0_180=0.83 C90_270=0.83

Maximum s/h(1/4): C0_180=0.84 C90_270=0.84

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 84.19%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.093%

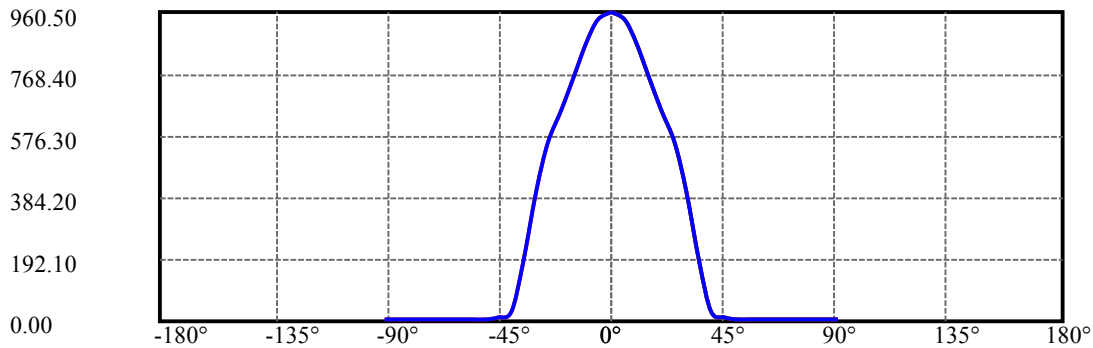
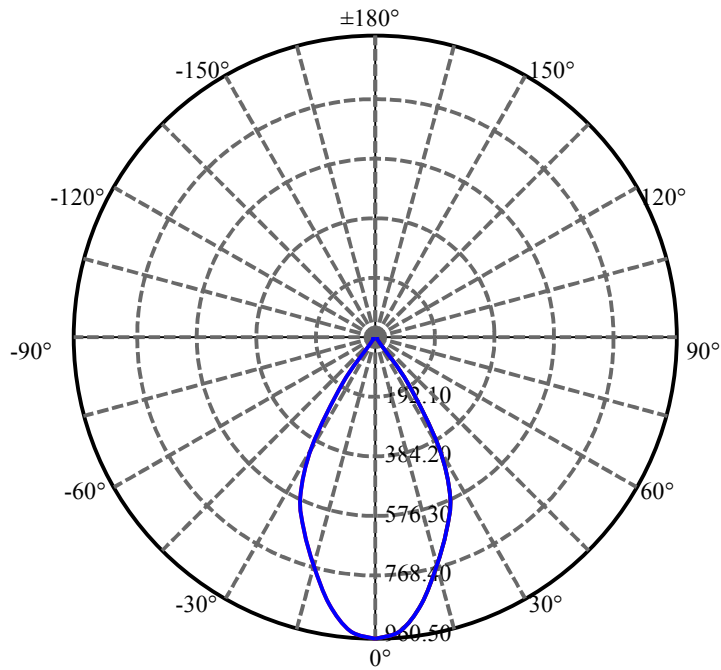
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	960.497	0.000	0	.000%	.000%
5.0	938.454	22.701	22.701	2.735%	3.249%
10.0	862.896	64.440	87.141	7.764%	12.471%
15.0	752.548	95.827	182.968	11.545%	26.185%
20.0	656.888	116.157	299.126	13.995%	42.809%
25.0	557.480	127.365	426.49	15.345%	61.037%
30.0	402.870	121.533	548.023	14.643%	78.430%
35.0	179.002	85.685	633.708	10.323%	90.692%
40.0	30.741	34.994	668.702	4.216%	95.700%
45.0	11.728	7.863	676.565	.947%	96.826%
50.0	7.059	3.796	680.362	.457%	97.369%
55.0	5.400	2.709	683.071	.326%	97.757%
60.0	4.753	2.347	685.418	.283%	98.093%
65.0	4.598	2.273	687.691	.274%	98.418%
70.0	4.627	2.336	690.027	.281%	98.752%
75.0	4.648	2.424	692.451	.292%	99.099%
80.0	4.092	2.339	694.789	.282%	99.434%
85.0	3.586	2.086	696.876	.251%	99.732%
90.0	3.241	1.869	698.745	.225%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	548.02	66.03%	78.43%
0-40	668.70	80.57%	95.70%
0-60	685.42	82.58%	98.09%
0-90	696.88	83.96%	99.73%
0-120	696.88	83.96%	99.73%
0-180	698.75	84.19%	100.00%
60-90	13.81	1.66%	1.98%
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%
0-30.64	559.00	67.35%	80.00%

ZONAL LUMEN SUMMARY

0-10	87.14
10-20	211.98
20-30	248.90
30-40	120.68
40-50	11.66
50-60	5.06
60-70	4.61
70-80	4.76
80-90	2.09
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: —————

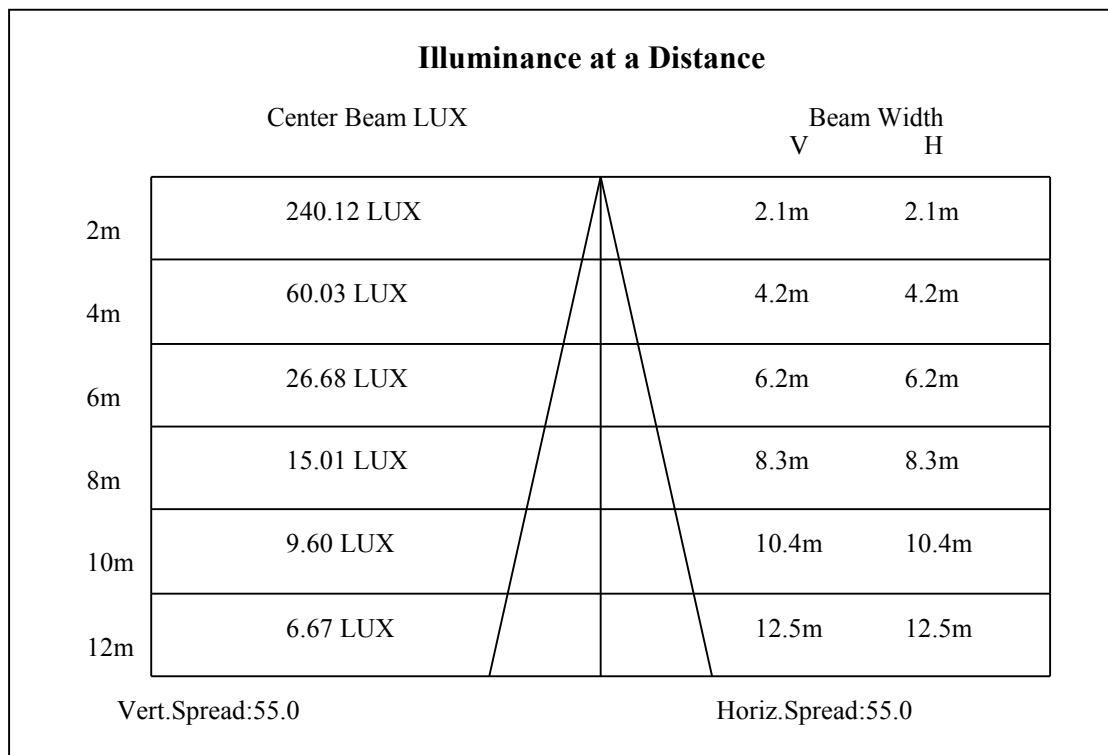
C90/C270: —————

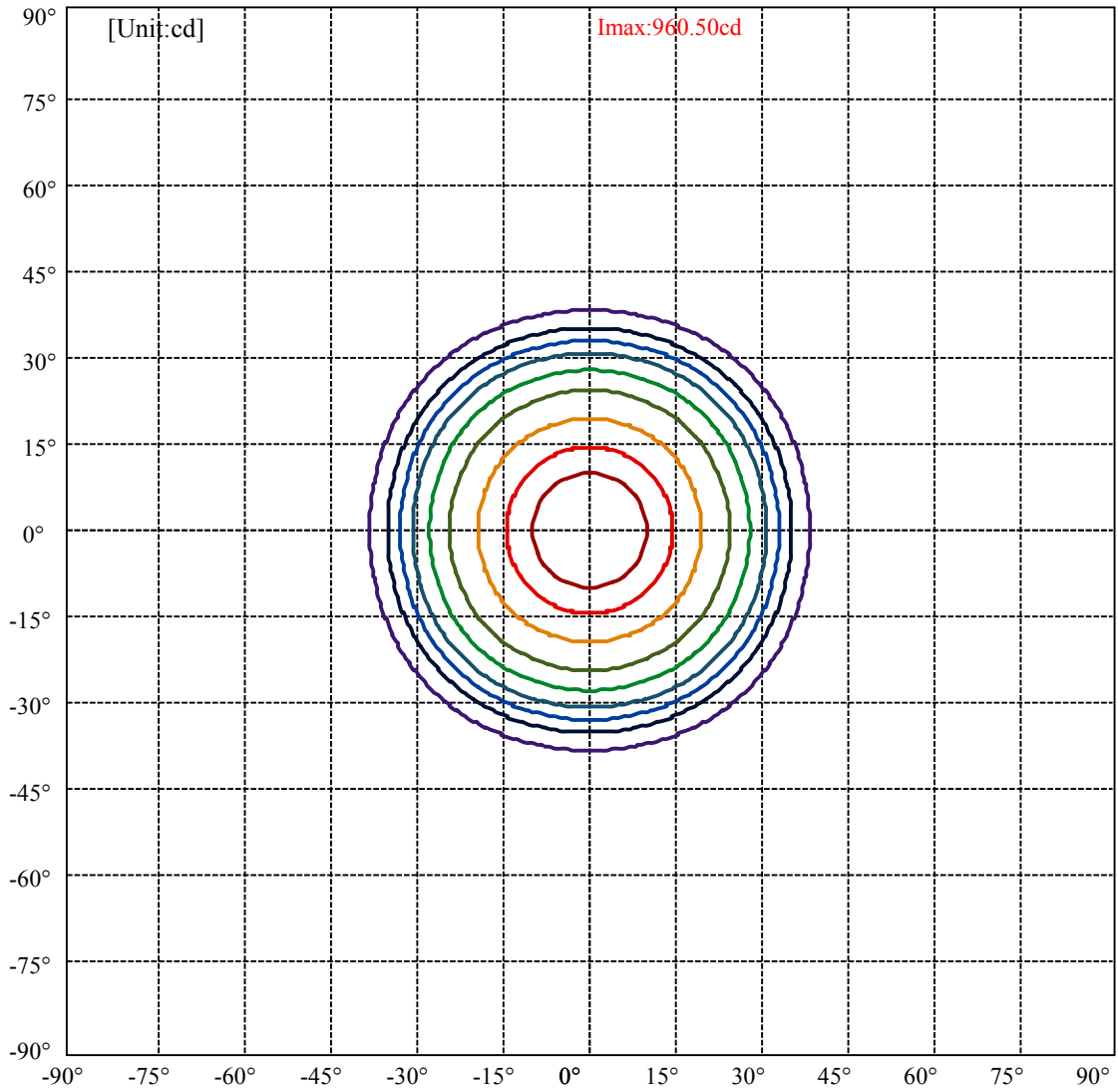
Field angle(10%Imax):C0/180Left:37.8 Right:37.8

:C90/270Left:37.8 Right:37.8

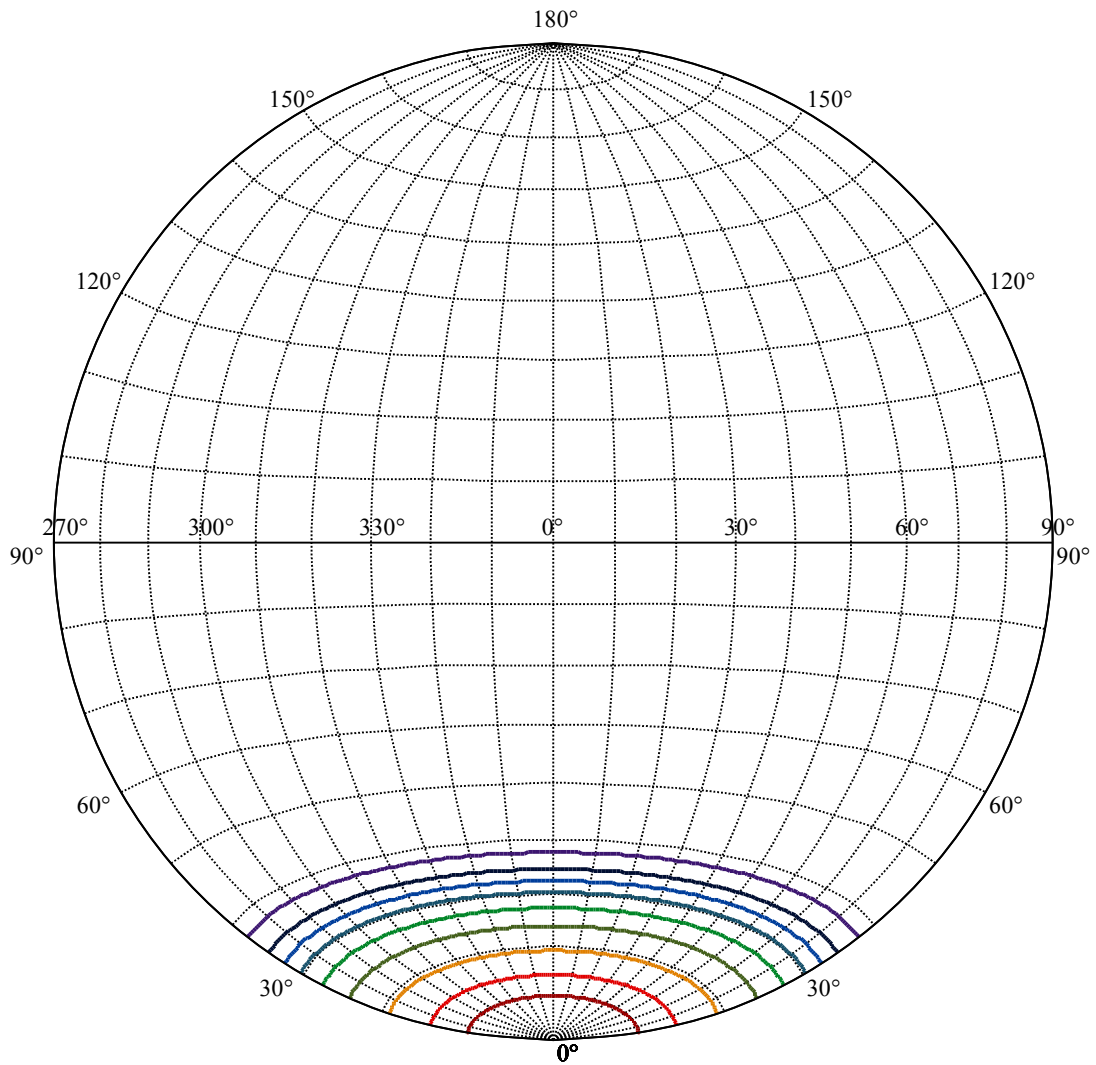
Beam Angle(50%Imax):C0/180Left:27.5 Right:27.5

:C90/270Left:27.5 Right:27.5





(10%Imax) 96.0497	—
(20%Imax) 192.099	—
(30%Imax) 288.149	—
(40%Imax) 384.199	—
(50%Imax) 480.248	—
(60%Imax) 576.298	—
(70%Imax) 672.348	—
(80%Imax) 768.398	—
(90%Imax) 864.447	—












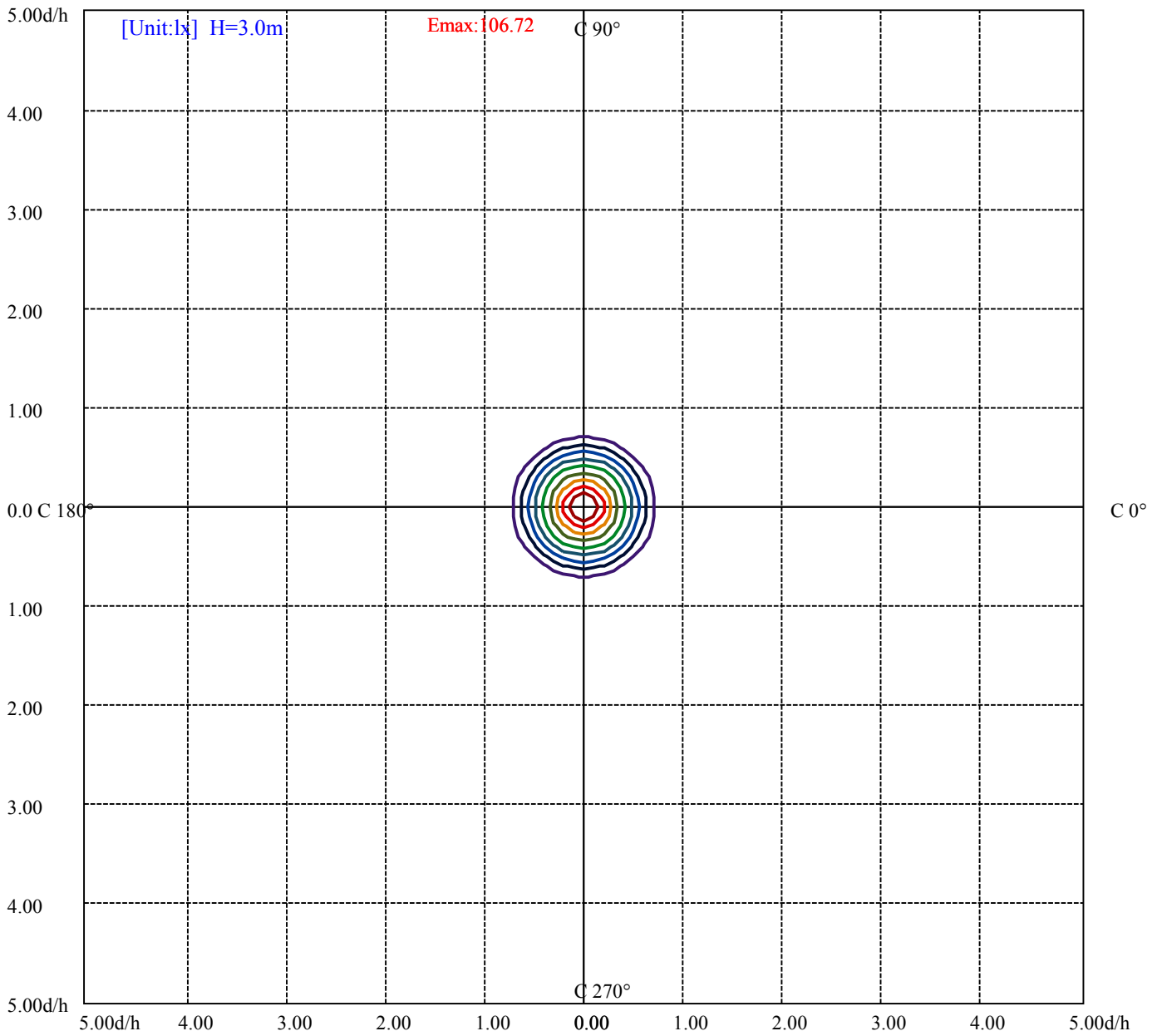
House

[Unit:cd]

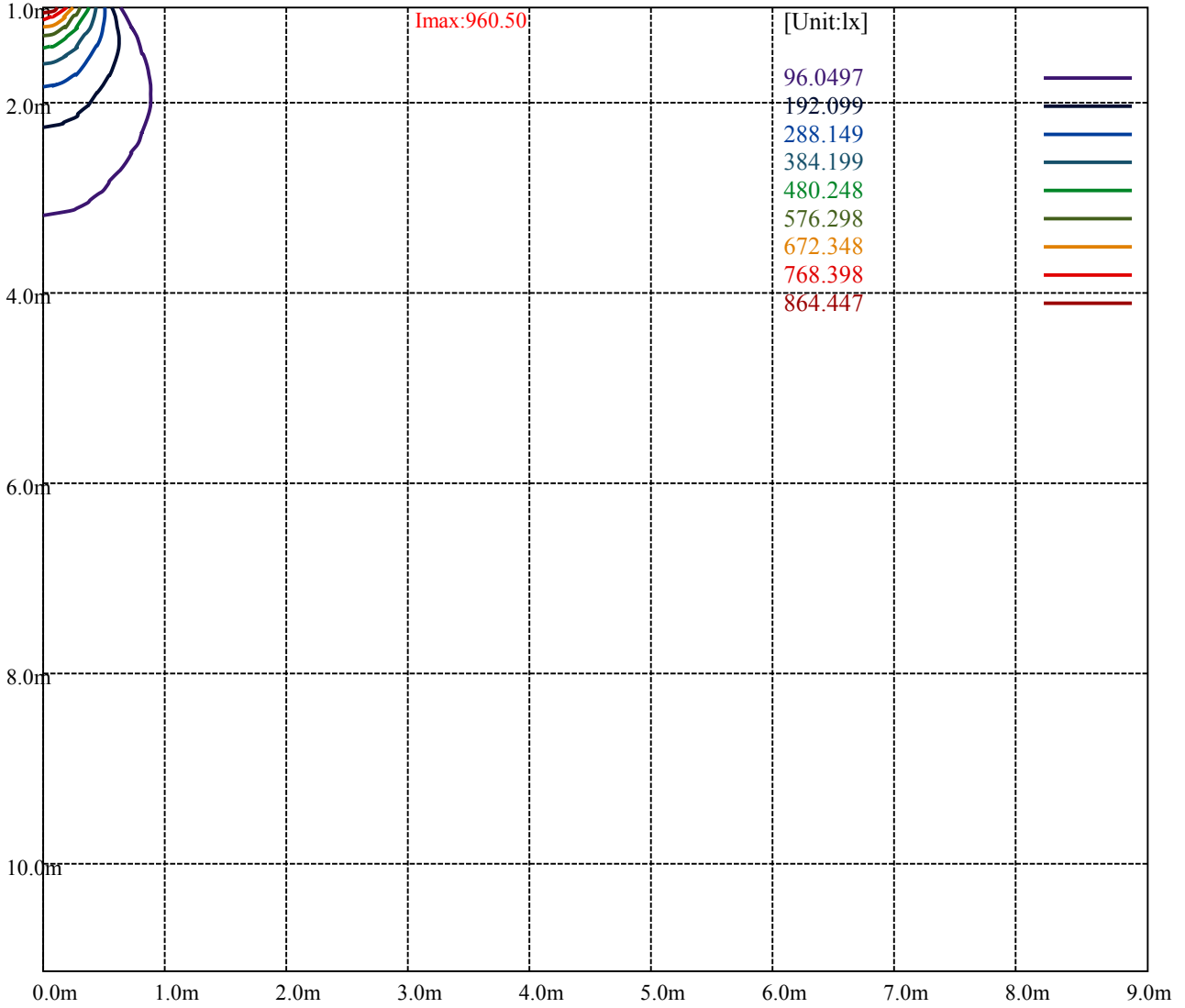
Road

I_{max}:960.50

(10%I _{max}) 96.0497	
(20%I _{max}) 192.099	
(30%I _{max}) 288.149	
(40%I _{max}) 384.199	
(50%I _{max}) 480.248	
(60%I _{max}) 576.298	
(70%I _{max}) 672.348	
(80%I _{max}) 768.398	
(90%I _{max}) 864.447	



(10%Emax) 10.67218	—
(20%Emax) 21.34433	—
(30%Emax) 32.01656	—
(40%Emax) 42.68867	—
(50%Emax) 53.36089	—
(60%Emax) 64.03311	—
(70%Emax) 74.70522	—
(80%Emax) 85.37744	—
(90%Emax) 96.04967	—



Luminance Table

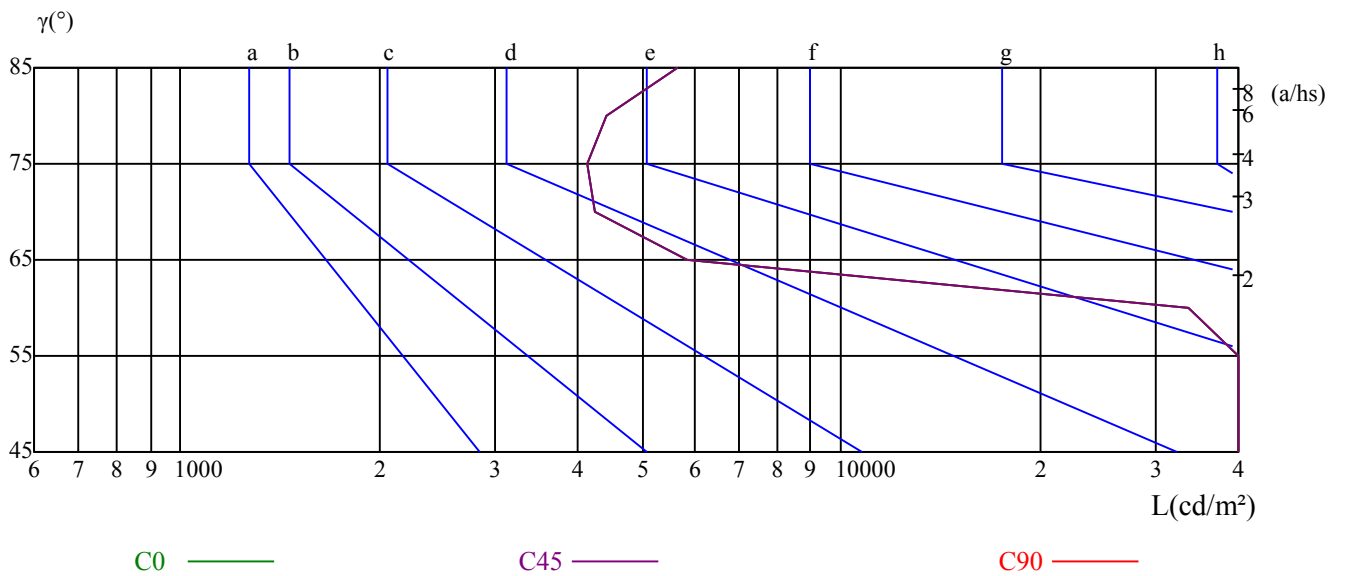
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

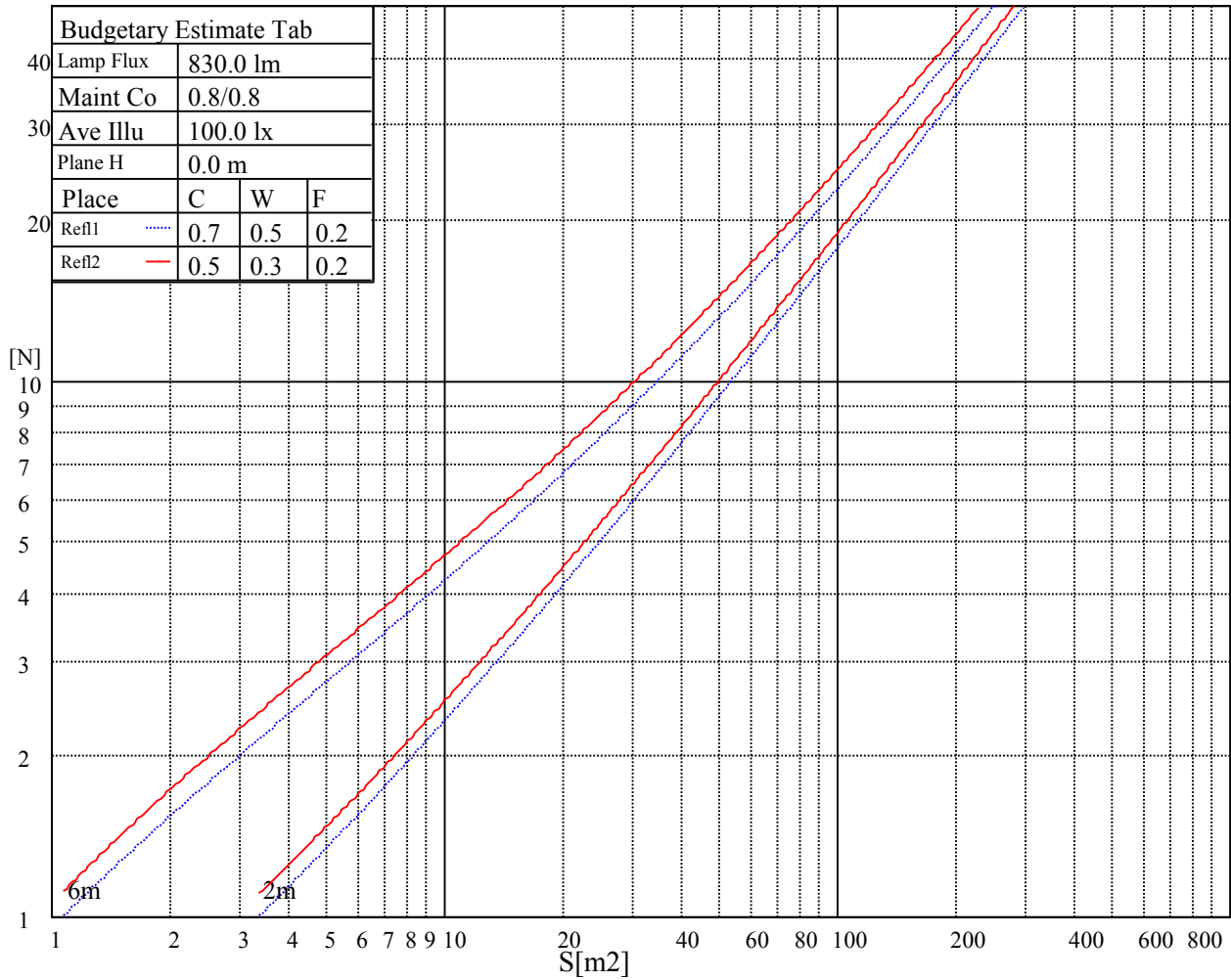
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

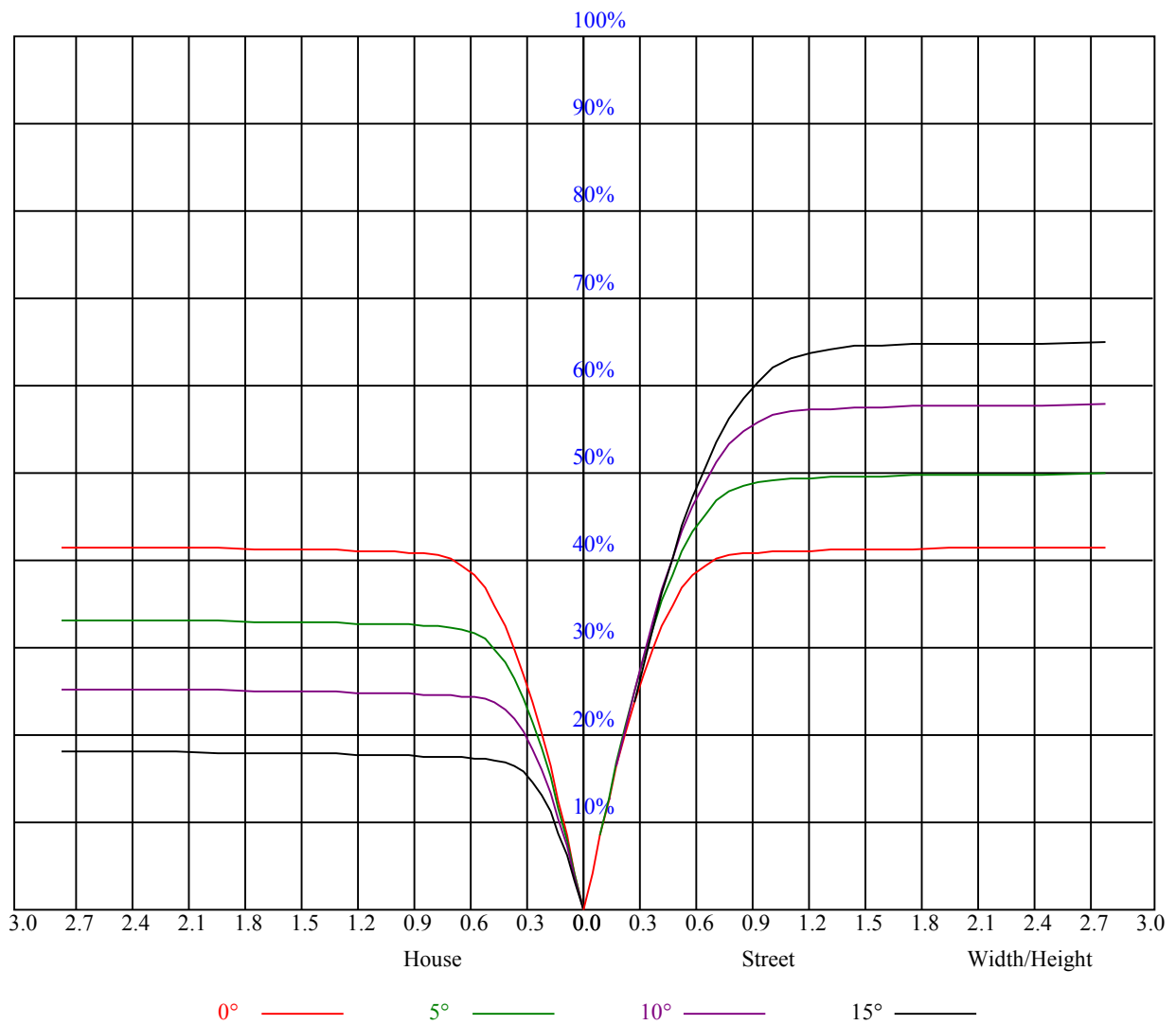
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

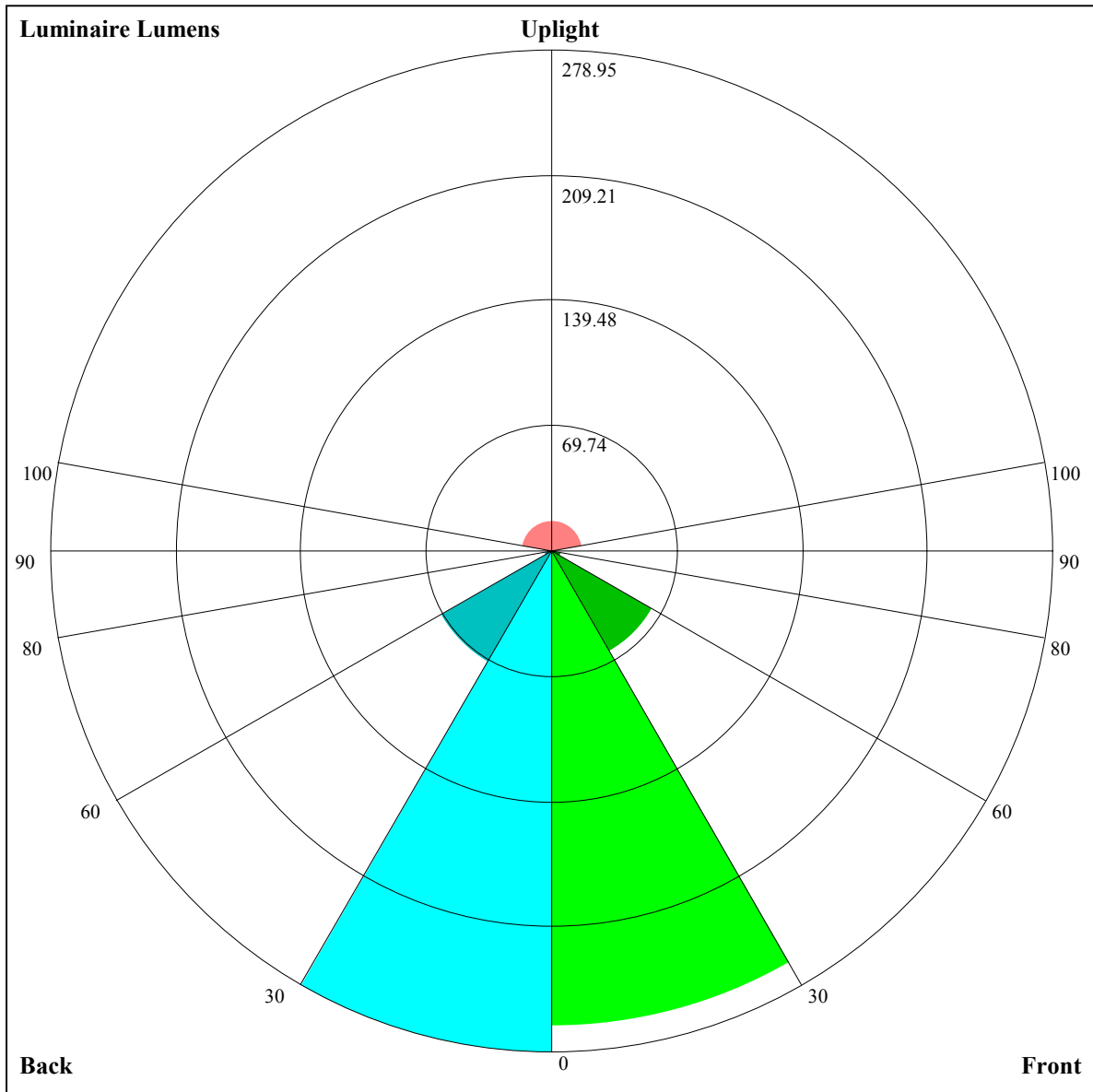
Luminance Limiting Curve





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	1.00	1.00	1.00	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.86	0.86	0.86	0.84
1	0.93	0.91	0.89	0.91	0.89	0.88	0.88	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
2	0.87	0.84	0.81	0.86	0.82	0.80	0.83	0.80	0.78	0.80	0.78	0.76	0.78	0.76	0.75	0.74
3	0.81	0.77	0.74	0.80	0.77	0.74	0.78	0.75	0.72	0.76	0.73	0.71	0.74	0.72	0.70	0.69
4	0.76	0.72	0.69	0.76	0.71	0.68	0.74	0.70	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
5	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
6	0.68	0.63	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.57
7	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.61	0.57	0.55	0.54
8	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.52	0.59	0.55	0.52	0.58	0.54	0.52	0.51
9	0.58	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.49	0.56	0.52	0.49	0.55	0.52	0.49	0.48
10	0.55	0.50	0.47	0.54	0.50	0.47	0.54	0.50	0.47	0.53	0.49	0.47	0.53	0.49	0.47	0.46





Luminaire Lumens:

FL=264.67,FM=64.39,FH=5.01,FVH=2.01

BL=278.95,BM=71.08,BH=4.68,BVH=2.02

UL=3.54,UH=16.83

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	957.26	919.91	832.78	723.26	615.71	527.29	395.38	167.79	29.14
45.0	961.76	950.68	887.01	779.40	686.03	575.44	431.44	197.83	33.08
90.0	965.53	961.59	909.39	799.09	694.41	577.41	413.38	193.84	30.66
135.0	957.43	969.69	942.19	857.53	756.68	639.79	483.36	259.59	43.65
180.0	957.26	954.68	893.08	784.74	704.64	595.80	431.38	194.85	29.76
225.0	961.76	933.24	835.99	716.34	630.45	543.21	371.53	151.65	25.37
270.0	965.53	916.76	813.21	690.19	584.72	503.04	364.84	162.45	30.38
315.0	957.43	901.07	789.53	669.83	582.47	497.87	331.65	104.01	23.91
360.0	957.26	919.91	832.78	723.26	615.71	527.29	395.38	167.79	29.14
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.59	7.03	5.40	4.78	4.56	4.78	3.66	3.54	3.49
45.0	12.77	7.37	5.57	4.84	4.56	4.61	4.56	3.60	3.54
90.0	11.98	7.20	5.46	4.95	5.01	5.74	6.13	5.46	3.66
135.0	13.73	7.93	5.63	4.67	4.28	4.05	3.71	3.60	3.49
180.0	11.98	7.26	5.51	4.73	4.39	3.94	3.88	3.71	3.66
225.0	10.52	6.58	5.12	4.50	4.33	3.88	3.77	3.66	3.60
270.0	11.31	6.81	5.34	4.89	4.89	5.23	5.63	4.89	3.71
315.0	9.96	6.30	5.18	4.67	4.78	4.78	5.85	4.28	3.54
360.0	11.59	7.03	5.40	4.78	4.56	4.78	3.66	3.54	3.49
C/ γ (°)	90.0								
0.0	3.15								
45.0	3.26								
90.0	3.21								
135.0	3.26								
180.0	3.32								
225.0	3.38								
270.0	3.21								
315.0	3.15								
360.0	3.15								