
Client:

LumCAT: 1651-S

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019121814

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.8400

Current(A): 0.1970

Power (W): 6.8600

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 749.95, Efficiency(%): 91.12% , Luminous Efficacy(lm/W): 109.32

Central intensity(cd): 2084.766, Maximum intensity(cd): 2084.766

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=24.4

[C90/270]Total=24.4

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=69.4

Maximum s/h(1/2): C0_180=0.41 C90_270=0.41

Maximum s/h(1/4): C0_180=0.47 C90_270=0.47

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.12%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.264%

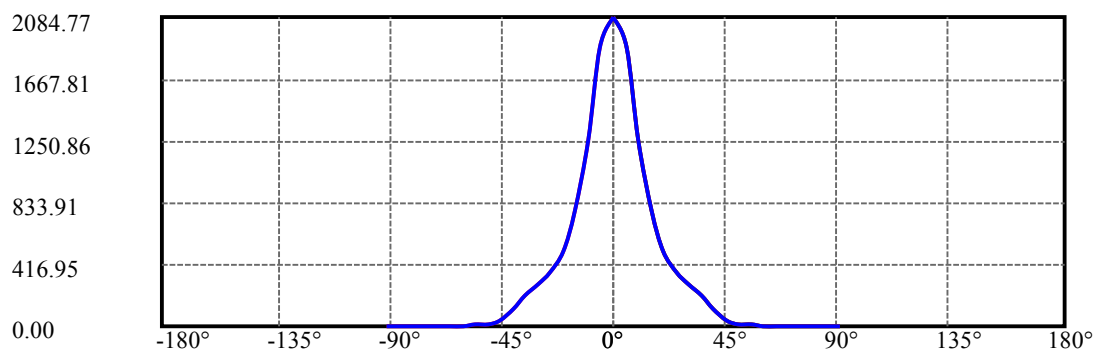
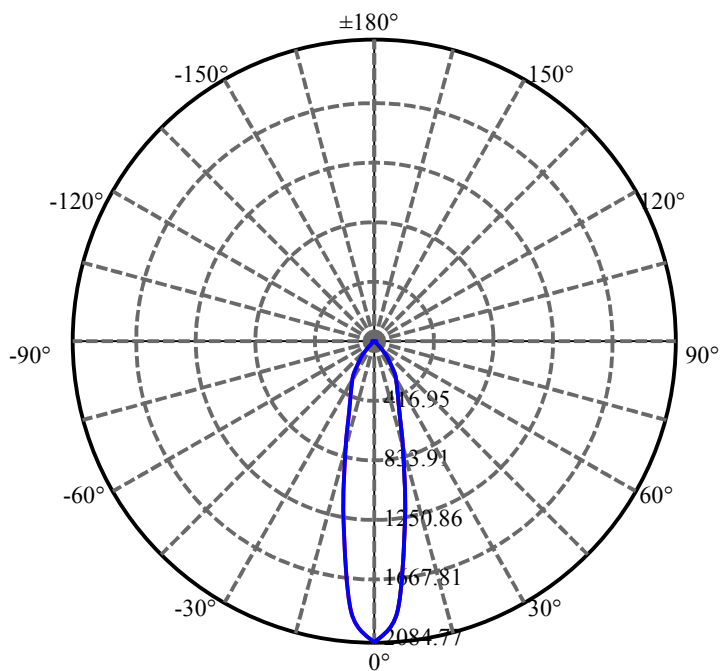
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2084.766	0.000	0	.000%	.000%
5.0	1883.391	47.438	47.438	5.764%	6.325%
10.0	1256.843	112.336	159.774	13.650%	21.305%
15.0	777.987	120.705	280.479	14.666%	37.400%
20.0	511.066	106.236	386.715	12.908%	51.565%
25.0	362.201	91.590	478.305	11.129%	63.778%
30.0	283.416	81.703	560.008	9.927%	74.672%
35.0	204.209	71.806	631.814	8.725%	84.247%
40.0	121.458	54.335	686.149	6.602%	91.492%
45.0	42.553	30.368	716.517	3.690%	95.541%
50.0	16.270	11.886	728.403	1.444%	97.126%
55.0	8.318	5.346	733.749	.650%	97.839%
60.0	5.470	3.187	736.937	.387%	98.264%
65.0	4.669	2.465	739.401	.299%	98.593%
70.0	4.388	2.293	741.694	.279%	98.899%
75.0	4.120	2.224	743.918	.270%	99.195%
80.0	3.895	2.145	746.063	.261%	99.481%
85.0	3.586	2.033	748.096	.247%	99.752%
90.0	3.199	1.858	749.954	.226%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	560.01	68.04%	74.67%
0-40	686.15	83.37%	91.49%
0-60	736.94	89.54%	98.26%
0-90	748.10	90.90%	99.75%
0-120	748.10	90.90%	99.75%
0-180	749.95	91.12%	100.00%
60-90	14.35	1.74%	1.91%
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%
0-32.78	599.96	72.90%	80.00%

ZONAL LUMEN SUMMARY

0-10	159.77
10-20	226.94
20-30	173.29
30-40	126.14
40-50	42.25
50-60	8.53
60-70	4.76
70-80	4.37
80-90	2.03
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:

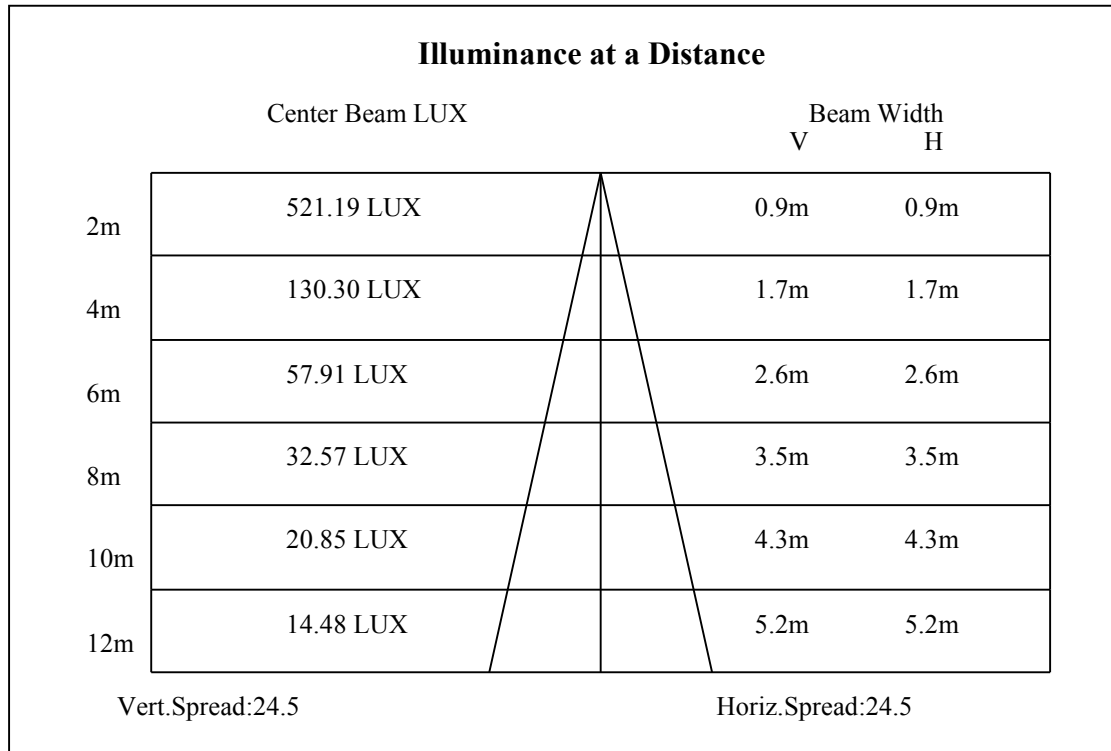
C90/C270:

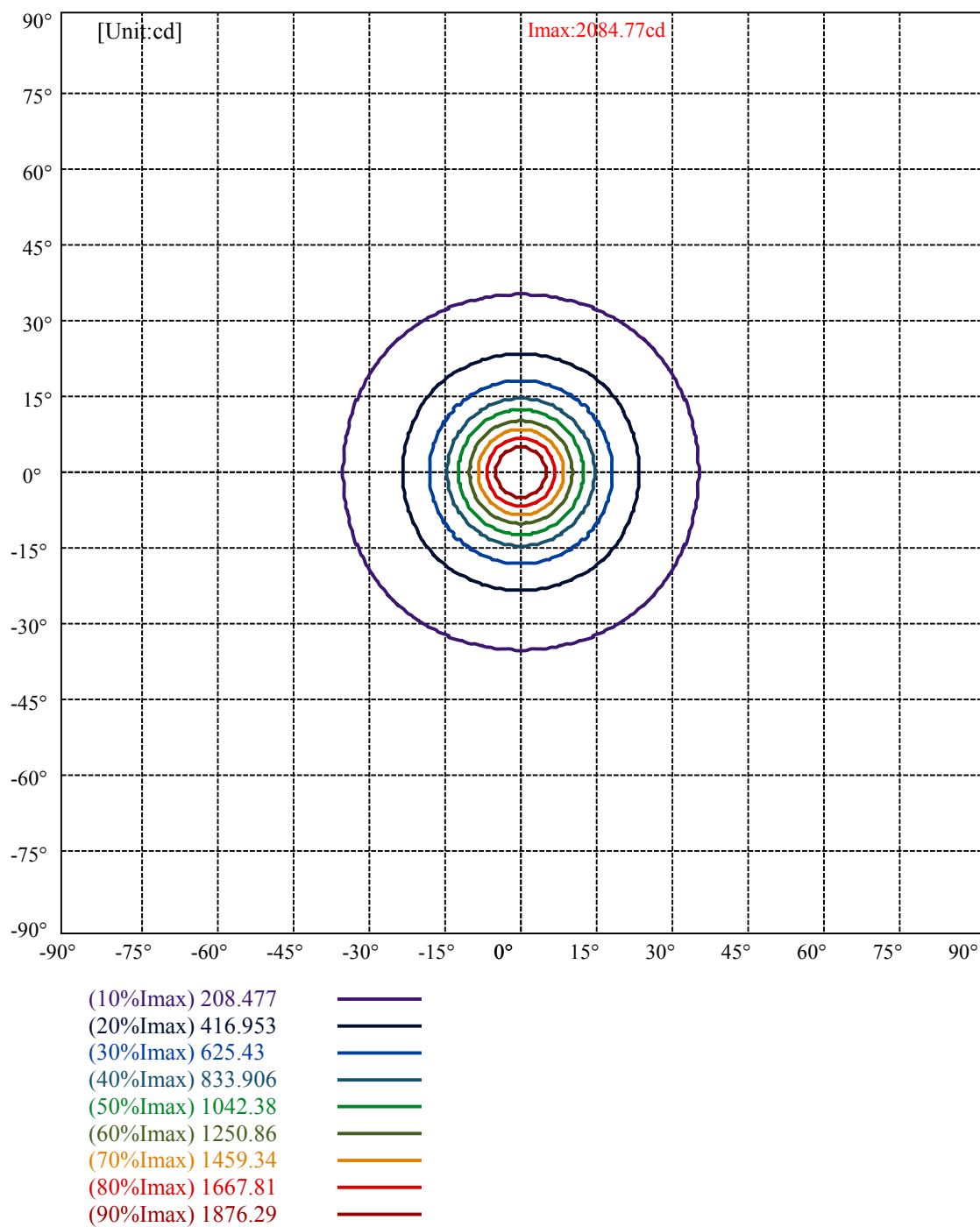
Field angle(10%Imax):C0/180Left:34.7 Right:34.7

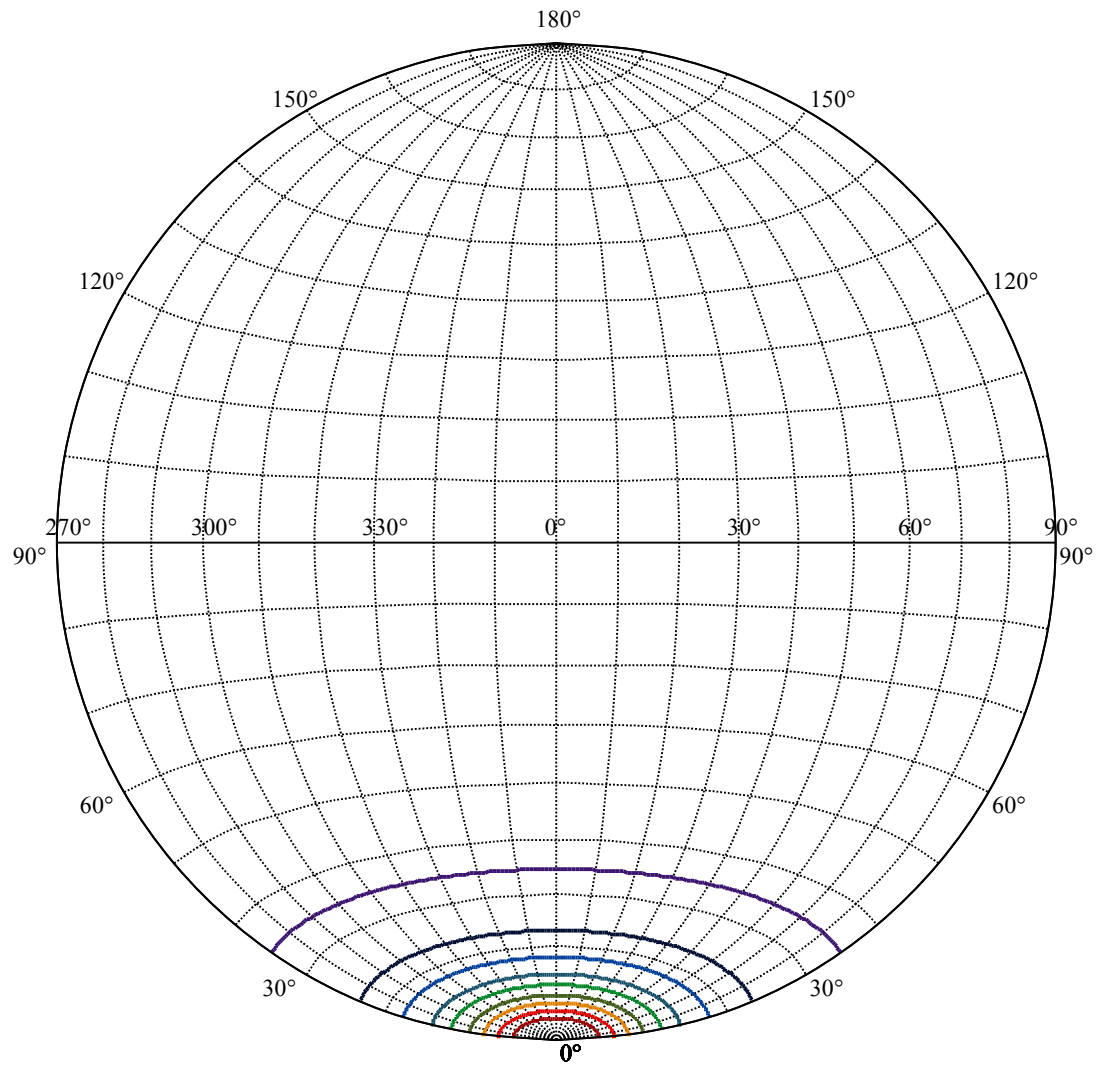
:C90/270Left:34.7 Right:34.7

Beam Angle(50%Imax):C0/180Left:12.2 Right:12.2

:C90/270Left:12.2 Right:12.2





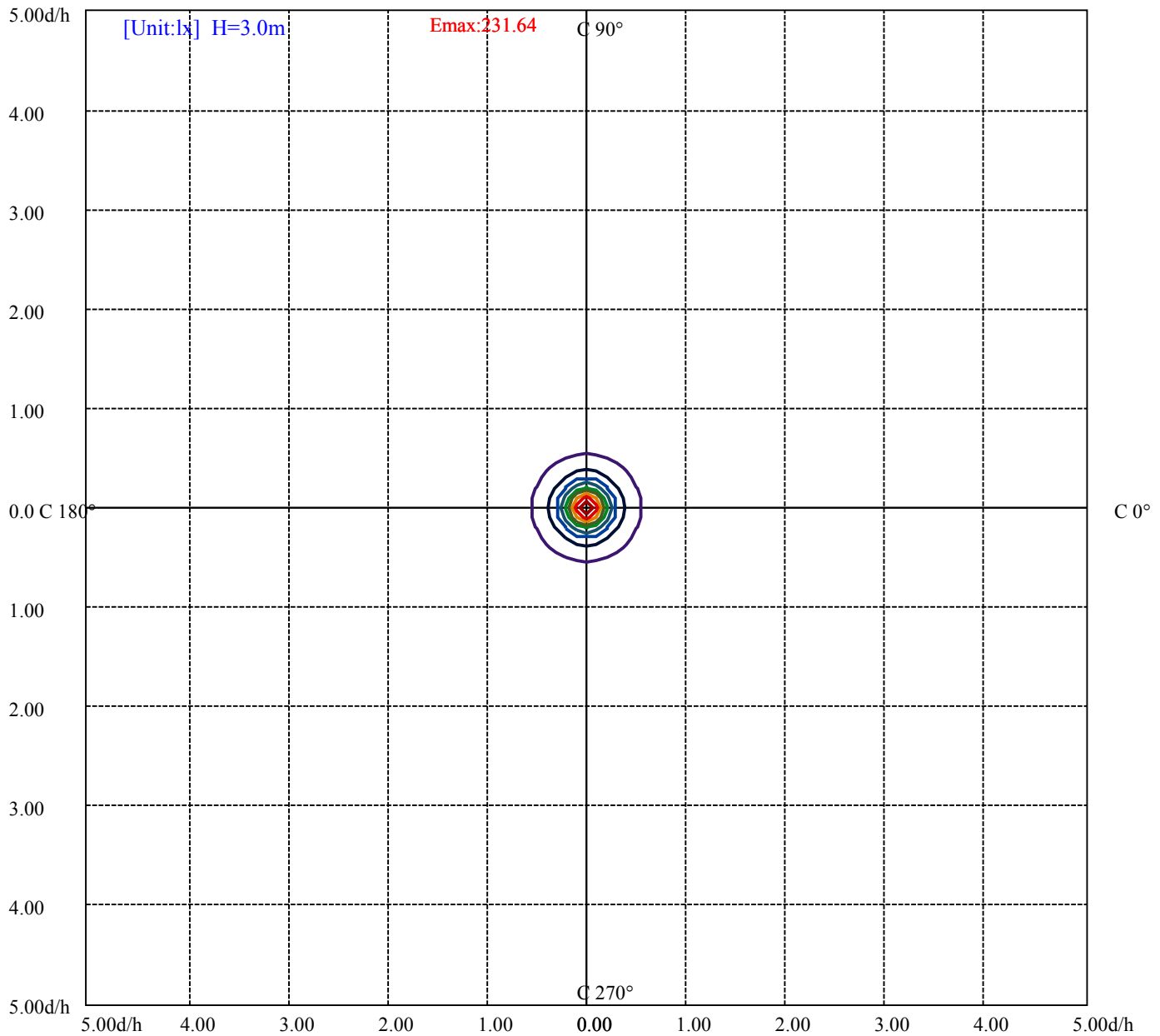


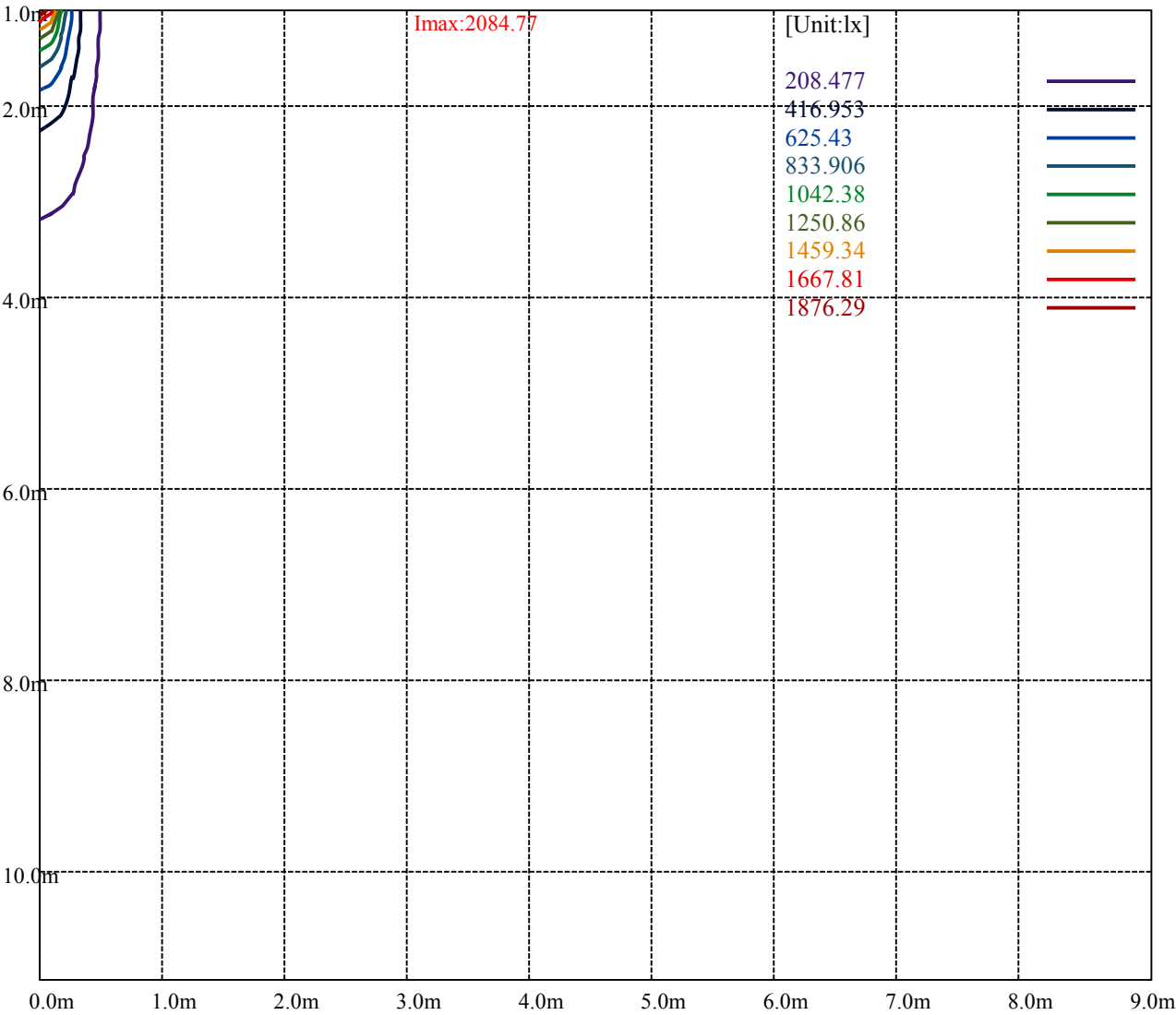
House

[Unit:cd]

Road

Imax:2084.77	
(10%Imax) 208.477	
(20%Imax) 416.953	
(30%Imax) 625.43	
(40%Imax) 833.906	
(50%Imax) 1042.38	
(60%Imax) 1250.86	
(70%Imax) 1459.34	
(80%Imax) 1667.81	
(90%Imax) 1876.29	





Luminance Table

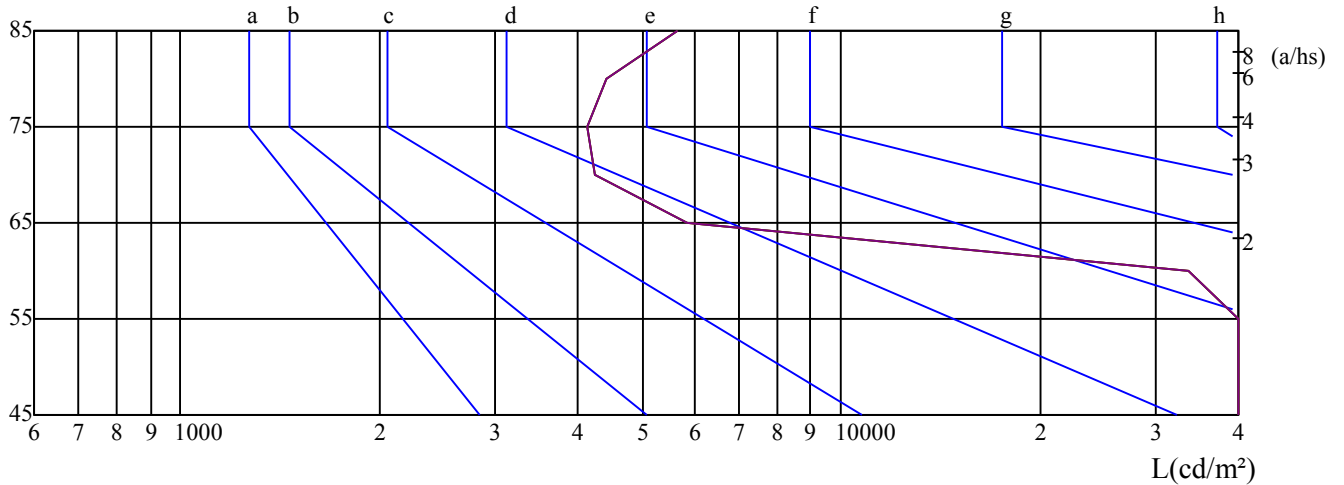
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

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

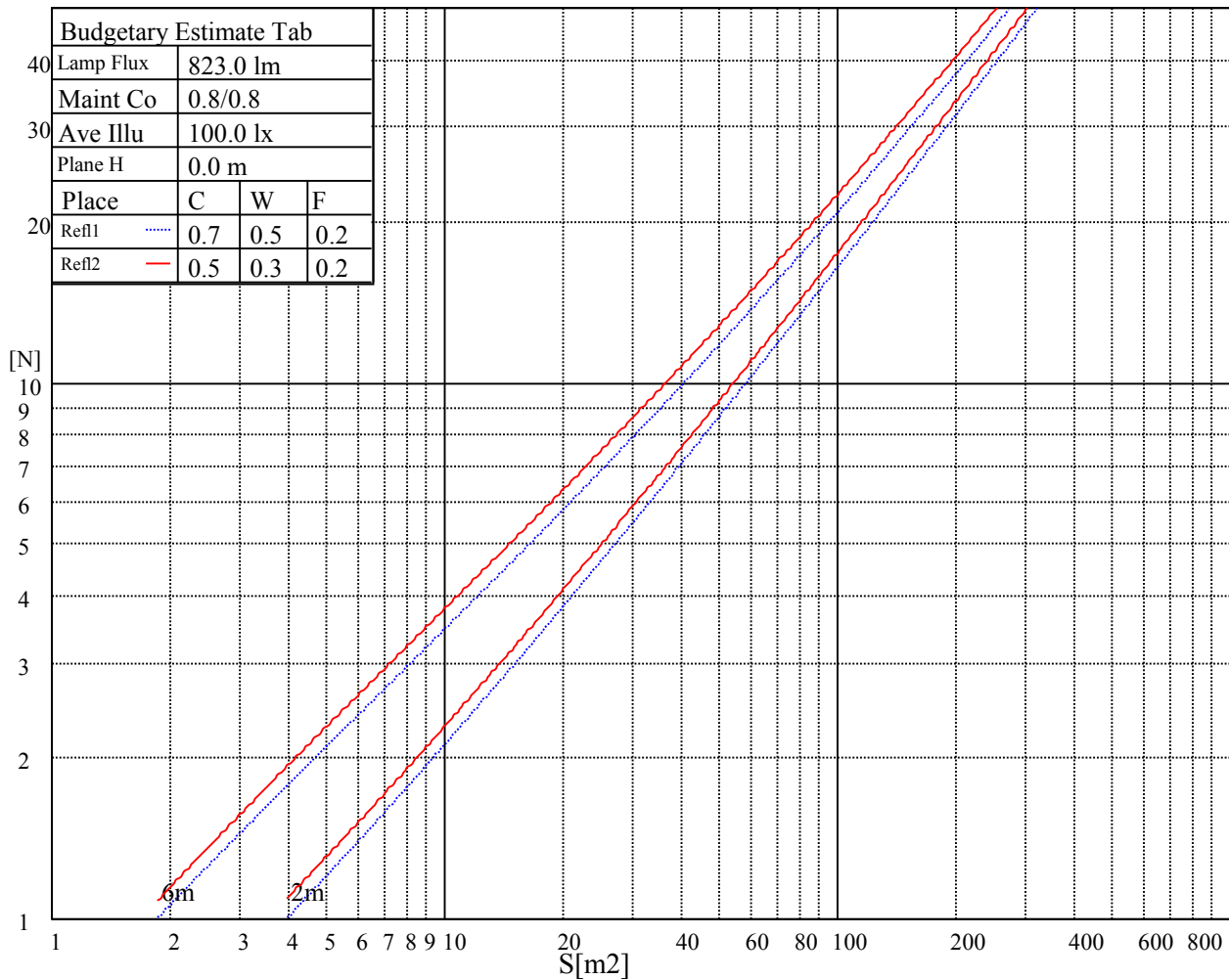
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

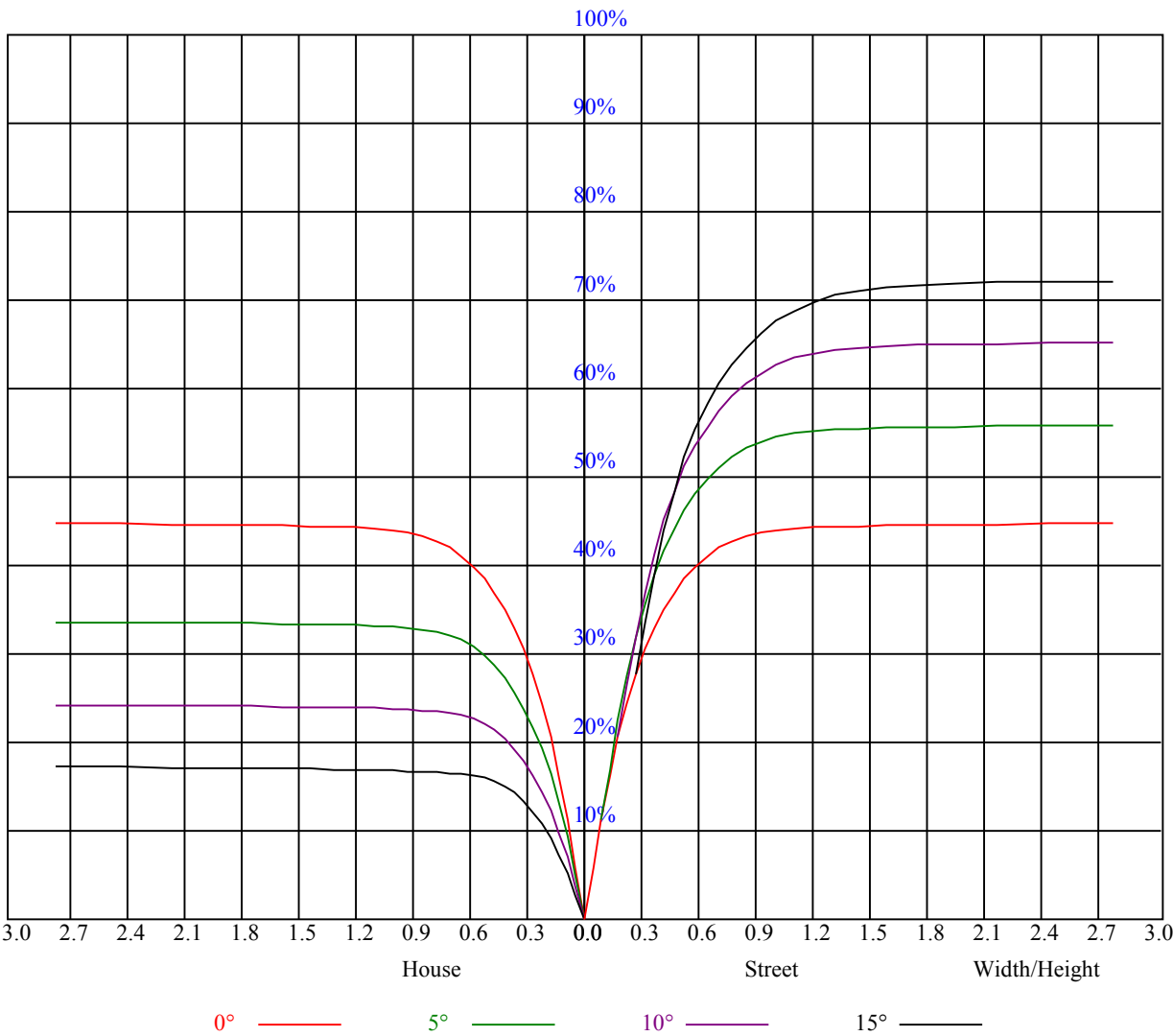
C0 ———

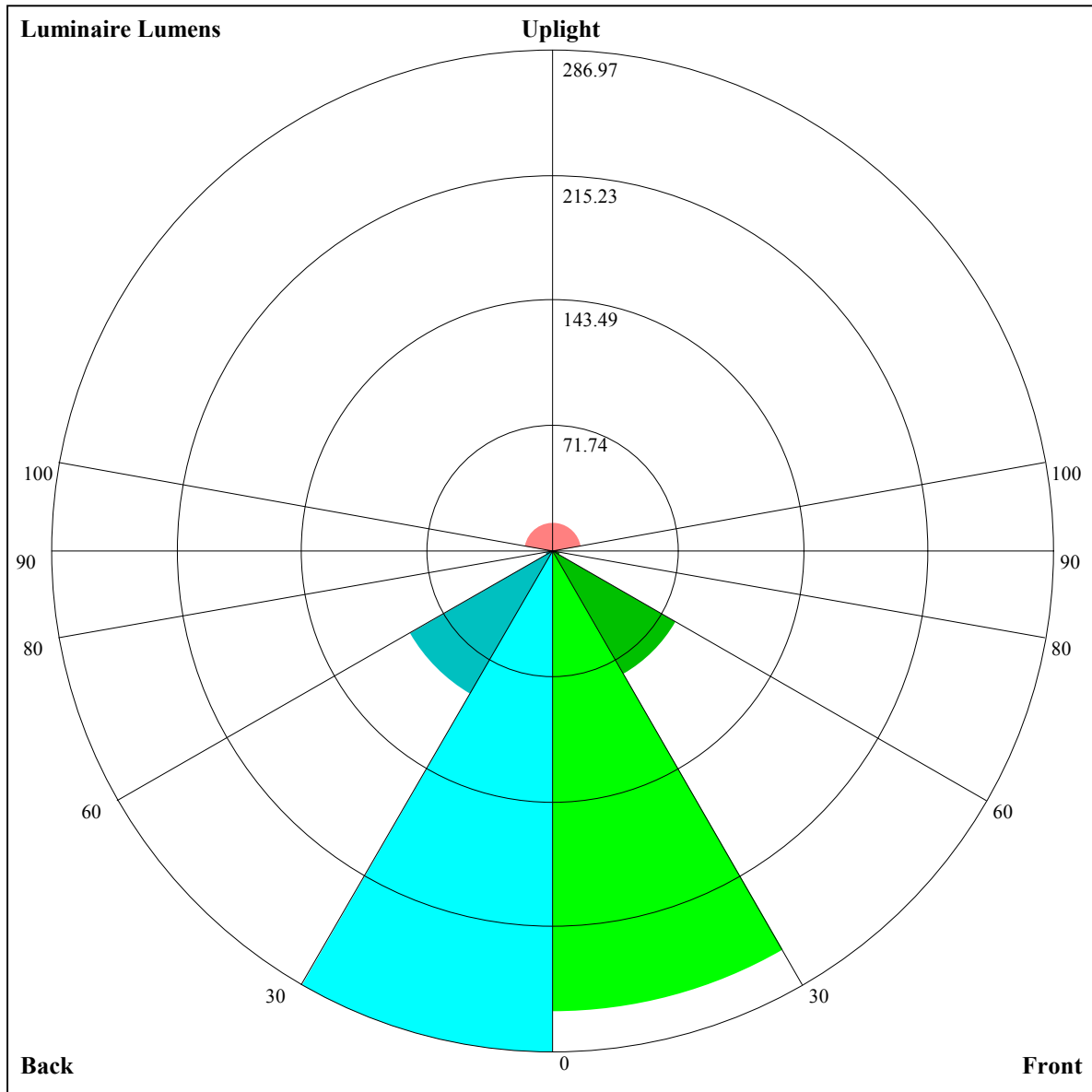
C45 ———

C90 ———



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	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.85
2	0.95	0.91	0.88	0.93	0.90	0.87	0.90	0.88	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.80
3	0.89	0.85	0.81	0.88	0.84	0.81	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.75	0.72	0.71
5	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.67
6	0.75	0.70	0.66	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.64
7	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.60
8	0.68	0.63	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.58
9	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.55
10	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.60	0.56	0.54	0.53





Luminaire Lumens:

FL=264.04,FM=81.27,FH=4.52,FVH=1.93

BL=286.97,BM=94.51,BH=4.6,BVH=1.96

UL=3.49,UH=16.61

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	2086.31	1791.56	1145.25	705.38	475.88	347.63	284.63	193.73	100.29
45.0	2091.94	1877.63	1242.56	756.00	507.94	366.75	293.63	200.87	106.43
90.0	2091.38	1878.19	1119.71	748.69	499.67	361.01	283.16	200.87	112.11
135.0	2069.44	2032.88	1605.94	918.56	563.06	388.69	286.31	218.76	149.06
180.0	2086.31	1996.31	1479.94	852.53	556.99	380.48	283.39	221.40	142.93
225.0	2091.94	1912.50	1095.19	784.18	527.74	373.28	293.23	219.49	143.94
270.0	2091.38	1880.44	1310.63	799.88	513.56	360.00	285.75	208.35	127.74
315.0	2069.44	1697.63	1055.53	658.69	443.70	319.78	257.23	170.21	89.16
360.0	2086.31	1791.56	1145.25	705.38	475.88	347.63	284.63	193.73	100.29

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	26.72	14.12	6.86	4.78	4.50	4.39	4.11	3.88	3.54
45.0	26.55	11.31	6.36	5.68	4.78	4.50	4.22	4.11	3.66
90.0	35.49	13.73	7.65	5.68	4.78	4.50	4.28	4.05	3.71
135.0	61.93	20.59	12.60	5.68	4.67	4.50	4.28	3.99	3.66
180.0	58.61	21.32	10.29	5.68	4.78	4.44	4.11	3.83	3.66
225.0	52.03	17.72	9.00	6.19	4.78	4.28	4.05	3.83	3.66
270.0	49.56	16.99	7.82	5.34	4.56	4.16	3.88	3.71	3.43
315.0	29.53	14.40	5.96	4.73	4.50	4.33	4.05	3.77	3.38
360.0	26.72	14.12	6.86	4.78	4.50	4.39	4.11	3.88	3.54

C/γ(°)	90.0
0.0	3.09
45.0	3.15
90.0	3.15
135.0	3.26
180.0	3.32
225.0	3.32
270.0	3.21
315.0	3.09
360.0	3.09