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Client:

LumCAT: 1547-E

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019121809

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.7700

Current(A): 0.1970

Power (W): 6.8400

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

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Photometric Results

Lumens(lm): 713.98, Efficiency(%): 86.75% , Luminous Efficacy(lm/W): 104.38

Central intensity(cd): 718.516, Maximum intensity(cd): 718.516

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=60.8

[C90/270]Total=60.8

Field angle(10%Imax): [C0/180]Total=93.6

[C90/270]Total=93.6

Maximum s/h(1/2): C0\_180=0.84 C90\_270=0.84

Maximum s/h(1/4): C0\_180=0.94 C90\_270=0.94

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.75%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.703%

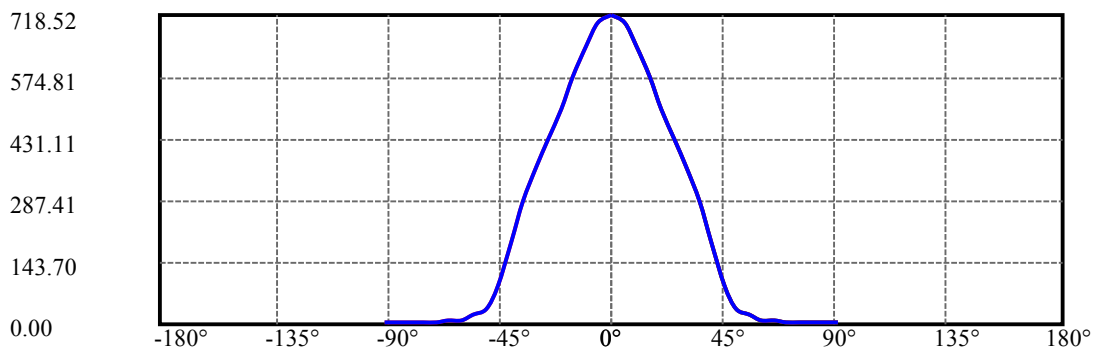
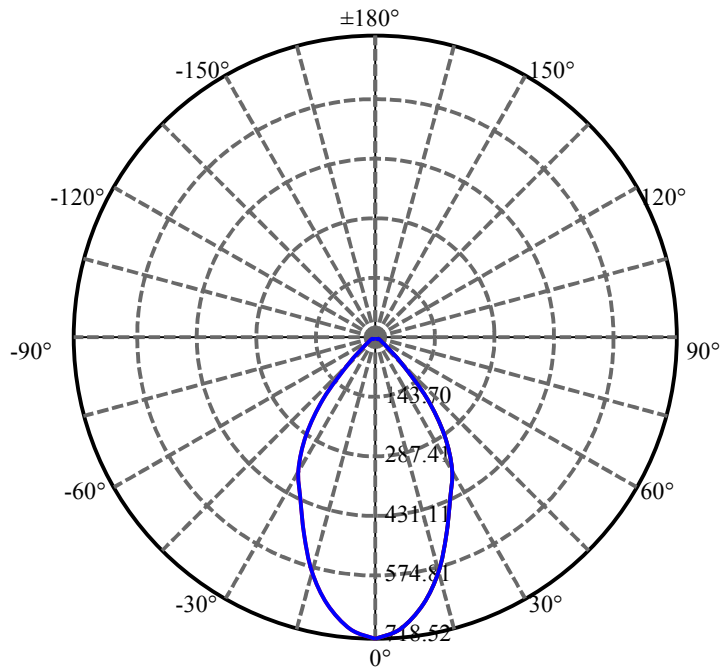
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	718.516	0.000	0	.000%	.000%
5.0	699.328	16.950	16.95	2.060%	2.374%
10.0	645.778	48.119	65.069	5.847%	9.113%
15.0	575.880	72.468	137.537	8.805%	19.263%
20.0	501.124	88.760	226.297	10.785%	31.695%
25.0	426.305	97.270	323.567	11.819%	45.319%
30.0	365.041	100.146	423.713	12.168%	59.345%
35.0	285.652	95.819	519.532	11.643%	72.765%
40.0	189.745	79.316	598.848	9.637%	83.874%
45.0	91.378	52.052	650.9	6.325%	91.165%
50.0	37.308	26.003	676.903	3.160%	94.807%
55.0	23.147	13.145	690.048	1.597%	96.648%
60.0	9.450	7.535	697.583	.916%	97.703%
65.0	7.109	4.025	701.608	.489%	98.267%
70.0	5.899	3.294	704.902	.400%	98.728%
75.0	4.922	2.828	707.73	.344%	99.124%
80.0	4.170	2.433	710.163	.296%	99.465%
85.0	3.488	2.081	712.244	.253%	99.756%
90.0	2.869	1.740	713.984	.211%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	423.71	51.48%	59.34%
0-40	598.85	72.76%	83.87%
0-60	697.58	84.76%	97.70%
0-90	712.24	86.54%	99.76%
0-120	712.24	86.54%	99.76%
0-180	713.98	86.75%	100.00%
60-90	22.20	2.70%	3.11%
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%
0-38.26	571.19	69.40%	80.00%

## ZONAL LUMEN SUMMARY

0-10	65.07
10-20	161.23
20-30	197.42
30-40	175.14
40-50	78.06
50-60	20.68
60-70	7.32
70-80	5.26
80-90	2.08
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: —————

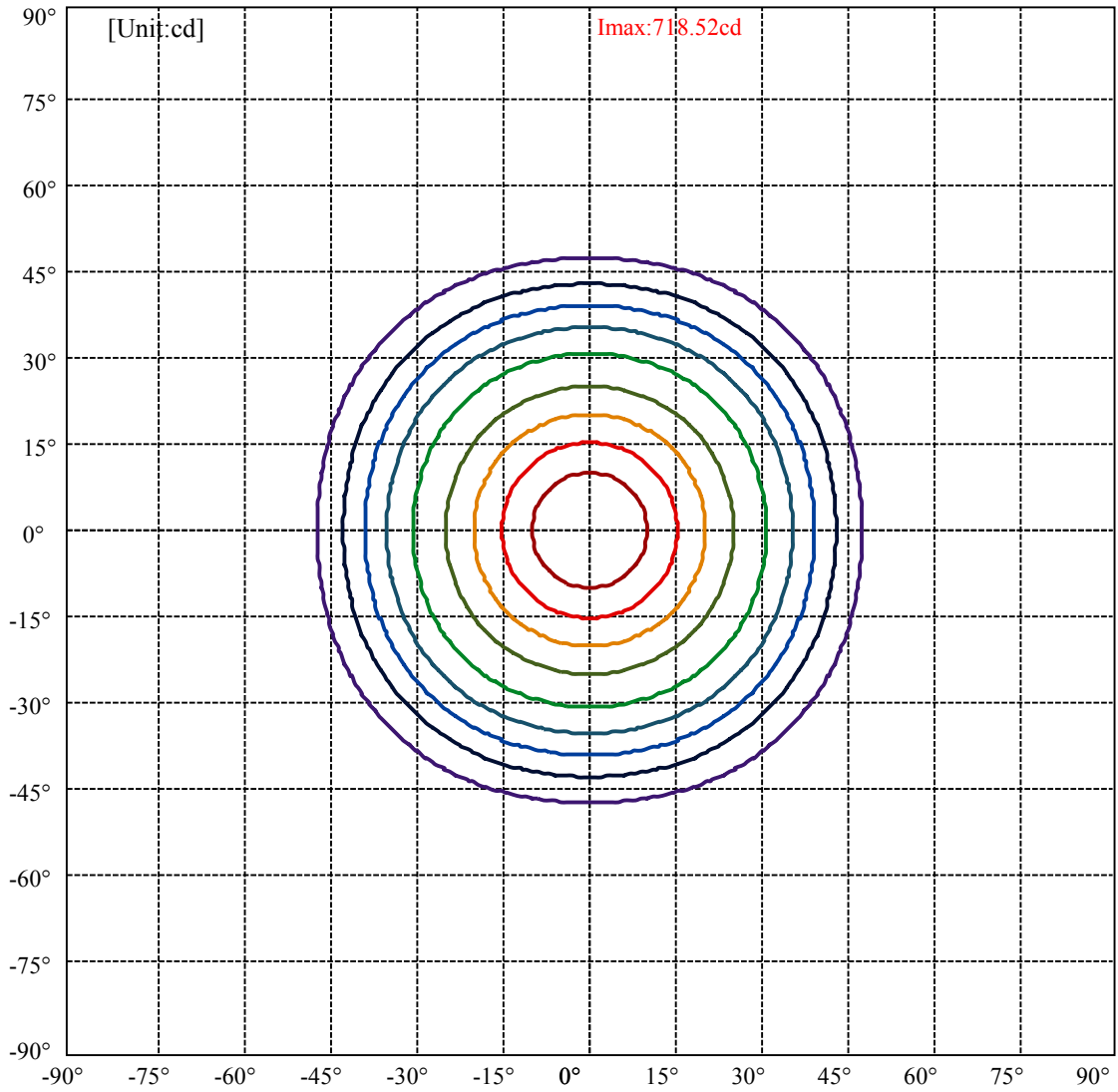
Field angle(10%Imax):C0/180Left:46.8 Right:46.8

:C90/270Left:46.8 Right:46.8

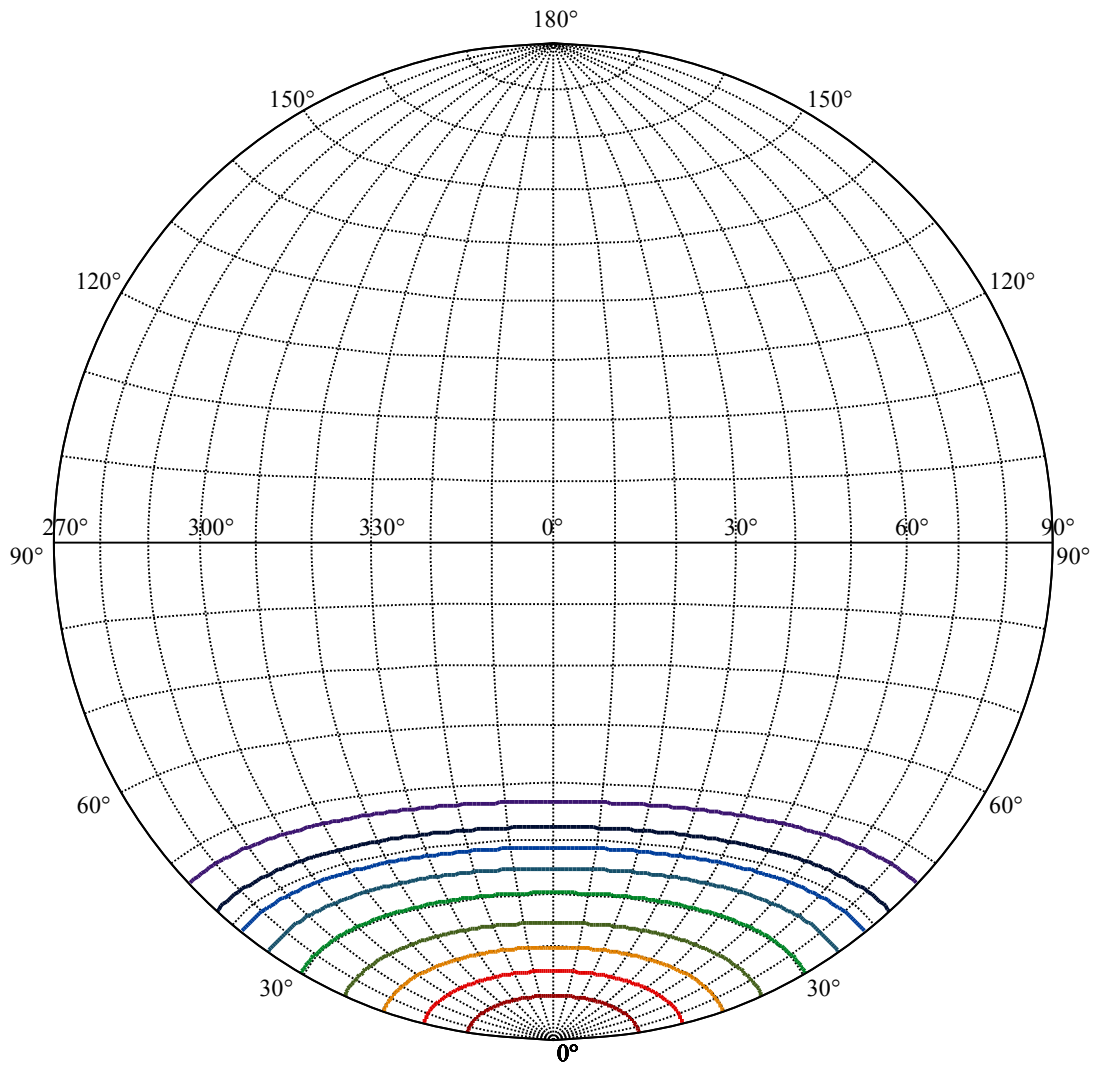
Beam Angle(50%Imax):C0/180Left:30.4 Right:30.4

:C90/270Left:30.4 Right:30.4





(10%Imax) 71.8516	—
(20%Imax) 143.703	—
(30%Imax) 215.555	—
(40%Imax) 287.407	—
(50%Imax) 359.258	—
(60%Imax) 431.11	—
(70%Imax) 502.961	—
(80%Imax) 574.813	—
(90%Imax) 646.665	—












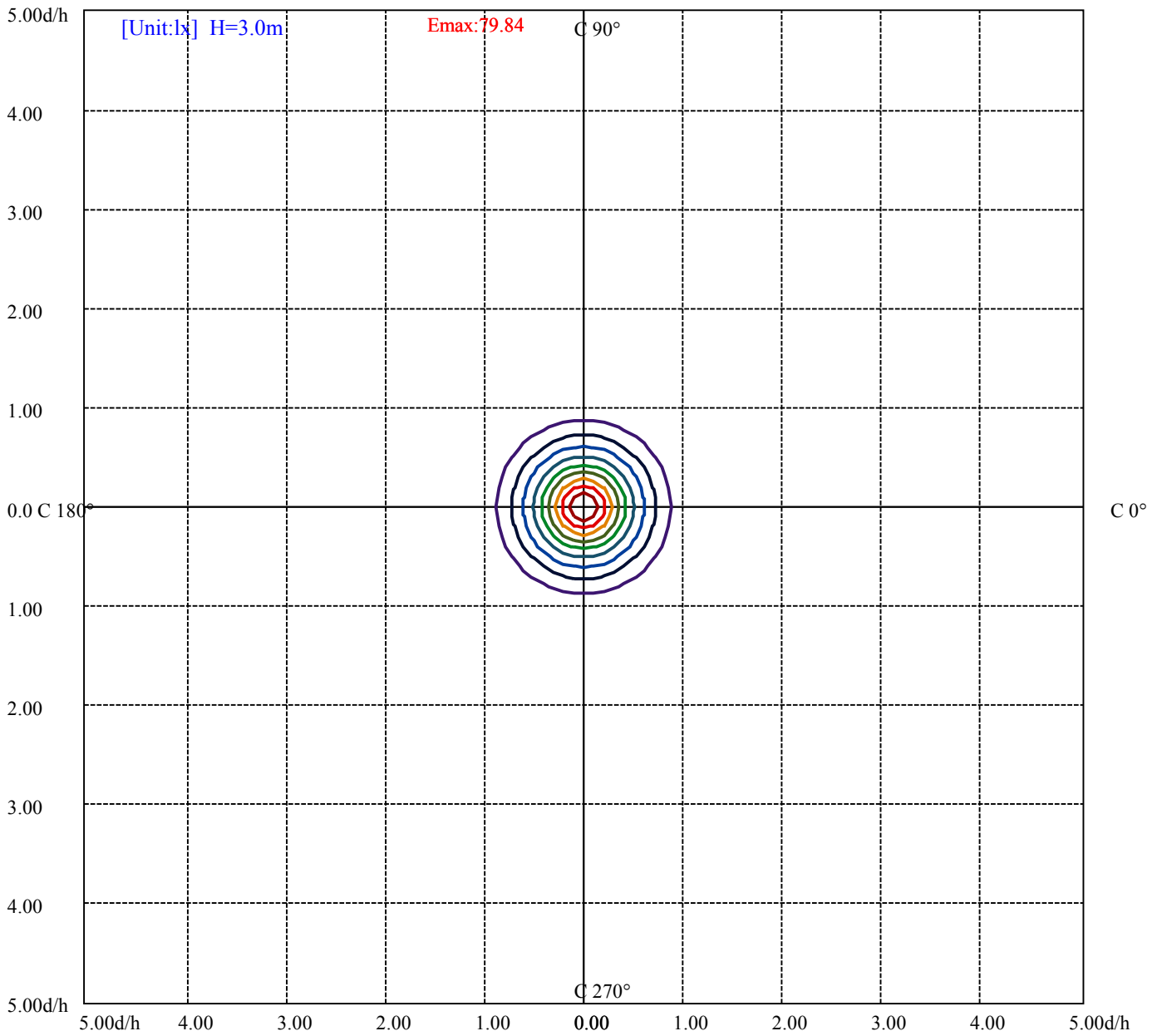
House

[Unit:cd]

Road

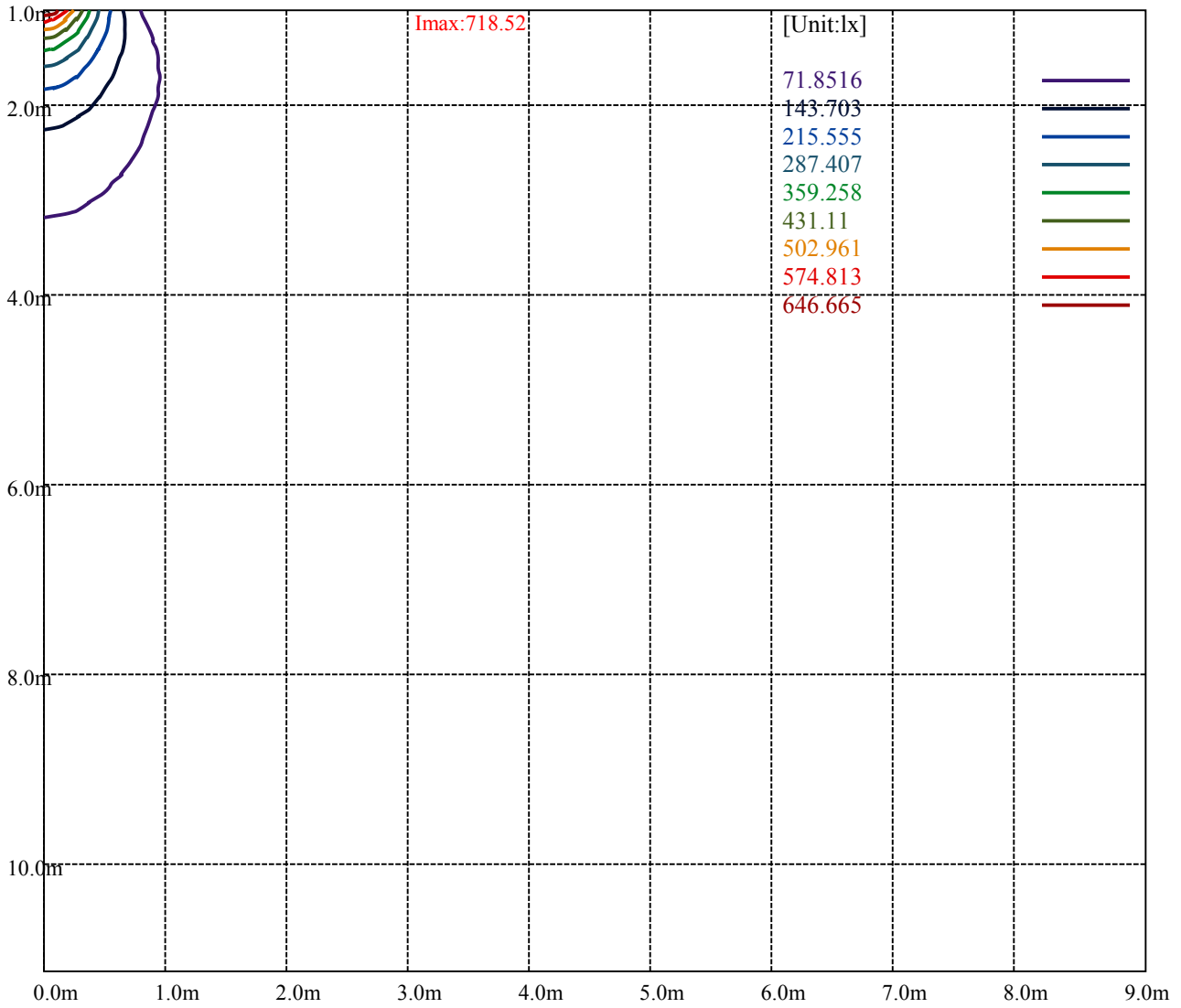
**Imax:718.52**

(10%Imax) 71.8516	
(20%Imax) 143.703	
(30%Imax) 215.555	
(40%Imax) 287.407	
(50%Imax) 359.258	
(60%Imax) 431.11	
(70%Imax) 502.961	
(80%Imax) 574.813	
(90%Imax) 646.665	



(10%Emax) 7.983511	—
(20%Emax) 15.967	—
(30%Emax) 23.95055	—
(40%Emax) 31.934	—
(50%Emax) 39.91756	—
(60%Emax) 47.90111	—
(70%Emax) 55.88456	—
(80%Emax) 63.86811	—
(90%Emax) 71.85155	—





Luminance Table

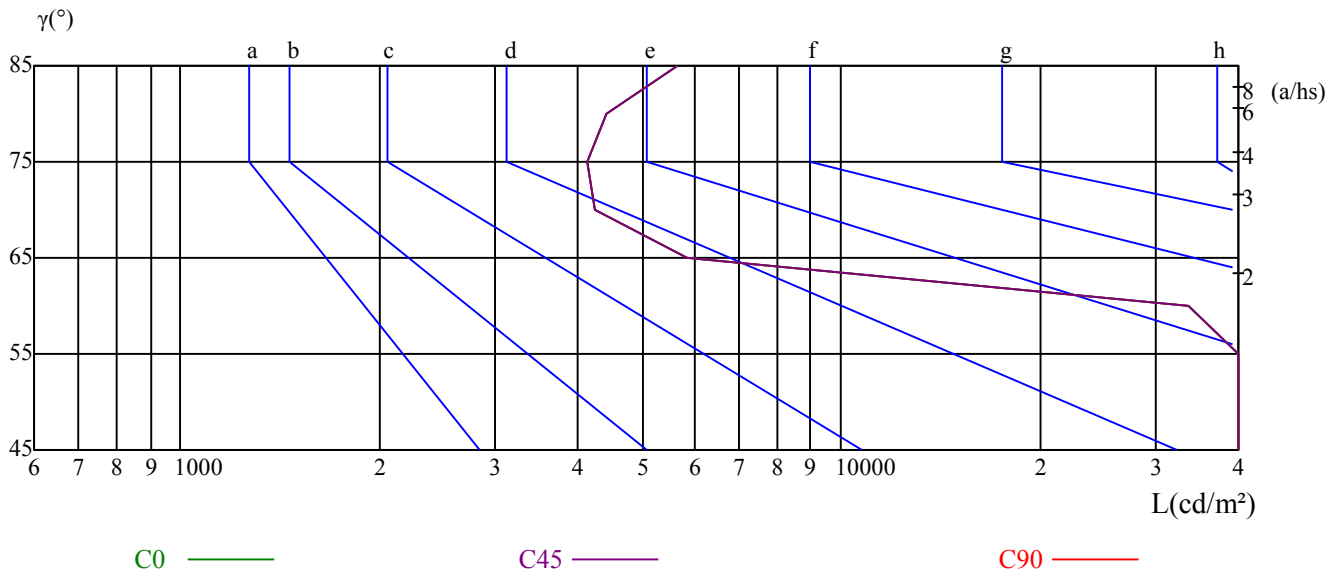
$\gamma$	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

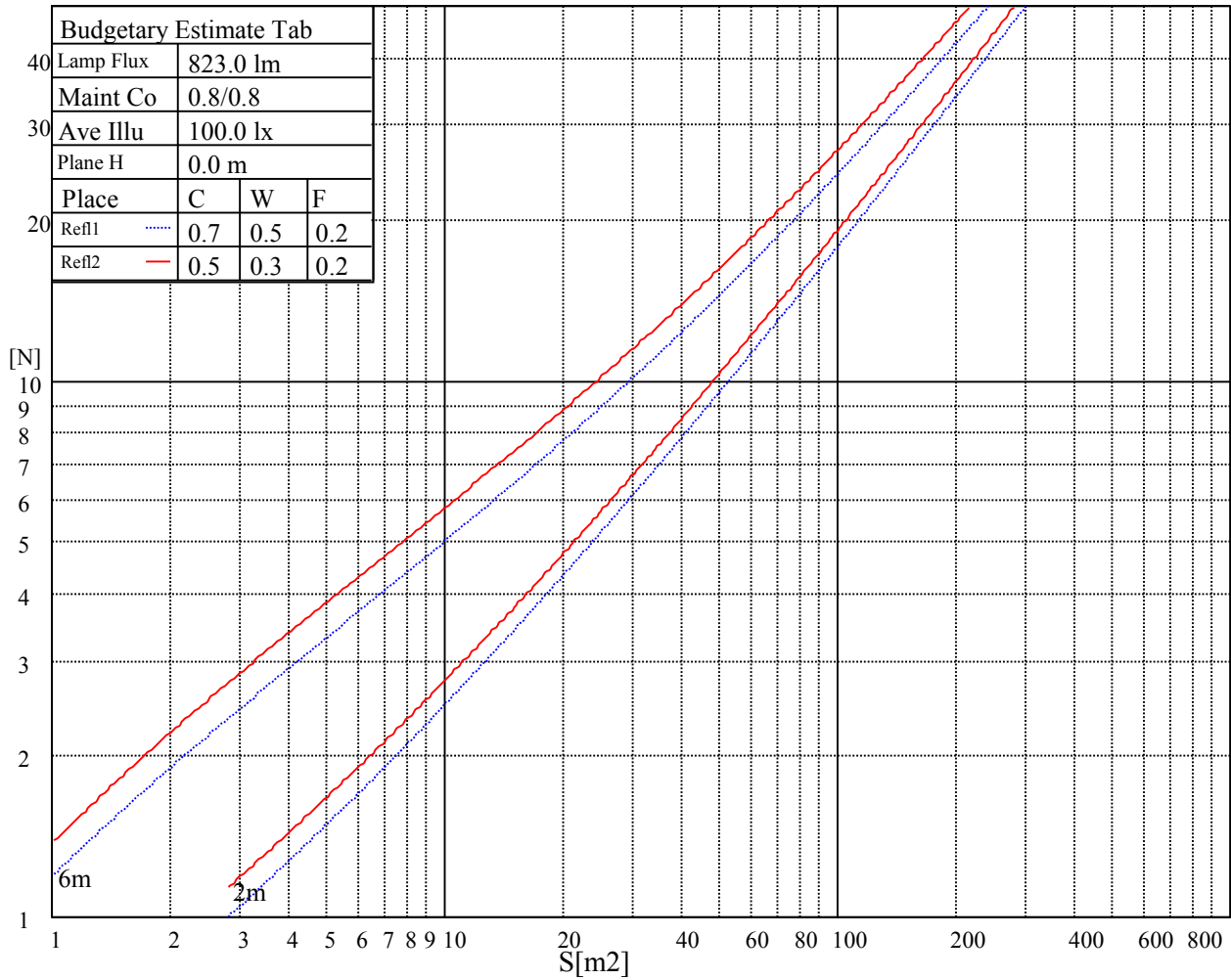
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

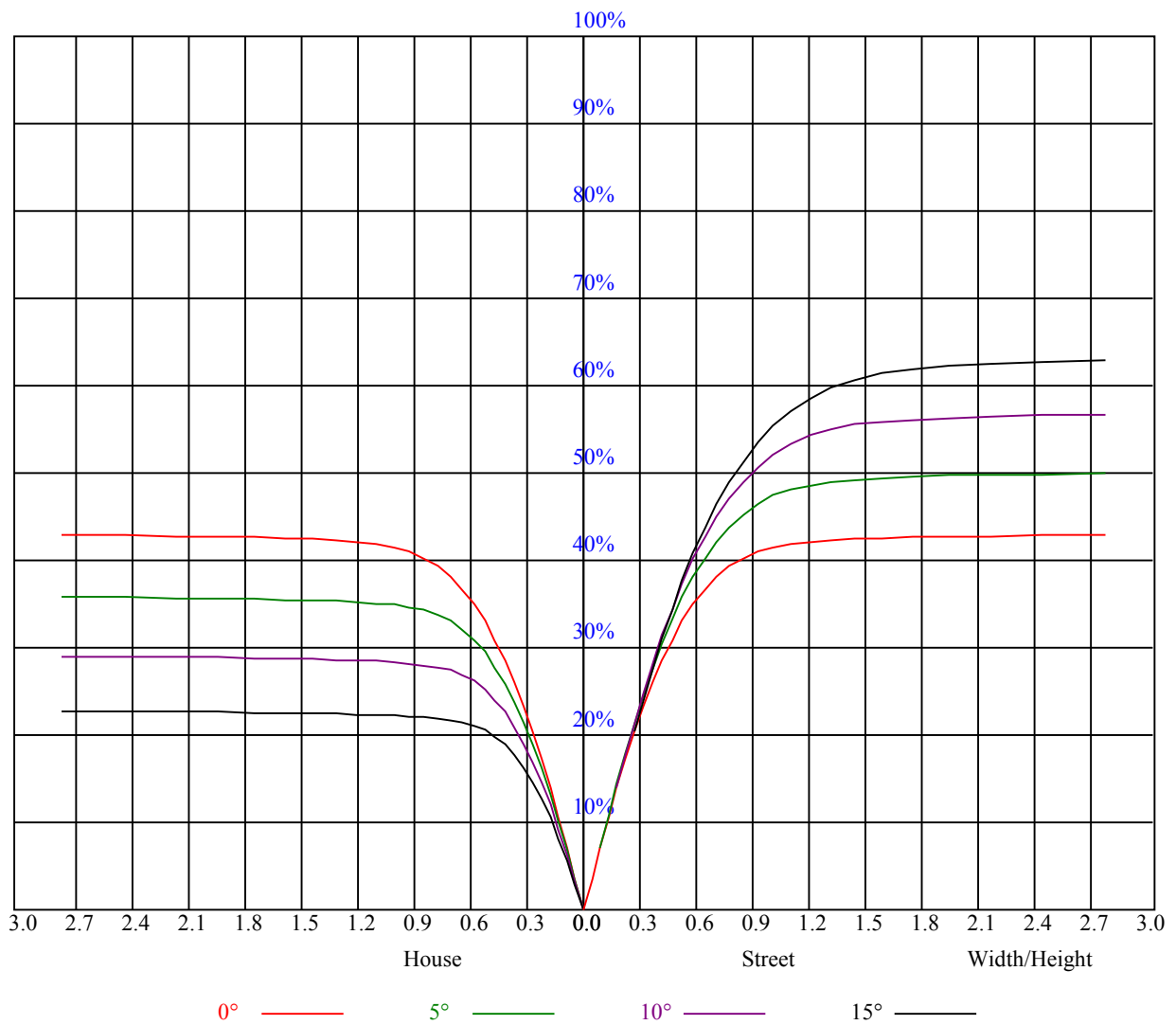
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

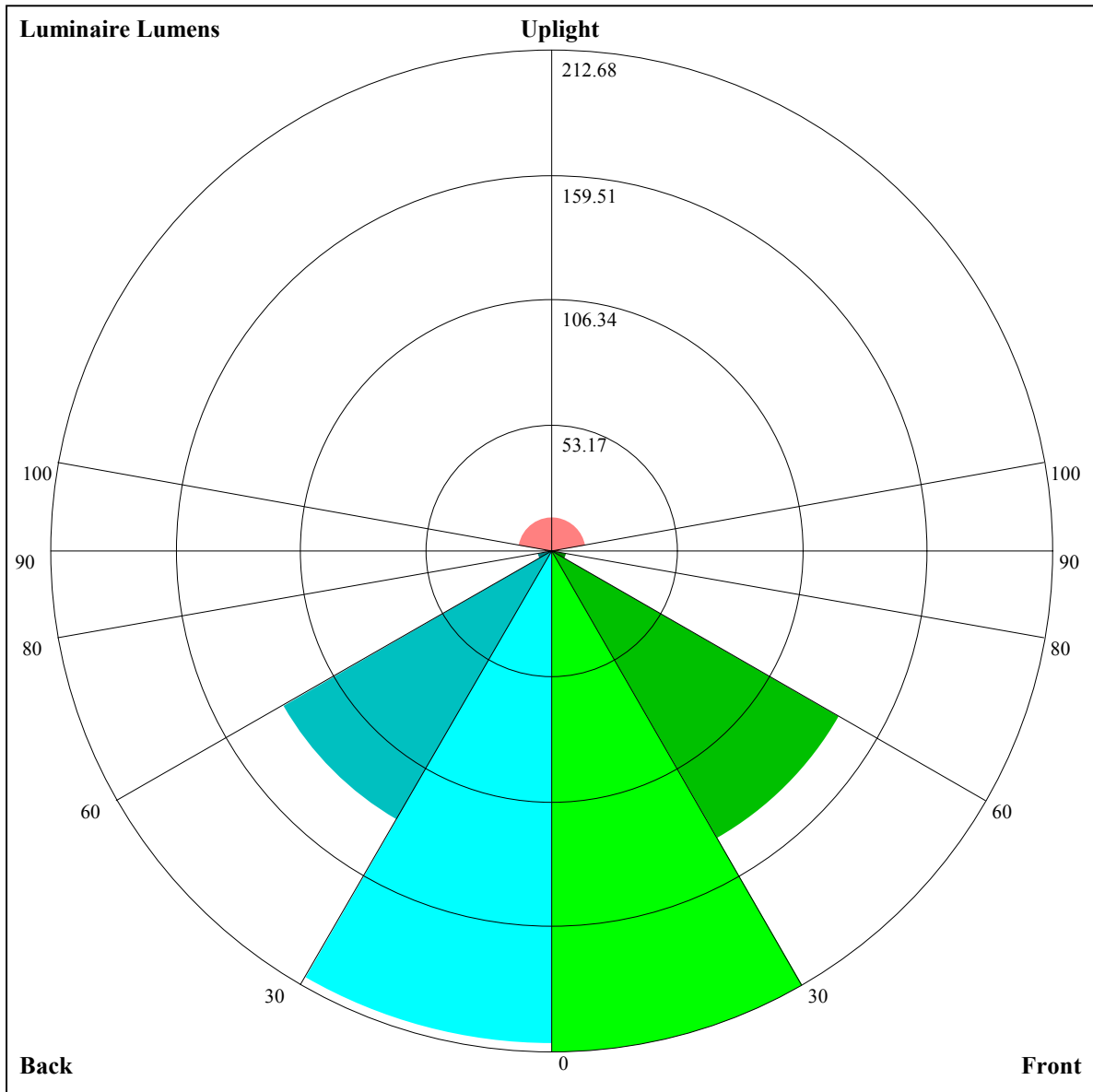
Luminance Limiting Curve





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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.89	0.89	0.89	0.87
1	0.95	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80
2	0.88	0.84	0.80	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	0.76	0.72	0.80	0.75	0.72	0.77	0.74	0.71	0.75	0.72	0.69	0.73	0.71	0.68	0.67
4	0.75	0.70	0.66	0.74	0.69	0.65	0.72	0.68	0.64	0.70	0.67	0.64	0.69	0.65	0.63	0.61
5	0.70	0.64	0.60	0.69	0.64	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.64	0.61	0.58	0.57
6	0.65	0.59	0.55	0.64	0.59	0.55	0.63	0.58	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.52
7	0.60	0.55	0.51	0.60	0.54	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.48
8	0.57	0.51	0.47	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.46	0.53	0.49	0.46	0.45
9	0.53	0.47	0.44	0.53	0.47	0.44	0.52	0.47	0.44	0.51	0.47	0.43	0.50	0.46	0.43	0.42
10	0.50	0.44	0.41	0.49	0.44	0.41	0.49	0.44	0.41	0.48	0.44	0.41	0.47	0.43	0.40	0.39





Luminaire Lumens:

FL=212.68,FM=141.28,FH=6.26,FVH=1.92

BL=209.44,BM=132.05,BH=6.28,BVH=1.91

UL=3.13,UH=14.89

BUG Rating:B1-U2-G0

## Intensity data(cd)

<b>C/γ(°)</b>	<b>0.0</b>	<b>5.0</b>	<b>10.0</b>	<b>15.0</b>	<b>20.0</b>	<b>25.0</b>	<b>30.0</b>	<b>35.0</b>	<b>40.0</b>
<b>0.0</b>	714.21	698.06	647.66	581.23	514.86	442.24	379.18	316.01	219.15
<b>45.0</b>	720.90	708.41	652.67	590.29	512.94	446.12	386.78	311.79	217.01
<b>90.0</b>	720.96	694.18	636.98	566.27	490.95	420.41	362.81	292.56	195.58
<b>135.0</b>	718.03	700.59	647.94	579.04	507.15	429.30	366.24	282.99	181.41
<b>180.0</b>	714.21	695.31	640.13	564.36	485.10	413.10	349.88	264.88	172.29
<b>225.0</b>	720.90	695.03	642.77	569.98	489.71	412.09	355.22	270.90	173.98
<b>270.0</b>	720.96	706.05	653.51	584.89	511.37	428.79	366.92	283.11	190.41
<b>315.0</b>	717.98	696.99	644.57	570.99	496.91	418.39	353.31	262.97	168.13
<b>360.0</b>	714.21	698.06	647.66	581.23	514.86	442.24	379.18	316.01	219.15
<b>C/γ(°)</b>	<b>45.0</b>	<b>50.0</b>	<b>55.0</b>	<b>60.0</b>	<b>65.0</b>	<b>70.0</b>	<b>75.0</b>	<b>80.0</b>	<b>85.0</b>
<b>0.0</b>	109.29	43.09	26.04	9.00	6.98	5.85	5.01	4.28	3.49
<b>45.0</b>	112.22	41.18	24.02	8.16	6.47	5.51	4.84	4.22	3.60
<b>90.0</b>	93.94	37.63	25.54	8.21	6.53	5.63	4.84	4.16	3.71
<b>135.0</b>	87.81	40.78	24.53	11.36	7.93	6.41	5.18	4.33	3.54
<b>180.0</b>	76.95	30.04	19.69	9.00	6.81	5.68	4.78	3.99	3.38
<b>225.0</b>	77.96	29.70	19.24	8.89	6.92	5.63	4.67	3.99	3.38
<b>270.0</b>	95.57	35.78	23.18	10.13	7.37	6.13	4.95	4.16	3.38
<b>315.0</b>	77.29	40.28	22.95	10.86	7.88	6.36	5.12	4.22	3.43
<b>360.0</b>	109.29	43.09	26.04	9.00	6.98	5.85	5.01	4.28	3.49
<b>C/γ(°)</b>	<b>90.0</b>								
<b>0.0</b>	2.81								
<b>45.0</b>	2.81								
<b>90.0</b>	2.81								
<b>135.0</b>	2.87								
<b>180.0</b>	2.93								
<b>225.0</b>	2.93								
<b>270.0</b>	2.98								
<b>315.0</b>	2.81								
<b>360.0</b>	2.81								