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Client:

LumCAT: 1-0788-M

Luminaire: 92.70.123.00

Report No: GC2019091909

Test No: GC2019121606

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 830.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.8500

Current(A): 0.1970

Power (W): 6.8600

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

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Photometric Results

Lumens(lm): 759.13, Efficiency(%): 91.46% , Luminous Efficacy(lm/W): 110.66

Central intensity(cd): 1324.477, Maximum intensity(cd): 1324.477

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

Beam Angle(50%Imax): [C0/180]Total=35.0

[C90/270]Total=35.0

Field angle(10%Imax): [C0/180]Total=85.2

[C90/270]Total=85.2

Maximum s/h(1/2): C0\_180=0.56 C90\_270=0.56

Maximum s/h(1/4): C0\_180=0.62 C90\_270=0.62

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.46%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.595%

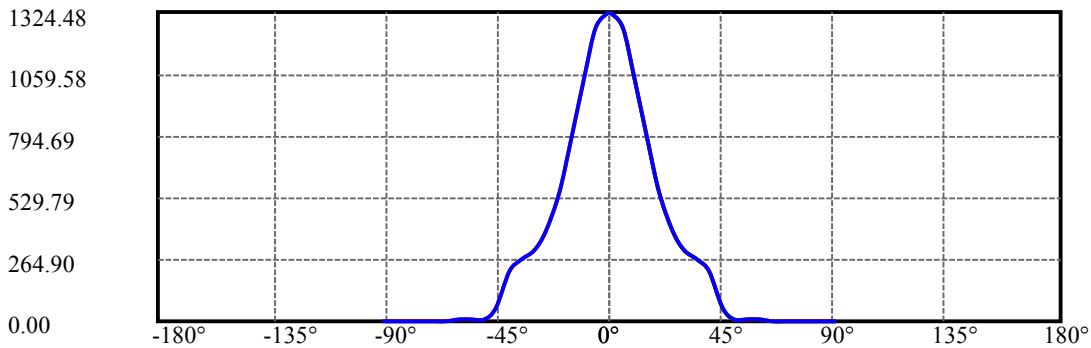
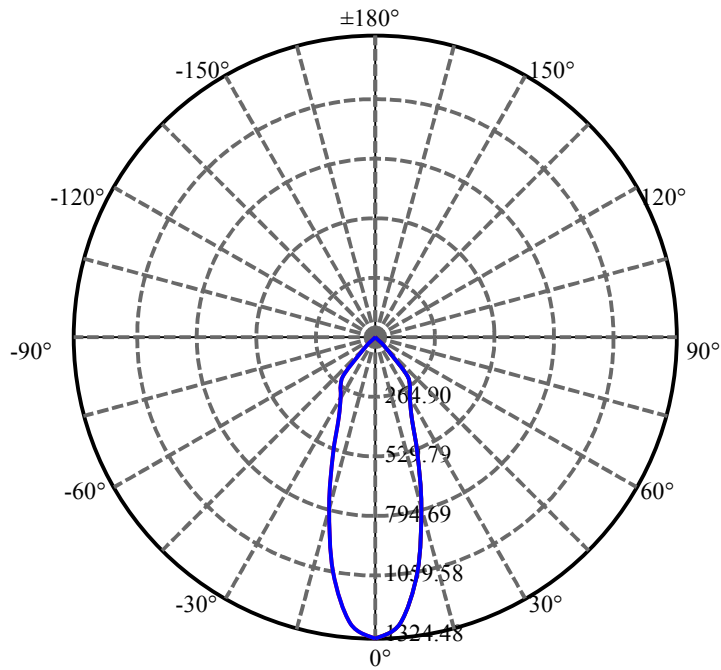
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1324.477	0.000	0	.000%	.000%
5.0	1262.250	30.924	30.924	3.726%	4.074%
10.0	1048.409	82.660	113.583	9.959%	14.962%
15.0	770.934	107.922	221.505	13.003%	29.179%
20.0	551.355	108.975	330.481	13.130%	43.534%
25.0	388.702	98.595	429.075	11.879%	56.522%
30.0	302.892	87.522	516.597	10.545%	68.051%
35.0	261.795	83.154	599.751	10.019%	79.005%
40.0	212.238	79.089	678.84	9.529%	89.424%
45.0	60.567	50.512	729.352	6.086%	96.078%
50.0	8.866	14.030	743.382	1.690%	97.926%
55.0	4.901	2.993	746.376	.361%	98.320%
60.0	4.127	2.087	748.462	.251%	98.595%
65.0	3.691	1.901	750.363	.229%	98.845%
70.0	3.473	1.814	752.177	.219%	99.084%
75.0	3.270	1.763	753.94	.212%	99.316%
80.0	3.192	1.729	755.669	.208%	99.544%
85.0	3.171	1.729	757.398	.208%	99.772%
90.0	3.150	1.731	759.129	.209%	100.000%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	516.60	62.24%	68.05%
0-40	678.84	81.79%	89.42%
0-60	748.46	90.18%	98.59%
0-90	757.40	91.25%	99.77%
0-120	757.40	91.25%	99.77%
0-180	759.13	91.46%	100.00%
60-90	11.02	1.33%	1.45%
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%
0-35.48	607.30	73.17%	80.00%

## ZONAL LUMEN SUMMARY

0-10	113.58
10-20	216.90
20-30	186.12
30-40	162.24
40-50	64.54
50-60	5.08
60-70	3.71
70-80	3.49
80-90	1.73
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: —————

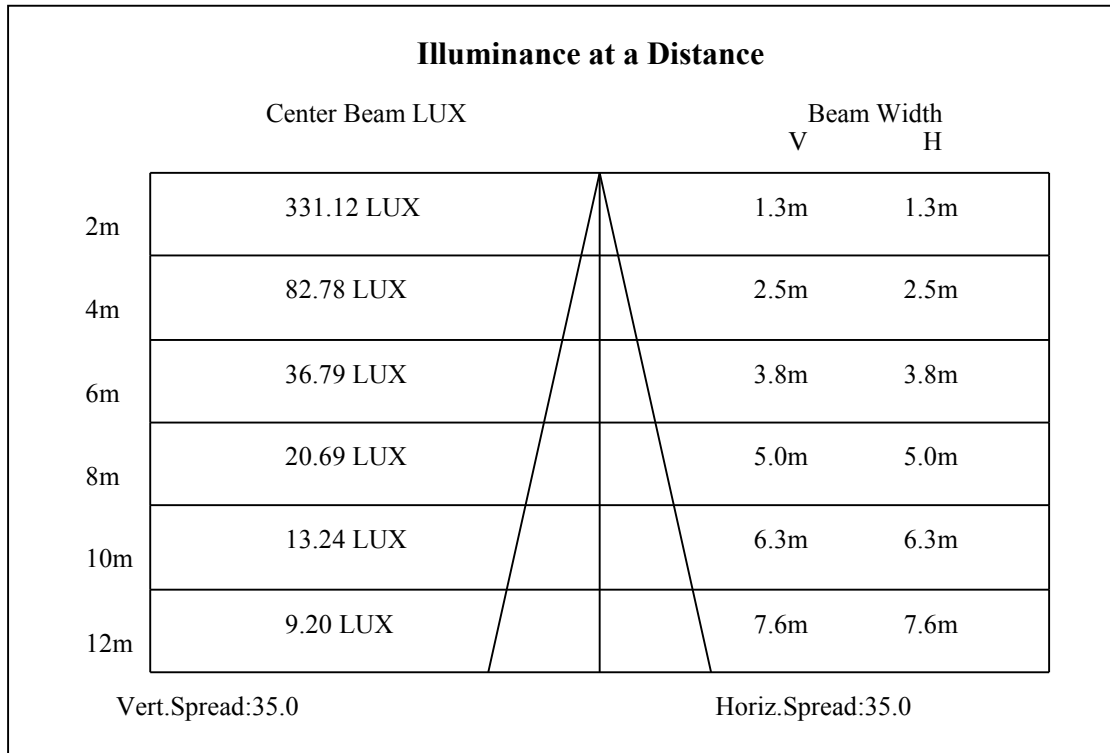
C90/C270: —————

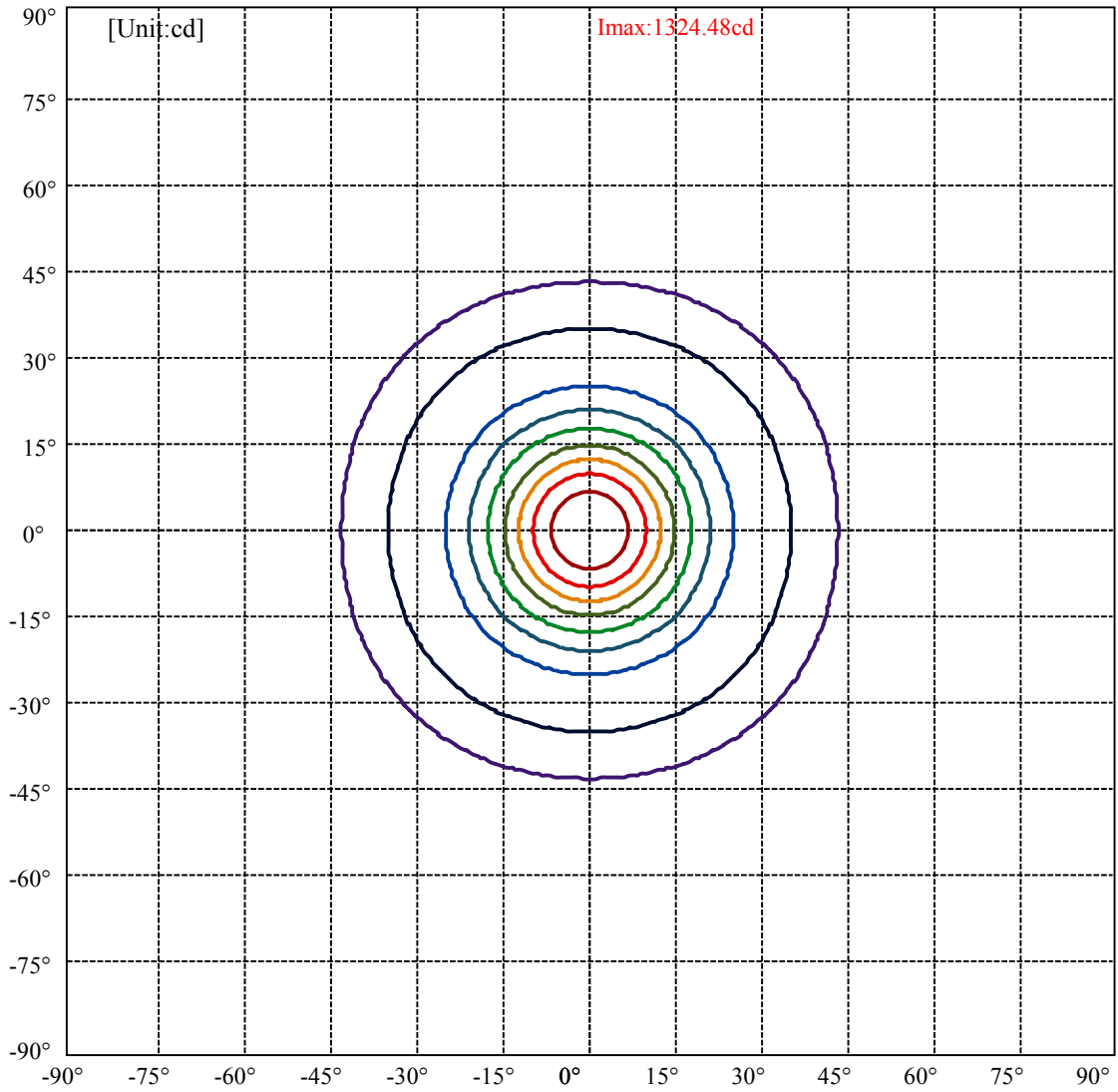
Field angle(10%Imax):C0/180Left:42.6 Right:42.6

:C90/270Left:42.6 Right:42.6

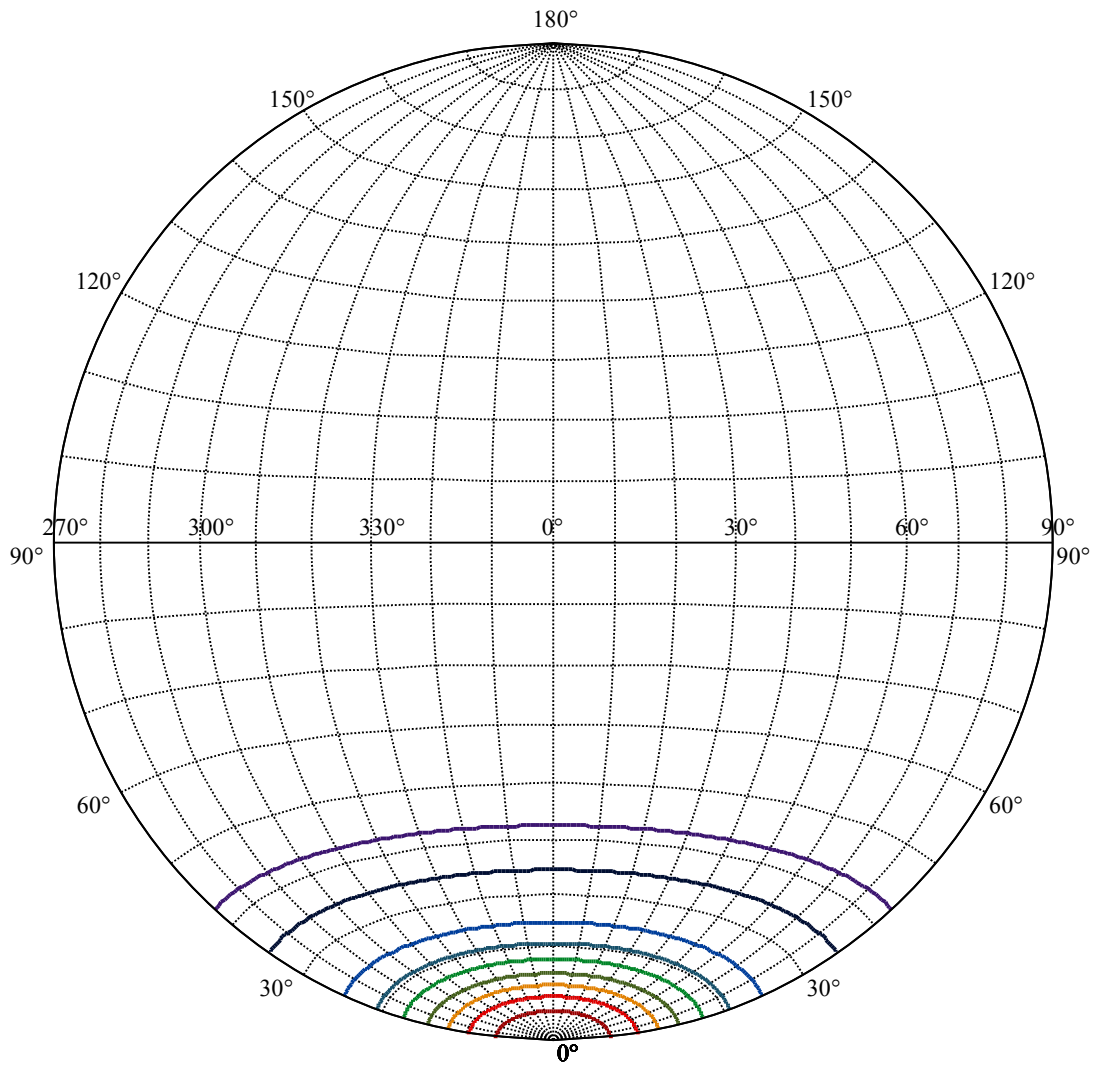
Beam Angle(50%Imax):C0/180Left:17.5 Right:17.5

:C90/270Left:17.5 Right:17.5





(10%Imax) 132.448	—
(20%Imax) 264.895	—
(30%Imax) 397.343	—
(40%Imax) 529.791	—
(50%Imax) 662.238	—
(60%Imax) 794.686	—
(70%Imax) 927.134	—
(80%Imax) 1059.58	—
(90%Imax) 1192.03	—



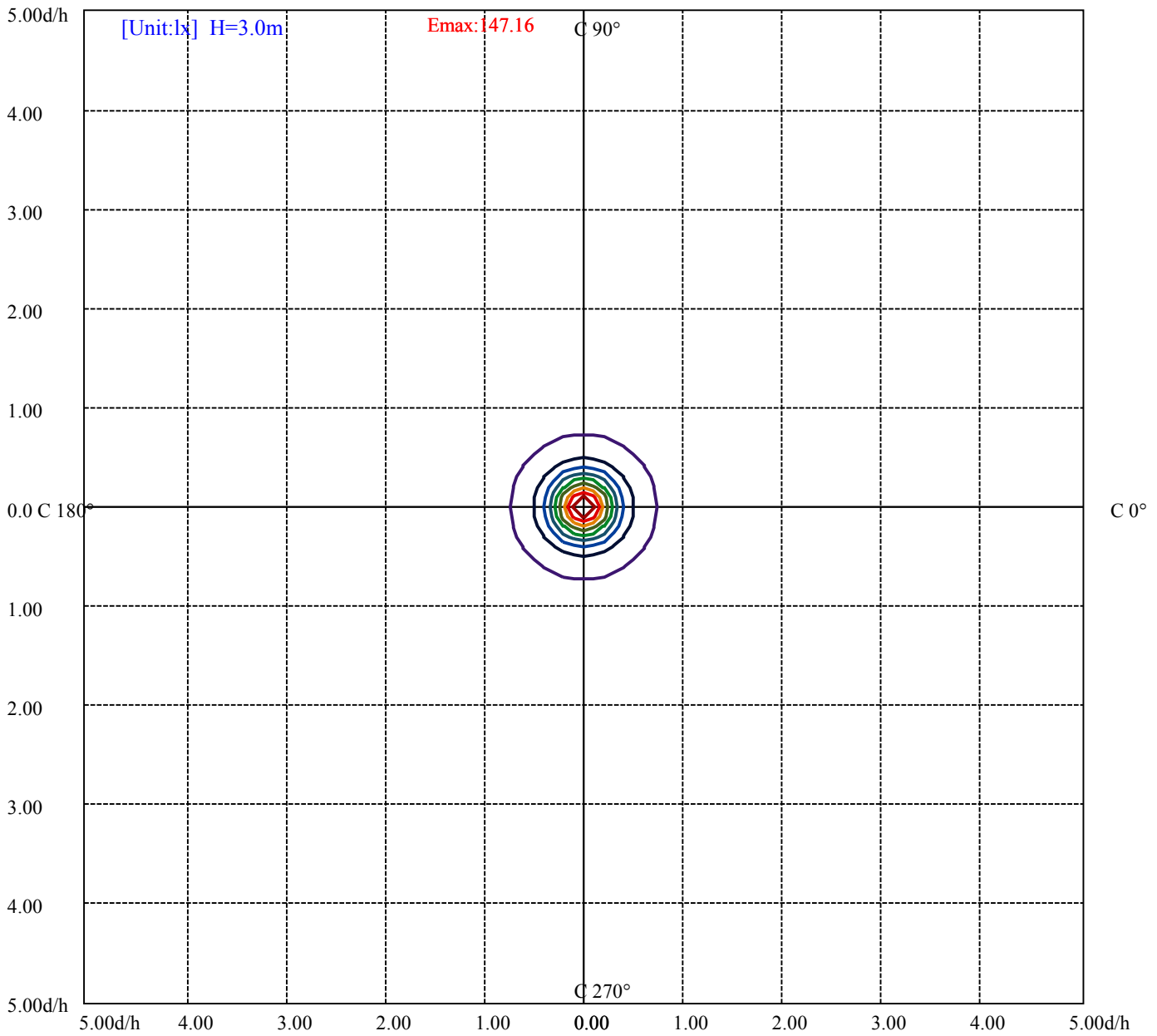
House

[Unit:cd]

Road

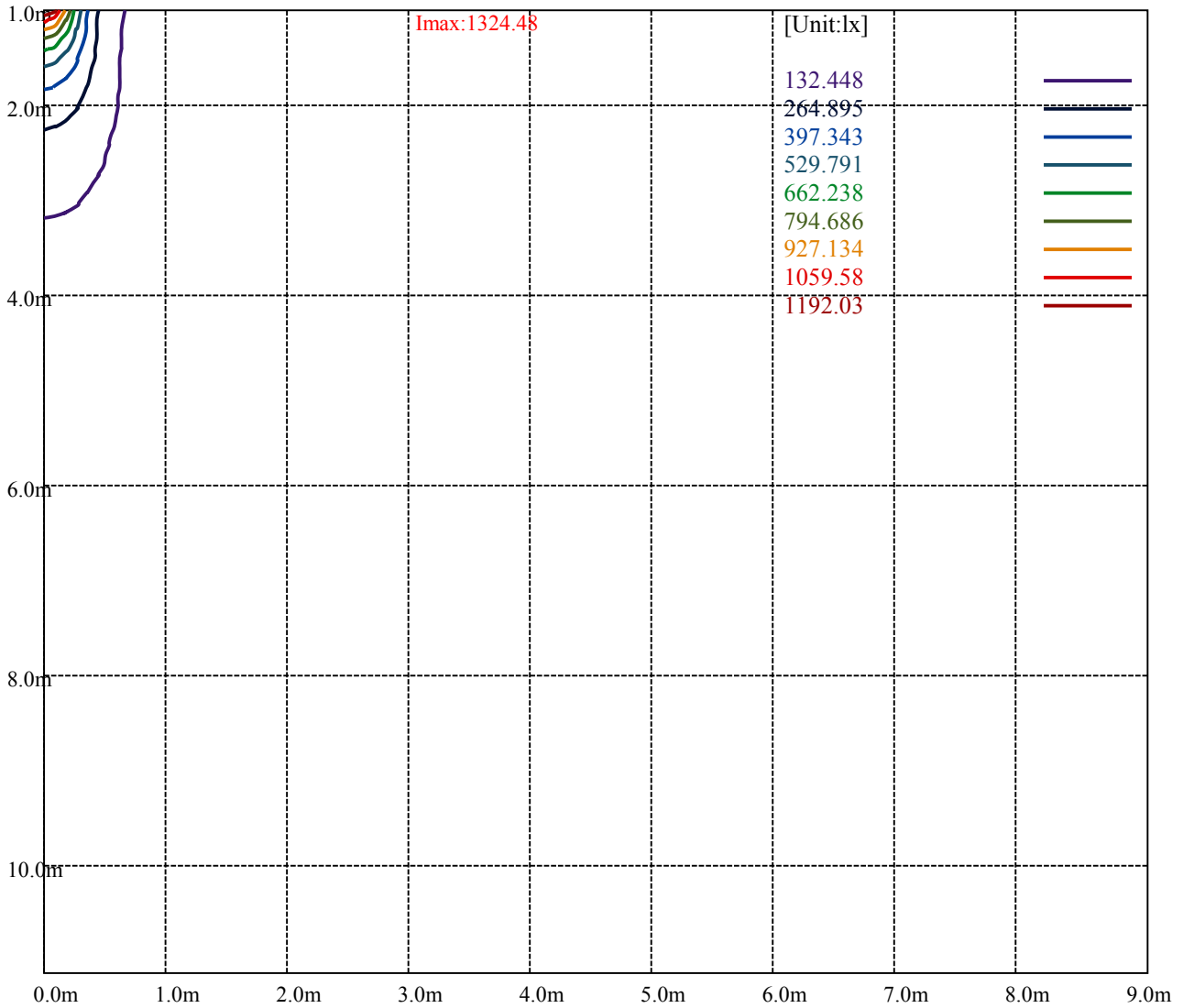
**Imax:1324.48**

(10%Imax) 132.448	—
(20%Imax) 264.895	—
(30%Imax) 397.343	—
(40%Imax) 529.791	—
(50%Imax) 662.238	—
(60%Imax) 794.686	—
(70%Imax) 927.134	—
(80%Imax) 1059.58	—
(90%Imax) 1192.03	—



(10%Emax) 14.71633	—
(20%Emax) 29.43278	—
(30%Emax) 44.14911	—
(40%Emax) 58.86555	—
(50%Emax) 73.58189	—
(60%Emax) 88.29833	—
(70%Emax) 103.0147	—
(80%Emax) 117.7311	—
(90%Emax) 132.4478	—





Luminance Table

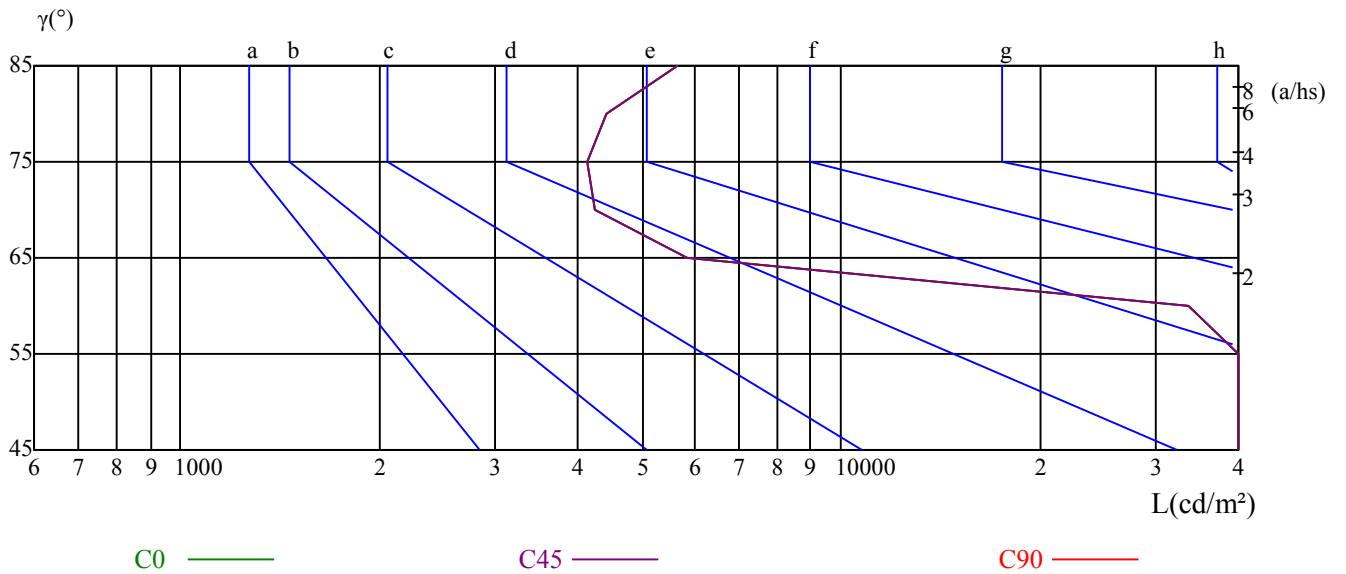
$\gamma$	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

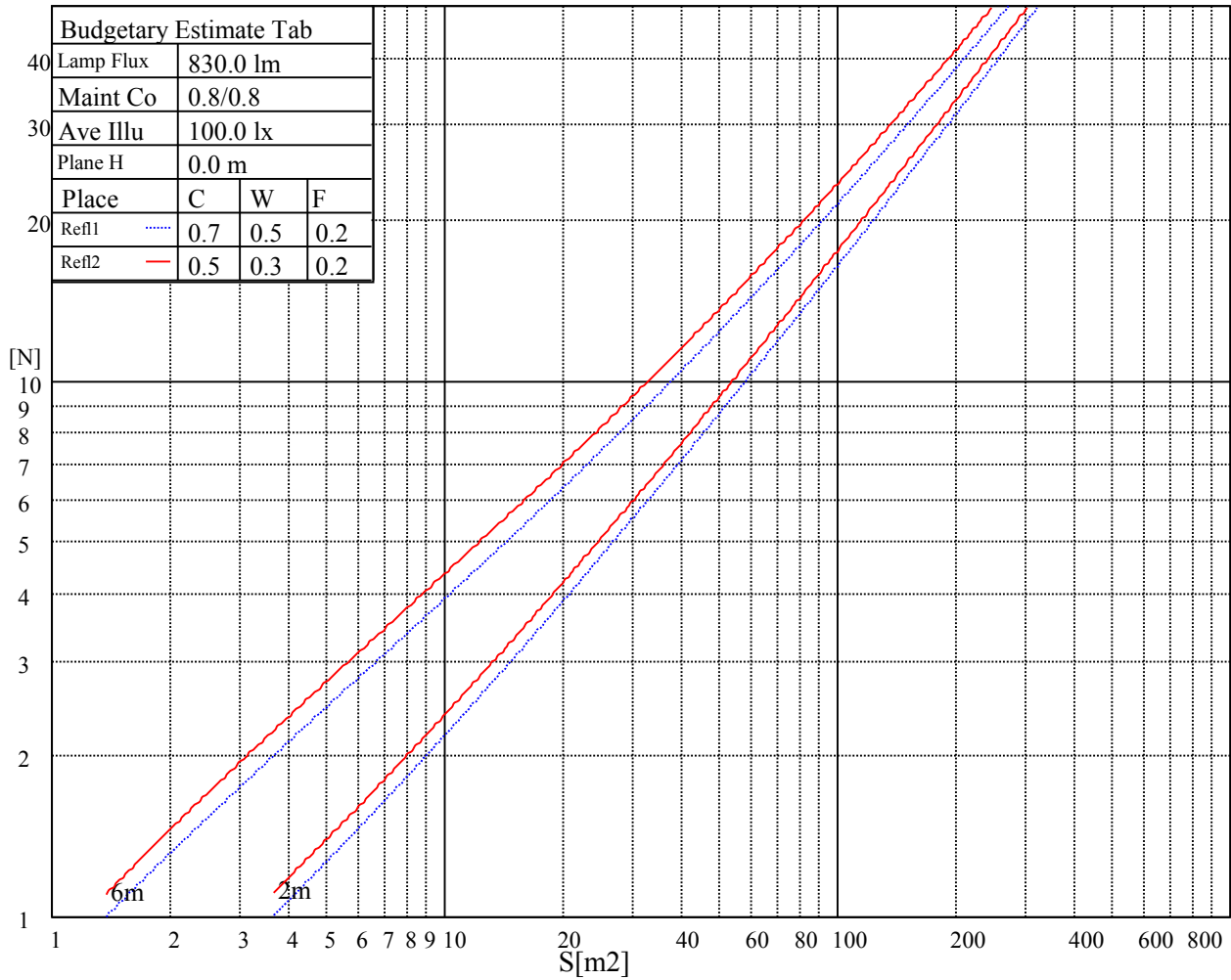
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5848	5848	5848	4131	4131	4131	5640	5640	5640

Glare Table

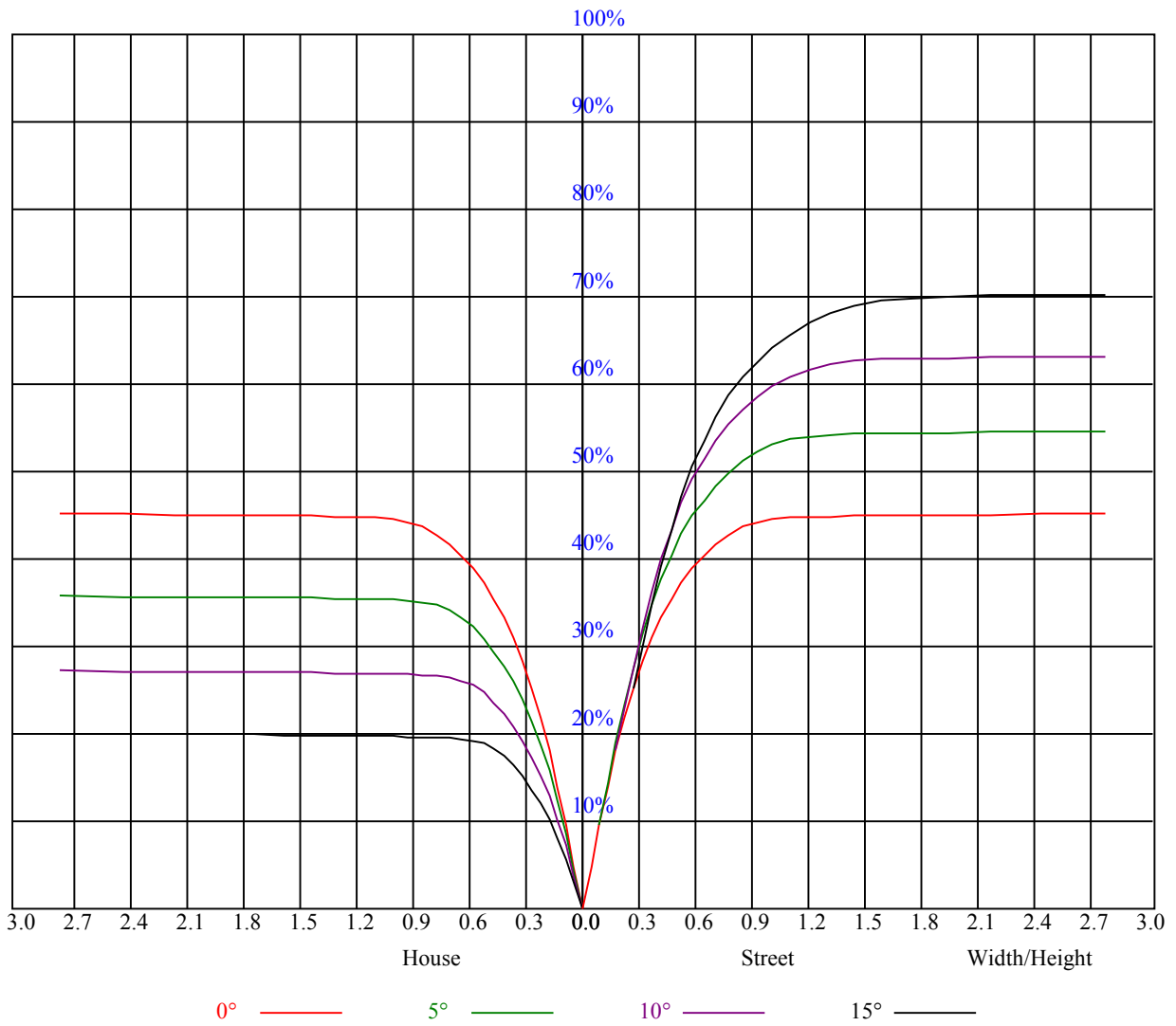
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

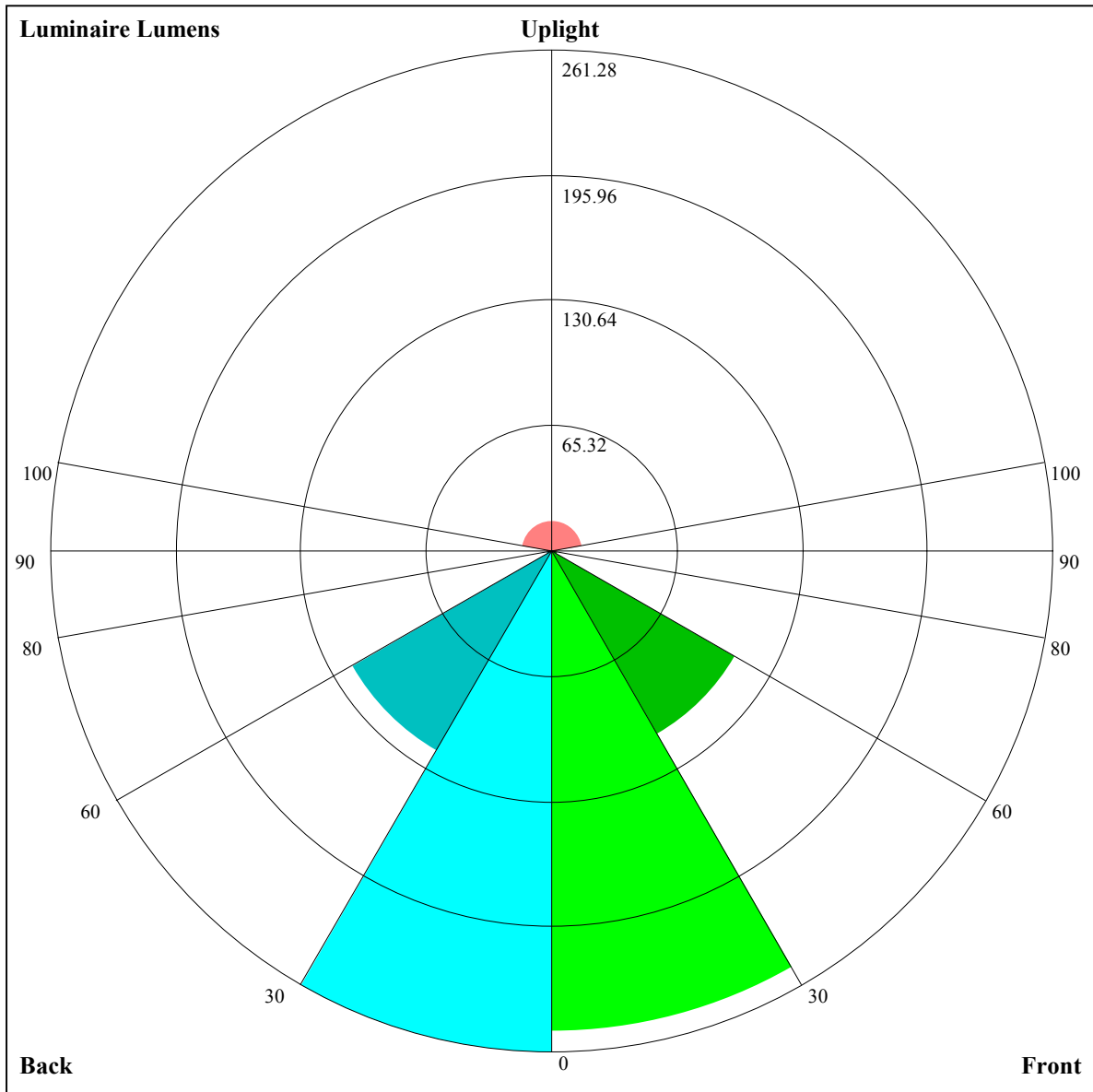
Luminance Limiting Curve





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	1.09	1.09	1.09	1.06	1.06	1.06	1.02	1.02	1.02	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	0.89	0.89	0.88	0.87	0.85
2	0.94	0.90	0.87	0.93	0.89	0.86	0.90	0.87	0.84	0.87	0.85	0.83	0.84	0.82	0.81	0.79
3	0.88	0.83	0.80	0.87	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.77	0.75	0.74
4	0.82	0.77	0.73	0.81	0.77	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.70	0.69
5	0.77	0.72	0.68	0.76	0.71	0.68	0.75	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.65
6	0.73	0.67	0.63	0.72	0.67	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.60
7	0.68	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.61	0.58	0.65	0.61	0.58	0.57
8	0.65	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.54
9	0.61	0.56	0.52	0.61	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.51
10	0.58	0.53	0.50	0.58	0.53	0.49	0.57	0.52	0.49	0.56	0.52	0.49	0.56	0.52	0.49	0.48





Luminaire Lumens:

FL=250.9,FM=110.52,FH=3.58,FVH=1.73

BL=261.28,BM=120.67,BH=3.63,BVH=1.74

UL=3.44,UH=16.36

BUG Rating:B1-U2-G0

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1320.75	1245.94	1022.63	747.56	542.25	378.00	299.25	257.29	201.66
45.0	1325.25	1255.50	1018.69	748.69	530.44	371.81	297.00	250.99	196.03
90.0	1325.81	1242.56	1014.58	730.35	514.29	365.01	287.89	247.95	198.11
135.0	1325.81	1288.69	1091.25	815.06	572.06	415.13	314.44	273.38	233.72
180.0	1321.31	1266.75	1060.26	786.26	571.33	401.23	305.16	263.87	224.33
225.0	1325.25	1278.00	1080.34	795.83	580.44	408.60	310.73	263.36	229.11
270.0	1325.81	1284.75	1116.00	809.44	578.25	408.38	315.00	284.63	229.16
315.0	1325.81	1235.81	983.53	734.29	521.78	361.46	293.68	252.90	185.79
360.0	1320.75	1245.94	1022.63	747.56	542.25	378.00	299.25	257.29	201.66
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	44.33	8.77	4.67	4.05	3.66	3.43	3.26	3.15	3.15
45.0	45.51	8.10	4.67	4.05	3.66	3.43	3.26	3.15	3.15
90.0	38.42	7.93	4.78	4.05	3.66	3.43	3.26	3.26	3.15
135.0	88.93	9.73	5.01	4.28	3.77	3.54	3.32	3.21	3.15
180.0	72.56	9.51	5.18	4.16	3.71	3.49	3.26	3.15	3.15
225.0	77.51	9.45	5.23	4.22	3.71	3.49	3.26	3.21	3.15
270.0	82.29	9.79	5.01	4.28	3.77	3.54	3.32	3.26	3.32
315.0	34.99	7.65	4.67	3.94	3.60	3.43	3.21	3.15	3.15
360.0	44.33	8.77	4.67	4.05	3.66	3.43	3.26	3.15	3.15
C/ $\gamma$ (°)	90.0								
0.0	3.15								
45.0	3.15								
90.0	3.15								
135.0	3.15								
180.0	3.15								
225.0	3.15								
270.0	3.15								
315.0	3.15								
360.0	3.15								