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## Nata

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Client:

LumCAT: CR01D07538AR

Luminaire: 92.70.065.00

Report No:

Voltage(V): 32.9700

Test No: GC2019072207

Current(A): 0.2970

LampCAT: LUMINUS CXM-14

Power (W): 9.7900

Lamp flux(lm): 1570.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 0

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## Photometric Results

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Lumens(lm): 1460.11, Efficiency(%): 93.00% , Luminous Efficacy(lm/W): 149.14

Central intensity(cd): 3088.828, Maximum intensity(cd): 3088.828

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

Beam Angle(50%Imax): [C0/180]Total=37.2

[C90/270]Total=37.2

Field angle(10%Imax): [C0/180]Total=63.6

[C90/270]Total=63.6

Maximum s/h(1/2): C0\_180=0.61 C90\_270=0.61

Maximum s/h(1/4): C0\_180=0.61 C90\_270=0.61

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 95.255%

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Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2019/7/22  
Humidity(%): 65.0%

Operator: NT07  
Distance(m): 7.50

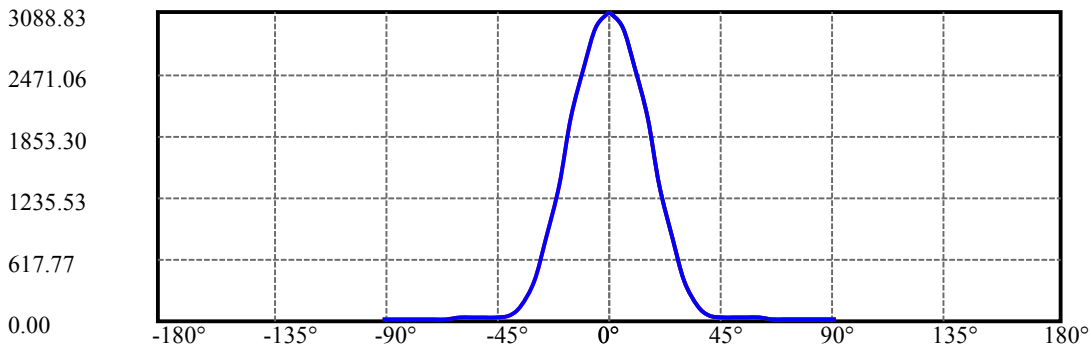
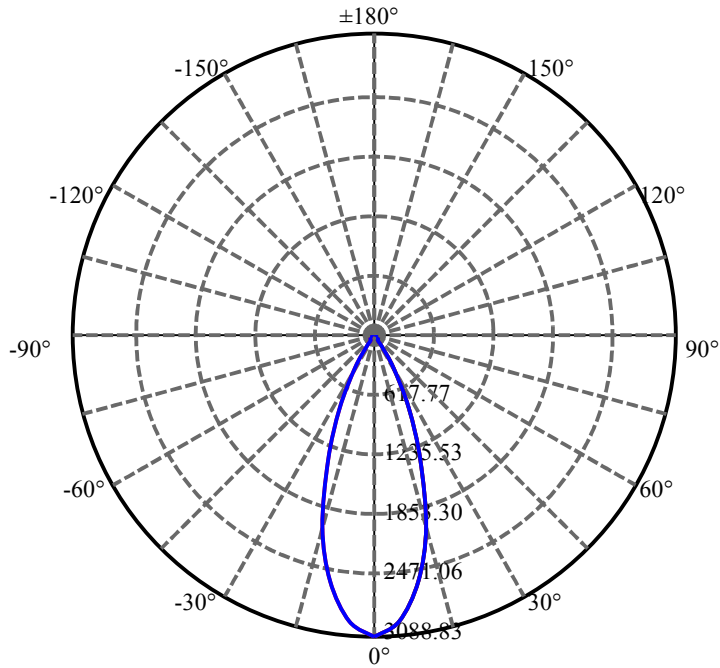
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3088.828	0.000	0	.000%	.000%
5.0	2933.156	71.991	71.991	4.585%	4.931%
10.0	2553.117	196.261	268.252	12.501%	18.372%
15.0	2032.664	272.025	540.278	17.326%	37.003%
20.0	1363.704	279.908	820.186	17.829%	56.173%
25.0	819.823	229.012	1049.198	14.587%	71.858%
30.0	394.376	153.658	1202.856	9.787%	82.381%
35.0	152.480	80.528	1283.384	5.129%	87.897%
40.0	65.805	36.419	1319.803	2.320%	90.391%
45.0	47.363	20.954	1340.757	1.335%	91.826%
50.0	41.674	17.991	1358.748	1.146%	93.058%
55.0	36.239	16.941	1375.689	1.079%	94.218%
60.0	29.271	15.142	1390.832	.964%	95.255%
65.0	27.155	13.717	1404.549	.874%	96.195%
70.0	25.214	13.260	1417.809	.845%	97.103%
75.0	19.090	11.580	1429.389	.738%	97.896%
80.0	16.910	9.633	1439.022	.614%	98.556%
85.0	18.555	9.637	1448.659	.614%	99.216%
90.0	23.259	11.449	1460.108	.729%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1202.86	76.62%	82.38%
0-40	1319.80	84.06%	90.39%
0-60	1390.83	88.59%	95.26%
0-90	1448.66	92.27%	99.22%
0-120	1448.66	92.27%	99.22%
0-180	1460.11	93.00%	100.00%
60-90	72.97	4.65%	5.00%
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%
0-28.87	1168.09	74.40%	80.00%

ZONAL LUMEN SUMMARY

0-10	268.25
10-20	551.93
20-30	382.67
30-40	116.95
40-50	38.95
50-60	32.08
60-70	26.98
70-80	21.21
80-90	9.64
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: —————

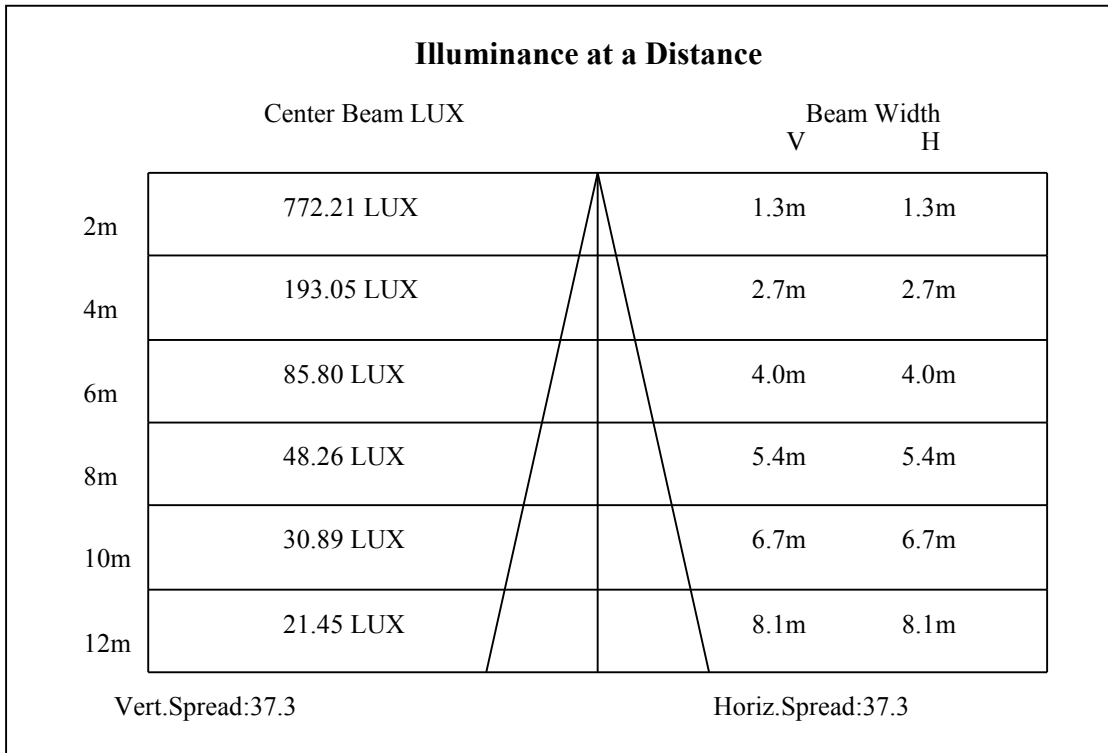
C90/C270: —————

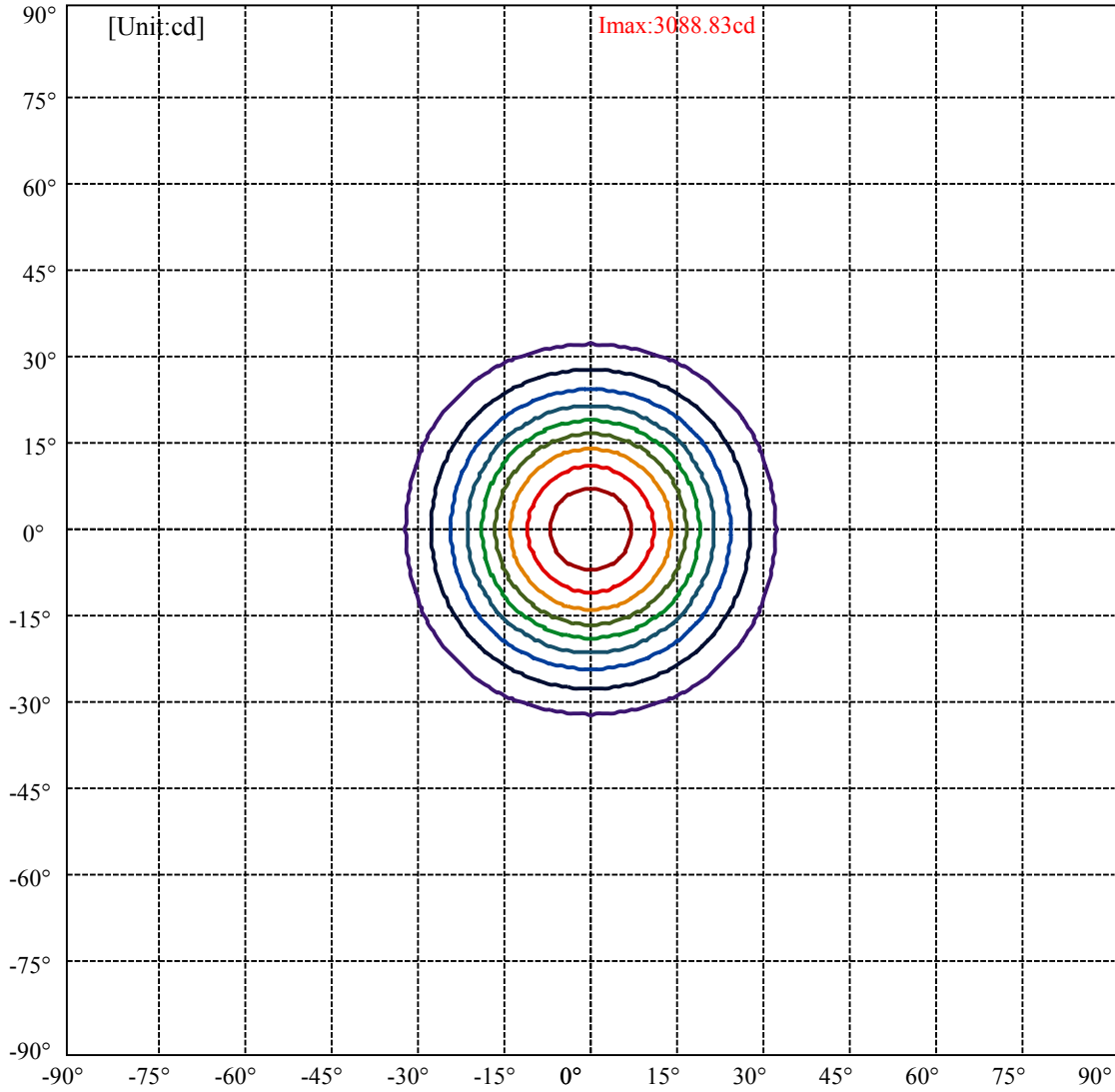
Field angle(10%Imax):C0/180Left:31.8 Right:31.8

:C90/270Left:31.8 Right:31.8

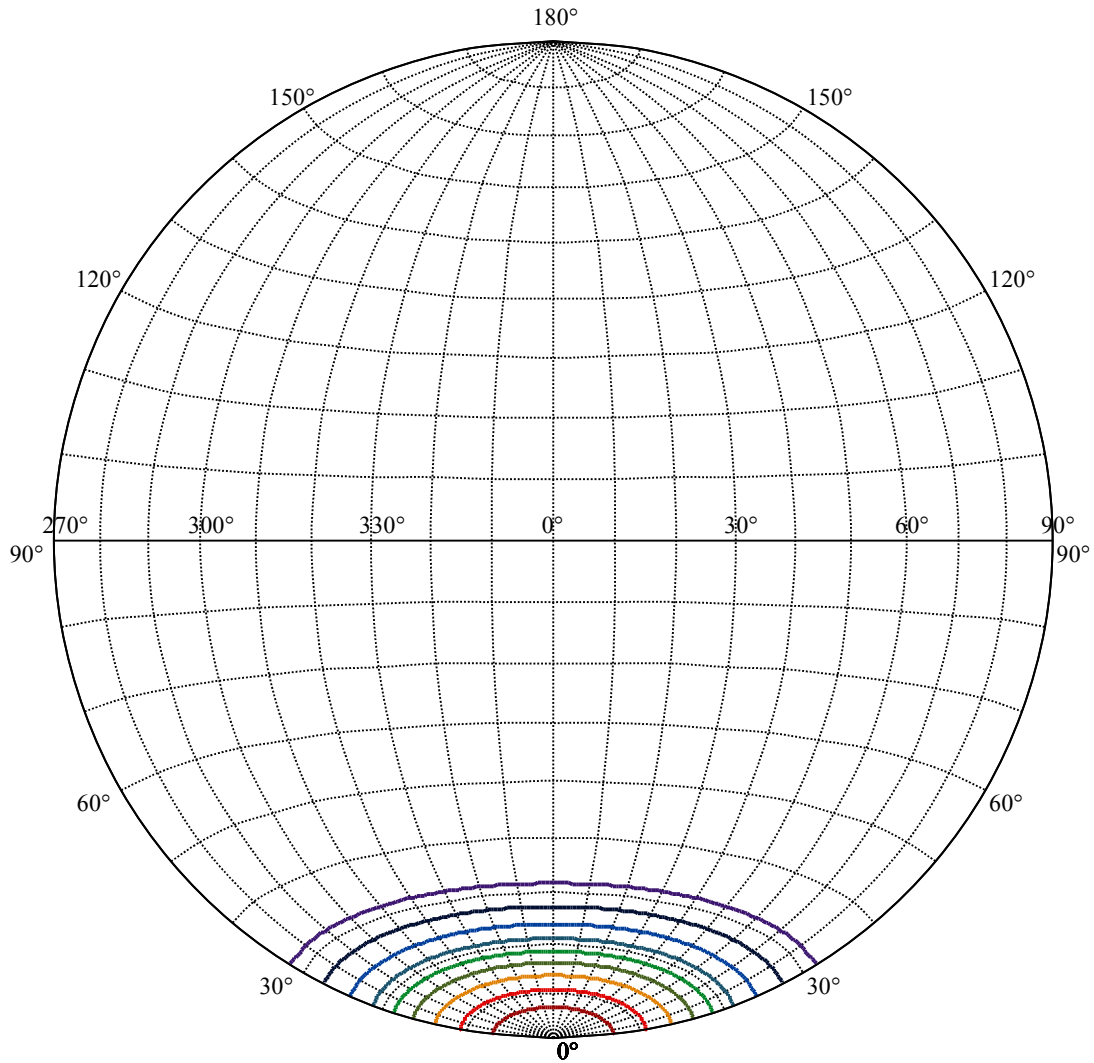
Beam Angle(50%Imax):C0/180Left:18.6 Right:18.6

:C90/270Left:18.6 Right:18.6





(10%Imax) 308.883	—
(20%Imax) 617.766	—
(30%Imax) 926.648	—
(40%Imax) 1235.53	—
(50%Imax) 1544.41	—
(60%Imax) 1853.3	—
(70%Imax) 2162.18	—
(80%Imax) 2471.06	—
(90%Imax) 2779.95	—



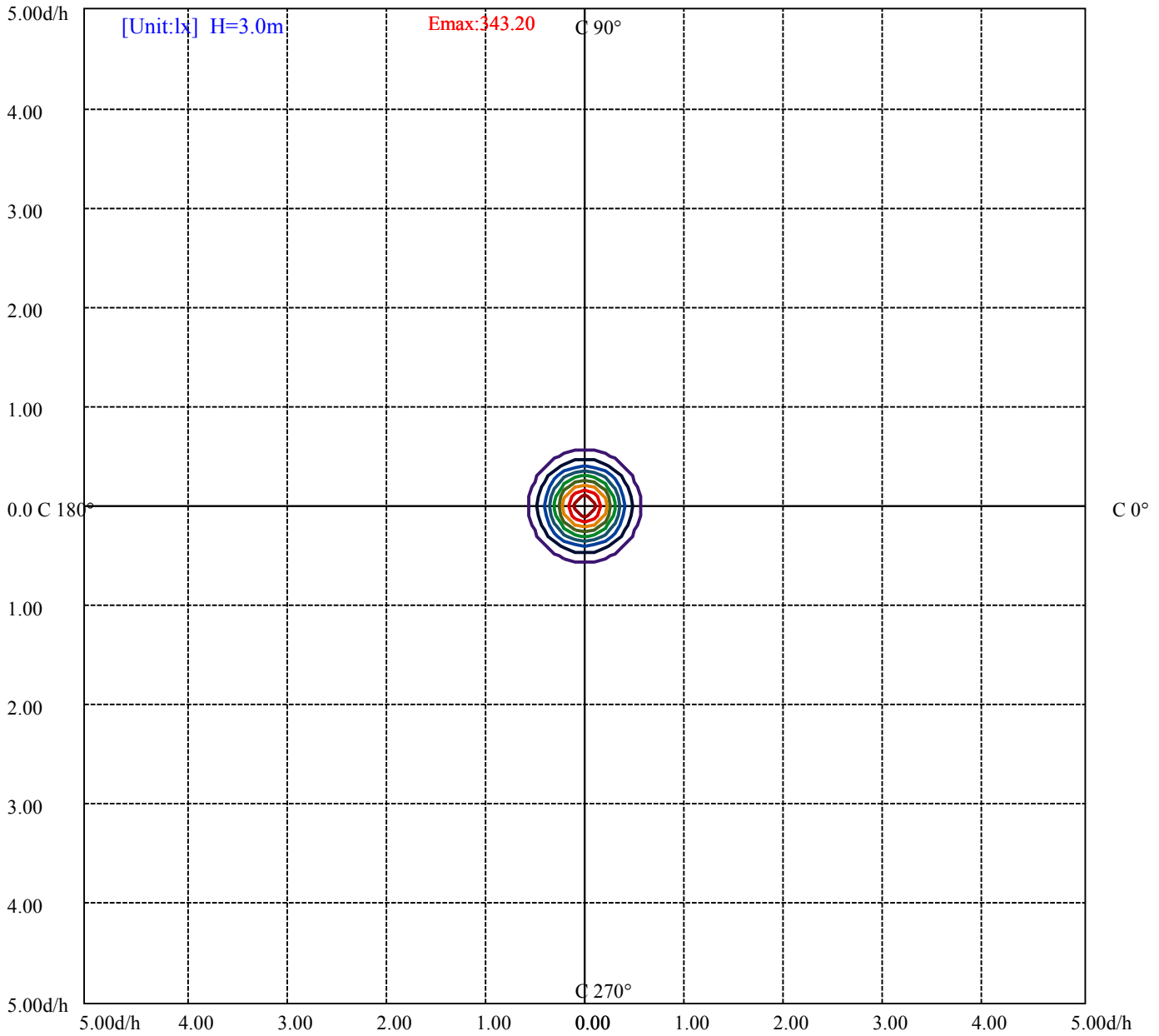
House

[Unit:cd]

Road

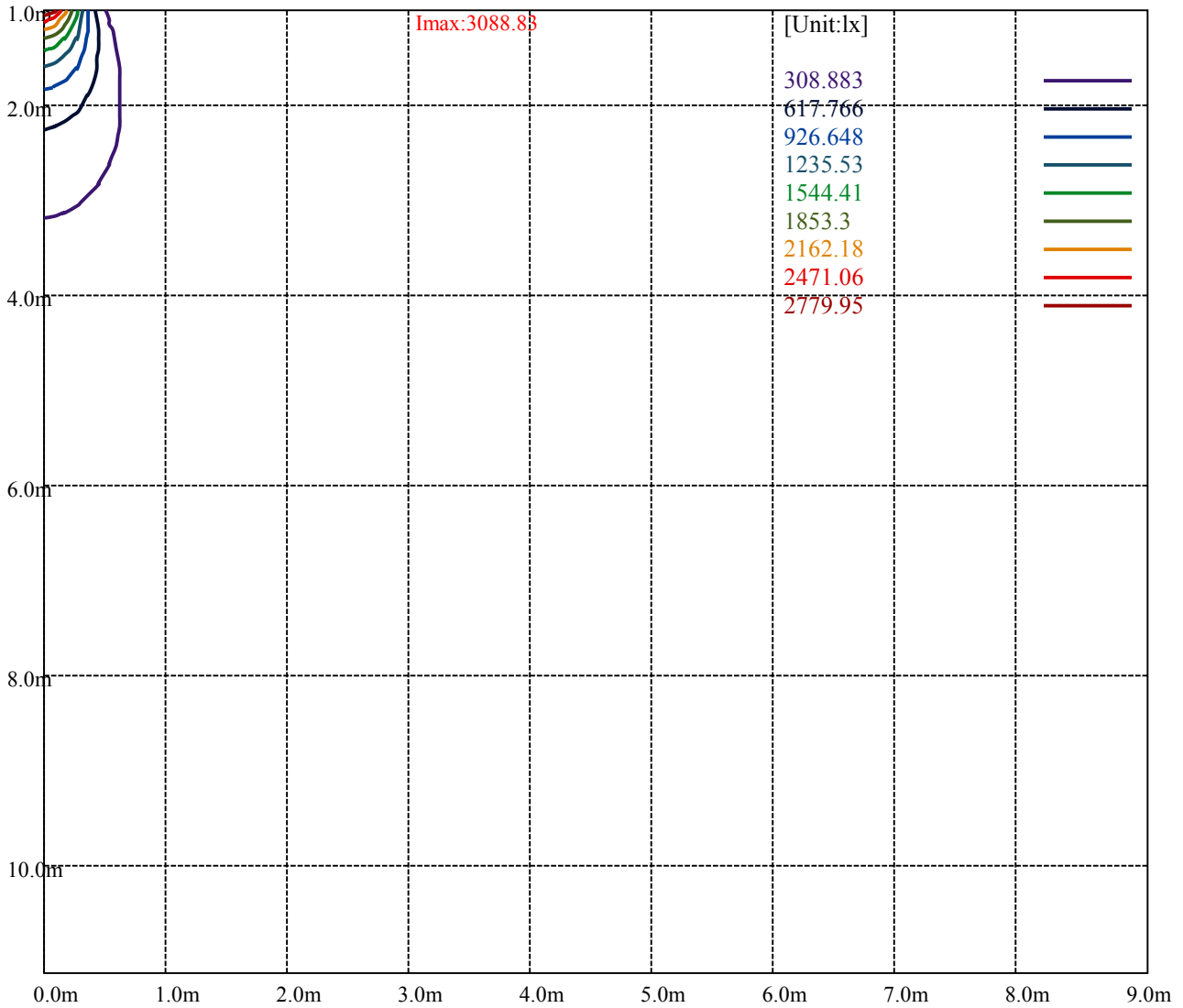
**Imax:3088.83**

(10%Imax) 308.883	—
(20%Imax) 617.766	—
(30%Imax) 926.648	—
(40%Imax) 1235.53	—
(50%Imax) 1544.41	—
(60%Imax) 1853.3	—
(70%Imax) 2162.18	—
(80%Imax) 2471.06	—
(90%Imax) 2779.95	—



(10%Emax) 34.32022	—
(20%Emax) 68.64056	—
(30%Emax) 102.9608	—
(40%Emax) 137.2811	—
(50%Emax) 171.6011	—
(60%Emax) 205.9211	—
(70%Emax) 240.2422	—
(80%Emax) 274.5622	—
(90%Emax) 308.8822	—





Luminance Table

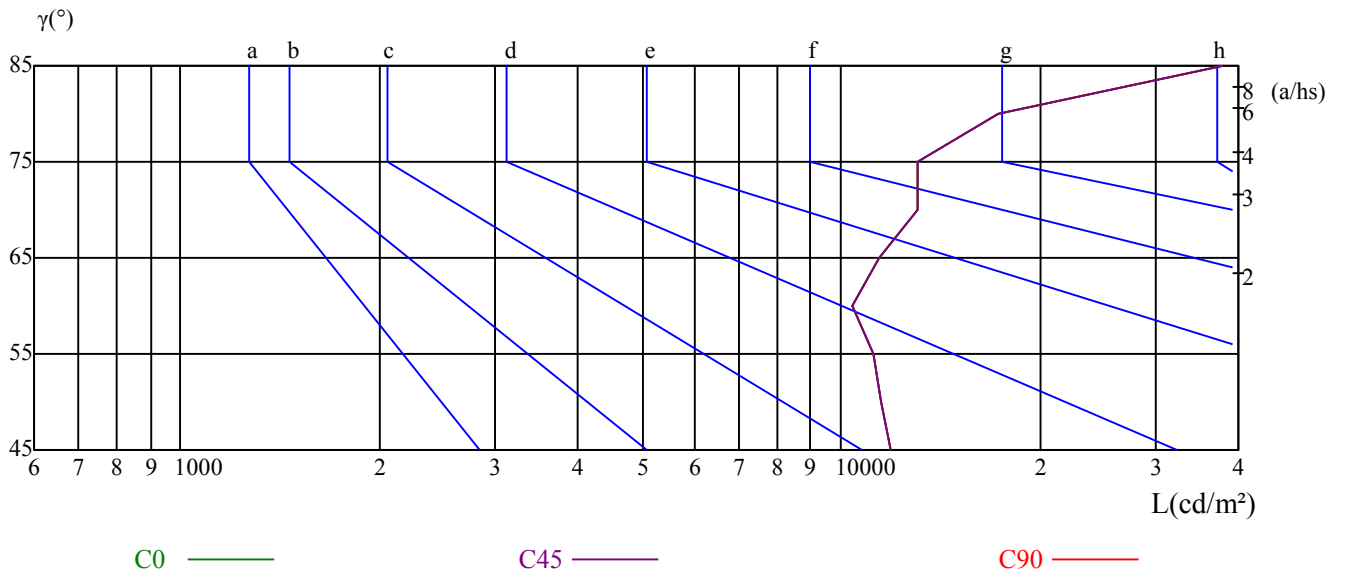
$\gamma$	45	50	55	60	65	70	75	80	85
C0	11908	11526	11232	10408	11423	13106	13112	17312	37849
C45	11908	11526	11232	10408	11423	13106	13112	17312	37849
C90	11908	11526	11232	10408	11423	13106	13112	17312	37849

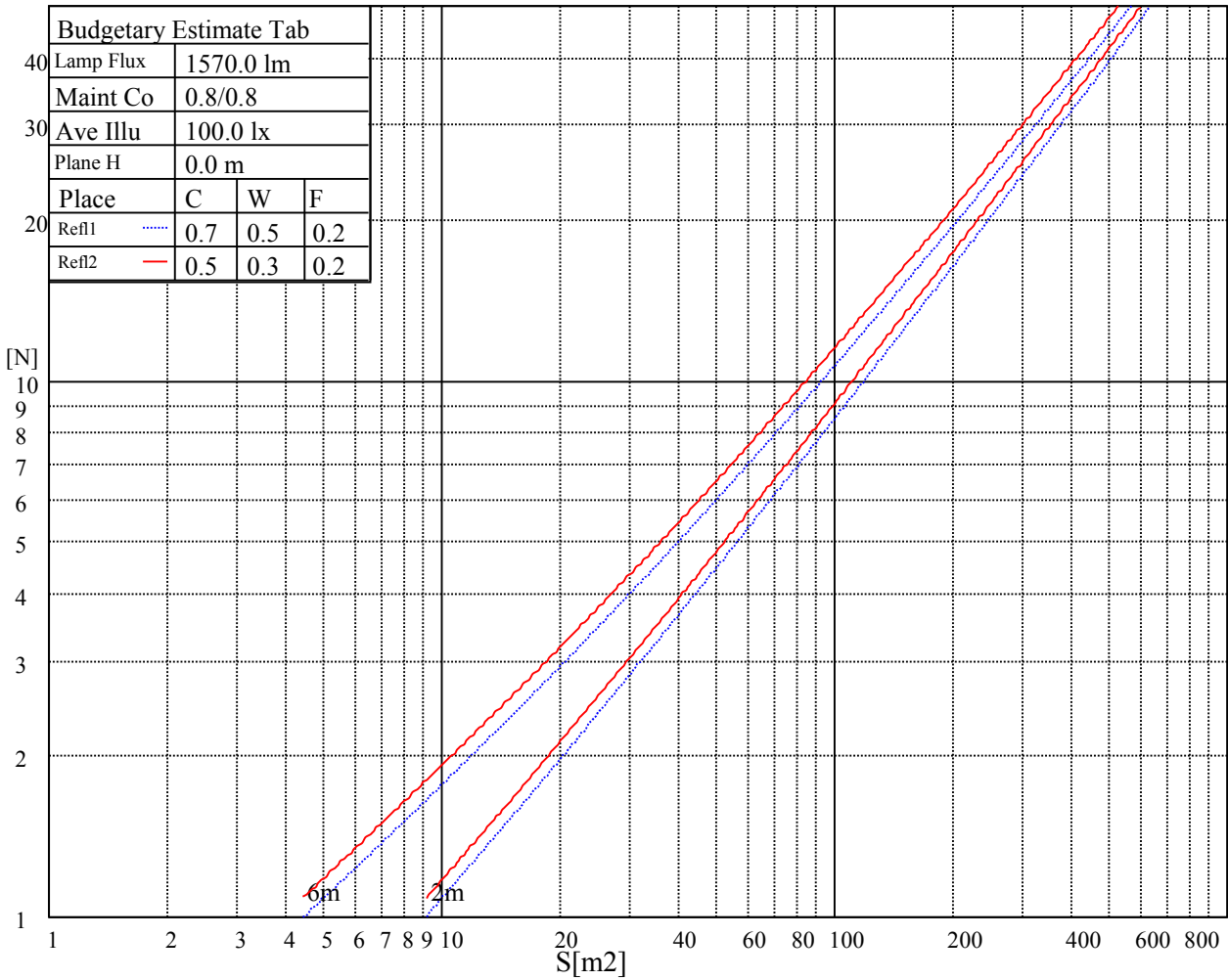
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11423	11423	11423	13112	13112	13112	37849	37849	37849

Glare Table

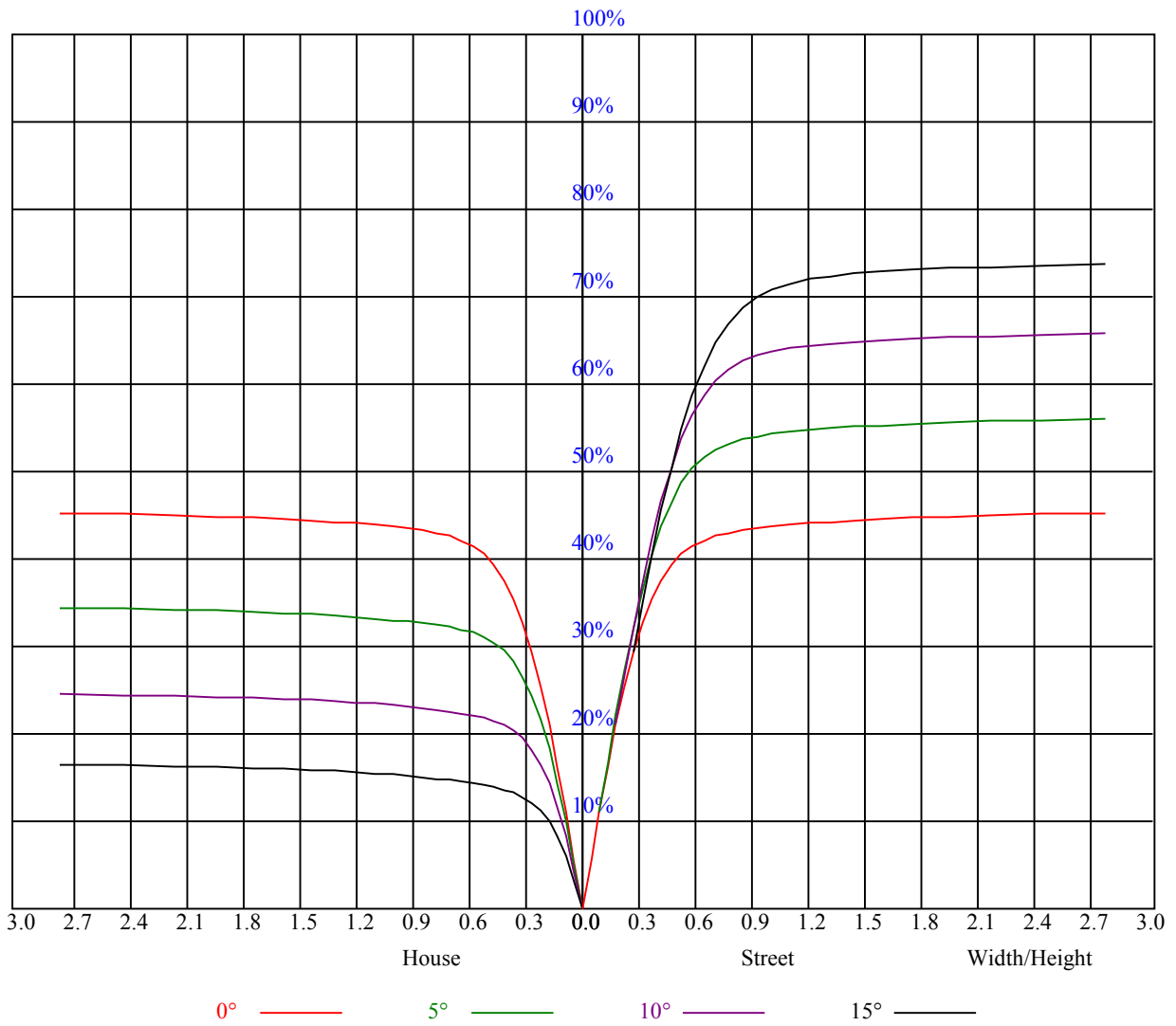
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

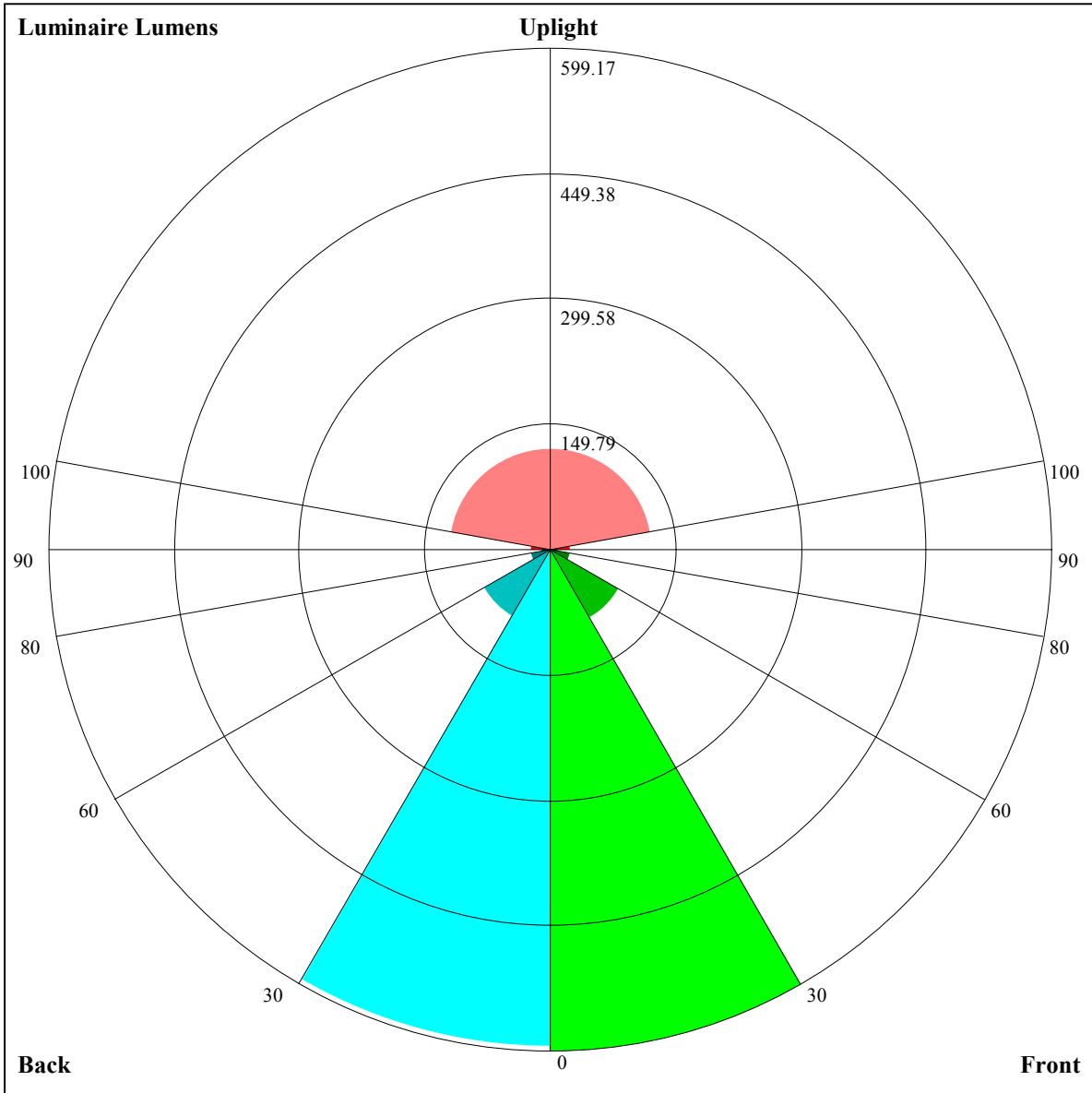
Luminance Limiting Curve





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	1.11	1.11	1.11	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.03	1.00	0.98	1.01	0.98	0.96	0.97	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.82	0.81
3	0.90	0.86	0.82	0.89	0.85	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.76
4	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.73	0.72
5	0.81	0.76	0.72	0.80	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.70	0.68
6	0.77	0.71	0.68	0.76	0.71	0.68	0.75	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.65
7	0.73	0.68	0.64	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.62
8	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.59
9	0.67	0.62	0.58	0.66	0.62	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.57
10	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.62	0.58	0.55	0.54





Luminaire Lumens:

FL=599.17,FM=94.38,FH=24.19,FVH=10.56

BL=593.48,BM=91.31,BH=23.84,BVH=10.59

UL=25.38,UH=120.77

BUG Rating:B2-U3-G1

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	3088.13	2915.44	2556.00	2077.88	1487.25	847.13	421.31	154.91	63.79
45.0	3093.19	2963.81	2629.69	2125.13	1542.38	943.88	469.69	218.59	73.01
90.0	3094.88	2934.56	2543.63	2019.94	1410.75	783.62	380.42	137.25	62.94
135.0	3079.13	2992.50	2630.81	2108.25	1545.19	903.38	434.81	165.99	68.23
180.0	3088.13	2924.44	2533.50	2003.06	1281.38	794.76	379.24	142.37	66.99
225.0	3093.19	2896.88	2508.19	1976.06	1100.59	752.06	351.79	129.77	60.98
270.0	3094.88	2961.56	2567.25	2037.94	1450.69	811.13	385.88	146.81	70.26
315.0	3079.13	2876.06	2455.88	1913.06	1091.42	722.64	331.88	124.14	60.24
360.0	3088.13	2915.44	2556.00	2077.88	1487.25	847.13	421.31	154.91	63.79
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	46.91	42.02	37.58	30.43	27.96	26.89	19.69	17.10	17.83
45.0	50.06	42.81	37.52	30.66	26.94	25.93	19.58	16.37	17.89
90.0	45.90	40.28	34.31	27.90	25.88	24.08	18.23	16.54	17.89
135.0	45.73	40.84	36.17	29.14	25.26	24.64	18.51	15.86	18.06
180.0	46.13	41.12	36.73	29.70	26.83	25.20	19.80	16.99	18.68
225.0	47.08	41.57	36.23	29.42	28.58	25.14	18.62	17.04	19.41
270.0	50.51	43.14	36.73	29.19	26.78	25.26	19.97	18.34	20.03
315.0	46.58	41.63	34.65	27.73	29.03	24.58	18.34	17.04	18.68
360.0	46.91	42.02	37.58	30.43	27.96	26.89	19.69	17.10	17.83
C/γ(°)	90.0								
0.0	24.47								
45.0	21.32								
90.0	20.64								
135.0	20.14								
180.0	20.76								
225.0	28.18								
270.0	25.59								
315.0	24.98								
360.0	24.47								