
Client:

LumCAT: 1406-N

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019122007

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 823.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 34.9300

Current(A): 0.1970

Power (W): 6.8800

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 721.75, Efficiency(%): 87.70% , Luminous Efficacy(lm/W): 104.91

Central intensity(cd): 1039.894, Maximum intensity(cd): 1039.894

Angle of maximum intensity: C=0.0 γ =0.0

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

[C90/270]Total=37.2

Field angle(10%Imax): [C0/180]Total=89.4

[C90/270]Total=89.4

Maximum s/h(1/2): C0_180=0.60 C90_270=0.60

Maximum s/h(1/4): C0_180=0.65 C90_270=0.65

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.70%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.664%

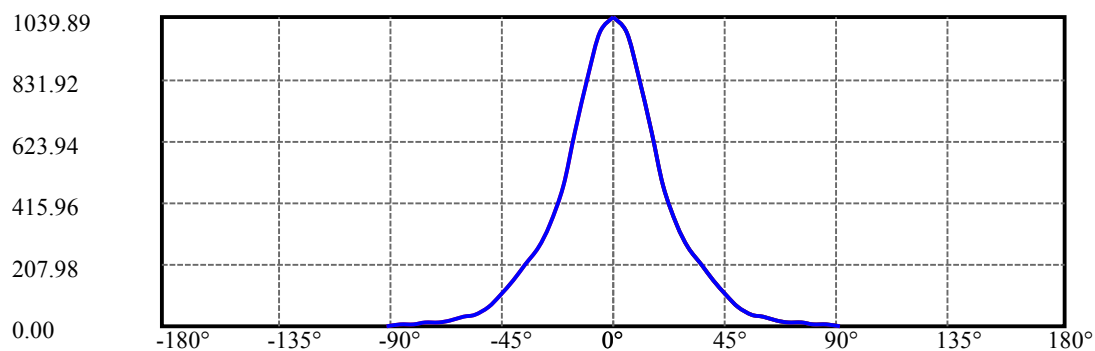
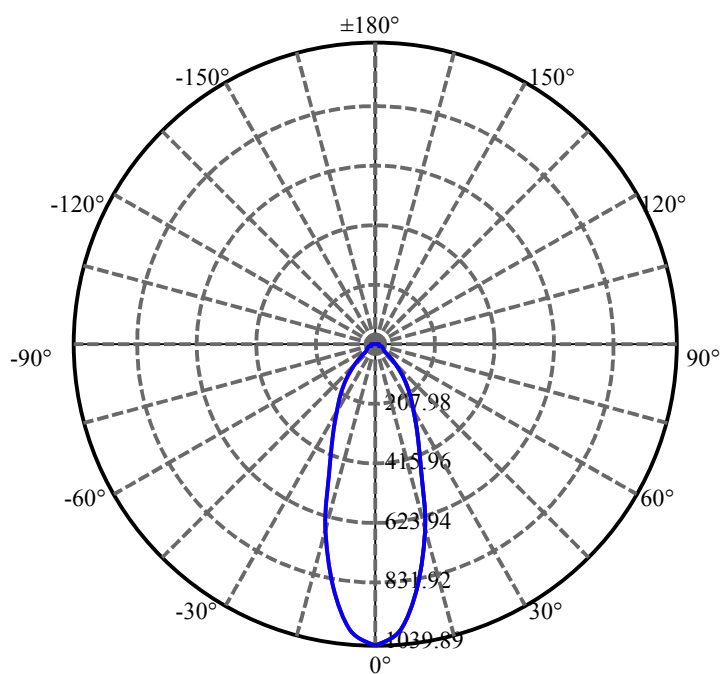
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1039.894	0.000	0	.000%	.000%
5.0	991.188	24.281	24.281	2.950%	3.364%
10.0	848.271	65.803	90.084	7.996%	12.481%
15.0	653.112	89.061	179.145	10.822%	24.821%
20.0	468.738	92.456	271.601	11.234%	37.631%
25.0	341.670	84.997	356.598	10.328%	49.407%
30.0	265.627	76.854	433.452	9.338%	60.056%
35.0	206.578	69.535	502.988	8.449%	69.690%
40.0	153.675	60.106	563.093	7.303%	78.018%
45.0	100.526	47.067	610.16	5.719%	84.539%
50.0	64.624	33.371	643.531	4.055%	89.163%
55.0	41.948	23.172	666.704	2.816%	92.373%
60.0	29.573	16.532	683.236	2.009%	94.664%
65.0	21.312	12.370	695.606	1.503%	96.378%
70.0	15.518	9.326	704.932	1.133%	97.670%
75.0	10.716	6.857	711.789	.833%	98.620%
80.0	7.088	4.764	716.552	.579%	99.280%
85.0	4.395	3.120	719.672	.379%	99.712%
90.0	3.192	2.077	721.75	.252%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	433.45	52.67%	60.06%
0-40	563.09	68.42%	78.02%
0-60	683.24	83.02%	94.66%
0-90	719.67	87.44%	99.71%
0-120	719.67	87.44%	99.71%
0-180	721.75	87.70%	100.00%
60-90	52.97	6.44%	7.34%
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%
0-41.52	577.40	70.16%	80.00%

ZONAL LUMEN SUMMARY

0-10	90.08
10-20	181.52
20-30	161.85
30-40	129.64
40-50	80.44
50-60	39.70
60-70	21.70
70-80	11.62
80-90	3.12
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

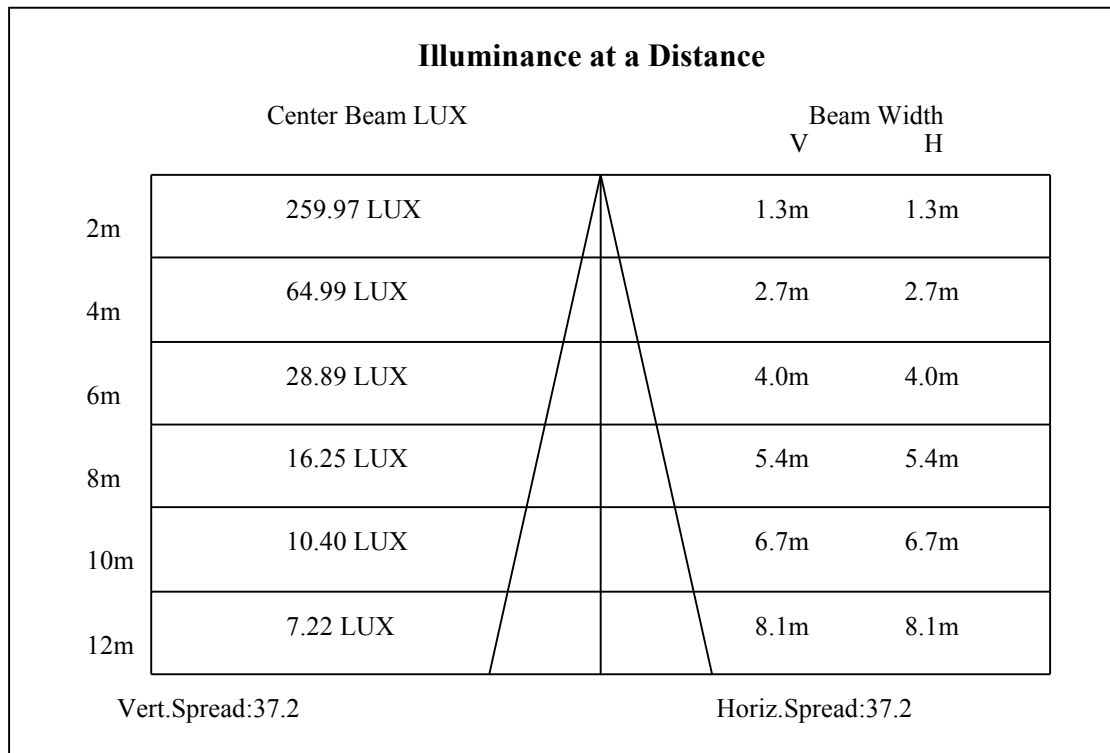
C0(Max): —————C0/C180: —————C90/C270: —————

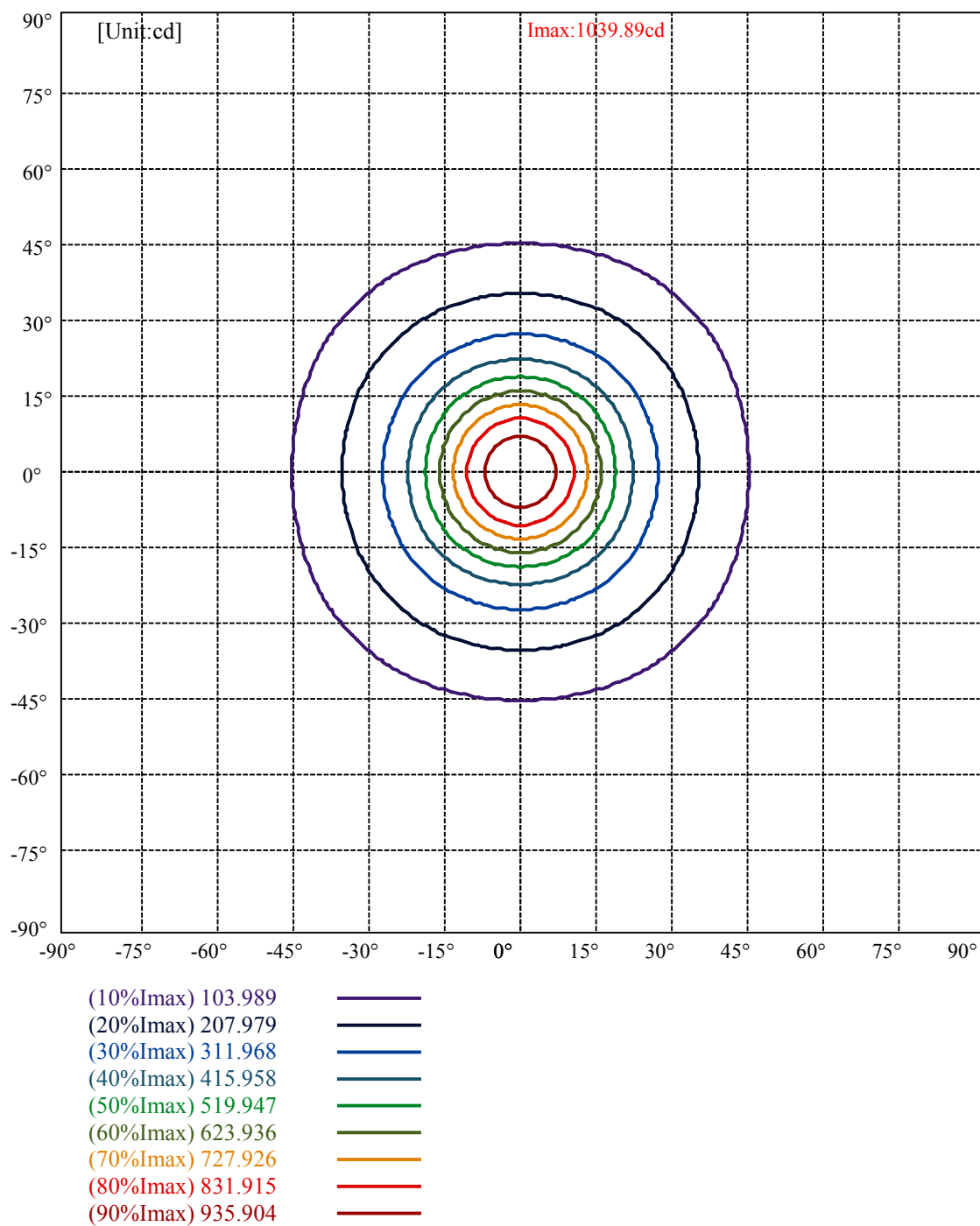
Field angle(10%Imax):C0/180Left:44.7 Right:44.7

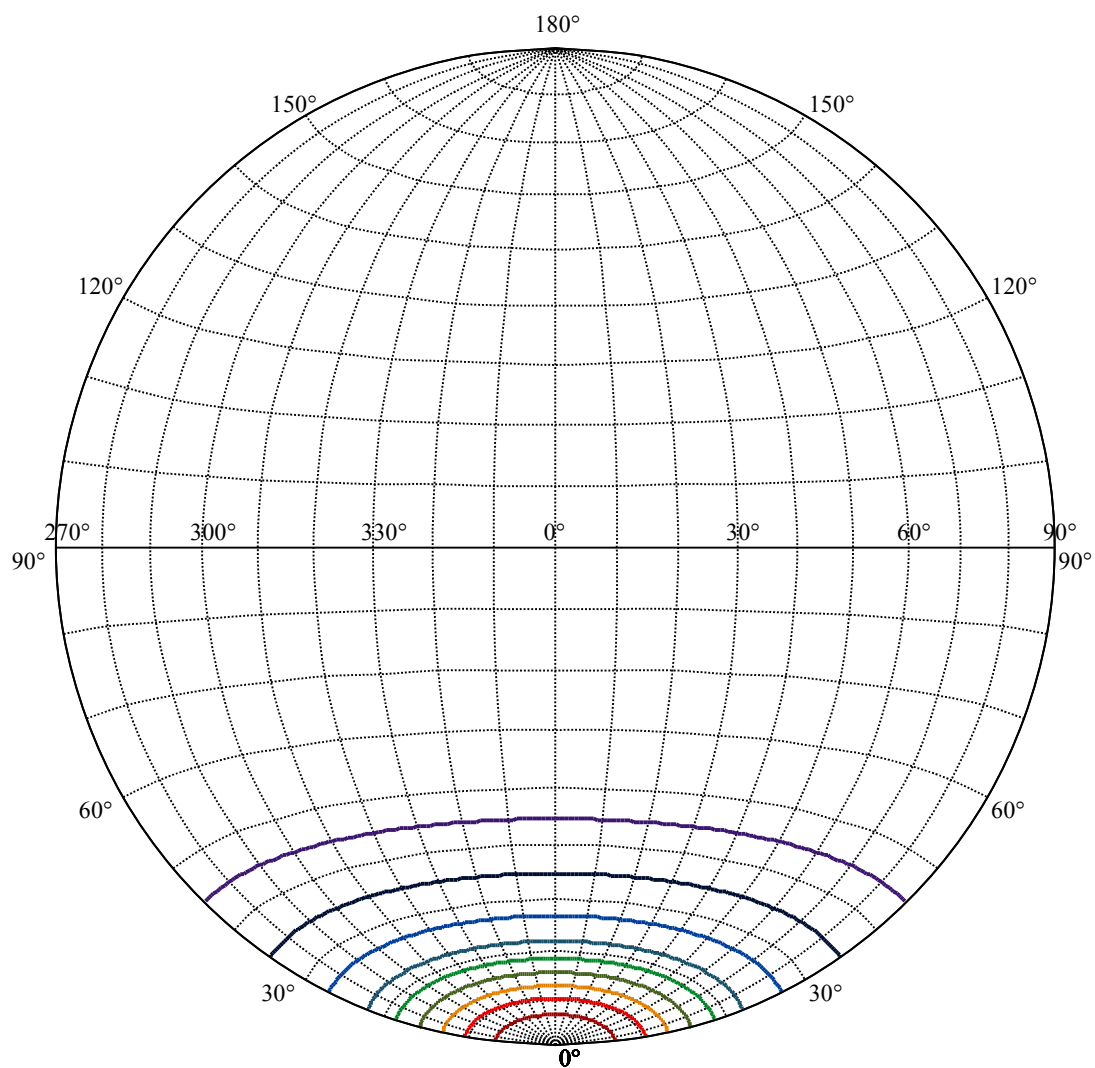
:C90/270Left:44.7 Right:44.7

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

:C90/270Left:18.6 Right:18.6





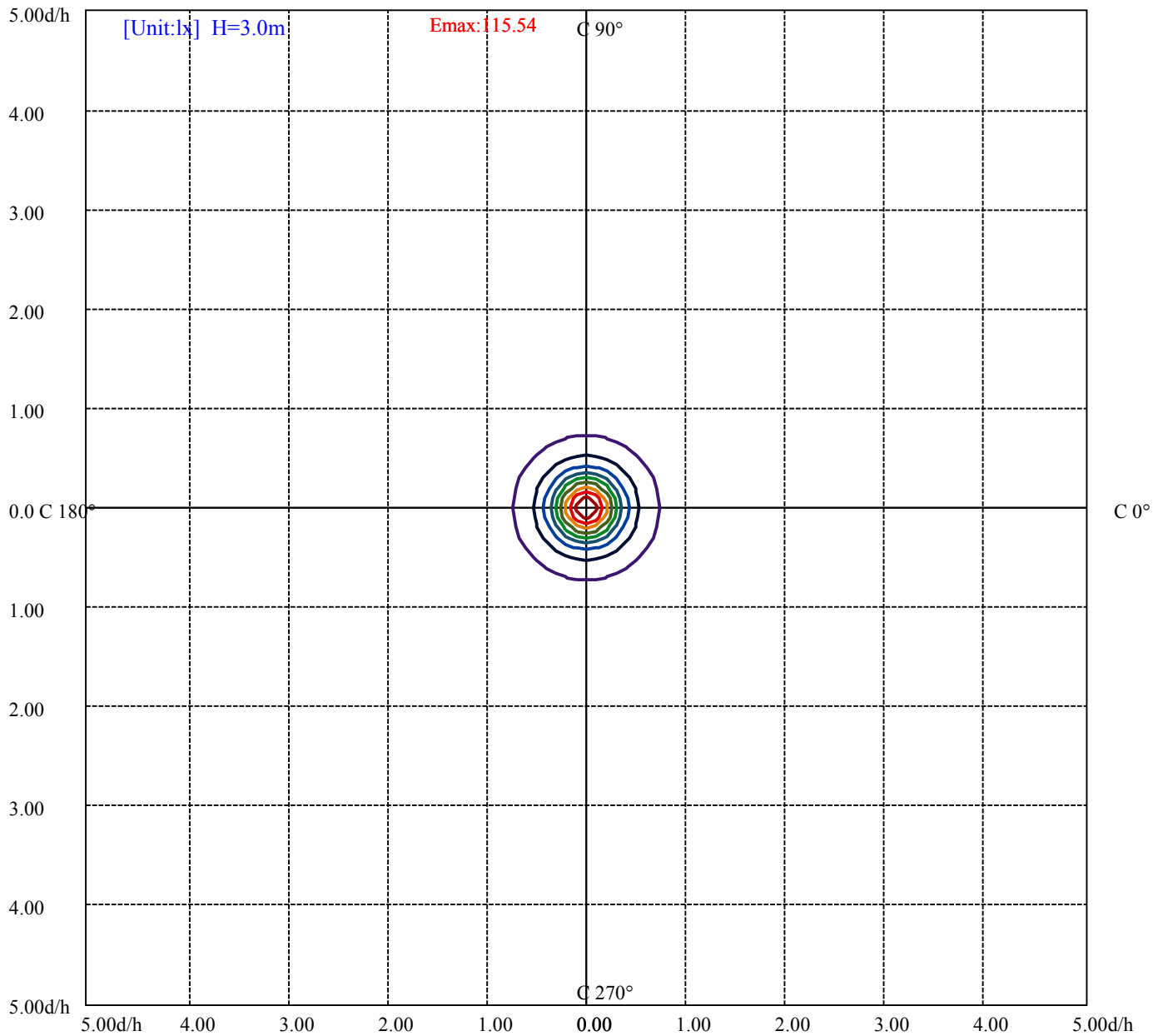


House

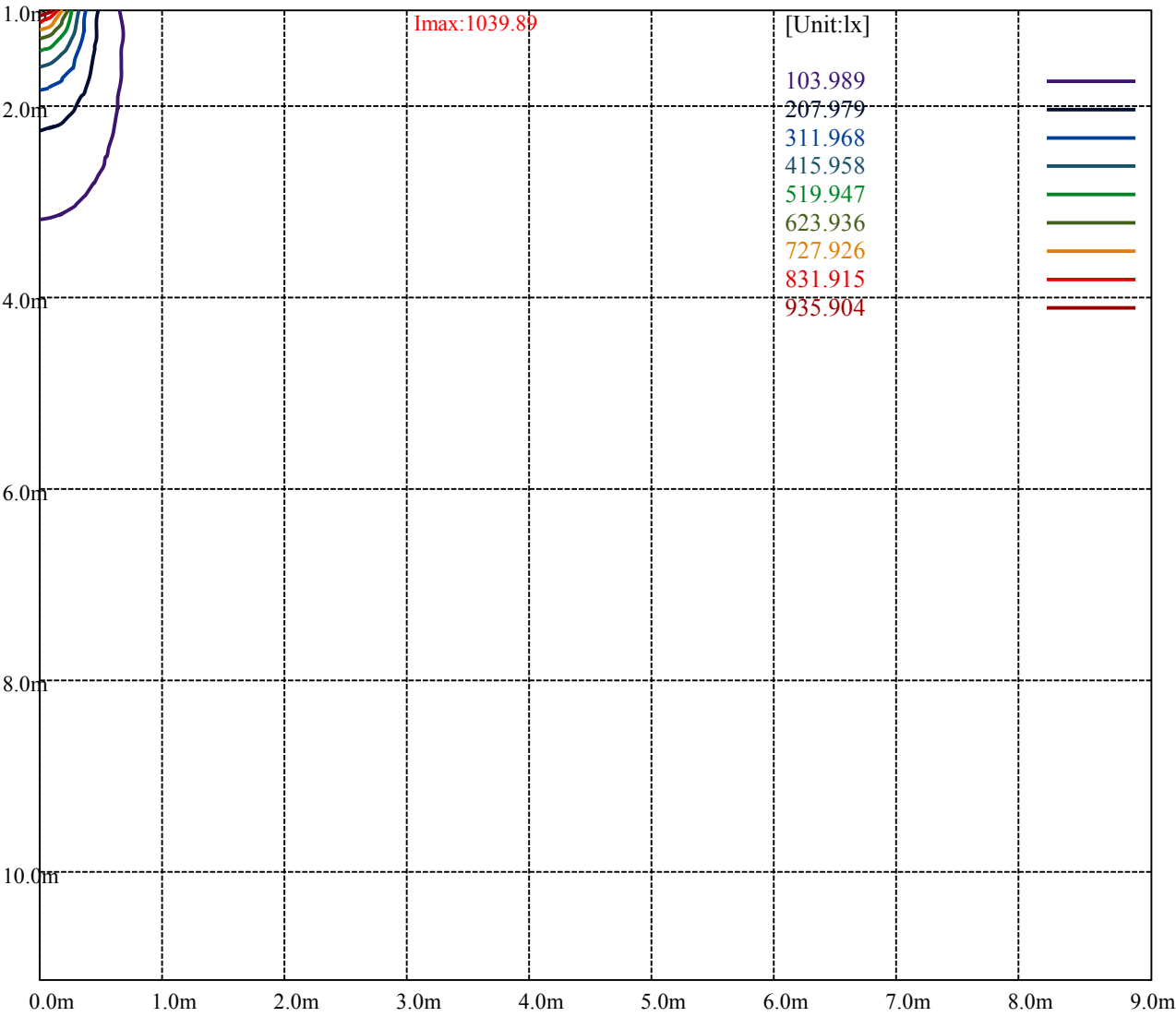
[Unit:cd]

Road

I_{max}:1039.89(10%I_{max}) 103.989(20%I_{max}) 207.979(30%I_{max}) 311.968(40%I_{max}) 415.958(50%I_{max}) 519.947(60%I_{max}) 623.936(70%I_{max}) 727.926(80%I_{max}) 831.915(90%I_{max}) 935.904



(10%E _{max}) 11.55433	—
(20%E _{max}) 23.10867	—
(30%E _{max}) 34.66311	—
(40%E _{max}) 46.21745	—
(50%E _{max}) 57.77177	—
(60%E _{max}) 69.32611	—
(70%E _{max}) 80.88055	—
(80%E _{max}) 92.43489	—
(90%E _{max}) 103.9892	—



Luminance Table

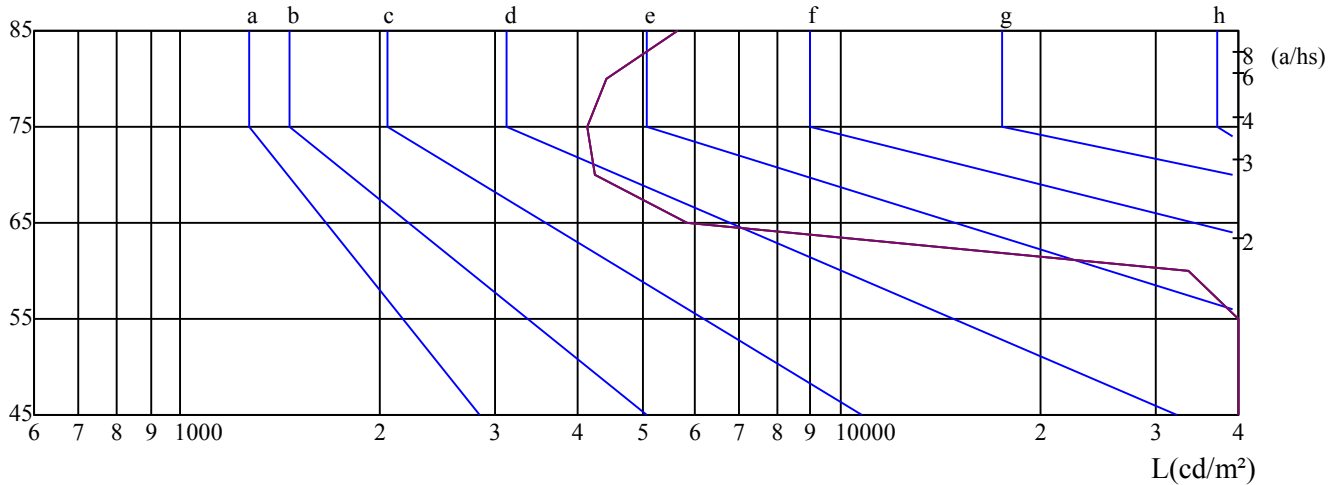
γ	45	50	55	60	65	70	75	80	85
C0	46650	52836	53885	33658	5848	4245	4131	4405	5640
C45	46650	52836	53885	33658	5848	4245	4131	4405	5640
C90	46650	52836	53885	33658	5848	4245	4131	4405	5640

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

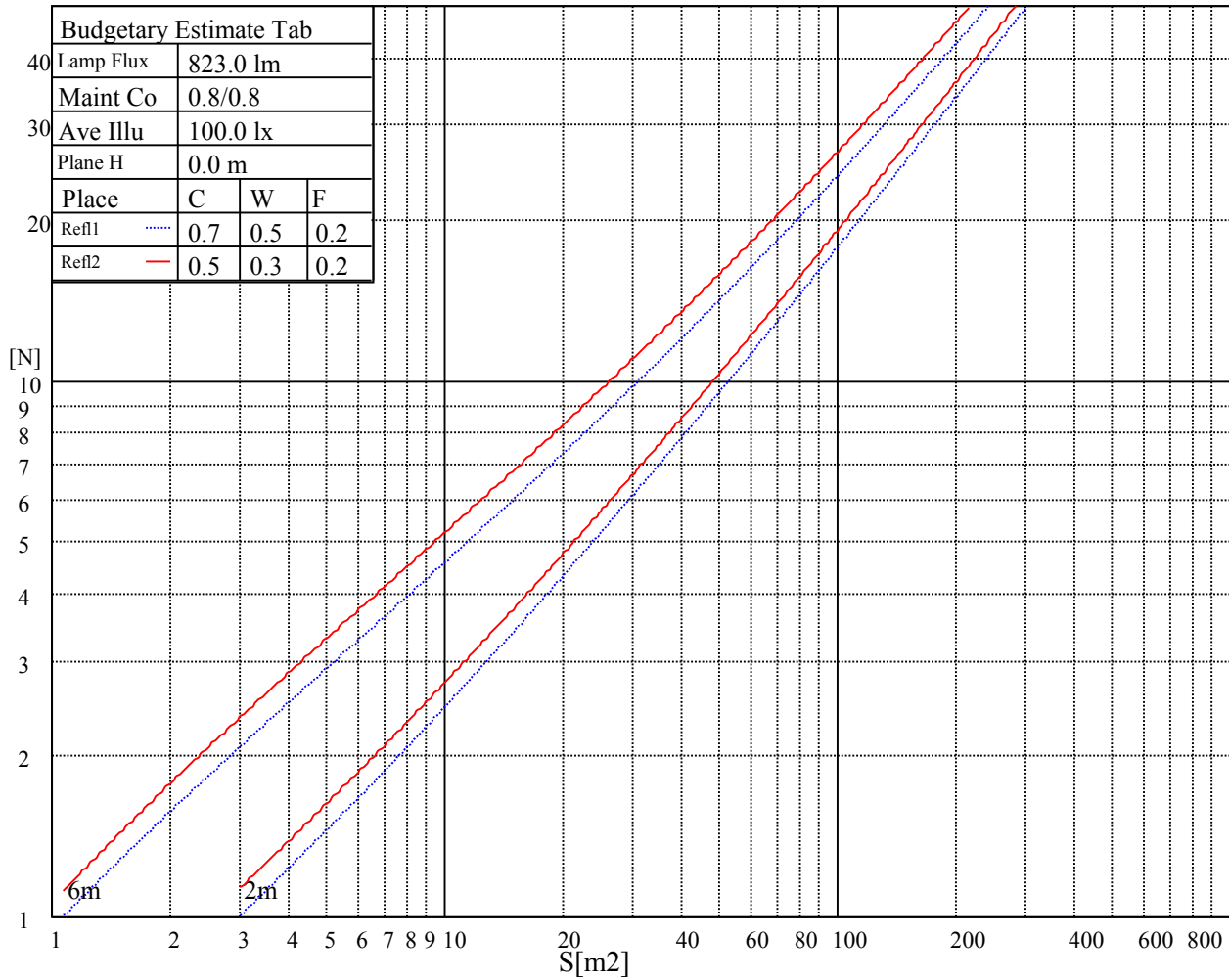
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

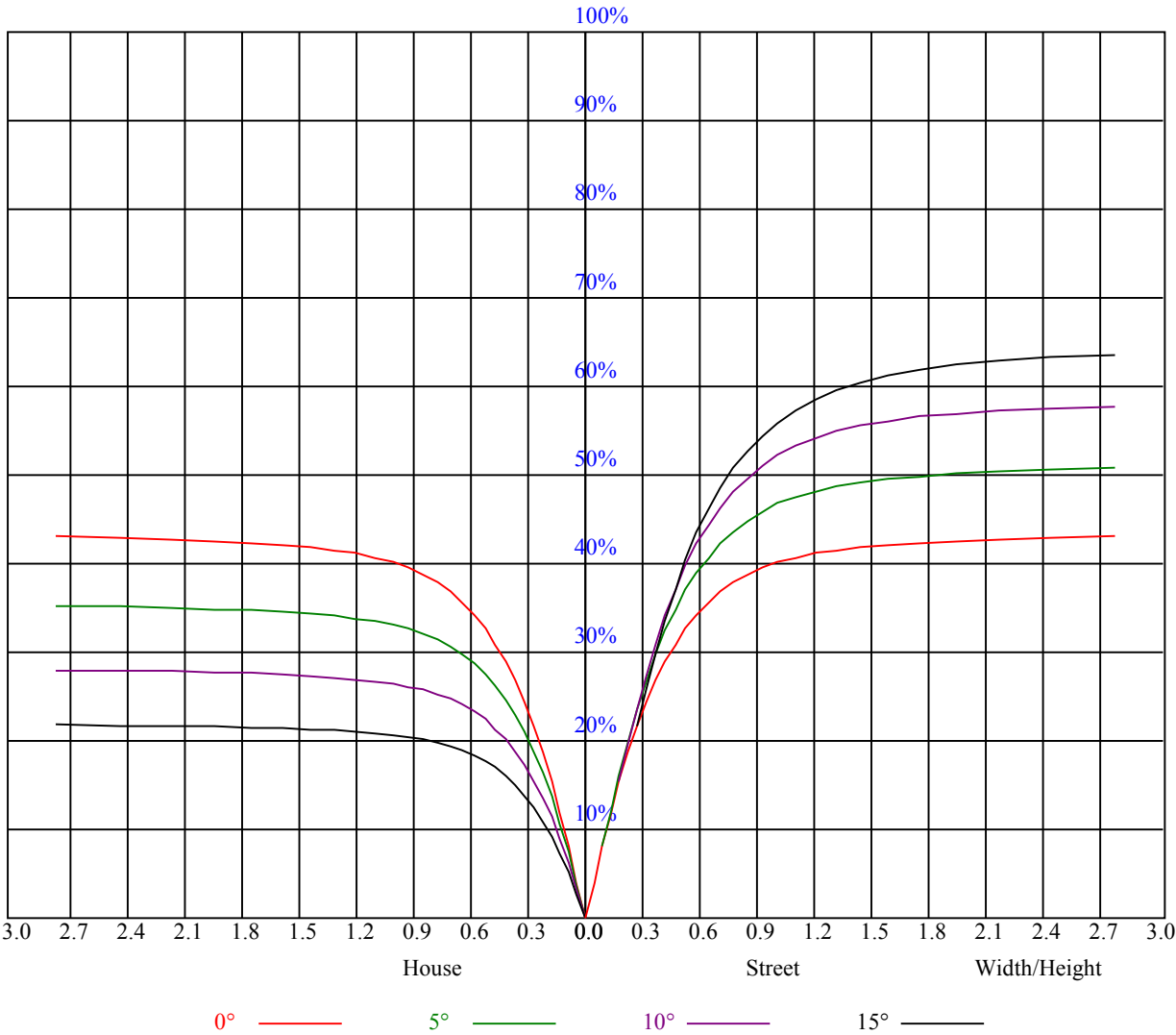
C0 ———

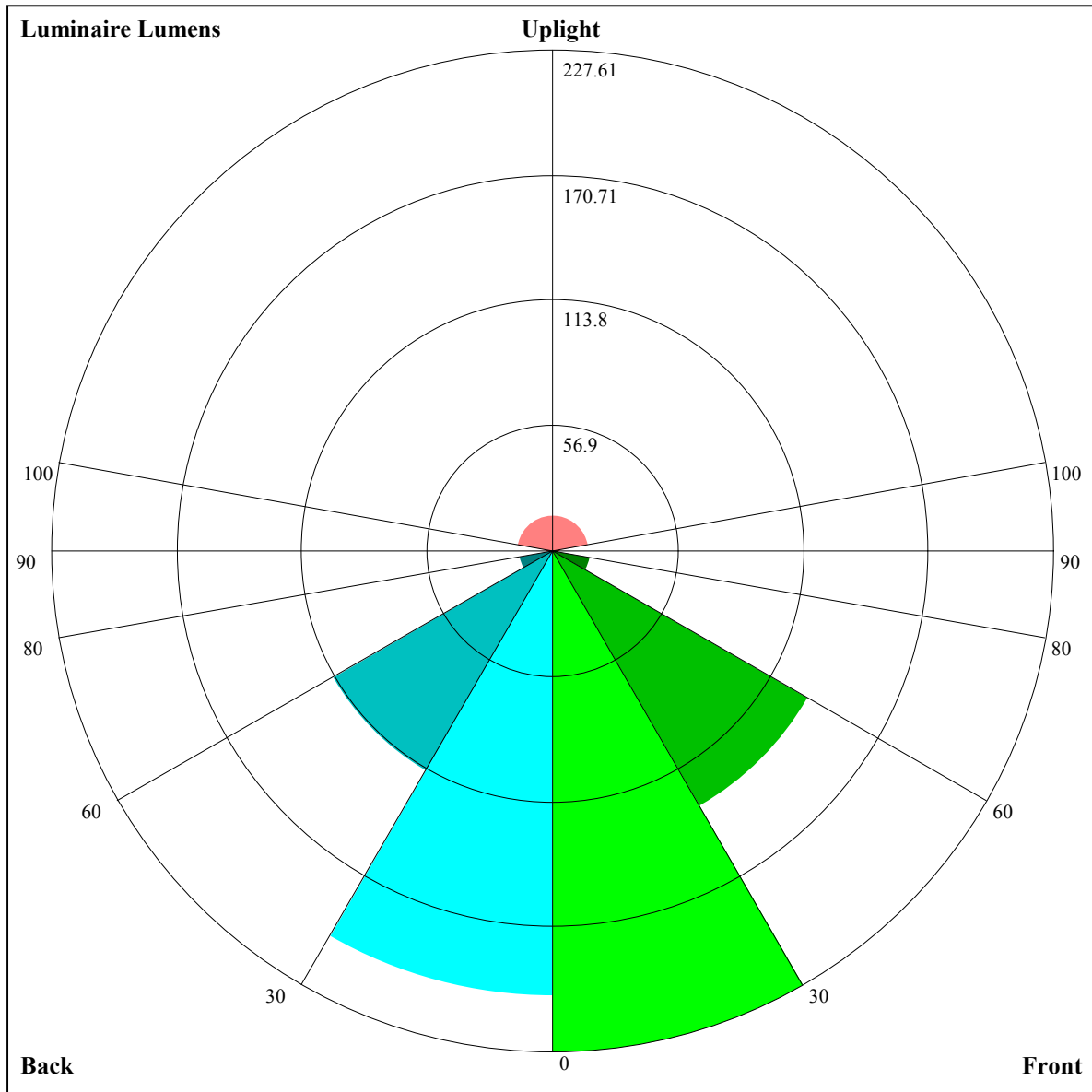
C45 ———

C90 ———



RHOC	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	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.88
1	0.96	0.93	0.91	0.94	0.91	0.89	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.80
2	0.88	0.84	0.80	0.86	0.83	0.79	0.83	0.80	0.78	0.81	0.78	0.76	0.78	0.76	0.74	0.73
3	0.81	0.76	0.72	0.80	0.75	0.71	0.77	0.74	0.70	0.75	0.72	0.69	0.73	0.70	0.68	0.67
4	0.75	0.70	0.65	0.74	0.69	0.65	0.72	0.68	0.64	0.70	0.66	0.63	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	0.55	0.62	0.58	0.54	0.61	0.57	0.54	0.52
7	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.50	0.49
8	0.57	0.52	0.48	0.57	0.51	0.48	0.56	0.51	0.48	0.55	0.51	0.47	0.54	0.50	0.47	0.46
9	0.54	0.49	0.45	0.54	0.48	0.45	0.53	0.48	0.45	0.52	0.48	0.44	0.51	0.47	0.44	0.43
10	0.51	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.49	0.45	0.42	0.41





Luminaire Lumens:

FL=227.61,FM=133.84,FH=17.59,FVH=2.78

BL=202.17,BM=115.54,BH=15.69,BVH=2.41

UL=3.48,UH=16.57

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	1041.41	1046.81	947.87	769.33	568.24	403.48	306.00	240.64	187.99
45.0	1036.52	1034.94	937.13	738.90	532.63	381.49	289.35	226.24	175.50
90.0	1040.74	998.10	856.80	657.17	467.72	336.43	265.28	207.84	156.49
135.0	1040.91	985.89	834.24	633.49	444.04	334.01	257.57	200.03	145.91
180.0	1041.41	933.58	751.11	548.38	388.01	289.74	229.44	176.34	124.31
225.0	1036.52	936.00	751.11	553.73	397.58	293.46	231.47	173.87	122.96
270.0	1040.74	991.97	836.16	644.29	459.34	342.00	268.43	210.26	155.93
315.0	1040.91	1002.21	871.76	679.61	492.36	352.74	277.48	217.41	160.31
360.0	1041.41	1046.81	947.87	769.33	568.24	403.48	306.00	240.64	187.99
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	128.03	79.76	50.40	34.31	24.08	18.28	12.60	8.61	5.29
45.0	118.97	76.61	47.87	33.81	24.13	17.61	12.43	8.32	5.06
90.0	101.81	68.23	43.14	30.38	22.11	16.03	10.97	7.43	4.50
135.0	94.67	61.20	41.40	29.87	21.38	15.41	10.80	6.97	4.16
180.0	79.48	53.78	36.11	25.88	18.73	13.44	9.00	5.51	3.77
225.0	80.94	52.88	35.55	25.48	18.51	13.16	8.72	5.63	3.54
270.0	99.39	61.48	40.50	28.63	20.48	15.02	10.46	6.98	4.22
315.0	100.91	63.06	40.61	28.24	21.09	15.19	10.74	7.26	4.61
360.0	128.03	79.76	50.40	34.31	24.08	18.28	12.60	8.61	5.29
C/γ(°)	90.0								
0.0	3.49								
45.0	3.26								
90.0	3.09								
135.0	3.15								
180.0	3.15								
225.0	3.09								
270.0	3.15								
315.0	3.15								
360.0	3.49								