



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

Nata

Client:

LumCAT: 1407-N

Luminaire: 92.70.043.00

Report No:

Voltage(V): 31.5600

Test No: GC20190824010

Current(A): 0.1970

LampCAT: XICATO XOB LES 6MM

Power (W): 6.2200

Lamp flux(lm): 658.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 39

Width(mm): 39

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 562.80, Efficiency(%): 85.53% , Luminous Efficacy(lm/W): 90.48

Central intensity(cd): 644.288, Maximum intensity(cd): 644.288

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=45.6

[C90/270]Total=45.6

Field angle(10%Imax): [C0/180]Total=96.6

[C90/270]Total=96.6

Maximum s/h(1/2): C0_180=0.69 C90_270=0.69

Maximum s/h(1/4): C0_180=0.78 C90_270=0.78

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.53%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 93.869%

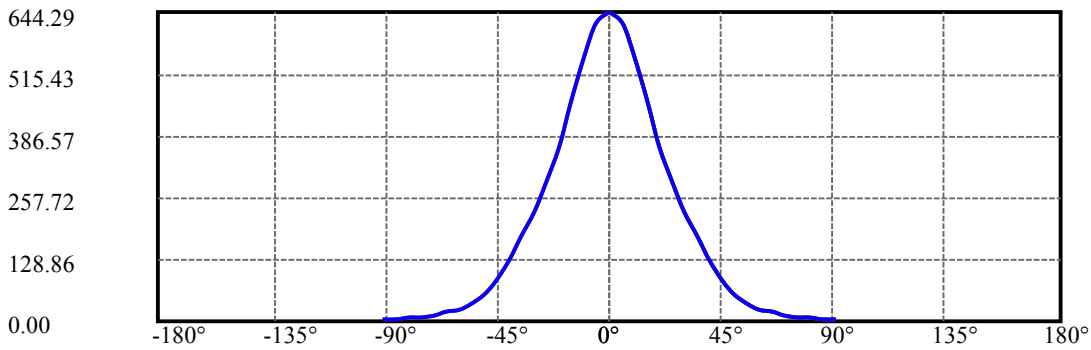
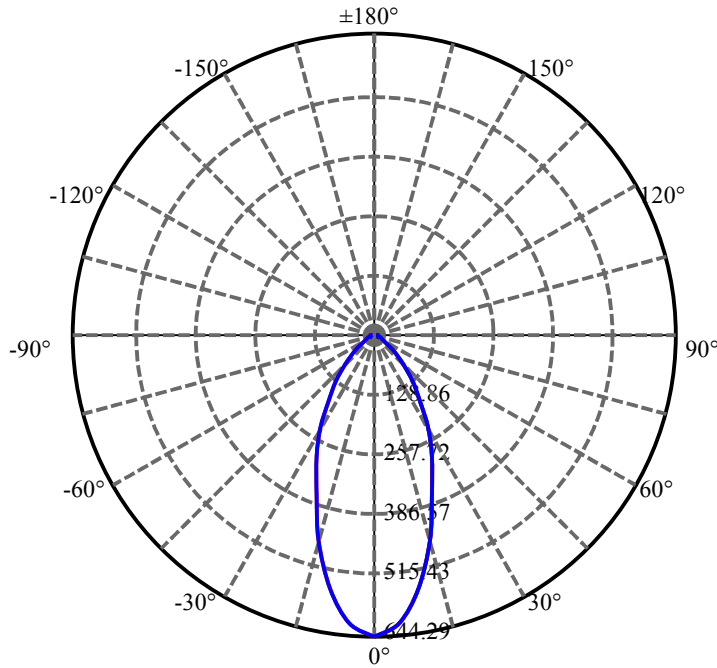
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	644.288	0.000	0	.000%	.000%
5.0	619.397	15.107	15.107	2.296%	2.684%
10.0	550.540	41.852	56.959	6.361%	10.121%
15.0	456.180	59.718	116.677	9.076%	20.732%
20.0	365.203	67.694	184.371	10.288%	32.759%
25.0	287.135	68.418	252.789	10.398%	44.916%
30.0	226.610	65.015	317.804	9.881%	56.468%
35.0	174.087	59.005	376.809	8.967%	66.952%
40.0	128.292	50.450	427.259	7.667%	75.916%
45.0	84.509	39.402	466.661	5.988%	82.917%
50.0	54.204	28.029	494.69	4.260%	87.898%
55.0	35.599	19.526	514.216	2.968%	91.367%
60.0	25.327	14.083	528.299	2.140%	93.869%
65.0	18.570	10.671	538.97	1.622%	95.766%
70.0	13.830	8.204	547.174	1.247%	97.223%
75.0	9.858	6.192	553.366	.941%	98.323%
80.0	6.750	4.444	557.809	.675%	99.113%
85.0	4.303	3.003	560.813	.456%	99.647%
90.0	2.960	1.989	562.801	.302%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	317.80	48.30%	56.47%
0-40	427.26	64.93%	75.92%
0-60	528.30	80.29%	93.87%
0-90	560.81	85.23%	99.65%
0-120	560.81	85.23%	99.65%
0-180	562.80	85.53%	100.00%
60-90	46.60	7.08%	8.28%
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%
0-42.92	450.24	68.43%	80.00%

ZONAL LUMEN SUMMARY

0-10	56.96
10-20	127.41
20-30	133.43
30-40	109.46
40-50	67.43
50-60	33.61
60-70	18.88
70-80	10.64
80-90	3.00
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: —————

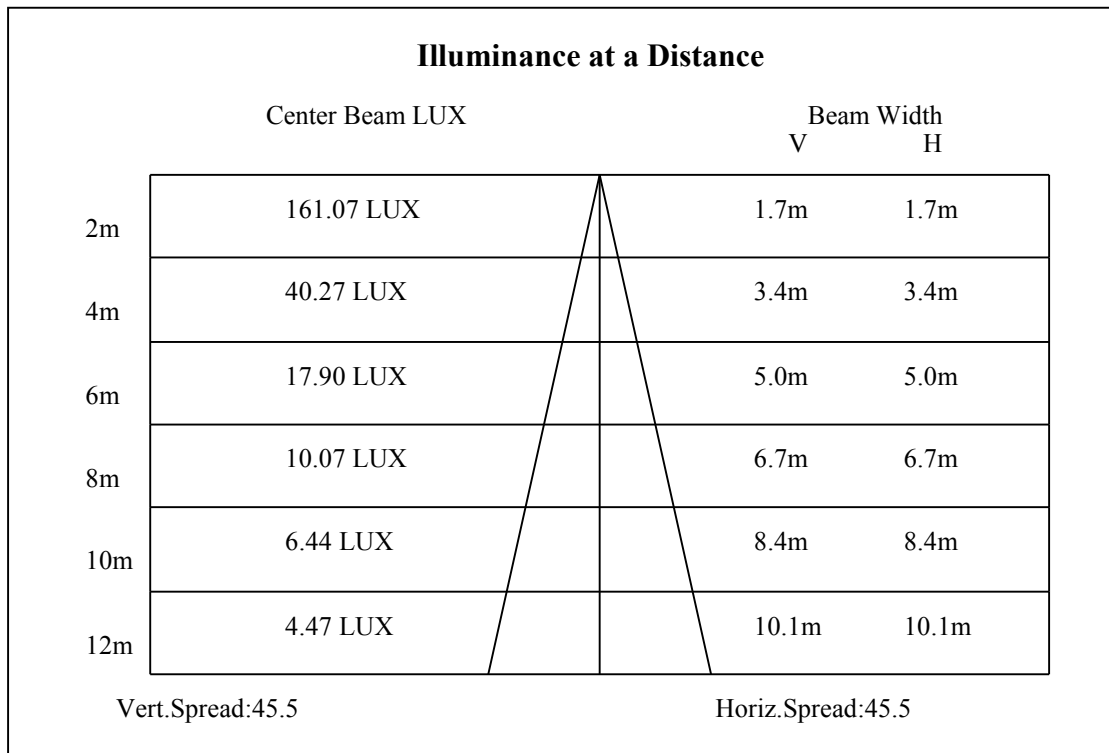
C90/C270: —————

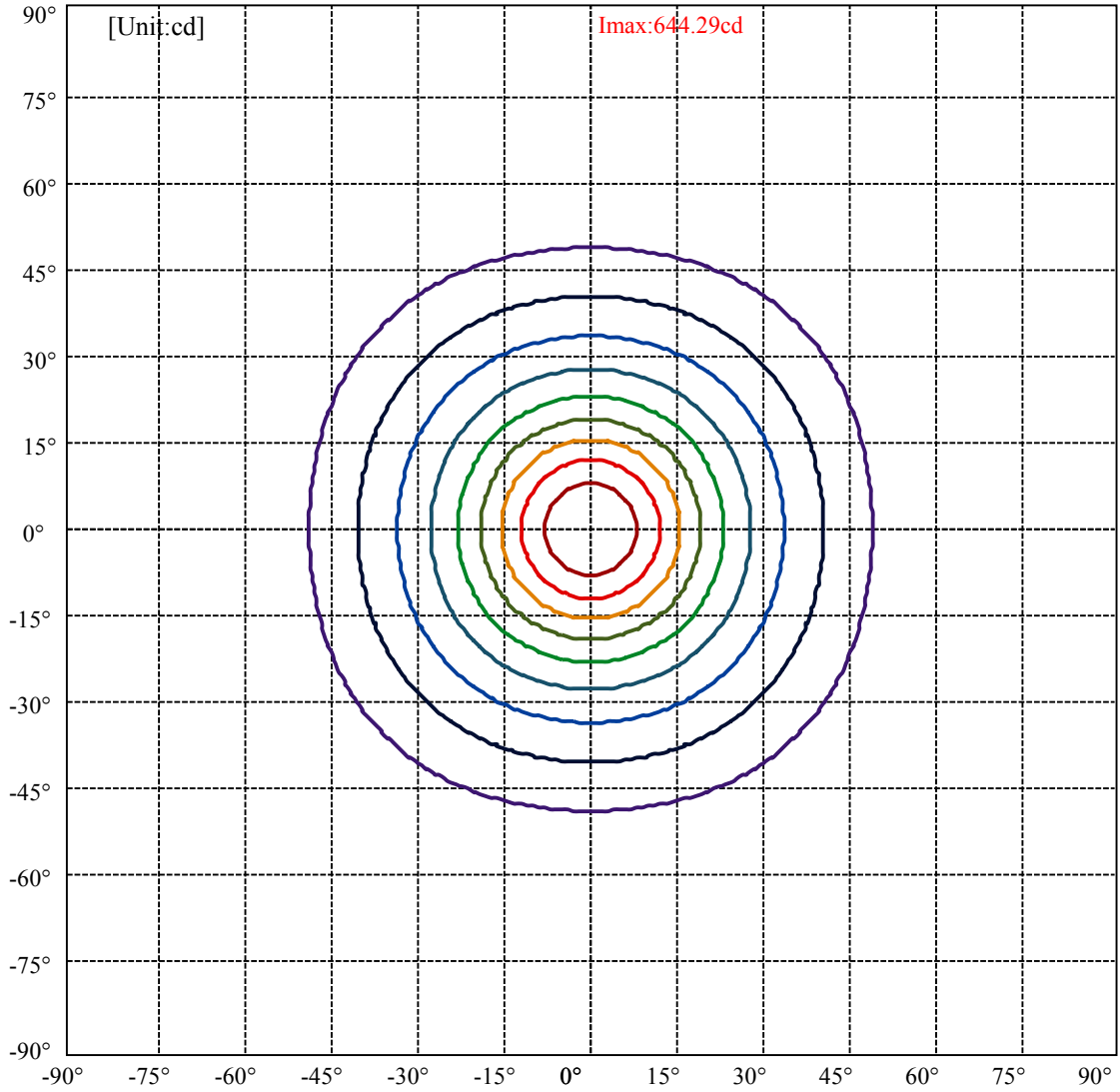
Field angle(10%Imax):C0/180Left:48.3 Right:48.3

:C90/270Left:48.3 Right:48.3

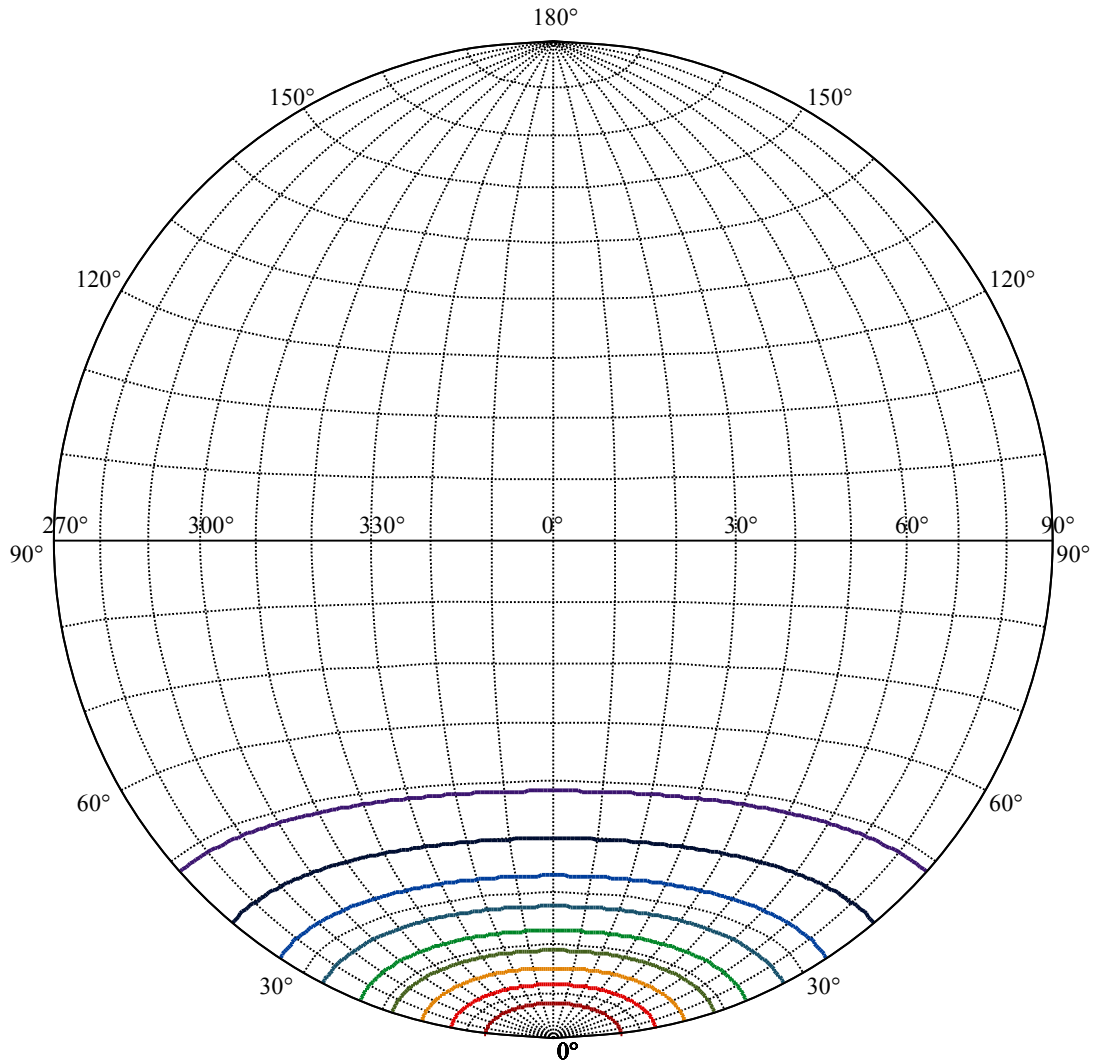
Beam Angle(50%Imax):C0/180Left:22.8 Right:22.8

:C90/270Left:22.8 Right:22.8





(10%Imax) 64.4288	—
(20%Imax) 128.858	—
(30%Imax) 193.286	—
(40%Imax) 257.715	—
(50%Imax) 322.144	—
(60%Imax) 386.573	—
(70%Imax) 451.001	—
(80%Imax) 515.43	—
(90%Imax) 579.859	—

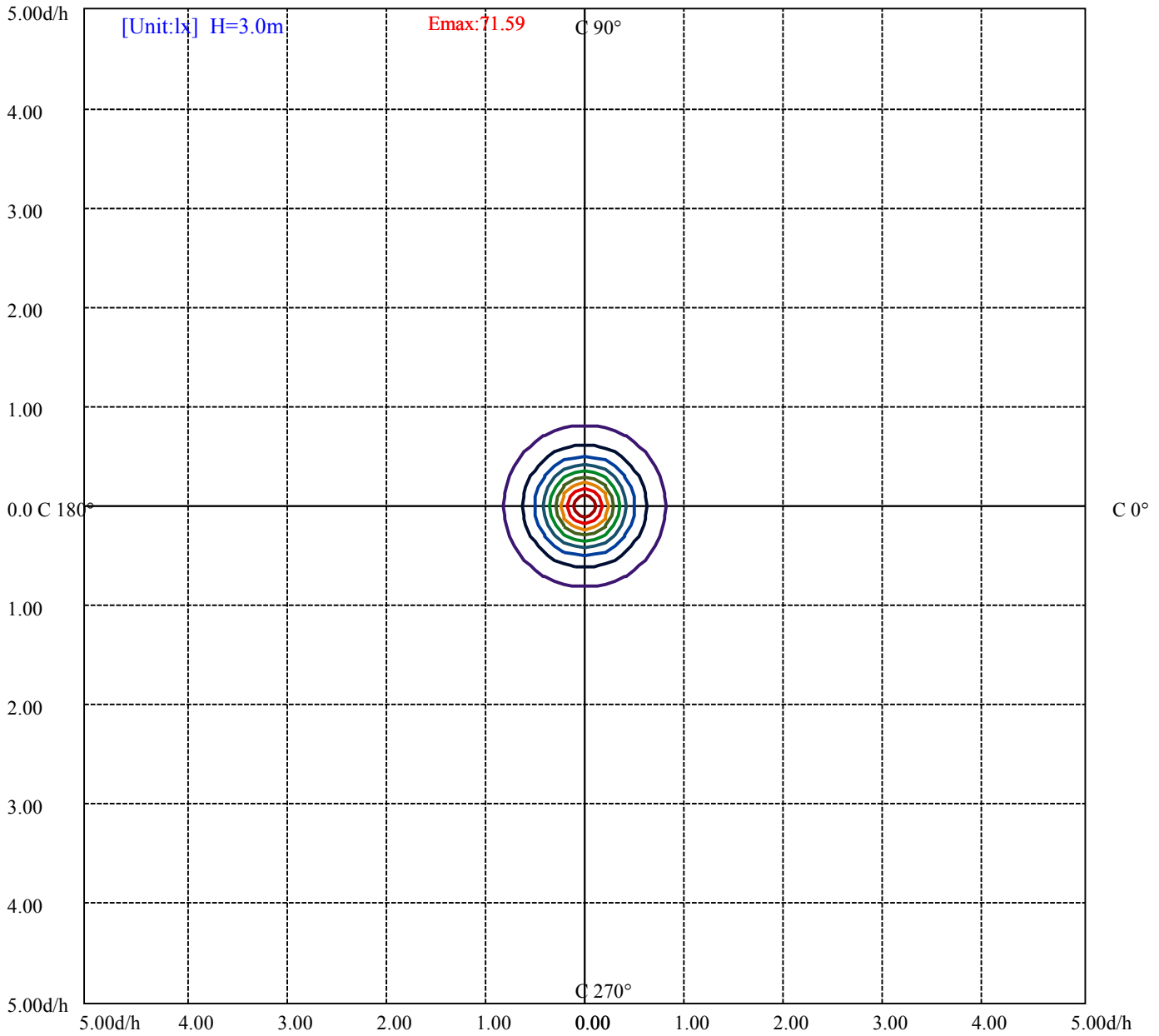


House

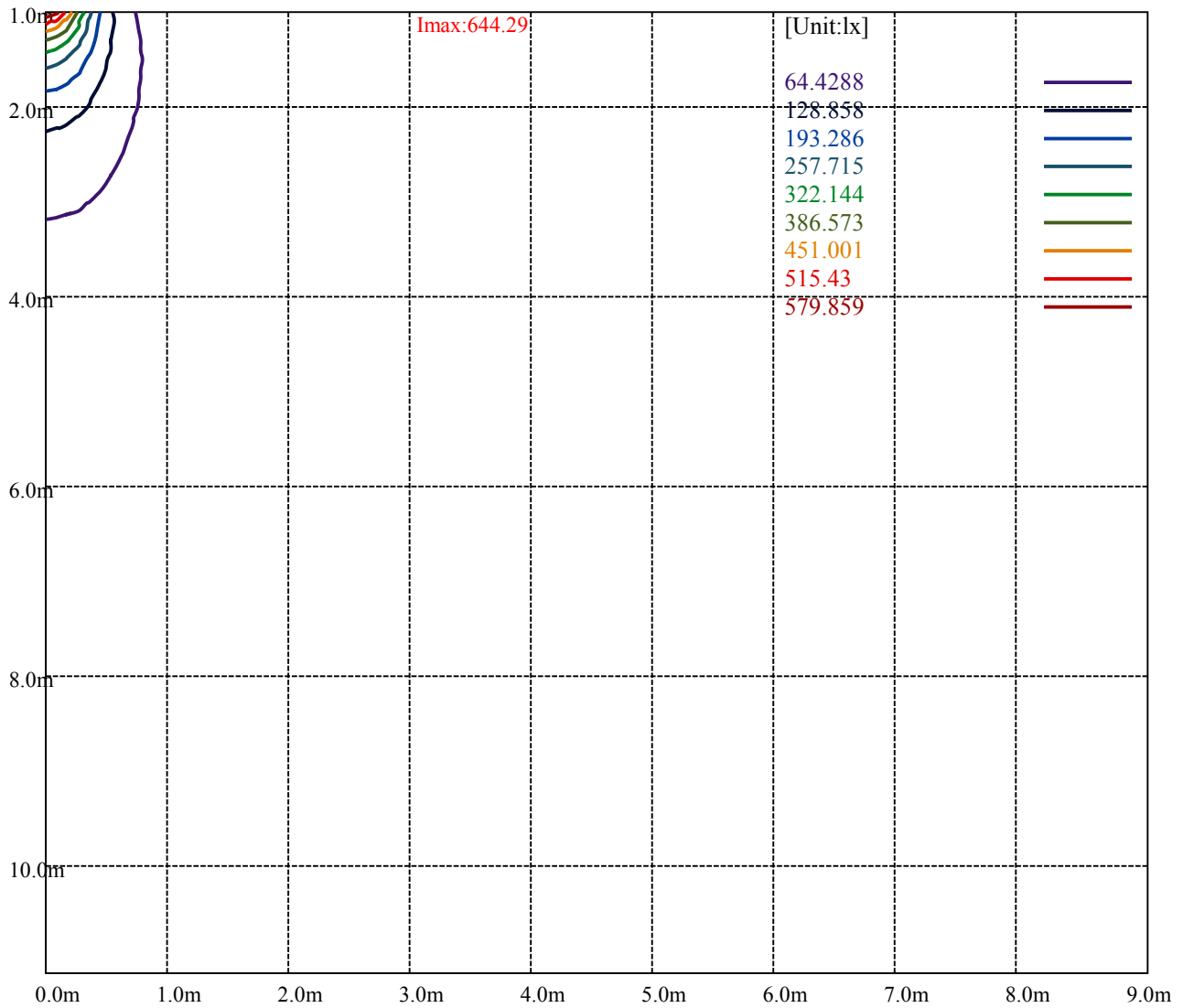
[Unit:cd]

Road

Imax:644.29	
(10%Imax) 64.4288	—
(20%Imax) 128.858	—
(30%Imax) 193.286	—
(40%Imax) 257.715	—
(50%Imax) 322.144	—
(60%Imax) 386.573	—
(70%Imax) 451.001	—
(80%Imax) 515.43	—
(90%Imax) 579.859	—



- (10%Emax) 7.158745
- (20%Emax) 14.31744
- (30%Emax) 21.47622
- (40%Emax) 28.635
- (50%Emax) 35.79367
- (60%Emax) 42.95244
- (70%Emax) 50.11122
- (80%Emax) 57.26989
- (90%Emax) 64.42867



Luminance Table

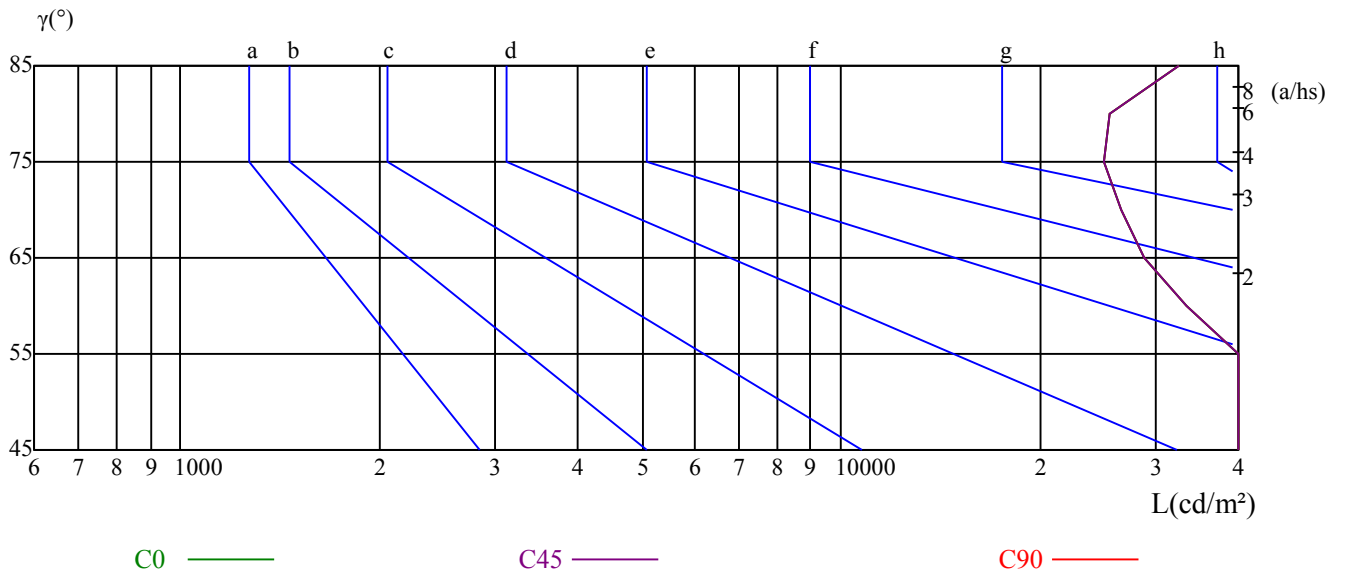
γ	45	50	55	60	65	70	75	80	85
C0	78575	55441	40806	33303	28888	26586	25041	25557	32461
C45	78575	55441	40806	33303	28888	26586	25041	25557	32461
C90	78575	55441	40806	33303	28888	26586	25041	25557	32461

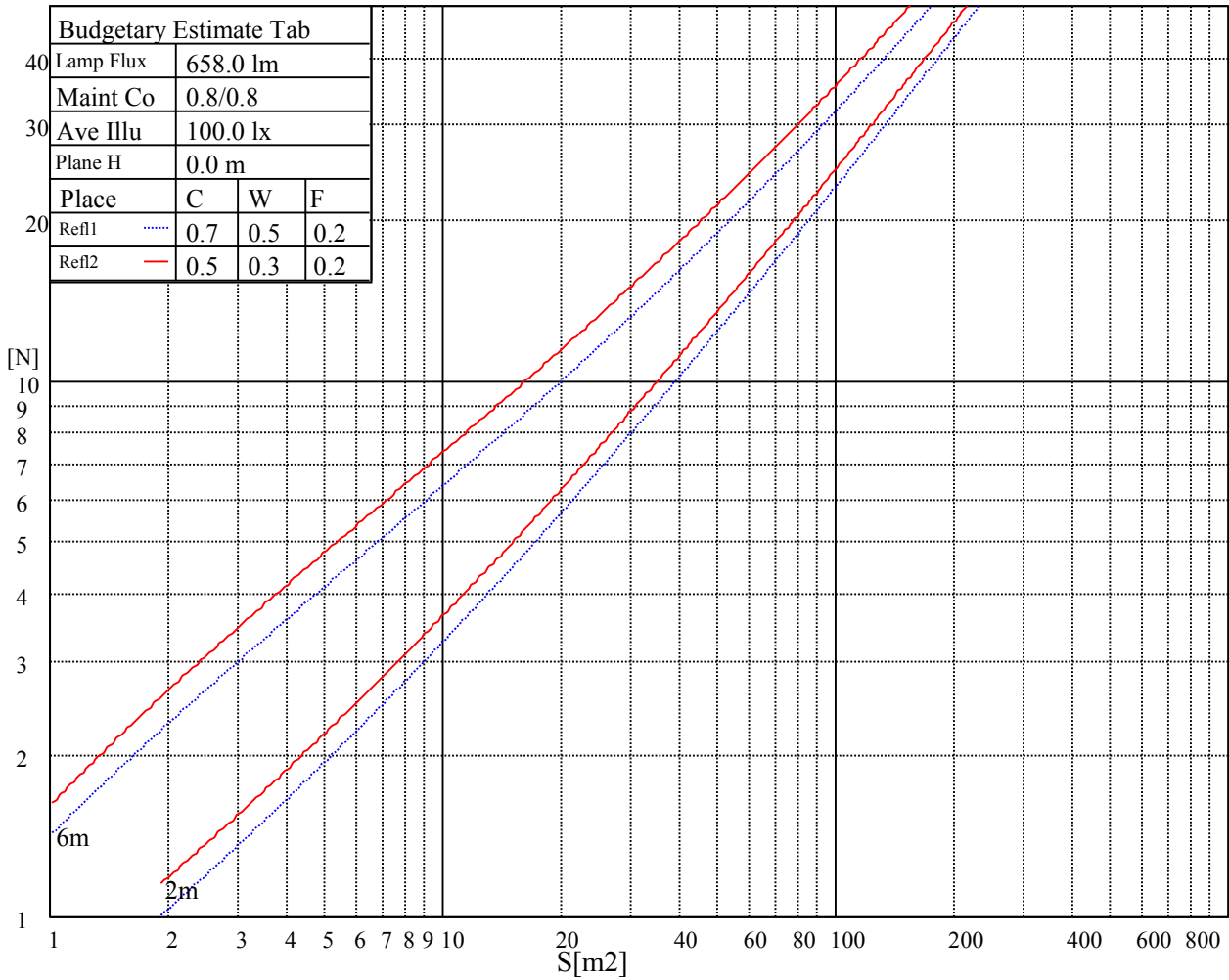
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
28888	28888	28888	25041	25041	25041	32461	32461	32461

Glare Table

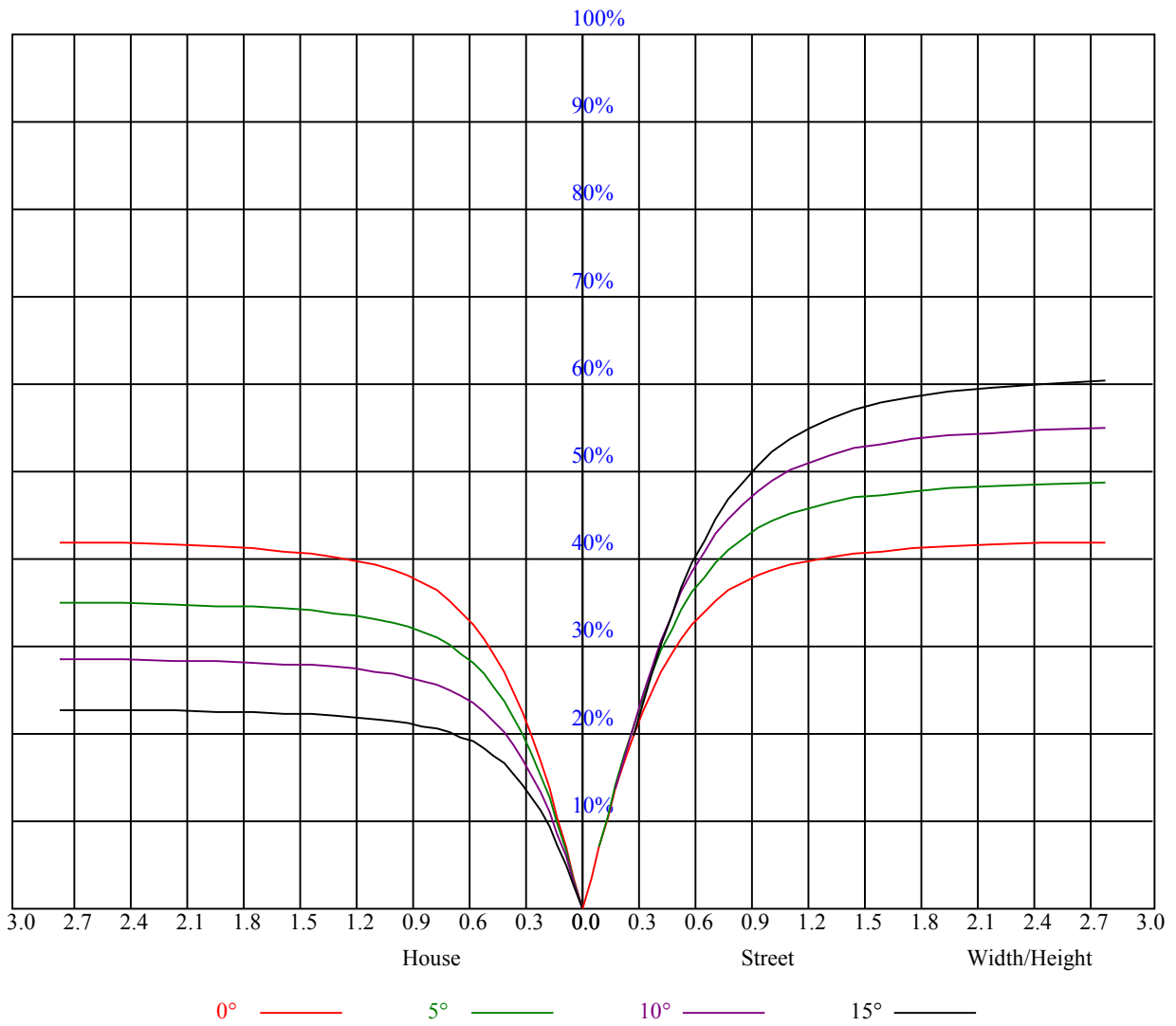
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

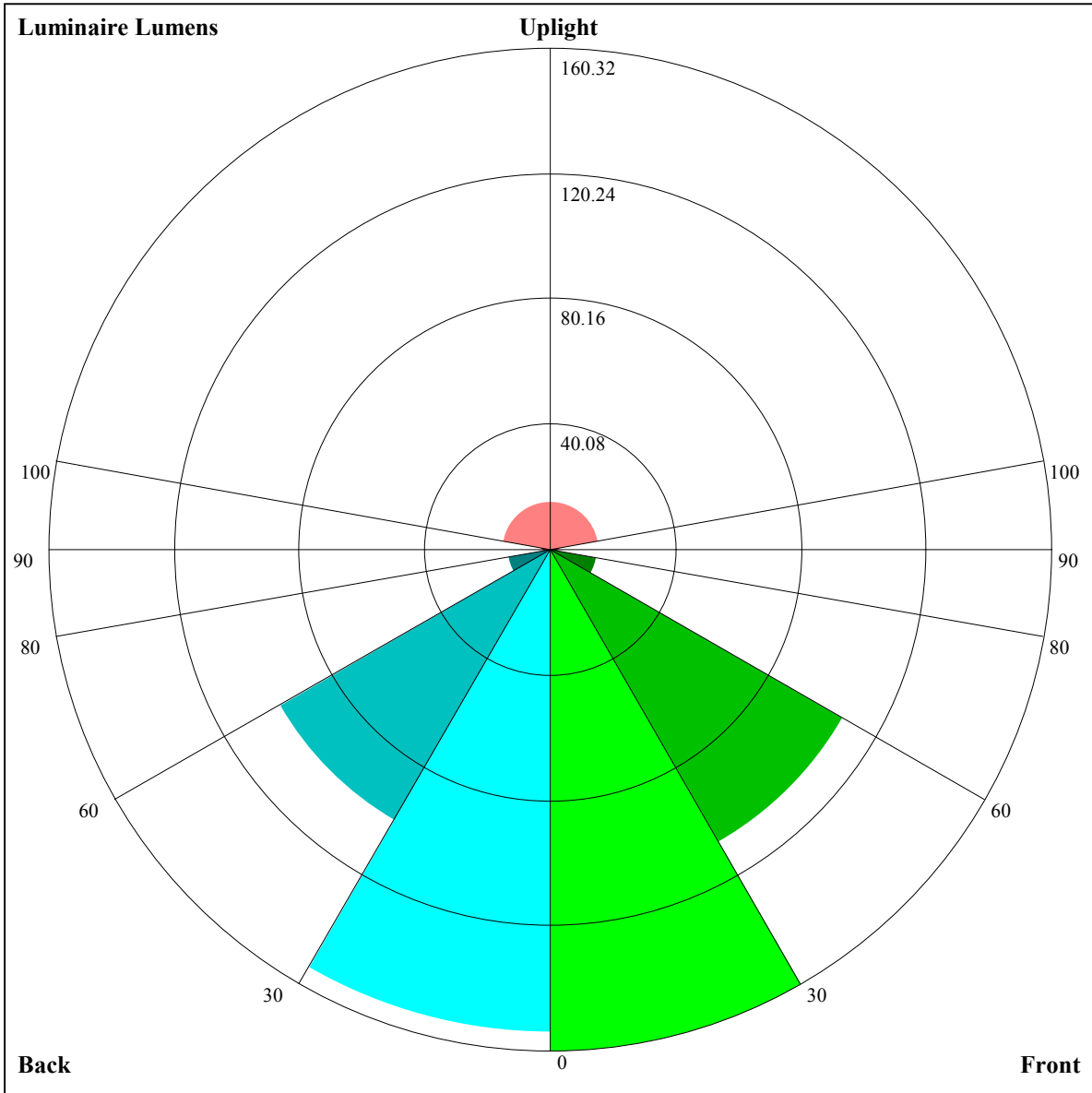
Luminance Limiting Curve





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	1.02	1.02	1.02	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.86
1	0.93	0.90	0.88	0.91	0.89	0.87	0.88	0.86	0.84	0.84	0.83	0.81	0.81	0.80	0.79	0.77
2	0.85	0.81	0.77	0.83	0.80	0.76	0.81	0.77	0.75	0.78	0.75	0.73	0.76	0.73	0.72	0.70
3	0.78	0.73	0.69	0.77	0.72	0.68	0.74	0.70	0.67	0.72	0.69	0.66	0.70	0.67	0.65	0.64
4	0.72	0.66	0.62	0.71	0.66	0.62	0.69	0.64	0.61	0.67	0.63	0.60	0.65	0.62	0.59	0.58
5	0.67	0.61	0.57	0.66	0.60	0.56	0.64	0.59	0.56	0.63	0.58	0.55	0.61	0.58	0.55	0.53
6	0.62	0.56	0.52	0.61	0.56	0.52	0.60	0.55	0.51	0.59	0.54	0.51	0.57	0.53	0.50	0.49
7	0.58	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.45
8	0.54	0.48	0.44	0.54	0.48	0.44	0.53	0.48	0.44	0.52	0.47	0.44	0.51	0.47	0.44	0.42
9	0.51	0.45	0.41	0.50	0.45	0.41	0.49	0.45	0.41	0.49	0.44	0.41	0.48	0.44	0.41	0.40
10	0.48	0.42	0.39	0.47	0.42	0.39	0.47	0.42	0.39	0.46	0.42	0.38	0.45	0.41	0.38	0.37





Luminaire Lumens:

FL=160.32,FM=107.74,FH=15.11,FVH=2.53

BL=154.15,BM=99.85,BH=14.09,BVH=2.36

UL=3.23,UH=15.37

BUG Rating:B1-U2-G0

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	647.16	630.73	572.79	485.21	393.98	313.43	243.96	195.36	144.23
45.0	640.52	638.89	580.84	487.86	392.34	306.17	247.22	192.99	148.16
90.0	643.78	630.56	561.71	458.33	354.83	279.84	216.90	165.21	125.21
135.0	645.69	626.29	563.06	471.43	378.00	297.73	235.80	180.90	133.65
180.0	647.16	606.66	534.21	442.46	352.97	278.21	218.31	166.56	119.81
225.0	640.52	599.57	515.93	417.38	335.76	263.36	207.68	156.43	113.57
270.0	643.78	611.49	536.29	440.78	348.36	269.61	215.83	160.43	115.76
315.0	645.69	610.99	539.49	446.01	365.40	288.73	227.19	174.83	125.94
360.0	647.16	630.73	572.79	485.21	393.98	313.43	243.96	195.36	144.23
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	97.03	57.94	38.76	27.17	20.36	15.47	11.36	8.04	5.34
45.0	101.25	67.16	42.24	28.91	21.32	15.41	11.03	7.71	4.67
90.0	83.98	54.73	35.04	25.14	18.17	13.16	9.56	6.47	4.05
135.0	87.64	56.87	36.34	25.82	18.84	14.46	10.46	7.37	4.78
180.0	77.23	49.56	33.47	24.36	17.83	13.56	9.56	6.41	4.39
225.0	72.56	46.24	31.39	22.61	16.37	12.15	8.38	5.46	3.49
270.0	75.88	50.06	33.19	23.91	17.55	12.83	8.89	6.13	3.54
315.0	80.49	51.08	34.37	24.69	18.11	13.61	9.62	6.41	4.16
360.0	97.03	57.94	38.76	27.17	20.36	15.47	11.36	8.04	5.34
C/γ(°)	90.0								
0.0	3.66								
45.0	2.98								
90.0	2.59								
135.0	3.38								
180.0	3.15								
225.0	2.64								
270.0	2.48								
315.0	2.81								
360.0	3.66								