



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: 1-1008-M

Luminaire: BJB 47.360.1020

Report No: nt0100

Voltage(V): 34.0600

Test No: GC2020011511

Current(A): 0.2970

LampCAT: LUMINUS CXM-9-AC40

Power (W): 10.1200

Lamp flux(lm): 1108.1

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 785.12, Efficiency(%): 70.85% , Luminous Efficacy(lm/W): 77.58

Central intensity(cd): 2367.984, Maximum intensity(cd): 2367.984

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=35.2

[C90/270]Total=35.2

Field angle(10%Imax): [C0/180]Total=49.6

[C90/270]Total=49.6

Maximum s/h(1/2): C0_180=0.59 C90_270=0.59

Maximum s/h(1/4): C0_180=0.55 C90_270=0.55

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 70.85%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.478%

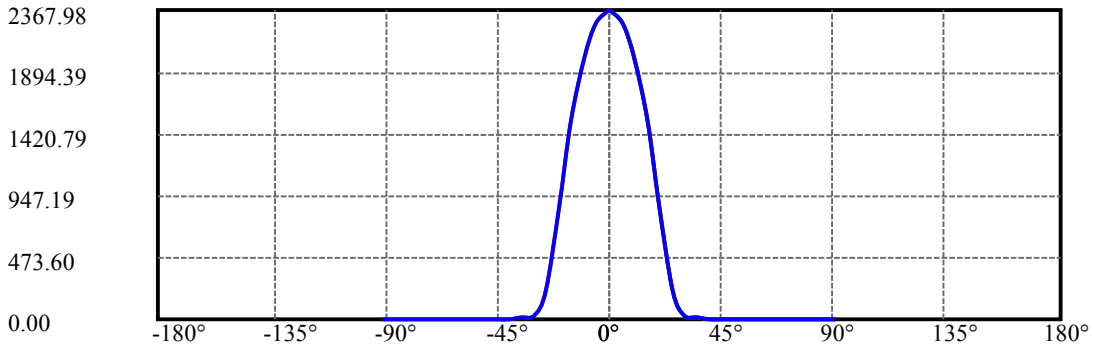
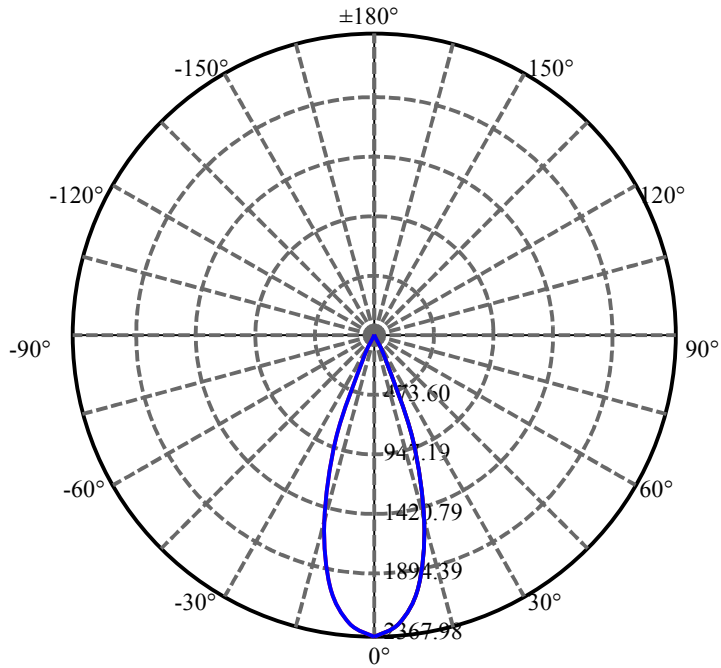
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2367.984	0.000	0	.000%	.000%
5.0	2266.172	55.400	55.4	5.000%	7.056%
10.0	1998.844	152.573	207.973	13.769%	26.489%
15.0	1519.242	208.690	416.663	18.834%	53.070%
20.0	872.501	197.113	613.777	17.789%	78.176%
25.0	213.525	113.904	727.681	10.280%	92.684%
30.0	27.155	30.458	758.139	2.749%	96.563%
35.0	8.163	5.201	763.34	.469%	97.226%
40.0	5.618	2.299	765.639	.208%	97.519%
45.0	4.781	1.925	767.565	.174%	97.764%
50.0	4.388	1.853	769.417	.167%	98.000%
55.0	4.163	1.859	771.276	.168%	98.237%
60.0	4.029	1.893	773.17	.171%	98.478%
65.0	3.945	1.938	775.108	.175%	98.725%
70.0	3.888	1.983	777.091	.179%	98.977%
75.0	3.846	2.022	779.113	.182%	99.235%
80.0	3.790	2.043	781.156	.184%	99.495%
85.0	3.607	2.010	783.166	.181%	99.751%
90.0	3.530	1.954	785.12	.176%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	758.14	68.42%	96.56%
0-40	765.64	69.10%	97.52%
0-60	773.17	69.78%	98.48%
0-90	783.17	70.68%	99.75%
0-120	783.17	70.68%	99.75%
0-180	785.12	70.85%	100.00%
60-90	11.89	1.07%	1.51%
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%
0-20.63	628.10	56.68%	80.00%

ZONAL LUMEN SUMMARY

0-10	207.97
10-20	405.80
20-30	144.36
30-40	7.50
40-50	3.78
50-60	3.75
60-70	3.92
70-80	4.06
80-90	2.01
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: —————

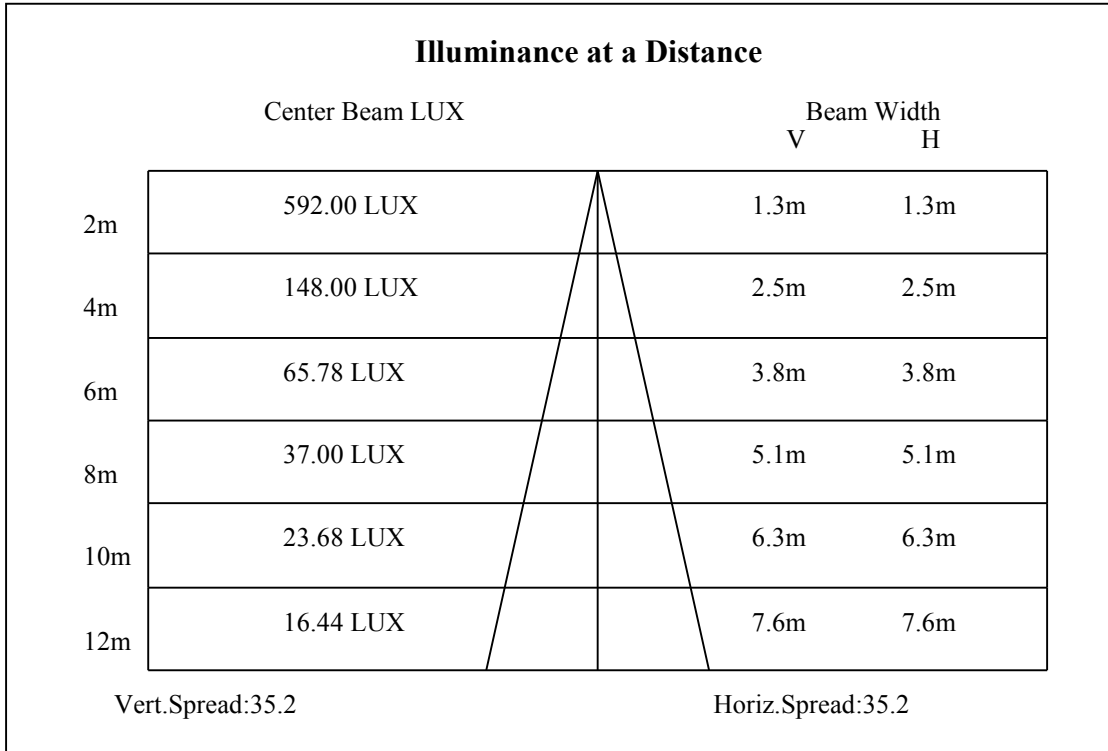
C90/C270: —————

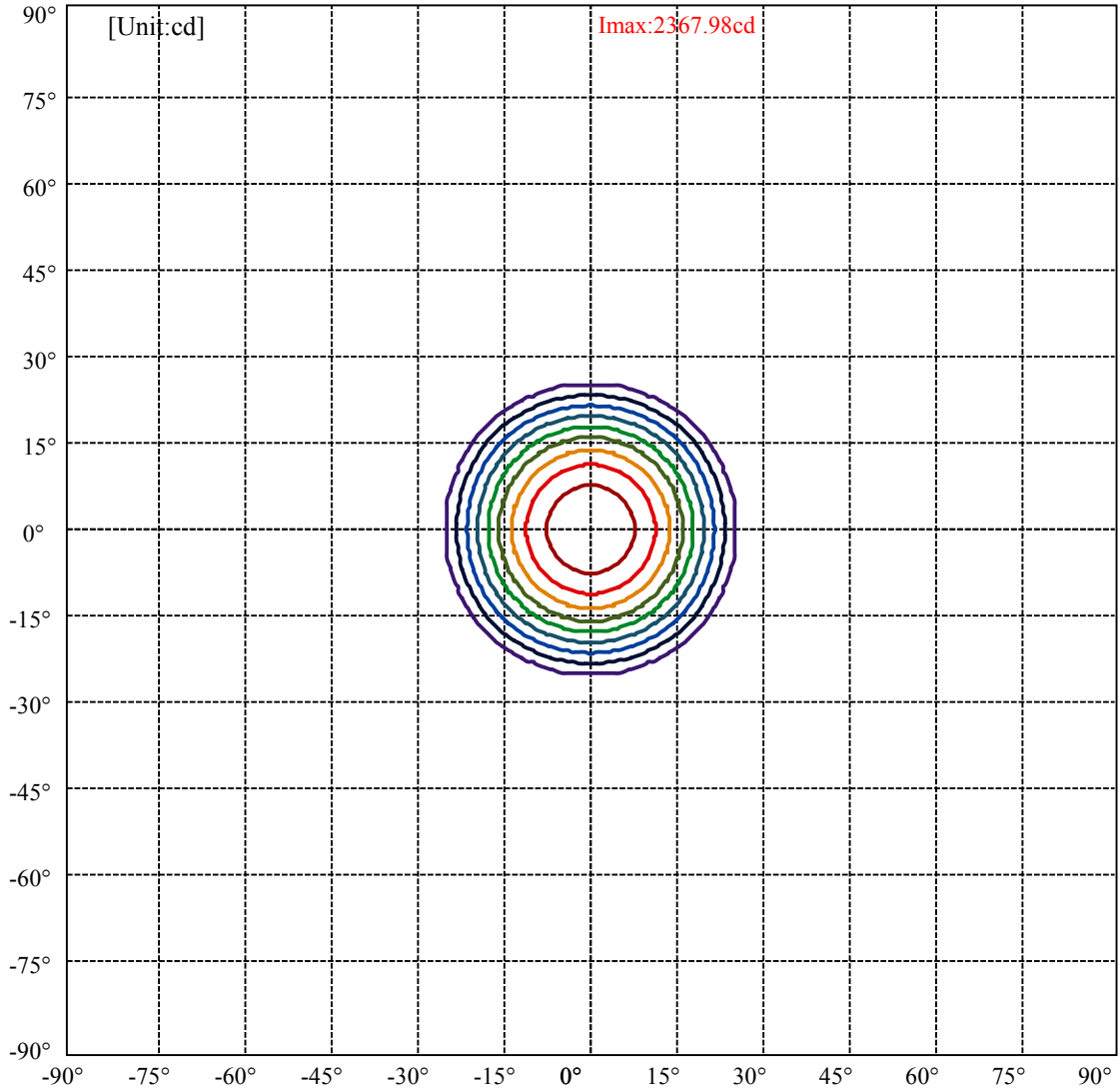
Field angle(10%Imax):C0/180Left:24.8 Right:24.8

:C90/270Left:24.8 Right:24.8

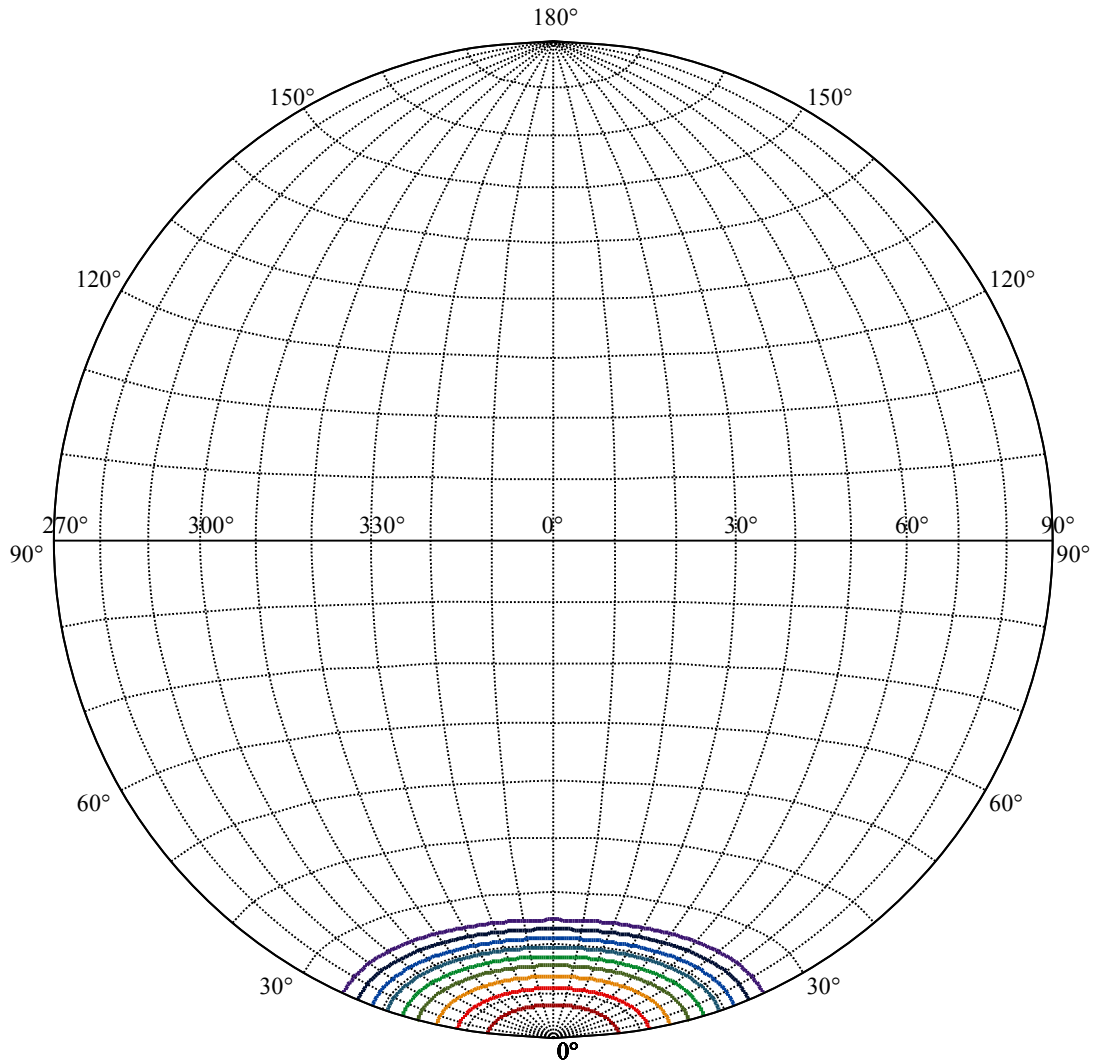
Beam Angle(50%Imax):C0/180Left:17.6 Right:17.6

:C90/270Left:17.6 Right:17.6





(10%Imax) 236.798	—
(20%Imax) 473.597	—
(30%Imax) 710.395	—
(40%Imax) 947.194	—
(50%Imax) 1183.99	—
(60%Imax) 1420.79	—
(70%Imax) 1657.59	—
(80%Imax) 1894.39	—
(90%Imax) 2131.19	—



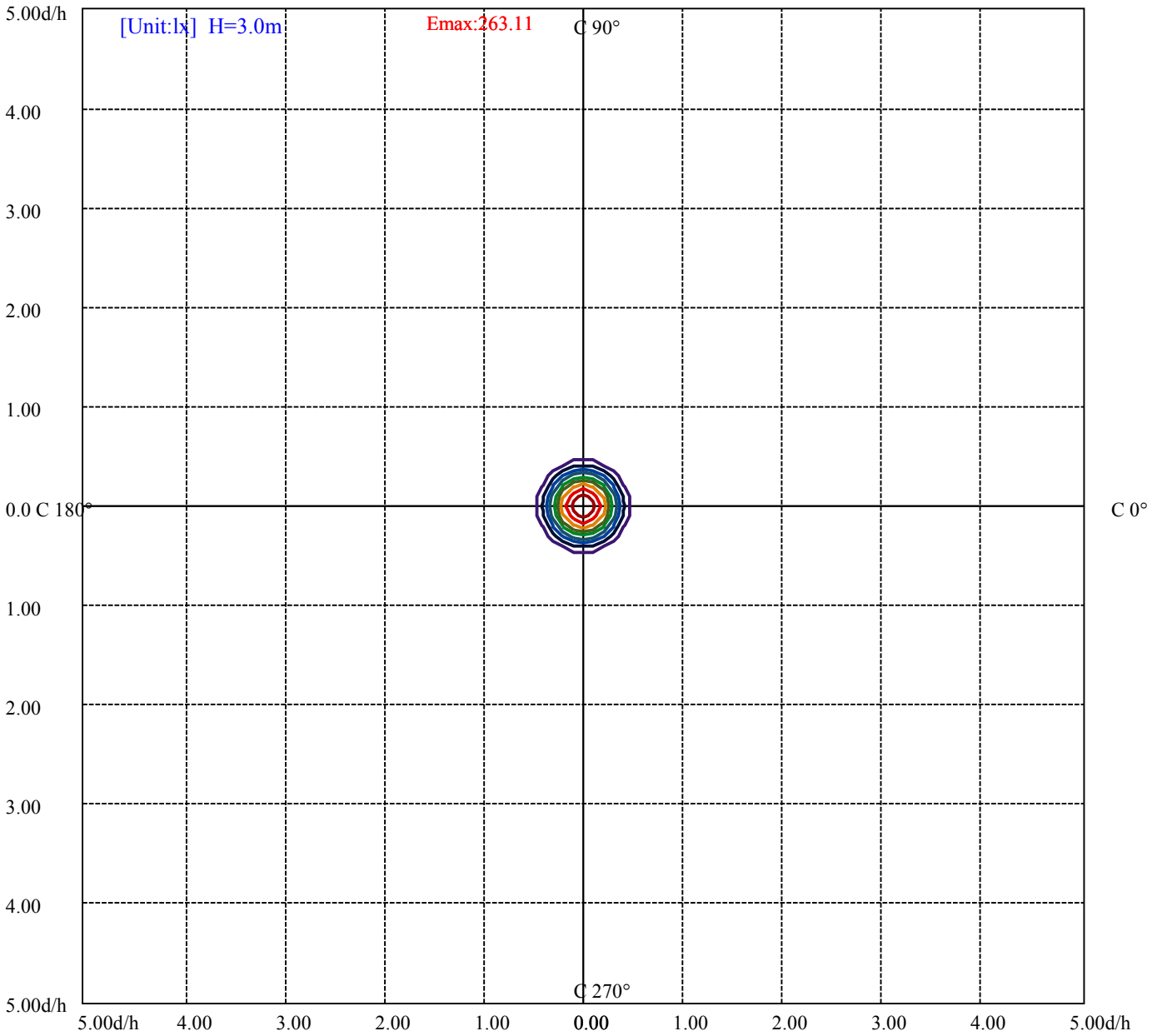
House

[Unit:cd]

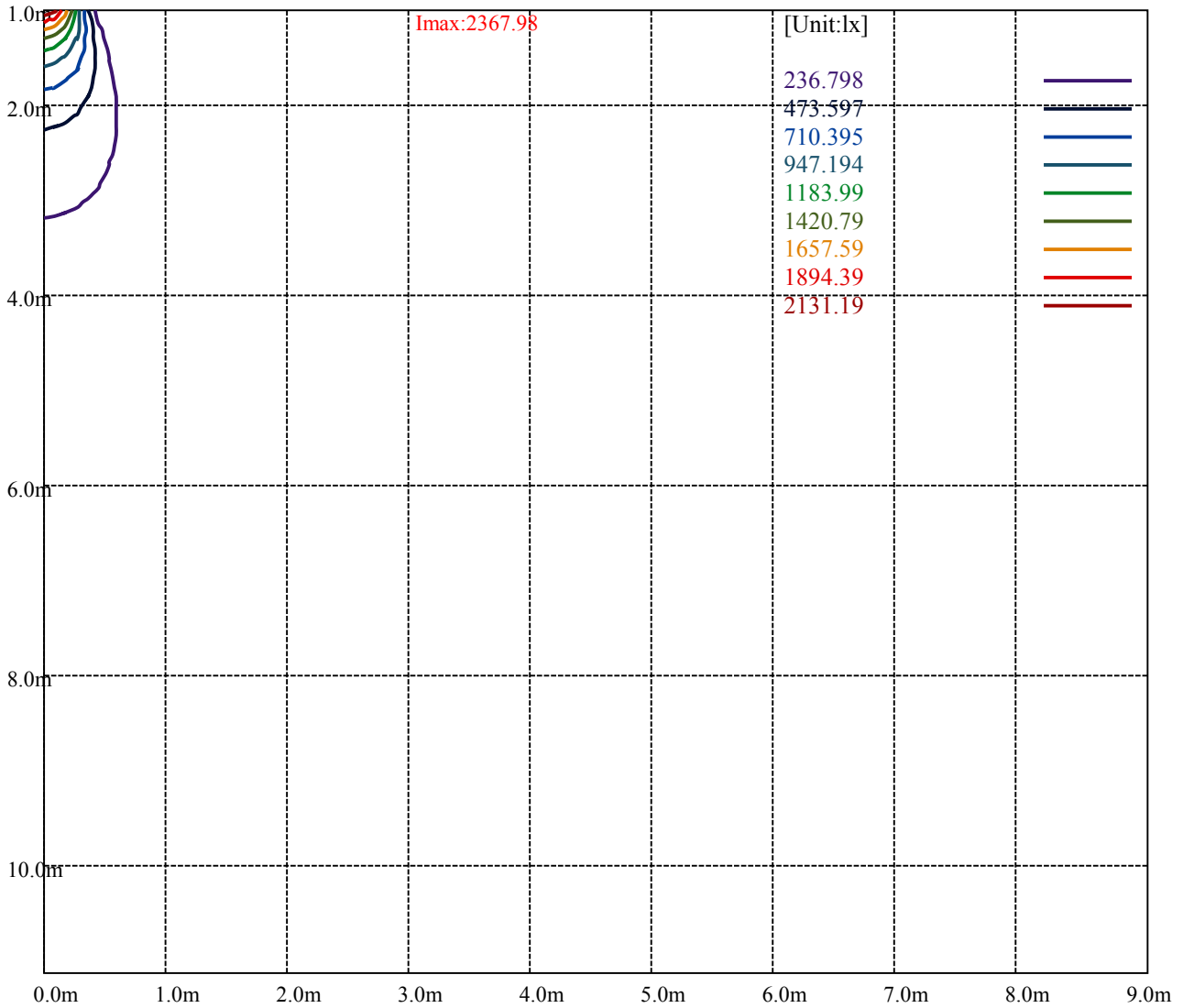
Road

Imax:2367.98

(10%Imax) 236.798	—
(20%Imax) 473.597	—
(30%Imax) 710.395	—
(40%Imax) 947.194	—
(50%Imax) 1183.99	—
(60%Imax) 1420.79	—
(70%Imax) 1657.59	—
(80%Imax) 1894.39	—
(90%Imax) 2131.19	—



(10%Emax) 26.31089	—
(20%Emax) 52.62178	—
(30%Emax) 78.93266	—
(40%Emax) 105.2437	—
(50%Emax) 131.5544	—
(60%Emax) 157.8656	—
(70%Emax) 184.1767	—
(80%Emax) 210.4878	—
(90%Emax) 236.7978	—



Luminance Table

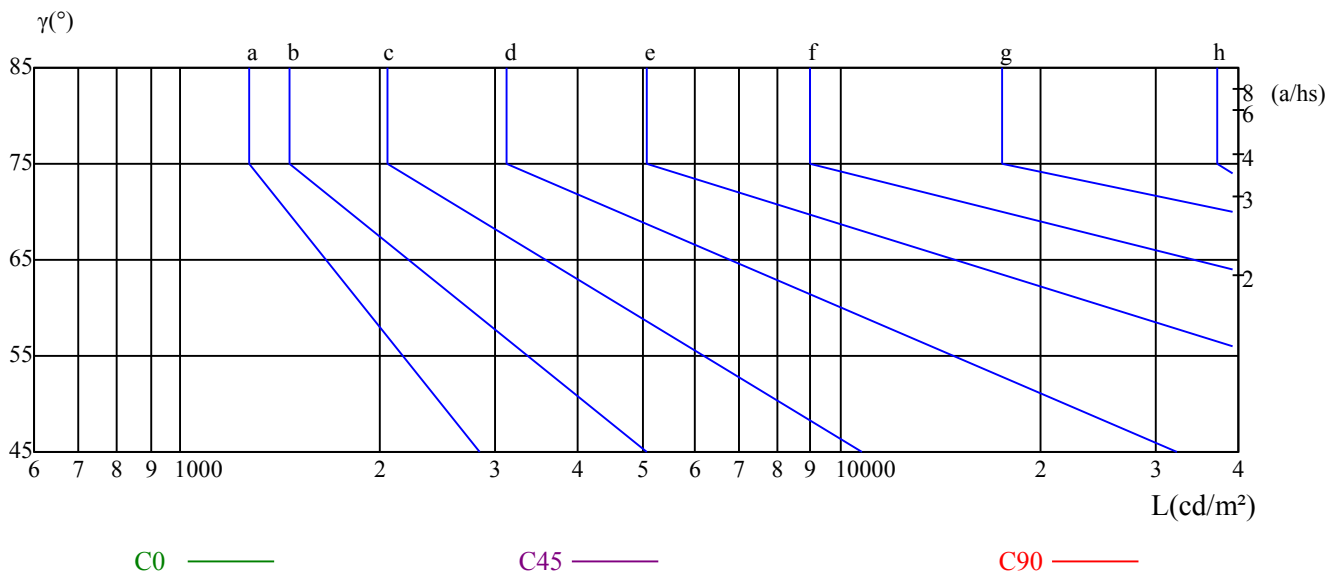
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

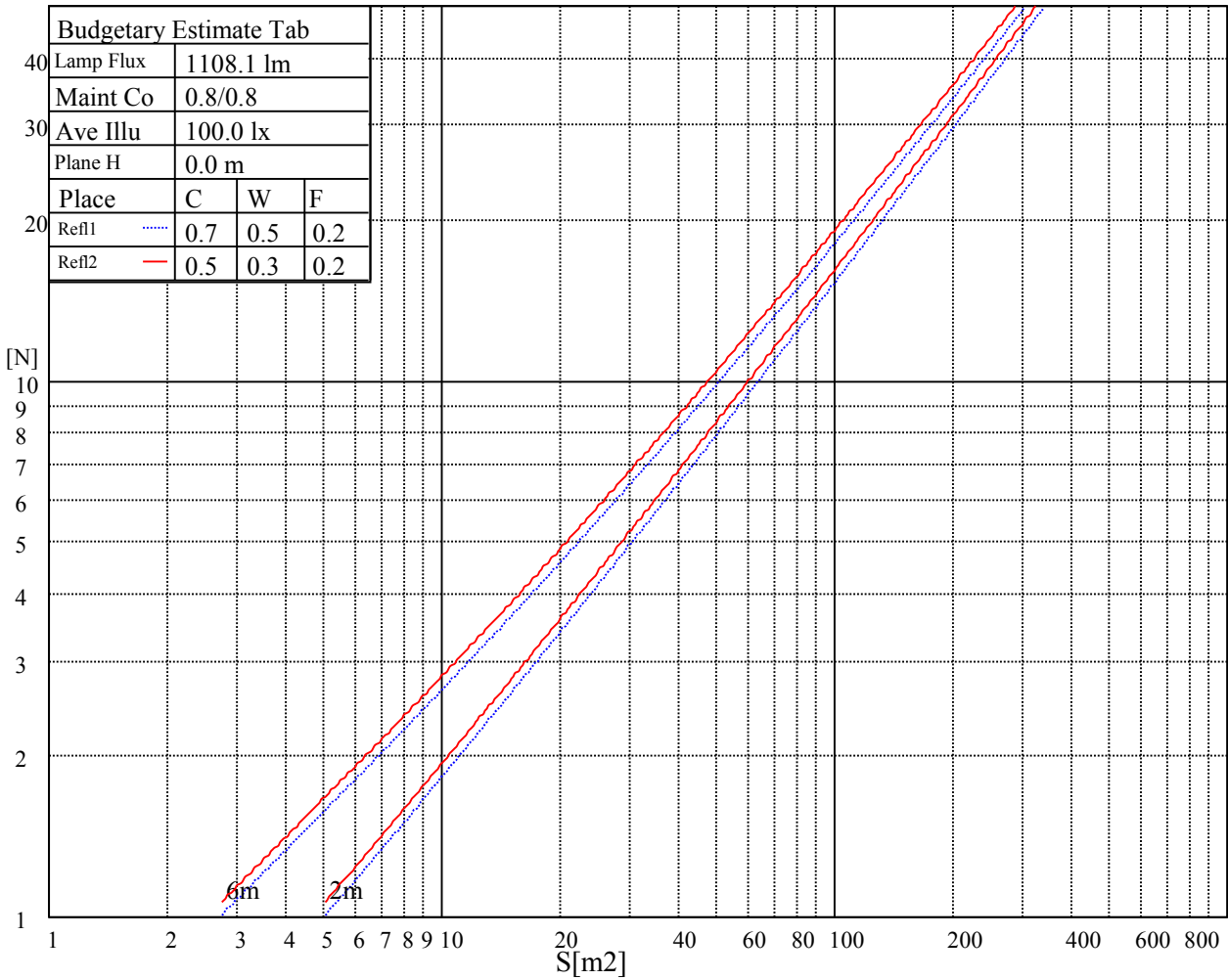
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

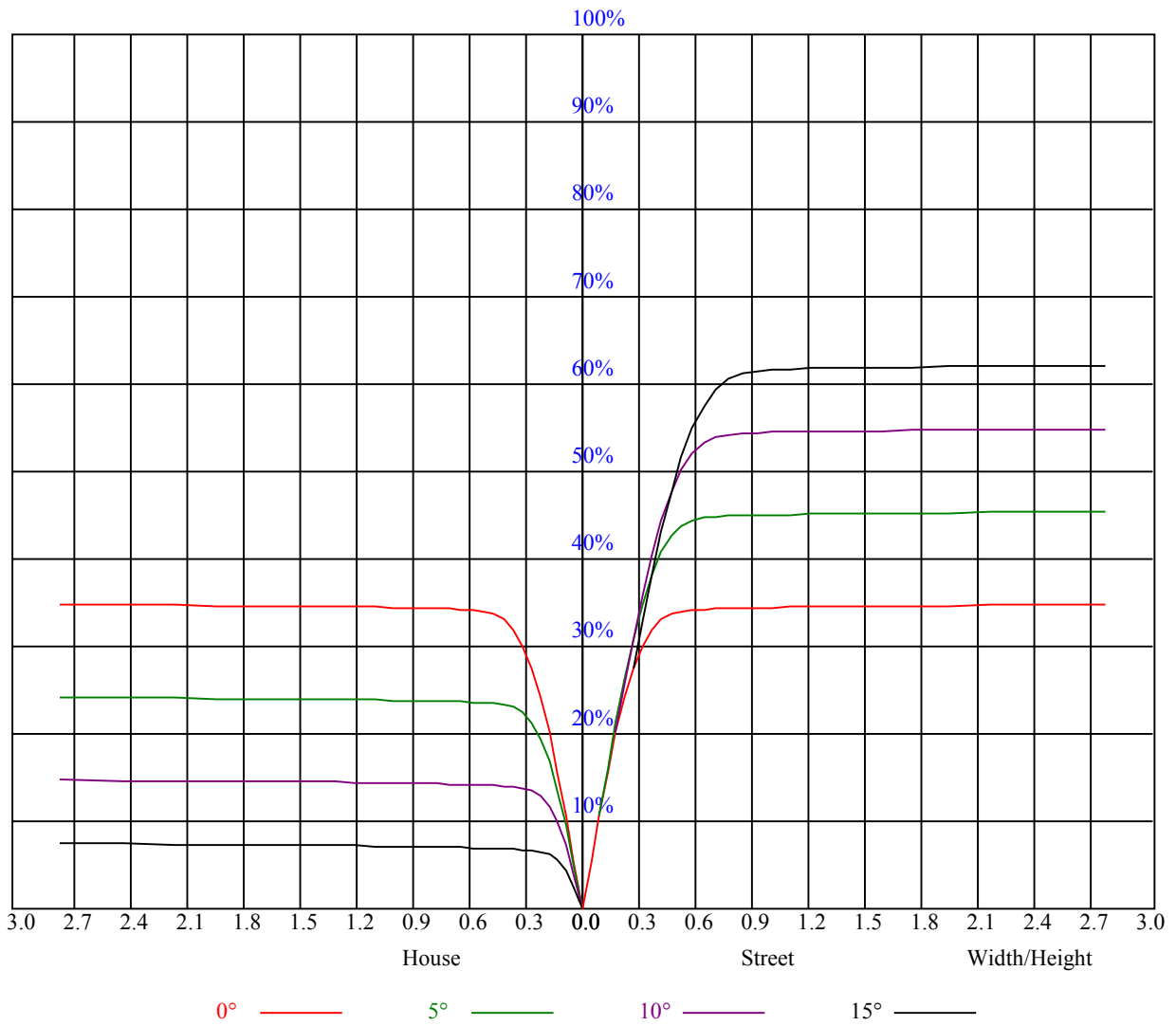
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

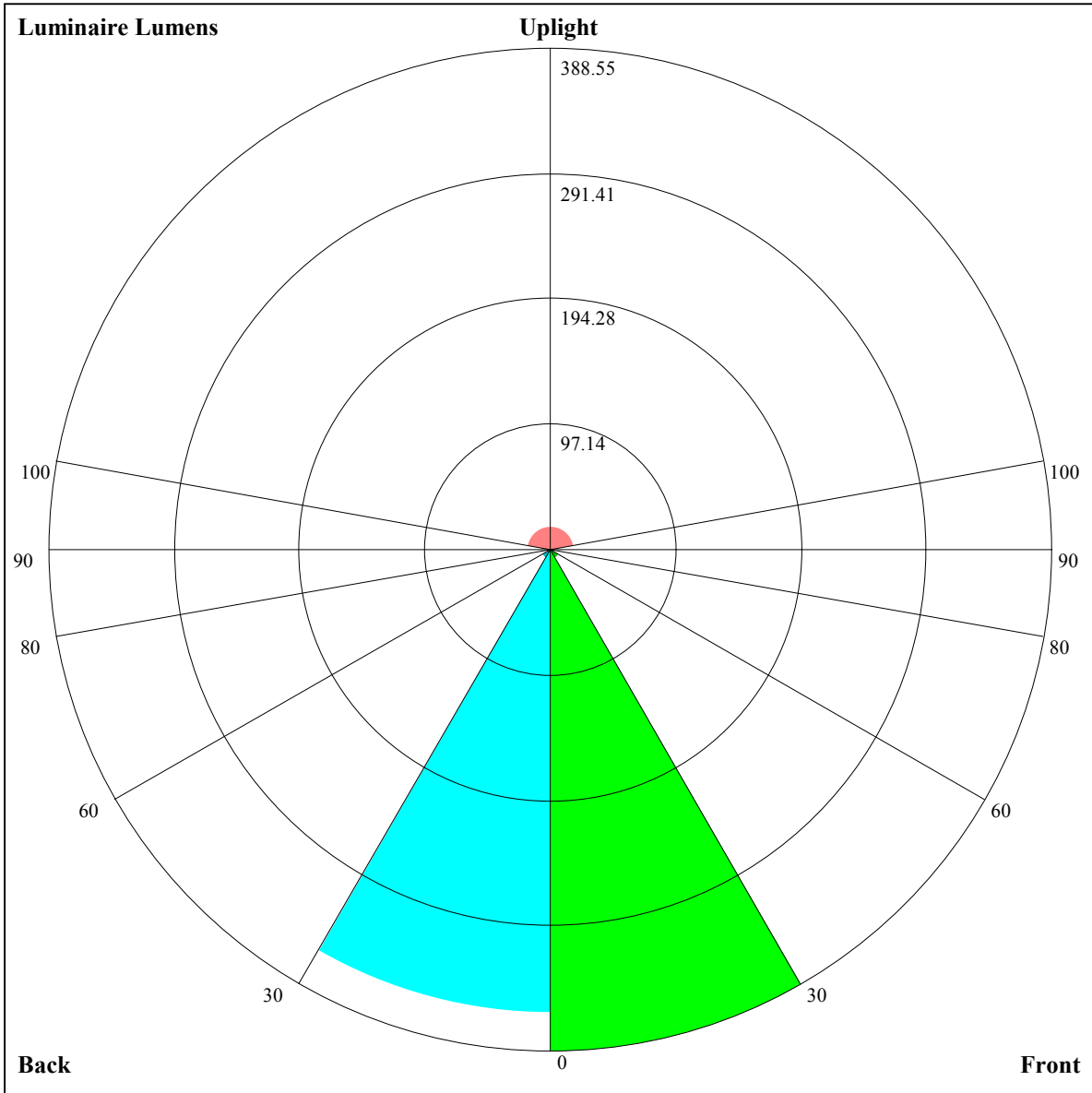
Luminance Limiting Curve





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	0.84	0.84	0.84	0.82	0.82	0.82	0.79	0.79	0.79	0.75	0.75	0.75	0.72	0.72	0.72	0.71
1	0.80	0.78	0.77	0.78	0.77	0.75	0.75	0.74	0.73	0.73	0.72	0.71	0.70	0.70	0.69	0.68
2	0.76	0.73	0.71	0.74	0.72	0.71	0.72	0.70	0.69	0.70	0.69	0.68	0.68	0.67	0.66	0.65
3	0.72	0.69	0.67	0.71	0.69	0.67	0.69	0.67	0.66	0.68	0.66	0.65	0.66	0.65	0.64	0.63
4	0.69	0.66	0.64	0.68	0.66	0.63	0.67	0.65	0.63	0.66	0.64	0.62	0.64	0.63	0.61	0.60
5	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.63	0.61	0.60	0.62	0.61	0.59	0.58
6	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.59	0.58	0.61	0.59	0.57	0.56
7	0.62	0.58	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.60	0.57	0.56	0.59	0.57	0.55	0.55
8	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.54	0.58	0.56	0.54	0.57	0.55	0.54	0.53
9	0.58	0.55	0.52	0.57	0.54	0.52	0.57	0.54	0.52	0.56	0.54	0.52	0.56	0.54	0.52	0.51
10	0.56	0.53	0.51	0.56	0.53	0.51	0.55	0.52	0.51	0.55	0.52	0.51	0.54	0.52	0.50	0.50





Luminaire Lumens:

FL=388.55,FM=7.66,FH=3.93,FVH=1.97

BL=359.69,BM=7.27,BH=4.02,BVH=1.99

UL=3.85,UH=18.33

BUG Rating:B1-U2-G0

NATA 1-1008-M

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	2368.13	2297.81	2069.44	1687.50	1039.50	306.56	35.55	8.72	5.63
45.0	2368.69	2301.75	2063.81	1668.38	1014.75	293.63	32.01	7.88	5.57
90.0	2365.31	2238.19	1973.81	1509.19	809.10	124.20	19.80	6.86	5.29
135.0	2369.81	2261.81	2007.56	1565.44	972.56	289.13	24.36	8.04	5.74
180.0	2368.13	2239.31	1926.00	1314.00	736.09	120.54	20.42	7.82	5.63
225.0	2368.69	2238.75	1931.06	1290.94	658.18	119.70	23.29	7.99	5.63
270.0	2365.31	2291.06	2035.69	1578.94	910.13	293.63	33.69	9.73	5.85
315.0	2369.81	2260.69	1983.38	1539.56	839.70	160.82	28.13	8.27	5.63
360.0	2368.13	2297.81	2069.44	1687.50	1039.50	306.56	35.55	8.72	5.63
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	4.78	4.39	4.16	3.99	3.94	3.88	3.83	3.83	3.60
45.0	4.73	4.33	4.05	3.88	3.77	3.71	3.66	3.60	3.54
90.0	4.73	4.39	4.16	4.05	3.94	3.83	3.77	3.66	3.60
135.0	4.89	4.56	4.33	4.22	4.22	4.22	4.22	4.28	3.60
180.0	4.78	4.44	4.22	4.16	4.05	3.99	3.94	3.94	3.60
225.0	4.73	4.28	4.11	3.88	3.83	3.71	3.71	3.66	3.60
270.0	4.84	4.33	4.11	3.94	3.83	3.77	3.66	3.66	3.66
315.0	4.78	4.39	4.16	4.11	3.99	3.99	3.99	3.71	3.66
360.0	4.78	4.39	4.16	3.99	3.94	3.88	3.83	3.83	3.60
C/ γ (°)	90.0								
0.0	3.54								
45.0	3.54								
90.0	3.54								
135.0	3.49								
180.0	3.54								
225.0	3.54								
270.0	3.49								
315.0	3.54								
360.0	3.54								