



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: 3-2326-M	
Luminaire: 92.70.131.00	
Report No: GC2019091909	Voltage(V): 220.4000
Test No: NATA07	Current(A): 0.0690
LampCAT: BRIDGELEX V13B	Power (W): 14.0300
Lamp flux(lm): 1760.0	PF: 0.9160
Number of Lamps: 1	Ballast type: AC
Length(mm): 78	Width(mm): 78
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1573.46, Efficiency(%): 89.40% , Luminous Efficacy(lm/W): 112.15
Central intensity(cd): 3776.466, Maximum intensity(cd): 3776.466
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=33.6
 [C90/270]Total=33.6
Field angle(10%Imax): [C0/180]Total=68.4
 [C90/270]Total=68.4
Maximum s/h(1/2): C0_180=0.56 C90_270=0.56
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(%): 89.40%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.663%

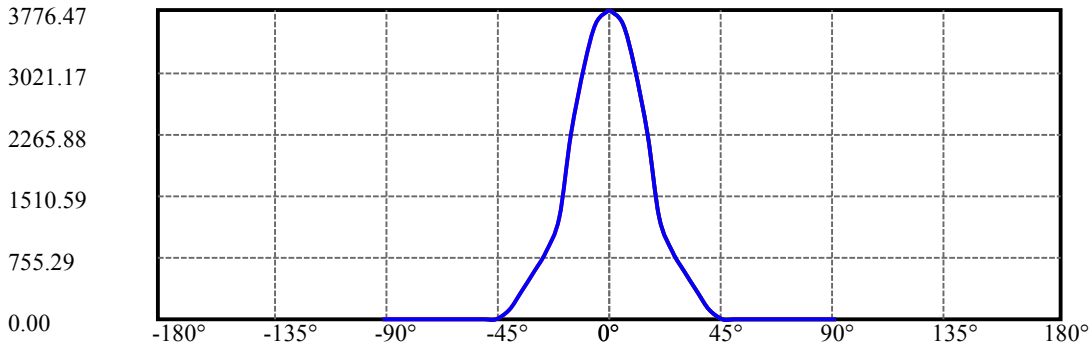
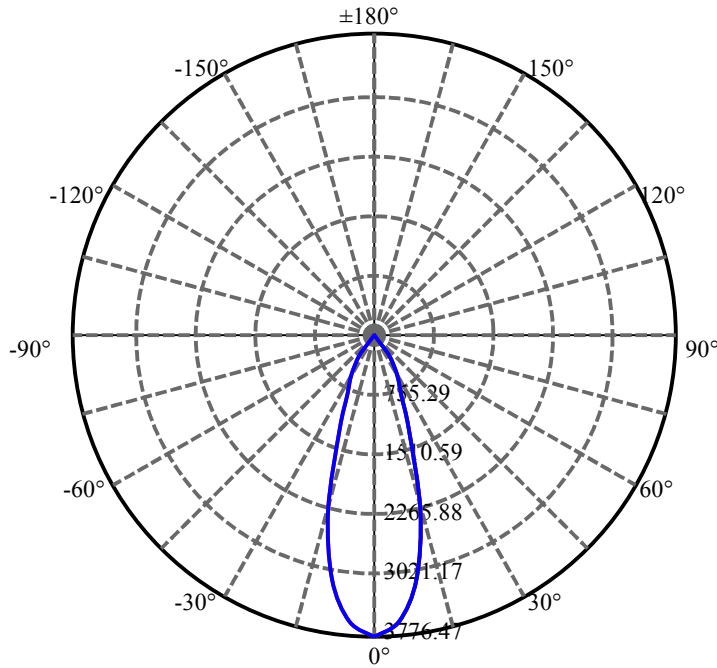
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3776.467	0.000	0	.000%	.000%
5.0	3603.266	88.223	88.223	5.013%	5.607%
10.0	3102.168	239.874	328.097	13.629%	20.852%
15.0	2254.437	317.750	645.847	18.054%	41.046%
20.0	1254.306	289.170	935.017	16.430%	59.424%
25.0	810.365	216.546	1151.563	12.304%	73.187%
30.0	583.371	176.378	1327.941	10.022%	84.396%
35.0	335.891	135.368	1463.309	7.691%	93.000%
40.0	119.326	75.949	1539.258	4.315%	97.827%
45.0	7.088	23.407	1562.665	1.330%	99.314%
50.0	4.513	2.344	1565.009	.133%	99.463%
55.0	3.434	1.728	1566.737	.098%	99.573%
60.0	2.697	1.417	1568.154	.081%	99.663%
65.0	2.169	1.183	1569.337	.067%	99.738%
70.0	1.804	1.006	1570.343	.057%	99.802%
75.0	1.560	0.879	1571.223	.050%	99.858%
80.0	1.380	0.787	1572.009	.045%	99.908%
85.0	1.293	0.727	1572.736	.041%	99.954%
90.0	1.334	0.719	1573.455	.041%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1327.94	75.45%	84.40%
0-40	1539.26	87.46%	97.83%
0-60	1568.15	89.10%	99.66%
0-90	1572.74	89.36%	99.95%
0-120	1572.74	89.36%	99.95%
0-180	1573.46	89.40%	100.00%
60-90	6.00	0.34%	0.38%
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%
0-28.04	1258.76	71.52%	80.00%

ZONAL LUMEN SUMMARY

0-10	328.10
10-20	606.92
20-30	392.92
30-40	211.32
40-50	25.75
50-60	3.15
60-70	2.19
70-80	1.67
80-90	0.73
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: ———

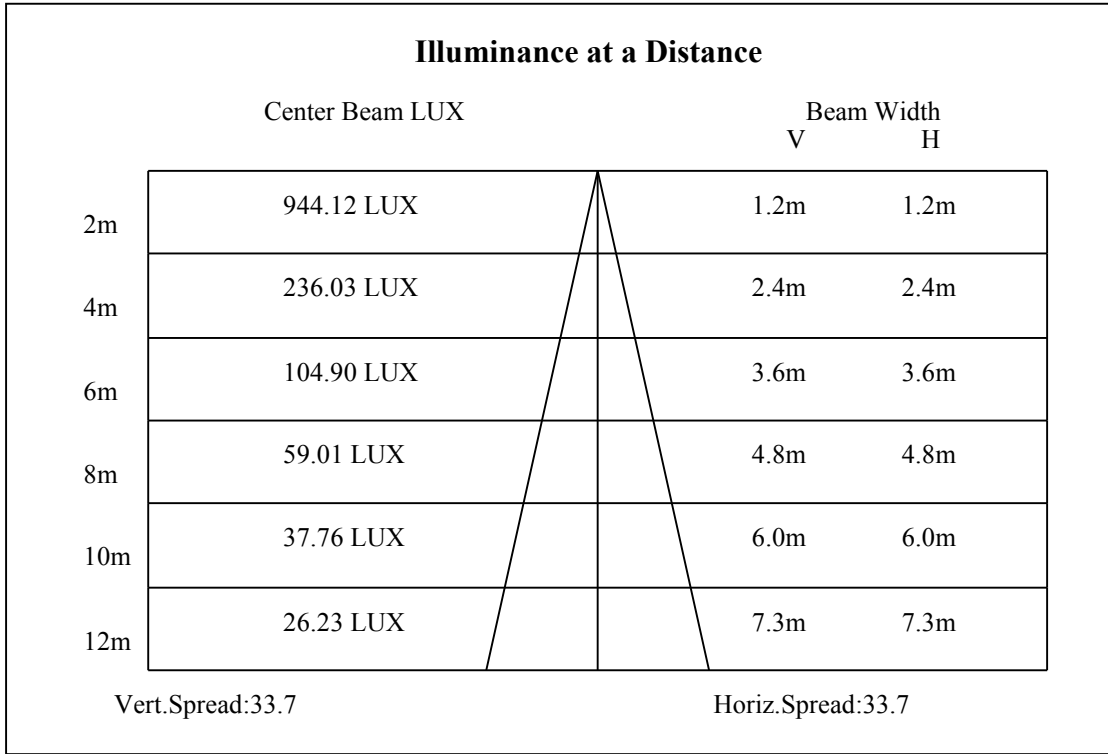
C90/C270: ———

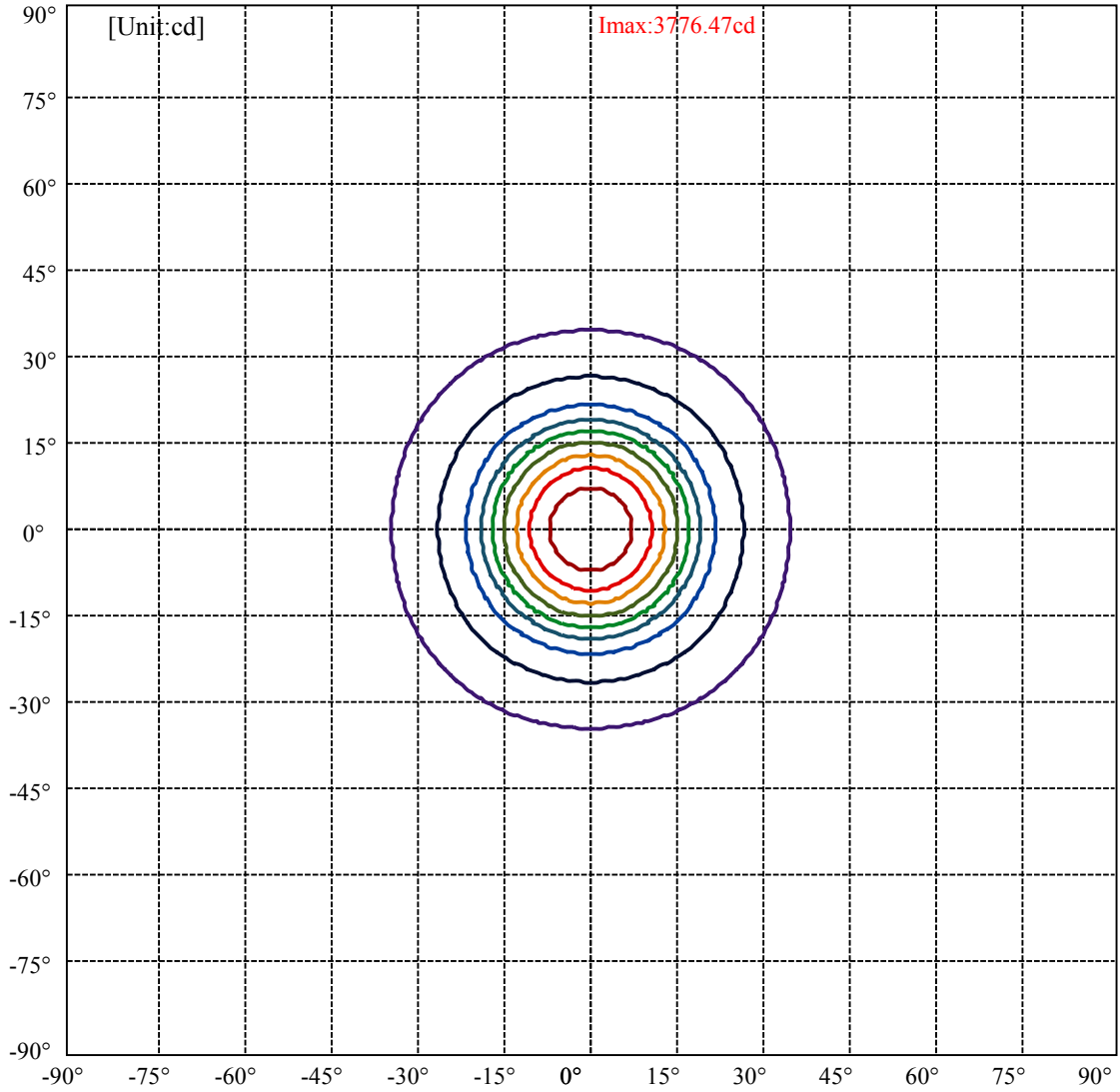
Field angle(10%Imax):C0/180Left:34.2 Right:34.2

:C90/270Left:34.2 Right:34.2

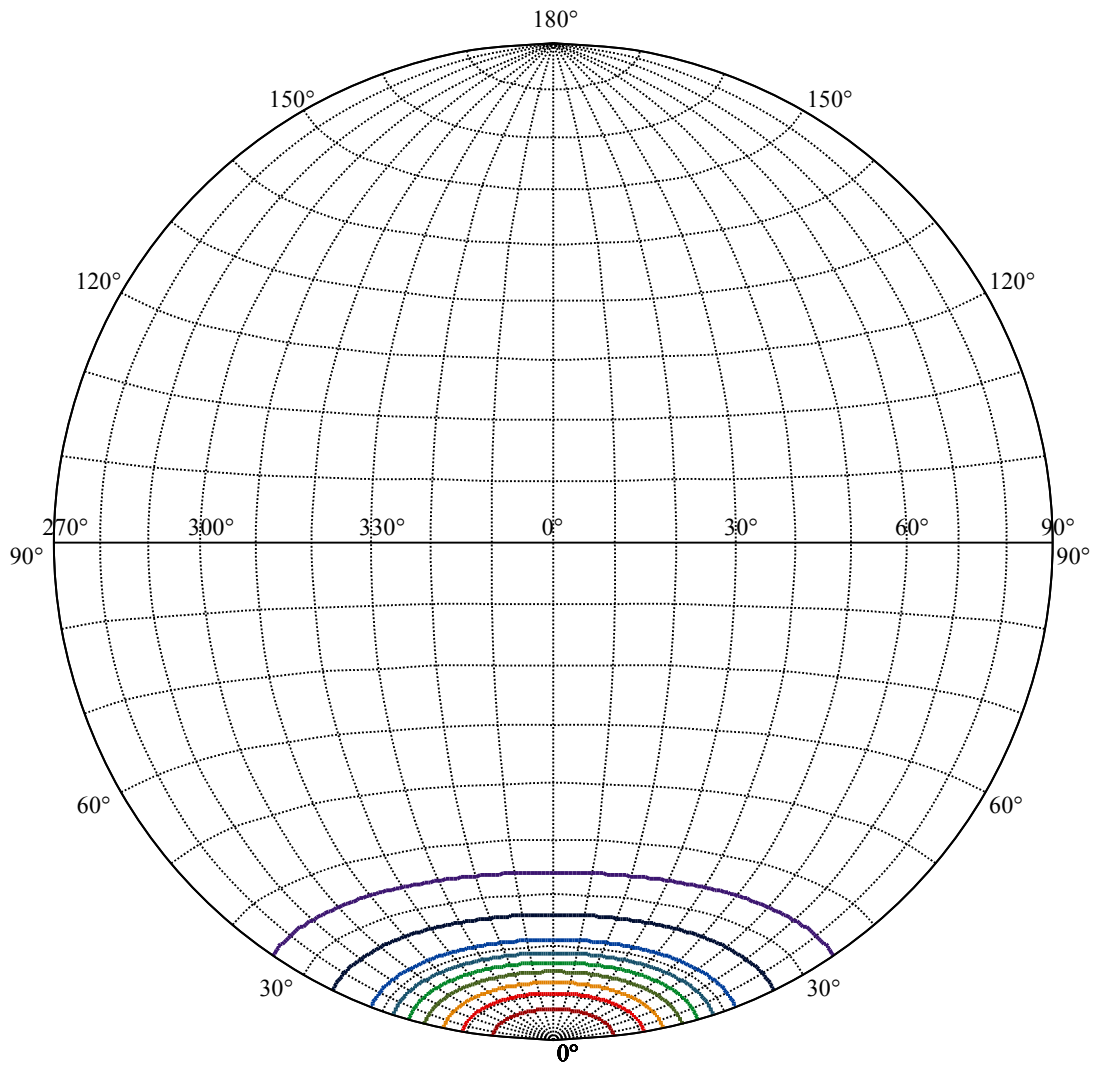
Beam Angle(50%Imax):C0/180Left:16.8 Right:16.8

:C90/270Left:16.8 Right:16.8





(10%Imax)	377.647	—
(20%Imax)	755.293	—
(30%Imax)	1132.94	—
(40%Imax)	1510.59	—
(50%Imax)	1888.23	—
(60%Imax)	2265.88	—
(70%Imax)	2643.53	—
(80%Imax)	3021.17	—
(90%Imax)	3398.82	—



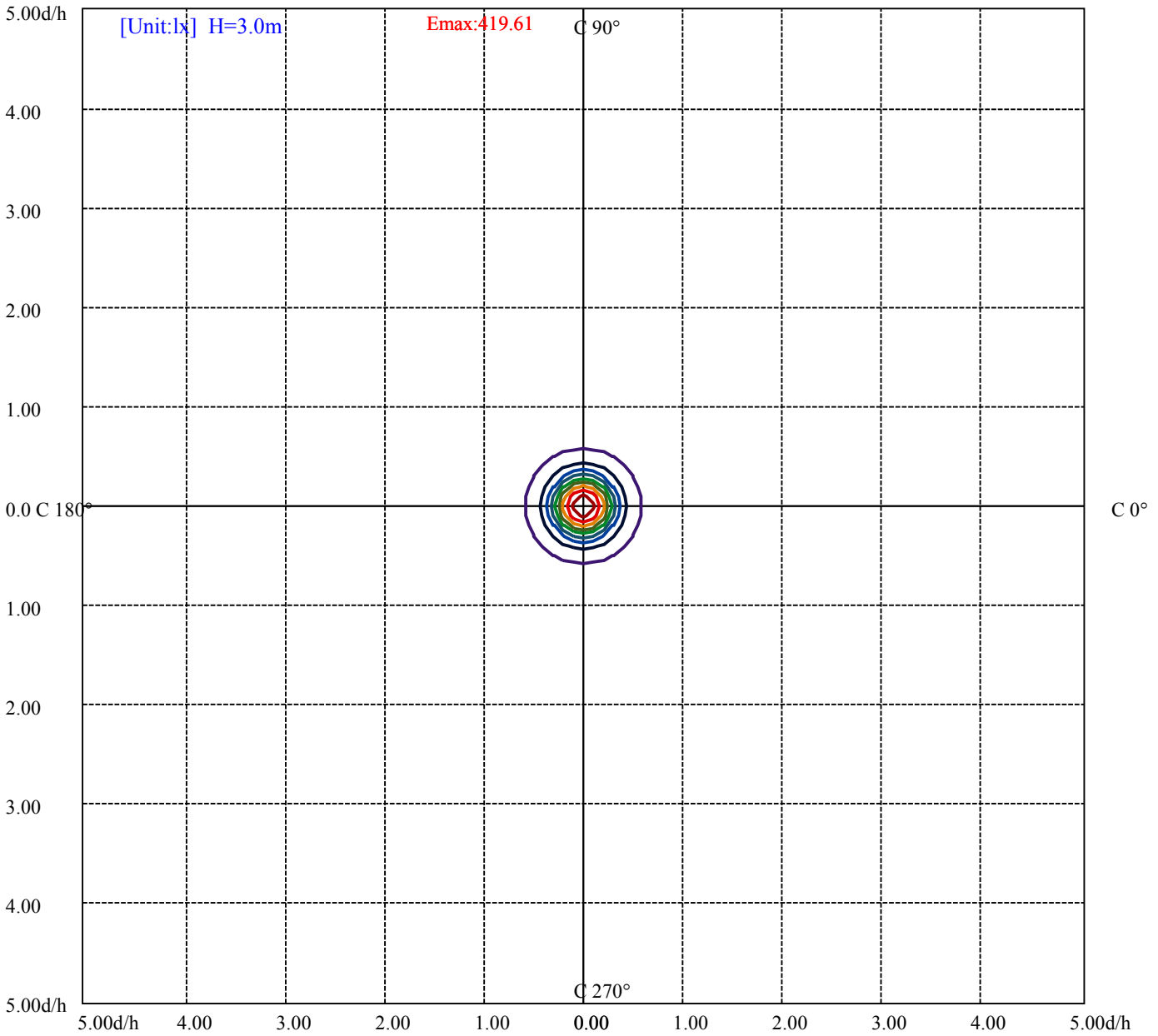
House

[Unit:cd]

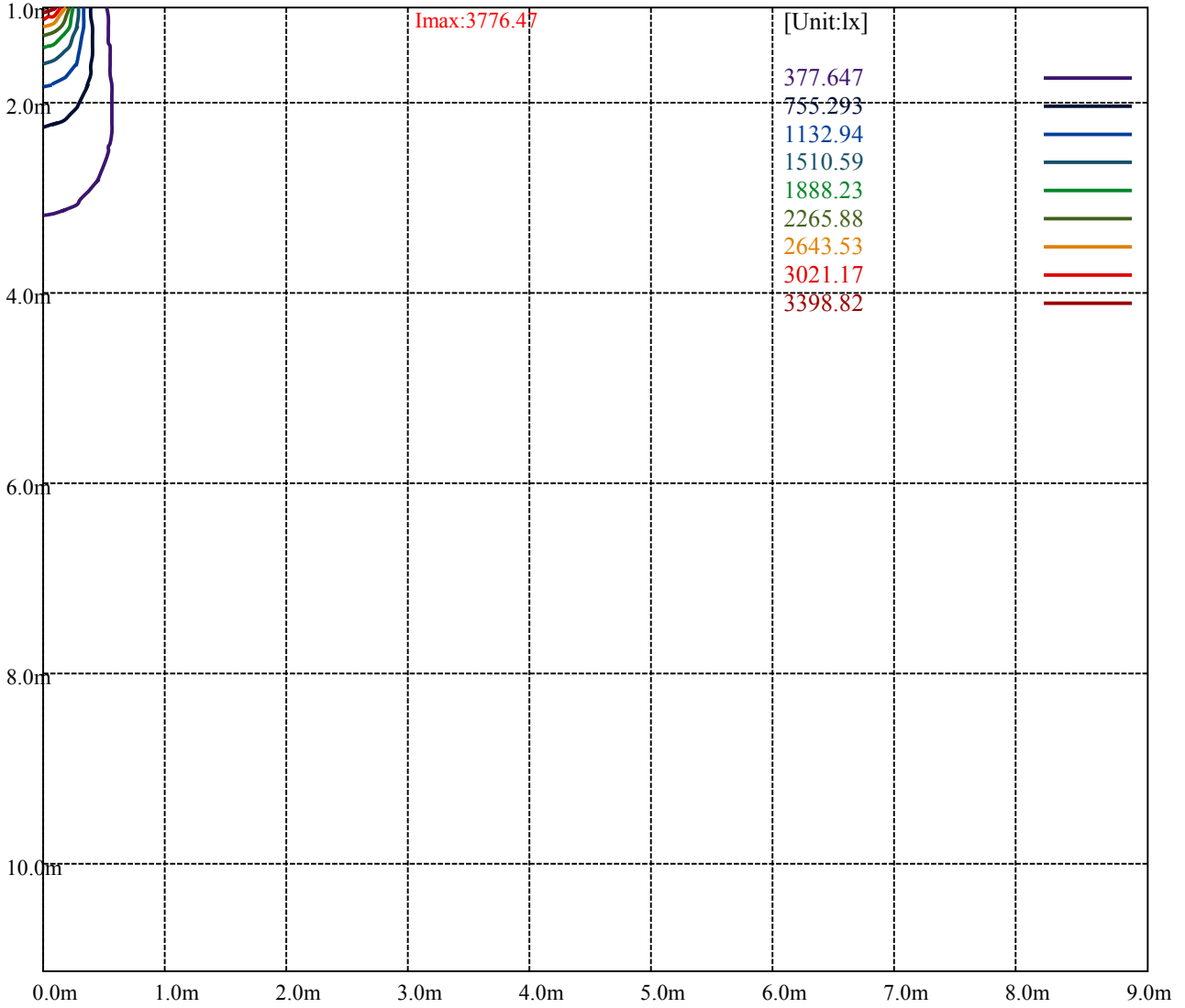
Road

Imax:3776.47

(10%Imax)	377.647	—
(20%Imax)	755.293	—
(30%Imax)	1132.94	—
(40%Imax)	1510.59	—
(50%Imax)	1888.23	—
(60%Imax)	2265.88	—
(70%Imax)	2643.53	—
(80%Imax)	3021.17	—
(90%Imax)	3398.82	—



- (10%Emax) 41.96067
- (20%Emax) 83.92133
- (30%Emax) 125.8822
- (40%Emax) 167.8422
- (50%Emax) 209.8033
- (60%Emax) 251.7644
- (70%Emax) 293.7245
- (80%Emax) 335.6855
- (90%Emax) 377.6456



Luminance Table

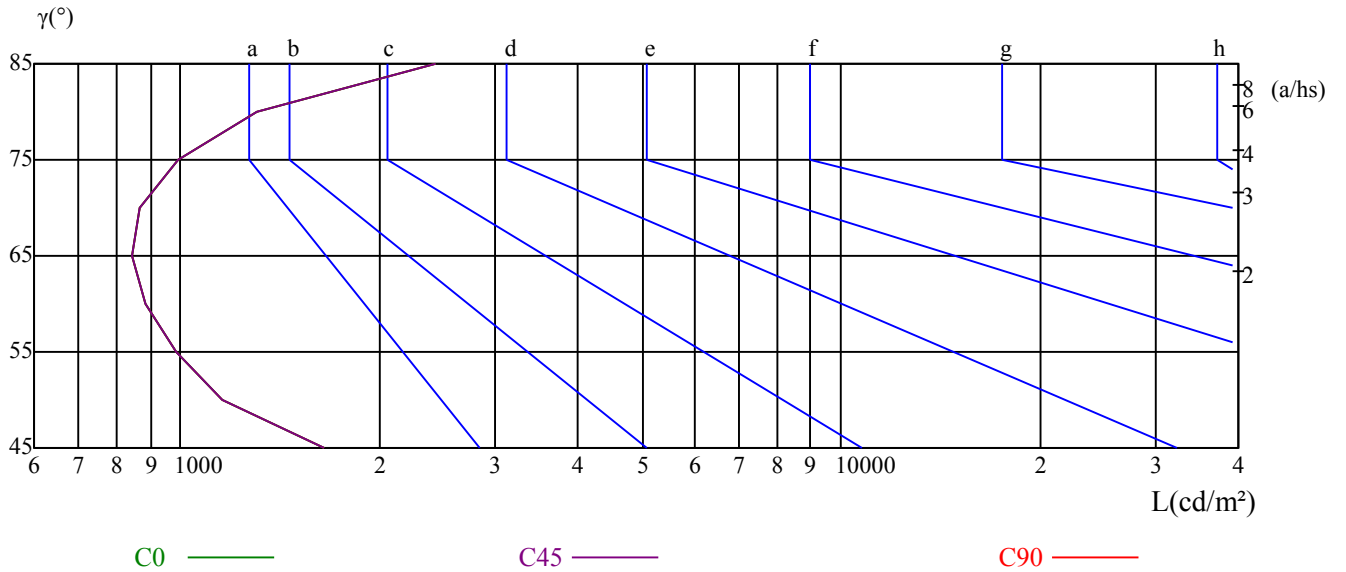
γ	45	50	55	60	65	70	75	80	85
C0	1648	1154	984	887	844	867	991	1307	2439
C45	1648	1154	984	887	844	867	991	1307	2439
C90	1648	1154	984	887	844	867	991	1307	2439

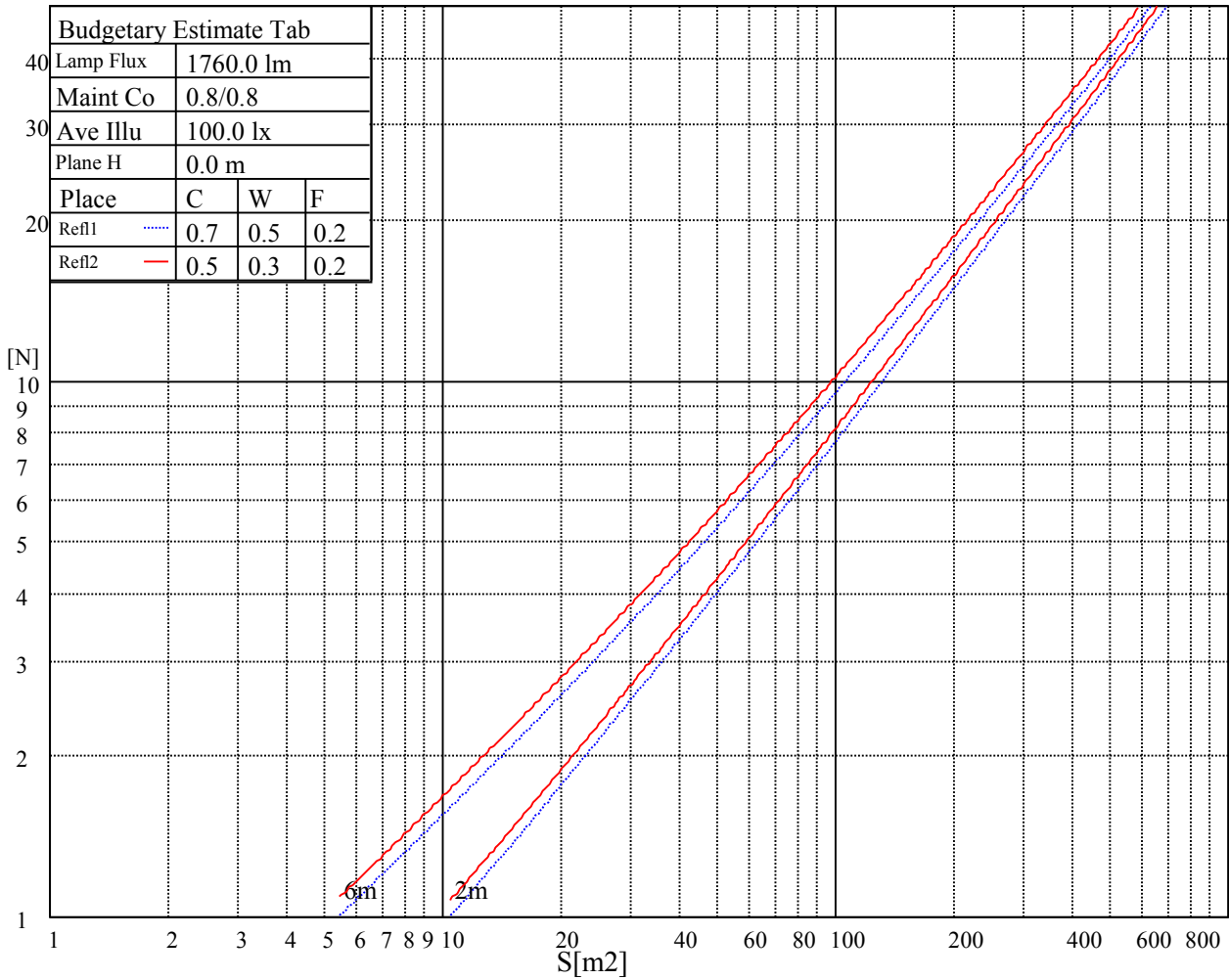
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
844	844	844	991	991	991	2439	2439	2439

Glare Table

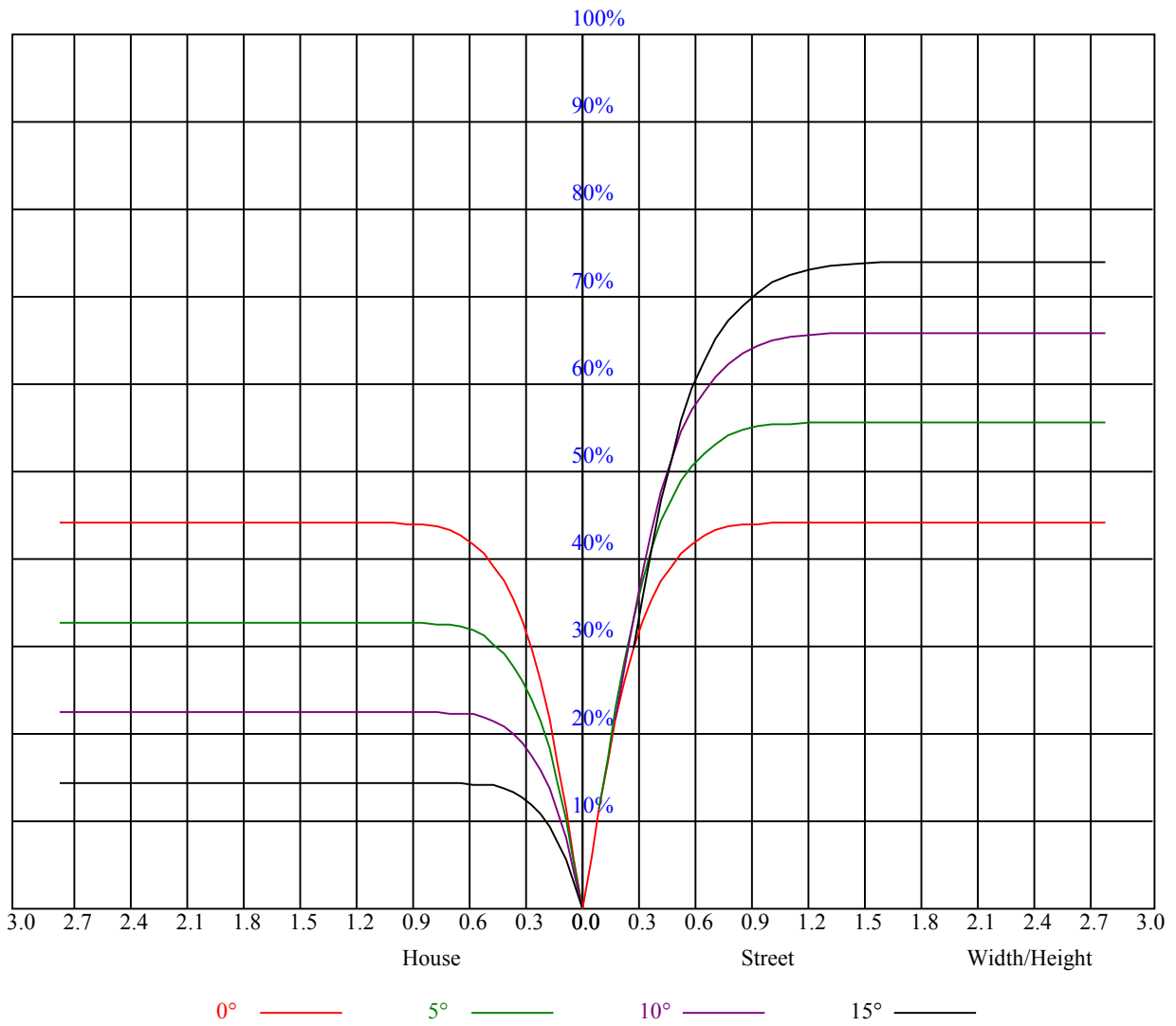
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

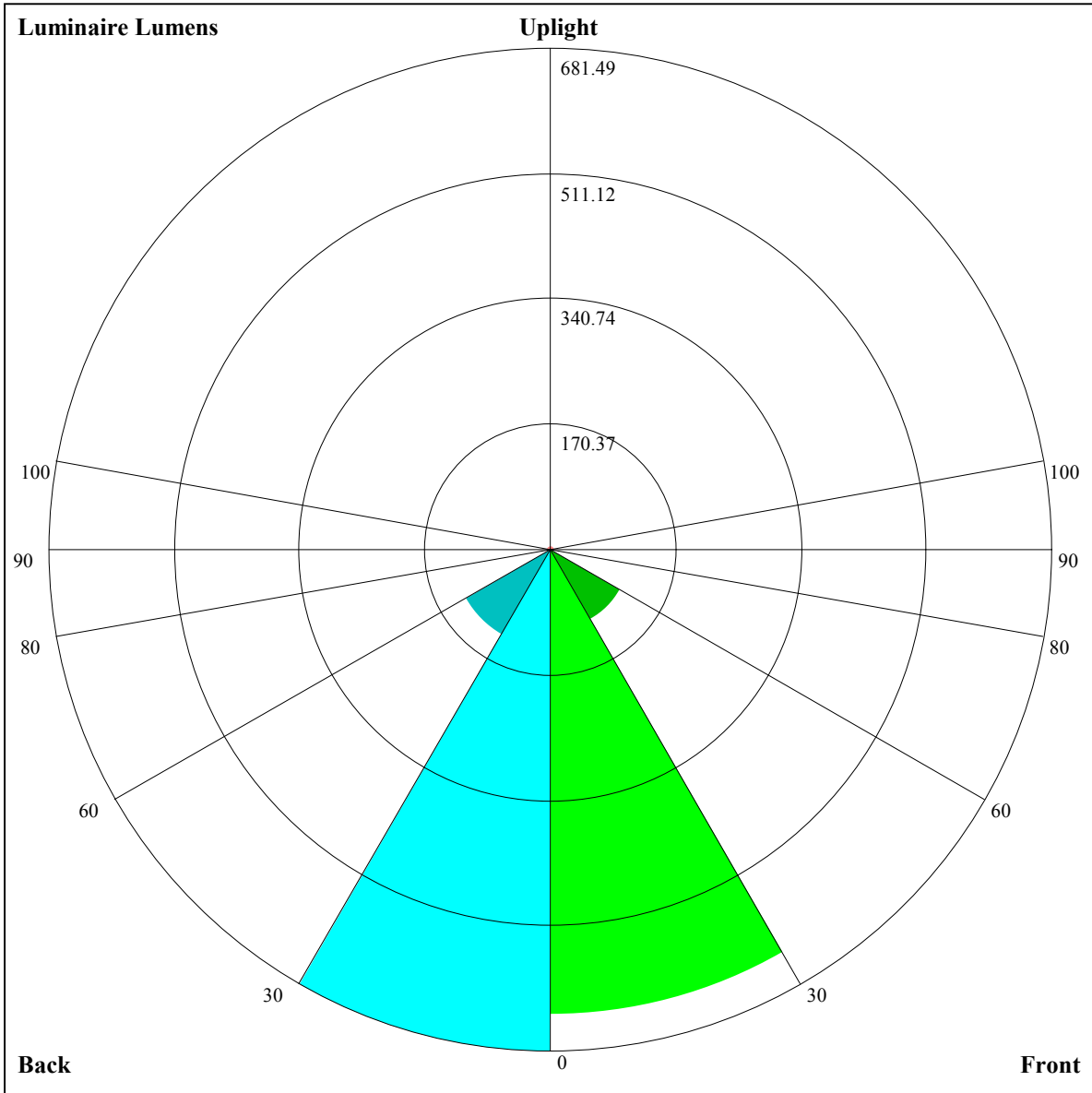
Luminance Limiting Curve





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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	1.00	0.98	0.96	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.85
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.85	0.84	0.85	0.83	0.82	0.81
3	0.89	0.85	0.82	0.88	0.84	0.82	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.78	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.73
5	0.80	0.76	0.73	0.80	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.75	0.73	0.71	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.73	0.70	0.68	0.72	0.70	0.67	0.66
7	0.73	0.69	0.65	0.73	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.65	0.62	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
9	0.67	0.63	0.60	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58
10	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.57	0.62	0.59	0.57	0.56





Luminaire Lumens:

FL=632.11,FM=108.71,FH=1.88,FVH=0.72

BL=681.49,BM=132.68,BH=1.96,BVH=0.72

UL=1.46,UH=6.93

BUG Rating:B2-U1-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	3767.07	3496.07	2891.44	1902.58	899.85	701.53	555.08	206.68	14.20
45.0	3782.38	3656.17	3201.88	2460.82	1507.69	852.48	606.07	375.45	120.51
90.0	3768.46	3512.32	2864.52	2089.59	831.92	740.60	555.87	263.71	14.85
135.0	3787.95	3677.51	3303.04	2497.47	1715.58	890.99	613.96	449.23	245.98
180.0	3767.07	3688.18	3327.63	2632.51	1746.20	953.64	626.03	439.49	235.31
225.0	3782.38	3543.87	3044.11	2025.55	902.50	736.33	564.13	264.31	14.29
270.0	3768.46	3718.81	3308.60	2490.51	1555.95	921.62	600.97	439.49	294.24
315.0	3787.95	3533.20	2876.13	1936.46	874.75	685.75	544.87	248.77	15.22
360.0	3767.07	3496.07	2891.44	1902.58	899.85	701.53	555.08	206.68	14.20
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	6.17	4.45	3.48	2.74	2.13	1.76	1.53	1.35	1.30
45.0	7.80	4.59	3.43	2.74	2.18	1.81	1.58	1.35	1.35
90.0	5.34	3.99	3.11	2.51	2.00	1.72	1.53	1.39	1.25
135.0	8.82	4.92	3.76	2.88	2.27	1.95	1.62	1.39	1.30
180.0	9.23	5.48	4.04	3.16	2.51	2.00	1.72	1.44	1.30
225.0	5.43	4.13	3.11	2.46	2.04	1.72	1.53	1.39	1.30
270.0	8.40	4.45	3.39	2.64	2.18	1.81	1.53	1.39	1.25
315.0	5.52	4.08	3.16	2.46	2.04	1.67	1.44	1.35	1.30
360.0	6.17	4.45	3.48	2.74	2.13	1.76	1.53	1.35	1.30
C/ γ (°)	90.0								
0.0	1.30								
45.0	1.35								
90.0	1.30								
135.0	1.30								
180.0	1.62								
225.0	1.21								
270.0	1.21								
315.0	1.39								
360.0	1.30								