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Nata

Client:

LumCAT: 3-2046-M

Luminaire: 92.70.131.00

Report No:

Voltage(V): 34.9800

Test No: GC2019082206

Current(A): 0.3980

LampCAT: TRIDONIC SLE 13MM G7

Power (W): 13.9200

Lamp flux(lm): 1702.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 84

Width(mm): 84

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1577.53, Efficiency(%): 92.69% , Luminous Efficacy(lm/W): 113.33

Central intensity(cd): 4036.219, Maximum intensity(cd): 4036.219

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=31.4

[C90/270]Total=31.4

Field angle(10%Imax): [C0/180]Total=67.2

[C90/270]Total=67.2

Maximum s/h(1/2): C0_180=0.51 C90_270=0.51

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(%): 92.69%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.526%

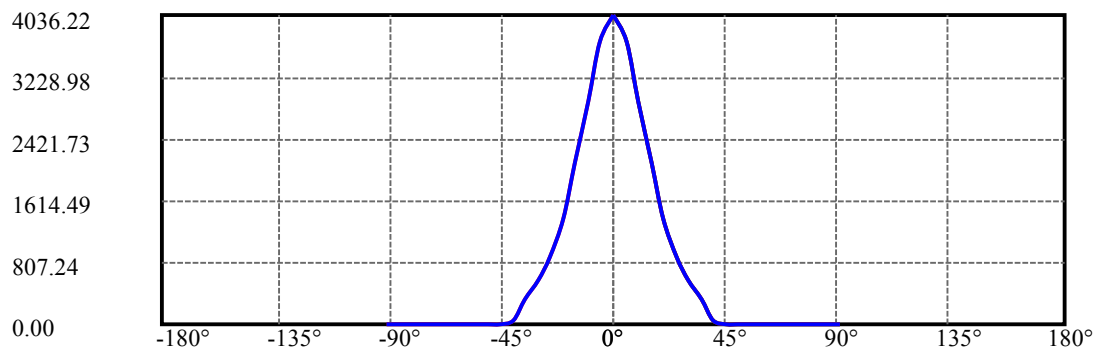
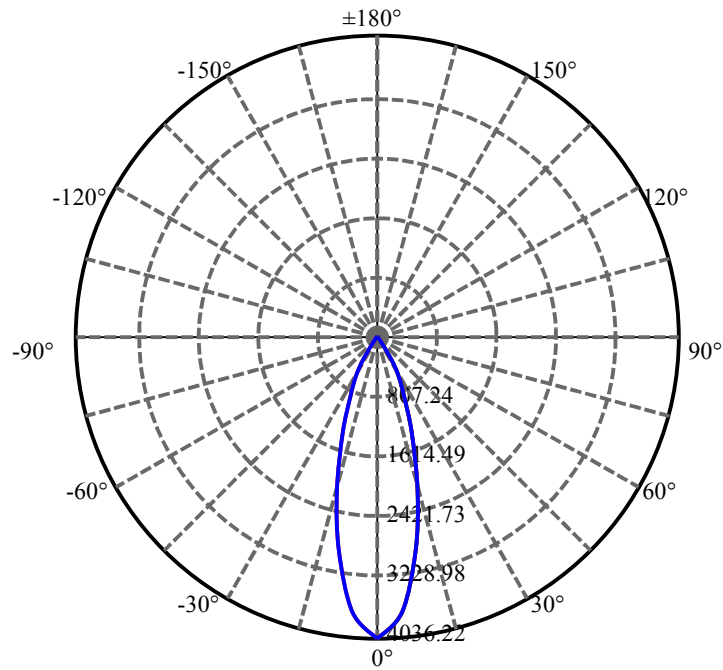
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4036.219	0.000	0	.000%	.000%
5.0	3696.258	92.440	92.44	5.431%	5.860%
10.0	2899.125	235.938	328.377	13.862%	20.816%
15.0	2117.180	297.564	625.941	17.483%	39.679%
20.0	1372.781	287.622	913.563	16.899%	57.911%
25.0	880.263	236.303	1149.866	13.884%	72.890%
30.0	584.128	185.320	1335.186	10.888%	84.638%
35.0	334.484	135.272	1470.458	7.948%	93.213%
40.0	41.414	62.716	1533.173	3.685%	97.188%
45.0	10.477	9.608	1542.781	.565%	97.797%
50.0	9.035	3.943	1546.724	.232%	98.047%
55.0	8.367	3.784	1550.508	.222%	98.287%
60.0	7.959	3.774	1554.282	.222%	98.526%
65.0	7.671	3.800	1558.081	.223%	98.767%
70.0	7.481	3.837	1561.918	.225%	99.010%
75.0	7.348	3.876	1565.794	.228%	99.256%
80.0	7.235	3.902	1569.696	.229%	99.503%
85.0	7.179	3.917	1573.613	.230%	99.752%
90.0	7.123	3.916	1577.529	.230%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1335.19	78.45%	84.64%
0-40	1533.17	90.08%	97.19%
0-60	1554.28	91.32%	98.53%
0-90	1573.61	92.46%	99.75%
0-120	1573.61	92.46%	99.75%
0-180	1577.53	92.69%	100.00%
60-90	23.10	1.36%	1.46%
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%
0-28.03	1262.02	74.15%	80.00%

ZONAL LUMEN SUMMARY

0-10	328.38
10-20	585.19
20-30	421.62
30-40	197.99
40-50	13.55
50-60	7.56
60-70	7.64
70-80	7.78
80-90	3.92
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:

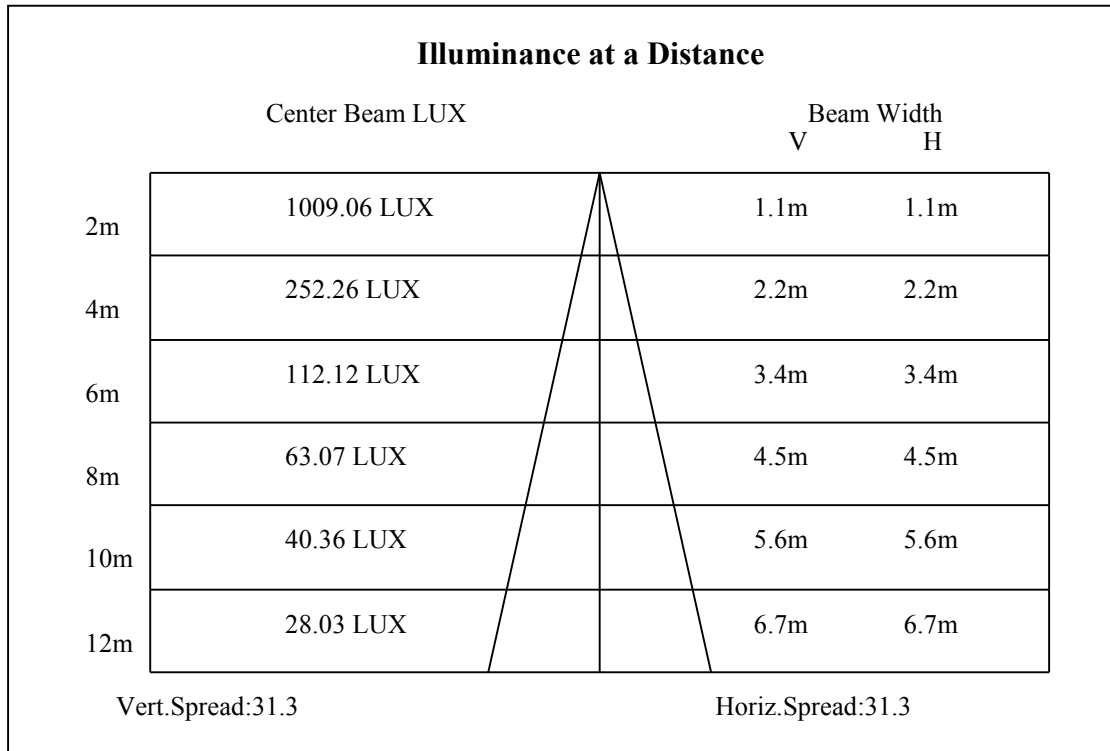
C90/C270:

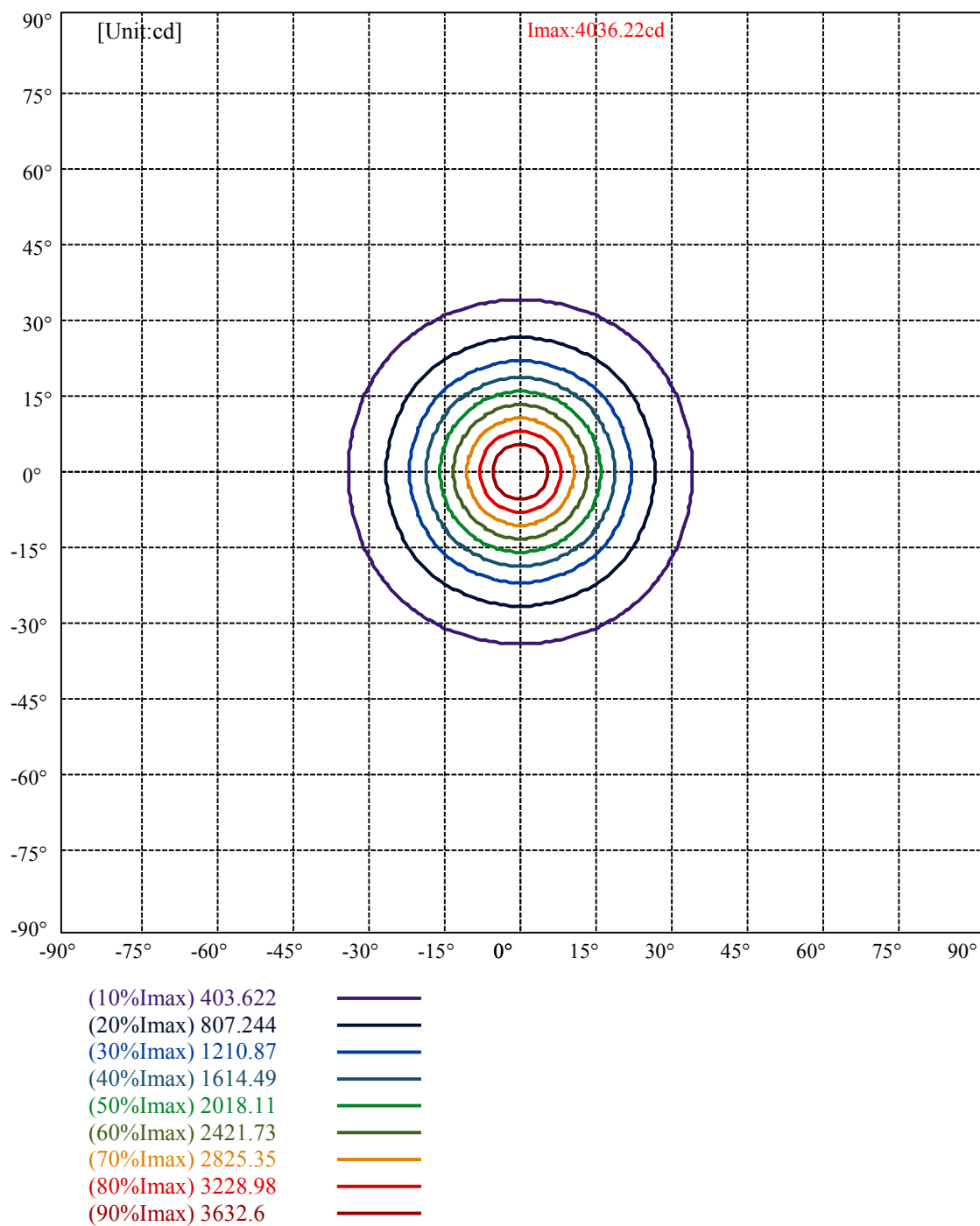
Field angle(10%Imax):C0/180Left:33.6 Right:33.6

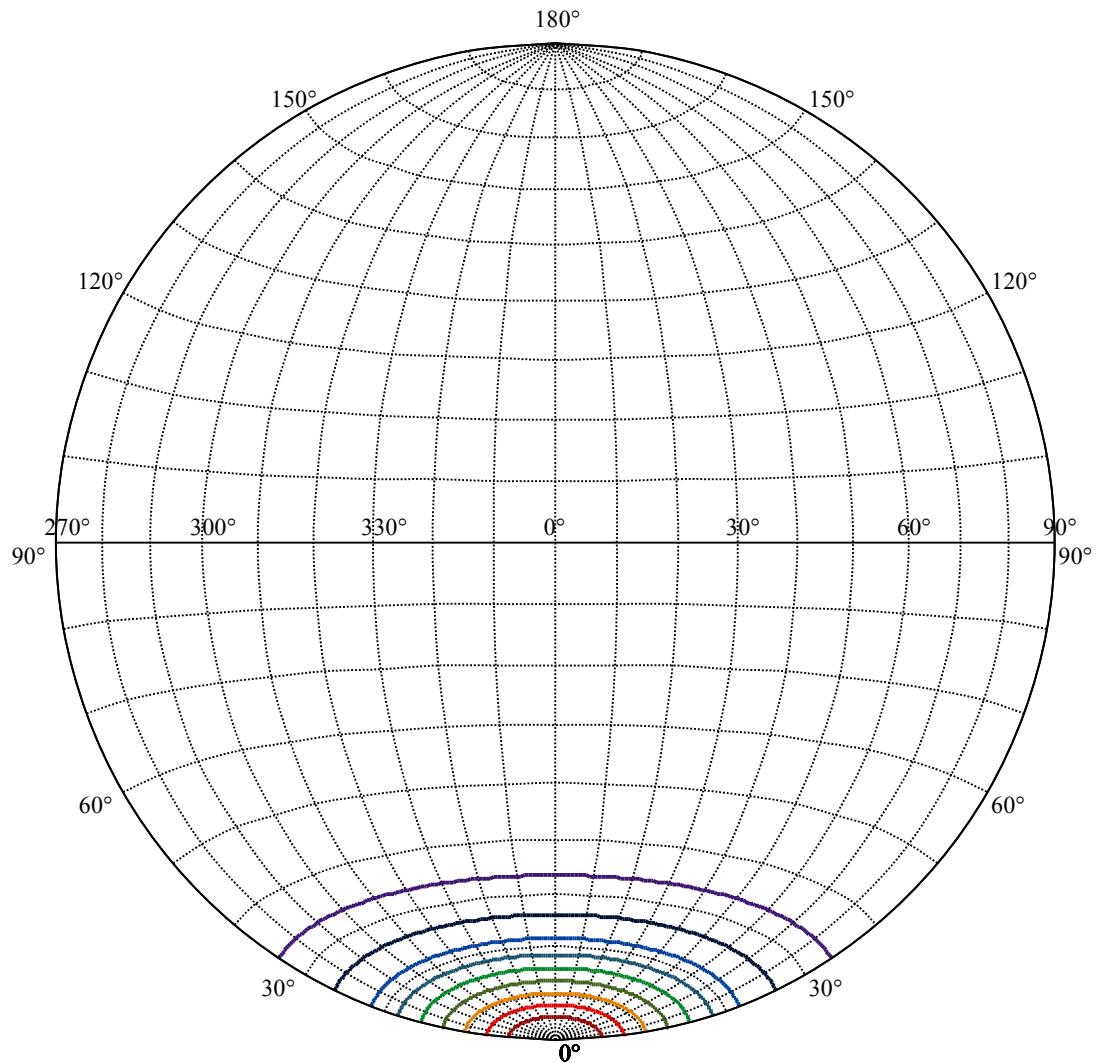
:C90/270Left:33.6 Right:33.6

Beam Angle(50%Imax):C0/180Left:15.7 Right:15.7

:C90/270Left:15.7 Right:15.7







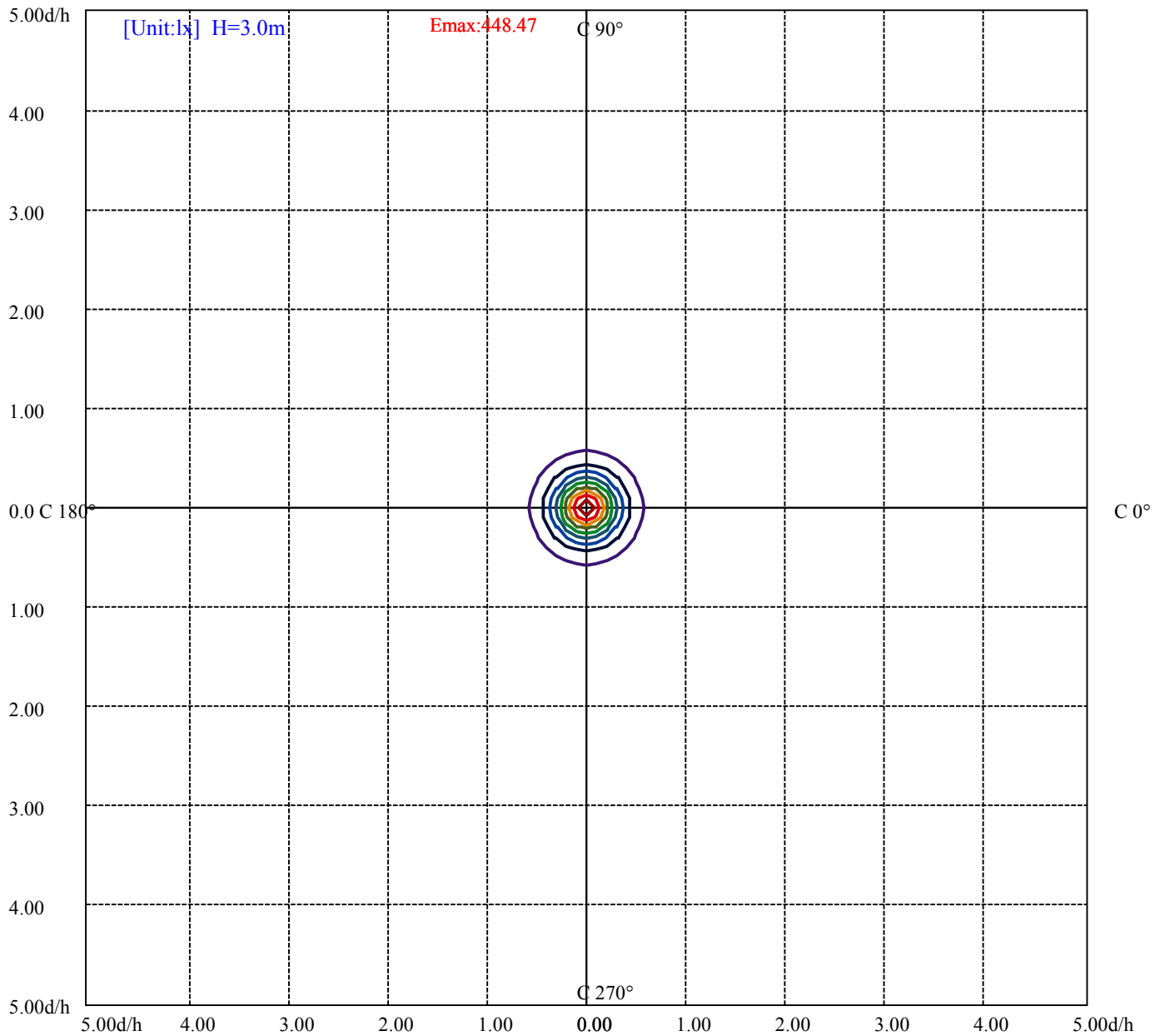
House

[Unit:cd]

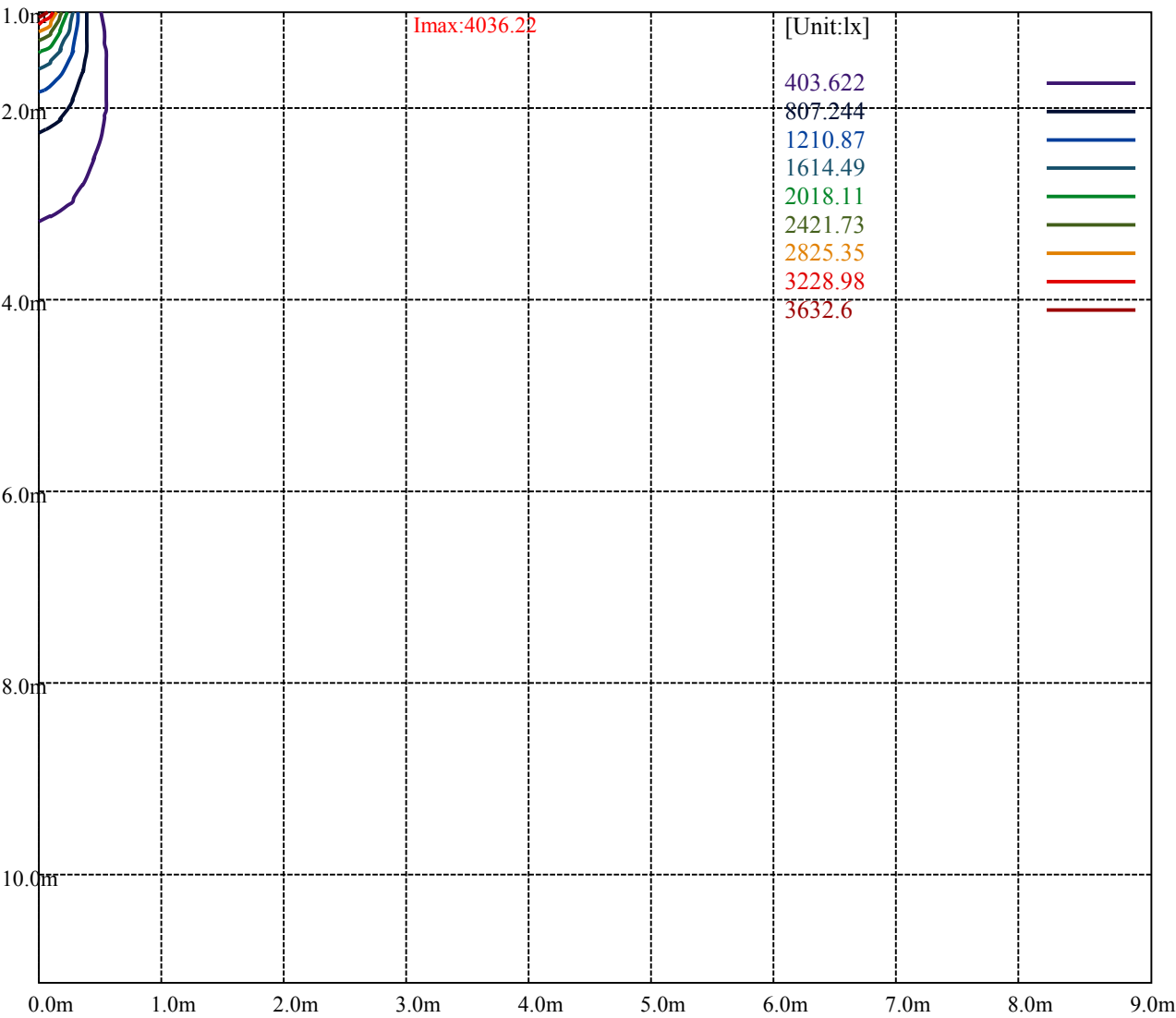
Road

Imax:4036.22

(10%Imax)	403.622	—
(20%Imax)	807.244	—
(30%Imax)	1210.87	—
(40%Imax)	1614.49	—
(50%Imax)	2018.11	—
(60%Imax)	2421.73	—
(70%Imax)	2825.35	—
(80%Imax)	3228.98	—
(90%Imax)	3632.6	—



(10%Emax)	44.84678	—
(20%Emax)	89.69356	—
(30%Emax)	134.54	—
(40%Emax)	179.3867	—
(50%Emax)	224.2333	—
(60%Emax)	269.0811	—
(70%Emax)	313.9278	—
(80%Emax)	358.7744	—
(90%Emax)	403.6211	—



Luminance Table

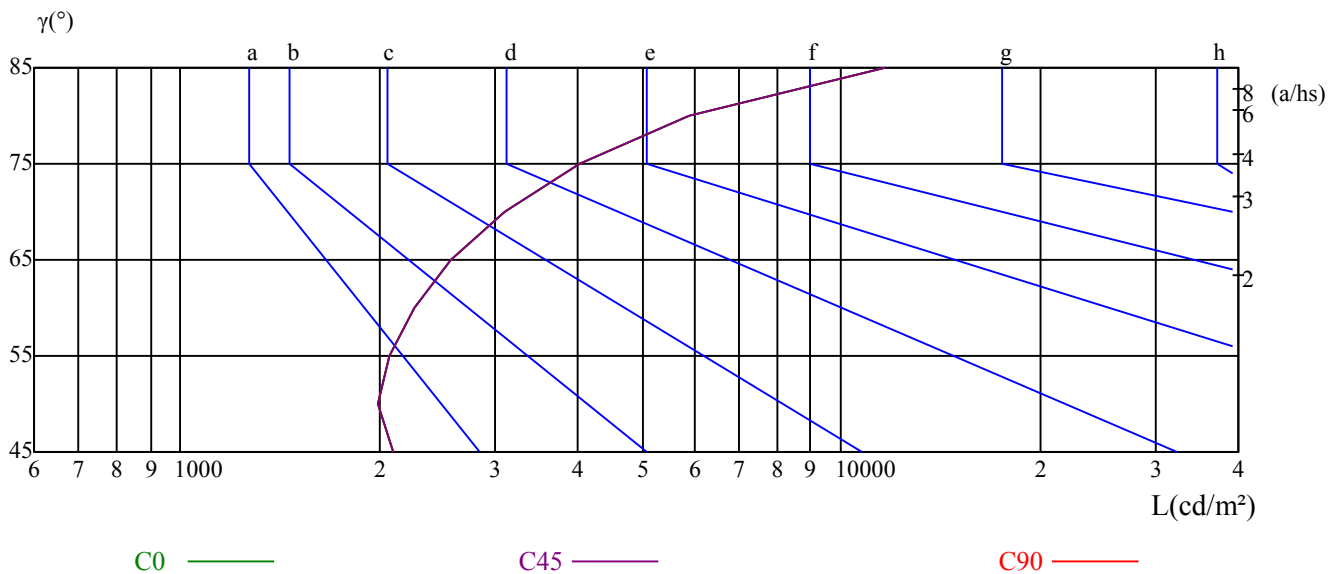
γ	45	50	55	60	65	70	75	80	85
C0	2100	1992	2067	2256	2572	3100	4023	5905	11674
C45	2100	1992	2067	2256	2572	3100	4023	5905	11674
C90	2100	1992	2067	2256	2572	3100	4023	5905	11674

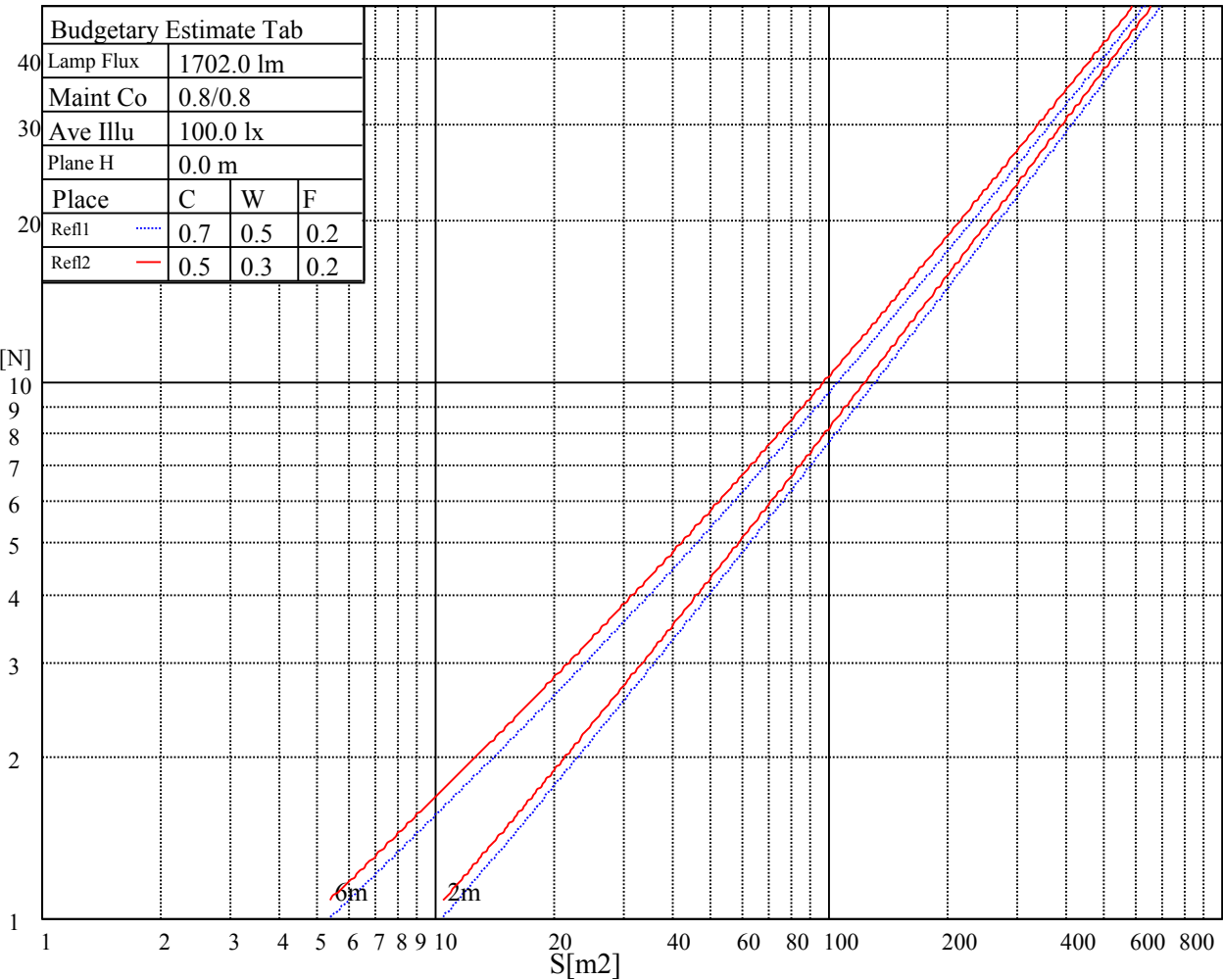
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2572	2572	2572	4023	4023	4023	11674	11674	11674

Glare Table

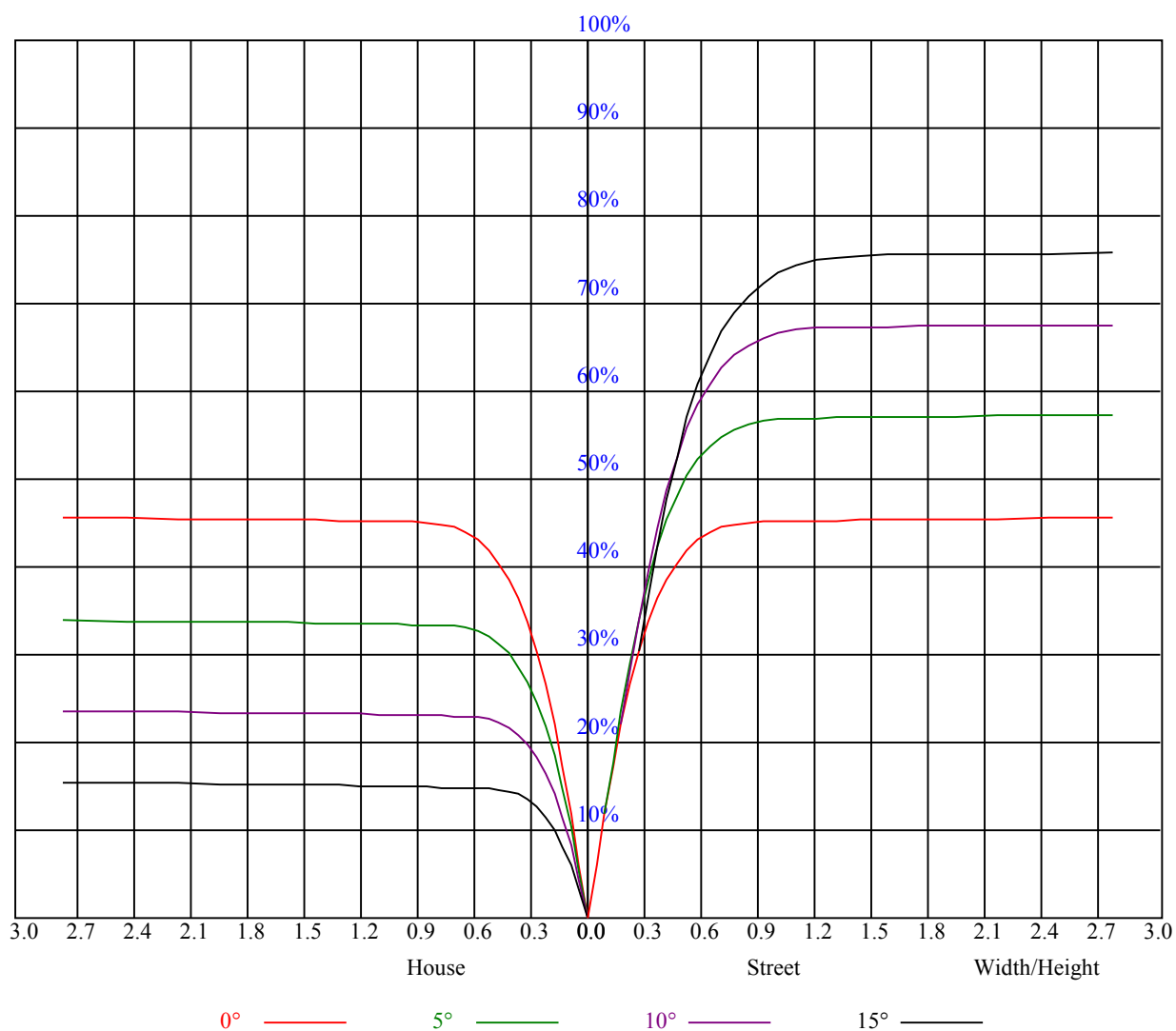
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

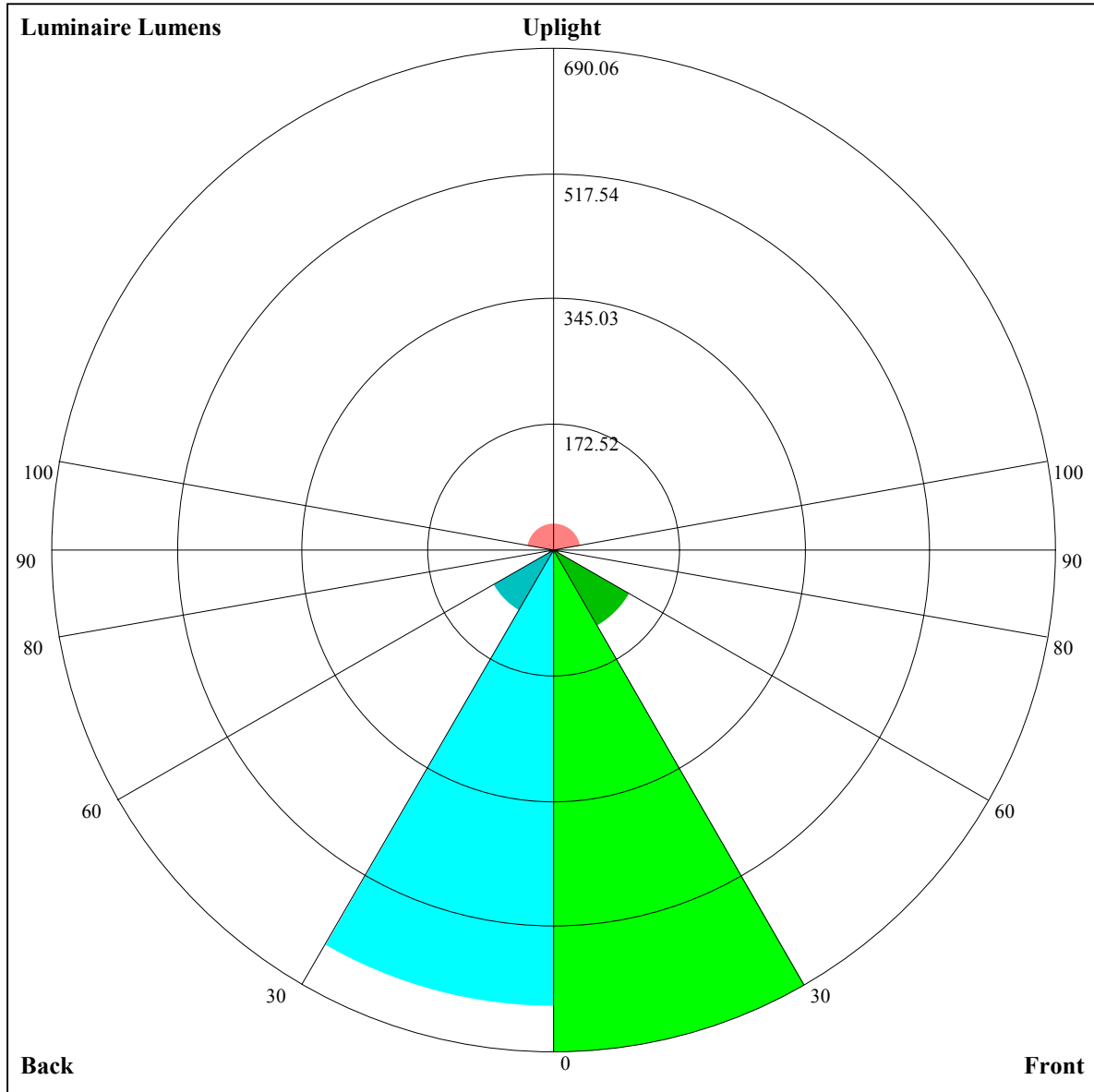
Luminance Limiting Curve





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	1.10	1.10	1.10	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	1.01	0.99	1.01	0.99	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.97	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.88	0.85	0.91	0.87	0.84	0.88	0.85	0.83	0.86	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.71
6	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.74	0.71	0.69	0.68
7	0.75	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.65
8	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.62
9	0.69	0.64	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.59
10	0.66	0.62	0.59	0.66	0.61	0.59	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.57





Luminaire Lumens:

FL=690.06,FM=120.24,FH=7.74,FVH=3.92

BL=628.98,BM=96.03,BH=7.68,BVH=3.91

UL=7.77,UH=36.98

BUG Rating:B2-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	4034.81	3892.50	3093.75	2328.75	1629.00	1013.63	650.81	447.19	80.38		
45.0	4026.38	3773.81	3054.38	2298.38	1603.69	1042.31	640.69	411.75	94.50		
90.0	4029.19	3540.38	2706.19	2025.56	1115.94	800.66	556.99	275.12	17.21		
135.0	4054.50	3642.19	2815.88	2099.81	1371.94	830.25	560.81	326.81	19.07		
180.0	4034.81	3511.13	2714.63	1920.94	1097.27	752.96	534.77	202.16	16.37		
225.0	4026.38	3574.69	2772.00	1935.56	1095.41	755.21	545.18	239.06	15.53		
270.0	4029.19	3850.31	3066.75	2233.13	1585.13	943.31	602.44	392.63	49.56		
315.0	4054.50	3785.06	2969.44	2095.31	1483.88	903.77	581.34	381.15	38.70		
360.0	4034.81	3892.50	3093.75	2328.75	1629.00	1013.63	650.81	447.19	80.38		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	12.09	9.45	8.61	8.10	7.76	7.54	7.43	7.31	7.20		
45.0	11.14	9.11	8.44	8.04	7.71	7.48	7.37	7.26	7.14		
90.0	9.68	8.94	8.33	7.93	7.71	7.54	7.37	7.26	7.20		
135.0	9.79	8.94	8.27	7.93	7.65	7.48	7.31	7.20	7.20		
180.0	9.51	8.72	8.16	7.88	7.59	7.43	7.31	7.26	7.20		
225.0	9.68	8.72	8.16	7.76	7.54	7.37	7.26	7.20	7.14		
270.0	10.97	9.23	8.49	8.04	7.71	7.48	7.37	7.20	7.14		
315.0	10.97	9.17	8.49	7.99	7.71	7.54	7.37	7.20	7.20		
360.0	12.09	9.45	8.61	8.10	7.76	7.54	7.43	7.31	7.20		
C/γ(°)	90.0										
0.0	7.20										
45.0	7.09										
90.0	7.09										
135.0	7.14										
180.0	7.14										
225.0	7.09										
270.0	7.09										
315.0	7.14										
360.0	7.20										