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Nata

Client:

LumCAT: 3-2046-M

Luminaire: 92.70.131.00

Report No:

Voltage(V): 33.9400

Test No: GC20190824010

Current(A): 0.4470

LampCAT: TRIDONIC SLE 15MM G7

Power (W): 15.1700

Lamp flux(lm): 2050.0

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): 1788.04, Efficiency(%): 87.22% , Luminous Efficacy(lm/W): 117.87

Central intensity(cd): 4143.375, Maximum intensity(cd): 4143.375

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=34.2

[C90/270]Total=34.2

Field angle(10%Imax): [C0/180]Total=68.6

[C90/270]Total=68.6

Maximum s/h(1/2): C0_180=0.56 C90_270=0.56

Maximum s/h(1/4): C0_180=0.59 C90_270=0.59

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.22%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.507%

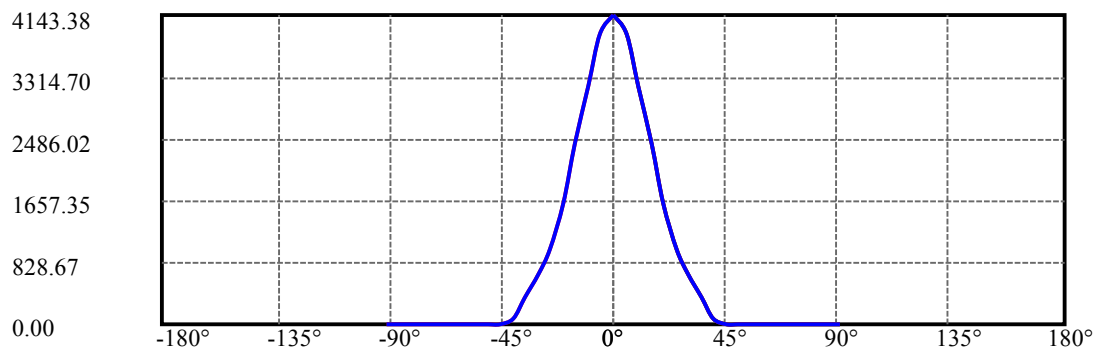
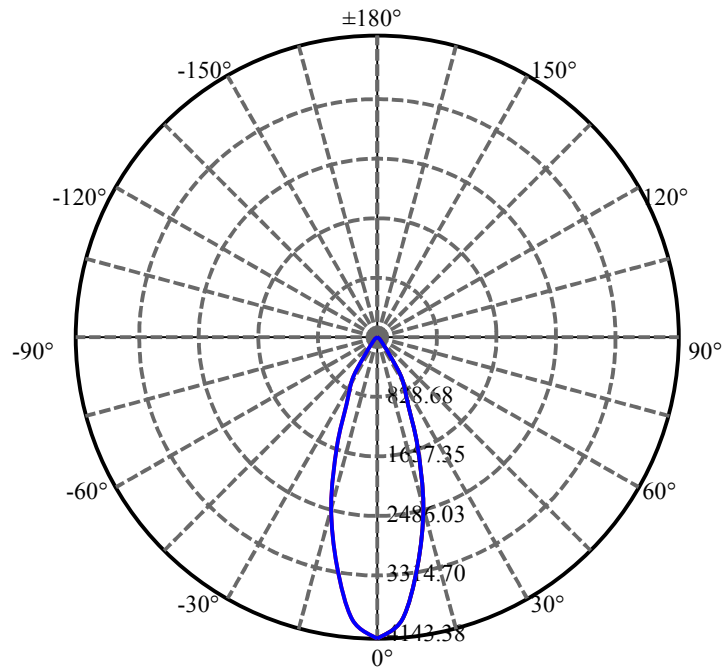
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4143.375	0.000	0	.000%	.000%
5.0	3896.859	96.119	96.119	4.689%	5.376%
10.0	3201.398	253.927	350.046	12.387%	19.577%
15.0	2414.602	333.137	683.183	16.251%	38.208%
20.0	1612.427	331.884	1015.067	16.189%	56.770%
25.0	1008.127	274.848	1289.915	13.407%	72.141%
30.0	676.624	213.207	1503.121	10.400%	84.065%
35.0	371.152	154.292	1657.413	7.526%	92.694%
40.0	74.503	74.354	1731.768	3.627%	96.853%
45.0	12.544	16.117	1747.885	.786%	97.754%
50.0	10.568	4.670	1752.555	.228%	98.015%
55.0	9.745	4.417	1756.972	.215%	98.262%
60.0	9.211	4.382	1761.354	.214%	98.507%
65.0	8.845	4.390	1765.743	.214%	98.753%
70.0	8.599	4.417	1770.16	.215%	99.000%
75.0	8.423	4.449	1774.61	.217%	99.249%
80.0	8.297	4.474	1779.083	.218%	99.499%
85.0	8.213	4.486	1783.569	.219%	99.750%
90.0	8.121	4.472	1788.042	.218%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1503.12	73.32%	84.07%
0-40	1731.77	84.48%	96.85%
0-60	1761.35	85.92%	98.51%
0-90	1783.57	87.00%	99.75%
0-120	1783.57	87.00%	99.75%
0-180	1788.04	87.22%	100.00%
60-90	26.60	1.30%	1.49%
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%
0-28.30	1430.43	69.78%	80.00%

ZONAL LUMEN SUMMARY

0-10	350.05
10-20	665.02
20-30	488.05
30-40	228.65
40-50	20.79
50-60	8.80
60-70	8.81
70-80	8.92
80-90	4.49
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: —————

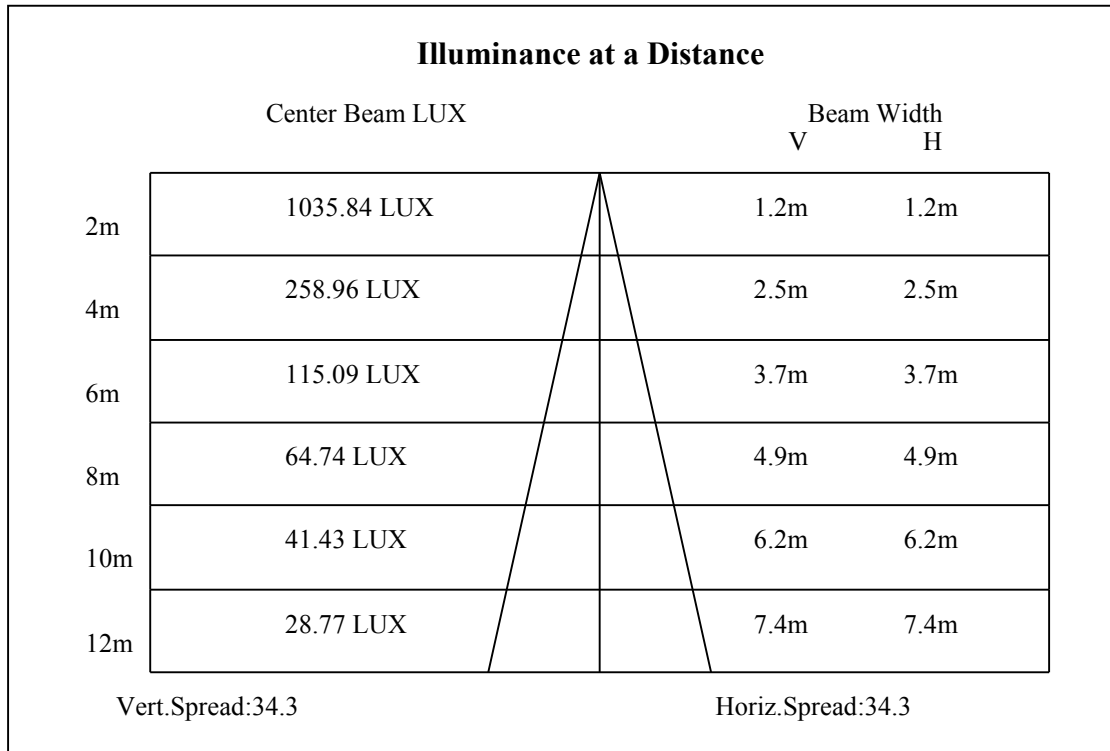
C90/C270: —————

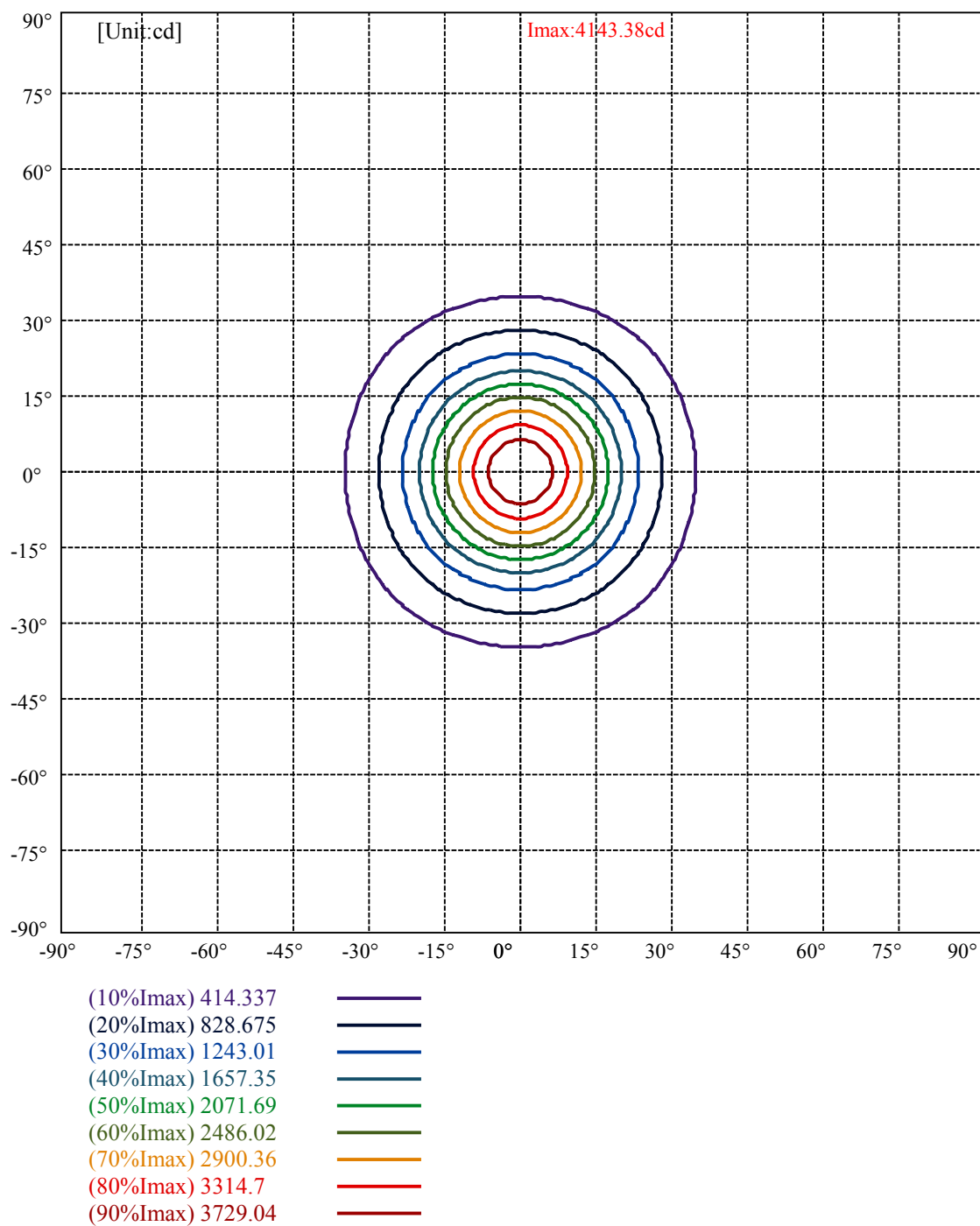
Field angle(10%Imax):C0/180Left:34.3 Right:34.3

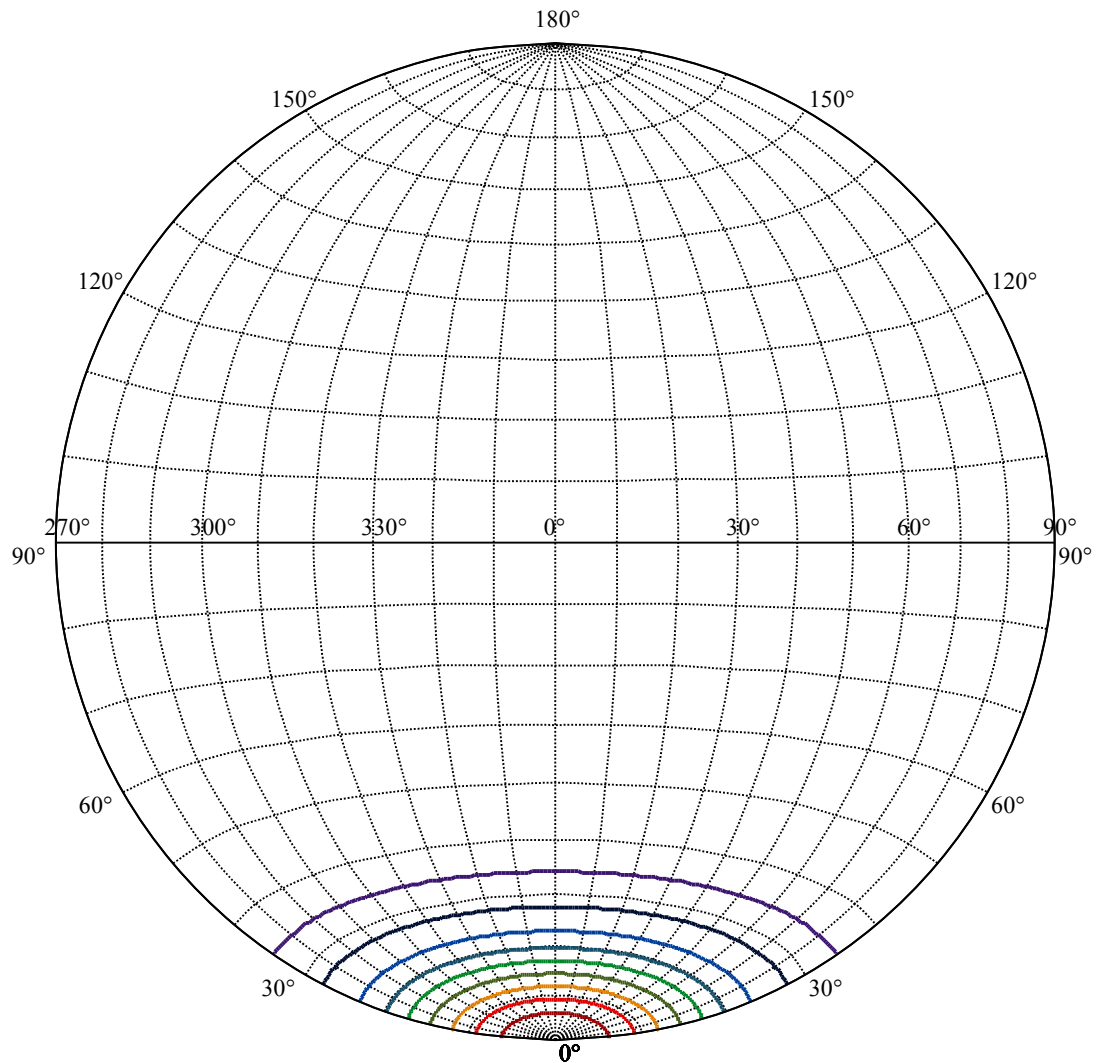
:C90/270Left:34.3 Right:34.3

Beam Angle(50%Imax):C0/180Left:17.1 Right:17.1

:C90/270Left:17.1 Right:17.1







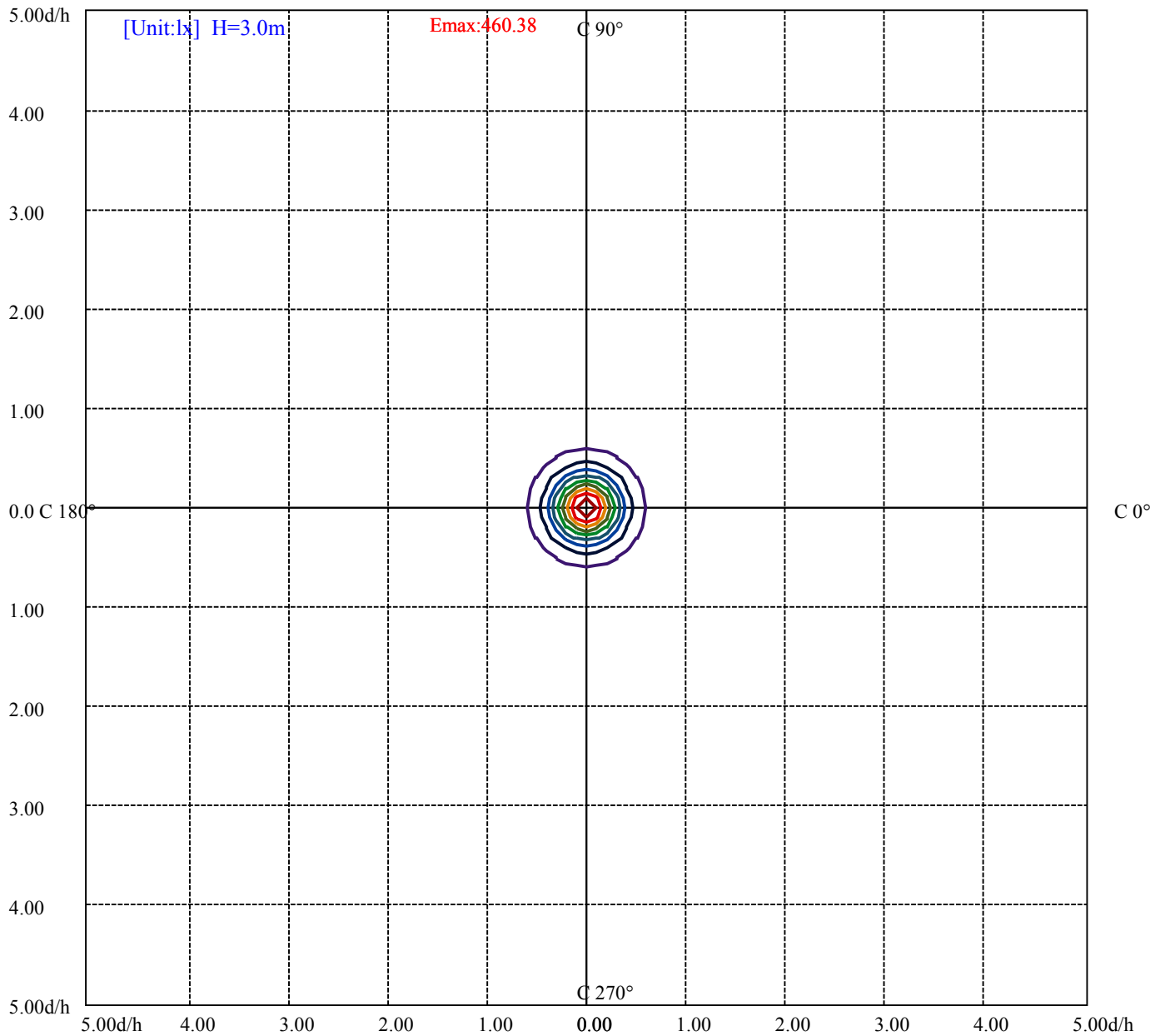
House

[Unit:cd]

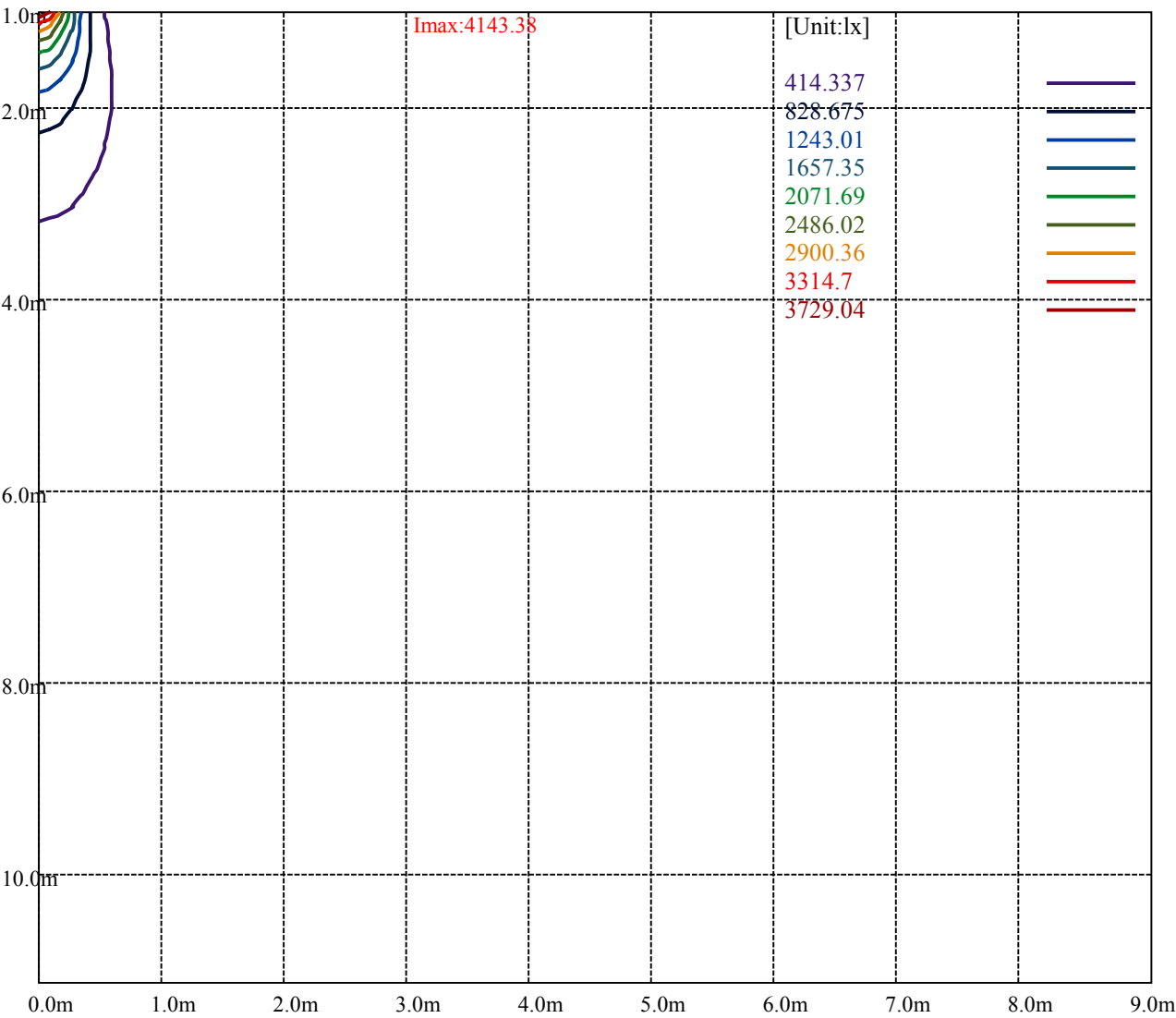
Road

Imax:4143.38

(10%Imax)	414.337	—
(20%Imax)	828.675	—
(30%Imax)	1243.01	—
(40%Imax)	1657.35	—
(50%Imax)	2071.69	—
(60%Imax)	2486.02	—
(70%Imax)	2900.36	—
(80%Imax)	3314.7	—
(90%Imax)	3729.04	—



(10%Emax)	46.03745	—
(20%Emax)	92.07489	—
(30%Emax)	138.1122	—
(40%Emax)	184.15	—
(50%Emax)	230.1867	—
(60%Emax)	276.2245	—
(70%Emax)	322.2622	—
(80%Emax)	368.2989	—
(90%Emax)	414.3367	—



Luminance Table

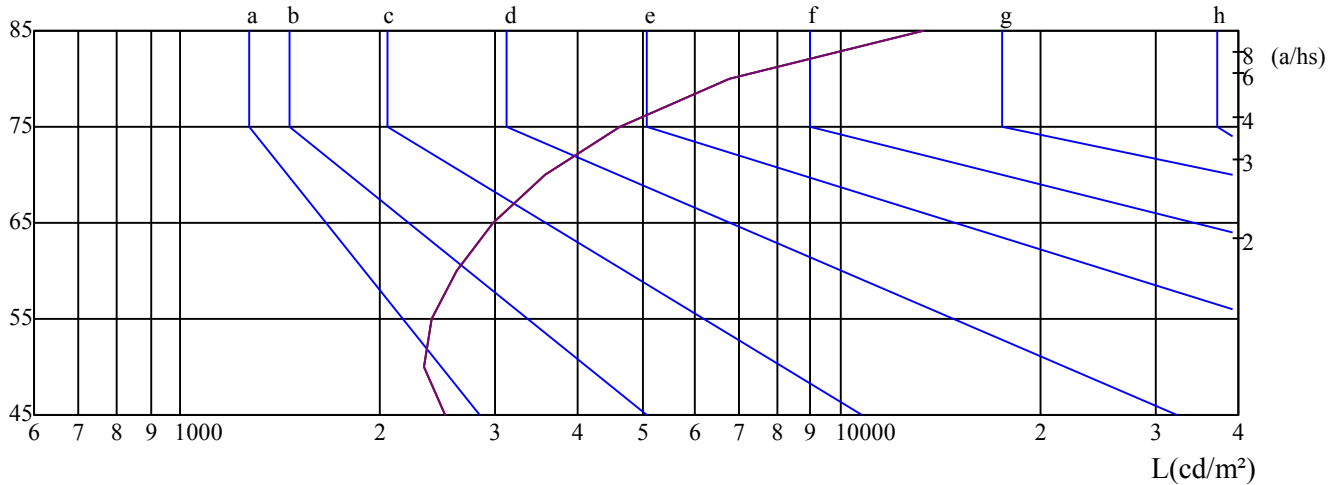
γ	45	50	55	60	65	70	75	80	85
C0	2514	2330	2408	2611	2966	3563	4612	6772	13354
C45	2514	2330	2408	2611	2966	3563	4612	6772	13354
C90	2514	2330	2408	2611	2966	3563	4612	6772	13354

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2966	2966	2966	4612	4612	4612	13354	13354	13354

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

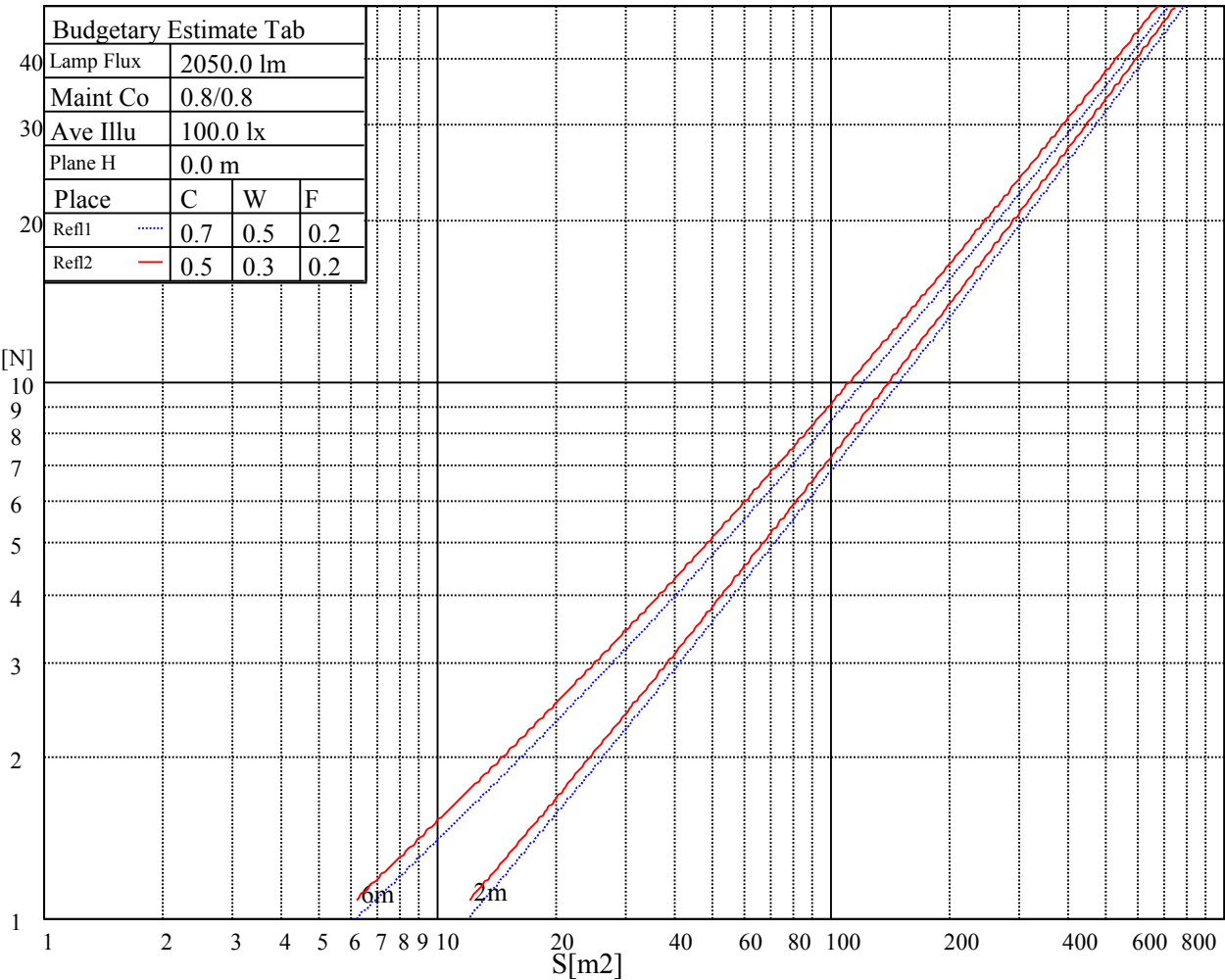
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

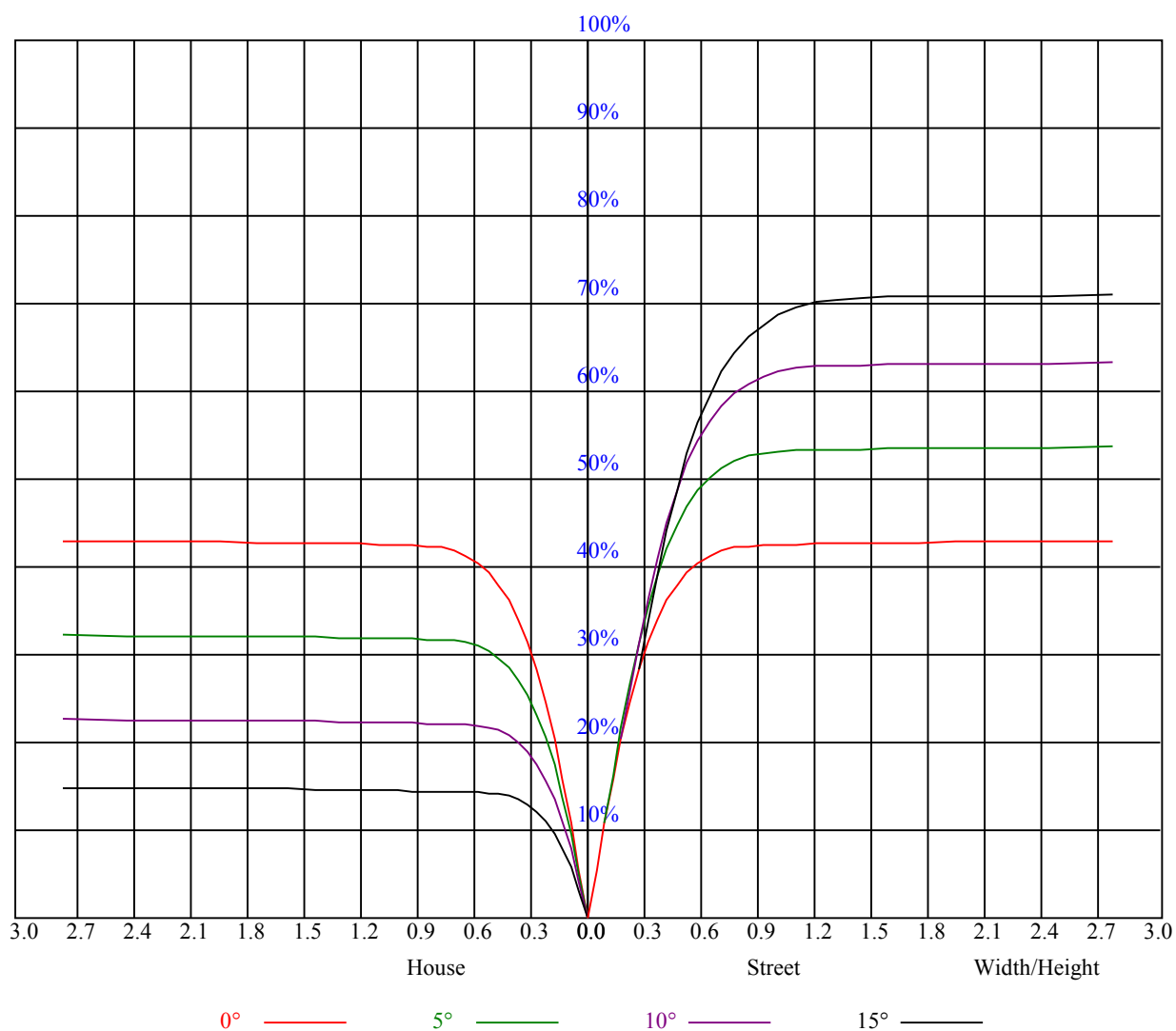
C0 ———

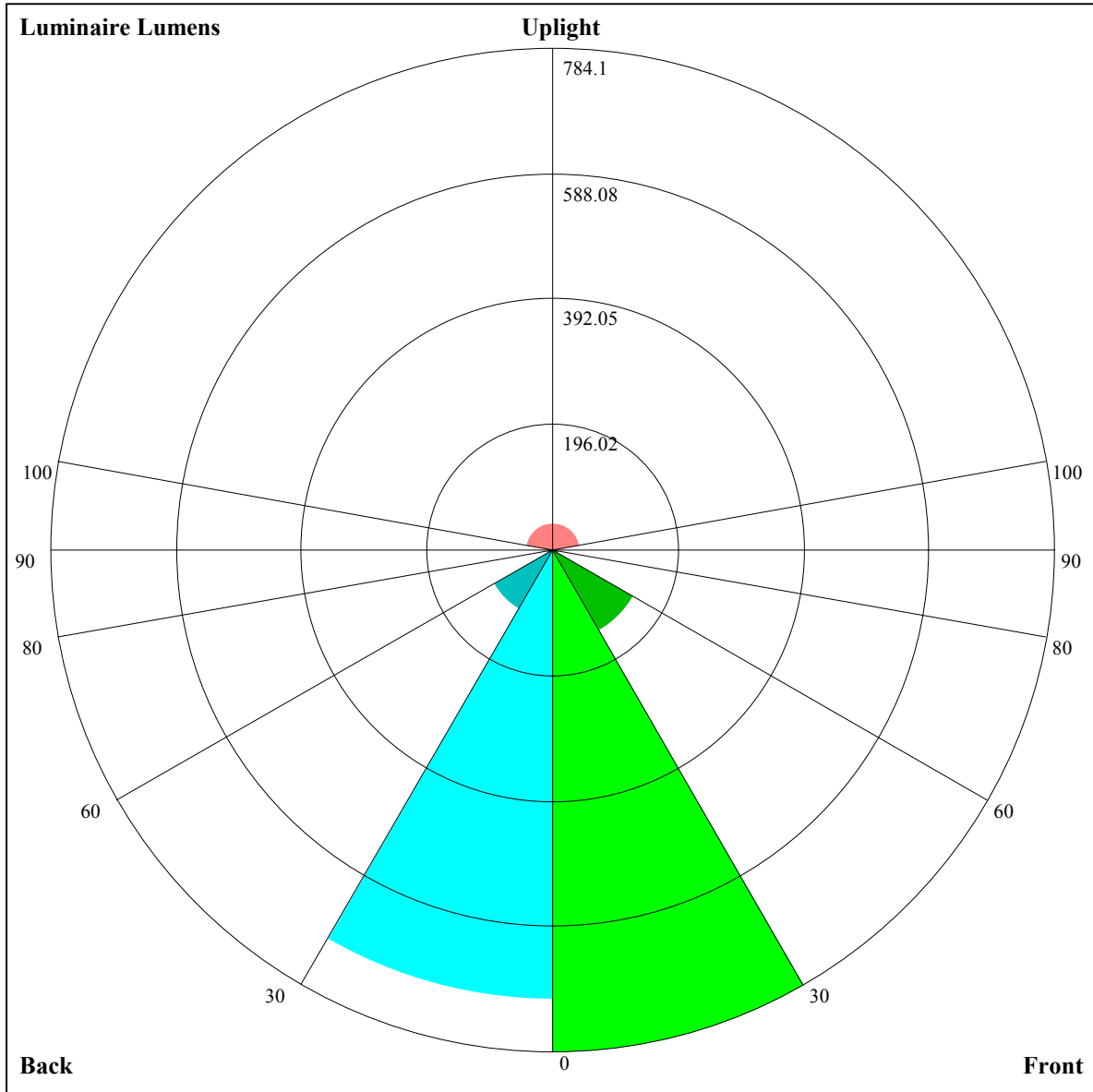
C45 ———

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	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.97	0.95	0.93	0.95	0.93	0.92	0.92	0.90	0.89	0.89	0.87	0.86	0.86	0.85	0.84	0.82
2	0.91	0.88	0.85	0.90	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.81	0.82	0.81	0.79	0.78
3	0.86	0.82	0.79	0.85	0.82	0.79	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
6	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.65	0.63
7	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61
8	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58
9	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.55
10	0.62	0.57	0.54	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.60	0.56	0.54	0.53





Luminaire Lumens:

FL=784.1,FM=145.58,FH=8.9,FVH=4.48

BL=703.45,BM=107.71,BH=8.82,BVH=4.48

UL=8.86,UH=42.17

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	4141.13	4087.13	3540.94	2740.50	1940.06	1195.88	753.19	516.38	198.84
45.0	4131.00	4039.31	3416.63	2631.94	1878.19	1186.88	770.63	510.75	197.66
90.0	4135.50	3786.75	3030.19	2327.63	1619.44	999.68	675.39	347.23	33.13
135.0	4165.88	3818.25	3092.06	2336.63	1675.13	1009.13	673.88	330.75	29.25
180.0	4141.13	3711.38	2916.00	2126.25	1400.63	848.81	599.06	242.33	19.29
225.0	4131.00	3704.06	2958.19	2107.69	1098.73	830.98	603.56	228.38	19.91
270.0	4135.50	3989.25	3317.63	2521.13	1617.75	995.63	672.19	394.31	49.16
315.0	4165.88	4038.75	3339.56	2525.06	1669.50	998.04	665.10	399.09	48.77
360.0	4141.13	4087.13	3540.94	2740.50	1940.06	1195.88	753.19	516.38	198.84
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.41	11.19	10.13	9.45	9.00	8.72	8.49	8.33	8.21
45.0	15.41	11.03	10.13	9.45	9.06	8.72	8.55	8.33	8.21
90.0	11.81	10.52	9.68	9.23	8.83	8.61	8.44	8.33	8.21
135.0	11.48	10.41	9.68	9.17	8.83	8.61	8.44	8.33	8.21
180.0	11.25	10.24	9.62	9.17	8.78	8.55	8.38	8.27	8.21
225.0	11.31	10.18	9.51	9.00	8.72	8.49	8.33	8.27	8.21
270.0	11.93	10.46	9.62	9.11	8.78	8.55	8.38	8.27	8.21
315.0	11.76	10.52	9.62	9.11	8.78	8.55	8.38	8.27	8.21
360.0	15.41	11.19	10.13	9.45	9.00	8.72	8.49	8.33	8.21
C/ γ (°)	90.0								
0.0	8.16								
45.0	8.16								
90.0	8.10								
135.0	8.10								
180.0	8.10								
225.0	8.16								
270.0	8.10								
315.0	8.10								
360.0	8.16								