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Nata

Client:

LumCAT: 1763-A

Luminaire: 99.02.73.171

Report No:

Voltage(V): 34.2900

Test No: GC2019083006

Current(A): 0.3550

LampCAT: XICATO XOB LES 9.8MM

Power (W): 12.1700

Lamp flux(lm): 1120.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1008.02, Efficiency(%): 90.00% , Luminous Efficacy(lm/W): 82.83

Central intensity(cd): 2418.610, Maximum intensity(cd): 2418.610

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=39.2

[C90/270]Total=39.2

Field angle(10%Imax): [C0/180]Total=56.6

[C90/270]Total=56.6

Maximum s/h(1/2): C0_180=0.65 C90_270=0.65

Maximum s/h(1/4): C0_180=0.60 C90_270=0.60

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.00%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.483%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/8/30
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

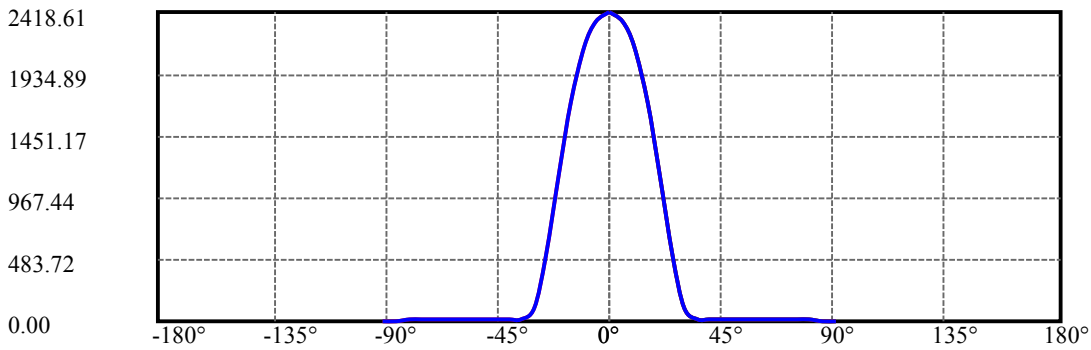
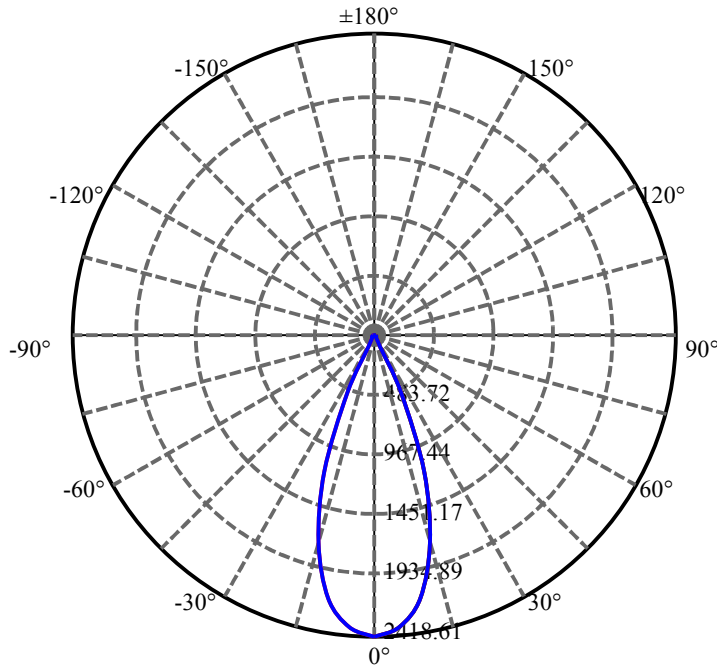
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2418.609	0.000	0	.000%	.000%
5.0	2349.563	57.002	57.002	5.089%	5.655%
10.0	2148.609	160.914	217.916	14.367%	21.618%
15.0	1715.766	229.232	447.148	20.467%	44.359%
20.0	1164.473	237.372	684.52	21.194%	67.908%
25.0	517.880	176.448	860.968	15.754%	85.412%
30.0	98.543	78.009	938.977	6.965%	93.151%
35.0	21.466	17.672	956.649	1.578%	94.904%
40.0	15.413	6.153	962.802	.549%	95.515%
45.0	13.008	5.262	968.064	.470%	96.037%
50.0	11.651	4.983	973.047	.445%	96.531%
55.0	10.666	4.853	977.899	.433%	97.012%
60.0	9.851	4.742	982.642	.423%	97.483%
65.0	9.028	4.589	987.231	.410%	97.938%
70.0	8.438	4.422	991.654	.395%	98.377%
75.0	8.002	4.297	995.951	.384%	98.803%
80.0	7.678	4.195	1000.146	.375%	99.219%
85.0	7.327	4.077	1004.223	.364%	99.624%
90.0	6.525	3.793	1008.016	.339%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	938.98	83.84%	93.15%
0-40	962.80	85.96%	95.51%
0-60	982.64	87.74%	97.48%
0-90	1004.22	89.66%	99.62%
0-120	1004.22	89.66%	99.62%
0-180	1008.02	90.00%	100.00%
60-90	26.32	2.35%	2.61%
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%
0-23.45	806.41	72.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	217.92
10-20	466.60
20-30	254.46
30-40	23.83
40-50	10.24
50-60	9.59
60-70	9.01
70-80	8.49
80-90	4.08
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: —————

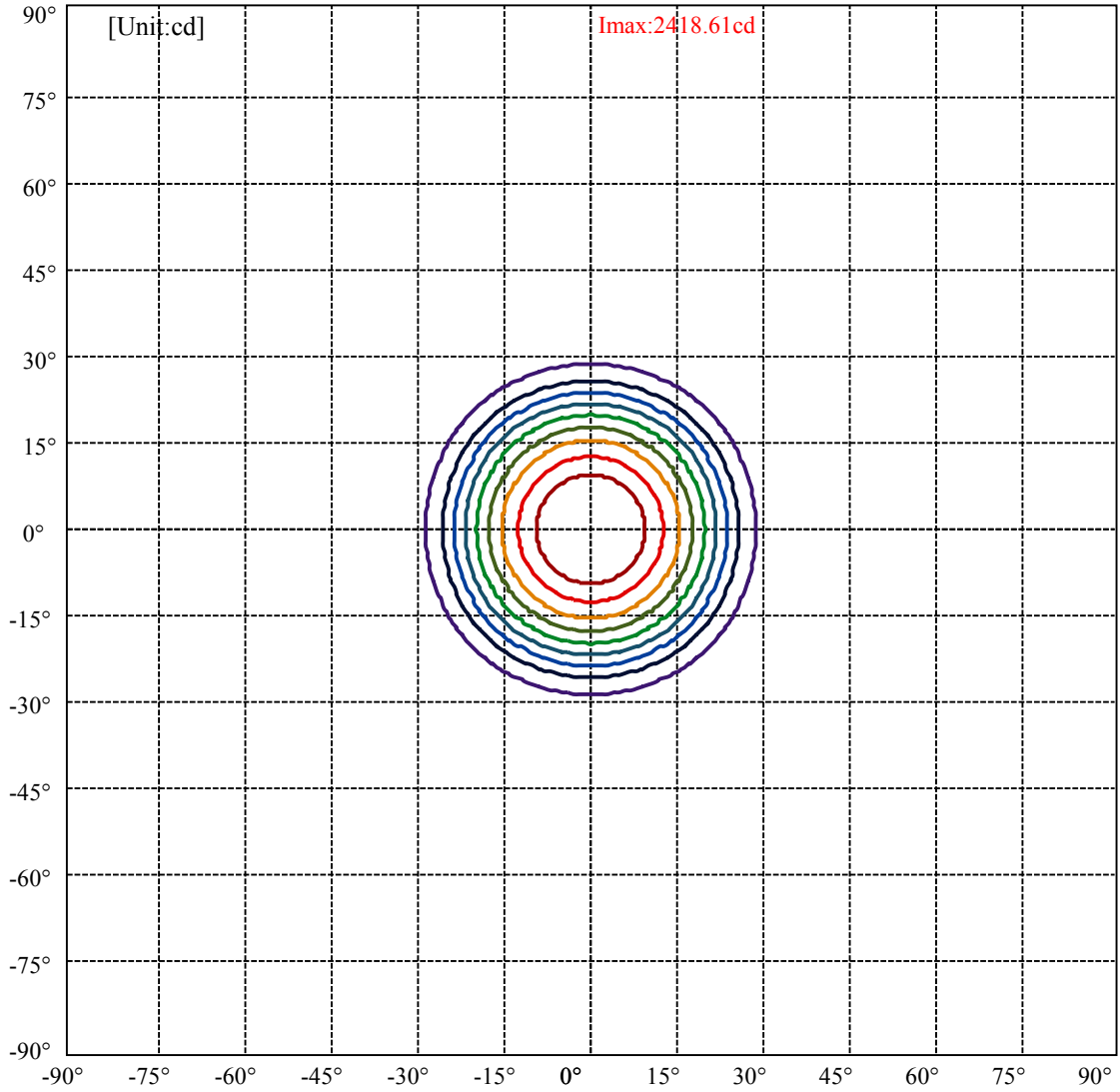
C90/C270: —————

Field angle(10%Imax):C0/180Left:28.3 Right:28.3

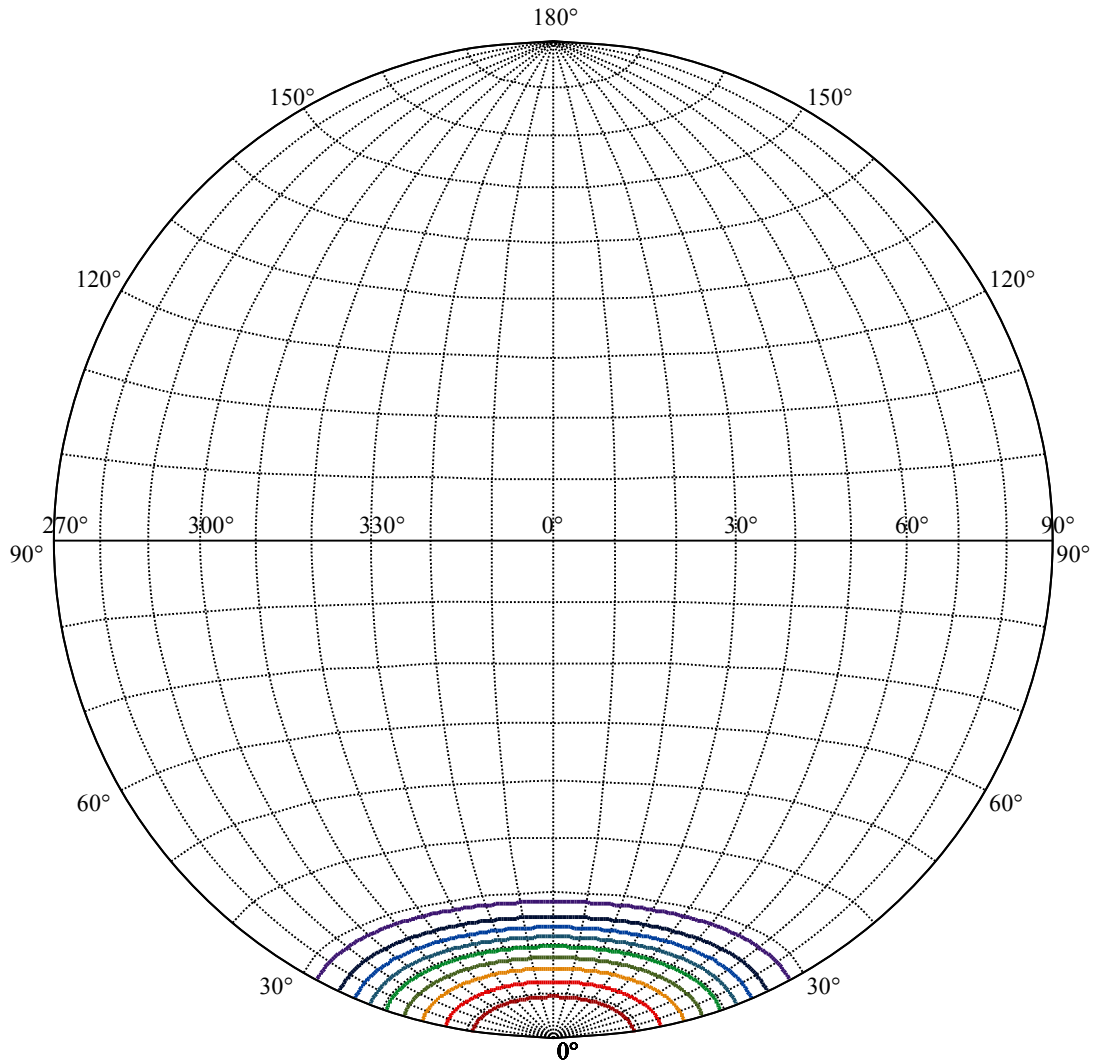
:C90/270Left:28.3 Right:28.3

Beam Angle(50%Imax):C0/180Left:19.6 Right:19.6

:C90/270Left:19.6 Right:19.6



(10%Imax) 241.861	—
(20%Imax) 483.722	—
(30%Imax) 725.583	—
(40%Imax) 967.444	—
(50%Imax) 1209.3	—
(60%Imax) 1451.17	—
(70%Imax) 1693.03	—
(80%Imax) 1934.89	—
(90%Imax) 2176.75	—



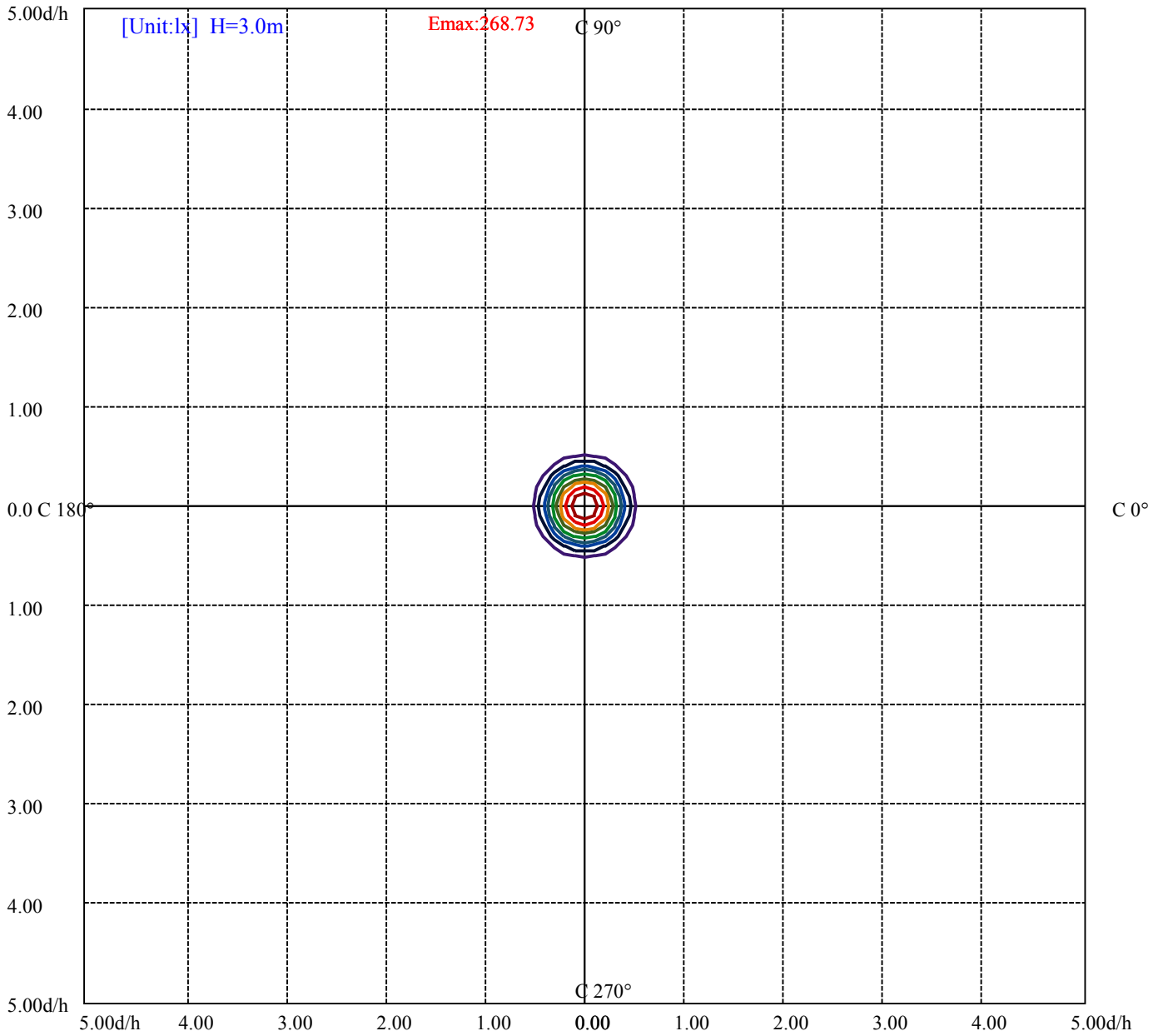
House

[Unit:cd]

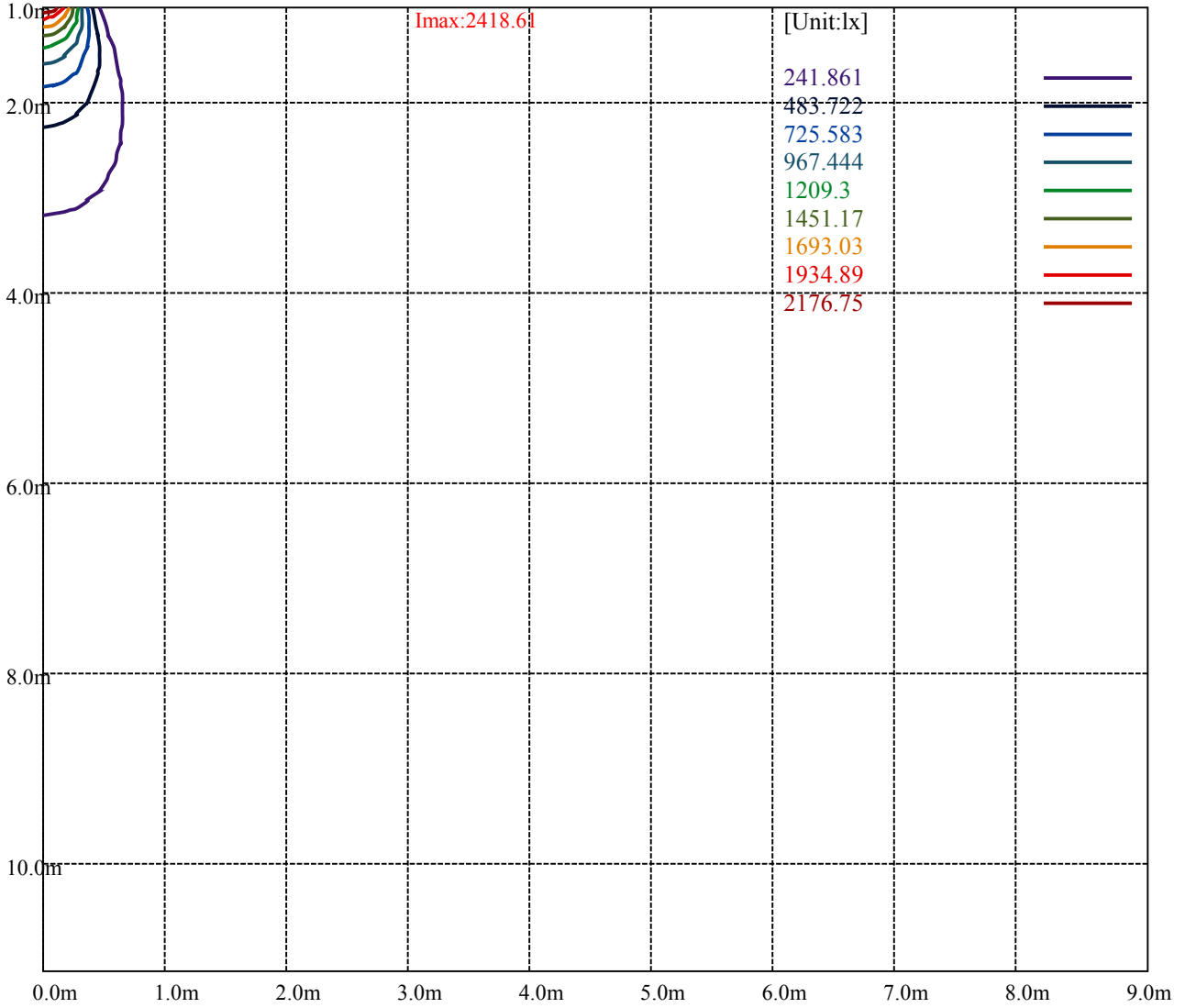
Road

Imax:2418.61

(10%Imax) 241.861	—
(20%Imax) 483.722	—
(30%Imax) 725.583	—
(40%Imax) 967.444	—
(50%Imax) 1209.3	—
(60%Imax) 1451.17	—
(70%Imax) 1693.03	—
(80%Imax) 1934.89	—
(90%Imax) 2176.75	—



- (10%Emax) 26.87344
- (20%Emax) 53.74678
- (30%Emax) 80.62022
- (40%Emax) 107.4937
- (50%Emax) 134.3667
- (60%Emax) 161.24
- (70%Emax) 188.1144
- (80%Emax) 214.9878
- (90%Emax) 241.8611



Luminance Table

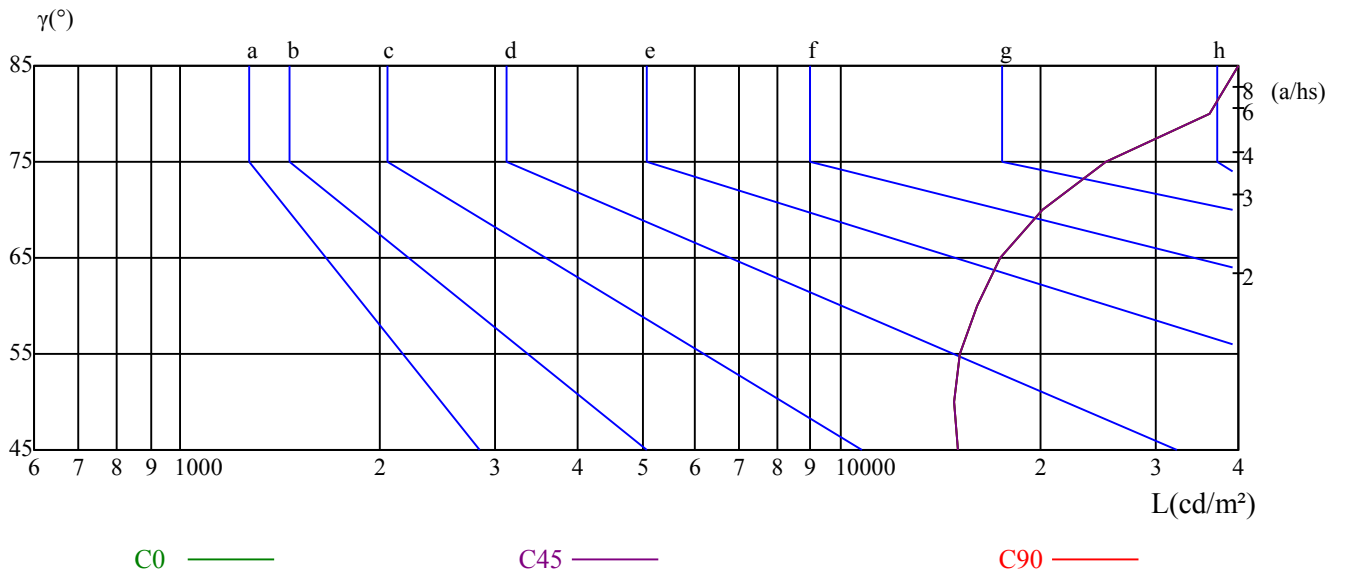
γ	45	50	55	60	65	70	75	80	85
C0	15017	14796	15181	16083	17439	20138	25237	36095	68623
C45	15017	14796	15181	16083	17439	20138	25237	36095	68623
C90	15017	14796	15181	16083	17439	20138	25237	36095	68623

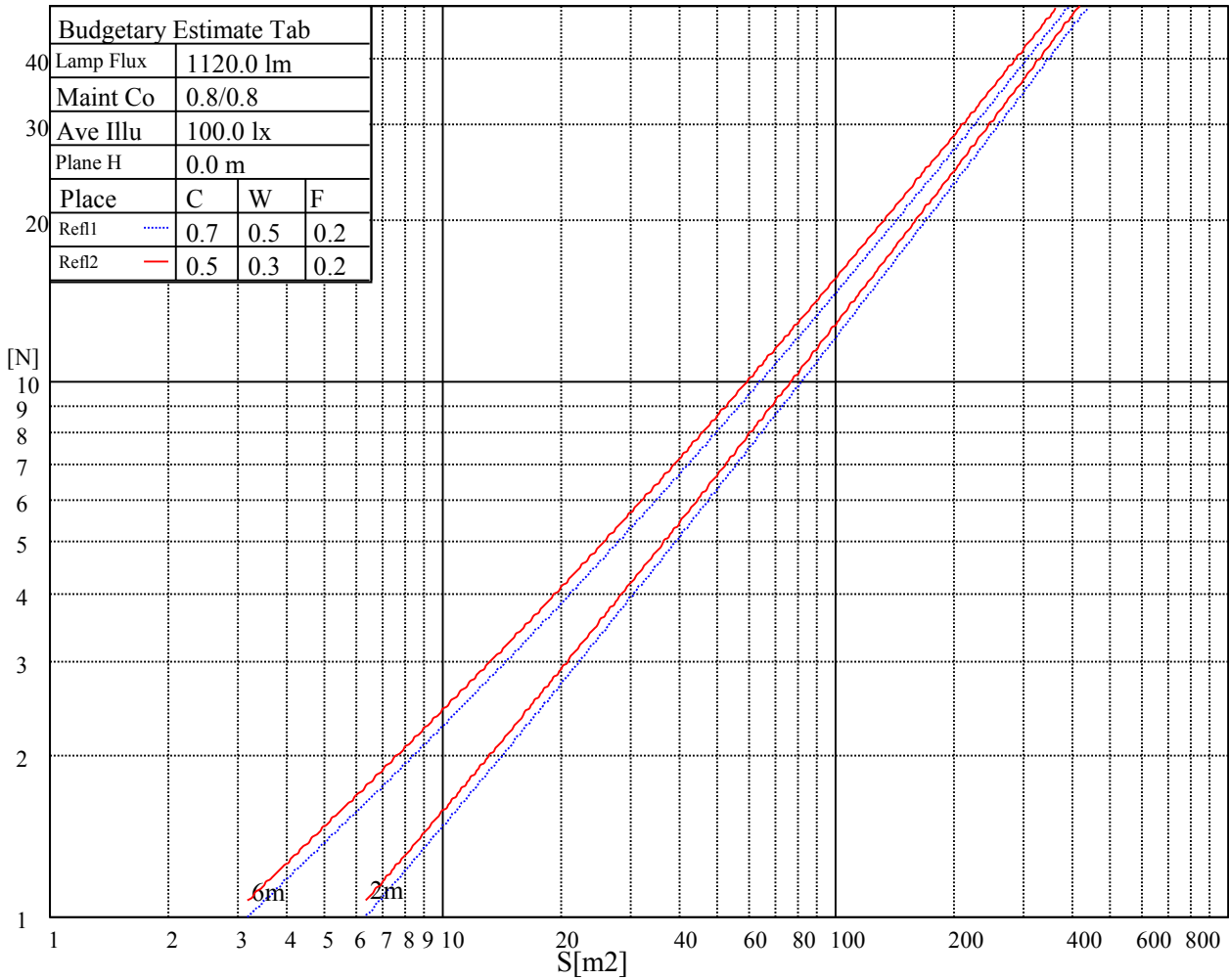
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
17439	17439	17439	25237	25237	25237	68623	68623	68623

Glare Table

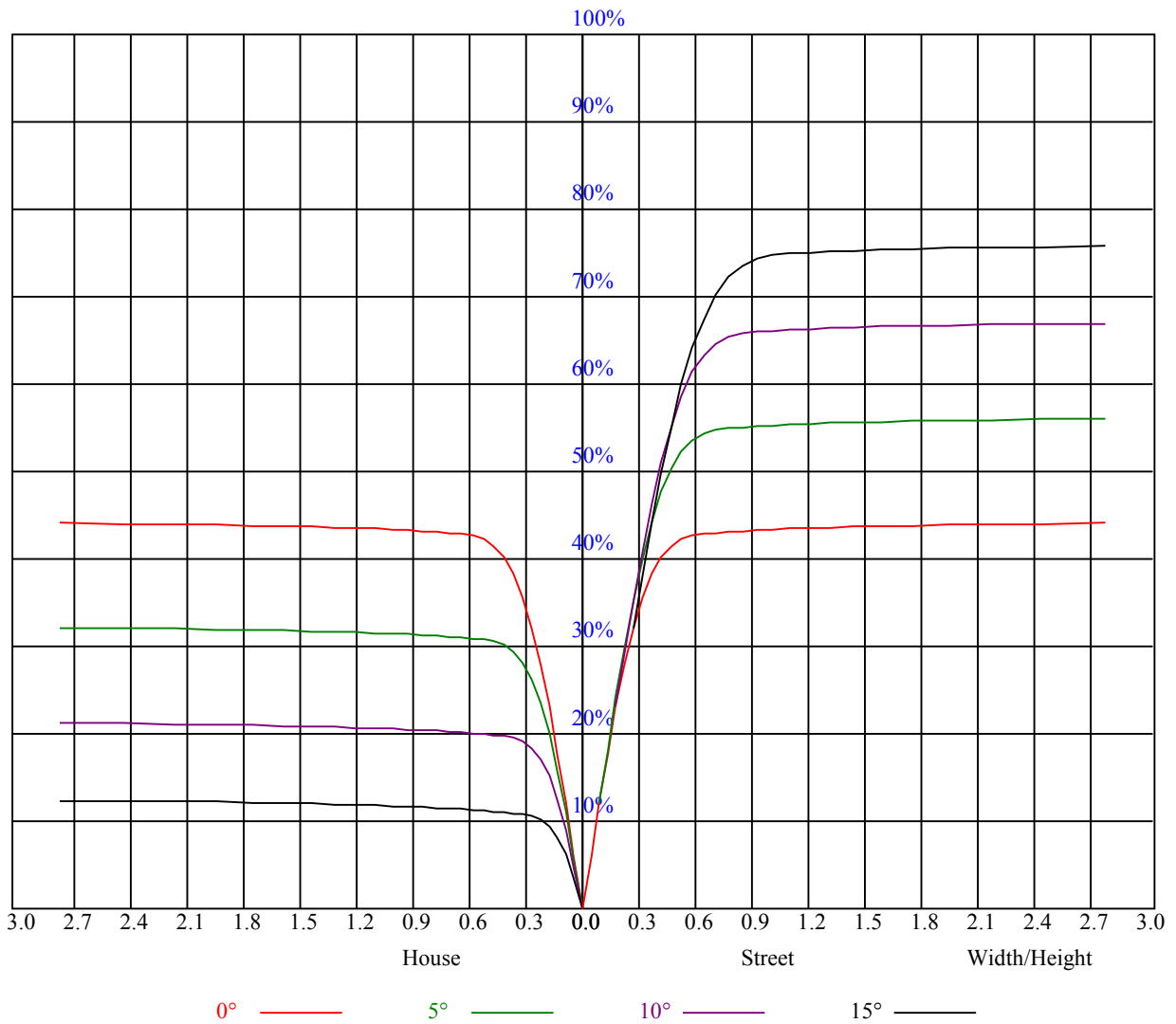
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

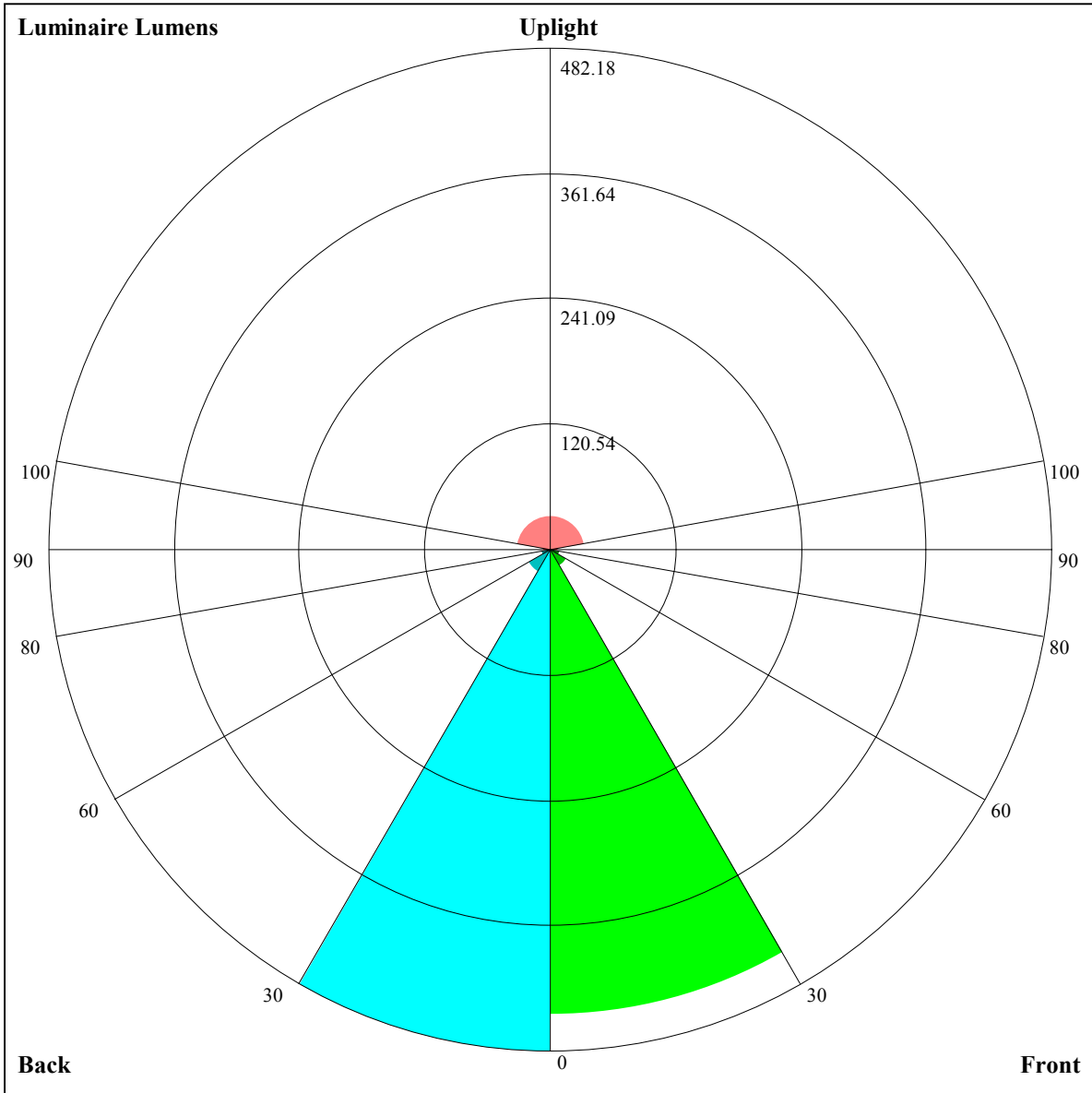
Luminance Limiting Curve





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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.97	0.95	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.85
2	0.95	0.92	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.86	0.83	0.89	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.82	0.80	0.79	0.77
4	0.86	0.81	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
5	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
6	0.78	0.74	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.68
7	0.75	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
8	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.63
9	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59





Luminaire Lumens:

FL=447.33,FM=17.93,FH=8.62,FVH=3.85

BL=482.18,BM=24.72,BH=8.97,BVH=4.03

UL=7.12,UH=33.88

BUG Rating:B1-U2-G0

Nata 1763-A

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	2414.81	2309.63	2207.25	1783.13	1103.63	334.69	38.08	19.01	15.92
45.0	2418.75	2355.19	2154.94	1684.13	1054.13	416.25	47.93	16.48	12.09
90.0	2424.94	2342.81	2108.25	1627.88	1108.58	448.31	56.42	19.91	14.91
135.0	2415.94	2389.50	2167.31	1787.63	1319.06	758.25	303.19	26.38	16.88
180.0	2414.81	2397.94	2126.25	1729.13	1239.75	738.90	129.77	24.13	15.98
225.0	2418.75	2349.00	2060.44	1627.31	1122.02	539.04	98.27	23.57	14.01
270.0	2424.94	2342.81	2165.06	1787.63	1293.75	599.63	78.52	22.89	16.76
315.0	2415.94	2309.63	2199.38	1699.31	1074.88	307.97	36.17	19.35	16.76
360.0	2414.81	2309.63	2207.25	1783.13	1103.63	334.69	38.08	19.01	15.92
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	13.39	11.81	10.52	9.79	9.11	8.38	7.93	7.71	7.31
45.0	10.29	9.11	8.21	7.48	6.86	6.47	6.02	5.68	5.51
90.0	12.94	12.15	11.19	10.18	9.23	8.61	8.16	7.71	7.14
135.0	14.51	13.56	13.05	12.32	11.36	10.86	10.52	10.35	9.73
180.0	13.22	11.93	11.14	10.24	9.17	8.61	8.16	7.76	7.59
225.0	11.03	9.56	8.44	7.59	6.98	6.47	6.08	5.68	5.46
270.0	14.06	12.54	11.42	10.46	9.45	8.66	8.10	7.76	7.48
315.0	14.63	12.54	11.36	10.74	10.07	9.45	9.06	8.78	8.38
360.0	13.39	11.81	10.52	9.79	9.11	8.38	7.93	7.71	7.31
C/ γ (°)	90.0								
0.0	6.86								
45.0	4.73								
90.0	6.41								
135.0	8.44								
180.0	6.92								
225.0	4.89								
270.0	6.98								
315.0	6.98								
360.0	6.86								