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Nata

Client:

LumCAT: 1406-N

Luminaire: 92.70.043.00

Report No:

Voltage(V): 9.4200

Test No: GC2019082601

Current(A): 0.2990

LampCAT: EDISON 2PHM10WW38P55020

Power (W): 2.8200

Lamp flux(lm): 323.7

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 39

Width(mm): 39

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 280.33, Efficiency(%): 86.62% , Luminous Efficacy(lm/W): 99.41

Central intensity(cd): 419.498, Maximum intensity(cd): 419.498

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=36.0

[C90/270]Total=36.0

Field angle(10%Imax): [C0/180]Total=88.8

[C90/270]Total=88.8

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

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.62%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.568%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2019/8/26
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

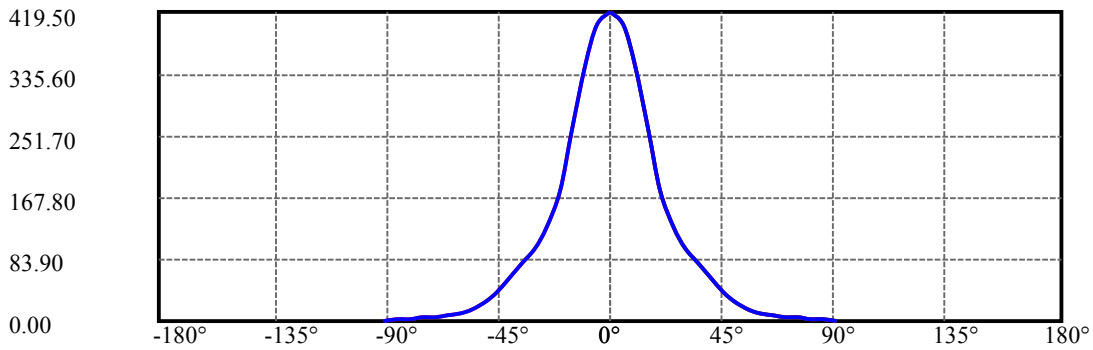
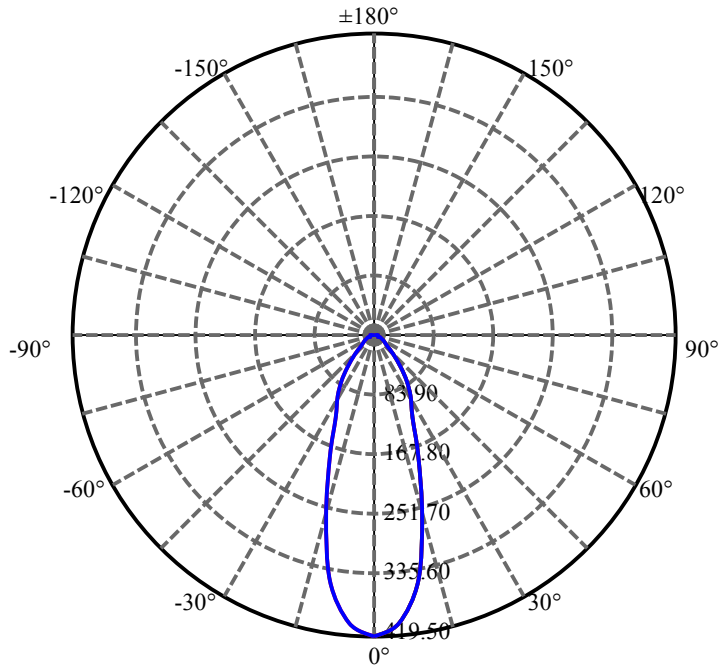
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	419.498	0.000	0	.000%	.000%
5.0	402.166	9.823	9.823	3.035%	3.504%
10.0	347.709	26.825	36.648	8.288%	13.073%
15.0	258.694	35.971	72.62	11.114%	25.905%
20.0	178.249	36.010	108.63	11.126%	38.750%
25.0	126.654	31.979	140.609	9.881%	50.157%
30.0	99.232	28.586	169.195	8.832%	60.355%
35.0	78.286	26.141	195.335	8.077%	69.679%
40.0	59.576	23.001	218.337	7.107%	77.884%
45.0	39.663	18.375	236.711	5.677%	84.439%
50.0	25.059	13.078	249.79	4.041%	89.104%
55.0	16.095	8.948	258.738	2.765%	92.296%
60.0	11.461	6.369	265.107	1.968%	94.568%
65.0	8.290	4.801	269.909	1.484%	96.281%
70.0	6.103	3.644	273.553	1.126%	97.581%
75.0	4.282	2.715	276.268	.839%	98.549%
80.0	2.925	1.928	278.196	.596%	99.237%
85.0	1.856	1.299	279.495	.401%	99.701%
90.0	1.209	0.839	280.335	.259%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	169.19	52.28%	60.35%
0-40	218.34	67.46%	77.88%
0-60	265.11	81.91%	94.57%
0-90	279.50	86.36%	99.70%
0-120	279.50	86.36%	99.70%
0-180	280.33	86.62%	100.00%
60-90	20.76	6.41%	7.40%
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%
0-41.61	224.27	69.29%	80.00%

ZONAL LUMEN SUMMARY

0-10	36.65
10-20	71.98
20-30	60.56
30-40	49.14
40-50	31.45
50-60	15.32
60-70	8.45
70-80	4.64
80-90	1.30
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: —————

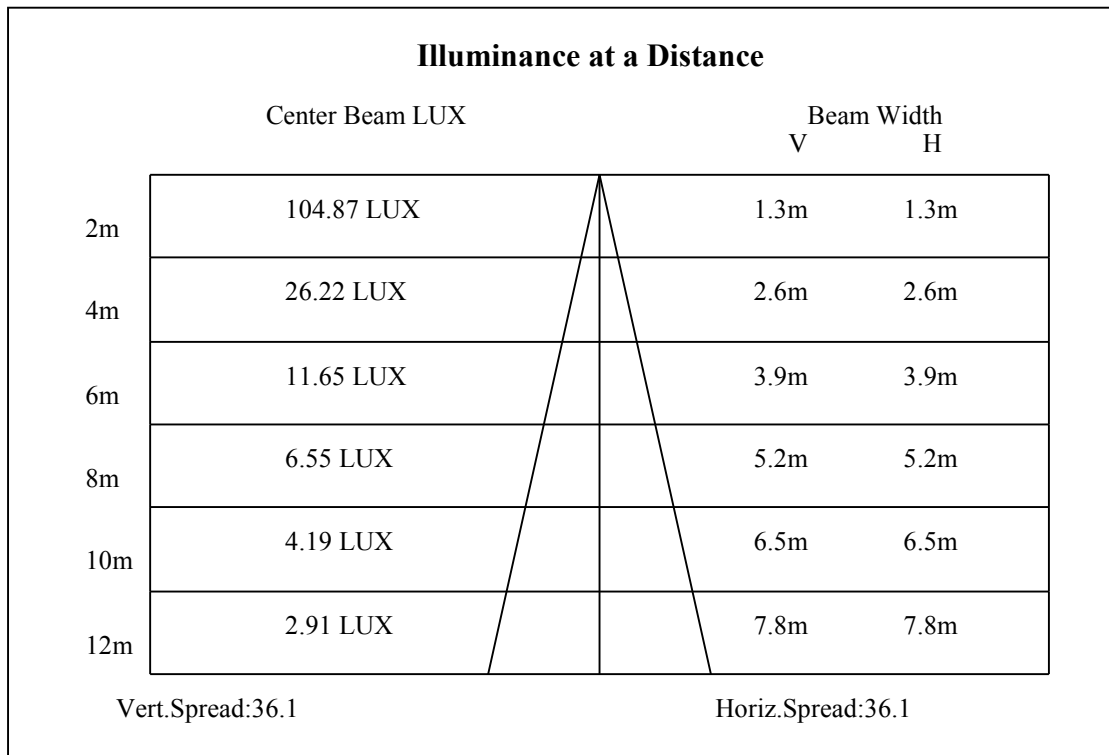
C90/C270: —————

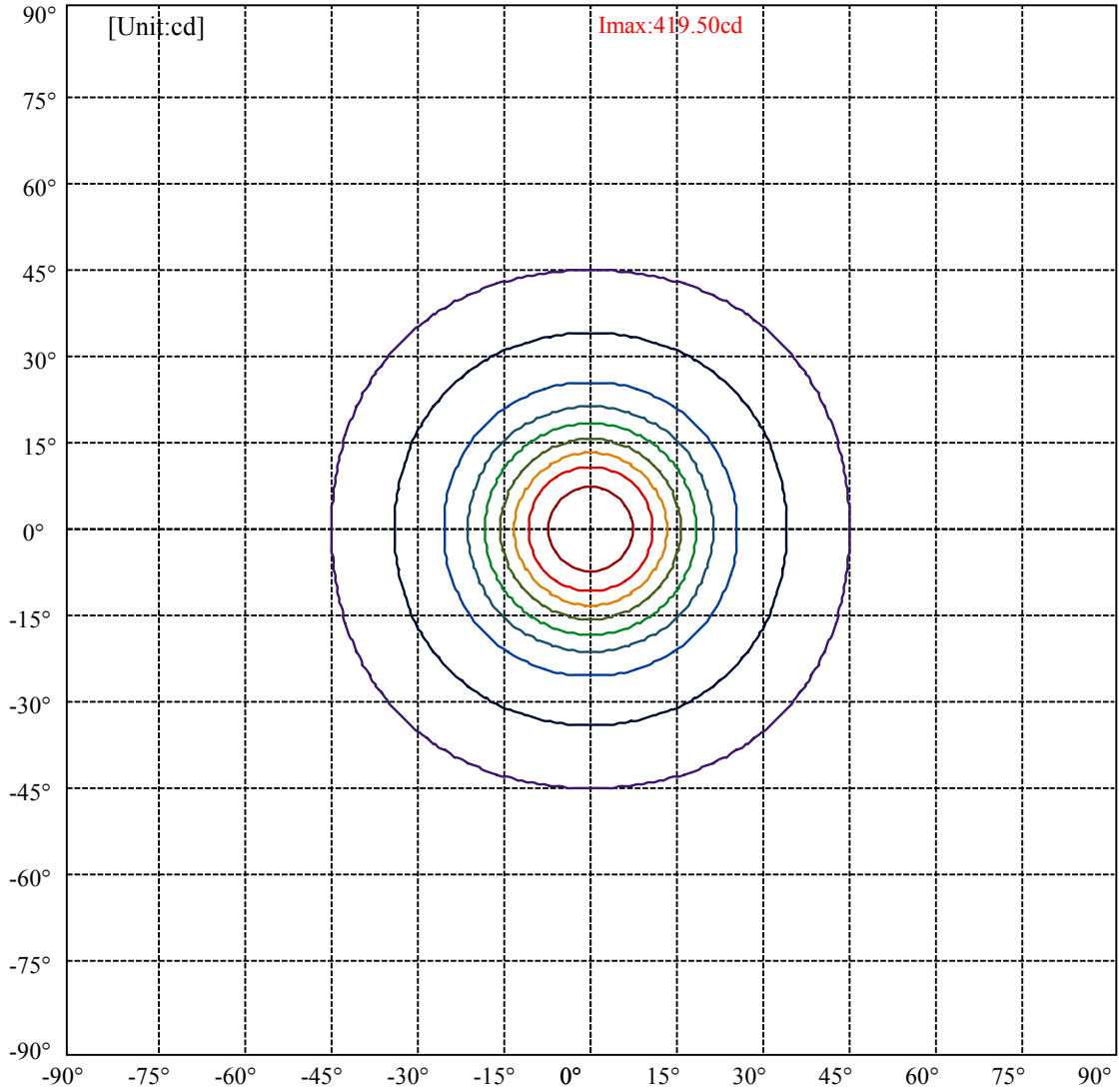
Field angle(10%Imax):C0/180Left:44.4 Right:44.4

:C90/270Left:44.4 Right:44.4

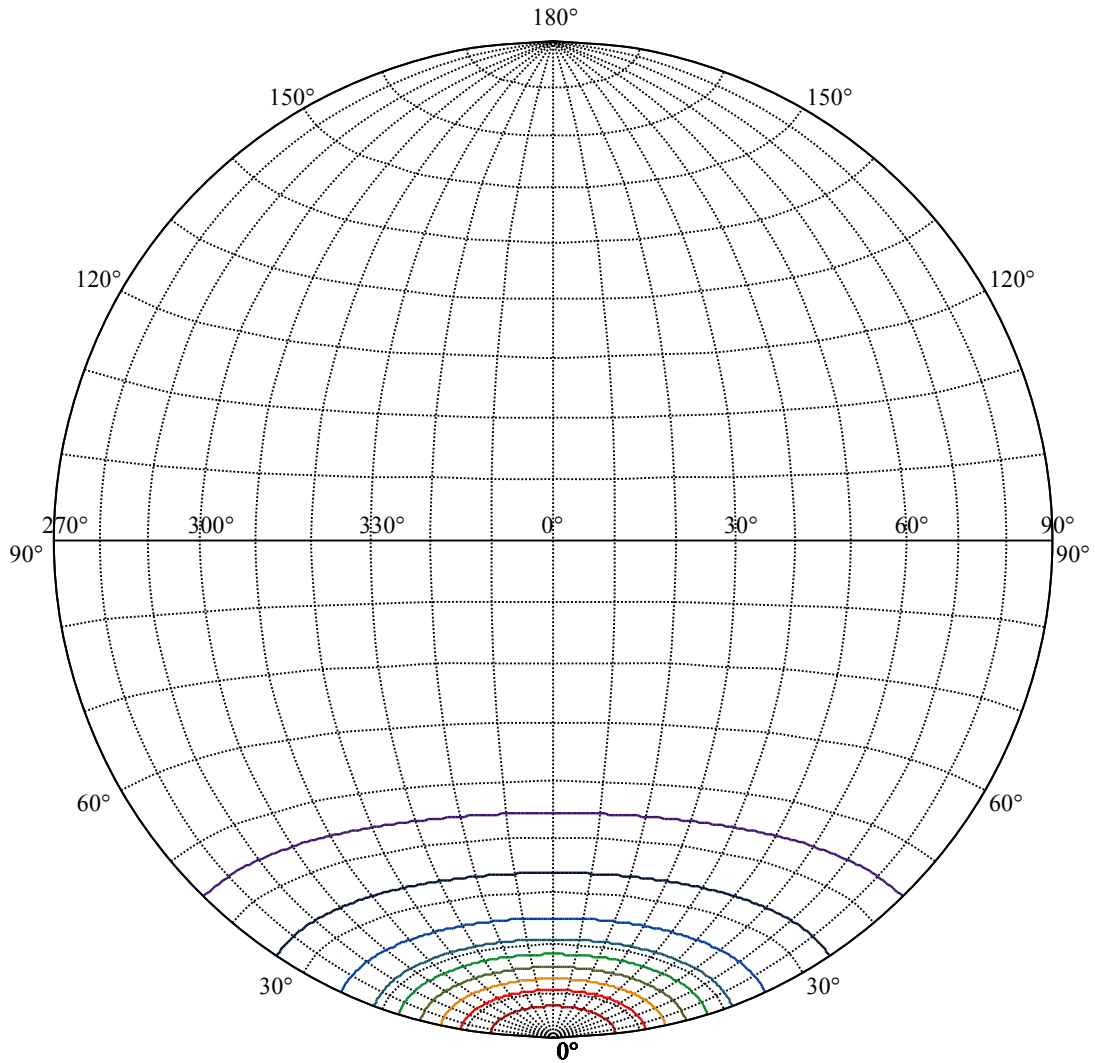
Beam Angle(50%Imax):C0/180Left:18.0 Right:18.0

:C90/270Left:18.0 Right:18.0





(10%Imax) 41.9498	—
(20%Imax) 83.8997	—
(30%Imax) 125.85	—
(40%Imax) 167.799	—
(50%Imax) 209.749	—
(60%Imax) 251.699	—
(70%Imax) 293.649	—
(80%Imax) 335.599	—
(90%Imax) 377.549	—



House

[Unit:cd]

Road

Imax:419.50

(10%Imax) 41.9498

(20%Imax) 83.8997

(30%Imax) 125.85

(40%Imax) 167.799

(50%Imax) 209.749

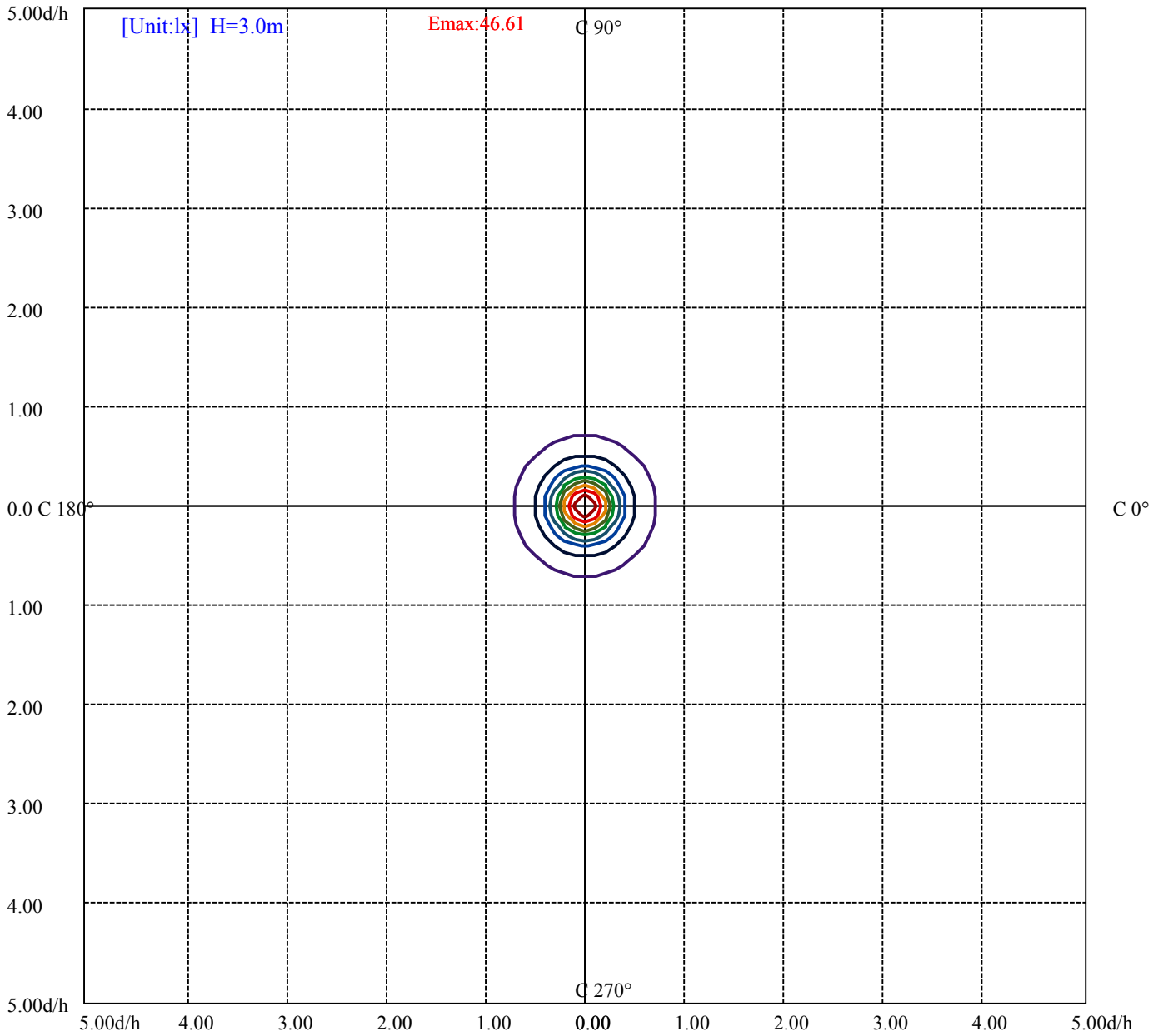
(60%Imax) 251.699

(70%Imax) 293.649

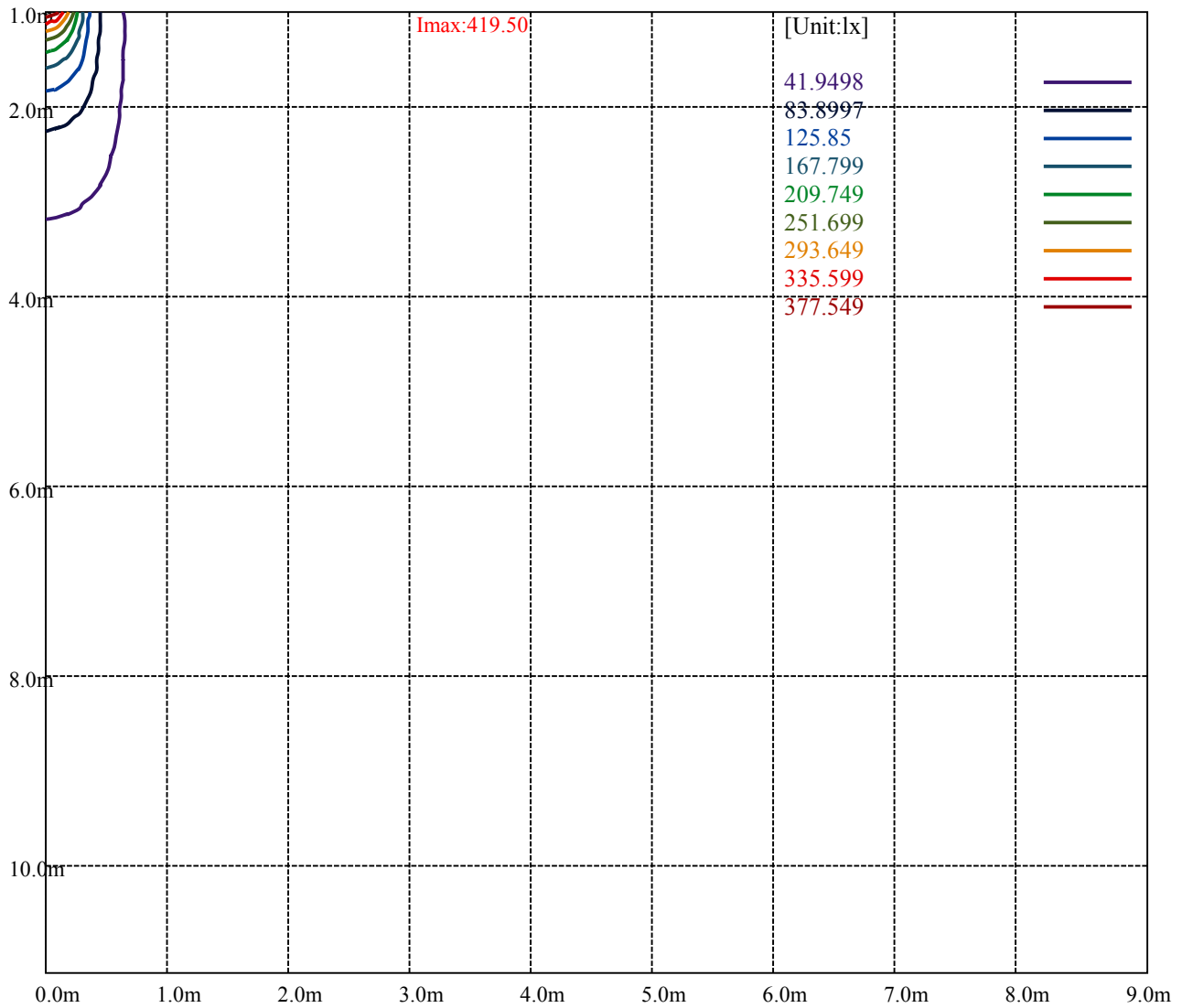
(80%Imax) 335.599

(90%Imax) 377.549





- (10%Emax) 4.661089
- (20%Emax) 9.322178
- (30%Emax) 13.98322
- (40%Emax) 18.64433
- (50%Emax) 23.30544
- (60%Emax) 27.96656
- (70%Emax) 32.62767
- (80%Emax) 37.28867
- (90%Emax) 41.94978



Luminance Table

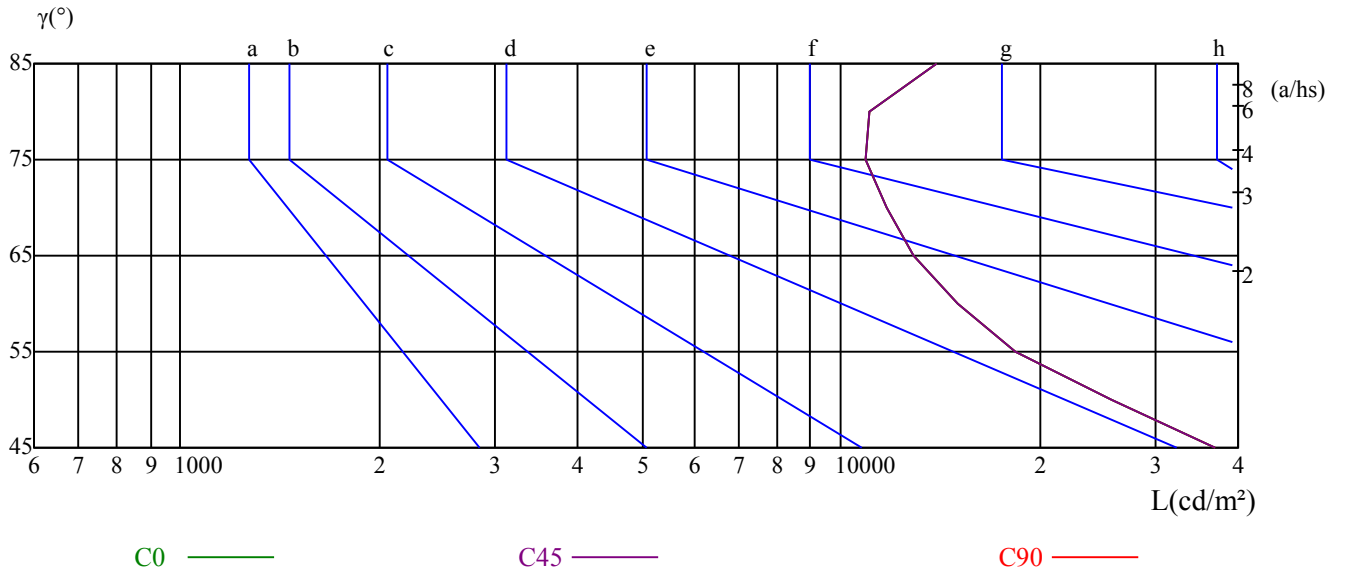
γ	45	50	55	60	65	70	75	80	85
C0	36879	25631	18448	15070	12896	11732	10877	11075	14003
C45	36879	25631	18448	15070	12896	11732	10877	11075	14003
C90	36879	25631	18448	15070	12896	11732	10877	11075	14003

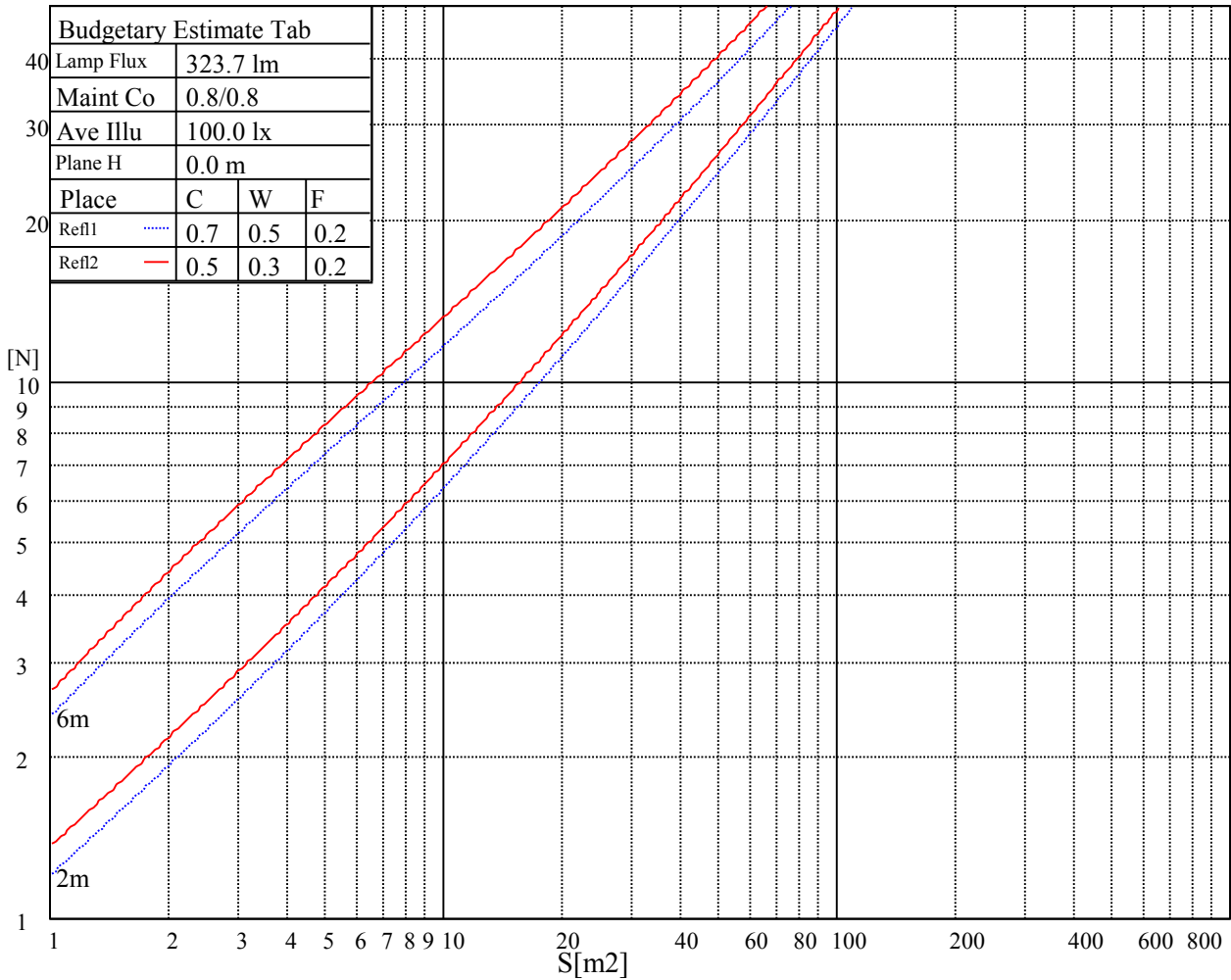
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12896	12896	12896	10877	10877	10877	14003	14003	14003

Glare Table

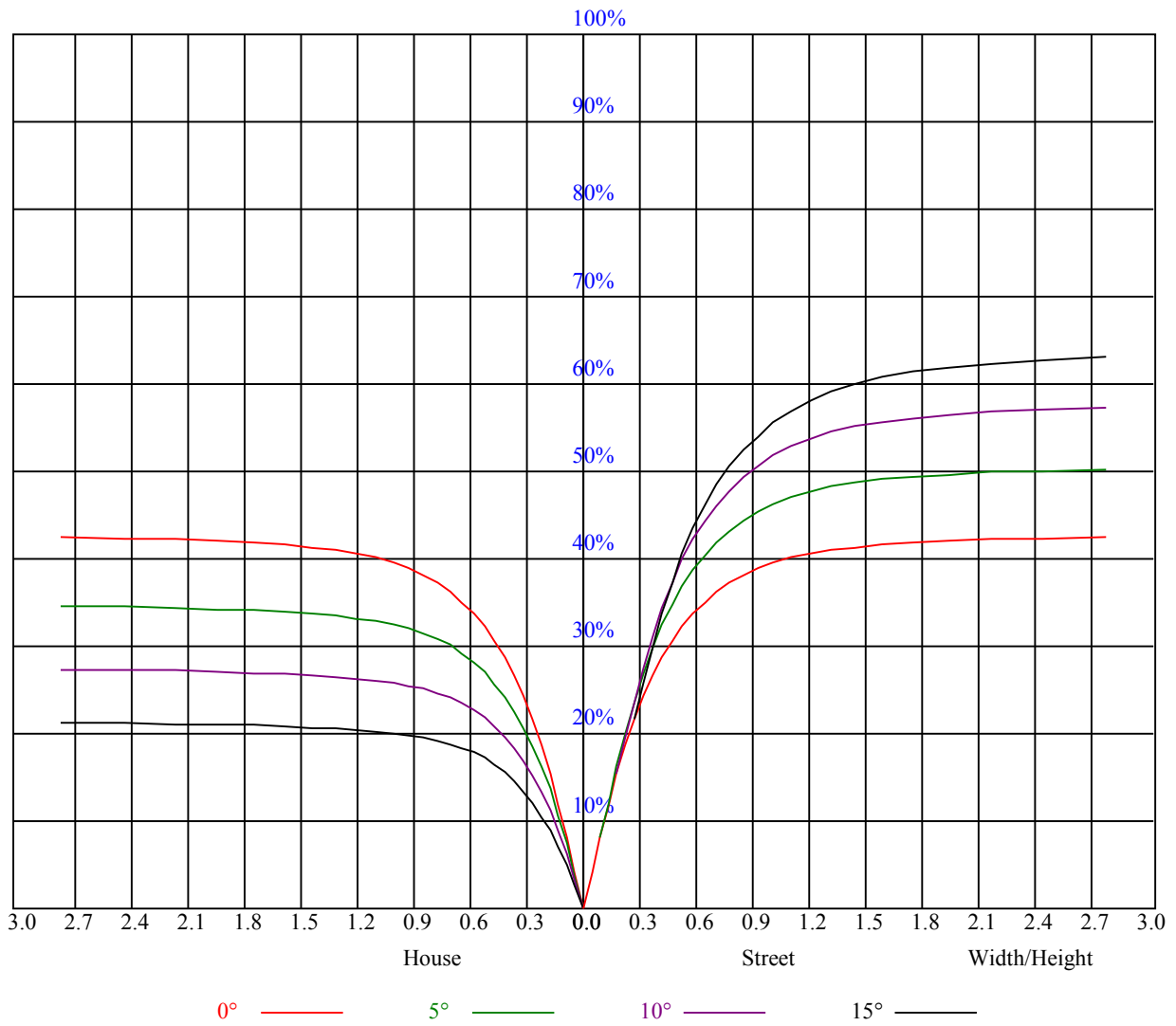
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

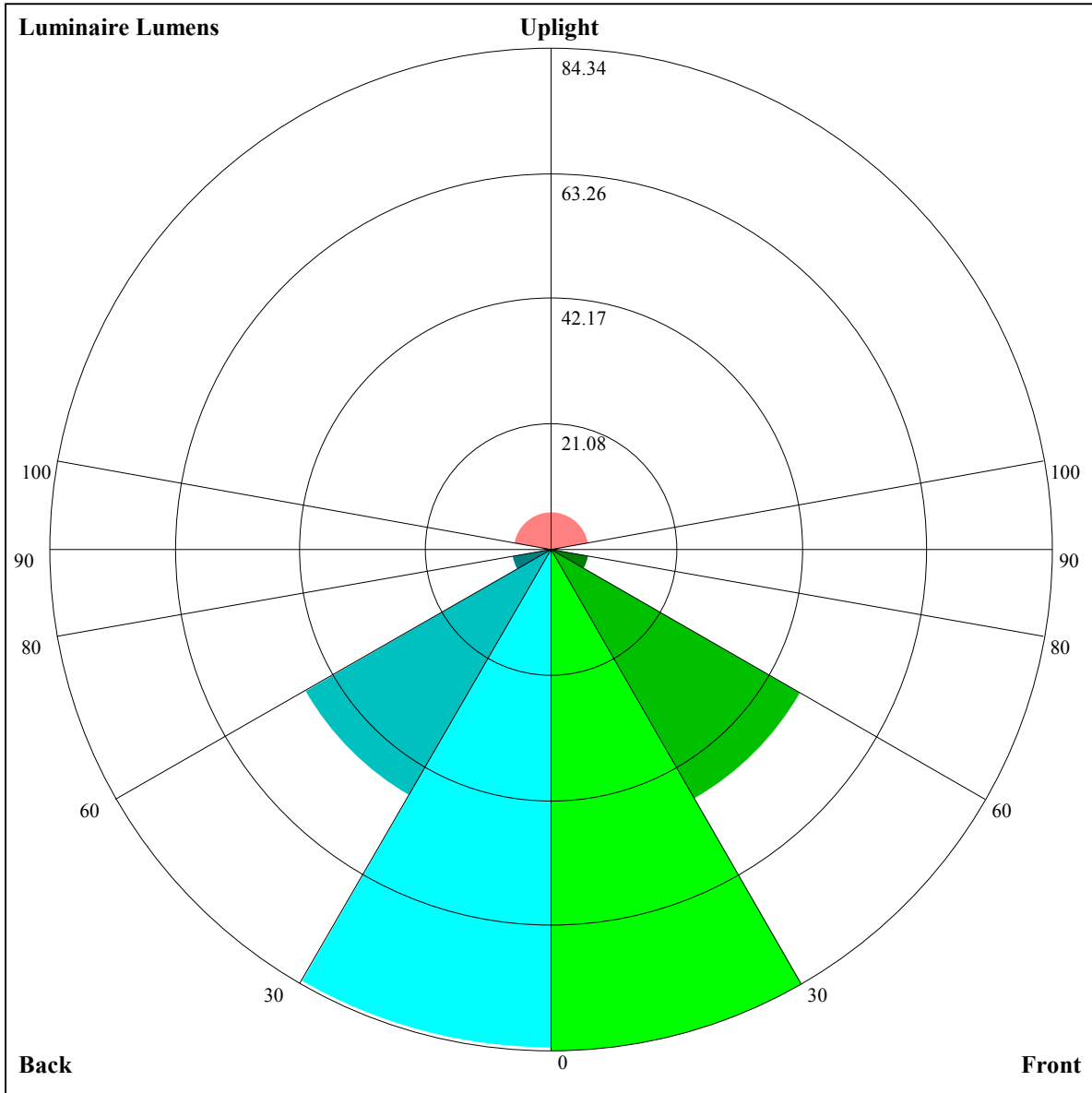
Luminance Limiting Curve





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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.87
1	0.95	0.92	0.90	0.93	0.90	0.88	0.89	0.87	0.86	0.86	0.84	0.83	0.83	0.82	0.81	0.79
2	0.87	0.83	0.79	0.85	0.82	0.79	0.82	0.79	0.77	0.80	0.77	0.75	0.77	0.75	0.74	0.72
3	0.80	0.75	0.71	0.79	0.74	0.71	0.77	0.73	0.70	0.74	0.71	0.68	0.72	0.70	0.67	0.66
4	0.74	0.69	0.65	0.73	0.68	0.64	0.71	0.67	0.64	0.69	0.66	0.63	0.68	0.65	0.62	0.61
5	0.69	0.63	0.59	0.68	0.63	0.59	0.67	0.62	0.59	0.65	0.61	0.58	0.64	0.60	0.57	0.56
6	0.65	0.59	0.55	0.64	0.59	0.55	0.62	0.58	0.54	0.61	0.57	0.54	0.60	0.56	0.53	0.52
7	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.53	0.50	0.57	0.53	0.50	0.49
8	0.57	0.51	0.48	0.56	0.51	0.47	0.55	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.46
9	0.54	0.48	0.45	0.53	0.48	0.45	0.53	0.48	0.44	0.52	0.47	0.44	0.51	0.47	0.44	0.43
10	0.51	0.46	0.42	0.51	0.45	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.48	0.45	0.42	0.40





Luminaire Lumens:

FL=84.34,FM=48.36,FH=6.55,FVH=1.1

BL=84.03,BM=47.76,BH=6.66,BVH=1.08

UL=1.32,UH=6.28

BUG Rating:B0-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	420.08	404.04	348.47	259.82	178.43	124.71	97.99	77.79	58.84
45.0	418.78	403.43	348.81	259.59	178.31	125.72	99.68	81.84	62.94
90.0	418.50	396.51	335.19	243.23	169.14	123.86	97.76	76.44	57.32
135.0	420.64	400.84	349.09	265.44	182.93	129.60	102.09	78.75	58.95
180.0	420.08	397.46	344.76	252.39	169.93	122.06	94.39	73.18	54.84
225.0	418.78	403.76	346.67	253.46	175.50	123.13	95.34	75.04	58.39
270.0	418.50	409.44	362.25	281.53	195.92	137.14	106.88	84.26	64.86
315.0	420.64	401.85	346.44	254.08	175.84	127.01	99.73	78.98	60.47
360.0	420.08	404.04	348.47	259.82	178.43	124.71	97.99	77.79	58.84
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	40.39	24.13	15.24	11.03	7.93	5.91	4.11	2.87	1.74
45.0	40.95	25.76	15.92	11.08	8.10	5.96	4.16	2.87	1.80
90.0	36.90	23.18	15.41	11.14	8.16	6.08	4.39	3.09	2.14
135.0	39.54	26.04	16.65	11.70	8.44	6.13	4.28	2.87	1.74
180.0	37.74	24.64	16.03	11.59	8.21	5.96	4.05	2.76	1.69
225.0	39.38	25.37	16.71	11.70	8.33	6.08	4.22	2.81	1.80
270.0	43.88	28.24	17.83	12.54	9.17	6.81	4.78	3.26	2.03
315.0	38.53	23.12	14.96	10.91	7.99	5.91	4.28	2.87	1.91
360.0	40.39	24.13	15.24	11.03	7.93	5.91	4.11	2.87	1.74
C/γ(°)	90.0								
0.0	1.13								
45.0	1.18								
90.0	1.24								
135.0	1.18								
180.0	1.13								
225.0	1.24								
270.0	1.29								
315.0	1.29								
360.0	1.13								