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Nata

Client:

LumCAT: 1406-N

Luminaire: 92.70.043.00

Report No:

Voltage(V): 31.5600

Test No: GC20190824010

Current(A): 0.1970

LampCAT: XICATO XOB LES 6MM

Power (W): 6.2200

Lamp flux(lm): 658.0

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): 575.50, Efficiency(%): 87.46% , Luminous Efficacy(lm/W): 92.52

Central intensity(cd): 840.361, Maximum intensity(cd): 840.361

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=36.8

[C90/270]Total=36.8

Field angle(10%Imax): [C0/180]Total=89.4

[C90/270]Total=89.4

Maximum s/h(1/2): C0_180=0.60 C90_270=0.60

Maximum s/h(1/4): C0_180=0.64 C90_270=0.64

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.46%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.486%

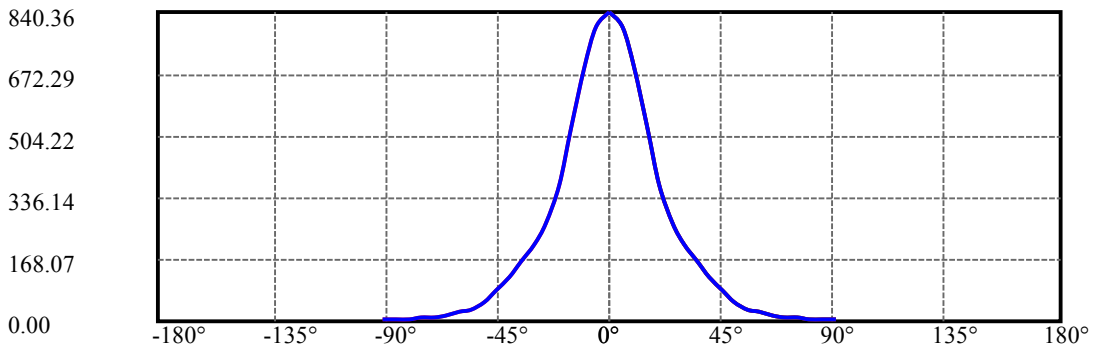
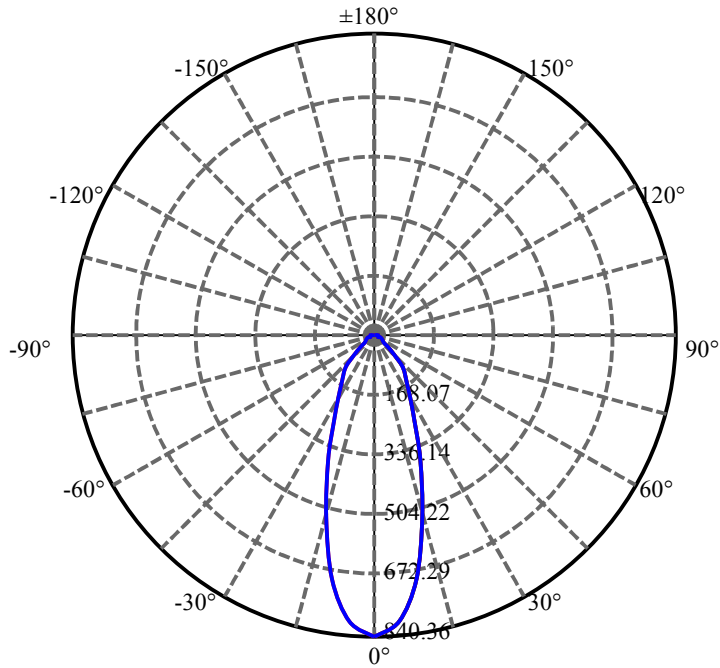
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	840.361	0.000	0	.000%	.000%
5.0	801.035	19.622	19.622	2.982%	3.410%
10.0	689.695	53.328	72.951	8.105%	12.676%
15.0	524.398	72.019	144.97	10.945%	25.190%
20.0	371.728	73.853	218.823	11.224%	38.023%
25.0	266.337	66.921	285.744	10.170%	49.652%
30.0	207.253	59.933	345.677	9.108%	60.066%
35.0	161.782	54.343	400.02	8.259%	69.509%
40.0	121.395	47.246	447.266	7.180%	77.718%
45.0	81.619	37.590	484.856	5.713%	84.250%
50.0	51.996	26.999	511.855	4.103%	88.941%
55.0	33.574	18.606	530.461	2.828%	92.174%
60.0	23.984	13.304	543.765	2.022%	94.486%
65.0	17.339	10.046	553.811	1.527%	96.231%
70.0	12.607	7.583	561.393	1.152%	97.549%
75.0	8.937	5.631	567.024	.856%	98.528%
80.0	6.082	4.019	571.043	.611%	99.226%
85.0	3.818	2.690	573.733	.409%	99.693%
90.0	2.630	1.765	575.498	.268%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	345.68	52.53%	60.07%
0-40	447.27	67.97%	77.72%
0-60	543.76	82.64%	94.49%
0-90	573.73	87.19%	99.69%
0-120	573.73	87.19%	99.69%
0-180	575.50	87.46%	100.00%
60-90	43.27	6.58%	7.52%
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%
0-41.75	460.40	69.97%	80.00%

ZONAL LUMEN SUMMARY

0-10	72.95
10-20	145.87
20-30	126.85
30-40	101.59
40-50	64.59
50-60	31.91
60-70	17.63
70-80	9.65
80-90	2.69
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: ———

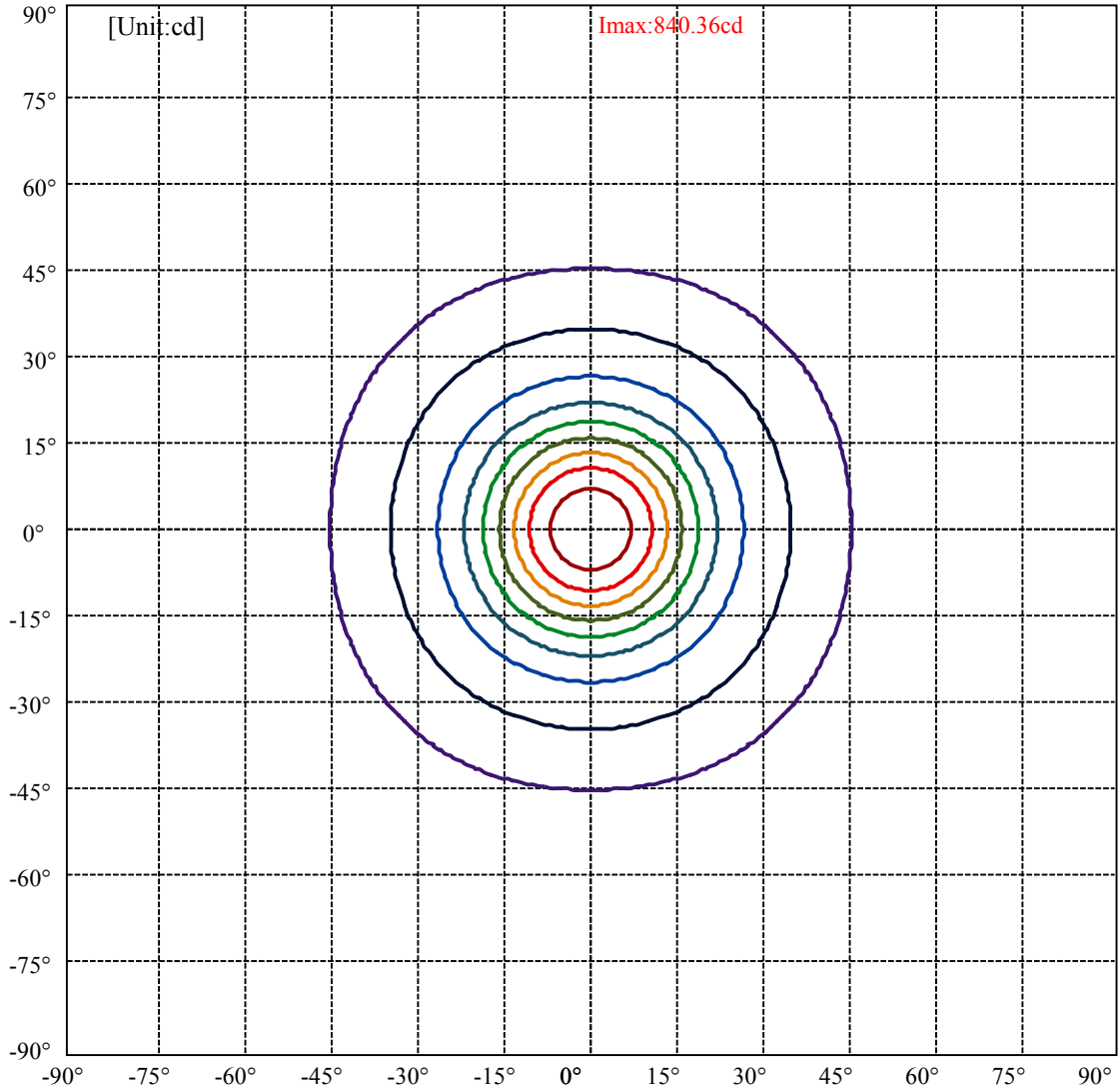
C90/C270: ———

Field angle(10%Imax):C0/180Left:44.7 Right:44.7

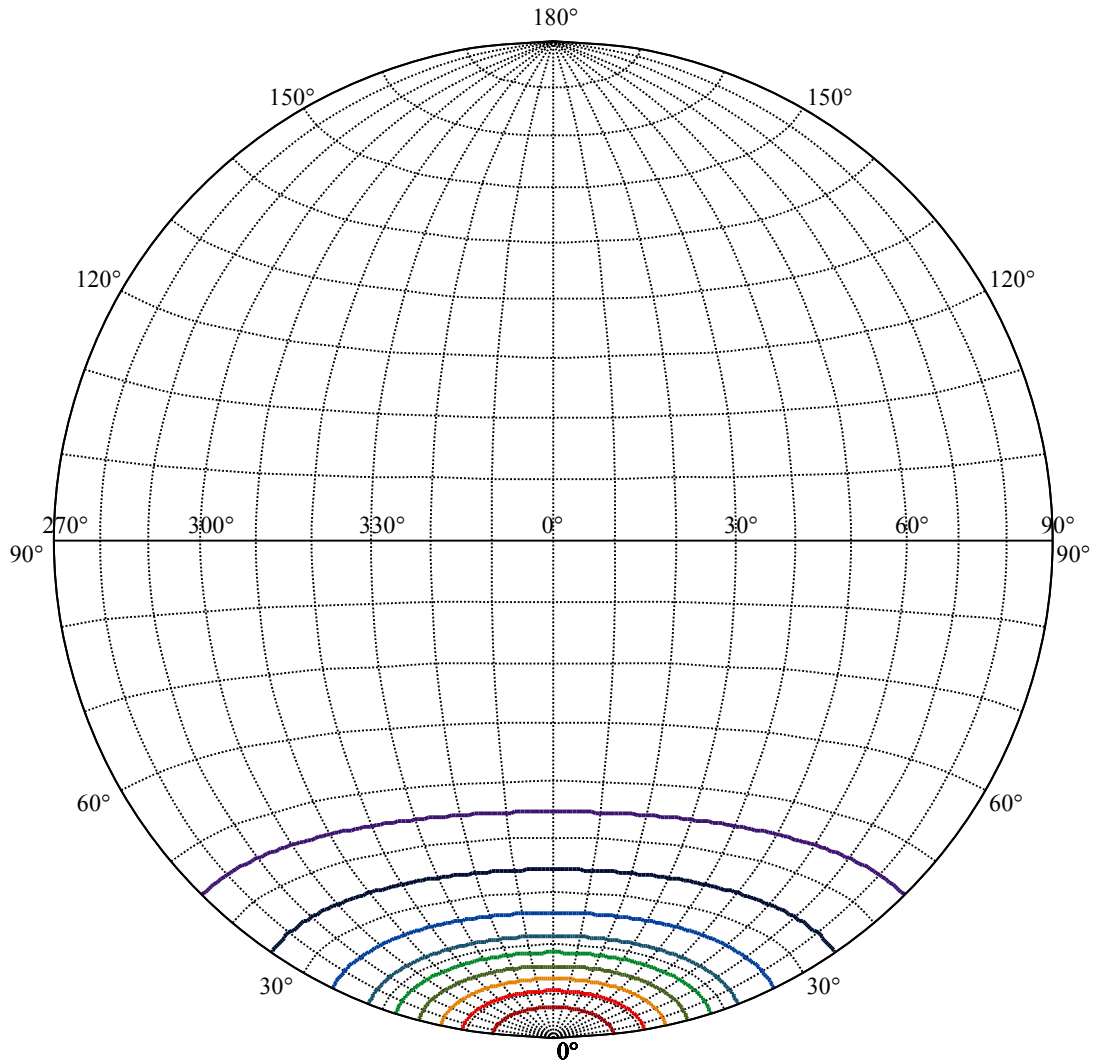
:C90/270Left:44.7 Right:44.7

Beam Angle(50%Imax):C0/180Left:18.4 Right:18.4

:C90/270Left:18.4 Right:18.4



(10%Imax) 84.0361	—
(20%Imax) 168.072	—
(30%Imax) 252.108	—
(40%Imax) 336.144	—
(50%Imax) 420.18	—
(60%Imax) 504.216	—
(70%Imax) 588.253	—
(80%Imax) 672.289	—
(90%Imax) 756.325	—



House

[Unit:cd]

Road

Imax:840.36

(10%Imax) 84.0361

(20%Imax) 168.072

(30%Imax) 252.108

(40%Imax) 336.144

(50%Imax) 420.18

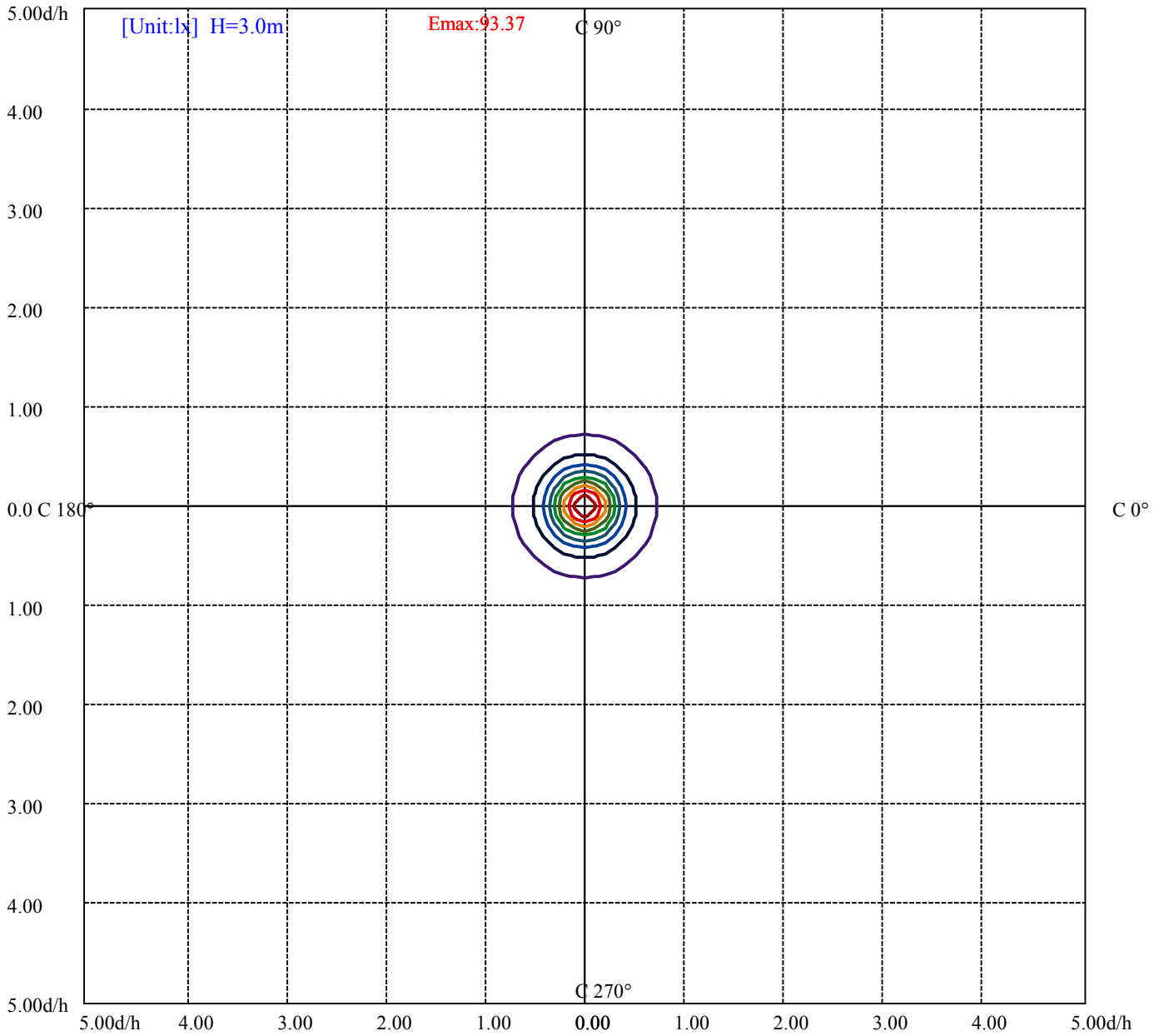
(60%Imax) 504.216

(70%Imax) 588.253

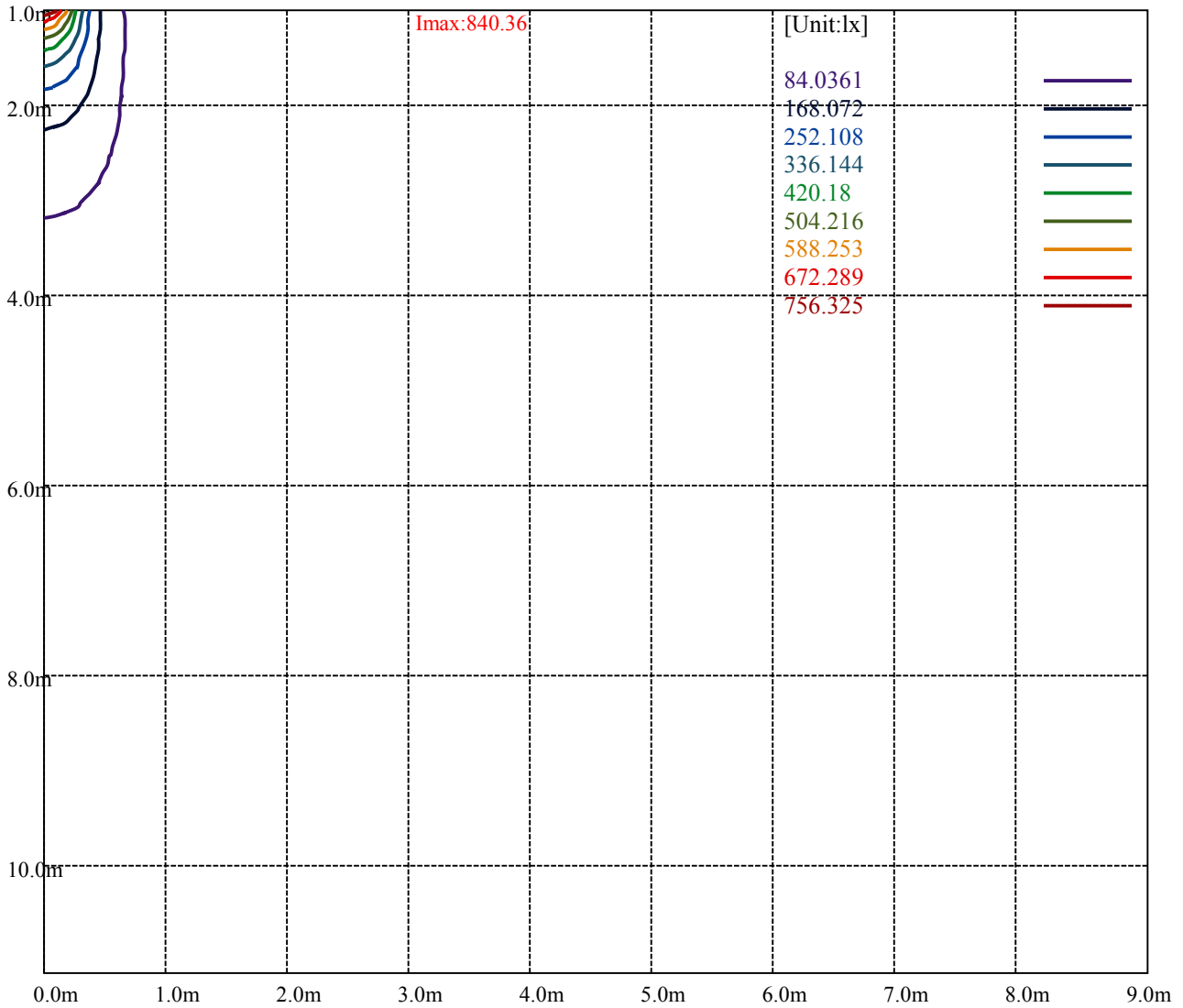
(80%Imax) 672.289

(90%Imax) 756.325





(10%Emax) 9.337334	—
(20%Emax) 18.67467	—
(30%Emax) 28.012	—
(40%Emax) 37.34933	—
(50%Emax) 46.68666	—
(60%Emax) 56.024	—
(70%Emax) 65.36134	—
(80%Emax) 74.69867	—
(90%Emax) 84.036	—



Luminance Table

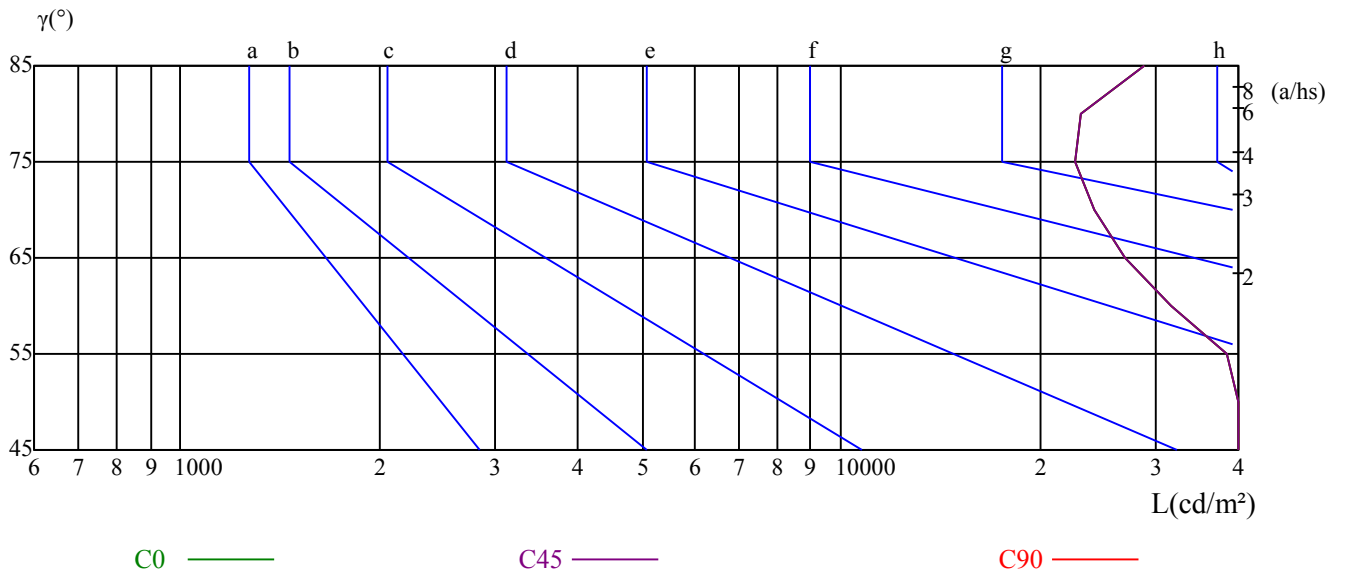
γ	45	50	55	60	65	70	75	80	85
C0	75888	53183	38484	31537	26974	24234	22701	23028	28801
C45	75888	53183	38484	31537	26974	24234	22701	23028	28801
C90	75888	53183	38484	31537	26974	24234	22701	23028	28801

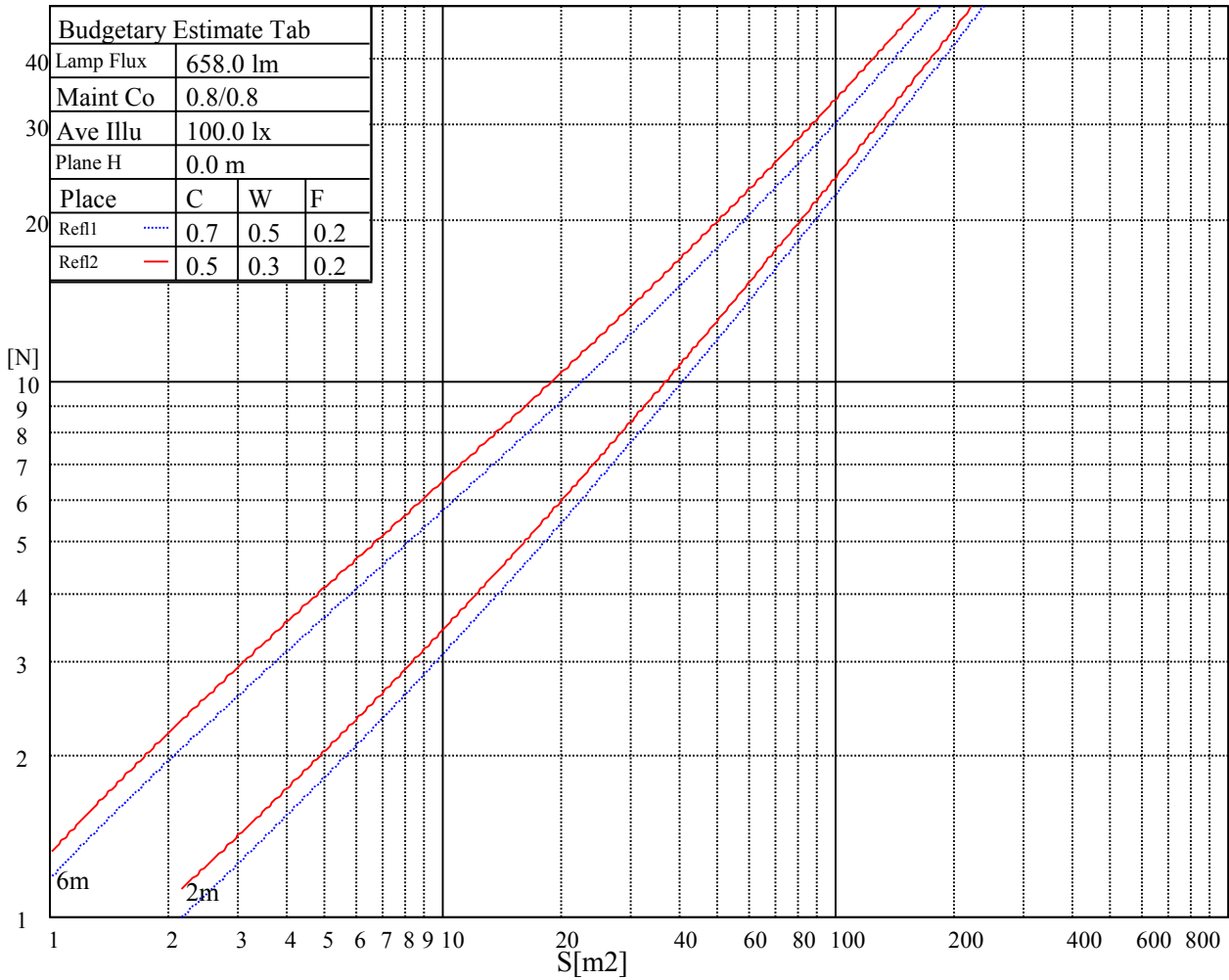
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
26974	26974	26974	22701	22701	22701	28801	28801	28801

Glare Table

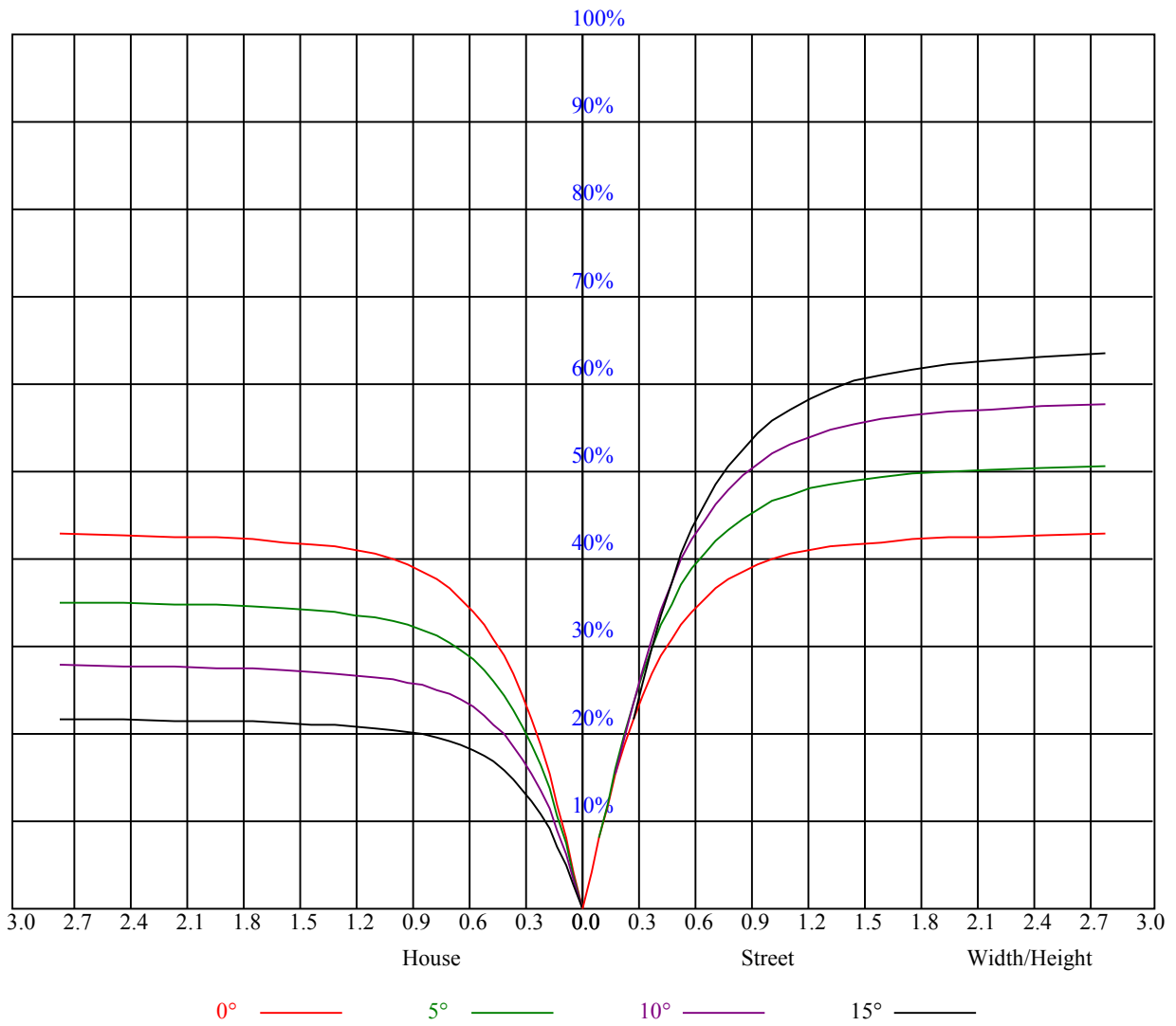
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

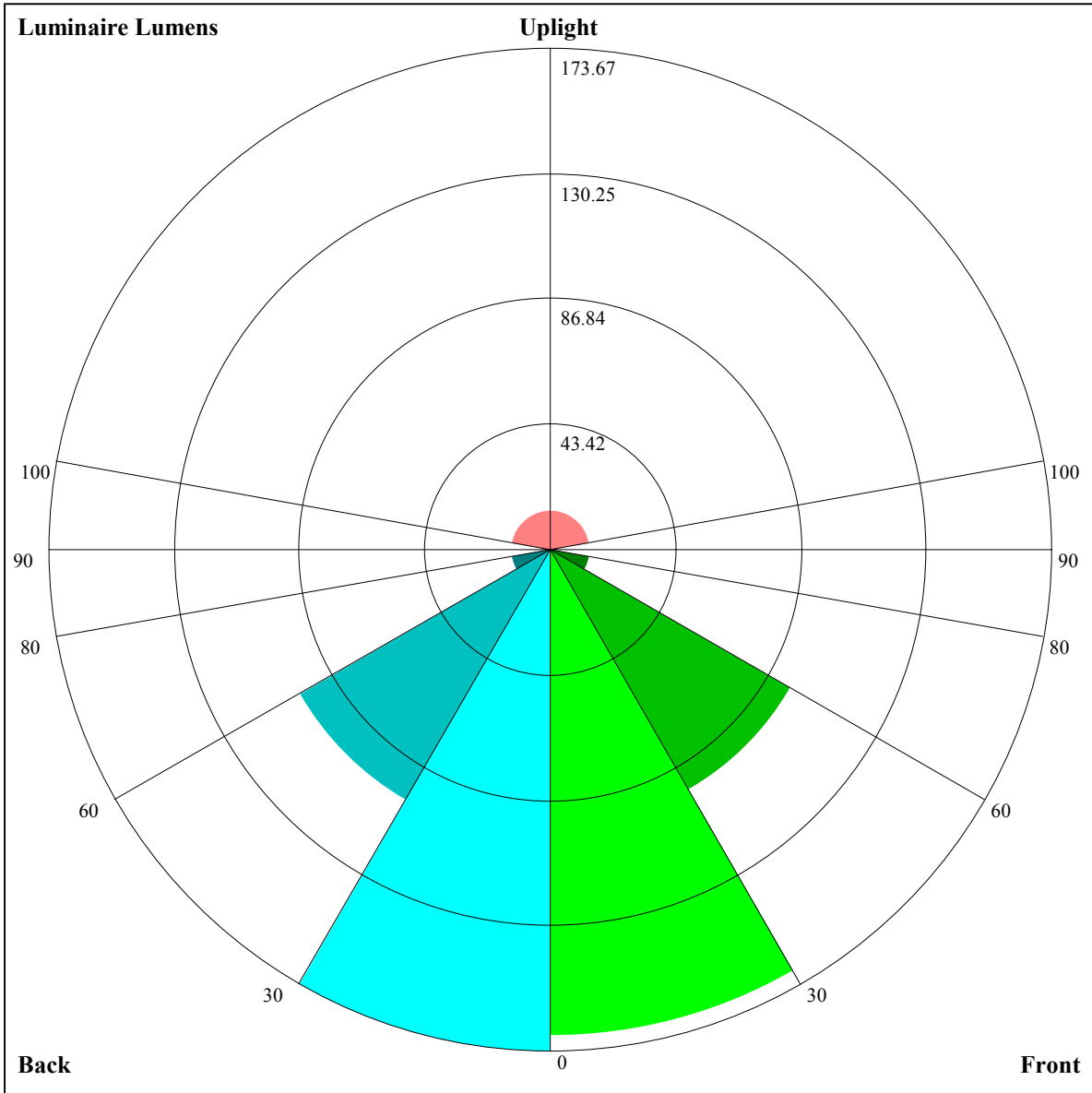
Luminance Limiting Curve





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	1.04	1.04	1.04	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.95	0.93	0.91	0.94	0.91	0.89	0.90	0.88	0.86	0.87	0.85	0.84	0.84	0.82	0.81	0.80
2	0.88	0.84	0.80	0.86	0.82	0.79	0.83	0.80	0.77	0.80	0.78	0.76	0.78	0.76	0.74	0.73
3	0.81	0.76	0.72	0.80	0.75	0.71	0.77	0.73	0.70	0.75	0.72	0.69	0.73	0.70	0.68	0.66
4	0.75	0.69	0.65	0.74	0.69	0.65	0.72	0.67	0.64	0.70	0.66	0.63	0.68	0.65	0.62	0.61
5	0.70	0.64	0.60	0.69	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.58	0.64	0.61	0.58	0.56
6	0.65	0.59	0.55	0.64	0.59	0.55	0.63	0.58	0.54	0.62	0.57	0.54	0.60	0.57	0.54	0.52
7	0.61	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.50	0.57	0.53	0.50	0.49
8	0.57	0.52	0.48	0.57	0.51	0.48	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.46
9	0.54	0.49	0.45	0.54	0.48	0.45	0.53	0.48	0.45	0.52	0.48	0.44	0.51	0.47	0.44	0.43
10	0.51	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.49	0.45	0.42	0.41





Luminaire Lumens:

FL=168.16,FM=96.15,FH=13.61,FVH=2.18

BL=173.67,BM=100.08,BH=13.54,BVH=2.25

UL=2.87,UH=13.65

BUG Rating:B1-U2-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	840.94	801.11	686.70	513.39	360.90	264.43	205.82	159.64	117.68
45.0	838.63	810.06	698.46	546.30	377.04	266.12	207.79	165.32	124.65
90.0	841.67	794.87	678.94	507.60	351.79	251.61	192.43	148.50	112.89
135.0	840.21	818.04	719.44	557.10	398.14	282.49	220.73	172.35	132.92
180.0	840.94	802.80	704.08	540.11	388.86	277.43	217.07	170.44	127.86
225.0	838.63	798.24	681.69	517.78	382.44	276.64	215.89	168.30	126.00
270.0	841.67	803.81	688.44	528.98	375.98	266.29	207.90	162.62	121.28
315.0	840.21	779.34	659.81	483.92	338.68	245.70	190.41	147.09	107.89
360.0	840.94	801.11	686.70	513.39	360.90	264.43	205.82	159.64	117.68
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	80.61	51.98	34.20	24.81	17.72	12.88	9.23	6.13	3.71
45.0	83.98	56.03	36.06	25.14	18.51	13.33	9.45	6.53	3.94
90.0	75.15	48.94	31.89	22.95	16.59	11.98	8.66	5.85	3.77
135.0	90.17	55.18	34.20	24.58	17.72	12.49	9.06	6.41	4.11
180.0	84.83	52.26	33.24	23.96	17.27	12.83	9.06	6.30	4.11
225.0	81.62	50.51	33.08	23.34	16.88	12.54	8.83	5.96	3.83
270.0	83.25	53.04	34.09	24.08	17.49	12.88	8.83	6.02	3.60
315.0	73.35	48.04	31.84	23.01	16.54	11.93	8.38	5.46	3.49
360.0	80.61	51.98	34.20	24.81	17.72	12.88	9.23	6.13	3.71
C/ γ (°)	90.0								
0.0	2.64								
45.0	2.76								
90.0	2.53								
135.0	2.76								
180.0	2.76								
225.0	2.59								
270.0	2.48								
315.0	2.53								
360.0	2.64								