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Nata

Client:

LumCAT: 1-0788-M

Luminaire: 92.70.124.00

Report No:

Voltage(V): 33.2100

Test No: GC2019082903

Current(A): 0.2970

LampCAT: XICATO XOB LES 9.8MM

Power (W): 9.8600

Lamp flux(lm): 902.0

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 46

Width(mm): 46

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 826.79, Efficiency(%): 91.66% , Luminous Efficacy(lm/W): 83.85

Central intensity(cd): 1308.094, Maximum intensity(cd): 1308.094

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Field angle(10%Imax): [C0/180]Total=86.8

[C90/270]Total=86.8

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

Maximum s/h(1/4): C0_180=0.67 C90_270=0.67

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.66%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.656%

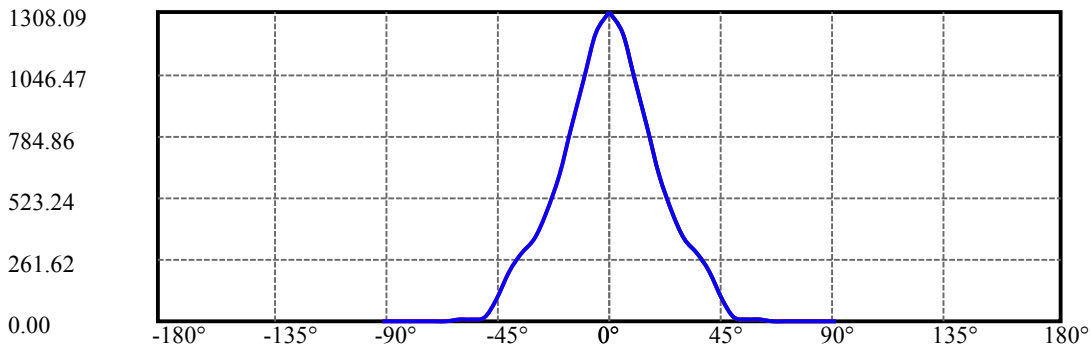
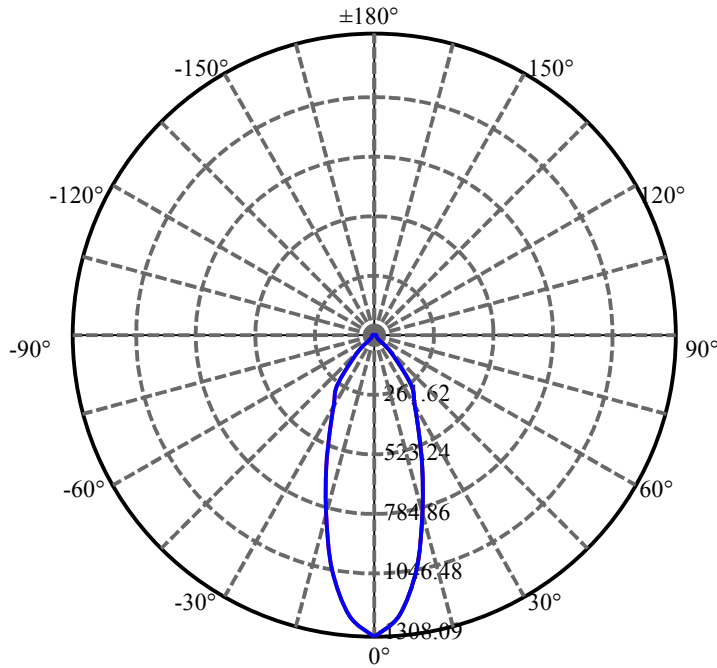
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1308.094	0.000	0	.000%	.000%
5.0	1221.131	30.236	30.236	3.352%	3.657%
10.0	1033.566	80.658	110.894	8.942%	13.413%
15.0	809.677	109.340	220.234	12.122%	26.637%
20.0	613.427	117.284	337.517	13.003%	40.823%
25.0	452.503	111.796	449.314	12.394%	54.345%
30.0	347.808	101.280	550.594	11.228%	66.594%
35.0	288.127	93.646	644.24	10.382%	77.921%
40.0	213.863	83.753	727.993	9.285%	88.051%
45.0	92.981	56.815	784.807	6.299%	94.923%
50.0	20.264	22.883	807.69	2.537%	97.690%
55.0	5.752	5.657	813.347	.627%	98.374%
60.0	4.331	2.331	815.677	.258%	98.656%
65.0	3.895	2.000	817.677	.222%	98.898%
70.0	3.607	1.900	819.577	.211%	99.128%
75.0	3.403	1.832	821.409	.203%	99.350%
80.0	3.312	1.797	823.206	.199%	99.567%
85.0	3.277	1.790	824.996	.198%	99.783%
90.0	3.263	1.790	826.787	.198%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	550.59	61.04%	66.59%
0-40	727.99	80.71%	88.05%
0-60	815.68	90.43%	98.66%
0-90	825.00	91.46%	99.78%
0-120	825.00	91.46%	99.78%
0-180	826.79	91.66%	100.00%
60-90	11.65	1.29%	1.41%
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%
0-36.03	661.43	73.33%	80.00%

ZONAL LUMEN SUMMARY

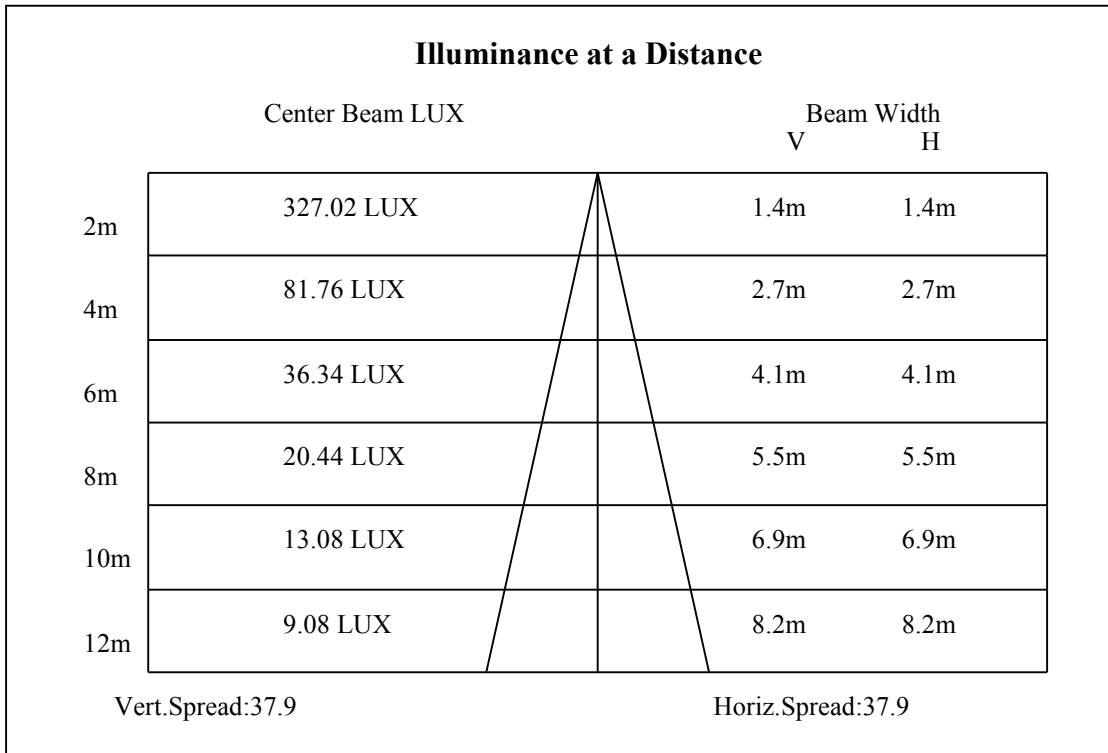
0-10	110.89
10-20	226.62
20-30	213.08
30-40	177.40
40-50	79.70
50-60	7.99
60-70	3.90
70-80	3.63
80-90	1.79
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

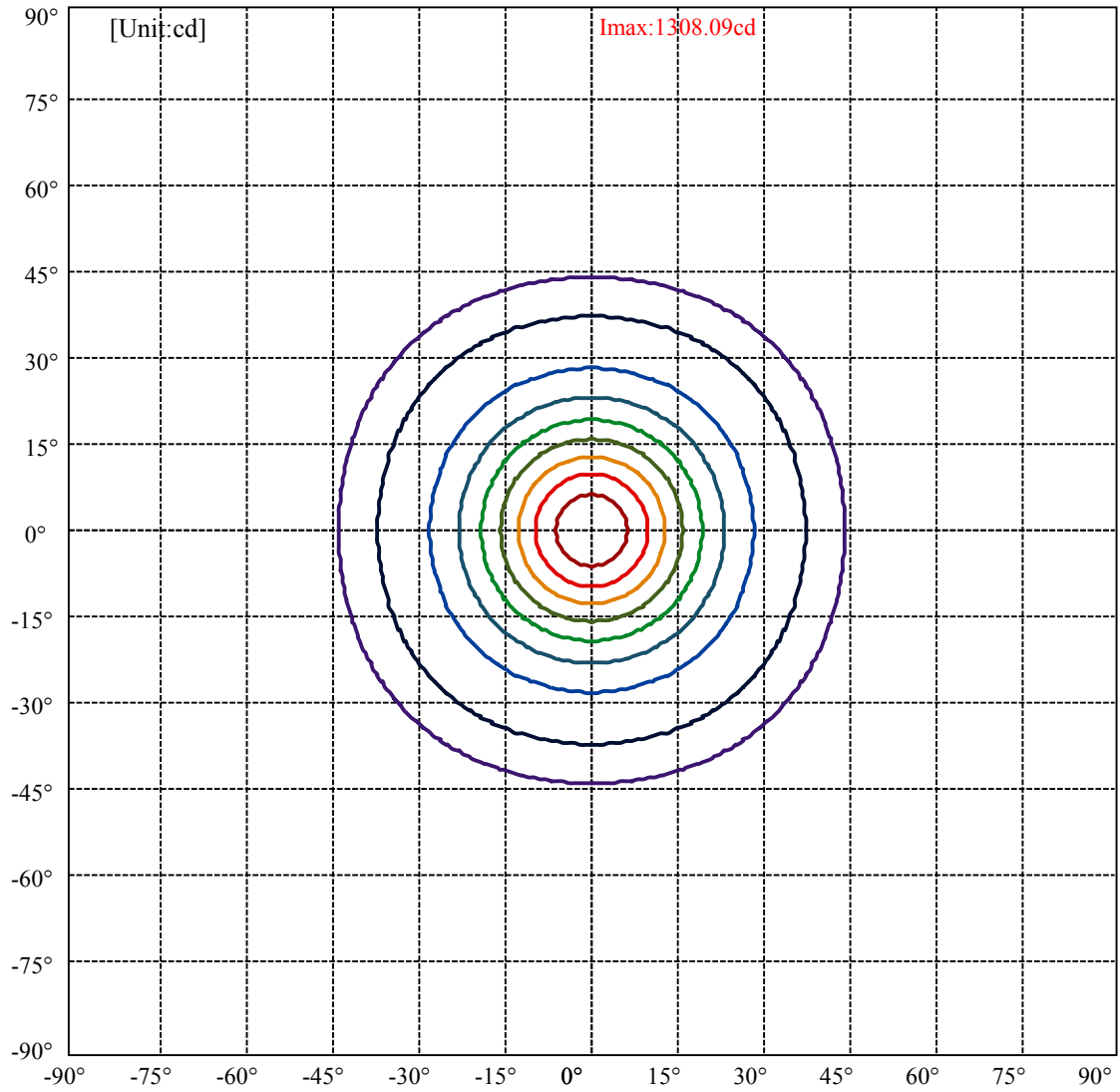


C0(Max): —————
C0/C180: —————
C90/C270: —————

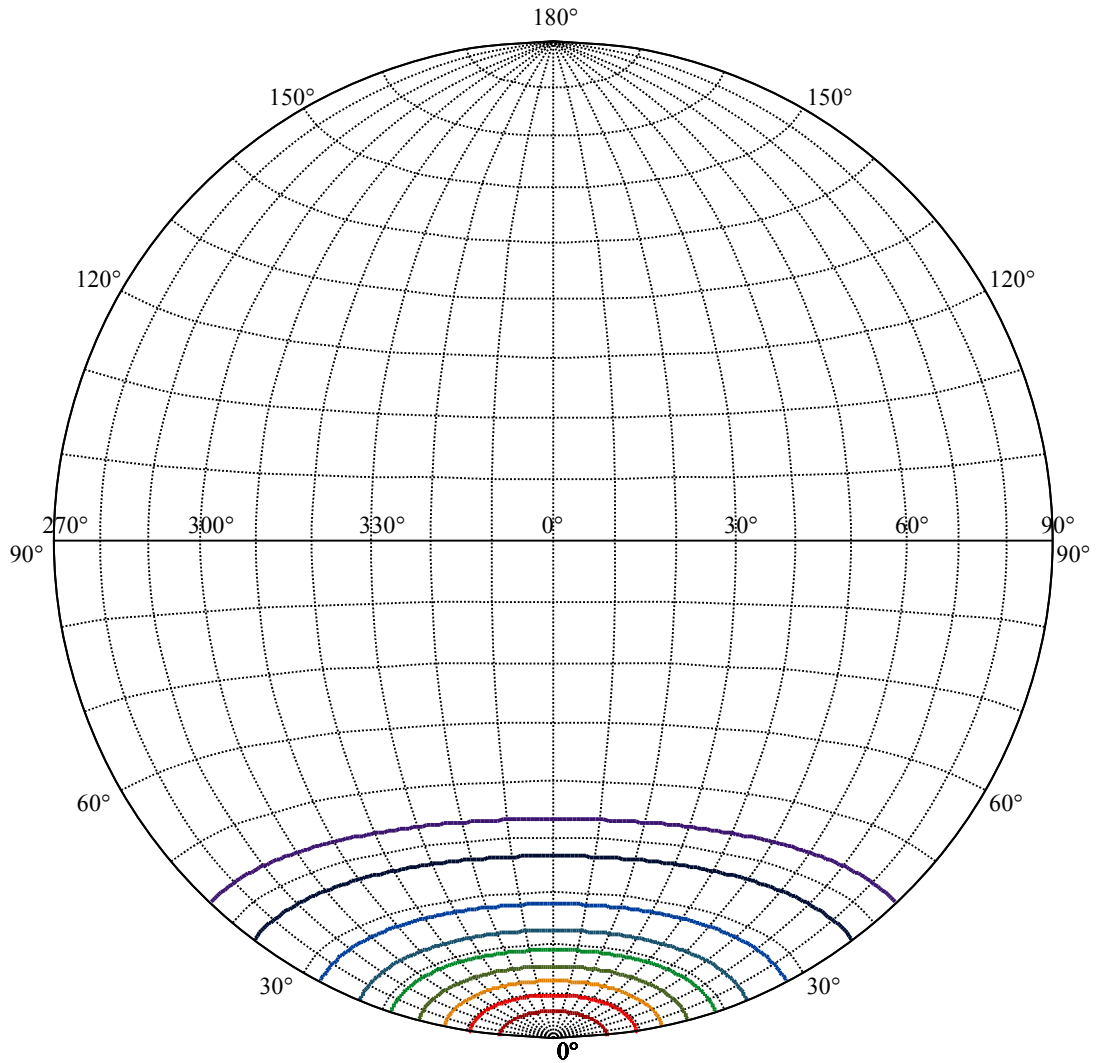
Field angle(10%Imax):C0/180Left:43.4 Right:43.4
:C90/270Left:43.4 Right:43.4

Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0
:C90/270Left:19.0 Right:19.0





(10%Imax) 130.809	—
(20%Imax) 261.619	—
(30%Imax) 392.428	—
(40%Imax) 523.237	—
(50%Imax) 654.047	—
(60%Imax) 784.856	—
(70%Imax) 915.666	—
(80%Imax) 1046.47	—
(90%Imax) 1177.28	—



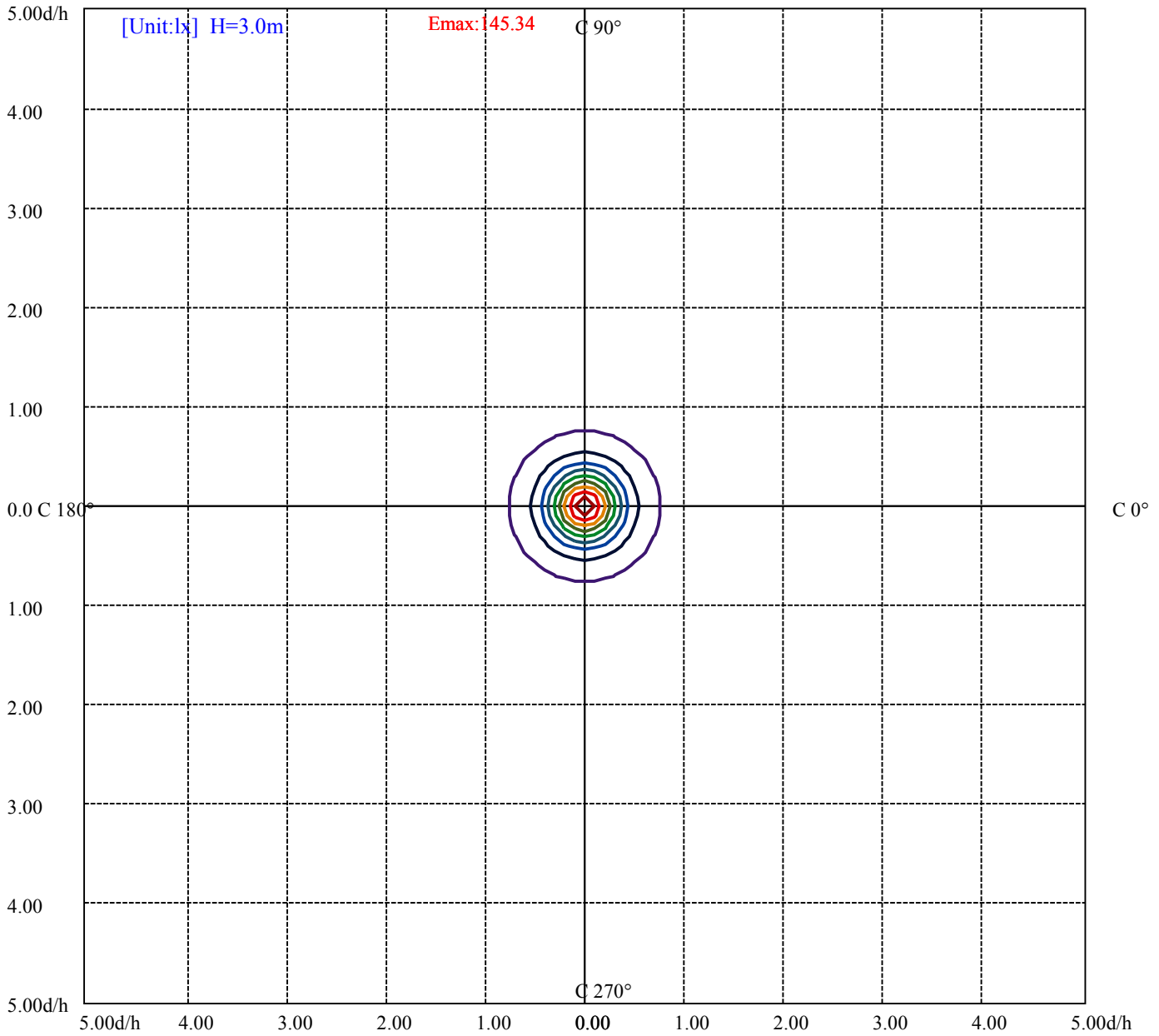
House

[Unit:cd]

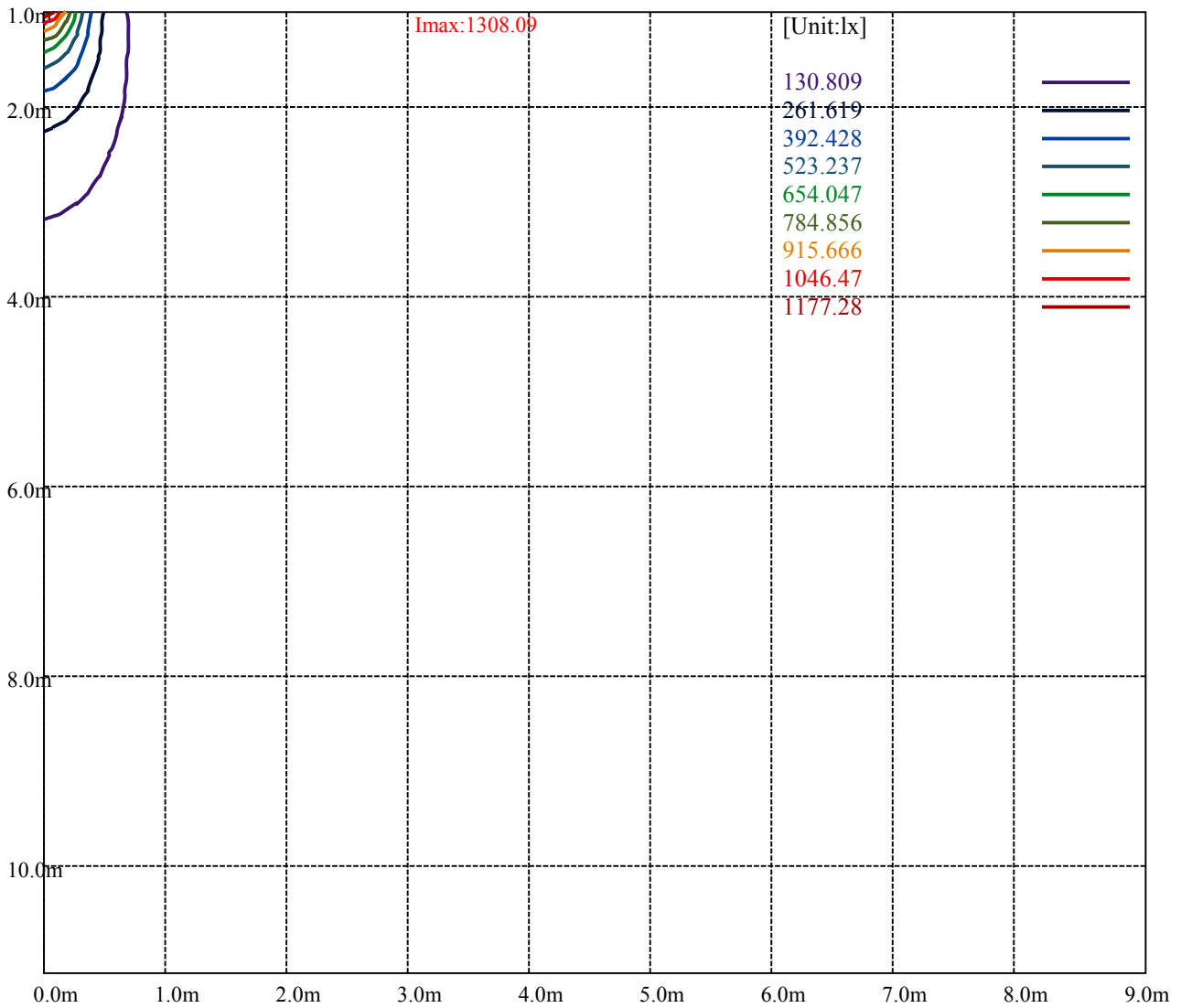
Road

Imax:1308.09

(10%Imax)	130.809	—
(20%Imax)	261.619	—
(30%Imax)	392.428	—
(40%Imax)	523.237	—
(50%Imax)	654.047	—
(60%Imax)	784.856	—
(70%Imax)	915.666	—
(80%Imax)	1046.47	—
(90%Imax)	1177.28	—



(10%Emax) 14.53433	—
(20%Emax) 29.06867	—
(30%Emax) 43.603	—
(40%Emax) 58.13734	—
(50%Emax) 72.67178	—
(60%Emax) 87.20611	—
(70%Emax) 101.7404	—
(80%Emax) 116.2744	—
(90%Emax) 130.8089	—



Luminance Table

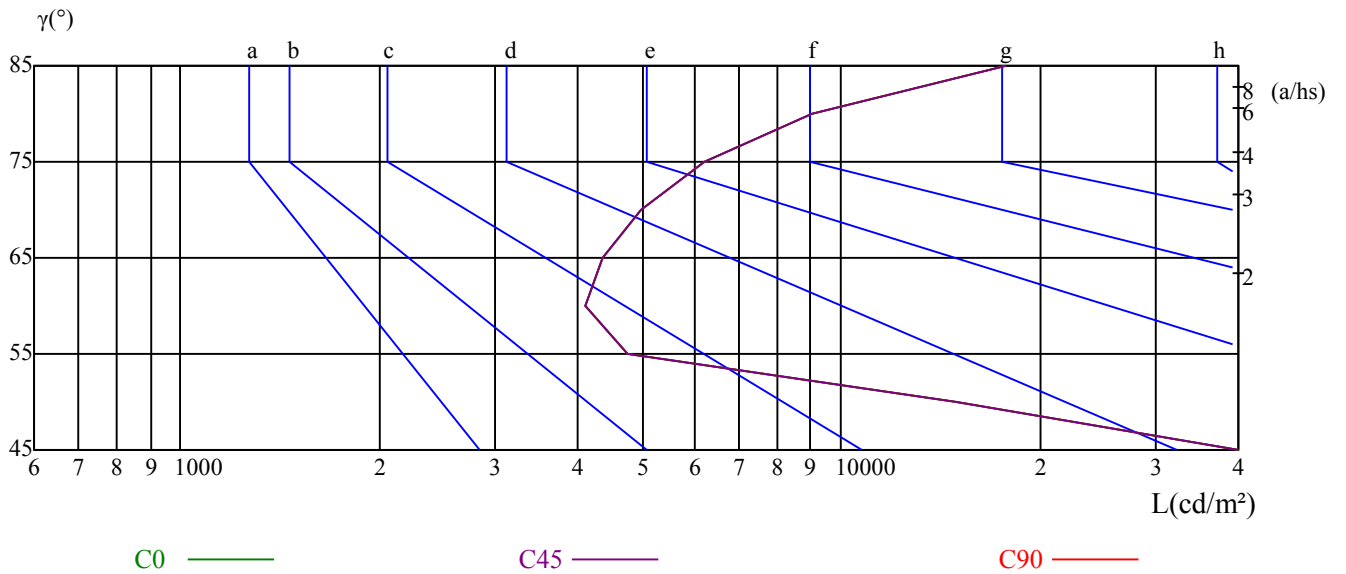
γ	45	50	55	60	65	70	75	80	85
C0	62143	14899	4739	4094	4356	4984	6214	9013	17767
C45	62143	14899	4739	4094	4356	4984	6214	9013	17767
C90	62143	14899	4739	4094	4356	4984	6214	9013	17767

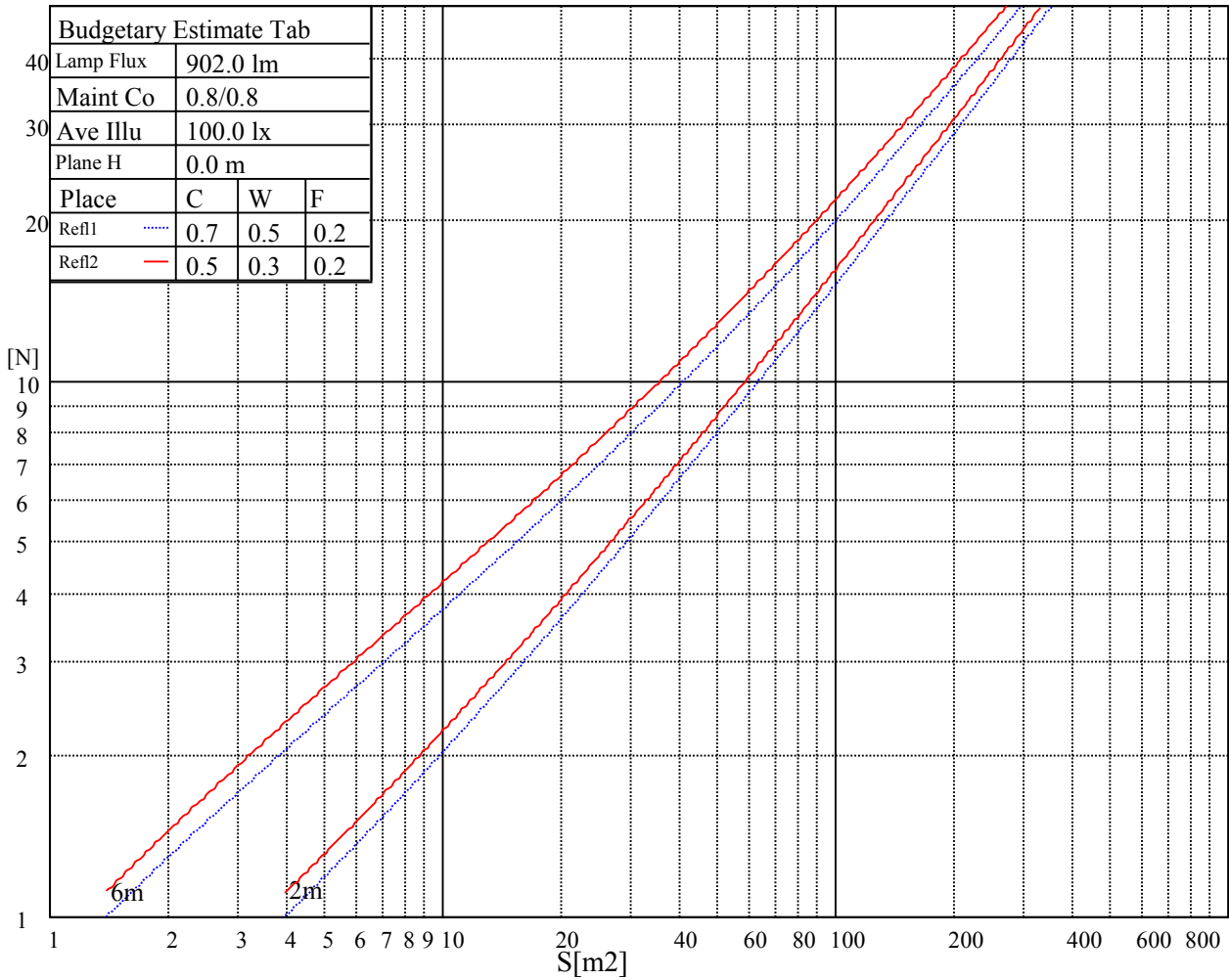
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4356	4356	4356	6214	6214	6214	17767	17767	17767

Glare Table

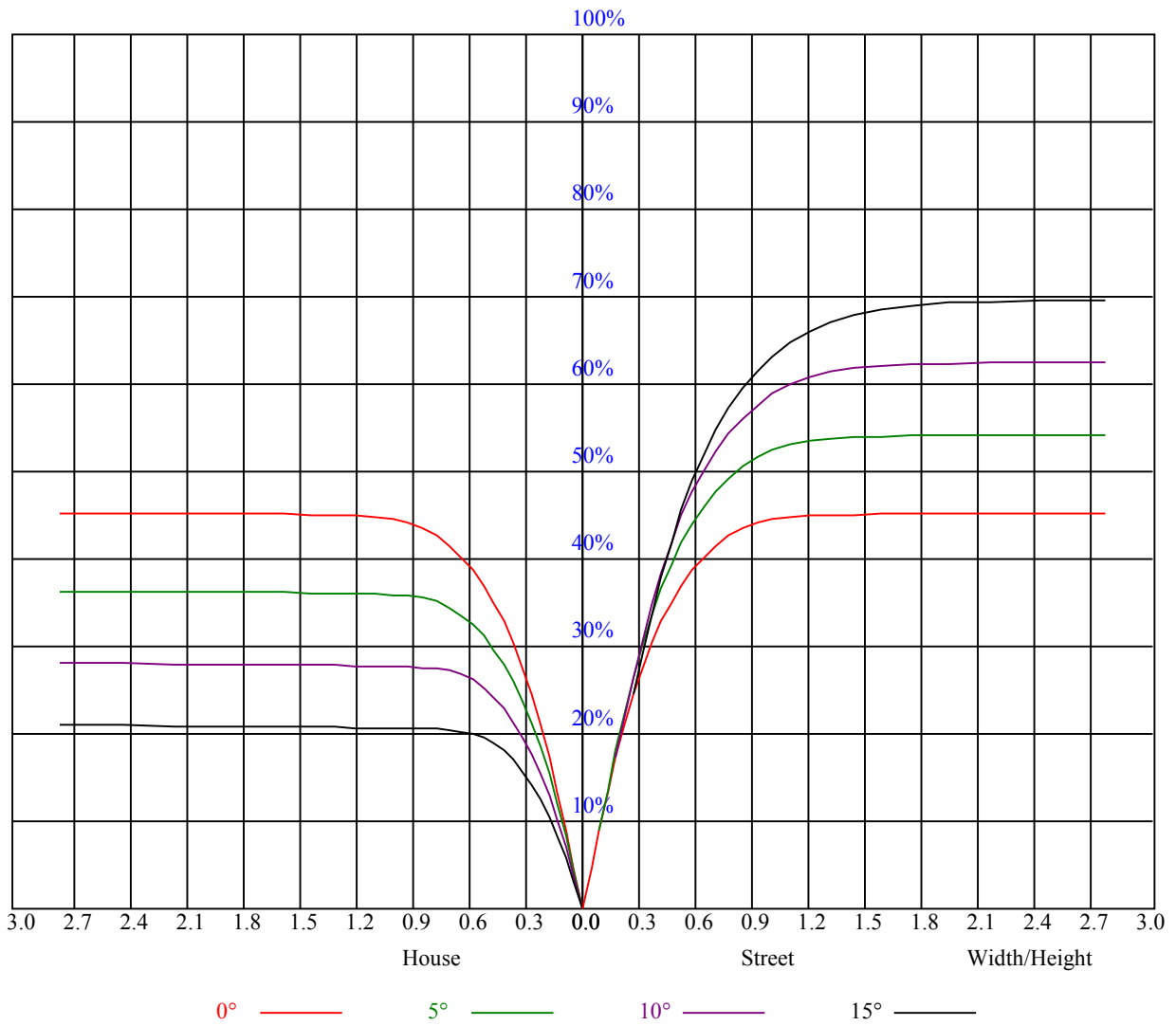
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

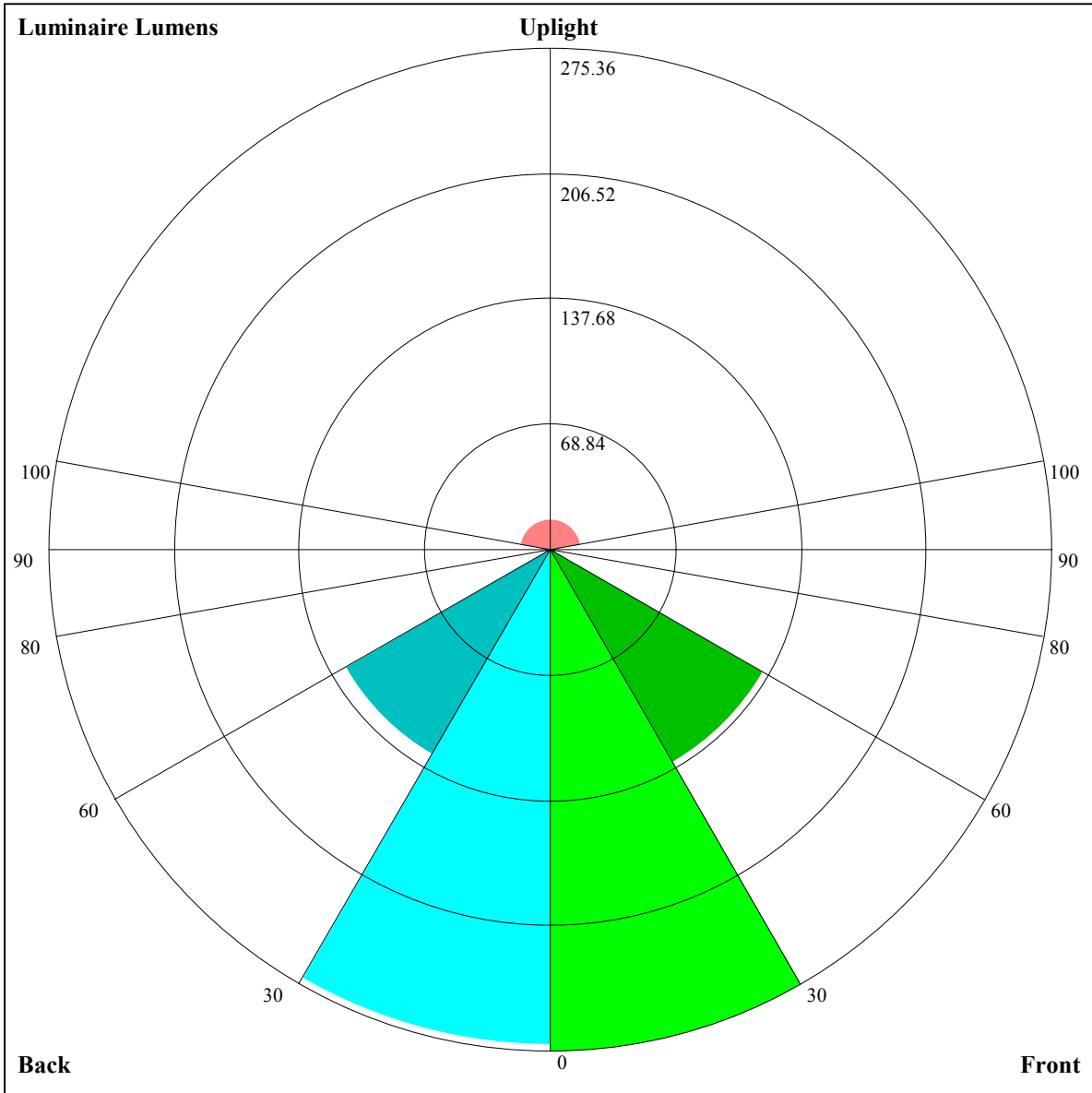
Luminance Limiting Curve





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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.85
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.84	0.87	0.84	0.82	0.84	0.82	0.81	0.79
3	0.88	0.83	0.79	0.86	0.82	0.79	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.73
4	0.82	0.77	0.73	0.81	0.76	0.72	0.79	0.75	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.68
5	0.77	0.71	0.67	0.76	0.71	0.67	0.74	0.70	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.64
6	0.72	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
7	0.68	0.62	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.56
8	0.64	0.58	0.54	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.57	0.54	0.52
9	0.60	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.57	0.53	0.51	0.49
10	0.57	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.55	0.51	0.48	0.55	0.51	0.48	0.47





Luminaire Lumens:

FL=275.36,FM=134.49,FH=3.75,FVH=1.79

BL=271.96,BM=130.12,BH=3.77,BVH=1.79

UL=3.56,UH=16.94

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	1310.06	1234.69	1050.19	830.81	624.94	457.31	351.00	290.81	228.83
45.0	1304.44	1302.75	1159.31	934.88	707.06	534.94	393.75	309.94	284.06
90.0	1322.44	1319.63	1112.96	939.54	717.19	528.81	392.63	308.53	265.50
135.0	1295.44	1304.44	1161.00	919.13	709.88	522.56	383.06	309.94	273.54
180.0	1310.06	1217.25	1018.24	778.11	583.54	430.54	332.94	280.58	213.58
225.0	1304.44	1114.88	921.15	690.30	514.41	380.42	309.66	257.91	135.68
270.0	1322.44	1153.13	928.69	695.81	529.31	385.88	311.63	284.06	154.63
315.0	1295.44	1122.30	916.99	688.84	521.10	379.58	307.80	263.25	155.08
360.0	1310.06	1234.69	1050.19	830.81	624.94	457.31	351.00	290.81	228.83
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	107.94	12.09	5.23	4.33	3.88	3.60	3.38	3.32	3.26
45.0	167.63	41.01	7.31	4.61	4.05	3.71	3.49	3.38	3.26
90.0	159.69	40.50	7.48	4.50	4.05	3.71	3.49	3.32	3.26
135.0	157.11	38.31	7.26	4.61	4.11	3.77	3.49	3.32	3.26
180.0	74.19	10.80	5.01	4.33	3.94	3.60	3.38	3.32	3.26
225.0	25.20	6.53	4.56	4.11	3.77	3.54	3.38	3.32	3.38
270.0	26.72	6.36	4.61	4.11	3.71	3.49	3.32	3.26	3.26
315.0	25.37	6.53	4.56	4.05	3.66	3.43	3.32	3.26	3.26
360.0	107.94	12.09	5.23	4.33	3.88	3.60	3.38	3.32	3.26
C/ γ (°)	90.0								
0.0	3.26								
45.0	3.26								
90.0	3.26								
135.0	3.26								
180.0	3.26								
225.0	3.26								
270.0	3.26								
315.0	3.26								
360.0	3.26								