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Client:

LumCAT: 1406-N
Luminaire: 92.70.043.00
Report No: nt0100
Test No: GC2019112606
LampCAT: LUMINUS CXM-3-AC40
Lamp flux(lm): 346.0
Number of Lamps: 1
Length(mm): 0
Phm Type: C

Voltage(V): 35.6600
Current(A): 0.0970
Power (W): 3.4500
PF: 1.0000
Ballast type: DC
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 303.06, Efficiency(%): 87.59% , Luminous Efficacy(lm/W): 87.84
Central intensity(cd): 461.630, Maximum intensity(cd): 461.630
Angle of maximum intensity: C=0.0 $\gamma=0.0$
Beam Angle(50%Imax): [C0/180]Total=35.4
 [C90/270]Total=35.4
Field angle(10%Imax): [C0/180]Total=88.0
 [C90/270]Total=88.0
Maximum s/h(1/2): C0_180=0.58 C90_270=0.58
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(%): 87.59%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 94.793%

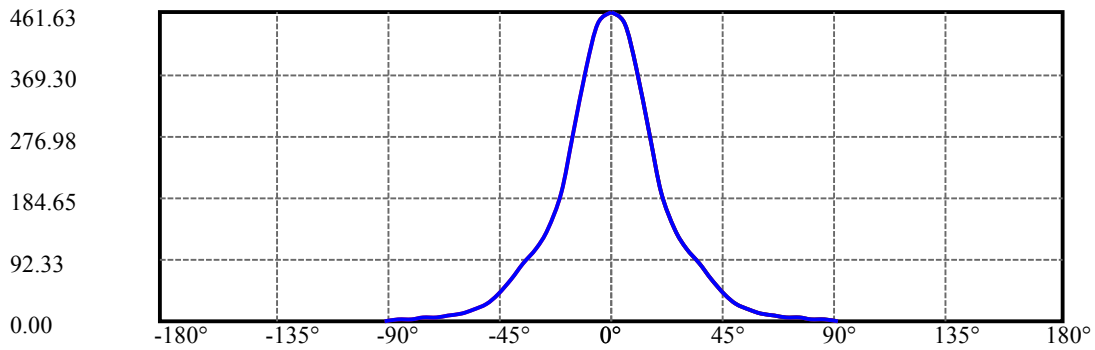
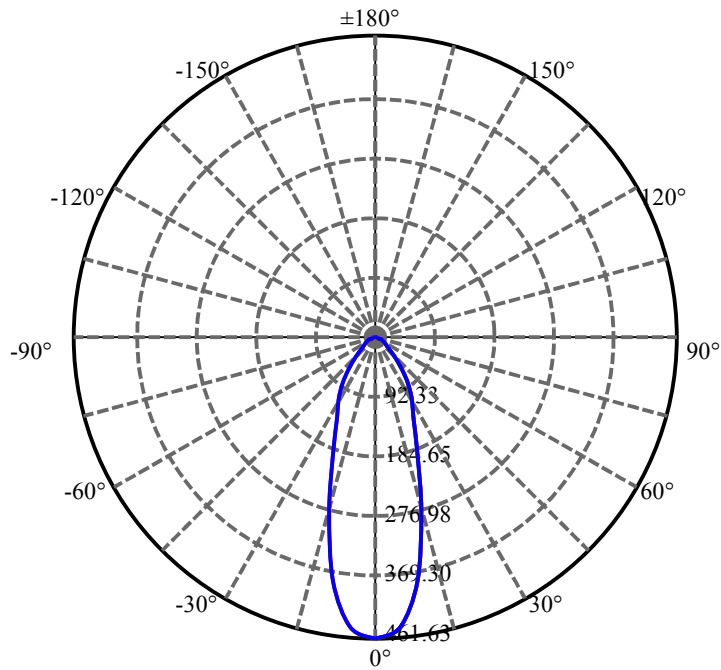
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	461.630	0.000	0	.000%	.000%
5.0	444.305	10.830	10.83	3.130%	3.574%
10.0	379.744	29.479	40.309	8.520%	13.301%
15.0	277.840	39.007	79.316	11.274%	26.172%
20.0	192.143	38.733	118.05	11.195%	38.953%
25.0	138.445	34.673	152.722	10.021%	50.394%
30.0	109.336	31.357	184.079	9.063%	60.740%
35.0	85.971	28.760	212.839	8.312%	70.230%
40.0	64.013	25.024	237.863	7.232%	78.487%
45.0	41.428	19.523	257.386	5.643%	84.929%
50.0	26.381	13.702	271.088	3.960%	89.451%
55.0	17.100	9.454	280.542	2.732%	92.570%
60.0	12.038	6.735	287.277	1.947%	94.793%
65.0	8.655	5.030	292.308	1.454%	96.453%
70.0	6.377	3.806	296.114	1.100%	97.709%
75.0	4.430	2.825	298.939	.816%	98.641%
80.0	2.953	1.975	300.915	.571%	99.292%
85.0	1.821	1.297	302.212	.375%	99.720%
90.0	1.273	0.847	303.059	.245%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	184.08	53.20%	60.74%
0-40	237.86	68.75%	78.49%
0-60	287.28	83.03%	94.79%
0-90	302.21	87.34%	99.72%
0-120	302.21	87.34%	99.72%
0-180	303.06	87.59%	100.00%
60-90	21.67	6.26%	7.15%
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%
0-41.17	242.45	70.07%	80.00%

ZONAL LUMEN SUMMARY

0-10	40.31
10-20	77.74
20-30	66.03
30-40	53.78
40-50	33.23
50-60	16.19
60-70	8.84
70-80	4.80
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: —————

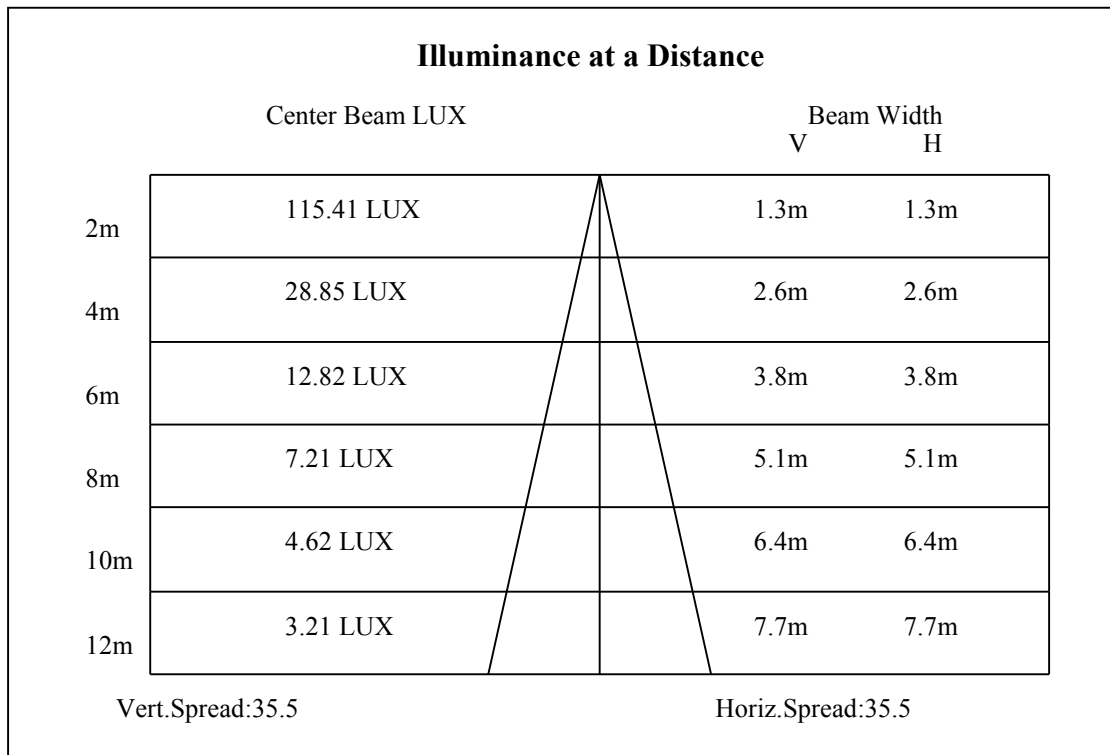
C90/C270: —————

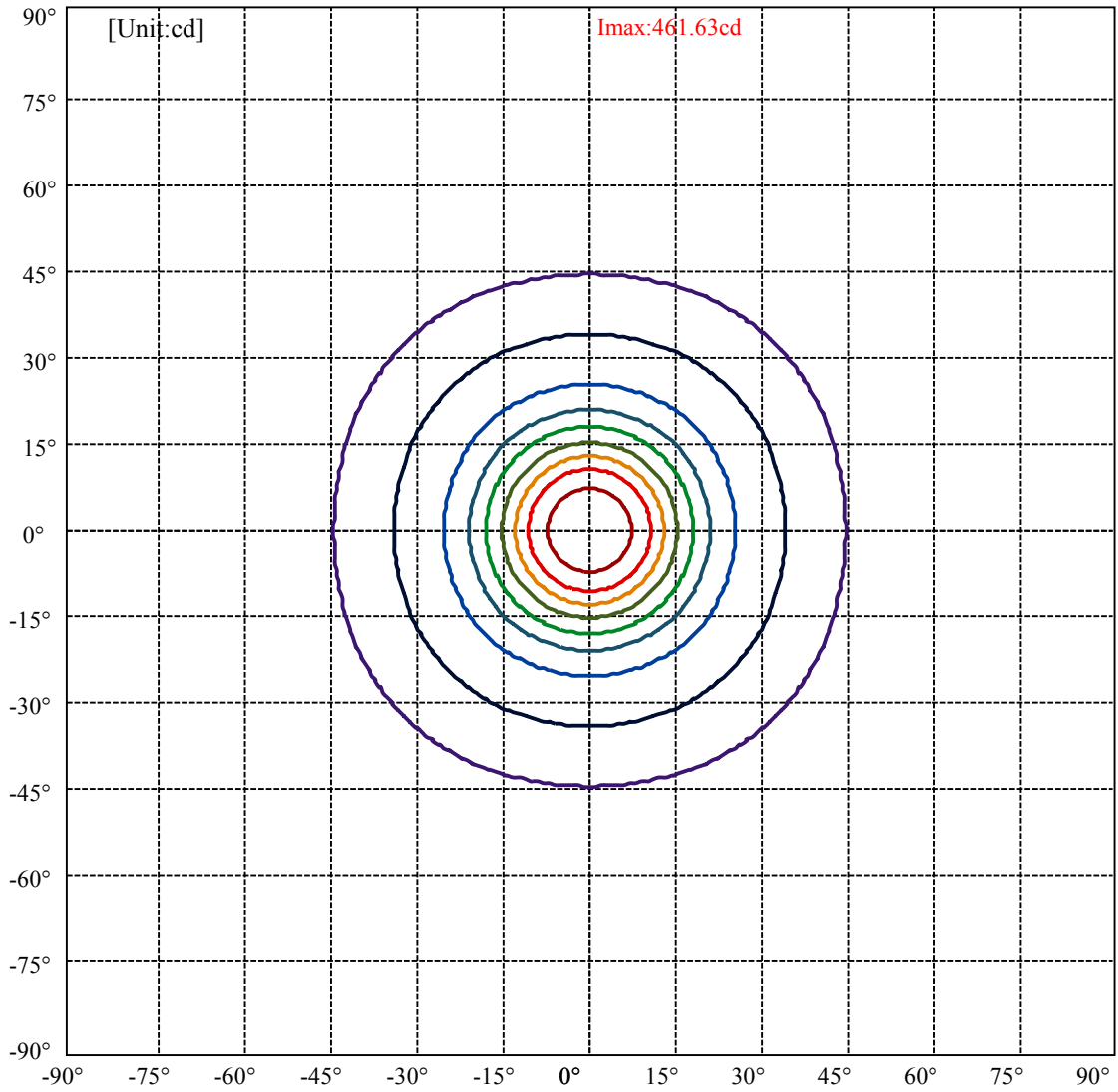
Field angle(10%Imax):C0/180Left:44.0 Right:44.0

:C90/270Left:44.0 Right:44.0

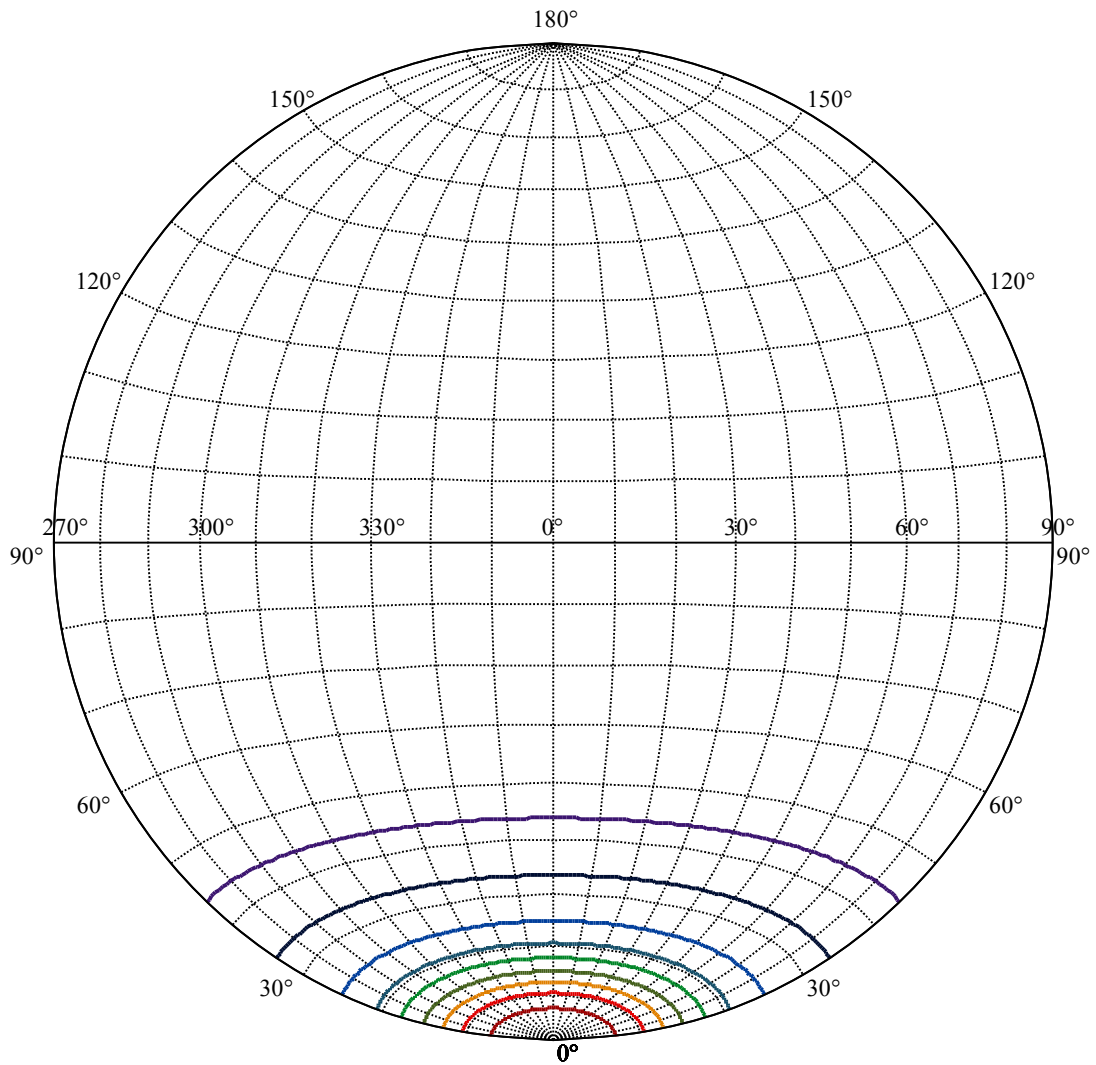
Beam Angle(50%Imax):C0/180Left:17.7 Right:17.7

:C90/270Left:17.7 Right:17.7





(10%Imax) 46.163	—
(20%Imax) 92.3259	—
(30%Imax) 138.489	—
(40%Imax) 184.652	—
(50%Imax) 230.815	—
(60%Imax) 276.978	—
(70%Imax) 323.141	—
(80%Imax) 369.304	—
(90%Imax) 415.467	—












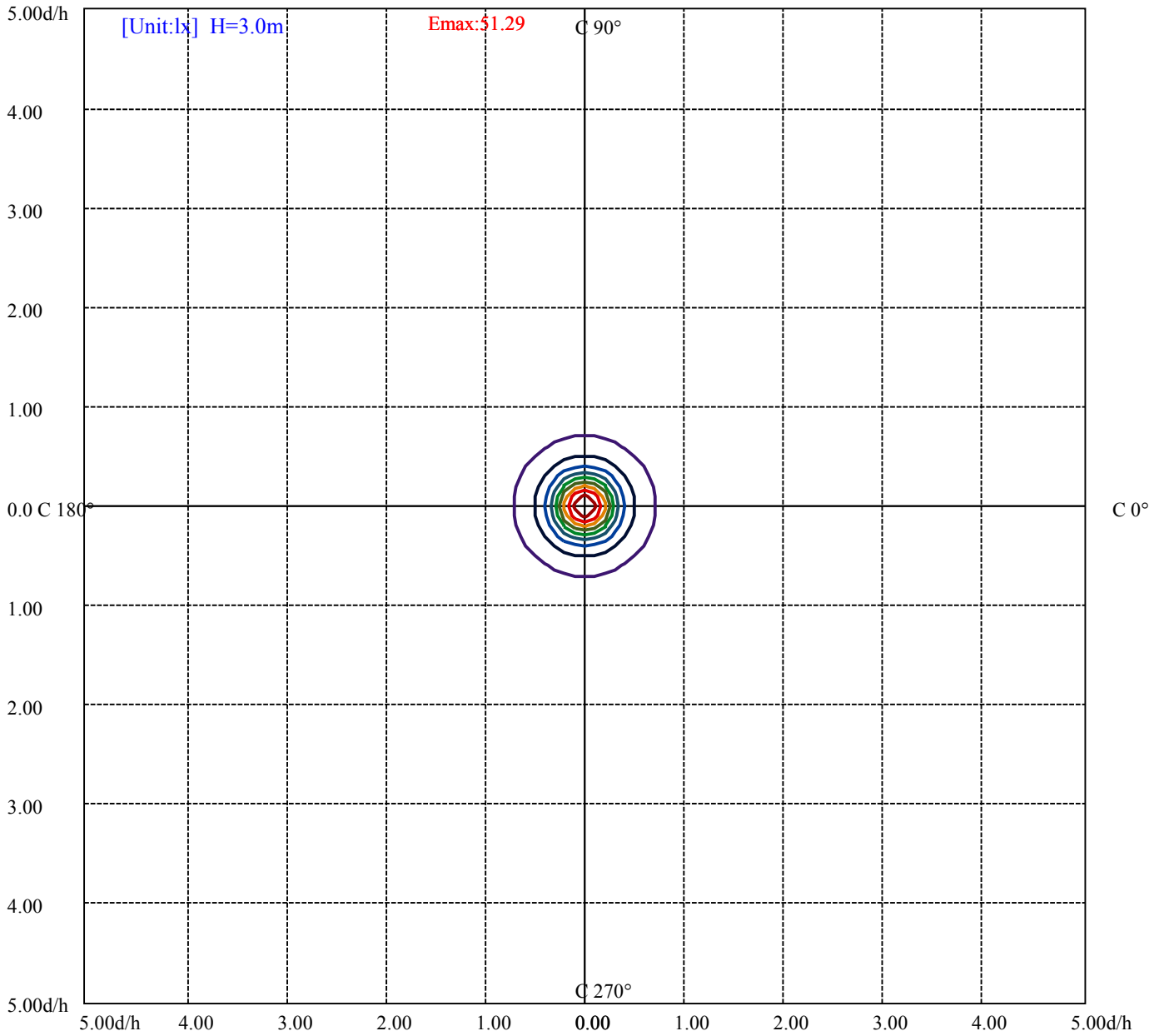
House

[Unit:cd]

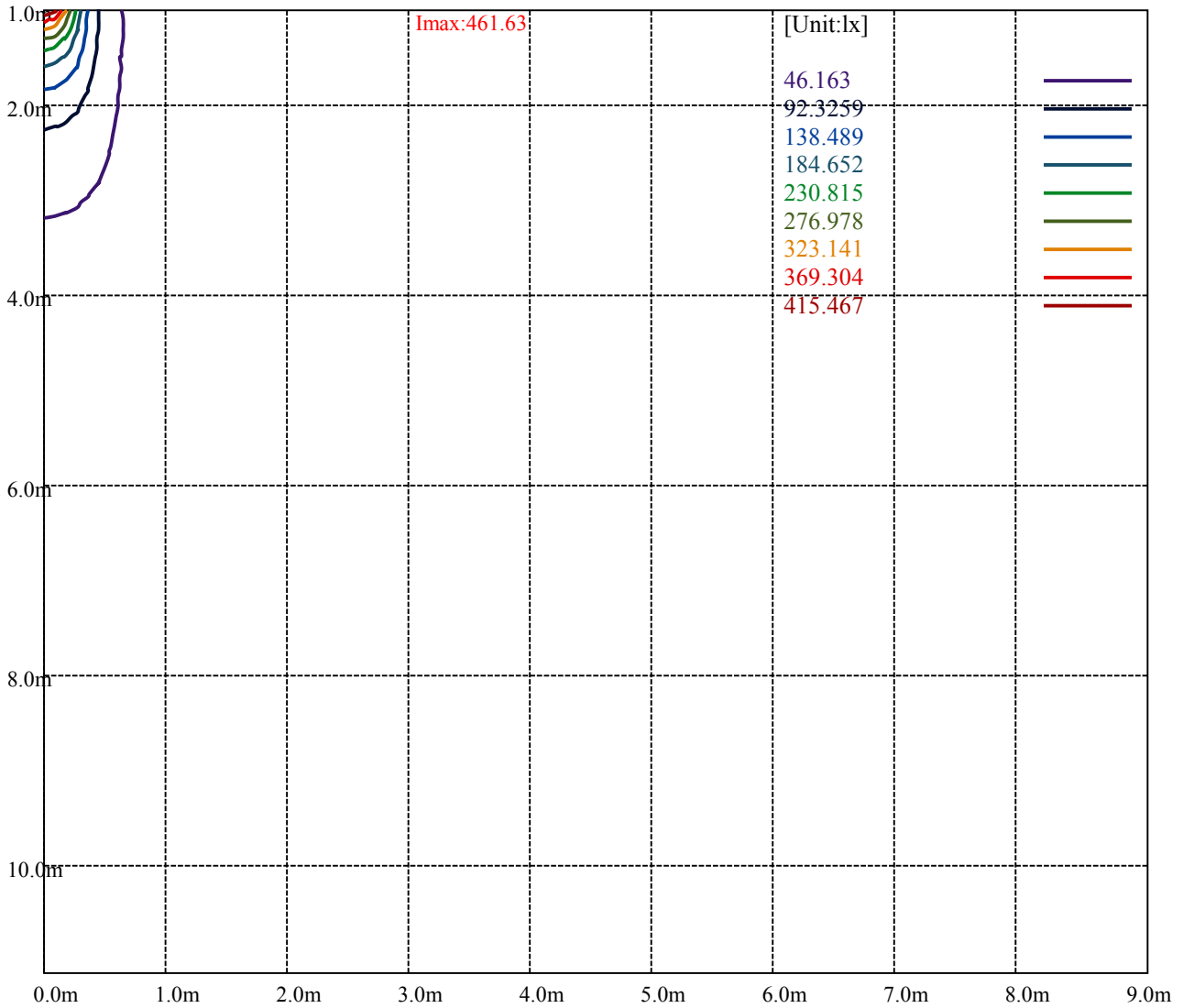
Road

Imax:461.63

(10%Imax) 46.163	
(20%Imax) 92.3259	
(30%Imax) 138.489	
(40%Imax) 184.652	
(50%Imax) 230.815	
(60%Imax) 276.978	
(70%Imax) 323.141	
(80%Imax) 369.304	
(90%Imax) 415.467	



(10%Emax) 5.129211	—
(20%Emax) 10.25842	—
(30%Emax) 15.38767	—
(40%Emax) 20.51689	—
(50%Emax) 25.64611	—
(60%Emax) 30.77522	—
(70%Emax) 35.90445	—
(80%Emax) 41.03367	—
(90%Emax) 46.16289	—



Luminance Table

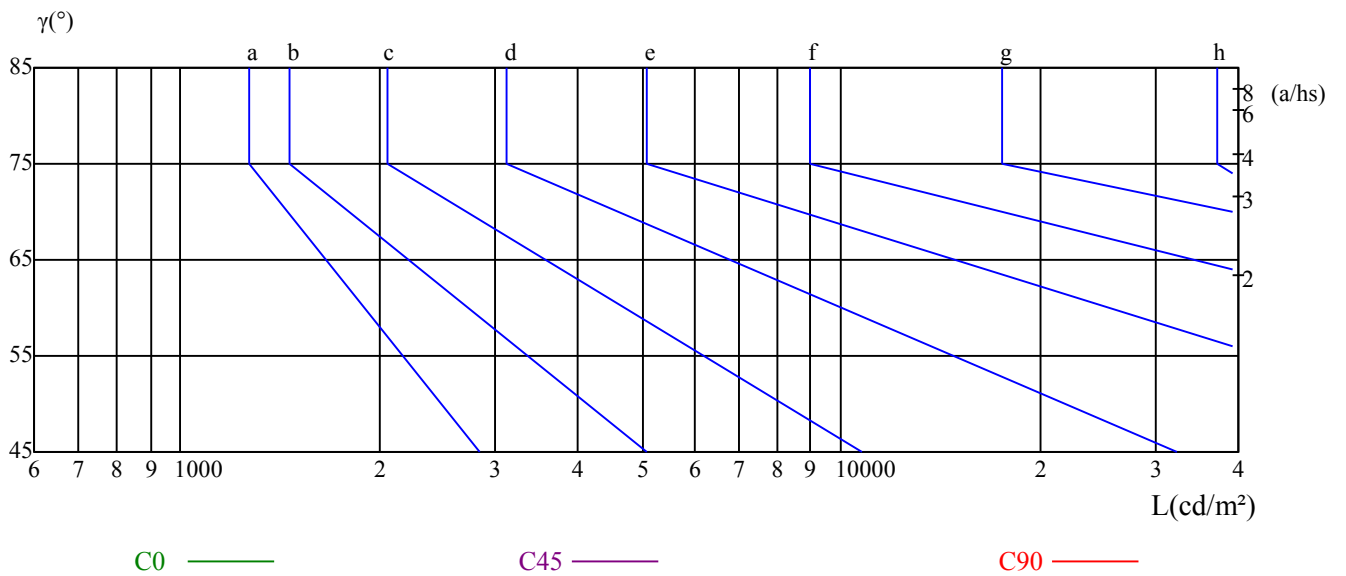
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

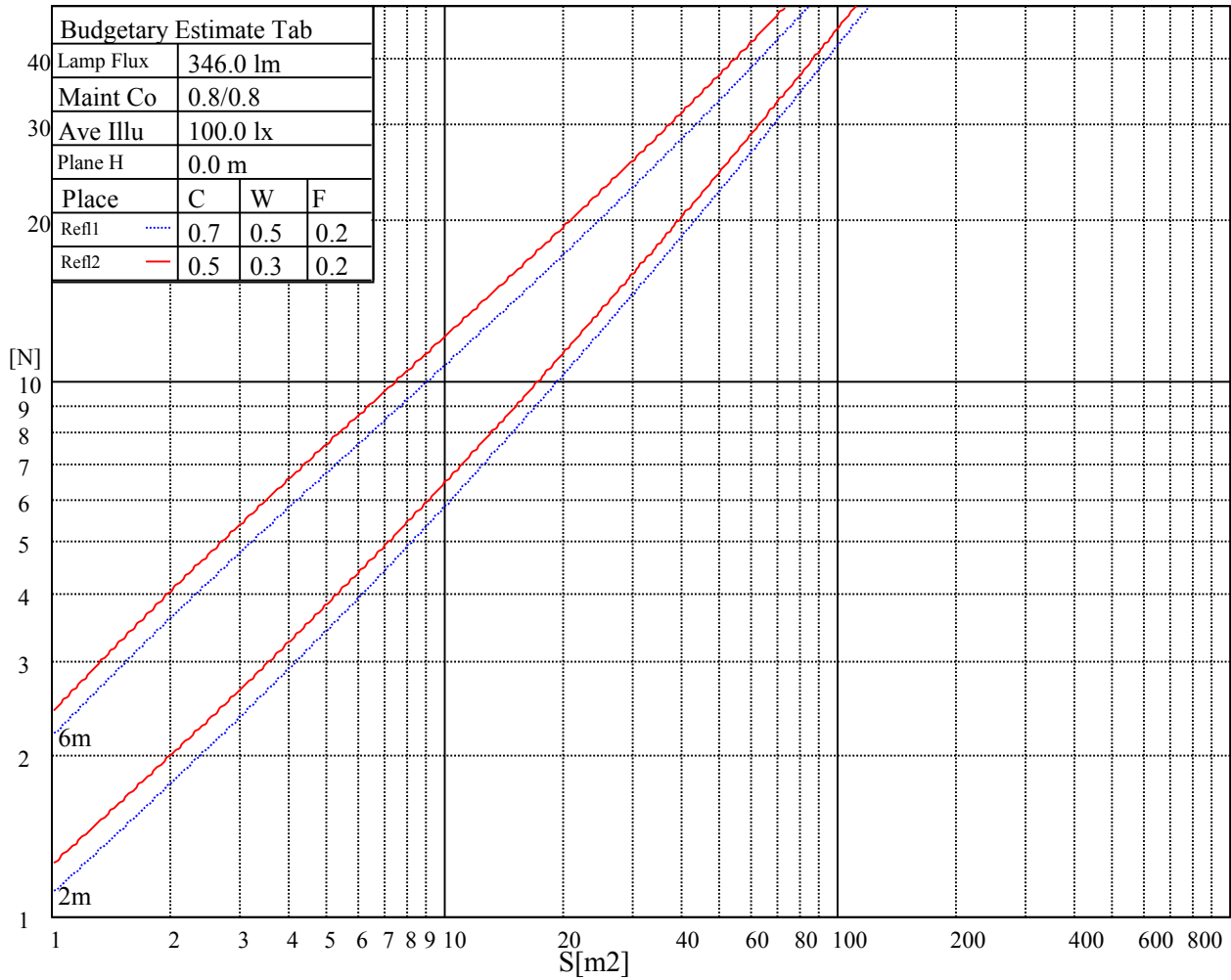
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

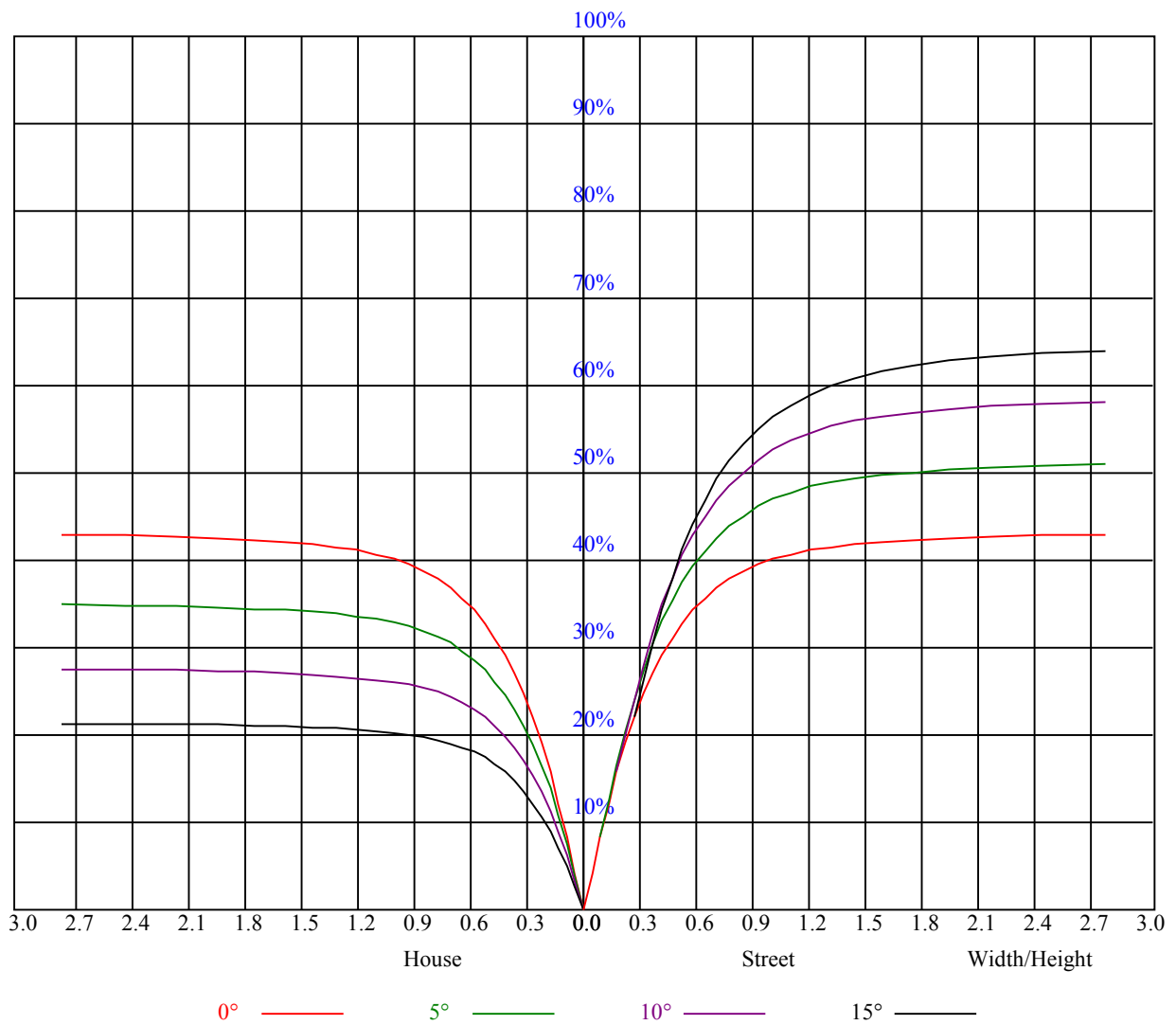
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

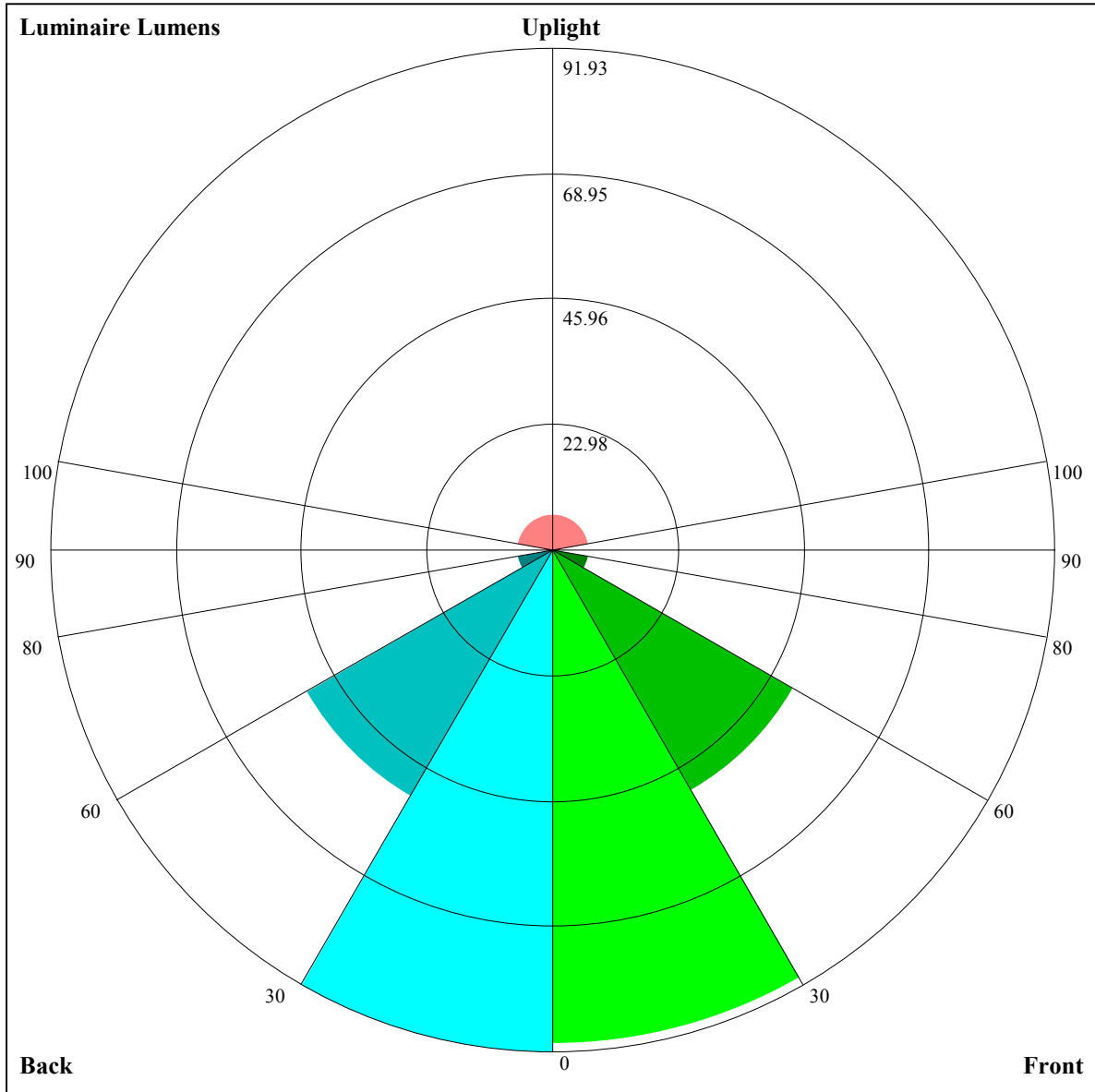
Luminance Limiting Curve





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	0.88
1	0.96	0.93	0.91	0.94	0.91	0.89	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.80
2	0.88	0.84	0.80	0.86	0.83	0.80	0.84	0.80	0.78	0.81	0.78	0.76	0.78	0.76	0.75	0.73
3	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.75	0.72	0.69	0.73	0.71	0.68	0.67
4	0.75	0.70	0.66	0.74	0.69	0.65	0.72	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.63	0.62
5	0.70	0.64	0.60	0.69	0.64	0.60	0.68	0.63	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.57
6	0.66	0.60	0.56	0.65	0.59	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
7	0.61	0.56	0.52	0.61	0.55	0.52	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.49
8	0.58	0.52	0.48	0.57	0.52	0.48	0.56	0.52	0.48	0.55	0.51	0.48	0.55	0.51	0.48	0.46
9	0.55	0.49	0.45	0.54	0.49	0.45	0.53	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.44
10	0.52	0.46	0.43	0.51	0.46	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.45	0.42	0.41





Luminaire Lumens:

FL=90.51,FM=50.99,FH=6.82,FVH=1.05

BL=91.93,BM=52.15,BH=6.8,BVH=1.09

UL=1.39,UH=6.61

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	463.73	444.94	383.96	285.13	194.51	139.22	110.48	88.26	65.08
45.0	461.36	446.74	382.56	275.23	186.02	134.55	104.46	79.65	59.34
90.0	461.81	442.41	368.66	267.86	182.81	133.59	107.04	86.34	64.41
135.0	459.62	449.16	393.58	293.40	207.84	147.60	115.93	93.21	70.71
180.0	463.73	447.08	379.07	275.46	194.63	141.13	111.66	88.20	66.54
225.0	461.36	442.91	376.88	276.02	186.58	134.16	106.26	80.83	58.78
270.0	461.81	444.04	386.21	285.92	198.68	142.65	113.23	88.65	66.83
315.0	459.62	437.18	367.03	263.70	186.08	134.66	105.64	82.63	60.41
360.0	463.73	444.94	383.96	285.13	194.51	139.22	110.48	88.26	65.08
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	42.92	27.62	17.83	12.54	9.06	6.58	4.50	2.98	1.74
45.0	39.09	24.98	16.88	11.81	8.44	6.24	4.28	2.81	1.63
90.0	39.26	24.19	15.53	11.03	8.04	5.85	4.11	2.70	1.80
135.0	45.73	28.63	17.44	12.09	8.61	6.41	4.56	3.09	1.97
180.0	42.53	25.93	16.65	11.70	8.38	6.30	4.39	2.98	1.86
225.0	37.86	25.48	16.82	11.98	8.78	6.41	4.44	2.98	1.86
270.0	44.72	28.41	18.62	13.05	9.23	6.86	4.78	3.21	1.91
315.0	39.32	25.82	17.04	12.09	8.72	6.36	4.39	2.87	1.80
360.0	42.92	27.62	17.83	12.54	9.06	6.58	4.50	2.98	1.74
C/ γ (°)	90.0								
0.0	1.24								
45.0	1.24								
90.0	1.24								
135.0	1.29								
180.0	1.29								
225.0	1.29								
270.0	1.29								
315.0	1.29								
360.0	1.24								