
Client:

LumCAT: 1407-S

Luminaire: 92.70.043.00

Report No: nt0100

Test No: GC2019112607

LampCAT: LUMINUS CXM-3-AC40

Lamp flux(lm): 346.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 35.6000

Current(A): 0.0970

Power (W): 3.4500

PF: 1.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 295.70, Efficiency(%): 85.46% , Luminous Efficacy(lm/W): 85.71

Central intensity(cd): 352.645, Maximum intensity(cd): 352.645

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=43.6

[C90/270]Total=43.6

Field angle(10%Imax): [C0/180]Total=95.2

[C90/270]Total=95.2

Maximum s/h(1/2): C0_180=0.67 C90_270=0.67

Maximum s/h(1/4): C0_180=0.77 C90_270=0.77

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.46%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.466%

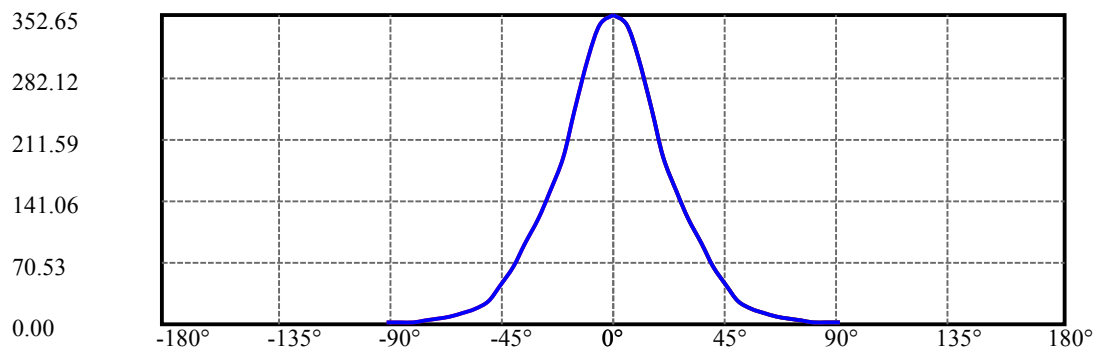
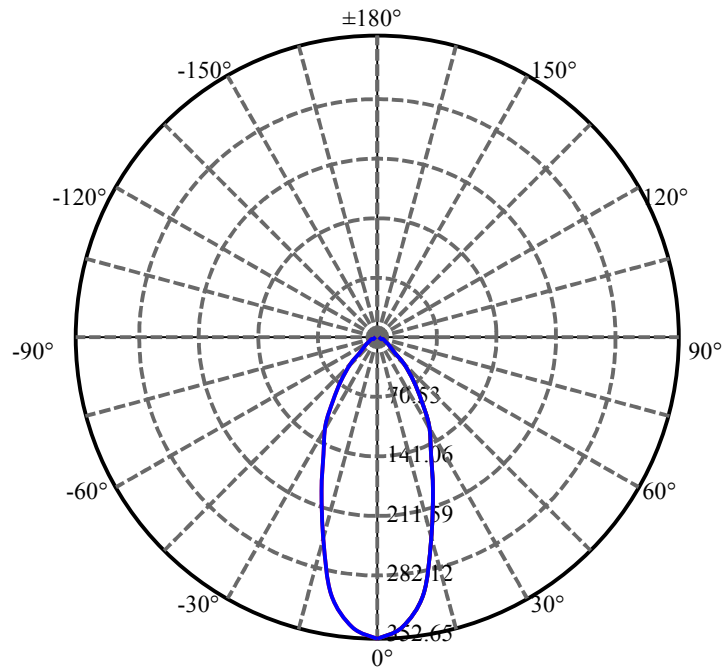
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	352.645	0.000	0	.000%	.000%
5.0	340.995	8.292	8.292	2.397%	2.804%
10.0	304.516	23.092	31.384	6.674%	10.613%
15.0	246.326	32.676	64.06	9.444%	21.663%
20.0	191.496	36.083	100.142	10.429%	33.866%
25.0	150.244	35.842	135.985	10.359%	45.987%
30.0	120.143	34.218	170.202	9.889%	57.558%
35.0	91.709	31.197	201.399	9.016%	68.108%
40.0	66.741	26.436	227.835	7.640%	77.048%
45.0	43.748	20.458	248.293	5.913%	83.966%
50.0	27.323	14.361	262.654	4.151%	88.823%
55.0	17.466	9.739	272.393	2.815%	92.116%
60.0	12.586	6.946	279.339	2.008%	94.466%
65.0	9.056	5.261	284.6	1.521%	96.245%
70.0	6.609	3.967	288.567	1.146%	97.586%
75.0	4.605	2.931	291.498	.847%	98.577%
80.0	3.045	2.047	293.545	.592%	99.270%
85.0	1.821	1.322	294.867	.382%	99.717%
90.0	1.238	0.837	295.705	.242%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	170.20	49.19%	57.56%
0-40	227.84	65.85%	77.05%
0-60	279.34	80.73%	94.47%
0-90	294.87	85.22%	99.72%
0-120	294.87	85.22%	99.72%
0-180	295.70	85.46%	100.00%
60-90	22.47	6.50%	7.60%
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%
0-42.13	236.56	68.37%	80.00%

ZONAL LUMEN SUMMARY

0-10	31.38
10-20	68.76
20-30	70.06
30-40	57.63
40-50	34.82
50-60	16.68
60-70	9.23
70-80	4.98
80-90	1.32
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:

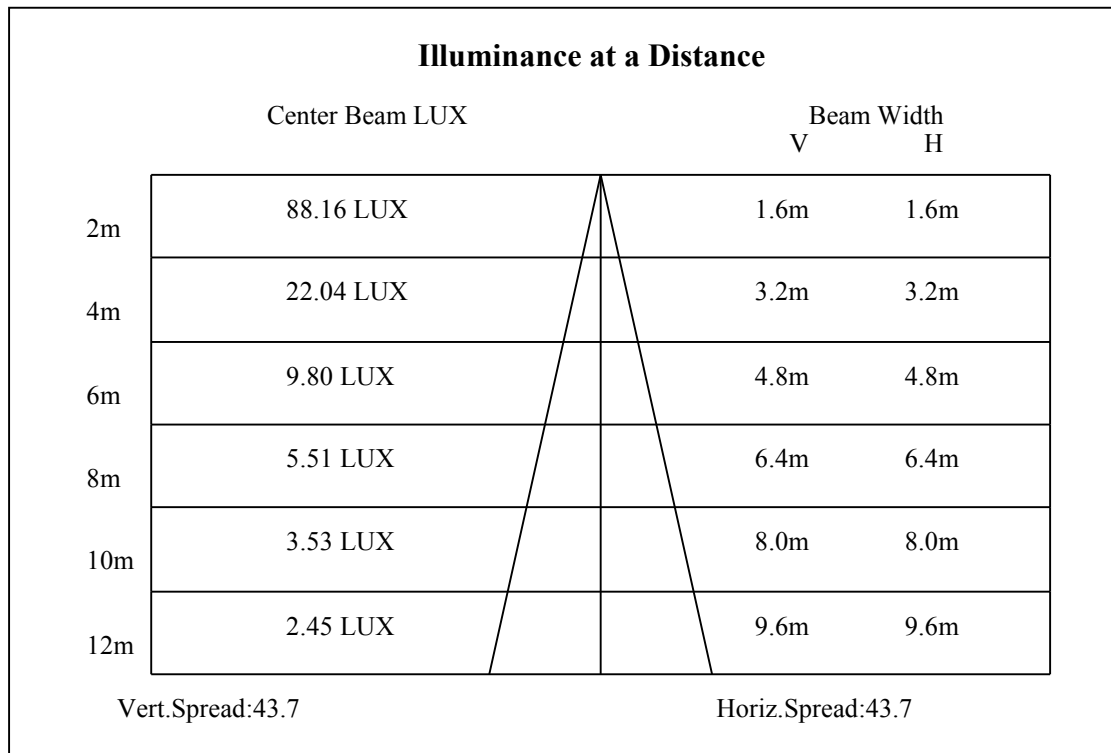
C90/C270:

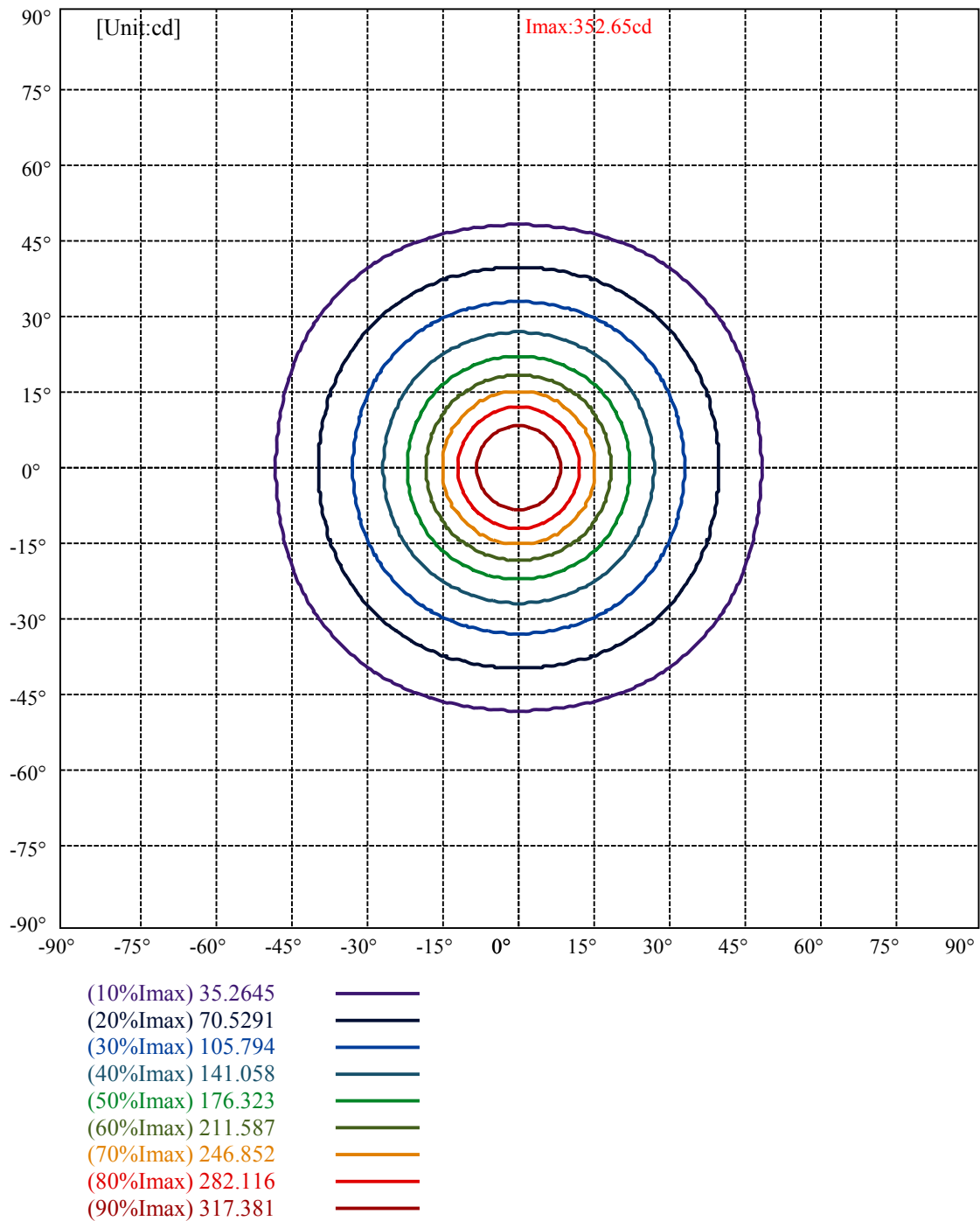
Field angle(10%Imax):C0/180Left:47.6 Right:47.6

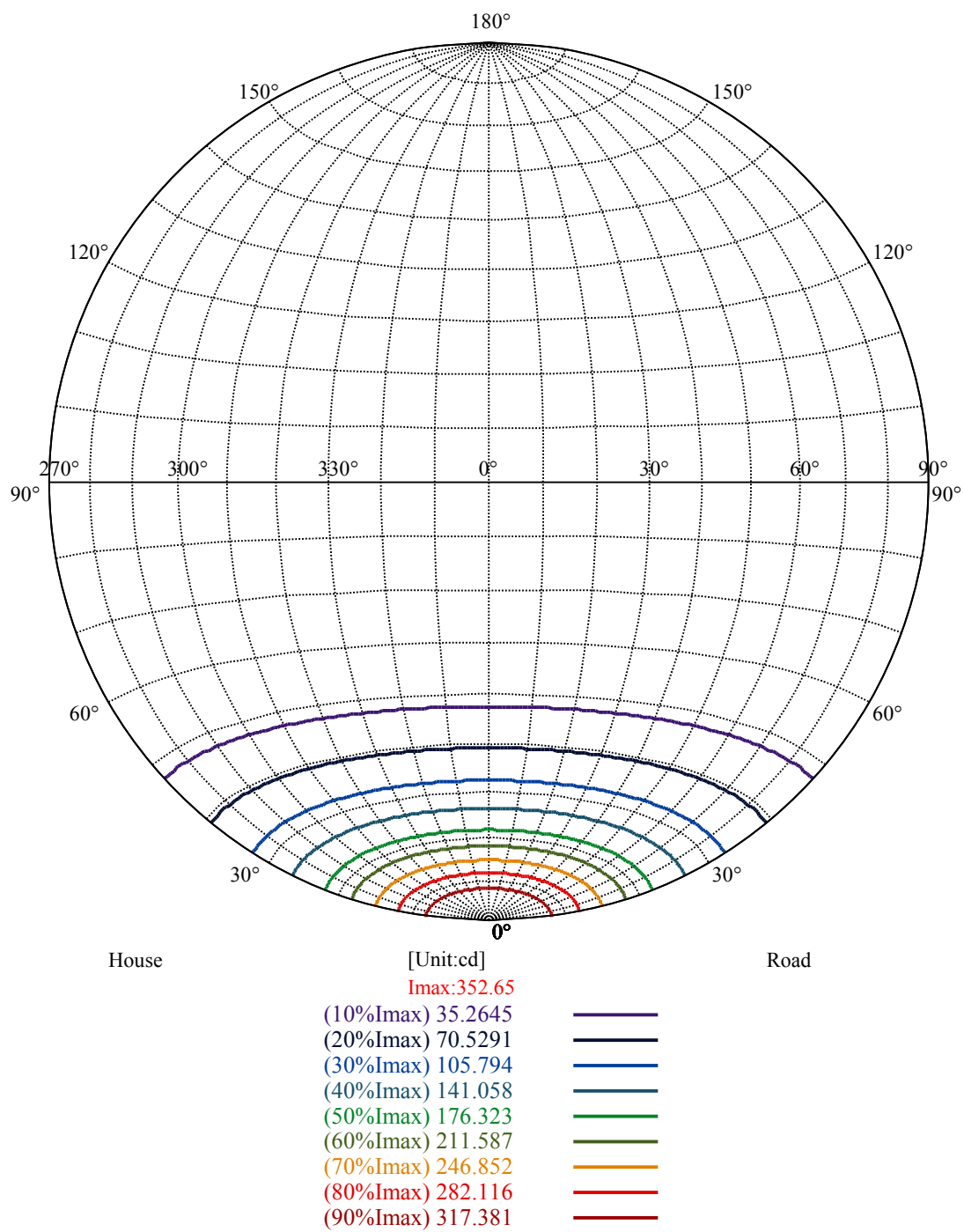
:C90/270Left:47.6 Right:47.6

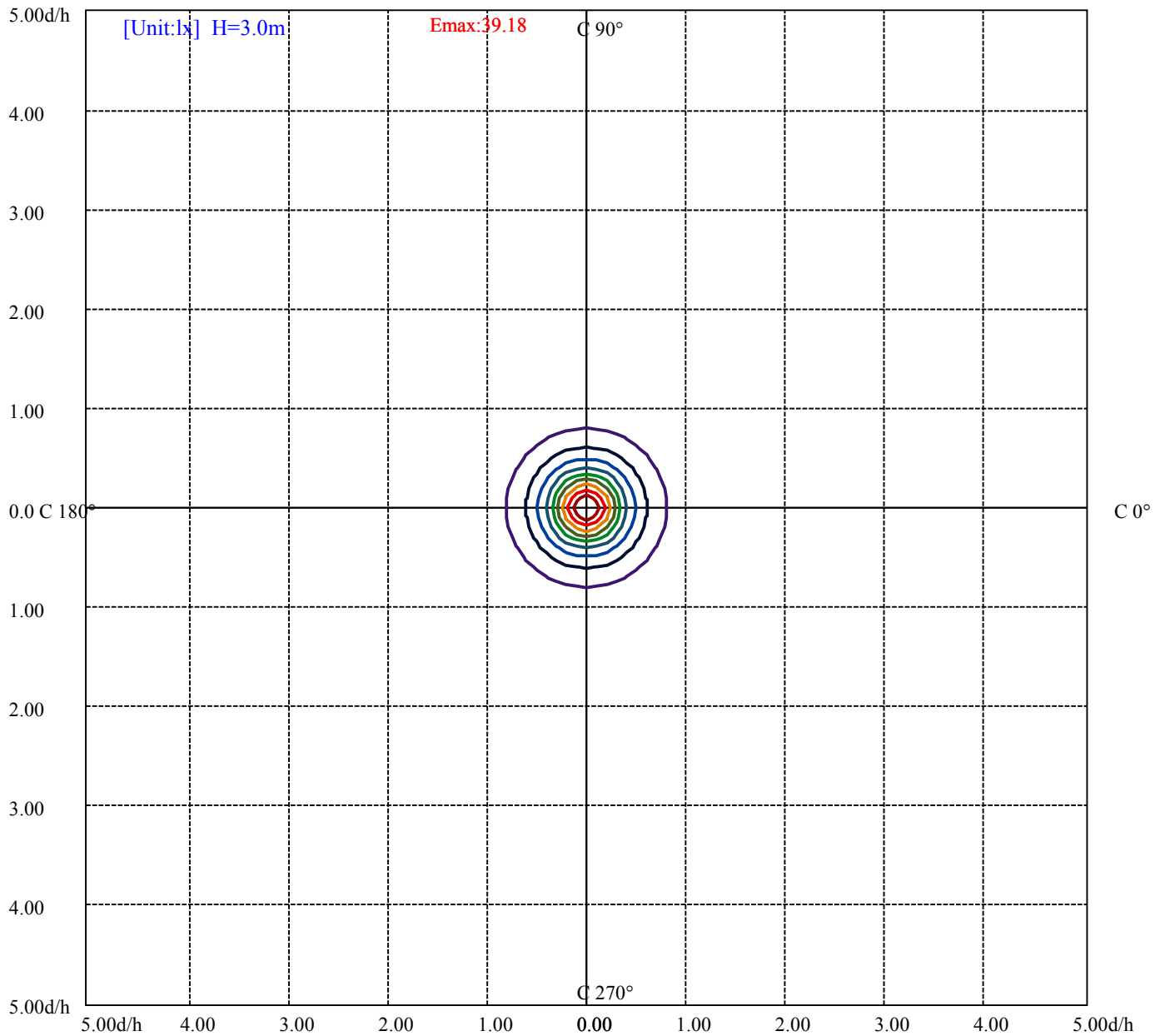
Beam Angle(50%Imax):C0/180Left:21.8 Right:21.8

:C90/270Left:21.8 Right:21.8

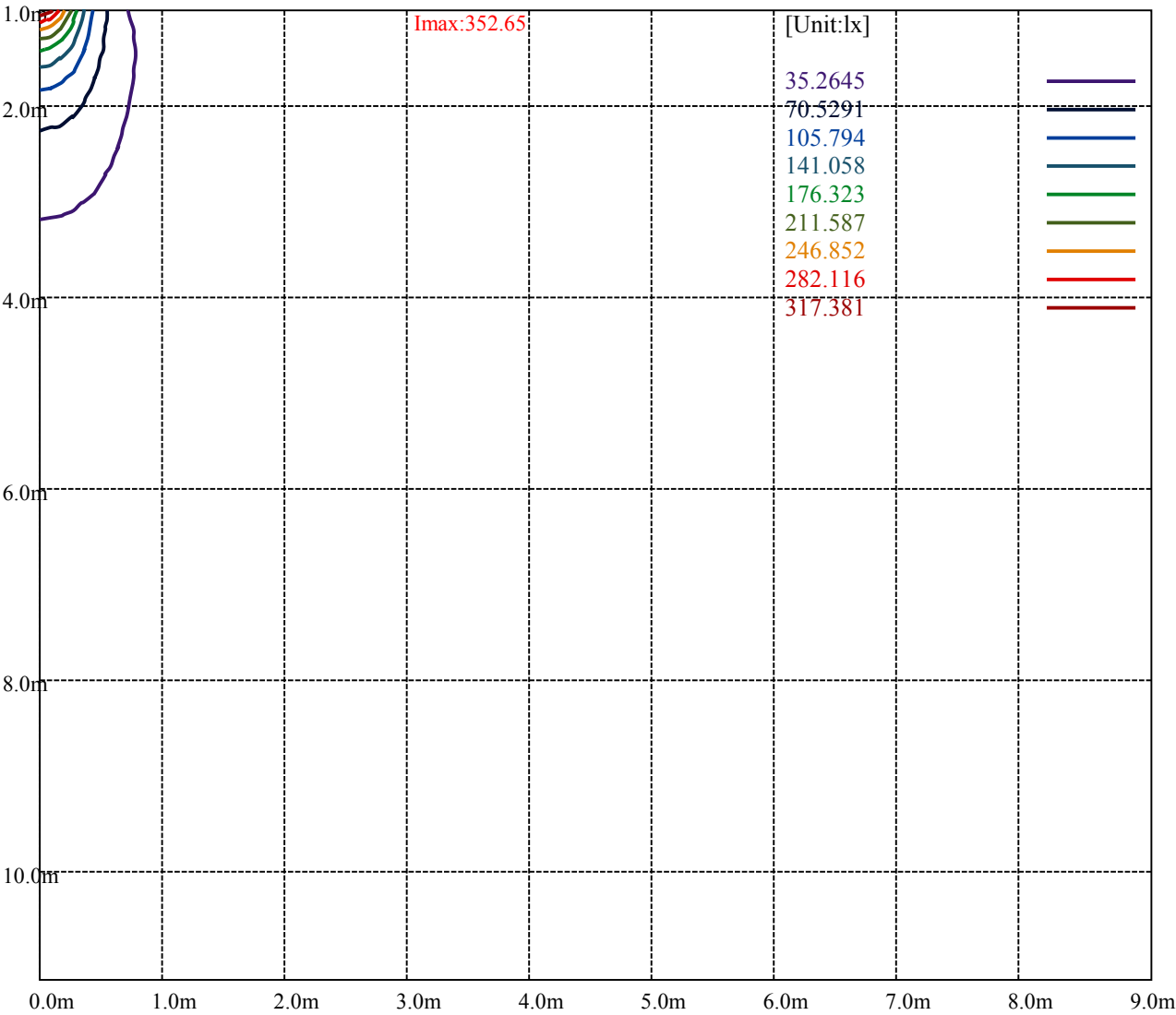








(10%E _{max}) 3.918278	—
(20%E _{max}) 7.836555	—
(30%E _{max}) 11.75478	—
(40%E _{max}) 15.67311	—
(50%E _{max}) 19.59133	—
(60%E _{max}) 23.50967	—
(70%E _{max}) 27.42789	—
(80%E _{max}) 31.34622	—
(90%E _{max}) 35.26445	—



Luminance Table

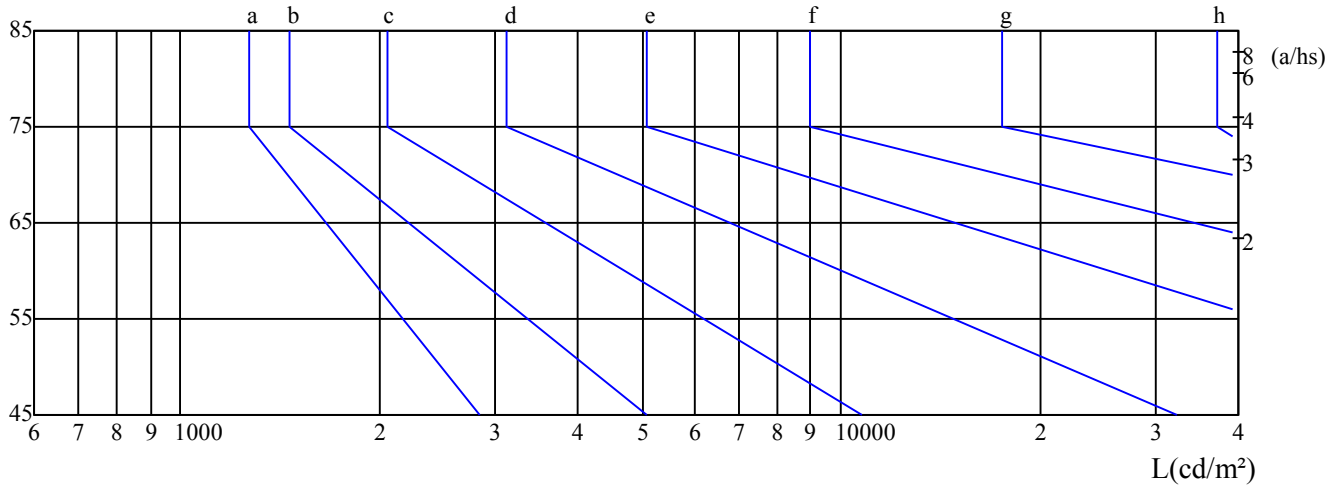
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

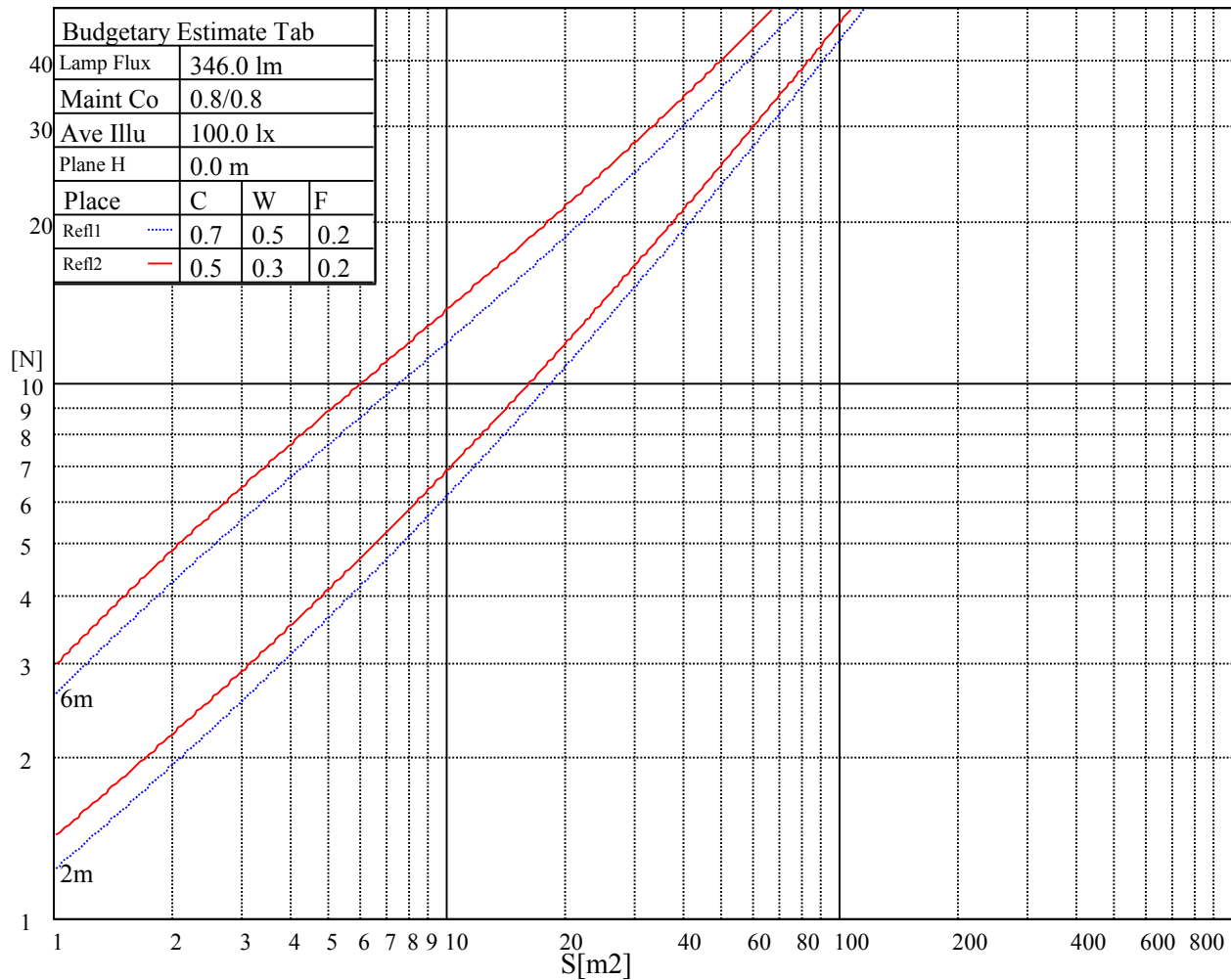
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

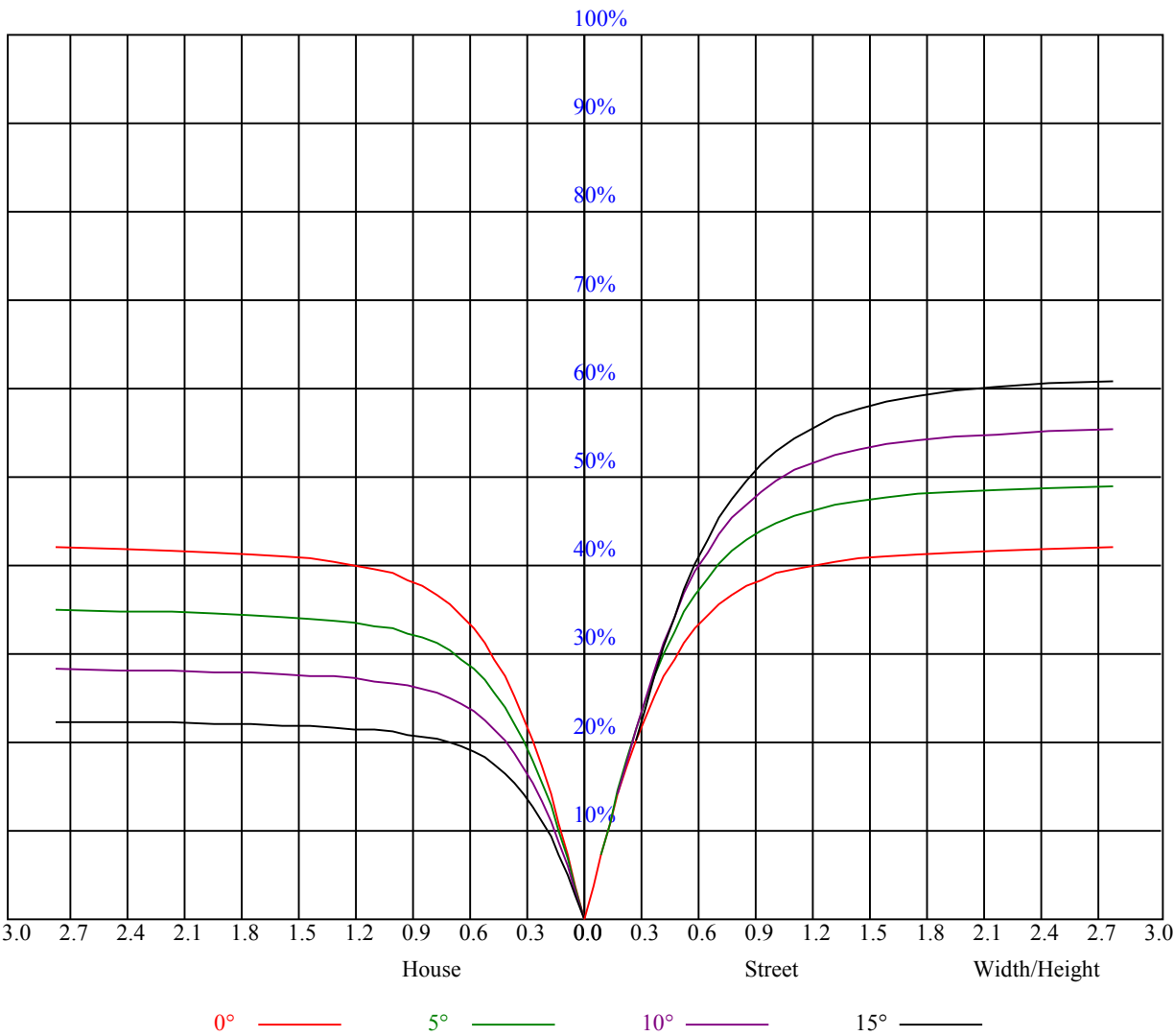
C0 ———

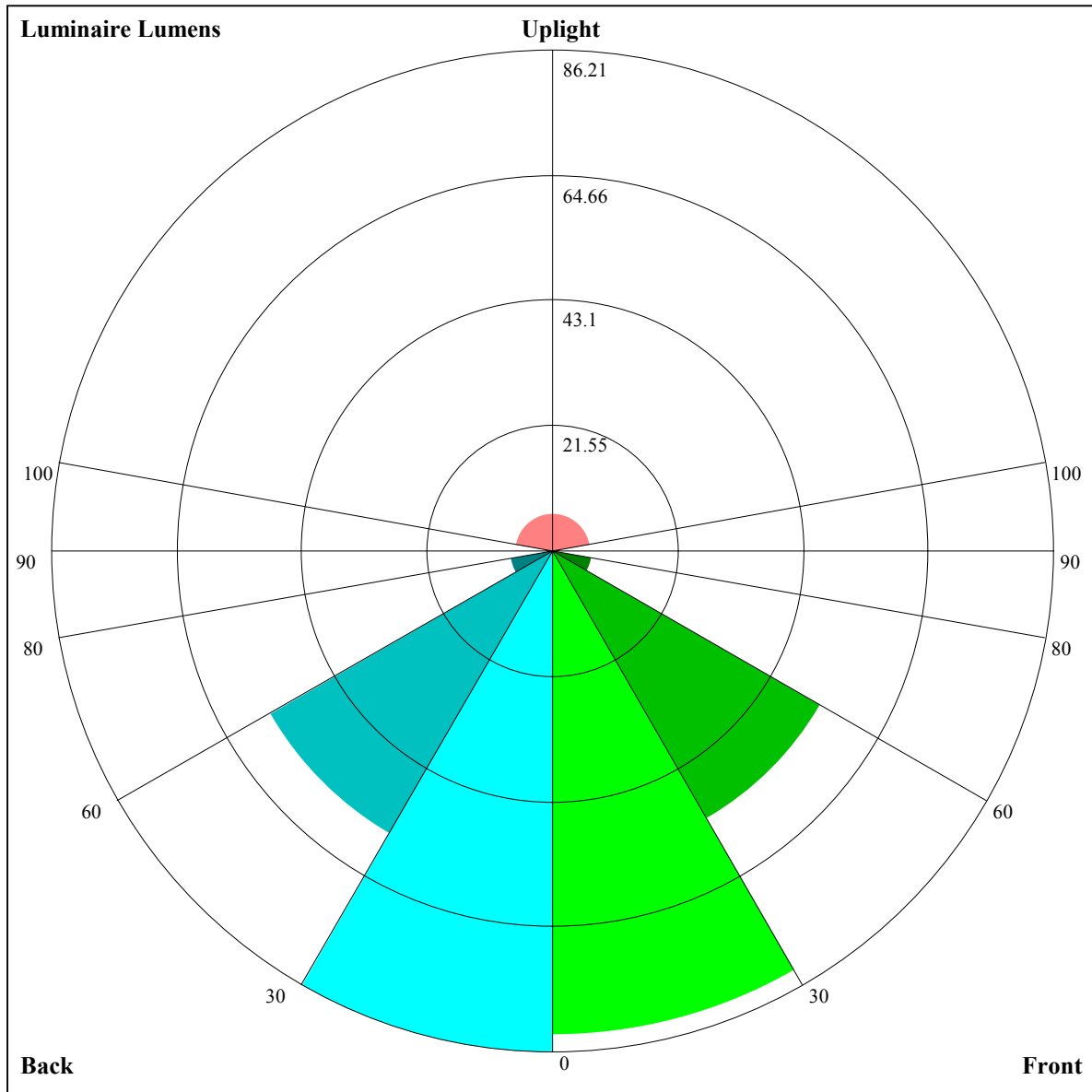
C45 ———

C90 ———



RHOC	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	1.02	1.02	1.02	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.85
1	0.93	0.91	0.88	0.91	0.89	0.87	0.88	0.86	0.84	0.84	0.83	0.82	0.82	0.80	0.79	0.78
2	0.85	0.81	0.78	0.84	0.80	0.77	0.81	0.78	0.75	0.78	0.76	0.73	0.76	0.74	0.72	0.70
3	0.78	0.73	0.69	0.77	0.73	0.69	0.75	0.71	0.68	0.73	0.69	0.67	0.71	0.68	0.66	0.64
4	0.72	0.67	0.63	0.71	0.66	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.66	0.63	0.60	0.59
5	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.54
6	0.62	0.57	0.52	0.62	0.56	0.52	0.60	0.56	0.52	0.59	0.55	0.52	0.58	0.54	0.51	0.50
7	0.58	0.53	0.48	0.58	0.52	0.48	0.57	0.52	0.48	0.55	0.51	0.48	0.54	0.51	0.48	0.46
8	0.55	0.49	0.45	0.54	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.51	0.47	0.44	0.43
9	0.51	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.42	0.49	0.45	0.42	0.48	0.44	0.41	0.40
10	0.48	0.43	0.39	0.48	0.43	0.39	0.47	0.43	0.39	0.47	0.42	0.39	0.46	0.42	0.39	0.38





Luminaire Lumens:

FL=83.33,FM=53.14,FH=6.89,FVH=1.04

BL=86.21,BM=56.21,BH=7.35,BVH=1.12

UL=1.35,UH=6.43

BUG Rating:B0-U1-G0

Intensity data(cd)

Appendix Page: 15 Total:15

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	352.91	339.36	301.05	239.18	185.01	144.79	114.30	88.37	66.60
45.0	353.31	336.66	291.94	232.88	180.73	140.01	111.15	82.35	58.78
90.0	351.79	336.09	294.58	237.43	187.71	148.95	116.89	88.20	61.43
135.0	352.58	343.46	313.54	263.48	205.54	162.23	128.42	98.55	71.78
180.0	352.91	343.74	304.14	252.90	198.73	156.09	125.83	96.41	70.65
225.0	353.31	344.76	311.51	246.09	185.68	145.97	117.11	89.78	66.09
270.0	351.79	345.32	319.11	259.20	199.80	155.76	127.58	99.68	74.48
315.0	352.58	338.57	300.26	239.46	188.78	148.16	119.87	90.34	64.13
360.0	352.91	339.36	301.05	239.18	185.01	144.79	114.30	88.37	66.60
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	41.51	25.43	16.26	11.81	8.49	6.24	4.39	2.87	1.69
45.0	39.83	25.03	16.31	11.70	8.61	6.30	4.28	2.81	1.58
90.0	40.50	25.48	16.31	11.76	8.44	6.13	4.33	2.81	1.69
135.0	47.08	29.59	18.68	13.33	9.51	6.98	5.06	3.32	1.97
180.0	46.69	29.25	18.34	12.71	9.45	6.92	4.78	3.21	1.97
225.0	42.58	27.00	17.61	13.11	9.51	6.92	4.84	3.15	1.97
270.0	50.51	31.33	19.69	14.34	9.90	7.20	5.01	3.38	1.97
315.0	41.29	25.48	16.54	11.93	8.55	6.19	4.16	2.81	1.74
360.0	41.51	25.43	16.26	11.81	8.49	6.24	4.39	2.87	1.69
C/γ(°)	90.0								
0.0	1.24								
45.0	1.24								
90.0	1.18								
135.0	1.29								
180.0	1.24								
225.0	1.29								
270.0	1.24								
315.0	1.18								
360.0	1.24								