
P.Q.L., Inc. 6 LAMPS

LumCAT: 6 LAMPS	Luminaire: 4000K
Report No: /	Voltage(V):
Test No:	Current(A):
LampCAT: LED SMD 4' 15WT8/40K/FR/V4/1900Lm	Power (W): 104.400
Lamp flux(lm)	PF:
Number of Lamps: 6	Ballast type:
Length(mm): 1200	Width(mm): 500
Phm Type: C	Height(mm): 150

Photometric Results

Lumens(lm): 11965.28
Lumens(lm)/Power(W): 114.61
Central intensity(cd): 3897.701
Maximum intensity(cd): 3909.065
Angle of maximum intensity: C=30.0 γ =0.0
Beam Angle(50%Imax): [H]Left=55.8 Right=54.8
[V]Left=54.3 Right=53.5
Field angle(10%Imax): [H]Left=84.9 Right=84.2
[V]Left=86.0 Right=86.4
Maximum s/h: C0_180=1.09 C90_270=1.24
Up flux rate of LUM(%): 8.58%
Down flux rate of LUM(%): 91.42%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 67.806%

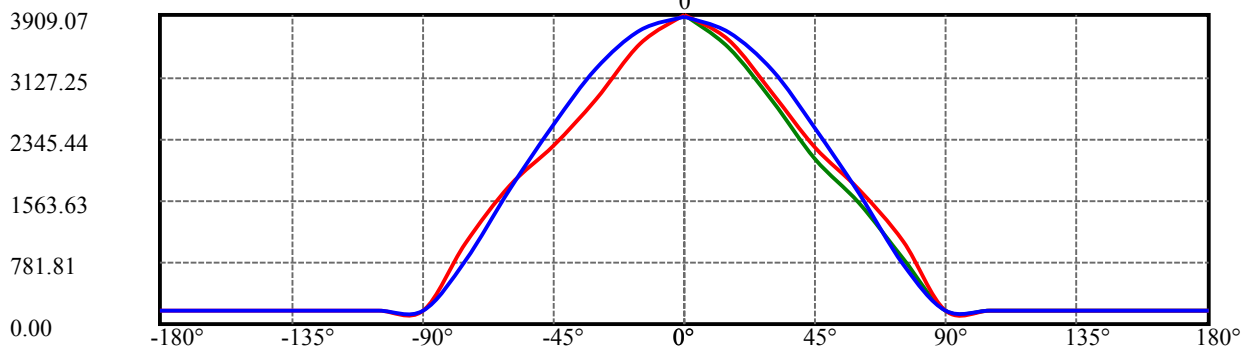
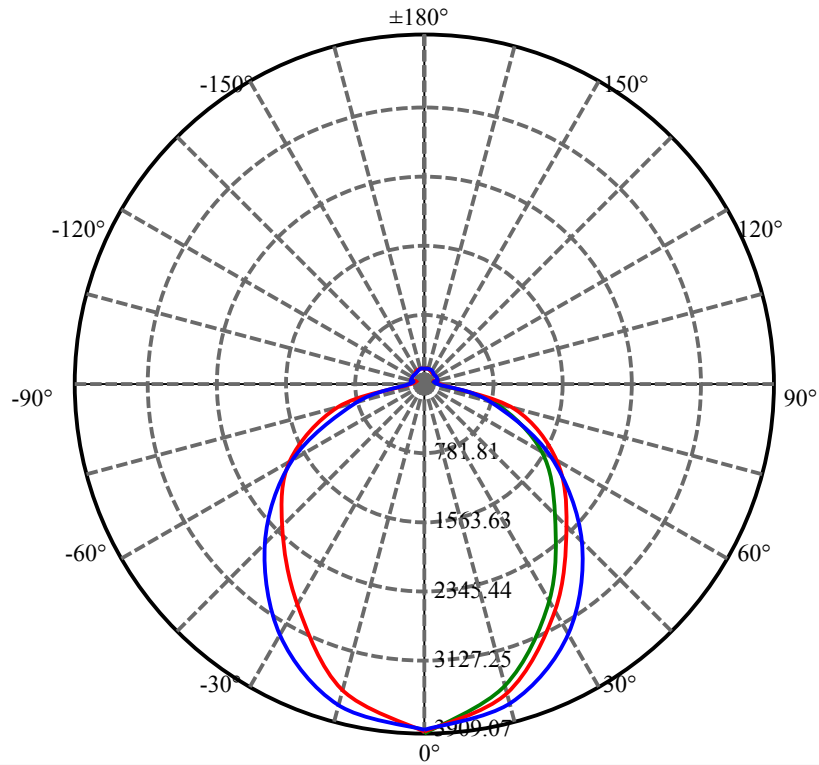
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3890.125	.000	.000	.000%	.000%
15.0	3642.968	806.397	806.397	6.739%	6.739%
30.0	3035.018	2095.862	2902.258	17.516%	24.256%
45.0	2303.015	2665.053	5567.312	22.273%	46.529%
60.0	1609.838	2545.878	8113.189	21.277%	67.806%
75.0	928.024	1922.918	10036.110	16.071%	83.877%
90.0	181.817	902.416	10938.520	7.542%	91.419%
105.0	159.090	277.193	11215.720	2.317%	93.736%
120.0	159.090	241.083	11456.800	2.015%	95.750%
135.0	159.090	207.022	11663.820	1.730%	97.481%
150.0	162.878	160.745	11824.570	1.343%	98.824%
165.0	169.506	104.318	11928.880	.872%	99.696%
180.0	170.453	36.392	11965.280	.304%	100.000%

ZONAL LUMEN SUMMARY

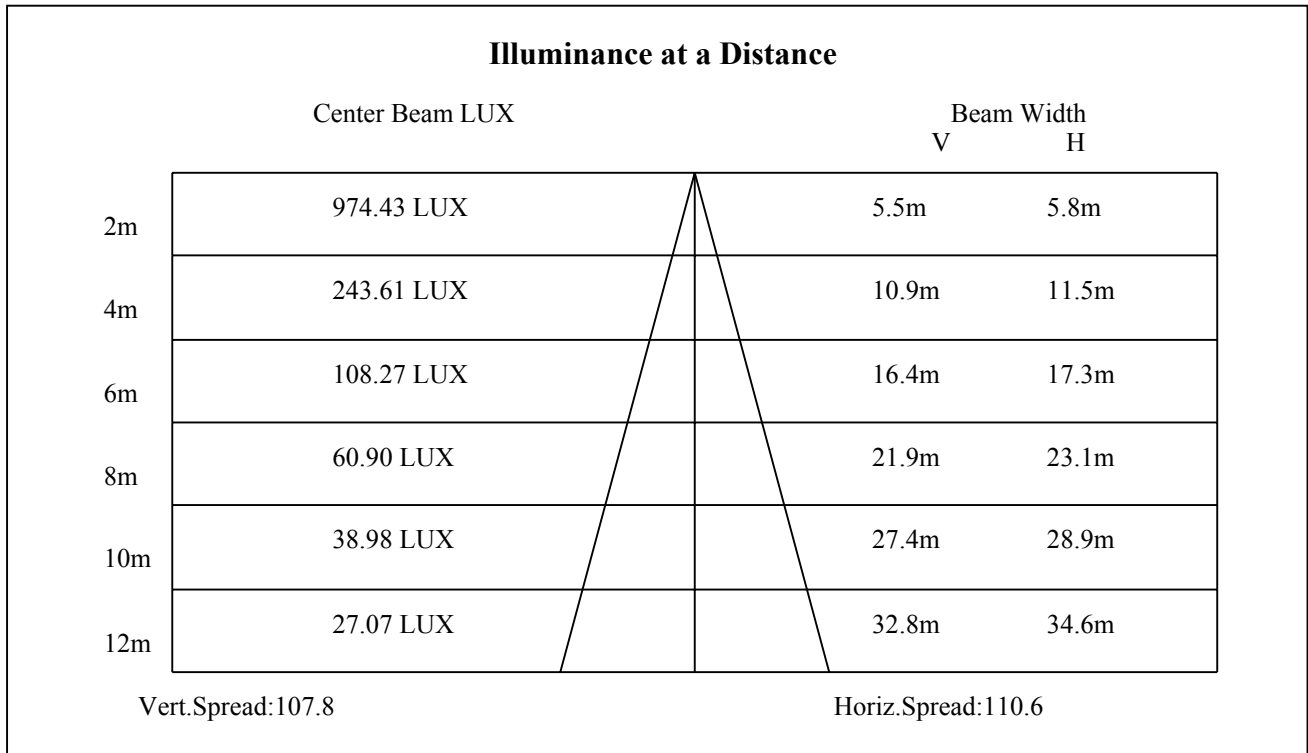
Zone	Lumens	%Fixt
0-30	2902.26	24.26%
0-40	2902.26	24.26%
0-60	8113.19	67.81%
0-90	10938.52	91.42%
90-120	518.28	4.33%
90-130	518.28	4.33%
90-150	886.04	7.41%
90-180	990.36	8.28%
0-180	11965.28	100.00%

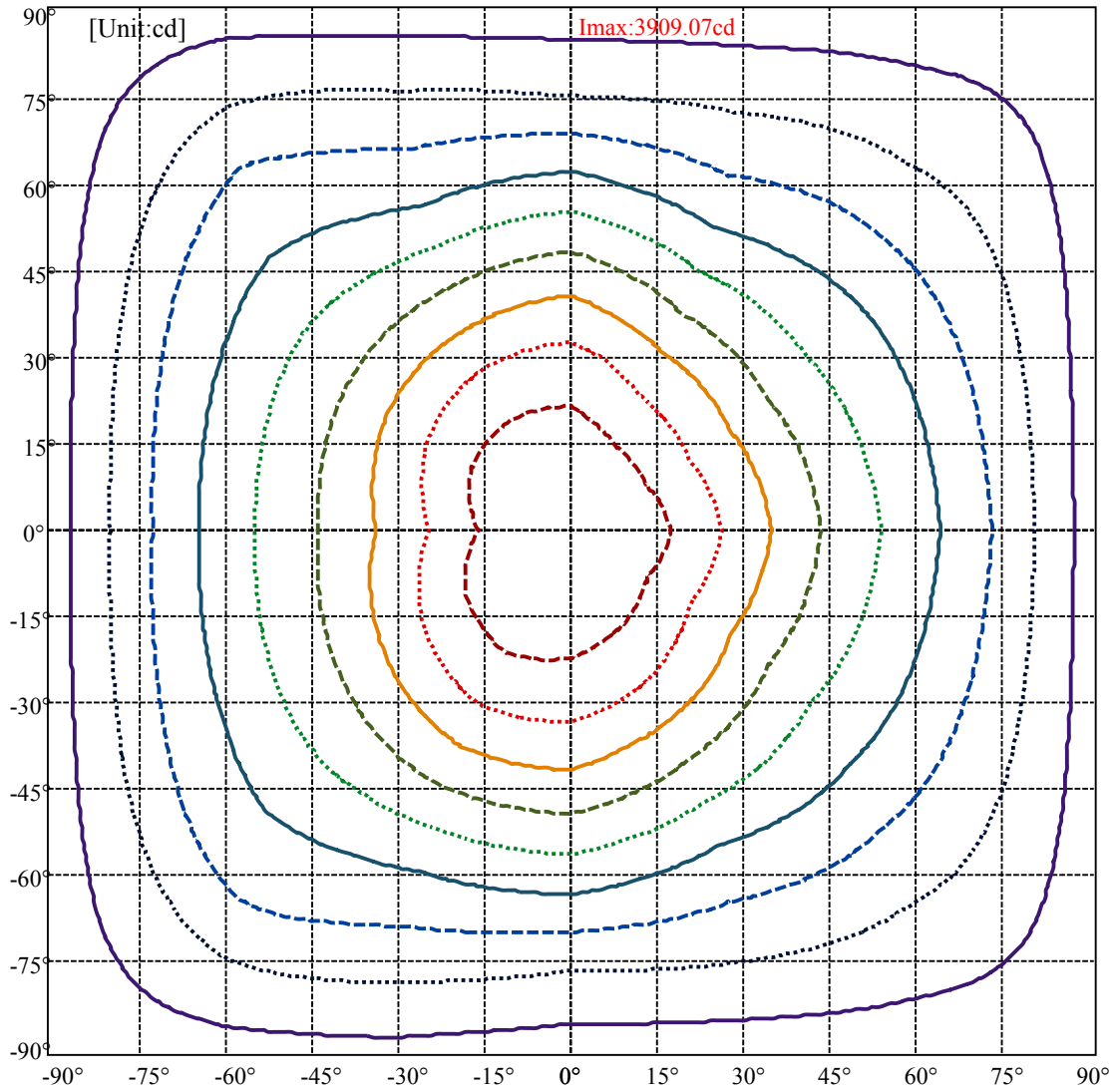
ZONAL LUMEN SUMMARY

0-10	0.00
10-20	806.40
20-30	2095.86
30-40	0.00
40-50	2665.05
50-60	2545.88
60-70	0.00
70-80	1922.92
80-90	902.42
90-100	0.00
100-110	277.19
110-120	241.08
120-130	0.00
130-140	207.02
140-150	160.74
150-160	0.00
160-170	104.32
170-180	0.00

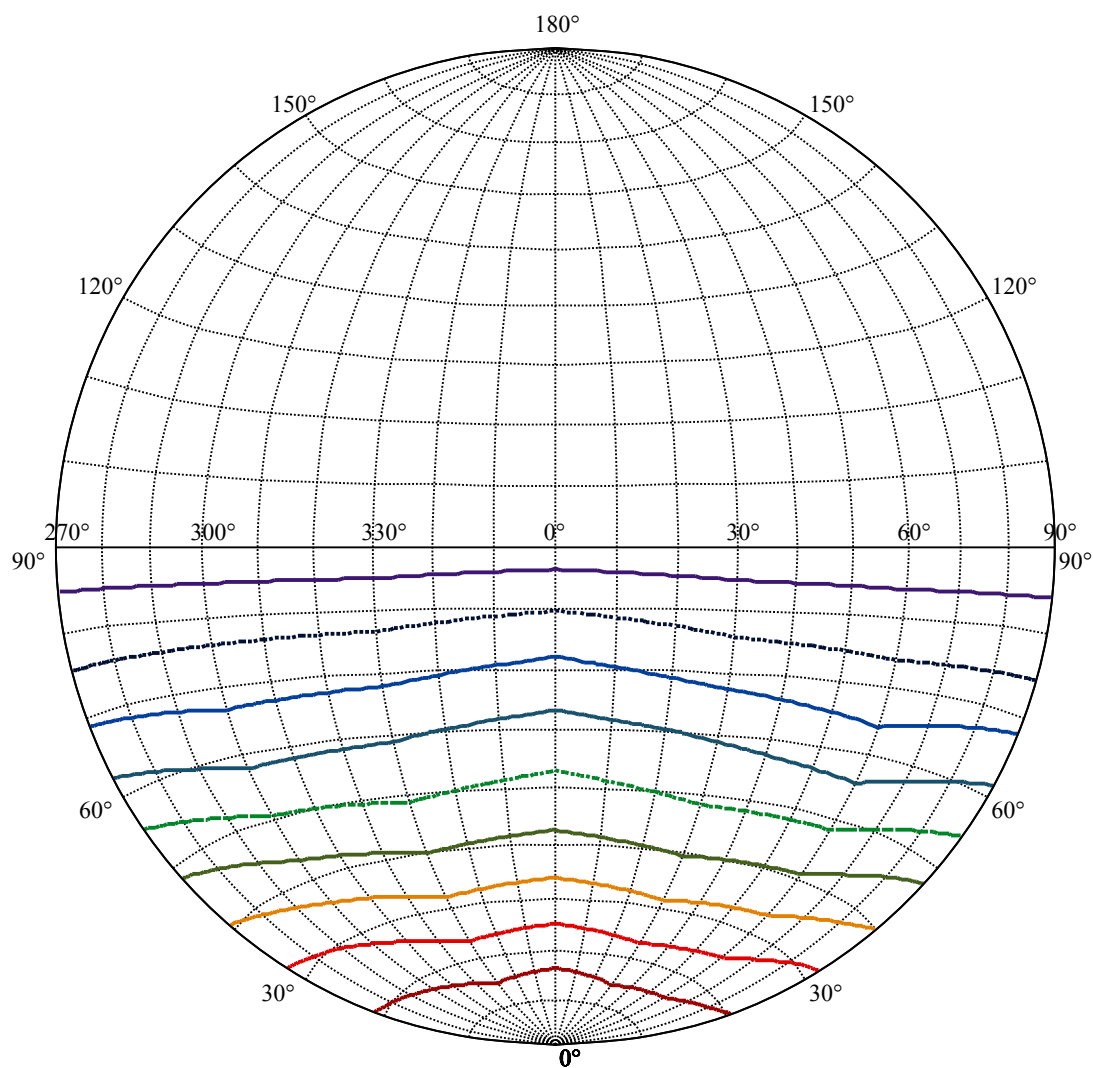


C30(Max): —————
C0/C180: —————
C90/C270: —————





(10%Imax) 388.204	—
(20%Imax) 776.409	·····
(30%Imax) 1164.61	- - - -
(40%Imax) 1552.82	—
(50%Imax) 1941.02	·····
(60%Imax) 2329.23	- - - -
(70%Imax) 2717.43	—
(80%Imax) 3105.63	·····
(90%Imax) 3493.84	- - - -

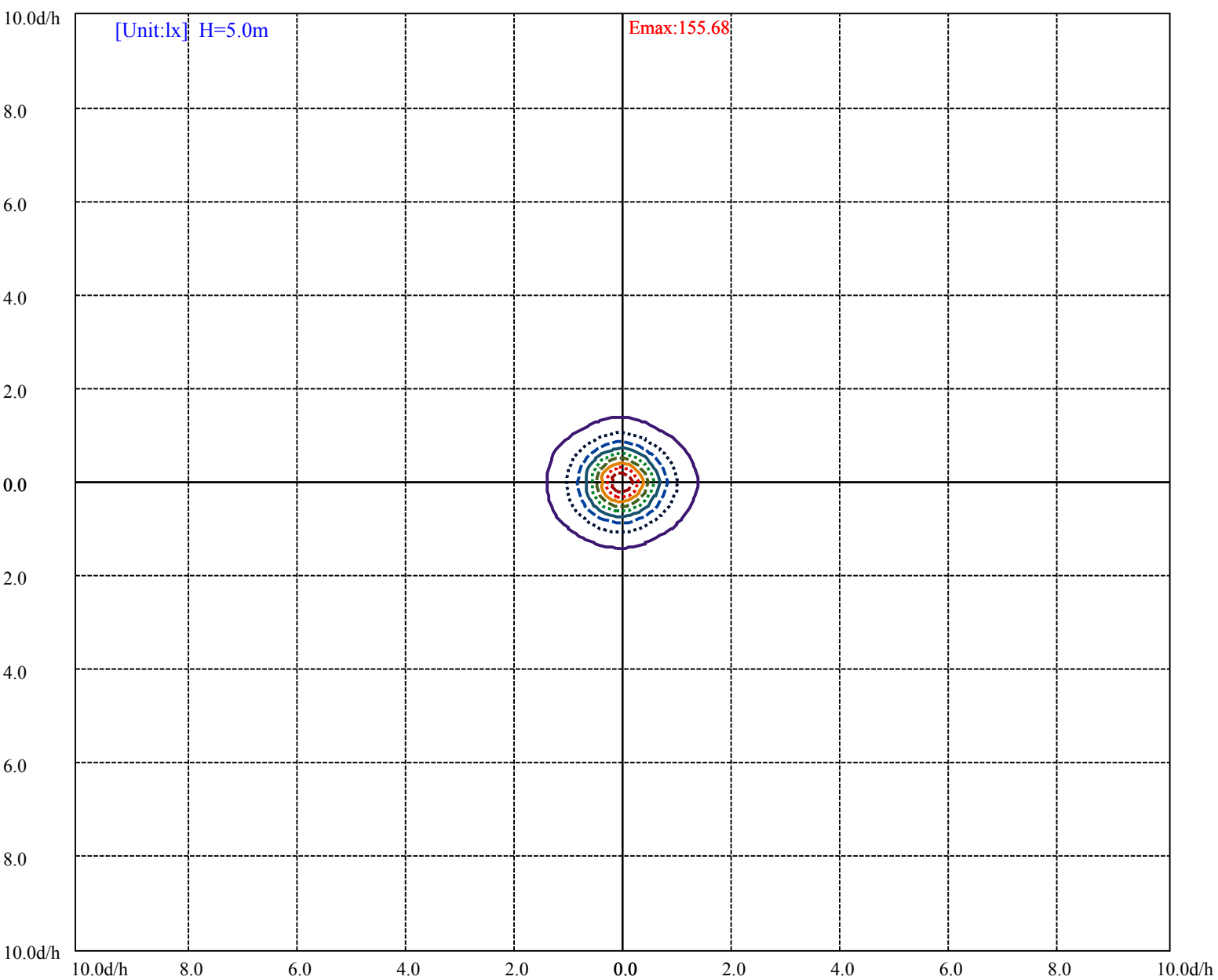


House

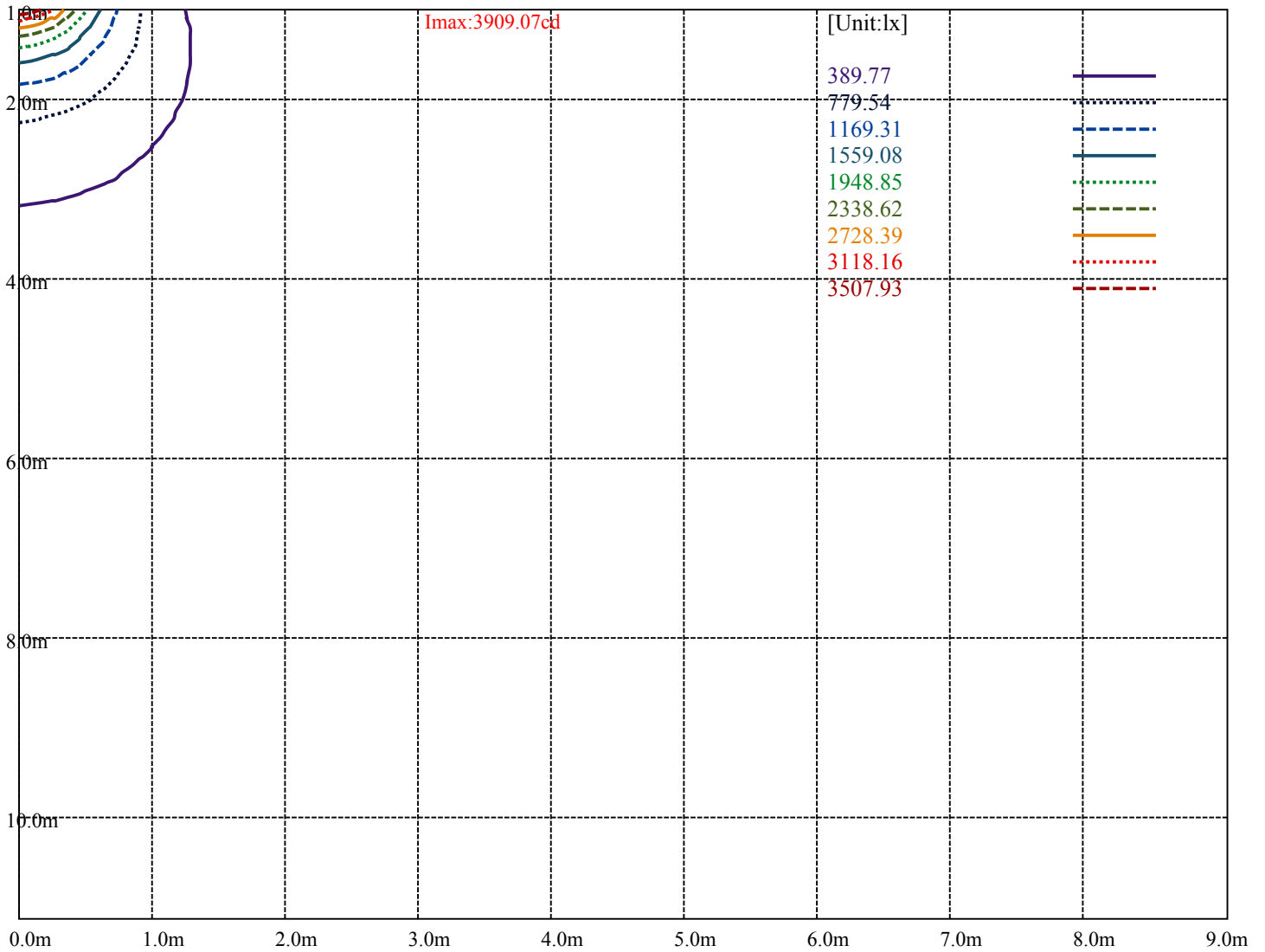
Road

I_{max}:3909.07cd

(10%I _{max}) 390.906	—
(20%I _{max}) 781.813	·····
(30%I _{max}) 1172.72	- - - - -
(40%I _{max}) 1563.63	—
(50%I _{max}) 1954.53	·····
(60%I _{max}) 2345.44	- - - - -
(70%I _{max}) 2736.35	—
(80%I _{max}) 3127.25	·····
(90%I _{max}) 3518.16	- - - - -



(10%Emax) 15.56804	———
(20%Emax) 31.13608
(30%Emax) 46.704	- - - - -
(40%Emax) 62.272	—————
(50%Emax) 77.8404
(60%Emax) 93.4084	- - - - -
(70%Emax) 108.9764	—————
(80%Emax) 124.5444
(90%Emax) 140.1124	- - - - -



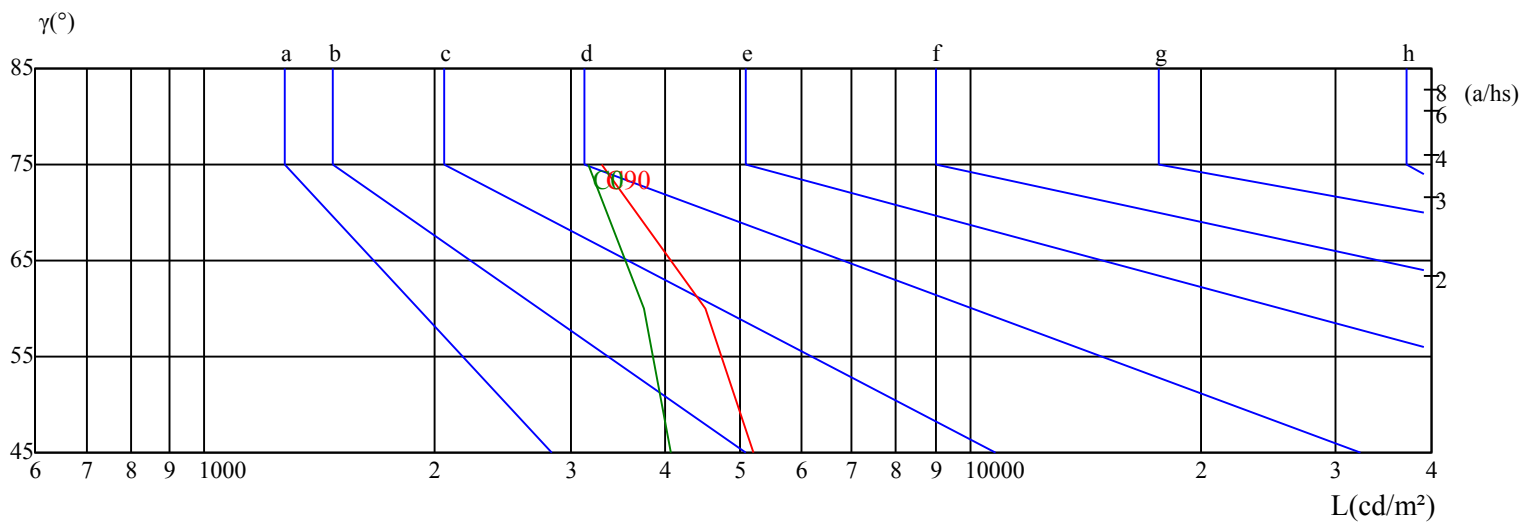
Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	4059	0	0	3739	0	0	3176	0	0
C45	0	0	0	0	0	0	0	0	0
C90	5214	0	0	4515	0	0	3293	0	0

Glare Table

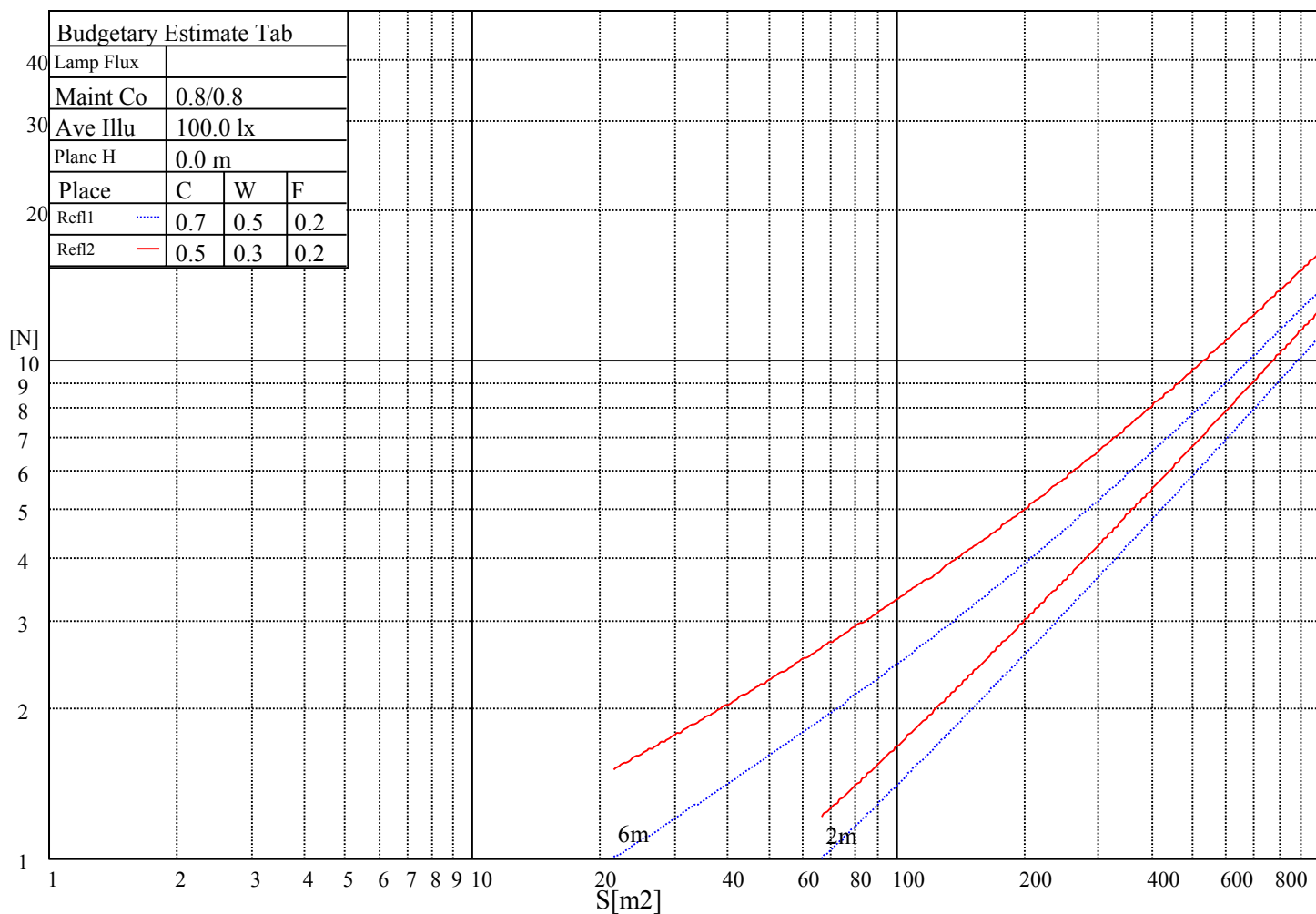
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

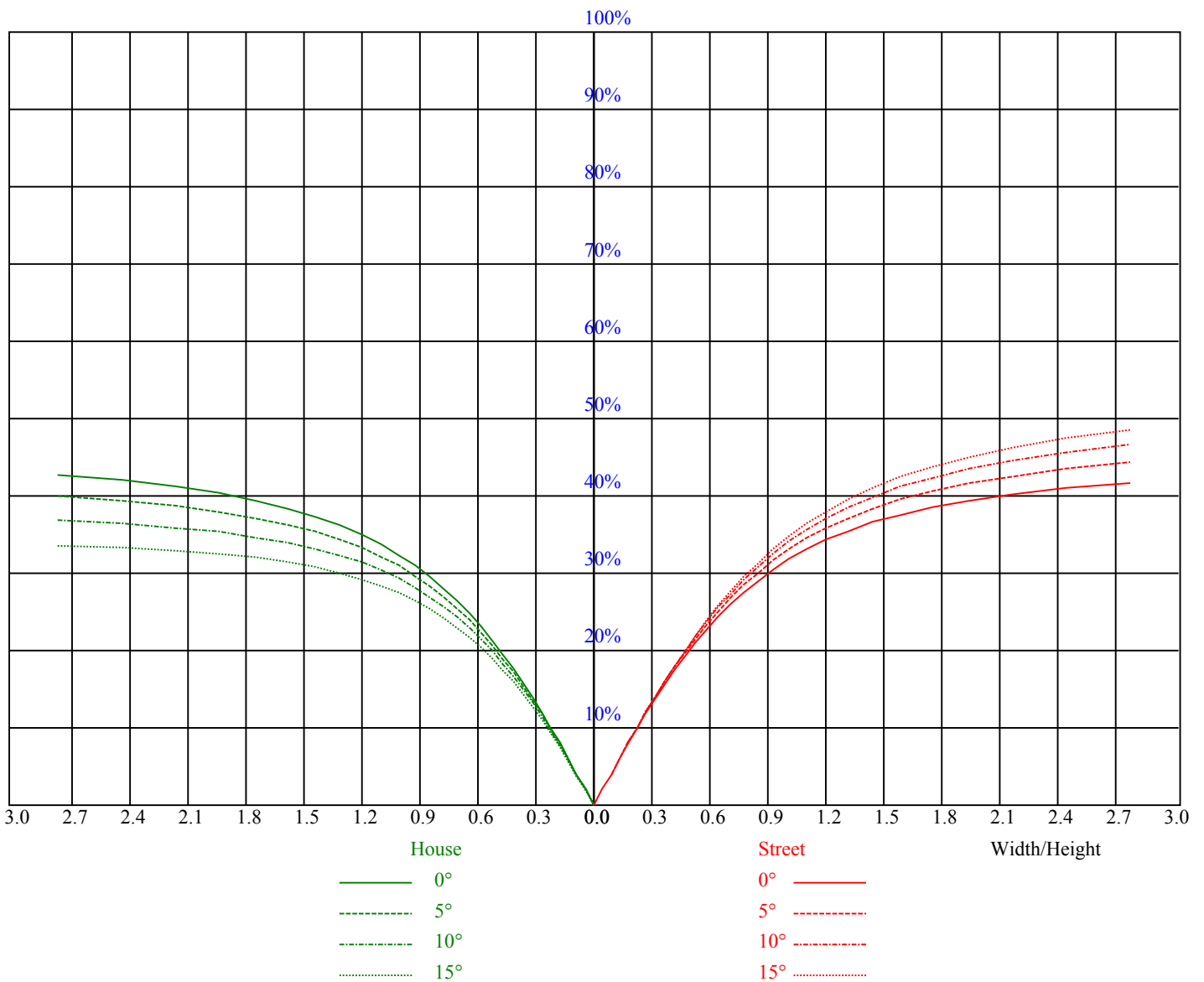


Illuminatin assessment accoding UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	7.5	9.0	7.9	9.4	9.8	7.5	9.0	7.9	9.4	9.8
	3H	9.4	10.7	9.9	11.2	11.7	9.1	10.5	9.6	10.9	11.4
	4H	10.1	11.3	10.6	11.7	12.3	9.7	10.8	10.2	11.3	11.9
	6H	10.9	12.1	11.4	12.6	13.1	10.3	11.5	10.9	12.0	12.5
	8H	11.2	12.4	11.7	12.9	13.4	10.7	11.8	11.2	12.3	12.9
	12H	11.2	12.2	11.8	12.7	13.3	10.7	11.6	11.2	12.2	12.8
4H	2H	7.8	9.0	8.3	9.5	10.0	7.8	9.0	8.3	9.4	10.0
	3H	9.9	10.8	10.4	11.4	12.0	9.6	10.6	10.2	11.1	11.7
	4H	10.9	11.9	11.5	12.4	13.0	10.5	11.5	11.1	12.0	12.6
	6H	11.9	12.8	12.4	13.4	14.0	11.4	12.3	11.9	12.9	13.5
	8H	12.0	12.7	12.7	13.3	14.0	11.5	12.2	12.1	12.8	13.5
	12H	12.4	13.0	13.0	13.6	14.3	11.8	12.5	12.5	13.1	13.8
8H	4H	11.1	11.7	11.7	12.4	13.1	10.7	11.4	11.3	12.0	12.7
	6H	12.2	12.8	12.8	13.4	14.1	11.7	12.4	12.3	13.0	13.7
	8H	12.7	13.3	13.3	13.9	14.6	12.2	12.8	12.8	13.5	14.2
	12H	13.1	13.7	13.7	14.3	15.0	12.6	13.3	13.2	13.9	14.6
12H	4H	11.1	11.8	11.8	12.4	13.1	10.8	11.4	11.4	12.1	12.8
	6H	12.3	12.9	12.9	13.5	14.2	11.8	12.5	12.4	13.1	13.8
	8H	12.8	13.5	13.4	14.1	14.8	12.3	13.0	13.0	13.6	14.3
Variation with the observer position at spacings:											
S = 1.0H	0.2/-0.8					0.2/-0.6					
S = 1.5H	0.6/-0.5					0.6/-0.5					
S = 2.0H	0.7/-0.5					0.7/-0.6					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	-2.5					-2.8					
According 1000lm											

五、灯具的概算曲线



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 RHOF=20 CU															
0	1.17	1.17	1.17	1.13	1.13	1.13	1.06	1.06	1.06	1.00	1.00	1.00	0.94	0.94	0.94	0.91
1	0.92	0.85	0.78	0.88	0.82	0.76	0.82	0.77	0.72	0.77	0.72	0.68	0.71	0.68	0.65	0.62
2	0.79	0.70	0.62	0.76	0.67	0.60	0.71	0.64	0.58	0.66	0.60	0.55	0.61	0.57	0.52	0.49
3	0.68	0.58	0.50	0.66	0.56	0.49	0.61	0.53	0.47	0.57	0.51	0.45	0.53	0.48	0.43	0.40
4	0.59	0.49	0.41	0.57	0.48	0.40	0.53	0.45	0.39	0.50	0.43	0.37	0.47	0.41	0.36	0.33
5	0.52	0.42	0.34	0.50	0.41	0.33	0.47	0.39	0.32	0.44	0.37	0.31	0.41	0.35	0.30	0.27
6	0.46	0.36	0.29	0.44	0.35	0.28	0.42	0.33	0.27	0.39	0.32	0.26	0.37	0.30	0.25	0.23
7	0.41	0.31	0.24	0.40	0.30	0.24	0.37	0.29	0.23	0.35	0.28	0.22	0.33	0.26	0.21	0.19
8	0.37	0.27	0.21	0.36	0.27	0.21	0.34	0.26	0.20	0.32	0.24	0.19	0.30	0.23	0.19	0.16
9	0.33	0.24	0.18	0.32	0.24	0.18	0.31	0.23	0.17	0.29	0.22	0.17	0.27	0.21	0.16	0.14
10	0.31	0.22	0.16	0.30	0.21	0.16	0.28	0.21	0.15	0.26	0.20	0.15	0.25	0.19	0.15	0.13



Intensity data(cd)

C/γ(°)	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0
0.0	3897.70	3590.89	2920.44	2238.62	1704.53	1045.45	181.82	159.09	159.09
30.0	3909.07	3499.98	2806.80	2079.53	1522.72	818.18	159.09	159.09	159.09
60.0	3874.97	3545.43	2920.44	2124.99	1340.90	738.63	159.09	159.09	159.09
90.0	3874.97	3693.16	3215.89	2488.62	1647.72	750.00	159.09	159.09	159.09
120.0	3886.34	3738.61	3170.43	2363.62	1522.72	886.36	170.45	159.09	159.09
150.0	3897.70	3715.88	3045.43	2318.17	1738.63	1181.81	204.54	159.09	159.09
180.0	3897.70	3534.07	2852.25	2261.35	1738.63	1011.36	159.09	159.09	159.09
210.0	3909.07	3761.34	3090.89	2363.62	1772.72	1227.27	227.27	159.09	159.09
240.0	3874.97	3784.07	3284.07	2511.35	1647.72	977.27	272.73	159.09	159.09
270.0	3874.97	3715.88	3238.62	2534.07	1704.53	806.81	170.45	159.09	159.09
300.0	3886.34	3624.98	3045.43	2249.99	1454.54	829.54	159.09	159.09	159.09
330.0	3897.70	3511.34	2829.53	2102.26	1522.72	863.63	159.09	159.09	159.09
360.0	3897.70	3590.89	2920.44	2238.62	1704.53	1045.45	181.82	159.09	159.09

C/γ(°)	135.0	150.0	165.0	180.0
0.0	159.09	159.09	170.45	170.45
30.0	159.09	159.09	170.45	170.45
60.0	159.09	170.45	170.45	170.45
90.0	159.09	170.45	170.45	170.45
120.0	159.09	170.45	170.45	170.45
150.0	159.09	159.09	170.45	170.45
180.0	159.09	170.45	170.45	170.45
210.0	159.09	159.09	159.09	170.45
240.0	159.09	159.09	170.45	170.45
270.0	159.09	159.09	170.45	170.45
300.0	159.09	159.09	170.45	170.45
330.0	159.09	159.09	170.45	170.45
360.0	159.09	159.09	170.45	170.45