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P.Q.L., Inc. 6 LAMPS

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LumCAT: 6 LAMPS	Luminaire: 3500K
Report No: /	Voltage(V): 277.400
Test No:	Current(A): 0.476
LampCAT: LED SMD 4' 15WT8/35K/FR/V4/1850Lm	Power (W): 109.540
Lamp flux(lm)	PF: 0.983
Number of Lamps: 6	Ballast type:
Length(mm): 1200	Width(mm): 500
Phm Type: C	Height(mm): 150

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Photometric Results

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Lumens(lm): 12757.18  
Lumens(lm)/Power(W): 116.46  
Central intensity(cd): 4629.434  
Maximum intensity(cd): 4629.434  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [H]Left=52.5 Right=56.0  
[V]Left=50.8 Right=53.3  
Field angle(10%Imax): [H]Left=80.2 Right=83.1  
[V]Left=84.1 Right=84.0  
Maximum s/h: C0\_180=1.07 C90\_270=1.27  
Up flux rate of LUM(%): 2.10%  
Down flux rate of LUM(%): 97.90%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 74.482%

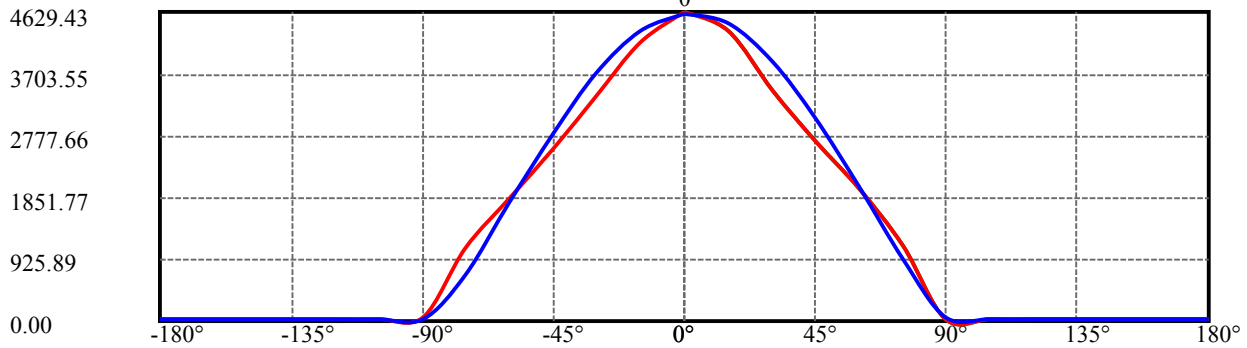
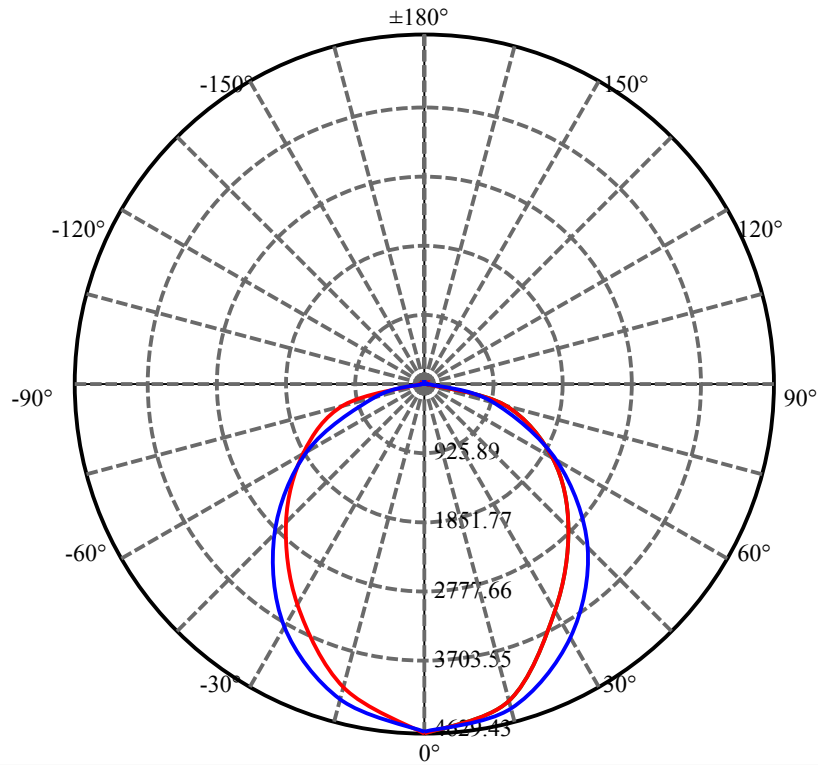
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4609.788	.000	.000	.000%	.000%
15.0	4313.177	955.179	955.179	7.487%	7.487%
30.0	3567.607	2473.356	3428.535	19.388%	26.875%
45.0	2696.564	3127.435	6555.970	24.515%	51.390%
60.0	1831.078	2945.889	9501.858	23.092%	74.482%
75.0	951.282	2108.172	11610.030	16.525%	91.008%
90.0	129.603	878.872	12488.900	6.889%	97.897%
105.0	26.637	127.040	12615.940	.996%	98.893%
120.0	27.629	41.117	12657.060	.322%	99.215%
135.0	30.335	37.714	12694.770	.296%	99.511%
150.0	33.966	32.103	12726.880	.252%	99.762%
165.0	36.990	22.269	12749.150	.175%	99.937%
180.0	38.059	8.034	12757.180	.063%	100.000%

ZONAL LUMEN SUMMARY

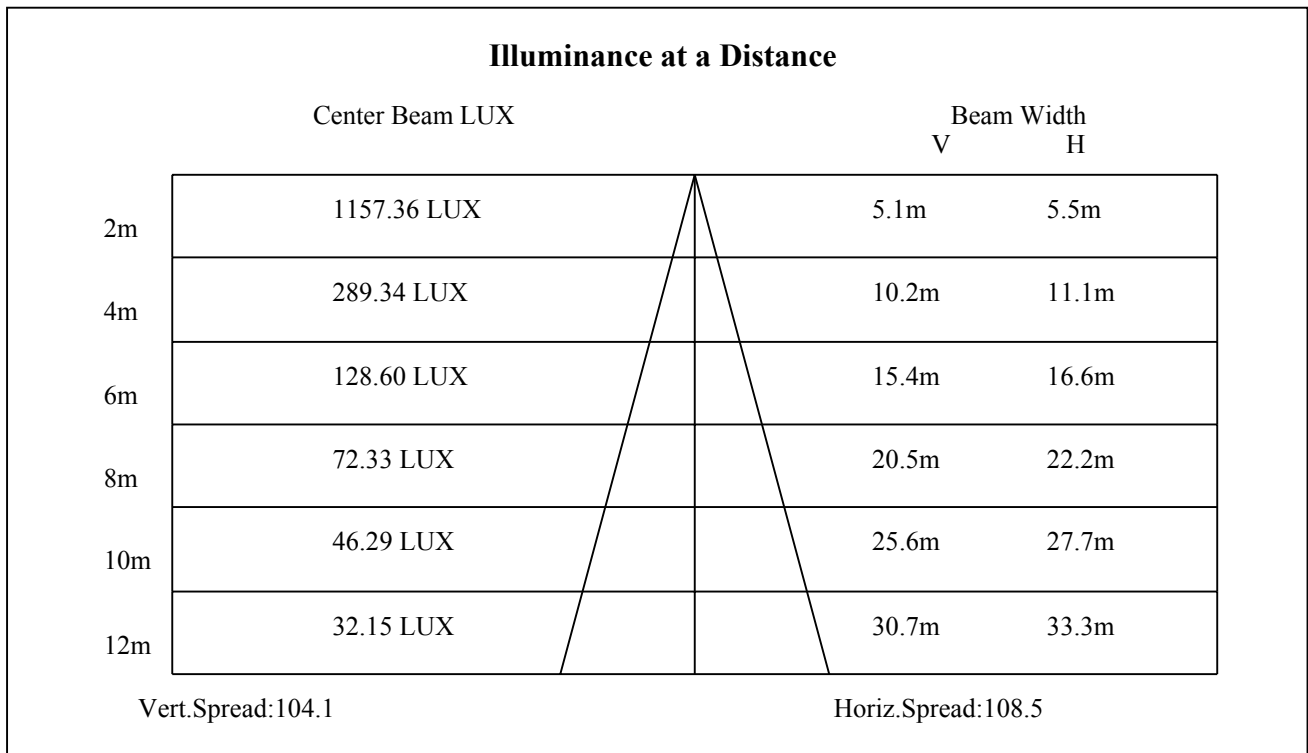
Zone	Lumens	%Fixt
0-30	3428.54	26.88%
0-40	3428.54	26.88%
0-60	9501.86	74.48%
0-90	12488.90	97.90%
90-120	168.16	1.32%
90-130	168.16	1.32%
90-150	237.97	1.87%
90-180	260.24	2.04%
0-180	12757.18	100.00%

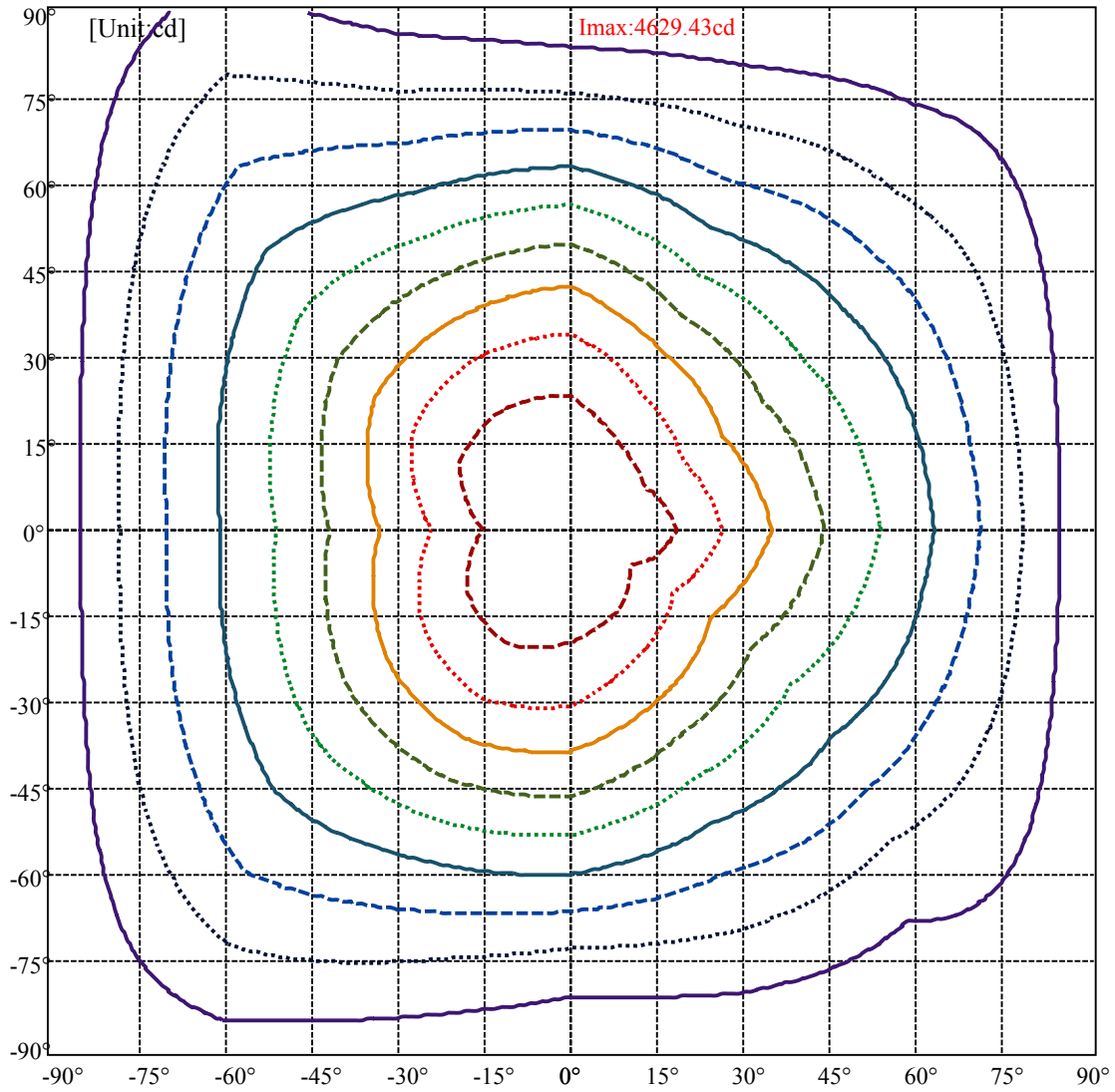
ZONAL LUMEN SUMMARY

0-10	0.00
10-20	955.18
20-30	2473.36
30-40	0.00
40-50	3127.44
50-60	2945.89
60-70	0.00
70-80	2108.17
80-90	878.87
90-100	0.00
100-110	127.04
110-120	41.12
120-130	0.00
130-140	37.71
140-150	32.10
150-160	0.00
160-170	22.27
170-180	0.00

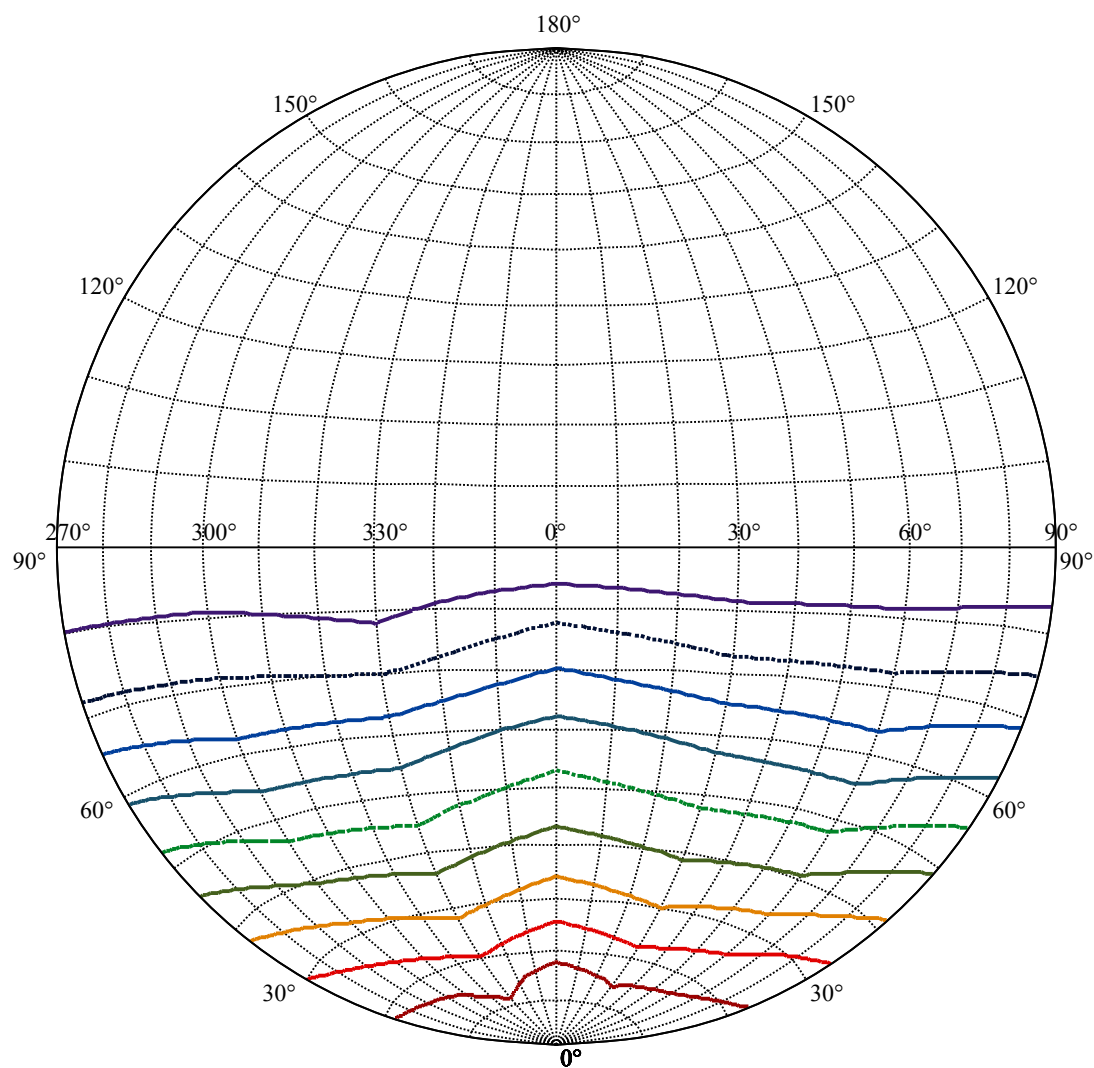


C0(Max): —  
C0/C180: —  
C90/C270: —





(10%Imax) 460.963	—
(20%Imax) 921.927	·····
(30%Imax) 1382.89	- - - - -
(40%Imax) 1843.85	— — — — —
(50%Imax) 2304.82	·····
(60%Imax) 2765.78	- - - - -
(70%Imax) 3226.74	— — — — —
(80%Imax) 3687.71	·····
(90%Imax) 4148.67	- - - - -

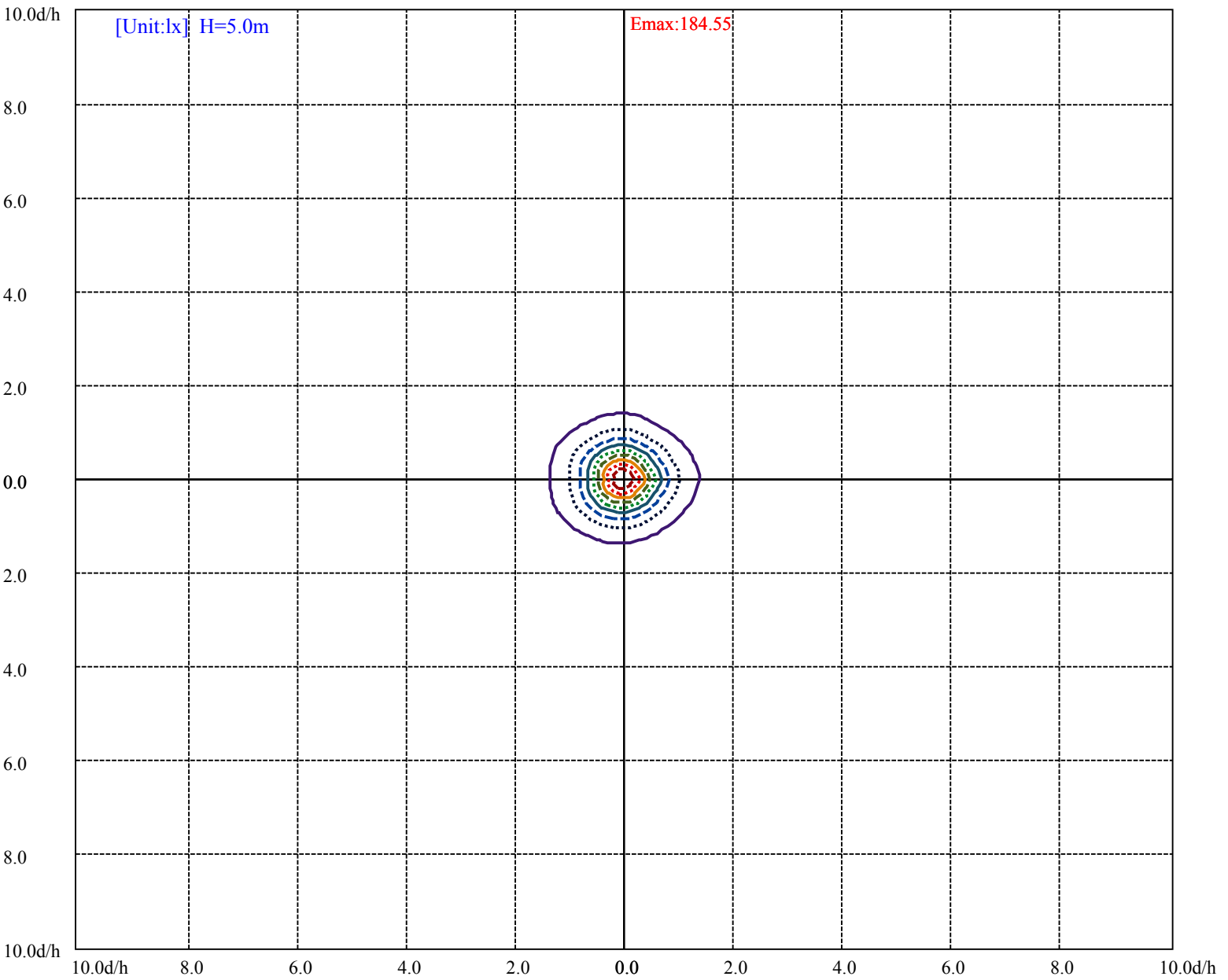


House

Road

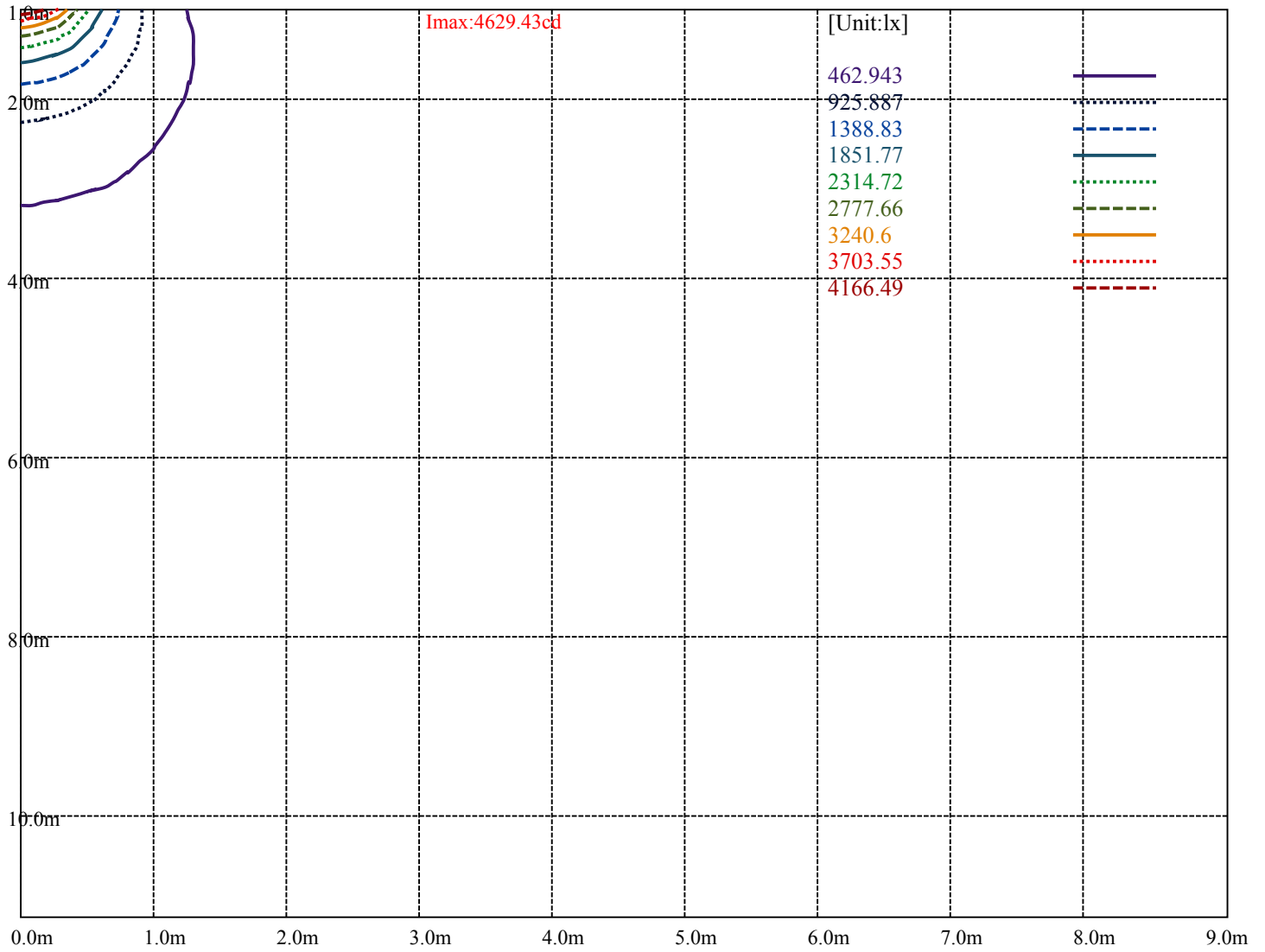
**I<sub>max</sub>:4629.43cd**

(10%I <sub>max</sub> ) 462.943	—
(20%I <sub>max</sub> ) 925.887	⋯
(30%I <sub>max</sub> ) 1388.83	- - -
(40%I <sub>max</sub> ) 1851.77	—
(50%I <sub>max</sub> ) 2314.72	⋯
(60%I <sub>max</sub> ) 2777.66	- - -
(70%I <sub>max</sub> ) 3240.6	—
(80%I <sub>max</sub> ) 3703.55	⋯
(90%I <sub>max</sub> ) 4166.49	- - -



- (10%Emax) 18.45532 ————
- (20%Emax) 36.9106    ······
- (30%Emax) 55.366     - - - -
- (40%Emax) 73.8212    ————
- (50%Emax) 92.2764    ······
- (60%Emax) 110.732    - - - -
- (70%Emax) 129.1872   ————
- (80%Emax) 147.6424   ······
- (90%Emax) 166.0976   - - - -





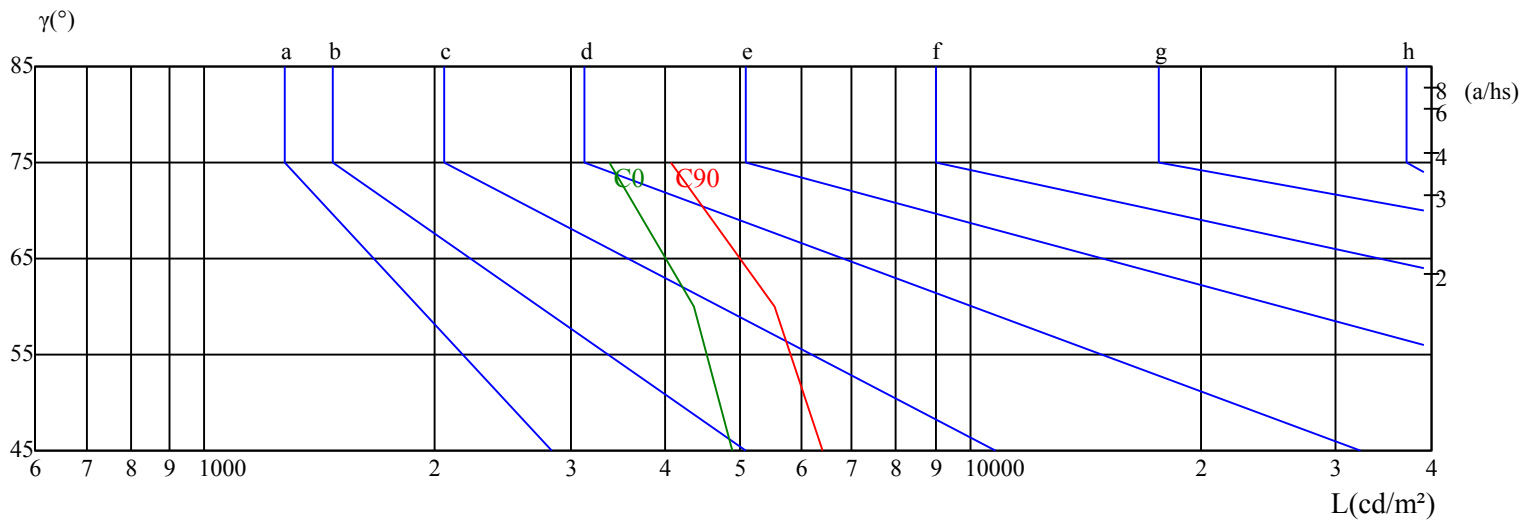
Luminance Table

$\gamma$	45	50	55	60	65	70	75	80	85
C0	4878	0	0	4347	0	0	3384	0	0
C45	0	0	0	0	0	0	0	0	0
C90	6394	0	0	5538	0	0	4065	0	0

Glare Table

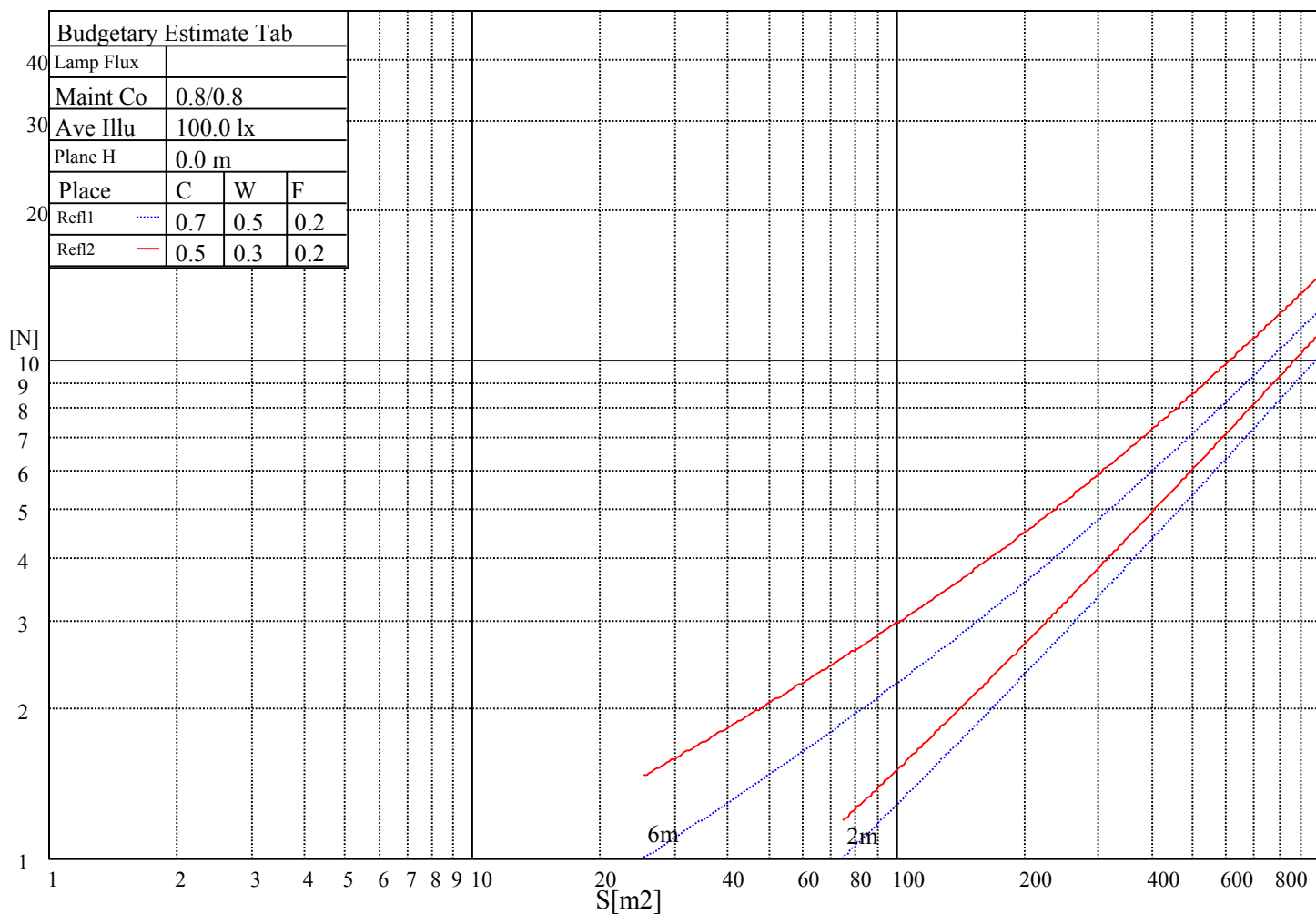
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	$\leq 300$				
1.5	B		2000	1000	500	$\leq 300$			
1.85	C			2000	1000	500	$\leq 300$		
2.2	D				2000	1000	500	$\leq 300$	
2.55	E					2000	1000	500	$\leq 300$
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

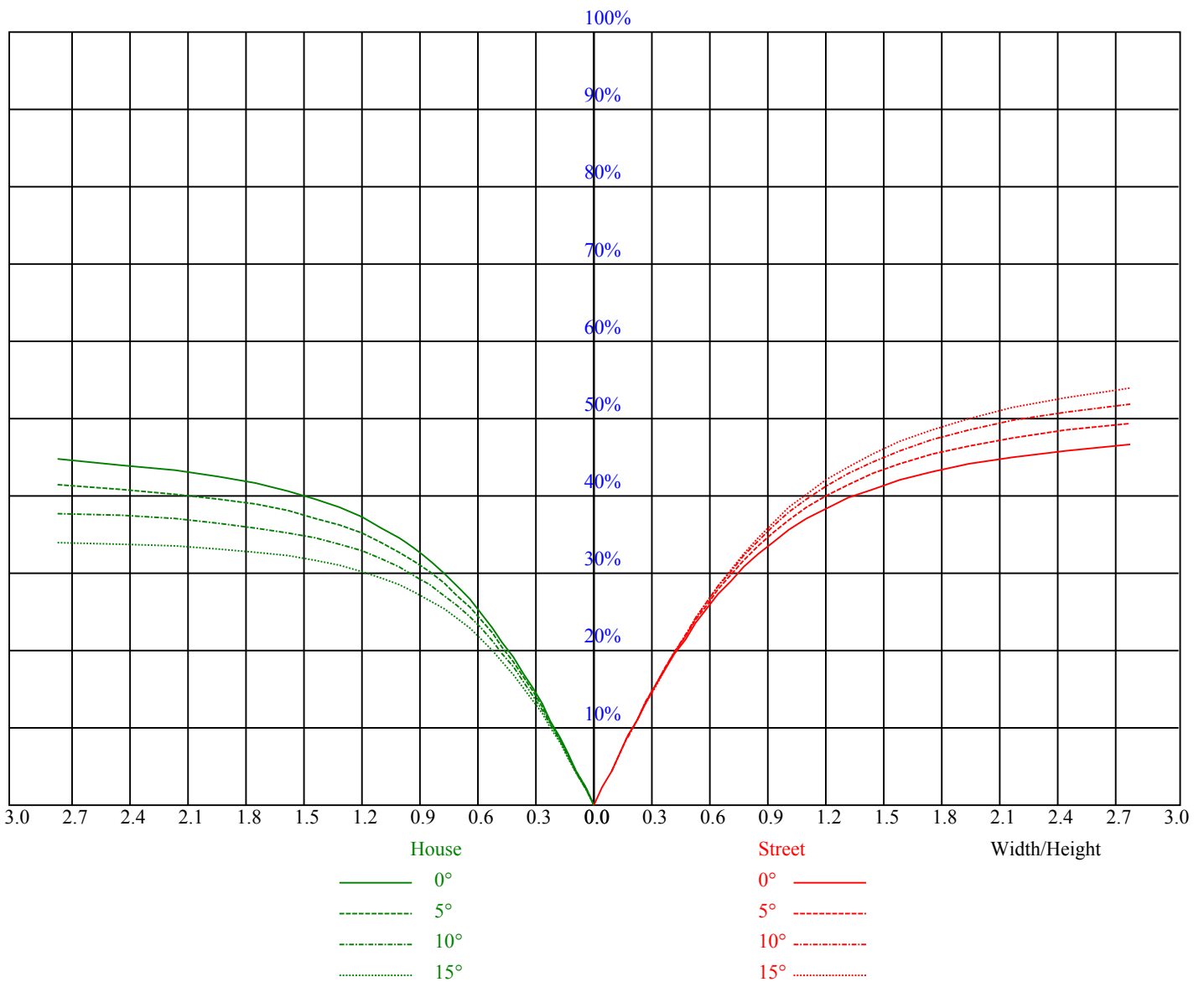


Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	8.2	9.8	8.5	10.1	10.4	8.4	10.0	8.8	10.3	10.6
	3H	10.0	11.4	10.3	11.7	12.1	10.1	11.6	10.5	11.9	12.2
	4H	10.6	11.8	11.0	12.2	12.6	10.6	11.9	11.0	12.3	12.7
	6H	11.2	12.5	11.7	12.9	13.3	11.3	12.5	11.7	12.9	13.3
	8H	11.5	12.7	11.9	13.1	13.5	11.5	12.8	11.9	13.2	13.6
	12H	11.4	12.4	11.9	12.9	13.4	11.5	12.5	12.0	13.0	13.4
4H	2H	8.5	9.8	8.9	10.2	10.6	8.7	10.0	9.1	10.3	10.7
	3H	10.4	11.4	10.9	11.9	12.3	10.5	11.5	11.0	12.0	12.4
	4H	11.3	12.4	11.8	12.8	13.3	11.4	12.4	11.9	12.8	13.3
	6H	12.1	13.2	12.6	13.6	14.1	12.1	13.2	12.6	13.6	14.1
	8H	12.2	12.9	12.8	13.5	14.0	12.3	13.0	12.8	13.5	14.1
	12H	12.4	13.1	13.0	13.7	14.2	12.5	13.2	13.0	13.7	14.3
8H	4H	11.5	12.2	12.0	12.7	13.2	11.5	12.2	12.0	12.7	13.3
	6H	12.3	13.1	12.9	13.6	14.1	12.4	13.1	12.9	13.6	14.2
	8H	12.7	13.4	13.2	13.9	14.5	12.8	13.5	13.3	14.0	14.6
	12H	13.0	13.7	13.5	14.2	14.8	13.1	13.8	13.6	14.3	14.9
12H	4H	11.5	12.2	12.0	12.7	13.3	11.5	12.3	12.1	12.8	13.3
	6H	12.4	13.1	13.0	13.6	14.2	12.4	13.2	13.0	13.7	14.2
	8H	12.8	13.5	13.4	14.0	14.6	12.9	13.6	13.4	14.1	14.7
Variation with the observer position at spacings:											
S = 1.0H	0.2/-0.7					0.2/-0.6					
S = 1.5H	0.6/-0.5					0.6/-0.5					
S = 2.0H	0.9/-0.6					0.9/-0.7					
Standard tables:	BK3					BK3					
Uncorrected UGR	-6.0					-5.8					
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	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	0.98
1	0.93	0.86	0.80	0.91	0.84	0.78	0.86	0.80	0.75	0.81	0.77	0.73	0.77	0.73	0.70	0.67
2	0.80	0.71	0.63	0.78	0.69	0.62	0.74	0.67	0.60	0.70	0.64	0.59	0.66	0.61	0.57	0.54
3	0.69	0.59	0.51	0.67	0.58	0.50	0.64	0.56	0.49	0.61	0.54	0.48	0.58	0.52	0.47	0.44
4	0.60	0.50	0.42	0.59	0.49	0.41	0.56	0.47	0.40	0.53	0.46	0.40	0.50	0.44	0.39	0.36
5	0.53	0.42	0.35	0.51	0.42	0.34	0.49	0.40	0.34	0.47	0.39	0.33	0.44	0.38	0.32	0.30
6	0.47	0.36	0.29	0.46	0.36	0.29	0.43	0.35	0.28	0.41	0.34	0.28	0.39	0.33	0.27	0.25
7	0.42	0.32	0.25	0.41	0.31	0.25	0.39	0.30	0.24	0.37	0.29	0.24	0.35	0.29	0.23	0.21
8	0.37	0.28	0.21	0.37	0.28	0.21	0.35	0.27	0.21	0.33	0.26	0.21	0.32	0.25	0.20	0.18
9	0.34	0.25	0.19	0.33	0.25	0.19	0.32	0.24	0.18	0.31	0.23	0.18	0.29	0.23	0.18	0.16
10	0.31	0.22	0.17	0.30	0.22	0.16	0.29	0.22	0.16	0.28	0.21	0.16	0.27	0.20	0.16	0.14



## 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	4629.43	4332.44	3459.94	2690.30	1981.90	1114.02	29.35	25.31	25.77
30.0	4627.12	4135.98	3236.91	2454.55	1710.33	783.51	30.05	27.62	29.82
60.0	4600.54	4251.54	3479.59	2492.68	1577.78	767.57	29.82	27.16	29.35
90.0	4597.08	4446.85	3889.83	3052.01	2021.19	925.66	58.71	27.50	28.31
120.0	4606.32	4497.69	3890.99	2958.40	1946.07	1044.45	242.91	27.39	28.66
150.0	4598.23	4488.45	3786.98	2929.51	2126.35	1408.71	600.93	28.20	28.08
180.0	4629.43	4156.78	3374.43	2577.04	1852.70	1093.68	50.62	27.62	29.01
210.0	4627.12	4441.07	3679.51	2802.39	2001.89	1291.87	260.94	26.23	26.12
240.0	4600.54	4446.85	3834.36	2878.66	1864.02	984.59	167.57	26.00	26.35
270.0	4597.08	4327.82	3699.16	2816.26	1779.78	690.95	29.82	25.31	26.46
300.0	4606.32	4204.16	3372.11	2400.23	1516.18	739.60	27.50	25.42	26.58
330.0	4598.23	4028.51	3107.48	2306.74	1594.76	570.76	27.04	25.89	27.04
360.0	4629.43	4332.44	3459.94	2690.30	1981.90	1114.02	29.35	25.31	25.77

C/γ(°)	135.0	150.0	165.0	180.0
0.0	28.66	32.47	36.98	37.44
30.0	32.36	36.17	37.44	37.90
60.0	31.90	35.36	37.33	38.37
90.0	31.20	35.13	37.67	38.60
120.0	31.20	34.55	37.90	38.37
150.0	31.09	34.32	37.56	37.67
180.0	32.47	35.02	37.33	37.44
210.0	28.08	32.47	36.06	37.90
240.0	28.20	32.59	35.94	38.37
270.0	28.54	32.94	36.29	38.60
300.0	29.82	32.94	36.52	38.37
330.0	30.51	33.63	36.86	37.67
360.0	28.66	32.47	36.98	37.44