
P.Q.L., Inc. 4 LAMPS

LumCAT: 4 LAMPS	Luminaire: 5000K
Report No: /	Voltage(V):
Test No:	Current(A):
LampCAT: LED 45.8" 30WT5/50K/FR	Power (W): 121.500
Lamp flux(lm): 3138.9	PF:
Number of Lamps: 4	Ballast type:
Length(mm): 1200	Width(mm): 500
Phm Type: C	Height(mm): 150

Photometric Results

Lumens(lm): 12555.74
Efficiency(%): 100.00%
Lumens(lm)/Power(W): 103.34
Central intensity(cd): 6127.231
Maximum intensity(cd): 6127.231
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [H]Left=55.2 Right=53.2
[V]Left=32.7 Right=28.5
Field angle(10%Imax): [H]Left=82.0 Right=80.5
[V]Left=73.1 Right=72.8
Maximum s/h: C0_180=0.86 C90_270=1.23
Up flux rate of lamp(%): 1.57%
Down flux rate of lamp(%): 98.43%
Up flux rate of LUM(%): 1.57%
Down flux rate of LUM(%): 98.43%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 79.753%

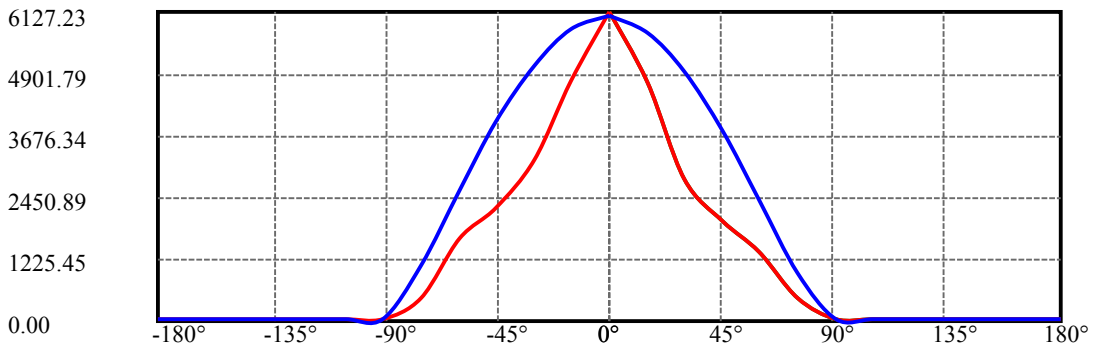
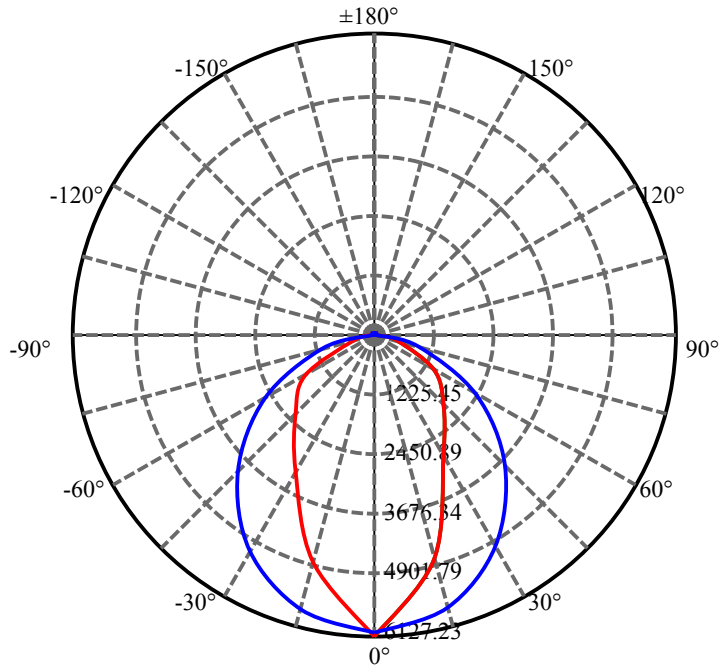
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6064.164	.000	.000	.000%	.000%
15.0	5265.778	1212.839	1212.839	9.660%	9.660%
30.0	3816.262	2850.366	4063.205	22.702%	32.361%
45.0	2597.729	3202.233	7265.438	25.504%	57.865%
60.0	1625.908	2748.088	10013.530	21.887%	79.752%
75.0	688.102	1753.307	11766.830	13.964%	93.717%
90.0	39.725	591.799	12358.630	4.713%	98.430%
105.0	25.274	52.851	12411.480	.421%	98.851%
120.0	27.661	40.109	12451.590	.319%	99.170%
135.0	31.733	38.644	12490.240	.308%	99.478%
150.0	35.776	33.704	12523.940	.268%	99.747%
165.0	38.721	23.381	12547.320	.186%	99.933%
180.0	39.943	8.421	12555.740	.067%	100.000%

ZONAL LUMEN SUMMARY

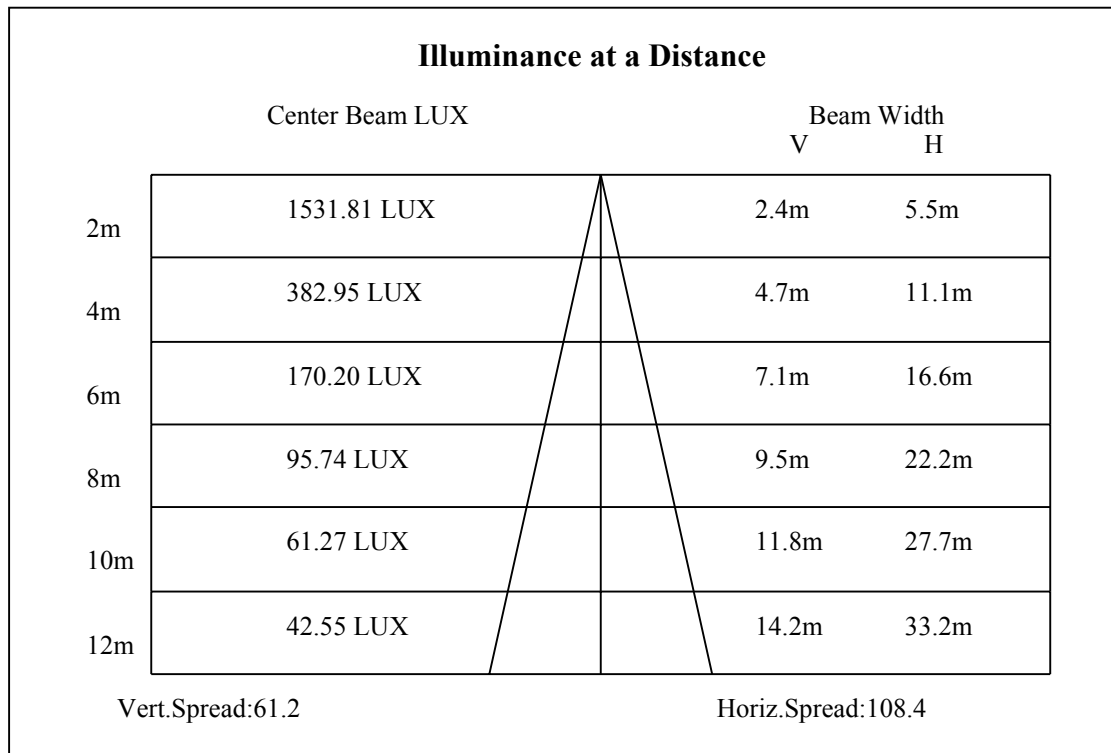
Zone	Lumens	%Lamp	%Fixt
0-30	4063.21	32.36%	32.36%
0-40	4063.21	32.36%	32.36%
0-60	10013.53	79.75%	79.75%
0-90	12358.63	98.43%	98.43%
90-120	92.96	0.74%	0.74%
90-130	92.96	0.74%	0.74%
90-150	165.31	1.32%	1.32%
90-180	188.69	1.50%	1.50%
0-180	12555.74	100.00%	100.00%

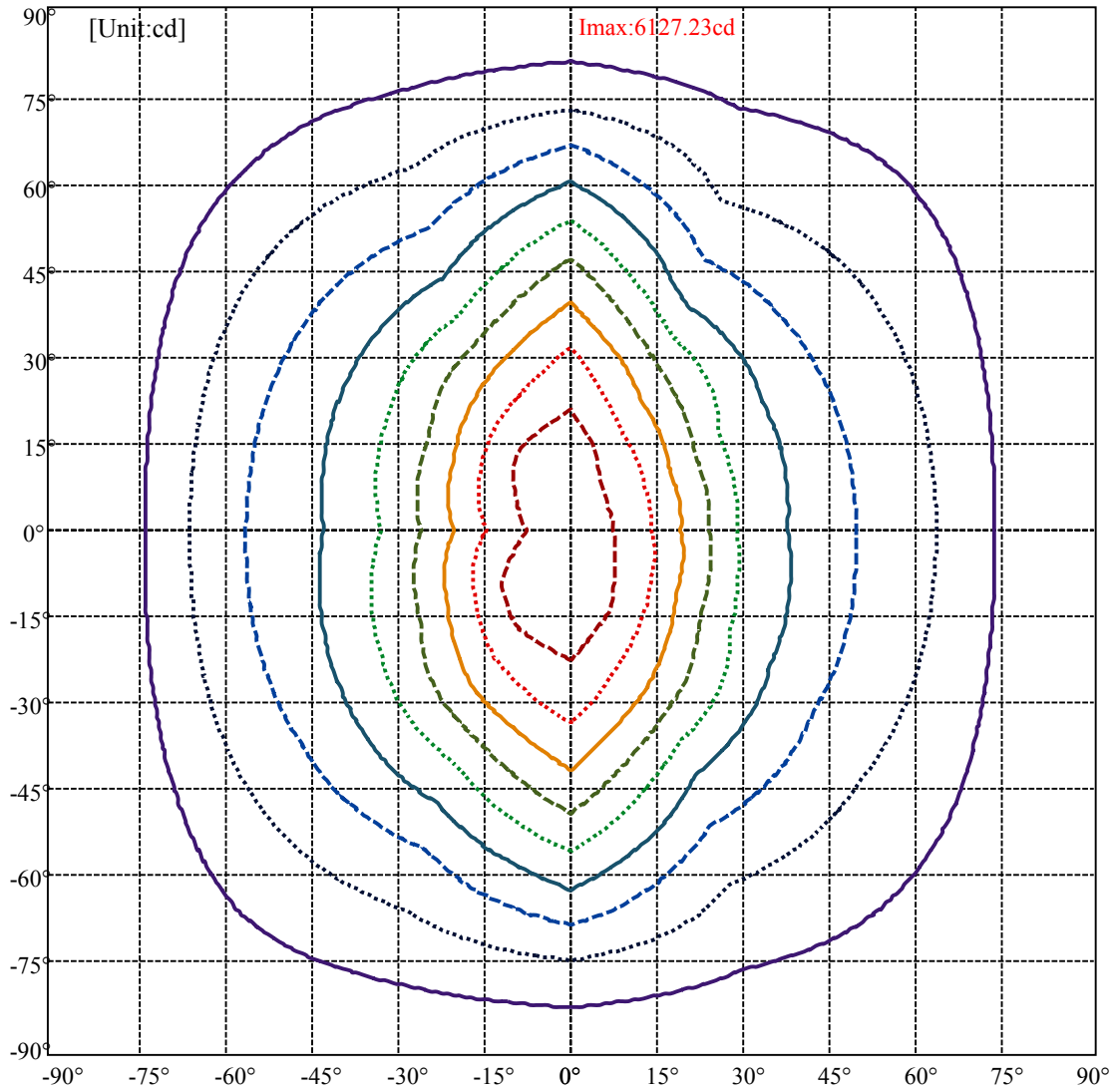
ZONAL LUMEN SUMMARY

0-10	0.00
10-20	1212.84
20-30	2850.37
30-40	0.00
40-50	3202.23
50-60	2748.09
60-70	0.00
70-80	1753.31
80-90	591.80
90-100	0.00
100-110	52.85
110-120	40.11
120-130	0.00
130-140	38.64
140-150	33.70
150-160	0.00
160-170	23.38
170-180	0.00



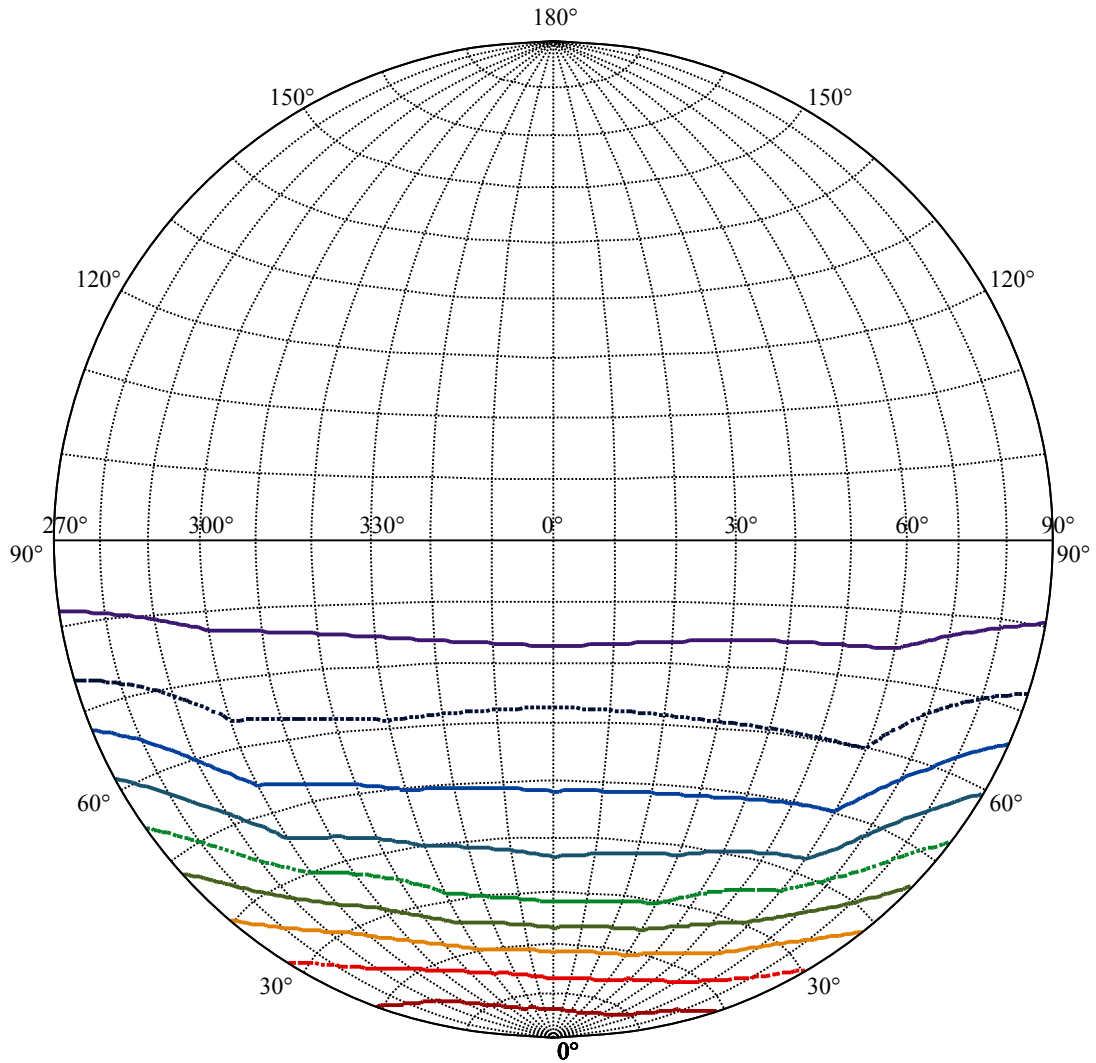
C0(Max): ———
C0/C180: ———
C90/C270: ———





- (10%Imax) 603.663
- (20%Imax) 1207.33
- (30%Imax) 1810.99
- (40%Imax) 2414.65
- (50%Imax) 3018.31
- (60%Imax) 3621.98
- (70%Imax) 4225.64
- (80%Imax) 4829.3
- (90%Imax) 5432.96



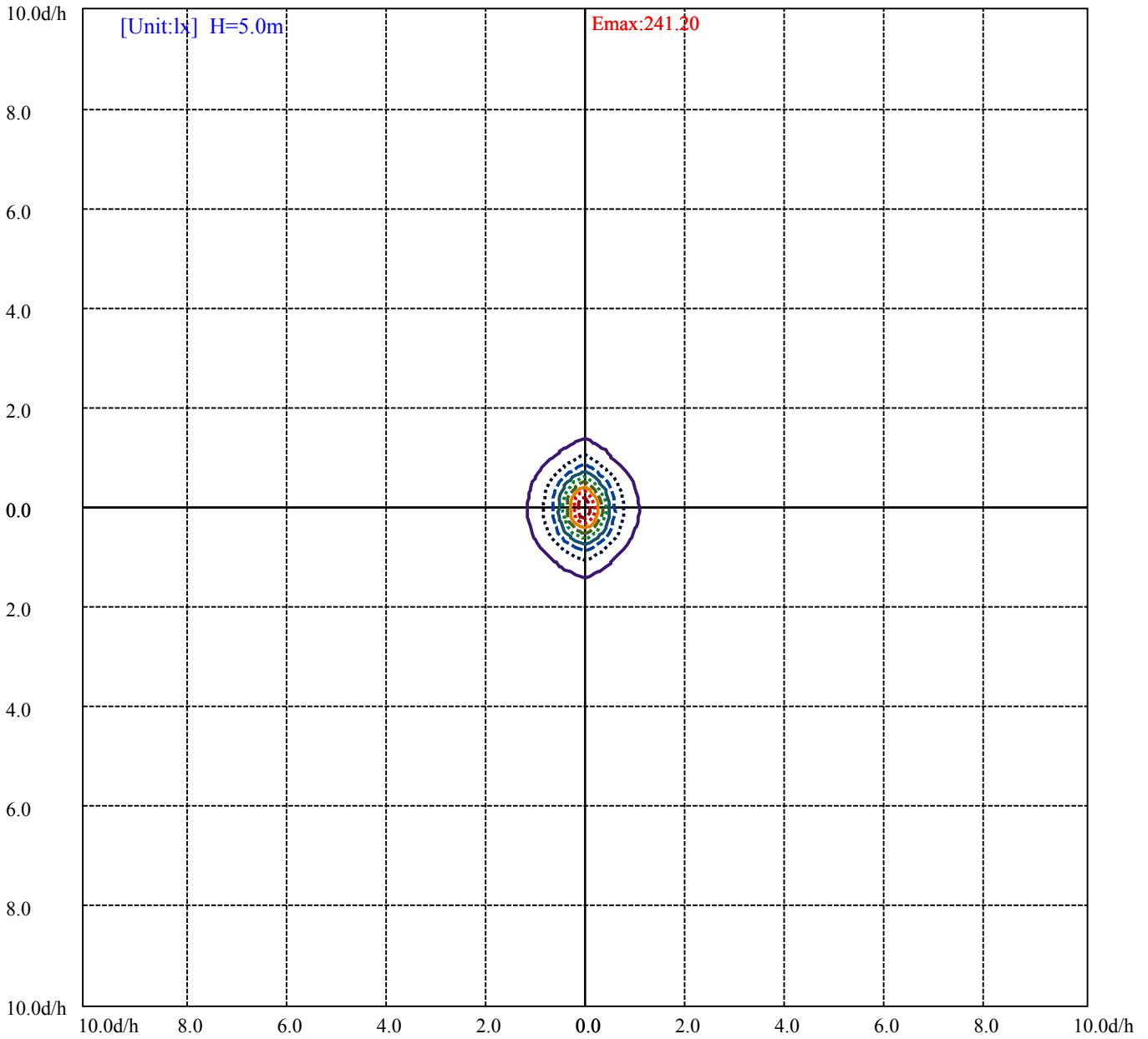


House

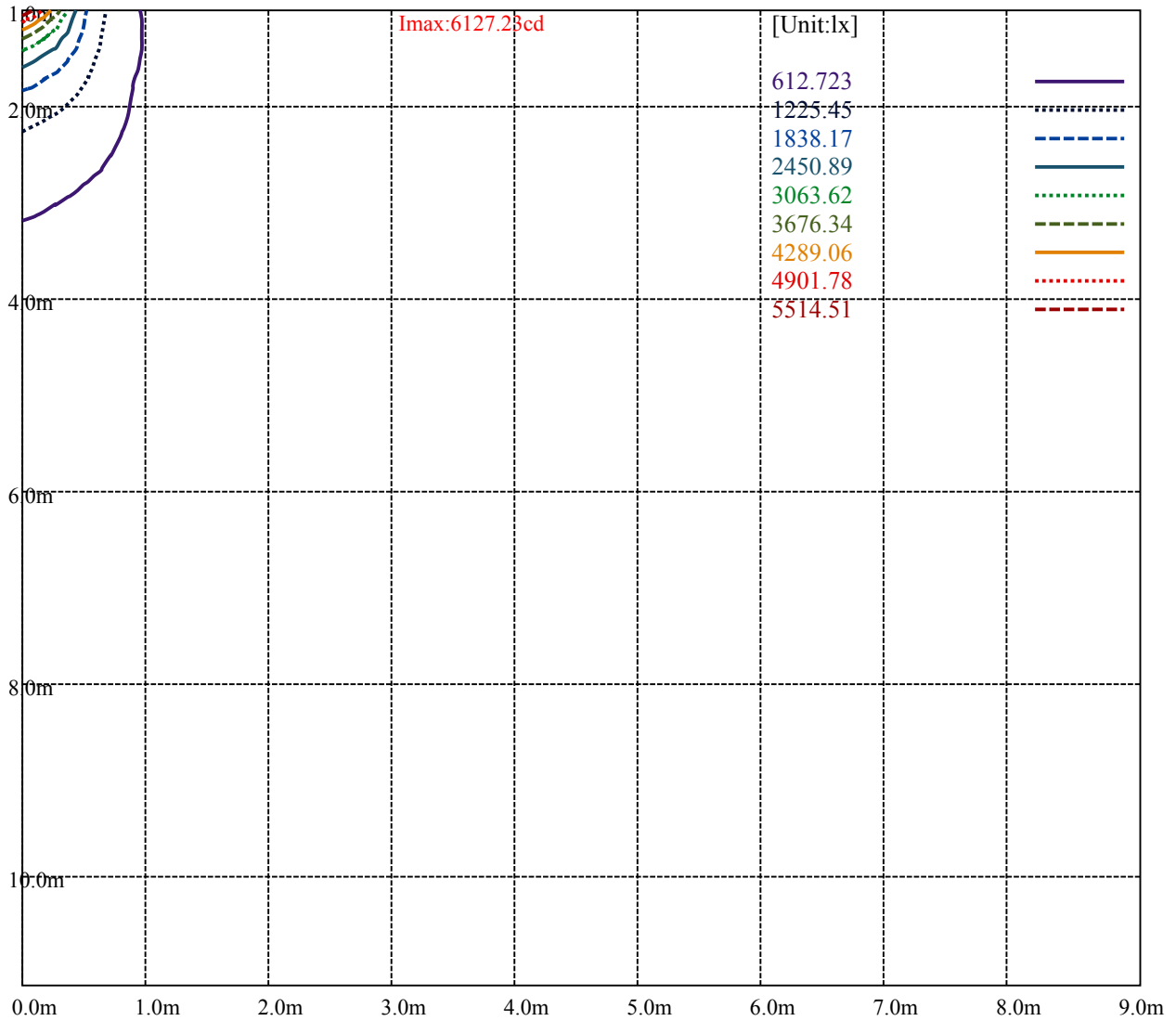
Road

I_{max}:6127.23cd

(10%I _{max}) 612.723	—
(20%I _{max}) 1225.45	·····
(30%I _{max}) 1838.17	- - - - -
(40%I _{max}) 2450.89	—
(50%I _{max}) 3063.62	·····
(60%I _{max}) 3676.34	- - - - -
(70%I _{max}) 4289.06	—
(80%I _{max}) 4901.78	·····
(90%I _{max}) 5514.51	- - - - -



- (10%Emax) 24.12024 ————
- (20%Emax) 48.2404
- (30%Emax) 72.3608 - - - - -
- (40%Emax) 96.4808 —————
- (50%Emax) 120.6012
- (60%Emax) 144.7212 - - - - -
- (70%Emax) 168.8416 —————
- (80%Emax) 192.962
- (90%Emax) 217.082 - - - - -



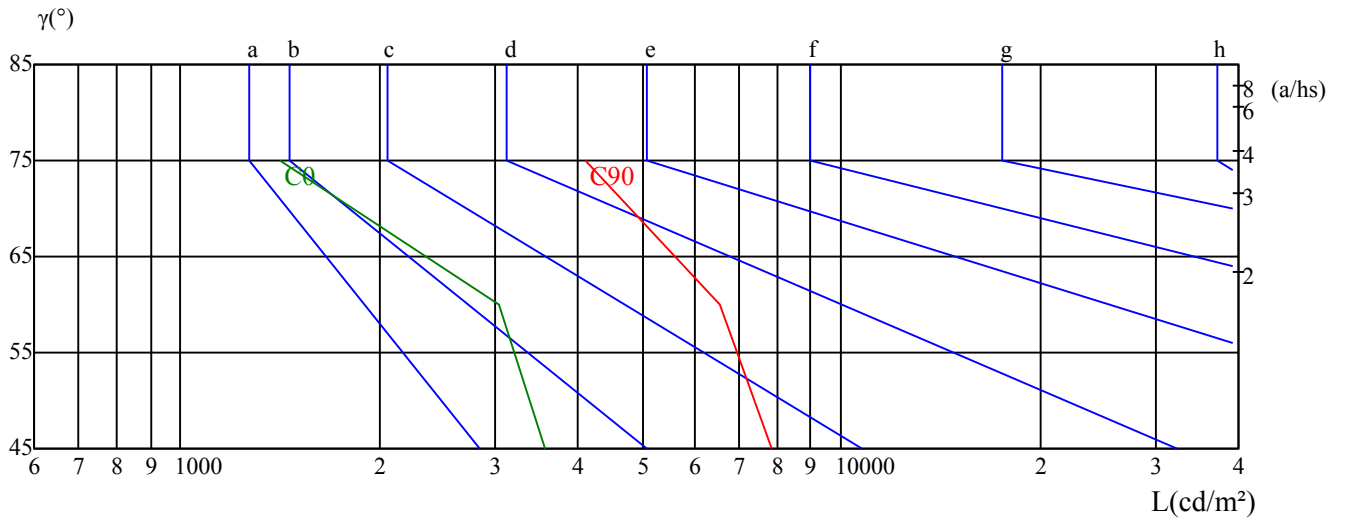
Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	3563	0	0	3028	0	0	1418	0	0
C45	0	0	0	0	0	0	0	0	0
C90	7880	0	0	6564	0	0	4107	0	0

Glare Table

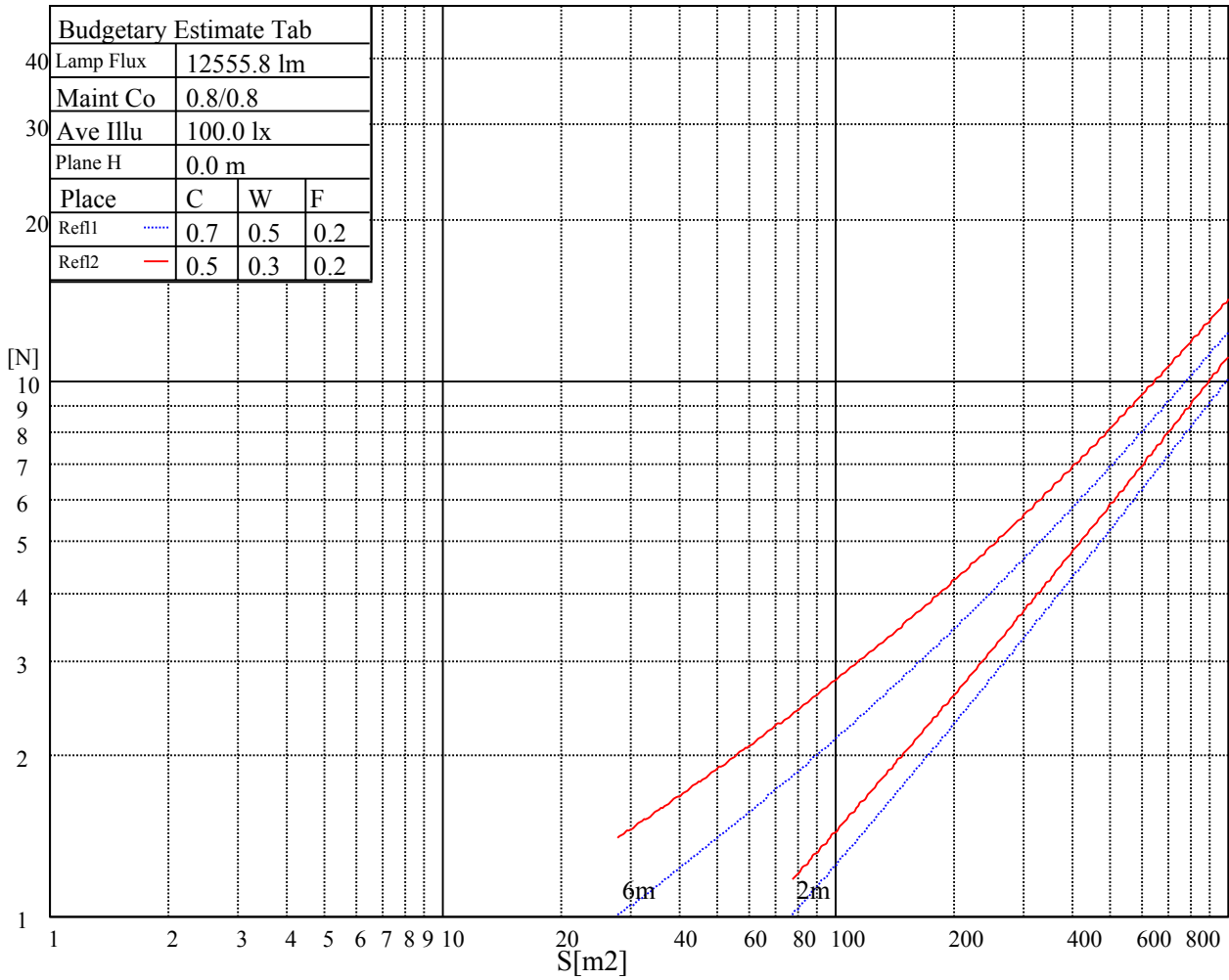
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

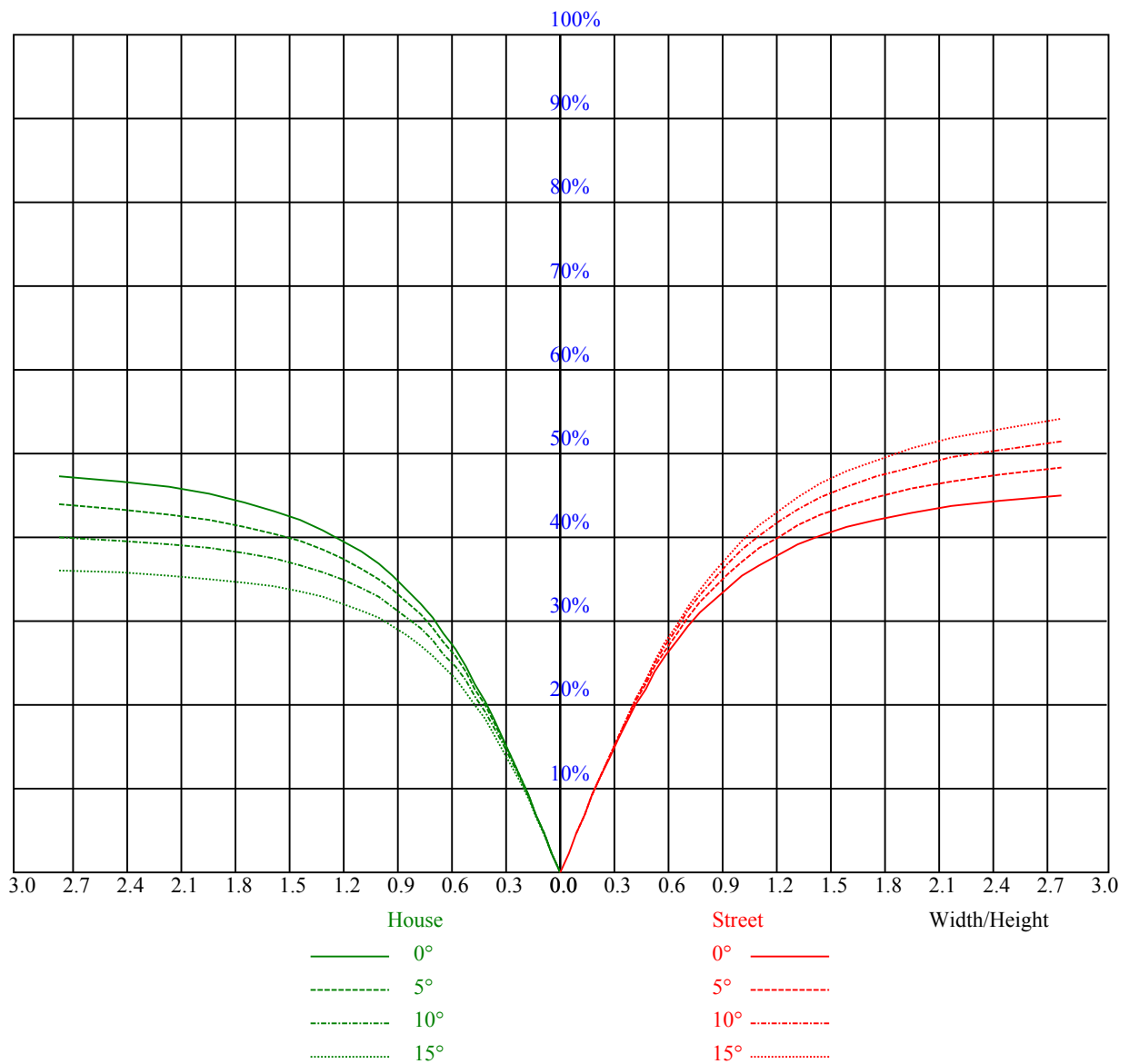


Illuminatin assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	6.3	7.9	6.6	8.1	8.4	8.7	10.2	9.0	10.5	10.8
	3H	7.6	9.0	8.0	9.3	9.7	10.4	11.8	10.7	12.1	12.4
	4H	7.9	9.1	8.3	9.5	9.8	10.9	12.1	11.3	12.4	12.8
	6H	8.2	9.4	8.6	9.8	10.2	11.4	12.6	11.8	13.0	13.4
	8H	8.4	9.6	8.8	9.9	10.3	11.7	12.9	12.1	13.2	13.6
	12H	8.2	9.2	8.7	9.6	10.1	11.6	12.6	12.1	13.0	13.5
4H	2H	6.7	7.9	7.1	8.3	8.7	8.6	9.9	9.1	10.2	10.6
	3H	8.2	9.2	8.7	9.6	10.1	10.5	11.4	10.9	11.9	12.3
	4H	8.8	9.8	9.3	10.2	10.7	11.3	12.3	11.8	12.7	13.1
	6H	9.3	10.3	9.7	10.7	11.1	12.0	13.0	12.5	13.4	13.9
	8H	9.3	9.9	9.8	10.4	11.0	12.1	12.8	12.7	13.3	13.8
	12H	9.4	10.0	9.9	10.6	11.1	12.4	13.0	12.9	13.5	14.1
8H	4H	9.0	9.7	9.6	10.2	10.7	11.3	11.9	11.8	12.4	13.0
	6H	9.6	10.3	10.2	10.8	11.3	12.1	12.8	12.6	13.3	13.8
	8H	9.9	10.5	10.4	11.0	11.6	12.5	13.1	13.0	13.6	14.2
	12H	10.1	10.7	10.6	11.2	11.8	12.8	13.4	13.3	13.9	14.5
12H	4H	9.1	9.7	9.6	10.2	10.8	11.3	12.0	11.9	12.5	13.0
	6H	9.8	10.4	10.3	10.9	11.4	12.2	12.8	12.7	13.3	13.9
	8H	10.0	10.7	10.6	11.2	11.7	12.6	13.2	13.1	13.7	14.3
Variation with the observer position at spacings:											
S = 1.0H	0.3/-0.4					0.2/-0.4					
S = 1.5H	0.7/-0.7					0.7/-0.8					
S = 2.0H	1.0/-0.9					1.5/-1.1					
Standard tables:	BK3					BK2					
Uncorrected UGR	-8.4					-6.4					
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 RHOFC=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	1.01	1.01	1.01	0.98
1	0.96	0.90	0.84	0.94	0.88	0.83	0.89	0.84	0.80	0.84	0.80	0.77	0.80	0.77	0.74	0.72
2	0.83	0.75	0.68	0.81	0.73	0.67	0.77	0.70	0.65	0.73	0.68	0.63	0.70	0.65	0.61	0.59
3	0.72	0.63	0.55	0.71	0.62	0.55	0.67	0.60	0.53	0.64	0.58	0.52	0.61	0.56	0.51	0.48
4	0.63	0.53	0.46	0.62	0.52	0.45	0.59	0.51	0.44	0.56	0.49	0.43	0.54	0.48	0.43	0.40
5	0.56	0.46	0.38	0.54	0.45	0.38	0.52	0.44	0.37	0.50	0.42	0.37	0.48	0.41	0.36	0.34
6	0.49	0.39	0.32	0.48	0.39	0.32	0.46	0.38	0.32	0.44	0.37	0.31	0.42	0.36	0.31	0.28
7	0.44	0.34	0.28	0.43	0.34	0.28	0.41	0.33	0.27	0.40	0.32	0.27	0.38	0.32	0.27	0.24
8	0.40	0.31	0.24	0.39	0.30	0.24	0.37	0.29	0.24	0.36	0.29	0.23	0.35	0.28	0.23	0.21
9	0.36	0.27	0.21	0.35	0.27	0.21	0.34	0.26	0.21	0.33	0.26	0.21	0.32	0.25	0.20	0.18
10	0.33	0.25	0.19	0.32	0.24	0.19	0.31	0.24	0.19	0.30	0.23	0.18	0.29	0.23	0.18	0.16



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	6127.23	4714.74	2831.80	1965.10	1380.45	466.82	30.23	25.68	28.86
30.0	6053.37	4797.70	2997.71	2019.31	1276.13	581.81	28.75	27.05	29.89
60.0	6006.78	5157.92	3770.43	2165.67	1220.22	595.11	28.98	27.84	30.80
90.0	6032.91	5727.23	4937.47	3761.34	2395.44	935.22	29.77	28.30	30.34
120.0	6068.14	5604.51	4174.97	2599.98	1501.58	710.11	27.84	26.70	29.43
150.0	6092.00	5179.51	3477.25	2429.53	1530.67	586.36	26.25	25.11	27.61
180.0	6127.23	4768.15	3180.66	2259.53	1638.06	452.04	25.00	24.77	27.84
210.0	6062.46	5327.24	3618.16	2530.67	1582.26	684.77	39.32	21.48	23.18
240.0	6006.78	5772.69	4465.88	2892.03	1694.31	838.63	65.68	22.61	24.43
270.0	6032.91	5795.42	5059.06	3944.29	2582.94	1099.08	34.09	25.11	26.14
300.0	6068.14	5402.24	4118.15	2511.35	1422.72	706.81	78.75	24.55	26.70
330.0	6092.00	4942.01	3163.62	2093.96	1286.13	600.45	62.05	24.09	26.70
360.0	6127.23	4714.74	2831.80	1965.10	1380.45	466.82	30.23	25.68	28.86

C/γ(°)	135.0	150.0	165.0	180.0
0.0	33.30	36.48	38.30	38.75
30.0	33.98	37.73	39.66	39.77
60.0	34.77	38.18	40.34	40.45
90.0	33.98	37.84	40.34	40.80
120.0	33.52	37.27	40.00	40.68
150.0	31.93	36.02	38.64	39.20
180.0	32.39	35.68	37.84	38.75
210.0	27.61	32.95	37.50	39.77
240.0	28.41	33.30	37.61	40.45
270.0	29.55	33.98	38.07	40.80
300.0	30.57	34.66	38.30	40.68
330.0	30.80	35.23	38.07	39.20
360.0	33.30	36.48	38.30	38.75