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Client: P.Q.L., Inc.

LumCAT:

Luminaire: STR-32-X-35K-15-HH

Report No:

Ballast type:

Test No:

LampCAT:

Lamp flux(lm)

Number of Lamps: 1

Length(mm): -75

Phm Type: C

Voltage(V): 211.700

Current(A): 0.164

Power (W): 33.080

PF: 0.948

Width(mm): -75

Height(mm): 0

### Photometric Results

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Lumens(lm): 2617.29, Luminous Efficacy(lm/W): 79.12

Central intensity(cd): 0.000, Maximum intensity(cd): 25600.790

Angle of maximum intensity: C=0.0  $\gamma$ =1.0

Beam Angle(50%Imax): [C0/180]Total=17.2

[C90/270]Total=17.4

Field angle(10%Imax): [C0/180]Total=29.0

[C90/270]Total=30.6

Maximum s/h(1/2): C0\_180=0.30 C90\_270=0.30

Maximum s/h(1/4): C0\_180=0.28 C90\_270=0.29

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 0.000%

## Zonal flux distribution table

Appendix Page: 2 Total:14

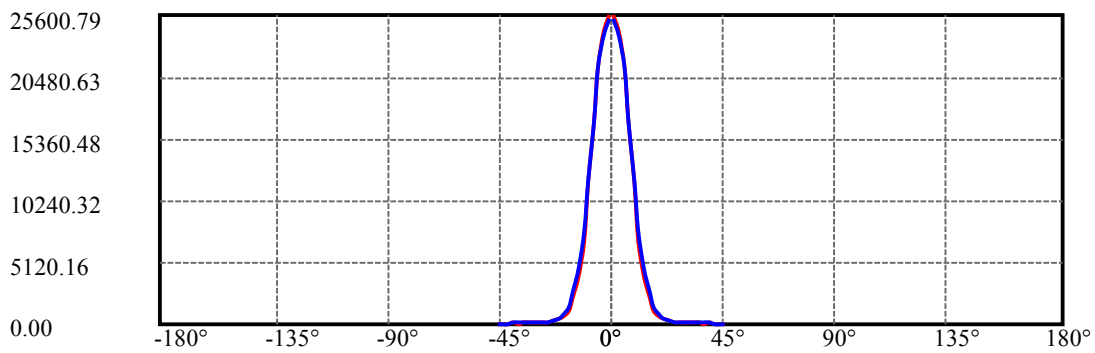
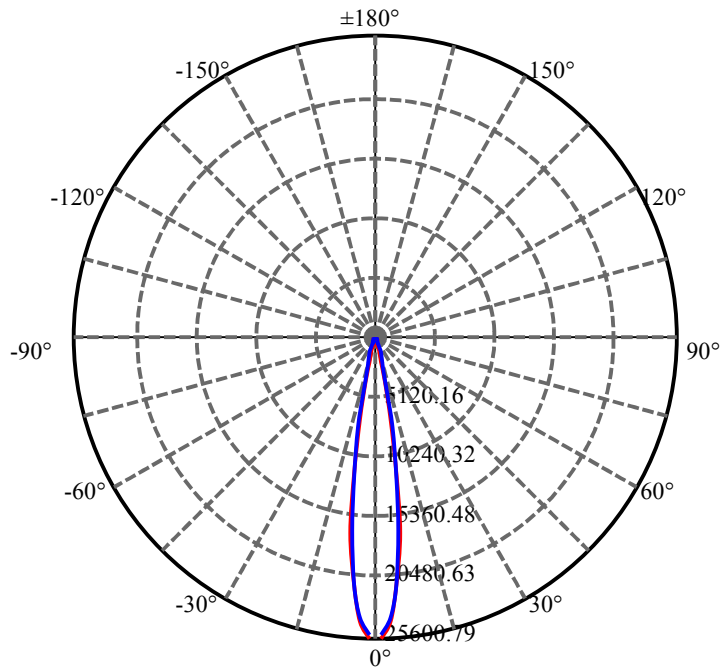
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
1.0	25438.488	0.000	0	0.00%	0.00%
3.0	24013.029	189.249	189.249	7.23%	7.23%
5.0	21126.832	345.287	534.536	13.19%	20.42%
7.0	16702.268	433.607	968.143	16.57%	36.99%
9.0	11833.131	435.486	1403.629	16.64%	53.63%
11.0	7443.852	367.066	1770.695	14.02%	67.65%
13.0	4285.969	267.427	2038.122	10.22%	77.87%
15.0	2433.580	178.259	2216.381	6.81%	84.68%
17.0	1293.920	112.666	2329.047	4.30%	88.99%
19.0	718.797	68.203	2397.249	2.61%	91.59%
21.0	415.359	42.536	2439.785	1.63%	93.22%
23.0	288.338	28.907	2468.692	1.10%	94.32%
25.0	207.185	22.101	2490.793	0.84%	95.17%
27.0	161.317	17.714	2508.507	0.68%	95.84%
29.0	133.090	15.156	2523.663	0.58%	96.42%
31.0	126.033	14.207	2537.87	0.54%	96.97%
33.0	111.920	13.827	2551.698	0.53%	97.49%
35.0	97.806	12.860	2564.558	0.49%	97.99%
37.0	83.693	11.698	2576.256	0.45%	98.43%
39.0	87.221	11.539	2587.795	0.44%	98.87%
41.0	66.051	10.804	2598.598	0.41%	99.29%
43.0	62.523	9.434	2608.033	0.36%	99.65%
45.0	58.994	9.256	2617.289	0.35%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixt
0-30	2523.66	96.42%
0-40	2587.79	98.87%
0-60	2608.03	99.65%
0-90	2608.03	99.65%
0-120	2608.03	99.65%
0-180	2617.29	100.00%
60-90	0.00	0.00%
90-120	0.00	0.00%
90-130	0.00	0.00%
90-150	0.00	0.00%
90-180	0.00	0.00%
0-13.63	2093.83	80.00%

ZONAL LUMEN SUMMARY

0-10	1403.63
10-20	993.62
20-30	126.41
30-40	64.13
40-50	20.24
50-60	0.00
60-70	0.00
70-80	0.00
80-90	0.00
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/C180: —

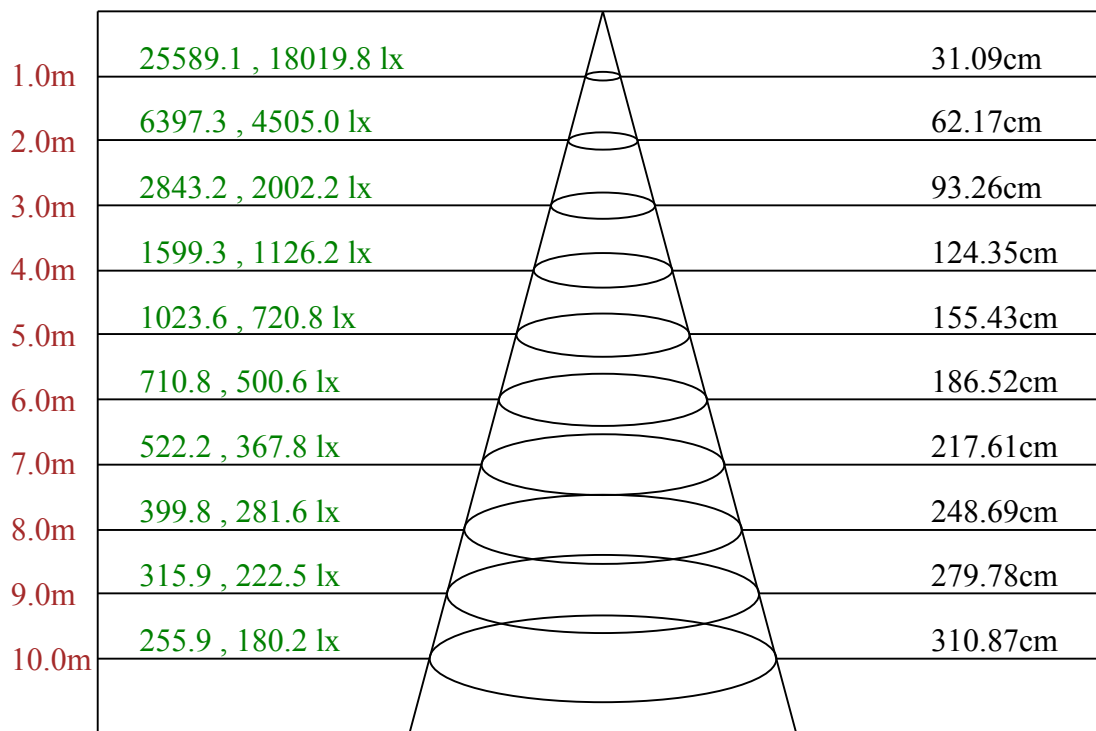
C90/C270: —

Field angle(10%Imax):C0/180Left:15.5 Right:13.5

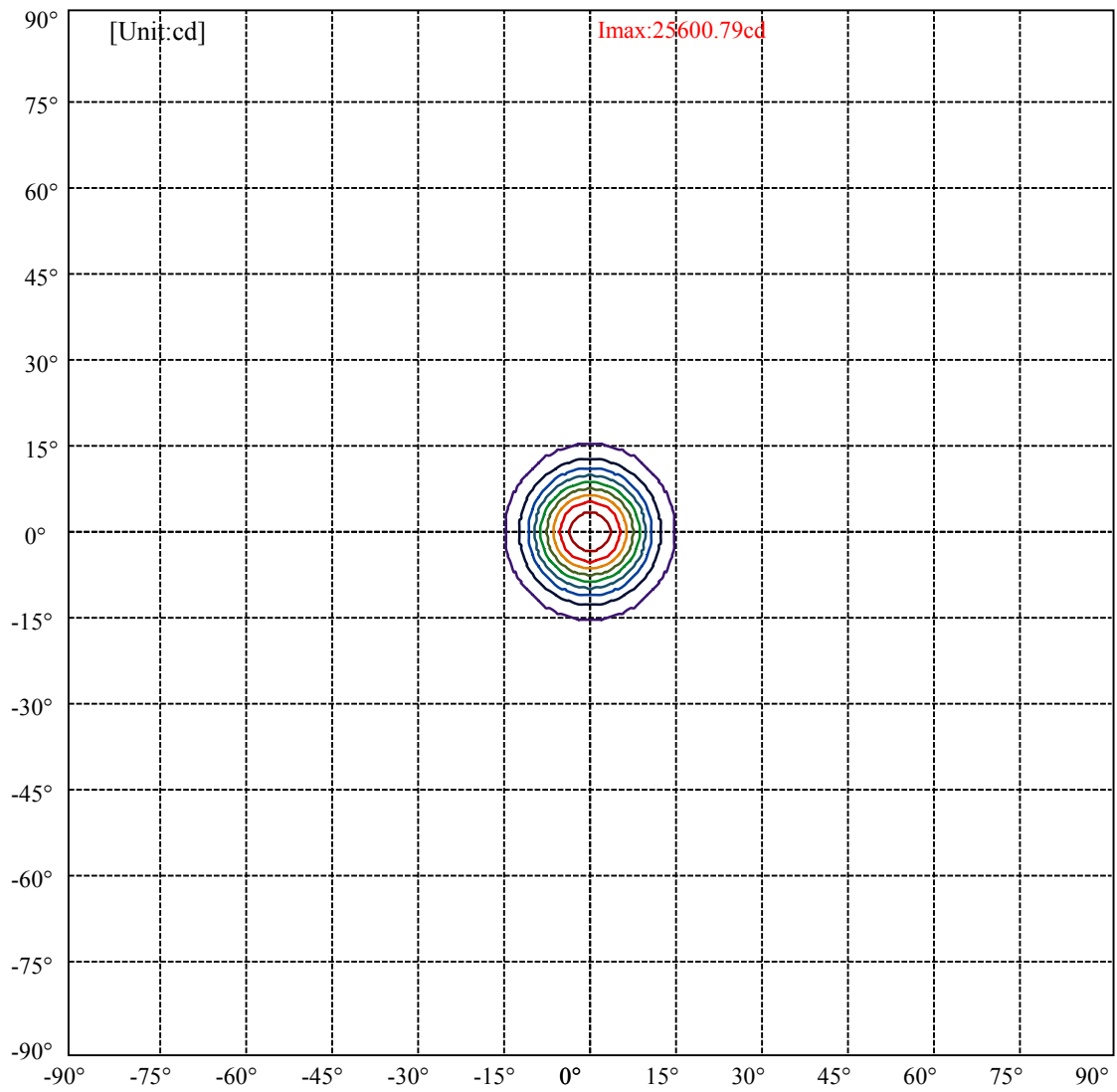
:C90/270Left:16.3 Right:14.3

Beam Angle(50%Imax):C0/180Left:9.6 Right:7.6

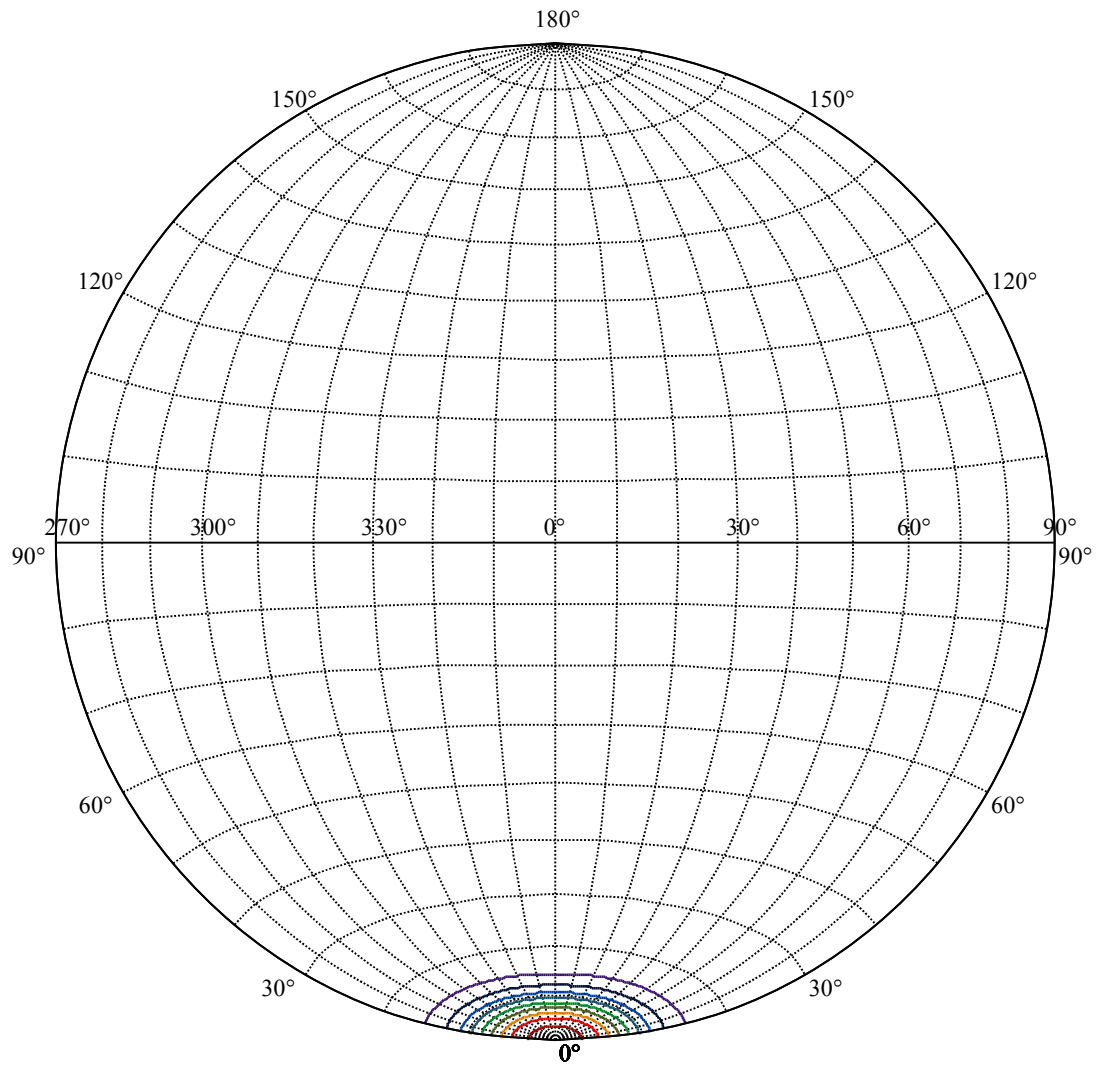
:C90/270Left:9.7 Right:7.7



Max , Ave      Beam angle of C0 plane 17.67



(10%Imax) 2601.01	—
(20%Imax) 5202.02	—
(30%Imax) 7803.02	—
(40%Imax) 10404	—
(50%Imax) 13005	—
(60%Imax) 15606	—
(70%Imax) 18207.1	—
(80%Imax) 20808.1	—
(90%Imax) 23409.1	—



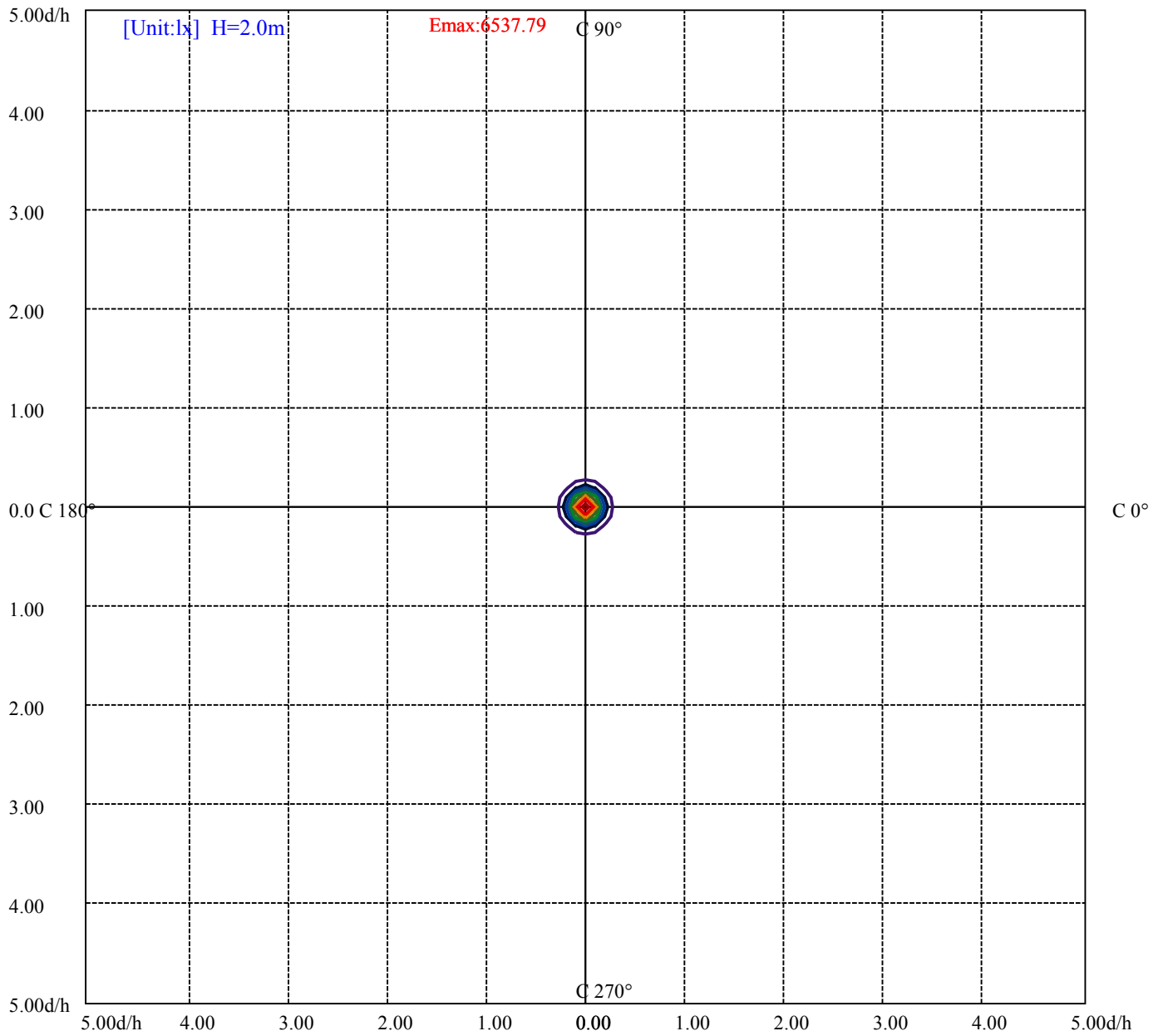
House

[Unit:cd]

Road

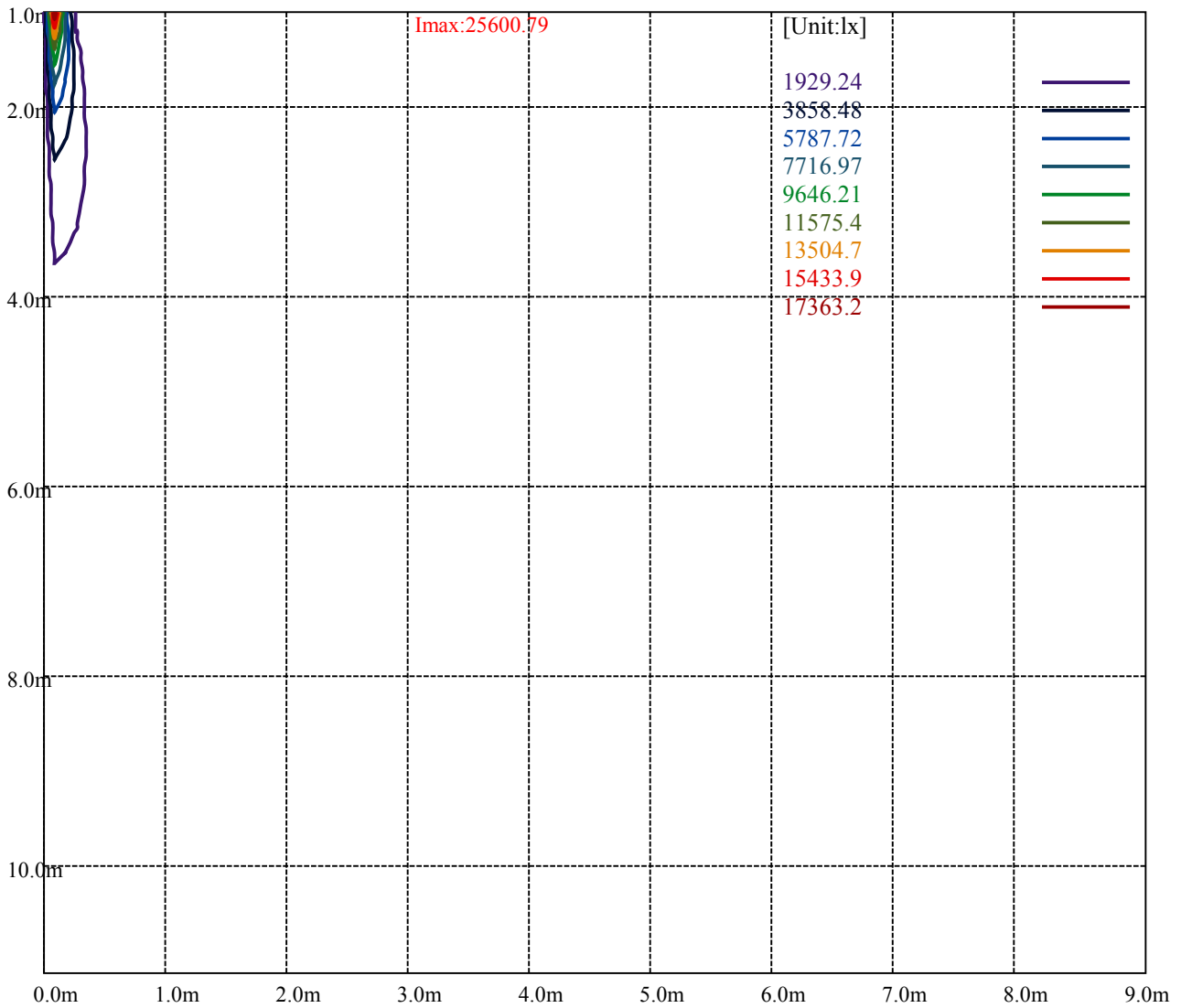
**Imax:25600.79**

(10%Imax)	2629.24	—
(20%Imax)	5258.47	—
(30%Imax)	7887.71	—
(40%Imax)	10516.9	—
(50%Imax)	13146.2	—
(60%Imax)	15775.4	—
(70%Imax)	18404.6	—
(80%Imax)	21033.9	—
(90%Imax)	23663.1	—



- (10%Emax) 653.7775
- (20%Emax) 1307.555
- (30%Emax) 1961.333
- (40%Emax) 2615.1
- (50%Emax) 3268.875
- (60%Emax) 3922.675
- (70%Emax) 4576.45
- (80%Emax) 5230.225
- (90%Emax) 5884





Luminance Limiting Curve(luminous side)

Luminance Table

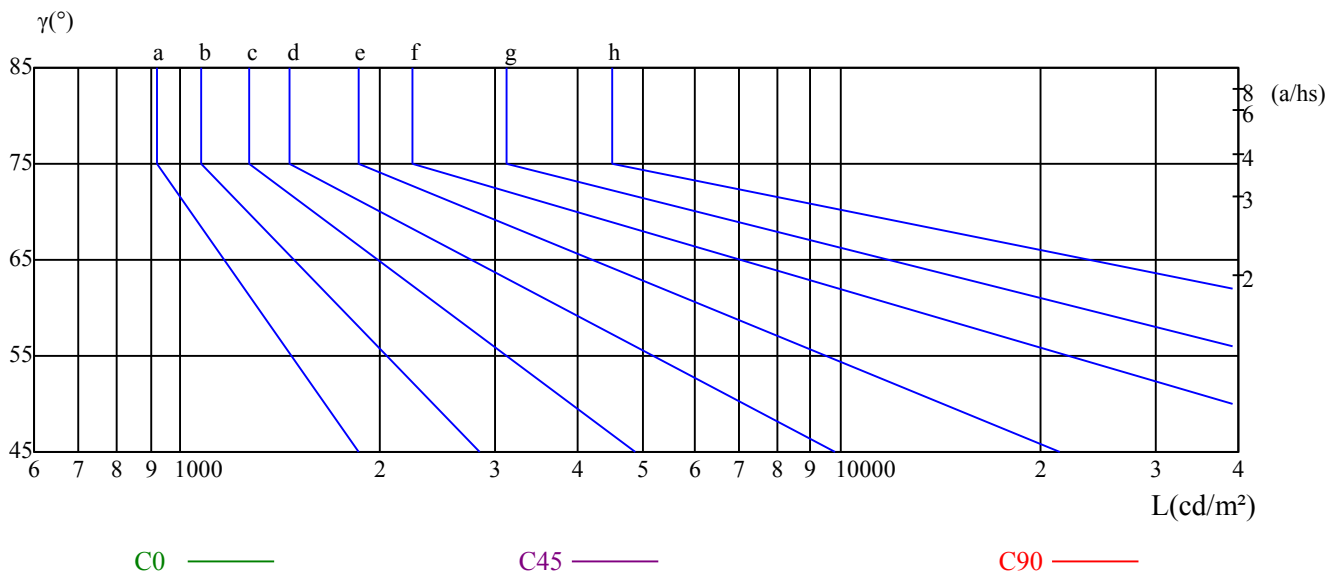
$\gamma$	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

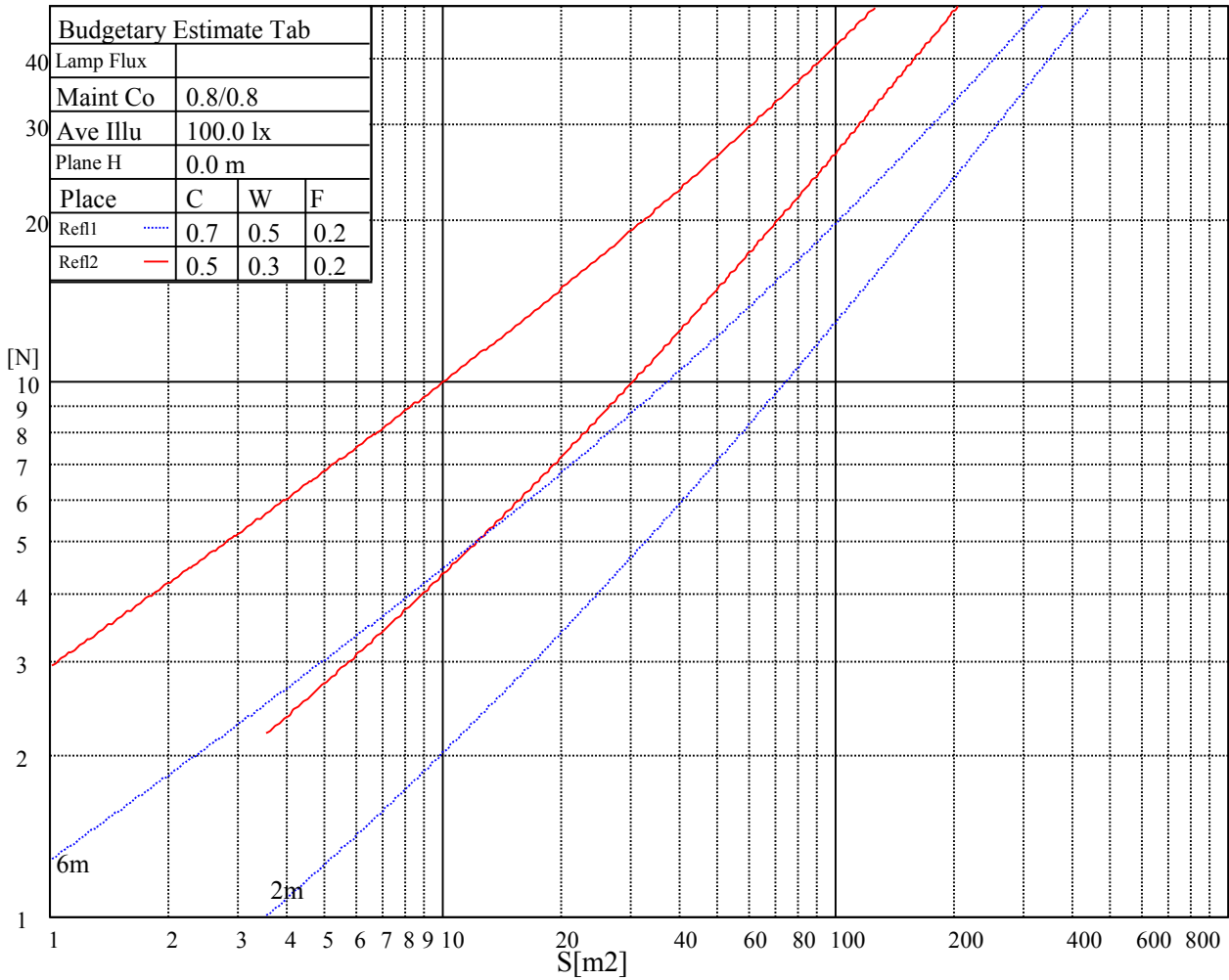
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

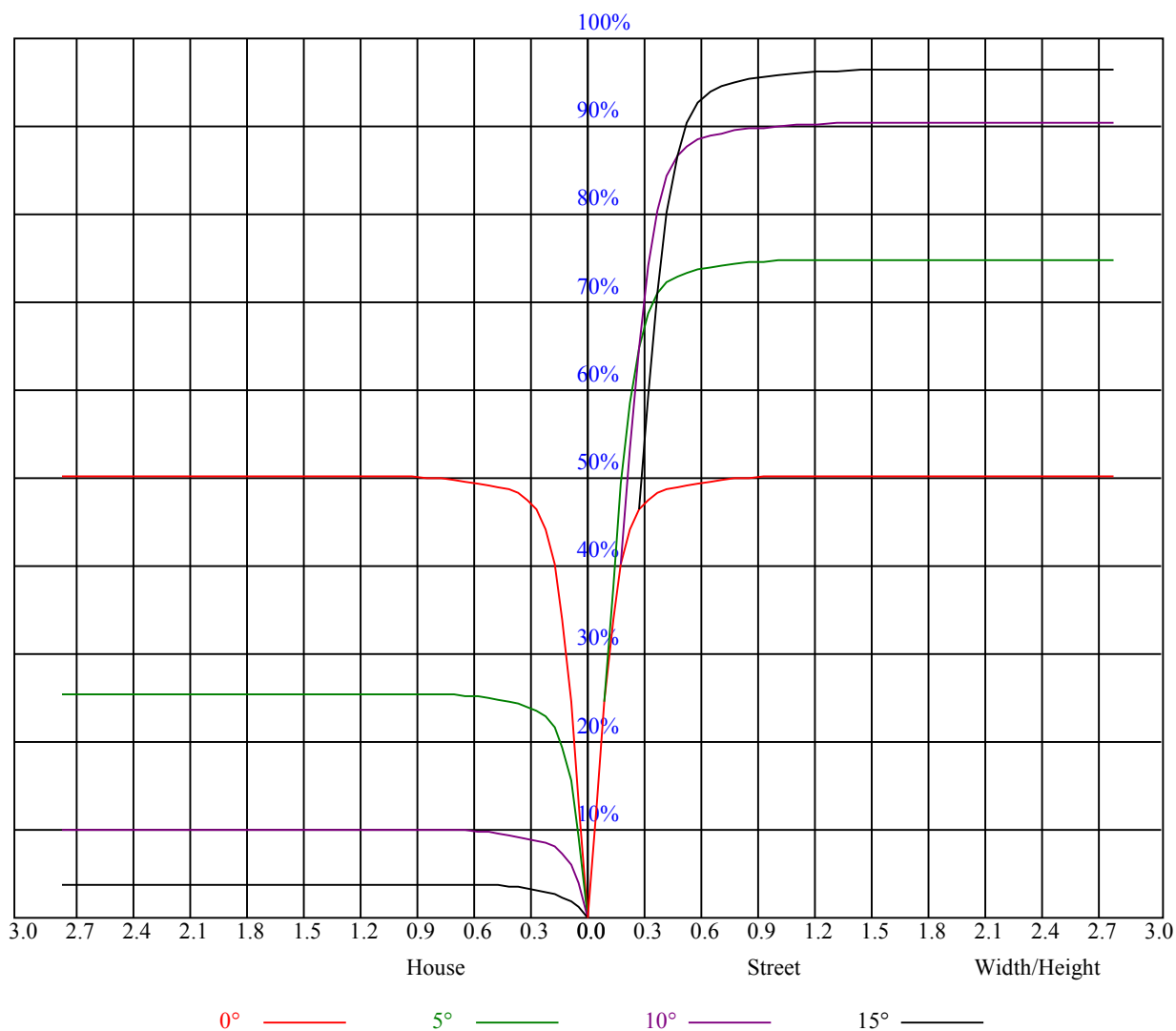
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	0.46	0.26	0.08	0.43	0.24	0.08	0.37	0.21	0.07	0.31	0.18	0.06	0.26	0.15	0.05	0.00
2	0.40	0.22	0.07	0.38	0.21	0.06	0.33	0.18	0.06	0.28	0.16	0.05	0.24	0.14	0.04	0.00
3	0.36	0.19	0.06	0.34	0.18	0.05	0.30	0.16	0.05	0.26	0.14	0.04	0.23	0.13	0.04	0.00
4	0.32	0.17	0.05	0.30	0.16	0.05	0.27	0.14	0.04	0.24	0.13	0.04	0.21	0.12	0.04	0.00
5	0.29	0.15	0.04	0.27	0.14	0.04	0.25	0.13	0.04	0.22	0.12	0.03	0.20	0.11	0.03	0.00
6	0.26	0.13	0.04	0.25	0.13	0.04	0.23	0.12	0.03	0.21	0.11	0.03	0.19	0.10	0.03	0.00
7	0.24	0.12	0.03	0.23	0.11	0.03	0.21	0.11	0.03	0.19	0.10	0.03	0.18	0.09	0.03	0.00
8	0.22	0.11	0.03	0.21	0.10	0.03	0.20	0.10	0.03	0.18	0.09	0.03	0.17	0.09	0.03	0.00
9	0.20	0.10	0.03	0.20	0.10	0.03	0.18	0.09	0.03	0.17	0.09	0.02	0.16	0.08	0.02	0.00
10	0.19	0.09	0.03	0.18	0.09	0.02	0.17	0.08	0.02	0.16	0.08	0.02	0.15	0.08	0.02	0.00



Intensity data(cd)

C/ $\gamma$ ( $^{\circ}$ )	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0
0.0	25417.32	23695.48	20054.21	15297.98	10555.87	5870.20	3400.35	1805.53	1015.18
90.0	25854.83	25854.83	24443.49	21338.53	16173.01	11162.74	6886.37	4063.68	2116.03
180.0	25784.27	24739.87	22241.79	18191.24	12828.13	8255.37	4458.86	2497.09	1311.56
270.0	24697.53	21761.94	17767.83	11981.32	7775.52	4487.09	2398.30	1368.02	732.91
360.0	25417.32	23695.48	20054.21	15297.98	10555.87	5870.20	3400.35	1805.53	1015.18
C/ $\gamma$ ( $^{\circ}$ )	19.0	21.0	23.0	25.0	27.0	29.0	31.0	33.0	35.0
0.0	535.32	380.07	267.17	196.60	140.15	126.03	111.92	111.92	97.81
90.0	1170.43	549.44	365.96	253.05	196.60	168.37	140.15	126.03	111.92
180.0	732.91	436.53	295.39	210.71	168.37	126.03	126.03	111.92	97.81
270.0	436.53	295.39	224.83	168.37	140.15	111.92	126.03	97.81	83.69
360.0	535.32	380.07	267.17	196.60	140.15	126.03	111.92	111.92	97.81
C/ $\gamma$ ( $^{\circ}$ )	37.0	39.0	41.0	43.0	45.0				
0.0	69.58	83.69	69.58	55.47	55.47				
90.0	97.81	83.69	69.58	69.58	83.69				
180.0	83.69	83.69	55.47	55.47	41.35				
270.0	83.69	97.81	69.58	69.58	55.47				
360.0	69.58	83.69	69.58	55.47	55.47				