
Nata

LumCAT: 3-1547-A3
Luminaire: TE 2213130-1+92.76.365.00
Report No: GC2015082201
Test No: NT-0010
LampCAT: LUXEON CoB 1208
Lamp flux(lm): 3121.0
Number of Lamps: 1
Length(mm): 84
Phm Type: C

Voltage(V): 36.1000
Current(A): 0.8600
Power (W): 32.0900
PF: 0.0000
Ballast type: DC
Width(mm): 84
Height(mm): 0

Photometric Results

Lumens(lm): 2766.11
Efficiency(%): 88.63%
Lumens(lm)/Power(W): 86.20
Central intensity(cd): 5558.532
Maximum intensity(cd): 5558.532
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=38.0
 [C90/270]Total=38.0
Field angle(10%Imax): [C0/180]Total=70.1
 [C90/270]Total=70.1
Maximum s/h(1/2): C0_180=0.63 C90_270=0.63
Maximum s/h(1/4): C0_180=0.62 C90_270=0.62
Up flux rate of lamp(%): 1.77%
Down flux rate of lamp(%): 86.86%
Up flux rate of LUM(%): 1.99%
Down flux rate of LUM(%): 98.01%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 96.589%

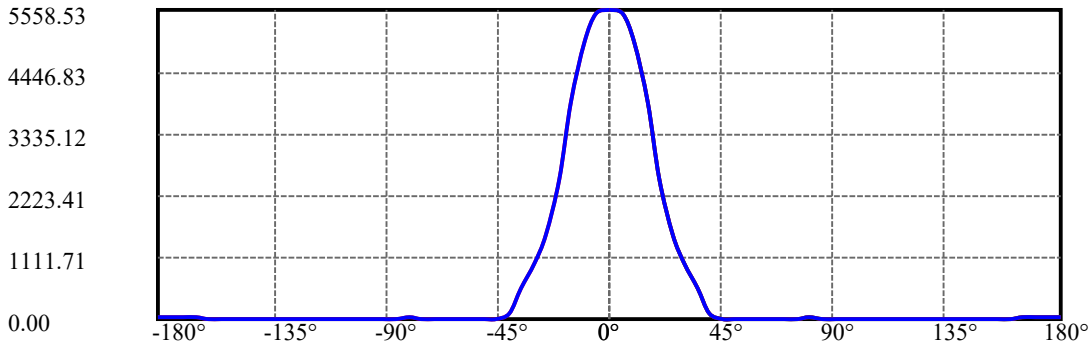
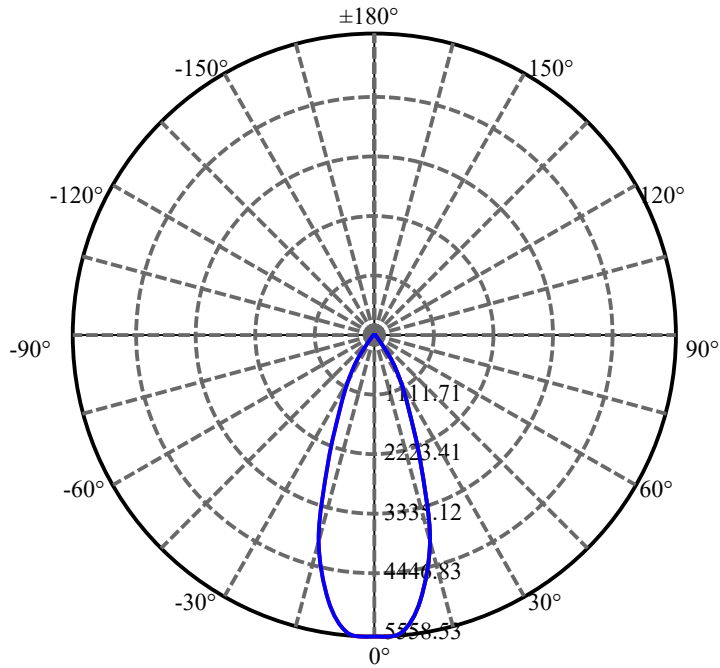
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5558.532	0.000	0	.000%	.000%
5.0	5504.974	132.261	132.261	4.238%	4.781%
10.0	4960.493	374.383	506.644	11.996%	18.316%
15.0	3902.750	525.762	1032.405	16.846%	37.323%
20.0	2503.375	527.955	1560.36	16.916%	56.410%
25.0	1512.899	421.233	1981.593	13.497%	71.638%
30.0	1005.275	318.677	2300.27	10.211%	83.159%
35.0	562.679	230.892	2531.162	7.398%	91.506%
40.0	92.626	109.333	2640.495	3.503%	95.459%
45.0	10.854	19.160	2659.655	.614%	96.151%
50.0	9.288	4.070	2663.725	.130%	96.299%
55.0	8.938	3.963	2667.688	.127%	96.442%
60.0	8.686	4.074	2671.762	.131%	96.589%
65.0	8.462	4.169	2675.931	.134%	96.740%
70.0	8.393	4.268	2680.199	.137%	96.894%
75.0	12.883	5.561	2685.76	.178%	97.095%
80.0	27.626	10.839	2696.598	.347%	97.487%
85.0	8.714	9.874	2706.473	.316%	97.844%
90.0	7.819	4.527	2711	.145%	98.008%
95.0	7.120	4.090	2715.09	.131%	98.156%
100.0	7.959	4.097	2719.187	.131%	98.304%
105.0	10.854	5.034	2724.221	.161%	98.486%
110.0	8.393	5.031	2729.252	.161%	98.667%
115.0	7.036	3.907	2733.159	.125%	98.809%
120.0	7.022	3.417	2736.576	.109%	98.932%
125.0	7.050	3.253	2739.829	.104%	99.050%
130.0	7.106	3.078	2742.907	.099%	99.161%
135.0	7.204	2.891	2745.798	.093%	99.266%
140.0	7.302	2.686	2748.484	.086%	99.363%
145.0	7.875	2.532	2751.016	.081%	99.454%
150.0	9.637	2.579	2753.595	.083%	99.548%
155.0	12.281	2.774	2756.368	.089%	99.648%
160.0	15.107	2.872	2759.241	.092%	99.752%
165.0	17.624	2.697	2761.938	.086%	99.849%
170.0	19.723	2.215	2764.154	.071%	99.929%
175.0	20.883	1.453	2765.606	.047%	99.982%
180.0	21.303	0.504	2766.111	.016%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2300.27	73.70%	83.16%
0-40	2640.49	84.60%	95.46%
0-60	2671.76	85.61%	96.59%
0-90	2711.00	86.86%	98.01%
0-120	2736.58	87.68%	98.93%
0-180	2766.11	88.63%	100.00%
60-90	43.31	1.39%	1.57%
90-120	30.10	0.96%	1.09%
90-130	36.43	1.17%	1.32%
90-150	47.12	1.51%	1.70%
90-180	59.13	1.89%	2.14%
0-28.63	2212.89	70.90%	80.00%

ZONAL LUMEN SUMMARY

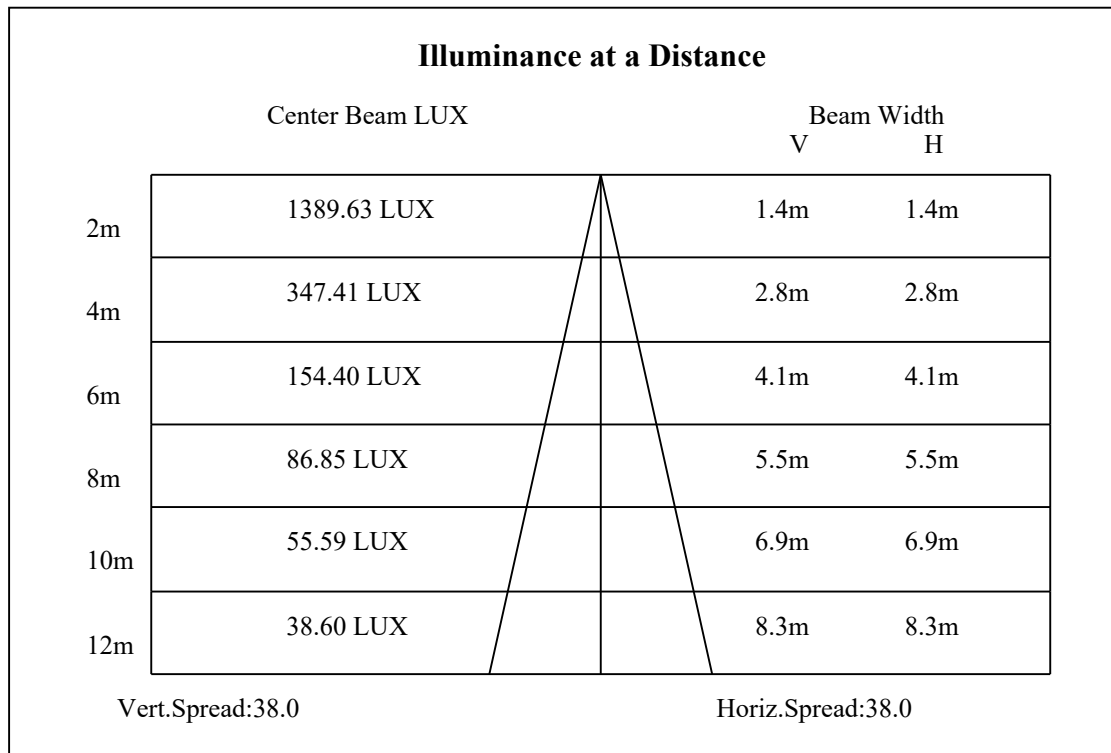
0-10	506.64
10-20	1053.72
20-30	739.91
30-40	340.22
40-50	23.23
50-60	8.04
60-70	8.44
70-80	16.40
80-90	14.40
90-100	8.19
100-110	10.06
110-120	7.32
120-130	6.33
130-140	5.58
140-150	5.11
150-160	5.65
160-170	4.91
170-180	1.45

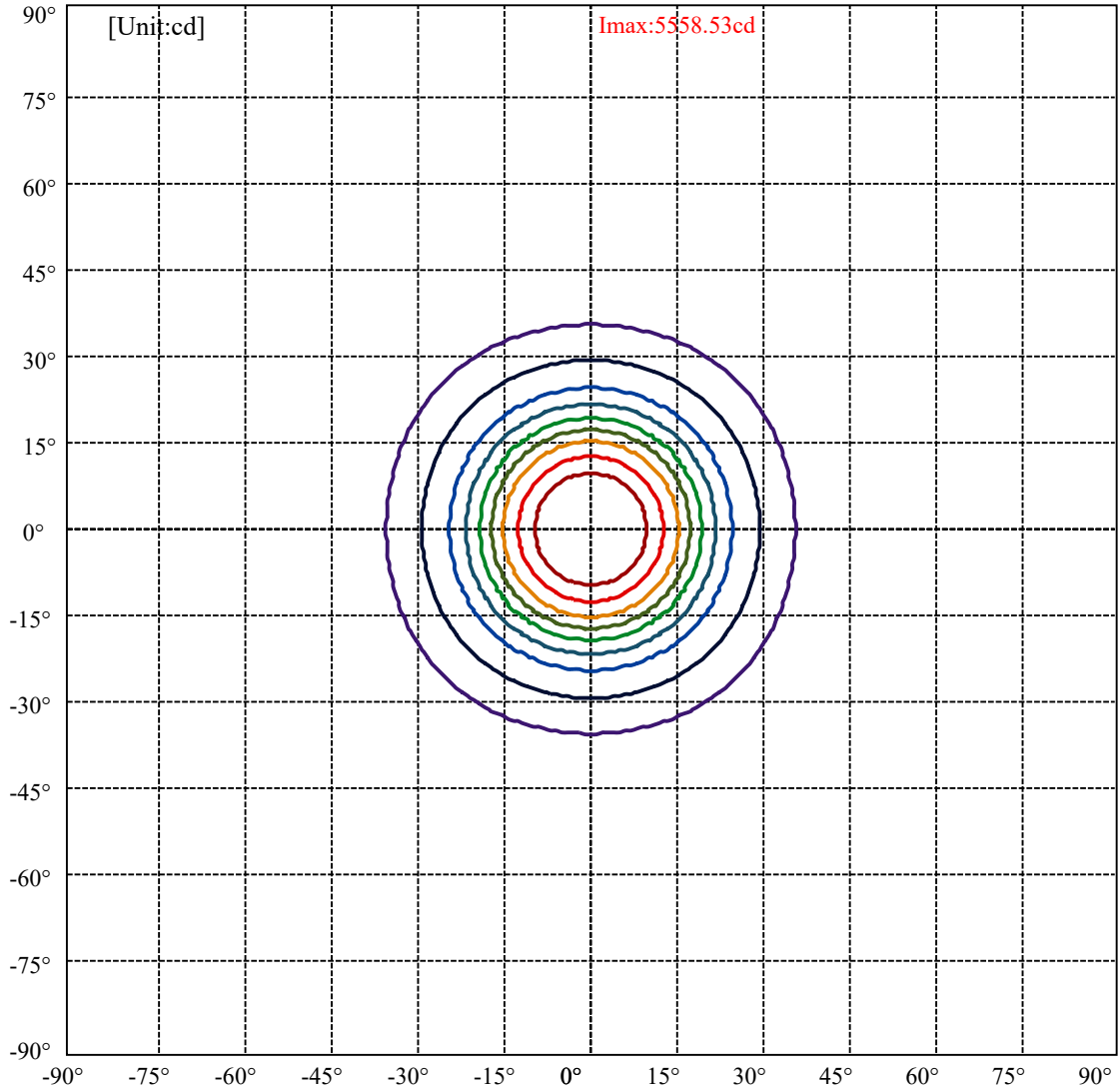


C0(Max): —————
C0/C180: —————
C90/C270: —————

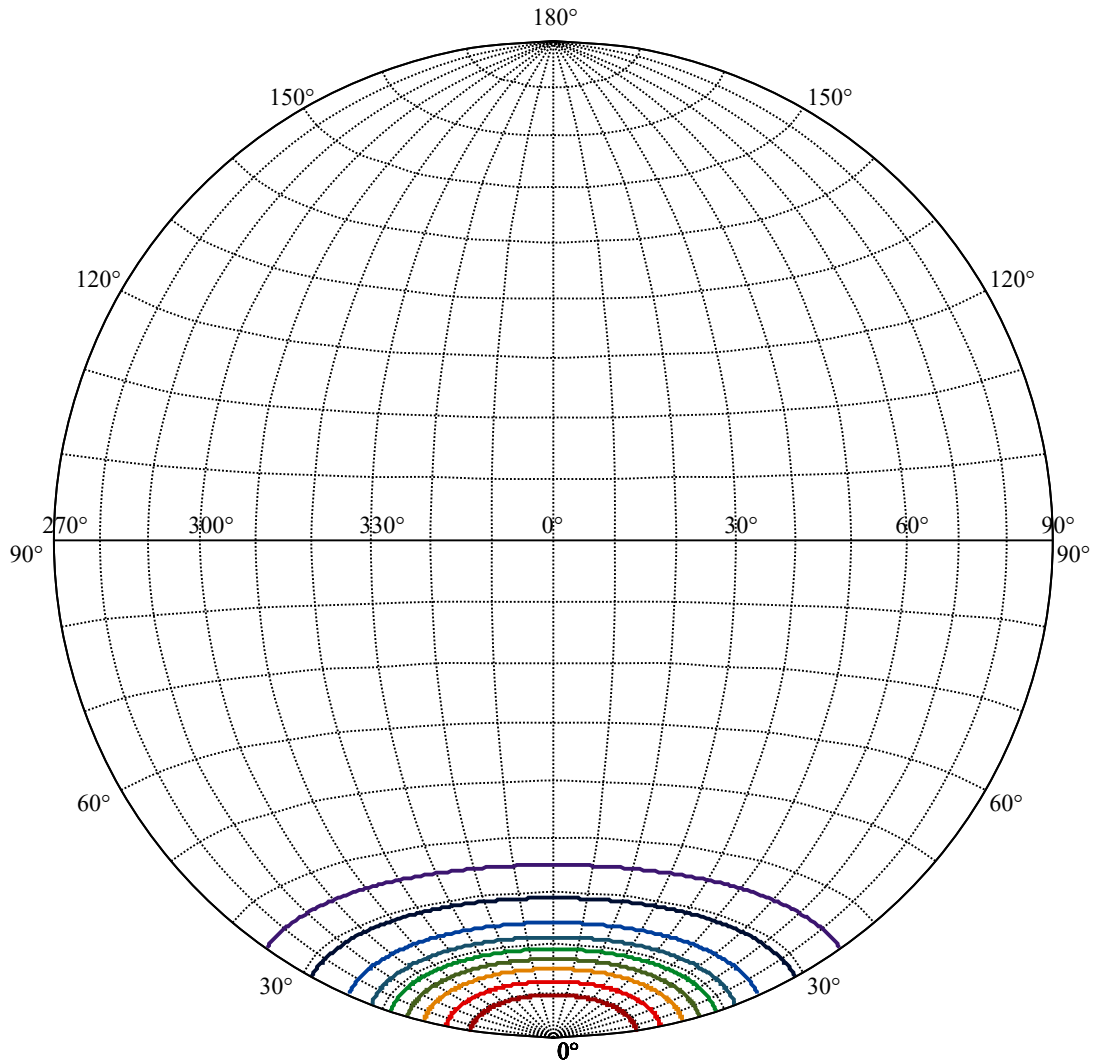
Field angle(10%Imax):C0/180Left:35.1 Right:35.1
:C90/270Left:35.1 Right:35.1

Beam Angle(50%Imax):C0/180Left:19.0 Right:19.0
:C90/270Left:19.0 Right:19.0





(10%Imax) 555.853	—
(20%Imax) 1111.71	—
(30%Imax) 1667.56	—
(40%Imax) 2223.41	—
(50%Imax) 2779.27	—
(60%Imax) 3335.12	—
(70%Imax) 3890.97	—
(80%Imax) 4446.83	—
(90%Imax) 5002.68	—



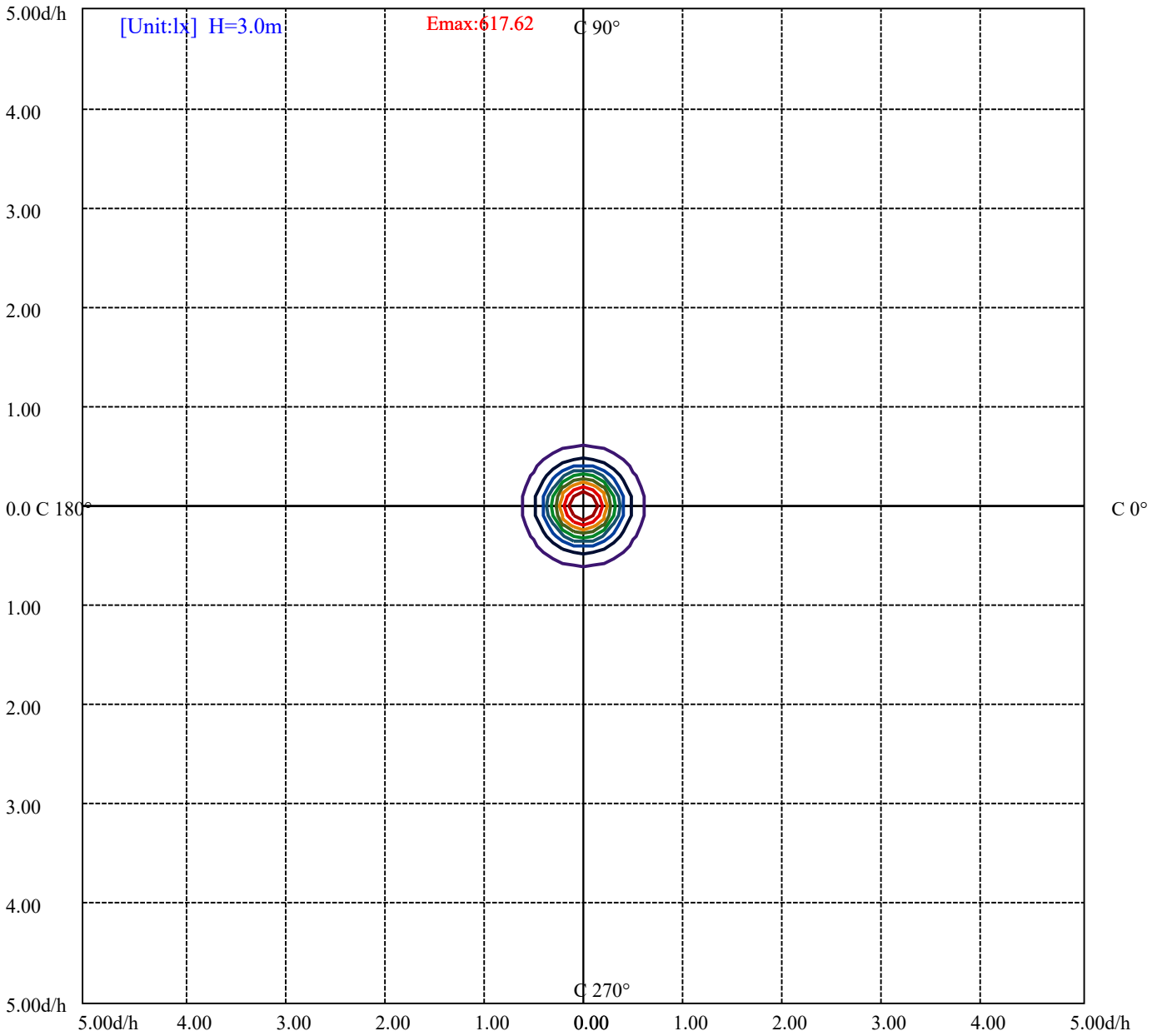
House

[Unit:cd]

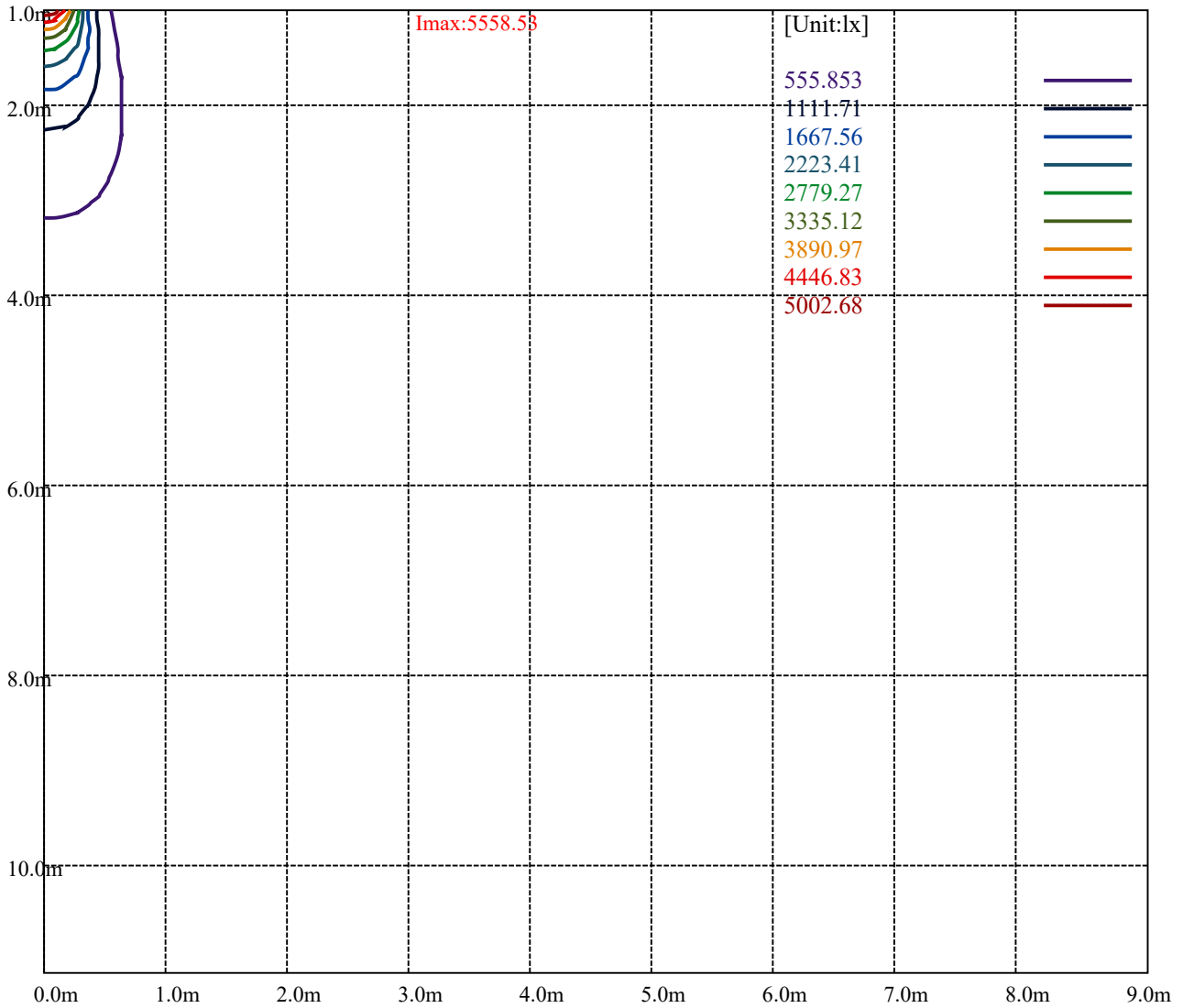
Road

Imax:5558.53

(10%Imax)	555.853	—
(20%Imax)	1111.71	—
(30%Imax)	1667.56	—
(40%Imax)	2223.41	—
(50%Imax)	2779.27	—
(60%Imax)	3335.12	—
(70%Imax)	3890.97	—
(80%Imax)	4446.83	—
(90%Imax)	5002.68	—



- (10%Emax) 61.76145
- (20%Emax) 123.5233
- (30%Emax) 185.2845
- (40%Emax) 247.0455
- (50%Emax) 308.8078
- (60%Emax) 370.5689
- (70%Emax) 432.33
- (80%Emax) 494.0911
- (90%Emax) 555.8533



Luminance Table

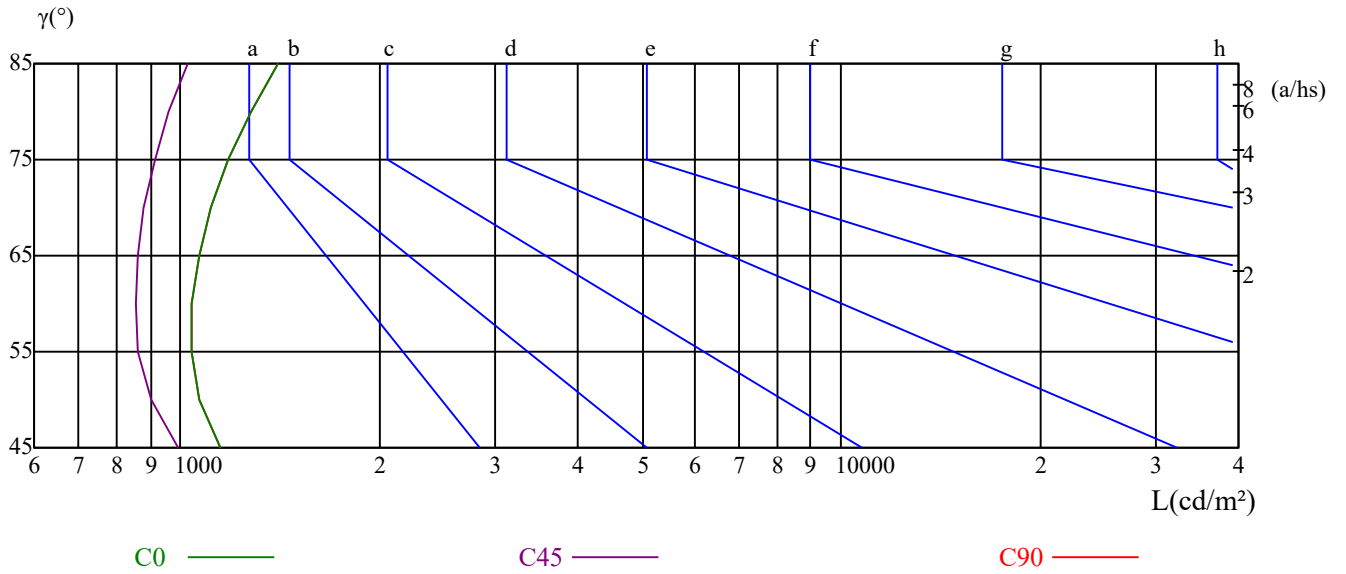
γ	45	50	55	60	65	70	75	80	85
C0	1152	1064	1038	1041	1067	1114	1183	1276	1403
C45	990	900	864	853	859	879	914	962	1027
C90	1152	1064	1038	1041	1067	1114	1183	1276	1403

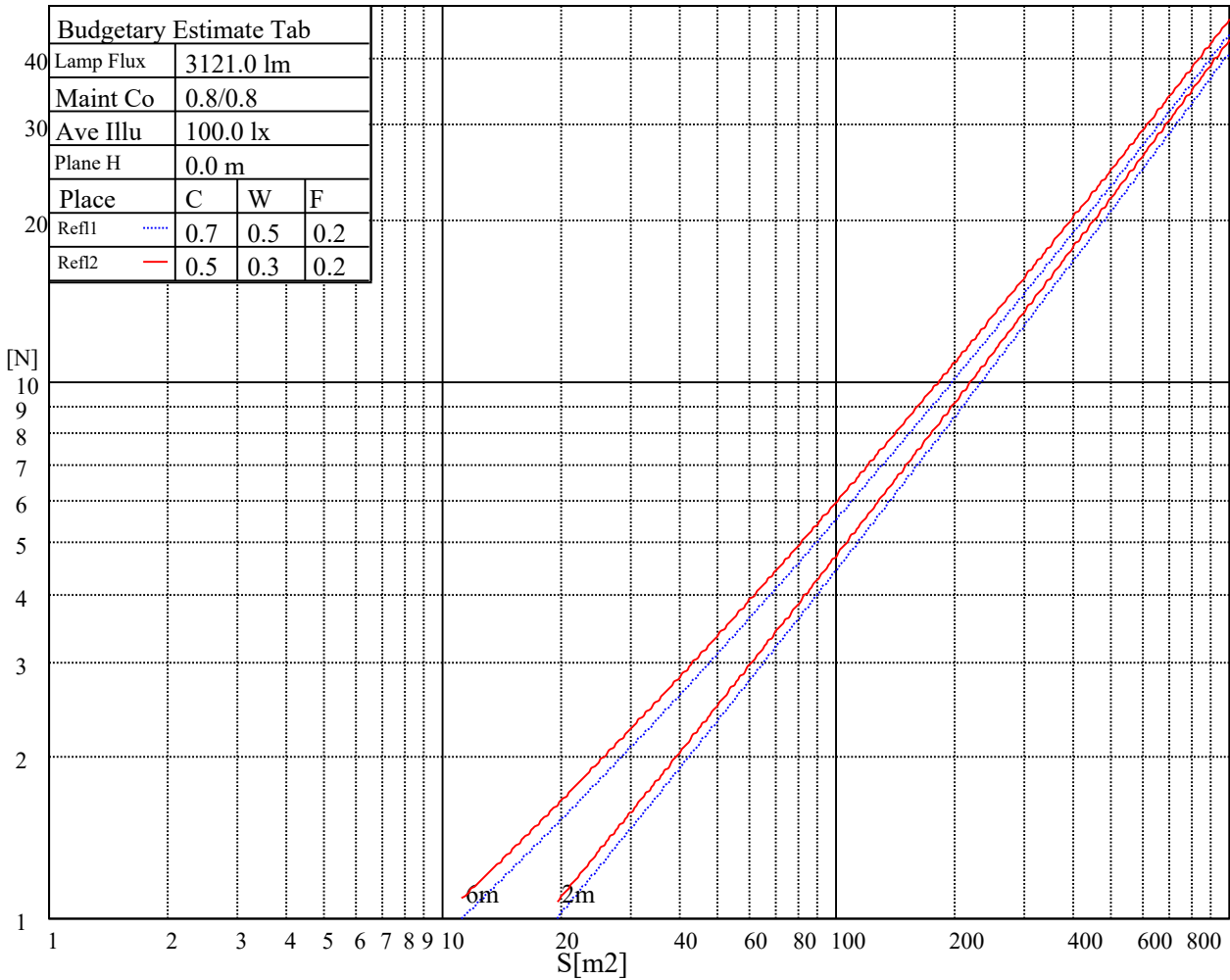
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2574	2574	2574	4092	4092	4092	11964	11964	11964

Glare Table

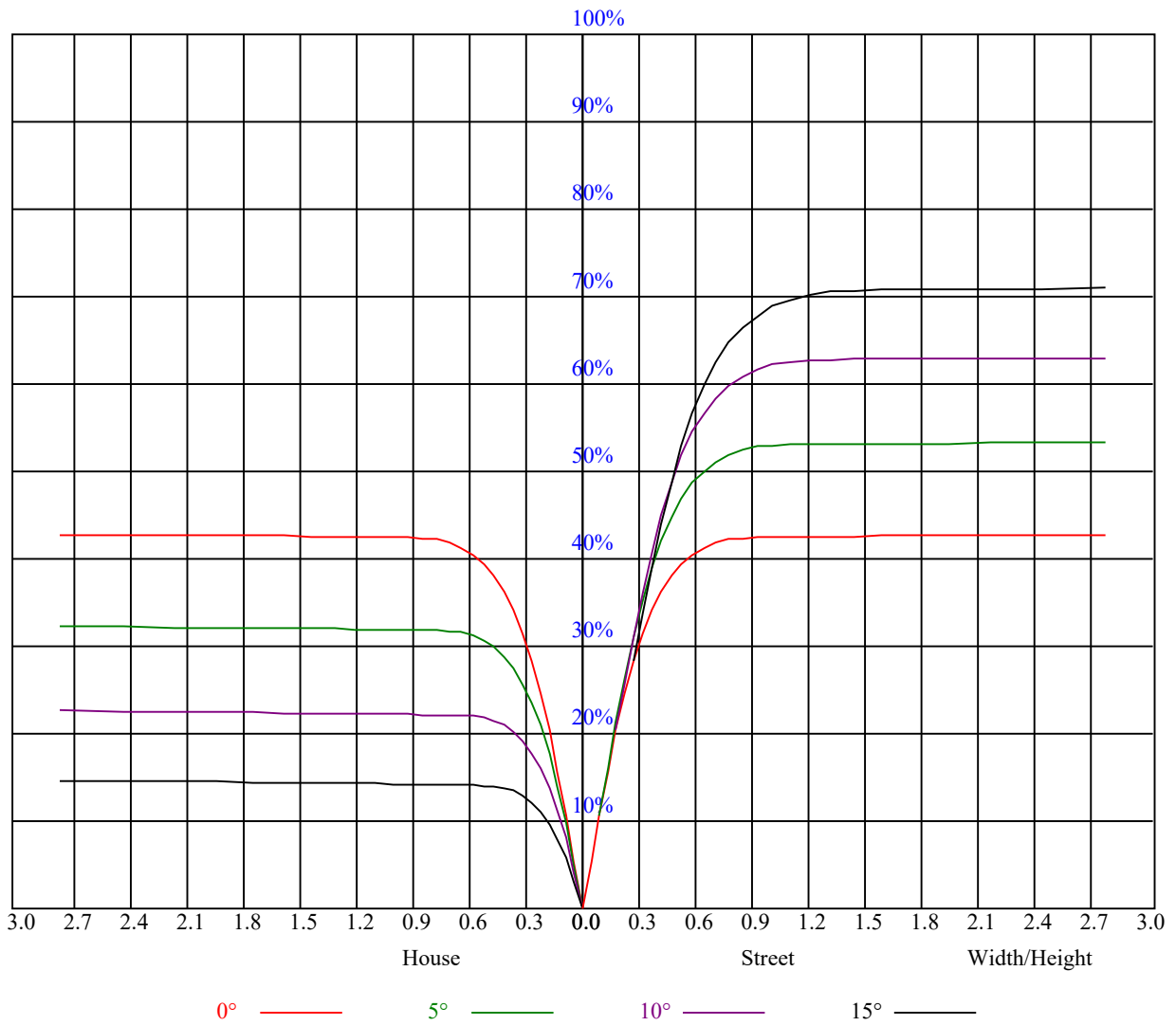
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.05	1.05	1.05	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.98	0.96	0.94	0.96	0.94	0.93	0.92	0.91	0.89	0.89	0.88	0.86	0.85	0.84	0.84	0.82
2	0.92	0.89	0.86	0.91	0.88	0.85	0.88	0.85	0.83	0.85	0.83	0.81	0.82	0.80	0.79	0.78
3	0.87	0.83	0.80	0.86	0.82	0.79	0.83	0.80	0.78	0.81	0.78	0.76	0.79	0.77	0.75	0.74
4	0.82	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.76	0.73	0.71	0.70
5	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.66
6	0.74	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.64	0.63
7	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.60
8	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58
9	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.55
10	0.62	0.58	0.55	0.62	0.57	0.55	0.61	0.57	0.54	0.60	0.57	0.54	0.59	0.56	0.54	0.53



Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	5531.26	5480.06	4929.23	3890.79	2492.03	1521.85	992.90	561.46	165.45
45.0	5579.37	5516.60	4964.48	3895.83	2501.71	1504.51	1008.51	562.41	60.15
90.0	5559.23	5506.64	4983.78	3928.56	2518.05	1520.73	1011.19	564.43	84.76
135.0	5564.27	5516.60	4964.48	3895.83	2501.71	1504.51	1008.51	562.41	60.15
180.0	5531.26	5480.06	4929.23	3890.79	2492.03	1521.85	992.90	561.46	165.45
225.0	5579.37	5516.60	4964.48	3895.83	2501.71	1504.51	1008.51	562.41	60.15
270.0	5559.23	5506.64	4983.78	3928.56	2518.05	1520.73	1011.19	564.43	84.76
315.0	5564.27	5516.60	4964.48	3895.83	2501.71	1504.51	1008.51	562.41	60.15
360.0	5531.26	5480.06	4929.23	3890.79	2492.03	1521.85	992.90	561.46	165.45
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.08	9.46	9.12	8.90	8.73	8.84	13.32	24.84	8.73
45.0	10.85	9.29	8.95	8.67	8.45	8.28	11.92	30.83	8.67
90.0	10.63	9.12	8.73	8.50	8.22	8.17	14.38	24.00	8.78
135.0	10.85	9.29	8.95	8.67	8.45	8.28	11.92	30.83	8.67
180.0	11.08	9.46	9.12	8.90	8.73	8.84	13.32	24.84	8.73
225.0	10.85	9.29	8.95	8.67	8.45	8.28	11.92	30.83	8.67
270.0	10.63	9.12	8.73	8.50	8.22	8.17	14.38	24.00	8.78
315.0	10.85	9.29	8.95	8.67	8.45	8.28	11.92	30.83	8.67
360.0	11.08	9.46	9.12	8.90	8.73	8.84	13.32	24.84	8.73
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	7.72	7.16	7.33	7.33	7.16	7.05	6.99	7.05	7.11
45.0	7.89	7.11	8.67	14.44	9.62	7.05	7.05	7.05	7.11
90.0	7.78	7.11	7.16	7.22	7.16	6.99	6.99	7.05	7.11
135.0	7.89	7.11	8.67	14.44	9.62	7.05	7.05	7.05	7.11
180.0	7.72	7.16	7.33	7.33	7.16	7.05	6.99	7.05	7.11
225.0	7.89	7.11	8.67	14.44	9.62	7.05	7.05	7.05	7.11
270.0	7.78	7.11	7.16	7.22	7.16	6.99	6.99	7.05	7.11
315.0	7.89	7.11	8.67	14.44	9.62	7.05	7.05	7.05	7.11
360.0	7.72	7.16	7.33	7.33	7.16	7.05	6.99	7.05	7.11
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	7.22	7.33	7.83	9.57	12.03	14.83	17.29	19.30	20.42
45.0	7.22	7.33	7.89	9.68	12.37	15.16	17.68	19.81	20.98
90.0	7.16	7.22	7.89	9.62	12.37	15.27	17.85	19.97	21.15
135.0	7.22	7.33	7.89	9.68	12.37	15.16	17.68	19.81	20.98
180.0	7.22	7.33	7.83	9.57	12.03	14.83	17.29	19.30	20.42
225.0	7.22	7.33	7.89	9.68	12.37	15.16	17.68	19.81	20.98
270.0	7.16	7.22	7.89	9.62	12.37	15.27	17.85	19.97	21.15
315.0	7.22	7.33	7.89	9.68	12.37	15.16	17.68	19.81	20.98
360.0	7.22	7.33	7.83	9.57	12.03	14.83	17.29	19.30	20.42
C/γ(°)	180.0								
0.0	20.87								
45.0	21.37								
90.0	21.60								
135.0	21.37								
180.0	20.87								
225.0	21.37								
270.0	21.60								
315.0	21.37								
360.0	20.87								