
Nata

LumCAT: 3-1944-M
Luminaire: BJB 47.319.2011
Report No: GC20170406119
Test No: NT-0010
LampCAT: LUMILEDS LUXEON CoB 1205
Lamp flux(lm): 2428.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V):
Current(A):
Power (W): 20.4000
PF:
Ballast type:
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2238.4
Efficiency(%): 92.19%
Lumens(lm)/Power(W): 109.72
Central intensity(cd): 2055.849
Maximum intensity(cd): 2066.118
Angle of maximum intensity: C=0.0 γ =5.0
Beam Angle(50%Imax): [C0/180]Total=38.7
 [C90/270]Total=38.7
Field angle(10%Imax): [C0/180]Total=68.6
 [C90/270]Total=68.6
Maximum s/h(1/2): C0_180=0.66 C90_270=0.66
Maximum s/h(1/4): C0_180=0.60 C90_270=0.60
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.19%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.687%

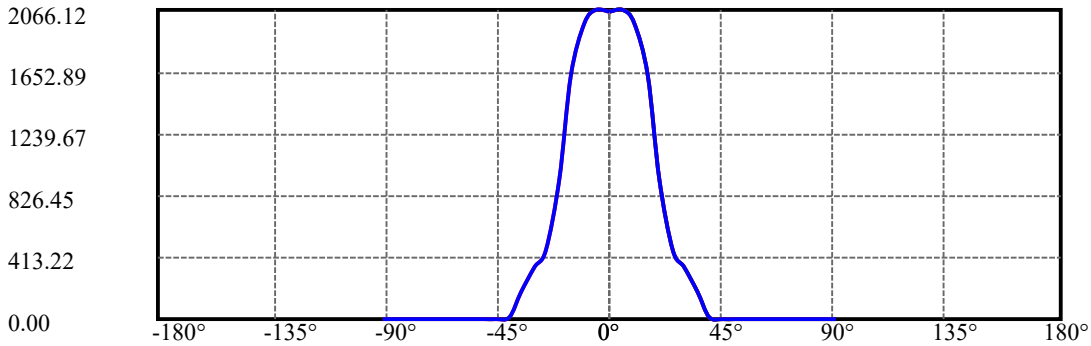
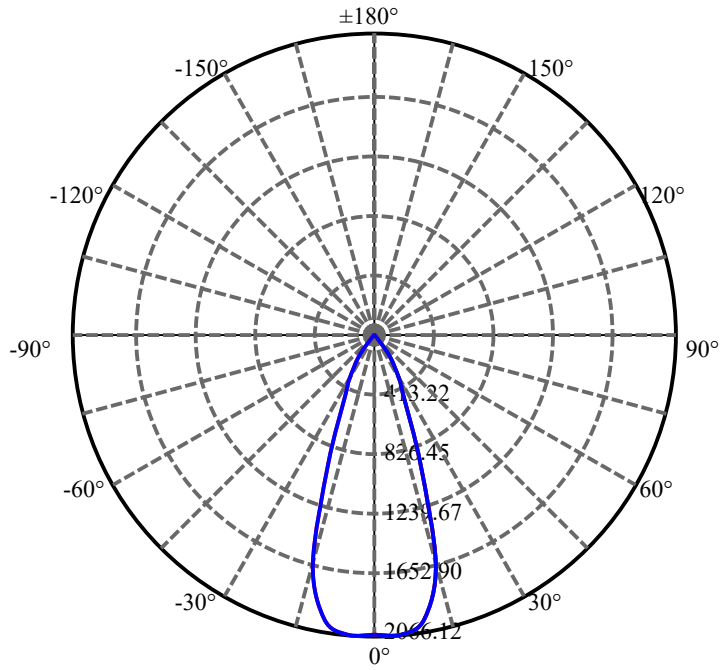
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2055.850	0.000	0	.000%	.000%
5.0	2066.119	49.277	49.277	4.543%	4.928%
10.0	1975.418	144.578	193.855	13.329%	19.386%
15.0	1624.147	213.524	407.379	19.685%	40.738%
20.0	941.099	211.412	618.792	19.490%	61.879%
25.0	455.859	146.515	765.307	13.507%	76.531%
30.0	343.508	101.161	866.467	9.326%	86.647%
35.0	183.915	77.667	944.134	7.160%	94.413%
40.0	13.885	33.001	977.135	3.042%	97.714%
45.0	5.627	3.613	980.748	.333%	98.075%
50.0	4.689	2.084	982.832	.192%	98.283%
55.0	4.474	1.992	984.824	.184%	98.483%
60.0	4.351	2.040	986.864	.188%	98.687%
65.0	4.262	2.094	988.958	.193%	98.896%
70.0	4.209	2.145	991.103	.198%	99.110%
75.0	4.157	2.187	993.289	.202%	99.329%
80.0	4.132	2.218	995.507	.204%	99.551%
85.0	4.117	2.241	997.749	.207%	99.775%
90.0	4.102	2.250	999.999	.207%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	866.47	35.69%	86.65%
0-40	977.14	40.24%	97.71%
0-60	986.86	40.65%	98.69%
0-90	997.75	41.09%	99.77%
0-120	997.75	41.09%	99.77%
0-180	1000.00	41.19%	100.00%
60-90	12.92	0.53%	1.29%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-26.71	800.00	32.95%	80.00%

ZONAL LUMEN SUMMARY

0-10	193.86
10-20	424.94
20-30	247.68
30-40	110.67
40-50	5.70
50-60	4.03
60-70	4.24
70-80	4.40
80-90	2.24
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(Max): —————

C0/C180: —————

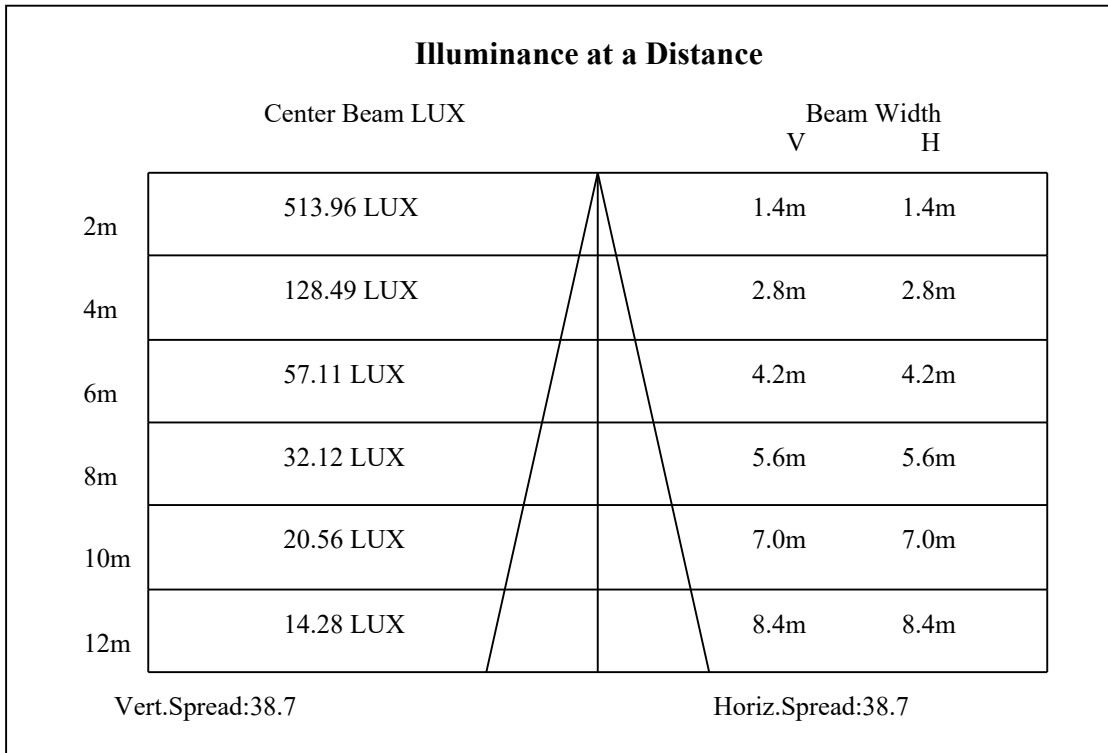
C90/C270: —————

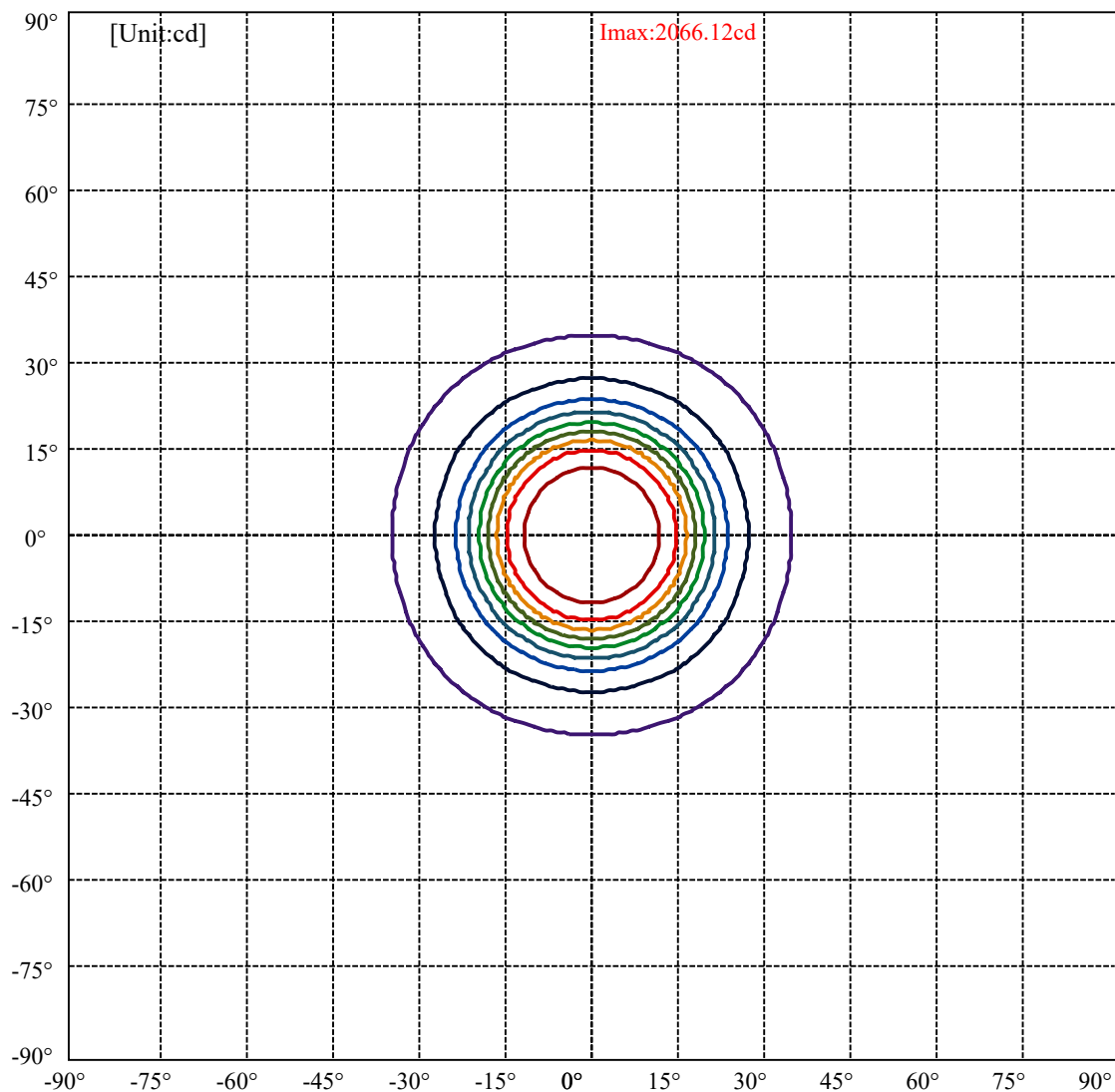
Field angle(10%Imax):C0/180Left:39.3 Right:29.3

:C90/270Left:39.3 Right:29.3

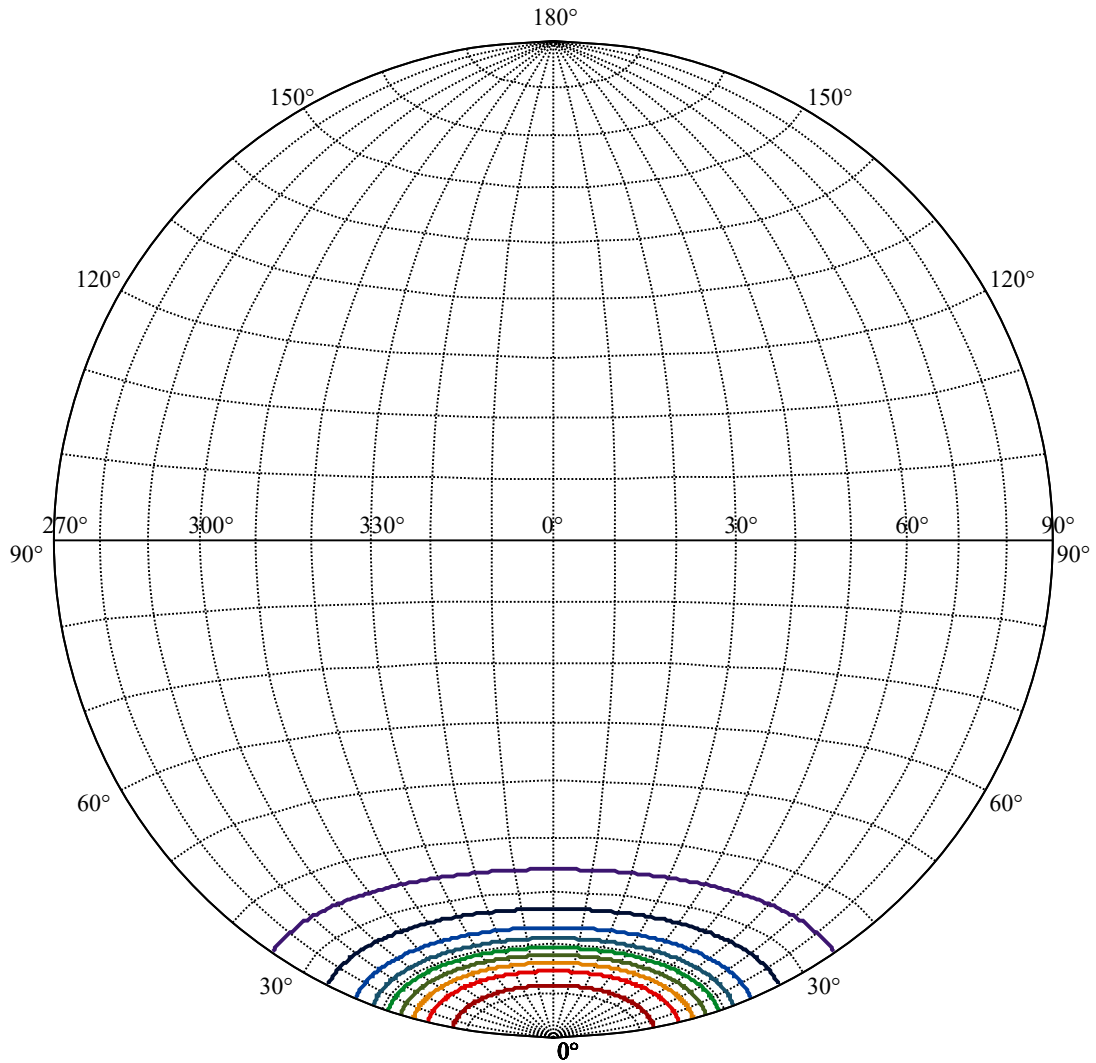
Beam Angle(50%Imax):C0/180Left:24.3 Right:14.3

:C90/270Left:24.3 Right:14.3





(10%Imax) 206.612	—
(20%Imax) 413.224	—
(30%Imax) 619.836	—
(40%Imax) 826.447	—
(50%Imax) 1033.06	—
(60%Imax) 1239.67	—
(70%Imax) 1446.28	—
(80%Imax) 1652.89	—
(90%Imax) 1859.51	—



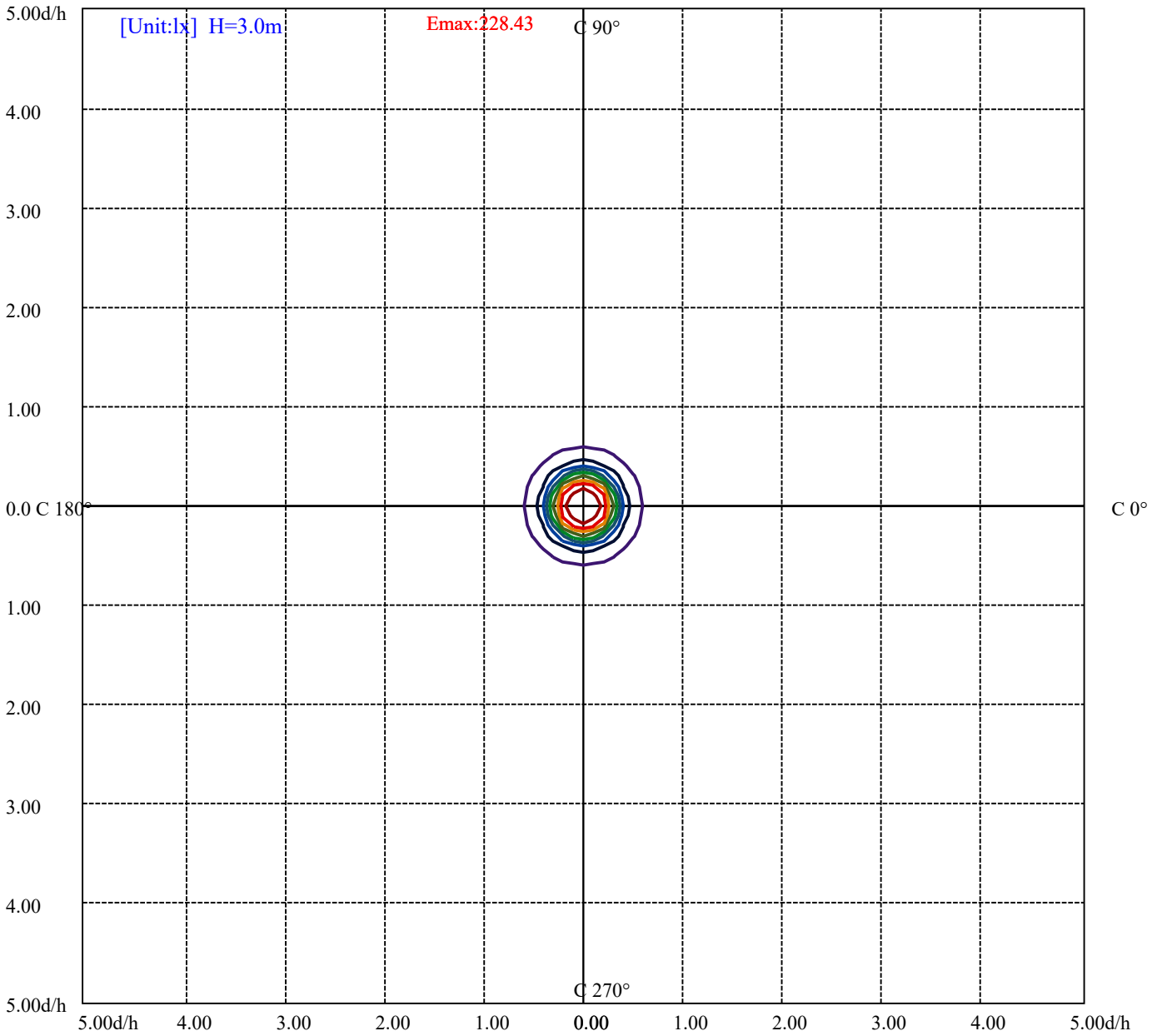
House

[Unit:cd]

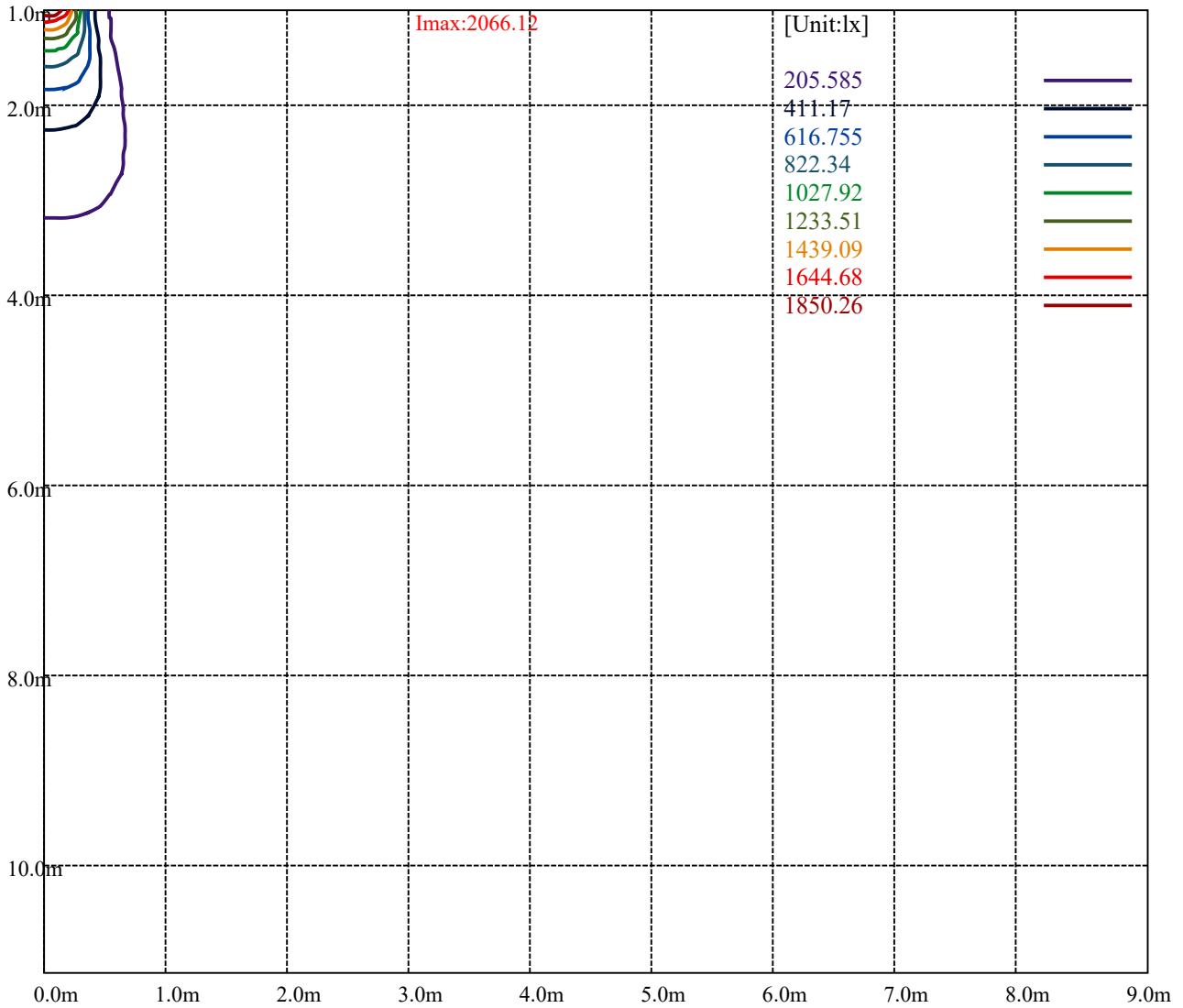
Road

I_{max}:2066.12

(10%I _{max})	206.612	—
(20%I _{max})	413.224	—
(30%I _{max})	619.836	—
(40%I _{max})	826.447	—
(50%I _{max})	1033.06	—
(60%I _{max})	1239.67	—
(70%I _{max})	1446.28	—
(80%I _{max})	1652.89	—
(90%I _{max})	1859.51	—



- (10%Emax) 22.84278
- (20%Emax) 45.68556
- (30%Emax) 68.52834
- (40%Emax) 91.37112
- (50%Emax) 114.2133
- (60%Emax) 137.0567
- (70%Emax) 159.8989
- (80%Emax) 182.7422
- (90%Emax) 205.5844



Luminance Table

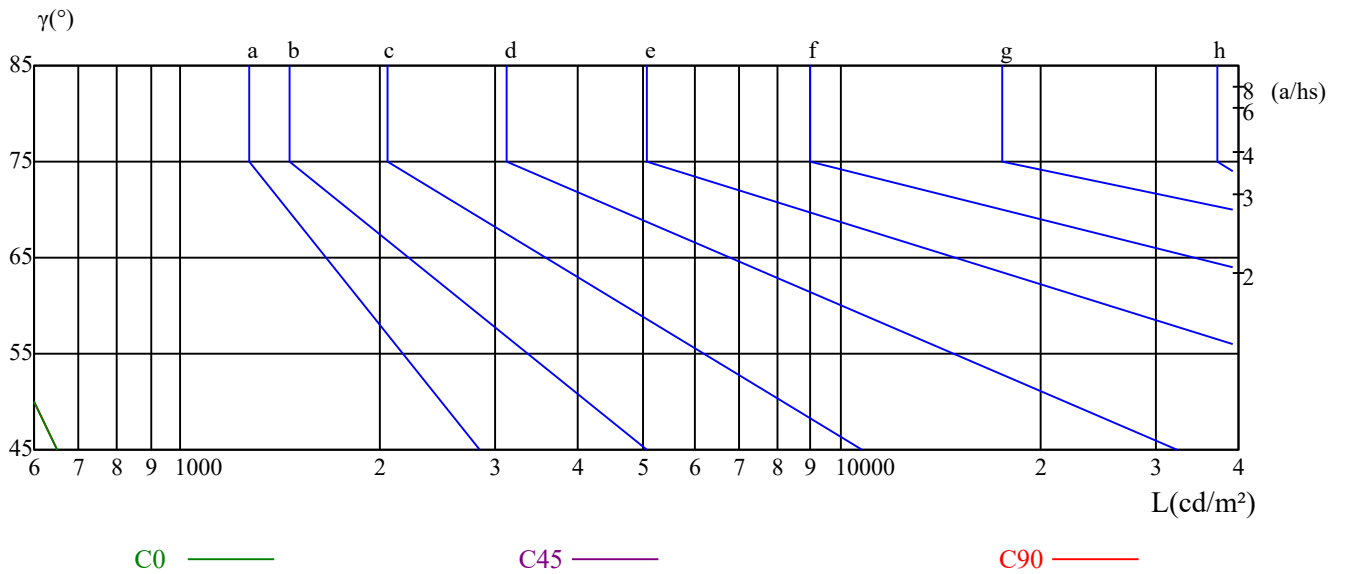
γ	45	50	55	60	65	70	75	80	85
C0	652	555	546	553	569	597	633	686	756
C45	560	470	455	453	458	471	489	517	554
C90	652	555	546	553	569	597	633	686	756

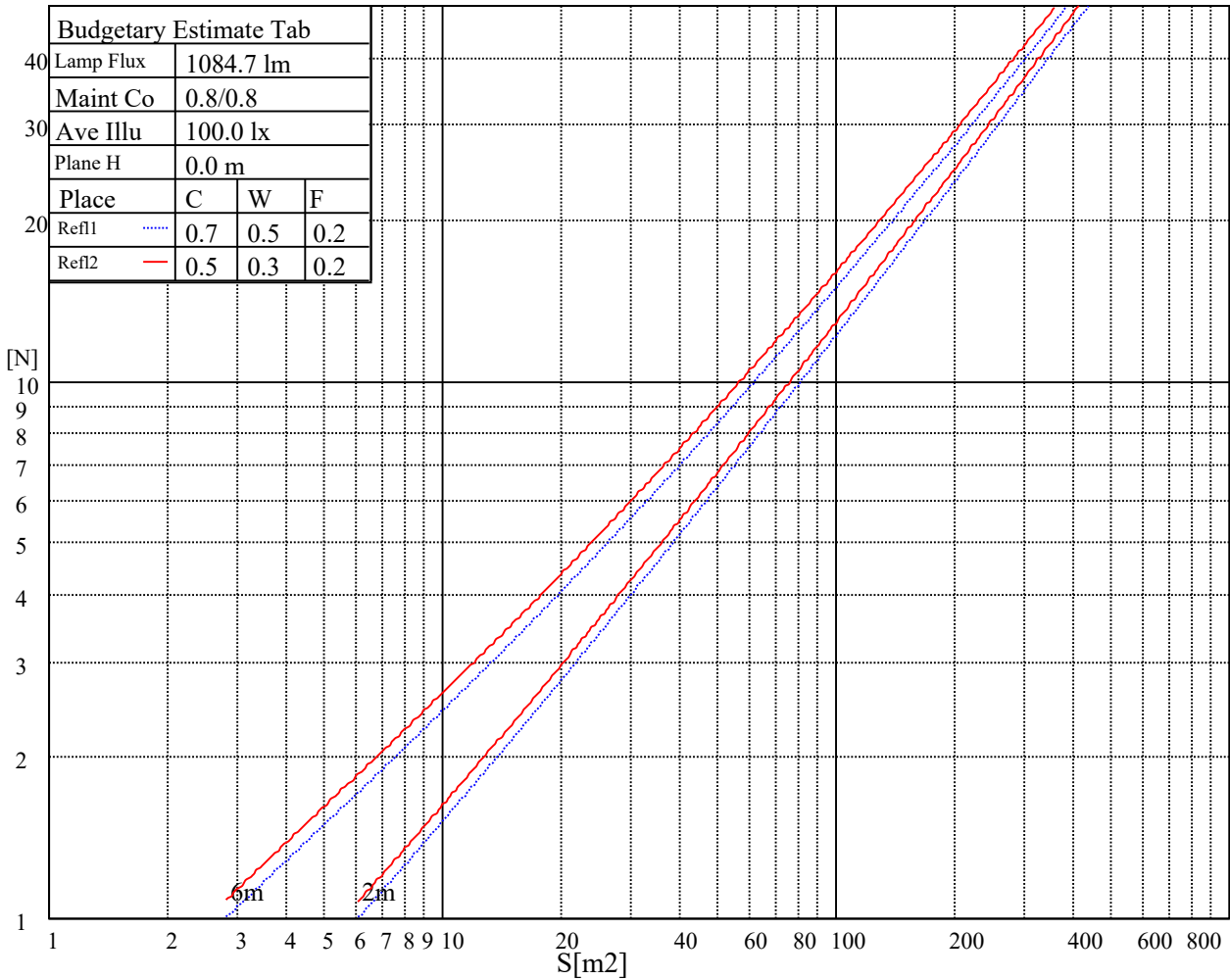
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1363	1363	1363	2171	2171	2171	6387	6387	6387

Glare Table

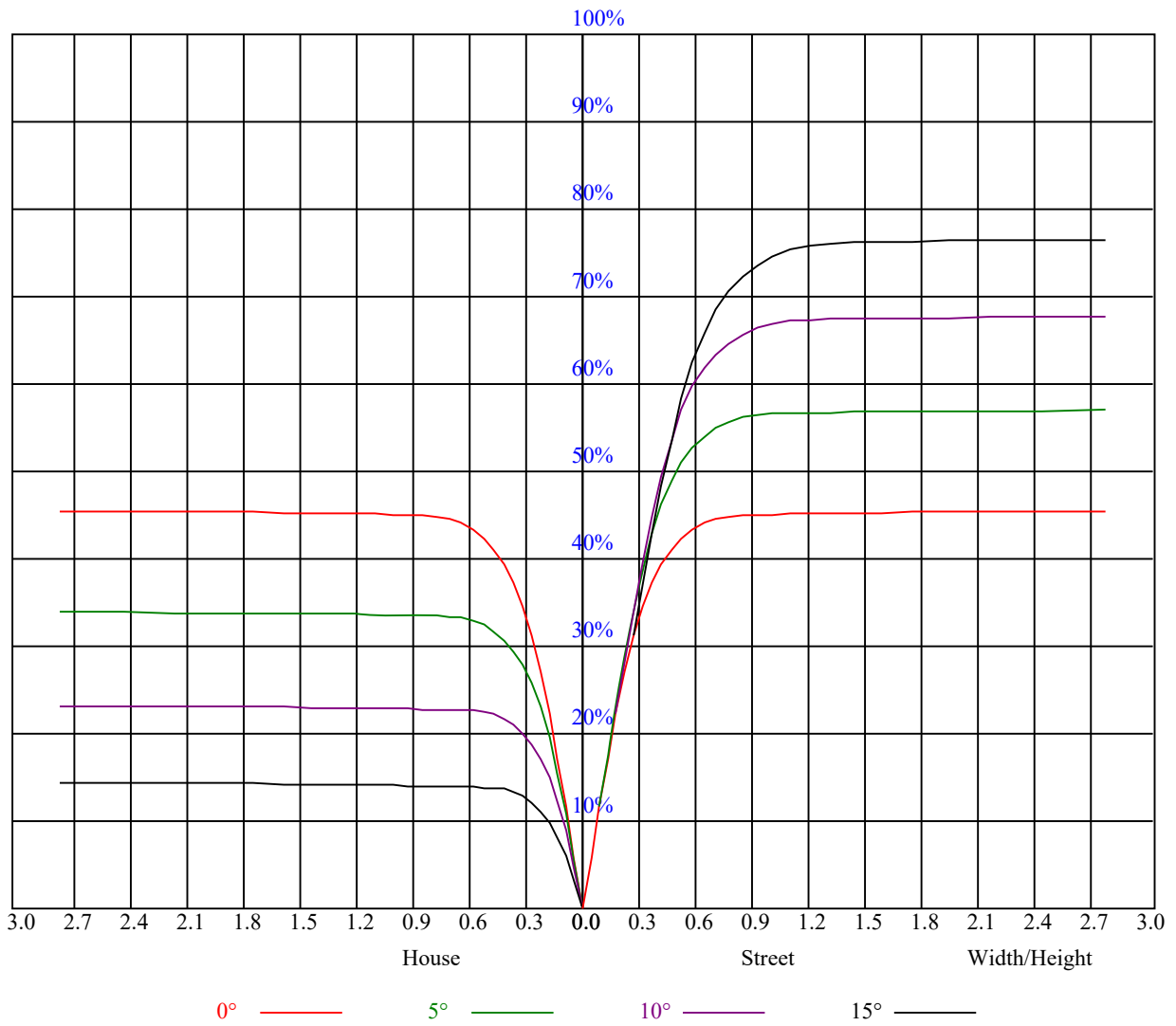
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.10	1.10	1.10	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.94	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
6	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
8	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63
9	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.67	0.63	0.61	0.60
10	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58



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	2048.16	2022.09	1902.80	1498.92	795.46	427.00	337.71	133.81	9.57
45.0	2064.15	2041.28	1964.29	1620.18	933.44	464.88	342.63	182.26	10.60
90.0	2056.03	2055.79	1966.26	1604.44	936.64	446.60	335.06	175.96	10.26
135.0	2055.05	2072.76	2039.80	1813.27	1186.05	534.49	363.05	256.30	30.82
180.0	2048.16	2098.34	2044.23	1751.04	1072.91	472.60	353.43	235.05	19.58
225.0	2064.15	2106.21	1990.36	1628.05	904.42	435.51	342.19	184.28	10.50
270.0	2056.03	2091.45	1995.03	1643.06	972.31	460.20	345.34	200.46	10.80
315.0	2055.05	2041.03	1900.58	1434.23	727.57	405.60	328.66	103.21	8.95
360.0	2048.16	2022.09	1902.80	1498.92	795.46	427.00	337.71	133.81	9.57
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	5.31	4.62	4.43	4.33	4.23	4.18	4.13	4.11	4.08
45.0	5.36	4.67	4.48	4.35	4.28	4.23	4.18	4.16	4.13
90.0	5.51	4.67	4.45	4.35	4.26	4.21	4.16	4.13	4.11
135.0	6.89	4.80	4.55	4.40	4.30	4.23	4.18	4.13	4.11
180.0	5.93	4.70	4.45	4.33	4.23	4.18	4.13	4.08	4.08
225.0	5.49	4.67	4.45	4.35	4.28	4.21	4.16	4.16	4.13
270.0	5.53	4.75	4.53	4.38	4.28	4.26	4.18	4.18	4.18
315.0	4.99	4.62	4.45	4.30	4.23	4.18	4.13	4.11	4.11
360.0	5.31	4.62	4.43	4.33	4.23	4.18	4.13	4.11	4.08
C/ γ (°)	90.0								
0.0	4.08								
45.0	4.11								
90.0	4.11								
135.0	4.11								
180.0	4.08								
225.0	4.11								
270.0	4.13								
315.0	4.08								
360.0	4.08								