
Nata

LumCAT: 3-1944-M
Luminaire: BJB 47.319.2011
Report No: GC2017060706
Test No: NT-0010
LampCAT: LUMILEDS LUXEON CoB 1208
Lamp flux(lm): 3235.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 217.5000
Current(A): 0.1370
Power (W): 28.1000
PF: 0.9440
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2963.70
Efficiency(%): 91.61%
Lumens(lm)/Power(W): 105.47
Central intensity(cd): 6001.561
Maximum intensity(cd): 6020.693
Angle of maximum intensity: C=0.0 γ =5.0
Beam Angle(50%Imax): [C0/180]Total=39.3
 [C90/270]Total=39.3
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=0.61 C90_270=0.61
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.61%
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%

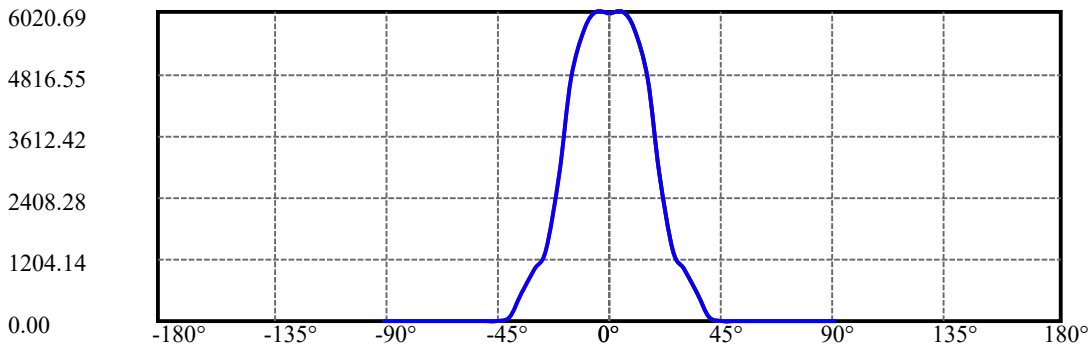
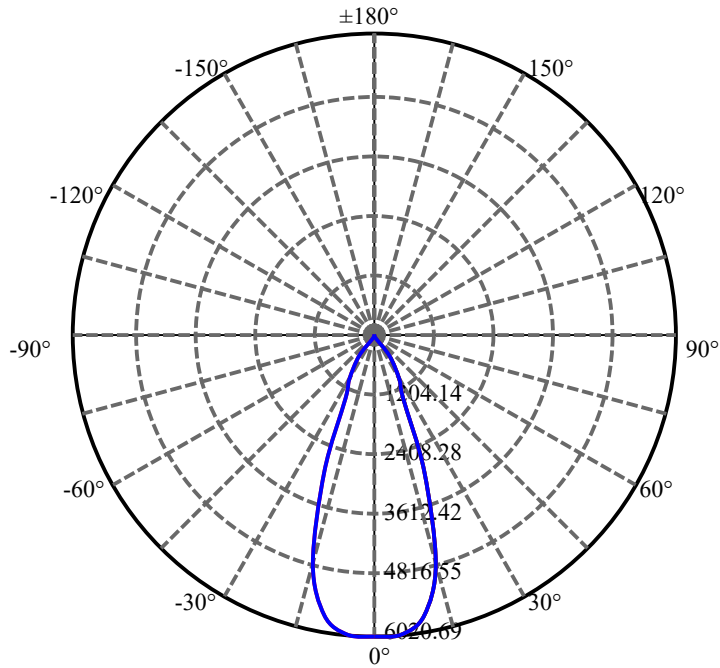
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6001.561	0.000	0	.000%	.000%
5.0	6020.693	143.723	143.723	4.443%	4.849%
10.0	5685.055	418.751	562.474	12.944%	18.979%
15.0	4709.593	616.604	1179.078	19.060%	39.784%
20.0	2881.446	625.608	1804.686	19.339%	60.893%
25.0	1389.348	447.927	2252.613	13.846%	76.007%
30.0	1022.163	305.179	2557.792	9.434%	86.304%
35.0	531.280	228.755	2786.548	7.071%	94.023%
40.0	80.926	102.142	2888.69	3.157%	97.469%
45.0	16.524	18.044	2906.733	.558%	98.078%
50.0	13.874	6.142	2912.876	.190%	98.285%
55.0	13.220	5.891	2918.767	.182%	98.484%
60.0	12.876	6.032	2924.799	.186%	98.687%
65.0	12.615	6.197	2930.996	.192%	98.896%
70.0	12.457	6.348	2937.344	.196%	99.111%
75.0	12.319	6.476	2943.82	.200%	99.329%
80.0	12.243	6.572	2950.392	.203%	99.551%
85.0	12.202	6.642	2957.035	.205%	99.775%
90.0	12.147	6.667	2963.701	.206%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2557.79	79.07%	86.30%
0-40	2888.69	89.29%	97.47%
0-60	2924.80	90.41%	98.69%
0-90	2957.03	91.41%	99.78%
0-120	2957.03	91.41%	99.78%
0-180	2963.70	91.61%	100.00%
60-90	38.27	1.18%	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%
0-26.94	2370.96	73.29%	80.00%

ZONAL LUMEN SUMMARY

0-10	562.47
10-20	1242.21
20-30	753.11
30-40	330.90
40-50	24.19
50-60	11.92
60-70	12.55
70-80	13.05
80-90	6.64
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: —————

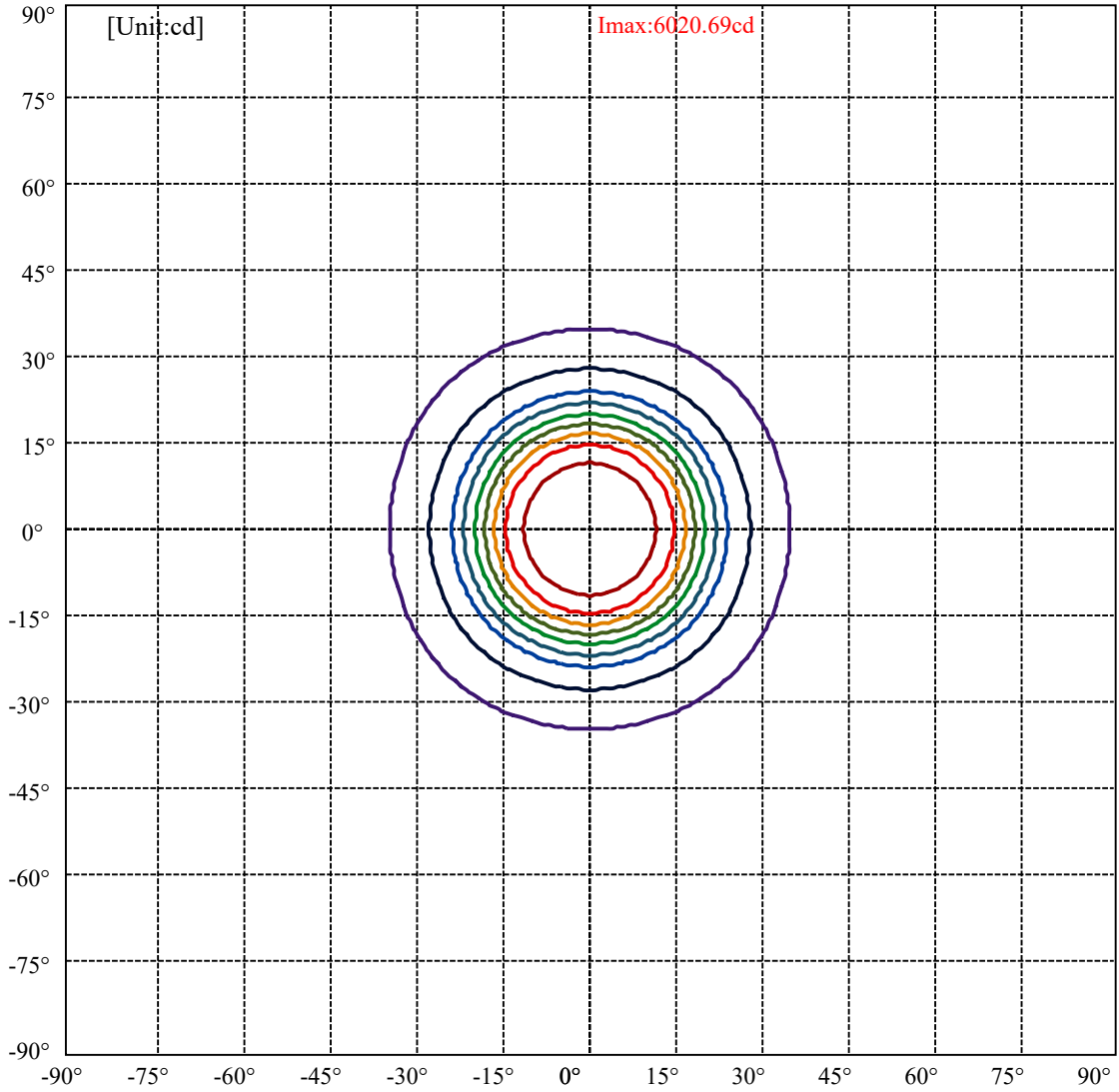
C90/C270: —————

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

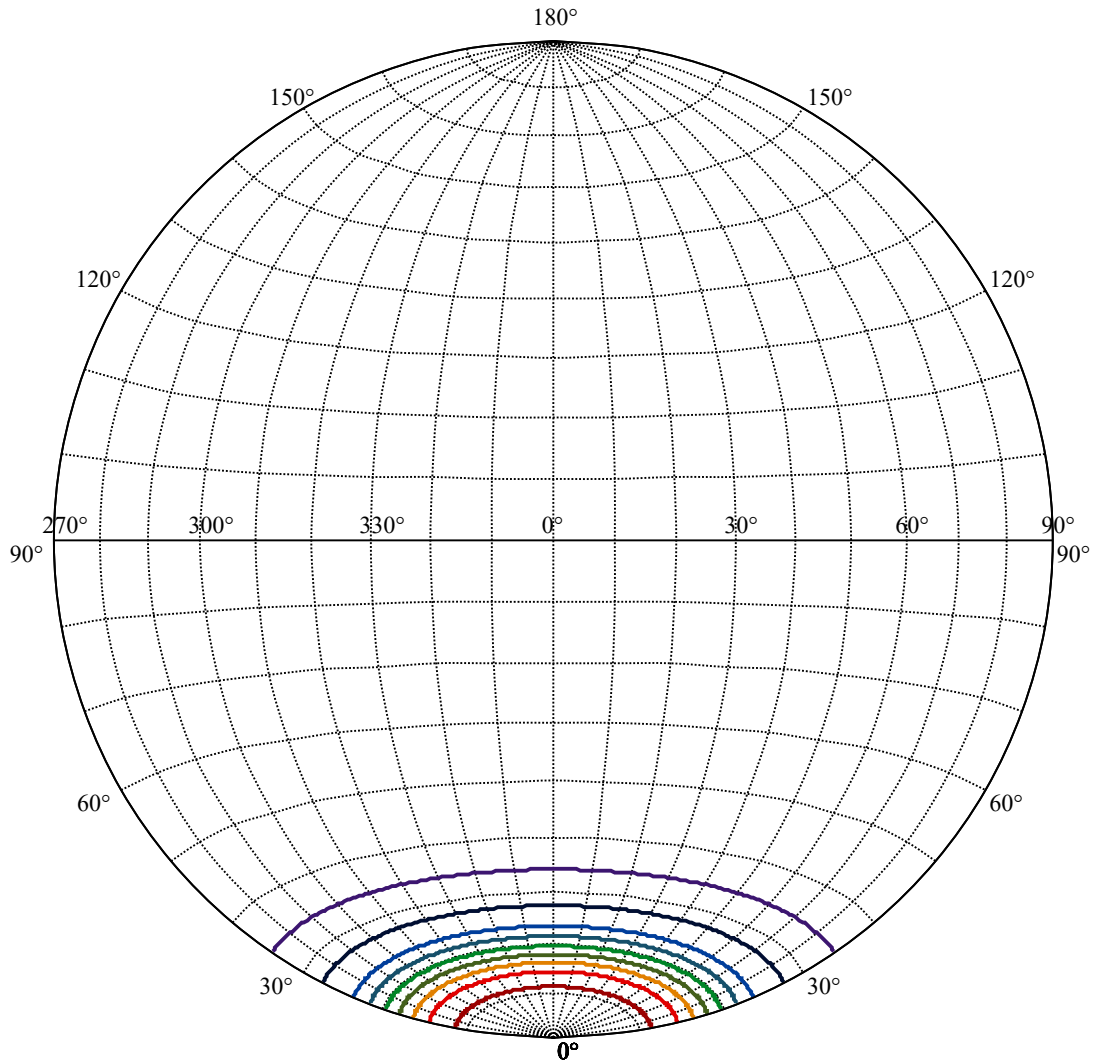
:C90/270Left:39.3 Right:29.3

Beam Angle(50%Imax):C0/180Left:24.6 Right:14.6

:C90/270Left:24.6 Right:14.6



(10%Imax)	602.069	—
(20%Imax)	1204.14	—
(30%Imax)	1806.21	—
(40%Imax)	2408.28	—
(50%Imax)	3010.35	—
(60%Imax)	3612.42	—
(70%Imax)	4214.48	—
(80%Imax)	4816.55	—
(90%Imax)	5418.62	—



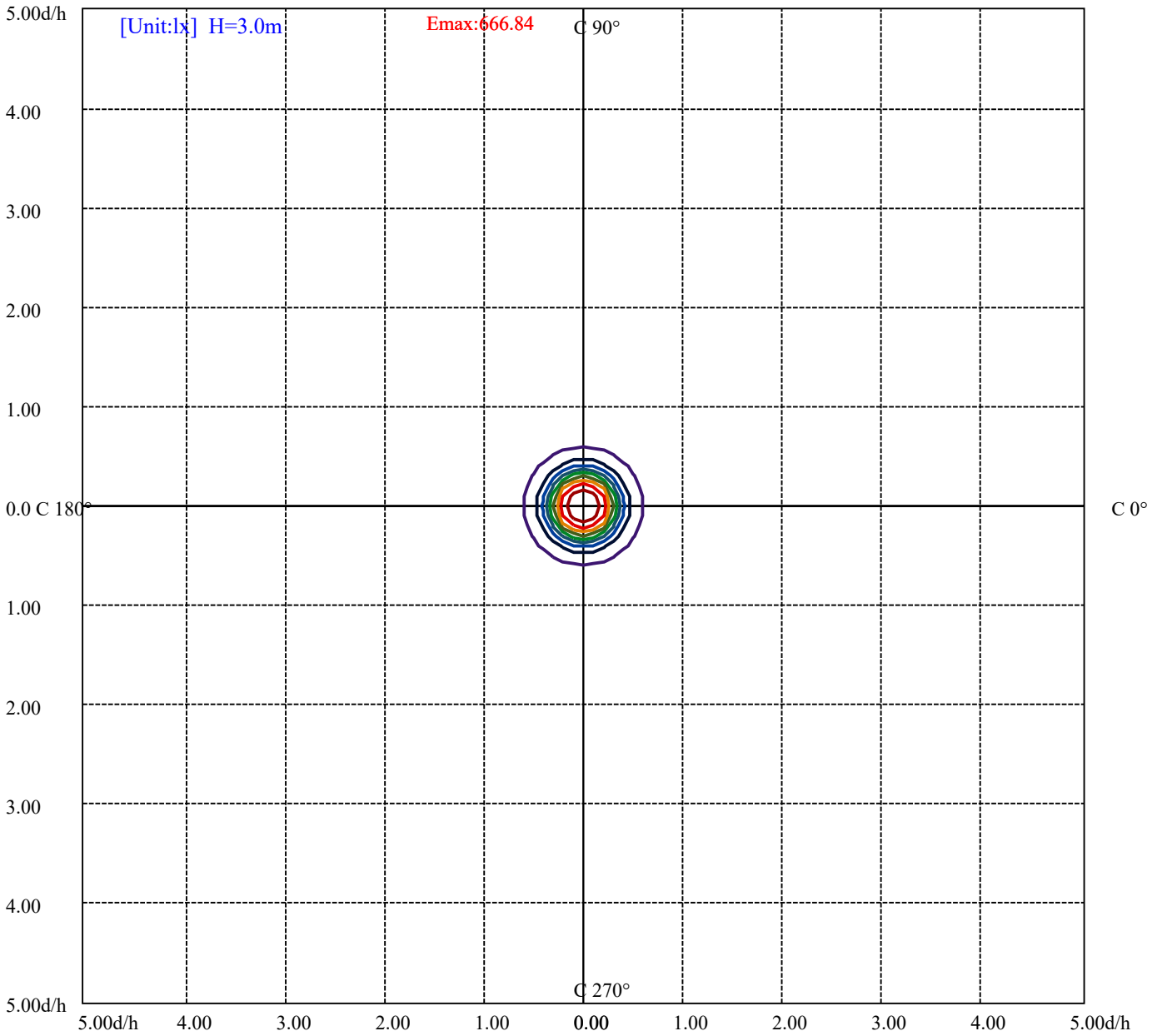
House

[Unit:cd]

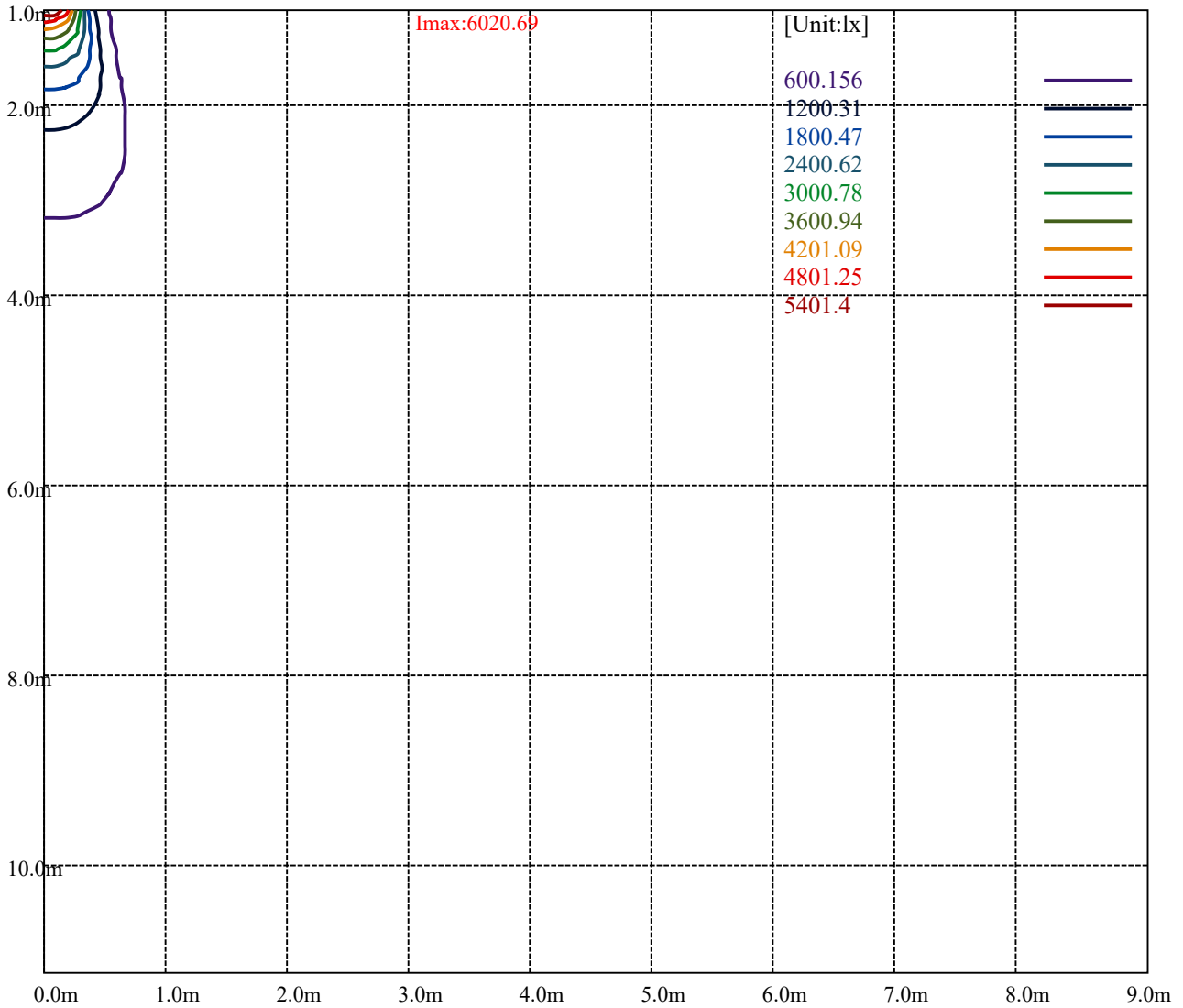
Road

Imax:6020.69

(10%Imax)	602.069	—
(20%Imax)	1204.14	—
(30%Imax)	1806.21	—
(40%Imax)	2408.28	—
(50%Imax)	3010.35	—
(60%Imax)	3612.42	—
(70%Imax)	4214.48	—
(80%Imax)	4816.55	—
(90%Imax)	5418.62	—



(10%Emax) 66.684	—
(20%Emax) 133.3678	—
(30%Emax) 200.0522	—
(40%Emax) 266.7356	—
(50%Emax) 333.42	—
(60%Emax) 400.1044	—
(70%Emax) 466.7878	—
(80%Emax) 533.4722	—
(90%Emax) 600.1555	—



Luminance Table

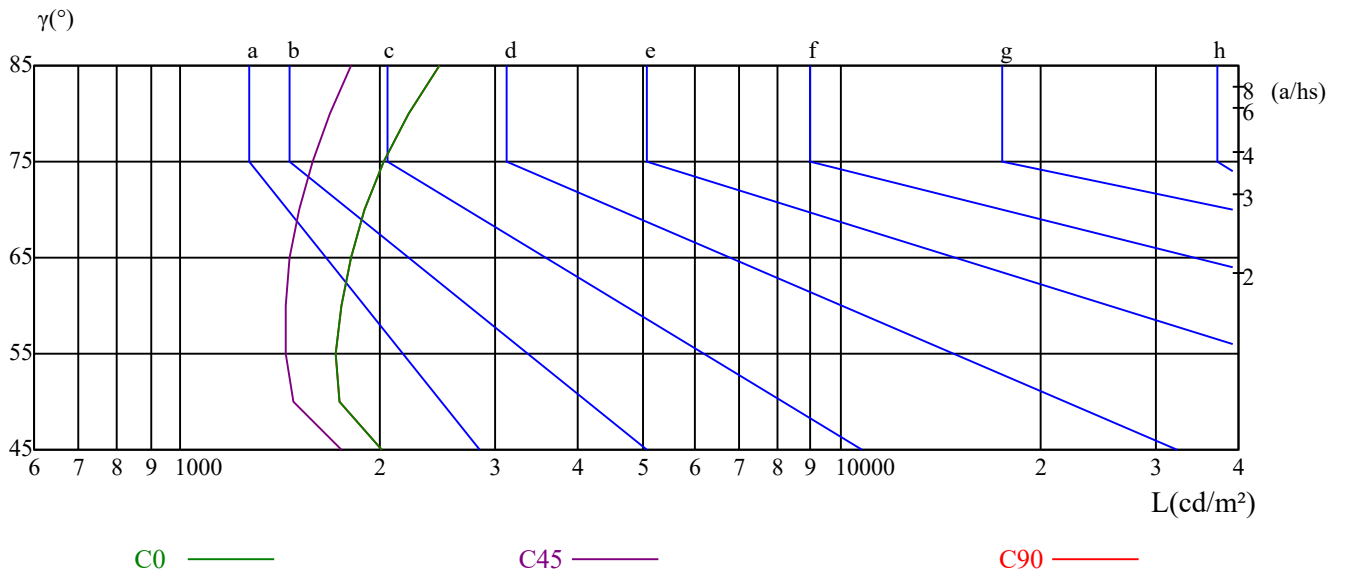
γ	45	50	55	60	65	70	75	80	85
C0	2021	1742	1718	1748	1807	1903	2034	2216	2466
C45	1750	1485	1442	1443	1465	1513	1581	1679	1811
C90	2021	1742	1718	1748	1807	1903	2034	2216	2466

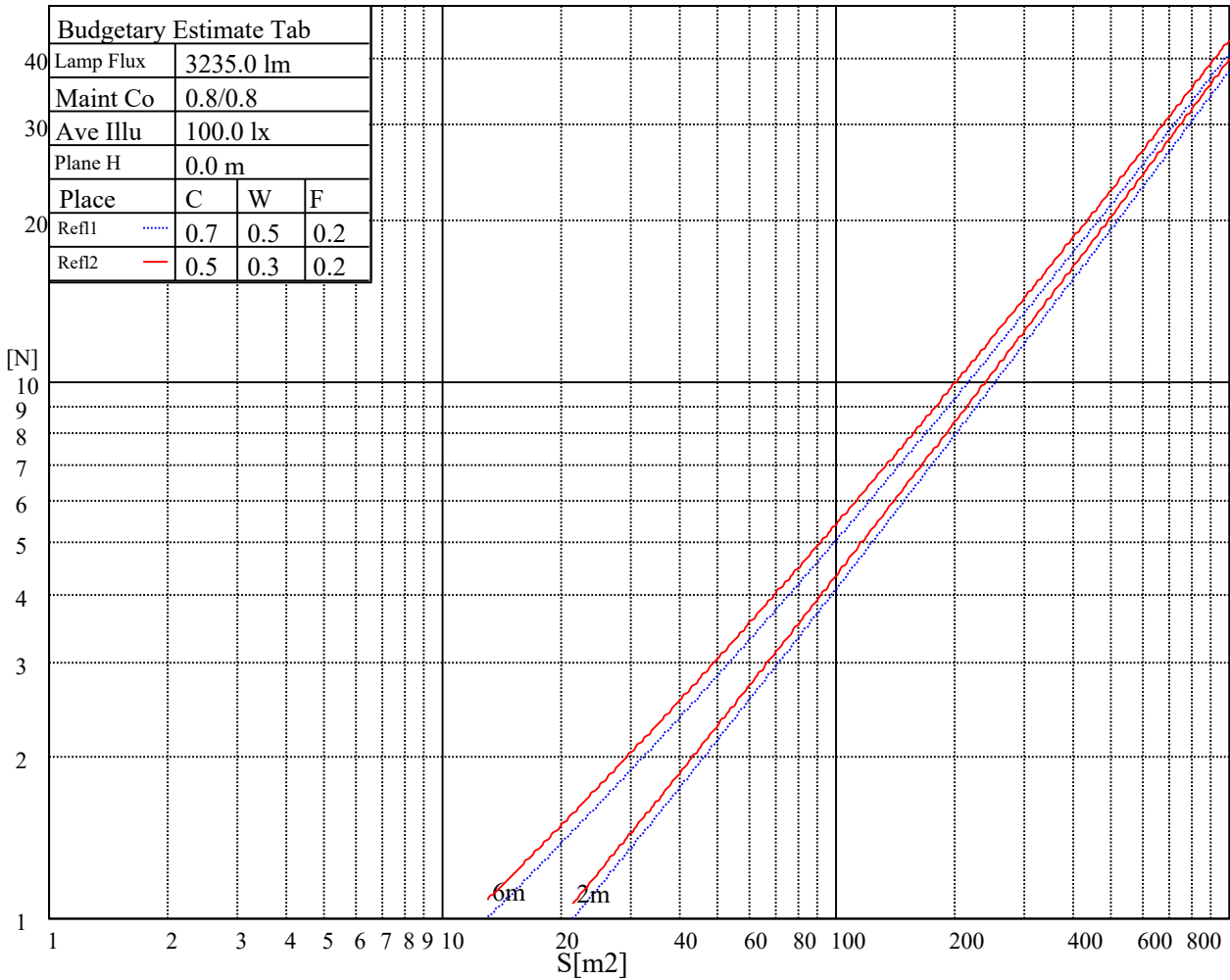
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4131	4131	4131	6588	6588	6588	19377	19377	19377

Glare Table

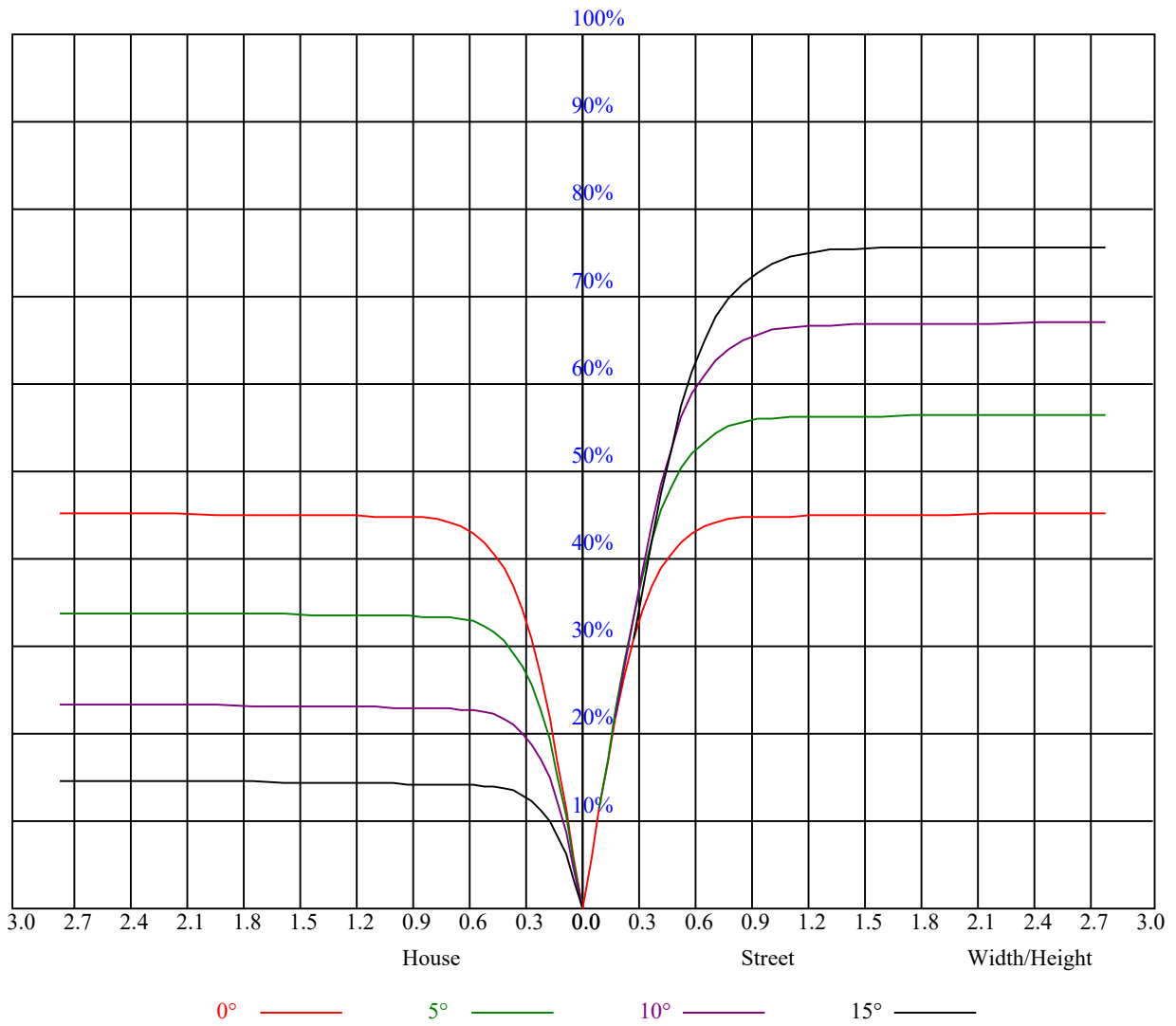
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.92
1	1.02	1.00	0.98	1.00	0.98	0.97	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.96	0.93	0.90	0.95	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.84	0.82
3	0.91	0.87	0.84	0.90	0.86	0.83	0.87	0.84	0.82	0.85	0.83	0.81	0.83	0.81	0.79	0.78
4	0.86	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.74
5	0.82	0.78	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
6	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.65
8	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.62
9	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
10	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57



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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	6009.41	6069.42	5845.34	5050.87	3358.99	1565.80	1063.69	633.15	156.20
45.0	5982.98	6094.19	5935.08	5118.59	3532.97	1620.31	1082.41	768.04	280.79
90.0	6004.45	6111.26	5734.12	4685.85	2716.48	1349.98	1015.07	473.98	37.88
135.0	6009.41	6076.02	5772.66	4816.33	2931.20	1429.81	1027.90	555.52	52.96
180.0	6009.41	5990.69	5545.28	4494.80	2511.12	1199.13	990.35	422.45	27.25
225.0	5982.98	5899.84	5404.34	4079.13	2326.68	1176.56	926.49	354.67	26.43
270.0	6004.45	5940.59	5603.09	4791.56	2926.25	1426.51	1055.43	558.82	35.46
315.0	6009.41	5983.53	5640.53	4639.60	2747.86	1346.68	1015.96	483.62	30.45
360.0	6009.41	6069.42	5845.34	5050.87	3358.99	1565.80	1063.69	633.15	156.20

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	18.94	14.20	13.49	13.05	12.77	12.61	12.44	12.39	12.33
45.0	18.39	14.15	13.38	12.99	12.66	12.55	12.33	12.22	12.17
90.0	15.80	13.65	13.05	12.72	12.50	12.39	12.28	12.17	12.11
135.0	16.41	13.87	13.21	12.88	12.66	12.44	12.39	12.28	12.28
180.0	14.81	13.76	13.21	12.88	12.66	12.50	12.33	12.28	12.28
225.0	15.31	13.65	13.05	12.77	12.50	12.33	12.22	12.17	12.11
270.0	16.90	13.87	13.21	12.88	12.61	12.44	12.28	12.22	12.17
315.0	15.64	13.82	13.16	12.83	12.55	12.39	12.28	12.22	12.17
360.0	18.94	14.20	13.49	13.05	12.77	12.61	12.44	12.39	12.33

C/γ(°)	90.0
0.0	12.22
45.0	12.11
90.0	12.06
135.0	12.17
180.0	12.22
225.0	12.11
270.0	12.11
315.0	12.17
360.0	12.22