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Nata

LumCAT: 2-1676-M
Luminaire: 92.70.135.00
Report No: NT2017061711
Test No: GC2017061711
LampCAT: LUMILEDS LUXEON 1208
Lamp flux(lm): 3097.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 35.3000
Current(A): 0.7000
Power (W): 24.7100
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 2812.59
Efficiency(%): 90.82%
Lumens(lm)/Power(W): 113.82
Central intensity(cd): 6178.016
Maximum intensity(cd): 6178.016
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=35.7
 [C90/270]Total=35.7
Field angle(10%Imax): [C0/180]Total=70.4
 [C90/270]Total=70.4
Maximum s/h(1/2): C0_180=0.59 C90_270=0.59
Maximum s/h(1/4): C0_180=0.59 C90_270=0.59
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.82%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.706%

Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/6/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

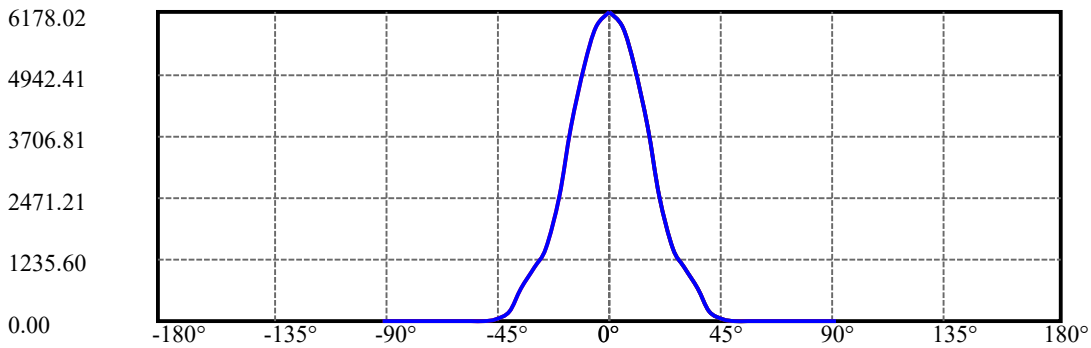
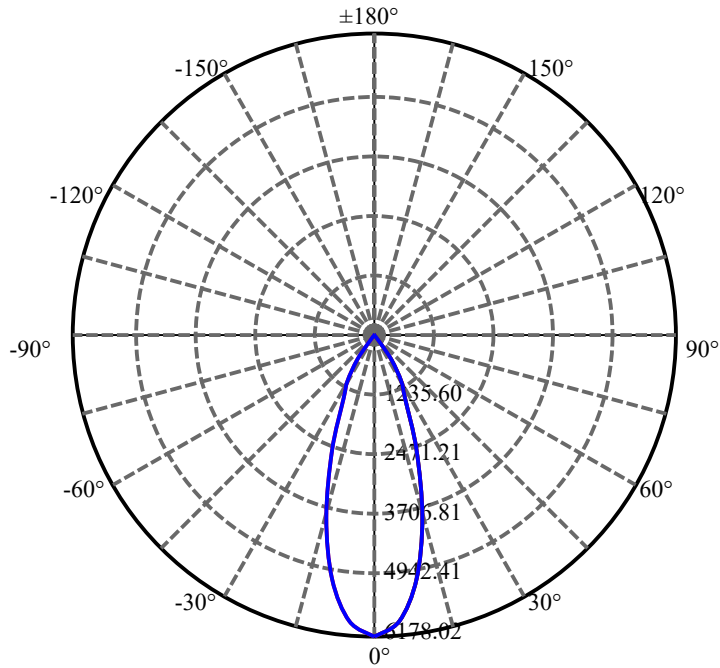
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6178.016	0.000	0	.000%	.000%
5.0	5865.915	143.982	143.982	4.649%	5.119%
10.0	5094.300	392.081	536.063	12.660%	19.059%
15.0	3865.923	531.514	1067.578	17.162%	37.957%
20.0	2503.896	524.963	1592.54	16.951%	56.622%
25.0	1448.231	414.505	2007.045	13.384%	71.359%
30.0	1068.603	318.508	2325.553	10.284%	82.684%
35.0	637.078	251.174	2576.726	8.110%	91.614%
40.0	197.632	139.265	2715.992	4.497%	96.566%
45.0	21.100	40.500	2756.492	1.308%	98.006%
50.0	14.989	7.292	2763.784	.235%	98.265%
55.0	13.737	6.246	2770.03	.202%	98.487%
60.0	12.876	6.151	2776.181	.199%	98.706%
65.0	12.264	6.112	2782.293	.197%	98.923%
70.0	11.775	6.087	2788.38	.197%	99.139%
75.0	11.438	6.068	2794.447	.196%	99.355%
80.0	11.438	6.121	2800.568	.198%	99.573%
85.0	10.915	6.074	2806.642	.196%	99.789%
90.0	10.791	5.943	2812.585	.192%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2325.55	75.09%	82.68%
0-40	2715.99	87.70%	96.57%
0-60	2776.18	89.64%	98.71%
0-90	2806.64	90.62%	99.79%
0-120	2806.64	90.62%	99.79%
0-180	2812.59	90.82%	100.00%
60-90	36.61	1.18%	1.30%
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%
0-28.82	2250.07	72.65%	80.00%

ZONAL LUMEN SUMMARY

0-10	536.06
10-20	1056.48
20-30	733.01
30-40	390.44
40-50	47.79
50-60	12.40
60-70	12.20
70-80	12.19
80-90	6.07
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: —————

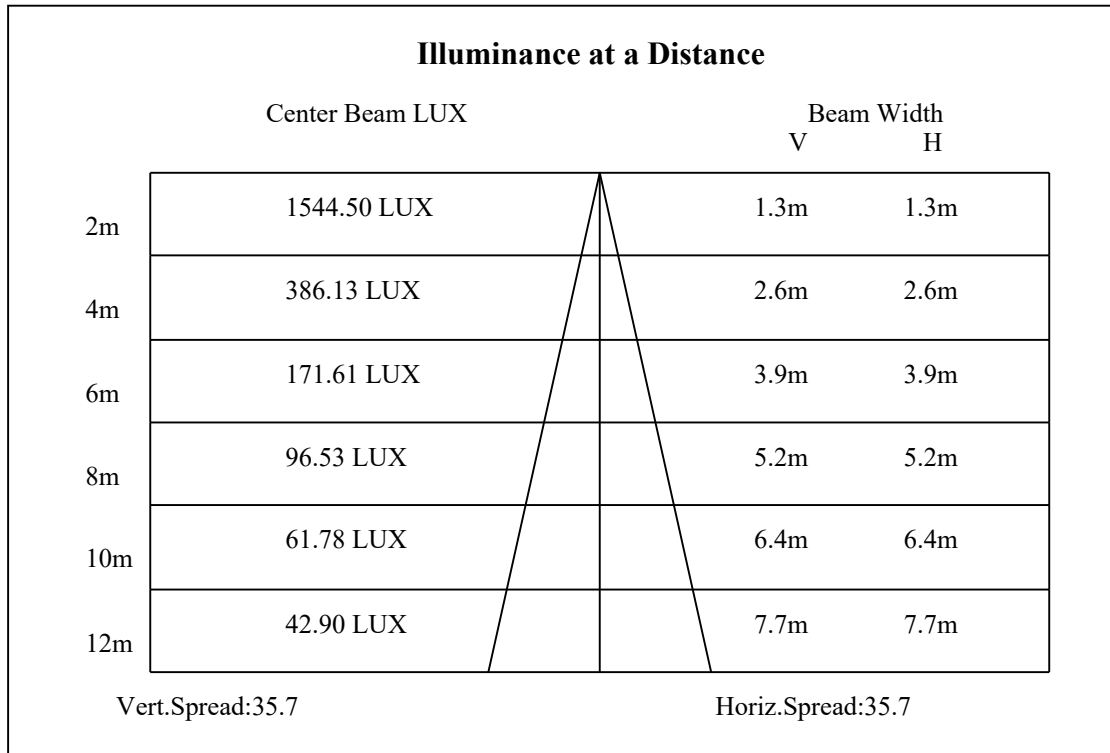
C90/C270: —————

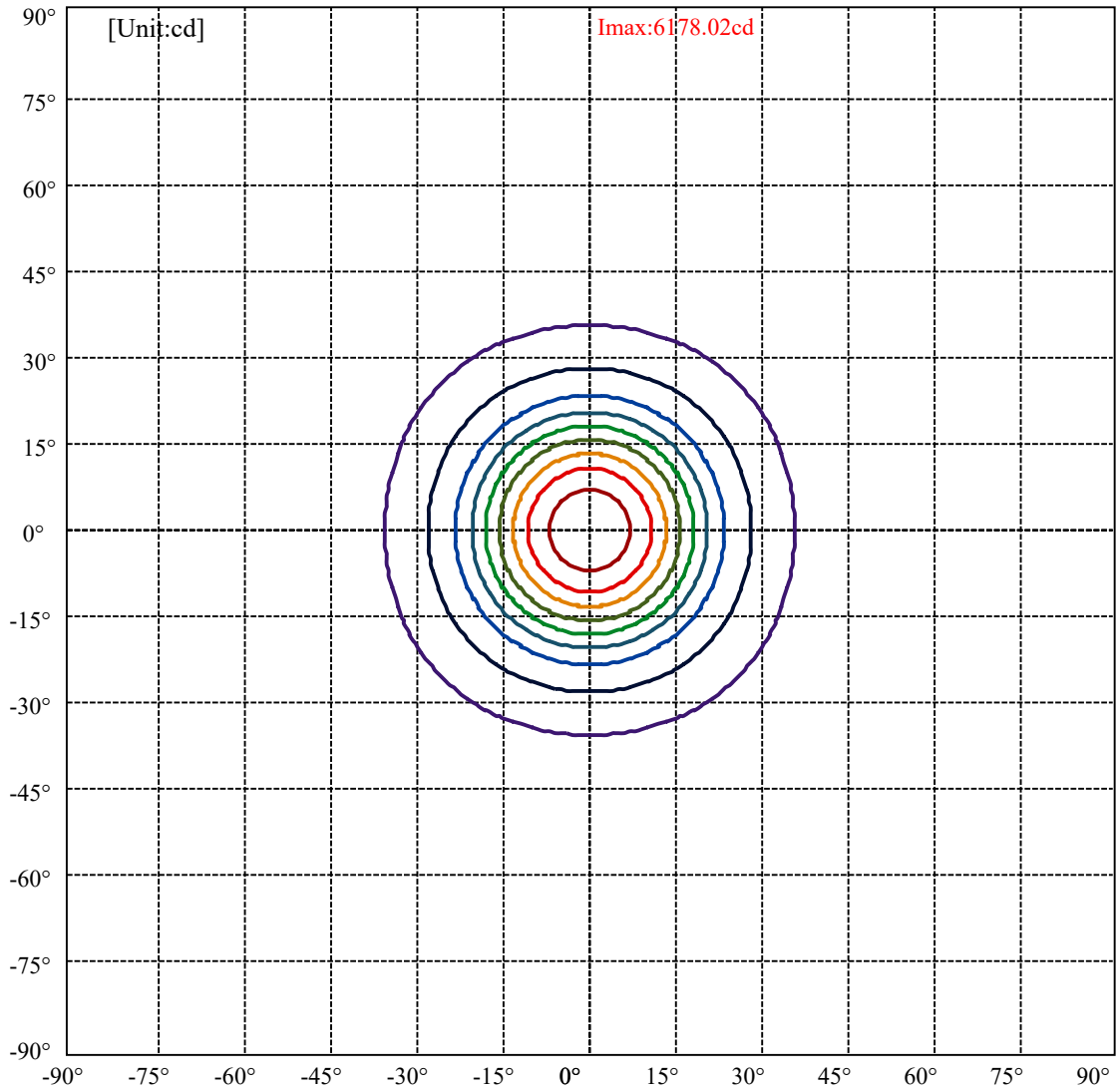
Field angle(10%Imax):C0/180Left:35.2 Right:35.2

:C90/270Left:35.2 Right:35.2

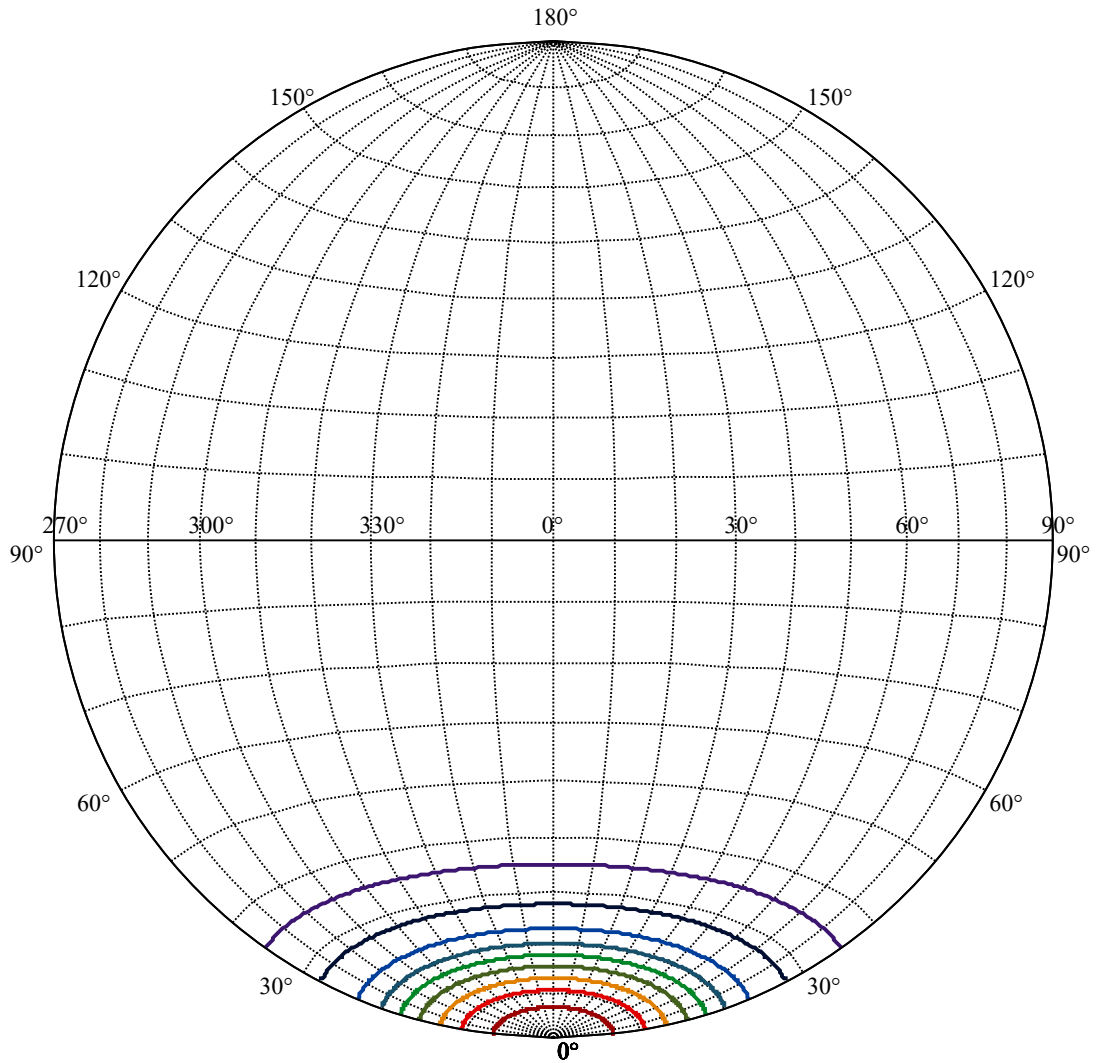
Beam Angle(50%Imax):C0/180Left:17.9 Right:17.9

:C90/270Left:17.9 Right:17.9





(10%Imax) 617.802	—
(20%Imax) 1235.6	—
(30%Imax) 1853.4	—
(40%Imax) 2471.21	—
(50%Imax) 3089.01	—
(60%Imax) 3706.81	—
(70%Imax) 4324.61	—
(80%Imax) 4942.41	—
(90%Imax) 5560.21	—



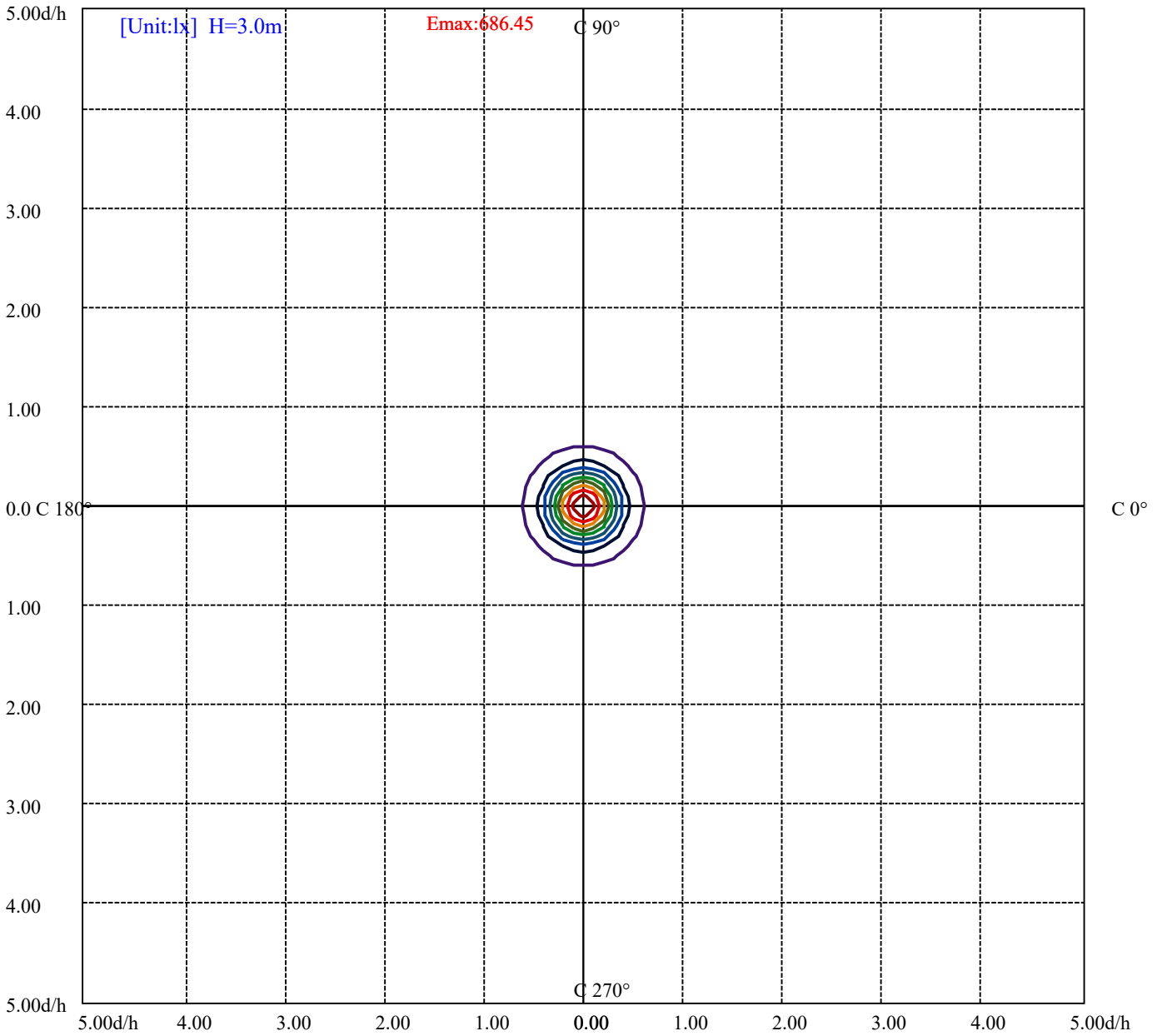
House

[Unit:cd]

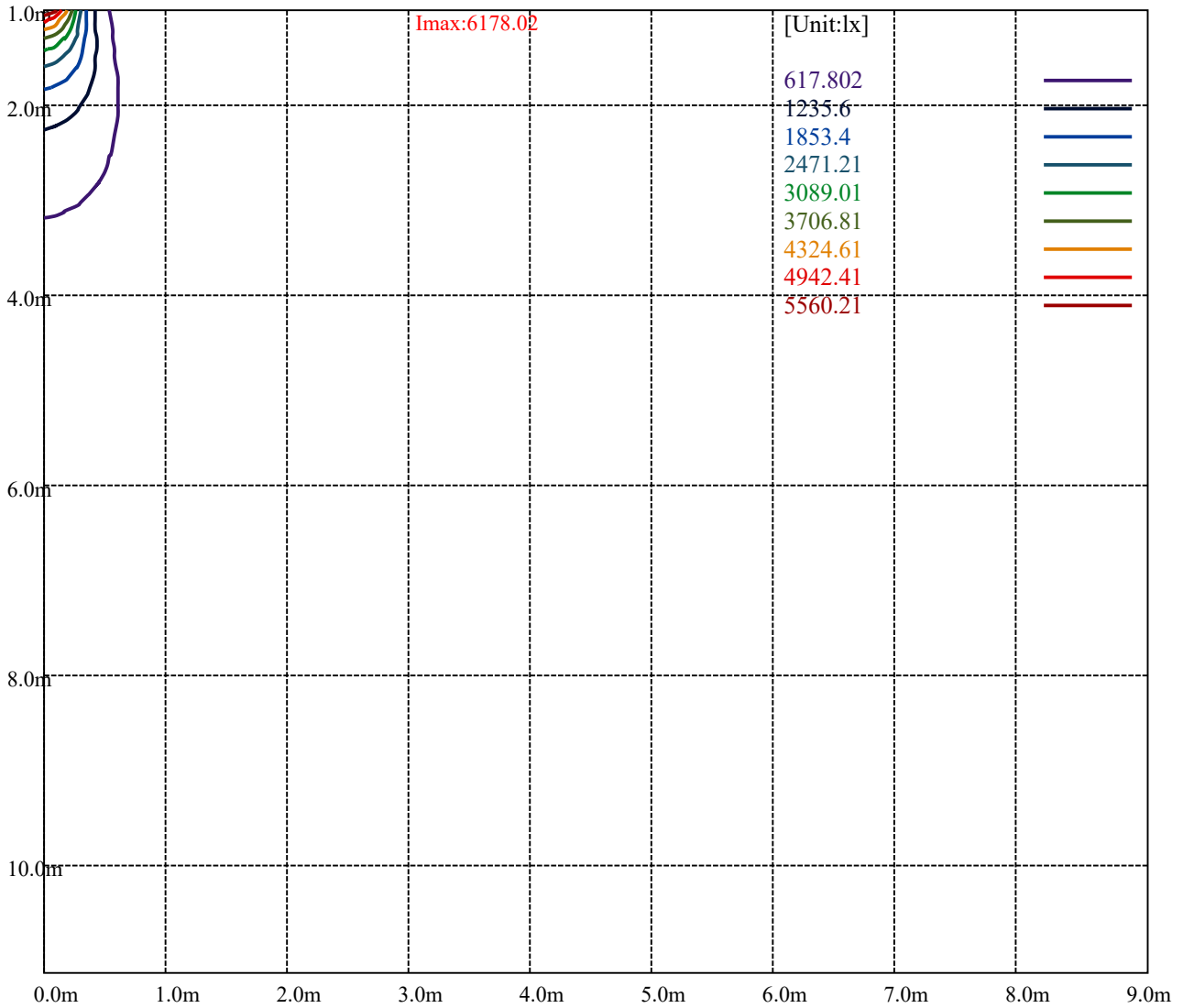
Road

Imax:6178.02

(10%Imax)	617.802	—
(20%Imax)	1235.6	—
(30%Imax)	1853.4	—
(40%Imax)	2471.21	—
(50%Imax)	3089.01	—
(60%Imax)	3706.81	—
(70%Imax)	4324.61	—
(80%Imax)	4942.41	—
(90%Imax)	5560.21	—



(10%Emax)	68.64456	—
(20%Emax)	137.2889	—
(30%Emax)	205.9333	—
(40%Emax)	274.5778	—
(50%Emax)	343.2222	—
(60%Emax)	411.8667	—
(70%Emax)	480.5111	—
(80%Emax)	549.1567	—
(90%Emax)	617.8011	—



Luminance Table

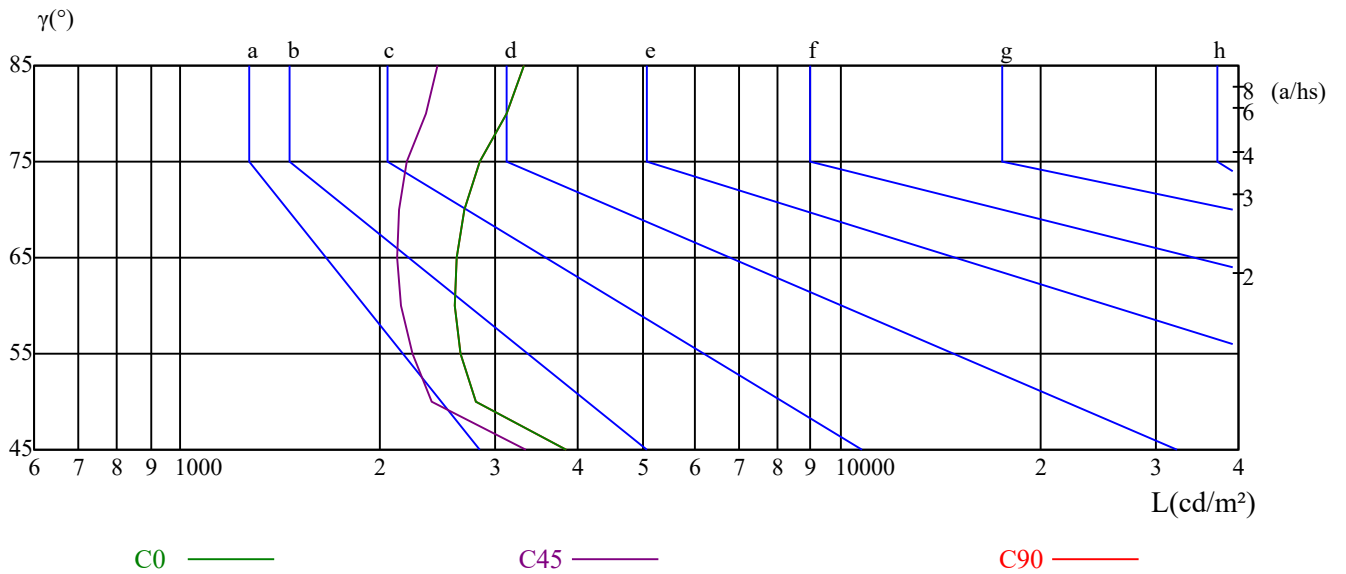
γ	45	50	55	60	65	70	75	80	85
C0	3840	2803	2661	2609	2625	2693	2831	3110	3322
C45	3331	2395	2239	2159	2133	2145	2204	2359	2442
C90	3840	2803	2661	2609	2625	2693	2831	3110	3322

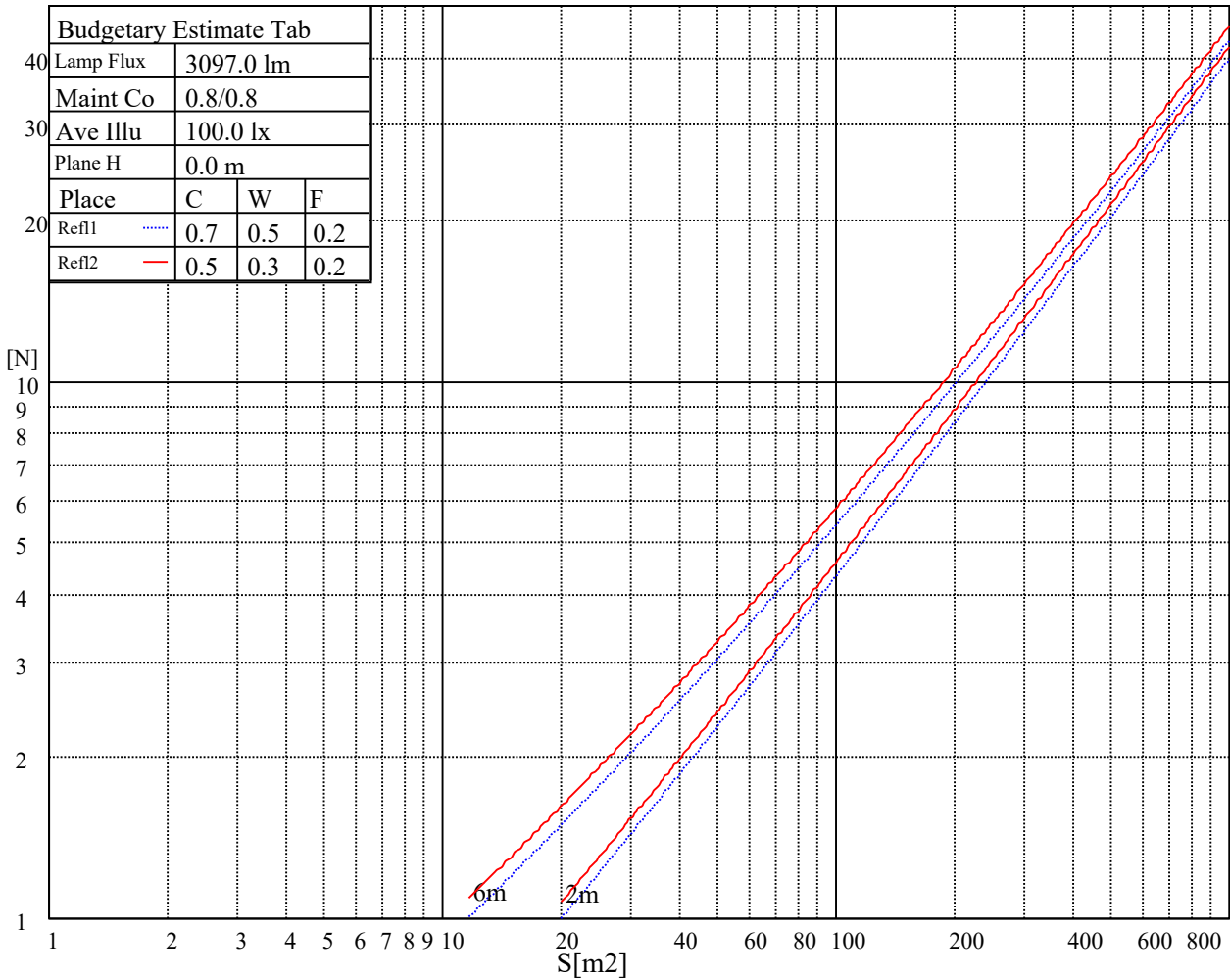
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5922	5922	5922	9019	9019	9019	25558	25558	25558

Glare Table

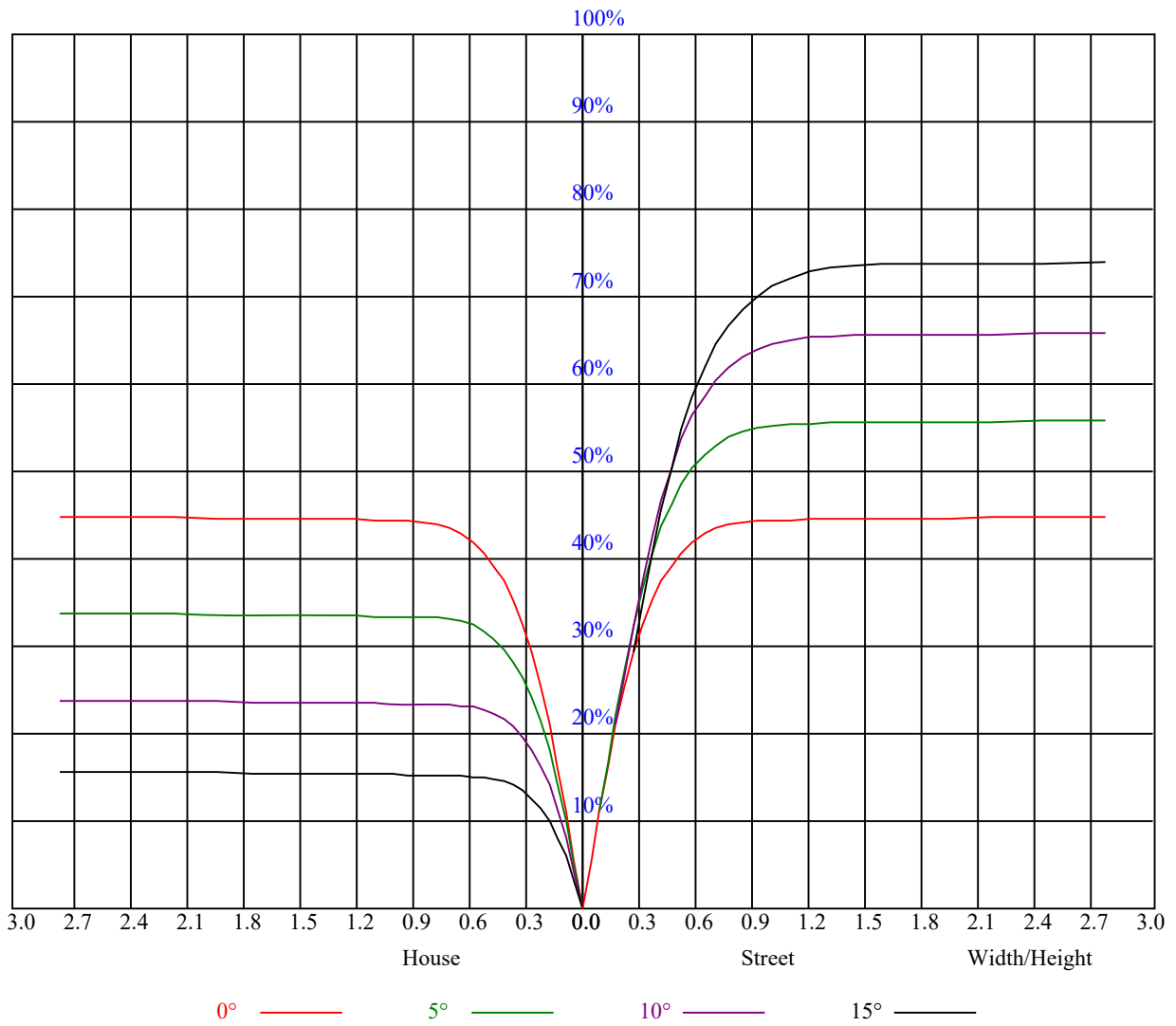
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.01	0.99	0.97	0.99	0.97	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86
2	0.95	0.92	0.89	0.94	0.91	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.86	0.84	0.82	0.81
3	0.90	0.86	0.82	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.79	0.82	0.80	0.78	0.77
4	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
5	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.72	0.77	0.73	0.71	0.75	0.73	0.70	0.69
6	0.77	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
7	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.64	0.63
8	0.70	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
9	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57
10	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.55



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	6208.71	5921.87	5192.92	4030.68	2703.82	1528.92	1104.43	732.80	280.24
45.0	6138.79	6083.73	5539.77	4492.60	3131.61	1870.82	1218.95	849.52	381.54
90.0	6189.44	5974.72	5234.76	4051.05	2692.81	1516.80	1090.61	720.74	226.12
135.0	6175.13	6027.02	5306.34	4185.39	2747.31	1530.57	1136.36	732.25	286.84
180.0	6208.71	5846.44	5027.75	3710.80	2323.38	1359.34	1038.42	585.25	114.96
225.0	6138.79	5567.30	4617.58	3242.27	1873.02	1097.60	917.68	396.41	31.66
270.0	6189.44	5771.56	4946.82	3630.97	2368.53	1341.72	1026.80	568.73	168.58
315.0	6175.13	5734.67	4888.46	3583.62	2190.69	1340.07	1015.57	510.92	91.12
360.0	6208.71	5921.87	5192.92	4030.68	2703.82	1528.92	1104.43	732.80	280.24
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	23.45	15.80	14.26	13.27	12.61	12.06	11.51	11.23	10.96
45.0	29.95	15.58	14.15	13.27	12.50	12.00	11.56	11.23	11.12
90.0	21.97	14.92	13.65	12.72	12.28	11.67	11.40	11.12	10.85
135.0	23.40	15.20	13.82	12.94	12.28	11.78	11.45	12.94	10.90
180.0	17.62	14.76	13.65	12.72	12.11	11.73	11.45	11.67	11.01
225.0	16.90	14.20	13.21	12.55	11.95	11.51	11.40	11.01	10.79
270.0	17.62	14.65	13.54	12.72	12.17	11.73	11.40	11.29	10.85
315.0	17.89	14.81	13.60	12.83	12.22	11.73	11.34	11.01	10.85
360.0	23.45	15.80	14.26	13.27	12.61	12.06	11.51	11.23	10.96
C/ γ (°)	90.0								
0.0	10.85								
45.0	10.79								
90.0	10.79								
135.0	10.79								
180.0	10.79								
225.0	10.74								
270.0	10.79								
315.0	10.79								
360.0	10.85								