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Nata

LumCAT: 1-0920-M	
Luminaire: 92.70.124.00	
Report No: 210719-B016	Voltage(V): 36.1600
Test No: 210719-C016	Current(A): 0.5110
LampCAT: Fortimo LED SLM 1204 G7N	Power (W): 18.4770
Lamp flux(lm): 2370.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 570	Width(mm): 45
Phm Type: C	Height(mm): 20

Photometric Results

Lumens(lm): 1818.02
Efficiency(%): 76.71%
Lumens(lm)/Power(W): 98.39
Central intensity(cd): 5472.844
Maximum intensity(cd): 5472.844
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=34.6
 [C90/270]Total=34.6
Field angle(10%Imax): [C0/180]Total=51.5
 [C90/270]Total=51.5
Maximum s/h(1/2): C0_180=0.58 C90_270=0.58
Maximum s/h(1/4): C0_180=0.54 C90_270=0.54
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 76.71%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.585%

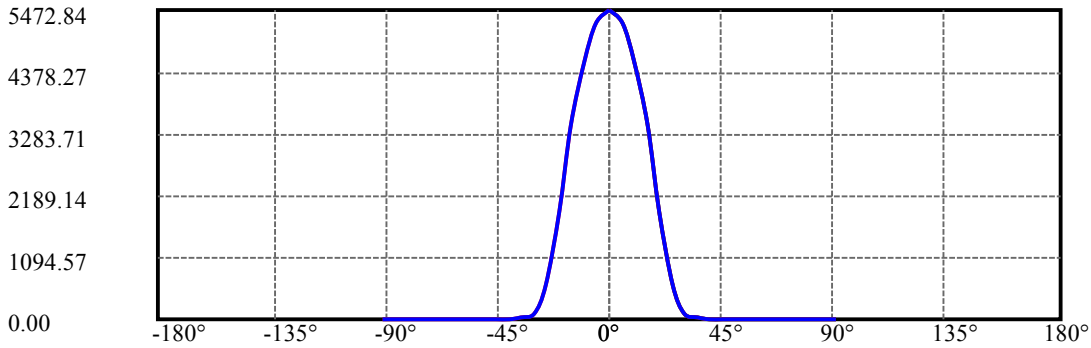
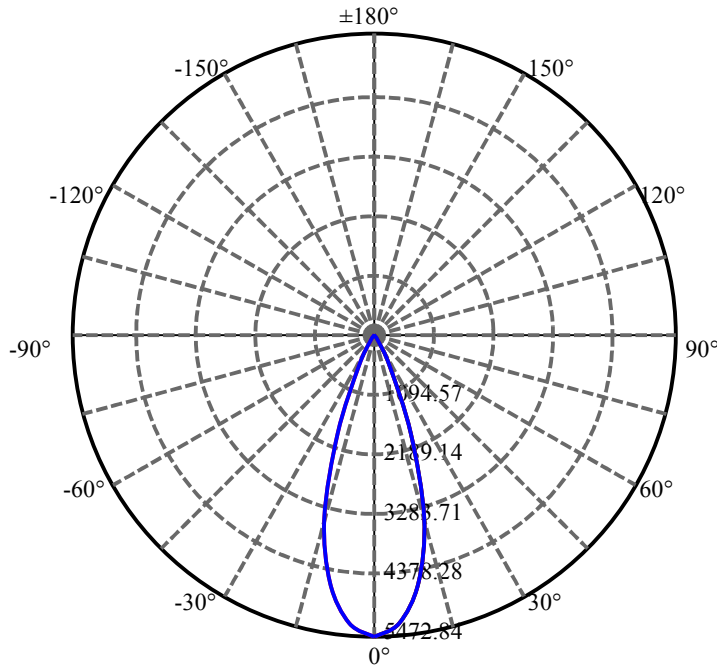
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5472.844	0.000	0	.000%	.000%
5.0	5235.680	128.017	128.017	5.402%	7.042%
10.0	4553.930	350.205	478.222	14.777%	26.305%
15.0	3437.086	474.022	952.244	20.001%	52.378%
20.0	1897.973	439.684	1391.928	18.552%	76.563%
25.0	625.141	264.628	1656.556	11.166%	91.119%
30.0	114.363	93.585	1750.141	3.949%	96.266%
35.0	19.793	19.755	1769.897	.834%	97.353%
40.0	13.331	5.527	1775.423	.233%	97.657%
45.0	10.955	4.497	1779.92	.190%	97.904%
50.0	9.773	4.188	1784.108	.177%	98.135%
55.0	9.042	4.091	1788.199	.173%	98.360%
60.0	8.648	4.089	1792.289	.173%	98.584%
65.0	8.381	4.140	1796.429	.175%	98.812%
70.0	8.234	4.207	1800.635	.178%	99.044%
75.0	8.142	4.280	1804.916	.181%	99.279%
80.0	8.079	4.340	1809.256	.183%	99.518%
85.0	8.037	4.379	1813.635	.185%	99.759%
90.0	7.988	4.388	1818.023	.185%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1750.14	73.85%	96.27%
0-40	1775.42	74.91%	97.66%
0-60	1792.29	75.62%	98.58%
0-90	1813.64	76.52%	99.76%
0-120	1813.64	76.52%	99.76%
0-180	1818.02	76.71%	100.00%
60-90	25.44	1.07%	1.40%
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%
0-21.18	1454.42	61.37%	80.00%

ZONAL LUMEN SUMMARY

0-10	478.22
10-20	913.71
20-30	358.21
30-40	25.28
40-50	8.69
50-60	8.18
60-70	8.35
70-80	8.62
80-90	4.38
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: —————

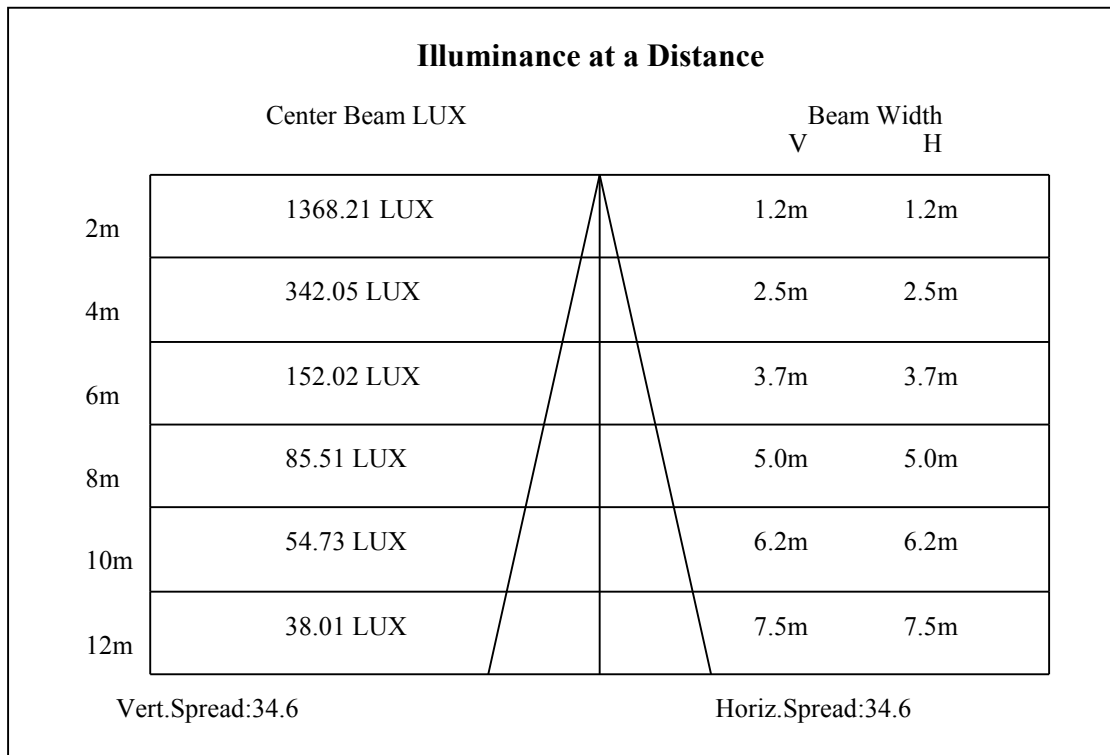
C90/C270: —————

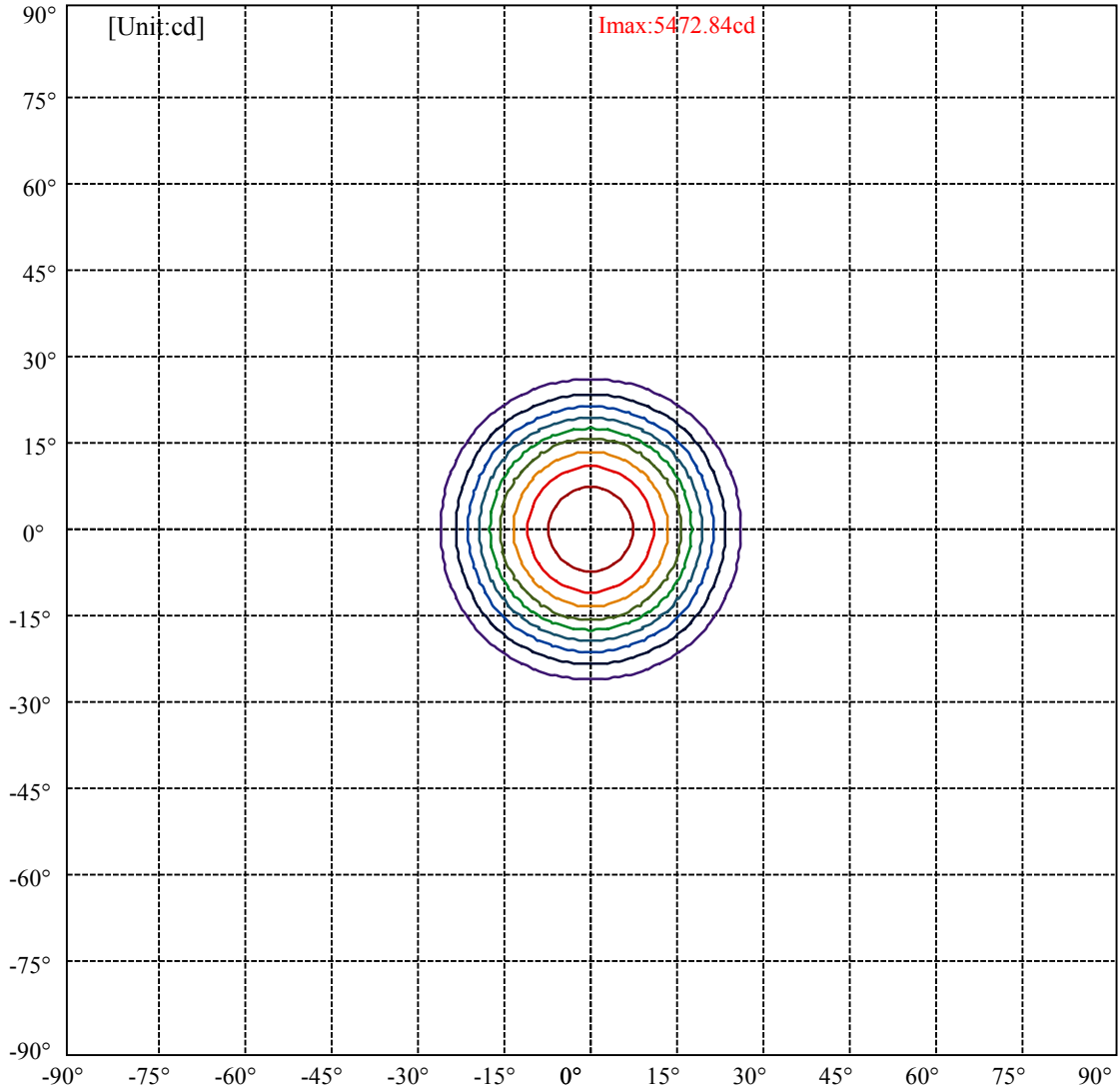
Field angle(10%Imax):C0/180Left:25.8 Right:25.8

:C90/270Left:25.8 Right:25.8

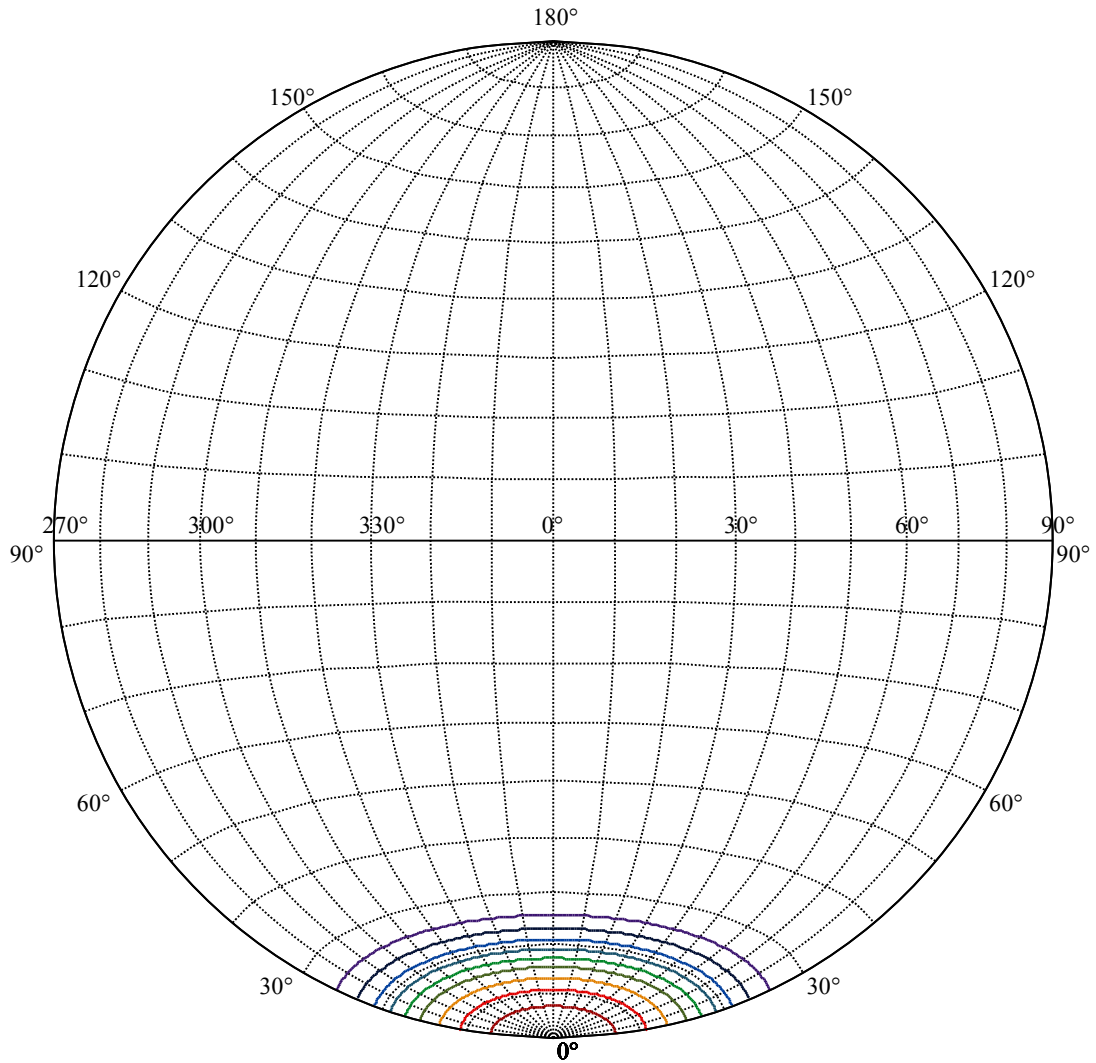
Beam Angle(50%Imax):C0/180Left:17.3 Right:17.3

:C90/270Left:17.3 Right:17.3





(10%Imax) 547.284	—
(20%Imax) 1094.57	—
(30%Imax) 1641.85	—
(40%Imax) 2189.14	—
(50%Imax) 2736.42	—
(60%Imax) 3283.71	—
(70%Imax) 3830.99	—
(80%Imax) 4378.27	—
(90%Imax) 4925.56	—



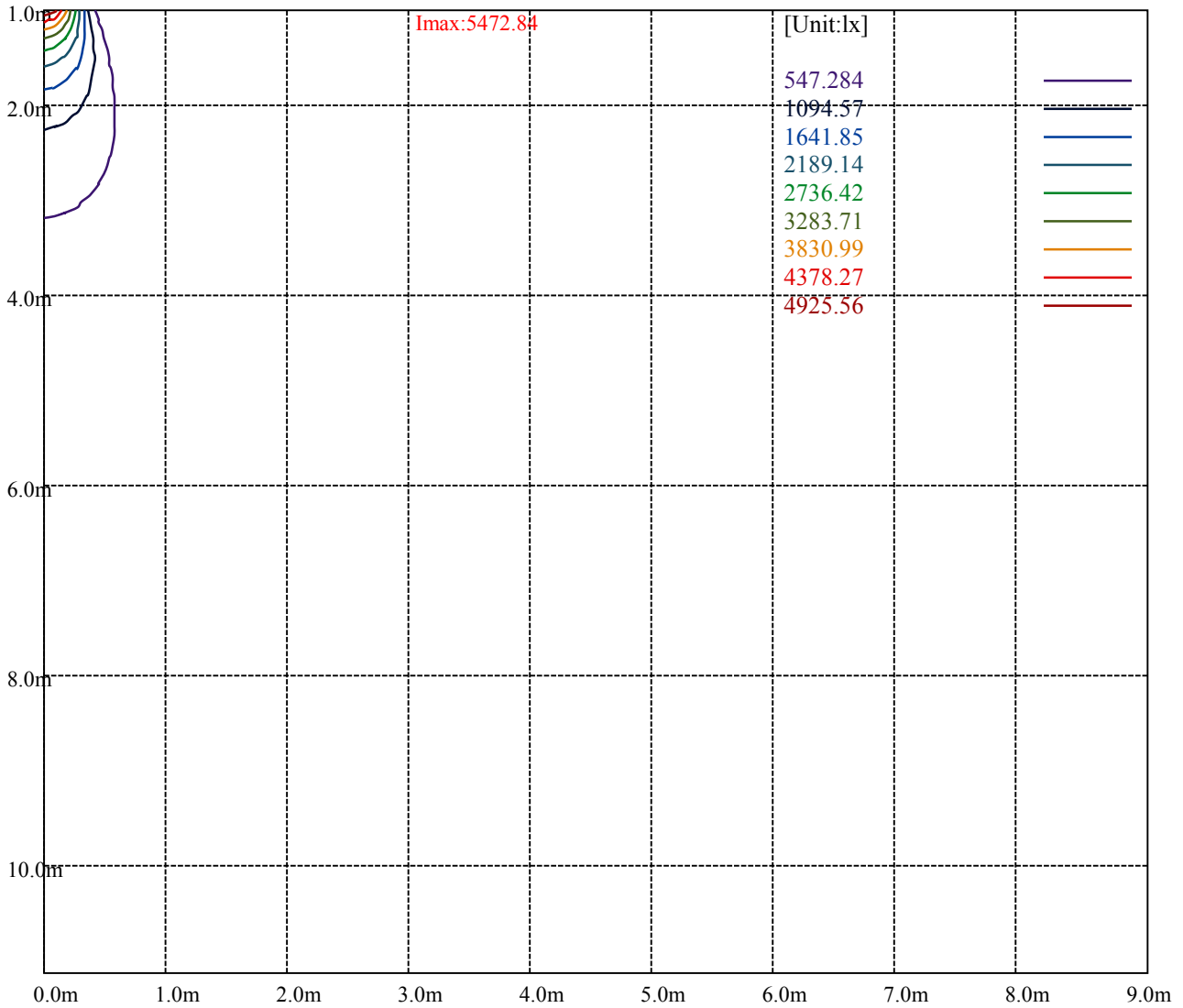
House

[Unit:cd]

Road

Imax:5472.84

(10%Imax) 547.284	—
(20%Imax) 1094.57	—
(30%Imax) 1641.85	—
(40%Imax) 2189.14	—
(50%Imax) 2736.42	—
(60%Imax) 3283.71	—
(70%Imax) 3830.99	—
(80%Imax) 4378.27	—
(90%Imax) 4925.56	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	418	388	376	381	396	423	461	515	591
C45	451	422	414	425	448	486	541	621	737
C90	584	569	585	636	719	856	1084	1513	2566

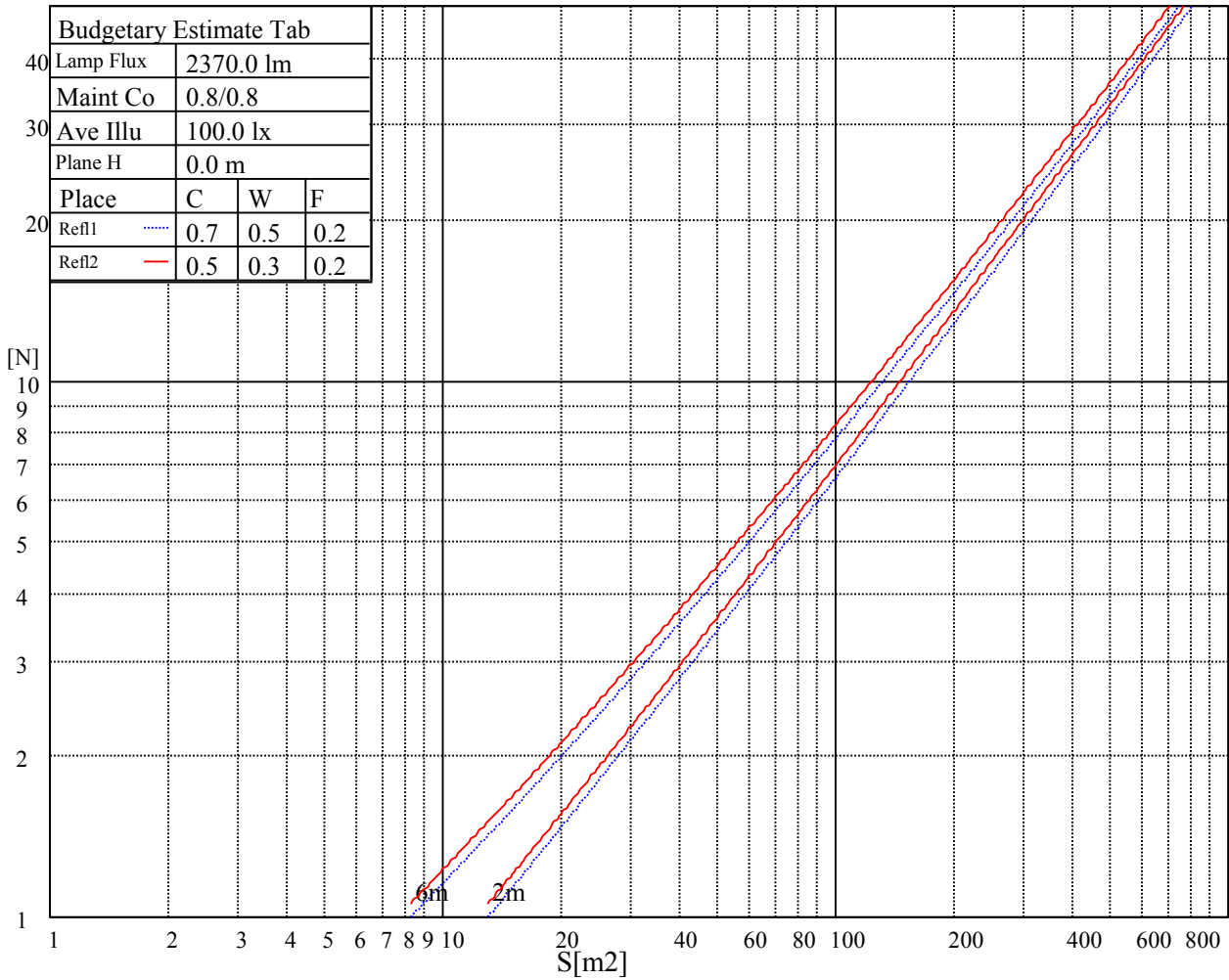
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
773	773	773	1226	1226	1226	3595	3595	3595

Glare Table

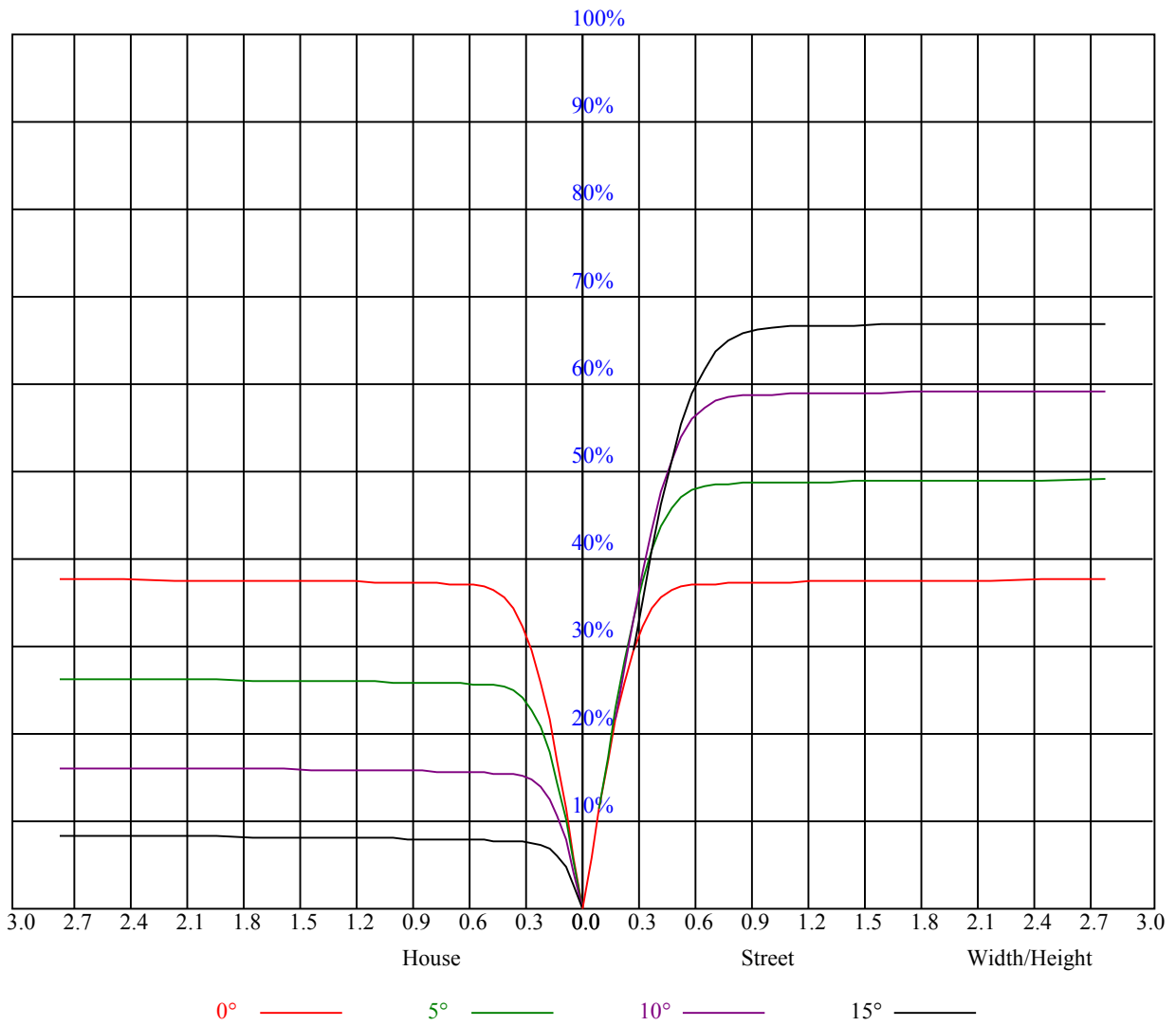
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.91	0.91	0.91	0.89	0.89	0.89	0.85	0.85	0.85	0.82	0.82	0.82	0.78	0.78	0.78	0.77
1	0.86	0.84	0.83	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.78	0.77	0.76	0.75	0.75	0.73
2	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.76	0.74	0.73	0.74	0.73	0.72	0.70
3	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.73	0.71	0.70	0.72	0.70	0.69	0.68
4	0.75	0.71	0.69	0.74	0.71	0.69	0.72	0.70	0.68	0.71	0.69	0.67	0.70	0.68	0.66	0.65
5	0.72	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.69	0.66	0.64	0.67	0.65	0.64	0.63
6	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.65	0.62	0.66	0.64	0.62	0.66	0.63	0.62	0.61
7	0.66	0.63	0.61	0.66	0.63	0.61	0.65	0.62	0.60	0.64	0.62	0.60	0.64	0.61	0.60	0.59
8	0.64	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.59	0.58	0.57
9	0.62	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.60	0.58	0.56	0.55
10	0.60	0.57	0.55	0.60	0.57	0.55	0.59	0.56	0.54	0.59	0.56	0.54	0.58	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	5460.19	5380.88	4847.06	3881.81	2545.88	991.13	284.63	27.00	14.79
45.0	5480.44	5240.81	4579.88	3482.44	1978.31	572.63	68.74	18.84	13.11
90.0	5465.81	5050.13	4231.13	3019.50	1087.93	328.05	40.73	16.20	12.26
135.0	5484.94	5181.19	4397.06	3226.50	1762.31	419.06	42.36	16.71	12.60
180.0	5460.19	5097.38	4229.44	3008.25	1051.48	300.60	34.14	15.53	12.32
225.0	5480.44	5225.63	4591.13	3430.13	1986.75	606.21	60.98	18.56	13.28
270.0	5465.81	5384.25	4836.38	3888.56	2455.31	988.31	299.25	23.23	14.40
315.0	5484.94	5325.19	4719.38	3559.50	2315.81	795.15	84.09	22.28	13.89
360.0	5460.19	5380.88	4847.06	3881.81	2545.88	991.13	284.63	27.00	14.79
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	11.76	10.13	9.28	8.83	8.49	8.33	8.21	8.16	8.16
45.0	10.86	9.73	8.94	8.55	8.27	8.10	8.04	7.99	7.93
90.0	10.52	9.51	8.83	8.49	8.33	8.21	8.10	8.04	7.93
135.0	10.63	9.73	9.00	8.61	8.38	8.21	8.16	8.10	8.04
180.0	10.58	9.62	9.00	8.66	8.44	8.33	8.21	8.16	8.10
225.0	10.86	9.68	8.94	8.61	8.33	8.16	8.04	7.99	7.99
270.0	11.36	9.96	9.23	8.78	8.44	8.27	8.21	8.10	8.10
315.0	11.08	9.84	9.11	8.66	8.38	8.27	8.16	8.10	8.04
360.0	11.76	10.13	9.28	8.83	8.49	8.33	8.21	8.16	8.16
C/ γ (°)	90.0								
0.0	8.10								
45.0	7.93								
90.0	7.93								
135.0	7.99								
180.0	8.10								
225.0	7.93								
270.0	7.93								
315.0	7.99								
360.0	8.10								