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Nata

LumCAT: 1-1006-M	
Luminaire: BJB 47.360.1020	
Report No: 210716-B017	Voltage(V): 36.9600
Test No: 210716-C017	Current(A): 0.4510
LampCAT: Fortimo LED SLM 1203 G7N	Power (W): 16.6680
Lamp flux(lm): 2154.2	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): 1529.35	Bright Area: 0.006
Efficiency(%): 70.99%	SLI: 14.008
Lumens(lm)/Power(W): 91.75	
Central intensity(cd): 7503.047	
Maximum intensity(cd): 7503.047	
Angle of maximum intensity: C=0.0 γ =0.0	
Beam Angle(50%Imax): [C0/180]Total=25.4	
[C90/270]Total=25.4	
Field angle(10%Imax): [C0/180]Total=43.3	
[C90/270]Total=43.3	
IES Classification : TypeI	
Longitudinal Classification : VeryShort	
Cut Off Classification : Cutoff	
Max Cd(At 90°Vert) : 6.75	
Max Cd(80 to 90°Vert) : 7.122656	
Street Side UpWard Lumens: - -of Lamp 0.00%of Luminaire	
Street Side DownWard Lumens: 35.50%of Lamp 50.00%of Luminaire	
House Side UpWard Lumens: - -of lamp 0.00%of Luminaire	
House Side DownWard Lumens: 35.50%of Lamp 50.00%of Luminaire	

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/7/16
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7503.047	0.000	0	.000%	.000%
1.0	7478.297	7.168	7.168	.333%	.469%
2.0	7389.281	21.339	28.508	.991%	1.864%
3.0	7244.508	34.999	63.507	1.625%	4.153%
4.0	7056.492	47.870	111.377	2.222%	7.283%
5.0	6826.359	59.723	171.1	2.772%	11.188%
6.0	6564.234	70.371	241.471	3.267%	15.789%
7.0	6244.523	79.504	320.975	3.691%	20.988%
8.0	5896.969	86.894	407.869	4.034%	26.669%
9.0	5481.141	92.213	500.083	4.281%	32.699%
10.0	5018.555	95.018	595.101	4.411%	38.912%
11.0	4564.477	95.754	690.855	4.445%	45.173%
12.0	4096.758	94.680	785.535	4.395%	51.364%
13.0	3608.930	91.447	876.982	4.245%	57.343%
14.0	3135.023	86.322	963.304	4.007%	62.988%
15.0	2722.078	80.409	1043.713	3.733%	68.245%
16.0	2332.125	74.058	1117.771	3.438%	73.088%
17.0	1973.602	67.052	1184.823	3.113%	77.472%
18.0	1635.152	59.501	1244.324	2.762%	81.363%
19.0	1379.363	52.446	1296.77	2.435%	84.792%
20.0	1065.270	44.744	1341.514	2.077%	87.718%
21.0	874.301	37.244	1378.757	1.729%	90.153%
22.0	680.252	31.239	1409.997	1.450%	92.196%
23.0	492.891	24.616	1434.612	1.143%	93.805%
24.0	351.837	18.469	1453.081	.857%	95.013%
25.0	214.425	12.876	1465.957	.598%	95.855%
26.0	132.694	8.194	1474.15	.380%	96.390%
27.0	64.702	4.829	1478.98	.224%	96.706%
28.0	37.146	2.579	1481.558	.120%	96.875%
29.0	24.855	1.622	1483.18	.075%	96.981%
30.0	19.343	1.193	1484.374	.055%	97.059%
31.0	16.284	0.991	1485.365	.046%	97.124%
32.0	14.590	0.885	1486.25	.041%	97.182%
33.0	13.500	0.828	1487.077	.038%	97.236%
34.0	12.628	0.791	1487.868	.037%	97.287%
35.0	11.834	0.760	1488.628	.035%	97.337%
36.0	11.208	0.734	1489.361	.034%	97.385%
37.0	10.723	0.715	1490.077	.033%	97.432%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	10.266	0.701	1490.777	.033%	97.478%
39.0	9.900	0.688	1491.465	.032%	97.523%
40.0	9.626	0.681	1492.146	.032%	97.567%
41.0	9.387	0.677	1492.823	.031%	97.611%
42.0	9.162	0.674	1493.497	.031%	97.655%
43.0	8.986	0.672	1494.17	.031%	97.699%
44.0	8.838	0.673	1494.842	.031%	97.743%
45.0	8.719	0.675	1495.517	.031%	97.788%
46.0	8.620	0.678	1496.195	.031%	97.832%
47.0	8.536	0.682	1496.878	.032%	97.876%
48.0	8.452	0.687	1497.564	.032%	97.921%
49.0	8.381	0.691	1498.255	.032%	97.967%
50.0	8.290	0.695	1498.951	.032%	98.012%
51.0	8.241	0.699	1499.65	.032%	98.058%
52.0	8.177	0.705	1500.354	.033%	98.104%
53.0	8.135	0.710	1501.064	.033%	98.150%
54.0	8.079	0.715	1501.779	.033%	98.197%
55.0	8.051	0.720	1502.499	.033%	98.244%
56.0	8.009	0.726	1503.224	.034%	98.291%
57.0	7.952	0.730	1503.954	.034%	98.339%
58.0	7.931	0.735	1504.689	.034%	98.387%
59.0	7.889	0.740	1505.428	.034%	98.436%
60.0	7.847	0.743	1506.172	.035%	98.484%
61.0	7.826	0.748	1506.92	.035%	98.533%
62.0	7.791	0.752	1507.672	.035%	98.582%
63.0	7.770	0.757	1508.429	.035%	98.632%
64.0	7.755	0.762	1509.191	.035%	98.682%
65.0	7.727	0.766	1509.957	.036%	98.732%
66.0	7.720	0.771	1510.728	.036%	98.782%
67.0	7.685	0.775	1511.502	.036%	98.833%
68.0	7.643	0.776	1512.279	.036%	98.884%
69.0	7.643	0.780	1513.059	.036%	98.935%
70.0	7.622	0.784	1513.843	.036%	98.986%
71.0	7.608	0.787	1514.63	.037%	99.037%
72.0	7.573	0.789	1515.419	.037%	99.089%
73.0	7.587	0.793	1516.212	.037%	99.141%
74.0	7.587	0.798	1517.009	.037%	99.193%
75.0	7.650	0.805	1517.815	.037%	99.245%

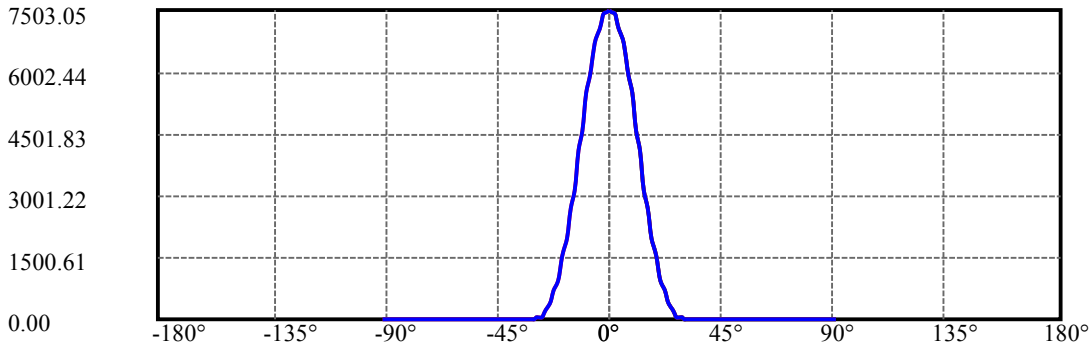
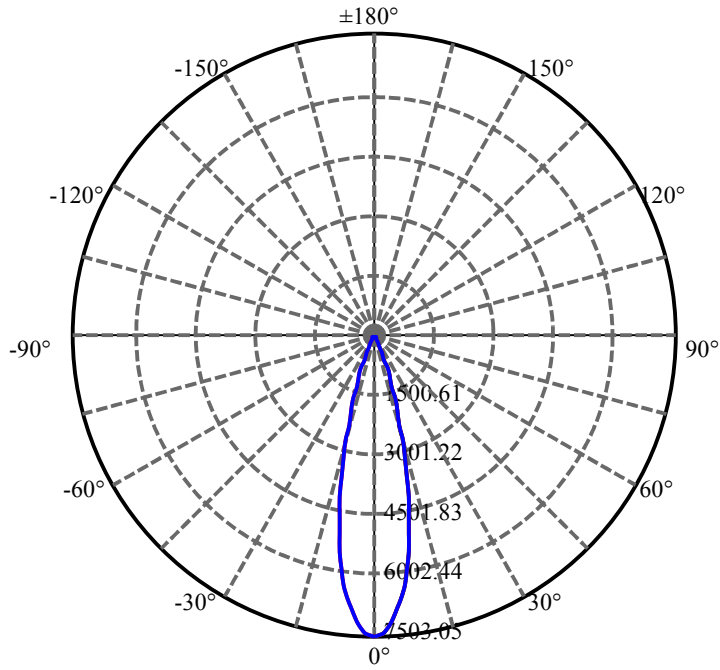
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.664	0.813	1518.627	.038%	99.299%
77.0	7.657	0.817	1519.444	.038%	99.352%
78.0	7.432	0.808	1520.252	.037%	99.405%
79.0	7.228	0.788	1521.04	.037%	99.456%
80.0	7.123	0.774	1521.813	.036%	99.507%
81.0	7.066	0.767	1522.581	.036%	99.557%
82.0	7.017	0.764	1523.344	.035%	99.607%
83.0	7.003	0.762	1524.107	.035%	99.657%
84.0	6.989	0.762	1524.869	.035%	99.707%
85.0	6.912	0.759	1525.628	.035%	99.756%
86.0	6.891	0.754	1526.382	.035%	99.806%
87.0	6.771	0.748	1527.13	.035%	99.855%
88.0	6.764	0.741	1527.871	.034%	99.903%
89.0	6.764	0.741	1528.613	.034%	99.952%
90.0	6.750	0.741	1529.354	.034%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1484.37	68.91%	97.06%
0-40	1492.15	69.27%	97.57%
0-60	1506.17	69.92%	98.48%
0-90	1528.61	70.96%	99.95%
0-120	1528.61	70.96%	99.95%
0-180	1529.35	70.99%	100.00%
60-90	23.18	1.08%	1.52%
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%
0-17.65	1223.48	56.79%	80.00%

ZONAL LUMEN SUMMARY

0-10	595.10
10-20	746.41
20-30	142.86
30-40	7.77
40-50	6.80
50-60	7.22
60-70	7.67
70-80	7.97
80-90	6.80
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: —————

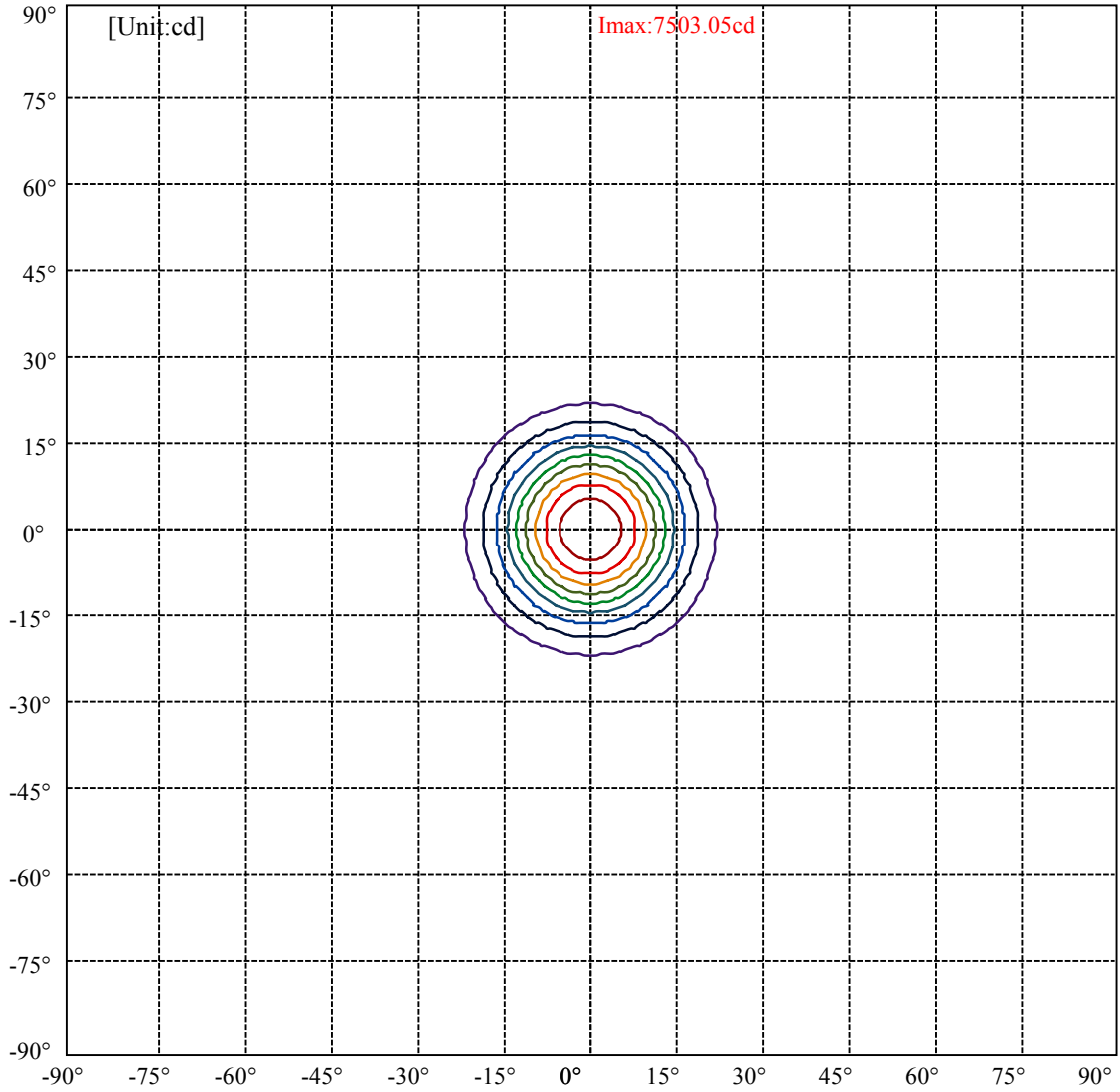
C90/C270: —————

Field angle(10%Imax):C0/180Left:21.6 Right:21.6

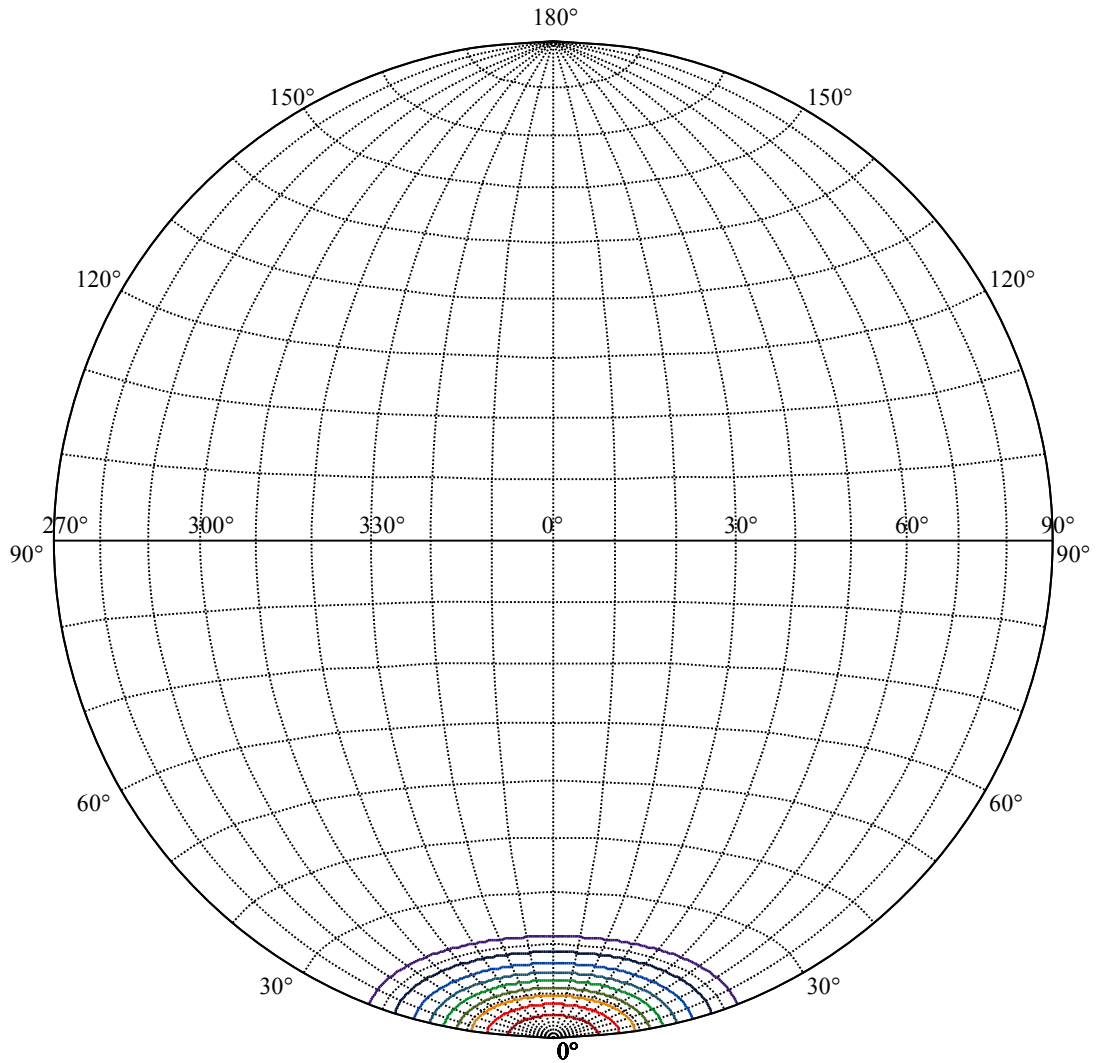
:C90/270Left:21.6 Right:21.6

Beam Angle(50%Imax):C0/180Left:12.7 Right:12.7

:C90/270Left:12.7 Right:12.7



(10%Imax)	750.305	—
(20%Imax)	1500.61	—
(30%Imax)	2250.91	—
(40%Imax)	3001.22	—
(50%Imax)	3751.52	—
(60%Imax)	4501.83	—
(70%Imax)	5252.13	—
(80%Imax)	6002.44	—
(90%Imax)	6752.74	—



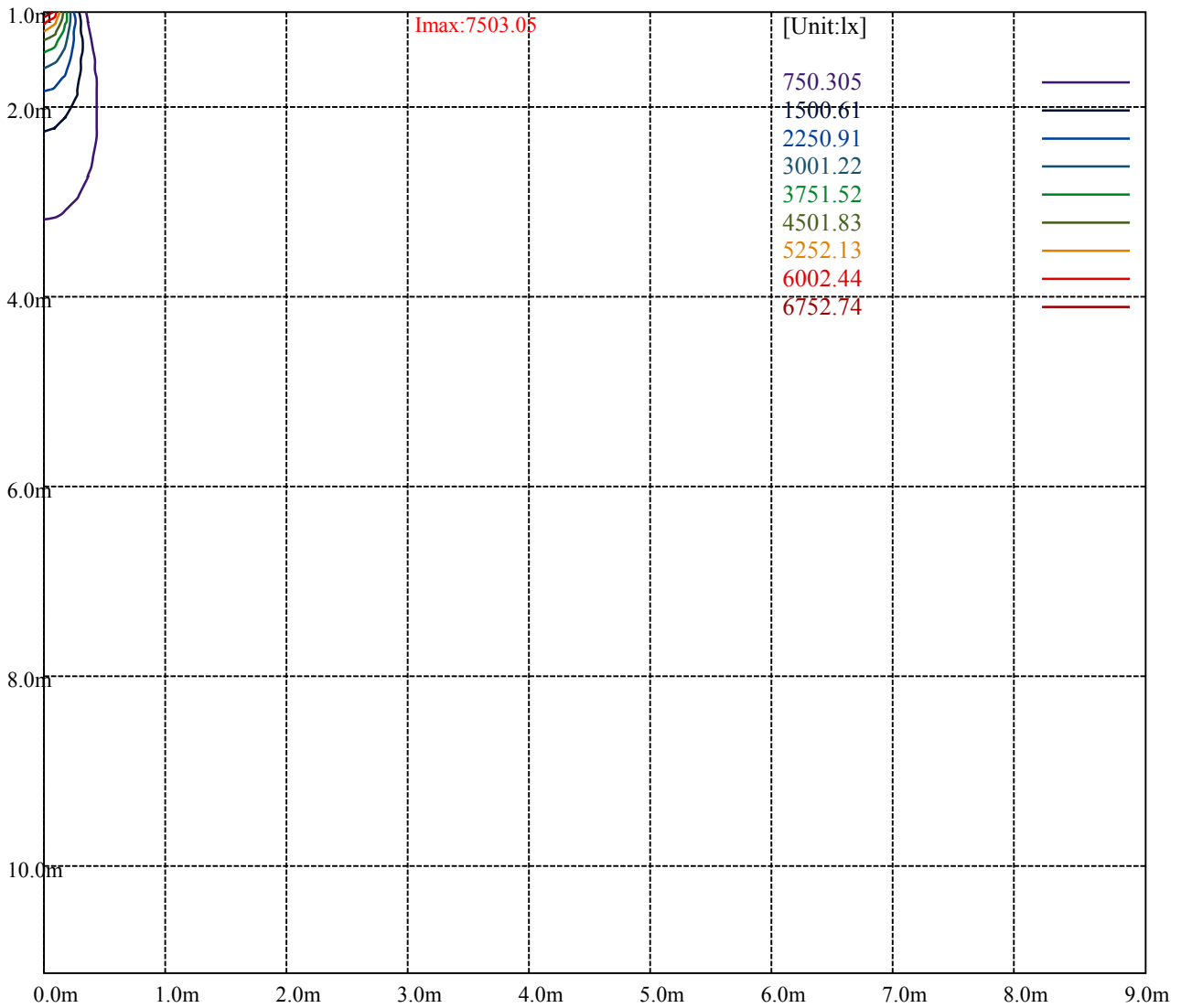
House

[Unit:cd]

Road

Imax:7503.05

(10%Imax) 750.305	—
(20%Imax) 1500.61	—
(30%Imax) 2250.91	—
(40%Imax) 3001.22	—
(50%Imax) 3751.52	—
(60%Imax) 4501.83	—
(70%Imax) 5252.13	—
(80%Imax) 6002.44	—
(90%Imax) 6752.74	—



Luminance Table

γ	45	50	55	60	65	70	75	80	85
C0	333	329	335	346	365	391	433	454	509
C45	359	358	369	385	413	450	509	547	634
C90	464	483	521	577	663	792	1019	1334	2207

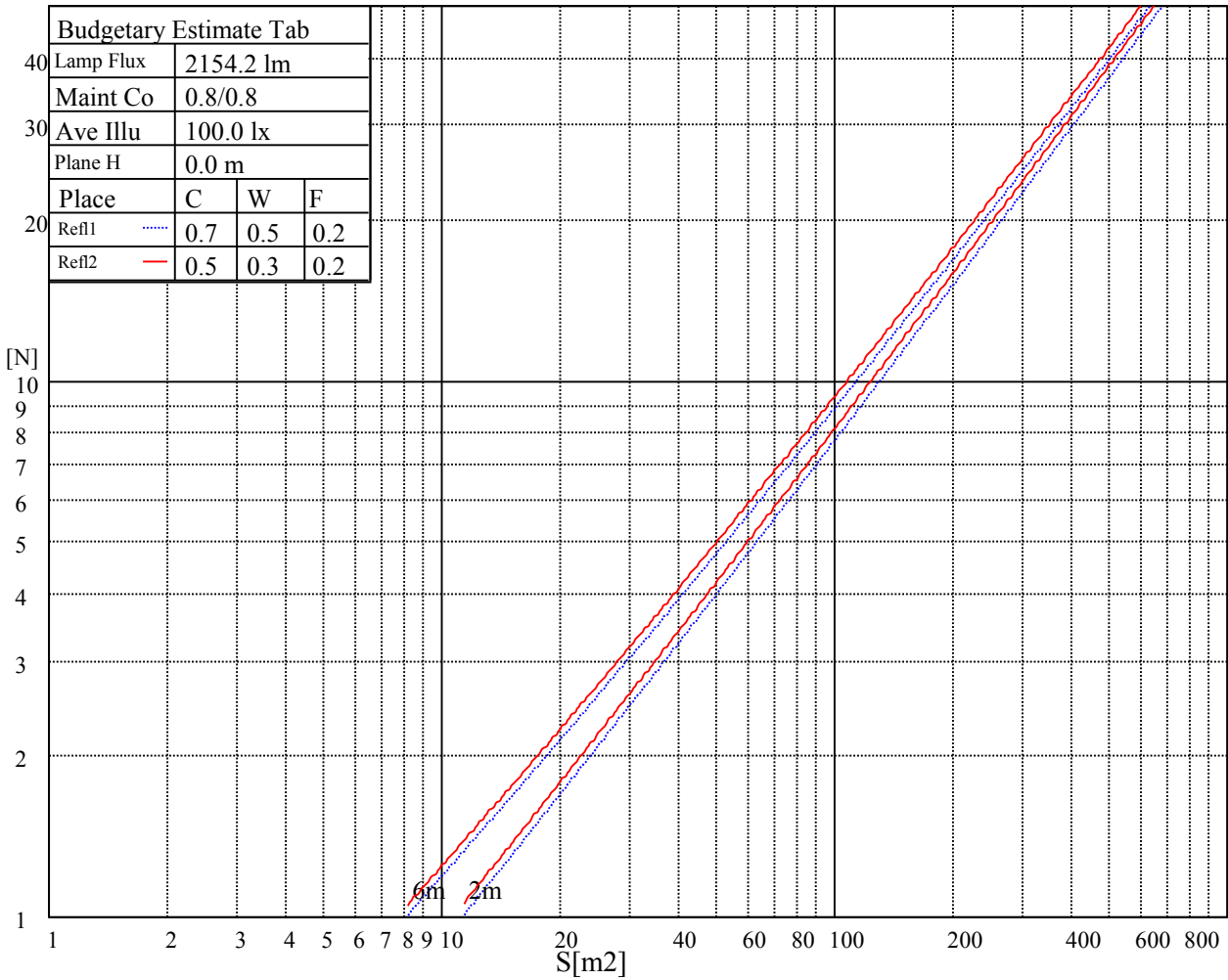
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
713	713	713	1152	1152	1152	3092	3092	3092

Glare Table

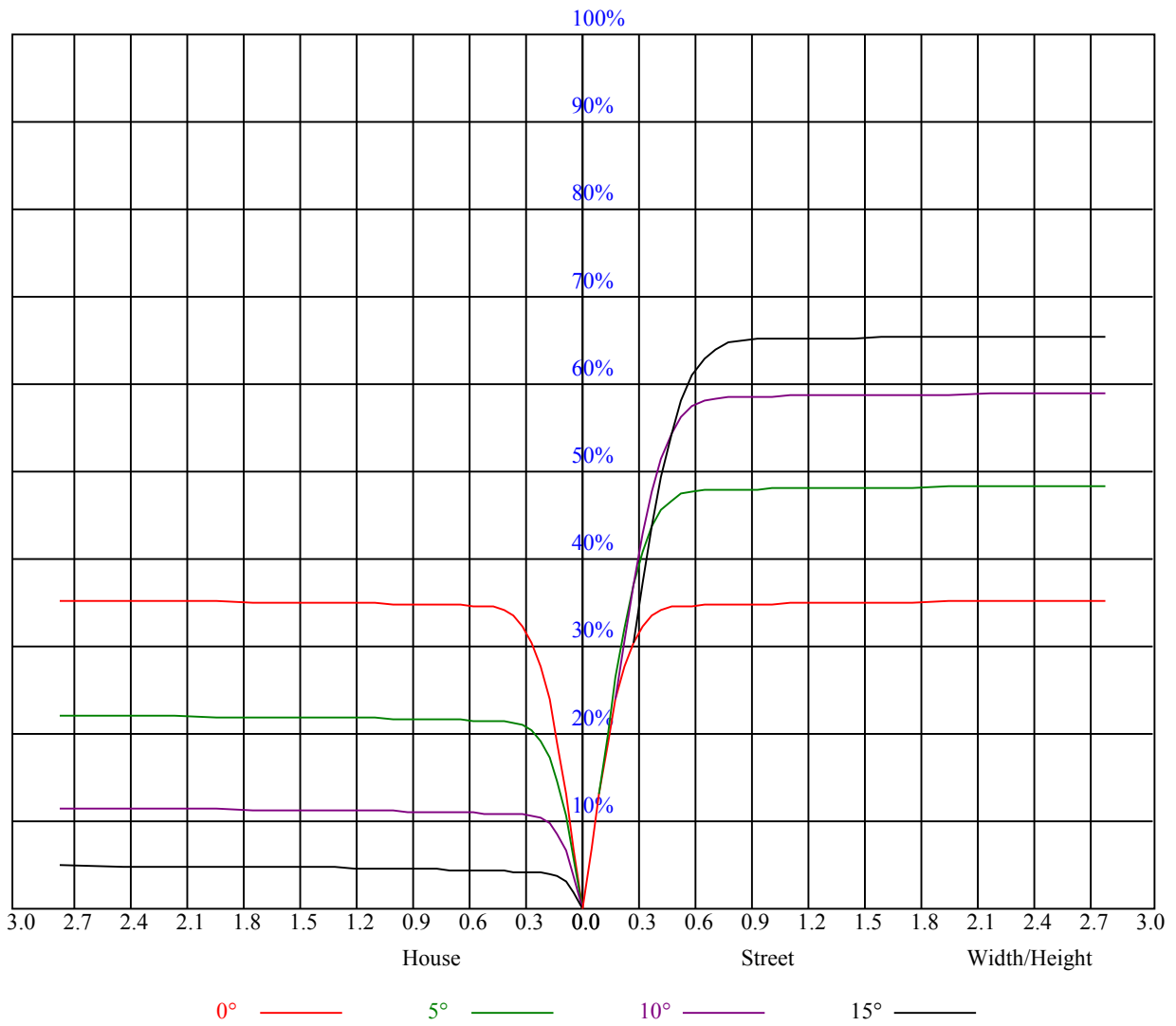
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.85	0.85	0.85	0.83	0.83	0.83	0.79	0.79	0.79	0.76	0.76	0.76	0.72	0.72	0.72	0.71
1	0.80	0.79	0.77	0.79	0.77	0.76	0.76	0.75	0.74	0.73	0.72	0.72	0.71	0.70	0.70	0.68
2	0.76	0.74	0.73	0.75	0.73	0.72	0.73	0.72	0.70	0.71	0.70	0.69	0.69	0.68	0.67	0.66
3	0.73	0.71	0.69	0.72	0.70	0.68	0.71	0.69	0.67	0.69	0.68	0.66	0.68	0.66	0.65	0.64
4	0.71	0.68	0.66	0.70	0.68	0.66	0.69	0.67	0.65	0.67	0.66	0.64	0.66	0.65	0.63	0.63
5	0.68	0.66	0.64	0.68	0.65	0.63	0.67	0.65	0.63	0.66	0.64	0.62	0.65	0.63	0.62	0.61
6	0.66	0.64	0.62	0.66	0.63	0.61	0.65	0.63	0.61	0.64	0.62	0.61	0.63	0.62	0.60	0.59
7	0.64	0.62	0.60	0.64	0.61	0.60	0.63	0.61	0.59	0.63	0.61	0.59	0.62	0.60	0.59	0.58
8	0.63	0.60	0.58	0.62	0.60	0.58	0.62	0.59	0.58	0.61	0.59	0.58	0.61	0.59	0.57	0.57
9	0.61	0.58	0.57	0.61	0.58	0.57	0.60	0.58	0.56	0.60	0.58	0.56	0.59	0.57	0.56	0.55
10	0.60	0.57	0.55	0.59	0.57	0.55	0.59	0.57	0.55	0.59	0.56	0.55	0.58	0.56	0.55	0.54



Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	7515.56	7521.19	7470.56	7383.38	7232.06	7005.94	6808.50	6573.38	6256.13
45.0	7507.13	7451.44	7313.63	7119.56	6945.75	6721.31	6389.44	6051.38	5688.56
90.0	7475.06	7372.13	7222.50	7003.69	6748.88	6494.06	6168.94	5716.13	5306.06
135.0	7514.44	7473.94	7323.75	7147.13	6947.44	6644.25	6350.63	6021.00	5605.31
180.0	7515.56	7458.19	7314.75	7115.63	6897.38	6627.38	6338.25	5955.75	5531.06
225.0	7507.13	7525.13	7508.25	7397.44	7194.38	7019.44	6783.19	6464.81	6193.69
270.0	7475.06	7512.19	7504.88	7458.19	7316.44	7117.31	6899.06	6673.50	6417.00
315.0	7514.44	7512.19	7455.94	7331.06	7169.63	6981.19	6775.88	6500.25	6177.94
360.0	7515.56	7521.19	7470.56	7383.38	7232.06	7005.94	6808.50	6573.38	6256.13
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5884.31	5503.50	5040.56	4611.38	4103.44	3586.50	3140.44	2674.13	2249.44
45.0	5177.25	4734.56	4274.44	3744.56	3239.44	2820.38	2395.69	2057.63	1717.31
90.0	4858.31	4292.44	3824.44	3375.00	2903.06	2481.75	2149.88	1809.00	1532.25
135.0	5135.06	4675.50	4137.19	3677.63	3179.81	2779.88	2374.88	2015.44	1695.94
180.0	5100.19	4595.63	4082.06	3625.31	3186.56	2681.44	2318.63	1996.31	1672.31
225.0	5848.88	5298.75	4924.13	4470.75	3946.50	3440.25	3019.50	2583.56	2186.44
270.0	6019.31	5654.25	5307.75	4783.50	4282.31	3823.88	3327.19	2867.06	2489.06
315.0	5825.81	5393.81	4925.25	4485.94	4030.31	3466.13	3050.44	2653.88	2246.06
360.0	5884.31	5503.50	5040.56	4611.38	4103.44	3586.50	3140.44	2674.13	2249.44
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1913.06	1610.44	1279.69	1041.19	826.31	595.13	438.19	298.69	228.60
45.0	1401.19	1156.50	911.25	691.88	517.50	369.00	285.19	120.60	60.64
90.0	1099.97	1020.88	788.12	587.48	420.86	272.64	164.36	79.14	37.24
135.0	1430.44	1193.06	953.44	725.63	549.56	370.69	285.75	129.32	63.06
180.0	1369.13	1097.83	884.48	668.36	495.96	328.39	212.96	113.68	51.64
225.0	1877.63	1555.88	1115.83	1031.29	817.20	608.29	421.48	282.54	163.74
270.0	2103.19	1804.50	1495.13	1212.19	992.81	784.69	561.94	402.19	285.75
315.0	1886.63	1595.81	1094.23	1036.41	821.81	614.31	444.83	289.24	170.89
360.0	1913.06	1610.44	1279.69	1041.19	826.31	595.13	438.19	298.69	228.60
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	85.95	47.98	32.06	22.84	18.23	16.48	15.02	13.84	13.05
45.0	32.34	22.73	18.45	16.59	15.02	13.95	13.11	12.43	11.76
90.0	24.81	19.52	16.54	15.24	14.18	13.05	12.38	11.81	11.19
135.0	29.03	21.32	17.38	15.41	14.12	13.11	12.32	11.64	11.03
180.0	30.15	21.26	16.09	14.46	13.33	12.26	11.53	10.97	10.41
225.0	84.71	43.14	28.18	21.15	17.38	15.36	14.12	13.11	12.04
270.0	136.46	69.02	39.66	26.49	19.91	16.93	15.19	13.89	12.94
315.0	94.16	52.20	30.49	22.56	18.11	15.58	14.34	13.33	12.26
360.0	85.95	47.98	32.06	22.84	18.23	16.48	15.02	13.84	13.05
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	12.26	11.64	11.08	10.58	10.24	10.01	9.73	9.51	9.39
45.0	11.25	10.86	10.58	10.24	10.01	9.84	9.62	9.56	9.45
90.0	10.74	10.41	10.07	9.84	9.68	9.51	9.34	9.23	9.11
135.0	10.52	10.18	9.79	9.56	9.34	9.11	8.94	8.78	8.66
180.0	9.96	9.62	9.28	9.00	8.83	8.66	8.49	8.33	8.21
225.0	11.31	10.74	10.18	9.73	9.39	9.11	8.89	8.66	8.44
270.0	12.04	11.31	10.69	10.18	9.79	9.45	9.11	8.89	8.72
315.0	11.59	11.03	10.46	10.07	9.73	9.39	9.17	8.94	8.72
360.0	12.26	11.64	11.08	10.58	10.24	10.01	9.73	9.51	9.39

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	9.17	9.06	9.00	8.89	8.83	8.78	8.66	8.61	8.55
45.0	9.34	9.17	9.17	9.06	9.00	8.89	8.89	8.78	8.78
90.0	9.06	9.00	8.94	8.89	8.83	8.72	8.72	8.66	8.61
135.0	8.55	8.49	8.38	8.33	8.21	8.16	8.10	8.04	7.99
180.0	8.10	8.04	7.99	7.93	7.88	7.82	7.76	7.71	7.71
225.0	8.33	8.21	8.10	7.99	7.93	7.82	7.76	7.71	7.65
270.0	8.55	8.44	8.33	8.21	8.16	8.04	7.99	7.93	7.88
315.0	8.66	8.55	8.38	8.33	8.21	8.10	8.04	7.99	7.93
360.0	9.17	9.06	9.00	8.89	8.83	8.78	8.66	8.61	8.55
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	8.49	8.44	8.44	8.38	8.33	8.27	8.21	8.16	8.10
45.0	8.72	8.72	8.66	8.61	8.61	8.61	8.55	8.55	8.55
90.0	8.55	8.49	8.44	8.38	8.38	8.33	8.27	8.27	8.21
135.0	7.93	7.93	7.88	7.82	7.76	7.71	7.71	7.65	7.59
180.0	7.65	7.59	7.59	7.54	7.54	7.48	7.48	7.43	7.43
225.0	7.59	7.59	7.54	7.48	7.48	7.48	7.43	7.43	7.43
270.0	7.88	7.82	7.76	7.71	7.71	7.65	7.59	7.59	7.54
315.0	7.82	7.82	7.76	7.71	7.65	7.59	7.54	7.54	7.48
360.0	8.49	8.44	8.44	8.38	8.33	8.27	8.21	8.16	8.10
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	8.10	8.04	8.04	7.99	7.93	7.88	7.88	7.82	7.76
45.0	8.55	8.55	8.55	8.55	8.55	8.55	8.55	8.55	8.55
90.0	8.16	8.16	8.10	8.10	7.99	7.93	7.88	7.88	7.88
135.0	7.54	7.54	7.54	7.48	7.48	7.43	7.43	7.43	7.37
180.0	7.37	7.37	7.37	7.37	7.31	7.31	7.31	7.26	7.26
225.0	7.43	7.43	7.37	7.43	7.43	7.37	7.43	7.43	7.43
270.0	7.54	7.54	7.48	7.48	7.48	7.43	7.43	7.43	7.43
315.0	7.48	7.43	7.37	7.37	7.31	7.26	7.26	7.20	7.20
360.0	8.10	8.04	8.04	7.99	7.93	7.88	7.88	7.82	7.76
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.71	7.65	7.59	7.59	7.54	7.54	7.43	7.37	7.37
45.0	8.49	8.61	8.89	9.34	9.62	9.68	8.33	7.26	7.03
90.0	7.82	7.82	7.82	7.88	7.82	7.71	7.54	7.31	7.03
135.0	7.37	7.37	7.31	7.31	7.31	7.26	7.20	7.14	7.09
180.0	7.26	7.26	7.20	7.20	7.20	7.20	7.14	7.09	7.09
225.0	7.43	7.48	7.48	7.48	7.48	7.48	7.48	7.37	7.14
270.0	7.37	7.37	7.31	7.31	7.26	7.26	7.26	7.20	7.20
315.0	7.14	7.14	7.09	7.09	7.09	7.14	7.09	7.09	7.03
360.0	7.71	7.65	7.59	7.59	7.54	7.54	7.43	7.37	7.37
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.31	7.26	7.31	7.31	7.31	7.37	6.92	6.86	6.81
45.0	7.03	7.03	7.03	7.09	6.81	6.81	6.69	6.69	6.69
90.0	6.98	6.92	6.92	6.92	6.81	6.75	6.69	6.69	6.75
135.0	7.03	7.03	6.98	6.98	6.92	6.86	6.81	6.81	6.81
180.0	7.09	7.03	7.03	6.98	6.92	6.86	6.81	6.81	6.81
225.0	6.92	6.81	6.75	6.75	6.75	6.75	6.69	6.69	6.69
270.0	7.14	7.03	6.98	6.86	6.81	6.81	6.75	6.75	6.75
315.0	7.03	7.03	7.03	7.03	6.98	6.92	6.81	6.81	6.81
360.0	7.31	7.26	7.31	7.31	7.31	7.37	6.92	6.86	6.81

Intensity data(cd)

C/γ(°)	90.0
0.0	6.86
45.0	6.69
90.0	6.69
135.0	6.81
180.0	6.86
225.0	6.64
270.0	6.69
315.0	6.75
360.0	6.86