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Nata

LumCAT: LN01D04536DA-N

Luminaire: 97.70.234.00

Report No: 210107-B007

Test No: 210107-C007

LampCAT: XICATO XOB LES 9.8MM

Lamp flux(lm): 1260.0

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 34.6400

Current(A): 0.3810

Power (W): 13.1970

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1153.23

Efficiency(%): 91.53%

Lumens(lm)/Power(W): 87.39

Central intensity(cd): 2279.109

Maximum intensity(cd): 2279.109

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=40.0

[C90/270]Total=40.0

Field angle(10%Imax): [C0/180]Total=64.7

[C90/270]Total=64.7

Maximum s/h(1/2): C0_180=0.66 C90_270=0.66

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 91.53%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.880%

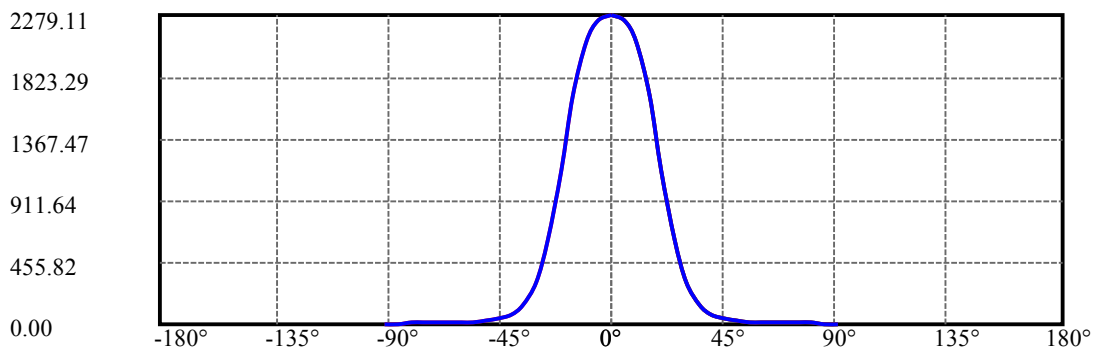
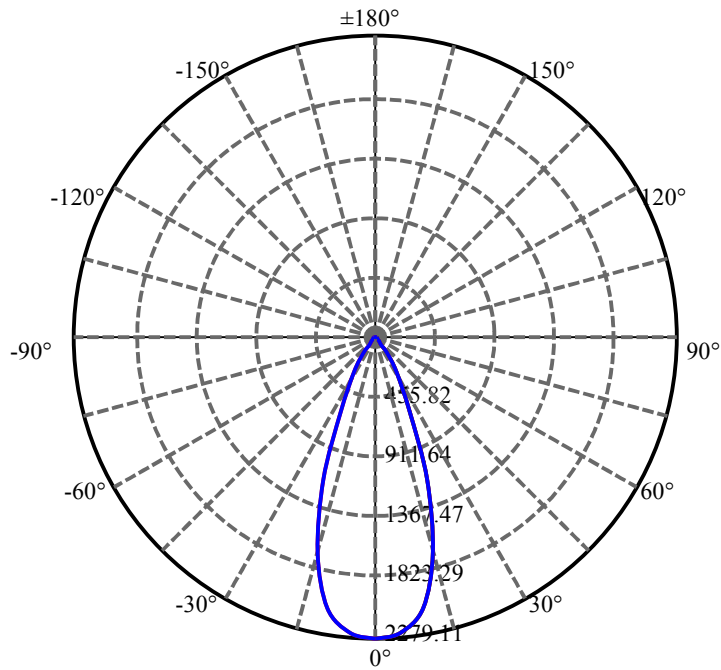
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2279.109	0.000	0	.000%	.000%
5.0	2240.297	54.028	54.028	4.288%	4.685%
10.0	2078.227	154.487	208.515	12.261%	18.081%
15.0	1688.133	223.418	431.933	17.732%	37.454%
20.0	1137.150	232.843	664.776	18.480%	57.645%
25.0	625.486	184.868	849.644	14.672%	73.675%
30.0	307.554	118.077	967.721	9.371%	83.914%
35.0	139.613	65.848	1033.57	5.226%	89.624%
40.0	68.787	34.770	1068.339	2.760%	92.639%
45.0	38.651	19.893	1088.232	1.579%	94.364%
50.0	24.975	12.857	1101.089	1.020%	95.479%
55.0	17.142	9.158	1110.247	.727%	96.273%
60.0	13.127	6.997	1117.243	.555%	96.880%
65.0	11.138	5.899	1123.142	.468%	97.391%
70.0	12.748	6.048	1129.19	.480%	97.916%
75.0	16.327	7.600	1136.79	.603%	98.575%
80.0	13.148	7.887	1144.676	.626%	99.259%
85.0	6.490	5.336	1150.012	.424%	99.721%
90.0	5.245	3.213	1153.226	.255%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	967.72	76.80%	83.91%
0-40	1068.34	84.79%	92.64%
0-60	1117.24	88.67%	96.88%
0-90	1150.01	91.27%	99.72%
0-120	1150.01	91.27%	99.72%
0-180	1153.23	91.53%	100.00%
60-90	39.77	3.16%	3.45%
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%
0-28.09	922.58	73.22%	80.00%

ZONAL LUMEN SUMMARY

0-10	208.52
10-20	456.26
20-30	302.94
30-40	100.62
40-50	32.75
50-60	16.15
60-70	11.95
70-80	15.49
80-90	5.34
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: —————

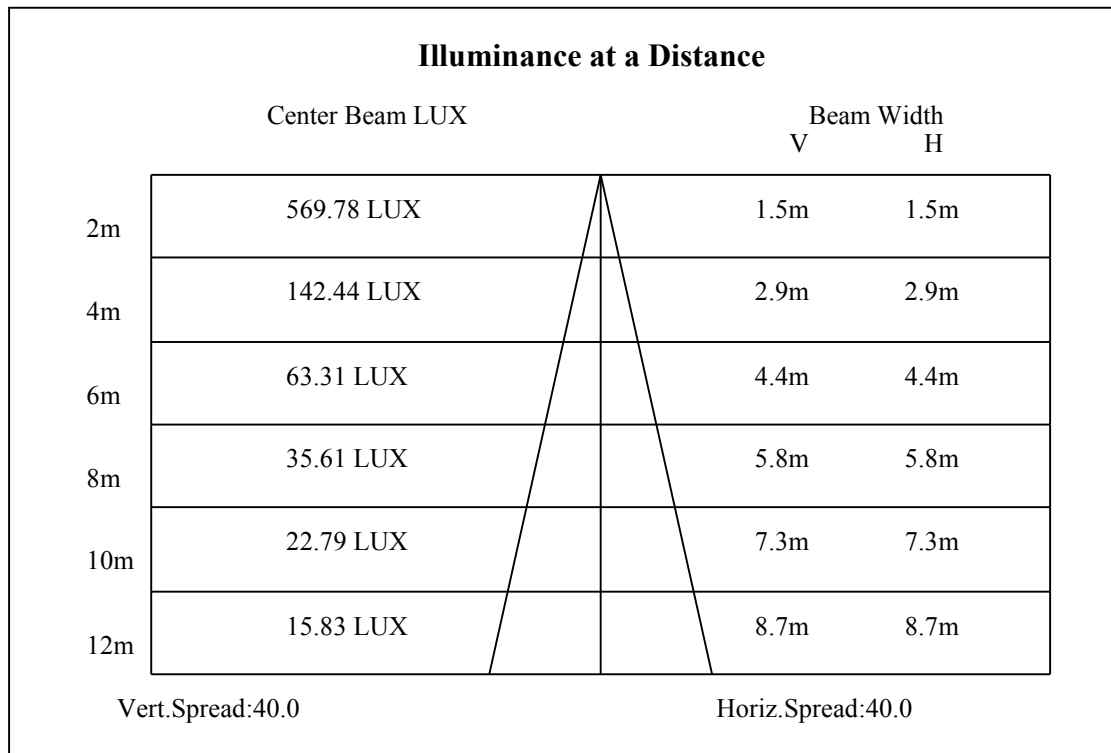
C90/C270: —————

Field angle(10%Imax):C0/180Left:32.4 Right:32.4

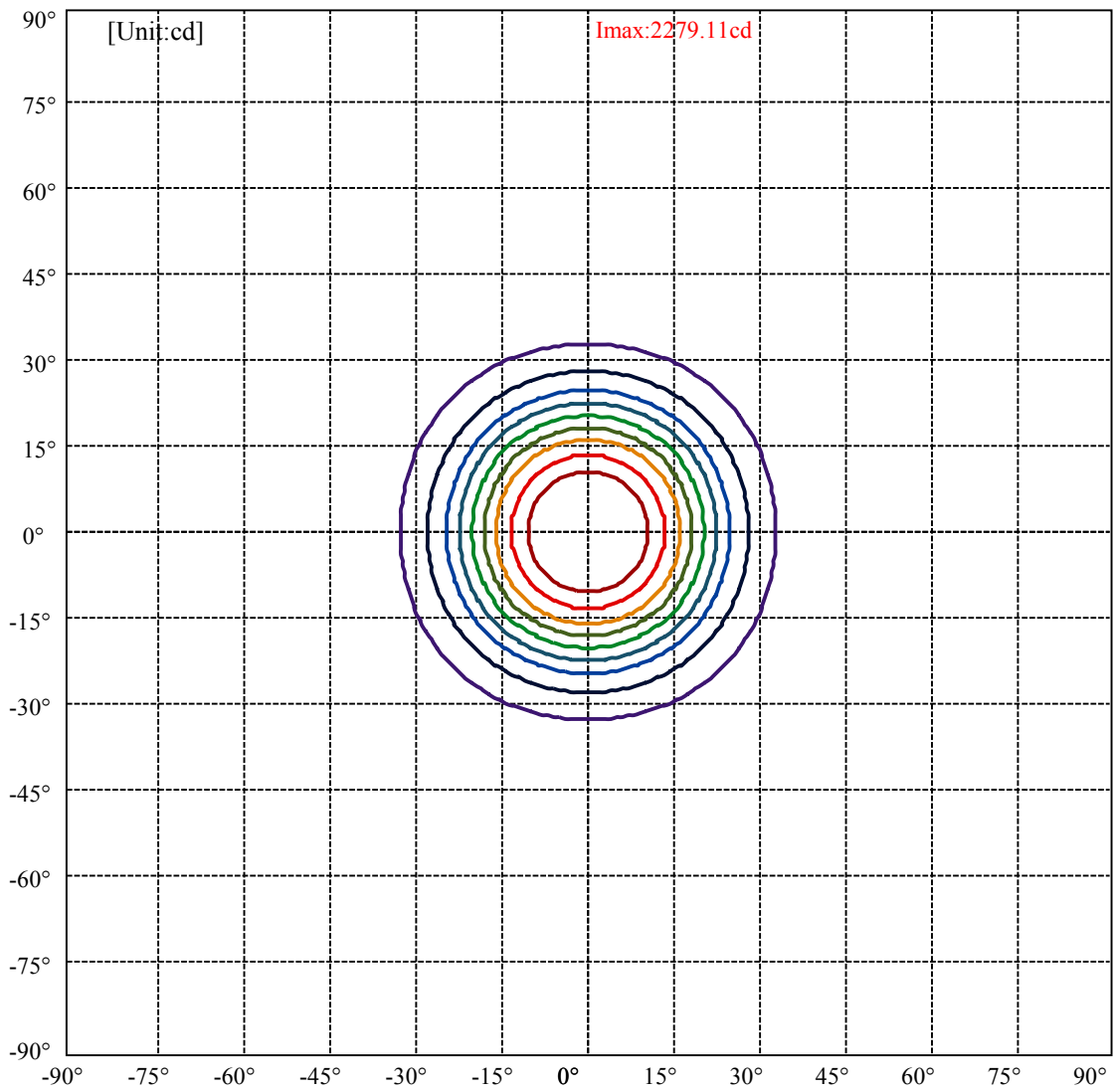
:C90/270Left:32.4 Right:32.4

Beam Angle(50%Imax):C0/180Left:20.0 Right:20.0

:C90/270Left:20.0 Right:20.0



ISO-Intensity(V-H)

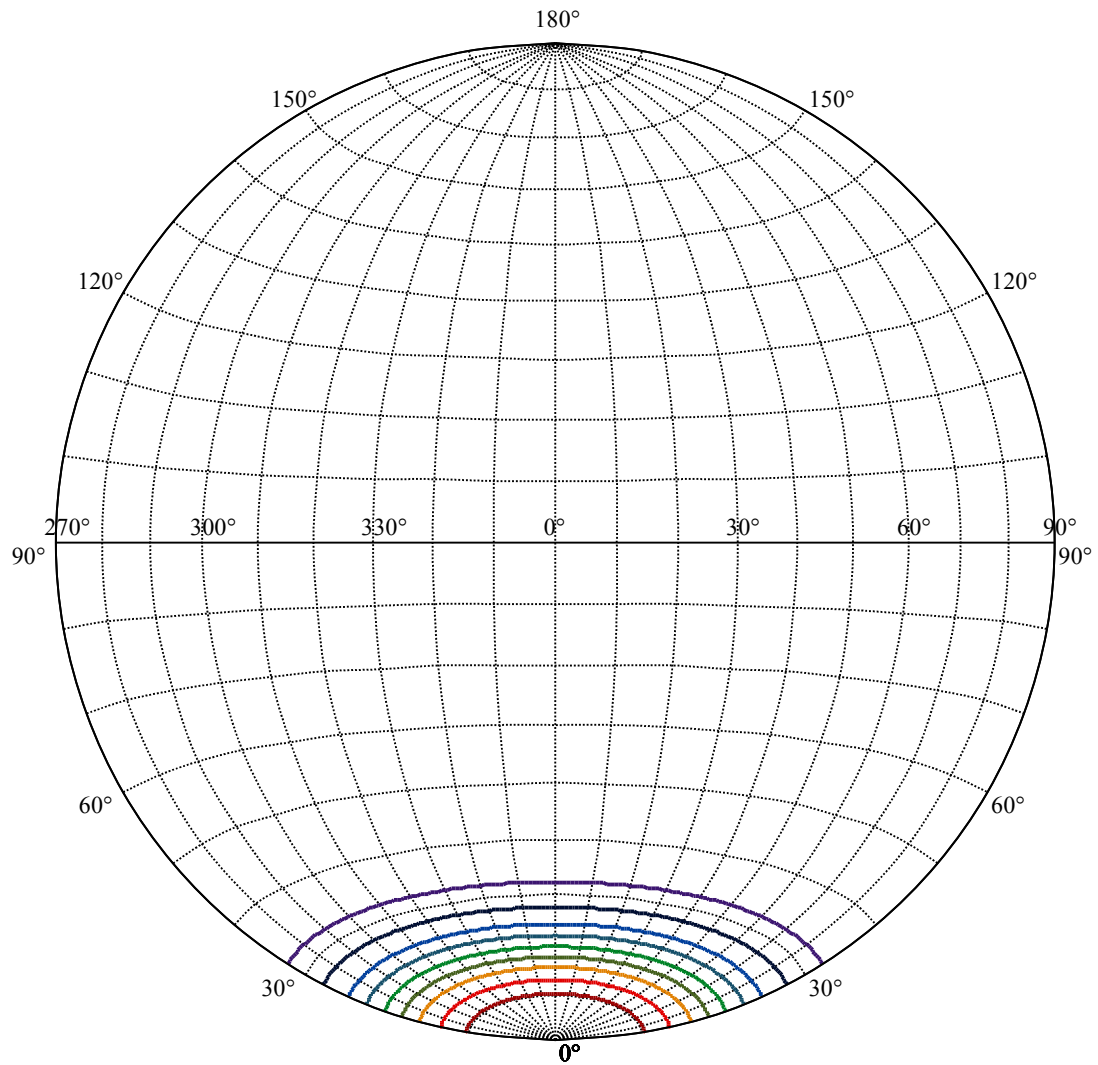


(10%Imax) 227.911	—
(20%Imax) 455.822	—
(30%Imax) 683.733	—
(40%Imax) 911.644	—
(50%Imax) 1139.55	—
(60%Imax) 1367.47	—
(70%Imax) 1595.38	—
(80%Imax) 1823.29	—
(90%Imax) 2051.2	—

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/01/07
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50



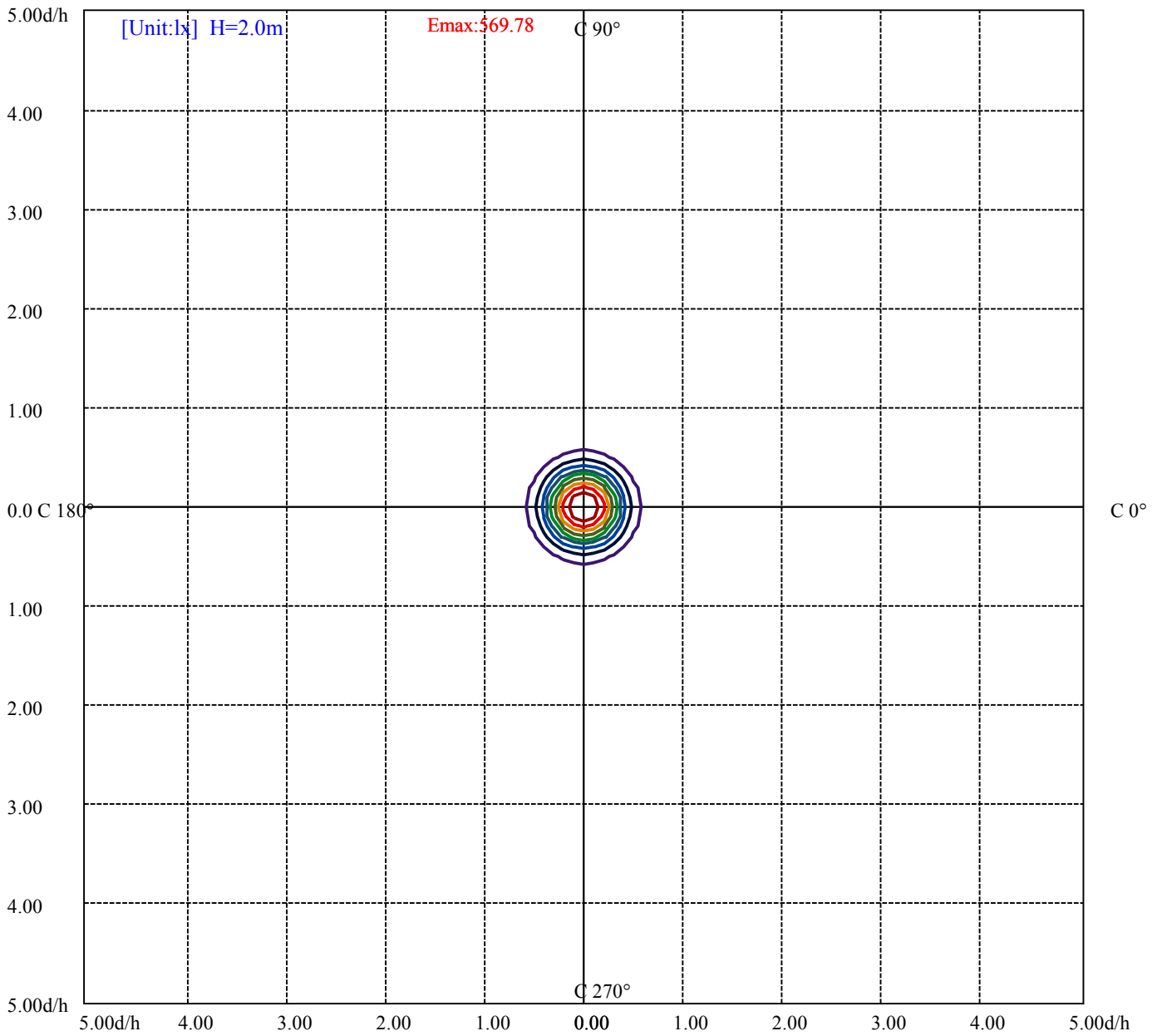
House

[Unit:cd]

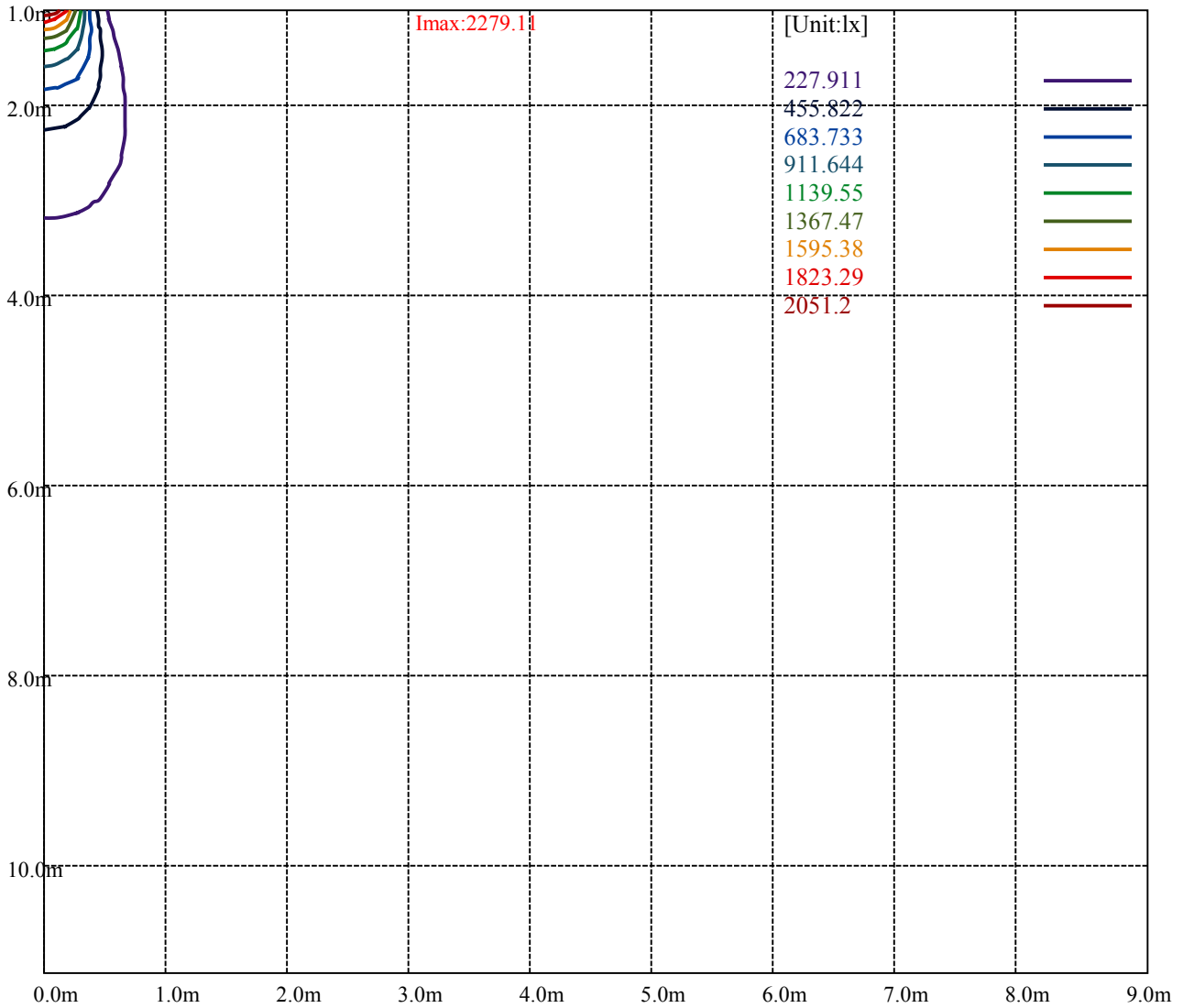
Road

Imax:2279.11

(10%Imax)	227.911	—
(20%Imax)	455.822	—
(30%Imax)	683.733	—
(40%Imax)	911.644	—
(50%Imax)	1139.55	—
(60%Imax)	1367.47	—
(70%Imax)	1595.38	—
(80%Imax)	1823.29	—
(90%Imax)	2051.2	—



(10%Emax) 56.97775	—
(20%Emax) 113.9555	—
(30%Emax) 170.933	—
(40%Emax) 227.9108	—
(50%Emax) 284.8875	—
(60%Emax) 341.865	—
(70%Emax) 398.845	—
(80%Emax) 455.8225	—
(90%Emax) 512.8	—



Luminance Table

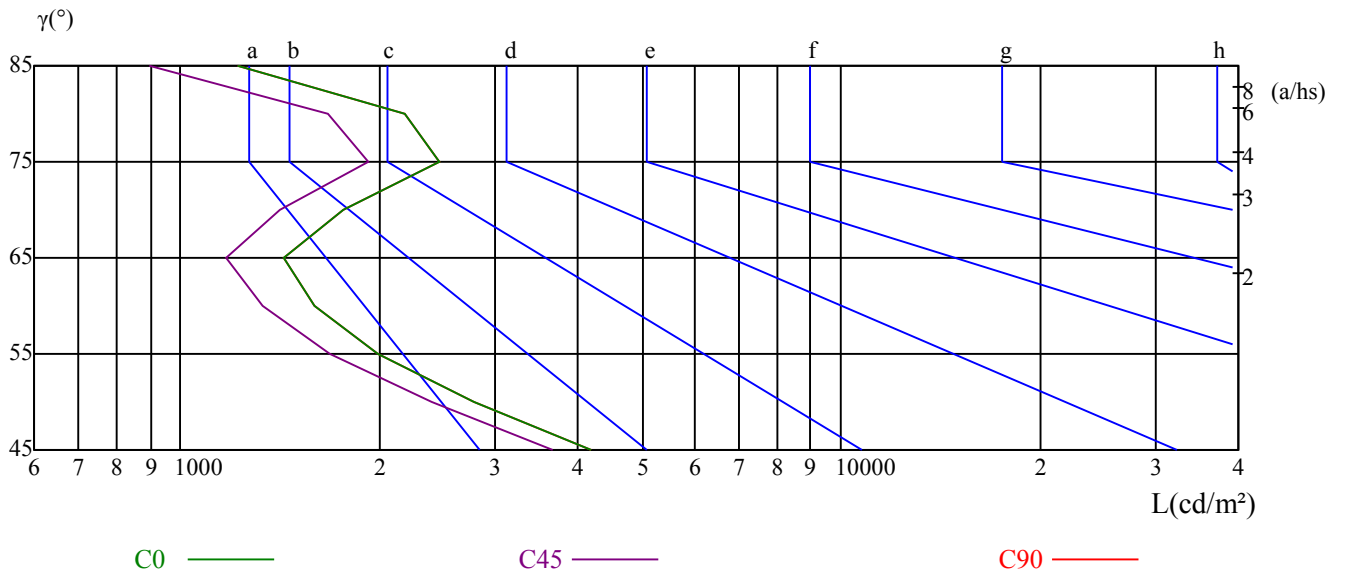
γ	45	50	55	60	65	70	75	80	85
C0	4184	2786	1988	1598	1438	1766	2461	2191	1220
C45	3651	2396	1683	1331	1176	1415	1927	1669	899
C90	4184	2786	1988	1598	1438	1766	2461	2191	1220

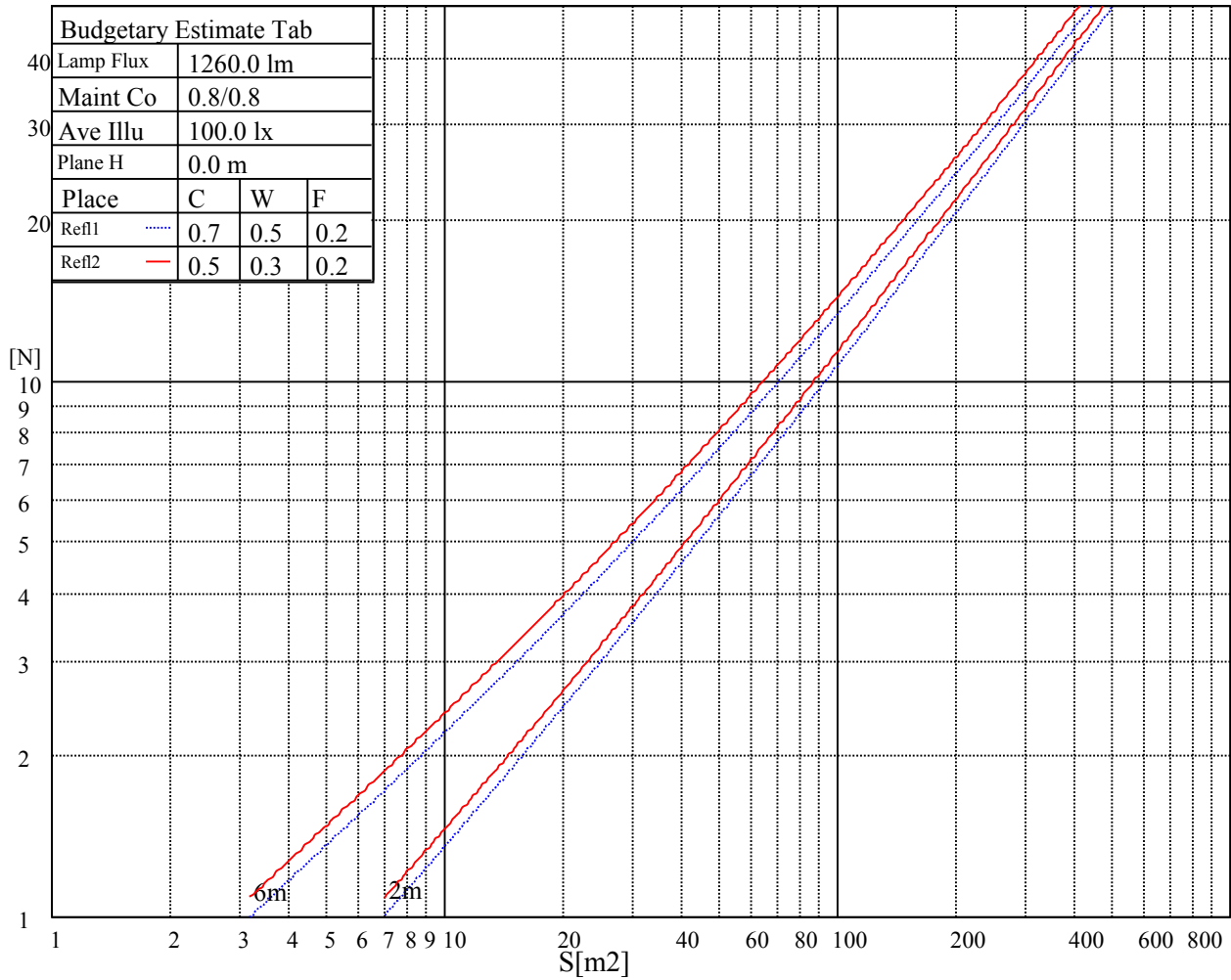
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3114	3114	3114	7453	7453	7453	8798	8798	8798

Glare Table

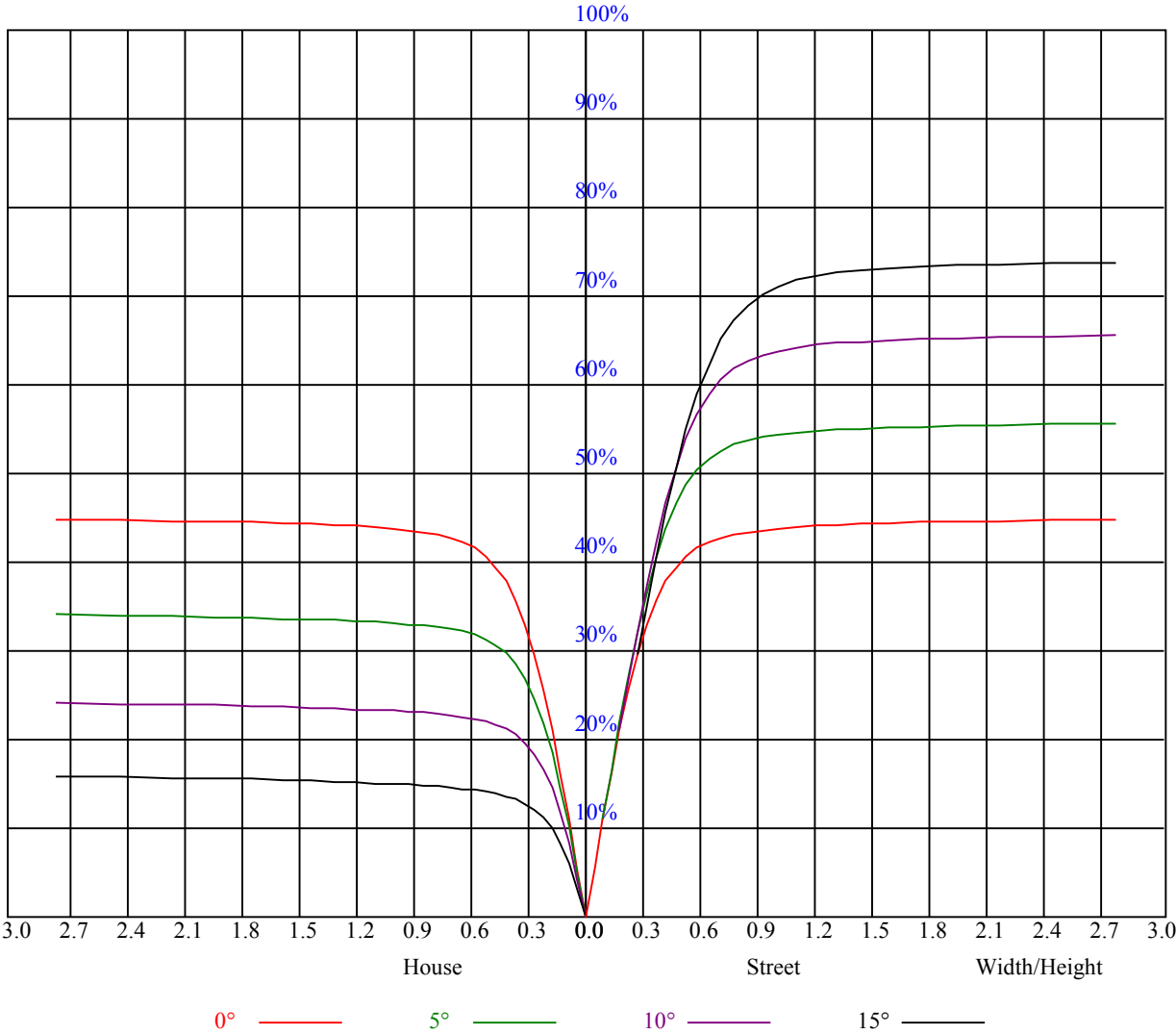
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.06	1.06	1.06	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.92
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	0.93	0.90	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.82	0.81
3	0.90	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.78	0.76
4	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.73	0.72
5	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
6	0.76	0.71	0.68	0.76	0.71	0.68	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.65
7	0.73	0.68	0.65	0.72	0.68	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.62
8	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.59
9	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.57
10	0.64	0.59	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	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	2270.81	2277.56	2131.31	1766.81	1163.81	625.50	302.06	138.32	67.78
45.0	2288.81	2237.06	2072.81	1634.63	1078.88	578.25	289.69	126.68	63.11
90.0	2275.88	2185.88	1998.00	1592.44	1063.91	569.59	287.61	128.48	64.29
135.0	2280.94	2209.50	2057.06	1712.25	1244.81	717.19	360.56	172.74	80.38
180.0	2270.81	2197.13	2003.06	1611.56	1116.84	614.93	300.99	141.69	69.19
225.0	2288.81	2246.06	2080.13	1688.63	1121.29	650.93	322.20	145.18	71.61
270.0	2275.88	2282.63	2170.13	1825.31	1235.25	696.38	338.63	146.64	74.25
315.0	2280.94	2286.56	2113.31	1673.44	1072.41	551.14	258.69	117.17	59.68
360.0	2270.81	2277.56	2131.31	1766.81	1163.81	625.50	302.06	138.32	67.78
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	39.43	26.16	17.72	13.28	10.97	9.28	8.16	7.31	5.96
45.0	36.90	24.30	16.93	13.22	10.97	9.34	8.49	7.48	6.24
90.0	36.45	23.34	16.09	12.38	11.03	15.86	21.83	14.46	6.02
135.0	41.91	26.66	17.83	13.56	11.76	17.66	27.79	24.75	7.59
180.0	38.08	24.41	17.33	13.16	10.80	9.17	8.21	7.31	6.02
225.0	41.63	26.78	18.23	13.89	11.19	9.45	8.33	7.59	6.53
270.0	40.61	25.54	17.33	13.33	11.03	12.26	19.07	16.54	7.03
315.0	34.20	22.61	15.69	12.21	11.36	18.96	28.74	19.74	6.53
360.0	39.43	26.16	17.72	13.28	10.97	9.28	8.16	7.31	5.96
C/γ(°)	90.0								
0.0	5.12								
45.0	5.46								
90.0	5.23								
135.0	5.12								
180.0	5.18								
225.0	5.51								
270.0	5.18								
315.0	5.18								
360.0	5.12								