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Nata

LumCAT: LN01D04560DA-N

Luminaire: 97.70.234.00

Report No: 210107-B008

Test No: 210107-C008

LampCAT: XICATO XOB LES 9.8MM

Lamp flux(lm): 1260.0

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 34.6800

Current(A): 0.3810

Power (W): 13.2130

PF: 1.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1031.72

Efficiency(%): 81.88%

Lumens(lm)/Power(W): 78.08

Central intensity(cd): 981.731

Maximum intensity(cd): 981.731

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=59.5

[C90/270]Total=59.5

Field angle(10%Imax): [C0/180]Total=94.4

[C90/270]Total=94.4

Maximum s/h(1/2): C0_180=0.90 C90_270=0.90

Maximum s/h(1/4): C0_180=0.91 C90_270=0.91

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 81.88%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.306%

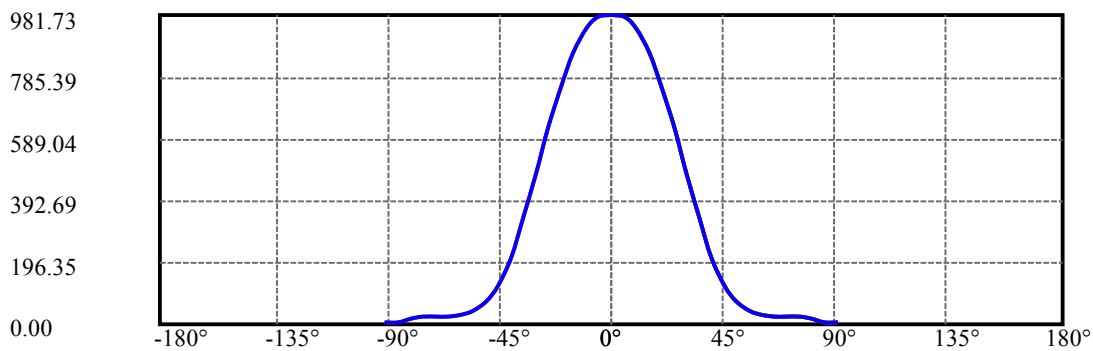
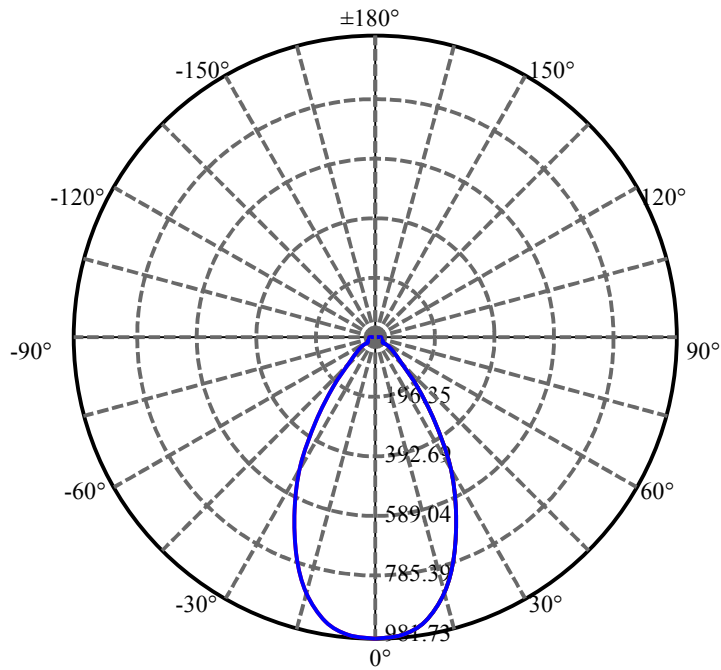
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	981.731	0.000	0	.000%	.000%
5.0	973.301	23.372	23.372	1.855%	2.265%
10.0	937.596	68.359	91.731	5.425%	8.891%
15.0	862.552	106.784	198.514	8.475%	19.241%
20.0	757.448	133.511	332.025	10.596%	32.182%
25.0	621.949	144.673	476.698	11.482%	46.204%
30.0	484.502	140.022	616.721	11.113%	59.776%
35.0	338.189	121.147	737.868	9.615%	71.518%
40.0	212.520	91.882	829.749	7.292%	80.424%
45.0	119.777	61.527	891.277	4.883%	86.387%
50.0	71.093	38.568	929.845	3.061%	90.126%
55.0	45.148	25.275	955.12	2.006%	92.575%
60.0	32.077	17.850	972.97	1.417%	94.306%
65.0	24.342	13.716	986.685	1.089%	95.635%
70.0	22.324	11.816	998.501	.938%	96.780%
75.0	22.493	11.714	1010.216	.930%	97.916%
80.0	17.634	10.737	1020.953	.852%	98.956%
85.0	8.550	7.115	1028.068	.565%	99.646%
90.0	4.788	3.652	1031.72	.290%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	616.72	48.95%	59.78%
0-40	829.75	65.85%	80.42%
0-60	972.97	77.22%	94.31%
0-90	1028.07	81.59%	99.65%
0-120	1028.07	81.59%	99.65%
0-180	1031.72	81.88%	100.00%
60-90	72.95	5.79%	7.07%
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%
0-39.76	825.38	65.51%	80.00%

ZONAL LUMEN SUMMARY

0-10	91.73
10-20	240.29
20-30	284.70
30-40	213.03
40-50	100.10
50-60	43.12
60-70	25.53
70-80	22.45
80-90	7.11
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: —————

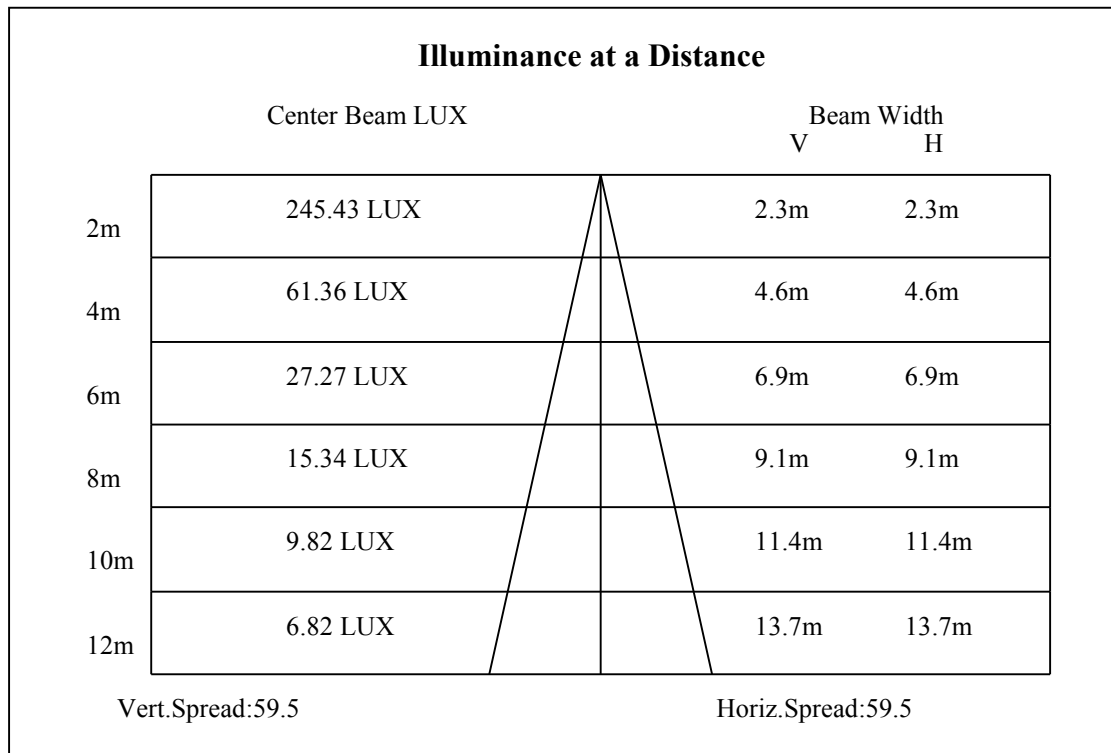
C90/C270: —————

Field angle(10%Imax):C0/180Left:47.2 Right:47.2

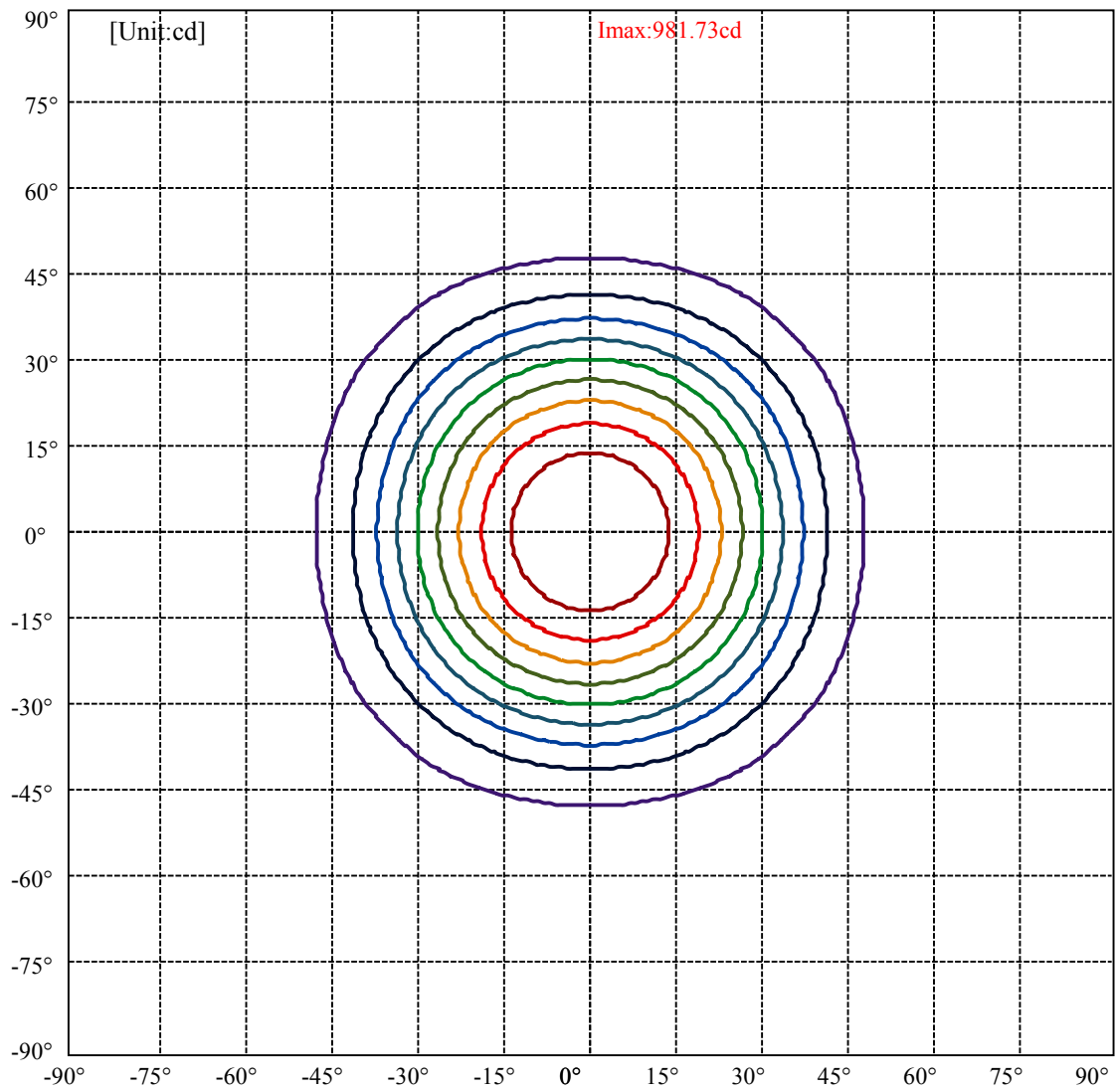
:C90/270Left:47.2 Right:47.2

Beam Angle(50%Imax):C0/180Left:29.8 Right:29.8

:C90/270Left:29.8 Right:29.8



ISO-Intensity(V-H)

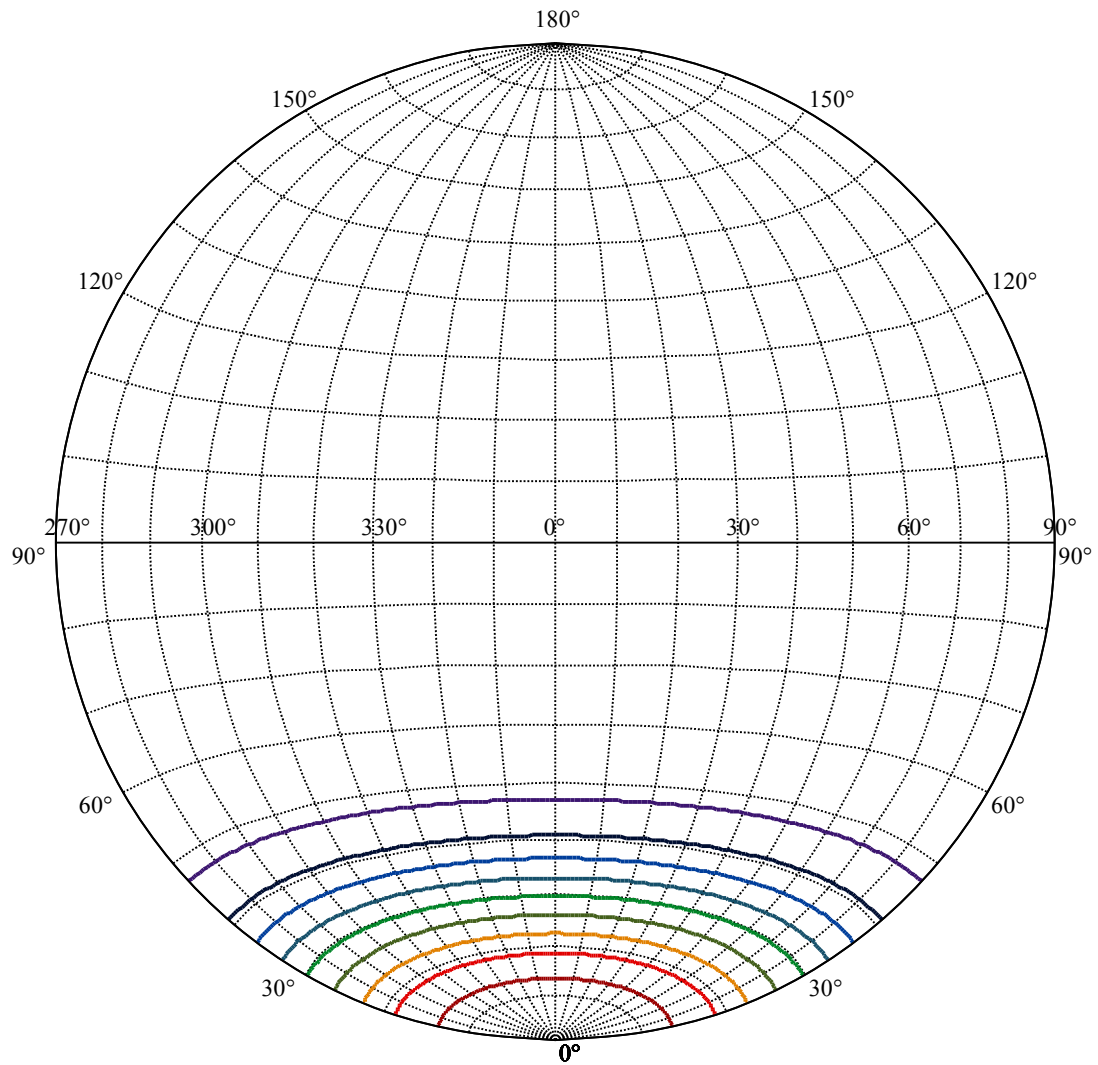


(10%Imax) 98.1731	—
(20%Imax) 196.346	—
(30%Imax) 294.519	—
(40%Imax) 392.693	—
(50%Imax) 490.866	—
(60%Imax) 589.039	—
(70%Imax) 687.212	—
(80%Imax) 785.385	—
(90%Imax) 883.558	—

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.50



House

[Unit:cd]

Road

Imax:981.73

(10%Imax) 98.1731

(20%Imax) 196.346

(30%Imax) 294.519

(40%Imax) 392.693

(50%Imax) 490.866

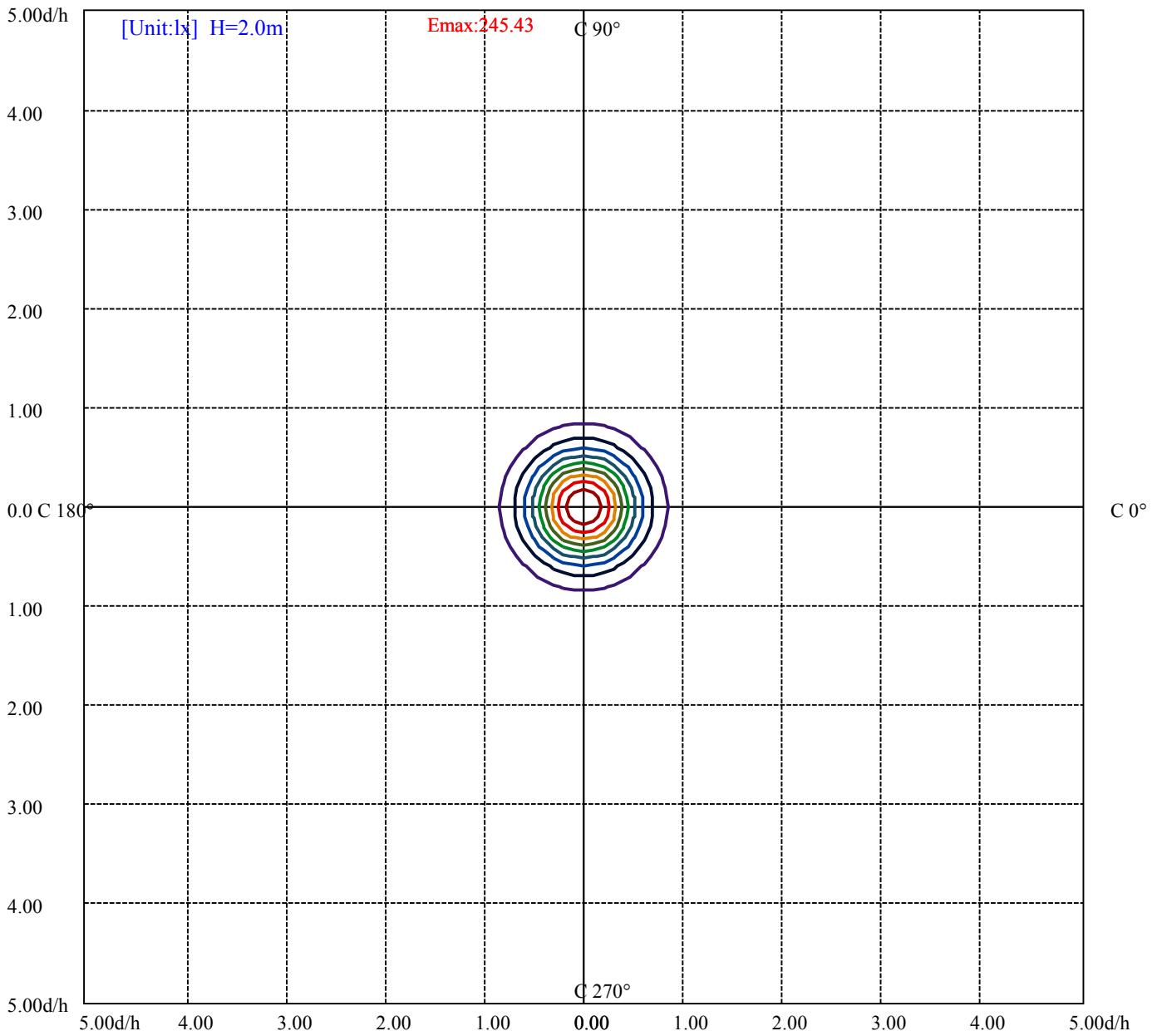
(60%Imax) 589.039

(70%Imax) 687.212

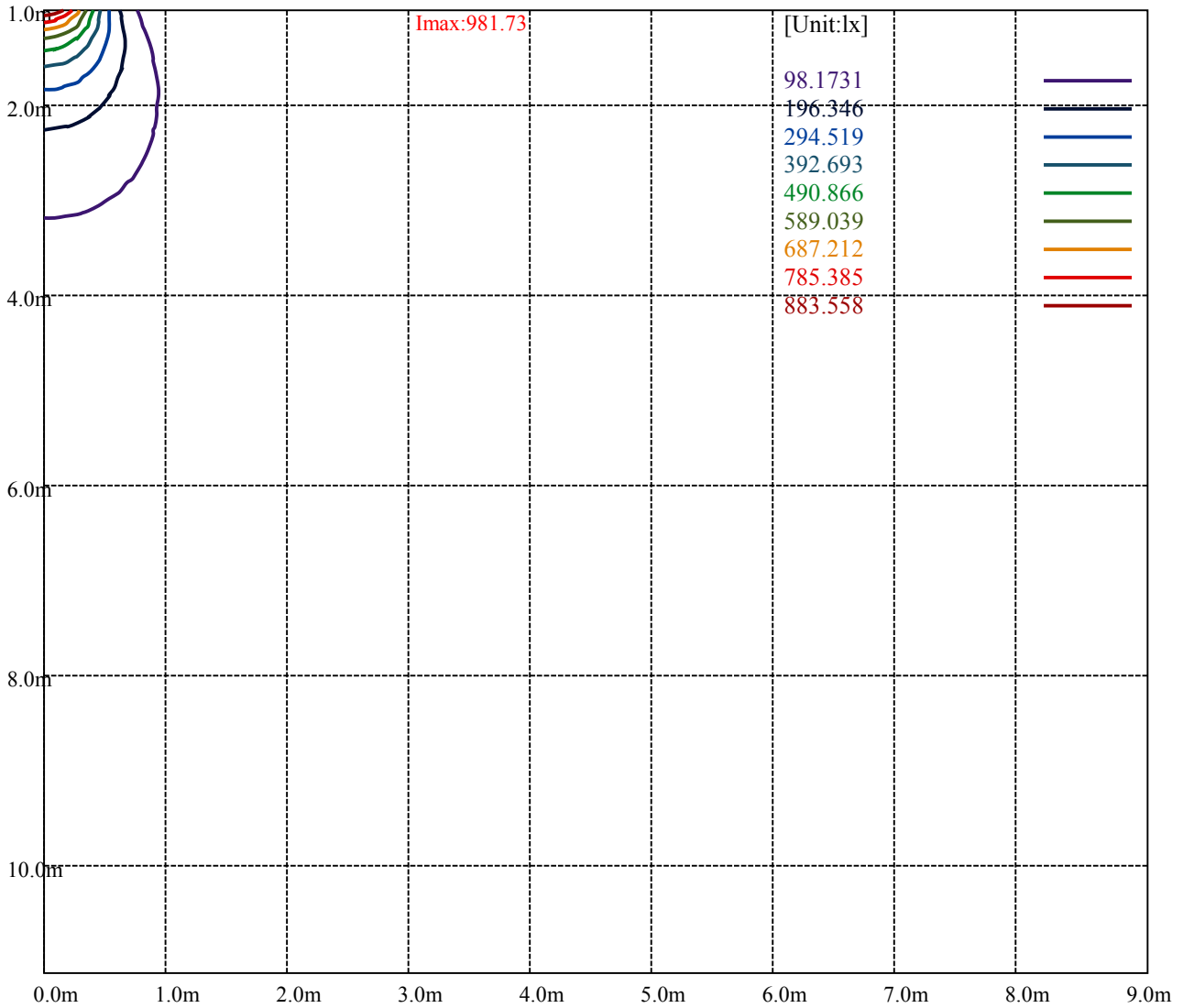
(80%Imax) 785.385

(90%Imax) 883.558





- (10%Emax) 24.54328
- (20%Emax) 49.0865
- (30%Emax) 73.62975
- (40%Emax) 98.173
- (50%Emax) 122.7165
- (60%Emax) 147.2598
- (70%Emax) 171.803
- (80%Emax) 196.3463
- (90%Emax) 220.8895



Luminance Table

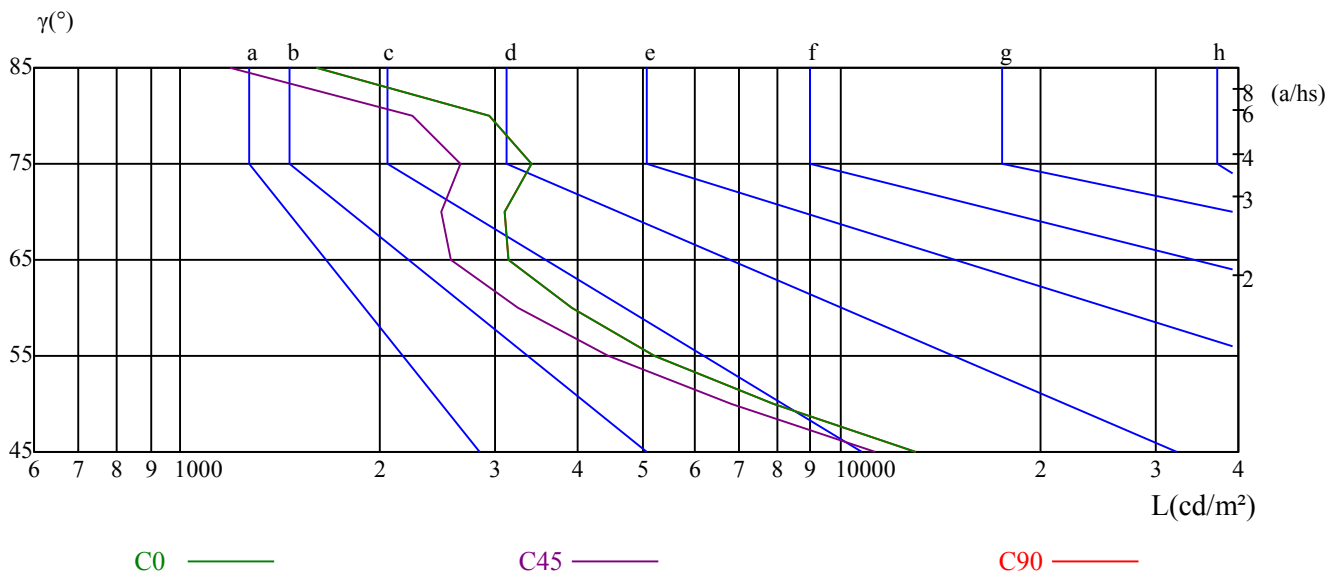
γ	45	50	55	60	65	70	75	80	85
C0	12966	7931	5236	3904	3143	3093	3391	2939	1607
C45	11316	6820	4433	3251	2570	2478	2654	2239	1184
C90	12966	7931	5236	3904	3143	3093	3391	2939	1607

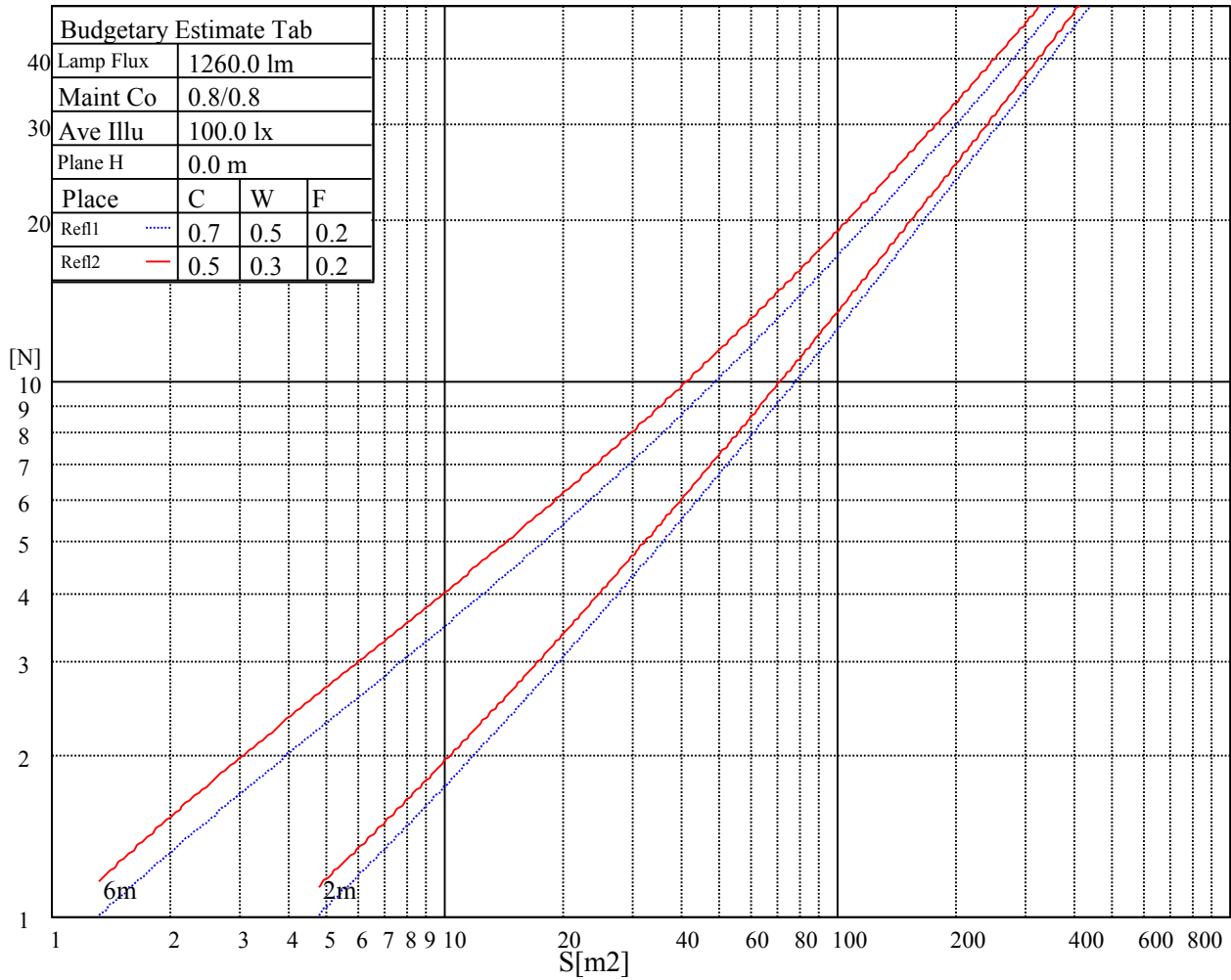
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6805	6805	6805	10268	10268	10268	11590	11590	11590

Glare Table

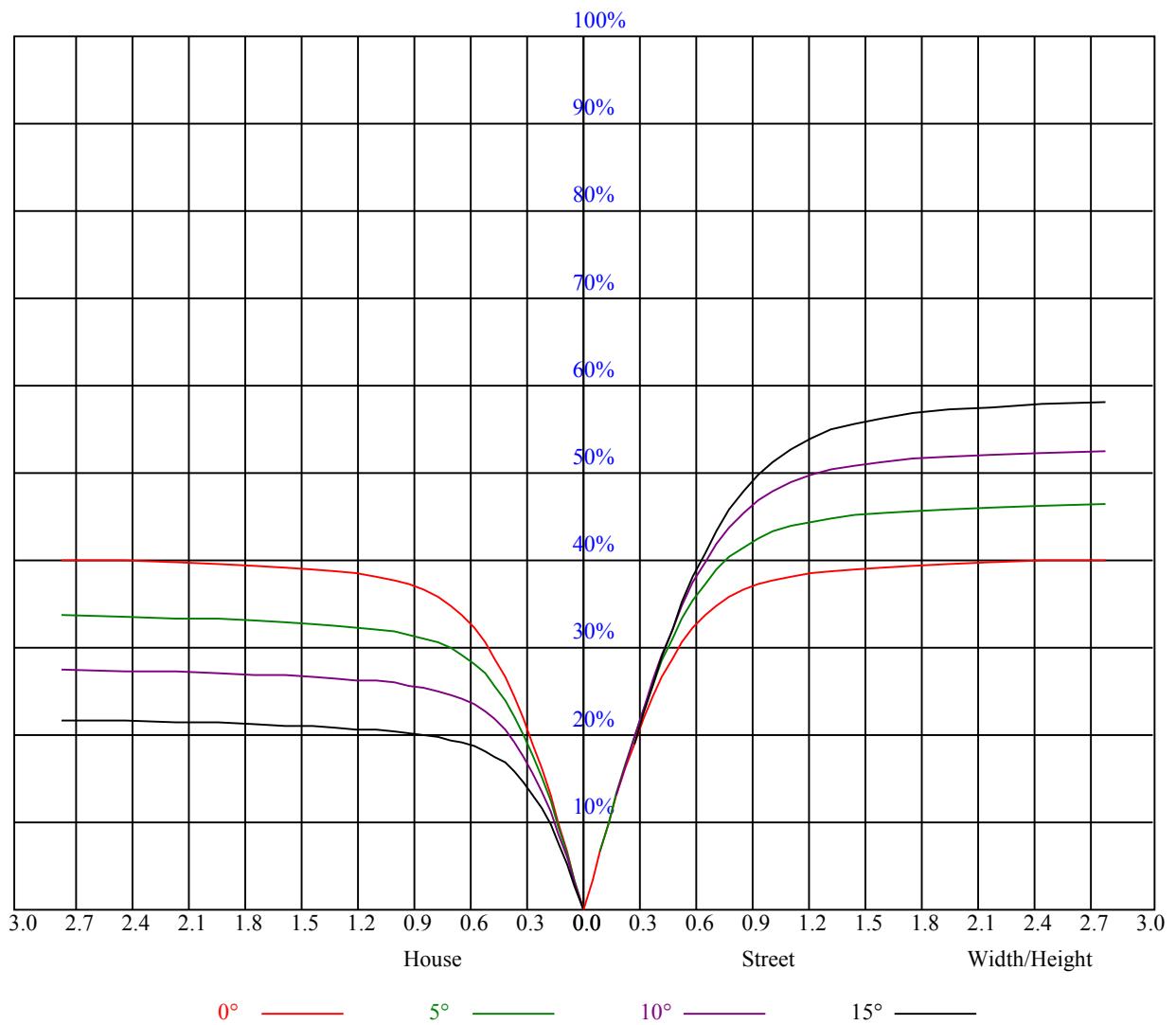
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.97	0.97	0.97	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.84	0.84	0.84	0.82
1	0.89	0.87	0.84	0.87	0.85	0.83	0.84	0.82	0.80	0.81	0.79	0.78	0.78	0.77	0.76	0.74
2	0.82	0.78	0.74	0.80	0.77	0.74	0.77	0.75	0.72	0.75	0.73	0.70	0.73	0.71	0.69	0.67
3	0.75	0.70	0.67	0.74	0.70	0.66	0.72	0.68	0.65	0.70	0.67	0.64	0.68	0.65	0.63	0.62
4	0.69	0.64	0.60	0.69	0.64	0.60	0.67	0.62	0.59	0.65	0.61	0.58	0.63	0.60	0.58	0.56
5	0.64	0.59	0.55	0.64	0.59	0.55	0.62	0.58	0.54	0.61	0.57	0.54	0.59	0.56	0.53	0.52
6	0.60	0.55	0.51	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.56	0.52	0.49	0.48
7	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.46	0.53	0.49	0.46	0.52	0.49	0.46	0.45
8	0.52	0.47	0.43	0.52	0.47	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.46	0.43	0.41
9	0.49	0.44	0.40	0.49	0.44	0.40	0.48	0.43	0.40	0.47	0.43	0.40	0.47	0.43	0.40	0.39
10	0.46	0.41	0.38	0.46	0.41	0.38	0.45	0.41	0.38	0.45	0.40	0.38	0.44	0.40	0.37	0.36



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	982.07	968.06	935.49	869.79	781.37	655.99	524.42	396.17	253.24
45.0	981.62	979.09	949.56	879.30	776.19	655.59	506.64	350.72	225.34
90.0	983.19	989.61	959.06	886.16	764.94	612.17	465.75	305.66	181.91
135.0	980.04	993.88	974.36	908.72	797.18	633.77	475.59	312.47	192.66
180.0	982.07	980.27	940.95	848.42	739.13	591.53	442.01	295.88	176.63
225.0	981.62	965.14	919.35	836.27	730.91	597.15	477.96	325.24	196.99
270.0	983.19	957.21	913.44	834.41	733.22	617.79	496.18	362.59	242.55
315.0	980.04	953.16	908.55	837.34	736.65	611.61	487.46	356.79	230.85
360.0	982.07	968.06	935.49	869.79	781.37	655.99	524.42	396.17	253.24
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	144.56	83.25	52.09	35.94	26.44	21.38	17.04	13.50	9.51
45.0	125.21	74.19	46.63	33.64	25.14	20.14	16.48	12.77	8.78
90.0	103.44	62.49	40.56	28.97	22.89	22.56	24.47	15.86	7.20
135.0	105.75	63.62	41.79	30.09	23.57	26.27	32.06	23.51	7.31
180.0	97.88	61.20	39.71	28.91	21.77	17.94	14.23	10.69	6.98
225.0	111.71	66.04	42.36	30.94	23.51	18.84	14.91	11.98	8.44
270.0	139.28	80.33	50.23	34.76	25.59	23.46	27.00	23.01	9.56
315.0	130.39	77.63	47.81	33.36	25.82	28.01	33.75	29.76	10.63
360.0	144.56	83.25	52.09	35.94	26.44	21.38	17.04	13.50	9.51
C/γ(°)	90.0								
0.0	5.40								
45.0	4.84								
90.0	4.44								
135.0	4.33								
180.0	4.78								
225.0	4.89								
270.0	4.67								
315.0	4.95								
360.0	5.40								