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Nata

LumCAT: LN01D04536DA-N

Luminaire: 97.70.234.00

Report No: 200707-B011

Test No: 200707-C011

LampCAT: LUMINUS CXM-6-AC40

Lamp flux(lm): 985.0

Number of Lamps: 1

Length(mm): 0

Phm Type: C

Voltage(V): 35.9500

Current(A): 0.2800

Power (W): 10.0660

PF: 0.0000

Ballast type: DC

Width(mm): 0

Height(mm): 0

Photometric Results

Lumens(lm): 919.19

Efficiency(%): 93.32%

Lumens(lm)/Power(W): 91.32

Central intensity(cd): 2051.578

Maximum intensity(cd): 2051.578

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.5

[C90/270]Total=37.5

Field angle(10%Imax): [C0/180]Total=61.0

[C90/270]Total=61.0

Maximum s/h(1/2): C0_180=0.62 C90_270=0.62

Maximum s/h(1/4): C0_180=0.60 C90_270=0.60

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.32%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.906%

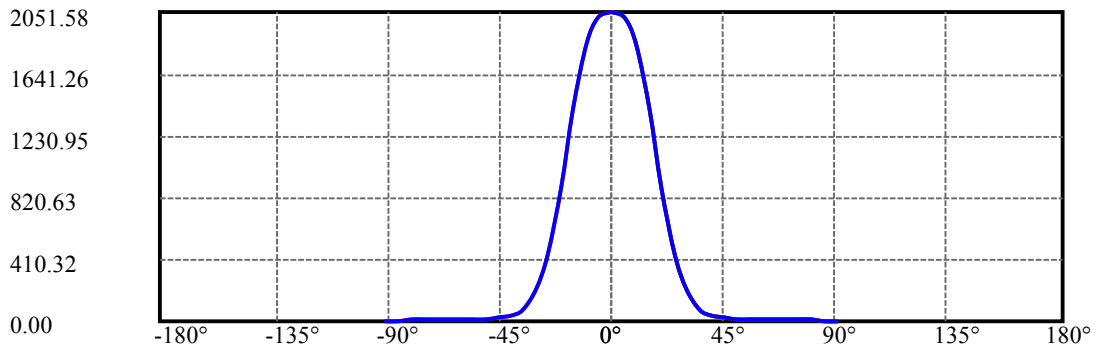
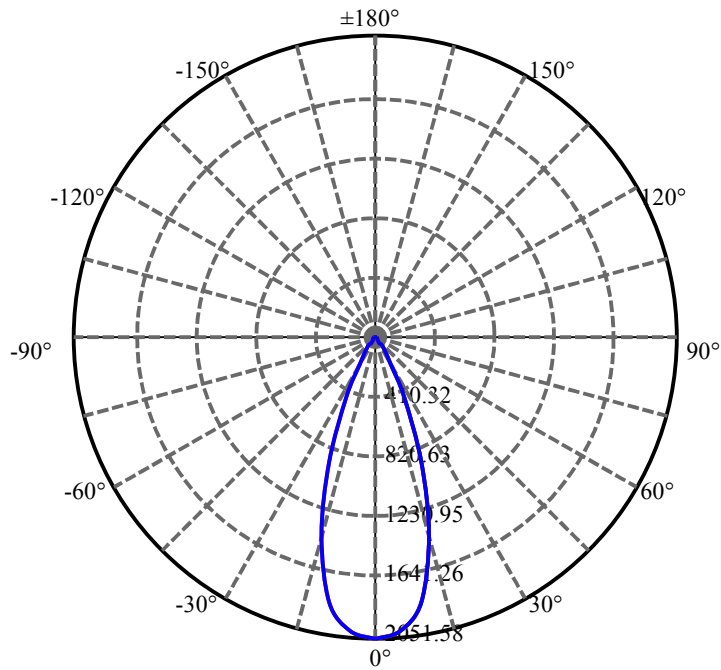
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2051.578	0.000	0	.000%	.000%
5.0	2008.336	48.535	48.535	4.927%	5.280%
10.0	1832.695	137.406	185.941	13.950%	20.229%
15.0	1399.781	191.748	377.689	19.467%	41.089%
20.0	898.200	189.386	567.075	19.227%	61.693%
25.0	450.359	141.439	708.514	14.359%	77.080%
30.0	218.461	84.640	793.154	8.593%	86.288%
35.0	81.457	44.165	837.319	4.484%	91.093%
40.0	43.249	20.806	858.125	2.112%	93.357%
45.0	25.903	12.804	870.929	1.300%	94.749%
50.0	17.037	8.677	879.606	.881%	95.693%
55.0	11.813	6.273	885.879	.637%	96.376%
60.0	9.274	4.874	890.753	.495%	96.906%
65.0	7.847	4.162	894.915	.423%	97.359%
70.0	9.105	4.292	899.207	.436%	97.826%
75.0	14.182	6.087	905.294	.618%	98.488%
80.0	11.595	6.897	912.191	.700%	99.238%
85.0	5.006	4.511	916.702	.458%	99.729%
90.0	4.085	2.489	919.192	.253%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	793.15	80.52%	86.29%
0-40	858.13	87.12%	93.36%
0-60	890.75	90.43%	96.91%
0-90	916.70	93.07%	99.73%
0-120	916.70	93.07%	99.73%
0-180	919.19	93.32%	100.00%
60-90	30.82	3.13%	3.35%
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%
0-26.59	735.35	74.66%	80.00%

ZONAL LUMEN SUMMARY

0-10	185.94
10-20	381.13
20-30	226.08
30-40	64.97
40-50	21.48
50-60	11.15
60-70	8.45
70-80	12.98
80-90	4.51
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: —————

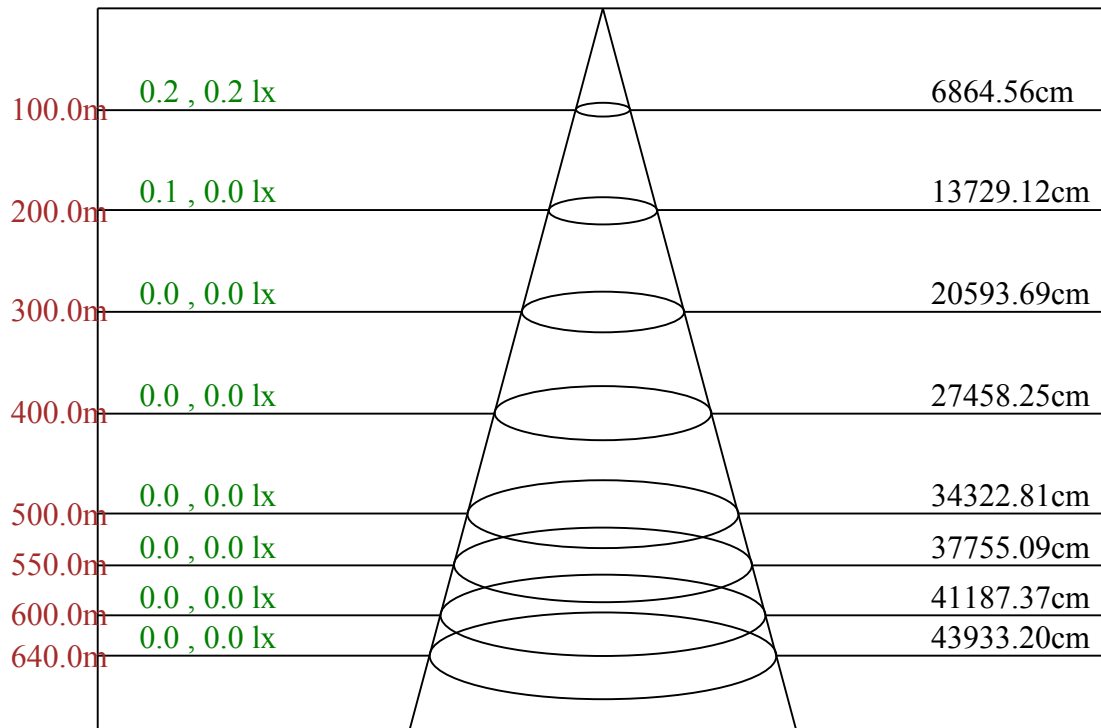
C90/C270: —————

Field angle(10%Imax):C0/180Left:30.5 Right:30.5

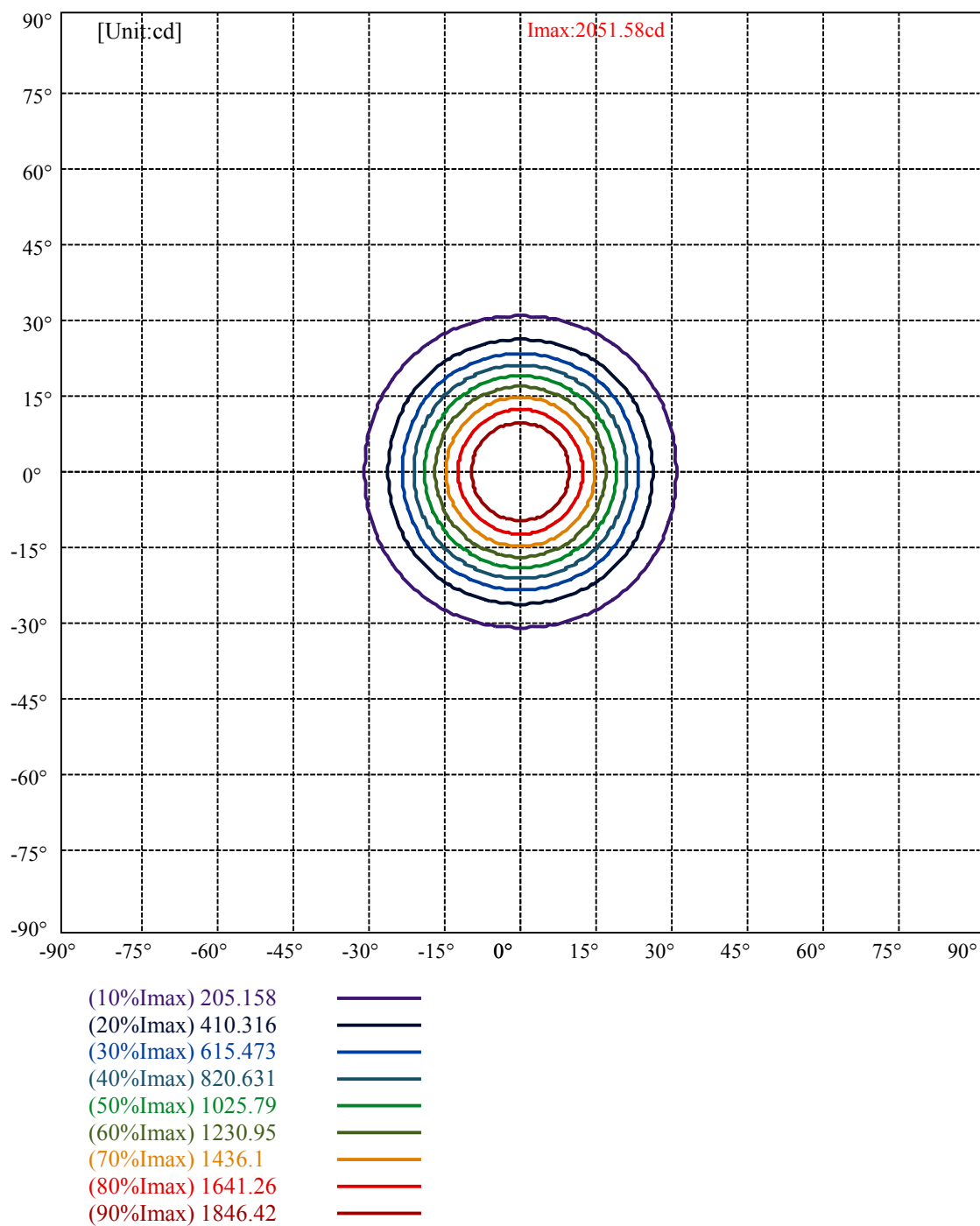
:C90/270Left:30.5 Right:30.5

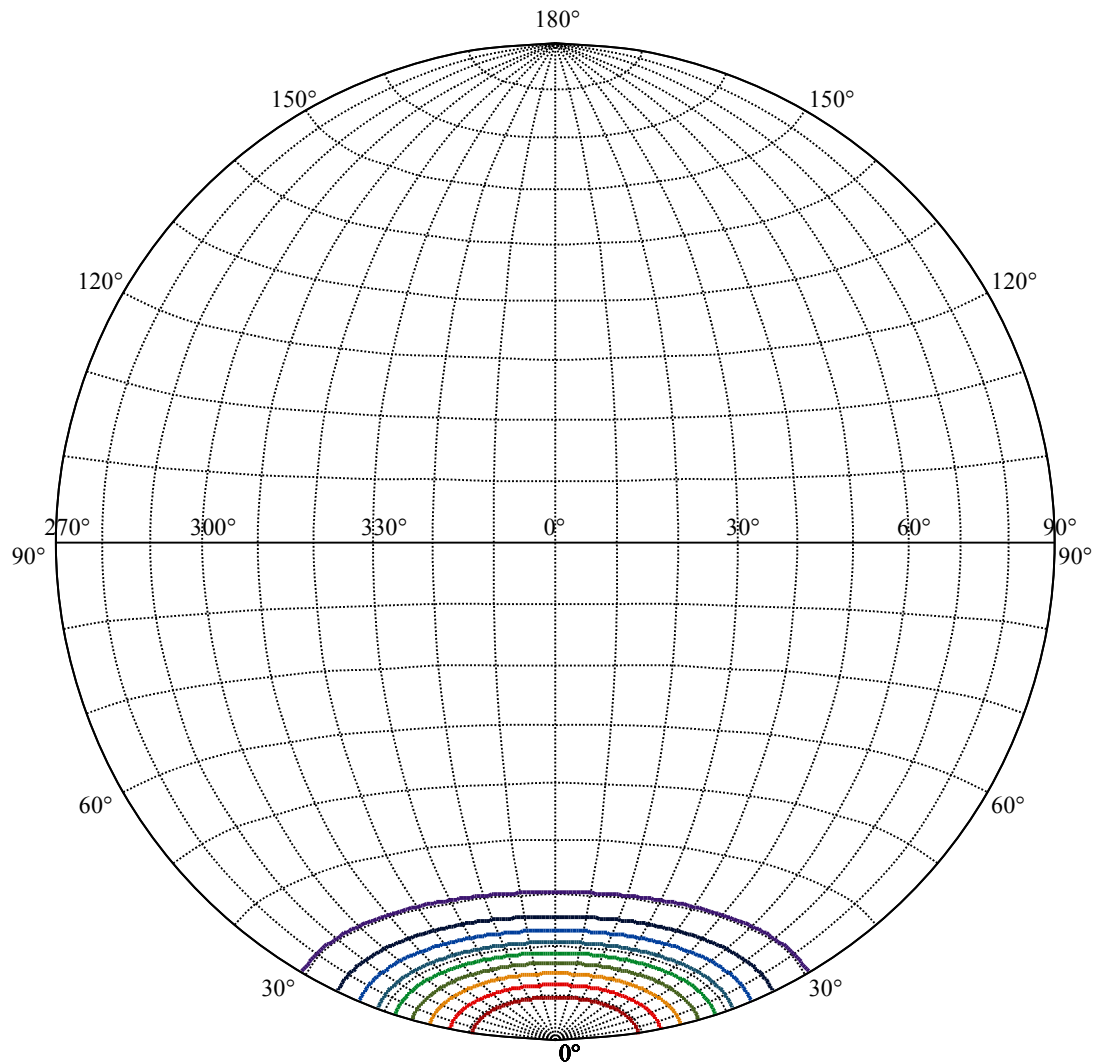
Beam Angle(50%Imax):C0/180Left:18.7 Right:18.7

:C90/270Left:18.7 Right:18.7



Max , Ave Beam angle of C0 plane 37.89





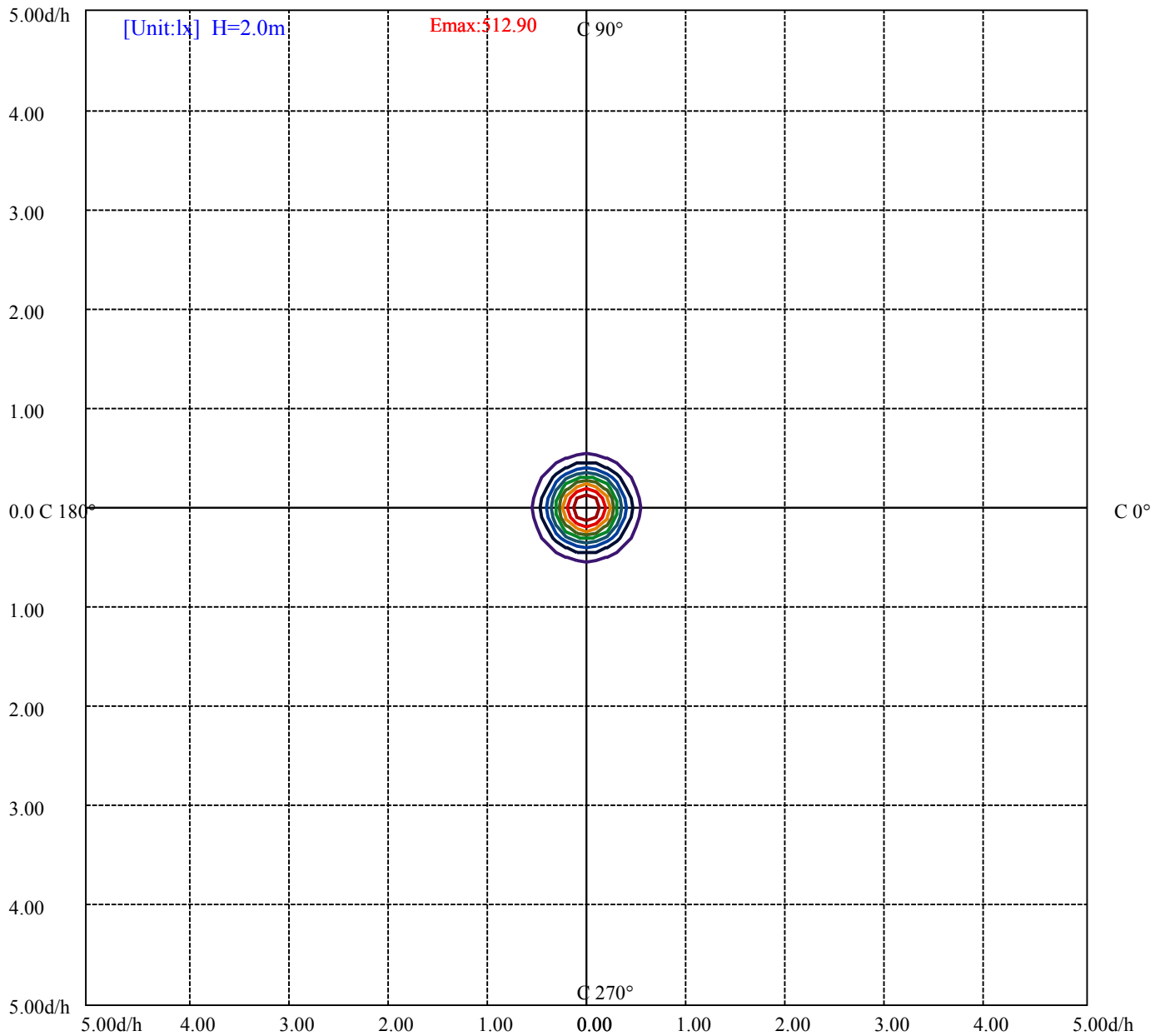
House

[Unit:cd]

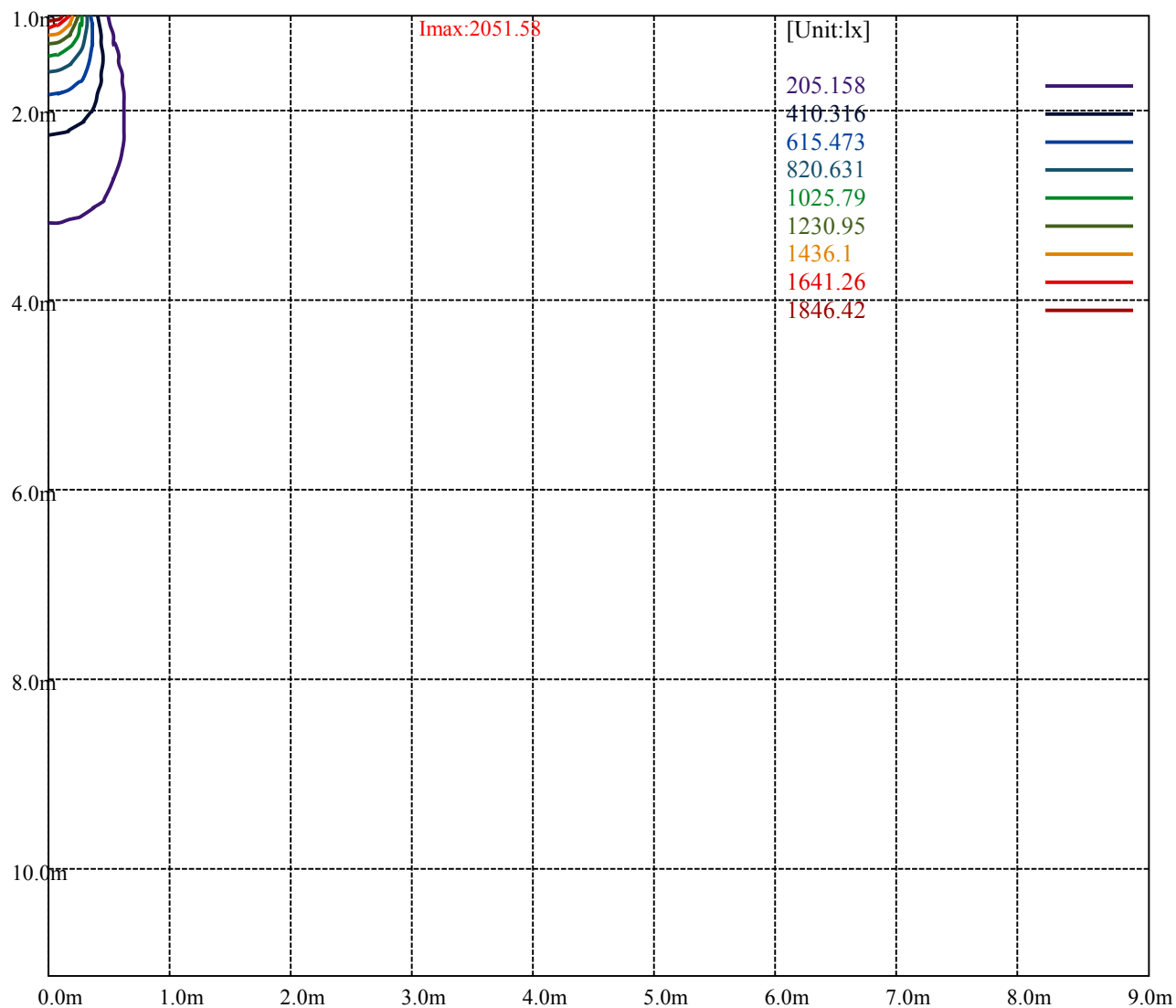
Road

Imax:2051.58

(10%Imax)	205.158	—
(20%Imax)	410.316	—
(30%Imax)	615.473	—
(40%Imax)	820.631	—
(50%Imax)	1025.79	—
(60%Imax)	1230.95	—
(70%Imax)	1436.1	—
(80%Imax)	1641.26	—
(90%Imax)	1846.42	—



(10%Emax)	51.2895	—
(20%Emax)	102.5788	—
(30%Emax)	153.8683	—
(40%Emax)	205.1577	—
(50%Emax)	256.4475	—
(60%Emax)	307.7375	—
(70%Emax)	359.025	—
(80%Emax)	410.315	—
(90%Emax)	461.605	—



Luminance Table

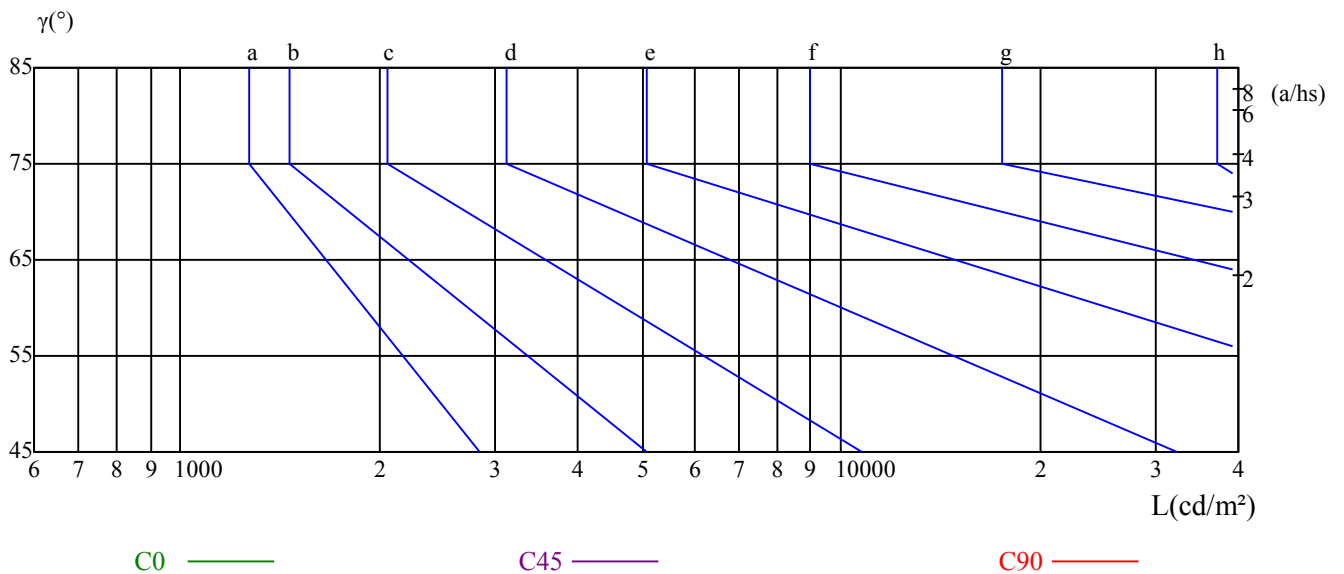
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

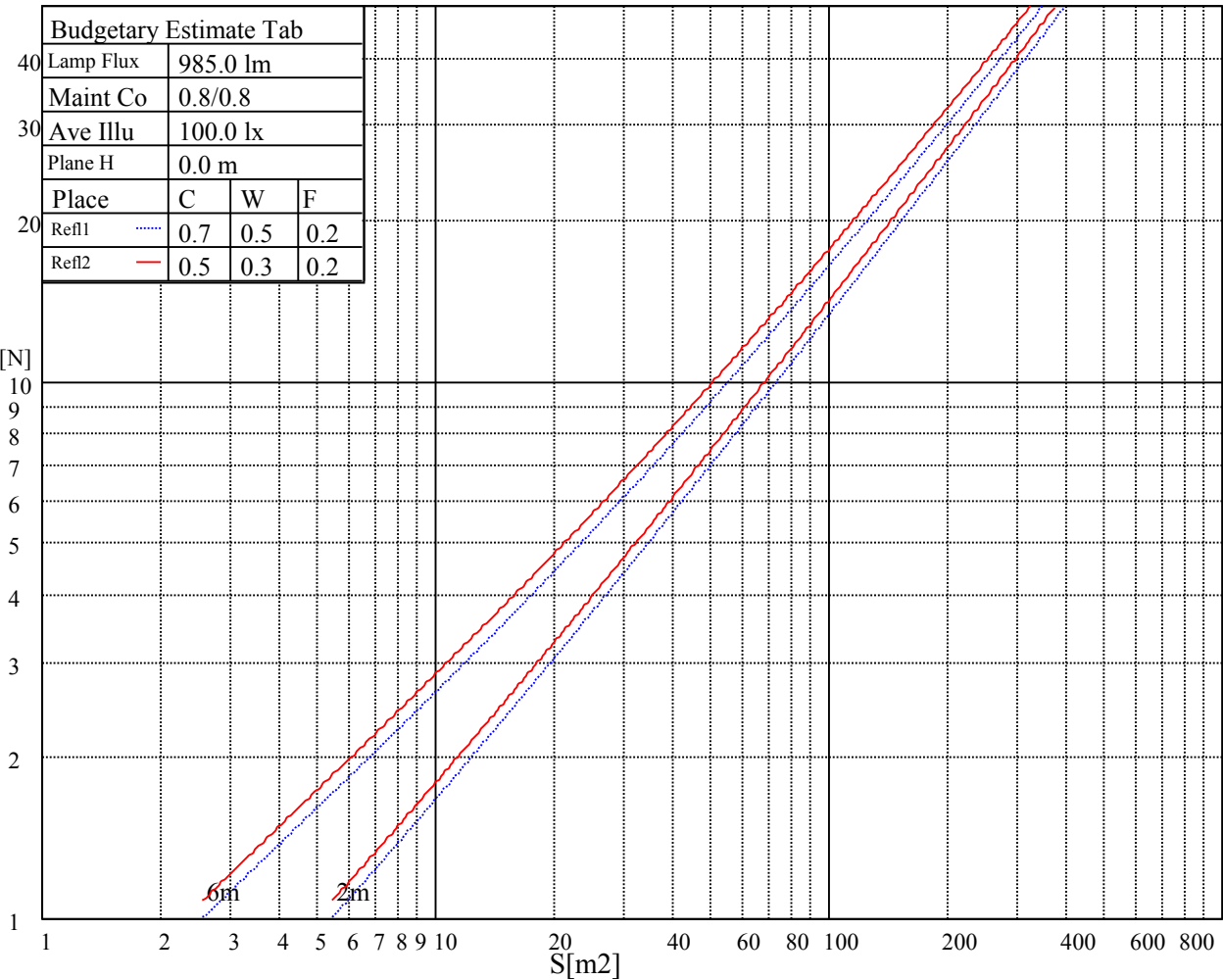
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

Glare Table

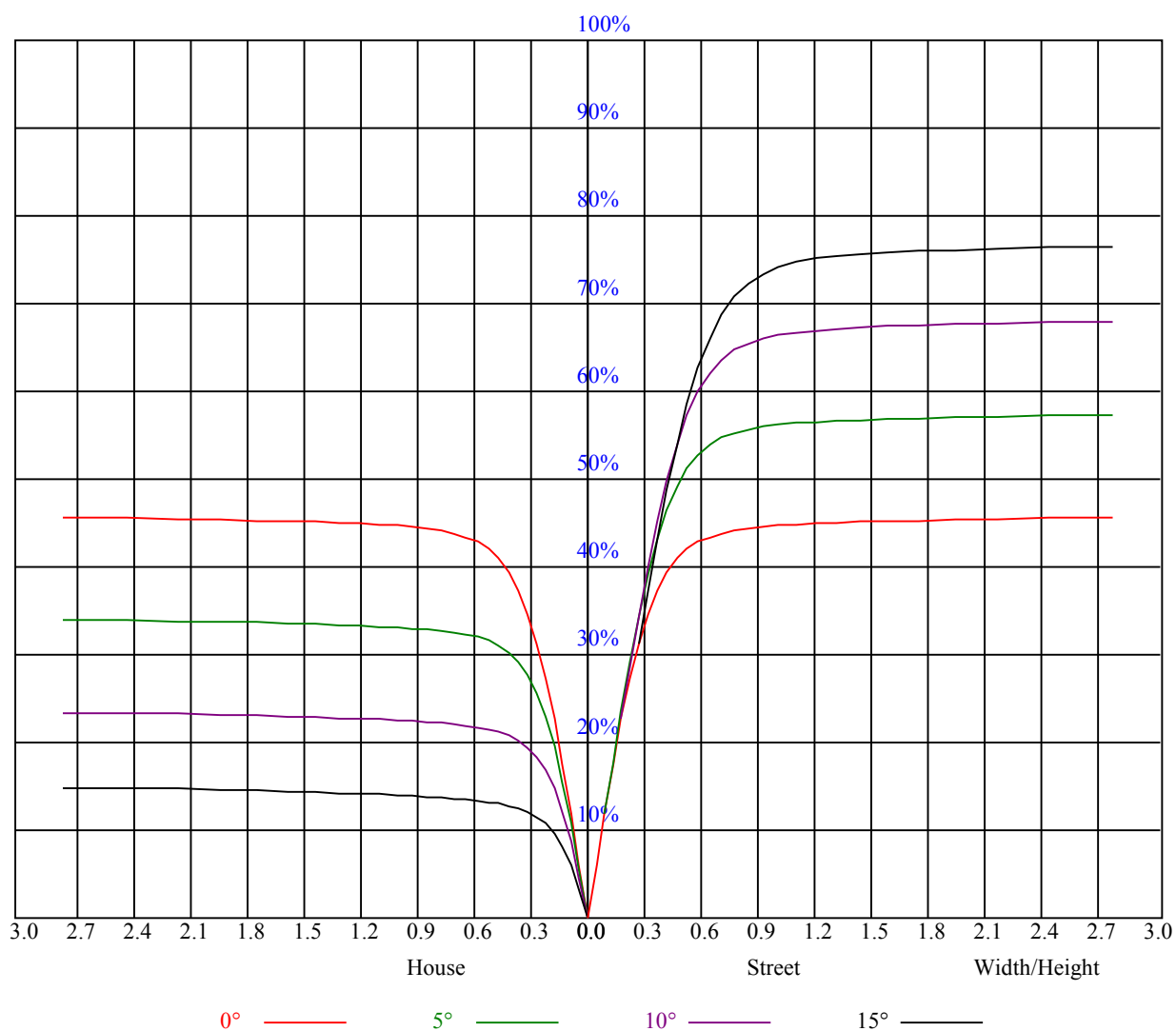
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOC	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	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.01	0.99	1.02	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.97	0.94	0.91	0.96	0.93	0.90	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.86	0.84	0.83
3	0.92	0.88	0.84	0.91	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.78
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.75
5	0.83	0.78	0.75	0.82	0.78	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.71
6	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.68
7	0.76	0.71	0.67	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.66	0.65
8	0.72	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.63	0.62
9	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.60
10	0.67	0.62	0.59	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.58



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	2047.50	2032.31	1881.00	1475.44	948.94	471.94	284.63	89.66	47.19
45.0	2052.00	2029.50	1843.31	1470.38	878.06	429.75	230.06	77.40	41.46
90.0	2053.69	2017.13	1805.63	1111.50	771.98	374.63	161.61	68.12	36.34
135.0	2053.13	2028.94	1848.38	1440.56	912.94	442.13	189.56	82.80	43.82
180.0	2047.50	1971.56	1762.88	1266.75	849.88	418.89	182.03	77.63	41.18
225.0	2052.00	1959.75	1790.44	1421.44	895.16	462.88	206.44	79.37	41.96
270.0	2053.69	2010.38	1885.50	1554.75	1027.69	567.00	294.75	95.01	50.12
315.0	2053.13	2017.13	1844.44	1457.44	900.96	435.66	198.62	81.68	43.93
360.0	2047.50	2032.31	1881.00	1475.44	948.94	471.94	284.63	89.66	47.19
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	27.96	18.28	12.32	9.56	8.04	7.09	6.58	6.02	5.06
45.0	26.49	17.38	12.04	9.51	7.99	6.92	6.19	5.51	4.56
90.0	23.01	15.19	10.69	8.72	7.59	21.26	39.94	23.12	5.01
135.0	25.59	16.37	11.59	9.11	7.71	6.81	6.13	5.63	4.67
180.0	24.53	16.37	11.31	9.00	7.59	6.86	6.36	5.79	4.84
225.0	25.65	17.04	12.04	9.23	7.76	6.75	6.24	5.63	4.67
270.0	28.52	18.28	12.49	9.68	8.10	10.18	35.55	35.21	6.36
315.0	25.48	17.38	12.04	9.39	7.99	6.98	6.47	5.85	4.89
360.0	27.96	18.28	12.32	9.56	8.04	7.09	6.58	6.02	5.06
C/γ(°)	90.0								
0.0	4.28								
45.0	4.11								
90.0	3.99								
135.0	3.99								
180.0	4.16								
225.0	4.11								
270.0	4.05								
315.0	3.99								
360.0	4.28								