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Nata

LumCAT: LN01D03536DA-N

Luminaire: 97.70.267.00

Report No: 200623-B010

Voltage(V): 9.0000

Test No: 200623-C010

Current(A): 0.3000

LampCAT: EDISON 2PHM10WW38P55020

Power (W): 2.7000

Lamp flux(lm): 274.6

PF: 0.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 246.56

Efficiency(%): 89.79%

Lumens(lm)/Power(W): 91.32

Central intensity(cd): 539.100

Maximum intensity(cd): 539.100

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.6

[C90/270]Total=37.6

Field angle(10%Imax): [C0/180]Total=60.2

[C90/270]Total=60.2

Maximum s/h(1/2): C0_180=0.63 C90_270=0.63

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(%): 89.79%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.199%

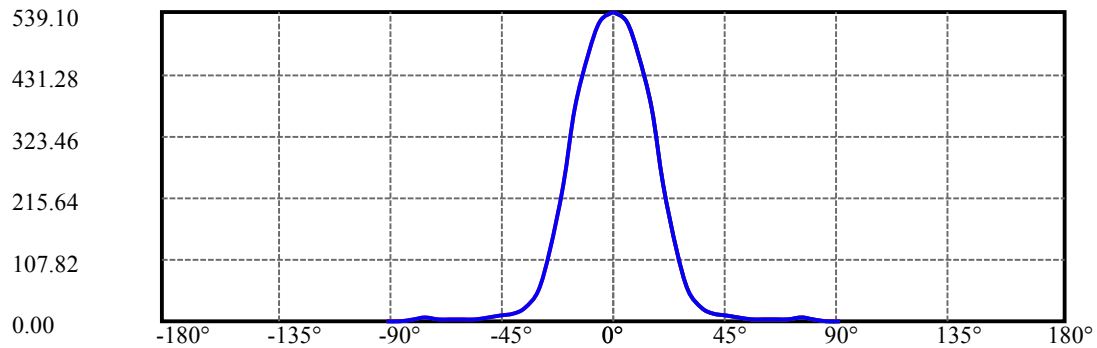
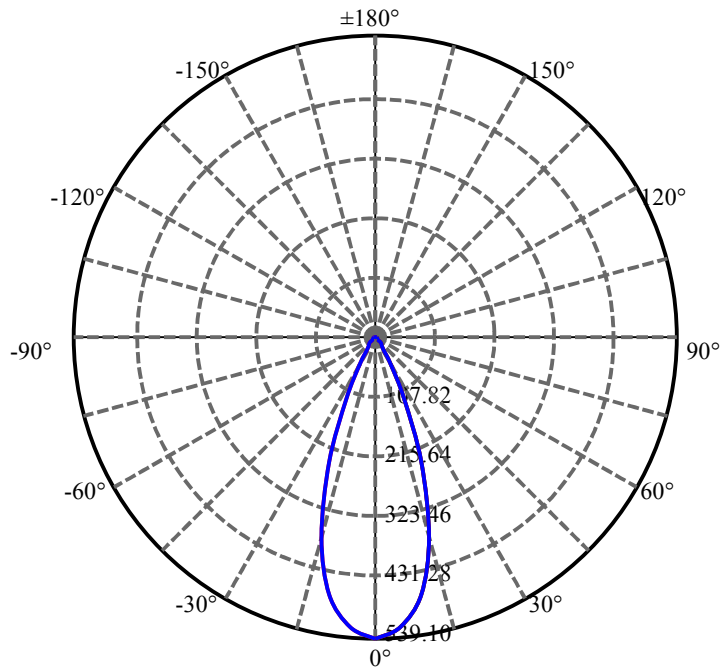
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	539.100	0.000	0	.000%	.000%
5.0	521.599	12.680	12.68	4.618%	5.143%
10.0	467.016	35.366	48.046	12.879%	19.487%
15.0	370.266	49.667	97.713	18.087%	39.631%
20.0	238.029	50.132	147.845	18.256%	59.964%
25.0	122.808	37.845	185.69	13.782%	75.314%
30.0	54.619	22.453	208.144	8.177%	84.421%
35.0	24.595	11.665	219.809	4.248%	89.152%
40.0	14.027	6.444	226.253	2.347%	91.766%
45.0	8.761	4.219	230.472	1.537%	93.477%
50.0	5.738	2.930	233.402	1.067%	94.665%
55.0	4.029	2.124	235.525	.773%	95.526%
60.0	3.150	1.659	237.184	.604%	96.199%
65.0	2.609	1.400	238.584	.510%	96.767%
70.0	3.087	1.442	240.027	.525%	97.352%
75.0	5.119	2.145	242.171	.781%	98.222%
80.0	3.677	2.354	244.525	.857%	99.177%
85.0	1.371	1.372	245.897	.500%	99.733%
90.0	1.034	0.658	246.555	.240%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	208.14	75.80%	84.42%
0-40	226.25	82.39%	91.77%
0-60	237.18	86.37%	96.20%
0-90	245.90	89.55%	99.73%
0-120	245.90	89.55%	99.73%
0-180	246.56	89.79%	100.00%
60-90	10.37	3.78%	4.21%
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%
0-27.57	197.24	71.83%	80.00%

ZONAL LUMEN SUMMARY

0-10	48.05
10-20	99.80
20-30	60.30
30-40	18.11
40-50	7.15
50-60	3.78
60-70	2.84
70-80	4.50
80-90	1.37
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: —————

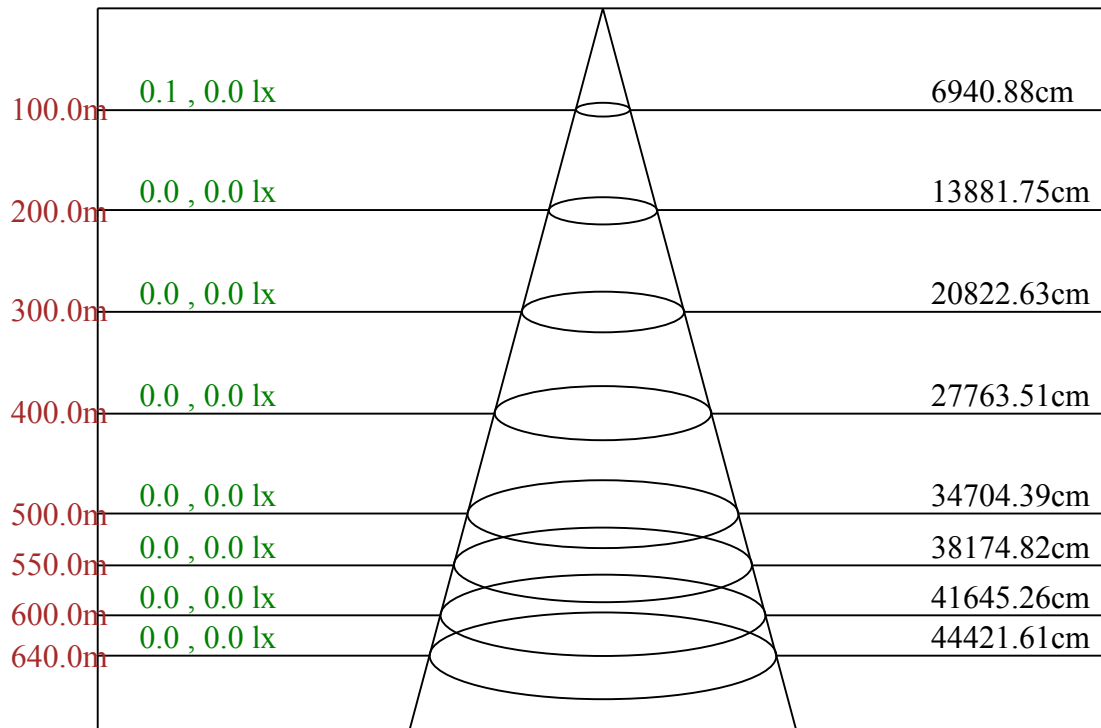
C90/C270: —————

Field angle(10%Imax):C0/180Left:30.1 Right:30.1

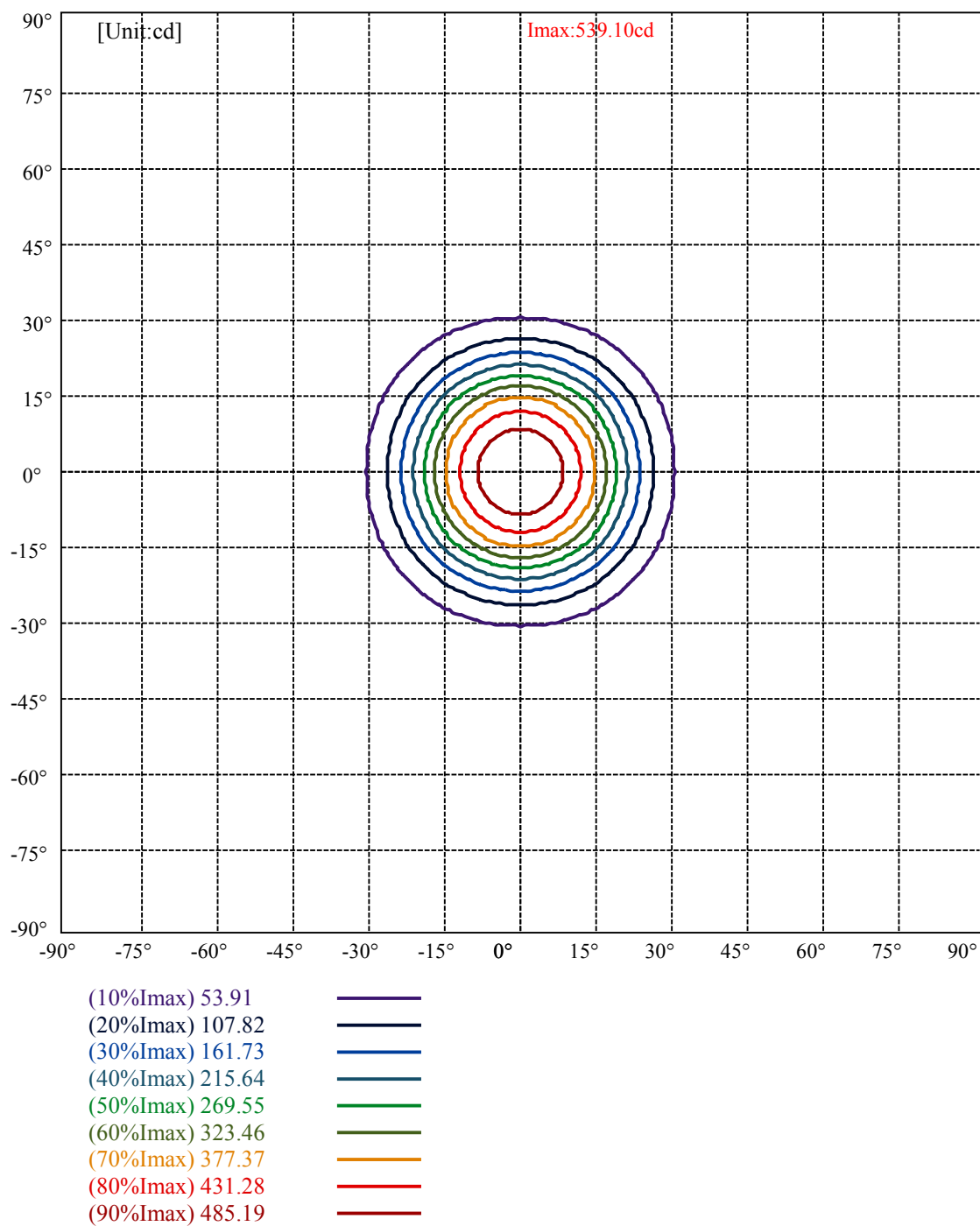
:C90/270Left:30.1 Right:30.1

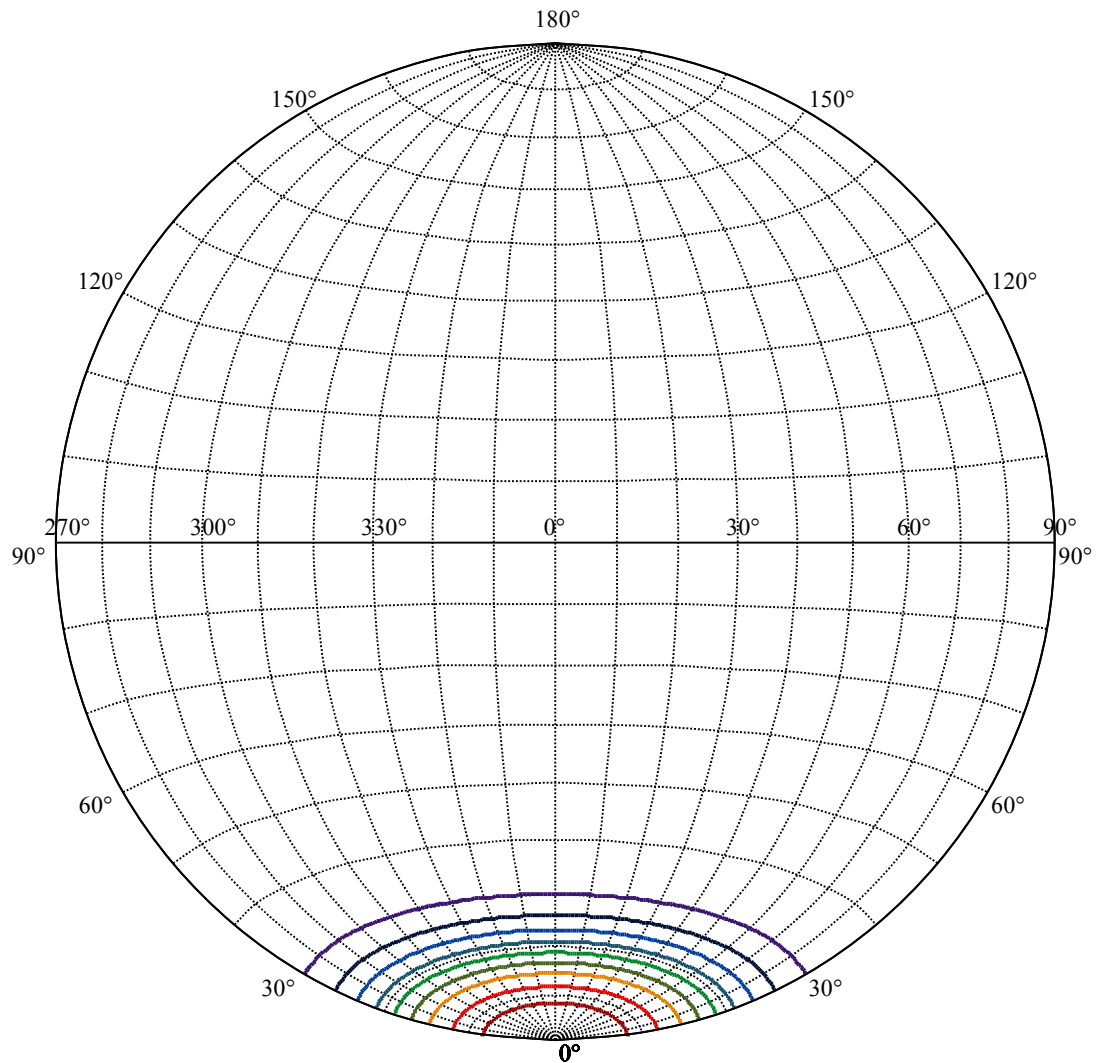
Beam Angle(50%Imax):C0/180Left:18.8 Right:18.8

:C90/270Left:18.8 Right:18.8



Max , Ave Beam angle of C0 plane 38.28





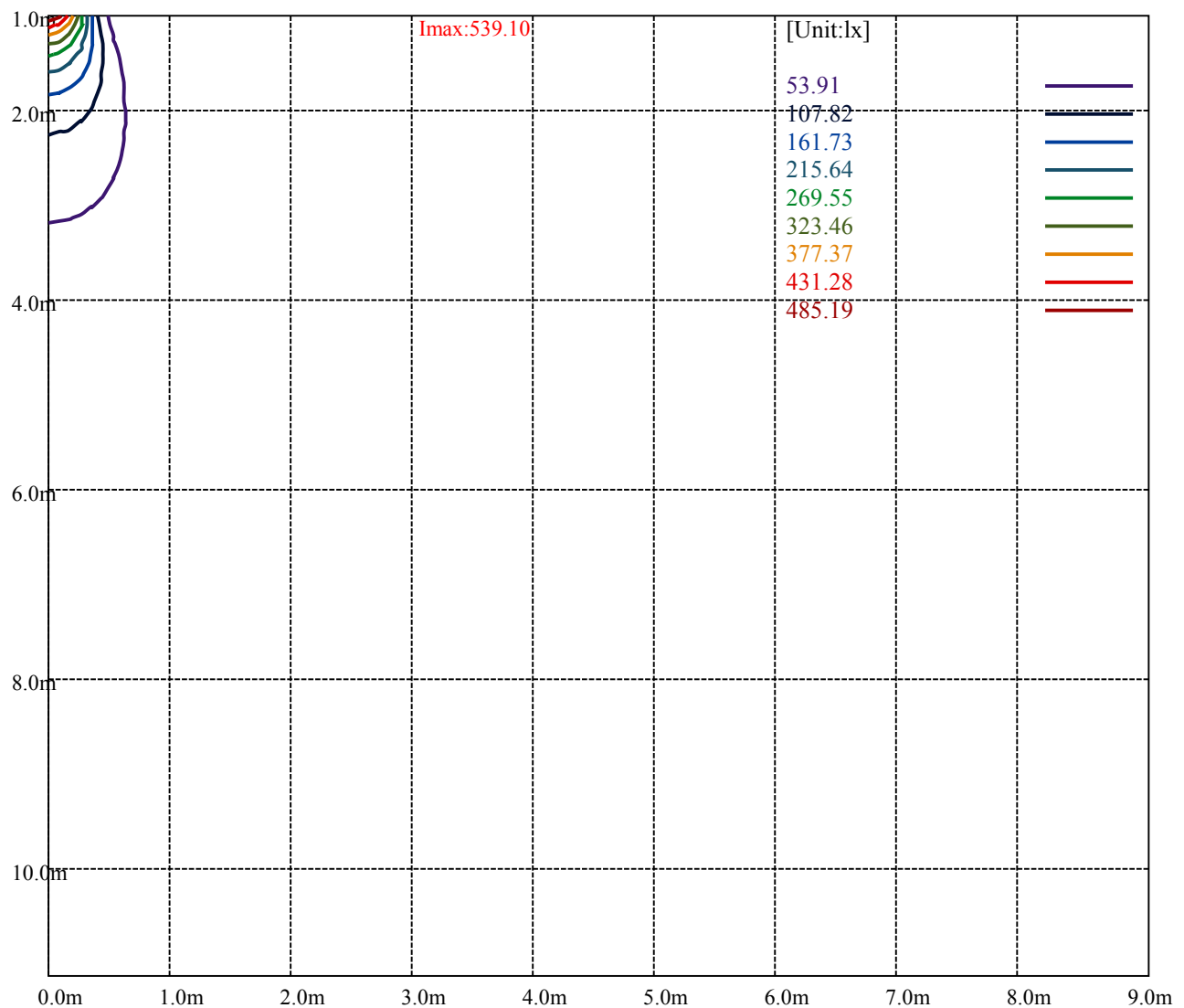
House

[Unit:cd]

Road

Imax:539.10

(10%Imax)	53.91	
(20%Imax)	107.82	
(30%Imax)	161.73	
(40%Imax)	215.64	
(50%Imax)	269.55	
(60%Imax)	323.46	
(70%Imax)	377.37	
(80%Imax)	431.28	
(90%Imax)	485.19	



Luminance Table

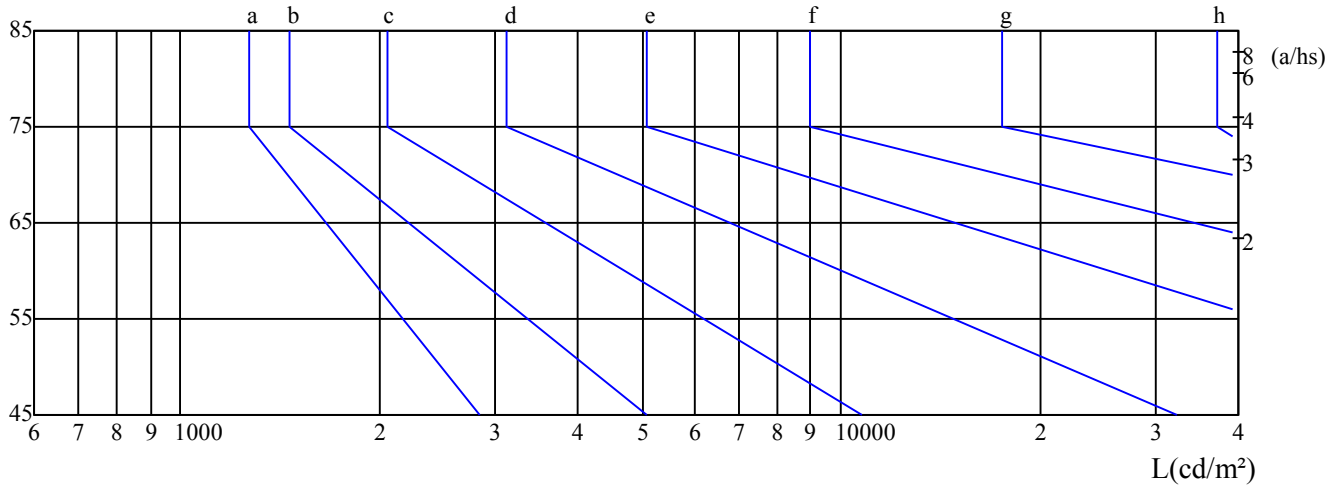
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

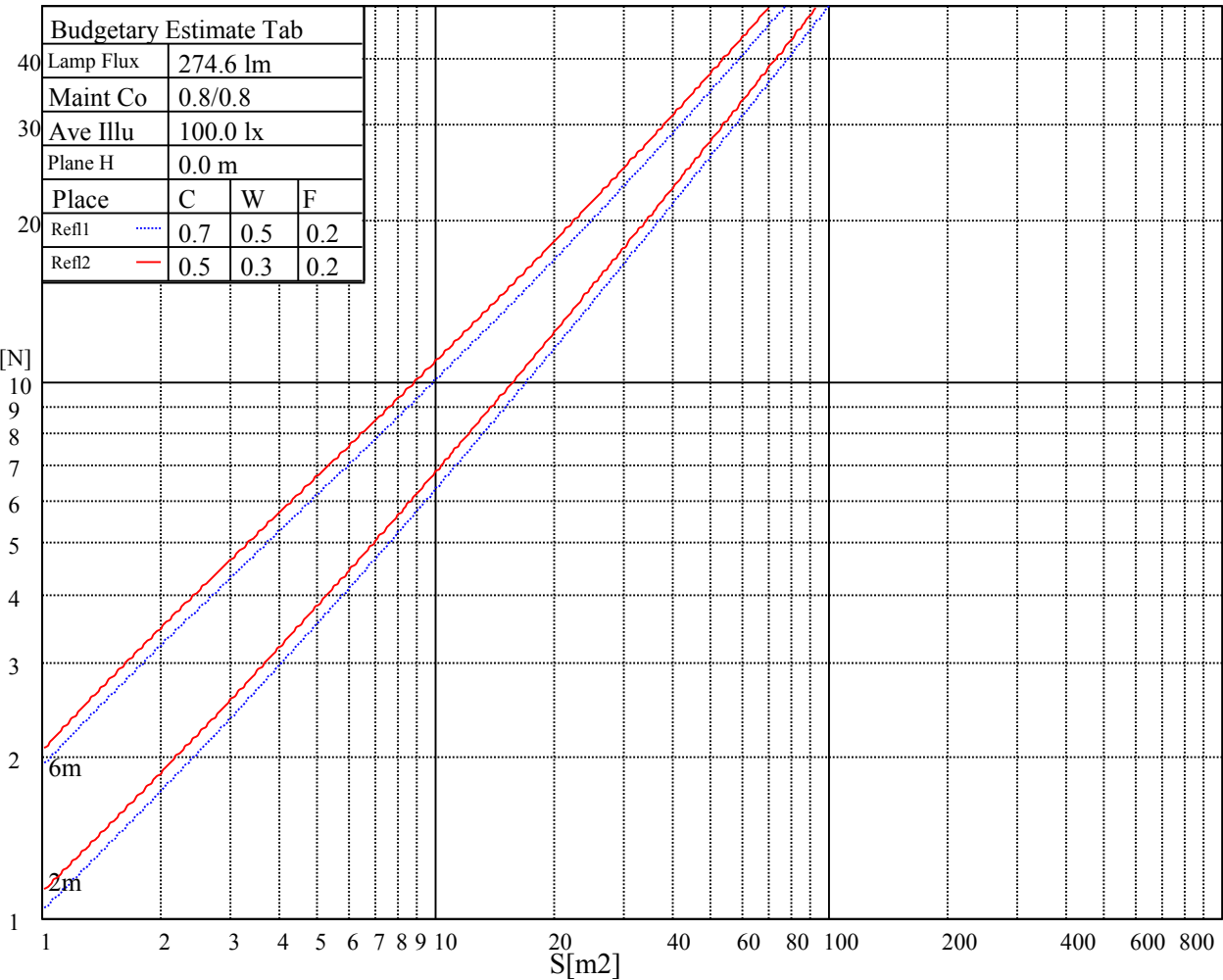
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

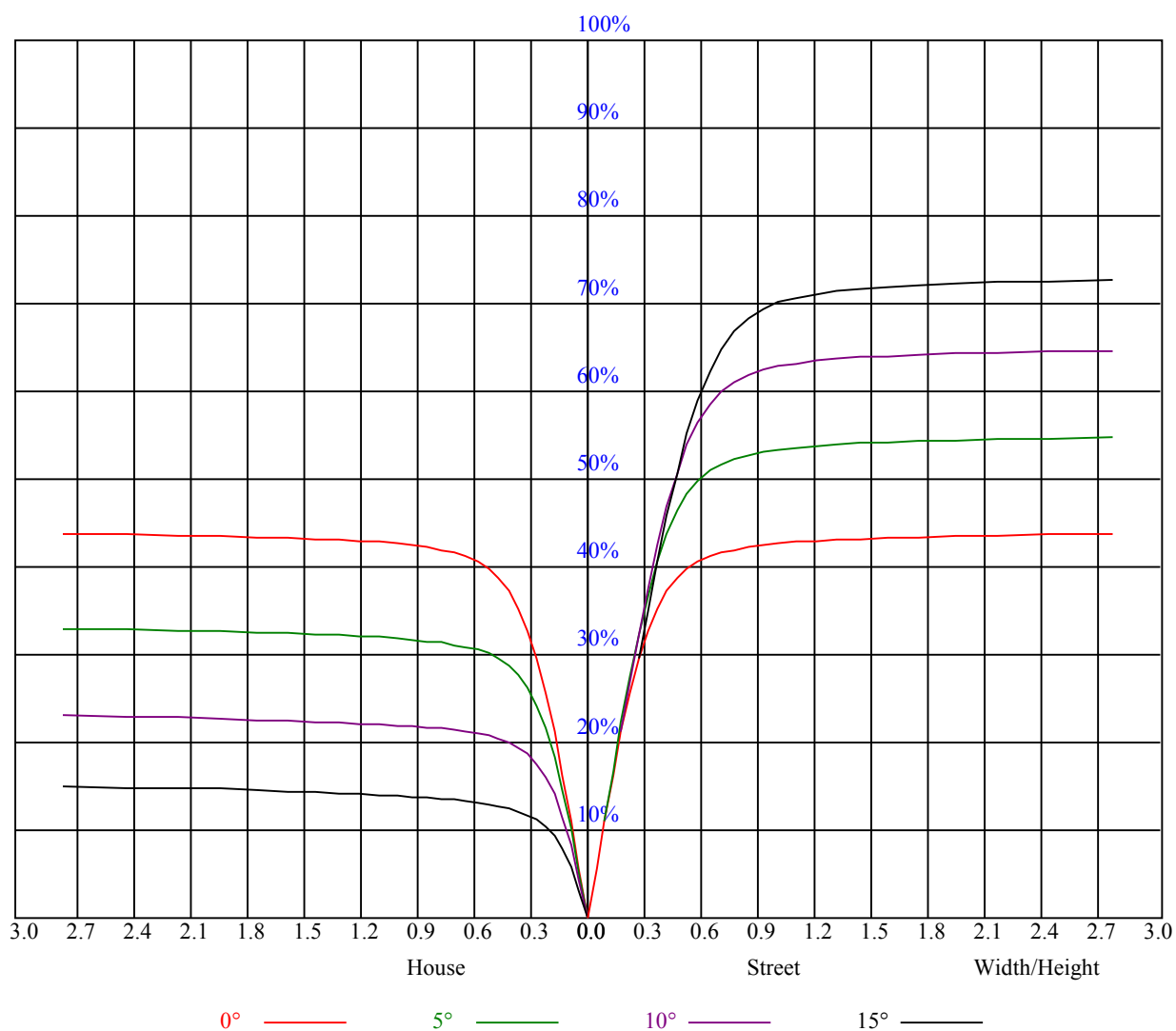
C0 ———

C45 ———

C90 ———



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	1.07	1.07	1.07	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	0.99	0.97	0.95	0.97	0.95	0.94	0.94	0.92	0.91	0.91	0.89	0.88	0.87	0.86	0.86	0.84
2	0.93	0.90	0.87	0.92	0.88	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.79
3	0.88	0.84	0.80	0.87	0.83	0.80	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
4	0.83	0.79	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.71
5	0.79	0.74	0.71	0.78	0.74	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
6	0.75	0.70	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.64
7	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.61
8	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.59
9	0.66	0.61	0.58	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.56
10	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.62	0.58	0.55	0.61	0.58	0.55	0.54



Intensity data(cd)

Appendix Page: 14 Total:14

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	540.73	509.96	443.87	361.69	234.23	125.44	53.44	25.48	14.51
45.0	537.92	522.90	472.78	368.78	225.56	104.40	47.31	22.11	13.22
90.0	540.51	538.59	488.48	364.67	208.80	97.93	41.34	19.86	11.93
135.0	537.24	545.96	506.36	405.28	256.73	129.04	55.35	24.30	14.12
180.0	540.73	536.74	489.21	385.43	254.76	128.98	55.69	24.24	14.68
225.0	537.92	515.81	461.59	370.01	246.66	131.85	60.30	26.16	14.85
270.0	540.51	509.63	451.01	369.23	260.04	148.22	70.48	31.16	15.53
315.0	537.24	493.20	422.83	337.05	217.46	116.61	53.04	23.46	13.39
360.0	540.73	509.96	443.87	361.69	234.23	125.44	53.44	25.48	14.51
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	9.06	5.79	4.11	3.21	2.59	2.31	2.64	1.86	1.35
45.0	8.27	5.57	3.94	3.15	2.59	2.25	1.91	1.63	1.24
90.0	7.48	5.01	3.60	2.93	2.64	8.21	14.85	8.78	1.35
135.0	8.78	5.79	4.05	3.09	2.53	2.14	1.86	1.58	1.24
180.0	8.72	5.79	4.11	3.15	2.59	2.19	2.19	1.80	1.35
225.0	9.51	6.24	4.33	3.38	2.70	2.31	1.97	1.69	1.41
270.0	9.79	6.13	4.16	3.21	2.70	3.09	13.67	10.52	1.74
315.0	8.49	5.57	3.94	3.09	2.53	2.19	1.86	1.58	1.29
360.0	9.06	5.79	4.11	3.21	2.59	2.31	2.64	1.86	1.35
C/γ(°)	90.0								
0.0	1.07								
45.0	1.01								
90.0	1.01								
135.0	0.96								
180.0	1.07								
225.0	1.07								
270.0	1.07								
315.0	1.01								
360.0	1.07								