
LumCAT: 2-2010-M

Luminaire: 92.70.135.00

Report No:

Test No: GC2019051510

LampCAT: LUMILEDS LUXEON 1205

Lamp flux(lm): 1661.0

Number of Lamps: 1

Length(mm): 70

Phm Type: C

Voltage(V): 34.6300

Current(A): 0.4000

Power (W): 13.8520

PF: 0.0000

Ballast type: DC

Width(mm): 70

Height(mm): 0

Photometric Results

Lumens(lm): 1458.90

Efficiency(%): 87.83%

Lumens(lm)/Power(W): 105.32

Central intensity(cd): 1489.500

Maximum intensity(cd): 1489.500

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=64.1

[C90/270]Total=64.1

Field angle(10%Imax): [C0/180]Total=84.2

[C90/270]Total=84.2

Maximum s/h(1/2): C0_180=1.00 C90_270=1.00

Maximum s/h(1/4): C0_180=0.95 C90_270=0.95

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.83%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.842%

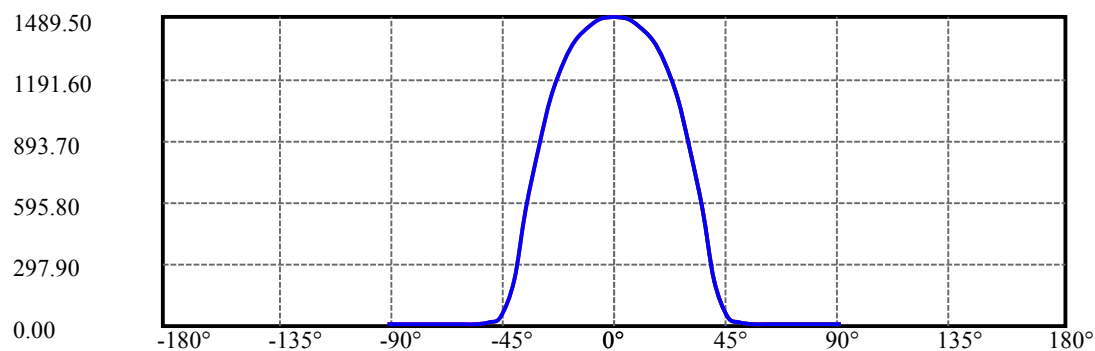
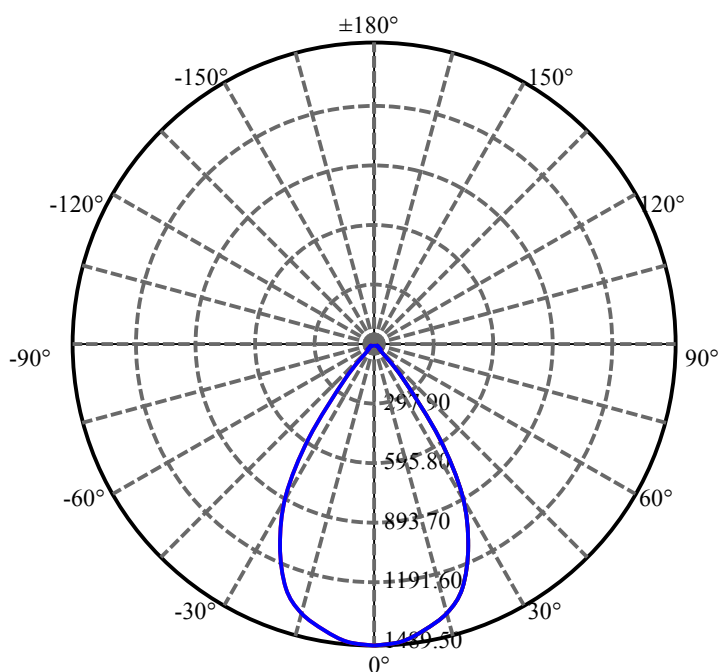
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1489.500	0.000	0	.000%	.000%
5.0	1478.039	35.476	35.476	2.136%	2.432%
10.0	1439.016	104.352	139.828	6.282%	9.585%
15.0	1378.406	167.128	306.956	10.062%	21.040%
20.0	1281.305	219.198	526.153	13.197%	36.065%
25.0	1099.245	249.676	775.829	15.032%	53.179%
30.0	869.702	249.172	1025.001	15.001%	70.259%
35.0	562.113	210.845	1235.846	12.694%	84.711%
40.0	223.116	131.010	1366.855	7.887%	93.691%
45.0	45.577	49.751	1416.606	2.995%	97.101%
50.0	21.333	13.520	1430.126	.814%	98.028%
55.0	11.988	7.245	1437.371	.436%	98.525%
60.0	8.023	4.625	1441.997	.278%	98.842%
65.0	5.892	3.383	1445.379	.204%	99.074%
70.0	5.077	2.777	1448.157	.167%	99.264%
75.0	4.999	2.634	1450.79	.159%	99.444%
80.0	4.992	2.673	1453.464	.161%	99.628%
85.0	4.978	2.709	1456.173	.163%	99.813%
90.0	4.964	2.722	1458.895	.164%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1025.00	61.71%	70.26%
0-40	1366.86	82.29%	93.69%
0-60	1442.00	86.81%	98.84%
0-90	1456.17	87.67%	99.81%
0-120	1456.17	87.67%	99.81%
0-180	1458.90	87.83%	100.00%
60-90	18.80	1.13%	1.29%
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%
0-33.37	1167.12	70.27%	80.00%

ZONAL LUMEN SUMMARY

0-10	139.83
10-20	386.33
20-30	498.85
30-40	341.85
40-50	63.27
50-60	11.87
60-70	6.16
70-80	5.31
80-90	2.71
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: —————

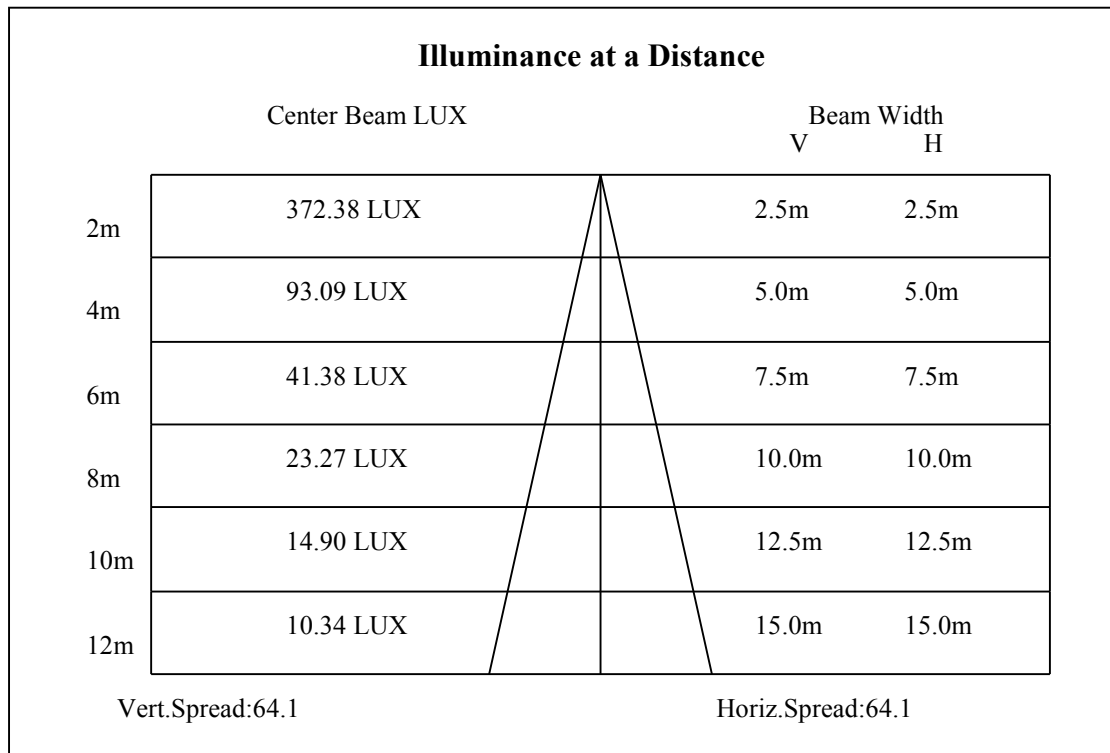
C90/C270: —————

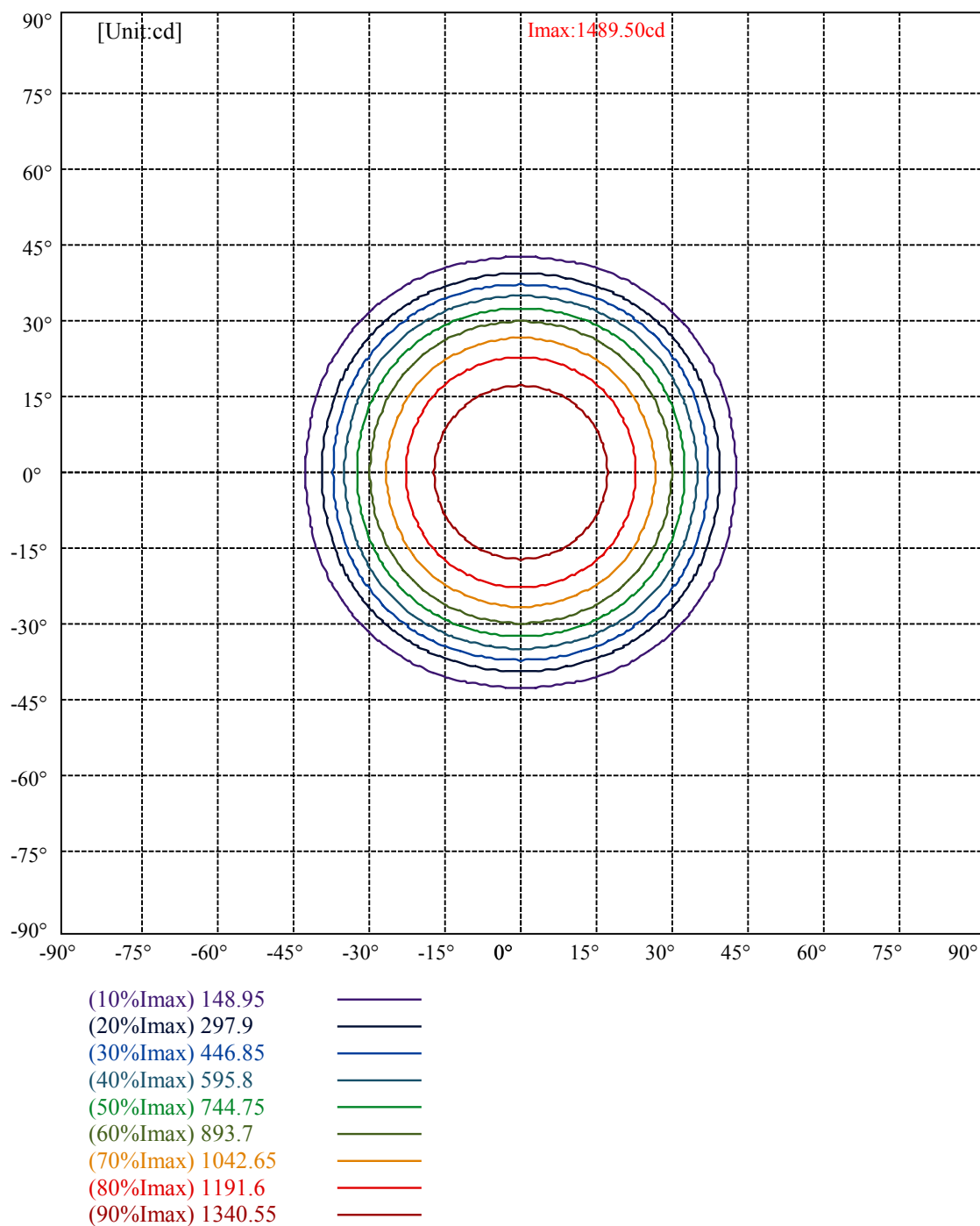
Field angle(10%Imax):C0/180Left:42.1 Right:42.1

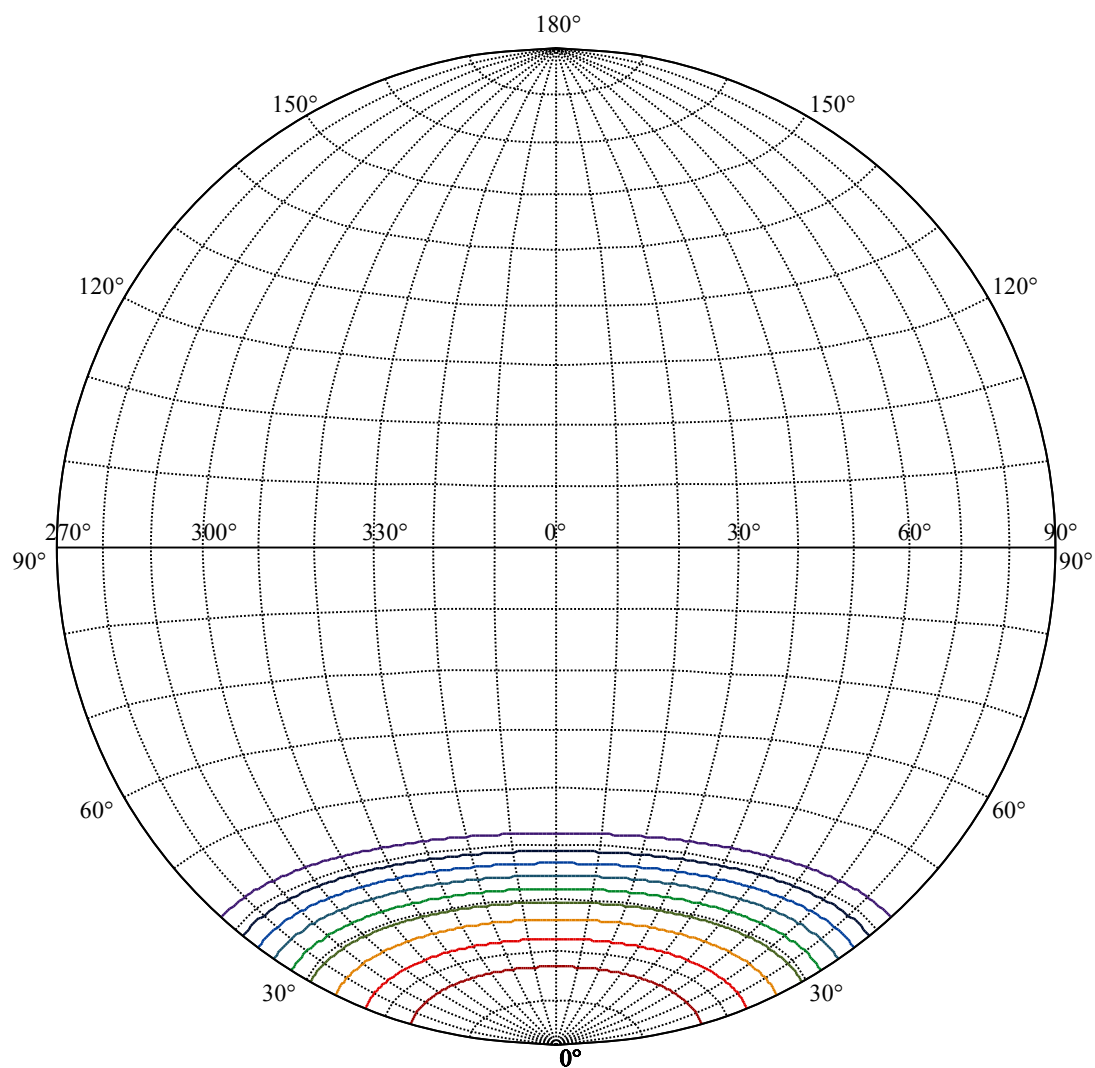
:C90/270Left:42.1 Right:42.1

Beam Angle(50%Imax):C0/180Left:32.0 Right:32.0

:C90/270Left:32.0 Right:32.0







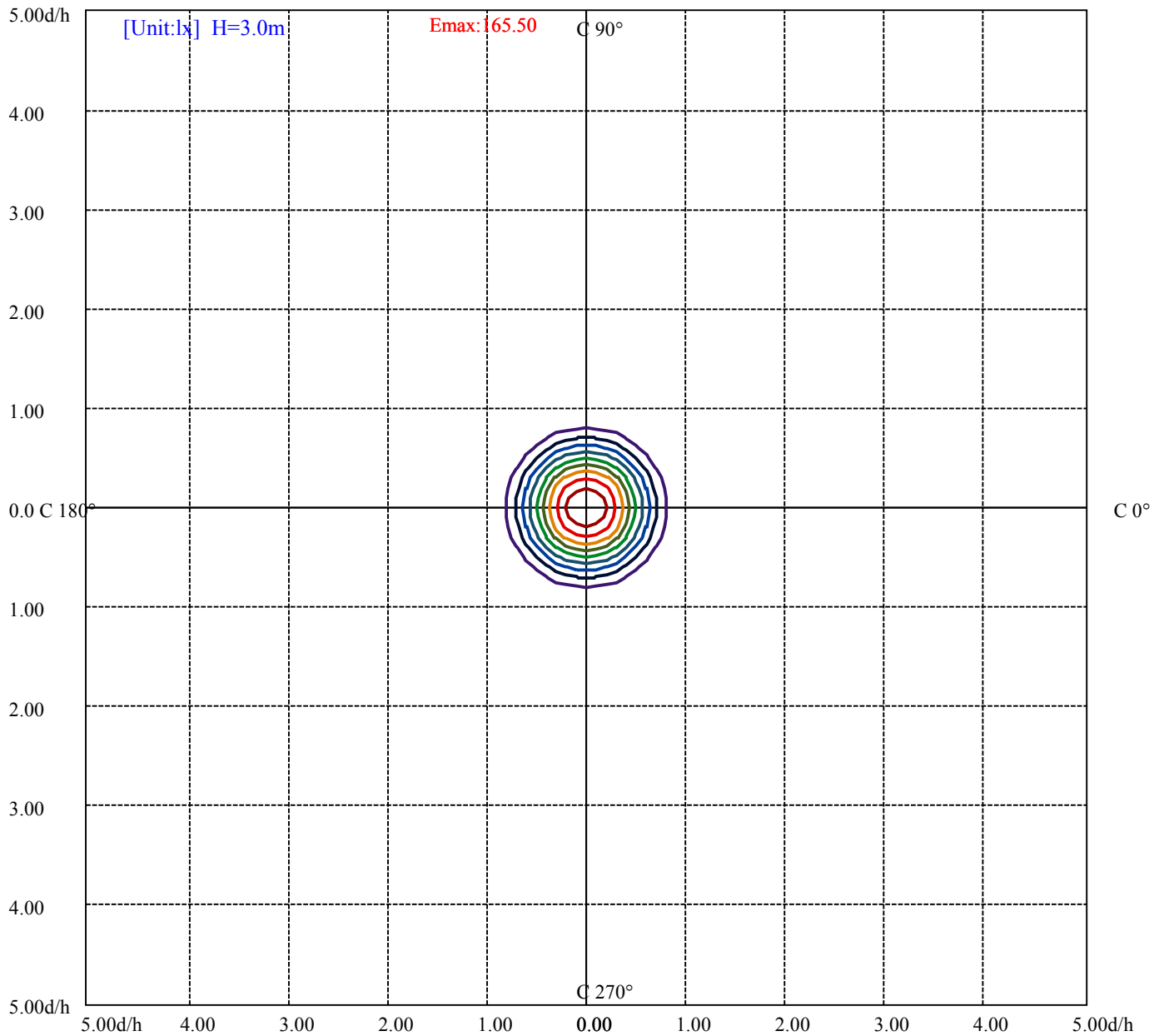
House

[Unit:cd]

Road

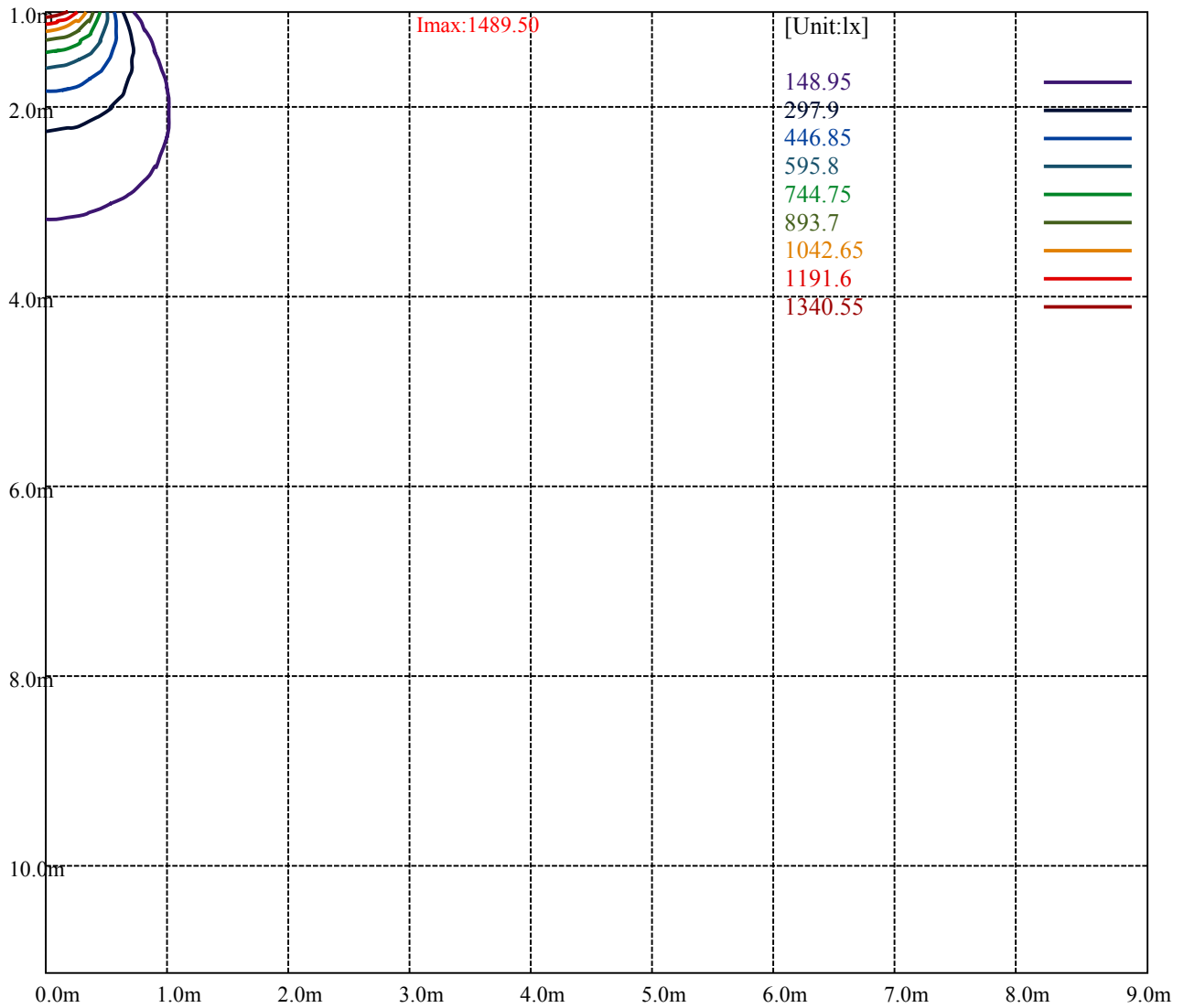
Imax:1489.50

(10%Imax)	148.95	—
(20%Imax)	297.9	—
(30%Imax)	446.85	—
(40%Imax)	595.8	—
(50%Imax)	744.75	—
(60%Imax)	893.7	—
(70%Imax)	1042.65	—
(80%Imax)	1191.6	—
(90%Imax)	1340.55	—



(10%Emax) 16.55
(20%Emax) 33.1
(30%Emax) 49.65
(40%Emax) 66.2
(50%Emax) 82.75
(60%Emax) 99.3
(70%Emax) 115.85
(80%Emax) 132.4
(90%Emax) 148.95





Luminance Table

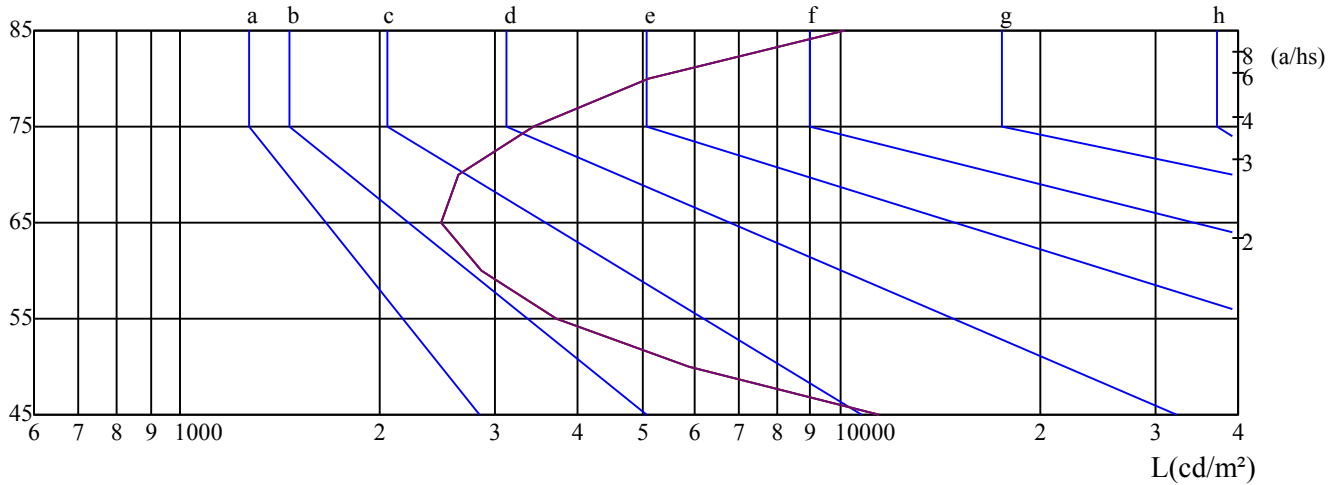
γ	45	50	55	60	65	70	75	80	85
C0	11459	5900	3716	2853	2479	2639	3434	5111	10154
C45	11459	5900	3716	2853	2479	2639	3434	5111	10154
C90	11459	5900	3716	2853	2479	2639	3434	5111	10154

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2479	2479	2479	3434	3434	3434	10154	10154	10154

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

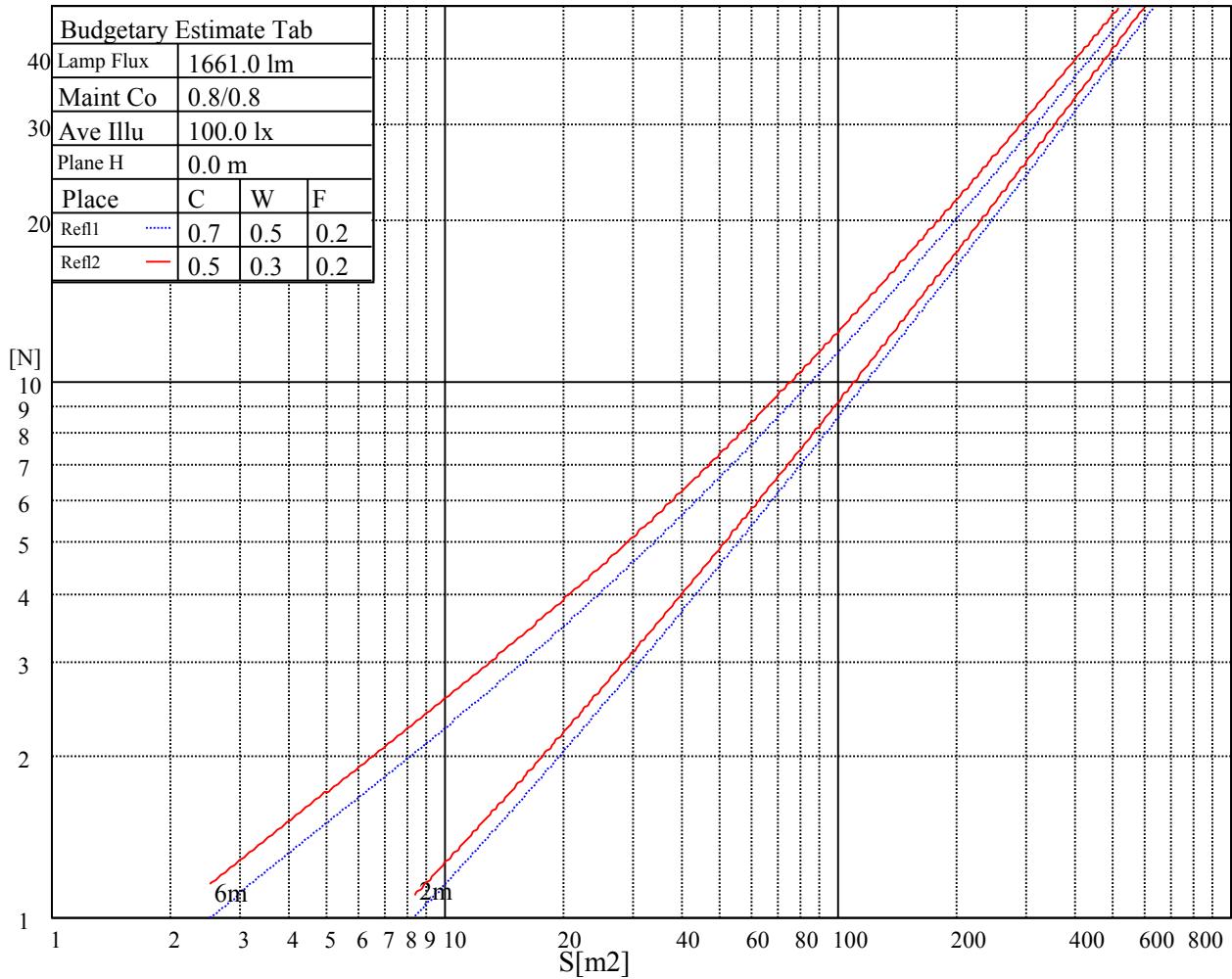
Luminance Limiting Curve

 $\gamma(^{\circ})$ 

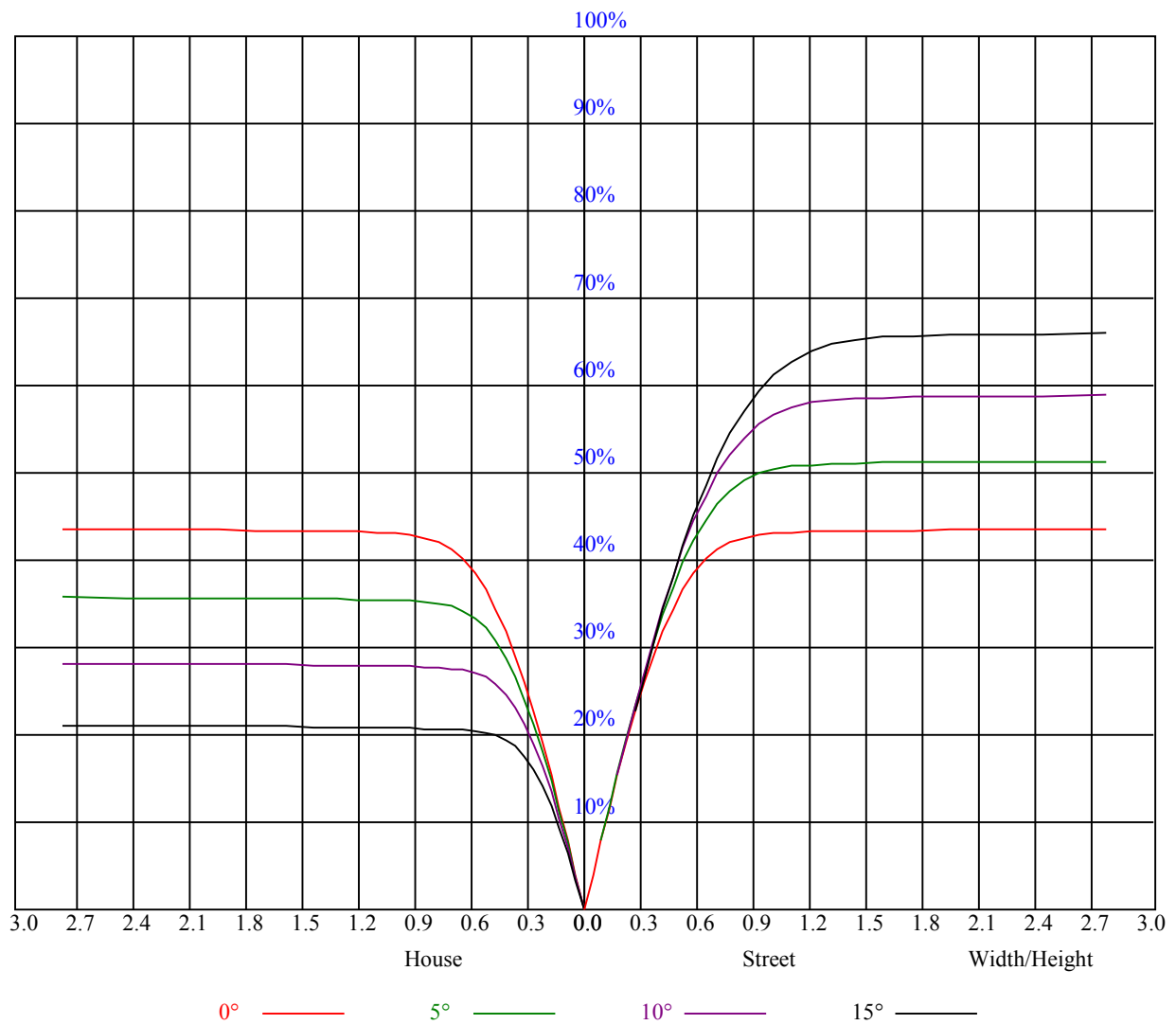
C0 ———

C45 ———

C90 ———



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	1.05	1.05	1.05	1.02	1.02	1.02	0.98	0.98	0.98	0.93	0.93	0.93	0.90	0.90	0.90	0.88
1	0.97	0.95	0.93	0.95	0.93	0.91	0.92	0.90	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82
2	0.90	0.87	0.84	0.89	0.85	0.83	0.86	0.83	0.81	0.83	0.81	0.79	0.81	0.79	0.77	0.76
3	0.84	0.80	0.76	0.83	0.79	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.71
4	0.78	0.73	0.70	0.77	0.73	0.69	0.76	0.72	0.68	0.74	0.70	0.68	0.72	0.69	0.67	0.66
5	0.73	0.68	0.64	0.73	0.68	0.64	0.71	0.67	0.63	0.69	0.66	0.63	0.68	0.65	0.62	0.61
6	0.69	0.63	0.60	0.68	0.63	0.59	0.67	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.58	0.57
7	0.65	0.59	0.55	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
8	0.61	0.55	0.52	0.60	0.55	0.52	0.59	0.55	0.51	0.58	0.54	0.51	0.58	0.54	0.51	0.50
9	0.57	0.52	0.48	0.57	0.52	0.48	0.56	0.51	0.48	0.55	0.51	0.48	0.54	0.51	0.48	0.47
10	0.54	0.49	0.46	0.54	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.52	0.48	0.45	0.44



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	1492.31	1478.25	1434.94	1368.56	1274.63	1100.25	876.38	591.75	304.31
45.0	1491.19	1475.44	1434.94	1370.81	1289.81	1147.50	948.38	678.38	293.63
90.0	1487.25	1471.50	1428.19	1369.69	1279.13	1106.61	892.80	598.84	211.28
135.0	1487.25	1479.94	1449.56	1398.38	1316.81	1152.00	918.56	658.69	288.00
180.0	1492.31	1483.88	1446.75	1390.50	1290.38	1095.13	847.74	557.55	179.04
225.0	1491.19	1481.06	1442.81	1374.19	1253.81	1041.08	808.43	434.70	94.67
270.0	1487.25	1480.50	1444.50	1386.00	1290.38	1094.63	853.88	523.69	294.75
315.0	1487.25	1473.75	1430.44	1369.13	1255.50	1056.77	811.46	453.32	119.25
360.0	1492.31	1478.25	1434.94	1368.56	1274.63	1100.25	876.38	591.75	304.31
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	49.84	23.40	12.99	8.49	6.08	5.12	5.01	5.01	4.95
45.0	61.59	25.76	13.78	9.00	6.36	5.18	5.01	4.95	5.01
90.0	46.18	21.43	11.87	7.93	5.96	5.06	5.01	5.01	5.01
135.0	52.93	23.74	12.88	8.44	6.13	5.12	5.01	5.01	5.01
180.0	43.93	21.99	12.38	8.21	5.96	5.06	5.01	5.01	4.95
225.0	34.88	17.49	10.35	7.26	5.46	5.01	4.95	4.95	4.95
270.0	39.60	18.73	11.08	7.54	5.68	5.01	5.01	5.01	4.95
315.0	35.66	18.11	10.58	7.31	5.51	5.06	5.01	5.01	5.01
360.0	49.84	23.40	12.99	8.49	6.08	5.12	5.01	5.01	4.95
C/γ(°)	90.0								
0.0	5.01								
45.0	4.95								
90.0	4.95								
135.0	4.95								
180.0	4.95								
225.0	4.95								
270.0	4.95								
315.0	5.01								
360.0	5.01								