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## Nata

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LumCAT: 2-2534-L	
Luminaire: 92.70.135.00	
Report No: 220914-B005	Voltage(V): 34.7900
Test No: 220914-C005	Current(A): 0.4850
LampCAT: LUMILEDS LUXEON1205	Power (W): 16.8730
Lamp flux(lm): 2455.9	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

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## Photometric Results

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Lumens(lm): 2091.35  
Efficiency(%): 85.16%  
Lumens(lm)/Power(W): 123.95  
Central intensity(cd): 3685.708  
Maximum intensity(cd): 3685.708  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=44.4  
                                  [C90/270]Total=44.4  
Field angle(10%Imax): [C0/180]Total=68.7  
                                  [C90/270]Total=68.7  
Maximum s/h(1/2): C0\_180=0.72 C90\_270=0.72  
Maximum s/h(1/4): C0\_180=0.70 C90\_270=0.70  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 85.16%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 97.701%

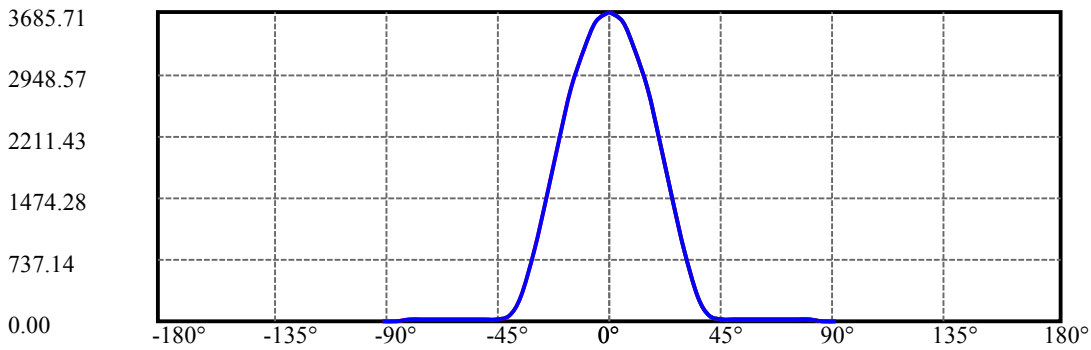
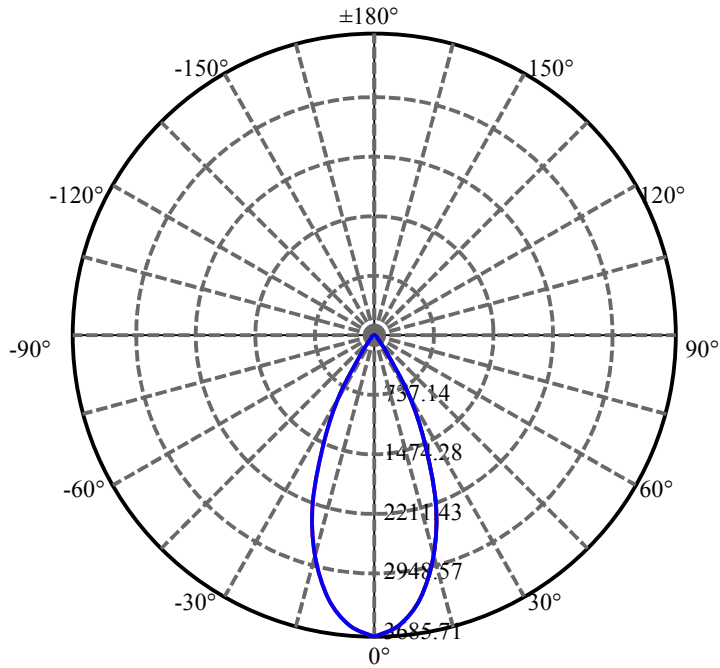
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3685.708	0.000	0	.000%	.000%
5.0	3562.468	86.650	86.65	3.528%	4.143%
10.0	3255.711	243.908	330.558	9.932%	15.806%
15.0	2776.792	357.844	688.402	14.571%	32.917%
20.0	2169.105	407.611	1096.013	16.598%	52.407%
25.0	1435.885	378.097	1474.11	15.396%	70.486%
30.0	841.620	288.220	1762.33	11.736%	84.267%
35.0	298.824	167.938	1930.268	6.838%	92.298%
40.0	59.790	59.832	1990.1	2.436%	95.159%
45.0	34.223	17.407	2007.508	.709%	95.991%
50.0	28.614	12.697	2020.205	.517%	96.598%
55.0	25.544	11.776	2031.981	.480%	97.161%
60.0	23.281	11.286	2043.267	.460%	97.701%
65.0	20.562	10.658	2053.925	.434%	98.210%
70.0	17.687	9.685	2063.61	.394%	98.673%
75.0	14.550	8.426	2072.037	.343%	99.076%
80.0	13.198	7.425	2079.461	.302%	99.431%
85.0	10.531	6.448	2085.909	.263%	99.740%
90.0	9.351	5.444	2091.353	.222%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1762.33	71.76%	84.27%
0-40	1990.10	81.04%	95.16%
0-60	2043.27	83.20%	97.70%
0-90	2085.91	84.94%	99.74%
0-120	2085.91	84.94%	99.74%
0-180	2091.35	85.16%	100.00%
60-90	53.93	2.20%	2.58%
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%
0-28.45	1673.08	68.13%	80.00%

ZONAL LUMEN SUMMARY

0-10	330.56
10-20	765.46
20-30	666.32
30-40	227.77
40-50	30.10
50-60	23.06
60-70	20.34
70-80	15.85
80-90	6.45
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: ———

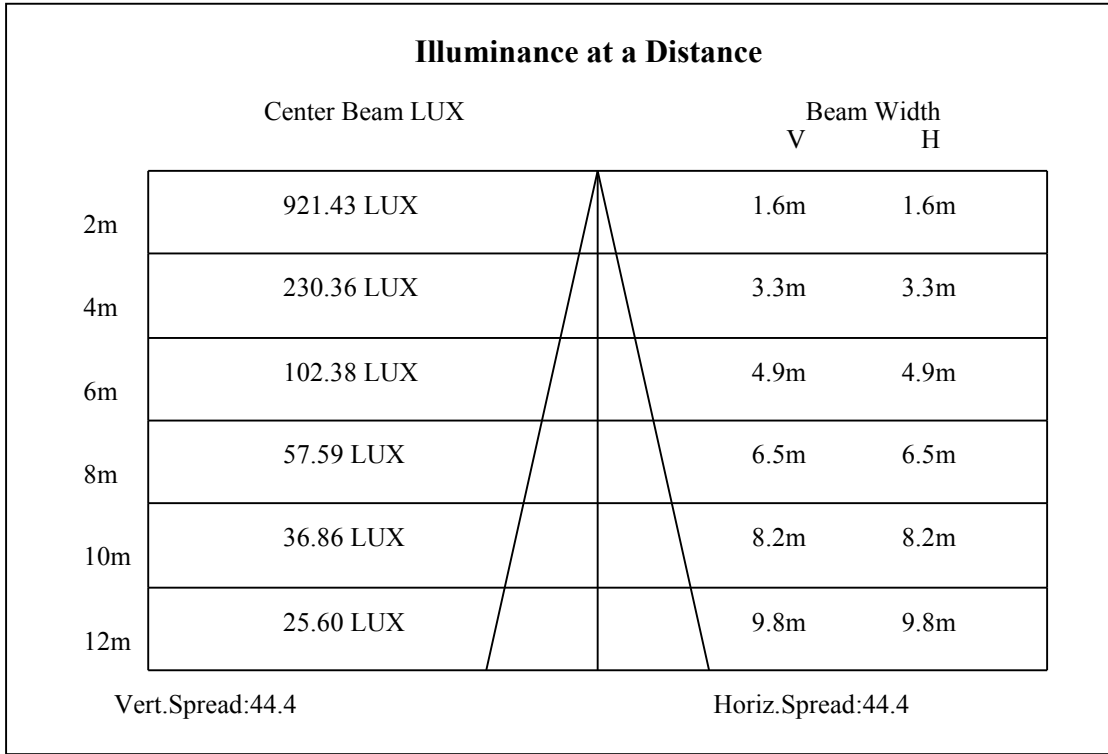
C90/C270: ———

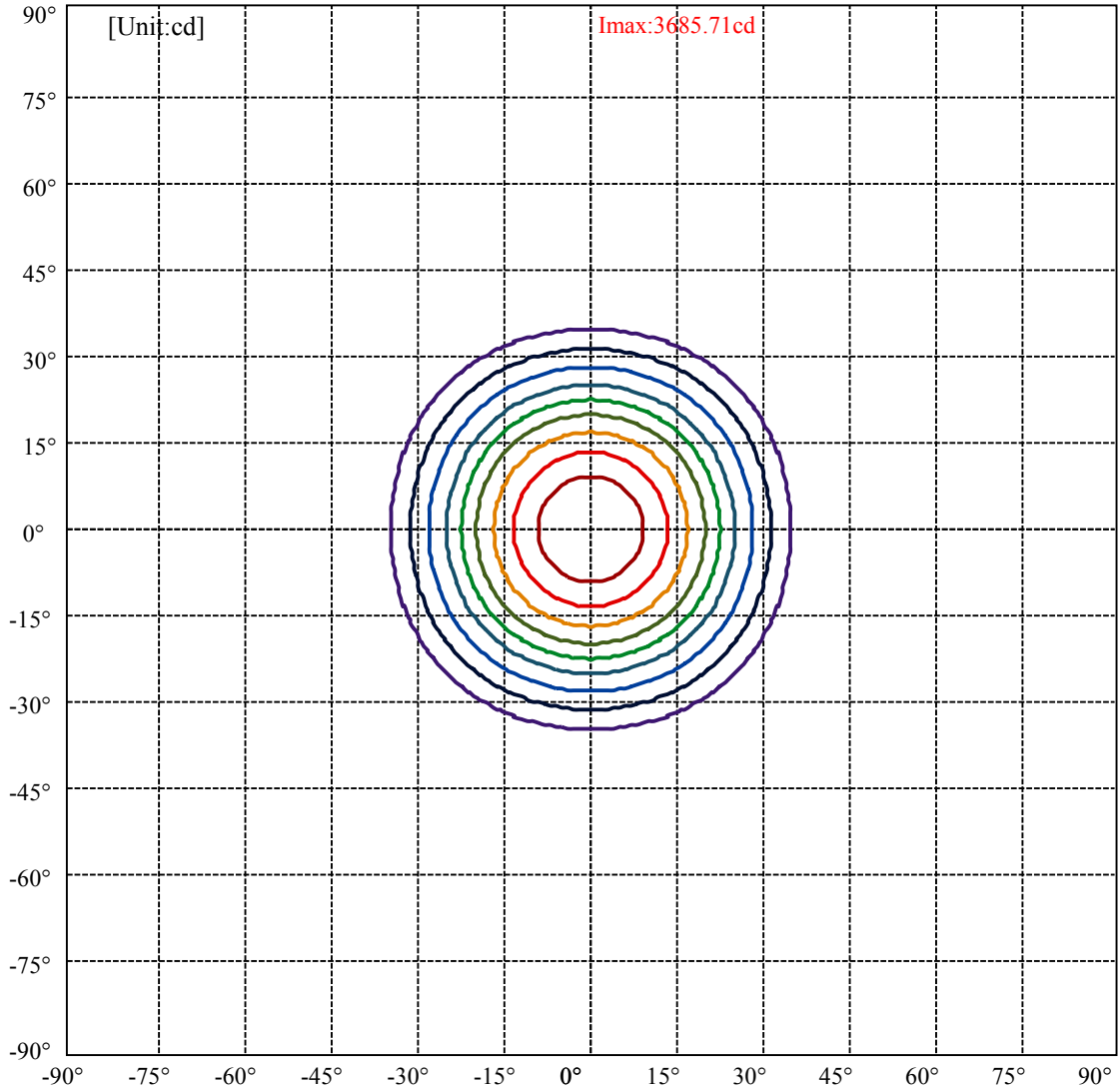
Field angle(10%Imax):C0/180Left:34.4 Right:34.4

:C90/270Left:34.4 Right:34.4

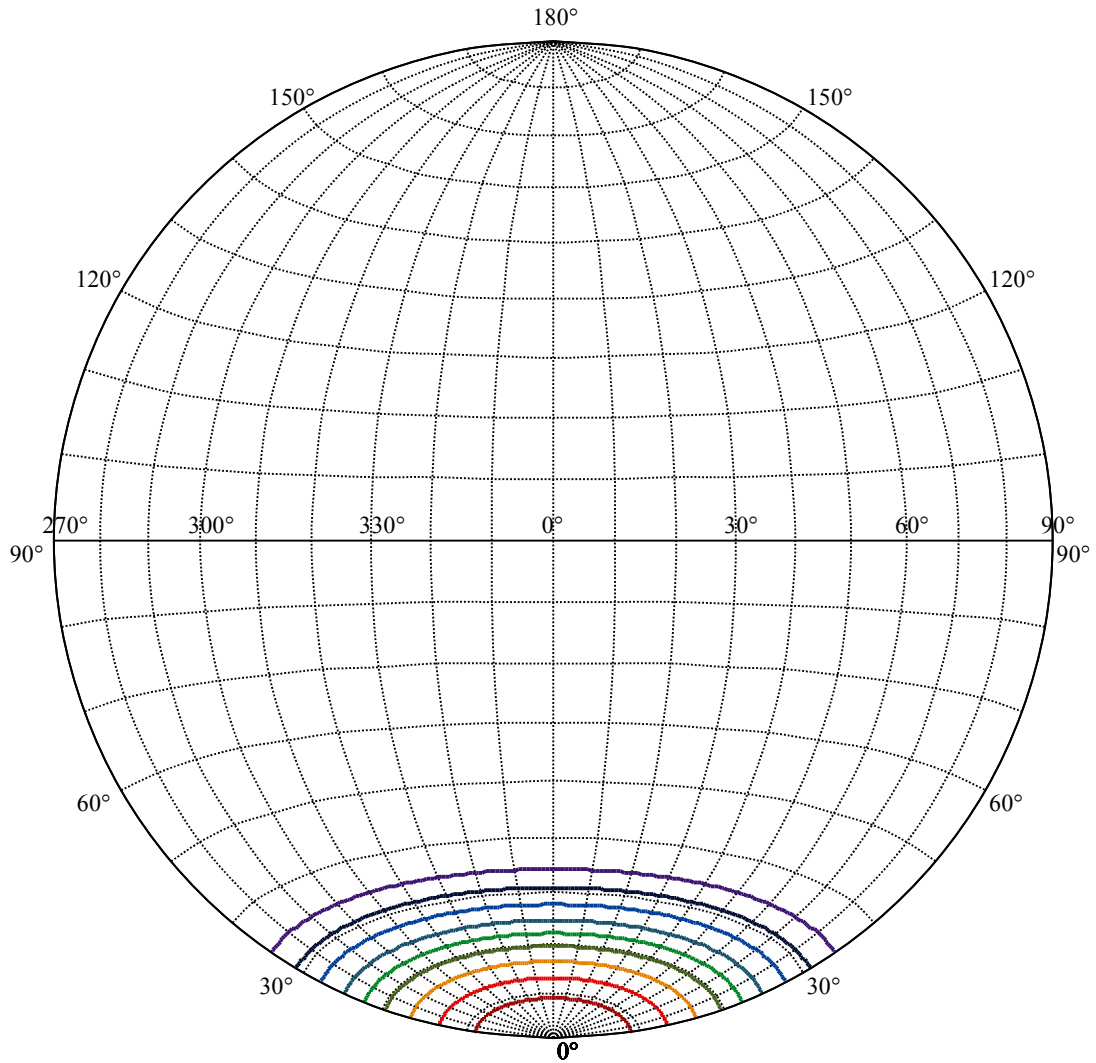
Beam Angle(50%Imax):C0/180Left:22.2 Right:22.2

:C90/270Left:22.2 Right:22.2





(10%Imax) 368.571	—
(20%Imax) 737.142	—
(30%Imax) 1105.71	—
(40%Imax) 1474.28	—
(50%Imax) 1842.85	—
(60%Imax) 2211.43	—
(70%Imax) 2580	—
(80%Imax) 2948.57	—
(90%Imax) 3317.14	—



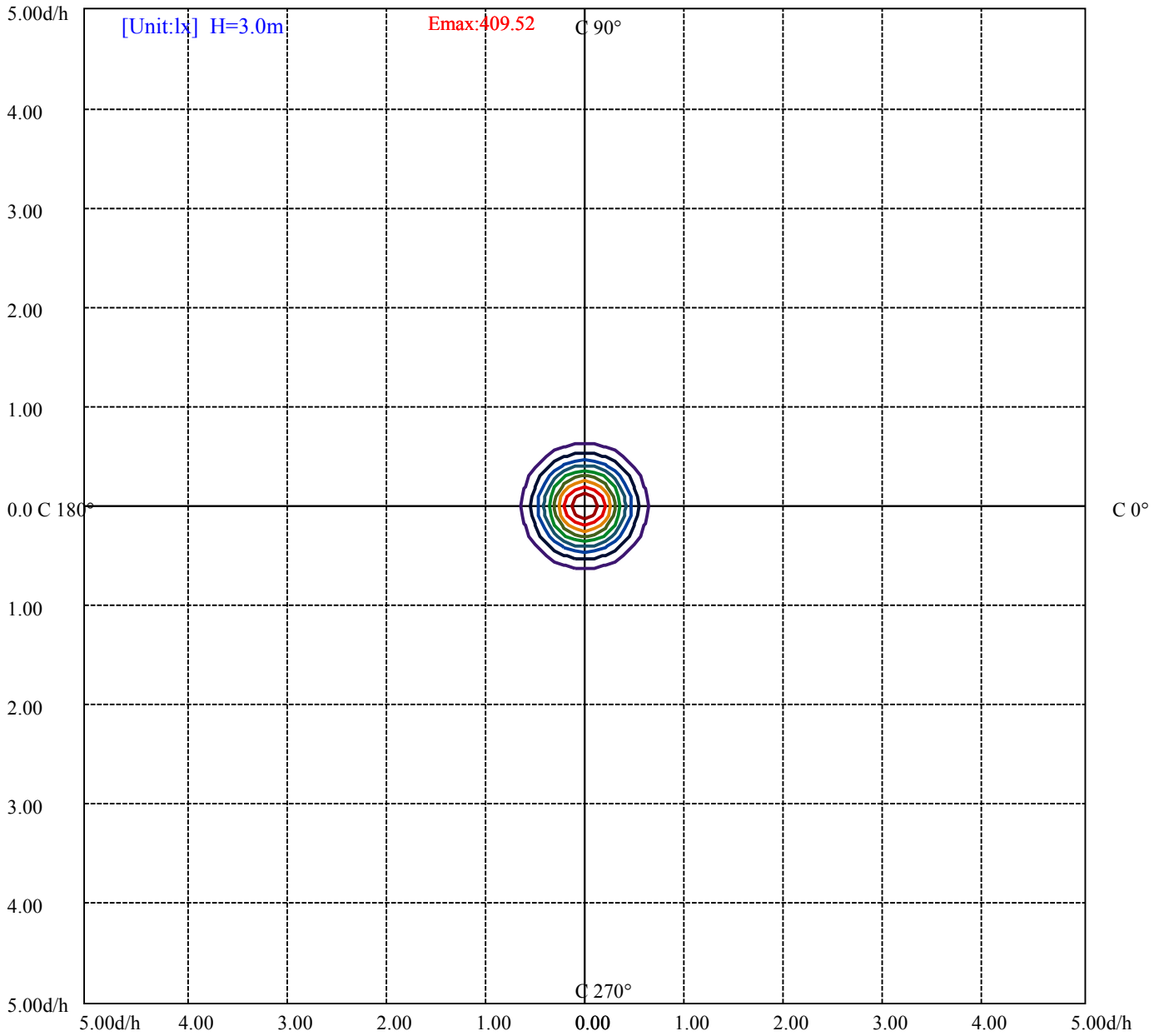
House

[Unit:cd]

Road

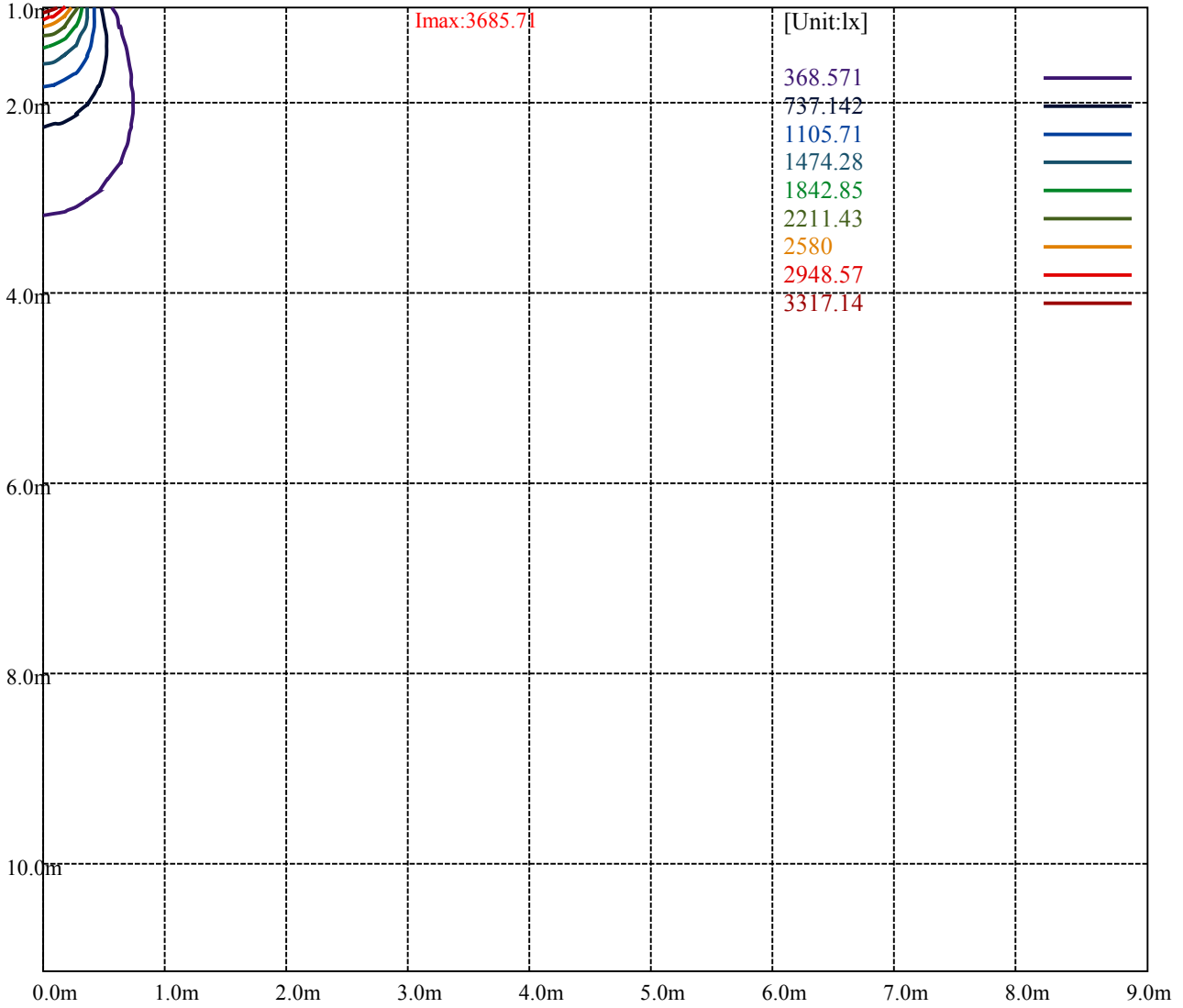
Imax:3685.71

(10%Imax)	368.571	—
(20%Imax)	737.142	—
(30%Imax)	1105.71	—
(40%Imax)	1474.28	—
(50%Imax)	1842.85	—
(60%Imax)	2211.43	—
(70%Imax)	2580	—
(80%Imax)	2948.57	—
(90%Imax)	3317.14	—



(10%Emax) 40.95222	—
(20%Emax) 81.90456	—
(30%Emax) 122.8567	—
(40%Emax) 163.8089	—
(50%Emax) 204.7611	—
(60%Emax) 245.7133	—
(70%Emax) 286.6656	—
(80%Emax) 327.6178	—
(90%Emax) 368.57	—





Luminance Table

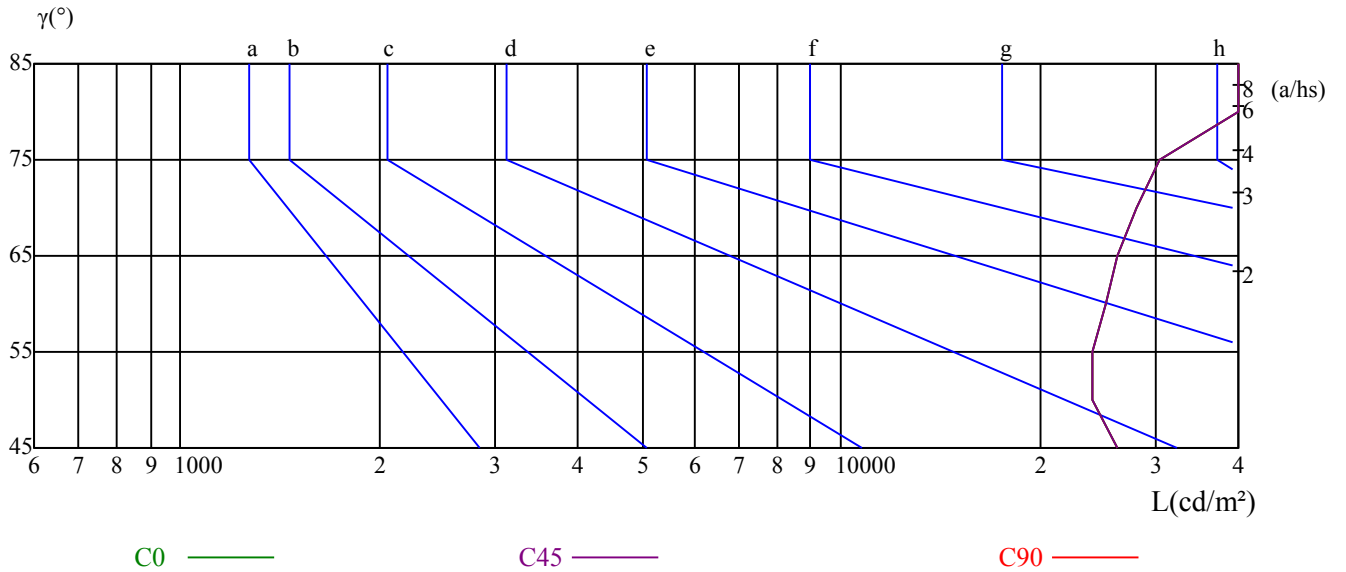
$\gamma$	45	50	55	60	65	70	75	80	85
C0	26176	24076	24086	25183	26314	27968	30404	41105	65351
C45	26176	24076	24086	25183	26314	27968	30404	41105	65351
C90	26176	24076	24086	25183	26314	27968	30404	41105	65351

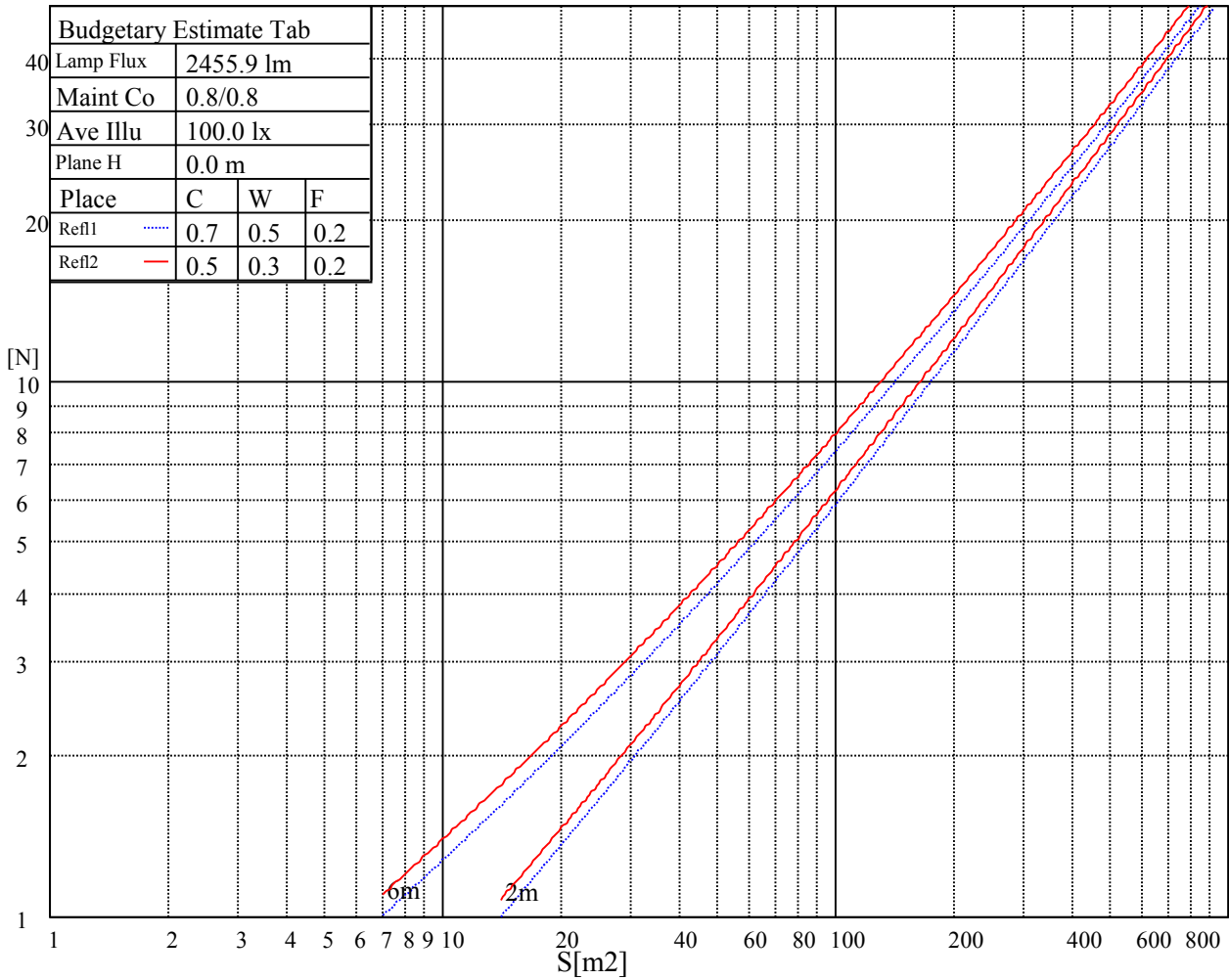
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
26314	26314	26314	30404	30404	30404	65351	65351	65351

Glare Table

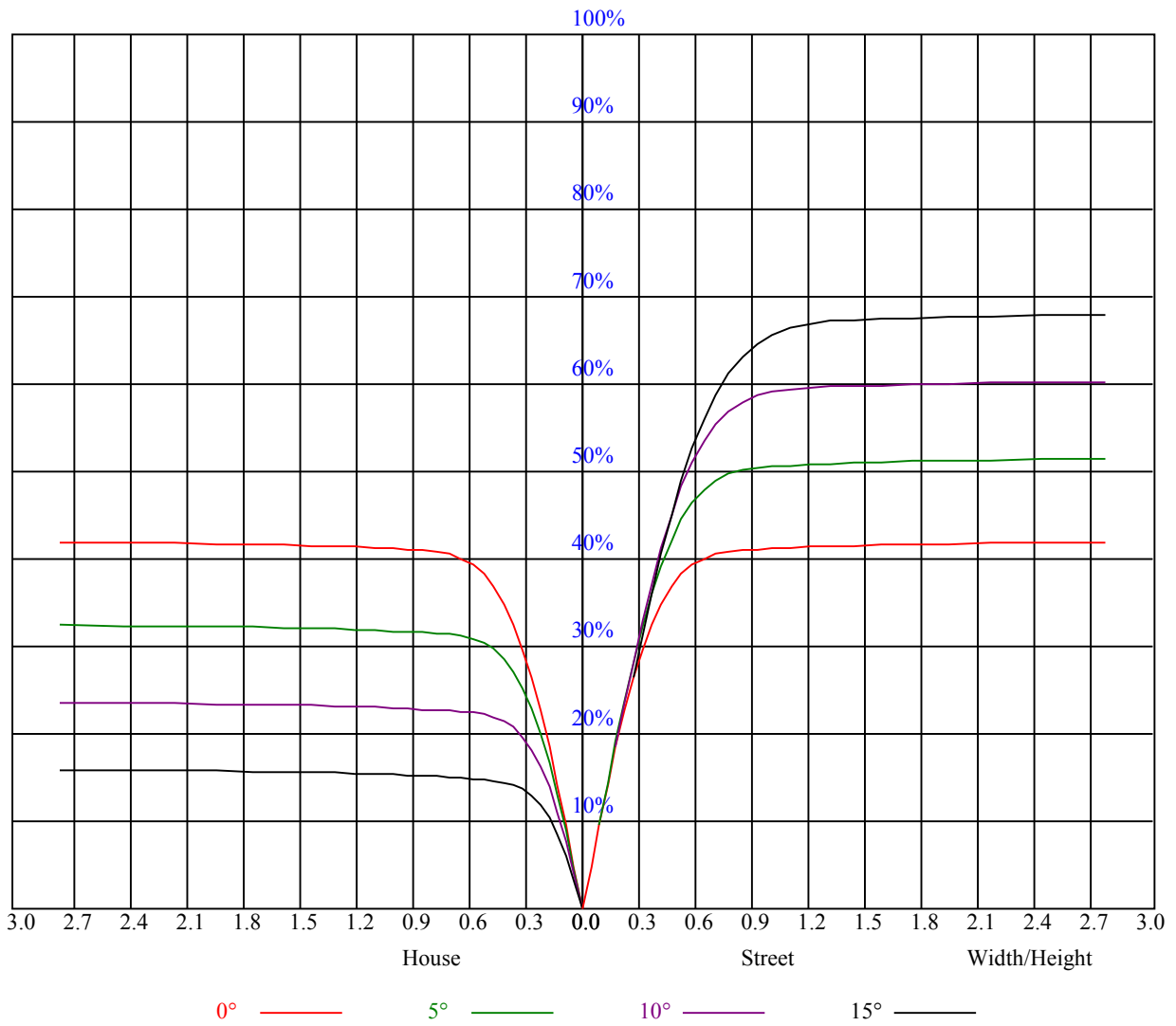
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.01	1.01	1.01	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.85
1	0.95	0.92	0.91	0.93	0.91	0.89	0.89	0.88	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80
2	0.89	0.85	0.83	0.87	0.84	0.82	0.84	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.77	0.75
3	0.83	0.79	0.76	0.82	0.79	0.76	0.80	0.77	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.71
4	0.79	0.74	0.71	0.78	0.74	0.71	0.76	0.73	0.70	0.74	0.71	0.69	0.73	0.70	0.68	0.67
5	0.74	0.70	0.67	0.74	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.63
6	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
7	0.67	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.58	0.57
8	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.54
9	0.61	0.57	0.54	0.61	0.56	0.53	0.60	0.56	0.53	0.59	0.56	0.53	0.59	0.55	0.53	0.52
10	0.58	0.54	0.51	0.58	0.54	0.51	0.57	0.54	0.51	0.57	0.53	0.51	0.56	0.53	0.51	0.50



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	3681.97	3616.25	3344.37	2902.20	2326.78	1636.03	1017.59	419.47	80.19
45.0	3693.92	3554.10	3217.10	2734.29	2155.29	1453.79	803.08	307.73	59.63
90.0	3676.60	3518.85	3174.07	2665.58	2004.11	1176.00	710.28	181.65	52.28
135.0	3690.34	3557.09	3276.25	2794.64	2168.43	1508.16	850.88	302.95	58.68
180.0	3681.97	3470.45	3155.55	2651.83	1980.21	1190.40	682.80	184.10	47.92
225.0	3693.92	3593.54	3289.40	2784.49	2237.75	1538.04	832.36	312.99	56.94
270.0	3676.60	3618.64	3337.20	2911.76	2330.96	1628.86	995.48	387.80	65.85
315.0	3690.34	3570.83	3251.75	2769.55	2149.31	1355.79	840.48	293.92	56.83
360.0	3681.97	3616.25	3344.37	2902.20	2326.78	1636.03	1017.59	419.47	80.19
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	38.60	29.76	26.23	24.26	21.63	18.70	15.30	13.56	11.53
45.0	34.18	28.98	25.51	23.12	20.32	17.57	14.40	13.15	9.86
90.0	32.86	28.02	25.10	22.65	19.96	17.27	14.10	13.15	9.80
135.0	34.06	28.74	25.51	23.24	20.38	17.51	14.58	13.09	10.22
180.0	32.03	27.96	24.92	22.53	19.72	16.73	14.04	12.85	9.80
225.0	33.76	28.86	25.93	23.48	20.61	17.75	14.46	13.21	11.23
270.0	34.90	28.74	25.93	23.72	21.21	18.28	14.94	13.38	11.17
315.0	33.40	27.84	25.22	23.24	20.67	17.69	14.58	13.21	10.64
360.0	38.60	29.76	26.23	24.26	21.63	18.70	15.30	13.56	11.53
C/γ(°)	90.0								
0.0	9.38								
45.0	9.38								
90.0	9.32								
135.0	9.26								
180.0	9.32								
225.0	9.44								
270.0	9.38								
315.0	9.32								
360.0	9.38								