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Nata

LumCAT: 1-0938-N	
Luminaire: 92.70.361.000	
Report No: 220519-B023	Voltage(V): 37.2000
Test No: 220519-C023	Current(A): 0.3700
LampCAT: Bridgelux C10-(30C2000C)	Power (W): 13.7640
Lamp flux(lm): 1425.8	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 43	Width(mm): 43
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1167.78
Efficiency(%): 81.90%
Lumens(lm)/Power(W): 84.84
Central intensity(cd): 2409.237
Maximum intensity(cd): 2409.237
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=41.0
 [C90/270]Total=41.0
Field angle(10%Imax): [C0/180]Total=62.8
 [C90/270]Total=62.8
Maximum s/h(1/2): C0_180=0.67 C90_270=0.67
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.90%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.972%

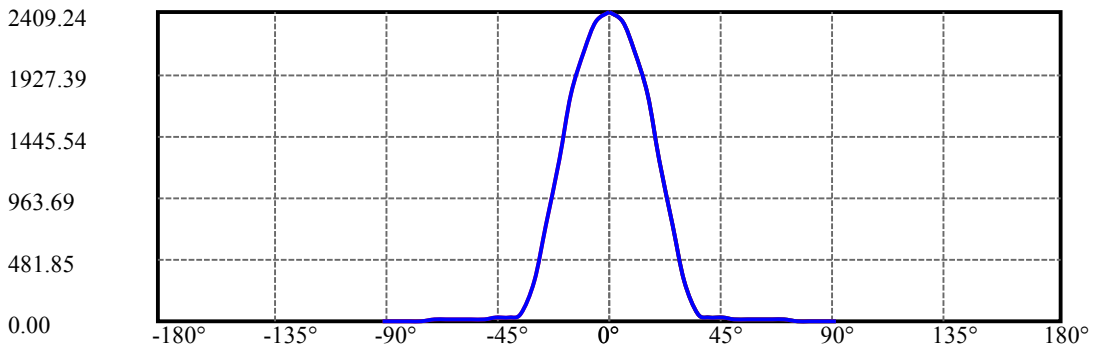
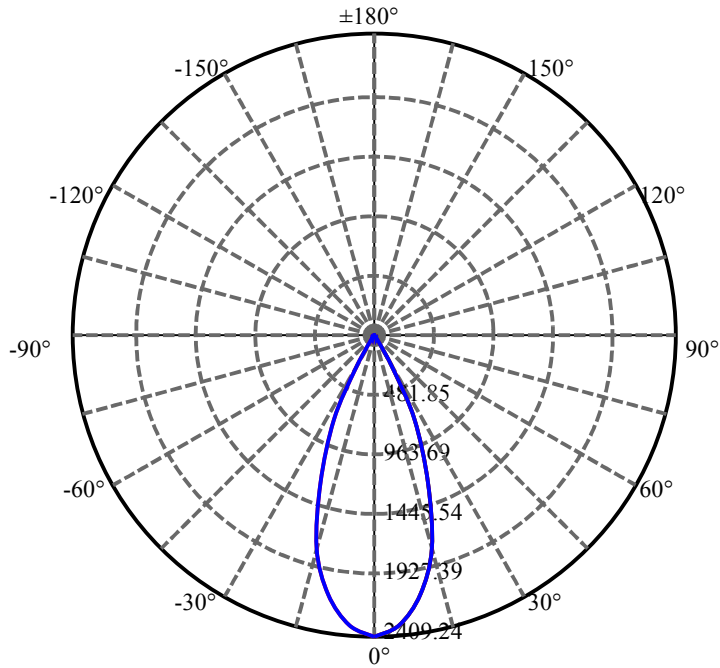
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2409.237	0.000	0	.000%	.000%
5.0	2329.616	56.652	56.652	3.973%	4.851%
10.0	2109.651	158.807	215.458	11.138%	18.450%
15.0	1764.653	229.821	445.279	16.119%	38.131%
20.0	1256.544	248.989	694.268	17.463%	59.452%
25.0	750.003	210.450	904.718	14.760%	77.474%
30.0	310.827	134.249	1038.967	9.416%	88.970%
35.0	62.763	55.014	1093.981	3.858%	93.681%
40.0	33.880	16.124	1110.105	1.131%	95.061%
45.0	24.715	10.849	1120.954	.761%	95.991%
50.0	19.606	8.956	1129.91	.628%	96.757%
55.0	15.625	7.661	1137.571	.537%	97.413%
60.0	12.585	6.521	1144.092	.457%	97.972%
65.0	10.068	5.507	1149.599	.386%	98.443%
70.0	8.321	4.656	1154.255	.327%	98.842%
75.0	6.984	4.000	1158.255	.281%	99.185%
80.0	6.132	3.509	1161.765	.246%	99.485%
85.0	5.460	3.150	1164.915	.221%	99.755%
90.0	4.989	2.861	1167.776	.201%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1038.97	72.87%	88.97%
0-40	1110.10	77.86%	95.06%
0-60	1144.09	80.24%	97.97%
0-90	1164.91	81.70%	99.75%
0-120	1164.91	81.70%	99.75%
0-180	1167.78	81.90%	100.00%
60-90	27.34	1.92%	2.34%
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%
0-26.10	934.22	65.52%	80.00%

ZONAL LUMEN SUMMARY

0-10	215.46
10-20	478.81
20-30	344.70
30-40	71.14
40-50	19.81
50-60	14.18
60-70	10.16
70-80	7.51
80-90	3.15
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: —————

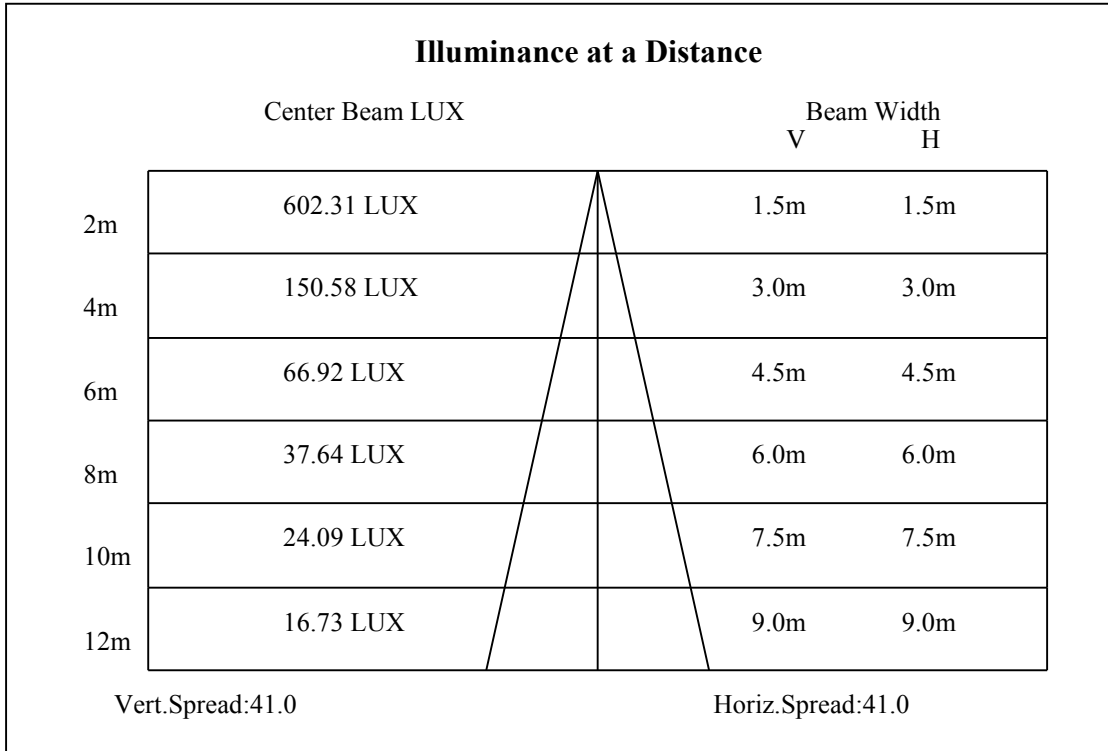
C90/C270: —————

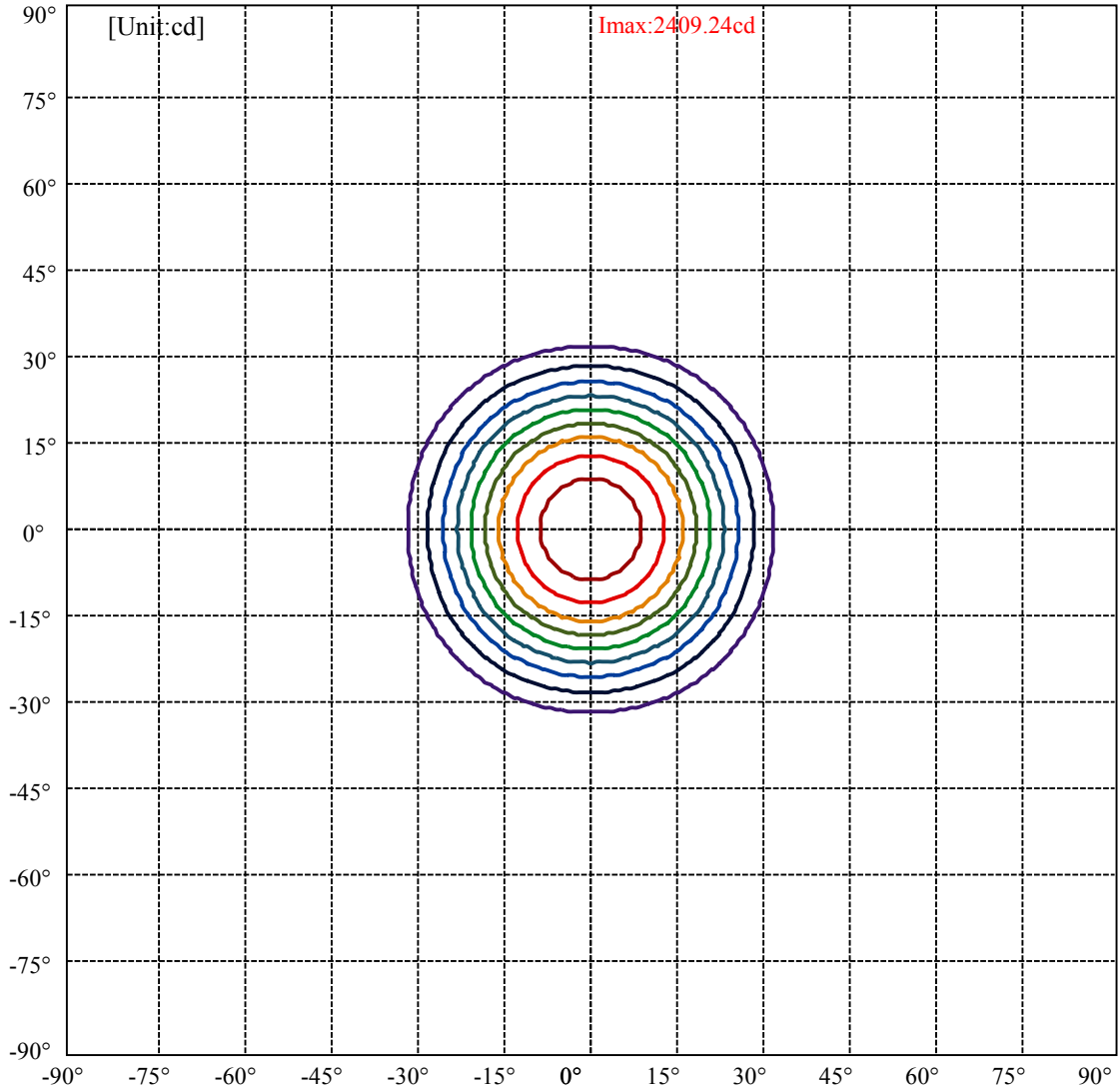
Field angle(10%Imax):C0/180Left:31.4 Right:31.4

:C90/270Left:31.4 Right:31.4

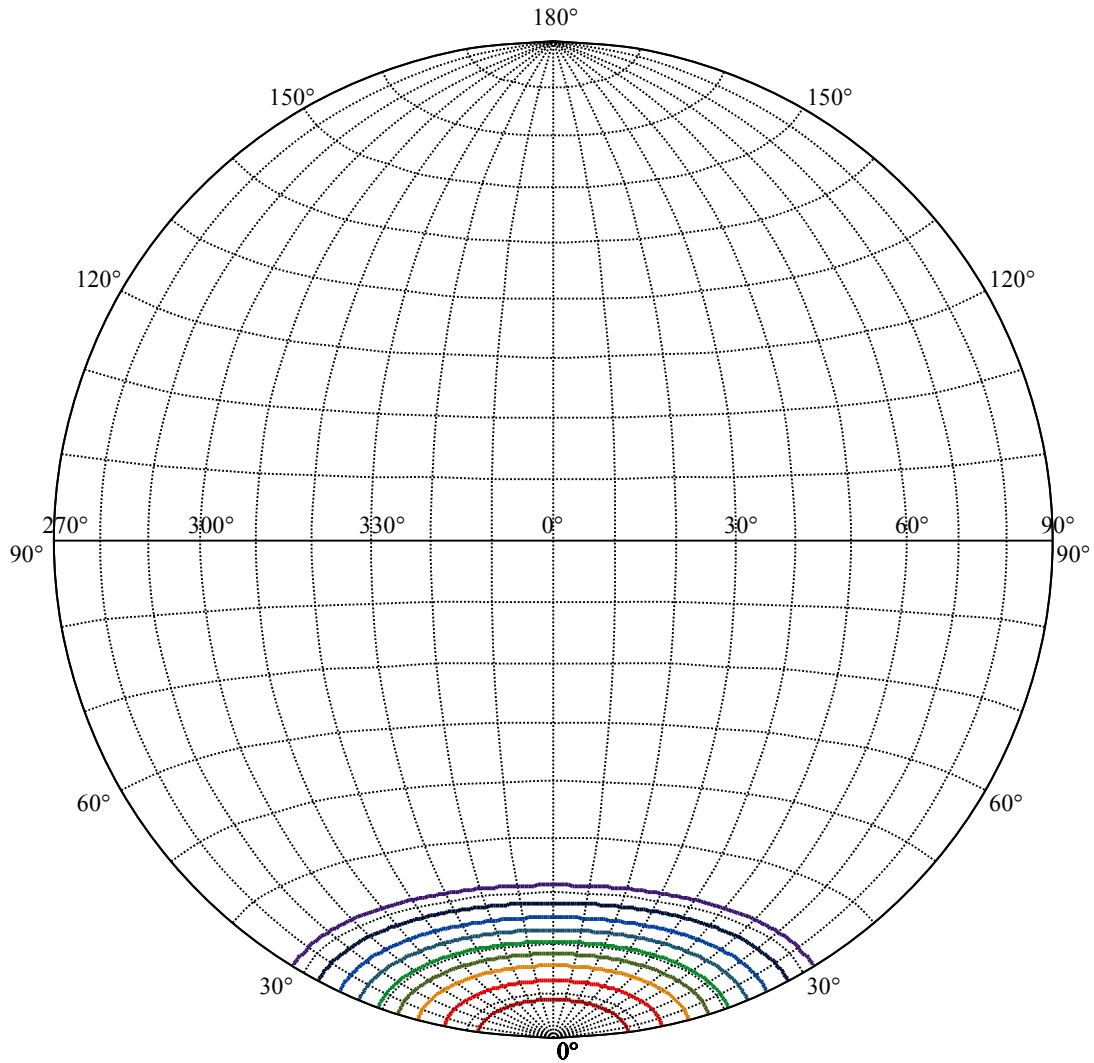
Beam Angle(50%Imax):C0/180Left:20.5 Right:20.5

:C90/270Left:20.5 Right:20.5





(10%Imax) 240.924	—
(20%Imax) 481.847	—
(30%Imax) 722.771	—
(40%Imax) 963.695	—
(50%Imax) 1204.62	—
(60%Imax) 1445.54	—
(70%Imax) 1686.47	—
(80%Imax) 1927.39	—
(90%Imax) 2168.31	—



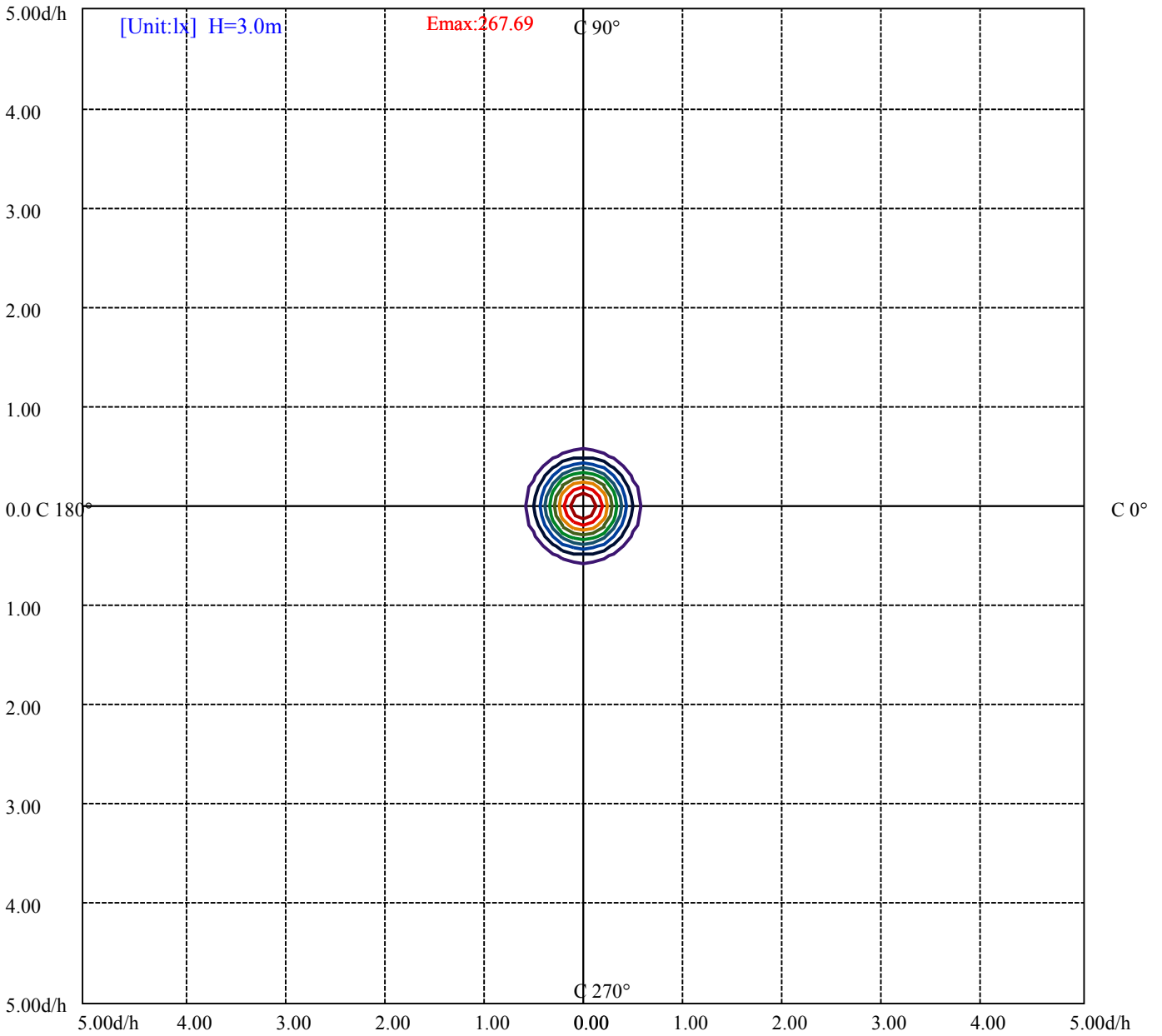
House

[Unit:cd]

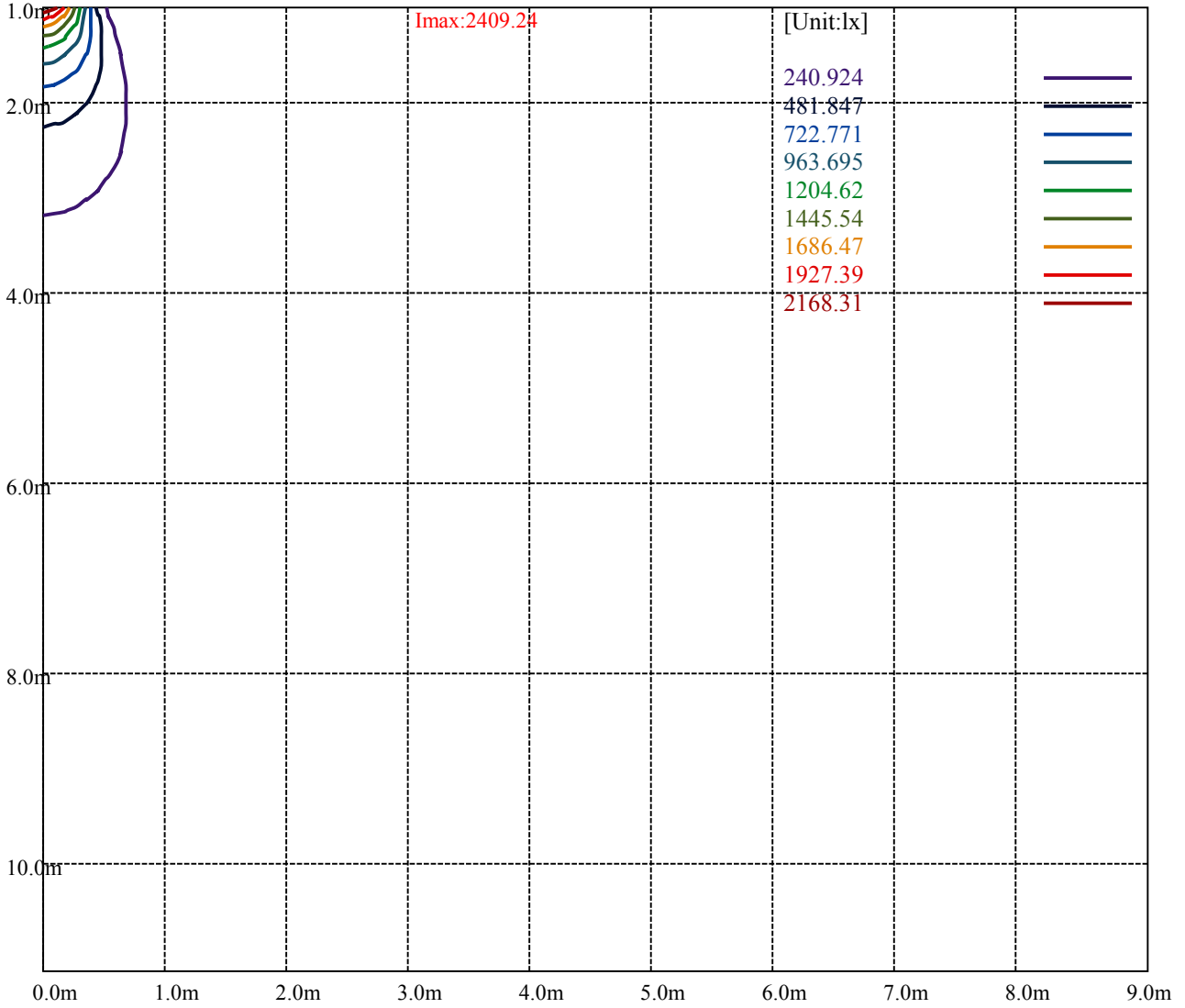
Road

I_{max}:2409.24

(10%I _{max})	240.924	—
(20%I _{max})	481.847	—
(30%I _{max})	722.771	—
(40%I _{max})	963.695	—
(50%I _{max})	1204.62	—
(60%I _{max})	1445.54	—
(70%I _{max})	1686.47	—
(80%I _{max})	1927.39	—
(90%I _{max})	2168.31	—



- (10%Emax) 26.76922
- (20%Emax) 53.53856
- (30%Emax) 80.30778
- (40%Emax) 107.0771
- (50%Emax) 133.8467
- (60%Emax) 160.6156
- (70%Emax) 187.3844
- (80%Emax) 214.1544
- (90%Emax) 240.9233



Luminance Table

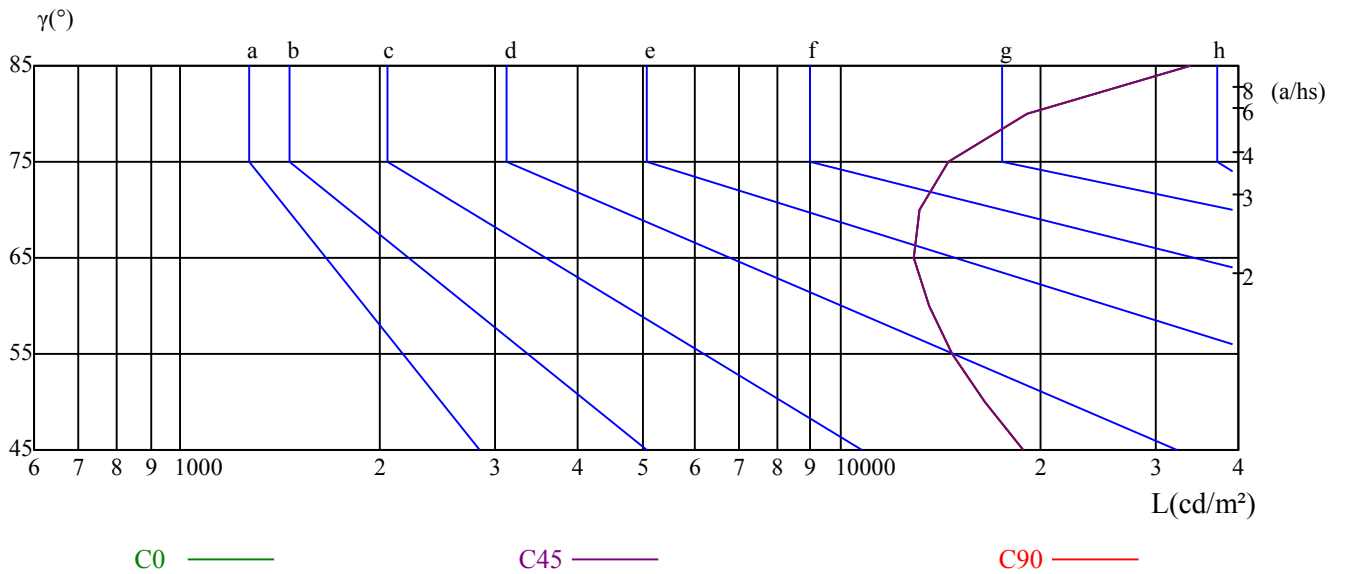
γ	45	50	55	60	65	70	75	80	85
C0	18904	16497	14733	13613	12885	13157	14593	19099	33881
C45	18904	16497	14733	13613	12885	13157	14593	19099	33881
C90	18904	16497	14733	13613	12885	13157	14593	19099	33881

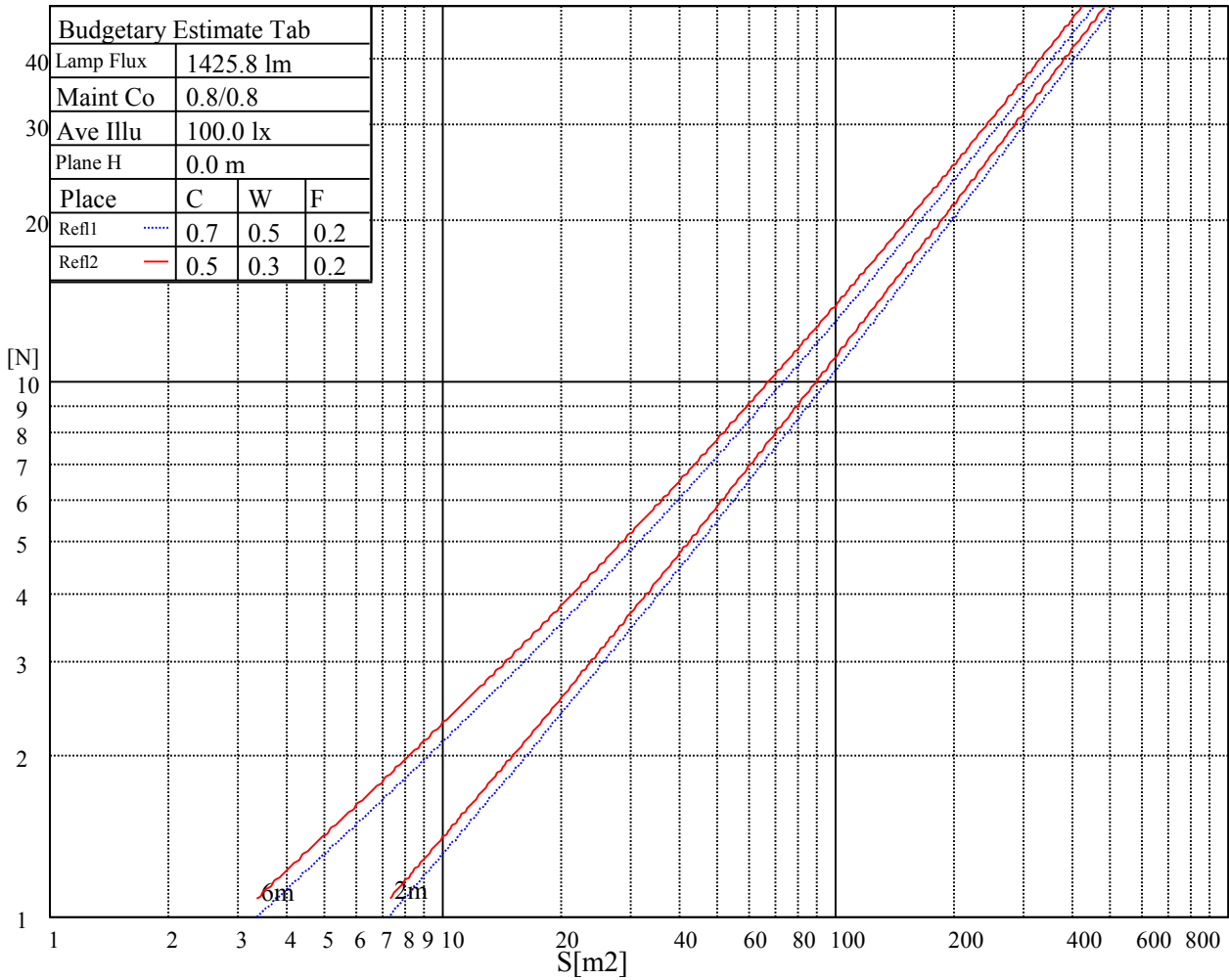
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
12885	12885	12885	14593	14593	14593	33881	33881	33881

Glare Table

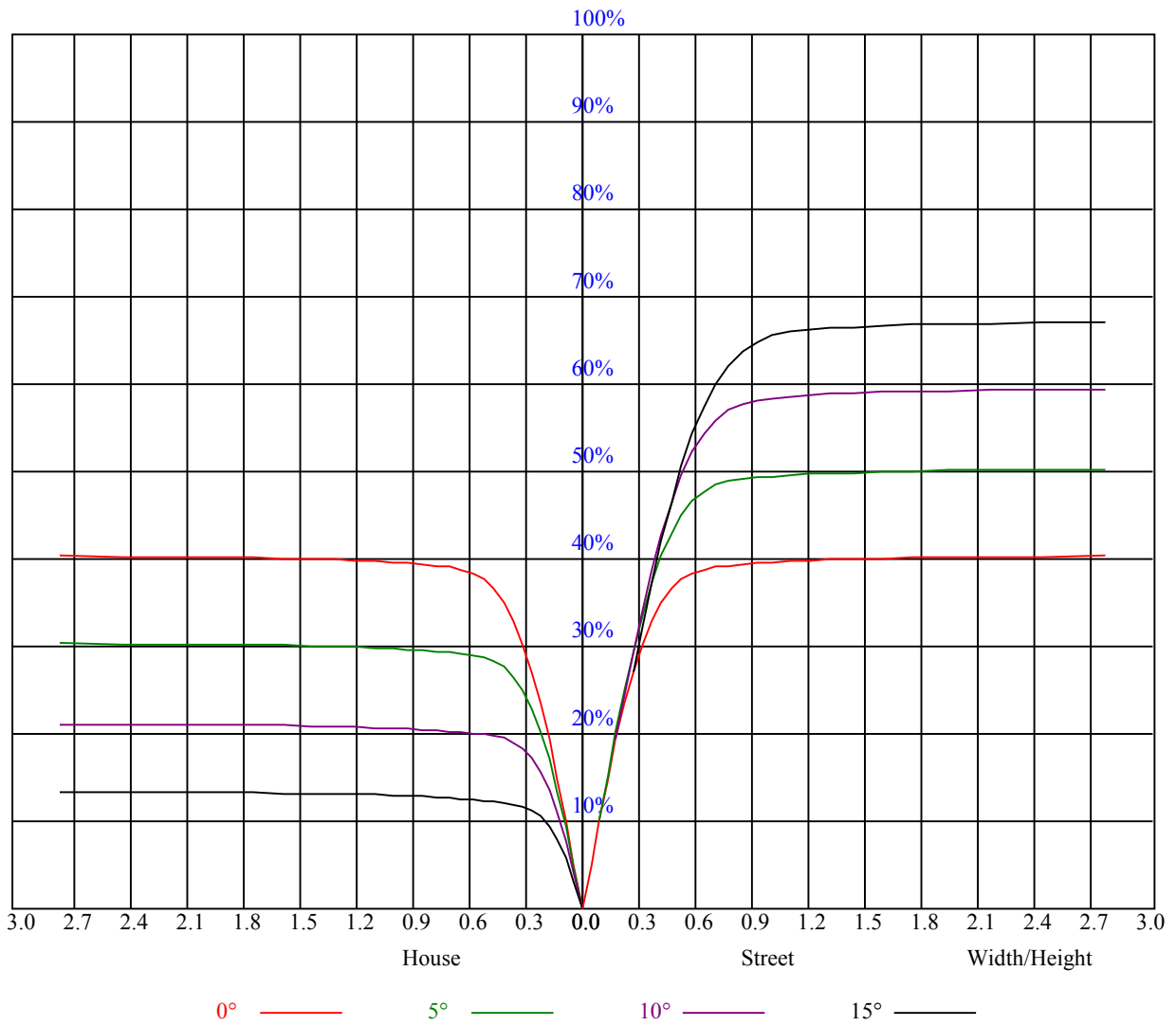
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	0.98	0.98	0.98	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	0.91	0.89	0.88	0.89	0.88	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.77
2	0.86	0.83	0.80	0.84	0.82	0.79	0.82	0.80	0.78	0.79	0.78	0.76	0.77	0.76	0.74	0.73
3	0.81	0.77	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.76	0.74	0.72	0.74	0.72	0.71	0.69
4	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.64	0.68	0.66	0.64	0.63
6	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.66	0.63	0.61	0.60
7	0.66	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.59	0.64	0.61	0.59	0.63	0.60	0.58	0.57
8	0.64	0.59	0.57	0.63	0.59	0.56	0.62	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.55
9	0.61	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.59	0.56	0.54	0.59	0.56	0.53	0.53
10	0.59	0.54	0.52	0.58	0.54	0.52	0.58	0.54	0.52	0.57	0.54	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	2404.46	2388.32	2221.61	1915.68	1516.53	958.44	404.53	71.64	34.78
45.0	2417.00	2311.84	2072.83	1708.93	1214.18	642.34	339.40	45.59	30.06
90.0	2401.47	2263.44	1980.21	1576.28	1039.22	501.51	115.44	40.99	29.22
135.0	2414.02	2283.16	2047.73	1667.70	1149.05	653.70	321.47	50.01	33.04
180.0	2404.46	2261.65	1984.39	1609.74	1093.06	547.28	156.73	50.25	31.85
225.0	2417.00	2359.04	2144.53	1823.06	1165.00	827.70	320.57	76.60	38.06
270.0	2401.47	2392.51	2228.19	1940.18	1530.87	996.08	471.45	99.43	40.27
315.0	2414.02	2376.97	2197.71	1875.64	1344.44	872.99	357.02	67.58	33.76
360.0	2404.46	2388.32	2221.61	1915.68	1516.53	958.44	404.53	71.64	34.78
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	25.57	20.38	16.61	13.44	10.70	8.84	7.35	6.33	5.74
45.0	23.00	18.70	14.82	11.89	9.62	7.95	6.69	5.92	5.26
90.0	22.41	17.99	14.22	11.53	9.32	7.77	6.69	6.27	5.20
135.0	23.90	18.88	15.12	12.07	9.62	7.95	6.81	5.98	5.32
180.0	23.18	18.82	14.76	11.77	9.50	7.95	6.69	5.86	5.26
225.0	26.47	20.55	16.43	13.09	10.34	8.54	7.05	6.04	5.44
270.0	28.08	21.63	17.09	13.86	10.99	8.96	7.41	6.45	5.74
315.0	25.10	19.90	15.95	13.03	10.46	8.60	7.17	6.21	5.74
360.0	25.57	20.38	16.61	13.44	10.70	8.84	7.35	6.33	5.74
C/ γ (°)	90.0								
0.0	5.08								
45.0	4.90								
90.0	4.96								
135.0	4.96								
180.0	4.96								
225.0	4.90								
270.0	5.08								
315.0	5.08								
360.0	5.08								