
THINKLUX

LumCAT: LED-BL1A-Oval-AC180-265V-12W200-3000K

Luminaire:

Report No:	Voltage(V): 230.2000
Test No:	Current(A): 0.0660
LampCAT:	Power (W): 11.7500
Lamp flux(lm): 850.0	PF: 0.7690
Number of Lamps: 1	Ballast type:
Length(mm): 0	Width(mm): 0
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 839.47
Efficiency(%): 98.76%
Lumens(lm)/Power(W): 71.44
Central intensity(cd): 229.702
Maximum intensity(cd): 233.602
Angle of maximum intensity: C=45.0 $\gamma=0.0$
Beam Angle(50%Imax): [C0/180]Total=134.4
 [C90/270]Total=100.5
Field angle(10%Imax): [C0/180]Total=213.4
 [C90/270]Total=167.5
Maximum s/h(1/2): C0_180=1.36 C90_270=1.18
Maximum s/h(1/4): C0_180=1.94 C90_270=1.30
Up flux rate of lamp(%): 10.85%
Down flux rate of lamp(%): 87.91%
Up flux rate of LUM(%): 10.98%
Down flux rate of LUM(%): 89.02%
CIE Type : Semidirect lighting
Output flux ratio in π solid angle : 63.251%

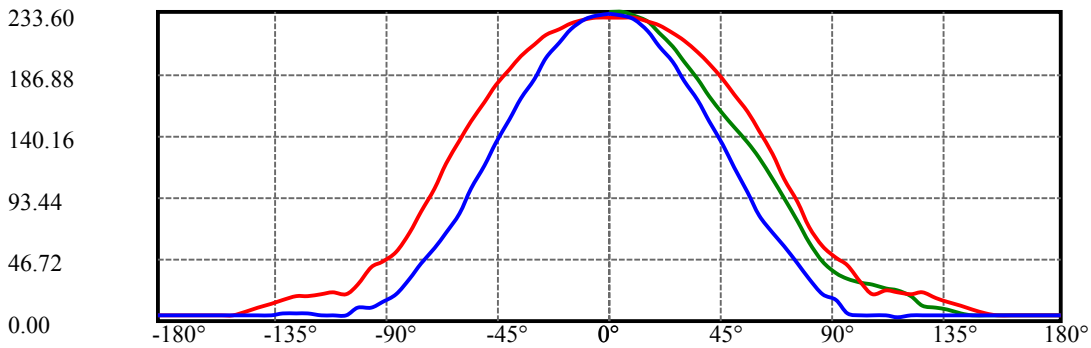
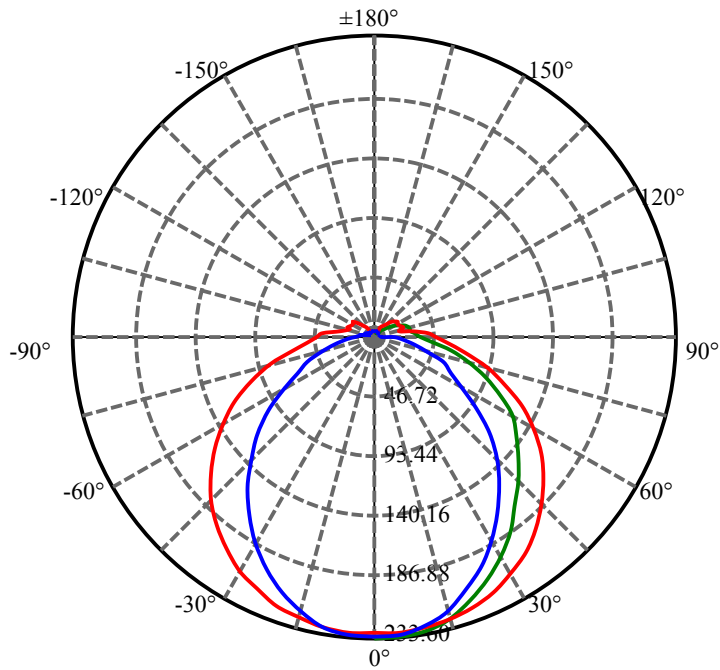
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	231.555	.000	.000	.000%	.000%
5.0	230.921	5.529	5.529	.650%	.650%
10.0	228.337	16.429	21.958	1.933%	2.583%
15.0	222.926	26.769	48.726	3.149%	5.733%
20.0	215.078	36.098	84.824	4.247%	9.979%
25.0	205.669	44.129	128.953	5.192%	15.171%
30.0	194.823	50.683	179.635	5.963%	21.134%
35.0	182.758	55.601	235.237	6.541%	27.675%
40.0	169.790	58.820	294.057	6.920%	34.595%
45.0	156.799	60.471	354.527	7.114%	41.709%
50.0	143.539	60.688	415.215	7.140%	48.849%
55.0	129.427	59.352	474.567	6.983%	55.831%
60.0	114.607	56.408	530.975	6.636%	62.468%
65.0	99.593	52.072	583.047	6.126%	68.594%
70.0	84.335	46.572	629.619	5.479%	74.073%
75.0	68.711	40.004	669.622	4.706%	78.779%
80.0	53.087	32.590	702.212	3.834%	82.613%
85.0	39.925	25.274	727.486	2.973%	85.587%
90.0	32.296	19.775	747.260	2.326%	87.913%
95.0	27.689	16.424	763.685	1.932%	89.845%
100.0	23.131	13.809	777.494	1.625%	91.470%
105.0	18.890	11.244	788.737	1.323%	92.793%
110.0	18.232	9.703	798.440	1.142%	93.934%
115.0	16.574	8.813	807.253	1.037%	94.971%
120.0	14.698	7.602	814.856	.894%	95.865%
125.0	11.797	6.124	820.980	.720%	96.586%
130.0	9.847	4.706	825.686	.554%	97.140%
135.0	8.238	3.654	829.341	.430%	97.569%
140.0	6.630	2.753	832.094	.324%	97.893%
145.0	5.387	2.005	834.098	.236%	98.129%
150.0	4.680	1.482	835.581	.174%	98.304%
155.0	4.534	1.166	836.747	.137%	98.441%
160.0	4.582	.956	837.703	.112%	98.553%
165.0	4.655	.761	838.464	.090%	98.643%
170.0	4.802	.561	839.025	.066%	98.709%
175.0	4.704	.340	839.365	.040%	98.749%
180.0	4.241	.107	839.472	.013%	98.761%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	179.64	21.13%	21.40%
0-40	294.06	34.59%	35.03%
0-60	530.97	62.47%	63.25%
0-90	747.26	87.91%	89.02%
0-120	814.86	95.87%	97.07%
0-180	839.47	98.76%	100.00%
60-90	272.69	32.08%	32.48%
90-120	87.37	10.28%	10.41%
90-130	98.20	11.55%	11.70%
90-150	108.10	12.72%	12.88%
90-180	111.88	13.16%	13.33%
0-75.30	671.58	79.01%	80.00%

ZONAL LUMEN SUMMARY

0-10	21.96
10-20	62.87
20-30	94.81
30-40	114.42
40-50	121.16
50-60	115.76
60-70	98.64
70-80	72.59
80-90	45.05
90-100	30.23
100-110	20.95
110-120	16.42
120-130	10.83
130-140	6.41
140-150	3.49
150-160	2.12
160-170	1.32
170-180	0.34



C45(Max): —

C0/C180: —

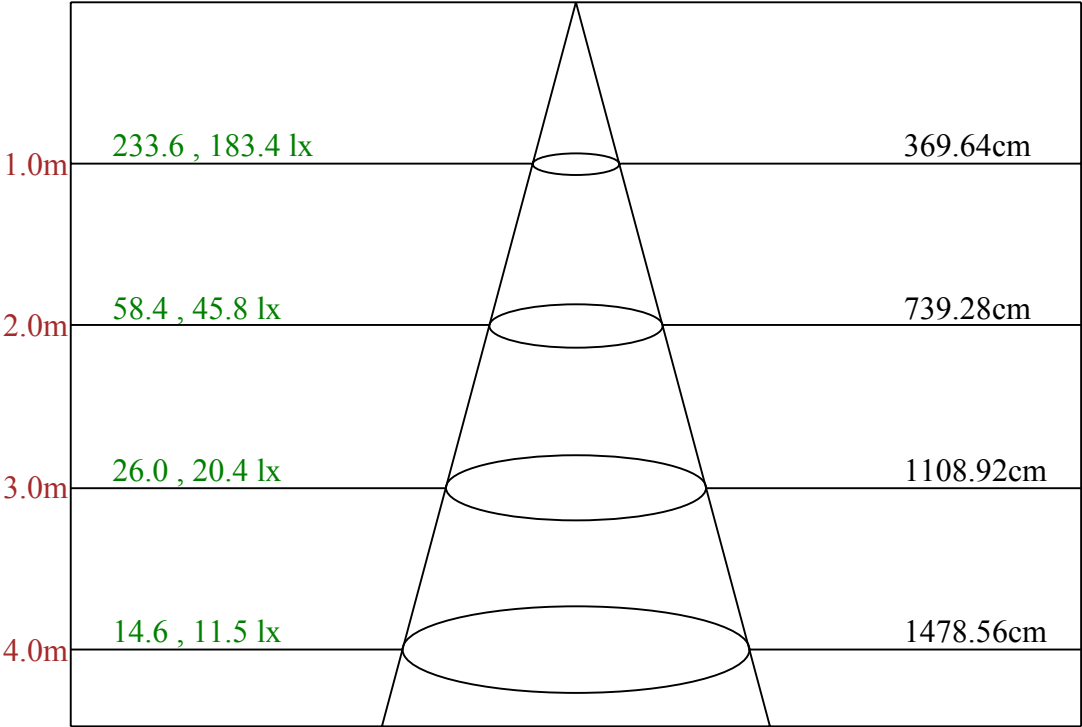
C90/C270: —

Field angle(10%Imax):C0/180Left:108.3 Right:105.1

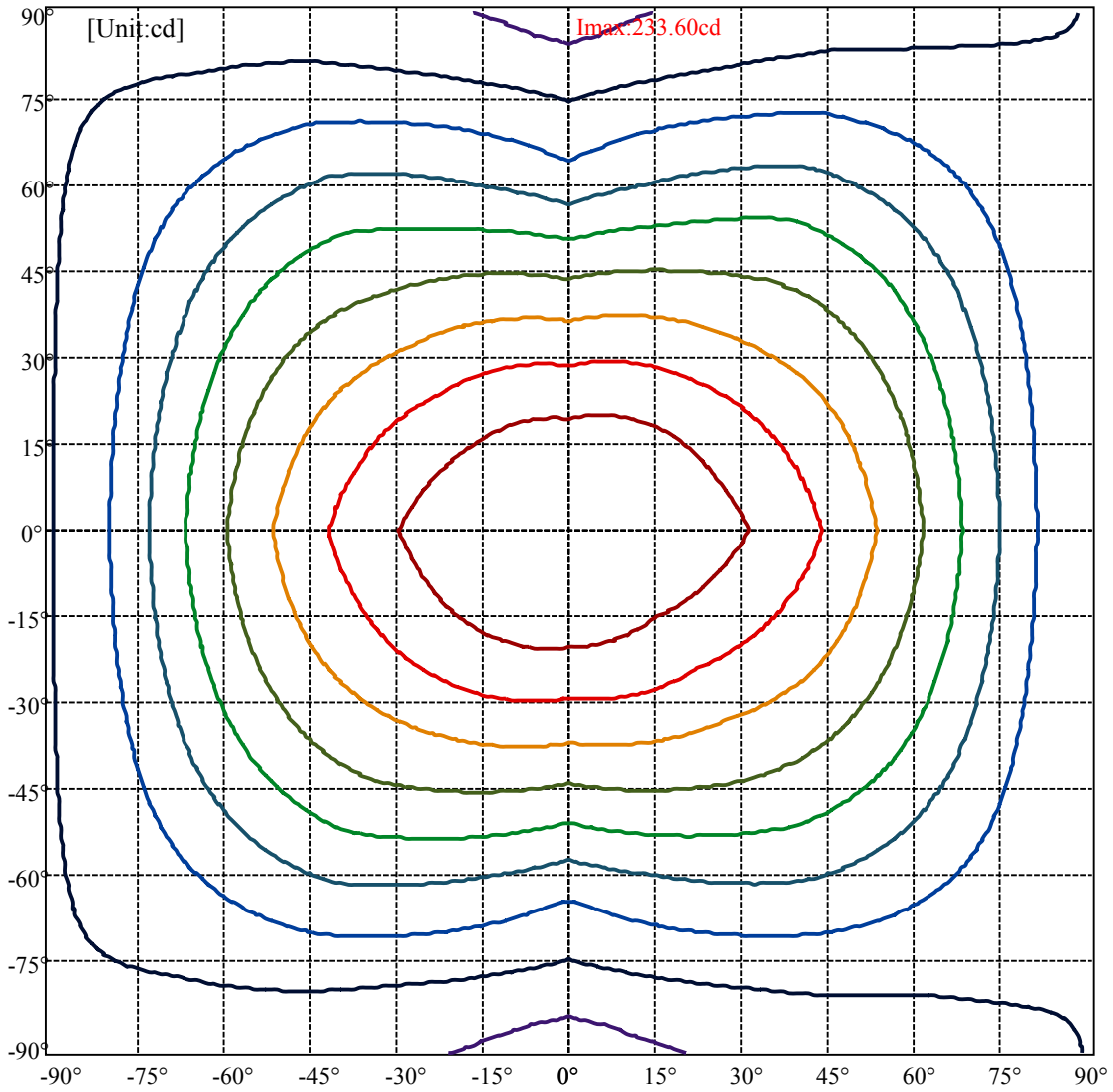
:C90/270Left:83.8 Right:83.7

Beam Angle(50%Imax):C0/180Left:71.3 Right:63.1

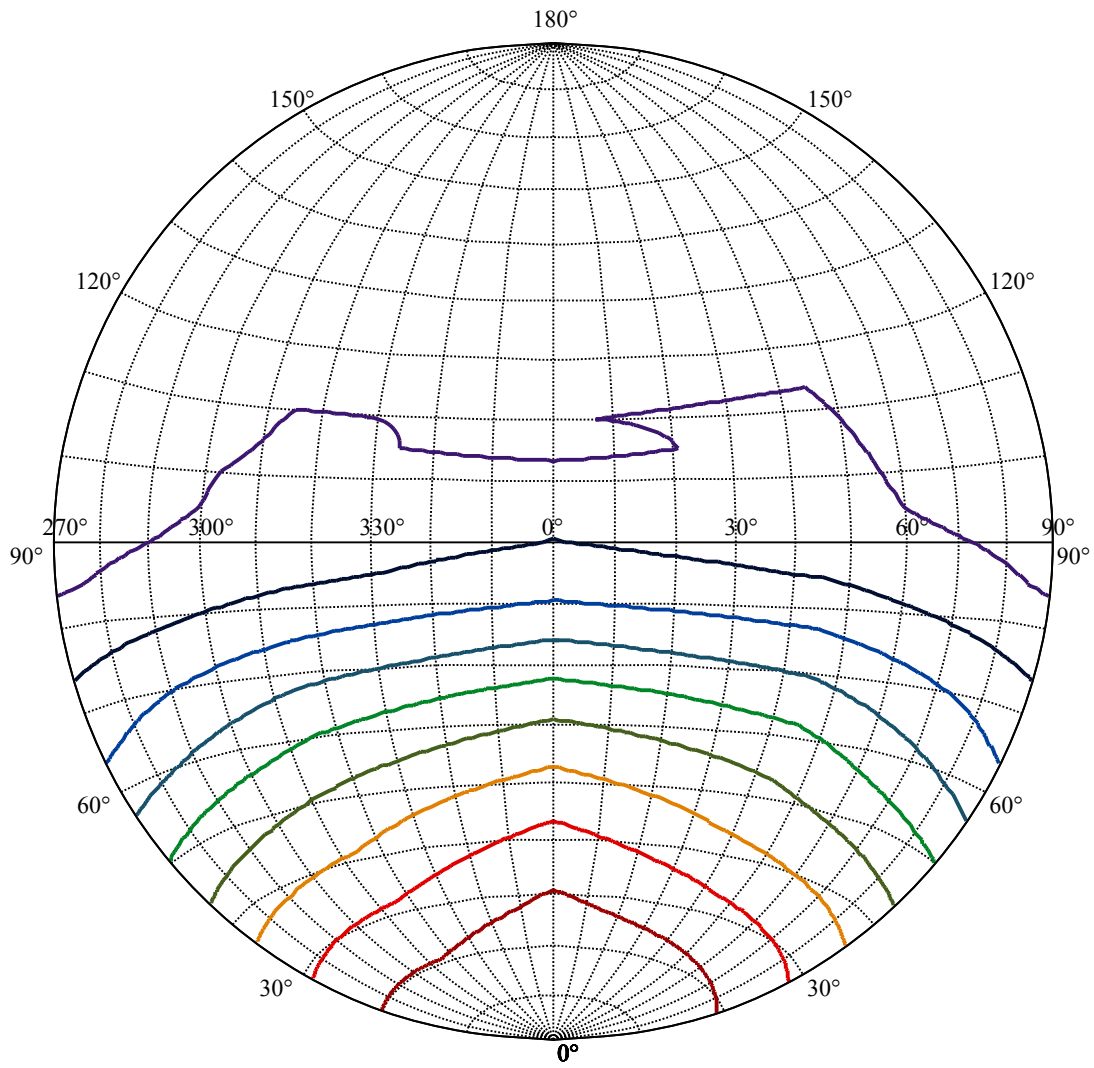
:C90/270Left:50.4 Right:50.1



Max , Ave Beam angle of C45plane123.14



(10%Imax) 23.3436	
(20%Imax) 46.6872	
(30%Imax) 70.0308	
(40%Imax) 93.3745	
(50%Imax) 116.718	
(60%Imax) 140.062	
(70%Imax) 163.405	
(80%Imax) 186.749	
(90%Imax) 210.093	



House

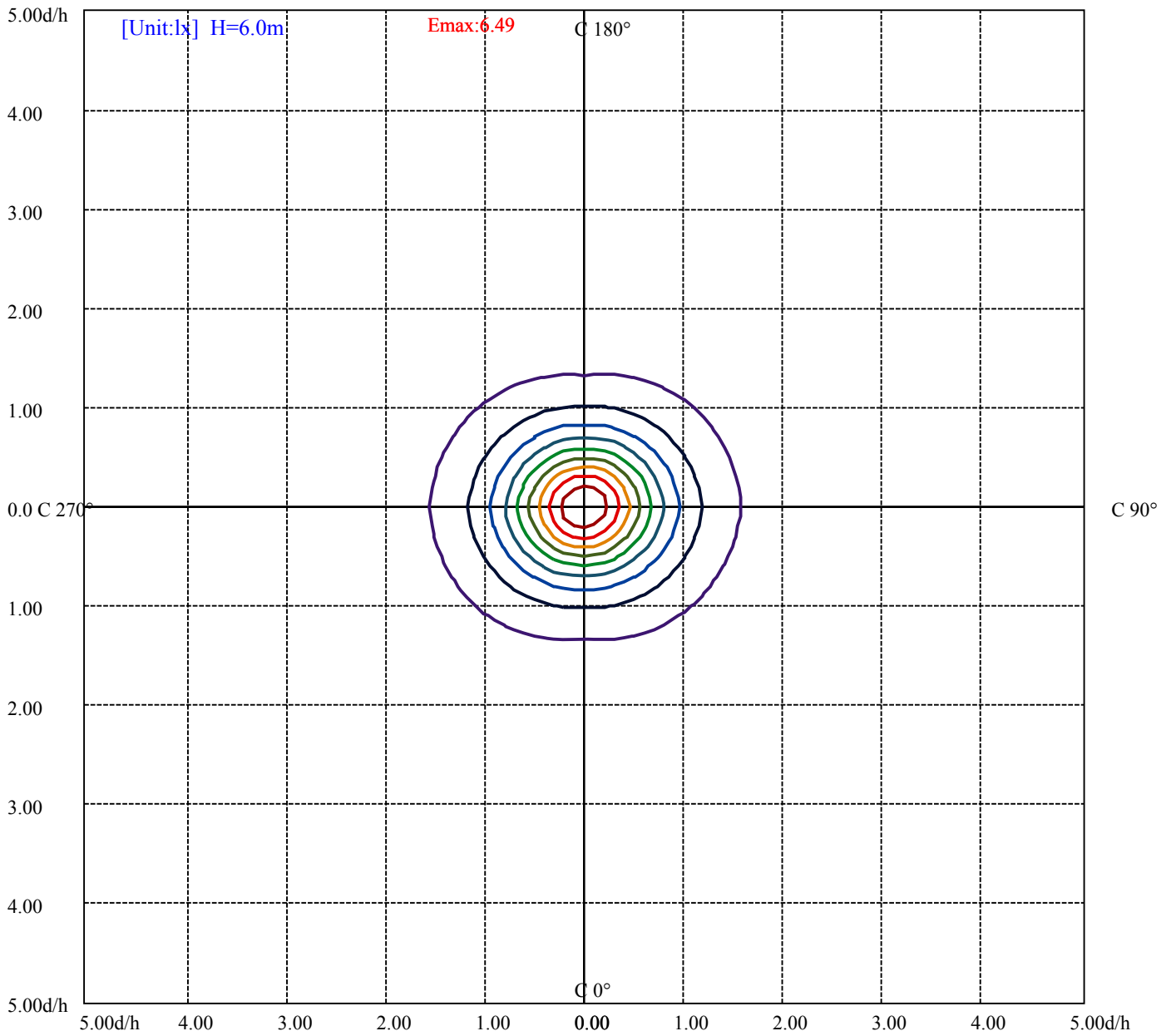
[Unit:cd]

Road

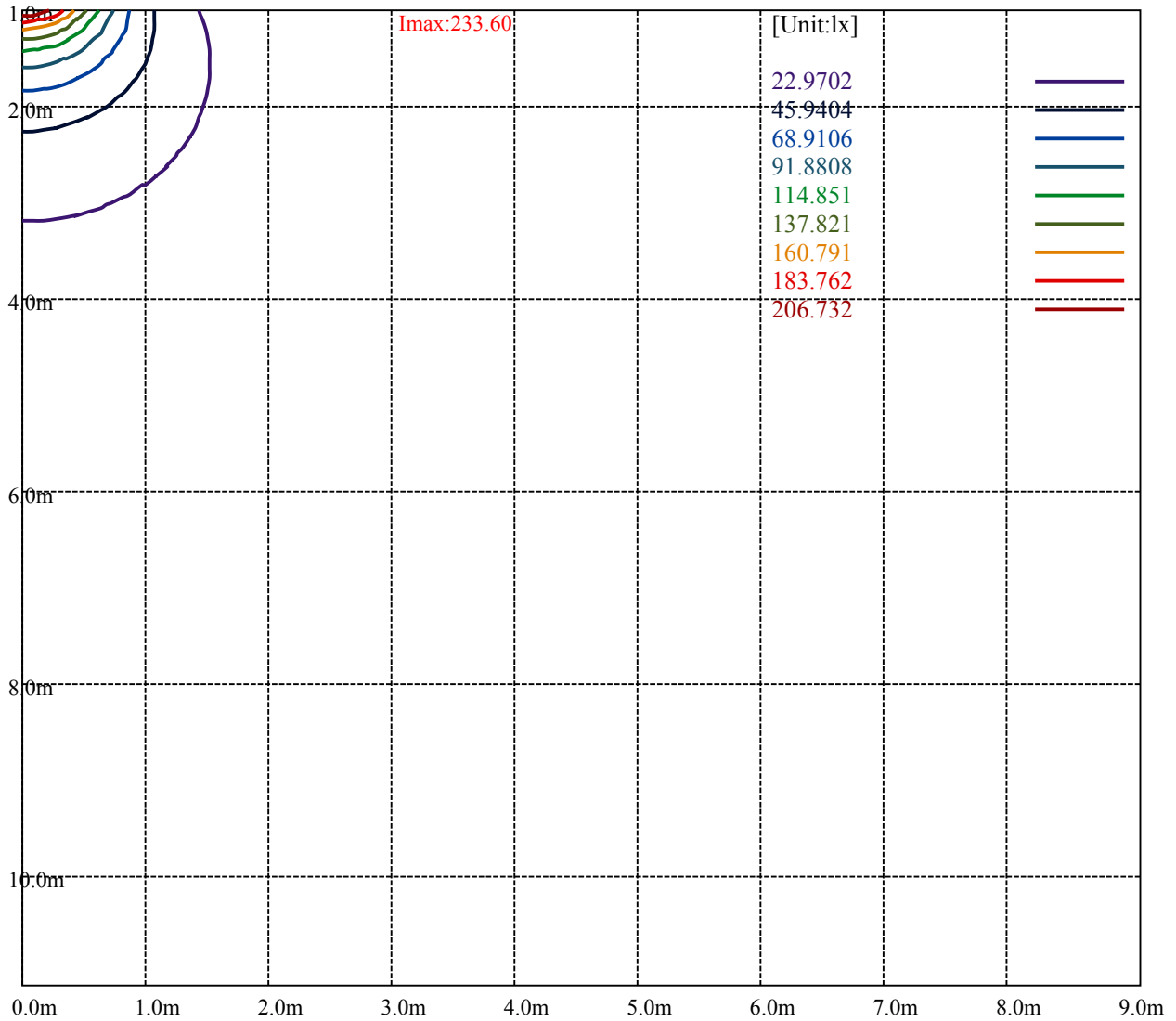
I_{max}:233.60

- (10%I_{max}) 23.3602
- (20%I_{max}) 46.7204
- (30%I_{max}) 70.0806
- (40%I_{max}) 93.4408
- (50%I_{max}) 116.801
- (60%I_{max}) 140.161
- (70%I_{max}) 163.521
- (80%I_{max}) 186.882
- (90%I_{max}) 210.242





(10%Emax) 0.6488945	—
(20%Emax) 1.297789	—
(30%Emax) 1.946681	—
(40%Emax) 2.595575	—
(50%Emax) 3.244472	—
(60%Emax) 3.893361	—
(70%Emax) 4.54225	—
(80%Emax) 5.191139	—
(90%Emax) 5.840055	—



Luminance Table

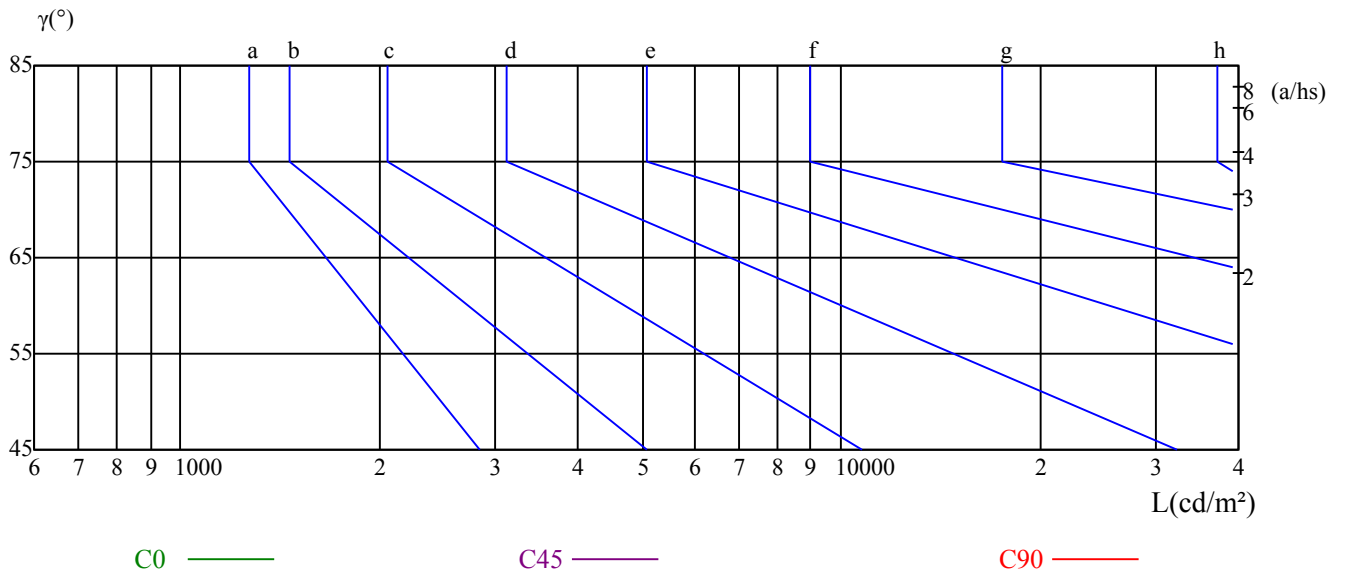
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

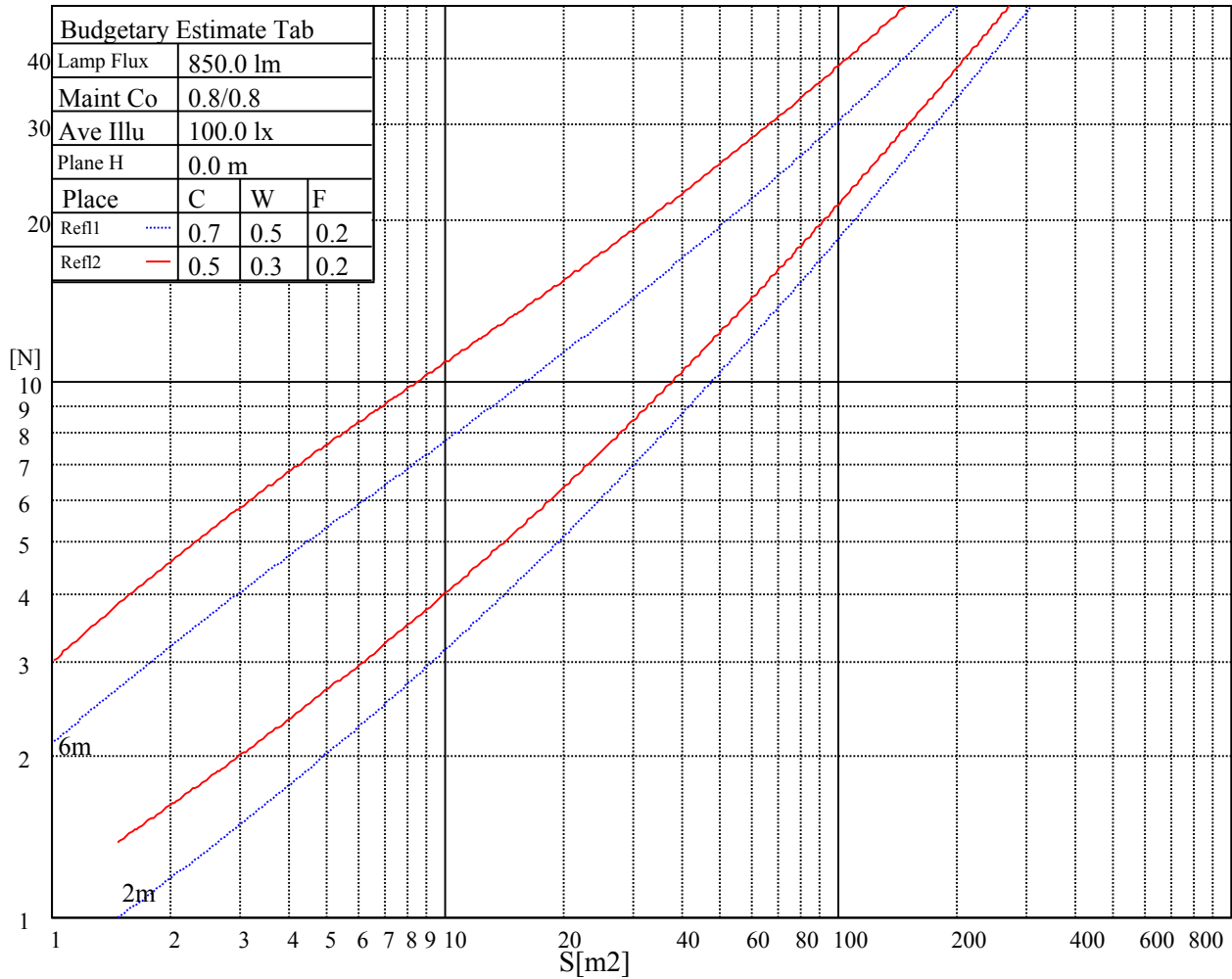
L横(65)	L纵(65)	L45(65)	L横(75)	L纵(75)	L45(75)	L横(85)	L纵(85)	L45(85)
0	0	0	0	0	0	0	0	0

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





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 RHOF=20 CU															
0	1.15	1.15	1.15	1.11	1.11	1.11	1.04	1.04	1.04	0.97	0.97	0.97	0.91	0.91	0.91	0.88
1	0.98	0.93	0.88	0.94	0.90	0.86	0.88	0.84	0.81	0.82	0.79	0.77	0.77	0.75	0.72	0.70
2	0.84	0.77	0.70	0.81	0.74	0.69	0.76	0.70	0.65	0.71	0.66	0.62	0.66	0.63	0.59	0.57
3	0.73	0.65	0.58	0.71	0.63	0.57	0.66	0.60	0.54	0.62	0.57	0.52	0.58	0.54	0.50	0.47
4	0.65	0.55	0.48	0.63	0.54	0.48	0.59	0.51	0.46	0.55	0.49	0.44	0.52	0.46	0.42	0.40
5	0.57	0.48	0.41	0.56	0.47	0.41	0.52	0.45	0.39	0.49	0.43	0.38	0.46	0.41	0.36	0.34
6	0.52	0.42	0.36	0.50	0.42	0.35	0.47	0.40	0.34	0.44	0.38	0.33	0.42	0.36	0.32	0.30
7	0.47	0.38	0.32	0.45	0.37	0.31	0.43	0.35	0.30	0.40	0.34	0.29	0.38	0.33	0.28	0.26
8	0.42	0.34	0.28	0.41	0.33	0.28	0.39	0.32	0.27	0.37	0.31	0.26	0.35	0.29	0.25	0.23
9	0.39	0.31	0.25	0.38	0.30	0.25	0.36	0.29	0.24	0.34	0.28	0.23	0.32	0.27	0.23	0.21
10	0.36	0.28	0.23	0.35	0.27	0.22	0.33	0.26	0.22	0.32	0.25	0.21	0.30	0.25	0.21	0.19

THINKLUX THINKLUX LED-BL1A-Oval-AC180-265V-12W200-3000K

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	229.70	229.70	228.73	226.58	223.07	217.61	211.57	203.77	194.21
45.0	233.60	233.02	230.87	225.80	217.03	206.89	195.19	182.90	170.03
90.0	232.04	231.07	227.36	219.56	208.06	195.58	181.93	166.33	150.34
135.0	230.87	230.09	227.17	221.32	212.93	202.40	190.70	178.22	165.55
180.0	229.70	229.51	228.34	225.61	221.12	215.86	209.03	199.67	189.53
225.0	233.60	232.82	230.09	224.24	216.25	206.30	195.19	183.29	169.64
270.0	232.04	231.26	227.75	220.34	210.40	198.50	183.29	168.67	151.70
315.0	230.87	229.90	226.39	219.95	211.76	202.21	191.68	179.20	167.30
360.0	229.70	229.70	228.73	226.58	223.07	217.61	211.57	203.77	194.21
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	183.49	171.20	157.55	142.93	126.94	107.64	90.28	71.56	56.94
45.0	156.97	146.05	135.13	123.04	107.83	92.23	76.05	59.86	45.63
90.0	133.77	116.22	96.91	79.56	66.30	56.35	43.68	31.20	20.47
135.0	152.87	140.40	129.48	117.58	104.32	88.14	71.95	56.16	42.12
180.0	178.22	165.35	151.31	135.91	119.53	100.81	83.26	66.49	52.65
225.0	158.14	146.63	133.96	119.53	103.35	87.16	70.39	53.04	39.97
270.0	134.94	117.58	99.64	80.92	66.10	55.77	43.87	31.78	20.47
315.0	155.99	144.88	131.43	117.39	102.37	86.58	70.20	54.60	41.14
360.0	183.49	171.20	157.55	142.93	126.94	107.64	90.28	71.56	56.94
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	47.19	42.31	29.64	19.89	23.01	21.25	20.86	21.06	17.94
45.0	35.88	31.78	29.44	27.30	25.15	22.62	18.33	12.09	9.55
90.0	15.60	5.85	4.87	4.29	3.70	3.51	3.90	4.29	4.68
135.0	33.54	30.22	28.08	25.93	23.79	21.25	17.35	10.53	8.19
180.0	44.46	40.56	27.30	20.67	21.84	20.08	19.50	19.50	16.18
225.0	33.15	30.61	27.30	23.40	20.67	18.52	15.60	10.53	8.38
270.0	15.01	9.75	10.14	3.70	4.29	4.87	6.24	5.65	5.26
315.0	33.54	30.42	28.27	25.93	23.40	20.47	15.79	10.72	8.58
360.0	47.19	42.31	29.64	19.89	23.01	21.25	20.86	21.06	17.94
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	15.01	12.09	8.77	5.85	4.29	4.29	4.29	4.48	4.68
45.0	8.19	6.24	4.48	4.09	4.29	4.29	4.48	4.87	4.68
90.0	4.87	4.87	5.07	5.07	5.07	5.07	5.07	5.07	4.68
135.0	6.82	5.07	4.29	4.29	4.48	4.68	4.68	4.87	4.68
180.0	13.26	10.33	7.21	4.68	4.29	4.48	4.68	4.87	5.07
225.0	6.24	4.68	4.29	4.48	4.68	4.68	4.68	4.87	4.68
270.0	5.07	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.68
315.0	6.43	4.87	4.09	4.09	4.29	4.29	4.48	4.48	4.48
360.0	15.01	12.09	8.77	5.85	4.29	4.29	4.29	4.48	4.68
C/γ(°)	180.0								
0.0	4.29								
45.0	4.29								
90.0	4.09								
135.0	4.29								
180.0	4.29								
225.0	4.29								
270.0	4.09								
315.0	4.29								
360.0	4.29								