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Nata

LumCAT: 1634-M	
Luminaire: BJB47.319.6105	
Report No: NT2017072804	Voltage(V): 38.0000
Test No: GC2017072804	Current(A): 0.3500
LampCAT: CREE CXA1512	Power (W): 13.3000
Lamp flux(lm): 1430.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 46	Width(mm): 46
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1307.27
Efficiency(%): 91.42%
Lumens(lm)/Power(W): 98.29
Central intensity(cd): 1880.189
Maximum intensity(cd): 1880.189
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=42.4
 [C90/270]Total=42.4
Field angle(10%Imax): [C0/180]Total=87.3
 [C90/270]Total=87.3
Maximum s/h(1/2): C0_180=0.68 C90_270=0.68
Maximum s/h(1/4): C0_180=0.71 C90_270=0.71
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.12%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.114%

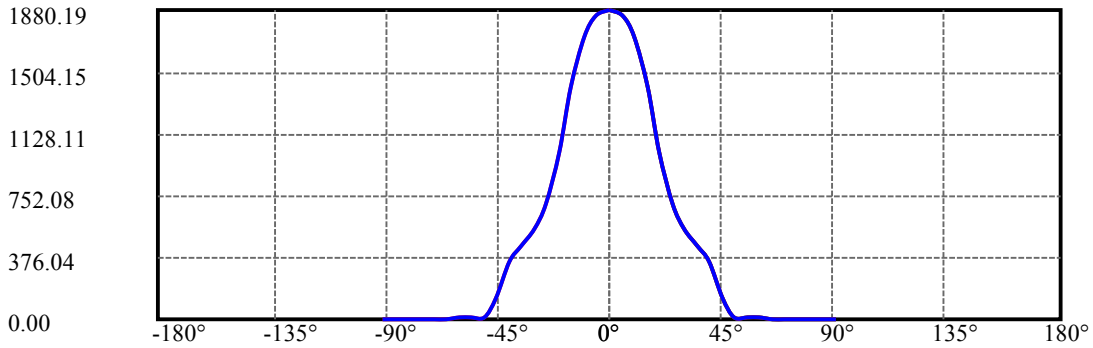
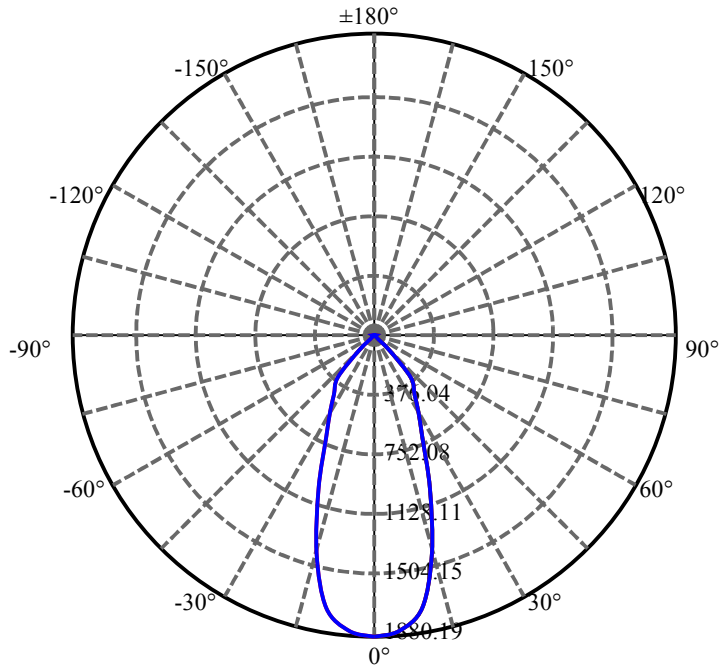
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1880.189	11.244	11.244	.786%	.860%
5.0	1846.381	88.208	99.452	6.168%	7.608%
10.0	1721.582	163.865	263.317	11.459%	20.143%
15.0	1408.403	199.808	463.125	13.973%	35.427%
20.0	1015.315	190.345	653.47	13.311%	49.988%
25.0	704.341	163.163	816.633	11.410%	62.469%
30.0	546.408	149.753	966.386	10.472%	73.924%
35.0	448.656	141.057	1107.443	9.864%	84.714%
40.0	345.116	121.597	1229.04	8.503%	94.016%
45.0	130.621	50.628	1279.668	3.540%	97.889%
50.0	14.880	6.248	1285.916	.437%	98.367%
55.0	8.229	3.695	1289.611	.258%	98.649%
60.0	5.934	2.817	1292.428	.197%	98.865%
65.0	5.343	2.654	1295.082	.186%	99.068%
70.0	5.148	2.652	1297.733	.185%	99.271%
75.0	5.217	2.762	1300.495	.193%	99.482%
80.0	5.023	2.711	1303.207	.190%	99.689%
85.0	4.995	2.727	1305.934	.191%	99.898%
90.0	4.863	1.333	1307.267	.093%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	966.39	67.58%	73.92%
0-40	1229.04	85.95%	94.02%
0-60	1292.43	90.38%	98.86%
0-90	1305.93	91.32%	99.90%
0-120	1305.93	91.32%	99.90%
0-180	1307.27	91.42%	100.00%
60-90	16.32	1.14%	1.25%
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%
0-32.82	1045.81	73.13%	80.00%

ZONAL LUMEN SUMMARY

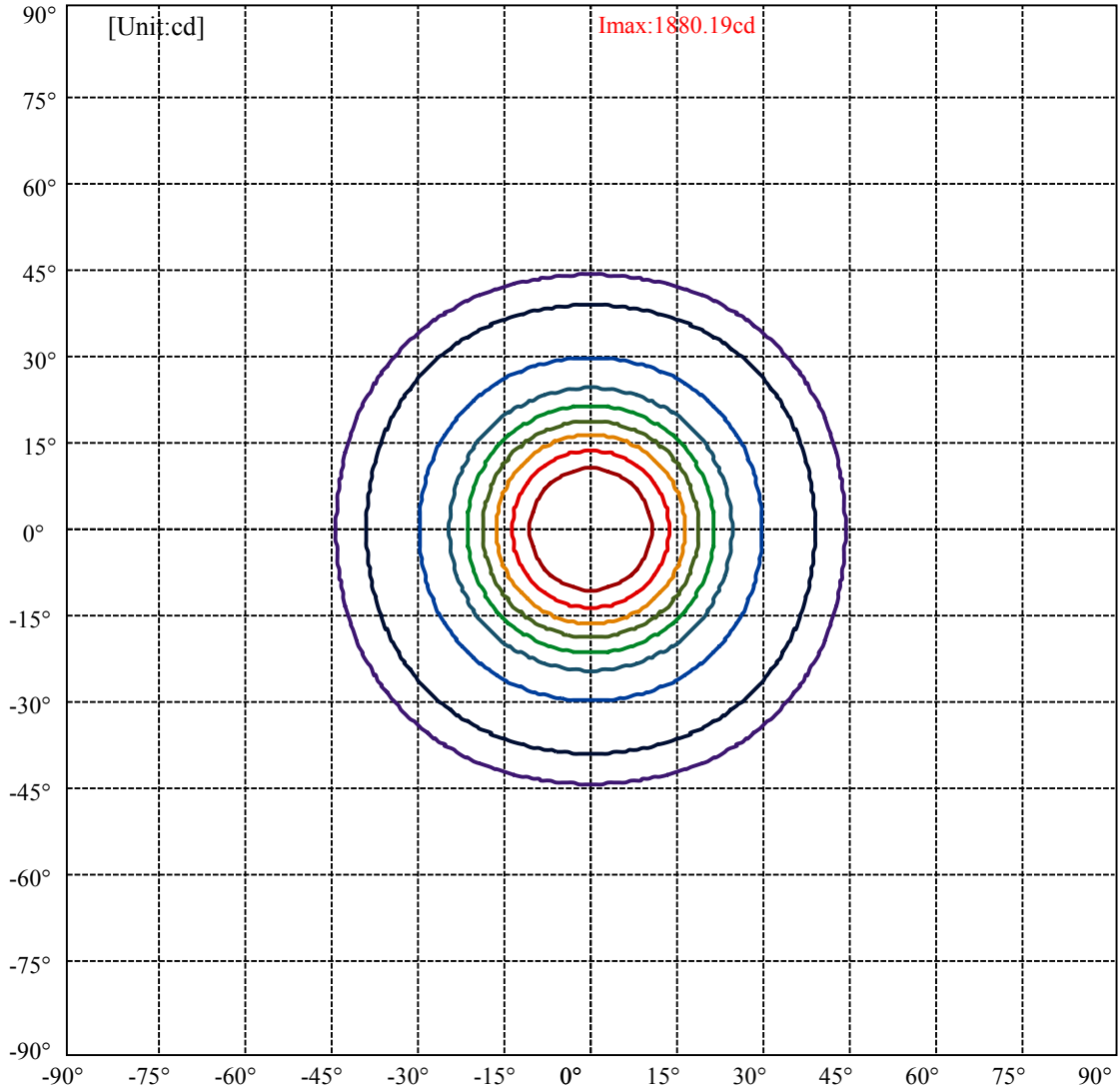
0-10	263.32
10-20	390.15
20-30	312.92
30-40	262.65
40-50	56.88
50-60	6.51
60-70	5.31
70-80	5.47
80-90	2.73
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



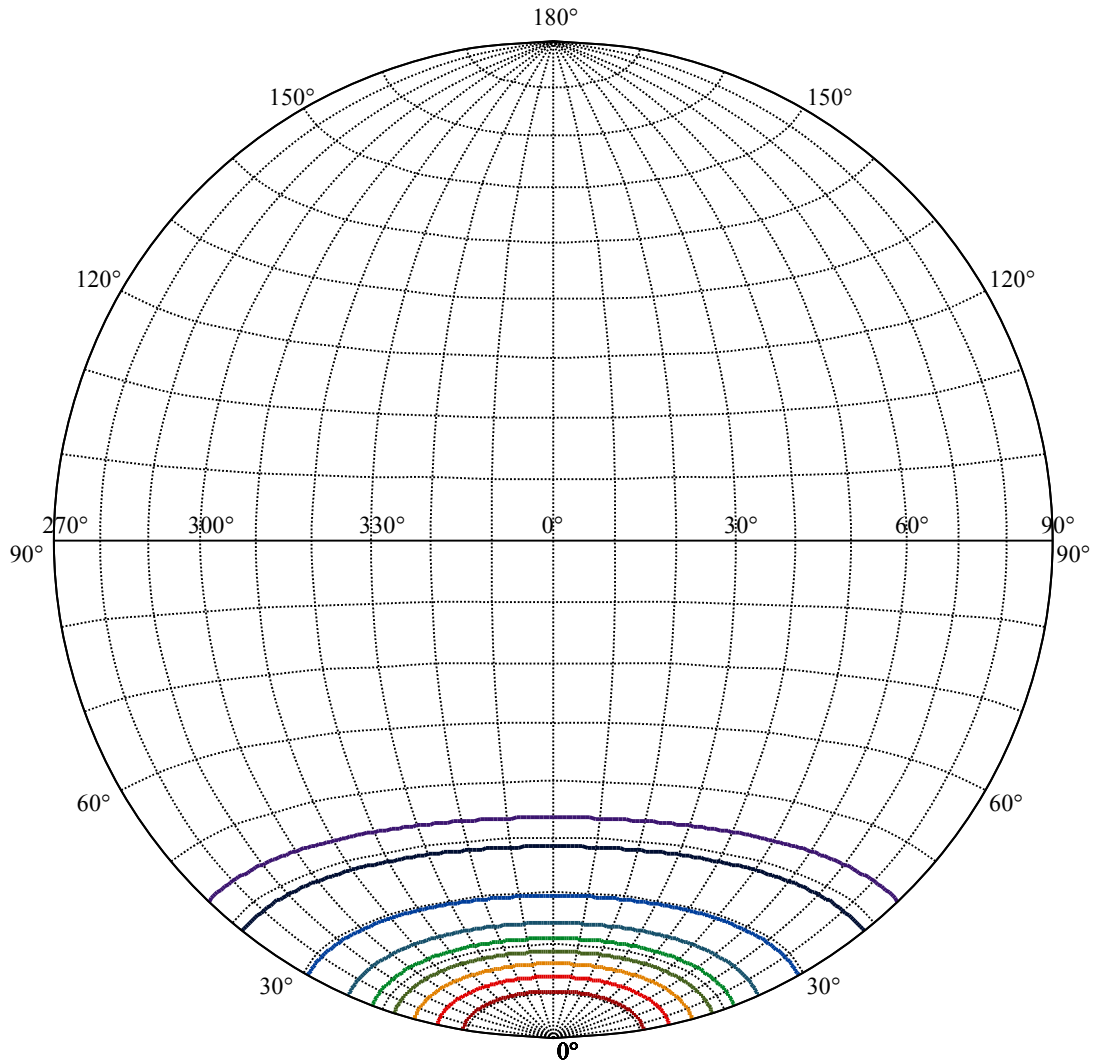
C0(Max): —————
C0/C180: —————
C90/C270: —————

Field angle(10%Imax):C0/180Left:43.7 Right:43.7
:C90/270Left:43.7 Right:43.7

Beam Angle(50%Imax):C0/180Left:21.2 Right:21.2
:C90/270Left:21.2 Right:21.2



(10%Imax) 188.019	—
(20%Imax) 376.038	—
(30%Imax) 564.057	—
(40%Imax) 752.076	—
(50%Imax) 940.095	—
(60%Imax) 1128.11	—
(70%Imax) 1316.13	—
(80%Imax) 1504.15	—
(90%Imax) 1692.17	—



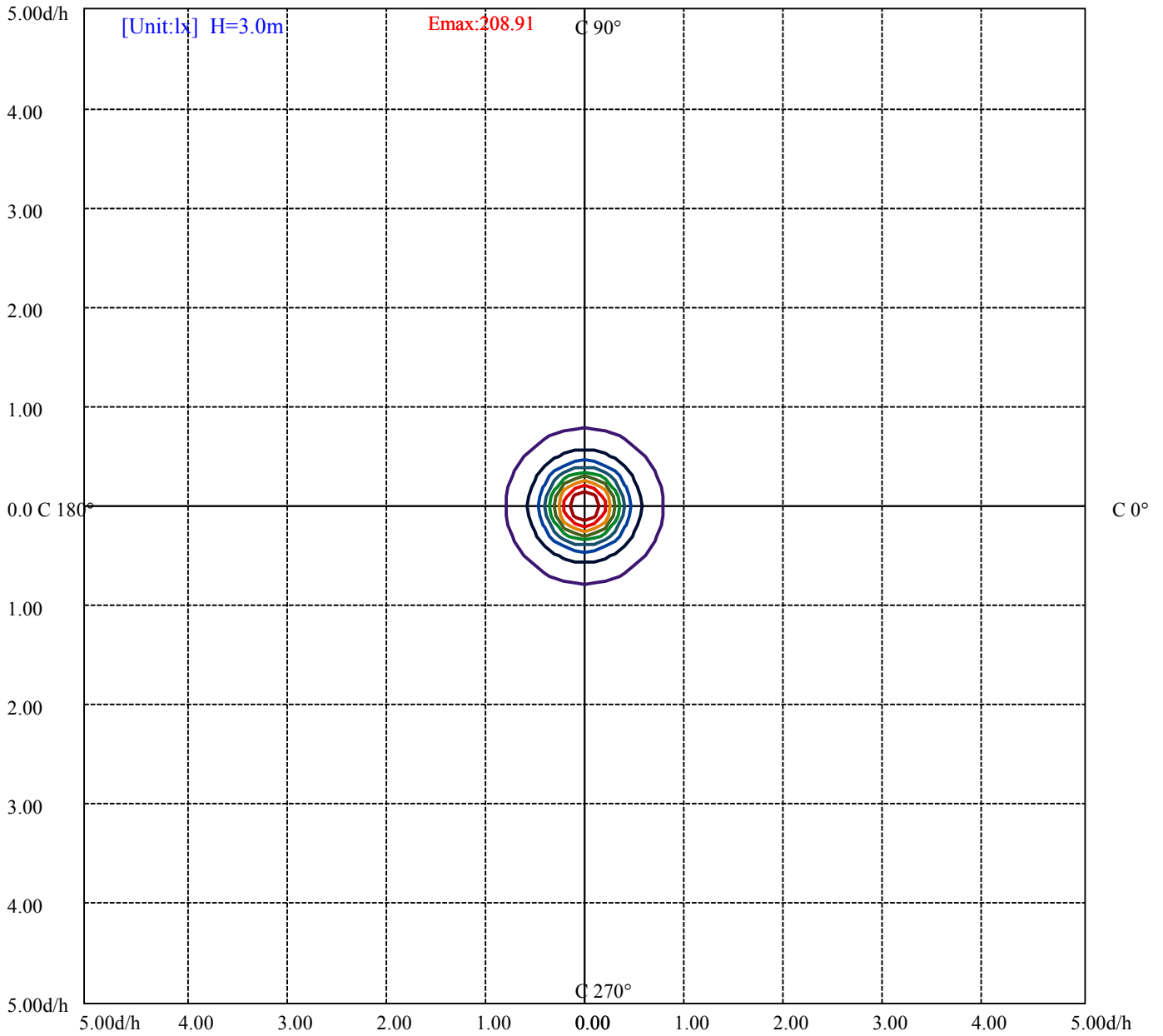
House

[Unit:cd]

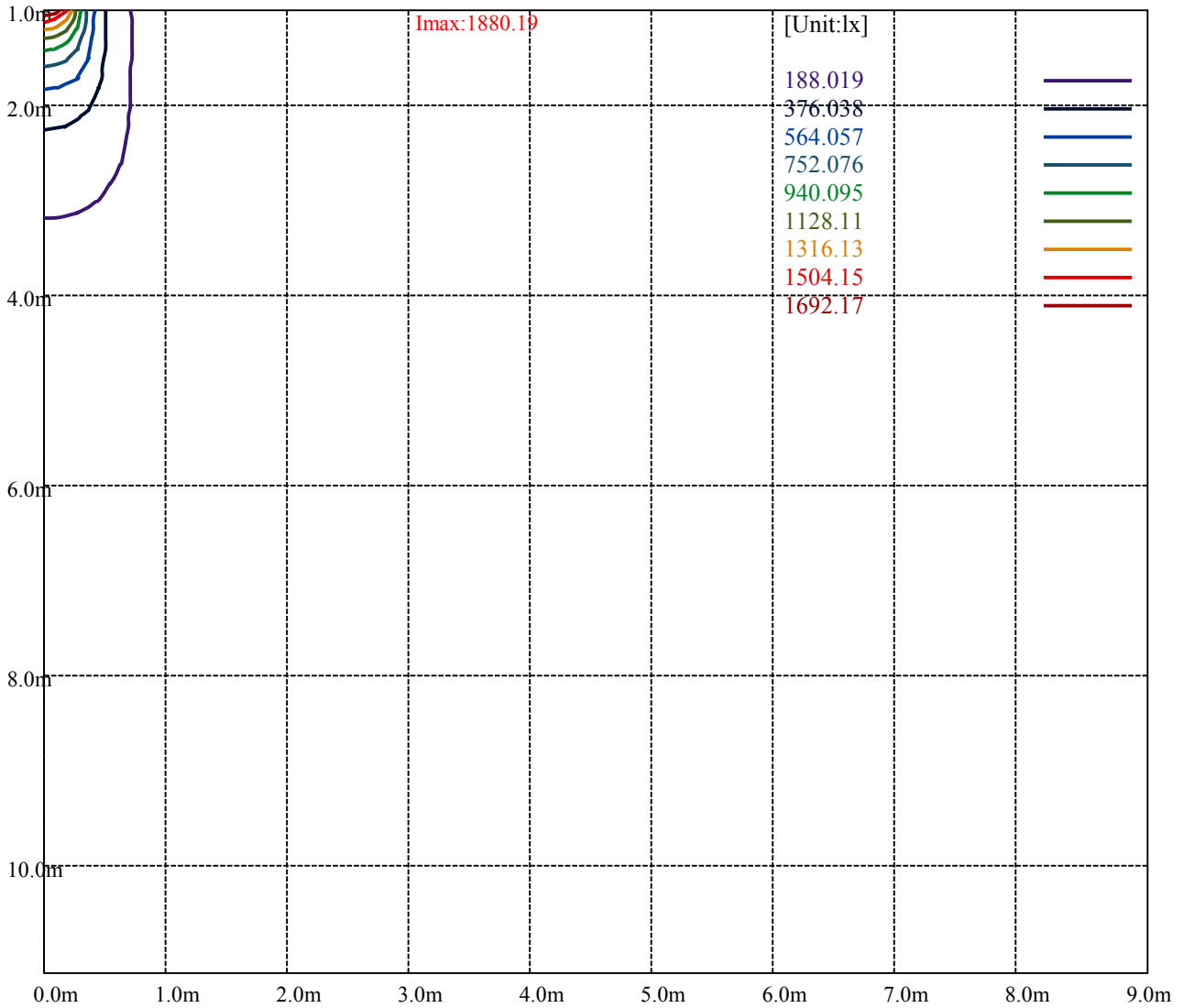
Road

Imax:1880.19

(10%Imax)	188.019	—
(20%Imax)	376.038	—
(30%Imax)	564.057	—
(40%Imax)	752.076	—
(50%Imax)	940.095	—
(60%Imax)	1128.11	—
(70%Imax)	1316.13	—
(80%Imax)	1504.15	—
(90%Imax)	1692.17	—



- (10%Emax) 20.891
- (20%Emax) 41.782
- (30%Emax) 62.67289
- (40%Emax) 83.56389
- (50%Emax) 104.4549
- (60%Emax) 125.3456
- (70%Emax) 146.2367
- (80%Emax) 167.1278
- (90%Emax) 188.0189



Luminance Table

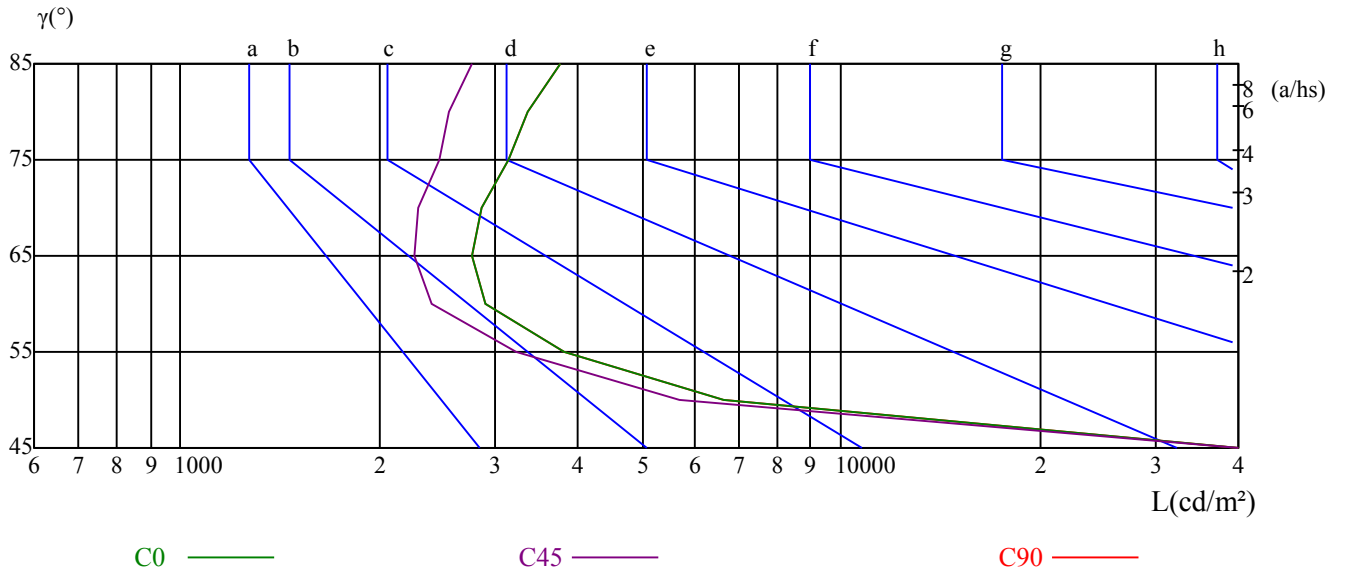
γ	45	50	55	60	65	70	75	80	85
C0	56560	6640	3818	2889	2759	2853	3146	3348	3755
C45	49361	5710	3232	2406	2256	2286	2463	2551	2768
C90	56560	6640	3818	2889	2759	2853	3146	3348	3755

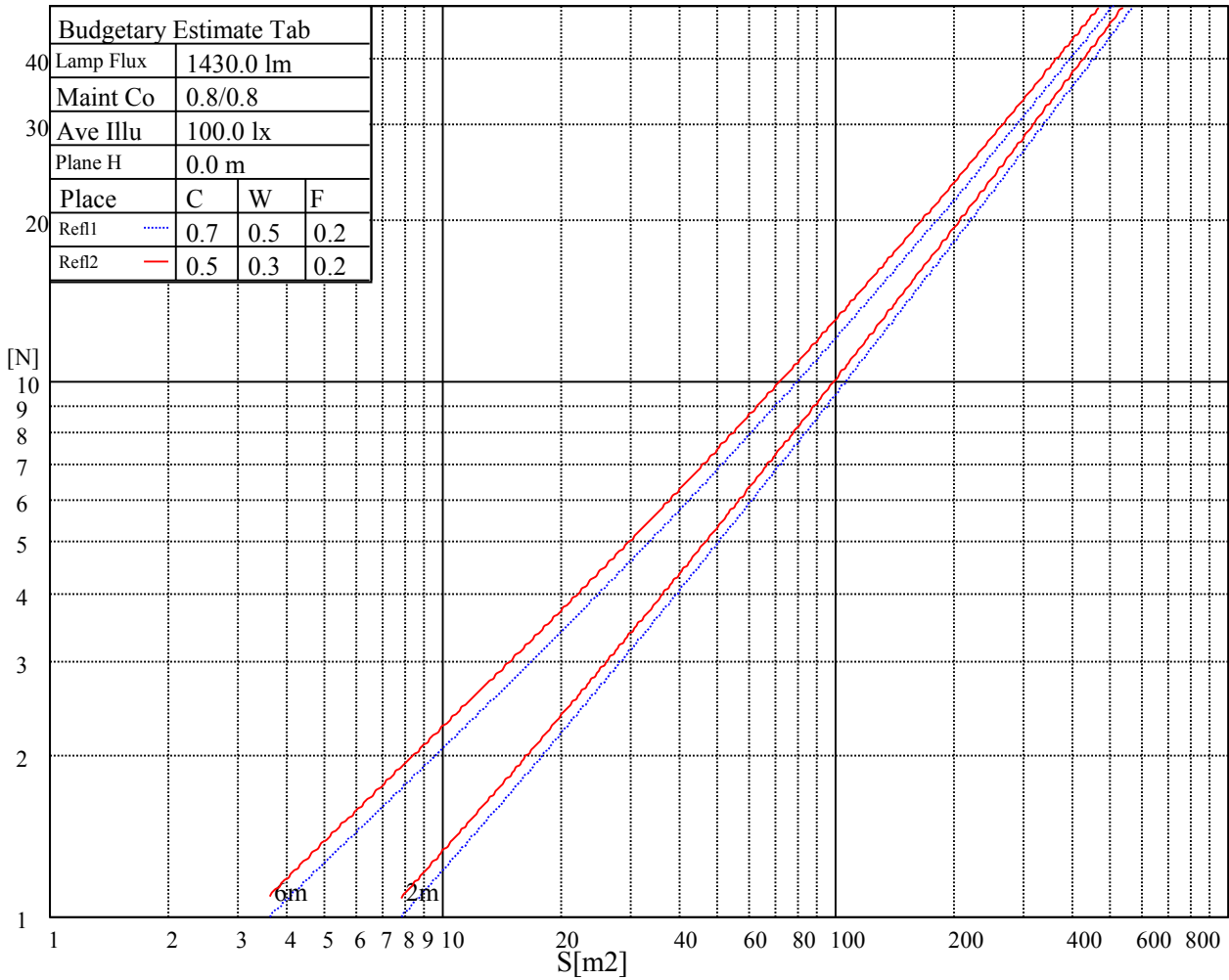
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5974	5974	5974	9527	9527	9527	27083	27083	27083

Glare Table

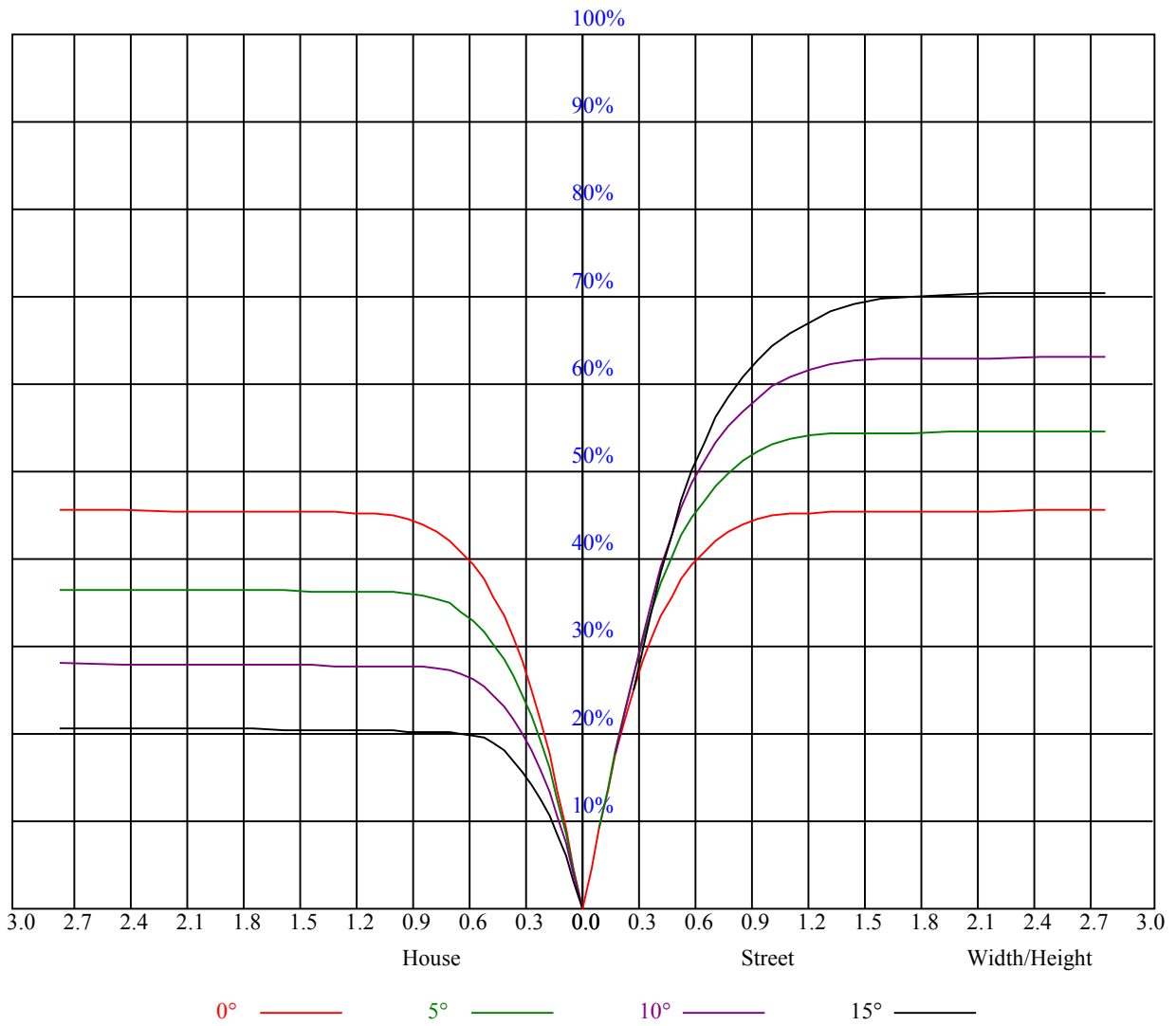
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.10	1.10	1.10	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.01	0.99	0.97	0.99	0.97	0.95	0.96	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.85
2	0.95	0.91	0.88	0.93	0.90	0.87	0.90	0.87	0.85	0.88	0.85	0.83	0.85	0.83	0.82	0.80
3	0.89	0.85	0.81	0.88	0.84	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.75
4	0.84	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.71
5	0.79	0.74	0.70	0.78	0.73	0.70	0.77	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.68	0.67
6	0.75	0.70	0.66	0.74	0.69	0.66	0.73	0.68	0.65	0.72	0.68	0.65	0.70	0.67	0.64	0.63
7	0.71	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.60
8	0.68	0.62	0.59	0.67	0.62	0.59	0.66	0.62	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.57
9	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.62	0.58	0.55	0.54
10	0.61	0.56	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.52



Nata 1634-M

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	1883.81	1856.54	1755.25	1445.27	1023.43	730.71	557.07	458.01	353.94
45.0	1879.91	1857.65	1742.45	1398.52	1027.89	681.73	529.80	435.75	339.47
90.0	1872.68	1836.50	1677.34	1326.18	919.42	646.62	516.39	423.40	294.34
135.0	1884.36	1853.75	1744.68	1455.85	1028.44	716.79	545.94	443.54	350.61
180.0	1883.81	1836.50	1697.37	1394.07	977.80	693.03	537.09	448.38	324.67
225.0	1879.91	1843.18	1715.74	1400.75	1032.17	705.16	552.06	461.96	360.18
270.0	1872.68	1853.20	1750.24	1472.54	1116.37	765.21	583.79	472.48	397.35
315.0	1884.36	1833.72	1689.58	1374.04	997.00	695.48	549.11	445.71	340.37
360.0	1883.81	1856.54	1755.25	1445.27	1023.43	730.71	557.07	458.01	353.94

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	145.25	14.75	8.24	6.01	5.34	5.12	5.95	5.06	5.01
45.0	111.19	13.80	8.07	5.73	5.29	5.18	5.06	5.12	5.01
90.0	73.24	12.52	6.79	5.51	5.29	5.12	5.01	5.12	5.18
135.0	124.55	14.97	8.46	6.23	5.40	5.12	5.12	4.95	4.95
180.0	115.64	13.91	8.18	5.84	5.34	5.18	5.45	5.06	4.95
225.0	131.34	14.97	8.51	5.73	5.34	5.12	5.06	4.95	4.90
270.0	221.60	19.65	9.63	6.73	5.40	5.23	5.06	4.95	5.06
315.0	122.16	14.47	7.96	5.68	5.34	5.12	5.01	4.95	4.90
360.0	145.25	14.75	8.24	6.01	5.34	5.12	5.95	5.06	5.01

C/γ(°)	90.0
0.0	4.84
45.0	4.90
90.0	4.90
135.0	4.84
180.0	4.84
225.0	4.84
270.0	4.90
315.0	4.84
360.0	4.84