



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NATA

LumCAT: 3-1944-M
Luminaire: BJB 47.319.2030
Report No: NATA0100
Test No: GC2019021909
LampCAT: BRIDGELUX V22B
Lamp flux(lm): 6678.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 50.6000
Current(A): 0.9000
Power (W): 45.5400
PF: 0.0000
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 5755.71
Efficiency(%): 86.19%
Lumens(lm)/Power(W): 127.69
Central intensity(cd): 10865.110
Maximum intensity(cd): 10865.110
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=42.0
 [C90/270]Total=42.0
Field angle(10%Imax): [C0/180]Total=69.3
 [C90/270]Total=69.3
Maximum s/h(1/2): C0_180=0.70 C90_270=0.70
Maximum s/h(1/4): C0_180=0.64 C90_270=0.64
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 87.08%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.760%

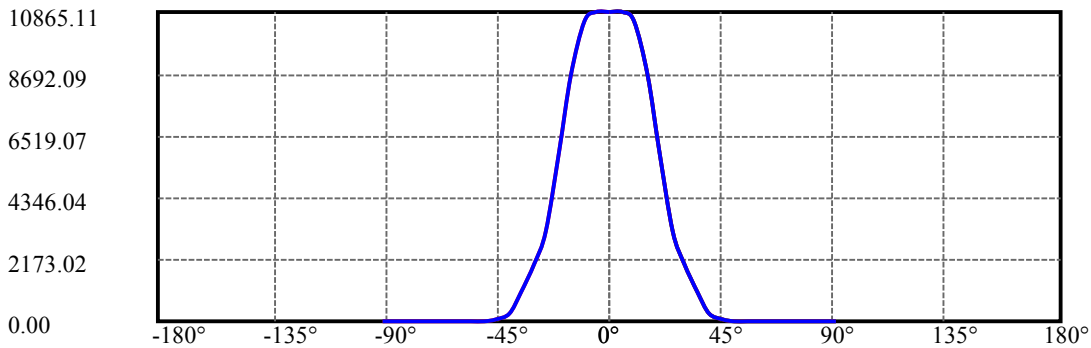
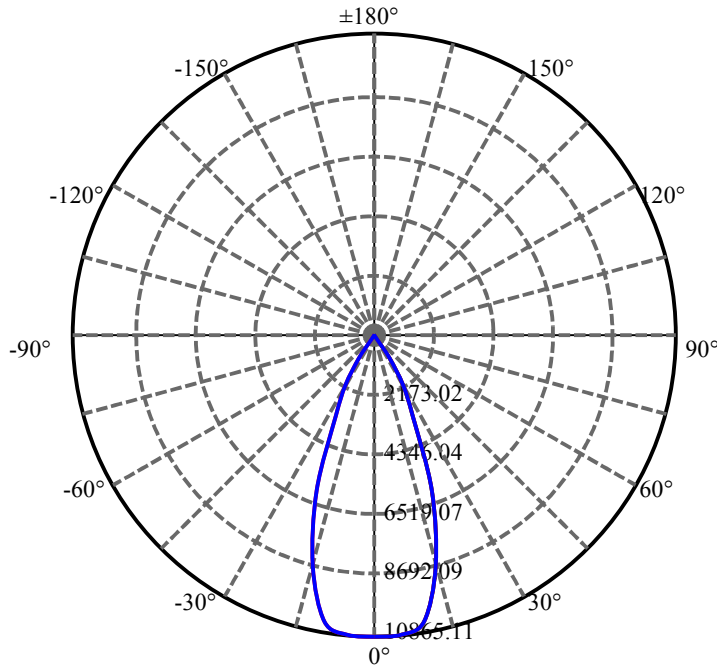
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10865.109	64.976	64.976	.973%	1.129%
5.0	10840.500	517.887	582.862	7.755%	10.127%
10.0	10498.570	999.286	1582.148	14.964%	27.488%
15.0	8621.930	1223.179	2805.328	18.317%	48.740%
20.0	5989.289	1122.836	3928.164	16.814%	68.248%
25.0	3195.492	740.245	4668.409	11.085%	81.109%
30.0	2048.203	561.348	5229.757	8.406%	90.862%
35.0	1015.643	319.317	5549.074	4.782%	96.410%
40.0	238.767	84.126	5633.2	1.260%	97.872%
45.0	37.680	14.605	5647.805	.219%	98.125%
50.0	29.559	12.412	5660.217	.186%	98.341%
55.0	27.492	12.344	5672.561	.185%	98.555%
60.0	26.072	12.376	5684.937	.185%	98.770%
65.0	25.052	12.446	5697.383	.186%	98.987%
70.0	24.441	12.589	5709.972	.189%	99.205%
75.0	24.082	12.750	5722.722	.191%	99.427%
80.0	24.623	13.292	5736.014	.199%	99.658%
85.0	24.356	13.300	5749.314	.199%	99.889%
90.0	23.330	6.394	5755.708	.096%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	5229.76	78.31%	90.86%
0-40	5633.20	84.35%	97.87%
0-60	5684.94	85.13%	98.77%
0-90	5749.31	86.09%	99.89%
0-120	5749.31	86.09%	99.89%
0-180	5755.71	86.19%	100.00%
60-90	76.75	1.15%	1.33%
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%
0-24.57	4604.57	68.95%	80.00%

ZONAL LUMEN SUMMARY

0-10	1582.15
10-20	2346.02
20-30	1301.59
30-40	403.44
40-50	27.02
50-60	24.72
60-70	25.03
70-80	26.04
80-90	13.30
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: —————

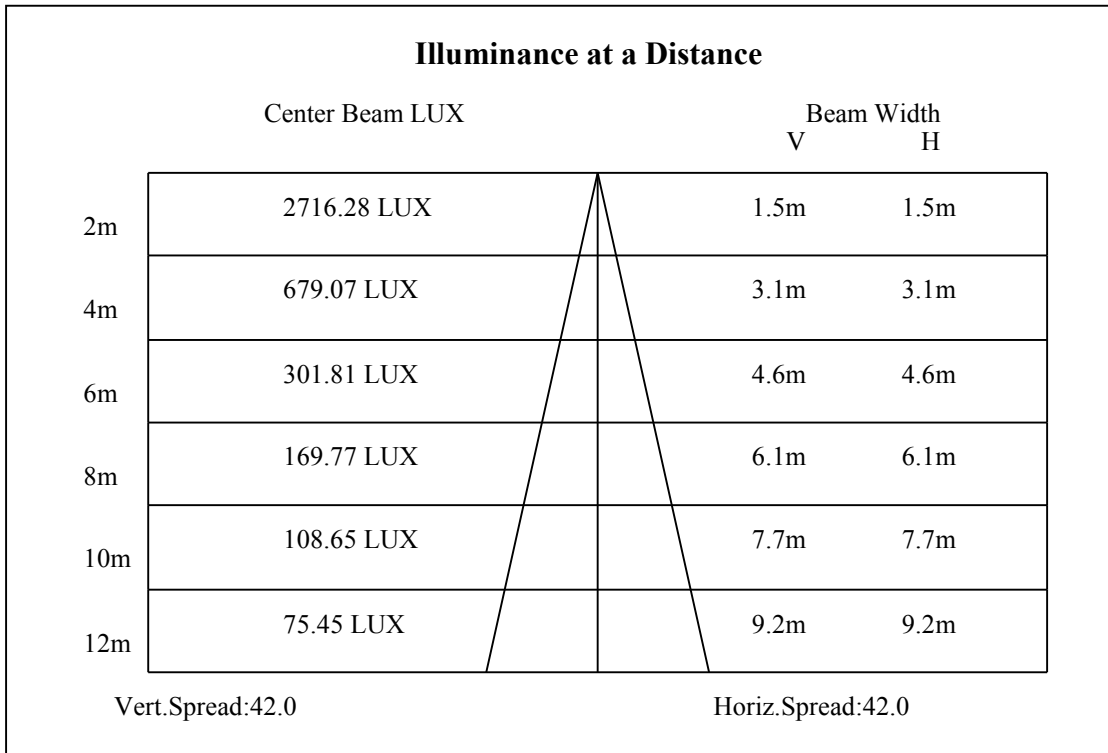
C90/C270: —————

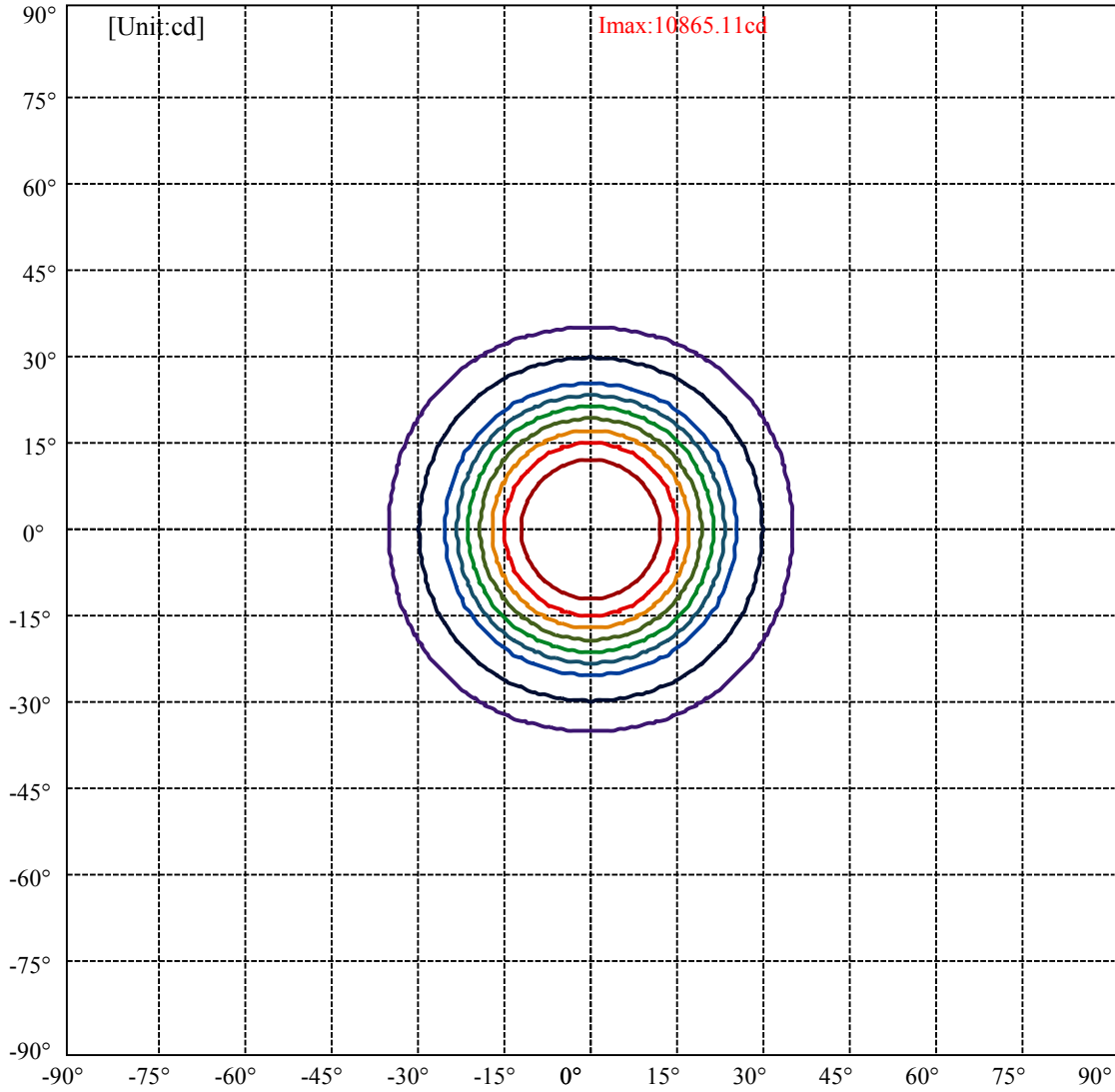
Field angle(10%Imax):C0/180Left:34.7 Right:34.7

:C90/270Left:34.7 Right:34.7

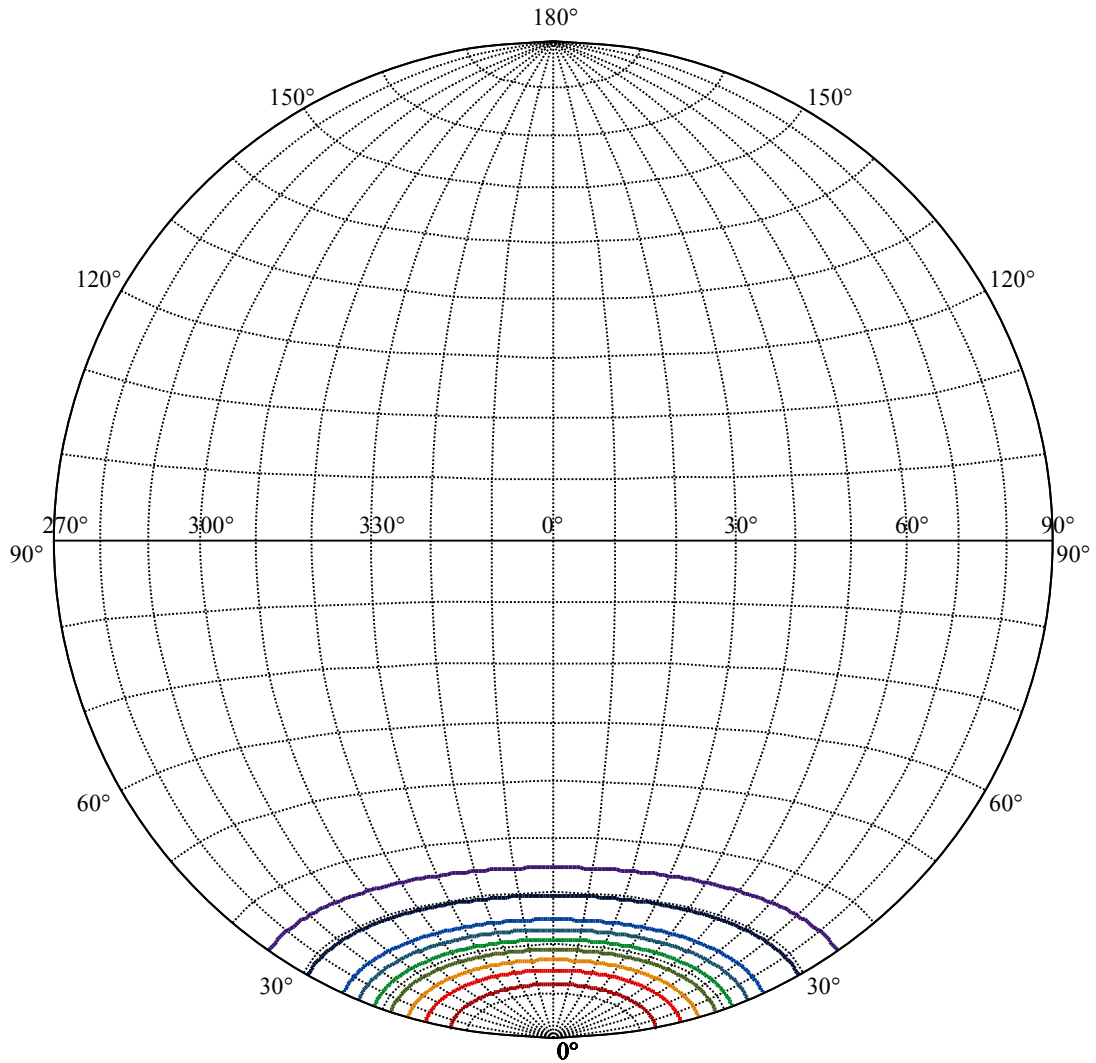
Beam Angle(50%Imax):C0/180Left:21.0 Right:21.0

:C90/270Left:21.0 Right:21.0





(10%Imax) 1086.51	—
(20%Imax) 2173.02	—
(30%Imax) 3259.53	—
(40%Imax) 4346.04	—
(50%Imax) 5432.55	—
(60%Imax) 6519.07	—
(70%Imax) 7605.58	—
(80%Imax) 8692.09	—
(90%Imax) 9778.6	—



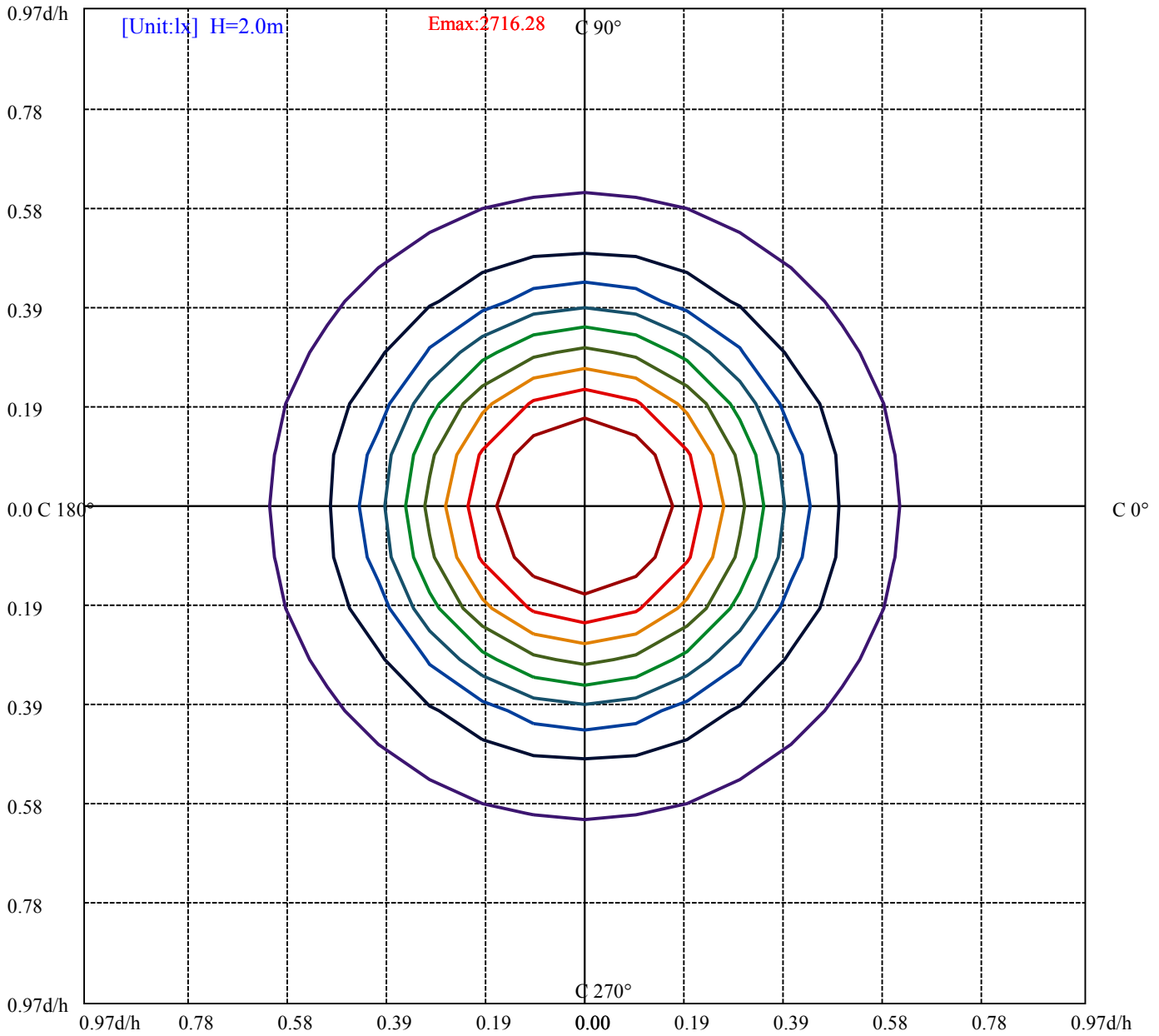
House

[Unit:cd]

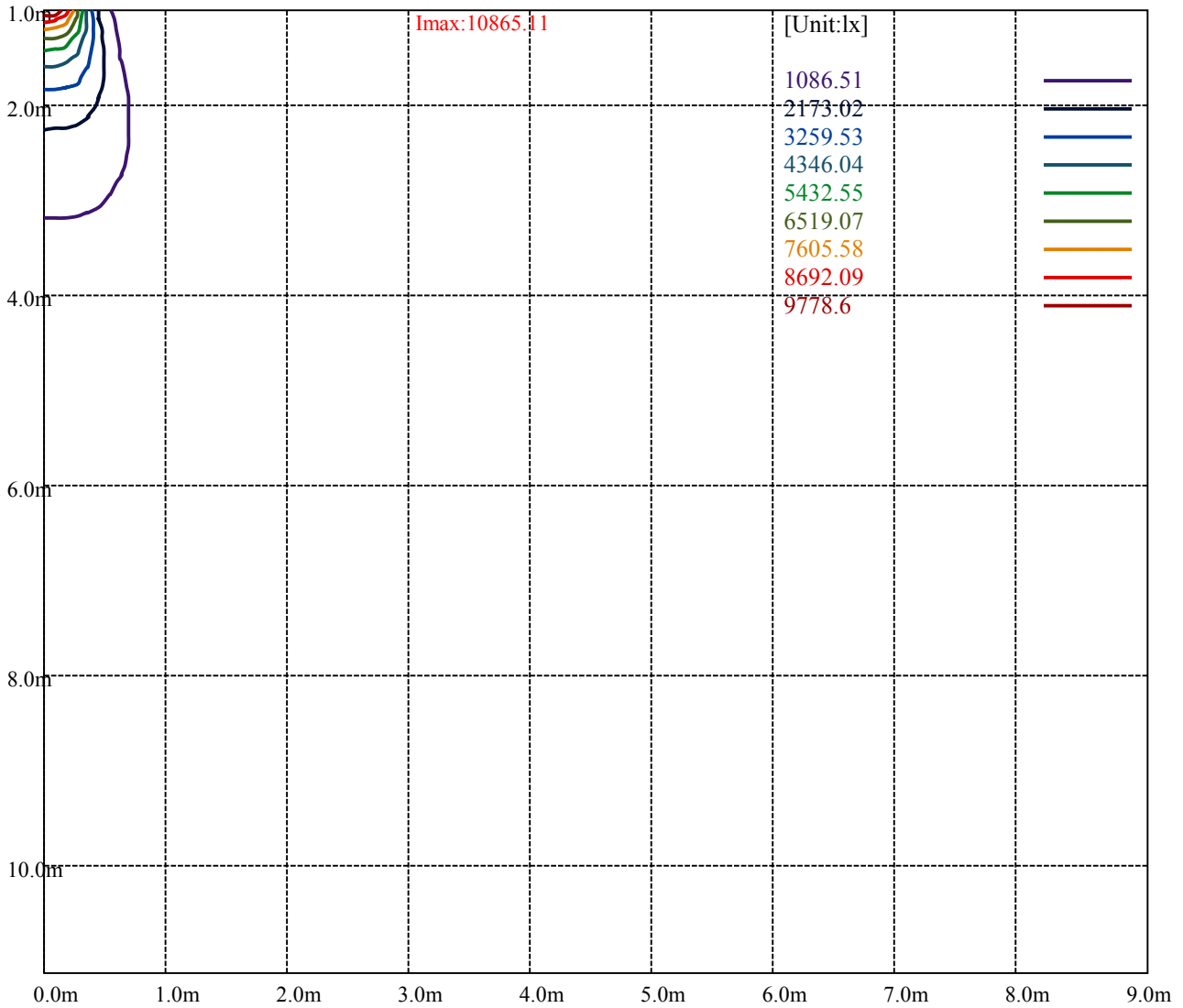
Road

Imax:10865.11

(10%Imax) 1086.51	—
(20%Imax) 2173.02	—
(30%Imax) 3259.53	—
(40%Imax) 4346.04	—
(50%Imax) 5432.55	—
(60%Imax) 6519.07	—
(70%Imax) 7605.58	—
(80%Imax) 8692.09	—
(90%Imax) 9778.6	—



- (10%Emax) 271.6275
- (20%Emax) 543.255
- (30%Emax) 814.8825
- (40%Emax) 1086.51
- (50%Emax) 1358.137
- (60%Emax) 1629.765
- (70%Emax) 1901.395
- (80%Emax) 2173.022
- (90%Emax) 2444.65



Luminance Table

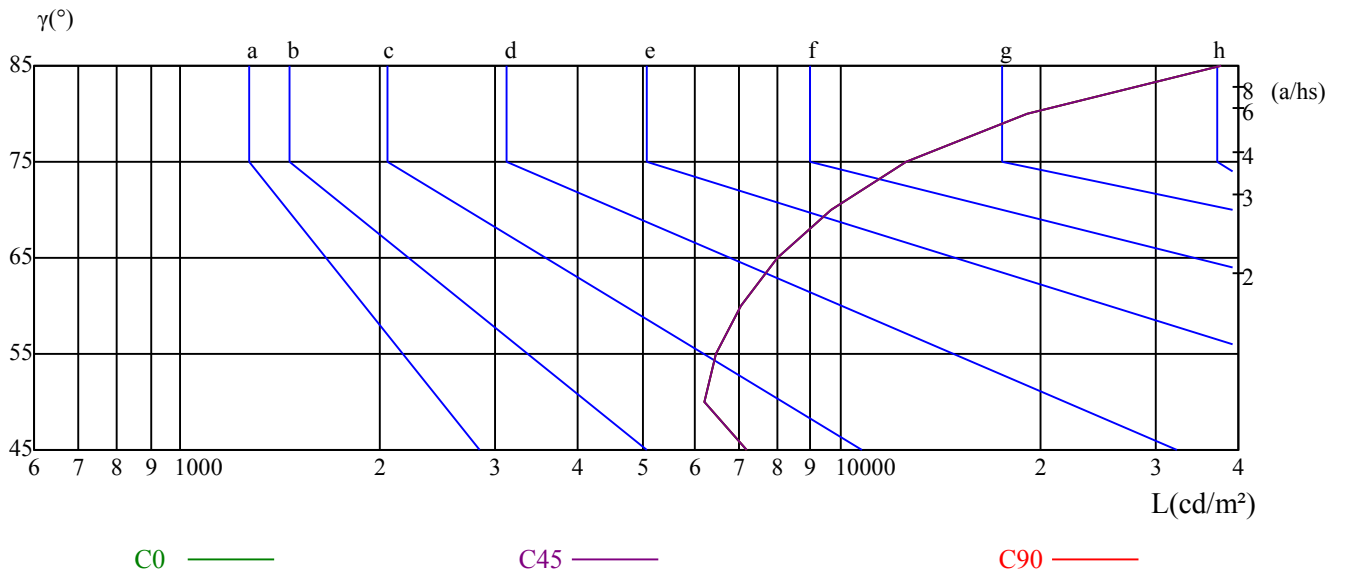
γ	45	50	55	60	65	70	75	80	85
C0	7205	6218	6481	7050	8015	9662	12581	19173	37785
C45	7205	6218	6481	7050	8015	9662	12581	19173	37785
C90	7205	6218	6481	7050	8015	9662	12581	19173	37785

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
8015	8015	8015	12581	12581	12581	37785	37785	37785

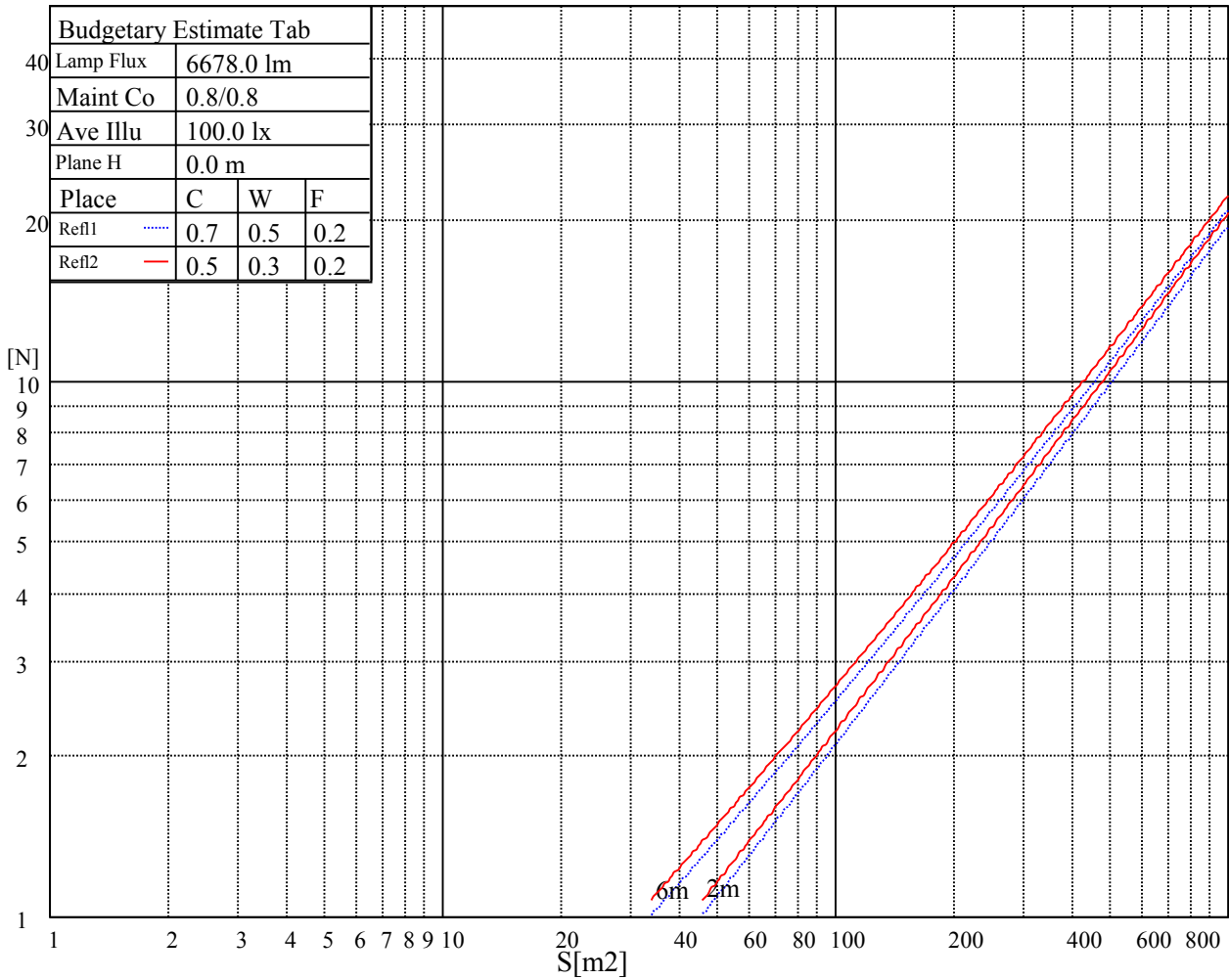
Glare Table

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

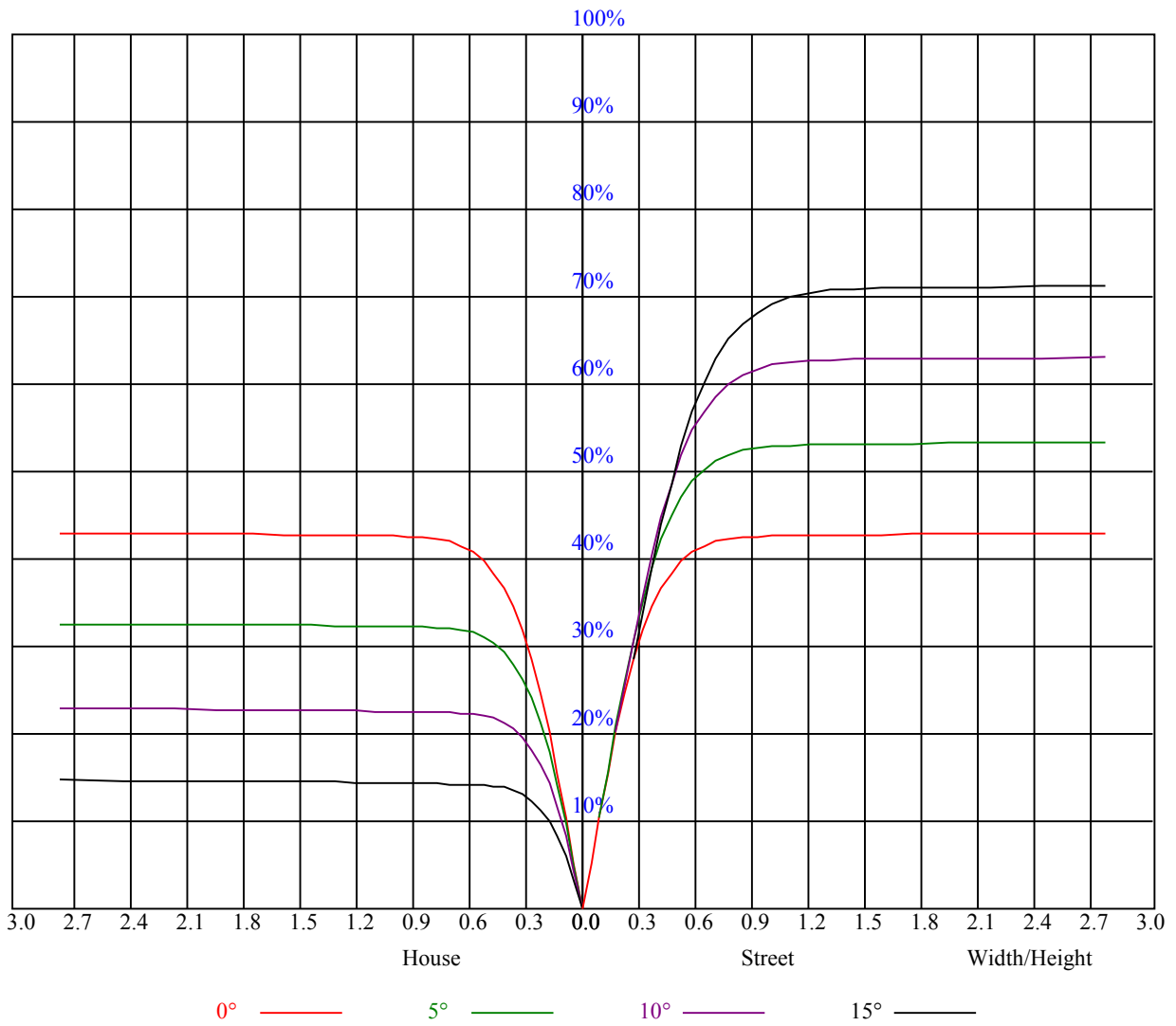
Luminance Limiting Curve



Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	1.26	2.18	1.63	2.49	2.80	1.25	2.16	1.61	2.47	2.79
	3H	4.40	5.21	4.79	5.54	5.91	4.37	5.18	4.76	5.51	5.88
	4H	6.13	6.88	6.54	7.23	7.62	6.12	6.86	6.52	7.22	7.61
	6H	8.10	8.78	8.52	9.16	9.56	8.19	8.87	8.61	9.25	9.65
	8H	9.21	9.85	9.65	10.24	10.65	9.32	9.96	9.75	10.35	10.76
	12H	11.01	11.62	11.45	12.01	12.44	11.08	11.69	11.52	12.08	12.51
4H	2H	2.15	2.89	2.56	3.25	3.64	2.14	2.88	2.55	3.24	3.63
	3H	5.55	6.16	5.97	6.57	6.98	5.52	6.14	5.94	6.55	6.95
	4H	7.45	8.00	7.89	8.43	8.87	7.44	7.99	7.88	8.41	8.86
	6H	9.58	10.04	10.05	10.49	10.97	9.66	10.13	10.13	10.58	11.05
	8H	10.79	11.23	11.27	11.68	12.15	10.89	11.33	11.37	11.78	12.25
	12H	12.50	12.87	12.99	13.36	13.84	12.56	12.93	13.05	13.42	13.90
8H	4H	8.20	8.63	8.68	9.09	9.56	8.19	8.63	8.67	9.08	9.55
	6H	10.62	10.96	11.13	11.47	11.95	10.69	11.04	11.20	11.54	12.03
	8H	12.02	12.33	12.56	12.85	13.35	12.11	12.41	12.64	12.94	13.43
	12H	13.86	14.11	14.38	14.61	15.20	13.90	14.16	14.42	14.66	15.24
12H	4H	8.43	8.80	8.92	9.29	9.77	8.41	8.79	8.91	9.28	9.76
	6H	11.16	11.27	11.50	11.74	12.29	11.22	11.33	11.56	11.80	12.35
	8H	12.50	12.76	13.02	13.26	13.84	12.57	12.83	13.10	13.33	13.91
Variation with the observer position at spacings:											
S = 1.0H	5.5/-6.6					5.5/-6.6					
S = 1.5H	7.4/-4.8					7.4/-4.8					
S = 2.0H	8.6/-3.5					8.6/-3.5					
Standard tables:	BK3					BK3					
Uncorrected UGR	2.6					2.6					



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	1.04	1.04	1.04	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.89	0.89	0.89	0.87
1	0.96	0.94	0.92	0.94	0.92	0.91	0.91	0.89	0.88	0.88	0.86	0.85	0.85	0.84	0.83	0.81
2	0.91	0.88	0.85	0.90	0.87	0.84	0.87	0.84	0.82	0.84	0.82	0.81	0.82	0.80	0.79	0.78
3	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.79	0.77	0.76	0.74
4	0.83	0.78	0.75	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.77	0.74	0.72	0.71
5	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.72	0.70	0.74	0.72	0.70	0.68
6	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.72	0.69	0.67	0.66
7	0.73	0.68	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.65	0.69	0.67	0.64	0.63
8	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
9	0.67	0.63	0.61	0.67	0.63	0.61	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59
10	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.57



NATA 3-1944-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	10865.25	10776.38	10377.00	8449.31	5936.06	3131.44	2016.56	1016.44	290.25
45.0	10882.13	10808.44	10378.69	8460.00	5763.38	3012.19	2019.38	961.88	301.50
90.0	10859.06	10789.31	10290.38	8164.13	5352.19	2894.63	1872.56	819.51	115.26
135.0	10854.00	10854.56	10658.25	8959.50	6404.63	3440.81	2175.19	1110.94	321.75
180.0	10865.25	10923.19	10631.25	8683.88	6080.06	3160.13	2039.06	1058.12	225.90
225.0	10882.13	10927.13	10686.38	8799.75	6271.88	3284.44	2109.94	1064.25	246.21
270.0	10859.06	10865.81	10666.69	9141.19	6536.25	3645.00	2248.88	1207.69	289.13
315.0	10854.00	10779.19	10299.94	8317.69	5569.88	2995.31	1904.06	886.33	120.15
360.0	10865.25	10776.38	10377.00	8449.31	5936.06	3131.44	2016.56	1016.44	290.25

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	38.76	29.64	27.45	25.99	25.03	24.36	24.08	25.09	23.91
45.0	34.09	29.70	27.62	26.10	25.09	24.36	23.96	23.91	25.09
90.0	34.93	29.08	27.11	25.88	24.92	24.36	23.91	23.96	24.47
135.0	39.99	29.42	27.62	26.21	25.20	24.64	24.36	24.69	24.92
180.0	36.84	29.25	27.34	25.99	24.86	24.36	24.08	24.75	23.96
225.0	38.48	29.87	27.73	26.16	25.09	24.47	24.08	23.96	24.41
270.0	43.20	30.15	27.79	26.33	25.20	24.47	23.96	23.74	23.85
315.0	35.16	29.36	27.28	25.93	25.03	24.53	24.24	26.89	24.24
360.0	38.76	29.64	27.45	25.99	25.03	24.36	24.08	25.09	23.91

C/γ(°)	90.0
0.0	22.84
45.0	22.95
90.0	23.29
135.0	23.74
180.0	24.86
225.0	23.01
270.0	23.01
315.0	22.95
360.0	22.84