
Nata

LumCAT: 3-1938-M
Luminaire: BJB 47.319.2011
Report No: GC2017060703
Test No: NT-0010
LampCAT: LUXEON CoB 1208
Lamp flux(lm): 3235.0
Number of Lamps: 1
Length(mm): 78
Phm Type: C

Voltage(V): 217.5000
Current(A): 0.1370
Power (W): 28.1000
PF: 0.9430
Ballast type: DC
Width(mm): 78
Height(mm): 0

Photometric Results

Lumens(lm): 2999.65
Efficiency(%): 92.72%
Lumens(lm)/Power(W): 106.75
Central intensity(cd): 11570.380
Maximum intensity(cd): 11570.380
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=17.8
 [C90/270]Total=17.8
Field angle(10%Imax): [C0/180]Total=60.9
 [C90/270]Total=60.9
Maximum s/h(1/2): C0_180=0.31 C90_270=0.31
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 92.72%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.703%

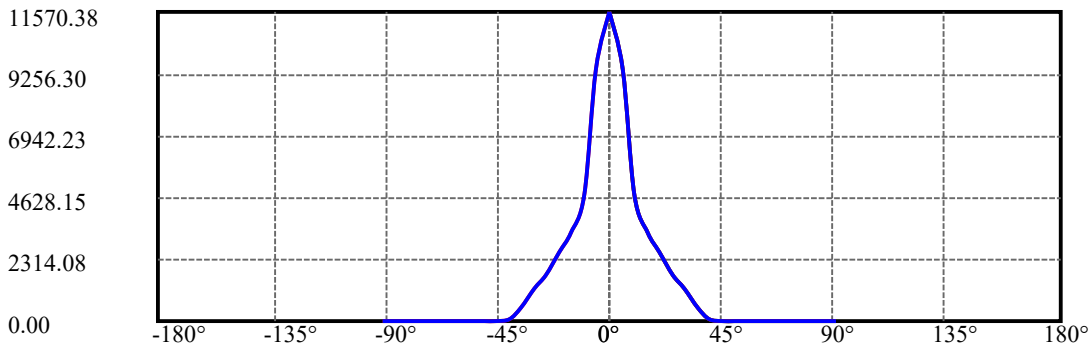
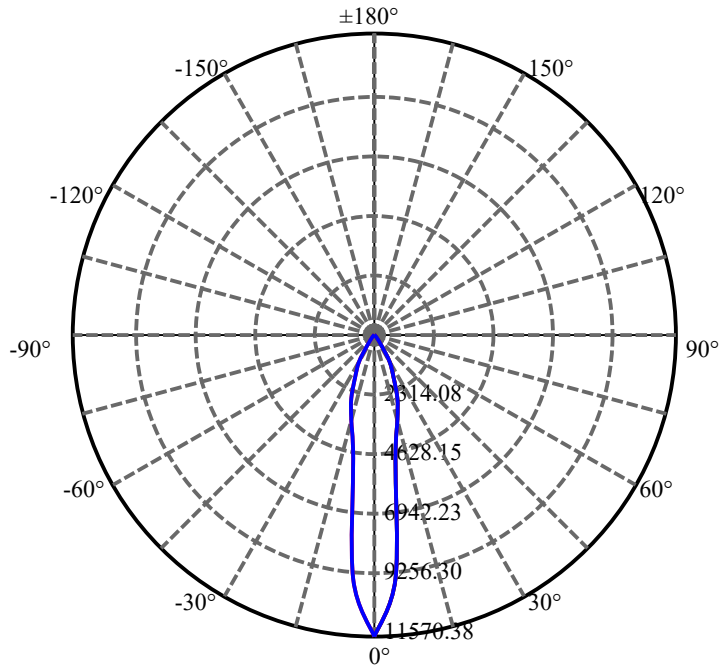
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	11570.378	0.000	0	.000%	.000%
5.0	9426.261	251.009	251.009	7.759%	8.368%
10.0	4775.647	508.047	759.056	15.705%	25.305%
15.0	3326.122	480.592	1239.647	14.856%	41.326%
20.0	2564.968	485.509	1725.156	15.008%	57.512%
25.0	1760.704	453.683	2178.839	14.024%	72.636%
30.0	1220.876	377.321	2556.16	11.664%	85.215%
35.0	534.047	258.425	2814.585	7.988%	93.830%
40.0	92.550	104.543	2919.128	3.232%	97.316%
45.0	23.729	21.530	2940.658	.666%	98.033%
50.0	15.085	7.843	2948.501	.242%	98.295%
55.0	13.379	6.189	2954.69	.191%	98.501%
60.0	12.773	6.045	2960.735	.187%	98.703%
65.0	12.498	6.143	2966.878	.190%	98.907%
70.0	12.388	6.301	2973.18	.195%	99.118%
75.0	12.333	6.461	2979.641	.200%	99.333%
80.0	12.553	6.659	2986.3	.206%	99.555%
85.0	12.167	6.717	2993.017	.208%	99.779%
90.0	12.057	6.633	2999.65	.205%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2556.16	79.02%	85.22%
0-40	2919.13	90.24%	97.32%
0-60	2960.74	91.52%	98.70%
0-90	2993.02	92.52%	99.78%
0-120	2993.02	92.52%	99.78%
0-180	2999.65	92.72%	100.00%
60-90	38.33	1.18%	1.28%
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%
0-27.93	2399.72	74.18%	80.00%

ZONAL LUMEN SUMMARY

0-10	759.06
10-20	966.10
20-30	831.00
30-40	362.97
40-50	29.37
50-60	12.23
60-70	12.44
70-80	13.12
80-90	6.72
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



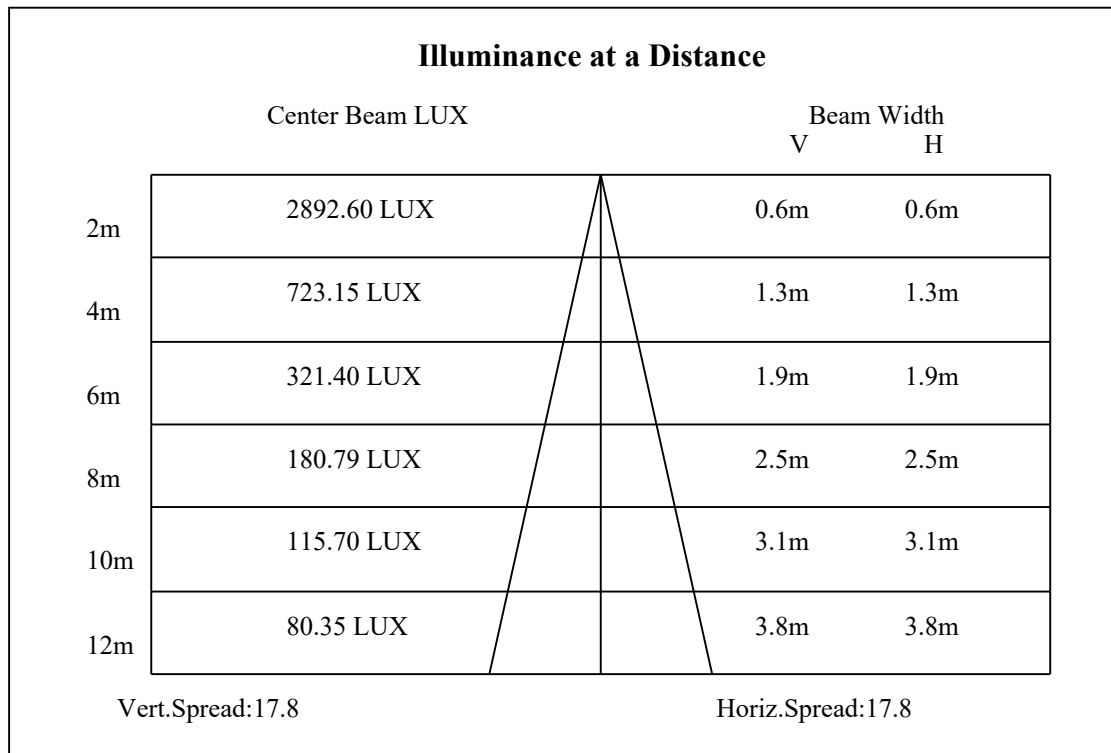
C0(Max): —————

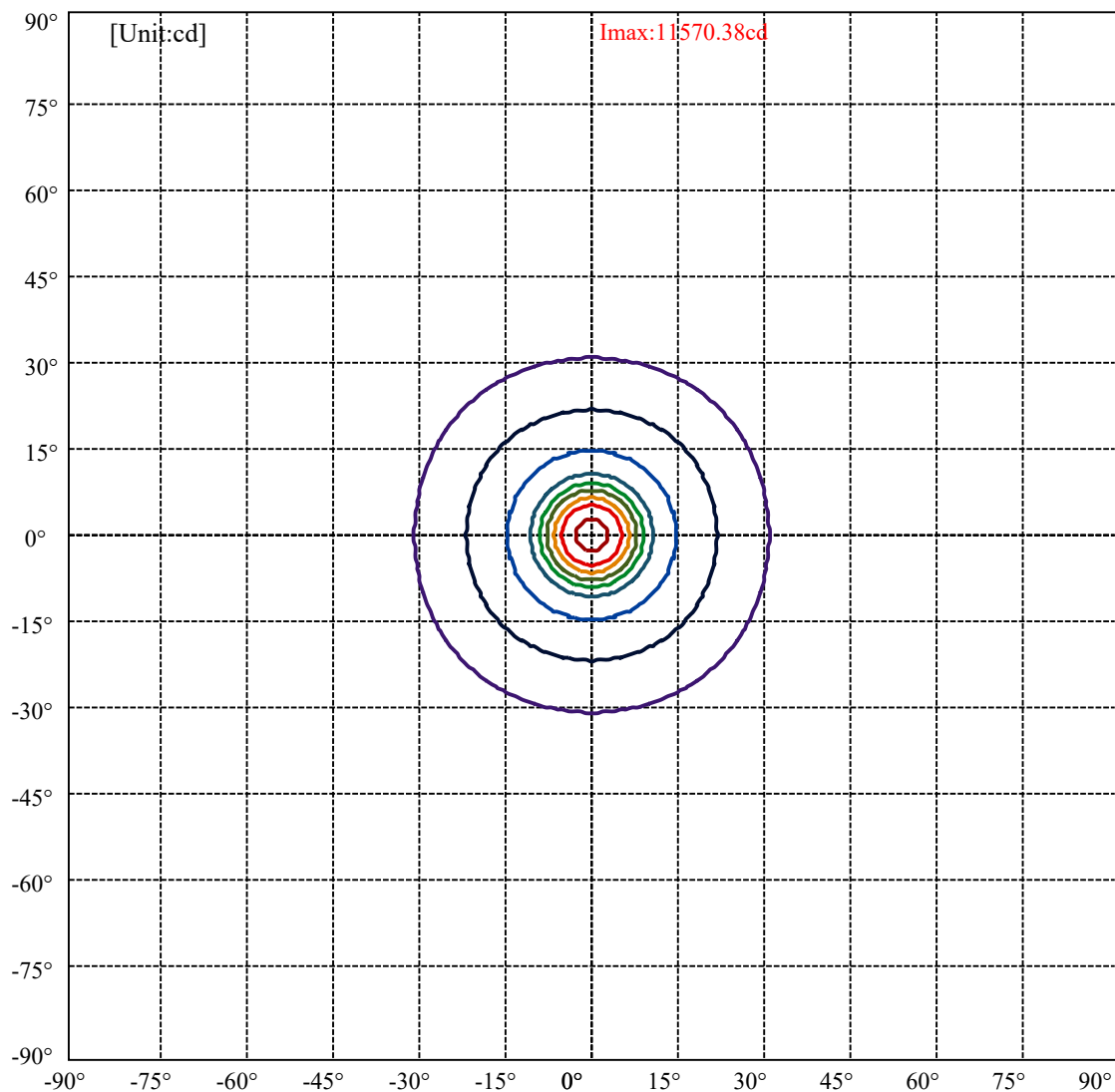
C0/C180: —————

C90/C270: —————

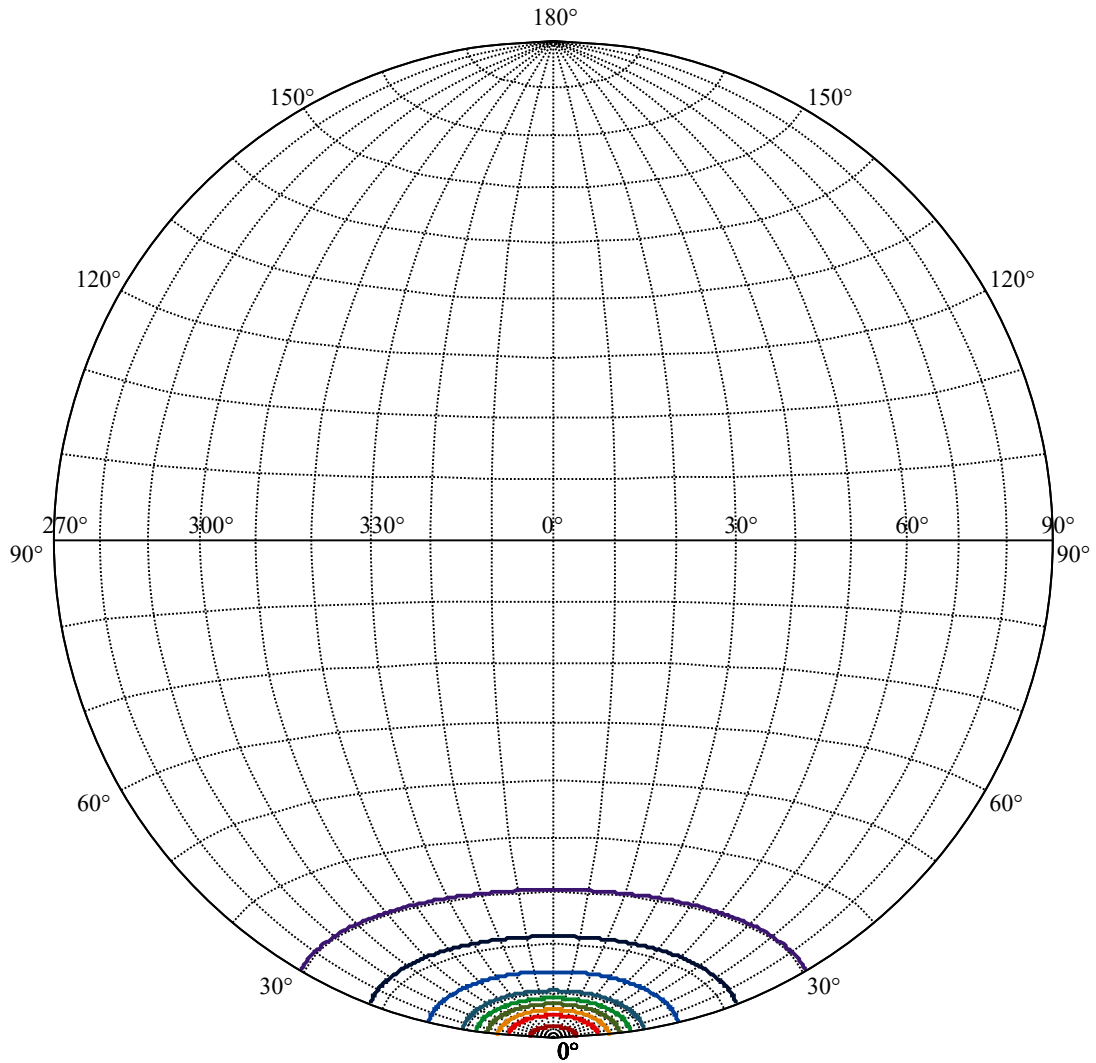
Field angle(10%Imax):C0/180Left:30.5 Right:30.5
:C90/270Left:30.5 Right:30.5

Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9
:C90/270Left:8.9 Right:8.9





(10%Imax) 1157.04	—
(20%Imax) 2314.08	—
(30%Imax) 3471.11	—
(40%Imax) 4628.15	—
(50%Imax) 5785.19	—
(60%Imax) 6942.23	—
(70%Imax) 8099.27	—
(80%Imax) 9256.3	—
(90%Imax) 10413.3	—



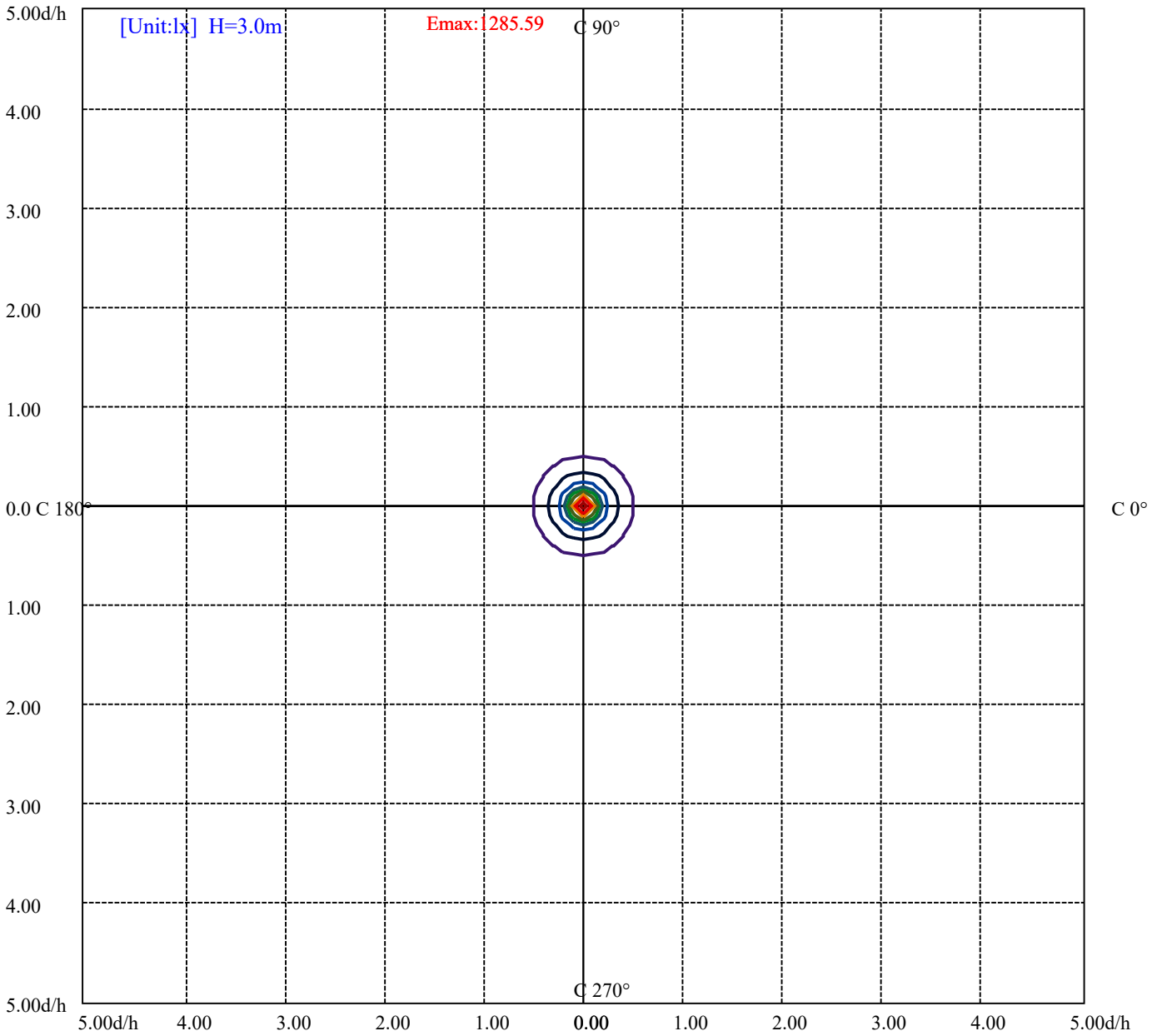
House

[Unit:cd]

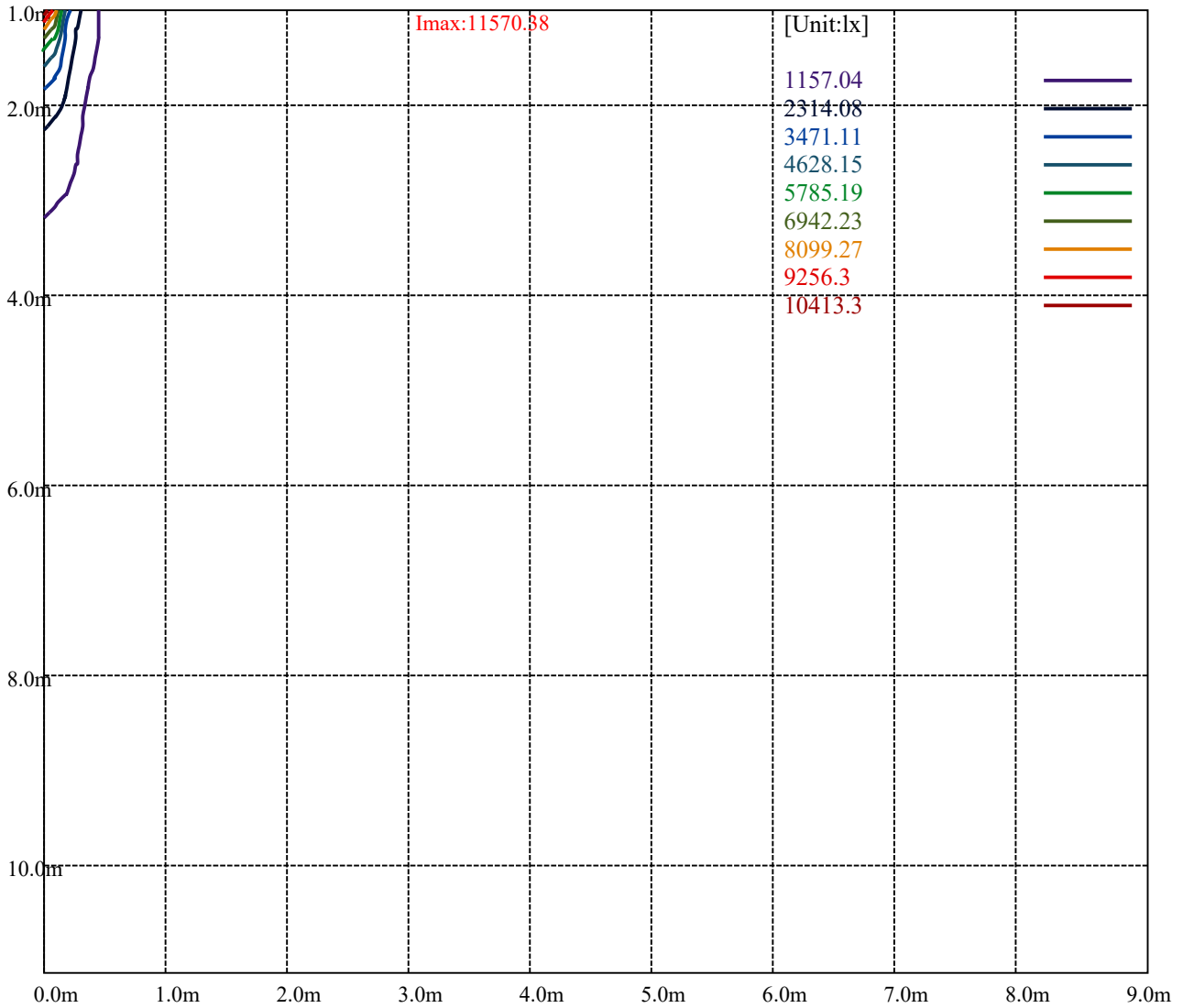
Road

Imax:11570.38

(10%Imax)	1157.04	—
(20%Imax)	2314.08	—
(30%Imax)	3471.11	—
(40%Imax)	4628.15	—
(50%Imax)	5785.19	—
(60%Imax)	6942.23	—
(70%Imax)	8099.27	—
(80%Imax)	9256.3	—
(90%Imax)	10413.3	—



(10%Emax) 128.5589	—
(20%Emax) 257.1178	—
(30%Emax) 385.6767	—
(40%Emax) 514.2366	—
(50%Emax) 642.7956	—
(60%Emax) 771.3544	—
(70%Emax) 899.9133	—
(80%Emax) 1028.472	—
(90%Emax) 1157.033	—



Luminance Table

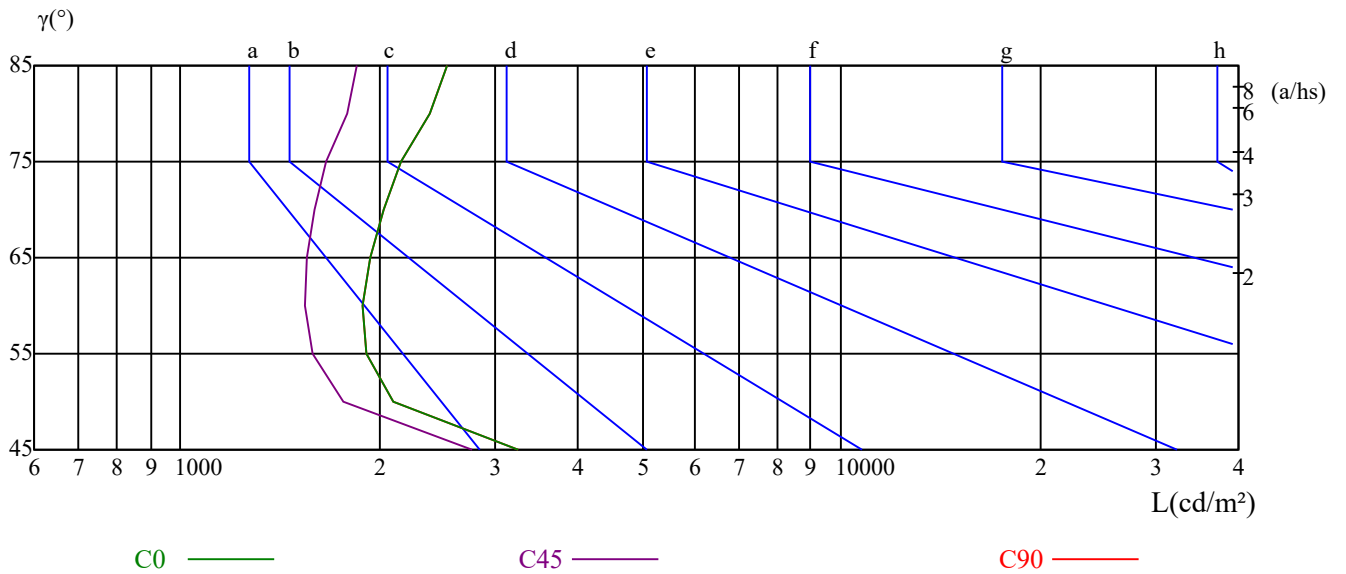
γ	45	50	55	60	65	70	75	80	85
C0	3235	2096	1910	1890	1935	2027	2157	2377	2533
C45	2762	1763	1582	1540	1549	1592	1659	1785	1851
C90	3235	2096	1910	1890	1935	2027	2157	2377	2533

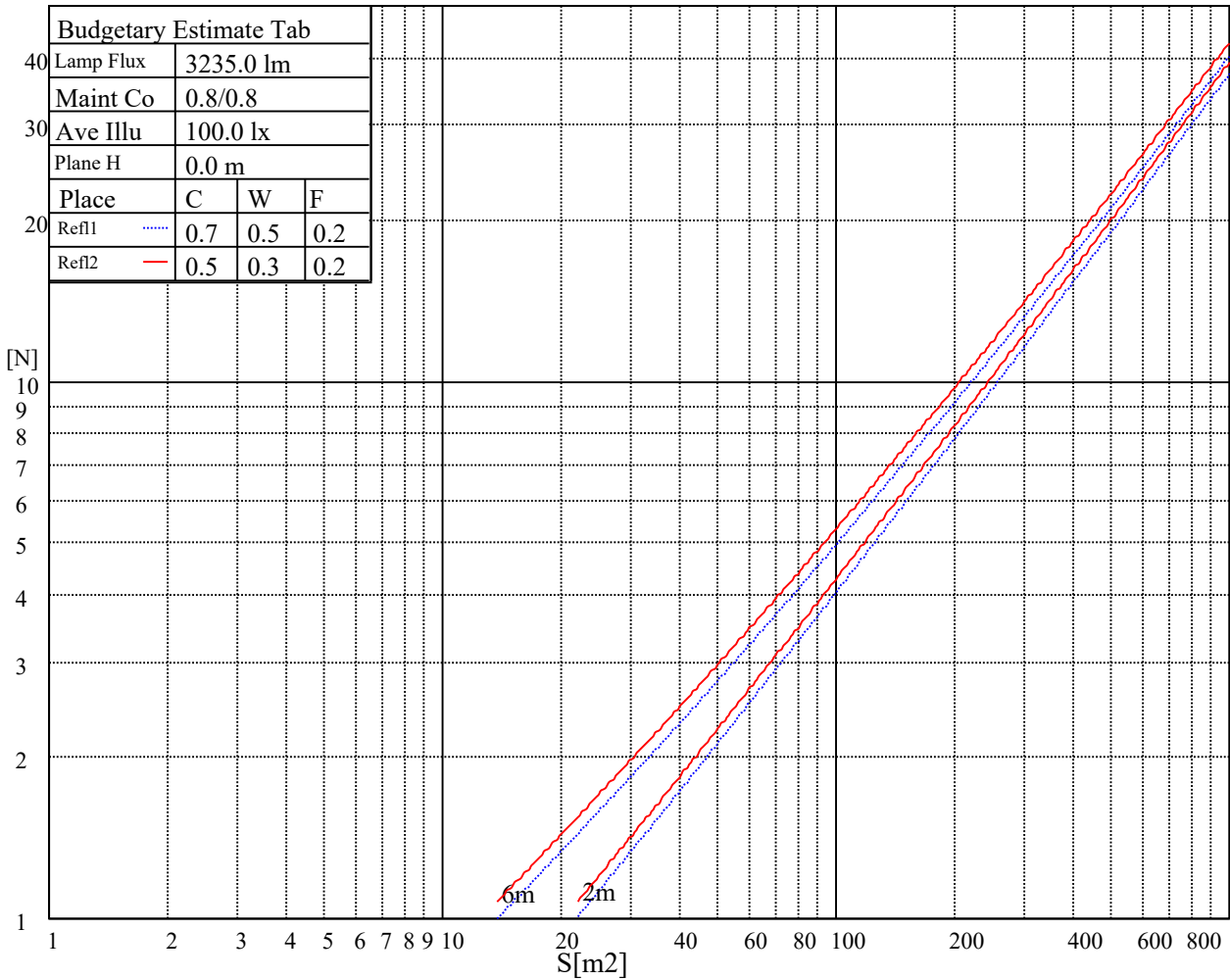
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4861	4861	4861	7832	7832	7832	22946	22946	22946

Glare Table

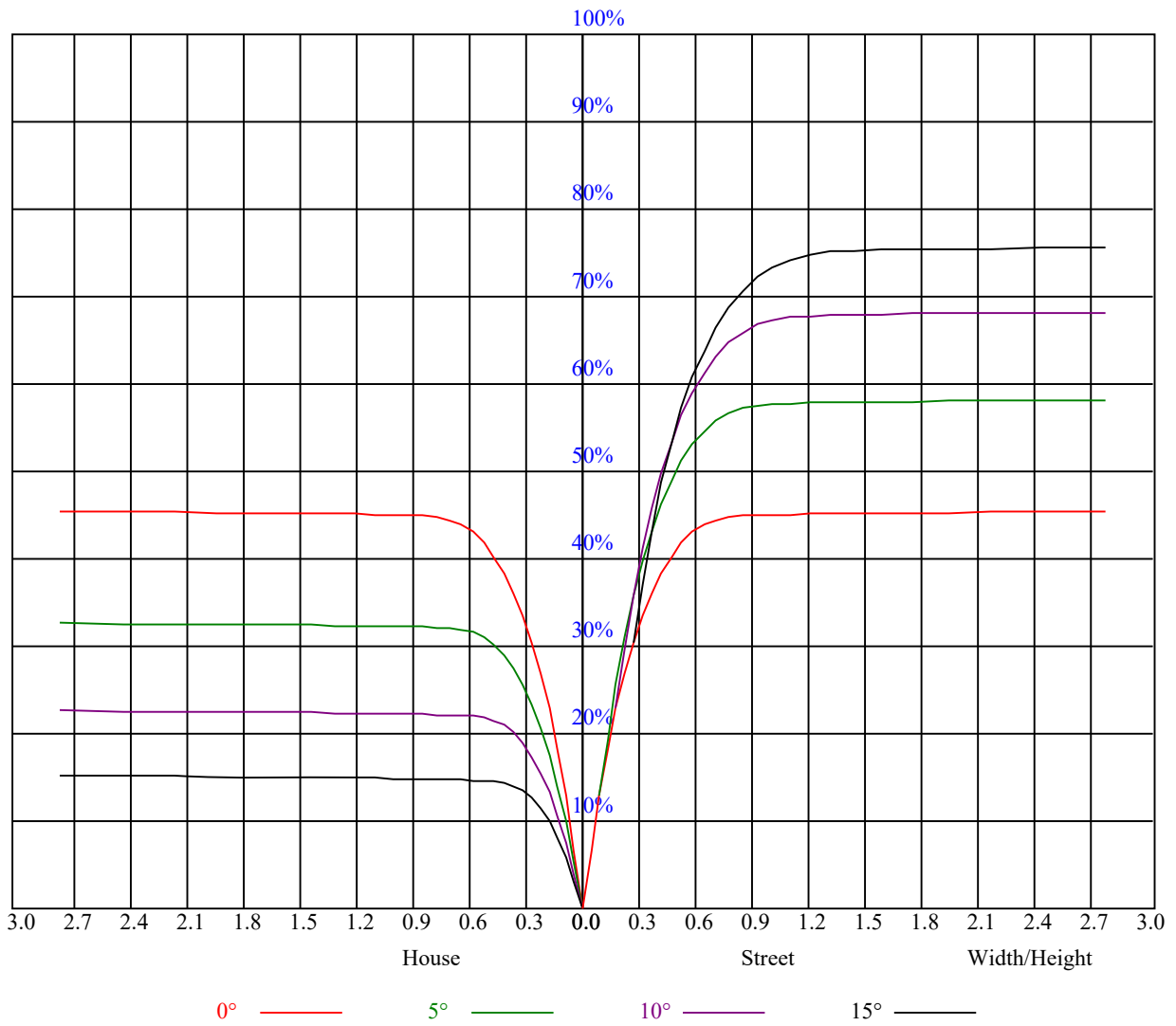
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.95	0.95	0.95	0.93
1	1.04	1.01	1.00	1.02	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88
2	0.98	0.94	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.88	0.86	0.85	0.83
3	0.92	0.88	0.85	0.91	0.87	0.85	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.82	0.81	0.79
4	0.88	0.83	0.80	0.87	0.83	0.80	0.85	0.81	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
5	0.83	0.79	0.76	0.83	0.78	0.75	0.81	0.77	0.75	0.80	0.76	0.74	0.78	0.76	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.71	0.78	0.74	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.69
7	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.67	0.73	0.69	0.67	0.66
8	0.73	0.68	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
9	0.70	0.66	0.63	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.59



Nata 3-1938-M

Intensity data(cd)

C/\u03b3(\u00b0)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
45.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
90.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
135.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
180.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
225.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
270.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
315.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55
360.0	11570.38	9426.26	4775.65	3326.12	2564.97	1760.70	1220.88	534.05	92.55

C/\u03b3(\u00b0)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
45.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
90.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
135.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
180.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
225.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
270.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
315.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17
360.0	23.73	15.09	13.38	12.77	12.50	12.39	12.33	12.55	12.17

C/\u03b3(\u00b0)	90.0
0.0	12.06
45.0	12.06
90.0	12.06
135.0	12.06
180.0	12.06
225.0	12.06
270.0	12.06
315.0	12.06
360.0	12.06