

---

Nata

---

LumCAT: 3-1945-M  
Luminaire: BJB 47.319.2141  
Report No: GC2017041506  
Test No: NT-0010  
LampCAT: BRIDGELUX V18B  
Lamp flux(lm): 3874.0  
Number of Lamps: 1  
Length(mm): 86  
Phm Type: C

Voltage(V): 35.0000  
Current(A): 0.8000  
Power (W): 28.0000  
PF: 0.0000  
Ballast type: DC  
Width(mm): 86  
Height(mm): 0

---

Photometric Results

---

Lumens(lm): 3417.49  
Efficiency(%): 88.22%  
Lumens(lm)/Power(W): 122.05  
Central intensity(cd): 4241.821  
Maximum intensity(cd): 4242.990  
Angle of maximum intensity: C=0.0  $\gamma$ =5.0  
Beam Angle(50%Imax): [C0/180]Total=57.6  
                                  [C90/270]Total=57.6  
Field angle(10%Imax): [C0/180]Total=75.8  
                                  [C90/270]Total=75.8  
Maximum s/h(1/2): C0\_180=0.93 C90\_270=0.93  
Maximum s/h(1/4): C0\_180=0.85 C90\_270=0.85  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 88.22%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.484%

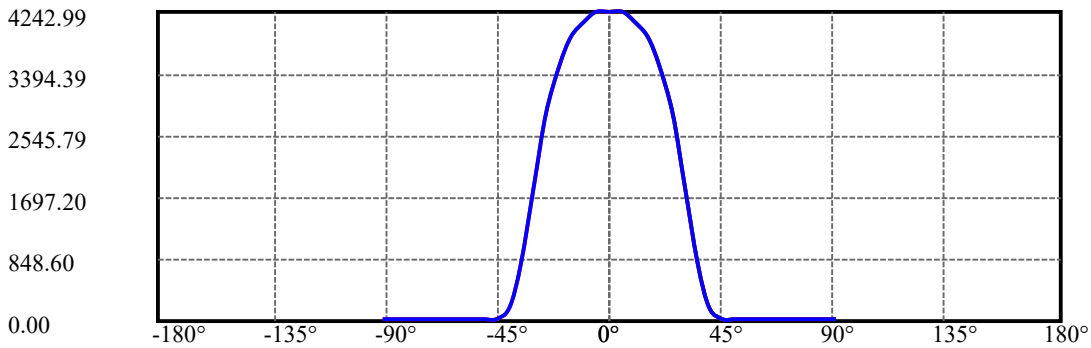
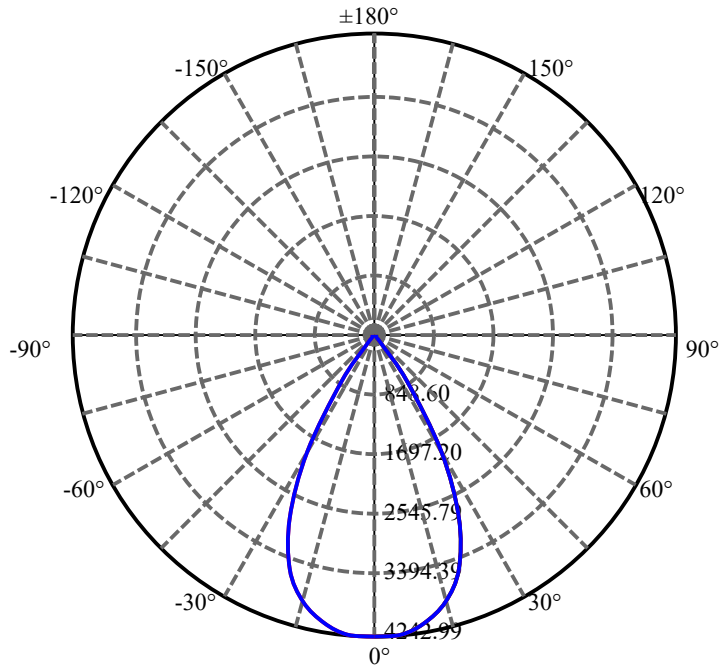
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4241.820	0.000	0	.000%	.000%
5.0	4242.990	101.433	101.433	2.618%	2.968%
10.0	4116.429	299.043	400.476	7.719%	11.718%
15.0	3893.795	475.161	875.637	12.265%	25.622%
20.0	3499.867	609.342	1484.979	15.729%	43.452%
25.0	2845.521	665.514	2150.493	17.179%	62.926%
30.0	1896.831	600.149	2750.642	15.492%	80.487%
35.0	780.115	394.199	3144.841	10.176%	92.022%
40.0	171.542	158.777	3303.617	4.099%	96.668%
45.0	28.223	36.988	3340.606	.955%	97.750%
50.0	18.850	9.512	3350.117	.246%	98.028%
55.0	17.026	7.801	3357.918	.201%	98.257%
60.0	16.544	7.760	3365.678	.200%	98.484%
65.0	16.593	8.056	3373.733	.208%	98.719%
70.0	16.276	8.323	3382.056	.215%	98.963%
75.0	18.905	9.196	3391.252	.237%	99.232%
80.0	16.668	9.518	3400.77	.246%	99.511%
85.0	15.436	8.724	3409.494	.225%	99.766%
90.0	13.785	8.001	3417.495	.207%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2750.64	71.00%	80.49%
0-40	3303.62	85.28%	96.67%
0-60	3365.68	86.88%	98.48%
0-90	3409.49	88.01%	99.77%
0-120	3409.49	88.01%	99.77%
0-180	3417.49	88.22%	100.00%
60-90	51.58	1.33%	1.51%
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%
0-29.86	2734.00	70.57%	80.00%

ZONAL LUMEN SUMMARY

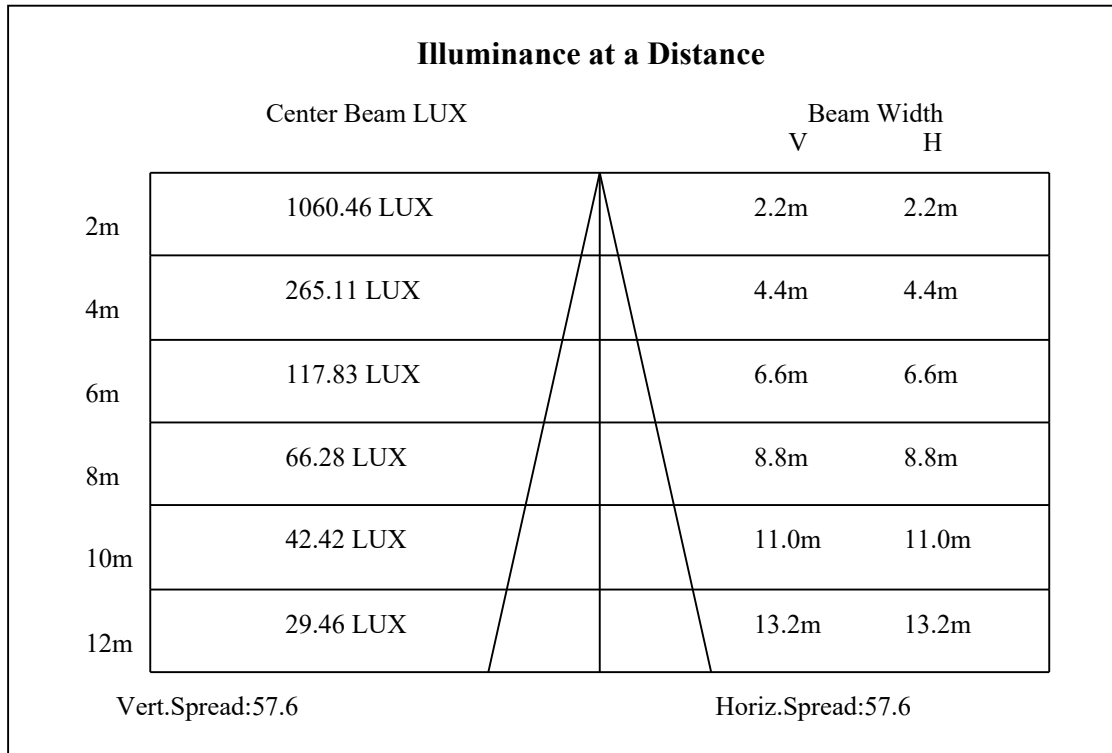
0-10	400.48
10-20	1084.50
20-30	1265.66
30-40	552.98
40-50	46.50
50-60	15.56
60-70	16.38
70-80	18.71
80-90	8.72
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

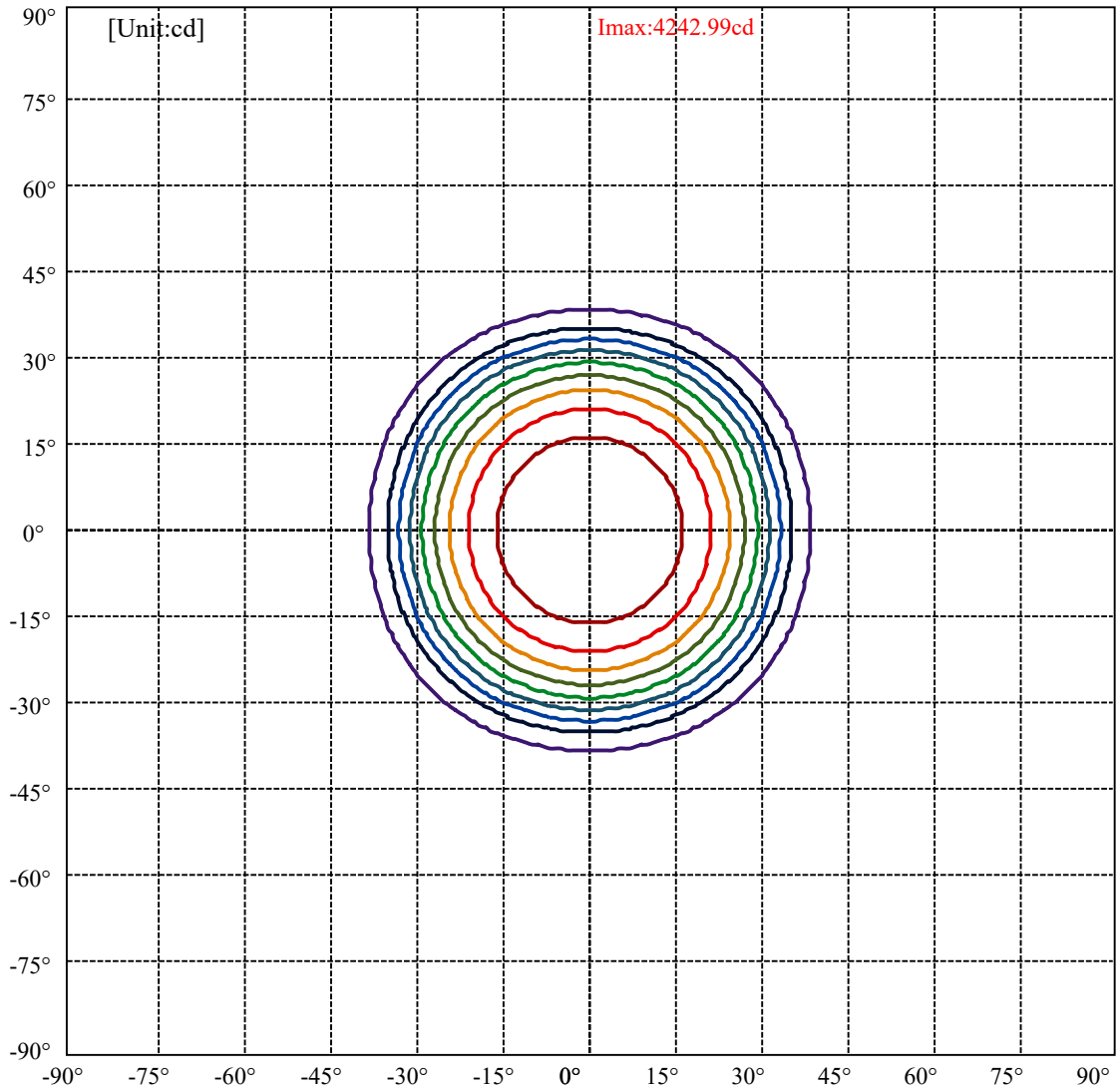


C0(Max): ———  
C0/C180: ———  
C90/C270: ———

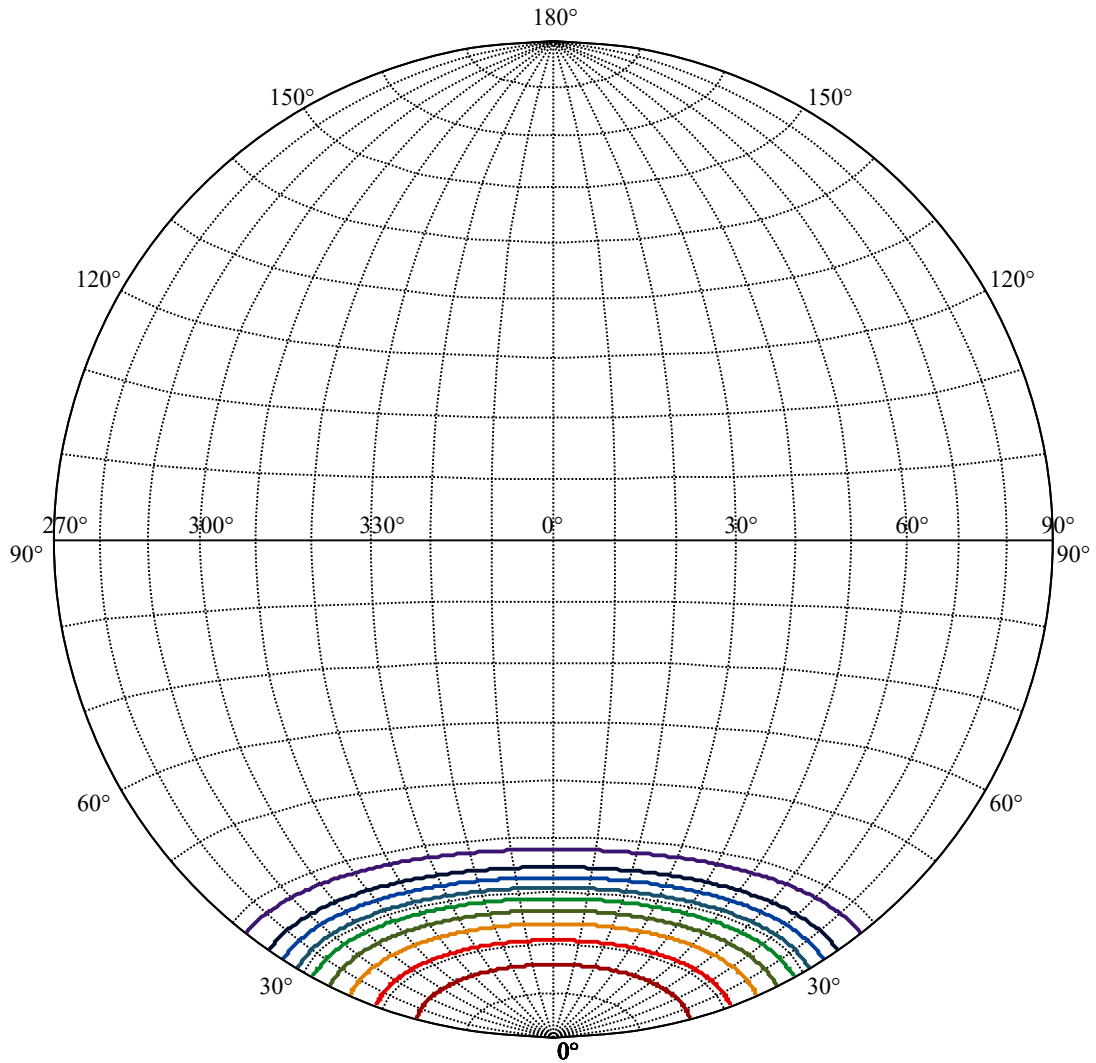
Field angle(10%Imax):C0/180Left:42.9 Right:32.9  
:C90/270Left:42.9 Right:32.9

Beam Angle(50%Imax):C0/180Left:33.8 Right:23.8  
:C90/270Left:33.8 Right:23.8





(10%Imax) 424.299	—
(20%Imax) 848.598	—
(30%Imax) 1272.9	—
(40%Imax) 1697.2	—
(50%Imax) 2121.5	—
(60%Imax) 2545.79	—
(70%Imax) 2970.09	—
(80%Imax) 3394.39	—
(90%Imax) 3818.69	—



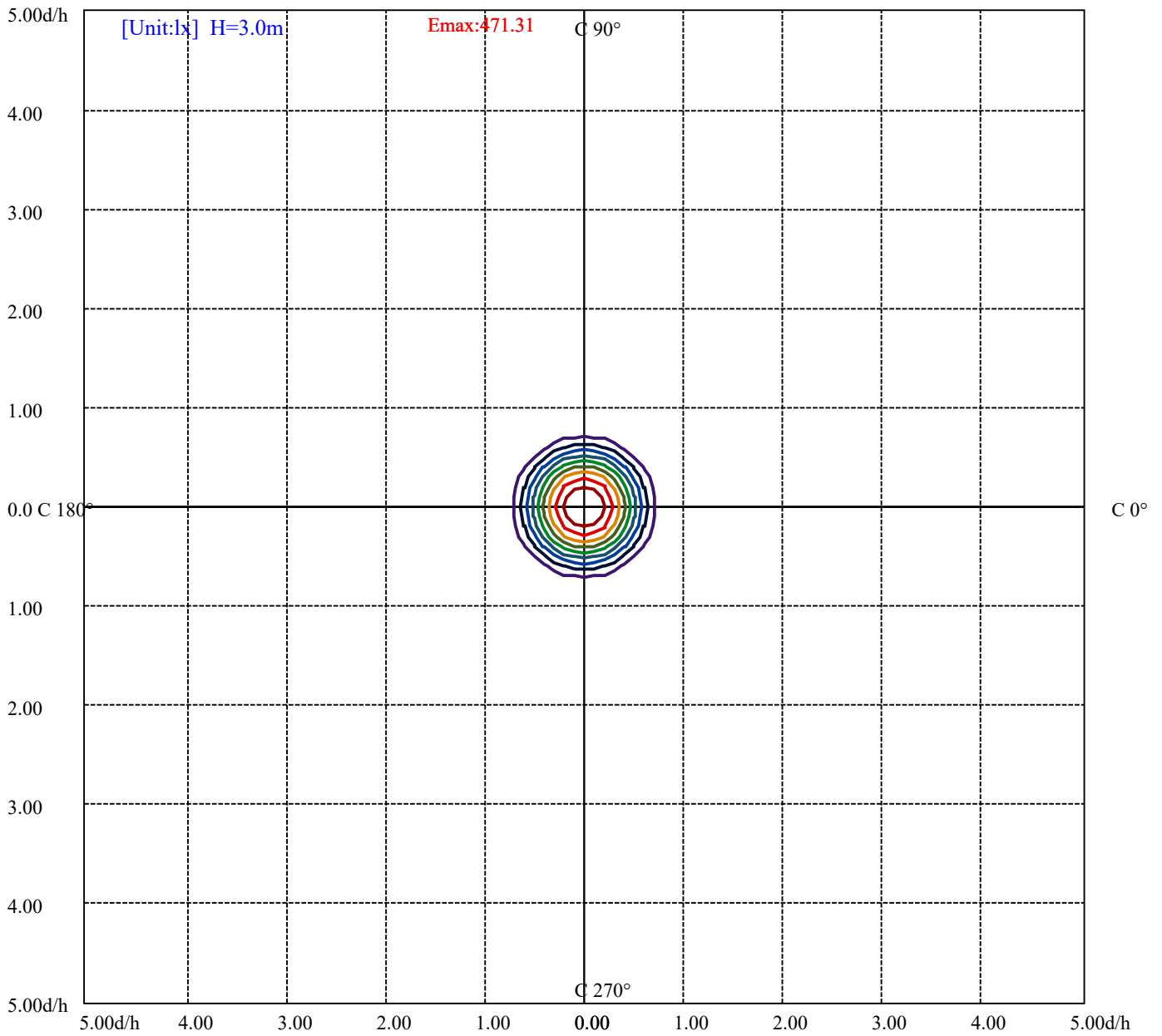
House

[Unit:cd]

Road

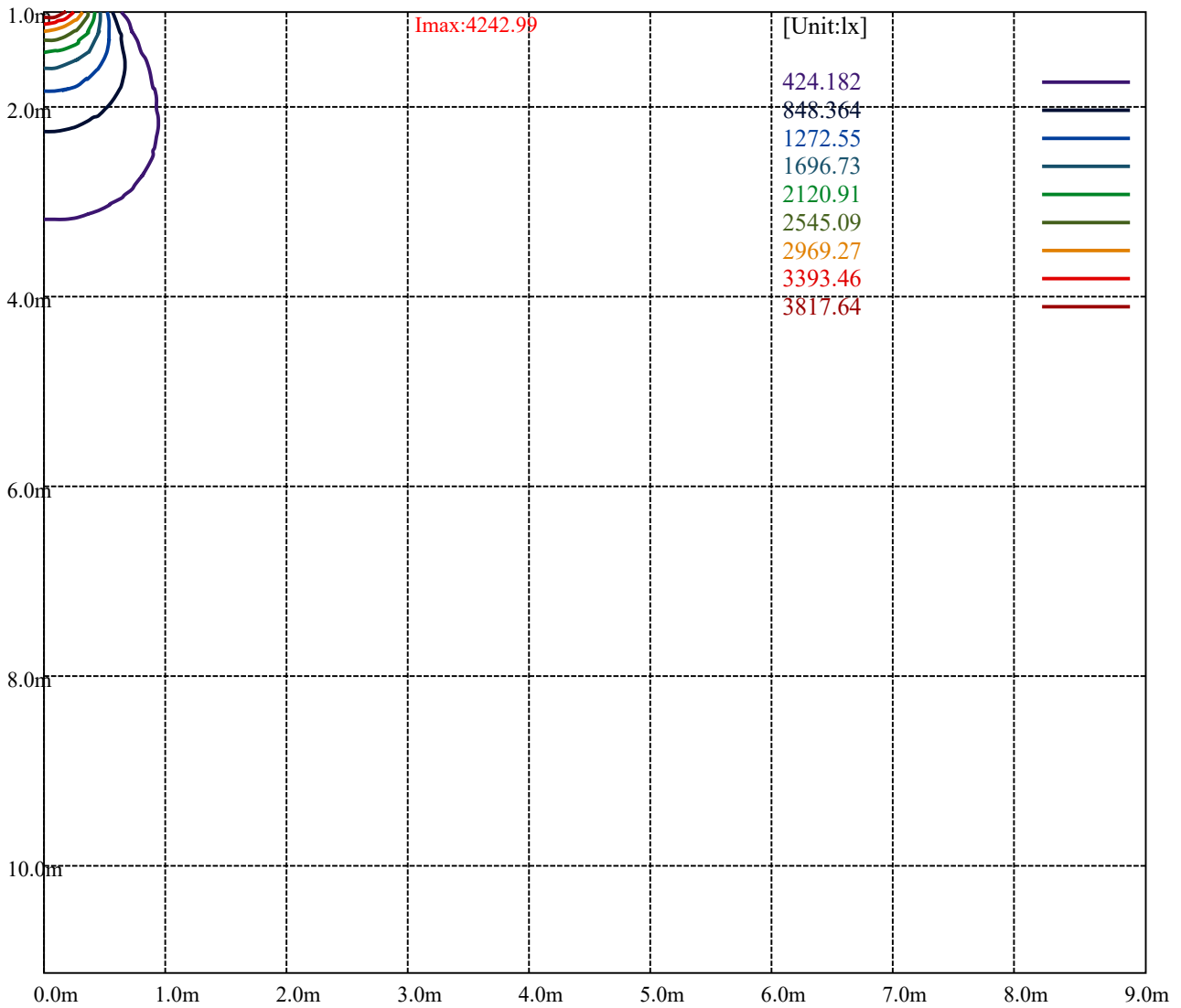
Imax:4242.99

(10%Imax)	424.299	—
(20%Imax)	848.598	—
(30%Imax)	1272.9	—
(40%Imax)	1697.2	—
(50%Imax)	2121.5	—
(60%Imax)	2545.79	—
(70%Imax)	2970.09	—
(80%Imax)	3394.39	—
(90%Imax)	3818.69	—



(10%Emax) 47.13133	—
(20%Emax) 94.26266	—
(30%Emax) 141.3945	—
(40%Emax) 188.5256	—
(50%Emax) 235.6567	—
(60%Emax) 282.7878	—
(70%Emax) 329.9189	—
(80%Emax) 377.0511	—
(90%Emax) 424.1822	—





Luminance Table

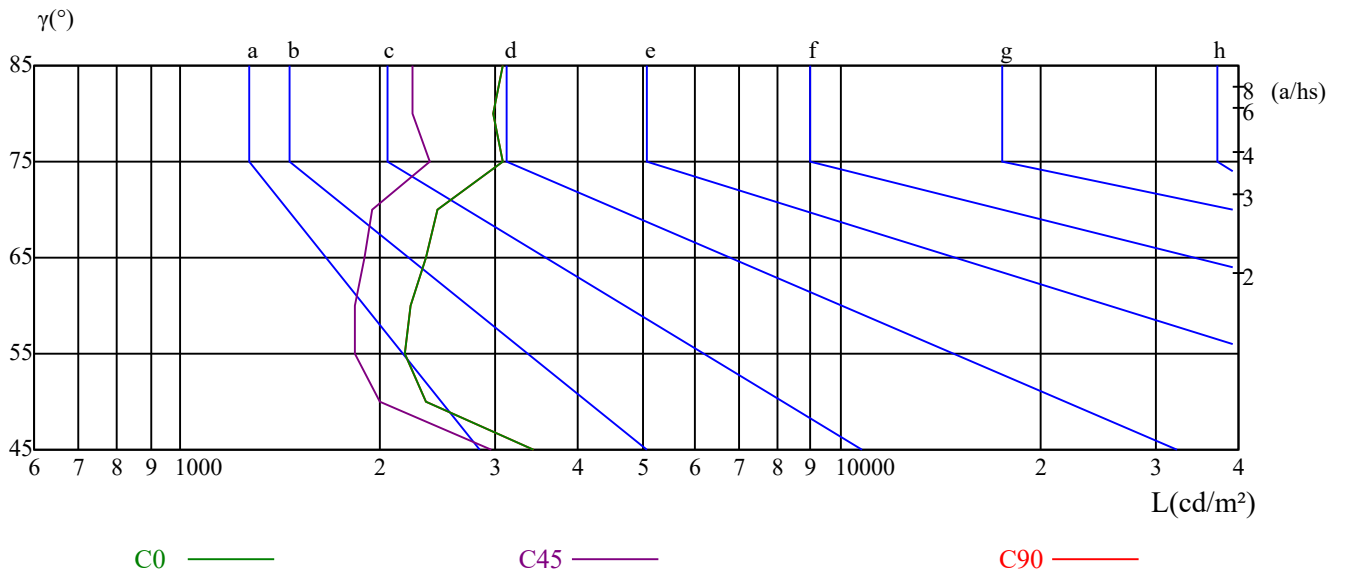
$\gamma$	45	50	55	60	65	70	75	80	85
C0	3428	2347	2193	2224	2350	2457	3079	2973	3067
C45	2962	1998	1838	1833	1903	1950	2391	2249	2251
C90	3428	2347	2193	2224	2350	2457	3079	2973	3067

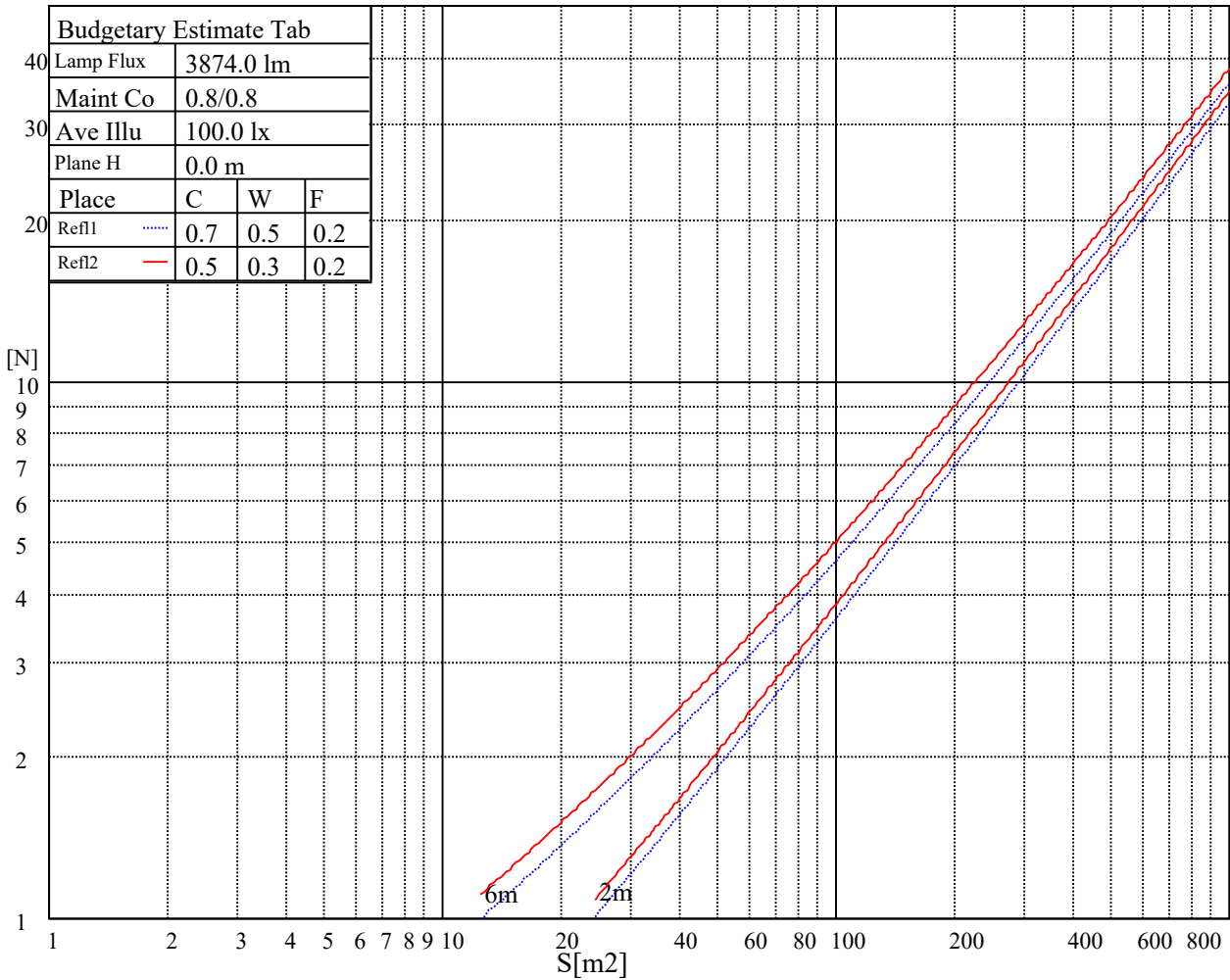
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5434	5434	5434	10110	10110	10110	24514	24514	24514

Glare Table

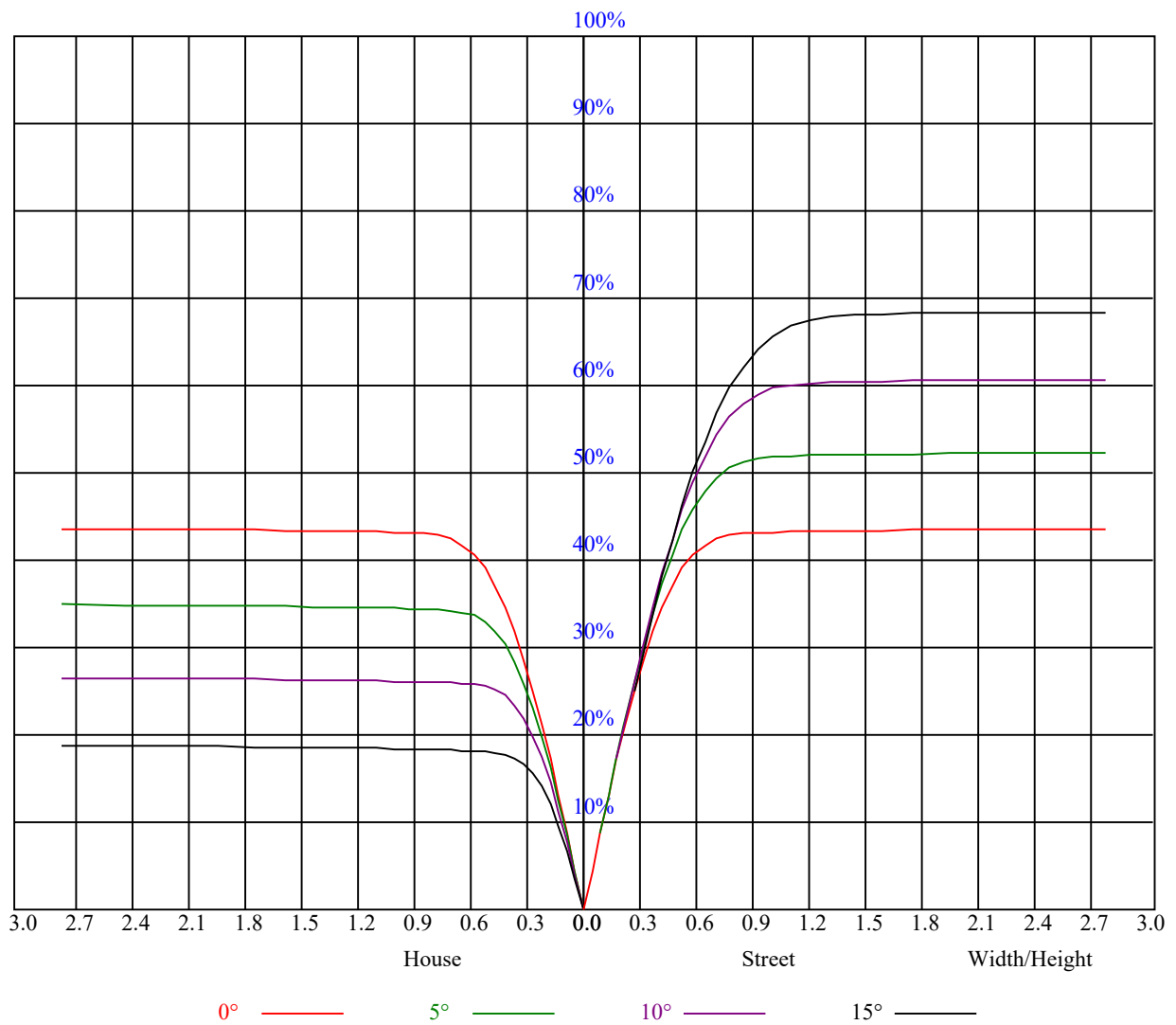
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.05	1.05	1.05	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.90	0.90	0.90	0.88
1	0.98	0.96	0.94	0.96	0.94	0.92	0.92	0.91	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83
2	0.91	0.88	0.85	0.90	0.87	0.84	0.87	0.84	0.82	0.84	0.82	0.80	0.82	0.80	0.79	0.77
3	0.86	0.81	0.78	0.84	0.81	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.78	0.76	0.74	0.73
4	0.81	0.76	0.72	0.80	0.75	0.72	0.78	0.74	0.71	0.76	0.73	0.70	0.74	0.72	0.69	0.68
5	0.76	0.71	0.67	0.75	0.70	0.67	0.73	0.70	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.64
6	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.60
7	0.68	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.61	0.58	0.64	0.61	0.58	0.57
8	0.64	0.59	0.56	0.64	0.59	0.56	0.63	0.58	0.55	0.62	0.58	0.55	0.61	0.57	0.55	0.54
9	0.61	0.56	0.53	0.60	0.56	0.52	0.60	0.55	0.52	0.59	0.55	0.52	0.58	0.55	0.52	0.51
10	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.52	0.50	0.56	0.52	0.49	0.55	0.52	0.49	0.48



Nata 3-1945-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	4248.15	4259.71	4157.86	3931.03	3547.28	2937.81	2028.28	876.50	308.32
45.0	4239.34	4272.93	4227.78	4054.35	3681.62	3093.07	2285.94	1092.87	282.44
90.0	4242.65	4287.79	4191.99	3960.21	3561.05	2892.11	1960.56	844.57	121.84
135.0	4237.14	4280.08	4172.72	3972.87	3603.99	2964.79	2125.18	887.51	289.05
180.0	4248.15	4251.46	4079.13	3857.25	3448.73	2762.18	1828.42	674.00	79.56
225.0	4239.34	4176.58	3987.74	3732.27	3298.98	2555.17	1335.67	467.59	60.12
270.0	4242.65	4204.66	4046.09	3831.93	3457.54	2805.12	1842.74	751.52	149.59
315.0	4237.14	4210.71	4068.12	3810.45	3399.73	2753.92	1767.86	646.36	81.43
360.0	4248.15	4259.71	4157.86	3931.03	3547.28	2937.81	2028.28	876.50	308.32

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	30.06	18.61	16.30	15.42	14.81	14.48	14.70	15.20	15.47
45.0	37.44	19.60	16.68	15.64	14.98	14.59	14.42	14.59	14.76
90.0	28.41	19.32	17.40	16.68	16.41	16.68	24.67	20.76	15.53
135.0	31.44	19.93	18.44	18.94	20.10	17.78	19.16	16.41	15.69
180.0	24.06	17.56	16.13	15.47	15.03	14.81	14.81	15.14	15.36
225.0	21.47	17.73	16.63	16.68	17.51	16.08	16.85	15.42	15.53
270.0	27.31	19.49	17.78	17.56	18.22	20.10	30.94	20.59	15.91
315.0	25.60	18.55	16.85	15.97	15.69	15.69	15.69	15.25	15.25
360.0	30.06	18.61	16.30	15.42	14.81	14.48	14.70	15.20	15.47

C/γ(°)	90.0
0.0	13.87
45.0	13.76
90.0	13.71
135.0	13.82
180.0	13.82
225.0	13.76
270.0	13.76
315.0	13.76
360.0	13.87