
Nata

LumCAT: 3-1945-M	
Luminaire: BJB 47.319.2344	
Report No: GC2017070306	Voltage(V): 34.3300
Test No: NT-0010	Current(A): 0.5000
LampCAT: Certaflux SLM 1208 L14 G1	Power (W): 17.1650
Lamp flux(lm): 2321.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 86	Width(mm): 86
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2092.62
Efficiency(%): 90.16%
Lumens(lm)/Power(W): 121.91
Central intensity(cd): 2734.441
Maximum intensity(cd): 2734.441
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=56.3
[C90/270]Total=56.3
Field angle(10%Imax): [C0/180]Total=74.3
[C90/270]Total=74.3
Maximum s/h(1/2): C0_180=0.90 C90_270=0.90
Maximum s/h(1/4): C0_180=0.84 C90_270=0.84
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.16%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.528%

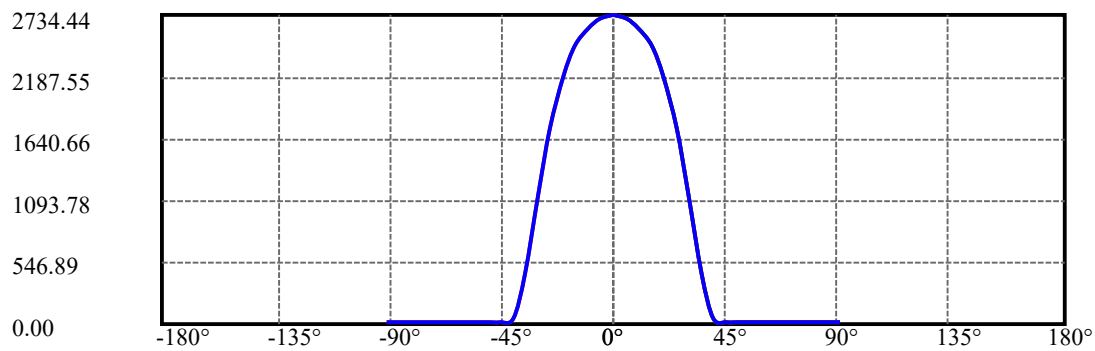
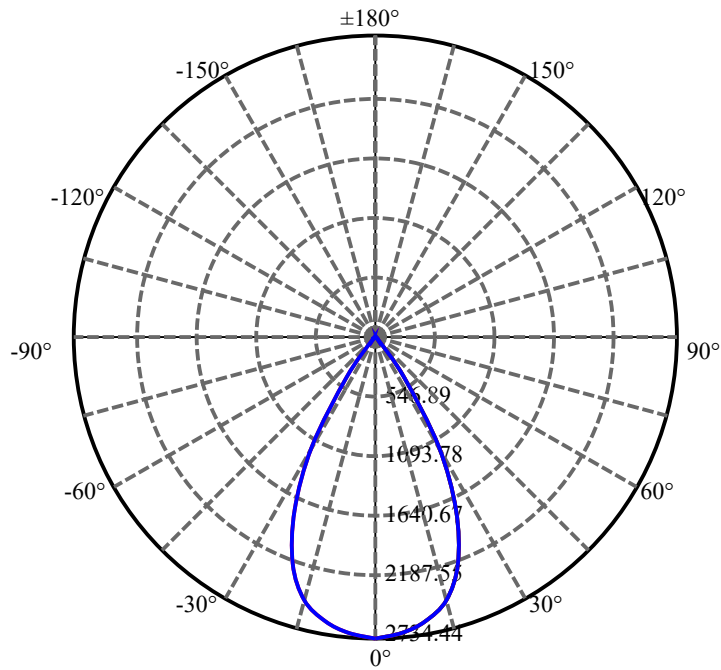
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2734.441	0.000	0	.000%	.000%
5.0	2698.546	64.950	64.95	2.798%	3.104%
10.0	2619.057	190.227	255.177	8.196%	12.194%
15.0	2468.380	301.783	556.961	13.002%	26.615%
20.0	2191.143	384.010	940.971	16.545%	44.966%
25.0	1732.666	411.535	1352.506	17.731%	64.632%
30.0	1152.123	365.072	1717.578	15.729%	82.078%
35.0	446.126	235.353	1952.932	10.140%	93.325%
40.0	43.960	81.767	2034.699	3.523%	97.232%
45.0	16.607	11.215	2045.913	.483%	97.768%
50.0	12.429	5.867	2051.781	.253%	98.048%
55.0	11.047	5.104	2056.885	.220%	98.292%
60.0	10.291	4.932	2061.817	.213%	98.528%
65.0	9.841	4.894	2066.711	.211%	98.762%
70.0	9.349	4.859	2071.571	.209%	98.994%
75.0	10.996	5.318	2076.888	.229%	99.248%
80.0	9.734	5.547	2082.435	.239%	99.513%
85.0	9.442	5.211	2087.646	.225%	99.762%
90.0	8.719	4.973	2092.619	.214%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1717.58	74.00%	82.08%
0-40	2034.70	87.66%	97.23%
0-60	2061.82	88.83%	98.53%
0-90	2087.65	89.95%	99.76%
0-120	2087.65	89.95%	99.76%
0-180	2092.62	90.16%	100.00%
60-90	30.76	1.33%	1.47%
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%
0-29.40	1674.10	72.13%	80.00%

ZONAL LUMEN SUMMARY

0-10	255.18
10-20	685.79
20-30	776.61
30-40	317.12
40-50	17.08
50-60	10.04
60-70	9.75
70-80	10.86
80-90	5.21
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: —————

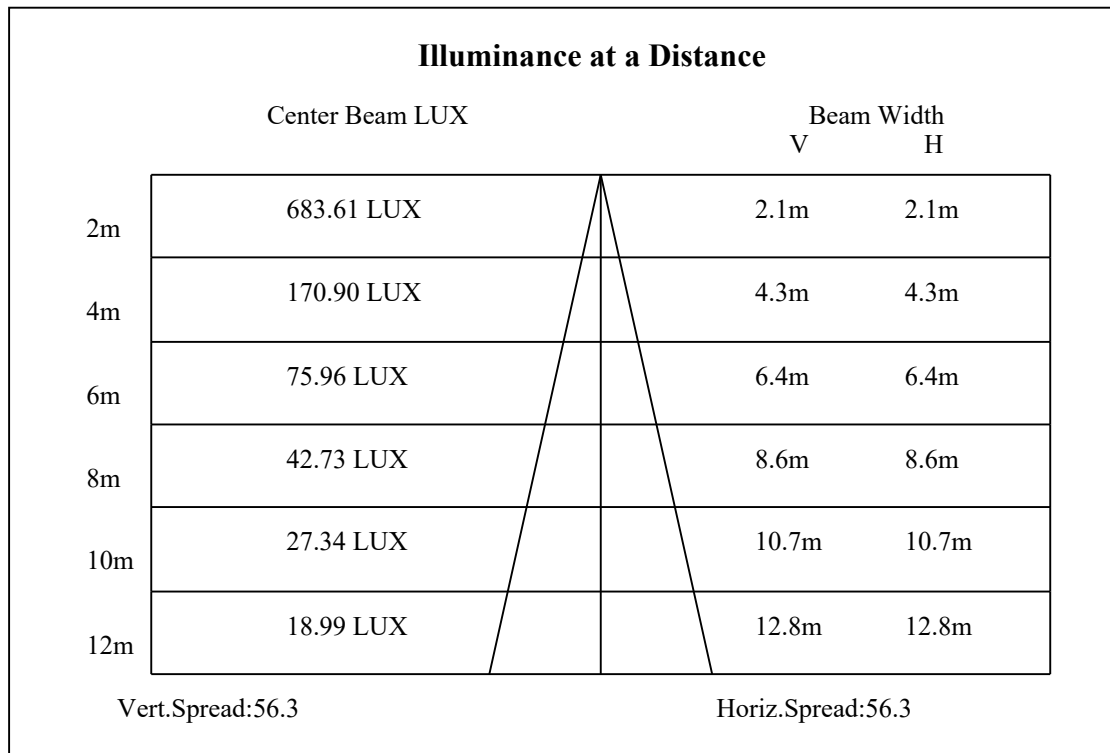
C90/C270: —————

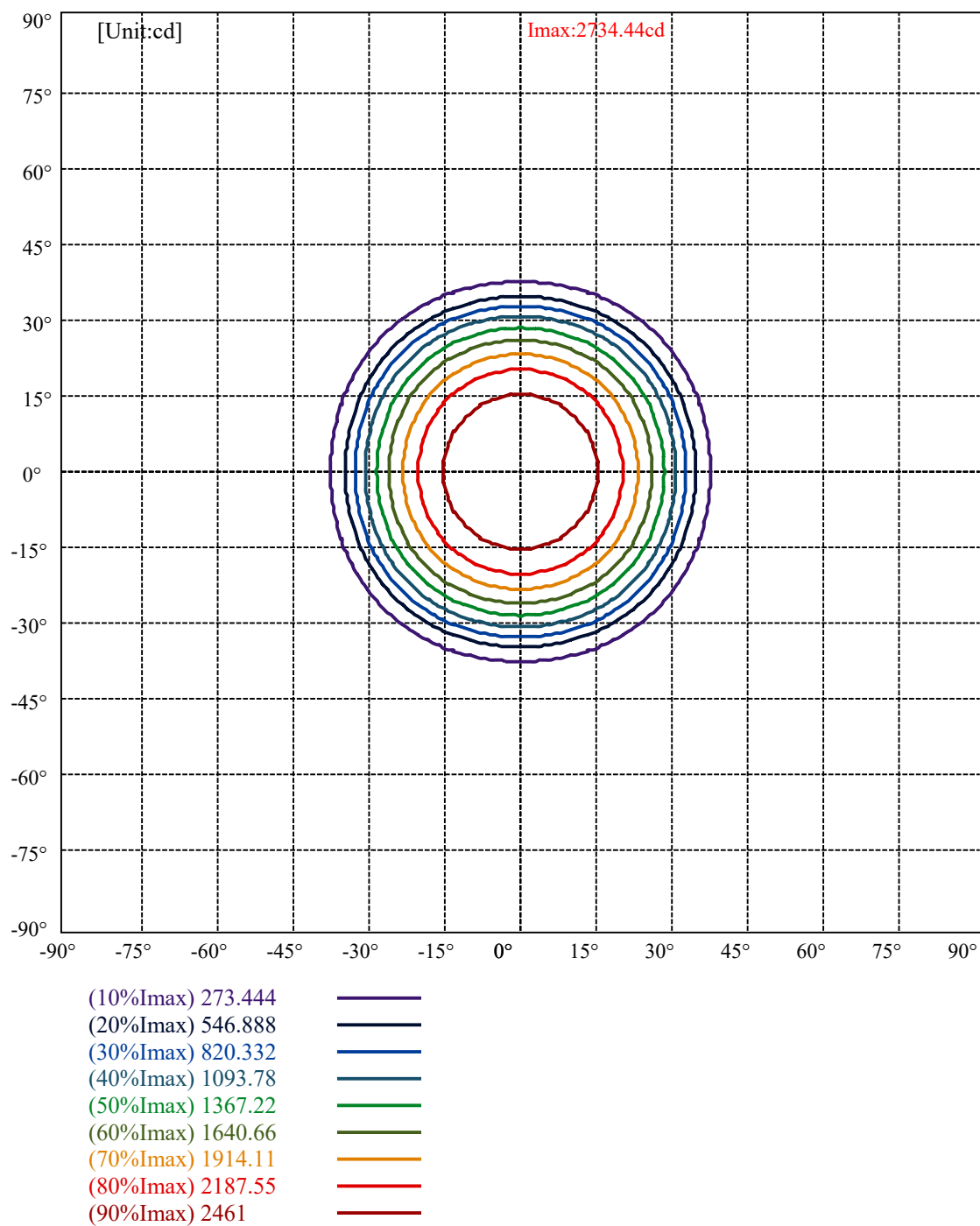
Field angle(10%Imax):C0/180Left:37.1 Right:37.1

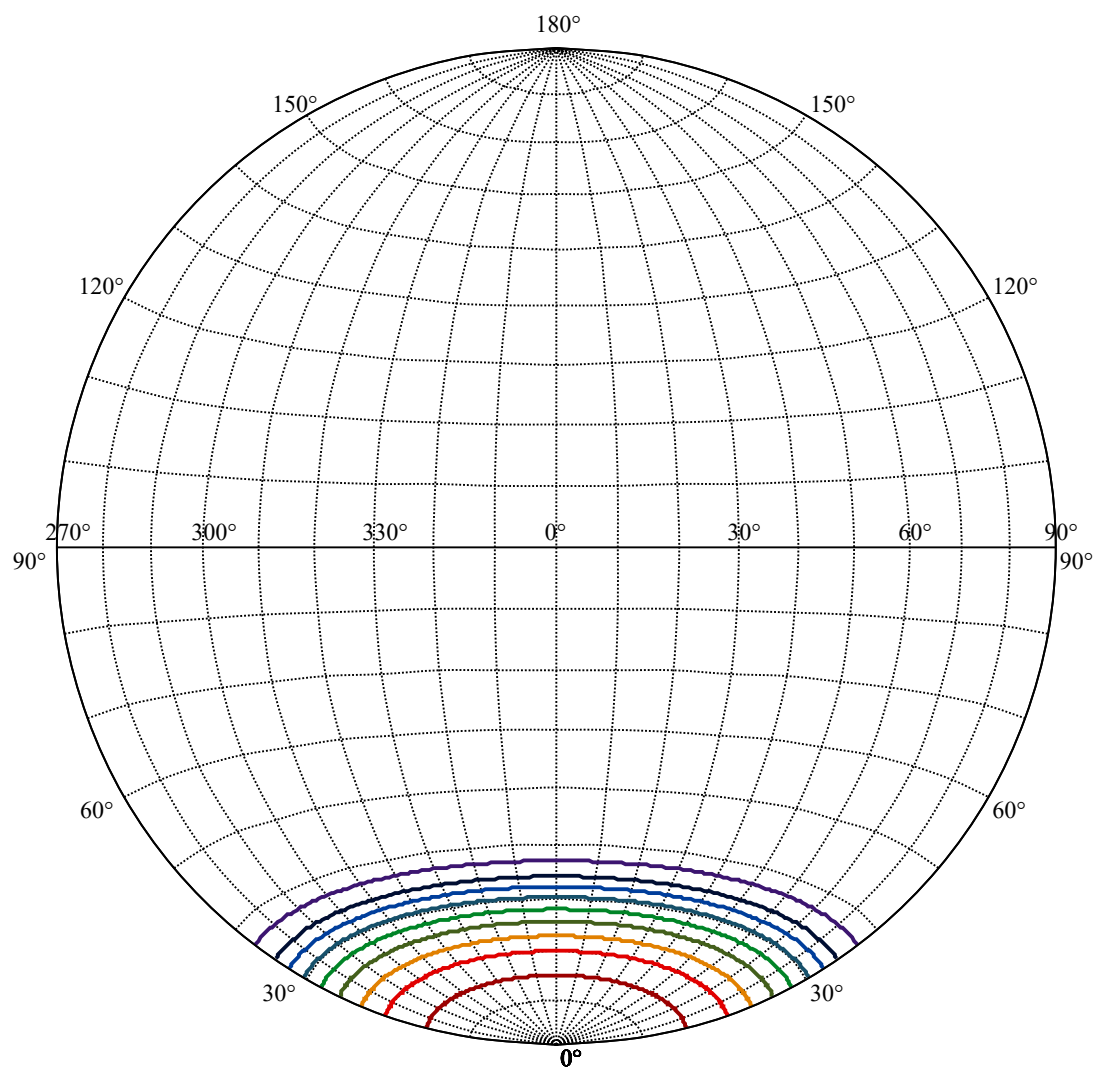
:C90/270Left:37.1 Right:37.1

Beam Angle(50%Imax):C0/180Left:28.1 Right:28.1

:C90/270Left:28.1 Right:28.1







House

[Unit:cd]

Road

Imax:2734.44

(10%Imax) 273.444

(20%Imax) 546.888

(30%Imax) 820.332

(40%Imax) 1093.78

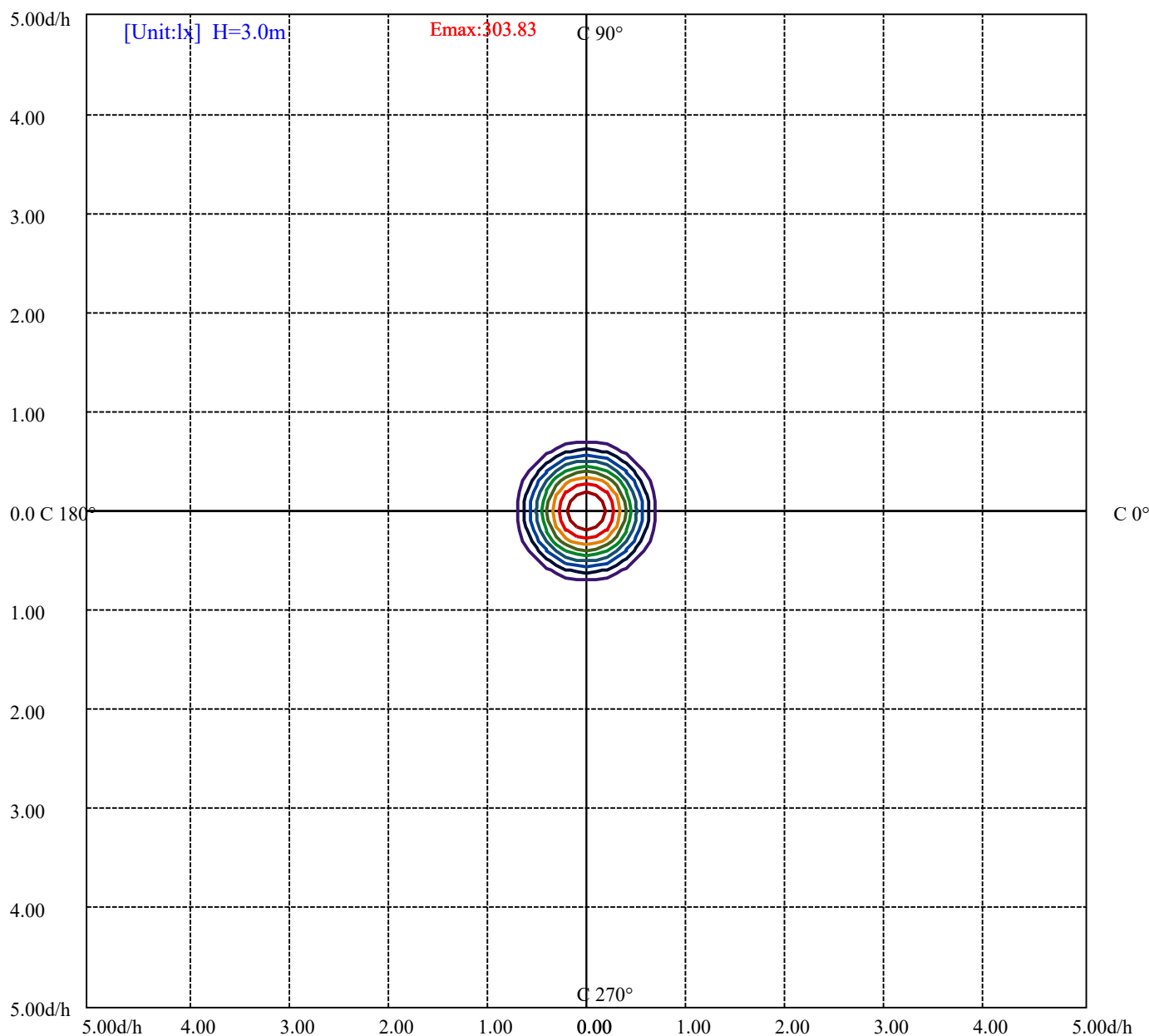
(50%Imax) 1367.22

(60%Imax) 1640.66

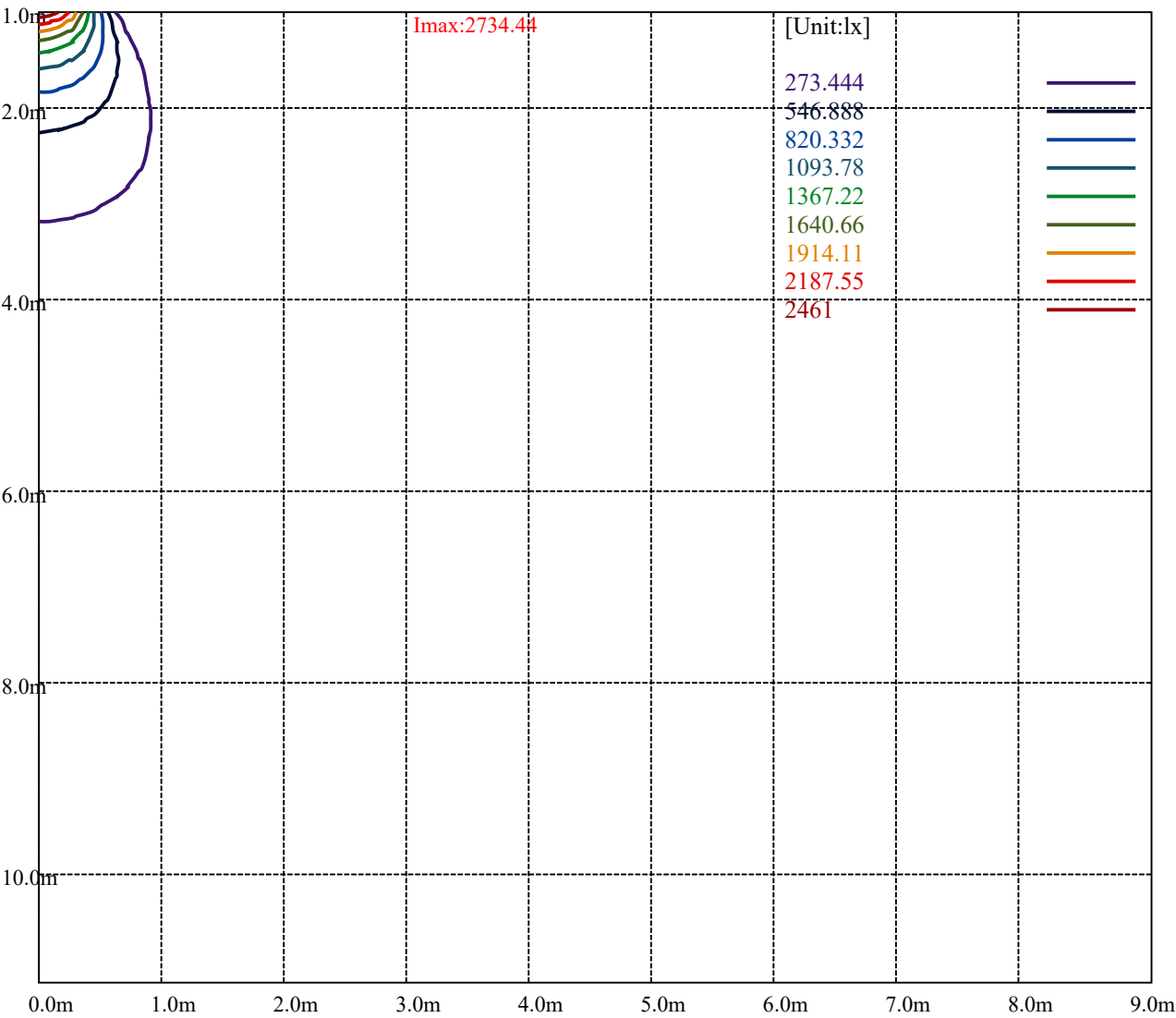
(70%Imax) 1914.11

(80%Imax) 2187.55

(90%Imax) 2461



(10%Emax)	30.38267	—
(20%Emax)	60.76534	—
(30%Emax)	91.14799	—
(40%Emax)	121.5311	—
(50%Emax)	151.9133	—
(60%Emax)	182.2956	—
(70%Emax)	212.6789	—
(80%Emax)	243.0611	—
(90%Emax)	273.4445	—



Luminance Table

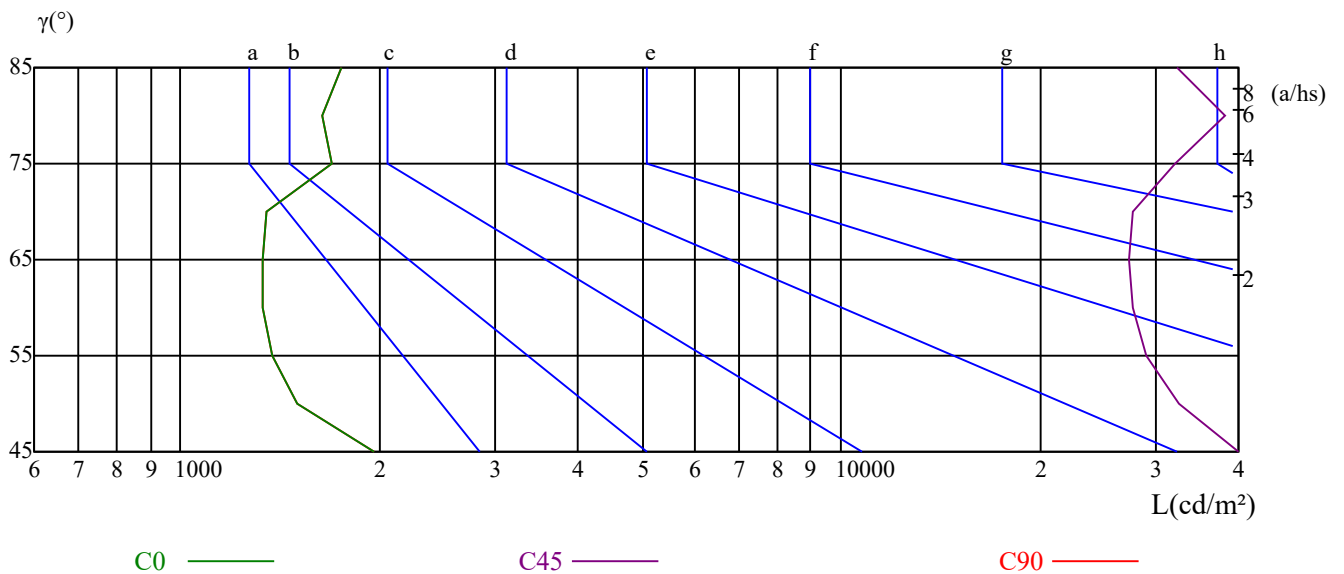
γ	45	50	55	60	65	70	75	80	85
C0	1960	1499	1373	1330	1336	1346	1700	1638	1758
C45	46058	32560	29050	27650	27255	27601	32050	38041	32201
C90	1960	1499	1373	1330	1336	1346	1700	1638	1758

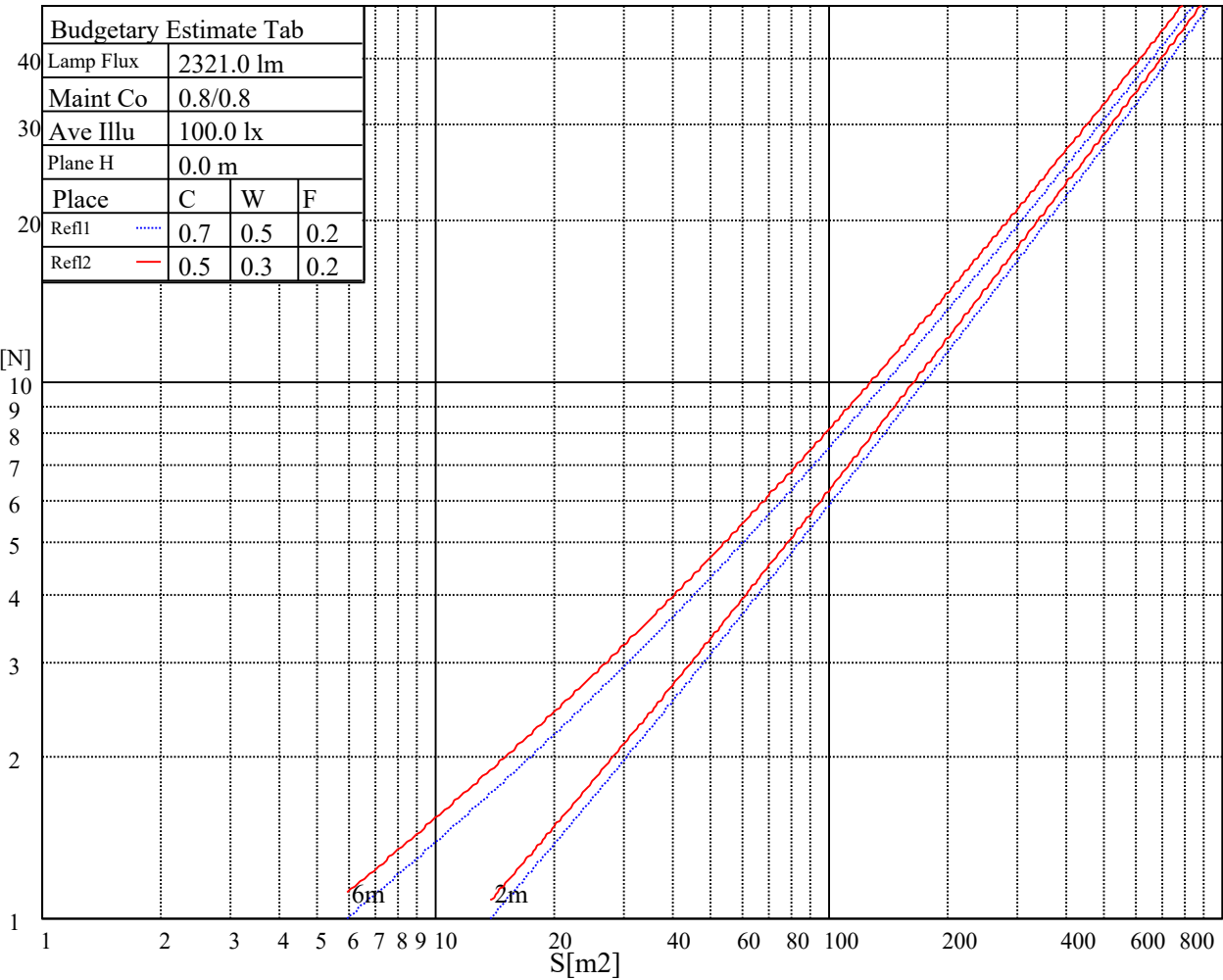
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3223	3223	81712	5880	5880	143495	14995	14995	375131

Glare Table

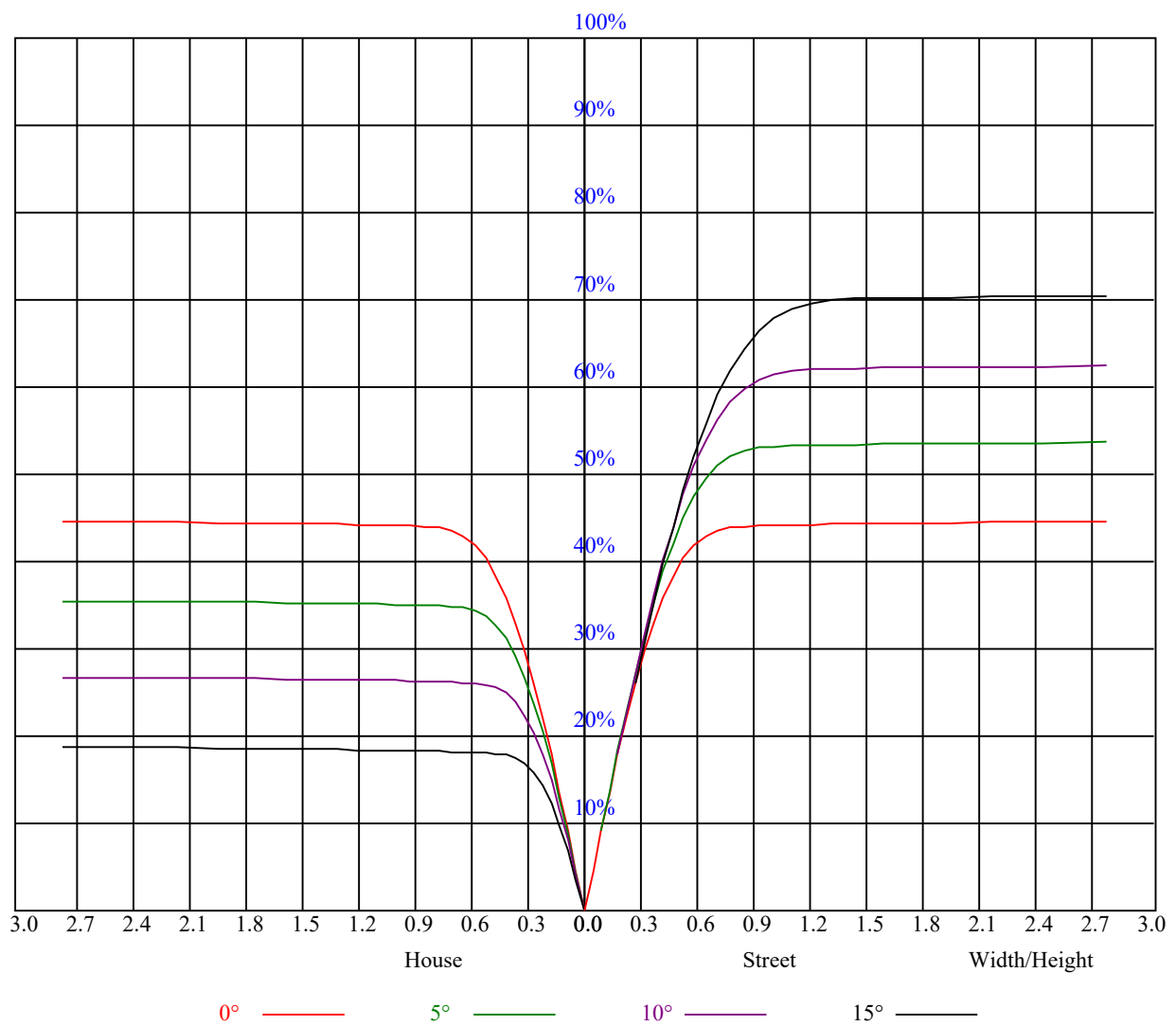
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	≤ 300				
1.5	B		2000	1000	500	≤ 300			
1.85	C			2000	1000	500	≤ 300		
2.2	D				2000	1000	500	≤ 300	
2.55	E					2000	1000	500	≤ 300
		a	b	c	d	e	f	g	h

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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.87	0.84	0.86	0.84	0.82	0.84	0.82	0.81	0.79
3	0.88	0.84	0.80	0.87	0.83	0.80	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.75
4	0.83	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.72	0.76	0.74	0.71	0.70
5	0.78	0.73	0.69	0.77	0.73	0.69	0.76	0.72	0.68	0.74	0.71	0.68	0.73	0.70	0.67	0.66
6	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.67	0.64	0.70	0.67	0.64	0.69	0.66	0.63	0.62
7	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
8	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56
9	0.63	0.58	0.54	0.62	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.53
10	0.60	0.55	0.52	0.59	0.55	0.52	0.59	0.54	0.51	0.58	0.54	0.51	0.57	0.54	0.51	0.50



Nata 3-1945-M

Intensity data(cd)										Appendix Page: 14 Total:14	
C/ γ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0		
0.0	2727.48	2717.47	2663.49	2526.58	2226.06	1745.79	1169.24	489.18	43.13		
30.0	2736.39	2726.93	2667.94	2522.13	2202.69	1748.57	1194.28	479.72	51.03		
60.0	2743.07	2721.92	2631.76	2433.09	2125.89	1626.70	1052.20	378.88	41.57		
90.0	2739.17	2709.68	2650.13	2497.64	2197.68	1766.38	1201.52	475.26	51.70		
120.0	2731.94	2699.66	2625.64	2448.11	2168.19	1687.91	1093.89	399.86	41.13		
150.0	2728.60	2691.87	2620.63	2487.63	2228.29	1818.69	1256.61	519.79	54.15		
180.0	2727.48	2670.72	2567.21	2409.16	2160.95	1715.18	1099.29	427.13	40.68		
210.0	2736.39	2660.70	2561.64	2403.59	2151.49	1694.59	1106.80	392.68	38.68		
240.0	2743.07	2691.31	2598.93	2464.81	2232.19	1821.48	1243.26	536.48	49.81		
270.0	2739.17	2678.51	2593.92	2453.12	2190.45	1707.39	1099.29	386.33	37.45		
300.0	2731.94	2711.35	2624.53	2499.31	2238.86	1798.66	1218.77	514.78	44.41		
330.0	2728.60	2702.44	2622.86	2475.38	2170.97	1660.64	1090.33	353.44	33.78		
360.0	2727.48	2717.47	2663.49	2526.58	2226.06	1745.79	1169.24	489.18	43.13		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	16.86	12.47	10.85	10.30	10.41	9.68	15.47	9.68	9.41		
30.0	17.47	12.58	11.07	10.35	10.13	9.52	10.91	9.52	9.24		
60.0	15.86	12.19	10.85	10.02	9.52	9.13	8.96	9.02	9.07		
90.0	17.25	12.58	11.02	10.13	9.52	9.18	8.90	9.07	9.29		
120.0	16.19	12.08	10.74	9.96	9.46	9.13	9.35	9.57	9.79		
150.0	17.36	12.69	11.02	10.18	9.52	9.18	9.02	9.35	9.57		
180.0	15.81	12.19	10.91	10.02	9.52	9.13	9.02	9.02	9.29		
210.0	16.08	12.30	10.91	10.30	9.79	9.46	11.07	9.35	9.24		
240.0	17.81	13.02	11.52	11.07	10.30	9.68	14.91	13.97	9.41		
270.0	16.53	12.69	11.85	10.63	9.96	9.35	12.19	9.35	9.68		
300.0	16.81	12.41	11.13	10.35	9.79	9.29	9.18	9.41	9.63		
330.0	15.25	11.97	10.69	10.18	10.18	9.46	12.97	9.52	9.68		
360.0	16.86	12.47	10.85	10.30	10.41	9.68	15.47	9.68	9.41		
C/ γ (°)	90.0										
0.0	8.74										
30.0	8.68										
60.0	8.68										
90.0	8.68										
120.0	8.68										
150.0	8.74										
180.0	8.74										
210.0	8.74										
240.0	8.68										
270.0	8.74										
300.0	8.79										
330.0	8.74										
360.0	8.74										