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Nata

LumCAT: 3-1943-M	
Luminaire: BJB 47.319.2021	
Report No: GC2017070607	Voltage(V): 34.5600
Test No: NT-0010	Current(A): 0.5000
LampCAT: SEOUL SAWx15	Power (W): 17.2800
Lamp flux(lm): 2402.0	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): 2183.38
Efficiency(%): 90.90%
Lumens(lm)/Power(W): 126.35
Central intensity(cd): 7253.630
Maximum intensity(cd): 7253.630
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.3
 [C90/270]Total=27.3
Field angle(10%Imax): [C0/180]Total=60.2
 [C90/270]Total=60.2
Maximum s/h(1/2): C0_180=0.46 C90_270=0.46
Maximum s/h(1/4): C0_180=0.45 C90_270=0.45
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.90%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.720%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/7/5
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.46

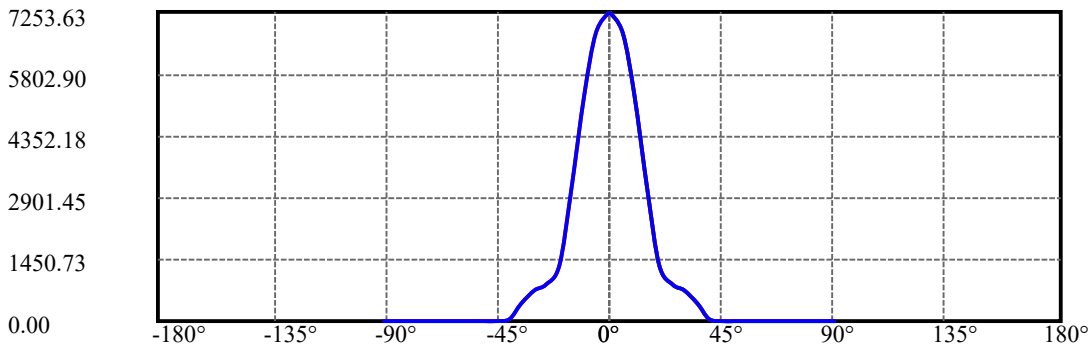
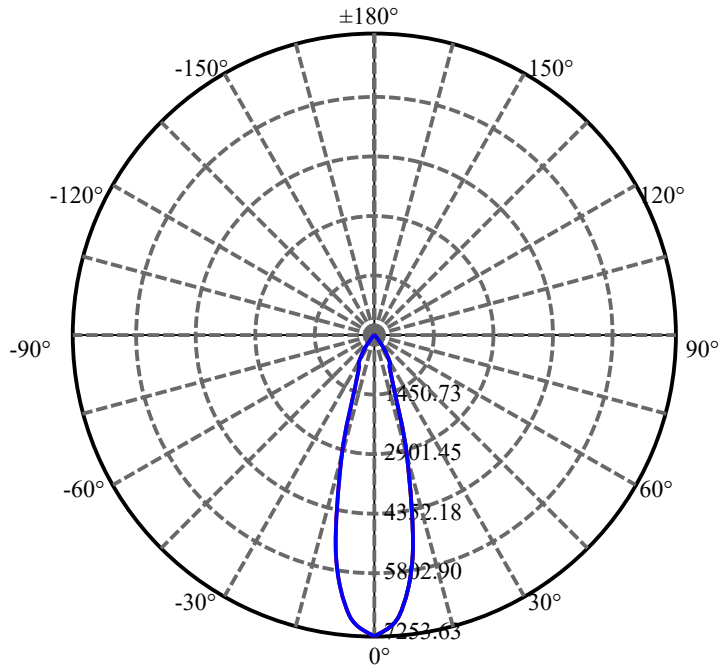
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7253.630	0.000	0	.000%	.000%
5.0	6765.843	167.599	167.599	6.977%	7.676%
10.0	5335.110	432.889	600.488	18.022%	27.503%
15.0	3005.465	494.757	1095.245	20.598%	50.163%
20.0	1328.515	357.181	1452.426	14.870%	66.522%
25.0	868.875	230.466	1682.892	9.595%	77.077%
30.0	731.485	202.527	1885.419	8.432%	86.353%
35.0	387.586	164.791	2050.209	6.861%	93.901%
40.0	67.464	75.922	2126.131	3.161%	97.378%
45.0	13.871	15.060	2141.191	.627%	98.068%
50.0	11.137	5.053	2146.244	.210%	98.299%
55.0	10.163	4.631	2150.876	.193%	98.511%
60.0	9.530	4.552	2155.428	.190%	98.720%
65.0	9.231	4.561	2159.989	.190%	98.929%
70.0	9.009	4.618	2164.607	.192%	99.140%
75.0	8.835	4.664	2169.271	.194%	99.354%
80.0	8.703	4.692	2173.964	.195%	99.569%
85.0	8.640	4.712	2178.676	.196%	99.785%
90.0	8.543	4.705	2183.381	.196%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1885.42	78.49%	86.35%
0-40	2126.13	88.52%	97.38%
0-60	2155.43	89.73%	98.72%
0-90	2178.68	90.70%	99.78%
0-120	2178.68	90.70%	99.78%
0-180	2183.38	90.90%	100.00%
60-90	27.80	1.16%	1.27%
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%
0-26.58	1746.70	72.72%	80.00%

ZONAL LUMEN SUMMARY

0-10	600.49
10-20	851.94
20-30	432.99
30-40	240.71
40-50	20.11
50-60	9.18
60-70	9.18
70-80	9.36
80-90	4.71
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: —————

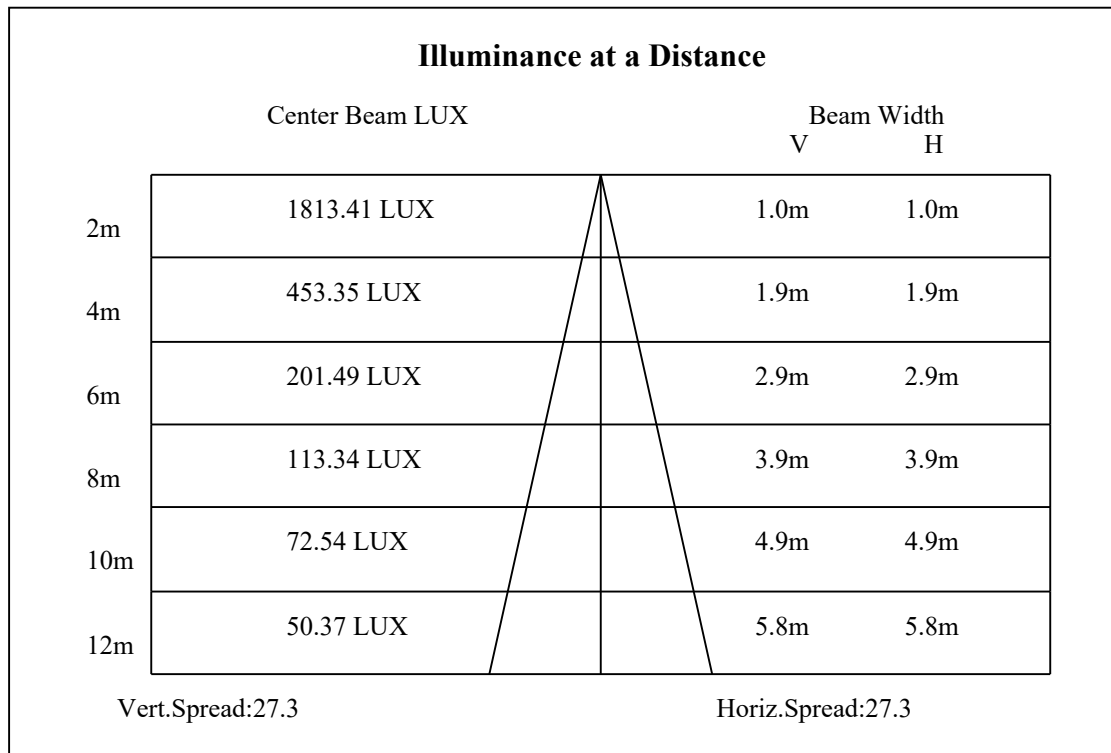
C90/C270: —————

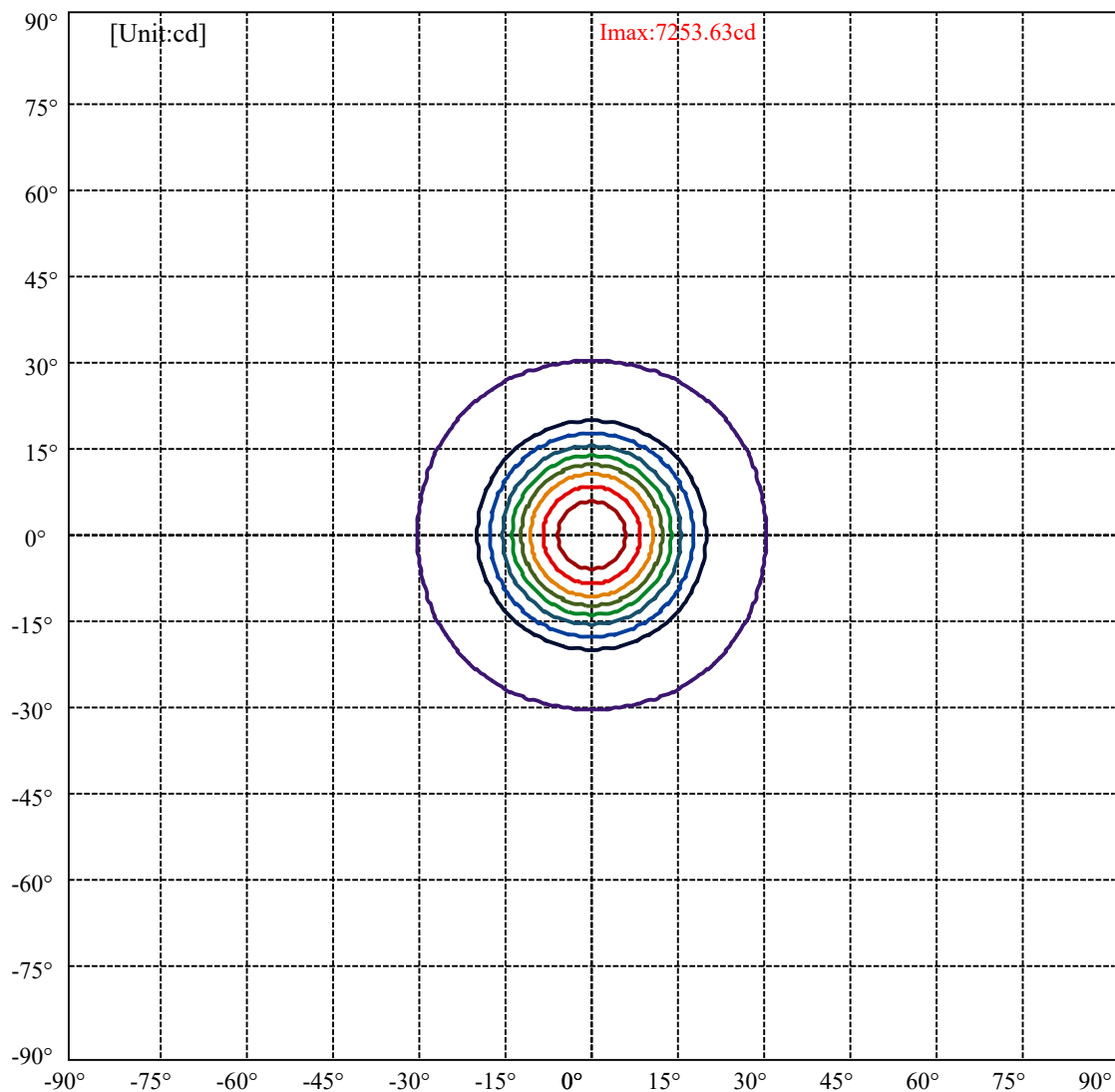
Field angle(10%Imax):C0/180Left:30.1 Right:30.1

:C90/270Left:30.1 Right:30.1

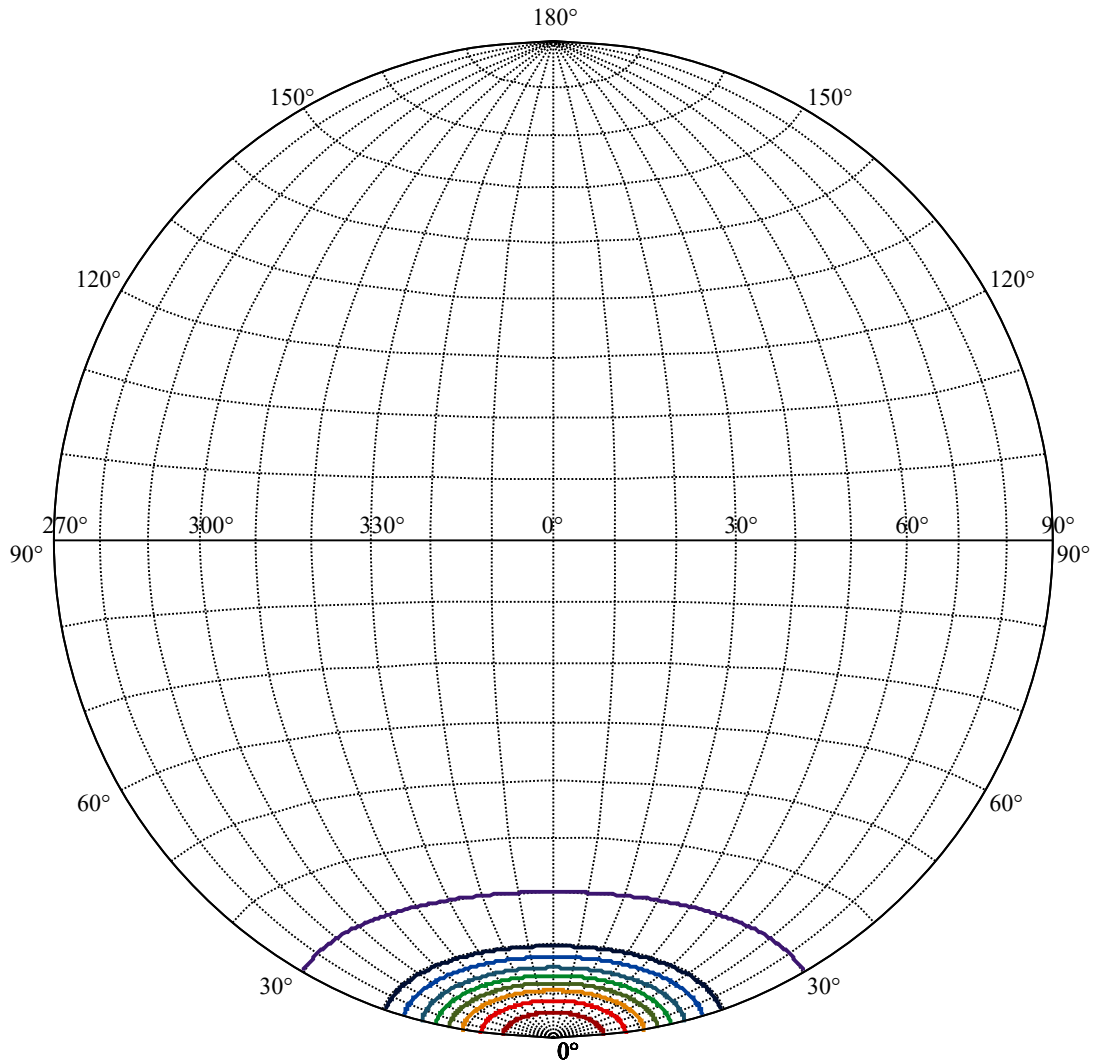
Beam Angle(50%Imax):C0/180Left:13.7 Right:13.7

:C90/270Left:13.7 Right:13.7





(10%Imax) 725.363	—
(20%Imax) 1450.73	—
(30%Imax) 2176.09	—
(40%Imax) 2901.45	—
(50%Imax) 3626.82	—
(60%Imax) 4352.18	—
(70%Imax) 5077.54	—
(80%Imax) 5802.9	—
(90%Imax) 6528.27	—



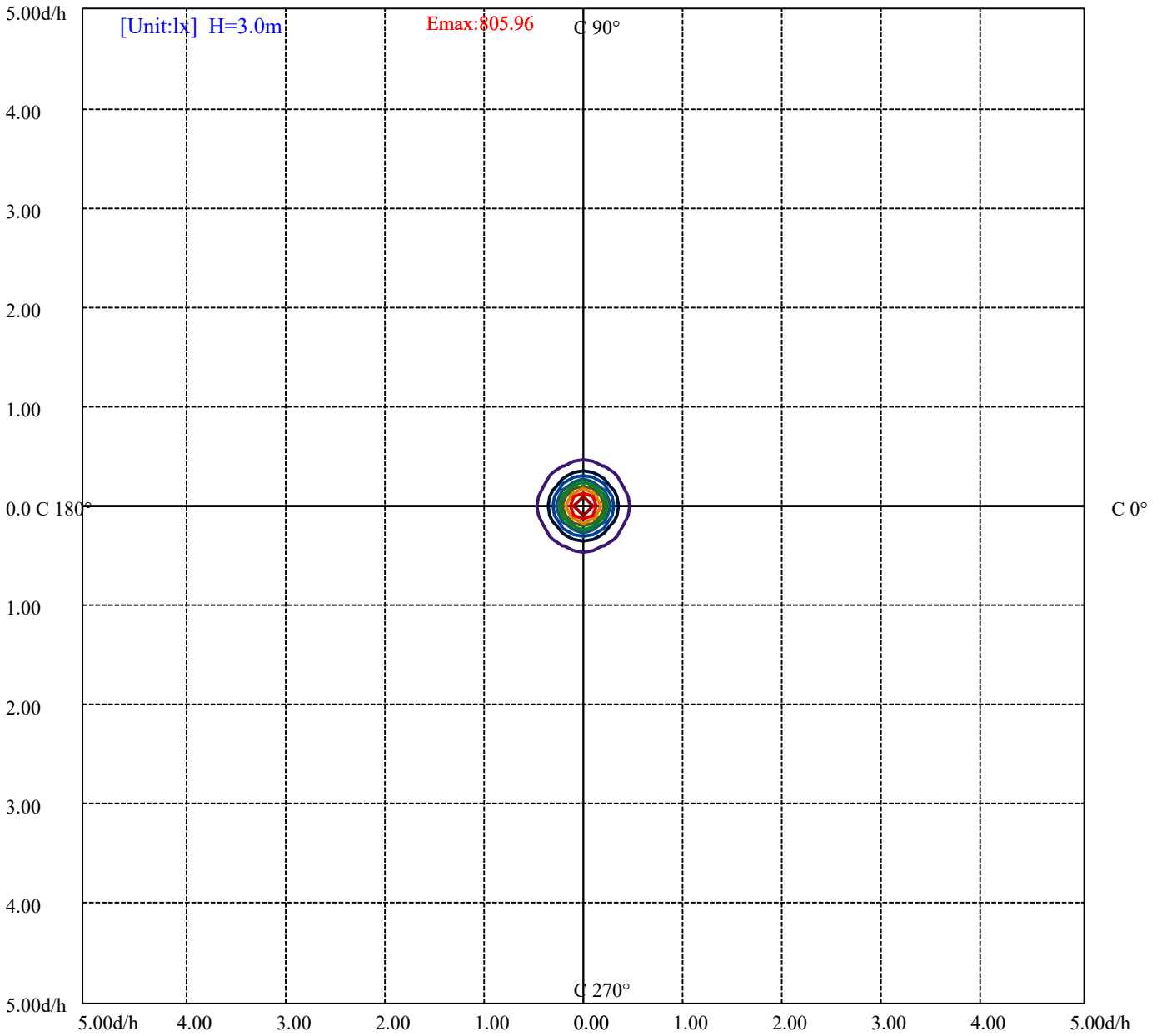
House

[Unit:cd]

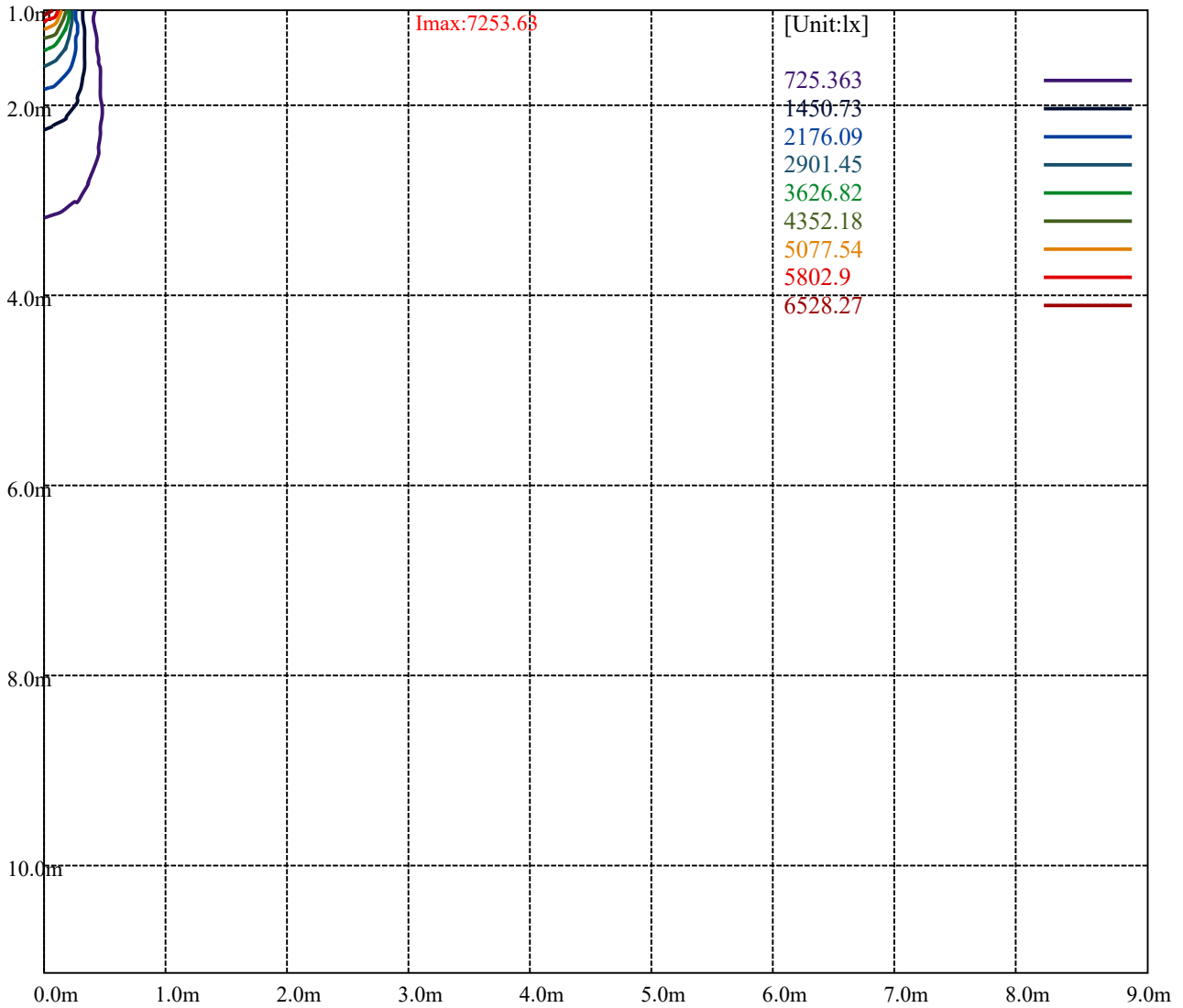
Road

Imax:7253.63

(10%Imax) 725.363	—
(20%Imax) 1450.73	—
(30%Imax) 2176.09	—
(40%Imax) 2901.45	—
(50%Imax) 3626.82	—
(60%Imax) 4352.18	—
(70%Imax) 5077.54	—
(80%Imax) 5802.9	—
(90%Imax) 6528.27	—



(10%Emax) 80.59578	—
(20%Emax) 161.1911	—
(30%Emax) 241.7867	—
(40%Emax) 322.3833	—
(50%Emax) 402.9789	—
(60%Emax) 483.5744	—
(70%Emax) 564.17	—
(80%Emax) 644.7656	—
(90%Emax) 725.3611	—



Luminance Table

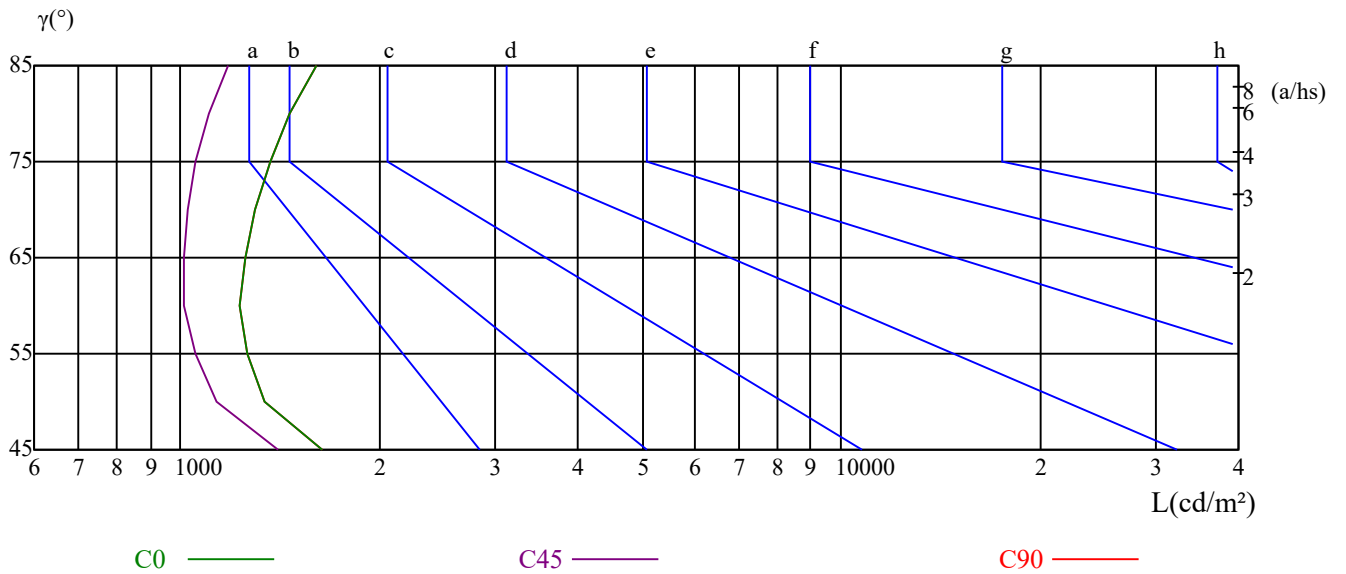
γ	45	50	55	60	65	70	75	80	85
C0	1637	1343	1264	1232	1253	1297	1366	1465	1608
C45	1406	1136	1052	1009	1008	1024	1055	1104	1178
C90	1637	1343	1264	1232	1253	1297	1366	1465	1608

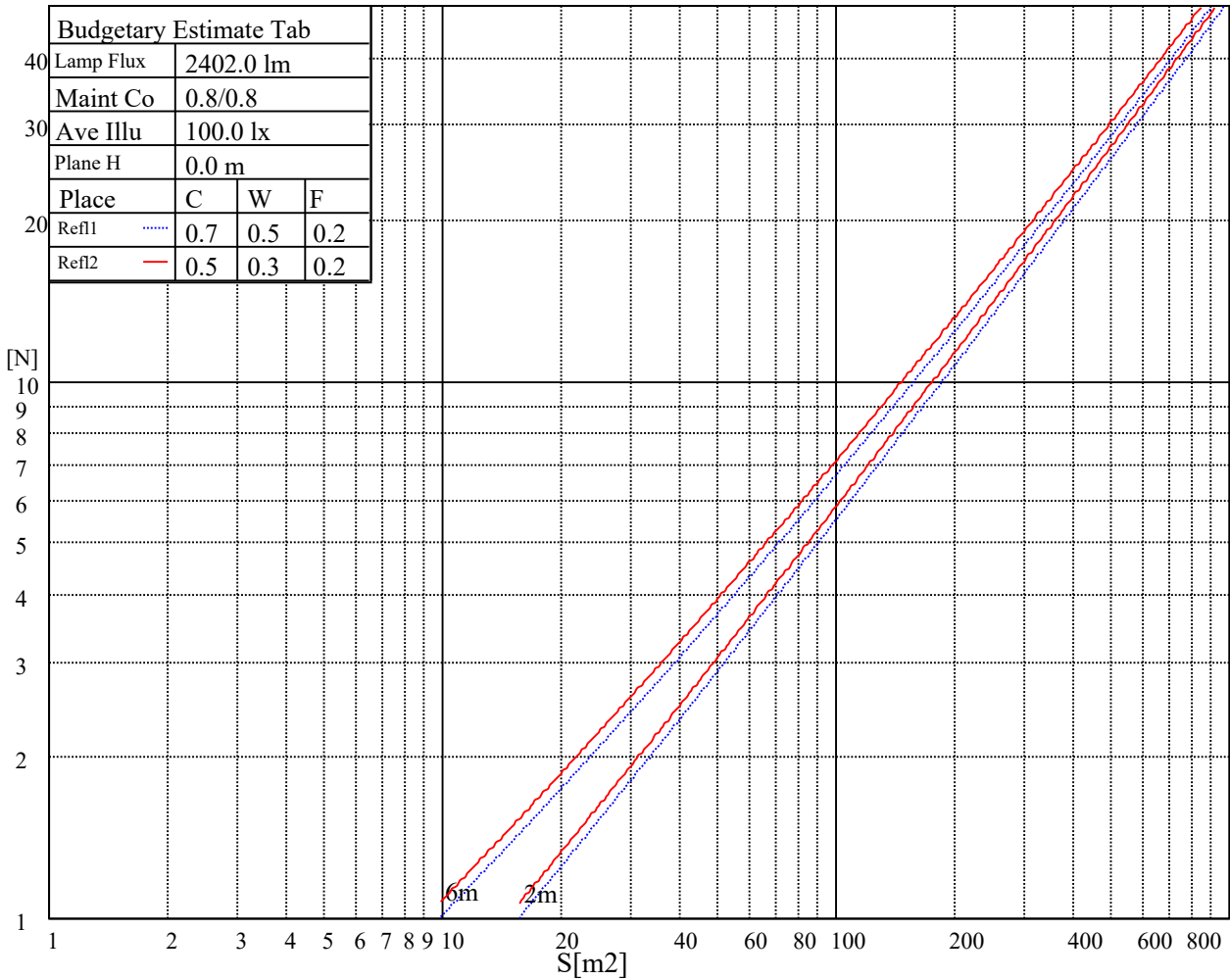
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3023	3023	3023	4725	4725	4725	13721	13721	13721

Glare Table

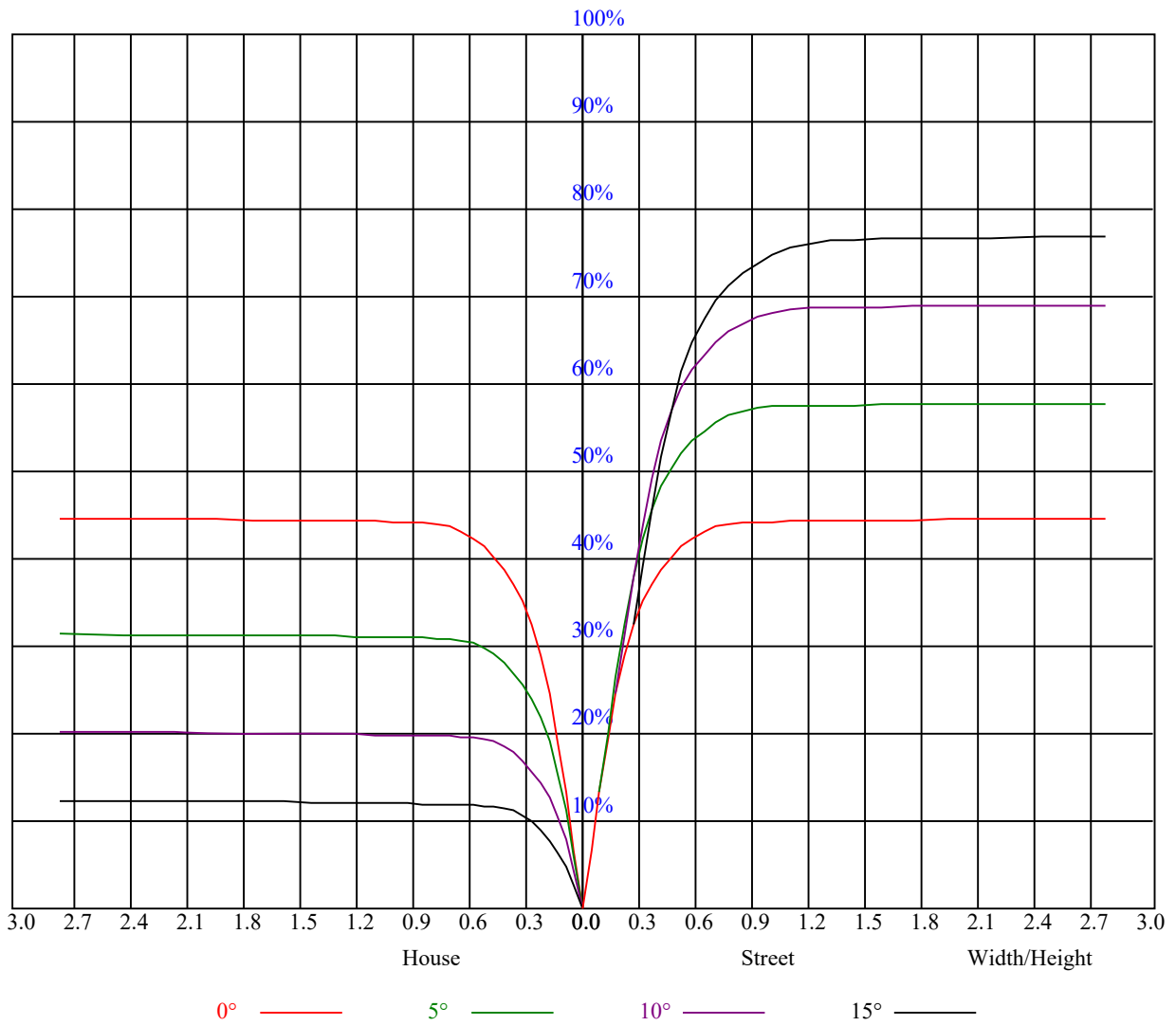
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.08	1.08	1.08	1.06	1.06	1.06	1.01	1.01	1.01	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.02	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.86
2	0.96	0.93	0.90	0.95	0.92	0.89	0.92	0.89	0.88	0.89	0.87	0.86	0.87	0.85	0.84	0.83
3	0.91	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.83	0.81	0.84	0.82	0.80	0.79
4	0.87	0.83	0.80	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.80	0.78	0.81	0.79	0.77	0.75
5	0.83	0.79	0.76	0.82	0.78	0.75	0.81	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.73	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.75	0.73	0.71	0.69
7	0.76	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.67
8	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.71	0.68	0.65	0.64
9	0.71	0.67	0.64	0.70	0.66	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.62
10	0.68	0.64	0.61	0.68	0.64	0.61	0.67	0.64	0.61	0.67	0.63	0.61	0.66	0.63	0.61	0.60



Nata 3-1943-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	7256.41	7006.54	6048.22	3854.43	1700.71	940.51	765.21	543.72	296.62
45.0	7251.96	6930.85	5574.06	3278.44	1365.69	872.62	750.74	464.69	42.96
90.0	7239.16	6634.23	4864.51	2342.38	1088.77	815.80	706.89	285.83	21.26
135.0	7266.99	6741.08	5055.95	2527.70	1187.61	860.93	719.58	291.06	23.65
180.0	7256.41	6465.05	4536.16	2192.67	1098.51	800.66	677.78	236.91	20.15
225.0	7251.96	6496.77	5014.77	2582.23	1101.51	834.94	726.75	320.50	23.99
270.0	7239.16	6957.56	5764.95	3700.27	1583.29	913.80	755.75	501.42	62.61
315.0	7266.99	6894.68	5822.27	3565.60	1502.04	911.74	749.18	456.57	48.47
360.0	7256.41	7006.54	6048.22	3854.43	1700.71	940.51	765.21	543.72	296.62

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	16.14	11.58	10.57	9.79	9.46	9.24	9.02	8.79	8.74
45.0	14.19	11.24	10.18	9.57	9.18	9.02	8.79	8.68	8.63
90.0	12.74	10.74	9.91	9.35	9.13	8.90	8.74	8.63	8.51
135.0	12.63	11.07	10.02	9.52	9.24	9.07	8.90	8.79	8.68
180.0	12.35	10.96	10.07	9.52	9.29	9.02	8.90	8.74	8.74
225.0	12.86	10.85	9.96	9.41	9.07	8.85	8.74	8.57	8.51
270.0	15.08	11.30	10.30	9.52	9.24	8.96	8.74	8.68	8.63
315.0	14.97	11.35	10.30	9.57	9.24	9.02	8.85	8.74	8.68
360.0	16.14	11.58	10.57	9.79	9.46	9.24	9.02	8.79	8.74

C/γ(°)	90.0
0.0	8.63
45.0	8.46
90.0	8.51
135.0	8.63
180.0	8.63
225.0	8.46
270.0	8.46
315.0	8.57
360.0	8.63