



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

---

## Nata

---

LumCAT: 1635-M  
Luminaire: BJB47.319.6105  
Report No: NT2017072805  
Test No: GC2017072805  
LampCAT: CREE CXA1512  
Lamp flux(lm): 1430.0  
Number of Lamps: 1  
Length(mm): 46  
Phm Type: C

Voltage(V): 38.0000  
Current(A): 0.3500  
Power (W): 13.3000  
PF: 0.0000  
Ballast type: DC  
Width(mm): 46  
Height(mm): 0

---

## Photometric Results

---

Lumens(lm): 1309.03  
Efficiency(%): 91.54%  
Lumens(lm)/Power(W): 98.42  
Central intensity(cd): 1219.744  
Maximum intensity(cd): 1219.744  
Angle of maximum intensity: C=0.0  $\gamma$ =0.0  
Beam Angle(50%Imax): [C0/180]Total=67.2  
                                  [C90/270]Total=67.2  
Field angle(10%Imax): [C0/180]Total=93.9  
                                  [C90/270]Total=93.9  
Maximum s/h(1/2): C0\_180=0.93 C90\_270=0.93  
Maximum s/h(1/4): C0\_180=1.01 C90\_270=1.01  
Up flux rate of lamp(%): 0.00%  
Down flux rate of lamp(%): 91.96%  
Up flux rate of LUM(%): - -  
Down flux rate of LUM(%): 100.00%  
CIE Type : Direct lighting  
Output flux ratio in  $\pi$  solid angle : 98.381%

---

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2017/7/28  
Humidity(%): 60.0%

Operator: NT07  
Distance(m): 7.46

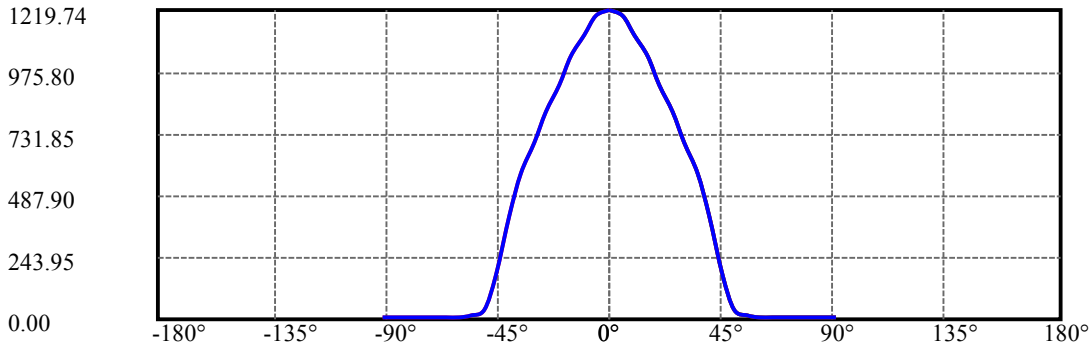
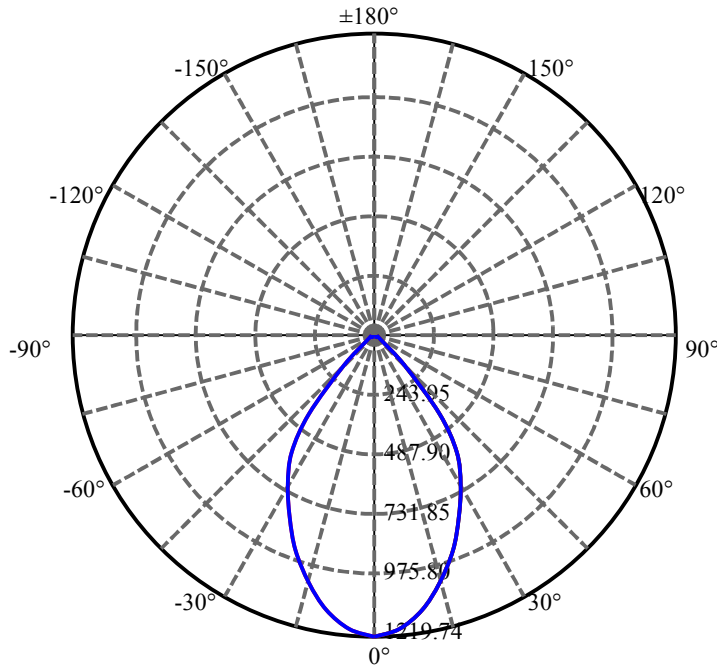
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1219.744	7.294	7.294	.510%	.557%
5.0	1196.440	57.158	64.452	3.997%	4.924%
10.0	1124.948	107.076	171.528	7.488%	13.104%
15.0	1034.570	146.773	318.301	10.264%	24.316%
20.0	923.997	173.226	491.527	12.114%	37.549%
25.0	814.468	188.674	680.2	13.194%	51.962%
30.0	696.842	190.982	871.183	13.355%	66.552%
35.0	576.224	181.164	1052.347	12.669%	80.392%
40.0	412.378	145.296	1197.643	10.161%	91.491%
45.0	175.699	68.099	1265.742	4.762%	96.693%
50.0	36.939	15.510	1281.253	1.085%	97.878%
55.0	17.739	7.965	1289.217	.557%	98.487%
60.0	9.614	4.564	1293.781	.319%	98.835%
65.0	6.490	3.224	1297.005	.225%	99.082%
70.0	5.510	2.838	1299.843	.198%	99.299%
75.0	5.078	2.689	1302.532	.188%	99.504%
80.0	4.835	2.610	1305.142	.183%	99.703%
85.0	4.772	2.606	1307.748	.182%	99.902%
90.0	4.661	1.277	1309.025	.089%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	871.18	60.92%	66.55%
0-40	1197.64	83.75%	91.49%
0-60	1293.78	90.47%	98.84%
0-90	1307.75	91.45%	99.90%
0-120	1307.75	91.45%	99.90%
0-180	1309.03	91.54%	100.00%
60-90	18.53	1.30%	1.42%
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%
0-34.86	1047.22	73.23%	80.00%

ZONAL LUMEN SUMMARY

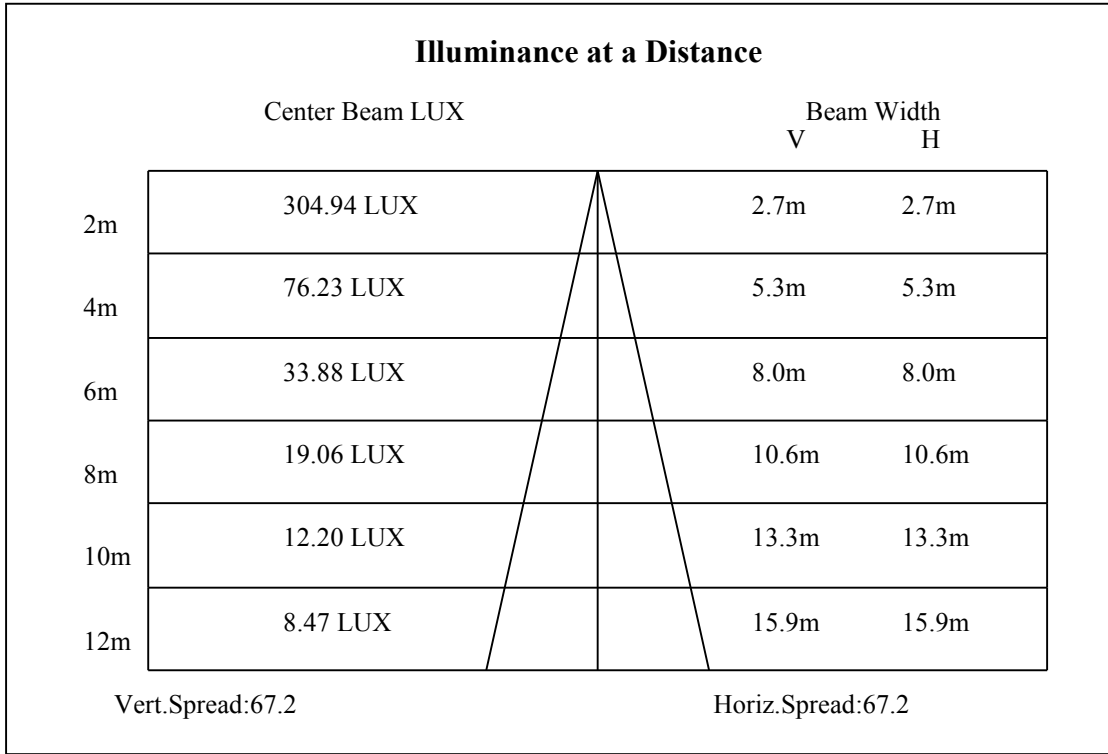
0-10	171.53
10-20	320.00
20-30	379.66
30-40	326.46
40-50	83.61
50-60	12.53
60-70	6.06
70-80	5.30
80-90	2.61
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

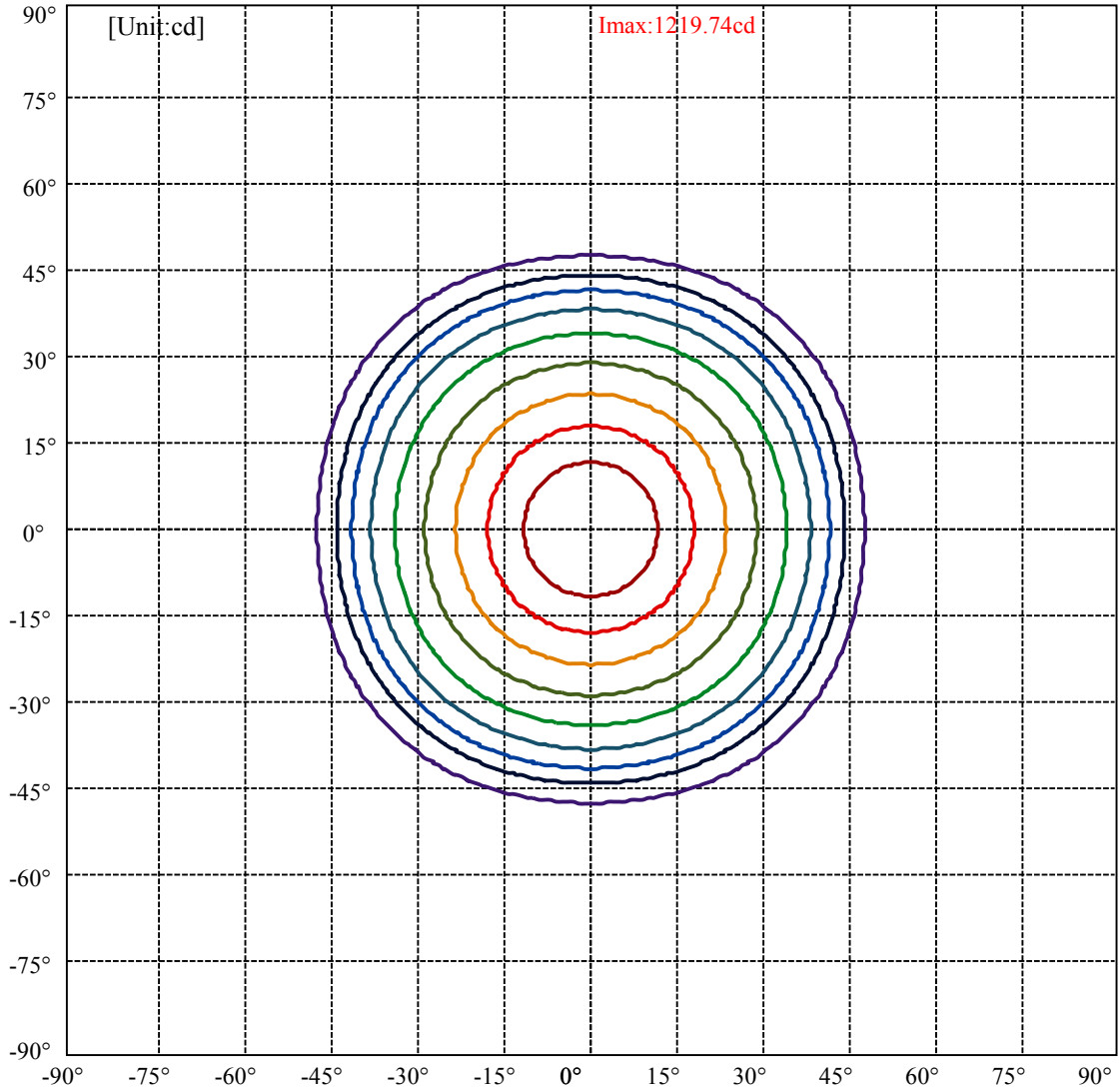


C0(Max): ———  
C0/C180: ———  
C90/C270: ———

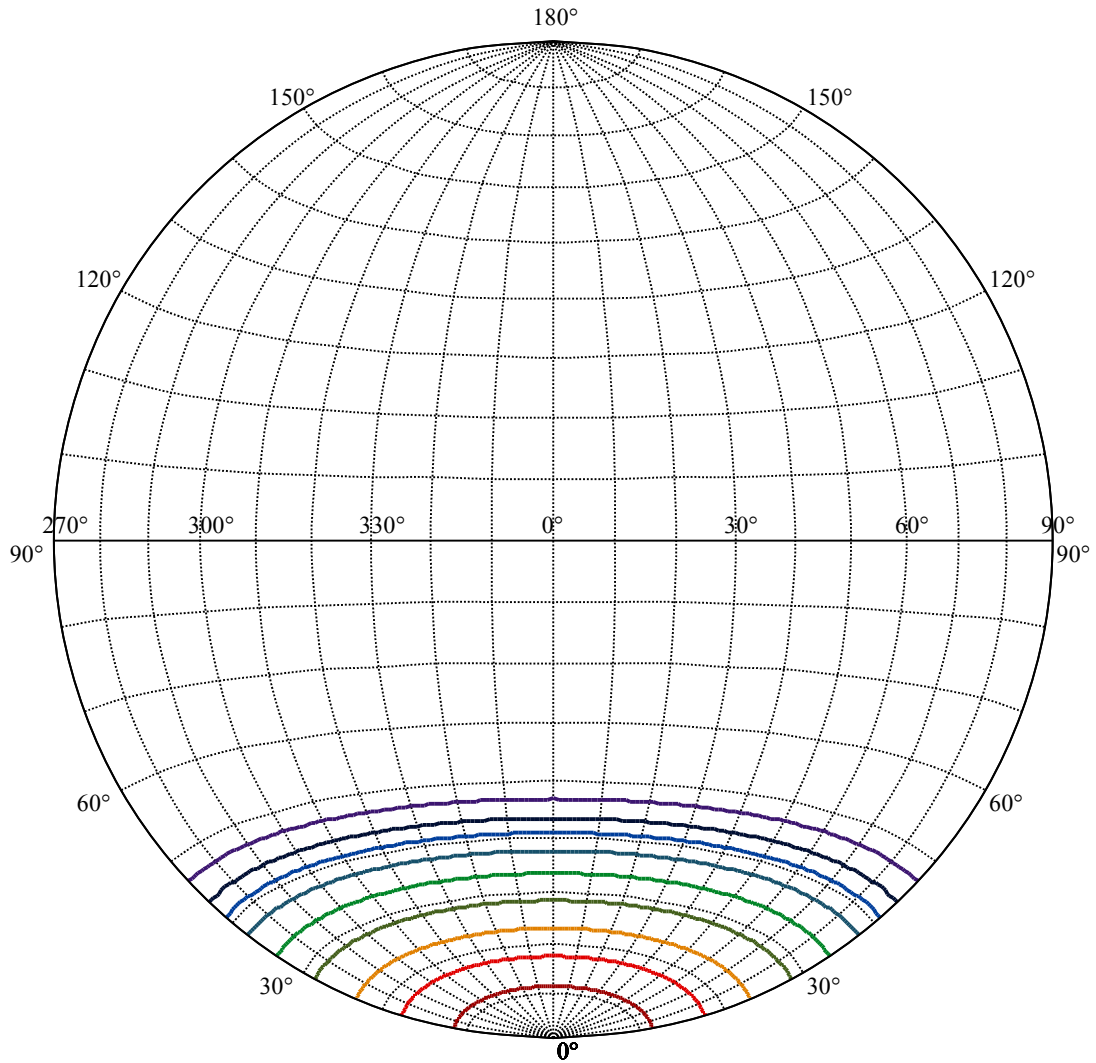
Field angle(10%Imax):C0/180Left:46.9 Right:46.9  
:C90/270Left:46.9 Right:46.9

Beam Angle(50%Imax):C0/180Left:33.6 Right:33.6  
:C90/270Left:33.6 Right:33.6





(10%Imax) 121.974	—
(20%Imax) 243.949	—
(30%Imax) 365.923	—
(40%Imax) 487.898	—
(50%Imax) 609.872	—
(60%Imax) 731.846	—
(70%Imax) 853.821	—
(80%Imax) 975.795	—
(90%Imax) 1097.77	—



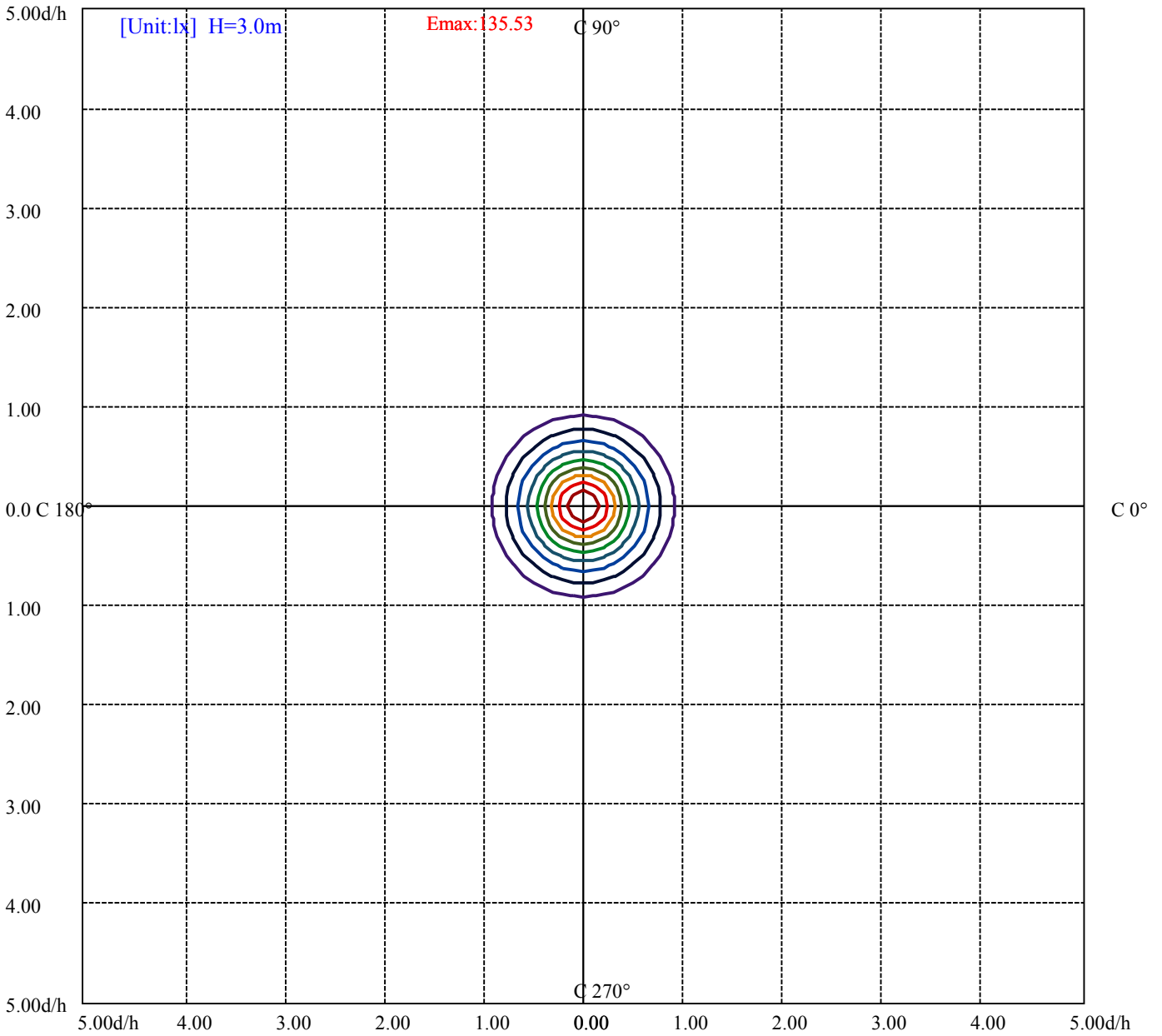
House

[Unit:cd]

Road

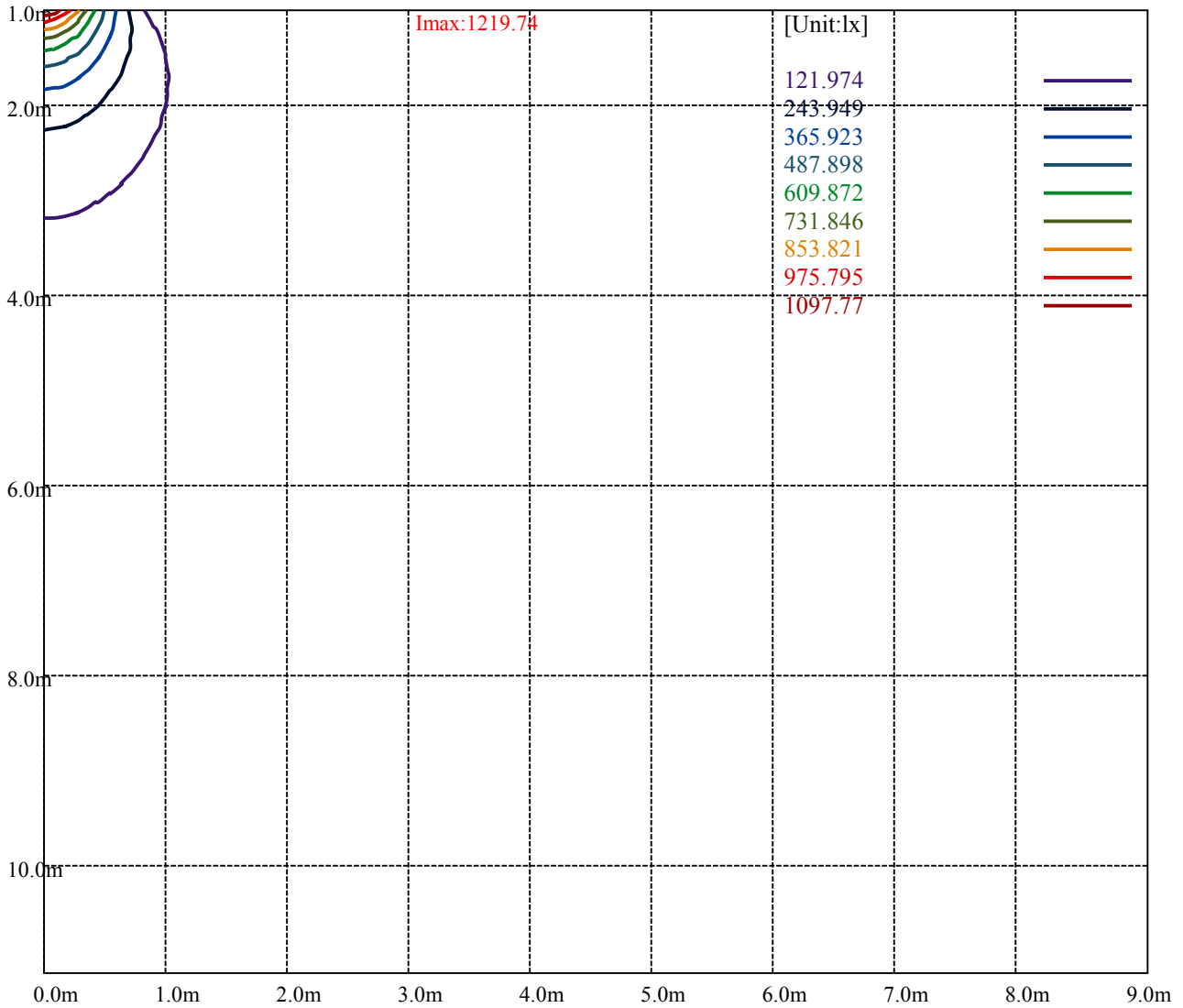
Imax:1219.74

(10%Imax) 121.974	—
(20%Imax) 243.949	—
(30%Imax) 365.923	—
(40%Imax) 487.898	—
(50%Imax) 609.872	—
(60%Imax) 731.846	—
(70%Imax) 853.821	—
(80%Imax) 975.795	—
(90%Imax) 1097.77	—



(10%Emax) 13.55267	—
(20%Emax) 27.10545	—
(30%Emax) 40.65811	—
(40%Emax) 54.21078	—
(50%Emax) 67.76356	—
(60%Emax) 81.31622	—
(70%Emax) 94.86889	—
(80%Emax) 108.4217	—
(90%Emax) 121.9744	—





Luminance Table

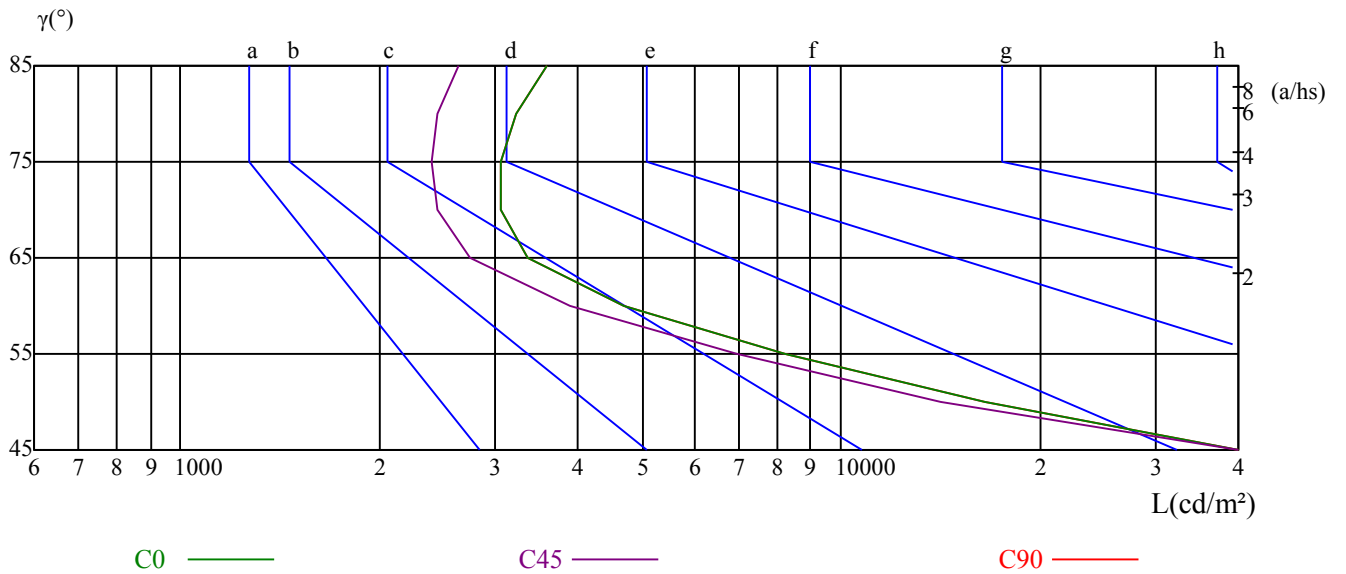
$\gamma$	45	50	55	60	65	70	75	80	85
C0	76080	16482	8229	4681	3352	3053	3062	3223	3588
C45	66396	14175	6968	3898	2741	2447	2397	2455	2644
C90	76080	16482	8229	4681	3352	3053	3062	3223	3588

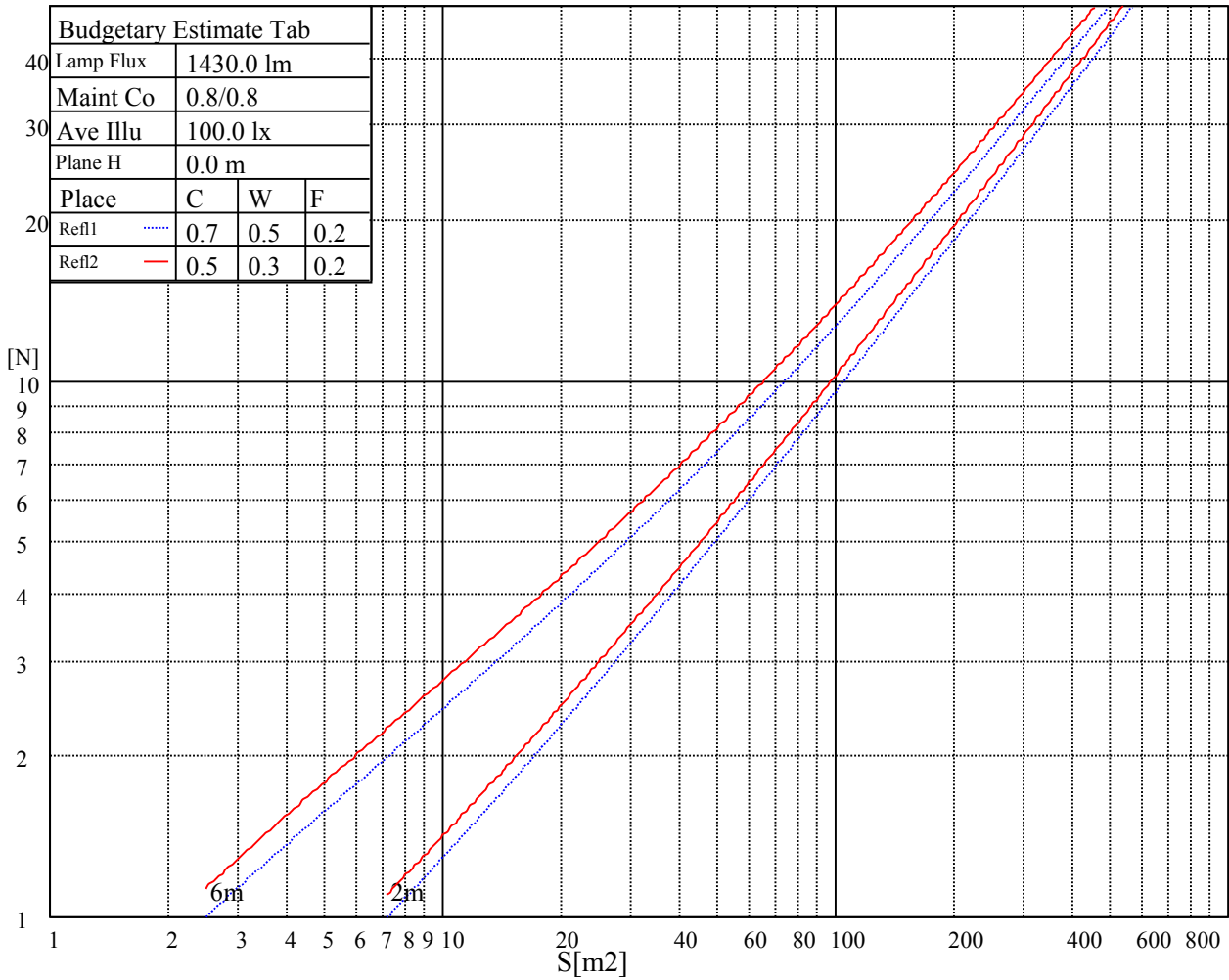
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7258	7258	7258	9273	9273	9273	25876	25876	25876

Glare Table

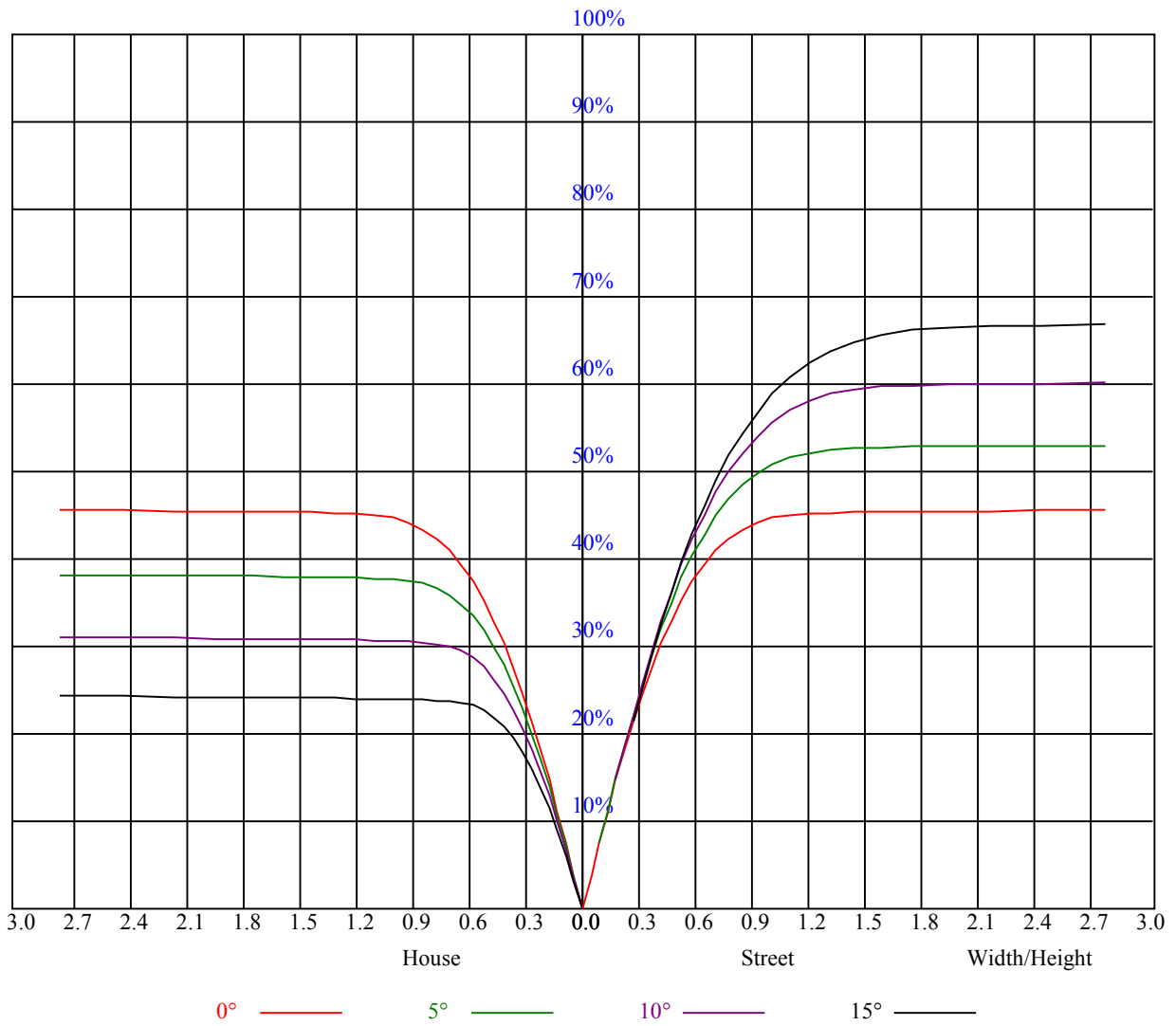
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.01	0.98	0.96	0.99	0.97	0.95	0.95	0.93	0.92	0.92	0.90	0.89	0.89	0.87	0.86	0.85
2	0.94	0.90	0.87	0.92	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.82	0.84	0.82	0.80	0.79
3	0.87	0.83	0.79	0.86	0.82	0.78	0.84	0.80	0.77	0.81	0.78	0.76	0.79	0.77	0.74	0.73
4	0.81	0.76	0.72	0.80	0.76	0.72	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.69	0.68
5	0.76	0.71	0.67	0.75	0.70	0.66	0.74	0.69	0.66	0.72	0.68	0.65	0.71	0.67	0.65	0.63
6	0.71	0.66	0.62	0.71	0.65	0.62	0.69	0.65	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.59
7	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.56	0.55
8	0.63	0.58	0.54	0.63	0.57	0.54	0.62	0.57	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.52
9	0.60	0.54	0.50	0.59	0.54	0.50	0.58	0.53	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.48
10	0.56	0.51	0.47	0.56	0.51	0.47	0.55	0.50	0.47	0.54	0.50	0.47	0.54	0.50	0.47	0.46



Nata 1635-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	1224.89	1213.20	1153.10	1067.40	944.96	854.81	732.38	611.05	464.69
45.0	1217.66	1200.41	1141.97	1045.69	941.07	843.12	731.26	608.83	470.81
90.0	1221.55	1199.29	1108.19	1040.13	923.93	813.79	698.37	571.32	406.70
135.0	1214.87	1197.07	1143.08	1054.04	938.29	823.64	700.65	581.00	429.07
180.0	1224.89	1188.72	1108.52	1007.35	885.53	759.25	652.63	541.77	347.21
225.0	1217.66	1184.27	1106.52	1015.42	913.85	785.63	664.20	549.34	362.51
270.0	1221.55	1196.51	1129.73	1023.43	919.92	820.30	702.32	577.11	422.40
315.0	1214.87	1192.06	1108.47	1023.10	924.43	815.18	692.92	569.37	395.63
360.0	1224.89	1213.20	1153.10	1067.40	944.96	854.81	732.38	611.05	464.69

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	290.50	40.68	19.26	9.18	6.12	5.34	5.06	4.90	4.79
45.0	292.73	43.58	18.31	9.02	5.90	5.29	4.95	4.84	4.73
90.0	144.64	37.40	17.31	9.74	6.51	5.51	4.95	4.79	4.79
135.0	161.22	40.85	20.31	11.58	7.74	6.07	5.18	4.90	4.73
180.0	117.98	33.17	17.70	10.35	6.96	5.79	5.68	4.84	4.84
225.0	105.46	32.72	17.20	9.85	7.01	5.62	5.06	4.79	4.73
270.0	157.10	35.17	16.64	8.96	6.12	5.34	4.90	4.84	4.90
315.0	135.96	31.94	15.19	8.24	5.57	5.12	4.84	4.79	4.67
360.0	290.50	40.68	19.26	9.18	6.12	5.34	5.06	4.90	4.79

C/γ(°)	90.0
0.0	4.73
45.0	4.62
90.0	4.67
135.0	4.67
180.0	4.67
225.0	4.62
270.0	4.62
315.0	4.67
360.0	4.73