
Nata

LumCAT: 3-1943-M
Luminaire: BJB 47.319.2011
Report No: GC2017060706
Test No: NT-0010
LampCAT: LUMILEDS LUXEON CoB 1208
Lamp flux(lm): 3235.0
Number of Lamps: 1
Length(mm): 86
Phm Type: C

Voltage(V): 217.5000
Current(A): 0.1370
Power (W): 28.1000
PF: 0.9430
Ballast type: DC
Width(mm): 86
Height(mm): 0

Photometric Results

Lumens(lm): 2986.02
Efficiency(%): 92.30%
Lumens(lm)/Power(W): 106.26
Central intensity(cd): 9896.802
Maximum intensity(cd): 9896.802
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.4
 [C90/270]Total=27.4
Field angle(10%Imax): [C0/180]Total=60.2
 [C90/270]Total=60.2
Maximum s/h(1/2): C0_180=0.47 C90_270=0.47
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(%): 92.30%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.700%

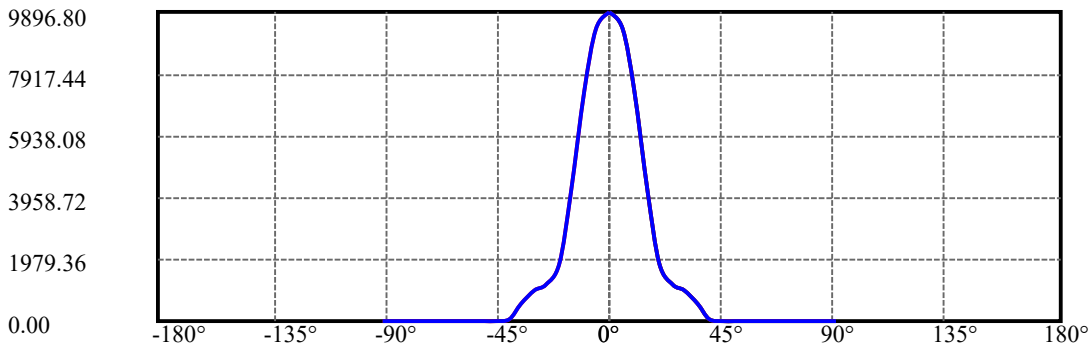
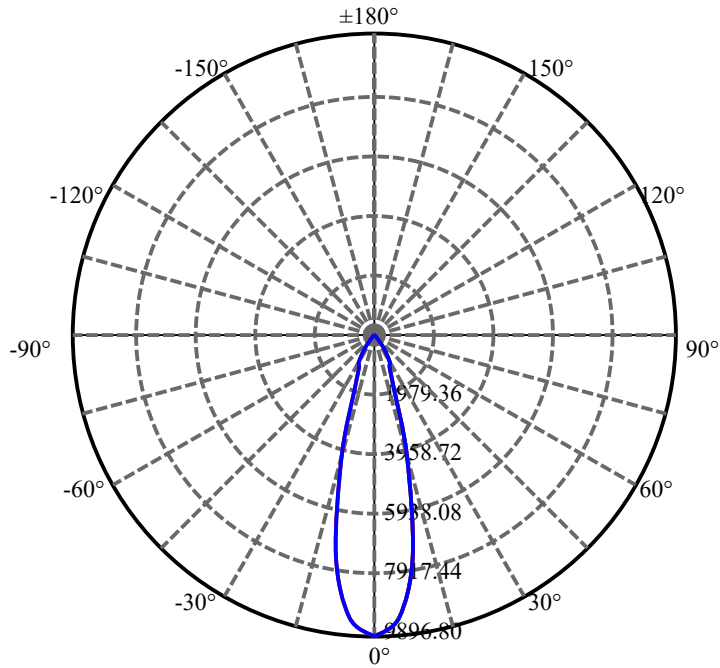
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9896.801	0.000	0	.000%	.000%
5.0	9329.307	229.843	229.843	7.105%	7.697%
10.0	7352.232	596.751	826.594	18.447%	27.682%
15.0	4113.470	680.138	1506.732	21.024%	50.459%
20.0	1838.333	490.512	1997.244	15.163%	66.886%
25.0	1165.661	315.064	2312.307	9.739%	77.438%
30.0	1000.210	274.093	2586.4	8.473%	86.617%
35.0	527.193	224.921	2811.321	6.953%	94.149%
40.0	74.388	100.369	2911.69	3.103%	97.511%
45.0	17.240	16.966	2928.655	.524%	98.079%
50.0	14.342	6.382	2935.037	.197%	98.292%
55.0	13.468	6.047	2941.084	.187%	98.495%
60.0	12.993	6.116	2947.2	.189%	98.700%
65.0	12.670	6.239	2953.439	.193%	98.909%
70.0	12.457	6.362	2959.801	.197%	99.122%
75.0	12.319	6.476	2966.277	.200%	99.339%
80.0	12.167	6.552	2972.829	.203%	99.558%
85.0	12.085	6.590	2979.419	.204%	99.779%
90.0	12.037	6.605	2986.024	.204%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2586.40	79.95%	86.62%
0-40	2911.69	90.01%	97.51%
0-60	2947.20	91.10%	98.70%
0-90	2979.42	92.10%	99.78%
0-120	2979.42	92.10%	99.78%
0-180	2986.02	92.30%	100.00%
60-90	38.34	1.19%	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%
0-26.40	2388.82	73.84%	80.00%

ZONAL LUMEN SUMMARY

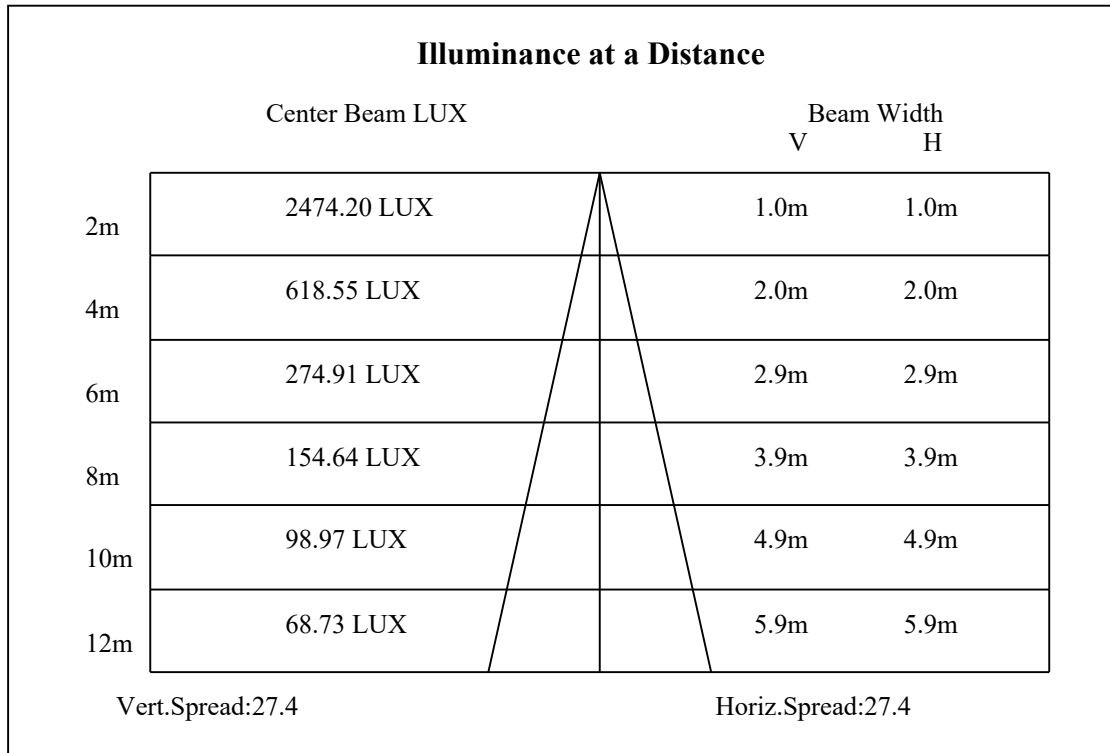
0-10	826.59
10-20	1170.65
20-30	589.16
30-40	325.29
40-50	23.35
50-60	12.16
60-70	12.60
70-80	13.03
80-90	6.59
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

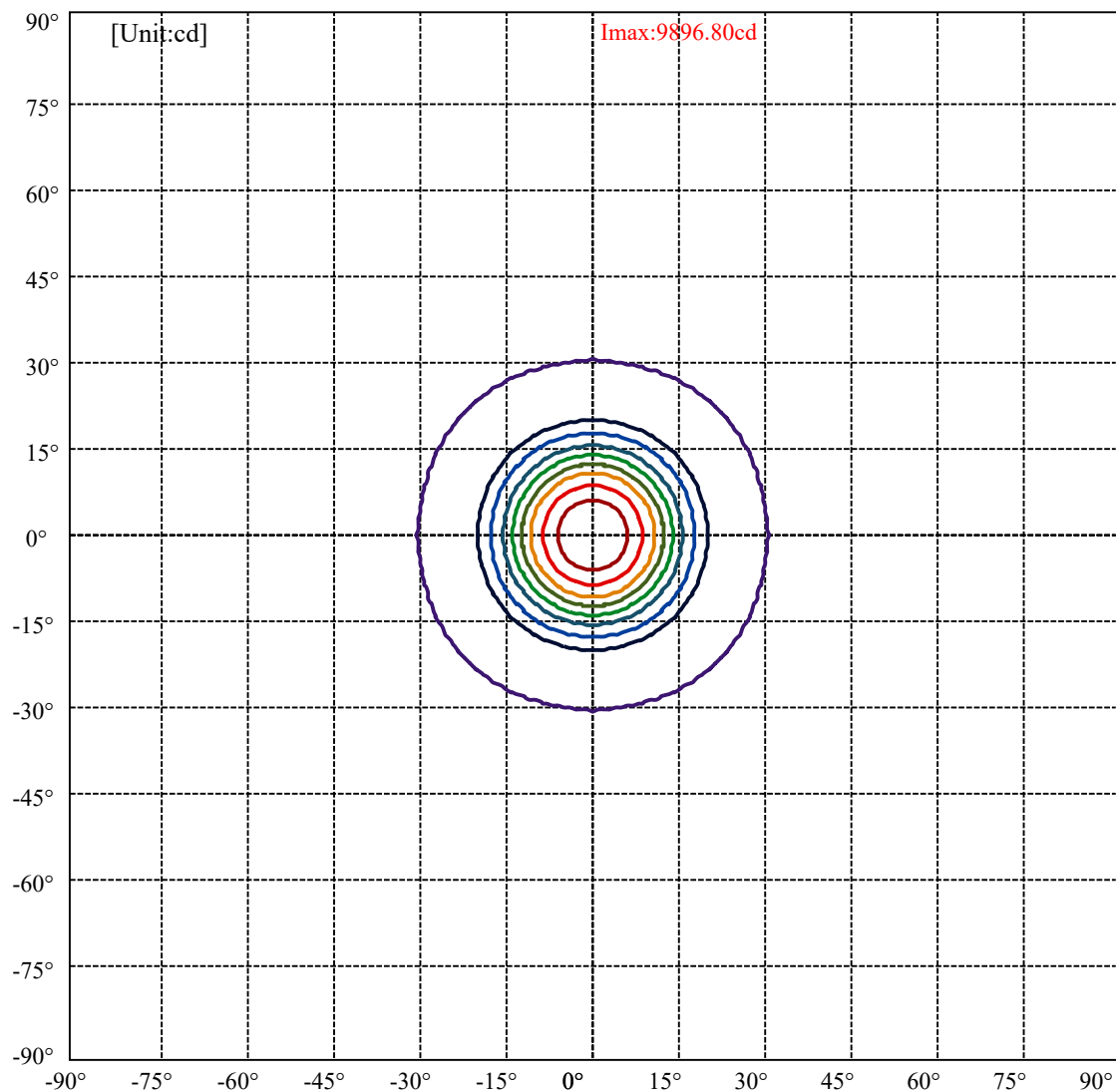


C0(Max): ———
C0/C180: ———
C90/C270: ———

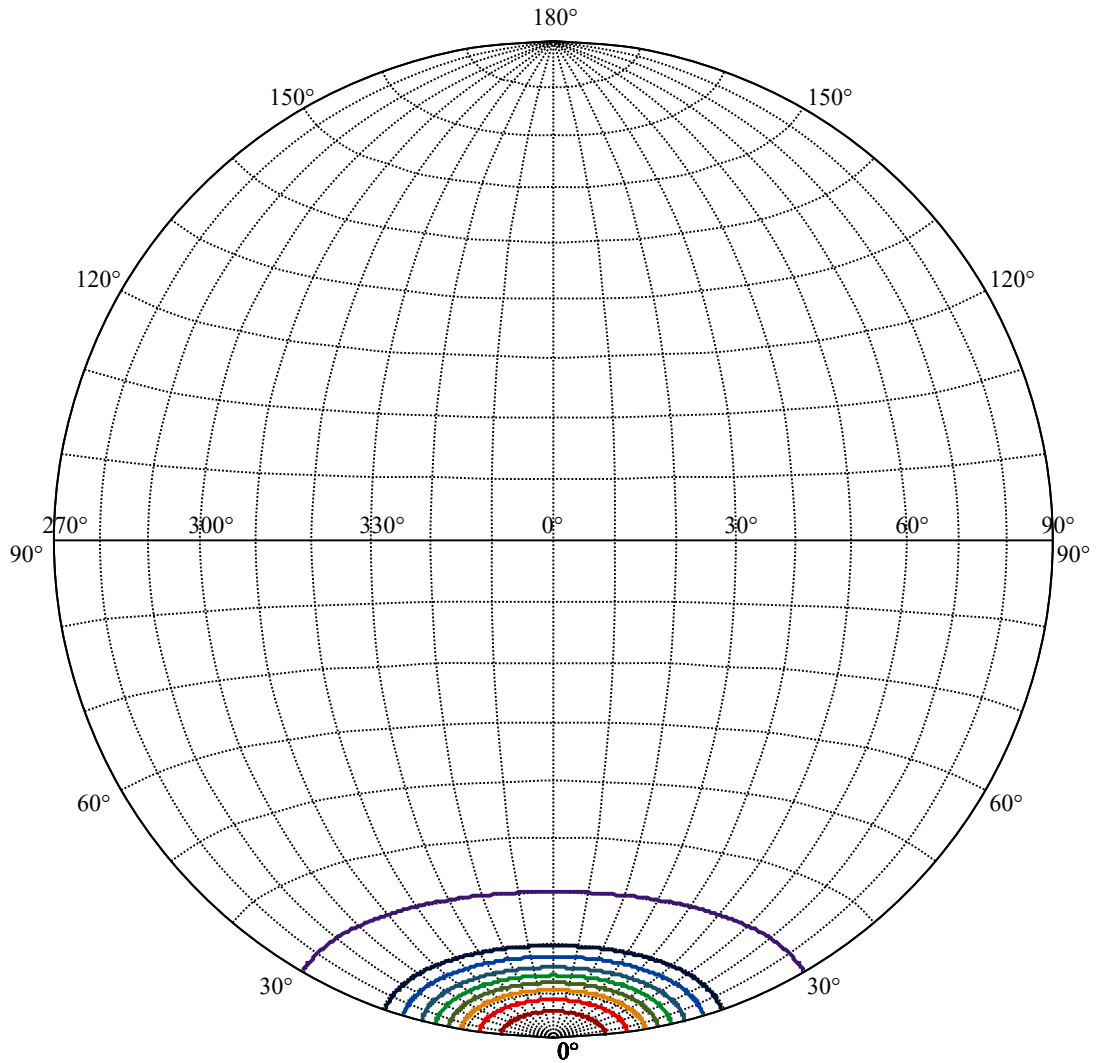
Field angle(10%Imax):C0/180Left:30.1 Right:30.1
:C90/270Left:30.1 Right:30.1

Beam Angle(50%Imax):C0/180Left:13.7 Right:13.7
:C90/270Left:13.7 Right:13.7



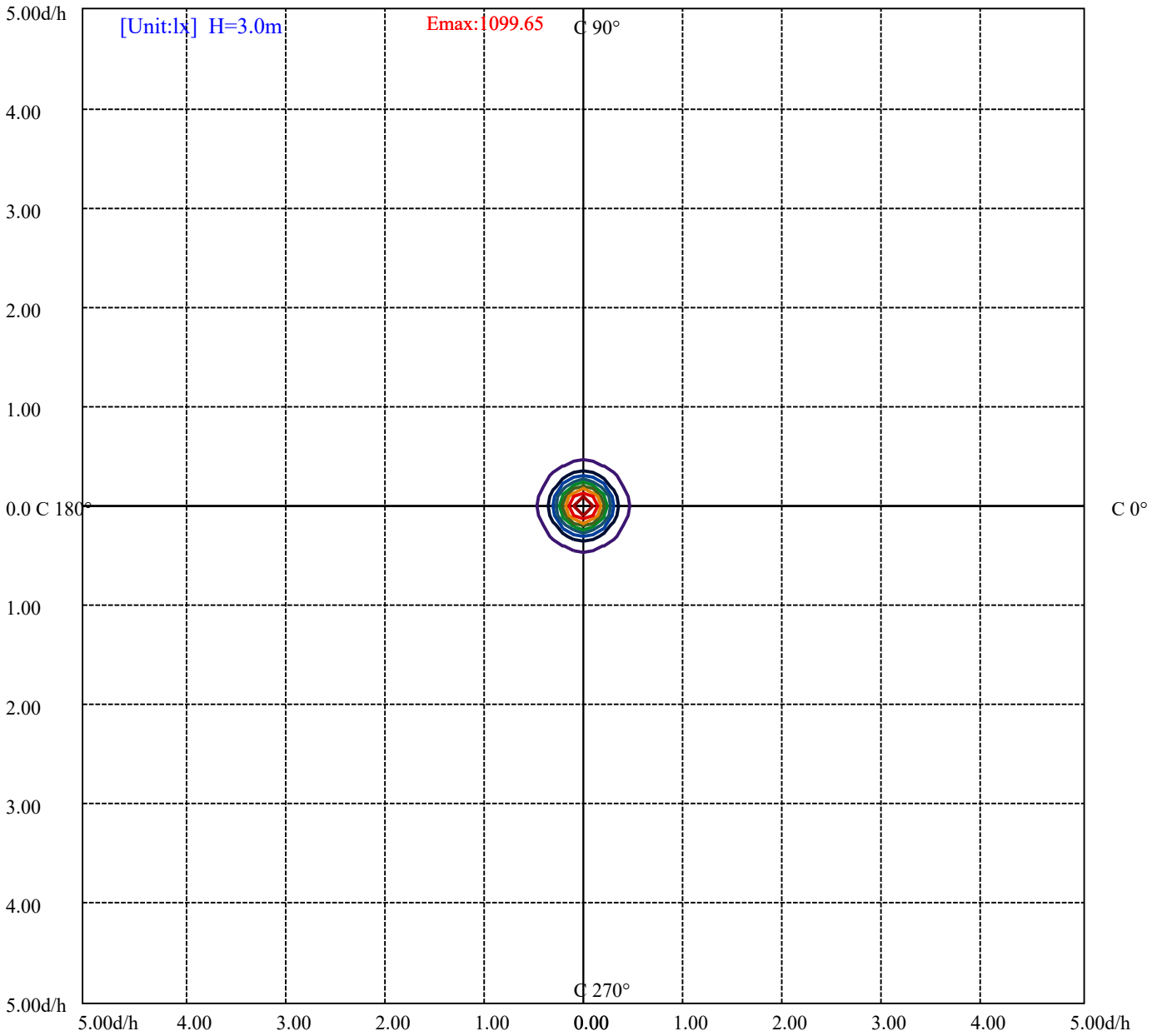


(10%Imax) 989.68	—
(20%Imax) 1979.36	—
(30%Imax) 2969.04	—
(40%Imax) 3958.72	—
(50%Imax) 4948.4	—
(60%Imax) 5938.08	—
(70%Imax) 6927.76	—
(80%Imax) 7917.44	—
(90%Imax) 8907.12	—

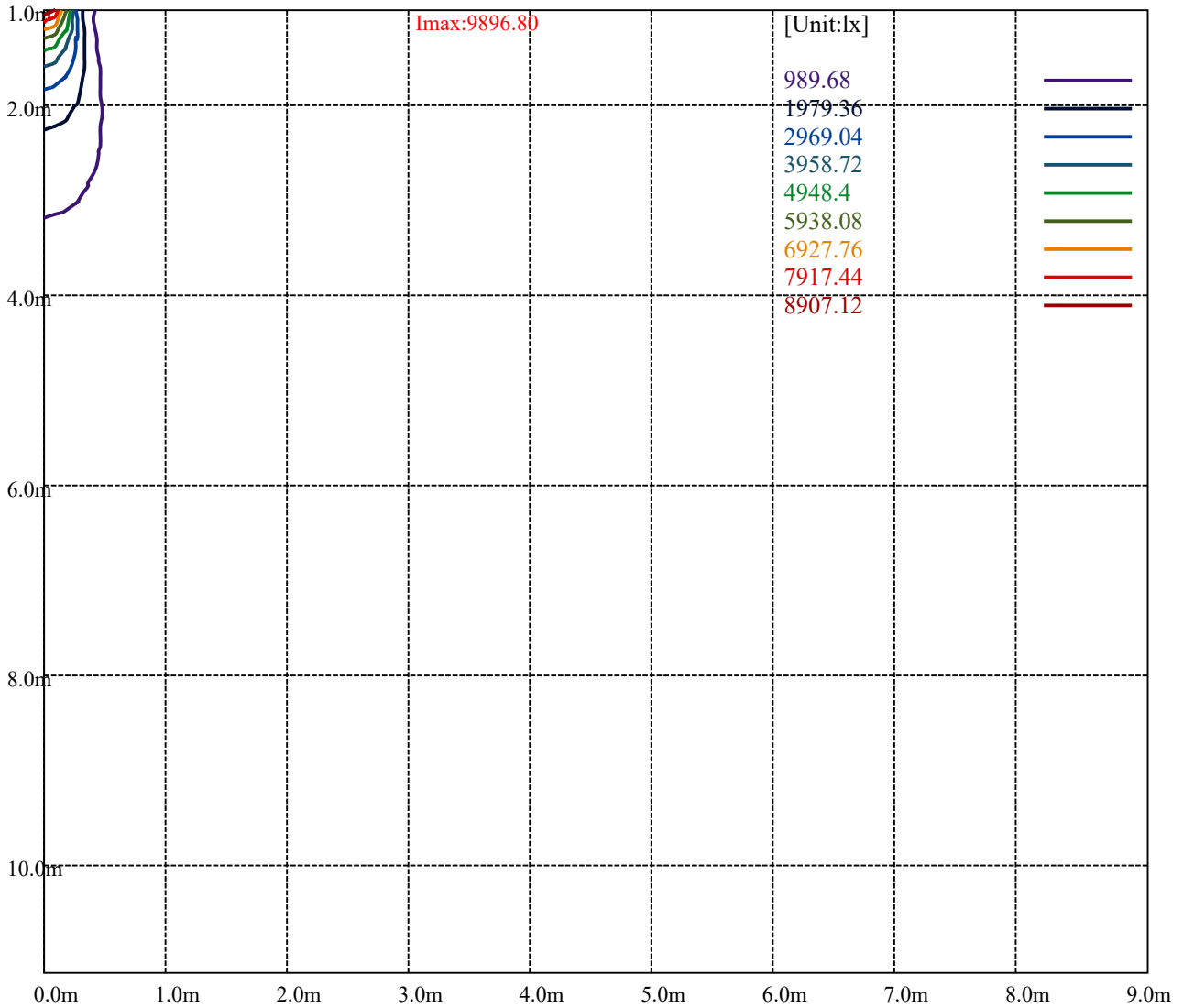


I_{max}:9896.80

(10%I _{max}) 989.68	—
(20%I _{max}) 1979.36	—
(30%I _{max}) 2969.04	—
(40%I _{max}) 3958.72	—
(50%I _{max}) 4948.4	—
(60%I _{max}) 5938.08	—
(70%I _{max}) 6927.76	—
(80%I _{max}) 7917.44	—
(90%I _{max}) 8907.12	—



- (10%Emax) 109.9642
- (20%Emax) 219.9289
- (30%Emax) 329.8933
- (40%Emax) 439.8567
- (50%Emax) 549.8211
- (60%Emax) 659.7855
- (70%Emax) 769.75
- (80%Emax) 879.7145
- (90%Emax) 989.679



Luminance Table

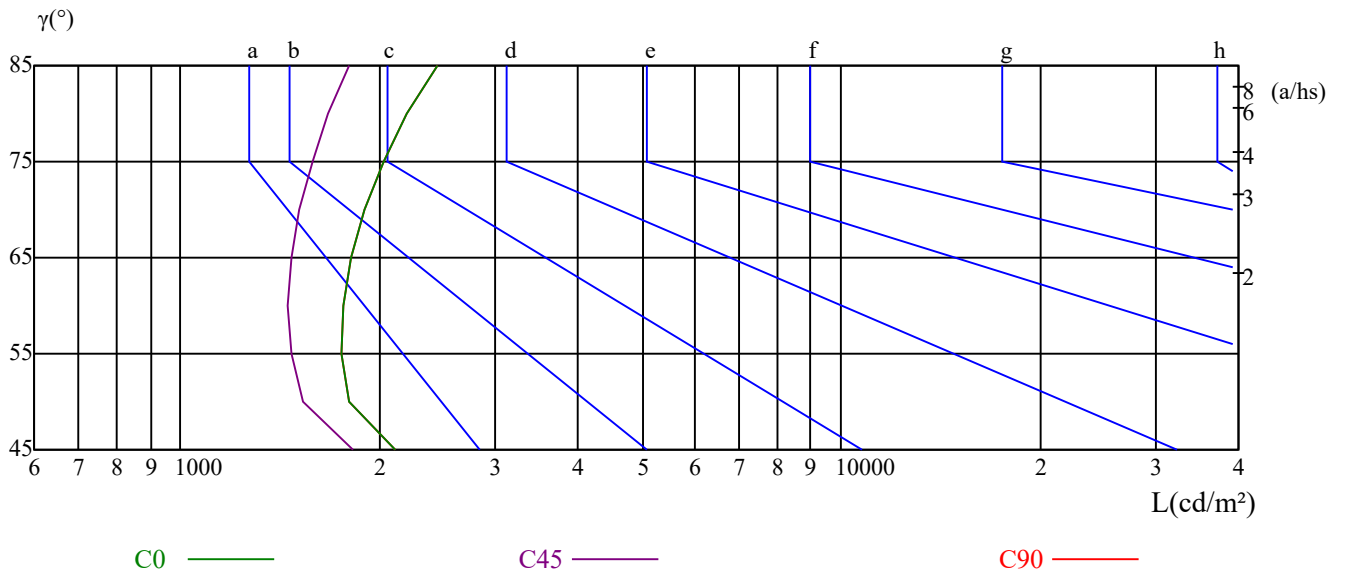
γ	45	50	55	60	65	70	75	80	85
C0	2109	1801	1750	1764	1815	1903	2034	2203	2442
C45	1825	1535	1469	1456	1472	1513	1581	1669	1794
C90	2109	1801	1750	1764	1815	1903	2034	2203	2442

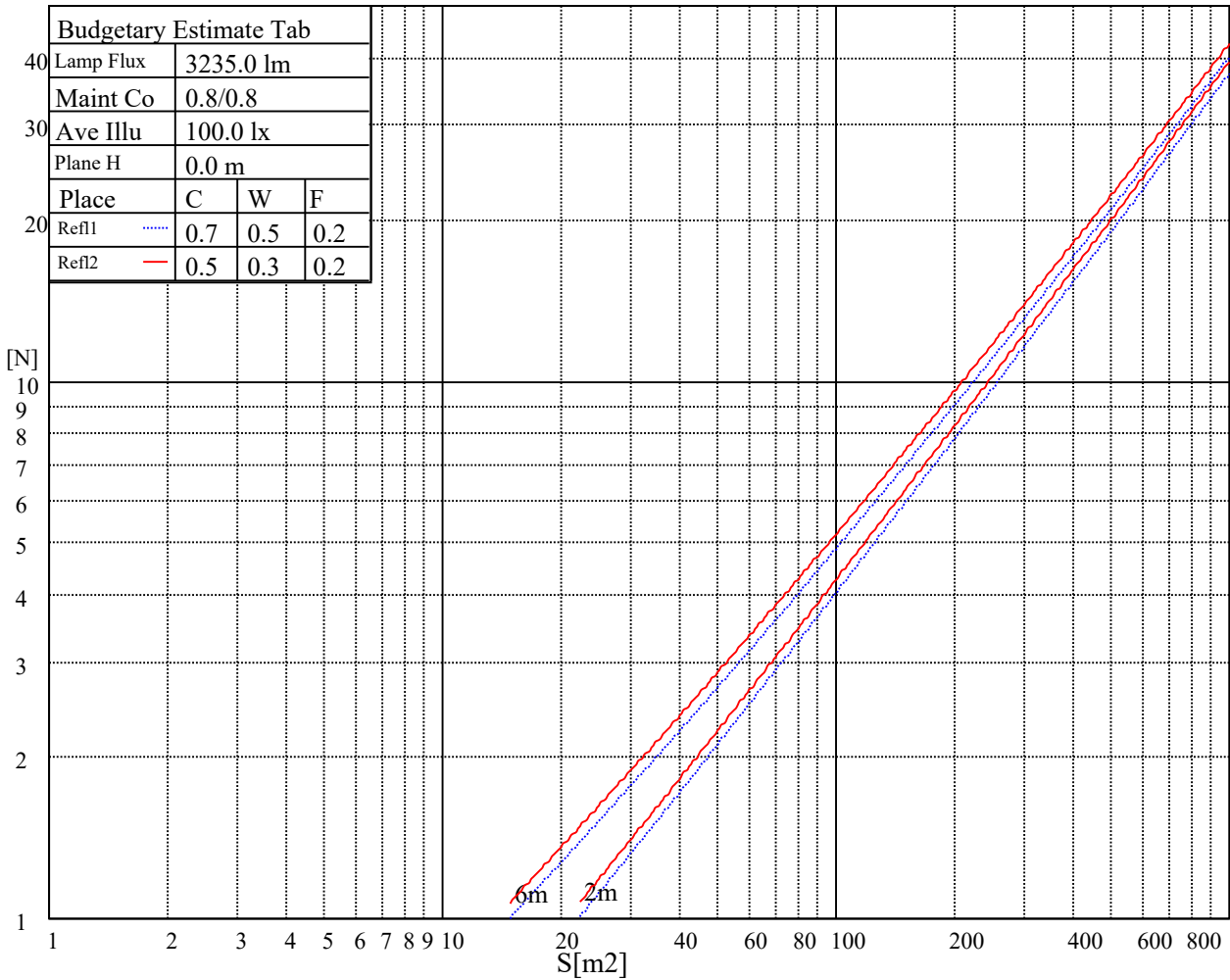
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4149	4149	4149	6588	6588	6588	19191	19191	19191

Glare Table

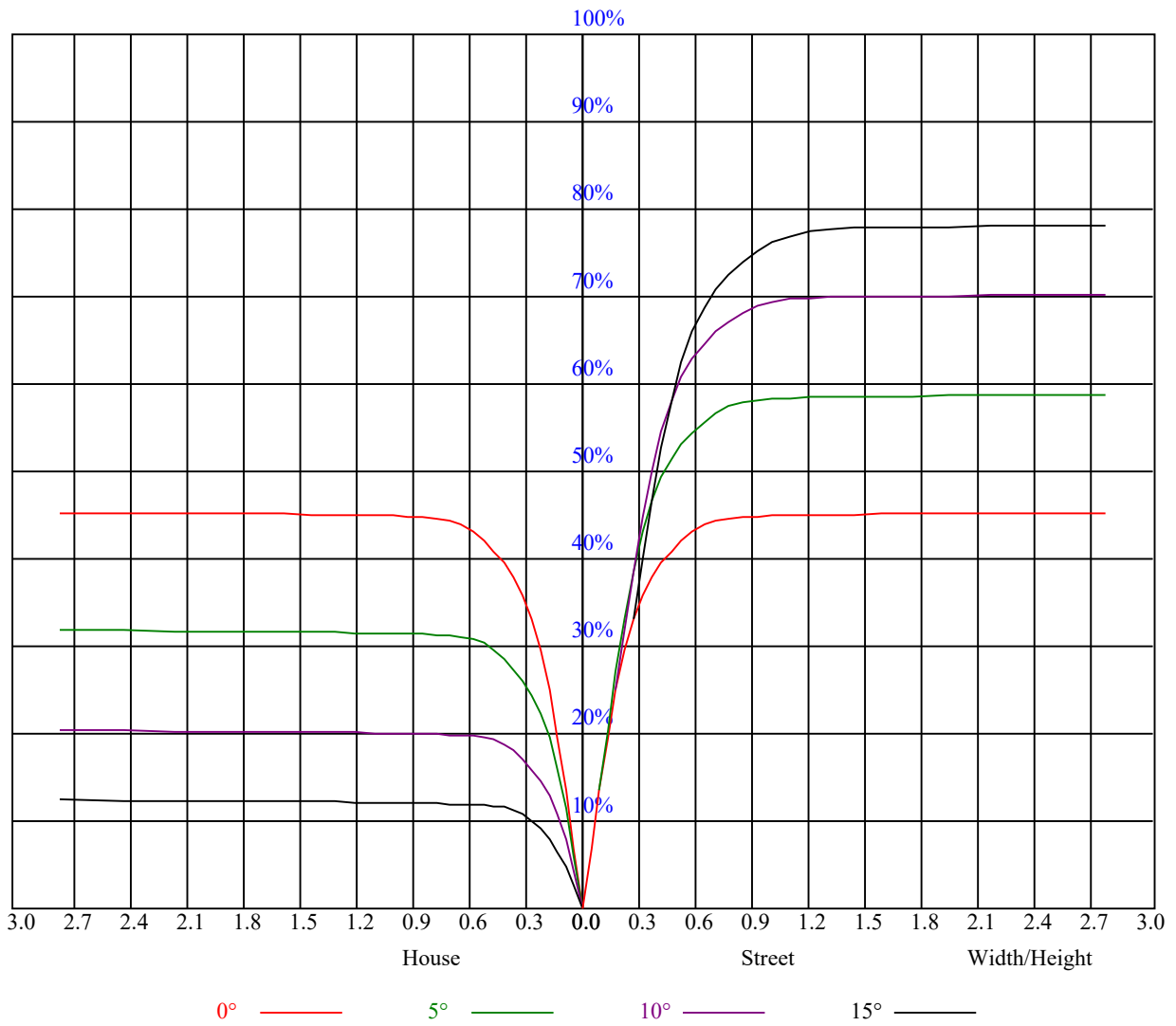
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	1.10	1.10	1.10	1.07	1.07	1.07	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.03	1.01	0.99	1.01	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	0.95	0.92	0.96	0.93	0.91	0.93	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.85	0.84
3	0.93	0.89	0.86	0.92	0.88	0.85	0.89	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.81	0.80
4	0.88	0.84	0.81	0.87	0.84	0.81	0.86	0.82	0.80	0.84	0.81	0.79	0.82	0.80	0.78	0.77
5	0.85	0.80	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.75	0.74
6	0.81	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
7	0.78	0.73	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
8	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66
9	0.72	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.70	0.66	0.64	0.63
10	0.70	0.65	0.63	0.69	0.65	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.61



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	9904.10	9227.45	6938.76	3480.67	1636.28	1187.57	1004.23	434.95	29.51
45.0	9877.67	9620.56	7720.56	4554.82	1975.97	1236.57	1013.59	576.44	57.37
90.0	9947.59	9487.87	7479.41	4194.75	1881.83	1096.67	991.95	536.30	47.57
135.0	9857.85	9572.66	8281.58	5350.93	2283.74	1287.77	1033.96	722.34	307.77
180.0	9904.10	9387.12	7708.45	4806.42	2026.08	1169.40	1015.35	622.08	63.65
225.0	9877.67	9111.83	7006.48	3607.30	1677.02	1088.13	988.48	472.49	30.83
270.0	9947.59	9257.18	7230.56	3977.27	1729.32	1164.44	1009.18	530.74	32.65
315.0	9857.85	8969.79	6452.06	2935.61	1496.43	1094.74	944.93	322.19	25.77
360.0	9904.10	9227.45	6938.76	3480.67	1636.28	1187.57	1004.23	434.95	29.51

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	15.69	14.20	13.32	12.88	12.55	12.39	12.17	12.11	12.06
45.0	18.17	14.70	13.76	13.21	12.83	12.61	12.39	12.28	12.17
90.0	17.40	14.31	13.49	12.99	12.66	12.50	12.28	12.17	12.06
135.0	19.99	14.53	13.60	13.10	12.72	12.50	12.33	12.17	12.06
180.0	18.28	14.20	13.32	12.88	12.55	12.28	12.17	12.00	11.95
225.0	16.02	14.48	13.54	13.05	12.72	12.44	12.33	12.17	12.11
270.0	16.68	14.42	13.54	13.05	12.77	12.50	12.33	12.22	12.17
315.0	15.69	13.87	13.16	12.77	12.55	12.44	12.55	12.22	12.11
360.0	15.69	14.20	13.32	12.88	12.55	12.39	12.17	12.11	12.06

C/γ(°)	90.0
0.0	11.95
45.0	12.11
90.0	12.06
135.0	12.00
180.0	11.95
225.0	12.11
270.0	12.11
315.0	12.00
360.0	11.95