



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

NATA

LumCAT: 1407-N	
Luminaire: 92.70.051.00	
Report No: NATA0100	Voltage(V): 35.1000
Test No: GC2019010407	Current(A): 0.2600
LampCAT: BRIDGELUX V8E G7	Power (W): 9.2300
Lamp flux(lm): 1258.7	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 39	Width(mm): 39
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 1082.53
Efficiency(%): 86.01%
Lumens(lm)/Power(W): 117.98
Central intensity(cd): 1251.844
Maximum intensity(cd): 1251.844
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=46.6
 [C90/270]Total=46.6
Field angle(10%Imax): [C0/180]Total=95.7
 [C90/270]Total=95.7
Maximum s/h(1/2): C0_180=0.71 C90_270=0.71
Maximum s/h(1/4): C0_180=0.79 C90_270=0.79
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.52%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 95.195%

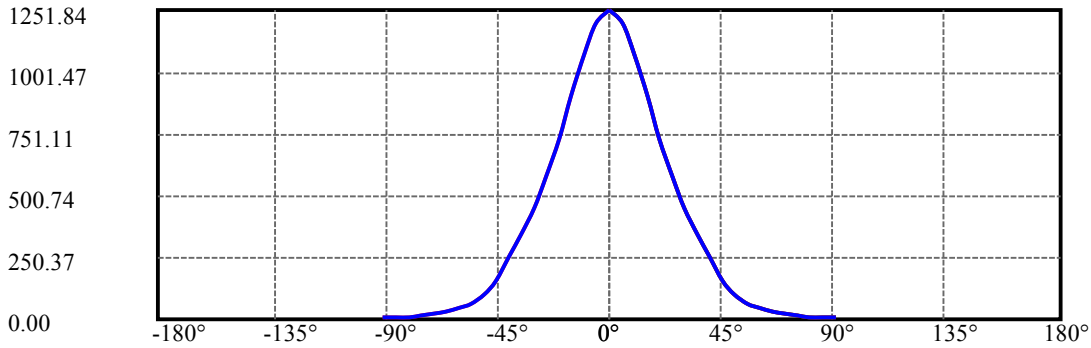
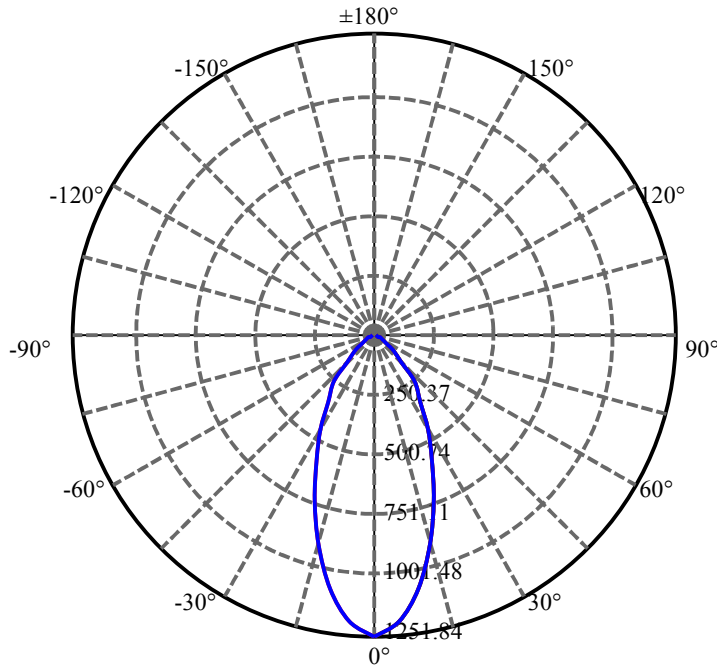
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1251.844	7.486	7.486	.595%	.692%
5.0	1196.163	57.145	64.631	4.540%	5.970%
10.0	1071.970	102.033	166.664	8.107%	15.396%
15.0	898.390	127.453	294.118	10.126%	27.170%
20.0	729.633	136.787	430.905	10.868%	39.805%
25.0	572.920	132.719	563.623	10.544%	52.066%
30.0	449.522	123.200	686.823	9.788%	63.446%
35.0	338.520	106.430	793.253	8.456%	73.278%
40.0	254.616	89.710	882.964	7.127%	81.565%
45.0	157.029	60.863	943.827	4.836%	87.187%
50.0	101.468	42.606	986.433	3.385%	91.123%
55.0	64.575	28.995	1015.427	2.304%	93.802%
60.0	44.733	21.235	1036.662	1.687%	95.763%
65.0	31.451	15.624	1052.286	1.241%	97.206%
70.0	22.648	11.665	1063.952	.927%	98.284%
75.0	15.574	8.246	1072.198	.655%	99.046%
80.0	10.371	5.598	1077.796	.445%	99.563%
85.0	6.405	3.498	1081.294	.278%	99.886%
90.0	4.500	1.233	1082.527	.098%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	686.82	54.57%	63.45%
0-40	882.96	70.15%	81.57%
0-60	1036.66	82.36%	95.76%
0-90	1081.29	85.91%	99.89%
0-120	1081.29	85.91%	99.89%
0-180	1082.53	86.01%	100.00%
60-90	65.87	5.23%	6.08%
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%
0-39.06	866.02	68.81%	80.00%

ZONAL LUMEN SUMMARY

0-10	166.66
10-20	264.24
20-30	255.92
30-40	196.14
40-50	103.47
50-60	50.23
60-70	27.29
70-80	13.84
80-90	3.50
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



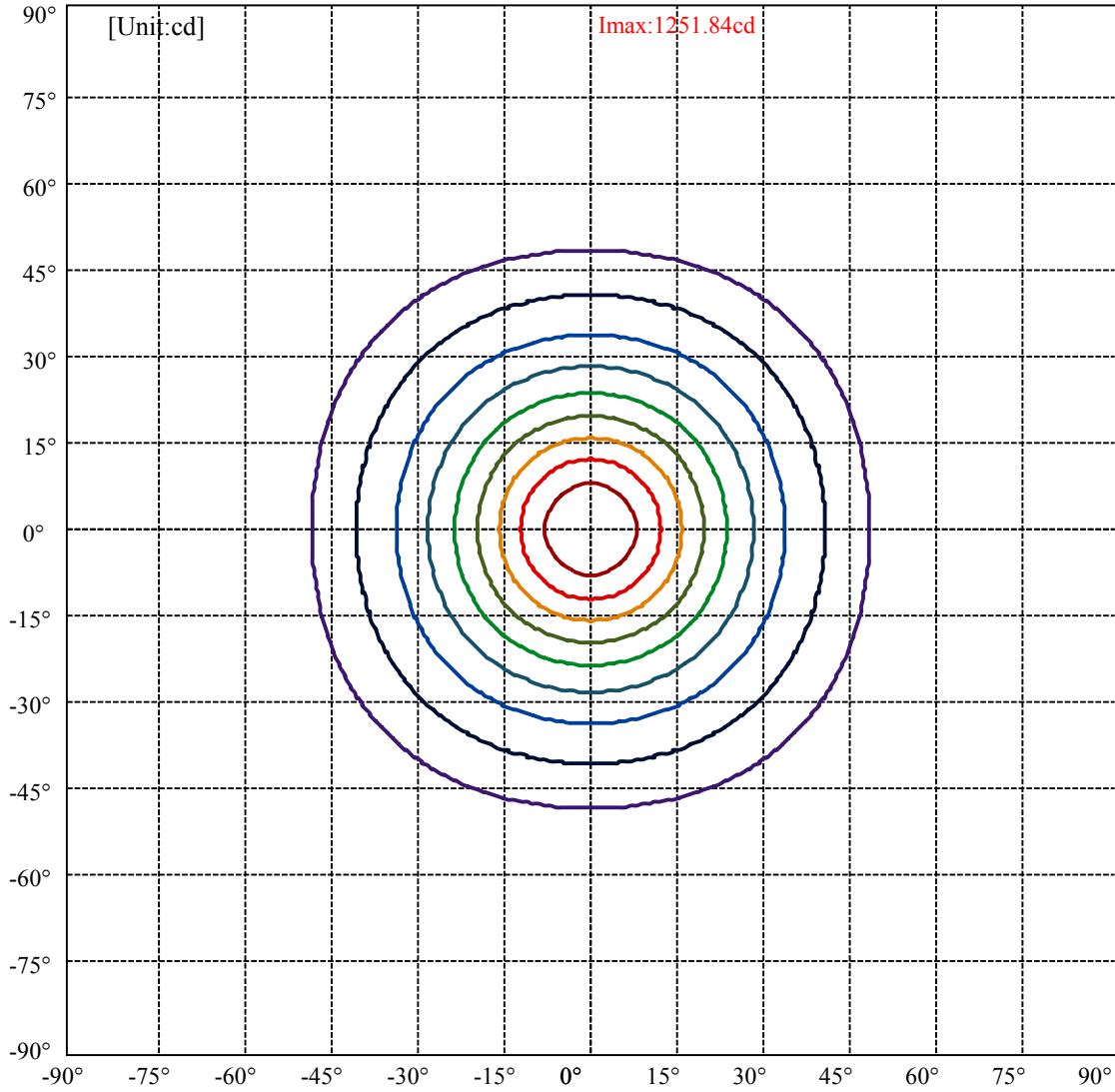
C0(Max): —————

C0/C180: —————

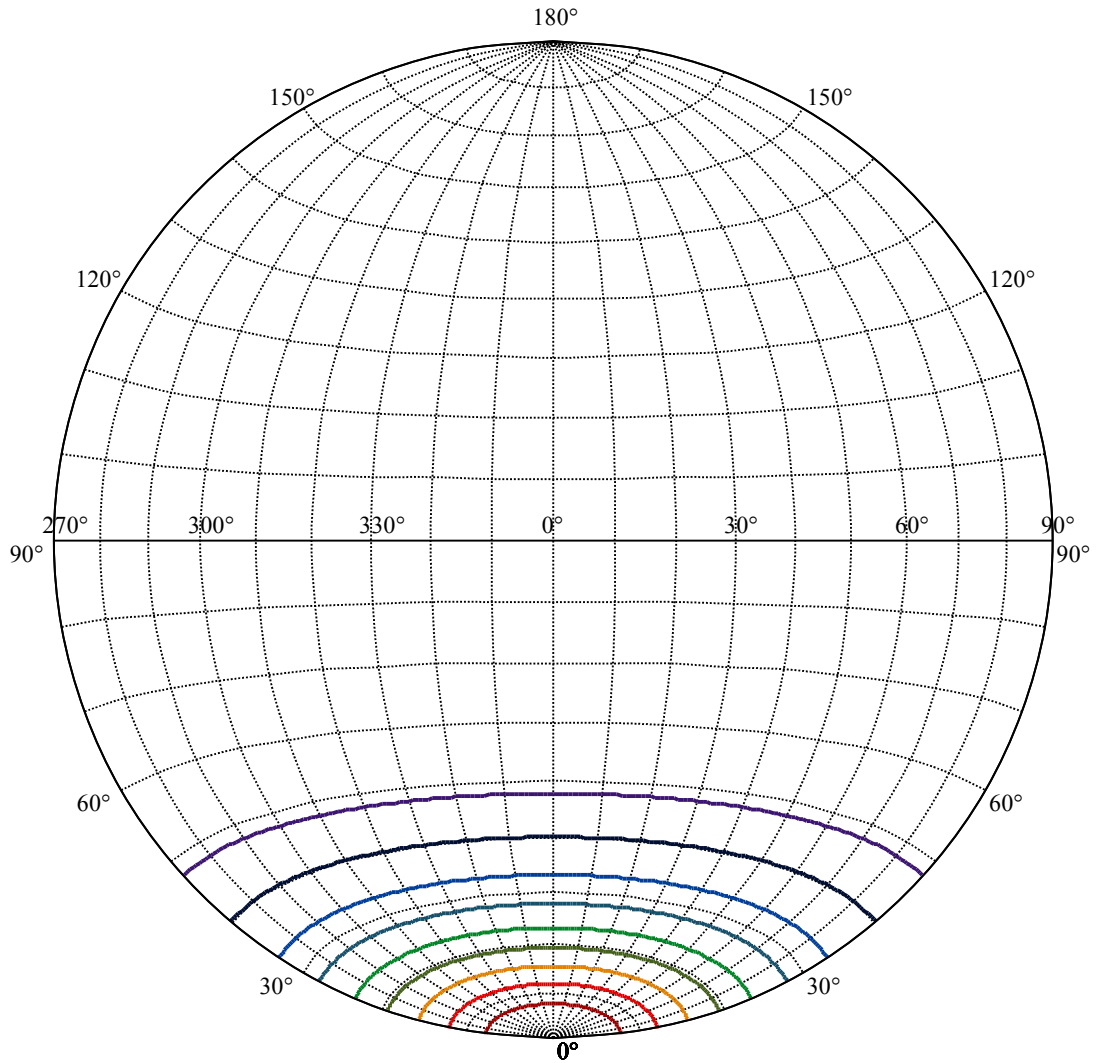
C90/C270: —————

Field angle(10%Imax):C0/180Left:47.9 Right:47.9
:C90/270Left:47.9 Right:47.9

Beam Angle(50%Imax):C0/180Left:23.3 Right:23.3
:C90/270Left:23.3 Right:23.3



(10%Imax) 125.184	—
(20%Imax) 250.369	—
(30%Imax) 375.553	—
(40%Imax) 500.737	—
(50%Imax) 625.922	—
(60%Imax) 751.106	—
(70%Imax) 876.291	—
(80%Imax) 1001.47	—
(90%Imax) 1126.66	—



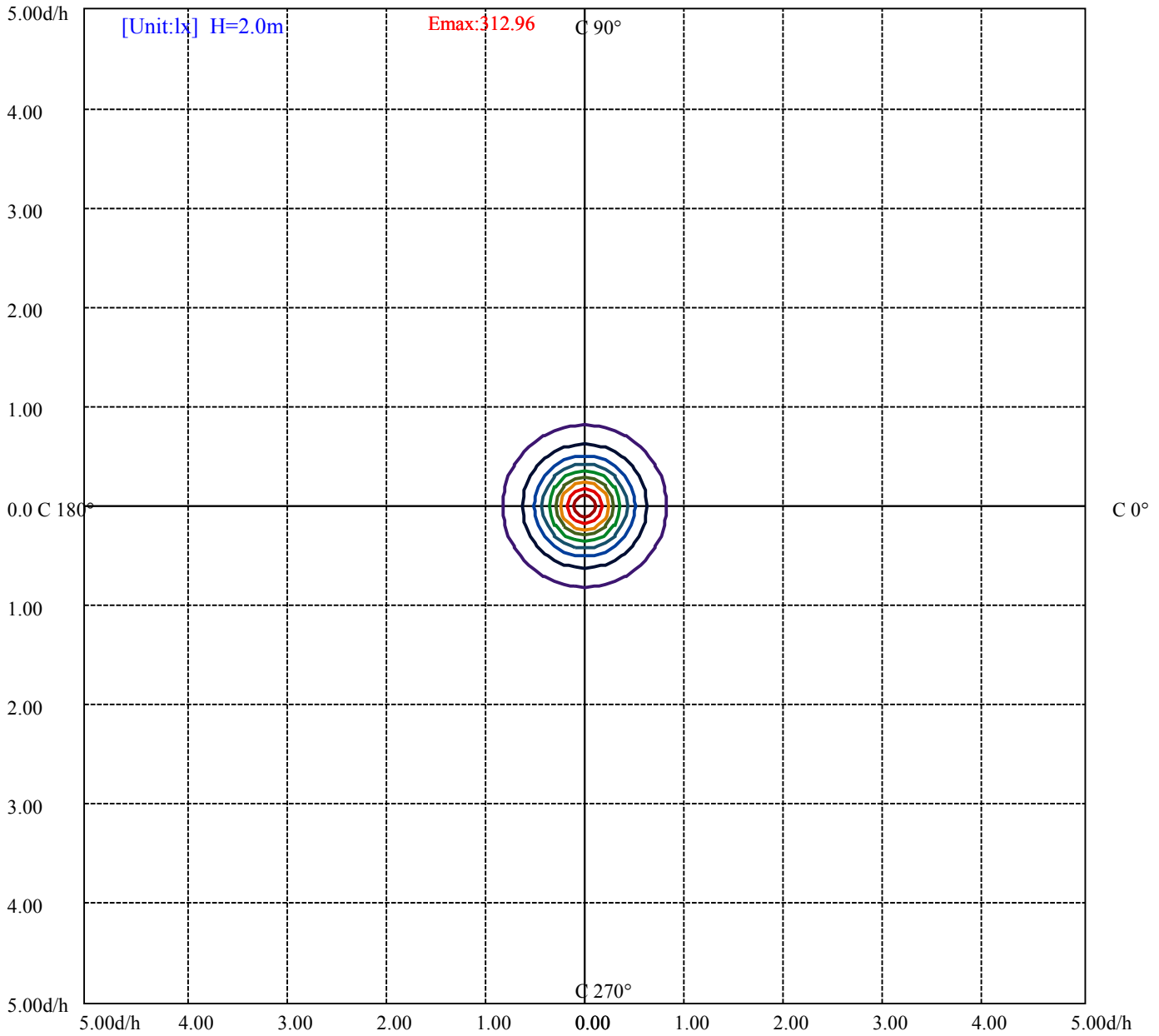
House

[Unit:cd]

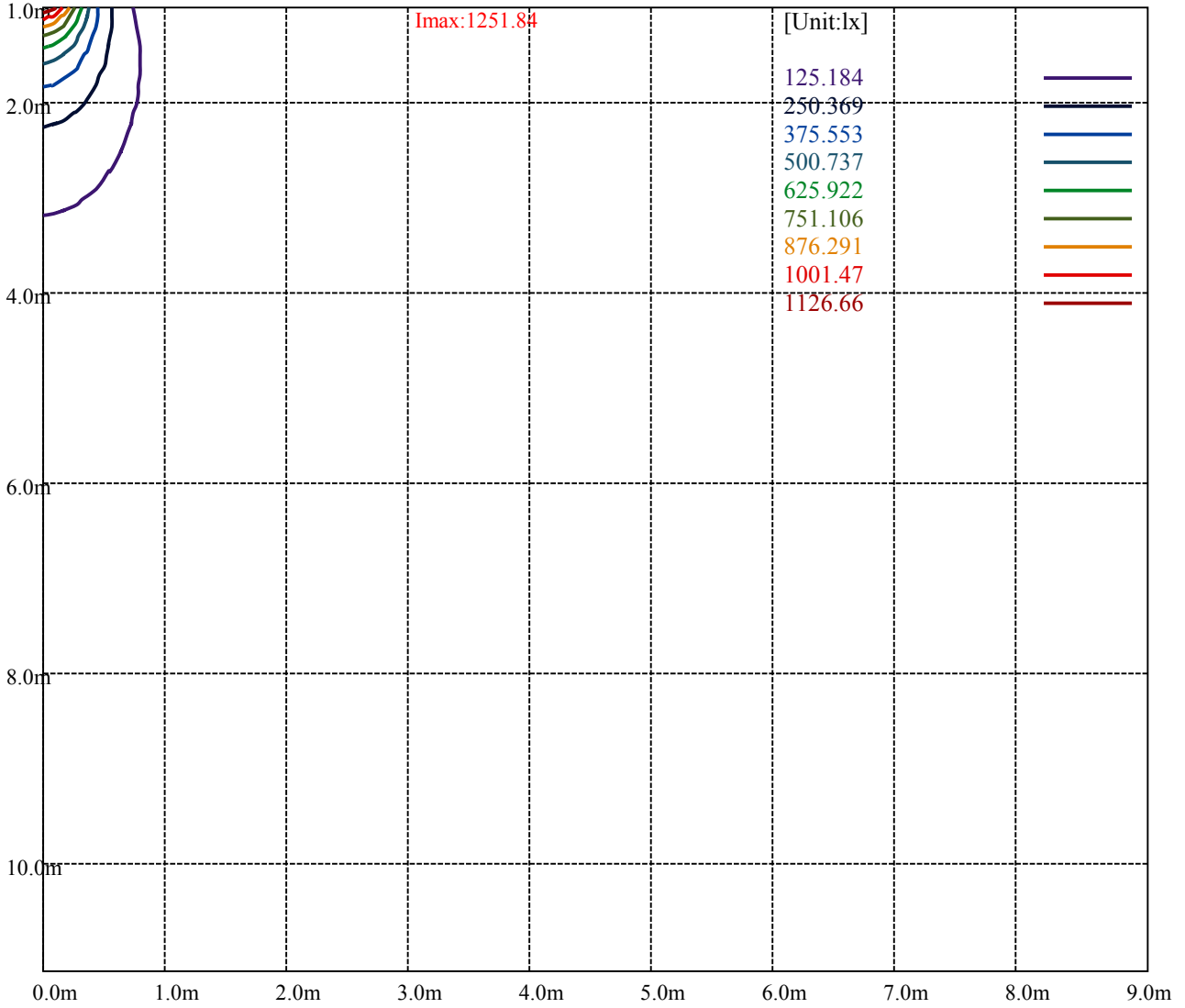
Road

Imax:1251.84

(10%Imax)	125.184	—
(20%Imax)	250.369	—
(30%Imax)	375.553	—
(40%Imax)	500.737	—
(50%Imax)	625.922	—
(60%Imax)	751.106	—
(70%Imax)	876.291	—
(80%Imax)	1001.47	—
(90%Imax)	1126.66	—



(10%Emax) 31.296	—
(20%Emax) 62.592	—
(30%Emax) 93.88825	—
(40%Emax) 125.1842	—
(50%Emax) 156.4803	—
(60%Emax) 187.7762	—
(70%Emax) 219.0723	—
(80%Emax) 250.3675	—
(90%Emax) 281.665	—



Luminance Table

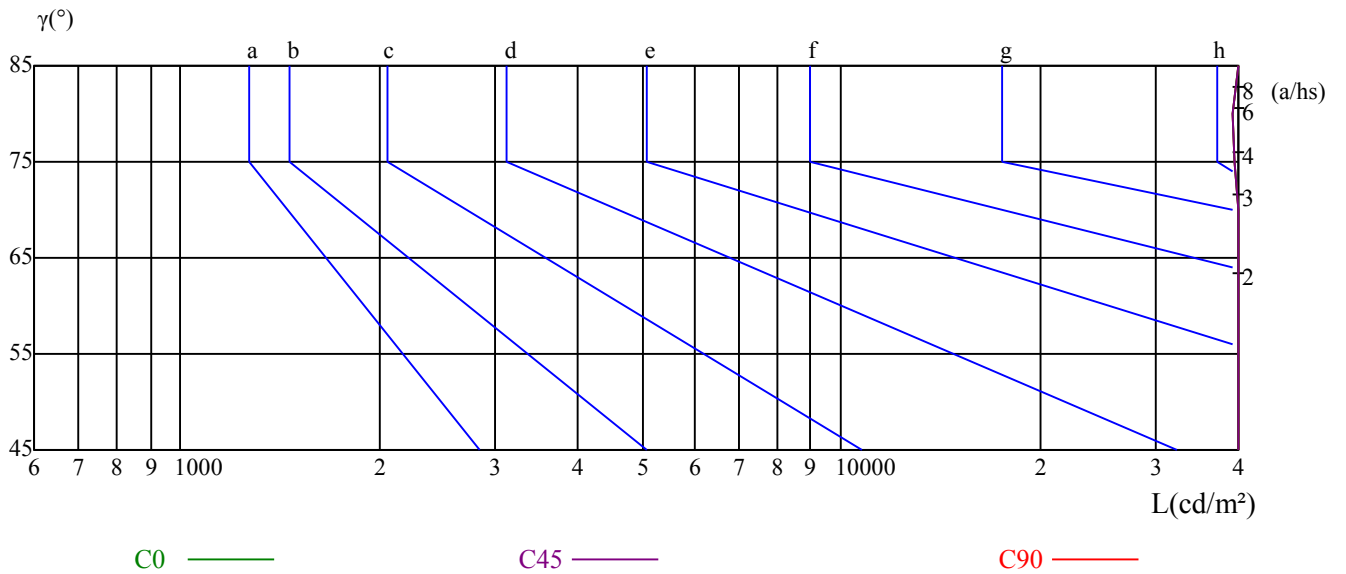
γ	45	50	55	60	65	70	75	80	85
C0	146004	103784	74019	58820	48928	43535	39562	39267	48320
C45	146004	103784	74019	58820	48928	43535	39562	39267	48320
C90	146004	103784	74019	58820	48928	43535	39562	39267	48320

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
48928	48928	48928	39562	39562	39562	48320	48320	48320

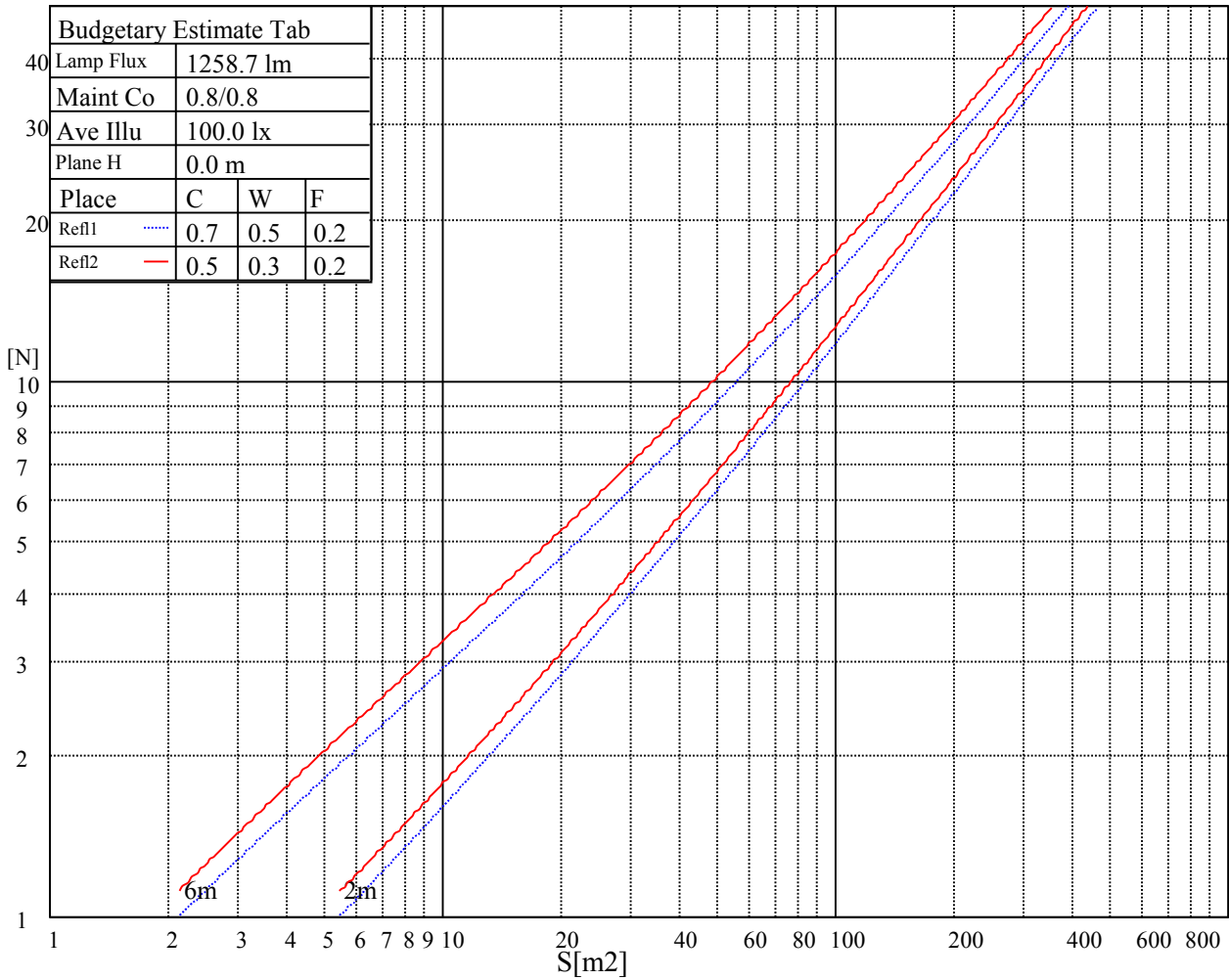
Glare Table

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

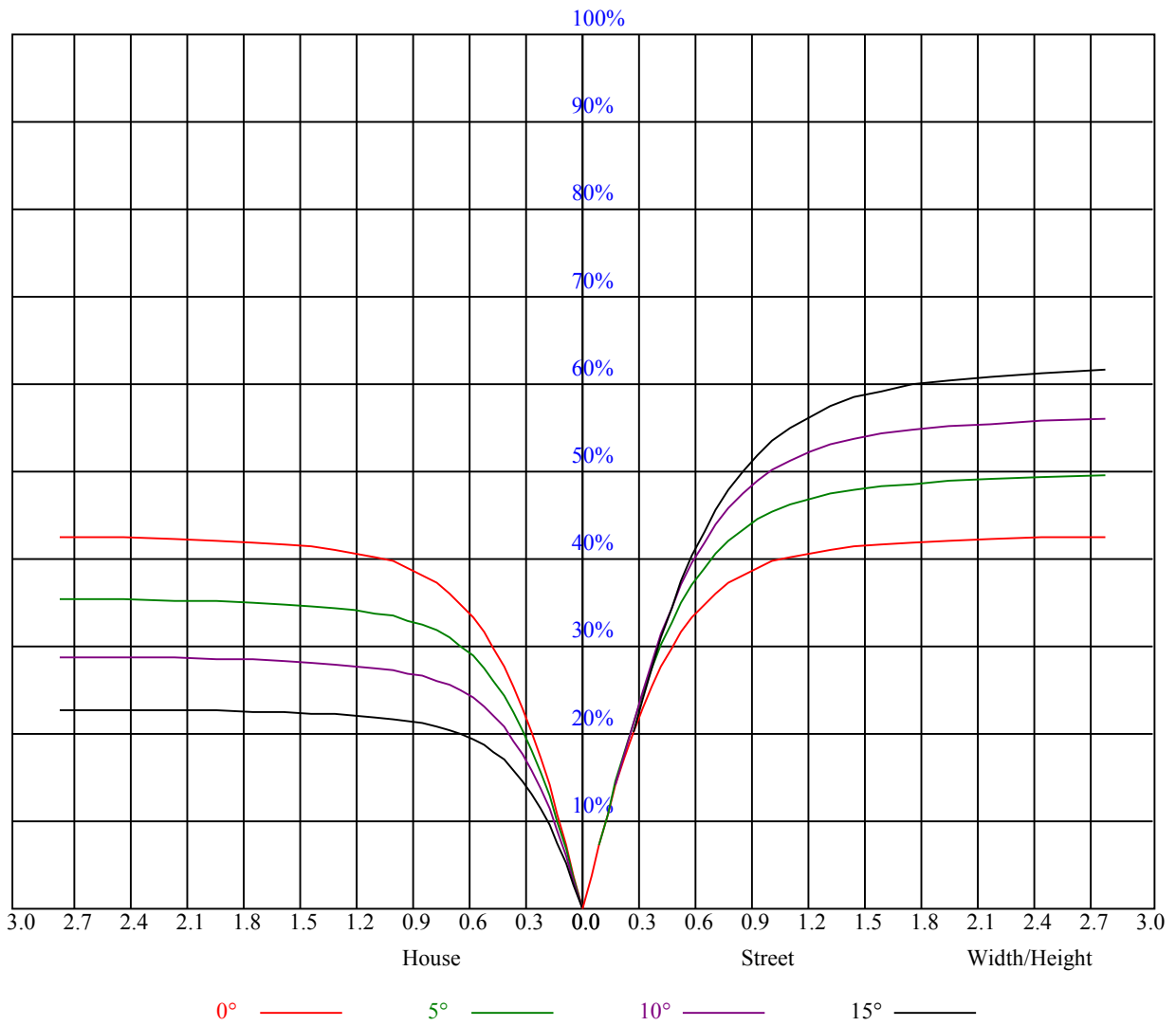
Luminance Limiting Curve



Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	22.86	24.05	23.22	24.36	24.68	22.93	24.12	23.29	24.43	24.75
	3H	23.90	24.96	24.28	25.29	25.65	23.97	25.02	24.35	25.36	25.72
	4H	24.30	25.28	24.71	25.63	26.02	24.38	25.36	24.79	25.71	26.10
	6H	24.64	25.53	25.05	25.91	26.30	24.74	25.63	25.15	26.01	26.40
	8H	24.78	25.63	25.21	26.02	26.43	24.89	25.74	25.32	26.13	26.54
	12H	25.03	25.84	25.46	26.22	26.66	25.15	25.97	25.59	26.35	26.78
4H	2H	23.14	24.12	23.54	24.47	24.86	23.20	24.18	23.61	24.53	24.92
	3H	24.41	25.21	24.82	25.61	26.02	24.46	25.26	24.88	25.67	26.07
	4H	24.92	25.64	25.36	26.06	26.51	24.99	25.71	25.43	26.13	26.58
	6H	25.32	25.94	25.79	26.39	26.85	25.41	26.03	25.88	26.48	26.95
	8H	25.53	26.11	26.00	26.55	27.03	25.63	26.21	26.11	26.66	27.13
	12H	25.83	26.33	26.32	26.82	27.29	25.95	26.45	26.43	26.94	27.41
8H	4H	25.09	25.66	25.56	26.11	26.58	25.15	25.73	25.62	26.18	26.65
	6H	25.63	26.10	26.14	26.60	27.08	25.72	26.18	26.22	26.68	27.17
	8H	25.94	26.36	26.47	26.88	27.37	26.04	26.46	26.57	26.98	27.47
	12H	26.75	27.12	27.27	27.61	28.19	26.86	27.22	27.38	27.72	28.30
12H	4H	25.09	25.59	25.58	26.08	26.56	25.15	25.66	25.64	26.14	26.62
	6H	26.16	26.10	26.21	26.57	27.12	26.24	26.18	26.29	26.65	27.20
	8H	26.06	26.43	26.58	26.92	27.50	26.15	26.52	26.67	27.02	27.59
Variation with the observer position at spacings:											
S = 1.0H	1.1/-1.8					1.1/-1.8					
S = 1.5H	2.3/-2.4					2.3/-2.4					
S = 2.0H	4.2/-2.5					4.2/-2.5					
Standard tables:	BK2					BK2					
Uncorrected UGR	9.6					9.6					



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	1.03	1.03	1.03	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.88	0.88	0.88	0.87
1	0.94	0.92	0.89	0.92	0.90	0.88	0.89	0.87	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
2	0.87	0.83	0.79	0.85	0.82	0.79	0.82	0.79	0.77	0.80	0.77	0.75	0.77	0.75	0.74	0.72
3	0.80	0.76	0.72	0.79	0.75	0.71	0.77	0.73	0.70	0.75	0.71	0.69	0.73	0.70	0.68	0.66
4	0.75	0.69	0.65	0.74	0.69	0.65	0.72	0.68	0.64	0.70	0.66	0.63	0.68	0.65	0.63	0.61
5	0.70	0.64	0.60	0.69	0.64	0.60	0.67	0.63	0.59	0.66	0.62	0.59	0.64	0.61	0.58	0.57
6	0.65	0.60	0.56	0.65	0.59	0.56	0.63	0.59	0.55	0.62	0.58	0.55	0.61	0.57	0.54	0.53
7	0.61	0.56	0.52	0.61	0.55	0.52	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.50
8	0.58	0.52	0.49	0.57	0.52	0.49	0.56	0.52	0.48	0.55	0.51	0.48	0.55	0.51	0.48	0.47
9	0.55	0.49	0.46	0.54	0.49	0.46	0.53	0.49	0.45	0.53	0.48	0.45	0.52	0.48	0.45	0.44
10	0.52	0.47	0.43	0.51	0.46	0.43	0.51	0.46	0.43	0.50	0.46	0.43	0.49	0.46	0.43	0.42



NATA 1407-N

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	1252.13	1205.44	1100.81	923.06	756.56	600.19	478.69	362.25	287.44
45.0	1251.00	1194.19	1063.69	884.81	724.50	570.94	448.88	335.81	259.20
90.0	1251.00	1119.99	1013.12	836.61	665.21	511.99	386.04	292.61	205.99
135.0	1253.25	1204.88	1076.06	902.81	730.69	570.94	455.63	342.00	259.88
180.0	1252.13	1200.38	1068.24	896.85	728.10	580.78	453.09	334.91	240.69
225.0	1251.00	1209.38	1072.74	900.68	723.88	561.43	443.64	334.91	244.01
270.0	1251.00	1229.06	1110.94	945.56	767.25	599.63	466.88	359.44	288.56
315.0	1253.25	1206.00	1070.16	896.74	740.87	587.48	463.33	346.22	251.16
360.0	1252.13	1205.44	1100.81	923.06	756.56	600.19	478.69	362.25	287.44
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	170.61	107.61	68.57	48.32	33.64	24.08	16.76	11.14	6.58
45.0	153.23	98.55	64.63	44.89	31.22	22.22	15.24	9.90	5.85
90.0	131.96	87.53	56.81	39.71	28.24	19.97	13.22	8.44	5.51
135.0	156.15	102.09	64.24	43.88	31.05	22.16	15.08	10.35	6.36
180.0	154.18	97.43	60.41	42.58	29.81	21.43	14.96	9.96	6.41
225.0	155.81	103.50	64.24	43.59	31.11	22.50	15.64	10.74	6.75
270.0	172.63	113.01	70.93	48.71	34.14	25.20	17.44	11.70	6.98
315.0	161.66	102.04	66.77	46.18	32.40	23.63	16.26	10.74	6.81
360.0	170.61	107.61	68.57	48.32	33.64	24.08	16.76	11.14	6.58
C/ γ (°)	90.0								
0.0	4.50								
45.0	4.39								
90.0	4.39								
135.0	4.56								
180.0	4.50								
225.0	4.56								
270.0	4.56								
315.0	4.56								
360.0	4.50								