



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: 2-1680-M
Luminaire: 92.70.127.00
Report No: NATA0100
Test No: GC2019011603
LampCAT: PHILIPS Certaflux SLM 1202
Lamp flux(lm): 967.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 36.6000
Current(A): 0.2500
Power (W): 9.1500
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 857.16
Efficiency(%): 88.64%
Lumens(lm)/Power(W): 93.76
Central intensity(cd): 3112.734
Maximum intensity(cd): 3112.734
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=24.2
[C90/270]Total=24.2
Field angle(10%Imax): [C0/180]Total=61.4
[C90/270]Total=61.4
Maximum s/h(1/2): C0_180=0.41 C90_270=0.41
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.71%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.633%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3112.734	0.745	0.745	.077%	.087%
1.0	3106.195	5.945	6.689	.615%	.780%
2.0	3086.367	11.812	18.501	1.221%	2.158%
3.0	3052.758	17.520	36.022	1.812%	4.202%
4.0	3006.844	23.001	59.023	2.379%	6.886%
5.0	2929.219	27.996	87.019	2.895%	10.152%
6.0	2822.555	32.354	119.373	3.346%	13.927%
7.0	2670.891	35.695	155.068	3.691%	18.091%
8.0	2493.000	38.048	193.115	3.935%	22.530%
9.0	2284.383	39.188	232.303	4.053%	27.102%
10.0	2053.758	39.109	271.412	4.044%	31.664%
11.0	1820.531	38.093	309.505	3.939%	36.108%
12.0	1580.892	36.044	345.549	3.727%	40.313%
13.0	1361.046	33.575	379.124	3.472%	44.230%
14.0	1105.727	29.334	408.458	3.034%	47.653%
15.0	961.038	27.276	435.735	2.821%	50.835%
16.0	802.378	24.253	459.988	2.508%	53.664%
17.0	675.914	21.671	481.659	2.241%	56.193%
18.0	576.745	19.544	501.203	2.021%	58.473%
19.0	508.591	18.158	519.361	1.878%	60.591%
20.0	457.826	17.171	536.532	1.776%	62.594%
21.0	422.269	16.595	553.127	1.716%	64.530%
22.0	398.447	16.368	569.495	1.693%	66.440%
23.0	379.371	16.255	585.75	1.681%	68.336%
24.0	364.669	16.265	602.016	1.682%	70.234%
25.0	353.067	16.363	618.378	1.692%	72.143%
26.0	344.166	16.545	634.923	1.711%	74.073%
27.0	336.234	16.739	651.663	1.731%	76.026%
28.0	328.950	16.935	668.598	1.751%	78.002%
29.0	321.764	17.106	685.704	1.769%	79.998%
30.0	315.394	17.293	702.997	1.788%	82.015%
31.0	309.677	17.490	720.488	1.809%	84.056%
32.0	303.806	17.655	738.143	1.826%	86.115%
33.0	298.498	17.828	755.97	1.844%	88.195%
34.0	289.484	17.752	773.722	1.836%	90.266%
35.0	265.085	16.674	790.396	1.724%	92.211%
36.0	230.449	14.854	805.25	1.536%	93.944%
37.0	184.395	12.169	817.419	1.258%	95.364%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	134.416	9.075	826.494	.938%	96.423%
39.0	84.122	5.805	832.299	.600%	97.100%
40.0	47.243	3.330	835.629	.344%	97.489%
41.0	25.066	1.803	837.433	.186%	97.699%
42.0	13.001	0.954	838.387	.099%	97.810%
43.0	9.373	0.701	839.088	.072%	97.892%
44.0	7.587	0.578	839.666	.060%	97.959%
45.0	6.265	0.486	840.151	.050%	98.016%
46.0	5.625	0.444	840.595	.046%	98.068%
47.0	5.316	0.426	841.021	.044%	98.118%
48.0	5.091	0.415	841.436	.043%	98.166%
49.0	4.957	0.410	841.847	.042%	98.214%
50.0	4.823	0.405	842.252	.042%	98.261%
51.0	4.718	0.402	842.654	.042%	98.308%
52.0	4.605	0.398	843.052	.041%	98.354%
53.0	4.528	0.397	843.448	.041%	98.401%
54.0	4.409	0.391	843.84	.040%	98.446%
55.0	4.317	0.388	844.227	.040%	98.492%
56.0	4.240	0.385	844.613	.040%	98.537%
57.0	4.184	0.385	844.998	.040%	98.581%
58.0	4.092	0.381	845.378	.039%	98.626%
59.0	4.057	0.381	845.759	.039%	98.670%
60.0	4.001	0.380	846.139	.039%	98.715%
61.0	3.930	0.377	846.516	.039%	98.759%
62.0	3.881	0.376	846.892	.039%	98.803%
63.0	3.832	0.374	847.267	.039%	98.846%
64.0	3.797	0.374	847.641	.039%	98.890%
65.0	3.755	0.373	848.014	.039%	98.933%
66.0	3.720	0.373	848.387	.039%	98.977%
67.0	3.691	0.373	848.759	.039%	99.020%
68.0	3.663	0.372	849.132	.039%	99.064%
69.0	3.628	0.371	849.503	.038%	99.107%
70.0	3.600	0.371	849.874	.038%	99.150%
71.0	3.579	0.371	850.245	.038%	99.194%
72.0	3.565	0.372	850.617	.038%	99.237%
73.0	3.551	0.372	850.989	.039%	99.281%
74.0	3.530	0.372	851.361	.038%	99.324%
75.0	3.523	0.373	851.735	.039%	99.367%

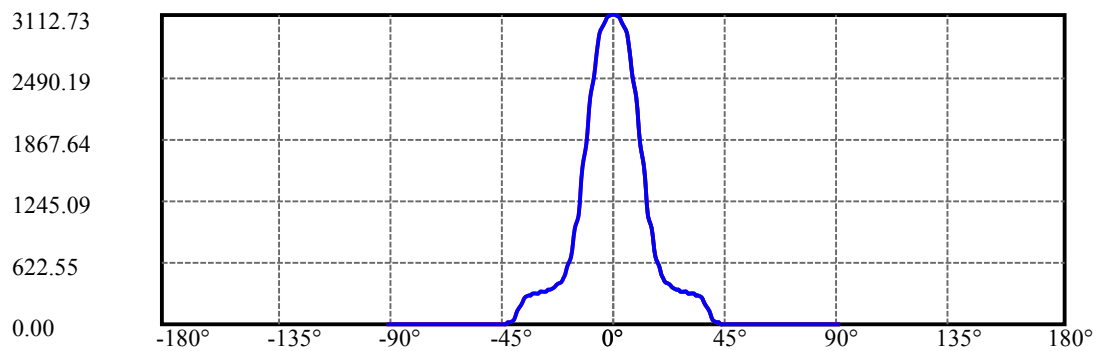
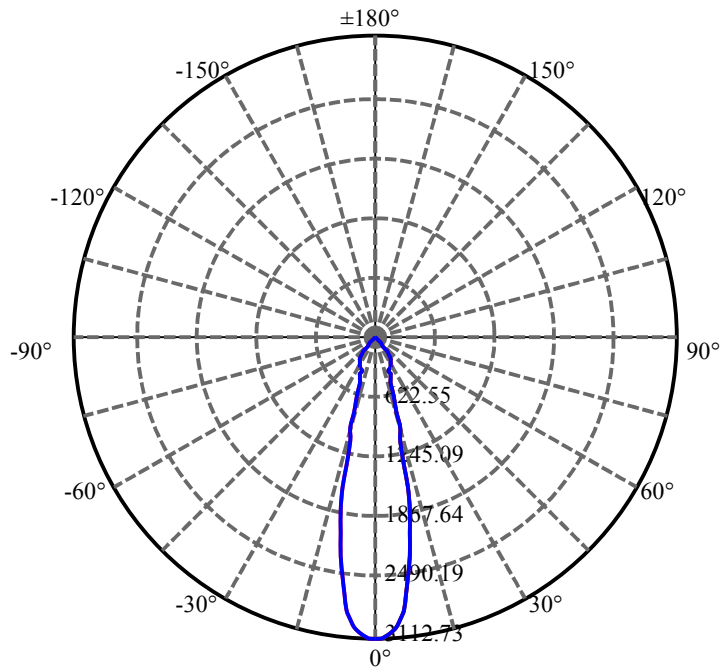
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	3.502	0.373	852.107	.039%	99.411%
77.0	3.502	0.374	852.481	.039%	99.455%
78.0	3.488	0.374	852.855	.039%	99.498%
79.0	3.466	0.373	853.229	.039%	99.542%
80.0	3.452	0.373	853.601	.039%	99.585%
81.0	3.459	0.375	853.976	.039%	99.629%
82.0	3.459	0.376	854.352	.039%	99.673%
83.0	3.452	0.376	854.727	.039%	99.717%
84.0	3.438	0.375	855.102	.039%	99.760%
85.0	3.445	0.376	855.479	.039%	99.804%
86.0	3.424	0.375	855.853	.039%	99.848%
87.0	3.396	0.372	856.225	.038%	99.891%
88.0	3.403	0.373	856.598	.039%	99.935%
89.0	3.396	0.372	856.971	.039%	99.978%
90.0	3.389	0.186	857.156	.019%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	703.00	72.70%	82.02%
0-40	835.63	86.41%	97.49%
0-60	846.14	87.50%	98.71%
0-90	856.97	88.62%	99.98%
0-120	856.97	88.62%	99.98%
0-180	857.16	88.64%	100.00%
60-90	11.21	1.16%	1.31%
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%
0-29.00	685.73	70.91%	80.00%

ZONAL LUMEN SUMMARY

0-10	271.41
10-20	265.12
20-30	166.47
30-40	132.63
40-50	6.62
50-60	3.89
60-70	3.73
70-80	3.73
80-90	3.37
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

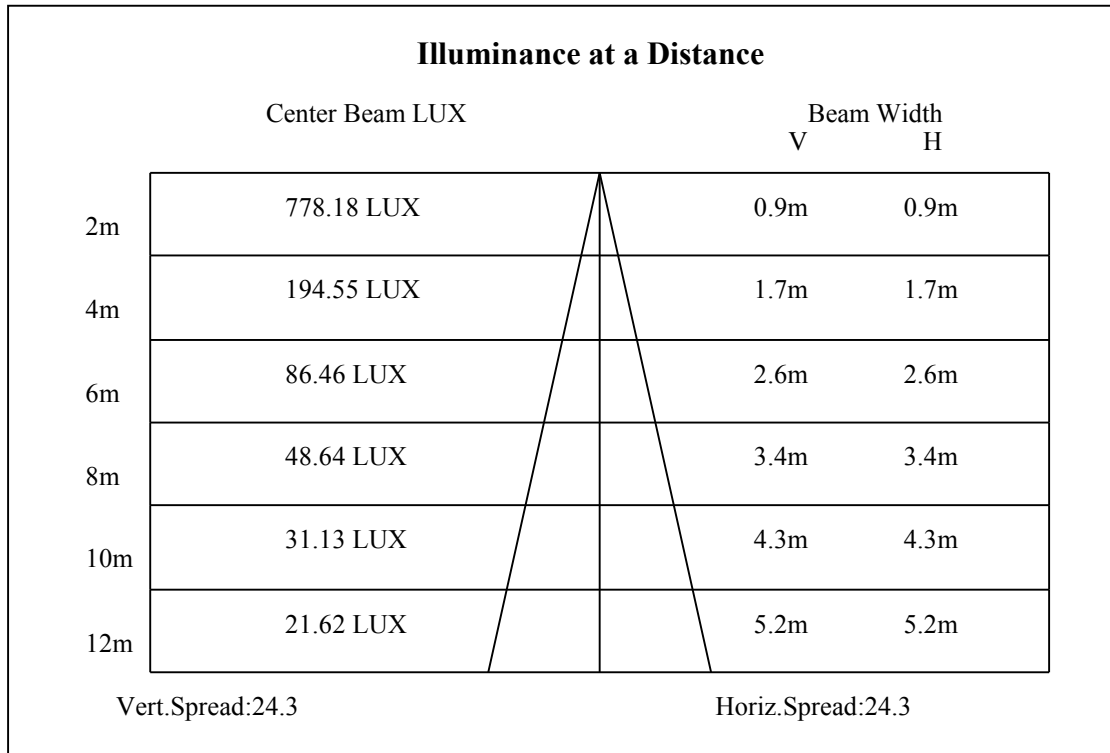
C0(Max): —————C0/C180: —————C90/C270: —————

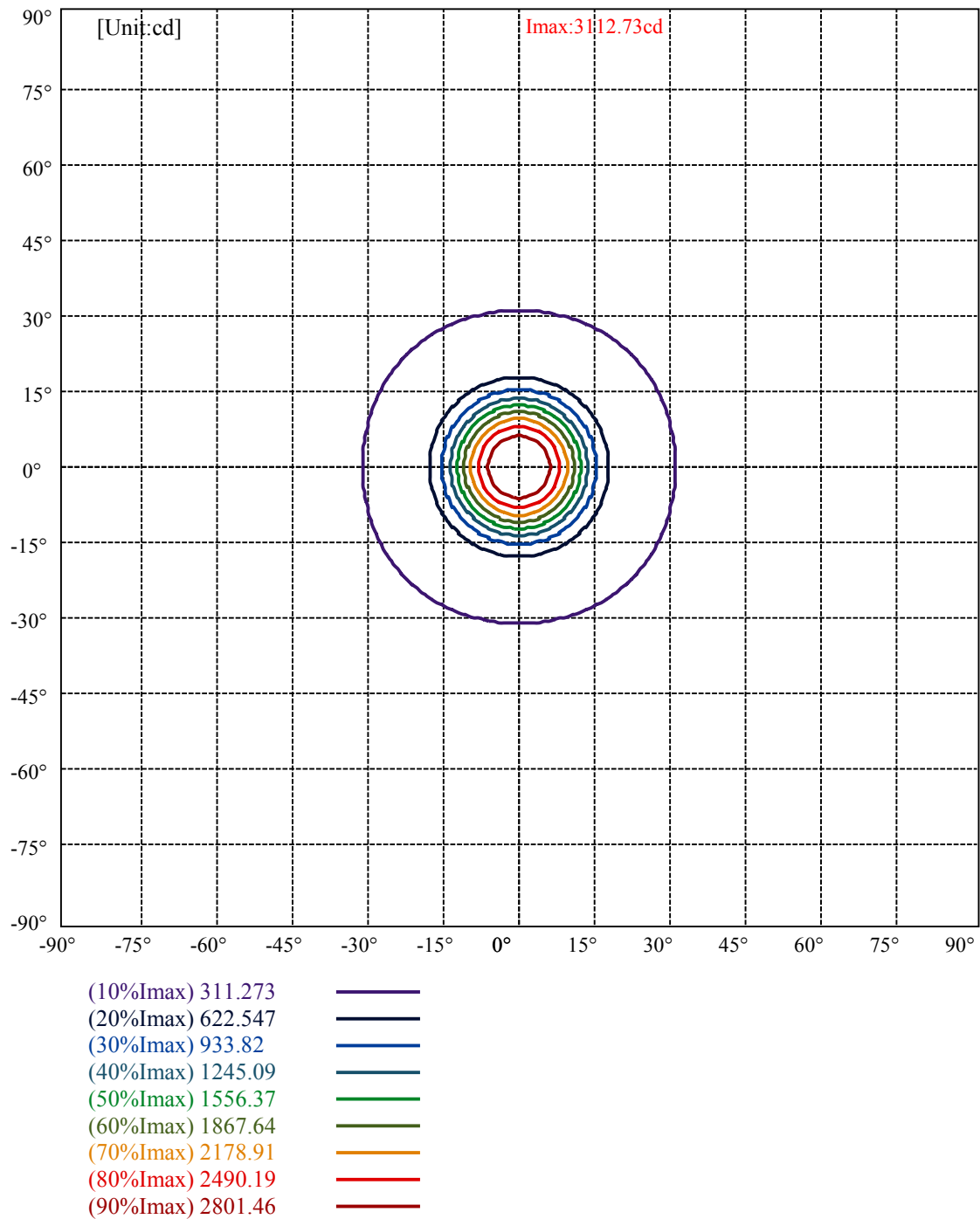
Field angle(10%Imax):C0/180Left:30.7 Right:30.7

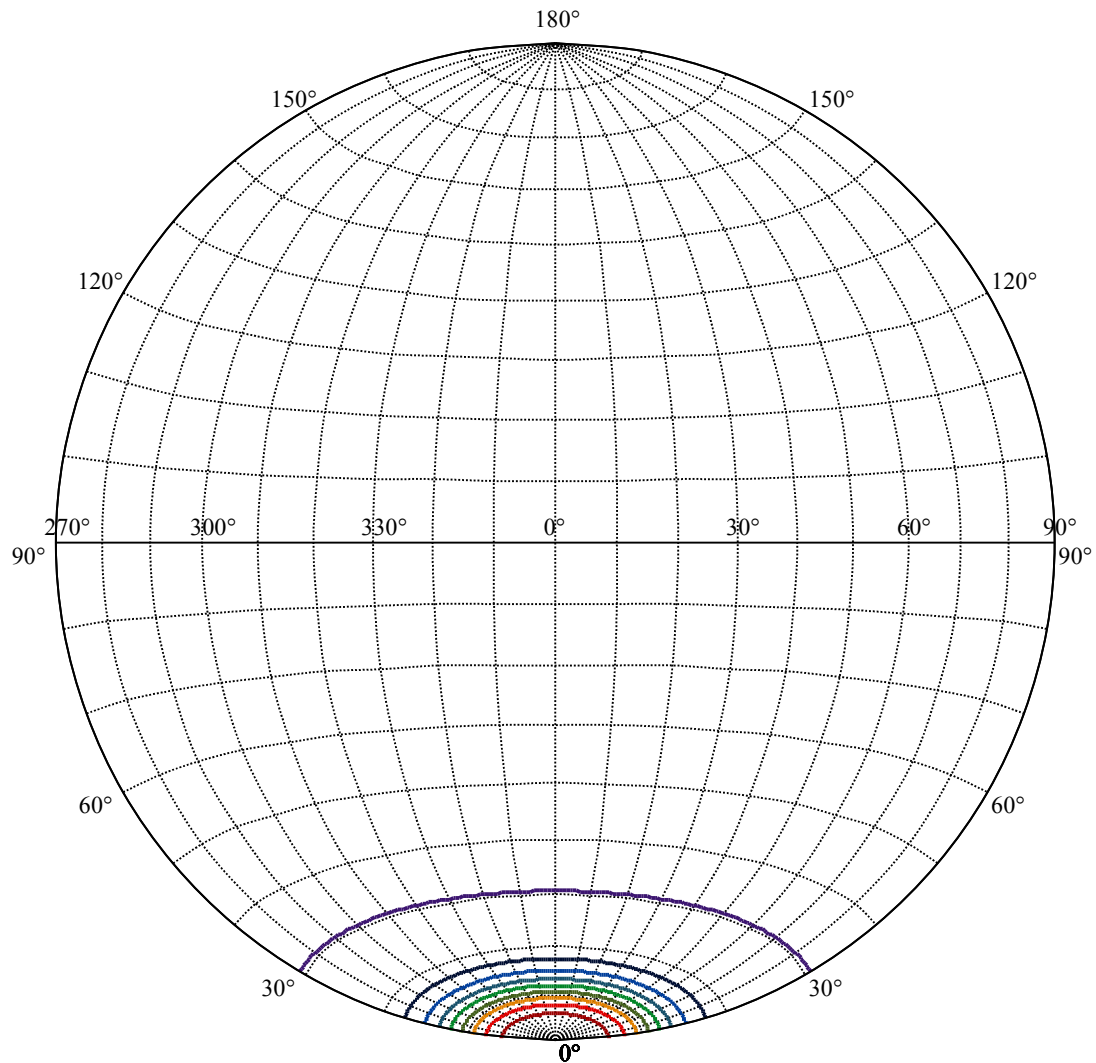
:C90/270Left:30.7 Right:30.7

Beam Angle(50%Imax):C0/180Left:12.1 Right:12.1

:C90/270Left:12.1 Right:12.1







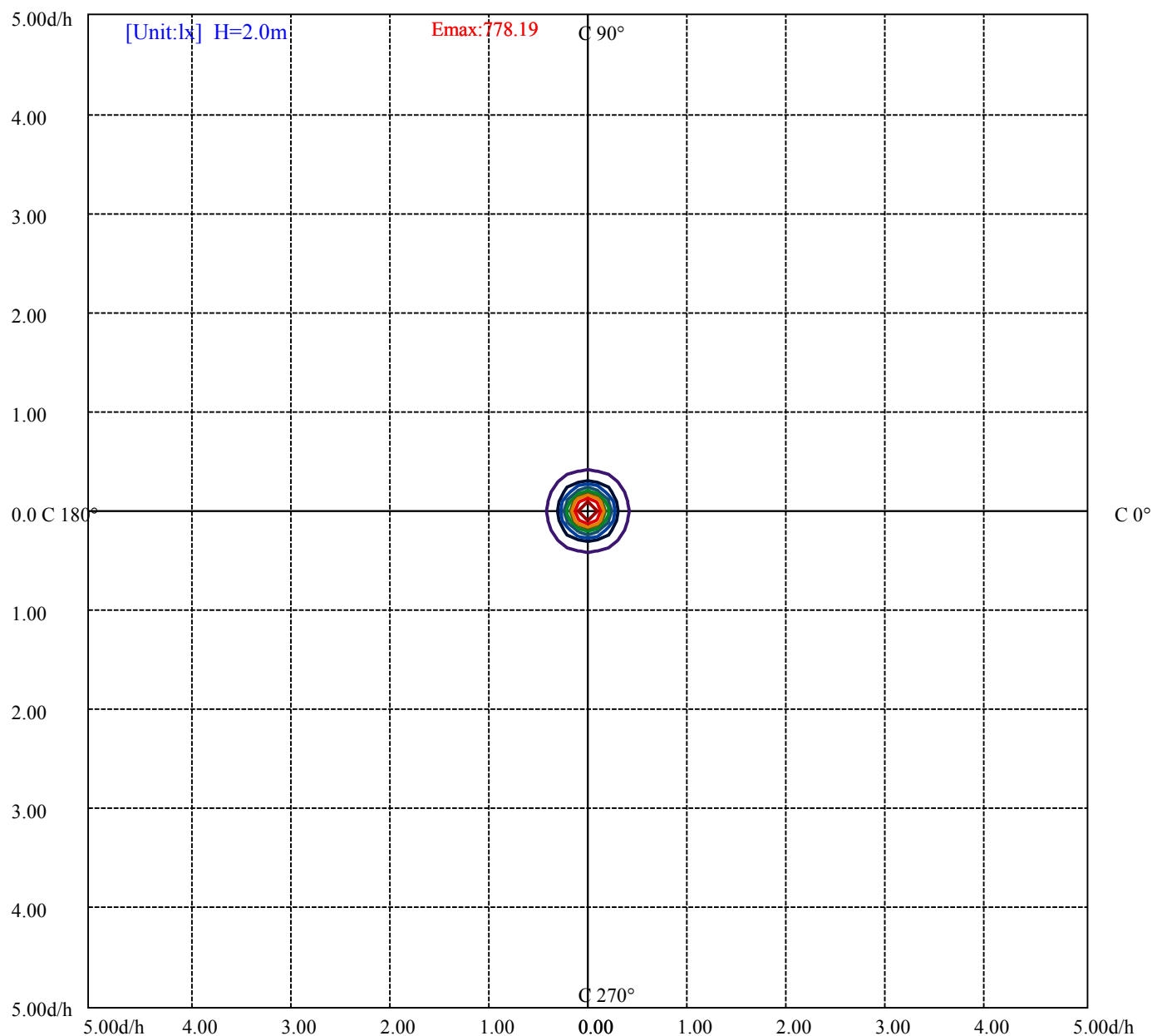
House

[Unit:cd]

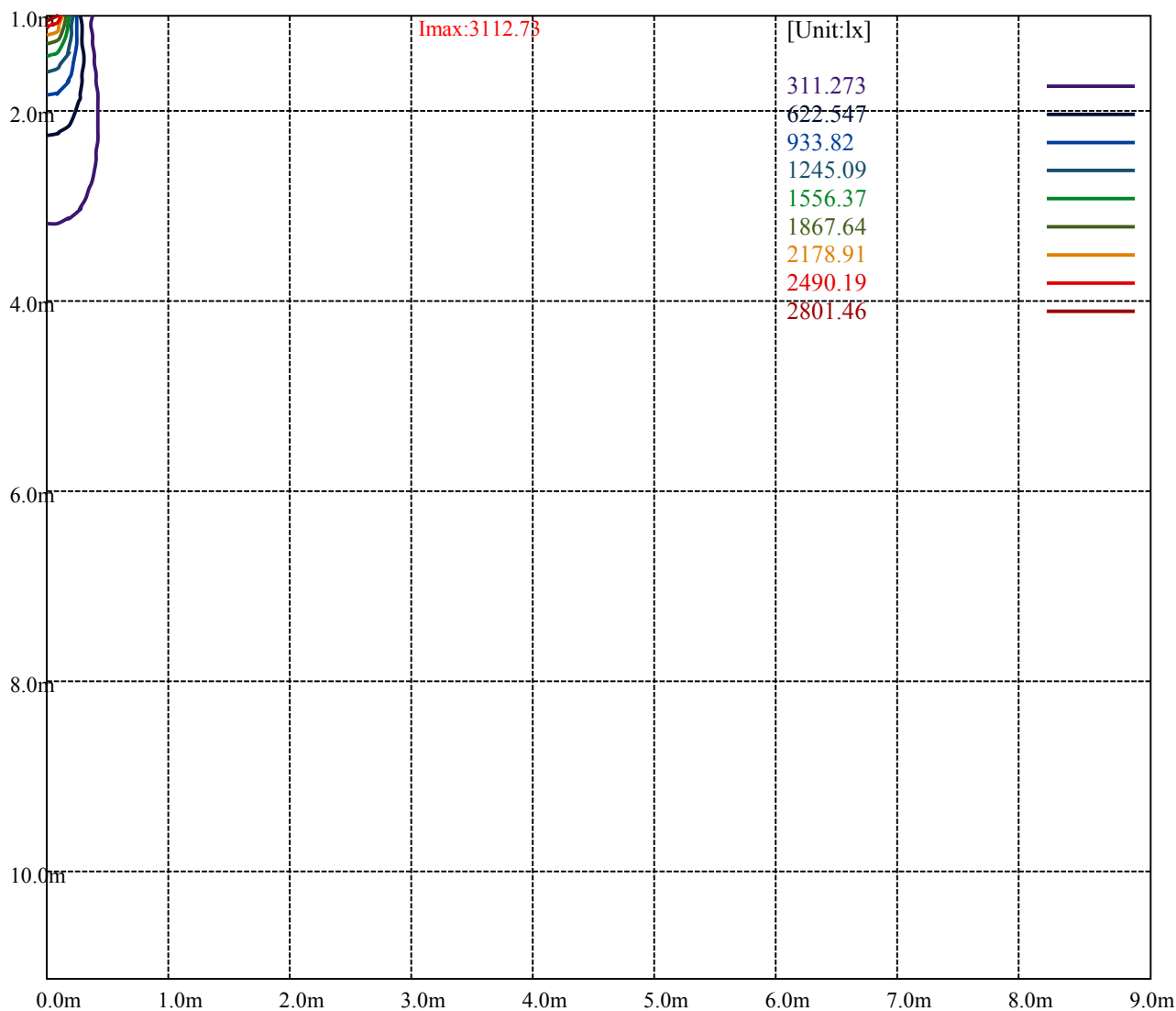
Road

Imax:3112.73

(10%Imax)	311.273	—
(20%Imax)	622.547	—
(30%Imax)	933.82	—
(40%Imax)	1245.09	—
(50%Imax)	1556.37	—
(60%Imax)	1867.64	—
(70%Imax)	2178.91	—
(80%Imax)	2490.19	—
(90%Imax)	2801.46	—



(10%E _{max}) 77.81825	—
(20%E _{max}) 155.6367	—
(30%E _{max}) 233.455	—
(40%E _{max}) 311.2725	—
(50%E _{max}) 389.0925	—
(60%E _{max}) 466.91	—
(70%E _{max}) 544.7275	—
(80%E _{max}) 622.5475	—
(90%E _{max}) 700.365	—



Luminance Table

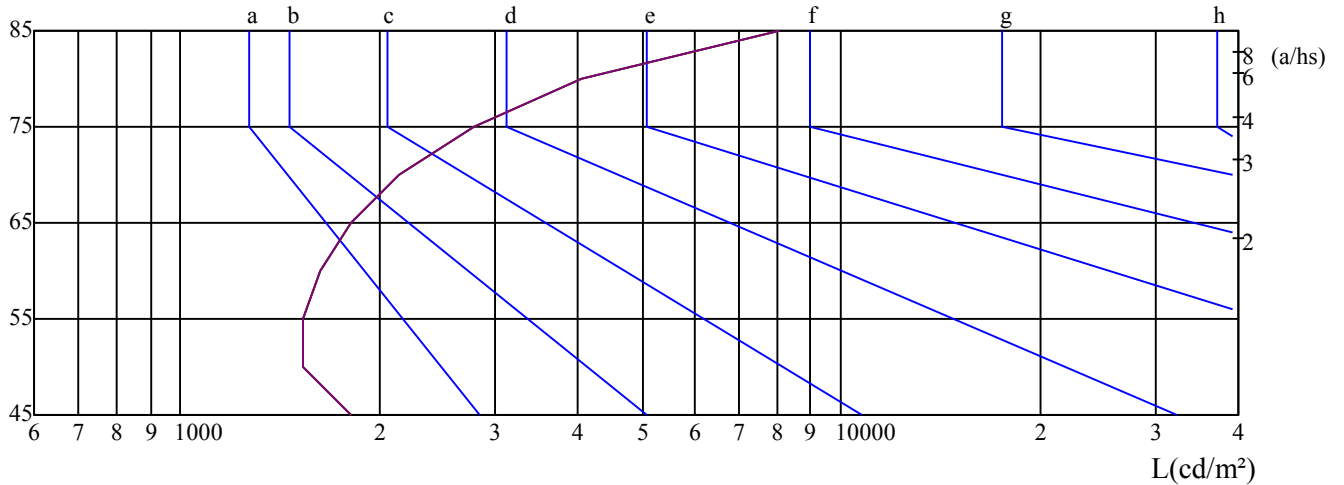
γ	45	50	55	60	65	70	75	80	85
C0	1808	1531	1536	1633	1813	2148	2778	4057	8067
C45	1808	1531	1536	1633	1813	2148	2778	4057	8067
C90	1808	1531	1536	1633	1813	2148	2778	4057	8067

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1813	1813	1813	2778	2778	2778	8067	8067	8067

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

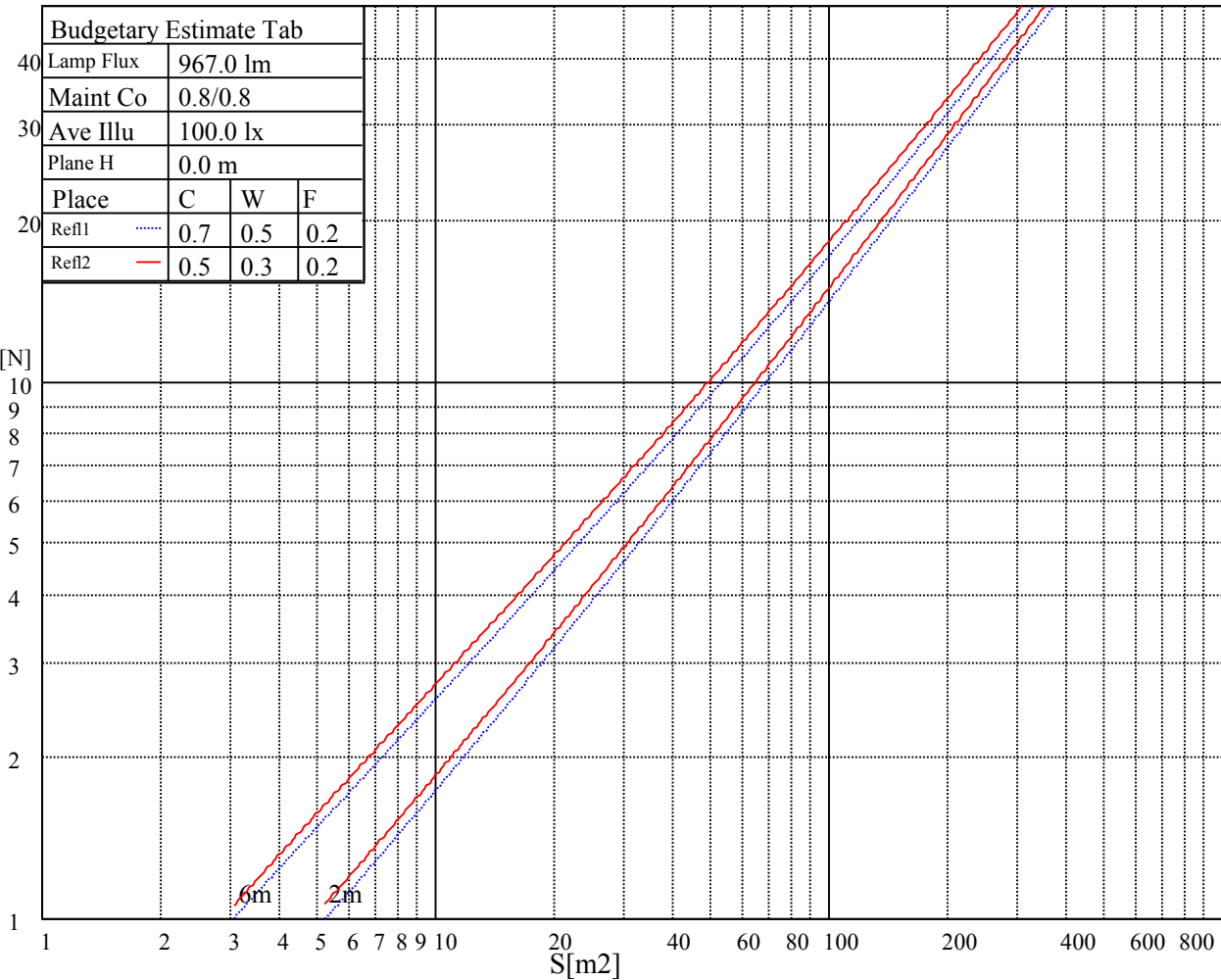
 $\gamma(^{\circ})$ 

C0 ———

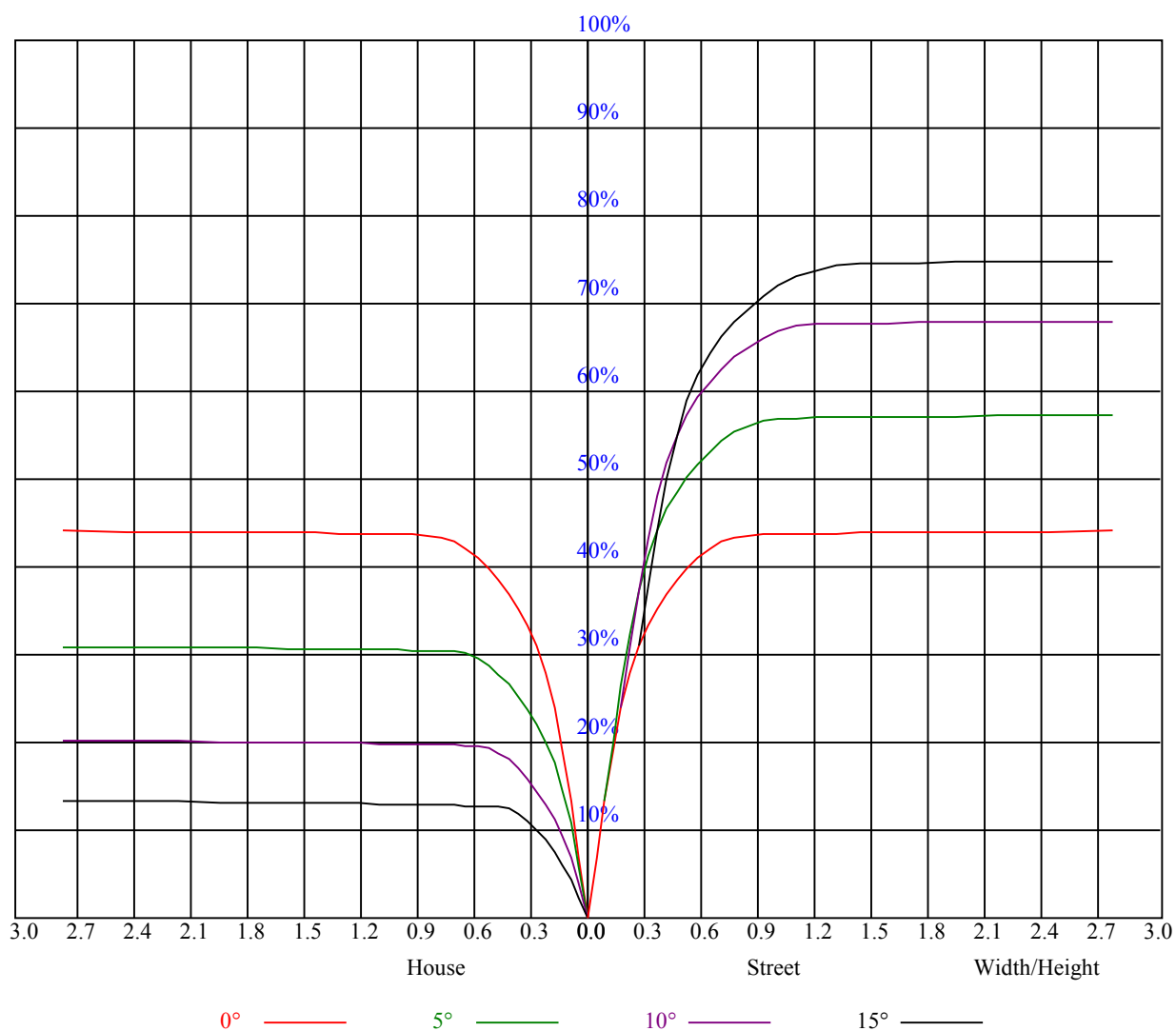
C45 ———

C90 ———

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	3.01	3.92	3.38	4.23	4.55	2.93	3.85	3.30	4.16	4.47
	3H	5.96	6.76	6.34	7.10	7.47	5.88	6.68	6.26	7.02	7.39
	4H	7.61	8.35	8.02	8.71	9.10	7.53	8.27	7.94	8.63	9.02
	6H	9.49	10.17	9.91	10.55	10.94	9.39	10.07	9.81	10.45	10.85
	8H	10.55	11.18	10.98	11.58	11.99	10.45	11.09	10.89	11.48	11.89
	12H	12.28	12.89	12.72	13.27	13.71	12.19	12.80	12.63	13.19	13.62
4H	2H	3.82	4.56	4.22	4.91	5.30	3.76	4.51	4.17	4.86	5.25
	3H	7.05	7.66	7.46	8.07	8.47	6.98	7.59	7.40	8.00	8.41
	4H	8.88	9.42	9.32	9.85	10.30	8.81	9.35	9.25	9.78	10.23
	6H	10.93	11.40	11.40	11.85	12.32	10.85	11.32	11.32	11.77	12.25
	8H	12.09	12.52	12.57	12.97	13.45	12.01	12.44	12.49	12.90	13.37
	12H	13.73	14.10	14.22	14.59	15.07	13.66	14.03	14.15	14.52	15.00
8H	4H	9.57	10.00	10.05	10.45	10.93	9.52	9.95	9.99	10.40	10.88
	6H	11.90	12.24	12.41	12.75	13.23	11.84	12.18	12.35	12.68	13.17
	8H	13.25	13.55	13.79	14.08	14.57	13.19	13.49	13.72	14.01	14.51
	12H	15.04	15.30	15.56	15.80	16.38	14.99	15.24	15.51	15.74	16.33
12H	4H	9.76	10.13	10.25	10.62	11.10	9.72	10.09	10.21	10.58	11.06
	6H	12.41	12.51	12.75	12.98	13.53	12.35	12.45	12.69	12.93	13.48
	8H	13.69	13.95	14.22	14.45	15.03	13.64	13.90	14.16	14.40	14.98
Variation with the observer position at spacings:											
S = 1.0H		5.2/-8.7					5.2/-8.7				
S = 1.5H		7.6/-6.7					7.6/-6.7				
S = 2.0H		9.1/-5.1					9.1/-5.1				
Standard tables:		BK2					BK2				
Uncorrected UGR		-1.2					-1.2				



RHOC	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	1.06	1.06	1.06	1.03	1.03	1.03	0.99	0.99	0.99	0.94	0.94	0.94	0.91	0.91	0.91	0.89
1	0.99	0.97	0.95	0.97	0.95	0.94	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.84
2	0.94	0.91	0.88	0.92	0.89	0.87	0.89	0.87	0.85	0.87	0.85	0.83	0.84	0.83	0.82	0.80
3	0.89	0.85	0.82	0.88	0.84	0.82	0.85	0.83	0.80	0.83	0.81	0.79	0.81	0.79	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.77	0.75	0.79	0.76	0.74	0.73
5	0.81	0.77	0.73	0.80	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.70
6	0.77	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.73	0.71	0.68	0.67
7	0.74	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.65
8	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.66	0.63	0.62
9	0.69	0.65	0.62	0.68	0.64	0.62	0.68	0.64	0.61	0.67	0.64	0.61	0.66	0.63	0.61	0.60
10	0.66	0.62	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.65	0.62	0.59	0.64	0.61	0.59	0.58



NATA 2-1680-M

Intensity data(cd)									Appendix Page: 17 Total:19
C/ γ (°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	3110.06	3093.19	3053.81	3007.13	2940.75	2812.50	2667.38	2498.63	2285.44
45.0	3112.88	3106.13	3080.81	3040.88	2979.00	2871.56	2718.56	2551.50	2366.44
90.0	3120.75	3124.13	3116.81	3091.50	3042.56	2980.13	2878.88	2678.06	2523.38
135.0	3107.25	3124.69	3132.56	3125.81	3107.25	3066.19	3017.25	2930.63	2795.63
180.0	3110.06	3112.88	3103.88	3079.13	3049.88	3000.94	2944.13	2832.75	2649.94
225.0	3112.88	3110.63	3094.31	3066.75	3037.50	3000.38	2939.06	2804.63	2650.50
270.0	3120.75	3103.31	3079.13	3038.06	3002.63	2942.44	2813.63	2669.63	2495.81
315.0	3107.25	3074.63	3029.63	2972.81	2895.19	2759.63	2601.56	2401.31	2176.88
360.0	3110.06	3093.19	3053.81	3007.13	2940.75	2812.50	2667.38	2498.63	2285.44
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2053.13	1835.44	1584.00	1365.19	1141.31	947.81	803.25	669.94	570.38
45.0	2112.19	1892.81	1665.56	1413.00	1175.63	991.13	817.88	678.38	584.44
90.0	2323.13	2034.00	1841.06	1619.44	1371.38	1110.26	951.08	794.70	654.81
135.0	2611.13	2421.00	2185.31	1966.50	1713.38	1460.25	1248.19	1058.06	849.38
180.0	2492.44	2274.19	2006.44	1809.56	1581.75	1233.56	1104.13	928.07	780.36
225.0	2468.81	2219.06	2000.81	1776.94	1520.44	1108.35	1085.79	877.95	758.08
270.0	2253.38	2043.56	1823.06	1575.00	1330.31	1134.56	943.88	783.56	669.38
315.0	1960.88	1710.00	1458.00	1121.51	1054.18	859.89	734.12	628.37	540.51
360.0	2053.13	1835.44	1584.00	1365.19	1141.31	947.81	803.25	669.94	570.38
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	507.38	463.50	426.38	404.44	387.56	371.25	360.56	352.69	345.38
45.0	509.06	462.94	428.06	401.06	382.50	366.19	353.25	344.81	337.50
90.0	552.21	488.08	440.16	408.38	387.62	369.11	355.89	344.53	335.81
135.0	719.44	614.25	519.75	468.56	433.69	403.88	382.50	367.88	354.38
180.0	636.64	550.69	488.03	437.01	409.67	389.25	370.74	356.01	345.66
225.0	635.46	534.88	484.65	439.43	406.35	388.69	372.26	355.11	346.78
270.0	573.19	510.75	461.81	428.06	405.00	385.31	370.13	359.44	350.44
315.0	480.60	443.64	413.78	391.22	375.19	361.29	352.01	344.08	337.39
360.0	507.38	463.50	426.38	404.44	387.56	371.25	360.56	352.69	345.38
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	338.63	330.75	324.00	318.94	313.88	307.69	302.63	288.56	241.37
45.0	329.63	322.88	316.13	309.94	304.88	299.25	293.63	284.63	232.20
90.0	329.18	322.26	314.49	308.03	302.79	296.94	291.38	286.54	265.95
135.0	344.25	335.25	327.94	321.75	313.31	306.56	301.50	296.44	289.69
180.0	336.54	329.74	322.65	314.94	309.04	303.36	298.24	293.34	288.11
225.0	338.91	331.26	324.62	317.25	311.29	306.00	301.56	295.82	290.70
270.0	341.44	335.25	327.38	320.06	314.44	309.38	303.19	297.56	285.75
315.0	331.31	324.23	316.91	312.24	307.80	301.28	295.88	272.98	226.91
360.0	338.63	330.75	324.00	318.94	313.88	307.69	302.63	288.56	241.37
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	194.79	143.66	81.79	42.36	18.06	11.53	9.06	6.86	6.02
45.0	189.23	137.36	86.63	45.56	17.33	12.09	9.51	6.92	6.08
90.0	223.31	178.03	127.74	75.26	38.03	15.13	11.93	9.17	6.64
135.0	285.19	246.83	205.20	147.88	98.33	56.64	20.53	13.11	10.86
180.0	272.93	238.22	194.01	131.74	83.64	44.49	17.66	12.04	9.79
225.0	268.26	222.75	178.54	122.12	71.72	33.47	15.64	11.87	8.94
270.0	237.54	182.87	129.54	75.49	37.18	16.59	11.70	9.17	6.92
315.0	172.35	125.44	71.89	32.57	13.67	10.58	7.99	5.85	5.46
360.0	194.79	143.66	81.79	42.36	18.06	11.53	9.06	6.86	6.02

NATA 2-1680-M

Intensity data(cd)										Appendix Page: 18 Total:19	
C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0		
0.0	5.29	5.06	4.95	4.84	4.73	4.61	4.50	4.44	4.33		
45.0	5.46	5.23	5.12	5.01	4.89	4.73	4.67	4.56	4.44		
90.0	5.79	5.46	5.29	5.12	5.01	4.84	4.78	4.67	4.61		
135.0	8.16	6.75	6.19	5.34	5.18	5.06	4.95	4.78	4.73		
180.0	7.09	6.08	5.40	5.23	5.06	4.95	4.84	4.73	4.67		
225.0	6.81	5.91	5.40	5.29	5.12	4.95	4.84	4.73	4.61		
270.0	6.24	5.40	5.23	5.06	4.95	4.84	4.67	4.56	4.50		
315.0	5.29	5.12	4.95	4.84	4.73	4.61	4.50	4.39	4.33		
360.0	5.29	5.06	4.95	4.84	4.73	4.61	4.50	4.44	4.33		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	4.22	4.16	4.11	4.05	3.99	3.94	3.88	3.83	3.83		
45.0	4.39	4.28	4.16	4.16	4.05	4.05	3.99	3.94	3.88		
90.0	4.44	4.39	4.28	4.22	4.16	4.11	4.05	3.99	3.94		
135.0	4.61	4.44	4.44	4.33	4.22	4.16	4.11	4.05	3.99		
180.0	4.50	4.39	4.33	4.28	4.16	4.11	4.05	3.94	3.88		
225.0	4.50	4.39	4.33	4.22	4.11	4.11	4.05	3.94	3.88		
270.0	4.39	4.33	4.22	4.16	4.11	4.05	3.99	3.94	3.88		
315.0	4.22	4.16	4.05	4.05	3.94	3.94	3.88	3.83	3.77		
360.0	4.22	4.16	4.11	4.05	3.99	3.94	3.88	3.83	3.83		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	3.77	3.71	3.66	3.66	3.60	3.60	3.54	3.54	3.54		
45.0	3.83	3.83	3.77	3.71	3.71	3.66	3.66	3.60	3.60		
90.0	3.88	3.83	3.83	3.77	3.71	3.71	3.66	3.66	3.60		
135.0	3.94	3.88	3.83	3.77	3.77	3.71	3.71	3.66	3.60		
180.0	3.83	3.83	3.77	3.77	3.71	3.66	3.60	3.60	3.54		
225.0	3.88	3.83	3.77	3.71	3.71	3.66	3.66	3.60	3.60		
270.0	3.83	3.77	3.77	3.71	3.71	3.71	3.66	3.60	3.60		
315.0	3.71	3.71	3.66	3.66	3.60	3.60	3.54	3.54	3.54		
360.0	3.77	3.71	3.66	3.66	3.60	3.60	3.54	3.54	3.54		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	3.54	3.49	3.49	3.49	3.49	3.49	3.43	3.43	3.38		
45.0	3.54	3.60	3.54	3.54	3.49	3.49	3.49	3.49	3.49		
90.0	3.60	3.60	3.60	3.54	3.54	3.54	3.54	3.49	3.49		
135.0	3.60	3.60	3.54	3.54	3.54	3.54	3.49	3.49	3.43		
180.0	3.54	3.54	3.49	3.49	3.49	3.49	3.49	3.43	3.43		
225.0	3.54	3.54	3.54	3.54	3.49	3.49	3.49	3.49	3.49		
270.0	3.60	3.54	3.54	3.54	3.54	3.54	3.54	3.49	3.49		
315.0	3.54	3.49	3.49	3.49	3.43	3.43	3.43	3.43	3.43		
360.0	3.54	3.49	3.49	3.49	3.49	3.49	3.43	3.43	3.38		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	3.43	3.38	3.43	3.38	3.43	3.38	3.38	3.38	3.38		
45.0	3.43	3.49	3.43	3.43	3.49	3.43	3.43	3.43	3.43		
90.0	3.49	3.49	3.49	3.49	3.43	3.43	3.38	3.43	3.38		
135.0	3.49	3.43	3.43	3.43	3.43	3.43	3.38	3.38	3.43		
180.0	3.43	3.43	3.43	3.43	3.43	3.38	3.38	3.38	3.38		
225.0	3.49	3.49	3.49	3.43	3.43	3.43	3.43	3.43	3.43		
270.0	3.49	3.54	3.49	3.49	3.49	3.49	3.43	3.43	3.38		
315.0	3.43	3.43	3.43	3.43	3.43	3.43	3.38	3.38	3.38		
360.0	3.43	3.38	3.43	3.38	3.43	3.38	3.38	3.38	3.38		

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	3.38
45.0	3.43
90.0	3.38
135.0	3.38
180.0	3.38
225.0	3.38
270.0	3.43
315.0	3.38
360.0	3.38