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NATA

LumCAT: 2-1680-M	
Luminaire: 92.70.124.00	
Report No: NATA0100	Voltage(V): 22.5000
Test No: GC2019022210	Current(A): 0.3000
LampCAT: BMTC MA-1313 LES11	Power (W): 6.7500
Lamp flux(lm): 718.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 70	Width(mm): 70
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 639.72
Efficiency(%): 89.10%
Lumens(lm)/Power(W): 94.85
Central intensity(cd): 2332.125
Maximum intensity(cd): 2332.125
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=60.7
[C90/270]Total=60.7
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(%): 89.17%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.706%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2332.125	0.558	0.558	.078%	.087%
1.0	2327.695	4.455	5.013	.620%	.784%
2.0	2315.953	8.863	13.876	1.234%	2.169%
3.0	2292.398	13.157	27.033	1.832%	4.226%
4.0	2256.047	17.258	44.291	2.404%	6.923%
5.0	2198.883	21.016	65.306	2.927%	10.209%
6.0	2116.336	24.259	89.565	3.379%	14.001%
7.0	1998.281	26.706	116.271	3.719%	18.175%
8.0	1871.578	28.564	144.835	3.978%	22.640%
9.0	1715.484	29.429	174.263	4.099%	27.241%
10.0	1534.992	29.230	203.493	4.071%	31.810%
11.0	1344.101	28.124	231.618	3.917%	36.206%
12.0	1184.513	27.007	258.624	3.761%	40.428%
13.0	1010.820	24.935	283.56	3.473%	44.326%
14.0	852.539	22.617	306.177	3.150%	47.861%
15.0	715.662	20.312	326.489	2.829%	51.036%
16.0	593.149	17.929	344.418	2.497%	53.839%
17.0	504.485	16.175	360.593	2.253%	56.367%
18.0	430.102	14.575	375.168	2.030%	58.646%
19.0	378.323	13.507	388.674	1.881%	60.757%
20.0	340.763	12.781	401.455	1.780%	62.755%
21.0	314.044	12.342	413.797	1.719%	64.684%
22.0	295.770	12.150	425.947	1.692%	66.583%
23.0	284.133	12.174	438.121	1.696%	68.487%
24.0	272.194	12.141	450.262	1.691%	70.384%
25.0	261.443	12.116	462.379	1.688%	72.278%
26.0	255.030	12.260	474.638	1.708%	74.195%
27.0	249.272	12.410	487.048	1.728%	76.135%
28.0	244.385	12.582	499.63	1.752%	78.101%
29.0	239.133	12.713	512.343	1.771%	80.089%
30.0	234.802	12.874	525.218	1.793%	82.101%
31.0	230.505	13.019	538.237	1.813%	84.136%
32.0	226.357	13.154	551.39	1.832%	86.193%
33.0	222.328	13.279	564.669	1.849%	88.268%
34.0	214.861	13.176	577.845	1.835%	90.328%
35.0	199.477	12.547	590.392	1.747%	92.289%
36.0	172.905	11.145	601.537	1.552%	94.031%
37.0	138.734	9.156	610.692	1.275%	95.463%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	100.132	6.760	617.453	.942%	96.519%
39.0	64.083	4.422	621.875	.616%	97.211%
40.0	34.952	2.464	624.339	.343%	97.596%
41.0	17.740	1.276	625.615	.178%	97.795%
42.0	10.097	0.741	626.356	.103%	97.911%
43.0	7.200	0.538	626.895	.075%	97.995%
44.0	5.484	0.418	627.312	.058%	98.061%
45.0	4.416	0.342	627.655	.048%	98.114%
46.0	4.043	0.319	627.974	.044%	98.164%
47.0	3.825	0.307	628.28	.043%	98.212%
48.0	3.713	0.303	628.583	.042%	98.259%
49.0	3.614	0.299	628.882	.042%	98.306%
50.0	3.502	0.294	629.176	.041%	98.352%
51.0	3.410	0.291	629.467	.040%	98.397%
52.0	3.326	0.287	629.754	.040%	98.442%
53.0	3.263	0.286	630.04	.040%	98.487%
54.0	3.199	0.284	630.324	.040%	98.531%
55.0	3.122	0.280	630.604	.039%	98.575%
56.0	3.038	0.276	630.88	.038%	98.618%
57.0	2.981	0.274	631.155	.038%	98.661%
58.0	2.939	0.273	631.428	.038%	98.704%
59.0	2.890	0.272	631.7	.038%	98.746%
60.0	2.848	0.270	631.97	.038%	98.789%
61.0	2.784	0.267	632.237	.037%	98.830%
62.0	2.756	0.267	632.504	.037%	98.872%
63.0	2.735	0.267	632.771	.037%	98.914%
64.0	2.686	0.265	633.036	.037%	98.955%
65.0	2.651	0.263	633.299	.037%	98.997%
66.0	2.637	0.264	633.563	.037%	99.038%
67.0	2.588	0.261	633.825	.036%	99.079%
68.0	2.573	0.262	634.086	.036%	99.120%
69.0	2.545	0.261	634.347	.036%	99.160%
70.0	2.538	0.262	634.608	.036%	99.201%
71.0	2.517	0.261	634.869	.036%	99.242%
72.0	2.510	0.262	635.131	.036%	99.283%
73.0	2.482	0.260	635.392	.036%	99.324%
74.0	2.482	0.262	635.653	.036%	99.364%
75.0	2.482	0.263	635.916	.037%	99.406%

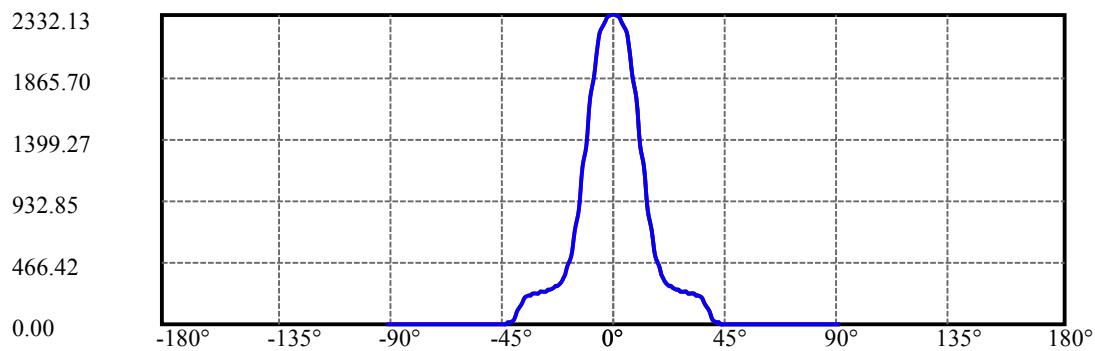
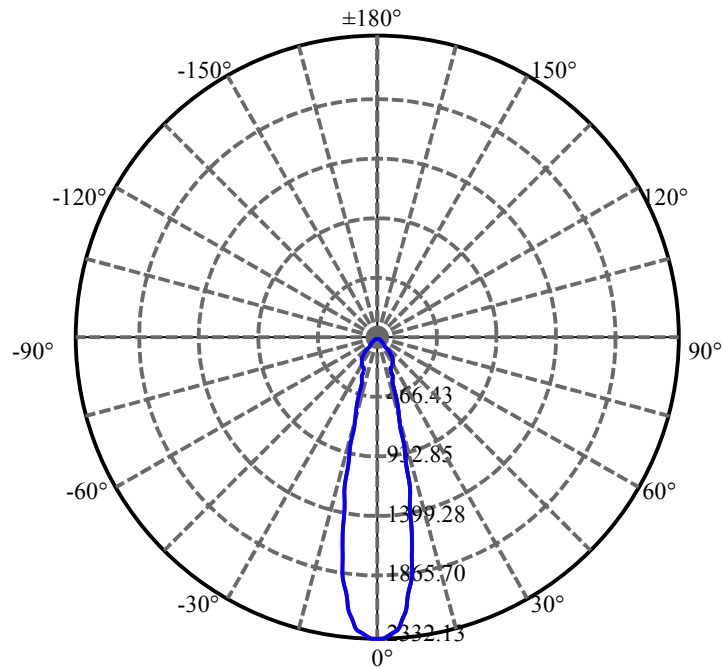
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	2.482	0.264	636.18	.037%	99.447%
77.0	2.461	0.263	636.443	.037%	99.488%
78.0	2.447	0.262	636.706	.037%	99.529%
79.0	2.440	0.263	636.968	.037%	99.570%
80.0	2.433	0.263	637.231	.037%	99.611%
81.0	2.433	0.263	637.494	.037%	99.652%
82.0	2.419	0.263	637.757	.037%	99.693%
83.0	2.412	0.262	638.02	.037%	99.734%
84.0	2.419	0.264	638.283	.037%	99.776%
85.0	2.398	0.262	638.545	.036%	99.817%
86.0	2.391	0.262	638.807	.036%	99.857%
87.0	2.377	0.260	639.067	.036%	99.898%
88.0	2.377	0.260	639.328	.036%	99.939%
89.0	2.377	0.261	639.588	.036%	99.980%
90.0	2.384	0.131	639.719	.018%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	525.22	73.15%	82.10%
0-40	624.34	86.96%	97.60%
0-60	631.97	88.02%	98.79%
0-90	639.59	89.08%	99.98%
0-120	639.59	89.08%	99.98%
0-180	639.72	89.10%	100.00%
60-90	7.89	1.10%	1.23%
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%
0-28.96	511.78	71.28%	80.00%

ZONAL LUMEN SUMMARY

0-10	203.49
10-20	197.96
20-30	123.76
30-40	99.12
40-50	4.84
50-60	2.79
60-70	2.64
70-80	2.62
80-90	2.36
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:

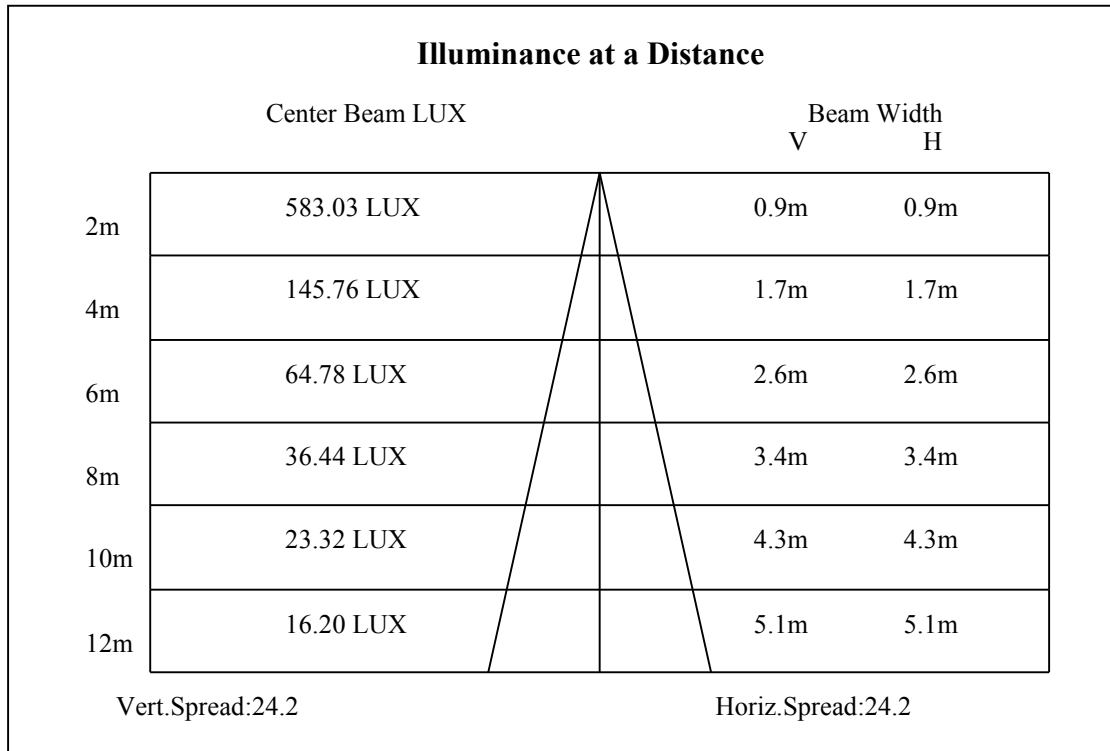
C90/C270:

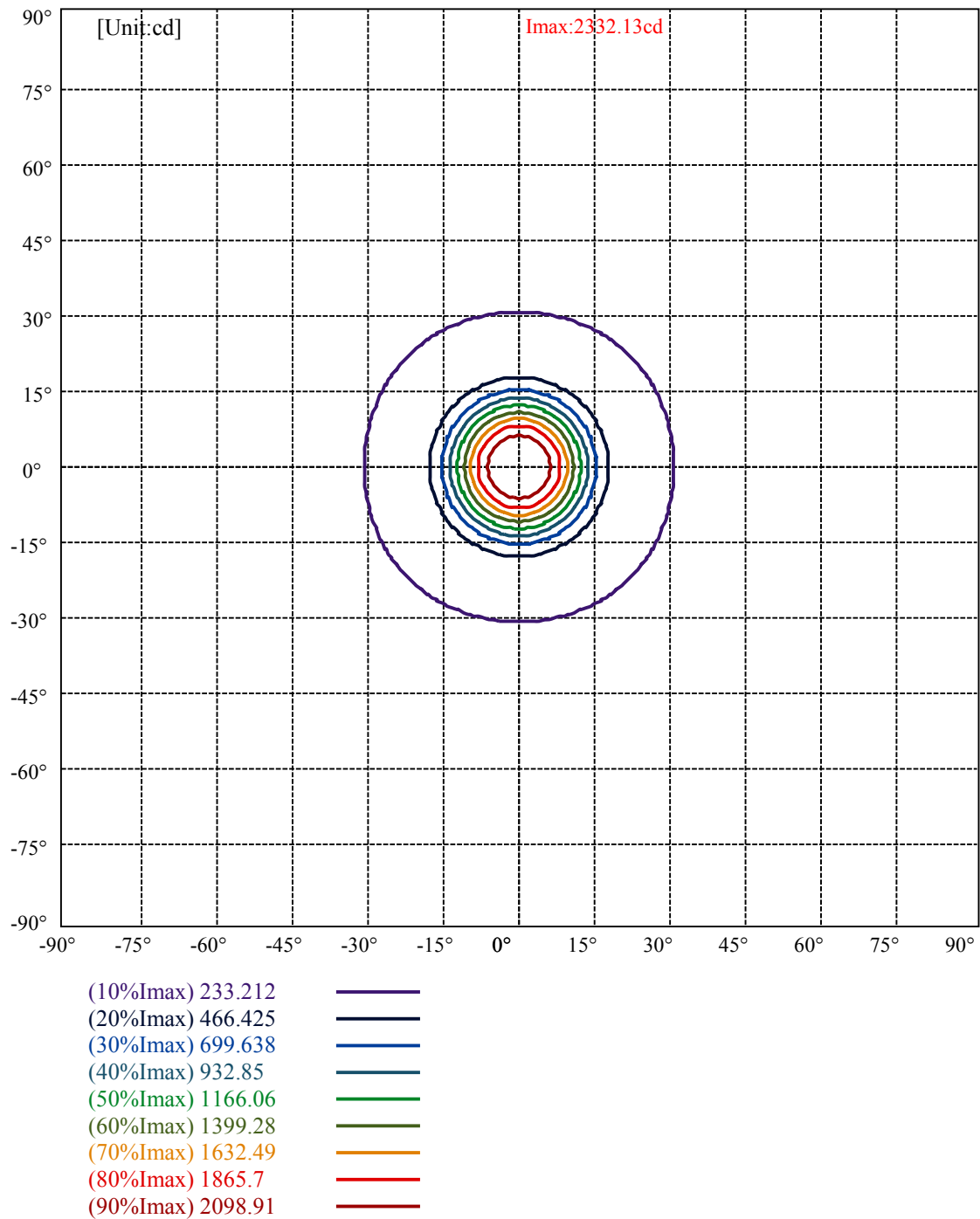
Field angle(10%Imax):C0/180Left:30.4 Right:30.4

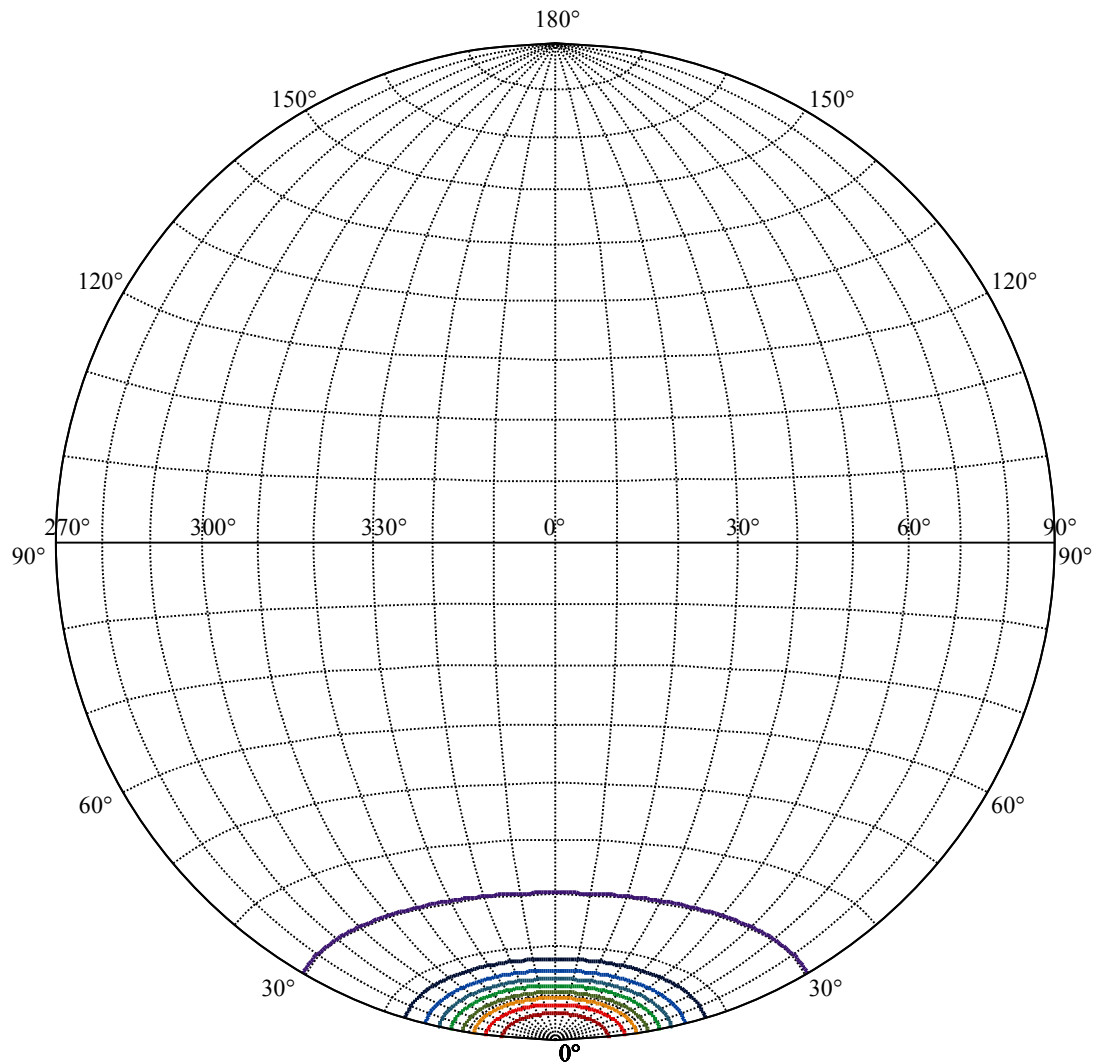
:C90/270Left:30.4 Right:30.4

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

:C90/270Left:12.1 Right:12.1





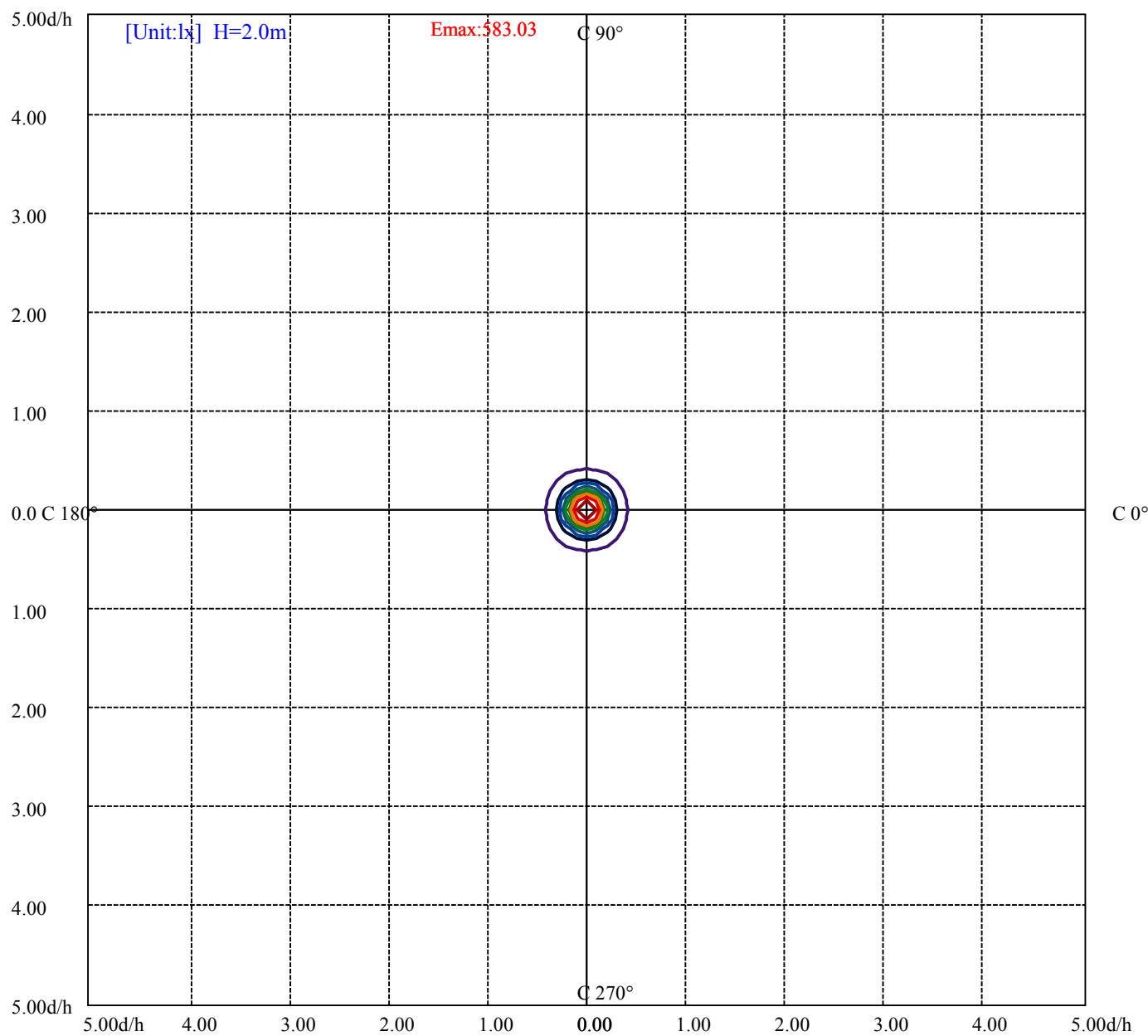


House

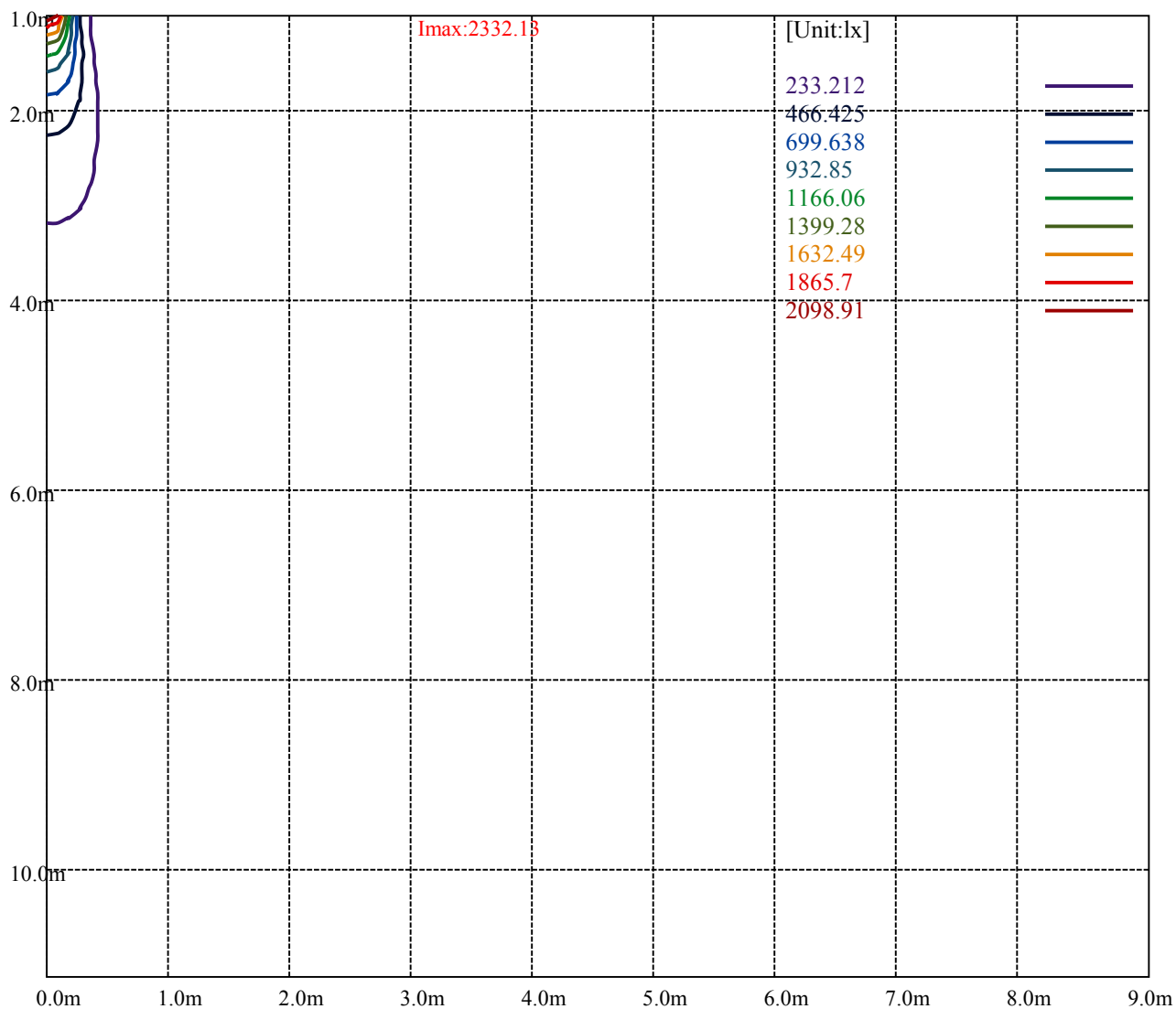
[Unit:cd]

Road

I_{max}:2332.13(10%I_{max}) 233.212(20%I_{max}) 466.425(30%I_{max}) 699.638(40%I_{max}) 932.85(50%I_{max}) 1166.06(60%I_{max}) 1399.28(70%I_{max}) 1632.49(80%I_{max}) 1865.7(90%I_{max}) 2098.91



(10%E _{max}) 58.303	—
(20%E _{max}) 116.6062	—
(30%E _{max}) 174.9093	—
(40%E _{max}) 233.2125	—
(50%E _{max}) 291.515	—
(60%E _{max}) 349.8175	—
(70%E _{max}) 408.1225	—
(80%E _{max}) 466.425	—
(90%E _{max}) 524.7275	—



Luminance Table

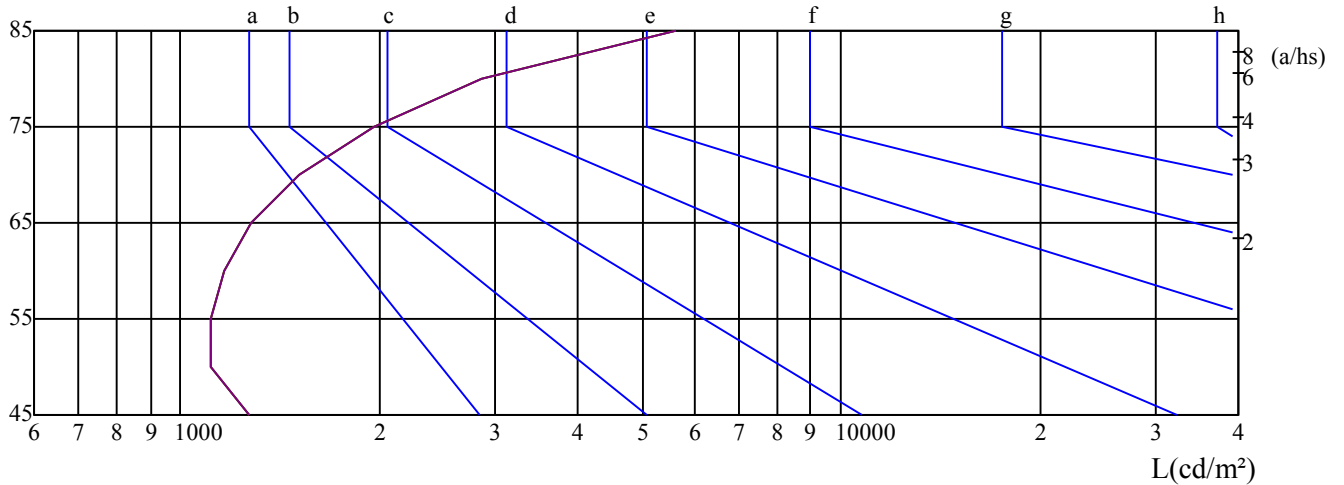
γ	45	50	55	60	65	70	75	80	85
C0	1274	1112	1111	1162	1280	1515	1957	2859	5614
C45	1274	1112	1111	1162	1280	1515	1957	2859	5614
C90	1274	1112	1111	1162	1280	1515	1957	2859	5614

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1280	1280	1280	1957	1957	1957	5614	5614	5614

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

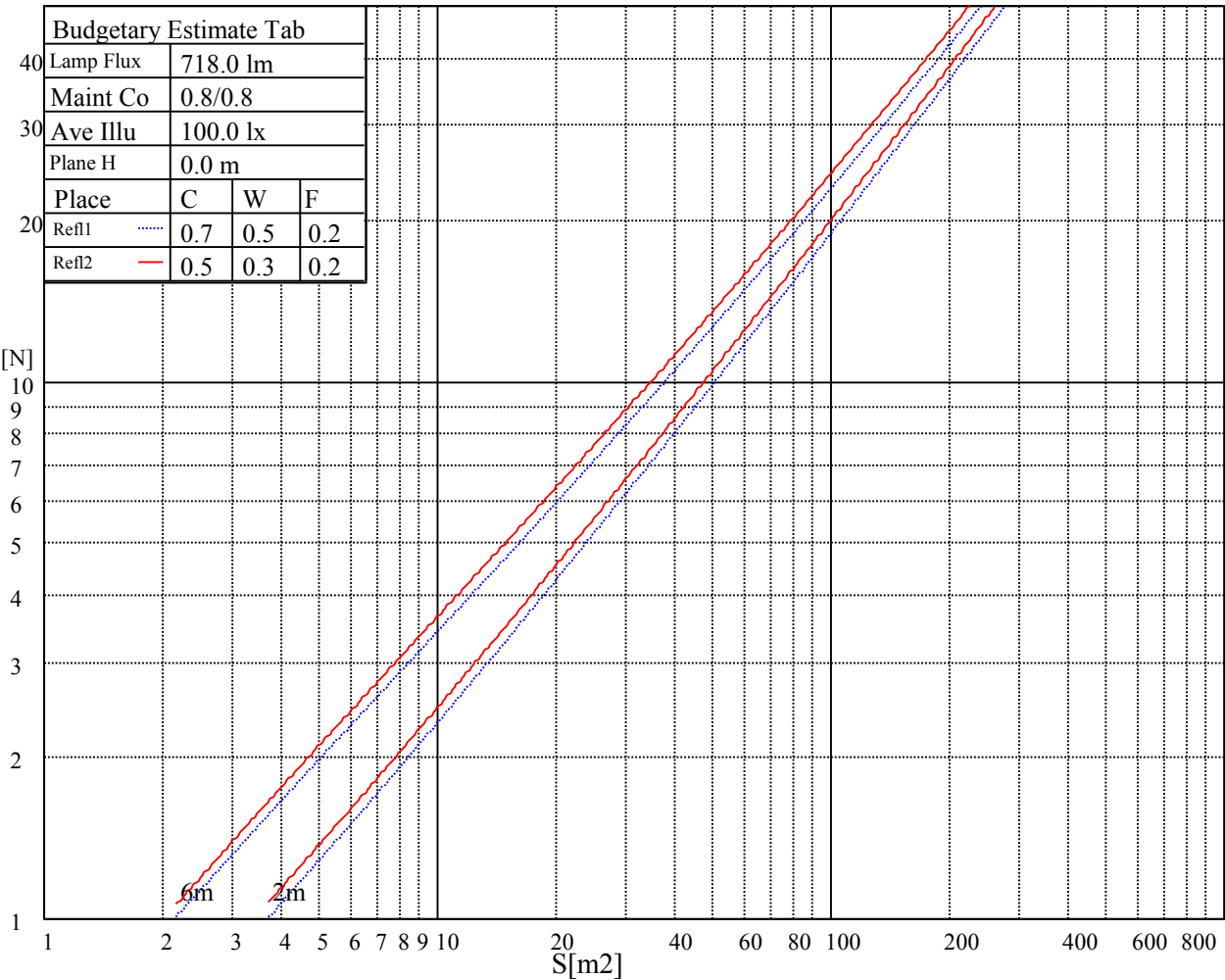
 $\gamma(^{\circ})$ 

C0 ———

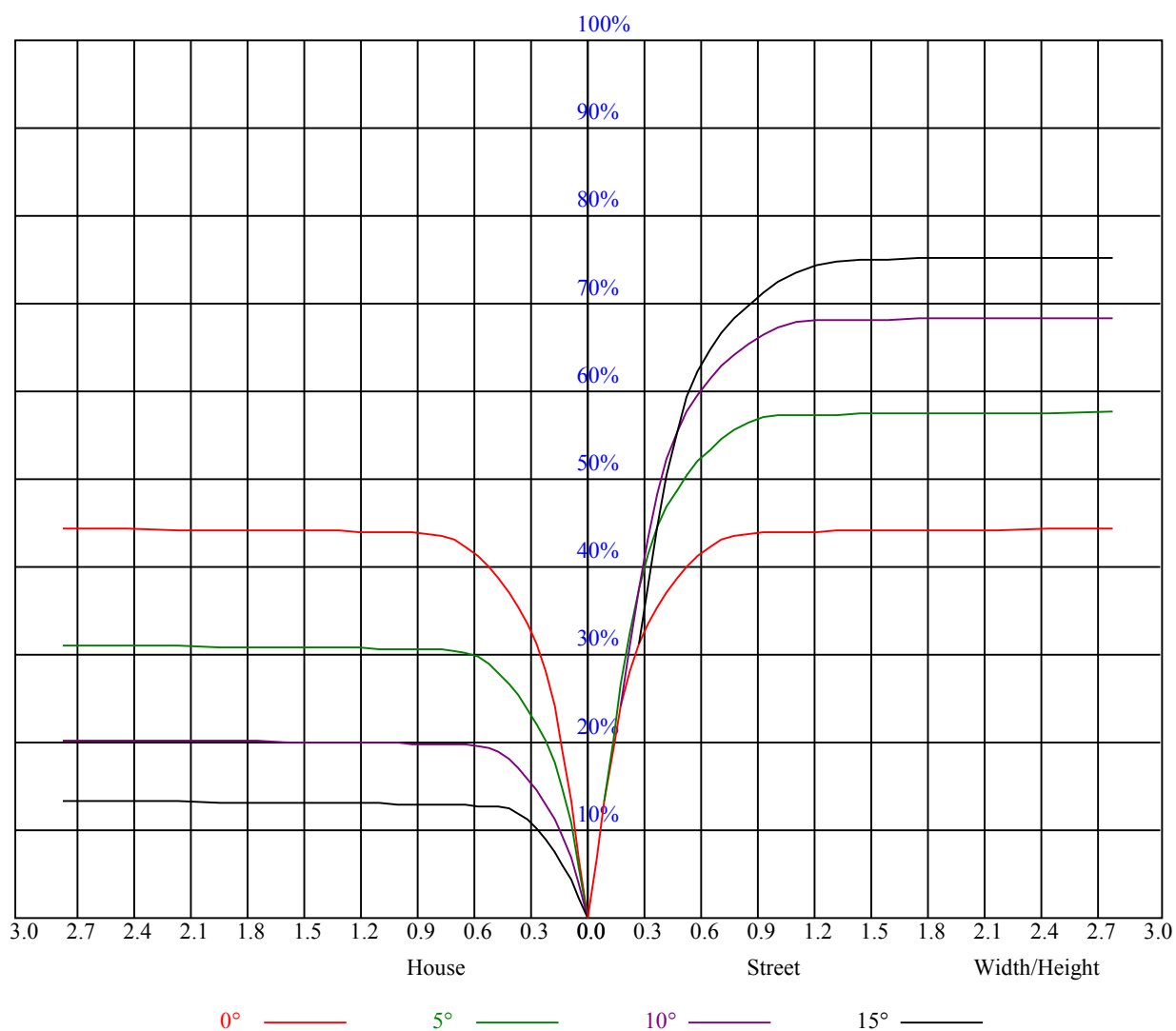
C45 ———

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	2.71	3.62	3.08	3.93	4.25	2.71	3.62	3.07	3.93	4.24
	3H	5.59	6.39	5.98	6.73	7.10	5.58	6.38	5.96	6.72	7.09
	4H	7.23	7.97	7.64	8.32	8.71	7.20	7.94	7.61	8.30	8.69
	6H	9.11	9.79	9.53	10.16	10.56	9.05	9.73	9.47	10.11	10.50
	8H	10.16	10.80	10.60	11.19	11.60	10.09	10.73	10.53	11.12	11.53
	12H	11.88	12.49	12.32	12.87	13.31	11.80	12.41	12.24	12.79	13.23
4H	2H	3.49	4.23	3.90	4.59	4.98	3.49	4.23	3.90	4.58	4.97
	3H	6.66	7.27	7.08	7.68	8.09	6.65	7.26	7.07	7.67	8.07
	4H	8.48	9.03	8.92	9.45	9.90	8.46	9.00	8.90	9.43	9.88
	6H	10.53	10.99	11.00	11.44	11.92	10.49	10.96	10.97	11.41	11.89
	8H	11.69	12.12	12.17	12.57	13.05	11.64	12.07	12.12	12.52	13.00
	12H	13.32	13.69	13.82	14.18	14.66	13.26	13.63	13.75	14.12	14.60
8H	4H	9.17	9.60	9.65	10.05	10.53	9.15	9.58	9.63	10.03	10.51
	6H	11.49	11.83	12.00	12.34	12.82	11.46	11.80	11.97	12.31	12.79
	8H	12.84	13.14	13.38	13.67	14.17	12.80	13.10	13.34	13.63	14.12
	12H	14.63	14.89	15.16	15.39	15.97	14.58	14.83	15.10	15.33	15.91
12H	4H	9.36	9.73	9.85	10.22	10.70	9.34	9.72	9.84	10.21	10.68
	6H	11.99	12.10	12.33	12.57	13.12	11.96	12.07	12.31	12.54	13.09
	8H	13.28	13.54	13.80	14.03	14.62	13.24	13.50	13.77	14.00	14.58
Variation with the observer position at spacings:											
S = 1.0H		5.2/-9.1					5.2/-9.1				
S = 1.5H		7.6/-7.0					7.6/-7.0				
S = 2.0H		9.2/-5.4					9.2/-5.4				
Standard tables:		BK2					BK2				
Uncorrected UGR		-2.3					-2.3				



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	1.06	1.06	1.06	1.04	1.04	1.04	0.99	0.99	0.99	0.95	0.95	0.95	0.91	0.91	0.91	0.89
1	1.00	0.98	0.96	0.98	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85
2	0.94	0.91	0.89	0.93	0.90	0.88	0.90	0.88	0.86	0.87	0.85	0.84	0.85	0.83	0.82	0.81
3	0.89	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.80	0.82	0.80	0.78	0.77
4	0.85	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
5	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.76	0.74	0.72	0.71
6	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
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.71	0.68	0.66	0.65
8	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63
9	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.67	0.64	0.62	0.61
10	0.67	0.63	0.60	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.59	0.59



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	2332.13	2331.56	2328.75	2315.81	2294.44	2256.75	2192.63	2104.88	1989.56		
45.0	2329.88	2329.31	2320.31	2298.94	2261.81	2205.00	2117.25	2013.75	1890.56		
90.0	2333.81	2329.88	2314.13	2280.38	2225.81	2154.94	2059.31	1908.00	1769.06		
135.0	2332.69	2333.25	2322.56	2298.94	2260.69	2189.81	2086.88	1968.19	1834.31		
180.0	2332.13	2323.69	2307.38	2276.44	2229.75	2145.38	2040.19	1895.06	1733.06		
225.0	2329.88	2318.06	2299.50	2269.69	2232.00	2173.50	2093.06	1962.00	1833.75		
270.0	2333.81	2329.31	2314.13	2294.44	2266.31	2224.69	2160.00	2078.44	1970.44		
315.0	2332.69	2326.50	2320.88	2304.56	2277.56	2241.00	2181.38	2055.94	1951.88		
360.0	2332.13	2331.56	2328.75	2315.81	2294.44	2256.75	2192.63	2104.88	1989.56		
C/ γ (°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0		
0.0	1823.06	1674.56	1517.63	1334.25	1149.19	989.44	825.19	682.31	579.38		
45.0	1732.50	1556.44	1388.25	1217.25	1009.69	857.81	725.63	590.63	504.00		
90.0	1617.19	1409.06	1110.49	1068.86	872.27	736.93	622.58	507.21	443.87		
135.0	1651.50	1492.88	1324.13	1131.75	946.69	797.63	654.75	540.00	462.38		
180.0	1578.94	1377.00	1109.19	1049.63	897.24	728.21	615.83	523.97	443.03		
225.0	1693.13	1497.38	1330.88	1116.11	975.94	815.18	691.76	575.55	493.88		
270.0	1811.81	1668.38	1512.00	1326.94	1137.94	973.13	807.75	666.00	563.63		
315.0	1815.75	1604.25	1460.25	1231.31	1097.61	921.99	781.82	659.53	545.74		
360.0	1823.06	1674.56	1517.63	1334.25	1149.19	989.44	825.19	682.31	579.38		
C/ γ (°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0		
0.0	487.13	423.56	371.25	334.69	312.19	297.56	284.06	268.14	260.66		
45.0	433.13	374.06	334.69	310.50	290.81	285.19	264.99	256.56	250.54		
90.0	383.51	338.63	316.63	295.76	279.11	270.23	261.96	253.24	248.74		
135.0	396.56	356.06	326.25	304.31	289.69	284.06	265.89	259.37	253.46		
180.0	384.69	348.36	320.29	300.21	286.65	274.50	265.89	257.91	251.38		
225.0	424.29	373.11	340.93	315.96	297.79	285.08	274.67	264.49	258.08		
270.0	472.50	411.75	361.69	327.94	306.56	289.69	284.63	266.06	259.09		
315.0	459.00	401.06	354.38	322.99	303.36	286.76	275.46	265.78	258.30		
360.0	487.13	423.56	371.25	334.69	312.19	297.56	284.06	268.14	260.66		
C/ γ (°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0		
0.0	253.13	248.18	243.96	238.78	234.45	230.91	227.14	222.81	217.46		
45.0	244.97	240.47	235.69	231.47	226.86	223.54	219.66	214.09	201.94		
90.0	244.29	239.23	233.66	229.89	225.96	221.40	217.24	206.21	180.96		
135.0	247.39	243.00	237.83	233.27	229.11	224.89	220.05	209.19	187.71		
180.0	246.43	241.65	235.29	231.30	227.64	222.30	217.63	205.31	176.12		
225.0	252.45	247.11	241.09	236.98	232.76	228.71	224.49	218.48	204.24		
270.0	252.62	247.28	242.94	238.89	233.33	229.67	226.69	221.29	216.00		
315.0	252.90	248.18	242.61	237.83	233.94	229.44	225.73	221.51	211.39		
360.0	253.13	248.18	243.96	238.78	234.45	230.91	227.14	222.81	217.46		
C/ γ (°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0		
0.0	198.79	169.31	132.98	95.63	63.00	34.37	13.84	9.51	7.20		
45.0	177.08	142.03	101.53	66.04	33.92	16.31	9.68	7.26	5.18		
90.0	146.03	109.18	67.56	33.98	15.13	9.84	7.65	5.46	4.61		
135.0	152.38	115.43	78.69	42.24	20.08	10.91	7.71	5.63	4.39		
180.0	141.92	109.58	73.91	39.94	18.17	10.24	7.99	5.57	4.67		
225.0	174.99	136.69	99.11	59.57	29.81	14.63	10.01	7.03	5.23		
270.0	205.82	171.62	131.06	99.39	54.34	25.48	12.99	8.78	6.64		
315.0	186.24	156.04	116.21	75.88	45.17	20.14	10.91	8.38	5.96		
360.0	198.79	169.31	132.98	95.63	63.00	34.37	13.84	9.51	7.20		

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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	4.73	4.16	3.99	3.83	3.71	3.60	3.49	3.38	3.32		
45.0	4.22	3.88	3.77	3.66	3.54	3.49	3.38	3.32	3.21		
90.0	4.16	3.88	3.71	3.66	3.54	3.43	3.32	3.26	3.21		
135.0	3.99	3.88	3.77	3.66	3.60	3.49	3.43	3.32	3.26		
180.0	4.05	3.88	3.71	3.60	3.54	3.38	3.32	3.26	3.21		
225.0	4.56	3.99	3.83	3.71	3.60	3.49	3.43	3.32	3.26		
270.0	4.84	4.16	3.94	3.83	3.71	3.60	3.49	3.38	3.32		
315.0	4.78	4.50	3.88	3.77	3.66	3.54	3.43	3.38	3.32		
360.0	4.73	4.16	3.99	3.83	3.71	3.60	3.49	3.38	3.32		
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0		
0.0	3.21	3.15	3.09	3.04	2.98	2.98	2.87	2.81	2.76		
45.0	3.21	3.09	3.04	2.93	2.93	2.87	2.87	2.76	2.76		
90.0	3.15	3.09	2.98	2.98	2.87	2.87	2.81	2.76	2.76		
135.0	3.21	3.15	3.04	2.98	2.93	2.87	2.87	2.81	2.76		
180.0	3.15	3.09	2.98	2.93	2.93	2.87	2.81	2.76	2.76		
225.0	3.21	3.09	3.04	2.98	2.93	2.87	2.81	2.76	2.76		
270.0	3.26	3.15	3.09	3.04	2.98	2.93	2.87	2.81	2.76		
315.0	3.21	3.15	3.04	2.98	2.98	2.87	2.87	2.81	2.76		
360.0	3.21	3.15	3.09	3.04	2.98	2.98	2.87	2.81	2.76		
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0		
0.0	2.76	2.70	2.70	2.64	2.59	2.59	2.53	2.53	2.53		
45.0	2.70	2.64	2.64	2.64	2.64	2.59	2.59	2.53	2.48		
90.0	2.70	2.70	2.64	2.64	2.59	2.59	2.53	2.59	2.53		
135.0	2.76	2.70	2.64	2.64	2.59	2.59	2.53	2.53	2.53		
180.0	2.70	2.64	2.64	2.64	2.59	2.59	2.53	2.53	2.53		
225.0	2.76	2.70	2.64	2.64	2.59	2.53	2.53	2.53	2.53		
270.0	2.76	2.70	2.64	2.64	2.59	2.59	2.59	2.53	2.53		
315.0	2.76	2.70	2.64	2.59	2.53	2.53	2.53	2.53	2.48		
360.0	2.76	2.70	2.70	2.64	2.59	2.59	2.53	2.53	2.53		
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0		
0.0	2.53	2.48	2.48	2.48	2.48	2.48	2.42	2.42	2.42		
45.0	2.48	2.48	2.48	2.48	2.48	2.42	2.42	2.42	2.42		
90.0	2.53	2.48	2.48	2.53	2.53	2.48	2.48	2.48	2.48		
135.0	2.53	2.48	2.48	2.48	2.48	2.48	2.48	2.42	2.42		
180.0	2.53	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.42		
225.0	2.48	2.48	2.48	2.48	2.48	2.48	2.42	2.42	2.42		
270.0	2.53	2.53	2.53	2.48	2.48	2.48	2.48	2.48	2.48		
315.0	2.48	2.48	2.48	2.48	2.48	2.42	2.42	2.42	2.42		
360.0	2.53	2.48	2.48	2.48	2.48	2.48	2.42	2.42	2.42		
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0		
0.0	2.42	2.42	2.42	2.42	2.42	2.36	2.36	2.36	2.42		
45.0	2.48	2.42	2.42	2.42	2.42	2.36	2.36	2.36	2.36		
90.0	2.42	2.42	2.42	2.48	2.42	2.36	2.36	2.36	2.36		
135.0	2.42	2.42	2.42	2.42	2.36	2.42	2.36	2.36	2.42		
180.0	2.42	2.42	2.36	2.42	2.36	2.42	2.36	2.42	2.36		
225.0	2.42	2.42	2.42	2.36	2.42	2.36	2.42	2.42	2.36		
270.0	2.48	2.48	2.42	2.42	2.42	2.42	2.42	2.36	2.36		
315.0	2.42	2.36	2.42	2.42	2.36	2.42	2.36	2.36	2.36		
360.0	2.42	2.42	2.42	2.42	2.42	2.36	2.36	2.36	2.42		

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	2.42
45.0	2.36
90.0	2.36
135.0	2.42
180.0	2.36
225.0	2.42
270.0	2.36
315.0	2.36
360.0	2.42