



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: 2-1678-M
Luminaire: 92.70.126.00
Report No: NATA0100
Test No: GC2018090801
LampCAT: LUMINUS CHM-9-XD20
Lamp flux(lm): 1946.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 35.2000
Current(A): 0.4100
Power (W): 14.4320
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 00

Photometric Results

Lumens(lm): 1755.66
Efficiency(%): 90.22%
Lumens(lm)/Power(W): 122.01
Central intensity(cd): 22177.970
Maximum intensity(cd): 22177.970
Angle of maximum intensity: $C=0.0$ $\gamma=0.0$
Beam Angle(50%Imax): [C0/180]Total=10.6
[C90/270]Total=10.6
Field angle(10%Imax): [C0/180]Total=20.5
[C90/270]Total=20.5
Maximum s/h(1/2): C0_180=0.18 C90_270=0.18
Maximum s/h(1/4): C0_180=0.18 C90_270=0.18
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.49%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.377%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	22177.969	5.306	5.306	.273%	.302%
1.0	21793.359	41.709	47.015	2.143%	2.678%
2.0	20478.516	78.374	125.389	4.027%	7.142%
3.0	18459.844	105.945	231.333	5.444%	13.176%
4.0	15334.734	117.304	348.637	6.028%	19.858%
5.0	11994.820	114.641	463.279	5.891%	26.388%
6.0	9000.633	103.171	566.45	5.302%	32.264%
7.0	6432.398	85.964	652.415	4.417%	37.161%
8.0	4396.711	67.102	719.517	3.448%	40.983%
9.0	3034.969	52.064	771.581	2.675%	43.948%
10.0	2404.266	45.783	817.364	2.353%	46.556%
11.0	1695.164	35.470	852.834	1.823%	48.576%
12.0	1328.632	30.293	883.126	1.557%	50.302%
13.0	1140.961	28.146	911.272	1.446%	51.905%
14.0	1011.973	26.847	938.119	1.380%	53.434%
15.0	927.563	26.326	964.445	1.353%	54.933%
16.0	874.603	26.436	990.882	1.358%	56.439%
17.0	833.175	26.713	1017.595	1.373%	57.961%
18.0	807.005	27.347	1044.942	1.405%	59.518%
19.0	786.741	28.088	1073.03	1.443%	61.118%
20.0	767.552	28.788	1101.818	1.479%	62.758%
21.0	752.105	29.557	1131.375	1.519%	64.441%
22.0	739.406	30.375	1161.749	1.561%	66.172%
23.0	727.587	31.176	1192.925	1.602%	67.947%
24.0	715.451	31.911	1224.836	1.640%	69.765%
25.0	706.627	32.748	1257.585	1.683%	71.630%
26.0	698.555	33.581	1291.166	1.726%	73.543%
27.0	689.041	34.304	1325.47	1.763%	75.497%
28.0	679.859	35.001	1360.471	1.799%	77.490%
29.0	669.206	35.578	1396.049	1.828%	79.517%
30.0	657.422	36.047	1432.095	1.852%	81.570%
31.0	647.445	36.567	1468.663	1.879%	83.653%
32.0	638.128	37.083	1505.745	1.906%	85.765%
33.0	625.254	37.344	1543.089	1.919%	87.892%
34.0	605.517	37.131	1580.22	1.908%	90.007%
35.0	549.506	34.563	1614.784	1.776%	91.976%
36.0	466.235	30.052	1644.836	1.544%	93.687%
37.0	381.600	25.184	1670.02	1.294%	95.122%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	286.706	19.357	1689.376	.995%	96.224%
39.0	199.329	13.756	1703.132	.707%	97.008%
40.0	104.892	7.394	1710.526	.380%	97.429%
41.0	52.840	3.802	1714.328	.195%	97.646%
42.0	29.032	2.130	1716.458	.109%	97.767%
43.0	21.980	1.644	1718.102	.084%	97.861%
44.0	16.748	1.276	1719.378	.066%	97.933%
45.0	13.205	1.024	1720.402	.053%	97.992%
46.0	10.702	0.844	1721.246	.043%	98.040%
47.0	10.238	0.821	1722.067	.042%	98.086%
48.0	10.005	0.815	1722.882	.042%	98.133%
49.0	9.759	0.808	1723.69	.042%	98.179%
50.0	9.534	0.801	1724.491	.041%	98.225%
51.0	9.338	0.796	1725.287	.041%	98.270%
52.0	9.183	0.794	1726.08	.041%	98.315%
53.0	9.014	0.789	1726.87	.041%	98.360%
54.0	8.866	0.787	1727.656	.040%	98.405%
55.0	8.726	0.784	1728.44	.040%	98.449%
56.0	8.599	0.782	1729.222	.040%	98.494%
57.0	8.452	0.777	1729.999	.040%	98.538%
58.0	8.339	0.776	1730.775	.040%	98.582%
59.0	8.241	0.775	1731.549	.040%	98.627%
60.0	8.121	0.771	1732.32	.040%	98.670%
61.0	8.044	0.771	1733.092	.040%	98.714%
62.0	7.973	0.772	1733.864	.040%	98.758%
63.0	7.903	0.772	1734.636	.040%	98.802%
64.0	7.840	0.773	1735.409	.040%	98.846%
65.0	7.798	0.775	1736.184	.040%	98.891%
66.0	7.748	0.776	1736.96	.040%	98.935%
67.0	7.713	0.779	1737.739	.040%	98.979%
68.0	7.671	0.780	1738.519	.040%	99.024%
69.0	7.636	0.782	1739.3	.040%	99.068%
70.0	7.608	0.784	1740.084	.040%	99.113%
71.0	7.573	0.785	1740.87	.040%	99.157%
72.0	7.545	0.787	1741.656	.040%	99.202%
73.0	7.523	0.789	1742.445	.041%	99.247%
74.0	7.516	0.792	1743.238	.041%	99.292%
75.0	7.495	0.794	1744.032	.041%	99.338%

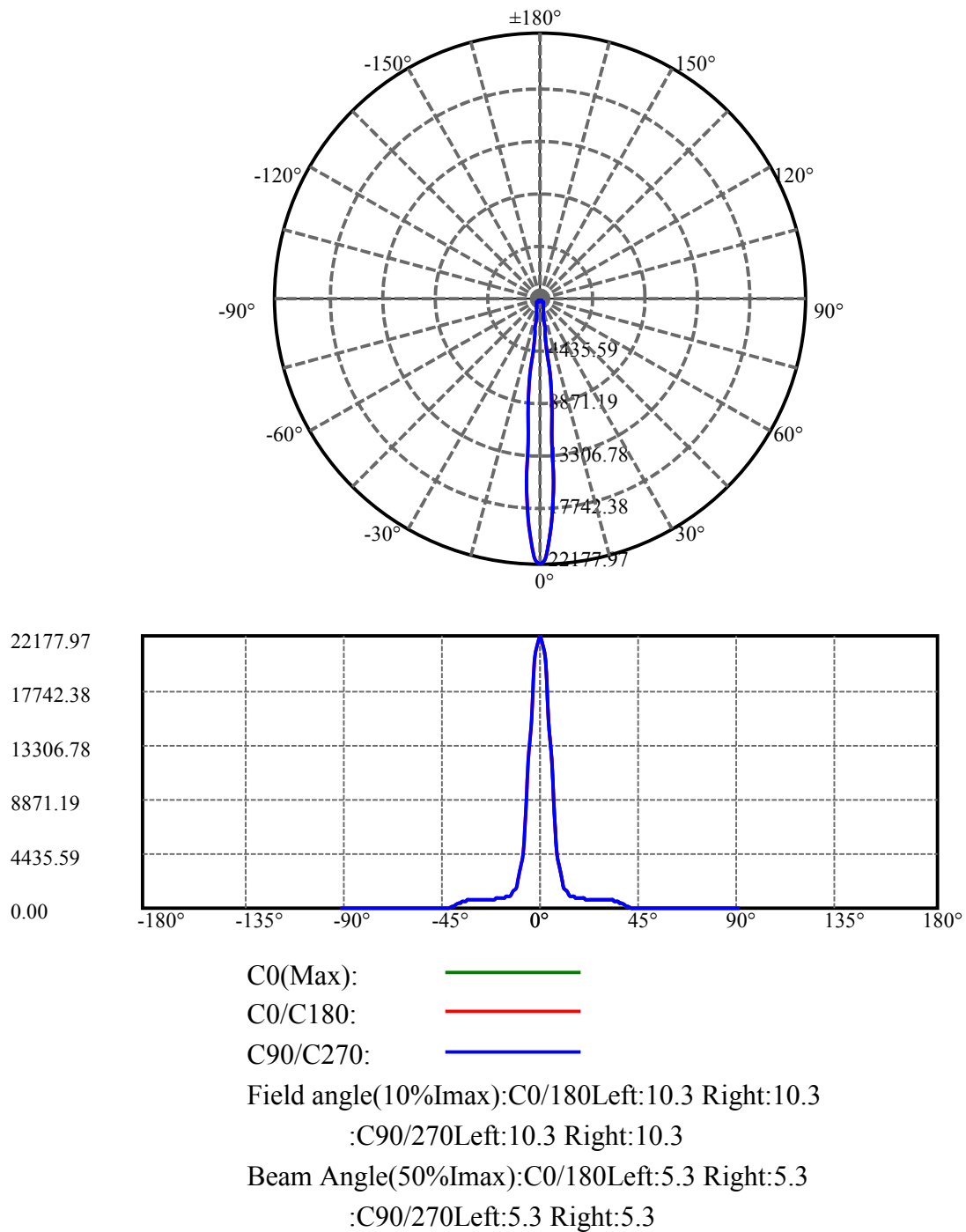
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.488	0.797	1744.828	.041%	99.383%
77.0	7.453	0.796	1745.625	.041%	99.428%
78.0	7.446	0.799	1746.423	.041%	99.474%
79.0	7.432	0.800	1747.223	.041%	99.519%
80.0	7.411	0.800	1748.024	.041%	99.565%
81.0	7.418	0.803	1748.827	.041%	99.611%
82.0	7.418	0.806	1749.633	.041%	99.657%
83.0	7.418	0.807	1750.44	.041%	99.703%
84.0	7.418	0.809	1751.249	.042%	99.749%
85.0	7.404	0.809	1752.058	.042%	99.795%
86.0	7.348	0.804	1752.862	.041%	99.840%
87.0	7.313	0.801	1753.663	.041%	99.886%
88.0	7.298	0.800	1754.462	.041%	99.932%
89.0	7.298	0.800	1755.263	.041%	99.977%
90.0	7.284	0.399	1755.662	.021%	100.000%

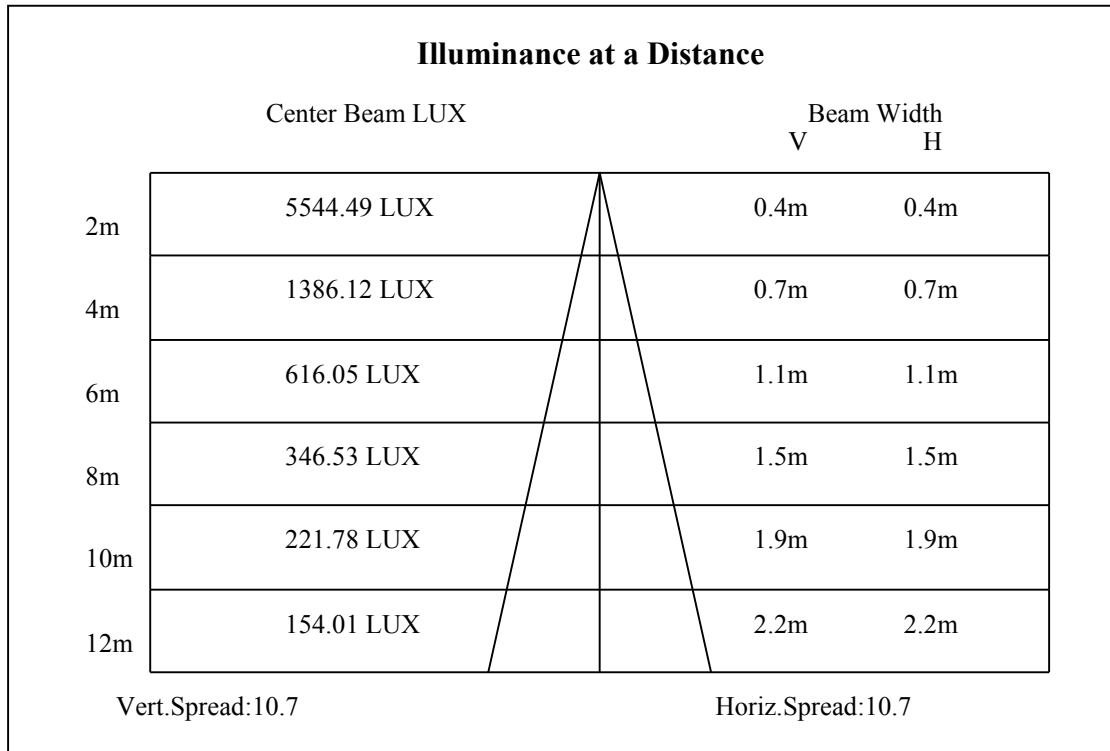
ZONAL LUMEN SUMMARY

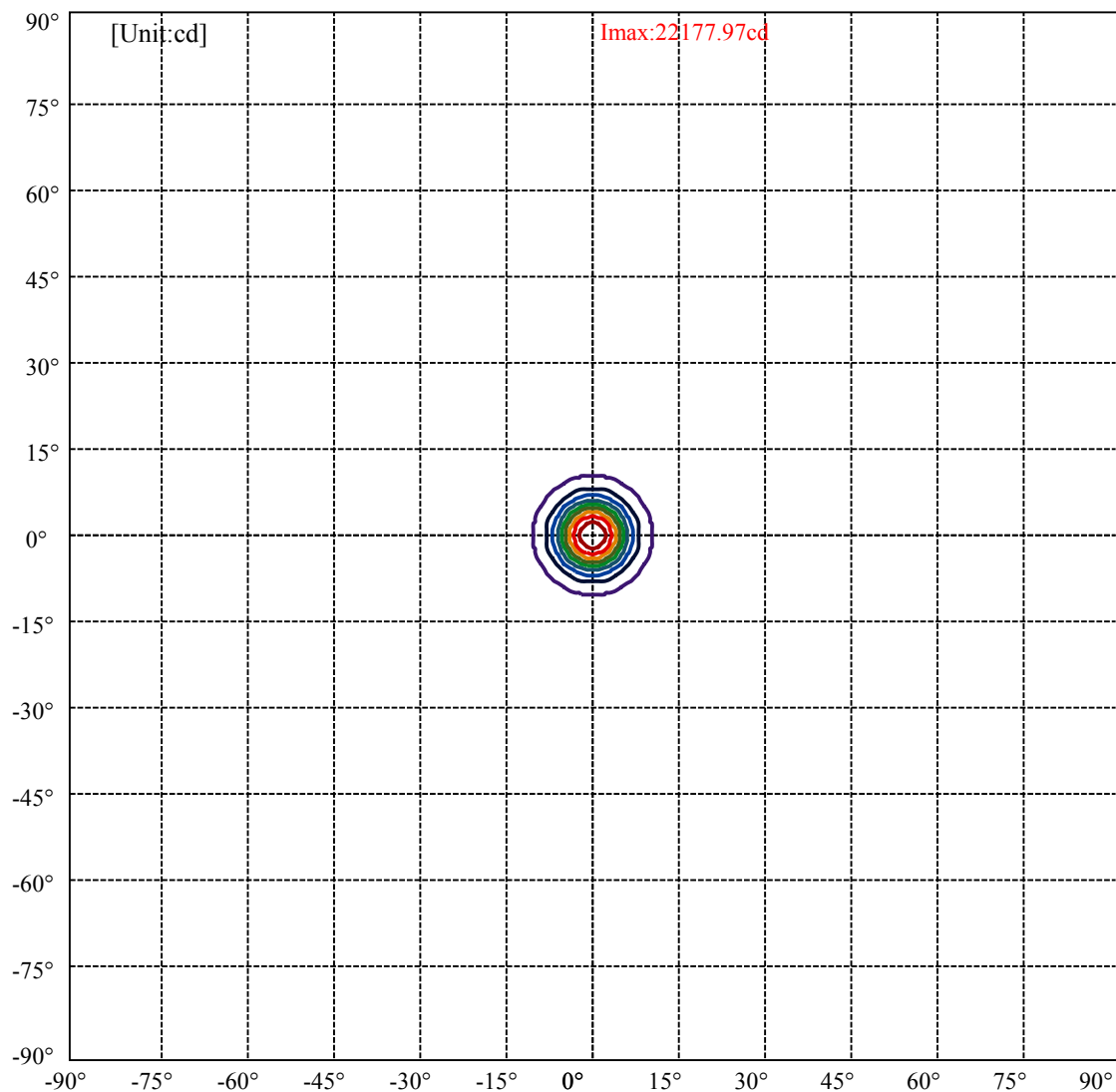
Zone	Lumens	%Lamp	%Fixt
0-30	1432.10	73.59%	81.57%
0-40	1710.53	87.90%	97.43%
0-60	1732.32	89.02%	98.67%
0-90	1755.26	90.20%	99.98%
0-120	1755.26	90.20%	99.98%
0-180	1755.66	90.22%	100.00%
60-90	23.71	1.22%	1.35%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-29.24	1404.53	72.18%	80.00%

ZONAL LUMEN SUMMARY

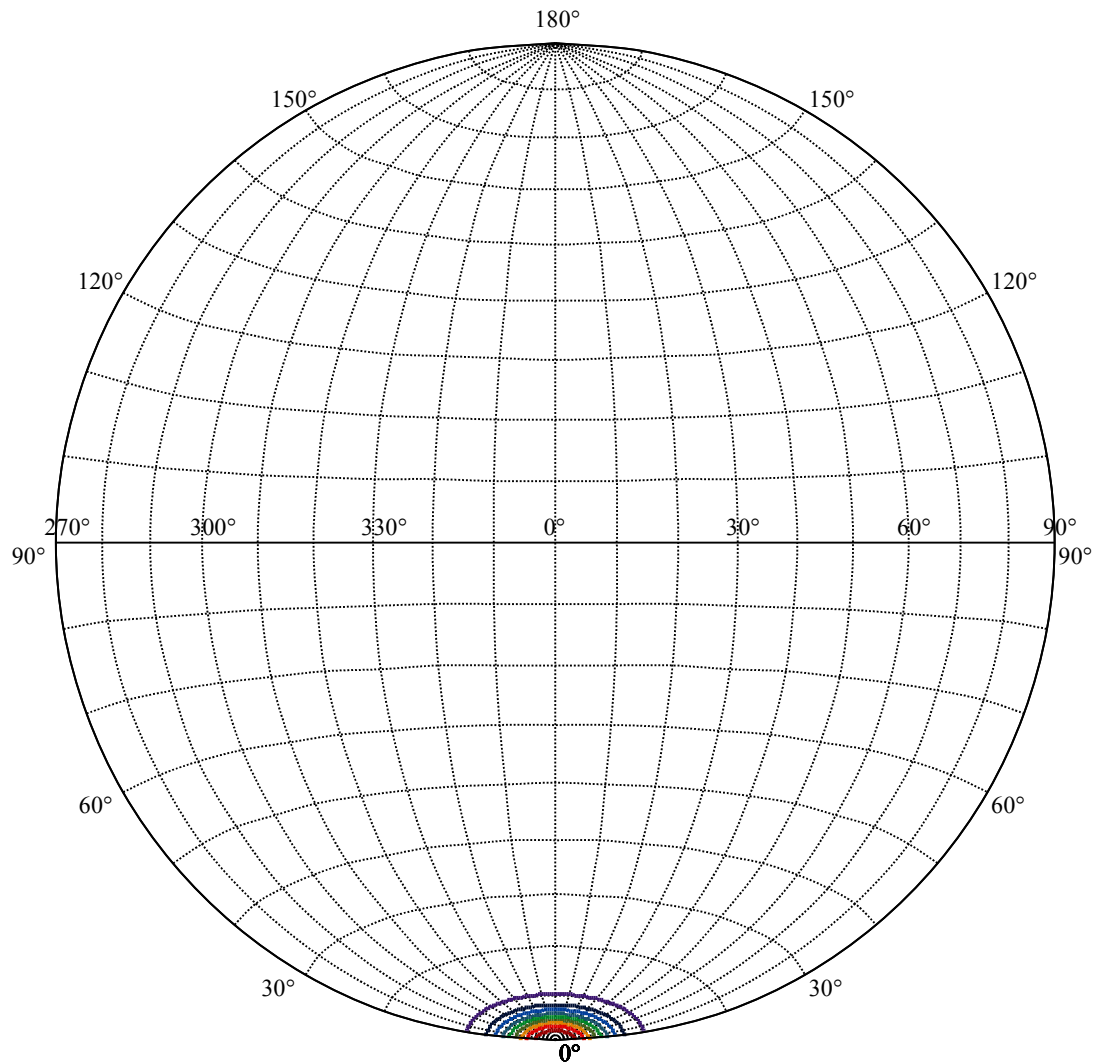
0-10	817.36
10-20	284.45
20-30	330.28
30-40	278.43
40-50	13.96
50-60	7.83
60-70	7.76
70-80	7.94
80-90	7.24
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00







(10%Imax) 2217.8	—
(20%Imax) 4435.59	—
(30%Imax) 6653.39	—
(40%Imax) 8871.19	—
(50%Imax) 11089	—
(60%Imax) 13306.8	—
(70%Imax) 15524.6	—
(80%Imax) 17742.4	—
(90%Imax) 19960.2	—



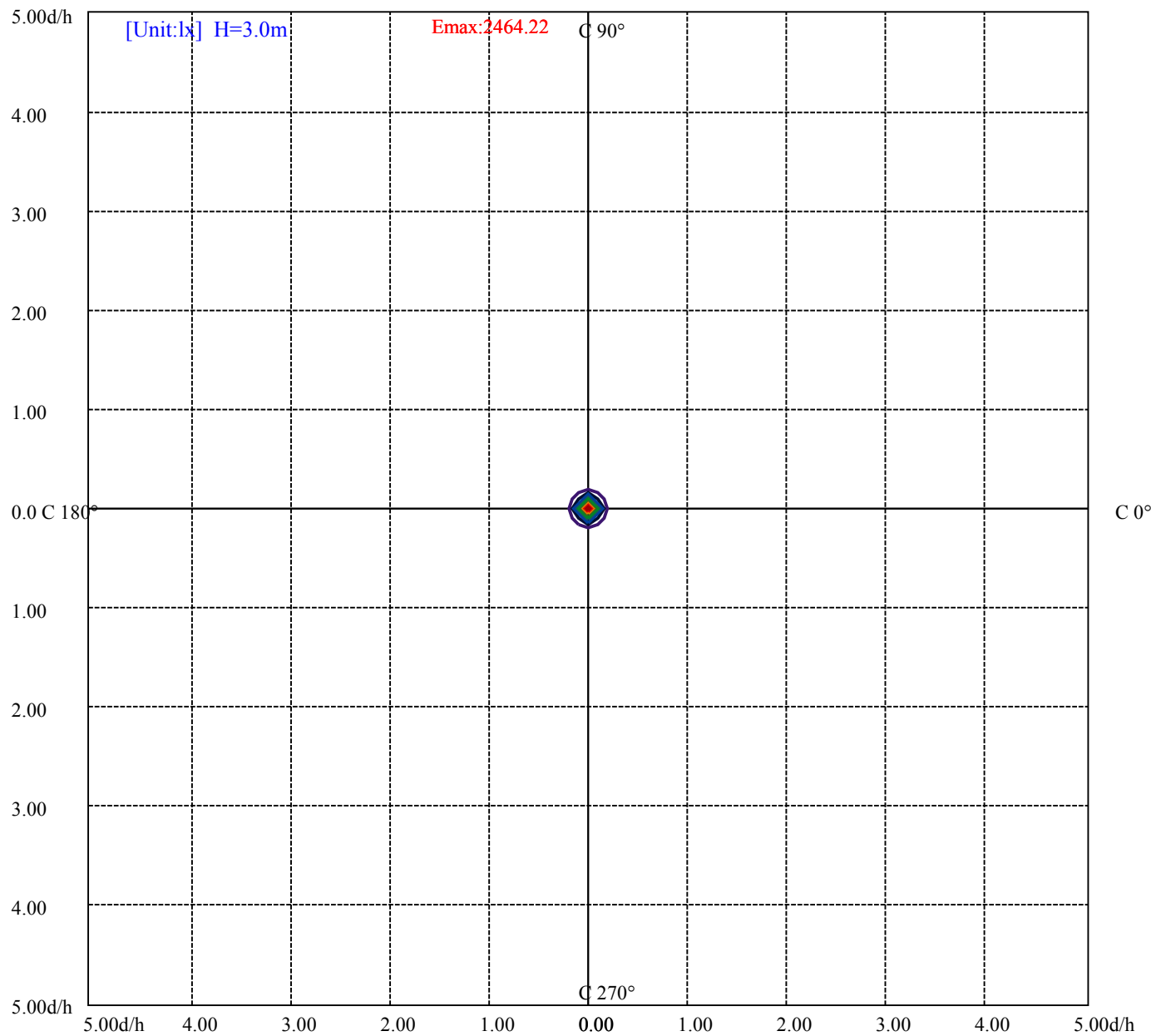
House

[Unit:cd]

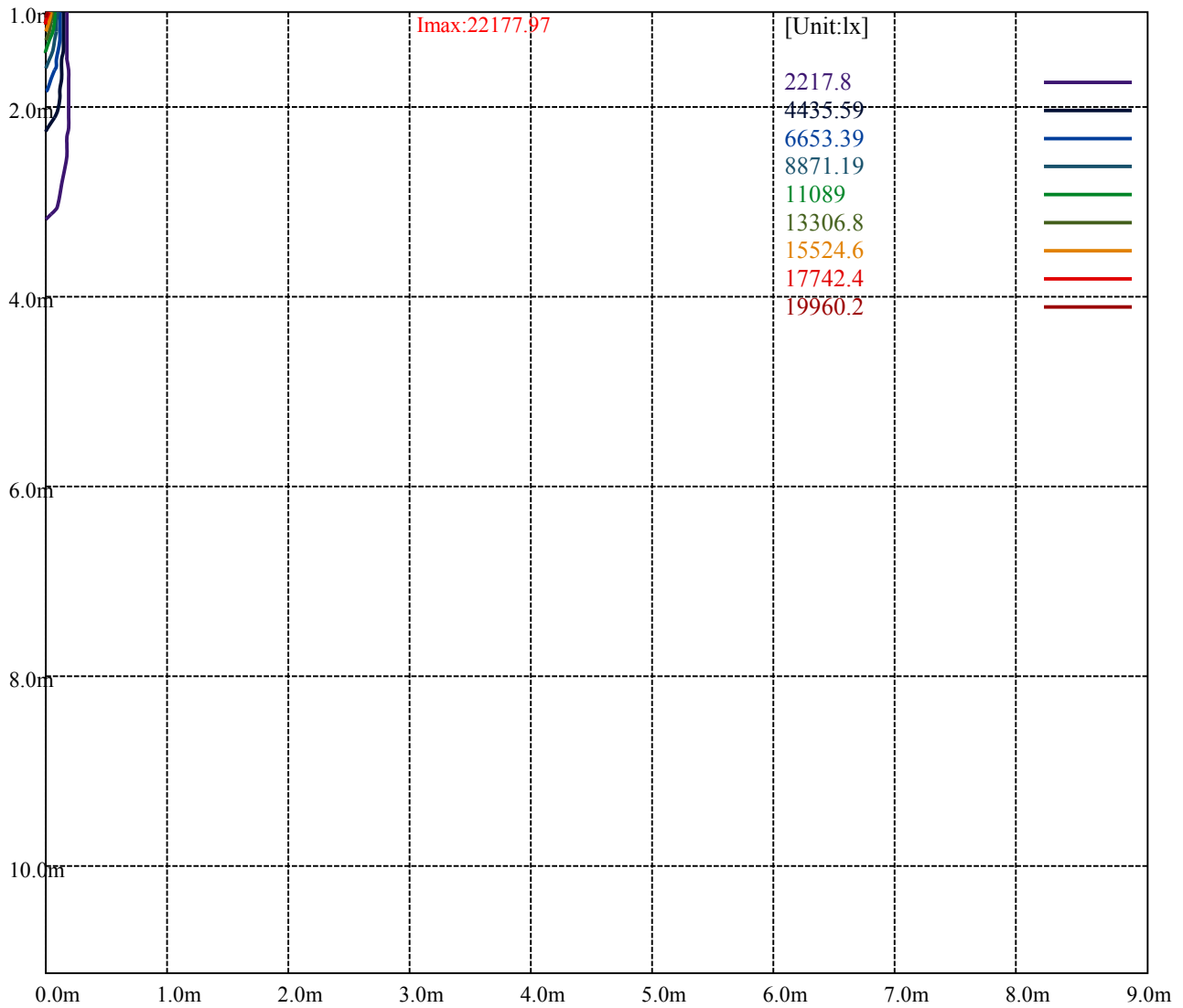
Road

Imax:22177.97

(10%Imax)	2217.8	—
(20%Imax)	4435.59	—
(30%Imax)	6653.39	—
(40%Imax)	8871.19	—
(50%Imax)	11089	—
(60%Imax)	13306.8	—
(70%Imax)	15524.6	—
(80%Imax)	17742.4	—
(90%Imax)	19960.2	—



(10%E _{max}) 246.4211	—
(20%E _{max}) 492.8422	—
(30%E _{max}) 739.2634	—
(40%E _{max}) 985.6844	—
(50%E _{max}) 1232.111	—
(60%E _{max}) 1478.522	—
(70%E _{max}) 1724.944	—
(80%E _{max}) 1971.367	—
(90%E _{max}) 2217.789	—



Luminance Table

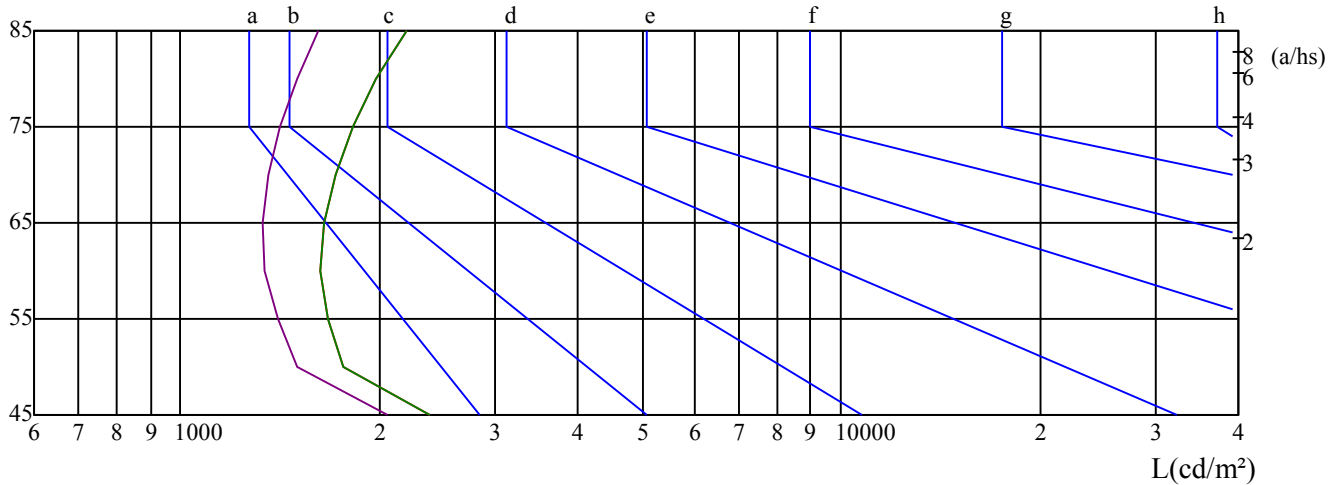
γ	45	50	55	60	65	70	75	80	85
C0	2382	1765	1672	1625	1647	1714	1825	1978	2206
C45	2062	1505	1404	1342	1335	1363	1418	1499	1620
C90	2382	1765	1672	1625	1647	1714	1825	1978	2206

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3765	3765	3765	5910	5910	5910	17337	17337	17337

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

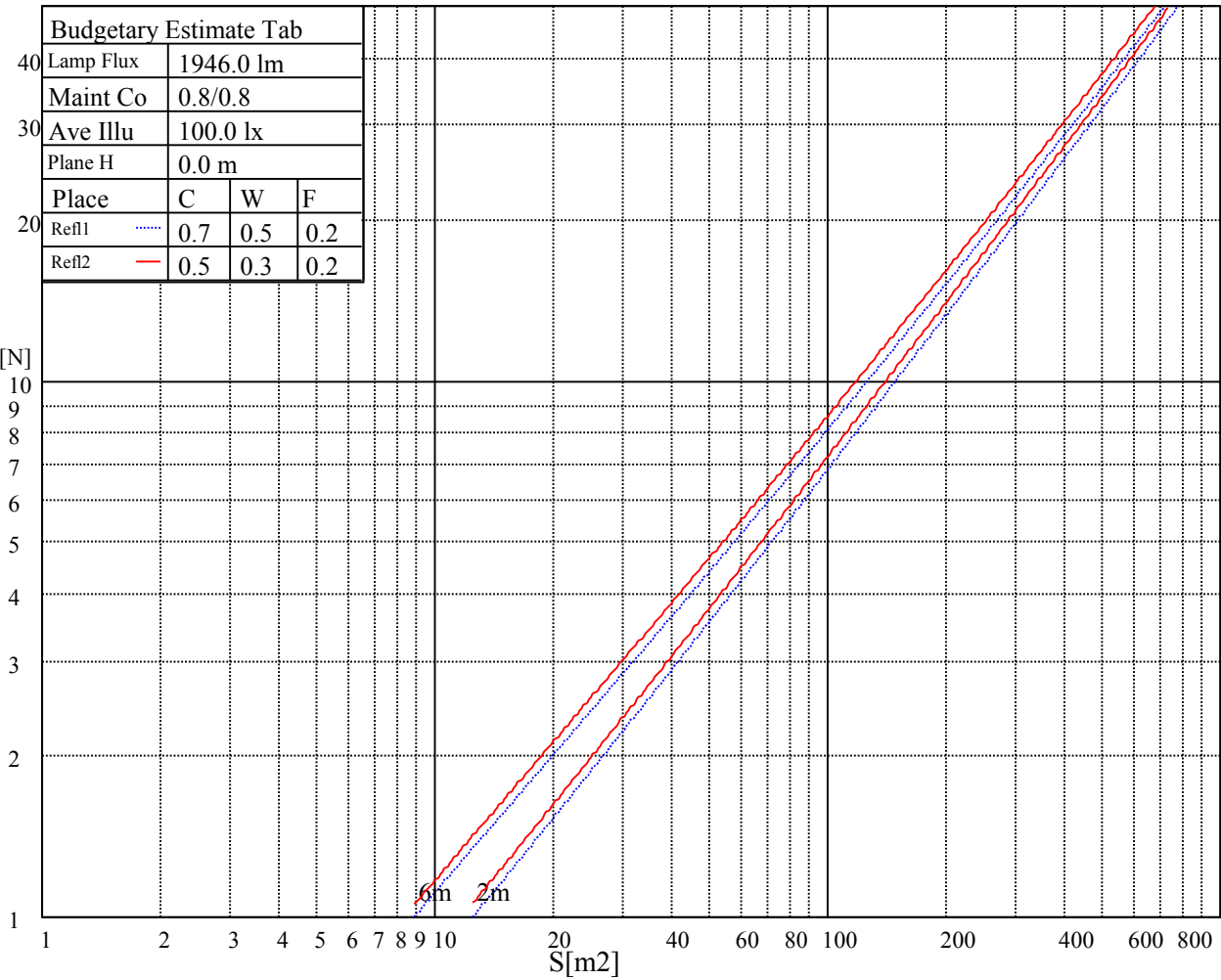
 $\gamma(^{\circ})$ 

C0 ———

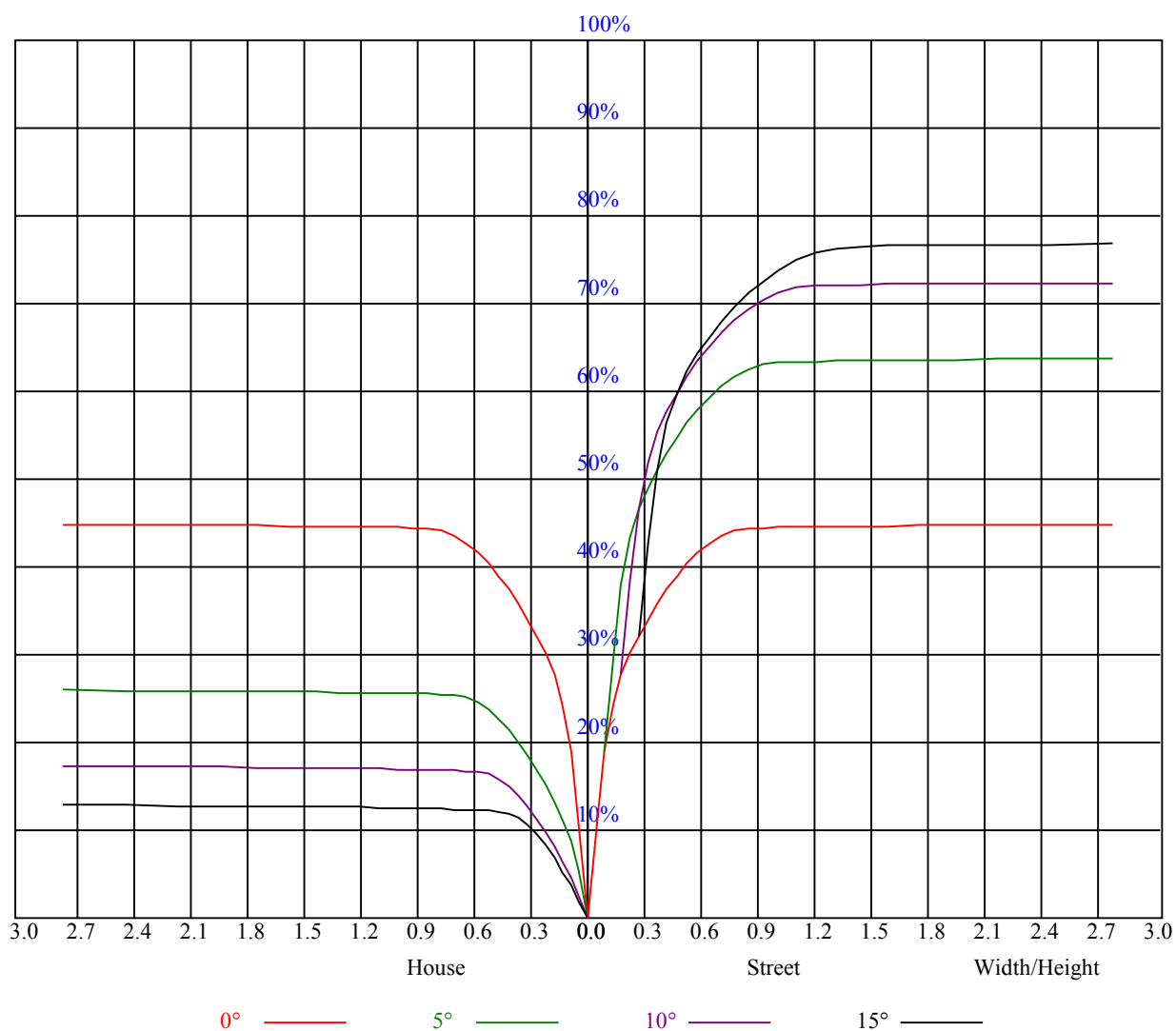
C45 ———

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	0.95	1.86	1.32	2.17	2.49	0.98	1.89	1.35	2.20	2.52
	3H	3.14	3.94	3.53	4.28	4.65	3.14	3.94	3.53	4.28	4.65
	4H	4.37	5.11	4.78	5.47	5.86	4.36	5.10	4.77	5.46	5.85
	6H	5.69	6.37	6.11	6.74	7.14	5.65	6.33	6.07	6.70	7.10
	8H	6.35	6.99	6.79	7.38	7.79	6.30	6.93	6.74	7.32	7.74
	12H	7.39	7.99	7.82	8.38	8.81	7.31	7.91	7.74	8.30	8.73
4H	2H	1.41	2.15	1.82	2.51	2.90	1.44	2.18	1.85	2.53	2.92
	3H	3.90	4.51	4.32	4.92	5.33	3.90	4.51	4.32	4.92	5.32
	4H	5.32	5.86	5.76	6.28	6.73	5.30	5.84	5.74	6.26	6.71
	6H	6.73	7.19	7.20	7.64	8.12	6.70	7.16	7.17	7.61	8.09
	8H	7.51	7.94	7.99	8.39	8.87	7.46	7.89	7.94	8.34	8.82
	12H	8.54	8.91	9.03	9.40	9.88	8.46	8.83	8.96	9.32	9.80
8H	4H	5.74	6.17	6.22	6.62	7.10	5.72	6.16	6.20	6.61	7.08
	6H	7.39	7.73	7.90	8.23	8.72	7.36	7.70	7.87	8.21	8.69
	8H	8.33	8.63	8.86	9.15	9.65	8.28	8.58	8.81	9.10	9.60
	12H	9.49	9.75	10.02	10.25	10.83	9.42	9.67	9.94	10.17	10.76
12H	4H	5.83	6.20	6.32	6.69	7.17	5.81	6.18	6.31	6.67	7.15
	6H	7.75	7.86	8.09	8.33	8.88	7.72	7.83	8.07	8.30	8.85
	8H	8.59	8.85	9.11	9.35	9.93	8.54	8.80	9.07	9.30	9.88
Variation with the observer position at spacings:											
S = 1.0H		5.4/-9.7					5.4/-9.7				
S = 1.5H		8.0/-7.9					8.0/-7.9				
S = 2.0H		9.7/-6.5					9.7/-6.5				
Standard tables:		BK1					BK1				
Uncorrected UGR		-1.8					-1.8				



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	1.08	1.08	1.08	1.05	1.05	1.05	1.01	1.01	1.01	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	0.99	0.97	0.99	0.98	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.86
2	0.96	0.93	0.90	0.94	0.92	0.89	0.92	0.89	0.87	0.89	0.87	0.86	0.87	0.85	0.84	0.82
3	0.91	0.88	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.86	0.84	0.82	0.84	0.82	0.80	0.79
4	0.87	0.84	0.81	0.86	0.83	0.80	0.85	0.82	0.79	0.83	0.80	0.78	0.81	0.79	0.77	0.76
5	0.84	0.80	0.77	0.83	0.79	0.77	0.82	0.78	0.76	0.80	0.77	0.75	0.79	0.77	0.75	0.74
6	0.81	0.77	0.74	0.80	0.76	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
7	0.78	0.74	0.71	0.77	0.74	0.71	0.76	0.73	0.71	0.75	0.72	0.70	0.75	0.72	0.70	0.69
8	0.75	0.71	0.69	0.75	0.71	0.69	0.74	0.71	0.68	0.73	0.70	0.68	0.73	0.70	0.68	0.67
9	0.73	0.69	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.65
10	0.71	0.67	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



Nata 2-1678-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	22156.88	22331.25	21780.00	20323.13	18101.25	14748.75	11165.63	8257.50	5883.75		
45.0	22173.75	21931.88	20615.63	18697.50	16087.50	12661.88	9253.13	6643.13	4539.38		
90.0	22123.13	21386.25	19485.00	17156.25	13151.25	10800.56	7636.50	5433.75	3711.94		
135.0	22258.13	21751.88	20176.88	18084.38	15406.88	11970.00	8662.50	6165.00	4179.38		
180.0	22156.88	21065.63	19400.63	16678.13	10875.38	10106.44	7282.13	4799.25	3198.94		
225.0	22173.75	21740.63	20396.25	18157.50	15435.00	11018.25	8412.19	5954.06	4107.94		
270.0	22123.13	22095.00	21200.63	19591.88	17223.75	13764.38	10215.00	7413.75	4966.88		
315.0	22258.13	22044.38	20773.13	18990.00	16396.88	10888.31	9378.00	6792.75	4585.50		
360.0	22156.88	22331.25	21780.00	20323.13	18101.25	14748.75	11165.63	8257.50	5883.75		
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0		
0.0	3858.75	2919.38	2123.44	1618.31	1307.81	1127.81	1001.81	921.38	874.13		
45.0	3150.00	2925.00	1776.38	1436.63	1183.50	1032.19	938.25	879.75	829.13		
90.0	2720.25	2010.38	1559.25	1222.31	1097.16	986.18	904.95	857.70	818.66		
135.0	2885.63	2448.56	1692.00	1337.63	1123.31	1002.94	912.94	861.19	826.31		
180.0	2327.63	1729.69	1370.25	1111.67	1039.16	936.84	882.23	847.18	814.73		
225.0	2782.69	2000.81	1573.31	1115.89	1085.18	981.90	907.48	863.27	827.10		
270.0	3313.13	2925.00	1785.38	1432.69	1183.50	1032.19	948.94	893.25	841.50		
315.0	3241.69	2275.31	1681.31	1353.94	1108.07	995.74	923.91	873.11	833.85		
360.0	3858.75	2919.38	2123.44	1618.31	1307.81	1127.81	1001.81	921.38	874.13		
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0		
0.0	838.13	813.38	790.88	775.13	760.50	747.00	731.81	721.69	711.56		
45.0	802.13	782.44	760.50	747.00	734.06	721.69	709.31	700.88	692.44		
90.0	790.54	770.40	753.64	736.71	723.99	712.97	699.69	691.48	683.33		
135.0	801.56	782.44	761.06	744.19	730.13	720.00	705.94	698.06	693.00		
180.0	793.74	775.13	761.06	745.20	735.58	723.94	714.77	704.19	697.56		
225.0	802.35	783.06	766.01	749.64	737.78	725.96	714.60	706.78	698.40		
270.0	818.44	795.94	774.56	758.81	745.88	733.50	722.25	713.81	704.81		
315.0	809.16	791.16	772.71	760.16	747.34	735.64	725.23	716.12	707.34		
360.0	838.13	813.38	790.88	775.13	760.50	747.00	731.81	721.69	711.56		
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0		
0.0	701.44	693.56	684.56	672.75	660.94	651.38	641.81	628.31	605.81		
45.0	684.00	674.44	664.31	651.38	640.13	632.25	619.31	606.38	555.19		
90.0	673.09	663.98	652.22	642.66	633.09	624.99	608.68	586.86	520.88		
135.0	682.88	671.63	664.88	649.69	640.13	633.38	620.44	604.13	554.63		
180.0	687.88	681.19	662.85	655.14	646.03	631.13	617.68	574.88	496.97		
225.0	687.43	679.61	669.21	656.49	648.39	639.28	623.98	598.84	530.10		
270.0	697.50	686.81	678.94	666.00	655.88	646.31	637.31	624.94	574.31		
315.0	698.12	687.66	676.69	665.27	654.98	646.31	632.81	619.82	558.17		
360.0	701.44	693.56	684.56	672.75	660.94	651.38	641.81	628.31	605.81		
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0		
0.0	543.94	465.75	361.69	288.56	160.43	88.88	37.86	27.39	19.97		
45.0	478.69	395.44	299.25	235.63	119.14	53.44	29.53	21.43	15.19		
90.0	434.03	347.34	255.83	153.17	85.16	40.16	26.83	18.51	13.95		
135.0	458.44	369.56	288.56	164.76	91.41	42.81	26.83	21.94	16.48		
180.0	399.60	304.31	201.77	120.88	55.58	29.59	23.12	16.99	13.61		
225.0	427.28	350.55	264.99	148.33	85.78	40.61	28.07	20.98	16.54		
270.0	506.25	424.13	318.94	294.19	131.40	75.32	31.28	26.10	20.81		
315.0	481.67	395.72	302.63	189.11	110.25	51.92	28.74	22.50	17.44		
360.0	543.94	465.75	361.69	288.56	160.43	88.88	37.86	27.39	19.97		

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	14.51	12.32	10.80	10.52	10.18	9.96	9.68	9.51	9.28
45.0	12.66	10.52	10.18	9.96	9.68	9.39	9.28	9.11	8.94
90.0	11.70	10.35	10.07	9.90	9.68	9.51	9.34	9.17	9.00
135.0	13.16	10.29	10.07	9.90	9.68	9.45	9.28	9.17	9.00
180.0	10.46	10.07	9.84	9.68	9.45	9.28	9.11	9.00	8.89
225.0	13.95	10.18	9.90	9.68	9.45	9.28	9.11	8.94	8.78
270.0	15.81	11.03	10.52	10.18	9.96	9.68	9.39	9.23	9.06
315.0	13.39	10.86	10.52	10.24	10.01	9.73	9.51	9.34	9.17
360.0	14.51	12.32	10.80	10.52	10.18	9.96	9.68	9.51	9.28
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	9.17	9.00	8.83	8.72	8.55	8.44	8.21	8.10	8.04
45.0	8.83	8.66	8.55	8.38	8.27	8.21	8.10	8.04	7.99
90.0	8.89	8.72	8.61	8.44	8.33	8.27	8.16	8.10	8.04
135.0	8.83	8.72	8.61	8.44	8.38	8.27	8.21	8.10	8.04
180.0	8.72	8.55	8.44	8.33	8.21	8.10	8.04	7.99	7.88
225.0	8.61	8.49	8.38	8.27	8.16	8.04	7.99	7.88	7.82
270.0	8.89	8.78	8.66	8.49	8.38	8.33	8.16	8.10	8.04
315.0	9.00	8.89	8.72	8.55	8.44	8.27	8.10	8.04	7.93
360.0	9.17	9.00	8.83	8.72	8.55	8.44	8.21	8.10	8.04
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.99	7.88	7.82	7.82	7.76	7.65	7.65	7.65	7.59
45.0	7.88	7.88	7.82	7.71	7.71	7.65	7.59	7.59	7.54
90.0	7.93	7.88	7.82	7.76	7.76	7.71	7.71	7.65	7.59
135.0	7.99	7.93	7.88	7.82	7.82	7.71	7.71	7.65	7.65
180.0	7.88	7.76	7.76	7.71	7.65	7.65	7.65	7.59	7.54
225.0	7.76	7.71	7.71	7.65	7.59	7.59	7.54	7.54	7.48
270.0	7.93	7.88	7.82	7.82	7.76	7.76	7.65	7.65	7.65
315.0	7.88	7.82	7.76	7.71	7.65	7.65	7.59	7.54	7.54
360.0	7.99	7.88	7.82	7.82	7.76	7.65	7.65	7.65	7.59
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.59	7.54	7.54	7.48	7.48	7.48	7.43	7.43	7.43
45.0	7.54	7.54	7.48	7.48	7.48	7.43	7.43	7.37	7.37
90.0	7.59	7.59	7.59	7.54	7.54	7.54	7.54	7.48	7.48
135.0	7.59	7.59	7.59	7.54	7.54	7.48	7.48	7.48	7.43
180.0	7.54	7.48	7.48	7.48	7.43	7.43	7.43	7.43	7.37
225.0	7.43	7.43	7.43	7.43	7.43	7.37	7.37	7.37	7.37
270.0	7.59	7.59	7.59	7.59	7.59	7.54	7.54	7.54	7.54
315.0	7.48	7.43	7.43	7.43	7.43	7.37	7.37	7.37	7.31
360.0	7.59	7.54	7.54	7.48	7.48	7.48	7.43	7.43	7.43
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.43	7.37	7.43	7.43	7.37	7.37	7.37	7.37	7.31
45.0	7.37	7.37	7.37	7.37	7.31	7.31	7.31	7.26	7.26
90.0	7.48	7.54	7.59	7.54	7.54	7.31	7.31	7.26	7.26
135.0	7.43	7.43	7.43	7.43	7.43	7.37	7.31	7.31	7.31
180.0	7.43	7.43	7.37	7.37	7.37	7.31	7.31	7.31	7.37
225.0	7.31	7.31	7.31	7.31	7.31	7.31	7.26	7.26	7.26
270.0	7.54	7.54	7.54	7.59	7.54	7.48	7.31	7.31	7.31
315.0	7.37	7.37	7.31	7.31	7.37	7.31	7.31	7.31	7.31
360.0	7.43	7.37	7.43	7.43	7.37	7.37	7.37	7.37	7.31

Intensity data(cd)

Appendix Page: 19 Total:19

C/ $\gamma(^{\circ})$	90.0
0.0	7.37
45.0	7.26
90.0	7.26
135.0	7.31
180.0	7.31
225.0	7.26
270.0	7.26
315.0	7.26
360.0	7.37