



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: LN01D05015DA-N

Luminaire: 97.70.273.00

Report No: 200804-B009

Voltage(V): 34.6000

Test No: 200804-B009

Current(A): 0.1500

LampCAT: NICHIANTCWS024B-V3 LES6.7

Power (W): 5.1900

Lamp flux(lm): 578.0

PF: 1.0000

Number of Lamps: 1

Ballast type: DC

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 522.49

Efficiency(%): 90.40%

Lumens(lm)/Power(W): 100.67

Central intensity(cd): 4386.796

Maximum intensity(cd): 4386.796

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=16.4

[C90/270]Total=16.4

Field angle(10%Imax): [C0/180]Total=31.9

[C90/270]Total=31.9

Maximum s/h(1/2): C0_180=0.28 C90_270=0.28

Maximum s/h(1/4): C0_180=0.29 C90_270=0.29

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.40%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.732%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4386.797	0.000	0	.000%	.000%
1.0	4346.086	4.179	4.179	.723%	.800%
2.0	4211.367	12.282	16.461	2.125%	3.150%
3.0	3996.984	19.632	36.093	3.396%	6.908%
4.0	3725.438	25.849	61.942	4.472%	11.855%
5.0	3370.641	30.527	92.469	5.281%	17.698%
6.0	3017.461	33.571	126.04	5.808%	24.123%
7.0	2650.219	35.179	161.219	6.086%	30.856%
8.0	2268.773	35.204	196.424	6.091%	37.594%
9.0	1914.328	33.902	230.325	5.865%	44.082%
10.0	1568.524	31.519	261.844	5.453%	50.115%
11.0	1268.677	28.349	290.193	4.905%	55.540%
12.0	1054.413	25.395	315.588	4.394%	60.401%
13.0	841.943	22.505	338.093	3.894%	64.708%
14.0	667.772	19.324	357.417	3.343%	68.406%
15.0	537.173	16.542	373.959	2.862%	71.572%
16.0	432.394	14.207	388.166	2.458%	74.292%
17.0	345.016	12.106	400.273	2.095%	76.609%
18.0	281.109	10.323	410.596	1.786%	78.584%
19.0	239.625	9.060	419.656	1.567%	80.318%
20.0	188.438	7.835	427.491	1.355%	81.818%
21.0	154.969	6.594	434.085	1.141%	83.080%
22.0	131.660	5.760	439.845	.997%	84.182%
23.0	111.080	5.093	444.938	.881%	85.157%
24.0	94.486	4.494	449.432	.778%	86.017%
25.0	81.823	4.009	453.441	.694%	86.785%
26.0	71.241	3.613	457.054	.625%	87.476%
27.0	62.213	3.265	460.319	.565%	88.101%
28.0	55.167	2.972	463.291	.514%	88.670%
29.0	48.952	2.724	466.015	.471%	89.191%
30.0	43.861	2.506	468.521	.434%	89.671%
31.0	39.614	2.323	470.844	.402%	90.115%
32.0	35.817	2.161	473.005	.374%	90.529%
33.0	32.857	2.023	475.028	.350%	90.916%
34.0	30.284	1.911	476.939	.331%	91.282%
35.0	28.041	1.811	478.75	.313%	91.628%
36.0	26.002	1.721	480.471	.298%	91.958%
37.0	24.427	1.645	482.116	.285%	92.273%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	22.795	1.576	483.692	.273%	92.574%
39.0	21.255	1.504	485.195	.260%	92.862%
40.0	20.004	1.439	486.634	.249%	93.137%
41.0	18.773	1.381	488.015	.239%	93.402%
42.0	17.515	1.318	489.334	.228%	93.654%
43.0	16.383	1.256	490.589	.217%	93.894%
44.0	15.342	1.197	491.787	.207%	94.124%
45.0	14.252	1.137	492.924	.197%	94.341%
46.0	13.352	1.080	494.004	.187%	94.548%
47.0	12.473	1.027	495.031	.178%	94.744%
48.0	11.679	0.976	496.007	.169%	94.931%
49.0	11.060	0.934	496.941	.162%	95.110%
50.0	10.455	0.897	497.838	.155%	95.282%
51.0	9.935	0.863	498.701	.149%	95.447%
52.0	9.506	0.834	499.535	.144%	95.606%
53.0	9.084	0.809	500.344	.140%	95.761%
54.0	8.705	0.784	501.128	.136%	95.911%
55.0	8.381	0.763	501.89	.132%	96.057%
56.0	8.058	0.743	502.633	.129%	96.199%
57.0	7.748	0.723	503.356	.125%	96.338%
58.0	7.474	0.704	504.06	.122%	96.473%
59.0	7.193	0.686	504.746	.119%	96.604%
60.0	6.954	0.668	505.414	.116%	96.732%
61.0	6.694	0.651	506.065	.113%	96.856%
62.0	6.476	0.635	506.7	.110%	96.978%
63.0	6.293	0.621	507.321	.107%	97.097%
64.0	6.082	0.607	507.928	.105%	97.213%
65.0	5.899	0.593	508.521	.103%	97.326%
66.0	5.730	0.580	509.101	.100%	97.437%
67.0	5.576	0.569	509.67	.098%	97.546%
68.0	5.428	0.557	510.227	.096%	97.653%
69.0	5.344	0.550	510.777	.095%	97.758%
70.0	5.309	0.547	511.324	.095%	97.863%
71.0	5.421	0.555	511.878	.096%	97.969%
72.0	5.780	0.582	512.461	.101%	98.080%
73.0	6.216	0.627	513.088	.109%	98.200%
74.0	6.750	0.682	513.77	.118%	98.331%
75.0	7.320	0.743	514.513	.129%	98.473%

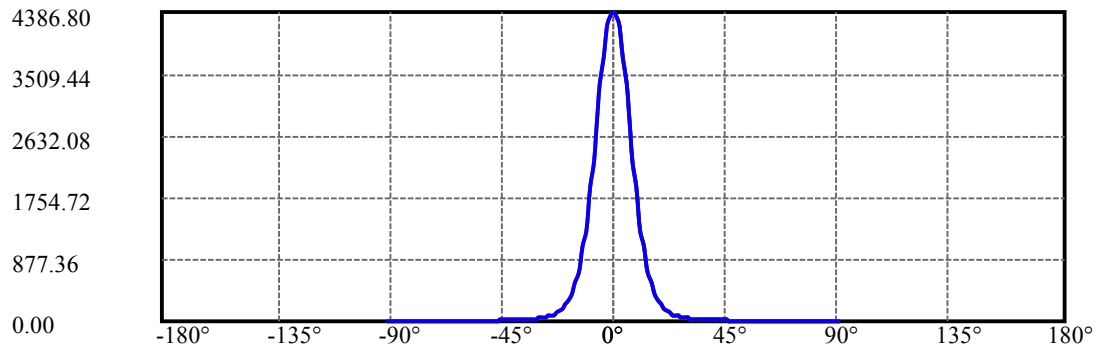
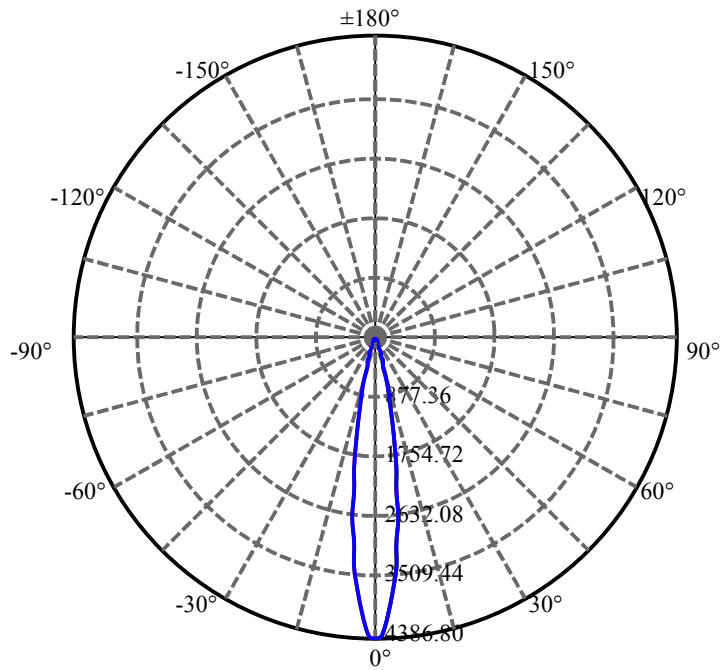
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.741	0.799	515.313	.138%	98.626%
77.0	7.959	0.837	516.15	.145%	98.786%
78.0	7.826	0.845	516.995	.146%	98.948%
79.0	7.411	0.819	517.813	.142%	99.105%
80.0	6.553	0.753	518.566	.130%	99.249%
81.0	5.611	0.658	519.224	.114%	99.375%
82.0	4.669	0.557	519.781	.096%	99.481%
83.0	3.825	0.462	520.243	.080%	99.570%
84.0	3.382	0.393	520.636	.068%	99.645%
85.0	3.178	0.358	520.994	.062%	99.714%
86.0	2.939	0.334	521.328	.058%	99.777%
87.0	2.756	0.312	521.64	.054%	99.837%
88.0	2.609	0.294	521.934	.051%	99.893%
89.0	2.531	0.282	522.215	.049%	99.947%
90.0	2.489	0.275	522.491	.048%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	468.52	81.06%	89.67%
0-40	486.63	84.19%	93.14%
0-60	505.41	87.44%	96.73%
0-90	522.22	90.35%	99.95%
0-120	522.22	90.35%	99.95%
0-180	522.49	90.40%	100.00%
60-90	17.47	3.02%	3.34%
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%
0-18.82	417.99	72.32%	80.00%

ZONAL LUMEN SUMMARY

0-10	261.84
10-20	165.65
20-30	41.03
30-40	18.11
40-50	11.20
50-60	7.58
60-70	5.91
70-80	7.24
80-90	3.65
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:

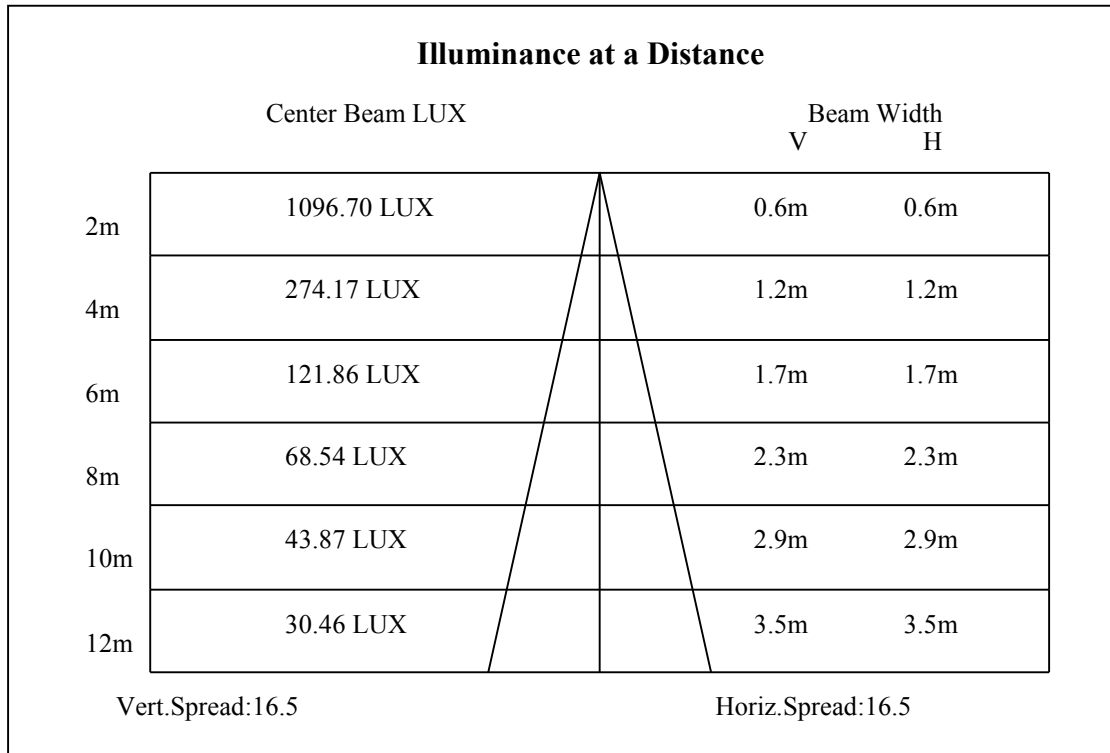
C90/C270:

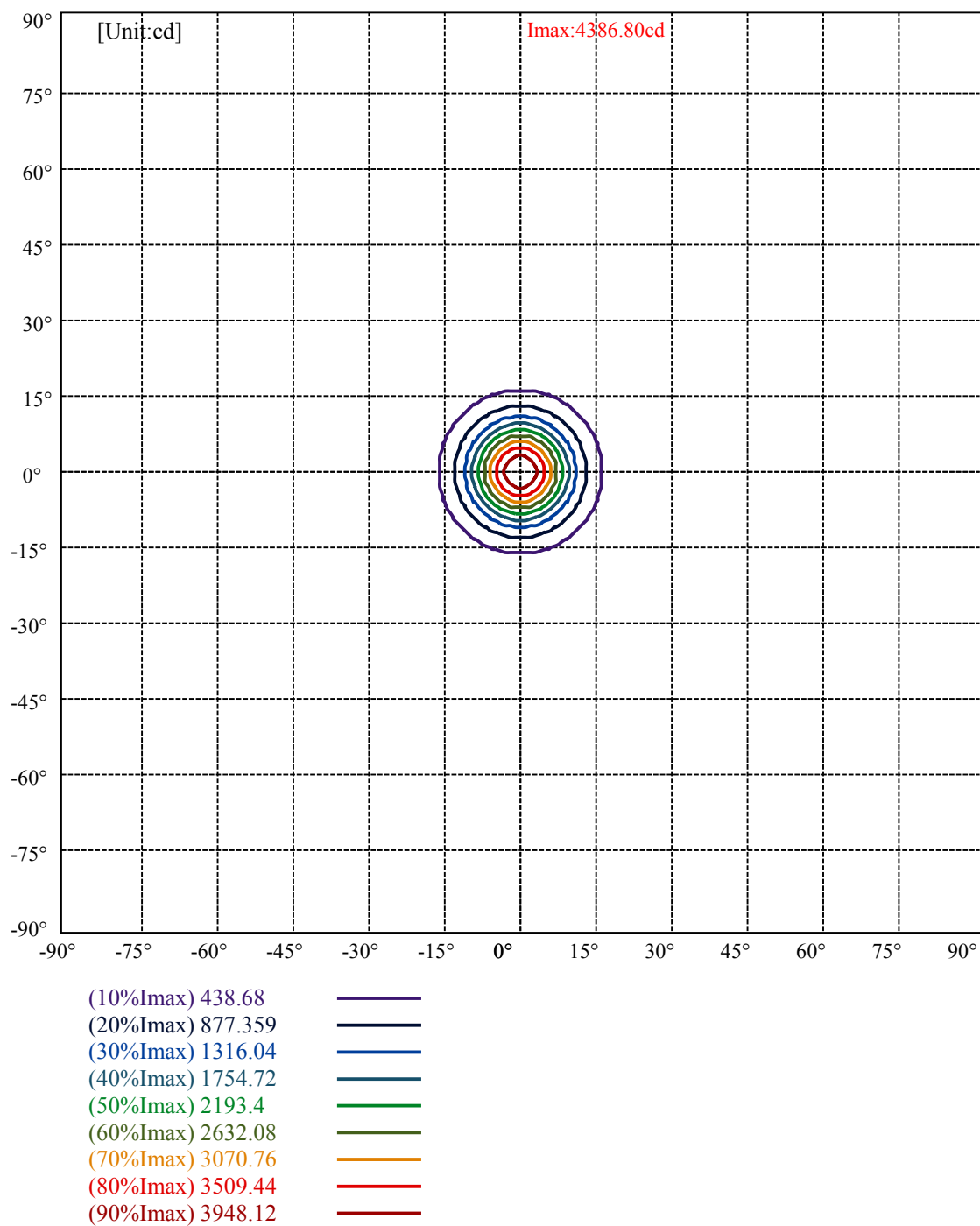
Field angle(10%Imax):C0/180Left:15.9 Right:15.9

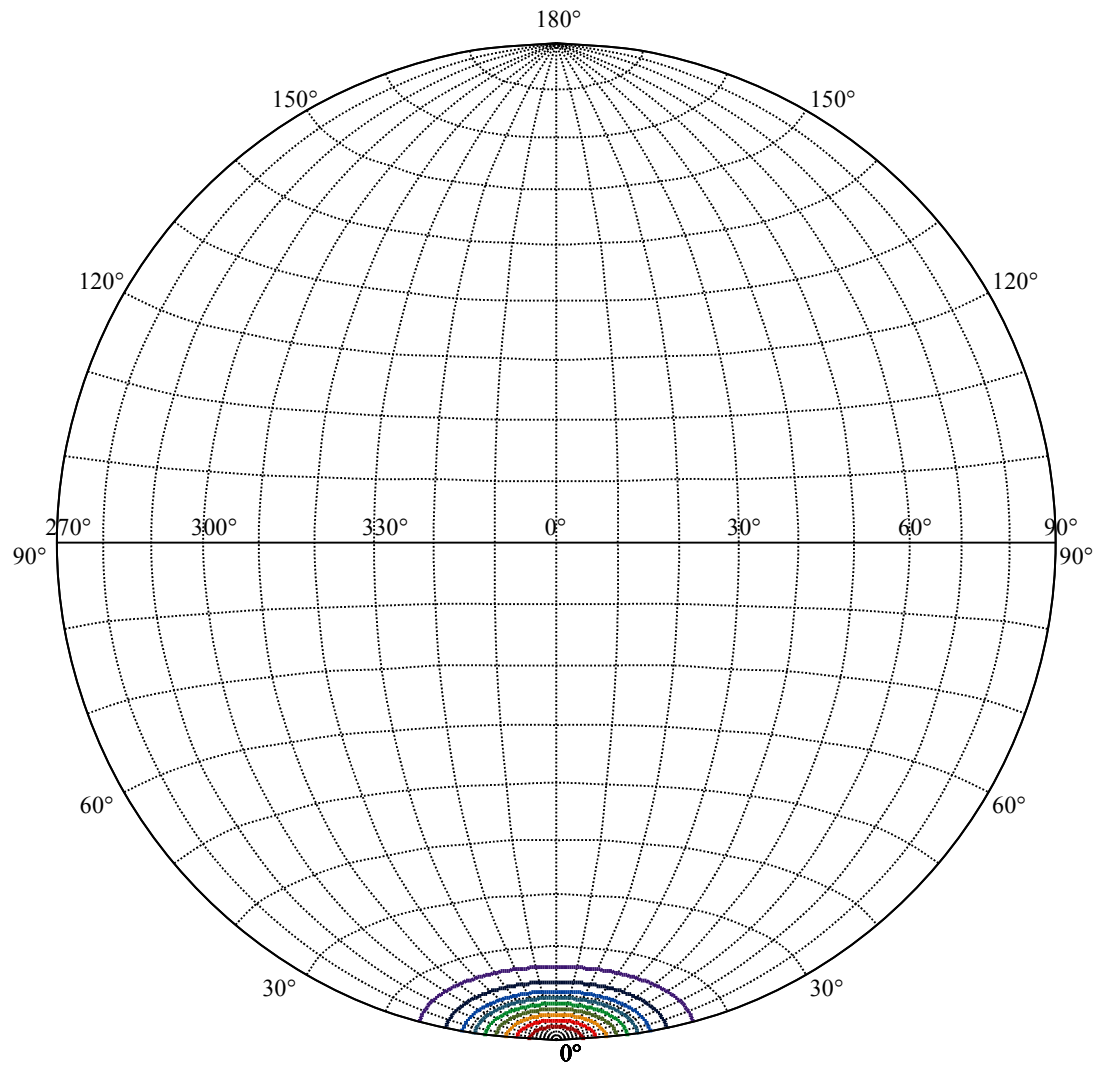
:C90/270Left:15.9 Right:15.9

Beam Angle(50%Imax):C0/180Left:8.2 Right:8.2

:C90/270Left:8.2 Right:8.2





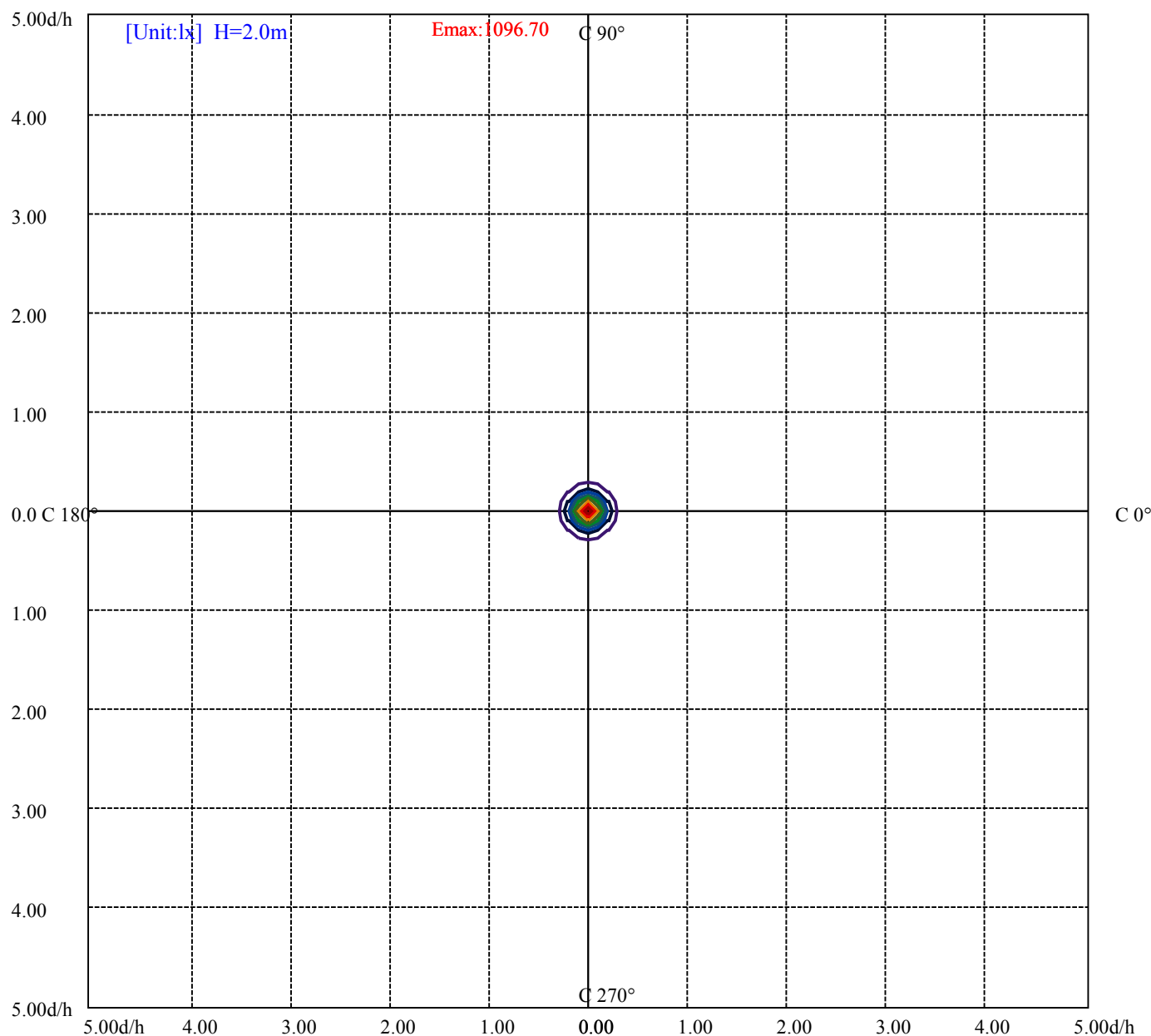


House

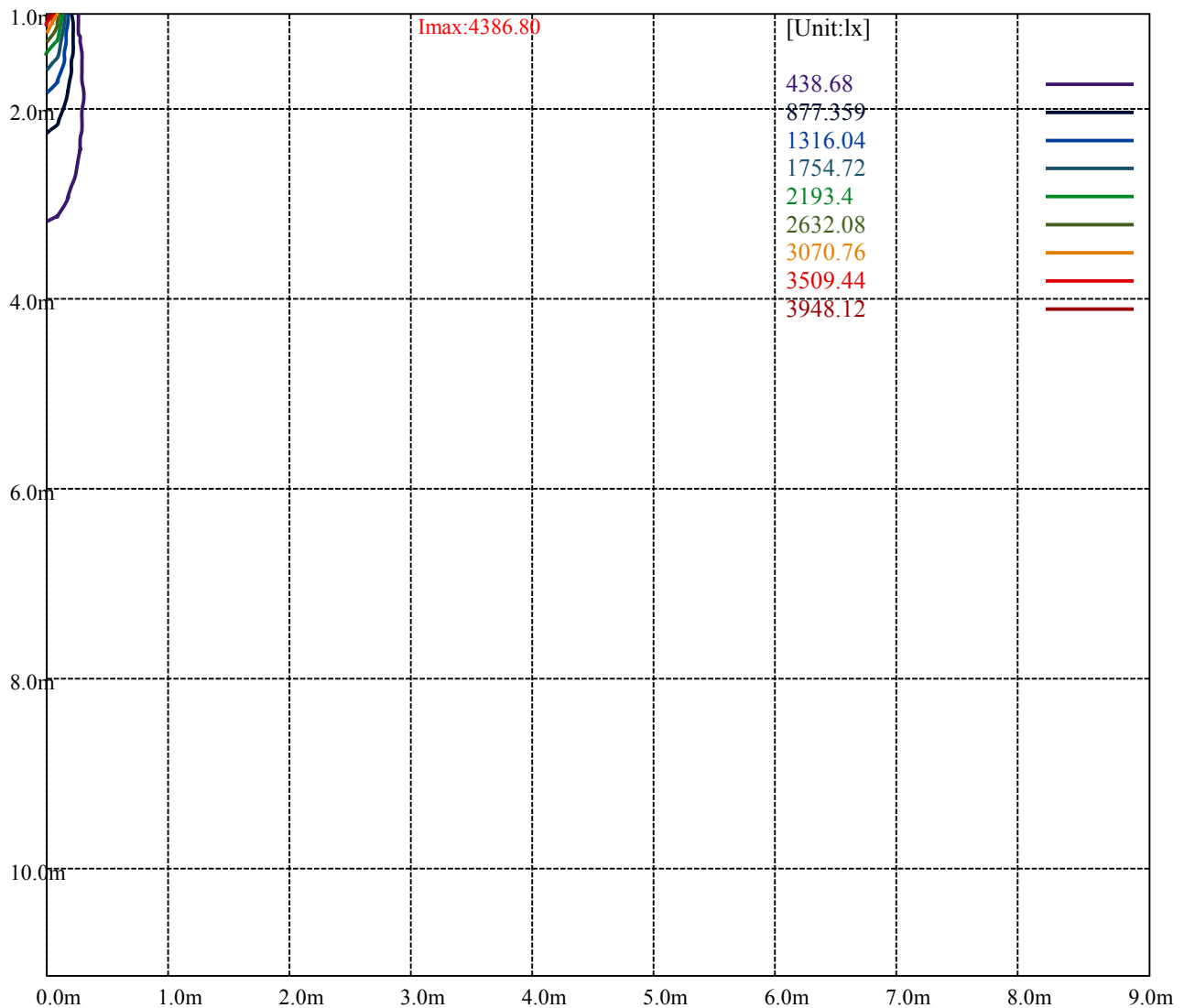
[Unit:cd]

Road

Imax:4386.80	
(10%Imax) 438.68	
(20%Imax) 877.359	
(30%Imax) 1316.04	
(40%Imax) 1754.72	
(50%Imax) 2193.4	
(60%Imax) 2632.08	
(70%Imax) 3070.76	
(80%Imax) 3509.44	
(90%Imax) 3948.12	



(10%Emax)	109.6697	—
(20%Emax)	219.3395	—
(30%Emax)	329.01	—
(40%Emax)	438.68	—
(50%Emax)	548.35	—
(60%Emax)	658.0175	—
(70%Emax)	767.6875	—
(80%Emax)	877.3575	—
(90%Emax)	987.0275	—



Luminance Table

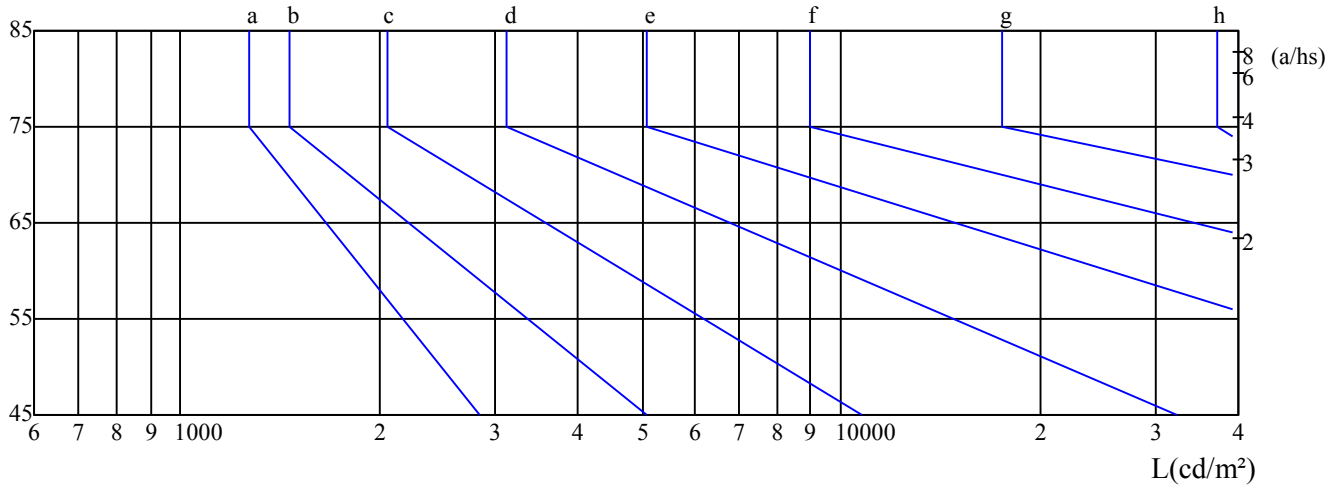
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
0	0	0	0	0	0	0	0	0

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

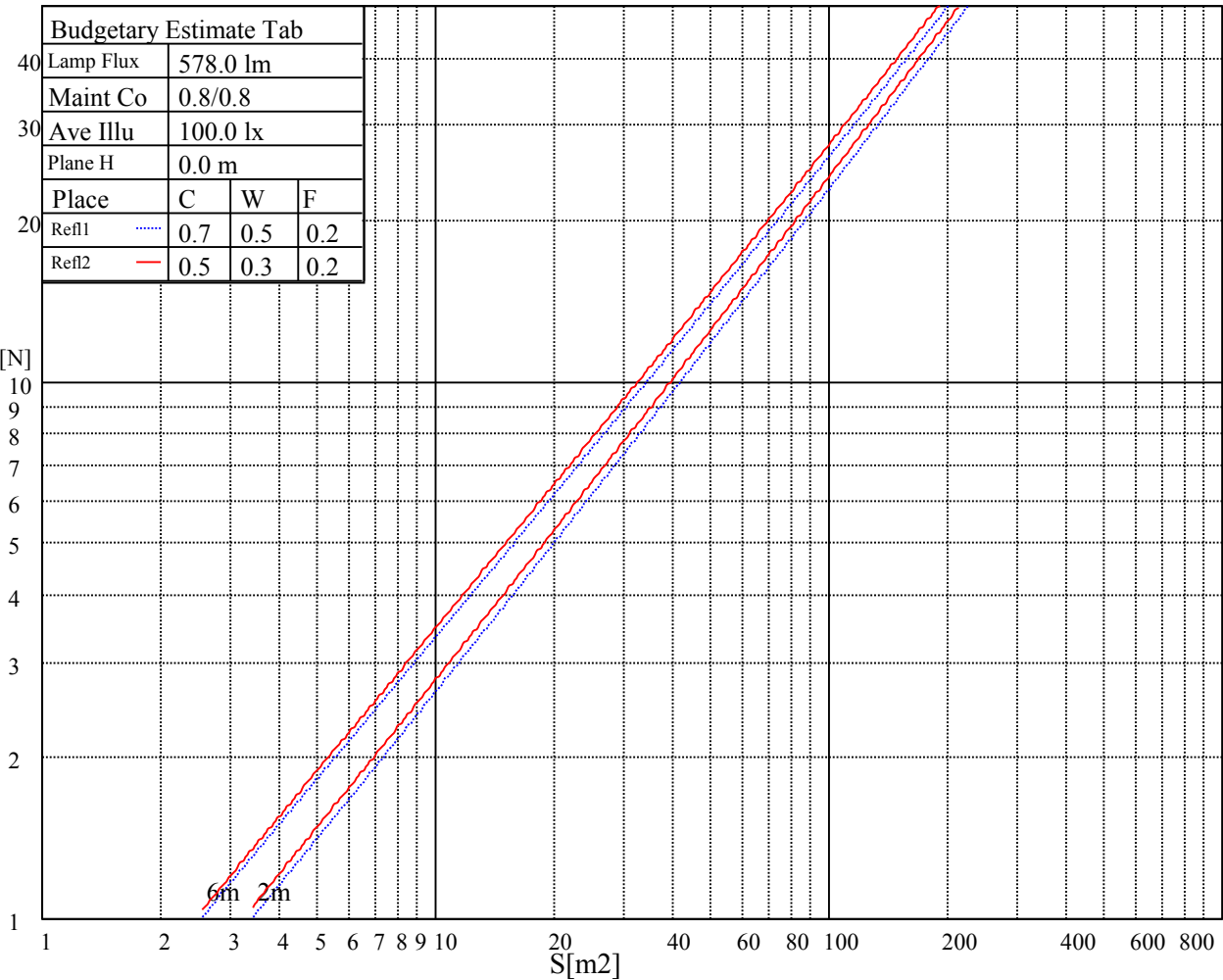
 $\gamma(^{\circ})$ 

C0 ———

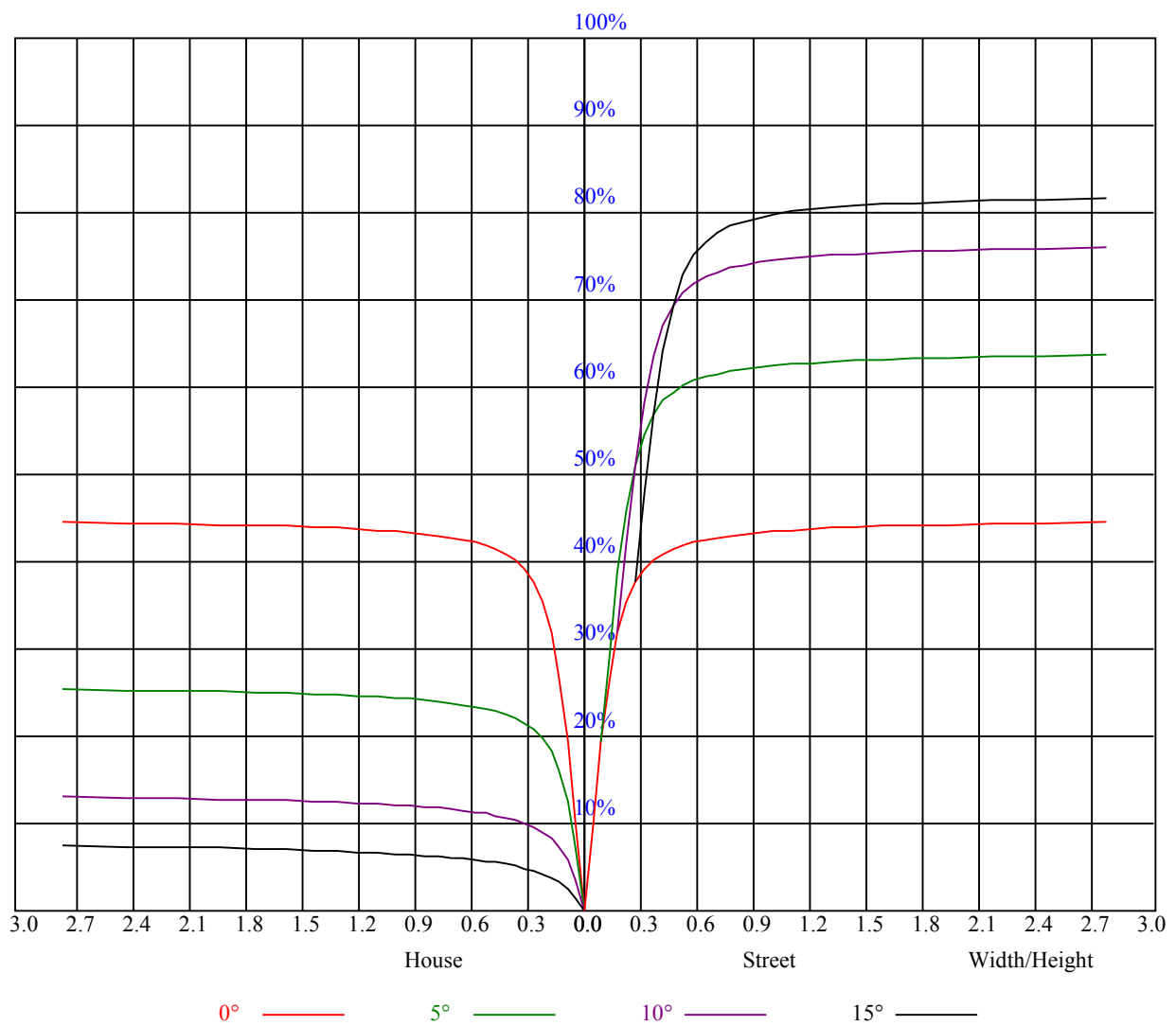
C45 ———

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	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	3H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
4H	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	2H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	3H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
8H	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
12H	12H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	4H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	6H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
	8H	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	正无穷大	
Variation with the observer position at spacings:											
S = 1.0H		非数字/非数字					非数字/非数字				
S = 1.5H		非数字/非数字					非数字/非数字				
S = 2.0H		非数字/非数字					非数字/非数字				
Standard tables:		BK0					BK0				
Uncorrected UGR		负无穷大					负无穷大				



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	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	1.00	0.98	1.00	0.98	0.96	0.96	0.95	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87
2	0.97	0.94	0.91	0.95	0.93	0.90	0.92	0.90	0.88	0.90	0.88	0.87	0.87	0.86	0.85	0.83
3	0.93	0.89	0.87	0.91	0.88	0.86	0.89	0.87	0.85	0.87	0.85	0.83	0.85	0.83	0.82	0.81
4	0.89	0.86	0.83	0.88	0.85	0.82	0.86	0.84	0.81	0.85	0.82	0.81	0.83	0.81	0.80	0.79
5	0.86	0.83	0.80	0.86	0.82	0.80	0.84	0.81	0.79	0.83	0.80	0.78	0.81	0.79	0.78	0.77
6	0.84	0.80	0.77	0.83	0.80	0.77	0.82	0.79	0.77	0.81	0.78	0.76	0.80	0.78	0.76	0.75
7	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.75	0.79	0.76	0.74	0.78	0.76	0.74	0.73
8	0.80	0.76	0.73	0.79	0.76	0.73	0.78	0.75	0.73	0.77	0.75	0.73	0.77	0.74	0.73	0.72
9	0.78	0.74	0.72	0.77	0.74	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
10	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.75	0.72	0.70	0.74	0.72	0.70	0.69



Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	4350.38	4401.56	4361.06	4247.44	4064.63	3749.06	3445.31	3160.69	2741.63
45.0	4386.94	4394.81	4304.81	4132.13	3907.69	3624.75	3222.56	2868.19	2519.44
90.0	4411.13	4366.69	4242.38	4024.69	3752.44	3398.06	3042.56	2633.63	2231.44
135.0	4398.75	4366.69	4222.13	4014.00	3735.56	3330.56	2977.88	2615.63	2217.94
180.0	4350.38	4223.25	3981.38	3660.19	3332.25	2891.81	2568.94	2162.25	1740.94
225.0	4386.94	4280.06	4123.69	3852.00	3472.31	3173.06	2766.38	2368.69	2033.44
270.0	4411.13	4379.63	4228.31	4033.13	3772.69	3372.75	3025.13	2676.94	2332.13
315.0	4398.75	4356.00	4227.19	4012.31	3765.94	3425.06	3090.94	2715.75	2333.25
360.0	4350.38	4401.56	4361.06	4247.44	4064.63	3749.06	3445.31	3160.69	2741.63

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2365.31	2043.56	1699.88	1423.13	1152.00	929.25	768.38	619.88	504.56
45.0	2093.63	1773.00	1473.75	1179.56	939.94	764.44	604.69	492.19	388.13
90.0	1893.38	1549.13	1096.31	1016.94	825.53	632.19	509.06	412.37	326.31
135.0	1846.13	1536.19	1224.00	987.19	771.19	596.81	473.06	366.19	284.06
180.0	1472.63	1107.51	940.22	732.71	581.18	444.71	339.30	268.31	213.81
225.0	1711.69	1253.81	1097.94	885.32	670.11	534.88	428.23	341.89	260.61
270.0	1924.88	1621.69	1351.69	1089.56	871.31	711.00	567.56	453.38	372.94
315.0	2007.00	1663.31	1265.63	1120.89	924.30	728.89	607.11	504.96	409.73
360.0	2365.31	2043.56	1699.88	1423.13	1152.00	929.25	768.38	619.88	504.56

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	421.31	353.25	289.69	235.69	198.11	163.63	135.79	115.59	97.14
45.0	309.94	286.31	200.64	162.06	134.94	113.46	92.64	80.16	69.98
90.0	259.26	214.26	175.11	146.19	125.78	107.55	94.22	81.96	72.00
135.0	245.31	184.39	150.86	125.94	108.51	93.49	81.62	73.13	65.81
180.0	164.03	135.34	113.85	93.66	81.45	71.38	62.55	55.18	49.67
225.0	212.91	175.44	143.10	118.29	100.97	85.44	73.07	63.90	55.97
270.0	300.94	286.88	203.18	167.01	141.98	118.91	100.52	87.08	75.71
315.0	335.19	281.14	231.08	190.91	161.55	134.78	115.48	97.59	83.64
360.0	421.31	353.25	289.69	235.69	198.11	163.63	135.79	115.59	97.14

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	82.29	71.66	62.04	55.29	48.88	43.82	40.05	36.51	33.53
45.0	60.69	53.38	48.04	42.98	38.76	35.61	32.74	30.49	28.41
90.0	64.58	58.16	51.19	46.18	42.08	37.58	34.54	31.89	29.31
135.0	58.16	52.93	48.09	43.20	38.98	35.55	32.40	29.53	27.34
180.0	44.27	39.60	36.00	32.40	29.81	27.17	25.03	23.29	21.94
225.0	49.84	43.88	39.15	35.49	32.51	29.36	27.23	25.43	23.51
270.0	64.41	56.98	50.85	45.06	40.33	36.84	33.58	30.83	28.63
315.0	73.46	64.74	56.25	50.29	45.56	40.61	37.29	34.31	31.67
360.0	82.29	71.66	62.04	55.29	48.88	43.82	40.05	36.51	33.53

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	31.11	29.14	26.94	25.31	23.91	22.28	20.76	19.46	18.17
45.0	26.66	25.26	23.85	22.28	21.04	19.86	18.39	17.33	16.31
90.0	26.94	25.14	23.29	21.66	20.25	18.90	17.72	16.48	15.24
135.0	25.09	23.46	21.71	20.19	18.90	17.89	16.48	15.47	14.63
180.0	20.36	19.29	18.28	17.16	16.26	15.41	14.51	13.67	12.94
225.0	22.22	21.04	19.86	18.73	17.78	16.82	16.03	15.02	14.12
270.0	26.38	24.75	23.01	21.38	20.03	18.84	17.38	16.31	15.24
315.0	29.25	27.34	25.43	23.34	21.88	20.19	18.84	17.33	16.09
360.0	31.11	29.14	26.94	25.31	23.91	22.28	20.76	19.46	18.17

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	16.82	15.81	14.68	13.78	12.88	12.09	11.53	10.97	10.41
45.0	15.19	14.12	13.28	12.38	11.70	11.03	10.46	9.96	9.51
90.0	14.34	13.44	12.38	11.59	10.97	10.29	9.79	9.34	8.89
135.0	13.39	12.54	11.93	11.03	10.41	9.96	9.39	9.00	8.61
180.0	12.15	11.53	10.86	10.29	9.90	9.45	9.00	8.66	8.38
225.0	13.33	12.54	11.81	11.25	10.80	10.18	9.79	9.39	8.94
270.0	14.06	13.16	12.32	11.42	10.80	10.29	9.68	9.34	8.94
315.0	14.74	13.67	12.54	11.70	11.03	10.35	9.84	9.39	9.00
360.0	16.82	15.81	14.68	13.78	12.88	12.09	11.53	10.97	10.41
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.01	9.62	9.17	8.83	8.49	8.10	7.76	7.48	7.14
45.0	9.11	8.78	8.49	8.10	7.88	7.59	7.31	7.03	6.81
90.0	8.55	8.21	7.88	7.59	7.31	7.03	6.86	6.58	6.36
135.0	8.21	7.93	7.65	7.31	7.09	6.86	6.58	6.41	6.24
180.0	7.99	7.71	7.43	7.14	6.86	6.64	6.47	6.19	6.02
225.0	8.61	8.27	7.93	7.65	7.37	7.03	6.86	6.58	6.36
270.0	8.55	8.27	7.93	7.65	7.37	7.14	6.86	6.64	6.41
315.0	8.61	8.27	7.99	7.71	7.43	7.14	6.92	6.64	6.47
360.0	10.01	9.62	9.17	8.83	8.49	8.10	7.76	7.48	7.14
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	6.92	6.69	6.47	6.30	6.02	5.85	5.68	5.51	5.34
45.0	6.64	6.41	6.19	6.02	5.85	5.68	5.51	5.40	5.23
90.0	6.19	6.02	5.79	5.63	5.51	5.34	5.23	5.12	5.23
135.0	6.08	5.85	5.74	5.57	5.46	5.40	5.74	6.36	7.65
180.0	5.79	5.63	5.46	5.29	5.18	5.01	4.89	4.73	4.61
225.0	6.19	5.96	5.79	5.63	5.46	5.29	5.18	5.01	4.89
270.0	6.24	6.02	5.85	5.68	5.57	5.40	5.23	5.12	5.01
315.0	6.30	6.08	5.91	5.74	5.57	5.46	5.29	5.23	5.40
360.0	6.92	6.69	6.47	6.30	6.02	5.85	5.68	5.51	5.34
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	5.18	5.01	4.84	4.61	4.50	4.39	4.22	4.11	3.94
45.0	5.12	4.95	4.78	4.61	4.44	4.28	4.16	3.99	3.88
90.0	5.79	6.53	7.54	8.27	8.72	8.83	8.49	7.59	5.96
135.0	9.45	11.19	12.83	14.57	15.53	15.69	14.40	12.94	10.86
180.0	4.44	4.33	4.16	4.05	3.88	3.83	3.66	3.54	3.38
225.0	4.73	4.56	4.39	4.22	4.11	3.99	3.88	3.77	3.60
270.0	4.89	4.78	4.67	4.50	4.39	4.28	4.22	4.22	4.16
315.0	6.64	8.38	10.80	13.73	16.37	18.39	19.58	19.13	16.65
360.0	5.18	5.01	4.84	4.61	4.50	4.39	4.22	4.11	3.94
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	3.83	3.66	3.49	3.32	3.21	2.98	2.87	2.70	2.59
45.0	3.77	3.60	3.43	3.32	3.15	3.04	2.87	2.70	2.64
90.0	4.67	3.77	3.49	3.32	3.09	2.87	2.64	2.53	2.42
135.0	8.10	5.63	3.88	3.54	3.38	2.93	2.64	2.53	2.48
180.0	3.26	3.15	2.98	2.87	2.76	2.64	2.53	2.53	2.48
225.0	3.54	3.38	3.26	3.15	3.04	2.93	2.76	2.64	2.59
270.0	4.05	3.71	3.54	3.38	3.26	2.98	2.81	2.59	2.53
315.0	13.67	10.46	6.53	4.16	3.54	3.15	2.93	2.64	2.53
360.0	3.83	3.66	3.49	3.32	3.21	2.98	2.87	2.70	2.59

Intensity data(cd)

Appendix Page: 19 Total:19

C/ γ (°)	90.0
0.0	2.53
45.0	2.59
90.0	2.48
135.0	2.42
180.0	2.48
225.0	2.53
270.0	2.42
315.0	2.48
360.0	2.53