



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: 2-1259-N
Luminaire: 92.70.065.00+92.70.059.00
Report No: NATA0100 Voltage(V): 34.8500
Test No: GC2019011706 Current(A): 0.6000
LampCAT: CITIZEN CLU038 Power (W): 20.9100
Lamp flux(lm): 2971.0 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): 2170.70
Efficiency(%): 73.06%
Lumens(lm)/Power(W): 103.86
Central intensity(cd): 4495.922
Maximum intensity(cd): 4495.922
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=36.5
 [C90/270]Total=36.5
Field angle(10%Imax): [C0/180]Total=65.7
 [C90/270]Total=65.7
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
Maximum s/h(1/4): C0_180=0.58 C90_270=0.58
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 73.10%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.134%

Equipment: GMS1980
Temperature(°C): 10.0

Date: 2019/1/17
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	4495.922	1.076	1.076	.036%	.050%
1.0	4489.383	8.592	9.668	.289%	.445%
2.0	4468.430	17.101	26.769	.576%	1.233%
3.0	4431.727	25.435	52.203	.856%	2.405%
4.0	4383.844	33.534	85.738	1.129%	3.950%
5.0	4321.125	41.299	127.037	1.390%	5.852%
6.0	4244.133	48.649	175.686	1.637%	8.094%
7.0	4147.102	55.423	231.11	1.865%	10.647%
8.0	4047.117	61.766	292.876	2.079%	13.492%
9.0	3921.258	67.268	360.144	2.264%	16.591%
10.0	3775.289	71.891	432.035	2.420%	19.903%
11.0	3634.664	76.053	508.088	2.560%	23.407%
12.0	3474.352	79.214	587.302	2.666%	27.056%
13.0	3285.211	81.041	668.343	2.728%	30.789%
14.0	3101.906	82.292	750.634	2.770%	34.580%
15.0	2913.891	82.703	833.337	2.784%	38.390%
16.0	2698.594	81.569	914.907	2.746%	42.148%
17.0	2509.031	80.444	995.351	2.708%	45.854%
18.0	2297.320	77.849	1073.2	2.620%	49.440%
19.0	2092.852	74.719	1147.919	2.515%	52.882%
20.0	1893.797	71.029	1218.948	2.391%	56.155%
21.0	1696.641	66.676	1285.625	2.244%	59.226%
22.0	1506.938	61.905	1347.529	2.084%	62.078%
23.0	1329.912	56.984	1404.513	1.918%	64.703%
24.0	1186.643	52.928	1457.441	1.781%	67.142%
25.0	1049.555	48.641	1506.082	1.637%	69.382%
26.0	944.641	45.411	1551.493	1.528%	71.474%
27.0	842.386	41.938	1593.431	1.412%	73.406%
28.0	744.694	38.339	1631.77	1.290%	75.173%
29.0	666.527	35.436	1667.206	1.193%	76.805%
30.0	600.462	32.924	1700.13	1.108%	78.322%
31.0	534.635	30.196	1730.325	1.016%	79.713%
32.0	484.235	28.140	1758.465	.947%	81.009%
33.0	442.533	26.431	1784.896	.890%	82.227%
34.0	401.520	24.622	1809.517	.829%	83.361%
35.0	370.905	23.330	1832.847	.785%	84.436%
36.0	341.930	22.040	1854.887	.742%	85.451%
37.0	315.570	20.826	1875.713	.701%	86.411%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	293.505	19.816	1895.529	.667%	87.323%
39.0	270.956	18.699	1914.228	.629%	88.185%
40.0	250.840	17.681	1931.909	.595%	88.999%
41.0	226.920	16.326	1948.235	.549%	89.751%
42.0	207.260	15.208	1963.443	.512%	90.452%
43.0	188.438	14.093	1977.536	.474%	91.101%
44.0	172.695	13.155	1990.691	.443%	91.707%
45.0	158.210	12.268	2002.959	.413%	92.273%
46.0	144.359	11.388	2014.347	.383%	92.797%
47.0	131.716	10.564	2024.91	.356%	93.284%
48.0	121.036	9.864	2034.774	.332%	93.738%
49.0	109.526	9.065	2043.839	.305%	94.156%
50.0	100.167	8.415	2052.253	.283%	94.543%
51.0	92.032	7.843	2060.096	.264%	94.905%
52.0	84.045	7.263	2067.359	.244%	95.239%
53.0	76.641	6.712	2074.071	.226%	95.549%
54.0	70.277	6.235	2080.306	.210%	95.836%
55.0	64.357	5.781	2086.087	.195%	96.102%
56.0	58.943	5.359	2091.446	.180%	96.349%
57.0	54.513	5.014	2096.459	.169%	96.580%
58.0	49.922	4.643	2101.102	.156%	96.794%
59.0	46.069	4.330	2105.432	.146%	96.993%
60.0	42.363	4.023	2109.456	.135%	97.179%
61.0	38.728	3.714	2113.17	.125%	97.350%
62.0	35.789	3.465	2116.635	.117%	97.509%
63.0	33.413	3.265	2119.9	.110%	97.660%
64.0	31.198	3.075	2122.975	.103%	97.801%
65.0	29.517	2.934	2125.909	.099%	97.937%
66.0	28.245	2.830	2128.738	.095%	98.067%
67.0	26.972	2.723	2131.461	.092%	98.192%
68.0	25.882	2.632	2134.092	.089%	98.314%
69.0	24.870	2.546	2136.638	.086%	98.431%
70.0	23.885	2.461	2139.1	.083%	98.544%
71.0	22.880	2.372	2141.472	.080%	98.654%
72.0	21.973	2.292	2143.764	.077%	98.759%
73.0	21.045	2.207	2145.97	.074%	98.861%
74.0	20.180	2.127	2148.098	.072%	98.959%
75.0	19.308	2.045	2150.143	.069%	99.053%

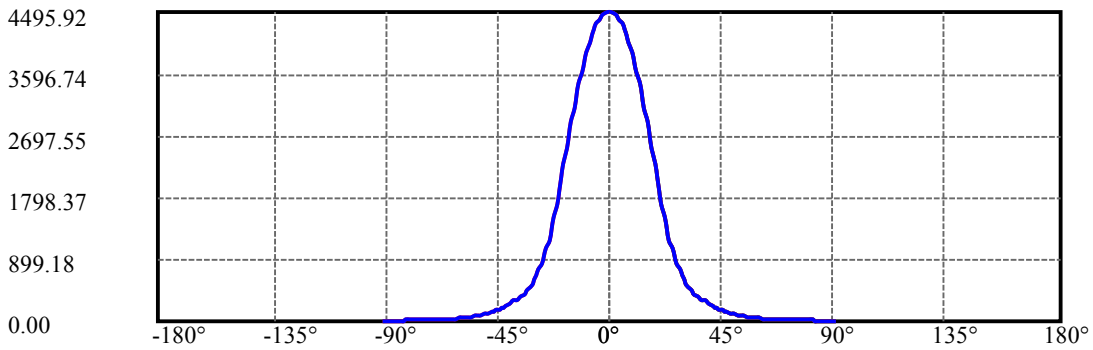
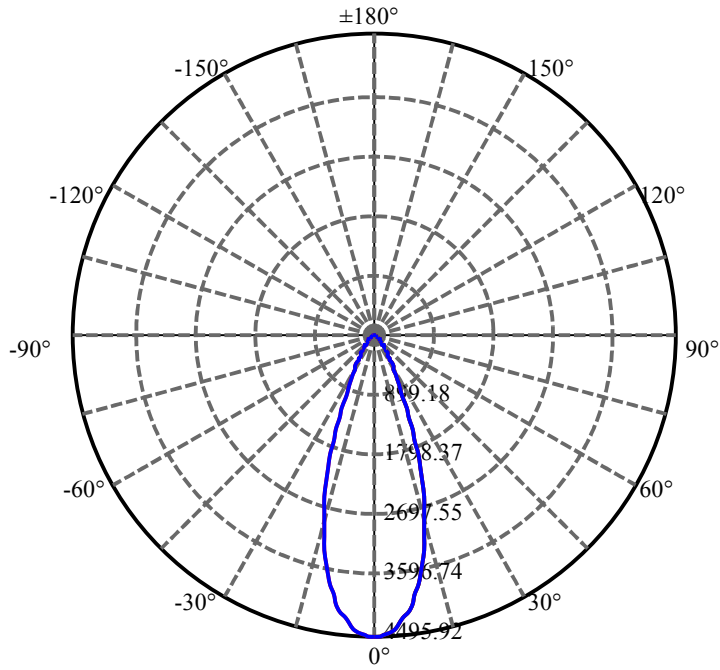
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	18.387	1.956	2152.099	.066%	99.143%
77.0	17.571	1.877	2153.977	.063%	99.230%
78.0	16.741	1.796	2155.772	.060%	99.312%
79.0	15.863	1.708	2157.48	.057%	99.391%
80.0	14.991	1.619	2159.099	.054%	99.466%
81.0	14.217	1.540	2160.639	.052%	99.537%
82.0	13.373	1.452	2162.091	.049%	99.603%
83.0	12.614	1.373	2163.464	.046%	99.667%
84.0	11.855	1.293	2164.757	.044%	99.726%
85.0	11.138	1.217	2165.974	.041%	99.782%
86.0	10.448	1.143	2167.117	.038%	99.835%
87.0	9.823	1.076	2168.192	.036%	99.885%
88.0	9.366	1.026	2169.219	.035%	99.932%
89.0	9.049	0.992	2170.211	.033%	99.977%
90.0	8.909	0.488	2170.699	.016%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1700.13	57.22%	78.32%
0-40	1931.91	65.03%	89.00%
0-60	2109.46	71.00%	97.18%
0-90	2170.21	73.05%	99.98%
0-120	2170.21	73.05%	99.98%
0-180	2170.70	73.06%	100.00%
60-90	64.78	2.18%	2.98%
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%
0-31.22	1736.56	58.45%	80.00%

ZONAL LUMEN SUMMARY

0-10	432.03
10-20	786.91
20-30	481.18
30-40	231.78
40-50	120.34
50-60	57.20
60-70	29.64
70-80	20.00
80-90	11.11
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: —————

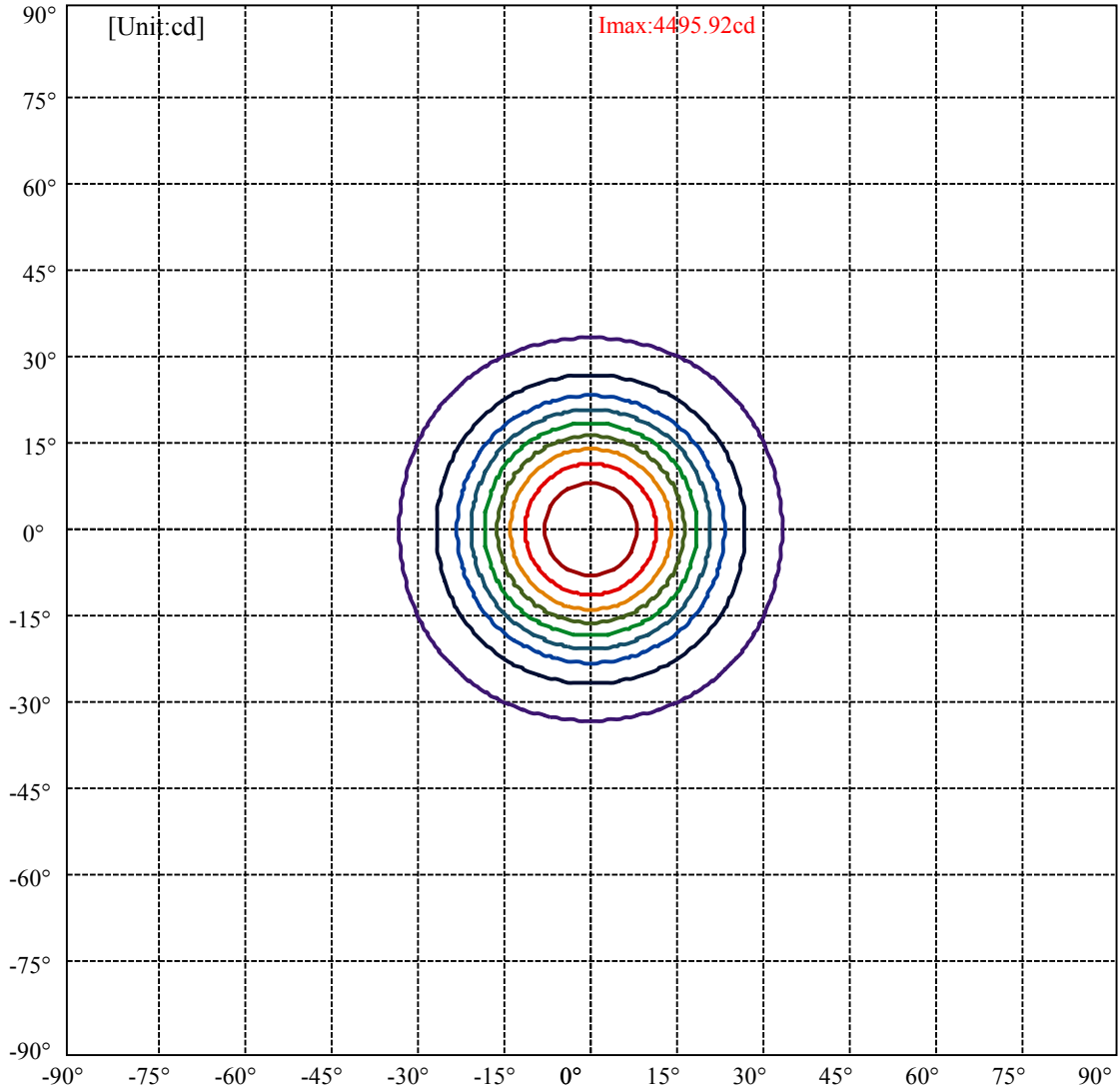
C90/C270: —————

Field angle(10%Imax):C0/180Left:32.8 Right:32.8

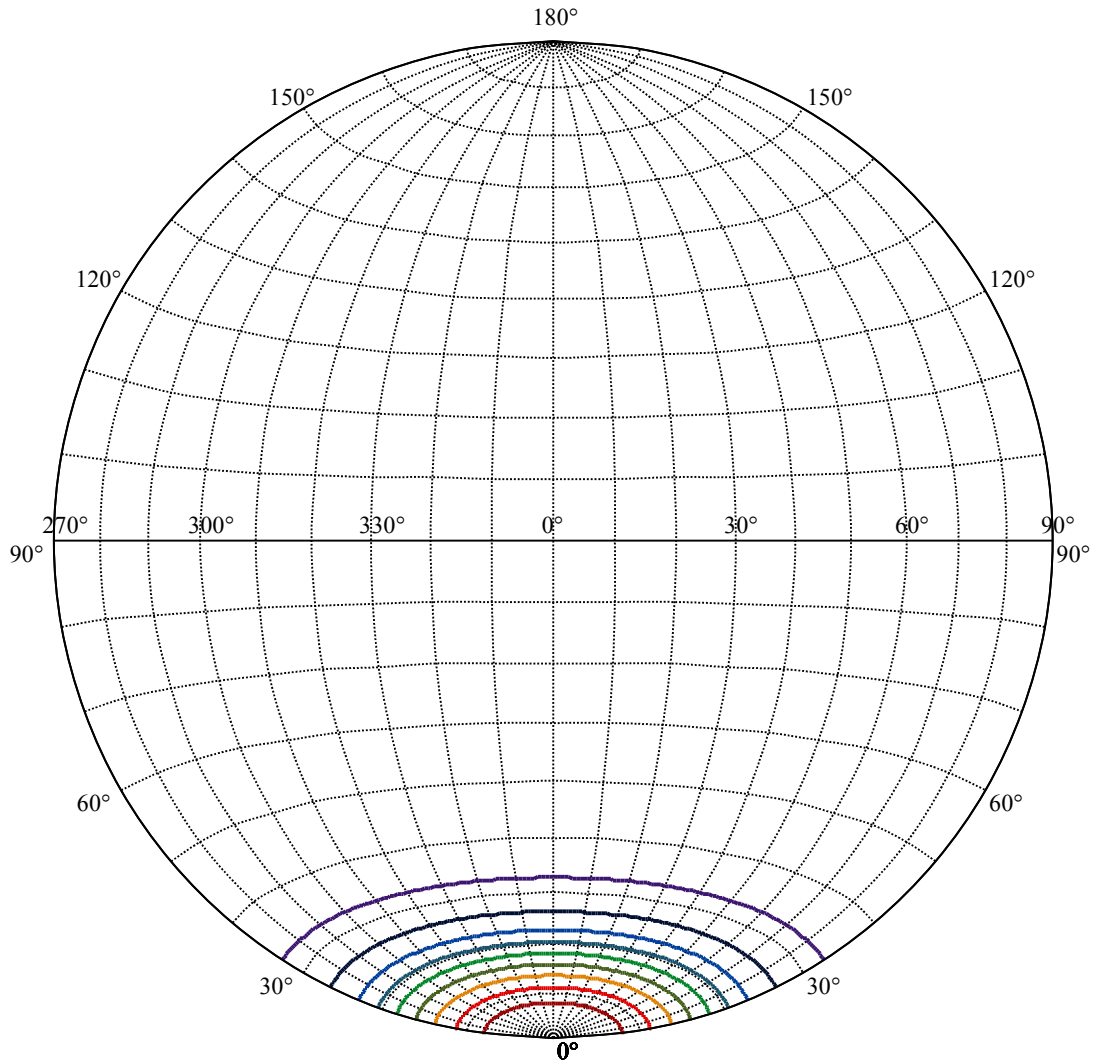
:C90/270Left:32.8 Right:32.8

Beam Angle(50%Imax):C0/180Left:18.2 Right:18.2

:C90/270Left:18.2 Right:18.2



(10%Imax) 449.592	—
(20%Imax) 899.184	—
(30%Imax) 1348.78	—
(40%Imax) 1798.37	—
(50%Imax) 2247.96	—
(60%Imax) 2697.55	—
(70%Imax) 3147.15	—
(80%Imax) 3596.74	—
(90%Imax) 4046.33	—



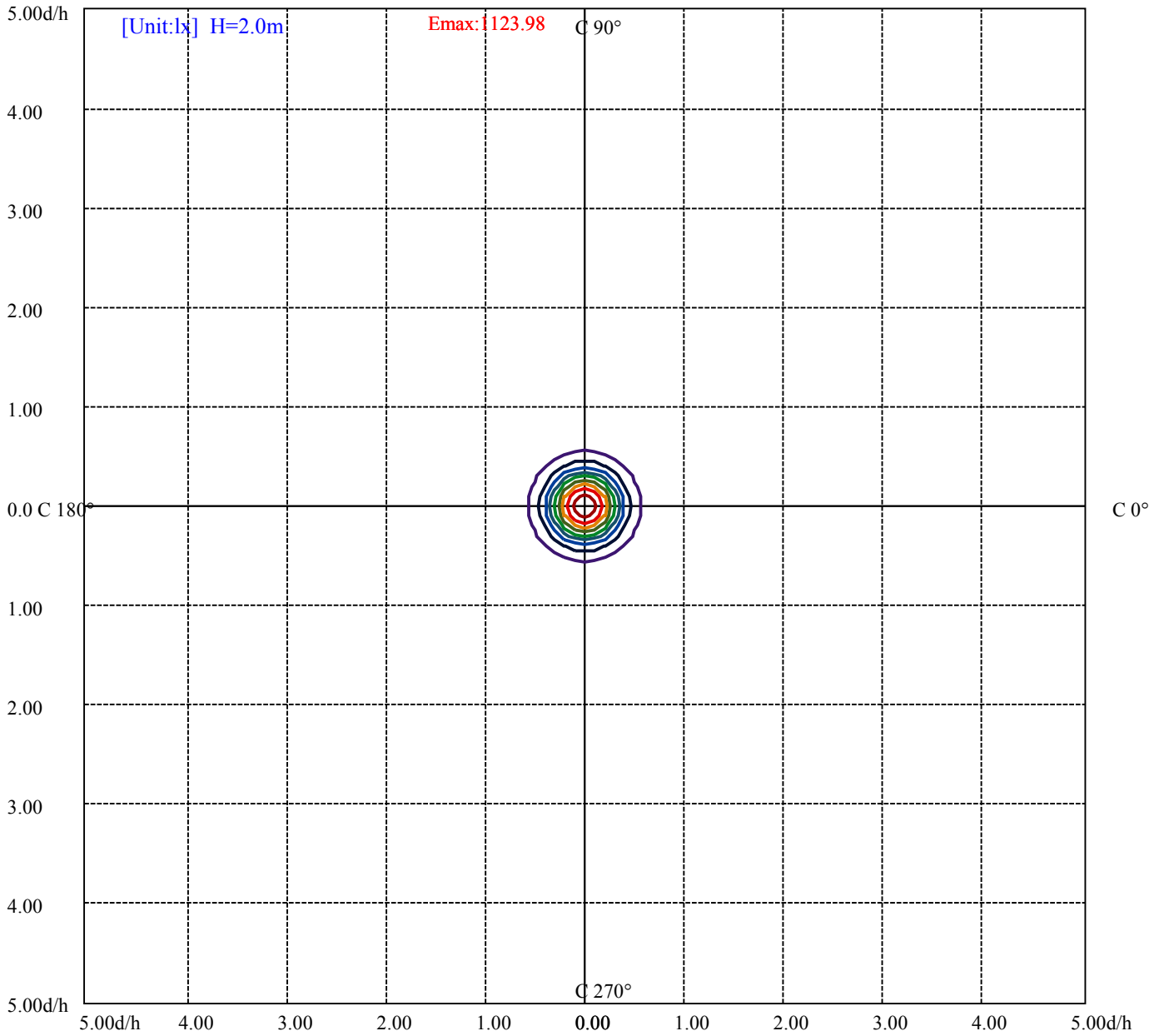
House

[Unit:cd]

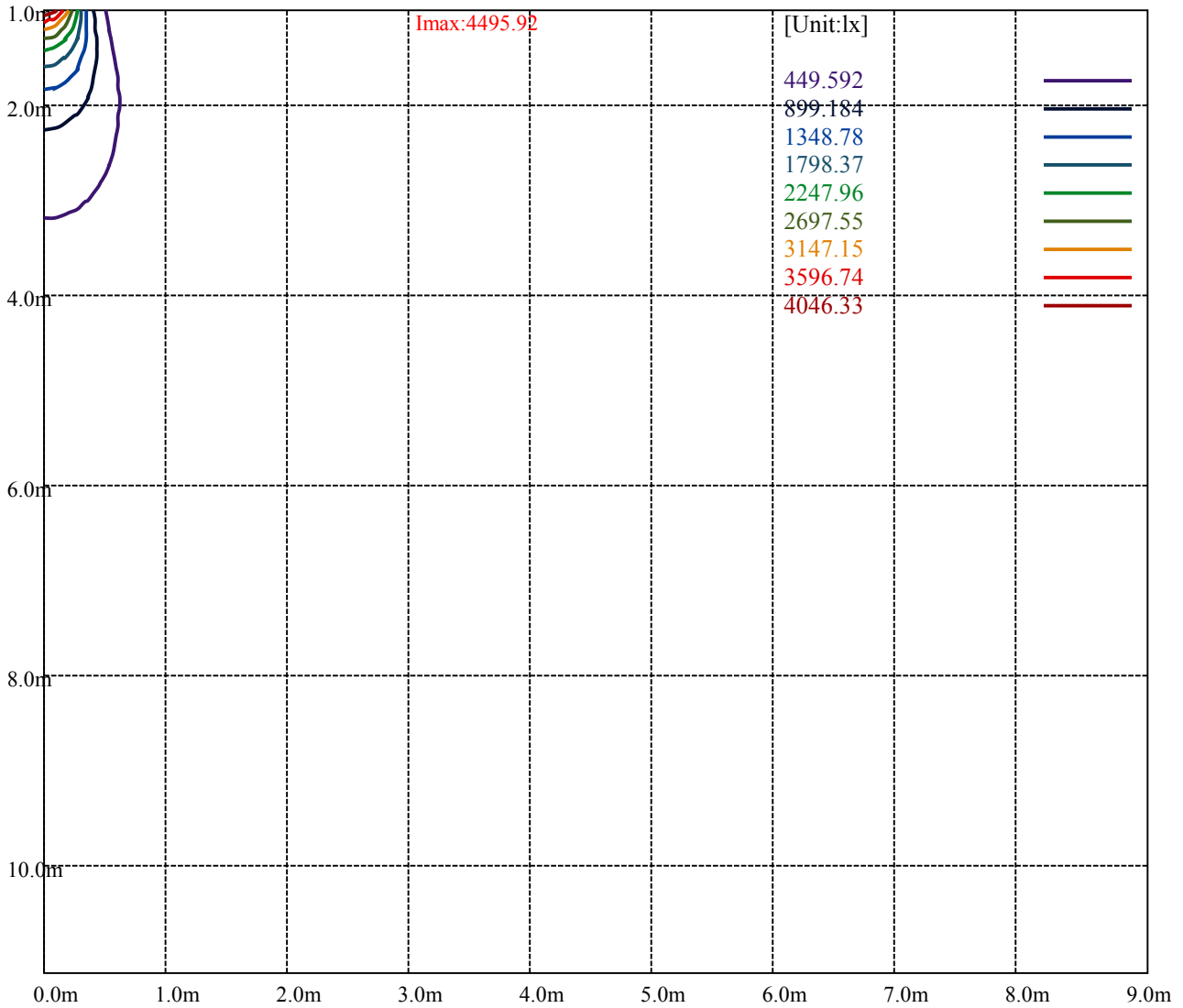
Road

Imax:4495.92

(10%Imax) 449.592	—
(20%Imax) 899.184	—
(30%Imax) 1348.78	—
(40%Imax) 1798.37	—
(50%Imax) 2247.96	—
(60%Imax) 2697.55	—
(70%Imax) 3147.15	—
(80%Imax) 3596.74	—
(90%Imax) 4046.33	—



(10%E _{max}) 112.398	—
(20%E _{max}) 224.796	—
(30%E _{max}) 337.195	—
(40%E _{max}) 449.5925	—
(50%E _{max}) 561.99	—
(60%E _{max}) 674.3875	—
(70%E _{max}) 786.7875	—
(80%E _{max}) 899.185	—
(90%E _{max}) 1011.583	—



Luminance Table

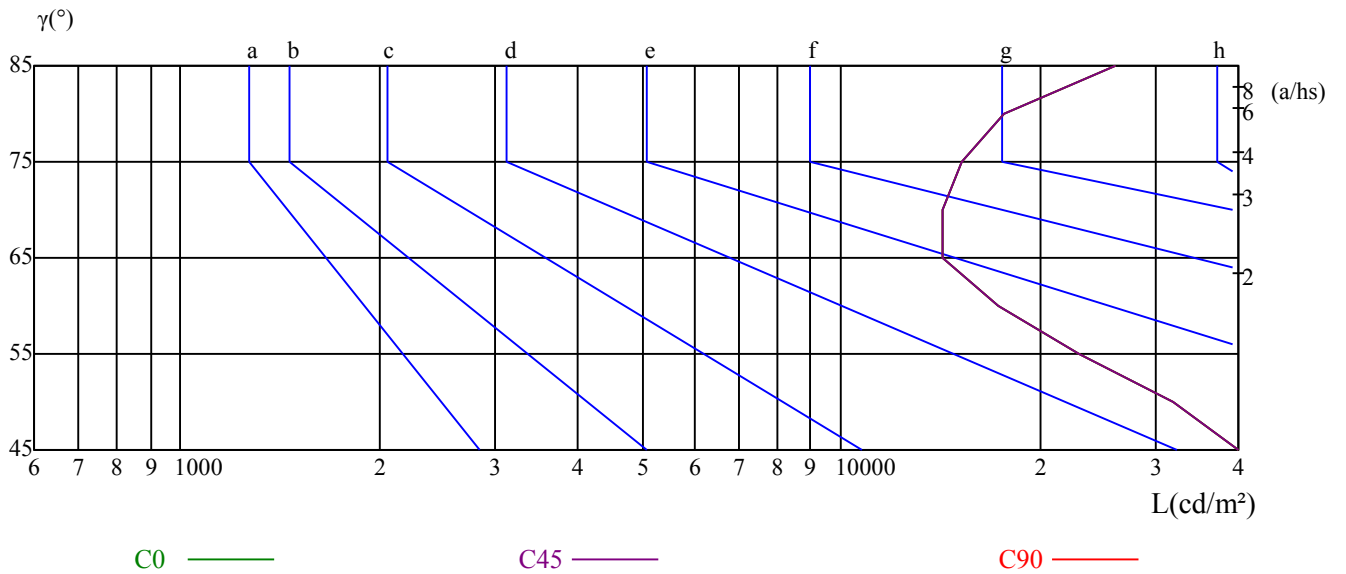
γ	45	50	55	60	65	70	75	80	85
C0	45662	31803	22899	17291	14254	14252	15224	17618	26079
C45	45662	31803	22899	17291	14254	14252	15224	17618	26079
C90	45662	31803	22899	17291	14254	14252	15224	17618	26079

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
14254	14254	14254	15224	15224	15224	26079	26079	26079

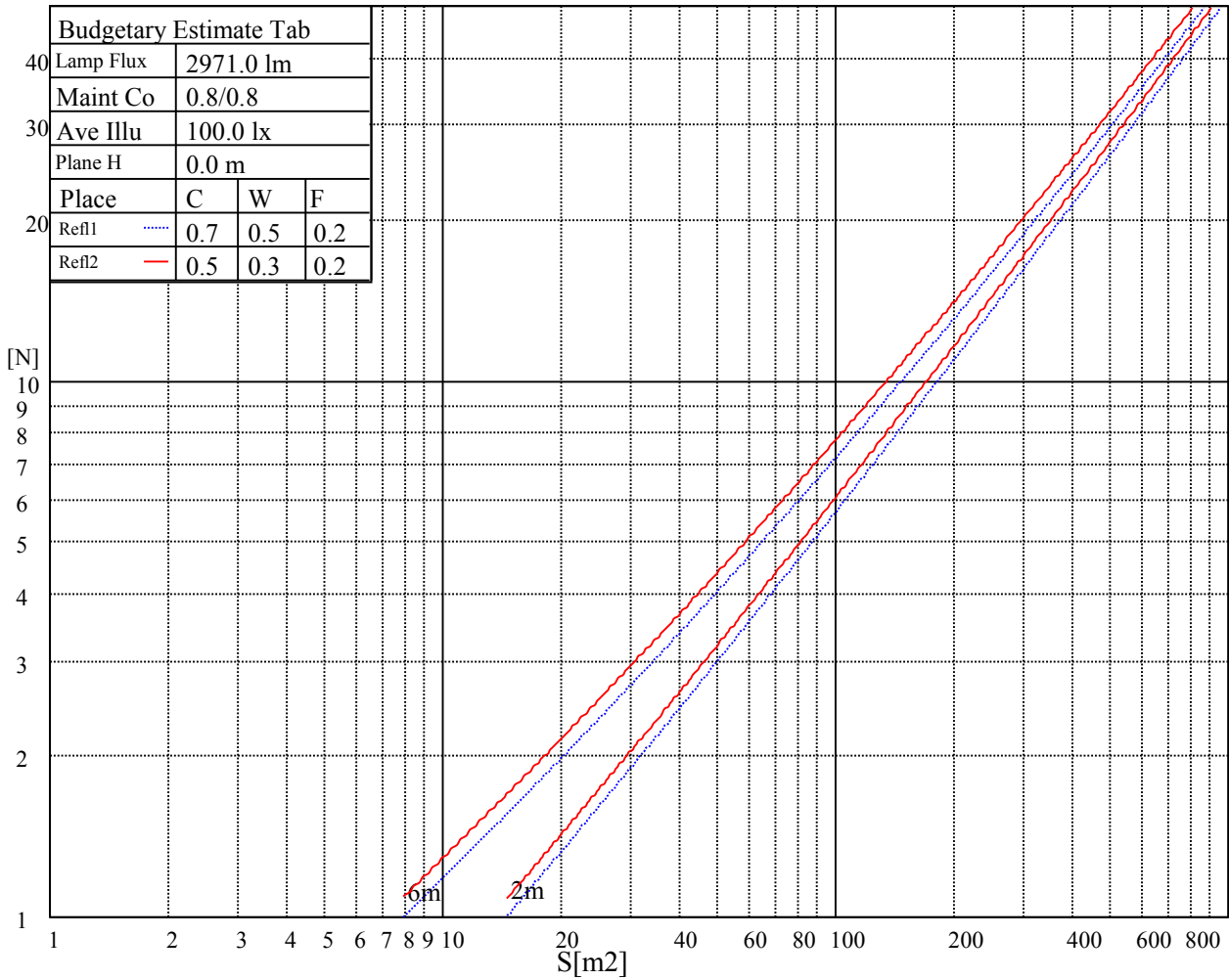
Glare Table

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

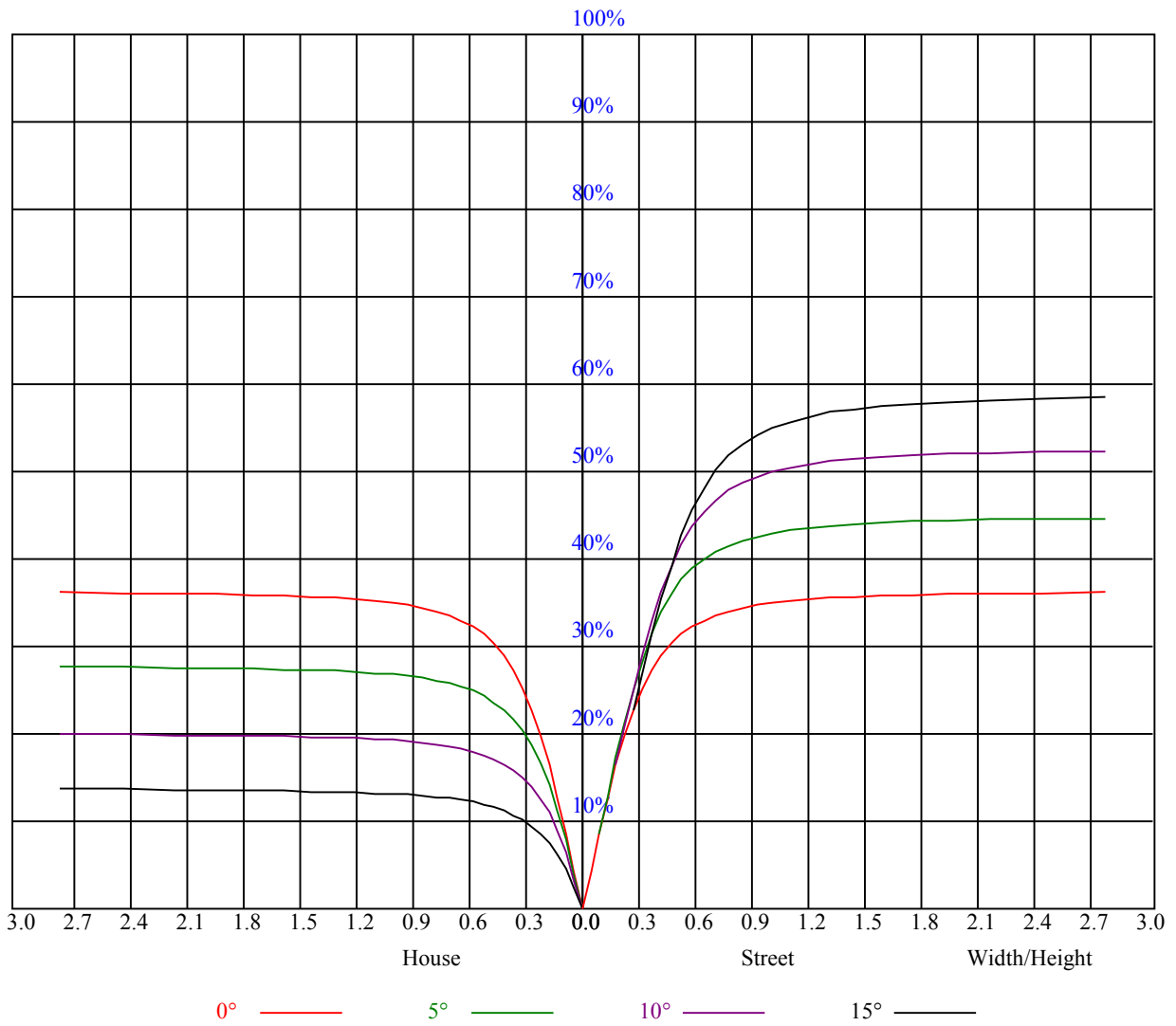
Luminance Limiting Curve



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	13.99	15.03	14.36	15.34	15.66	14.02	15.06	14.38	15.37	15.69
	3H	15.09	16.01	15.48	16.34	16.71	15.12	16.04	15.50	16.37	16.74
	4H	15.70	16.55	16.11	16.91	17.30	15.73	16.58	16.13	16.93	17.32
	6H	16.36	17.14	16.77	17.51	17.91	16.38	17.16	16.80	17.53	17.93
	8H	16.70	17.43	17.13	17.83	18.24	16.72	17.46	17.16	17.85	18.26
	12H	17.30	18.00	17.74	18.39	18.82	17.33	18.03	17.76	18.41	18.84
4H	2H	14.20	15.05	14.60	15.40	15.79	14.22	15.07	14.62	15.42	15.81
	3H	15.59	16.29	16.01	16.70	17.10	15.62	16.31	16.03	16.72	17.13
	4H	16.39	17.01	16.83	17.43	17.88	16.41	17.03	16.85	17.45	17.90
	6H	17.15	17.68	17.62	18.13	18.60	17.16	17.70	17.63	18.15	18.62
	8H	17.61	18.11	18.08	18.56	19.03	17.63	18.12	18.10	18.57	19.05
	12H	18.28	18.71	18.77	19.20	19.68	18.30	18.73	18.79	19.22	19.70
8H	4H	16.67	17.16	17.14	17.61	18.09	16.68	17.18	17.16	17.63	18.11
	6H	17.66	18.06	18.17	18.56	19.05	17.67	18.07	18.18	18.58	19.06
	8H	18.28	18.64	18.81	19.16	19.65	18.29	18.65	18.83	19.17	19.67
	12H	19.32	19.63	19.84	20.13	20.71	19.34	19.65	19.86	20.15	20.72
12H	4H	16.70	17.14	17.20	17.63	18.10	16.72	17.15	17.21	17.64	18.12
	6H	18.10	18.14	18.32	18.61	19.16	18.12	18.15	18.33	18.62	19.17
	8H	18.50	18.81	19.02	19.31	19.89	18.51	18.82	19.04	19.32	19.90
Variation with the observer position at spacings:											
S = 1.0H	1.7/-1.9					1.7/-1.9					
S = 1.5H	2.9/-2.3					2.9/-2.3					
S = 2.0H	4.3/-2.1					4.3/-2.1					
Standard tables:	BK3					BK3					
Uncorrected UGR	4.0					4.0					



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	0.87	0.87	0.87	0.85	0.85	0.85	0.81	0.81	0.81	0.78	0.78	0.78	0.75	0.75	0.75	0.73
1	0.81	0.79	0.78	0.79	0.78	0.76	0.76	0.75	0.74	0.74	0.73	0.72	0.71	0.70	0.70	0.68
2	0.76	0.73	0.70	0.74	0.72	0.70	0.72	0.70	0.68	0.70	0.68	0.67	0.68	0.66	0.65	0.64
3	0.71	0.68	0.65	0.70	0.67	0.64	0.68	0.65	0.63	0.66	0.64	0.62	0.65	0.63	0.61	0.60
4	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.59	0.63	0.61	0.59	0.62	0.60	0.58	0.57
5	0.63	0.59	0.57	0.63	0.59	0.56	0.61	0.58	0.56	0.60	0.57	0.55	0.59	0.57	0.55	0.54
6	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.52	0.57	0.54	0.52	0.51
7	0.57	0.53	0.50	0.57	0.53	0.50	0.56	0.53	0.50	0.55	0.52	0.50	0.54	0.52	0.50	0.49
8	0.55	0.51	0.48	0.54	0.51	0.48	0.54	0.50	0.48	0.53	0.50	0.47	0.52	0.49	0.47	0.46
9	0.52	0.48	0.46	0.52	0.48	0.46	0.51	0.48	0.46	0.51	0.48	0.45	0.50	0.47	0.45	0.44
10	0.50	0.46	0.44	0.50	0.46	0.44	0.49	0.46	0.44	0.49	0.46	0.43	0.48	0.45	0.43	0.43



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	4492.13	4497.75	4493.81	4471.88	4432.50	4385.81	4318.31	4250.81	4169.25
45.0	4497.19	4491.56	4469.06	4438.13	4394.81	4327.31	4251.94	4156.88	4059.56
90.0	4496.63	4483.13	4453.31	4399.88	4343.63	4269.38	4166.44	4061.81	3946.50
135.0	4497.75	4487.06	4456.13	4426.31	4366.69	4291.88	4222.13	4098.38	3983.63
180.0	4492.13	4473.56	4438.69	4385.81	4320.00	4250.25	4165.88	4032.56	3911.63
225.0	4497.19	4490.44	4471.31	4426.88	4381.88	4323.38	4241.81	4147.88	4050.56
270.0	4496.63	4496.06	4482.56	4461.19	4421.81	4363.31	4302.00	4222.69	4140.56
315.0	4497.75	4495.50	4482.56	4443.75	4409.44	4357.69	4284.56	4205.81	4115.25
360.0	4492.13	4497.75	4493.81	4471.88	4432.50	4385.81	4318.31	4250.81	4169.25
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4048.31	3936.38	3811.50	3693.38	3477.94	3313.13	3160.13	2905.88	2715.75
45.0	3930.75	3783.94	3641.63	3489.75	3280.50	3107.25	2928.94	2692.69	2505.94
90.0	3787.31	3649.50	3495.94	3299.63	3145.50	2945.25	2710.69	2541.94	2349.00
135.0	3857.06	3682.69	3528.00	3365.44	3147.75	2970.00	2785.50	2543.06	2356.88
180.0	3779.44	3596.06	3440.25	3273.19	3075.19	2869.88	2684.81	2469.38	2276.44
225.0	3925.69	3785.06	3644.44	3467.25	3300.19	3108.38	2907.00	2721.94	2528.44
270.0	4029.75	3903.19	3780.56	3641.63	3448.13	3285.00	3112.88	2882.25	2694.38
315.0	4011.75	3865.50	3735.00	3564.56	3406.50	3216.38	3021.19	2831.63	2645.44
360.0	4048.31	3936.38	3811.50	3693.38	3477.94	3313.13	3160.13	2905.88	2715.75
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2549.81	2314.13	2098.69	1936.13	1709.44	1538.44	1342.69	1199.25	1076.63
45.0	2311.88	2093.63	1884.38	1699.88	1487.25	1321.31	1177.88	1035.56	928.13
90.0	2081.81	1913.06	1725.75	1484.44	1346.06	1118.76	1072.46	931.56	835.88
135.0	2162.25	1951.88	1742.06	1567.69	1369.69	1218.94	1092.38	960.19	865.69
180.0	2060.44	1850.06	1670.06	1481.63	1316.81	1115.10	1055.87	923.01	828.28
225.0	2288.81	2099.81	1911.94	1683.56	1512.56	1350.00	1108.13	1050.24	945.17
270.0	2509.88	2298.38	2086.88	1896.75	1691.44	1521.56	1340.44	1180.69	1057.50
315.0	2413.69	2221.88	2030.63	1823.06	1622.25	1455.19	1303.31	1115.94	1019.87
360.0	2549.81	2314.13	2098.69	1936.13	1709.44	1538.44	1342.69	1199.25	1076.63
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	964.69	842.06	755.44	679.50	596.81	541.13	491.63	440.44	403.88
45.0	822.94	731.25	658.69	594.00	525.94	479.81	441.00	399.38	370.69
90.0	750.54	665.83	590.57	534.88	481.16	435.94	401.85	368.94	343.29
135.0	765.56	677.25	608.06	548.44	487.13	446.06	410.63	373.50	346.50
180.0	742.89	647.16	582.08	526.84	473.51	429.02	395.49	361.69	335.14
225.0	838.91	754.09	671.51	599.01	543.26	487.29	440.89	405.51	375.02
270.0	934.31	825.19	741.38	668.25	588.94	535.50	487.13	436.50	401.63
315.0	919.24	814.73	724.50	652.78	580.33	519.13	471.66	426.21	391.11
360.0	964.69	842.06	755.44	679.50	596.81	541.13	491.63	440.44	403.88
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	372.94	340.88	312.75	289.69	284.06	245.87	223.03	202.50	186.47
45.0	344.81	321.75	295.31	285.75	252.68	228.99	208.41	194.01	175.05
90.0	317.48	293.79	275.57	253.41	230.06	211.89	194.74	175.16	160.93
135.0	322.31	297.56	284.63	252.39	228.88	210.38	191.19	174.04	160.09
180.0	308.19	284.18	265.22	241.76	216.90	201.88	186.30	168.41	154.97
225.0	341.49	318.15	296.04	271.41	250.09	228.99	210.32	189.45	174.49
270.0	371.25	340.31	313.31	291.94	284.63	248.34	224.89	206.78	188.33
315.0	356.96	327.94	305.21	281.31	259.43	239.01	219.21	197.16	181.24
360.0	372.94	340.88	312.75	289.69	284.06	245.87	223.03	202.50	186.47

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	170.44	155.64	143.38	131.91	118.63	109.01	100.41	91.58	83.81
45.0	159.75	147.09	133.71	122.68	111.66	101.70	93.32	85.67	77.12
90.0	147.94	134.44	122.06	112.16	102.04	92.70	85.05	77.18	70.88
135.0	145.74	132.69	121.95	112.22	101.03	92.93	85.44	77.51	70.54
180.0	142.59	128.81	118.52	109.18	98.55	90.84	83.59	76.05	70.03
225.0	160.93	146.48	132.86	121.95	111.04	100.97	92.59	84.32	77.63
270.0	171.56	157.95	143.33	131.40	117.90	108.17	99.34	92.08	82.07
315.0	166.73	151.76	137.93	126.79	115.37	105.02	96.53	87.98	81.06
360.0	170.44	155.64	143.38	131.91	118.63	109.01	100.41	91.58	83.81
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	77.46	70.93	65.03	60.13	55.29	51.24	46.86	42.92	39.71
45.0	70.99	65.31	59.01	54.51	50.57	46.35	42.36	39.21	35.94
90.0	64.58	58.89	54.45	50.40	45.79	42.30	39.09	35.55	32.96
135.0	64.97	59.34	54.28	50.23	46.18	42.75	39.15	35.78	33.24
180.0	64.01	57.88	54.06	50.01	44.89	41.91	38.70	34.76	32.63
225.0	70.88	64.80	59.68	55.29	50.12	46.29	42.81	38.70	35.78
270.0	75.54	70.31	62.94	58.11	54.39	49.33	45.17	42.19	38.36
315.0	73.80	67.39	62.10	57.43	52.14	48.38	44.78	40.73	37.69
360.0	77.46	70.93	65.03	60.13	55.29	51.24	46.86	42.92	39.71
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	36.79	33.69	31.67	30.09	28.58	27.45	26.44	25.31	24.19
45.0	33.47	31.33	29.70	28.52	27.23	26.10	25.14	24.24	23.18
90.0	31.11	29.48	28.18	27.11	25.93	24.98	24.02	23.06	22.16
135.0	31.28	29.36	28.18	27.06	25.88	24.92	24.02	23.18	22.05
180.0	30.77	29.14	27.79	26.72	25.59	24.58	23.57	22.61	21.77
225.0	33.30	30.99	29.31	28.07	26.72	25.71	24.58	23.57	22.67
270.0	35.55	33.19	30.83	29.36	28.13	26.72	25.71	24.75	23.57
315.0	35.04	32.40	30.49	29.03	27.73	26.61	25.48	24.36	23.46
360.0	36.79	33.69	31.67	30.09	28.58	27.45	26.44	25.31	24.19
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	23.29	22.28	21.43	20.53	19.58	18.79	17.89	16.99	16.20
45.0	22.28	21.38	20.48	19.52	18.73	17.78	16.88	16.09	15.13
90.0	21.26	20.31	19.52	18.68	17.66	16.88	16.09	15.13	14.34
135.0	21.26	20.31	19.52	18.56	17.72	16.99	16.03	15.30	14.29
180.0	20.87	19.97	19.07	18.23	17.21	16.43	15.64	14.68	13.84
225.0	21.71	20.76	19.91	19.18	18.17	17.38	16.65	15.75	14.85
270.0	22.61	21.83	20.81	19.91	19.13	18.23	17.38	16.59	15.69
315.0	22.50	21.54	20.70	19.86	18.90	18.11	17.38	16.37	15.58
360.0	23.29	22.28	21.43	20.53	19.58	18.79	17.89	16.99	16.20
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	15.30	14.40	13.73	12.88	12.15	11.36	10.63	9.96	9.39
45.0	14.29	13.56	12.77	12.04	11.25	10.46	9.73	9.28	8.94
90.0	13.61	12.77	12.09	11.31	10.58	9.90	9.34	9.00	8.89
135.0	13.56	12.66	11.98	11.31	10.58	9.90	9.39	9.06	8.89
180.0	13.16	12.32	11.59	10.91	10.24	9.68	9.23	8.89	8.89
225.0	14.12	13.22	12.49	11.59	11.03	10.41	9.73	9.34	8.94
270.0	14.85	14.12	13.11	12.38	11.59	10.86	10.24	9.68	9.23
315.0	14.85	13.95	13.16	12.43	11.70	11.03	10.29	9.73	9.23
360.0	15.30	14.40	13.73	12.88	12.15	11.36	10.63	9.96	9.39

Intensity data(cd)

C/ γ (°)	90.0
0.0	9.11
45.0	8.83
90.0	8.89
135.0	8.89
180.0	8.89
225.0	8.83
270.0	8.89
315.0	8.94
360.0	9.11