



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: 2-1794-N	
Luminaire: 92.70.131.00	
Report No: NATA0100	Voltage(V): 34.8000
Test No: GC2019011708	Current(A): 0.6000
LampCAT: CITIZEN CLU038	Power (W): 20.8800
Lamp flux(lm): 2971.0	PF: 0.0000
Number of Lamps: 1	Ballast type: DC
Length(mm): 69	Width(mm): 69
Phm Type: C	Height(mm): 0

Photometric Results

Lumens(lm): 2428.09
Efficiency(%): 81.73%
Lumens(lm)/Power(W): 116.38
Central intensity(cd): 8009.578
Maximum intensity(cd): 8009.578
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=27.3
 [C90/270]Total=27.3
Field angle(10%Imax): [C0/180]Total=58.0
 [C90/270]Total=58.0
Maximum s/h(1/2): C0_180=0.46 C90_270=0.46
Maximum s/h(1/4): C0_180=0.48 C90_270=0.48
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 81.79%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.898%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8009.578	1.916	1.916	.064%	.079%
1.0	7976.461	15.266	17.182	.514%	.708%
2.0	7882.313	30.166	47.348	1.015%	1.950%
3.0	7726.148	44.342	91.69	1.492%	3.776%
4.0	7541.508	57.689	149.38	1.942%	6.152%
5.0	7303.219	69.801	219.181	2.349%	9.027%
6.0	7030.125	80.584	299.765	2.712%	12.346%
7.0	6698.320	89.518	389.283	3.013%	16.032%
8.0	6362.297	97.100	486.383	3.268%	20.032%
9.0	5961.094	102.261	588.645	3.442%	24.243%
10.0	5543.367	105.559	694.204	3.553%	28.591%
11.0	5128.383	107.308	801.511	3.612%	33.010%
12.0	4708.125	107.344	908.856	3.613%	37.431%
13.0	4271.766	105.377	1014.233	3.547%	41.771%
14.0	3864.305	102.518	1116.75	3.451%	45.993%
15.0	3493.617	99.157	1215.907	3.337%	50.077%
16.0	3128.414	94.561	1310.469	3.183%	53.971%
17.0	2805.328	89.944	1400.413	3.027%	57.675%
18.0	2505.305	84.897	1485.31	2.858%	61.172%
19.0	2249.508	80.312	1565.622	2.703%	64.480%
20.0	1995.469	74.843	1640.465	2.519%	67.562%
21.0	1778.625	69.898	1710.363	2.353%	70.441%
22.0	1600.242	65.737	1776.1	2.213%	73.148%
23.0	1446.258	61.969	1838.069	2.086%	75.700%
24.0	1318.430	58.806	1896.875	1.979%	78.122%
25.0	1203.230	55.763	1952.639	1.877%	80.419%
26.0	1109.813	53.351	2005.99	1.796%	82.616%
27.0	1024.840	51.022	2057.011	1.717%	84.717%
28.0	918.738	47.299	2104.31	1.592%	86.665%
29.0	798.427	42.448	2146.759	1.429%	88.413%
30.0	678.959	37.228	2183.986	1.253%	89.947%
31.0	559.399	31.595	2215.581	1.063%	91.248%
32.0	442.209	25.697	2241.278	.865%	92.306%
33.0	340.334	20.327	2261.605	.684%	93.143%
34.0	255.101	15.643	2277.248	.527%	93.788%
35.0	173.932	10.940	2288.188	.368%	94.238%
36.0	116.599	7.516	2295.704	.253%	94.548%
37.0	93.530	6.173	2301.876	.208%	94.802%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	80.684	5.447	2307.324	.183%	95.026%
39.0	72.359	4.994	2312.317	.168%	95.232%
40.0	66.298	4.673	2316.99	.157%	95.424%
41.0	61.601	4.432	2321.422	.149%	95.607%
42.0	57.059	4.187	2325.609	.141%	95.779%
43.0	53.220	3.980	2329.589	.134%	95.943%
44.0	49.774	3.792	2333.381	.128%	96.099%
45.0	46.575	3.612	2336.992	.122%	96.248%
46.0	43.988	3.470	2340.462	.117%	96.391%
47.0	41.400	3.320	2343.783	.112%	96.528%
48.0	39.227	3.197	2346.979	.108%	96.659%
49.0	37.273	3.085	2350.064	.104%	96.787%
50.0	35.367	2.971	2353.035	.100%	96.909%
51.0	33.806	2.881	2355.916	.097%	97.028%
52.0	32.428	2.802	2358.718	.094%	97.143%
53.0	31.191	2.732	2361.45	.092%	97.255%
54.0	30.009	2.662	2364.112	.090%	97.365%
55.0	29.004	2.605	2366.718	.088%	97.472%
56.0	27.991	2.545	2369.263	.086%	97.577%
57.0	27.021	2.485	2371.748	.084%	97.680%
58.0	26.051	2.423	2374.17	.082%	97.779%
59.0	25.095	2.359	2376.529	.079%	97.876%
60.0	24.230	2.301	2378.83	.077%	97.971%
61.0	23.344	2.239	2381.069	.075%	98.063%
62.0	22.549	2.183	2383.253	.073%	98.153%
63.0	21.860	2.136	2385.388	.072%	98.241%
64.0	21.115	2.081	2387.47	.070%	98.327%
65.0	20.461	2.034	2389.503	.068%	98.411%
66.0	19.905	1.994	2391.497	.067%	98.493%
67.0	19.350	1.953	2393.451	.066%	98.573%
68.0	18.837	1.915	2395.366	.064%	98.652%
69.0	18.345	1.878	2397.244	.063%	98.730%
70.0	17.916	1.846	2399.09	.062%	98.806%
71.0	17.459	1.810	2400.9	.061%	98.880%
72.0	17.002	1.773	2402.673	.060%	98.953%
73.0	16.580	1.739	2404.412	.059%	99.025%
74.0	16.186	1.706	2406.118	.057%	99.095%
75.0	15.750	1.668	2407.787	.056%	99.164%

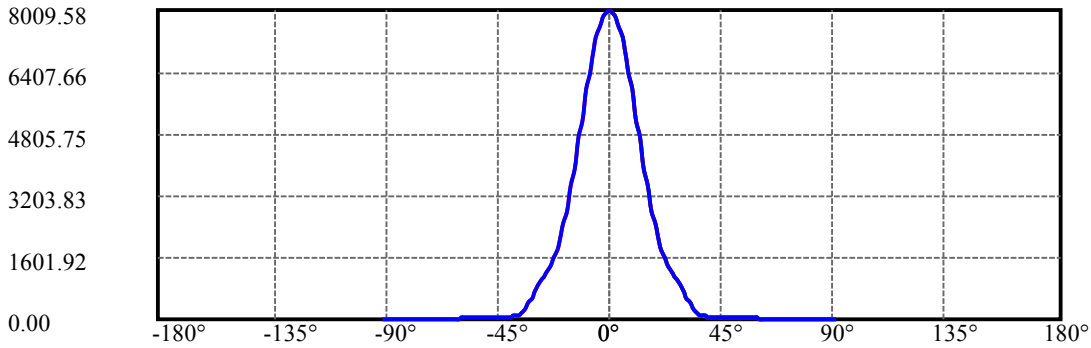
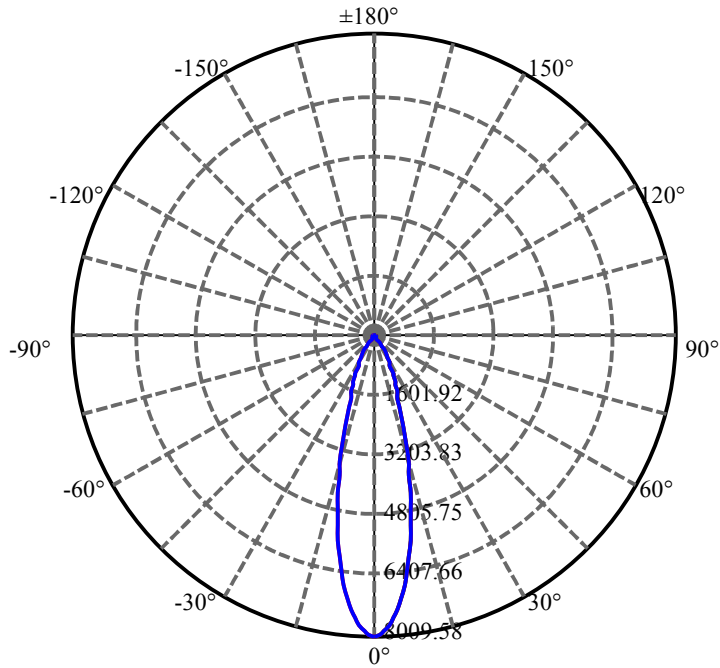
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.328	1.631	2409.418	.055%	99.231%
77.0	14.948	1.597	2411.015	.054%	99.297%
78.0	14.583	1.564	2412.579	.053%	99.361%
79.0	14.189	1.527	2414.106	.051%	99.424%
80.0	13.802	1.491	2415.597	.050%	99.485%
81.0	13.479	1.460	2417.057	.049%	99.546%
82.0	13.113	1.424	2418.481	.048%	99.604%
83.0	12.769	1.390	2419.871	.047%	99.661%
84.0	12.438	1.357	2421.227	.046%	99.717%
85.0	12.115	1.323	2422.551	.045%	99.772%
86.0	11.763	1.287	2423.838	.043%	99.825%
87.0	11.426	1.251	2425.089	.042%	99.876%
88.0	11.159	1.223	2426.312	.041%	99.927%
89.0	10.863	1.191	2427.503	.040%	99.976%
90.0	10.709	0.587	2428.09	.020%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2183.99	73.51%	89.95%
0-40	2316.99	77.99%	95.42%
0-60	2378.83	80.07%	97.97%
0-90	2427.50	81.71%	99.98%
0-120	2427.50	81.71%	99.98%
0-180	2428.09	81.73%	100.00%
60-90	50.97	1.72%	2.10%
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%
0-24.82	1942.47	65.38%	80.00%

ZONAL LUMEN SUMMARY

0-10	694.20
10-20	946.26
20-30	543.52
30-40	133.00
40-50	36.04
50-60	25.80
60-70	20.26
70-80	16.51
80-90	11.91
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: —————

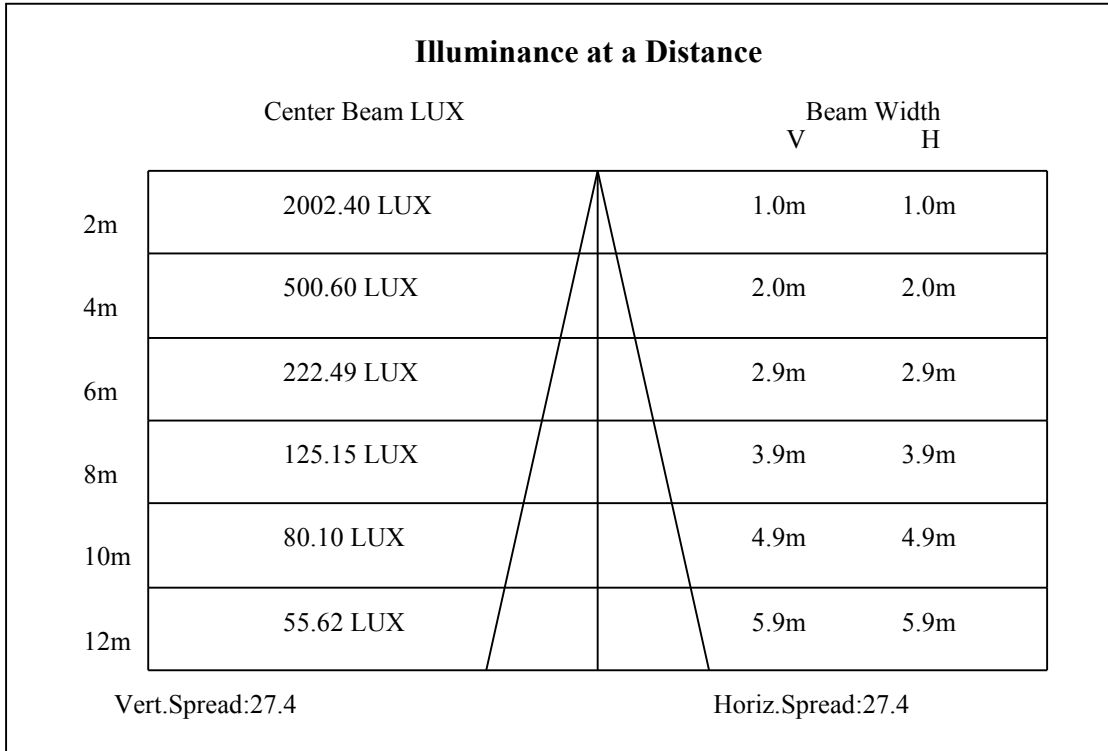
C90/C270: —————

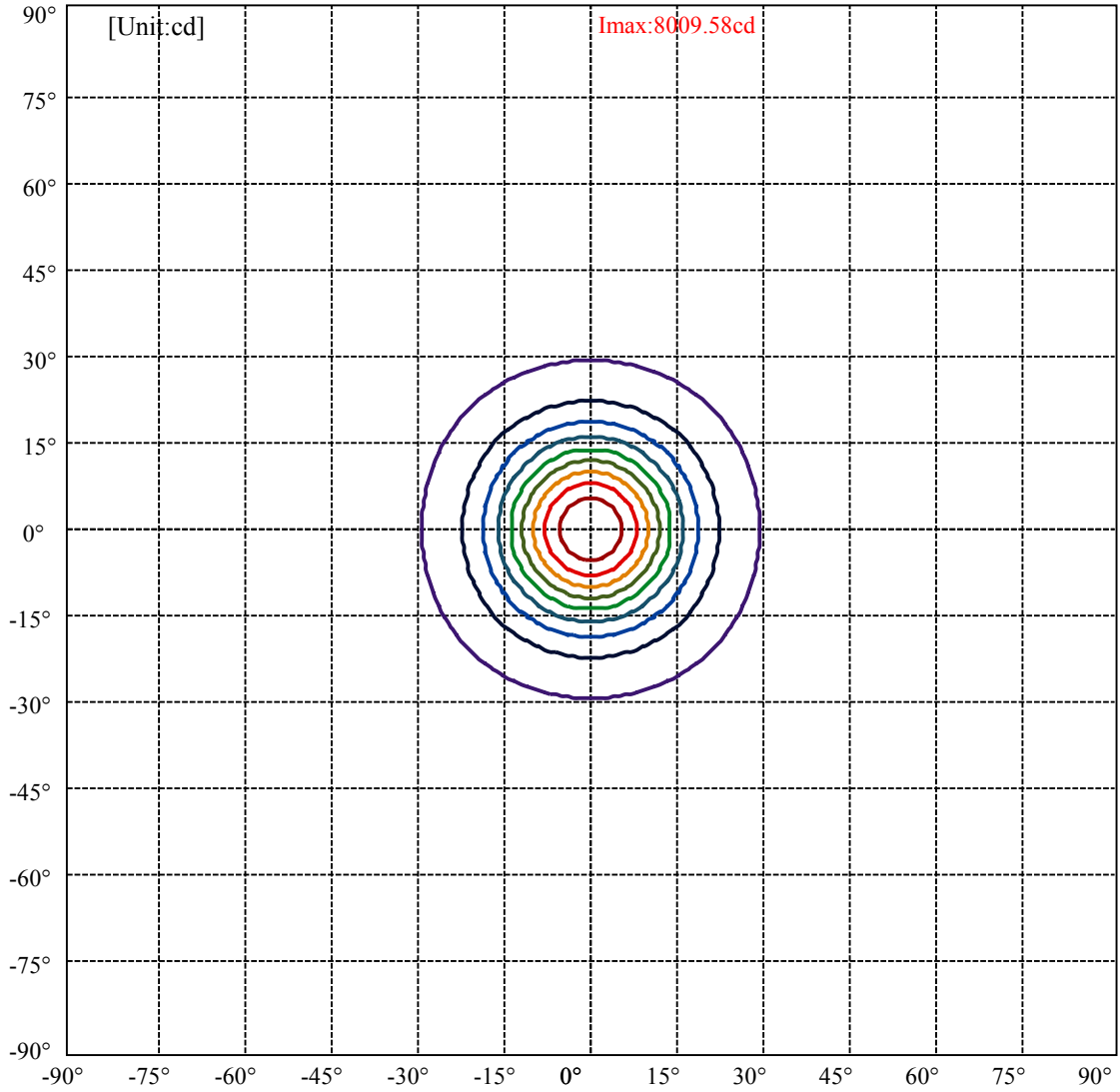
Field angle(10%Imax):C0/180Left:29.0 Right:29.0

:C90/270Left:29.0 Right:29.0

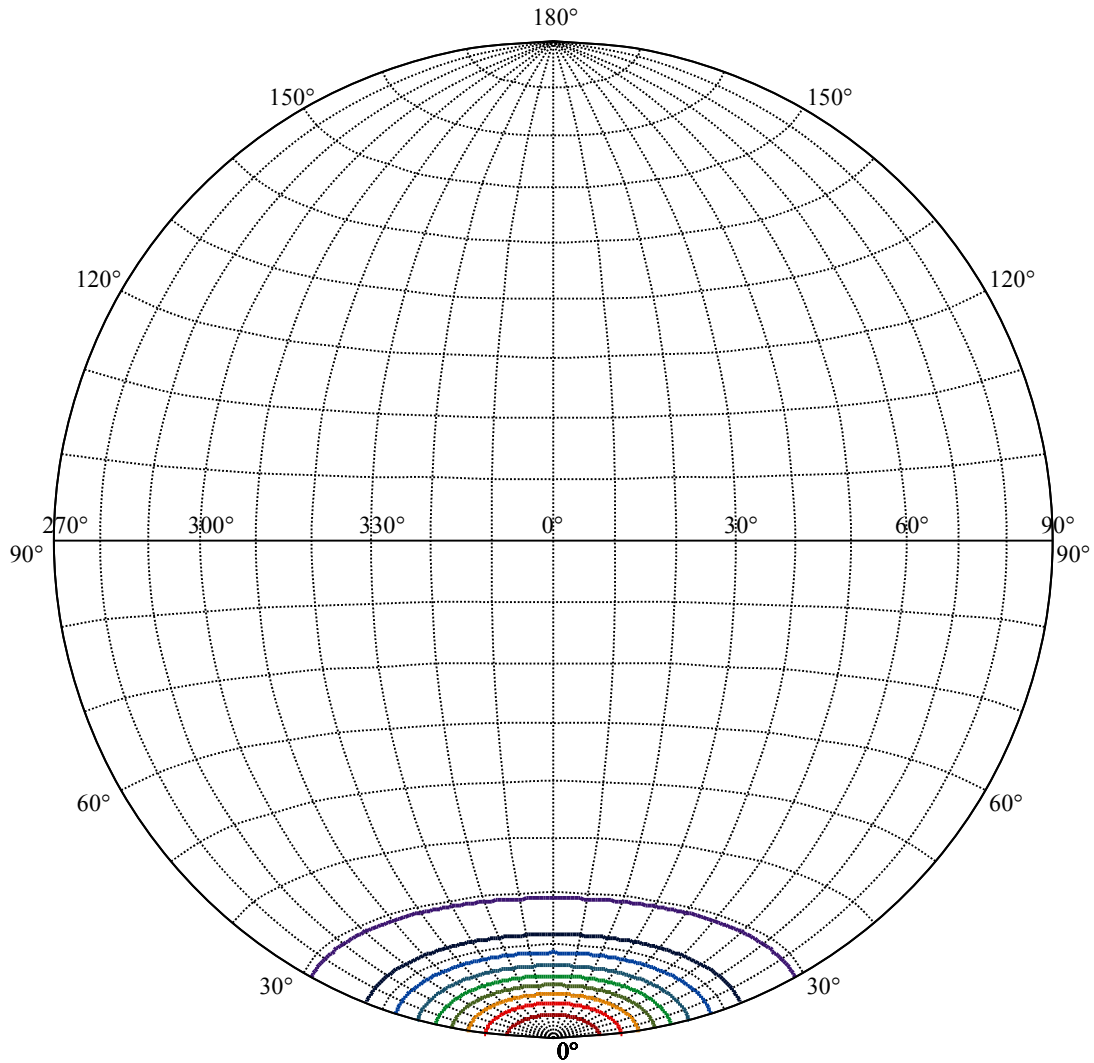
Beam Angle(50%Imax):C0/180Left:13.7 Right:13.7

:C90/270Left:13.7 Right:13.7





(10%Imax) 800.958	—
(20%Imax) 1601.92	—
(30%Imax) 2402.87	—
(40%Imax) 3203.83	—
(50%Imax) 4004.79	—
(60%Imax) 4805.75	—
(70%Imax) 5606.7	—
(80%Imax) 6407.66	—
(90%Imax) 7208.62	—



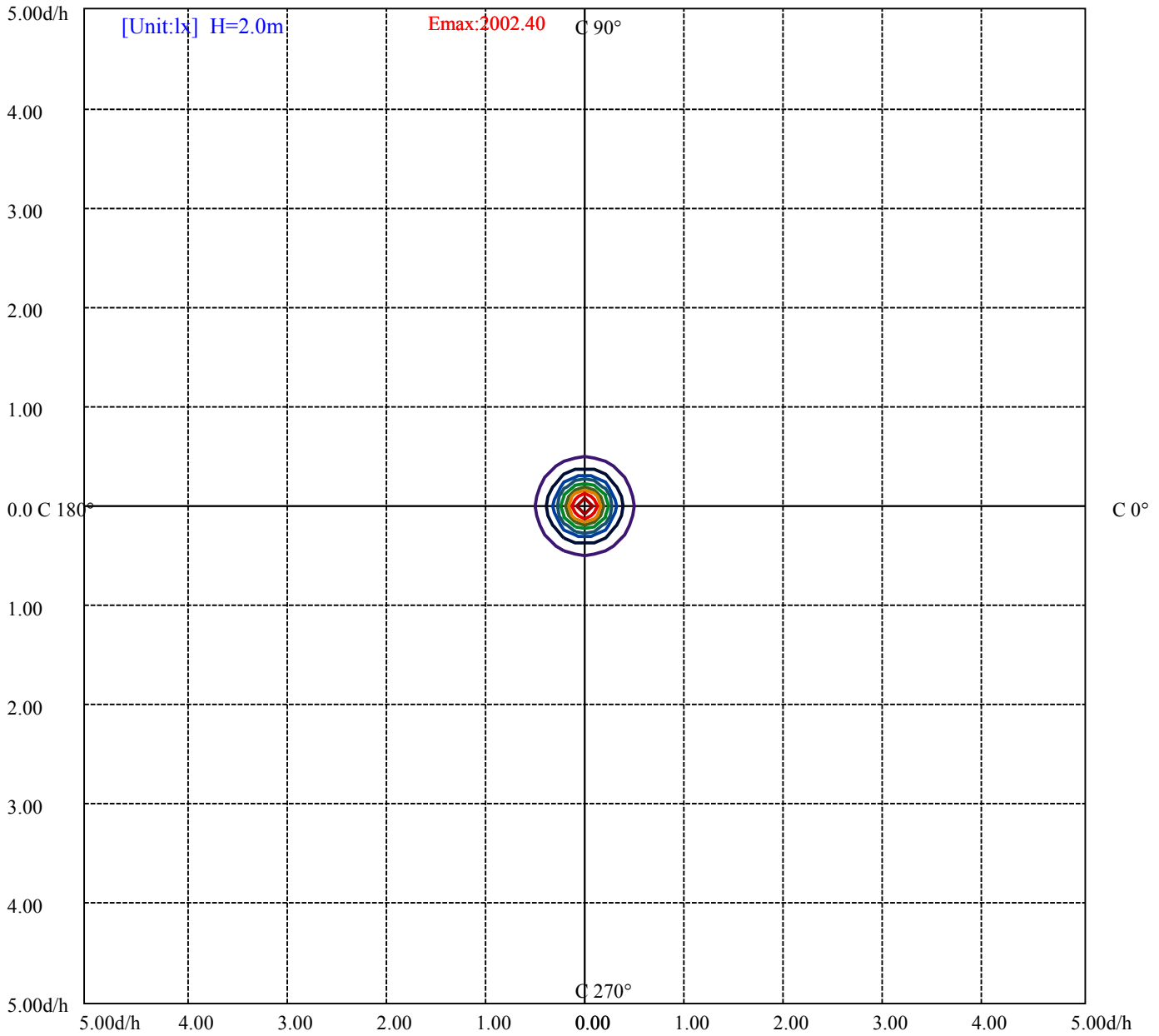
House

[Unit:cd]

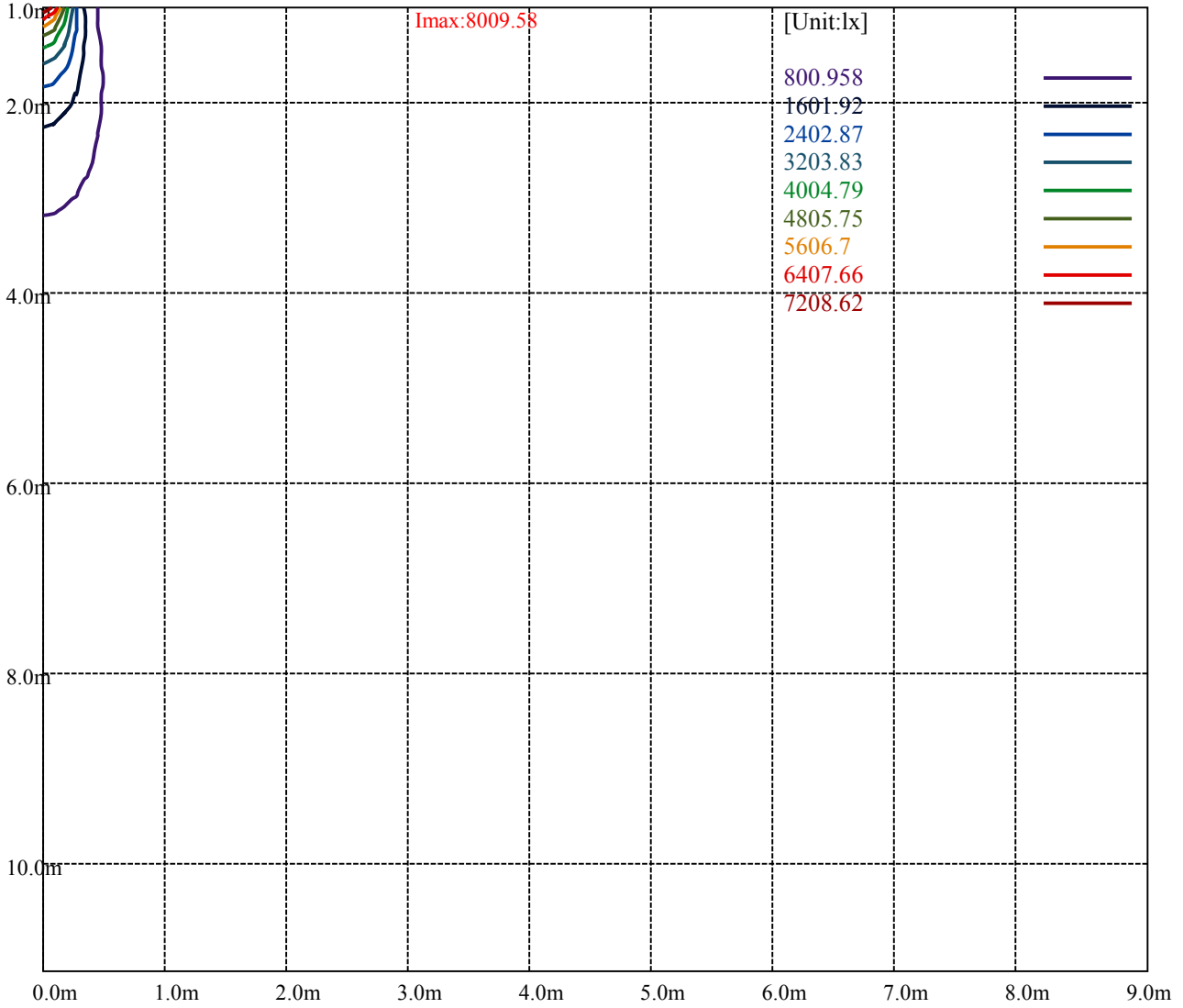
Road

Imax:8009.58

(10%Imax) 800.958	—
(20%Imax) 1601.92	—
(30%Imax) 2402.87	—
(40%Imax) 3203.83	—
(50%Imax) 4004.79	—
(60%Imax) 4805.75	—
(70%Imax) 5606.7	—
(80%Imax) 6407.66	—
(90%Imax) 7208.62	—



(10%Emax) 200.2392	—
(20%Emax) 400.4775	—
(30%Emax) 600.7175	—
(40%Emax) 800.9575	—
(50%Emax) 1001.198	—
(60%Emax) 1201.435	—
(70%Emax) 1401.675	—
(80%Emax) 1601.915	—
(90%Emax) 1802.155	—



Luminance Table

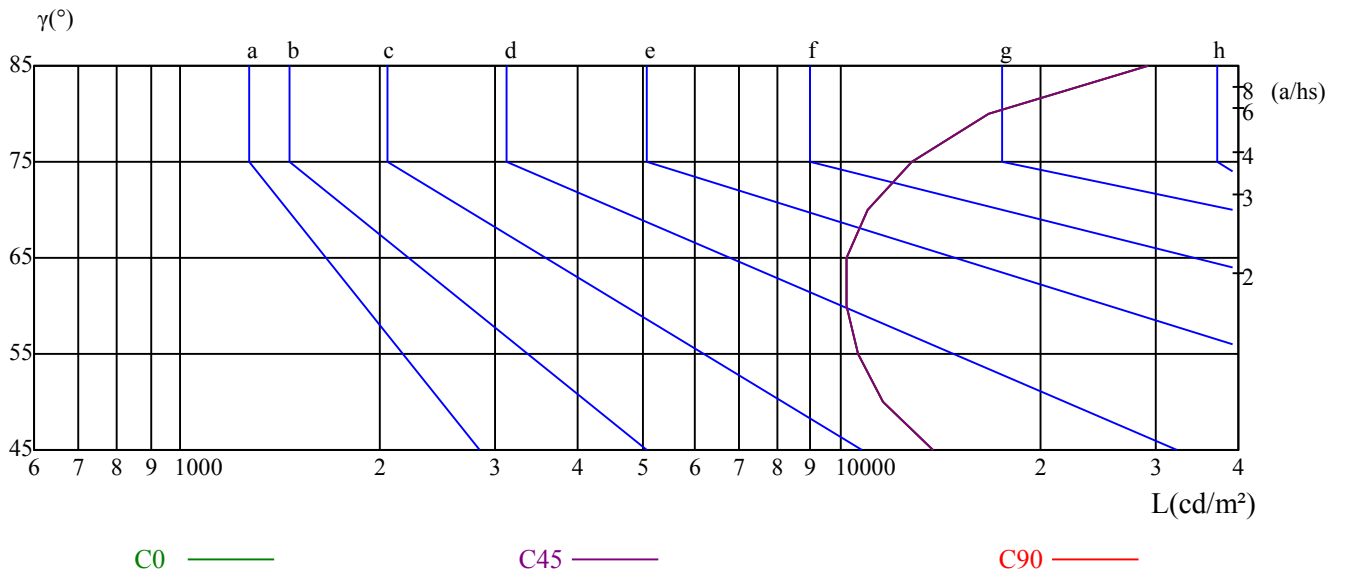
γ	45	50	55	60	65	70	75	80	85
C0	13835	11557	10621	10178	10169	11002	12782	16695	29196
C45	13835	11557	10621	10178	10169	11002	12782	16695	29196
C90	13835	11557	10621	10178	10169	11002	12782	16695	29196

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
10169	10169	10169	12782	12782	12782	29196	29196	29196

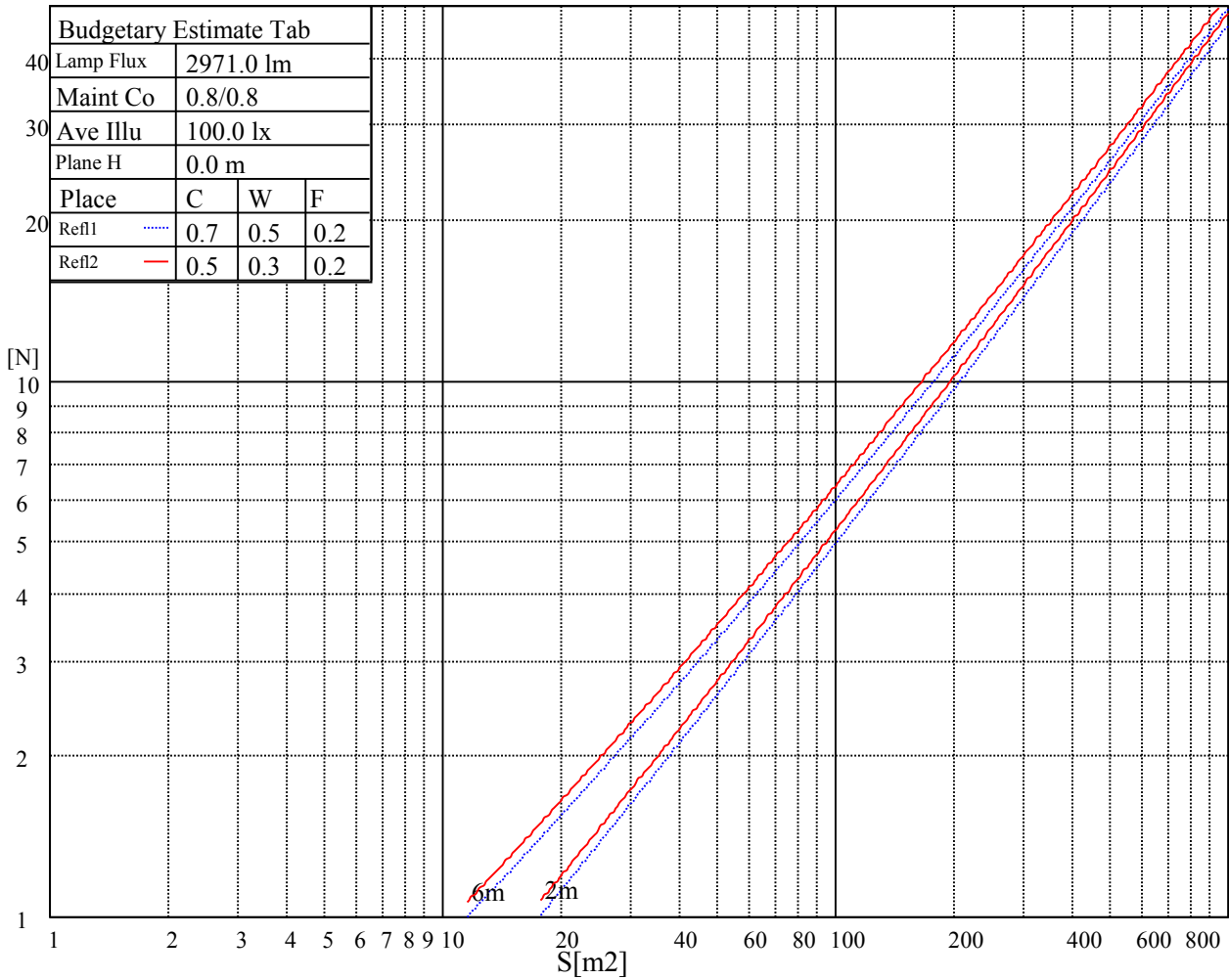
Glare Table

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

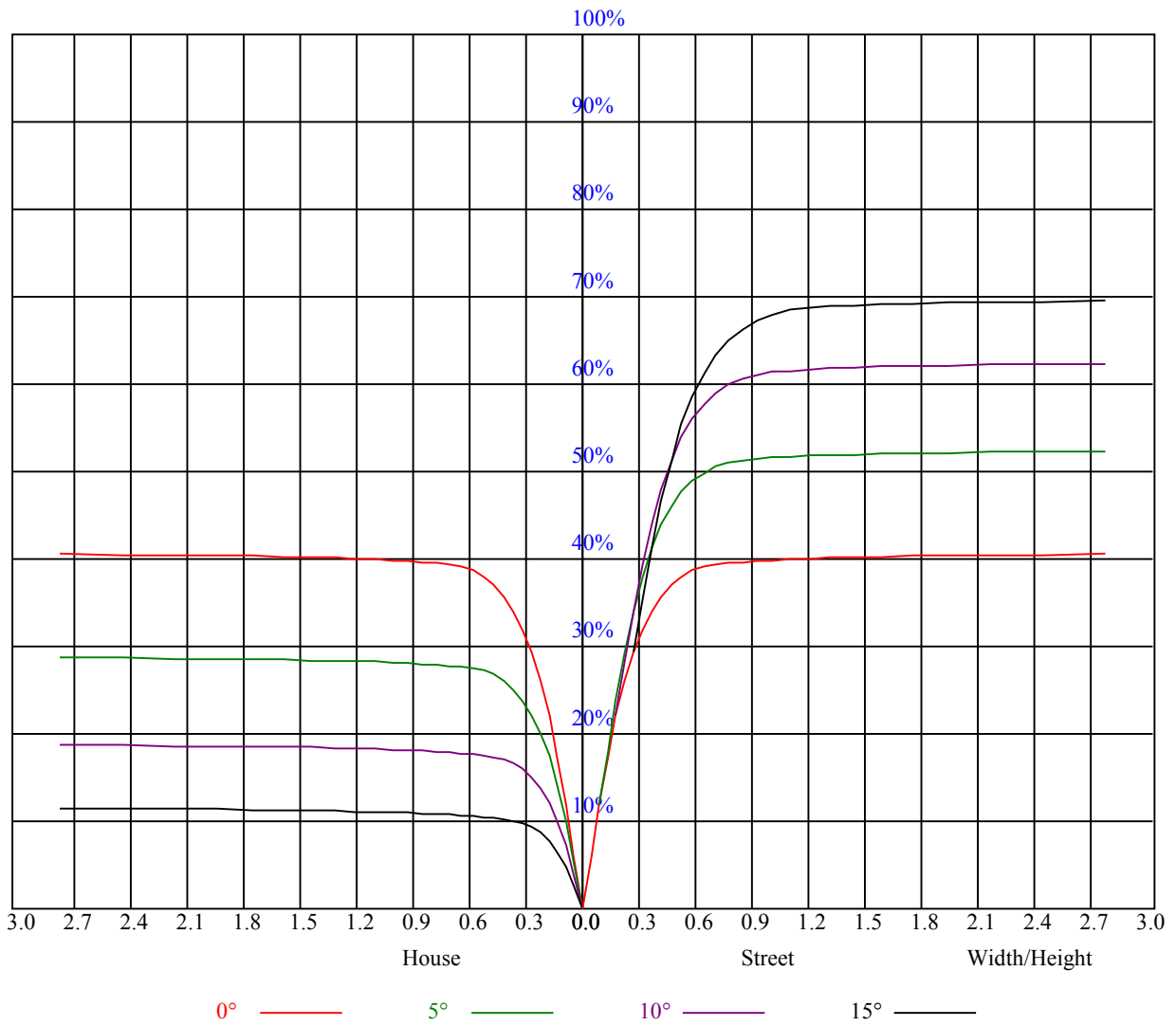
Luminance Limiting Curve



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	8.65	9.60	9.02	9.91	10.23	8.69	9.64	9.05	9.95	10.26
	3H	10.78	11.61	11.16	11.95	12.32	10.81	11.65	11.20	11.99	12.35
	4H	11.91	12.69	12.32	13.04	13.43	11.94	12.72	12.35	13.07	13.46
	6H	13.17	13.88	13.59	14.25	14.65	13.19	13.90	13.61	14.27	14.67
	8H	13.86	14.52	14.29	14.92	15.33	13.88	14.55	14.32	14.94	15.35
	12H	15.03	15.67	15.47	16.05	16.48	15.07	15.70	15.50	16.09	16.52
4H	2H	9.21	9.99	9.62	10.34	10.73	9.24	10.02	9.65	10.37	10.76
	3H	11.63	12.27	12.05	12.68	13.08	11.67	12.31	12.08	12.72	13.12
	4H	12.96	13.53	13.40	13.95	14.40	12.98	13.55	13.42	13.98	14.43
	6H	14.32	14.80	14.79	15.26	15.73	14.33	14.82	14.81	15.27	15.75
	8H	15.14	15.60	15.62	16.05	16.52	15.16	15.61	15.64	16.07	16.54
	12H	16.32	16.71	16.81	17.20	17.68	16.35	16.75	16.85	17.23	17.71
8H	4H	13.45	13.91	13.93	14.36	14.83	13.47	13.93	13.95	14.38	14.86
	6H	15.10	15.46	15.61	15.97	16.45	15.12	15.48	15.63	15.98	16.47
	8H	16.12	16.44	16.65	16.96	17.46	16.13	16.45	16.67	16.98	17.47
	12H	17.55	17.83	18.08	18.33	18.91	17.59	17.86	18.11	18.36	18.94
12H	4H	13.56	13.95	14.06	14.44	14.92	13.58	13.97	14.08	14.46	14.94
	6H	15.56	15.65	15.86	16.12	16.67	15.58	15.66	15.88	16.13	16.68
	8H	16.46	16.74	16.99	17.24	17.82	16.48	16.75	17.00	17.25	17.83
Variation with the observer position at spacings:											
S = 1.0H	3.4/-1.7					3.4/-1.7					
S = 1.5H	4.3/-1.4					4.3/-1.4					
S = 2.0H	5.0/-1.2					5.0/-1.2					
Standard tables:	BKBF					BKBF					
Uncorrected UGR	3.8					3.8					



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	0.97	0.97	0.97	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.82
1	0.91	0.90	0.88	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	0.79	0.78
2	0.86	0.84	0.81	0.85	0.82	0.80	0.82	0.80	0.79	0.80	0.78	0.77	0.78	0.76	0.75	0.74
3	0.82	0.79	0.76	0.81	0.78	0.75	0.79	0.76	0.74	0.77	0.75	0.73	0.75	0.73	0.72	0.71
4	0.78	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.70	0.74	0.72	0.70	0.73	0.71	0.69	0.68
5	0.75	0.71	0.68	0.74	0.71	0.68	0.73	0.70	0.67	0.71	0.69	0.67	0.70	0.68	0.66	0.65
6	0.72	0.68	0.65	0.71	0.68	0.65	0.70	0.67	0.64	0.69	0.66	0.64	0.68	0.66	0.64	0.63
7	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.60
8	0.66	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.58
9	0.64	0.60	0.58	0.64	0.60	0.58	0.63	0.60	0.58	0.62	0.60	0.57	0.62	0.59	0.57	0.56
10	0.62	0.58	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.60	0.57	0.55	0.55



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	8026.31	7976.25	7874.44	7728.19	7522.88	7274.81	7001.44	6660.00	6338.25
45.0	8010.00	7948.69	7795.13	7628.63	7436.81	7135.31	6848.44	6532.88	6147.56
90.0	8001.56	7936.88	7831.13	7627.50	7425.56	7189.88	6879.94	6510.94	6159.38
135.0	8000.44	8017.88	7950.94	7848.00	7691.63	7479.56	7245.00	6936.19	6629.06
180.0	8026.31	8006.63	7932.38	7782.75	7619.06	7428.94	7158.38	6837.19	6524.44
225.0	8010.00	8009.44	7944.75	7809.75	7652.25	7438.50	7211.81	6904.69	6563.81
270.0	8001.56	7986.94	7914.94	7774.31	7579.13	7321.50	7059.94	6725.81	6409.13
315.0	8000.44	7929.00	7814.81	7610.06	7404.75	7157.25	6836.06	6478.88	6126.75
360.0	8026.31	7976.25	7874.44	7728.19	7522.88	7274.81	7001.44	6660.00	6338.25
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5935.50	5517.00	5126.63	4728.94	4242.94	3875.06	3524.63	3104.44	2805.75
45.0	5720.63	5319.00	4862.25	4452.19	4016.25	3597.75	3255.75	2898.00	2580.19
90.0	5733.56	5339.25	4897.13	4453.88	4071.38	3668.06	3284.44	2964.94	2669.06
135.0	6241.50	5820.19	5420.25	5011.31	4511.81	4134.94	3764.25	3326.06	3012.19
180.0	6121.69	5695.31	5301.00	4843.13	4443.75	4021.88	3614.06	3272.63	2949.19
225.0	6217.88	5798.25	5360.63	4956.75	4551.75	4068.00	3706.88	3367.13	2972.81
270.0	6009.19	5587.31	5185.69	4784.06	4289.63	3902.06	3528.56	3140.44	2787.75
315.0	5708.81	5270.63	4873.50	4434.75	4046.63	3646.69	3270.38	2953.69	2665.69
360.0	5935.50	5517.00	5126.63	4728.94	4242.94	3875.06	3524.63	3104.44	2805.75
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2531.25	2250.00	2002.50	1796.63	1604.81	1440.00	1328.63	1220.06	1135.69
45.0	2321.44	2089.69	1833.75	1651.50	1489.50	1361.81	1242.56	1160.44	1065.38
90.0	2329.88	2089.13	1875.38	1642.50	1485.00	1364.06	1251.00	1113.58	1071.56
135.0	2723.63	2416.50	2152.13	1938.94	1706.06	1557.00	1400.06	1280.81	1194.19
180.0	2588.06	2325.94	2090.25	1830.38	1652.63	1500.75	1348.31	1245.94	1117.52
225.0	2694.94	2428.31	2134.13	1925.44	1733.06	1528.31	1411.88	1292.06	1116.79
270.0	2506.50	2281.50	1969.31	1765.13	1608.19	1419.19	1283.63	1190.81	1074.94
315.0	2346.75	2115.00	1906.31	1678.50	1522.69	1398.94	1281.38	1122.13	1102.44
360.0	2531.25	2250.00	2002.50	1796.63	1604.81	1440.00	1328.63	1220.06	1135.69
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1039.50	929.81	825.19	714.38	571.50	459.56	354.38	294.75	163.46
45.0	950.63	839.25	708.19	593.44	474.75	362.81	291.94	178.14	122.46
90.0	960.75	838.35	725.57	585.96	492.53	379.97	268.20	202.61	142.37
135.0	1100.81	995.63	885.94	770.06	625.50	513.00	406.13	287.44	234.39
180.0	1076.29	971.61	849.15	735.02	604.13	476.89	371.03	268.88	192.15
225.0	1106.38	1010.64	889.37	763.31	653.79	533.59	416.42	319.33	230.74
270.0	969.19	880.31	746.44	640.69	537.75	418.50	330.75	290.25	170.94
315.0	995.18	884.31	757.58	628.82	515.25	393.36	283.84	199.41	134.94
360.0	1039.50	929.81	825.19	714.38	571.50	459.56	354.38	294.75	163.46
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	113.18	90.73	76.61	69.92	64.46	59.74	55.74	52.65	48.60
45.0	92.36	82.13	73.18	66.43	62.04	58.28	53.33	50.01	47.31
90.0	97.14	87.13	77.91	69.13	63.68	59.12	54.68	51.02	47.93
135.0	138.43	103.67	83.81	75.60	68.63	63.06	58.05	54.45	50.63
180.0	128.19	94.61	82.29	74.42	66.43	62.10	58.16	53.78	50.51
225.0	142.76	105.75	89.04	77.40	70.43	65.70	60.64	56.31	52.76
270.0	125.61	100.74	86.46	77.68	71.16	65.53	60.24	56.36	52.31
315.0	95.12	83.48	76.16	68.29	63.56	59.29	55.63	51.19	48.15
360.0	113.18	90.73	76.61	69.92	64.46	59.74	55.74	52.65	48.60

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	45.68	43.37	40.56	38.70	36.79	34.82	33.36	32.06	30.88
45.0	43.82	41.51	39.60	37.35	35.44	34.09	32.40	31.16	30.09
90.0	44.78	42.53	39.94	37.74	36.11	34.26	32.63	31.44	30.21
135.0	47.31	44.78	42.19	39.99	38.08	36.00	34.54	33.19	31.61
180.0	47.70	44.66	42.13	40.11	38.03	36.11	34.71	33.13	32.12
225.0	49.16	46.46	43.54	40.95	38.98	36.84	35.10	33.58	32.23
270.0	48.66	45.90	43.09	40.67	38.48	36.28	34.71	33.19	31.67
315.0	45.51	42.69	40.16	38.31	36.28	34.54	33.02	31.67	30.71
360.0	45.68	43.37	40.56	38.70	36.79	34.82	33.36	32.06	30.88
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	29.76	28.74	27.62	26.72	25.82	24.86	24.02	23.18	22.39
45.0	28.97	27.96	27.11	25.99	25.14	24.30	23.34	22.50	21.94
90.0	28.97	28.24	27.28	26.49	25.43	24.53	23.85	22.78	22.11
135.0	30.60	29.59	28.46	27.51	26.72	25.65	24.69	23.96	23.01
180.0	30.88	29.59	28.69	27.62	26.55	25.59	24.81	23.91	23.06
225.0	30.83	29.87	28.86	27.79	26.78	25.82	24.81	24.02	23.12
270.0	30.54	29.59	28.41	27.45	26.61	25.48	24.53	23.68	22.78
315.0	29.53	28.46	27.51	26.61	25.37	24.53	23.79	22.73	21.99
360.0	29.76	28.74	27.62	26.72	25.82	24.86	24.02	23.18	22.39
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.71	20.98	20.36	19.80	19.24	18.73	18.34	17.89	17.38
45.0	21.15	20.42	19.97	19.35	18.84	18.39	17.89	17.49	17.10
90.0	21.43	20.64	20.08	19.52	19.01	18.56	18.06	17.66	17.33
135.0	22.33	21.60	20.81	20.31	19.74	19.13	18.68	18.28	17.72
180.0	22.44	21.66	20.93	20.42	19.80	19.29	18.79	18.28	17.83
225.0	22.33	21.66	20.87	20.25	19.74	19.18	18.56	18.11	17.66
270.0	22.11	21.38	20.64	20.08	19.52	18.96	18.51	18.11	17.55
315.0	21.38	20.59	20.03	19.52	18.90	18.45	17.94	17.49	17.10
360.0	21.71	20.98	20.36	19.80	19.24	18.73	18.34	17.89	17.38
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.99	16.54	16.14	15.69	15.24	14.91	14.46	14.12	13.78
45.0	16.65	16.26	15.92	15.41	15.08	14.68	14.34	13.89	13.61
90.0	16.82	16.43	16.03	15.64	15.24	14.85	14.51	14.06	13.67
135.0	17.27	16.88	16.48	15.98	15.58	15.13	14.79	14.40	13.95
180.0	17.38	16.82	16.43	15.98	15.47	15.13	14.79	14.34	13.89
225.0	17.16	16.82	16.37	15.98	15.53	15.19	14.74	14.40	14.01
270.0	17.16	16.76	16.31	15.92	15.53	15.08	14.74	14.40	14.01
315.0	16.59	16.14	15.81	15.41	14.96	14.63	14.29	13.89	13.50
360.0	16.99	16.54	16.14	15.69	15.24	14.91	14.46	14.12	13.78
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	13.44	13.05	12.71	12.43	12.15	11.87	11.48	11.14	10.86
45.0	13.22	12.88	12.60	12.32	12.04	11.76	11.42	11.14	10.91
90.0	13.33	12.94	12.54	12.15	11.81	11.42	11.08	10.86	10.63
135.0	13.67	13.28	12.88	12.60	12.26	11.93	11.64	11.42	11.03
180.0	13.61	13.22	12.88	12.54	12.21	11.87	11.53	11.36	10.86
225.0	13.67	13.33	12.99	12.60	12.32	11.98	11.64	11.31	11.08
270.0	13.61	13.28	12.94	12.66	12.15	11.64	11.31	11.03	10.74
315.0	13.28	12.94	12.60	12.21	11.98	11.64	11.31	11.03	10.80
360.0	13.44	13.05	12.71	12.43	12.15	11.87	11.48	11.14	10.86

Intensity data(cd)

C/γ(°)	90.0
0.0	10.69
45.0	10.69
90.0	10.63
135.0	10.74
180.0	10.74
225.0	10.91
270.0	10.63
315.0	10.63
360.0	10.69