



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: 2-2641-L
Luminaire: 92.70.411.00
LampCAT: NICHIA NFDWJ130B-V3
Ballast type: AC
Report No: 20231023-B013
Test No: 20231023-C013
Number of Lamps: 1
Lamp flux(lm): 2810.0
Length(mm): 0
Phm Type: C

Voltage(V): 36.5900
Current(A): 0.5760
Power (W): 21.0750
PF: 0.0000
Width(mm): 0
Height(mm): 0

Photometric Results

Lumens(lm): 2577.07, Efficiency(%): 91.71% , Luminous Efficacy(lm/W): 122.28
Central intensity(cd): 5630.845, Maximum intensity(cd): 5630.845
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=37.2
[C90/270]Total=37.2
Field angle(10%Imax): [C0/180]Total=65.6
[C90/270]Total=65.6
Maximum s/h(1/2): C0_180=0.60 C90_270=0.60
Maximum s/h(1/4): C0_180=0.62 C90_270=0.62
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.71%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.981%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5630.845	0.000	0	0.00%	0.00%
1.0	5622.611	5.385	5.385	0.19%	0.21%
2.0	5588.915	16.092	21.476	0.57%	0.83%
3.0	5534.668	26.604	48.08	0.95%	1.87%
4.0	5452.952	36.779	84.859	1.31%	3.29%
5.0	5350.410	46.475	131.335	1.65%	5.10%
6.0	5228.217	55.593	186.928	1.98%	7.25%
7.0	5087.549	64.030	250.958	2.28%	9.74%
8.0	4935.396	71.732	322.691	2.55%	12.52%
9.0	4760.064	78.576	401.267	2.80%	15.57%
10.0	4587.222	84.590	485.856	3.01%	18.85%
11.0	4387.050	89.671	575.528	3.19%	22.33%
12.0	4194.350	93.807	669.335	3.34%	25.97%
13.0	3983.591	97.052	766.386	3.45%	29.74%
14.0	3778.091	99.349	865.735	3.54%	33.59%
15.0	3583.454	101.063	966.798	3.60%	37.52%
16.0	3360.932	101.755	1068.552	3.62%	41.46%
17.0	3147.198	101.349	1169.902	3.61%	45.40%
18.0	2933.602	100.259	1270.161	3.57%	49.29%
19.0	2727.549	98.492	1368.653	3.51%	53.11%
20.0	2505.304	95.776	1464.429	3.41%	56.83%
21.0	2309.214	92.448	1556.877	3.29%	60.41%
22.0	2113.400	88.874	1645.752	3.16%	63.86%
23.0	1916.618	84.561	1730.312	3.01%	67.14%
24.0	1738.380	79.911	1810.224	2.84%	70.24%
25.0	1533.738	74.401	1884.625	2.65%	73.13%
26.0	1382.477	68.838	1953.462	2.45%	75.80%
27.0	1214.859	63.544	2017.007	2.26%	78.27%
28.0	1108.850	58.831	2075.838	2.09%	80.55%
29.0	993.908	55.014	2130.852	1.96%	82.69%
30.0	861.233	50.088	2180.94	1.78%	84.63%
31.0	749.917	44.836	2225.776	1.60%	86.37%
32.0	643.970	39.933	2265.71	1.42%	87.92%
33.0	547.073	35.089	2300.798	1.25%	89.28%
34.0	461.884	30.534	2331.332	1.09%	90.46%
35.0	381.981	26.207	2357.54	0.93%	91.48%
36.0	319.556	22.337	2379.877	0.79%	92.35%
37.0	266.244	19.106	2398.982	0.68%	93.09%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	236.533	16.782	2415.764	0.60%	93.74%
39.0	187.144	14.461	2430.225	0.51%	94.30%
40.0	134.973	11.234	2441.46	0.40%	94.74%
41.0	111.192	8.766	2450.226	0.31%	95.08%
42.0	93.146	7.424	2457.649	0.26%	95.37%
43.0	80.657	6.438	2464.088	0.23%	95.62%
44.0	70.216	5.694	2469.782	0.20%	95.84%
45.0	63.048	5.121	2474.904	0.18%	96.04%
46.0	57.533	4.716	2479.619	0.17%	96.22%
47.0	52.814	4.389	2484.008	0.16%	96.39%
48.0	49.071	4.119	2488.127	0.15%	96.55%
49.0	45.591	3.887	2492.014	0.14%	96.70%
50.0	42.691	3.681	2495.695	0.13%	96.84%
51.0	40.041	3.500	2499.195	0.12%	96.98%
52.0	37.772	3.339	2502.534	0.12%	97.11%
53.0	35.724	3.197	2505.731	0.11%	97.23%
54.0	33.807	3.065	2508.796	0.11%	97.35%
55.0	32.147	2.944	2511.74	0.10%	97.47%
56.0	30.597	2.835	2514.575	0.10%	97.58%
57.0	29.254	2.737	2517.312	0.10%	97.68%
58.0	28.050	2.650	2519.962	0.09%	97.78%
59.0	26.964	2.572	2522.534	0.09%	97.88%
60.0	25.975	2.501	2525.035	0.09%	97.98%
61.0	24.964	2.431	2527.466	0.09%	98.08%
62.0	24.141	2.366	2529.832	0.08%	98.17%
63.0	23.345	2.310	2532.141	0.08%	98.26%
64.0	22.640	2.256	2534.398	0.08%	98.34%
65.0	21.955	2.207	2536.605	0.08%	98.43%
66.0	21.325	2.159	2538.764	0.08%	98.51%
67.0	20.730	2.115	2540.879	0.08%	98.60%
68.0	20.073	2.067	2542.946	0.07%	98.68%
69.0	19.498	2.019	2544.964	0.07%	98.75%
70.0	18.862	1.970	2546.934	0.07%	98.83%
71.0	18.336	1.923	2548.857	0.07%	98.91%
72.0	17.789	1.878	2550.735	0.07%	98.98%
73.0	17.215	1.830	2552.566	0.07%	99.05%
74.0	16.689	1.782	2554.348	0.06%	99.12%
75.0	16.142	1.735	2556.083	0.06%	99.19%

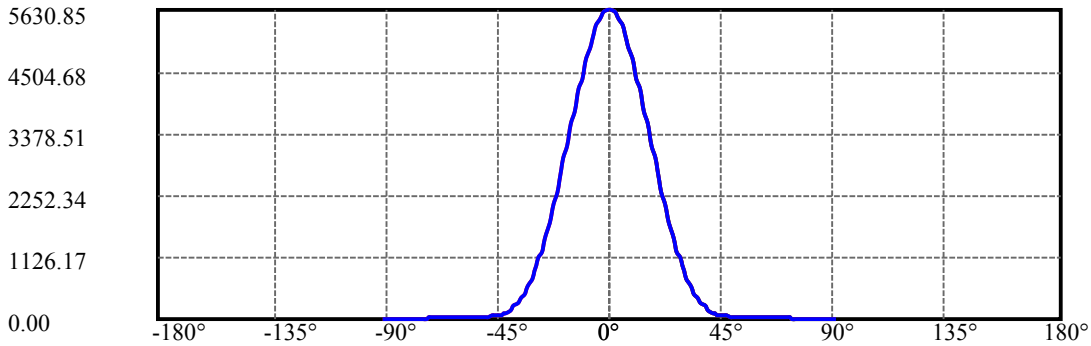
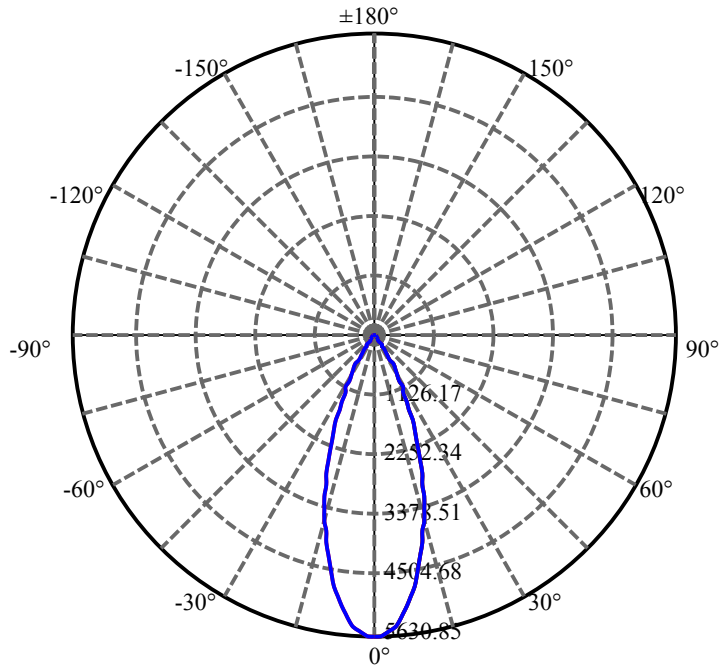
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.672	1.689	2557.772	0.06%	99.25%
77.0	15.160	1.644	2559.416	0.06%	99.32%
78.0	14.689	1.598	2561.013	0.06%	99.38%
79.0	14.233	1.554	2562.567	0.06%	99.44%
80.0	13.748	1.509	2564.076	0.05%	99.50%
81.0	13.326	1.464	2565.54	0.05%	99.55%
82.0	12.849	1.419	2566.96	0.05%	99.61%
83.0	12.461	1.376	2568.336	0.05%	99.66%
84.0	12.122	1.339	2569.675	0.05%	99.71%
85.0	11.804	1.306	2570.981	0.05%	99.76%
86.0	11.507	1.274	2572.255	0.05%	99.81%
87.0	11.202	1.243	2573.498	0.04%	99.86%
88.0	10.939	1.213	2574.711	0.04%	99.91%
89.0	10.718	1.187	2575.898	0.04%	99.95%
90.0	10.614	1.170	2577.067	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2180.94	77.61%	84.63%
0-40	2441.46	86.88%	94.74%
0-60	2525.03	89.86%	97.98%
0-90	2575.90	91.67%	99.95%
0-120	2575.90	91.67%	99.95%
0-180	2577.07	91.71%	100.00%
60-90	50.86	1.81%	1.97%
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%
0-27.76	2061.65	73.37%	80.00%

ZONAL LUMEN SUMMARY

0-10	485.86
10-20	978.57
20-30	716.51
30-40	260.52
40-50	54.24
50-60	29.34
60-70	21.90
70-80	17.14
80-90	11.82
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: —————

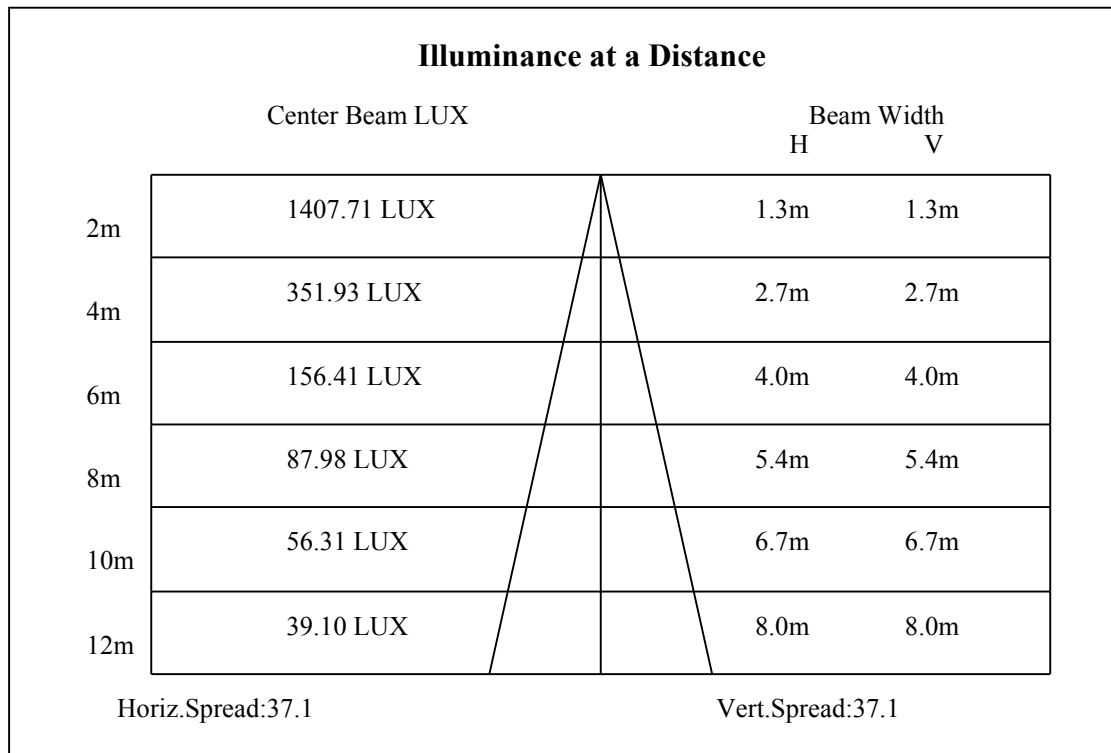
C90/C270: —————

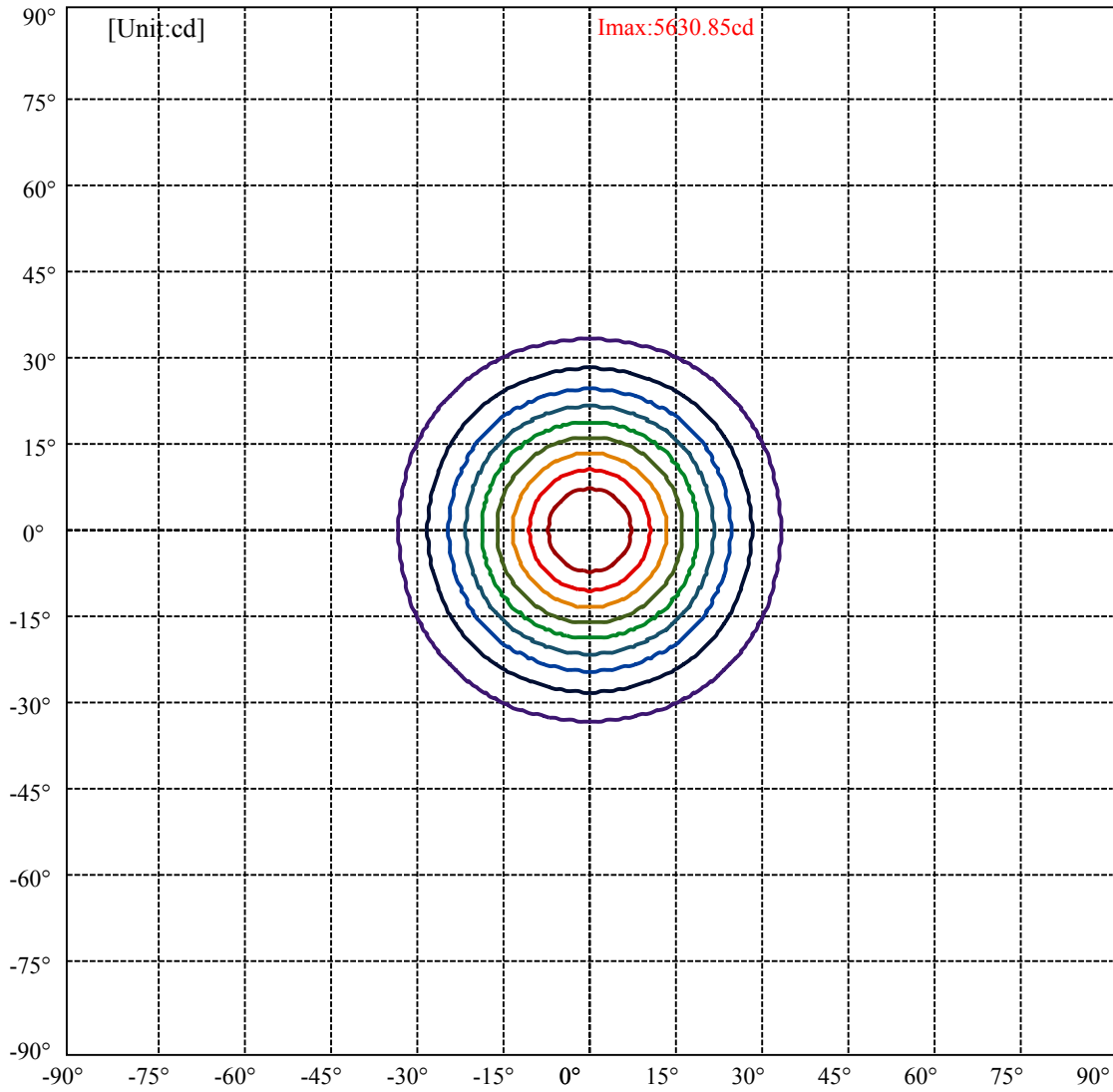
Field angle(10%Imax):C0/180Left:32.8 Right:32.8

:C90/270Left:32.8 Right:32.8

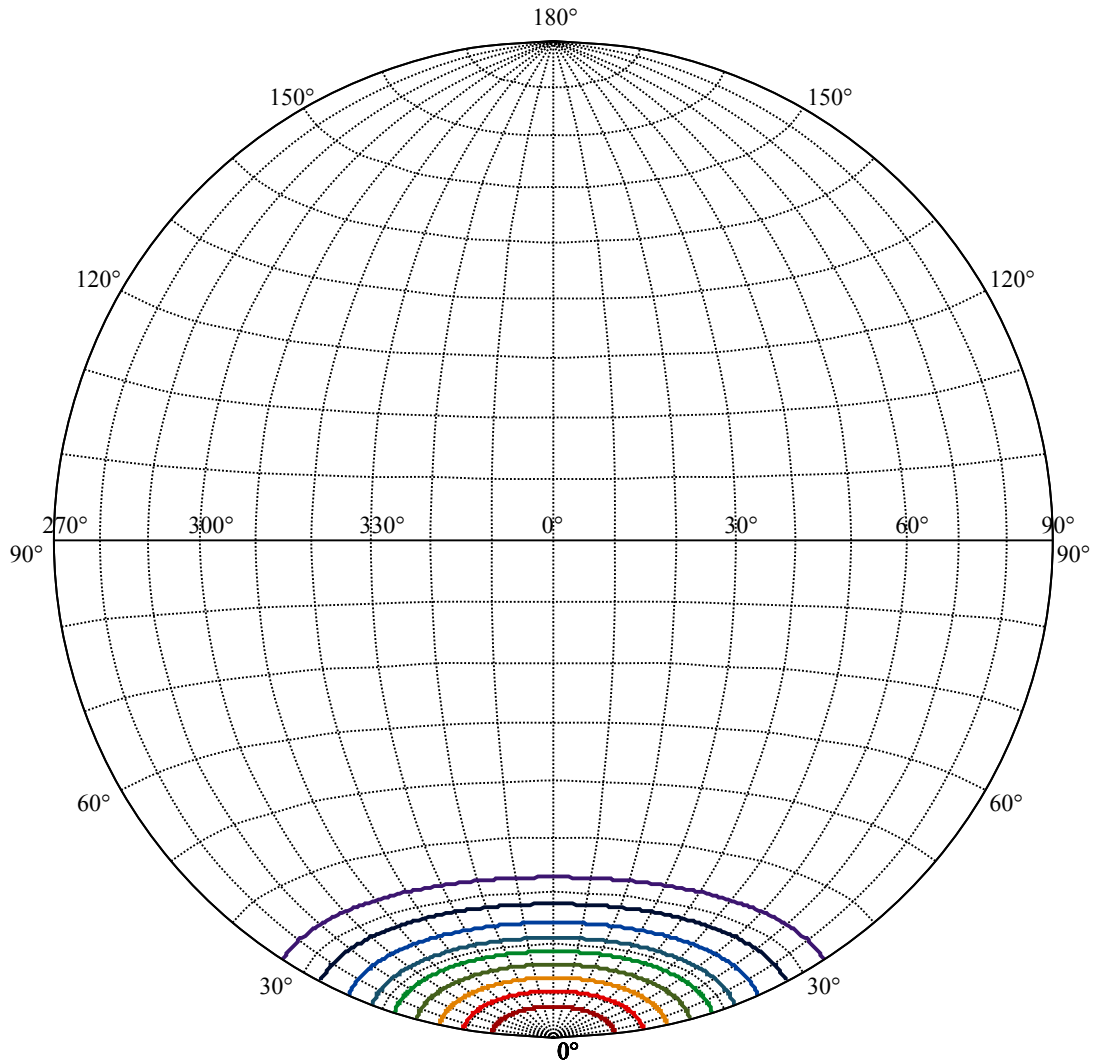
Beam Angle(50%Imax):C0/180Left:18.6 Right:18.6

:C90/270Left:18.6 Right:18.6





(10%Imax) 563.085	—
(20%Imax) 1126.17	—
(30%Imax) 1689.25	—
(40%Imax) 2252.34	—
(50%Imax) 2815.42	—
(60%Imax) 3378.51	—
(70%Imax) 3941.59	—
(80%Imax) 4504.68	—
(90%Imax) 5067.76	—



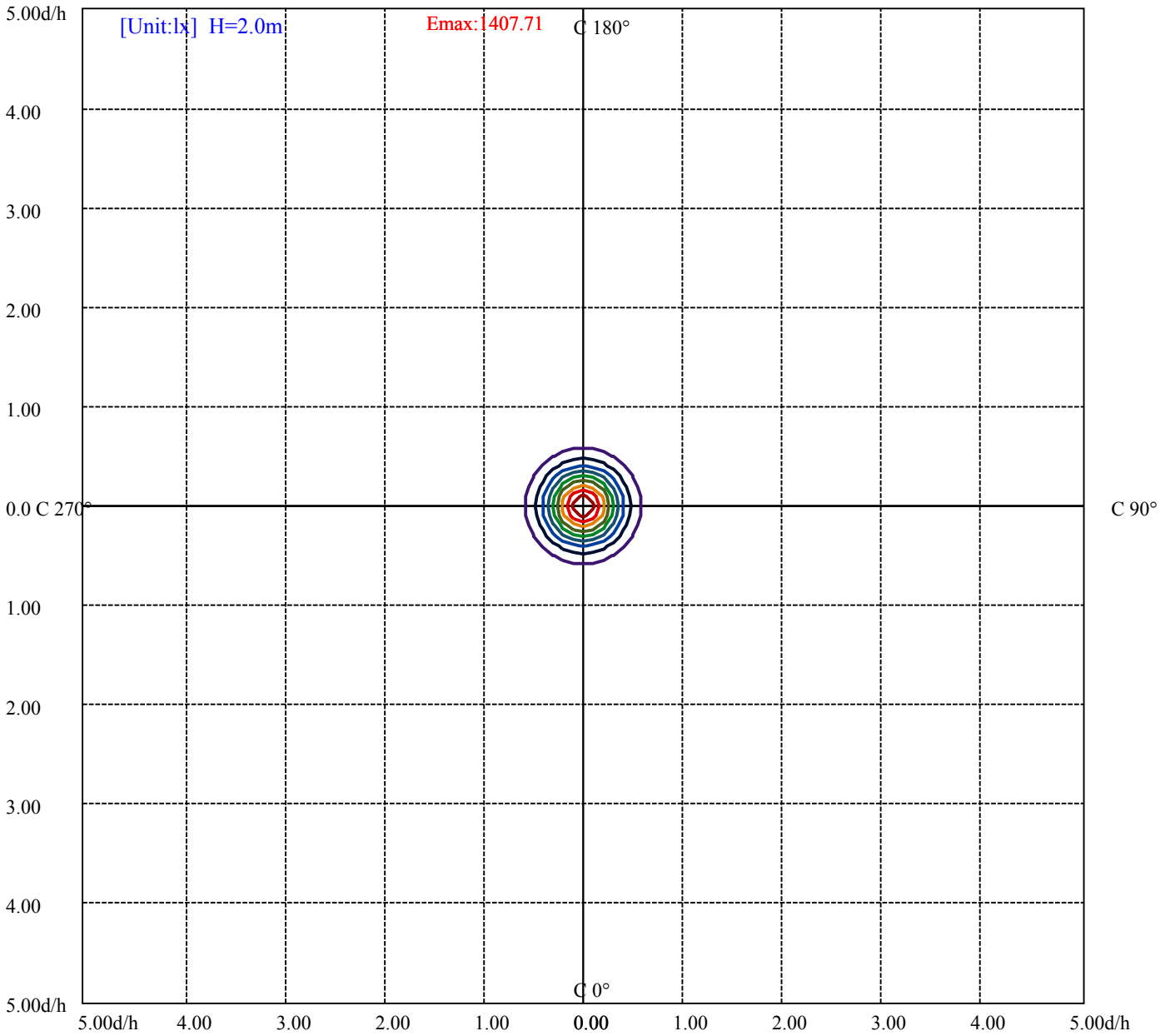
House

[Unit:cd]

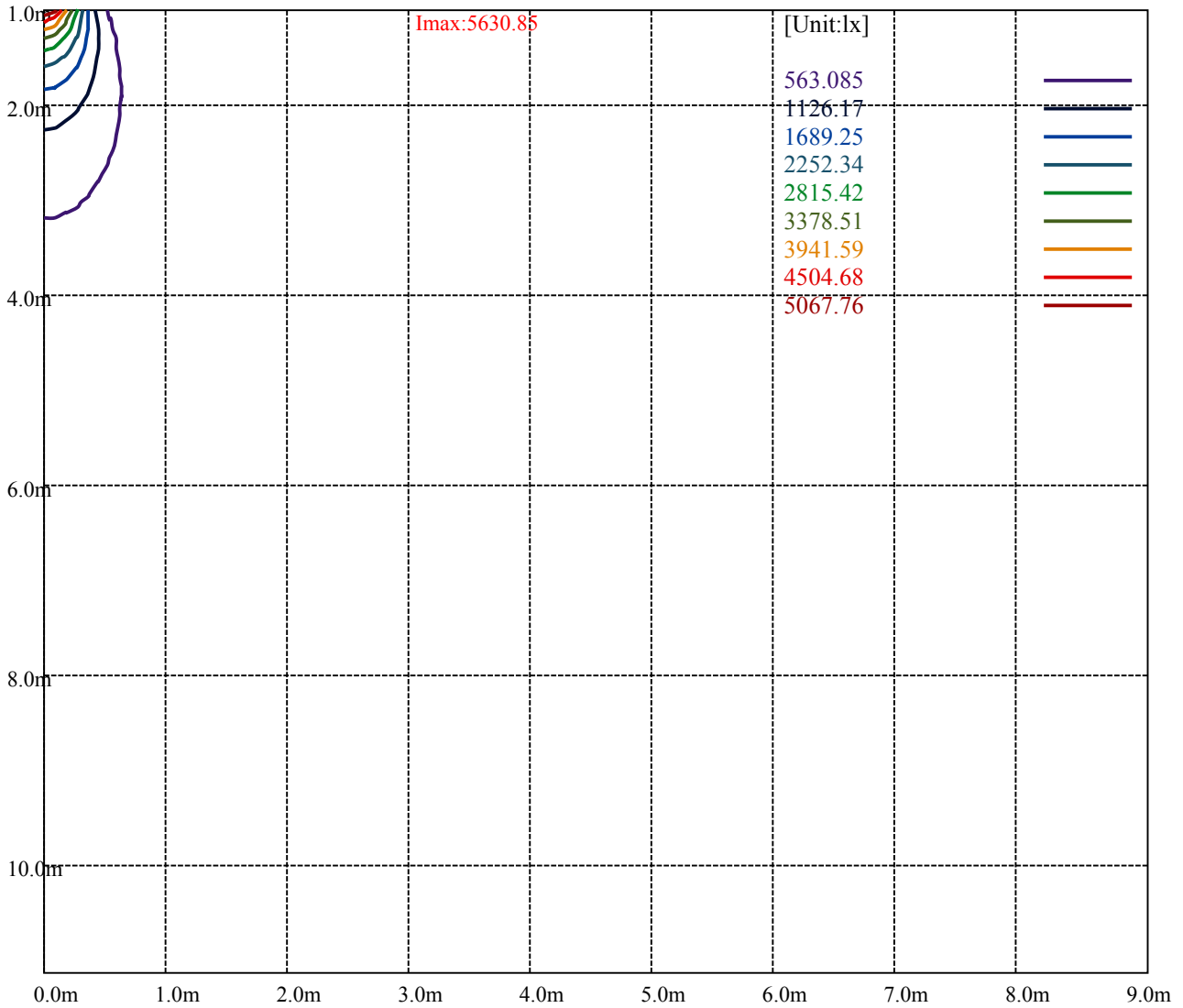
Road

Imax:5630.85

(10%Imax)	563.085	—
(20%Imax)	1126.17	—
(30%Imax)	1689.25	—
(40%Imax)	2252.34	—
(50%Imax)	2815.42	—
(60%Imax)	3378.51	—
(70%Imax)	3941.59	—
(80%Imax)	4504.68	—
(90%Imax)	5067.76	—



(10%Emax) 140.771	—
(20%Emax) 281.5425	—
(30%Emax) 422.3125	—
(40%Emax) 563.085	—
(50%Emax) 703.855	—
(60%Emax) 844.6275	—
(70%Emax) 985.3975	—
(80%Emax) 1126.167	—
(90%Emax) 1266.94	—



Luminance Table

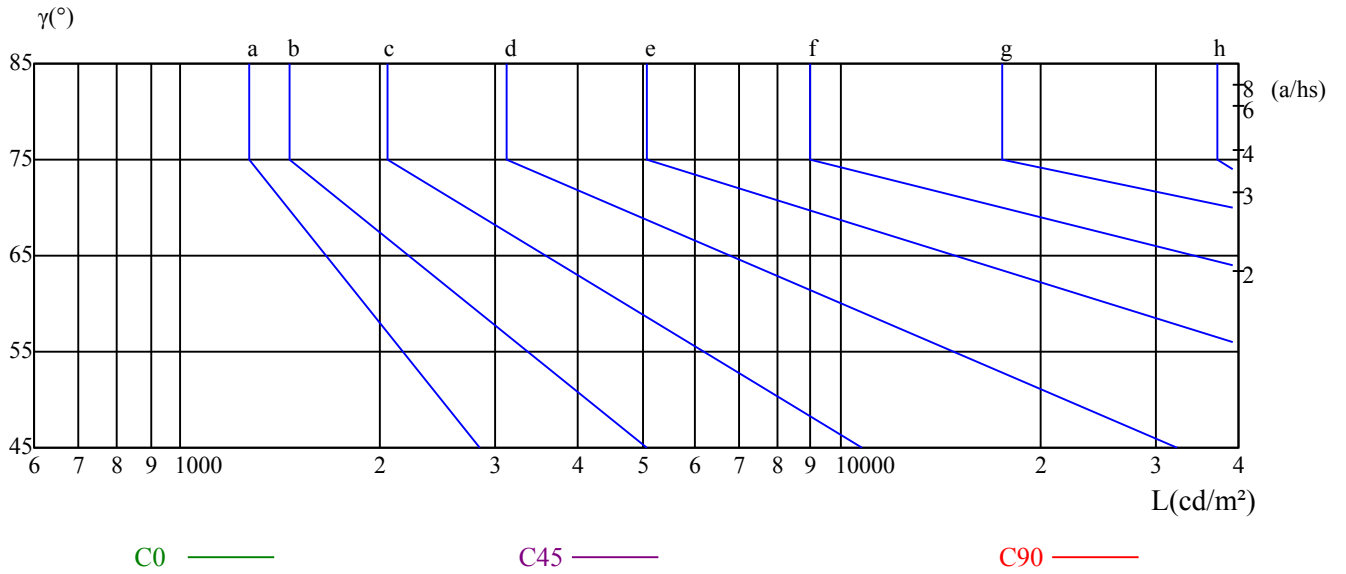
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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

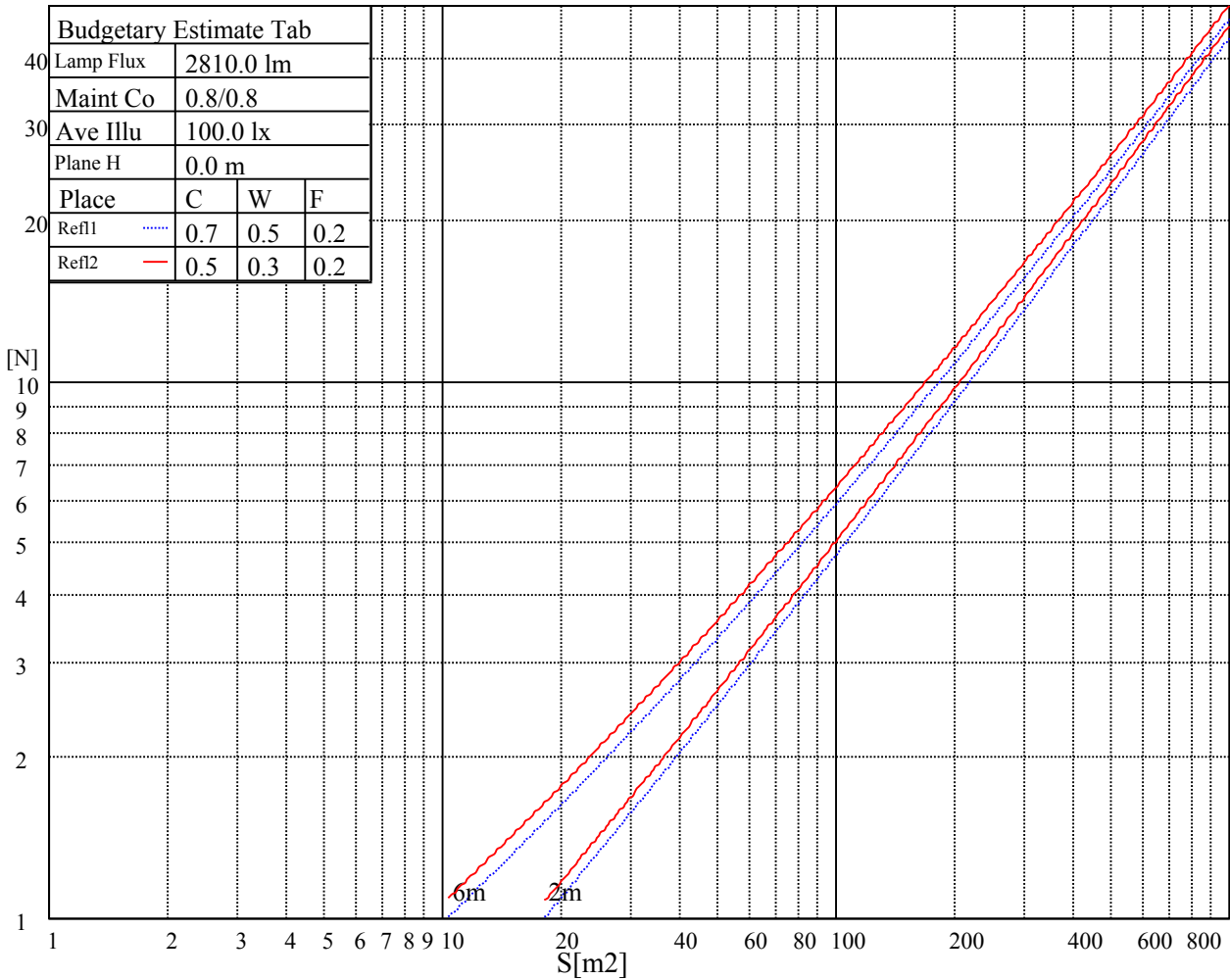
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

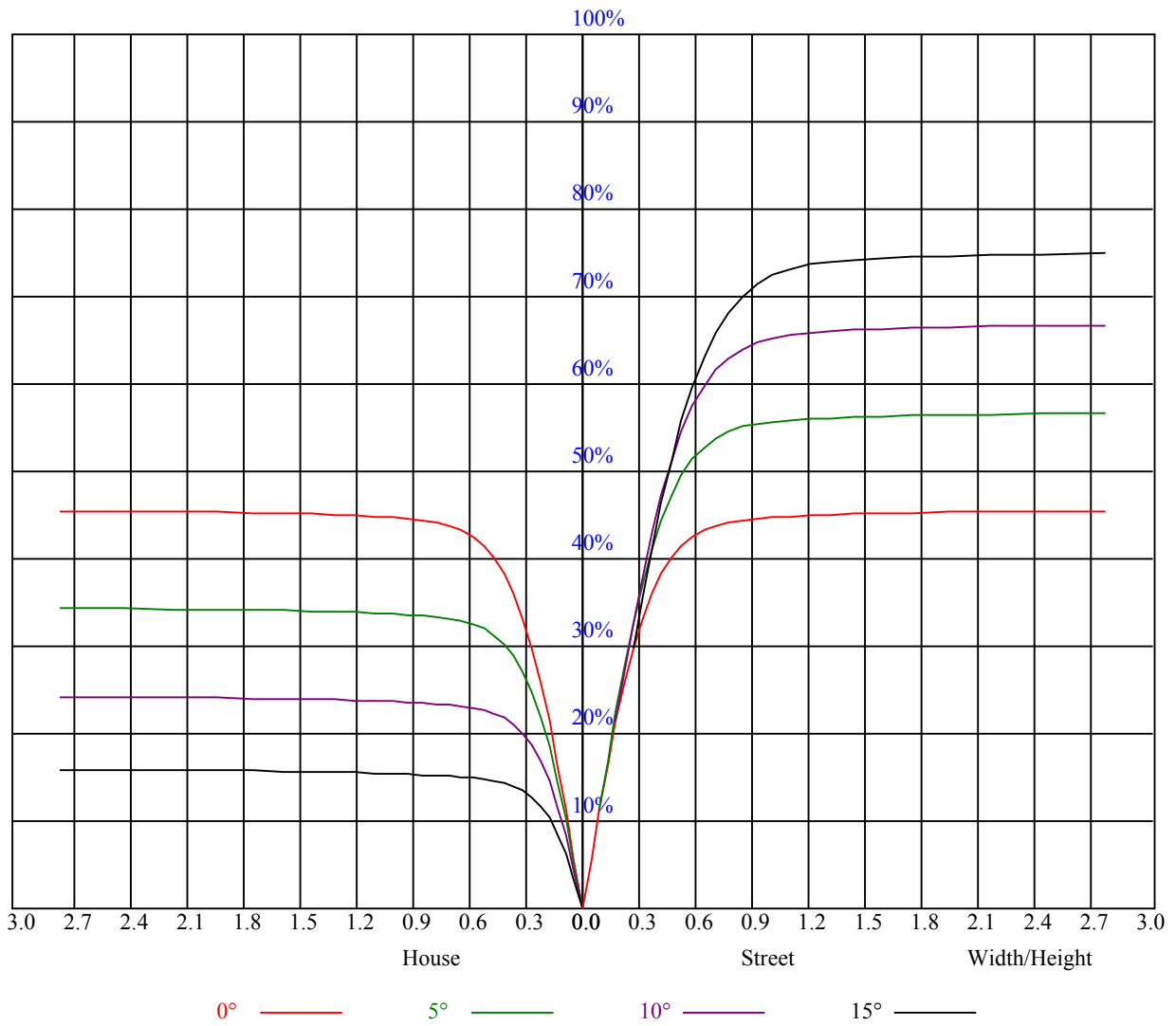


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
4H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
8H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
12H	12H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	4H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	6H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	8H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
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				

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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 RHOF=20 CU															
0	1.09	1.09	1.09	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.94	0.94	0.94	0.92
1	1.02	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	0.86
2	0.96	0.92	0.90	0.94	0.91	0.89	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.82
3	0.90	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.83	0.80	0.78	0.77
4	0.85	0.81	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.79	0.77	0.74	0.73
5	0.81	0.76	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.77	0.74	0.71	0.76	0.73	0.71	0.69
6	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
7	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.65	0.70	0.67	0.64	0.63
8	0.70	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.61	0.60
9	0.67	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.65	0.62	0.59	0.65	0.61	0.59	0.58
10	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.63	0.59	0.56	0.62	0.59	0.56	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	5613.96	5574.66	5516.54	5449.01	5307.30	5196.60	5041.05	4882.74	4713.36
45.0	5630.01	5617.84	5580.20	5520.41	5427.42	5331.11	5184.97	5060.98	4914.29
90.0	5625.03	5581.86	5504.36	5429.63	5328.89	5196.60	5053.23	4896.58	4725.54
135.0	5654.37	5647.17	5612.86	5529.82	5466.17	5347.71	5239.77	5091.98	4945.84
180.0	5613.96	5621.71	5621.71	5596.80	5550.31	5476.69	5374.83	5264.68	5119.65
225.0	5630.01	5635.00	5606.77	5553.63	5491.08	5366.53	5263.02	5137.92	4982.93
270.0	5625.03	5643.85	5654.92	5627.25	5560.27	5505.47	5396.42	5262.47	5132.94
315.0	5654.37	5658.80	5613.96	5570.79	5492.18	5382.58	5272.43	5103.05	4948.61
360.0	5613.96	5574.66	5516.54	5449.01	5307.30	5196.60	5041.05	4882.74	4713.36
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4499.69	4320.90	4127.16	3881.39	3686.00	3495.03	3301.29	3090.39	2837.43
45.0	4710.04	4541.76	4367.95	4190.27	3948.37	3763.49	3562.00	3314.02	3109.21
90.0	4565.01	4391.20	4158.16	3971.62	3741.90	3551.49	3352.77	3102.02	2903.85
135.0	4788.64	4610.40	4404.49	4207.43	4015.90	3779.54	3582.48	3342.80	3142.42
180.0	4967.99	4819.08	4620.36	4441.57	4189.71	4003.17	3816.08	3620.68	3378.78
225.0	4784.77	4620.36	4400.61	4211.30	4029.74	3786.74	3599.64	3403.14	3203.31
270.0	4981.27	4828.49	4628.11	4450.98	4248.94	4064.61	3871.43	3630.09	3423.62
315.0	4783.10	4565.56	4389.54	4200.23	4008.15	3780.65	3581.93	3384.32	3178.96
360.0	4499.69	4320.90	4127.16	3881.39	3686.00	3495.03	3301.29	3090.39	2837.43
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2644.80	2446.63	2206.95	2033.14	1853.24	1645.66	1490.12	1078.51	1078.51
45.0	2913.81	2714.54	2469.32	2276.14	2097.90	1881.47	1709.87	1513.37	1365.02
90.0	2704.02	2459.36	2273.93	2093.47	1914.13	1702.12	1548.24	1404.32	1095.39
135.0	2948.13	2758.82	2510.84	2323.19	2143.84	1963.39	1755.82	1598.06	1448.60
180.0	3192.24	2986.33	2785.95	2594.98	2354.74	2170.41	1994.94	1785.15	1630.72
225.0	2953.11	2755.50	2553.46	2363.05	2136.65	1958.96	1791.24	1599.17	1453.03
270.0	3183.39	2974.70	2721.18	2513.05	2312.12	2134.43	1908.59	1738.66	1582.56
315.0	2929.31	2724.50	2520.80	2276.69	2094.58	1876.49	1708.21	1552.67	1405.98
360.0	2644.80	2446.63	2206.95	2033.14	1853.24	1645.66	1490.12	1078.51	1078.51
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1047.35	931.38	823.66	696.90	603.08	516.50	439.67	355.65	296.20
45.0	1225.53	1094.89	942.67	831.96	726.79	629.37	520.88	444.49	376.40
90.0	1095.39	973.28	856.32	720.26	620.79	509.47	433.47	365.00	287.67
135.0	1305.24	1136.41	1007.44	859.09	748.93	644.32	528.63	450.02	378.62
180.0	1447.50	1311.33	1177.92	1020.72	899.50	786.02	676.42	557.96	473.83
225.0	1086.98	1086.98	1024.65	877.08	764.10	661.42	566.54	482.24	390.63
270.0	1435.32	1260.96	1133.09	1011.86	896.73	763.88	660.37	568.48	467.18
315.0	1075.58	1075.58	985.52	871.99	739.41	640.77	550.60	471.23	385.32
360.0	1047.35	931.38	823.66	696.90	603.08	516.50	439.67	355.65	296.20
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	244.94	191.30	156.54	129.25	104.18	89.67	76.28	68.47	62.16
45.0	314.41	285.62	285.62	159.31	124.66	104.78	89.84	76.17	68.20
90.0	236.08	192.63	156.54	128.70	103.35	88.57	77.61	69.30	61.28
135.0	314.96	285.07	285.07	158.98	130.97	105.50	90.67	79.49	69.36
180.0	399.65	332.68	288.95	288.95	170.82	140.38	111.92	95.60	83.03
225.0	325.31	267.75	218.65	169.60	138.77	115.08	93.66	80.98	69.52
270.0	396.33	317.18	288.95	288.95	171.54	133.13	110.26	93.44	78.05
315.0	324.76	257.73	211.95	173.42	135.51	112.42	94.93	81.81	70.13
360.0	244.94	191.30	156.54	129.25	104.18	89.67	76.28	68.47	62.16

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	57.18	51.98	48.49	45.45	42.68	39.69	37.64	35.70	34.04
45.0	60.67	55.91	51.76	48.16	44.95	41.57	39.30	37.09	35.15
90.0	56.29	51.20	47.66	44.67	41.29	38.97	36.98	35.09	33.10
135.0	63.10	58.01	52.75	49.15	45.22	42.46	40.02	37.86	35.43
180.0	71.68	64.93	58.40	54.19	50.43	47.22	43.73	41.18	38.86
225.0	62.83	57.68	52.42	48.93	45.83	43.12	39.97	37.86	35.87
270.0	69.36	62.66	57.51	53.19	48.60	45.56	42.84	39.74	37.64
315.0	63.27	57.90	53.53	48.82	45.72	42.95	39.85	37.64	35.70
360.0	57.18	51.98	48.49	45.45	42.68	39.69	37.64	35.70	34.04
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	32.16	30.83	29.23	28.12	27.07	25.91	24.96	24.19	23.47
45.0	33.21	31.66	30.06	28.89	27.79	26.57	25.63	24.74	23.80
90.0	31.61	30.28	28.78	27.68	26.68	25.74	24.96	23.97	23.25
135.0	33.77	32.16	30.78	29.23	28.12	27.12	26.13	24.96	24.13
180.0	36.81	34.54	32.88	31.39	29.78	28.56	27.51	26.24	25.35
225.0	34.10	32.11	30.72	29.39	27.90	26.90	25.96	24.91	24.08
270.0	35.26	33.54	31.99	30.28	29.12	27.95	26.90	25.79	24.91
315.0	33.54	32.05	30.33	29.06	27.95	26.96	25.74	24.91	24.13
360.0	32.16	30.83	29.23	28.12	27.07	25.91	24.96	24.19	23.47
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.58	21.98	21.37	20.76	20.04	19.43	18.88	18.16	17.66
45.0	23.19	22.53	21.86	21.26	20.54	19.98	19.37	18.71	18.21
90.0	22.47	21.81	21.20	20.48	19.93	19.37	18.71	18.16	17.66
135.0	23.30	22.58	21.92	21.20	20.65	20.09	19.48	18.82	18.27
180.0	24.52	23.64	22.86	22.25	21.64	20.87	20.31	19.76	19.21
225.0	23.19	22.58	21.92	21.37	20.81	20.09	19.60	19.04	18.49
270.0	24.13	23.41	22.58	21.98	21.42	20.70	20.15	19.43	18.93
315.0	23.36	22.58	21.92	21.31	20.81	20.04	19.48	18.82	18.27
360.0	22.58	21.98	21.37	20.76	20.04	19.43	18.88	18.16	17.66
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.16	16.61	16.05	15.50	15.06	14.61	14.23	13.62	13.23
45.0	17.66	17.05	16.55	15.94	15.50	15.06	14.61	14.12	13.67
90.0	17.10	16.55	16.11	15.67	15.17	14.61	14.23	13.78	13.23
135.0	17.77	17.21	16.66	16.16	15.72	15.17	14.67	14.34	13.78
180.0	18.54	17.99	17.44	16.83	16.27	15.72	15.22	14.78	14.28
225.0	17.88	17.33	16.83	16.22	15.78	15.17	14.72	14.28	13.73
270.0	18.43	17.88	17.21	16.72	16.22	15.83	15.22	14.72	14.28
315.0	17.77	17.10	16.66	16.11	15.67	15.11	14.61	14.23	13.78
360.0	17.16	16.61	16.05	15.50	15.06	14.61	14.23	13.62	13.23
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.84	12.40	12.07	11.79	11.57	11.24	10.96	10.74	10.63
45.0	13.28	12.73	12.34	11.96	11.68	11.40	11.13	10.79	10.57
90.0	12.84	12.45	12.07	11.73	11.46	11.24	10.90	10.63	10.57
135.0	13.34	12.84	12.45	12.12	11.85	11.51	11.18	10.96	10.68
180.0	13.89	13.34	12.90	12.57	12.12	11.85	11.51	11.24	10.96
225.0	13.34	12.90	12.57	12.18	11.85	11.51	11.29	11.02	10.79
270.0	13.78	13.34	12.84	12.51	12.12	11.79	11.46	11.18	10.90
315.0	13.28	12.79	12.45	12.12	11.79	11.51	11.18	10.96	10.63
360.0	12.84	12.40	12.07	11.79	11.57	11.24	10.96	10.74	10.63

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.68
45.0	10.57
90.0	10.57
135.0	10.57
180.0	10.74
225.0	10.57
270.0	10.63
315.0	10.57
360.0	10.68