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NATA

Client:

LumCAT: 2-2640-L

Luminaire: 92.70.411.00

Report No: 20231016-B012

Ballast type: AC

Test No: 20231016-C012

Voltage(V): 34.460

LampCAT: NICHIA NFCWJ108B-V3

Current(A): 0.576

Lamp flux(lm): 2574.8

Power (W): 19.848

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2381.93, Efficiency(%): 92.51% , Luminous Efficacy(lm/W): 120.01

Central intensity(cd): 6843.780, Maximum intensity(cd): 6843.780

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=27.2

[C90/270]Total=27.2

Field angle(10%Imax): [C0/180]Total=63.4

[C90/270]Total=63.4

Maximum s/h(1/2): C0_180=0.45 C90_270=0.45

Maximum s/h(1/4): C0_180=0.51 C90_270=0.51

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.51%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.010%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6843.781	0.000	0	0.00%	0.00%
1.0	6793.547	6.525	6.525	0.25%	0.27%
2.0	6701.314	19.369	25.894	0.75%	1.09%
3.0	6552.275	31.698	57.593	1.23%	2.42%
4.0	6341.378	43.159	100.752	1.68%	4.23%
5.0	6085.160	53.458	154.21	2.08%	6.47%
6.0	5818.079	62.555	216.765	2.43%	9.10%
7.0	5496.336	70.228	286.993	2.73%	12.05%
8.0	5157.641	76.248	363.242	2.96%	15.25%
9.0	4831.401	80.956	444.197	3.14%	18.65%
10.0	4491.806	84.372	528.569	3.28%	22.19%
11.0	4174.561	86.595	615.164	3.36%	25.83%
12.0	3852.680	87.749	702.913	3.41%	29.51%
13.0	3575.981	88.159	791.072	3.42%	33.21%
14.0	3296.030	87.961	879.034	3.42%	36.90%
15.0	3045.624	87.061	966.095	3.38%	40.56%
16.0	2798.886	85.638	1051.733	3.33%	44.15%
17.0	2579.132	83.750	1135.483	3.25%	47.67%
18.0	2377.091	81.717	1217.201	3.17%	51.10%
19.0	2203.419	79.692	1296.892	3.10%	54.45%
20.0	2033.345	77.545	1374.437	3.01%	57.70%
21.0	1880.915	75.162	1449.598	2.92%	60.86%
22.0	1739.210	72.748	1522.346	2.83%	63.91%
23.0	1612.312	70.324	1592.67	2.73%	66.86%
24.0	1487.144	67.765	1660.435	2.63%	69.71%
25.0	1349.715	64.504	1724.939	2.51%	72.42%
26.0	1247.483	61.307	1786.247	2.38%	74.99%
27.0	1152.580	58.718	1844.965	2.28%	77.46%
28.0	1060.686	56.035	1901	2.18%	79.81%
29.0	960.689	52.885	1953.885	2.05%	82.03%
30.0	849.304	48.869	2002.754	1.90%	84.08%
31.0	749.322	44.487	2047.242	1.73%	85.95%
32.0	650.419	40.101	2087.343	1.56%	87.63%
33.0	556.753	35.564	2122.906	1.38%	89.13%
34.0	465.088	30.924	2153.83	1.20%	90.42%
35.0	387.378	26.474	2180.305	1.03%	91.54%
36.0	319.660	22.512	2202.817	0.87%	92.48%
37.0	264.037	19.037	2221.854	0.74%	93.28%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	220.646	16.178	2238.032	0.63%	93.96%
39.0	177.007	13.573	2251.605	0.53%	94.53%
40.0	130.531	10.726	2262.331	0.42%	94.98%
41.0	99.304	8.184	2270.515	0.32%	95.32%
42.0	81.958	6.586	2277.101	0.26%	95.60%
43.0	68.438	5.571	2282.672	0.22%	95.83%
44.0	58.578	4.794	2287.466	0.19%	96.03%
45.0	51.036	4.213	2291.678	0.16%	96.21%
46.0	45.681	3.782	2295.461	0.15%	96.37%
47.0	41.377	3.462	2298.923	0.13%	96.52%
48.0	38.166	3.216	2302.139	0.12%	96.65%
49.0	35.717	3.034	2305.173	0.12%	96.78%
50.0	33.579	2.889	2308.062	0.11%	96.90%
51.0	32.057	2.777	2310.839	0.11%	97.02%
52.0	30.991	2.705	2313.544	0.11%	97.13%
53.0	30.195	2.662	2316.206	0.10%	97.24%
54.0	29.600	2.636	2318.841	0.10%	97.35%
55.0	29.171	2.623	2321.465	0.10%	97.46%
56.0	28.846	2.622	2324.086	0.10%	97.57%
57.0	28.556	2.625	2326.711	0.10%	97.68%
58.0	28.154	2.622	2329.333	0.10%	97.79%
59.0	27.642	2.609	2331.942	0.10%	97.90%
60.0	26.957	2.579	2334.521	0.10%	98.01%
61.0	25.989	2.527	2337.048	0.10%	98.12%
62.0	24.902	2.452	2339.5	0.10%	98.22%
63.0	23.664	2.362	2341.862	0.09%	98.32%
64.0	22.314	2.256	2344.118	0.09%	98.41%
65.0	21.007	2.144	2346.262	0.08%	98.50%
66.0	19.720	2.032	2348.294	0.08%	98.59%
67.0	18.543	1.924	2350.218	0.07%	98.67%
68.0	17.547	1.828	2352.047	0.07%	98.75%
69.0	16.710	1.748	2353.794	0.07%	98.82%
70.0	16.025	1.681	2355.475	0.07%	98.89%
71.0	15.471	1.628	2357.103	0.06%	98.96%
72.0	14.994	1.584	2358.687	0.06%	99.02%
73.0	14.593	1.547	2360.235	0.06%	99.09%
74.0	14.184	1.513	2361.747	0.06%	99.15%
75.0	13.825	1.480	2363.227	0.06%	99.21%

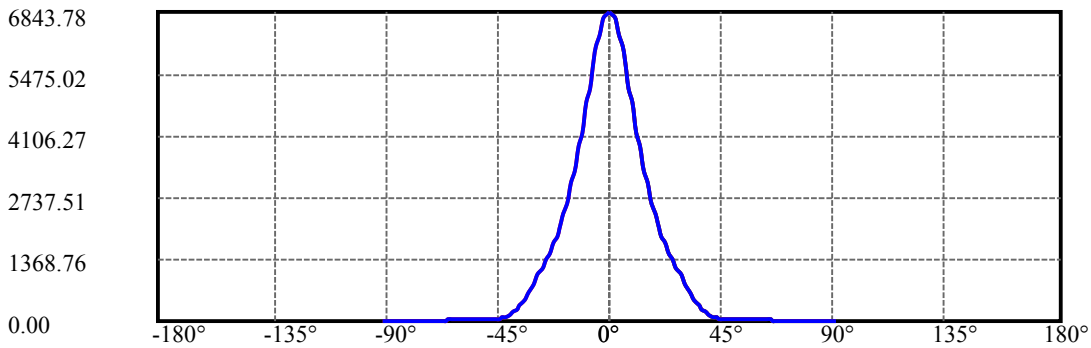
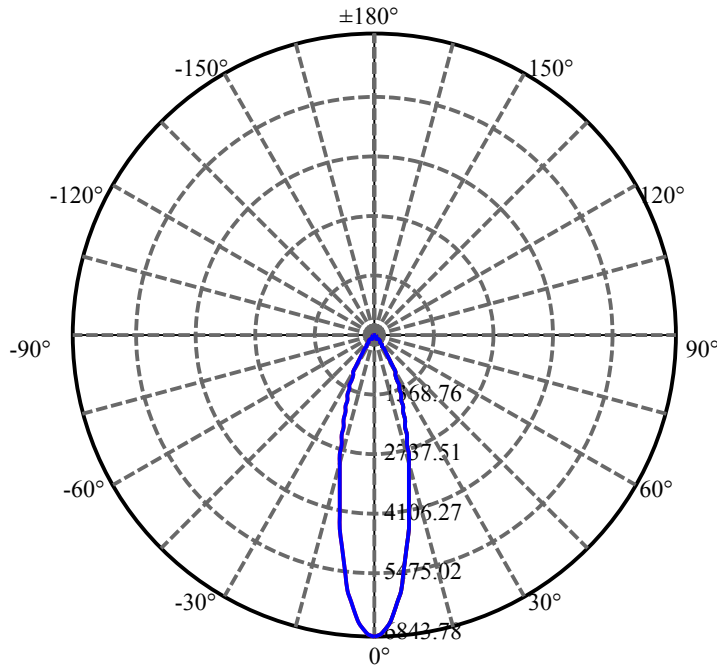
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.465	1.449	2364.676	0.06%	99.28%
77.0	13.105	1.417	2366.093	0.06%	99.34%
78.0	12.773	1.385	2367.478	0.05%	99.39%
79.0	12.455	1.355	2368.833	0.05%	99.45%
80.0	12.102	1.324	2370.157	0.05%	99.51%
81.0	11.790	1.292	2371.449	0.05%	99.56%
82.0	11.493	1.263	2372.712	0.05%	99.61%
83.0	11.223	1.235	2373.947	0.05%	99.66%
84.0	10.974	1.209	2375.156	0.05%	99.72%
85.0	10.739	1.185	2376.341	0.05%	99.77%
86.0	10.496	1.161	2377.502	0.05%	99.81%
87.0	10.275	1.137	2378.638	0.04%	99.86%
88.0	10.081	1.115	2379.753	0.04%	99.91%
89.0	9.881	1.094	2380.848	0.04%	99.95%
90.0	9.791	1.079	2381.926	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2002.75	77.78%	84.08%
0-40	2262.33	87.87%	94.98%
0-60	2334.52	90.67%	98.01%
0-90	2380.85	92.47%	99.95%
0-120	2380.85	92.47%	99.95%
0-180	2381.93	92.51%	100.00%
60-90	46.33	1.80%	1.94%
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%
0-28.09	1905.54	74.01%	80.00%

ZONAL LUMEN SUMMARY

0-10	528.57
10-20	845.87
20-30	628.32
30-40	259.58
40-50	45.73
50-60	26.46
60-70	20.95
70-80	14.68
80-90	10.69
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: —————

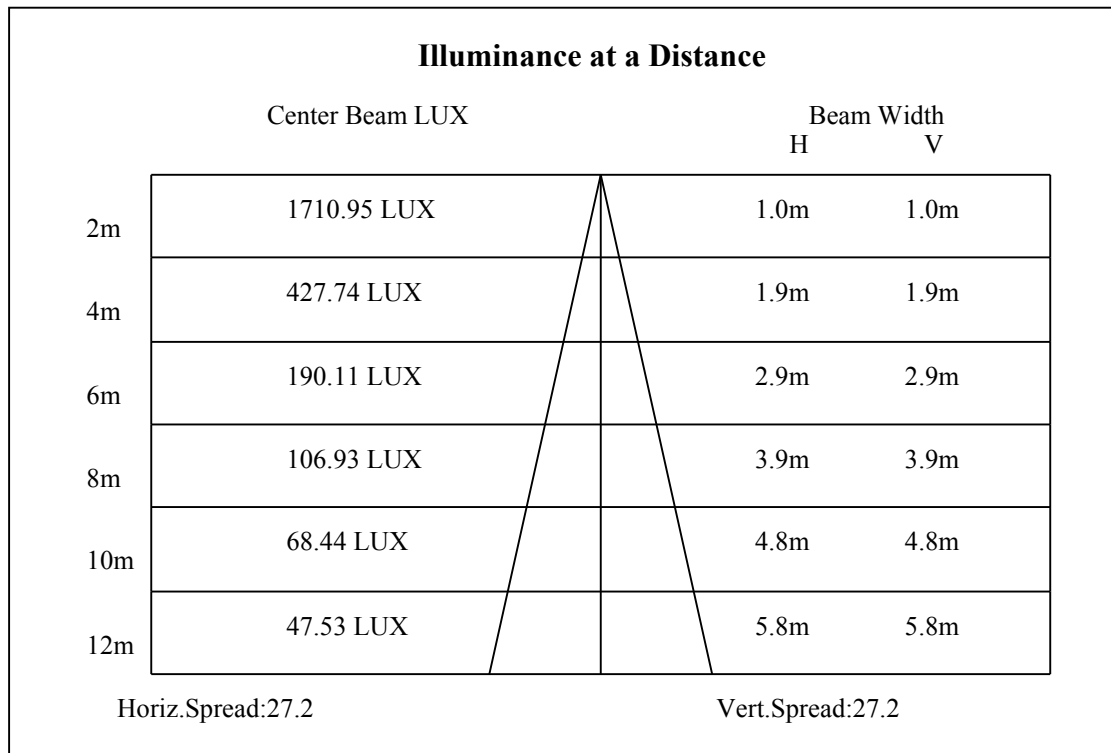
C90/C270: —————

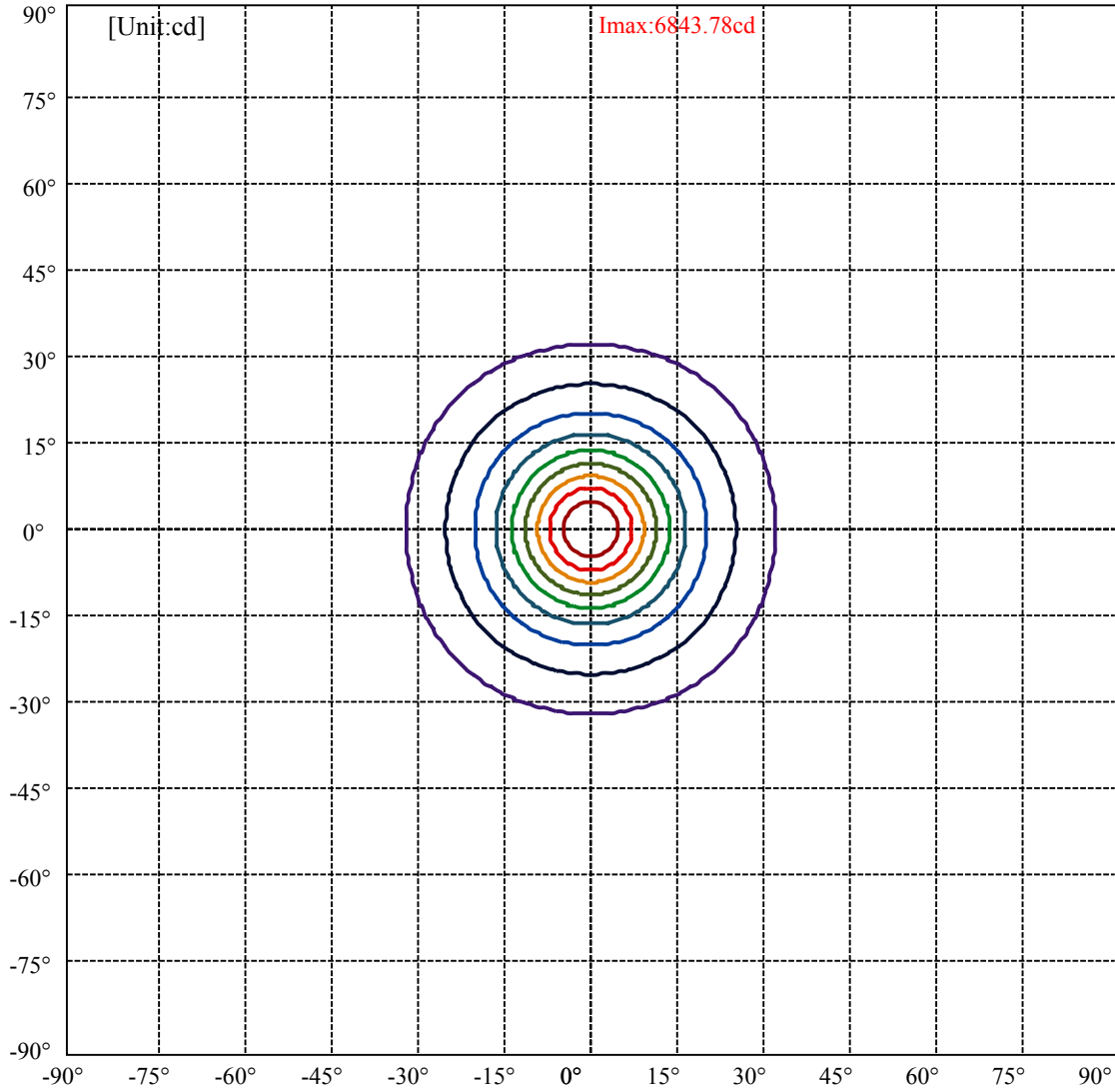
Field angle(10%Imax):C0/180Left:31.7 Right:31.7

:C90/270Left:31.7 Right:31.7

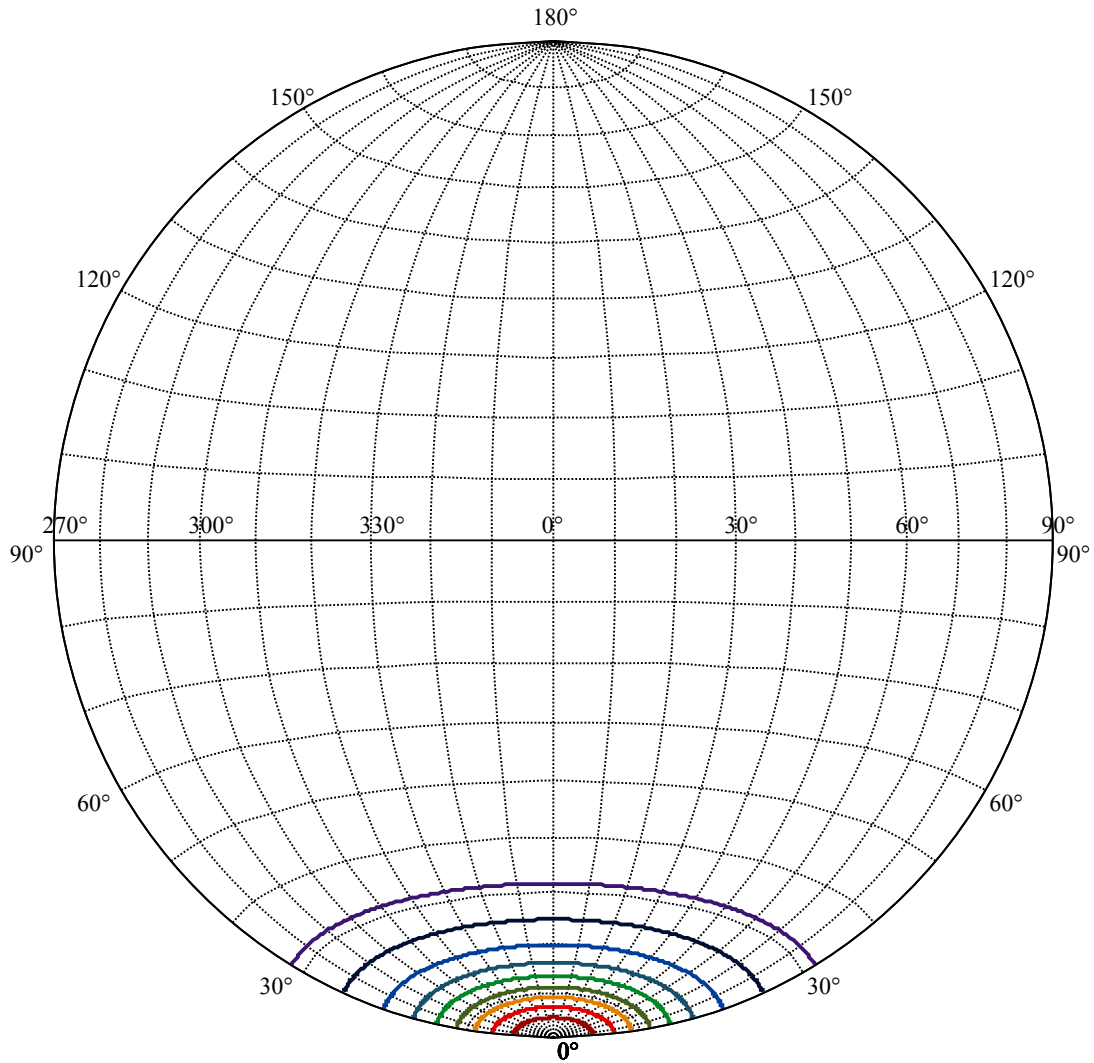
Beam Angle(50%Imax):C0/180Left:13.6 Right:13.6

:C90/270Left:13.6 Right:13.6





(10%Imax)	684.378	—
(20%Imax)	1368.76	—
(30%Imax)	2053.13	—
(40%Imax)	2737.51	—
(50%Imax)	3421.89	—
(60%Imax)	4106.27	—
(70%Imax)	4790.65	—
(80%Imax)	5475.02	—
(90%Imax)	6159.4	—



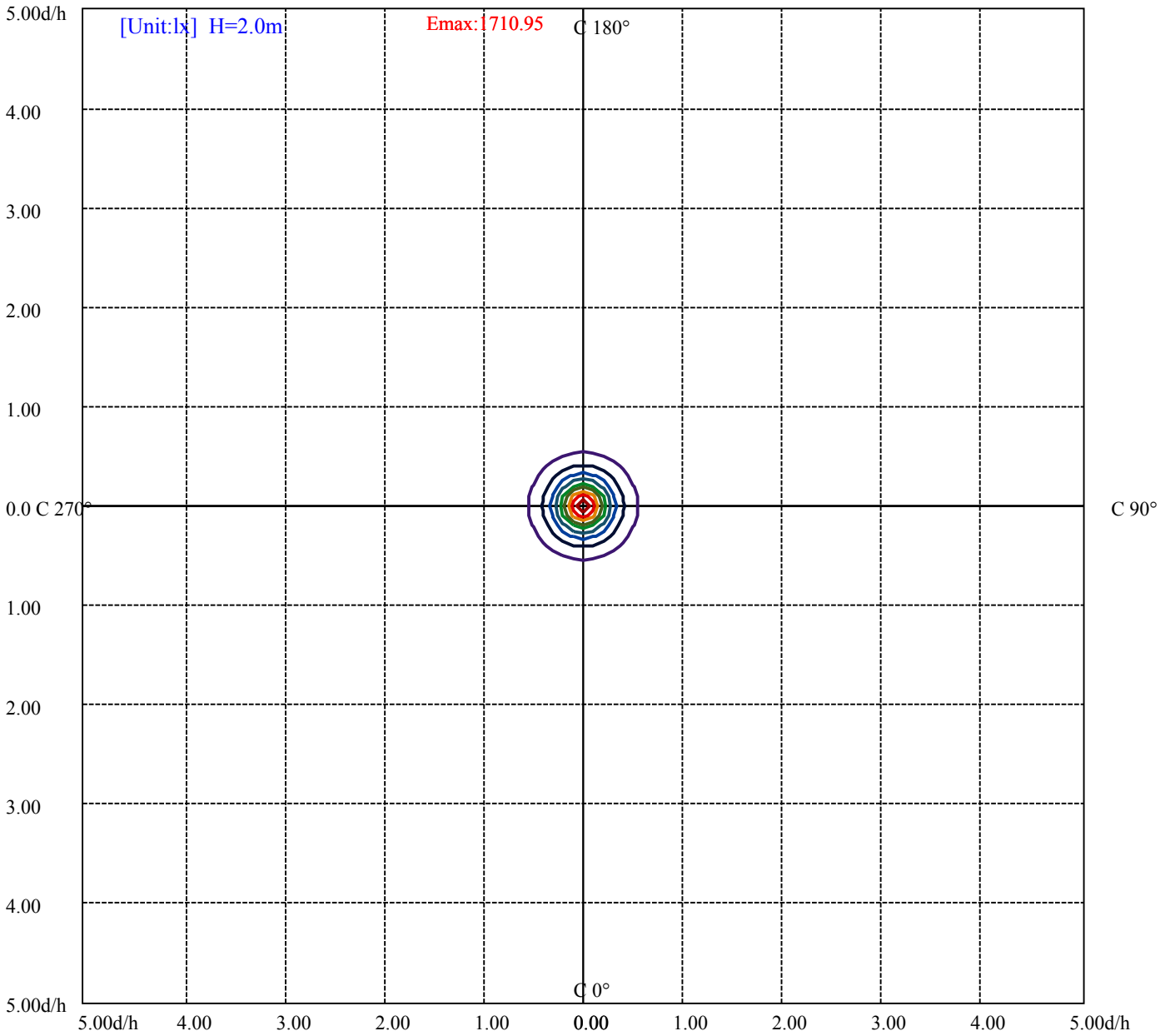
House

[Unit:cd]

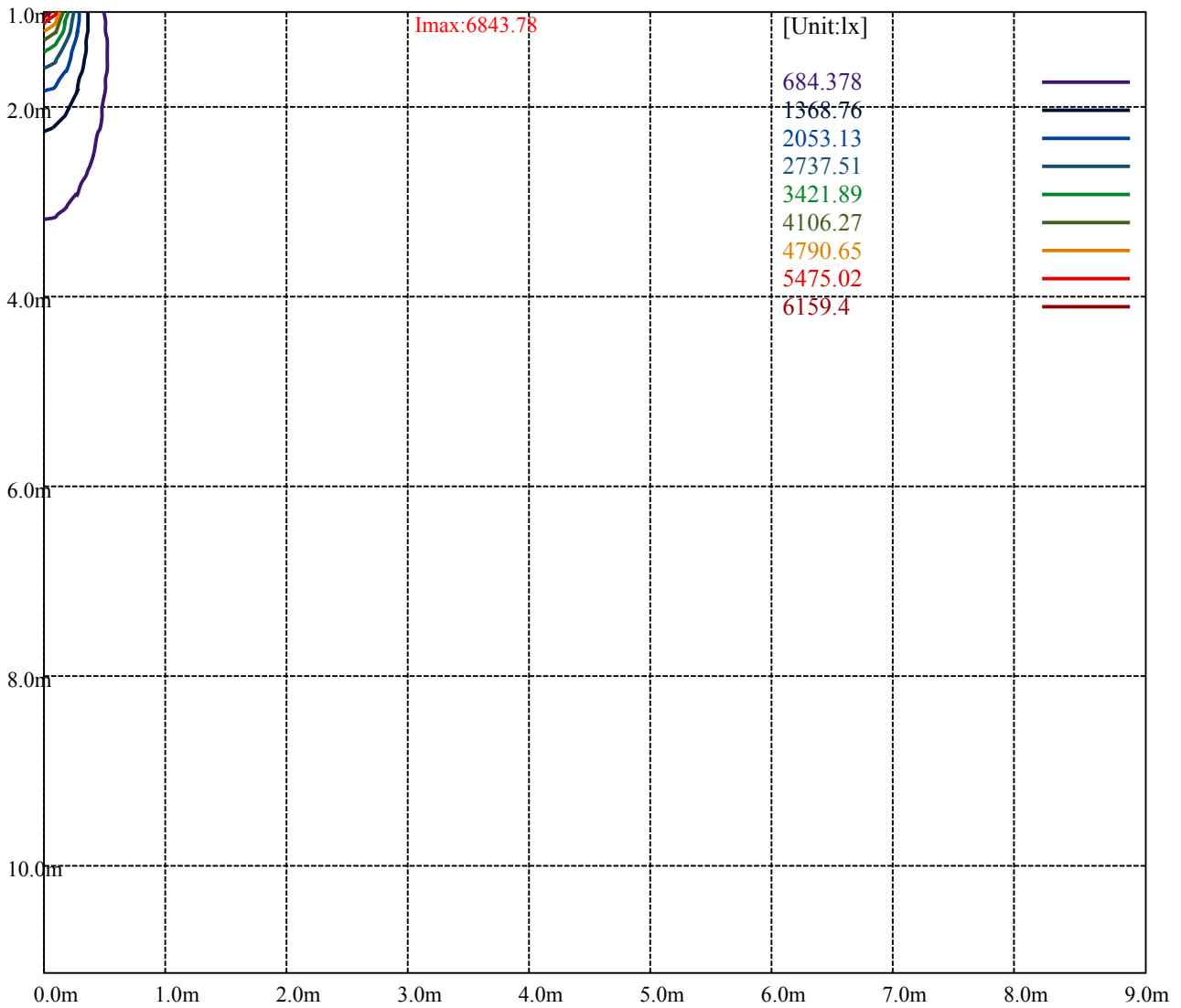
Road

Imax:6843.78

(10%Imax)	684.378	—
(20%Imax)	1368.76	—
(30%Imax)	2053.13	—
(40%Imax)	2737.51	—
(50%Imax)	3421.89	—
(60%Imax)	4106.27	—
(70%Imax)	4790.65	—
(80%Imax)	5475.02	—
(90%Imax)	6159.4	—



- (10%Emax) 171.0943 ———
- (20%Emax) 342.1875 ———
- (30%Emax) 513.2825 ———
- (40%Emax) 684.3775 ———
- (50%Emax) 855.4725 ———
- (60%Emax) 1026.565 ———
- (70%Emax) 1197.66 ———
- (80%Emax) 1368.755 ———
- (90%Emax) 1539.85 ———



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

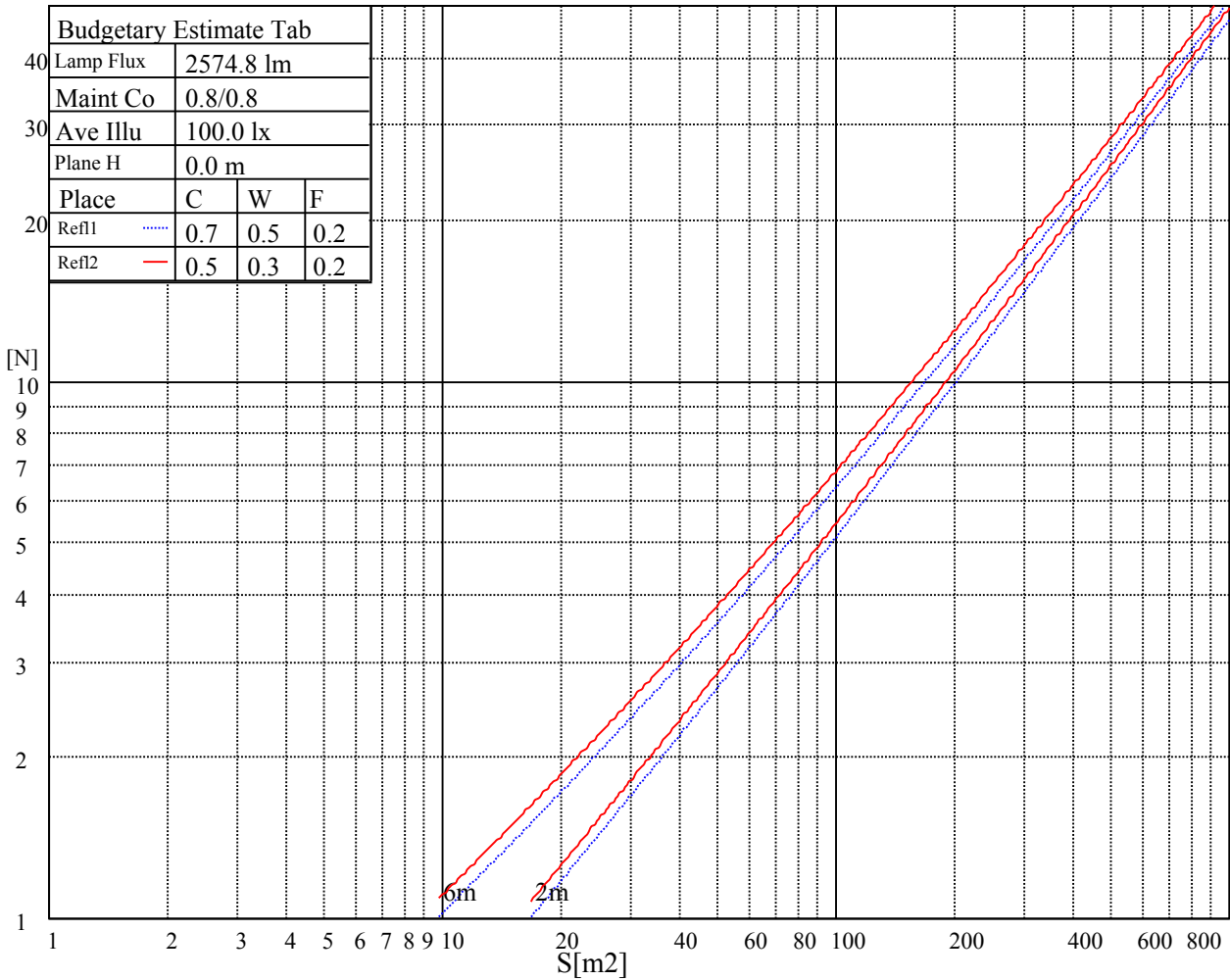
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

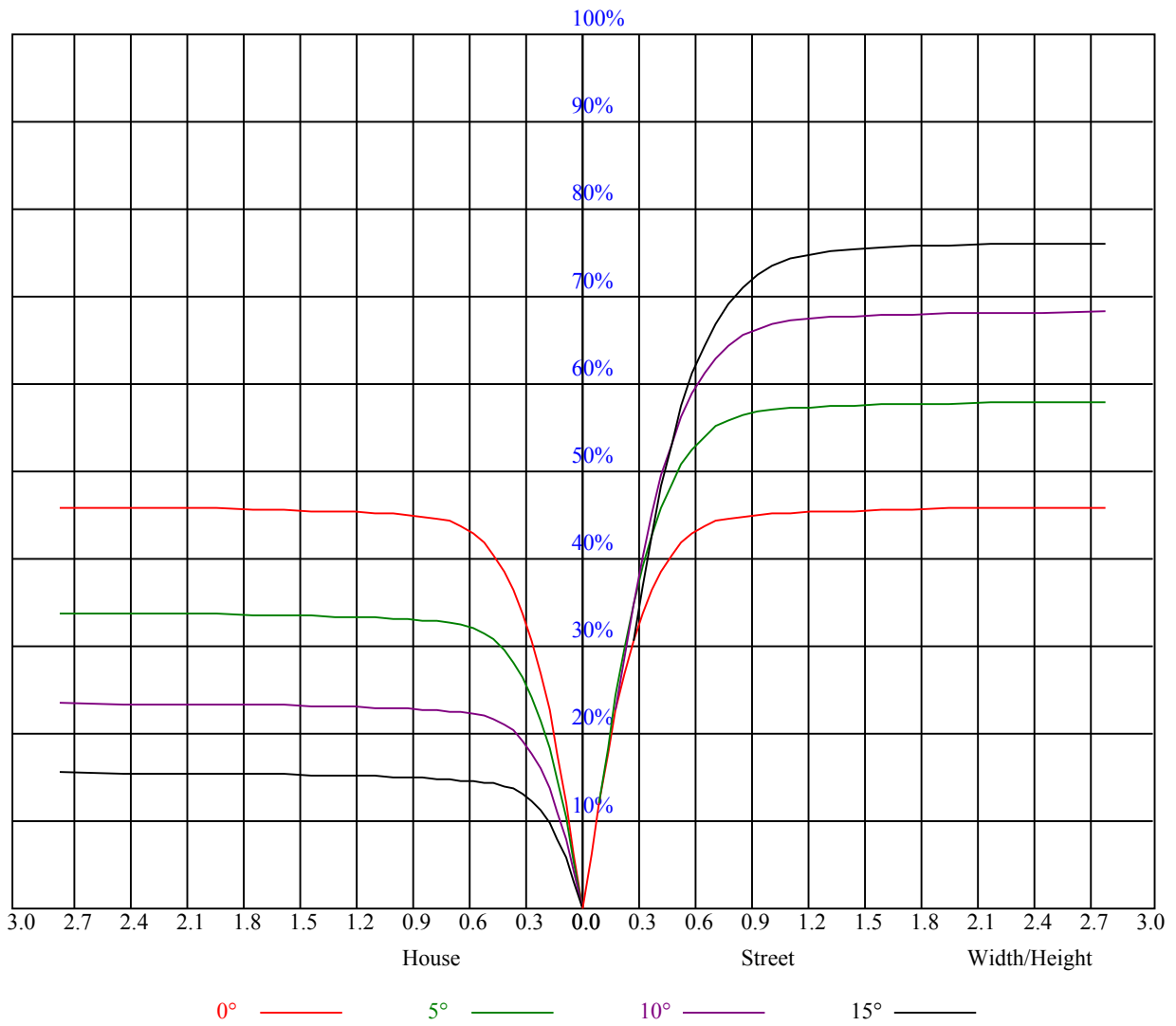


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	
4H	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	
	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	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	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	1.10	1.10	1.10	1.08	1.08	1.08	1.03	1.03	1.03	0.98	0.98	0.98	0.94	0.94	0.94	0.93
1	1.03	1.01	0.99	1.01	0.99	0.97	0.97	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.97	0.93	0.91	0.95	0.92	0.90	0.92	0.90	0.88	0.90	0.88	0.86	0.87	0.85	0.84	0.83
3	0.91	0.87	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.83	0.81	0.84	0.81	0.80	0.78
4	0.87	0.82	0.79	0.86	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.80	0.78	0.76	0.74
5	0.82	0.78	0.74	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.71
6	0.78	0.74	0.70	0.78	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.66	0.64
8	0.72	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.63	0.69	0.66	0.63	0.69	0.65	0.63	0.62
9	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.59
10	0.66	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.64	0.60	0.58	0.57



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	6790.78	6610.33	6436.52	6196.84	5941.10	5655.48	5292.36	4979.61	4649.15
45.0	6862.74	6819.56	6696.12	6543.90	6312.52	6066.75	5799.95	5447.35	5138.47
90.0	6847.24	6697.23	6559.40	6386.70	6139.27	5803.27	5523.18	5197.15	4869.46
135.0	6874.36	6867.17	6767.53	6620.84	6453.12	6220.08	5946.64	5576.88	5271.32
180.0	6790.78	6852.22	6878.24	6821.78	6632.47	6458.66	6275.99	6019.15	5654.37
225.0	6862.74	6839.49	6774.73	6618.08	6412.71	6133.18	5870.25	5573.00	5189.95
270.0	6847.24	6869.38	6820.67	6738.19	6585.97	6328.02	6099.97	5826.52	5448.45
315.0	6874.36	6792.99	6677.30	6491.87	6253.85	6015.83	5736.29	5351.03	5039.95
360.0	6790.78	6610.33	6436.52	6196.84	5941.10	5655.48	5292.36	4979.61	4649.15

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4254.48	3973.83	3695.96	3425.83	3104.78	2871.74	2658.08	2454.93	2239.05
45.0	4817.42	4414.45	4130.49	3781.76	3506.10	3252.02	3016.22	2732.81	2529.66
90.0	4554.49	4200.78	3910.18	3555.92	3292.99	3047.22	2776.54	2567.30	2389.61
135.0	4945.29	4626.45	4276.62	3992.10	3709.24	3371.59	3126.92	2843.51	2634.83
180.0	5353.80	5048.25	4723.32	4308.72	4039.71	3702.60	3440.23	3192.80	2911.60
225.0	4869.46	4461.50	4157.06	3897.45	3628.98	3315.68	3086.52	2862.33	2658.08
270.0	5137.37	4820.19	4498.03	4106.13	3840.99	3571.97	3312.36	3011.79	2790.93
315.0	4718.89	4388.99	4004.83	3753.53	3485.06	3235.42	2948.13	2725.61	2479.29
360.0	4254.48	3973.83	3695.96	3425.83	3104.78	2871.74	2658.08	2454.93	2239.05

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2074.65	1893.65	1759.69	1637.91	1502.30	1393.80	1221.10	1091.35	1067.27
45.0	2346.99	2177.06	1984.43	1838.29	1714.85	1564.29	1456.91	1351.73	1222.76
90.0	2178.72	2025.39	1882.58	1755.26	1604.15	1490.67	1382.73	1103.31	1103.31
135.0	2452.16	2283.34	2086.28	1944.02	1812.28	1693.27	1550.45	1439.19	1330.15
180.0	2700.15	2511.95	2339.80	2126.69	1978.34	1842.72	1720.94	1579.79	1472.96
225.0	2422.83	2247.91	2092.92	1947.34	1776.30	1660.61	1521.12	1418.16	1317.97
270.0	2545.16	2362.49	2188.68	1999.37	1852.13	1719.84	1611.90	1480.16	1372.22
315.0	2296.07	2125.58	1932.39	1798.44	1673.34	1533.29	1432.00	1334.02	1093.23
360.0	2074.65	1893.65	1759.69	1637.91	1502.30	1393.80	1221.10	1091.35	1067.27

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	970.24	873.42	776.72	658.87	569.09	486.28	408.73	322.55	261.66
45.0	1124.79	1003.56	902.82	804.84	707.42	616.09	510.36	431.76	361.46
90.0	1054.76	954.02	855.32	736.09	642.38	532.50	452.13	379.39	297.91
135.0	1227.19	1102.09	1001.35	880.68	782.70	686.94	574.02	490.99	414.04
180.0	1373.88	1247.12	1150.25	1025.70	924.96	822.55	723.47	603.35	517.56
225.0	1098.44	1098.44	1003.67	883.61	784.97	690.59	598.54	492.54	417.81
270.0	1278.11	1184.01	1065.56	970.35	870.71	748.93	654.83	566.27	464.42
315.0	1093.23	1022.82	929.83	834.29	712.35	619.46	531.95	433.86	364.17
360.0	970.24	873.42	776.72	658.87	569.09	486.28	408.73	322.55	261.66

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	210.45	158.70	126.59	97.09	80.48	68.42	59.45	51.15	46.05
45.0	297.25	281.75	215.05	141.04	107.83	88.84	74.56	62.00	54.69
90.0	242.34	195.23	156.43	119.29	97.42	81.20	69.25	58.18	51.59
135.0	326.59	280.09	280.09	165.73	125.93	102.46	84.91	71.96	62.27
180.0	438.40	364.78	283.96	283.96	217.15	133.73	106.83	86.96	72.73
225.0	349.72	288.12	234.70	177.85	141.59	107.22	87.62	73.18	60.45
270.0	391.90	311.09	281.20	281.20	159.81	120.39	96.81	79.60	66.98
315.0	300.63	232.54	187.15	149.90	114.03	92.16	76.22	64.49	53.86
360.0	210.45	158.70	126.59	97.09	80.48	68.42	59.45	51.15	46.05

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	41.96	38.69	35.54	33.71	32.22	31.11	30.11	29.61	29.12
45.0	49.04	43.45	40.02	37.25	35.04	32.88	31.55	30.67	30.00
90.0	46.55	41.52	38.47	36.15	33.71	32.22	30.94	30.11	29.61
135.0	53.47	48.10	43.73	39.52	36.87	34.26	32.66	31.44	30.44
180.0	60.28	53.25	46.66	42.57	39.36	36.20	34.26	32.71	31.44
225.0	53.25	47.71	42.40	39.19	36.64	34.60	32.71	31.55	30.72
270.0	55.91	49.54	44.67	40.80	37.81	34.93	33.21	31.61	30.67
315.0	47.83	43.18	39.52	36.15	34.10	32.44	31.00	30.22	29.56
360.0	41.96	38.69	35.54	33.71	32.22	31.11	30.11	29.61	29.12
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	28.89	28.73	28.40	28.12	27.68	26.63	25.68	24.52	23.41
45.0	29.39	28.95	28.67	28.45	28.01	27.62	26.79	25.74	24.36
90.0	29.12	28.73	28.40	28.01	27.62	26.90	25.91	24.91	23.86
135.0	29.78	29.34	29.01	28.56	28.23	27.90	27.34	26.29	25.35
180.0	30.33	29.67	29.12	28.84	28.51	28.12	27.73	27.07	26.24
225.0	30.11	29.56	29.23	28.95	28.45	27.95	27.18	26.18	25.13
270.0	30.06	29.50	29.17	28.95	28.62	28.29	27.84	27.23	25.96
315.0	29.12	28.89	28.78	28.56	28.12	27.73	27.18	25.96	24.91
360.0	28.89	28.73	28.40	28.12	27.68	26.63	25.68	24.52	23.41
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.81	20.54	19.32	18.32	17.10	16.38	15.72	15.22	14.78
45.0	23.08	21.86	20.65	19.15	18.21	17.27	16.50	15.83	15.33
90.0	22.31	21.03	19.54	18.54	17.55	16.50	15.94	15.44	15.00
135.0	24.24	22.75	21.48	19.98	18.93	17.88	16.94	16.16	15.67
180.0	25.35	23.91	22.75	21.59	19.98	18.93	17.93	16.99	16.16
225.0	23.97	22.42	21.15	19.87	18.76	17.60	16.77	16.11	15.55
270.0	24.85	23.58	22.36	20.76	19.48	18.49	17.33	16.55	15.89
315.0	23.69	22.42	20.81	19.54	18.32	17.33	16.55	15.89	15.39
360.0	21.81	20.54	19.32	18.32	17.10	16.38	15.72	15.22	14.78
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.34	13.95	13.62	13.28	12.95	12.62	12.29	12.01	11.68
45.0	14.89	14.39	14.06	13.73	13.34	13.01	12.68	12.34	12.07
90.0	14.50	14.17	13.78	13.45	13.12	12.79	12.51	12.12	11.79
135.0	15.11	14.78	14.34	13.95	13.62	13.28	12.90	12.62	12.23
180.0	15.67	15.22	14.78	14.34	13.95	13.62	13.23	12.90	12.51
225.0	15.11	14.72	14.23	13.89	13.51	13.06	12.79	12.51	12.07
270.0	15.39	15.00	14.56	14.17	13.78	13.45	13.12	12.73	12.40
315.0	14.95	14.50	14.12	13.78	13.45	13.01	12.68	12.40	12.07
360.0	14.34	13.95	13.62	13.28	12.95	12.62	12.29	12.01	11.68
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.40	11.07	10.85	10.63	10.46	10.19	10.02	9.80	9.80
45.0	11.73	11.40	11.13	10.85	10.68	10.41	10.24	10.02	9.74
90.0	11.46	11.29	11.02	10.79	10.57	10.35	10.13	9.91	9.74
135.0	11.90	11.62	11.35	11.13	10.85	10.63	10.35	10.19	9.91
180.0	12.18	11.90	11.57	11.29	11.02	10.74	10.52	10.35	10.13
225.0	11.85	11.51	11.29	11.02	10.74	10.57	10.30	10.13	9.91
270.0	12.12	11.73	11.46	11.18	10.90	10.63	10.41	10.24	10.02
315.0	11.68	11.40	11.13	10.90	10.68	10.46	10.24	10.02	9.80
360.0	11.40	11.07	10.85	10.63	10.46	10.19	10.02	9.80	9.80

Intensity data(cd)

C/γ(°)	90.0
0.0	9.80
45.0	9.74
90.0	9.74
135.0	9.80
180.0	9.91
225.0	9.74
270.0	9.80
315.0	9.80
360.0	9.80