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NATA

Client:

LumCAT: 2-2639-L

Luminaire: 92.70.411.00

Report No: 20231019-B018

Ballast type: AC

Test No: 20231019-C018

Voltage(V): 34.070

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.577

Lamp flux(lm): 2611.4

Power (W): 19.658

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2477.86, Efficiency(%): 94.89% , Luminous Efficacy(lm/W): 126.05

Central intensity(cd): 9890.027, Maximum intensity(cd): 9890.027

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=21.4

[C90/270]Total=21.4

Field angle(10%Imax): [C0/180]Total=55.4

[C90/270]Total=55.4

Beam angle of C0 plane : 21.44

Aveage BeamAngle(IEC 61341):21.44

Maximum s/h(1/2): C0_180=0.36 C90_270=0.36

Maximum s/h(1/4): C0_180=0.40 C90_270=0.40

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.89%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.073%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	9890.028	0.000	0	0.00%	0.00%
1.0	9827.201	9.434	9.434	0.36%	0.38%
2.0	9637.684	27.938	37.372	1.07%	1.51%
3.0	9344.310	45.399	82.771	1.74%	3.34%
4.0	8921.755	61.142	143.913	2.34%	5.81%
5.0	8390.845	74.478	218.391	2.85%	8.81%
6.0	7795.171	85.062	303.453	3.26%	12.25%
7.0	7196.452	93.053	396.506	3.56%	16.00%
8.0	6544.733	98.343	494.849	3.77%	19.97%
9.0	5888.931	100.768	595.617	3.86%	24.04%
10.0	5323.494	101.468	697.085	3.89%	28.13%
11.0	4799.365	101.148	798.233	3.87%	32.21%
12.0	4287.828	99.336	897.569	3.80%	36.22%
13.0	3815.385	96.165	993.734	3.68%	40.10%
14.0	3428.187	92.717	1086.451	3.55%	43.85%
15.0	3077.037	89.307	1175.758	3.42%	47.45%
16.0	2757.647	85.494	1261.252	3.27%	50.90%
17.0	2483.716	81.622	1342.874	3.13%	54.19%
18.0	2242.167	77.920	1420.794	2.98%	57.34%
19.0	2039.919	74.500	1495.293	2.85%	60.35%
20.0	1870.052	71.563	1566.857	2.74%	63.23%
21.0	1710.980	68.763	1635.62	2.63%	66.01%
22.0	1571.558	65.964	1701.584	2.53%	68.67%
23.0	1453.516	63.474	1765.058	2.43%	71.23%
24.0	1321.228	60.666	1825.724	2.32%	73.68%
25.0	1228.165	57.968	1883.691	2.22%	76.02%
26.0	1123.415	55.509	1939.201	2.13%	78.26%
27.0	1051.974	53.221	1992.422	2.04%	80.41%
28.0	958.738	50.907	2043.329	1.95%	82.46%
29.0	862.631	47.652	2090.981	1.82%	84.39%
30.0	767.907	44.024	2135.005	1.69%	86.16%
31.0	678.158	40.242	2175.247	1.54%	87.79%
32.0	584.984	36.188	2211.435	1.39%	89.25%
33.0	496.210	31.852	2243.287	1.22%	90.53%
34.0	419.629	27.716	2271.003	1.06%	91.65%
35.0	342.078	23.656	2294.659	0.91%	92.61%
36.0	285.625	19.986	2314.645	0.77%	93.41%
37.0	244.608	17.293	2331.938	0.66%	94.11%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	185.227	14.347	2346.286	0.55%	94.69%
39.0	151.171	11.482	2357.768	0.44%	95.15%
40.0	105.718	8.959	2366.727	0.34%	95.51%
41.0	83.978	6.755	2373.482	0.26%	95.79%
42.0	65.843	5.443	2378.926	0.21%	96.01%
43.0	54.883	4.472	2383.398	0.17%	96.19%
44.0	47.182	3.852	2387.25	0.15%	96.34%
45.0	41.404	3.404	2390.654	0.13%	96.48%
46.0	37.315	3.079	2393.733	0.12%	96.60%
47.0	34.361	2.851	2396.584	0.11%	96.72%
48.0	32.216	2.691	2399.275	0.10%	96.83%
49.0	30.444	2.573	2401.848	0.10%	96.93%
50.0	29.268	2.490	2404.338	0.10%	97.03%
51.0	28.424	2.441	2406.779	0.09%	97.13%
52.0	27.926	2.418	2409.197	0.09%	97.23%
53.0	27.767	2.423	2411.619	0.09%	97.33%
54.0	27.891	2.453	2414.072	0.09%	97.43%
55.0	28.327	2.509	2416.582	0.10%	97.53%
56.0	28.929	2.587	2419.169	0.10%	97.63%
57.0	29.414	2.668	2421.837	0.10%	97.74%
58.0	29.808	2.739	2424.575	0.10%	97.85%
59.0	29.607	2.778	2427.353	0.11%	97.96%
60.0	28.895	2.764	2430.117	0.11%	98.07%
61.0	27.559	2.694	2432.811	0.10%	98.18%
62.0	25.622	2.563	2435.374	0.10%	98.29%
63.0	23.491	2.389	2437.762	0.09%	98.38%
64.0	21.567	2.211	2439.973	0.08%	98.47%
65.0	19.990	2.057	2442.03	0.08%	98.55%
66.0	18.661	1.928	2443.958	0.07%	98.63%
67.0	17.727	1.830	2445.788	0.07%	98.71%
68.0	16.966	1.757	2447.545	0.07%	98.78%
69.0	16.302	1.697	2449.242	0.06%	98.84%
70.0	15.803	1.649	2450.891	0.06%	98.91%
71.0	15.333	1.609	2452.501	0.06%	98.98%
72.0	14.876	1.571	2454.071	0.06%	99.04%
73.0	14.516	1.537	2455.608	0.06%	99.10%
74.0	14.191	1.509	2457.118	0.06%	99.16%
75.0	13.866	1.482	2458.6	0.06%	99.22%

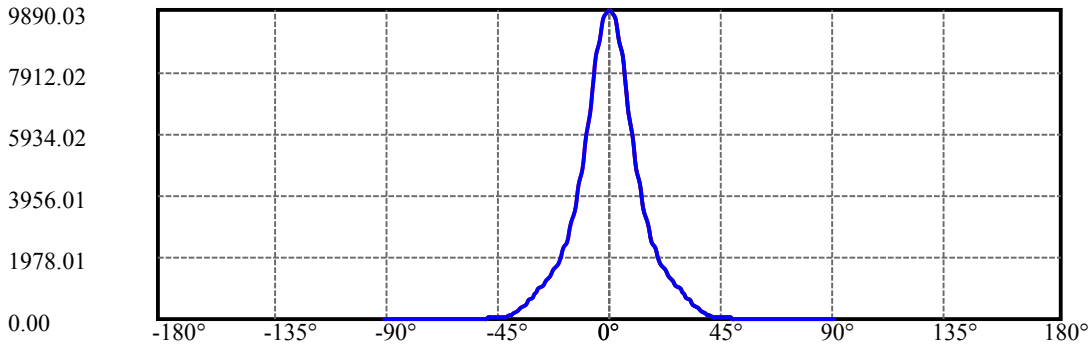
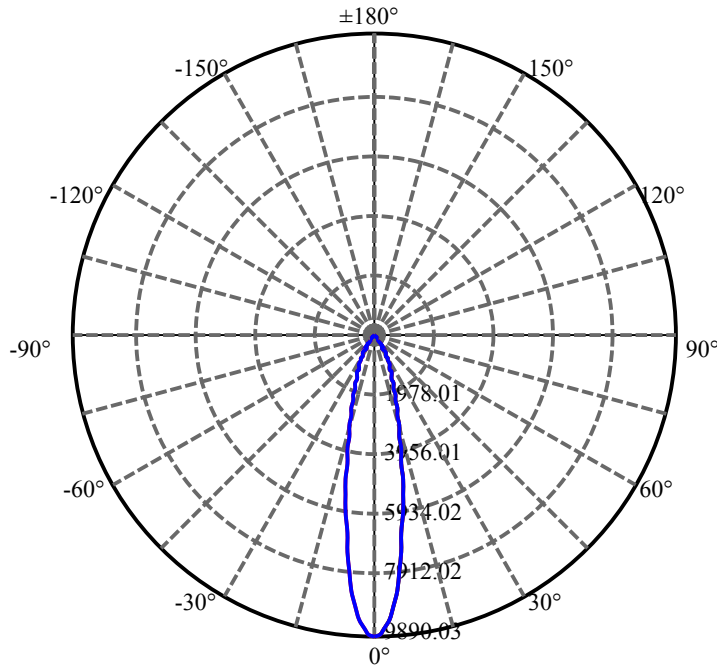
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	13.555	1.456	2460.056	0.06%	99.28%
77.0	13.299	1.432	2461.487	0.05%	99.34%
78.0	13.015	1.409	2462.896	0.05%	99.40%
79.0	12.766	1.385	2464.281	0.05%	99.45%
80.0	12.482	1.361	2465.642	0.05%	99.51%
81.0	12.185	1.334	2466.976	0.05%	99.56%
82.0	11.908	1.307	2468.283	0.05%	99.61%
83.0	11.624	1.279	2469.562	0.05%	99.66%
84.0	11.389	1.254	2470.816	0.05%	99.72%
85.0	11.126	1.229	2472.045	0.05%	99.77%
86.0	10.918	1.205	2473.25	0.05%	99.81%
87.0	10.718	1.184	2474.434	0.05%	99.86%
88.0	10.490	1.162	2475.595	0.04%	99.91%
89.0	10.323	1.141	2476.736	0.04%	99.95%
90.0	10.233	1.127	2477.863	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2135.01	81.76%	86.16%
0-40	2366.73	90.63%	95.51%
0-60	2430.12	93.06%	98.07%
0-90	2476.74	94.84%	99.95%
0-120	2476.74	94.84%	99.95%
0-180	2477.86	94.89%	100.00%
60-90	46.62	1.79%	1.88%
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%
0-26.81	1982.29	75.91%	80.00%

ZONAL LUMEN SUMMARY

0-10	697.09
10-20	869.77
20-30	568.15
30-40	231.72
40-50	37.61
50-60	25.78
60-70	20.77
70-80	14.75
80-90	11.09
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: —————

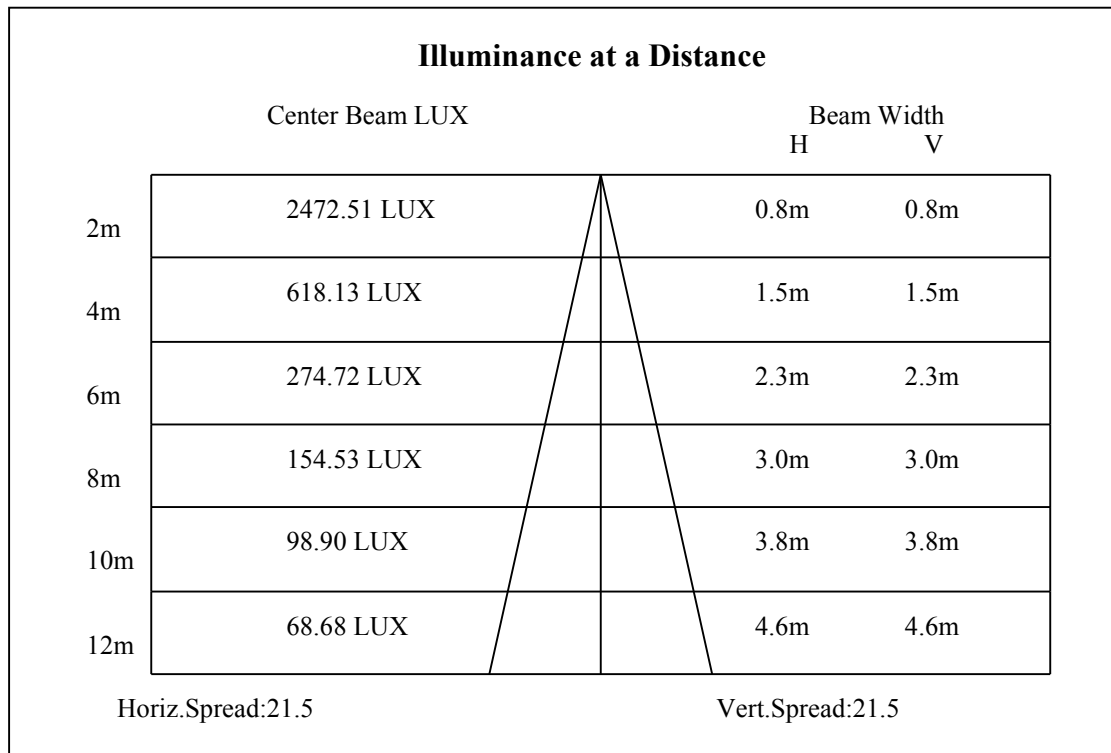
C90/C270: —————

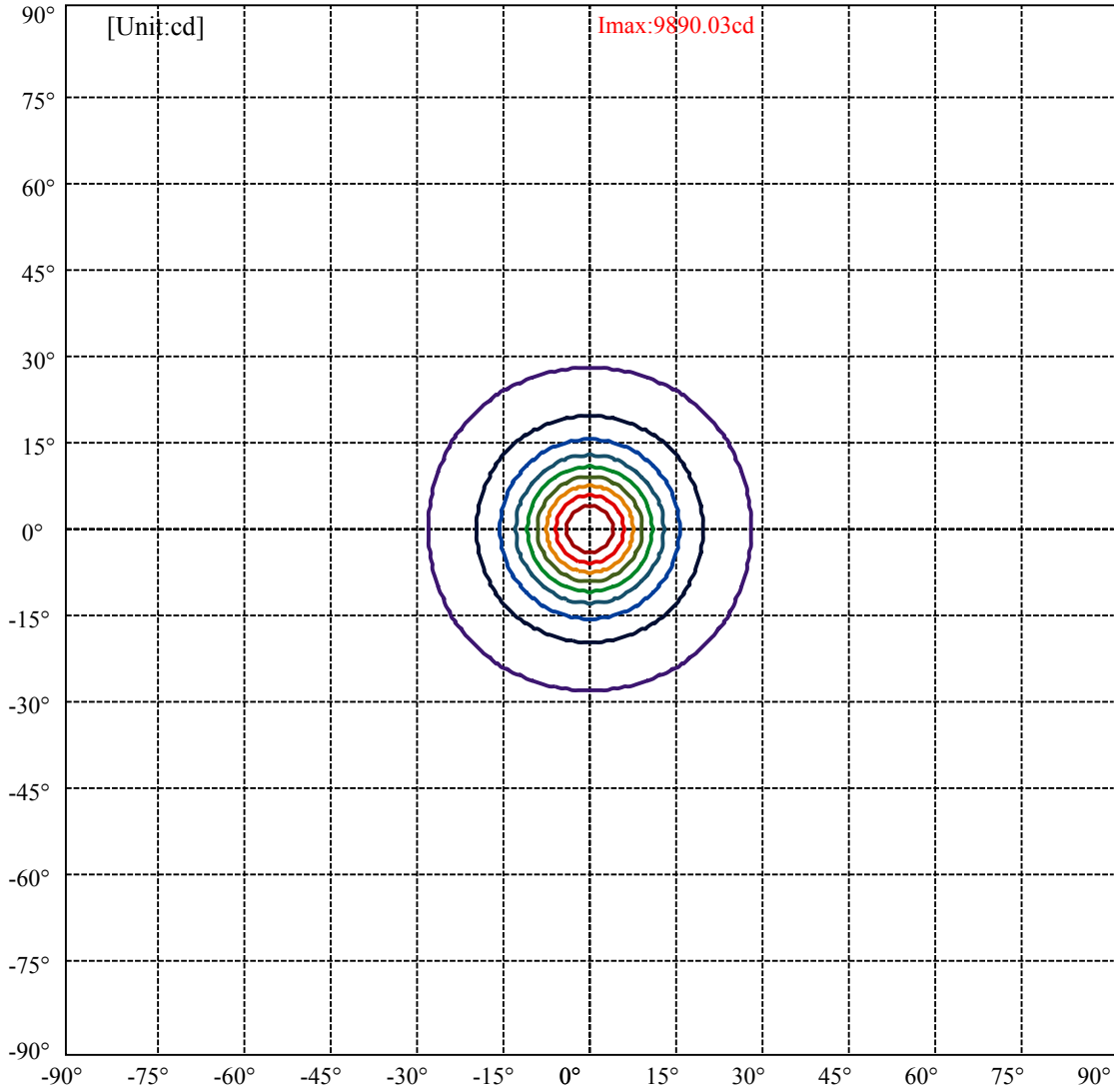
Field angle(10%Imax):C0/180Left:27.7 Right:27.7

:C90/270Left:27.7 Right:27.7

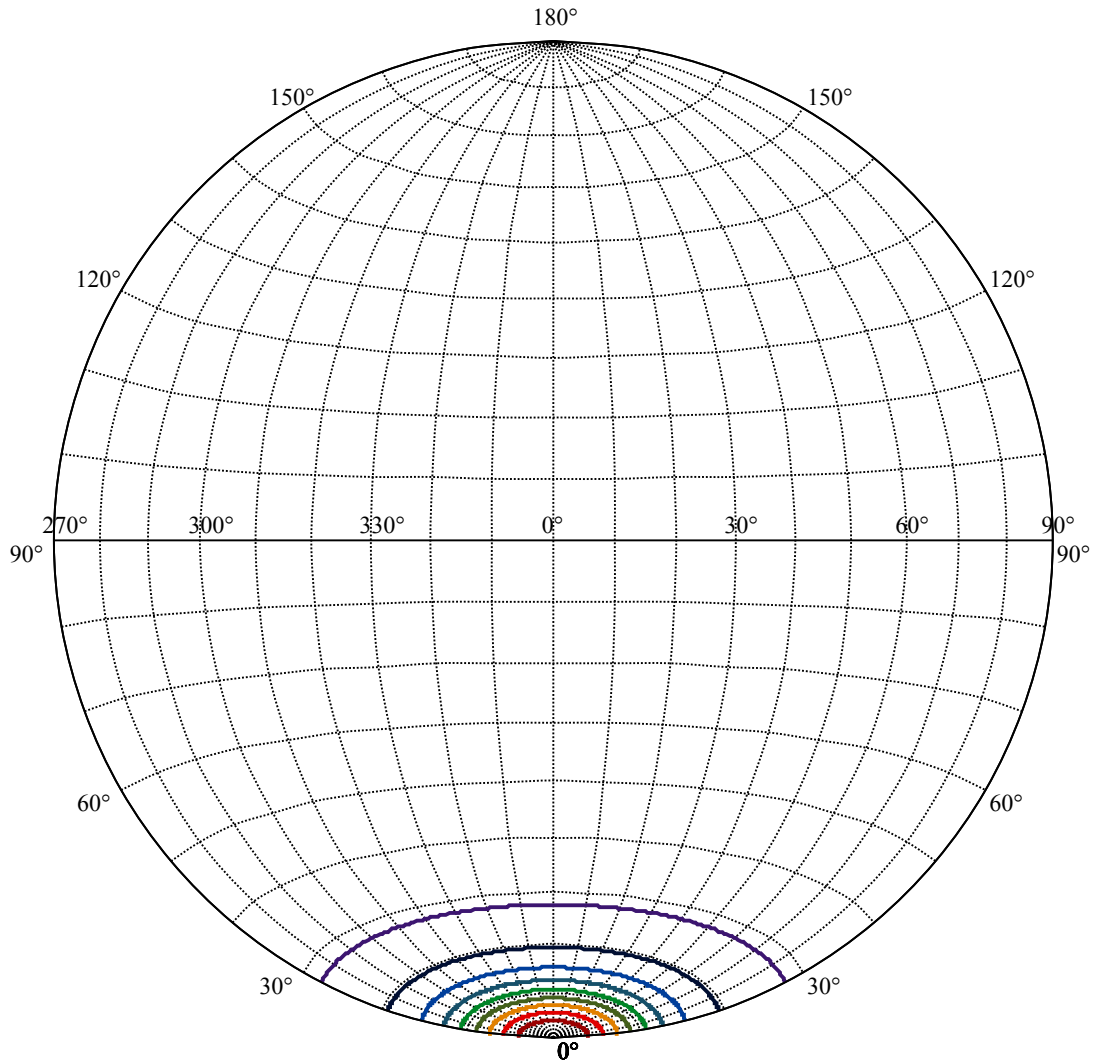
Beam Angle(50%Imax):C0/180Left:10.7 Right:10.7

:C90/270Left:10.7 Right:10.7





(10%Imax) 989.003	—
(20%Imax) 1978.01	—
(30%Imax) 2967.01	—
(40%Imax) 3956.01	—
(50%Imax) 4945.01	—
(60%Imax) 5934.02	—
(70%Imax) 6923.02	—
(80%Imax) 7912.02	—
(90%Imax) 8901.02	—



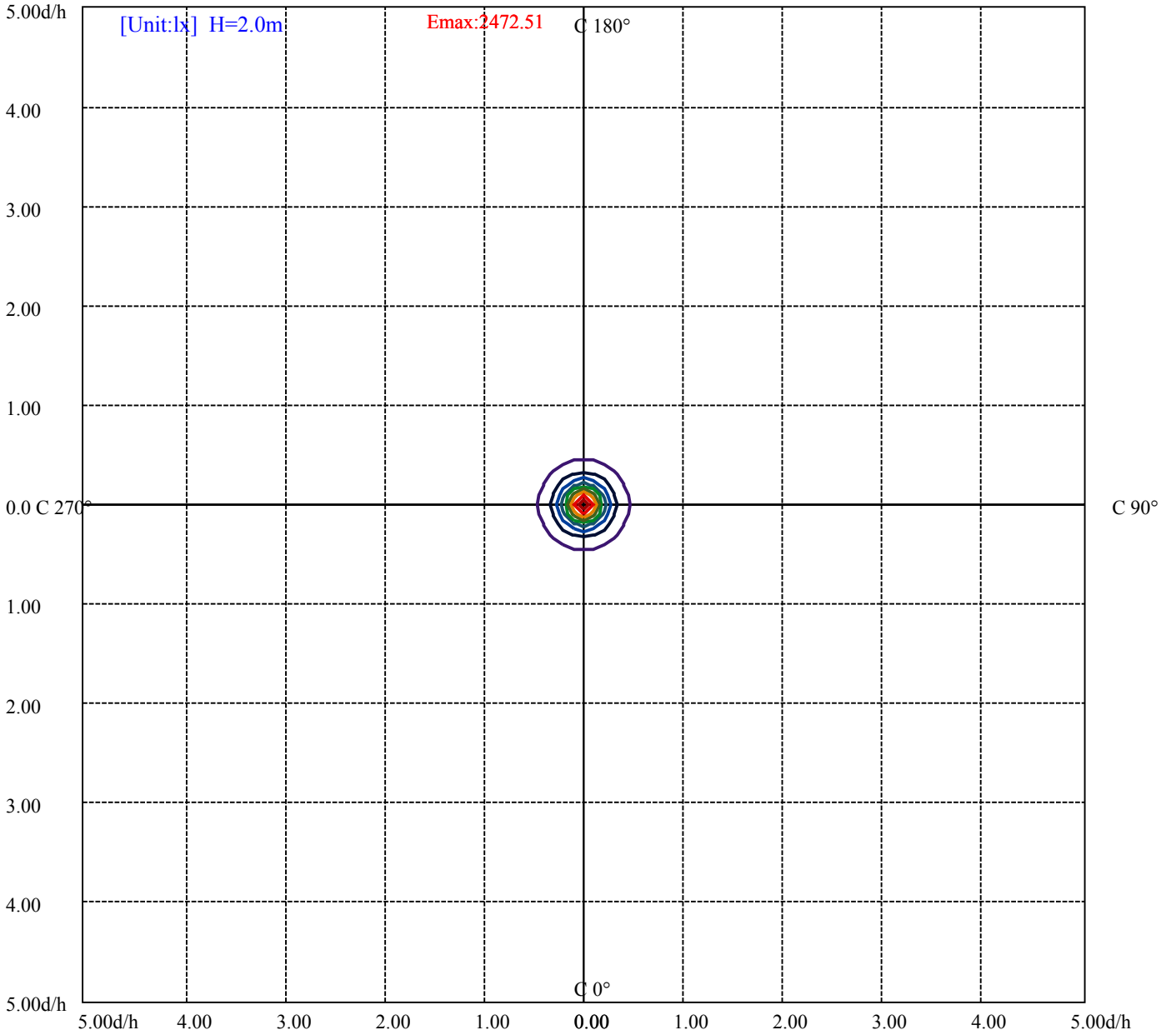
House

[Unit:cd]

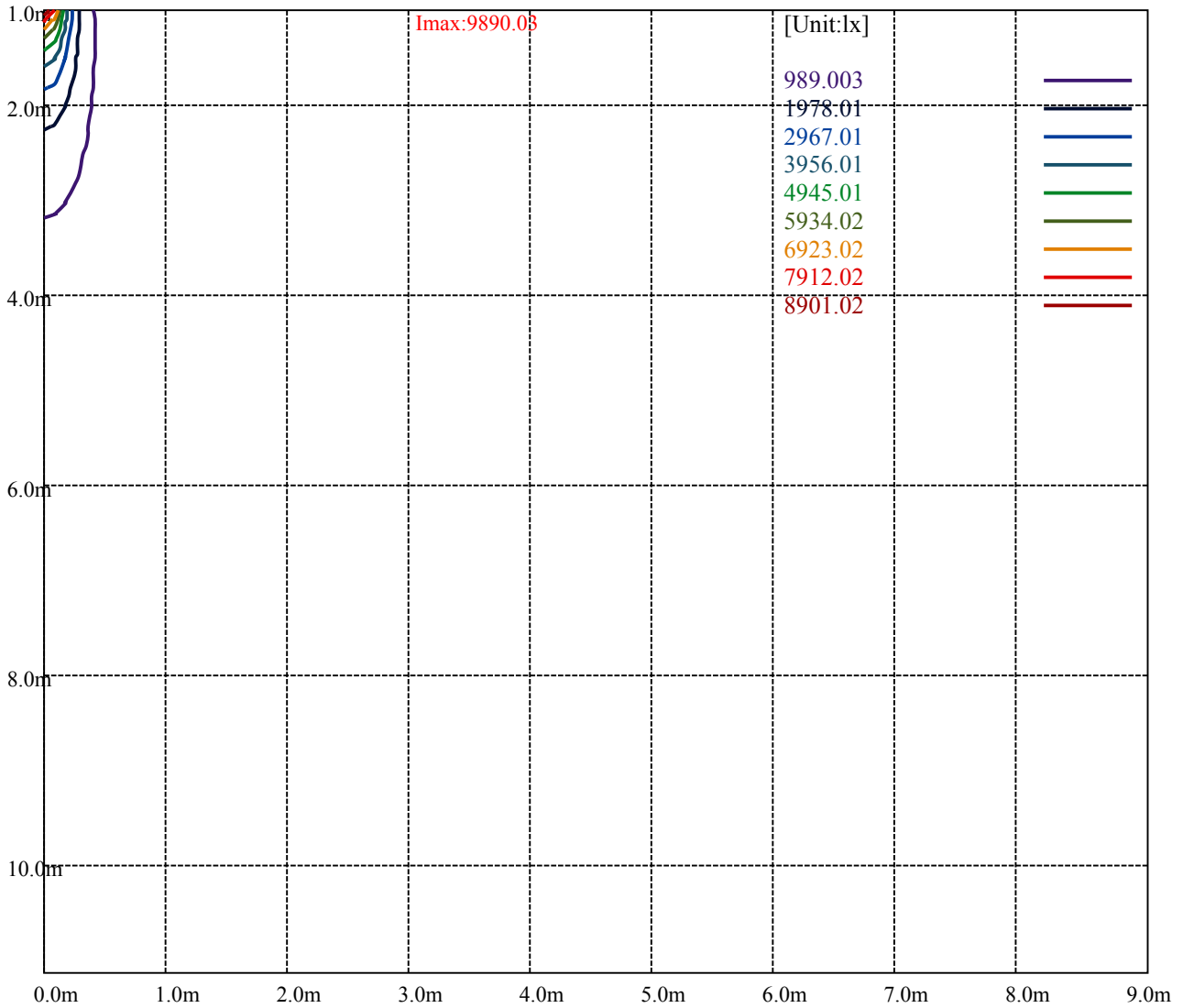
Road

Imax:9890.03

(10%Imax) 989.003	—
(20%Imax) 1978.01	—
(30%Imax) 2967.01	—
(40%Imax) 3956.01	—
(50%Imax) 4945.01	—
(60%Imax) 5934.02	—
(70%Imax) 6923.02	—
(80%Imax) 7912.02	—
(90%Imax) 8901.02	—



- (10%Emax) 247.2505
- (20%Emax) 494.5
- (30%Emax) 741.7525
- (40%Emax) 989.0025
- (50%Emax) 1236.252
- (60%Emax) 1483.502
- (70%Emax) 1730.752
- (80%Emax) 1978.002
- (90%Emax) 2225.255



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

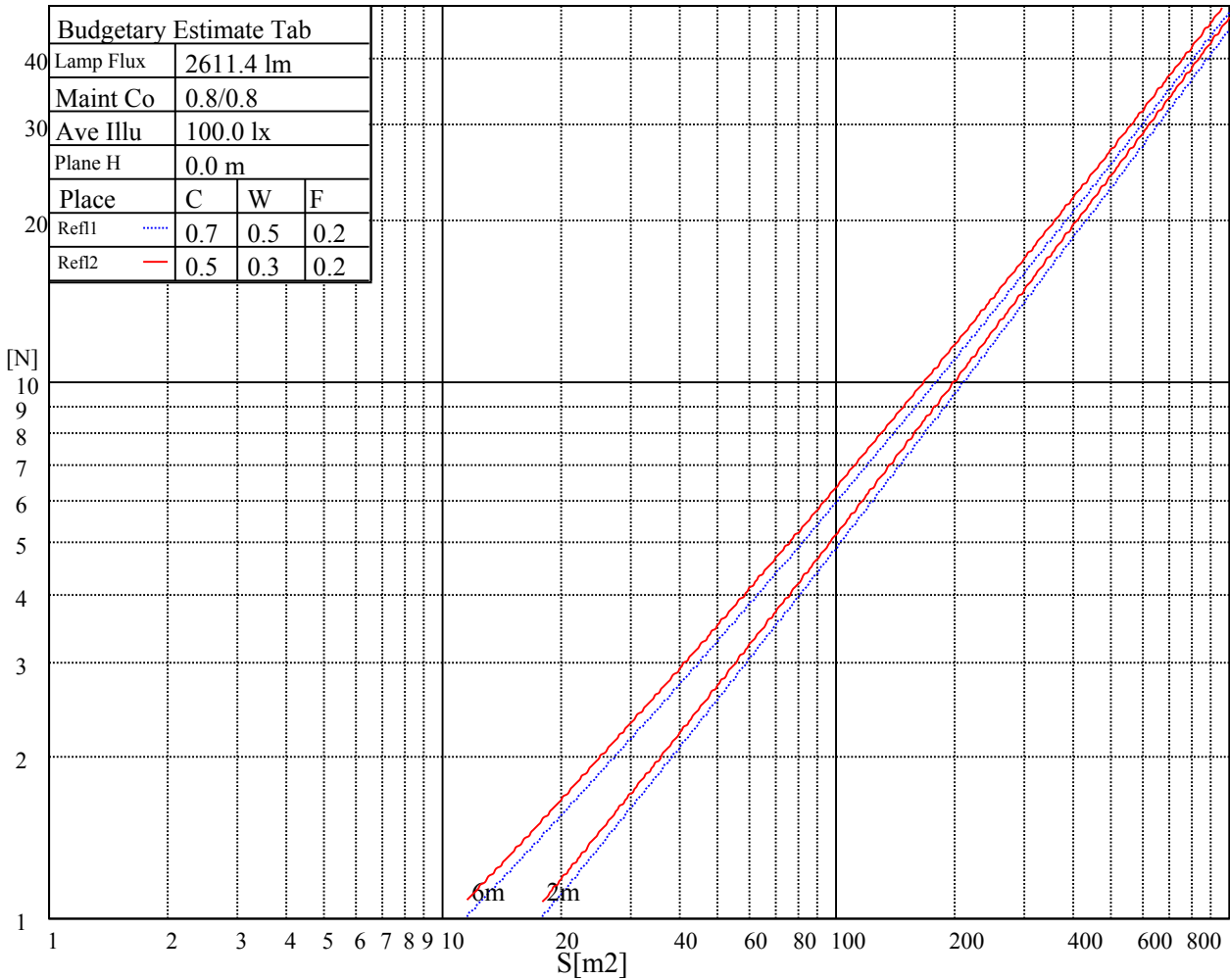
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

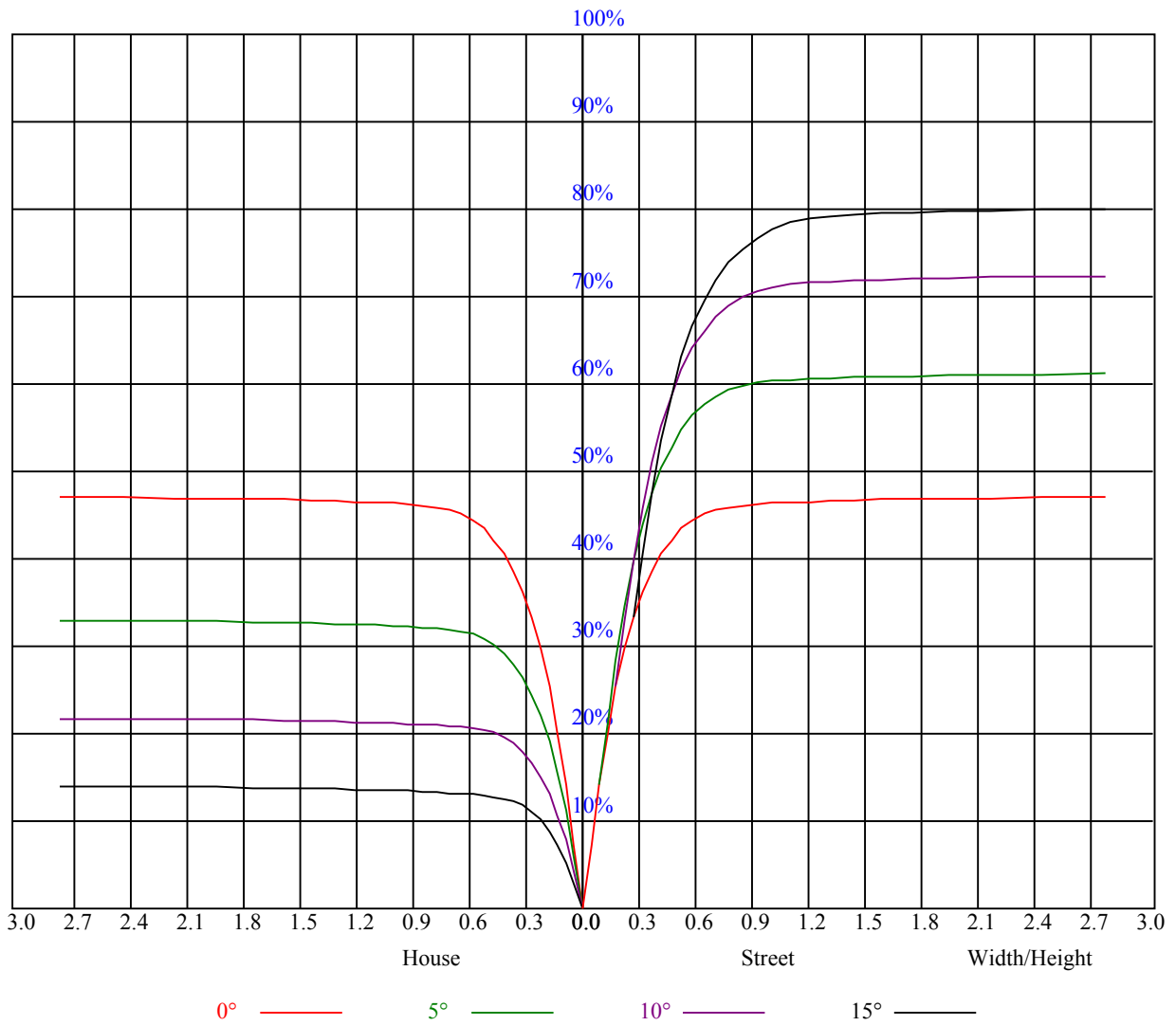


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.06	1.04	1.02	1.04	1.02	1.00	1.00	0.99	0.97	0.97	0.95	0.94	0.93	0.92	0.92	0.90
2	1.00	0.97	0.94	0.98	0.95	0.93	0.95	0.93	0.91	0.93	0.91	0.89	0.90	0.88	0.87	0.86
3	0.95	0.91	0.88	0.93	0.90	0.87	0.91	0.88	0.86	0.89	0.86	0.84	0.87	0.85	0.83	0.82
4	0.90	0.86	0.82	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.78
5	0.86	0.82	0.78	0.85	0.81	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.76	0.75
6	0.82	0.78	0.74	0.82	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.73	0.72
7	0.79	0.74	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.75	0.72	0.70	0.69
8	0.76	0.71	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.67	0.66
9	0.73	0.69	0.66	0.73	0.68	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.64
10	0.71	0.66	0.63	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.63	0.62



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	9859.58	9648.13	9330.40	8906.95	8407.10	7703.01	7109.06	6506.82	5902.91
45.0	9929.88	9854.05	9665.29	9355.87	8939.05	8303.59	7732.90	7142.28	6377.29
90.0	9836.33	9617.69	9195.89	8760.81	8234.40	7654.85	6910.34	6300.35	5709.17
135.0	9934.31	9821.94	9613.81	9277.82	8716.53	8197.31	7625.51	7058.14	6319.72
180.0	9859.58	9933.76	9898.88	9714.00	9428.38	8936.29	8450.28	7896.74	7317.75
225.0	9929.88	9890.03	9723.97	9476.54	9002.16	8513.94	7969.26	7235.82	6639.11
270.0	9836.33	9936.52	9933.76	9770.46	9541.85	9184.27	8611.36	8068.34	7323.28
315.0	9934.31	9915.49	9739.47	9492.04	9104.56	8633.50	7952.65	7363.14	6768.64
360.0	9859.58	9648.13	9330.40	8906.95	8407.10	7703.01	7109.06	6506.82	5902.91
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5206.56	4706.72	4243.96	3816.08	3347.79	3021.75	2662.51	2412.86	2203.63
45.0	5778.36	5237.00	4615.94	4160.38	3655.00	3290.22	2964.19	2673.58	2422.83
90.0	5031.09	4539.55	4086.20	3581.38	3231.54	2922.67	2578.37	2344.78	2144.40
135.0	5730.20	5200.47	4707.27	4132.70	3723.64	3351.11	3016.22	2655.31	2409.54
180.0	6571.03	5973.21	5417.46	4904.33	4294.89	3865.34	3490.04	3160.14	2774.32
225.0	5894.60	5333.87	4819.64	4357.44	3837.67	3466.80	3134.67	2835.21	2511.95
270.0	6735.43	6162.52	5589.61	4914.85	4424.41	3980.48	3586.36	3177.30	2857.91
315.0	6164.18	5434.62	4914.85	4435.48	4008.15	3527.13	3183.94	2802.00	2545.16
360.0	5206.56	4706.72	4243.96	3816.08	3347.79	3021.75	2662.51	2412.86	2203.63
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1981.11	1823.35	1689.39	1564.85	1428.12	1325.17	1091.63	1091.63	1026.26
45.0	2161.00	1978.34	1823.90	1686.62	1537.17	1428.68	1329.59	1211.69	1121.46
90.0	1969.48	1777.96	1646.22	1523.33	1417.05	1295.27	1091.02	1091.02	1004.00
135.0	2154.36	1976.68	1821.69	1652.86	1537.72	1432.00	1334.02	1216.67	1127.55
180.0	2531.32	2239.05	2046.42	1836.63	1696.03	1572.04	1459.67	1336.79	1248.22
225.0	2288.32	2091.26	1921.88	1734.23	1604.70	1463.55	1362.25	1202.28	1086.43
270.0	2590.55	2362.49	2106.76	1929.63	1750.28	1620.75	1509.49	1380.52	1285.31
315.0	2261.19	2070.22	1904.16	1759.69	1601.38	1490.67	1392.14	1294.72	1088.09
360.0	1981.11	1823.35	1689.39	1564.85	1428.12	1325.17	1091.63	1091.63	1026.26
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	938.19	850.29	740.30	651.95	566.32	464.58	391.24	324.93	249.98
45.0	1009.65	920.53	830.86	720.70	633.25	548.55	468.84	378.07	313.30
90.0	913.56	802.41	713.01	626.16	521.49	444.21	373.64	308.54	236.58
135.0	1038.43	950.97	841.37	755.02	668.12	561.84	483.24	409.06	326.03
180.0	1162.98	1079.40	997.47	893.41	806.50	716.83	605.01	523.65	428.44
225.0	1067.60	981.14	874.97	788.79	700.78	613.21	509.81	435.69	367.71
270.0	1197.30	1086.04	994.15	908.91	819.23	708.53	620.51	536.38	459.43
315.0	1088.09	999.13	908.91	798.31	709.58	622.12	517.39	440.73	355.15
360.0	938.19	850.29	740.30	651.95	566.32	464.58	391.24	324.93	249.98
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	199.16	157.09	115.25	91.28	73.45	60.83	49.87	43.67	39.19
45.0	282.86	282.86	146.08	114.36	90.72	73.34	58.23	49.93	42.46
90.0	188.81	149.01	116.85	87.62	70.96	59.01	48.66	42.84	38.64
135.0	280.64	280.64	154.60	121.39	95.98	73.90	61.39	52.25	45.72
180.0	360.91	299.46	284.52	219.42	142.59	111.98	83.81	68.14	56.79
225.0	307.16	239.13	192.41	152.50	113.09	89.29	68.58	57.18	49.21
270.0	372.53	311.09	282.30	282.30	149.01	116.74	86.41	69.58	57.73
315.0	292.93	237.58	189.81	140.49	109.93	86.74	69.80	55.46	47.71
360.0	199.16	157.09	115.25	91.28	73.45	60.83	49.87	43.67	39.19

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	35.98	32.94	31.16	29.56	28.62	27.95	27.40	27.40	27.46
45.0	38.30	35.32	32.44	30.78	29.50	28.51	27.73	27.46	27.40
90.0	34.87	32.66	31.00	29.45	28.51	27.84	27.51	27.40	27.73
135.0	39.85	36.59	34.04	32.05	30.22	29.12	28.29	27.90	27.84
180.0	48.77	42.95	37.92	34.98	32.33	30.72	29.56	28.62	28.17
225.0	43.51	38.53	35.59	33.38	31.61	30.06	29.12	28.45	28.23
270.0	47.83	42.40	38.42	35.37	32.60	30.94	29.67	28.73	28.01
315.0	42.12	37.14	34.32	32.16	30.17	29.01	28.12	27.46	27.29
360.0	35.98	32.94	31.16	29.56	28.62	27.95	27.40	27.40	27.46
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	27.90	28.67	29.28	29.61	29.56	28.73	27.40	25.52	23.08
45.0	27.57	28.06	28.78	29.45	29.72	29.56	28.73	26.85	24.80
90.0	28.29	28.95	29.72	29.89	29.72	28.56	27.07	25.02	22.53
135.0	28.06	28.67	29.45	30.06	30.44	30.22	29.28	27.84	25.19
180.0	27.95	28.17	28.56	29.01	29.72	30.06	29.95	29.28	28.06
225.0	28.34	28.62	29.12	29.78	30.28	30.17	29.61	28.40	26.74
270.0	27.73	27.79	28.23	28.67	29.56	29.95	30.00	29.50	28.06
315.0	27.29	27.68	28.29	28.84	29.45	29.61	29.12	28.06	26.51
360.0	27.90	28.67	29.28	29.61	29.56	28.73	27.40	25.52	23.08
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.15	19.43	18.38	17.60	16.77	16.22	15.72	15.28	14.89
45.0	22.86	20.59	19.32	18.21	17.38	16.61	16.05	15.55	15.11
90.0	20.70	19.37	18.10	17.27	16.61	16.11	15.44	15.06	14.72
135.0	23.08	21.20	19.37	18.32	17.60	16.88	16.11	15.55	15.11
180.0	25.79	23.75	21.81	19.93	18.76	17.66	16.99	16.44	15.78
225.0	24.08	22.03	20.43	19.10	17.93	17.21	16.50	16.00	15.55
270.0	26.35	24.30	22.25	20.15	18.93	18.05	17.16	16.61	16.05
315.0	23.91	21.86	20.26	18.71	17.82	16.99	16.44	15.94	15.44
360.0	21.15	19.43	18.38	17.60	16.77	16.22	15.72	15.28	14.89
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	14.45	14.17	13.89	13.62	13.28	13.06	12.73	12.51	12.23
45.0	14.72	14.39	14.00	13.73	13.51	13.17	12.95	12.73	12.40
90.0	14.23	13.95	13.67	13.40	13.12	12.90	12.62	12.34	12.07
135.0	14.72	14.39	14.06	13.73	13.45	13.23	12.90	12.68	12.40
180.0	15.39	14.95	14.61	14.23	13.89	13.62	13.34	13.06	12.79
225.0	15.00	14.61	14.28	13.95	13.56	13.34	13.06	12.79	12.51
270.0	15.55	15.11	14.72	14.34	14.00	13.73	13.40	13.12	12.90
315.0	14.95	14.56	14.28	13.95	13.62	13.34	13.12	12.90	12.57
360.0	14.45	14.17	13.89	13.62	13.28	13.06	12.73	12.51	12.23
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.90	11.68	11.40	11.24	10.96	10.74	10.57	10.35	10.24
45.0	12.18	11.85	11.57	11.35	11.07	10.85	10.68	10.41	10.24
90.0	11.73	11.51	11.29	11.02	10.85	10.68	10.46	10.24	10.19
135.0	12.12	11.85	11.51	11.35	11.02	10.85	10.68	10.41	10.24
180.0	12.51	12.18	11.85	11.62	11.35	11.13	10.90	10.68	10.52
225.0	12.23	11.96	11.68	11.40	11.24	10.96	10.74	10.57	10.35
270.0	12.51	12.29	12.01	11.68	11.35	11.18	10.90	10.68	10.52
315.0	12.29	11.96	11.68	11.46	11.18	10.96	10.79	10.57	10.30
360.0	11.90	11.68	11.40	11.24	10.96	10.74	10.57	10.35	10.24

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.24
45.0	10.24
90.0	10.19
135.0	10.24
180.0	10.24
225.0	10.24
270.0	10.30
315.0	10.19
360.0	10.24