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NATA

Client:

LumCAT: 2-2645-L

Luminaire: 92.70.411.00

Report No: 20231019-B004

Ballast type: AC

Test No: 20231019-C004

Voltage(V): 34.870

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.576

Lamp flux(lm): 2611.4

Power (W): 20.085

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2456.46, Efficiency(%): 94.07% , Luminous Efficacy(lm/W): 122.30

Central intensity(cd): 5248.213, Maximum intensity(cd): 5248.213

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=39.8

[C90/270]Total=39.8

Field angle(10%Imax): [C0/180]Total=63.2

[C90/270]Total=63.2

Maximum s/h(1/2): C0_180=0.66 C90_270=0.66

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.07%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.116%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5248.213	0.000	0	0.00%	0.00%
1.0	5239.218	5.018	5.018	0.19%	0.20%
2.0	5212.372	15.001	20.019	0.57%	0.81%
3.0	5174.247	24.841	44.861	0.95%	1.83%
4.0	5113.842	34.438	79.298	1.32%	3.23%
5.0	5043.336	43.696	122.994	1.67%	5.01%
6.0	4960.374	52.572	175.566	2.01%	7.15%
7.0	4871.878	61.029	236.594	2.34%	9.63%
8.0	4763.454	68.958	305.553	2.64%	12.44%
9.0	4658.974	76.364	381.916	2.92%	15.55%
10.0	4529.308	83.151	465.067	3.18%	18.93%
11.0	4409.606	89.318	554.385	3.42%	22.57%
12.0	4266.102	94.838	649.223	3.63%	26.43%
13.0	4114.226	99.453	748.676	3.81%	30.48%
14.0	3935.641	103.038	851.714	3.95%	34.67%
15.0	3752.836	105.551	957.265	4.04%	38.97%
16.0	3549.204	106.995	1064.26	4.10%	43.32%
17.0	3319.140	106.959	1171.219	4.10%	47.68%
18.0	3097.380	105.794	1277.013	4.05%	51.99%
19.0	2865.863	103.748	1380.761	3.97%	56.21%
20.0	2608.746	100.201	1480.962	3.84%	60.29%
21.0	2378.198	95.759	1576.721	3.67%	64.19%
22.0	2137.410	90.743	1667.464	3.47%	67.88%
23.0	1928.658	85.317	1752.781	3.27%	71.35%
24.0	1720.044	79.774	1832.555	3.05%	74.60%
25.0	1474.994	72.648	1905.203	2.78%	77.56%
26.0	1289.919	65.266	1970.469	2.50%	80.22%
27.0	1143.391	59.531	2030.001	2.28%	82.64%
28.0	1000.496	54.279	2084.28	2.08%	84.85%
29.0	859.510	48.663	2132.943	1.86%	86.83%
30.0	723.070	42.729	2175.672	1.64%	88.57%
31.0	597.694	36.755	2212.427	1.41%	90.07%
32.0	484.849	31.014	2243.44	1.19%	91.33%
33.0	375.394	25.343	2268.783	0.97%	92.36%
34.0	293.886	20.254	2289.038	0.78%	93.18%
35.0	234.492	16.409	2305.447	0.63%	93.85%
36.0	171.437	12.925	2318.372	0.49%	94.38%
37.0	142.286	10.232	2328.604	0.39%	94.79%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	102.010	8.154	2336.758	0.31%	95.13%
39.0	88.158	6.491	2343.249	0.25%	95.39%
40.0	78.069	5.797	2349.047	0.22%	95.63%
41.0	69.317	5.248	2354.295	0.20%	95.84%
42.0	62.716	4.797	2359.092	0.18%	96.04%
43.0	56.177	4.404	2363.496	0.17%	96.22%
44.0	51.403	4.060	2367.556	0.16%	96.38%
45.0	46.947	3.780	2371.336	0.14%	96.53%
46.0	43.349	3.531	2374.867	0.14%	96.68%
47.0	40.028	3.316	2378.184	0.13%	96.81%
48.0	37.288	3.125	2381.309	0.12%	96.94%
49.0	34.900	2.964	2384.273	0.11%	97.06%
50.0	32.769	2.821	2387.095	0.11%	97.18%
51.0	30.915	2.694	2389.789	0.10%	97.29%
52.0	29.254	2.582	2392.371	0.10%	97.39%
53.0	27.767	2.480	2394.852	0.09%	97.49%
54.0	26.438	2.389	2397.241	0.09%	97.59%
55.0	25.297	2.309	2399.55	0.09%	97.68%
56.0	24.273	2.240	2401.79	0.09%	97.77%
57.0	23.359	2.178	2403.968	0.08%	97.86%
58.0	22.487	2.120	2406.088	0.08%	97.95%
59.0	21.768	2.069	2408.157	0.08%	98.03%
60.0	21.076	2.024	2410.181	0.08%	98.12%
61.0	20.460	1.982	2412.163	0.08%	98.20%
62.0	19.872	1.943	2414.107	0.07%	98.28%
63.0	19.374	1.909	2416.015	0.07%	98.35%
64.0	18.834	1.875	2417.89	0.07%	98.43%
65.0	18.357	1.841	2419.731	0.07%	98.50%
66.0	17.886	1.808	2421.539	0.07%	98.58%
67.0	17.450	1.777	2423.316	0.07%	98.65%
68.0	17.042	1.747	2425.063	0.07%	98.72%
69.0	16.620	1.717	2426.78	0.07%	98.79%
70.0	16.246	1.688	2428.468	0.06%	98.86%
71.0	15.880	1.660	2430.129	0.06%	98.93%
72.0	15.520	1.633	2431.761	0.06%	98.99%
73.0	15.188	1.606	2433.367	0.06%	99.06%
74.0	14.883	1.581	2434.948	0.06%	99.12%
75.0	14.544	1.555	2436.503	0.06%	99.19%

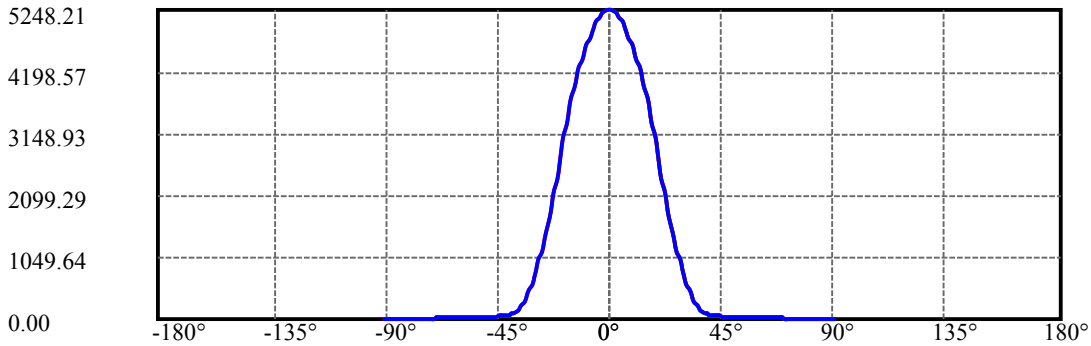
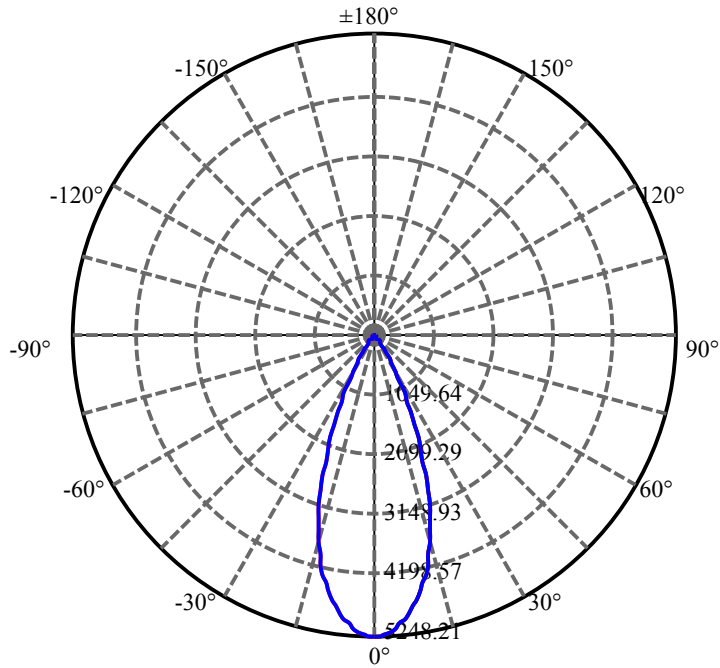
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.226	1.527	2438.03	0.06%	99.25%
77.0	13.908	1.500	2439.53	0.06%	99.31%
78.0	13.548	1.470	2441	0.06%	99.37%
79.0	13.257	1.440	2442.44	0.06%	99.43%
80.0	12.960	1.413	2443.853	0.05%	99.49%
81.0	12.641	1.384	2445.238	0.05%	99.54%
82.0	12.358	1.356	2446.593	0.05%	99.60%
83.0	12.039	1.326	2447.92	0.05%	99.65%
84.0	11.763	1.297	2449.216	0.05%	99.70%
85.0	11.507	1.270	2450.486	0.05%	99.76%
86.0	11.244	1.244	2451.73	0.05%	99.81%
87.0	11.022	1.219	2452.949	0.05%	99.86%
88.0	10.746	1.192	2454.141	0.05%	99.91%
89.0	10.566	1.168	2455.309	0.04%	99.95%
90.0	10.483	1.154	2456.463	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2175.67	83.32%	88.57%
0-40	2349.05	89.95%	95.63%
0-60	2410.18	92.30%	98.12%
0-90	2455.31	94.02%	99.95%
0-120	2455.31	94.02%	99.95%
0-180	2456.46	94.07%	100.00%
60-90	45.13	1.73%	1.84%
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%
0-25.92	1965.17	75.25%	80.00%

ZONAL LUMEN SUMMARY

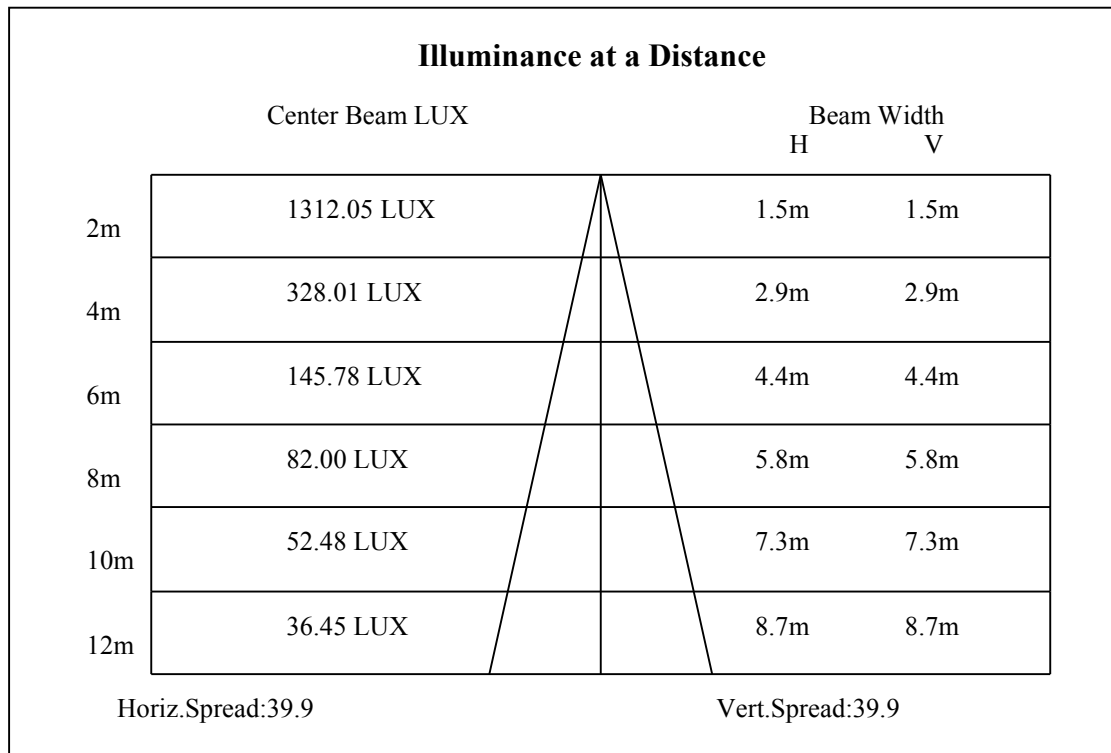
0-10	465.07
10-20	1015.89
20-30	694.71
30-40	173.37
40-50	38.05
50-60	23.09
60-70	18.29
70-80	15.39
80-90	11.46
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

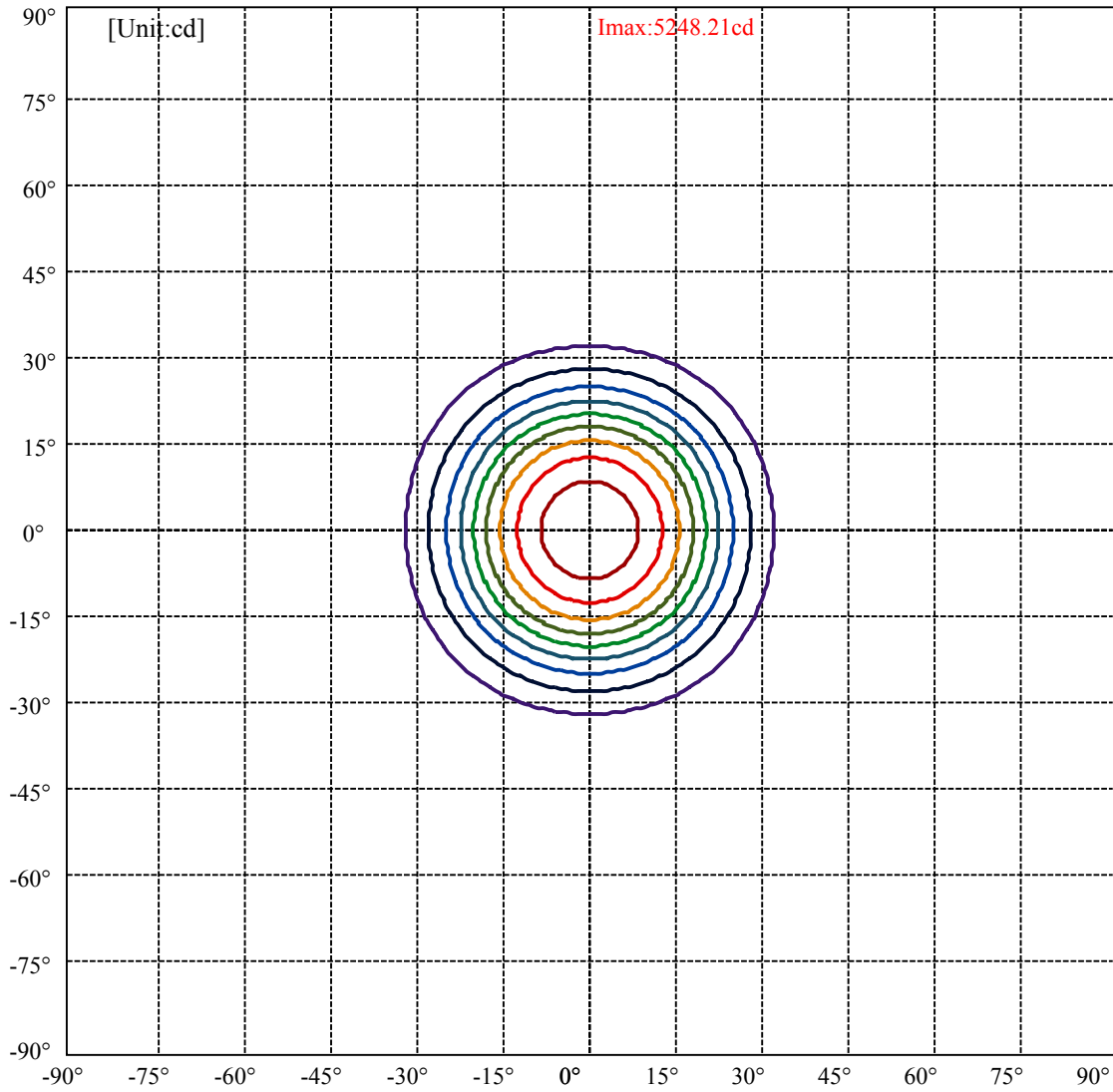


C0(Max): —————
C0/C180: —————
C90/C270: —————

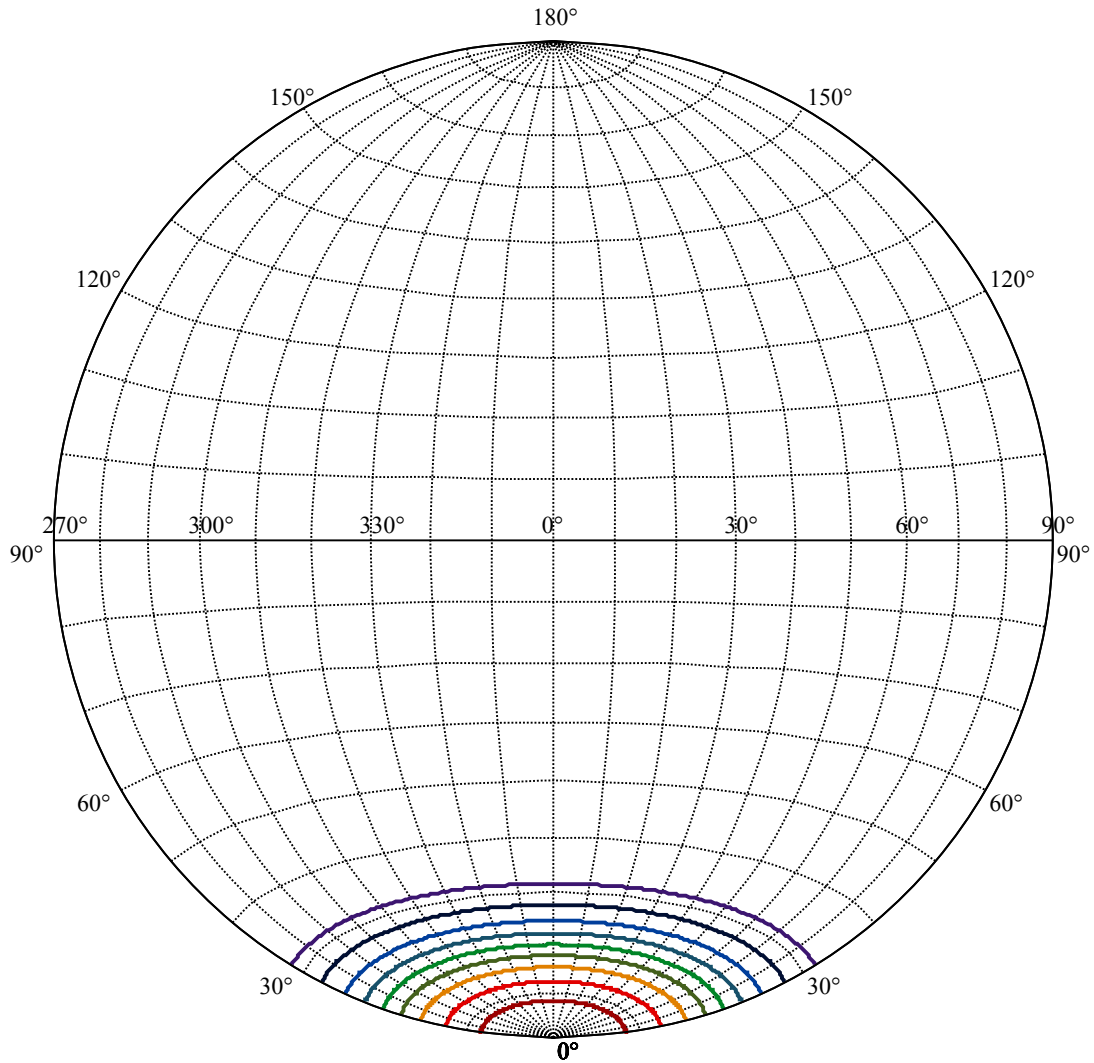
Field angle(10%Imax):C0/180Left:31.6 Right:31.6
:C90/270Left:31.6 Right:31.6

Beam Angle(50%Imax):C0/180Left:19.9 Right:19.9
:C90/270Left:19.9 Right:19.9





(10%I _{max}) 524.821	—
(20%I _{max}) 1049.64	—
(30%I _{max}) 1574.46	—
(40%I _{max}) 2099.29	—
(50%I _{max}) 2624.11	—
(60%I _{max}) 3148.93	—
(70%I _{max}) 3673.75	—
(80%I _{max}) 4198.57	—
(90%I _{max}) 4723.39	—



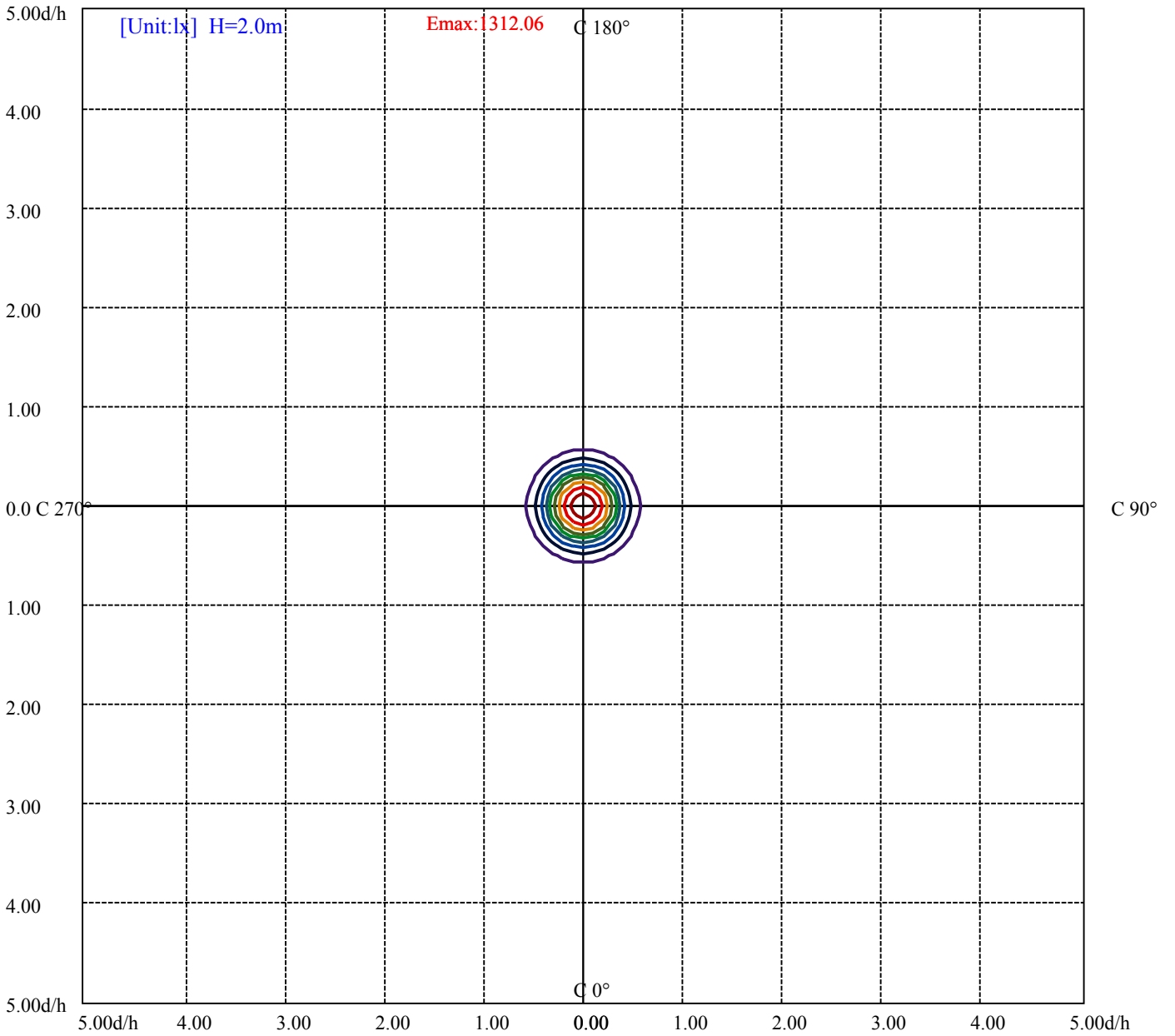
House

[Unit:cd]

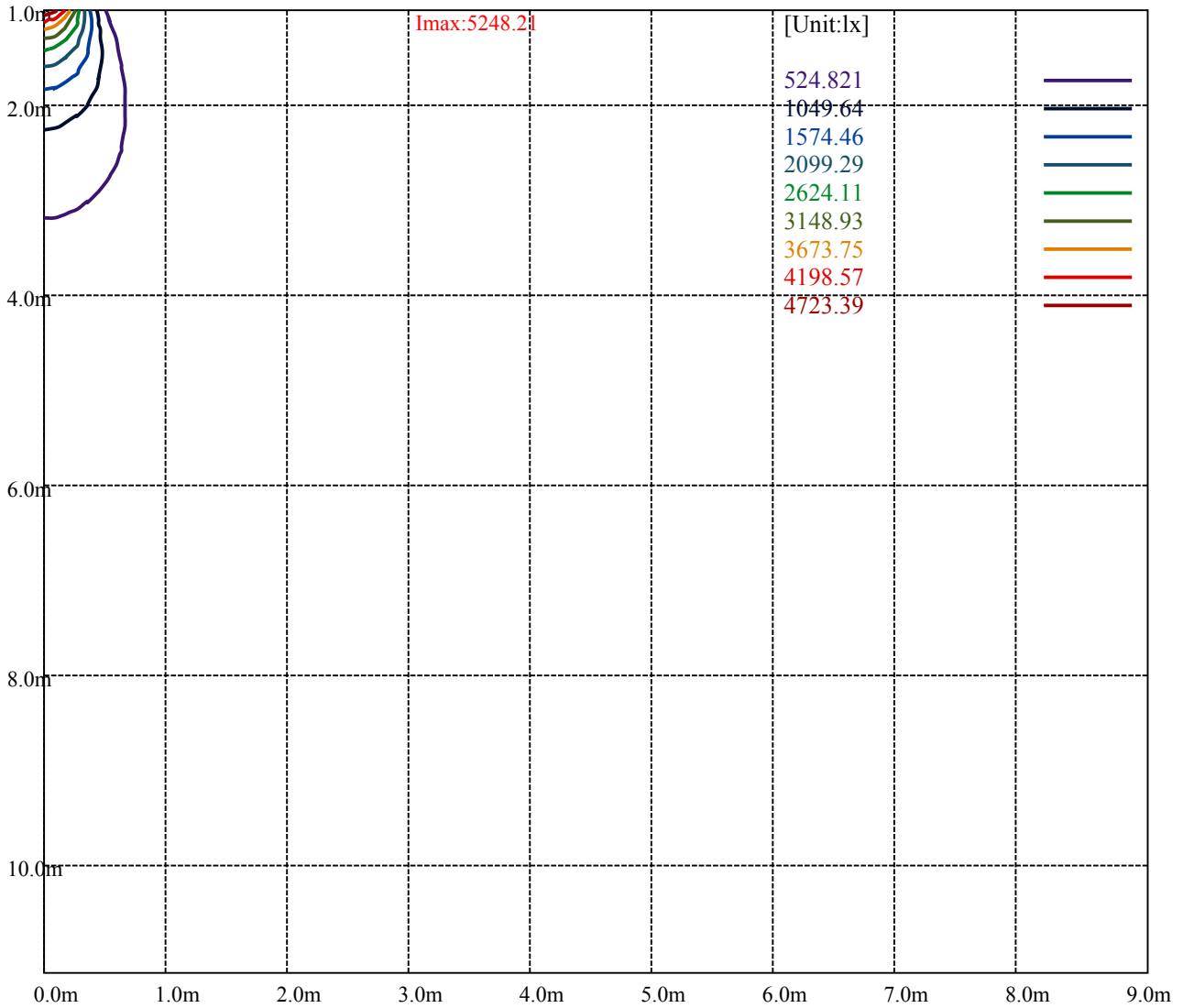
Road

Imax:5248.21

(10%Imax)	524.821	—
(20%Imax)	1049.64	—
(30%Imax)	1574.46	—
(40%Imax)	2099.29	—
(50%Imax)	2624.11	—
(60%Imax)	3148.93	—
(70%Imax)	3673.75	—
(80%Imax)	4198.57	—
(90%Imax)	4723.39	—



- (10%Emax) 131.2052
- (20%Emax) 262.41
- (30%Emax) 393.615
- (40%Emax) 524.82
- (50%Emax) 656.0275
- (60%Emax) 787.2325
- (70%Emax) 918.4375
- (80%Emax) 1049.642
- (90%Emax) 1180.848



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

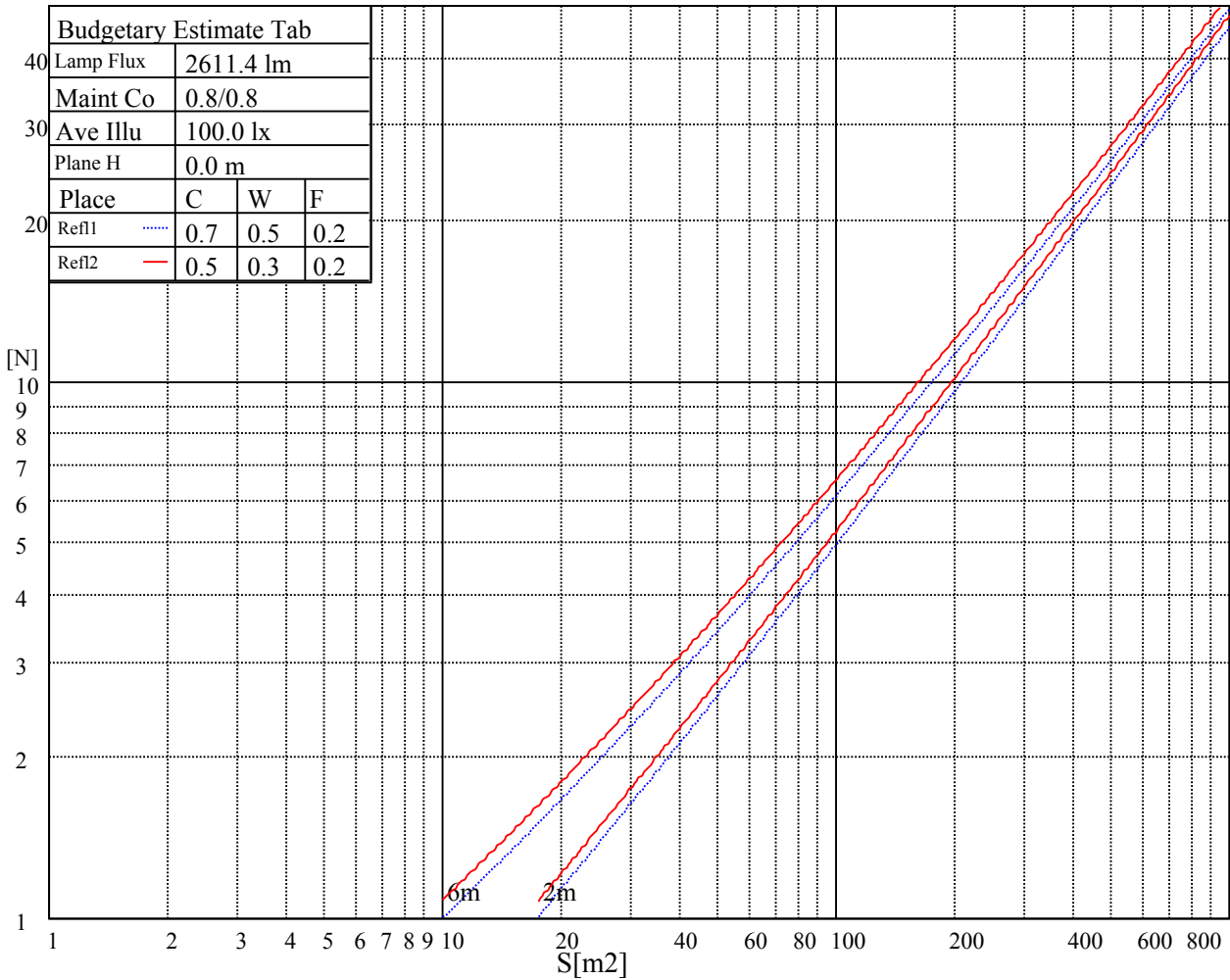
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

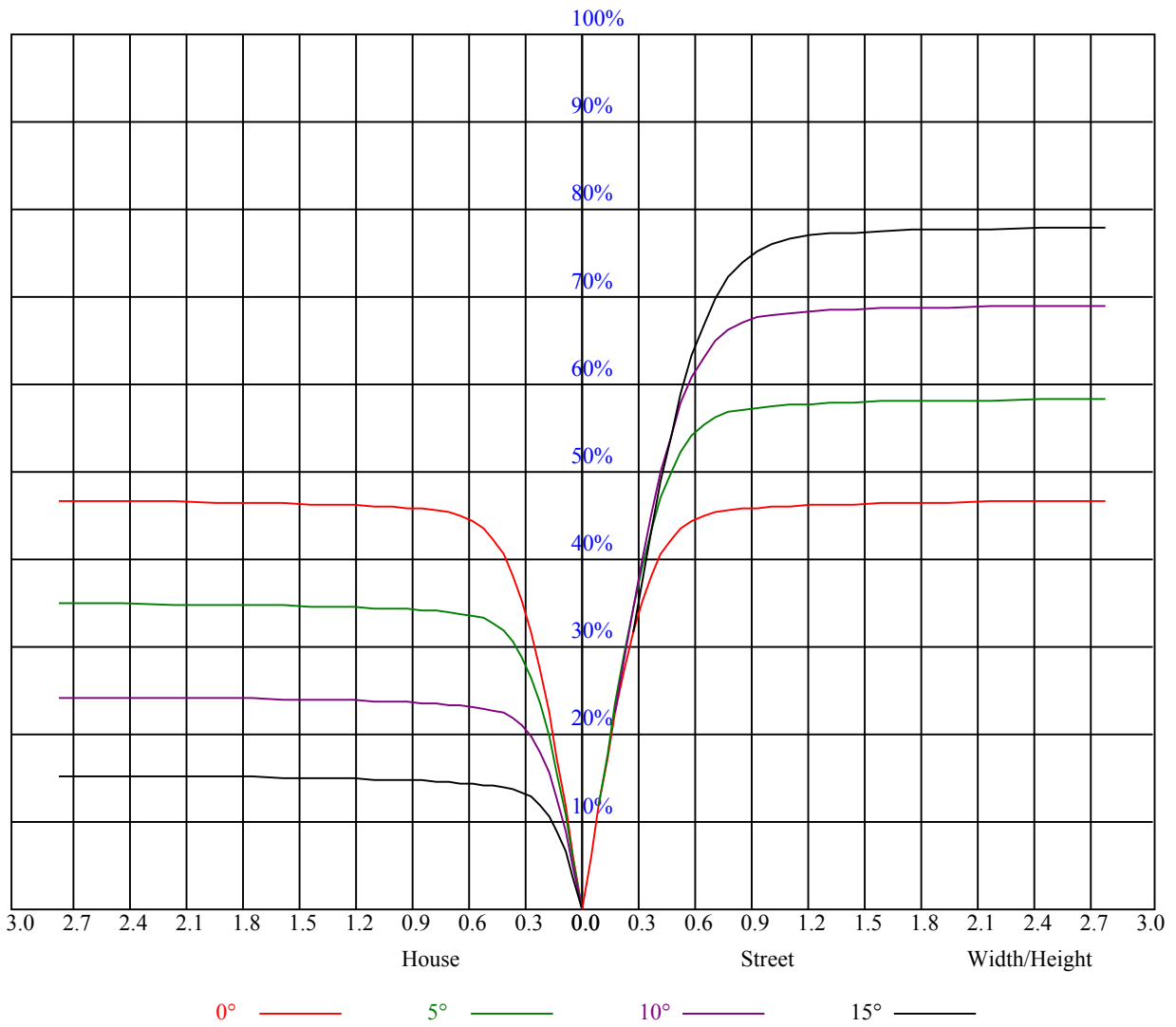


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.12	1.12	1.12	1.09	1.09	1.09	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.03	1.01	1.03	1.01	0.99	0.99	0.97	0.96	0.96	0.94	0.93	0.92	0.91	0.90	0.89
2	0.99	0.95	0.92	0.97	0.94	0.91	0.94	0.92	0.89	0.91	0.89	0.87	0.89	0.87	0.86	0.84
3	0.93	0.89	0.86	0.92	0.88	0.85	0.90	0.86	0.84	0.87	0.85	0.83	0.85	0.83	0.81	0.80
4	0.88	0.84	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.76
5	0.84	0.79	0.76	0.83	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.72
6	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.69
7	0.77	0.72	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
8	0.73	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
9	0.70	0.66	0.62	0.70	0.65	0.62	0.69	0.65	0.62	0.68	0.65	0.62	0.68	0.64	0.62	0.61
10	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.59	0.65	0.62	0.59	0.58



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	5240.88	5197.15	5155.63	5071.50	5002.86	4918.17	4800.26	4701.18	4588.26
45.0	5262.47	5230.92	5178.88	5135.15	5043.82	4958.58	4878.87	4755.98	4660.77
90.0	5225.93	5177.78	5107.48	5023.34	4953.04	4862.26	4748.23	4658.56	4550.07
135.0	5263.57	5253.61	5212.65	5174.45	5089.21	5017.25	4938.09	4853.96	4732.18
180.0	5240.88	5265.23	5272.98	5272.98	5227.04	5188.29	5132.39	5067.62	4959.68
225.0	5262.47	5275.20	5276.31	5250.84	5211.54	5145.12	5078.69	4997.32	4872.22
270.0	5225.93	5259.70	5267.45	5269.11	5237.00	5181.10	5126.85	5051.57	4952.49
315.0	5263.57	5254.16	5227.59	5196.60	5146.22	5075.93	4979.61	4888.83	4791.96
360.0	5240.88	5197.15	5155.63	5071.50	5002.86	4918.17	4800.26	4701.18	4588.26
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4467.04	4306.51	4167.02	4017.56	3860.36	3635.07	3440.78	3231.54	2966.40
45.0	4549.51	4410.02	4290.46	4127.16	3980.48	3829.92	3653.89	3415.32	3222.13
90.0	4434.38	4297.10	4164.80	4036.38	3845.41	3669.94	3429.16	3222.69	3017.32
135.0	4634.20	4527.92	4394.52	4256.69	4121.08	3926.78	3750.21	3550.38	3288.00
180.0	4870.56	4769.82	4673.50	4533.46	4407.25	4227.91	4065.72	3905.75	3658.87
225.0	4772.59	4639.19	4526.26	4394.52	4256.14	4062.95	3877.52	3674.37	3469.01
270.0	4863.92	4755.43	4644.72	4490.84	4355.22	4211.86	4060.19	3841.54	3641.16
315.0	4679.59	4528.48	4415.56	4272.19	4087.86	3920.70	3745.22	3552.04	3290.22
360.0	4467.04	4306.51	4167.02	4017.56	3860.36	3635.07	3440.78	3231.54	2966.40
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2750.52	2524.68	2249.57	2048.64	1816.71	1639.57	1461.89	1073.20	1073.20
45.0	3017.32	2811.41	2548.48	2334.81	2131.11	1931.84	1700.46	1520.56	1293.06
90.0	2759.93	2536.30	2314.89	2100.67	1852.13	1664.48	1480.71	1093.01	1093.01
135.0	3073.23	2857.35	2627.08	2348.65	2128.35	1923.54	1736.44	1515.58	1340.11
180.0	3467.90	3237.08	2937.62	2699.60	2457.15	2227.98	2008.23	1751.39	1568.72
225.0	3192.80	2951.45	2704.02	2462.13	2184.81	1975.02	1733.67	1560.42	1275.90
270.0	3441.89	3166.78	2936.51	2702.92	2406.77	2187.02	1936.27	1751.39	1583.11
315.0	3075.45	2841.85	2551.80	2328.17	2122.26	1879.81	1702.68	1534.40	1092.24
360.0	2750.52	2524.68	2249.57	2048.64	1816.71	1639.57	1461.89	1073.20	1073.20
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	923.19	794.60	675.70	561.95	429.05	331.07	227.67	168.99	133.73
45.0	1119.80	959.28	783.81	660.92	548.00	444.49	324.93	281.75	281.75
90.0	941.40	802.68	680.74	543.52	441.00	321.55	236.97	172.48	133.57
135.0	1167.96	976.99	845.80	695.79	584.53	479.36	355.92	288.95	288.95
180.0	1404.32	1198.41	1047.29	902.82	746.72	637.67	510.36	406.30	306.66
225.0	1081.17	1044.02	908.08	784.19	640.88	529.51	424.01	326.59	219.98
270.0	1417.05	1210.03	1055.04	912.78	784.36	636.01	525.86	422.90	304.44
315.0	1092.24	1017.95	879.62	722.59	607.01	499.12	397.44	283.13	206.86
360.0	923.19	794.60	675.70	561.95	429.05	331.07	227.67	168.99	133.73
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	108.27	93.94	82.92	72.68	65.65	59.45	54.25	48.71	44.95
45.0	133.62	107.44	93.38	82.70	72.62	65.65	59.56	53.08	48.82
90.0	107.94	94.71	84.75	74.17	66.98	60.78	55.46	49.76	45.94
135.0	143.64	119.23	99.86	88.84	80.04	70.52	63.93	58.01	53.14
180.0	283.96	200.16	127.42	110.82	96.43	83.97	75.28	67.53	61.22
225.0	158.59	123.60	105.23	88.62	79.27	69.14	62.33	55.13	50.32
270.0	282.86	282.86	122.83	100.13	87.96	76.83	69.25	62.60	56.79
315.0	152.61	116.35	99.69	87.29	75.61	68.20	61.66	54.58	50.04
360.0	108.27	93.94	82.92	72.68	65.65	59.45	54.25	48.71	44.95

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	41.79	38.97	35.92	33.82	31.99	29.89	28.45	27.18	25.68
45.0	45.17	41.29	38.69	36.31	34.15	31.88	30.22	28.73	27.18
90.0	42.68	39.13	36.75	34.10	32.27	30.61	29.12	27.46	26.29
135.0	47.99	44.45	40.63	37.97	35.09	33.05	31.22	29.56	28.17
180.0	54.52	50.15	46.22	42.07	39.13	36.15	33.88	31.94	30.17
225.0	46.39	43.01	39.36	36.87	34.71	32.82	30.72	29.17	27.84
270.0	50.98	47.11	43.62	40.63	37.47	35.26	33.32	31.16	29.56
315.0	46.05	42.68	39.02	36.53	34.37	32.49	30.39	28.84	27.23
360.0	41.79	38.97	35.92	33.82	31.99	29.89	28.45	27.18	25.68
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	24.63	23.58	22.75	21.98	21.31	20.76	20.09	19.60	19.15
45.0	26.07	25.02	24.08	23.03	22.31	21.42	20.87	20.31	19.65
90.0	25.24	24.24	23.14	22.42	21.64	21.03	20.31	19.82	19.15
135.0	26.68	25.46	24.47	23.53	22.47	21.70	21.09	20.31	19.82
180.0	28.23	26.90	25.68	24.63	23.47	22.69	21.92	21.09	20.48
225.0	26.68	25.41	24.47	23.47	22.69	22.03	21.26	20.70	20.15
270.0	27.90	26.74	25.68	24.69	23.64	22.86	22.14	21.48	20.76
315.0	26.07	25.02	23.91	23.14	22.36	21.64	20.92	20.37	19.82
360.0	24.63	23.58	22.75	21.98	21.31	20.76	20.09	19.60	19.15
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	18.65	18.16	17.66	17.27	16.83	16.44	16.00	15.72	15.39
45.0	19.21	18.76	18.27	17.77	17.38	16.99	16.61	16.16	15.83
90.0	18.76	18.32	17.77	17.33	16.94	16.50	16.11	15.78	15.44
135.0	19.32	18.71	18.32	17.77	17.38	16.99	16.66	16.16	15.83
180.0	19.93	19.26	18.76	18.32	17.82	17.38	16.99	16.66	16.22
225.0	19.60	19.04	18.60	18.16	17.71	17.33	16.83	16.55	16.11
270.0	20.20	19.65	19.15	18.60	18.16	17.71	17.21	16.77	16.38
315.0	19.32	18.76	18.32	17.88	17.38	16.99	16.55	16.16	15.83
360.0	18.65	18.16	17.66	17.27	16.83	16.44	16.00	15.72	15.39
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	15.00	14.72	14.45	14.12	13.78	13.51	13.23	12.95	12.62
45.0	15.50	15.11	14.78	14.50	14.17	13.84	13.51	13.23	12.90
90.0	15.17	14.78	14.50	14.23	13.84	13.51	13.12	12.84	12.57
135.0	15.50	15.17	14.89	14.50	14.23	13.95	13.51	13.23	12.90
180.0	15.83	15.55	15.28	14.83	14.56	14.28	13.89	13.56	13.23
225.0	15.72	15.39	15.06	14.72	14.39	14.00	13.67	13.40	13.12
270.0	16.00	15.67	15.28	14.95	14.61	14.34	13.95	13.62	13.34
315.0	15.44	15.11	14.83	14.50	14.23	13.84	13.51	13.23	13.01
360.0	15.00	14.72	14.45	14.12	13.78	13.51	13.23	12.95	12.62
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.34	12.01	11.73	11.57	11.35	11.07	10.85	10.46	10.63
45.0	12.62	12.29	12.01	11.73	11.46	11.18	10.96	10.68	10.35
90.0	12.23	12.07	11.73	11.51	11.24	11.02	10.79	10.46	10.41
135.0	12.62	12.40	12.01	11.73	11.46	11.24	11.02	10.74	10.46
180.0	12.95	12.68	12.34	12.07	11.73	11.46	11.24	11.02	10.79
225.0	12.73	12.40	12.18	11.79	11.57	11.29	11.07	10.85	10.68
270.0	13.06	12.73	12.34	12.01	11.73	11.46	11.24	10.96	10.74
315.0	12.57	12.29	11.96	11.68	11.51	11.24	11.02	10.79	10.46
360.0	12.34	12.01	11.73	11.57	11.35	11.07	10.85	10.46	10.63

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.57
45.0	10.52
90.0	10.46
135.0	10.46
180.0	10.57
225.0	10.41
270.0	10.41
315.0	10.46
360.0	10.57