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NATA

Client:

LumCAT: 2-2643-L

Luminaire: 92.70.411.00

Report No: 20231016-B008

Ballast type: AC

Test No: 20231016-C008

Voltage(V): 34.510

LampCAT: NICHIA NFCWJ108B-V3

Current(A): 0.576

Lamp flux(lm): 2574.8

Power (W): 19.877

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2438.05, Efficiency(%): 94.69% , Luminous Efficacy(lm/W): 122.66

Central intensity(cd): 12788.070, Maximum intensity(cd): 12788.070

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=18.0

[C90/270]Total=18.0

Field angle(10%Imax): [C0/180]Total=45.6

[C90/270]Total=45.6

Maximum s/h(1/2): C0_180=0.31 C90_270=0.31

Maximum s/h(1/4): C0_180=0.34 C90_270=0.34

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 94.69%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.948%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	12788.065	0.000	0	0.00%	0.00%
1.0	12657.293	12.175	12.175	0.47%	0.50%
2.0	12184.711	35.656	47.831	1.38%	1.96%
3.0	11578.451	56.834	104.664	2.21%	4.29%
4.0	11024.569	75.660	180.324	2.94%	7.40%
5.0	10299.506	91.735	272.059	3.56%	11.16%
6.0	9274.219	102.865	374.924	4.00%	15.38%
7.0	8315.149	109.177	484.101	4.24%	19.86%
8.0	7298.234	111.742	595.843	4.34%	24.44%
9.0	6377.980	110.838	706.681	4.30%	28.99%
10.0	5506.438	107.550	814.231	4.18%	33.40%
11.0	4773.349	102.716	916.947	3.99%	37.61%
12.0	4162.591	97.683	1014.63	3.79%	41.62%
13.0	3671.950	92.976	1107.606	3.61%	45.43%
14.0	3235.487	88.415	1196.021	3.43%	49.06%
15.0	2904.957	84.299	1280.319	3.27%	52.51%
16.0	2665.345	81.620	1361.94	3.17%	55.86%
17.0	2444.623	79.576	1441.516	3.09%	59.13%
18.0	2248.532	77.380	1518.896	3.01%	62.30%
19.0	1940.005	72.872	1591.768	2.83%	65.29%
20.0	1755.332	67.635	1659.403	2.63%	68.06%
21.0	1585.327	64.147	1723.55	2.49%	70.69%
22.0	1405.532	60.103	1783.653	2.33%	73.16%
23.0	1252.659	55.776	1839.429	2.17%	75.45%
24.0	1168.909	52.944	1892.373	2.06%	77.62%
25.0	1084.197	51.231	1943.603	1.99%	79.72%
26.0	990.829	48.981	1992.585	1.90%	81.73%
27.0	889.276	45.997	2038.582	1.79%	83.62%
28.0	787.557	42.454	2081.036	1.65%	85.36%
29.0	689.166	38.635	2119.671	1.50%	86.94%
30.0	595.369	34.682	2154.353	1.35%	88.36%
31.0	495.193	30.349	2184.702	1.18%	89.61%
32.0	402.787	25.726	2210.428	1.00%	90.66%
33.0	322.151	21.357	2231.785	0.83%	91.54%
34.0	260.992	17.648	2249.433	0.69%	92.26%
35.0	227.704	15.177	2264.61	0.59%	92.89%
36.0	183.878	13.105	2277.715	0.51%	93.42%
37.0	140.176	10.569	2288.283	0.41%	93.86%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	124.040	8.819	2297.103	0.34%	94.22%
39.0	110.340	8.000	2305.103	0.31%	94.55%
40.0	98.578	7.286	2312.389	0.28%	94.85%
41.0	88.337	6.656	2319.045	0.26%	95.12%
42.0	79.557	6.100	2325.145	0.24%	95.37%
43.0	71.683	5.602	2330.747	0.22%	95.60%
44.0	65.283	5.169	2335.917	0.20%	95.81%
45.0	59.249	4.786	2340.703	0.19%	96.01%
46.0	54.447	4.446	2345.149	0.17%	96.19%
47.0	50.074	4.157	2349.306	0.16%	96.36%
48.0	46.255	3.894	2353.2	0.15%	96.52%
49.0	42.934	3.663	2356.863	0.14%	96.67%
50.0	40.014	3.458	2360.321	0.13%	96.81%
51.0	37.488	3.279	2363.6	0.13%	96.95%
52.0	35.212	3.120	2366.72	0.12%	97.07%
53.0	33.288	2.980	2369.7	0.12%	97.20%
54.0	31.517	2.856	2372.556	0.11%	97.31%
55.0	30.175	2.754	2375.31	0.11%	97.43%
56.0	28.805	2.665	2377.975	0.10%	97.54%
57.0	27.829	2.589	2380.564	0.10%	97.64%
58.0	26.930	2.532	2383.096	0.10%	97.75%
59.0	26.155	2.482	2385.578	0.10%	97.85%
60.0	25.442	2.438	2388.016	0.09%	97.95%
61.0	24.833	2.399	2390.415	0.09%	98.05%
62.0	24.224	2.364	2392.779	0.09%	98.14%
63.0	23.539	2.323	2395.102	0.09%	98.24%
64.0	22.730	2.270	2397.372	0.09%	98.33%
65.0	21.962	2.212	2399.584	0.09%	98.42%
66.0	21.104	2.149	2401.733	0.08%	98.51%
67.0	20.190	2.076	2403.809	0.08%	98.60%
68.0	19.374	2.004	2405.813	0.08%	98.68%
69.0	18.564	1.935	2407.749	0.08%	98.76%
70.0	17.782	1.867	2409.615	0.07%	98.83%
71.0	17.118	1.804	2411.419	0.07%	98.91%
72.0	16.558	1.751	2413.17	0.07%	98.98%
73.0	15.990	1.702	2414.872	0.07%	99.05%
74.0	15.527	1.657	2416.529	0.06%	99.12%
75.0	15.049	1.616	2418.145	0.06%	99.18%

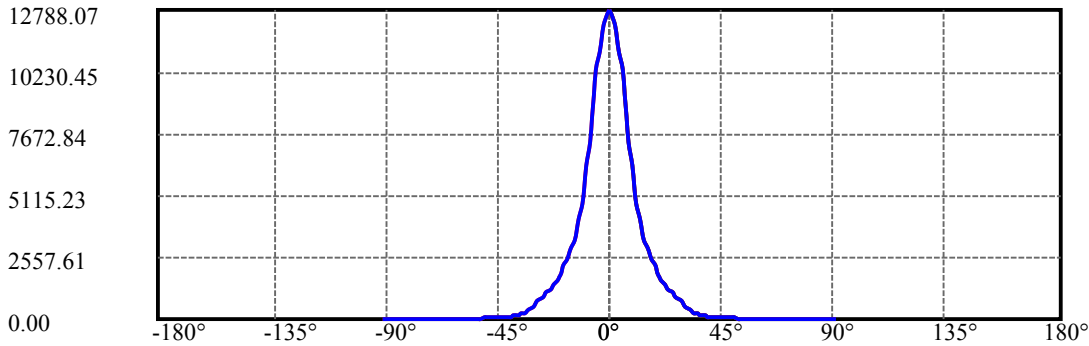
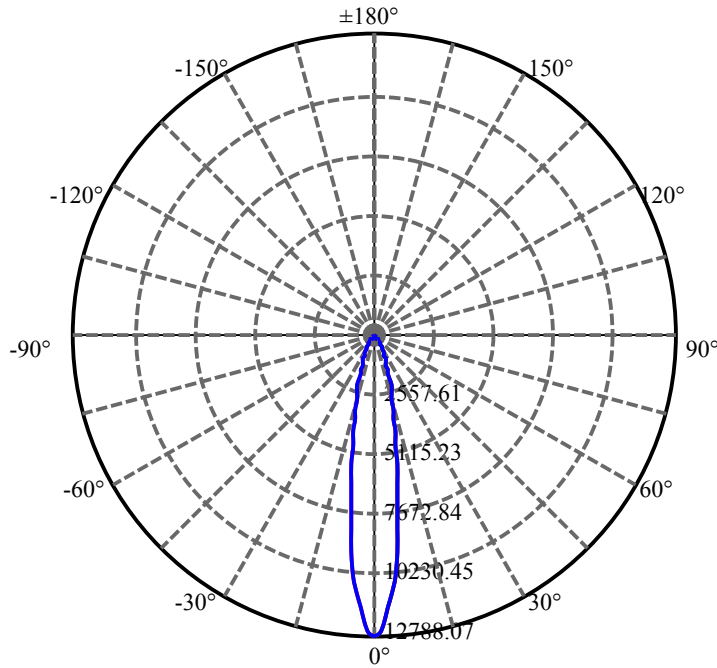
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	14.586	1.573	2419.718	0.06%	99.25%
77.0	14.122	1.531	2421.248	0.06%	99.31%
78.0	13.721	1.490	2422.739	0.06%	99.37%
79.0	13.306	1.452	2424.191	0.06%	99.43%
80.0	12.925	1.414	2425.605	0.05%	99.49%
81.0	12.538	1.377	2426.982	0.05%	99.55%
82.0	12.205	1.342	2428.324	0.05%	99.60%
83.0	11.846	1.307	2429.631	0.05%	99.65%
84.0	11.569	1.276	2430.907	0.05%	99.71%
85.0	11.285	1.247	2432.154	0.05%	99.76%
86.0	11.022	1.219	2433.373	0.05%	99.81%
87.0	10.842	1.197	2434.57	0.05%	99.86%
88.0	10.628	1.176	2435.746	0.05%	99.91%
89.0	10.524	1.159	2436.906	0.05%	99.95%
90.0	10.406	1.148	2438.053	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2154.35	83.67%	88.36%
0-40	2312.39	89.81%	94.85%
0-60	2388.02	92.75%	97.95%
0-90	2436.91	94.65%	99.95%
0-120	2436.91	94.65%	99.95%
0-180	2438.05	94.69%	100.00%
60-90	48.89	1.90%	2.01%
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%
0-25.14	1950.44	75.75%	80.00%

ZONAL LUMEN SUMMARY

0-10	814.23
10-20	845.17
20-30	494.95
30-40	158.04
40-50	47.93
50-60	27.69
60-70	21.60
70-80	15.99
80-90	11.30
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



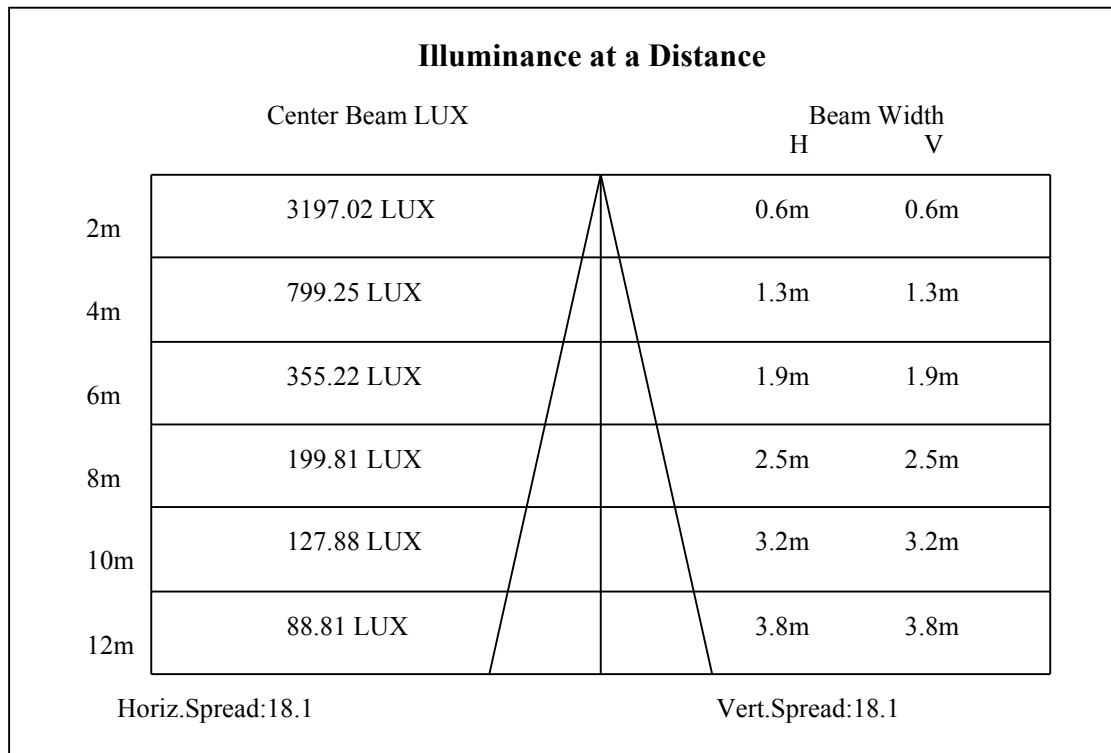
C0(Max): —————

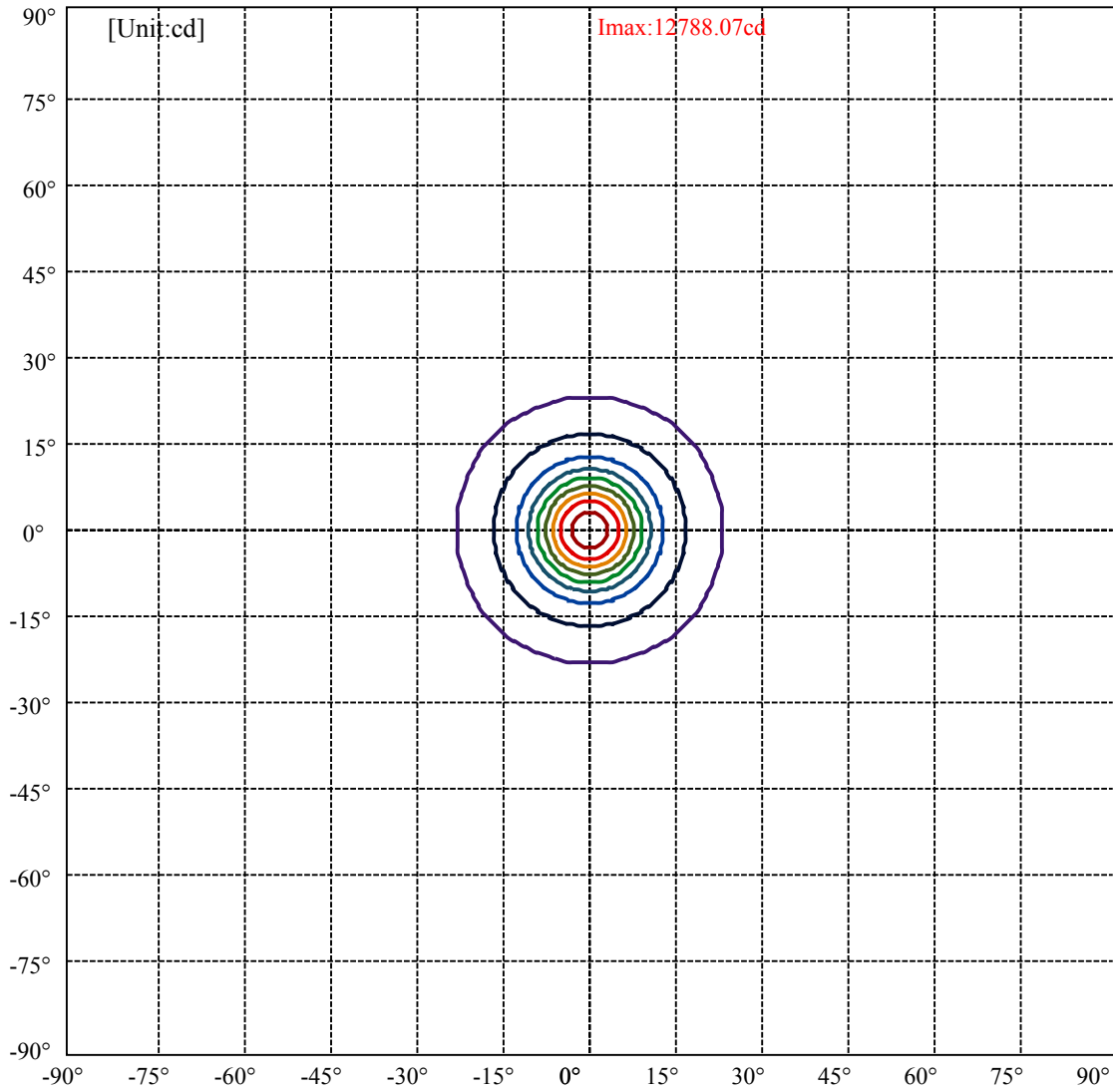
C0/C180: —————

C90/C270: —————

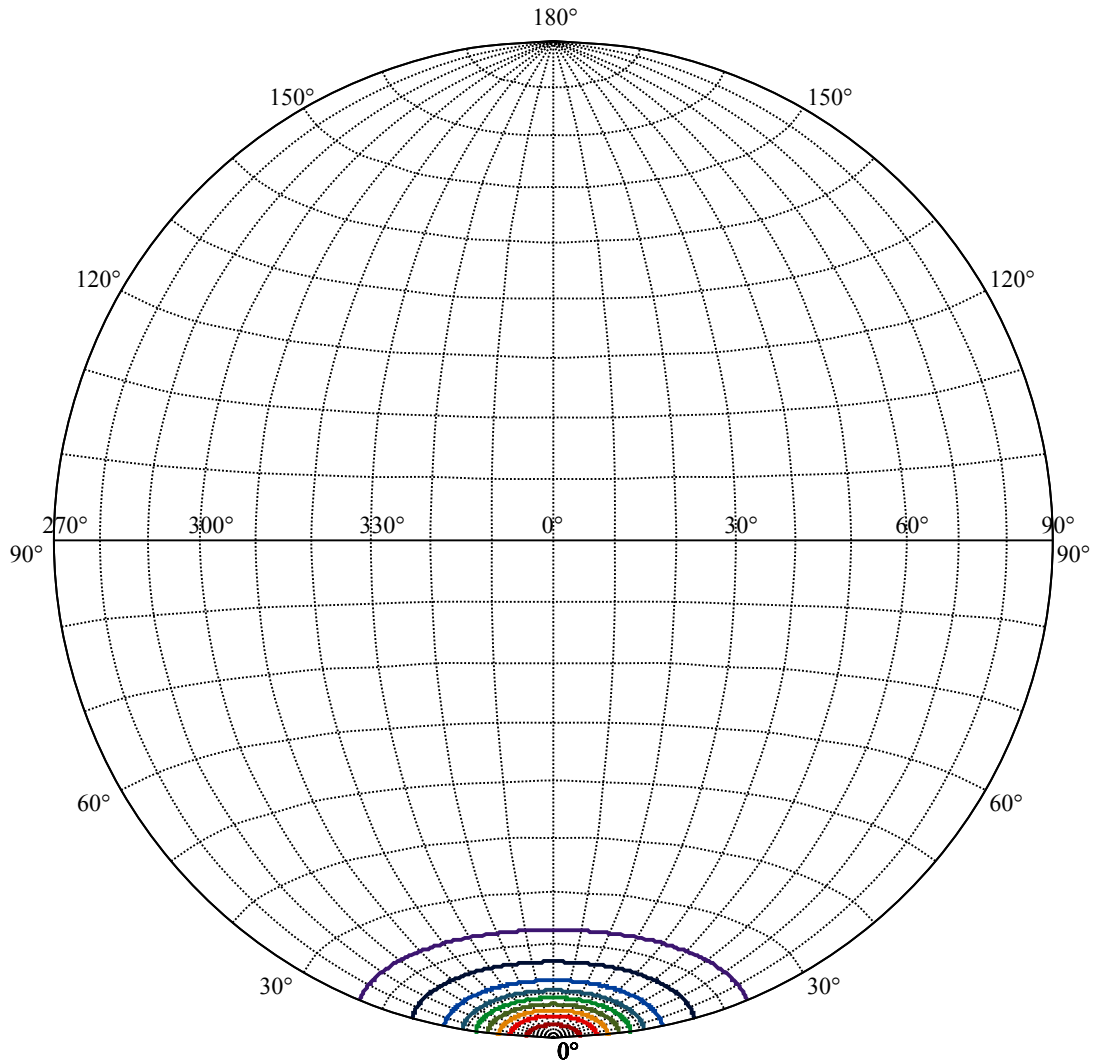
Field angle(10%Imax):C0/180Left:22.8 Right:22.8
:C90/270Left:22.8 Right:22.8

Beam Angle(50%Imax):C0/180Left:9.0 Right:9.0
:C90/270Left:9.0 Right:9.0





(10%Imax) 1278.81	—
(20%Imax) 2557.61	—
(30%Imax) 3836.42	—
(40%Imax) 5115.23	—
(50%Imax) 6394.03	—
(60%Imax) 7672.84	—
(70%Imax) 8951.65	—
(80%Imax) 10230.5	—
(90%Imax) 11509.3	—



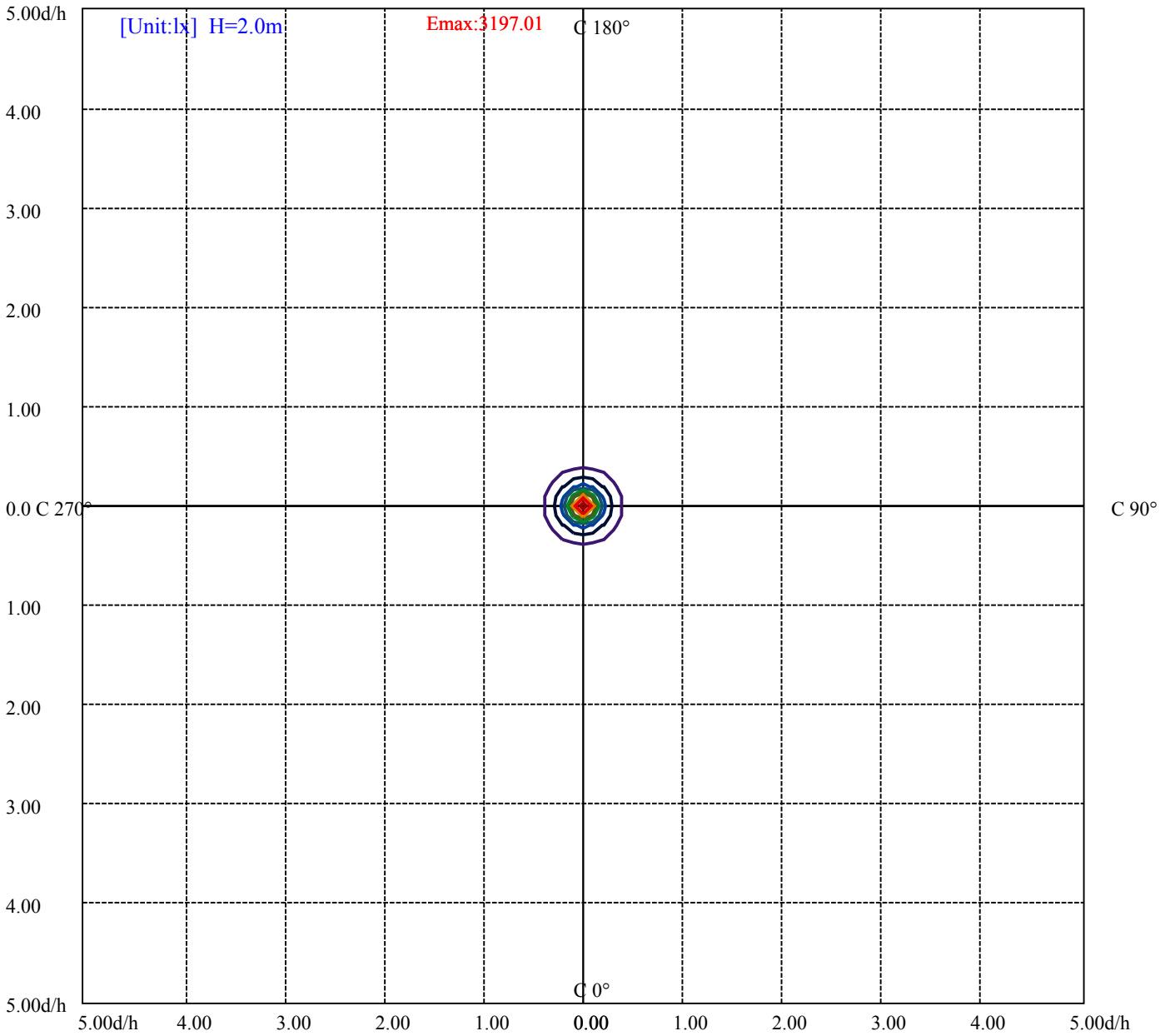
House

[Unit:cd]

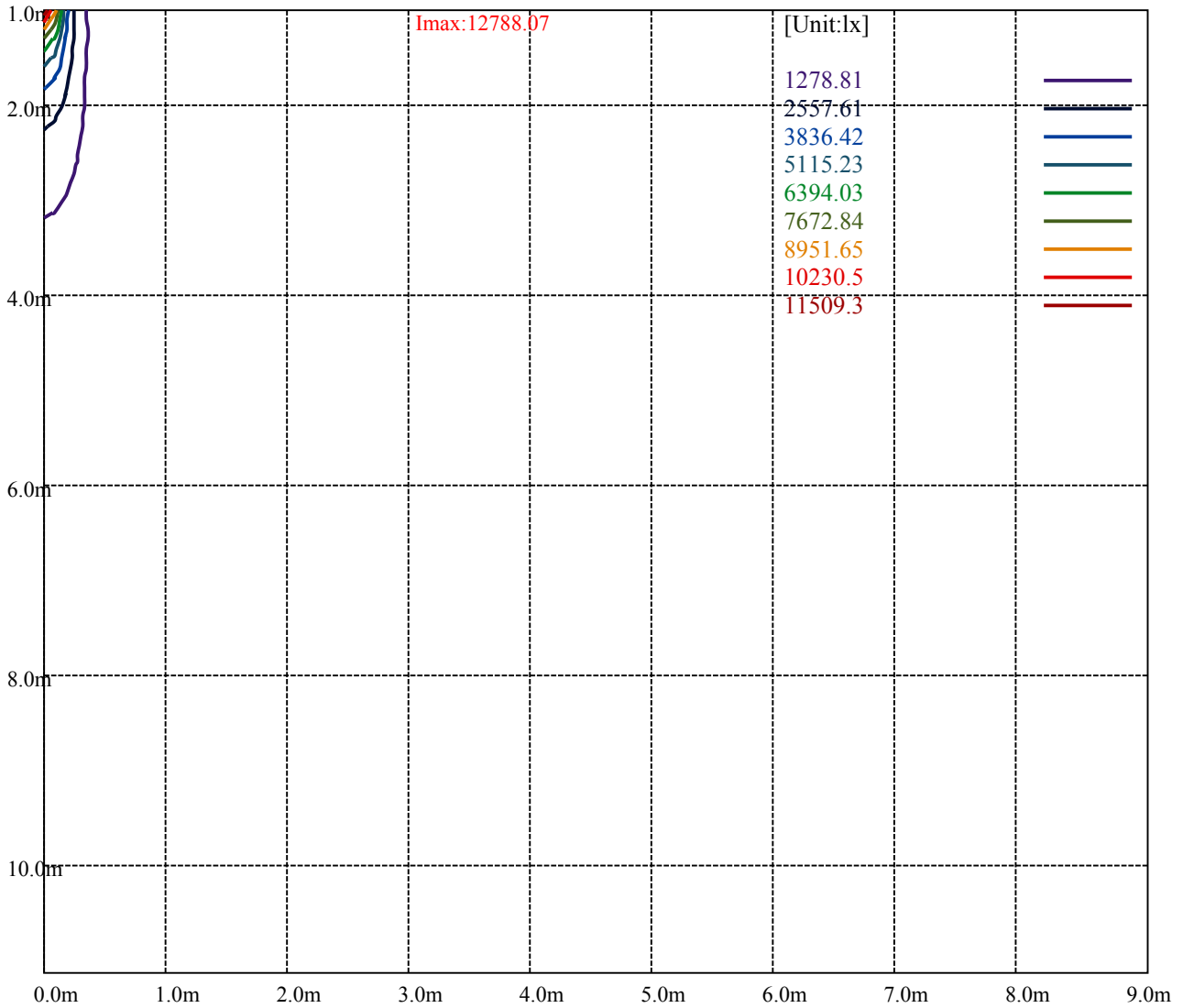
Road

Imax:12788.07

(10%Imax)	1278.81	—
(20%Imax)	2557.61	—
(30%Imax)	3836.42	—
(40%Imax)	5115.23	—
(50%Imax)	6394.03	—
(60%Imax)	7672.84	—
(70%Imax)	8951.65	—
(80%Imax)	10230.5	—
(90%Imax)	11509.3	—



- (10%Emax) 319.7
- (20%Emax) 639.4025
- (30%Emax) 959.1025
- (40%Emax) 1278.805
- (50%Emax) 1598.505
- (60%Emax) 1918.208
- (70%Emax) 2237.907
- (80%Emax) 2557.6
- (90%Emax) 2877.3



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

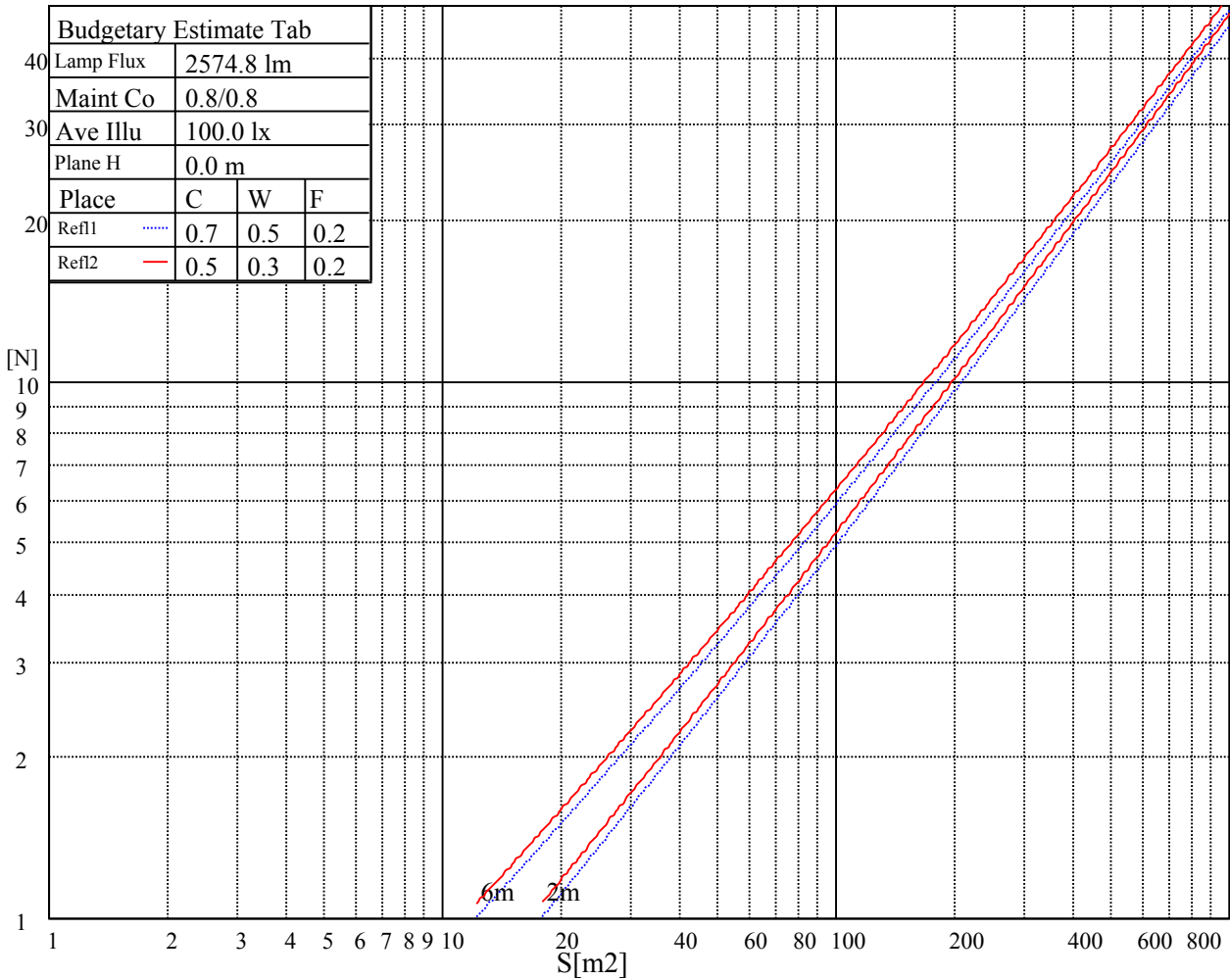
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

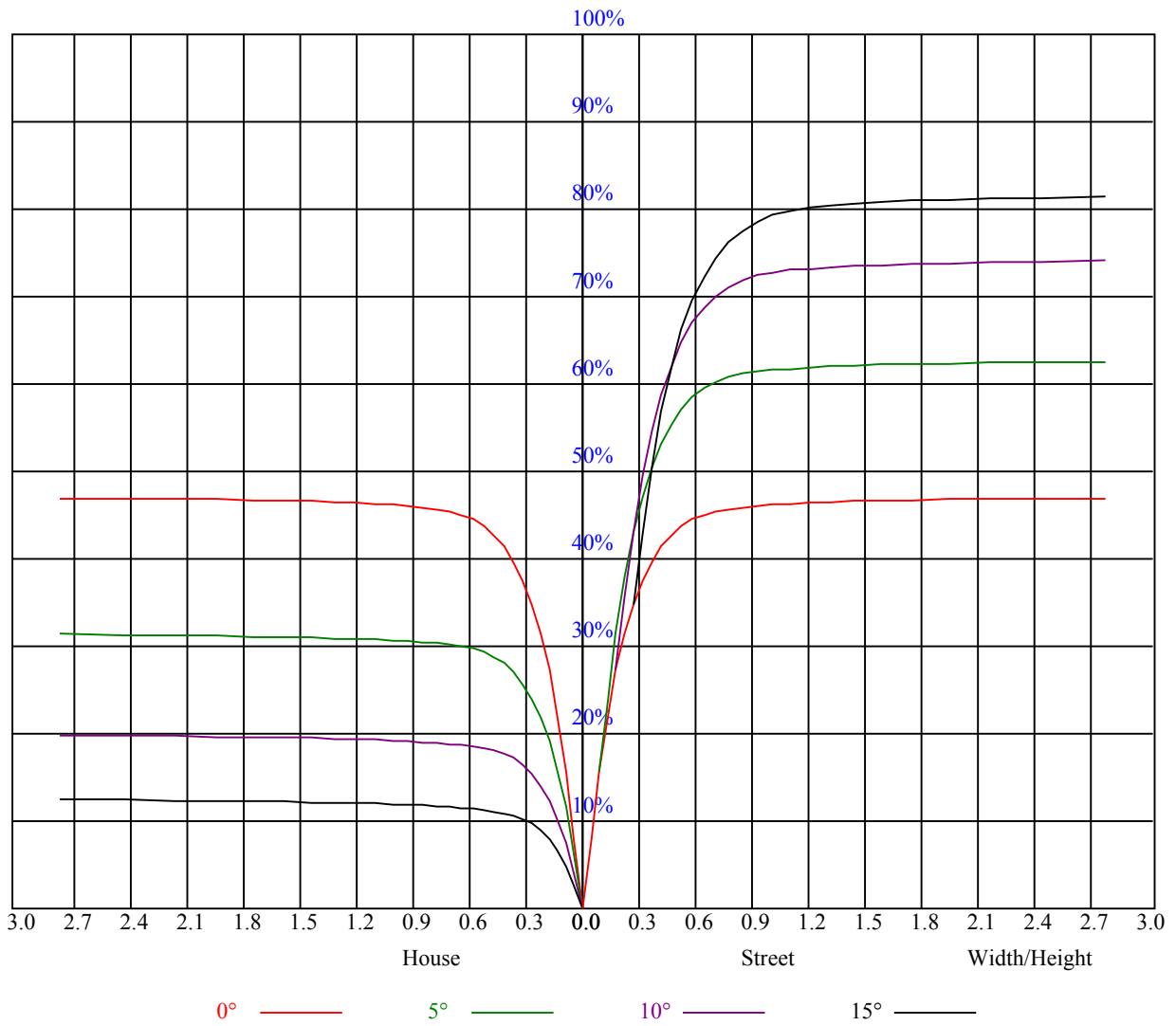


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字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



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	12642.76	11984.05	10986.03	10986.03	9923.79	9003.26	8053.95	7127.88	6023.03
45.0	12891.85	12742.40	12415.81	11773.71	11092.86	10268.09	9172.09	8242.15	7068.65
90.0	12725.79	12371.53	10989.35	10989.35	10166.80	9265.09	8102.11	7176.59	6286.51
135.0	12891.85	12781.15	12460.10	11829.06	11103.93	10268.09	9365.83	8192.33	7251.32
180.0	12642.76	12891.85	12869.71	12648.30	12127.97	11485.87	10495.04	9565.10	8629.63
225.0	12891.85	12847.57	12504.38	10969.42	10969.42	10560.91	9420.08	8467.44	7514.80
270.0	12725.79	12886.32	12808.82	12498.84	11878.88	11236.78	10423.08	9542.96	8352.86
315.0	12891.85	12753.47	12443.49	10932.89	10932.89	10307.95	9161.57	8206.72	7259.07
360.0	12642.76	11984.05	10986.03	10986.03	9923.79	9003.26	8053.95	7127.88	6023.03
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	5246.97	4589.37	3915.16	3479.53	3123.60	2766.02	2511.95	2290.53	2046.98
45.0	6194.07	5419.12	4738.27	4051.88	3597.98	3232.65	2922.67	2850.71	2550.14
90.0	5484.99	4641.40	4088.42	3637.84	3262.54	2885.58	2618.23	2326.51	2129.45
135.0	6360.13	5546.43	4693.99	4145.98	3675.48	3216.04	2906.06	2834.10	2544.05
180.0	7433.99	6520.65	5662.67	4920.94	4300.97	3692.09	3299.07	2972.49	2834.10
225.0	6565.49	5501.04	4780.34	4198.57	3603.52	3232.10	2839.64	2572.28	2338.14
270.0	7417.38	6515.12	5662.67	4771.48	4179.20	3692.09	3288.00	2883.92	2811.96
315.0	6320.83	5318.37	4645.27	4094.51	3632.30	3167.33	2854.03	2592.21	2302.16
360.0	5246.97	4589.37	3915.16	3479.53	3123.60	2766.02	2511.95	2290.53	2046.98
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1870.40	1710.43	1556.54	1378.86	1092.40	1092.40	1070.43	955.29	862.13
45.0	2144.40	1963.95	1757.48	1606.92	1428.68	1301.36	1197.85	1081.06	986.40
90.0	1946.79	1744.19	1591.42	1448.60	1211.14	1092.90	1092.90	1001.35	906.08
135.0	2148.27	1967.27	1758.58	1604.15	1460.78	1326.83	1191.21	1099.32	1011.86
180.0	2834.10	2191.45	2003.80	1789.03	1635.70	1490.67	1320.18	1210.03	1098.77
225.0	2132.22	1899.74	1730.91	1577.58	1435.87	1205.60	1091.19	1091.19	1003.67
270.0	2811.96	2126.69	1939.59	1729.80	1573.70	1422.59	1298.60	1168.51	1077.18
315.0	2100.12	1916.34	1704.34	1547.69	1405.98	1088.92	1088.92	1066.83	980.53
360.0	1870.40	1710.43	1556.54	1378.86	1092.40	1092.40	1070.43	955.29	862.13
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	766.26	648.30	555.20	464.97	359.08	282.80	209.62	173.87	152.94
45.0	888.98	770.52	678.08	586.75	499.29	393.56	316.62	281.20	281.20
90.0	788.07	696.74	608.56	523.87	419.69	340.98	253.80	197.61	158.86
135.0	917.76	803.18	711.29	621.62	511.47	426.78	345.41	291.16	291.16
180.0	1011.31	920.53	828.64	712.95	618.30	527.52	440.06	339.87	286.73
225.0	887.98	795.15	680.90	588.46	496.80	389.41	311.75	243.78	180.56
270.0	989.17	895.07	773.29	681.40	588.41	478.81	395.22	319.94	285.07
315.0	864.68	770.96	677.36	582.93	468.51	382.44	304.72	240.51	185.10
360.0	766.26	648.30	555.20	464.97	359.08	282.80	209.62	173.87	152.94
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	137.44	120.50	108.49	97.75	88.46	80.26	71.35	65.43	60.00
45.0	152.44	135.23	120.95	105.78	95.37	86.30	76.61	69.69	63.88
90.0	134.84	120.95	108.49	95.32	86.02	78.10	71.18	63.49	58.40
135.0	161.36	136.17	121.83	108.99	97.98	86.19	78.27	71.07	64.65
180.0	286.73	169.71	142.31	126.98	110.21	98.47	88.07	77.22	69.86
225.0	152.22	136.39	122.61	107.33	96.54	87.07	78.66	69.91	63.99
270.0	285.07	161.19	140.60	126.32	113.42	99.47	89.78	81.43	74.06
315.0	160.91	141.26	127.04	114.25	100.63	90.84	82.53	75.23	67.42
360.0	137.44	120.50	108.49	97.75	88.46	80.26	71.35	65.43	60.00

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	54.08	50.26	45.89	42.73	40.13	37.31	35.15	33.27	31.77
45.0	57.46	52.97	49.26	45.89	42.07	39.41	37.20	35.20	32.99
90.0	53.64	49.54	45.50	42.51	39.74	36.92	34.98	32.60	31.11
135.0	58.12	53.64	49.32	45.00	41.96	38.53	36.26	34.37	32.16
180.0	63.44	58.23	52.48	48.27	44.78	41.85	38.47	36.20	34.10
225.0	59.06	53.19	49.32	45.39	42.35	39.74	37.47	34.93	33.16
270.0	66.42	60.94	56.07	52.09	47.66	44.34	41.57	38.64	36.48
315.0	61.77	56.79	52.75	48.16	44.78	42.01	38.80	36.48	34.54
360.0	54.08	50.26	45.89	42.73	40.13	37.31	35.15	33.27	31.77
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.06	28.84	27.90	27.07	26.35	25.52	24.96	24.36	23.58
45.0	31.39	29.95	28.45	27.46	26.51	25.91	25.13	24.52	23.97
90.0	29.78	28.56	27.18	26.40	25.74	25.13	24.30	23.80	23.30
135.0	30.67	29.34	28.17	27.18	26.18	25.52	24.96	24.30	23.75
180.0	31.99	30.44	28.89	27.84	27.01	26.07	25.41	24.85	24.24
225.0	31.66	30.44	28.95	28.01	27.18	26.29	25.68	25.08	24.52
270.0	34.10	32.66	31.39	30.11	28.78	27.95	27.18	26.40	25.68
315.0	32.49	31.16	29.50	28.56	27.68	26.85	25.91	25.35	24.74
360.0	30.06	28.84	27.90	27.07	26.35	25.52	24.96	24.36	23.58
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.86	21.92	21.09	20.26	19.37	18.54	17.88	17.27	16.50
45.0	23.25	22.47	21.75	20.92	20.04	19.26	18.43	17.77	17.10
90.0	22.31	21.53	20.81	19.76	18.99	18.32	17.38	16.77	16.27
135.0	23.19	22.20	21.53	20.81	19.71	18.93	18.27	17.38	16.77
180.0	23.80	23.14	22.47	21.75	21.09	20.04	19.32	18.49	17.71
225.0	23.91	23.14	22.20	21.42	20.54	19.82	18.82	18.05	17.49
270.0	25.19	24.36	23.47	22.69	21.53	20.48	19.87	18.76	17.93
315.0	23.80	23.08	22.36	21.20	20.26	19.60	18.54	17.77	17.16
360.0	22.86	21.92	21.09	20.26	19.37	18.54	17.88	17.27	16.50
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	16.05	15.50	15.06	14.50	14.06	13.56	13.17	12.79	12.40
45.0	16.50	16.00	15.55	15.00	14.61	14.17	13.67	13.28	12.95
90.0	15.67	15.28	14.89	14.50	14.00	13.62	13.34	12.95	12.57
135.0	16.27	15.78	15.28	14.89	14.50	14.12	13.73	13.40	13.06
180.0	17.16	16.50	16.00	15.55	15.00	14.56	14.17	13.78	13.34
225.0	16.88	16.16	15.72	15.22	14.67	14.17	13.78	13.34	12.95
270.0	17.33	16.77	16.22	15.67	15.22	14.72	14.28	13.67	13.28
315.0	16.61	15.94	15.50	15.06	14.61	14.06	13.62	13.23	12.84
360.0	16.05	15.50	15.06	14.50	14.06	13.56	13.17	12.79	12.40
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.07	11.79	11.51	11.18	11.02	10.74	10.85	10.24	10.68
45.0	12.51	12.18	11.85	11.51	11.29	11.02	10.79	10.68	10.19
90.0	12.34	11.96	11.62	11.40	11.07	10.85	10.63	10.41	10.19
135.0	12.62	12.34	11.90	11.68	11.35	11.07	10.85	10.63	10.41
180.0	12.95	12.57	12.23	11.96	11.57	11.29	11.07	10.85	10.63
225.0	12.51	12.23	11.90	11.62	11.29	11.07	10.85	10.68	10.57
270.0	12.90	12.51	12.01	11.73	11.46	11.18	10.96	10.68	10.90
315.0	12.40	12.07	11.73	11.46	11.24	10.96	10.74	10.85	10.63
360.0	12.07	11.79	11.51	11.18	11.02	10.74	10.85	10.24	10.68

Intensity data(cd)

C/ γ (°)	90.0
0.0	10.57
45.0	10.19
90.0	10.07
135.0	10.19
180.0	10.30
225.0	10.30
270.0	10.74
315.0	10.90
360.0	10.57