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NATA

Client:

LumCAT: 2-2644-L

Luminaire: 92.70.411.00

Report No: 20231019-B002

Ballast type: AC

Test No: 20231019-C002

Voltage(V): 33.960

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.577

Lamp flux(lm): 2611.4

Power (W): 19.594

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2356.43, Efficiency(%): 90.24% , Luminous Efficacy(lm/W): 120.26

Central intensity(cd): 7835.717, Maximum intensity(cd): 7835.717

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=26.0

[C90/270]Total=26.0

Field angle(10%Imax): [C0/180]Total=56.8

[C90/270]Total=56.8

Maximum s/h(1/2): C0_180=0.44 C90_270=0.44

Maximum s/h(1/4): C0_180=0.47 C90_270=0.47

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.24%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.827%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7835.717	0.000	0	0.00%	0.00%
1.0	7807.003	7.485	7.485	0.29%	0.32%
2.0	7706.536	22.267	29.751	0.85%	1.26%
3.0	7540.129	36.465	66.216	1.40%	2.81%
4.0	7335.874	49.795	116.011	1.91%	4.92%
5.0	7058.760	61.925	177.936	2.37%	7.55%
6.0	6755.353	72.597	250.533	2.78%	10.63%
7.0	6399.153	81.650	332.183	3.13%	14.10%
8.0	6003.098	88.761	420.943	3.40%	17.86%
9.0	5608.634	94.107	515.05	3.60%	21.86%
10.0	5149.061	97.353	612.403	3.73%	25.99%
11.0	4738.268	98.795	711.198	3.78%	30.18%
12.0	4327.544	99.102	810.3	3.80%	34.39%
13.0	3928.791	97.982	908.282	3.75%	38.54%
14.0	3562.558	95.889	1004.171	3.67%	42.61%
15.0	3244.551	93.451	1097.622	3.58%	46.58%
16.0	2951.108	90.784	1188.405	3.48%	50.43%
17.0	2661.747	87.407	1275.813	3.35%	54.14%
18.0	2419.713	83.782	1359.595	3.21%	57.70%
19.0	2196.292	80.309	1439.904	3.08%	61.11%
20.0	1985.464	76.538	1516.442	2.93%	64.35%
21.0	1790.551	72.507	1588.949	2.78%	67.43%
22.0	1617.155	68.479	1657.428	2.62%	70.34%
23.0	1425.390	63.841	1721.269	2.44%	73.05%
24.0	1279.775	59.145	1780.414	2.26%	75.56%
25.0	1150.684	55.263	1835.677	2.12%	77.90%
26.0	1056.762	52.107	1887.784	2.00%	80.11%
27.0	938.825	48.822	1936.606	1.87%	82.18%
28.0	829.370	44.767	1981.373	1.71%	84.08%
29.0	716.539	40.445	2021.819	1.55%	85.80%
30.0	608.737	35.782	2057.601	1.37%	87.32%
31.0	506.444	31.034	2088.635	1.19%	88.64%
32.0	420.120	26.545	2115.18	1.02%	89.76%
33.0	335.657	22.265	2137.445	0.85%	90.71%
34.0	274.450	18.464	2155.909	0.71%	91.49%
35.0	225.801	15.536	2171.445	0.59%	92.15%
36.0	190.375	13.251	2184.696	0.51%	92.71%
37.0	153.461	11.214	2195.91	0.43%	93.19%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	131.728	9.519	2205.429	0.36%	93.59%
39.0	118.346	8.536	2213.965	0.33%	93.95%
40.0	106.653	7.847	2221.812	0.30%	94.29%
41.0	95.693	7.205	2229.017	0.28%	94.59%
42.0	86.967	6.636	2235.654	0.25%	94.87%
43.0	78.388	6.125	2241.779	0.23%	95.13%
44.0	71.524	5.658	2247.437	0.22%	95.37%
45.0	65.407	5.262	2252.699	0.20%	95.60%
46.0	59.775	4.896	2257.595	0.19%	95.81%
47.0	55.208	4.573	2262.168	0.18%	96.00%
48.0	51.050	4.296	2266.464	0.16%	96.18%
49.0	47.639	4.053	2270.516	0.16%	96.35%
50.0	44.241	3.831	2274.347	0.15%	96.52%
51.0	41.522	3.629	2277.976	0.14%	96.67%
52.0	39.177	3.463	2281.439	0.13%	96.82%
53.0	37.163	3.321	2284.759	0.13%	96.96%
54.0	35.475	3.202	2287.961	0.12%	97.09%
55.0	33.918	3.098	2291.058	0.12%	97.23%
56.0	32.534	3.003	2294.061	0.11%	97.35%
57.0	31.240	2.916	2296.977	0.11%	97.48%
58.0	29.995	2.832	2299.809	0.11%	97.60%
59.0	28.853	2.751	2302.56	0.11%	97.71%
60.0	27.580	2.666	2305.226	0.10%	97.83%
61.0	26.424	2.577	2307.803	0.10%	97.94%
62.0	25.283	2.492	2310.295	0.10%	98.04%
63.0	24.210	2.407	2312.702	0.09%	98.14%
64.0	23.145	2.324	2315.026	0.09%	98.24%
65.0	22.287	2.248	2317.274	0.09%	98.34%
66.0	21.408	2.180	2319.454	0.08%	98.43%
67.0	20.598	2.112	2321.566	0.08%	98.52%
68.0	19.865	2.050	2323.616	0.08%	98.61%
69.0	19.159	1.991	2325.607	0.08%	98.69%
70.0	18.474	1.933	2327.54	0.07%	98.77%
71.0	17.810	1.875	2329.415	0.07%	98.85%
72.0	17.194	1.820	2331.235	0.07%	98.93%
73.0	16.613	1.768	2333.003	0.07%	99.01%
74.0	16.046	1.717	2334.72	0.07%	99.08%
75.0	15.575	1.671	2336.391	0.06%	99.15%

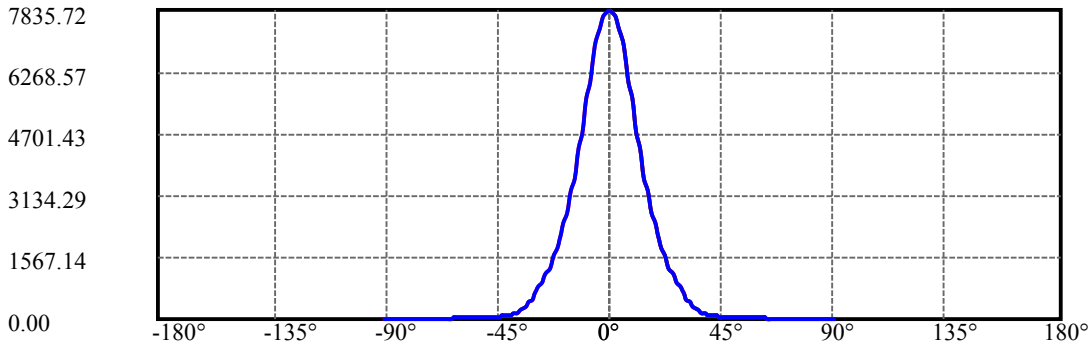
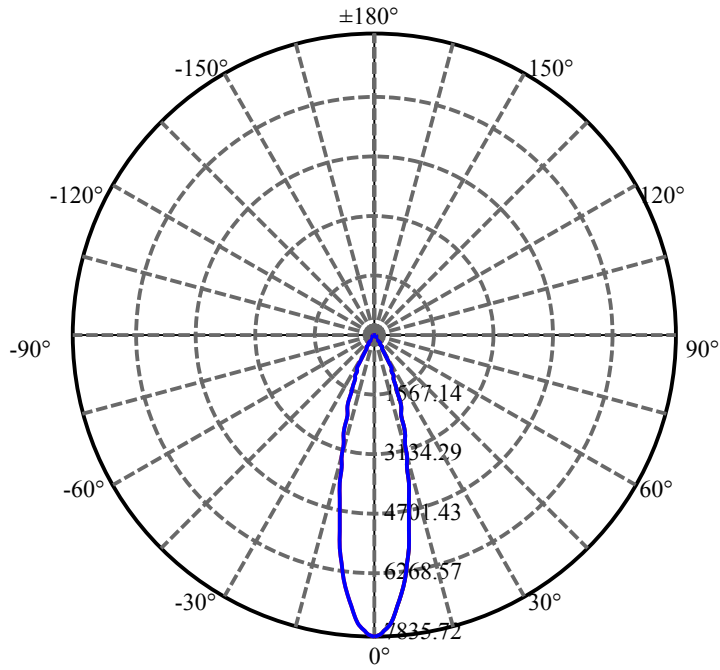
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	15.029	1.625	2338.015	0.06%	99.22%
77.0	14.565	1.578	2339.593	0.06%	99.29%
78.0	14.108	1.535	2341.128	0.06%	99.35%
79.0	13.659	1.492	2342.62	0.06%	99.41%
80.0	13.216	1.449	2344.069	0.06%	99.48%
81.0	12.828	1.408	2345.477	0.05%	99.54%
82.0	12.413	1.369	2346.846	0.05%	99.59%
83.0	12.026	1.329	2348.174	0.05%	99.65%
84.0	11.659	1.290	2349.465	0.05%	99.70%
85.0	11.299	1.253	2350.718	0.05%	99.76%
86.0	10.822	1.209	2351.927	0.05%	99.81%
87.0	10.483	1.166	2353.093	0.04%	99.86%
88.0	10.206	1.133	2354.226	0.04%	99.91%
89.0	10.061	1.111	2355.337	0.04%	99.95%
90.0	9.957	1.098	2356.434	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	2057.60	78.79%	87.32%
0-40	2221.81	85.08%	94.29%
0-60	2305.23	88.28%	97.83%
0-90	2355.34	90.20%	99.95%
0-120	2355.34	90.20%	99.95%
0-180	2356.43	90.24%	100.00%
60-90	50.11	1.92%	2.13%
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%
0-25.95	1885.15	72.19%	80.00%

ZONAL LUMEN SUMMARY

0-10	612.40
10-20	904.04
20-30	541.16
30-40	164.21
40-50	52.54
50-60	30.88
60-70	22.31
70-80	16.53
80-90	11.27
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: —————

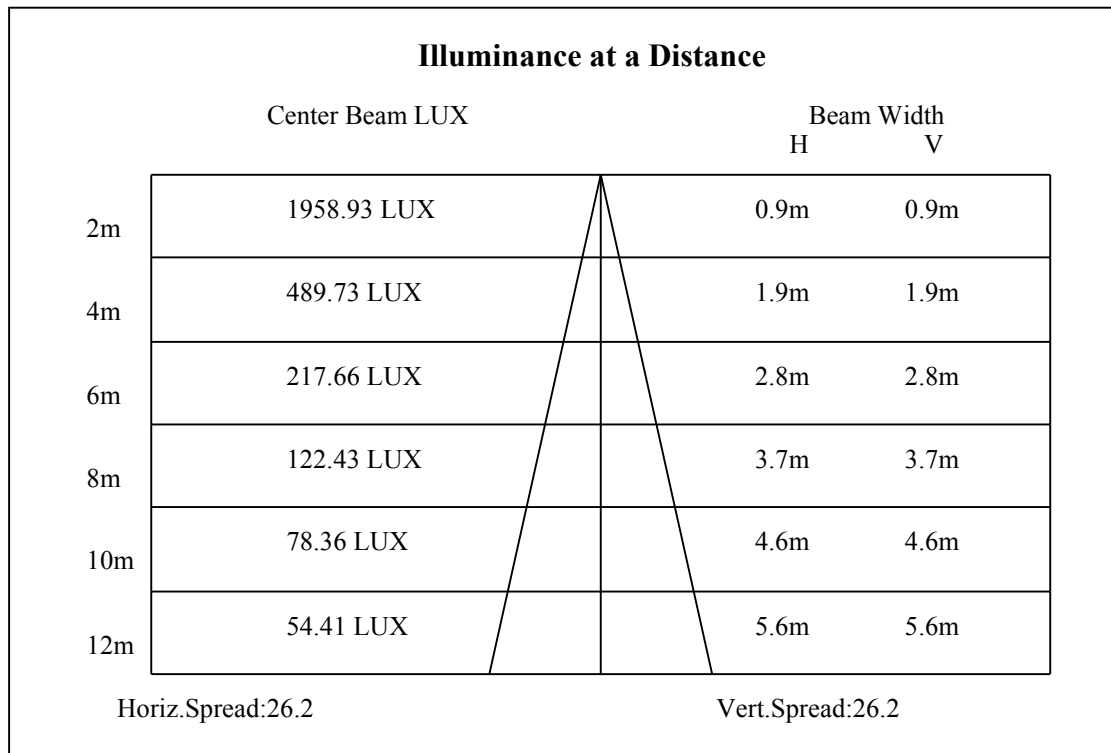
C90/C270: —————

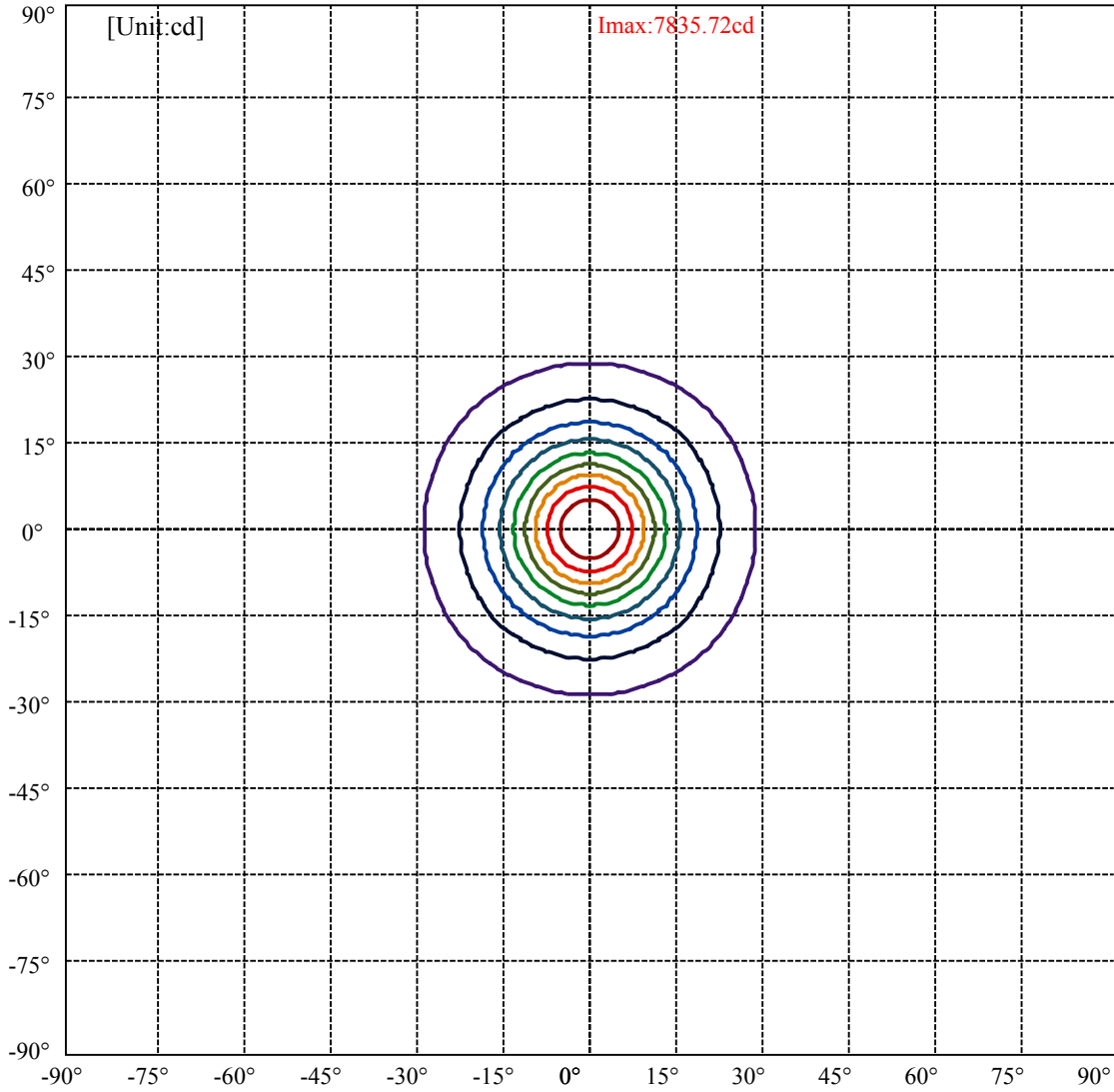
Field angle(10%Imax):C0/180Left:28.4 Right:28.4

:C90/270Left:28.4 Right:28.4

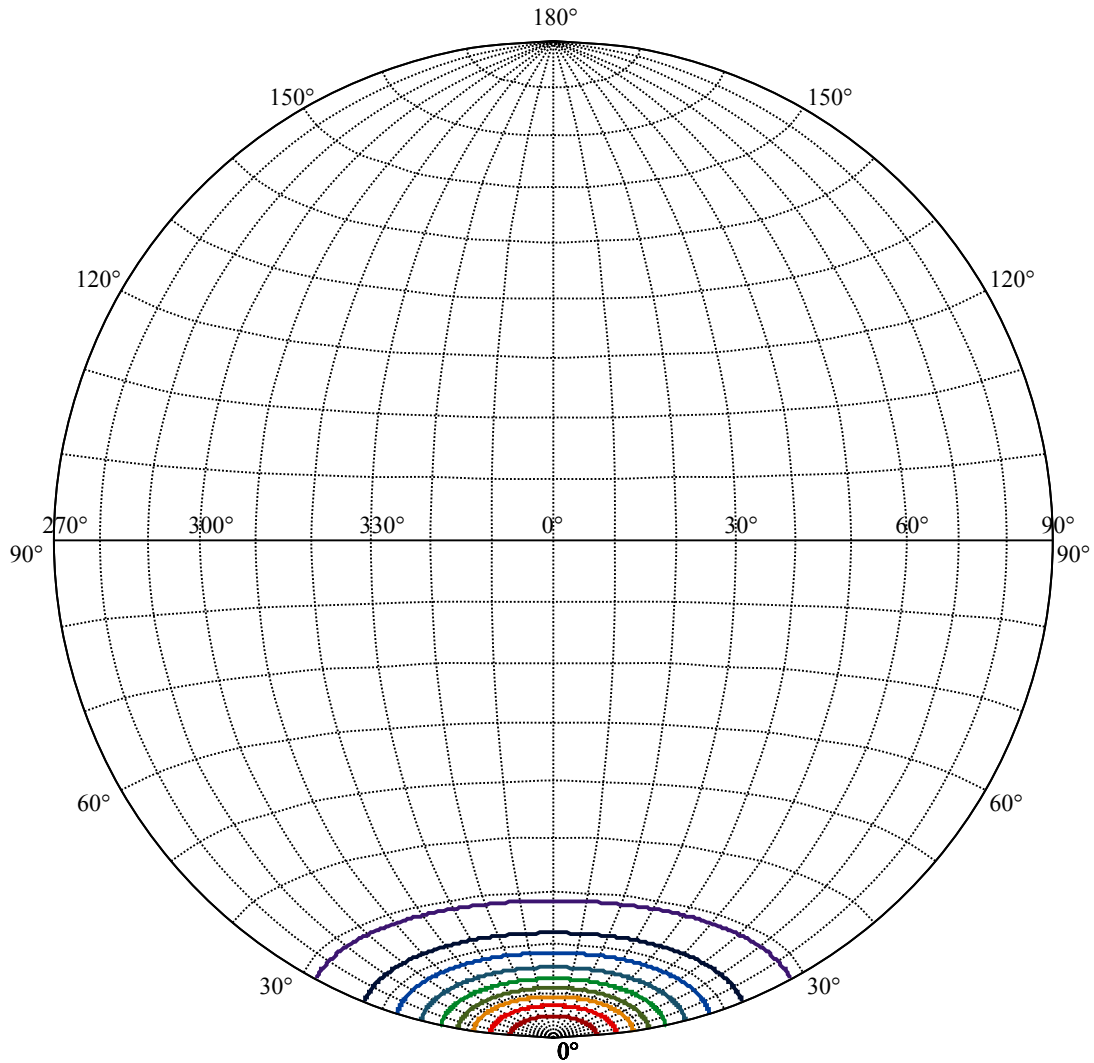
Beam Angle(50%Imax):C0/180Left:13.0 Right:13.0

:C90/270Left:13.0 Right:13.0





(10%Imax) 783.572	—
(20%Imax) 1567.14	—
(30%Imax) 2350.72	—
(40%Imax) 3134.29	—
(50%Imax) 3917.86	—
(60%Imax) 4701.43	—
(70%Imax) 5485	—
(80%Imax) 6268.57	—
(90%Imax) 7052.15	—



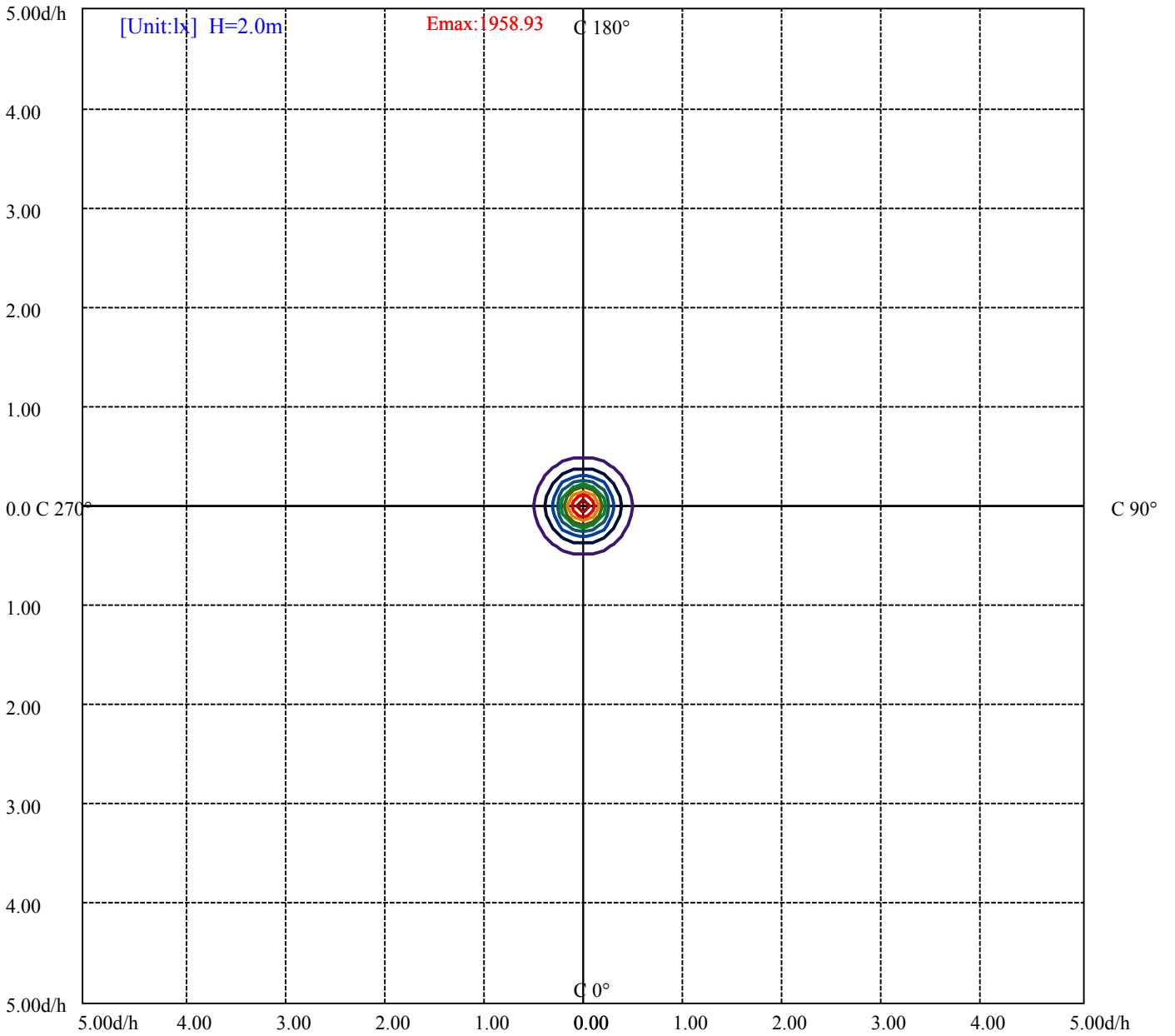
House

[Unit:cd]

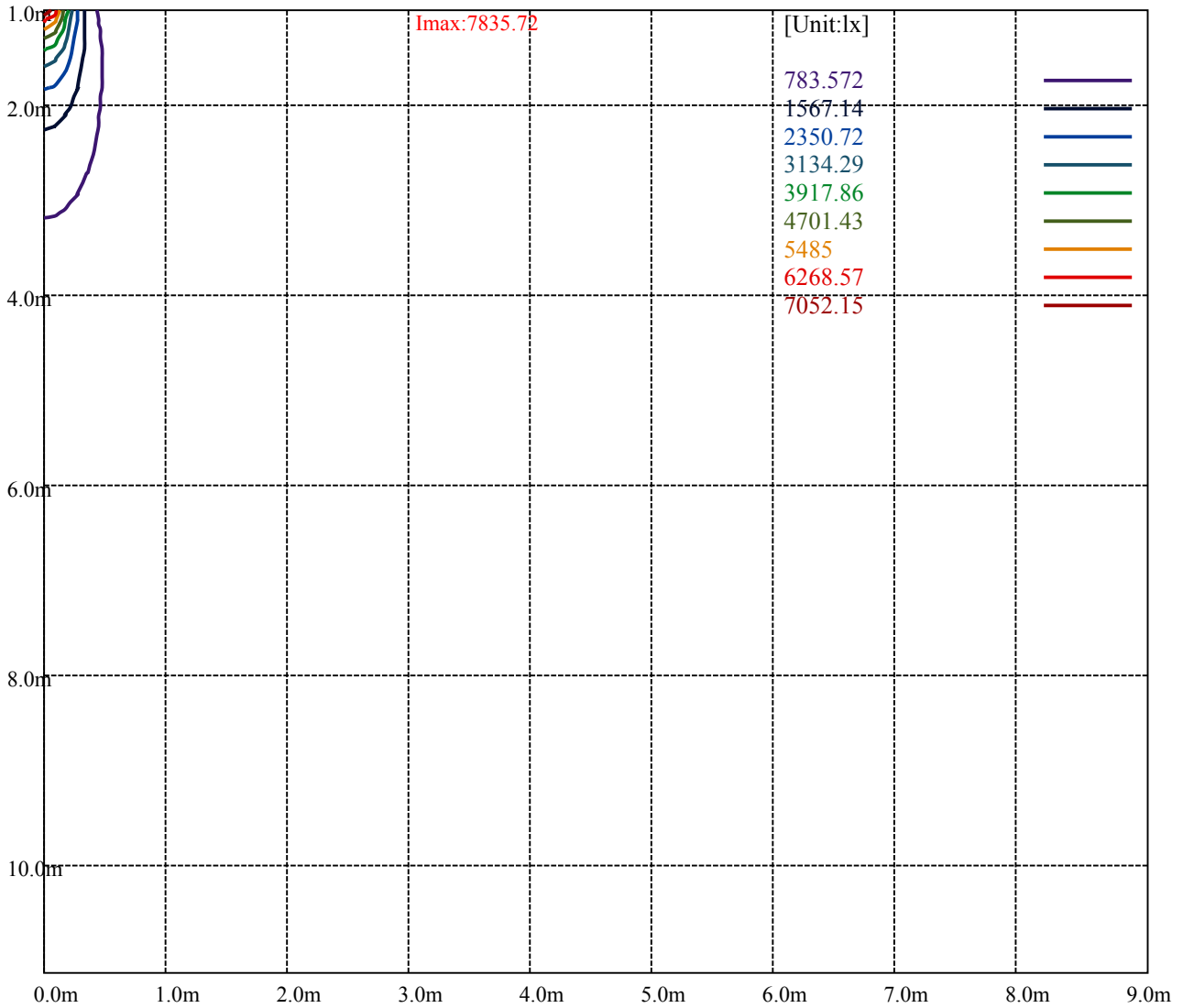
Road

Imax:7835.72

(10%Imax) 783.572	—
(20%Imax) 1567.14	—
(30%Imax) 2350.72	—
(40%Imax) 3134.29	—
(50%Imax) 3917.86	—
(60%Imax) 4701.43	—
(70%Imax) 5485	—
(80%Imax) 6268.57	—
(90%Imax) 7052.15	—



(10%Emax) 195.8927	—
(20%Emax) 391.785	—
(30%Emax) 587.6775	—
(40%Emax) 783.57	—
(50%Emax) 979.465	—
(60%Emax) 1175.358	—
(70%Emax) 1371.25	—
(80%Emax) 1567.142	—
(90%Emax) 1763.035	—



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

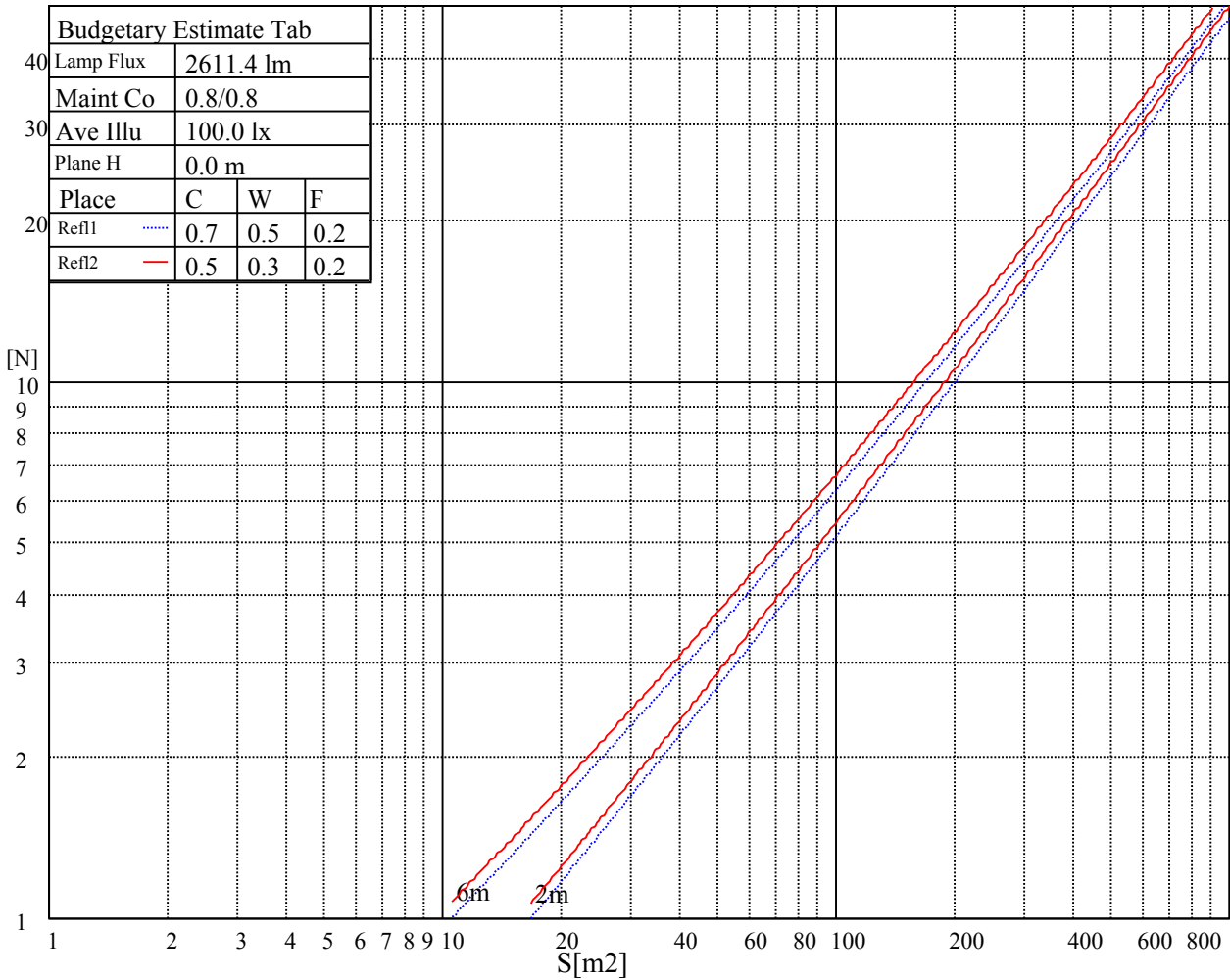
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

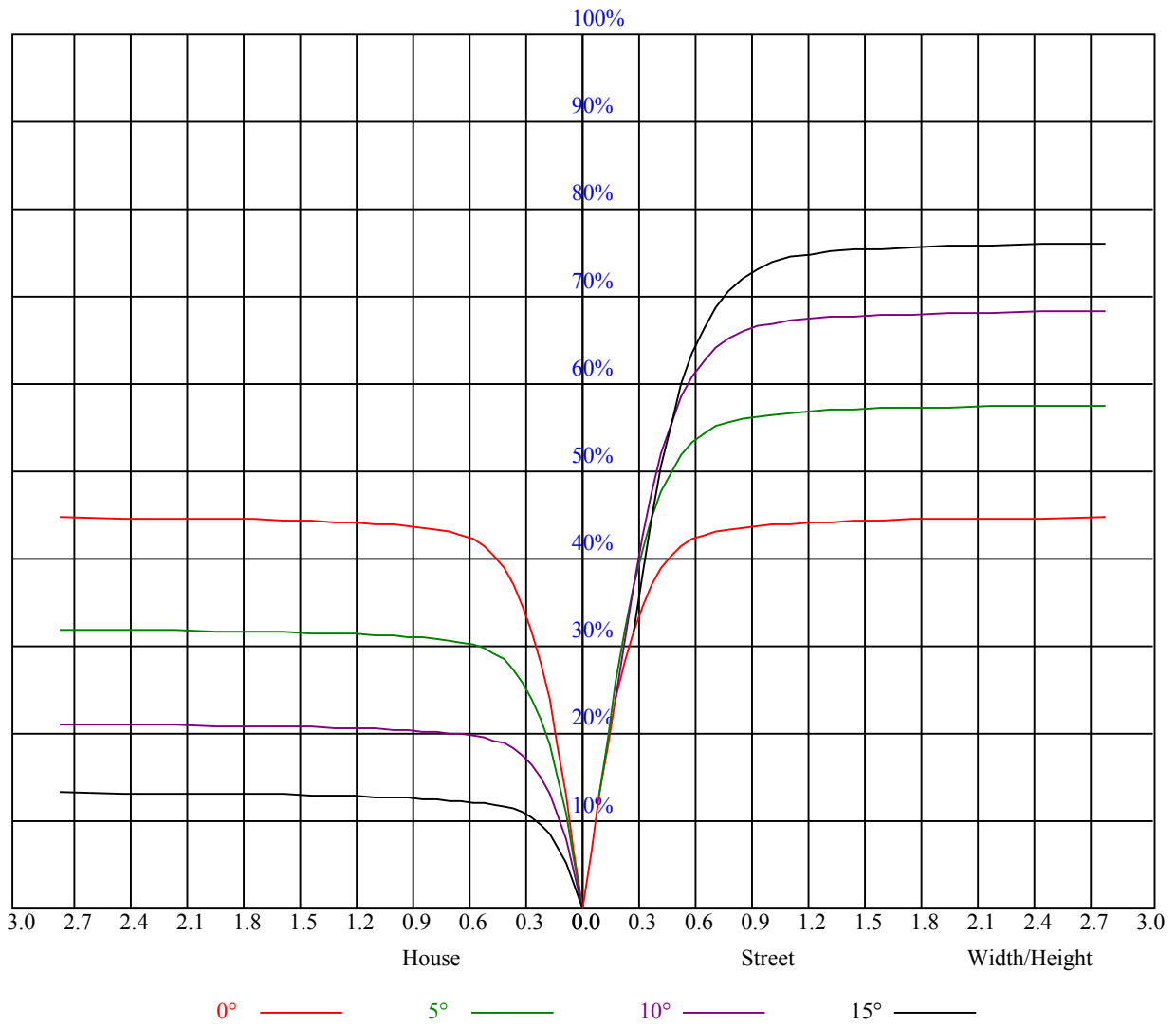


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	1.07	1.07	1.07	1.05	1.05	1.05	1.00	1.00	1.00	0.96	0.96	0.96	0.92	0.92	0.92	0.90
1	1.01	0.99	0.97	0.99	0.97	0.95	0.95	0.94	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.85
2	0.95	0.92	0.89	0.93	0.90	0.88	0.91	0.88	0.86	0.88	0.86	0.84	0.85	0.84	0.83	0.81
3	0.90	0.86	0.83	0.89	0.85	0.82	0.86	0.83	0.81	0.84	0.82	0.80	0.82	0.80	0.79	0.77
4	0.86	0.81	0.78	0.85	0.81	0.78	0.83	0.79	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
5	0.82	0.77	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.77	0.74	0.72	0.71
6	0.78	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.68
7	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.72	0.69	0.66	0.71	0.68	0.66	0.65
8	0.72	0.68	0.65	0.71	0.67	0.64	0.71	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.63
9	0.69	0.65	0.62	0.69	0.65	0.62	0.68	0.64	0.62	0.67	0.64	0.62	0.67	0.64	0.61	0.60
10	0.67	0.63	0.60	0.66	0.62	0.60	0.66	0.62	0.60	0.65	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	7789.36	7652.64	7475.50	7254.64	6978.43	6573.79	6212.89	5734.63	5319.48
45.0	7871.28	7827.00	7710.76	7480.49	7253.54	6905.36	6583.76	6222.30	5742.38
90.0	7809.29	7681.97	7507.61	7233.05	6968.46	6664.57	6247.76	5855.30	5439.04
135.0	7872.94	7850.25	7753.38	7603.37	7346.53	7105.19	6828.97	6528.96	6072.84
180.0	7789.36	7882.35	7871.28	7810.95	7694.15	7486.57	7273.46	7026.59	6656.82
225.0	7871.28	7864.64	7774.97	7634.37	7467.20	7251.88	6933.04	6628.04	6284.85
270.0	7809.29	7871.84	7843.61	7742.31	7604.48	7413.51	7188.77	6845.58	6534.49
315.0	7872.94	7825.34	7715.18	7561.86	7374.21	7069.21	6774.17	6351.83	5974.87
360.0	7789.36	7652.64	7475.50	7254.64	6978.43	6573.79	6212.89	5734.63	5319.48
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4901.56	4408.36	4035.83	3687.66	3302.40	3020.09	2757.72	2513.61	2243.48
45.0	5334.43	4924.81	4528.48	4062.95	3711.46	3399.82	3108.10	2772.11	2528.55
90.0	5029.98	4524.05	4139.90	3783.97	3465.14	3104.23	2836.32	2588.33	2310.46
135.0	5693.67	5172.24	4764.84	4367.40	3904.64	3562.56	3250.92	2903.30	2648.12
180.0	6323.04	5858.63	5459.53	5041.05	4515.75	4112.77	3755.74	3444.10	3060.50
225.0	5820.98	5417.46	5010.05	4500.80	4122.74	3689.32	3370.48	3085.96	2821.37
270.0	6191.30	5829.29	5322.80	4912.63	4497.48	4104.47	3669.39	3370.48	3004.04
315.0	5574.11	5057.66	4644.72	4263.89	3910.73	3507.20	3207.74	2930.97	2677.45
360.0	4901.56	4408.36	4035.83	3687.66	3302.40	3020.09	2757.72	2513.61	2243.48
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2048.08	1865.42	1691.05	1495.10	1360.04	1075.63	1075.63	989.17	879.46
45.0	2309.91	2065.24	1882.02	1710.43	1515.03	1383.84	1268.15	1124.23	1006.88
90.0	2112.29	1880.36	1707.66	1547.69	1408.75	1103.36	1103.36	1015.68	904.03
135.0	2418.40	2211.38	1971.14	1791.24	1627.95	1469.64	1305.24	1190.66	1074.41
180.0	2804.21	2556.23	2317.10	2063.03	1870.95	1696.59	1497.31	1354.50	1207.26
225.0	2523.57	2296.62	2098.45	1910.81	1698.80	1538.83	1394.36	1079.89	1079.89
270.0	2754.40	2519.70	2233.52	2041.44	1853.24	1684.96	1491.23	1348.41	1226.64
315.0	2386.85	2175.40	1982.77	1764.67	1602.49	1450.26	1102.92	1102.92	1075.52
360.0	2048.08	1865.42	1691.05	1495.10	1360.04	1075.63	1075.63	989.17	879.46
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	743.45	644.65	549.94	437.51	352.55	277.88	216.93	165.62	145.52
45.0	887.87	781.59	654.83	560.18	469.95	383.60	288.95	288.95	217.82
90.0	768.20	668.89	574.74	483.46	375.68	299.68	225.84	188.48	167.06
135.0	928.28	816.47	685.83	589.52	498.18	411.83	314.41	280.09	280.09
180.0	1098.22	990.83	882.89	750.59	648.74	556.30	467.18	364.78	290.61
225.0	1026.53	917.98	782.26	680.52	559.40	468.35	381.77	304.89	225.23
270.0	1115.93	980.87	871.82	764.43	638.23	546.34	457.22	357.03	287.84
315.0	942.12	833.68	730.00	603.69	508.81	416.98	332.95	245.77	192.24
360.0	743.45	644.65	549.94	437.51	352.55	277.88	216.93	165.62	145.52
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	131.41	119.34	105.78	96.15	87.74	78.44	71.85	64.71	59.56
45.0	162.08	142.70	129.25	114.03	103.57	94.32	84.03	76.89	70.52
90.0	147.41	133.57	120.95	110.10	97.87	89.40	81.65	73.01	67.09
135.0	165.34	145.14	131.24	118.62	107.88	95.93	87.62	78.27	71.74
180.0	290.61	214.99	147.96	133.24	120.12	105.73	95.98	87.35	77.83
225.0	179.40	153.16	137.66	121.11	109.43	99.36	90.61	80.87	74.01
270.0	287.84	177.80	157.09	141.48	127.65	112.59	102.07	92.88	84.47
315.0	158.92	140.99	123.88	112.04	98.97	89.78	81.92	73.12	66.98
360.0	131.41	119.34	105.78	96.15	87.74	78.44	71.85	64.71	59.56

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	55.30	50.48	47.27	44.39	41.79	39.19	37.31	35.65	34.37
45.0	64.82	58.73	54.36	50.48	47.16	43.51	41.07	38.91	36.64
90.0	61.83	57.07	52.09	48.60	45.39	42.18	39.85	37.42	35.87
135.0	66.04	59.62	55.24	51.31	47.83	44.01	41.46	39.30	37.31
180.0	71.30	64.32	59.45	55.13	51.15	46.83	43.95	41.29	39.02
225.0	66.65	61.50	57.01	52.03	48.49	45.45	42.73	39.74	37.75
270.0	75.50	69.25	63.93	57.68	53.53	49.82	45.72	42.90	39.91
315.0	61.83	57.24	52.31	48.77	45.78	42.95	40.08	38.19	36.42
360.0	55.30	50.48	47.27	44.39	41.79	39.19	37.31	35.65	34.37
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	33.27	31.72	30.83	29.56	28.40	27.29	26.02	24.85	23.91
45.0	35.26	33.93	32.27	31.16	29.67	28.45	27.29	26.18	24.85
90.0	34.37	32.88	31.39	30.11	28.78	27.57	26.24	25.02	24.08
135.0	35.37	34.04	32.66	31.16	30.17	29.01	27.51	26.46	25.19
180.0	37.09	34.87	33.43	32.38	30.89	29.89	28.67	27.57	26.51
225.0	35.98	34.43	32.88	31.66	30.56	29.34	28.17	27.07	25.74
270.0	37.81	35.98	34.49	32.88	31.44	30.39	29.28	27.79	26.63
315.0	34.65	33.49	32.33	31.00	30.06	28.89	27.46	26.46	25.35
360.0	33.27	31.72	30.83	29.56	28.40	27.29	26.02	24.85	23.91
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.92	22.09	21.31	20.65	19.82	19.21	18.60	18.10	17.49
45.0	23.86	22.97	22.14	21.15	20.48	19.82	18.88	18.21	17.60
90.0	23.19	22.09	21.26	20.31	19.60	18.88	18.05	17.38	16.83
135.0	24.08	23.19	22.36	21.31	20.59	19.93	19.26	18.38	17.77
180.0	25.24	24.19	23.25	22.42	21.42	20.65	19.98	19.37	18.60
225.0	24.69	23.41	22.53	21.75	20.92	20.04	19.43	18.76	18.10
270.0	25.52	24.13	23.19	22.31	21.31	20.54	19.87	19.04	18.38
315.0	24.19	23.08	22.25	21.37	20.65	19.87	19.21	18.54	17.71
360.0	22.92	22.09	21.31	20.65	19.82	19.21	18.60	18.10	17.49
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.05	16.66	16.22	15.83	15.28	14.78	14.28	13.84	13.23
45.0	16.83	16.27	15.67	15.17	14.72	14.28	13.84	13.34	13.01
90.0	16.27	15.67	15.17	14.72	14.17	13.73	13.28	12.90	12.40
135.0	17.16	16.38	15.83	15.33	14.78	14.28	13.89	13.34	12.95
180.0	17.93	17.38	16.66	16.16	15.55	15.06	14.61	14.23	13.73
225.0	17.38	16.83	16.27	15.78	15.17	14.72	14.23	13.78	13.45
270.0	17.77	17.21	16.50	16.00	15.50	15.00	14.45	14.00	13.56
315.0	17.16	16.50	16.05	15.61	15.06	14.67	14.28	13.84	13.40
360.0	17.05	16.66	16.22	15.83	15.28	14.78	14.28	13.84	13.23
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.79	12.29	11.90	11.57	11.24	10.46	10.24	9.96	10.13
45.0	12.57	12.12	11.73	11.35	11.07	10.52	10.30	10.07	9.91
90.0	12.07	11.68	11.35	11.07	10.63	10.41	10.13	9.80	9.96
135.0	12.62	12.18	11.73	11.46	11.07	10.68	10.46	10.19	9.85
180.0	13.40	13.01	12.62	12.29	11.90	11.46	10.96	10.63	10.35
225.0	13.06	12.68	12.29	11.85	11.46	10.90	10.63	10.35	10.19
270.0	13.12	12.73	12.29	11.90	11.57	11.24	10.68	10.46	10.19
315.0	13.01	12.62	12.29	11.79	11.46	10.90	10.46	10.19	9.91
360.0	12.79	12.29	11.90	11.57	11.24	10.46	10.24	9.96	10.13

Intensity data(cd)

C/γ(°)	90.0
0.0	10.02
45.0	9.91
90.0	9.85
135.0	9.96
180.0	10.19
225.0	9.85
270.0	9.96
315.0	9.91
360.0	10.02