



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client:

LumCAT: 2-2688-L

Luminaire: 92.70.411.00

Report No: 2024416-B022

Ballast type: AC

Test No: 2024416-C022

Voltage(V): 33.730

LampCAT: NICHIA NFCWJ108B-V3

Current(A): 0.577

Lamp flux(lm): 2647.0

Power (W): 19.462

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2162.55, Efficiency(%): 81.70% , Luminous Efficacy(lm/W): 111.12

Central intensity(cd): 5230.800, Maximum intensity(cd): 5230.800

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=35.2

[C90/270]Total=35.2

Field angle(10%Imax): [C0/180]Total=61.0

[C90/270]Total=61.0

Maximum s/h(1/2): C0_180=0.58 C90_270=0.58

Maximum s/h(1/4): C0_180=0.58 C90_270=0.58

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 81.70%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.537%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/16
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5230.800	0.000	0	0.00%	0.00%
1.0	5224.582	5.003	5.003	0.19%	0.23%
2.0	5209.805	14.976	19.979	0.57%	0.92%
3.0	5180.763	24.851	44.83	0.94%	2.07%
4.0	5138.261	34.541	79.371	1.30%	3.67%
5.0	5072.716	43.927	123.298	1.66%	5.70%
6.0	4982.518	52.843	176.141	2.00%	8.15%
7.0	4849.160	61.025	237.166	2.31%	10.97%
8.0	4711.632	68.425	305.591	2.58%	14.13%
9.0	4559.693	75.139	380.73	2.84%	17.61%
10.0	4357.424	80.697	461.427	3.05%	21.34%
11.0	4155.156	85.058	546.485	3.21%	25.27%
12.0	3943.231	88.527	635.012	3.34%	29.36%
13.0	3708.410	90.806	725.817	3.43%	33.56%
14.0	3474.393	91.939	817.757	3.47%	37.81%
15.0	3227.574	92.008	909.764	3.48%	42.07%
16.0	3000.946	91.265	1001.029	3.45%	46.29%
17.0	2744.544	89.473	1090.502	3.38%	50.43%
18.0	2523.988	86.867	1177.369	3.28%	54.44%
19.0	2300.359	83.934	1261.303	3.17%	58.32%
20.0	2088.800	80.334	1341.636	3.03%	62.04%
21.0	1882.654	76.260	1417.896	2.88%	65.57%
22.0	1687.335	71.740	1489.637	2.71%	68.88%
23.0	1485.755	66.580	1556.217	2.52%	71.96%
24.0	1297.451	60.851	1617.068	2.30%	74.78%
25.0	1197.846	56.738	1673.805	2.14%	77.40%
26.0	1079.616	53.760	1727.565	2.03%	79.89%
27.0	942.307	49.467	1777.032	1.87%	82.17%
28.0	812.717	44.433	1821.465	1.68%	84.23%
29.0	692.124	39.371	1860.836	1.49%	86.05%
30.0	574.091	34.188	1895.024	1.29%	87.63%
31.0	469.263	29.035	1924.059	1.10%	88.97%
32.0	373.791	24.152	1948.211	0.91%	90.09%
33.0	297.887	19.788	1967.999	0.75%	91.00%
34.0	248.245	16.528	1984.527	0.62%	91.77%
35.0	176.994	13.206	1997.733	0.50%	92.38%
36.0	138.062	10.031	2007.764	0.38%	92.84%
37.0	116.255	8.294	2016.059	0.31%	93.23%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	103.578	7.338	2023.397	0.28%	93.57%
39.0	94.397	6.757	2030.154	0.26%	93.88%
40.0	85.582	6.277	2036.431	0.24%	94.17%
41.0	77.784	5.817	2042.248	0.22%	94.44%
42.0	71.690	5.431	2047.679	0.21%	94.69%
43.0	65.501	5.082	2052.761	0.19%	94.92%
44.0	60.446	4.754	2057.515	0.18%	95.14%
45.0	56.028	4.476	2061.991	0.17%	95.35%
46.0	52.129	4.230	2066.221	0.16%	95.55%
47.0	48.603	4.006	2070.227	0.15%	95.73%
48.0	45.560	3.807	2074.034	0.14%	95.91%
49.0	42.897	3.633	2077.666	0.14%	96.07%
50.0	40.322	3.470	2081.136	0.13%	96.24%
51.0	38.135	3.319	2084.455	0.13%	96.39%
52.0	36.167	3.188	2087.643	0.12%	96.54%
53.0	34.367	3.068	2090.712	0.12%	96.68%
54.0	32.663	2.954	2093.666	0.11%	96.81%
55.0	31.127	2.847	2096.514	0.11%	96.95%
56.0	29.700	2.749	2099.262	0.10%	97.07%
57.0	28.171	2.646	2101.908	0.10%	97.20%
58.0	26.884	2.546	2104.454	0.10%	97.31%
59.0	25.647	2.456	2106.91	0.09%	97.43%
60.0	24.455	2.367	2109.277	0.09%	97.54%
61.0	23.343	2.281	2111.558	0.09%	97.64%
62.0	22.385	2.203	2113.762	0.08%	97.74%
63.0	21.492	2.134	2115.895	0.08%	97.84%
64.0	20.695	2.070	2117.966	0.08%	97.94%
65.0	20.000	2.014	2119.98	0.08%	98.03%
66.0	19.561	1.974	2121.953	0.07%	98.12%
67.0	19.378	1.958	2123.911	0.07%	98.21%
68.0	19.334	1.961	2125.872	0.07%	98.30%
69.0	19.408	1.976	2127.849	0.07%	98.40%
70.0	19.627	2.005	2129.854	0.08%	98.49%
71.0	20.124	2.055	2131.908	0.08%	98.58%
72.0	20.571	2.116	2134.024	0.08%	98.68%
73.0	20.878	2.167	2136.192	0.08%	98.78%
74.0	21.024	2.203	2138.395	0.08%	98.88%
75.0	20.922	2.216	2140.611	0.08%	98.99%

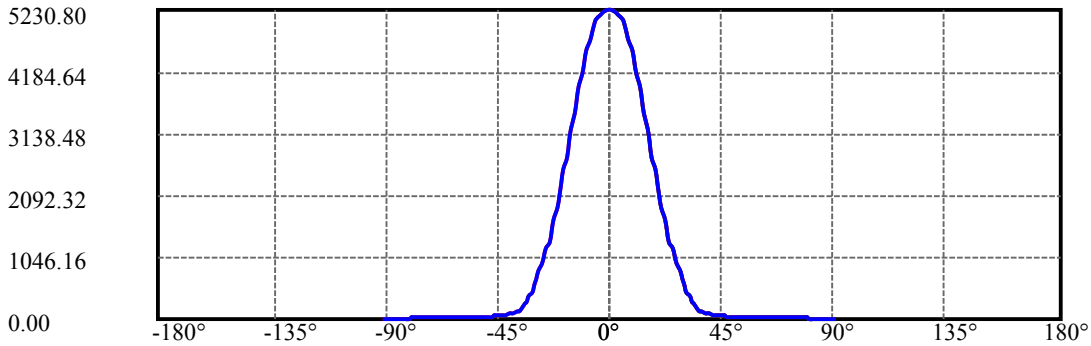
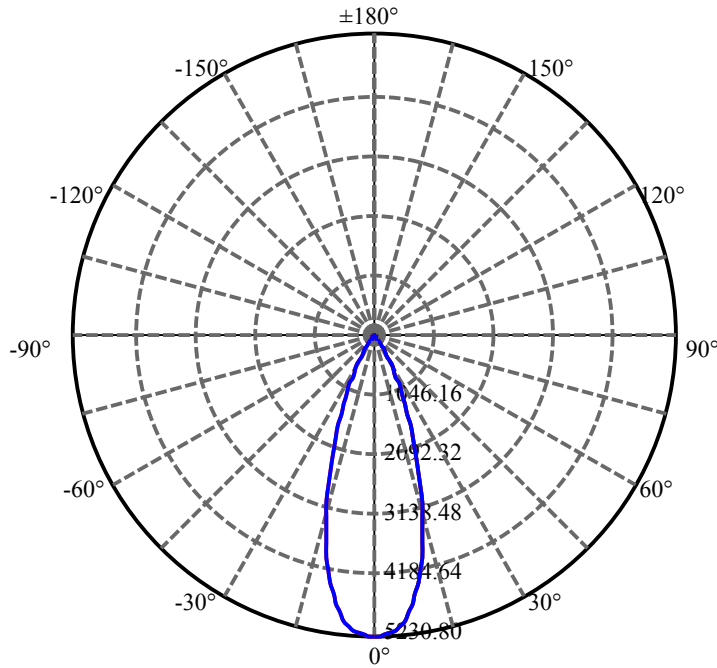
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	20.446	2.196	2142.807	0.08%	99.09%
77.0	19.700	2.140	2144.947	0.08%	99.19%
78.0	18.500	2.045	2146.992	0.08%	99.28%
79.0	16.642	1.888	2148.88	0.07%	99.37%
80.0	14.528	1.680	2150.561	0.06%	99.45%
81.0	12.941	1.485	2152.046	0.06%	99.51%
82.0	12.048	1.355	2153.401	0.05%	99.58%
83.0	11.705	1.291	2154.693	0.05%	99.64%
84.0	11.470	1.263	2155.955	0.05%	99.70%
85.0	11.046	1.229	2157.184	0.05%	99.75%
86.0	10.219	1.162	2158.347	0.04%	99.81%
87.0	9.795	1.095	2159.442	0.04%	99.86%
88.0	9.466	1.055	2160.497	0.04%	99.91%
89.0	9.312	1.029	2161.526	0.04%	99.95%
90.0	9.327	1.022	2162.548	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1895.02	71.59%	87.63%
0-40	2036.43	76.93%	94.17%
0-60	2109.28	79.69%	97.54%
0-90	2161.53	81.66%	99.95%
0-120	2161.53	81.66%	99.95%
0-180	2162.55	81.70%	100.00%
60-90	52.25	1.97%	2.42%
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%
0-26.05	1730.04	65.36%	80.00%

ZONAL LUMEN SUMMARY

0-10	461.43
10-20	880.21
20-30	553.39
30-40	141.41
40-50	44.70
50-60	28.14
60-70	20.58
70-80	20.71
80-90	10.97
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: —————

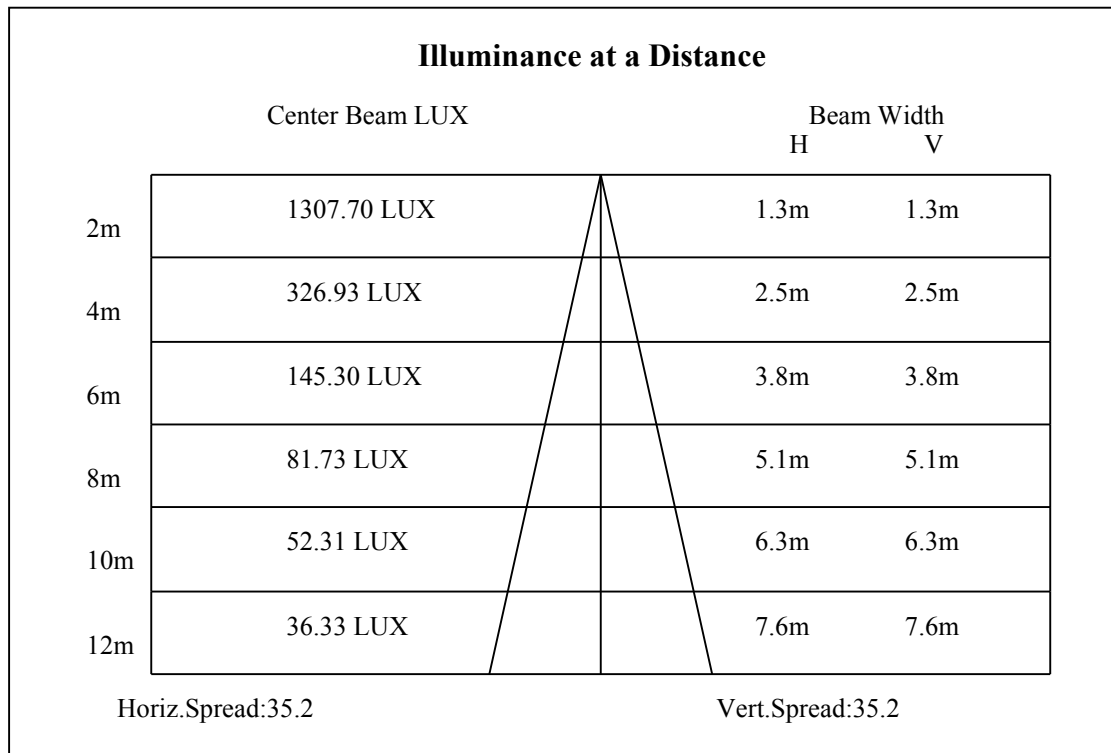
C90/C270: —————

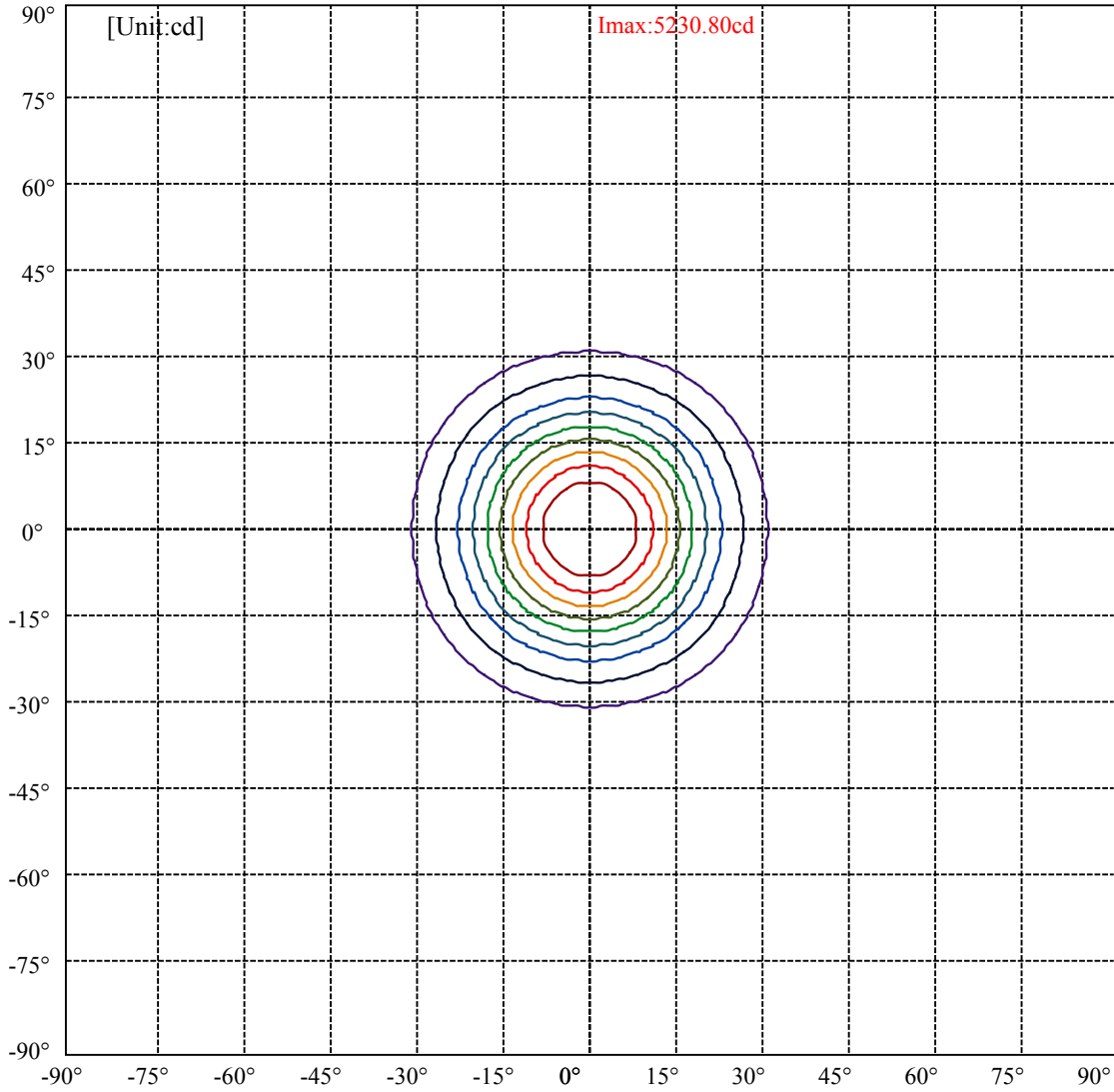
Field angle(10%Imax):C0/180Left:30.5 Right:30.5

:C90/270Left:30.5 Right:30.5

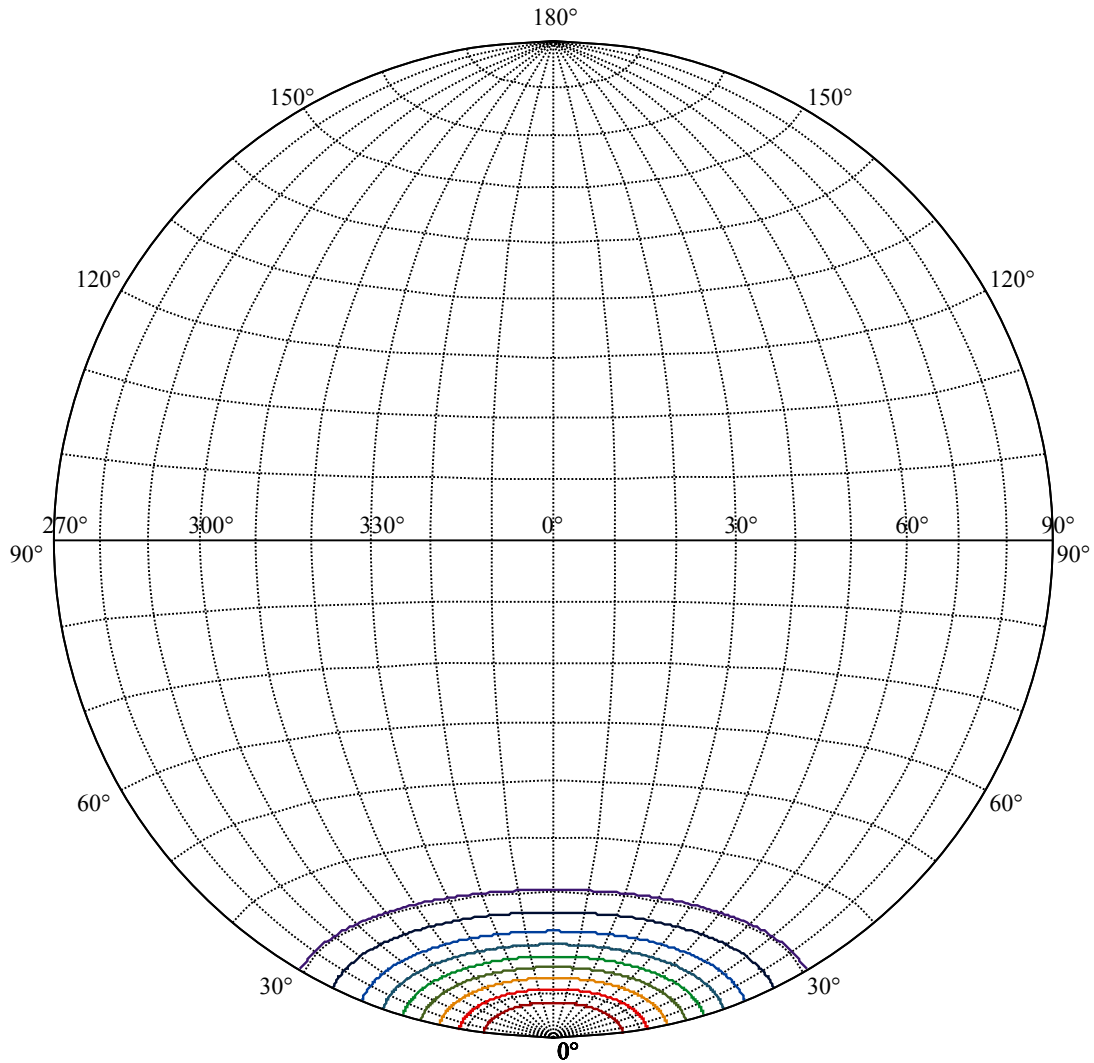
Beam Angle(50%Imax):C0/180Left:17.6 Right:17.6

:C90/270Left:17.6 Right:17.6





(10%Imax) 523.08	—
(20%Imax) 1046.16	—
(30%Imax) 1569.24	—
(40%Imax) 2092.32	—
(50%Imax) 2615.4	—
(60%Imax) 3138.48	—
(70%Imax) 3661.56	—
(80%Imax) 4184.64	—
(90%Imax) 4707.72	—



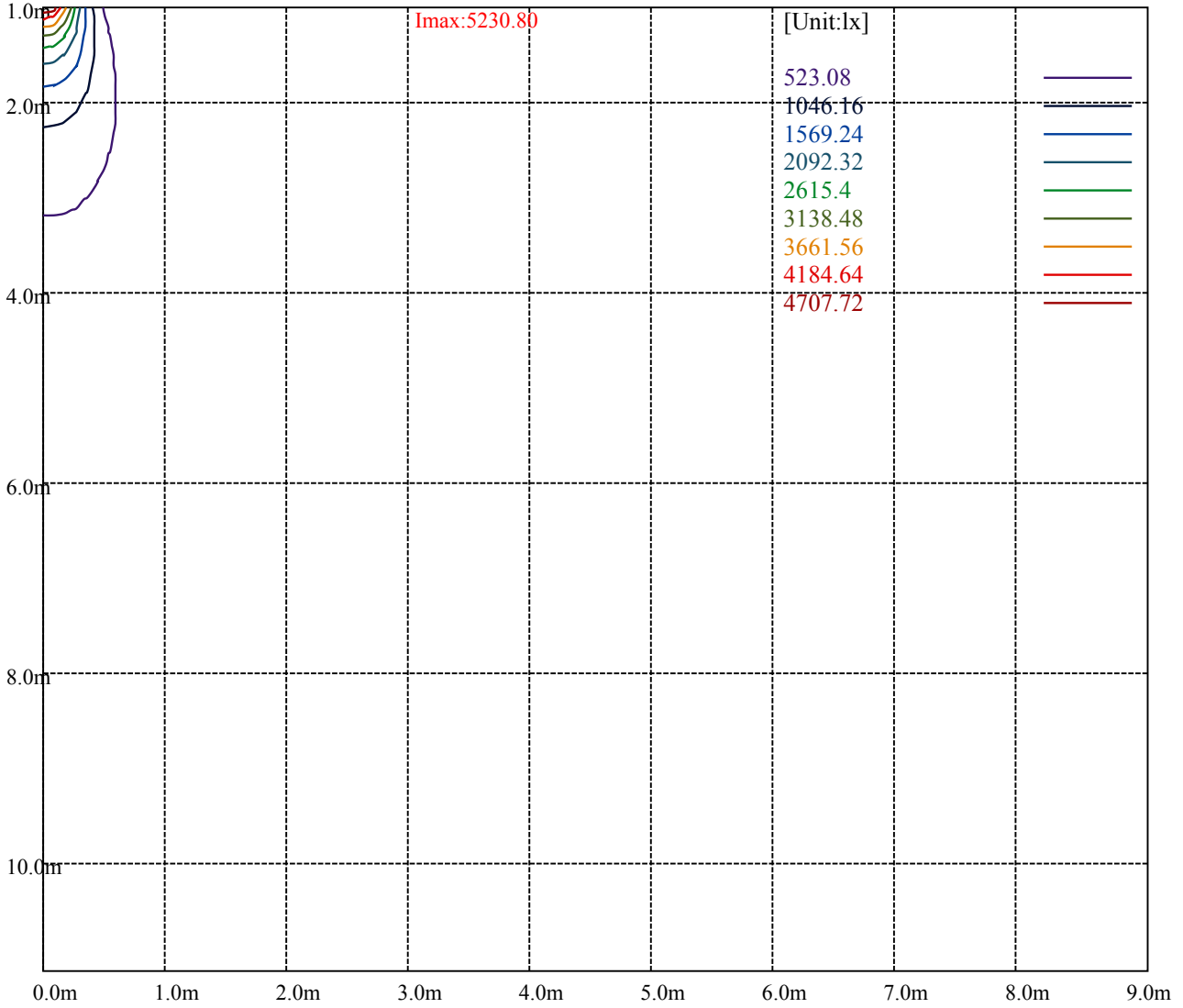
House

[Unit:cd]

Road

Imax:5230.80

(10%Imax) 523.08	—
(20%Imax) 1046.16	—
(30%Imax) 1569.24	—
(40%Imax) 2092.32	—
(50%Imax) 2615.4	—
(60%Imax) 3138.48	—
(70%Imax) 3661.56	—
(80%Imax) 4184.64	—
(90%Imax) 4707.72	—



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

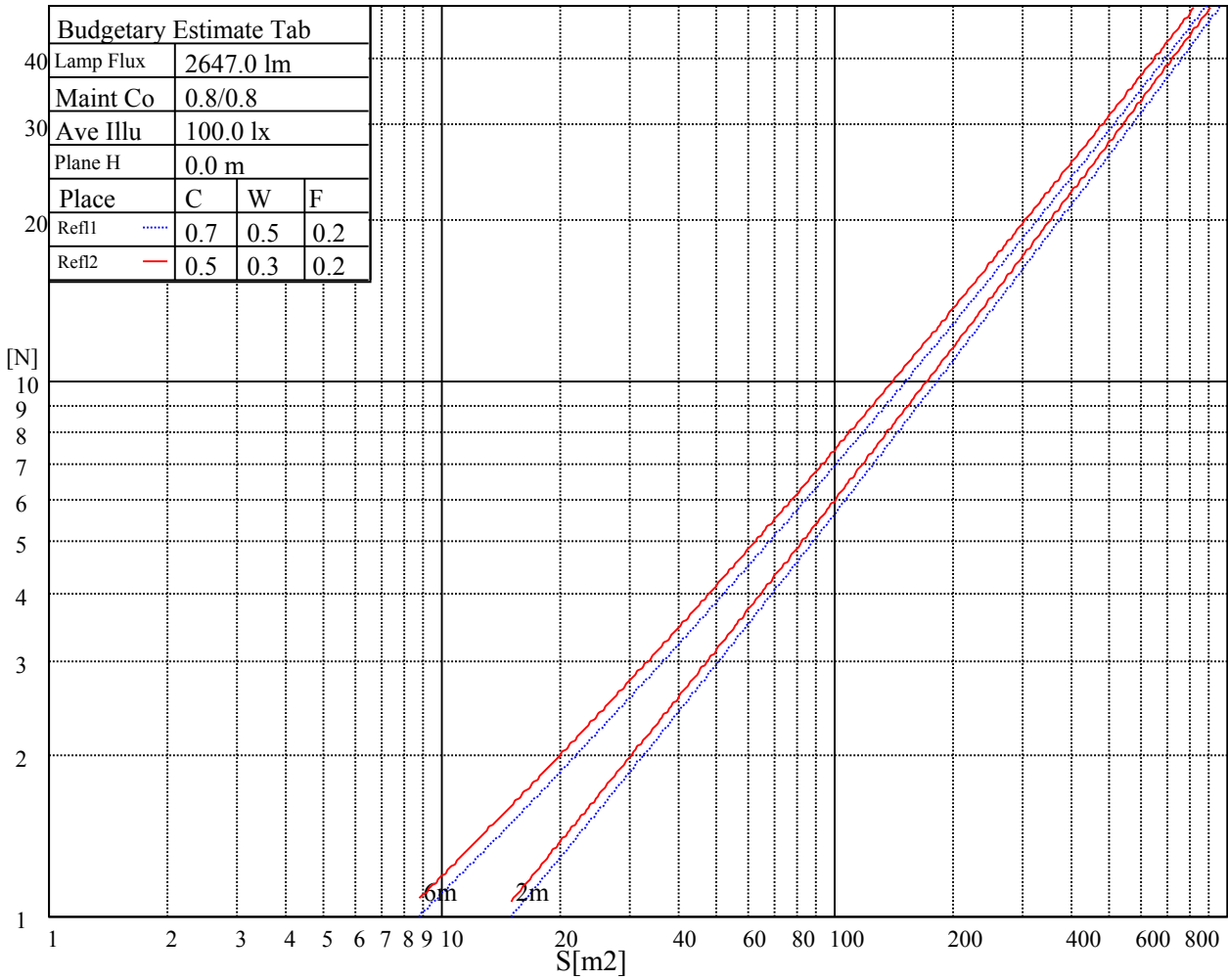
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

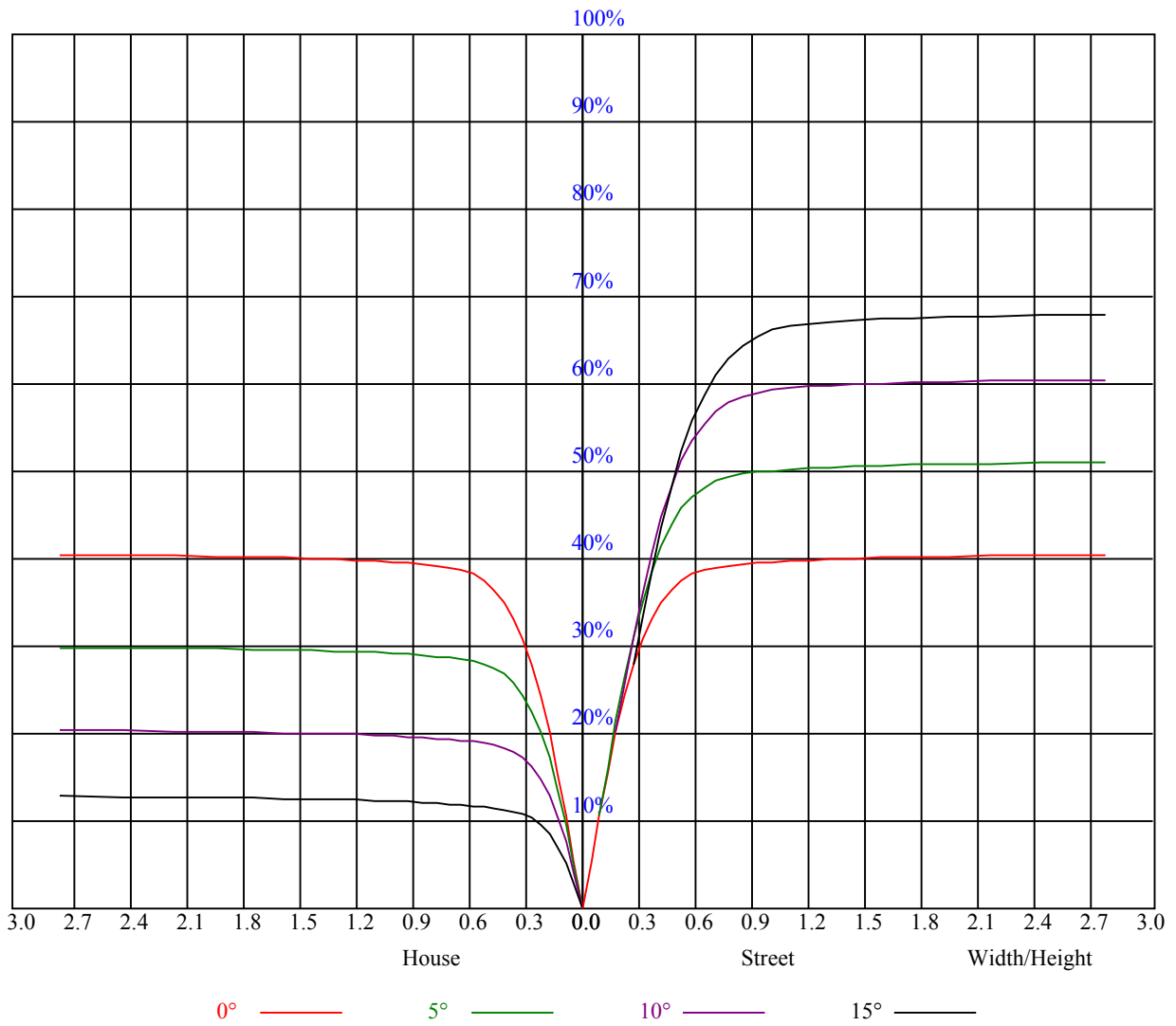


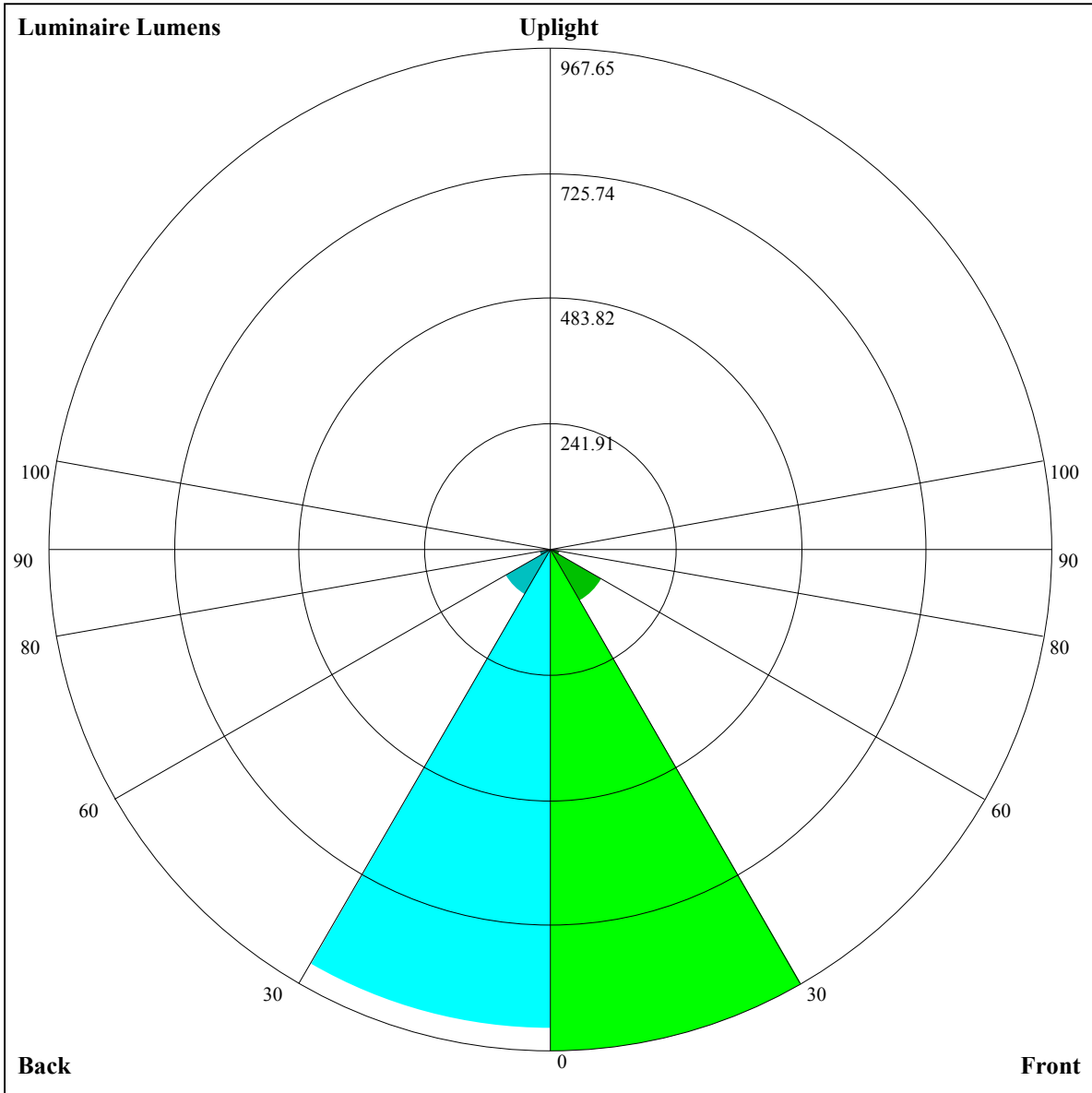
Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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	
	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	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	
8H	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 RHOFC=20 CU															
0	0.97	0.97	0.97	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	0.87	0.83	0.83	0.83	0.82
1	0.91	0.89	0.87	0.89	0.87	0.86	0.86	0.85	0.83	0.83	0.82	0.81	0.80	0.79	0.78	0.77
2	0.86	0.83	0.80	0.84	0.81	0.79	0.82	0.79	0.77	0.79	0.77	0.76	0.77	0.76	0.74	0.73
3	0.81	0.77	0.74	0.80	0.76	0.74	0.78	0.75	0.73	0.76	0.73	0.72	0.74	0.72	0.70	0.69
4	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.69	0.73	0.70	0.68	0.71	0.69	0.67	0.66
5	0.73	0.69	0.66	0.72	0.69	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.68	0.66	0.64	0.63
6	0.70	0.66	0.63	0.69	0.65	0.62	0.68	0.65	0.62	0.67	0.64	0.62	0.66	0.63	0.61	0.60
7	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.64	0.61	0.59	0.63	0.61	0.59	0.58
8	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.62	0.59	0.56	0.61	0.58	0.56	0.55
9	0.61	0.57	0.55	0.61	0.57	0.55	0.60	0.57	0.54	0.60	0.57	0.54	0.59	0.56	0.54	0.53
10	0.59	0.55	0.53	0.59	0.55	0.52	0.58	0.55	0.52	0.58	0.54	0.52	0.57	0.54	0.52	0.51





Luminaire Lumens:

FL=967.65,FM=114.18,FH=19.9,FVH=6.07

BL=925.69,BM=101.74,BH=21.2,BVH=6.07

UL=0,UH=0

BUG Rating:B2-U0-G0

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	5235.48	5233.73	5223.78	5199.78	5153.55	5095.03	5024.80	4898.39	4769.64
45.0	5233.14	5228.46	5225.53	5198.61	5167.01	5109.66	5037.68	4961.60	4826.99
90.0	5227.29	5200.95	5169.94	5110.83	5051.72	4970.96	4872.06	4716.39	4585.30
135.0	5230.80	5216.75	5195.69	5161.74	5109.66	5041.19	4960.43	4823.48	4698.83
180.0	5235.48	5226.70	5203.88	5171.11	5132.48	5058.16	4967.45	4807.10	4667.23
225.0	5233.14	5225.53	5199.78	5169.35	5111.41	5029.48	4887.27	4740.97	4571.84
270.0	5220.27	5234.31	5234.90	5230.80	5209.73	5172.28	5102.64	4980.91	4852.74
315.0	5230.80	5230.21	5224.95	5203.88	5170.52	5104.98	5007.83	4864.45	4720.48
360.0	5235.48	5233.73	5223.78	5199.78	5153.55	5095.03	5024.80	4898.39	4769.64
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4633.28	4420.85	4230.06	4030.50	3822.16	3553.54	3327.65	3099.41	2877.61
45.0	4704.10	4567.74	4415.58	4189.10	4000.66	3799.92	3532.48	3310.09	3084.19
90.0	4437.82	4265.18	4033.43	3840.89	3629.04	3353.40	3132.18	2905.70	2627.13
135.0	4552.52	4344.77	4162.18	3976.66	3720.92	3500.87	3276.15	3044.98	2676.42
180.0	4505.12	4275.13	4073.81	3867.81	3592.17	3369.20	3142.13	2913.31	2642.93
225.0	4385.73	4142.28	3922.82	3644.25	3415.43	3184.27	2903.36	2686.83	2469.71
270.0	4706.44	4527.36	4280.39	4081.42	3854.35	3626.11	3327.06	3092.97	2816.16
315.0	4552.52	4316.09	4122.97	3915.21	3632.55	3407.82	3179.59	2954.27	2672.20
360.0	4633.28	4420.85	4230.06	4030.50	3822.16	3553.54	3327.65	3099.41	2877.61
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2610.16	2398.31	2196.99	1951.20	1760.42	1583.68	1305.70	1139.32	1139.32
45.0	2862.98	2589.68	2378.41	2177.68	1938.32	1753.98	1541.54	1399.33	1268.83
90.0	2421.13	2219.82	1979.29	1793.19	1612.94	1325.59	1160.74	1160.74	1031.58
135.0	2549.30	2338.62	2143.15	1902.04	1717.69	1547.98	1373.58	1239.57	1075.12
180.0	2430.50	2216.89	2016.16	1791.43	1600.65	1445.56	1289.89	1159.39	989.67
225.0	2254.35	2007.38	1816.60	1638.69	1484.19	1164.31	1164.31	1070.49	910.20
270.0	2603.72	2376.66	2124.43	1941.84	1739.93	1573.14	1402.84	1272.92	1143.00
315.0	2459.76	2255.52	2055.37	1865.17	1644.54	1491.80	1141.01	1141.01	1079.21
360.0	2610.16	2398.31	2196.99	1951.20	1760.42	1583.68	1305.70	1139.32	1139.32
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	975.75	850.45	737.85	605.12	506.28	415.98	332.47	239.42	181.42
45.0	1134.81	968.02	845.12	731.00	621.57	493.40	401.52	317.25	296.77
90.0	873.33	754.30	643.28	534.90	411.24	323.69	245.03	173.64	142.85
135.0	946.37	822.88	680.68	574.75	475.85	385.72	303.21	303.21	162.69
180.0	870.29	756.17	647.90	513.30	422.01	336.56	296.18	296.18	138.23
225.0	790.29	678.80	544.79	445.59	358.45	262.12	198.22	152.80	122.31
270.0	1021.86	867.95	748.56	631.52	501.01	405.03	318.42	299.11	214.37
315.0	925.77	803.16	688.81	556.55	457.70	367.81	288.05	204.36	157.31
360.0	975.75	850.45	737.85	605.12	506.28	415.98	332.47	239.42	181.42
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	143.73	120.73	108.97	99.37	91.24	82.28	75.90	69.00	63.91
45.0	211.44	138.29	118.04	106.34	97.03	86.73	79.65	73.33	67.71
90.0	122.31	110.61	100.48	91.65	82.17	75.49	69.58	64.32	58.52
135.0	134.60	119.80	105.11	95.45	85.33	78.30	72.16	65.49	60.69
180.0	119.09	107.51	95.51	87.43	80.29	72.51	67.07	60.92	56.88
225.0	110.20	99.66	90.89	82.98	74.32	68.35	63.03	57.35	53.37
270.0	133.08	118.04	107.04	97.79	87.67	80.41	73.97	68.18	61.86
315.0	130.04	115.41	102.59	94.16	86.61	78.19	72.16	65.43	60.63
360.0	143.73	120.73	108.97	99.37	91.24	82.28	75.90	69.00	63.91

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	59.34	54.37	50.80	47.64	44.71	41.49	39.27	37.22	35.35
45.0	61.51	57.24	53.37	49.80	45.94	43.19	40.67	38.04	36.11
90.0	54.43	50.80	46.88	44.13	41.67	38.98	36.99	35.35	33.42
135.0	56.59	52.14	48.98	46.23	43.72	41.02	39.15	37.45	35.87
180.0	53.26	49.98	46.53	44.01	41.84	39.85	37.57	35.87	34.29
225.0	49.16	46.23	43.60	40.73	38.62	36.81	35.05	33.01	31.54
270.0	57.41	53.49	49.98	46.17	43.48	40.38	38.22	36.23	33.94
315.0	56.53	52.79	48.69	45.76	43.19	40.85	38.16	36.17	34.41
360.0	59.34	54.37	50.80	47.64	44.71	41.49	39.27	37.22	35.35
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	33.24	31.72	30.31	28.56	27.15	25.93	24.58	23.47	22.41
45.0	34.47	32.54	31.19	29.55	28.27	26.98	25.87	24.52	23.35
90.0	31.95	30.67	29.14	27.86	26.69	25.63	24.35	23.29	22.53
135.0	34.06	32.60	31.37	30.08	28.50	27.10	25.98	24.93	23.70
180.0	32.42	31.02	29.73	28.09	26.86	25.52	24.40	23.47	22.59
225.0	30.20	28.85	27.15	26.04	24.93	23.58	22.59	21.54	20.66
270.0	32.25	30.72	29.26	27.51	26.16	25.05	23.88	22.59	21.77
315.0	32.71	30.90	29.44	27.68	26.51	25.40	23.99	22.94	22.06
360.0	33.24	31.72	30.31	28.56	27.15	25.93	24.58	23.47	22.41
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.42	20.54	19.84	19.43	19.31	19.55	19.96	20.72	21.89
45.0	22.41	21.65	20.60	19.84	19.20	18.61	17.85	17.26	16.68
90.0	21.83	20.95	20.48	20.07	20.19	20.31	20.89	21.36	21.89
135.0	22.88	22.18	21.42	21.01	21.01	21.30	21.83	22.94	24.35
180.0	21.59	20.83	20.42	20.83	21.95	23.06	24.17	25.34	26.80
225.0	19.90	19.25	18.43	17.79	17.26	16.80	16.21	15.74	15.33
270.0	20.89	19.90	19.20	18.55	17.85	17.26	16.91	16.39	16.33
315.0	21.01	20.25	19.61	18.96	18.26	17.79	17.44	17.26	17.73
360.0	21.42	20.54	19.84	19.43	19.31	19.55	19.96	20.72	21.89
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	22.65	22.77	22.41	21.77	20.89	20.13	19.55	18.32	15.80
45.0	16.21	15.74	15.27	14.86	14.51	14.10	13.75	13.34	12.99
90.0	22.36	22.77	23.12	23.06	22.71	21.65	19.96	17.73	14.86
135.0	25.69	27.04	28.09	28.68	28.15	27.15	25.16	21.24	18.02
180.0	27.39	27.39	26.86	26.28	25.40	24.58	23.00	20.13	15.92
225.0	14.98	14.63	14.16	13.93	13.52	13.23	12.87	12.29	11.76
270.0	16.85	17.44	18.38	18.84	19.02	18.49	17.50	16.15	14.28
315.0	18.43	19.25	19.90	19.96	19.37	18.26	16.21	13.93	12.58
360.0	22.65	22.77	22.41	21.77	20.89	20.13	19.55	18.32	15.80
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.93	11.47	11.18	10.89	10.65	10.42	9.89	9.60	9.48
45.0	12.58	12.29	12.00	11.70	11.41	11.24	10.24	9.71	9.48
90.0	12.99	12.11	12.00	11.88	10.94	10.12	9.77	9.42	9.31
135.0	15.92	13.23	12.06	11.94	11.59	10.42	10.01	9.42	9.25
180.0	12.87	11.70	11.35	11.12	10.42	9.89	9.48	9.42	9.36
225.0	11.70	11.82	11.82	11.06	9.83	9.54	9.48	9.25	9.31
270.0	12.29	11.94	11.65	11.59	11.59	10.12	9.83	9.48	9.19
315.0	12.23	11.82	11.59	11.59	11.94	10.01	9.66	9.42	9.13
360.0	12.93	11.47	11.18	10.89	10.65	10.42	9.89	9.60	9.48

Intensity data(cd)

C/ γ (°)	90.0
0.0	9.36
45.0	9.48
90.0	9.19
135.0	9.25
180.0	9.31
225.0	9.31
270.0	9.31
315.0	9.42
360.0	9.36