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NT

Client:

LumCAT: 2-2683-L

Luminaire: 92.70.411.00

Report No: 2024416-B013

Ballast type: AC

Test No: 2024416-C013

Voltage(V): 33.780

LampCAT: NICHIA NFCWJ108B-V3

Current(A): 0.577

Lamp flux(lm): 2647.0

Power (W): 19.491

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 2272.75, Efficiency(%): 85.86% , Luminous Efficacy(lm/W): 116.61

Central intensity(cd): 7582.526, Maximum intensity(cd): 7582.526

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=25.2

[C90/270]Total=25.2

Field angle(10%Imax): [C0/180]Total=58.4

[C90/270]Total=58.4

Maximum s/h(1/2): C0\_180=0.42 C90\_270=0.42

Maximum s/h(1/4): C0\_180=0.45 C90\_270=0.45

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.86%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.006%

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	7582.526	0.000	0	0.00%	0.00%
1.0	7554.216	7.243	7.243	0.27%	0.32%
2.0	7469.139	21.563	28.806	0.81%	1.27%
3.0	7330.075	35.395	64.2	1.34%	2.82%
4.0	7111.640	48.341	112.541	1.83%	4.95%
5.0	6823.855	59.950	172.491	2.26%	7.59%
6.0	6498.397	70.012	242.503	2.64%	10.67%
7.0	6135.777	78.420	320.923	2.96%	14.12%
8.0	5727.656	84.904	405.828	3.21%	17.86%
9.0	5299.490	89.369	495.197	3.38%	21.79%
10.0	4856.914	91.912	587.108	3.47%	25.83%
11.0	4461.156	93.107	680.215	3.52%	29.93%
12.0	4029.186	92.812	773.027	3.51%	34.01%
13.0	3629.039	90.884	863.911	3.43%	38.01%
14.0	3258.079	88.155	952.065	3.33%	41.89%
15.0	2926.257	84.901	1036.966	3.21%	45.63%
16.0	2633.790	81.470	1118.437	3.08%	49.21%
17.0	2351.273	77.631	1196.067	2.93%	52.63%
18.0	2133.277	73.941	1270.008	2.79%	55.88%
19.0	1940.153	70.869	1340.877	2.68%	59.00%
20.0	1775.558	68.008	1408.885	2.57%	61.99%
21.0	1624.716	65.292	1474.177	2.47%	64.86%
22.0	1496.406	62.720	1536.898	2.37%	67.62%
23.0	1318.263	59.059	1595.957	2.23%	70.22%
24.0	1250.560	56.164	1652.121	2.12%	72.69%
25.0	1173.610	55.120	1707.241	2.08%	75.12%
26.0	1074.751	53.073	1760.314	2.01%	77.45%
27.0	980.069	50.272	1810.585	1.90%	79.66%
28.0	881.707	47.136	1857.722	1.78%	81.74%
29.0	780.507	43.488	1901.21	1.64%	83.65%
30.0	682.007	39.488	1940.697	1.49%	85.39%
31.0	583.082	35.206	1975.903	1.33%	86.94%
32.0	492.547	30.816	2006.718	1.16%	88.29%
33.0	410.404	26.601	2033.32	1.00%	89.47%
34.0	340.352	22.720	2056.04	0.86%	90.46%
35.0	290.067	19.578	2075.618	0.74%	91.33%
36.0	263.300	17.619	2093.238	0.67%	92.10%
37.0	228.633	16.044	2109.282	0.61%	92.81%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	175.480	13.489	2122.77	0.51%	93.40%
39.0	148.347	11.053	2133.824	0.42%	93.89%
40.0	127.360	9.616	2143.439	0.36%	94.31%
41.0	108.567	8.401	2151.84	0.32%	94.68%
42.0	92.531	7.306	2159.147	0.28%	95.00%
43.0	79.496	6.372	2165.519	0.24%	95.28%
44.0	69.488	5.623	2171.142	0.21%	95.53%
45.0	61.397	5.030	2176.172	0.19%	95.75%
46.0	54.799	4.544	2180.716	0.17%	95.95%
47.0	49.817	4.161	2184.877	0.16%	96.13%
48.0	46.628	3.899	2188.776	0.15%	96.31%
49.0	44.272	3.733	2192.509	0.14%	96.47%
50.0	42.363	3.612	2196.121	0.14%	96.63%
51.0	40.915	3.523	2199.644	0.13%	96.78%
52.0	39.642	3.457	2203.101	0.13%	96.94%
53.0	38.347	3.392	2206.494	0.13%	97.08%
54.0	36.986	3.320	2209.814	0.13%	97.23%
55.0	35.384	3.230	2213.044	0.12%	97.37%
56.0	33.833	3.128	2216.172	0.12%	97.51%
57.0	32.173	3.018	2219.19	0.11%	97.64%
58.0	30.395	2.893	2222.084	0.11%	97.77%
59.0	28.464	2.752	2224.835	0.10%	97.89%
60.0	26.730	2.608	2227.443	0.10%	98.01%
61.0	25.245	2.480	2229.923	0.09%	98.12%
62.0	23.804	2.363	2232.287	0.09%	98.22%
63.0	22.378	2.246	2234.533	0.08%	98.32%
64.0	21.119	2.134	2236.667	0.08%	98.41%
65.0	19.890	2.030	2238.697	0.08%	98.50%
66.0	18.713	1.926	2240.623	0.07%	98.59%
67.0	17.557	1.824	2242.446	0.07%	98.67%
68.0	16.606	1.731	2244.177	0.07%	98.74%
69.0	15.860	1.656	2245.833	0.06%	98.82%
70.0	15.260	1.598	2247.431	0.06%	98.89%
71.0	14.667	1.547	2248.978	0.06%	98.95%
72.0	14.214	1.502	2250.48	0.06%	99.02%
73.0	13.848	1.467	2251.947	0.06%	99.08%
74.0	13.497	1.438	2253.385	0.05%	99.15%
75.0	13.153	1.408	2254.793	0.05%	99.21%

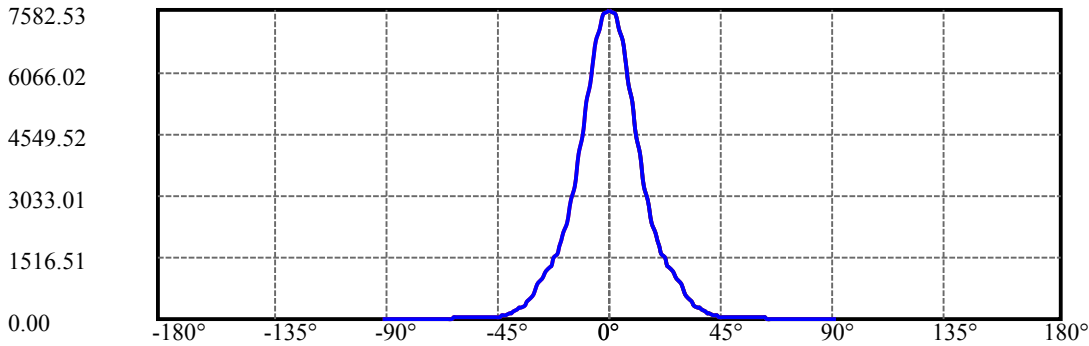
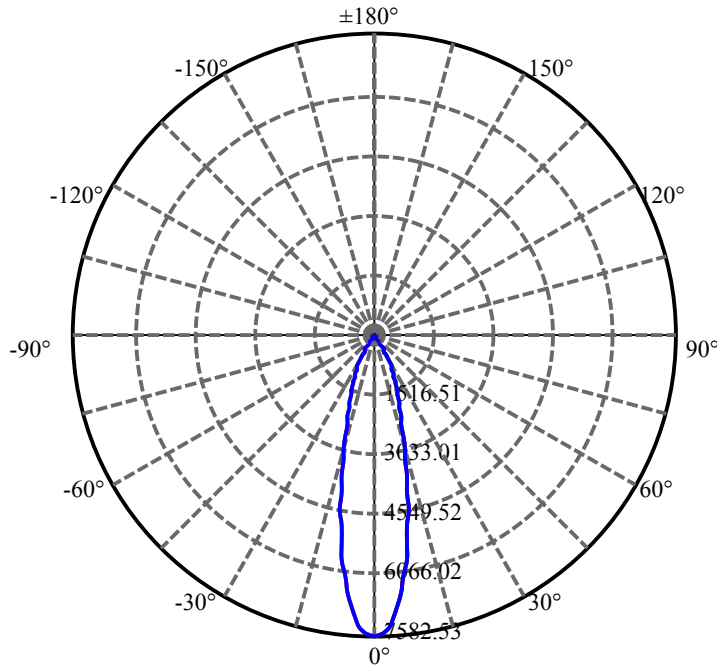
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	12.824	1.379	2256.172	0.05%	99.27%
77.0	12.524	1.351	2257.523	0.05%	99.33%
78.0	12.224	1.325	2258.848	0.05%	99.39%
79.0	11.917	1.297	2260.145	0.05%	99.45%
80.0	11.602	1.268	2261.413	0.05%	99.50%
81.0	11.324	1.240	2262.653	0.05%	99.56%
82.0	11.053	1.213	2263.866	0.05%	99.61%
83.0	10.783	1.187	2265.053	0.04%	99.66%
84.0	10.527	1.161	2266.214	0.04%	99.71%
85.0	10.315	1.137	2267.352	0.04%	99.76%
86.0	10.110	1.116	2268.468	0.04%	99.81%
87.0	9.912	1.096	2269.564	0.04%	99.86%
88.0	9.751	1.077	2270.641	0.04%	99.91%
89.0	9.598	1.061	2271.702	0.04%	99.95%
90.0	9.561	1.050	2272.752	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1940.70	73.32%	85.39%
0-40	2143.44	80.98%	94.31%
0-60	2227.44	84.15%	98.01%
0-90	2271.70	85.82%	99.95%
0-120	2271.70	85.82%	99.95%
0-180	2272.75	85.86%	100.00%
60-90	44.26	1.67%	1.95%
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%
0-27.16	1818.20	68.69%	80.00%

ZONAL LUMEN SUMMARY

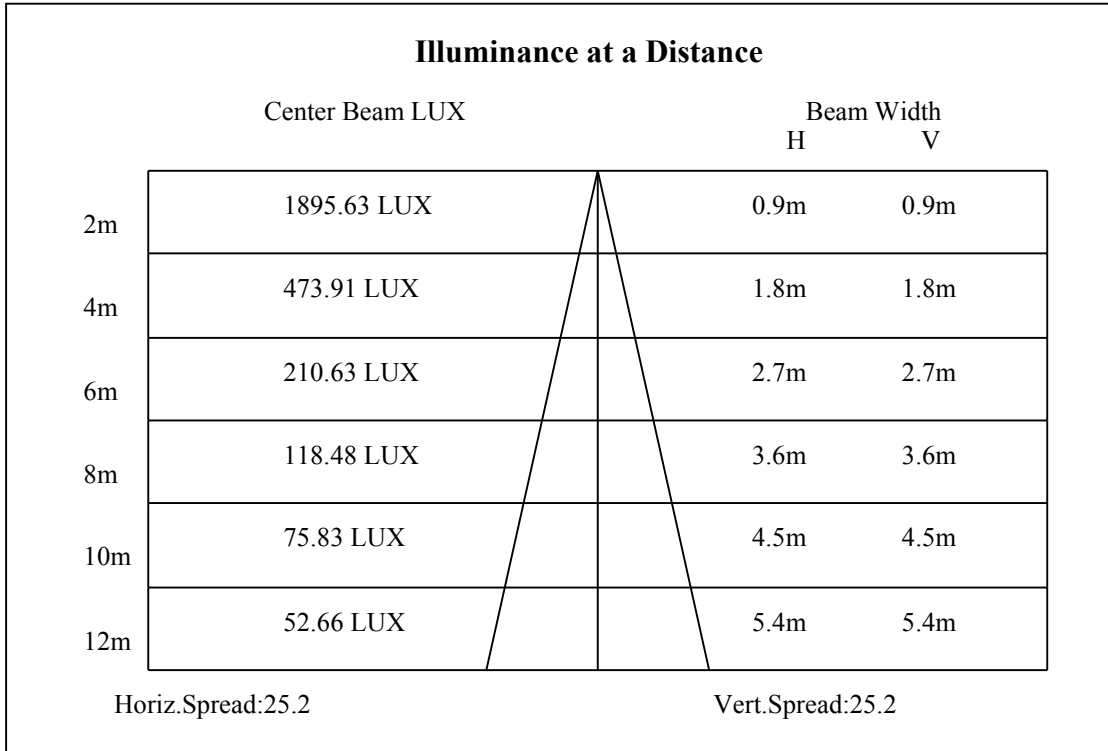
0-10	587.11
10-20	821.78
20-30	531.81
30-40	202.74
40-50	52.68
50-60	31.32
60-70	19.99
70-80	13.98
80-90	10.29
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

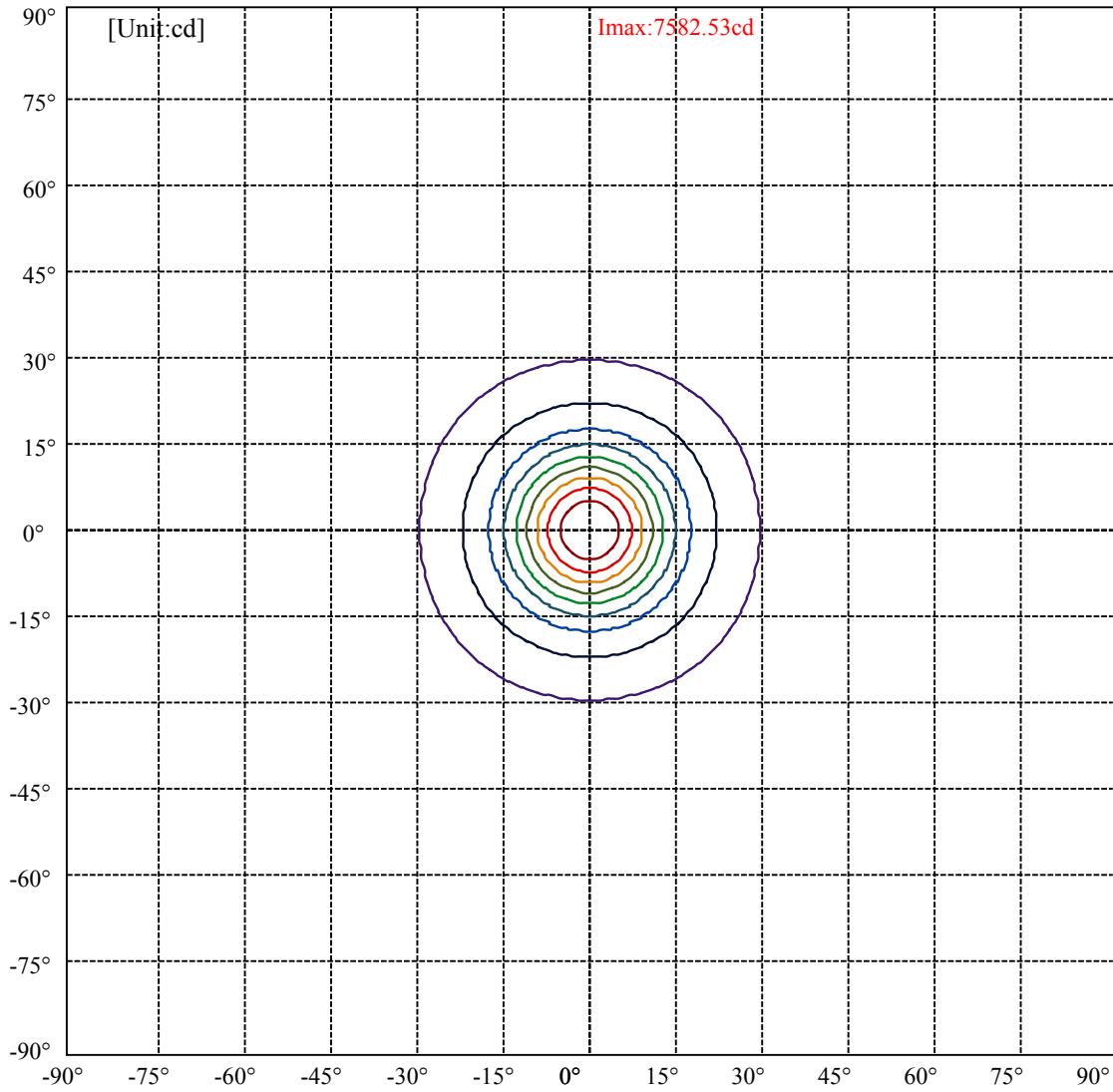


C0(Max): ———  
C0/C180: ———  
C90/C270: ———

Field angle(10%Imax):C0/180Left:29.2 Right:29.2  
:C90/270Left:29.2 Right:29.2

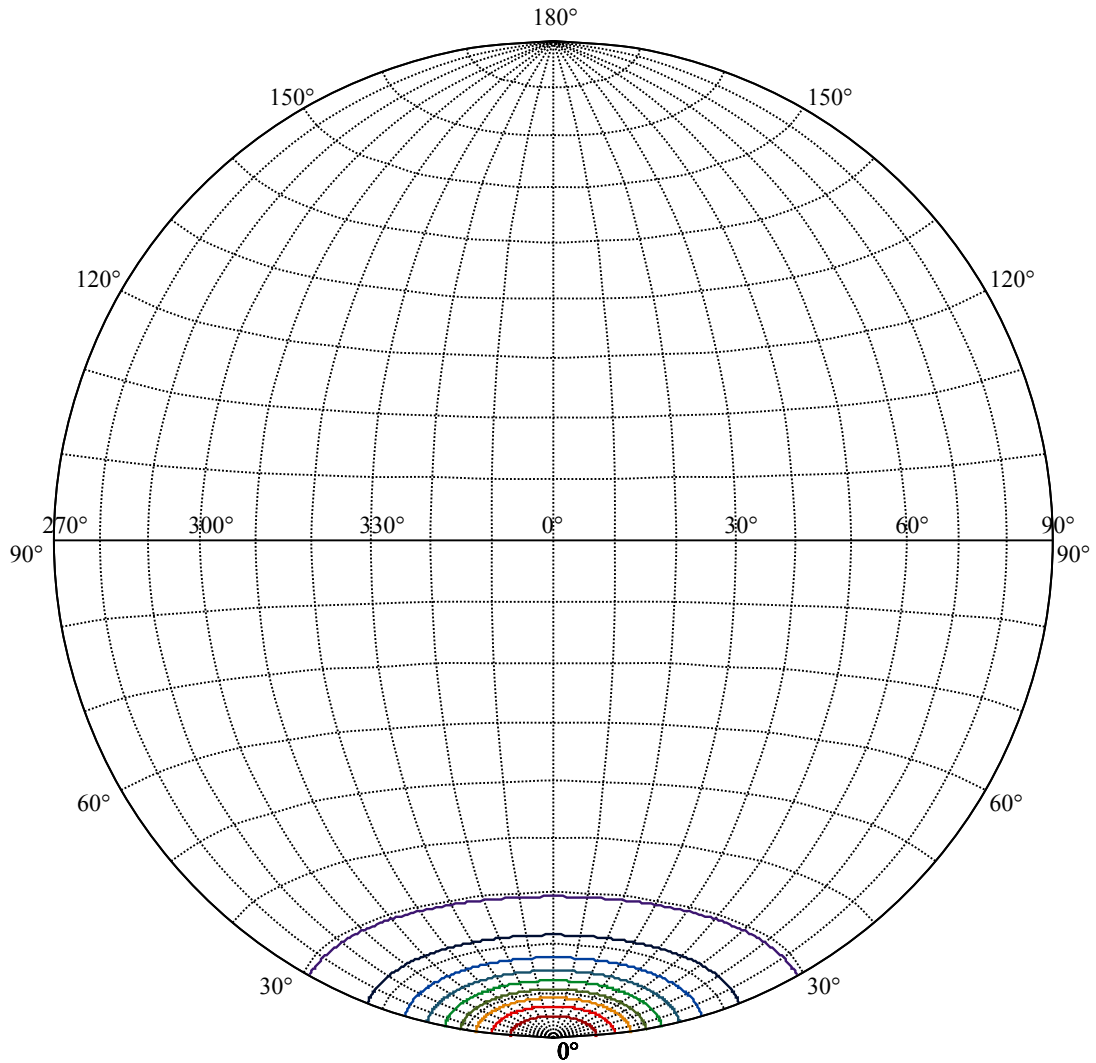
Beam Angle(50%Imax):C0/180Left:12.6 Right:12.6  
:C90/270Left:12.6 Right:12.6





(10%Imax) 758.253	—
(20%Imax) 1516.51	—
(30%Imax) 2274.76	—
(40%Imax) 3033.01	—
(50%Imax) 3791.26	—
(60%Imax) 4549.52	—
(70%Imax) 5307.77	—
(80%Imax) 6066.02	—
(90%Imax) 6824.27	—





House

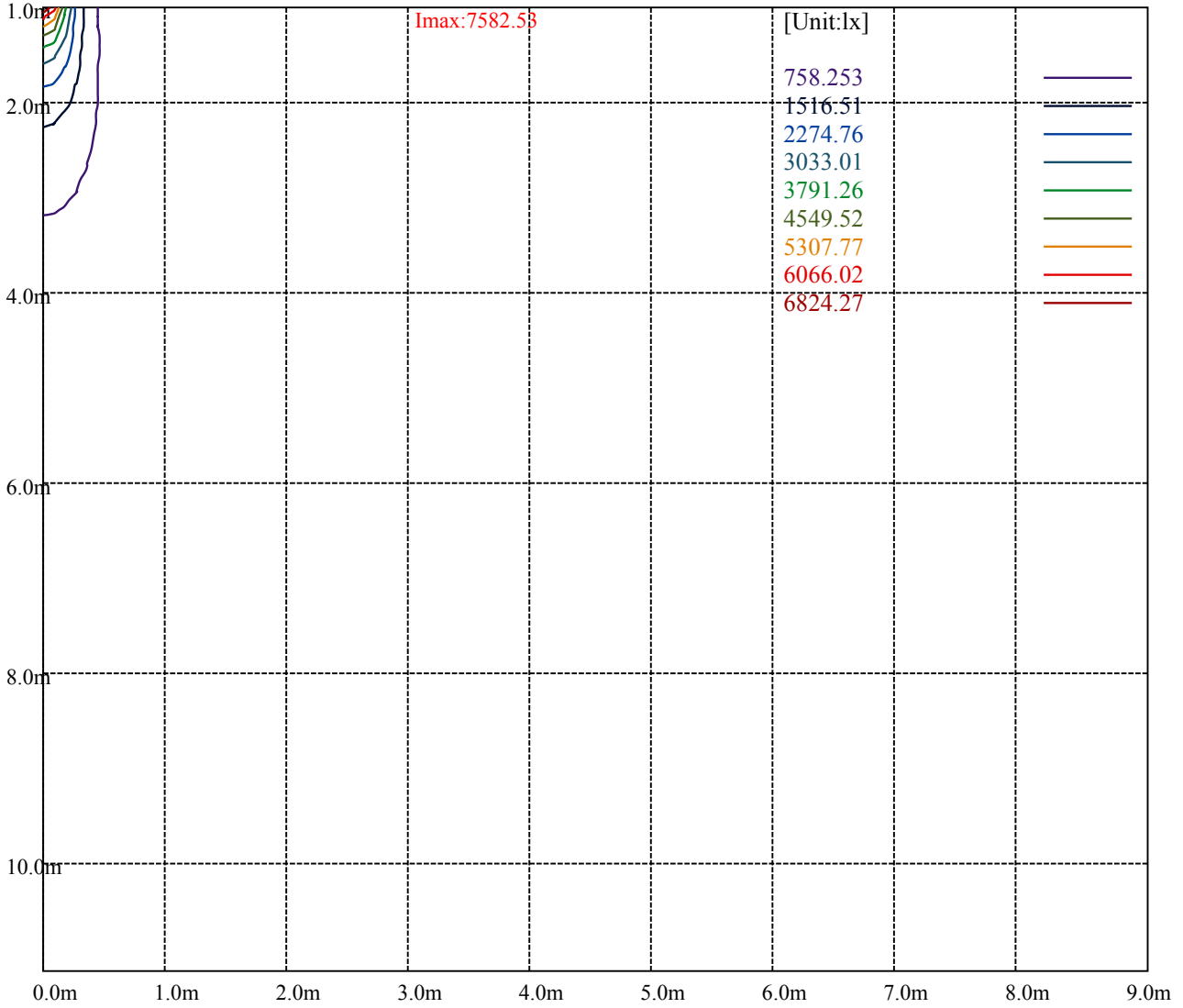
[Unit:cd]

Road

**Imax:7582.53**

(10%Imax)	758.253	—
(20%Imax)	1516.51	—
(30%Imax)	2274.76	—
(40%Imax)	3033.01	—
(50%Imax)	3791.26	—
(60%Imax)	4549.52	—
(70%Imax)	5307.77	—
(80%Imax)	6066.02	—
(90%Imax)	6824.27	—





Luminance Table

$\gamma$	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

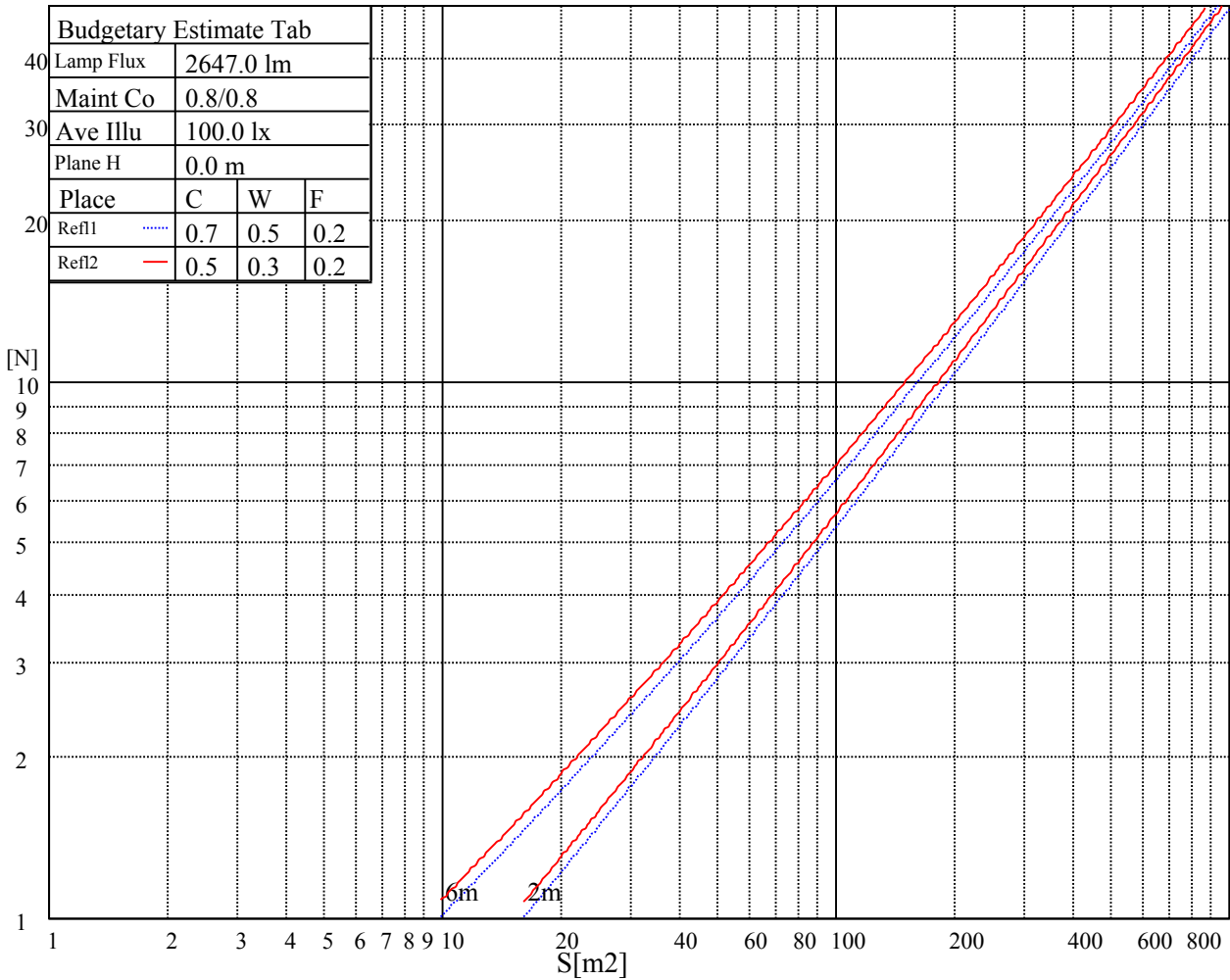
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

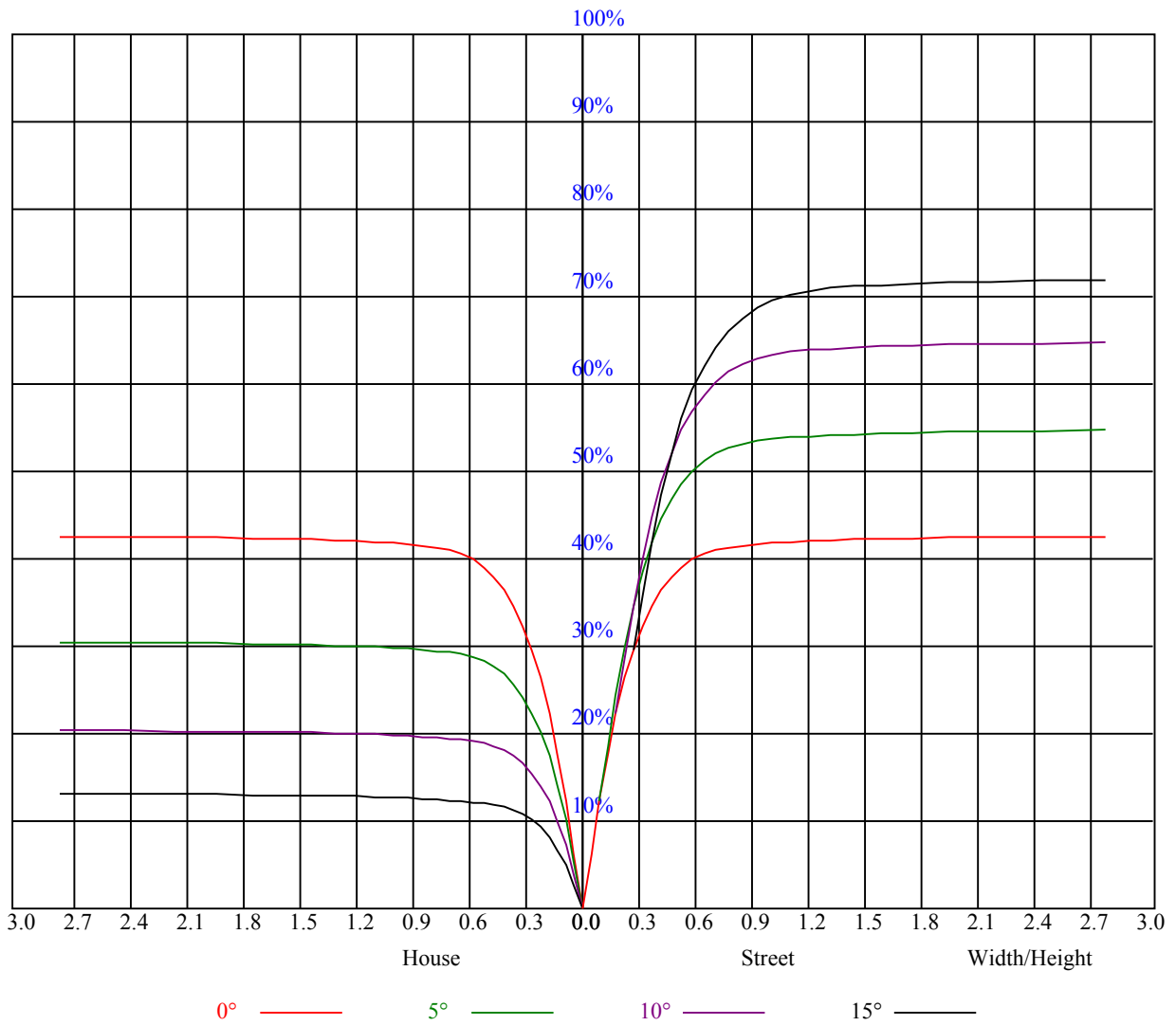


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字	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				

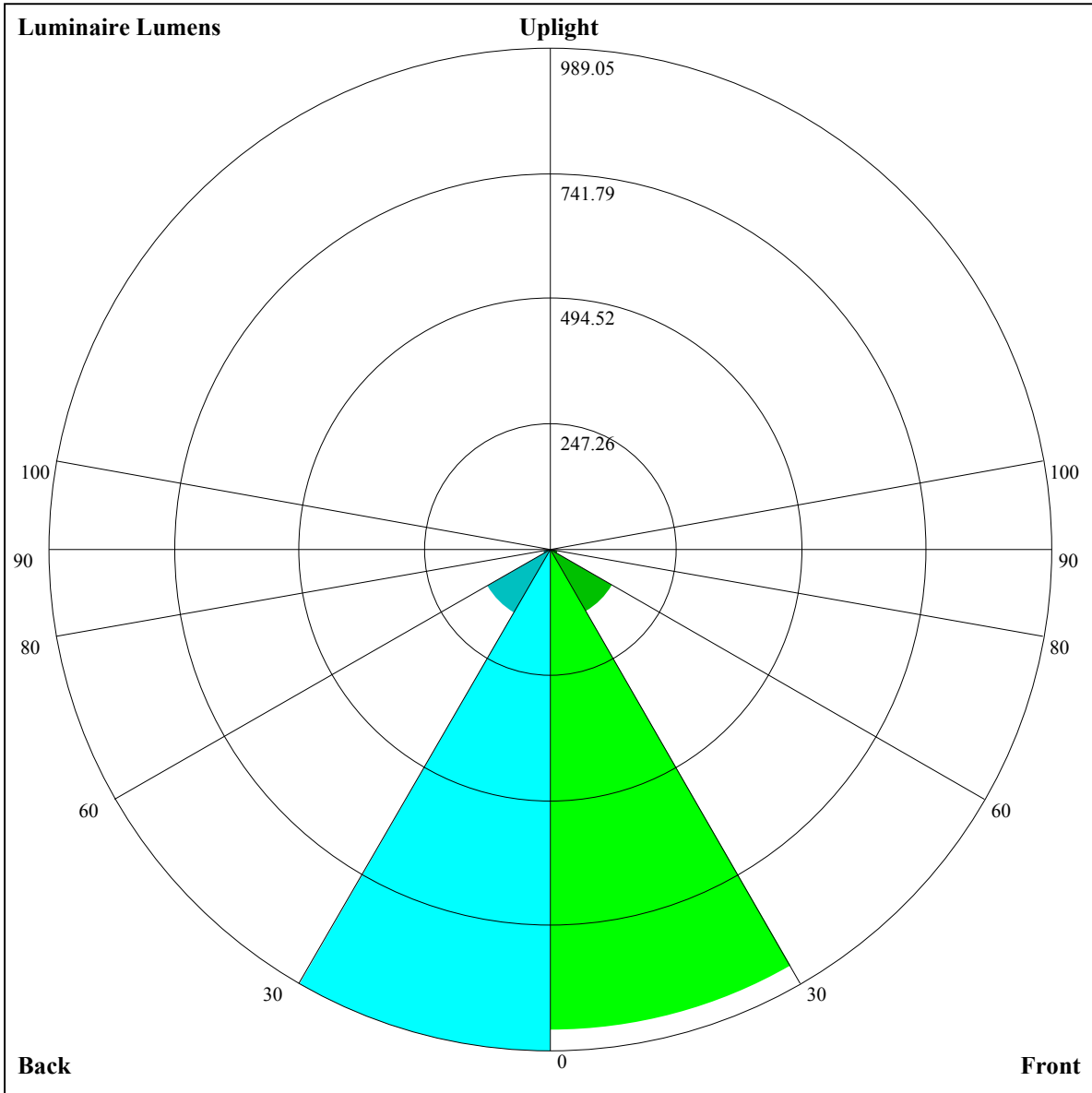
UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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 RHOF=20 CU															
0	1.02	1.02	1.02	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91	0.88	0.88	0.88	0.86
1	0.96	0.94	0.92	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.81
2	0.90	0.87	0.85	0.89	0.86	0.84	0.86	0.84	0.82	0.83	0.82	0.80	0.81	0.80	0.78	0.77
3	0.85	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.80	0.78	0.76	0.78	0.76	0.75	0.73
4	0.81	0.77	0.74	0.80	0.76	0.73	0.78	0.75	0.73	0.77	0.74	0.72	0.75	0.73	0.71	0.70
5	0.77	0.73	0.70	0.76	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.68	0.72	0.70	0.68	0.67
6	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.70	0.67	0.65	0.64
7	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.66	0.63	0.68	0.65	0.63	0.67	0.64	0.62	0.61
8	0.68	0.64	0.61	0.67	0.63	0.61	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.59
9	0.65	0.61	0.58	0.65	0.61	0.58	0.64	0.61	0.58	0.63	0.60	0.58	0.63	0.60	0.58	0.57
10	0.63	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.56	0.61	0.58	0.56	0.61	0.58	0.56	0.55







Luminaire Lumens:

FL=950.21,FM=142.55,FH=16.82,FVH=5.65

BL=989.05,BM=145.59,BH=17.23,BVH=5.7

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	7589.26	7522.54	7396.13	7207.69	6895.76	6585.01	6231.53	5824.80	5319.75
45.0	7591.01	7586.33	7548.29	7464.60	7265.04	7029.78	6762.33	6339.80	5933.65
90.0	7585.16	7530.15	7438.27	7294.89	7107.03	6772.87	6466.21	6099.86	5701.32
135.0	7564.68	7591.60	7557.07	7490.35	7307.76	7094.16	6843.68	6565.11	6142.58
180.0	7589.26	7590.43	7543.02	7459.34	7311.86	7041.49	6776.38	6462.11	6117.42
225.0	7591.01	7531.32	7433.00	7208.86	6960.14	6671.04	6250.85	5872.79	5470.74
270.0	7585.16	7593.35	7532.49	7403.74	7187.21	6937.32	6564.53	6228.02	5859.92
315.0	7564.68	7488.01	7304.84	7111.13	6858.31	6459.19	6091.67	5693.71	5275.86
360.0	7589.26	7522.54	7396.13	7207.69	6895.76	6585.01	6231.53	5824.80	5319.75
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4911.85	4523.26	4139.94	3685.81	3340.52	3014.55	2651.71	2402.41	2135.54
45.0	5529.85	5120.19	4729.85	4256.99	3888.29	3449.96	3113.46	2807.38	2467.95
90.0	5182.23	4750.33	4349.45	3877.17	3528.97	3123.99	2825.52	2549.88	2253.76
135.0	5770.96	5372.42	4964.52	4450.69	4050.40	3674.10	3242.79	2937.30	2642.93
180.0	5632.26	5214.41	4811.19	4409.14	3927.50	3554.72	3209.43	2833.13	2566.86
225.0	5067.52	4572.42	4189.68	3804.02	3441.18	3040.30	2749.45	2498.97	2218.65
270.0	5457.87	4959.26	4545.50	4134.09	3657.13	3315.94	3004.02	2721.94	2414.11
315.0	4843.38	4343.01	3959.11	3615.58	3198.31	2891.07	2613.67	2319.31	2110.38
360.0	4911.85	4523.26	4139.94	3685.81	3340.52	3014.55	2651.71	2402.41	2135.54
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1962.32	1808.40	1673.80	1523.98	1418.06	1152.31	1152.31	1106.48	1016.65
45.0	2244.98	2054.78	1883.90	1704.23	1577.24	1461.95	1361.29	1243.66	1148.86
90.0	2059.47	1888.58	1738.18	1570.80	1453.17	1277.02	1150.32	1128.14	1035.15
135.0	2332.77	2120.33	1942.42	1748.71	1615.28	1489.46	1377.09	1251.27	1155.88
180.0	2316.96	2057.12	1875.70	1729.98	1568.46	1443.22	1336.71	1215.57	1120.76
225.0	2024.94	1854.05	1679.07	1553.83	1413.38	1148.80	1148.80	1125.27	1032.86
270.0	2192.31	1994.51	1794.94	1665.02	1550.90	1406.35	1310.96	1217.91	1097.94
315.0	1932.47	1743.44	1616.45	1501.16	1374.75	1167.00	1167.00	1100.57	989.91
360.0	1962.32	1808.40	1673.80	1523.98	1418.06	1152.31	1152.31	1106.48	1016.65
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	925.83	832.95	719.94	629.41	541.86	444.65	379.69	316.61	275.00
45.0	1055.22	939.93	848.63	756.75	642.05	553.68	454.19	388.06	334.81
90.0	944.32	828.50	737.68	643.98	530.27	448.22	379.34	311.05	266.86
135.0	1061.07	968.02	852.73	761.44	670.14	557.19	472.34	382.21	324.86
180.0	1030.05	935.25	846.29	731.59	641.47	549.00	441.32	369.92	301.45
225.0	919.04	827.74	733.58	614.66	524.71	442.78	372.44	303.61	259.25
270.0	1007.23	913.59	791.87	697.65	604.60	514.47	434.30	351.19	299.69
315.0	897.79	807.67	713.33	620.57	509.56	430.37	349.61	300.16	258.61
360.0	925.83	832.95	719.94	629.41	541.86	444.65	379.69	316.61	275.00
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	239.53	207.81	172.64	147.65	126.64	108.44	89.60	77.54	67.83
45.0	299.69	299.69	203.37	174.16	148.76	122.08	104.23	89.25	77.02
90.0	229.35	196.93	162.34	138.93	119.91	99.55	85.74	73.80	62.21
135.0	300.28	300.28	192.42	163.98	140.22	120.79	101.19	87.90	76.90
180.0	301.45	247.61	177.09	151.05	128.63	110.14	91.47	79.47	69.76
225.0	221.39	181.65	155.20	127.70	109.85	95.33	83.28	71.22	63.56
270.0	299.69	210.04	181.19	151.28	131.32	114.29	100.07	85.33	75.38
315.0	215.01	185.05	159.59	132.03	113.53	97.91	84.68	71.46	63.26
360.0	239.53	207.81	172.64	147.65	126.64	108.44	89.60	77.54	67.83

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	60.16	53.20	49.33	45.76	43.48	42.14	40.15	38.92	37.63
45.0	65.25	57.82	51.03	47.81	45.24	42.25	40.91	39.91	38.68
90.0	55.48	50.39	46.06	44.13	42.08	40.73	40.03	38.57	37.57
135.0	67.48	58.52	52.90	48.11	46.00	44.18	42.31	41.49	40.73
180.0	61.86	54.19	49.39	46.00	43.37	41.55	40.20	39.09	37.98
225.0	56.83	51.50	47.29	44.83	42.49	40.73	39.85	38.62	37.22
270.0	67.18	60.40	54.13	50.74	47.99	45.65	43.54	42.02	39.97
315.0	56.94	52.38	48.40	45.65	43.54	41.67	40.32	38.51	36.99
360.0	60.16	53.20	49.33	45.76	43.48	42.14	40.15	38.92	37.63
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	36.11	34.41	32.77	30.84	29.26	26.98	25.40	24.35	22.59
45.0	37.40	35.93	34.53	33.12	30.96	29.26	27.56	25.52	24.29
90.0	36.64	34.82	33.42	31.49	29.55	27.97	25.81	24.64	23.53
135.0	39.15	38.10	36.58	35.17	33.18	31.31	29.55	27.68	25.52
180.0	36.87	35.41	34.12	32.77	31.31	29.20	27.80	26.04	24.58
225.0	35.93	34.53	32.71	31.02	29.32	27.86	25.69	24.52	23.35
270.0	38.45	36.23	34.70	33.01	31.13	28.97	27.27	25.57	24.40
315.0	35.35	33.65	31.84	29.96	28.44	26.16	24.76	23.64	22.18
360.0	36.11	34.41	32.77	30.84	29.26	26.98	25.40	24.35	22.59
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	21.30	20.31	19.02	17.85	16.80	16.09	15.39	14.86	14.34
45.0	23.06	21.48	20.37	19.14	17.97	17.03	16.27	15.63	14.86
90.0	21.83	20.72	19.72	18.61	17.44	16.44	15.74	15.16	14.46
135.0	24.40	23.17	21.30	20.31	19.02	17.79	16.85	16.09	15.33
180.0	23.29	21.89	20.48	19.25	18.20	16.80	16.04	15.45	14.86
225.0	21.83	20.37	19.37	18.08	16.80	16.09	15.27	14.81	14.34
270.0	22.65	21.30	20.25	19.20	17.73	16.91	16.21	15.45	14.92
315.0	20.66	19.72	18.61	17.26	16.50	15.68	15.10	14.63	14.22
360.0	21.30	20.31	19.02	17.85	16.80	16.09	15.39	14.86	14.34
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	13.99	13.64	13.34	12.93	12.64	12.35	12.11	11.76	11.47
45.0	14.40	13.99	13.64	13.23	12.87	12.64	12.29	12.00	11.65
90.0	14.10	13.75	13.34	13.05	12.76	12.41	12.11	11.82	11.59
135.0	14.75	14.34	13.99	13.58	13.23	12.93	12.70	12.29	12.00
180.0	14.34	13.99	13.64	13.23	12.93	12.70	12.41	12.11	11.76
225.0	13.93	13.58	13.23	12.93	12.70	12.29	11.94	11.70	11.41
270.0	14.40	14.05	13.69	13.40	12.99	12.70	12.35	12.06	11.65
315.0	13.81	13.46	13.11	12.87	12.47	12.17	11.88	11.59	11.29
360.0	13.99	13.64	13.34	12.93	12.64	12.35	12.11	11.76	11.47
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.18	11.00	10.71	10.42	10.24	10.01	9.83	9.77	9.48
45.0	11.41	11.18	10.89	10.65	10.48	10.24	10.01	9.71	9.77
90.0	11.29	11.00	10.83	10.53	10.30	10.12	9.83	9.71	9.54
135.0	11.65	11.41	11.06	10.83	10.53	10.36	10.12	9.89	9.77
180.0	11.53	11.24	10.94	10.65	10.42	10.24	10.07	9.83	9.77
225.0	11.12	10.83	10.59	10.36	10.18	10.01	9.83	9.83	9.48
270.0	11.41	11.06	10.77	10.48	10.30	10.07	9.89	9.77	9.48
315.0	11.00	10.71	10.48	10.30	10.07	9.83	9.71	9.48	9.48
360.0	11.18	11.00	10.71	10.42	10.24	10.01	9.83	9.77	9.48

Intensity data(cd)

C/ $\gamma$ ( $^{\circ}$ )	90.0
0.0	9.66
45.0	9.48
90.0	9.48
135.0	9.66
180.0	9.48
225.0	9.66
270.0	9.60
315.0	9.48
360.0	9.66