



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: 92.70.412.00

Report No: 2024229-B008

Ballast type: AC

Test No: 2024229-C008

Voltage(V): 0.000

LampCAT: CITIZEN CLU038 LES14.5

Current(A): 0.000

Lamp flux(lm): 2609.0

Power (W): 0.000

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 2147.60, Efficiency(%): 82.31% , Luminous Efficacy(lm/W): 0.00

Central intensity(cd): 5280.836, Maximum intensity(cd): 5280.836

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

Beam Angle(50%Imax): [C0/180]Total=35.0

[C90/270]Total=35.0

Field angle(10%Imax): [C0/180]Total=60.8

[C90/270]Total=60.8

Maximum s/h(1/2): C0\_180=0.58 C90\_270=0.58

Maximum s/h(1/4): C0\_180=0.57 C90\_270=0.57

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 82.31%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.691%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/2/29  
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	5280.836	0.000	0	0.00%	0.00%
1.0	5273.009	5.050	5.05	0.19%	0.24%
2.0	5253.843	15.109	20.159	0.58%	0.94%
3.0	5223.118	25.057	45.216	0.96%	2.11%
4.0	5176.813	34.812	80.028	1.33%	3.73%
5.0	5103.294	44.224	124.253	1.70%	5.79%
6.0	5018.948	53.195	177.448	2.04%	8.26%
7.0	4911.706	61.639	239.087	2.36%	11.13%
8.0	4768.399	69.279	308.366	2.66%	14.36%
9.0	4599.781	75.924	384.29	2.91%	17.89%
10.0	4409.656	81.532	465.822	3.13%	21.69%
11.0	4219.092	86.219	552.041	3.30%	25.71%
12.0	3987.270	89.707	641.748	3.44%	29.88%
13.0	3753.619	91.865	733.613	3.52%	34.16%
14.0	3494.949	92.781	826.394	3.56%	38.48%
15.0	3253.910	92.651	919.045	3.55%	42.79%
16.0	3006.140	91.727	1010.773	3.52%	47.07%
17.0	2749.519	89.631	1100.404	3.44%	51.24%
18.0	2513.966	86.783	1187.187	3.33%	55.28%
19.0	2280.534	83.414	1270.602	3.20%	59.16%
20.0	2062.465	79.489	1350.091	3.05%	62.87%
21.0	1846.297	75.056	1425.147	2.88%	66.36%
22.0	1622.449	69.706	1494.853	2.67%	69.61%
23.0	1456.705	64.609	1559.462	2.48%	72.61%
24.0	1280.545	59.846	1619.308	2.29%	75.40%
25.0	1173.976	55.810	1675.118	2.14%	78.00%
26.0	1057.502	52.674	1727.793	2.02%	80.45%
27.0	928.350	48.584	1776.377	1.86%	82.71%
28.0	806.213	43.915	1820.292	1.68%	84.76%
29.0	679.212	38.863	1859.155	1.49%	86.57%
30.0	568.612	33.691	1892.846	1.29%	88.14%
31.0	455.971	28.513	1921.359	1.09%	89.47%
32.0	357.785	23.313	1944.672	0.89%	90.55%
33.0	284.346	18.917	1963.589	0.73%	91.43%
34.0	227.477	15.489	1979.079	0.59%	92.15%
35.0	177.572	12.579	1991.658	0.48%	92.74%
36.0	124.273	9.611	2001.269	0.37%	93.19%
37.0	109.166	7.613	2008.882	0.29%	93.54%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	97.491	6.898	2015.78	0.26%	93.86%
39.0	87.915	6.328	2022.109	0.24%	94.16%
40.0	80.666	5.880	2027.988	0.23%	94.43%
41.0	73.826	5.501	2033.49	0.21%	94.69%
42.0	67.689	5.141	2038.631	0.20%	94.93%
43.0	62.231	4.813	2043.444	0.18%	95.15%
44.0	57.689	4.526	2047.97	0.17%	95.36%
45.0	53.512	4.274	2052.243	0.16%	95.56%
46.0	49.766	4.039	2056.282	0.15%	95.75%
47.0	46.613	3.833	2060.115	0.15%	95.93%
48.0	43.716	3.652	2063.767	0.14%	96.10%
49.0	41.134	3.484	2067.252	0.13%	96.26%
50.0	39.013	3.342	2070.593	0.13%	96.41%
51.0	36.972	3.215	2073.808	0.12%	96.56%
52.0	35.157	3.095	2076.903	0.12%	96.71%
53.0	33.431	2.984	2079.887	0.11%	96.85%
54.0	31.946	2.882	2082.768	0.11%	96.98%
55.0	30.337	2.780	2085.548	0.11%	97.11%
56.0	28.954	2.679	2088.227	0.10%	97.24%
57.0	27.608	2.586	2090.814	0.10%	97.36%
58.0	26.299	2.493	2093.306	0.10%	97.47%
59.0	25.018	2.399	2095.706	0.09%	97.58%
60.0	23.884	2.310	2098.016	0.09%	97.69%
61.0	22.853	2.230	2100.246	0.09%	97.80%
62.0	21.770	2.150	2102.397	0.08%	97.90%
63.0	20.900	2.075	2104.472	0.08%	97.99%
64.0	20.073	2.011	2106.482	0.08%	98.09%
65.0	19.437	1.955	2108.438	0.07%	98.18%
66.0	18.932	1.914	2110.352	0.07%	98.27%
67.0	18.756	1.895	2112.247	0.07%	98.35%
68.0	18.713	1.898	2114.145	0.07%	98.44%
69.0	18.691	1.908	2116.053	0.07%	98.53%
70.0	18.515	1.911	2117.964	0.07%	98.62%
71.0	18.347	1.905	2119.869	0.07%	98.71%
72.0	18.244	1.903	2121.772	0.07%	98.80%
73.0	17.937	1.892	2123.664	0.07%	98.89%
74.0	17.630	1.870	2125.534	0.07%	98.97%
75.0	17.198	1.840	2127.374	0.07%	99.06%

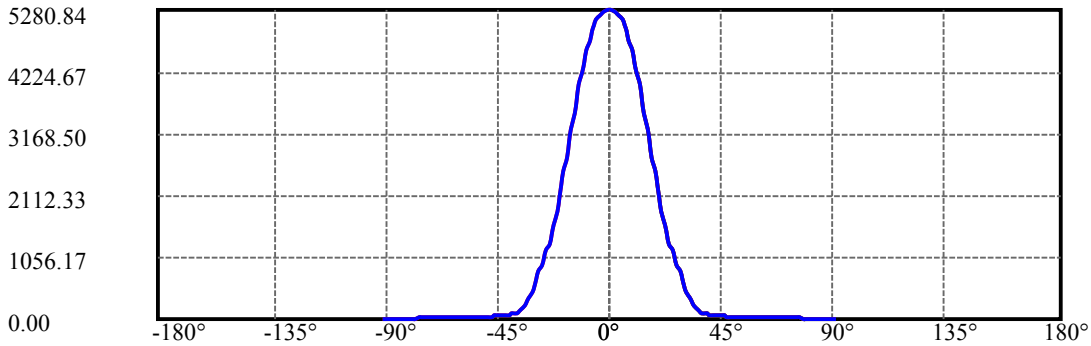
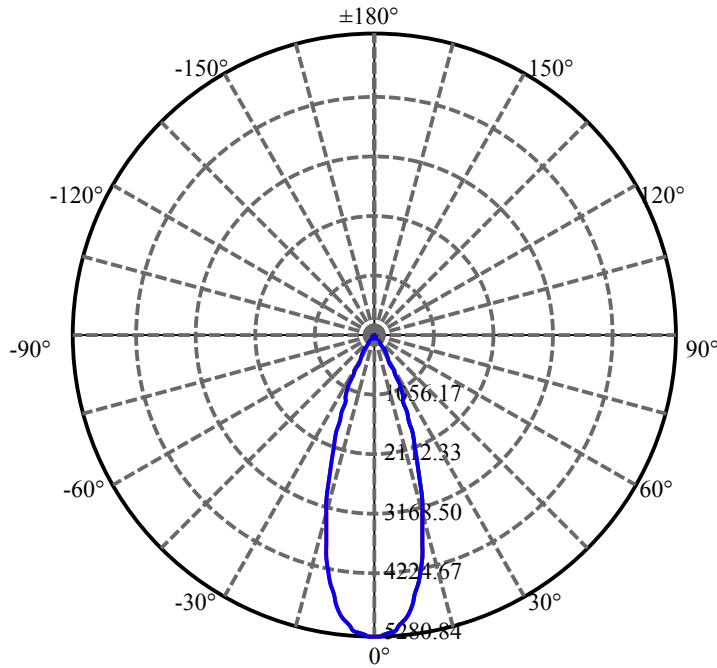
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	16.818	1.806	2129.18	0.07%	99.14%
77.0	16.379	1.770	2130.95	0.07%	99.22%
78.0	15.757	1.720	2132.67	0.07%	99.30%
79.0	15.018	1.654	2134.323	0.06%	99.38%
80.0	13.753	1.551	2135.875	0.06%	99.45%
81.0	12.655	1.428	2137.303	0.05%	99.52%
82.0	11.661	1.319	2138.621	0.05%	99.58%
83.0	11.156	1.240	2139.862	0.05%	99.64%
84.0	10.827	1.198	2141.059	0.05%	99.70%
85.0	10.461	1.162	2142.221	0.04%	99.75%
86.0	10.154	1.127	2143.348	0.04%	99.80%
87.0	9.839	1.094	2144.442	0.04%	99.85%
88.0	9.634	1.067	2145.509	0.04%	99.90%
89.0	9.525	1.050	2146.559	0.04%	99.95%
90.0	9.422	1.039	2147.598	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1892.85	72.55%	88.14%
0-40	2027.99	77.73%	94.43%
0-60	2098.02	80.41%	97.69%
0-90	2146.56	82.28%	99.95%
0-120	2146.56	82.28%	99.95%
0-180	2147.60	82.31%	100.00%
60-90	48.54	1.86%	2.26%
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%
0-25.82	1718.08	65.85%	80.00%

ZONAL LUMEN SUMMARY

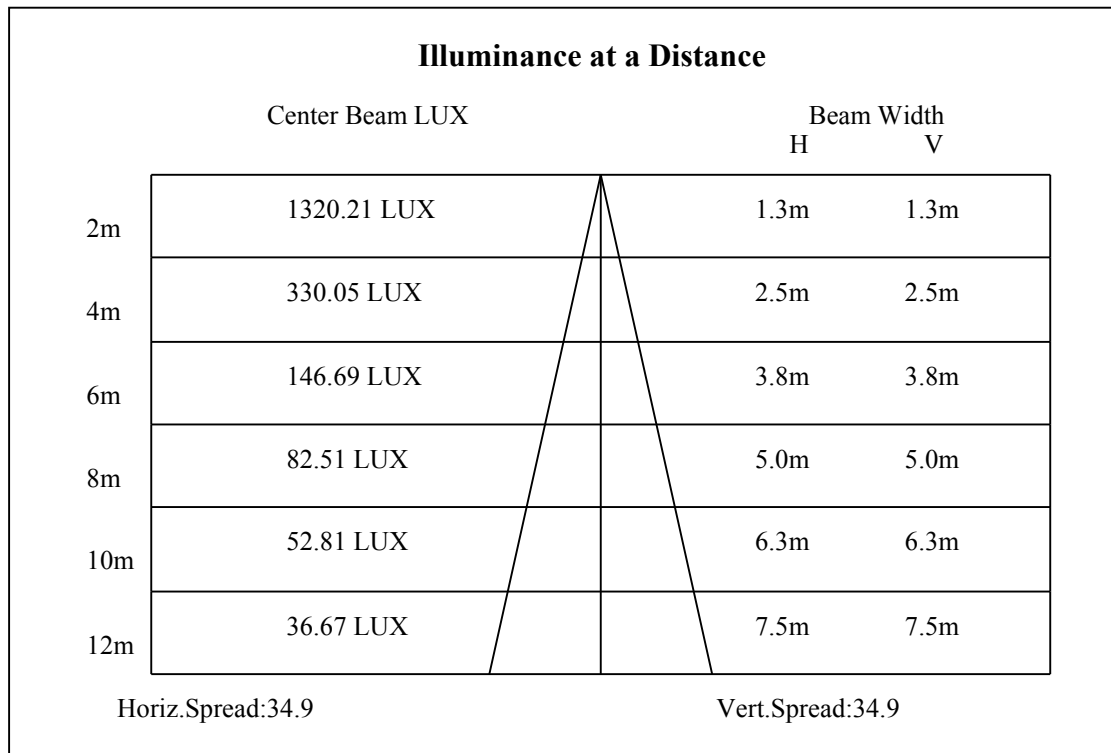
0-10	465.82
10-20	884.27
20-30	542.76
30-40	135.14
40-50	42.60
50-60	27.42
60-70	19.95
70-80	17.91
80-90	10.68
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

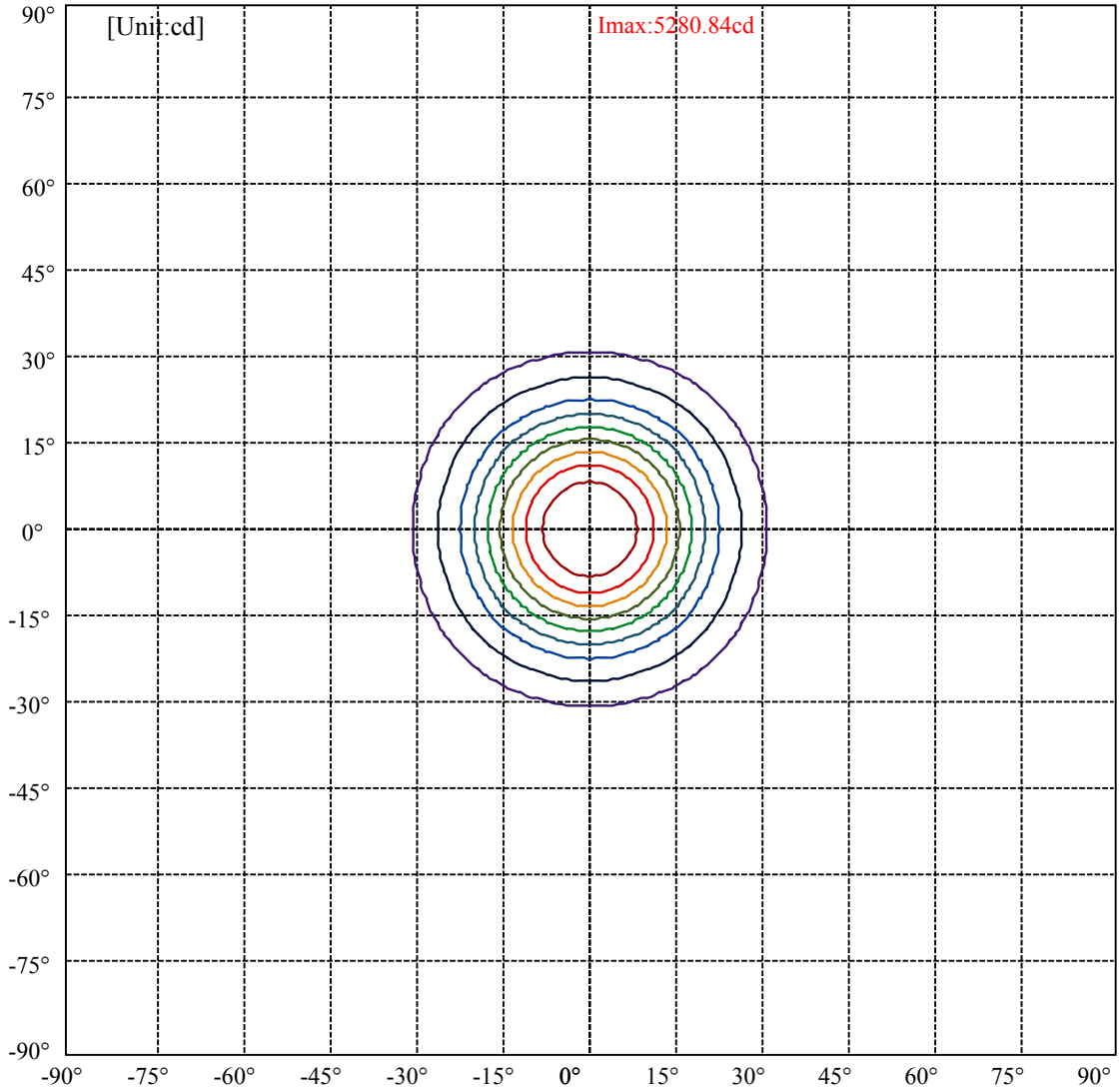


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:30.4 Right:30.4  
:C90/270Left:30.4 Right:30.4

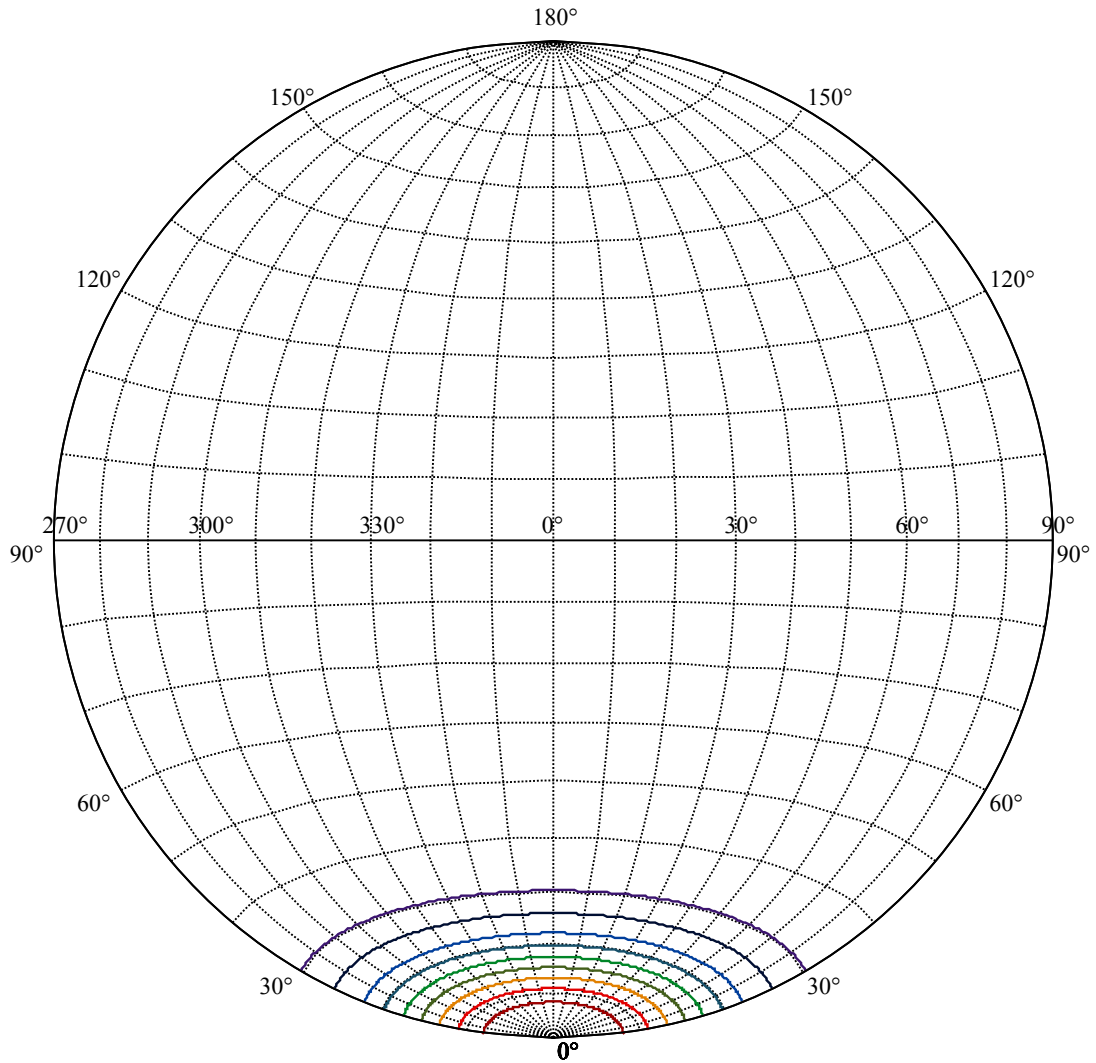
Beam Angle(50%Imax):C0/180Left:17.5 Right:17.5  
:C90/270Left:17.5 Right:17.5





(10%Imax) 528.084	—
(20%Imax) 1056.17	—
(30%Imax) 1584.25	—
(40%Imax) 2112.33	—
(50%Imax) 2640.42	—
(60%Imax) 3168.5	—
(70%Imax) 3696.59	—
(80%Imax) 4224.67	—
(90%Imax) 4752.75	—





House

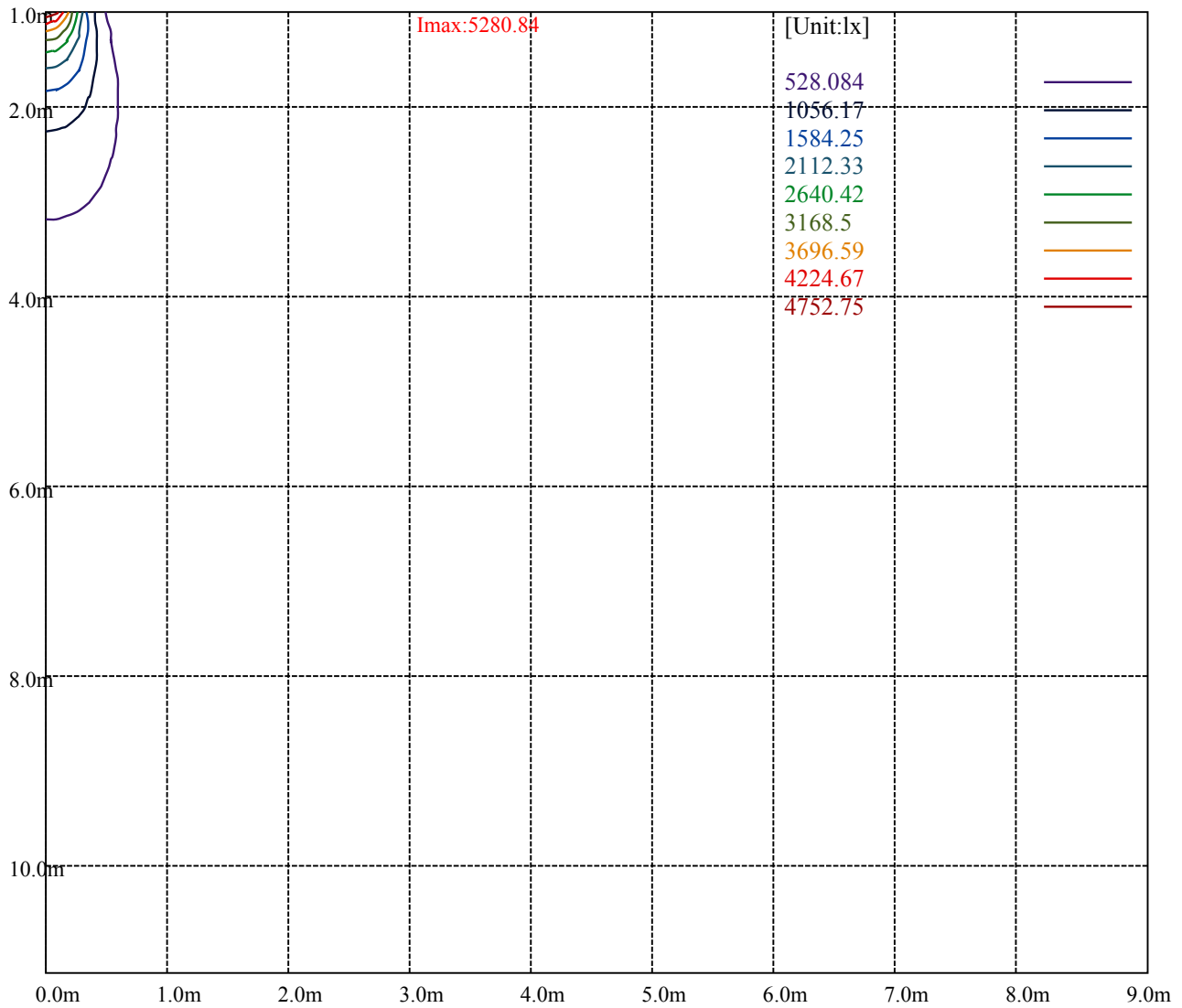
[Unit:cd]

Road

**Imax:5280.84**

(10%Imax) 528.084	—
(20%Imax) 1056.17	—
(30%Imax) 1584.25	—
(40%Imax) 2112.33	—
(50%Imax) 2640.42	—
(60%Imax) 3168.5	—
(70%Imax) 3696.59	—
(80%Imax) 4224.67	—
(90%Imax) 4752.75	—





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

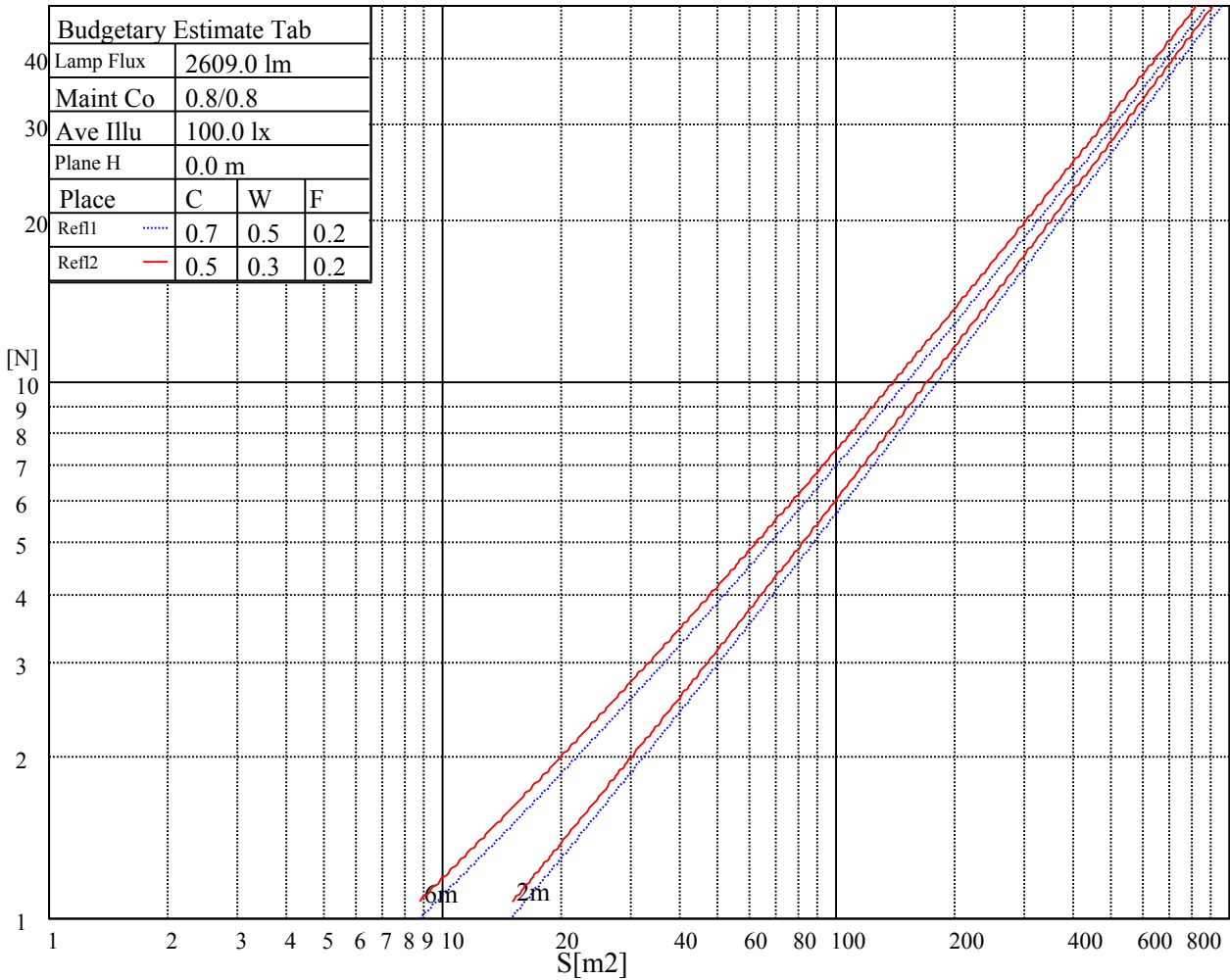
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

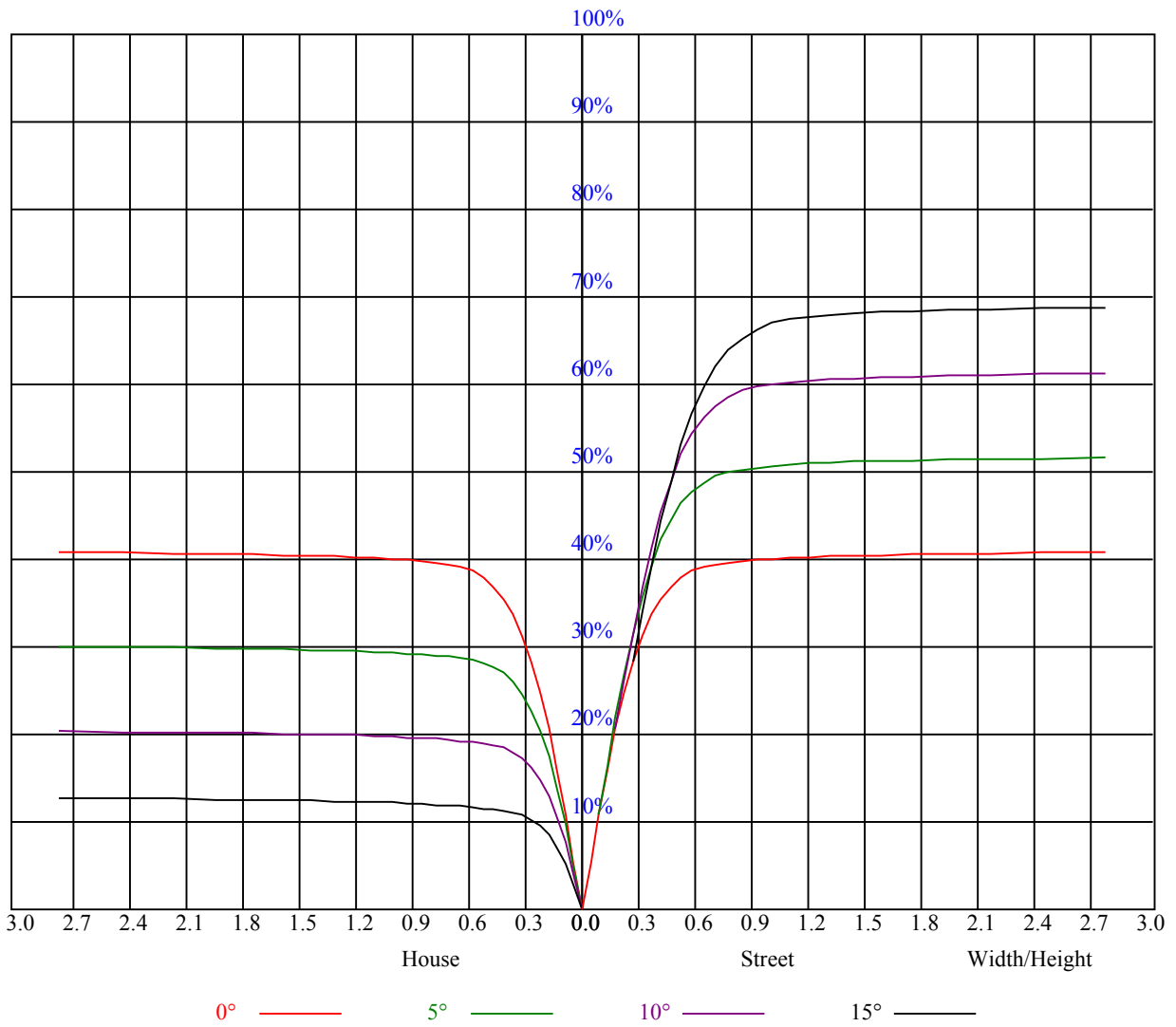


Illumination assessment according UGR											
Rf of Ceiling	70	70	50	50	30	70	70	50	50	30	
Rf of Wall	50	30	50	30	30	50	30	50	30	30	
Rf of Floor	20	20	20	20	20	20	20	20	20	20	
Room dimensions		Viewed crosswise					Viewed endwise				
X	Y										
2H	2H	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	非数字	
	3H	非数字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

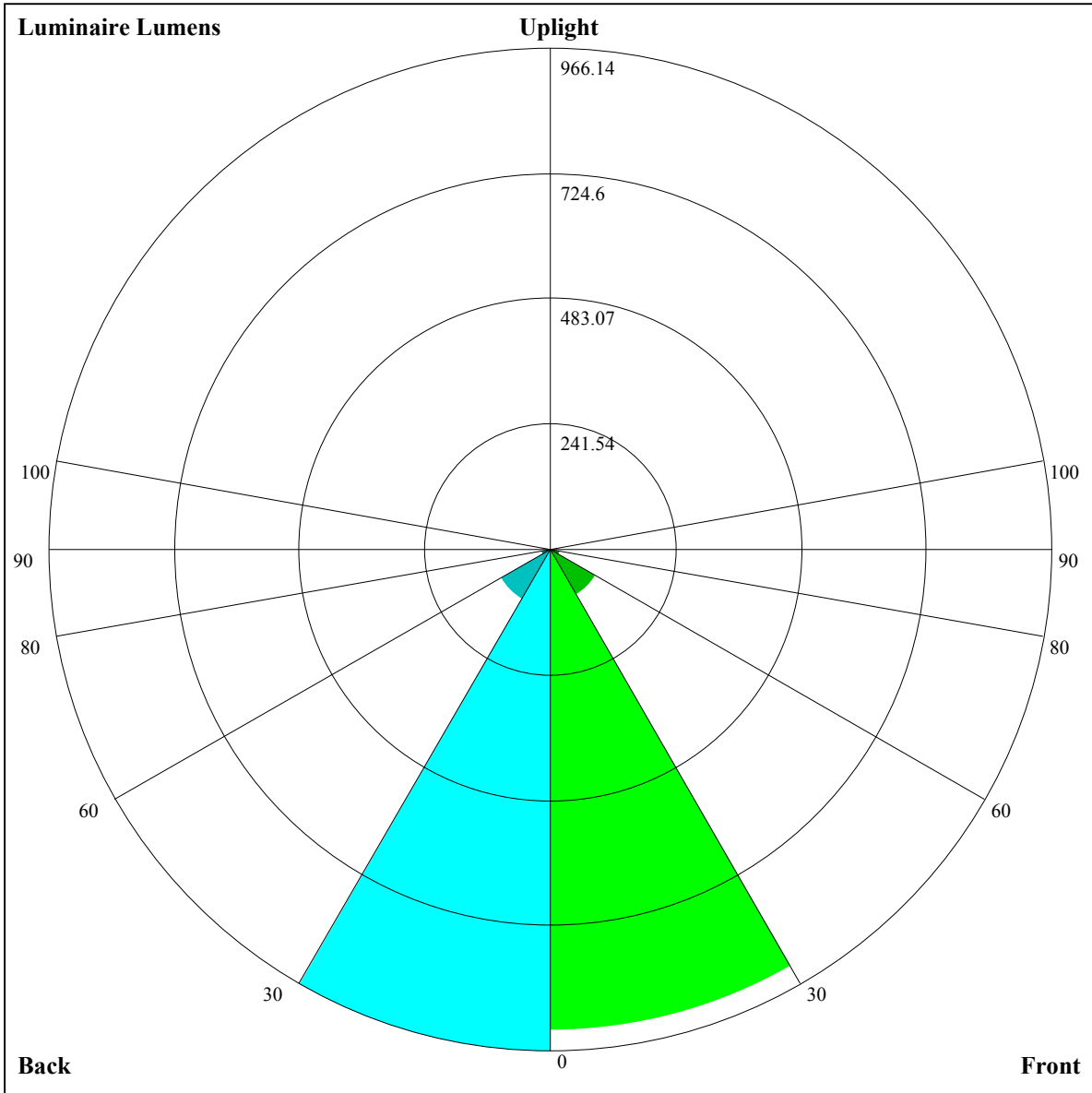
UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



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	0.98	0.98	0.98	0.96	0.96	0.96	0.91	0.91	0.91	0.88	0.88	0.88	0.84	0.84	0.84	0.82
1	0.92	0.90	0.88	0.90	0.88	0.87	0.87	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.78
2	0.86	0.83	0.81	0.85	0.82	0.80	0.82	0.80	0.78	0.80	0.78	0.77	0.78	0.76	0.75	0.74
3	0.82	0.78	0.75	0.81	0.77	0.75	0.78	0.76	0.73	0.76	0.74	0.72	0.75	0.73	0.71	0.70
4	0.78	0.74	0.71	0.77	0.73	0.70	0.75	0.72	0.69	0.73	0.71	0.69	0.72	0.70	0.68	0.67
5	0.74	0.70	0.67	0.73	0.69	0.66	0.72	0.68	0.66	0.70	0.68	0.65	0.69	0.67	0.65	0.64
6	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.67	0.64	0.62	0.61
7	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.65	0.62	0.60	0.64	0.62	0.59	0.58
8	0.65	0.61	0.58	0.64	0.60	0.58	0.63	0.60	0.57	0.63	0.60	0.57	0.62	0.59	0.57	0.56
9	0.62	0.58	0.55	0.62	0.58	0.55	0.61	0.58	0.55	0.60	0.57	0.55	0.60	0.57	0.55	0.54
10	0.60	0.56	0.53	0.60	0.56	0.53	0.59	0.55	0.53	0.58	0.55	0.53	0.58	0.55	0.53	0.52







Luminaire Lumens:

FL=926.77,FM=100.05,FH=17.62,FVH=5.71

BL=966.14,BM=110.17,BH=19.43,BVH=6.02

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	5272.35	5244.26	5210.32	5162.91	5094.44	4980.91	4865.03	4729.85	4572.42
45.0	5284.64	5274.11	5259.48	5231.38	5172.28	5108.49	5020.70	4908.34	4739.80
90.0	5279.37	5265.91	5232.56	5185.74	5123.70	5007.24	4885.52	4747.40	4546.67
135.0	5286.98	5279.37	5255.96	5228.46	5182.81	5095.03	5007.83	4891.37	4718.73
180.0	5272.35	5279.96	5278.79	5261.82	5234.90	5189.25	5135.99	5062.84	4964.52
225.0	5284.64	5276.45	5255.96	5222.61	5179.30	5121.95	5031.82	4928.82	4797.73
270.0	5279.37	5289.32	5281.13	5258.89	5228.46	5191.59	5144.77	5061.08	4965.69
315.0	5286.98	5274.69	5256.55	5233.14	5198.61	5131.90	5059.91	4963.94	4841.62
360.0	5272.35	5244.26	5210.32	5162.91	5094.44	4980.91	4865.03	4729.85	4572.42
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4340.67	4145.21	3930.43	3647.77	3414.85	3118.14	2880.54	2649.96	2379.58
45.0	4573.59	4389.83	4199.05	3936.87	3708.63	3415.43	3176.07	2938.47	2651.13
90.0	4362.91	4114.19	3897.66	3668.83	3437.08	3142.13	2906.29	2675.12	2456.25
135.0	4557.21	4377.54	4185.00	3918.14	3689.90	3453.47	3211.77	2908.63	2680.39
180.0	4809.44	4657.28	4490.49	4309.66	4048.65	3822.75	3596.85	3370.37	3076.59
225.0	4649.67	4436.06	4242.94	4041.04	3831.53	3552.96	3322.38	3087.71	2801.53
270.0	4843.97	4660.21	4500.44	4269.27	4058.59	3839.72	3615.58	3334.67	3100.58
315.0	4660.79	4496.93	4306.73	4106.58	3839.72	3614.99	3321.80	3084.19	2850.10
360.0	4340.67	4145.21	3930.43	3647.77	3414.85	3118.14	2880.54	2649.96	2379.58
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2175.93	1975.19	1779.73	1554.42	1311.55	1150.55	1150.55	998.34	877.90
45.0	2432.84	2224.50	1972.85	1778.56	1595.97	1440.88	1277.02	1151.78	1022.45
90.0	2196.41	1991.58	1795.53	1569.63	1319.74	1164.89	1134.05	1008.99	886.03
135.0	2463.86	2208.11	2003.87	1758.07	1581.34	1433.86	1304.53	1149.44	1023.03
180.0	2837.81	2556.91	2348.57	2130.28	1877.46	1693.11	1518.72	1373.00	1217.91
225.0	2577.39	2301.75	2095.75	1896.77	1659.17	1490.63	1164.77	1164.77	1104.03
270.0	2861.22	2639.42	2369.63	2149.59	1944.18	1758.07	1531.01	1381.77	1226.10
315.0	2566.27	2346.81	2133.79	1933.06	1690.19	1521.64	1163.72	1163.72	1102.56
360.0	2175.93	1975.19	1779.73	1554.42	1311.55	1150.55	1150.55	998.34	877.90
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	757.52	645.62	512.66	413.52	302.27	229.17	172.82	137.29	115.70
45.0	895.45	746.22	637.95	537.30	420.84	333.64	295.01	295.01	139.46
90.0	739.72	631.87	531.03	433.48	320.06	241.58	180.19	139.46	116.23
135.0	898.38	778.41	635.61	528.52	426.69	333.05	311.98	221.57	136.94
180.0	1099.11	977.38	860.34	716.37	604.60	496.91	373.43	307.89	307.89
225.0	950.46	830.32	717.19	610.97	484.68	389.99	283.37	213.37	160.12
270.0	1103.79	978.55	826.40	709.94	599.91	473.51	379.28	295.01	295.01
315.0	982.36	861.33	712.51	598.80	488.72	364.42	278.68	210.21	149.23
360.0	757.52	645.62	512.66	413.52	302.27	229.17	172.82	137.29	115.70
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	104.70	95.45	85.79	79.18	73.15	67.71	61.68	57.53	53.72
45.0	120.73	109.14	96.85	88.78	81.87	74.50	69.00	63.97	59.40
90.0	105.11	95.39	85.27	78.65	72.68	66.13	61.33	57.06	52.26
135.0	115.58	104.17	94.22	84.04	77.13	71.34	64.73	60.04	55.77
180.0	150.23	124.01	109.85	96.85	88.25	80.82	72.68	67.07	62.03
225.0	122.49	111.43	98.08	87.20	80.06	73.80	68.24	61.98	57.70
270.0	152.04	123.89	109.96	99.31	90.12	80.70	74.03	66.95	61.86
315.0	123.31	109.85	99.90	89.31	82.05	75.61	69.82	63.26	58.76
360.0	104.70	95.45	85.79	79.18	73.15	67.71	61.68	57.53	53.72

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	49.57	46.53	43.31	41.02	38.92	37.10	35.05	33.47	31.95
45.0	54.72	51.15	48.05	44.42	41.90	39.74	37.28	35.46	33.88
90.0	48.92	46.06	43.25	40.32	38.22	36.28	34.59	32.60	31.13
135.0	51.21	47.93	45.06	42.43	39.50	37.45	35.64	33.65	32.13
180.0	57.59	52.85	49.51	46.58	44.01	41.20	39.27	37.45	35.35
225.0	53.96	50.68	47.11	44.54	41.73	39.80	37.92	36.23	34.24
270.0	57.41	52.67	49.39	46.53	43.31	41.08	39.09	37.22	35.17
315.0	54.72	50.27	47.23	43.89	41.49	39.44	36.93	35.17	33.59
360.0	49.57	46.53	43.31	41.02	38.92	37.10	35.05	33.47	31.95
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	30.67	29.26	27.51	26.28	24.87	23.76	22.65	21.77	20.66
45.0	31.95	30.55	29.14	27.74	26.10	24.99	23.82	22.65	21.54
90.0	29.85	28.15	26.74	25.28	24.23	23.06	21.83	21.01	20.13
135.0	30.78	29.20	27.97	26.57	25.22	24.11	23.06	22.00	21.01
180.0	33.88	32.13	30.84	29.67	28.44	26.92	25.93	24.87	23.94
225.0	32.77	31.02	29.79	28.50	27.21	26.10	24.76	23.70	22.71
270.0	33.65	32.13	30.72	29.20	27.97	26.34	25.28	24.17	22.77
315.0	32.01	30.26	28.91	27.62	26.34	24.87	23.76	22.65	21.42
360.0	30.67	29.26	27.51	26.28	24.87	23.76	22.65	21.77	20.66
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	19.84	19.02	18.38	17.79	17.85	18.20	18.26	17.97	17.73
45.0	20.78	19.66	18.96	18.43	18.79	19.90	20.89	20.72	20.42
90.0	19.37	18.49	17.91	17.32	16.74	16.09	15.68	15.22	14.81
135.0	20.31	19.49	18.84	18.20	17.67	17.03	16.56	16.27	15.80
180.0	22.77	21.95	21.24	20.37	19.78	19.25	18.61	18.90	19.72
225.0	21.71	21.24	21.19	21.95	23.12	24.46	25.81	26.45	26.57
270.0	21.83	21.01	20.19	19.20	18.55	17.97	17.38	16.68	16.27
315.0	20.60	19.72	18.79	18.20	17.56	16.80	16.33	15.92	15.45
360.0	19.84	19.02	18.38	17.79	17.85	18.20	18.26	17.97	17.73
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.62	17.15	16.80	15.68	14.86	14.22	12.87	12.00	11.59
45.0	20.31	19.43	18.96	18.32	17.73	17.15	16.39	15.57	12.64
90.0	14.51	14.16	13.81	13.46	13.11	12.76	12.41	12.06	11.70
135.0	15.51	15.27	15.04	14.51	14.16	13.81	13.28	12.47	11.94
180.0	21.01	21.65	21.83	22.00	22.88	22.82	22.36	21.36	19.43
225.0	26.16	25.81	25.16	24.76	23.94	23.00	22.12	21.01	17.85
270.0	15.86	15.33	14.92	14.63	14.16	13.87	13.64	13.17	12.82
315.0	14.98	14.69	14.51	14.22	13.69	13.40	12.99	12.52	12.06
360.0	17.62	17.15	16.80	15.68	14.86	14.22	12.87	12.00	11.59
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.29	11.06	10.65	10.36	10.01	9.77	9.71	9.42	9.60
45.0	11.41	11.06	10.71	10.53	10.18	9.89	9.71	9.71	9.36
90.0	11.41	11.12	10.94	10.18	9.89	9.66	9.54	9.36	9.48
135.0	11.65	11.29	11.06	10.94	10.24	9.83	9.60	9.54	9.36
180.0	16.97	13.69	12.00	11.59	11.29	11.06	10.36	9.95	9.60
225.0	14.40	11.76	11.24	11.00	10.77	10.36	9.95	9.66	9.60
270.0	12.52	12.00	11.70	11.35	10.94	10.59	10.07	9.83	9.60
315.0	11.59	11.29	10.94	10.65	10.36	10.07	9.77	9.60	9.60
360.0	11.29	11.06	10.65	10.36	10.01	9.77	9.71	9.42	9.60

Intensity data(cd)

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