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

Nata

Client: NT
LumCAT: 2-2896-L & 92.70.401.00
Luminaire: 92.70.411.00LED HOLDER
Report No: 20250110-B023
Ballast type: AC

Test No: 20250110-C023	Voltage(V): 36.570
LampCAT: LUMILEDS 1208 LES15	Current(A): 0.898
Lamp flux(lm): 4053.0	Power (W): 32.830
Number of Lamps: 1	PF: 0.000
Length(mm): 69	Width(mm): 69
Phm Type: C	Height(mm): 44

Photometric Results

Lumens(lm): 3798.79, Efficiency(%): 93.73% , Luminous Efficacy(lm/W): 115.71
Central intensity(cd): 7715.321, Maximum intensity(cd): 7715.321
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=39.0
[C90/270]Total=39.0
Field angle(10%Imax): [C0/180]Total=68.2
[C90/270]Total=68.2
Maximum s/h(1/2): C0_180=0.62 C90_270=0.62
Maximum s/h(1/4): C0_180=0.65 C90_270=0.65
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 93.73%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.128%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7715.321	0.000	0	0.00%	0.00%
1.0	7693.882	7.373	7.373	0.18%	0.19%
2.0	7642.614	22.012	29.385	0.54%	0.77%
3.0	7565.794	36.374	65.759	0.90%	1.73%
4.0	7470.242	50.330	116.089	1.24%	3.06%
5.0	7332.206	63.679	179.769	1.57%	4.73%
6.0	7177.455	76.252	256.021	1.88%	6.74%
7.0	6994.630	87.966	343.987	2.17%	9.06%
8.0	6758.401	98.428	442.415	2.43%	11.65%
9.0	6554.406	107.893	550.308	2.66%	14.49%
10.0	6288.781	116.226	666.534	2.87%	17.55%
11.0	6073.301	123.523	790.056	3.05%	20.80%
12.0	5808.367	129.884	919.94	3.20%	24.22%
13.0	5561.618	134.933	1054.873	3.33%	27.77%
14.0	5283.931	138.822	1193.695	3.43%	31.42%
15.0	5032.038	141.622	1335.317	3.49%	35.15%
16.0	4774.837	143.698	1479.015	3.55%	38.93%
17.0	4503.903	144.495	1623.51	3.57%	42.74%
18.0	4237.306	144.124	1767.634	3.56%	46.53%
19.0	3977.667	142.924	1910.558	3.53%	50.29%
20.0	3723.324	140.950	2051.507	3.48%	54.00%
21.0	3470.097	138.128	2189.635	3.41%	57.64%
22.0	3225.912	134.559	2324.195	3.32%	61.18%
23.0	2985.787	130.338	2454.533	3.22%	64.61%
24.0	2752.120	125.451	2579.984	3.10%	67.92%
25.0	2539.485	120.320	2700.303	2.97%	71.08%
26.0	2316.147	114.618	2814.921	2.83%	74.10%
27.0	2118.407	108.492	2923.414	2.68%	76.96%
28.0	1920.069	102.246	3025.659	2.52%	79.65%
29.0	1682.059	94.242	3119.901	2.33%	82.13%
30.0	1476.559	85.282	3205.183	2.10%	84.37%
31.0	1264.654	76.284	3281.467	1.88%	86.38%
32.0	1102.998	67.830	3349.297	1.67%	88.17%
33.0	951.447	60.525	3409.822	1.49%	89.76%
34.0	785.974	52.579	3462.402	1.30%	91.14%
35.0	642.629	44.367	3506.769	1.09%	92.31%
36.0	529.002	37.305	3544.074	0.92%	93.29%
37.0	443.154	31.706	3575.78	0.78%	94.13%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	363.082	26.911	3602.691	0.66%	94.84%
39.0	310.506	22.991	3625.683	0.57%	95.44%
40.0	267.563	20.161	3645.844	0.50%	95.97%
41.0	212.858	17.108	3662.951	0.42%	96.42%
42.0	176.925	14.162	3677.113	0.35%	96.80%
43.0	141.104	11.781	3688.893	0.29%	97.11%
44.0	116.735	9.732	3698.625	0.24%	97.36%
45.0	99.107	8.295	3706.92	0.20%	97.58%
46.0	83.075	7.125	3714.045	0.18%	97.77%
47.0	72.497	6.187	3720.232	0.15%	97.93%
48.0	62.635	5.463	3725.695	0.13%	98.08%
49.0	55.657	4.858	3730.553	0.12%	98.20%
50.0	50.315	4.418	3734.971	0.11%	98.32%
51.0	45.388	4.049	3739.02	0.10%	98.43%
52.0	41.767	3.740	3742.76	0.09%	98.53%
53.0	38.259	3.481	3746.241	0.09%	98.62%
54.0	35.670	3.258	3749.5	0.08%	98.70%
55.0	33.134	3.071	3752.571	0.08%	98.78%
56.0	30.940	2.895	3755.466	0.07%	98.86%
57.0	28.982	2.740	3758.206	0.07%	98.93%
58.0	27.287	2.602	3760.808	0.06%	99.00%
59.0	25.769	2.480	3763.288	0.06%	99.07%
60.0	24.428	2.371	3765.66	0.06%	99.13%
61.0	23.114	2.269	3767.929	0.06%	99.19%
62.0	21.958	2.172	3770.101	0.05%	99.24%
63.0	20.913	2.085	3772.186	0.05%	99.30%
64.0	19.816	1.999	3774.184	0.05%	99.35%
65.0	18.798	1.911	3776.095	0.05%	99.40%
66.0	17.812	1.827	3777.922	0.05%	99.45%
67.0	16.689	1.735	3779.656	0.04%	99.50%
68.0	15.782	1.645	3781.301	0.04%	99.54%
69.0	14.678	1.554	3782.855	0.04%	99.58%
70.0	13.679	1.456	3784.312	0.04%	99.62%
71.0	12.924	1.375	3785.687	0.03%	99.66%
72.0	11.984	1.295	3786.982	0.03%	99.69%
73.0	11.406	1.223	3788.205	0.03%	99.72%
74.0	10.631	1.159	3789.363	0.03%	99.75%
75.0	9.980	1.089	3790.452	0.03%	99.78%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	9.258	1.021	3791.474	0.03%	99.81%
77.0	8.568	0.950	3792.424	0.02%	99.83%
78.0	7.884	0.881	3793.305	0.02%	99.86%
79.0	7.188	0.810	3794.115	0.02%	99.88%
80.0	6.465	0.736	3794.851	0.02%	99.90%
81.0	5.828	0.665	3795.515	0.02%	99.91%
82.0	5.112	0.593	3796.109	0.01%	99.93%
83.0	4.501	0.523	3796.631	0.01%	99.94%
84.0	3.890	0.457	3797.088	0.01%	99.96%
85.0	3.377	0.397	3797.485	0.01%	99.97%
86.0	2.924	0.344	3797.829	0.01%	99.97%
87.0	2.503	0.297	3798.126	0.01%	99.98%
88.0	2.162	0.256	3798.382	0.01%	99.99%
89.0	1.827	0.219	3798.6	0.01%	99.99%
90.0	1.656	0.191	3798.791	0.00%	100.00%

Zonal flux distribution table

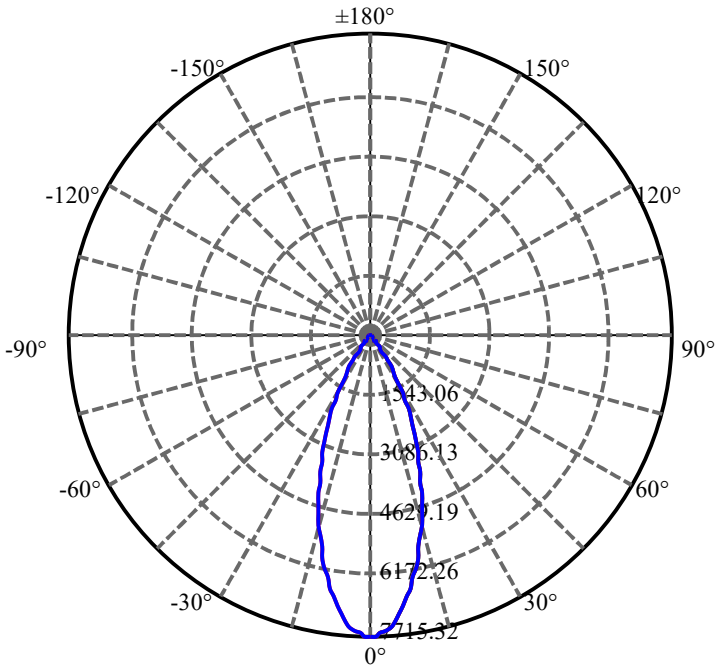
ZONAL LUMEN SUMMARY

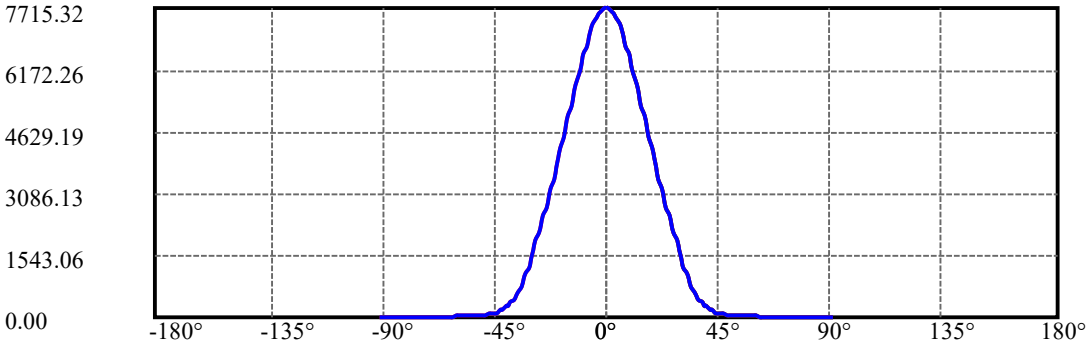
Zone	Lumens	%Lamp	%Fixt
0-30	3205.18	79.08%	84.37%
0-40	3645.84	89.95%	95.97%
0-60	3765.66	92.91%	99.13%
0-90	3798.60	93.72%	99.99%
0-120	3798.60	93.72%	99.99%
0-180	3798.79	93.73%	100.00%
60-90	32.94	0.81%	0.87%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-28.14	3039.03	74.98%	80.00%

ZONAL LUMEN SUMMARY

0-10	666.53
10-20	1384.97
20-30	1153.68
30-40	440.66
40-50	89.13
50-60	30.69
60-70	18.65
70-80	10.54
80-90	3.75
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

Light Distribution Curve [Unit:cd]





C0(Max):

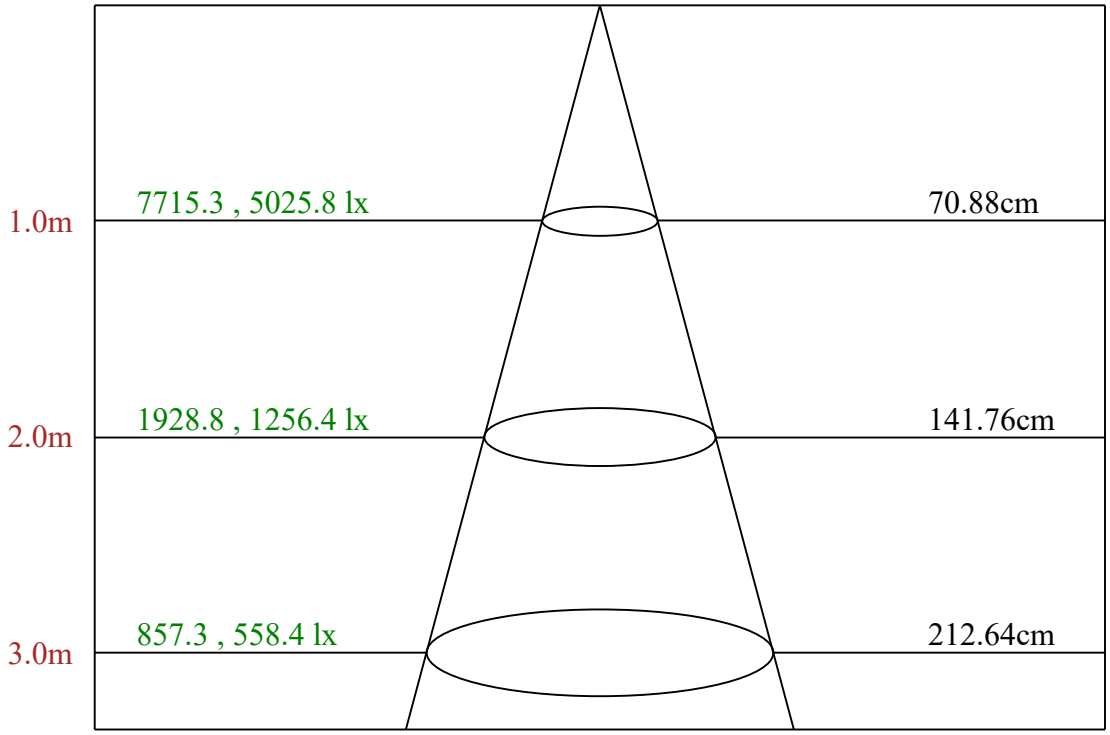
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:34.1 Right:34.1
:C90/270Left:34.1 Right:34.1

Beam Angle(50%Imax):C0/180Left:19.5 Right:19.5
:C90/270Left:19.5 Right:19.5

Lux distance Curve



Max , Ave

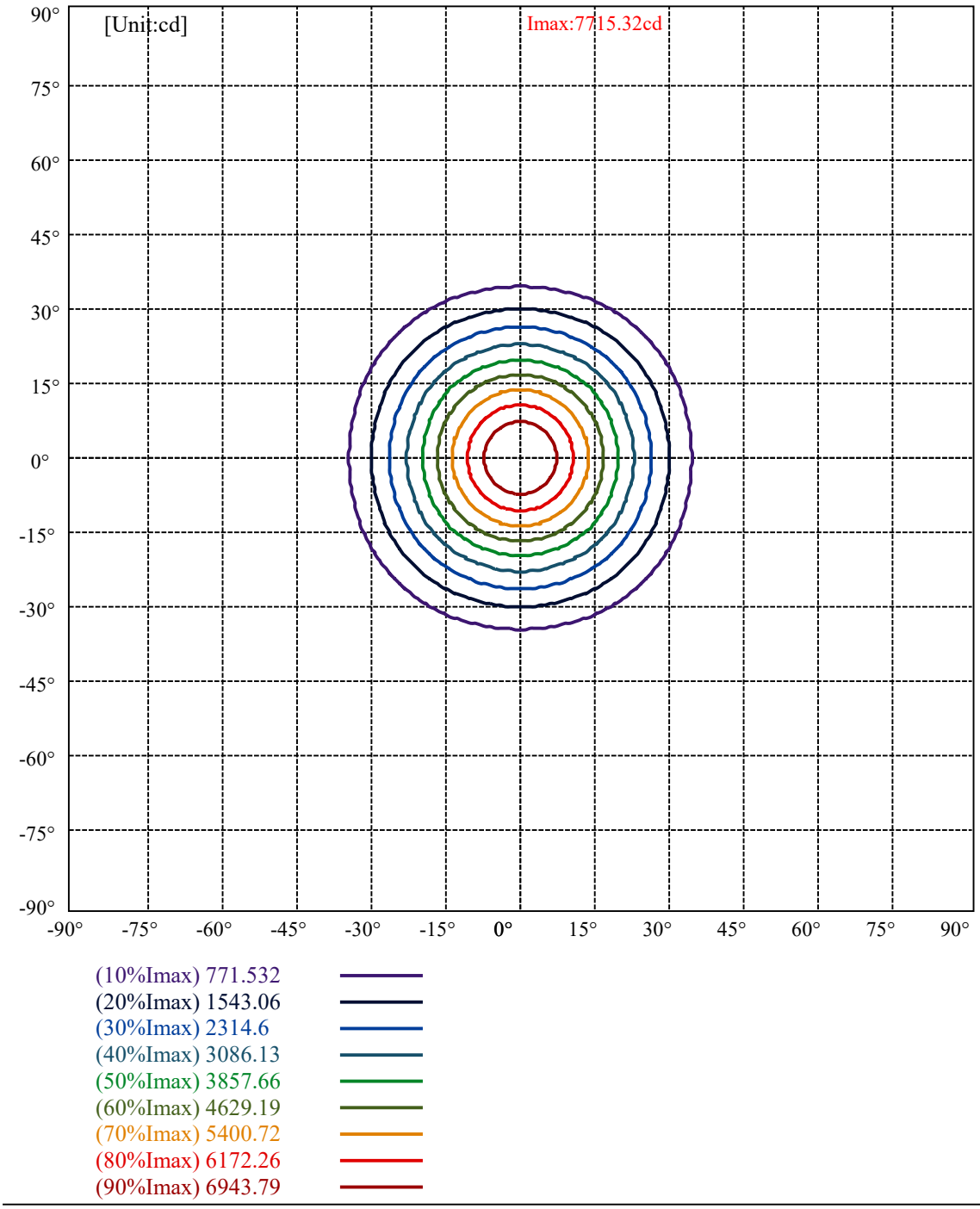
Beam angle of C0 plane 39.03

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/01/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.25

ISO-Intensity(V-H)



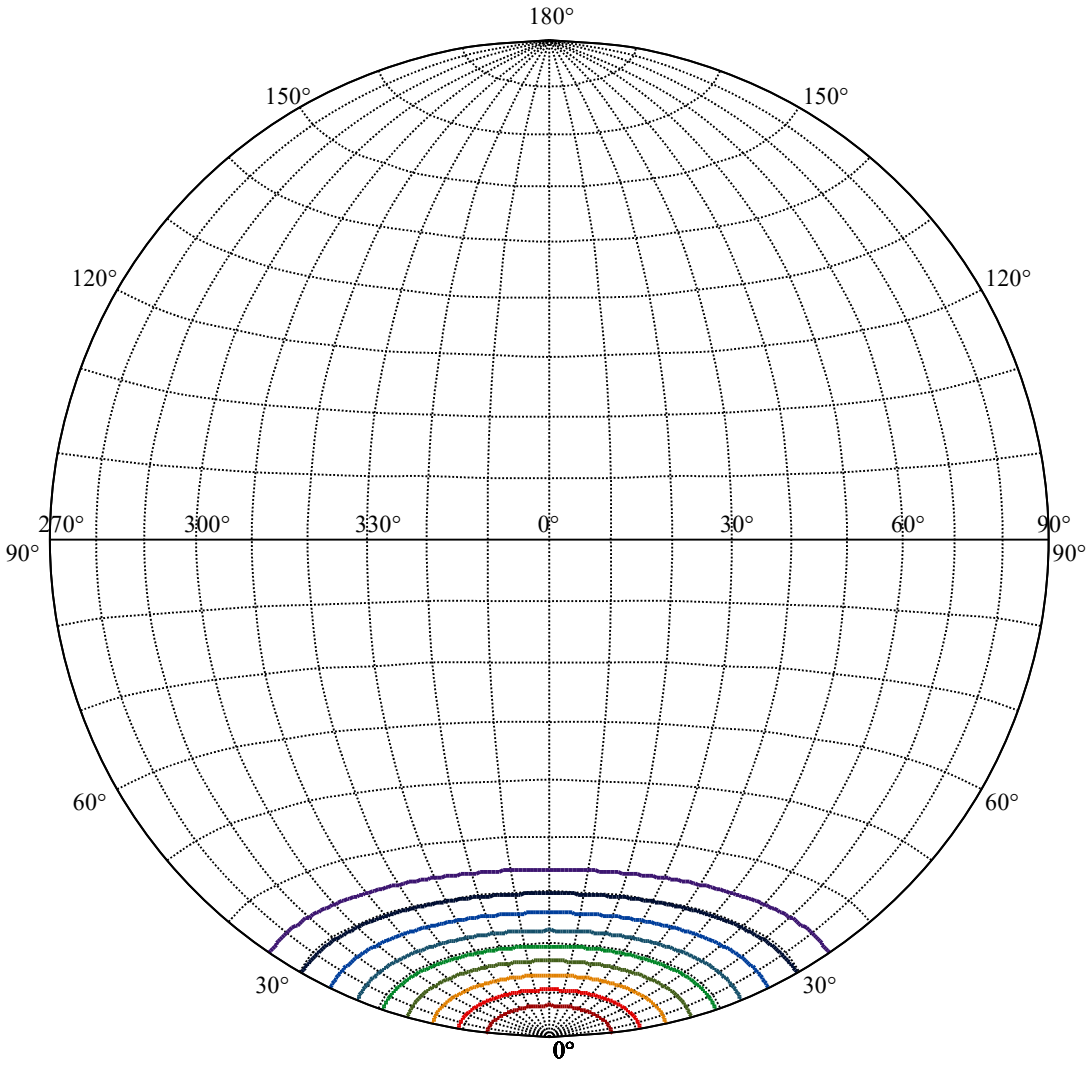
(10%Imax) 771.532
(20%Imax) 1543.06
(30%Imax) 2314.6
(40%Imax) 3086.13
(50%Imax) 3857.66
(60%Imax) 4629.19
(70%Imax) 5400.72
(80%Imax) 6172.26
(90%Imax) 6943.79

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/01/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.25

ISO candela diagram on circular web



House [Unit:cd] Road

Imax:7715.32

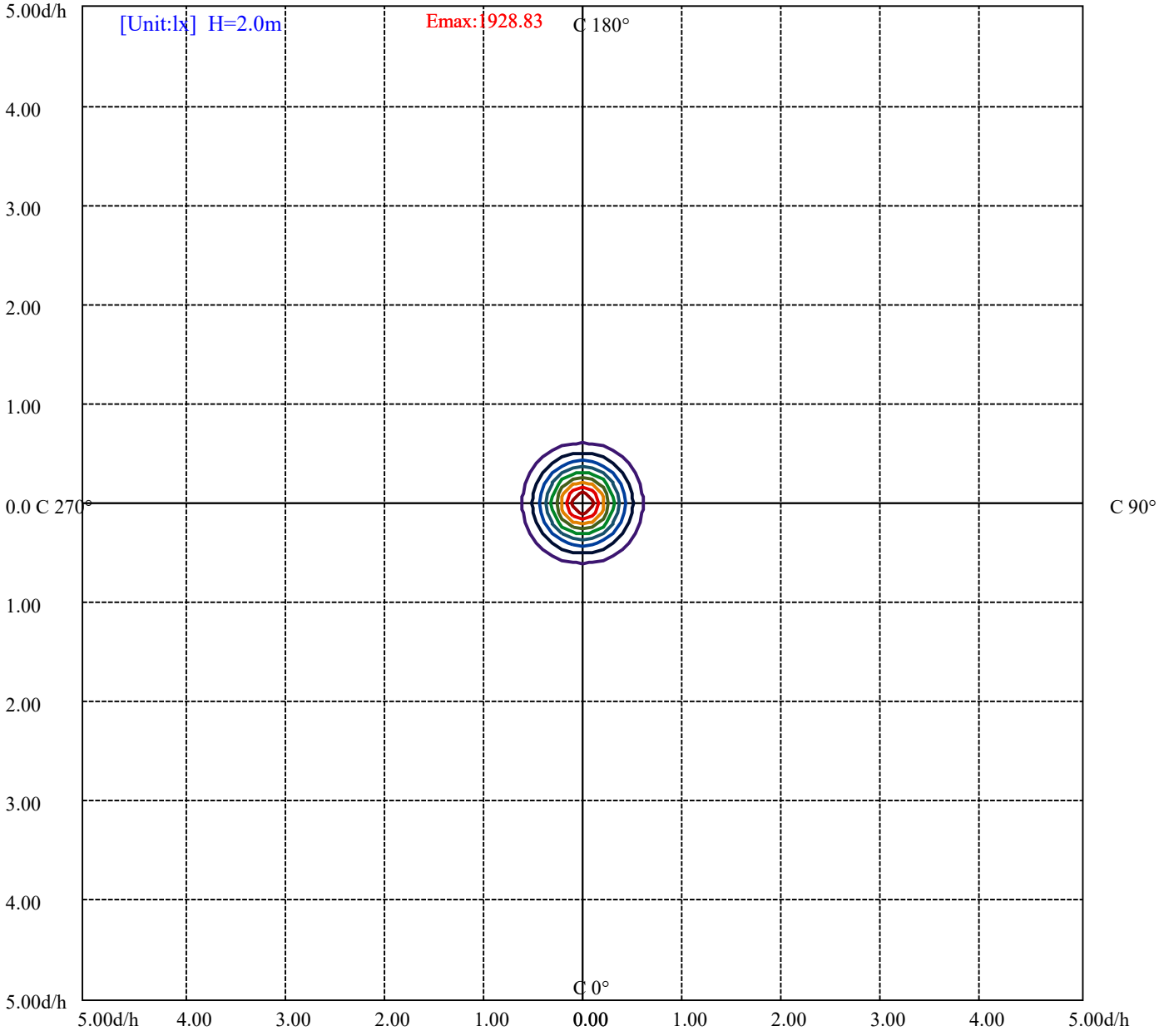
(10%Imax) 771.532
(20%Imax) 1543.06
(30%Imax) 2314.6
(40%Imax) 3086.13
(50%Imax) 3857.66
(60%Imax) 4629.19
(70%Imax) 5400.72
(80%Imax) 6172.26
(90%Imax) 6943.79

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2025/01/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.25

ISO illuminance diagram



(10%Emax) 192.883
(20%Emax) 385.765
(30%Emax) 578.65
(40%Emax) 771.5325
(50%Emax) 964.415
(60%Emax) 1157.297
(70%Emax) 1350.18
(80%Emax) 1543.063
(90%Emax) 1735.948

Equipment: GMS 1800
Temperature(°C): 25.0
Date: 2025/01/10
Humidity(%): 60.0%
Operator: NT07
Distance(m): 7.25

Luminance Limitting Curve(no luminous side)

Luminance Table

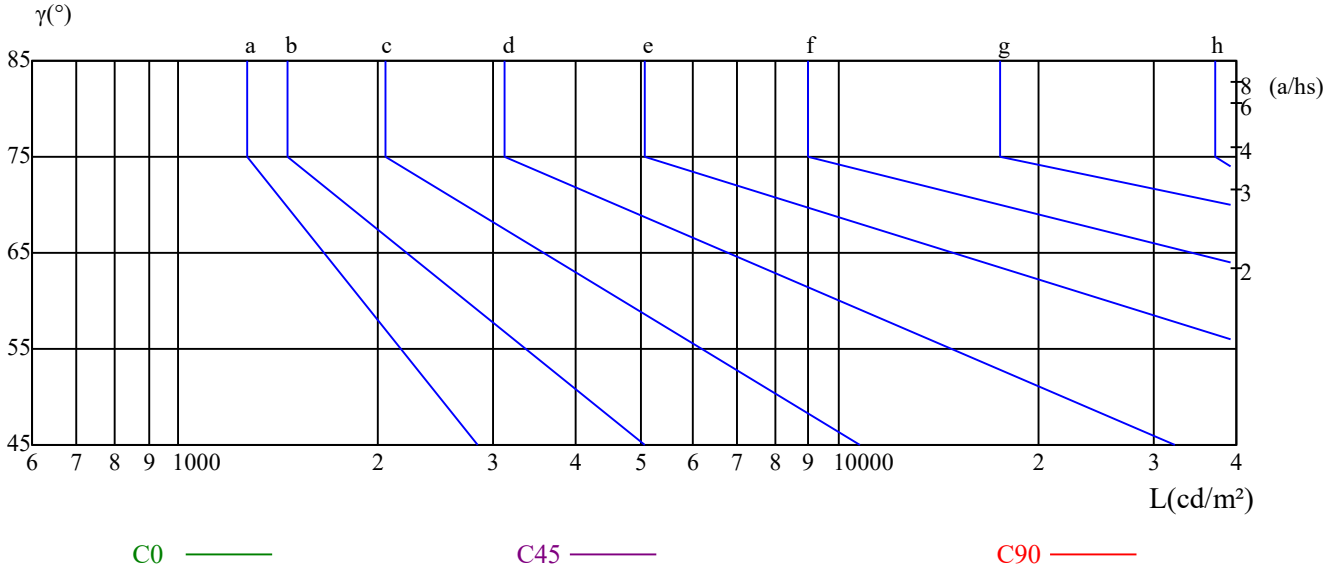
γ	45	50	55	60	65	70	75	80	85
C0	0	0	0	0	0	0	0	0	0
C45	0	0	0	0	0	0	0	0	0
C90	0	0	0	0	0	0	0	0	0

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 Limitting Curve

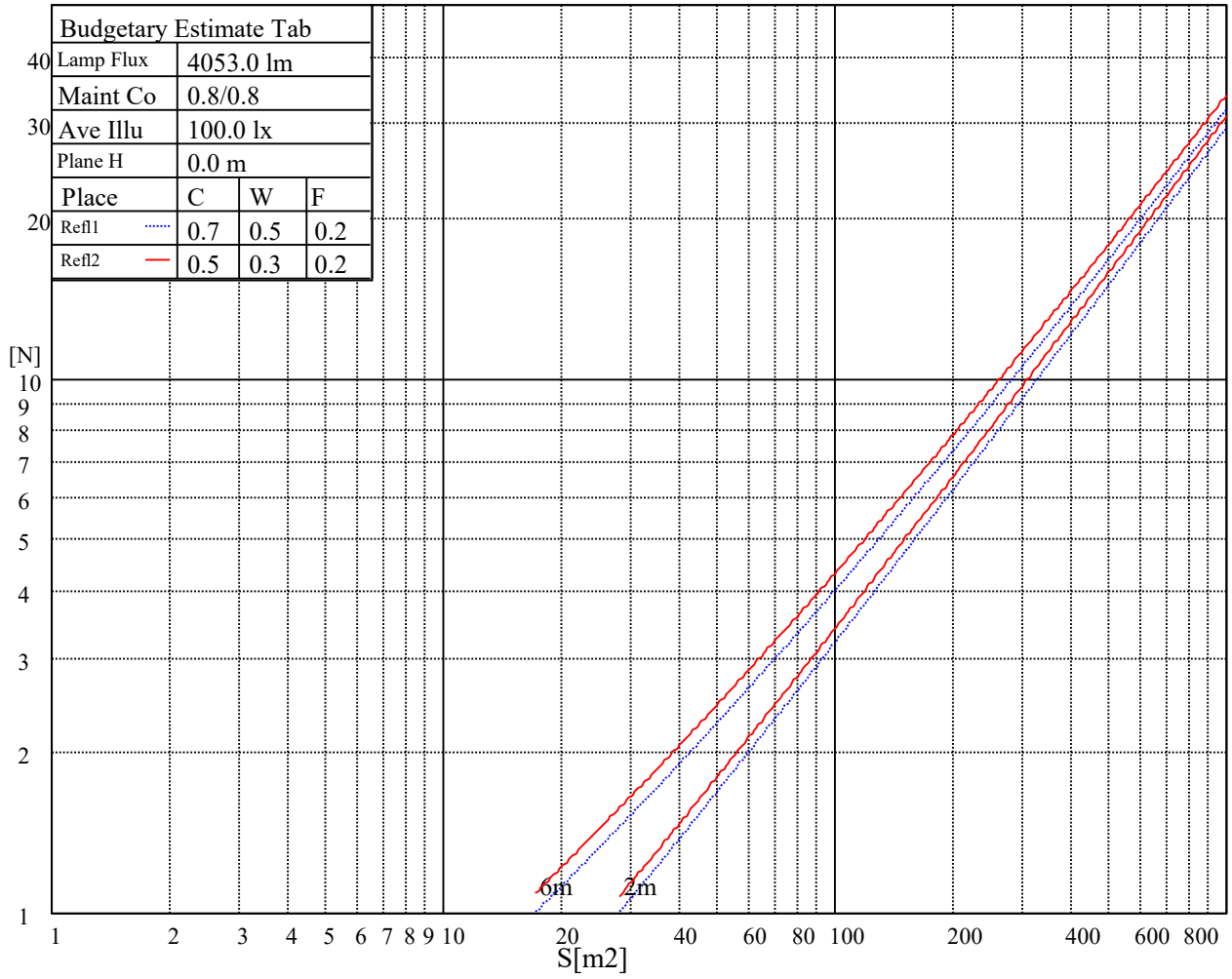


UGR Glare

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	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	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	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	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	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	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	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	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	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	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	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	非数字
8H	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	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	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	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	非数字
12H	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	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	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	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

Budgetary Estimate Table



Equipment: GMS 1800 Date: 2025/01/10 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.25

Utilization factor table for indoor luminaire

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.12	1.12	1.12	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.05	1.02	1.00	1.02	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89
2	0.98	0.95	0.92	0.97	0.93	0.91	0.94	0.91	0.89	0.91	0.89	0.87	0.88	0.87	0.85	0.84
3	0.93	0.88	0.85	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.85	0.82	0.81	0.79
4	0.87	0.83	0.79	0.86	0.82	0.79	0.84	0.81	0.78	0.83	0.80	0.77	0.81	0.78	0.76	0.75
5	0.83	0.78	0.74	0.82	0.78	0.74	0.80	0.77	0.74	0.79	0.76	0.73	0.78	0.75	0.72	0.71
6	0.79	0.74	0.70	0.78	0.73	0.70	0.77	0.73	0.70	0.75	0.72	0.69	0.74	0.71	0.69	0.67
7	0.75	0.70	0.67	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.65	0.64
8	0.71	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
9	0.68	0.63	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.60	0.65	0.62	0.59	0.58
10	0.65	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.63	0.59	0.57	0.56

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	7714.76	7661.83	7584.93	7485.79	7351.50	7207.74	6994.91	6821.61	6519.64
45.0	7722.01	7690.84	7643.43	7569.89	7449.00	7308.03	7212.21	6928.63	6693.47
90.0	7671.29	7597.23	7502.51	7378.78	7228.92	7028.34	6820.51	6597.65	6343.61
135.0	7753.23	7690.84	7621.72	7544.82	7445.11	7320.85	7146.45	6962.59	6739.20
180.0	7714.76	7717.54	7681.33	7616.15	7565.43	7456.78	7318.64	7156.49	6968.74
225.0	7722.01	7718.70	7665.77	7597.23	7511.97	7389.39	7231.13	7040.59	6825.56
270.0	7671.29	7727.00	7757.12	7727.58	7643.43	7558.22	7461.83	7321.96	7153.70
315.0	7753.23	7747.08	7684.11	7606.11	7566.58	7388.29	7233.97	7127.53	6823.30
360.0	7714.76	7661.83	7584.93	7485.79	7351.50	7207.74	6994.91	6821.61	6519.64

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6324.64	6059.46	5794.23	5529.58	5262.72	4993.60	4726.16	4453.15	4194.59
45.0	6543.03	6177.57	6024.35	5765.79	5498.93	5222.56	4945.13	4672.65	4400.74
90.0	6092.31	5818.20	5659.93	5388.08	4998.06	4832.54	4548.97	4280.43	4025.24
135.0	6506.29	6247.21	6004.85	5750.76	5591.97	5233.70	5071.60	4792.44	4489.36
180.0	6750.86	6514.65	6260.04	6017.09	5861.66	5490.57	5221.45	5066.03	4787.45
225.0	6588.76	6348.03	6143.03	5834.33	5629.86	5366.89	5112.28	4833.70	4559.53
270.0	6953.70	6724.69	6528.58	6279.54	6018.20	5755.23	5505.08	5240.43	4979.67
315.0	6675.65	6420.46	6171.42	5901.77	5631.55	5376.36	5125.63	4859.88	4594.65
360.0	6324.64	6059.46	5794.23	5529.58	5262.72	4993.60	4726.16	4453.15	4194.59

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	3938.88	3697.61	3452.46	3219.03	2990.60	2761.58	2542.08	2413.93	2135.35
45.0	4138.35	3884.26	3632.44	3378.93	3133.78	2885.26	2645.68	2431.17	2220.03
90.0	3765.58	3503.19	3244.10	2992.28	2750.44	2532.62	2322.00	2120.84	1919.16
135.0	4214.67	3942.77	3693.15	3432.96	3192.28	2946.02	2694.72	2471.86	2262.40
180.0	4515.54	4254.78	3991.81	3731.62	3471.96	3220.71	2970.52	2728.73	2514.22
225.0	4293.25	4034.17	3775.09	3516.01	3264.71	3028.49	2792.23	2559.32	2338.72
270.0	4704.97	4426.39	4161.16	3909.34	3670.86	3421.29	3185.60	2949.33	2717.01
315.0	4327.21	4078.17	3836.38	3580.61	3332.67	3090.31	2864.13	2640.69	2422.29
360.0	3938.88	3697.61	3452.46	3219.03	2990.60	2761.58	2542.08	2413.93	2135.35

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	2014.98	1816.09	1607.15	1104.76	1104.76	950.59	784.39	648.36	535.24
45.0	2016.09	1809.41	1608.25	1487.36	1285.10	1081.74	895.67	731.30	603.15
90.0	1722.47	1524.15	1039.16	1039.16	961.95	787.49	645.99	531.56	436.06
135.0	2057.87	1856.19	1653.41	1447.26	1236.06	1026.60	836.06	709.02	558.58
180.0	2299.71	2099.66	1899.08	1696.30	1487.94	1281.21	1075.06	957.48	719.58
225.0	2132.57	1932.51	1733.09	1530.83	1043.31	1043.31	1003.42	819.87	668.75
270.0	2489.68	2270.75	2063.45	1857.30	1660.08	1541.97	1341.92	1049.41	931.30
315.0	2213.88	2051.78	1852.88	1649.52	1338.03	1111.07	1029.07	840.79	688.36
360.0	2014.98	1816.09	1607.15	1104.76	1104.76	950.59	784.39	648.36	535.24

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	442.68	365.15	301.81	269.38	205.89	170.72	152.59	117.69	106.02
45.0	496.72	408.15	337.40	288.88	288.88	179.87	148.17	122.05	101.39
90.0	359.05	294.93	241.79	197.27	160.32	130.41	106.70	88.25	74.27
135.0	461.60	397.00	328.46	292.25	292.25	182.18	149.59	122.58	100.92
180.0	593.12	530.15	408.67	366.36	305.60	305.60	201.63	167.04	138.29
225.0	550.54	455.09	378.61	315.95	262.87	217.35	179.50	148.33	123.10
270.0	758.58	620.97	515.11	427.65	355.22	294.46	294.46	199.47	164.21
315.0	569.72	473.80	392.80	326.31	269.49	222.29	182.76	163.42	125.68
360.0	442.68	365.15	301.81	269.38	205.89	170.72	152.59	117.69	106.02

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	89.93	77.69	68.33	61.03	55.24	50.41	46.26	42.73	39.63
45.0	91.41	72.85	66.75	58.55	50.04	47.25	43.21	39.95	37.11
90.0	63.65	55.82	49.83	44.84	40.58	38.42	34.43	32.96	30.85
135.0	84.05	71.43	61.71	54.45	48.62	43.63	41.05	37.21	32.90
180.0	114.48	95.82	81.47	70.54	62.08	55.24	49.88	45.20	41.37
225.0	102.34	85.94	76.06	64.39	58.40	52.40	46.36	43.00	39.42
270.0	134.30	110.38	95.35	77.63	68.91	60.24	52.30	48.04	43.52
315.0	112.69	94.67	80.47	69.65	61.39	54.93	49.62	45.05	41.26
360.0	89.93	77.69	68.33	61.03	55.24	50.41	46.26	42.73	39.63

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	37.11	34.80	32.75	30.75	28.91	27.23	26.28	24.39	23.13
45.0	34.27	32.01	30.12	28.23	26.65	25.12	23.65	22.44	21.18
90.0	28.91	27.02	25.12	23.50	22.23	21.18	20.13	19.24	18.45
135.0	31.33	29.17	27.33	25.76	24.34	23.07	21.97	20.97	20.03
180.0	39.37	36.27	33.48	31.27	29.65	28.17	26.86	25.65	24.65
225.0	36.48	33.80	31.64	29.70	27.86	26.28	24.81	23.55	22.18
270.0	39.84	36.69	34.11	31.75	29.75	27.86	26.07	24.44	23.18
315.0	38.06	35.32	32.96	30.91	28.91	27.23	25.65	24.23	22.86
360.0	37.11	34.80	32.75	30.75	28.91	27.23	26.28	24.39	23.13

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	22.29	20.50	19.71	18.50	17.03	15.77	14.61	13.56	12.67
45.0	19.97	18.92	17.87	17.19	15.82	15.19	14.30	13.09	12.56
90.0	17.61	16.66	15.61	14.56	13.67	12.98	12.25	11.51	11.04
135.0	19.08	18.19	17.40	16.61	15.72	14.72	13.67	13.09	12.14
180.0	23.65	22.60	21.45	20.13	18.87	17.61	16.29	14.98	13.88
225.0	20.97	19.76	18.82	17.82	16.77	16.08	14.72	13.77	13.19
270.0	21.97	21.03	19.97	18.98	17.98	17.35	15.98	14.98	14.40
315.0	21.76	20.87	19.55	18.71	17.66	16.56	15.61	14.45	13.51
360.0	22.29	20.50	19.71	18.50	17.03	15.77	14.61	13.56	12.67

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	11.83	11.14	10.41	9.67	8.88	8.20	7.57	6.83	6.04
45.0	11.77	11.09	10.30	9.62	8.88	8.20	7.52	6.89	6.15
90.0	10.14	9.78	8.99	8.36	7.73	7.10	6.41	5.68	5.10
135.0	11.41	10.83	10.09	9.51	8.78	8.20	7.52	6.78	6.10
180.0	12.88	12.35	11.30	10.83	10.14	9.36	8.62	7.88	7.10
225.0	11.98	11.46	10.78	10.14	9.36	8.62	7.94	7.31	6.52
270.0	13.30	12.83	12.04	11.30	10.57	9.88	9.20	8.46	7.73
315.0	12.56	11.77	11.14	10.41	9.72	8.99	8.30	7.67	6.99
360.0	11.83	11.14	10.41	9.67	8.88	8.20	7.57	6.83	6.04

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	5.47	4.94	4.21	3.63	3.21	2.84	2.52	2.26	1.89
45.0	5.47	4.84	4.05	3.57	3.05	2.63	2.21	1.89	1.52
90.0	4.57	3.84	3.36	2.89	2.52	2.21	1.84	1.37	1.31
135.0	5.47	4.73	4.26	3.63	3.05	2.68	2.26	2.00	1.47
180.0	6.41	5.73	4.94	4.15	3.73	3.05	2.63	2.26	1.89
225.0	5.78	4.99	4.52	3.94	3.36	2.89	2.47	2.10	1.79
270.0	7.10	6.10	5.57	4.94	4.26	3.68	3.15	2.79	2.42
315.0	6.36	5.73	5.10	4.36	3.84	3.42	2.94	2.63	2.31
360.0	5.47	4.94	4.21	3.63	3.21	2.84	2.52	2.26	1.89

Intensity data(cd)

C/γ(°)	90.0
0.0	1.68
45.0	1.47
90.0	1.37
135.0	1.42
180.0	1.52
225.0	1.58
270.0	2.10
315.0	2.10
360.0	1.68