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Nata

Client: NT
LumCAT: 2-3133-LM
Luminaire: 92.70.412.00 LED HOLDER
Report No: 20251106-B003
Ballast type: DC

Test No: 20251106-C003	Voltage(V): 35.220
LampCAT: CITIZEN CLU038 LES14.5	Current(A): 0.712
Lamp flux(lm): 3788.4	Power (W): 25.070
Number of Lamps: 1	PF: 0.000
Length(mm): 75	Width(mm): 75
Phm Type: C	Height(mm): 43

Photometric Results

Lumens(lm): 3644.47, Efficiency(%): 96.20% , Luminous Efficacy(lm/W): 145.37
Central intensity(cd): 8398.138, Maximum intensity(cd): 8398.138
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=36.8
[C90/270]Total=36.8
Field angle(10%Imax): [C0/180]Total=65.6
[C90/270]Total=65.6
Maximum s/h(1/2): C0_180=0.61 C90_270=0.61
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(%): 96.20%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.287%

Equipment: GMS1980	Date: 2025/11/6	Operator: YZQ
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 9.28

NT Nata 2-3133-LM

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	8398.137	0.000	0	0.00%	0.00%
1.0	8390.925	8.033	8.033	0.21%	0.22%
2.0	8365.520	24.050	32.084	0.63%	0.88%
3.0	8334.410	39.941	72.024	1.05%	1.98%
4.0	8290.597	55.649	127.674	1.47%	3.50%
5.0	8229.237	71.067	198.741	1.88%	5.45%
6.0	8133.108	85.988	284.73	2.27%	7.81%
7.0	8012.542	100.216	384.945	2.65%	10.56%
8.0	7863.342	113.621	498.566	3.00%	13.68%
9.0	7666.238	125.859	624.425	3.32%	17.13%
10.0	7435.441	136.665	761.089	3.61%	20.88%
11.0	7158.355	145.822	906.911	3.85%	24.88%
12.0	6849.728	153.128	1060.04	4.04%	29.09%
13.0	6501.487	158.445	1218.485	4.18%	33.43%
14.0	6113.416	161.470	1379.955	4.26%	37.86%
15.0	5726.206	162.540	1542.494	4.29%	42.32%
16.0	5254.816	160.903	1703.397	4.25%	46.74%
17.0	4831.221	157.067	1860.464	4.15%	51.05%
18.0	4347.020	151.329	2011.793	3.99%	55.20%
19.0	3944.094	144.248	2156.041	3.81%	59.16%
20.0	3510.057	136.432	2292.473	3.60%	62.90%
21.0	3142.116	127.735	2420.208	3.37%	66.41%
22.0	2806.685	119.544	2539.752	3.16%	69.69%
23.0	2461.275	110.536	2650.288	2.92%	72.72%
24.0	2189.194	101.676	2751.964	2.68%	75.51%
25.0	1938.568	93.856	2845.82	2.48%	78.09%
26.0	1747.052	86.999	2932.82	2.30%	80.47%
27.0	1614.795	82.248	3015.068	2.17%	82.73%
28.0	1470.999	78.126	3093.194	2.06%	84.87%
29.0	1338.915	73.515	3166.709	1.94%	86.89%
30.0	1211.245	68.854	3235.563	1.82%	88.78%
31.0	1079.720	63.754	3299.317	1.68%	90.53%
32.0	948.713	58.112	3357.429	1.53%	92.12%
33.0	815.315	51.969	3409.398	1.37%	93.55%
34.0	689.044	45.526	3454.924	1.20%	94.80%
35.0	550.695	38.502	3493.426	1.02%	95.86%
36.0	462.101	32.248	3525.674	0.85%	96.74%
37.0	303.083	24.956	3550.63	0.66%	97.43%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	223.940	17.591	3568.221	0.46%	97.91%
39.0	176.640	13.673	3581.894	0.36%	98.28%
40.0	78.475	8.898	3590.791	0.23%	98.53%
41.0	44.082	4.364	3595.156	0.12%	98.65%
42.0	27.999	2.619	3597.774	0.07%	98.72%
43.0	22.768	1.881	3599.655	0.05%	98.77%
44.0	19.398	1.591	3601.246	0.04%	98.81%
45.0	17.288	1.410	3602.656	0.04%	98.85%
46.0	15.953	1.300	3603.956	0.03%	98.89%
47.0	14.812	1.224	3605.18	0.03%	98.92%
48.0	14.027	1.166	3606.346	0.03%	98.95%
49.0	13.391	1.126	3607.472	0.03%	98.98%
50.0	12.907	1.096	3608.568	0.03%	99.01%
51.0	12.390	1.070	3609.639	0.03%	99.04%
52.0	11.960	1.045	3610.683	0.03%	99.07%
53.0	11.551	1.023	3611.706	0.03%	99.10%
54.0	11.228	1.004	3612.71	0.03%	99.13%
55.0	10.926	0.989	3613.699	0.03%	99.16%
56.0	10.668	0.976	3614.675	0.03%	99.18%
57.0	10.431	0.965	3615.639	0.03%	99.21%
58.0	10.216	0.955	3616.594	0.03%	99.24%
59.0	10.022	0.946	3617.54	0.02%	99.26%
60.0	9.861	0.939	3618.48	0.02%	99.29%
61.0	9.688	0.933	3619.413	0.02%	99.31%
62.0	9.516	0.925	3620.338	0.02%	99.34%
63.0	9.387	0.919	3621.257	0.02%	99.36%
64.0	9.247	0.914	3622.172	0.02%	99.39%
65.0	9.129	0.909	3623.081	0.02%	99.41%
66.0	8.999	0.904	3623.986	0.02%	99.44%
67.0	8.902	0.900	3624.886	0.02%	99.46%
68.0	8.806	0.897	3625.783	0.02%	99.49%
69.0	8.719	0.894	3626.677	0.02%	99.51%
70.0	8.569	0.888	3627.565	0.02%	99.54%
71.0	8.515	0.883	3628.448	0.02%	99.56%
72.0	8.397	0.879	3629.327	0.02%	99.58%
73.0	8.310	0.874	3630.201	0.02%	99.61%
74.0	8.214	0.869	3631.069	0.02%	99.63%
75.0	8.138	0.864	3631.933	0.02%	99.66%

Zonal flux distribution table

γ(°)	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	8.063	0.860	3632.793	0.02%	99.68%
77.0	7.998	0.856	3633.65	0.02%	99.70%
78.0	7.934	0.853	3634.503	0.02%	99.73%
79.0	7.858	0.848	3635.351	0.02%	99.75%
80.0	7.815	0.845	3636.196	0.02%	99.77%
81.0	7.751	0.842	3637.038	0.02%	99.80%
82.0	7.708	0.838	3637.876	0.02%	99.82%
83.0	7.665	0.836	3638.712	0.02%	99.84%
84.0	7.611	0.832	3639.544	0.02%	99.86%
85.0	7.578	0.829	3640.373	0.02%	99.89%
86.0	7.546	0.827	3641.2	0.02%	99.91%
87.0	7.471	0.822	3642.021	0.02%	99.93%
88.0	7.460	0.818	3642.839	0.02%	99.96%
89.0	7.438	0.817	3643.656	0.02%	99.98%
90.0	7.438	0.816	3644.472	0.02%	100.00%

Zonal flux distribution table

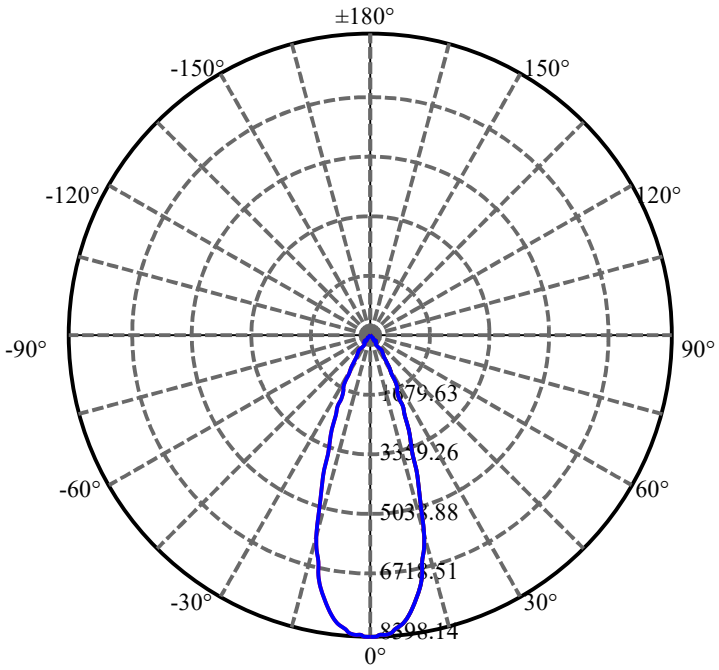
ZONAL LUMEN SUMMARY

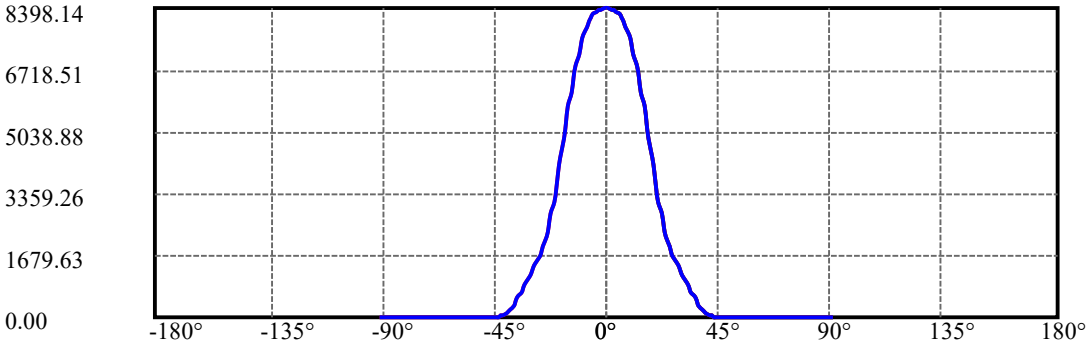
Zone	Lumens	%Lamp	%Fixt
0-30	3235.56	85.41%	88.78%
0-40	3590.79	94.78%	98.53%
0-60	3618.48	95.51%	99.29%
0-90	3643.66	96.18%	99.98%
0-120	3643.66	96.18%	99.98%
0-180	3644.47	96.20%	100.00%
60-90	25.18	0.66%	0.69%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-25.80	2915.58	76.96%	80.00%

ZONAL LUMEN SUMMARY

0-10	761.09
10-20	1531.38
20-30	943.09
30-40	355.23
40-50	17.78
50-60	9.91
60-70	9.08
70-80	8.63
80-90	7.46
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):

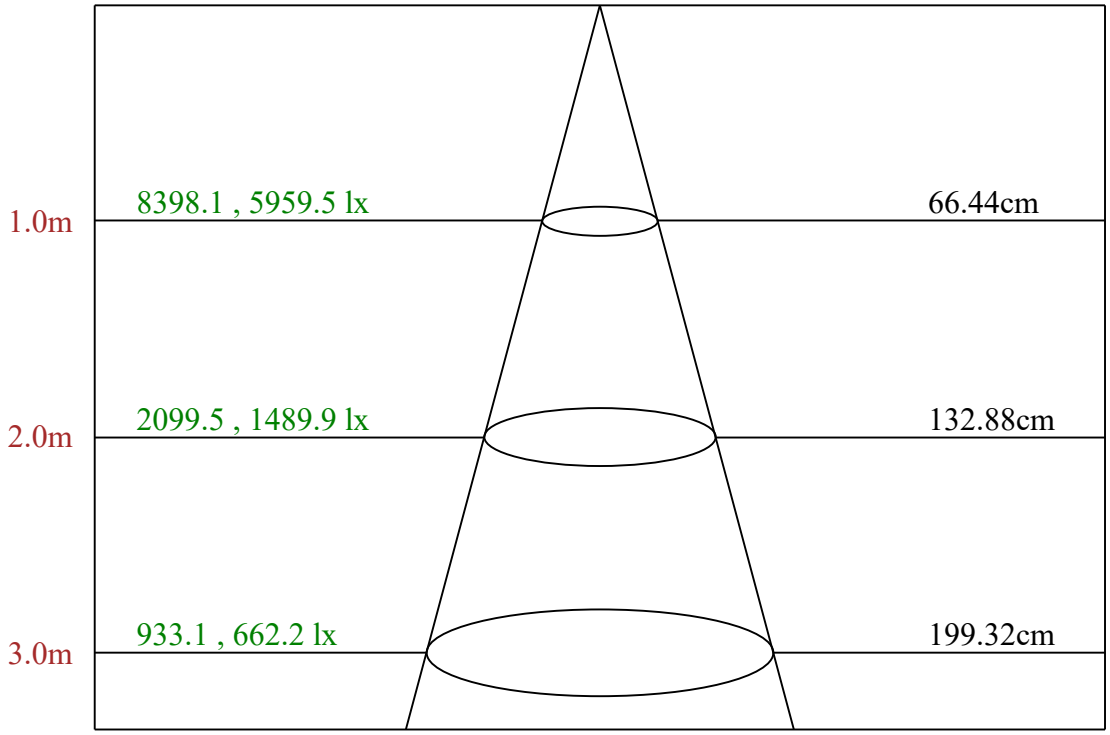
C0/C180:

C90/C270:

Field angle(10%Imax):C0/180Left:32.8 Right:32.8
:C90/270Left:32.8 Right:32.8

Beam Angle(50%Imax):C0/180Left:18.4 Right:18.4
:C90/270Left:18.4 Right:18.4

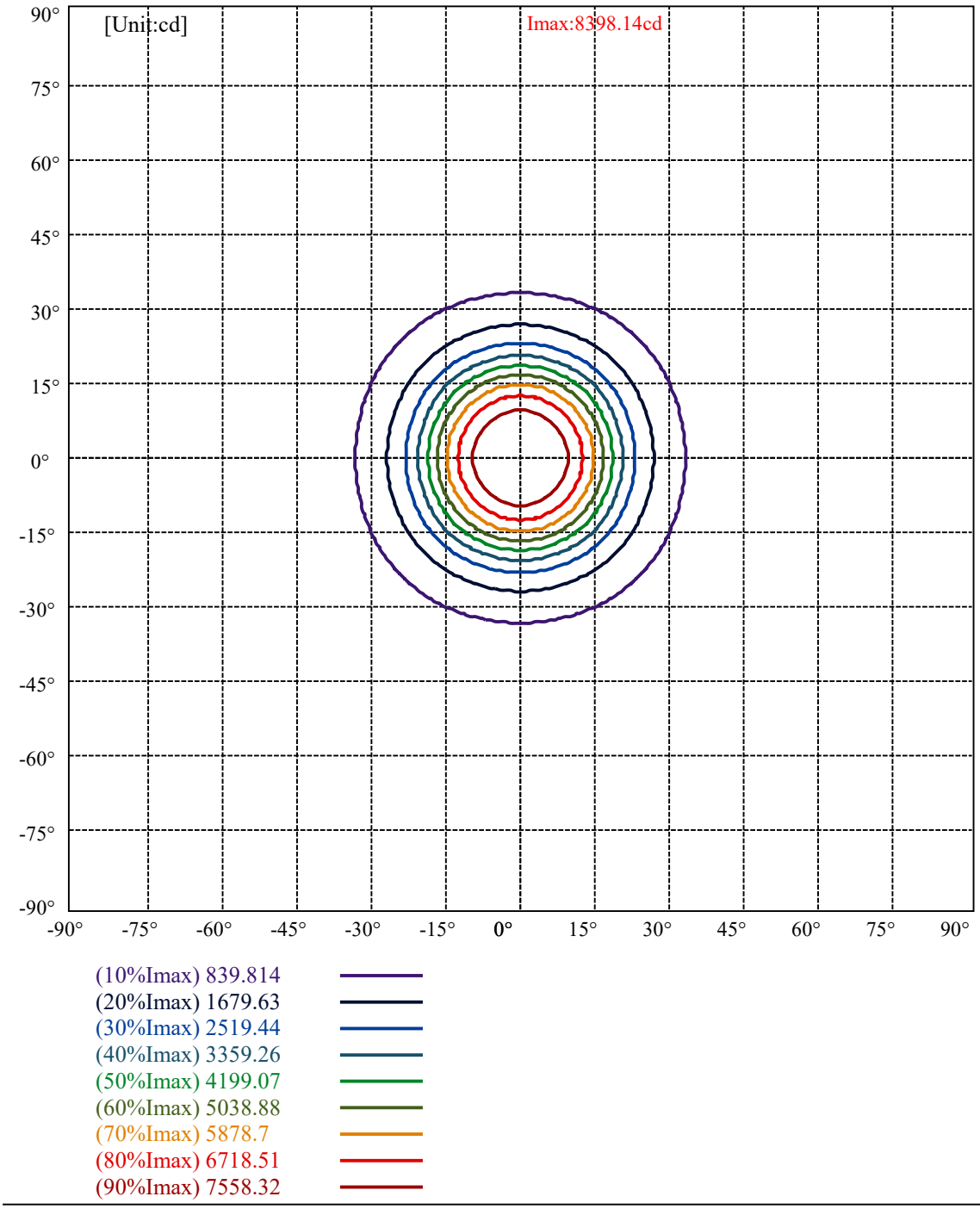
Lux distance Curve



Max , Ave

Beam angle of C0 plane 36.75

ISO-Intensity(V-H)



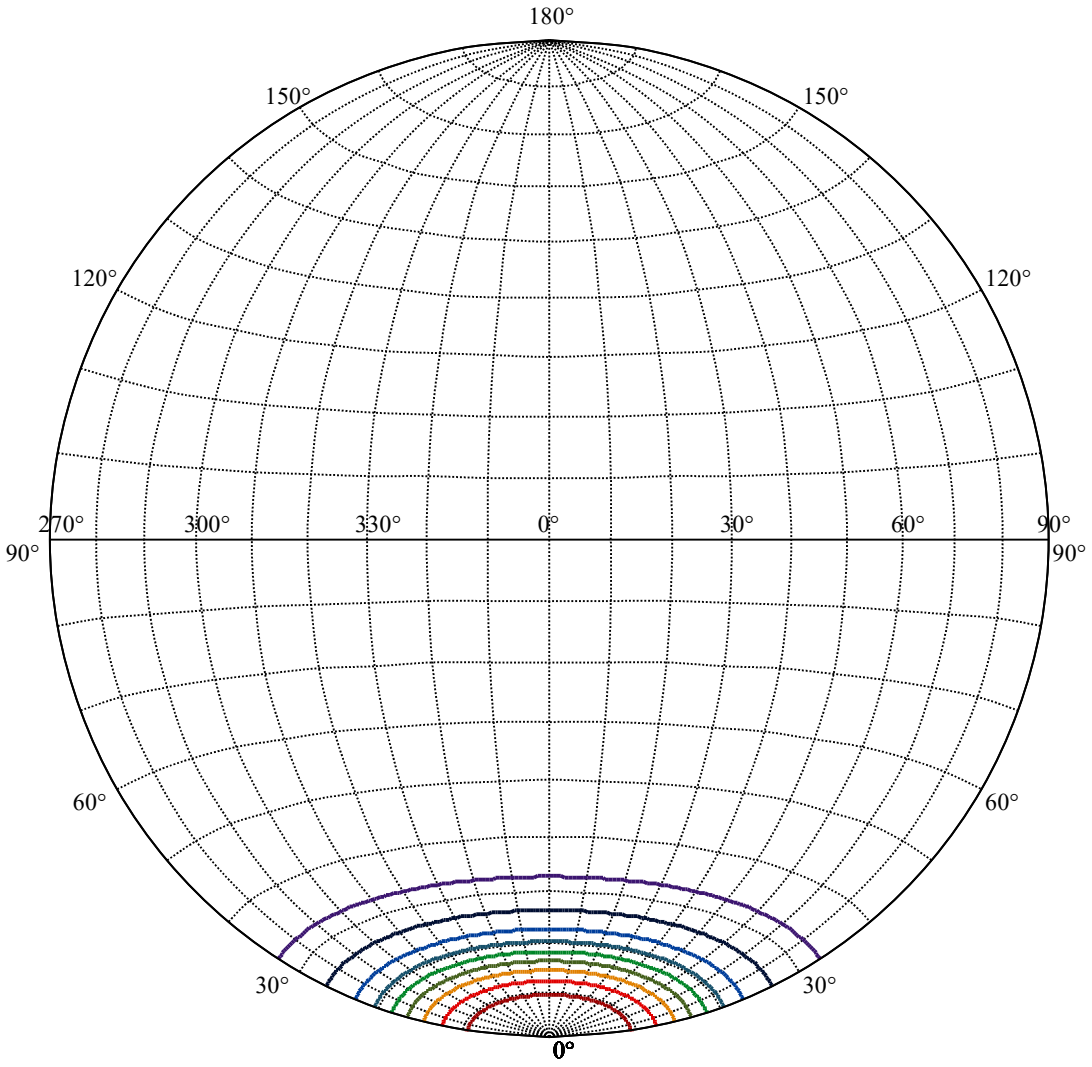
(10%Imax) 839.814
(20%Imax) 1679.63
(30%Imax) 2519.44
(40%Imax) 3359.26
(50%Imax) 4199.07
(60%Imax) 5038.88
(70%Imax) 5878.7
(80%Imax) 6718.51
(90%Imax) 7558.32

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

ISO candela diagram on circular web



House [Unit:cd] Road

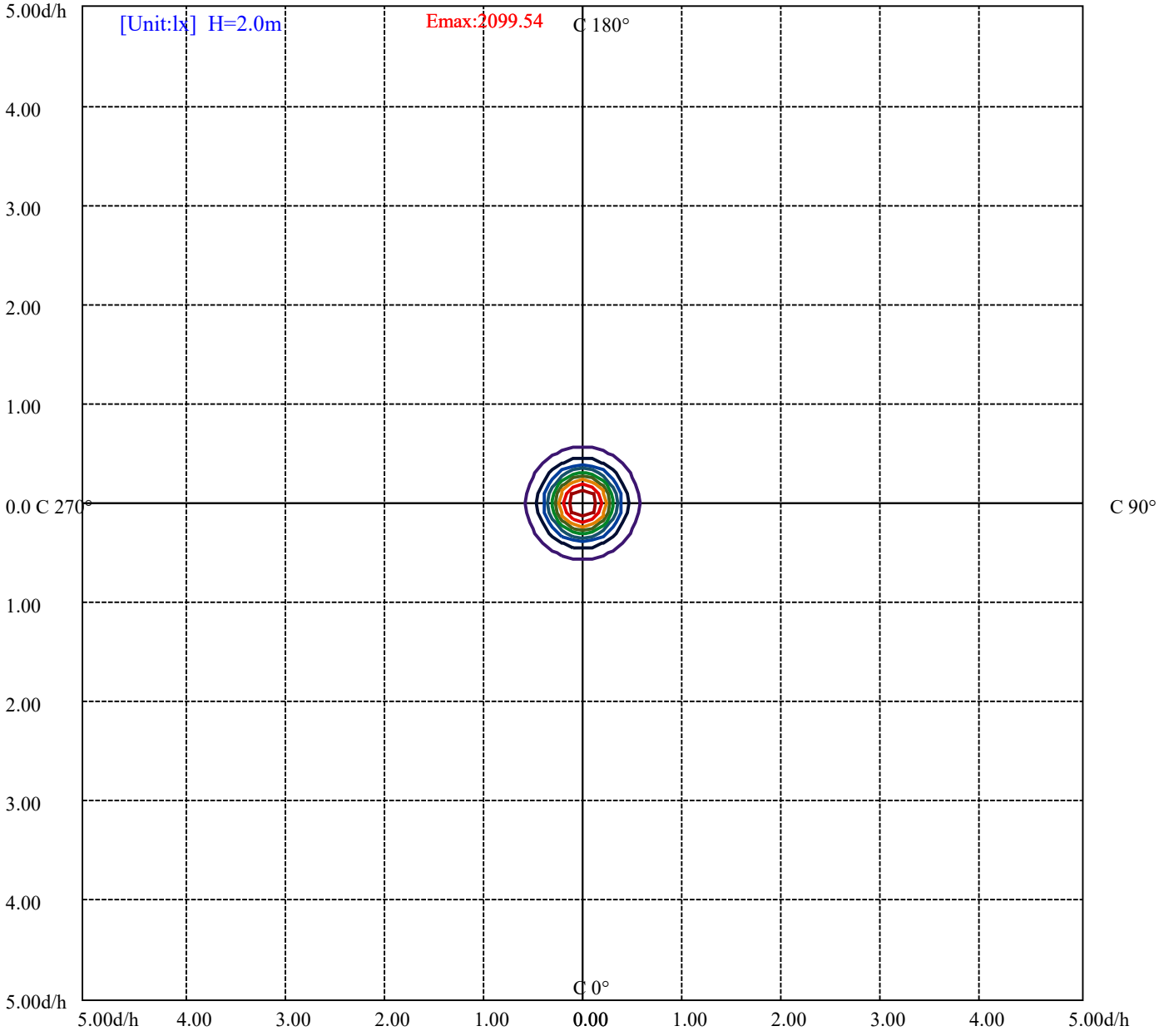
Imax:8398.14

(10%Imax) 839.814
(20%Imax) 1679.63
(30%Imax) 2519.44
(40%Imax) 3359.26
(50%Imax) 4199.07
(60%Imax) 5038.88
(70%Imax) 5878.7
(80%Imax) 6718.51
(90%Imax) 7558.32

Equipment: GMS1980 Date: 2025/11/6 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

NT Nata 2-3133-LM

ISO illuminance diagram



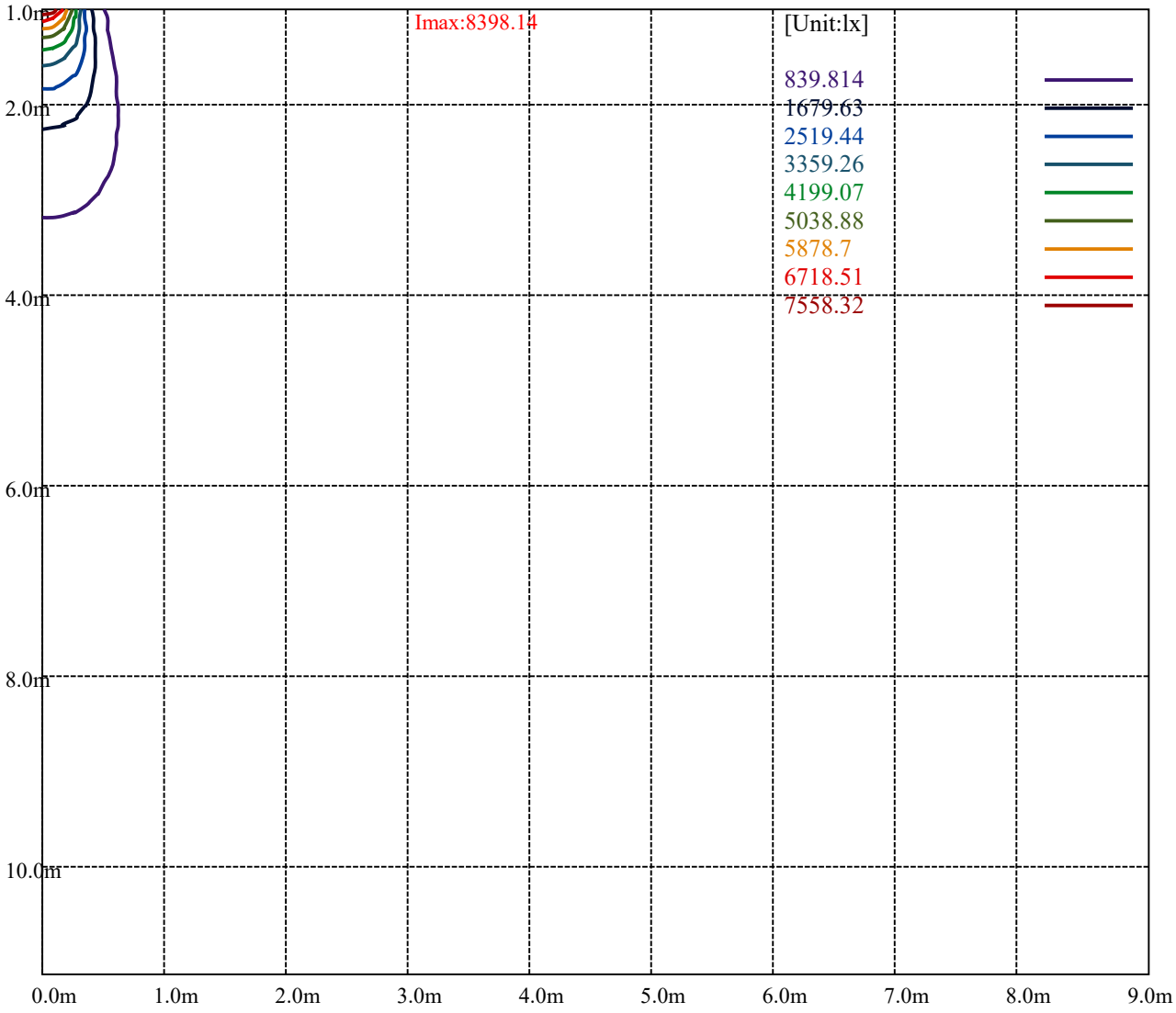
(10%Emax) 209.9535
(20%Emax) 419.9075
(30%Emax) 629.86
(40%Emax) 839.8125
(50%Emax) 1049.767
(60%Emax) 1259.72
(70%Emax) 1469.675
(80%Emax) 1679.627
(90%Emax) 1889.58

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

Space ISO Lux diagram



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/6
Humidity(%): 60.0%

Operator: YZQ
Distance(m): 9.28

NT Nata 2-3133-LM

Luminance Limitting Curve(no luminous side)

Luminance Table

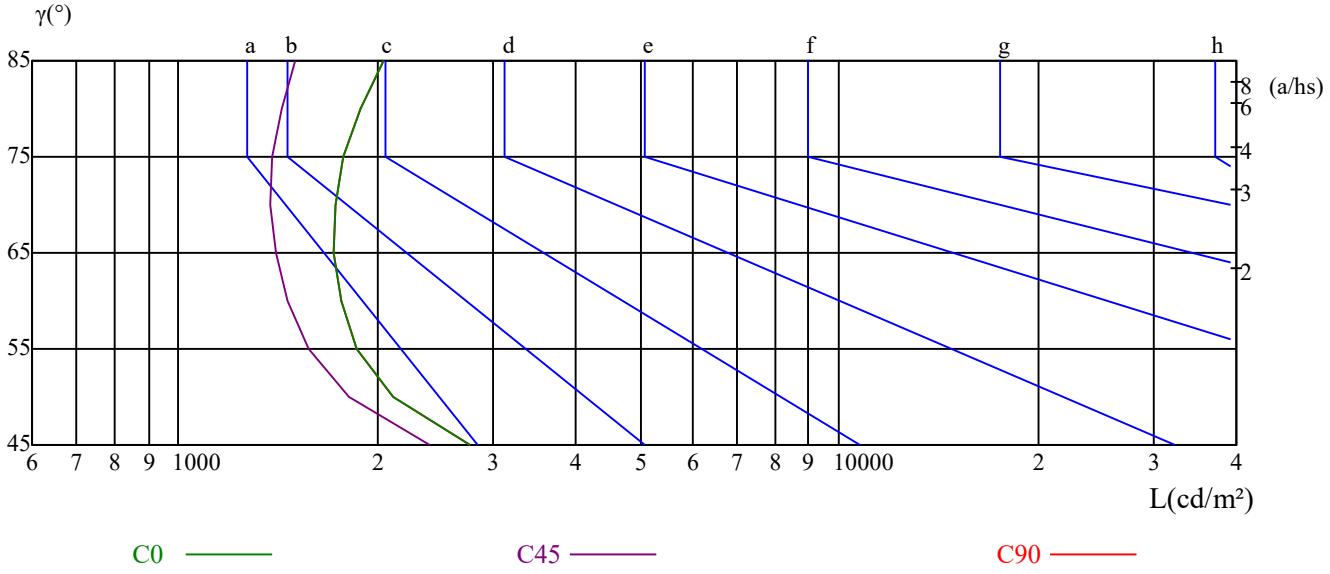
γ	45	50	55	60	65	70	75	80	85
C0	2763	2121	1862	1759	1722	1730	1780	1882	2047
C45	2400	1815	1569	1458	1402	1380	1388	1429	1506
C90	2763	2121	1862	1759	1722	1730	1780	1882	2047

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3840	3840	3840	5590	5590	5590	15458	15458	15458

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



Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/6
Humidity(%): 60.0%

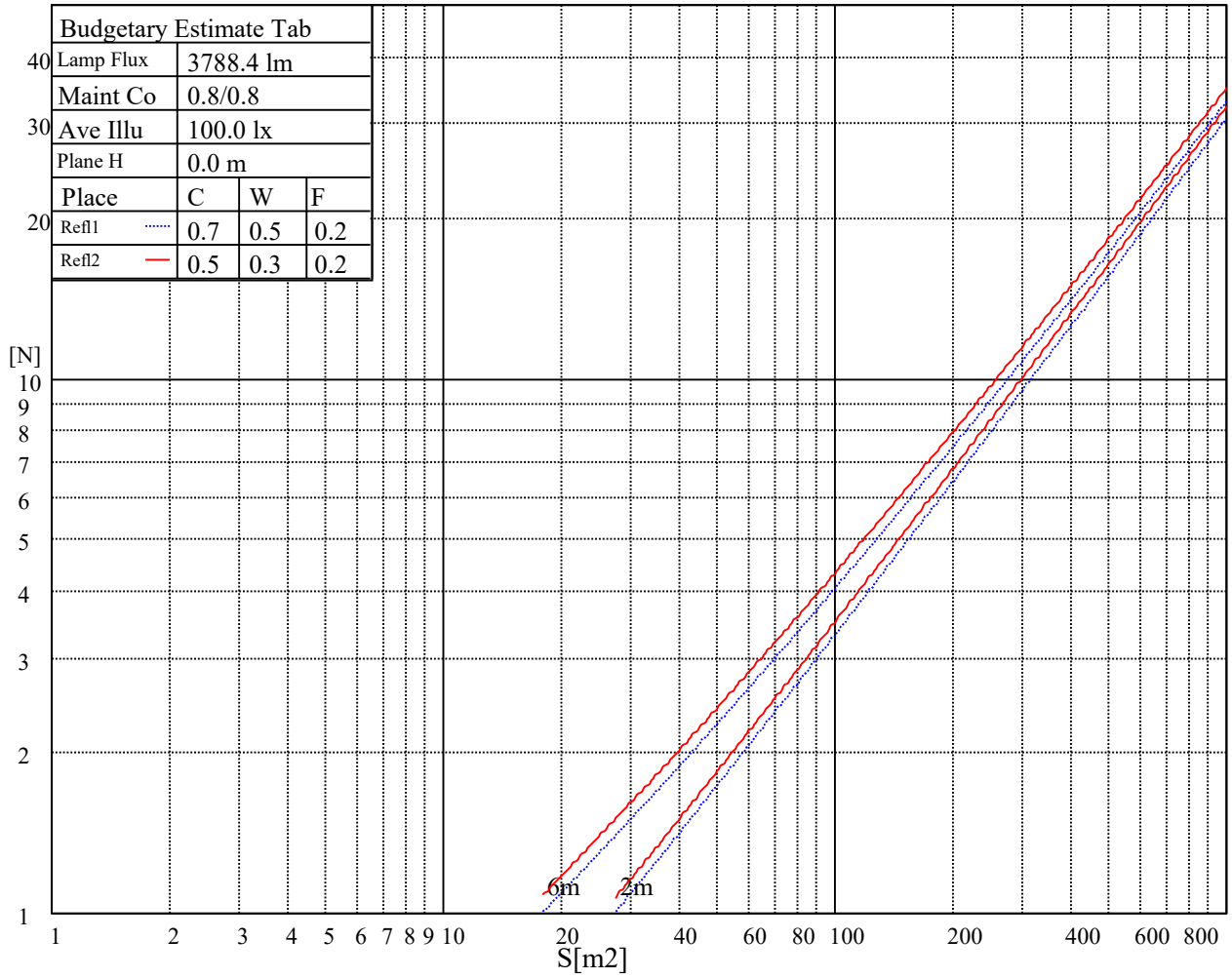
Operator: YZQ
Distance(m): 9.28

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	17.04	17.94	17.40	18.25	18.57	16.78	17.68	17.15	17.99	18.31
	3H	16.85	17.65	17.24	17.99	18.33	16.60	17.39	16.98	17.73	18.08
	4H	16.77	17.51	17.17	17.86	18.23	16.51	17.25	16.92	17.61	17.98
	6H	16.72	17.39	17.14	17.77	18.17	16.47	17.14	16.89	17.52	17.92
	8H	16.67	17.31	17.10	17.70	18.11	16.42	17.06	16.84	17.45	17.86
	12H	16.64	17.24	17.07	17.64	18.06	16.39	16.99	16.82	17.39	17.81
4H	2H	16.72	17.45	17.12	17.81	18.18	16.46	17.20	16.86	17.55	17.92
	3H	16.50	17.12	16.93	17.52	17.94	16.25	16.87	16.68	17.26	17.68
	4H	16.46	17.00	16.90	17.42	17.87	16.21	16.75	16.65	17.17	17.62
	6H	16.39	16.86	16.87	17.32	17.77	16.14	16.62	16.62	17.07	17.52
	8H	16.39	16.82	16.88	17.28	17.76	16.14	16.58	16.63	17.04	17.51
	12H	16.41	16.81	16.90	17.26	17.78	16.16	16.56	16.65	17.02	17.54
8H	4H	16.28	16.71	16.77	17.17	17.65	16.03	16.46	16.52	16.92	17.40
	6H	16.23	16.58	16.74	17.06	17.58	15.98	16.34	16.49	16.82	17.33
	8H	16.30	16.59	16.83	17.12	17.61	16.06	16.35	16.59	16.87	17.37
	12H	16.36	16.58	16.91	17.10	17.62	16.12	16.34	16.67	16.86	17.39
12H	4H	16.23	16.63	16.72	17.08	17.61	15.98	16.38	16.47	16.84	17.36
	6H	16.23	16.52	16.76	17.05	17.54	15.98	16.28	16.52	16.80	17.30
	8H	16.27	16.49	16.82	17.01	17.54	16.03	16.26	16.58	16.77	17.30
Variation with the observer position at spacings:											
S = 1.0H		6.2/-10.2					6.2/-10.2				
S = 1.5H		8.8/-8.4					8.8/-8.4				
S = 2.0H		10.6/-7.2					10.6/-7.2				
Standard tables:		BK1					BK1				
Uncorrected UGR		-3.2					-3.2				

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

Budgetary Estimate Table



Equipment: GMS1980 Date: 2025/11/6 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

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	1.15	1.15	1.15	1.12	1.12	1.12	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.08	1.06	1.04	1.06	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92
2	1.02	0.98	0.96	1.00	0.97	0.94	0.97	0.95	0.92	0.94	0.92	0.90	0.92	0.90	0.89	0.87
3	0.96	0.92	0.89	0.95	0.91	0.88	0.93	0.90	0.87	0.90	0.88	0.86	0.88	0.86	0.84	0.83
4	0.92	0.87	0.84	0.91	0.86	0.83	0.89	0.85	0.82	0.87	0.84	0.81	0.85	0.83	0.80	0.79
5	0.87	0.83	0.79	0.86	0.82	0.79	0.85	0.81	0.78	0.83	0.80	0.78	0.82	0.79	0.77	0.76
6	0.83	0.79	0.75	0.83	0.78	0.75	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.72
7	0.80	0.75	0.72	0.79	0.75	0.71	0.78	0.74	0.71	0.77	0.73	0.71	0.76	0.73	0.70	0.69
8	0.76	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.66
9	0.73	0.69	0.66	0.73	0.69	0.65	0.72	0.68	0.65	0.71	0.68	0.65	0.71	0.67	0.65	0.64
10	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61

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	8444.86	8435.38	8412.13	8359.60	8284.68	8194.25	8118.47	8019.43	7851.50
45.0	8385.43	8414.71	8433.66	8436.24	8405.24	8375.96	8348.40	8295.87	8230.42
90.0	8405.24	8436.24	8443.13	8454.33	8478.44	8474.14	8439.69	8371.66	8265.73
135.0	8357.02	8398.35	8417.30	8437.11	8448.30	8461.22	8459.50	8428.49	8367.35
180.0	8444.86	8436.24	8424.19	8414.71	8366.49	8296.73	8164.11	8013.40	7836.00
225.0	8385.43	8352.71	8303.62	8244.20	8161.53	8044.41	7852.36	7669.79	7440.72
270.0	8405.24	8368.21	8307.07	8226.98	8175.31	8096.08	7981.54	7791.22	7612.95
315.0	8357.02	8285.54	8183.06	8102.11	8004.79	7891.12	7700.79	7510.47	7302.07
360.0	8444.86	8435.38	8412.13	8359.60	8284.68	8194.25	8118.47	8019.43	7851.50

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7680.99	7486.36	7206.47	6954.15	6671.68	6285.87	5939.67	5567.64	5171.50
45.0	8120.19	7970.34	7792.94	7533.72	7277.09	6985.15	6659.62	6193.72	5779.49
90.0	8128.80	7908.34	7673.24	7403.68	7080.74	6622.59	6202.33	5764.85	5311.01
135.0	8235.59	8084.02	7905.76	7605.20	7321.87	7006.68	6639.81	6131.72	5691.65
180.0	7563.00	7294.31	6991.18	6574.36	6192.86	5793.27	5367.85	4818.41	4365.43
225.0	7186.67	6820.66	6488.25	6136.02	5642.56	5226.61	4798.60	4261.22	3834.94
270.0	7409.71	7173.75	6833.58	6531.31	6117.08	5750.21	5358.37	4852.00	4444.66
315.0	7004.96	6745.74	6375.43	6059.38	5708.01	5236.95	4843.38	4448.96	4051.10
360.0	7680.99	7486.36	7206.47	6954.15	6671.68	6285.87	5939.67	5567.64	5171.50

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	4672.87	4277.59	3884.89	3516.30	3081.40	2781.71	2516.47	2228.83	1706.61
45.0	5246.42	4814.97	4391.26	3865.08	3468.94	3103.79	2715.40	2441.54	2193.52
90.0	4741.77	4287.06	3740.21	3328.56	2971.17	2580.19	2306.34	1717.72	1717.72
135.0	5237.81	4777.07	4210.41	3772.07	3369.90	2928.97	2622.39	2286.53	2041.95
180.0	3927.09	3522.33	3062.46	2736.07	2452.74	2137.54	1922.25	1701.79	1563.14
225.0	3342.34	2991.84	2681.81	2412.26	2177.16	1689.99	1689.99	1582.60	1462.29
270.0	4029.57	3649.78	3194.22	2867.83	2587.08	2342.51	2056.59	1865.41	1706.95
315.0	3578.31	3232.11	2915.19	2638.75	2345.09	2125.49	1684.13	1684.13	1584.23
360.0	4672.87	4277.59	3884.89	3516.30	3081.40	2781.71	2516.47	2228.83	1706.61

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1706.61	1636.42	1508.88	1393.14	1239.50	1111.79	980.46	846.37	675.51
45.0	1964.45	1731.07	1582.08	1459.79	1355.59	1219.52	1098.96	974.09	817.35
90.0	1640.73	1506.04	1396.15	1297.89	1157.00	1038.59	919.57	797.37	641.41
135.0	1836.99	1630.31	1495.96	1389.18	1287.56	1148.91	1030.92	907.77	782.90
180.0	1442.57	1334.06	1192.83	1078.29	956.86	835.43	667.50	532.30	436.71
225.0	1328.20	1211.08	1085.87	926.55	799.87	647.18	529.54	414.49	276.78
270.0	1540.74	1419.32	1290.14	1125.65	992.17	869.88	702.81	571.05	451.35
315.0	1458.07	1299.70	1159.41	1019.47	849.21	718.40	592.75	468.91	323.55
360.0	1706.61	1636.42	1508.88	1393.14	1239.50	1111.79	980.46	846.37	675.51

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	536.52	407.86	293.49	171.12	99.29	53.91	30.66	26.18	21.53
45.0	695.06	539.19	446.18	446.18	190.06	89.99	47.28	30.31	25.84
90.0	518.86	372.98	268.60	173.61	82.07	43.32	28.59	24.03	19.98
135.0	659.75	503.88	444.46	444.46	142.61	72.08	36.26	27.21	22.48
180.0	436.71	169.14	98.86	52.62	29.28	24.63	20.67	18.95	16.97
225.0	178.61	98.69	50.55	28.42	24.37	20.75	19.12	17.40	14.81
270.0	451.35	201.86	121.60	63.56	33.50	25.66	21.62	19.89	17.74
315.0	219.95	131.07	67.78	33.16	26.61	22.30	19.81	18.17	15.85
360.0	536.52	407.86	293.49	171.12	99.29	53.91	30.66	26.18	21.53

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	19.81	17.91	15.85	15.07	14.38	13.87	13.18	12.75	12.31
45.0	20.84	19.03	17.22	15.42	14.47	13.87	13.26	12.75	12.23
90.0	18.17	16.10	14.98	14.21	13.69	13.18	12.57	12.14	11.63
135.0	19.55	17.91	16.02	15.07	14.21	13.69	13.18	12.66	12.06
180.0	15.42	14.55	14.04	13.52	13.09	12.57	12.06	11.71	11.45
225.0	14.12	13.43	13.00	12.57	12.06	11.71	11.28	10.94	10.68
270.0	15.50	14.47	13.69	13.26	12.66	12.23	11.88	11.45	11.02
315.0	14.90	14.21	13.69	13.09	12.57	12.14	11.71	11.28	11.02
360.0	19.81	17.91	15.85	15.07	14.38	13.87	13.18	12.75	12.31

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	11.88	11.45	11.20	10.94	10.59	10.42	10.25	9.99	9.82
45.0	11.80	11.28	11.11	10.76	10.51	10.25	10.08	9.90	9.73
90.0	11.28	11.02	10.68	10.42	10.25	10.08	9.82	9.65	9.56
135.0	11.63	11.37	11.02	10.76	10.42	10.25	10.08	9.90	9.65
180.0	11.11	10.85	10.59	10.33	10.25	9.99	9.82	9.65	9.47
225.0	10.51	10.25	10.08	9.90	9.73	9.65	9.47	9.39	9.21
270.0	10.85	10.59	10.33	10.16	9.99	9.82	9.73	9.56	9.39
315.0	10.76	10.59	10.33	10.16	9.99	9.73	9.65	9.47	9.30
360.0	11.88	11.45	11.20	10.94	10.59	10.42	10.25	9.99	9.82

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	9.65	9.47	9.39	9.21	9.13	9.04	8.96	8.78	8.70
45.0	9.65	9.47	9.21	9.13	9.04	8.96	8.87	8.70	8.61
90.0	9.39	9.21	9.13	9.04	8.87	8.78	8.70	8.53	8.44
135.0	9.56	9.39	9.30	9.13	9.04	8.96	8.87	8.70	8.61
180.0	9.30	9.21	9.13	8.96	8.87	8.78	8.70	8.61	8.53
225.0	9.13	8.96	8.87	8.78	8.70	8.53	8.44	8.35	8.35
270.0	9.21	9.13	9.04	8.87	8.78	8.70	8.61	8.44	8.44
315.0	9.21	9.13	8.96	8.87	8.78	8.70	8.61	8.44	8.44
360.0	9.65	9.47	9.39	9.21	9.13	9.04	8.96	8.78	8.70

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	8.61	8.53	8.35	8.35	8.27	8.10	8.10	8.01	8.01
45.0	8.53	8.44	8.27	8.27	8.18	8.10	8.01	7.92	7.92
90.0	8.35	8.27	8.18	8.10	8.01	7.92	7.92	7.84	7.75
135.0	8.44	8.35	8.27	8.18	8.10	8.10	7.92	7.92	7.84
180.0	8.35	8.35	8.18	8.10	8.01	8.01	7.92	7.84	7.84
225.0	8.27	8.10	8.10	8.01	7.92	7.92	7.84	7.75	7.66
270.0	8.35	8.27	8.18	8.10	8.01	7.92	7.92	7.84	7.75
315.0	8.27	8.18	8.18	8.01	8.01	7.92	7.84	7.75	7.75
360.0	8.61	8.53	8.35	8.35	8.27	8.10	8.10	8.01	8.01

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.92	7.84	7.75	7.75	7.75	7.66	7.58	7.58	7.58
45.0	7.84	7.75	7.75	7.66	7.58	7.58	7.58	7.49	7.49
90.0	7.66	7.66	7.66	7.58	7.58	7.49	7.41	7.41	7.41
135.0	7.75	7.66	7.66	7.66	7.66	7.58	7.49	7.49	7.41
180.0	7.75	7.75	7.66	7.58	7.58	7.58	7.49	7.49	7.41
225.0	7.66	7.66	7.58	7.58	7.49	7.49	7.41	7.41	7.41
270.0	7.75	7.66	7.66	7.58	7.49	7.49	7.41	7.41	7.41
315.0	7.66	7.66	7.58	7.49	7.49	7.49	7.41	7.41	7.41
360.0	7.92	7.84	7.75	7.75	7.75	7.66	7.58	7.58	7.58

Intensity data(cd)

C/γ(°)	90.0
0.0	7.58
45.0	7.41
90.0	7.41
135.0	7.41
180.0	7.49
225.0	7.41
270.0	7.41
315.0	7.41
360.0	7.58