NATA LIGHTING CO.,LTD
www.nata.cn
Email:+86 0750-377 1111
Tel:www.nata.cn Fax:+86 0750-377 0000(10 lines)
Address:info@nata.cn

NT

Client: NT
LumCAT: 2-2735-L2-K0
Luminaire: 92.70.412.00
Report No: 20241226-B002
Ballast type: AC

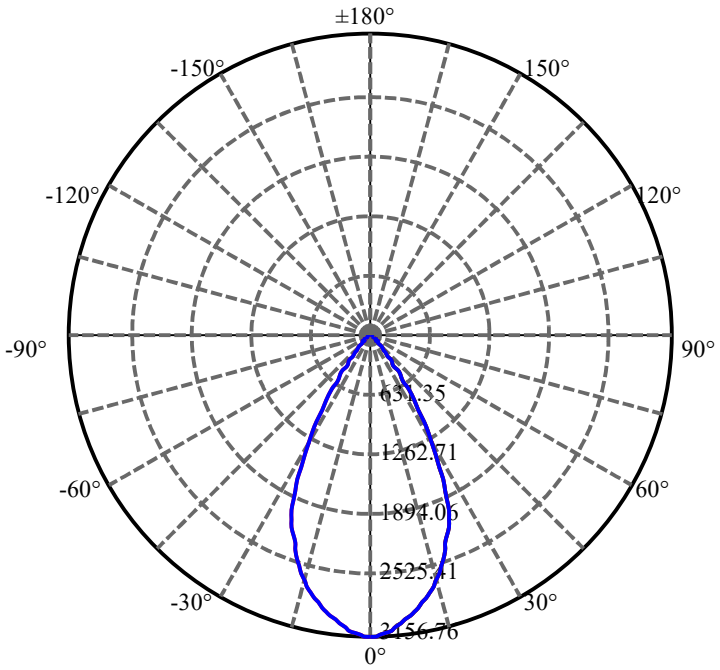
Test No: 20241226-C002	Voltage(V): 34.500
LampCAT: CITIZEN CLU038	Current(A): 0.451
Lamp flux(lm): 2649.0	Power (W): 15.559
Number of Lamps: 1	PF: 0.000
Length(mm): 75	Width(mm): 75
Phm Type: C	Height(mm): 44

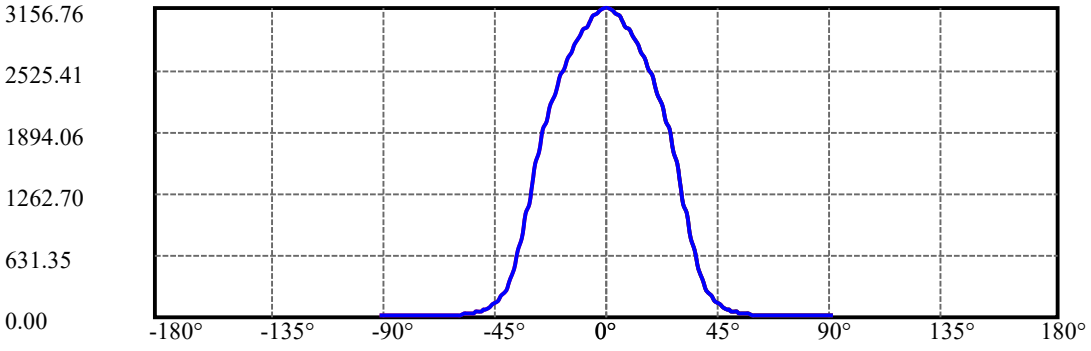
Photometric Results

Lumens(lm): 2510.89, Efficiency(%): 94.79% , Luminous Efficacy(lm/W): 161.38
Central intensity(cd): 3156.762, Maximum intensity(cd): 3156.762
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=55.8
[C90/270]Total=55.8
Field angle(10%Imax): [C0/180]Total=78.8
[C90/270]Total=78.8

Equipment: GMS1980	Date: 2024/12/26	Operator: NT07
Temperature(°C): 25.0	Humidity(%): 60.0%	Distance(m): 7.65

Light Distribution Curve [Unit:cd]





C0(Max):

C0/C180:

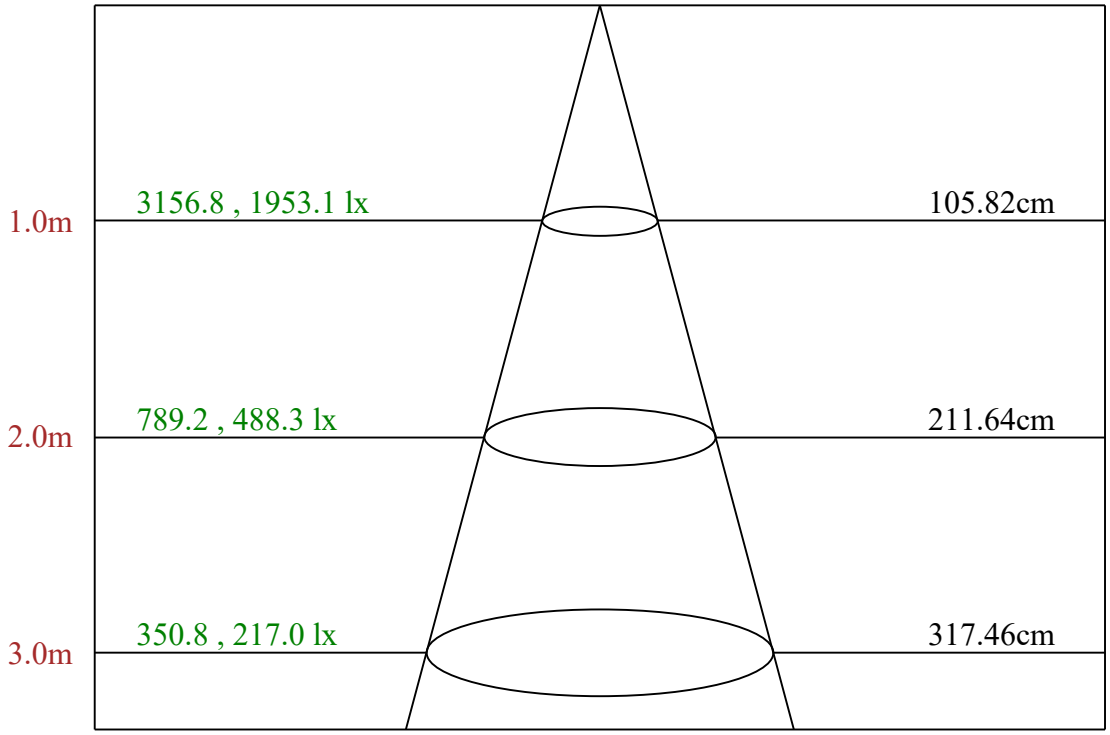
C90/C270:

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/12/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

Lux distance Curve

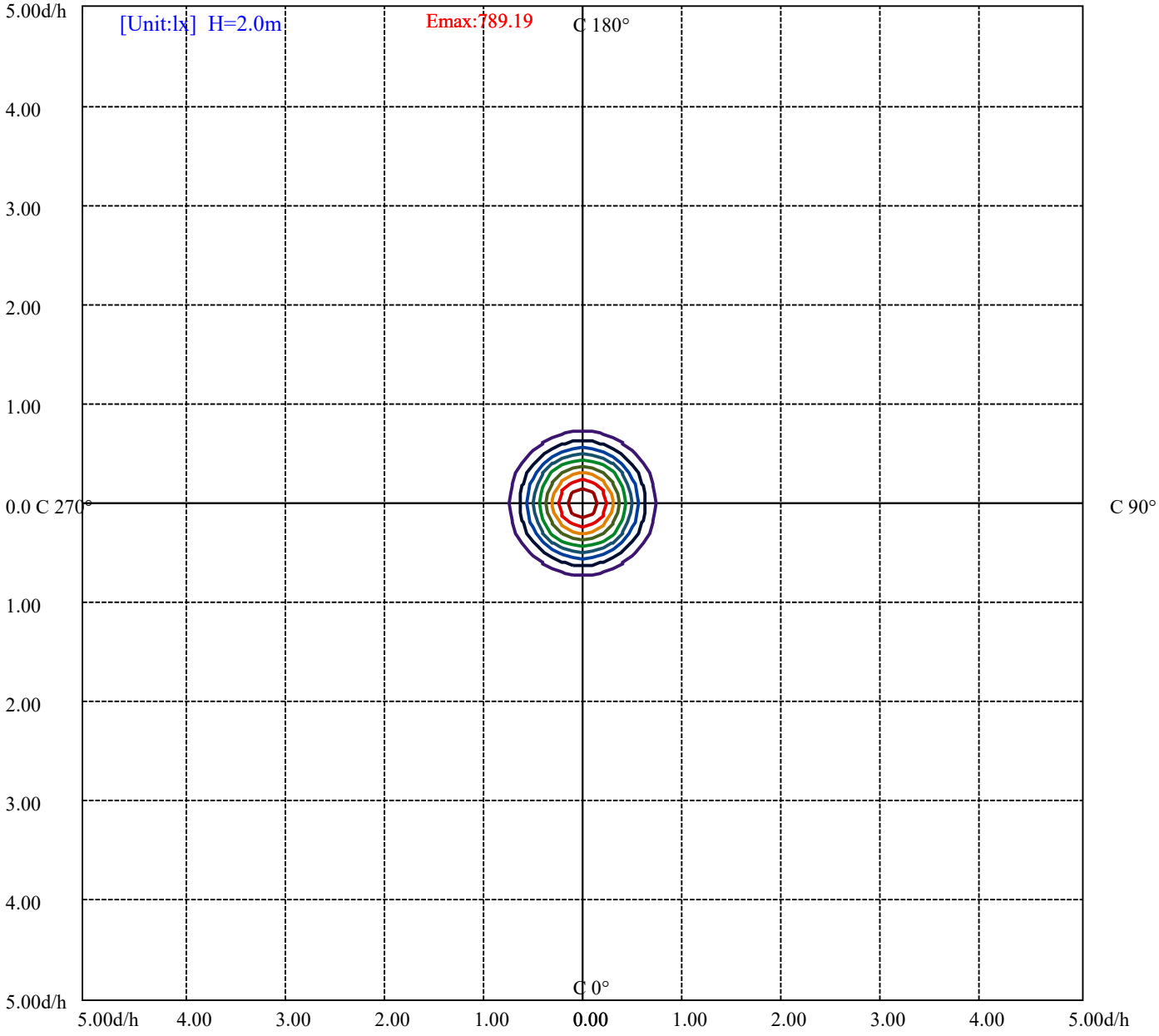


Max , Ave

Beam angle of C0 plane 55.77

NT NT 2-2735-L2-K0

ISO illuminance diagram



(10%Emax) 78.919
(20%Emax) 157.838
(30%Emax) 236.7572
(40%Emax) 315.675
(50%Emax) 394.595
(60%Emax) 473.515
(70%Emax) 552.4325
(80%Emax) 631.3525
(90%Emax) 710.2725

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/12/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

NT NT 2-2735-L2-K0

Luminance Limitting Curve(no luminous side)

Luminance Table

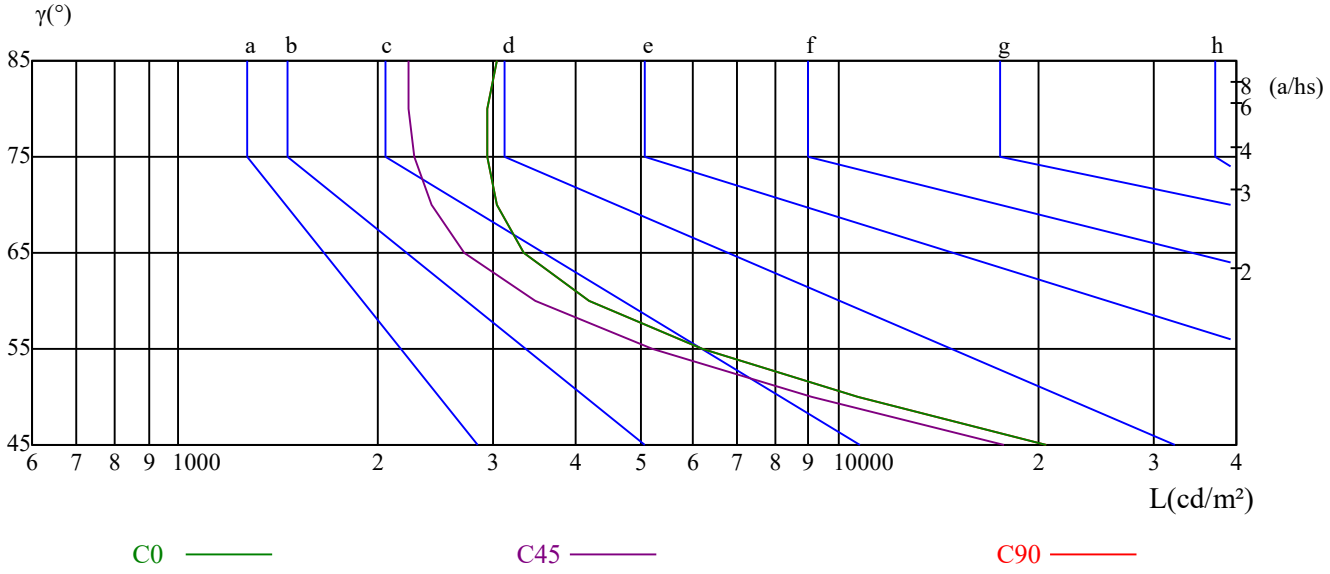
γ	45	50	55	60	65	70	75	80	85
C0	20551	10659	6225	4198	3335	3044	2929	2935	3025
C45	17821	9107	5236	3473	2709	2424	2280	2226	2223
C90	20551	10659	6225	4198	3335	3044	2929	2935	3025

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
7530	7530	7530	9341	9341	9341	23307	23307	23307

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

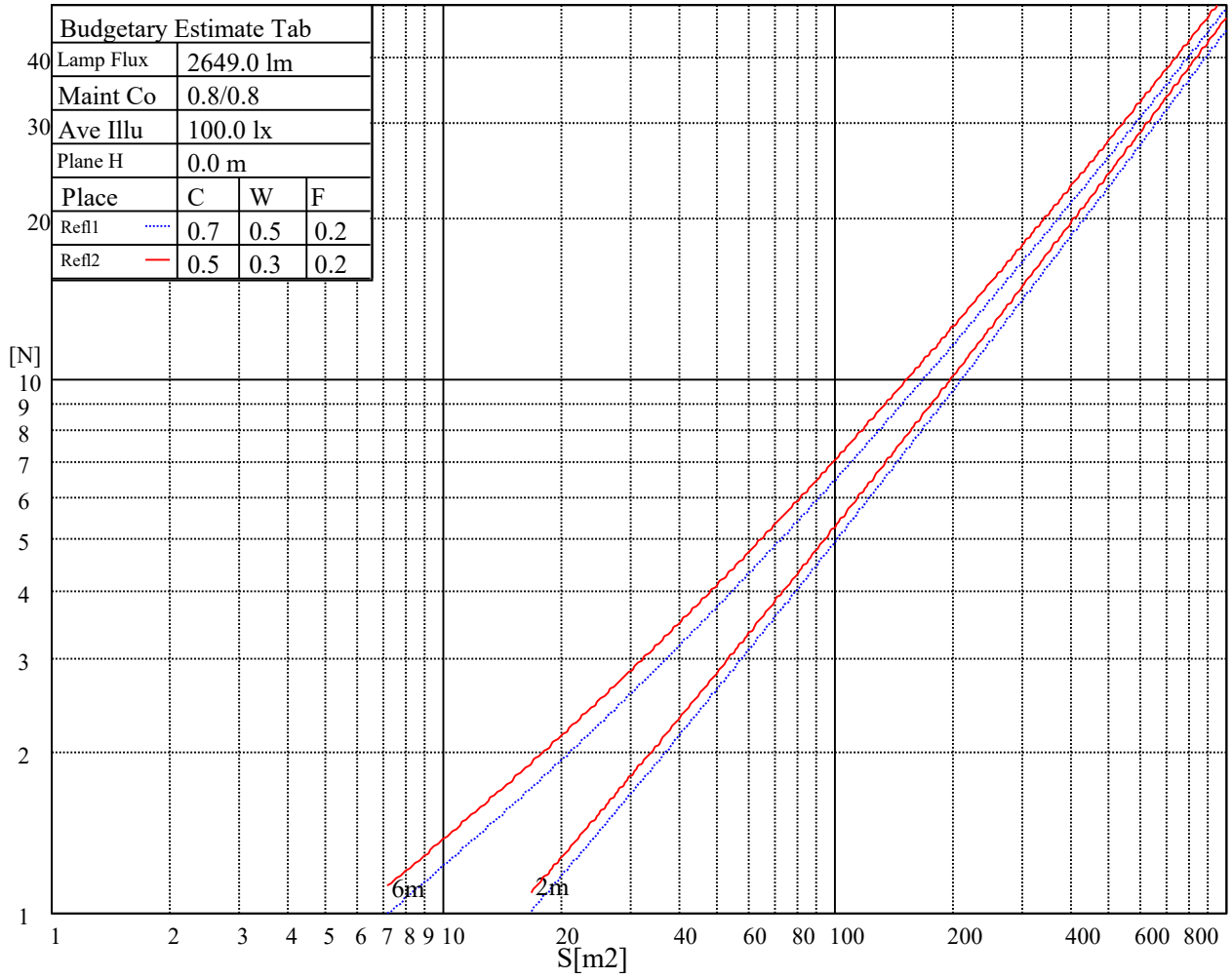
Date: 2024/12/26
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

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	17.42	18.41	17.78	18.72	19.04	16.18	17.17	16.55	17.48	17.80
	3H	17.31	18.19	17.70	18.53	18.88	16.20	17.08	16.58	17.41	17.76
	4H	17.29	18.10	17.69	18.45	18.82	16.26	17.08	16.66	17.43	17.80
	6H	17.31	18.06	17.73	18.43	18.83	16.38	17.12	16.80	17.50	17.90
	8H	17.32	18.03	17.74	18.42	18.82	16.41	17.12	16.83	17.51	17.91
	12H	17.35	18.02	17.77	18.42	18.83	16.46	17.14	16.89	17.53	17.95
4H	2H	17.16	17.97	17.56	18.32	18.69	15.94	16.76	16.34	17.11	17.48
	3H	17.06	17.74	17.48	18.13	18.55	16.00	16.68	16.42	17.07	17.49
	4H	17.10	17.69	17.54	18.12	18.57	16.17	16.76	16.61	17.18	17.63
	6H	17.16	17.68	17.63	18.13	18.58	16.34	16.87	16.82	17.32	17.77
	8H	17.24	17.72	17.72	18.18	18.65	16.46	16.94	16.95	17.40	17.88
	12H	17.36	17.80	17.85	18.25	18.77	16.61	17.06	17.10	17.51	18.03
8H	4H	16.98	17.46	17.46	17.92	18.39	16.07	16.55	16.55	17.01	17.48
	6H	17.09	17.49	17.60	17.97	18.48	16.33	16.72	16.83	17.20	17.71
	8H	17.28	17.62	17.82	18.14	18.64	16.57	16.90	17.10	17.42	17.92
	12H	17.50	17.75	18.04	18.27	18.79	16.83	17.08	17.37	17.60	18.12
12H	4H	16.94	17.39	17.43	17.84	18.36	16.04	16.48	16.53	16.93	17.45
	6H	17.12	17.46	17.66	17.98	18.48	16.37	16.70	16.90	17.22	17.72
	8H	17.31	17.57	17.85	18.08	18.61	16.61	16.87	17.15	17.38	17.91
Variation with the observer position at spacings:											
S = 1.0H		5.0/-6.7					5.0/-6.7				
S = 1.5H		7.5/-6.4					7.5/-6.4				
S = 2.0H		9.3/-5.7					9.3/-5.7				
Standard tables:		BK1					BK1				
Uncorrected UGR		0.1					0.1				

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

Budgetary Estimate Table



Equipment: GMS1980 Date: 2024/12/26 Operator: NT07
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 7.65

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	1.13	1.13	1.13	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.97	0.97	0.97	0.95
1	1.05	1.02	1.00	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.88
2	0.97	0.94	0.90	0.96	0.92	0.89	0.93	0.90	0.87	0.90	0.88	0.86	0.87	0.85	0.84	0.82
3	0.91	0.86	0.83	0.90	0.85	0.82	0.87	0.84	0.81	0.85	0.82	0.79	0.83	0.80	0.78	0.77
4	0.85	0.80	0.76	0.84	0.79	0.76	0.82	0.78	0.75	0.80	0.77	0.74	0.78	0.75	0.73	0.72
5	0.80	0.75	0.71	0.79	0.74	0.70	0.77	0.73	0.70	0.76	0.72	0.69	0.74	0.71	0.68	0.67
6	0.75	0.70	0.66	0.75	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.63
7	0.71	0.65	0.61	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.59
8	0.67	0.61	0.58	0.66	0.61	0.58	0.65	0.61	0.57	0.64	0.60	0.57	0.64	0.60	0.57	0.56
9	0.63	0.58	0.54	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.60	0.56	0.54	0.52
10	0.60	0.55	0.51	0.60	0.55	0.51	0.59	0.54	0.51	0.58	0.54	0.51	0.58	0.54	0.51	0.49

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	3155.59	3138.62	3107.60	3083.02	3052.59	3009.87	2976.51	2941.40	2889.31
45.0	3171.39	3155.01	3133.35	3095.31	3064.30	3031.52	3001.09	2960.71	2923.26
90.0	3149.15	3126.92	3095.31	3067.81	3039.72	3011.04	2973.59	2943.16	2910.38
135.0	3150.91	3147.40	3138.03	3118.14	3098.82	3077.17	3054.35	3026.84	2997.58
180.0	3155.59	3164.96	3166.13	3160.86	3152.08	3135.69	3108.77	3085.95	3063.71
225.0	3171.39	3181.34	3179.00	3170.22	3148.57	3124.57	3096.48	3061.96	3032.11
270.0	3149.15	3166.13	3171.39	3165.54	3152.08	3122.82	3092.97	3059.61	3016.89
315.0	3150.91	3143.89	3128.67	3099.41	3072.49	3040.30	2997.00	2960.71	2921.50
360.0	3155.59	3138.62	3107.60	3083.02	3052.59	3009.87	2976.51	2941.40	2889.31

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2847.18	2803.29	2738.91	2693.26	2645.28	2586.75	2508.92	2444.54	2380.17
45.0	2894.58	2849.52	2810.89	2765.25	2704.97	2655.22	2595.53	2513.01	2452.74
90.0	2862.39	2825.52	2785.14	2727.79	2679.80	2619.53	2538.76	2468.54	2396.55
135.0	2967.73	2940.23	2907.46	2861.81	2823.77	2771.68	2723.70	2666.34	2589.09
180.0	3032.11	3000.51	2970.66	2927.35	2885.80	2844.25	2783.97	2737.16	2679.80
225.0	3004.02	2963.05	2933.79	2900.43	2864.73	2814.99	2770.51	2718.43	2663.42
270.0	2983.54	2946.67	2912.14	2864.73	2825.52	2785.14	2741.84	2686.83	2632.40
315.0	2879.37	2831.96	2789.83	2743.01	2694.43	2631.82	2580.32	2521.79	2444.54
360.0	2847.18	2803.29	2738.91	2693.26	2645.28	2586.75	2508.92	2444.54	2380.17

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2317.55	2240.89	2178.27	2102.77	2037.81	1962.90	1862.24	1772.71	1671.46
45.0	2384.85	2316.96	2235.03	2164.22	2088.73	2012.06	1906.14	1806.65	1667.95
90.0	2328.08	2236.79	2160.71	2081.70	1999.19	1882.73	1777.39	1663.27	1517.55
135.0	2527.06	2465.61	2387.19	2322.82	2254.35	2182.95	2107.45	2000.36	1904.38
180.0	2612.50	2537.59	2470.29	2398.31	2328.67	2241.47	2167.15	2091.65	1986.90
225.0	2582.07	2516.53	2451.57	2363.78	2292.38	2201.09	2120.91	2037.81	1947.10
270.0	2575.63	2492.53	2426.99	2356.76	2271.90	2202.85	2115.65	2039.57	1960.56
315.0	2387.19	2312.87	2256.10	2199.92	2123.25	2061.22	1991.58	1915.50	1829.47
360.0	2317.55	2240.89	2178.27	2102.77	2037.81	1962.90	1862.24	1772.71	1671.46

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1562.61	1422.74	1154.94	1154.94	1067.33	950.70	807.84	696.42	574.34
45.0	1547.39	1422.74	1269.41	1150.03	1030.05	911.84	767.87	661.36	560.70
90.0	1301.01	1148.50	1118.25	999.92	882.75	739.31	630.87	528.11	413.87
135.0	1794.94	1645.71	1523.98	1398.16	1239.57	1113.74	959.24	840.44	724.57
180.0	1892.68	1790.85	1651.56	1528.08	1370.66	1244.83	1119.01	994.94	846.88
225.0	1824.20	1711.26	1589.53	1461.95	1142.13	1142.13	1051.59	932.44	787.19
270.0	1873.95	1755.15	1645.71	1528.67	1411.62	1261.80	1141.25	1021.28	880.82
315.0	1705.99	1597.14	1483.02	1152.07	1152.07	1091.33	972.47	830.84	722.75
360.0	1562.61	1422.74	1154.94	1154.94	1067.33	950.70	807.84	696.42	574.34

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	484.57	407.61	328.25	287.05	255.28	227.65	195.00	172.58	154.09
45.0	462.97	355.29	304.38	304.38	204.13	171.76	150.87	127.99	111.60
90.0	335.33	271.02	224.20	182.88	158.36	137.00	119.03	99.61	85.97
135.0	615.72	490.48	403.86	330.71	302.03	302.03	200.67	176.50	155.85
180.0	732.76	626.83	532.61	427.86	354.70	298.52	298.52	222.68	196.11
225.0	676.93	575.22	454.95	366.00	291.03	227.30	193.24	162.17	141.62
270.0	769.63	666.63	546.07	456.53	376.94	307.30	307.30	203.66	177.56
315.0	595.82	502.18	419.26	336.97	289.57	253.87	225.02	192.60	170.01
360.0	484.57	407.61	328.25	287.05	255.28	227.65	195.00	172.58	154.09

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	136.42	115.87	101.71	89.13	76.61	67.77	60.04	51.79	46.29
45.0	96.74	82.46	72.04	62.74	54.02	48.52	43.25	38.92	34.59
90.0	74.85	63.26	55.89	48.34	43.60	39.85	36.46	33.24	31.13
135.0	132.55	116.64	102.94	87.26	76.61	66.25	58.87	52.55	47.11
180.0	174.40	150.34	135.30	117.22	103.41	91.76	81.46	70.70	63.09
225.0	124.30	108.91	92.17	80.64	71.16	62.79	54.19	48.34	43.89
270.0	149.17	129.51	112.77	98.38	83.45	72.74	64.08	56.71	49.39
315.0	149.12	131.32	115.64	99.14	87.26	74.21	65.55	58.46	50.50
360.0	136.42	115.87	101.71	89.13	76.61	67.77	60.04	51.79	46.29

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	41.49	35.70	32.01	29.03	26.28	23.06	21.30	19.84	18.26
45.0	31.78	29.20	26.98	24.70	23.12	21.59	20.07	19.02	17.97
90.0	29.32	27.62	26.10	25.11	24.05	23.12	22.30	21.65	21.07
135.0	41.67	37.81	34.12	30.96	27.92	25.87	23.58	22.00	20.25
180.0	56.42	50.45	44.07	39.50	35.23	31.95	28.32	25.46	22.88
225.0	39.74	35.29	32.42	29.26	27.10	25.34	23.29	21.77	20.60
270.0	44.54	39.74	36.58	34.00	31.43	29.55	28.15	26.98	25.57
315.0	45.00	39.50	35.23	31.78	29.09	26.57	23.41	21.83	20.42
360.0	41.49	35.70	32.01	29.03	26.28	23.06	21.30	19.84	18.26

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.85	16.21	15.51	14.92	14.34	13.81	13.46	13.17	12.82
45.0	16.97	16.33	15.80	15.16	14.63	14.22	13.81	13.40	13.11
90.0	20.66	20.25	19.78	19.43	19.02	18.61	18.14	17.79	17.26
135.0	18.79	17.67	17.09	16.33	15.80	15.33	14.92	14.57	14.16
180.0	21.07	19.20	17.62	16.80	16.09	15.33	14.63	14.16	13.75
225.0	19.49	18.14	17.26	16.68	16.09	15.39	14.81	14.34	13.81
270.0	24.76	23.99	23.23	22.41	21.89	21.48	21.01	20.60	20.19
315.0	19.08	17.56	16.91	16.33	15.68	15.22	14.69	14.34	14.05
360.0	16.85	16.21	15.51	14.92	14.34	13.81	13.46	13.17	12.82

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.52	12.29	12.11	12.00	11.88	11.82	11.76	11.70	11.65
45.0	12.76	12.47	12.23	12.06	11.94	11.82	11.70	11.65	11.53
90.0	16.85	16.56	16.27	15.86	15.27	14.81	14.22	13.46	12.64
135.0	13.87	13.58	13.28	13.05	12.93	12.70	12.47	12.29	12.17
180.0	13.40	12.93	12.64	12.35	12.11	12.06	12.00	11.88	11.82
225.0	13.40	12.93	12.58	12.23	12.06	11.94	11.76	11.70	11.65
270.0	19.66	19.25	18.79	18.32	17.85	17.44	16.91	16.39	15.86
315.0	13.64	13.40	13.17	12.93	12.82	12.47	12.29	12.06	11.94
360.0	12.52	12.29	12.11	12.00	11.88	11.82	11.76	11.70	11.65

C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	11.65	11.59	11.47	11.41	11.35	11.24	11.12	11.06	10.71
45.0	11.53	11.47	11.41	11.29	11.24	11.18	11.06	10.77	10.71
90.0	11.88	11.53	11.29	11.12	11.00	10.94	10.77	10.71	10.65
135.0	12.06	11.88	11.65	11.53	11.35	11.24	11.06	10.94	10.71
180.0	11.76	11.70	11.65	11.59	11.53	11.41	11.35	11.12	11.00
225.0	11.59	11.53	11.47	11.41	11.35	11.29	11.18	11.06	10.89
270.0	15.39	14.81	14.10	12.99	12.23	11.65	11.29	11.06	10.89
315.0	11.82	11.70	11.59	11.47	11.35	11.24	11.12	10.94	10.83
360.0	11.65	11.59	11.47	11.41	11.35	11.24	11.12	11.06	10.71

Intensity data(cd)

C/γ(°)	90.0
0.0	10.65
45.0	10.65
90.0	10.65
135.0	10.65
180.0	10.59
225.0	10.89
270.0	10.83
315.0	10.65
360.0	10.65