



NATA LIGHTING CO.,LTD
www.nata.cn
Email: info@nata.cn
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

NT

Client: NT

LumCAT: 2-2061-L2

Luminaire: 光源支架92.70.412.00

Report No: 20241226-B001

Ballast type: AC

Test No: 20241226-C007

Voltage(V): 34.460

LampCAT: CITIZEN CLU038

Current(A): 0.451

Lamp flux(lm): 2649.0

Power (W): 15.541

Number of Lamps: 1

PF: 0.000

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 44

Photometric Results

Lumens(lm): 2568.58, Efficiency(%): 96.96% , Luminous Efficacy(lm/W): 165.28

Central intensity(cd): 9963.368, Maximum intensity(cd): 9963.368

Angle of maximum intensity: C=0.0 γ =0.0

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

[C90/270]Total=25.2

Field angle(10%Imax): [C0/180]Total=50.4

[C90/270]Total=50.4

Maximum s/h(1/2): C0_180=0.43 C90_270=0.43

Maximum s/h(1/4): C0_180=0.41 C90_270=0.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 96.96%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

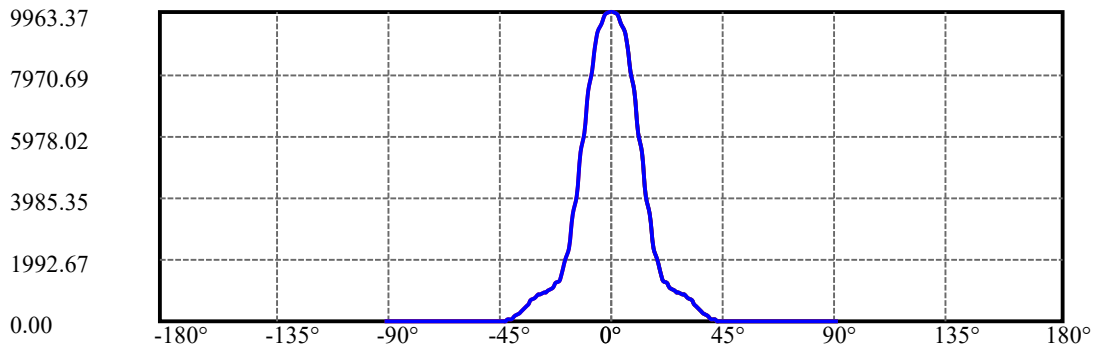
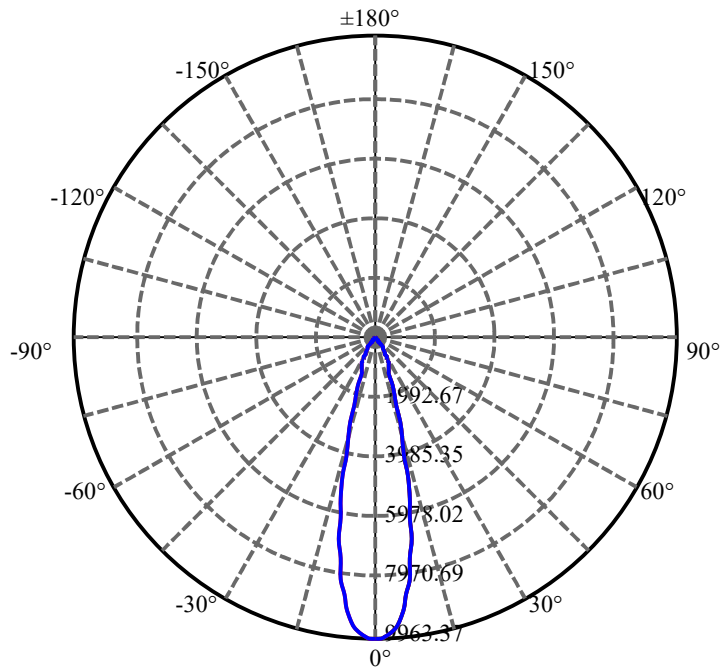
CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.357%

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.65



C0(Max): —————

C0/C180: —————

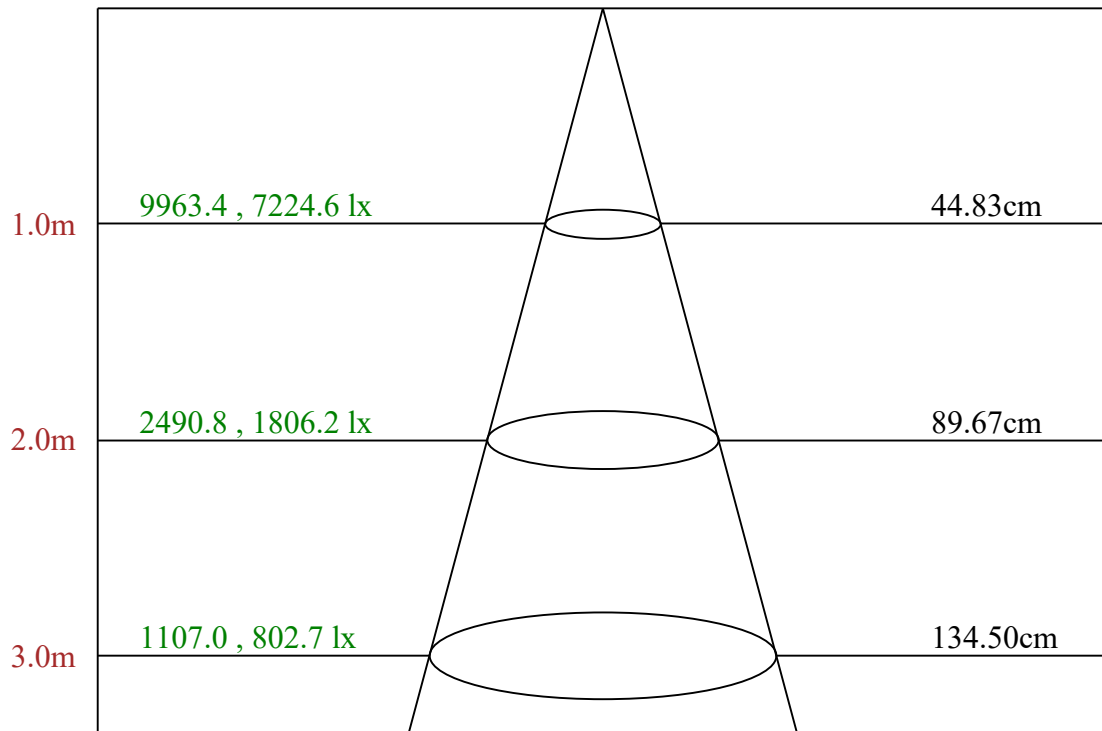
C90/C270: —————

Field angle(10%Imax):C0/180Left:25.2 Right:25.2

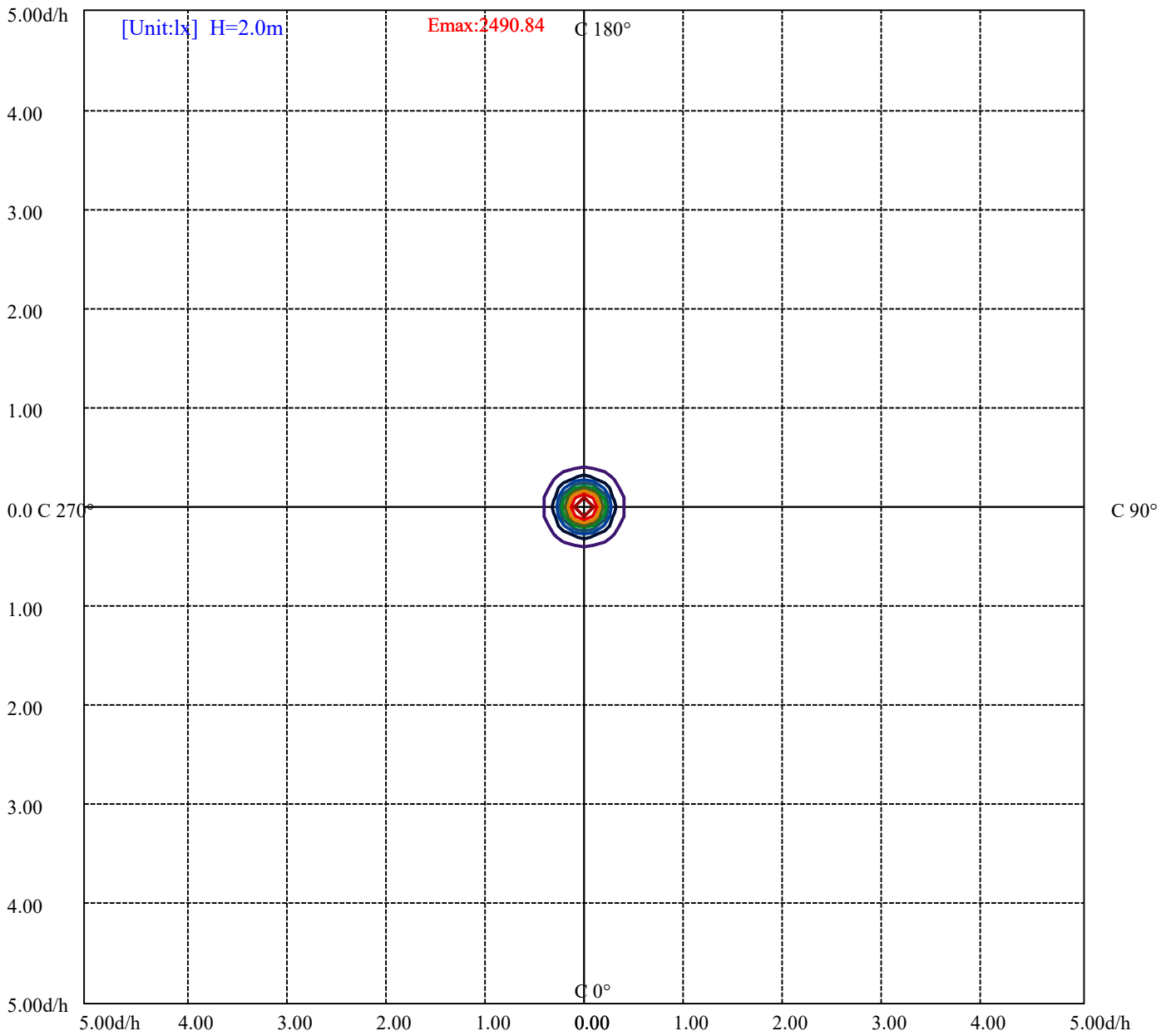
:C90/270Left:25.2 Right:25.2

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

:C90/270Left:12.6 Right:12.6



Max , Ave Beam angle of C0 plane 25.27



(10%Emax) 249.0842	—
(20%Emax) 498.1675	—
(30%Emax) 747.2525	—
(40%Emax) 996.3375	—
(50%Emax) 1245.42	—
(60%Emax) 1494.505	—
(70%Emax) 1743.59	—
(80%Emax) 1992.672	—
(90%Emax) 2241.758	—

Luminance Table

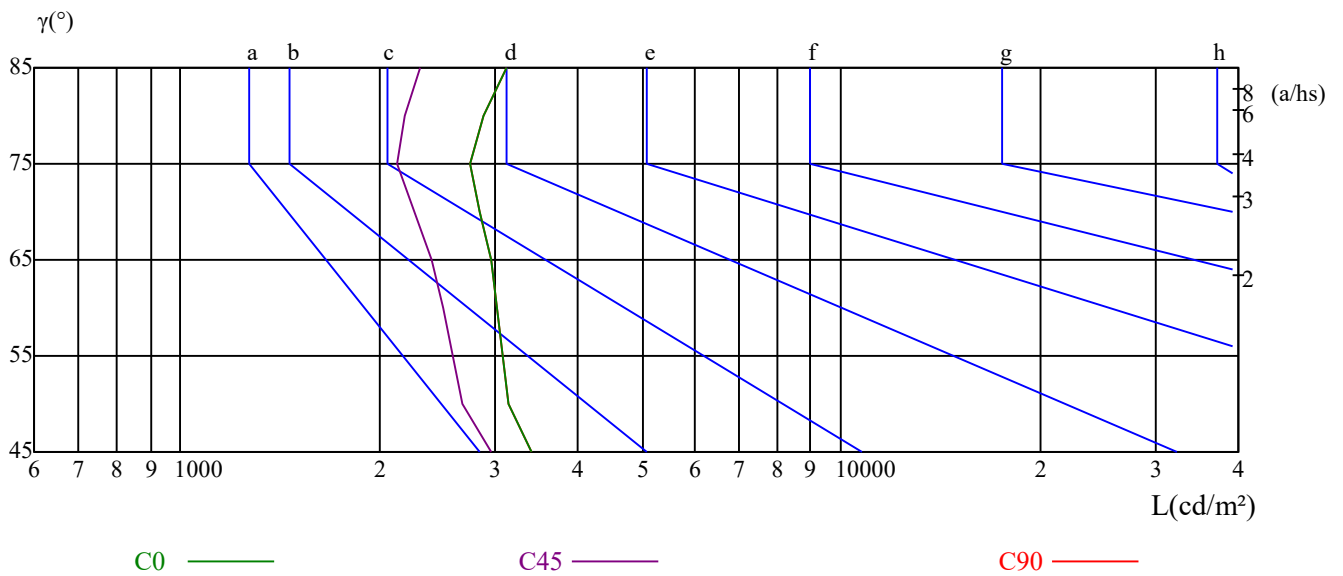
γ	45	50	55	60	65	70	75	80	85
C0	3404	3130	3072	3011	2964	2840	2741	2882	3127
C45	2952	2675	2584	2491	2408	2262	2134	2186	2299
C90	3404	3130	3072	3011	2964	2840	2741	2882	3127

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6693	6693	6693	8743	8743	8743	24098	24098	24098

Glare Table

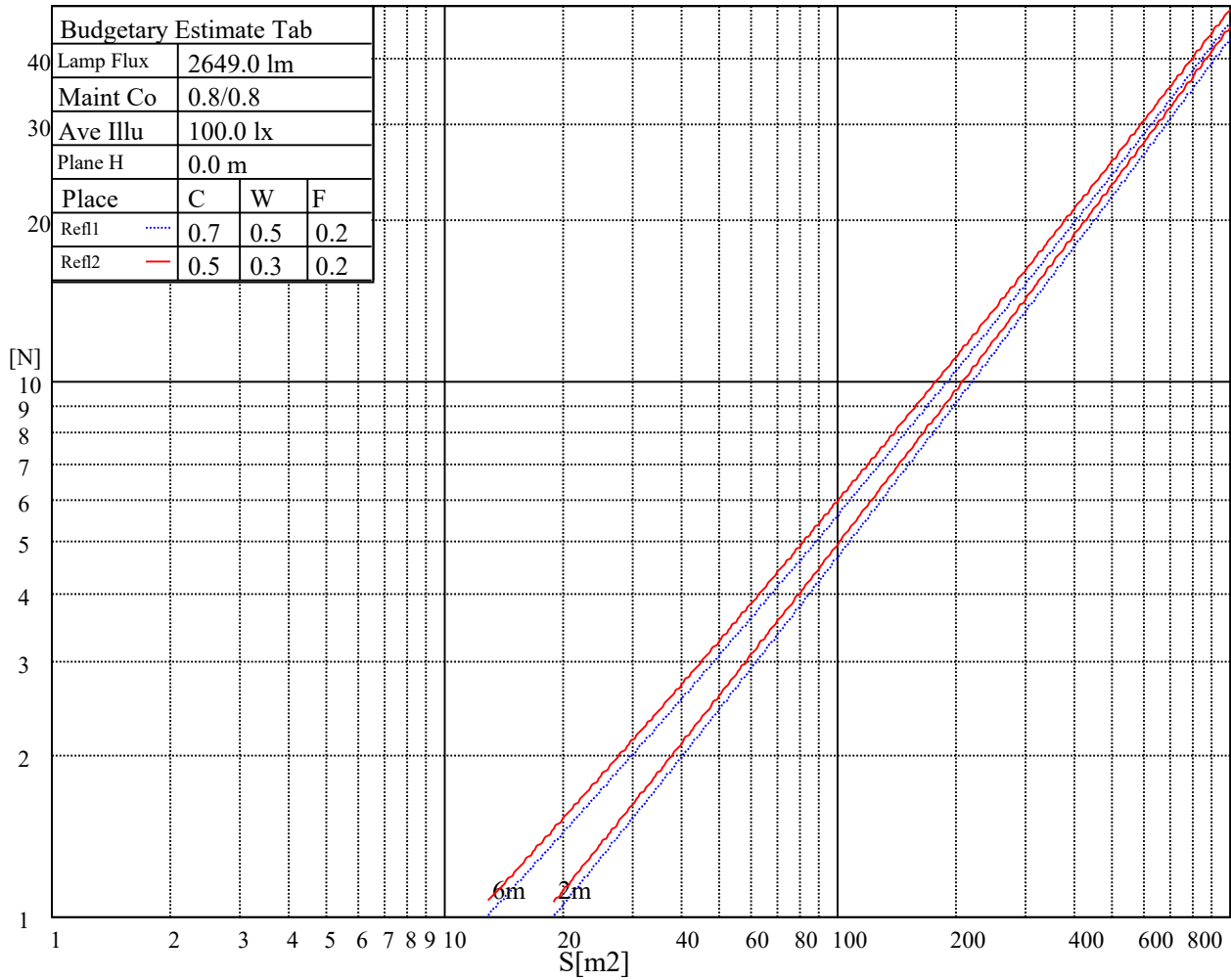
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	14.04	14.97	14.41	15.28	15.60	13.36	14.29	13.73	14.60	14.92
	3H	14.12	14.95	14.51	15.28	15.63	13.49	14.32	13.88	14.65	15.00
	4H	14.23	14.99	14.63	15.35	15.72	13.63	14.40	14.03	14.75	15.12
	6H	14.44	15.14	14.86	15.52	15.92	13.90	14.60	14.32	14.97	15.37
	8H	14.57	15.23	14.99	15.62	16.03	14.05	14.72	14.48	15.11	15.52
	12H	14.73	15.36	15.16	15.76	16.18	14.25	14.88	14.67	15.27	15.69
4H	2H	13.83	14.60	14.23	14.95	15.32	13.18	13.94	13.58	14.30	14.67
	3H	14.00	14.64	14.43	15.04	15.46	13.41	14.06	13.84	14.45	14.87
	4H	14.25	14.80	14.69	15.23	15.68	13.71	14.26	14.15	14.69	15.14
	6H	14.57	15.06	15.05	15.52	15.97	14.11	14.60	14.58	15.05	15.51
	8H	14.82	15.28	15.31	15.74	16.21	14.40	14.85	14.89	15.31	15.79
	12H	15.14	15.55	15.63	16.01	16.53	14.74	15.16	15.23	15.61	16.14
8H	4H	14.22	14.67	14.71	15.13	15.61	13.71	14.17	14.20	14.63	15.10
	6H	14.69	15.06	15.20	15.54	16.06	14.28	14.65	14.78	15.13	15.64
	8H	15.11	15.42	15.65	15.94	16.44	14.74	15.05	15.28	15.57	16.07
	12H	15.58	15.82	16.13	16.33	16.86	15.25	15.48	15.79	16.00	16.53
12H	4H	14.21	14.63	14.70	15.08	15.61	13.71	14.13	14.20	14.58	15.11
	6H	14.77	15.08	15.31	15.61	16.10	14.37	14.68	14.91	15.20	15.70
	8H	15.21	15.45	15.76	15.97	16.49	14.86	15.09	15.40	15.61	16.14
Variation with the observer position at spacings:											
S = 1.0H	5.5/-5.2					5.5/-5.2					
S = 1.5H	7.5/-4.1					7.5/-4.1					
S = 2.0H	9.0/-3.1					9.0/-3.1					
Standard tables:	BK2					BK2					
Uncorrected UGR	-3.0					-3.0					

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 RHOFC=20 CU															
0	1.15	1.15	1.15	1.13	1.13	1.13	1.08	1.08	1.08	1.03	1.03	1.03	0.99	0.99	0.99	0.97
1	1.09	1.06	1.05	1.06	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.92
2	1.03	1.00	0.97	1.01	0.98	0.96	0.98	0.96	0.94	0.95	0.93	0.92	0.93	0.91	0.90	0.88
3	0.98	0.94	0.91	0.96	0.93	0.90	0.94	0.91	0.89	0.92	0.89	0.87	0.90	0.88	0.86	0.85
4	0.93	0.89	0.86	0.92	0.88	0.85	0.90	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.81
5	0.89	0.85	0.82	0.89	0.84	0.81	0.87	0.83	0.81	0.85	0.82	0.80	0.84	0.81	0.79	0.78
6	0.86	0.81	0.78	0.85	0.81	0.78	0.84	0.80	0.77	0.83	0.79	0.77	0.81	0.79	0.76	0.75
7	0.83	0.78	0.75	0.82	0.78	0.75	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.73
8	0.80	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.71	0.77	0.73	0.71	0.70
9	0.77	0.73	0.70	0.77	0.72	0.70	0.76	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.68
10	0.75	0.70	0.67	0.74	0.70	0.67	0.73	0.70	0.67	0.73	0.69	0.67	0.72	0.69	0.67	0.66

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	9958.83	9937.18	9870.46	9753.42	9581.36	9270.61	8932.93	8512.16	7863.14
45.0	9984.00	9964.68	9918.45	9811.94	9608.28	9355.47	9053.49	8675.43	8086.70
90.0	9954.15	9884.51	9761.03	9579.02	9261.24	8909.52	8354.15	7813.98	7219.39
135.0	9956.49	9942.45	9914.94	9831.84	9642.81	9406.97	8999.06	8573.02	8052.75
180.0	9958.83	9974.05	9950.05	9877.49	9709.53	9498.26	9207.40	8701.18	8203.74
225.0	9984.00	9961.17	9890.95	9775.07	9610.04	9281.73	8937.03	8506.30	7987.79
270.0	9954.15	9984.00	9961.17	9929.57	9833.59	9701.92	9505.28	9244.27	8812.38
315.0	9956.49	9929.57	9886.26	9800.24	9655.10	9394.09	9089.77	8677.19	8192.04
360.0	9958.83	9937.18	9870.46	9753.42	9581.36	9270.61	8932.93	8512.16	7863.14
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7267.97	6634.17	5831.24	5186.91	4404.46	3811.63	3245.13	2719.01	2175.93
45.0	7533.66	6932.05	6290.06	5655.09	4875.57	4258.16	3660.06	2952.52	2443.37
90.0	6579.74	5772.13	5130.73	4492.83	3875.42	3167.88	2650.54	2205.77	1855.81
135.0	7306.01	6670.45	6026.71	5387.05	4584.71	3973.74	3399.63	2865.91	2308.19
180.0	7482.75	6855.97	6219.24	5577.25	4781.93	4156.91	3572.86	3055.52	2449.23
225.0	7242.80	6621.88	6004.47	5385.88	4612.22	4017.63	3298.39	2768.76	2316.96
270.0	8362.34	7822.18	7056.70	6417.05	5763.94	4951.06	4328.97	3754.86	3012.21
315.0	7455.83	6829.63	6031.39	5392.91	4761.45	3999.49	3420.11	2891.66	2316.38
360.0	7267.97	6634.17	5831.24	5186.91	4404.46	3811.63	3245.13	2719.01	2175.93
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1848.78	1611.77	1438.54	1151.02	1151.02	1114.44	1052.64	1003.43	947.83
45.0	1958.22	1686.09	1491.21	1327.93	1229.62	1147.68	1083.90	1021.86	975.04
90.0	1559.68	1392.31	1147.74	1147.74	1072.25	998.63	950.17	905.99	861.86
135.0	1974.61	1717.11	1529.84	1361.29	1259.46	1158.22	1090.33	1035.91	978.55
180.0	2081.12	1796.11	1541.54	1394.06	1282.29	1172.26	1100.28	1030.05	982.07
225.0	1890.92	1639.86	1458.44	1157.63	1157.63	1119.89	1055.22	1005.30	952.40
270.0	2510.67	2095.75	1775.05	1494.14	1341.98	1226.10	1133.64	1038.83	978.55
315.0	1960.56	1688.43	1491.80	1281.70	1160.97	1141.83	1071.49	1007.87	962.81
360.0	1848.78	1611.77	1438.54	1151.02	1151.02	1114.44	1052.64	1003.43	947.83
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	912.01	871.93	833.59	780.63	698.70	624.38	525.30	443.13	360.09
45.0	935.25	904.23	867.95	811.18	750.32	663.12	587.62	505.11	405.62
90.0	827.16	790.11	745.69	665.40	596.17	522.78	447.70	351.78	276.11
135.0	934.08	900.72	861.51	813.52	757.92	690.04	614.54	513.30	426.10
180.0	937.59	903.65	866.78	819.37	766.70	694.72	620.40	523.25	443.66
225.0	913.07	881.41	844.95	790.87	730.30	658.67	565.39	486.85	389.12
270.0	932.32	878.48	846.29	801.82	763.78	711.69	626.83	557.19	483.45
315.0	921.20	879.94	842.08	785.61	725.68	655.57	578.73	475.32	388.06
360.0	912.01	871.93	833.59	780.63	698.70	624.38	525.30	443.13	360.09
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	278.39	202.55	119.33	67.83	38.92	26.34	24.23	22.47	21.54
45.0	323.69	303.21	210.04	95.45	53.55	34.18	29.26	27.62	26.57
90.0	204.59	126.82	77.07	46.29	31.19	28.50	26.22	24.52	23.35
135.0	338.90	296.77	296.77	99.25	49.04	30.14	25.69	22.94	21.65
180.0	341.83	302.62	302.62	119.97	57.35	32.25	23.35	21.48	19.72
225.0	310.93	237.31	168.43	94.51	50.39	28.62	24.23	21.77	20.54
270.0	409.13	317.25	298.52	298.52	114.29	58.11	36.23	27.62	25.34
315.0	302.56	224.20	139.81	85.91	48.34	30.37	25.16	23.35	21.77
360.0	278.39	202.55	119.33	67.83	38.92	26.34	24.23	22.47	21.54

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	20.54	20.07	19.55	19.31	19.08	18.73	18.43	18.26	18.08
45.0	25.93	25.11	24.70	24.35	23.82	23.12	22.65	22.18	21.83
90.0	22.24	21.54	21.36	20.95	20.42	20.31	19.66	19.20	18.96
135.0	20.66	20.13	19.72	19.49	19.14	18.61	18.43	18.32	18.14
180.0	18.61	17.91	16.97	16.68	16.56	16.21	15.98	15.86	15.80
225.0	19.90	19.49	19.20	18.90	18.67	18.32	18.20	18.38	18.49
270.0	22.94	22.12	20.83	19.90	19.43	19.31	18.96	18.73	18.67
315.0	21.07	20.66	20.25	20.07	19.78	19.25	19.02	18.90	18.67
360.0	20.54	20.07	19.55	19.31	19.08	18.73	18.43	18.26	18.08
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.91	17.67	17.50	17.32	17.03	16.80	16.50	16.21	16.04
45.0	21.24	21.01	20.66	20.25	19.84	19.37	18.96	18.49	18.14
90.0	18.67	18.32	17.85	17.56	17.44	17.15	16.68	16.44	16.21
135.0	18.08	17.91	17.79	17.73	17.56	17.38	17.09	16.85	16.68
180.0	15.74	15.63	15.51	15.45	15.39	15.33	15.27	15.22	15.10
225.0	18.32	18.55	18.55	18.20	17.91	17.67	17.50	17.15	16.91
270.0	18.61	18.32	18.26	18.20	17.85	17.62	17.38	17.26	16.91
315.0	18.49	18.32	18.08	17.91	17.67	17.44	17.21	16.85	16.62
360.0	17.91	17.67	17.50	17.32	17.03	16.80	16.50	16.21	16.04
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.86	15.80	15.63	15.45	15.16	14.81	14.51	14.22	13.87
45.0	17.62	17.21	16.91	16.44	16.04	15.51	15.04	14.63	14.16
90.0	15.98	15.68	15.45	15.16	14.86	14.46	14.10	13.75	13.46
135.0	16.50	16.39	16.15	15.98	15.63	15.27	14.81	14.28	13.99
180.0	14.98	14.98	14.98	14.98	14.81	14.69	14.46	14.10	13.81
225.0	16.50	16.33	16.15	15.86	15.45	15.04	14.69	14.34	13.99
270.0	16.50	16.27	16.15	15.80	15.57	15.16	14.98	14.63	14.16
315.0	16.33	16.15	15.86	15.68	15.27	14.92	14.57	14.22	13.87
360.0	15.86	15.80	15.63	15.45	15.16	14.81	14.51	14.22	13.87
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	13.64	13.34	13.05	12.87	12.70	12.52	12.47	12.35	12.23
45.0	13.75	13.34	13.05	12.70	12.52	12.47	12.35	12.23	12.17
90.0	13.23	12.93	12.76	12.64	12.64	12.52	12.47	12.35	12.29
135.0	13.52	13.17	12.87	12.58	12.41	12.29	12.17	12.06	12.00
180.0	13.52	13.23	12.99	12.76	12.58	12.41	12.35	12.23	12.17
225.0	13.58	13.17	12.93	12.70	12.52	12.41	12.29	12.23	12.17
270.0	13.93	13.58	13.28	13.05	12.82	12.64	12.64	12.52	12.47
315.0	13.52	13.17	12.87	12.52	12.35	12.23	12.17	12.06	11.94
360.0	13.64	13.34	13.05	12.87	12.70	12.52	12.47	12.35	12.23
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.23	12.11	12.11	12.00	11.94	11.88	11.88	11.82	11.70
45.0	12.11	12.00	11.94	11.88	11.82	11.76	11.70	11.59	11.47
90.0	12.17	12.00	11.88	11.76	11.70	11.53	11.53	11.35	11.29
135.0	11.88	11.82	11.76	11.76	11.70	11.65	11.59	11.53	11.29
180.0	12.11	12.00	11.94	11.94	11.88	11.82	11.82	11.65	11.47
225.0	12.06	12.00	11.94	11.88	11.82	11.76	11.70	11.53	11.41
270.0	12.41	12.23	12.17	12.06	11.94	11.76	11.70	11.65	11.47
315.0	11.88	11.82	11.82	11.70	11.70	11.59	11.53	11.47	11.35
360.0	12.23	12.11	12.11	12.00	11.94	11.88	11.88	11.82	11.70

Intensity data(cd)

C/ γ (°)	90.0
0.0	11.53
45.0	11.41
90.0	11.24
135.0	11.24
180.0	11.41
225.0	11.41
270.0	11.29
315.0	11.18
360.0	11.53