



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: 2-2062-L2

Luminaire: 光源支架92.70.412.00

Report No: 20241226-B005

Ballast type: AC

Test No: 20241226-C005

Voltage(V): 34.470

LampCAT: CITIZEN CLU038

Current(A): 0.451

Lamp flux(lm): 2649.0

Power (W): 15.545

Number of Lamps: 1

PF: 0.000

Length(mm): 75

Width(mm): 75

Phm Type: C

Height(mm): 44

Photometric Results

Lumens(lm): 2570.85, Efficiency(%): 97.05% , Luminous Efficacy(lm/W): 165.38

Central intensity(cd): 5397.589, Maximum intensity(cd): 5397.589

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

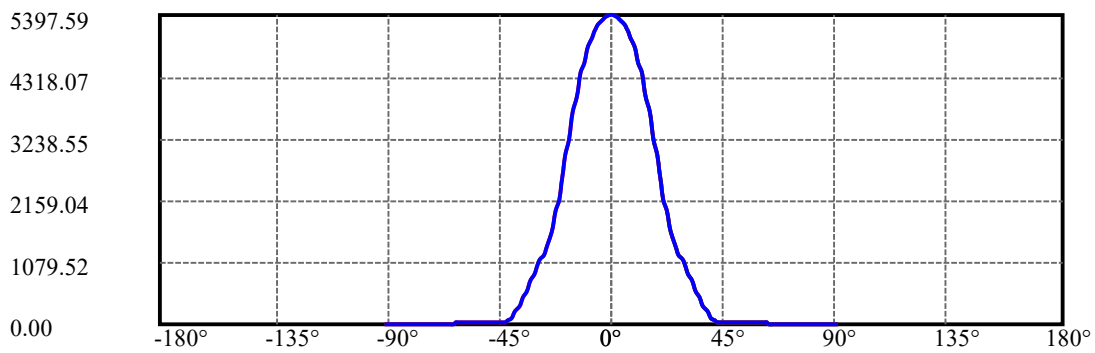
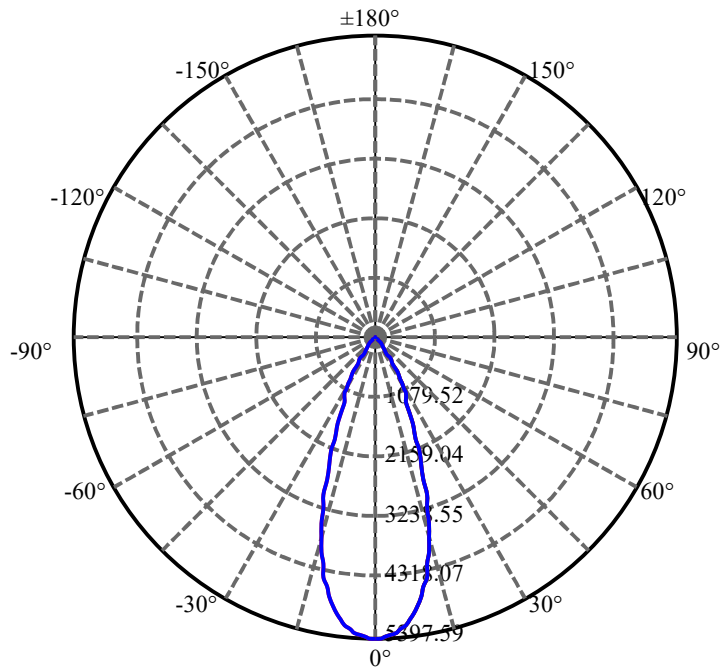
Field angle(10%Imax): [C0/180]Total=68.8

[C90/270]Total=68.8

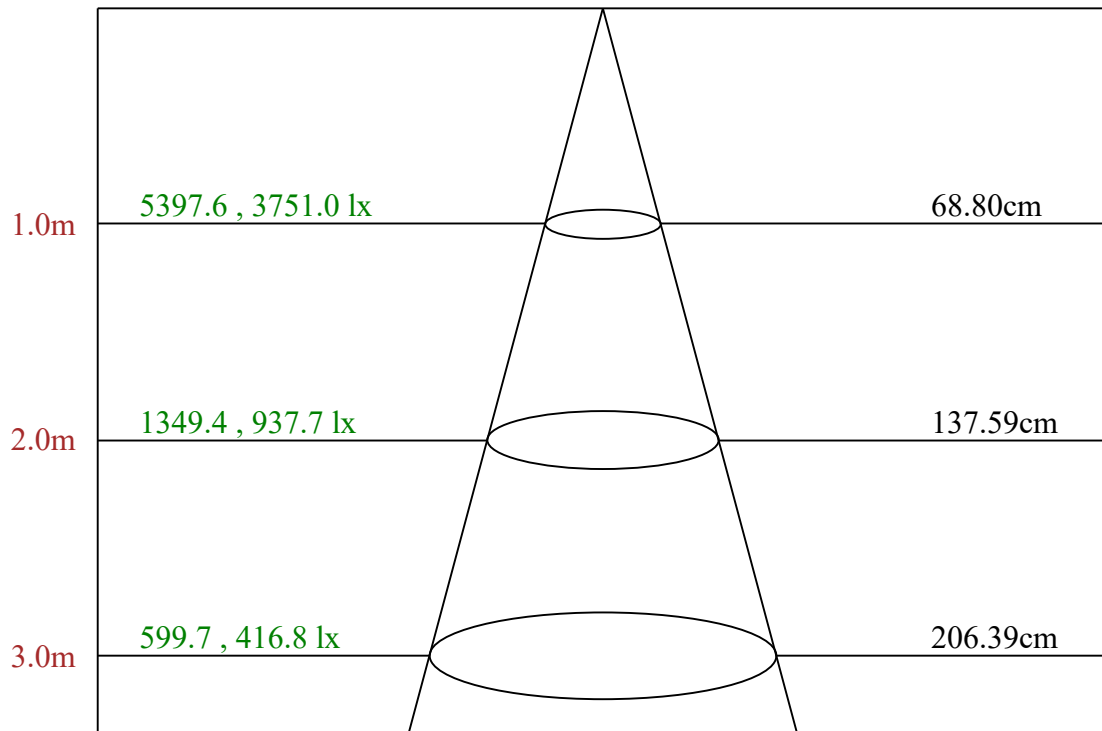
Equipment: GMS1980
Temperature(°C): 25.0

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

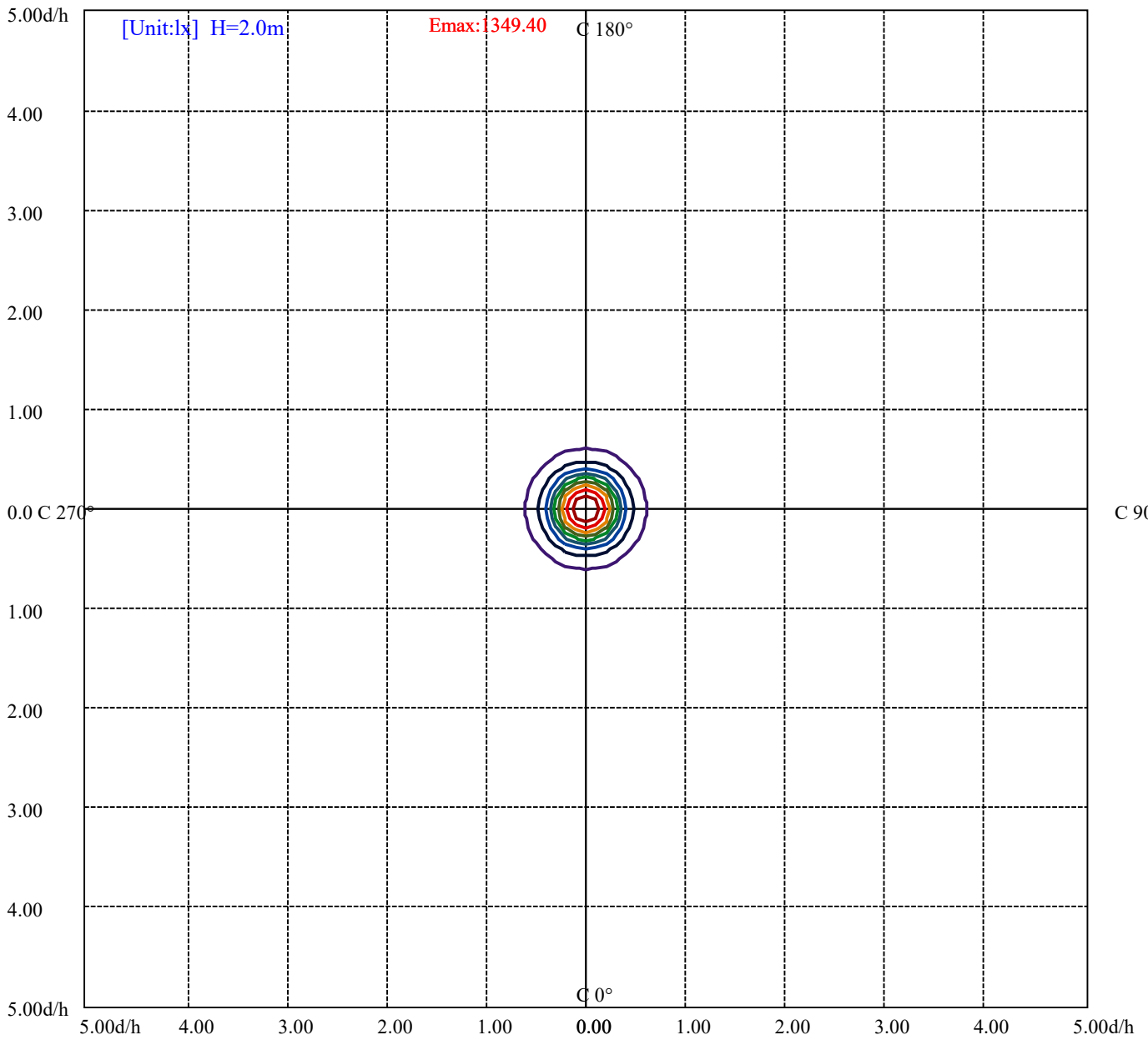
Operator: NT07
Distance(m): 7.65



C0(Max): —
C0/C180: —
C90/C270: —



Max , Ave Beam angle of C0 plane 37.97



(10%E _{max}) 134.9397	—
(20%E _{max}) 269.88	—
(30%E _{max}) 404.82	—
(40%E _{max}) 539.76	—
(50%E _{max}) 674.6975	—
(60%E _{max}) 809.6375	—
(70%E _{max}) 944.5775	—
(80%E _{max}) 1079.517	—
(90%E _{max}) 1214.458	—

Luminance Table

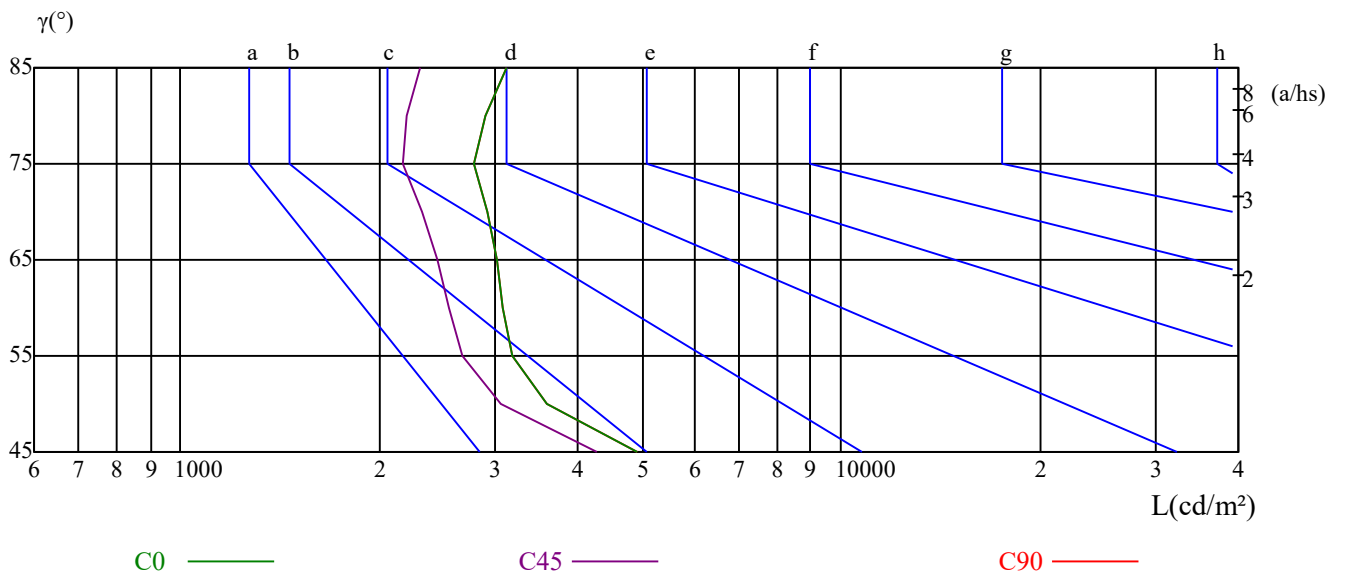
γ	45	50	55	60	65	70	75	80	85
C0	4910	3583	3184	3085	3008	2907	2785	2901	3127
C45	4258	3061	2678	2552	2444	2315	2169	2200	2299
C90	4910	3583	3184	3085	3008	2907	2785	2901	3127

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6791	6791	6791	8884	8884	8884	24098	24098	24098

Glare Table

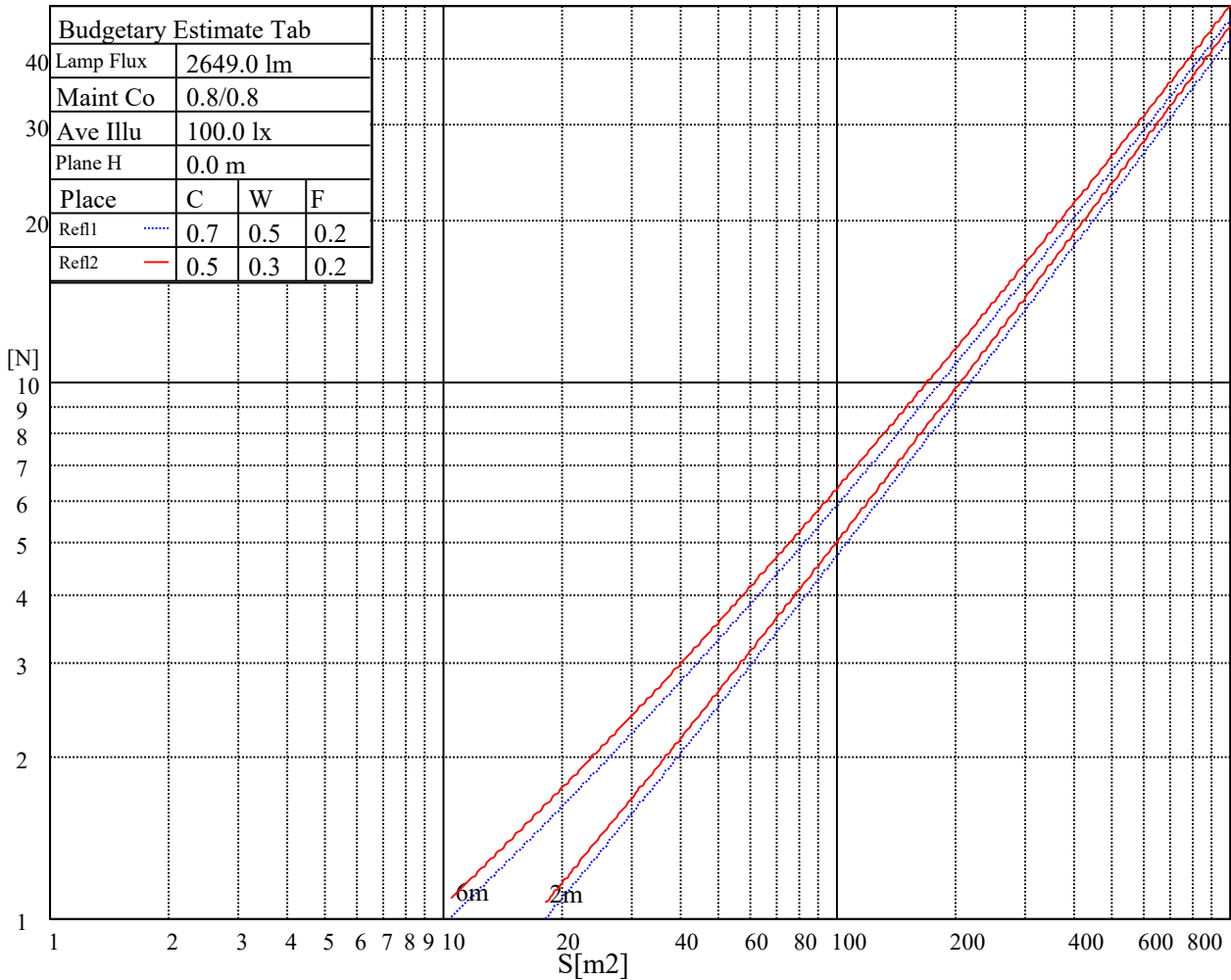
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	14.39	15.32	14.76	15.63	15.95	14.97	15.90	15.34	16.22	16.53
	3H	14.44	15.27	14.83	15.61	15.95	14.99	15.82	15.38	16.16	16.50
	4H	14.53	15.30	14.93	15.65	16.02	15.05	15.82	15.45	16.18	16.54
	6H	14.72	15.42	15.14	15.80	16.20	15.20	15.90	15.62	16.28	16.68
	8H	14.83	15.50	15.25	15.89	16.29	15.29	15.96	15.71	16.34	16.75
	12H	14.98	15.61	15.40	16.00	16.42	15.41	16.04	15.83	16.44	16.85
4H	2H	14.15	14.92	14.55	15.27	15.64	14.72	15.49	15.12	15.84	16.21
	3H	14.27	14.92	14.70	15.32	15.73	14.80	15.44	15.22	15.84	16.26
	4H	14.50	15.06	14.94	15.48	15.93	14.98	15.54	15.42	15.97	16.42
	6H	14.80	15.29	15.27	15.75	16.20	15.22	15.72	15.70	16.17	16.62
	8H	15.03	15.49	15.52	15.95	16.42	15.42	15.88	15.91	16.34	16.81
	12H	15.32	15.74	15.81	16.19	16.71	15.67	16.10	16.17	16.55	17.07
8H	4H	14.47	14.92	14.95	15.38	15.86	14.92	15.38	15.41	15.84	16.32
	6H	14.90	15.27	15.41	15.75	16.27	15.29	15.66	15.80	16.14	16.65
	8H	15.30	15.61	15.83	16.13	16.63	15.64	15.95	16.18	16.48	16.97
	12H	15.74	15.97	16.28	16.49	17.01	16.04	16.27	16.58	16.79	17.31
12H	4H	14.45	14.87	14.94	15.33	15.85	14.91	15.33	15.40	15.78	16.30
	6H	14.98	15.29	15.51	15.81	16.31	15.36	15.67	15.89	16.19	16.69
	8H	15.39	15.63	15.93	16.15	16.67	15.72	15.96	16.27	16.48	17.00
Variation with the observer position at spacings:											
S = 1.0H	5.6/-5.9					5.6/-5.9					
S = 1.5H	7.9/-4.6					7.9/-4.6					
S = 2.0H	9.4/-3.8					9.4/-3.8					
Standard tables:	BK2					BK2					
Uncorrected UGR	-2.2					-2.2					

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	1.16	1.16	1.16	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	1.08	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	0.95	1.00	0.97	0.94	0.97	0.94	0.92	0.94	0.92	0.90	0.91	0.90	0.88	0.87
3	0.96	0.92	0.88	0.95	0.91	0.88	0.92	0.89	0.86	0.90	0.87	0.85	0.88	0.85	0.84	0.82
4	0.91	0.86	0.83	0.90	0.85	0.82	0.88	0.84	0.81	0.86	0.83	0.80	0.84	0.81	0.79	0.78
5	0.86	0.81	0.78	0.85	0.81	0.77	0.84	0.80	0.77	0.82	0.79	0.76	0.81	0.78	0.75	0.74
6	0.82	0.77	0.74	0.81	0.77	0.73	0.80	0.76	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.71
7	0.78	0.73	0.70	0.78	0.73	0.70	0.77	0.72	0.69	0.75	0.72	0.69	0.74	0.71	0.69	0.67
8	0.75	0.70	0.66	0.74	0.70	0.66	0.73	0.69	0.66	0.72	0.69	0.66	0.72	0.68	0.66	0.64
9	0.72	0.67	0.63	0.71	0.67	0.63	0.70	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.62
10	0.69	0.64	0.61	0.68	0.64	0.61	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.59

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	5398.76	5379.45	5350.77	5295.17	5237.82	5148.87	5062.25	4969.79	4858.01
45.0	5404.61	5402.27	5391.74	5370.08	5339.07	5299.86	5252.45	5178.13	5106.15
90.0	5400.51	5394.66	5373.01	5338.48	5302.20	5248.94	5171.11	5090.93	4998.47
135.0	5386.47	5396.42	5395.25	5382.37	5349.02	5305.71	5250.70	5182.23	5081.57
180.0	5398.76	5406.95	5404.61	5395.25	5364.82	5324.44	5275.28	5208.56	5106.73
225.0	5404.61	5400.51	5385.88	5361.30	5328.53	5279.96	5205.63	5130.73	5041.19
270.0	5400.51	5397.00	5381.20	5354.87	5306.88	5252.45	5189.25	5108.49	4992.03
315.0	5386.47	5357.21	5318.58	5267.67	5182.81	5101.46	4977.40	4865.03	4733.94
360.0	5398.76	5379.45	5350.77	5295.17	5237.82	5148.87	5062.25	4969.79	4858.01
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	4691.81	4542.57	4373.44	4186.76	3930.43	3715.65	3486.24	3245.72	2933.21
45.0	4993.78	4880.25	4752.67	4549.01	4354.13	4138.77	3903.51	3585.73	3318.87
90.0	4885.52	4714.63	4549.60	4363.50	4104.24	3877.17	3642.50	3337.01	3087.12
135.0	4985.01	4874.40	4714.05	4566.57	4406.22	4181.49	3985.44	3779.44	3509.65
180.0	5017.19	4906.00	4777.84	4589.39	4420.85	4238.84	3985.44	3782.95	3509.65
225.0	4898.39	4764.38	4569.50	4384.56	4180.32	3960.86	3668.83	3424.21	3169.64
270.0	4883.18	4753.26	4605.19	4393.34	4201.39	3993.05	3781.20	3511.41	3274.39
315.0	4547.26	4390.42	4216.60	4029.33	3780.03	3575.20	3365.10	3147.40	2925.01
360.0	4691.81	4542.57	4373.44	4186.76	3930.43	3715.65	3486.24	3245.72	2933.21
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	2682.73	2370.80	2127.94	1905.55	1676.14	1519.89	1386.46	1155.70	1155.70
45.0	3050.25	2781.05	2444.54	2179.44	1926.03	1663.85	1490.04	1313.30	1199.18
90.0	2783.97	2539.94	2302.92	2077.61	1827.72	1658.59	1511.69	1383.53	1158.45
135.0	3293.70	3077.17	2858.88	2583.83	2373.73	2170.66	1990.41	1798.45	1664.44
180.0	3265.03	3017.48	2780.46	2473.80	2233.86	2020.26	1828.89	1624.06	1483.60
225.0	2910.97	2582.07	2322.23	2071.17	1848.78	1615.86	1457.27	1157.87	1157.87
270.0	2977.68	2741.25	2505.99	2213.38	2005.62	1822.45	1666.78	1492.38	1373.00
315.0	2642.93	2421.13	2157.78	1971.10	1813.09	1640.44	1519.89	1413.96	1157.46
360.0	2682.73	2370.80	2127.94	1905.55	1676.14	1519.89	1386.46	1155.70	1155.70
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	1079.80	1012.61	943.32	841.73	753.77	660.60	541.33	445.59	351.78
45.0	1108.47	1020.11	965.09	908.33	838.69	738.61	653.17	567.73	480.53
90.0	1158.45	1079.10	1009.40	911.55	823.94	733.58	617.59	526.64	412.93
135.0	1543.30	1414.55	1326.18	1231.96	1154.71	1071.02	972.70	843.37	734.52
180.0	1360.71	1254.20	1144.76	1069.26	975.04	888.43	795.96	675.41	578.85
225.0	1093.84	1004.77	941.33	871.63	768.75	681.14	593.24	506.75	397.25
270.0	1267.66	1176.95	1072.19	990.84	900.72	779.58	681.85	587.04	471.16
315.0	1157.46	1137.27	1051.53	929.86	825.40	717.72	609.69	478.71	378.82
360.0	1079.80	1012.61	943.32	841.73	753.77	660.60	541.33	445.59	351.78
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	243.04	169.13	107.97	55.89	37.04	31.25	27.10	24.81	23.17
45.0	371.68	307.30	307.30	133.78	68.41	41.55	29.26	26.22	23.70
90.0	328.08	250.36	180.72	109.85	73.74	54.02	46.29	38.86	34.76
135.0	623.91	515.64	386.89	314.91	314.91	144.08	96.80	77.78	66.25
180.0	480.53	386.31	296.77	296.77	124.54	74.50	42.66	35.17	30.78
225.0	314.32	236.20	164.57	90.77	51.09	33.07	28.32	25.16	22.77
270.0	385.14	302.62	302.62	142.21	93.11	58.76	48.75	42.78	37.92
315.0	287.99	190.55	129.16	86.50	59.69	52.14	46.06	40.15	36.11
360.0	243.04	169.13	107.97	55.89	37.04	31.25	27.10	24.81	23.17

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	22.00	21.01	20.31	19.84	19.43	19.02	18.73	18.43	18.20
45.0	21.65	20.42	19.61	18.90	18.14	17.67	17.21	16.91	16.68
90.0	31.02	27.27	24.99	23.23	21.71	20.83	20.13	19.55	19.14
135.0	58.76	52.55	45.59	41.38	37.92	34.06	31.43	29.20	27.51
180.0	26.92	24.70	23.17	21.77	20.83	19.84	19.20	18.73	18.32
225.0	21.13	20.07	19.31	18.38	17.85	17.38	16.97	16.56	16.27
270.0	33.18	30.02	27.33	25.16	23.47	22.47	21.48	20.89	20.37
315.0	33.24	30.49	28.62	27.15	25.87	24.81	23.70	23.00	22.41
360.0	22.00	21.01	20.31	19.84	19.43	19.02	18.73	18.43	18.20
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	17.97	17.73	17.62	17.50	17.38	17.21	17.03	16.80	16.56
45.0	16.39	16.27	16.04	15.92	15.80	15.74	15.68	15.57	15.39
90.0	18.90	18.67	18.55	18.38	18.32	18.26	18.08	17.79	17.32
135.0	25.63	24.35	23.23	22.24	21.24	20.54	19.84	19.37	18.96
180.0	17.91	17.67	17.38	17.15	16.97	16.80	16.68	16.56	16.39
225.0	15.98	15.74	15.45	15.33	15.22	15.16	15.16	15.04	14.98
270.0	19.84	19.37	19.02	18.73	18.32	18.08	17.91	17.79	17.62
315.0	21.71	21.24	20.72	20.42	20.19	19.84	19.55	19.14	18.79
360.0	17.97	17.73	17.62	17.50	17.38	17.21	17.03	16.80	16.56
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	16.27	16.04	15.80	15.45	15.16	14.98	14.69	14.40	14.16
45.0	15.27	15.16	15.04	14.86	14.63	14.46	14.34	14.10	13.99
90.0	16.85	16.56	16.21	15.98	15.68	15.33	15.10	14.75	14.40
135.0	18.38	17.97	17.56	17.15	16.62	16.21	15.74	15.33	14.86
180.0	16.21	15.92	15.68	15.45	15.16	14.86	14.63	14.46	14.22
225.0	14.92	14.81	14.63	14.51	14.34	14.22	14.05	13.93	13.75
270.0	17.32	16.97	16.85	16.56	16.21	15.57	15.27	14.92	14.57
315.0	18.26	17.79	17.38	16.97	16.39	15.92	15.51	14.98	14.51
360.0	16.27	16.04	15.80	15.45	15.16	14.98	14.69	14.40	14.16
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	13.75	13.40	13.05	12.82	12.70	12.58	12.52	12.41	12.35
45.0	13.75	13.46	13.28	12.93	12.70	12.52	12.47	12.35	12.23
90.0	13.81	13.52	13.28	12.93	12.64	12.52	12.41	12.29	12.29
135.0	14.57	14.22	13.81	13.34	12.99	12.64	12.47	12.41	12.29
180.0	13.93	13.69	13.40	12.99	12.76	12.58	12.47	12.41	12.29
225.0	13.52	13.23	12.87	12.64	12.47	12.41	12.35	12.29	12.17
270.0	14.40	13.99	13.58	13.11	12.82	12.64	12.58	12.47	12.35
315.0	13.93	13.46	12.99	12.70	12.52	12.47	12.35	12.23	12.11
360.0	13.75	13.40	13.05	12.82	12.70	12.58	12.52	12.41	12.35
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.17	12.11	12.06	11.94	11.88	11.82	11.76	11.70	11.47
45.0	12.11	12.06	11.94	11.88	11.82	11.70	11.65	11.59	11.47
90.0	12.17	12.11	12.06	11.94	11.82	11.65	11.53	11.41	11.29
135.0	12.17	12.11	12.00	11.94	11.82	11.70	11.65	11.53	11.47
180.0	12.23	12.17	12.06	11.94	11.88	11.82	11.70	11.65	11.59
225.0	12.11	12.00	11.94	11.88	11.76	11.65	11.59	11.47	11.35
270.0	12.29	12.17	12.11	12.00	11.88	11.70	11.59	11.47	11.29
315.0	12.00	11.88	11.82	11.70	11.65	11.53	11.47	11.35	11.24
360.0	12.17	12.11	12.06	11.94	11.88	11.82	11.76	11.70	11.47

Intensity data(cd)

C/ γ (°)	90.0
0.0	11.41
45.0	11.35
90.0	11.29
135.0	11.35
180.0	11.41
225.0	11.35
270.0	11.24
315.0	11.24
360.0	11.41