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

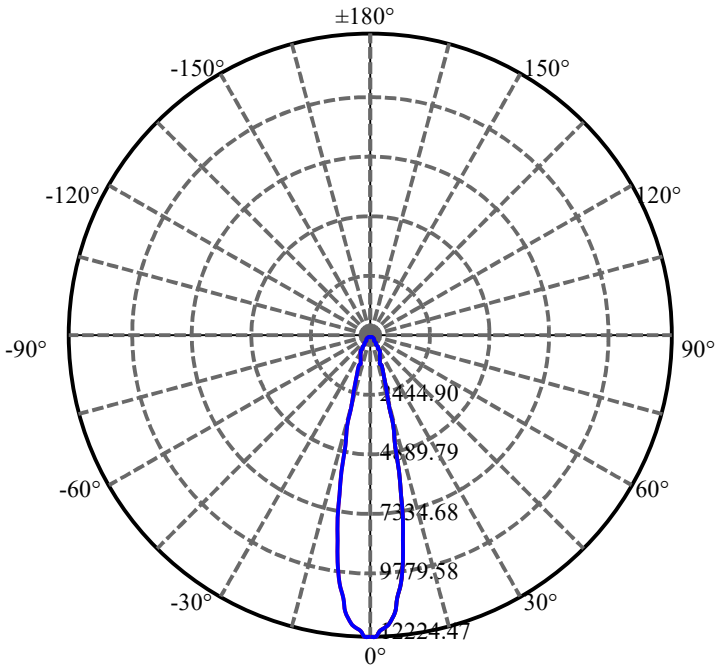
Client: NT
LumCAT: 3-2383-L2-K0
Luminaire: 92.70.412.00
Report No: 20241226-B012
Ballast type: AC

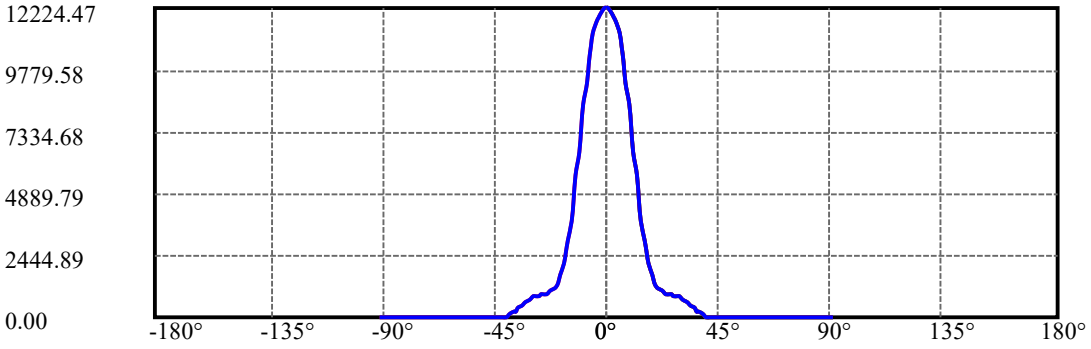
Test No: 20241226-C012	Voltage(V): 34.440
LampCAT: CITIZEN CLU038	Current(A): 0.451
Lamp flux(lm): 2649.0	Power (W): 15.532
Number of Lamps: 1	PF: 0.000
Length(mm): 85	Width(mm): 85
Phm Type: C	Height(mm): 52

Photometric Results

Lumens(lm): 2586.27, Efficiency(%): 97.63% , Luminous Efficacy(lm/W): 166.51
Central intensity(cd): 12224.470, Maximum intensity(cd): 12224.470
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=23.0
[C90/270]Total=23.0
Field angle(10%Imax): [C0/180]Total=40.2
[C90/270]Total=40.2

Light Distribution Curve [Unit:cd]





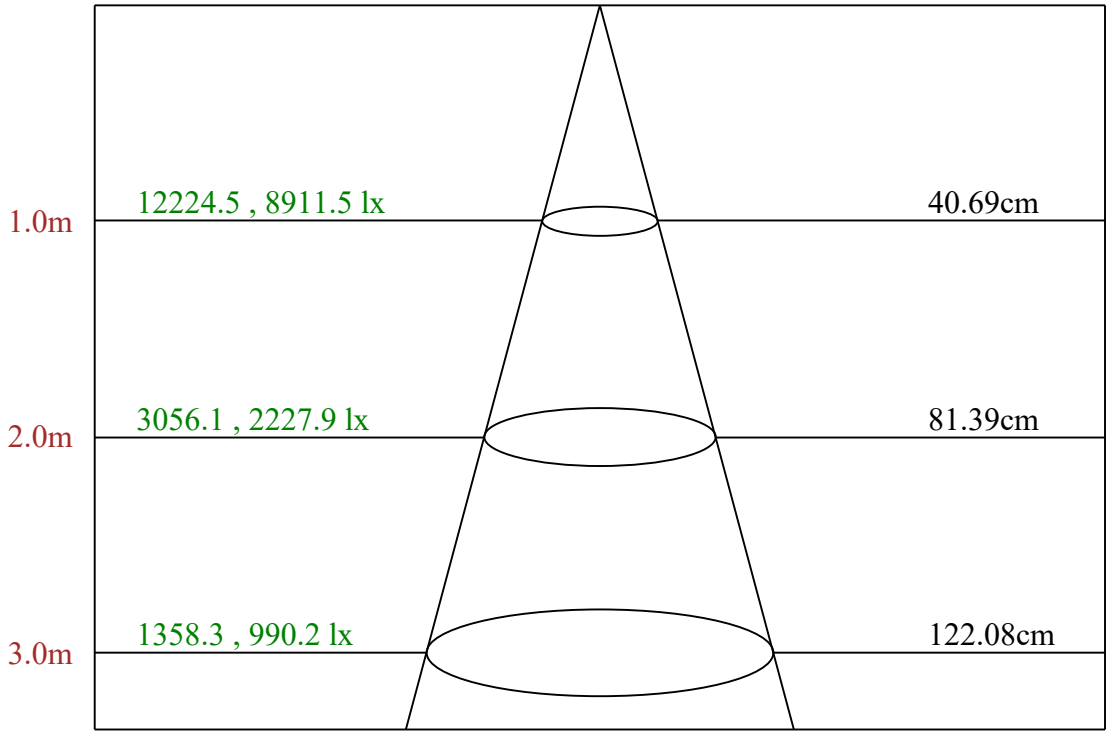
C0(Max):

C0/C180:

C90/C270:

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

Lux distance Curve

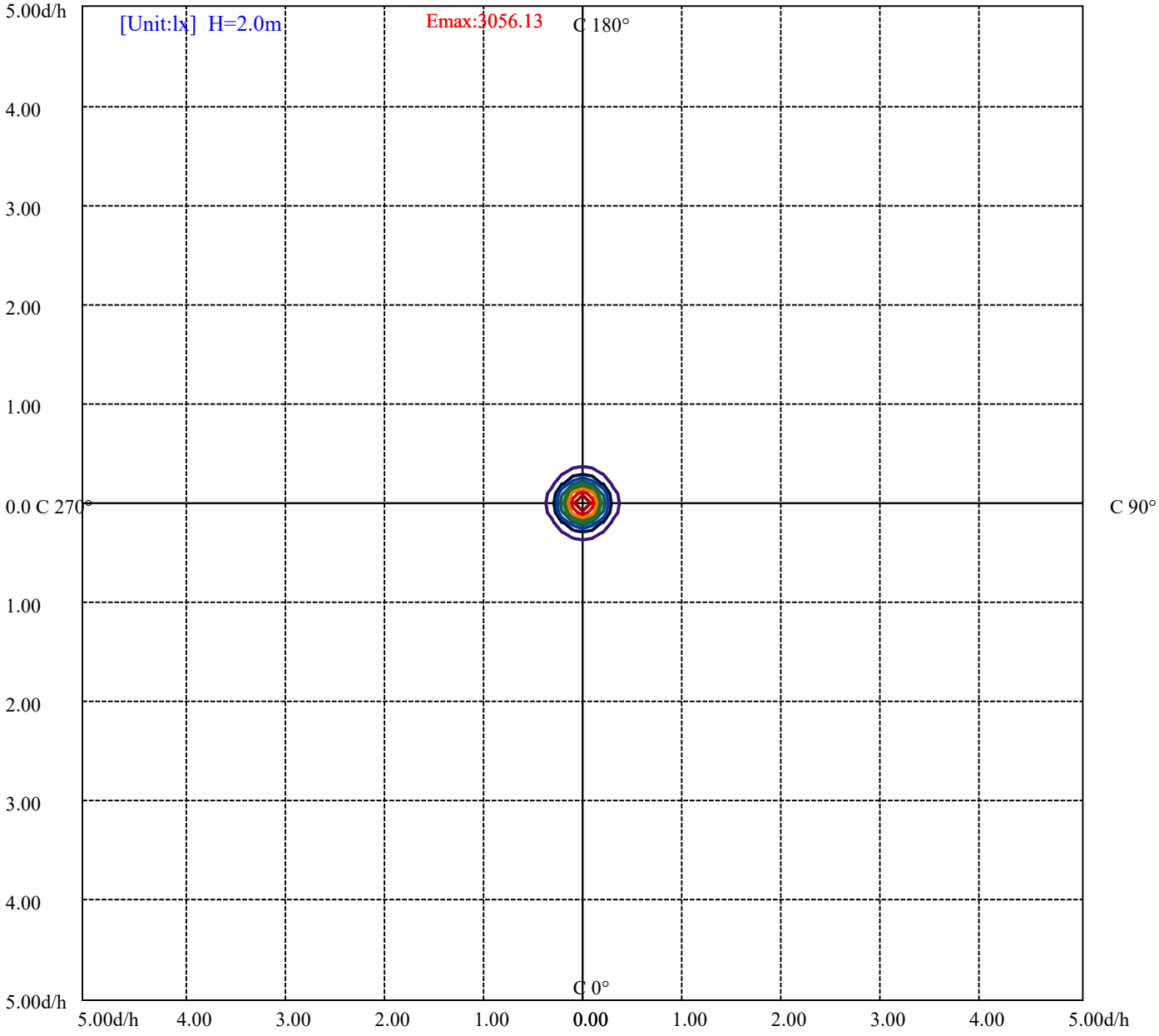


Max , Ave

Beam angle of C0 plane 23.00

NT NT 3-2383-L2-K0

ISO illuminance diagram



(10%Emax) 305.6125
(20%Emax) 611.2225
(30%Emax) 916.835
(40%Emax) 1222.448
(50%Emax) 1528.057
(60%Emax) 1833.67
(70%Emax) 2139.282
(80%Emax) 2444.893
(90%Emax) 2750.5

Equipment: GMS1980
Temperature(°C): 25.0

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

Operator: NT07
Distance(m): 7.65

NT NT 3-2383-L2-K0

Luminance Limitting Curve(no luminous side)

Luminance Table

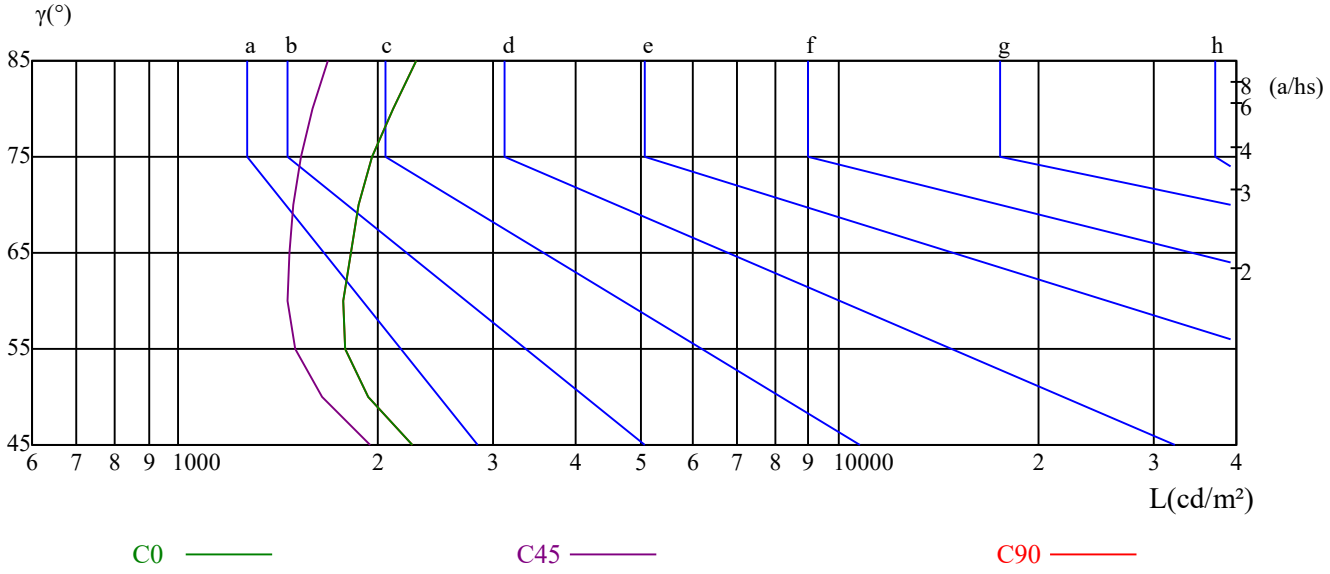
γ	45	50	55	60	65	70	75	80	85
C0	2259	1939	1792	1773	1824	1875	1970	2109	2294
C45	1952	1650	1502	1461	1477	1488	1529	1596	1684
C90	2259	1939	1792	1773	1824	1875	1970	2109	2294

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4217	4217	4217	6467	6467	6467	18332	18332	18332

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

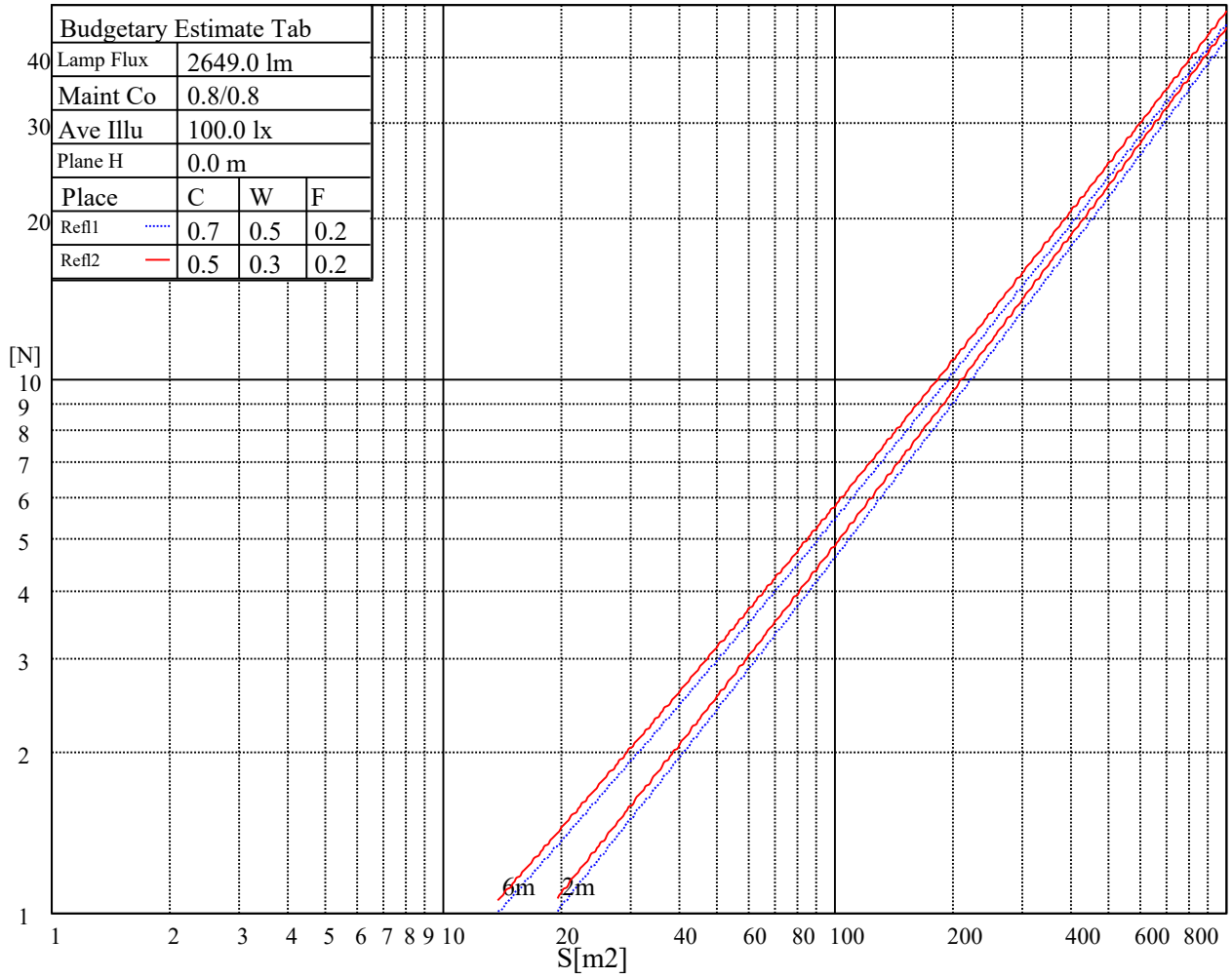
Date: 2024/12/26
Humidity(%): 60.0%

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	13.13	14.05	13.50	14.36	14.68	13.05	13.96	13.41	14.27	14.59
	3H	13.12	13.94	13.51	14.28	14.62	13.04	13.86	13.43	14.20	14.54
	4H	13.20	13.95	13.60	14.31	14.68	13.13	13.89	13.53	14.24	14.61
	6H	13.38	14.07	13.80	14.45	14.85	13.34	14.03	13.76	14.41	14.81
	8H	13.49	14.15	13.92	14.54	14.95	13.46	14.12	13.89	14.51	14.92
	12H	13.65	14.27	14.07	14.67	15.08	13.62	14.25	14.05	14.64	15.06
4H	2H	12.87	13.63	13.27	13.98	14.35	12.78	13.54	13.18	13.89	14.26
	3H	12.92	13.56	13.35	13.95	14.37	12.84	13.48	13.27	13.88	14.29
	4H	13.13	13.68	13.57	14.10	14.55	13.07	13.62	13.51	14.04	14.49
	6H	13.43	13.91	13.90	14.37	14.82	13.40	13.88	13.87	14.34	14.79
	8H	13.66	14.11	14.15	14.57	15.05	13.66	14.11	14.14	14.56	15.04
	12H	13.96	14.38	14.45	14.83	15.35	13.96	14.38	14.46	14.83	15.35
8H	4H	13.09	13.54	13.57	14.00	14.47	13.03	13.48	13.52	13.94	14.41
	6H	13.53	13.89	14.03	14.37	14.89	13.50	13.87	14.01	14.35	14.87
	8H	13.93	14.24	14.47	14.76	15.26	13.93	14.24	14.47	14.76	15.26
	12H	14.39	14.62	14.93	15.14	15.66	14.40	14.63	14.94	15.15	15.67
12H	4H	13.08	13.49	13.57	13.95	14.47	13.02	13.43	13.51	13.89	14.41
	6H	13.61	13.91	14.14	14.44	14.93	13.59	13.89	14.12	14.42	14.91
	8H	14.03	14.26	14.58	14.78	15.30	14.03	14.26	14.58	14.78	15.31
Variation with the observer position at spacings:											
S = 1.0H		5.8/-5.8					5.8/-5.8				
S = 1.5H		7.8/-4.3					7.8/-4.3				
S = 2.0H		9.2/-3.3					9.2/-3.3				
Standard tables:		BK3					BK3				
Uncorrected UGR		-4.2					-4.2				

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	1.16	1.16	1.16	1.14	1.14	1.14	1.08	1.08	1.08	1.04	1.04	1.04	1.00	1.00	1.00	0.98
1	1.10	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.93
2	1.04	1.01	0.98	1.02	1.00	0.97	0.99	0.97	0.95	0.97	0.95	0.93	0.94	0.92	0.91	0.90
3	0.99	0.95	0.92	0.98	0.95	0.92	0.96	0.93	0.90	0.93	0.91	0.89	0.91	0.89	0.88	0.86
4	0.95	0.91	0.88	0.94	0.90	0.87	0.92	0.89	0.86	0.90	0.88	0.85	0.89	0.86	0.84	0.83
5	0.91	0.87	0.84	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.86	0.84	0.82	0.80
6	0.88	0.84	0.81	0.87	0.83	0.80	0.86	0.82	0.80	0.85	0.82	0.79	0.84	0.81	0.79	0.78
7	0.85	0.81	0.78	0.84	0.80	0.77	0.83	0.80	0.77	0.82	0.79	0.77	0.81	0.79	0.76	0.75
8	0.82	0.78	0.75	0.82	0.78	0.75	0.81	0.77	0.75	0.80	0.77	0.74	0.79	0.76	0.74	0.73
9	0.80	0.76	0.73	0.79	0.75	0.73	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.72	0.71
10	0.77	0.73	0.71	0.77	0.73	0.70	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.69

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	12228.86	12152.78	11674.71	11674.71	11518.46	11125.77	10633.01	9851.74	9120.20
45.0	12240.57	12240.57	12182.04	12082.56	11877.73	11602.67	11257.39	10824.32	10127.90
90.0	12234.71	12170.34	12076.70	11656.57	11656.57	11208.29	10720.21	10126.21	9411.06
135.0	12193.75	12223.01	12187.90	12088.41	11936.25	11596.82	11198.87	10672.16	9847.00
180.0	12228.86	12246.42	12199.60	12094.26	11918.69	11520.74	11029.15	10379.55	9460.75
225.0	12240.57	12170.34	11599.80	11599.80	11500.90	10845.45	10156.64	9384.73	8328.98
270.0	12234.71	12217.16	12164.49	12029.89	11772.39	11438.81	10824.32	10168.87	9408.08
315.0	12193.75	12082.56	11629.06	11629.06	11361.62	10743.62	10105.14	9357.81	8540.25
360.0	12228.86	12152.78	11674.71	11674.71	11518.46	11125.77	10633.01	9851.74	9120.20

C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	8110.69	7255.68	6369.65	5485.37	4452.45	3687.56	2974.76	2331.01	1742.86
45.0	9460.75	8506.83	7664.11	6809.68	5709.46	4866.73	4076.68	3339.29	2988.16
90.0	8403.30	7548.88	6645.29	5511.71	4664.89	3690.49	2987.63	2359.69	1874.53
135.0	9086.20	8290.30	7430.02	6540.47	5434.40	4579.97	3784.06	3052.53	3052.53
180.0	8670.69	7822.12	6727.75	5844.06	4954.51	3883.55	3122.76	2953.05	2302.92
225.0	7450.56	6563.36	5456.11	4594.07	3574.03	2841.33	2262.54	1857.56	1545.64
270.0	8372.23	7470.98	6558.03	5422.69	4539.01	3702.13	3005.72	3005.72	1806.65
315.0	7664.75	6545.21	5654.50	4798.32	3798.17	3087.71	2326.91	1872.19	1572.56
360.0	8110.69	7255.68	6369.65	5485.37	4452.45	3687.56	2974.76	2331.01	1742.86

C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1474.83	1147.22	1147.22	1088.87	1026.84	978.67	932.50	904.29	881.29
45.0	2988.16	1594.80	1393.48	1235.47	1148.86	1078.04	1006.06	964.51	931.15
90.0	1499.40	1162.90	1162.90	1091.09	999.97	944.08	899.37	863.91	828.44
135.0	1895.02	1619.96	1389.97	1265.31	1151.20	1082.14	1026.54	973.87	937.00
180.0	1642.79	1452.00	1306.87	1176.36	1098.53	1036.49	986.75	937.59	905.40
225.0	1278.78	1147.33	1147.33	1058.03	1002.49	958.54	921.38	885.21	860.11
270.0	1529.84	1341.98	1176.95	1079.21	1007.82	936.42	890.19	853.90	818.79
315.0	1165.01	1165.01	1121.99	1038.36	988.68	949.35	915.70	891.36	862.97
360.0	1474.83	1147.22	1147.22	1088.87	1026.84	978.67	932.50	904.29	881.29

C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	854.31	836.29	818.61	770.33	703.91	622.85	532.03	411.82	313.91
45.0	897.21	873.80	854.49	832.83	798.89	739.20	641.47	554.27	460.05
90.0	804.45	784.14	763.72	735.51	666.57	594.65	513.71	406.26	319.94
135.0	905.40	879.07	852.15	835.76	807.08	755.58	666.04	578.26	481.11
180.0	877.31	848.63	830.49	806.50	745.64	672.48	587.62	472.34	377.53
225.0	833.36	816.86	785.49	710.46	632.39	544.20	451.91	337.73	250.53
270.0	792.45	774.90	751.49	720.47	665.46	595.23	494.57	410.89	327.20
315.0	844.13	827.57	800.70	734.98	661.36	573.40	452.14	352.66	234.50
360.0	854.31	836.29	818.61	770.33	703.91	622.85	532.03	411.82	313.91

C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	220.98	140.45	64.08	33.18	22.88	20.54	18.84	17.44	16.62
45.0	364.07	317.25	317.25	91.94	46.12	26.51	24.05	21.83	20.37
90.0	237.13	161.64	84.97	48.98	34.47	30.26	27.56	24.76	22.88
135.0	352.95	302.03	302.03	79.30	40.97	26.16	23.17	21.36	20.01
180.0	307.30	307.30	99.72	48.81	26.39	22.18	19.49	18.20	16.97
225.0	170.36	101.95	43.19	25.98	23.88	21.54	20.13	19.14	18.38
270.0	306.72	208.69	87.96	49.80	31.78	28.62	25.69	24.05	22.41
315.0	153.80	89.25	40.79	26.74	24.76	22.82	21.36	19.96	19.14
360.0	220.98	140.45	64.08	33.18	22.88	20.54	18.84	17.44	16.62

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	16.04	15.27	14.86	14.51	14.22	13.93	13.69	13.52	13.34
45.0	19.25	18.55	17.79	17.21	16.85	16.15	15.74	15.22	14.81
90.0	21.01	19.96	19.20	18.49	17.79	17.44	16.80	16.39	15.98
135.0	19.20	18.38	17.62	16.91	16.33	15.51	14.92	14.51	14.16
180.0	16.15	15.51	14.92	14.57	14.28	14.05	13.81	13.69	13.58
225.0	17.62	16.91	16.15	15.68	15.39	14.92	14.51	14.16	13.99
270.0	21.19	19.84	18.96	18.55	17.79	17.38	16.68	16.27	15.80
315.0	18.38	17.44	16.80	16.21	15.63	15.16	14.63	14.22	13.93
360.0	16.04	15.27	14.86	14.51	14.22	13.93	13.69	13.52	13.34

C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.17	13.05	12.87	12.82	12.70	12.58	12.52	12.52	12.52
45.0	14.40	14.05	13.87	13.64	13.52	13.40	13.17	13.17	13.05
90.0	15.63	15.10	14.86	14.51	14.34	13.99	13.81	13.46	13.40
135.0	13.93	13.75	13.58	13.46	13.28	13.28	13.17	13.11	13.05
180.0	13.46	13.28	13.11	12.99	12.82	12.76	12.76	12.76	12.76
225.0	13.81	13.58	13.40	13.40	13.34	13.28	13.23	13.23	13.17
270.0	15.51	14.98	14.69	14.34	14.28	13.93	13.81	13.69	13.58
315.0	13.69	13.52	13.34	13.28	13.23	13.11	13.05	12.99	12.99
360.0	13.17	13.05	12.87	12.82	12.70	12.58	12.52	12.52	12.52

C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	12.52	12.52	12.58	12.64	12.64	12.58	12.52	12.41	12.35
45.0	12.93	12.87	12.82	12.76	12.58	12.47	12.41	12.29	12.29
90.0	13.28	13.11	12.93	12.82	12.76	12.64	12.58	12.52	12.41
135.0	13.05	12.93	12.87	12.87	12.76	12.76	12.58	12.52	12.47
180.0	12.82	12.82	12.87	12.87	12.82	12.64	12.58	12.47	12.41
225.0	13.17	12.99	12.93	12.76	12.58	12.47	12.35	12.29	12.29
270.0	13.52	13.40	13.28	13.05	12.93	12.82	12.70	12.58	12.52
315.0	12.87	12.82	12.70	12.58	12.52	12.41	12.35	12.29	12.29
360.0	12.52	12.52	12.58	12.64	12.64	12.58	12.52	12.41	12.35

C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.23	12.11	12.06	12.00	11.88	11.82	11.76	11.70	11.65
45.0	12.23	12.17	12.11	12.06	12.00	11.94	11.88	11.76	11.76
90.0	12.35	12.29	12.29	12.23	12.23	12.23	12.23	12.17	12.11
135.0	12.41	12.35	12.29	12.17	12.11	12.06	12.00	11.88	11.88
180.0	12.29	12.17	12.11	12.00	12.00	11.88	11.82	11.76	11.70
225.0	12.17	12.06	12.00	12.00	11.88	11.82	11.76	11.70	11.65
270.0	12.41	12.35	12.29	12.29	12.29	12.29	12.29	12.29	12.17
315.0	12.23	12.17	12.06	12.00	11.88	11.88	11.82	11.76	11.70
360.0	12.23	12.11	12.06	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	11.59	11.53	11.47	11.41	11.41	11.35	11.35
45.0	11.70	11.65	11.59	11.53	11.53	11.47	11.41	11.35	11.35
90.0	12.11	12.00	11.88	11.70	11.59	11.47	11.35	11.35	11.29
135.0	11.76	11.70	11.70	11.65	11.59	11.59	11.53	11.47	11.41
180.0	11.65	11.65	11.59	11.59	11.59	11.53	11.47	11.41	11.29
225.0	11.65	11.59	11.53	11.53	11.47	11.41	11.35	11.29	11.18
270.0	12.11	12.00	11.82	11.70	11.59	11.53	11.47	11.47	11.29
315.0	11.65	11.59	11.65	11.53	11.53	11.47	11.41	11.35	11.24
360.0	11.65	11.59	11.59	11.53	11.47	11.41	11.41	11.35	11.35

Intensity data(cd)

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