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NT

Client: NT

LumCAT: 2-2734-L2-K0

Luminaire: 92.70.412.00

Report No: 20241226-B004

Ballast type: AC

Test No: 20241226-C004

LampCAT: CITIZEN CLU038

Lamp flux(lm): 2649.0

Number of Lamps: 1

Length(mm): 75

Phm Type: C

Voltage(V): 34.510

Current(A): 0.451

Power (W): 15.564

PF: 0.000

Width(mm): 75

Height(mm): 44

Photometric Results

Lumens(lm): 2569.54, Efficiency(%): 97.00% , Luminous Efficacy(lm/W): 165.10

Central intensity(cd): 16590.250, Maximum intensity(cd): 16590.250

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=17.0

[C90/270]Total=17.0

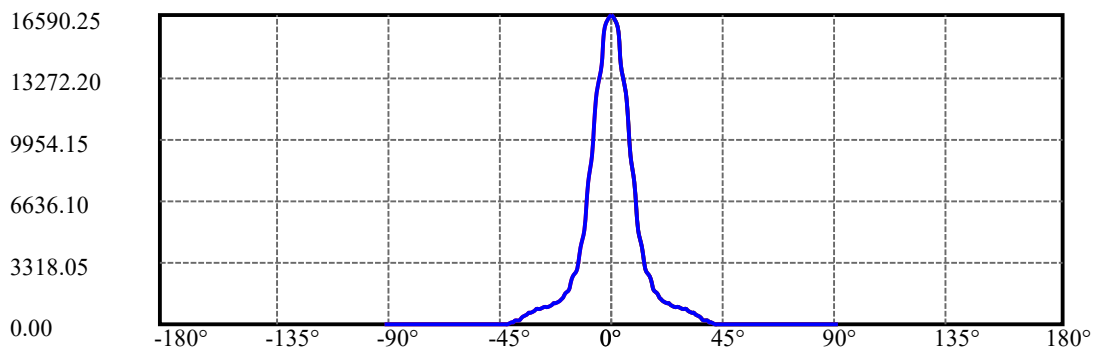
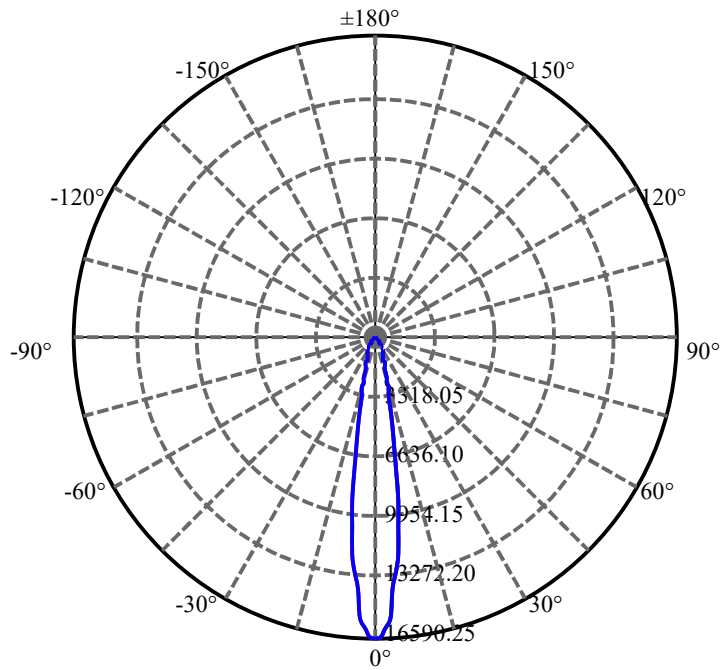
Field angle(10%Imax): [C0/180]Total=35.8

[C90/270]Total=35.8

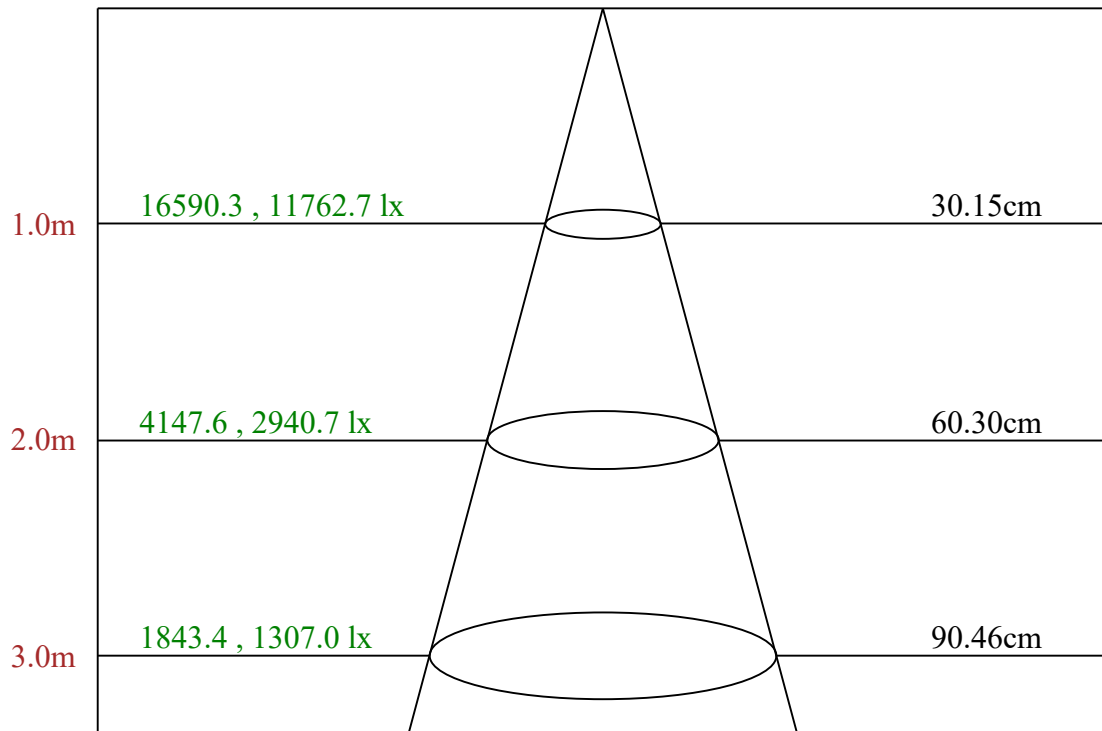
Equipment: GMS1980
Temperature(°C): 25.0

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

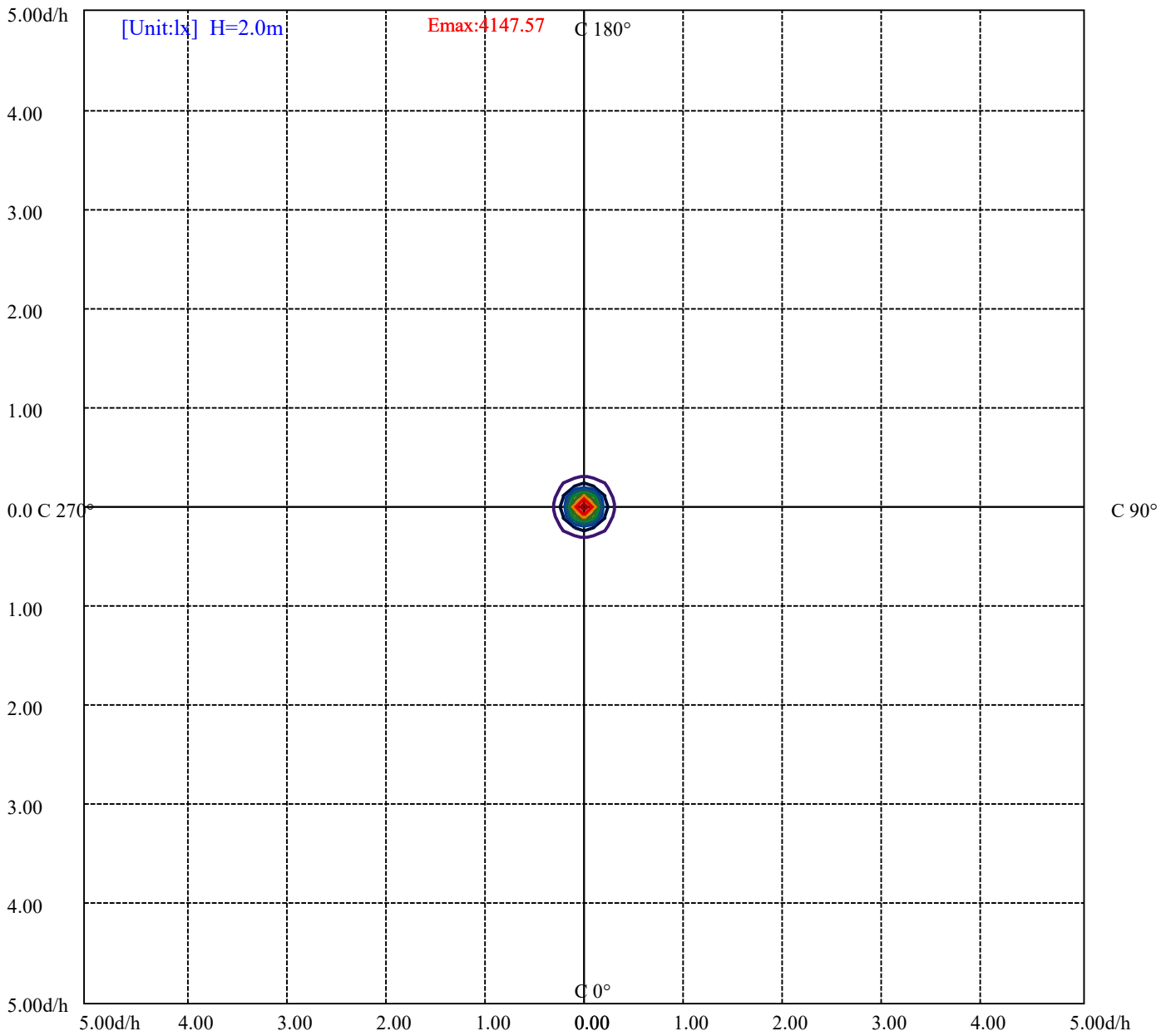
Operator: NT07
Distance(m): 7.65



C0(Max): —————
C0/C180: —————
C90/C270: —————



Max , Ave Beam angle of C0 plane 17.15



- (10%Emax) 414.755
- (20%Emax) 829.5125
- (30%Emax) 1244.267
- (40%Emax) 1659.022
- (50%Emax) 2073.78
- (60%Emax) 2488.535
- (70%Emax) 2903.3
- (80%Emax) 3318.05
- (90%Emax) 3732.8

Luminance Table

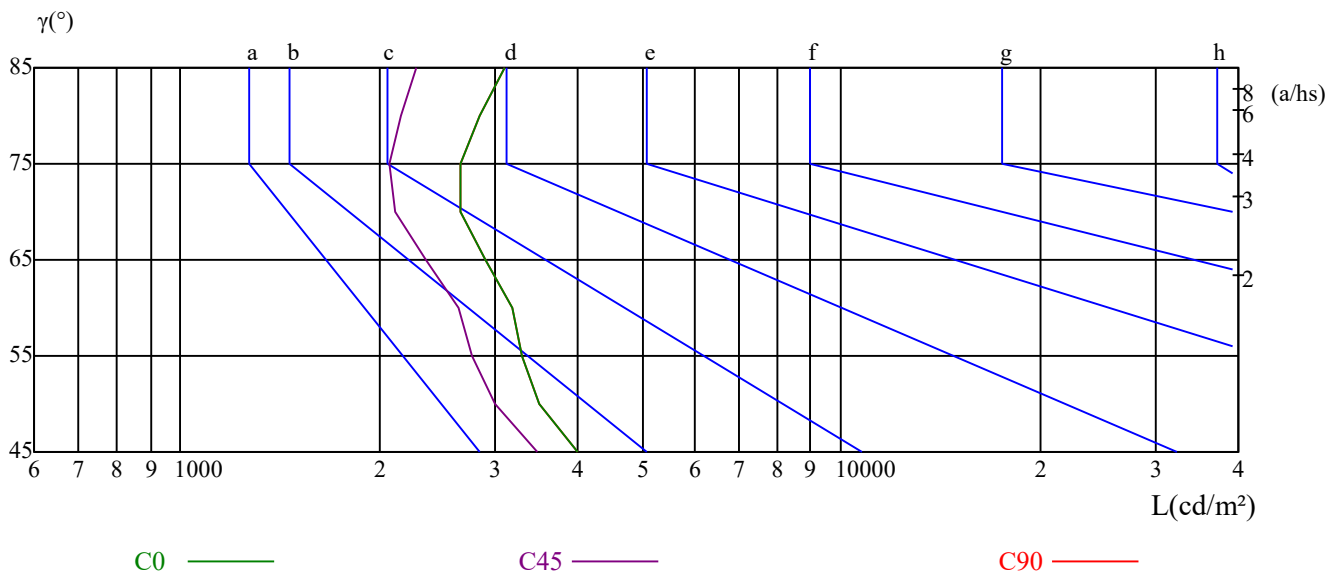
γ	45	50	55	60	65	70	75	80	85
C0	4005	3497	3284	3180	2893	2653	2659	2844	3091
C45	3473	2988	2762	2631	2351	2113	2071	2157	2272
C90	4005	3497	3284	3180	2893	2653	2659	2844	3091

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
6533	6533	6533	8482	8482	8482	23815	23815	23815

Glare Table

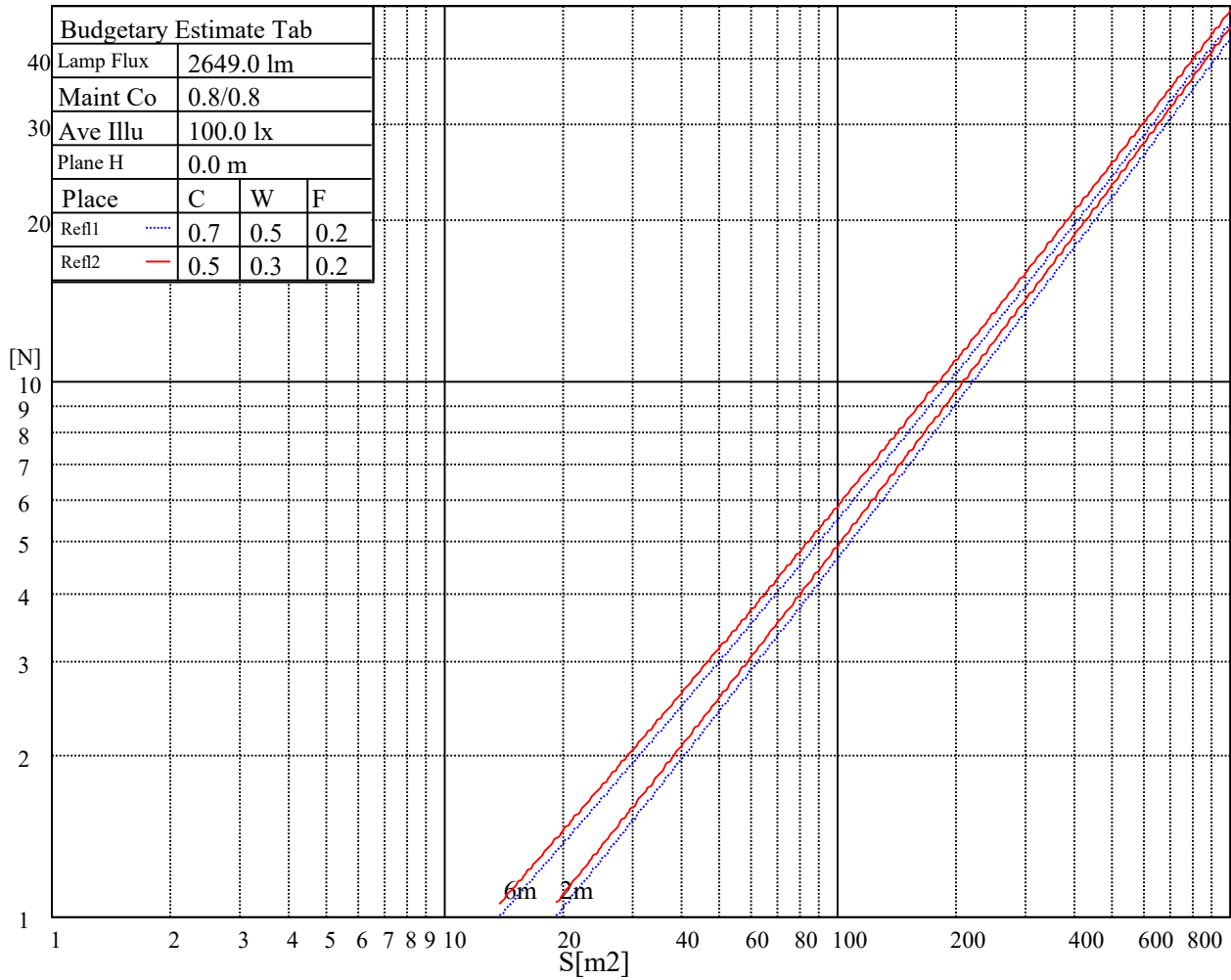
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	13.97	14.90	14.33	15.21	15.52	13.37	14.29	13.73	14.60	14.92
	3H	14.02	14.84	14.40	15.18	15.52	13.45	14.28	13.84	14.62	14.96
	4H	14.11	14.87	14.51	15.23	15.59	13.59	14.35	13.99	14.71	15.08
	6H	14.32	15.01	14.73	15.39	15.79	13.86	14.56	14.28	14.93	15.33
	8H	14.44	15.11	14.86	15.49	15.90	14.01	14.68	14.44	15.07	15.47
	12H	14.61	15.24	15.04	15.64	16.05	14.21	14.84	14.63	15.23	15.65
4H	2H	13.75	14.51	14.15	14.87	15.23	13.17	13.93	13.57	14.28	14.65
	3H	13.87	14.51	14.30	14.91	15.33	13.34	13.99	13.77	14.38	14.80
	4H	14.10	14.65	14.54	15.08	15.53	13.64	14.19	14.08	14.62	15.07
	6H	14.42	14.91	14.90	15.37	15.82	14.04	14.53	14.51	14.98	15.44
	8H	14.68	15.13	15.16	15.59	16.07	14.33	14.78	14.82	15.24	15.72
	12H	15.00	15.41	15.49	15.87	16.39	14.68	15.10	15.17	15.55	16.07
8H	4H	14.07	14.52	14.55	14.98	15.45	13.63	14.08	14.12	14.54	15.02
	6H	14.54	14.91	15.04	15.39	15.90	14.19	14.56	14.70	15.04	15.56
	8H	14.96	15.27	15.50	15.79	16.29	14.66	14.97	15.20	15.49	15.99
	12H	15.44	15.68	15.99	16.19	16.72	15.18	15.41	15.72	15.93	16.45
12H	4H	14.06	14.48	14.55	14.93	15.45	13.63	14.05	14.12	14.50	15.02
	6H	14.62	14.93	15.15	15.45	15.95	14.29	14.60	14.82	15.12	15.62
	8H	15.06	15.30	15.61	15.82	16.34	14.78	15.01	15.32	15.53	16.06
Variation with the observer position at spacings:											
S = 1.0H	5.5/-5.3					5.5/-5.3					
S = 1.5H	7.6/-4.1					7.6/-4.1					
S = 2.0H	9.0/-3.2					9.0/-3.2					
Standard tables:	BK2					BK2					
Uncorrected UGR	-3.1					-3.1					

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	1.07	1.05	1.07	1.05	1.03	1.03	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.94	0.93
2	1.03	1.00	0.97	1.02	0.99	0.96	0.99	0.96	0.94	0.96	0.94	0.92	0.93	0.92	0.90	0.89
3	0.98	0.95	0.92	0.97	0.94	0.91	0.95	0.92	0.90	0.93	0.90	0.88	0.90	0.89	0.87	0.86
4	0.94	0.90	0.87	0.93	0.89	0.87	0.91	0.88	0.86	0.90	0.87	0.85	0.88	0.86	0.84	0.82
5	0.91	0.86	0.83	0.90	0.86	0.83	0.88	0.85	0.82	0.87	0.84	0.81	0.85	0.83	0.81	0.80
6	0.87	0.83	0.80	0.87	0.83	0.80	0.85	0.82	0.79	0.84	0.81	0.79	0.83	0.80	0.78	0.77
7	0.84	0.80	0.77	0.84	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.81	0.78	0.76	0.75
8	0.82	0.77	0.74	0.81	0.77	0.74	0.80	0.77	0.74	0.79	0.76	0.74	0.78	0.76	0.73	0.72
9	0.79	0.75	0.72	0.79	0.75	0.72	0.78	0.74	0.72	0.77	0.74	0.72	0.76	0.74	0.71	0.70
10	0.77	0.73	0.70	0.76	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.75	0.72	0.69	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	16565.38	16325.44	15851.40	15125.73	11612.68	11612.68	11276.17	9529.86	8110.11
45.0	16653.16	16577.08	16284.47	15576.35	14710.22	13627.55	12369.32	10678.02	9261.77
90.0	16559.53	16225.95	15494.42	14628.28	11633.16	11633.16	10617.80	9226.13	7480.40
135.0	16582.94	16559.53	16290.32	15787.03	14827.26	13808.97	12632.67	11362.73	9659.72
180.0	16565.38	16571.23	16342.99	15874.81	15184.25	13996.24	12866.76	11590.97	9887.96
225.0	16653.16	16465.89	16067.94	15441.75	14318.11	11576.39	11576.39	10194.09	8757.95
270.0	16559.53	16664.87	16559.53	16144.02	15541.24	14692.66	13645.11	12117.67	10748.24
315.0	16582.94	16378.11	15810.44	15078.91	13340.79	11615.02	11269.74	9855.83	8416.76
360.0	16565.38	16325.44	15851.40	15125.73	11612.68	11612.68	11276.17	9529.86	8110.11
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	6443.97	5297.52	4343.60	3608.56	2922.67	2518.28	2200.50	1940.08	1694.28
45.0	7851.38	6552.18	5141.79	4228.84	3351.00	2953.05	2953.05	2057.71	1816.01
90.0	6214.56	5112.00	4008.85	3338.18	2818.50	2329.25	2028.45	1786.17	1594.80
135.0	8290.30	6979.39	5791.39	4533.15	3760.66	3169.58	3046.68	2563.93	1993.92
180.0	8530.24	7154.96	5645.08	4632.64	3667.02	3087.65	2970.60	2970.60	1986.90
225.0	7349.90	6084.06	4766.13	3949.74	3325.31	2845.42	2381.34	2095.75	1861.66
270.0	9378.82	7617.29	6300.53	4925.25	4064.97	3386.11	2982.31	2982.31	2089.31
315.0	7033.88	5529.26	4536.72	3765.98	3179.59	2624.21	2279.51	1934.81	1722.96
360.0	6443.97	5297.52	4343.60	3608.56	2922.67	2518.28	2200.50	1940.08	1694.28
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1537.44	1405.18	1165.53	1165.53	1114.39	1054.63	992.60	953.27	920.62
45.0	1629.91	1481.26	1332.62	1241.32	1171.68	1109.06	1044.10	997.87	956.32
90.0	1405.77	1163.66	1163.66	1106.89	1024.79	969.66	921.96	873.86	841.73
135.0	1739.35	1576.07	1436.79	1300.43	1213.23	1143.00	1079.80	1013.08	969.19
180.0	1771.53	1604.16	1460.19	1313.30	1224.93	1152.95	1089.16	1018.94	974.46
225.0	1636.93	1490.63	1369.49	1155.06	1155.06	1107.95	1038.19	991.02	949.59
270.0	1842.93	1650.39	1453.17	1321.50	1220.84	1141.25	1056.39	999.62	937.00
315.0	1555.59	1379.43	1165.53	1165.53	1098.70	1044.04	998.22	961.47	918.92
360.0	1537.44	1405.18	1165.53	1165.53	1114.39	1054.63	992.60	953.27	920.62
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	884.98	859.17	825.34	758.63	691.91	615.77	534.08	426.86	339.90
45.0	924.13	889.02	863.27	811.77	750.32	659.02	581.19	501.01	420.25
90.0	813.52	777.35	734.40	677.28	594.24	524.19	449.75	373.72	282.31
135.0	932.32	893.11	869.12	838.10	791.87	711.11	636.20	557.19	451.27
180.0	936.42	896.04	867.95	836.35	791.28	714.03	639.71	560.12	455.95
225.0	907.04	877.25	848.11	807.14	730.89	657.68	579.90	501.71	401.87
270.0	898.38	865.02	829.32	802.40	763.19	707.01	622.74	551.93	474.68
315.0	891.30	869.06	839.10	792.98	711.98	638.01	558.19	453.43	368.22
360.0	884.98	859.17	825.34	758.63	691.91	615.77	534.08	426.86	339.90
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	255.68	181.42	105.34	60.57	33.18	26.63	25.34	23.82	23.06
45.0	317.84	297.35	297.35	101.48	58.00	34.12	30.20	28.85	27.92
90.0	212.44	150.93	99.20	53.08	36.64	31.95	29.67	28.44	27.04
135.0	364.65	301.45	301.45	116.40	68.12	37.51	29.96	28.85	27.74
180.0	369.92	307.30	307.30	123.07	62.91	35.41	24.87	23.17	21.36
225.0	321.82	245.50	157.25	96.68	43.72	25.81	22.82	21.19	19.72
270.0	398.60	305.55	305.55	219.23	108.97	58.35	38.62	32.83	31.31
315.0	265.63	191.72	128.87	69.17	44.18	33.77	32.66	31.84	31.60
360.0	255.68	181.42	105.34	60.57	33.18	26.63	25.34	23.82	23.06

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	22.36	21.65	20.89	20.42	19.90	19.20	18.84	18.49	18.14
45.0	26.92	26.34	25.34	24.35	23.58	22.82	21.83	21.01	20.54
90.0	25.81	25.11	23.94	23.06	22.30	21.36	20.78	20.54	20.19
135.0	26.69	25.87	24.93	23.94	23.06	22.30	21.65	20.66	20.13
180.0	20.60	19.78	19.14	18.49	18.02	17.50	16.97	16.56	16.27
225.0	18.79	18.20	17.67	17.44	17.44	17.38	17.44	17.56	17.79
270.0	30.55	29.14	27.86	27.04	26.39	25.63	24.99	23.58	22.94
315.0	30.49	29.50	28.38	27.62	26.98	25.69	24.87	24.40	24.11
360.0	22.36	21.65	20.89	20.42	19.90	19.20	18.84	18.49	18.14
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	17.32	17.09	16.74	16.44	16.09	15.74
45.0	20.31	20.01	19.31	18.90	18.67	18.32	17.97	17.56	17.21
90.0	19.78	19.08	19.08	18.96	18.61	18.55	18.20	17.56	16.62
135.0	20.01	19.78	19.08	18.67	18.32	18.20	17.67	17.21	16.91
180.0	15.92	15.68	15.39	15.16	14.98	14.86	14.75	14.57	14.51
225.0	18.08	18.14	18.14	18.32	18.49	18.32	18.02	17.91	17.50
270.0	22.88	22.77	22.53	21.95	21.83	21.19	20.48	19.78	18.90
315.0	23.47	22.59	21.71	21.71	21.48	21.19	20.72	20.13	19.25
360.0	17.97	17.73	17.62	17.32	17.09	16.74	16.44	16.09	15.74
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	15.27	14.98	14.69	14.40	14.10	13.81	13.58	13.23	12.99
45.0	16.74	16.09	15.68	15.22	14.63	14.28	13.93	13.52	13.17
90.0	15.51	15.04	14.51	14.05	13.69	13.34	13.17	12.99	12.99
135.0	16.68	16.27	15.74	15.39	14.46	13.81	13.52	13.23	12.99
180.0	14.40	14.28	14.10	14.05	13.81	13.58	13.40	13.17	12.99
225.0	17.32	16.80	16.33	15.27	14.75	14.46	14.16	13.75	13.28
270.0	18.26	17.15	16.68	16.39	15.39	14.28	13.93	13.58	13.40
315.0	17.97	17.15	16.50	15.22	14.57	14.16	13.52	13.17	12.82
360.0	15.27	14.98	14.69	14.40	14.10	13.81	13.58	13.23	12.99
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	12.70	12.52	12.41	12.29	12.23	12.17	12.11	12.11	12.06
45.0	12.87	12.58	12.35	12.17	12.11	12.06	12.00	11.94	11.88
90.0	12.87	12.82	12.76	12.70	12.64	12.52	12.41	12.35	12.23
135.0	12.76	12.52	12.29	12.23	12.11	12.06	12.00	11.88	11.94
180.0	12.82	12.64	12.41	12.35	12.23	12.17	12.06	12.00	11.94
225.0	12.93	12.52	12.29	12.17	12.11	12.00	12.00	11.88	11.88
270.0	13.23	13.05	12.93	12.82	12.82	12.76	12.64	12.64	12.52
315.0	12.58	12.29	12.17	12.06	11.94	11.88	11.82	11.76	11.70
360.0	12.70	12.52	12.41	12.29	12.23	12.17	12.11	12.11	12.06
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.00	11.94	11.88	11.88	11.82	11.76	11.70	11.70	11.41
45.0	11.88	11.82	11.76	11.76	11.70	11.65	11.59	11.53	11.47
90.0	12.06	11.94	11.88	11.76	11.65	11.53	11.41	11.35	11.29
135.0	11.82	11.70	11.70	11.65	11.59	11.47	11.41	11.35	11.29
180.0	11.88	11.82	11.76	11.70	11.70	11.65	11.65	11.59	11.47
225.0	11.76	11.70	11.65	11.65	11.59	11.53	11.53	11.41	11.29
270.0	12.35	12.23	12.11	11.94	11.82	11.65	11.53	11.47	11.41
315.0	11.70	11.65	11.59	11.59	11.53	11.41	11.41	11.29	11.12
360.0	12.00	11.94	11.88	11.88	11.82	11.76	11.70	11.70	11.41

Intensity data(cd)

C/ γ (°)	90.0
0.0	11.29
45.0	11.29
90.0	11.24
135.0	11.18
180.0	11.29
225.0	11.24
270.0	11.18
315.0	11.12
360.0	11.29