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Nata

Client: NT

LumCAT: 1-1731-LM

Luminaire: 92.70.458.00 LED HOLDER

Report No: 20250927-B010

Ballast type: DC

Test No: 20250927-C010

Voltage(V): 34.080

LampCAT: PHILIPS SLM 1202 L06 1313

Current(A): 0.146

Lamp flux(lm): 850.0

Power (W): 4.975

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 15

Photometric Results

Lumens(lm): 816.03, Efficiency(%): 96.00% , Luminous Efficacy(lm/W): 164.03

Central intensity(cd): 3849.805, Maximum intensity(cd): 3849.805

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=17.2

[C90/270]Total=17.2

Field angle(10%Imax): [C0/180]Total=42.8

[C90/270]Total=42.8

Maximum s/h(1/2): C0_180=0.29 C90_270=0.29

Maximum s/h(1/4): C0_180=0.32 C90_270=0.32

Up flux rate of lamp(%): 0.00%

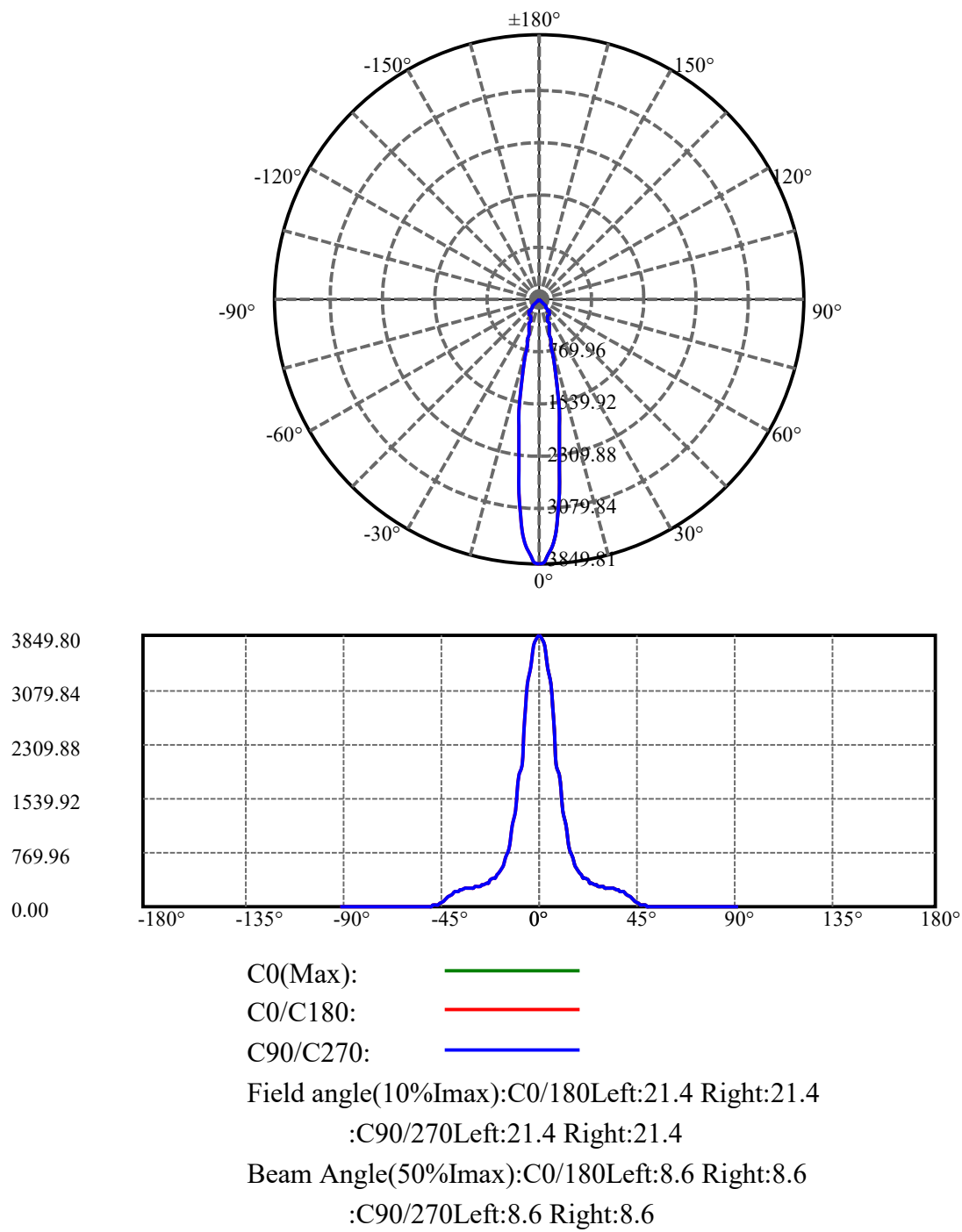
Down flux rate of lamp(%): 96.00%

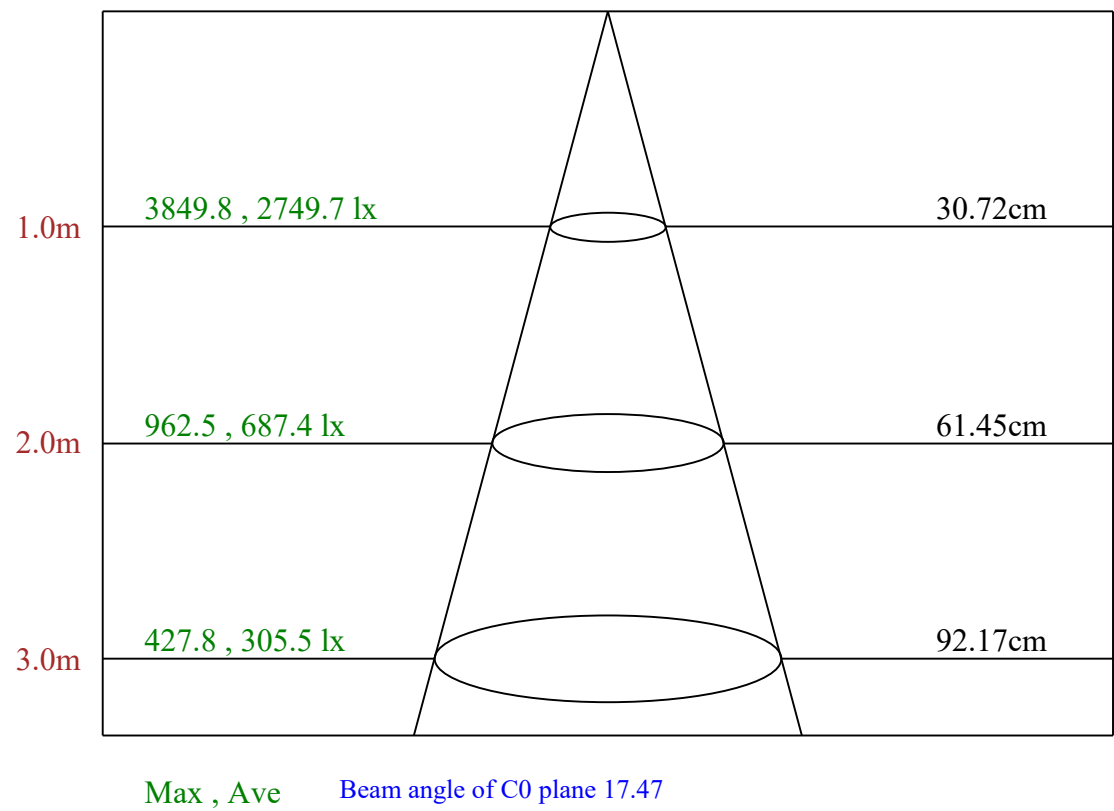
Up flux rate of LUM(%): - -

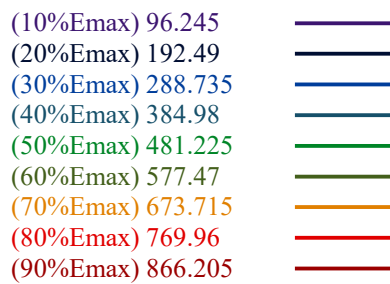
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.874%







Luminance Table

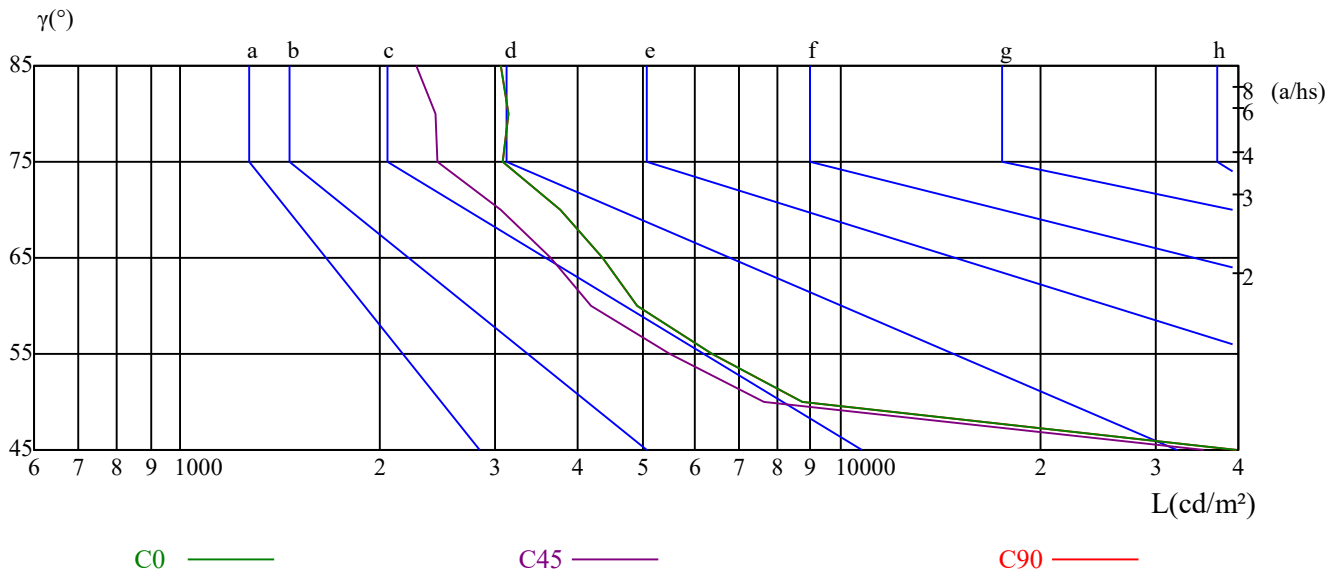
γ	45	50	55	60	65	70	75	80	85
C0	39731	8741	6375	4927	4357	3749	3074	3139	3051
C45	35339	7668	5509	4188	3635	3063	2450	2427	2270
C90	39731	8741	6375	4927	4357	3749	3074	3139	3051

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
8361	8361	8361	7991	7991	7991	17996	17996	17996

Glare Table

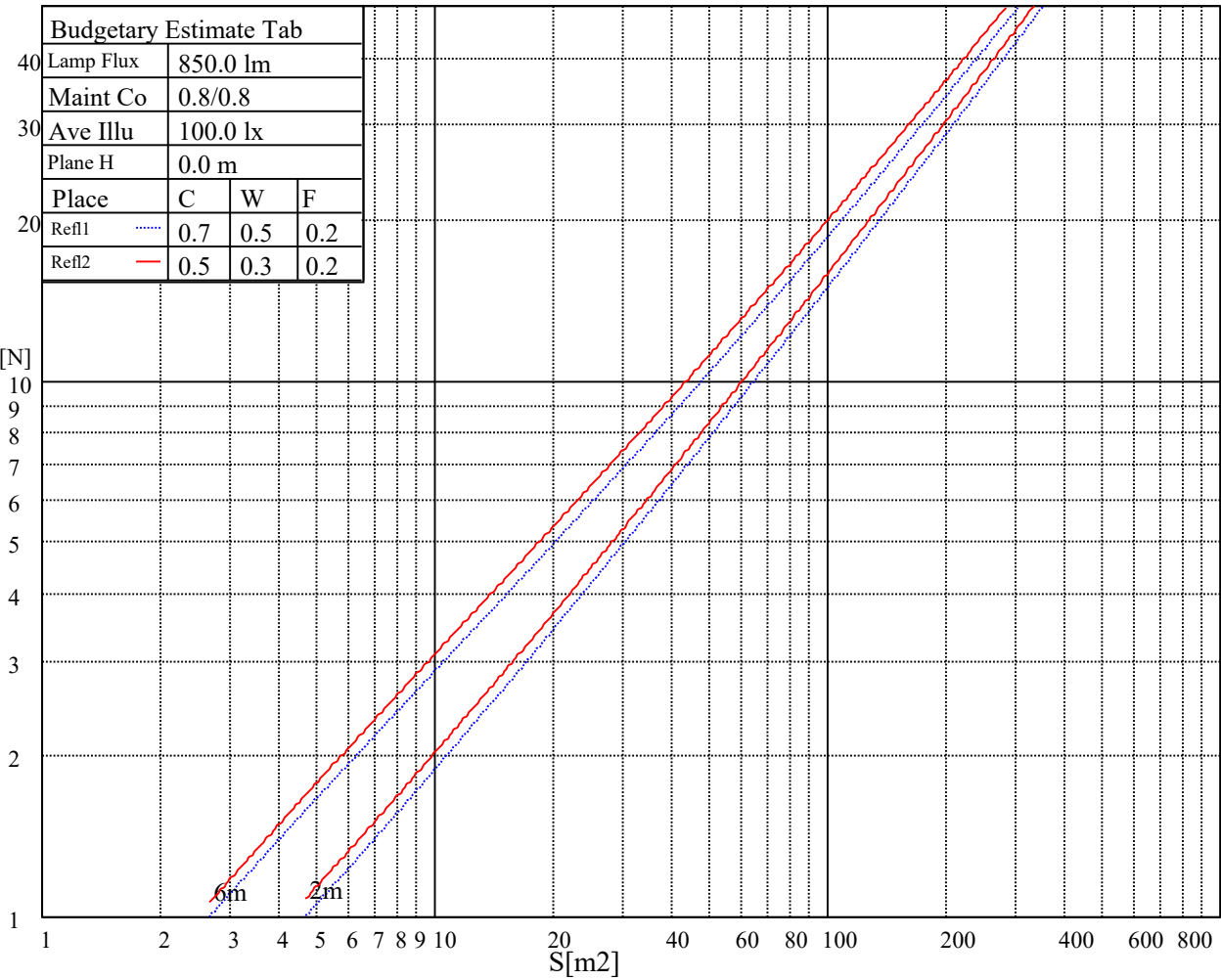
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

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	21.20	22.18	21.56	22.49	22.81	21.16	22.14	21.52	22.46	22.77
	3H	21.05	21.92	21.43	22.26	22.60	20.99	21.86	21.38	22.20	22.55
	4H	20.96	21.77	21.36	22.13	22.49	20.91	21.72	21.31	22.07	22.44
	6H	20.90	21.64	21.32	22.02	22.42	20.85	21.59	21.27	21.97	22.36
	8H	20.85	21.55	21.27	21.94	22.35	20.79	21.50	21.21	21.88	22.29
	12H	20.80	21.47	21.22	21.86	22.28	20.74	21.41	21.17	21.80	22.22
4H	2H	20.90	21.71	21.30	22.07	22.43	20.86	21.67	21.27	22.03	22.40
	3H	20.73	21.41	21.16	21.80	22.22	20.68	21.35	21.10	21.75	22.16
	4H	20.69	21.27	21.13	21.70	22.14	20.63	21.22	21.07	21.64	22.09
	6H	20.60	21.11	21.07	21.56	22.02	20.54	21.06	21.02	21.51	21.96
	8H	20.57	21.05	21.06	21.50	21.98	20.52	20.99	21.00	21.45	21.92
	12H	20.56	21.00	21.05	21.45	21.97	20.50	20.94	20.99	21.39	21.91
8H	4H	20.50	20.98	20.99	21.44	21.91	20.45	20.93	20.94	21.38	21.86
	6H	20.42	20.81	20.92	21.29	21.80	20.36	20.75	20.87	21.23	21.75
	8H	20.45	20.78	20.99	21.30	21.80	20.40	20.73	20.93	21.25	21.75
	12H	20.46	20.72	21.01	21.23	21.76	20.40	20.66	20.95	21.17	21.70
12H	4H	20.46	20.89	20.95	21.35	21.87	20.40	20.84	20.89	21.29	21.81
	6H	20.41	20.74	20.94	21.26	21.76	20.36	20.69	20.89	21.21	21.71
	8H	20.42	20.67	20.96	21.19	21.71	20.36	20.61	20.90	21.13	21.66
Variation with the observer position at spacings:											
S = 1.0H		3.7/-9.9					3.7/-9.9				
S = 1.5H		6.0/-9.4					6.0/-9.4				
S = 2.0H		7.9/-8.7					7.9/-8.7				
Standard tables:		BK0					BK0				
Uncorrected UGR		1.9					1.9				

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	COEFFCIENTS OF UTILIZATION RHOFC=20 CU															
0	1.14	1.14	1.14	1.12	1.12	1.12	1.07	1.07	1.07	1.02	1.02	1.02	0.98	0.98	0.98	0.96
1	1.07	1.05	1.03	1.05	1.03	1.01	1.01	1.00	0.98	0.98	0.96	0.95	0.94	0.93	0.92	0.91
2	1.01	0.97	0.94	0.99	0.96	0.93	0.96	0.93	0.91	0.93	0.91	0.89	0.90	0.89	0.87	0.86
3	0.95	0.91	0.87	0.94	0.90	0.87	0.91	0.88	0.85	0.89	0.86	0.84	0.87	0.84	0.83	0.81
4	0.90	0.85	0.82	0.89	0.84	0.81	0.87	0.83	0.80	0.85	0.82	0.79	0.83	0.81	0.78	0.77
5	0.85	0.80	0.77	0.84	0.80	0.76	0.83	0.79	0.76	0.81	0.78	0.75	0.80	0.77	0.74	0.73
6	0.81	0.76	0.73	0.80	0.76	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.77	0.73	0.71	0.70
7	0.78	0.73	0.69	0.77	0.72	0.69	0.76	0.72	0.69	0.75	0.71	0.68	0.74	0.70	0.68	0.67
8	0.74	0.69	0.66	0.74	0.69	0.66	0.73	0.69	0.66	0.72	0.68	0.65	0.71	0.68	0.65	0.64
9	0.71	0.66	0.63	0.71	0.66	0.63	0.70	0.66	0.63	0.69	0.65	0.63	0.68	0.65	0.62	0.61
10	0.69	0.64	0.61	0.68	0.64	0.61	0.67	0.63	0.60	0.67	0.63	0.60	0.66	0.63	0.60	0.59

NT Nata 1-1731-LM

Intensity data(cd)

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C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	3856.35	3793.01	3678.99	3509.24	3309.92	2977.16	2696.77	2413.00	1637.69
45.0	3858.88	3849.59	3775.27	3640.14	3486.43	3228.00	2963.65	2647.78	2402.02
90.0	3853.82	3770.20	3648.59	3484.74	3214.48	2970.41	2660.45	2413.00	1674.17
135.0	3830.17	3852.97	3824.26	3743.18	3613.12	3428.16	3120.74	2857.23	2514.34
180.0	3856.35	3854.66	3813.28	3730.51	3530.35	3312.45	3054.86	2656.23	2336.98
225.0	3858.88	3821.72	3709.40	3551.46	3341.17	3074.29	2680.72	2374.99	1643.01
270.0	3853.82	3857.19	3821.72	3713.62	3537.95	3325.12	3065.00	2685.79	2376.68
315.0	3830.17	3768.52	3598.76	3392.69	3172.26	2885.10	2492.38	1959.47	1628.99
360.0	3856.35	3793.01	3678.99	3509.24	3309.92	2977.16	2696.77	2413.00	1637.69
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	1637.69	1513.62	1216.17	1039.40	895.07	755.80	669.57	596.01	536.30
45.0	2132.60	1860.65	1525.36	1287.20	1085.35	924.88	799.04	674.89	598.03
90.0	1674.17	1545.80	1300.29	1092.78	929.69	778.01	680.04	604.11	544.32
135.0	2232.26	1956.93	1609.82	1358.14	1141.09	967.95	827.75	695.16	611.55
180.0	1981.42	1708.63	1451.04	1174.02	996.67	850.56	739.08	648.71	561.72
225.0	1643.01	1457.80	1230.78	1030.96	825.39	700.82	608.42	521.60	471.69
270.0	2081.08	1799.84	1478.91	1256.79	1058.32	846.33	718.81	598.88	533.00
315.0	1563.11	1323.09	1115.58	906.55	780.46	675.82	580.13	522.02	475.15
360.0	1637.69	1513.62	1216.17	1039.40	895.07	755.80	669.57	596.01	536.30
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	482.08	449.14	420.17	395.42	370.51	352.35	340.27	324.06	315.02
45.0	524.56	483.17	447.70	425.74	425.74	364.17	341.12	328.28	316.96
90.0	485.45	446.35	413.50	379.88	357.50	334.45	320.51	307.17	296.27
135.0	547.36	497.53	447.70	431.66	431.66	360.88	343.06	328.87	314.09
180.0	506.82	462.90	427.43	427.43	369.16	351.17	334.28	321.36	310.46
225.0	431.15	393.57	369.83	351.93	335.04	320.17	308.52	300.75	293.48
270.0	481.48	440.10	431.66	394.24	350.07	332.59	315.61	303.70	294.25
315.0	434.27	394.16	368.99	351.00	335.21	321.69	311.64	300.92	293.57
360.0	482.08	449.14	420.17	395.42	370.51	352.35	340.27	324.06	315.02
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	302.18	295.09	289.01	281.15	276.00	271.10	267.05	260.55	254.13
45.0	305.14	294.25	287.40	281.07	277.18	272.29	269.41	268.32	264.52
90.0	284.62	275.33	268.06	263.76	258.60	254.47	249.99	243.99	240.36
135.0	305.06	293.65	286.81	281.24	277.52	273.30	269.92	266.63	263.84
180.0	301.93	293.91	284.45	278.71	273.05	268.99	264.09	259.70	254.13
225.0	284.62	278.37	273.81	269.67	266.37	261.98	258.86	253.79	243.32
270.0	284.70	273.89	265.70	260.38	254.47	250.58	245.34	242.90	236.48
315.0	286.73	278.87	274.48	270.51	266.37	264.26	261.98	257.42	245.34
360.0	302.18	295.09	289.01	281.15	276.00	271.10	267.05	260.55	254.13
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	243.15	227.52	209.54	182.00	160.47	131.33	107.77	85.13	59.03
45.0	260.88	252.61	234.28	214.94	193.07	164.52	140.28	115.37	91.97
90.0	231.83	215.19	199.99	182.68	158.44	138.85	117.90	98.31	73.65
135.0	257.17	247.12	230.90	211.98	185.47	165.62	137.49	113.51	91.72
180.0	244.92	226.43	208.86	188.67	160.72	136.40	112.33	85.89	65.20
225.0	225.33	206.75	187.07	165.70	136.82	113.93	92.06	71.28	48.65
270.0	228.28	211.06	195.68	178.46	161.73	137.92	116.97	98.05	79.98
315.0	230.99	213.67	194.33	166.72	143.41	119.76	91.47	69.51	45.52
360.0	243.15	227.52	209.54	182.00	160.47	131.33	107.77	85.13	59.03

Intensity data(cd)

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C/ γ (°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	40.79	26.18	16.22	11.99	11.40	11.32	11.23	10.98	10.73
45.0	65.71	46.87	30.83	19.76	11.57	9.63	9.21	8.53	8.02
90.0	55.32	38.17	25.08	15.03	11.82	10.64	9.63	8.87	7.94
135.0	65.12	45.94	29.90	19.59	11.74	10.30	9.80	9.37	8.70
180.0	46.28	29.31	20.10	14.36	12.08	11.82	11.74	11.49	11.15
225.0	33.53	20.69	13.51	10.73	9.80	9.29	8.78	8.11	7.52
270.0	57.26	42.23	26.35	18.16	14.19	11.82	10.64	9.63	8.61
315.0	29.31	18.75	11.74	9.46	8.78	8.36	8.11	7.52	7.01
360.0	40.79	26.18	16.22	11.99	11.40	11.32	11.23	10.98	10.73
C/ γ (°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	10.13	9.37	9.21	8.78	8.19	7.85	7.43	7.09	6.76
45.0	7.26	6.33	5.49	5.07	4.81	4.73	4.56	4.48	4.48
90.0	7.18	6.17	5.66	5.49	5.24	4.98	4.65	4.56	4.39
135.0	8.11	7.52	6.50	5.91	5.49	5.15	4.90	4.65	4.48
180.0	10.64	10.13	9.37	9.04	8.53	7.85	7.52	7.09	6.76
225.0	6.76	5.83	4.98	4.48	4.22	3.97	3.88	3.72	3.72
270.0	7.77	6.93	6.00	5.41	5.07	4.65	4.48	4.22	4.14
315.0	6.08	5.49	5.24	5.07	4.81	4.73	4.65	4.48	4.39
360.0	10.13	9.37	9.21	8.78	8.19	7.85	7.43	7.09	6.76
C/ γ (°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	6.42	5.91	5.57	5.24	4.90	4.39	4.14	3.88	3.46
45.0	4.39	4.39	4.22	4.14	4.05	3.97	3.80	3.55	3.29
90.0	4.22	4.05	3.88	3.80	3.72	3.55	3.46	3.38	3.21
135.0	4.31	4.22	4.14	3.88	3.72	3.63	3.46	3.29	3.12
180.0	6.25	5.91	5.57	5.15	4.81	4.48	4.22	3.88	3.63
225.0	3.72	3.63	3.55	3.46	3.38	3.29	3.12	2.96	2.79
270.0	3.97	3.88	3.80	3.72	3.63	3.63	3.46	3.38	3.29
315.0	4.22	4.05	3.88	3.72	3.63	3.46	3.21	3.04	2.87
360.0	6.42	5.91	5.57	5.24	4.90	4.39	4.14	3.88	3.46
C/ γ (°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	3.21	2.96	2.70	2.53	2.45	2.45	2.45	2.36	2.36
45.0	3.04	2.87	2.62	2.45	2.36	2.36	2.36	2.28	2.28
90.0	3.04	2.79	2.70	2.62	2.53	2.53	2.45	2.45	2.28
135.0	2.87	2.70	2.53	2.36	2.36	2.28	2.28	2.28	2.28
180.0	3.38	3.04	2.87	2.70	2.62	2.53	2.45	2.45	2.36
225.0	2.70	2.53	2.45	2.45	2.36	2.28	2.28	2.28	2.20
270.0	3.21	3.04	2.96	2.79	2.70	2.62	2.53	2.45	2.45
315.0	2.62	2.45	2.45	2.36	2.36	2.28	2.28	2.20	2.11
360.0	3.21	2.96	2.70	2.53	2.45	2.45	2.45	2.36	2.36
C/ γ (°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	2.28	2.20	2.20	2.11	2.03	2.03	1.86	1.77	1.69
45.0	2.20	2.11	2.03	2.03	1.94	1.86	1.77	1.69	1.60
90.0	2.28	2.20	2.03	2.03	1.86	1.77	1.60	1.60	1.52
135.0	2.20	2.11	2.03	1.94	1.94	1.86	1.69	1.60	1.60
180.0	2.28	2.28	2.20	2.20	2.11	2.03	1.94	1.86	1.69
225.0	2.11	2.03	2.03	1.94	1.77	1.77	1.69	1.60	1.52
270.0	2.36	2.28	2.11	2.03	1.94	1.77	1.60	1.60	1.52
315.0	2.03	1.94	1.94	1.86	1.77	1.69	1.69	1.52	1.52
360.0	2.28	2.20	2.20	2.11	2.03	2.03	1.86	1.77	1.69

Intensity data(cd)

C/ $\gamma(^{\circ})$	90.0
0.0	1.60
45.0	1.52
90.0	1.52
135.0	1.60
180.0	1.52
225.0	1.52
270.0	1.52
315.0	1.52
360.0	1.60