
乐达凯

Client:

LumCAT: LYL2405LAJD1BN-3000K

Luminaire: LED Lamp

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.269

Lamp flux(lm): 1815.5

Power (W): 29.830

Number of Lamps: 1

PF: 0.924

Length(mm): 600

Width(mm): 80

Phm Type: C

Height(mm): 80

Photometric Results

Lumens(lm): 1815.54, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 60.86

Central intensity(cd): 4.827, Maximum intensity(cd): 712.905

Angle of maximum intensity: C=90.0 γ =125.0

Beam Angle(50%Imax): [C0/180]Total=299.8

[C90/270]Total=112.3

Field angle(10%Imax): [C0/180]Total=357.6

[C90/270]Total=159.6

Maximum s/h(1/2): C0_180=3.64 C90_270=8.98

Maximum s/h(1/4): C0_180=3.48 C90_270=7.91

Up flux rate of lamp(%): 50.74%

Down flux rate of lamp(%): 49.26%

Up flux rate of LUM(%): 50.74%

Down flux rate of LUM(%): 49.26%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 22.015%

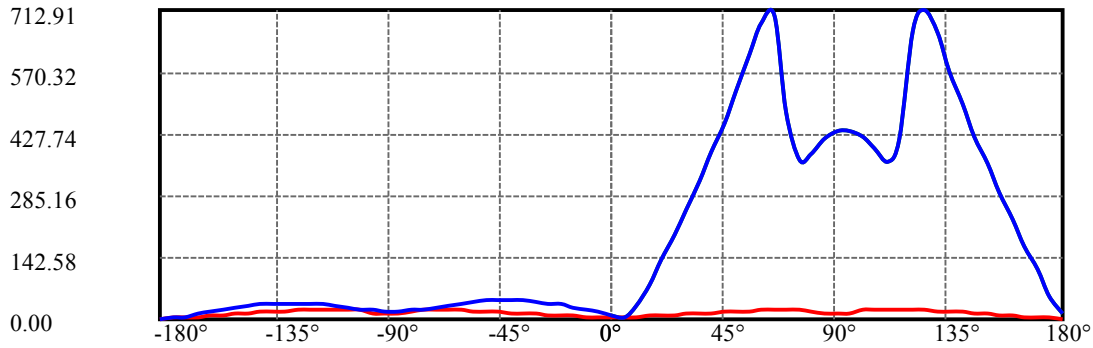
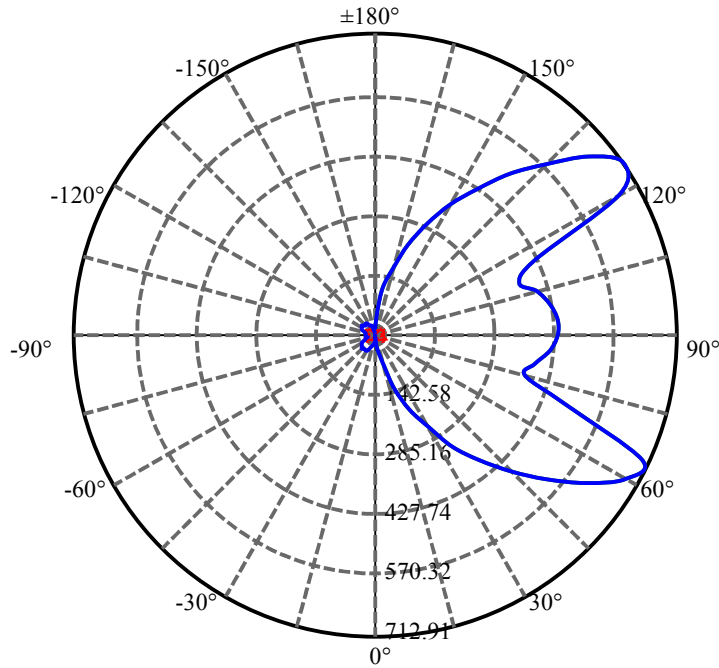
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6.770	0.000	0	0.00%	0.00%
5.0	8.113	0.178	0.178	0.01%	0.01%
10.0	17.167	0.904	1.082	0.05%	0.06%
15.0	32.706	2.958	4.041	0.16%	0.22%
20.0	51.129	6.909	10.95	0.38%	0.60%
25.0	69.040	12.603	23.553	0.69%	1.30%
30.0	88.491	19.936	43.489	1.10%	2.40%
35.0	108.553	29.016	72.505	1.60%	3.99%
40.0	128.536	39.556	112.061	2.18%	6.17%
45.0	149.186	51.422	163.484	2.83%	9.00%
50.0	169.943	64.485	227.968	3.55%	12.56%
55.0	191.318	78.550	306.518	4.33%	16.88%
60.0	211.794	93.178	399.696	5.13%	22.02%
65.0	222.335	105.537	505.234	5.81%	27.83%
70.0	190.134	104.440	609.674	5.75%	33.58%
75.0	142.872	87.042	696.716	4.79%	38.38%
80.0	119.929	70.318	767.034	3.87%	42.25%
85.0	114.810	63.784	830.819	3.51%	45.76%
90.0	117.087	63.495	894.314	3.50%	49.26%
95.0	119.178	64.691	959.005	3.56%	52.82%
100.0	119.447	64.840	1023.846	3.57%	56.39%
105.0	124.198	65.193	1089.038	3.59%	59.98%
110.0	139.817	69.009	1158.048	3.80%	63.79%
115.0	177.729	80.405	1238.452	4.43%	68.21%
120.0	223.090	97.440	1335.892	5.37%	73.58%
125.0	220.791	102.602	1438.494	5.65%	79.23%
130.0	201.036	91.719	1530.213	5.05%	84.28%
135.0	178.370	76.665	1606.878	4.22%	88.51%
140.0	155.963	61.905	1668.783	3.41%	91.92%
145.0	134.592	48.477	1717.259	2.67%	94.59%
150.0	113.835	36.583	1753.842	2.01%	96.60%
155.0	93.598	26.251	1780.093	1.45%	98.05%
160.0	73.551	17.531	1797.624	0.97%	99.01%
165.0	53.838	10.499	1808.123	0.58%	99.59%
170.0	35.123	5.277	1813.4	0.29%	99.88%
175.0	17.463	1.881	1815.281	0.10%	99.99%
180.0	4.425	0.262	1815.543	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	43.49	2.40%	2.40%
0-40	112.06	6.17%	6.17%
0-60	399.70	22.02%	22.02%
0-90	894.31	49.26%	49.26%
0-120	1335.89	73.58%	73.58%
0-180	1815.54	100.00%	100.00%
60-90	494.62	27.24%	27.24%
90-120	441.58	24.32%	24.32%
90-130	635.90	35.03%	35.03%
90-150	859.53	47.34%	47.34%
90-180	920.97	50.73%	50.73%
0-125.76	1452.43	80.00%	80.00%

ZONAL LUMEN SUMMARY

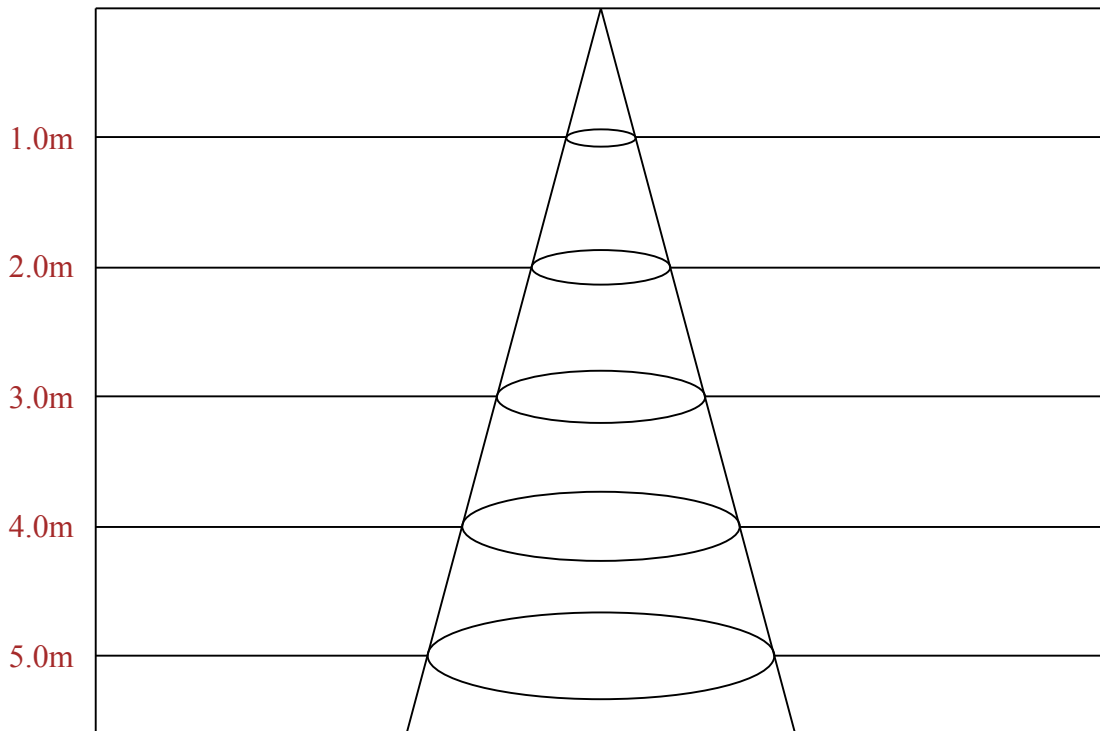
0-10	1.08
10-20	9.87
20-30	32.54
30-40	68.57
40-50	115.91
50-60	171.73
60-70	209.98
70-80	157.36
80-90	127.28
90-100	129.53
100-110	134.20
110-120	177.84
120-130	194.32
130-140	138.57
140-150	85.06
150-160	43.78
160-170	15.78
170-180	1.88



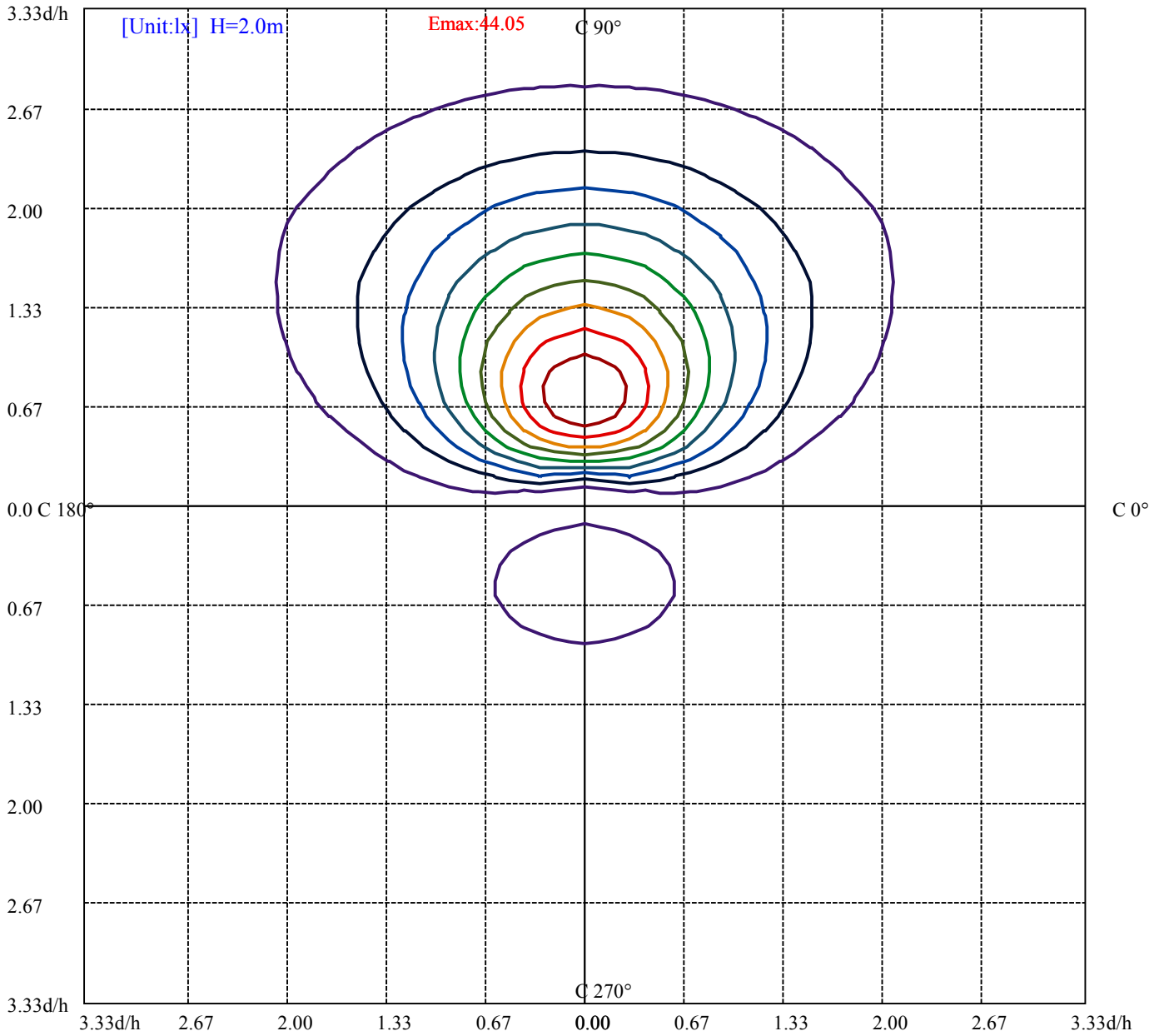
C90(Max): ——
 C0/C180: ——
 C90/C270: ——

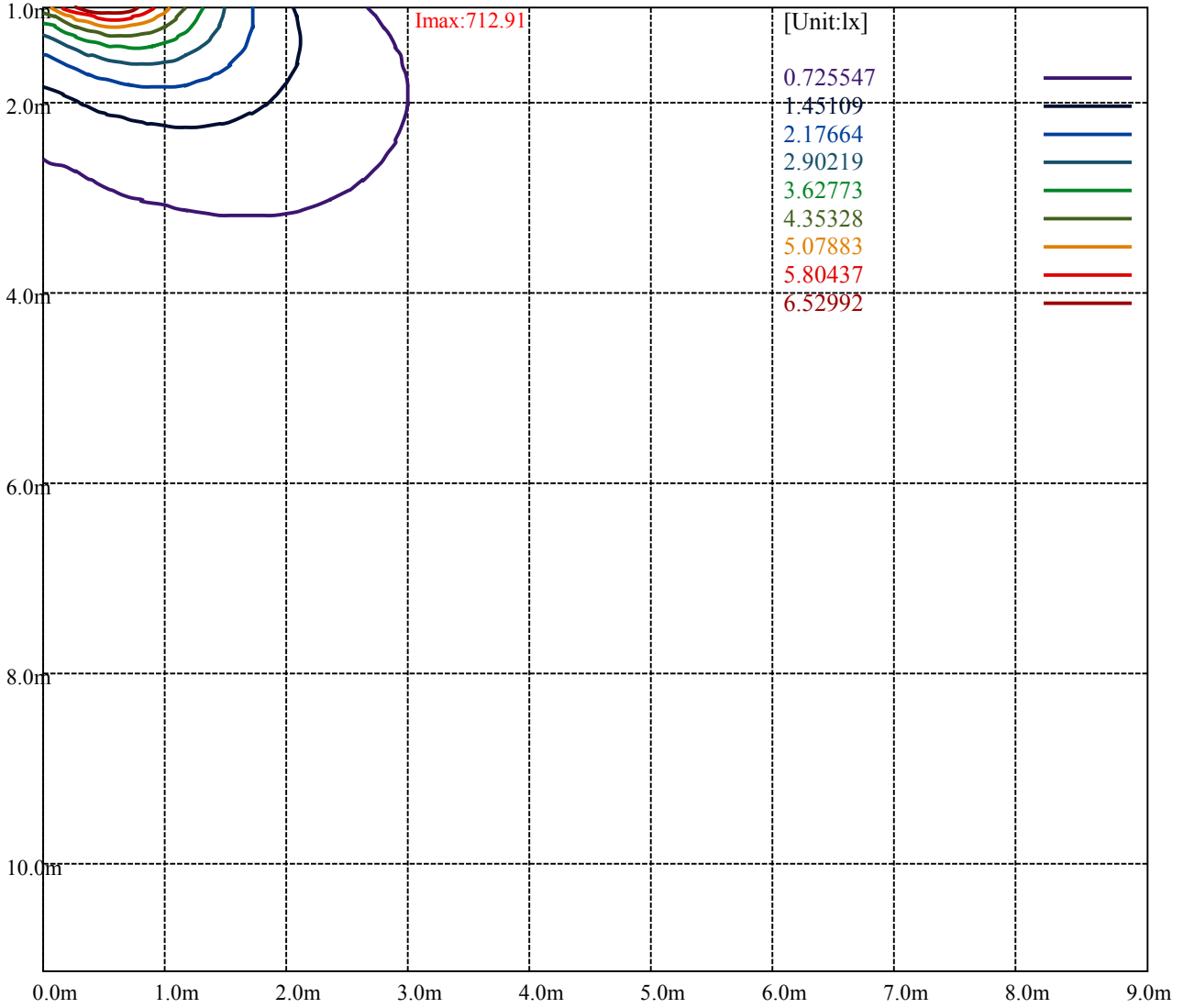
Field angle(10%Imax):C0/180Left:288.8 Right:68.8
 :C90/270Left:111.0 Right:48.6

Beam Angle(50%Imax):C0/180Left:259.9 Right:39.9
 :C90/270Left:87.2 Right:25.1



Max , Ave Beam angle of C90 plane 348.47





Luminance Table

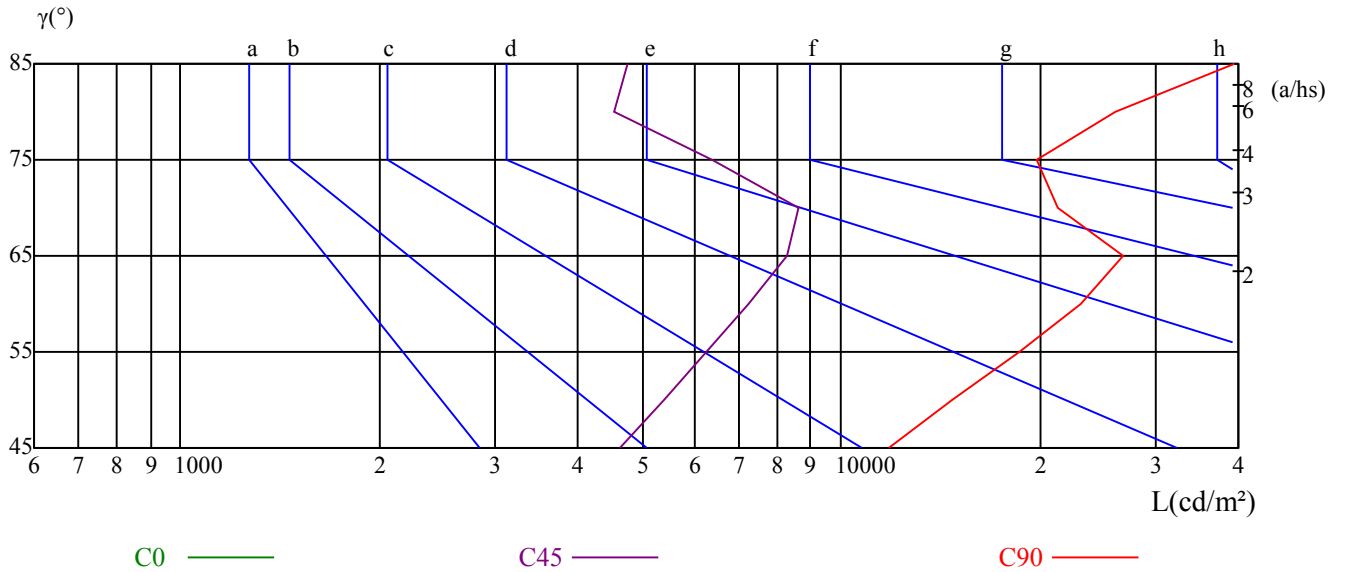
γ	45	50	55	60	65	70	75	80	85
C0	245	270	297	323	345	357	349	291	245
C45	4622	5403	6260	7240	8278	8602	6398	4523	4767
C90	11793	14757	18615	23080	26788	21332	19746	26075	39347

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
1084	17985	12109	1649	15673	13626	3048	51996	26145

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



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	1.07	1.07	1.07	0.99	0.99	0.99	0.83	0.83	0.83	0.69	0.69	0.69	0.55	0.55	0.55	0.49
1	0.87	0.82	0.77	0.80	0.75	0.71	0.66	0.63	0.59	0.54	0.51	0.49	0.42	0.40	0.39	0.33
2	0.73	0.65	0.59	0.67	0.60	0.54	0.55	0.50	0.45	0.44	0.40	0.37	0.34	0.31	0.28	0.23
3	0.62	0.53	0.46	0.57	0.49	0.42	0.47	0.40	0.35	0.37	0.32	0.28	0.28	0.25	0.22	0.17
4	0.54	0.44	0.37	0.49	0.41	0.34	0.40	0.33	0.28	0.32	0.27	0.22	0.24	0.20	0.17	0.13
5	0.47	0.37	0.30	0.43	0.34	0.28	0.35	0.28	0.23	0.28	0.22	0.18	0.21	0.17	0.13	0.10
6	0.41	0.32	0.25	0.38	0.29	0.23	0.31	0.24	0.19	0.24	0.19	0.15	0.18	0.14	0.11	0.08
7	0.37	0.28	0.21	0.34	0.25	0.20	0.27	0.21	0.16	0.22	0.16	0.13	0.16	0.12	0.09	0.06
8	0.33	0.24	0.18	0.30	0.22	0.17	0.25	0.18	0.14	0.19	0.14	0.11	0.15	0.11	0.08	0.05
9	0.30	0.21	0.16	0.27	0.20	0.15	0.22	0.16	0.12	0.18	0.13	0.09	0.13	0.09	0.07	0.04
10	0.27	0.19	0.14	0.25	0.18	0.13	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.06	0.04

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	4.83	4.92	5.56	6.28	6.92	7.65	8.38	9.20	9.93
15.0	5.92	4.46	5.46	8.20	13.02	19.40	27.41	36.25	45.08
30.0	6.83	4.37	9.93	22.13	42.07	63.75	85.42	110.11	132.96
45.0	7.65	4.74	16.39	42.80	75.77	110.92	147.54	186.15	225.13
60.0	7.92	4.83	23.77	62.75	106.37	153.00	202.82	254.09	303.63
75.0	8.20	4.74	30.96	74.41	127.95	180.50	239.15	298.44	360.73
90.0	8.47	5.10	32.60	81.33	135.70	194.71	253.54	320.57	383.96
105.0	8.11	5.37	30.33	80.51	130.87	188.34	248.72	310.73	374.76
120.0	7.83	4.64	26.14	68.39	115.30	163.29	219.66	271.57	328.31
135.0	3.55	4.37	19.03	52.09	87.52	129.50	169.39	212.47	256.00
150.0	6.37	3.92	11.75	30.69	78.78	82.60	110.56	139.79	169.30
165.0	5.56	3.64	6.37	12.20	21.86	34.79	49.18	63.84	79.14
180.0	4.83	5.46	6.56	7.92	9.29	11.57	13.93	16.76	19.67
195.0	5.92	7.10	8.56	9.93	11.29	12.75	13.93	15.39	16.57
210.0	6.83	9.74	13.02	16.03	19.22	21.95	24.77	27.32	29.69
225.0	7.65	12.11	16.94	21.49	25.68	29.42	32.60	35.79	38.43
240.0	7.92	14.21	20.04	25.23	30.24	34.06	37.52	40.34	42.44
255.0	8.20	15.12	21.67	27.50	32.51	36.70	39.62	42.07	43.71
270.0	8.47	15.76	22.40	28.14	33.42	37.52	40.44	42.53	43.99
285.0	8.11	15.39	22.04	27.96	32.97	37.34	40.07	42.17	42.80
300.0	7.83	14.30	20.76	25.96	27.69	35.06	38.61	41.16	43.17
315.0	3.55	12.84	17.85	23.13	27.23	31.24	34.79	37.79	40.44
330.0	6.37	10.20	14.21	18.03	21.49	24.86	27.78	30.87	33.42
345.0	5.56	7.38	9.65	11.84	13.93	16.03	17.94	19.85	21.58
360.0	4.83	4.92	5.56	6.28	6.92	7.65	8.38	9.20	9.93
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	10.84	11.57	12.48	13.48	14.39	15.03	15.39	15.03	13.30
15.0	54.82	63.48	72.67	80.78	88.07	93.53	96.44	91.80	62.02
30.0	156.73	180.32	203.36	225.13	244.71	263.38	259.37	188.97	107.01
45.0	264.20	304.45	343.61	385.69	425.48	432.50	334.87	207.46	186.24
60.0	359.55	412.19	471.75	534.04	574.29	507.81	329.04	270.66	288.70
75.0	425.21	491.51	569.92	639.68	665.73	506.08	347.98	345.16	376.40
90.0	453.63	527.67	610.09	681.85	698.79	478.49	367.38	381.68	415.47
105.0	442.42	514.73	589.14	662.82	686.13	479.40	352.08	363.01	395.07
120.0	387.05	448.62	514.19	583.40	617.46	505.90	312.10	293.80	320.57
135.0	300.99	347.35	395.61	444.25	487.60	471.84	299.53	210.65	219.03
150.0	196.90	227.77	255.64	284.87	311.74	329.50	295.80	168.48	124.13
165.0	92.62	106.37	120.21	132.51	144.17	153.00	154.18	132.24	67.48
180.0	22.40	24.95	27.23	28.87	29.60	28.96	25.59	17.30	12.20
195.0	18.03	19.31	20.22	21.04	21.67	21.49	19.31	12.66	6.65
210.0	31.87	33.88	35.52	36.34	34.70	30.60	23.04	14.75	12.84
225.0	40.62	42.62	42.35	40.07	34.79	28.23	21.13	16.94	15.94
240.0	44.17	43.90	41.35	36.97	31.78	26.05	20.22	18.03	17.30
255.0	44.17	42.99	39.16	35.15	31.06	25.59	21.13	20.76	18.76
270.0	43.99	42.07	38.34	37.52	30.87	26.23	22.04	20.67	19.58
285.0	44.17	42.44	38.98	34.97	31.06	26.14	21.67	19.94	19.03
300.0	44.53	43.62	40.80	36.43	31.51	25.96	20.76	18.40	17.67
315.0	42.35	44.08	42.99	40.07	34.70	28.41	21.58	17.21	16.30
330.0	35.88	37.89	39.71	39.62	37.52	31.69	24.41	16.67	14.30
345.0	23.31	24.86	26.32	27.50	28.23	27.41	23.86	16.03	9.47
360.0	10.84	11.57	12.48	13.48	14.39	15.03	15.39	15.03	13.30

Intensity data(cd)									
C/ γ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	8.47	6.37	11.66	14.75	15.57	15.76	15.57	15.03	14.21
15.0	36.97	36.25	48.45	88.16	100.63	101.27	97.81	91.89	84.61
30.0	101.00	101.18	99.09	146.17	245.16	275.03	261.83	241.34	221.03
45.0	194.16	194.89	188.43	184.24	273.21	419.11	445.43	411.19	368.20
60.0	301.63	302.45	292.43	272.39	284.60	439.78	584.31	568.38	505.08
75.0	390.79	392.61	380.31	355.09	334.69	408.64	647.88	669.65	608.90
90.0	431.95	433.32	420.57	395.61	361.64	415.10	666.00	712.91	657.62
105.0	409.55	411.37	399.53	374.76	347.80	423.03	654.26	690.87	633.31
120.0	333.78	334.87	324.03	303.72	305.54	441.79	616.46	612.00	552.35
135.0	229.23	229.95	222.67	214.29	284.51	451.62	502.80	472.02	423.39
150.0	129.05	129.50	126.32	166.02	282.32	340.24	330.95	304.27	277.13
165.0	54.73	55.10	69.67	134.69	162.93	163.02	156.19	145.99	133.78
180.0	14.57	24.41	30.14	32.51	32.88	32.15	30.33	28.05	25.32
195.0	10.20	16.76	19.12	19.31	18.76	18.21	17.76	16.67	14.39
210.0	13.66	19.67	25.68	28.78	29.14	28.51	27.41	25.86	23.04
225.0	16.30	19.22	24.95	29.96	33.61	34.52	34.61	32.33	31.24
240.0	17.39	18.94	19.76	28.05	31.87	35.15	35.88	35.06	34.24
255.0	18.94	20.22	23.86	27.87	31.33	34.06	35.97	35.43	34.79
270.0	19.76	21.22	24.13	28.14	31.33	33.61	35.34	36.06	35.43
285.0	19.31	20.67	23.50	27.96	31.06	33.70	35.70	36.16	35.24
300.0	17.85	18.94	22.77	27.23	30.78	33.33	35.61	35.24	34.33
315.0	16.48	17.67	23.04	28.14	32.24	35.24	35.34	34.15	32.88
330.0	14.30	17.94	24.22	29.14	30.87	30.60	29.60	28.78	26.50
345.0	10.02	16.76	22.40	23.77	23.13	22.04	21.13	19.67	17.85
360.0	8.47	6.37	11.66	14.75	15.57	15.76	15.57	15.03	14.21
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	12.57	11.47	11.38	10.75	9.93	8.47	6.74	5.28	4.55
15.0	76.86	67.85	59.01	49.18	39.43	30.14	21.49	13.39	7.83
30.0	198.99	176.22	152.18	129.59	106.55	83.79	56.46	32.51	15.12
45.0	330.86	286.97	249.81	210.92	171.49	134.60	101.00	61.20	23.59
60.0	446.70	388.51	333.68	281.41	232.23	181.32	133.69	88.89	37.16
75.0	535.86	459.91	396.34	333.14	272.39	213.84	158.92	106.01	51.36
90.0	573.20	495.97	422.84	357.45	291.88	229.41	168.12	114.84	55.01
105.0	553.26	478.85	411.46	345.80	283.05	222.12	165.48	110.65	54.64
120.0	485.23	421.48	362.01	305.27	252.63	197.99	145.99	97.36	48.54
135.0	375.12	330.77	285.78	242.52	198.72	155.46	114.93	78.32	36.16
150.0	248.08	221.03	191.70	162.20	133.42	106.19	78.78	46.08	22.95
165.0	121.22	108.37	96.35	81.69	64.11	48.27	34.42	21.04	11.47
180.0	22.68	19.67	16.48	13.39	10.66	7.92	5.92	4.74	3.73
195.0	12.29	10.38	9.20	9.84	9.56	9.11	5.01	4.46	3.64
210.0	20.86	18.40	15.66	12.66	10.84	9.47	7.29	5.74	3.82
225.0	27.69	24.50	21.77	19.22	15.12	12.75	9.84	6.28	3.92
240.0	33.61	30.33	26.14	22.86	19.31	15.94	12.39	6.83	3.92
255.0	34.24	33.33	29.23	25.23	21.58	17.58	14.02	6.19	3.46
270.0	34.61	34.24	30.78	26.23	22.59	18.58	15.21	4.64	4.10
285.0	34.24	33.42	29.69	25.59	22.22	18.58	9.20	4.55	5.65
300.0	33.33	31.78	27.32	23.41	20.40	17.12	8.01	5.83	5.28
315.0	31.24	26.77	23.22	20.22	17.49	10.75	7.47	6.65	4.83
330.0	23.13	20.40	17.94	14.66	11.84	8.29	6.37	6.28	4.37
345.0	15.03	12.48	10.20	8.83	8.92	7.56	5.37	5.19	4.01
360.0	12.57	11.47	11.38	10.75	9.93	8.47	6.74	5.28	4.55

Intensity data(cd)

C/γ(°)	180.0
0.0	3.73
15.0	4.74
30.0	6.10
45.0	7.29
60.0	8.65
75.0	9.93
90.0	14.02
105.0	13.84
120.0	12.11
135.0	10.66
150.0	8.74
165.0	6.37
180.0	0.00
195.0	0.00
210.0	0.00
225.0	0.00
240.0	0.00
255.0	0.00
270.0	0.00
285.0	0.00
300.0	0.00
315.0	0.00
330.0	0.00
345.0	0.00
360.0	3.73