
乐达凯

Client:

LumCAT: LYL2405LAJD1BN-2700K

Luminaire: LED Lamp

Report No:

Ballast type:

Test No:

Voltage(V): 119.990

LampCAT:

Current(A): 0.267

Lamp flux(lm): 1661.7

Power (W): 29.500

Number of Lamps: 1

PF: 0.921

Length(mm): 600

Width(mm): 80

Phm Type: C

Height(mm): 80

Photometric Results

Lumens(lm): 1661.73, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 56.33

Central intensity(cd): 4.371, Maximum intensity(cd): 649.520

Angle of maximum intensity: C=90.0 γ =125.0

Beam Angle(50%Imax): [C0/180]Total=302.6

[C90/270]Total=112.3

Field angle(10%Imax): [C0/180]Total=358.2

[C90/270]Total=159.7

Maximum s/h(1/2): C0_180=3.50 C90_270=9.34

Maximum s/h(1/4): C0_180=3.39 C90_270=8.29

Up flux rate of lamp(%): 50.68%

Down flux rate of lamp(%): 49.32%

Up flux rate of LUM(%): 50.68%

Down flux rate of LUM(%): 49.32%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 22.314%

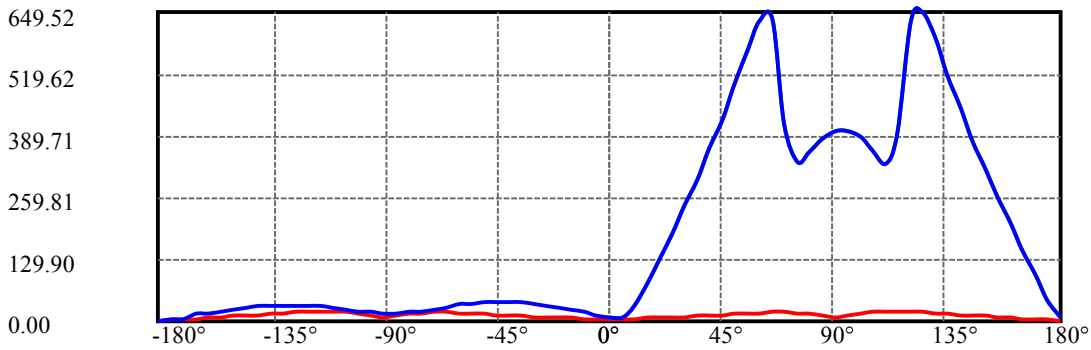
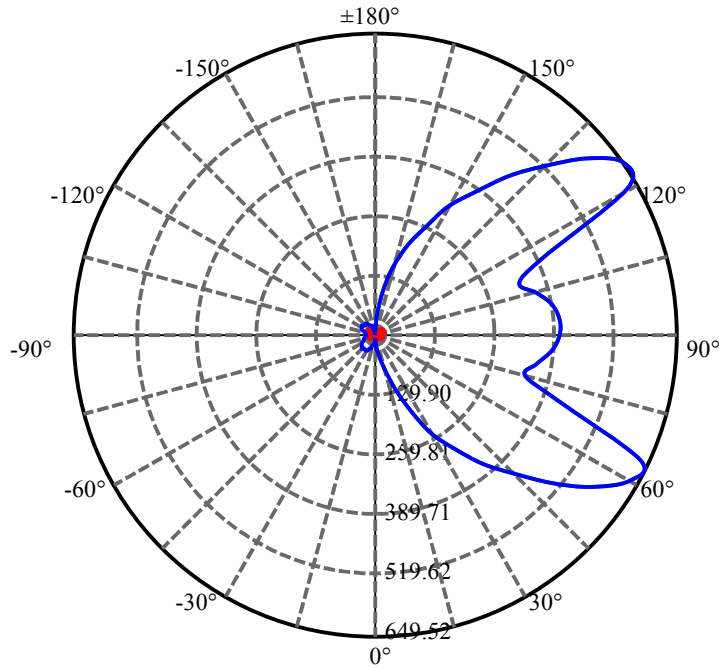
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	5.775	0.000	0	0.00%	0.00%
5.0	7.536	0.159	0.159	0.01%	0.01%
10.0	16.567	0.862	1.021	0.05%	0.06%
15.0	31.070	2.826	3.847	0.17%	0.23%
20.0	47.881	6.507	10.354	0.39%	0.62%
25.0	64.680	11.805	22.159	0.71%	1.33%
30.0	82.454	18.620	40.779	1.12%	2.45%
35.0	100.774	26.982	67.761	1.62%	4.08%
40.0	119.280	36.714	104.475	2.21%	6.29%
45.0	138.060	47.649	152.124	2.87%	9.15%
50.0	157.534	59.729	211.853	3.59%	12.75%
55.0	177.187	72.779	284.632	4.38%	17.13%
60.0	195.606	86.170	370.802	5.19%	22.31%
65.0	203.165	96.942	467.744	5.83%	28.15%
70.0	168.941	94.219	561.964	5.67%	33.82%
75.0	128.008	77.618	639.581	4.67%	38.49%
80.0	109.312	63.500	703.082	3.82%	42.31%
85.0	105.274	58.308	761.39	3.51%	45.82%
90.0	107.229	58.185	819.575	3.50%	49.32%
95.0	108.701	59.123	878.698	3.56%	52.88%
100.0	109.107	59.184	937.882	3.56%	56.44%
105.0	113.850	59.657	997.539	3.59%	60.03%
110.0	130.467	63.861	1061.4	3.84%	63.87%
115.0	167.343	75.407	1136.807	4.54%	68.41%
120.0	206.030	90.768	1227.575	5.46%	73.87%
125.0	200.596	93.990	1321.565	5.66%	79.53%
130.0	181.888	83.165	1404.73	5.00%	84.53%
135.0	160.930	69.271	1474.001	4.17%	88.70%
140.0	141.103	55.924	1529.925	3.37%	92.07%
145.0	121.163	43.757	1573.682	2.63%	94.70%
150.0	102.318	32.909	1606.591	1.98%	96.68%
155.0	83.971	23.575	1630.167	1.42%	98.10%
160.0	65.901	15.719	1645.885	0.95%	99.05%
165.0	47.676	9.360	1655.246	0.56%	99.61%
170.0	30.680	4.648	1659.894	0.28%	99.89%
175.0	14.602	1.620	1661.514	0.10%	99.99%
180.0	3.476	0.216	1661.73	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	40.78	2.45%	2.45%
0-40	104.48	6.29%	6.29%
0-60	370.80	22.31%	22.31%
0-90	819.57	49.32%	49.32%
0-120	1227.57	73.87%	73.87%
0-180	1661.73	100.00%	100.00%
60-90	448.77	27.01%	27.01%
90-120	408.00	24.55%	24.55%
90-130	585.15	35.21%	35.21%
90-150	787.02	47.36%	47.36%
90-180	841.94	50.67%	50.67%
0-125.47	1329.38	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	1.02
10-20	9.33
20-30	30.43
30-40	63.70
40-50	107.38
50-60	158.95
60-70	191.16
70-80	141.12
80-90	116.49
90-100	118.31
100-110	123.52
110-120	166.18
120-130	177.15
130-140	125.20
140-150	76.67
150-160	39.29
160-170	14.01
170-180	1.62



C90(Max): ——

C0/C180: ——

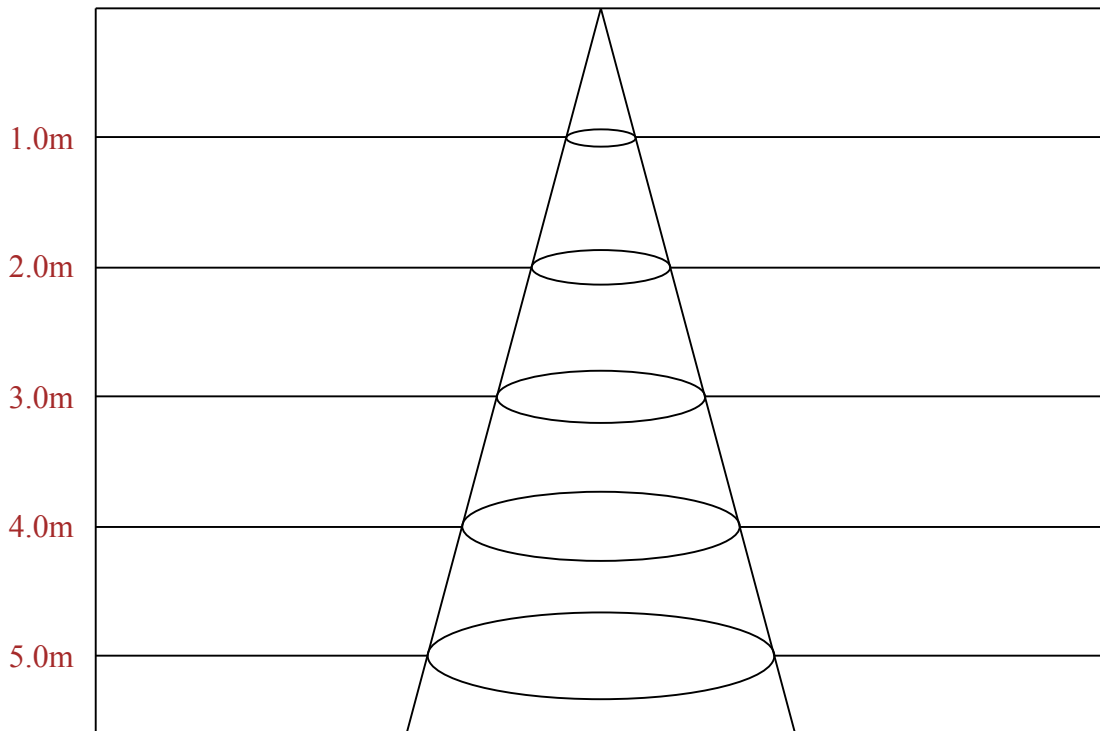
C90/C270: ——

Field angle(10%Imax):C0/180Left:289.1 Right:69.1

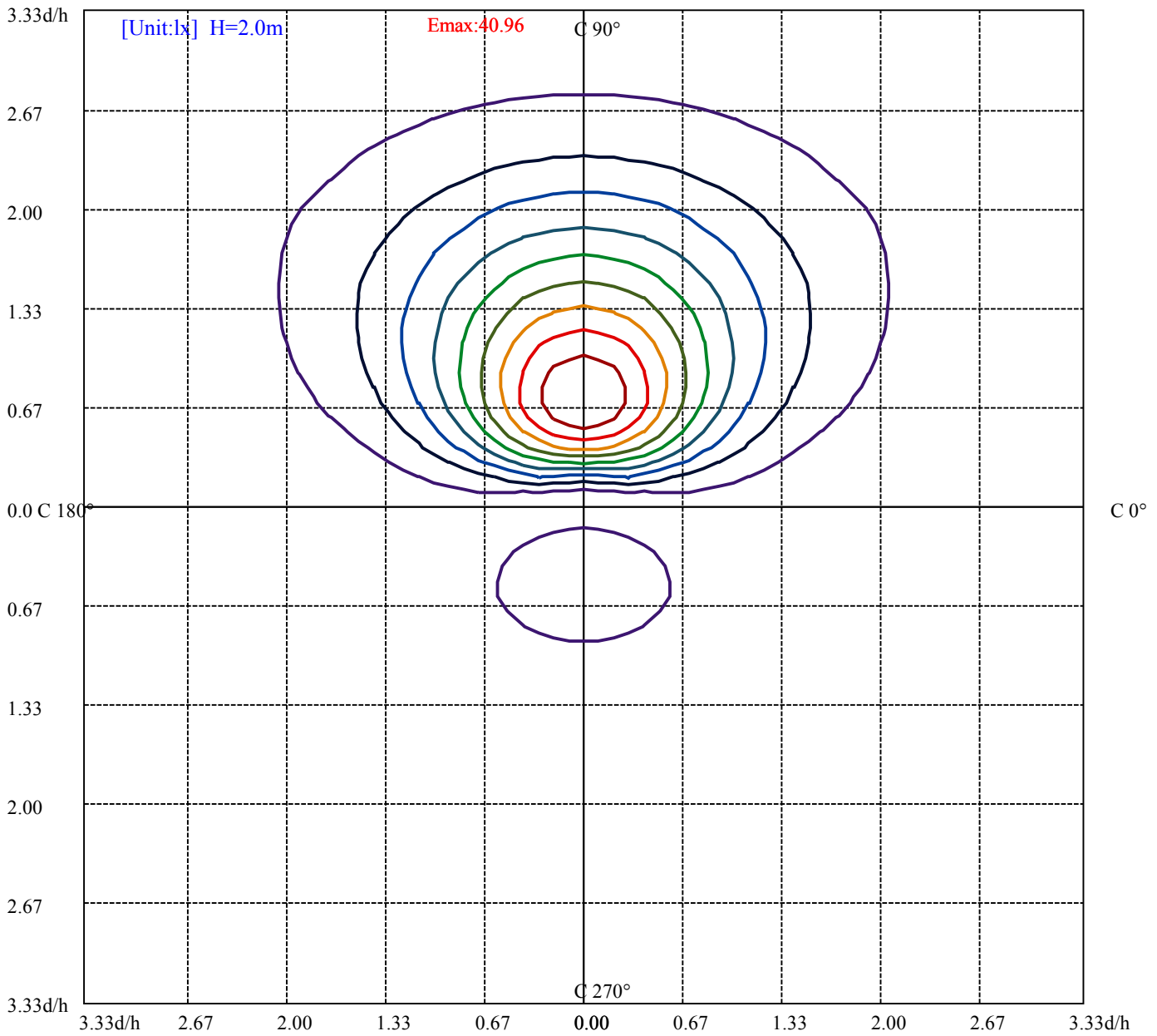
:C90/270Left:111.6 Right:48.1

Beam Angle(50%Imax):C0/180Left:261.3 Right:41.3

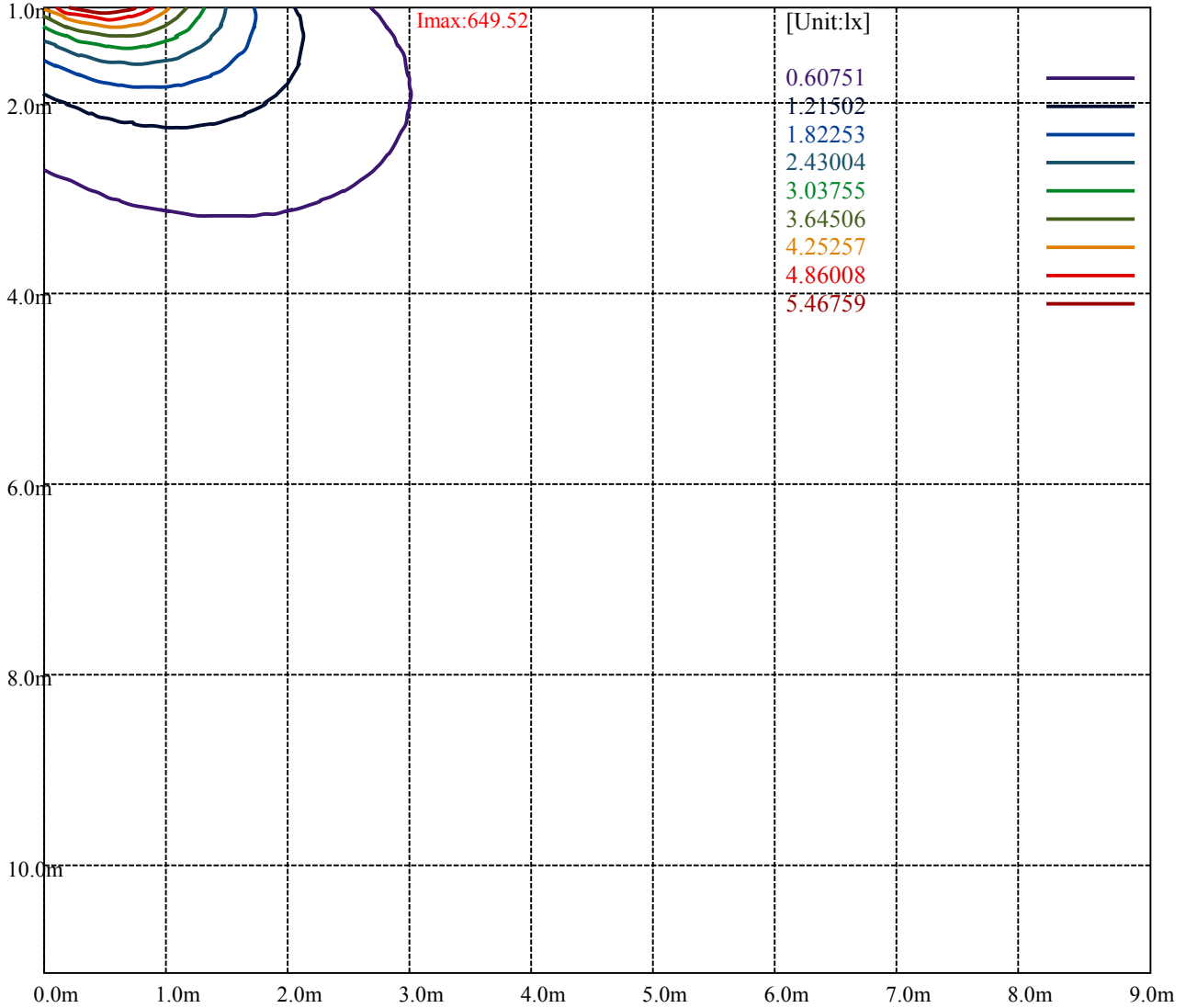
:C90/270Left:87.8 Right:24.5



Max , Ave Beam angle of C90 plane 348.88



- (10%Emax) 4.096425
- (20%Emax) 8.19285
- (30%Emax) 12.28928
- (40%Emax) 16.3857
- (50%Emax) 20.48212
- (60%Emax) 24.57855
- (70%Emax) 28.675
- (80%Emax) 32.7715
- (90%Emax) 36.86775



Luminance Table

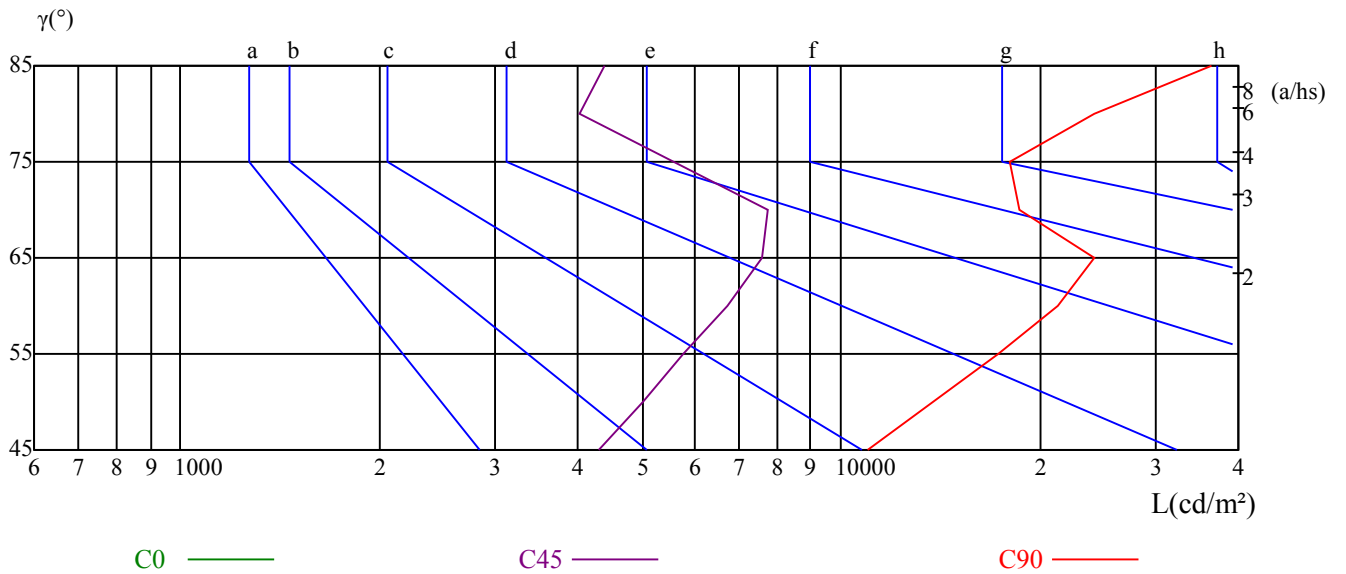
γ	45	50	55	60	65	70	75	80	85
C0	202	225	249	272	291	303	301	263	213
C45	4293	5005	5779	6736	7621	7772	5588	4014	4388
C90	10966	13835	17303	21335	24215	18587	17994	24221	36345

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
916	16281	11155	1422	14302	11964	2645	48023	24055

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	0.67	0.63	0.60	0.54	0.51	0.49	0.43	0.41	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	0.29	0.24
3	0.63	0.53	0.46	0.57	0.49	0.42	0.47	0.41	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	0.34	0.28	0.32	0.27	0.23	0.24	0.20	0.17	0.13
5	0.47	0.38	0.31	0.43	0.34	0.28	0.35	0.28	0.23	0.28	0.22	0.18	0.21	0.17	0.14	0.10
6	0.42	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	0.22	0.34	0.26	0.20	0.28	0.21	0.16	0.22	0.17	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	0.20	0.14	0.11	0.15	0.11	0.08	0.05
9	0.30	0.22	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	4.37	4.64	5.19	5.65	6.28	7.01	7.74	8.56	9.29
15.0	5.28	4.10	5.19	8.38	13.66	20.40	28.78	38.07	47.36
30.0	6.01	4.19	10.02	23.04	42.44	63.48	85.33	108.10	130.14
45.0	6.47	4.83	17.39	44.90	74.59	109.38	142.71	178.95	215.38
60.0	6.83	5.28	25.32	62.20	102.91	147.17	193.25	240.79	287.24
75.0	6.83	6.19	32.51	75.50	120.67	174.49	225.86	281.50	339.06
90.0	7.01	6.65	34.06	79.23	129.50	183.87	241.25	296.62	361.55
105.0	6.74	6.19	33.51	75.32	126.59	176.59	231.78	288.60	347.25
120.0	6.37	5.10	26.77	65.48	108.19	154.27	200.17	252.36	300.90
135.0	3.28	4.46	19.12	49.27	80.96	117.03	154.82	193.71	232.23
150.0	5.46	3.82	11.29	28.32	68.85	74.31	99.18	124.49	150.27
165.0	4.64	3.28	5.83	11.29	19.12	29.78	41.71	54.01	67.03
180.0	4.37	4.92	5.74	6.83	7.83	9.20	10.93	12.84	15.03
195.0	5.28	6.56	7.92	9.38	10.84	12.11	13.57	14.75	16.03
210.0	6.01	8.83	11.93	14.75	17.94	20.49	23.04	25.41	27.69
225.0	6.47	10.75	15.30	19.49	23.41	26.96	30.05	32.79	35.43
240.0	6.83	12.20	17.94	22.68	27.14	30.96	34.15	36.79	38.71
255.0	6.83	13.30	19.40	24.77	29.42	33.06	36.16	38.16	39.80
270.0	7.01	13.75	19.76	25.50	29.96	33.88	36.70	38.52	40.07
285.0	6.74	13.39	19.49	24.95	29.60	33.42	36.16	38.43	38.80
300.0	6.37	12.57	17.85	23.04	24.50	31.51	34.61	37.16	39.07
315.0	3.28	10.66	15.76	20.04	24.13	27.69	30.96	33.88	36.16
330.0	5.46	8.74	12.20	15.57	18.76	21.58	24.59	27.05	29.60
345.0	4.64	6.47	8.11	10.11	11.84	13.66	15.39	17.03	18.67
360.0	4.37	4.64	5.19	5.65	6.28	7.01	7.74	8.56	9.29
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	10.29	11.29	12.57	13.57	14.57	15.12	15.21	14.66	12.48
15.0	56.83	66.21	75.13	82.97	90.34	96.26	98.63	92.16	57.28
30.0	154.00	176.04	198.17	218.94	239.52	255.27	244.80	167.39	99.91
45.0	252.90	290.70	327.86	370.57	404.45	401.26	294.98	185.88	178.32
60.0	337.15	389.33	445.52	503.17	535.41	452.35	286.87	254.00	273.49
75.0	399.07	463.92	534.22	596.88	610.36	439.24	317.29	324.12	349.99
90.0	421.84	494.70	567.10	630.30	631.67	416.92	334.78	354.54	383.77
105.0	408.55	475.03	547.06	606.08	617.55	417.01	317.75	333.14	360.37
120.0	354.18	409.91	470.11	530.67	557.54	429.40	279.77	267.29	288.51
135.0	272.03	313.10	354.54	401.53	436.14	415.74	259.10	185.15	194.71
150.0	174.67	199.72	225.31	250.26	273.03	287.33	250.63	143.07	107.65
165.0	78.05	89.89	101.27	112.02	120.94	127.95	127.95	108.37	56.56
180.0	17.12	19.12	20.67	22.04	22.59	22.22	20.13	14.57	9.65
195.0	17.49	18.58	19.58	20.40	20.95	20.67	18.67	12.48	6.65
210.0	29.78	31.60	33.15	33.88	32.42	28.41	21.67	14.30	12.11
225.0	37.43	39.07	38.98	36.79	31.97	26.59	19.76	15.57	14.66
240.0	40.25	40.07	38.16	33.79	29.42	24.22	18.85	16.67	15.85
255.0	40.53	39.34	36.06	32.42	28.51	24.04	19.76	19.03	17.12
270.0	40.25	38.52	35.52	34.61	28.87	24.50	20.58	18.94	18.03
285.0	40.44	39.25	35.88	32.51	28.87	24.41	20.04	18.31	17.39
300.0	40.44	40.16	37.89	33.97	29.42	24.68	19.12	16.94	16.03
315.0	38.34	40.07	39.62	37.34	32.60	26.96	20.67	15.85	14.84
330.0	31.78	33.70	35.52	35.97	34.24	29.78	23.41	15.76	12.84
345.0	20.04	21.49	22.59	23.86	24.59	24.22	21.77	15.30	8.38
360.0	10.29	11.29	12.57	13.57	14.57	15.12	15.21	14.66	12.48

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	7.83	7.19	11.84	14.84	15.94	16.21	16.03	15.48	14.39
15.0	36.97	36.70	51.18	91.62	103.09	103.09	99.09	92.71	85.24
30.0	98.27	98.27	95.99	143.71	241.25	264.93	250.54	230.96	210.01
45.0	185.60	185.69	178.77	175.95	264.38	402.35	418.20	384.78	343.34
60.0	283.96	283.78	273.21	253.82	269.02	422.02	544.51	525.30	465.46
75.0	363.65	363.56	351.35	326.67	310.92	400.62	607.72	614.00	555.63
90.0	397.62	397.53	385.69	358.18	332.32	394.98	627.39	649.52	594.60
105.0	373.12	372.94	360.82	336.42	318.02	396.61	617.55	625.39	568.38
120.0	299.17	298.99	288.51	268.39	281.87	428.49	562.36	545.61	491.78
135.0	202.00	201.90	195.17	192.25	276.22	418.75	447.34	415.92	372.85
150.0	111.47	111.56	109.92	156.55	262.38	298.53	286.15	263.38	238.33
165.0	45.72	46.08	66.21	119.76	137.06	136.15	130.05	121.31	111.56
180.0	11.11	18.03	22.77	24.95	25.23	24.86	23.59	21.86	19.94
195.0	9.11	15.39	18.21	18.58	18.12	17.58	17.03	16.21	14.30
210.0	12.66	17.49	22.95	26.59	27.05	26.68	25.77	24.59	21.86
225.0	14.84	17.12	22.31	26.77	30.42	31.69	31.51	29.87	28.96
240.0	15.94	17.12	17.76	25.32	28.78	31.69	32.88	32.15	31.33
255.0	17.30	18.40	21.13	25.14	28.23	30.87	32.60	32.51	31.87
270.0	18.03	19.22	21.67	25.32	28.14	30.51	32.06	33.06	32.33
285.0	17.39	18.58	21.13	24.95	27.96	30.51	32.42	33.24	32.15
300.0	16.03	17.03	20.22	24.41	27.69	30.33	32.42	32.06	31.42
315.0	14.84	15.94	20.58	25.41	28.96	31.87	32.33	31.06	29.87
330.0	12.66	15.85	21.58	26.05	27.78	27.41	26.59	25.86	23.95
345.0	8.20	14.48	19.58	20.76	20.40	19.49	18.58	17.49	15.76
360.0	7.83	7.19	11.84	14.84	15.94	16.21	16.03	15.48	14.39
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	12.84	11.93	11.47	10.38	9.29	7.92	6.37	4.83	4.28
15.0	76.86	67.94	58.74	48.63	38.89	29.32	20.67	12.75	6.92
30.0	189.06	167.21	143.80	120.94	100.00	78.14	52.64	28.23	12.66
45.0	304.09	268.66	229.77	195.17	158.01	124.95	90.07	53.82	19.85
60.0	411.10	356.73	305.82	257.09	211.65	164.38	120.21	78.78	30.69
75.0	484.59	422.21	357.45	302.17	246.17	194.71	139.16	93.07	42.99
90.0	517.28	447.34	380.31	318.29	262.01	205.27	149.08	97.81	45.63
105.0	495.06	428.49	367.75	308.91	251.81	196.99	145.35	95.81	44.90
120.0	431.95	374.76	321.30	272.58	220.57	173.58	126.95	85.70	37.43
135.0	329.77	288.51	251.08	212.47	172.94	134.97	98.99	66.57	29.42
150.0	215.20	190.61	164.75	139.52	115.48	89.43	66.48	37.89	19.12
165.0	101.36	90.16	79.05	66.30	51.82	38.98	27.23	17.21	9.11
180.0	17.94	15.76	13.21	11.02	9.02	6.92	5.37	4.19	3.46
195.0	12.02	10.20	8.65	8.92	9.11	8.83	4.83	4.19	3.37
210.0	19.76	19.31	15.30	11.93	10.56	8.65	7.29	5.37	3.73
225.0	26.23	22.86	20.31	18.03	14.30	12.39	9.38	5.92	3.82
240.0	30.69	28.51	24.41	21.31	18.40	15.03	11.47	6.65	3.73
255.0	31.24	30.96	27.32	23.31	20.31	16.39	13.39	6.37	3.19
270.0	31.51	31.24	28.51	24.32	20.86	17.39	14.30	4.74	2.91
285.0	31.24	30.42	27.59	23.77	20.40	17.30	9.84	5.01	5.19
300.0	30.42	28.78	25.32	21.49	18.76	15.48	7.47	5.01	5.19
315.0	28.23	24.41	21.04	18.31	15.85	10.20	7.01	6.01	4.92
330.0	20.76	18.49	16.03	13.02	10.84	7.47	5.83	5.74	4.19
345.0	13.11	11.02	8.92	7.74	8.29	6.92	4.83	4.64	3.73
360.0	12.84	11.93	11.47	10.38	9.29	7.92	6.37	4.83	4.28

Intensity data(cd)

C/γ(°)	180.0
0.0	3.37
15.0	4.28
30.0	5.28
45.0	5.92
60.0	6.92
75.0	7.65
90.0	9.20
105.0	10.38
120.0	10.02
135.0	8.38
150.0	6.74
165.0	5.28
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	3.37