
乐达凯

Client:

LumCAT: CRNW0616LAJUDBK

Luminaire: LED lamp

Report No:

Ballast type:

Test No:

Voltage(V): 119.950

LampCAT:

Current(A): 0.177

Lamp flux(lm): 1653.1

Power (W): 21.050

Number of Lamps: 1

PF: 0.991

Length(mm): 570

Width(mm): 100

Phm Type: C

Height(mm): 120

Photometric Results

Lumens(lm): 1653.06, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 78.53

Central intensity(cd): 212.513, Maximum intensity(cd): 279.671

Angle of maximum intensity: C=90.0 γ =125.0

Beam Angle(50%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Field angle(10%Imax): [C0/180]Total=N.A.

[C90/270]Total=N.A.

Maximum s/h(1/2): C0_180=1.27 C90_270=1.84

Maximum s/h(1/4): C0_180=1.39 C90_270=2.00

Up flux rate of lamp(%): 49.77%

Down flux rate of lamp(%): 50.22%

Up flux rate of LUM(%): 49.78%

Down flux rate of LUM(%): 50.22%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 31.458%

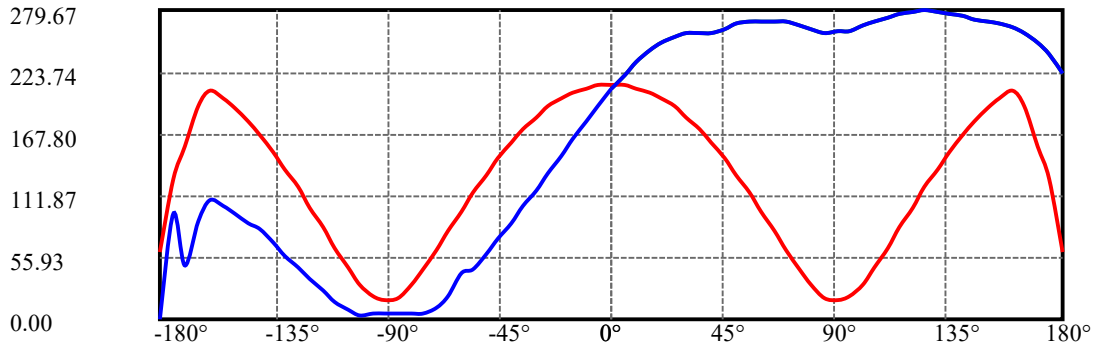
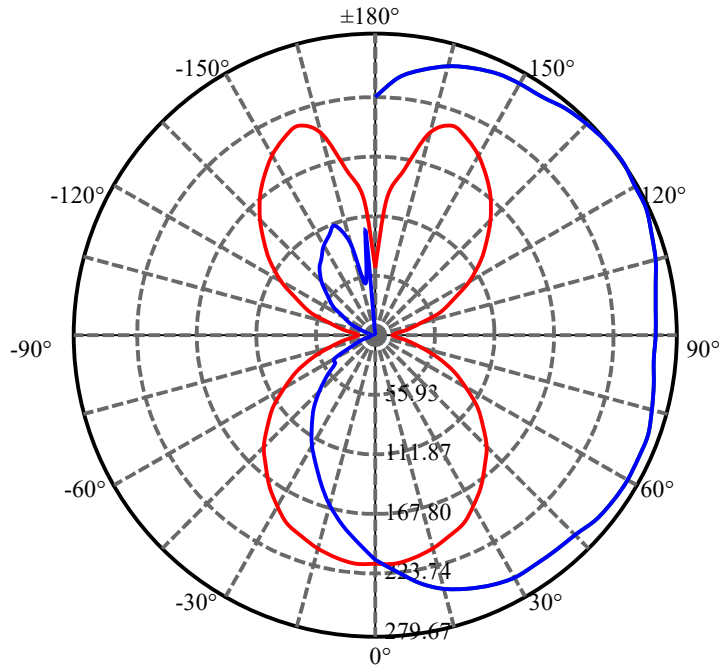
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	210.290	0.000	0	0.00%	0.00%
5.0	209.025	5.013	5.013	0.30%	0.30%
10.0	207.146	14.888	19.901	0.90%	1.20%
15.0	203.773	24.375	44.276	1.47%	2.68%
20.0	199.557	33.240	77.516	2.01%	4.69%
25.0	192.695	41.140	118.656	2.49%	7.18%
30.0	184.991	47.796	166.453	2.89%	10.07%
35.0	176.213	53.190	219.642	3.22%	13.29%
40.0	166.859	57.239	276.881	3.46%	16.75%
45.0	156.586	59.889	336.77	3.62%	20.37%
50.0	146.505	61.244	398.014	3.70%	24.08%
55.0	136.117	61.451	459.465	3.72%	27.79%
60.0	125.844	60.552	520.017	3.66%	31.46%
65.0	114.958	58.539	578.556	3.54%	35.00%
70.0	104.685	55.615	634.171	3.36%	38.36%
75.0	95.907	52.431	686.603	3.17%	41.54%
80.0	89.429	49.591	736.193	3.00%	44.54%
85.0	85.481	47.527	783.721	2.88%	47.41%
90.0	84.446	46.527	830.248	2.81%	50.23%
95.0	85.481	46.527	876.775	2.81%	53.04%
100.0	89.889	47.652	924.427	2.88%	55.92%
105.0	97.785	50.216	974.643	3.04%	58.96%
110.0	107.598	53.684	1028.327	3.25%	62.21%
115.0	118.216	57.178	1085.504	3.46%	65.67%
120.0	128.412	59.956	1145.46	3.63%	69.29%
125.0	139.222	61.863	1207.323	3.74%	73.04%
130.0	149.342	62.743	1270.067	3.80%	76.83%
135.0	158.771	62.259	1332.325	3.77%	80.60%
140.0	166.629	60.251	1392.576	3.64%	84.24%
145.0	173.836	56.804	1449.38	3.44%	87.68%
150.0	180.314	52.151	1501.531	3.15%	90.83%
155.0	185.566	46.302	1547.834	2.80%	93.63%
160.0	188.364	39.218	1587.052	2.37%	96.01%
165.0	181.732	30.501	1617.553	1.85%	97.85%
170.0	164.905	20.562	1638.115	1.24%	99.10%
175.0	166.323	11.849	1649.964	0.72%	99.81%
180.0	92.304	3.092	1653.056	0.19%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	166.45	10.07%	10.07%
0-40	276.88	16.75%	16.75%
0-60	520.02	31.46%	31.46%
0-90	830.25	50.22%	50.23%
0-120	1145.46	69.29%	69.29%
0-180	1653.06	100.00%	100.00%
60-90	310.23	18.77%	18.77%
90-120	315.21	19.07%	19.07%
90-130	439.82	26.61%	26.61%
90-150	671.28	40.61%	40.61%
90-180	819.72	49.59%	49.59%
0-134.21	1322.45	80.00%	80.00%

ZONAL LUMEN SUMMARY

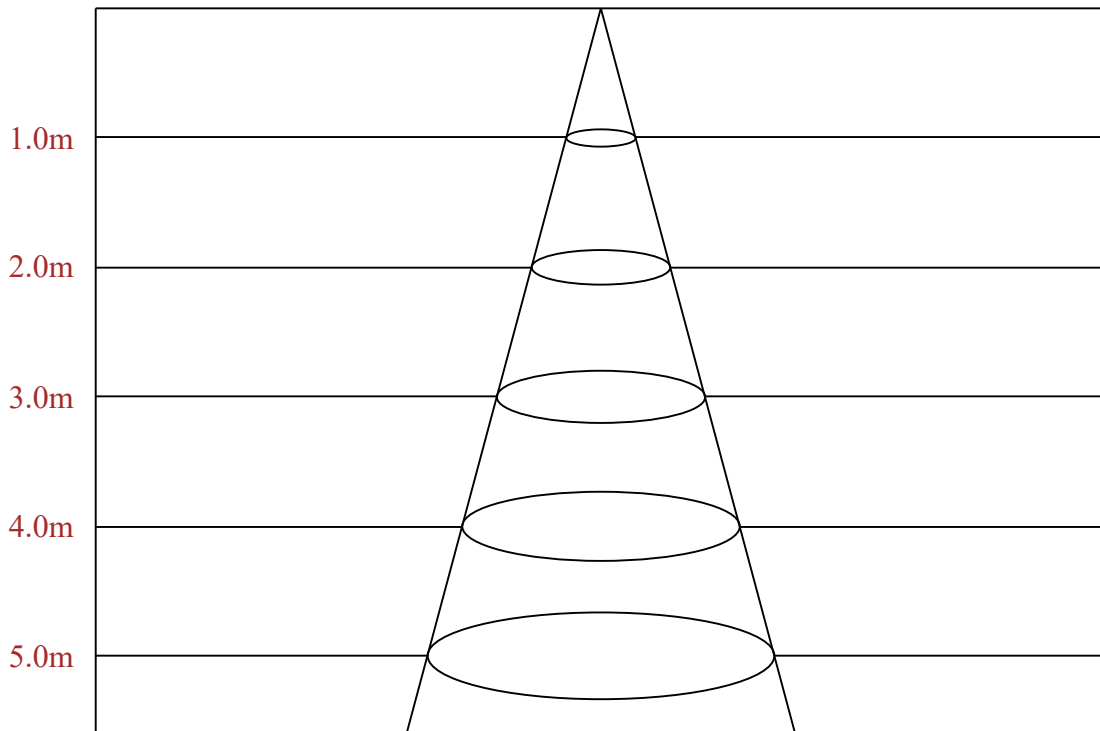
0-10	19.90
10-20	57.62
20-30	88.94
30-40	110.43
40-50	121.13
50-60	122.00
60-70	114.15
70-80	102.02
80-90	94.05
90-100	94.18
100-110	103.90
110-120	117.13
120-130	124.61
130-140	122.51
140-150	108.96
150-160	85.52
160-170	51.06
170-180	11.85



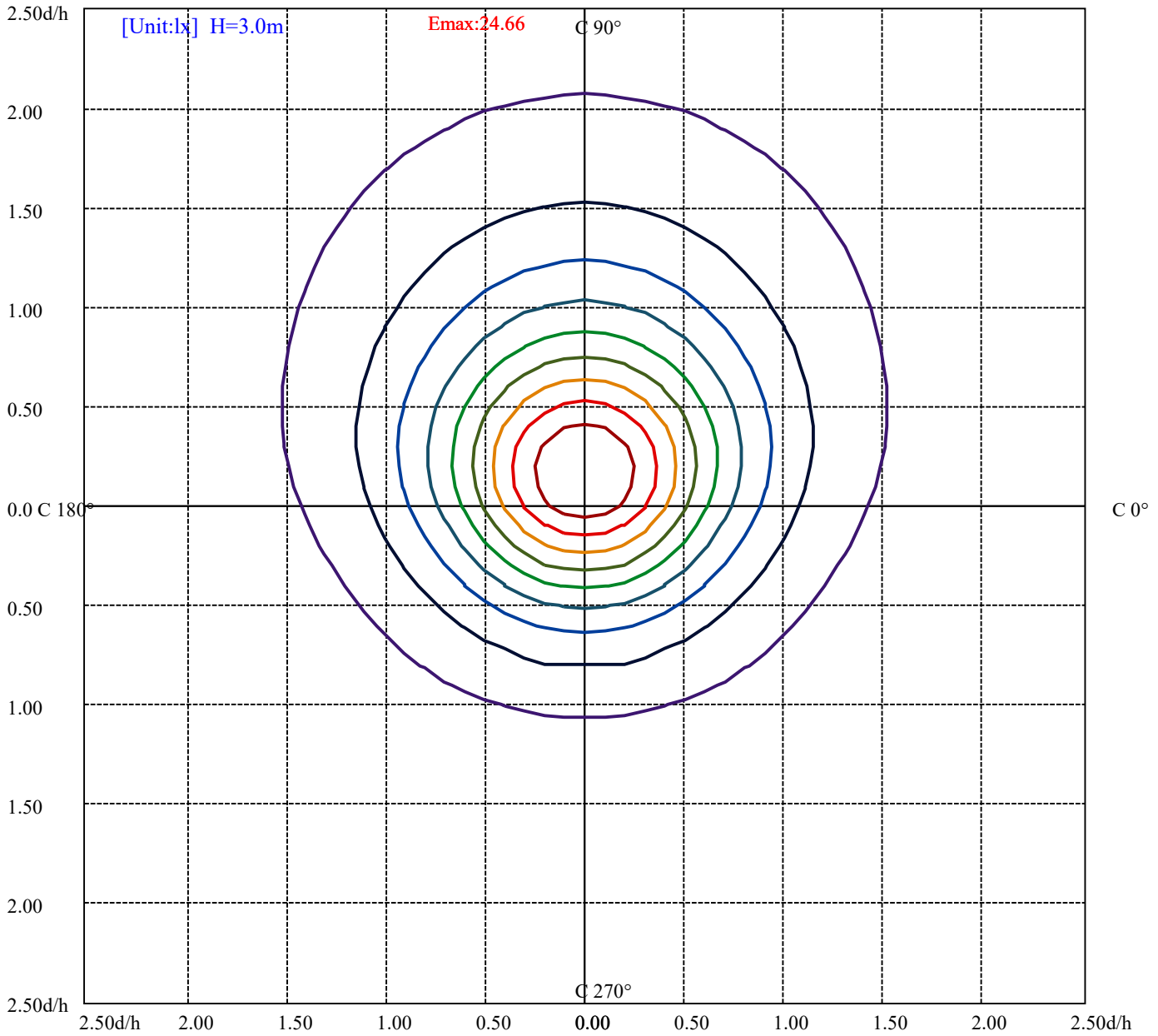
C90(Max): ——
 C0/C180: ——
 C90/C270: ——

Field angle(10%Imax):C0/180Left:0.0 Right:0.0
 :C90/270Left:0.0 Right:0.0

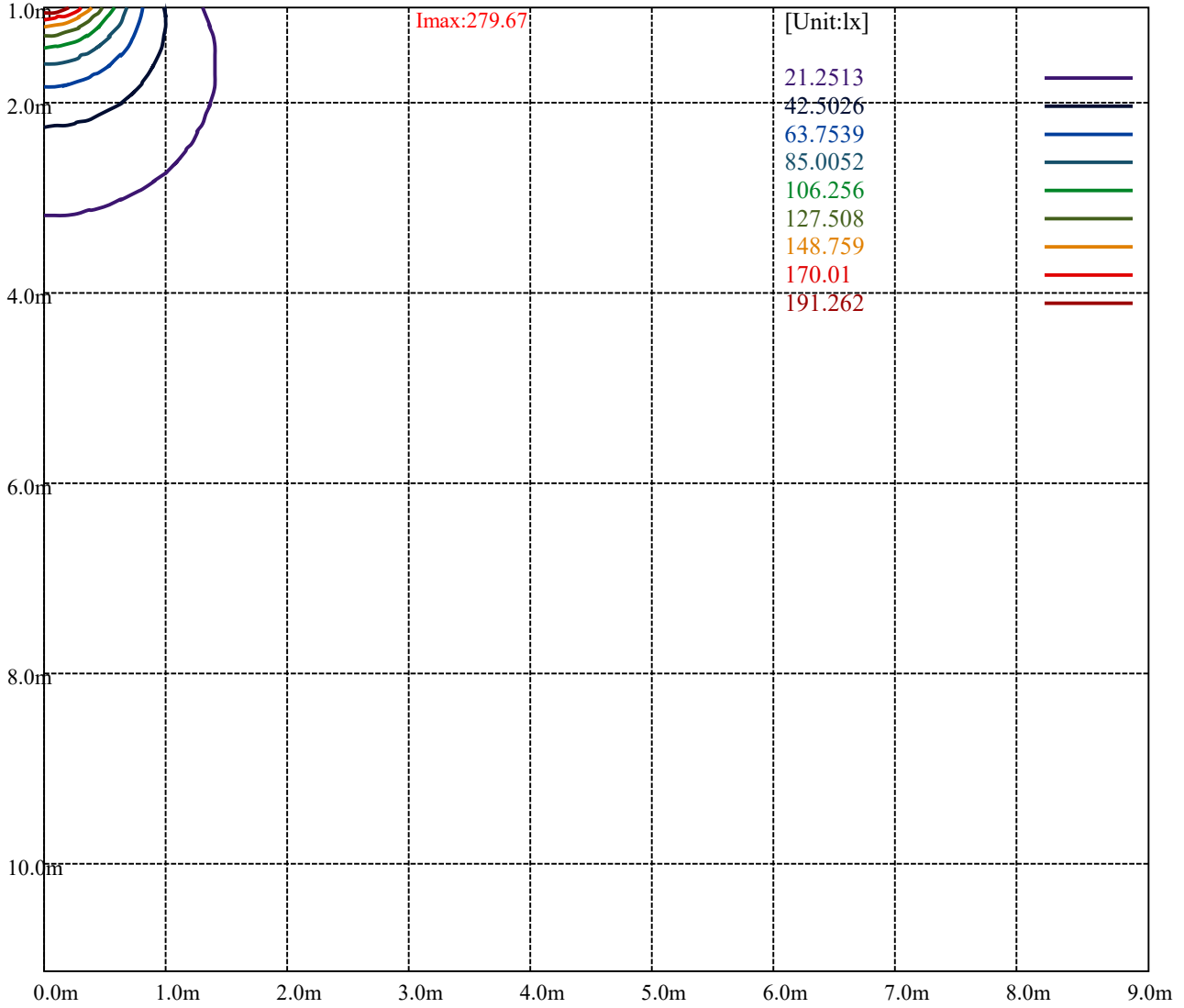
Beam Angle(50%Imax):C0/180Left:176.6 Right:176.6
 :C90/270Left:0.0 Right:0.0



Max , Ave Beam angle of C90 plane 216.88



- (10%Emax) 2.466144
- (20%Emax) 4.9323
- (30%Emax) 7.398444
- (40%Emax) 9.86459
- (50%Emax) 12.33078
- (60%Emax) 14.79689
- (70%Emax) 17.263
- (80%Emax) 19.72922
- (90%Emax) 22.19533



Luminance Table

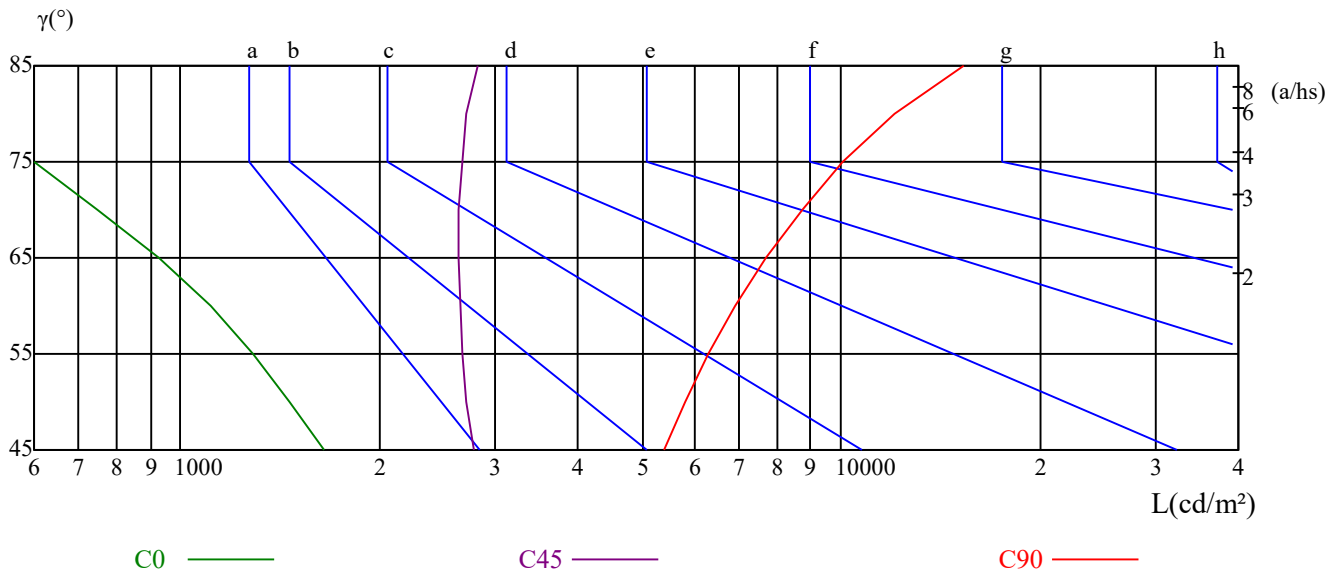
γ	45	50	55	60	65	70	75	80	85
C0	1644	1467	1291	1111	930	747	563	399	271
C45	2783	2707	2675	2651	2640	2643	2667	2716	2823
C90	5393	5821	6317	6931	7709	8730	10092	12074	15331

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
3323	6034	4869	3087	9198	6844	3981	26574	18750

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	0.56	0.56	0.56	0.50
1	0.90	0.85	0.81	0.83	0.79	0.75	0.69	0.66	0.63	0.57	0.55	0.53	0.46	0.44	0.43	0.37
2	0.77	0.70	0.64	0.71	0.65	0.60	0.60	0.55	0.51	0.49	0.45	0.42	0.39	0.36	0.34	0.29
3	0.67	0.59	0.52	0.62	0.55	0.49	0.52	0.46	0.42	0.43	0.38	0.35	0.34	0.31	0.28	0.24
4	0.59	0.50	0.44	0.54	0.47	0.41	0.46	0.40	0.35	0.37	0.33	0.29	0.30	0.27	0.24	0.20
5	0.52	0.44	0.37	0.48	0.40	0.35	0.41	0.34	0.30	0.33	0.29	0.25	0.27	0.23	0.20	0.17
6	0.47	0.38	0.32	0.43	0.35	0.30	0.36	0.30	0.26	0.30	0.25	0.22	0.24	0.20	0.18	0.15
7	0.42	0.34	0.28	0.39	0.31	0.26	0.33	0.27	0.22	0.27	0.22	0.19	0.22	0.18	0.15	0.13
8	0.38	0.30	0.24	0.35	0.28	0.23	0.30	0.24	0.20	0.25	0.20	0.17	0.20	0.16	0.14	0.11
9	0.35	0.27	0.22	0.32	0.25	0.20	0.27	0.22	0.18	0.23	0.18	0.15	0.19	0.15	0.12	0.10
10	0.32	0.24	0.19	0.29	0.23	0.18	0.25	0.20	0.16	0.21	0.17	0.13	0.17	0.14	0.11	0.09

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	212.51	212.51	210.67	206.99	201.47	195.03	184.91	174.79	162.83
15.0	211.59	215.27	217.11	217.11	215.27	210.67	205.15	197.79	188.59
30.0	211.59	218.03	222.63	226.31	228.15	226.31	224.47	218.95	212.51
45.0	209.75	219.87	228.15	233.67	238.27	240.11	239.19	236.43	231.83
60.0	209.75	220.79	230.91	239.19	245.63	249.31	250.23	249.31	246.55
75.0	207.91	220.79	232.75	241.95	249.31	253.91	256.67	257.59	256.67
90.0	207.91	220.79	232.75	242.87	250.23	255.75	258.51	259.43	259.43
105.0	207.91	220.79	231.83	241.95	248.39	252.99	255.75	255.75	254.83
120.0	207.91	218.95	229.99	237.35	243.79	247.47	248.39	247.47	244.71
135.0	216.19	218.03	225.39	231.83	235.51	237.35	236.43	234.59	229.07
150.0	209.75	216.19	220.79	223.55	224.47	224.47	221.71	216.19	209.75
165.0	210.67	213.43	214.35	214.35	212.51	207.91	202.39	195.03	184.91
180.0	212.51	211.59	207.91	203.31	197.79	189.51	179.39	168.35	155.47
195.0	211.59	206.99	200.55	193.19	183.99	172.95	160.99	147.20	133.40
210.0	211.59	202.39	193.19	183.07	172.03	159.15	144.44	128.80	113.16
225.0	209.75	199.63	187.67	174.79	160.99	146.28	131.56	115.92	101.20
240.0	209.75	195.95	183.07	169.27	153.63	138.00	122.36	107.64	93.84
255.0	207.91	195.03	180.31	164.67	148.12	133.40	117.76	103.96	89.24
270.0	207.91	193.19	179.39	162.83	148.12	132.48	116.84	102.12	87.40
285.0	207.91	194.11	179.39	164.67	149.96	133.40	119.60	104.88	101.20
300.0	207.91	195.95	182.15	168.35	165.59	139.84	125.12	110.40	95.68
315.0	216.19	198.71	186.75	174.79	161.91	148.12	133.40	118.68	103.96
330.0	209.75	201.47	193.19	182.15	171.11	158.23	144.44	130.64	115.92
345.0	210.67	206.07	200.55	192.27	183.07	172.03	160.07	147.20	132.48
360.0	212.51	212.51	210.67	206.99	201.47	195.03	184.91	174.79	162.83
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	149.96	135.24	118.68	102.12	83.72	66.24	48.76	33.12	21.16
15.0	177.55	165.59	150.88	135.24	117.76	100.28	83.72	69.92	58.88
30.0	203.31	193.19	180.31	169.27	158.23	147.20	136.16	126.96	120.52
45.0	225.39	218.95	214.35	208.83	202.39	195.95	189.51	183.07	178.47
60.0	244.71	243.79	243.79	241.95	239.19	235.51	230.91	226.31	223.55
75.0	259.43	261.27	263.11	263.11	262.19	260.35	257.59	253.91	251.15
90.0	263.11	266.79	268.63	269.55	269.55	268.63	265.87	262.19	259.43
105.0	257.59	259.43	260.35	260.35	260.35	257.59	254.83	251.15	247.47
120.0	241.95	241.03	240.11	237.35	234.59	229.99	225.39	220.79	216.19
135.0	222.63	215.27	209.75	203.31	196.87	189.51	182.15	174.79	169.27
150.0	200.55	190.43	178.47	164.67	153.63	140.76	129.72	118.68	110.40
165.0	174.79	161.91	148.12	132.48	115.92	98.44	80.04	63.48	51.52
180.0	141.68	126.04	110.40	92.92	76.36	58.88	42.32	28.52	18.40
195.0	117.76	102.12	85.56	69.92	54.28	40.48	29.44	20.24	15.64
210.0	97.52	82.80	69.00	56.12	43.24	31.28	21.16	15.64	14.72
225.0	87.40	73.60	59.80	46.92	34.96	23.92	15.64	11.96	11.96
240.0	79.12	66.24	52.44	40.48	28.52	17.48	11.04	9.20	9.20
255.0	74.52	60.72	47.84	34.04	22.08	12.88	7.36	6.44	6.44
270.0	73.60	58.88	46.00	42.32	21.16	11.04	5.52	4.60	4.60
285.0	75.44	61.64	47.84	34.96	23.00	13.80	7.36	7.36	7.36
300.0	80.96	67.16	53.36	40.48	28.52	18.40	11.96	10.12	10.12
315.0	89.24	75.44	60.72	47.84	34.96	23.92	16.56	12.88	12.88
330.0	101.20	85.56	70.84	56.12	43.24	30.36	21.16	15.64	15.64
345.0	118.68	103.04	86.48	69.92	54.28	39.56	27.60	19.32	16.56
360.0	149.96	135.24	118.68	102.12	83.72	66.24	48.76	33.12	21.16

乐达凯 CRNW0616LAJUDBK

Appendix Page: 11 Total:12

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	16.56	20.24	31.28	46.92	65.32	83.72	101.20	120.52	137.08
15.0	54.28	57.96	68.08	82.80	98.44	115.92	134.32	150.88	166.51
30.0	117.76	120.52	127.88	137.08	148.12	160.07	172.03	182.15	194.11
45.0	177.55	179.39	183.99	192.27	199.63	206.99	214.35	220.79	226.31
60.0	223.55	225.39	229.07	234.59	240.11	245.63	249.31	252.99	254.83
75.0	252.07	252.99	256.67	261.27	265.87	269.55	272.31	273.23	273.23
90.0	260.35	261.27	264.95	268.63	273.23	276.91	277.83	279.67	278.75
105.0	247.47	249.31	252.07	256.67	261.27	265.87	267.71	268.63	269.55
120.0	216.19	217.11	220.79	225.39	231.83	237.35	241.95	245.63	248.39
135.0	167.43	168.35	172.95	179.39	187.67	195.95	203.31	210.67	217.11
150.0	106.72	107.64	114.08	124.20	135.24	148.12	160.07	172.03	185.83
165.0	45.08	46.00	55.20	69.92	86.48	104.88	123.28	140.76	157.31
180.0	16.56	20.24	31.28	46.92	64.40	82.80	100.28	118.68	134.32
195.0	15.64	16.56	23.00	34.04	46.92	61.64	78.20	94.76	111.32
210.0	14.72	13.80	17.48	24.84	35.88	46.92	60.72	73.60	87.40
225.0	11.96	11.96	12.88	19.32	27.60	36.80	39.56	58.88	70.84
240.0	9.20	9.20	9.20	13.80	23.00	32.20	42.32	53.36	65.32
255.0	6.44	5.52	5.52	10.12	18.40	27.60	37.72	48.76	59.80
270.0	4.60	4.60	3.68	8.28	15.64	25.76	35.88	46.92	57.96
285.0	7.36	6.44	6.44	11.04	18.40	28.52	38.64	48.76	59.80
300.0	10.12	10.12	10.12	14.72	23.00	32.20	42.32	52.44	64.40
315.0	12.88	12.88	14.72	20.24	27.60	37.72	46.92	57.96	69.00
330.0	15.64	15.64	19.32	26.68	36.80	47.84	59.80	72.68	83.72
345.0	16.56	18.40	26.68	37.72	51.52	66.24	81.88	96.60	111.32
360.0	16.56	20.24	31.28	46.92	65.32	83.72	101.20	120.52	137.08
C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	152.71	167.43	180.31	191.35	200.55	207.91	199.63	163.75	131.56
15.0	180.31	194.11	204.23	212.51	219.87	224.47	224.47	196.87	149.96
30.0	206.99	217.11	225.39	231.83	236.43	239.19	239.19	227.23	178.47
45.0	230.91	238.27	243.79	248.39	250.23	250.23	248.39	242.87	215.27
60.0	255.75	256.67	257.59	260.35	260.35	258.51	253.91	247.47	236.43
75.0	272.31	269.55	267.71	267.71	265.87	263.11	257.59	249.31	240.11
90.0	276.91	274.15	270.47	268.63	267.71	264.03	258.51	250.23	239.19
105.0	268.63	266.79	264.03	264.95	264.95	261.27	256.67	248.39	240.11
120.0	249.31	251.15	252.99	256.67	256.67	255.75	252.07	246.55	237.35
135.0	223.55	230.91	237.35	242.87	245.63	245.63	244.71	241.03	234.59
150.0	198.71	208.83	218.03	225.39	230.91	233.67	234.59	232.75	229.07
165.0	172.03	184.91	195.95	206.07	213.43	218.95	222.63	224.47	222.63
180.0	150.88	165.59	178.47	190.43	200.55	205.15	187.67	148.12	121.44
195.0	127.88	141.68	155.47	164.67	174.79	176.63	159.15	123.28	111.32
210.0	101.20	103.04	121.44	129.72	138.00	143.52	134.32	103.04	98.44
225.0	81.88	91.08	101.20	106.72	111.32	117.76	111.32	80.04	76.36
240.0	76.36	85.56	92.92	100.28	104.88	110.40	104.88	63.48	65.32
255.0	71.76	81.88	89.24	97.52	103.96	109.48	101.20	46.92	62.56
270.0	69.92	80.96	87.40	94.76	102.12	107.64	89.24	48.76	95.68
285.0	71.76	80.96	86.48	92.92	100.28	108.56	80.96	65.32	120.52
300.0	73.60	80.96	87.40	93.84	100.28	103.04	87.40	84.64	147.20
315.0	77.28	85.56	92.00	100.28	106.72	108.56	103.96	108.56	162.83
330.0	94.76	104.88	114.08	121.44	130.64	133.40	134.32	138.00	180.31
345.0	125.12	137.08	148.12	158.23	167.43	173.87	174.79	176.63	195.03
360.0	152.71	167.43	180.31	191.35	200.55	207.91	199.63	163.75	131.56

Intensity data(cd)

C/γ(°)	180.0
0.0	123.28
15.0	127.88
30.0	130.64
45.0	141.68
60.0	172.95
75.0	206.99
90.0	221.71
105.0	221.71
120.0	219.87
135.0	218.95
150.0	215.27
165.0	214.35
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	123.28