
乐达凯

Client:

LumCAT: CRNW0616LAJUDBK

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP24090312

Voltage(V): 120.070

LampCAT:

Current(A): 0.180

Lamp flux(lm): 1419.7

Power (W): 21.460

Number of Lamps: 1

PF: 0.991

Length(mm): 570

Width(mm): 100

Phm Type: C

Height(mm): 120

Photometric Results

Lumens(lm): 1419.70, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 66.16

Central intensity(cd): 182.798, Maximum intensity(cd): 239.836

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=1.85

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

Up flux rate of lamp(%): 49.78%

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 : 31.455%

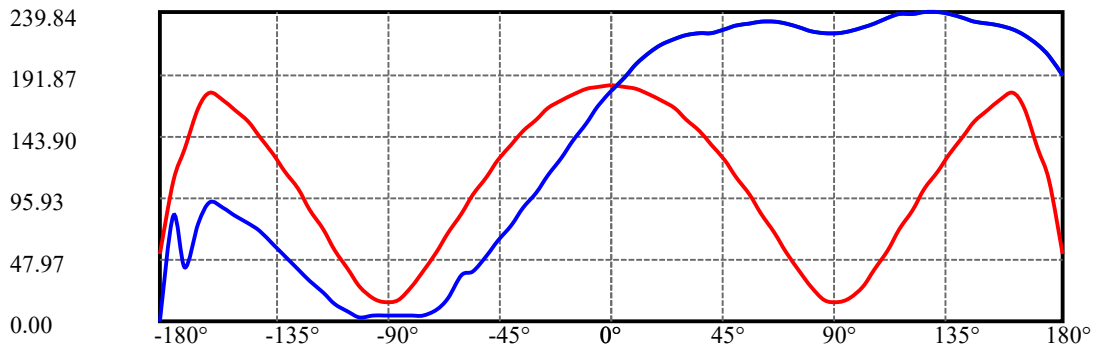
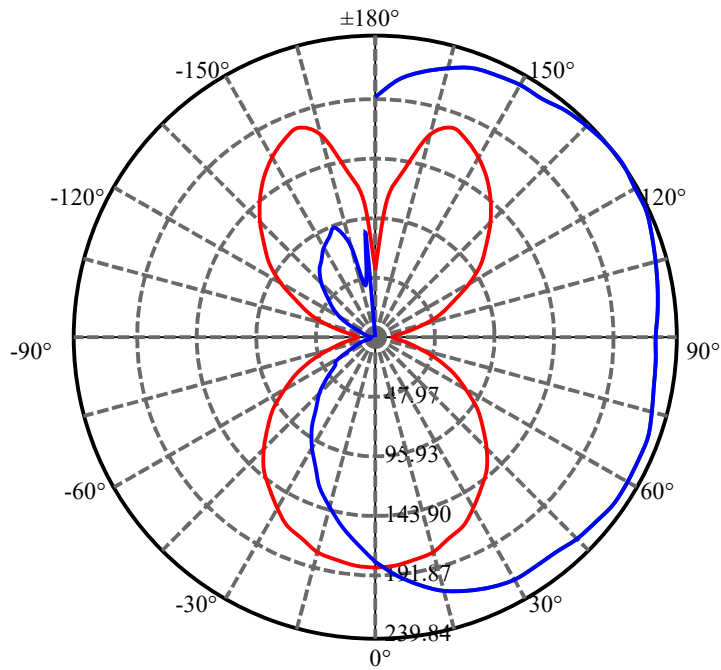
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	180.605	0.000	0	0.00%	0.00%
5.0	179.532	4.305	4.305	0.30%	0.30%
10.0	177.888	12.786	17.091	0.90%	1.20%
15.0	175.059	20.937	38.028	1.47%	2.68%
20.0	171.333	28.548	66.575	2.01%	4.69%
25.0	165.533	35.331	101.906	2.49%	7.18%
30.0	158.940	41.062	142.969	2.89%	10.07%
35.0	151.327	45.689	188.658	3.22%	13.29%
40.0	143.320	49.160	237.818	3.46%	16.75%
45.0	134.454	51.432	289.249	3.62%	20.37%
50.0	125.783	52.585	341.834	3.70%	24.08%
55.0	116.817	52.749	394.583	3.72%	27.79%
60.0	108.096	51.988	446.571	3.66%	31.46%
65.0	98.717	50.277	496.848	3.54%	35.00%
70.0	89.946	47.771	544.619	3.36%	38.36%
75.0	82.360	45.038	589.657	3.17%	41.53%
80.0	76.806	42.588	632.245	3.00%	44.53%
85.0	73.421	40.820	673.066	2.88%	47.41%
90.0	72.467	39.945	713.011	2.81%	50.22%
95.0	73.433	39.948	752.959	2.81%	53.04%
100.0	77.251	40.944	793.904	2.88%	55.92%
105.0	84.039	43.157	837.06	3.04%	58.96%
110.0	92.422	46.124	883.184	3.25%	62.21%
115.0	101.496	49.101	932.286	3.46%	65.67%
120.0	110.281	51.483	983.769	3.63%	69.29%
125.0	119.596	53.136	1036.905	3.74%	73.04%
130.0	128.209	53.881	1090.786	3.80%	76.83%
135.0	136.328	53.454	1144.239	3.77%	80.60%
140.0	143.067	51.732	1195.972	3.64%	84.24%
145.0	149.349	48.787	1244.759	3.44%	87.68%
150.0	154.888	44.801	1289.56	3.16%	90.83%
155.0	159.385	39.772	1329.332	2.80%	93.63%
160.0	161.784	33.685	1363.016	2.37%	96.01%
165.0	156.008	26.191	1389.207	1.84%	97.85%
170.0	141.698	17.660	1406.867	1.24%	99.10%
175.0	142.856	10.179	1417.046	0.72%	99.81%
180.0	79.267	2.655	1419.701	0.19%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	142.97	10.07%	10.07%
0-40	237.82	16.75%	16.75%
0-60	446.57	31.46%	31.46%
0-90	713.01	50.22%	50.22%
0-120	983.77	69.29%	69.29%
0-180	1419.70	100.00%	100.00%
60-90	266.44	18.77%	18.77%
90-120	270.76	19.07%	19.07%
90-130	377.77	26.61%	26.61%
90-150	576.55	40.61%	40.61%
90-180	704.04	49.59%	49.59%
0-134.21	1135.76	80.00%	80.00%

ZONAL LUMEN SUMMARY

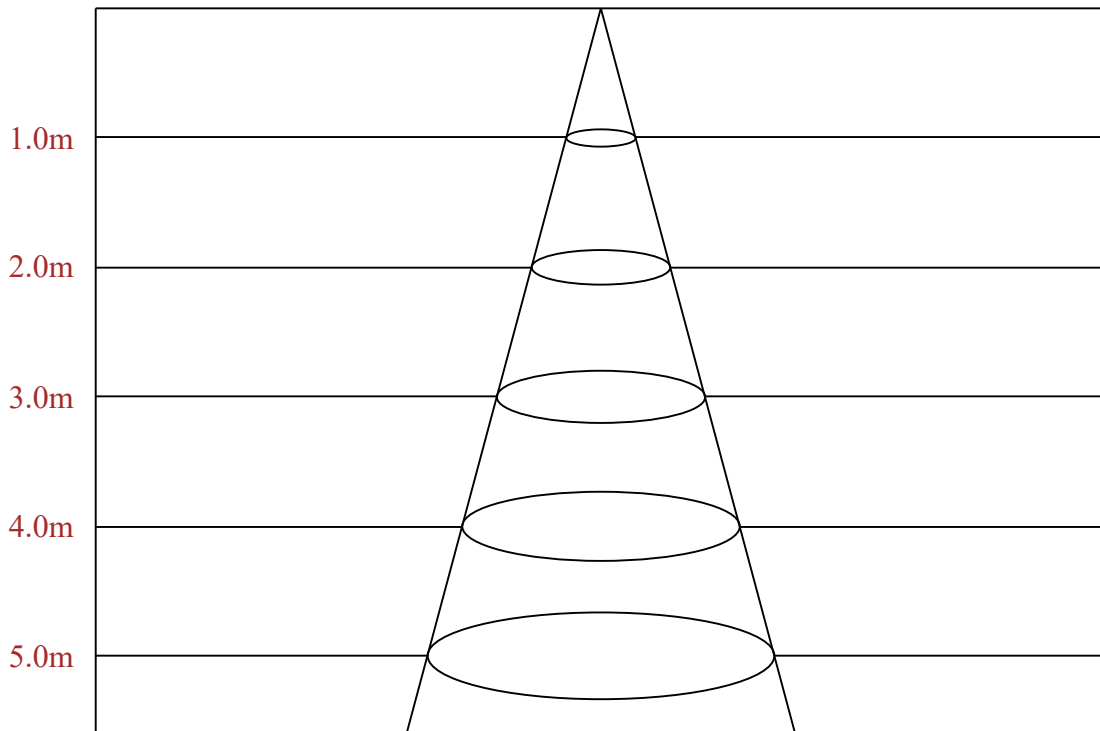
0-10	17.09
10-20	49.48
20-30	76.39
30-40	94.85
40-50	104.02
50-60	104.74
60-70	98.05
70-80	87.63
80-90	80.77
90-100	80.89
100-110	89.28
110-120	100.58
120-130	107.02
130-140	105.19
140-150	93.59
150-160	73.46
160-170	43.85
170-180	10.18



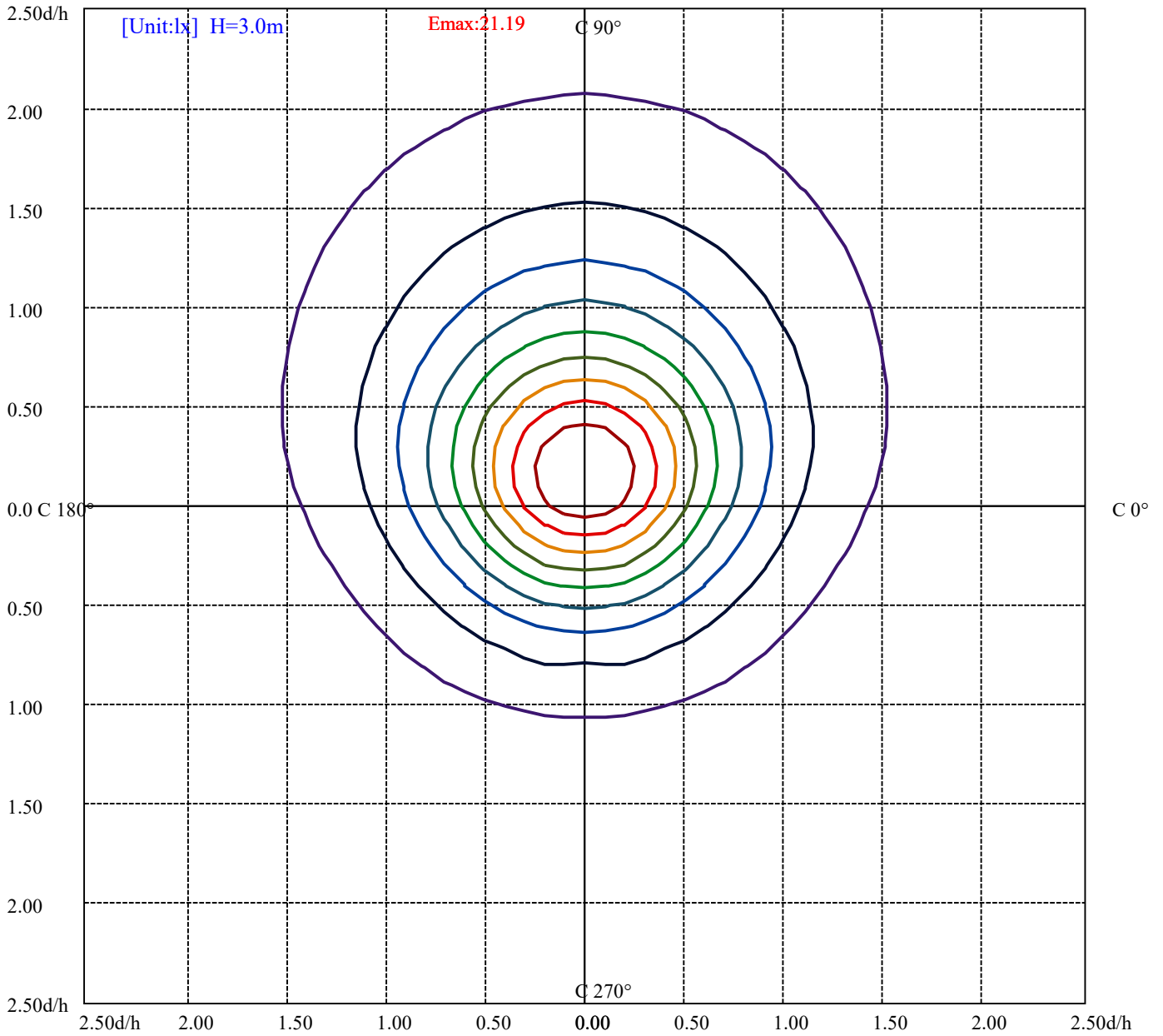
C90(Max): ———
 C0/C180: ———
 C90/C270: ———

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

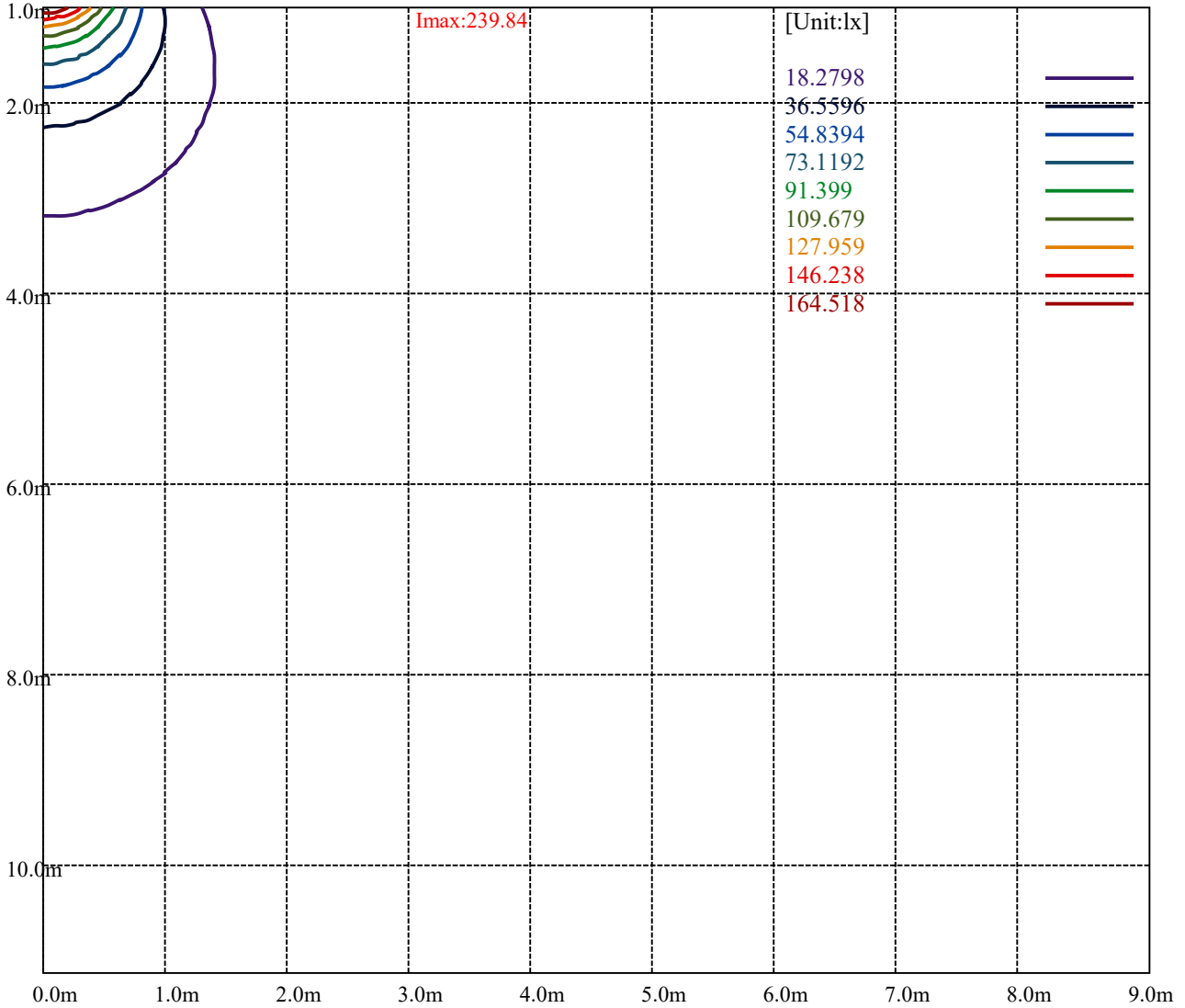
Beam Angle(50%Imax):C0/180Left:176.6 Right:176.6
 :C90/270Left:0.0 Right:0.0



Max , Ave Beam angle of C90 plane 216.74



(10%Emax) 2.119	—
(20%Emax) 4.238	—
(30%Emax) 6.357	—
(40%Emax) 8.476	—
(50%Emax) 10.59501	—
(60%Emax) 12.714	—
(70%Emax) 14.833	—
(80%Emax) 16.952	—
(90%Emax) 19.071	—



Luminance Table

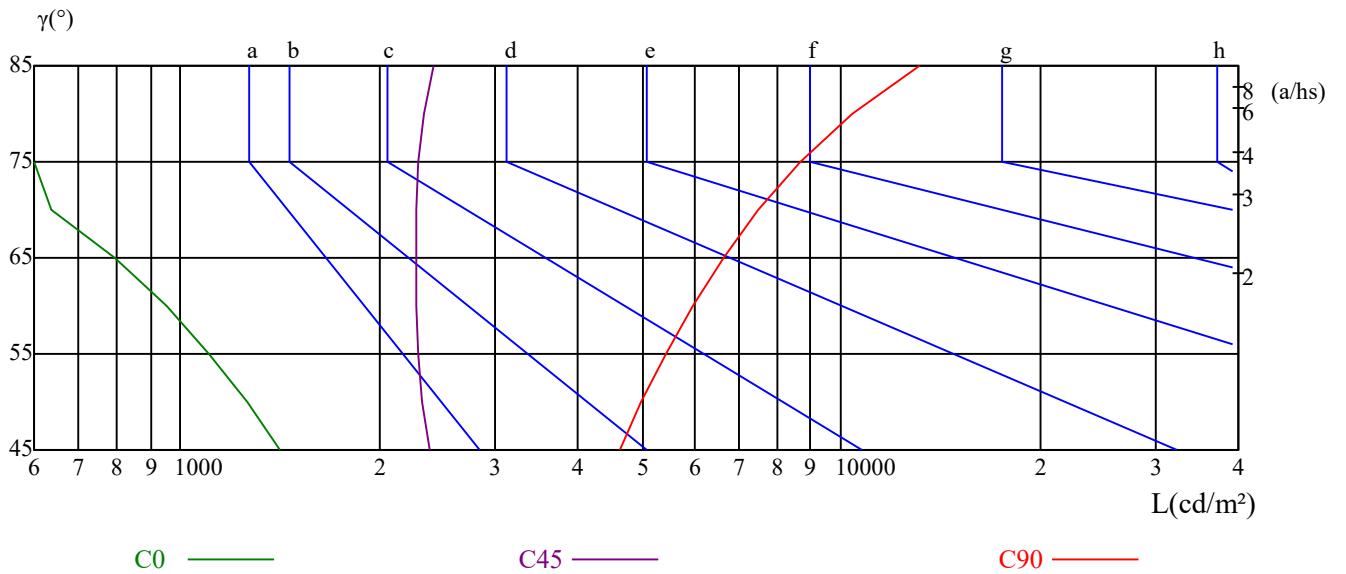
γ	45	50	55	60	65	70	75	80	85
C0	1410	1261	1106	955	795	639	484	344	233
C45	2390	2326	2294	2277	2268	2271	2289	2332	2424
C90	4635	4992	5426	5961	6628	7501	8668	10388	13189

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2841	5182	4183	2650	7895	5871	3435	22870	16116

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	182.80	182.71	180.96	177.92	173.32	167.43	159.15	150.42	140.02
15.0	181.97	184.91	186.11	186.11	184.55	181.33	176.45	169.73	161.64
30.0	181.42	186.94	191.17	194.21	195.59	194.76	192.46	187.86	182.43
45.0	180.31	188.50	195.59	200.83	204.42	205.89	205.43	203.22	199.17
60.0	179.76	189.42	198.35	205.61	210.77	213.98	214.90	214.17	211.78
75.0	178.93	189.97	200.00	207.82	214.26	218.31	220.61	220.88	220.33
90.0	178.29	189.51	200.00	208.65	215.18	219.60	221.99	222.82	223.00
105.0	178.38	189.33	199.36	207.64	213.43	217.48	219.69	219.96	219.14
120.0	178.66	188.41	197.15	204.14	209.20	212.33	213.43	212.60	210.03
135.0	185.47	187.31	193.84	199.08	202.39	203.59	203.31	201.11	197.06
150.0	180.13	185.37	189.24	192.09	192.92	192.64	190.16	185.93	180.13
165.0	181.14	183.26	184.45	184.09	182.25	178.93	173.87	167.43	158.97
180.0	182.80	181.51	178.75	174.89	169.55	162.65	154.28	144.62	133.86
195.0	181.97	177.55	172.13	165.69	157.68	148.58	138.00	126.59	114.81
210.0	181.42	174.15	166.24	157.50	147.38	136.43	124.20	110.67	97.15
225.0	180.31	171.11	161.18	150.32	138.64	125.67	112.70	99.54	87.12
240.0	179.76	168.54	157.50	145.17	132.02	118.68	105.43	92.73	80.22
255.0	178.93	167.25	154.55	141.31	127.51	114.35	101.01	88.96	76.45
270.0	178.29	166.15	153.82	139.93	127.32	113.80	100.37	87.49	74.79
285.0	178.38	166.79	154.19	141.31	128.52	114.81	103.04	90.34	86.57
300.0	178.66	168.63	156.49	144.99	142.14	120.42	107.73	94.94	82.34
315.0	185.47	170.84	160.72	150.14	138.92	126.86	114.54	101.75	89.42
330.0	180.13	173.41	165.59	156.58	146.64	136.25	124.38	111.96	99.36
345.0	181.14	177.19	171.94	165.41	157.41	148.02	137.44	126.13	113.89
360.0	182.80	182.71	180.96	177.92	173.32	167.43	159.15	150.42	140.02
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	128.43	115.92	101.66	87.67	71.57	56.76	41.86	28.80	18.22
15.0	152.25	141.95	129.53	116.01	101.29	86.02	71.57	59.71	50.41
30.0	174.89	165.78	155.20	145.08	136.16	126.68	117.30	109.02	103.13
45.0	193.38	188.13	183.90	179.21	174.06	168.45	162.65	157.22	153.27
60.0	210.12	209.75	209.11	207.64	205.43	202.39	198.62	194.76	192.00
75.0	222.45	224.10	225.67	225.94	225.58	223.92	221.25	218.40	215.92
90.0	226.13	228.80	230.73	231.83	231.74	230.82	228.34	225.58	223.18
105.0	220.98	222.72	223.64	223.92	223.28	221.53	218.68	215.46	212.88
120.0	207.73	206.99	205.98	203.96	201.20	197.79	193.65	189.42	186.02
135.0	191.45	184.91	179.76	174.79	168.91	162.74	156.30	150.05	145.36
150.0	172.59	163.66	153.08	141.58	131.74	120.98	111.13	101.93	94.76
165.0	150.14	139.38	127.05	114.17	99.63	84.18	68.35	54.83	43.97
180.0	121.62	108.56	94.57	79.85	65.32	50.32	36.34	24.29	15.92
195.0	101.01	87.58	73.78	60.07	47.01	34.87	25.12	17.20	13.80
210.0	83.63	71.30	59.15	48.02	36.89	26.77	18.49	13.16	12.42
225.0	75.07	63.02	51.33	40.29	29.90	20.52	13.62	10.40	10.49
240.0	68.08	56.76	44.89	34.50	24.20	15.27	9.66	8.00	8.00
255.0	64.21	52.25	40.75	29.62	19.32	11.22	5.98	5.15	5.24
270.0	62.93	50.32	39.28	35.97	17.94	9.20	4.60	3.86	4.05
285.0	64.58	52.99	41.31	30.27	19.87	11.50	6.62	5.98	5.98
300.0	69.92	57.59	45.72	34.50	24.20	15.73	10.21	8.74	8.83
315.0	76.82	64.40	52.53	40.94	30.18	20.70	13.89	10.95	11.13
330.0	86.66	73.78	60.99	48.57	37.35	26.31	18.49	13.71	13.06
345.0	101.84	88.13	73.97	59.89	46.46	34.04	23.92	16.74	14.08
360.0	128.43	115.92	101.66	87.67	71.57	56.76	41.86	28.80	18.22

乐达凯 CRNW0616LAJUDBK

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	14.35	17.39	27.14	40.66	55.75	72.03	87.21	103.31	117.39
15.0	46.73	49.59	58.42	70.93	84.27	99.63	115.18	129.81	143.33
30.0	101.29	103.22	109.57	117.76	127.60	137.63	147.56	156.76	167.07
45.0	152.53	154.28	158.42	164.77	171.48	177.92	183.99	189.70	194.39
60.0	191.81	193.38	196.41	201.29	206.17	210.58	214.35	217.20	219.14
75.0	216.10	217.57	220.52	224.56	228.43	231.37	233.49	234.59	234.68
90.0	223.55	224.75	227.42	231.10	234.87	237.63	238.92	239.84	239.47
105.0	212.70	213.80	216.74	220.61	224.47	227.97	229.72	231.00	231.37
120.0	185.47	186.48	189.33	193.93	198.90	203.59	207.55	210.77	212.97
135.0	143.70	144.53	148.30	154.46	161.45	168.17	174.79	181.05	186.75
150.0	91.44	92.27	97.88	106.53	116.28	126.96	137.63	148.12	159.34
165.0	38.45	39.56	47.47	59.80	74.61	90.25	106.16	121.07	134.87
180.0	14.35	17.30	26.96	40.02	54.92	70.84	85.83	101.75	115.73
195.0	13.71	14.44	19.96	29.07	40.11	53.27	67.34	81.51	95.22
210.0	12.33	12.24	15.18	21.71	30.45	40.66	51.89	62.93	74.79
225.0	10.49	10.30	11.32	16.47	23.37	31.83	33.76	50.51	60.63
240.0	8.00	7.82	7.91	12.14	19.41	27.32	36.52	46.18	56.21
255.0	5.15	4.97	4.88	8.65	15.82	23.55	32.20	41.49	51.24
270.0	3.96	3.77	3.50	7.18	13.80	21.99	31.00	40.48	49.95
285.0	6.07	5.89	5.70	9.38	16.01	24.38	32.84	42.13	51.43
300.0	8.74	8.65	8.92	12.97	20.06	27.97	36.71	45.26	55.11
315.0	11.13	11.04	12.33	17.48	23.83	32.38	40.66	50.05	58.97
330.0	13.06	13.16	16.93	23.00	31.46	41.31	51.06	62.10	71.57
345.0	14.08	16.01	22.82	32.47	44.62	56.67	70.38	82.71	95.40
360.0	14.35	17.39	27.14	40.66	55.75	72.03	87.21	103.31	117.39
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	131.10	143.79	155.01	164.49	172.13	178.20	171.30	140.94	112.97
15.0	154.83	166.33	175.16	182.89	188.96	193.10	192.46	169.46	128.98
30.0	177.65	186.66	193.75	199.36	203.13	205.15	205.43	194.85	153.27
45.0	198.62	204.33	209.66	213.43	215.27	215.09	213.16	208.93	184.64
60.0	219.87	220.06	221.62	223.74	223.64	221.99	218.31	212.60	202.67
75.0	233.58	231.74	229.62	229.72	228.70	225.85	220.98	214.44	205.89
90.0	238.00	235.24	231.92	231.10	229.90	226.96	221.80	214.72	205.80
105.0	230.64	228.80	226.96	227.78	227.23	224.66	220.06	213.71	206.07
120.0	214.44	215.36	217.48	220.15	220.61	219.60	216.47	211.50	204.23
135.0	191.72	198.35	204.05	208.47	210.86	211.32	209.85	206.72	201.47
150.0	170.56	179.67	187.49	193.65	197.98	200.65	201.38	200.19	196.78
165.0	147.66	158.97	168.35	177.09	183.53	188.41	191.45	192.46	191.17
180.0	129.44	142.14	153.63	163.20	171.94	175.99	160.81	127.51	104.60
195.0	109.75	121.90	133.40	141.58	150.42	151.98	136.52	106.26	95.77
210.0	86.57	88.87	104.51	111.13	118.68	123.00	115.27	88.23	84.55
225.0	70.19	78.20	86.75	92.00	95.77	100.92	95.95	68.81	65.59
240.0	65.96	73.23	79.58	86.11	90.07	94.57	90.07	54.55	55.75
255.0	61.36	70.65	76.36	83.81	89.24	93.84	86.94	40.48	54.09
270.0	59.98	69.55	75.35	81.23	87.67	92.64	76.45	42.13	82.15
285.0	61.45	69.18	74.24	79.95	85.83	93.19	69.37	55.75	103.22
300.0	63.11	69.27	75.07	80.59	86.39	88.50	75.44	72.49	126.77
315.0	66.70	73.14	79.30	85.83	91.44	93.10	89.15	93.56	140.11
330.0	81.42	90.07	97.88	104.32	112.05	114.81	115.27	118.77	154.55
345.0	107.27	118.12	127.23	135.70	143.79	149.31	150.32	151.70	167.43
360.0	131.10	143.79	155.01	164.49	172.13	178.20	171.30	140.94	112.97

Intensity data(cd)

C/γ(°)	180.0
0.0	105.61
15.0	109.75
30.0	112.14
45.0	121.71
60.0	148.48
75.0	177.74
90.0	190.62
105.0	190.80
120.0	188.78
135.0	187.77
150.0	185.10
165.0	183.90
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	105.61