
乐达凯

Client:

LumCAT: MIAP24LAJUDPC-3000K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No: LCZP26010190

Voltage(V): 120.030

LampCAT:

Current(A): 0.172

Lamp flux(lm): 2211.1

Power (W): 20.430

Number of Lamps: 1

PF: 0.991

Length(mm): -45

Width(mm): -45

Phm Type: C

Height(mm): 600

Photometric Results

Lumens(lm): 2211.11, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 108.23

Central intensity(cd): 27.777, Maximum intensity(cd): 229.545

Angle of maximum intensity: C=0.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=294.0

[C90/270]Total=285.2

Field angle(10%Imax): [C0/180]Total=343.0

[C90/270]Total=334.2

Maximum s/h(1/2): C0_180=4.58 C90_270=4.80

Maximum s/h(1/4): C0_180=4.31 C90_270=4.50

Up flux rate of lamp(%): 48.37%

Down flux rate of lamp(%): 51.63%

Up flux rate of LUM(%): 48.37%

Down flux rate of LUM(%): 51.63%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 20.335%

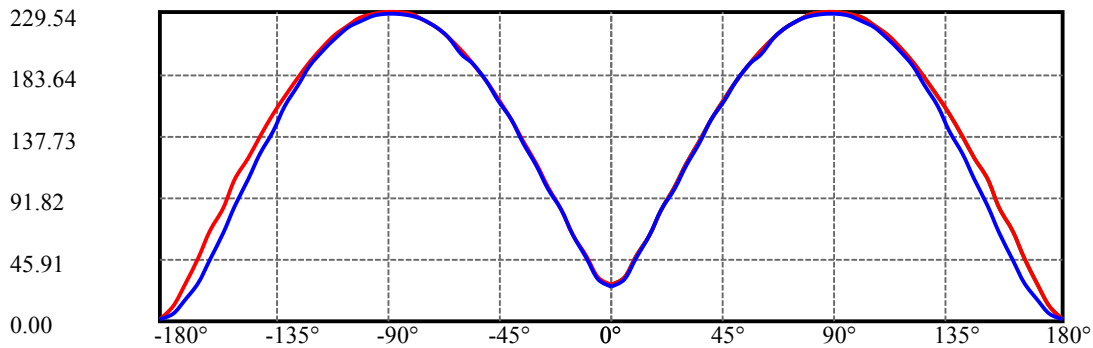
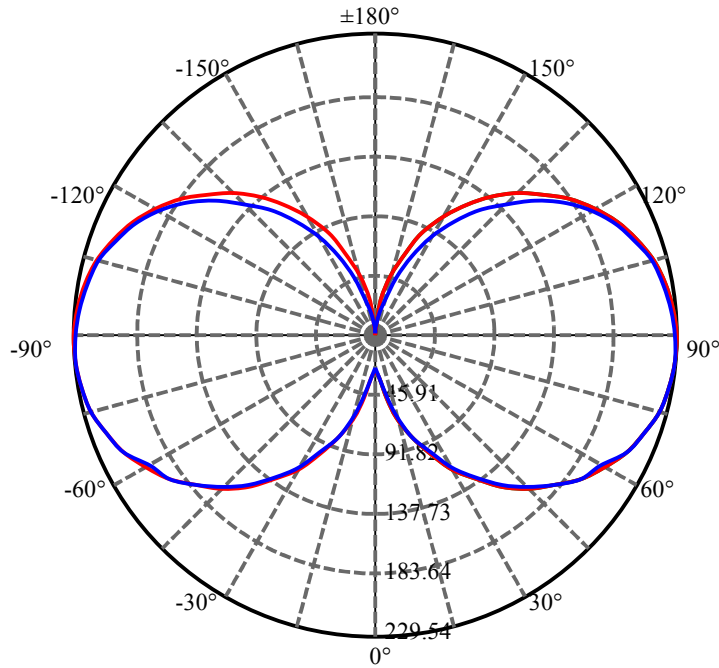
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	25.424	0.000	0	0.00%	0.00%
5.0	32.065	0.687	0.687	0.03%	0.03%
10.0	47.809	2.857	3.545	0.13%	0.16%
15.0	64.736	6.676	10.221	0.30%	0.46%
20.0	82.093	12.101	22.321	0.55%	1.01%
25.0	99.454	19.041	41.362	0.86%	1.87%
30.0	116.677	27.352	68.714	1.24%	3.11%
35.0	133.222	36.799	105.513	1.66%	4.77%
40.0	148.586	47.018	152.531	2.13%	6.90%
45.0	163.924	57.864	210.395	2.62%	9.52%
50.0	177.680	69.026	279.421	3.12%	12.64%
55.0	189.959	79.937	359.358	3.62%	16.25%
60.0	200.558	90.267	449.625	4.08%	20.33%
65.0	210.006	99.809	549.434	4.51%	24.85%
70.0	217.432	108.230	657.664	4.89%	29.74%
75.0	222.969	115.114	772.778	5.21%	34.95%
80.0	226.577	120.286	893.064	5.44%	40.39%
85.0	228.266	123.592	1016.656	5.59%	45.98%
90.0	228.183	124.979	1141.635	5.65%	51.63%
95.0	226.703	124.551	1266.186	5.63%	57.26%
100.0	223.557	122.346	1388.532	5.53%	62.80%
105.0	218.070	118.167	1506.699	5.34%	68.14%
110.0	210.803	112.101	1618.8	5.07%	73.21%
115.0	201.814	104.477	1723.277	4.73%	77.94%
120.0	191.272	95.560	1818.837	4.32%	82.26%
125.0	177.763	85.302	1904.139	3.86%	86.12%
130.0	163.101	74.115	1978.254	3.35%	89.47%
135.0	147.072	62.675	2040.929	2.83%	92.30%
140.0	130.881	51.465	2092.394	2.33%	94.63%
145.0	112.940	40.680	2133.074	1.84%	96.47%
150.0	94.395	30.532	2163.605	1.38%	97.85%
155.0	75.282	21.473	2185.078	0.97%	98.82%
160.0	56.768	13.850	2198.928	0.63%	99.45%
165.0	36.884	7.718	2206.646	0.35%	99.80%
170.0	20.203	3.386	2210.032	0.15%	99.95%
175.0	7.179	0.980	2211.012	0.04%	100.00%
180.0	0.842	0.096	2211.108	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	68.71	3.11%	3.11%
0-40	152.53	6.90%	6.90%
0-60	449.62	20.33%	20.33%
0-90	1141.63	51.63%	51.63%
0-120	1818.84	82.26%	82.26%
0-180	2211.11	100.00%	100.00%
60-90	692.01	31.30%	31.30%
90-120	677.20	30.63%	30.63%
90-130	836.62	37.84%	37.84%
90-150	1021.97	46.22%	46.22%
90-180	1069.38	48.36%	48.36%
0-117.39	1768.89	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	3.54
10-20	18.78
20-30	46.39
30-40	83.82
40-50	126.89
50-60	170.20
60-70	208.04
70-80	235.40
80-90	248.57
90-100	246.90
100-110	230.27
110-120	200.04
120-130	159.42
130-140	114.14
140-150	71.21
150-160	35.32
160-170	11.10
170-180	0.98



C0(Max): ———

C0/C180: ———

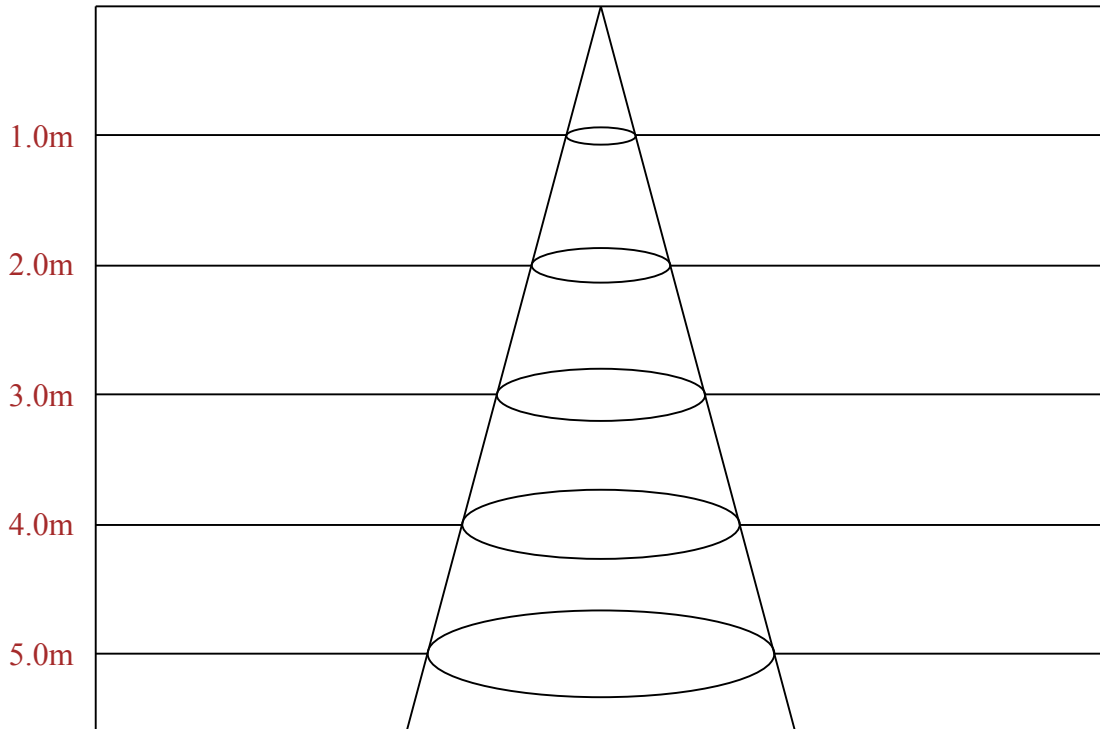
C90/C270: ———

Field angle(10%Imax):C0/180Left:261.5 Right:81.5

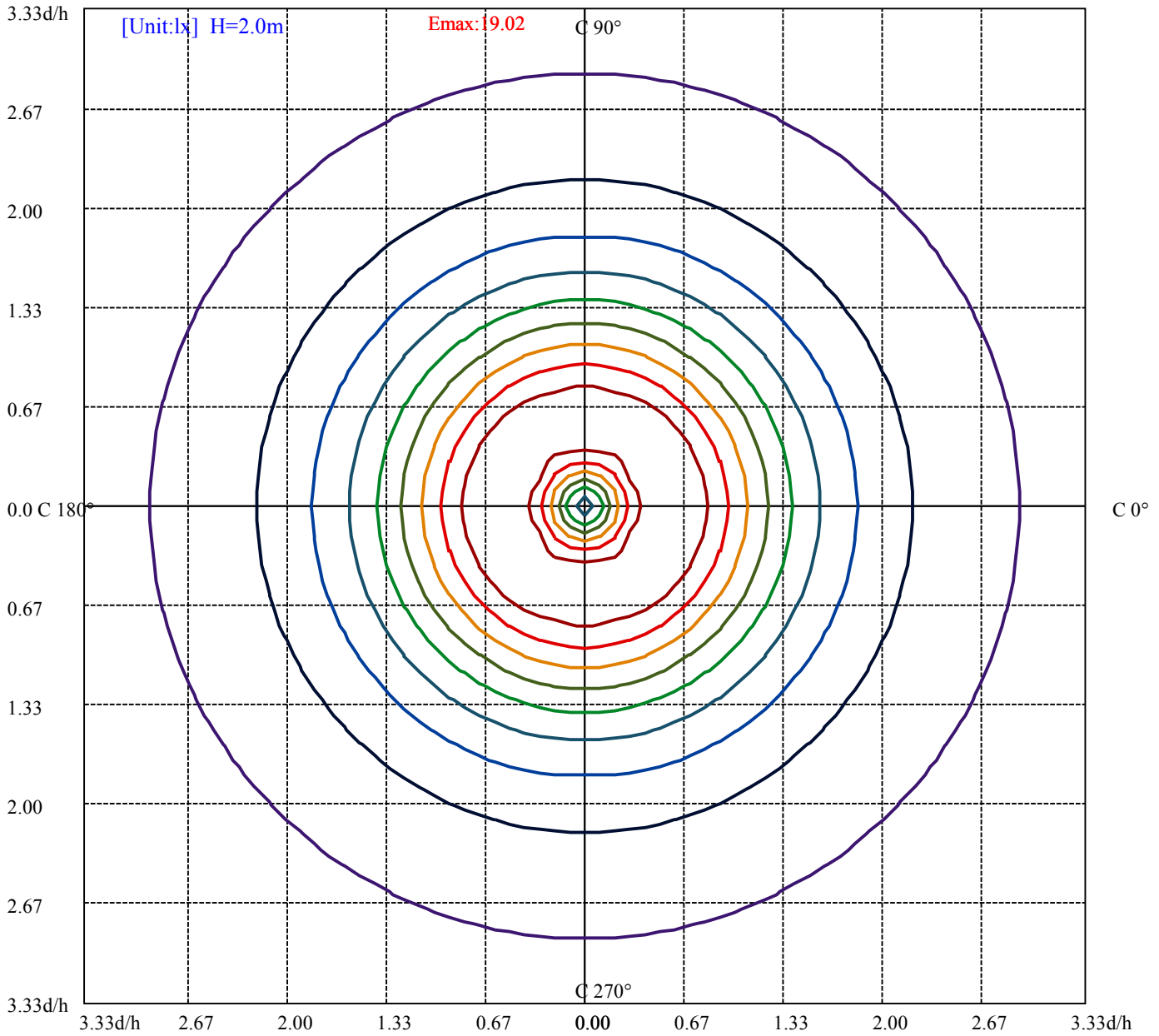
:C90/270Left:252.1 Right:82.1

Beam Angle(50%Imax):C0/180Left:237.0 Right:57.0

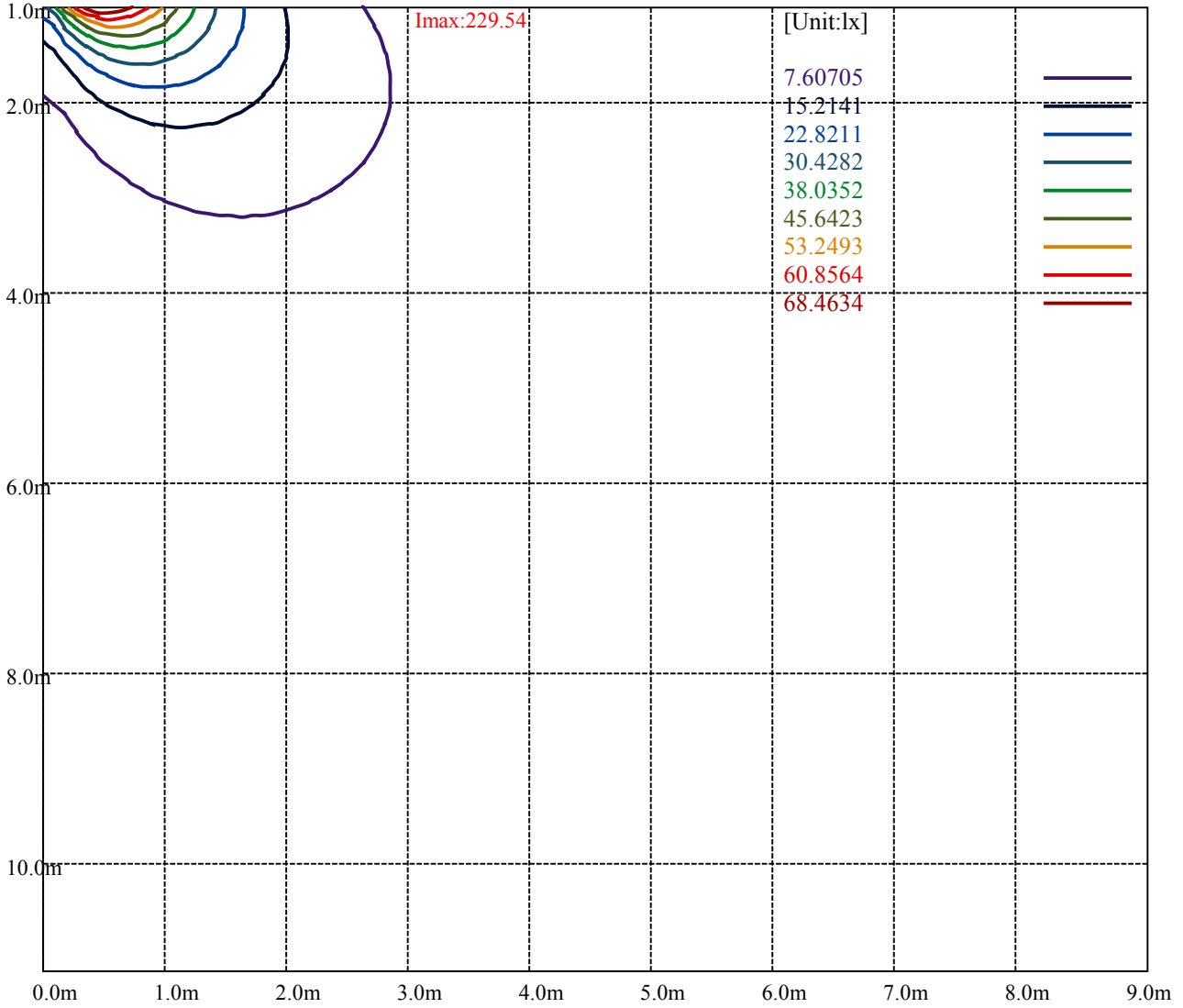
:C90/270Left:227.6 Right:57.6



Max , Ave Beam angle of C0 plane 347.01



- (10%Emax) 1.90176
- (20%Emax) 3.803525
- (30%Emax) 5.705275
- (40%Emax) 7.60705
- (50%Emax) 9.5088
- (60%Emax) 11.41057
- (70%Emax) 13.31232
- (80%Emax) 15.21408
- (90%Emax) 17.11585



Luminance Table

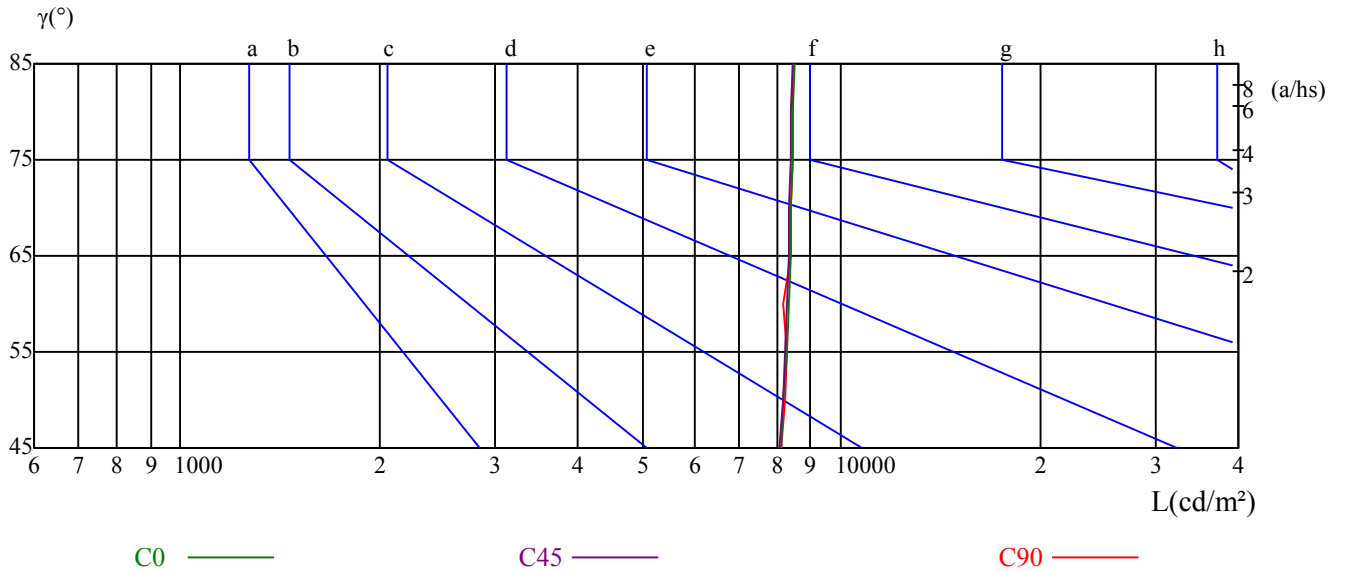
γ	45	50	55	60	65	70	75	80	85
C0	8147	8203	8291	8326	8376	8416	8450	8476	8489
C45	8091	8162	8227	8279	8336	8372	8403	8419	8429
C90	8129	8219	8289	8178	8384	8416	8438	8449	8450

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
313328	313599	311804	543816	543041	540773	1655657	1648102	1643995

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	1.08	1.08	1.08	0.99	0.99	0.99	0.84	0.84	0.84	0.70	0.70	0.70	0.58	0.58	0.58	0.52
1	0.86	0.79	0.74	0.78	0.73	0.68	0.65	0.61	0.57	0.53	0.50	0.47	0.42	0.39	0.37	0.32
2	0.72	0.63	0.56	0.65	0.58	0.51	0.54	0.48	0.43	0.43	0.39	0.35	0.34	0.30	0.27	0.22
3	0.61	0.51	0.44	0.56	0.47	0.40	0.46	0.39	0.34	0.36	0.31	0.27	0.28	0.24	0.21	0.16
4	0.53	0.43	0.36	0.48	0.39	0.33	0.39	0.33	0.27	0.31	0.26	0.22	0.24	0.20	0.16	0.12
5	0.46	0.37	0.29	0.42	0.33	0.27	0.35	0.28	0.22	0.28	0.22	0.18	0.21	0.17	0.13	0.10
6	0.41	0.31	0.25	0.37	0.29	0.23	0.31	0.24	0.19	0.24	0.19	0.15	0.19	0.14	0.11	0.08
7	0.37	0.27	0.21	0.33	0.25	0.19	0.27	0.21	0.16	0.22	0.16	0.12	0.17	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	0.15	0.11	0.15	0.11	0.08	0.05
9	0.30	0.21	0.16	0.27	0.20	0.14	0.22	0.16	0.12	0.18	0.13	0.09	0.14	0.10	0.07	0.04
10	0.27	0.19	0.14	0.25	0.18	0.13	0.21	0.15	0.10	0.17	0.12	0.08	0.13	0.09	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	27.78	22.86	37.61	53.00	71.40	89.43	106.92	124.68	141.34
15.0	27.50	22.68	37.07	53.73	71.40	89.43	107.19	123.49	140.07
30.0	26.59	23.13	37.34	54.28	71.22	89.98	106.37	123.58	140.34
45.0	26.68	23.86	37.43	54.19	71.76	89.43	107.01	123.49	140.07
60.0	25.96	23.95	38.34	55.10	71.86	90.43	107.19	124.40	140.70
75.0	25.77	24.68	38.71	55.37	72.86	90.52	108.19	124.68	141.62
90.0	24.95	24.86	39.62	56.28	73.86	90.71	108.47	125.68	141.80
105.0	24.13	25.59	39.89	56.56	74.13	91.62	109.38	126.41	142.07
120.0	24.22	25.50	40.62	57.47	74.95	91.71	109.38	126.50	142.62
135.0	23.22	26.14	41.35	57.28	74.68	92.07	109.65	126.68	142.71
150.0	23.95	26.32	40.53	58.01	87.61	91.98	108.74	126.59	141.52
165.0	24.32	26.05	40.89	57.56	74.77	90.89	109.01	124.77	142.07
180.0	27.78	42.26	59.29	76.68	93.99	110.56	128.05	143.16	158.37
195.0	27.50	41.53	58.92	75.13	92.62	109.65	126.13	142.07	156.92
210.0	26.59	41.07	57.74	74.68	91.98	108.19	125.40	140.61	155.46
225.0	26.68	40.16	56.65	74.59	90.80	107.65	124.22	140.07	155.09
240.0	25.96	39.80	56.37	73.49	89.71	107.74	123.40	139.43	154.55
255.0	25.77	38.89	55.46	72.49	89.80	107.01	123.86	140.16	155.82
270.0	24.95	38.80	55.64	71.95	90.16	106.55	123.67	140.25	156.19
285.0	24.13	38.16	55.01	72.40	89.98	107.56	124.86	140.61	145.35
300.0	24.22	38.34	55.55	73.31	77.32	108.28	125.59	142.44	157.28
315.0	23.22	38.52	55.74	73.68	91.34	108.10	125.40	142.16	158.01
330.0	23.95	38.25	55.55	73.49	91.16	108.74	126.13	142.80	157.74
345.0	24.32	38.16	56.10	72.95	90.89	108.65	126.04	142.62	158.37
360.0	27.78	22.86	37.61	53.00	71.40	89.43	106.92	124.68	141.34
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	156.92	171.03	185.24	196.44	207.19	215.84	223.03	228.22	231.41
15.0	155.73	170.39	183.78	195.71	206.19	214.65	221.58	226.59	229.77
30.0	155.73	170.21	182.87	194.71	205.09	213.74	220.48	225.40	228.86
45.0	155.46	169.67	182.87	194.53	204.73	213.38	220.12	225.13	228.04
60.0	156.00	170.30	182.96	194.89	204.82	213.47	220.12	225.04	227.77
75.0	156.37	170.67	183.69	195.26	205.18	213.47	220.21	225.13	227.95
90.0	157.10	171.30	184.24	195.35	205.64	214.02	220.57	225.31	228.13
105.0	157.28	171.58	184.51	195.89	205.91	214.38	220.48	225.58	228.04
120.0	157.83	171.85	183.96	195.99	205.46	213.84	220.48	225.31	227.86
135.0	157.55	170.85	183.69	194.98	205.00	213.20	219.75	223.76	226.40
150.0	156.28	170.21	183.05	194.16	203.09	211.29	217.93	222.58	224.95
165.0	155.73	169.76	181.32	192.52	202.27	210.37	216.29	220.85	223.49
180.0	172.49	185.06	196.62	206.19	214.02	220.39	224.67	227.22	227.59
195.0	170.67	183.24	194.71	204.18	212.29	218.39	222.67	224.95	225.49
210.0	169.30	181.96	193.25	202.91	210.83	217.11	221.21	223.85	224.13
225.0	168.48	181.69	192.62	202.36	210.37	216.57	220.85	223.22	223.58
240.0	168.66	181.78	193.44	203.45	211.65	217.66	222.21	224.49	224.67
255.0	170.58	184.24	195.26	206.46	214.02	220.30	224.49	225.13	226.59
270.0	171.58	185.51	197.53	200.08	215.93	222.21	226.49	228.68	228.77
285.0	172.76	186.97	198.54	209.92	217.66	223.94	228.41	230.68	231.05
300.0	173.22	186.33	198.81	209.74	218.57	225.49	229.59	232.69	232.78
315.0	172.76	186.42	198.72	208.83	218.21	224.67	229.68	232.60	233.51
330.0	172.58	186.70	198.54	209.37	218.12	225.04	229.95	232.50	233.69
345.0	173.13	186.60	198.81	209.46	217.93	224.95	229.95	232.96	233.87
360.0	156.92	171.03	185.24	196.44	207.19	215.84	223.03	228.22	231.41

乐达凯 MIAP24LAJUDPC-3000K

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	232.41	232.05	229.86	225.86	219.66	212.65	202.91	192.25	179.77
15.0	230.77	230.23	228.77	224.85	218.75	210.83	201.36	190.89	177.68
30.0	229.32	229.41	227.40	223.22	217.02	209.65	199.99	188.79	176.31
45.0	228.95	228.50	226.59	222.21	216.57	208.46	198.72	187.06	174.67
60.0	228.68	228.41	226.31	222.30	216.11	207.46	197.44	185.97	173.22
75.0	228.86	228.50	226.04	221.94	215.75	206.91	196.35	184.60	171.85
90.0	228.68	228.22	226.13	221.85	215.29	206.09	194.89	182.96	169.30
105.0	228.77	228.41	226.22	221.58	214.47	205.09	193.62	180.96	167.75
120.0	228.13	227.95	225.49	221.21	214.93	205.18	194.71	182.51	168.66
135.0	227.04	226.59	224.31	220.03	213.65	204.82	194.35	183.60	169.48
150.0	225.58	224.85	222.67	218.30	211.83	203.36	193.16	182.23	169.48
165.0	223.94	223.40	221.12	216.75	210.47	202.27	192.34	180.78	169.30
180.0	226.68	224.13	219.30	212.92	204.09	193.89	183.05	169.30	154.55
195.0	224.40	222.21	217.75	211.10	202.54	193.16	181.87	168.21	155.19
210.0	223.49	220.85	216.29	210.19	201.45	192.71	181.50	168.39	153.36
225.0	223.31	220.30	216.29	209.74	201.63	192.98	189.52	166.75	150.45
240.0	223.67	221.03	220.12	210.10	201.90	192.34	181.69	165.20	147.26
255.0	225.40	222.58	217.93	211.38	203.73	193.98	182.42	165.20	147.99
270.0	227.40	224.58	219.85	213.38	205.27	196.17	183.87	167.94	148.99
285.0	229.86	227.22	222.58	216.02	207.82	197.99	186.15	169.12	150.27
300.0	231.78	229.23	224.67	218.21	209.92	200.17	187.61	170.12	151.36
315.0	232.78	230.23	226.04	219.75	211.47	201.72	190.16	176.40	159.37
330.0	233.05	230.87	226.68	220.39	212.20	202.54	191.16	178.32	163.20
345.0	233.42	231.14	226.95	220.39	212.74	203.09	191.70	178.77	164.93
360.0	232.41	232.05	229.86	225.86	219.66	212.65	202.91	192.25	179.77
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	166.57	151.82	136.06	118.94	100.45	81.33	62.38	41.98	21.13
15.0	164.84	149.99	134.06	117.30	100.63	82.15	62.57	40.53	21.04
30.0	162.47	148.17	132.42	115.66	98.17	81.05	61.11	38.98	18.58
45.0	160.74	145.71	129.78	112.84	96.08	77.50	57.19	35.97	16.21
60.0	159.10	144.71	127.68	110.74	92.16	74.50	53.73	34.61	13.02
75.0	157.55	141.89	125.22	107.28	90.07	71.40	52.09	32.24	11.20
90.0	154.46	138.70	122.49	104.46	85.88	67.76	50.73	30.87	8.65
105.0	152.54	136.33	119.12	101.54	81.60	63.02	42.53	21.22	5.65
120.0	154.18	138.34	122.22	103.55	84.51	66.03	47.90	29.05	7.29
135.0	155.82	140.52	123.95	106.01	87.88	68.03	49.72	29.78	7.74
150.0	155.46	140.61	124.49	108.56	90.16	71.04	50.27	30.87	9.38
165.0	154.46	140.61	124.95	108.83	91.16	73.22	52.18	30.51	10.02
180.0	140.25	122.76	106.74	90.89	69.03	53.37	31.97	13.57	1.64
195.0	139.43	123.04	106.19	86.88	69.12	64.11	31.51	12.93	1.46
210.0	137.34	133.05	101.91	83.24	65.21	46.26	27.23	8.56	1.46
225.0	133.69	114.93	95.90	76.77	56.83	37.07	18.67	2.82	1.46
240.0	127.95	107.74	90.62	68.94	49.00	28.23	8.92	1.46	1.46
255.0	125.77	108.19	88.43	66.57	44.90	24.95	5.65	1.37	1.46
270.0	127.95	108.92	88.52	67.67	45.63	24.32	4.92	1.27	1.46
285.0	130.14	110.01	90.62	68.21	47.08	24.50	5.83	1.37	1.55
300.0	131.51	111.29	90.89	70.31	48.36	27.05	8.92	1.91	1.55
315.0	141.43	122.13	102.18	82.78	62.84	43.81	24.95	7.92	2.09
330.0	146.53	128.87	111.20	91.34	72.77	52.82	33.97	14.66	3.28
345.0	149.54	132.78	114.93	96.17	77.23	58.92	40.25	20.40	3.55
360.0	166.57	151.82	136.06	118.94	100.45	81.33	62.38	41.98	21.13

Intensity data(cd)

C/γ(°)	180.0
0.0	1.46
15.0	2.55
30.0	1.82
45.0	1.64
60.0	1.64
75.0	1.64
90.0	1.64
105.0	1.55
120.0	1.55
135.0	1.55
150.0	1.55
165.0	1.64
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	1.46