

---

乐达凯

---

Client:

LumCAT: LB72201

Luminaire: LED 灯具

Report No:

Ballast type:

Test No:

Voltage(V): 119.980

LampCAT:

Current(A): 0.205

Lamp flux(lm): 2171.4

Power (W): 24.440

Number of Lamps: 1

PF: 0.994

Length(mm): -380

Width(mm): -380

Phm Type: C

Height(mm): 0

---

Photometric Results

---

Lumens(lm): 2171.36, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 88.84

Central intensity(cd): 802.617, Maximum intensity(cd): 802.617

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=107.8

[C90/270]Total=107.6

Field angle(10%Imax): [C0/180]Total=156.6

[C90/270]Total=156.8

Maximum s/h(1/2): C0\_180=1.25 C90\_270=1.24

Maximum s/h(1/4): C0\_180=1.35 C90\_270=1.35

Up flux rate of lamp(%): 0.46%

Down flux rate of lamp(%): 99.54%

Up flux rate of LUM(%): 0.46%

Down flux rate of LUM(%): 99.54%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 80.839%

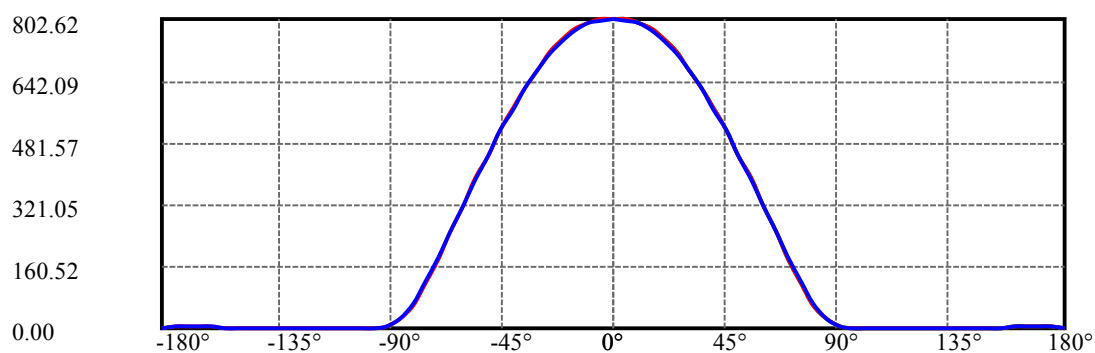
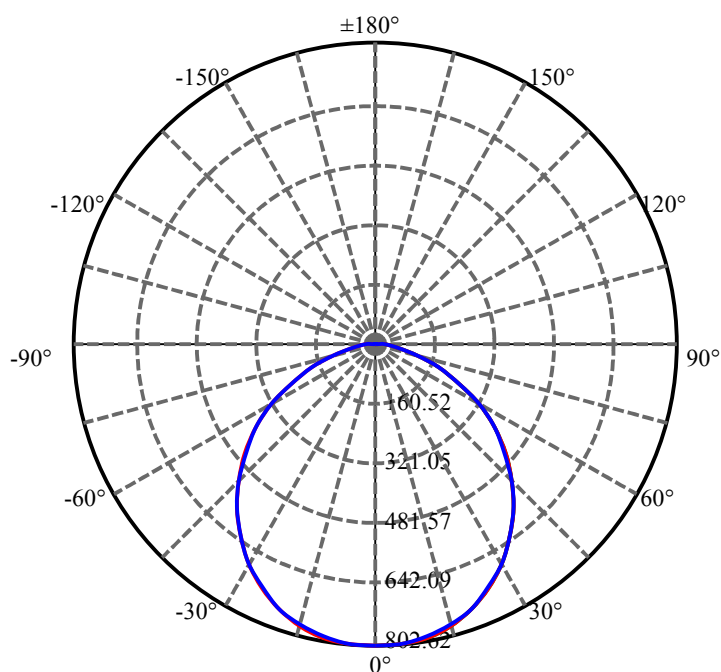
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	802.617	0.000	0	0.00%	0.00%
5.0	799.884	19.157	19.157	0.88%	0.88%
10.0	791.613	56.933	76.09	2.62%	3.50%
15.0	775.710	92.973	169.063	4.28%	7.79%
20.0	749.922	125.733	294.796	5.79%	13.58%
25.0	714.817	153.624	448.42	7.08%	20.65%
30.0	674.178	175.778	624.199	8.10%	28.75%
35.0	624.586	191.252	815.451	8.81%	37.55%
40.0	570.881	199.455	1014.906	9.19%	46.74%
45.0	513.811	200.840	1215.745	9.25%	55.99%
50.0	450.372	194.827	1410.572	8.97%	64.96%
55.0	385.776	181.806	1592.379	8.37%	73.34%
60.0	319.051	162.919	1755.298	7.50%	80.84%
65.0	249.212	138.146	1893.444	6.36%	87.20%
70.0	181.511	109.062	2002.506	5.02%	92.22%
75.0	118.943	78.534	2081.04	3.62%	95.84%
80.0	63.025	48.690	2129.729	2.24%	98.08%
85.0	24.252	23.715	2153.445	1.09%	99.17%
90.0	5.017	8.014	2161.458	0.37%	99.54%
95.0	1.273	1.722	2163.18	0.08%	99.62%
100.0	1.310	0.702	2163.882	0.03%	99.66%
105.0	1.310	0.701	2164.583	0.03%	99.69%
110.0	1.235	0.665	2165.248	0.03%	99.72%
115.0	1.198	0.616	2165.864	0.03%	99.75%
120.0	1.123	0.564	2166.428	0.03%	99.77%
125.0	1.048	0.502	2166.93	0.02%	99.80%
130.0	0.898	0.423	2167.353	0.02%	99.82%
135.0	0.898	0.363	2167.716	0.02%	99.83%
140.0	1.235	0.395	2168.111	0.02%	99.85%
145.0	1.796	0.506	2168.617	0.02%	99.87%
150.0	1.796	0.529	2169.146	0.02%	99.90%
155.0	2.358	0.526	2169.672	0.02%	99.92%
160.0	2.695	0.530	2170.202	0.02%	99.95%
165.0	3.106	0.478	2170.68	0.02%	99.97%
170.0	3.181	0.373	2171.053	0.02%	99.99%
175.0	3.593	0.242	2171.295	0.01%	100.00%
180.0	1.796	0.064	2171.36	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	624.20	28.75%	28.75%
0-40	1014.91	46.74%	46.74%
0-60	1755.30	80.84%	80.84%
0-90	2161.46	99.54%	99.54%
0-120	2166.43	99.77%	99.77%
0-180	2171.36	100.00%	100.00%
60-90	406.16	18.71%	18.71%
90-120	4.97	0.23%	0.23%
90-130	5.89	0.27%	0.27%
90-150	7.69	0.35%	0.35%
90-180	9.84	0.45%	0.45%
0-59.44	1737.09	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	76.09
10-20	218.71
20-30	329.40
30-40	390.71
40-50	395.67
50-60	344.73
60-70	247.21
70-80	127.22
80-90	31.73
90-100	2.42
100-110	1.37
110-120	1.18
120-130	0.92
130-140	0.76
140-150	1.03
150-160	1.06
160-170	0.85
170-180	0.24



C0(Max):

C0/C180:

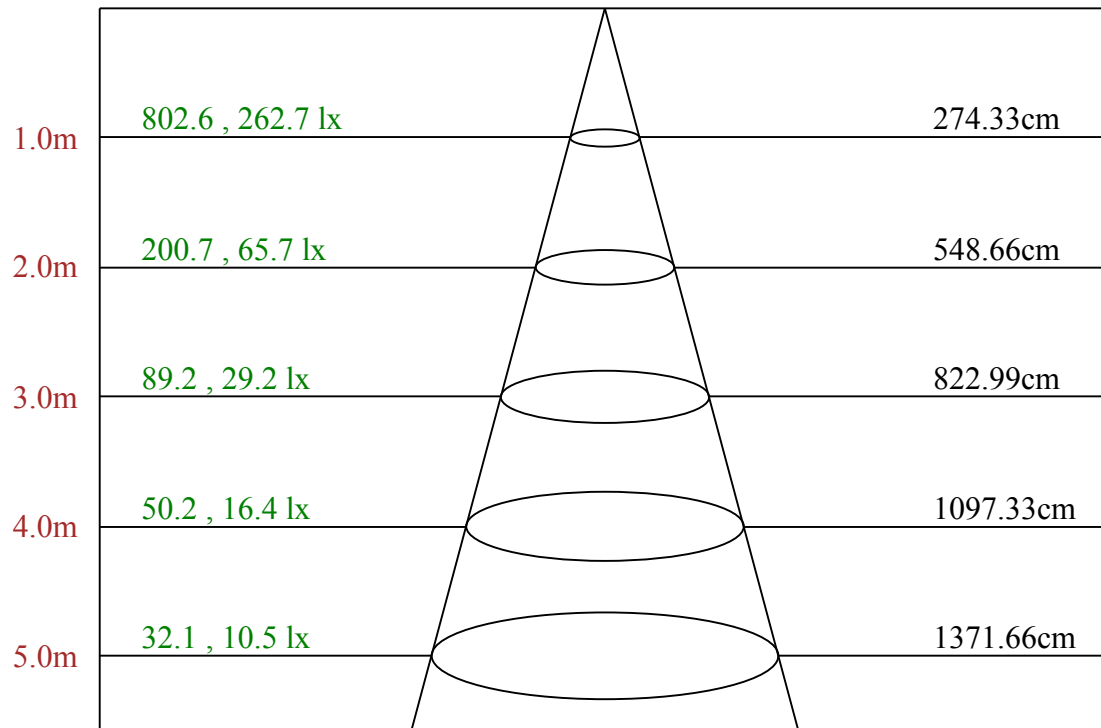
C90/C270:

Field angle(10%Imax):C0/180Left:78.3 Right:78.3

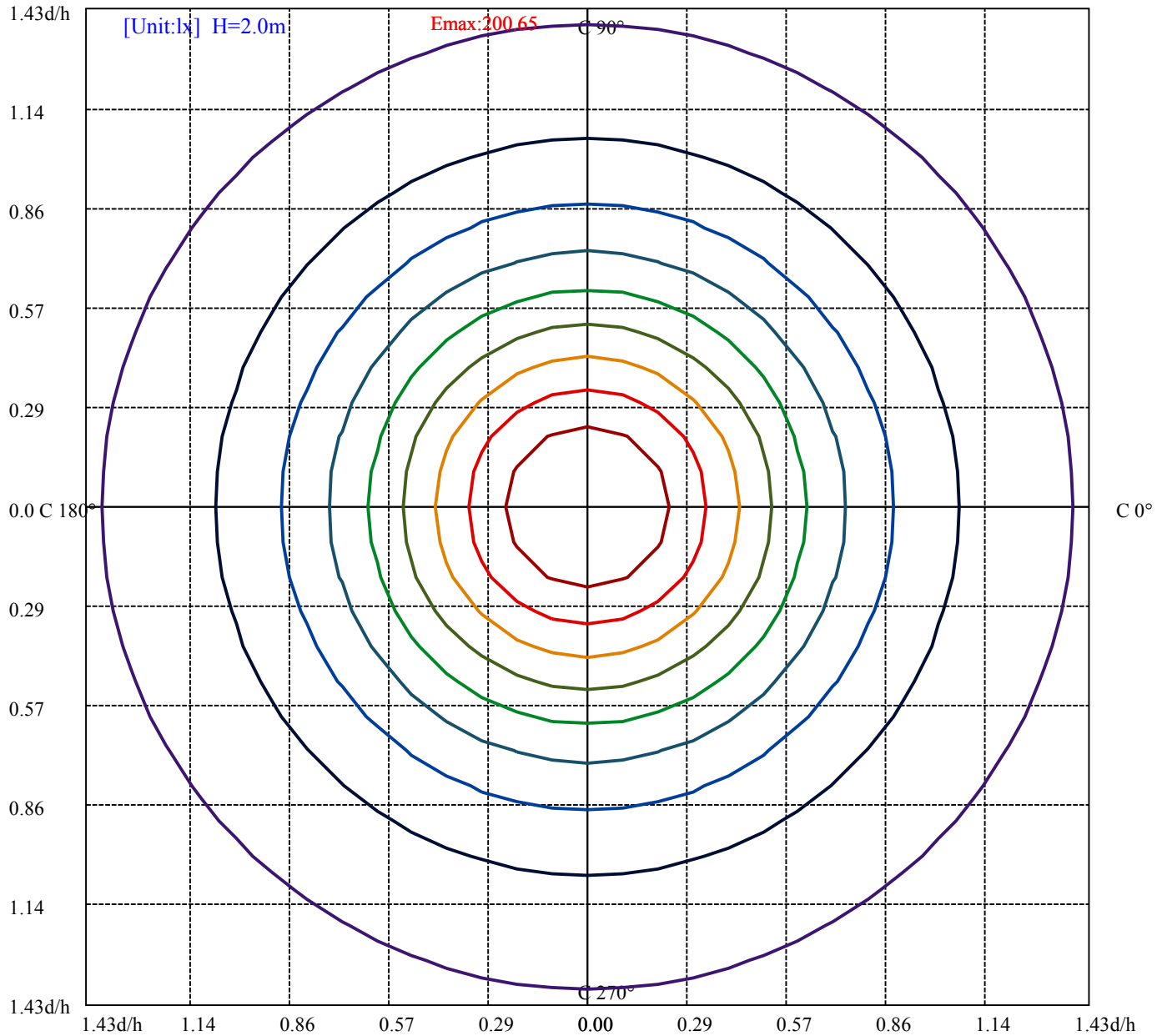
:C90/270Left:78.4 Right:78.4

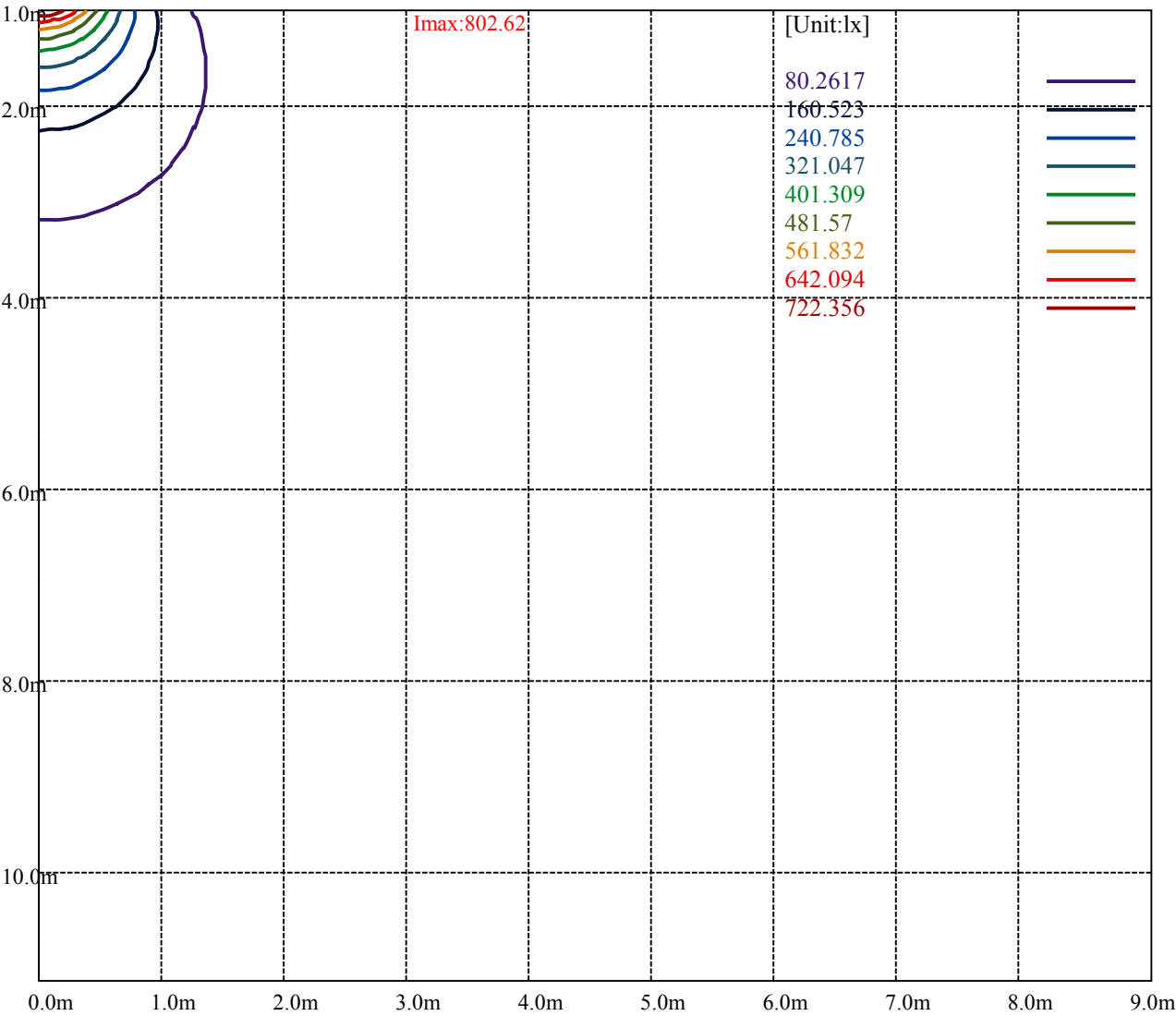
Beam Angle(50%Imax):C0/180Left:53.9 Right:53.9

:C90/270Left:53.8 Right:53.8



Max , Ave      Beam angle of C0 plane 107.81





Luminance Table

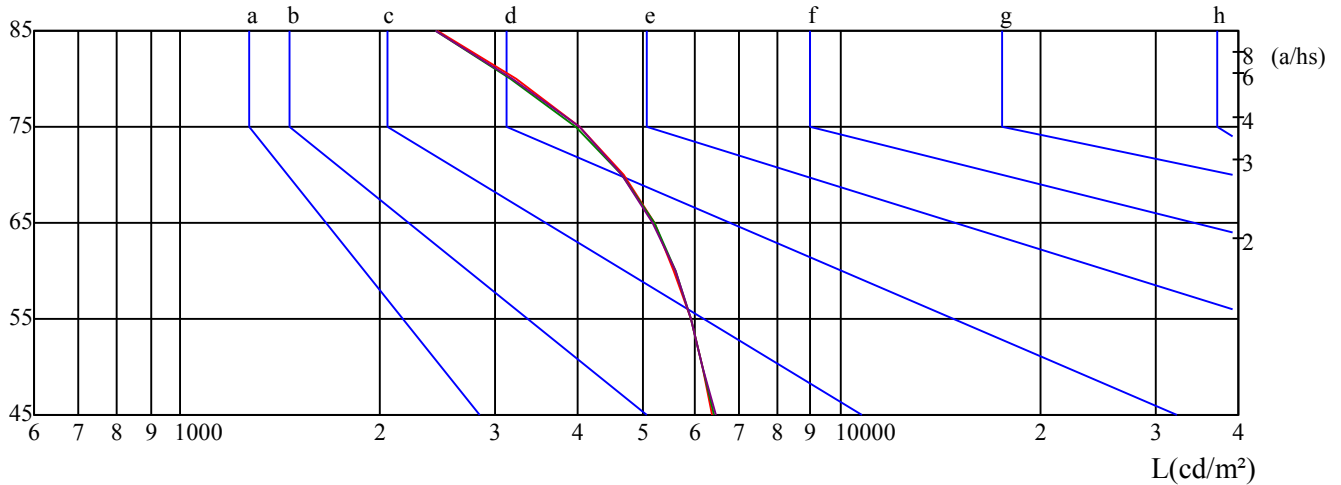
$\gamma$	45	50	55	60	65	70	75	80	85
C0	6406	6182	5944	5611	5211	4675	3967	3159	2428
C45	6473	6174	5924	5607	5190	4669	4019	3172	2432
C90	6377	6158	5927	5595	5213	4692	4011	3218	2455

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5211	5213	5190	3967	4011	4019	2428	2455	2432

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	$\leq 300$				
1.5	B		2000	1000	500	$\leq 300$			
1.85	C			2000	1000	500	$\leq 300$		
2.2	D				2000	1000	500	$\leq 300$	
2.55	E					2000	1000	500	$\leq 300$
		a	b	c	d	e	f	g	h

Luminance Limiting Curve

 $\gamma(^{\circ})$ 

C0 ———

C45 ———

C90 ———



RHOC	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.04	1.00	0.97	1.02	0.98	0.95	0.98	0.95	0.92	0.94	0.91	0.89	0.90	0.88	0.86	0.84
2	0.91	0.85	0.79	0.89	0.83	0.78	0.86	0.81	0.76	0.83	0.78	0.75	0.79	0.76	0.73	0.71
3	0.80	0.73	0.66	0.79	0.71	0.66	0.76	0.70	0.64	0.73	0.68	0.63	0.70	0.66	0.62	0.60
4	0.71	0.63	0.56	0.70	0.62	0.56	0.68	0.61	0.55	0.65	0.59	0.54	0.63	0.58	0.53	0.51
5	0.64	0.55	0.49	0.63	0.54	0.48	0.61	0.53	0.48	0.59	0.52	0.47	0.57	0.51	0.47	0.44
6	0.58	0.49	0.42	0.57	0.48	0.42	0.55	0.47	0.42	0.53	0.46	0.41	0.51	0.46	0.41	0.39
7	0.52	0.44	0.38	0.51	0.43	0.37	0.50	0.42	0.37	0.48	0.42	0.37	0.47	0.41	0.37	0.35
8	0.48	0.39	0.34	0.47	0.39	0.33	0.46	0.38	0.33	0.44	0.38	0.33	0.43	0.37	0.33	0.31
9	0.44	0.36	0.30	0.43	0.35	0.30	0.42	0.35	0.30	0.41	0.34	0.30	0.40	0.34	0.30	0.28
10	0.40	0.33	0.27	0.40	0.32	0.27	0.39	0.32	0.27	0.38	0.32	0.27	0.37	0.31	0.27	0.25

## 乐达凯 LB72201

Intensity data(cd)

Appendix Page: 10 Total:12

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	802.62	802.62	797.28	783.95	761.73	731.51	690.62	642.63	592.85
15.0	802.62	804.41	794.56	784.70	764.10	730.96	692.44	644.06	593.01
30.0	802.62	802.62	795.44	783.79	764.95	732.67	691.42	645.68	592.77
45.0	802.62	801.72	794.55	785.58	761.37	729.08	690.52	644.78	592.77
60.0	802.62	799.92	795.44	783.76	762.22	730.79	693.09	643.71	592.54
75.0	802.62	800.82	798.12	787.34	763.97	733.41	693.86	646.23	595.90
90.0	802.62	801.72	797.22	786.44	764.87	733.41	694.76	648.03	595.90
105.0	802.62	805.32	799.01	789.09	769.25	738.59	698.01	651.11	599.71
120.0	802.62	802.62	799.91	789.11	768.39	738.66	699.02	652.18	601.74
135.0	802.62	803.52	799.91	790.01	770.19	738.66	701.73	656.69	603.54
150.0	802.62	806.22	799.91	791.80	772.86	740.39	702.52	657.42	606.92
165.0	802.62	802.62	799.02	790.92	771.12	741.43	704.54	659.55	607.36
180.0	802.62	799.95	790.17	767.06	740.40	701.29	655.96	607.96	549.30
195.0	802.62	799.03	787.39	765.89	739.02	700.50	657.50	608.23	595.90
210.0	802.62	799.03	788.27	768.54	738.95	700.38	657.34	606.22	549.73
225.0	802.62	796.34	787.37	765.85	736.26	696.80	656.44	602.64	549.73
240.0	802.62	795.44	786.46	764.91	735.28	696.68	651.79	602.41	548.54
255.0	802.62	796.33	784.64	765.77	732.51	694.76	650.72	599.49	542.87
270.0	802.62	796.33	785.54	763.07	731.61	692.07	648.03	596.80	542.87
285.0	802.62	798.11	785.48	762.94	731.37	694.40	647.50	598.81	541.99
300.0	802.62	796.31	784.60	761.18	731.45	691.82	647.68	596.33	540.48
315.0	802.62	796.31	782.80	760.28	730.55	690.02	646.78	593.63	537.78
330.0	802.62	796.30	782.78	762.94	728.67	690.79	666.44	594.30	538.38
345.0	802.62	793.62	782.82	762.13	727.03	686.54	641.55	591.17	533.58
360.0	802.62	802.62	797.28	783.95	761.73	731.51	690.62	642.63	592.85
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	538.63	475.53	414.20	346.65	279.09	209.76	143.99	84.44	36.44
15.0	537.47	476.55	413.85	345.77	275.90	208.72	142.43	81.52	35.83
30.0	535.38	477.98	412.52	342.57	276.21	206.26	141.69	81.61	35.87
45.0	534.48	474.40	410.72	342.57	276.21	205.36	139.90	80.71	34.97
60.0	536.87	474.03	411.18	342.95	275.62	206.49	140.95	81.70	35.91
75.0	540.17	472.76	411.64	345.13	278.62	205.82	140.21	81.79	34.15
90.0	540.17	477.26	416.14	345.13	278.62	208.52	142.91	82.69	35.95
105.0	541.99	480.67	414.84	349.00	279.56	210.12	144.29	83.87	36.07
120.0	544.09	482.83	418.87	350.41	282.85	212.59	145.93	83.77	36.03
135.0	545.89	483.73	420.68	354.02	284.65	214.39	147.73	84.68	36.93
150.0	551.01	491.49	425.66	357.12	287.68	219.14	152.41	88.38	38.78
165.0	552.47	490.39	427.40	359.92	292.43	221.35	153.86	91.78	39.59
180.0	488.86	425.75	359.09	289.76	220.43	152.88	88.88	40.00	11.55
195.0	489.09	428.18	360.10	292.02	222.15	154.97	91.37	43.00	12.54
210.0	491.44	426.87	361.40	293.25	221.50	156.94	94.16	43.05	12.55
225.0	488.74	425.97	360.51	293.25	222.40	156.94	95.96	43.94	13.45
240.0	485.70	425.55	358.22	290.88	223.55	158.01	96.96	44.89	14.36
255.0	483.55	422.43	357.72	290.31	222.00	156.39	95.27	45.84	13.48
270.0	482.65	420.63	355.02	289.41	221.10	155.49	92.58	44.04	12.58
285.0	483.37	418.44	355.32	286.78	218.24	152.41	118.14	43.29	12.63
300.0	481.93	417.97	353.12	314.38	214.39	149.53	90.08	42.34	11.71
315.0	507.15	416.17	349.51	281.95	211.69	147.73	88.28	40.54	10.81
330.0	477.06	413.93	347.20	278.66	210.12	145.19	84.77	37.88	9.92
345.0	473.29	409.41	343.72	275.34	206.05	141.27	81.88	36.89	9.90
360.0	538.63	475.53	414.20	346.65	279.09	209.76	143.99	84.44	36.44

## Intensity data(cd)

C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	8.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
15.0	8.06	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
30.0	7.17	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
45.0	8.07	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
60.0	8.08	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
75.0	8.99	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
90.0	8.09	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
105.0	9.02	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
120.0	9.01	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
135.0	9.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
150.0	10.82	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
165.0	10.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
180.0	0.89	1.78	1.78	1.78	0.89	0.89	0.89	0.89	0.89
195.0	0.90	1.79	1.79	1.79	1.79	1.79	0.90	0.90	0.90
210.0	0.90	0.90	1.79	1.79	1.79	1.79	1.79	0.90	0.90
225.0	0.90	0.90	0.90	1.79	1.79	1.79	1.79	1.79	0.90
240.0	0.90	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.90
255.0	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.90
270.0	0.90	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.90
285.0	1.80	1.80	1.80	1.80	1.80	1.80	1.80	0.90	0.90
300.0	1.80	1.80	1.80	1.80	1.80	1.80	0.90	0.90	0.90
315.0	0.90	1.80	1.80	1.80	1.80	0.90	0.90	0.90	0.90
330.0	0.90	1.80	1.80	0.90	0.90	0.90	0.90	0.90	0.90
345.0	1.80	1.80	1.80	1.80	0.90	0.90	0.90	0.90	0.90
360.0	8.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
C/ $\gamma$ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	0.89	1.78	1.78	1.78	2.67	2.67	3.56	3.56	3.56
15.0	0.90	1.79	1.79	1.79	2.69	2.69	3.58	3.58	3.58
30.0	0.90	1.79	1.79	1.79	2.69	2.69	3.59	3.59	3.59
45.0	0.90	0.90	1.79	1.79	2.69	2.69	3.59	3.59	3.59
60.0	0.90	1.80	1.80	1.80	2.69	2.69	3.59	3.59	3.59
75.0	0.90	1.80	1.80	1.80	2.70	2.70	3.60	3.60	3.60
90.0	0.90	1.80	1.80	1.80	2.70	2.70	3.60	3.60	3.60
105.0	0.90	1.80	1.80	1.80	2.71	2.71	3.61	3.61	3.61
120.0	0.90	0.90	1.80	1.80	2.70	2.70	3.60	3.60	3.60
135.0	0.90	0.90	1.80	1.80	2.70	2.70	3.60	3.60	3.60
150.0	0.90	1.80	1.80	1.80	2.71	2.71	3.61	3.61	3.61
165.0	0.90	1.80	1.80	1.80	2.70	2.70	3.60	3.60	3.60
180.0	0.89	0.89	1.78	1.78	1.78	2.67	2.67	3.56	3.56
195.0	0.90	0.90	1.79	1.79	2.69	2.69	2.69	2.69	3.58
210.0	0.90	0.90	1.79	1.79	2.69	2.69	2.69	2.69	3.59
225.0	0.90	0.90	1.79	1.79	1.79	2.69	2.69	2.69	3.59
240.0	0.90	0.90	1.80	1.80	1.80	2.69	2.69	2.69	3.59
255.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
270.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
285.0	0.90	0.90	1.80	1.80	1.80	2.71	2.71	2.71	3.61
300.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
315.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
330.0	0.90	0.90	1.80	1.80	2.71	2.71	2.71	2.71	3.61
345.0	0.90	0.90	1.80	1.80	1.80	2.70	2.70	2.70	3.60
360.0	0.89	1.78	1.78	1.78	2.67	2.67	3.56	3.56	3.56

## Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	3.56
15.0	3.58
30.0	3.59
45.0	3.59
60.0	3.59
75.0	3.60
90.0	3.60
105.0	3.61
120.0	3.60
135.0	3.60
150.0	3.61
165.0	3.60
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	3.56