
乐达凯

Client:

LumCAT: EMAF06LAJD1LB

Luminaire: LED lamp

Report No:

Ballast type:

Test No: LCZP25010158

Voltage(V): 119.970

LampCAT:

Current(A): 0.136

Lamp flux(lm): 759.5

Power (W): 15.420

Number of Lamps: 1

PF: 0.944

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 20

Photometric Results

Lumens(lm): 759.46, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 49.25

Central intensity(cd): 215.585, Maximum intensity(cd): 215.585

Angle of maximum intensity: C=60.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=115.8

[C90/270]Total=118.0

Field angle(10%Imax): [C0/180]Total=174.0

[C90/270]Total=173.6

Maximum s/h(1/2): C0_180=1.26 C90_270=1.25

Maximum s/h(1/4): C0_180=1.38 C90_270=1.38

Up flux rate of lamp(%): 12.81%

Down flux rate of lamp(%): 87.19%

Up flux rate of LUM(%): 12.81%

Down flux rate of LUM(%): 87.19%

CIE Type : Semidirect lighting

Output flux ratio in π solid angle : 64.359%

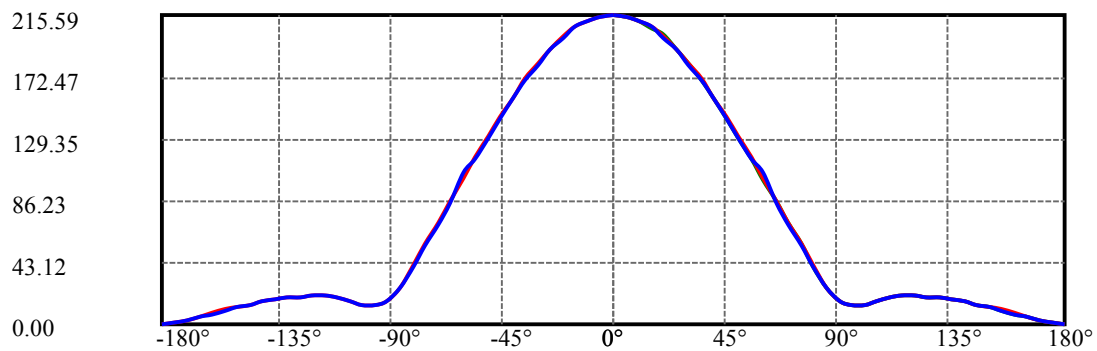
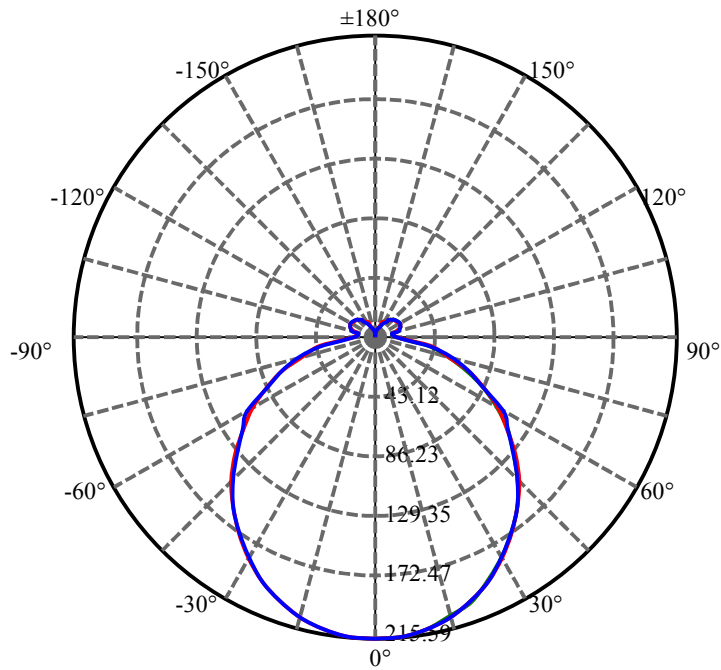
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	215.585	0.000	0	0.00%	0.00%
5.0	214.561	5.142	5.142	0.68%	0.68%
10.0	211.649	15.247	20.389	2.01%	2.68%
15.0	206.980	24.833	45.222	3.27%	5.95%
20.0	200.406	33.574	78.796	4.42%	10.38%
25.0	191.823	41.138	119.934	5.42%	15.79%
30.0	181.714	47.271	167.205	6.22%	22.02%
35.0	170.361	51.845	219.051	6.83%	28.84%
40.0	158.135	54.807	273.858	7.22%	36.06%
45.0	144.172	55.975	329.832	7.37%	43.43%
50.0	130.103	55.421	385.254	7.30%	50.73%
55.0	115.587	53.421	438.675	7.03%	57.76%
60.0	101.205	50.111	488.786	6.60%	64.36%
65.0	85.775	45.455	534.241	5.99%	70.34%
70.0	70.610	39.598	573.839	5.21%	75.56%
75.0	55.796	33.040	606.879	4.35%	79.91%
80.0	41.250	25.967	632.846	3.42%	83.33%
85.0	25.460	18.127	650.972	2.39%	85.71%
90.0	15.499	11.215	662.188	1.48%	87.19%
95.0	13.143	7.842	670.03	1.03%	88.22%
100.0	13.215	7.162	677.192	0.94%	89.17%
105.0	16.339	7.908	685.1	1.04%	90.21%
110.0	18.922	9.217	694.317	1.21%	91.42%
115.0	19.988	9.852	704.169	1.30%	92.72%
120.0	20.014	9.725	713.894	1.28%	94.00%
125.0	19.383	9.107	723	1.20%	95.20%
130.0	18.415	8.219	731.219	1.08%	96.28%
135.0	17.125	7.181	738.4	0.95%	97.23%
140.0	15.652	6.069	744.469	0.80%	98.03%
145.0	13.835	4.920	749.389	0.65%	98.67%
150.0	11.894	3.789	753.177	0.50%	99.17%
155.0	9.826	2.749	755.926	0.36%	99.53%
160.0	7.575	1.825	757.751	0.24%	99.77%
165.0	5.157	1.049	758.8	0.14%	99.91%
170.0	2.916	0.479	759.279	0.06%	99.98%
175.0	1.551	0.160	759.439	0.02%	100.00%
180.0	0.594	0.026	759.465	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	167.21	22.02%	22.02%
0-40	273.86	36.06%	36.06%
0-60	488.79	64.36%	64.36%
0-90	662.19	87.19%	87.19%
0-120	713.89	94.00%	94.00%
0-180	759.46	100.00%	100.00%
60-90	173.40	22.83%	22.83%
90-120	51.71	6.81%	6.81%
90-130	69.03	9.09%	9.09%
90-150	90.99	11.98%	11.98%
90-180	97.25	12.81%	12.81%
0-75.13	607.57	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	20.39
10-20	58.41
20-30	88.41
30-40	106.65
40-50	111.40
50-60	103.53
60-70	85.05
70-80	59.01
80-90	29.34
90-100	15.00
100-110	17.12
110-120	19.58
120-130	17.33
130-140	13.25
140-150	8.71
150-160	4.57
160-170	1.53
170-180	0.16



C60(Max):

C0/C180:

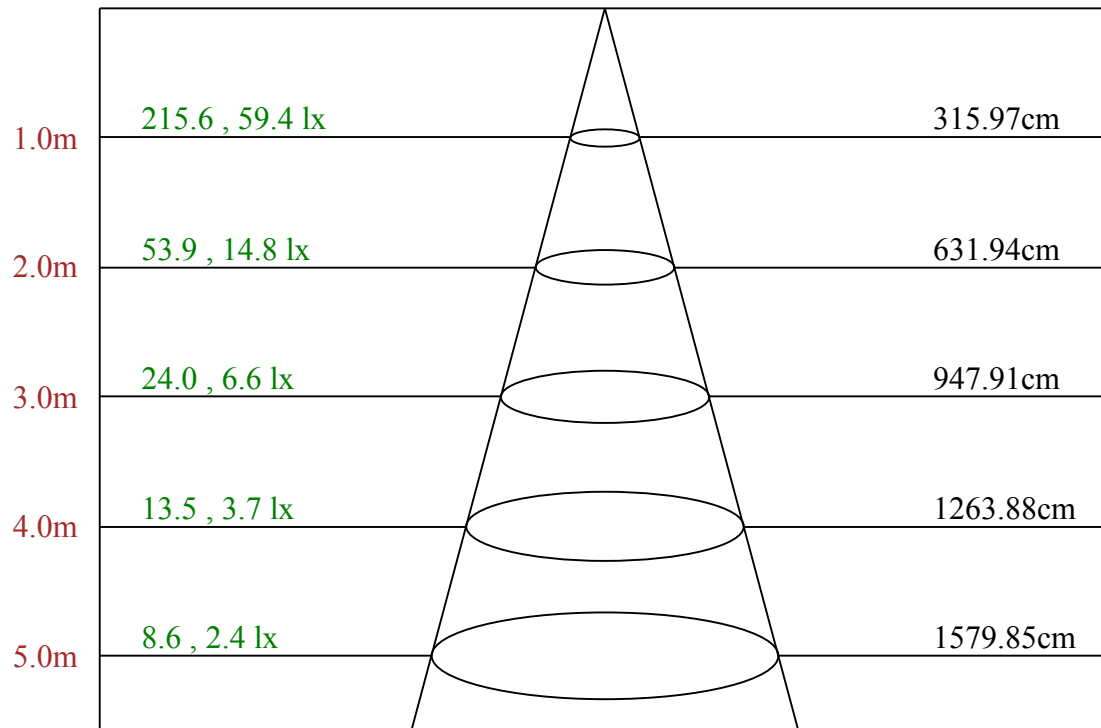
C90/C270:

Field angle(10%Imax):C0/180Left:87.0 Right:87.0

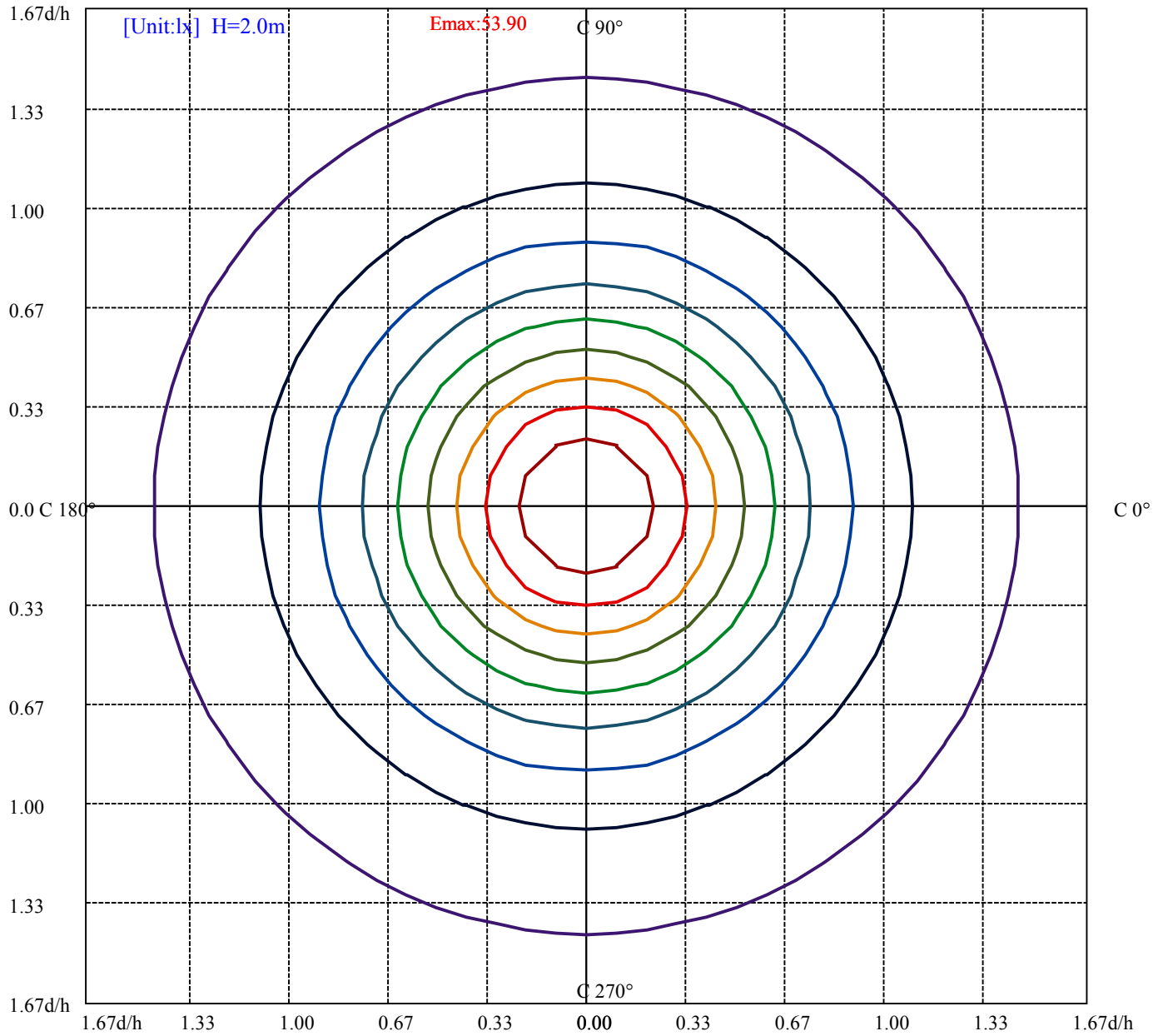
:C90/270Left:86.8 Right:86.8

Beam Angle(50%Imax):C0/180Left:57.9 Right:57.9

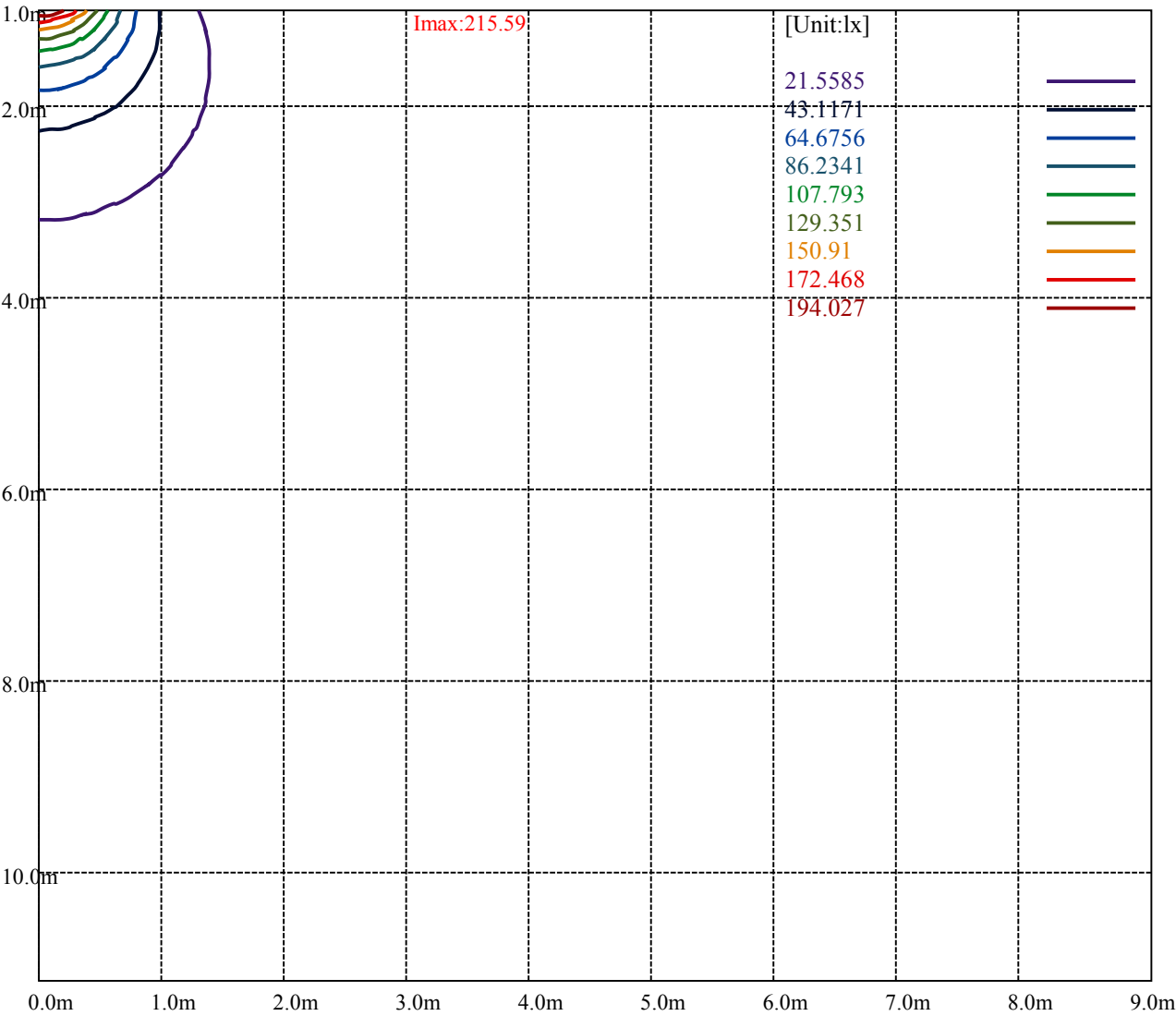
:C90/270Left:59.0 Right:59.0



Max , Ave Beam angle of C60 plane 115.33



(10%Emax) 5.389625	—
(20%Emax) 10.77927	—
(30%Emax) 16.1689	—
(40%Emax) 21.55853	—
(50%Emax) 26.94825	—
(60%Emax) 32.33775	—
(70%Emax) 37.7275	—
(80%Emax) 43.117	—
(90%Emax) 48.50675	—



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	1.16	1.16	1.16	1.12	1.12	1.12	1.04	1.04	1.04	0.97	0.97	0.97	0.90	0.90	0.90	0.87
1	0.99	0.95	0.91	0.96	0.92	0.88	0.89	0.86	0.83	0.83	0.80	0.78	0.78	0.75	0.73	0.70
2	0.86	0.79	0.73	0.83	0.76	0.71	0.77	0.72	0.67	0.72	0.68	0.64	0.67	0.64	0.61	0.58
3	0.75	0.67	0.60	0.73	0.65	0.59	0.68	0.61	0.56	0.63	0.58	0.53	0.59	0.55	0.51	0.48
4	0.66	0.57	0.50	0.64	0.56	0.49	0.60	0.53	0.47	0.56	0.50	0.45	0.53	0.48	0.43	0.41
5	0.59	0.50	0.43	0.57	0.49	0.42	0.54	0.46	0.41	0.50	0.44	0.39	0.47	0.42	0.38	0.35
6	0.53	0.44	0.38	0.51	0.43	0.37	0.48	0.41	0.36	0.45	0.39	0.34	0.43	0.37	0.33	0.31
7	0.48	0.39	0.33	0.47	0.38	0.32	0.44	0.37	0.31	0.41	0.35	0.30	0.39	0.33	0.29	0.27
8	0.44	0.35	0.29	0.42	0.34	0.29	0.40	0.33	0.28	0.38	0.32	0.27	0.36	0.30	0.26	0.24
9	0.40	0.32	0.26	0.39	0.31	0.26	0.37	0.30	0.25	0.35	0.29	0.24	0.33	0.28	0.24	0.22
10	0.37	0.29	0.24	0.36	0.28	0.23	0.34	0.27	0.23	0.32	0.26	0.22	0.31	0.25	0.21	0.20

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	215.59	215.15	212.87	208.39	202.77	194.79	185.14	174.08	161.62
15.0	215.59	215.14	212.58	208.60	202.59	194.72	184.90	174.47	161.47
30.0	215.59	215.05	212.65	208.38	202.87	194.95	185.26	174.14	161.96
45.0	215.59	215.23	212.90	208.70	202.80	194.67	185.46	173.76	162.14
60.0	215.59	215.05	212.63	208.50	202.86	194.34	184.93	173.90	161.53
75.0	215.59	214.96	212.71	208.49	202.47	194.38	185.03	173.35	161.58
90.0	215.59	215.04	212.52	208.56	202.16	194.50	184.14	173.42	161.08
105.0	215.59	214.95	212.61	208.46	202.32	194.11	184.36	173.08	161.26
120.0	215.59	215.04	212.51	208.09	201.94	194.35	184.41	173.39	160.92
135.0	215.59	215.59	212.86	208.87	202.80	194.63	184.66	173.50	161.80
150.0	215.59	215.04	212.50	208.42	196.46	194.28	184.22	173.70	161.46
165.0	215.59	215.13	212.50	208.33	202.25	194.18	184.84	173.96	160.26
180.0	215.59	214.01	210.67	205.58	198.74	189.26	179.26	167.68	154.87
195.0	215.59	214.08	210.46	205.59	198.52	189.59	178.98	167.48	154.57
210.0	215.59	213.98	210.60	205.62	198.24	189.79	178.85	167.74	154.84
225.0	215.59	214.07	210.85	205.49	198.60	189.58	179.12	167.32	154.45
240.0	215.59	214.06	210.66	205.55	198.64	189.05	179.01	167.18	154.36
255.0	215.59	213.88	210.64	205.43	198.15	188.90	178.38	166.52	153.58
270.0	215.59	213.96	210.63	205.32	198.02	189.19	178.56	166.58	153.69
285.0	215.59	213.96	210.62	205.39	198.08	188.78	178.05	166.77	162.97
300.0	215.59	213.96	210.53	205.19	203.48	188.57	177.82	165.80	153.42
315.0	215.59	214.22	210.87	205.79	198.08	189.28	178.58	166.70	153.73
330.0	215.59	213.95	210.60	205.43	198.54	188.93	178.32	167.08	153.58
345.0	215.59	213.95	210.60	205.34	198.35	188.92	178.85	167.06	154.09
360.0	215.59	215.15	212.87	208.39	202.77	194.79	185.14	174.08	161.62
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	148.90	134.16	120.38	105.38	90.20	74.76	59.49	44.40	28.60
15.0	148.73	134.67	120.08	105.05	89.84	75.07	59.25	45.01	29.09
30.0	148.44	134.39	119.71	105.57	90.09	74.89	59.50	44.65	29.71
45.0	148.73	134.70	119.14	105.11	90.54	74.36	59.97	45.05	29.41
60.0	148.00	134.01	119.94	104.25	89.91	74.58	59.43	44.55	29.13
75.0	147.38	133.99	119.25	104.42	89.42	74.14	59.76	44.30	29.57
90.0	147.48	133.42	118.92	104.77	88.92	74.50	59.55	44.77	29.28
105.0	147.81	133.74	119.21	104.50	89.43	74.18	60.01	44.49	29.78
120.0	147.46	133.45	118.91	104.18	90.08	74.90	59.90	45.00	29.55
135.0	147.84	134.41	119.90	105.12	90.15	74.92	59.95	45.80	30.20
150.0	148.04	134.08	119.67	105.71	90.02	75.61	60.56	45.69	30.01
165.0	148.02	134.77	120.35	105.57	90.61	75.37	61.13	45.44	30.66
180.0	141.27	126.96	112.31	97.40	82.30	67.21	52.21	37.99	22.46
195.0	140.86	126.54	112.66	97.09	82.59	67.47	52.53	37.49	22.02
210.0	141.14	126.83	112.24	97.30	82.18	66.97	52.83	37.89	22.23
225.0	141.31	126.38	112.35	97.51	82.32	67.04	52.29	37.27	21.72
240.0	140.56	126.39	111.69	96.72	81.57	67.14	52.35	37.29	21.69
255.0	139.83	126.26	111.70	96.69	81.51	66.41	51.58	48.26	21.30
270.0	139.82	125.50	110.81	107.30	80.99	65.95	51.17	36.13	20.72
285.0	139.33	125.16	110.36	95.47	81.22	65.33	51.26	36.19	20.85
300.0	138.96	125.41	110.68	95.78	80.78	65.60	51.41	35.51	20.96
315.0	139.76	125.43	110.74	95.78	81.35	66.12	51.06	35.83	20.68
330.0	140.25	125.92	111.24	96.19	81.05	65.82	50.77	35.27	20.85
345.0	140.22	125.89	111.83	96.05	81.54	66.30	51.15	35.73	20.59
360.0	148.90	134.16	120.38	105.38	90.20	74.76	59.49	44.40	28.60

乐达凯 EMAF06LAJD1LB

Intensity data(cd)										Appendix Page: 11 Total:12	
C/ $\gamma(^{\circ})$	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0		
0.0	16.58	13.60	12.72	15.36	18.25	19.83	20.09	19.65	18.95		
15.0	16.45	13.53	12.65	15.39	18.39	19.81	20.07	19.72	19.01		
30.0	16.28	13.43	12.72	15.56	18.50	19.74	20.10	19.57	18.68		
45.0	16.45	13.32	12.51	15.55	18.41	19.75	19.84	19.40	18.59		
60.0	16.67	13.27	12.37	15.24	18.11	19.54	19.81	19.27	18.56		
75.0	16.45	13.12	12.31	14.92	17.97	19.41	19.59	19.23	18.51		
90.0	16.58	13.06	12.07	14.77	17.84	19.28	19.55	19.28	18.56		
105.0	16.51	13.08	12.09	14.53	17.42	19.22	19.58	19.31	18.59		
120.0	16.81	13.01	12.11	14.28	17.35	19.16	19.61	19.34	18.70		
135.0	16.60	13.06	12.24	14.24	17.41	19.14	19.77	19.50	18.77		
150.0	16.68	13.24	12.24	14.41	17.50	19.31	19.85	19.58	18.68		
165.0	16.96	13.33	12.15	14.51	17.60	19.05	19.59	19.23	18.50		
180.0	14.48	13.07	13.51	16.76	19.04	19.74	19.65	18.86	17.72		
195.0	14.33	13.00	13.88	17.33	19.54	20.16	19.98	19.01	17.77		
210.0	14.41	13.07	14.05	17.88	20.19	20.72	20.37	19.39	18.23		
225.0	14.48	13.05	14.21	17.97	20.29	20.83	20.74	19.40	18.23		
240.0	14.43	13.00	12.91	17.93	20.35	20.80	20.44	19.36	18.11		
255.0	14.38	12.94	14.38	18.15	20.31	20.76	20.31	19.41	18.24		
270.0	14.41	13.06	14.23	18.02	20.18	20.81	20.18	19.46	18.20		
285.0	14.35	12.99	14.26	18.05	20.03	20.57	20.21	19.31	18.14		
300.0	14.28	13.01	14.37	17.89	20.06	20.60	20.24	19.52	18.25		
315.0	14.42	13.06	14.42	17.87	19.95	20.50	20.23	19.41	18.32		
330.0	14.51	13.05	14.41	17.86	19.76	20.49	20.31	19.49	18.31		
345.0	14.51	13.06	14.33	17.69	19.68	20.50	20.23	19.50	18.32		
360.0	16.58	13.60	12.72	15.36	18.25	19.83	20.09	19.65	18.95		
C/ $\gamma(^{\circ})$	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	17.72	16.50	14.92	13.07	11.06	8.69	6.41	3.51	1.67		
15.0	17.77	16.36	15.03	13.09	11.23	8.84	6.37	3.45	1.95		
30.0	17.70	16.36	14.94	13.07	11.03	8.80	6.31	3.56	2.05		
45.0	17.61	16.18	14.75	13.14	10.99	8.58	5.99	3.66	1.97		
60.0	17.48	16.14	14.52	12.91	10.85	8.43	5.92	3.76	1.97		
75.0	17.34	15.91	14.11	12.22	10.33	8.45	5.75	3.68	1.98		
90.0	17.48	16.13	14.23	12.34	10.00	7.75	5.59	3.51	1.98		
105.0	17.60	16.24	14.53	12.36	10.47	7.49	5.59	3.34	1.80		
120.0	17.62	16.26	14.55	12.38	10.48	7.50	5.60	3.61	1.81		
135.0	17.69	16.23	14.42	12.61	10.16	7.98	5.90	3.63	1.72		
150.0	17.32	15.96	14.32	12.15	10.24	8.34	5.98	3.63	1.72		
165.0	17.32	15.96	14.42	12.52	10.61	8.43	6.17	3.90	1.72		
180.0	16.50	14.74	13.07	11.14	9.13	6.76	4.65	2.28	1.23		
195.0	16.36	14.59	12.73	10.96	9.02	8.40	4.51	2.48	1.24		
210.0	16.81	16.36	12.81	11.03	8.98	6.85	4.45	2.40	1.25		
225.0	16.45	14.84	13.05	11.08	9.03	6.79	4.56	2.32	1.25		
240.0	16.67	15.06	13.36	11.29	9.23	6.90	4.39	2.24	1.25		
255.0	16.71	15.10	13.39	11.32	9.17	6.83	4.58	2.34	1.26		
270.0	16.76	15.05	13.33	11.26	9.10	6.85	4.50	2.25	1.26		
285.0	16.78	15.16	13.18	11.19	9.11	6.68	4.42	2.17	1.17		
300.0	16.72	15.00	13.01	11.02	8.76	6.42	4.07	2.17	1.26		
315.0	16.87	15.24	13.06	11.06	8.89	6.53	3.90	2.09	1.27		
330.0	16.86	15.14	13.05	11.06	8.88	6.71	3.90	1.99	1.27		
345.0	16.87	15.15	13.24	11.16	9.07	6.80	4.26	2.00	1.18		
360.0	17.72	16.50	14.92	13.07	11.06	8.69	6.41	3.51	1.67		

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	1.23
15.0	1.24
30.0	1.16
45.0	1.25
60.0	1.17
75.0	1.17
90.0	1.17
105.0	1.17
120.0	1.17
135.0	1.09
150.0	1.18
165.0	1.27
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	1.23