
弗格斯莱

Client:

LumCAT: KNOF18LAJUDPC

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.000

LampCAT:

Current(A): 0.287

Lamp flux(lm): 1656.1

Power (W): 34.240

Number of Lamps: 1

PF: 0.995

Length(mm): 400

Width(mm): 400

Phm Type: C

Height(mm): 90

Photometric Results

Lumens(lm): 1656.06, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 48.37

Central intensity(cd): 2.732, Maximum intensity(cd): 210.374

Angle of maximum intensity: C=30.0 γ =105.0

Beam Angle(50%Imax): [C0/180]Total=288.7

[C90/270]Total=282.2

Field angle(10%Imax): [C0/180]Total=335.8

[C90/270]Total=334.1

Maximum s/h(1/2): C0_180=10.07 C90_270=155.21

Maximum s/h(1/4): C0_180=9.21 C90_270=113.09

Up flux rate of lamp(%): 50.54%

Down flux rate of lamp(%): 49.46%

Up flux rate of LUM(%): 50.54%

Down flux rate of LUM(%): 49.46%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 17.417%

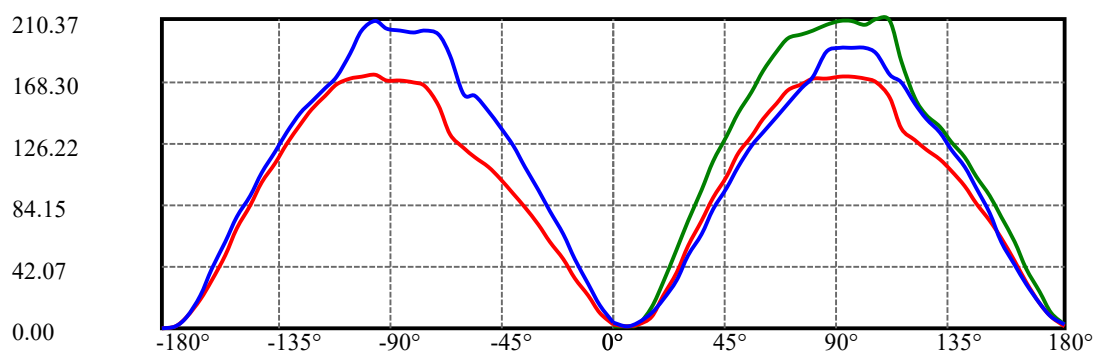
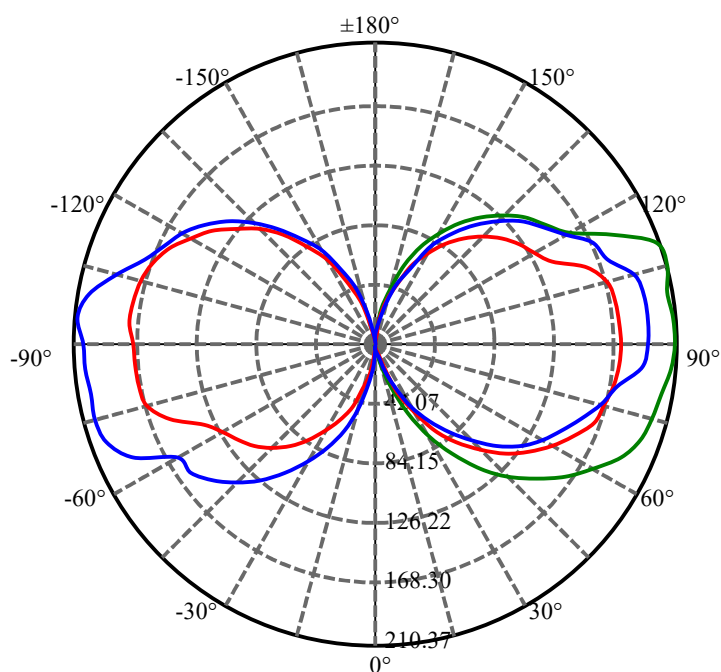
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2.353	0.000	0	0.00%	0.00%
5.0	5.996	0.100	0.1	0.01%	0.01%
10.0	13.433	0.695	0.795	0.04%	0.05%
15.0	24.665	2.260	3.055	0.14%	0.18%
20.0	38.440	5.201	8.255	0.31%	0.50%
25.0	53.353	9.627	17.883	0.58%	1.08%
30.0	68.265	15.391	33.274	0.93%	2.01%
35.0	82.761	22.240	55.513	1.34%	3.35%
40.0	96.346	29.883	85.396	1.80%	5.16%
45.0	109.589	38.130	123.526	2.30%	7.46%
50.0	121.314	46.657	170.184	2.82%	10.28%
55.0	131.712	55.016	225.2	3.32%	13.60%
60.0	141.843	63.231	288.432	3.82%	17.42%
65.0	152.924	71.658	360.09	4.33%	21.74%
70.0	162.904	79.969	440.059	4.83%	26.57%
75.0	171.859	87.502	527.561	5.28%	31.86%
80.0	178.537	93.756	621.317	5.66%	37.52%
85.0	181.839	97.923	719.24	5.91%	43.43%
90.0	182.749	99.827	819.067	6.03%	49.46%
95.0	181.611	99.765	918.832	6.02%	55.48%
100.0	179.524	98.129	1016.961	5.93%	61.41%
105.0	174.363	94.690	1111.652	5.72%	67.13%
110.0	166.243	89.029	1200.68	5.38%	72.50%
115.0	155.200	81.392	1282.072	4.91%	77.42%
120.0	145.296	73.051	1355.123	4.41%	81.83%
125.0	135.317	64.863	1419.986	3.92%	85.74%
130.0	125.261	56.658	1476.644	3.42%	89.17%
135.0	113.915	48.329	1524.973	2.92%	92.08%
140.0	101.582	39.901	1564.874	2.41%	94.49%
145.0	87.390	31.529	1596.403	1.90%	96.40%
150.0	73.312	23.665	1620.068	1.43%	97.83%
155.0	57.830	16.596	1636.664	1.00%	98.83%
160.0	42.424	10.515	1647.179	0.63%	99.46%
165.0	26.524	5.682	1652.861	0.34%	99.81%
170.0	14.040	2.406	1655.267	0.15%	99.95%
175.0	5.730	0.707	1655.975	0.04%	99.99%
180.0	1.404	0.085	1656.06	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	33.27	2.01%	2.01%
0-40	85.40	5.16%	5.16%
0-60	288.43	17.42%	17.42%
0-90	819.07	49.46%	49.46%
0-120	1355.12	81.83%	81.83%
0-180	1656.06	100.00%	100.00%
60-90	530.64	32.04%	32.04%
90-120	536.06	32.37%	32.37%
90-130	657.58	39.71%	39.71%
90-150	801.00	48.37%	48.37%
90-180	836.91	50.54%	50.54%
0-117.93	1324.85	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	0.79
10-20	7.46
20-30	25.02
30-40	52.12
40-50	84.79
50-60	118.25
60-70	151.63
70-80	181.26
80-90	197.75
90-100	197.89
100-110	183.72
110-120	154.44
120-130	121.52
130-140	88.23
140-150	55.19
150-160	27.11
160-170	8.09
170-180	0.71



C30(Max):

C0/C180:

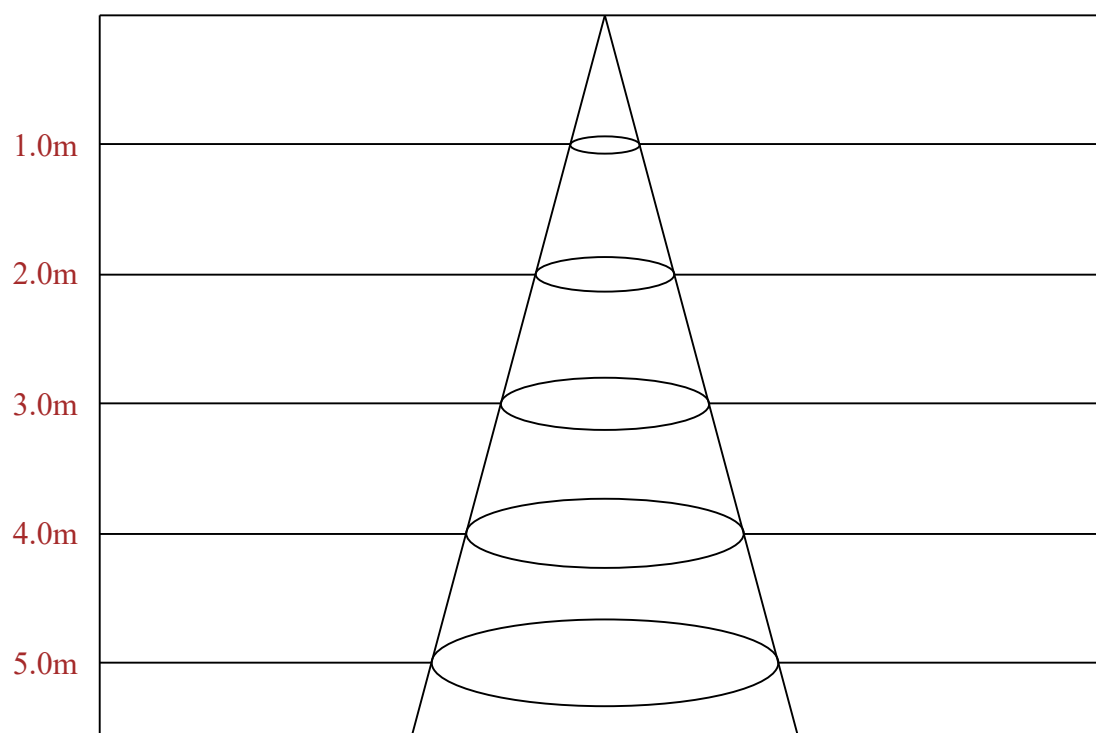
C90/C270:

Field angle(10%Imax):C0/180Left:70.8 Right:265.1

:C90/270Left:70.7 Right:263.4

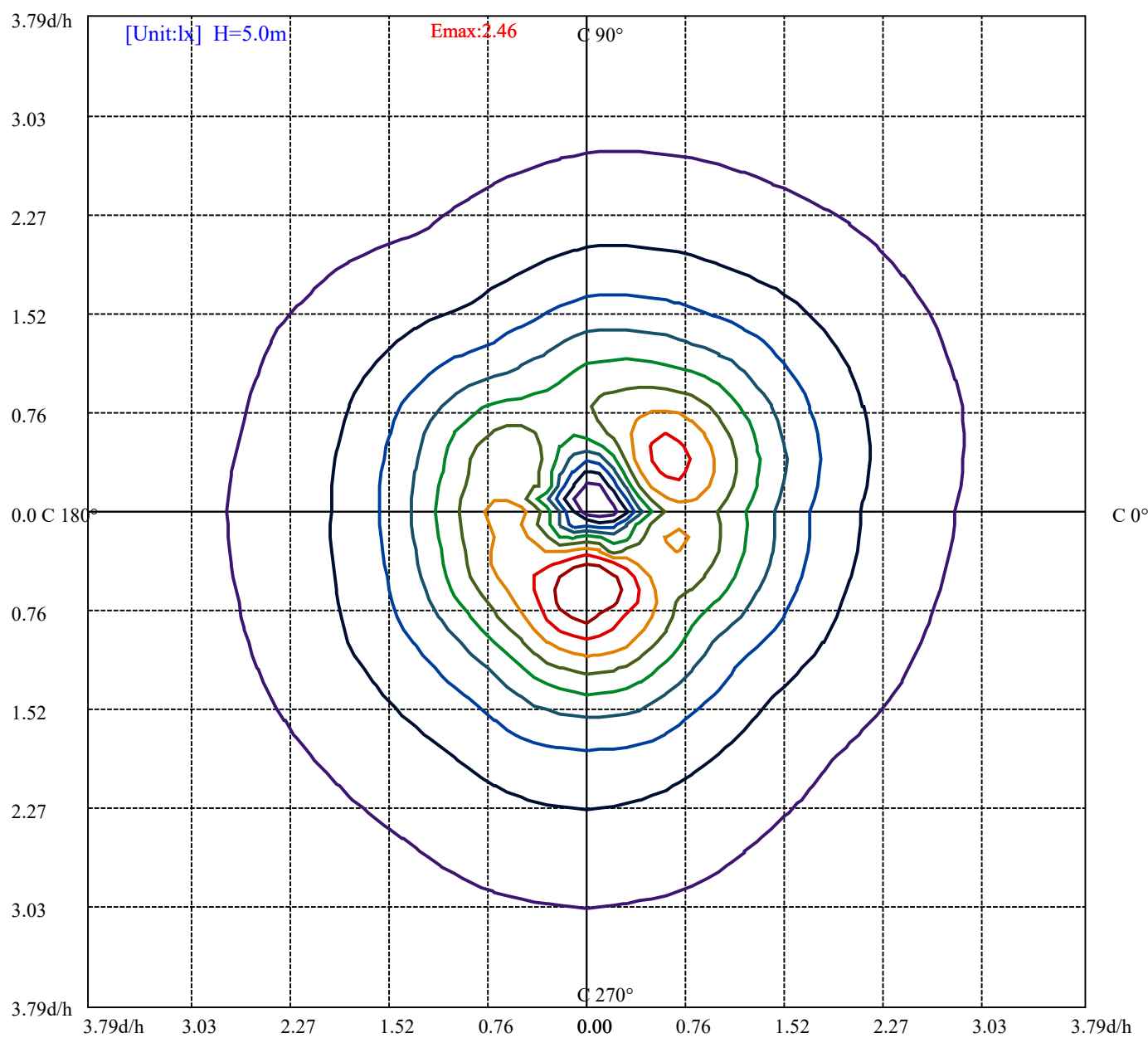
Beam Angle(50%Imax):C0/180Left:49.3 Right:239.4

:C90/270Left:45.4 Right:236.8

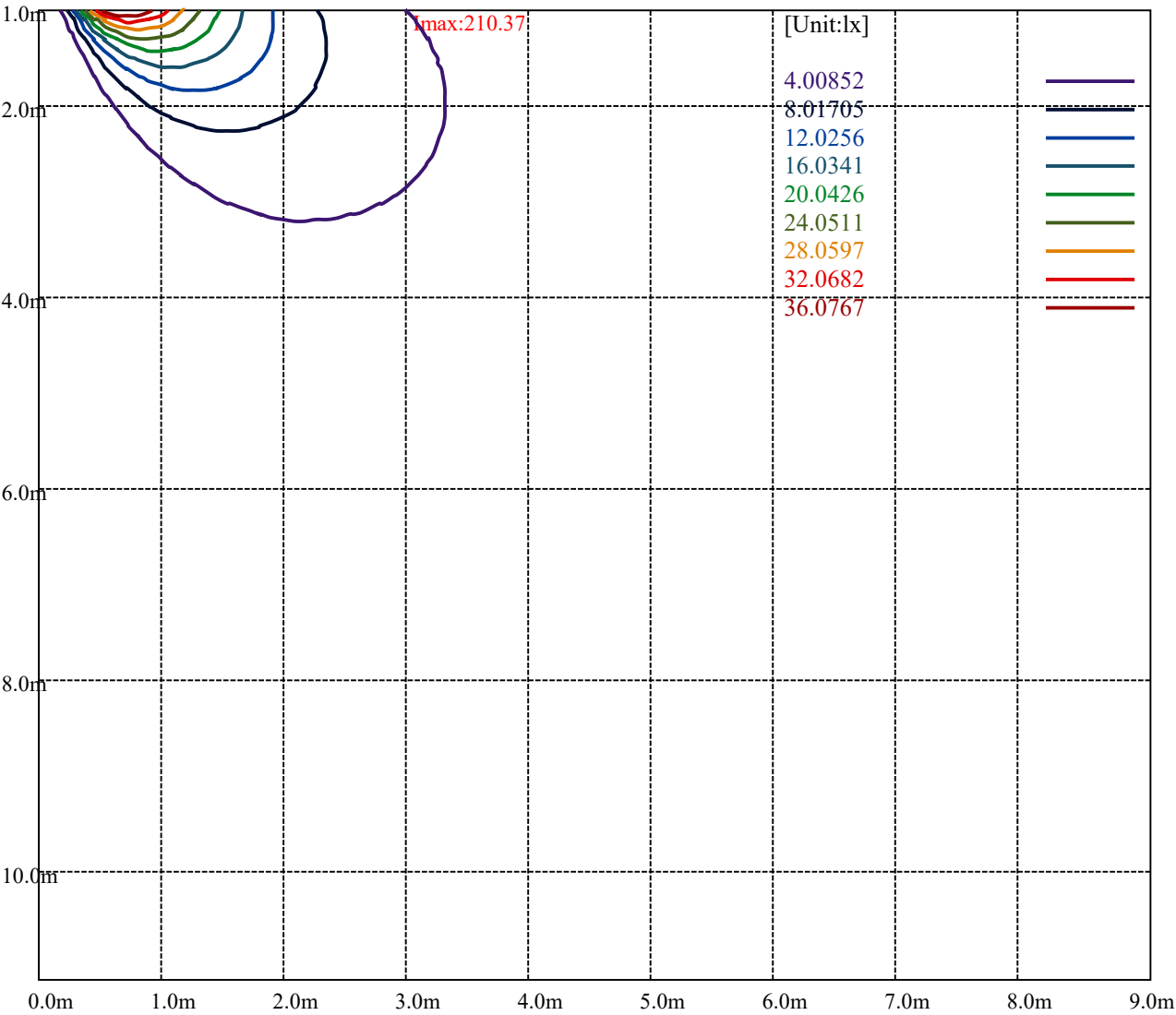


Max , Ave

Beam angle of C30 plane 349.79



(10%Emax) 0.2463988	—
(20%Emax) 0.492796	—
(30%Emax) 0.739196	—
(40%Emax) 0.985596	—
(50%Emax) 1.231992	—
(60%Emax) 1.478392	—
(70%Emax) 1.724792	—
(80%Emax) 1.971188	—
(90%Emax) 2.217588	—



Luminance Table

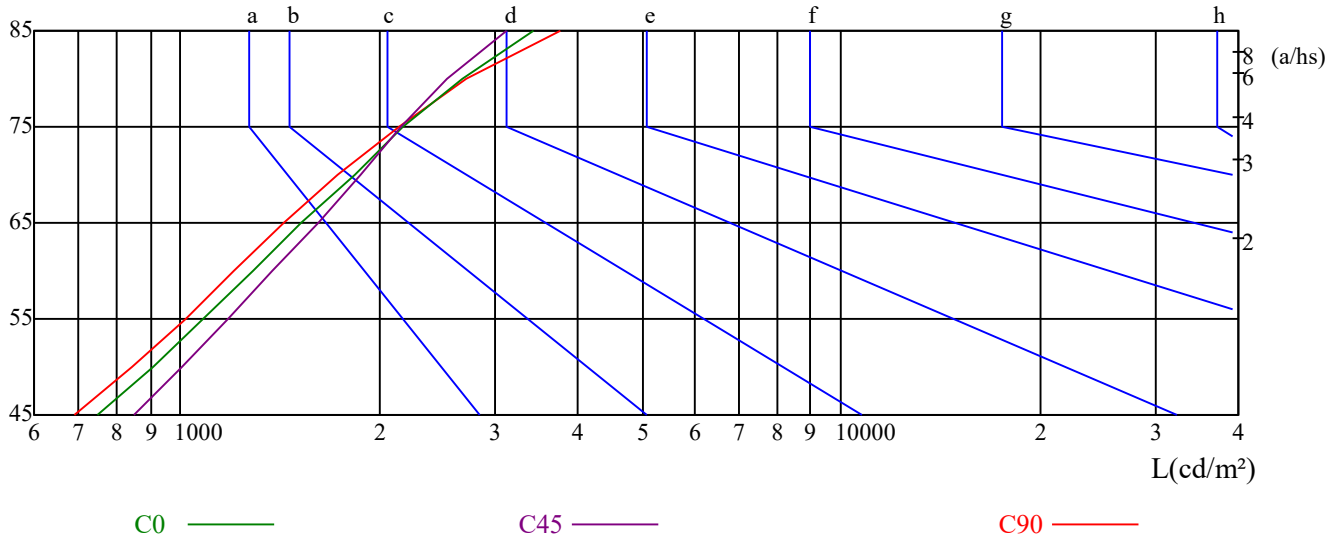
γ	45	50	55	60	65	70	75	80	85
C0	749	908	1081	1286	1526	1831	2176	2679	3419
C45	849	1008	1180	1380	1617	1874	2161	2536	3113
C90	690	845	1021	1204	1435	1728	2140	2708	3767

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
2108	2438	2242	3992	4409	4113	12147	14009	13013

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

 $\gamma(^{\circ})$ 

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	1.07	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	0.49
1	0.85	0.78	0.73	0.77	0.72	0.67	0.64	0.59	0.55	0.51	0.48	0.45	0.39	0.37	0.35	0.29
2	0.71	0.62	0.55	0.64	0.57	0.50	0.52	0.46	0.41	0.41	0.37	0.33	0.31	0.28	0.25	0.20
3	0.60	0.50	0.43	0.55	0.46	0.39	0.44	0.38	0.32	0.35	0.30	0.25	0.26	0.22	0.19	0.14
4	0.52	0.42	0.35	0.47	0.38	0.32	0.38	0.31	0.26	0.30	0.24	0.20	0.22	0.18	0.14	0.10
5	0.45	0.36	0.28	0.41	0.33	0.26	0.33	0.26	0.21	0.26	0.21	0.16	0.19	0.15	0.12	0.08
6	0.40	0.31	0.24	0.37	0.28	0.22	0.30	0.23	0.18	0.23	0.18	0.13	0.17	0.13	0.09	0.06
7	0.36	0.27	0.20	0.33	0.24	0.18	0.26	0.20	0.15	0.21	0.15	0.11	0.15	0.11	0.08	0.05
8	0.32	0.23	0.17	0.29	0.21	0.16	0.24	0.17	0.13	0.19	0.14	0.10	0.14	0.10	0.07	0.04
9	0.29	0.21	0.15	0.27	0.19	0.14	0.22	0.15	0.11	0.17	0.12	0.08	0.13	0.09	0.06	0.03
10	0.27	0.19	0.13	0.24	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.07	0.12	0.08	0.05	0.03

弗格斯莱 KNOF18LAJUDPC

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	2.73	0.91	2.73	8.20	21.86	38.25	55.55	72.86	88.34		
15.0	1.82	0.91	2.73	12.75	29.14	49.18	68.30	87.43	105.64		
30.0	1.82	0.91	2.73	14.57	31.87	53.73	73.77	93.80	113.84		
45.0	2.73	0.91	2.73	13.66	31.87	51.00	71.95	90.16	110.20		
60.0	2.73	0.91	2.73	10.02	26.41	42.80	61.02	79.23	96.54		
75.0	3.64	0.91	2.73	8.20	20.04	36.43	53.73	70.12	87.43		
90.0	3.64	0.91	3.64	10.02	20.04	32.79	49.18	64.66	81.05		
105.0	2.73	0.91	5.46	14.57	24.59	33.70	45.54	58.29	71.04		
120.0	2.73	1.82	8.20	19.12	30.05	41.89	53.73	65.57	76.50		
135.0	0.91	1.82	9.11	21.86	34.61	48.27	61.93	74.68	87.43		
150.0	1.82	1.82	10.93	22.77	47.36	51.00	64.66	78.32	91.07		
165.0	0.91	1.82	9.11	21.86	33.70	48.27	61.93	74.68	88.34		
180.0	2.73	10.93	21.86	33.70	46.45	59.20	70.12	81.96	91.98		
195.0	1.82	9.11	19.12	30.96	42.80	55.55	67.39	79.23	90.16		
210.0	1.82	8.20	20.04	31.87	45.54	58.29	71.04	83.79	95.62		
225.0	2.73	10.02	20.95	32.79	46.45	60.11	73.77	85.61	96.54		
240.0	2.73	12.75	24.59	38.25	52.82	66.48	80.14	91.98	103.82		
255.0	3.64	15.48	28.23	44.62	61.02	76.50	91.98	105.64	118.39		
270.0	3.64	15.48	30.05	47.36	63.75	79.23	94.71	110.20	124.77		
285.0	2.73	15.48	29.14	44.62	61.02	77.41	92.89	107.46	110.20		
300.0	2.73	12.75	24.59	39.16	40.98	68.30	81.96	94.71	106.55		
315.0	0.91	9.11	19.12	29.14	41.89	53.73	65.57	77.41	89.25		
330.0	1.82	6.37	12.75	21.86	33.70	48.27	62.84	77.41	92.89		
345.0	0.91	3.64	9.11	20.04	34.61	50.09	64.66	81.05	94.71		
360.0	2.73	0.91	2.73	8.20	21.86	38.25	55.55	72.86	88.34		
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	103.82	118.39	131.14	142.98	153.00	162.11	165.75	169.39	170.30		
15.0	122.04	138.43	153.00	165.75	177.59	186.70	190.34	194.89	194.89		
30.0	131.14	146.62	161.20	174.86	188.52	196.71	200.36	203.09	206.73		
45.0	126.59	142.98	157.55	171.21	183.96	192.16	195.80	197.62	201.27		
60.0	112.02	126.59	141.16	153.00	163.93	173.95	175.77	176.68	181.23		
75.0	102.00	117.48	131.14	142.98	153.00	163.02	166.66	170.30	181.23		
90.0	95.62	110.20	123.86	133.87	143.89	153.00	163.02	171.21	187.61		
105.0	85.61	97.45	108.37	117.48	124.77	136.61	151.18	173.04	177.59		
120.0	86.52	94.71	102.00	108.37	112.02	119.30	140.25	160.29	163.93		
135.0	97.45	108.37	116.57	123.86	128.41	141.16	165.75	180.32	185.79		
150.0	102.91	113.84	123.86	131.14	137.52	152.09	181.23	191.25	189.43		
165.0	99.27	109.29	118.39	126.59	133.87	146.62	171.21	184.87	182.14		
180.0	102.00	110.20	116.57	122.95	132.05	152.09	164.84	167.57	168.48		
195.0	101.09	109.29	116.57	125.68	139.34	152.09	167.57	171.21	172.12		
210.0	106.55	115.66	122.95	136.61	153.00	160.29	165.75	181.23	181.23		
225.0	107.46	116.57	123.86	137.52	154.82	163.02	165.75	172.12	175.77		
240.0	113.84	122.04	129.32	141.16	158.46	170.30	173.04	173.04	174.86		
255.0	129.32	139.34	146.62	159.37	178.50	192.16	193.07	193.07	195.80		
270.0	136.61	147.54	157.55	159.37	185.79	199.45	202.18	201.27	203.09		
285.0	132.96	143.89	153.91	163.93	175.77	191.25	192.16	193.98	195.80		
300.0	118.39	128.41	137.52	146.62	153.91	161.20	168.48	171.21	173.04		
315.0	101.09	112.93	123.86	132.96	139.34	141.16	153.91	161.20	163.02		
330.0	106.55	119.30	131.14	142.07	148.45	150.27	153.00	167.57	172.12		
345.0	109.29	122.04	132.96	143.89	150.27	153.00	157.55	158.46	166.66		
360.0	103.82	118.39	131.14	142.98	153.00	162.11	165.75	169.39	170.30		

弗格斯莱 KNOF18LAJUDPC

Intensity data(cd)										Appendix Page: 11 Total:12	
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0		
0.0	171.21	171.21	170.30	167.57	156.64	135.70	127.50	122.04	114.75		
15.0	197.62	197.62	195.80	195.80	192.16	163.02	146.62	138.43	130.23		
30.0	208.55	208.55	206.73	210.37	208.55	181.23	156.64	144.80	136.61		
45.0	204.00	204.00	204.91	203.09	196.71	173.95	151.18	139.34	132.05		
60.0	183.96	183.96	183.05	180.32	174.86	152.09	133.87	123.86	116.57		
75.0	184.87	185.79	184.87	181.23	172.12	154.82	140.25	126.59	118.39		
90.0	190.34	190.34	190.34	186.70	173.04	166.66	153.00	142.07	132.96		
105.0	180.32	189.43	183.05	173.95	168.48	165.75	155.73	145.71	136.61		
120.0	165.75	166.66	167.57	166.66	164.84	161.20	156.64	147.54	136.61		
135.0	183.96	183.96	183.96	183.96	183.05	178.50	174.86	164.84	154.82		
150.0	191.25	191.25	191.25	193.98	191.25	186.70	179.41	171.21	160.29		
165.0	183.96	183.96	184.87	187.61	183.05	181.23	173.95	164.84	153.91		
180.0	168.48	172.12	171.21	169.39	165.75	157.55	148.45	138.43	125.68		
195.0	165.75	166.66	164.84	163.93	160.29	152.09	142.98	132.05	120.21		
210.0	182.14	165.75	165.75	164.84	161.20	153.00	143.89	132.05	119.30		
225.0	175.77	169.39	158.46	158.46	154.82	146.62	143.89	123.86	112.02		
240.0	173.95	172.12	171.21	160.29	153.00	145.71	136.61	127.50	115.66		
255.0	195.80	193.98	192.16	179.41	169.39	162.11	153.00	142.07	130.23		
270.0	204.00	208.55	203.09	186.70	171.21	163.02	154.82	145.71	132.96		
285.0	200.36	196.71	194.89	178.50	160.29	152.09	145.71	136.61	125.68		
300.0	173.04	170.30	172.12	153.91	137.52	130.23	125.68	117.48	108.37		
315.0	162.11	156.64	156.64	146.62	130.23	120.21	113.84	106.55	97.45		
330.0	171.21	163.93	153.91	148.45	132.96	122.04	115.66	108.37	99.27		
345.0	167.57	165.75	157.55	142.98	128.41	119.30	112.93	105.64	95.62		
360.0	171.21	171.21	170.30	167.57	156.64	135.70	127.50	122.04	114.75		
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	106.55	96.54	84.70	72.86	61.02	45.54	31.87	17.30	8.20		
15.0	121.12	109.29	97.45	84.70	71.04	53.73	36.43	21.86	10.02		
30.0	126.59	115.66	102.91	90.16	75.59	58.29	40.07	24.59	10.93		
45.0	122.95	112.02	100.18	87.43	73.77	55.55	39.16	23.68	10.93		
60.0	109.29	100.18	90.16	78.32	65.57	51.00	33.70	21.86	9.11		
75.0	108.37	98.36	86.52	74.68	61.02	45.54	30.96	18.21	7.29		
90.0	122.04	109.29	95.62	78.32	58.29	43.71	30.05	16.39	7.29		
105.0	124.77	111.11	93.80	81.05	65.57	45.54	31.87	19.12	8.20		
120.0	124.77	112.93	99.27	85.61	70.12	53.73	36.43	22.77	10.93		
135.0	142.07	127.50	112.93	96.54	80.14	63.75	42.80	26.41	11.84		
150.0	147.54	133.87	119.30	102.00	83.79	66.48	46.45	28.23	13.66		
165.0	142.07	128.41	113.84	98.36	81.05	63.75	42.80	26.41	11.84		
180.0	112.93	99.27	83.79	68.30	50.09	32.79	19.12	7.29	0.91		
195.0	105.64	90.16	74.68	58.29	40.98	36.43	14.57	4.55	0.91		
210.0	105.64	101.09	71.04	55.55	37.34	24.59	12.75	4.55	0.91		
225.0	98.36	82.87	70.12	56.46	41.89	26.41	13.66	5.46	0.91		
240.0	103.82	91.07	77.41	62.84	49.18	33.70	17.30	6.37	0.91		
255.0	116.57	103.82	88.34	72.86	55.55	39.16	21.86	8.20	1.82		
270.0	120.21	105.64	90.16	75.59	58.29	40.98	22.77	8.20	1.82		
285.0	113.84	99.27	86.52	71.04	54.64	38.25	20.95	7.29	1.82		
300.0	98.36	86.52	74.68	61.02	47.36	32.79	16.39	5.46	1.82		
315.0	86.52	75.59	62.84	51.00	38.25	25.50	13.66	4.55	1.82		
330.0	87.43	74.68	61.93	49.18	32.79	20.04	10.02	3.64	1.82		
345.0	86.52	72.86	59.20	47.36	34.61	20.95	10.93	4.55	1.82		
360.0	106.55	96.54	84.70	72.86	61.02	45.54	31.87	17.30	8.20		

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	0.91
15.0	2.73
30.0	2.73
45.0	2.73
60.0	2.73
75.0	2.73
90.0	2.73
105.0	2.73
120.0	2.73
135.0	3.64
150.0	3.64
165.0	3.64
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	0.91