
弗格斯莱

Client:

LumCAT: KNOP48LAJUDBK

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.030

LampCAT:

Current(A): 0.504

Lamp flux(lm): 2707.5

Power (W): 59.460

Number of Lamps: 1

PF: 0.983

Length(mm): 130

Width(mm): 130

Phm Type: C

Height(mm): 1420

Photometric Results

Lumens(lm): 2707.54, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 45.54

Central intensity(cd): 67.632, Maximum intensity(cd): 316.853

Angle of maximum intensity: C=150.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=289.2

[C90/270]Total=294.3

Field angle(10%Imax): [C0/180]Total=341.5

[C90/270]Total=340.0

Maximum s/h(1/2): C0_180=3.46 C90_270=3.26

Maximum s/h(1/4): C0_180=3.37 C90_270=3.19

Up flux rate of lamp(%): 49.29%

Down flux rate of lamp(%): 50.71%

Up flux rate of LUM(%): 49.29%

Down flux rate of LUM(%): 50.71%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 19.993%

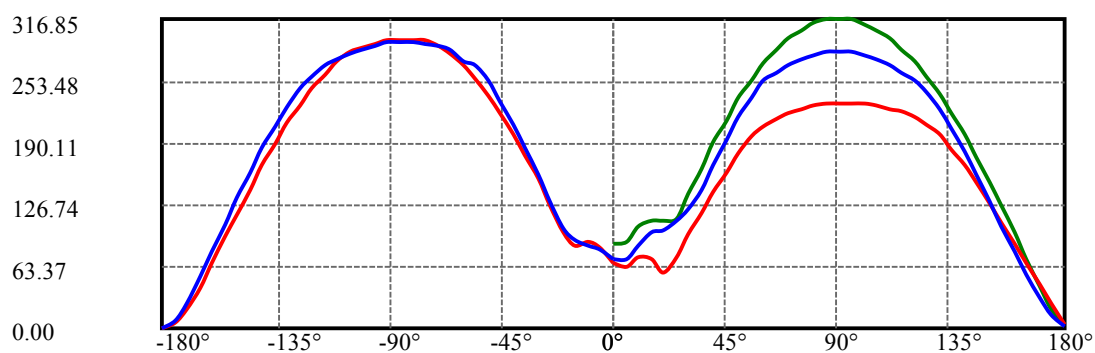
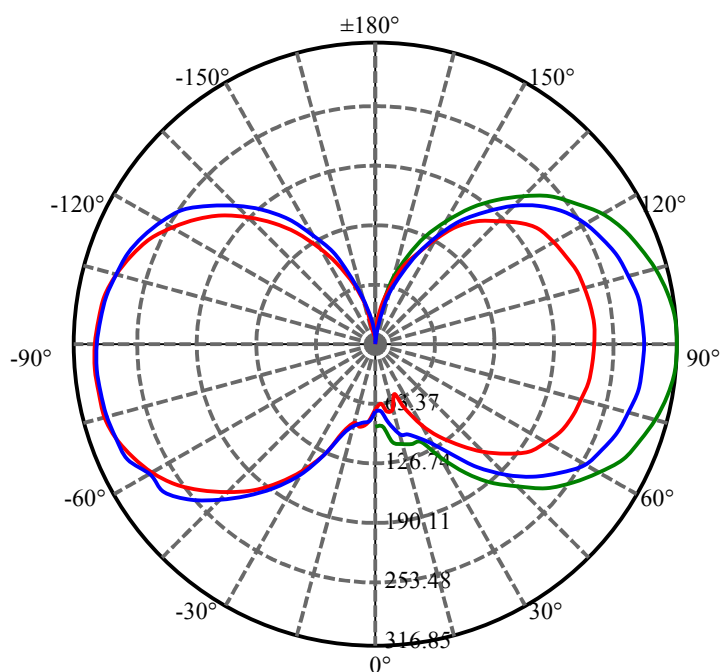
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	72.805	0.000	0	0.00%	0.00%
5.0	77.167	1.793	1.793	0.07%	0.07%
10.0	86.200	5.844	7.637	0.22%	0.28%
15.0	87.783	10.321	17.958	0.38%	0.66%
20.0	89.984	14.650	32.608	0.54%	1.20%
25.0	106.081	20.564	53.172	0.76%	1.96%
30.0	127.930	29.614	82.786	1.09%	3.06%
35.0	152.173	41.247	124.033	1.52%	4.58%
40.0	175.065	54.597	178.63	2.02%	6.60%
45.0	197.454	68.975	247.605	2.55%	9.15%
50.0	217.489	83.845	331.451	3.10%	12.24%
55.0	234.783	98.339	429.79	3.63%	15.87%
60.0	247.754	111.537	541.327	4.12%	19.99%
65.0	256.517	122.589	663.916	4.53%	24.52%
70.0	262.655	131.458	795.374	4.86%	29.38%
75.0	266.978	138.438	933.811	5.11%	34.49%
80.0	269.719	143.605	1077.417	5.30%	39.79%
85.0	271.109	146.956	1224.372	5.43%	45.22%
90.0	271.263	148.506	1372.878	5.48%	50.71%
95.0	269.796	148.146	1521.025	5.47%	56.18%
100.0	267.171	145.907	1666.931	5.39%	61.57%
105.0	263.041	141.870	1808.801	5.24%	66.81%
110.0	257.096	135.955	1944.757	5.02%	71.83%
115.0	249.453	128.261	2073.018	4.74%	76.56%
120.0	240.226	119.042	2192.06	4.40%	80.96%
125.0	228.298	108.298	2300.358	4.00%	84.96%
130.0	212.509	95.846	2396.204	3.54%	88.50%
135.0	193.594	82.059	2478.264	3.03%	91.53%
140.0	173.906	68.046	2546.309	2.51%	94.05%
145.0	150.822	54.178	2600.488	2.00%	96.05%
150.0	127.081	40.923	2641.411	1.51%	97.56%
155.0	102.993	29.116	2670.527	1.08%	98.63%
160.0	79.445	19.134	2689.661	0.71%	99.34%
165.0	54.353	11.027	2700.688	0.41%	99.75%
170.0	31.384	5.086	2705.774	0.19%	99.93%
175.0	12.893	1.584	2707.358	0.06%	99.99%
180.0	2.085	0.179	2707.537	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	82.79	3.06%	3.06%
0-40	178.63	6.60%	6.60%
0-60	541.33	19.99%	19.99%
0-90	1372.88	50.71%	50.71%
0-120	2192.06	80.96%	80.96%
0-180	2707.54	100.00%	100.00%
60-90	831.55	30.71%	30.71%
90-120	819.18	30.26%	30.26%
90-130	1023.33	37.80%	37.80%
90-150	1268.53	46.85%	46.85%
90-180	1334.48	49.29%	49.29%
0-118.91	2166.03	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	7.64
10-20	24.97
20-30	50.18
30-40	95.84
40-50	152.82
50-60	209.88
60-70	254.05
70-80	282.04
80-90	295.46
90-100	294.05
100-110	277.83
110-120	247.30
120-130	204.14
130-140	150.10
140-150	95.10
150-160	48.25
160-170	16.11
170-180	1.58



C150(Max): —————

C0/C180: —————

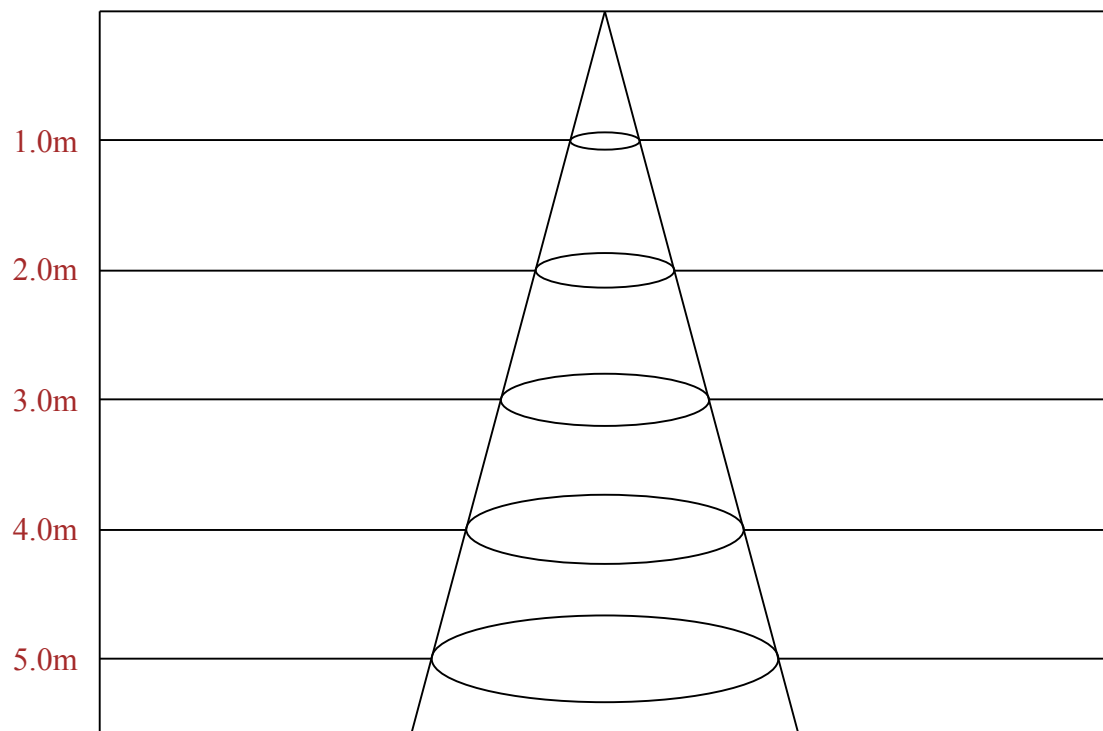
C90/C270: —————

Field angle(10%Imax):C0/180Left:92.7 Right:248.8

:C90/270Left:89.4 Right:250.6

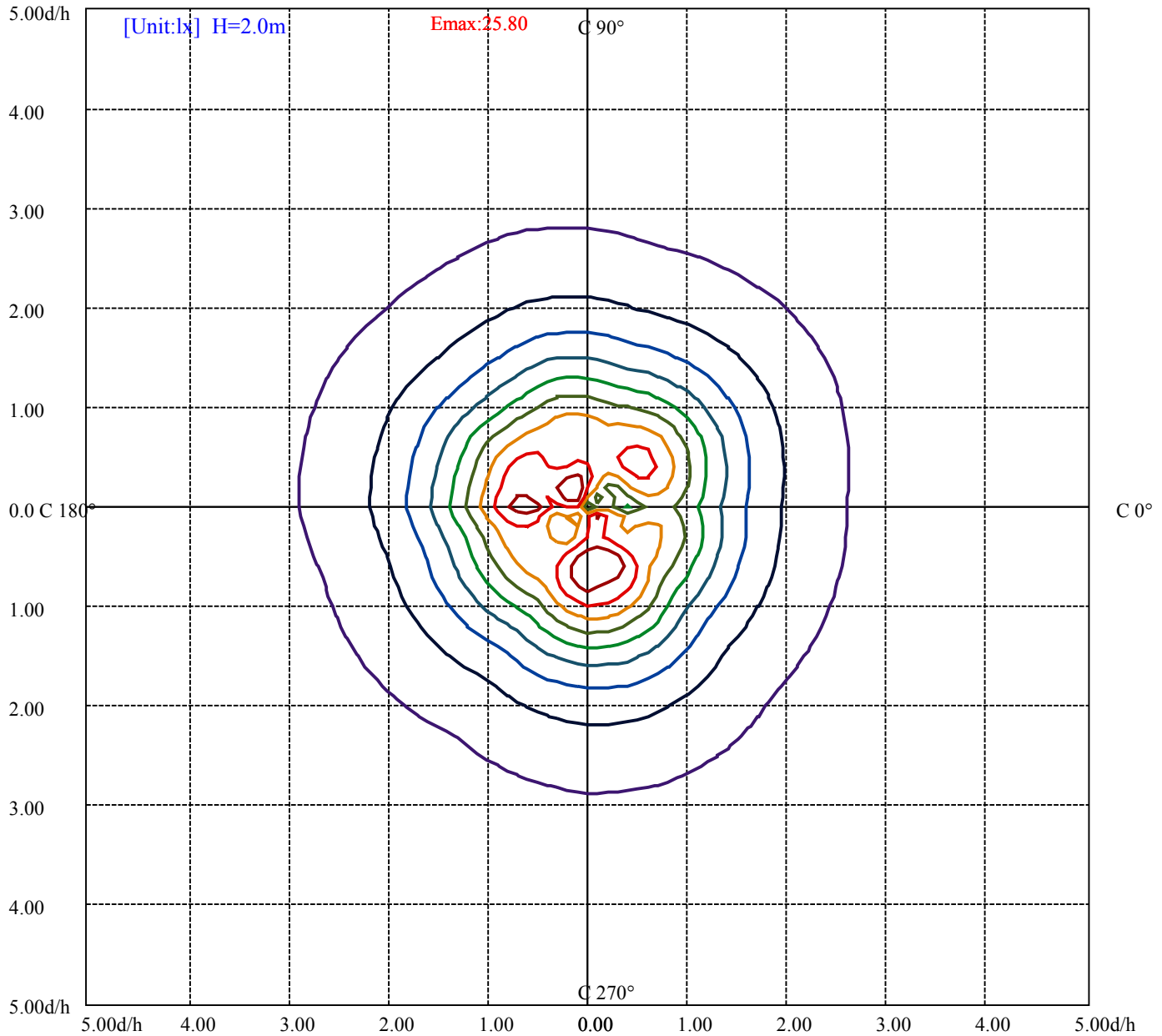
Beam Angle(50%Imax):C0/180Left:68.9 Right:220.3

:C90/270Left:67.4 Right:226.9

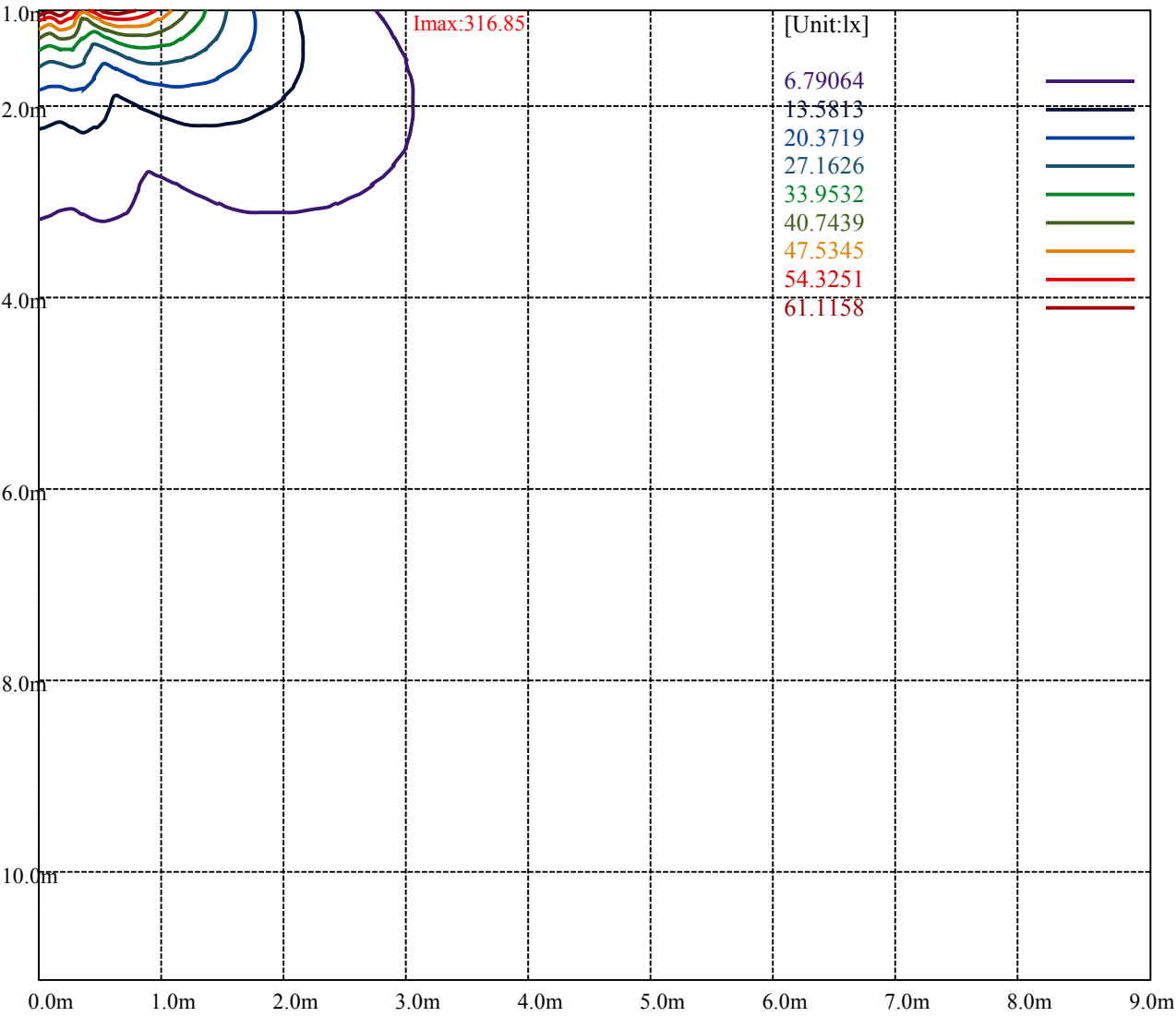


Max , Ave

Beam angle of C150 plane 333.67



(10%Emax) 2.5798	—
(20%Emax) 5.159575	—
(30%Emax) 7.739375	—
(40%Emax) 10.31917	—
(50%Emax) 12.89898	—
(60%Emax) 15.47875	—
(70%Emax) 18.05855	—
(80%Emax) 20.63835	—
(90%Emax) 23.21812	—



Luminance Table

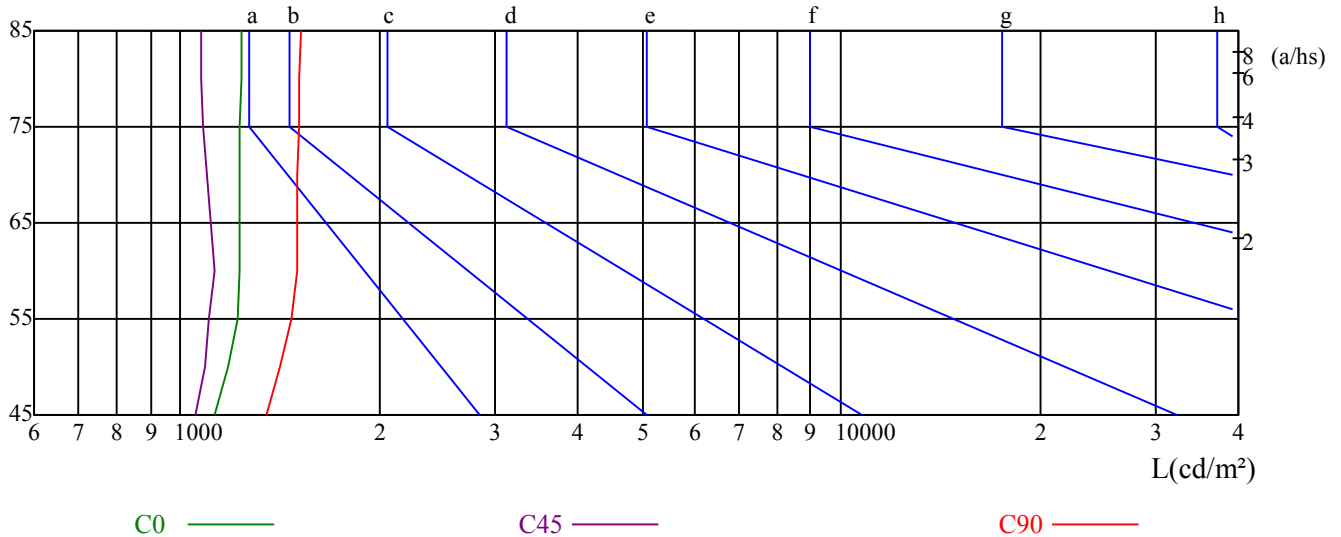
γ	45	50	55	60	65	70	75	80	85
C0	1125	1180	1221	1227	1232	1230	1227	1234	1239
C45	1051	1090	1107	1126	1114	1096	1083	1076	1073
C90	1352	1418	1468	1503	1503	1504	1511	1515	1524

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
34699	38396	35348	59413	64920	60101	178321	195618	181466

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	0.84	0.84	0.84	0.70	0.70	0.70	0.57	0.57	0.57	0.51
1	0.86	0.80	0.74	0.78	0.73	0.68	0.65	0.61	0.57	0.53	0.50	0.47	0.41	0.39	0.37	0.31
2	0.72	0.63	0.56	0.65	0.58	0.52	0.54	0.48	0.43	0.43	0.39	0.35	0.33	0.30	0.27	0.22
3	0.61	0.52	0.44	0.56	0.47	0.40	0.46	0.39	0.34	0.36	0.31	0.27	0.28	0.24	0.20	0.16
4	0.53	0.43	0.36	0.48	0.39	0.33	0.39	0.32	0.27	0.31	0.26	0.21	0.24	0.19	0.16	0.12
5	0.46	0.37	0.29	0.42	0.34	0.27	0.35	0.28	0.22	0.27	0.22	0.18	0.21	0.16	0.13	0.09
6	0.41	0.32	0.25	0.37	0.29	0.23	0.31	0.24	0.19	0.24	0.19	0.15	0.18	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	0.16	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	0.14	0.11	0.15	0.11	0.08	0.05
9	0.30	0.21	0.16	0.27	0.20	0.15	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	0.16	0.12	0.08	0.13	0.09	0.06	0.04

弗格斯莱 KNOP48LAJUDBK

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	67.63	63.00	72.26	71.34	56.51	73.19	97.28	117.66	139.90		
15.0	66.71	63.93	75.97	73.19	63.93	89.87	113.96	138.97	160.28		
30.0	62.07	59.29	72.26	70.41	71.34	100.06	126.93	154.72	179.74		
45.0	53.74	51.88	64.85	64.85	75.97	102.84	130.63	157.50	183.44		
60.0	61.15	60.22	73.19	76.90	86.16	105.62	126.93	148.24	173.25		
75.0	67.63	67.63	80.60	87.09	92.65	102.84	117.66	136.19	161.21		
90.0	71.34	71.34	84.31	99.13	100.99	109.32	121.37	142.68	167.69		
105.0	80.60	80.60	95.43	110.25	107.47	111.18	121.37	145.46	174.18		
120.0	89.87	90.79	103.76	116.74	108.40	108.40	116.74	144.53	168.62		
135.0	89.87	92.65	108.40	115.81	111.18	112.10	126.93	152.87	176.96		
150.0	86.16	88.01	103.76	109.32	111.18	113.03	138.04	163.99	189.93		
165.0	76.90	79.68	95.43	99.13	99.13	108.40	136.19	163.99	189.93		
180.0	67.63	82.46	88.94	85.24	99.13	126.00	152.87	176.96	199.19		
195.0	66.71	78.75	85.24	77.82	82.46	105.62	127.85	150.09	170.47		
210.0	62.07	72.26	81.53	73.19	74.12	97.28	121.37	145.46	168.62		
225.0	53.74	63.00	75.04	72.26	75.04	96.35	119.51	143.60	167.69		
240.0	61.15	69.49	76.90	75.04	79.68	98.21	120.44	143.60	163.06		
255.0	67.63	77.82	82.46	86.16	95.43	116.74	144.53	168.62	190.85		
270.0	71.34	80.60	84.31	90.79	101.91	129.71	158.43	185.29	209.38		
285.0	80.60	89.87	90.79	94.50	103.76	131.56	158.43	185.29	190.85		
300.0	89.87	98.21	97.28	96.35	97.28	118.59	146.38	172.32	194.56		
315.0	89.87	97.28	96.35	90.79	91.72	99.13	122.29	144.53	164.91		
330.0	86.16	90.79	91.72	86.16	87.09	93.57	113.03	136.19	159.35		
345.0	76.90	82.46	88.01	84.31	87.09	96.35	111.18	133.41	157.50		
360.0	67.63	63.00	72.26	71.34	56.51	73.19	97.28	117.66	139.90		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	160.28	179.74	196.41	206.60	214.94	220.50	224.21	227.91	229.77		
15.0	183.44	201.97	220.50	230.69	238.10	241.81	245.52	246.44	247.37		
30.0	202.90	224.21	243.66	258.49	265.90	269.60	272.38	274.24	275.16		
45.0	206.60	229.77	247.37	264.04	271.46	275.16	277.94	279.79	280.72		
60.0	194.56	216.79	235.32	250.15	257.56	261.27	263.12	265.90	265.90		
75.0	183.44	203.82	220.50	236.25	243.66	248.29	251.07	253.85	254.78		
90.0	192.71	215.87	236.25	252.93	262.19	269.60	276.09	279.79	282.57		
105.0	199.19	222.35	244.59	261.27	273.31	282.57	289.06	294.62	296.47		
120.0	192.71	214.01	232.54	250.15	263.12	273.31	280.72	286.28	289.99		
135.0	199.19	219.57	236.25	252.93	264.97	276.09	284.43	290.91	293.69		
150.0	212.16	235.32	252.93	271.46	286.28	297.40	305.74	312.22	315.93		
165.0	211.24	231.62	252.00	268.68	283.50	295.54	303.88	309.44	314.07		
180.0	219.57	239.03	255.71	269.60	280.72	289.99	295.54	295.54	295.54		
195.0	189.00	206.60	222.35	234.40	245.52	253.85	258.49	260.34	260.34		
210.0	189.00	209.38	225.13	239.03	249.22	256.63	261.27	264.04	264.04		
225.0	188.07	206.60	224.21	236.25	244.59	250.15	253.85	255.71	256.63		
240.0	183.44	200.12	215.87	226.99	231.62	234.40	237.18	238.10	239.03		
255.0	211.24	229.77	246.44	258.49	263.12	265.90	268.68	267.75	268.68		
270.0	231.62	252.93	270.53	273.31	286.28	289.99	291.84	293.69	293.69		
285.0	233.47	252.00	270.53	283.50	288.13	291.84	294.62	295.54	295.54		
300.0	215.87	234.40	252.93	263.12	267.75	271.46	273.31	275.16	276.09		
315.0	182.51	201.04	214.94	224.21	228.84	232.54	235.32	237.18	238.10		
330.0	179.74	197.34	211.24	219.57	226.06	230.69	234.40	237.18	239.03		
345.0	176.96	195.49	206.60	214.01	219.57	225.13	228.84	231.62	233.47		
360.0	160.28	179.74	196.41	206.60	214.94	220.50	224.21	227.91	229.77		

弗格斯莱 KNOP48LAJUDBK

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	230.69	230.69	229.77	227.91	225.13	221.43	215.87	209.38	199.19		
15.0	247.37	246.44	244.59	242.74	238.10	234.40	228.84	222.35	212.16		
30.0	275.16	273.31	271.46	268.68	264.04	258.49	252.93	245.52	235.32		
45.0	280.72	278.87	277.02	273.31	268.68	263.12	256.63	250.15	239.03		
60.0	265.90	264.97	263.12	259.41	254.78	250.15	243.66	237.18	225.13		
75.0	254.78	253.85	252.00	248.29	243.66	238.10	231.62	224.21	211.24		
90.0	283.50	282.57	279.79	275.16	269.60	262.19	252.93	241.81	225.13		
105.0	298.32	297.40	295.54	290.91	283.50	275.16	263.12	250.15	231.62		
120.0	291.84	289.99	287.21	282.57	275.16	265.90	253.85	239.96	220.50		
135.0	295.54	294.62	290.91	284.43	276.09	264.97	252.93	239.03	222.35		
150.0	316.85	315.93	311.29	305.74	297.40	286.28	274.24	257.56	240.88		
165.0	315.00	313.15	309.44	302.96	295.54	284.43	271.46	256.63	239.03		
180.0	294.62	291.84	288.13	282.57	273.31	260.34	245.52	227.91	210.31		
195.0	259.41	257.56	254.78	250.15	242.74	231.62	218.65	203.82	186.22		
210.0	264.04	262.19	259.41	255.71	247.37	236.25	223.28	208.46	189.00		
225.0	255.71	253.85	251.07	246.44	239.96	229.77	226.06	203.82	185.29		
240.0	238.10	236.25	234.40	228.84	224.21	216.79	207.53	197.34	181.59		
255.0	267.75	265.90	262.19	258.49	252.93	246.44	236.25	226.06	208.46		
270.0	292.77	289.99	286.28	281.65	276.09	268.68	257.56	246.44	226.99		
285.0	294.62	292.77	289.06	284.43	277.94	271.46	261.27	249.22	229.77		
300.0	275.16	273.31	269.60	265.90	260.34	253.85	245.52	231.62	213.09		
315.0	239.03	237.18	235.32	232.54	227.91	222.35	216.79	204.75	188.07		
330.0	239.03	239.03	237.18	234.40	230.69	225.13	217.72	205.68	190.85		
345.0	234.40	233.47	232.54	229.77	225.13	219.57	211.24	200.12	189.00		
360.0	230.69	230.69	229.77	227.91	225.13	221.43	215.87	209.38	199.19		
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	183.44	167.69	149.16	127.85	107.47	87.09	66.71	44.47	25.01		
15.0	197.34	180.66	161.21	139.90	117.66	96.35	72.26	48.18	25.01		
30.0	217.72	198.26	176.96	154.72	128.78	103.76	77.82	51.88	25.01		
45.0	221.43	203.82	181.59	158.43	131.56	104.69	77.82	50.03	24.09		
60.0	208.46	189.00	167.69	141.75	115.81	90.79	64.85	38.91	17.60		
75.0	194.56	175.10	152.87	127.85	102.84	79.68	55.59	33.35	12.04		
90.0	204.75	181.59	156.57	130.63	104.69	79.68	54.66	31.50	13.90		
105.0	210.31	186.22	162.13	135.26	109.32	81.53	57.44	32.43	13.90		
120.0	200.12	178.81	157.50	131.56	107.47	82.46	56.51	32.43	12.04		
135.0	202.90	183.44	162.13	138.97	113.96	90.79	63.93	40.76	17.60		
150.0	220.50	198.26	175.10	150.09	125.07	98.21	71.34	43.54	19.46		
165.0	218.65	197.34	175.10	150.09	123.22	97.28	71.34	44.47	20.38		
180.0	189.00	166.76	142.68	116.74	93.57	66.71	41.69	19.46	5.56		
195.0	167.69	148.24	124.15	102.84	80.60	75.04	36.13	17.60	5.56		
210.0	169.54	163.06	123.22	100.06	76.90	53.74	33.35	15.75	5.56		
225.0	165.84	144.53	121.37	99.13	77.82	54.66	34.28	17.60	5.56		
240.0	163.99	145.46	125.07	103.76	82.46	61.15	38.91	20.38	6.49		
255.0	189.00	168.62	145.46	121.37	98.21	73.19	47.25	24.09	7.41		
270.0	205.68	184.37	159.35	133.41	106.54	79.68	52.81	25.94	8.34		
285.0	208.46	185.29	161.21	136.19	108.40	81.53	53.74	26.87	7.41		
300.0	194.56	172.32	150.09	125.07	99.13	75.04	49.10	25.01	7.41		
315.0	170.47	151.94	131.56	109.32	88.94	65.78	43.54	23.16	8.34		
330.0	171.40	152.87	130.63	108.40	86.16	63.93	40.76	22.24	7.41		
345.0	170.47	150.09	126.93	106.54	85.24	63.93	42.62	23.16	8.34		
360.0	183.44	167.69	149.16	127.85	107.47	87.09	66.71	44.47	25.01		

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	3.71
15.0	6.49
30.0	5.56
45.0	3.71
60.0	2.78
75.0	2.78
90.0	2.78
105.0	3.71
120.0	4.63
135.0	4.63
150.0	4.63
165.0	4.63
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	3.71