
弗格斯莱

Client:

LumCAT: KNOP36LAJUDLB

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.020

LampCAT:

Current(A): 0.459

Lamp flux(lm): 2617.2

Power (W): 54.620

Number of Lamps: 1

PF: 0.991

Length(mm): 1020

Width(mm): 140

Phm Type: C

Height(mm): 120

Photometric Results

Lumens(lm): 2617.20, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 47.92

Central intensity(cd): 9.107, Maximum intensity(cd): 311.463

Angle of maximum intensity: C=75.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=283.2

[C90/270]Total=283.8

Field angle(10%Imax): [C0/180]Total=335.1

[C90/270]Total=338.5

Maximum s/h(1/2): C0_180=7.90 C90_270=8.57

Maximum s/h(1/4): C0_180=7.28 C90_270=7.67

Up flux rate of lamp(%): 49.45%

Down flux rate of lamp(%): 50.55%

Up flux rate of LUM(%): 49.45%

Down flux rate of LUM(%): 50.55%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 18.988%

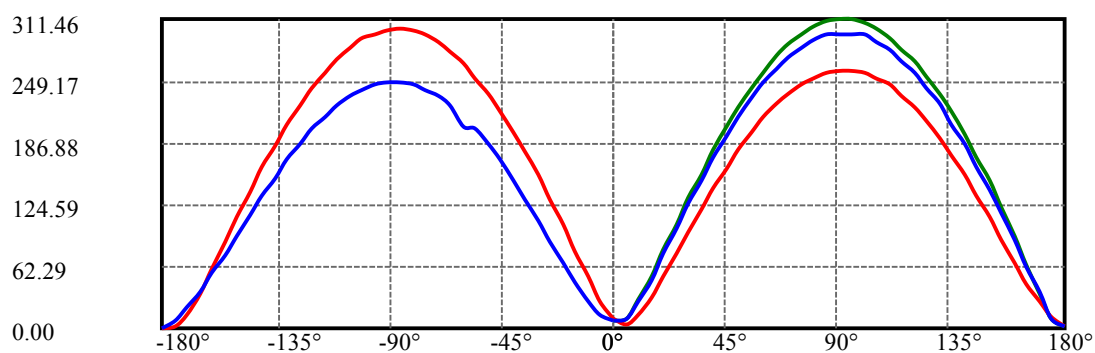
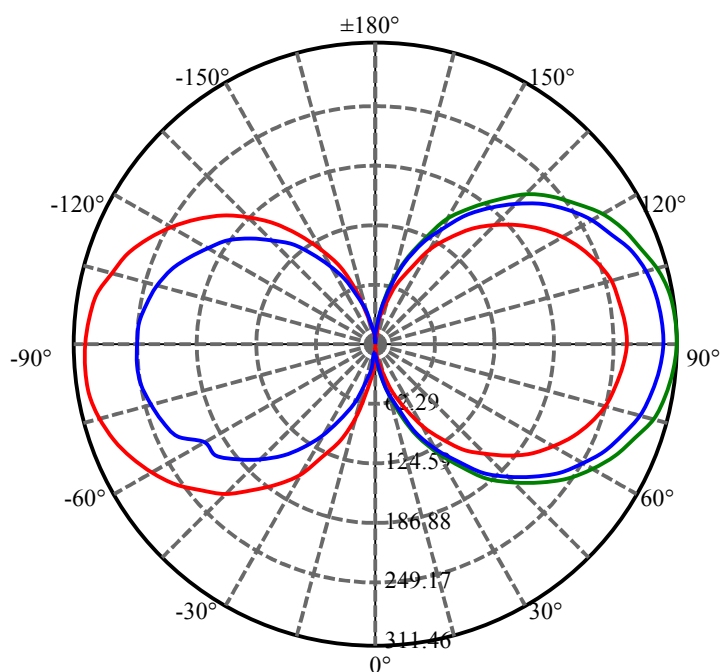
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7.969	0.000	0	0.00%	0.00%
5.0	13.737	0.259	0.259	0.01%	0.01%
10.0	30.585	1.586	1.845	0.06%	0.07%
15.0	52.138	4.907	6.752	0.19%	0.26%
20.0	75.361	10.508	17.26	0.40%	0.66%
25.0	99.381	18.327	35.587	0.70%	1.36%
30.0	122.567	28.088	63.675	1.07%	2.43%
35.0	145.069	39.411	103.086	1.51%	3.94%
40.0	165.750	51.858	154.944	1.98%	5.92%
45.0	186.241	65.174	220.118	2.49%	8.41%
50.0	204.493	78.953	299.071	3.02%	11.43%
55.0	220.923	92.500	391.571	3.53%	14.96%
60.0	235.040	105.395	496.965	4.03%	18.99%
65.0	247.941	117.414	614.379	4.49%	23.47%
70.0	258.111	128.136	742.514	4.90%	28.37%
75.0	266.155	137.035	879.549	5.24%	33.61%
80.0	271.544	143.873	1023.422	5.50%	39.10%
85.0	275.187	148.560	1171.982	5.68%	44.78%
90.0	275.908	150.894	1322.876	5.77%	50.55%
95.0	274.238	150.634	1473.51	5.76%	56.30%
100.0	270.481	148.013	1621.524	5.66%	61.96%
105.0	263.841	142.970	1764.493	5.46%	67.42%
110.0	255.113	135.646	1900.14	5.18%	72.60%
115.0	243.843	126.339	2026.479	4.83%	77.43%
120.0	231.093	115.458	2141.936	4.41%	81.84%
125.0	215.383	103.202	2245.138	3.94%	85.78%
130.0	198.421	89.975	2335.113	3.44%	89.22%
135.0	179.524	76.369	2411.483	2.92%	92.14%
140.0	159.906	62.848	2474.331	2.40%	94.54%
145.0	137.138	49.560	2523.89	1.89%	96.43%
150.0	114.029	36.986	2560.876	1.41%	97.85%
155.0	90.236	25.850	2586.726	0.99%	98.84%
160.0	66.786	16.469	2603.195	0.63%	99.47%
165.0	42.803	9.032	2612.227	0.35%	99.81%
170.0	22.123	3.851	2616.078	0.15%	99.96%
175.0	6.603	1.028	2617.106	0.04%	100.00%
180.0	0.949	0.090	2617.196	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	63.67	2.43%	2.43%
0-40	154.94	5.92%	5.92%
0-60	496.97	18.99%	18.99%
0-90	1322.88	50.55%	50.55%
0-120	2141.94	81.84%	81.84%
0-180	2617.20	100.00%	100.00%
60-90	825.91	31.56%	31.56%
90-120	819.06	31.30%	31.30%
90-130	1012.24	38.68%	38.68%
90-150	1238.00	47.30%	47.30%
90-180	1294.23	49.45%	49.45%
0-117.91	2093.76	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	1.84
10-20	15.41
20-30	46.42
30-40	91.27
40-50	144.13
50-60	197.89
60-70	245.55
70-80	280.91
80-90	299.45
90-100	298.65
100-110	278.62
110-120	241.80
120-130	193.18
130-140	139.22
140-150	86.55
150-160	42.32
160-170	12.88
170-180	1.03



C75(Max): —————

C0/C180: —————

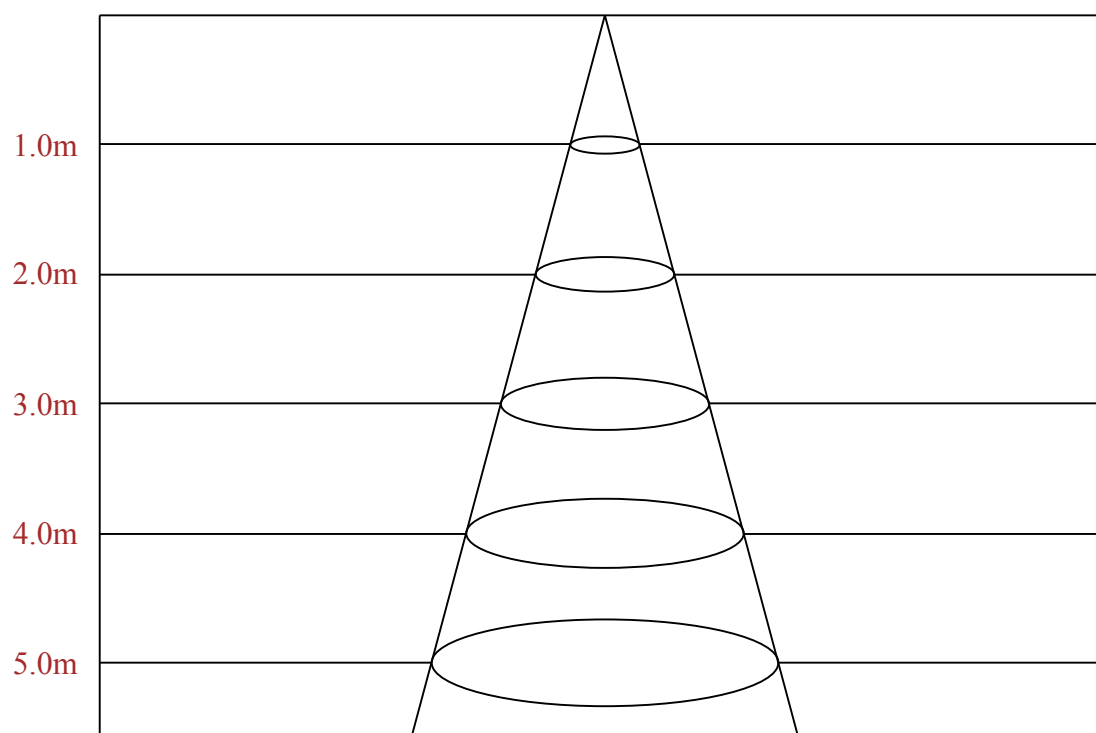
C90/C270: —————

Field angle(10%Imax):C0/180Left:81.1 Right:254.0

:C90/270Left:262.2 Right:76.3

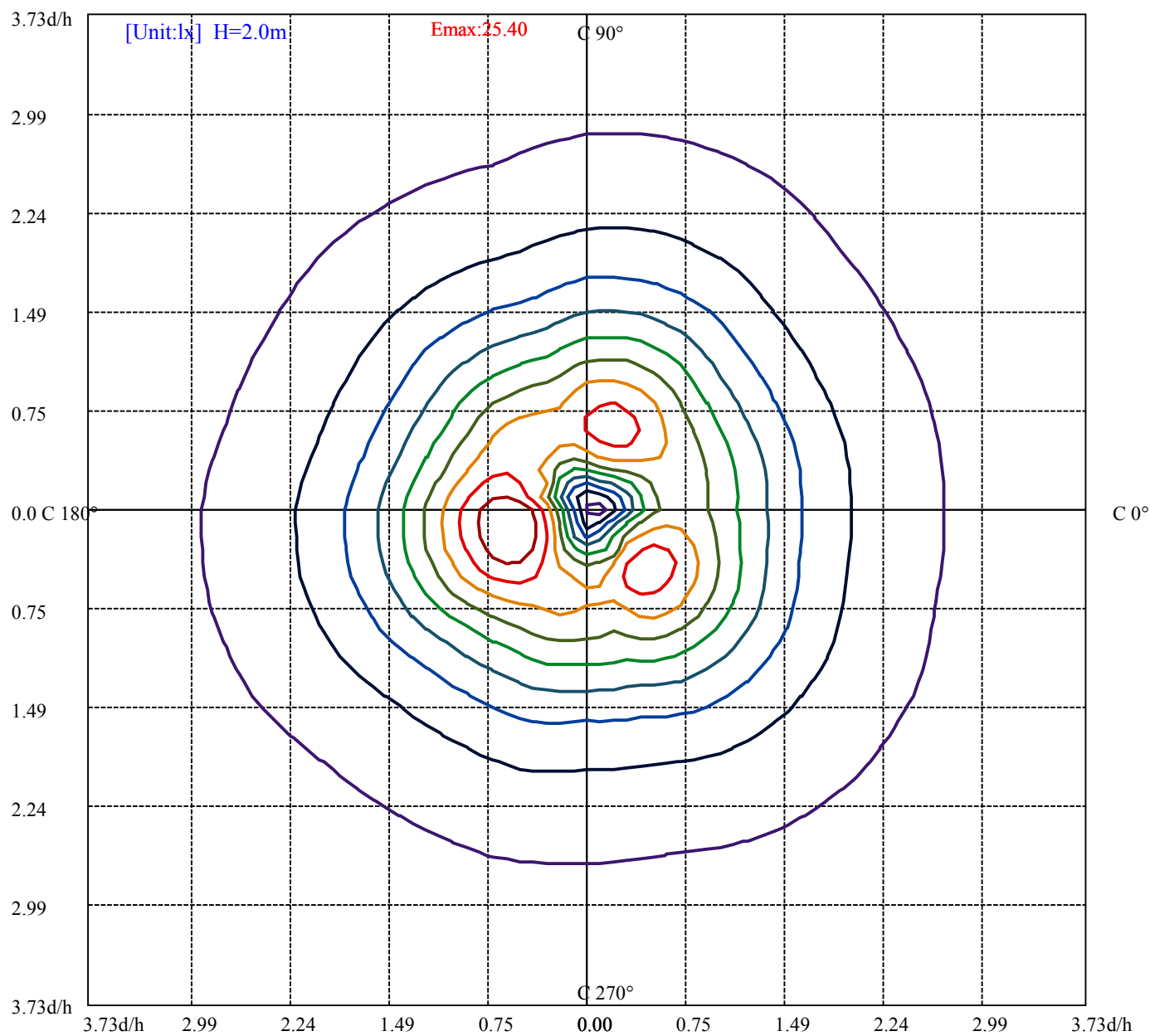
Beam Angle(50%Imax):C0/180Left:57.3 Right:225.9

:C90/270Left:230.8 Right:53.0

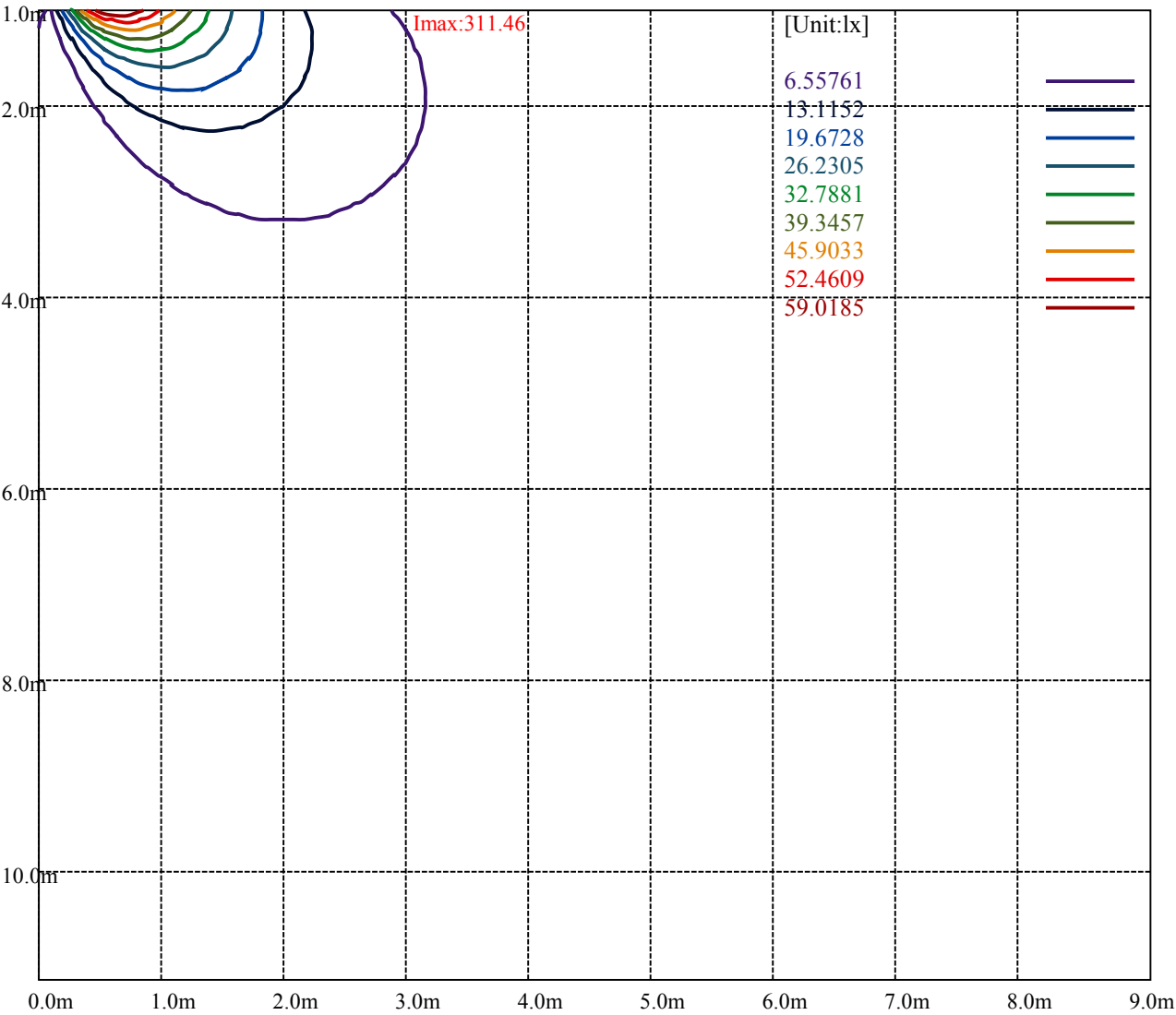


Max , Ave

Beam angle of C75 plane 350.14



(10%Emax) 2.540275	—
(20%Emax) 5.080525	—
(30%Emax) 7.6208	—
(40%Emax) 10.16107	—
(50%Emax) 12.70133	—
(60%Emax) 15.2416	—
(70%Emax) 17.78188	—
(80%Emax) 20.32215	—
(90%Emax) 22.8624	—



Luminance Table

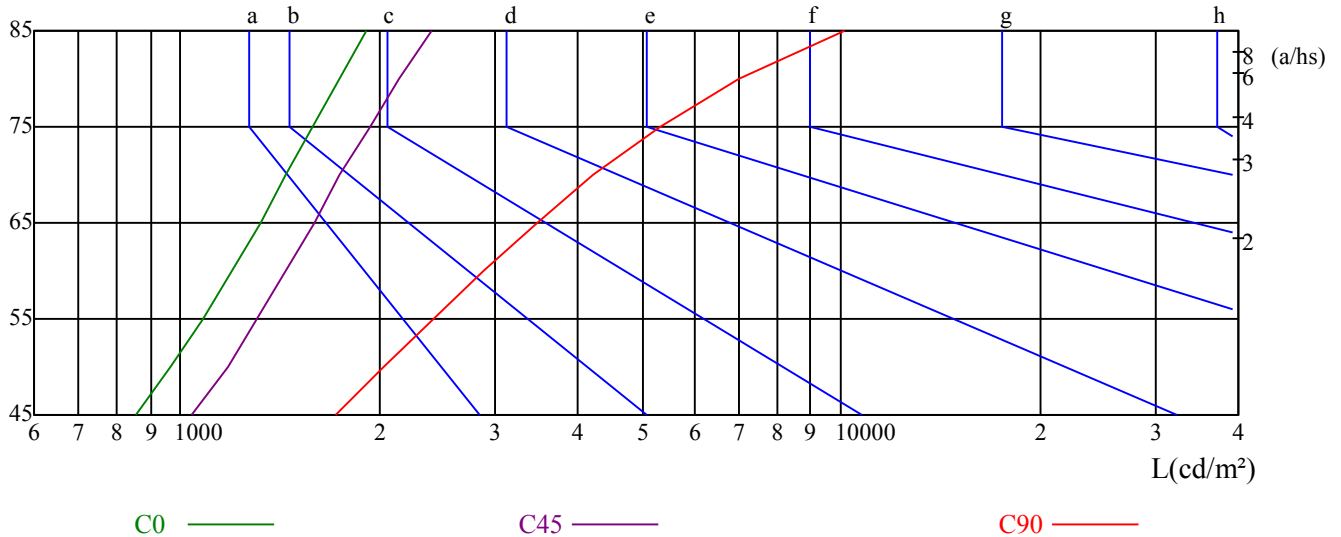
γ	45	50	55	60	65	70	75	80	85
C0	855	967	1080	1196	1319	1445	1584	1736	1911
C45	1041	1177	1306	1448	1595	1746	1931	2147	2407
C90	1719	2036	2418	2882	3458	4228	5325	7027	10111

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4180	4029	4127	7318	7084	7201	22428	21806	22117

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

 $\gamma(^{\circ})$ 

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	1.07	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	0.85	0.79	0.73	0.78	0.73	0.68	0.64	0.60	0.56	0.52	0.49	0.46	0.41	0.38	0.36	0.30
2	0.71	0.63	0.55	0.65	0.57	0.51	0.53	0.47	0.42	0.42	0.38	0.34	0.32	0.29	0.26	0.21
3	0.61	0.51	0.43	0.55	0.47	0.40	0.45	0.38	0.33	0.36	0.30	0.26	0.27	0.23	0.20	0.15
4	0.52	0.43	0.35	0.48	0.39	0.32	0.39	0.32	0.26	0.31	0.25	0.21	0.23	0.19	0.15	0.11
5	0.46	0.36	0.29	0.42	0.33	0.26	0.34	0.27	0.22	0.27	0.21	0.17	0.20	0.16	0.12	0.09
6	0.41	0.31	0.24	0.37	0.28	0.22	0.30	0.23	0.18	0.24	0.18	0.14	0.18	0.13	0.10	0.07
7	0.36	0.27	0.21	0.33	0.25	0.19	0.27	0.20	0.15	0.21	0.16	0.12	0.16	0.12	0.08	0.06
8	0.32	0.24	0.18	0.30	0.22	0.16	0.24	0.18	0.13	0.19	0.14	0.10	0.14	0.10	0.07	0.05
9	0.29	0.21	0.15	0.27	0.19	0.14	0.22	0.16	0.11	0.17	0.12	0.09	0.13	0.09	0.06	0.04
10	0.27	0.19	0.13	0.24	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.05	0.03

弗格斯莱 KNOP36LAJUDLB

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	9.11	3.64	13.66	30.96	51.91	74.68	97.45	119.30	141.16		
15.0	9.11	4.55	14.57	30.05	52.82	75.59	98.36	121.12	143.89		
30.0	9.11	6.37	17.30	34.61	55.55	78.32	100.18	125.68	146.62		
45.0	9.11	7.29	22.77	43.71	65.57	90.16	113.84	135.70	157.55		
60.0	8.20	8.20	25.50	50.09	76.50	102.91	127.50	152.09	174.86		
75.0	8.20	10.02	28.23	52.82	79.23	104.73	131.14	155.73	180.32		
90.0	7.29	10.02	26.41	49.18	74.68	100.18	125.68	148.45	173.04		
105.0	6.37	11.84	26.41	46.45	68.30	91.07	112.02	133.87	153.91		
120.0	6.37	12.75	27.32	46.45	68.30	91.07	114.75	137.52	157.55		
135.0	11.84	14.57	30.05	50.09	71.04	95.62	118.39	142.07	163.93		
150.0	5.46	16.39	33.70	53.73	91.98	98.36	121.12	142.98	163.93		
165.0	5.46	18.21	38.25	62.84	85.61	109.29	132.05	153.91	175.77		
180.0	9.11	27.32	52.82	78.32	104.73	129.32	154.82	177.59	197.62		
195.0	9.11	28.23	52.82	80.14	106.55	132.05	158.46	180.32	202.18		
210.0	9.11	27.32	50.09	76.50	102.00	127.50	151.18	173.95	194.89		
225.0	9.11	24.59	44.62	67.39	89.25	112.93	132.96	153.91	172.12		
240.0	8.20	20.04	35.52	54.64	75.59	96.54	117.48	137.52	156.64		
255.0	8.20	15.48	30.05	49.18	70.12	92.89	113.84	135.70	156.64		
270.0	7.29	12.75	26.41	45.54	65.57	87.43	109.29	130.23	149.36		
285.0	6.37	10.93	26.41	45.54	68.30	89.25	110.20	131.14	135.70		
300.0	6.37	10.93	28.23	51.91	58.29	103.82	127.50	150.27	172.12		
315.0	11.84	10.02	30.05	54.64	81.96	108.37	132.05	157.55	179.41		
330.0	5.46	10.02	29.14	51.91	77.41	102.91	128.41	152.09	174.86		
345.0	5.46	8.20	23.68	44.62	67.39	90.16	112.93	132.96	153.91		
360.0	9.11	3.64	13.66	30.96	51.91	74.68	97.45	119.30	141.16		
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0		
0.0	160.29	179.41	196.71	212.20	225.86	236.79	245.89	252.27	256.82		
15.0	164.84	183.96	202.18	216.75	229.50	239.52	249.54	255.91	260.46		
30.0	167.57	185.79	202.18	216.75	227.68	238.61	246.80	253.18	256.82		
45.0	177.59	196.71	212.20	226.77	238.61	246.80	255.00	261.37	265.93		
60.0	196.71	217.66	236.79	253.18	267.75	279.59	288.70	294.16	298.71		
75.0	202.18	223.12	242.25	257.73	274.12	285.96	296.89	304.18	309.64		
90.0	193.98	213.11	231.32	247.71	261.37	273.21	283.23	290.52	295.07		
105.0	172.12	189.43	204.91	218.57	231.32	241.34	249.54	255.91	259.55		
120.0	177.59	196.71	214.02	228.59	240.43	251.36	258.64	264.11	267.75		
135.0	184.87	204.00	220.39	236.79	248.62	259.55	266.84	272.30	275.95		
150.0	182.14	199.45	215.84	229.50	242.25	251.36	259.55	264.11	267.75		
165.0	193.07	209.46	224.95	237.70	249.54	258.64	265.93	270.48	273.21		
180.0	218.57	235.87	252.27	266.84	278.68	287.78	295.07	299.62	301.45		
195.0	223.12	242.25	258.64	273.21	285.96	295.07	302.36	307.82	309.64		
210.0	213.11	232.23	246.80	261.37	273.21	282.32	290.52	294.16	295.98		
225.0	189.43	204.91	218.57	231.32	241.34	249.54	255.00	258.64	260.46		
240.0	175.77	191.25	207.64	220.39	231.32	241.34	247.71	252.27	255.00		
255.0	175.77	193.07	208.55	223.12	234.96	244.98	252.27	253.18	259.55		
270.0	169.39	184.87	200.36	203.09	224.95	234.05	240.43	244.98	247.71		
285.0	168.48	186.70	200.36	214.02	225.86	235.87	243.16	248.62	252.27		
300.0	193.07	212.20	228.59	244.07	256.82	267.75	275.95	282.32	285.96		
315.0	202.18	221.30	238.61	254.09	267.75	279.59	287.78	295.07	298.71		
330.0	194.89	214.02	231.32	246.80	260.46	270.48	279.59	285.96	289.61		
345.0	173.04	190.34	206.73	220.39	232.23	243.16	251.36	255.91	260.46		
360.0	160.29	179.41	196.71	212.20	225.86	236.79	245.89	252.27	256.82		

弗格斯莱 KNOP36LAJUDLB

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	259.55	259.55	256.82	252.27	244.98	234.96	223.12	208.55	192.16		
15.0	263.20	263.20	260.46	255.91	247.71	237.70	224.95	210.37	193.98		
30.0	259.55	257.73	255.00	249.54	241.34	230.41	218.57	204.00	189.43		
45.0	267.75	267.75	265.93	260.46	253.18	244.07	232.23	219.48	204.00		
60.0	299.62	299.62	296.89	291.43	284.14	274.12	261.37	246.80	229.50		
75.0	311.46	310.55	307.82	301.45	292.34	281.41	269.57	254.09	236.79		
90.0	296.89	296.89	295.07	288.70	281.41	269.57	256.82	242.25	225.86		
105.0	261.37	261.37	258.64	254.09	246.80	238.61	225.86	214.02	198.54		
120.0	268.66	266.84	262.28	255.00	246.80	234.96	221.30	205.82	189.43		
135.0	275.95	273.21	268.66	261.37	251.36	239.52	225.86	208.55	190.34		
150.0	267.75	265.93	260.46	254.09	244.07	233.14	219.48	203.09	184.87		
165.0	273.21	269.57	265.02	258.64	249.54	238.61	224.04	209.46	192.16		
180.0	300.53	296.89	291.43	282.32	271.39	257.73	242.25	224.04	205.82		
195.0	308.73	305.09	298.71	290.52	279.59	265.02	249.54	231.32	211.29		
210.0	295.07	291.43	285.96	277.77	266.84	253.18	237.70	221.30	202.18		
225.0	258.64	255.91	251.36	243.16	233.14	222.21	219.48	192.16	175.77		
240.0	255.00	252.27	250.45	239.52	230.41	218.57	205.82	189.43	172.12		
255.0	259.55	256.82	251.36	244.07	234.96	222.21	208.55	191.25	173.95		
270.0	246.80	244.98	239.52	233.14	224.04	213.11	200.36	185.79	169.39		
285.0	253.18	252.27	249.54	244.07	236.79	226.77	214.93	202.18	187.61		
300.0	286.87	285.96	282.32	275.95	267.75	256.82	244.07	229.50	212.20		
315.0	299.62	297.80	295.07	287.78	279.59	266.84	254.09	238.61	220.39		
330.0	291.43	289.61	285.96	279.59	270.48	259.55	245.89	230.41	214.02		
345.0	261.37	260.46	256.82	251.36	244.07	233.14	220.39	206.73	190.34		
360.0	259.55	259.55	256.82	252.27	244.98	234.96	223.12	208.55	192.16		
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	173.95	154.82	132.96	112.02	88.34	65.57	44.62	26.41	11.84		
15.0	175.77	154.82	132.96	109.29	85.61	61.02	38.25	20.04	8.20		
30.0	172.12	152.09	128.41	106.55	84.70	61.93	38.25	19.12	5.46		
45.0	185.79	167.57	144.80	120.21	93.80	68.30	45.54	22.77	5.46		
60.0	211.29	191.25	168.48	142.98	117.48	88.34	58.29	28.23	9.11		
75.0	217.66	194.89	173.04	148.45	121.12	92.89	64.66	35.52	10.02		
90.0	205.82	184.87	163.02	138.43	115.66	89.25	61.93	36.43	10.02		
105.0	182.14	163.93	144.80	122.95	100.18	77.41	55.55	33.70	9.11		
120.0	169.39	149.36	127.50	106.55	82.87	62.84	41.89	24.59	6.37		
135.0	170.30	149.36	125.68	102.91	78.32	55.55	34.61	18.21	4.55		
150.0	166.66	145.71	122.95	100.18	77.41	51.91	32.79	15.48	3.64		
165.0	173.04	153.00	132.05	108.37	85.61	60.11	36.43	17.30	4.55		
180.0	183.96	162.11	137.52	112.02	86.52	60.11	34.61	13.66	2.73		
195.0	189.43	167.57	141.16	116.57	89.25	82.87	36.43	14.57	2.73		
210.0	181.23	175.77	134.79	109.29	83.79	57.37	33.70	11.84	2.73		
225.0	157.55	137.52	115.66	94.71	71.95	49.18	27.32	10.93	2.73		
240.0	153.00	132.96	111.11	88.34	66.48	44.62	26.41	11.84	4.55		
255.0	154.82	133.87	112.02	90.16	68.30	47.36	29.14	14.57	5.46		
270.0	151.18	133.87	113.84	93.80	73.77	55.55	36.43	20.95	7.29		
285.0	171.21	153.00	134.79	112.93	91.98	69.21	46.45	25.50	8.20		
300.0	193.98	173.04	151.18	127.50	103.82	77.41	53.73	29.14	9.11		
315.0	201.27	179.41	157.55	132.96	107.46	81.05	54.64	29.14	9.11		
330.0	193.98	173.04	151.18	127.50	102.00	77.41	51.91	27.32	8.20		
345.0	173.04	153.91	133.87	112.02	89.25	65.57	43.71	23.68	7.29		
360.0	173.95	154.82	132.96	112.02	88.34	65.57	44.62	26.41	11.84		

弗格斯莱 KNOP36LAJUDLB

Intensity data(cd)

Appendix Page: 12 Total:12

C/ $\gamma(^{\circ})$	180.0
0.0	2.73
15.0	1.82
30.0	1.82
45.0	1.82
60.0	1.82
75.0	1.82
90.0	1.82
105.0	1.82
120.0	1.82
135.0	1.82
150.0	1.82
165.0	1.82
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	2.73