
乐达凯

Client:

LumCAT: BLKW0718LAJUDBK-4000K

Luminaire: LED 灯具

Report No:

Ballast type:

Test No: LCZP24040387

Voltage(V): 119.970

LampCAT:

Current(A): 0.171

Lamp flux(lm): 1493.6

Power (W): 20.320

Number of Lamps: 1

PF: 0.991

Length(mm): 125

Width(mm): 125

Phm Type: C

Height(mm): 310

Photometric Results

Lumens(lm): 1493.64, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 73.51

Central intensity(cd): 7.545, Maximum intensity(cd): 361.795

Angle of maximum intensity: C=75.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=281.9

[C90/270]Total=104.6

Field angle(10%Imax): [C0/180]Total=327.9

[C90/270]Total=155.1

Maximum s/h(1/2): C0_180=6.72 C90_270=10.56

Maximum s/h(1/4): C0_180=6.22 C90_270=9.99

Up flux rate of lamp(%): 46.51%

Down flux rate of lamp(%): 53.49%

Up flux rate of LUM(%): 46.51%

Down flux rate of LUM(%): 53.49%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 21.322%

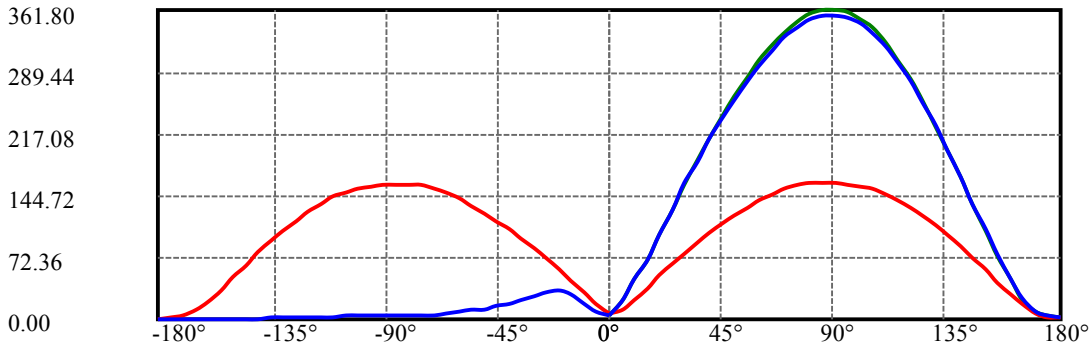
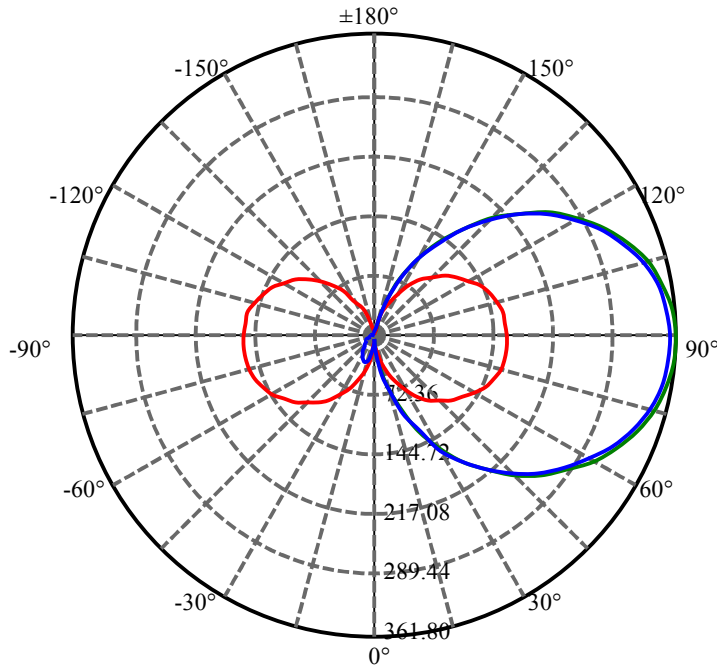
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6.460	0.000	0	0.00%	0.00%
5.0	16.400	0.273	0.273	0.02%	0.02%
10.0	33.477	1.784	2.058	0.12%	0.14%
15.0	49.143	4.901	6.958	0.33%	0.47%
20.0	63.028	9.244	16.203	0.62%	1.08%
25.0	74.906	14.467	30.67	0.97%	2.05%
30.0	85.999	20.363	51.032	1.36%	3.42%
35.0	96.209	26.831	77.864	1.80%	5.21%
40.0	105.962	33.731	111.594	2.26%	7.47%
45.0	114.985	40.910	152.504	2.74%	10.21%
50.0	123.364	48.162	200.666	3.22%	13.43%
55.0	131.377	55.389	256.055	3.71%	17.14%
60.0	138.652	62.416	318.472	4.18%	21.32%
65.0	145.082	68.976	387.448	4.62%	25.94%
70.0	150.748	74.906	462.354	5.01%	30.95%
75.0	155.089	79.941	542.295	5.35%	36.31%
80.0	157.791	83.718	626.013	5.60%	41.91%
85.0	158.791	86.023	712.036	5.76%	47.67%
90.0	158.592	86.902	798.938	5.82%	53.49%
95.0	157.604	86.577	885.515	5.80%	59.29%
100.0	154.835	84.897	970.412	5.68%	64.97%
105.0	150.202	81.619	1052.032	5.46%	70.43%
110.0	143.428	76.750	1128.782	5.14%	75.57%
115.0	134.891	70.472	1199.254	4.72%	80.29%
120.0	125.194	63.227	1262.481	4.23%	84.52%
125.0	114.105	55.313	1317.794	3.70%	88.23%
130.0	102.238	47.040	1364.835	3.15%	91.38%
135.0	89.446	38.732	1403.567	2.59%	93.97%
140.0	76.298	30.689	1434.256	2.05%	96.02%
145.0	61.886	23.055	1457.311	1.54%	97.57%
150.0	47.661	16.132	1473.442	1.08%	98.65%
155.0	33.791	10.308	1483.75	0.69%	99.34%
160.0	21.905	5.841	1489.592	0.39%	99.73%
165.0	11.523	2.755	1492.347	0.18%	99.91%
170.0	5.015	0.981	1493.328	0.07%	99.98%
175.0	2.564	0.271	1493.599	0.02%	100.00%
180.0	0.670	0.039	1493.637	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	51.03	3.42%	3.42%
0-40	111.59	7.47%	7.47%
0-60	318.47	21.32%	21.32%
0-90	798.94	53.49%	53.49%
0-120	1262.48	84.52%	84.52%
0-180	1493.64	100.00%	100.00%
60-90	480.47	32.17%	32.17%
90-120	463.54	31.03%	31.03%
90-130	565.90	37.89%	37.89%
90-150	674.50	45.16%	45.16%
90-180	694.66	46.51%	46.51%
0-114.69	1194.91	80.00%	80.00%

ZONAL LUMEN SUMMARY

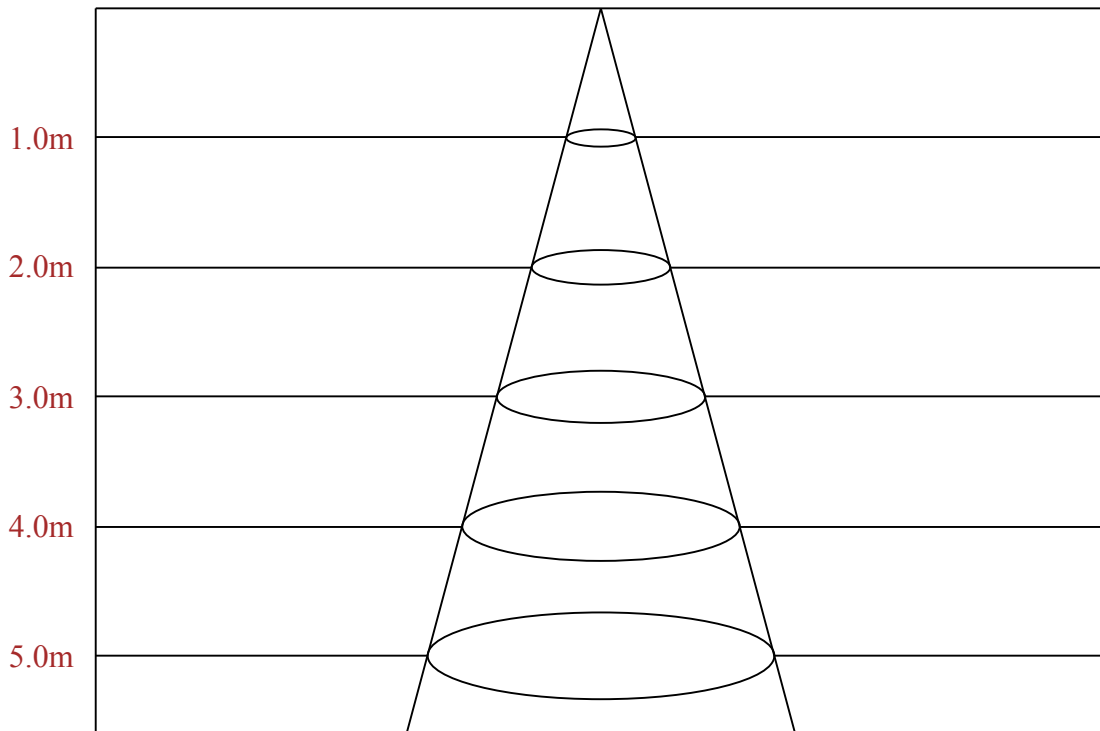
0-10	2.06
10-20	14.15
20-30	34.83
30-40	60.56
40-50	89.07
50-60	117.81
60-70	143.88
70-80	163.66
80-90	172.92
90-100	171.47
100-110	158.37
110-120	133.70
120-130	102.35
130-140	69.42
140-150	39.19
150-160	16.15
160-170	3.74
170-180	0.27



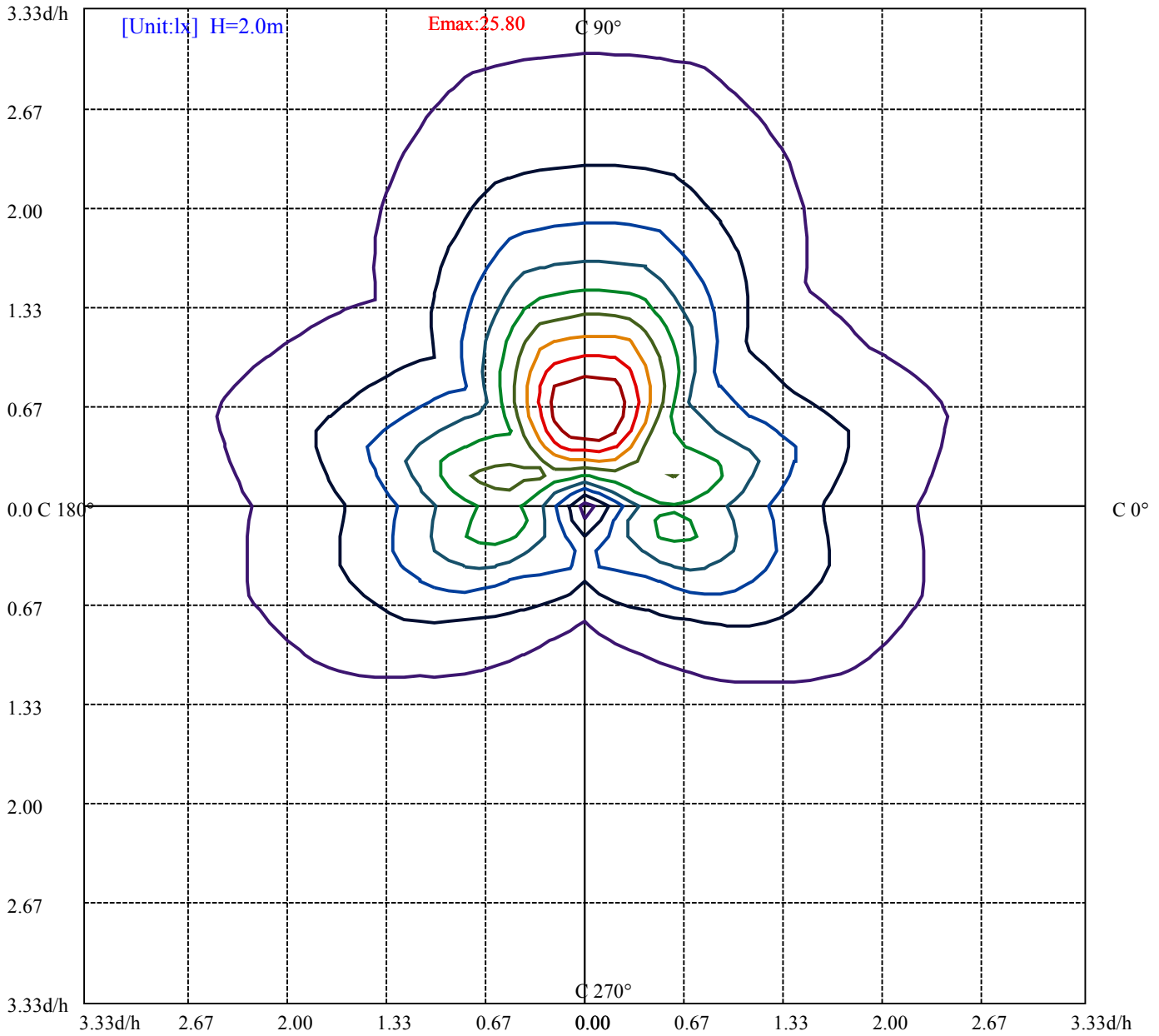
C75(Max): ——
C0/C180: ——
C90/C270: ——

Field angle(10%Imax):C0/180Left:247.4 Right:80.5
:C90/270Left:82.6 Right:72.5

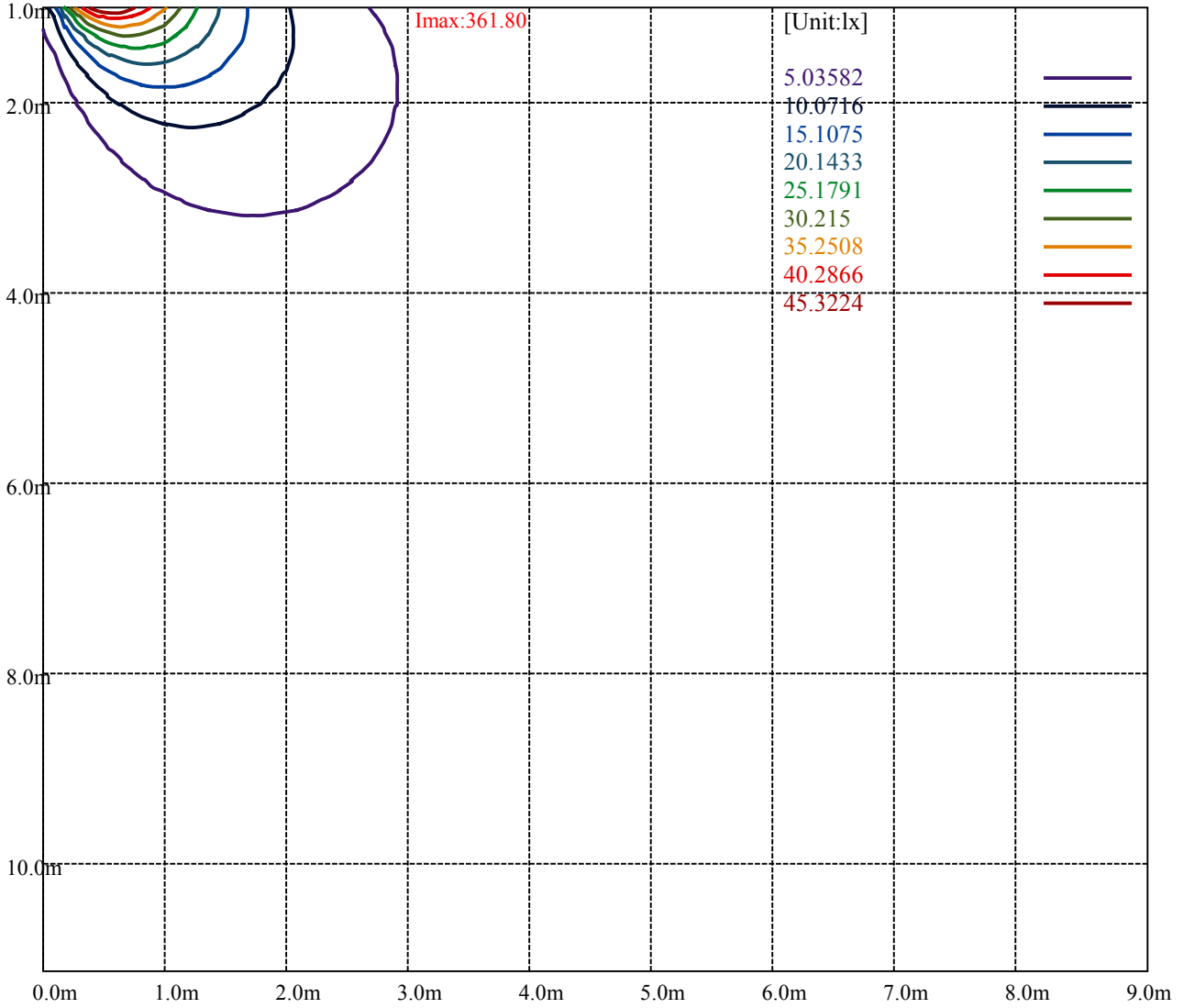
Beam Angle(50%Imax):C0/180Left:224.5 Right:57.4
:C90/270Left:56.4 Right:48.2



Max , Ave Beam angle of C75 plane 315.35



- (10%Emax) 2.5797
- (20%Emax) 5.1594
- (30%Emax) 7.7391
- (40%Emax) 10.3188
- (50%Emax) 12.89853
- (60%Emax) 15.47822
- (70%Emax) 18.05792
- (80%Emax) 20.63762
- (90%Emax) 23.21733



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Luminance Limiting Curve(no luminous side)

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Luminance Table

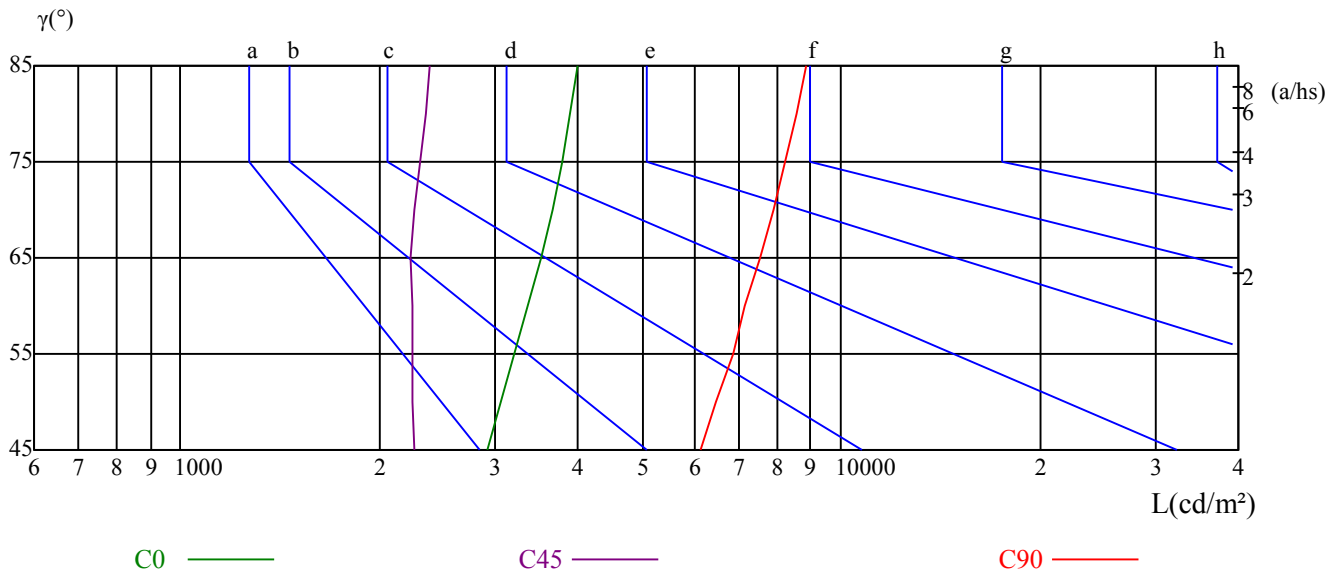
γ	45	50	55	60	65	70	75	80	85
C0	2906	3054	3206	3361	3515	3652	3779	3885	3989
C45	2264	2251	2242	2238	2233	2260	2313	2356	2390
C90	6125	6462	6856	7175	7565	7914	8256	8561	8857

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
22273	24348	14670	38691	42888	25048	116380	131517	74679

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



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	1.08	1.08	1.08	1.00	1.00	1.00	0.85	0.85	0.85	0.72	0.72	0.72	0.59	0.59	0.59	0.53
1	0.86	0.80	0.74	0.79	0.73	0.68	0.66	0.62	0.58	0.54	0.51	0.48	0.43	0.41	0.38	0.33
2	0.72	0.63	0.56	0.66	0.58	0.52	0.54	0.48	0.43	0.44	0.39	0.35	0.35	0.31	0.28	0.23
3	0.61	0.51	0.44	0.56	0.47	0.40	0.46	0.39	0.34	0.37	0.32	0.27	0.29	0.25	0.21	0.17
4	0.53	0.43	0.35	0.48	0.39	0.33	0.40	0.33	0.27	0.32	0.26	0.22	0.25	0.20	0.17	0.13
5	0.46	0.36	0.29	0.42	0.34	0.27	0.35	0.28	0.22	0.28	0.22	0.18	0.22	0.17	0.14	0.10
6	0.41	0.31	0.25	0.38	0.29	0.23	0.31	0.24	0.19	0.25	0.19	0.15	0.19	0.15	0.11	0.08
7	0.37	0.27	0.21	0.34	0.25	0.19	0.28	0.21	0.16	0.22	0.17	0.13	0.17	0.13	0.10	0.07
8	0.33	0.24	0.18	0.30	0.22	0.17	0.25	0.18	0.14	0.20	0.15	0.11	0.16	0.11	0.08	0.06
9	0.30	0.21	0.16	0.27	0.20	0.14	0.23	0.16	0.12	0.18	0.13	0.09	0.14	0.10	0.07	0.05
10	0.27	0.19	0.14	0.25	0.18	0.13	0.21	0.15	0.10	0.17	0.12	0.08	0.13	0.09	0.06	0.04

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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	7.54	11.50	23.53	36.20	50.84	64.22	77.51	89.73	101.23
15.0	6.92	14.46	30.36	46.71	63.86	81.56	97.99	112.99	128.80
30.0	6.38	17.07	39.07	57.48	70.42	80.93	91.08	100.33	108.68
45.0	5.93	20.21	45.72	63.05	74.28	84.34	92.96	100.33	107.25
60.0	5.48	21.47	48.05	67.37	88.92	109.85	130.60	150.45	168.50
75.0	5.12	21.92	47.34	69.70	97.99	128.08	157.27	185.48	211.44
90.0	4.85	23.26	48.14	69.16	99.34	128.17	158.62	184.76	210.81
105.0	4.85	23.89	48.68	70.87	96.38	124.85	153.32	180.09	204.79
120.0	4.76	22.37	50.30	67.54	85.33	102.84	120.27	136.80	151.35
135.0	15.18	21.29	46.17	62.25	71.86	80.12	86.95	93.14	97.72
150.0	5.12	18.59	38.17	57.84	80.75	84.07	95.21	106.08	115.96
165.0	5.39	15.27	30.99	47.43	65.57	83.98	100.87	117.39	135.45
180.0	7.54	18.68	30.99	44.91	58.47	72.22	83.53	94.85	105.18
195.0	6.92	17.34	29.55	44.37	59.91	74.37	88.20	100.96	113.17
210.0	6.38	16.26	29.64	44.19	55.42	65.12	74.73	83.80	92.16
225.0	5.93	14.73	27.66	38.62	44.82	49.22	52.63	56.05	59.37
240.0	5.48	13.38	25.96	37.45	43.38	44.46	44.28	43.74	43.20
255.0	5.12	11.23	21.47	34.67	40.96	40.96	37.45	32.87	28.11
270.0	4.85	9.70	18.41	30.27	33.14	30.45	26.68	22.72	18.50
285.0	4.85	9.70	19.67	33.59	40.15	40.42	37.63	33.59	32.43
300.0	4.76	10.96	23.44	35.93	37.90	44.10	43.65	43.38	43.20
315.0	15.18	12.93	25.69	36.83	43.83	48.41	52.54	56.86	60.90
330.0	5.12	13.47	27.04	41.41	53.08	64.49	75.18	84.61	93.95
345.0	5.39	13.92	27.40	41.59	56.05	70.51	84.79	97.99	110.93
360.0	7.54	11.50	23.53	36.20	50.84	64.22	77.51	89.73	101.23
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	111.74	121.35	130.51	139.04	146.68	152.51	156.74	158.80	159.43
15.0	144.52	159.16	173.17	185.75	196.62	206.86	214.49	219.61	222.75
30.0	116.32	122.87	128.89	134.01	138.50	142.45	146.14	149.28	151.17
45.0	112.72	117.13	120.72	123.68	125.66	128.44	131.77	133.56	133.74
60.0	185.21	200.21	213.77	225.18	235.96	246.11	253.74	259.22	261.20
75.0	237.93	261.11	282.57	302.42	321.11	335.93	348.23	356.50	360.81
90.0	235.51	256.71	279.07	296.86	315.63	330.45	342.39	349.94	353.98
105.0	227.24	249.07	269.64	288.86	306.20	322.18	333.41	341.77	346.26
120.0	165.00	176.86	187.36	196.35	204.97	214.40	221.77	226.98	229.85
135.0	102.31	105.36	107.60	109.58	110.84	112.45	115.06	116.50	116.50
150.0	124.85	132.66	139.85	145.51	151.44	155.93	159.79	162.75	164.37
165.0	150.36	164.55	178.92	191.95	203.53	213.32	220.51	225.27	227.78
180.0	115.06	124.40	132.84	141.20	147.48	152.78	156.20	157.54	157.54
195.0	125.03	135.54	146.05	155.66	164.01	170.48	174.79	177.13	177.66
210.0	100.42	107.96	115.15	121.71	127.99	132.66	135.18	136.35	135.45
225.0	62.34	65.03	67.90	70.60	72.57	74.82	75.72	75.63	74.46
240.0	42.48	42.31	41.95	41.95	41.86	41.68	41.68	41.41	40.87
255.0	24.97	22.90	21.92	21.20	20.48	20.12	20.12	20.12	19.49
270.0	15.09	12.31	10.42	9.97	5.93	4.67	4.49	4.31	4.22
285.0	26.50	25.06	24.34	23.89	23.71	23.44	23.26	22.81	22.54
300.0	42.93	42.48	42.40	42.48	42.66	42.66	42.75	42.57	41.86
315.0	64.67	68.53	72.22	75.45	78.41	81.02	82.63	82.90	82.10
330.0	103.11	112.01	120.18	127.81	134.37	139.85	143.35	144.88	144.70
345.0	123.32	135.18	145.60	156.56	165.36	172.72	177.93	181.17	182.24
360.0	111.74	121.35	130.51	139.04	146.68	152.51	156.74	158.80	159.43

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Intensity data(cd)

C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	158.62	157.99	155.93	152.42	146.86	139.40	130.51	120.72	109.85
15.0	223.65	223.29	219.88	213.95	205.33	193.47	180.27	165.09	149.28
30.0	151.53	151.71	150.36	147.04	141.83	134.91	126.38	117.39	106.89
45.0	133.02	132.30	130.33	126.11	120.45	113.35	105.81	96.29	87.13
60.0	261.02	258.68	253.83	245.93	233.35	218.89	201.20	183.05	162.93
75.0	361.80	358.92	351.56	340.78	324.07	303.23	279.79	255.54	225.81
90.0	354.52	352.00	345.18	334.85	318.86	300.63	277.99	253.11	226.08
105.0	347.69	345.00	339.70	328.74	314.28	295.51	273.23	248.89	223.83
120.0	230.30	228.59	225.09	219.07	208.65	196.08	182.60	166.53	149.19
135.0	115.60	115.15	113.62	111.11	106.17	100.78	94.13	86.59	78.41
150.0	164.28	164.01	161.14	156.92	150.81	142.63	133.38	123.59	112.01
165.0	228.68	227.24	222.30	215.30	206.41	194.28	180.09	164.28	147.84
180.0	156.83	156.02	153.32	149.10	142.99	135.09	125.57	114.88	103.11
195.0	177.13	174.97	170.93	164.82	157.36	146.50	135.90	122.16	108.86
210.0	134.19	132.93	130.15	126.11	119.91	112.01	103.02	93.41	83.62
225.0	73.02	72.57	71.23	68.80	65.39	61.44	60.09	51.47	45.09
240.0	40.06	39.97	39.79	37.72	36.02	33.68	31.17	28.11	24.97
255.0	19.31	18.86	18.23	17.25	15.99	14.55	12.93	11.23	9.43
270.0	4.13	4.13	3.95	3.68	3.32	2.96	2.51	2.07	1.44
285.0	22.46	22.28	21.83	20.93	19.76	18.32	16.62	14.64	12.75
300.0	41.23	41.23	40.51	39.34	37.81	35.75	33.32	30.45	27.22
315.0	81.20	81.29	80.03	77.78	74.19	69.70	64.67	59.10	52.54
330.0	143.89	142.99	140.30	135.99	129.70	121.62	112.36	102.39	91.26
345.0	182.07	180.36	176.86	171.11	162.75	152.60	141.11	127.54	114.16
360.0	158.62	157.99	155.93	152.42	146.86	139.40	130.51	120.72	109.85

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	98.26	86.32	72.57	58.29	43.47	28.92	16.98	7.28	2.34
15.0	131.41	112.81	92.60	72.22	52.19	34.85	19.49	8.26	3.23
30.0	95.84	83.53	70.51	56.32	42.13	28.74	17.16	8.62	4.31
45.0	76.53	65.75	54.07	42.31	31.08	21.29	12.93	7.54	4.40
60.0	141.38	118.83	97.10	73.92	51.56	31.80	16.44	7.28	4.49
75.0	197.51	166.08	134.19	103.29	73.11	47.07	23.17	8.17	4.31
90.0	197.16	166.44	135.00	106.62	75.72	47.34	23.71	8.44	3.95
105.0	193.74	165.27	134.55	104.28	73.74	46.71	23.17	8.08	4.04
120.0	130.33	110.12	90.72	68.08	48.50	29.73	16.53	7.28	4.04
135.0	70.15	60.36	49.76	38.62	28.11	19.49	11.95	7.01	4.04
150.0	99.25	85.51	70.60	55.60	40.15	26.23	15.09	7.28	3.77
165.0	128.17	109.58	89.28	68.62	48.50	30.81	16.35	7.01	3.14
180.0	91.44	78.32	63.86	48.95	34.67	21.20	10.33	3.68	1.62
195.0	94.58	78.86	62.60	47.16	31.98	29.01	9.07	3.50	1.53
210.0	72.13	68.71	48.05	35.75	24.07	14.10	6.92	2.60	1.26
225.0	38.98	32.43	25.51	18.50	12.04	6.83	3.86	2.25	1.17
240.0	21.56	17.87	14.10	9.97	6.38	4.04	2.51	1.71	0.99
255.0	7.72	6.20	4.76	3.50	2.60	1.89	1.35	0.99	0.72
270.0	1.17	0.99	0.90	0.90	0.72	0.72	0.81	0.72	0.81
285.0	10.78	8.80	7.01	5.39	3.68	2.60	1.80	1.26	1.08
300.0	23.80	20.21	16.08	11.32	7.63	4.94	3.05	1.98	1.26
315.0	45.63	38.44	30.81	22.99	15.72	9.07	4.58	2.51	1.44
330.0	79.85	66.47	53.80	40.42	28.11	16.44	8.35	2.96	1.53
345.0	99.34	83.26	66.83	50.84	35.12	21.92	10.96	3.95	2.07
360.0	98.26	86.32	72.57	58.29	43.47	28.92	16.98	7.28	2.34

Intensity data(cd)

C/γ(°)	180.0
0.0	1.26
15.0	0.90
30.0	1.17
45.0	1.26
60.0	1.26
75.0	1.62
90.0	1.53
105.0	1.44
120.0	1.44
135.0	1.53
150.0	1.35
165.0	1.35
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	1.26