
乐达凯

Client:

LumCAT: BLKW0718LAJUDBK-3500K

Luminaire: LED 灯具

Report No:

Ballast type:

Test No: LCZP24040387

Voltage(V): 119.960

LampCAT:

Current(A): 0.172

Lamp flux(lm): 1431.6

Power (W): 20.480

Number of Lamps: 1

PF: 0.992

Length(mm): 125

Width(mm): 125

Phm Type: C

Height(mm): 310

Photometric Results

Lumens(lm): 1431.55, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 69.90

Central intensity(cd): 6.108, Maximum intensity(cd): 349.849

Angle of maximum intensity: C=75.0 γ =85.0

Beam Angle(50%Imax): [C0/180]Total=280.9

[C90/270]Total=104.6

Field angle(10%Imax): [C0/180]Total=327.4

[C90/270]Total=155.0

Maximum s/h(1/2): C0_180=7.11 C90_270=9.59

Maximum s/h(1/4): C0_180=6.64 C90_270=8.52

Up flux rate of lamp(%): 46.11%

Down flux rate of lamp(%): 53.89%

Up flux rate of LUM(%): 46.11%

Down flux rate of LUM(%): 53.89%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 21.590%

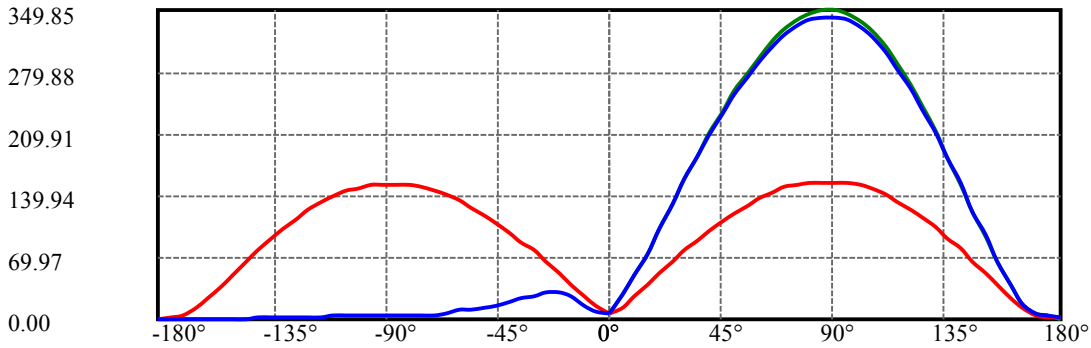
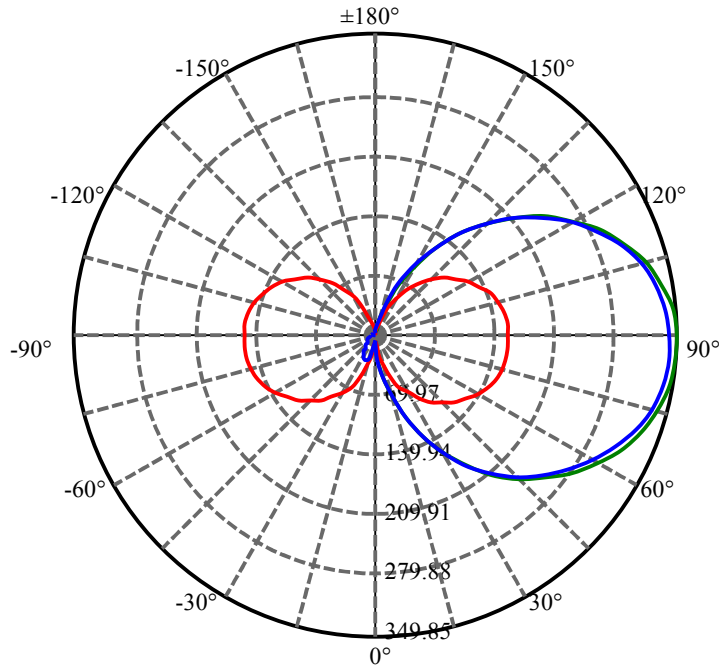
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	7.313	0.000	0	0.00%	0.00%
5.0	16.995	0.291	0.291	0.02%	0.02%
10.0	32.784	1.781	2.071	0.12%	0.14%
15.0	47.837	4.782	6.854	0.33%	0.48%
20.0	61.628	9.021	15.875	0.63%	1.11%
25.0	73.342	14.156	30.031	0.99%	2.10%
30.0	83.922	19.902	49.933	1.39%	3.49%
35.0	93.667	26.151	76.084	1.83%	5.31%
40.0	102.986	32.810	108.894	2.29%	7.61%
45.0	111.377	39.691	148.585	2.77%	10.38%
50.0	119.483	46.649	195.234	3.26%	13.64%
55.0	126.908	53.574	248.808	3.74%	17.38%
60.0	133.813	60.265	309.073	4.21%	21.59%
65.0	139.992	66.563	375.635	4.65%	26.24%
70.0	145.217	72.217	447.852	5.04%	31.28%
75.0	149.247	76.968	524.82	5.38%	36.66%
80.0	151.676	80.519	605.339	5.62%	42.29%
85.0	152.496	82.651	687.99	5.77%	48.06%
90.0	152.133	83.410	771.399	5.83%	53.89%
95.0	150.890	82.970	854.369	5.80%	59.68%
100.0	148.083	81.238	935.608	5.67%	65.36%
105.0	143.387	77.989	1013.597	5.45%	70.80%
110.0	136.665	73.201	1086.798	5.11%	75.92%
115.0	128.233	67.074	1153.872	4.69%	80.60%
120.0	118.903	60.079	1213.951	4.20%	84.80%
125.0	108.226	52.500	1266.451	3.67%	88.47%
130.0	96.688	44.555	1311.006	3.11%	91.58%
135.0	84.397	36.591	1347.597	2.56%	94.14%
140.0	71.684	28.900	1376.497	2.02%	96.15%
145.0	57.848	21.611	1398.108	1.51%	97.66%
150.0	44.195	15.027	1413.135	1.05%	98.71%
155.0	31.093	9.528	1422.663	0.67%	99.38%
160.0	19.603	5.317	1427.98	0.37%	99.75%
165.0	10.022	2.442	1430.421	0.17%	99.92%
170.0	4.401	0.856	1431.277	0.06%	99.98%
175.0	2.302	0.240	1431.517	0.02%	100.00%
180.0	0.516	0.034	1431.55	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	49.93	3.49%	3.49%
0-40	108.89	7.61%	7.61%
0-60	309.07	21.59%	21.59%
0-90	771.40	53.89%	53.89%
0-120	1213.95	84.80%	84.80%
0-180	1431.55	100.00%	100.00%
60-90	462.33	32.30%	32.30%
90-120	442.55	30.91%	30.91%
90-130	539.61	37.69%	37.69%
90-150	641.74	44.83%	44.83%
90-180	660.12	46.11%	46.11%
0-114.36	1145.24	80.00%	80.00%

ZONAL LUMEN SUMMARY

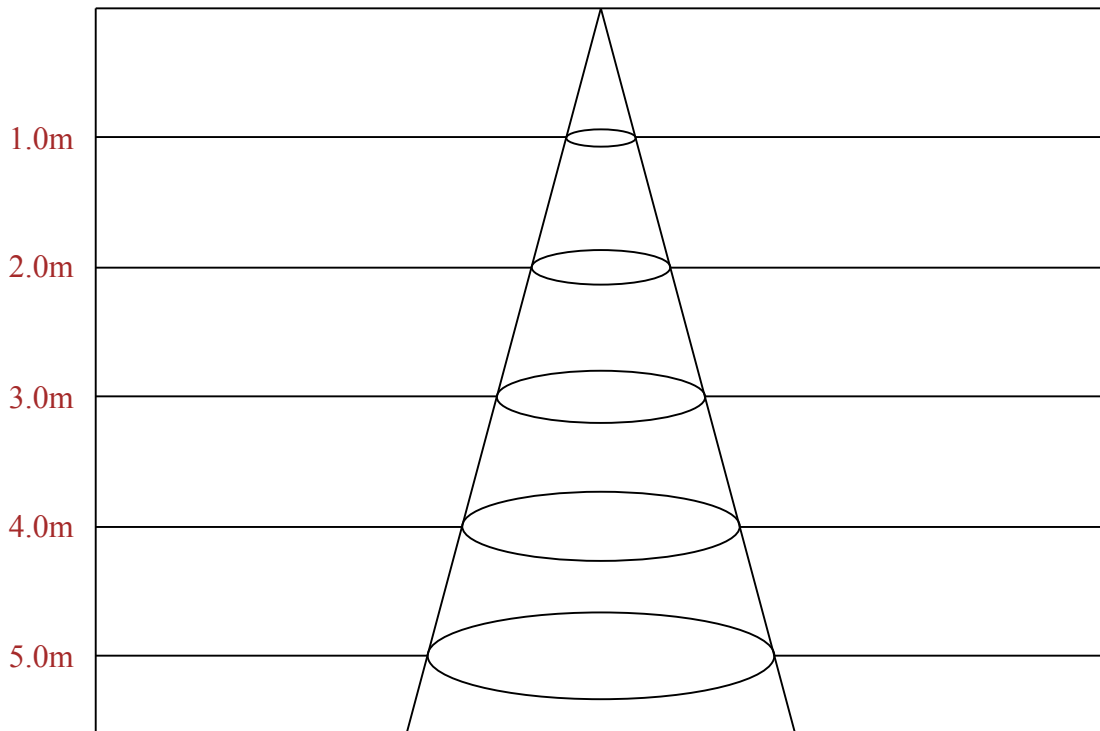
0-10	2.07
10-20	13.80
20-30	34.06
30-40	58.96
40-50	86.34
50-60	113.84
60-70	138.78
70-80	157.49
80-90	166.06
90-100	164.21
100-110	151.19
110-120	127.15
120-130	97.06
130-140	65.49
140-150	36.64
150-160	14.84
160-170	3.30
170-180	0.24



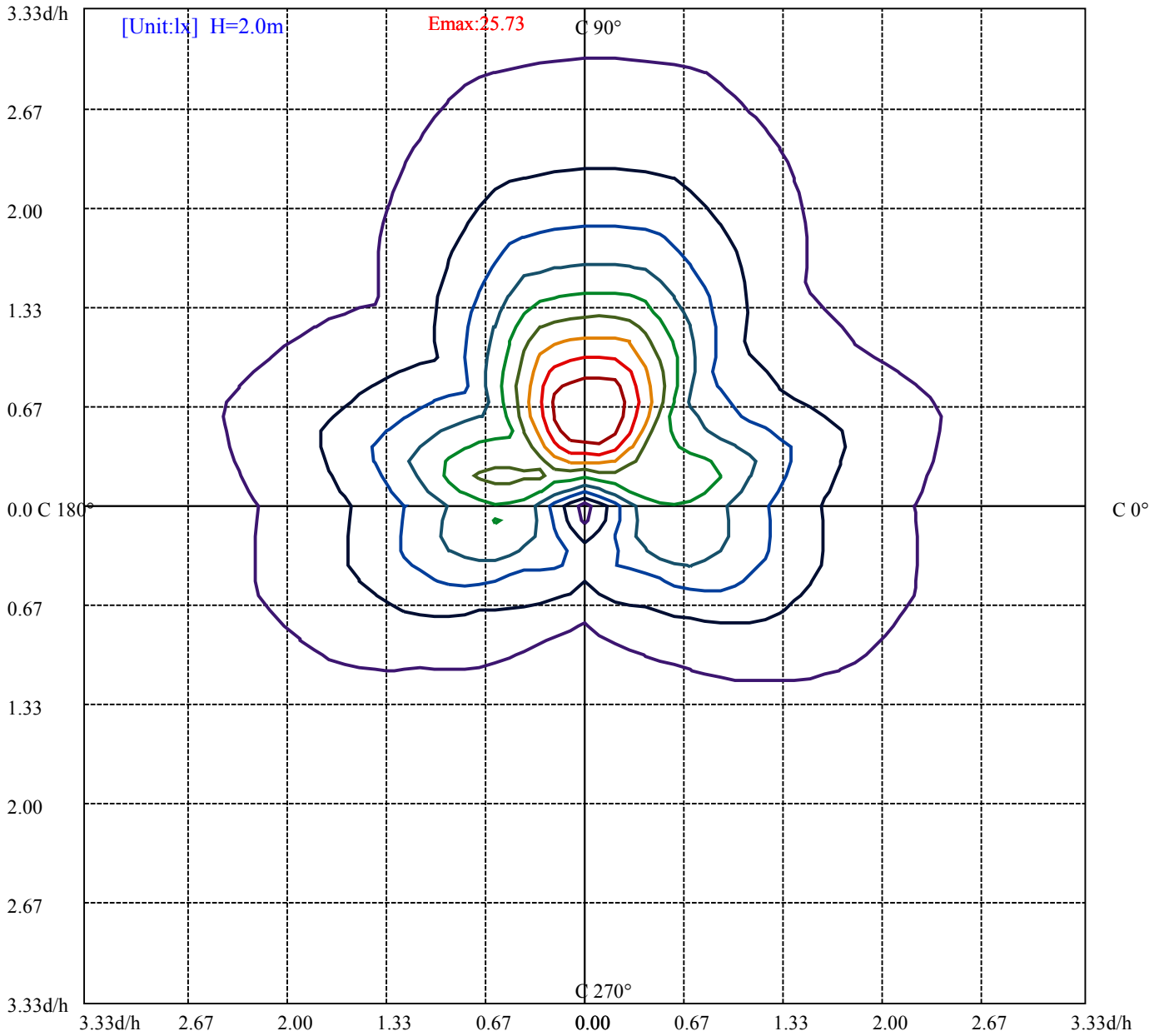
C75(Max): ——
 C0/C180: ——
 C90/C270: ——

Field angle(10%Imax):C0/180Left:248.5 Right:78.9
 :C90/270Left:83.8 Right:71.2

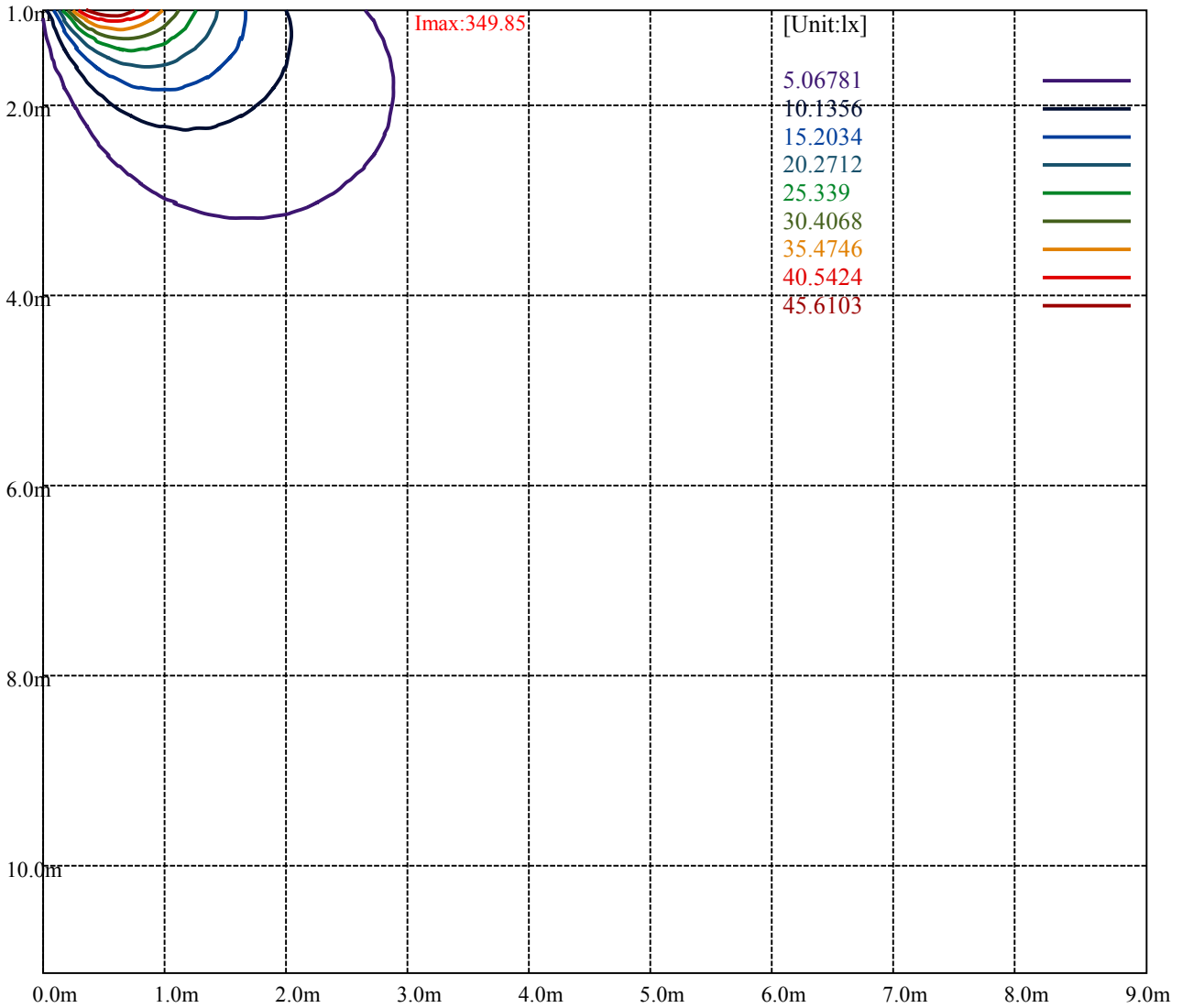
Beam Angle(50%Imax):C0/180Left:225.1 Right:55.8
 :C90/270Left:57.6 Right:47.0



Max , Ave Beam angle of C75 plane 318.75



- (10%Emax) 2.5729
- (20%Emax) 5.145775
- (30%Emax) 7.718675
- (40%Emax) 10.29158
- (50%Emax) 12.86445
- (60%Emax) 15.43735
- (70%Emax) 18.01025
- (80%Emax) 20.58315
- (90%Emax) 23.15602



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Luminance Limiting Curve(no luminous side)

Luminance Table

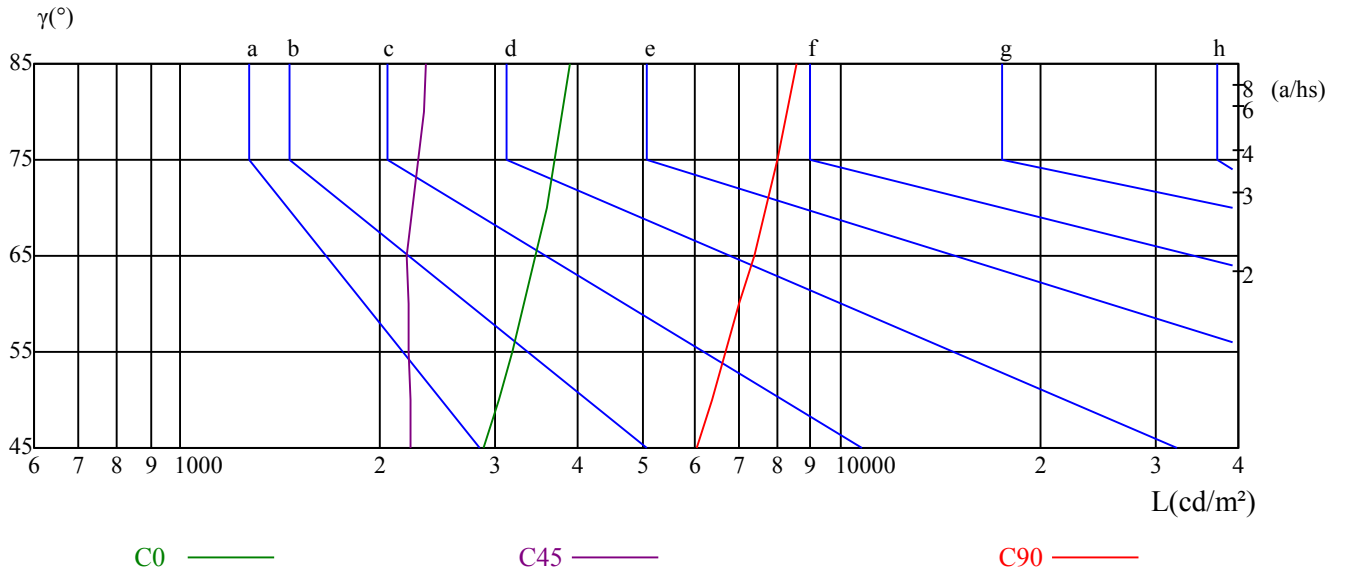
γ	45	50	55	60	65	70	75	80	85
C0	2876	3027	3171	3311	3451	3577	3690	3784	3879
C45	2237	2227	2218	2212	2208	2246	2294	2329	2355
C90	6036	6387	6704	7026	7386	7722	7996	8289	8550

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
21546	23817	14173	37458	41578	24232	112819	127065	72090

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	0.60	0.60	0.60	0.54
1	0.86	0.80	0.74	0.79	0.73	0.69	0.66	0.62	0.58	0.54	0.51	0.48	0.43	0.41	0.39	0.33
2	0.72	0.63	0.56	0.66	0.58	0.52	0.55	0.49	0.43	0.44	0.40	0.36	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	0.28	0.29	0.25	0.21	0.17
4	0.53	0.43	0.35	0.48	0.40	0.33	0.40	0.33	0.27	0.32	0.27	0.22	0.25	0.21	0.17	0.13
5	0.46	0.37	0.29	0.42	0.34	0.27	0.35	0.28	0.22	0.28	0.23	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	0.10	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	0.11	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	6.11	13.74	25.15	38.98	52.28	65.57	78.14	89.73	100.78
15.0	6.11	17.34	33.41	49.22	66.20	81.56	96.92	111.65	126.65
30.0	6.20	20.48	42.93	58.65	69.70	79.67	88.83	97.01	104.46
45.0	6.02	24.16	50.30	63.50	74.46	84.25	92.16	99.97	106.08
60.0	6.38	27.31	49.85	70.06	90.45	111.65	131.86	150.90	168.32
75.0	6.74	27.93	50.66	73.56	102.04	130.69	157.81	184.76	210.90
90.0	6.38	29.28	50.39	74.37	101.77	130.42	158.17	184.40	209.01
105.0	5.93	29.91	51.65	72.84	99.43	126.20	152.60	176.41	200.03
120.0	6.20	27.93	52.63	67.99	85.96	102.22	118.20	133.29	146.50
135.0	19.76	24.97	50.30	62.34	71.05	78.50	84.43	90.09	94.49
150.0	6.20	21.74	40.96	58.11	80.39	83.44	94.40	105.00	114.52
165.0	5.75	18.32	33.05	49.22	65.93	83.53	100.24	116.05	133.56
180.0	6.11	14.37	25.87	39.16	52.99	65.57	77.42	87.84	97.90
195.0	6.11	12.57	25.24	39.07	53.26	67.37	81.11	93.32	105.00
210.0	6.20	12.22	24.70	38.98	50.03	59.91	68.80	77.51	84.88
225.0	6.02	11.59	23.35	34.67	41.50	45.54	48.95	51.83	54.79
240.0	6.38	10.24	21.47	33.59	40.78	42.93	42.57	41.86	41.41
255.0	6.74	8.98	17.25	29.91	37.72	39.16	36.65	32.16	27.48
270.0	6.38	7.63	14.55	26.77	31.17	29.91	26.59	23.08	19.04
285.0	5.93	7.54	16.17	29.10	37.54	39.61	37.63	33.68	32.87
300.0	6.20	8.71	19.76	31.44	34.13	42.22	41.77	41.50	41.59
315.0	19.76	9.61	21.83	33.68	41.23	46.08	50.30	54.79	59.10
330.0	6.20	10.15	22.81	36.83	48.50	60.27	70.78	80.57	89.37
345.0	5.75	11.14	22.54	36.02	50.57	63.95	77.78	90.63	102.93
360.0	6.11	13.74	25.15	38.98	52.28	65.57	78.14	89.73	100.78
C/ γ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	110.57	120.27	129.07	136.98	143.98	149.37	153.05	154.67	155.03
15.0	141.02	154.76	167.07	179.19	189.25	197.87	204.97	209.19	211.89
30.0	111.20	116.86	122.07	126.47	130.24	133.83	137.07	139.94	141.20
45.0	111.38	115.87	119.46	122.25	124.22	127.63	130.69	132.04	131.77
60.0	183.95	199.13	211.71	223.20	233.89	243.14	250.24	254.64	256.62
75.0	234.88	257.60	278.08	296.41	314.55	328.56	339.25	346.17	349.85
90.0	232.10	253.74	272.87	290.66	308.17	322.45	331.62	338.80	341.68
105.0	222.30	242.96	261.92	279.70	295.51	309.43	319.85	327.12	330.63
120.0	158.44	168.77	178.29	186.47	194.73	203.08	209.46	213.23	215.21
135.0	98.08	101.14	103.02	104.64	105.99	107.69	109.85	110.84	110.48
150.0	123.41	131.14	137.60	143.80	149.28	153.77	157.27	159.88	161.50
165.0	146.77	160.69	174.34	186.47	197.16	204.88	211.44	215.03	216.74
180.0	107.87	117.04	125.66	133.92	140.57	145.96	149.91	152.16	152.25
195.0	116.14	126.92	136.71	146.23	153.95	160.24	165.00	167.51	168.50
210.0	92.42	99.61	106.53	112.45	118.65	123.32	126.29	127.63	127.45
225.0	57.40	59.82	62.34	64.49	66.47	68.44	69.34	69.34	68.26
240.0	40.78	40.33	40.06	39.79	39.70	39.61	39.61	39.43	38.89
255.0	23.89	21.65	20.21	19.49	18.68	18.14	18.23	18.14	17.60
270.0	15.54	12.66	10.60	10.15	6.38	4.94	4.67	4.49	4.40
285.0	26.86	25.42	24.34	24.07	23.71	23.44	23.35	22.99	22.46
300.0	41.23	40.78	40.60	40.78	40.78	40.87	40.96	40.78	40.24
315.0	63.05	66.92	70.78	74.46	77.69	80.30	82.10	82.90	82.19
330.0	98.80	107.07	115.33	122.87	129.88	135.36	138.86	141.11	141.38
345.0	114.97	126.47	137.16	146.59	156.38	162.84	168.86	172.19	173.71
360.0	110.57	120.27	129.07	136.98	143.98	149.37	153.05	154.67	155.03

Equipment: LC-I-902 GMS-2000
Temperature(°C): 25.1

Date: 2024/5/23
Humidity(%): 61.1%

Operator: JUN WANG
Distance(m): 29.97

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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	154.13	153.41	151.17	146.77	141.29	133.29	124.40	114.34	103.74
15.0	212.60	211.08	207.75	201.56	192.48	181.26	168.32	154.04	137.87
30.0	141.74	141.47	139.76	136.53	131.05	124.31	116.41	107.42	97.45
45.0	131.14	130.15	127.72	123.14	117.22	109.76	101.41	92.69	82.63
60.0	255.72	252.93	247.18	238.47	225.90	209.91	193.65	174.88	154.67
75.0	349.85	345.72	337.72	326.41	309.16	288.32	264.79	240.27	212.78
90.0	341.95	337.99	330.99	319.67	302.96	282.93	261.83	237.13	210.45
105.0	331.08	327.39	320.84	310.15	294.52	275.57	253.92	230.48	205.69
120.0	215.30	213.41	209.37	202.45	192.30	180.54	166.71	151.44	134.55
135.0	109.85	109.31	107.60	104.37	99.70	94.04	87.75	80.39	72.75
150.0	161.32	160.42	157.54	152.60	146.41	137.96	128.89	118.38	106.89
165.0	217.45	214.58	209.46	202.54	192.57	180.63	166.89	152.42	135.00
180.0	151.53	151.17	148.74	144.70	139.31	132.48	123.50	113.53	102.31
195.0	167.87	166.44	163.47	158.26	151.26	142.01	132.04	119.55	107.34
210.0	126.02	125.12	122.78	118.92	114.07	107.07	98.89	90.00	80.48
225.0	66.92	66.47	65.39	63.41	60.36	56.95	55.87	48.05	42.93
240.0	38.08	37.81	37.90	36.02	34.40	32.25	29.82	27.22	24.25
255.0	17.34	17.07	16.44	15.72	14.64	13.38	11.86	10.24	8.71
270.0	4.31	4.13	4.13	3.86	3.50	3.14	2.69	2.16	1.62
285.0	22.28	22.19	21.65	21.02	19.85	18.50	16.80	15.09	13.20
300.0	39.34	39.43	38.98	37.99	36.56	34.85	32.43	29.91	26.95
315.0	81.11	81.20	80.48	78.32	74.91	70.51	65.66	59.91	53.89
330.0	140.39	139.76	137.42	133.65	127.99	119.91	111.83	101.95	91.71
345.0	173.89	172.72	169.49	164.73	157.54	148.02	137.33	125.93	112.63
360.0	154.13	153.41	151.17	146.77	141.29	133.29	124.40	114.34	103.74

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	92.07	79.76	66.20	52.28	38.08	24.52	13.02	5.12	1.89
15.0	120.99	102.66	84.34	64.13	46.26	29.46	15.54	6.38	2.60
30.0	87.57	74.91	62.60	49.40	36.38	24.07	14.28	6.65	3.41
45.0	72.39	61.35	49.85	38.71	27.22	18.14	10.78	6.29	3.68
60.0	133.02	111.92	89.73	66.74	45.27	26.68	13.47	6.29	3.68
75.0	182.78	152.78	121.98	92.42	65.03	38.89	17.43	6.47	3.50
90.0	182.16	153.77	122.25	94.58	65.21	39.25	17.69	6.29	3.41
105.0	178.29	149.64	120.18	91.26	64.04	36.65	17.69	6.29	3.41
120.0	117.48	97.36	79.40	59.37	40.33	23.80	12.13	6.20	3.23
135.0	64.49	54.97	44.73	34.85	24.61	16.71	9.97	5.84	3.23
150.0	94.13	80.57	66.29	50.75	35.75	22.72	12.40	5.75	3.05
165.0	117.75	98.62	79.94	60.63	43.02	25.87	13.65	5.48	2.60
180.0	90.99	77.87	64.85	50.57	36.29	22.90	12.31	4.67	1.98
195.0	93.86	79.22	63.77	48.95	34.13	30.27	10.51	4.13	1.98
210.0	69.79	67.63	48.14	36.11	25.42	15.45	7.72	3.05	1.71
225.0	37.19	31.35	25.06	18.77	12.66	7.28	4.22	2.43	1.26
240.0	21.02	17.69	14.10	10.33	6.83	4.31	2.60	1.71	1.08
255.0	7.28	5.75	4.58	3.50	2.60	1.89	1.35	1.08	0.81
270.0	1.35	1.17	1.08	0.90	0.90	0.81	0.81	0.72	0.81
285.0	11.23	9.34	7.54	5.75	3.95	2.78	2.07	1.26	1.08
300.0	23.80	20.30	16.71	12.04	8.08	5.30	3.32	2.16	1.35
315.0	47.07	39.88	32.43	24.52	17.34	10.33	5.30	2.60	1.62
330.0	79.94	68.35	54.70	42.31	29.55	18.41	9.43	3.86	1.89
345.0	98.89	83.53	67.90	51.83	37.28	23.98	12.84	4.94	1.98
360.0	92.07	79.76	66.20	52.28	38.08	24.52	13.02	5.12	1.89

Intensity data(cd)

C/γ(°)	180.0
0.0	1.62
15.0	0.63
30.0	0.63
45.0	0.81
60.0	0.81
75.0	1.08
90.0	1.17
105.0	1.17
120.0	1.08
135.0	1.17
150.0	1.08
165.0	1.17
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	1.62