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乐达凯

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Client:

LumCAT: BLKW0724LAJUDBK 3500K

Luminaire: LED 灯具

Report No:

Ballast type:

Test No: LCZP24040387

Voltage(V): 120.010

LampCAT:

Current(A): 0.226

Lamp flux(lm): 1981.0

Power (W): 26.900

Number of Lamps: 1

PF: 0.994

Length(mm): 130

Width(mm): 130

Phm Type: C

Height(mm): 460

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Photometric Results

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Lumens(lm): 1981.00, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 73.64

Central intensity(cd): 6.018, Maximum intensity(cd): 483.412

Angle of maximum intensity: C=105.0  $\gamma$ =90.0

Beam Angle(50%Imax): [C0/180]Total=284.8

[C90/270]Total=106.8

Field angle(10%Imax): [C0/180]Total=331.0

[C90/270]Total=155.5

Maximum s/h(1/2): C0\_180=8.20 C90\_270=11.06

Maximum s/h(1/4): C0\_180=7.45 C90\_270=10.82

Up flux rate of lamp(%): 47.87%

Down flux rate of lamp(%): 52.13%

Up flux rate of LUM(%): 47.87%

Down flux rate of LUM(%): 52.13%

CIE Type : General diffuse lighting

Output flux ratio in  $\pi$  solid angle : 20.242%

## 乐达凯 BLKW0724LAJUDBK 3500K

Zonal flux distribution table

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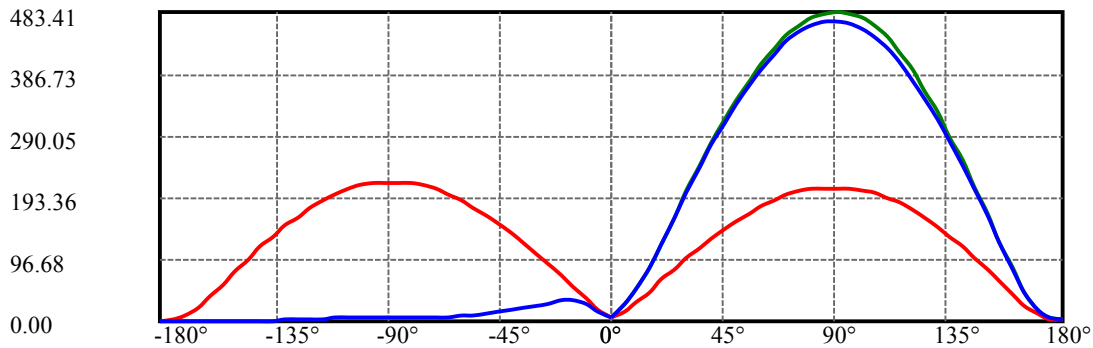
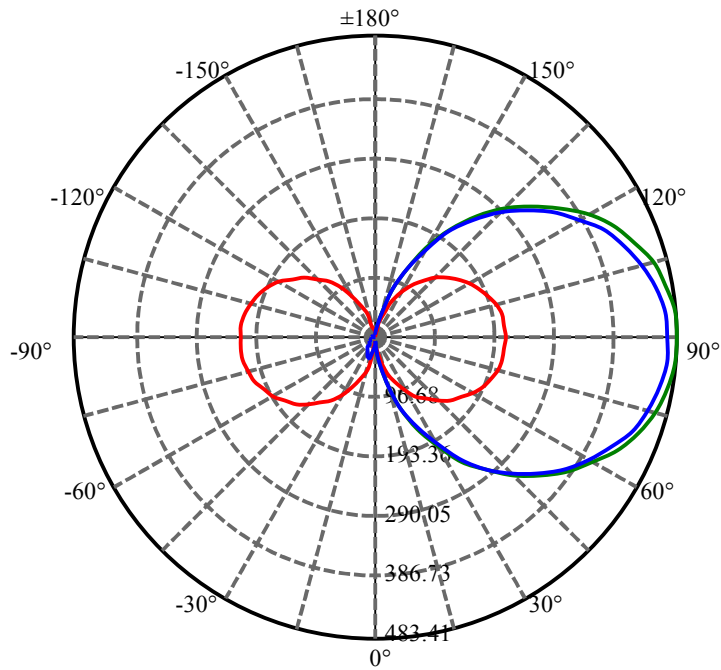
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	6.400	0.000	0	0.00%	0.00%
5.0	19.472	0.309	0.309	0.02%	0.02%
10.0	38.638	2.079	2.388	0.10%	0.12%
15.0	56.040	5.616	8.004	0.28%	0.40%
20.0	72.941	10.630	18.634	0.54%	0.94%
25.0	88.188	16.900	35.534	0.85%	1.79%
30.0	103.727	24.287	59.821	1.23%	3.02%
35.0	118.941	32.789	92.61	1.66%	4.67%
40.0	133.286	42.082	134.692	2.12%	6.80%
45.0	146.575	51.818	186.511	2.62%	9.41%
50.0	159.011	61.748	248.259	3.12%	12.53%
55.0	170.314	71.606	319.865	3.61%	16.15%
60.0	180.681	81.131	400.997	4.10%	20.24%
65.0	189.730	90.048	491.044	4.55%	24.79%
70.0	197.702	98.100	589.144	4.95%	29.74%
75.0	203.746	104.932	694.076	5.30%	35.04%
80.0	207.832	110.127	804.203	5.56%	40.60%
85.0	209.775	113.474	917.677	5.73%	46.32%
90.0	210.048	114.951	1032.628	5.80%	52.13%
95.0	208.981	114.734	1147.361	5.79%	57.92%
100.0	205.729	112.687	1260.048	5.69%	63.61%
105.0	200.254	108.630	1368.678	5.48%	69.09%
110.0	192.458	102.649	1471.326	5.18%	74.27%
115.0	182.342	94.902	1566.228	4.79%	79.06%
120.0	170.610	85.803	1652.031	4.33%	83.39%
125.0	157.099	75.749	1727.78	3.82%	87.22%
130.0	142.432	65.128	1792.908	3.29%	90.51%
135.0	126.463	54.334	1847.243	2.74%	93.25%
140.0	110.033	43.789	1891.032	2.21%	95.46%
145.0	91.568	33.636	1924.668	1.70%	97.16%
150.0	72.773	24.200	1948.868	1.22%	98.38%
155.0	53.589	15.991	1964.859	0.81%	99.19%
160.0	35.906	9.386	1974.245	0.47%	99.66%
165.0	19.745	4.586	1978.832	0.23%	99.89%
170.0	8.731	1.689	1980.521	0.09%	99.98%
175.0	3.350	0.432	1980.953	0.02%	100.00%
180.0	0.906	0.051	1981.004	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	59.82	3.02%	3.02%
0-40	134.69	6.80%	6.80%
0-60	401.00	20.24%	20.24%
0-90	1032.63	52.13%	52.13%
0-120	1652.03	83.39%	83.39%
0-180	1981.00	100.00%	100.00%
60-90	631.63	31.88%	31.88%
90-120	619.40	31.27%	31.27%
90-130	760.28	38.38%	38.38%
90-150	916.24	46.25%	46.25%
90-180	948.33	47.87%	47.87%
0-116.08	1584.80	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	2.39
10-20	16.25
20-30	41.19
30-40	74.87
40-50	113.57
50-60	152.74
60-70	188.15
70-80	215.06
80-90	228.42
90-100	227.42
100-110	211.28
110-120	180.71
120-130	140.88
130-140	98.12
140-150	57.84
150-160	25.38
160-170	6.28
170-180	0.43



C105(Max): ——

C0/C180: ——

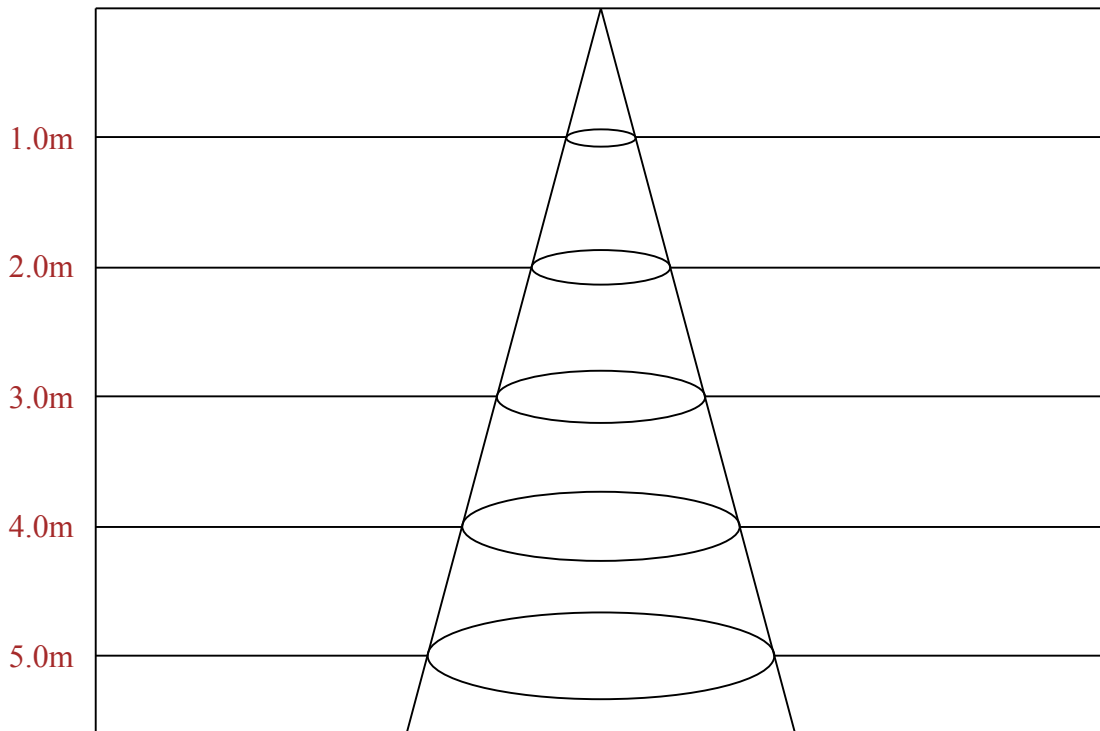
C90/C270: ——

Field angle(10%Imax):C0/180Left:79.7 Right:251.3

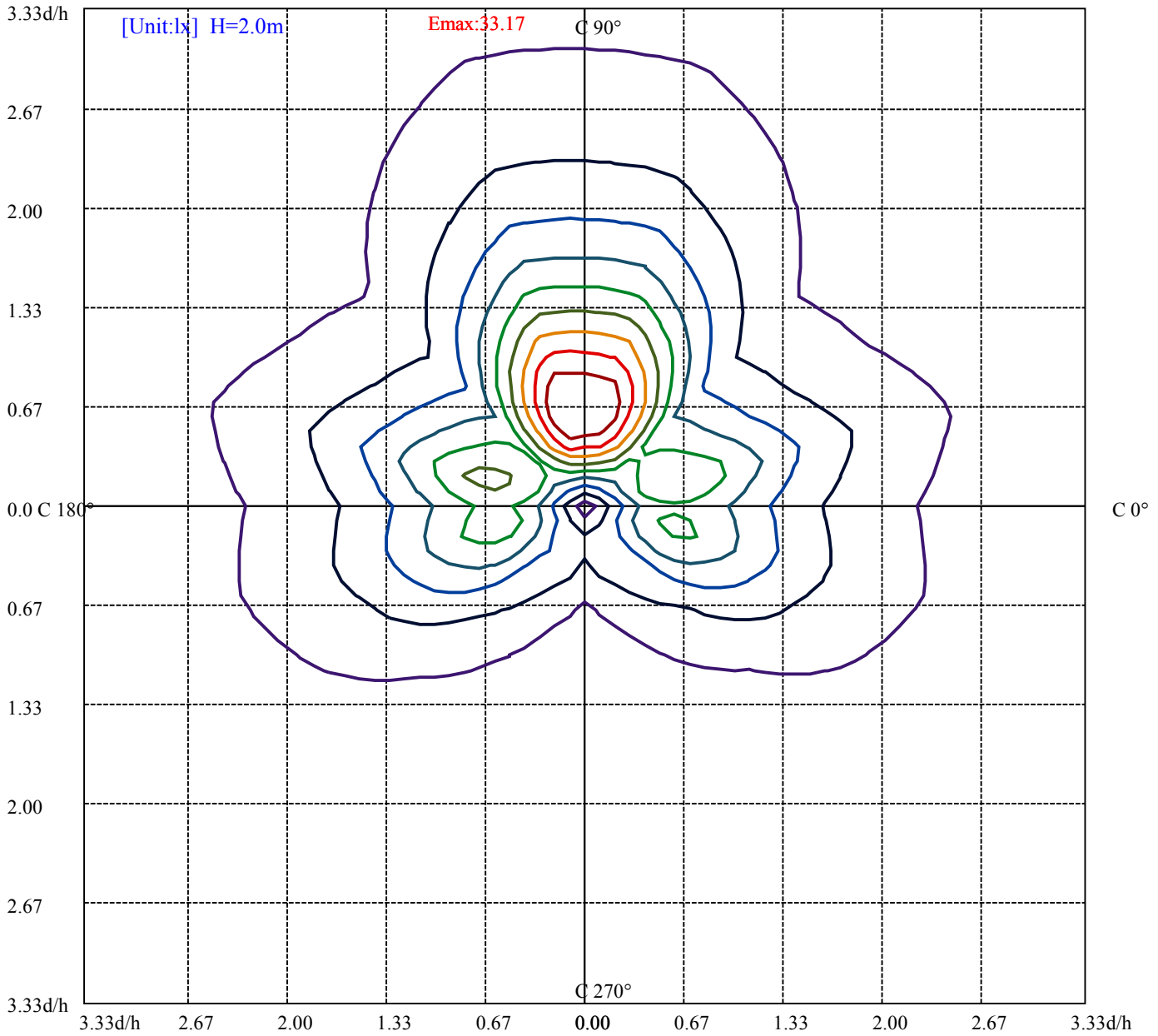
:C90/270Left:80.8 Right:74.7

Beam Angle(50%Imax):C0/180Left:57.1 Right:227.7

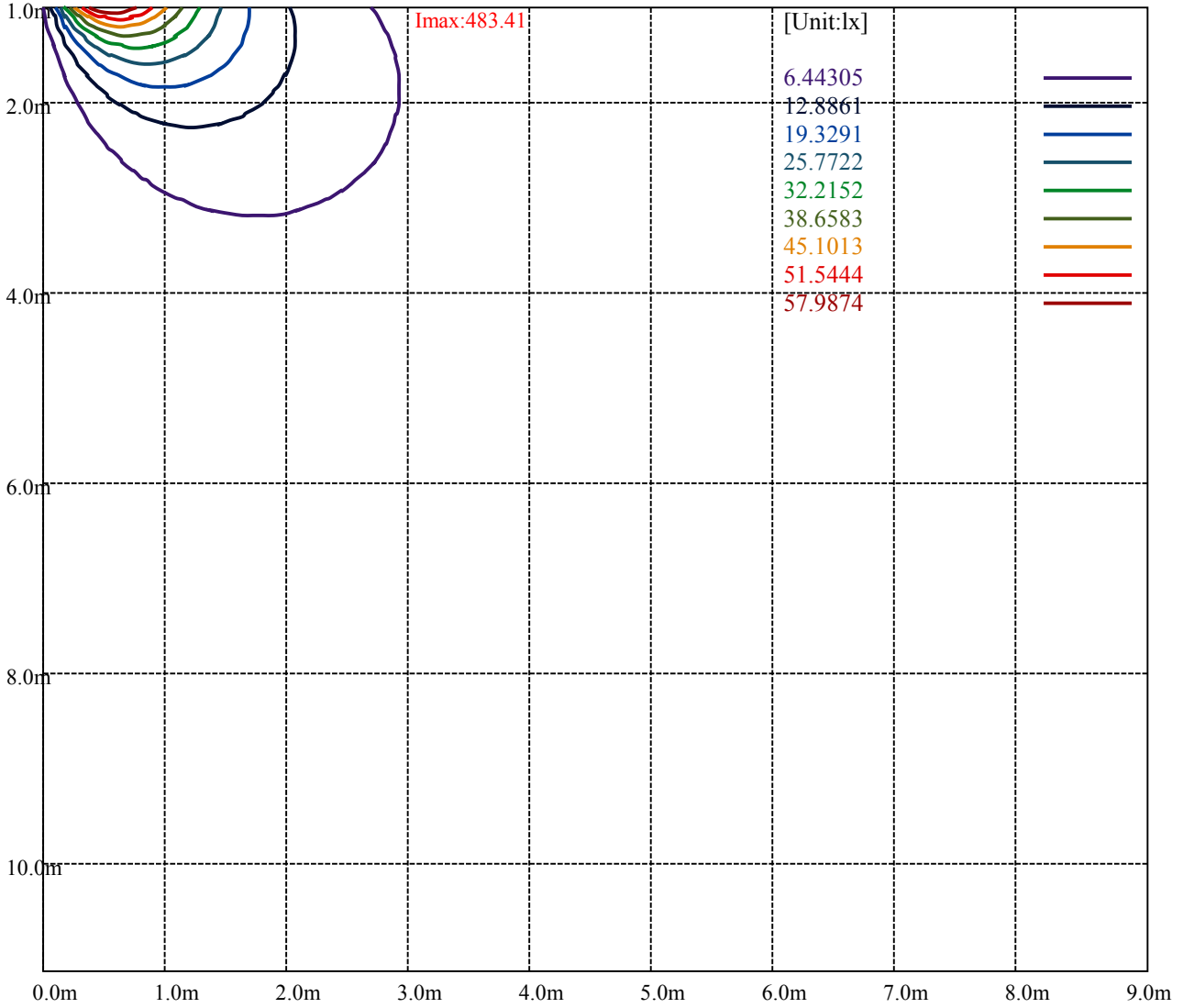
:C90/270Left:55.7 Right:51.1



Max , Ave      Beam angle of C105 plane 326.00



(10%Emax) 3.317225	—
(20%Emax) 6.63445	—
(30%Emax) 9.951675	—
(40%Emax) 13.2689	—
(50%Emax) 16.58612	—
(60%Emax) 19.90335	—
(70%Emax) 23.22058	—
(80%Emax) 26.53775	—
(90%Emax) 29.855	—



# 乐达凯 BLKW0724LAJUDBK 3500K

## Luminance Limiting Curve(no luminous side)

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Luminance Table

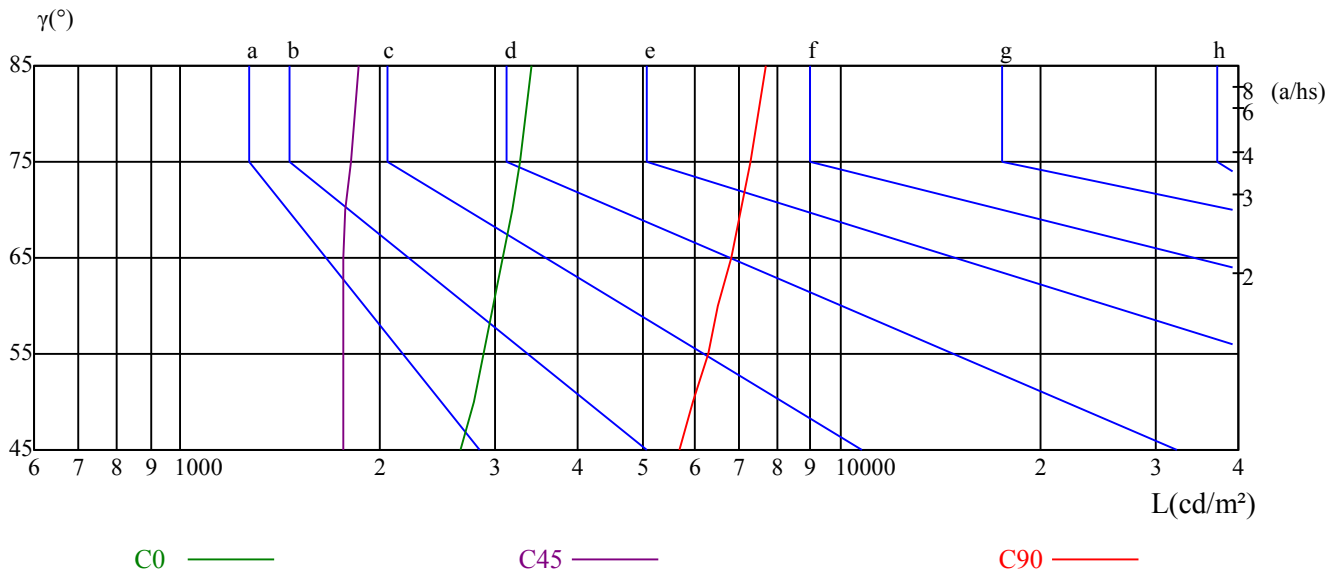
$\gamma$	45	50	55	60	65	70	75	80	85
C0	2663	2780	2875	2984	3085	3184	3267	3341	3402
C45	1764	1767	1765	1765	1767	1781	1812	1841	1864
C90	5712	5985	6290	6525	6805	7065	7290	7498	7682

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
27139	29667	16987	47405	52425	29411	143792	161049	89214

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



Equipment: LC-I-902 GMS-2000  
Temperature( $^{\circ}C$ ): 25.3

Date: 2024/5/27  
Humidity(%): 62.2%

Operator: JUN WANG  
Distance(m): 29.97



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	0.71	0.71	0.71	0.58	0.58	0.58	0.52
1	0.85	0.79	0.74	0.78	0.73	0.68	0.65	0.61	0.57	0.53	0.50	0.47	0.42	0.40	0.37	0.32
2	0.71	0.63	0.56	0.65	0.58	0.51	0.54	0.48	0.43	0.43	0.39	0.35	0.34	0.30	0.27	0.22
3	0.61	0.51	0.44	0.56	0.47	0.40	0.46	0.39	0.33	0.36	0.31	0.27	0.28	0.24	0.20	0.16
4	0.53	0.43	0.35	0.48	0.39	0.32	0.39	0.32	0.27	0.31	0.26	0.21	0.24	0.20	0.16	0.12
5	0.46	0.36	0.29	0.42	0.33	0.27	0.35	0.27	0.22	0.27	0.22	0.18	0.21	0.17	0.13	0.10
6	0.41	0.31	0.24	0.37	0.29	0.22	0.31	0.24	0.18	0.24	0.19	0.15	0.19	0.14	0.11	0.08
7	0.36	0.27	0.21	0.33	0.25	0.19	0.27	0.21	0.16	0.22	0.16	0.12	0.17	0.12	0.09	0.06
8	0.33	0.24	0.18	0.30	0.22	0.16	0.25	0.18	0.13	0.20	0.14	0.11	0.15	0.11	0.08	0.05
9	0.30	0.21	0.16	0.27	0.19	0.14	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	0.17	0.12	0.21	0.14	0.10	0.16	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	6.02	13.83	30.09	46.44	64.67	81.56	99.07	115.24	130.51
15.0	5.75	14.82	34.22	56.59	80.21	101.95	123.41	147.39	168.41
30.0	5.84	18.68	41.59	61.62	76.71	93.14	107.87	122.42	135.09
45.0	5.75	22.63	46.71	61.53	74.55	86.95	98.89	109.13	119.01
60.0	5.57	24.43	48.68	72.39	98.89	124.49	151.44	177.13	200.93
75.0	5.39	25.33	50.66	79.67	116.86	155.57	194.46	230.93	268.65
90.0	5.39	27.22	50.84	83.17	120.63	161.14	200.66	239.91	276.11
105.0	5.12	28.47	51.11	82.99	121.17	162.13	203.35	243.32	277.99
120.0	4.94	26.77	51.65	73.38	97.19	125.66	151.17	177.84	202.01
135.0	17.60	25.60	48.32	63.05	75.18	87.31	98.62	109.40	118.92
150.0	4.76	22.01	43.65	64.94	94.85	98.89	116.41	131.05	144.97
165.0	4.67	17.51	37.19	61.08	85.69	107.34	131.14	154.85	180.36
180.0	6.02	17.96	35.66	52.63	71.32	89.28	106.08	122.69	137.96
195.0	5.75	20.03	37.01	54.70	74.46	92.96	112.45	131.05	149.10
210.0	5.84	20.12	37.45	51.56	65.12	79.31	92.60	106.08	118.65
225.0	5.75	19.67	33.59	42.31	49.04	55.42	61.80	67.99	73.65
240.0	5.57	18.23	33.23	43.11	46.62	47.78	48.32	49.31	49.58
255.0	5.39	15.81	31.62	42.48	44.19	39.88	35.66	32.51	29.37
270.0	5.39	13.65	28.02	33.59	31.62	27.66	23.98	20.21	16.62
285.0	5.12	13.29	29.19	40.06	42.57	38.35	34.13	30.63	29.64
300.0	4.94	14.82	30.18	42.40	43.92	47.34	47.51	48.32	48.68
315.0	17.60	15.09	30.18	39.07	44.91	50.03	55.51	61.08	66.38
330.0	4.76	16.08	33.05	46.44	60.45	73.74	87.13	100.06	112.63
345.0	4.67	15.27	33.41	49.76	69.79	88.65	107.78	126.02	143.62
360.0	6.02	13.83	30.09	46.44	64.67	81.56	99.07	115.24	130.51
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	144.43	157.54	168.68	179.73	189.25	197.33	202.99	206.59	207.66
15.0	189.25	209.19	227.51	243.95	258.59	270.45	279.88	286.35	290.12
30.0	146.41	156.74	165.27	172.90	179.55	185.03	189.25	193.11	195.09
45.0	126.56	133.65	139.40	144.16	148.02	151.80	155.93	158.71	159.79
60.0	223.47	243.41	260.39	275.39	288.59	302.06	311.68	318.05	321.65
75.0	301.89	334.04	362.06	388.38	411.65	430.69	447.12	457.36	463.29
90.0	309.79	339.16	369.07	393.05	417.39	437.87	452.96	463.56	468.95
105.0	315.63	346.17	375.63	402.39	427.00	448.65	463.83	475.51	481.53
120.0	224.01	245.03	263.71	279.61	294.07	308.98	319.94	328.11	332.78
135.0	127.01	134.82	140.66	146.05	150.72	155.39	160.42	163.83	165.00
150.0	157.27	168.68	177.93	186.02	193.47	199.13	203.44	206.95	208.29
165.0	201.11	221.77	239.91	257.60	272.42	285.00	294.70	301.17	304.49
180.0	152.42	165.81	177.75	189.61	198.41	206.50	211.71	214.85	215.93
195.0	166.44	181.89	196.62	210.90	222.84	232.45	239.28	243.77	246.02
210.0	130.96	142.63	153.14	162.66	171.38	178.29	182.87	185.57	186.20
225.0	79.13	83.89	89.01	93.32	97.10	100.42	102.57	103.38	103.38
240.0	50.03	50.48	50.93	51.38	51.92	52.28	52.72	53.08	52.72
255.0	27.48	26.86	26.86	27.04	27.22	27.57	28.02	27.93	27.93
270.0	13.74	11.68	10.24	9.97	6.38	5.75	5.66	5.66	5.48
285.0	25.33	24.61	24.70	24.97	25.33	25.78	26.32	26.50	26.68
300.0	48.86	49.58	50.21	50.93	51.47	52.01	52.45	52.72	52.54
315.0	71.50	76.35	81.02	85.51	89.46	93.05	95.66	97.10	97.45
330.0	124.67	136.17	146.77	156.65	165.63	172.99	178.02	181.35	182.60
345.0	160.42	176.14	190.06	204.16	215.66	225.36	232.45	236.77	239.01
360.0	144.43	157.54	168.68	179.73	189.25	197.33	202.99	206.59	207.66

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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	207.84	207.66	204.88	200.12	193.20	184.94	173.89	161.50	148.11
15.0	291.11	289.85	285.09	278.17	267.48	253.47	237.04	218.26	198.95
30.0	195.72	195.27	192.84	188.53	181.98	173.35	163.74	152.07	139.31
45.0	159.52	159.07	157.19	153.41	147.93	140.57	132.13	122.25	111.65
60.0	321.92	319.94	314.37	305.57	292.90	277.01	258.05	236.86	213.77
75.0	463.83	459.16	450.81	437.15	419.01	395.48	367.72	337.72	304.58
90.0	469.40	465.72	457.63	444.34	426.56	404.91	376.44	348.95	316.08
105.0	483.41	480.99	472.99	461.77	443.98	420.18	393.05	361.71	327.30
120.0	334.04	333.41	328.47	321.02	308.44	292.54	275.12	253.83	230.21
135.0	165.27	165.36	163.38	159.43	154.13	146.41	137.60	127.54	116.05
150.0	208.20	206.77	203.62	197.69	190.24	180.45	168.50	156.29	142.10
165.0	305.21	303.41	297.93	289.31	278.08	262.01	245.39	225.09	203.44
180.0	215.84	215.03	211.80	206.14	198.77	188.98	176.77	162.93	148.74
195.0	246.56	245.03	240.99	234.07	224.55	212.78	197.16	181.53	167.56
210.0	185.84	184.67	181.62	176.77	169.31	160.06	148.83	136.53	123.32
225.0	102.75	102.39	100.87	97.99	94.04	88.56	87.93	77.25	69.52
240.0	52.37	52.10	51.92	49.85	47.87	45.54	42.75	39.61	36.20
255.0	27.84	27.48	26.68	25.60	23.98	22.01	19.94	17.60	15.00
270.0	5.48	5.39	5.30	4.94	4.58	3.95	3.32	2.69	2.16
285.0	26.86	26.68	26.14	25.24	23.89	22.28	20.21	18.14	15.81
300.0	52.19	52.10	51.38	50.30	48.41	46.08	43.47	40.42	37.10
315.0	97.45	97.90	97.36	95.57	92.07	87.57	82.37	76.26	69.52
330.0	182.87	182.24	180.00	175.42	168.95	160.15	149.91	138.23	125.48
345.0	239.64	237.93	234.25	227.69	218.62	206.95	193.29	177.13	160.42
360.0	207.84	207.66	204.88	200.12	193.20	184.94	173.89	161.50	148.11
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	133.02	117.13	100.33	81.20	61.71	42.22	25.06	11.32	3.23
15.0	176.95	153.32	128.08	101.68	75.36	51.47	29.46	13.38	4.49
30.0	125.21	110.03	93.23	76.26	57.75	39.70	23.62	11.86	5.03
45.0	99.97	87.66	73.92	59.37	44.91	31.71	19.58	10.51	5.12
60.0	188.80	161.95	135.45	105.99	78.50	51.56	28.74	12.93	5.39
75.0	271.08	233.08	193.20	152.87	113.98	72.75	41.14	17.34	5.57
90.0	280.87	243.32	205.69	164.55	122.33	80.75	44.46	18.05	5.75
105.0	289.58	252.12	210.18	167.87	123.95	83.53	45.90	18.23	5.57
120.0	204.70	177.13	148.47	119.19	87.75	57.84	31.98	13.47	5.30
135.0	103.56	90.99	76.62	61.35	45.99	31.26	19.31	9.97	4.85
150.0	126.38	110.03	91.89	73.74	54.43	36.29	20.57	10.15	4.31
165.0	178.47	154.76	127.72	99.79	72.31	46.62	26.23	11.05	3.95
180.0	132.22	115.78	96.83	77.16	56.86	38.08	20.57	8.08	2.43
195.0	144.52	123.41	102.04	79.04	55.87	50.39	17.96	6.83	2.07
210.0	109.04	104.37	75.81	59.46	42.04	26.05	13.47	5.30	1.98
225.0	60.99	52.72	43.65	34.49	24.16	15.00	7.37	3.32	1.71
240.0	32.43	28.47	23.89	18.68	13.20	7.81	4.04	2.43	1.53
255.0	12.66	10.33	8.26	6.20	4.49	2.96	2.07	1.53	1.17
270.0	1.44	1.17	1.08	0.90	0.72	0.72	0.81	0.99	1.17
285.0	13.56	11.23	9.25	7.19	5.30	3.59	2.43	1.62	1.35
300.0	33.41	29.37	25.15	20.21	14.46	8.71	4.67	2.78	1.98
315.0	61.98	53.89	45.09	36.20	26.59	17.07	9.07	4.04	1.98
330.0	112.28	96.38	80.84	63.41	45.72	29.01	15.99	6.56	2.16
345.0	142.01	122.16	100.96	79.76	57.75	36.65	19.40	7.81	2.34
360.0	133.02	117.13	100.33	81.20	61.71	42.22	25.06	11.32	3.23

Intensity data(cd)

C/γ(°)	180.0
0.0	2.16
15.0	1.17
30.0	1.53
45.0	1.53
60.0	1.71
75.0	1.98
90.0	2.07
105.0	1.98
120.0	2.07
135.0	1.89
150.0	1.80
165.0	1.89
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	2.16