
乐达凯

Client:

LumCAT: BLKW0724LAJUDBK 5000K

Luminaire: LED 灯具

Report No:

Ballast type:

Test No: LCZP24040387

Voltage(V): 120.040

LampCAT:

Current(A): 0.226

Lamp flux(lm): 2109.5

Power (W): 26.920

Number of Lamps: 1

PF: 0.994

Length(mm): 130

Width(mm): 130

Phm Type: C

Height(mm): 460

Photometric Results

Lumens(lm): 2109.45, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 78.36

Central intensity(cd): 6.557, Maximum intensity(cd): 517.005

Angle of maximum intensity: C=105.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=284.7

[C90/270]Total=107.0

Field angle(10%Imax): [C0/180]Total=330.8

[C90/270]Total=155.5

Maximum s/h(1/2): C0_180=8.03 C90_270=11.10

Maximum s/h(1/4): C0_180=7.35 C90_270=10.87

Up flux rate of lamp(%): 47.89%

Down flux rate of lamp(%): 52.11%

Up flux rate of LUM(%): 47.89%

Down flux rate of LUM(%): 52.11%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 20.230%

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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	6.871	0.000	0	0.00%	0.00%
5.0	20.576	0.328	0.328	0.02%	0.02%
10.0	41.018	2.203	2.532	0.10%	0.12%
15.0	59.652	5.972	8.503	0.28%	0.40%
20.0	77.552	11.308	19.811	0.54%	0.94%
25.0	93.652	17.956	37.767	0.85%	1.79%
30.0	110.400	25.823	63.59	1.22%	3.01%
35.0	126.534	34.890	98.48	1.65%	4.67%
40.0	141.837	44.776	143.256	2.12%	6.79%
45.0	155.890	55.127	198.383	2.61%	9.40%
50.0	169.311	65.712	264.094	3.12%	12.52%
55.0	181.351	76.245	340.34	3.61%	16.13%
60.0	192.406	86.393	426.732	4.10%	20.23%
65.0	202.054	95.894	522.626	4.55%	24.78%
70.0	210.404	104.437	627.063	4.95%	29.73%
75.0	216.912	111.693	738.757	5.29%	35.02%
80.0	221.246	117.239	855.995	5.56%	40.58%
85.0	223.315	120.798	976.793	5.73%	46.31%
90.0	223.543	122.353	1099.146	5.80%	52.11%
95.0	222.402	122.103	1221.25	5.79%	57.89%
100.0	219.067	119.958	1341.208	5.69%	63.58%
105.0	213.173	115.656	1456.863	5.48%	69.06%
110.0	204.958	109.293	1566.156	5.18%	74.24%
115.0	194.090	101.042	1667.198	4.79%	79.03%
120.0	181.830	91.387	1758.584	4.33%	83.37%
125.0	167.440	80.733	1839.317	3.83%	87.19%
130.0	151.845	69.423	1908.74	3.29%	90.49%
135.0	134.895	57.940	1966.68	2.75%	93.23%
140.0	117.391	46.713	2013.393	2.21%	95.45%
145.0	97.601	35.870	2049.262	1.70%	97.15%
150.0	77.679	25.811	2075.074	1.22%	98.37%
155.0	57.391	17.093	2092.167	0.81%	99.18%
160.0	38.394	10.046	2102.213	0.48%	99.66%
165.0	21.164	4.908	2107.121	0.23%	99.89%
170.0	9.375	1.812	2108.933	0.09%	99.98%
175.0	3.582	0.463	2109.396	0.02%	100.00%
180.0	0.973	0.054	2109.451	0.00%	100.00%

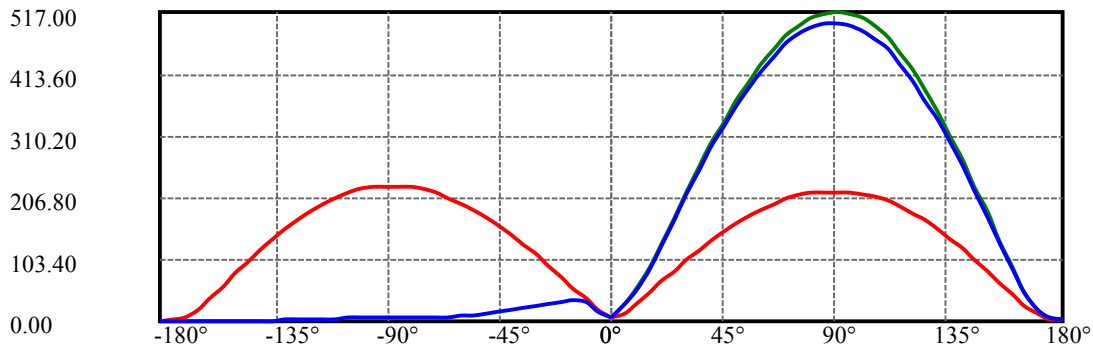
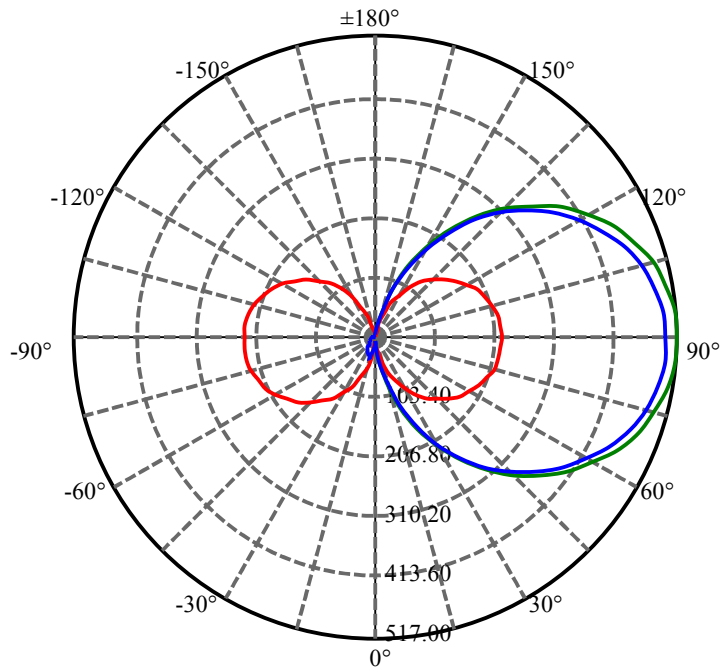
Equipment: LC-I-902 GMS-2000
Temperature($^{\circ}\text{C}$): 25.1Date: 2024/5/27
Humidity(%): 61.8%Operator: JUN WANG
Distance(m): 29.97

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	63.59	3.01%	3.01%
0-40	143.26	6.79%	6.79%
0-60	426.73	20.23%	20.23%
0-90	1099.15	52.11%	52.11%
0-120	1758.58	83.37%	83.37%
0-180	2109.45	100.00%	100.00%
60-90	672.41	31.88%	31.88%
90-120	659.44	31.26%	31.26%
90-130	809.59	38.38%	38.38%
90-150	975.93	46.26%	46.26%
90-180	1010.25	47.89%	47.89%
0-116.11	1687.56	80.00%	80.00%

ZONAL LUMEN SUMMARY

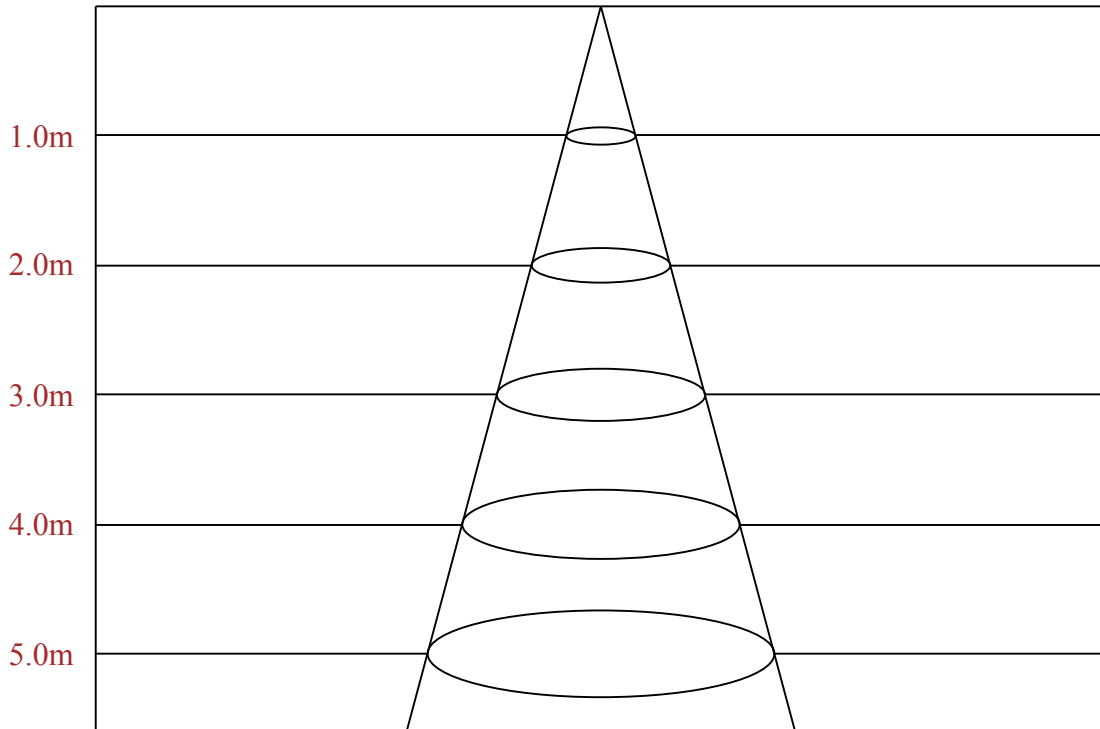
0-10	2.53
10-20	17.28
20-30	43.78
30-40	79.67
40-50	120.84
50-60	162.64
60-70	200.33
70-80	228.93
80-90	243.15
90-100	242.06
100-110	224.95
110-120	192.43
120-130	150.16
130-140	104.65
140-150	61.68
150-160	27.14
160-170	6.72
170-180	0.46



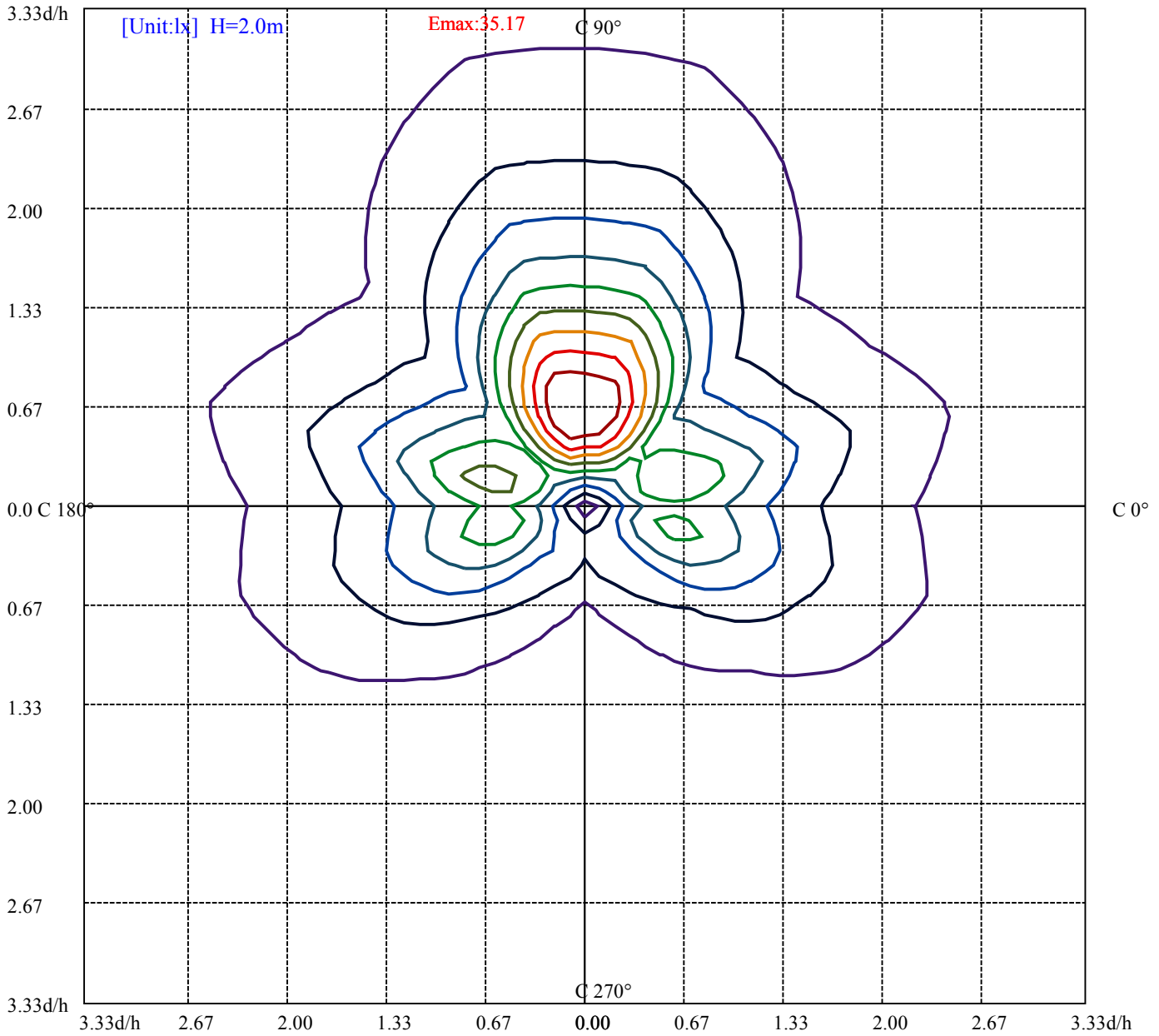
C105(Max): ——
 C0/C180: ——
 C90/C270: ——

Field angle(10%Imax):C0/180Left:79.5 Right:251.3
 :C90/270Left:80.6 Right:74.9

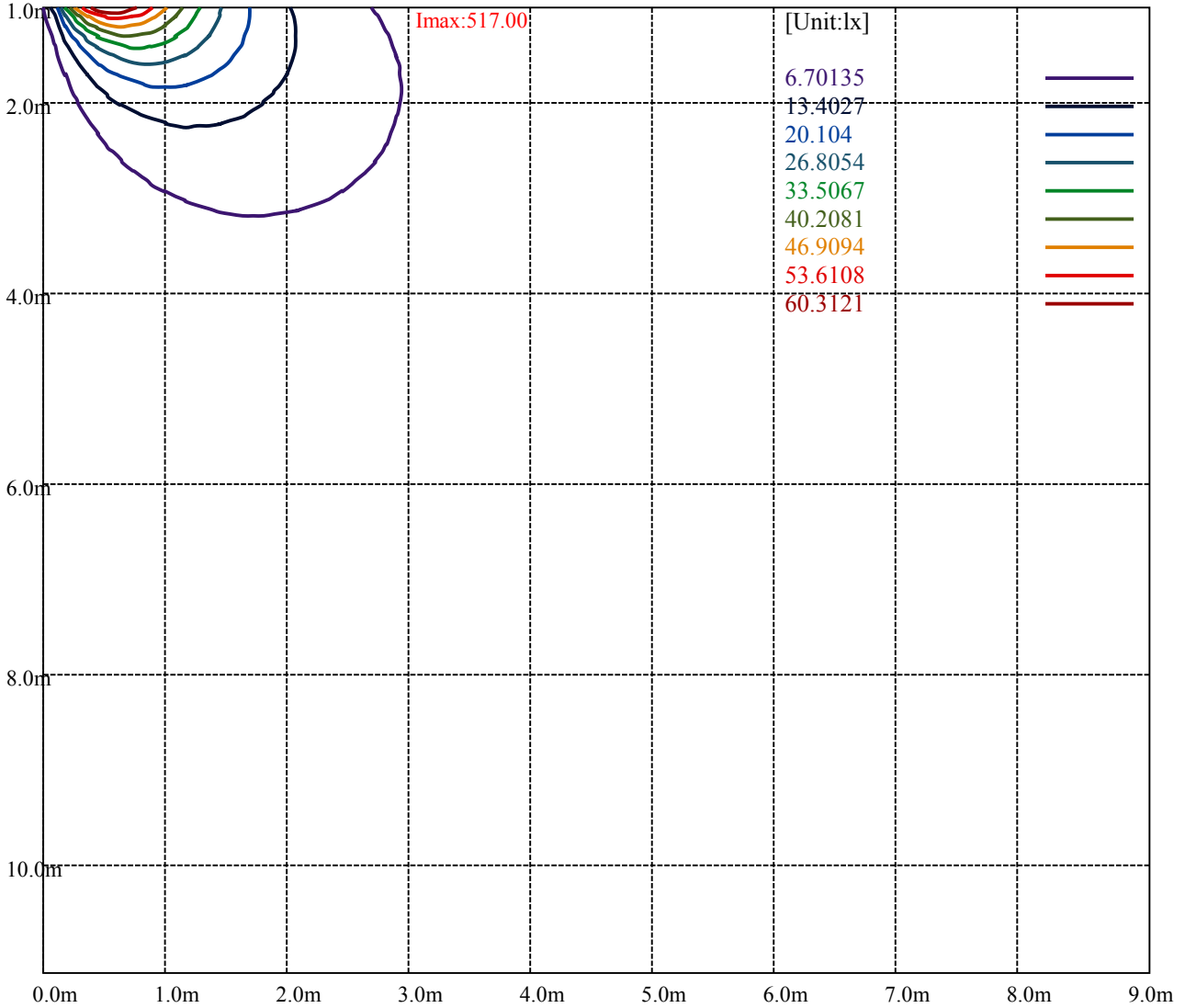
Beam Angle(50%Imax):C0/180Left:56.8 Right:227.9
 :C90/270Left:55.6 Right:51.4



Max , Ave Beam angle of C105 plane 324.74



- (10%Emax) 3.517325
- (20%Emax) 7.03465
- (30%Emax) 10.55198
- (40%Emax) 14.0693
- (50%Emax) 17.58662
- (60%Emax) 21.10395
- (70%Emax) 24.62127
- (80%Emax) 28.1385
- (90%Emax) 31.656



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Luminance Limiting Curve(no luminous side)

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Luminance Table

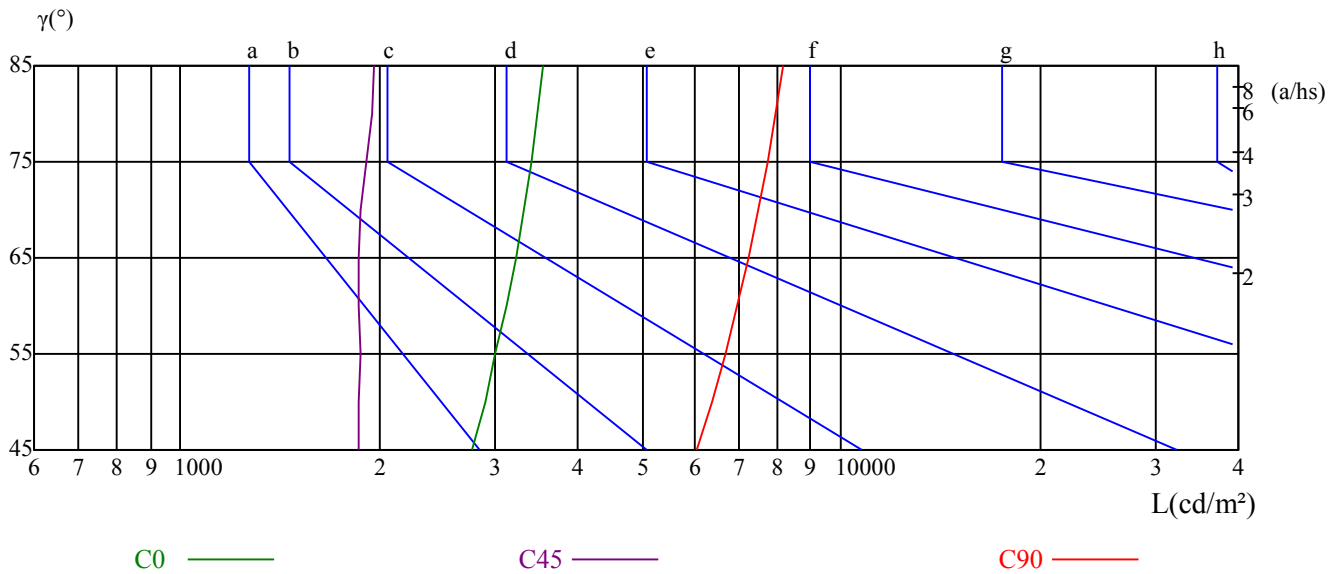
γ	45	50	55	60	65	70	75	80	85
C0	2764	2889	2994	3112	3217	3306	3394	3469	3542
C45	1865	1867	1871	1866	1866	1879	1915	1945	1968
C90	6043	6370	6668	6942	7240	7499	7739	7966	8153

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
28271	31559	18150	49294	55660	31454	149524	170959	95404

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	0.71	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	0.17	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	0.20	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	6.56	13.47	30.45	48.50	66.56	83.98	103.20	119.19	136.08
15.0	6.38	15.45	34.85	59.73	83.44	106.17	129.97	153.95	177.30
30.0	6.11	18.50	43.74	64.49	81.38	97.99	114.61	129.52	143.80
45.0	6.11	22.46	49.31	64.94	78.23	91.53	103.92	115.42	125.12
60.0	5.84	25.96	50.57	75.63	103.65	132.39	161.05	188.08	212.24
75.0	6.02	26.86	52.45	84.88	124.58	163.47	204.88	245.84	284.91
90.0	5.66	28.92	52.63	86.68	126.38	169.49	213.41	253.65	293.62
105.0	5.57	28.29	54.43	88.65	129.61	173.26	215.03	258.68	298.02
120.0	5.39	28.29	53.98	78.41	104.37	133.20	162.39	191.05	215.75
135.0	18.77	27.04	51.65	66.38	80.30	92.78	105.09	116.68	127.10
150.0	5.03	22.54	46.89	68.53	102.04	106.35	124.49	141.20	156.20
165.0	5.03	18.86	40.06	65.75	91.17	115.96	141.65	167.33	193.38
180.0	6.56	19.40	38.17	55.87	74.46	93.23	111.56	128.53	143.44
195.0	6.38	21.02	39.79	58.92	79.04	99.97	119.46	139.13	158.26
210.0	6.11	21.20	39.88	54.79	70.24	84.88	99.97	114.07	126.83
225.0	6.11	21.56	36.29	45.36	52.54	59.19	66.47	72.93	79.22
240.0	5.84	19.40	35.57	46.26	49.85	50.84	51.65	52.63	52.99
255.0	6.02	16.89	34.67	45.45	47.34	42.57	38.26	34.58	31.44
270.0	5.66	14.64	30.99	35.93	33.59	29.55	25.42	21.47	17.87
285.0	5.57	14.73	31.35	42.93	45.54	40.96	36.29	32.34	31.44
300.0	5.39	15.99	32.60	45.45	47.34	50.84	51.02	51.74	52.01
315.0	18.77	17.07	32.43	42.31	48.59	53.89	59.55	65.12	70.78
330.0	5.03	18.14	35.66	50.93	64.94	78.86	93.41	107.96	121.44
345.0	5.03	17.16	36.02	54.88	76.08	96.29	116.86	135.72	154.85
360.0	6.56	13.47	30.45	48.50	66.56	83.98	103.20	119.19	136.08
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	149.91	163.74	175.69	187.45	197.33	204.88	210.90	214.49	216.20
15.0	198.50	220.78	238.74	257.42	271.71	284.55	294.88	301.53	305.84
30.0	155.57	166.71	176.59	184.58	191.68	197.33	202.45	206.23	208.38
45.0	133.83	141.20	147.75	152.42	156.38	160.15	164.82	167.69	168.68
60.0	236.05	257.24	275.84	292.09	305.75	320.12	329.91	336.65	340.69
75.0	321.38	355.15	383.53	411.29	436.17	457.45	474.25	485.57	491.50
90.0	327.75	360.99	391.26	418.20	444.07	464.73	480.90	492.48	497.69
105.0	335.57	370.78	402.21	429.70	456.74	478.92	495.99	508.20	515.03
120.0	239.73	262.36	282.66	300.72	315.90	331.98	343.56	352.63	357.39
135.0	136.44	144.34	150.90	157.19	161.86	167.16	172.81	176.41	178.02
150.0	169.40	180.90	191.05	200.21	208.20	214.31	219.25	222.57	224.28
165.0	215.84	238.20	258.86	276.29	293.89	306.47	317.33	324.34	328.02
180.0	159.43	172.36	184.94	197.42	206.50	214.85	220.33	223.20	224.28
195.0	176.32	193.29	209.01	223.47	235.51	246.20	252.93	258.05	260.12
210.0	140.48	152.42	163.74	173.89	183.50	190.51	195.18	198.23	198.86
225.0	84.97	90.54	95.84	100.33	104.73	108.23	110.57	111.74	111.47
240.0	53.44	53.80	54.25	54.88	55.33	55.69	56.23	56.59	56.14
255.0	29.46	28.74	28.83	29.01	29.28	29.73	30.00	30.00	30.00
270.0	14.55	12.40	10.96	10.69	6.74	6.11	6.02	6.02	5.93
285.0	26.95	26.23	26.14	26.41	26.68	27.31	27.75	28.11	28.29
300.0	52.37	52.99	53.71	54.61	55.06	55.51	56.05	56.32	56.14
315.0	76.17	81.47	86.59	91.35	95.57	99.34	102.13	103.65	103.92
330.0	134.46	146.86	157.63	167.96	177.93	185.57	191.14	194.37	195.63
345.0	172.81	189.97	205.69	220.15	232.81	242.60	250.51	254.82	257.07
360.0	149.91	163.74	175.69	187.45	197.33	204.88	210.90	214.49	216.20

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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	215.84	215.66	213.41	208.29	201.29	192.21	180.81	169.04	154.94
15.0	307.01	305.66	300.81	292.72	282.12	266.77	250.60	231.11	209.82
30.0	208.56	208.02	206.14	201.47	194.64	185.57	174.52	162.13	148.47
45.0	168.50	167.96	165.90	162.22	156.02	148.92	140.03	129.61	118.02
60.0	340.69	338.44	333.50	324.07	311.59	293.80	274.22	251.59	228.50
75.0	492.12	487.45	479.10	465.09	447.12	420.36	393.23	361.44	326.23
90.0	498.32	494.91	486.20	472.18	454.85	430.42	402.57	370.78	336.20
105.0	517.00	514.49	506.41	492.93	474.07	449.28	419.46	387.57	350.84
120.0	359.19	357.66	353.17	344.55	331.80	315.36	295.06	272.60	248.44
135.0	178.02	178.11	176.23	172.27	165.81	157.81	148.29	137.69	125.48
150.0	223.92	222.30	219.07	213.14	204.70	194.37	181.98	168.05	152.69
165.0	328.92	326.41	320.84	311.95	298.74	282.75	263.89	243.14	219.25
180.0	224.01	223.38	219.97	214.13	205.87	195.72	183.41	169.22	153.59
195.0	260.57	258.77	254.28	246.74	236.68	223.29	208.02	190.42	172.19
210.0	198.68	197.42	193.83	188.17	180.45	170.48	158.98	145.78	131.68
225.0	110.66	110.21	108.59	105.63	101.05	95.39	95.48	82.90	74.64
240.0	55.78	55.60	55.51	53.08	51.11	48.50	45.45	42.13	38.62
255.0	30.00	29.55	28.65	27.48	25.78	23.62	21.47	18.86	16.17
270.0	5.93	5.93	5.66	5.39	4.76	4.31	3.59	2.87	2.16
285.0	28.47	28.20	27.57	26.68	25.24	23.53	21.47	19.13	16.53
300.0	55.78	55.78	54.97	53.71	51.74	49.22	46.44	43.02	39.70
315.0	103.74	104.28	103.65	101.50	97.90	93.14	87.66	81.02	73.74
330.0	195.72	195.36	192.66	187.90	180.54	170.93	159.97	148.11	134.73
345.0	257.60	256.08	251.50	244.85	235.15	222.39	207.30	190.33	171.65
360.0	215.84	215.66	213.41	208.29	201.29	192.21	180.81	169.04	154.94

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	139.22	122.87	104.28	84.88	65.57	44.28	26.23	11.59	3.41
15.0	186.47	161.86	136.80	109.04	81.20	54.52	32.25	14.19	5.03
30.0	134.28	118.29	100.60	81.47	62.69	42.31	25.78	13.02	5.30
45.0	105.54	92.42	78.14	63.59	48.14	33.41	20.66	11.50	5.48
60.0	200.39	173.44	143.98	114.34	83.53	56.05	31.53	14.28	5.66
75.0	288.32	248.26	205.87	165.18	121.53	79.76	43.83	18.59	6.11
90.0	300.54	261.11	218.71	174.61	132.48	86.14	48.95	20.39	6.11
105.0	311.50	269.28	224.64	181.53	134.91	89.19	49.13	20.66	5.93
120.0	219.79	191.59	160.87	128.08	94.31	63.68	35.66	15.27	5.84
135.0	112.10	97.90	83.17	66.02	50.30	34.31	20.66	10.60	5.39
150.0	136.89	119.10	99.52	79.22	58.47	38.98	22.81	10.87	4.85
165.0	193.56	166.53	137.42	108.86	79.22	51.29	28.20	11.86	4.22
180.0	137.16	119.28	99.43	80.12	59.01	38.53	20.57	7.72	2.43
195.0	152.07	129.79	106.26	82.10	57.84	52.37	18.32	6.65	1.89
210.0	115.78	112.10	81.47	62.69	44.10	27.93	14.28	5.03	2.07
225.0	65.84	56.32	47.07	36.11	25.96	15.72	7.81	3.32	1.80
240.0	34.58	30.18	25.24	19.76	13.83	8.17	4.22	2.51	1.44
255.0	13.56	11.14	8.71	6.56	4.67	3.14	2.07	1.62	1.17
270.0	1.53	1.26	1.17	0.99	0.81	0.81	0.81	1.08	1.26
285.0	14.28	11.86	9.70	7.46	5.48	3.59	2.60	1.71	1.44
300.0	35.75	31.44	26.68	21.20	15.09	9.25	4.76	2.87	1.98
315.0	65.75	57.57	48.14	38.08	27.93	18.23	9.25	4.40	2.25
330.0	119.64	103.47	85.87	67.37	49.13	31.26	16.62	6.74	2.34
345.0	152.96	130.33	108.68	85.06	61.17	38.53	20.93	8.53	2.60
360.0	139.22	122.87	104.28	84.88	65.57	44.28	26.23	11.59	3.41

Intensity data(cd)

C/γ(°)	180.0
0.0	1.62
15.0	1.17
30.0	1.62
45.0	2.07
60.0	1.98
75.0	2.25
90.0	2.25
105.0	2.25
120.0	2.07
135.0	2.07
150.0	1.98
165.0	2.07
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