
乐达凯

Client:

LumCAT: FTNW0448LAJUDBK-2700K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 119.990

LampCAT:

Current(A): 0.338

Lamp flux(lm): 1952.2

Power (W): 40.170

Number of Lamps: 1

PF: 0.991

Length(mm): 70

Width(mm): 45

Phm Type: C

Height(mm): 1130

Photometric Results

Lumens(lm): 1952.17, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 48.60

Central intensity(cd): 14.445, Maximum intensity(cd): 347.165

Angle of maximum intensity: C=15.0 γ =90.0

Beam Angle(50%Imax): [C0/180]Total=291.8

[C90/270]Total=114.5

Field angle(10%Imax): [C0/180]Total=343.8

[C90/270]Total=171.7

Maximum s/h(1/2): C0_180=6.82 C90_270=6.03

Maximum s/h(1/4): C0_180=6.33 C90_270=5.52

Up flux rate of lamp(%): 49.75%

Down flux rate of lamp(%): 50.25%

Up flux rate of LUM(%): 49.75%

Down flux rate of LUM(%): 50.25%

CIE Type : General diffuse lighting

Output flux ratio in π solid angle : 19.022%

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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	13.458	0.000	0	0.00%	0.00%
5.0	16.445	0.357	0.357	0.02%	0.02%
10.0	30.542	1.681	2.038	0.09%	0.10%
15.0	42.033	4.305	6.343	0.22%	0.32%
20.0	59.700	8.384	14.728	0.43%	0.75%
25.0	75.629	14.193	28.921	0.73%	1.48%
30.0	92.122	21.229	50.15	1.09%	2.57%
35.0	108.170	29.494	79.645	1.51%	4.08%
40.0	123.471	38.648	118.292	1.98%	6.06%
45.0	137.792	48.375	166.667	2.48%	8.54%
50.0	151.224	58.400	225.067	2.99%	11.53%
55.0	163.250	68.377	293.444	3.50%	15.03%
60.0	173.736	77.893	371.337	3.99%	19.02%
65.0	182.775	86.668	458.006	4.44%	23.46%
70.0	190.782	94.587	552.593	4.85%	28.31%
75.0	196.774	101.301	653.894	5.19%	33.50%
80.0	200.558	106.315	760.209	5.45%	38.94%
85.0	202.827	109.609	869.818	5.61%	44.56%
90.0	203.339	111.211	981.029	5.70%	50.25%
95.0	201.459	110.837	1091.866	5.68%	55.93%
100.0	198.195	108.595	1200.461	5.56%	61.49%
105.0	193.429	104.788	1305.249	5.37%	66.86%
110.0	187.466	99.560	1404.809	5.10%	71.96%
115.0	180.147	93.082	1497.891	4.77%	76.73%
120.0	171.717	85.539	1583.429	4.38%	81.11%
125.0	161.070	76.923	1660.352	3.94%	85.05%
130.0	149.160	67.454	1727.807	3.46%	88.51%
135.0	136.080	57.637	1785.444	2.95%	91.46%
140.0	122.492	47.877	1833.32	2.45%	93.91%
145.0	107.479	38.369	1871.689	1.97%	95.88%
150.0	92.309	29.420	1901.109	1.51%	97.38%
155.0	76.885	21.412	1922.521	1.10%	98.48%
160.0	61.775	14.543	1937.064	0.74%	99.23%
165.0	45.300	8.824	1945.888	0.45%	99.68%
170.0	29.611	4.444	1950.332	0.23%	99.91%
175.0	15.364	1.609	1951.941	0.08%	99.99%
180.0	3.794	0.229	1952.17	0.01%	100.00%

Equipment: LC-I-902 GMS-2000
Temperature($^{\circ}$ C): 25.1

Date: 2025/12/15
Humidity(%): 61.6%

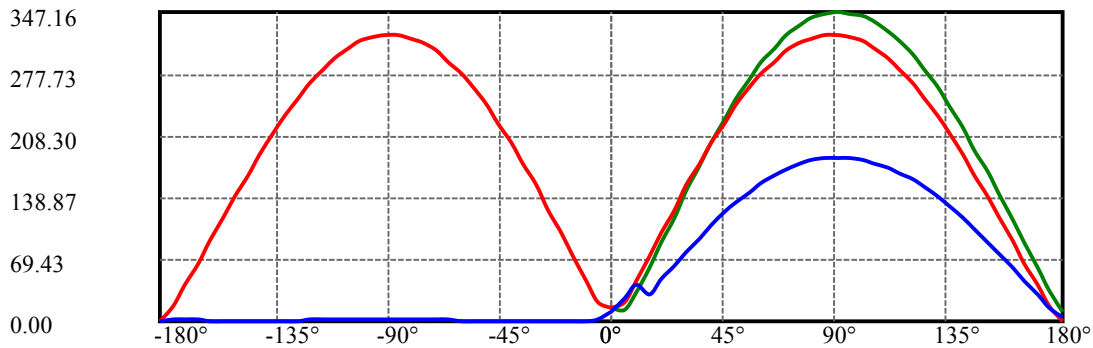
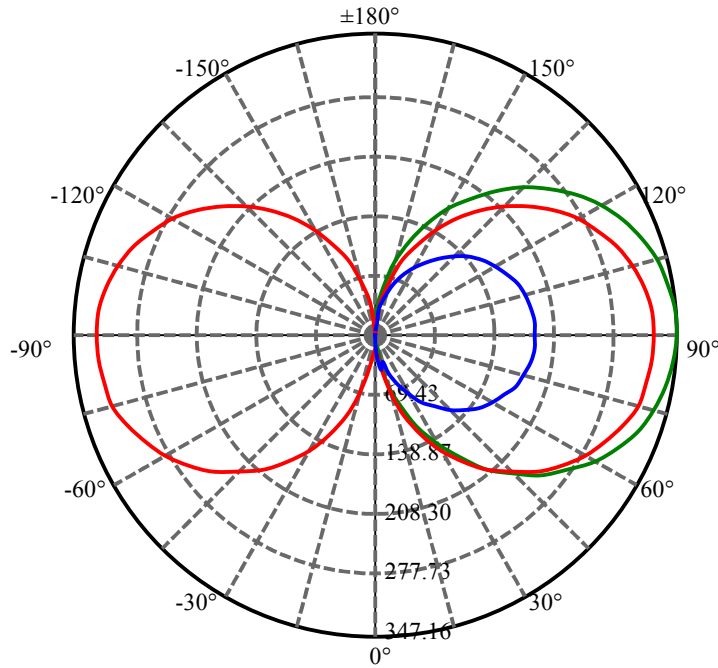
Operator: JUN WANG
Distance(m): 29.95

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	50.15	2.57%	2.57%
0-40	118.29	6.06%	6.06%
0-60	371.34	19.02%	19.02%
0-90	981.03	50.25%	50.25%
0-120	1583.43	81.11%	81.11%
0-180	1952.17	100.00%	100.00%
60-90	609.69	31.23%	31.23%
90-120	602.40	30.86%	30.86%
90-130	746.78	38.25%	38.25%
90-150	920.08	47.13%	47.13%
90-180	970.91	49.73%	49.73%
0-118.73	1561.74	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	2.04
10-20	12.69
20-30	35.42
30-40	68.14
40-50	106.77
50-60	146.27
60-70	181.26
70-80	207.62
80-90	220.82
90-100	219.43
100-110	204.35
110-120	178.62
120-130	144.38
130-140	105.51
140-150	67.79
150-160	35.95
160-170	13.27
170-180	1.61



C15(Max): ——

C0/C180: ——

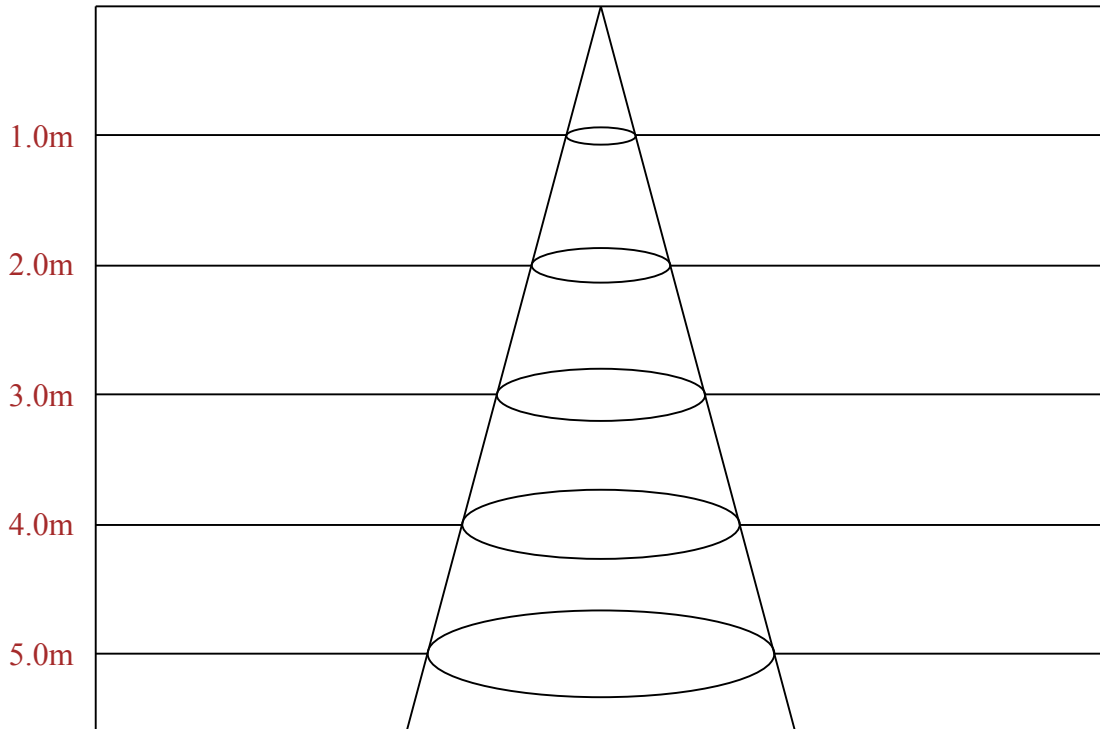
C90/C270: ——

Field angle(10%Imax):C0/180Left:261.9 Right:81.9

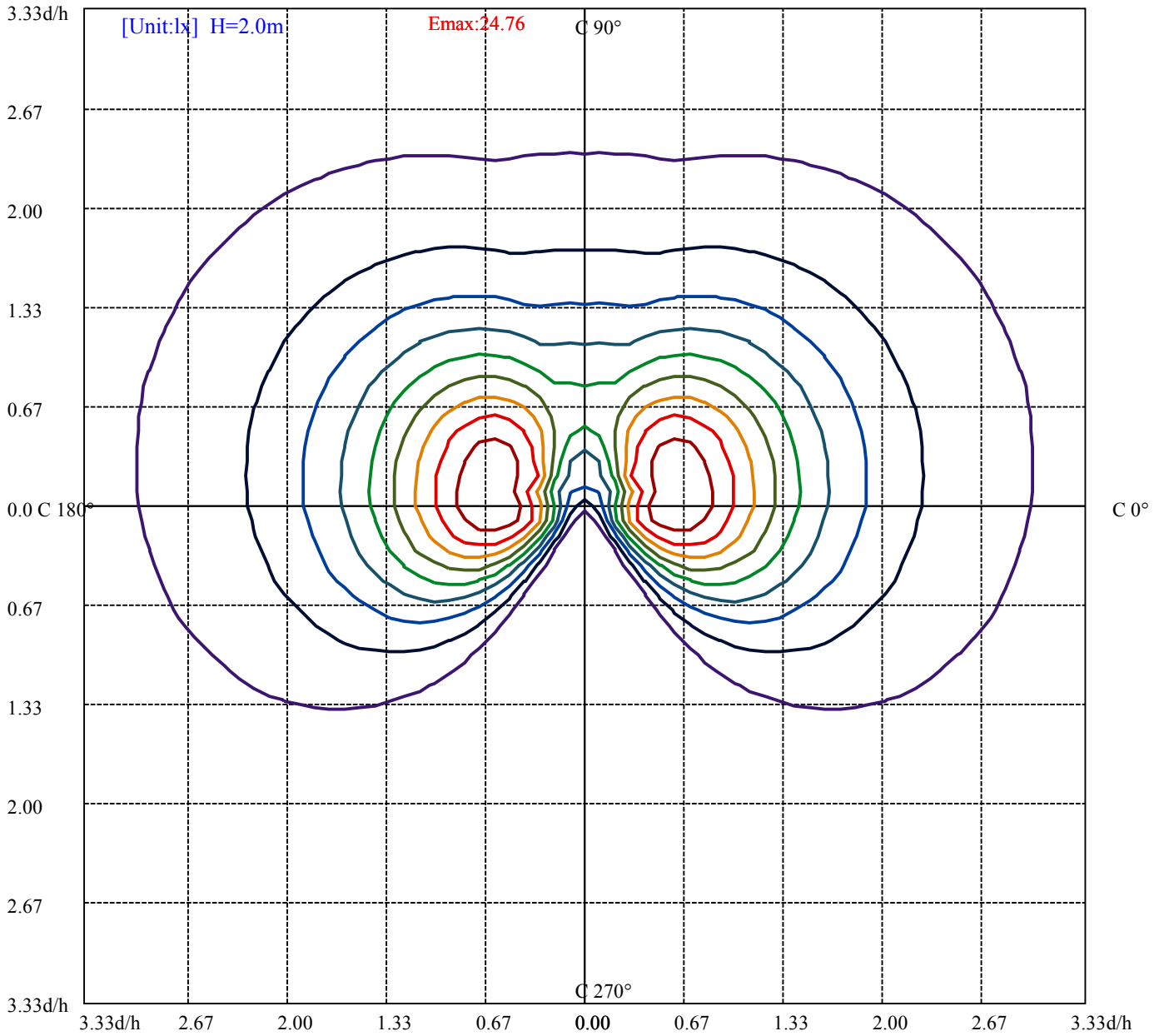
:C90/270Left:87.5 Right:84.2

Beam Angle(50%Imax):C0/180Left:235.9 Right:55.9

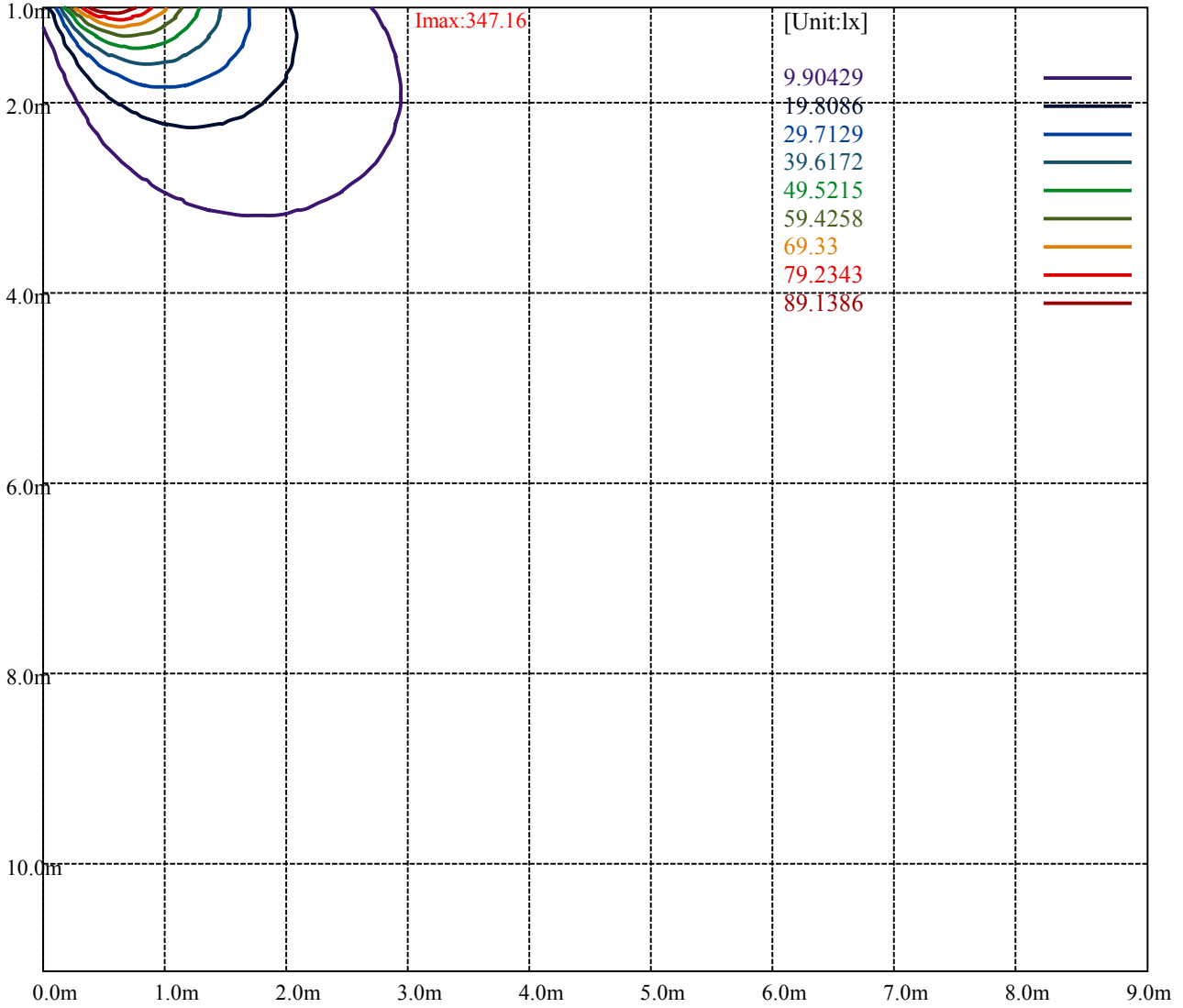
:C90/270Left:55.6 Right:58.9



Max , Ave Beam angle of C15 plane 350.87



- (10%Emax) 2.476073
- (20%Emax) 4.95215
- (30%Emax) 7.428225
- (40%Emax) 9.904275
- (50%Emax) 12.38035
- (60%Emax) 14.85643
- (70%Emax) 17.3325
- (80%Emax) 19.80857
- (90%Emax) 22.28465



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Luminance Limiting Curve(no luminous side)

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Luminance Table

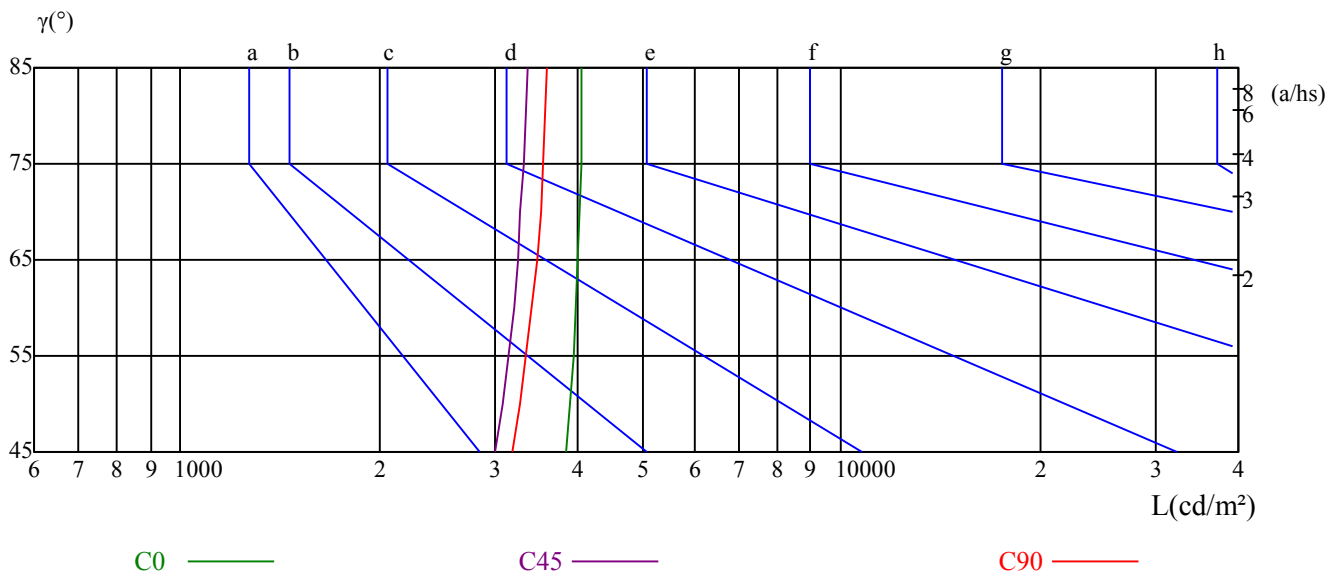
γ	45	50	55	60	65	70	75	80	85
C0	3828	3896	3939	3973	3985	4027	4050	4050	4055
C45	2997	3074	3139	3196	3239	3277	3309	3334	3353
C90	3191	3260	3334	3401	3461	3507	3545	3573	3597

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
218593	62137	138849	383565	109826	244164	1167961	337905	748930

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	1.07	1.07	1.07	0.99	0.99	0.99	0.83	0.83	0.83	0.69	0.69	0.69	0.56	0.56	0.56	0.50
1	0.85	0.79	0.74	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	0.44	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	0.27	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	0.14	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	0.09	0.06
8	0.33	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	0.18	0.12	0.09	0.13	0.09	0.06	0.04
10	0.27	0.19	0.14	0.25	0.17	0.12	0.20	0.14	0.10	0.16	0.11	0.08	0.12	0.08	0.05	0.03

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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	14.44	4.67	25.93	53.47	79.31	106.85	134.04	160.42	184.19
15.0	13.01	4.67	28.89	56.79	85.50	113.04	141.67	169.84	196.84
30.0	9.87	4.76	29.88	54.82	82.63	110.80	138.88	166.43	191.10
45.0	6.82	12.20	34.18	49.52	73.03	99.50	123.00	147.14	170.64
60.0	3.86	18.03	34.99	38.94	58.77	79.04	99.05	118.70	137.36
75.0	4.04	21.98	36.25	31.76	47.55	63.43	78.23	93.67	108.20
90.0	11.21	25.84	40.01	31.22	47.10	62.80	78.50	93.76	108.11
105.0	19.47	27.72	45.76	37.86	53.83	69.71	84.69	100.04	114.66
120.0	21.17	28.71	50.33	50.60	71.15	93.04	114.48	135.47	155.48
135.0	22.16	27.90	42.26	59.48	85.86	112.42	138.52	162.57	188.23
150.0	18.57	23.60	36.34	64.42	117.89	121.48	149.92	177.82	204.38
165.0	16.87	20.72	37.05	64.96	92.50	121.48	150.10	177.73	205.54
180.0	14.44	39.21	65.23	91.87	118.61	144.98	170.37	194.60	217.39
195.0	13.01	32.93	55.98	78.23	99.68	121.75	143.19	163.47	182.22
210.0	9.87	25.39	41.09	57.24	73.84	89.99	105.69	120.49	133.77
225.0	6.82	14.98	22.52	31.13	38.85	46.92	54.64	61.82	68.63
240.0	3.86	3.05	2.42	2.06	1.88	1.61	1.61	1.53	1.53
255.0	4.04	1.53	1.26	1.08	0.90	0.72	0.72	0.63	0.63
270.0	11.21	1.44	1.08	0.90	0.72	0.54	0.45	0.45	0.45
285.0	19.47	1.26	0.81	0.72	0.63	0.54	0.36	0.36	0.36
300.0	21.17	1.26	1.08	1.08	1.17	1.26	1.70	2.24	2.78
315.0	22.16	7.98	16.60	25.30	34.90	43.96	53.74	61.82	70.25
330.0	18.57	18.84	34.45	52.75	71.24	89.27	106.23	122.64	137.81
345.0	16.87	26.02	48.63	72.58	95.28	119.95	141.13	162.48	182.76
360.0	14.44	4.67	25.93	53.47	79.31	106.85	134.04	160.42	184.19
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	208.15	230.58	251.39	270.05	285.03	299.75	309.44	317.51	322.54
15.0	222.41	246.55	268.71	287.46	305.13	319.76	331.42	339.31	344.97
30.0	217.66	239.64	261.26	280.73	297.95	312.31	323.61	331.42	336.89
45.0	192.80	213.71	232.82	250.04	264.40	277.23	287.46	294.72	299.48
60.0	154.05	171.81	185.99	199.89	212.09	222.50	230.58	236.05	239.64
75.0	121.84	134.67	145.70	156.92	165.35	173.52	178.90	183.03	185.54
90.0	121.84	133.59	144.89	155.12	164.09	171.36	177.01	180.87	183.20
105.0	127.76	140.95	152.52	162.75	171.63	178.54	184.01	187.78	190.02
120.0	174.41	192.09	207.52	222.05	234.34	244.57	252.38	257.76	261.17
135.0	210.03	231.47	251.12	268.71	283.69	295.80	305.40	312.31	316.17
150.0	229.68	252.11	274.54	292.66	309.26	322.99	333.48	341.02	345.50
165.0	230.13	252.47	273.82	292.93	308.99	322.90	333.30	340.75	345.33
180.0	237.13	257.31	273.28	286.74	296.97	307.64	315.99	317.87	318.77
195.0	199.71	215.59	229.59	238.92	247.26	256.95	263.95	266.01	266.82
210.0	146.51	158.08	167.59	173.96	180.87	187.78	192.63	194.33	195.05
225.0	74.82	80.30	84.25	87.12	90.26	93.67	95.64	96.18	96.45
240.0	1.61	1.97	1.97	2.24	2.51	2.69	2.87	3.14	3.23
255.0	0.63	0.81	1.08	1.26	1.53	1.79	1.97	1.97	2.33
270.0	0.54	0.72	0.90	0.99	1.35	1.61	2.06	2.15	2.33
285.0	0.45	0.72	0.90	1.26	1.44	1.79	2.06	2.24	2.33
300.0	3.59	4.49	5.20	6.10	6.64	7.36	7.90	8.43	8.88
315.0	77.97	85.59	91.69	96.54	101.02	104.97	107.75	109.37	110.35
330.0	151.62	165.17	176.48	186.79	195.41	202.40	207.52	210.03	210.93
345.0	201.69	219.00	234.79	248.43	259.38	268.89	275.26	279.11	279.92
360.0	208.15	230.58	251.39	270.05	285.03	299.75	309.44	317.51	322.54

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	324.60	323.97	320.65	314.55	306.30	295.08	281.54	265.48	248.34
15.0	347.39	346.49	342.99	336.44	327.11	315.09	301.72	284.68	265.03
30.0	339.13	338.42	334.83	329.18	320.29	308.72	294.63	279.20	259.11
45.0	301.45	301.00	297.86	292.30	284.32	274.09	262.78	248.43	231.74
60.0	241.25	240.71	238.83	233.99	228.42	220.44	210.66	199.35	186.88
75.0	186.43	185.90	184.01	180.33	175.22	168.85	161.67	152.61	142.29
90.0	184.10	183.47	181.41	177.73	173.16	166.88	159.25	150.19	139.87
105.0	190.56	189.75	187.15	183.29	177.82	170.82	162.75	153.60	142.92
120.0	262.16	260.90	257.31	251.75	244.66	235.24	223.85	210.66	196.21
135.0	317.78	315.99	312.58	305.94	296.88	285.21	272.12	255.16	237.75
150.0	347.21	345.77	341.47	334.29	324.33	312.58	297.42	279.65	259.64
165.0	346.94	345.59	341.29	334.74	325.05	312.58	297.42	279.56	260.18
180.0	317.51	315.00	308.36	298.49	285.93	271.94	254.44	236.05	215.14
195.0	266.19	263.50	257.67	249.15	239.10	226.63	212.36	196.30	179.53
210.0	194.78	192.71	188.14	181.95	174.05	164.81	154.58	142.65	129.64
225.0	96.09	94.38	91.69	88.46	84.34	79.22	78.05	67.47	60.74
240.0	3.32	3.41	3.32	3.23	3.05	2.69	2.33	1.97	1.61
255.0	2.51	2.51	2.42	2.24	1.97	1.88	1.44	1.08	0.90
270.0	2.33	2.33	2.24	2.15	1.97	1.70	1.35	1.08	0.72
285.0	2.60	2.60	2.51	2.33	2.06	1.88	1.44	1.08	0.72
300.0	9.15	8.97	8.97	8.88	8.70	8.52	8.07	7.45	6.82
315.0	109.82	105.33	101.65	98.60	95.91	93.49	89.72	83.26	76.62
330.0	209.49	200.79	193.43	186.79	180.87	175.40	169.57	158.89	145.52
345.0	277.32	265.48	255.88	245.47	237.66	229.77	222.05	209.85	191.91
360.0	324.60	323.97	320.65	314.55	306.30	295.08	281.54	265.48	248.34

C/ γ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	227.79	205.81	182.85	160.33	134.58	110.44	84.78	59.21	34.00
15.0	243.23	219.54	196.03	170.46	144.18	117.26	90.71	62.17	36.87
30.0	239.19	216.40	192.36	167.32	143.10	116.99	90.17	63.43	36.87
45.0	213.08	193.61	171.45	150.37	127.76	104.43	80.48	57.69	34.09
60.0	172.26	156.20	139.15	121.39	103.18	85.32	66.03	46.74	27.81
75.0	130.63	117.98	104.61	91.15	76.89	62.35	47.64	34.09	20.64
90.0	128.75	116.19	102.91	89.09	75.45	60.02	45.58	30.68	15.97
105.0	130.90	117.89	104.61	90.35	75.72	60.92	45.85	30.86	16.96
120.0	178.99	161.67	142.56	122.82	102.82	83.35	62.80	42.53	22.43
135.0	217.57	195.85	172.98	149.20	126.05	101.47	76.53	51.77	28.80
150.0	238.29	213.89	189.84	164.27	137.72	110.71	84.78	57.78	31.31
165.0	238.11	214.52	189.75	165.35	138.79	111.70	84.34	58.59	30.86
180.0	192.98	169.75	146.78	120.40	96.27	70.88	46.12	22.52	1.61
195.0	160.95	141.49	121.21	100.30	79.85	74.02	37.50	17.50	1.61
210.0	115.92	112.69	87.12	71.42	55.72	41.18	26.20	9.15	1.70
225.0	53.65	46.38	39.12	31.04	23.69	16.15	8.79	2.15	1.61
240.0	1.35	1.17	1.26	1.26	1.17	1.17	1.26	1.35	1.61
255.0	0.63	0.63	0.63	0.81	0.90	1.08	1.17	1.26	1.79
270.0	0.54	0.54	0.54	0.63	0.81	0.90	1.17	1.26	1.88
285.0	0.54	0.45	0.54	0.54	0.81	0.99	1.26	1.44	1.88
300.0	6.19	5.74	5.38	4.76	4.31	3.86	3.59	3.05	2.33
315.0	68.99	61.73	53.47	45.49	36.69	27.81	18.57	11.84	3.95
330.0	131.26	116.45	100.75	84.51	68.54	51.68	34.90	19.20	5.20
345.0	174.14	153.24	133.59	112.15	90.26	67.92	47.01	24.40	6.91
360.0	227.79	205.81	182.85	160.33	134.58	110.44	84.78	59.21	34.00

Intensity data(cd)

C/γ(°)	180.0
0.0	1.61
15.0	12.29
30.0	12.11
45.0	11.84
60.0	9.69
75.0	7.72
90.0	5.11
105.0	4.22
120.0	5.11
135.0	6.55
150.0	7.09
165.0	7.72
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	1.61