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乐达凯

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Client:

LumCAT: ALDF12LAJUDWH 2700K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.030

LampCAT:

Current(A): 0.175

Lamp flux(lm): 1662.9

Power (W): 20.760

Number of Lamps: 1

PF: 0.991

Length(mm): -320

Width(mm): -320

Phm Type: C

Height(mm): 80

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Photometric Results

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Lumens(lm): 1662.90, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 80.10

Central intensity(cd): 491.739, Maximum intensity(cd): 491.739

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=114.0

[C90/270]Total=116.6

Field angle(10%Imax): [C0/180]Total=174.8

[C90/270]Total=173.8

Maximum s/h(1/2): C0\_180=1.25 C90\_270=1.25

Maximum s/h(1/4): C0\_180=1.38 C90\_270=1.37

Up flux rate of lamp(%): 10.92%

Down flux rate of lamp(%): 89.08%

Up flux rate of LUM(%): 10.92%

Down flux rate of LUM(%): 89.08%

CIE Type : Semidirect lighting

Output flux ratio in  $\pi$  solid angle : 66.670%

## 乐达凯 ALDF12LAJUDWH 2700K

Zonal flux distribution table

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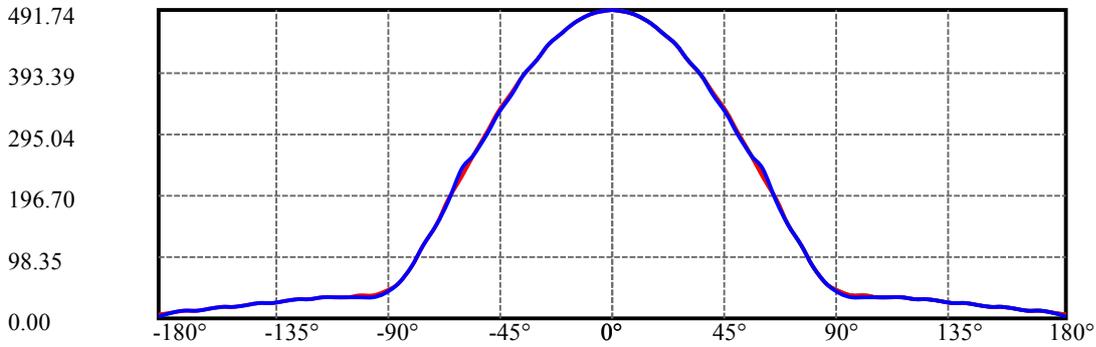
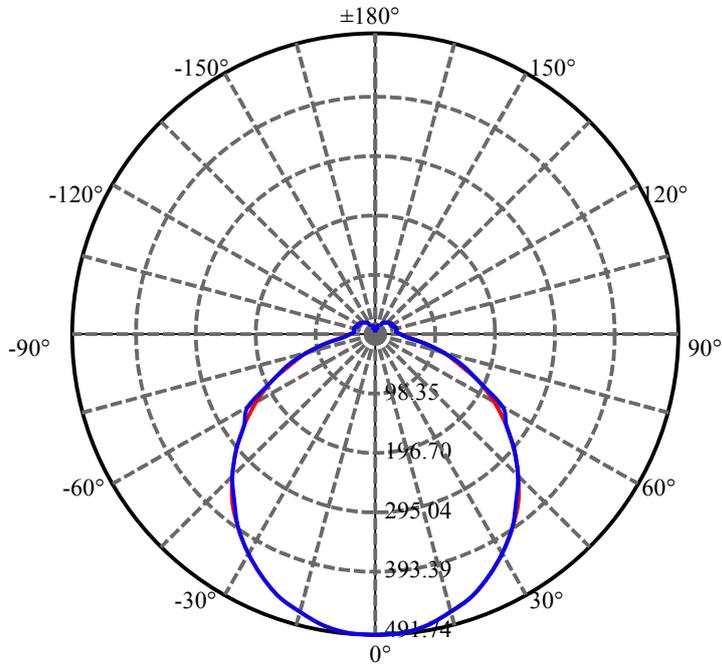
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	491.739	0.000	0	0.00%	0.00%
5.0	489.409	11.729	11.729	0.71%	0.71%
10.0	482.776	34.778	46.507	2.09%	2.80%
15.0	471.487	56.606	103.114	3.40%	6.20%
20.0	455.815	76.423	179.536	4.60%	10.80%
25.0	436.029	93.538	273.074	5.62%	16.42%
30.0	413.217	107.473	380.547	6.46%	22.88%
35.0	387.119	117.855	498.402	7.09%	29.97%
40.0	359.296	124.534	622.936	7.49%	37.46%
45.0	327.583	127.181	750.117	7.65%	45.11%
50.0	294.624	125.726	875.843	7.56%	52.67%
55.0	260.047	120.604	996.446	7.25%	59.92%
60.0	225.436	112.218	1108.664	6.75%	66.67%
65.0	187.863	100.474	1209.138	6.04%	72.71%
70.0	150.905	85.778	1294.916	5.16%	77.87%
75.0	115.414	69.611	1364.528	4.19%	82.06%
80.0	83.325	53.177	1417.704	3.20%	85.25%
85.0	54.764	37.522	1455.227	2.26%	87.51%
90.0	40.625	26.118	1481.345	1.57%	89.08%
95.0	35.117	20.739	1502.084	1.25%	90.33%
100.0	34.951	19.039	1521.123	1.14%	91.47%
105.0	34.366	18.547	1539.67	1.12%	92.59%
110.0	33.516	17.743	1557.413	1.07%	93.66%
115.0	32.434	16.699	1574.112	1.00%	94.66%
120.0	31.264	15.485	1589.597	0.93%	95.59%
125.0	29.758	14.105	1603.702	0.85%	96.44%
130.0	27.891	12.535	1616.237	0.75%	97.19%
135.0	25.819	10.853	1627.09	0.65%	97.85%
140.0	23.788	9.185	1636.275	0.55%	98.40%
145.0	21.755	7.598	1643.874	0.46%	98.86%
150.0	19.725	6.108	1649.982	0.37%	99.22%
155.0	17.653	4.730	1654.712	0.28%	99.51%
160.0	15.518	3.479	1658.191	0.21%	99.72%
165.0	13.278	2.373	1660.564	0.14%	99.86%
170.0	11.040	1.443	1662.007	0.09%	99.95%
175.0	9.391	0.731	1662.738	0.04%	99.99%
180.0	4.307	0.164	1662.901	0.01%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	380.55	22.88%	22.88%
0-40	622.94	37.46%	37.46%
0-60	1108.66	66.67%	66.67%
0-90	1481.35	89.08%	89.08%
0-120	1589.60	95.59%	95.59%
0-180	1662.90	100.00%	100.00%
60-90	372.68	22.41%	22.41%
90-120	108.25	6.51%	6.51%
90-130	134.89	8.11%	8.11%
90-150	168.64	10.14%	10.14%
90-180	181.39	10.91%	10.91%
0-72.54	1330.32	80.00%	80.00%

## ZONAL LUMEN SUMMARY

0-10	46.51
10-20	133.03
20-30	201.01
30-40	242.39
40-50	252.91
50-60	232.82
60-70	186.25
70-80	122.79
80-90	63.64
90-100	39.78
100-110	36.29
110-120	32.18
120-130	26.64
130-140	20.04
140-150	13.71
150-160	8.21
160-170	3.82
170-180	0.73



C0(Max): ———

C0/C180: ———

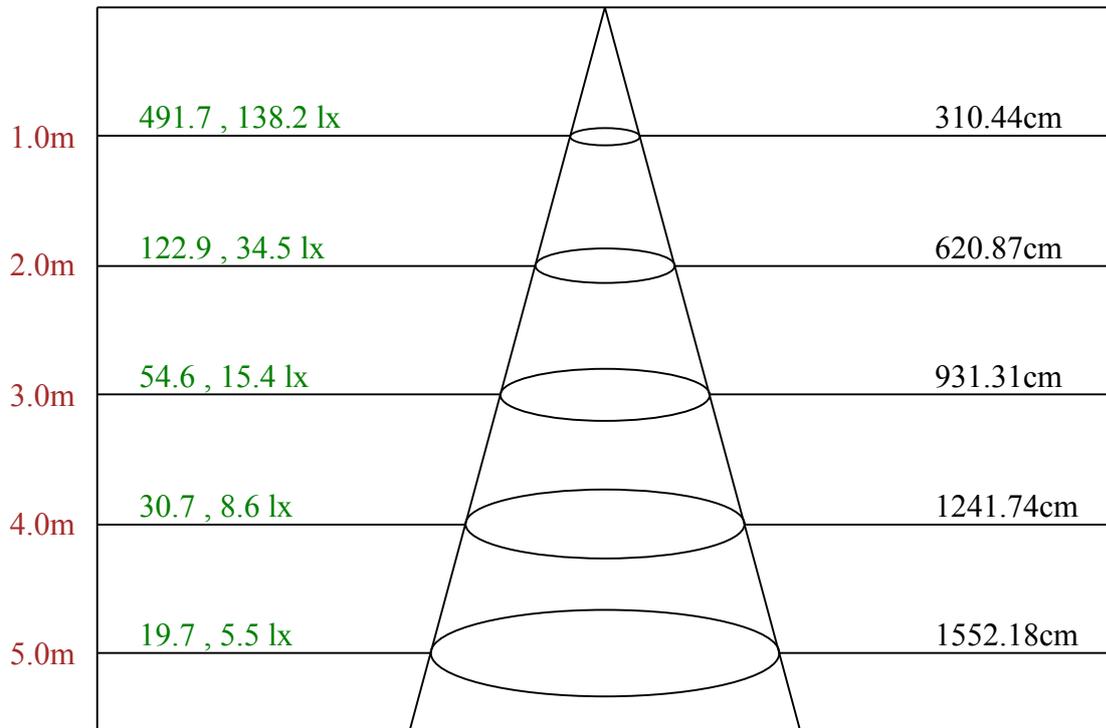
C90/C270: ———

Field angle(10%Imax):C0/180Left:87.4 Right:87.4

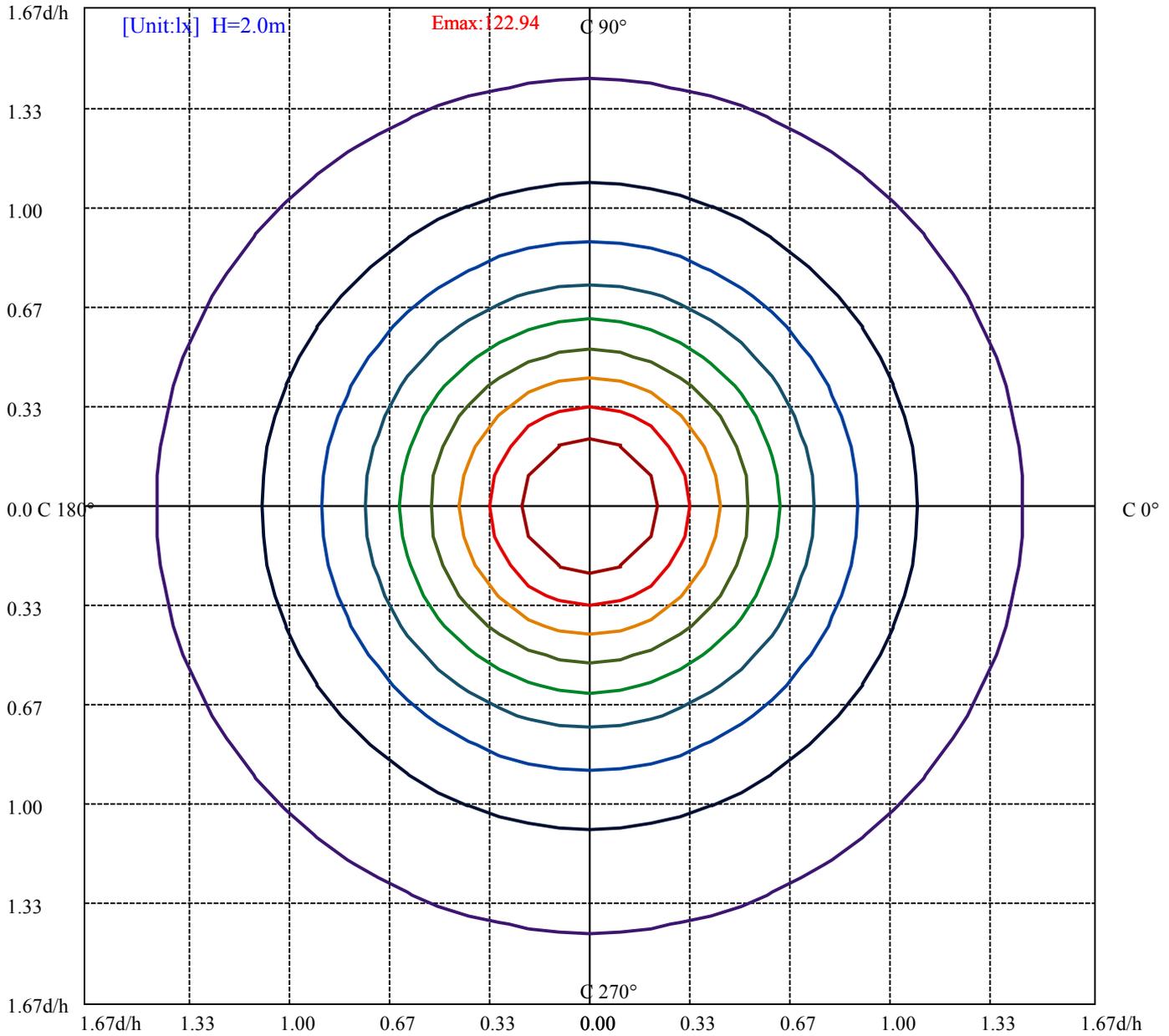
:C90/270Left:86.9 Right:86.9

Beam Angle(50%Imax):C0/180Left:57.0 Right:57.0

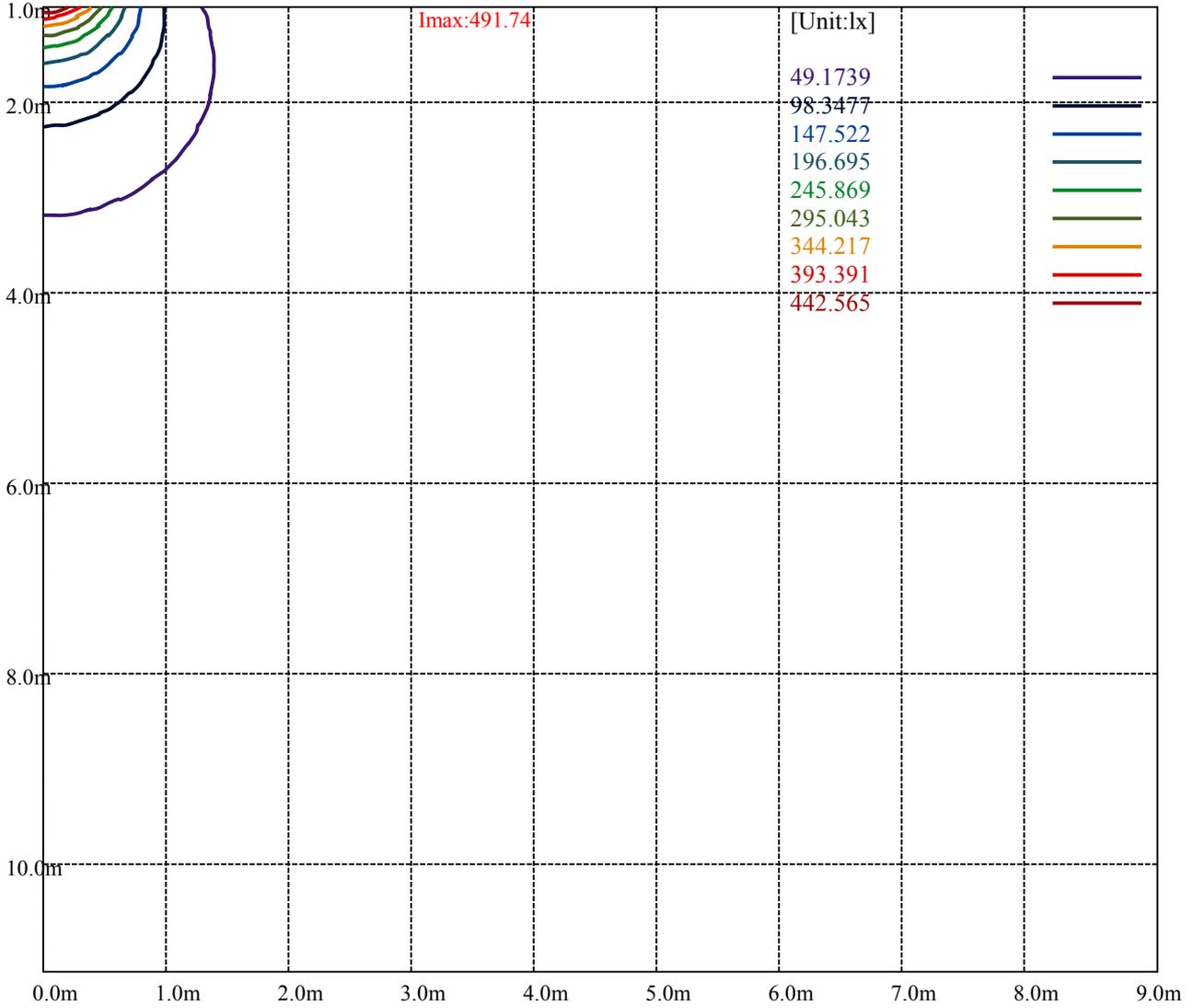
:C90/270Left:58.3 Right:58.3



Max , Ave      Beam angle of C0 plane 114.42



- (10%Emax) 12.29348
- (20%Emax) 24.58693
- (30%Emax) 36.8805
- (40%Emax) 49.17375
- (50%Emax) 61.46725
- (60%Emax) 73.76075
- (70%Emax) 86.05425
- (80%Emax) 98.34775
- (90%Emax) 110.6413



# 乐达凯 ALDF12LAJUDWH 2700K

## Luminance Limiting Curve(no luminous side)

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Luminance Table

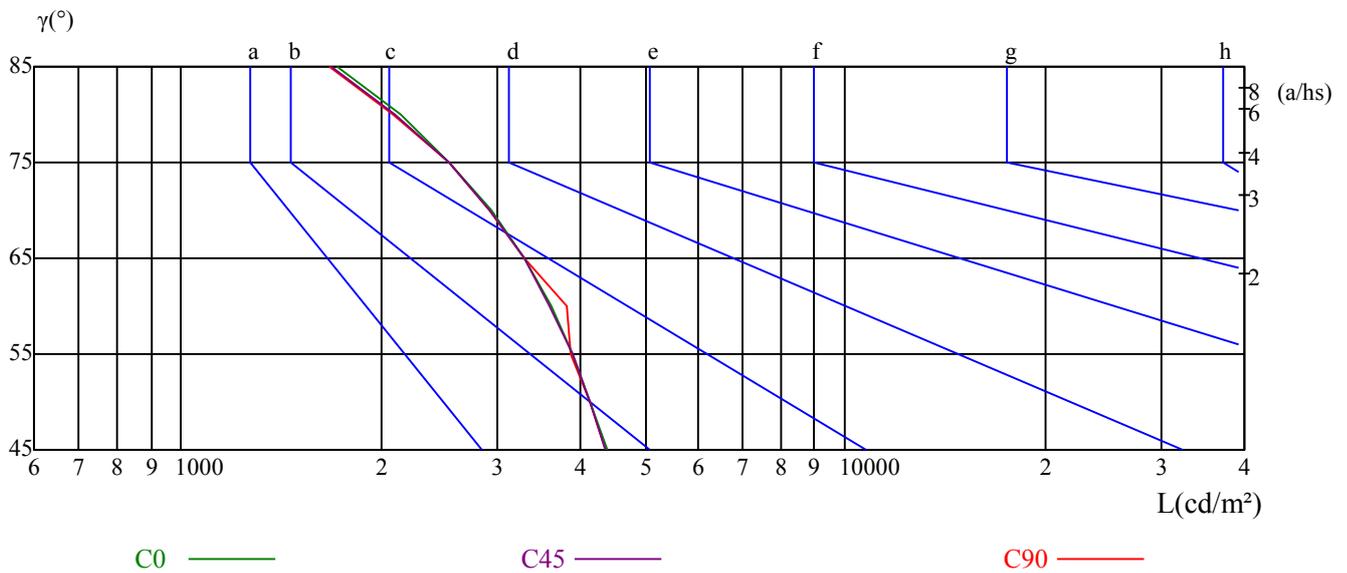
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4386	4135	3879	3608	3289	2932	2532	2143	1720
C45	4368	4129	3877	3586	3289	2922	2531	2106	1680
C90	4362	4122	3875	3820	3278	2917	2536	2079	1676

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5535	5515	5534	5540	5549	5537	7977	7773	7794

Glare Table

Glare	Quality	Service Values Illuminance(lx)							
		a	b	c	d	e	f	g	h
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

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	1.16	1.16	1.16	1.12	1.12	1.12	1.05	1.05	1.05	0.98	0.98	0.98	0.92	0.92	0.92	0.89
1	1.00	0.95	0.91	0.97	0.93	0.89	0.90	0.87	0.84	0.85	0.82	0.79	0.79	0.77	0.75	0.72
2	0.87	0.80	0.74	0.84	0.77	0.72	0.79	0.73	0.69	0.74	0.69	0.65	0.69	0.65	0.62	0.59
3	0.76	0.67	0.61	0.73	0.66	0.59	0.69	0.62	0.57	0.65	0.59	0.55	0.61	0.56	0.52	0.50
4	0.67	0.58	0.51	0.65	0.57	0.50	0.61	0.54	0.48	0.57	0.51	0.47	0.54	0.49	0.45	0.42
5	0.60	0.51	0.44	0.58	0.49	0.43	0.55	0.47	0.42	0.51	0.45	0.40	0.49	0.43	0.39	0.36
6	0.54	0.45	0.38	0.52	0.44	0.38	0.49	0.42	0.36	0.46	0.40	0.35	0.44	0.38	0.34	0.32
7	0.49	0.40	0.34	0.47	0.39	0.33	0.45	0.37	0.32	0.42	0.36	0.31	0.40	0.34	0.30	0.28
8	0.44	0.36	0.30	0.43	0.35	0.29	0.41	0.34	0.29	0.39	0.32	0.28	0.37	0.31	0.27	0.25
9	0.41	0.32	0.27	0.40	0.32	0.26	0.38	0.31	0.26	0.36	0.29	0.25	0.34	0.28	0.24	0.22
10	0.37	0.29	0.24	0.36	0.29	0.24	0.35	0.28	0.23	0.33	0.27	0.23	0.32	0.26	0.22	0.20

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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	491.74	492.90	490.22	482.81	470.30	453.51	432.87	410.54	381.87
15.0	491.74	493.00	490.21	482.38	469.87	454.57	432.70	410.29	383.38
30.0	491.74	492.82	489.84	483.06	470.58	454.02	433.58	409.44	383.93
45.0	491.74	492.37	489.92	482.03	469.61	452.73	433.23	409.46	382.61
60.0	491.74	492.65	489.46	481.73	469.27	452.71	431.87	408.04	381.11
75.0	491.74	492.19	489.09	481.07	468.30	451.25	431.37	406.56	380.57
90.0	491.74	492.38	488.72	480.40	468.98	450.78	429.94	405.90	378.93
105.0	491.74	492.47	488.53	480.10	467.09	449.68	428.69	405.78	378.84
120.0	491.74	492.01	487.98	480.00	465.87	449.26	428.25	403.94	376.69
135.0	491.74	491.65	487.61	478.71	465.31	447.59	427.95	401.98	376.38
150.0	491.74	491.19	487.42	478.42	451.77	446.44	427.33	401.97	374.68
165.0	491.74	491.56	487.06	477.96	463.82	446.74	425.53	400.65	371.72
180.0	491.74	485.93	475.48	460.47	441.45	418.85	394.73	364.99	336.04
195.0	491.74	486.07	475.45	460.69	440.98	419.02	393.37	364.93	334.16
210.0	491.74	485.86	475.64	460.63	441.54	418.75	392.70	365.30	333.10
225.0	491.74	485.84	475.41	460.08	441.76	417.72	393.14	364.56	333.72
240.0	491.74	486.28	475.91	460.99	441.88	418.96	392.94	364.37	334.80
255.0	491.74	485.81	475.51	462.01	443.13	420.60	394.70	366.07	335.06
270.0	491.74	486.71	476.65	462.12	443.10	420.71	394.93	368.23	335.60
285.0	491.74	486.88	477.81	462.51	445.00	422.73	397.26	368.94	361.98
300.0	491.74	487.34	477.70	463.67	459.35	423.12	397.98	370.00	339.35
315.0	491.74	486.97	477.79	463.93	446.49	423.92	399.69	371.79	341.59
330.0	491.74	487.33	478.60	464.82	447.09	425.59	400.59	372.94	342.62
345.0	491.74	487.61	478.61	465.11	447.02	425.44	401.84	374.20	344.35
360.0	491.74	492.90	490.22	482.81	470.30	453.51	432.87	410.54	381.87
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	354.27	320.68	289.06	253.77	217.24	179.81	142.30	108.08	74.94
15.0	353.95	322.19	288.71	255.41	216.98	181.88	144.35	108.18	75.06
30.0	353.18	323.24	289.78	254.69	218.42	181.25	145.61	107.81	76.33
45.0	353.22	321.93	288.46	253.53	218.88	181.96	144.77	108.76	75.83
60.0	352.00	321.70	288.58	253.65	217.53	180.68	143.66	109.45	76.51
75.0	351.39	320.01	286.73	251.89	217.69	180.75	143.73	107.98	76.88
90.0	349.49	318.04	286.50	251.77	215.75	178.81	143.80	106.14	75.51
105.0	351.35	317.99	284.63	249.63	215.63	178.79	141.68	106.12	73.95
120.0	347.15	317.52	282.20	249.26	213.12	176.24	139.36	105.69	72.11
135.0	346.82	315.16	281.75	246.79	212.28	173.55	138.58	103.25	71.59
150.0	346.11	313.03	281.15	246.05	209.76	172.83	135.89	100.70	70.56
165.0	343.90	312.03	278.42	243.25	208.45	171.44	134.53	99.45	67.95
180.0	303.35	269.05	231.44	196.34	159.00	122.56	88.34	59.85	36.89
195.0	301.40	266.84	230.84	193.85	158.39	121.76	87.39	57.51	35.19
210.0	301.54	266.90	230.90	193.73	156.20	119.48	85.29	56.80	34.19
225.0	300.61	265.78	231.22	192.40	156.47	119.65	85.27	55.24	33.11
240.0	300.23	267.11	230.99	193.60	155.85	118.91	85.97	54.41	32.84
255.0	302.05	267.30	230.91	195.53	157.68	120.75	85.91	78.52	33.01
270.0	304.51	269.78	233.48	224.89	159.16	122.04	87.21	56.77	33.46
285.0	305.80	271.35	235.24	197.94	160.28	123.16	90.08	57.73	35.10
300.0	306.69	274.22	236.33	201.10	163.39	126.24	91.10	60.27	36.05
315.0	309.29	274.96	239.17	202.18	164.74	127.48	92.42	62.78	38.00
330.0	311.56	276.10	242.01	203.42	167.59	130.56	95.19	63.86	38.87
345.0	312.12	278.06	242.61	205.79	168.23	131.13	97.52	64.46	40.40
360.0	354.27	320.68	289.06	253.77	217.24	179.81	142.30	108.08	74.94

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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	46.99	34.12	33.94	33.50	32.78	31.62	30.55	29.39	27.60
15.0	48.42	34.29	34.11	33.57	32.85	31.86	30.78	29.61	28.17
30.0	48.30	34.46	34.28	33.74	32.83	31.84	30.75	29.30	27.95
45.0	49.26	34.74	34.56	33.93	32.93	31.93	30.75	29.39	28.03
60.0	48.58	35.21	34.94	34.39	33.48	32.39	31.21	29.84	28.29
75.0	47.70	35.66	35.48	35.02	33.93	32.92	31.55	30.28	28.36
90.0	47.99	36.29	36.11	35.56	34.65	33.37	31.90	30.26	28.34
105.0	48.02	36.93	36.84	36.20	35.28	33.91	32.26	30.70	28.77
120.0	46.79	37.43	37.34	36.79	35.78	34.50	33.12	31.56	29.45
135.0	45.15	37.44	37.44	37.08	35.98	34.97	33.59	32.21	30.38
150.0	44.38	37.30	37.30	36.94	35.92	34.91	33.63	32.62	31.15
165.0	42.24	36.64	36.91	36.55	35.45	34.53	33.52	32.51	31.13
180.0	36.89	36.98	36.44	35.73	34.84	33.68	32.87	31.17	28.49
195.0	35.82	36.00	35.55	34.92	34.20	33.30	32.04	30.15	28.08
210.0	34.91	35.00	34.64	34.01	33.28	32.29	31.02	29.30	27.31
225.0	33.93	34.02	33.83	33.29	32.47	31.39	31.02	28.76	26.58
240.0	33.30	33.48	33.39	32.57	32.12	31.30	30.20	28.66	26.93
255.0	32.92	33.29	33.10	32.47	32.01	31.28	30.37	29.09	27.09
270.0	33.28	33.28	33.18	32.54	31.90	30.99	30.17	28.80	26.88
285.0	33.45	33.54	33.36	32.81	32.26	31.07	30.15	28.87	27.13
300.0	33.76	33.94	33.76	33.12	32.48	31.38	30.37	28.90	26.97
315.0	34.05	34.05	34.05	33.31	32.49	31.39	30.10	28.18	25.88
330.0	34.36	34.36	34.09	33.44	32.34	30.96	29.31	27.56	25.36
345.0	34.53	34.34	34.16	33.33	32.14	30.67	29.11	27.09	25.07
360.0	46.99	34.12	33.94	33.50	32.78	31.62	30.55	29.39	27.60
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	25.64	23.76	21.80	20.01	18.22	16.53	14.20	11.79	9.74
15.0	26.10	23.94	21.96	20.34	18.99	17.37	14.94	12.24	9.72
30.0	26.32	24.15	22.52	20.53	18.99	17.46	14.92	12.39	9.68
45.0	26.22	24.40	22.50	20.68	18.78	17.14	15.06	12.52	10.07
60.0	26.47	24.20	22.29	20.38	18.74	17.19	15.10	12.56	10.37
75.0	26.26	24.26	22.43	20.61	19.06	17.42	14.77	12.40	10.12
90.0	26.24	24.13	22.21	20.39	18.65	16.91	14.44	12.07	10.06
105.0	26.67	24.47	22.36	20.44	18.33	16.59	14.57	12.10	10.08
120.0	27.25	24.86	23.03	20.83	18.99	16.97	15.41	12.75	10.18
135.0	28.36	26.34	24.32	22.12	19.64	17.53	16.15	13.67	10.37
150.0	28.85	26.83	25.63	23.06	20.03	17.73	16.54	14.06	10.47
165.0	29.20	27.36	25.62	22.96	20.48	17.91	16.44	14.05	10.84
180.0	26.17	23.85	21.53	18.94	16.88	14.65	12.15	9.65	9.29
195.0	25.92	24.12	21.96	19.35	16.74	16.11	11.43	9.63	9.36
210.0	25.14	24.51	21.07	18.54	15.92	13.48	11.40	9.68	9.23
225.0	24.58	22.68	20.50	18.50	15.78	13.24	11.25	9.62	9.07
240.0	25.02	23.20	21.11	19.47	16.65	13.56	11.28	9.64	8.28
255.0	24.71	22.71	21.07	19.79	17.51	13.95	11.67	10.03	7.93
270.0	24.96	22.95	20.75	19.11	17.19	14.17	11.88	9.51	7.86
285.0	25.20	22.82	20.53	18.79	16.77	14.30	11.73	9.26	7.88
300.0	24.95	22.66	20.46	18.44	16.42	14.13	11.56	8.99	8.53
315.0	23.77	21.57	19.55	17.44	15.79	13.31	10.92	8.99	8.72
330.0	22.97	20.76	18.65	16.63	14.98	12.59	10.57	8.73	8.73
345.0	22.68	20.39	18.27	16.07	14.14	12.21	10.28	8.63	8.82
360.0	25.64	23.76	21.80	20.01	18.22	16.53	14.20	11.79	9.74

Intensity data(cd)

C/γ(°)	180.0
0.0	9.29
15.0	8.28
30.0	8.05
45.0	7.98
60.0	8.10
75.0	8.39
90.0	8.87
105.0	9.26
120.0	9.17
135.0	8.72
150.0	8.64
165.0	8.63
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	9.29