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乐达凯

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Client:

LumCAT: ALDF12LAJUDBK 3000K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.040

LampCAT:

Current(A): 0.176

Lamp flux(lm): 1362.2

Power (W): 20.880

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): 1362.19, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 65.24

Central intensity(cd): 463.545, Maximum intensity(cd): 463.545

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

Beam Angle(50%Imax): [C0/180]Total=110.2

[C90/270]Total=111.0

Field angle(10%Imax): [C0/180]Total=162.8

[C90/270]Total=162.6

Maximum s/h(1/2): C0\_180=1.24 C90\_270=1.24

Maximum s/h(1/4): C0\_180=1.36 C90\_270=1.36

Up flux rate of lamp(%): 3.97%

Down flux rate of lamp(%): 96.03%

Up flux rate of LUM(%): 3.97%

Down flux rate of LUM(%): 96.03%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 75.100%

## 乐达凯 ALDF12LAJUBK 3000K

## Zonal flux distribution table

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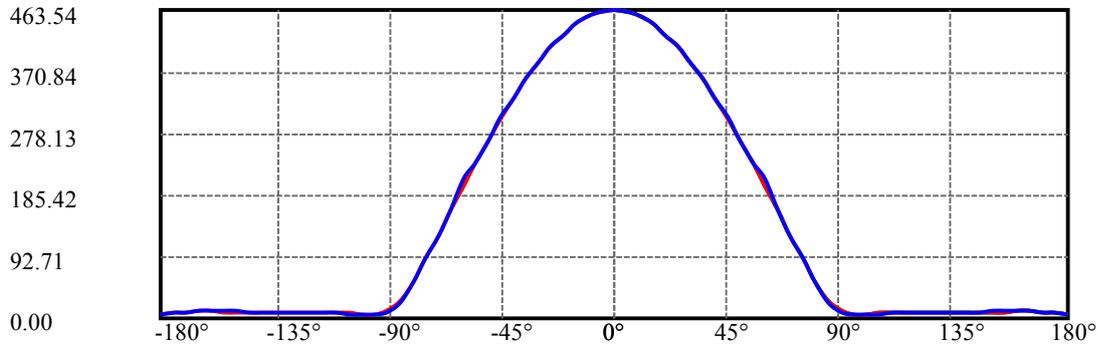
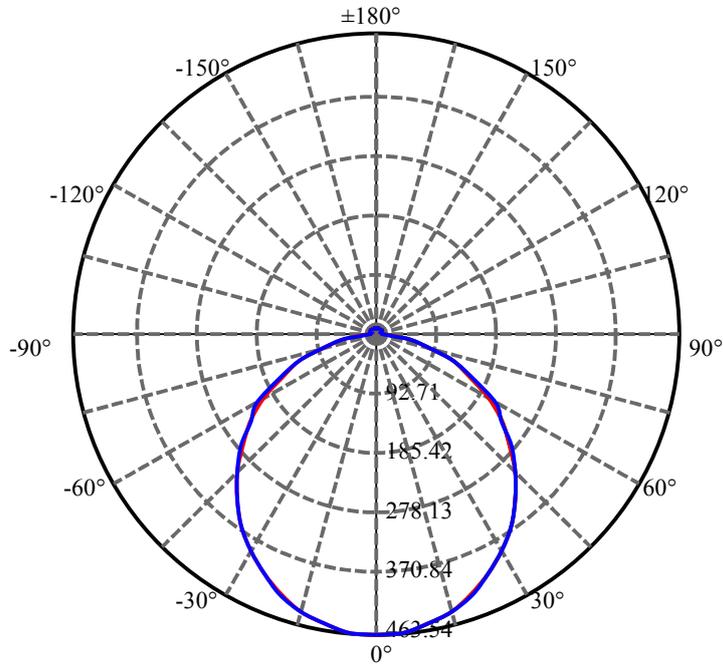
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	463.545	0.000	0	0.00%	0.00%
5.0	461.135	11.054	11.054	0.81%	0.81%
10.0	454.217	32.745	43.799	2.40%	3.22%
15.0	442.865	53.214	97.014	3.91%	7.12%
20.0	427.237	71.709	168.722	5.26%	12.39%
25.0	408.050	87.606	256.328	6.43%	18.82%
30.0	385.472	100.421	356.749	7.37%	26.19%
35.0	359.791	109.745	466.495	8.06%	34.25%
40.0	332.315	115.473	581.967	8.48%	42.72%
45.0	300.694	117.207	699.174	8.60%	51.33%
50.0	267.747	114.862	814.036	8.43%	59.76%
55.0	233.531	108.994	923.03	8.00%	67.76%
60.0	198.989	99.976	1023.006	7.34%	75.10%
65.0	161.050	87.526	1110.532	6.43%	81.53%
70.0	124.457	72.292	1182.824	5.31%	86.83%
75.0	88.537	55.673	1238.497	4.09%	90.92%
80.0	55.569	38.559	1277.056	2.83%	93.75%
85.0	24.566	21.775	1298.831	1.60%	95.35%
90.0	9.514	9.331	1308.162	0.69%	96.03%
95.0	6.359	4.346	1312.508	0.32%	96.35%
100.0	6.557	3.510	1316.018	0.26%	96.61%
105.0	7.107	3.656	1319.674	0.27%	96.88%
110.0	7.608	3.846	1323.52	0.28%	97.16%
115.0	8.226	4.009	1327.529	0.29%	97.46%
120.0	8.776	4.133	1331.662	0.30%	97.76%
125.0	9.247	4.166	1335.828	0.31%	98.06%
130.0	9.520	4.081	1339.909	0.30%	98.36%
135.0	9.630	3.870	1343.779	0.28%	98.65%
140.0	9.847	3.606	1347.385	0.26%	98.91%
145.0	10.041	3.318	1350.703	0.24%	99.16%
150.0	10.231	2.985	1353.688	0.22%	99.38%
155.0	10.319	2.601	1356.289	0.19%	99.57%
160.0	10.337	2.166	1358.455	0.16%	99.73%
165.0	10.151	1.688	1360.144	0.12%	99.85%
170.0	9.816	1.184	1361.328	0.09%	99.94%
175.0	9.603	0.695	1362.023	0.05%	99.99%
180.0	4.671	0.171	1362.194	0.01%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	356.75	26.19%	26.19%
0-40	581.97	42.72%	42.72%
0-60	1023.01	75.10%	75.10%
0-90	1308.16	96.03%	96.03%
0-120	1331.66	97.76%	97.76%
0-180	1362.19	100.00%	100.00%
60-90	285.16	20.93%	20.93%
90-120	23.50	1.73%	1.73%
90-130	31.75	2.33%	2.33%
90-150	45.53	3.34%	3.34%
90-180	53.86	3.95%	3.95%
0-63.81	1089.76	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	43.80
10-20	124.92
20-30	188.03
30-40	225.22
40-50	232.07
50-60	208.97
60-70	159.82
70-80	94.23
80-90	31.11
90-100	7.86
100-110	7.50
110-120	8.14
120-130	8.25
130-140	7.48
140-150	6.30
150-160	4.77
160-170	2.87
170-180	0.69



C0(Max): —————

C0/C180: —————

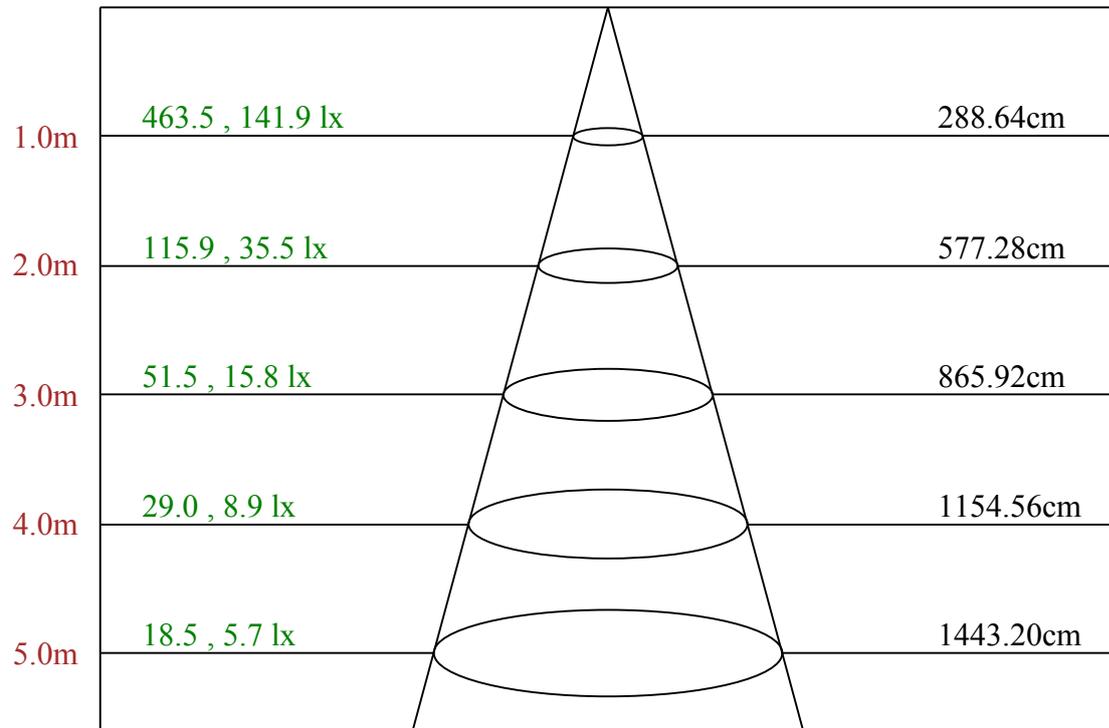
C90/C270: —————

Field angle(10%Imax):C0/180Left:81.4 Right:81.4

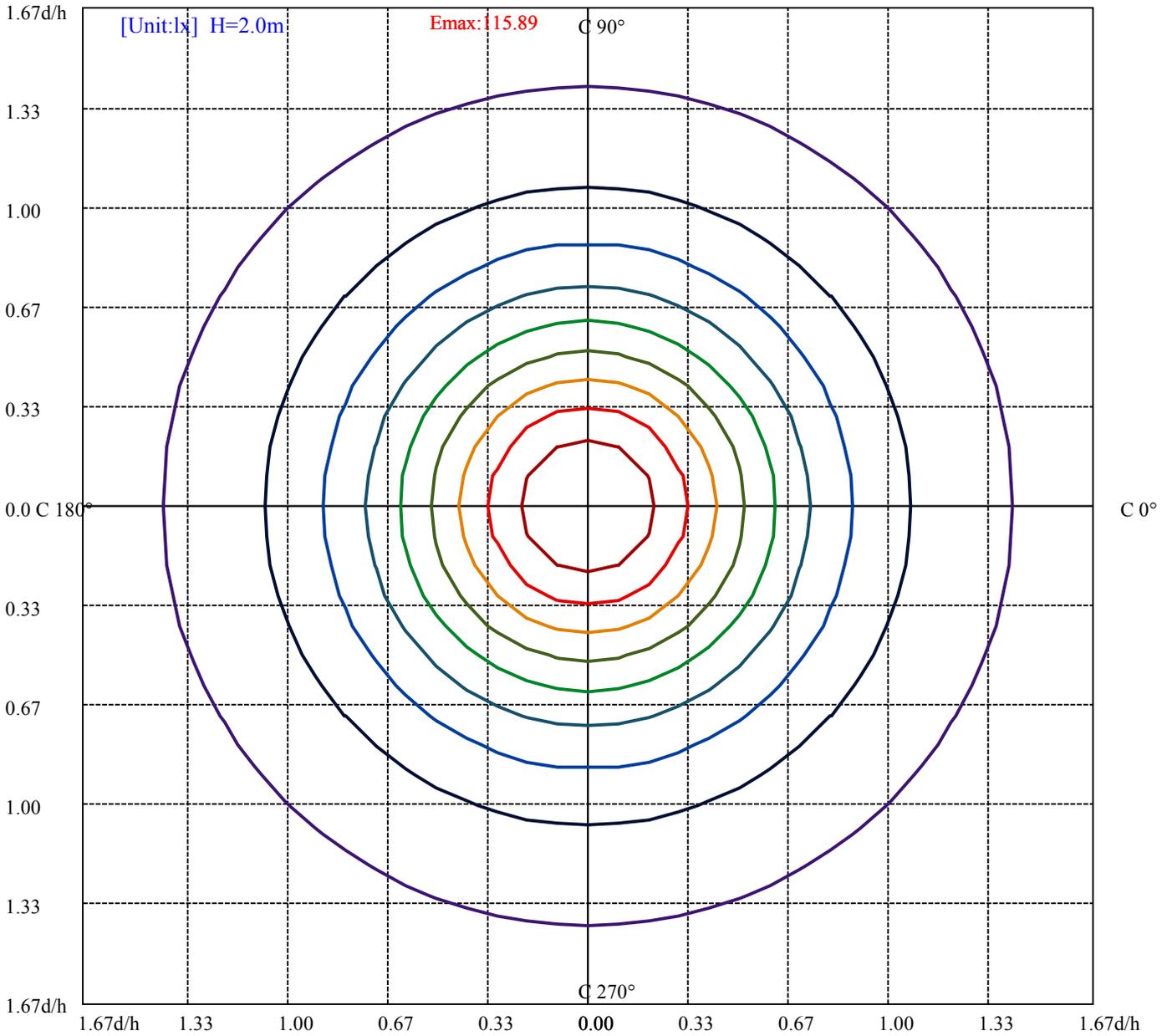
:C90/270Left:81.3 Right:81.3

Beam Angle(50%Imax):C0/180Left:55.1 Right:55.1

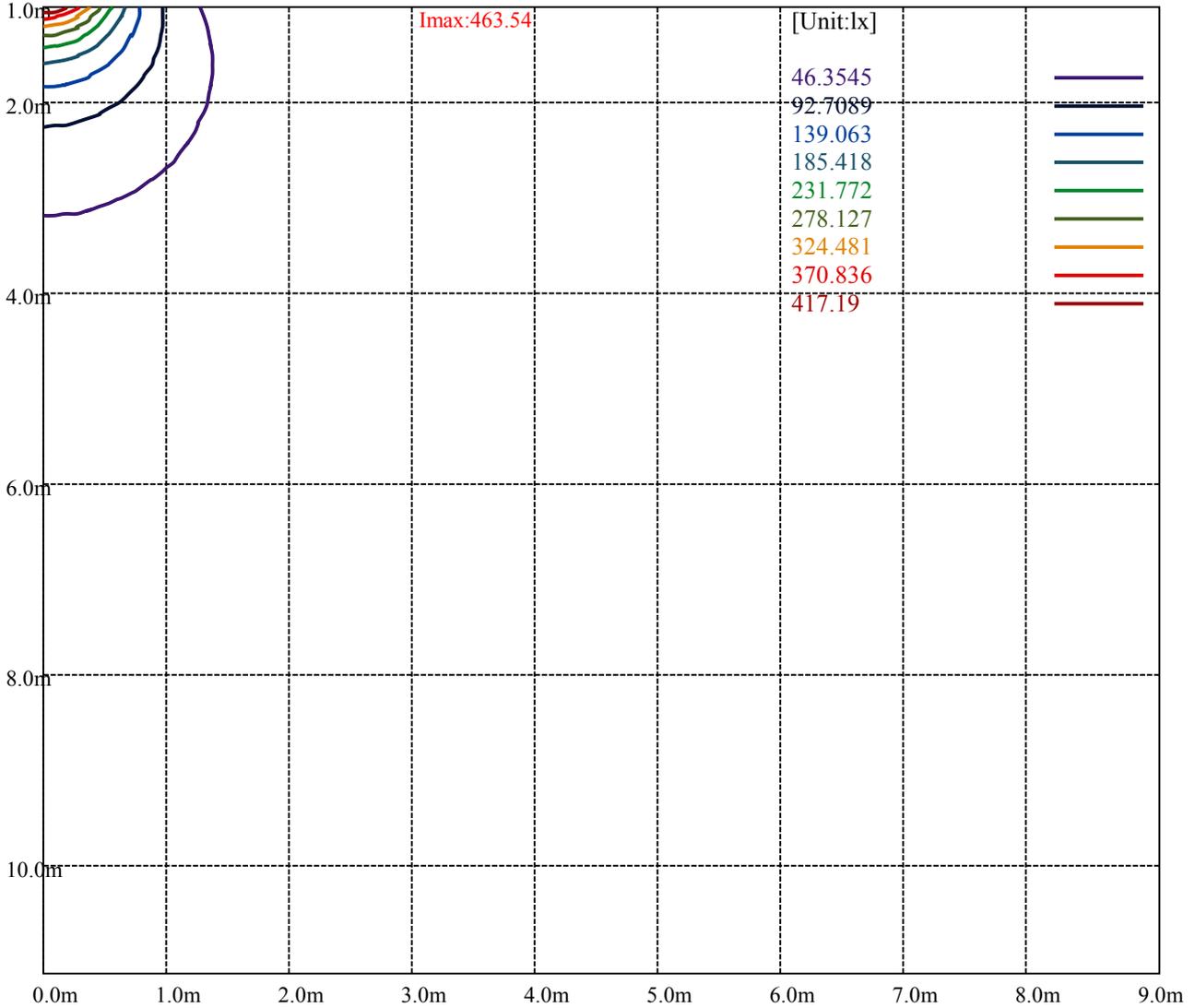
:C90/270Left:55.5 Right:55.5



Max , Ave      Beam angle of C0 plane 110.56



(10%Emax) 11.58862	—
(20%Emax) 23.17723	—
(30%Emax) 34.76575	—
(40%Emax) 46.3545	—
(50%Emax) 57.943	—
(60%Emax) 69.53175	—
(70%Emax) 81.12025	—
(80%Emax) 92.709	—
(90%Emax) 104.2975	—



# 乐达凯 ALDF12LAJUDBK 3000K

## Luminance Limiting Curve(no luminous side)

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Luminance Table

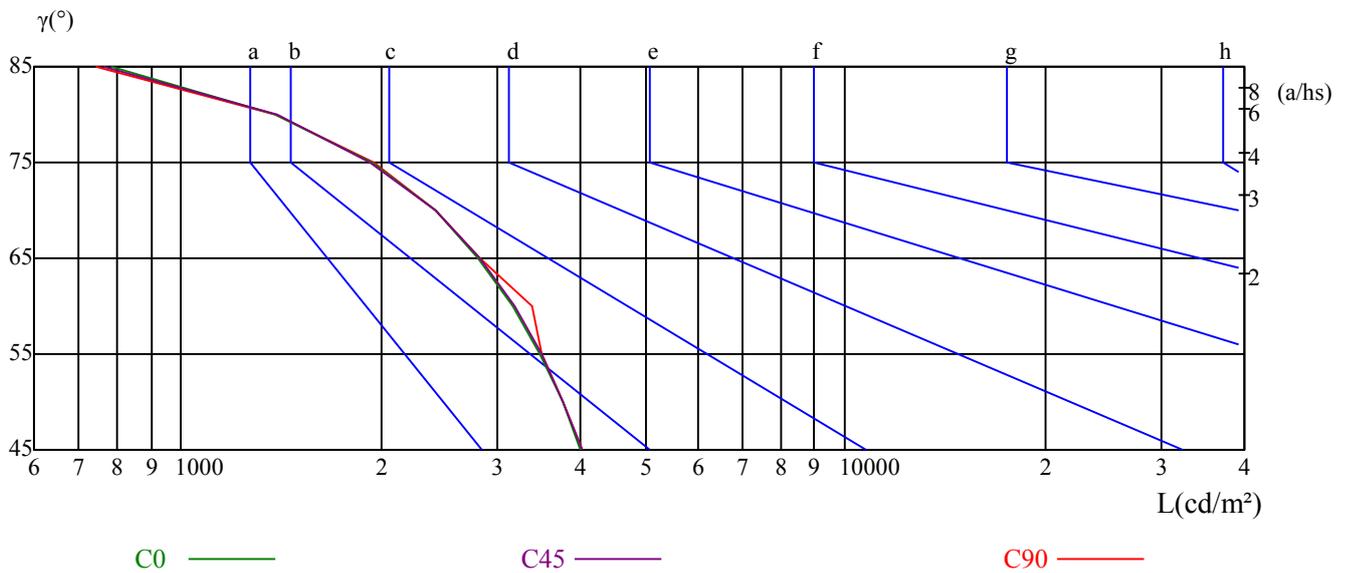
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4005	3750	3466	3162	2805	2413	1942	1391	782
C45	4009	3761	3485	3170	2813	2413	1930	1394	764
C90	4015	3760	3491	3389	2825	2418	1947	1387	743

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
4720	4753	4733	4249	4260	4223	3628	3446	3543

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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.03	1.03	1.03	0.98	0.98	0.98	0.96
1	1.03	0.98	0.94	1.00	0.96	0.93	0.95	0.92	0.89	0.91	0.88	0.85	0.86	0.84	0.82	0.80
2	0.89	0.83	0.77	0.87	0.81	0.76	0.83	0.78	0.73	0.79	0.75	0.71	0.76	0.72	0.69	0.66
3	0.78	0.70	0.64	0.77	0.69	0.63	0.73	0.67	0.61	0.70	0.64	0.60	0.67	0.62	0.58	0.56
4	0.69	0.61	0.54	0.68	0.60	0.53	0.65	0.58	0.52	0.62	0.56	0.51	0.59	0.54	0.50	0.48
5	0.62	0.53	0.46	0.61	0.52	0.46	0.58	0.51	0.45	0.56	0.49	0.44	0.53	0.48	0.43	0.41
6	0.56	0.47	0.40	0.55	0.46	0.40	0.52	0.45	0.39	0.50	0.44	0.39	0.48	0.43	0.38	0.36
7	0.51	0.42	0.36	0.50	0.41	0.35	0.48	0.40	0.35	0.46	0.39	0.34	0.44	0.38	0.34	0.32
8	0.46	0.38	0.32	0.45	0.37	0.32	0.44	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.30	0.28
9	0.42	0.34	0.29	0.42	0.34	0.28	0.40	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.27	0.25
10	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.25	0.36	0.30	0.25	0.35	0.29	0.25	0.23

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## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	463.54	464.53	460.68	452.28	439.32	423.50	403.39	379.35	352.71
15.0	463.54	464.26	461.20	452.74	439.96	422.94	402.33	378.38	351.64
30.0	463.54	464.72	460.83	452.15	439.40	422.21	401.41	378.34	351.30
45.0	463.54	464.18	459.92	451.48	438.51	421.46	400.78	378.56	349.90
60.0	463.54	464.46	460.45	451.61	438.50	421.37	402.15	378.10	351.32
75.0	463.54	463.91	460.81	451.96	439.00	421.75	401.04	377.04	350.03
90.0	463.54	464.09	459.71	450.85	437.79	421.54	399.62	377.16	350.31
105.0	463.54	464.00	459.34	450.92	438.02	421.01	400.24	376.27	350.29
120.0	463.54	464.00	459.60	450.63	437.52	420.11	400.14	375.22	349.38
135.0	463.54	463.91	459.14	450.43	436.94	419.79	398.96	375.02	348.05
150.0	463.54	463.64	459.31	450.40	424.28	419.68	398.81	375.45	348.42
165.0	463.54	463.18	458.58	449.39	435.88	418.41	398.74	373.10	344.88
180.0	463.54	457.82	447.37	433.06	414.29	392.66	367.64	339.93	309.72
195.0	463.54	457.69	447.61	433.21	414.48	392.51	367.13	339.13	308.97
210.0	463.54	457.76	448.08	432.52	415.25	393.18	368.30	339.99	310.78
225.0	463.54	457.92	447.58	433.16	414.57	392.44	368.86	339.29	310.81
240.0	463.54	458.17	448.15	434.49	415.45	394.32	369.27	341.58	311.25
255.0	463.54	458.53	448.58	434.44	416.37	394.74	369.83	343.46	311.80
270.0	463.54	458.34	448.48	434.41	416.97	395.60	370.95	343.55	313.50
285.0	463.54	458.70	449.18	435.46	417.62	396.21	371.60	345.26	337.21
300.0	463.54	458.51	449.62	436.06	431.11	396.01	373.20	344.25	316.30
315.0	463.54	457.95	448.32	436.02	416.94	397.04	372.63	345.30	315.48
330.0	463.54	458.76	449.29	435.50	417.84	398.07	372.23	346.58	316.69
345.0	463.54	458.21	449.39	435.60	417.68	396.63	372.09	344.69	314.82
360.0	463.54	464.53	460.68	452.28	439.32	423.50	403.39	379.35	352.71
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	323.30	291.84	258.05	224.35	187.80	150.79	113.70	77.85	44.42
15.0	322.11	290.42	258.38	223.08	186.62	149.35	113.97	78.14	44.83
30.0	323.71	290.61	258.68	221.69	186.77	149.60	112.61	76.97	43.78
45.0	322.51	290.86	257.30	221.93	185.38	150.28	111.37	77.54	44.26
60.0	321.99	290.21	256.59	223.16	184.54	149.38	112.40	76.60	43.27
75.0	320.65	288.89	257.32	221.92	185.33	148.28	112.97	75.46	43.71
90.0	320.99	289.49	255.70	220.36	185.56	148.58	111.69	75.89	42.46
105.0	319.92	289.54	254.51	220.75	184.25	147.20	110.33	76.30	42.72
120.0	319.96	288.35	254.73	219.36	184.54	145.78	110.59	74.77	41.32
135.0	320.07	286.86	254.57	219.25	182.92	145.68	108.80	74.95	41.56
150.0	318.90	286.99	253.34	219.77	183.17	146.12	108.97	73.38	40.00
165.0	317.12	285.13	253.33	219.50	181.08	143.94	109.02	71.51	39.98
180.0	277.18	242.95	207.10	170.19	133.09	98.05	63.19	31.11	6.44
195.0	277.55	241.72	207.33	170.51	133.15	96.51	61.76	31.33	6.21
210.0	277.04	242.58	206.49	169.50	134.04	97.41	62.50	30.39	5.88
225.0	276.17	243.79	207.87	170.87	133.50	96.86	62.04	29.84	5.62
240.0	278.64	244.11	208.14	173.16	133.99	99.01	64.03	31.33	5.47
255.0	280.68	246.28	210.51	173.46	136.23	101.47	64.42	56.67	5.47
270.0	281.09	246.75	212.78	202.46	137.53	100.82	65.66	32.78	5.84
285.0	282.23	248.01	213.98	177.29	140.06	103.28	67.88	34.67	6.04
300.0	284.23	250.05	214.32	177.57	141.93	103.36	69.64	36.28	6.78
315.0	283.37	251.27	215.67	179.07	141.64	104.76	69.44	36.14	7.89
330.0	284.60	250.58	214.90	178.12	140.78	105.93	68.69	37.33	7.82
345.0	282.65	248.64	213.16	178.41	141.28	104.51	69.21	36.40	7.81
360.0	323.30	291.84	258.05	224.35	187.80	150.79	113.70	77.85	44.42

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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	15.55	5.90	6.08	6.08	6.17	6.61	7.15	7.69	8.22
15.0	14.67	5.94	6.03	5.94	6.03	6.39	6.75	7.38	7.83
30.0	15.10	5.97	6.06	5.97	6.06	6.33	6.78	7.15	7.69
45.0	12.61	5.99	6.08	6.08	5.99	6.26	6.53	6.98	7.26
60.0	12.84	6.01	6.10	6.01	6.01	5.83	6.19	6.65	7.01
75.0	12.87	5.84	6.11	6.02	5.93	5.84	6.11	6.66	6.93
90.0	12.97	6.03	6.12	6.12	5.94	6.03	6.30	6.85	7.31
105.0	11.89	6.04	6.22	6.13	6.13	6.59	6.95	7.50	7.96
120.0	10.90	6.23	6.41	6.32	6.51	6.96	7.42	8.06	8.43
135.0	11.19	6.15	6.51	6.61	6.88	7.25	7.80	8.53	8.99
150.0	11.49	6.25	6.71	6.80	7.26	7.91	8.74	9.47	10.02
165.0	10.39	6.25	6.80	6.99	7.45	8.18	9.10	9.93	10.48
180.0	6.88	7.33	7.60	8.40	9.12	9.92	10.55	10.73	10.82
195.0	6.75	7.20	7.38	8.55	9.36	10.26	10.89	11.16	11.25
210.0	6.60	6.96	7.05	8.50	9.50	10.67	11.58	11.94	12.03
225.0	6.26	6.62	6.89	8.43	9.52	10.79	11.06	12.06	11.97
240.0	6.10	6.38	6.56	8.02	9.20	10.38	11.57	11.93	12.21
255.0	6.02	6.39	6.57	8.03	9.12	10.40	11.50	11.86	12.23
270.0	6.03	6.39	6.58	7.94	9.22	10.23	11.14	11.51	11.69
285.0	6.04	6.50	6.59	7.87	8.97	9.88	10.34	10.70	10.80
300.0	6.14	6.51	6.78	7.79	8.52	9.16	9.62	9.80	9.90
315.0	6.33	6.51	6.79	7.61	8.16	8.81	9.17	9.36	9.36
330.0	6.34	6.62	6.71	7.26	7.91	8.55	8.83	9.10	9.29
345.0	6.34	6.62	6.62	7.08	7.63	8.18	8.55	8.92	8.82
360.0	15.55	5.90	6.08	6.08	6.17	6.61	7.15	7.69	8.22
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	8.49	8.76	9.03	9.47	9.83	10.64	10.64	10.46	9.30
15.0	8.01	8.37	8.73	9.27	9.63	10.35	10.53	10.26	9.72
30.0	7.78	8.05	8.59	9.32	9.95	10.40	10.31	10.13	9.86
45.0	7.53	8.16	8.62	9.25	9.89	9.98	9.70	9.89	9.43
60.0	7.29	7.65	8.20	8.84	9.29	9.47	9.47	9.66	9.38
75.0	7.30	7.76	8.39	8.94	9.58	9.76	9.58	9.58	9.40
90.0	7.49	7.94	8.68	9.50	10.14	10.32	10.05	9.77	9.50
105.0	8.23	8.69	9.06	9.61	10.34	10.80	10.61	10.34	9.51
120.0	8.80	9.35	9.62	10.08	10.72	11.18	11.09	10.72	9.62
135.0	9.27	9.72	10.18	10.37	11.01	11.28	11.28	10.92	10.00
150.0	10.12	10.21	10.67	11.03	11.03	11.40	11.22	10.94	10.30
165.0	10.75	10.94	11.12	11.12	11.03	11.12	11.03	10.75	9.84
180.0	10.55	10.64	10.37	10.01	9.83	9.83	9.65	9.65	10.73
195.0	11.25	11.16	10.98	10.53	10.17	9.99	9.63	9.54	10.35
210.0	12.03	12.03	11.76	11.40	10.76	10.31	10.04	9.77	9.32
225.0	12.15	12.52	12.61	12.06	11.16	10.79	10.61	10.34	9.07
240.0	12.30	12.39	12.66	12.11	11.39	10.93	10.75	9.56	9.02
255.0	12.32	12.50	12.41	11.95	11.13	10.86	10.68	9.40	8.94
270.0	11.60	11.60	11.42	11.32	10.96	10.50	10.14	9.31	9.59
285.0	10.61	10.43	10.34	10.70	10.61	10.15	9.42	9.15	9.88
300.0	9.71	9.62	9.62	9.90	9.99	9.53	9.25	8.80	9.71
315.0	9.36	9.36	9.27	9.45	9.72	9.36	9.08	8.62	9.63
330.0	9.29	9.38	9.38	9.56	9.84	9.56	9.29	8.74	9.29
345.0	8.92	9.10	9.28	9.74	9.65	9.56	9.56	9.28	9.10
360.0	8.49	8.76	9.03	9.47	9.83	10.64	10.64	10.46	9.30

Intensity data(cd)

C/γ(°)	180.0
0.0	10.55
15.0	8.37
30.0	8.59
45.0	9.07
60.0	9.47
75.0	9.49
90.0	9.68
105.0	9.42
120.0	9.35
135.0	9.36
150.0	9.29
165.0	9.47
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	10.55