
乐达凯

Client:

LumCAT: BRQP42LAJUDBK-2700K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No: LCZP25120115

Voltage(V): 120.050

LampCAT:

Current(A): 0.316

Lamp flux(lm): 2794.2

Power (W): 37.450

Number of Lamps: 1

PF: 0.988

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 870

Photometric Results

Lumens(lm): 2794.19, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 74.61

Central intensity(cd): 71.400, Maximum intensity(cd): 250.264

Angle of maximum intensity: C=0.0 γ =85.0

Beam Angle(50%Imax): [C0/180]Total=327.2

[C90/270]Total=328.2

Field angle(10%Imax): [C0/180]Total=349.4

[C90/270]Total=352.6

Maximum s/h(1/2): C0_180=3.14 C90_270=3.19

Maximum s/h(1/4): C0_180=3.00 C90_270=3.02

Up flux rate of lamp(%): 50.50%

Down flux rate of lamp(%): 49.50%

Up flux rate of LUM(%): 50.50%

Down flux rate of LUM(%): 49.50%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 23.026%

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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	67.469	0.000	0	0.00%	0.00%
5.0	72.728	1.676	1.676	0.06%	0.06%
10.0	101.457	6.231	7.907	0.22%	0.28%
15.0	134.121	13.974	21.882	0.50%	0.78%
20.0	163.287	24.511	46.392	0.88%	1.66%
25.0	186.271	36.662	83.054	1.31%	2.97%
30.0	203.013	49.264	132.318	1.76%	4.74%
35.0	214.901	61.541	193.859	2.20%	6.94%
40.0	221.238	72.767	266.626	2.60%	9.54%
45.0	225.397	82.698	349.324	2.96%	12.50%
50.0	227.424	91.499	440.823	3.27%	15.78%
55.0	225.963	98.581	539.405	3.53%	19.30%
60.0	223.955	103.997	643.402	3.72%	23.03%
65.0	223.914	108.878	752.28	3.90%	26.92%
70.0	227.207	114.227	866.506	4.09%	31.01%
75.0	233.761	120.490	986.996	4.31%	35.32%
80.0	241.581	127.188	1114.184	4.55%	39.88%
85.0	247.801	132.977	1247.161	4.76%	44.63%
90.0	249.083	136.051	1383.212	4.87%	49.50%
95.0	244.412	135.123	1518.335	4.84%	54.34%
100.0	239.293	131.434	1649.769	4.70%	59.04%
105.0	235.017	126.912	1776.682	4.54%	63.58%
110.0	232.759	122.269	1898.951	4.38%	67.96%
115.0	232.023	117.686	2016.636	4.21%	72.17%
120.0	233.275	113.115	2129.751	4.05%	76.22%
125.0	236.941	108.689	2238.44	3.89%	80.11%
130.0	240.367	103.783	2342.223	3.71%	83.82%
135.0	240.113	97.088	2439.311	3.47%	87.30%
140.0	235.533	88.070	2527.38	3.15%	90.45%
145.0	226.555	77.096	2604.476	2.76%	93.21%
150.0	211.429	64.496	2668.972	2.31%	95.52%
155.0	189.796	50.775	2719.748	1.82%	97.34%
160.0	158.927	36.575	2756.322	1.31%	98.64%
165.0	116.564	22.704	2779.027	0.81%	99.46%
170.0	71.715	11.169	2790.195	0.40%	99.86%
175.0	28.919	3.600	2793.795	0.13%	99.99%
180.0	4.269	0.397	2794.192	0.01%	100.00%

Equipment: LC-I-902 GMS-2000
Temperature($^{\circ}$ C): 24.9

Date: 2026/3/6
Humidity(%): 61.1%

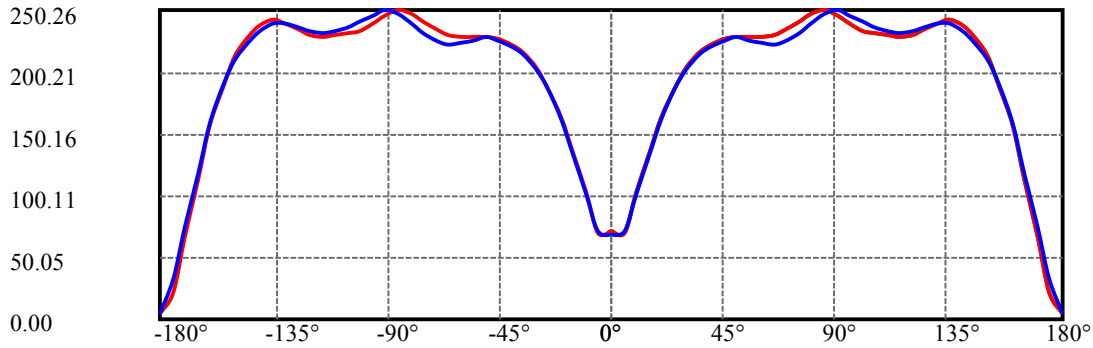
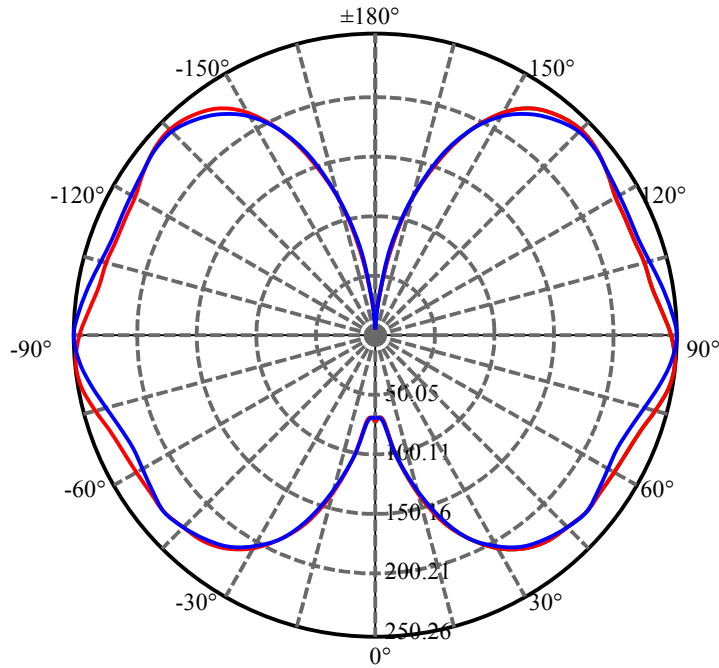
Operator: JUN WANG
Distance(m): 30.18

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	132.32	4.74%	4.74%
0-40	266.63	9.54%	9.54%
0-60	643.40	23.03%	23.03%
0-90	1383.21	49.50%	49.50%
0-120	2129.75	76.22%	76.22%
0-180	2794.19	100.00%	100.00%
60-90	739.81	26.48%	26.48%
90-120	746.54	26.72%	26.72%
90-130	959.01	34.32%	34.32%
90-150	1285.76	46.02%	46.02%
90-180	1410.58	50.48%	50.48%
0-124.86	2235.35	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	7.91
10-20	38.48
20-30	85.93
30-40	134.31
40-50	174.20
50-60	202.58
60-70	223.10
70-80	247.68
80-90	269.03
90-100	266.56
100-110	249.18
110-120	230.80
120-130	212.47
130-140	185.16
140-150	141.59
150-160	87.35
160-170	33.87
170-180	3.60



C0(Max): ———

C0/C180: ———

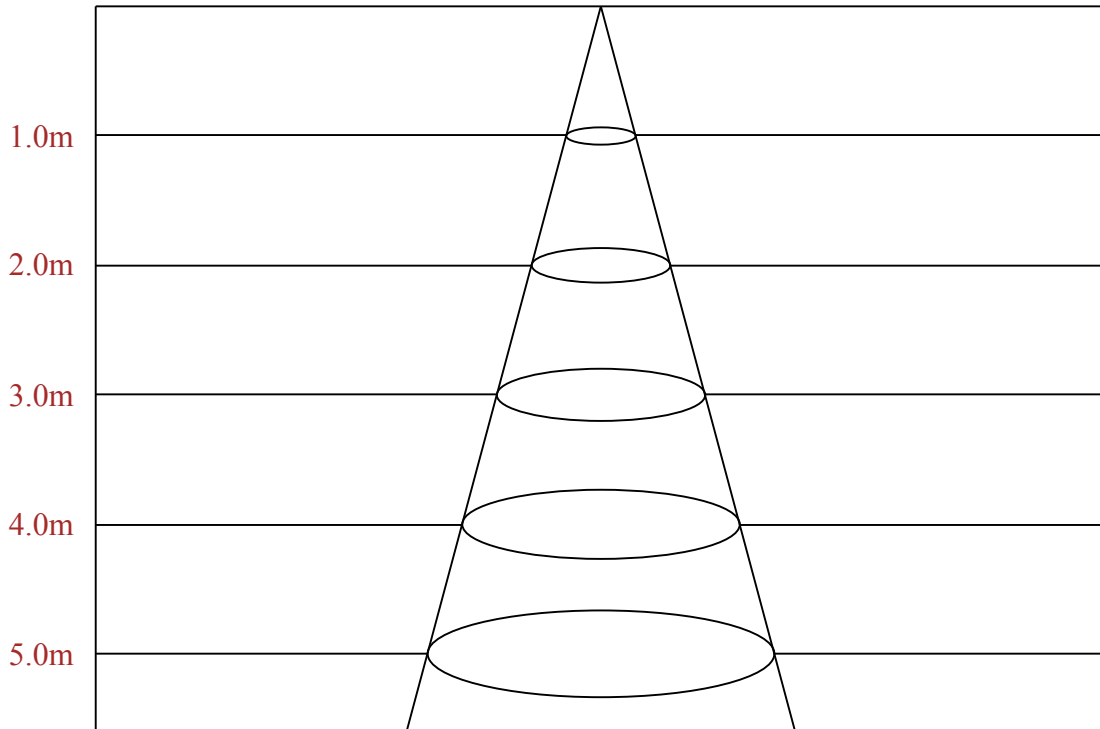
C90/C270: ———

Field angle(10%Imax):C0/180Left:259.7 Right:89.7

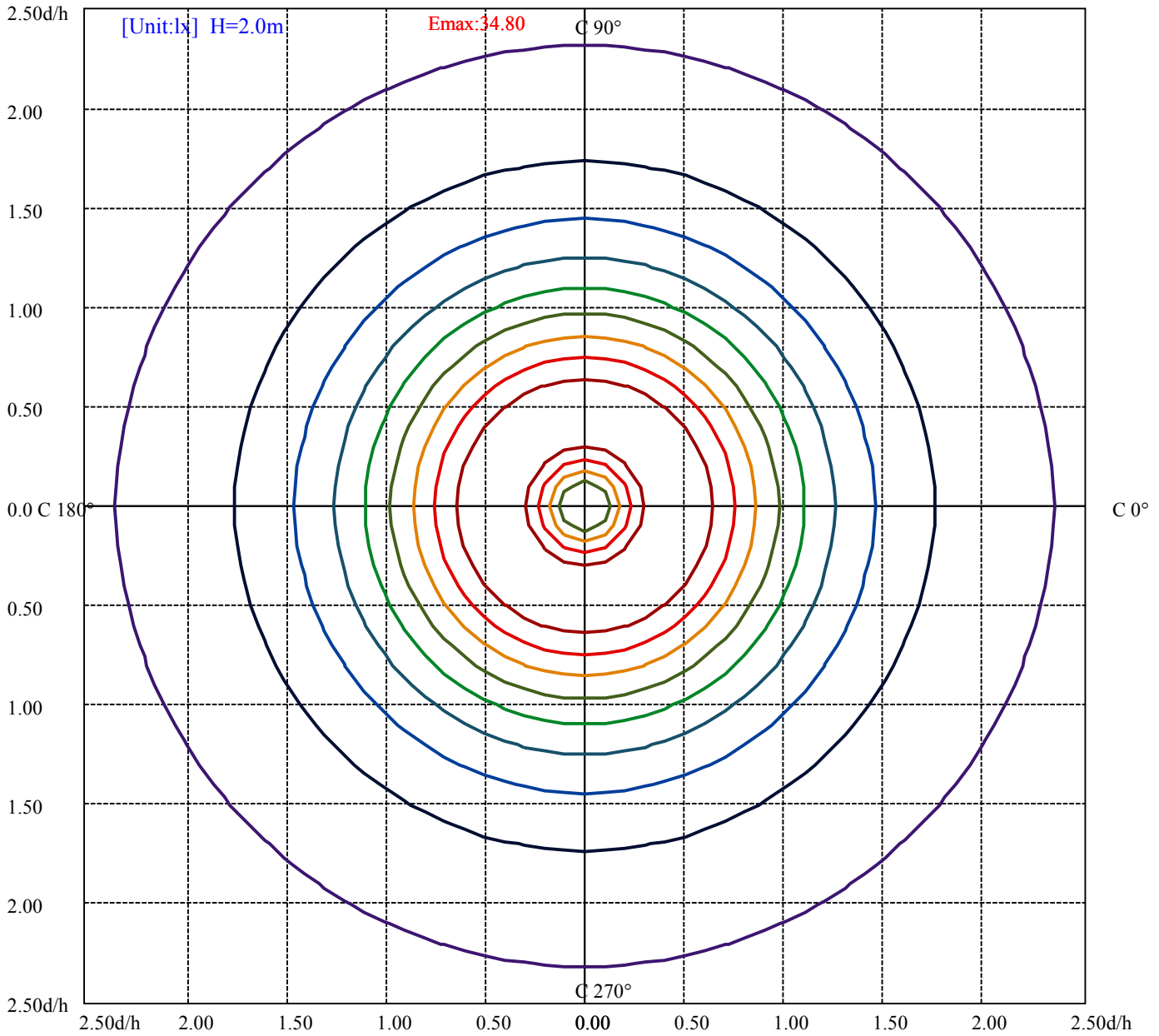
:C90/270Left:266.3 Right:86.3

Beam Angle(50%Imax):C0/180Left:248.6 Right:78.6

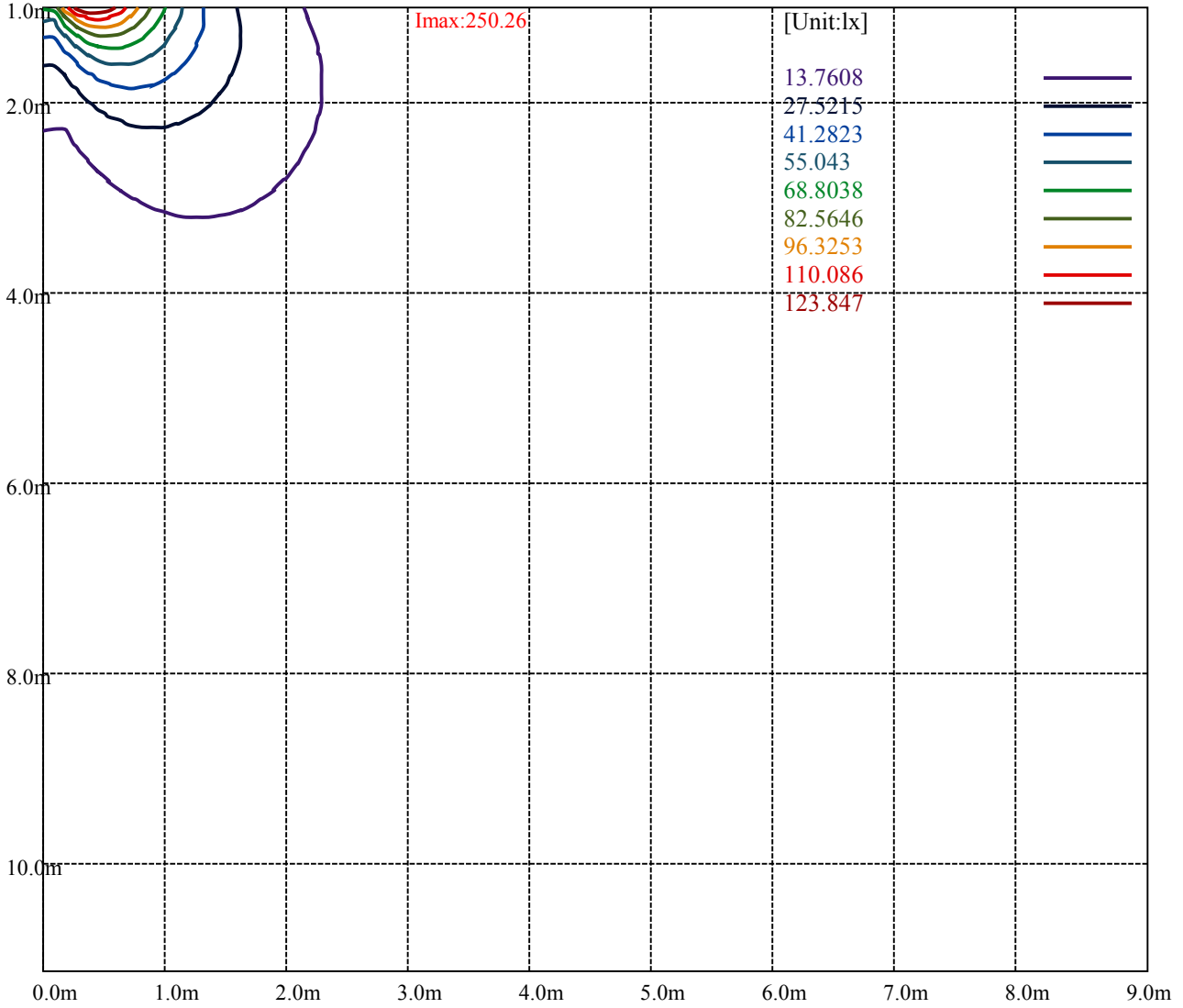
:C90/270Left:254.1 Right:74.1



Max , Ave Beam angle of C0 plane 347.11



- (10%Emax) 3.4801
- (20%Emax) 6.9602
- (30%Emax) 10.4403
- (40%Emax) 13.9204
- (50%Emax) 17.4005
- (60%Emax) 20.8806
- (70%Emax) 24.3607
- (80%Emax) 27.84075
- (90%Emax) 31.321



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Luminance Limiting Curve(no luminous side)

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Luminance Table

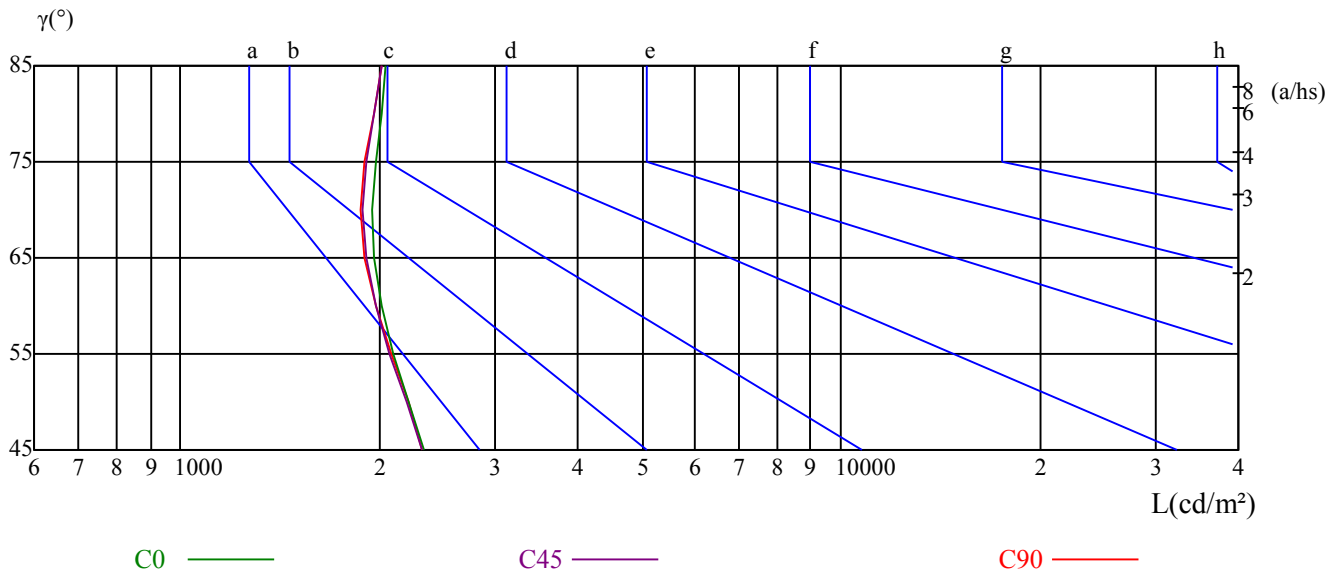
γ	45	50	55	60	65	70	75	80	85
C0	2335	2220	2105	2016	1965	1956	1982	2016	2040
C45	2323	2202	2078	1974	1910	1891	1915	1968	2018
C90	2324	2208	2079	1971	1899	1878	1900	1958	2014

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
35305	34129	34311	60517	57991	58471	186533	184123	184514

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
		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	0.87	0.81	0.76	0.79	0.74	0.70	0.66	0.62	0.58	0.53	0.50	0.48	0.42	0.40	0.38	0.32
2	0.73	0.65	0.58	0.67	0.60	0.54	0.55	0.50	0.45	0.44	0.40	0.36	0.34	0.31	0.28	0.23
3	0.63	0.54	0.47	0.57	0.49	0.43	0.47	0.41	0.36	0.38	0.33	0.29	0.29	0.25	0.22	0.18
4	0.55	0.45	0.38	0.50	0.42	0.35	0.41	0.34	0.29	0.33	0.28	0.23	0.25	0.21	0.18	0.14
5	0.48	0.39	0.32	0.44	0.36	0.29	0.36	0.29	0.24	0.29	0.24	0.20	0.22	0.18	0.15	0.11
6	0.43	0.33	0.27	0.39	0.31	0.25	0.32	0.26	0.21	0.26	0.20	0.17	0.20	0.16	0.12	0.09
7	0.38	0.29	0.23	0.35	0.27	0.21	0.29	0.22	0.18	0.23	0.18	0.14	0.18	0.14	0.11	0.08
8	0.34	0.26	0.20	0.31	0.24	0.18	0.26	0.20	0.15	0.21	0.16	0.12	0.16	0.12	0.09	0.07
9	0.31	0.23	0.17	0.29	0.21	0.16	0.24	0.18	0.13	0.19	0.14	0.11	0.15	0.11	0.08	0.06
10	0.28	0.21	0.15	0.26	0.19	0.14	0.22	0.16	0.12	0.17	0.13	0.09	0.14	0.10	0.07	0.05

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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	71.40	59.47	88.34	122.40	152.64	179.14	197.99	212.20	220.94
15.0	72.49	59.20	87.79	121.94	153.55	179.77	198.35	212.38	220.76
30.0	72.31	58.92	88.98	123.13	154.55	179.41	198.17	212.10	220.57
45.0	71.58	59.38	90.16	122.49	154.00	179.96	198.35	212.20	220.48
60.0	71.04	60.74	89.61	122.04	154.91	179.59	198.08	212.01	220.48
75.0	69.40	62.57	89.16	123.04	154.37	180.05	198.54	212.20	220.03
90.0	67.85	65.02	90.16	123.95	153.64	180.59	198.08	211.83	220.12
105.0	65.39	67.76	89.61	123.31	154.46	180.14	198.44	212.10	220.12
120.0	62.93	70.58	90.62	124.13	155.09	180.50	198.17	211.83	219.85
135.0	71.86	73.40	89.71	124.68	154.09	179.59	198.08	211.65	219.57
150.0	57.74	75.32	90.71	122.58	175.68	179.50	197.90	210.92	218.94
165.0	55.64	77.05	89.34	122.86	153.45	178.86	196.44	210.10	218.57
180.0	71.40	81.96	115.75	147.63	174.77	193.89	209.55	218.94	223.67
195.0	72.49	80.69	114.48	147.63	173.58	193.53	208.64	218.39	223.12
210.0	72.31	81.05	114.57	146.26	173.49	193.44	207.82	218.21	222.40
225.0	71.58	79.60	113.29	144.89	172.12	192.43	207.64	217.66	222.49
240.0	71.04	80.05	113.57	145.17	172.58	191.70	207.10	217.39	222.12
255.0	69.40	80.51	112.47	144.07	171.67	192.16	207.46	217.48	222.40
270.0	67.85	79.32	113.02	144.53	170.94	192.52	207.19	217.57	222.40
285.0	65.39	78.32	113.66	143.71	171.67	192.43	207.73	217.93	219.12
300.0	62.93	79.05	112.75	143.16	151.27	192.62	207.92	217.75	222.76
315.0	71.86	77.50	113.02	144.99	171.49	192.43	207.73	218.02	222.76
330.0	57.74	78.41	112.38	144.53	172.58	193.16	208.46	218.21	222.85
345.0	55.64	79.60	111.84	145.80	172.31	193.07	208.46	218.57	223.22
360.0	71.40	59.47	88.34	122.40	152.64	179.14	197.99	212.20	220.94
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	225.13	226.59	224.49	222.49	222.58	226.40	233.69	242.89	249.90
15.0	224.85	225.86	223.22	220.57	220.67	224.31	231.41	241.07	249.44
30.0	224.67	225.31	222.40	219.39	218.75	222.21	229.32	238.70	248.53
45.0	224.76	225.49	221.94	218.39	217.39	220.39	227.13	236.97	246.99
60.0	224.76	225.49	222.03	218.30	216.75	219.12	225.49	235.24	245.80
75.0	224.58	226.22	222.94	218.57	216.48	218.39	223.94	233.42	244.25
90.0	224.40	226.95	224.22	219.48	217.30	218.48	223.67	232.96	243.89
105.0	224.22	227.86	225.58	221.30	218.57	219.12	224.13	232.50	243.16
120.0	224.40	228.32	226.95	223.31	220.39	220.57	224.85	233.05	243.34
135.0	223.85	228.22	228.13	224.85	221.94	221.94	225.77	233.87	243.25
150.0	223.31	227.59	228.95	226.04	223.58	223.49	227.22	234.51	243.71
165.0	222.58	226.86	229.04	227.22	224.76	224.76	228.50	234.96	243.80
180.0	227.86	231.69	232.69	233.96	236.79	241.89	248.53	251.54	250.63
195.0	227.04	231.05	232.05	232.78	235.42	240.34	246.89	250.90	250.63
210.0	226.59	230.41	231.32	231.69	233.87	238.70	245.07	250.08	250.72
225.0	226.49	230.14	230.41	230.41	232.23	236.79	243.71	249.44	250.72
240.0	226.40	229.77	229.68	229.23	230.68	235.24	241.89	248.62	250.45
255.0	226.49	229.41	228.68	227.59	228.77	233.05	240.34	242.16	250.17
270.0	226.59	228.77	227.31	226.77	226.77	231.14	238.42	247.26	250.17
285.0	226.49	227.59	225.31	223.67	224.76	229.14	237.06	245.80	249.63
300.0	226.40	226.49	223.58	221.49	222.67	227.59	236.06	245.07	249.35
315.0	226.31	225.04	222.03	220.03	221.30	226.40	235.24	244.98	249.26
330.0	225.86	224.04	220.48	218.94	220.76	226.59	235.33	245.71	249.44
345.0	225.49	223.03	219.66	218.48	220.76	226.95	236.60	246.26	249.99
360.0	225.13	226.59	224.49	222.49	222.58	226.40	233.69	242.89	249.90

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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	251.72	252.81	253.45	252.27	250.72	250.35	250.99	249.08	246.07
15.0	251.72	252.81	253.54	253.18	251.90	251.27	251.08	248.99	245.89
30.0	251.54	252.63	253.36	253.54	252.36	251.72	250.99	248.99	245.35
45.0	251.27	252.36	253.09	253.36	252.81	251.99	250.63	248.62	244.98
60.0	251.17	252.36	253.00	253.27	252.90	251.99	250.72	248.44	244.71
75.0	250.99	252.18	252.81	253.00	252.72	252.18	250.45	248.26	244.80
90.0	251.27	252.54	253.09	253.36	252.72	252.08	250.35	248.35	245.16
105.0	251.36	252.63	253.36	253.36	252.81	252.08	250.35	248.44	245.71
120.0	251.27	252.54	253.18	253.18	252.90	251.72	250.54	248.53	245.98
135.0	251.17	252.36	252.81	252.90	252.18	250.81	249.90	248.53	246.17
150.0	250.35	251.72	251.99	252.18	251.27	249.44	248.62	248.08	245.89
165.0	249.90	250.90	251.36	251.36	249.72	247.53	247.17	247.53	245.71
180.0	240.34	225.40	214.29	210.19	207.92	206.73	209.19	220.12	233.96
195.0	242.43	227.04	215.75	210.19	207.82	206.55	208.64	218.57	232.14
210.0	243.71	229.86	217.93	210.56	208.19	206.82	208.83	218.66	231.59
225.0	245.25	232.96	219.94	211.92	208.64	207.37	207.37	219.30	231.14
240.0	247.17	235.24	232.05	213.65	209.55	208.28	211.47	219.94	231.59
255.0	248.17	237.60	225.58	216.20	211.19	210.01	213.56	221.94	232.14
270.0	249.26	240.15	227.68	218.21	213.47	212.29	215.75	223.58	233.14
285.0	249.54	241.70	229.23	220.76	215.57	215.02	218.84	226.68	235.42
300.0	249.54	242.16	230.68	222.03	217.48	217.57	222.30	230.41	239.06
315.0	249.54	241.98	231.69	223.31	219.39	219.39	224.13	232.87	240.25
330.0	249.72	242.07	231.59	224.04	220.57	222.03	227.50	235.60	240.52
345.0	249.63	241.89	231.59	224.40	221.39	223.31	229.23	237.06	241.43
360.0	251.72	252.81	253.45	252.27	250.72	250.35	250.99	249.08	246.07

C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	241.52	236.51	229.50	214.02	189.43	158.92	118.21	71.13	27.69
15.0	240.97	235.51	229.14	217.11	194.80	165.93	125.59	79.05	31.78
30.0	240.43	234.69	228.59	215.75	196.35	167.66	130.41	84.70	37.43
45.0	240.34	234.78	228.41	215.66	197.08	169.67	131.51	87.43	40.07
60.0	240.15	234.60	228.50	216.11	197.53	170.76	135.97	90.71	45.90
75.0	239.88	234.69	228.13	215.66	198.81	173.95	138.88	96.63	50.09
90.0	240.43	235.51	228.68	216.66	198.99	174.58	140.61	101.00	54.37
105.0	241.61	236.60	230.23	217.57	200.63	176.22	142.53	100.72	56.65
120.0	242.43	237.97	231.96	219.66	202.09	176.95	140.07	100.72	55.55
135.0	242.70	238.97	233.05	220.67	202.63	175.95	139.79	99.54	53.37
150.0	243.07	239.43	234.05	222.12	203.82	178.04	142.89	100.36	55.01
165.0	242.98	239.61	234.14	222.49	206.37	180.87	146.08	101.64	53.28
180.0	242.07	238.70	228.95	213.02	188.15	153.91	108.19	63.11	17.21
195.0	241.52	238.15	228.50	212.83	191.98	184.05	108.28	60.93	15.94
210.0	240.88	240.61	227.95	213.29	191.52	156.00	108.56	58.74	13.84
225.0	240.43	237.70	227.86	212.56	189.70	152.64	108.01	58.56	13.21
240.0	239.52	235.05	224.31	208.74	185.33	147.72	100.09	54.55	9.02
255.0	237.33	231.96	221.39	204.09	181.32	141.98	96.63	49.18	8.65
270.0	237.24	231.41	219.39	203.09	178.95	141.89	95.08	47.08	9.65
285.0	235.69	231.23	219.75	201.09	176.04	140.98	95.35	48.81	8.83
300.0	239.43	233.42	222.12	204.00	178.86	141.16	95.35	50.36	9.20
315.0	238.33	233.23	221.12	201.27	175.77	134.33	90.43	43.99	9.56
330.0	236.69	232.60	217.30	195.99	166.66	126.41	80.69	38.25	9.11
345.0	237.06	229.86	214.29	190.89	162.29	123.67	78.32	33.97	8.65
360.0	241.52	236.51	229.50	214.02	189.43	158.92	118.21	71.13	27.69

Intensity data(cd)

C/γ(°)	180.0
0.0	10.38
15.0	4.19
30.0	3.64
45.0	3.73
60.0	4.19
75.0	6.37
90.0	8.38
105.0	10.84
120.0	12.75
135.0	13.93
150.0	12.75
165.0	11.29
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	10.38