
乐达凯

Client:

LumCAT: LCD-RD-LS-15-CCT-120-36-WT

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 120.010

LampCAT:

Current(A): 0.119

Lamp flux(lm): 1195.2

Power (W): 13.910

Number of Lamps: 1

PF: 0.974

Length(mm): -70

Width(mm): -70

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1195.19, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 85.92

Central intensity(cd): 2115.367, Maximum intensity(cd): 2115.367

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=38.8

[C90/270]Total=39.0

Field angle(10%Imax): [C0/180]Total=69.4

[C90/270]Total=69.4

Maximum s/h(1/2): C0_180=0.64 C90_270=0.64

Maximum s/h(1/4): C0_180=0.63 C90_270=0.63

Up flux rate of lamp(%): 0.33%

Down flux rate of lamp(%): 99.67%

Up flux rate of LUM(%): 0.33%

Down flux rate of LUM(%): 99.67%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 95.365%

乐达凯 LCD-RD-LS-15-CCT-120-36-WT

Zonal flux distribution table

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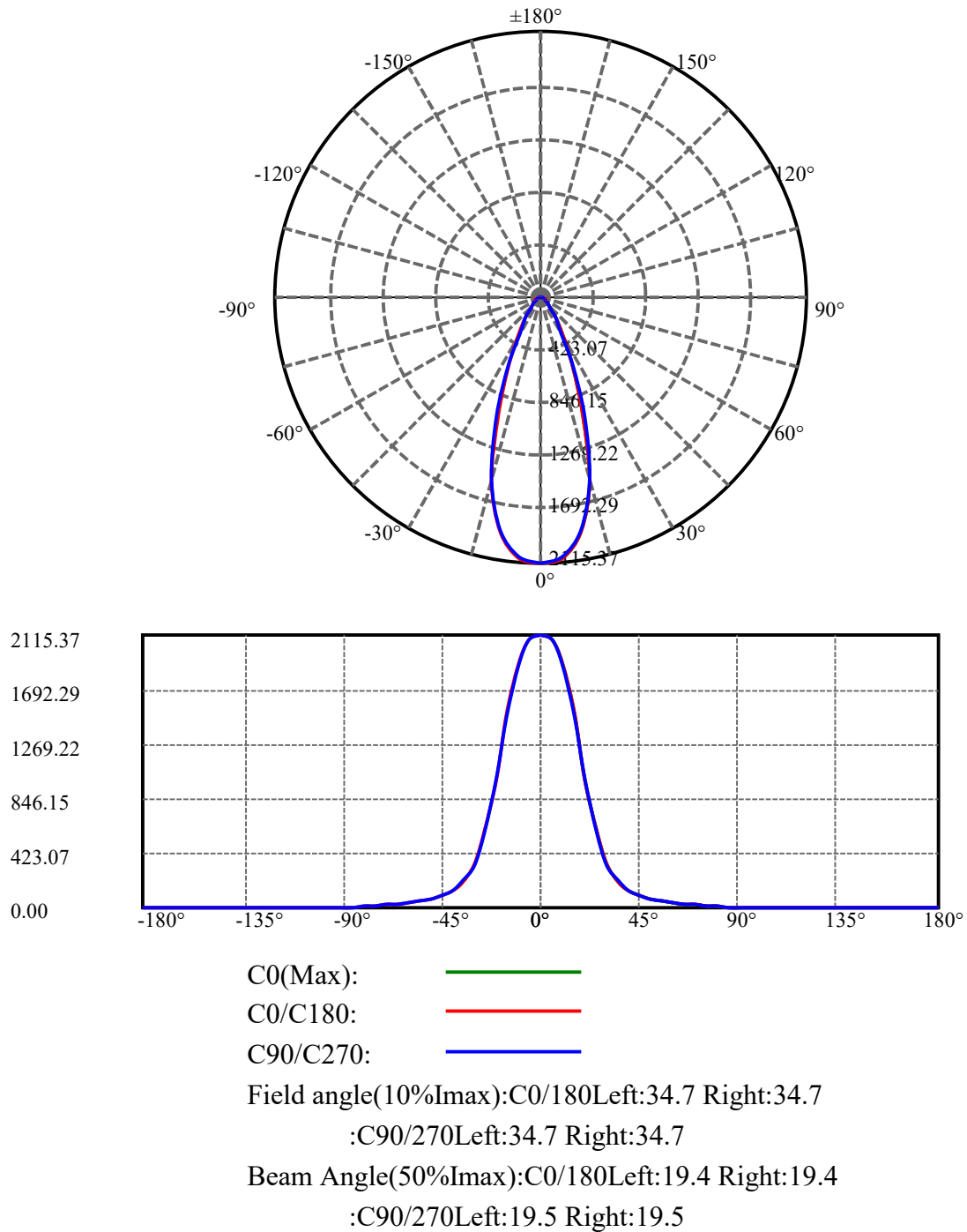
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	2115.367	0.000	0	0.00%	0.00%
5.0	2078.921	50.142	50.142	4.20%	4.20%
10.0	1888.322	141.921	192.062	11.87%	16.07%
15.0	1500.852	201.044	393.106	16.82%	32.89%
20.0	1011.810	207.079	600.184	17.33%	50.22%
25.0	597.252	168.761	768.945	14.12%	64.34%
30.0	339.777	118.582	887.527	9.92%	74.26%
35.0	203.207	79.958	967.485	6.69%	80.95%
40.0	129.439	55.500	1022.985	4.64%	85.59%
45.0	87.746	40.214	1063.198	3.36%	88.96%
50.0	64.891	30.842	1094.041	2.58%	91.54%
55.0	50.299	25.046	1119.087	2.10%	93.63%
60.0	39.298	20.710	1139.797	1.73%	95.37%
65.0	30.226	16.901	1156.698	1.41%	96.78%
70.0	22.506	13.352	1170.05	1.12%	97.90%
75.0	15.750	9.999	1180.05	0.84%	98.73%
80.0	9.227	6.683	1186.733	0.56%	99.29%
85.0	3.319	3.409	1190.142	0.29%	99.58%
90.0	0.618	1.078	1191.22	0.09%	99.67%
95.0	0.000	0.169	1191.389	0.01%	99.68%
100.0	0.000	0.000	1191.389	0.00%	99.68%
105.0	0.000	0.000	1191.389	0.00%	99.68%
110.0	0.000	0.000	1191.389	0.00%	99.68%
115.0	0.000	0.000	1191.389	0.00%	99.68%
120.0	0.000	0.000	1191.389	0.00%	99.68%
125.0	0.000	0.000	1191.389	0.00%	99.68%
130.0	0.000	0.000	1191.389	0.00%	99.68%
135.0	0.000	0.000	1191.389	0.00%	99.68%
140.0	0.000	0.000	1191.389	0.00%	99.68%
145.0	0.926	0.155	1191.544	0.01%	99.70%
150.0	1.853	0.409	1191.953	0.03%	99.73%
155.0	3.165	0.635	1192.588	0.05%	99.78%
160.0	4.131	0.765	1193.353	0.06%	99.85%
165.0	4.632	0.722	1194.075	0.06%	99.91%
170.0	5.443	0.598	1194.673	0.05%	99.96%
175.0	6.022	0.410	1195.083	0.03%	99.99%
180.0	2.779	0.105	1195.188	0.01%	100.00%

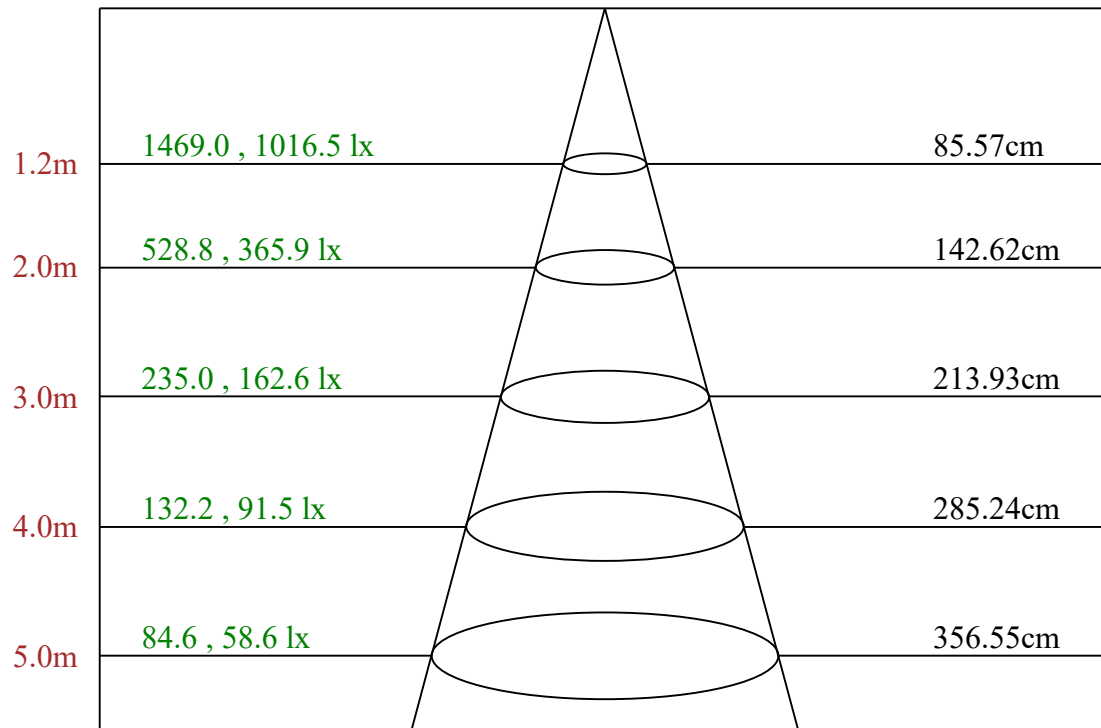
ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	887.53	74.26%	74.26%
0-40	1022.98	85.59%	85.59%
0-60	1139.80	95.37%	95.37%
0-90	1191.22	99.67%	99.67%
0-120	1191.39	99.68%	99.68%
0-180	1195.19	100.00%	100.00%
60-90	51.42	4.30%	4.30%
90-120	0.17	0.01%	0.01%
90-130	0.17	0.01%	0.01%
90-150	0.73	0.06%	0.06%
90-180	3.86	0.32%	0.32%
0-34.29	956.15	80.00%	80.00%

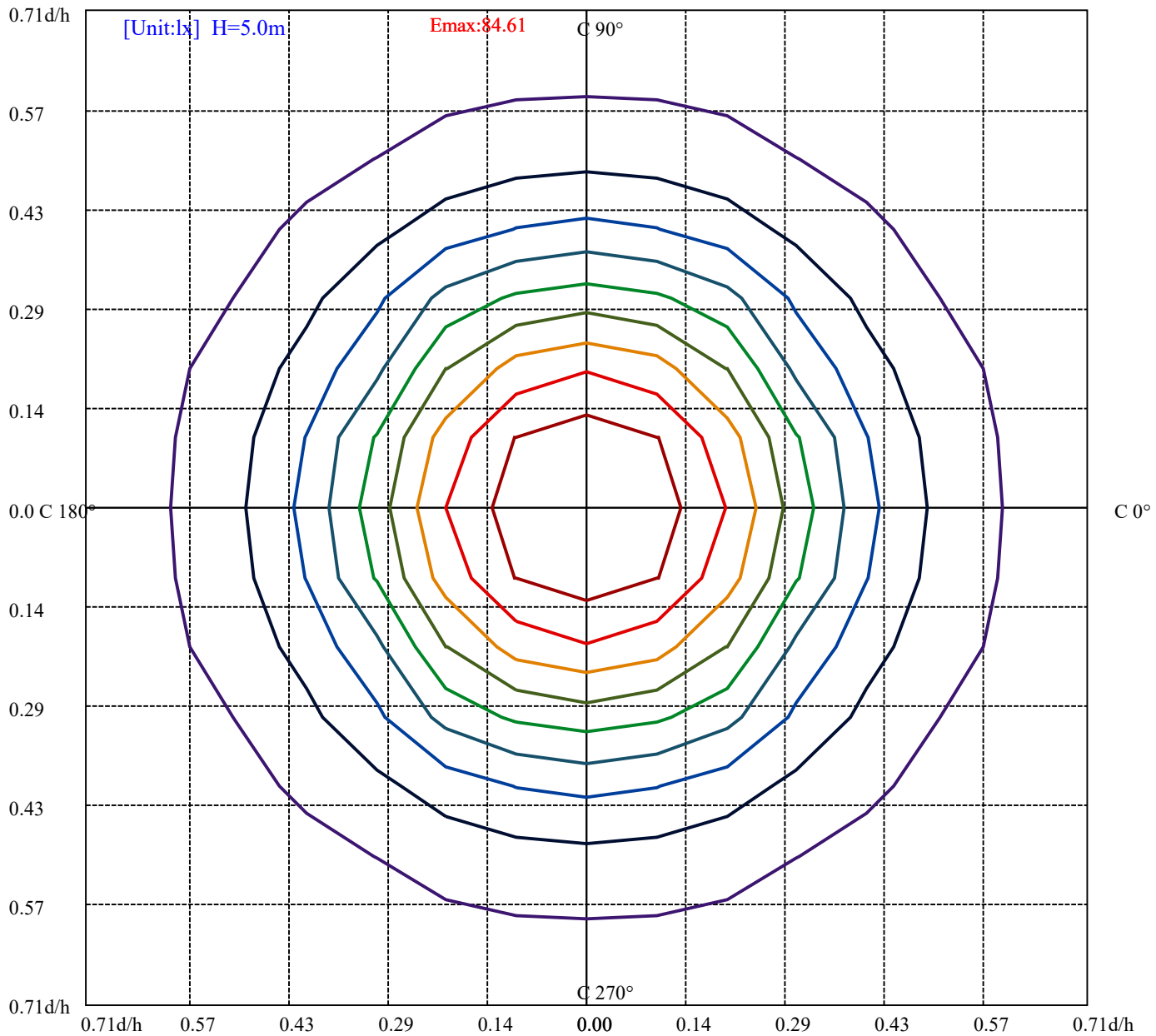
ZONAL LUMEN SUMMARY

0-10	192.06
10-20	408.12
20-30	287.34
30-40	135.46
40-50	71.06
50-60	45.76
60-70	30.25
70-80	16.68
80-90	4.49
90-100	0.17
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.56
150-160	1.40
160-170	1.32
170-180	0.41

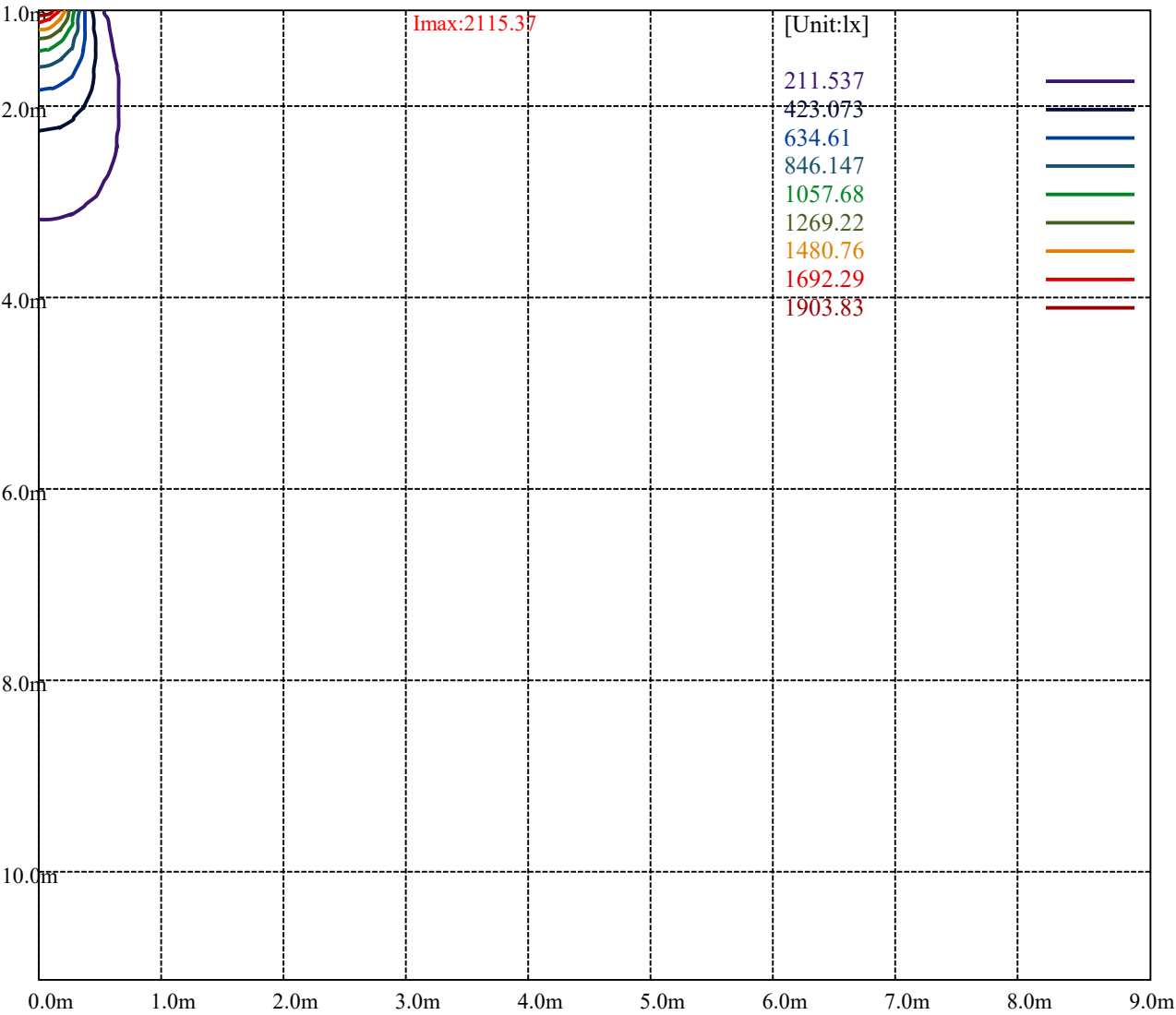




Max , Ave Beam angle of C0 plane 39.25



(10%Emax) 8.46148	—
(20%Emax) 16.92292	—
(30%Emax) 25.3844	—
(40%Emax) 33.84584	—
(50%Emax) 42.3072	—
(60%Emax) 50.7688	—
(70%Emax) 59.2304	—
(80%Emax) 67.6916	—
(90%Emax) 76.1532	—



Luminance Table

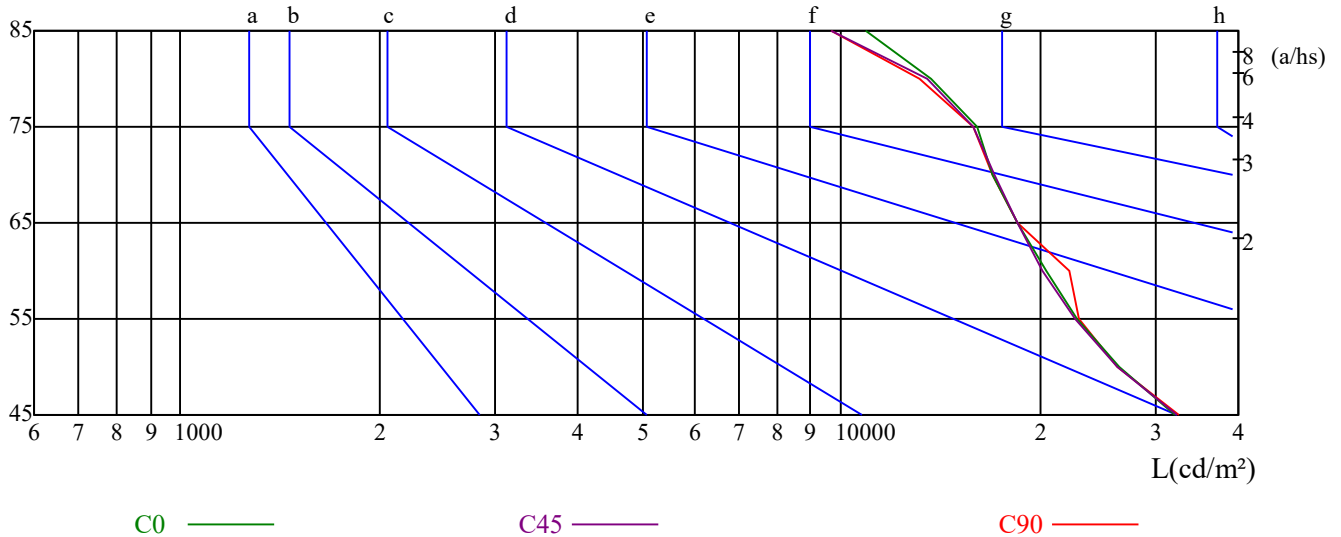
γ	45	50	55	60	65	70	75	80	85
C0	32082	26423	22778	20428	18548	17016	16061	13679	10902
C45	32191	26206	22631	20166	18572	17122	15863	13559	9698
C90	32589	26277	22927	22199	18556	16932	15849	13201	9690

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
18548	18556	18572	16061	15849	15863	10902	9690	9698

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

 $\gamma(^{\circ})$ 

RHOC	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	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.10	1.08	1.05	1.08	1.06	1.04	1.04	1.02	1.00	1.00	0.99	0.97	0.97	0.95	0.94	0.93
2	1.02	0.98	0.95	1.01	0.97	0.94	0.97	0.94	0.91	0.94	0.92	0.89	0.91	0.89	0.88	0.86
3	0.95	0.90	0.86	0.94	0.89	0.86	0.91	0.87	0.84	0.89	0.86	0.83	0.87	0.84	0.82	0.80
4	0.89	0.84	0.80	0.88	0.83	0.79	0.86	0.82	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.75
5	0.84	0.78	0.74	0.83	0.78	0.74	0.81	0.77	0.73	0.80	0.76	0.72	0.78	0.75	0.72	0.70
6	0.80	0.74	0.70	0.79	0.73	0.69	0.77	0.72	0.69	0.76	0.72	0.68	0.74	0.71	0.68	0.66
7	0.75	0.70	0.65	0.75	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.65	0.71	0.67	0.64	0.63
8	0.72	0.66	0.62	0.71	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.61	0.60
9	0.68	0.63	0.59	0.68	0.62	0.59	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.57
10	0.65	0.60	0.56	0.65	0.59	0.56	0.64	0.59	0.56	0.63	0.59	0.56	0.62	0.58	0.55	0.54

乐达凯 LCD-RD-LS-15-CCT-120-36-WT

Intensity data(cd)								Appendix Page: 10 Total:12	
C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	2115.37	2122.68	2066.00	1814.61	1276.17	798.98	441.54	254.14	155.41
15.0	2115.37	2125.47	2059.34	1807.66	1294.20	779.83	441.81	253.51	154.31
30.0	2115.37	2125.52	2052.58	1807.90	1304.68	781.14	427.51	249.30	151.43
45.0	2115.37	2118.15	2050.45	1797.27	1312.25	763.24	430.31	250.39	152.09
60.0	2115.37	2116.30	2054.98	1804.15	1287.61	766.44	418.06	251.76	154.22
75.0	2115.37	2115.37	2058.70	1789.28	1293.19	771.08	422.70	250.83	153.29
90.0	2115.37	2107.01	2046.65	1789.43	1271.26	776.32	413.23	253.51	156.93
105.0	2115.37	2107.95	2049.52	1807.47	1290.92	775.29	428.45	251.32	157.66
120.0	2115.37	2110.72	2042.94	1793.14	1311.19	793.96	435.52	253.51	155.08
135.0	2115.37	2116.30	2052.96	1807.05	1310.58	788.02	448.97	253.36	158.35
150.0	2115.37	2119.09	2056.66	1795.73	905.79	802.35	449.17	266.52	158.42
165.0	2115.37	2108.87	2050.36	1803.35	1309.34	797.67	448.52	265.58	155.08
180.0	2115.37	2034.92	1722.28	1207.61	725.84	418.69	246.82	151.75	99.64
195.0	2115.37	2036.37	1732.34	1225.31	736.66	415.17	246.17	155.23	100.12
210.0	2115.37	2051.66	1737.72	1215.11	732.21	414.58	252.07	151.43	102.49
225.0	2115.37	2052.30	1758.32	1200.04	740.05	421.03	250.39	154.87	102.94
240.0	2115.37	2059.63	1718.68	1215.15	738.57	418.99	253.62	155.15	104.98
255.0	2115.37	2048.48	1723.32	1205.86	750.64	413.41	252.69	157.93	104.05
270.0	2115.37	2039.22	1705.85	1184.90	740.10	418.80	249.80	155.08	103.08
285.0	2115.37	2027.27	1714.74	1193.55	728.93	409.90	243.90	154.87	137.25
300.0	2115.37	2039.22	1704.92	1184.90	1078.11	409.52	241.44	149.51	99.36
315.0	2115.37	2042.71	1720.42	1192.28	716.30	399.60	242.18	147.17	98.74
330.0	2115.37	2044.54	1710.93	1207.72	712.89	406.30	238.56	147.24	96.92
345.0	2115.37	2024.36	1729.07	1170.97	715.96	393.73	231.22	143.01	94.72
360.0	2115.37	2122.68	2066.00	1814.61	1276.17	798.98	441.54	254.14	155.41

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	101.47	74.05	56.68	44.79	34.74	26.51	20.11	13.71	6.40
15.0	101.96	73.48	56.95	44.09	34.90	26.64	20.21	12.86	6.43
30.0	99.72	72.02	56.32	44.32	35.09	26.78	20.31	13.85	6.46
45.0	99.23	72.34	56.57	43.59	34.31	26.89	20.40	13.91	6.49
60.0	100.33	72.46	56.67	44.59	34.37	26.94	20.44	13.94	6.50
75.0	100.33	72.46	56.67	44.59	35.30	26.94	20.44	13.01	6.50
90.0	102.15	73.36	56.65	44.57	34.36	26.93	20.43	13.00	6.50
105.0	102.01	72.34	56.57	43.59	34.31	25.97	20.40	12.98	6.49
120.0	101.22	72.43	56.65	44.57	34.36	26.00	19.50	13.00	6.50
135.0	103.39	74.52	56.82	44.71	35.40	26.08	20.49	13.04	6.52
150.0	106.23	75.48	58.71	45.66	35.41	27.02	19.57	13.05	6.52
165.0	104.93	75.22	59.43	46.43	35.29	26.93	19.50	13.00	6.50
180.0	73.13	56.68	43.88	33.82	25.60	18.28	11.88	4.57	0.91
195.0	73.48	56.03	44.09	33.99	25.72	18.37	11.02	4.59	0.00
210.0	74.79	58.17	44.32	34.16	25.85	18.47	12.00	4.62	0.92
225.0	75.12	57.50	44.51	34.31	25.97	19.48	11.13	4.64	0.00
240.0	75.25	58.53	44.59	34.37	26.01	18.58	11.15	4.65	0.00
255.0	75.25	57.60	44.59	33.44	26.01	18.58	11.15	10.22	0.00
270.0	75.22	56.65	44.57	40.86	26.00	17.64	11.14	4.64	0.00
285.0	74.19	56.57	43.59	32.46	25.97	17.62	11.13	4.64	0.00
300.0	72.43	56.65	42.72	32.50	25.07	18.57	11.14	4.64	0.00
315.0	72.65	54.96	41.92	32.60	25.15	17.70	11.18	4.66	0.00
330.0	70.82	54.05	41.93	32.62	25.16	18.64	11.18	4.66	0.00
345.0	70.57	53.86	41.79	32.50	25.07	18.57	12.07	5.57	0.00
360.0	101.47	74.05	56.68	44.79	34.74	26.51	20.11	13.71	6.40

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Intensity data(cd)										Appendix Page: 11 Total:12	
C/γ(°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0		
0.0	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15.0	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
30.0	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
45.0	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
60.0	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
75.0	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
90.0	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105.0	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120.0	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135.0	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150.0	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
165.0	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
195.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
210.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
225.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
240.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
255.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
270.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
285.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
300.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
315.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
330.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
345.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
360.0	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	0.00	0.00	0.91	1.83	3.66	4.57	4.57	6.40	6.40		
15.0	0.00	0.00	0.92	1.84	3.67	4.59	4.59	6.43	6.43		
30.0	0.00	0.00	0.92	1.85	3.69	4.62	4.62	6.46	6.46		
45.0	0.00	0.00	0.93	1.85	3.71	4.64	4.64	6.49	6.49		
60.0	0.00	0.00	0.93	1.86	3.72	4.65	4.65	6.50	6.50		
75.0	0.00	0.00	0.93	1.86	3.72	4.65	4.65	5.57	6.50		
90.0	0.00	0.00	0.93	1.86	3.71	4.64	4.64	6.50	6.50		
105.0	0.00	0.00	0.93	1.85	3.71	4.64	4.64	5.56	6.49		
120.0	0.00	0.00	0.93	1.86	3.71	4.64	4.64	6.50	6.50		
135.0	0.00	0.00	0.93	1.86	3.73	4.66	4.66	6.52	6.52		
150.0	0.00	0.00	0.93	1.86	3.73	4.66	4.66	6.52	6.52		
165.0	0.00	0.00	0.93	1.86	3.71	4.64	4.64	5.57	6.50		
180.0	0.00	0.00	0.91	1.83	2.74	3.66	4.57	4.57	5.48		
195.0	0.00	0.00	0.92	1.84	2.76	2.76	4.59	4.59	5.51		
210.0	0.00	0.00	0.92	1.85	2.77	3.69	4.62	4.62	5.54		
225.0	0.00	0.00	0.93	1.85	2.78	3.71	4.64	4.64	5.56		
240.0	0.00	0.00	0.93	1.86	2.79	3.72	4.65	4.65	5.57		
255.0	0.00	0.00	0.93	1.86	1.86	3.72	4.65	4.65	5.57		
270.0	0.00	0.00	0.93	1.86	2.79	3.71	4.64	4.64	5.57		
285.0	0.00	0.00	0.93	1.85	1.85	3.71	4.64	4.64	5.56		
300.0	0.00	0.00	0.93	1.86	2.79	3.71	4.64	4.64	5.57		
315.0	0.00	0.00	0.93	1.86	2.79	3.73	4.66	4.66	5.59		
330.0	0.00	0.00	0.93	1.86	2.80	3.73	4.66	4.66	5.59		
345.0	0.00	0.00	0.93	1.86	2.79	3.71	4.64	4.64	5.57		
360.0	0.00	0.00	0.91	1.83	3.66	4.57	4.57	6.40	6.40		

Intensity data(cd)

C/ $\gamma(^{\circ})$	180.0
0.0	5.48
15.0	5.51
30.0	5.54
45.0	5.56
60.0	5.57
75.0	5.57
90.0	5.57
105.0	5.56
120.0	5.57
135.0	5.59
150.0	5.59
165.0	5.57
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	5.48