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乐达凯

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Client:

LumCAT: ALDF16LAJUDBK 3000K

Luminaire: LED LAMP

Report No:

Ballast type:

Test No:

Voltage(V): 119.970

LampCAT:

Current(A): 0.252

Lamp flux(lm): 2030.7

Power (W): 29.990

Number of Lamps: 1

PF: 0.991

Length(mm): -380

Width(mm): -380

Phm Type: C

Height(mm): 80

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Photometric Results

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Lumens(lm): 2030.72, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 67.71

Central intensity(cd): 676.492, Maximum intensity(cd): 676.492

Angle of maximum intensity: C=60.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=111.6

[C90/270]Total=114.0

Field angle(10%Imax): [C0/180]Total=163.2

[C90/270]Total=163.8

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

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

Up flux rate of lamp(%): 4.23%

Down flux rate of lamp(%): 95.77%

Up flux rate of LUM(%): 4.23%

Down flux rate of LUM(%): 95.77%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 74.463%

## 乐达凯 ALDF16LAJUDBK 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	676.492	0.000	0	0.00%	0.00%
5.0	673.039	16.133	16.133	0.79%	0.79%
10.0	663.283	47.804	63.938	2.35%	3.15%
15.0	647.516	77.756	141.693	3.83%	6.98%
20.0	626.037	104.959	246.652	5.17%	12.15%
25.0	599.059	128.490	375.142	6.33%	18.47%
30.0	567.483	147.627	522.769	7.27%	25.74%
35.0	531.096	161.773	684.542	7.97%	33.71%
40.0	491.925	170.683	855.226	8.41%	42.11%
45.0	446.741	173.802	1029.027	8.56%	50.67%
50.0	399.175	170.930	1199.957	8.42%	59.09%
55.0	348.771	162.629	1362.586	8.01%	67.10%
60.0	298.192	149.544	1512.129	7.36%	74.46%
65.0	242.829	131.523	1643.653	6.48%	80.94%
70.0	187.883	109.059	1752.711	5.37%	86.31%
75.0	135.399	84.501	1837.212	4.16%	90.47%
80.0	85.878	59.208	1896.42	2.92%	93.39%
85.0	39.174	33.980	1930.4	1.67%	95.06%
90.0	13.351	14.382	1944.781	0.71%	95.77%
95.0	10.333	6.485	1951.266	0.32%	96.09%
100.0	10.876	5.763	1957.029	0.28%	96.37%
105.0	11.817	6.072	1963.1	0.30%	96.67%
110.0	12.659	6.398	1969.498	0.32%	96.98%
115.0	13.406	6.600	1976.098	0.33%	97.31%
120.0	14.017	6.667	1982.765	0.33%	97.64%
125.0	14.503	6.592	1989.357	0.32%	97.96%
130.0	14.787	6.369	1995.726	0.31%	98.28%
135.0	15.007	6.020	2001.746	0.30%	98.57%
140.0	15.284	5.609	2007.355	0.28%	98.85%
145.0	15.546	5.144	2012.499	0.25%	99.10%
150.0	15.706	4.602	2017.101	0.23%	99.33%
155.0	16.260	4.045	2021.146	0.20%	99.53%
160.0	16.696	3.456	2024.602	0.17%	99.70%
165.0	16.620	2.746	2027.348	0.14%	99.83%
170.0	16.006	1.935	2029.284	0.10%	99.93%
175.0	16.109	1.149	2030.432	0.06%	99.99%
180.0	8.356	0.292	2030.725	0.01%	100.00%

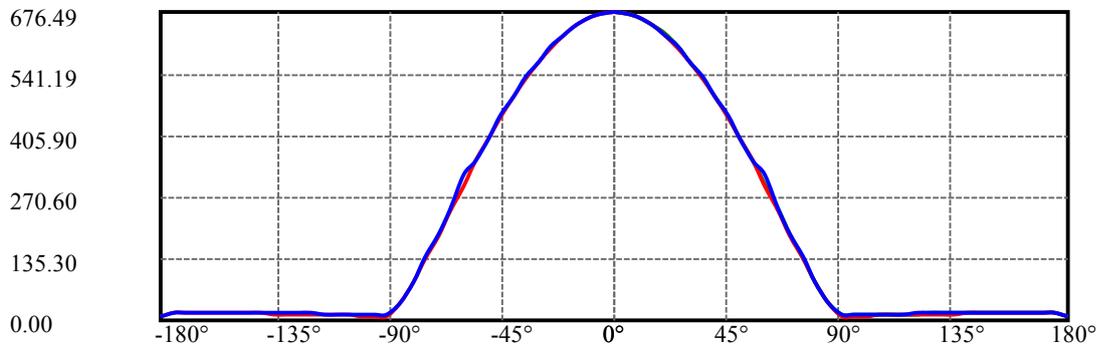
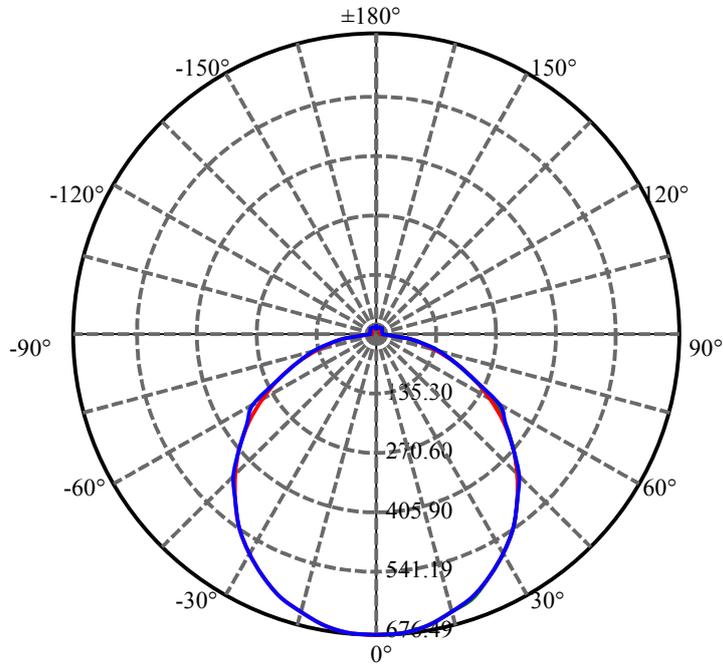
Equipment: LC-I-902 GMS-2000  
Temperature( $^{\circ}$ C): 25.1Date: 2026/1/4  
Humidity(%): 61.9%Operator: JUN WANG  
Distance(m): 30.18

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	522.77	25.74%	25.74%
0-40	855.23	42.11%	42.11%
0-60	1512.13	74.46%	74.46%
0-90	1944.78	95.77%	95.77%
0-120	1982.76	97.64%	97.64%
0-180	2030.72	100.00%	100.00%
60-90	432.65	21.31%	21.31%
90-120	37.98	1.87%	1.87%
90-130	50.94	2.51%	2.51%
90-150	72.32	3.56%	3.56%
90-180	85.65	4.22%	4.22%
0-64.27	1624.58	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	63.94
10-20	182.71
20-30	276.12
30-40	332.46
40-50	344.73
50-60	312.17
60-70	240.58
70-80	143.71
80-90	48.36
90-100	12.25
100-110	12.47
110-120	13.27
120-130	12.96
130-140	11.63
140-150	9.75
150-160	7.50
160-170	4.68
170-180	1.15



C60(Max): ——

C0/C180: ——

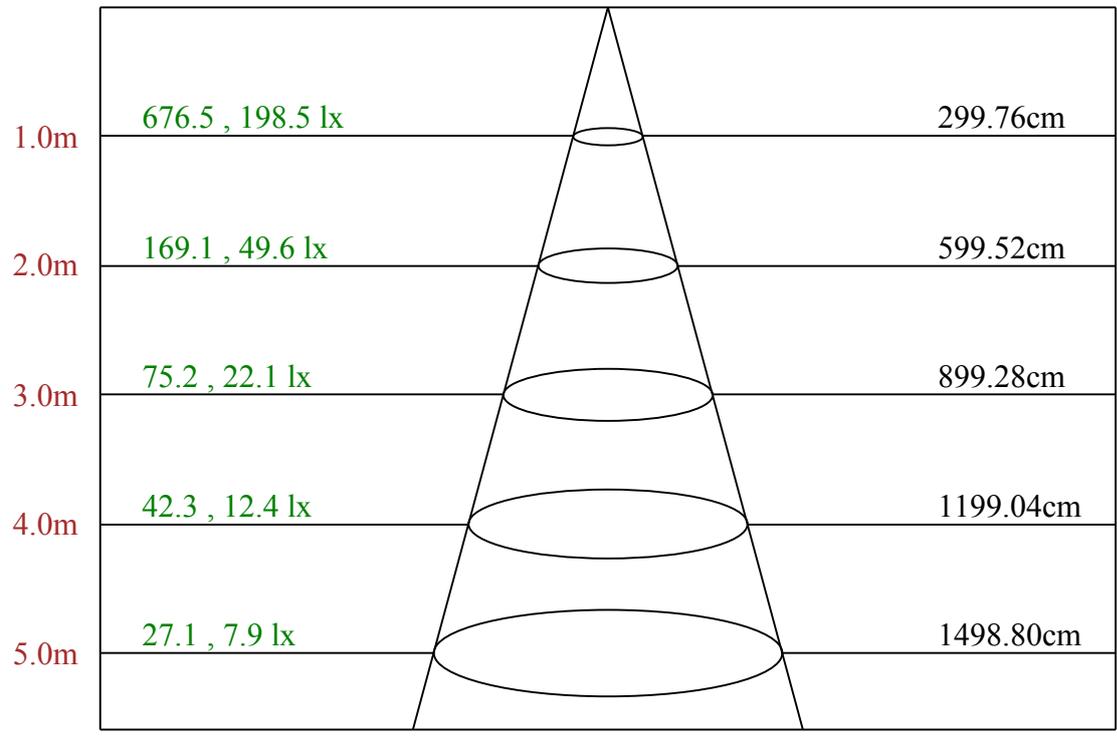
C90/C270: ——

Field angle(10%Imax):C0/180Left:81.6 Right:81.6

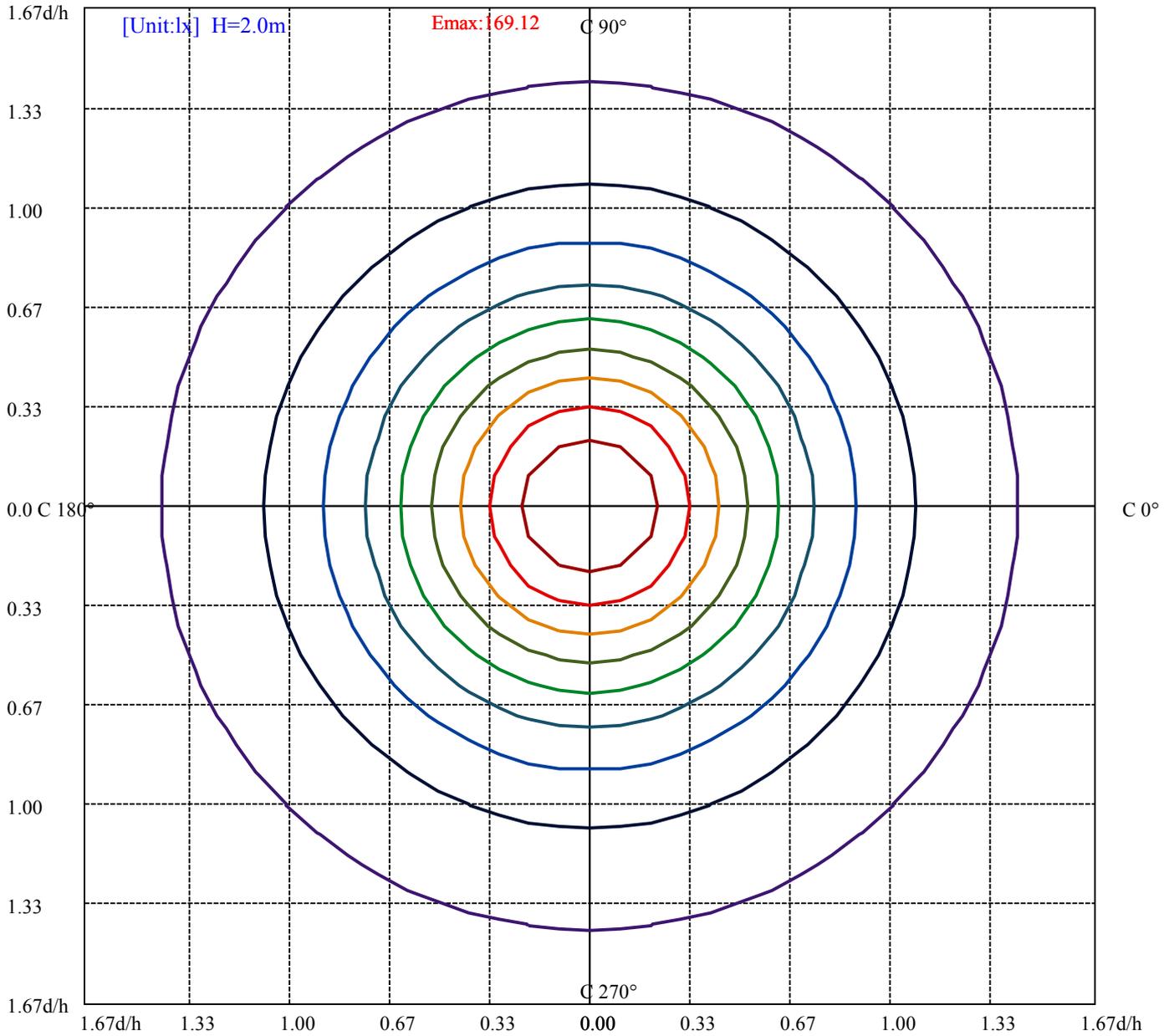
:C90/270Left:81.9 Right:81.9

Beam Angle(50%Imax):C0/180Left:55.8 Right:55.8

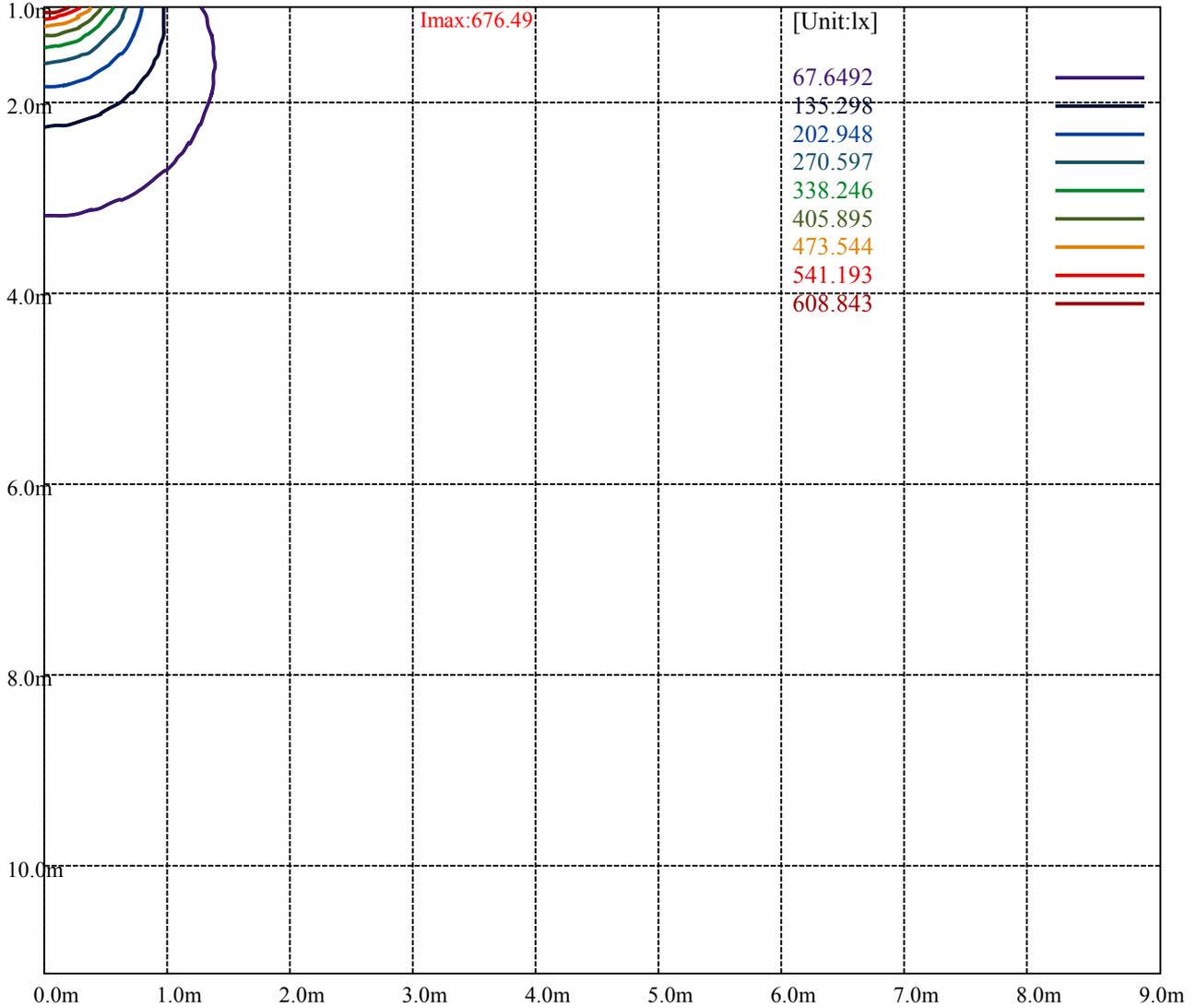
:C90/270Left:57.0 Right:57.0



Max , Ave      Beam angle of C60 plane 112.58



(10%Emax) 16.9123	—
(20%Emax) 33.8245	—
(30%Emax) 50.737	—
(40%Emax) 67.64925	—
(50%Emax) 84.5615	—
(60%Emax) 101.4737	—
(70%Emax) 118.386	—
(80%Emax) 135.2982	—
(90%Emax) 152.2108	—



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Luminance Limiting Curve(no luminous side)

Luminance Table

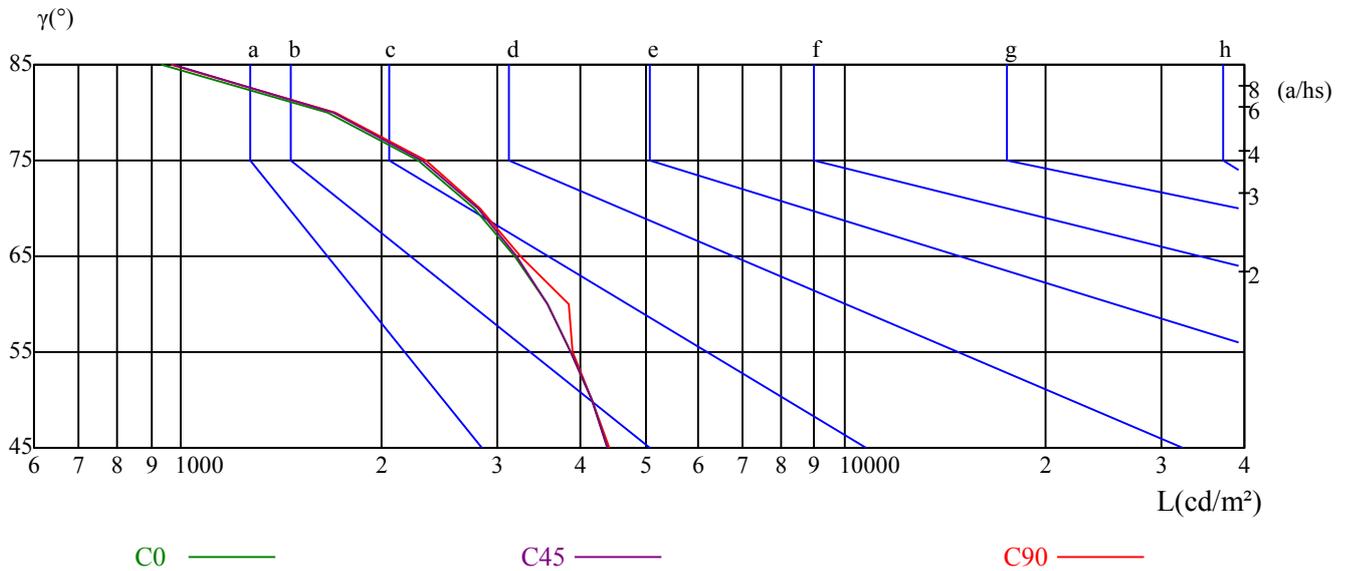
$\gamma$	45	50	55	60	65	70	75	80	85
C0	4382	4151	3856	3558	3190	2758	2272	1662	931
C45	4391	4153	3871	3572	3202	2797	2307	1693	974
C90	4405	4161	3899	3843	3238	2816	2338	1708	962

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5023	5099	5042	4544	4676	4615	3782	3910	3959

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	1.18	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	0.92	0.95	0.92	0.89	0.90	0.88	0.85	0.86	0.84	0.82	0.79
2	0.89	0.82	0.76	0.87	0.81	0.75	0.83	0.77	0.73	0.79	0.74	0.70	0.75	0.72	0.68	0.66
3	0.78	0.70	0.63	0.76	0.69	0.63	0.73	0.66	0.61	0.69	0.64	0.59	0.66	0.62	0.58	0.55
4	0.69	0.60	0.54	0.68	0.59	0.53	0.65	0.57	0.52	0.62	0.56	0.51	0.59	0.54	0.49	0.47
5	0.62	0.53	0.46	0.60	0.52	0.46	0.58	0.50	0.45	0.55	0.49	0.44	0.53	0.47	0.43	0.41
6	0.56	0.47	0.40	0.54	0.46	0.40	0.52	0.45	0.39	0.50	0.43	0.38	0.48	0.42	0.38	0.36
7	0.50	0.42	0.35	0.49	0.41	0.35	0.47	0.40	0.35	0.46	0.39	0.34	0.44	0.38	0.33	0.31
8	0.46	0.37	0.31	0.45	0.37	0.31	0.43	0.36	0.31	0.42	0.35	0.30	0.40	0.34	0.30	0.28
9	0.42	0.34	0.28	0.41	0.33	0.28	0.40	0.33	0.28	0.38	0.32	0.27	0.37	0.31	0.27	0.25
10	0.39	0.31	0.26	0.38	0.31	0.25	0.37	0.30	0.25	0.36	0.29	0.25	0.34	0.29	0.25	0.23

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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	676.49	675.49	666.20	652.81	632.14	605.82	574.49	538.52	497.99
15.0	676.49	674.49	666.12	651.30	631.38	604.00	574.63	536.70	498.41
30.0	676.49	674.13	665.22	650.49	630.21	604.11	573.11	537.47	497.28
45.0	676.49	674.76	666.48	651.74	631.54	605.34	576.50	541.10	501.34
60.0	676.49	674.67	666.40	651.85	631.94	606.66	576.38	541.28	501.73
75.0	676.49	674.49	666.67	652.84	633.00	607.61	580.05	542.65	506.16
90.0	676.49	675.58	668.02	654.18	636.25	611.57	581.62	547.29	508.51
105.0	676.49	676.40	669.48	656.54	637.22	612.90	583.38	550.30	511.86
120.0	676.49	676.77	670.11	657.98	638.92	615.40	586.40	552.39	514.18
135.0	676.49	675.22	669.94	657.65	639.54	617.52	586.66	555.54	515.13
150.0	676.49	678.04	672.84	660.87	625.88	620.40	591.80	558.46	522.83
165.0	676.49	677.86	672.84	662.80	645.36	622.26	593.96	561.00	520.93
180.0	676.49	671.76	660.46	643.07	619.84	591.52	558.64	523.94	482.60
195.0	676.49	671.58	660.48	643.11	620.83	592.82	560.17	522.97	482.04
210.0	676.49	672.04	661.13	644.21	621.30	593.20	562.38	523.28	484.36
225.0	676.49	671.85	660.75	644.19	621.17	593.69	561.03	523.72	482.60
240.0	676.49	671.58	660.67	643.39	620.48	592.48	559.47	523.46	480.45
255.0	676.49	670.30	658.75	642.74	619.53	590.96	557.84	520.08	478.23
270.0	676.49	671.21	659.28	641.44	617.67	588.81	554.94	517.89	474.36
285.0	676.49	670.02	657.18	638.59	616.09	584.38	552.31	513.77	504.39
300.0	676.49	669.56	656.34	637.19	631.90	582.94	548.11	508.81	465.77
315.0	676.49	668.21	654.38	634.63	606.87	579.66	543.07	505.03	461.52
330.0	676.49	668.64	655.48	633.83	609.25	578.19	542.29	502.18	457.88
345.0	676.49	668.28	653.58	632.94	606.56	575.15	540.37	498.47	455.65
360.0	676.49	675.49	666.20	652.81	632.14	605.82	574.49	538.52	497.99
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	453.54	408.92	354.91	305.00	250.18	194.62	140.16	90.89	43.53
15.0	454.21	406.73	356.16	303.14	250.93	193.18	141.43	89.68	42.56
30.0	456.09	405.90	358.52	305.69	251.23	196.22	141.85	92.74	45.01
45.0	457.67	410.35	360.31	309.90	253.22	200.90	146.58	94.44	46.49
60.0	458.63	411.62	363.89	311.79	257.96	203.13	151.76	96.84	50.83
75.0	463.13	416.54	367.04	315.00	263.86	209.27	154.95	102.45	55.96
90.0	465.71	419.37	372.21	320.67	267.05	212.51	160.70	105.71	59.00
105.0	469.67	423.75	375.01	323.44	272.97	218.39	164.00	111.25	61.86
120.0	472.06	429.38	380.60	329.36	275.83	221.39	166.87	116.72	67.29
135.0	476.08	430.85	382.25	331.01	277.86	226.16	171.74	118.86	69.44
150.0	479.16	435.95	385.43	336.56	283.39	228.85	174.31	121.05	74.00
165.0	482.67	437.57	389.19	338.15	287.85	230.34	178.57	125.26	75.23
180.0	437.70	389.70	338.79	285.79	231.33	176.96	126.59	74.13	31.24
195.0	437.29	389.36	338.52	288.31	234.02	179.54	126.42	76.40	30.92
210.0	439.81	391.80	340.88	287.87	235.77	175.94	128.12	77.38	31.28
225.0	437.83	392.43	338.66	288.25	233.75	179.06	125.74	75.25	31.21
240.0	437.26	388.89	337.70	284.51	229.86	177.49	121.48	73.47	27.19
255.0	432.65	383.88	332.38	281.88	227.01	172.06	118.83	107.27	23.75
270.0	430.11	381.13	329.32	317.49	221.70	166.89	113.81	63.83	18.30
285.0	425.67	375.92	323.71	269.59	214.47	159.72	109.61	57.58	15.40
300.0	418.81	368.84	319.23	261.88	209.45	154.74	104.95	53.43	12.58
315.0	414.47	364.32	311.72	257.11	201.86	147.44	97.75	47.60	9.37
330.0	413.48	359.58	309.79	254.70	199.34	144.62	92.54	45.13	8.86
345.0	408.09	357.42	304.28	249.51	197.01	139.77	90.84	43.73	8.86
360.0	453.54	408.92	354.91	305.00	250.18	194.62	140.16	90.89	43.53

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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	8.29	9.11	9.84	10.47	12.66	14.12	15.03	15.76	16.12
15.0	8.55	9.37	10.00	10.73	12.55	13.64	14.46	15.28	15.73
30.0	9.00	9.73	10.27	11.37	12.73	13.73	14.55	15.37	15.82
45.0	9.37	10.10	10.65	11.56	13.10	14.19	14.92	15.83	16.38
60.0	10.18	10.46	10.91	11.64	13.18	14.09	14.91	15.73	16.28
75.0	11.65	10.46	11.01	11.46	12.56	13.47	14.38	15.19	16.01
90.0	15.30	10.56	10.93	11.11	11.93	12.47	13.20	14.29	15.21
105.0	19.86	10.57	11.02	11.02	11.57	11.94	12.57	13.67	14.40
120.0	22.52	10.30	10.94	10.85	11.03	11.58	12.04	12.86	13.50
135.0	26.94	10.19	10.56	10.65	10.56	10.83	11.10	11.83	12.47
150.0	28.87	9.87	10.32	10.32	10.32	10.14	10.60	11.33	11.97
165.0	30.04	9.59	9.95	10.04	9.95	10.04	10.32	11.05	11.69
180.0	10.11	10.29	10.47	10.56	10.66	11.02	11.38	11.84	12.29
195.0	9.91	10.37	10.28	10.37	10.64	11.10	11.73	12.10	12.64
210.0	9.82	10.37	10.46	10.73	10.82	11.55	12.09	12.64	13.00
225.0	9.83	10.55	10.74	11.28	12.01	12.65	12.74	13.56	13.74
240.0	9.82	10.73	10.91	12.18	12.82	13.73	14.37	14.37	14.55
255.0	9.92	10.92	11.19	12.83	13.74	14.65	15.47	15.74	15.38
270.0	10.02	11.11	11.56	13.66	14.48	15.57	16.30	16.21	16.12
285.0	10.20	11.02	12.03	14.49	15.31	16.40	17.04	16.86	16.49
300.0	10.03	10.94	11.95	14.68	15.77	16.69	17.23	16.96	16.69
315.0	9.92	10.56	11.92	14.29	15.38	16.29	16.93	16.75	16.38
330.0	10.23	10.41	11.60	13.70	15.07	15.90	16.54	16.54	16.17
345.0	10.04	10.41	11.50	13.60	14.97	15.98	16.52	16.34	15.89
360.0	8.29	9.11	9.84	10.47	12.66	14.12	15.03	15.76	16.12
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	16.12	16.03	16.03	16.21	16.30	16.21	15.76	16.03	15.21
15.0	15.73	15.73	15.73	15.83	16.46	16.55	16.55	15.55	14.46
30.0	15.91	16.18	16.00	16.18	16.37	16.91	16.73	15.91	14.82
45.0	16.47	16.47	16.74	17.01	17.65	18.02	17.65	16.38	15.29
60.0	16.64	17.00	17.46	17.82	18.37	18.55	18.55	16.91	15.64
75.0	16.38	17.11	17.65	18.02	18.38	18.74	19.02	17.74	16.29
90.0	15.93	16.75	17.39	17.85	18.30	18.94	19.21	19.03	16.66
105.0	15.03	15.85	16.86	17.49	18.40	18.95	19.50	19.32	17.86
120.0	14.04	15.23	16.23	17.32	18.15	19.06	19.42	19.51	18.60
135.0	13.11	14.20	15.47	16.56	17.47	18.48	18.93	19.02	18.29
150.0	12.52	13.43	14.71	15.90	17.17	18.09	18.73	19.00	18.36
165.0	12.23	13.15	14.52	15.70	17.07	18.17	18.99	18.72	18.26
180.0	12.84	13.57	14.57	15.57	16.39	17.58	18.03	17.49	15.48
195.0	13.19	14.10	14.64	15.28	16.46	16.73	17.74	16.37	15.28
210.0	13.73	14.00	14.82	15.28	16.28	17.19	17.09	15.18	15.28
225.0	14.38	15.10	15.10	15.19	15.65	16.56	15.56	14.65	16.29
240.0	14.91	15.00	15.09	15.18	15.64	15.91	14.64	13.91	16.09
255.0	15.38	15.19	14.92	14.38	14.92	14.92	13.92	13.38	15.92
270.0	15.84	15.11	14.39	13.48	13.57	13.66	13.38	13.02	15.75
285.0	16.13	15.94	14.94	13.67	13.94	13.67	13.21	12.94	15.58
300.0	16.32	16.14	15.41	13.95	14.04	14.13	13.86	14.04	14.68
315.0	16.02	15.93	14.74	13.74	14.29	14.29	14.29	13.56	14.65
330.0	15.80	14.53	14.62	14.98	14.62	14.62	14.34	13.06	15.26
345.0	15.52	15.06	15.06	14.33	14.33	14.79	13.79	13.42	16.62
360.0	16.12	16.03	16.03	16.21	16.30	16.21	15.76	16.03	15.21

Intensity data(cd)

C/γ(°)	180.0
0.0	15.66
15.0	16.37
30.0	16.37
45.0	16.47
60.0	16.64
75.0	16.65
90.0	15.75
105.0	15.94
120.0	16.41
135.0	17.75
150.0	18.18
165.0	18.35
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	15.66