
Shenzhen Wisdom Light Co., Ltd.

Client:

LumCAT: WL-DL06IN12WDUV(30K-35K-40K)-T

Luminaire: Commercial downlight

Report No:

Ballast type:

Test No: LCZP21120042

Voltage(V): 120.040

LampCAT:

Current(A): 0.099

Lamp flux(lm): 1345.8

Power (W): 11.700

Number of Lamps: 1

PF: 0.985

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1345.83, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 115.03

Central intensity(cd): 680.761, Maximum intensity(cd): 680.761

Angle of maximum intensity: C=15.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=88.4

[C90/270]Total=88.6

Field angle(10%Imax): [C0/180]Total=131.8

[C90/270]Total=131.4

Maximum s/h(1/2): C0_180=1.16 C90_270=1.16

Maximum s/h(1/4): C0_180=1.22 C90_270=1.22

Up flux rate of lamp(%): 0.15%

Down flux rate of lamp(%): 99.85%

Up flux rate of LUM(%): 0.15%

Down flux rate of LUM(%): 99.85%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 90.687%

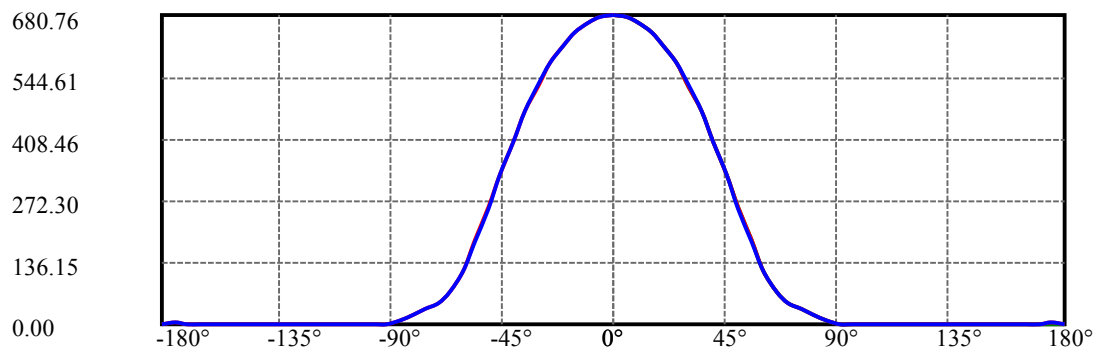
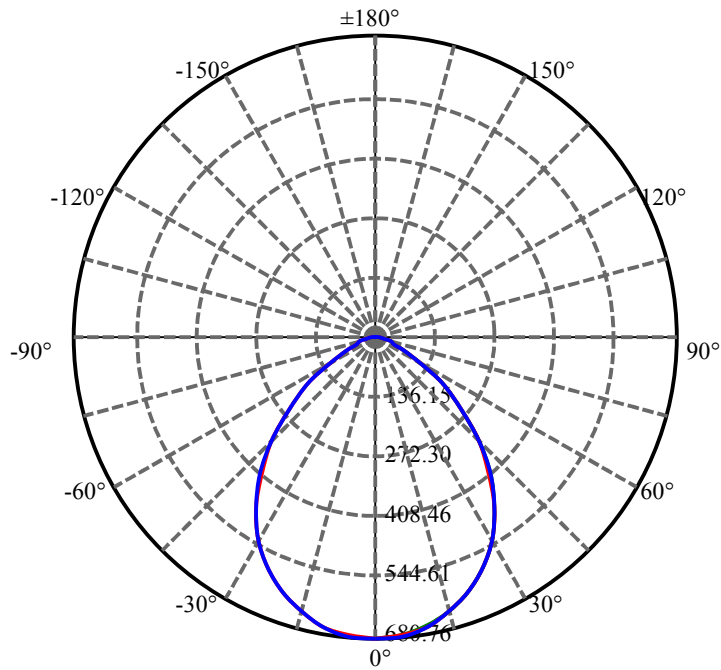
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	680.761	0.000	0	0.00%	0.00%
5.0	676.446	16.225	16.225	1.21%	1.21%
10.0	662.949	47.914	64.139	3.56%	4.77%
15.0	641.154	77.359	141.498	5.75%	10.51%
20.0	611.726	103.255	244.753	7.67%	18.19%
25.0	574.074	124.368	369.121	9.24%	27.43%
30.0	527.319	139.382	508.503	10.36%	37.78%
35.0	467.829	146.543	655.046	10.89%	48.67%
40.0	401.561	145.051	800.097	10.78%	59.45%
45.0	331.571	135.745	935.843	10.09%	69.54%
50.0	255.968	118.721	1054.563	8.82%	78.36%
55.0	183.907	95.643	1150.207	7.11%	85.46%
60.0	120.185	70.290	1220.497	5.22%	90.69%
65.0	72.020	46.725	1267.222	3.47%	94.16%
70.0	46.945	30.123	1297.345	2.24%	96.40%
75.0	34.112	21.187	1318.532	1.57%	97.97%
80.0	21.130	14.781	1333.313	1.10%	99.07%
85.0	8.371	8.016	1341.33	0.60%	99.67%
90.0	0.737	2.494	1343.823	0.19%	99.85%
95.0	0.000	0.202	1344.025	0.01%	99.87%
100.0	0.000	0.000	1344.025	0.00%	99.87%
105.0	0.000	0.000	1344.025	0.00%	99.87%
110.0	0.000	0.000	1344.025	0.00%	99.87%
115.0	0.000	0.000	1344.025	0.00%	99.87%
120.0	0.000	0.000	1344.025	0.00%	99.87%
125.0	0.000	0.000	1344.025	0.00%	99.87%
130.0	0.000	0.000	1344.025	0.00%	99.87%
135.0	0.184	0.037	1344.062	0.00%	99.87%
140.0	0.443	0.116	1344.178	0.01%	99.88%
145.0	0.848	0.215	1344.394	0.02%	99.89%
150.0	0.885	0.255	1344.649	0.02%	99.91%
155.0	0.885	0.224	1344.873	0.02%	99.93%
160.0	1.770	0.278	1345.152	0.02%	99.95%
165.0	1.770	0.292	1345.443	0.02%	99.97%
170.0	1.807	0.212	1345.656	0.02%	99.99%
175.0	2.028	0.137	1345.793	0.01%	100.00%
180.0	1.291	0.040	1345.832	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	508.50	37.78%	37.78%
0-40	800.10	59.45%	59.45%
0-60	1220.50	90.69%	90.69%
0-90	1343.82	99.85%	99.85%
0-120	1344.03	99.87%	99.87%
0-180	1345.83	100.00%	100.00%
60-90	123.33	9.16%	9.16%
90-120	0.20	0.01%	0.01%
90-130	0.20	0.01%	0.01%
90-150	0.83	0.06%	0.06%
90-180	1.97	0.15%	0.15%
0-51.16	1076.67	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	64.14
10-20	180.61
20-30	263.75
30-40	291.59
40-50	254.47
50-60	165.93
60-70	76.85
70-80	35.97
80-90	10.51
90-100	0.20
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.15
140-150	0.47
150-160	0.50
160-170	0.50
170-180	0.14



C15(Max): —————

C0/C180: —————

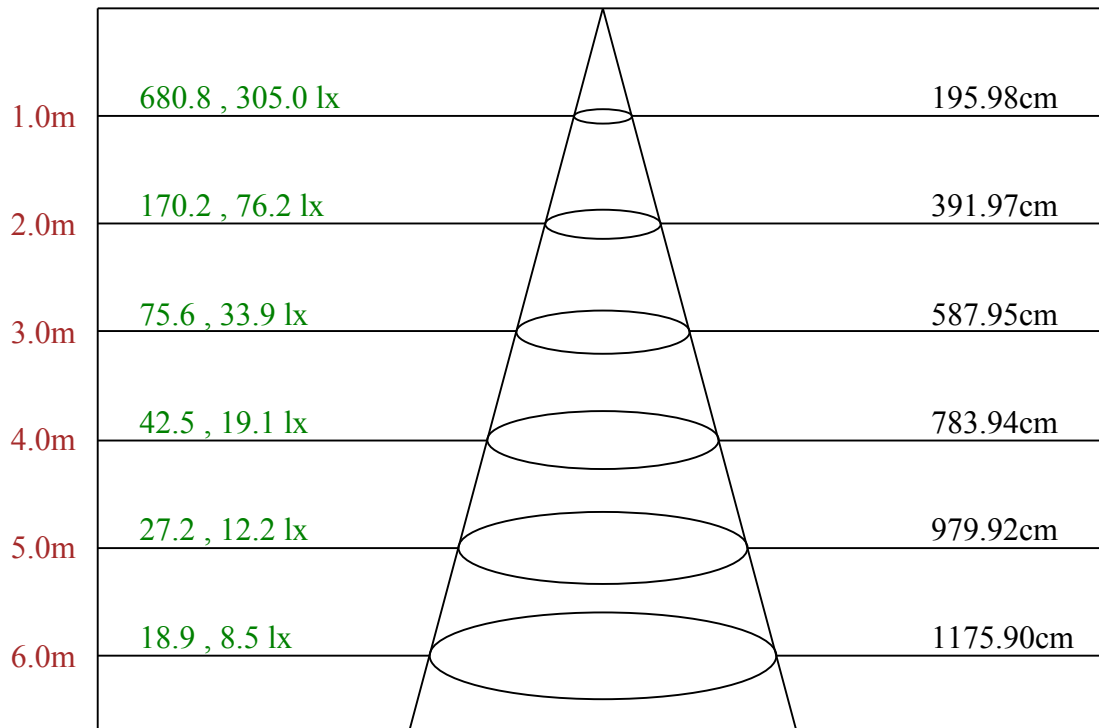
C90/C270: —————

Field angle(10%Imax):C0/180Left:65.9 Right:65.9

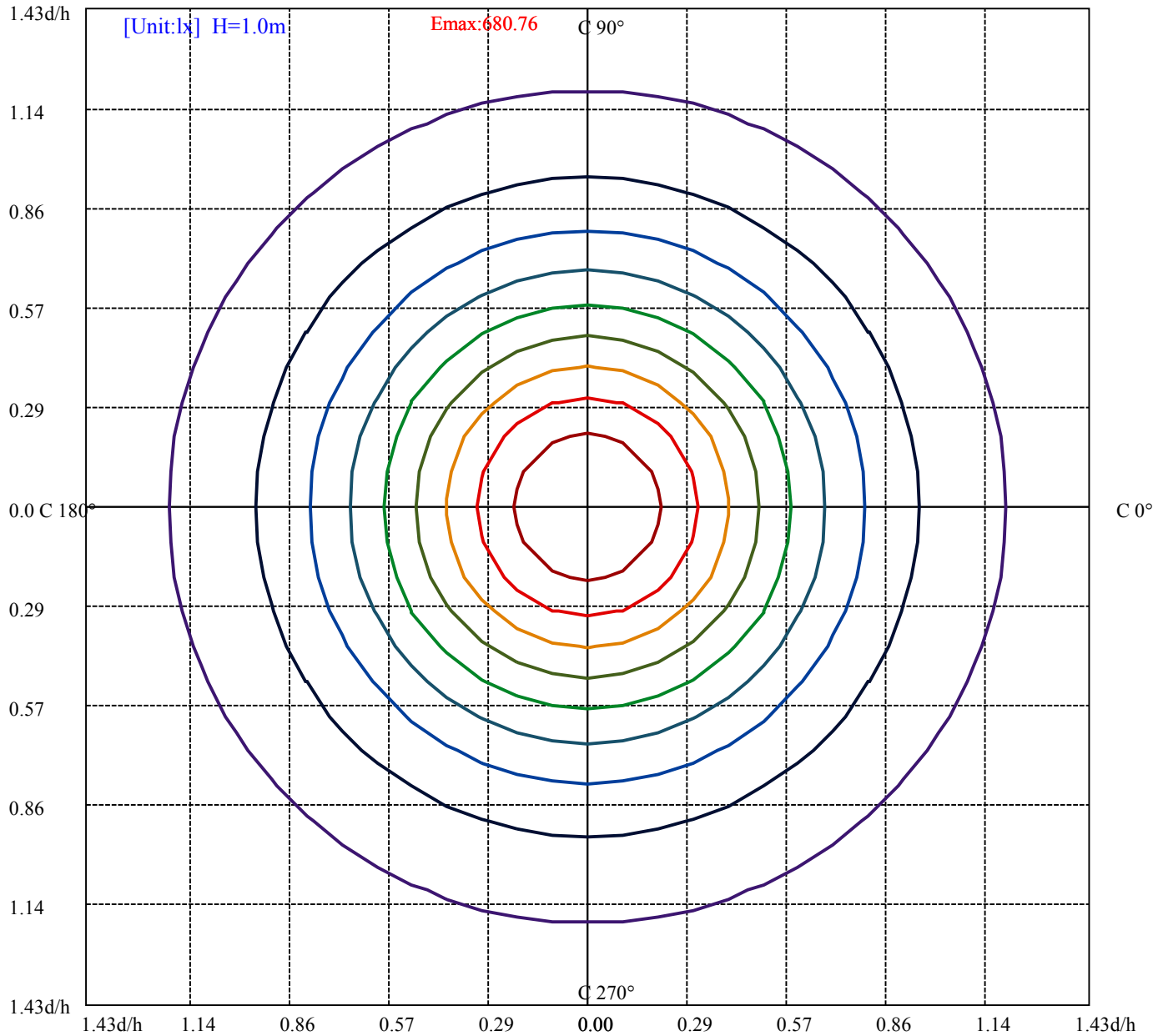
:C90/270Left:65.7 Right:65.7

Beam Angle(50%Imax):C0/180Left:44.2 Right:44.2

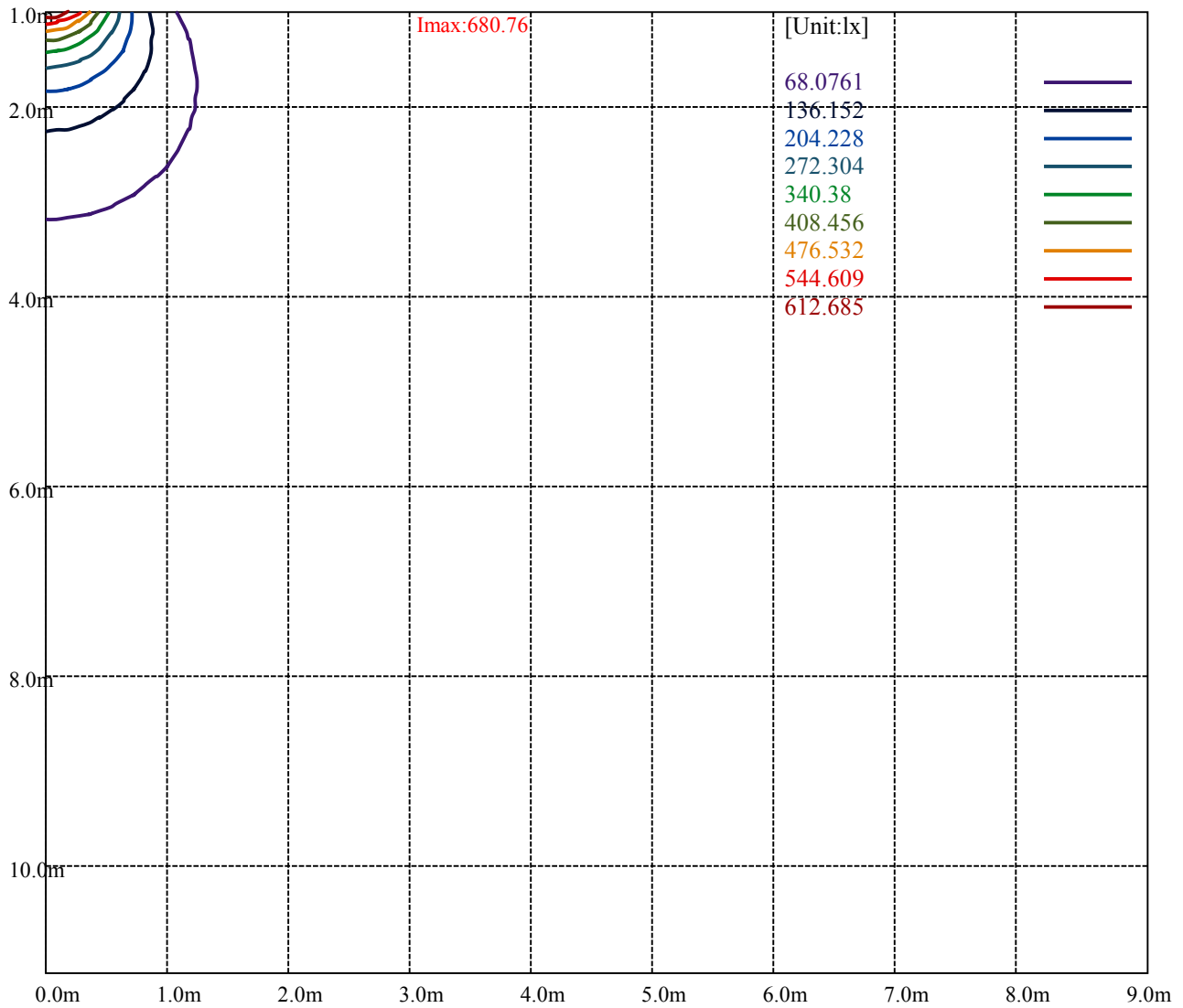
:C90/270Left:44.3 Right:44.3



Max , Ave Beam angle of C15 plane 88.84



(10%Emax) 68.0761	—
(20%Emax) 136.152	—
(30%Emax) 204.228	—
(40%Emax) 272.304	—
(50%Emax) 340.38	—
(60%Emax) 408.456	—
(70%Emax) 476.532	—
(80%Emax) 544.609	—
(90%Emax) 612.685	—



Luminance Table

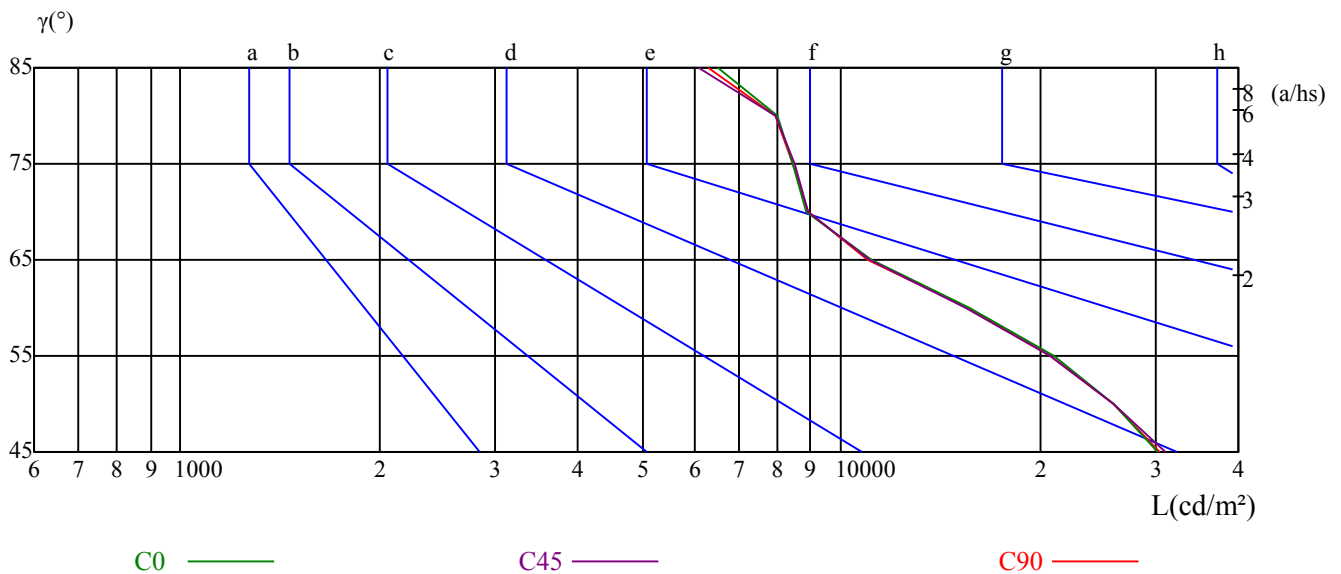
γ	45	50	55	60	65	70	75	80	85
C0	30266	25866	20960	15632	11163	8891	8455	8020	6522
C45	31109	25850	20792	15479	11063	8917	8504	7953	6107
C90	30333	25833	20708	15510	10982	8935	8465	7969	6285

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11163	10982	11063	8455	8465	8504	6522	6285	6107

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



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	1.07	1.03	1.00	1.05	1.02	0.99	1.00	0.98	0.96	0.97	0.95	0.93	0.93	0.91	0.90	0.88
2	0.96	0.90	0.85	0.94	0.89	0.84	0.90	0.86	0.82	0.87	0.84	0.80	0.84	0.81	0.79	0.77
3	0.86	0.79	0.73	0.84	0.78	0.73	0.81	0.76	0.71	0.79	0.74	0.70	0.76	0.72	0.69	0.67
4	0.77	0.70	0.64	0.76	0.69	0.63	0.74	0.68	0.63	0.71	0.66	0.62	0.69	0.65	0.61	0.59
5	0.70	0.62	0.56	0.69	0.62	0.56	0.67	0.60	0.55	0.65	0.59	0.55	0.63	0.58	0.54	0.52
6	0.64	0.56	0.50	0.63	0.55	0.50	0.61	0.54	0.49	0.60	0.54	0.49	0.58	0.53	0.49	0.47
7	0.58	0.50	0.45	0.58	0.50	0.45	0.56	0.49	0.44	0.55	0.49	0.44	0.53	0.48	0.44	0.42
8	0.54	0.46	0.41	0.53	0.46	0.40	0.52	0.45	0.40	0.51	0.44	0.40	0.49	0.44	0.40	0.38
9	0.50	0.42	0.37	0.49	0.42	0.37	0.48	0.41	0.37	0.47	0.41	0.36	0.46	0.40	0.36	0.35
10	0.46	0.39	0.34	0.45	0.38	0.34	0.45	0.38	0.34	0.44	0.38	0.33	0.43	0.37	0.33	0.32

Shenzhen Wisdom Light Co., Ltd. WL-DL06IN12WDUV(30K-35K-40K)-T

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	680.76	680.76	670.26	651.89	624.76	589.76	547.76	495.26	433.13
15.0	680.76	679.88	669.33	651.74	626.23	591.05	547.95	495.18	433.61
30.0	680.76	679.88	671.05	652.51	626.02	593.35	550.08	497.99	434.42
45.0	680.76	679.88	670.15	651.59	625.95	592.35	549.91	496.87	435.86
60.0	680.76	680.76	671.01	653.28	627.58	593.01	549.57	497.27	435.23
75.0	680.76	679.87	669.24	652.40	625.80	593.01	549.57	494.62	433.45
90.0	680.76	680.76	671.00	653.25	625.73	592.89	549.40	496.15	434.02
105.0	680.76	679.87	670.11	651.47	625.73	591.12	547.63	493.48	431.36
120.0	680.76	678.99	670.11	651.47	624.84	591.12	547.63	491.71	428.69
135.0	680.76	679.87	669.22	649.70	623.96	589.34	547.63	491.71	426.03
150.0	680.76	679.87	669.21	650.54	623.88	589.22	546.56	489.69	425.70
165.0	680.76	678.99	668.33	648.81	622.18	586.68	544.08	489.05	424.26
180.0	680.76	672.89	656.26	630.88	598.51	558.26	504.01	440.13	368.38
195.0	680.76	672.84	655.25	630.63	598.08	556.75	503.09	439.77	370.28
210.0	680.76	673.70	655.15	630.43	597.76	555.38	501.52	439.71	369.08
225.0	680.76	671.92	655.12	629.48	596.77	555.22	502.17	437.63	366.90
240.0	680.76	672.78	655.94	630.24	597.44	556.66	503.48	439.66	368.75
255.0	680.76	672.78	655.05	629.35	597.44	554.89	501.71	440.54	369.63
270.0	680.76	673.66	655.91	630.17	598.22	555.61	504.14	440.23	370.11
285.0	680.76	672.77	655.91	630.17	598.22	557.39	505.02	442.01	371.89
300.0	680.76	672.77	655.91	630.17	598.22	556.50	505.02	443.78	374.55
315.0	680.76	671.89	656.80	631.06	598.22	558.28	505.91	443.78	374.55
330.0	680.76	673.65	657.65	632.77	599.89	559.89	533.23	445.25	377.71
345.0	680.76	673.66	656.80	633.72	599.99	560.05	508.57	446.44	379.88
360.0	680.76	680.76	670.26	651.89	624.76	589.76	547.76	495.26	433.13
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	363.13	289.63	217.00	146.13	89.25	53.38	39.38	27.13	14.00
15.0	364.13	292.01	219.00	147.76	89.71	54.53	40.46	27.27	14.07
30.0	367.31	292.26	218.97	147.45	90.94	54.74	40.62	27.37	14.13
45.0	366.02	290.87	217.49	148.53	90.18	53.93	40.67	27.41	14.15
60.0	366.97	292.51	219.83	148.03	89.53	54.96	40.77	27.48	15.07
75.0	365.20	291.63	218.06	146.26	89.53	54.07	39.89	27.48	14.18
90.0	363.90	289.35	215.68	145.56	87.87	53.25	39.94	27.51	14.20
105.0	363.01	288.46	215.68	143.79	86.98	53.25	39.94	26.63	14.20
120.0	359.46	284.91	212.13	142.01	86.98	52.37	39.05	26.63	13.31
135.0	355.91	283.13	208.58	139.35	86.09	52.37	39.05	26.63	13.31
150.0	355.49	279.95	207.96	139.53	86.21	50.66	38.22	25.77	13.33
165.0	352.36	276.92	205.03	137.57	84.32	50.59	38.17	24.85	12.43
180.0	295.75	222.25	153.13	94.50	56.00	40.25	28.00	15.75	3.50
195.0	295.52	219.88	150.40	91.47	55.41	40.46	28.15	14.95	2.64
210.0	294.03	219.86	147.45	90.94	54.74	39.73	27.37	15.01	2.65
225.0	294.41	220.14	150.30	91.06	54.81	39.78	27.41	15.03	2.65
240.0	295.17	221.60	148.92	90.41	54.96	39.89	27.48	15.07	2.66
255.0	294.29	219.83	148.03	91.30	54.96	39.89	27.48	15.07	2.66
270.0	296.45	221.89	150.00	93.19	55.03	40.83	27.51	15.09	2.66
285.0	299.11	222.78	152.66	93.19	55.92	40.83	33.73	15.09	2.66
300.0	300.00	226.33	156.21	121.60	55.92	40.83	28.40	15.09	2.66
315.0	338.16	228.99	157.99	97.63	56.80	41.72	28.40	15.98	2.66
330.0	304.83	232.85	161.75	98.65	57.77	41.77	29.33	16.00	3.55
345.0	307.10	235.20	161.54	98.52	58.58	42.60	29.29	16.86	3.55
360.0	363.13	289.63	217.00	146.13	89.25	53.38	39.38	27.13	14.00

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	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15.0	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
30.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
45.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
60.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
75.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
90.0	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
105.0	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
120.0	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
135.0	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
150.0	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
165.0	0.89	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	1.75	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	0.88	0.88	0.88	0.88	0.88	1.75	1.75	1.75	2.63		
15.0	0.00	0.88	0.88	0.88	0.88	1.76	1.76	1.76	2.64		
30.0	0.00	0.88	0.88	0.88	0.88	1.77	1.77	1.77	2.65		
45.0	0.00	0.00	0.88	0.88	0.88	1.77	1.77	2.65	2.65		
60.0	0.00	0.89	0.89	0.89	0.89	1.77	1.77	1.77	1.77		
75.0	0.89	0.89	0.89	0.89	0.89	1.77	1.77	1.77	1.77		
90.0	0.89	0.89	0.89	0.89	0.89	1.78	1.78	1.78	2.66		
105.0	0.00	0.89	0.89	0.89	0.89	1.78	1.78	1.78	2.66		
120.0	0.89	0.89	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
135.0	0.89	0.00	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
150.0	0.00	0.89	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
165.0	0.00	0.89	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
180.0	0.00	0.00	0.88	0.88	0.88	1.75	1.75	1.75	1.75		
195.0	0.00	0.00	0.88	0.88	0.88	1.76	1.76	1.76	1.76		
210.0	0.00	0.00	0.88	0.88	0.88	1.77	1.77	1.77	1.77		
225.0	0.00	0.00	0.88	0.88	0.88	1.77	1.77	1.77	1.77		
240.0	0.00	0.00	0.89	0.89	0.89	1.77	1.77	1.77	1.77		
255.0	0.00	0.89	0.89	0.89	0.89	1.77	1.77	1.77	1.77		
270.0	0.00	0.00	0.89	0.89	0.89	1.78	1.78	1.78	2.66		
285.0	0.00	0.00	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
300.0	0.00	0.89	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
315.0	0.00	0.00	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
330.0	0.00	0.00	0.89	0.89	0.89	1.78	1.78	1.78	1.78		
345.0	0.00	0.00	0.00	0.89	0.89	1.78	1.78	1.78	1.78		
360.0	0.88	0.88	0.88	0.88	0.88	1.75	1.75	1.75	2.63		

Intensity data(cd)

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C/γ(°)	180.0
0.0	2.63
15.0	2.64
30.0	2.65
45.0	1.77
60.0	2.66
75.0	2.66
90.0	2.66
105.0	2.66
120.0	2.66
135.0	2.66
150.0	2.67
165.0	2.66
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	2.63