
Shenzhen Wisdom Light Co., Ltd.

Client:

LumCAT: WL-DL06IN24WDUV(30K-35K-40K)-T

Luminaire: Commercial downlight

Report No:

Ballast type:

Test No: LCZP21120038

Voltage(V): 120.010

LampCAT:

Current(A): 0.203

Lamp flux(lm): 2484.3

Power (W): 24.110

Number of Lamps: 1

PF: 0.990

Length(mm): -140

Width(mm): -140

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2484.31, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 103.04

Central intensity(cd): 1256.641, Maximum intensity(cd): 1256.641

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=88.6

[C90/270]Total=88.4

Field angle(10%Imax): [C0/180]Total=131.2

[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(%): 0.29%

Down flux rate of lamp(%): 99.71%

Up flux rate of LUM(%): 0.28%

Down flux rate of LUM(%): 99.72%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 90.554%

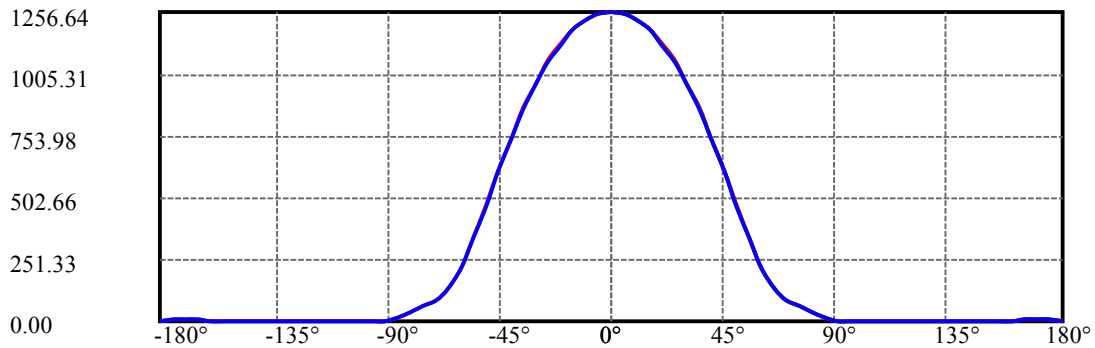
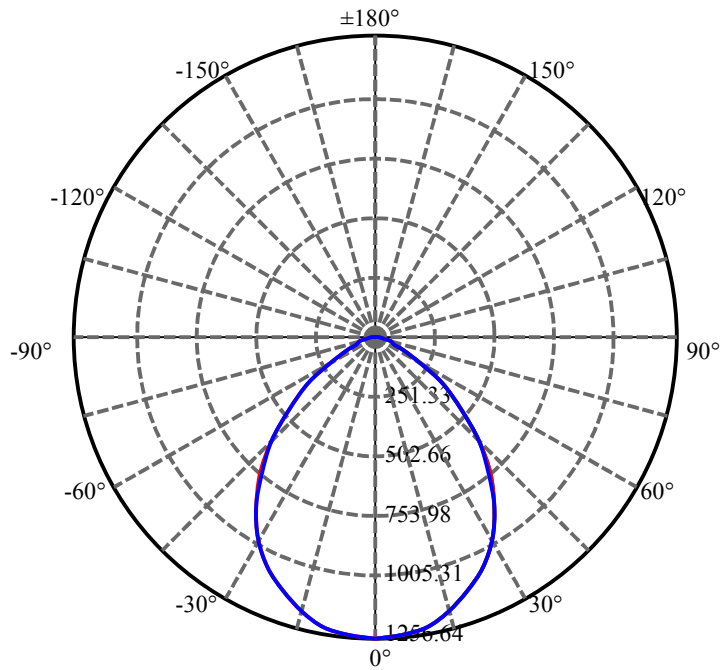
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1256.641	0.000	0	0.00%	0.00%
5.0	1248.491	29.948	29.948	1.21%	1.21%
10.0	1223.340	88.425	118.373	3.56%	4.76%
15.0	1182.996	142.742	261.116	5.75%	10.51%
20.0	1127.680	190.432	451.548	7.67%	18.18%
25.0	1058.313	229.270	680.818	9.23%	27.40%
30.0	972.464	256.996	937.815	10.34%	37.75%
35.0	861.459	270.058	1207.873	10.87%	48.62%
40.0	739.469	267.103	1474.975	10.75%	59.37%
45.0	611.171	250.082	1725.057	10.07%	69.44%
50.0	471.849	218.840	1943.897	8.81%	78.25%
55.0	338.905	176.285	2120.182	7.10%	85.34%
60.0	221.193	129.465	2249.647	5.21%	90.55%
65.0	131.948	85.849	2335.497	3.46%	94.01%
70.0	86.773	55.382	2390.879	2.23%	96.24%
75.0	63.393	39.251	2430.13	1.58%	97.82%
80.0	39.275	27.471	2457.601	1.11%	98.93%
85.0	15.857	14.981	2472.581	0.60%	99.53%
90.0	1.106	4.645	2477.226	0.19%	99.71%
95.0	0.295	0.384	2477.61	0.02%	99.73%
100.0	0.443	0.200	2477.81	0.01%	99.74%
105.0	0.443	0.237	2478.047	0.01%	99.75%
110.0	0.443	0.231	2478.278	0.01%	99.76%
115.0	0.443	0.224	2478.502	0.01%	99.77%
120.0	0.443	0.215	2478.717	0.01%	99.78%
125.0	0.885	0.307	2479.024	0.01%	99.79%
130.0	0.885	0.385	2479.409	0.02%	99.80%
135.0	0.885	0.358	2479.767	0.01%	99.82%
140.0	1.328	0.410	2480.177	0.02%	99.83%
145.0	1.770	0.517	2480.693	0.02%	99.85%
150.0	2.213	0.586	2481.28	0.02%	99.88%
155.0	3.061	0.667	2481.947	0.03%	99.91%
160.0	3.540	0.692	2482.64	0.03%	99.93%
165.0	4.425	0.656	2483.296	0.03%	99.96%
170.0	4.868	0.551	2483.847	0.02%	99.98%
175.0	5.310	0.364	2484.211	0.01%	100.00%
180.0	2.655	0.095	2484.307	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	937.81	37.75%	37.75%
0-40	1474.98	59.37%	59.37%
0-60	2249.65	90.55%	90.55%
0-90	2477.23	99.71%	99.71%
0-120	2478.72	99.77%	99.78%
0-180	2484.31	100.00%	100.00%
60-90	227.58	9.16%	9.16%
90-120	1.49	0.06%	0.06%
90-130	2.18	0.09%	0.09%
90-150	4.05	0.16%	0.16%
90-180	6.99	0.28%	0.28%
0-51.24	1987.45	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	118.37
10-20	333.17
20-30	486.27
30-40	537.16
40-50	468.92
50-60	305.75
60-70	141.23
70-80	66.72
80-90	19.63
90-100	0.58
100-110	0.47
110-120	0.44
120-130	0.69
130-140	0.77
140-150	1.10
150-160	1.36
160-170	1.21
170-180	0.36



C0(Max):

C0/C180:

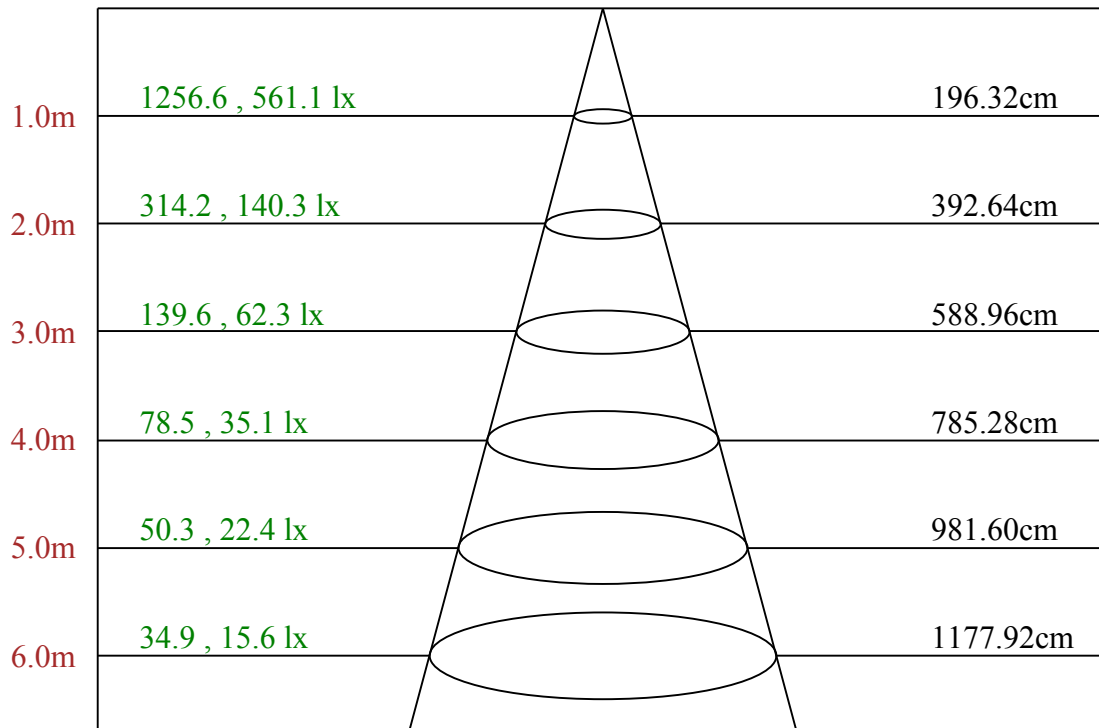
C90/C270:

Field angle(10%Imax):C0/180Left:65.6 Right:65.6

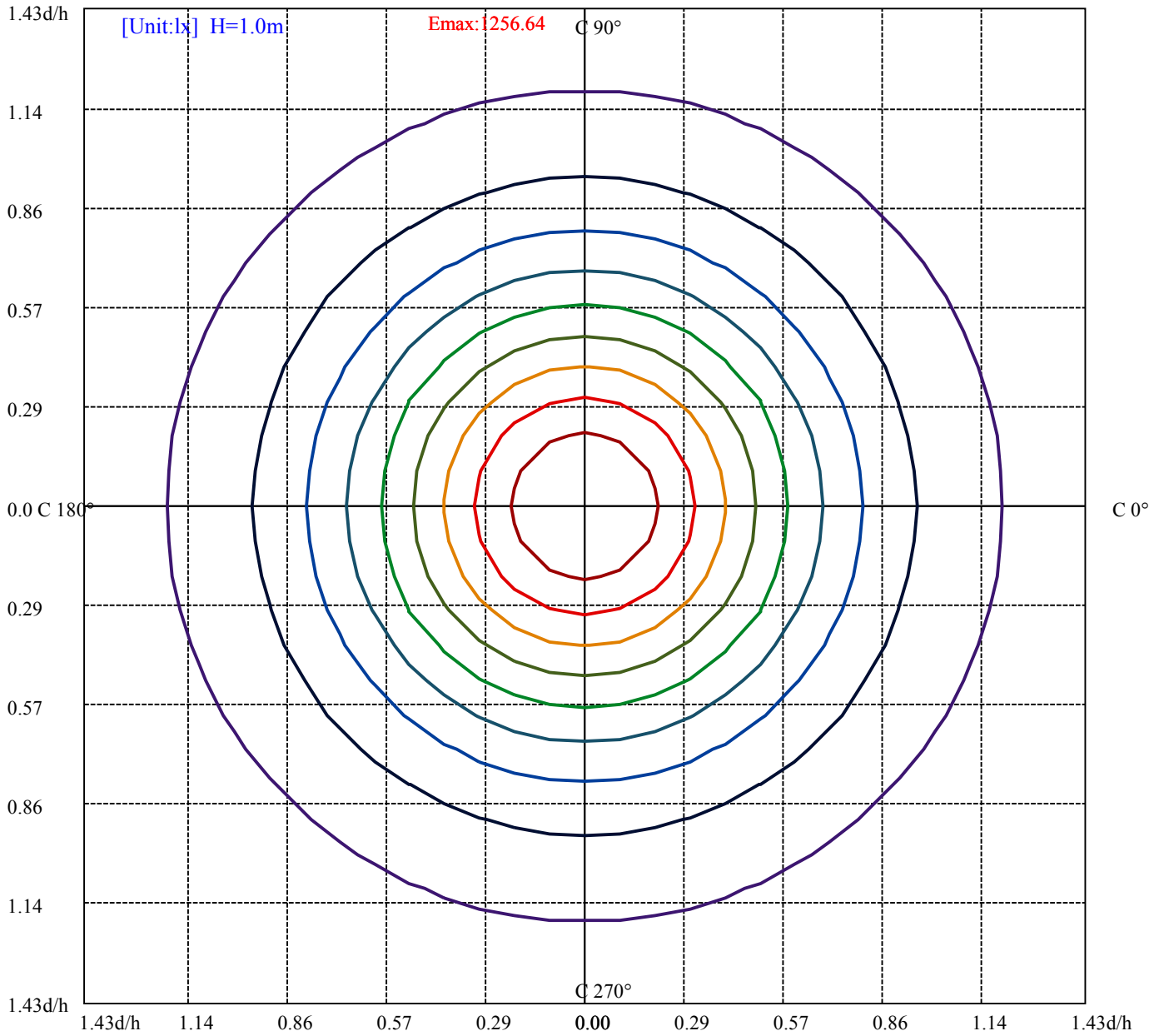
:C90/270Left:65.7 Right:65.7

Beam Angle(50%Imax):C0/180Left:44.3 Right:44.3

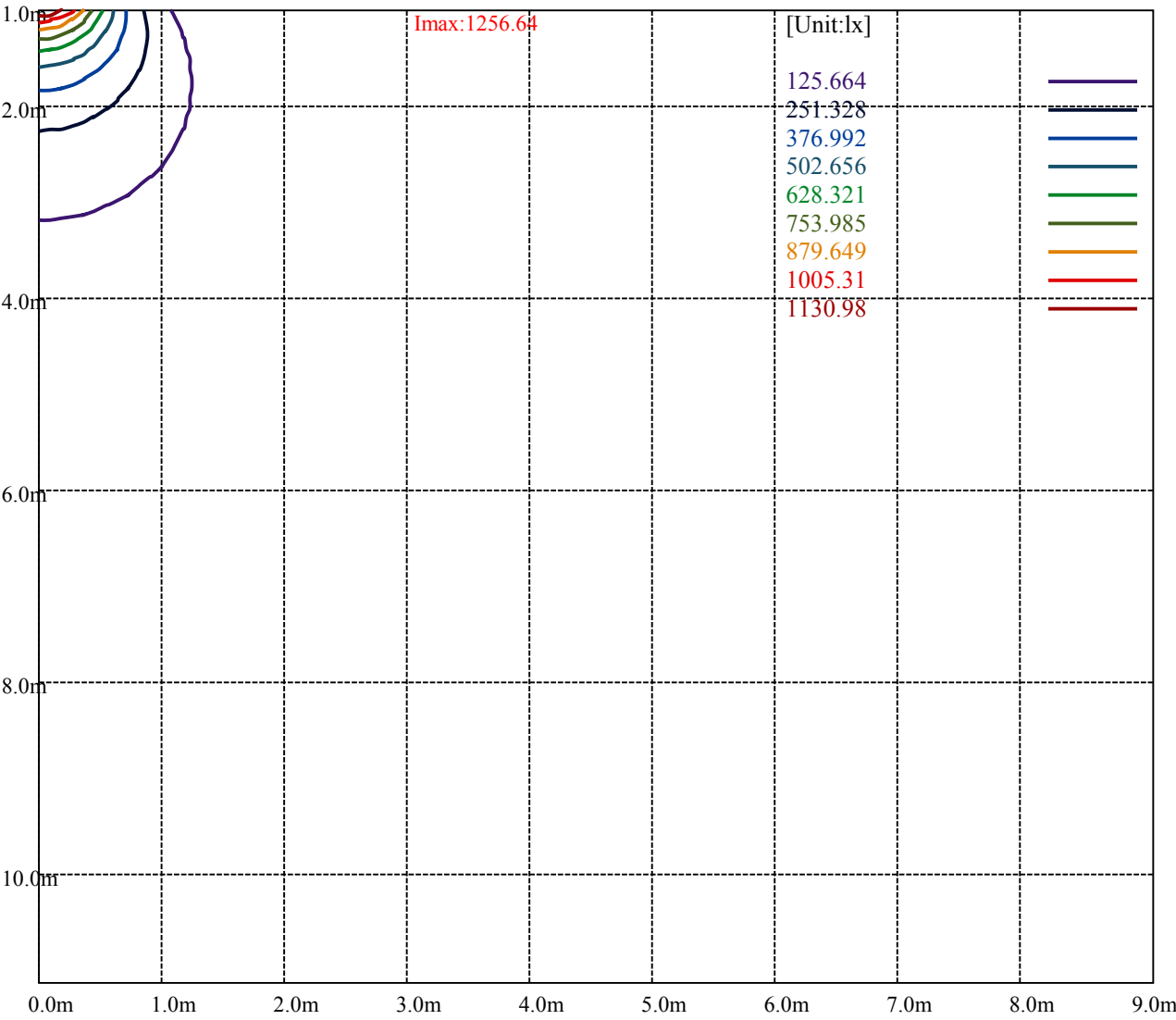
:C90/270Left:44.2 Right:44.2



Max , Ave Beam angle of C0 plane 88.94



(10%Emax) 125.664	—
(20%Emax) 251.328	—
(30%Emax) 376.992	—
(40%Emax) 502.656	—
(50%Emax) 628.32	—
(60%Emax) 753.985	—
(70%Emax) 879.649	—
(80%Emax) 1005.31	—
(90%Emax) 1130.98	—



Luminance Table

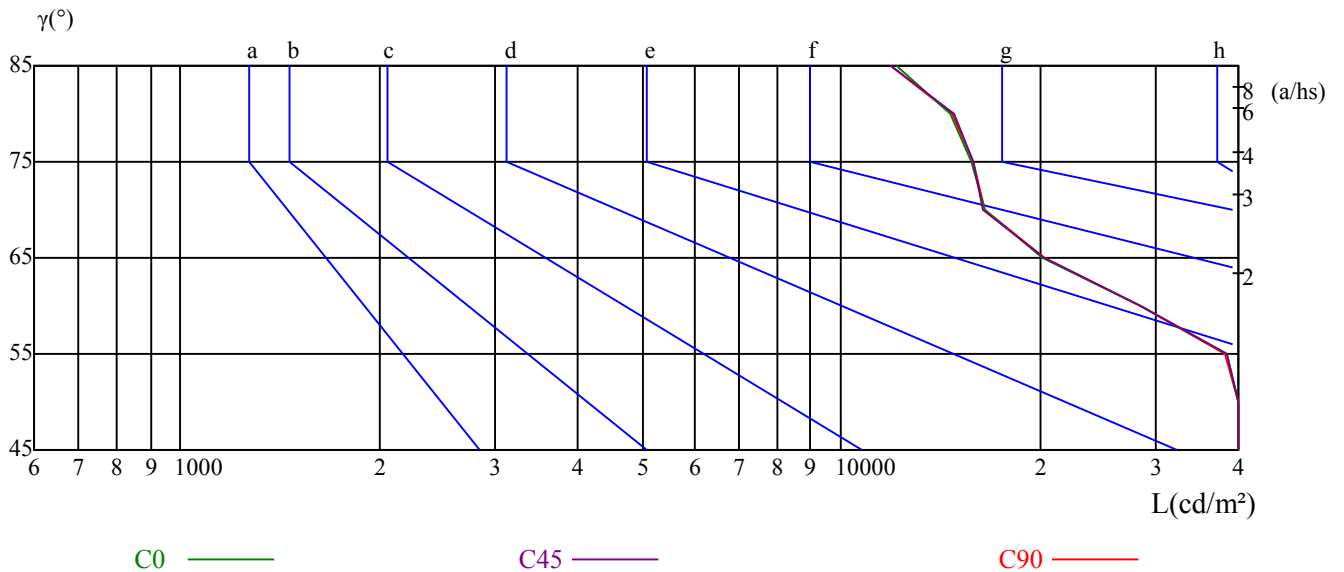
γ	45	50	55	60	65	70	75	80	85
C0	56103	47725	38452	28357	20197	16498	15715	14680	12160
C45	57357	47552	38350	28409	20309	16436	15831	14820	11877
C90	55811	47613	38213	28419	20282	16484	15893	14743	11881

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
20197	20282	20309	15715	15893	15831	12160	11881	11877

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	1.01	0.99	1.00	0.98	0.95	0.97	0.94	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	0.83	0.80	0.84	0.81	0.78	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	0.67	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	0.44	0.38	0.34	0.44	0.38	0.33	0.43	0.37	0.33	0.32

Shenzhen Wisdom Light Co., Ltd. WL-DL06IN24WDUV(30K-35K-40K)-T

Intensity data(cd)

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C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	1256.64	1254.00	1234.59	1198.44	1149.06	1083.80	1003.55	902.14	781.32
15.0	1256.64	1253.99	1234.53	1200.04	1148.75	1085.08	1002.84	901.14	784.41
30.0	1256.64	1253.99	1234.52	1199.12	1149.56	1084.07	1001.77	900.89	784.07
45.0	1256.64	1253.98	1234.50	1199.08	1148.60	1085.72	1005.14	900.64	783.74
60.0	1256.64	1253.98	1233.62	1197.31	1147.71	1084.84	1006.91	903.29	788.17
75.0	1256.64	1253.98	1234.50	1199.08	1149.49	1084.84	1006.02	903.29	788.17
90.0	1256.64	1253.98	1234.50	1200.85	1148.60	1085.72	1005.14	902.41	787.28
105.0	1256.64	1253.98	1234.50	1199.96	1149.49	1086.61	1007.79	905.95	790.82
120.0	1256.64	1253.98	1234.50	1199.96	1150.37	1085.72	1007.79	907.72	789.94
135.0	1256.64	1253.99	1234.52	1200.00	1151.33	1086.73	1006.20	907.08	788.50
150.0	1256.64	1253.98	1234.50	1200.85	1152.14	1086.61	1008.68	906.84	792.60
165.0	1256.64	1254.87	1235.39	1200.85	1151.26	1088.38	1007.79	909.49	791.71
180.0	1256.64	1244.30	1213.43	1168.46	1107.61	1034.41	937.41	828.06	701.07
195.0	1256.64	1243.38	1213.31	1167.32	1108.07	1032.90	938.28	824.20	697.74
210.0	1256.64	1242.48	1212.39	1167.26	1107.97	1032.75	938.94	824.78	697.35
225.0	1256.64	1244.24	1212.36	1166.31	1106.98	1031.70	936.06	825.36	696.95
240.0	1256.64	1242.47	1212.36	1166.31	1104.32	1030.82	935.17	820.93	693.41
255.0	1256.64	1243.36	1211.48	1166.31	1105.21	1031.70	935.17	816.51	692.53
270.0	1256.64	1242.47	1212.36	1165.43	1105.21	1029.05	933.40	816.51	691.64
285.0	1256.64	1242.47	1212.36	1165.43	1104.32	1029.93	933.40	816.51	686.33
300.0	1256.64	1242.47	1211.48	1164.54	1104.32	1030.82	934.29	812.08	685.44
315.0	1256.64	1242.48	1210.62	1164.61	1104.43	1028.32	930.98	813.28	685.84
330.0	1256.64	1242.47	1211.48	1165.43	1104.32	1029.93	984.77	812.08	684.56
345.0	1256.64	1242.47	1212.36	1168.97	1105.21	1029.05	931.63	813.85	683.67
360.0	1256.64	1254.00	1234.59	1198.44	1149.06	1083.80	1003.55	902.14	781.32
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	652.57	515.00	380.08	251.33	153.44	93.48	69.67	46.74	23.81
15.0	657.06	514.68	379.38	253.80	152.11	92.86	69.86	46.87	22.99
30.0	655.75	517.70	383.19	253.10	151.33	94.69	70.80	46.90	23.89
45.0	656.22	517.18	381.69	253.28	154.09	93.87	70.85	47.82	23.91
60.0	656.22	517.18	381.69	256.82	154.98	94.76	69.96	46.94	23.03
75.0	660.64	521.61	386.11	256.82	157.63	95.64	70.85	46.94	23.91
90.0	660.64	522.49	387.89	258.59	157.63	95.64	71.73	47.82	24.80
105.0	660.64	527.81	389.66	263.02	157.63	95.64	71.73	47.82	24.80
120.0	664.19	528.69	394.97	263.90	160.29	96.53	72.62	47.82	23.91
135.0	662.83	527.44	395.58	263.72	160.18	96.46	72.57	48.67	24.78
150.0	663.30	531.35	398.51	266.56	159.40	98.30	72.62	48.71	24.80
165.0	665.96	529.58	395.86	264.79	162.06	98.30	73.50	48.71	25.68
180.0	568.80	429.46	298.95	185.19	109.35	80.25	55.56	31.75	8.82
195.0	565.09	428.90	294.48	184.83	109.66	79.59	55.71	31.84	7.96
210.0	564.60	430.09	295.58	181.42	109.73	78.76	55.75	31.86	7.96
225.0	561.46	425.97	291.36	180.66	108.04	78.82	55.79	31.88	8.86
240.0	561.46	425.97	290.47	180.66	108.04	78.82	54.91	31.00	8.86
255.0	560.57	425.08	290.47	178.00	106.27	77.93	54.91	31.00	7.97
270.0	554.37	419.77	286.93	178.89	106.27	77.93	54.91	31.00	7.08
285.0	553.49	414.45	286.93	179.77	106.27	77.93	64.65	30.11	7.08
300.0	548.18	414.45	287.81	225.82	106.27	77.05	54.02	30.11	6.20
315.0	616.82	411.51	285.84	176.99	106.20	76.99	53.10	30.09	6.19
330.0	547.29	412.68	286.93	177.12	104.50	76.16	52.25	30.11	6.20
345.0	549.95	415.34	283.39	173.57	105.38	76.16	53.13	30.11	7.08
360.0	652.57	515.00	380.08	251.33	153.44	93.48	69.67	46.74	23.81

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	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88		
15.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88		
30.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88		
45.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
60.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
75.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
90.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
105.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
120.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
135.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88		
150.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
165.0	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89		
180.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88		
195.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88		
210.0	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88		
225.0	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
240.0	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
255.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
270.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
285.0	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
300.0	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
315.0	0.00	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88		
330.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
345.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
360.0	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88		
C/γ(°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0		
0.0	0.88	1.76	1.76	2.65	3.53	3.53	4.41	5.29	5.29		
15.0	0.88	1.77	1.77	2.65	2.65	3.54	4.42	5.31	5.31		
30.0	0.88	1.77	1.77	2.65	3.54	3.54	4.42	5.31	5.31		
45.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
60.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
75.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
90.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
105.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
120.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
135.0	0.88	1.77	1.77	2.65	3.54	3.54	4.42	5.31	5.31		
150.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
165.0	0.89	1.77	1.77	2.66	3.54	3.54	4.43	5.31	5.31		
180.0	0.88	0.88	1.76	1.76	2.65	3.53	4.41	4.41	5.29		
195.0	0.88	0.88	1.77	1.77	2.65	3.54	4.42	4.42	5.31		
210.0	0.88	0.88	1.77	1.77	2.65	3.54	4.42	4.42	5.31		
225.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
240.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
255.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
270.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
285.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
300.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
315.0	0.88	0.88	1.77	1.77	2.65	3.54	4.42	4.42	5.31		
330.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
345.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	5.31		
360.0	0.88	1.76	1.76	2.65	3.53	3.53	4.41	5.29	5.29		

Intensity data(cd)

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C/γ(°)	180.0
0.0	5.29
15.0	5.31
30.0	5.31
45.0	5.31
60.0	5.31
75.0	5.31
90.0	5.31
105.0	5.31
120.0	5.31
135.0	5.31
150.0	5.31
165.0	5.31
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	5.29