
Shenzhen Wisdom Light Co., Ltd.

Client:

LumCAT: WL-DL08IN30WDUV(30K-35K-40K)-T

Luminaire: Commercial downlight

Report No:

Ballast type:

Test No: LCZP21120039

Voltage(V): 120.050

LampCAT:

Current(A): 0.248

Lamp flux(lm): 2969.7

Power (W): 29.490

Number of Lamps: 1

PF: 0.992

Length(mm): -190

Width(mm): -190

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2969.74, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 100.70

Central intensity(cd): 1504.606, Maximum intensity(cd): 1504.606

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=90.8

[C90/270]Total=90.8

Field angle(10%Imax): [C0/180]Total=128.8

[C90/270]Total=129.0

Maximum s/h(1/2): C0_180=1.15 C90_270=1.16

Maximum s/h(1/4): C0_180=1.24 C90_270=1.24

Up flux rate of lamp(%): 0.27%

Down flux rate of lamp(%): 99.73%

Up flux rate of LUM(%): 0.27%

Down flux rate of LUM(%): 99.73%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 91.777%

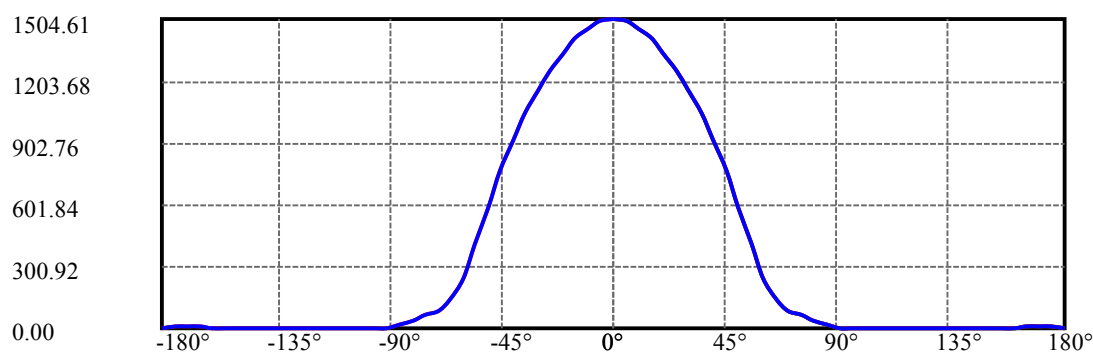
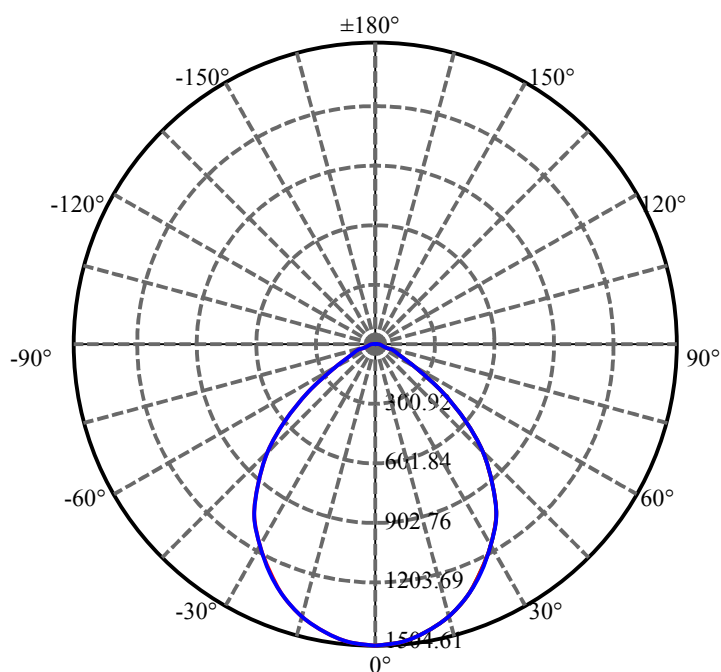
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1504.606	0.000	0	0.00%	0.00%
5.0	1493.727	35.844	35.844	1.21%	1.21%
10.0	1460.574	105.685	141.529	3.56%	4.77%
15.0	1407.544	170.135	311.664	5.73%	10.49%
20.0	1337.772	226.253	537.916	7.62%	18.11%
25.0	1254.134	271.843	809.759	9.15%	27.27%
30.0	1161.462	305.696	1115.455	10.29%	37.56%
35.0	1047.804	325.330	1440.785	10.95%	48.52%
40.0	915.671	327.591	1768.376	11.03%	59.55%
45.0	767.205	311.598	2079.974	10.49%	70.04%
50.0	591.664	274.579	2354.554	9.25%	79.28%
55.0	411.701	218.165	2572.719	7.35%	86.63%
60.0	249.407	152.813	2725.532	5.15%	91.78%
65.0	137.664	94.098	2819.63	3.17%	94.95%
70.0	87.584	57.034	2876.664	1.92%	96.87%
75.0	62.766	39.299	2915.963	1.32%	98.19%
80.0	37.984	26.958	2942.921	0.91%	99.10%
85.0	15.193	14.450	2957.37	0.49%	99.58%
90.0	1.106	4.463	2961.833	0.15%	99.73%
95.0	0.148	0.343	2962.177	0.01%	99.75%
100.0	0.443	0.160	2962.337	0.01%	99.75%
105.0	0.443	0.237	2962.574	0.01%	99.76%
110.0	0.443	0.231	2962.805	0.01%	99.77%
115.0	0.443	0.224	2963.029	0.01%	99.77%
120.0	0.443	0.215	2963.244	0.01%	99.78%
125.0	0.885	0.307	2963.551	0.01%	99.79%
130.0	0.885	0.385	2963.936	0.01%	99.80%
135.0	1.328	0.447	2964.383	0.02%	99.82%
140.0	1.328	0.492	2964.875	0.02%	99.84%
145.0	2.065	0.566	2965.441	0.02%	99.86%
150.0	2.618	0.690	2966.13	0.02%	99.88%
155.0	3.540	0.779	2966.91	0.03%	99.90%
160.0	4.425	0.835	2967.745	0.03%	99.93%
165.0	5.274	0.799	2968.545	0.03%	99.96%
170.0	5.753	0.654	2969.199	0.02%	99.98%
175.0	6.195	0.427	2969.626	0.01%	100.00%
180.0	3.245	0.113	2969.739	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1115.46	37.56%	37.56%
0-40	1768.38	59.55%	59.55%
0-60	2725.53	91.78%	91.78%
0-90	2961.83	99.73%	99.73%
0-120	2963.24	99.78%	99.78%
0-180	2969.74	100.00%	100.00%
60-90	236.30	7.96%	7.96%
90-120	1.41	0.05%	0.05%
90-130	2.10	0.07%	0.07%
90-150	4.30	0.14%	0.14%
90-180	7.79	0.26%	0.26%
0-50.49	2375.79	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	141.53
10-20	396.39
20-30	577.54
30-40	652.92
40-50	586.18
50-60	370.98
60-70	151.13
70-80	66.26
80-90	18.91
90-100	0.50
100-110	0.47
110-120	0.44
120-130	0.69
130-140	0.94
140-150	1.26
150-160	1.61
160-170	1.45
170-180	0.43



C0(Max):

C0/C180:

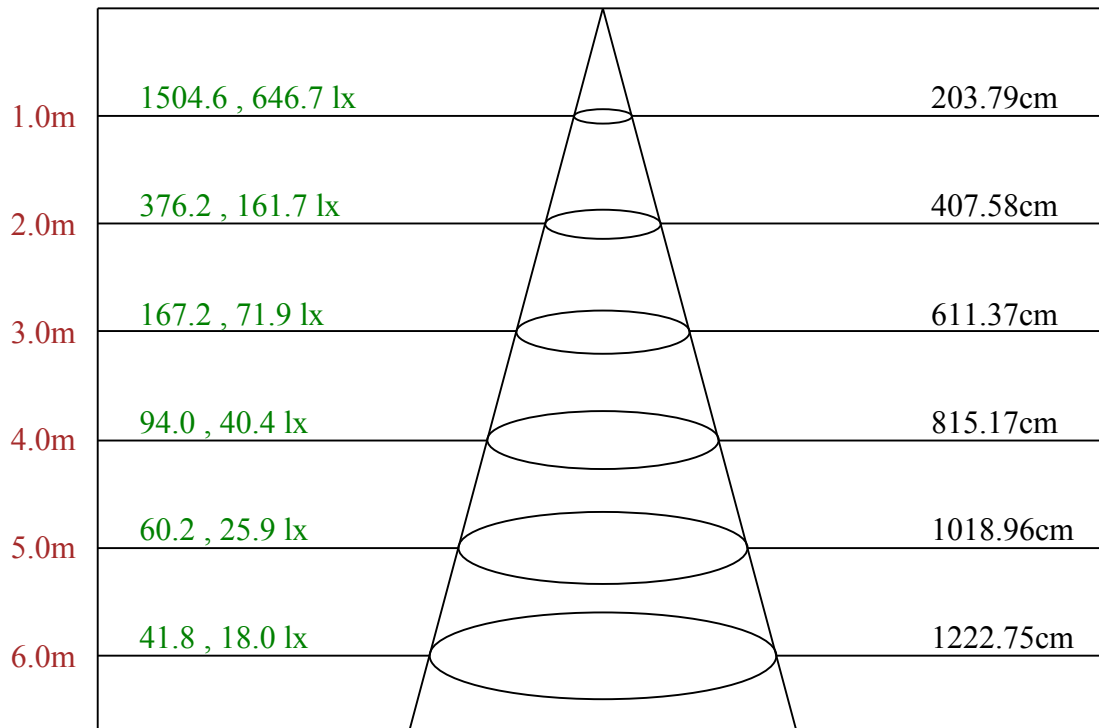
C90/C270:

Field angle(10%Imax):C0/180Left:64.4 Right:64.4

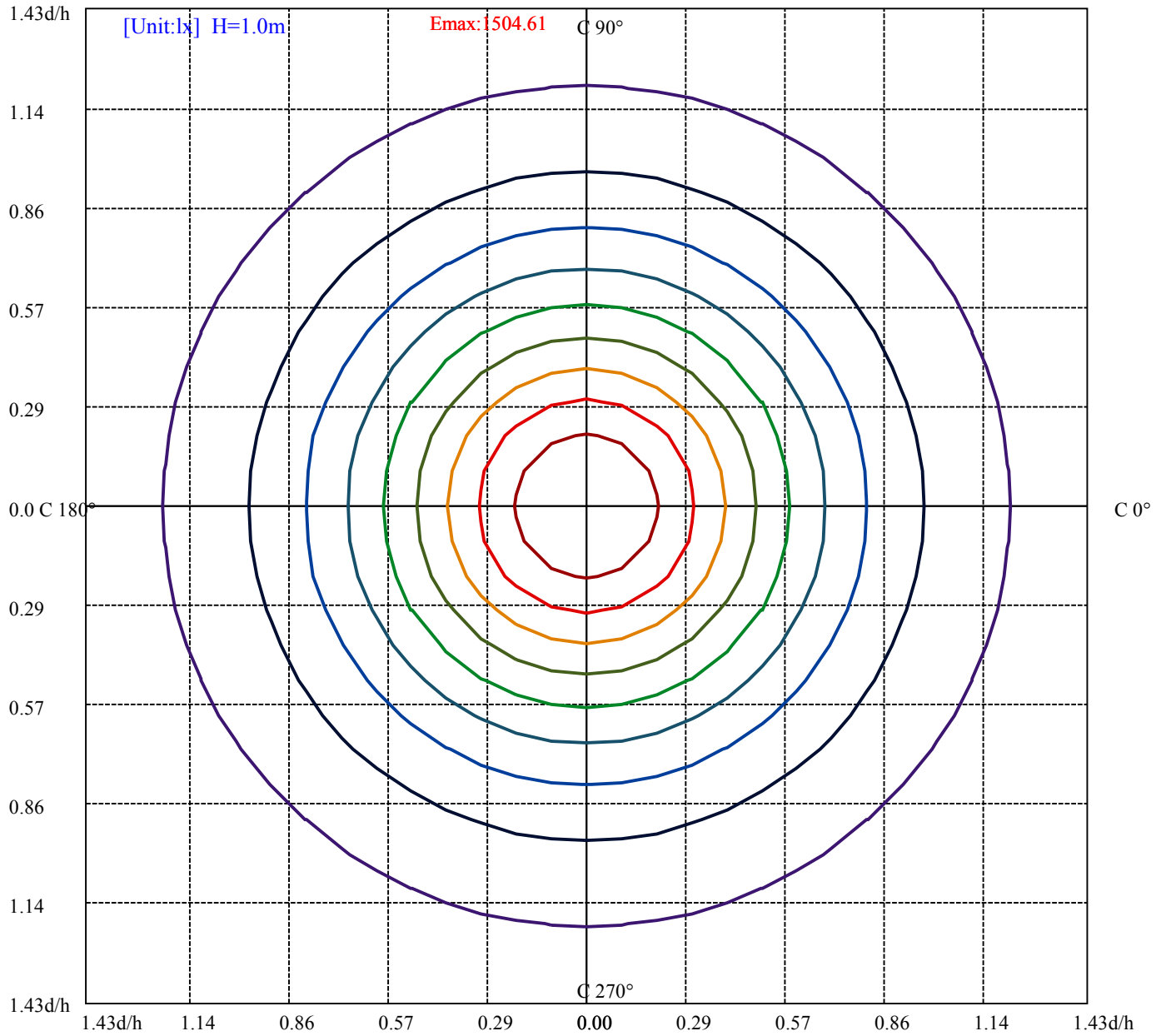
:C90/270Left:64.5 Right:64.5

Beam Angle(50%Imax):C0/180Left:45.4 Right:45.4

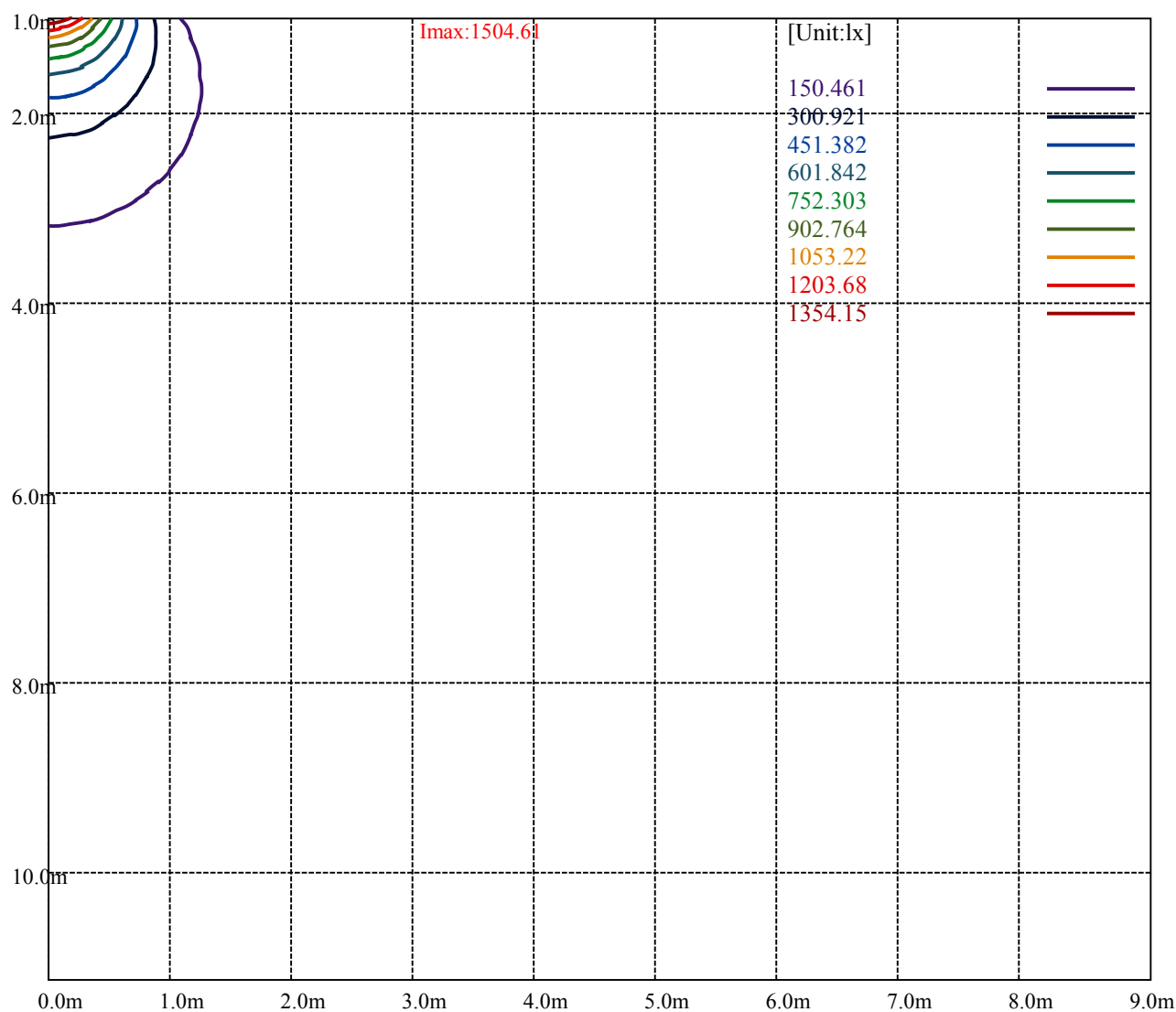
:C90/270Left:45.4 Right:45.4



Max , Ave Beam angle of C0 plane 91.08



(10%Emax) 150.461	—
(20%Emax) 300.921	—
(30%Emax) 451.382	—
(40%Emax) 601.842	—
(50%Emax) 752.303	—
(60%Emax) 902.763	—
(70%Emax) 1053.22	—
(80%Emax) 1203.68	—
(90%Emax) 1354.15	—



Luminance Table

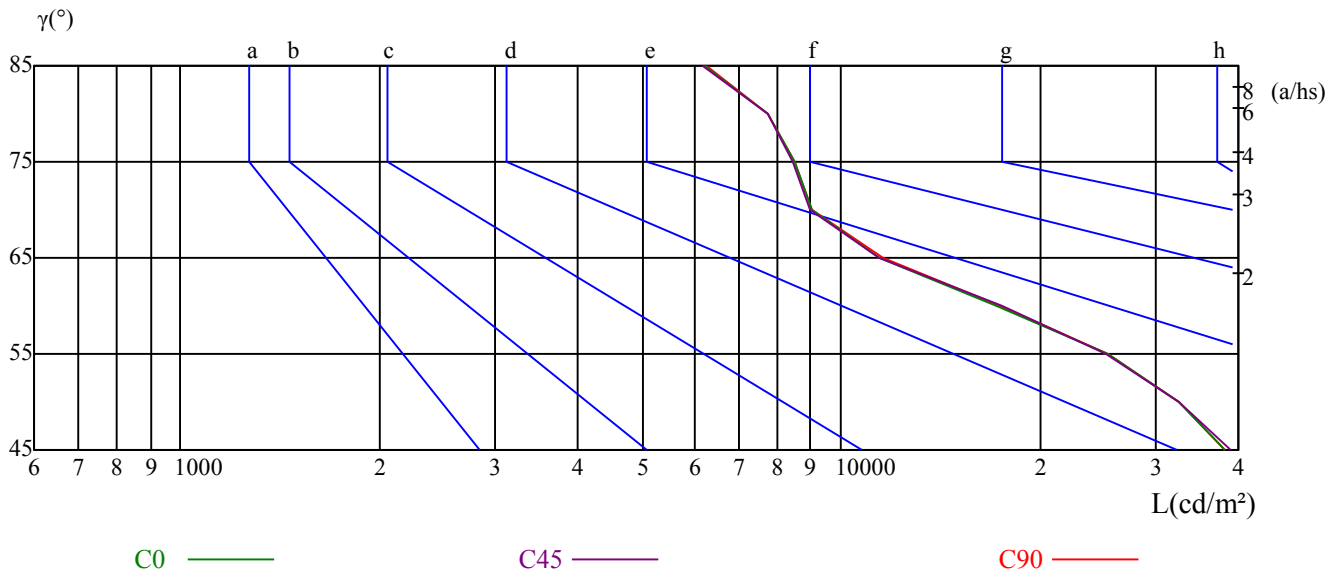
γ	45	50	55	60	65	70	75	80	85
C0	38182	32468	25294	17255	11455	9028	8513	7774	6231
C45	39027	32399	25267	17538	11455	8995	8478	7734	6182
C90	38165	32454	25418	17439	11573	9046	8513	7739	6275

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
11455	11573	11455	8513	8513	8478	6231	6275	6182

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	1.04	1.01	1.05	1.02	0.99	1.01	0.98	0.96	0.97	0.95	0.93	0.93	0.92	0.90	0.88
2	0.96	0.90	0.86	0.94	0.89	0.85	0.91	0.86	0.83	0.87	0.84	0.81	0.85	0.82	0.79	0.77
3	0.86	0.79	0.74	0.85	0.78	0.73	0.82	0.76	0.72	0.79	0.74	0.71	0.77	0.73	0.69	0.67
4	0.78	0.70	0.64	0.76	0.69	0.64	0.74	0.68	0.63	0.72	0.66	0.62	0.70	0.65	0.61	0.59
5	0.70	0.62	0.57	0.69	0.62	0.56	0.67	0.61	0.56	0.65	0.60	0.55	0.64	0.59	0.55	0.53
6	0.64	0.56	0.50	0.63	0.56	0.50	0.61	0.55	0.50	0.60	0.54	0.49	0.58	0.53	0.49	0.47
7	0.59	0.51	0.45	0.58	0.50	0.45	0.56	0.50	0.45	0.55	0.49	0.44	0.54	0.48	0.44	0.42
8	0.54	0.46	0.41	0.53	0.46	0.41	0.52	0.45	0.40	0.51	0.45	0.40	0.50	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	0.37	0.46	0.40	0.36	0.35
10	0.46	0.39	0.34	0.46	0.39	0.34	0.45	0.38	0.34	0.44	0.38	0.34	0.43	0.37	0.33	0.32

Shenzhen Wisdom Light Co., Ltd. WL-DL08IN30WDUV(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	1504.61	1501.97	1476.45	1431.58	1365.58	1283.75	1194.89	1094.58	967.88	
15.0	1504.61	1501.96	1477.22	1432.16	1368.55	1288.15	1195.38	1094.66	971.85	
30.0	1504.61	1501.95	1477.17	1432.03	1369.19	1291.31	1199.26	1098.36	970.91	
45.0	1504.61	1501.95	1477.17	1432.92	1368.31	1290.42	1201.03	1096.59	973.57	
60.0	1504.61	1502.83	1478.92	1432.87	1370.00	1289.41	1198.19	1099.01	971.48	
75.0	1504.61	1502.83	1478.04	1432.87	1368.23	1291.18	1199.08	1097.24	974.14	
90.0	1504.61	1502.83	1478.02	1432.83	1369.92	1290.17	1200.67	1096.11	972.94	
105.0	1504.61	1501.95	1478.02	1433.72	1368.15	1291.05	1198.90	1097.88	970.28	
120.0	1504.61	1502.83	1478.02	1432.83	1369.03	1289.28	1199.79	1098.77	971.17	
135.0	1504.61	1502.83	1478.02	1432.83	1368.15	1290.17	1198.01	1096.11	972.94	
150.0	1504.61	1501.95	1476.27	1431.10	1367.34	1286.75	1197.31	1095.47	968.83	
165.0	1504.61	1501.95	1477.14	1431.95	1366.37	1287.51	1195.36	1092.57	969.40	
180.0	1504.61	1485.25	1444.77	1383.18	1309.27	1222.16	1121.86	998.67	861.41	
195.0	1504.61	1486.05	1444.53	1384.45	1310.24	1220.12	1122.93	1000.13	862.30	
210.0	1504.61	1485.13	1444.42	1383.35	1308.12	1217.85	1119.60	1000.12	857.63	
225.0	1504.61	1484.25	1443.54	1381.58	1303.70	1216.08	1118.72	996.58	854.09	
240.0	1504.61	1485.12	1442.62	1380.62	1305.35	1218.56	1121.15	994.51	855.47	
255.0	1504.61	1485.12	1441.73	1381.51	1306.24	1215.91	1118.49	996.28	858.13	
270.0	1504.61	1485.11	1442.58	1382.32	1305.23	1217.51	1117.38	998.64	856.86	
285.0	1504.61	1484.23	1443.46	1381.44	1307.00	1216.62	1119.15	997.75	860.41	
300.0	1504.61	1485.11	1443.46	1381.44	1306.12	1219.28	1121.81	1000.41	860.41	
315.0	1504.61	1486.00	1444.35	1382.32	1307.89	1221.94	1121.81	1000.41	863.95	
330.0	1504.61	1484.24	1442.62	1381.51	1307.12	1221.22	1168.97	1001.59	865.21	
345.0	1504.61	1486.00	1445.24	1387.64	1311.44	1222.82	1125.35	1004.84	864.84	
360.0	1504.61	1501.97	1476.45	1431.58	1365.58	1283.75	1194.89	1094.58	967.88	
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0	
0.0	827.97	661.67	482.18	300.92	168.06	98.55	72.15	47.51	23.76	
15.0	826.96	665.28	488.58	306.58	166.98	98.95	72.45	46.83	23.85	
30.0	829.30	663.80	487.67	306.23	169.93	98.24	71.69	46.91	23.01	
45.0	827.53	661.14	485.01	310.66	168.16	97.36	71.69	46.91	23.01	
60.0	829.79	663.30	487.96	307.30	170.03	97.41	71.73	46.05	23.03	
75.0	828.02	660.65	482.64	302.87	168.26	98.30	71.73	46.05	23.03	
90.0	830.28	662.81	483.81	303.05	168.36	96.59	70.89	46.08	23.04	
105.0	827.62	665.46	479.38	303.05	165.70	95.70	70.89	46.08	23.04	
120.0	829.39	661.03	480.27	298.62	165.70	96.59	70.89	45.19	22.15	
135.0	825.85	657.49	476.72	299.50	163.04	95.70	70.00	46.08	22.15	
150.0	827.13	658.87	472.90	295.78	163.83	95.64	69.96	45.16	22.14	
165.0	823.19	654.83	474.95	292.41	162.16	95.70	70.00	46.08	22.15	
180.0	703.03	521.77	340.52	188.30	106.47	76.55	52.79	29.04	7.04	
195.0	698.85	522.15	336.61	188.19	107.79	76.86	52.13	29.16	6.18	
210.0	693.89	517.76	341.63	191.17	107.09	77.89	53.10	29.21	7.08	
225.0	694.77	519.53	338.98	193.83	108.86	77.89	53.10	29.21	7.97	
240.0	696.95	517.18	341.84	192.17	108.04	77.05	53.13	29.22	7.08	
255.0	695.18	520.72	339.18	190.40	108.93	78.82	54.02	30.11	7.08	
270.0	700.02	520.14	342.92	191.40	108.99	78.86	54.05	30.13	7.97	
285.0	699.14	524.57	340.26	192.28	108.99	78.86	64.69	29.24	7.97	
300.0	698.25	523.69	342.92	254.31	108.99	78.86	53.17	30.13	7.97	
315.0	781.54	523.69	342.92	190.51	108.99	77.98	54.05	30.13	7.97	
330.0	709.35	526.92	346.26	193.06	109.81	78.82	54.02	31.00	7.97	
345.0	708.88	525.46	344.69	193.17	110.76	78.86	54.05	30.13	7.97	
360.0	827.97	661.67	482.18	300.92	168.06	98.55	72.15	47.51	23.76	

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	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.88
15.0	2.65	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	0.89	0.89
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	0.89	0.89
150.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89
165.0	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.89
180.0	0.88	0.00	0.88	0.88	0.88	0.88	0.88	0.88	0.88
195.0	0.00	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
210.0	0.89	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
225.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
240.0	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
255.0	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
270.0	0.89	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
285.0	0.00	0.00	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	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
330.0	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
345.0	0.89	0.00	0.89	0.89	0.89	0.89	0.89	0.89	0.89
360.0	2.64	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	1.76	1.76	2.64	2.64	3.52	4.40	5.28	6.16	6.16
15.0	1.77	1.77	2.65	2.65	3.53	4.42	5.30	6.18	6.18
30.0	1.77	1.77	2.66	2.66	3.54	4.43	5.31	6.20	6.20
45.0	1.77	1.77	2.66	2.66	3.54	4.43	5.31	6.20	6.20
60.0	1.77	1.77	2.66	2.66	3.54	4.43	5.31	6.20	6.20
75.0	1.77	1.77	1.77	2.66	3.54	4.43	5.31	6.20	6.20
90.0	1.77	1.77	1.77	2.66	3.54	4.43	5.32	6.20	6.20
105.0	1.77	1.77	2.66	2.66	3.54	4.43	5.32	6.20	6.20
120.0	1.77	1.77	1.77	2.66	3.54	4.43	5.32	6.20	6.20
135.0	1.77	1.77	1.77	2.66	3.54	4.43	5.32	6.20	6.20
150.0	1.77	1.77	2.66	2.66	3.54	4.43	5.31	6.20	6.20
165.0	1.77	1.77	2.66	2.66	3.54	4.43	5.32	6.20	6.20
180.0	0.88	0.88	1.76	2.64	3.52	4.40	5.28	6.16	6.16
195.0	0.88	0.88	1.77	2.65	3.53	4.42	5.30	6.18	6.18
210.0	0.89	0.89	1.77	1.77	3.54	4.43	5.31	6.20	6.20
225.0	0.89	0.89	1.77	2.66	3.54	4.43	5.31	6.20	6.20
240.0	0.89	0.89	1.77	2.66	3.54	4.43	5.31	6.20	6.20
255.0	0.89	0.89	1.77	2.66	3.54	4.43	5.31	6.20	6.20
270.0	0.89	0.89	1.77	2.66	3.54	4.43	5.32	6.20	6.20
285.0	0.89	0.89	1.77	2.66	3.54	4.43	5.32	6.20	6.20
300.0	0.89	0.89	1.77	2.66	3.54	4.43	5.32	6.20	6.20
315.0	0.89	0.89	1.77	2.66	3.54	4.43	5.32	6.20	6.20
330.0	0.89	0.89	1.77	2.66	3.54	4.43	5.31	6.20	6.20
345.0	0.89	0.89	1.77	2.66	3.54	4.43	5.32	6.20	6.20
360.0	1.76	1.76	2.64	2.64	3.52	4.40	5.28	6.16	6.16

Intensity data(cd)

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C/γ(°)	180.0
0.0	6.16
15.0	6.18
30.0	6.20
45.0	6.20
60.0	6.20
75.0	6.20
90.0	7.09
105.0	7.09
120.0	6.20
135.0	6.20
150.0	7.08
165.0	7.09
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	6.16