
Shenzhen Wisdom Light Co., Ltd.

Client:

LumCAT: WL-DL08IN20WDUV(30K-35K-40K)-T

Luminaire: Commercial downlight

Report No:

Ballast type:

Test No: LCZP21120043

Voltage(V): 120.060

LampCAT:

Current(A): 0.169

Lamp flux(lm): 2214.5

Power (W): 20.090

Number of Lamps: 1

PF: 0.991

Length(mm): -190

Width(mm): -190

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2214.54, Efficiency(%): 100.00% , Luminous Efficacy(lm/W): 110.23

Central intensity(cd): 1122.112, Maximum intensity(cd): 1122.112

Angle of maximum intensity: C=60.0 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=128.8

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 : 91.783%

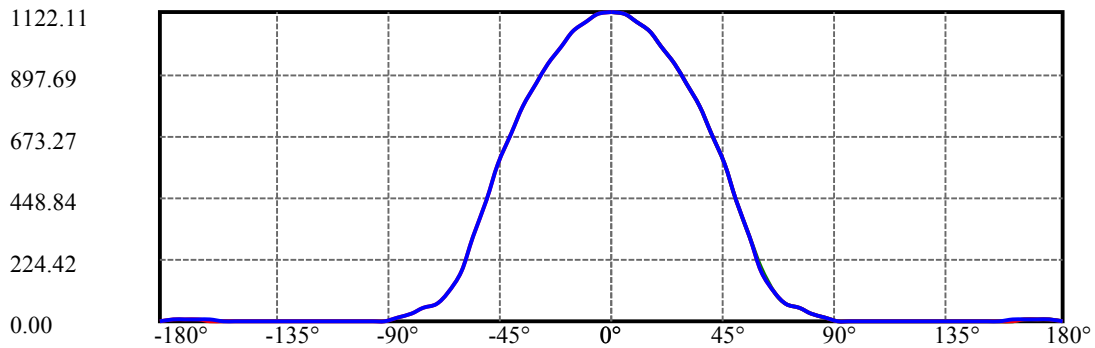
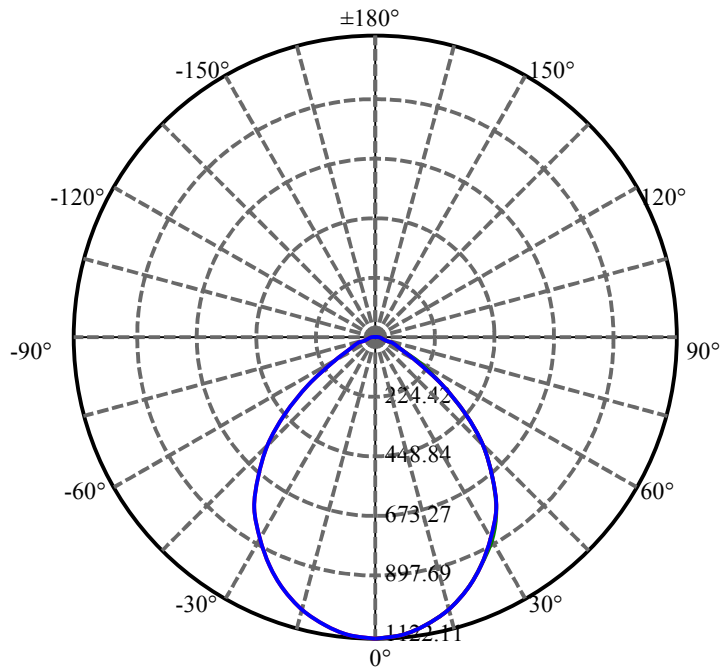
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	1122.112	0.000	0	0.00%	0.00%
5.0	1113.999	26.732	26.732	1.21%	1.21%
10.0	1089.143	78.813	105.545	3.56%	4.77%
15.0	1049.500	126.863	232.408	5.73%	10.49%
20.0	997.650	168.714	401.122	7.62%	18.11%
25.0	935.253	202.726	603.848	9.15%	27.27%
30.0	866.072	227.959	831.807	10.29%	37.56%
35.0	781.363	242.596	1074.404	10.95%	48.52%
40.0	682.900	244.301	1318.705	11.03%	59.55%
45.0	572.232	232.398	1551.103	10.49%	70.04%
50.0	441.314	204.802	1755.904	9.25%	79.29%
55.0	307.006	162.710	1918.614	7.35%	86.64%
60.0	186.012	113.960	2032.574	5.15%	91.78%
65.0	102.557	70.152	2102.725	3.17%	94.95%
70.0	65.273	42.496	2145.221	1.92%	96.87%
75.0	46.651	29.255	2174.476	1.32%	98.19%
80.0	28.359	20.070	2194.547	0.91%	99.10%
85.0	11.395	10.802	2205.349	0.49%	99.58%
90.0	0.737	3.322	2208.671	0.15%	99.73%
95.0	0.000	0.202	2208.873	0.01%	99.74%
100.0	0.000	0.000	2208.873	0.00%	99.74%
105.0	0.332	0.089	2208.962	0.00%	99.75%
110.0	0.443	0.202	2209.164	0.01%	99.76%
115.0	0.443	0.224	2209.388	0.01%	99.77%
120.0	0.443	0.215	2209.603	0.01%	99.78%
125.0	0.885	0.307	2209.91	0.01%	99.79%
130.0	0.885	0.385	2210.295	0.02%	99.81%
135.0	0.885	0.358	2210.653	0.02%	99.82%
140.0	1.069	0.362	2211.015	0.02%	99.84%
145.0	1.365	0.406	2211.421	0.02%	99.86%
150.0	1.770	0.462	2211.882	0.02%	99.88%
155.0	2.655	0.560	2212.442	0.03%	99.91%
160.0	3.208	0.615	2213.057	0.03%	99.93%
165.0	3.946	0.590	2213.647	0.03%	99.96%
170.0	4.425	0.497	2214.143	0.02%	99.98%
175.0	4.425	0.317	2214.46	0.01%	100.00%
180.0	2.655	0.085	2214.545	0.00%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	831.81	37.56%	37.56%
0-40	1318.70	59.55%	59.55%
0-60	2032.57	91.78%	91.78%
0-90	2208.67	99.73%	99.73%
0-120	2209.60	99.78%	99.78%
0-180	2214.54	100.00%	100.00%
60-90	176.10	7.95%	7.95%
90-120	0.93	0.04%	0.04%
90-130	1.62	0.07%	0.07%
90-150	3.21	0.15%	0.15%
90-180	5.79	0.26%	0.26%
0-50.48	1771.64	80.00%	80.00%

ZONAL LUMEN SUMMARY

0-10	105.55
10-20	295.58
20-30	430.69
30-40	486.90
40-50	437.20
50-60	276.67
60-70	112.65
70-80	49.33
80-90	14.12
90-100	0.20
100-110	0.29
110-120	0.44
120-130	0.69
130-140	0.72
140-150	0.87
150-160	1.18
160-170	1.09
170-180	0.32



C60(Max): —————

C0/C180: —————

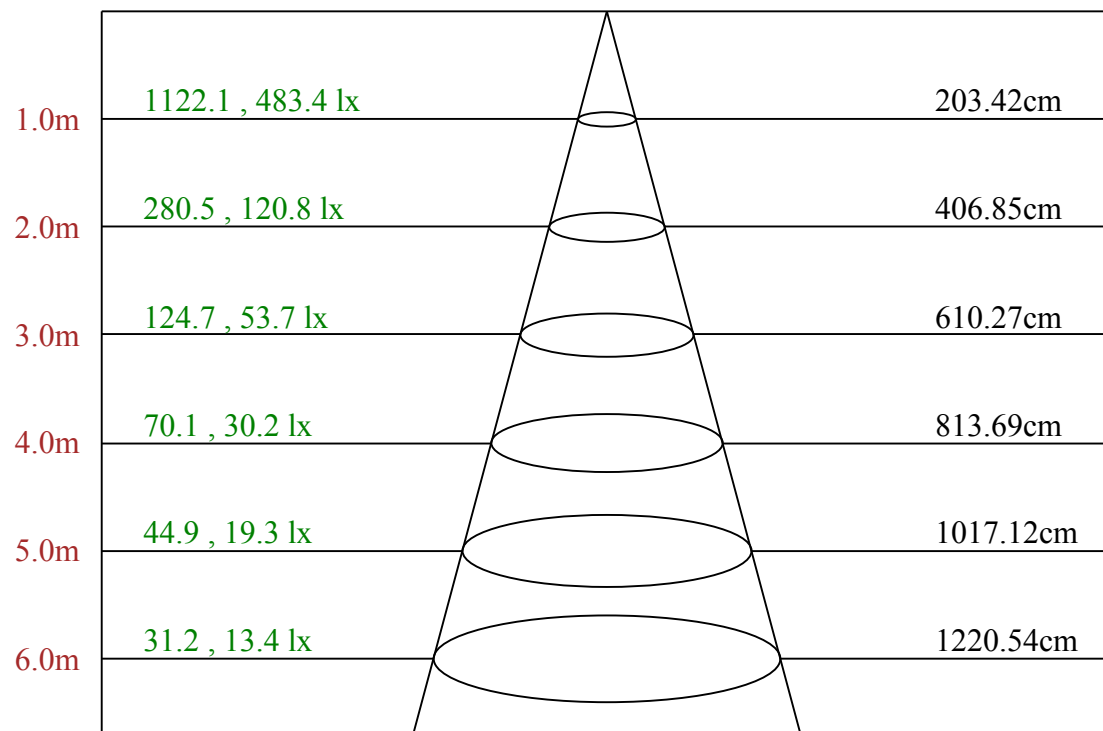
C90/C270: —————

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

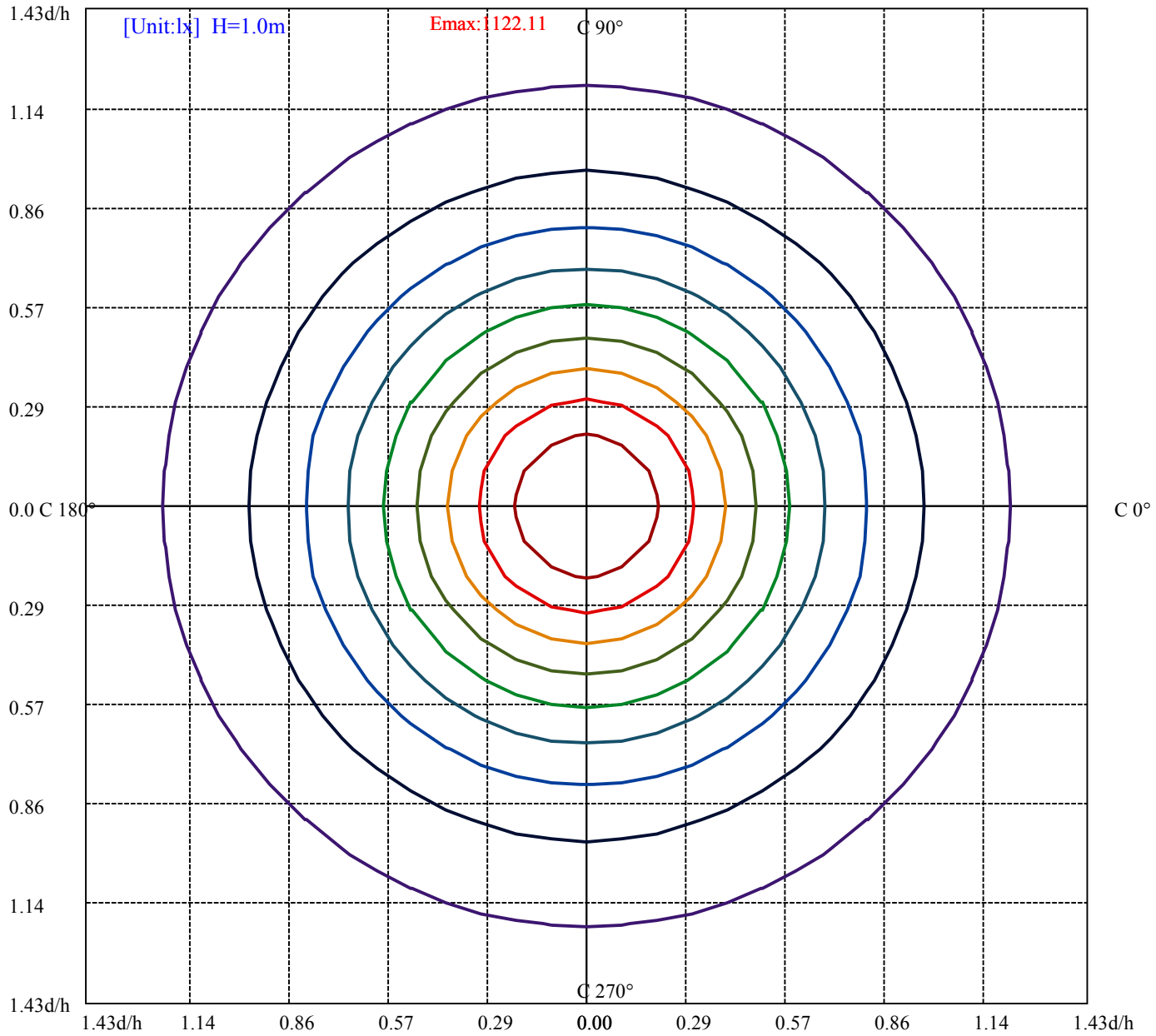
:C90/270Left:64.4 Right:64.4

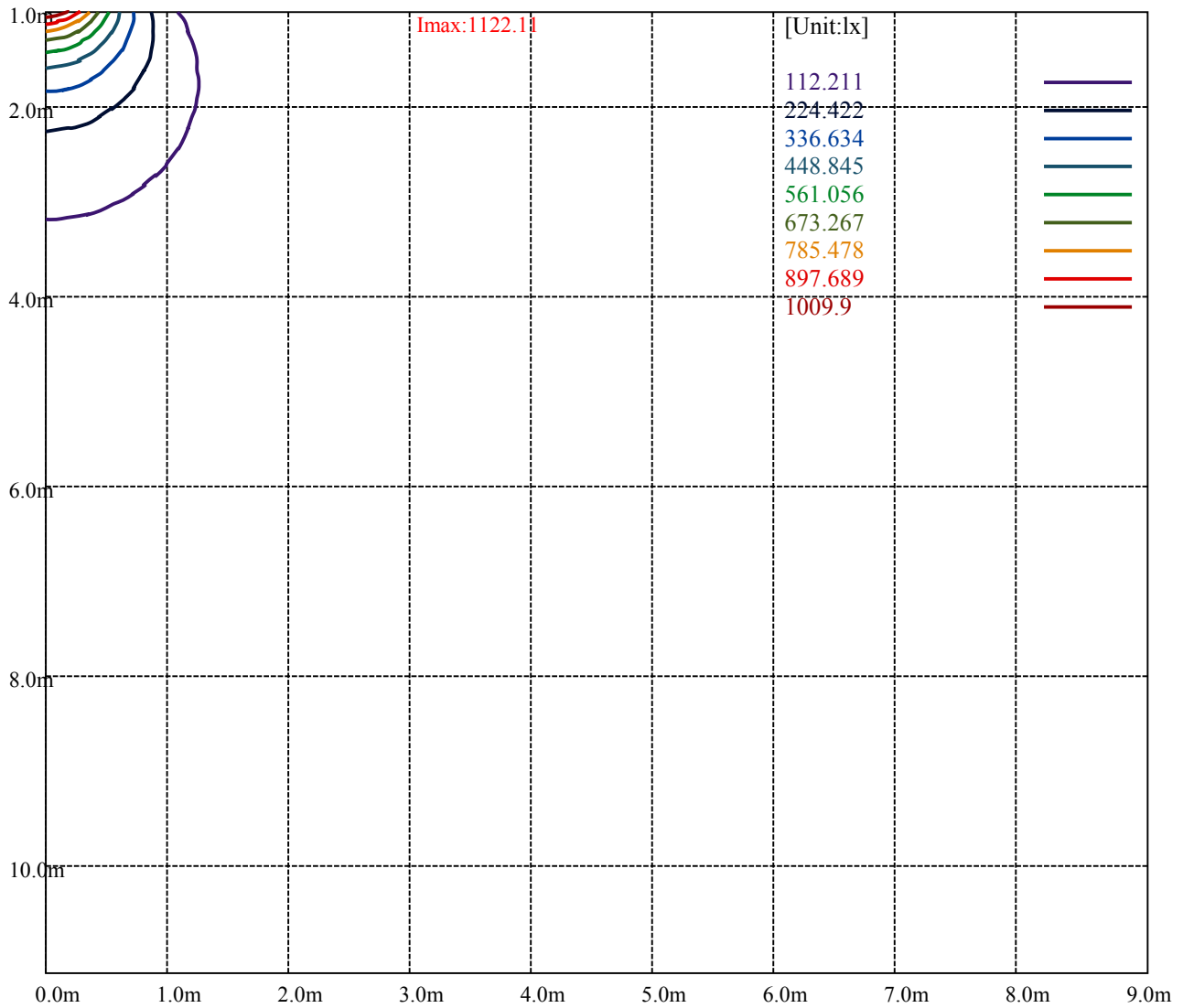
Beam Angle(50%Imax):C0/180Left:45.4 Right:45.4

:C90/270Left:45.4 Right:45.4



Max , Ave Beam angle of C60 plane 90.97





Luminance Table

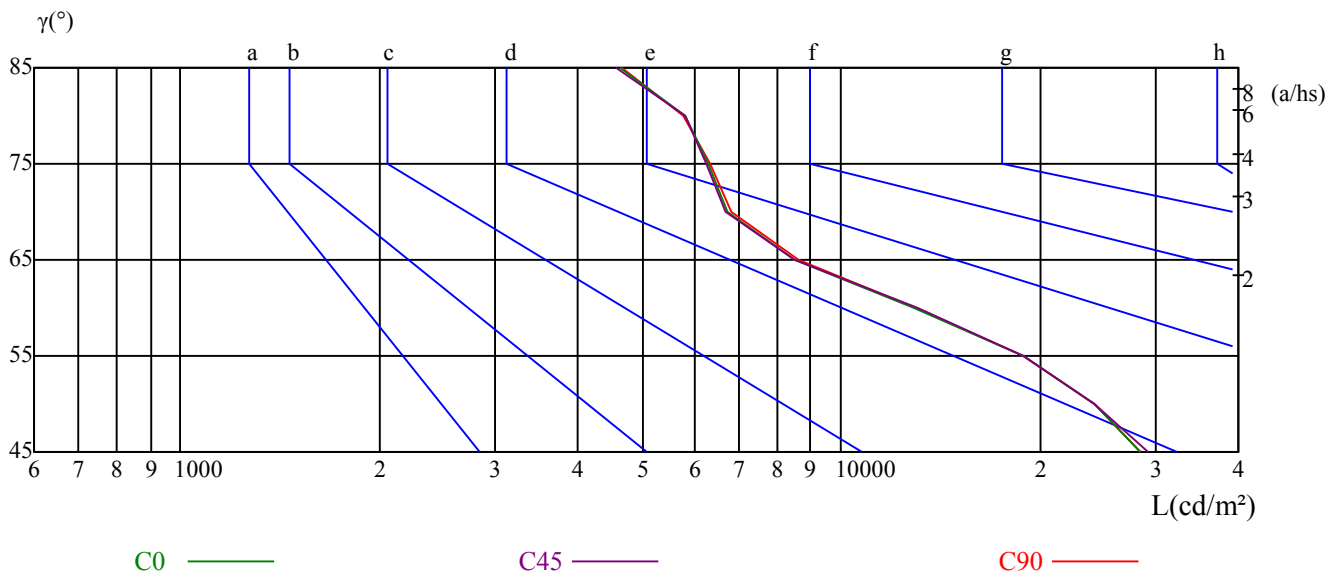
γ	45	50	55	60	65	70	75	80	85
C0	28468	24218	18887	12882	8520	6716	6296	5810	4630
C45	29100	24155	18835	13083	8515	6710	6273	5799	4568
C90	28471	24220	18940	13005	8618	6809	6341	5761	4663

L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
8520	8618	8515	6296	6341	6273	4630	4663	4568

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-DL08IN20WDUV(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	1122.11	1120.35	1101.87	1067.55	1019.14	957.54	890.65	815.84	721.67
15.0	1122.11	1120.34	1101.79	1067.33	1020.50	960.42	891.50	816.40	725.40
30.0	1122.11	1120.34	1101.76	1067.25	1020.34	962.82	893.80	818.58	723.89
45.0	1122.11	1120.34	1101.76	1068.13	1020.34	961.94	895.57	817.69	725.66
60.0	1122.11	1120.34	1102.63	1068.97	1021.15	961.81	893.62	819.22	724.46
75.0	1122.11	1120.34	1101.74	1068.97	1020.26	962.70	893.62	818.34	726.23
90.0	1122.11	1121.23	1102.61	1068.93	1021.95	962.57	895.21	817.21	725.92
105.0	1122.11	1120.34	1102.61	1068.93	1021.07	962.57	894.32	818.98	724.14
120.0	1122.11	1120.34	1101.74	1068.09	1021.15	960.92	894.50	819.22	723.57
135.0	1122.11	1120.34	1101.74	1068.09	1019.38	961.81	892.73	816.56	725.34
150.0	1122.11	1120.34	1100.86	1067.20	1020.26	960.04	892.73	817.45	722.69
165.0	1122.11	1120.34	1101.73	1068.04	1019.30	960.80	891.66	815.44	723.26
180.0	1122.11	1108.03	1077.23	1031.46	976.90	911.77	836.96	745.43	642.46
195.0	1122.11	1107.98	1077.05	1032.87	977.21	910.06	837.61	745.72	643.23
210.0	1122.11	1107.95	1076.98	1030.96	975.21	907.95	835.39	746.01	639.82
225.0	1122.11	1107.07	1076.09	1030.08	972.56	907.07	834.50	743.35	636.28
240.0	1122.11	1107.94	1076.06	1030.00	973.32	908.67	836.05	741.28	638.55
255.0	1122.11	1107.06	1075.17	1030.00	974.21	906.90	834.28	743.06	640.32
270.0	1122.11	1107.93	1076.02	1030.82	973.21	908.50	833.16	744.53	639.05
285.0	1122.11	1107.04	1076.91	1029.93	974.98	907.62	834.94	744.53	641.71
300.0	1122.11	1107.06	1075.17	1029.12	973.32	908.67	836.05	745.71	641.21
315.0	1122.11	1107.06	1076.06	1030.00	975.09	910.44	836.05	745.71	643.86
330.0	1122.11	1107.06	1076.06	1030.00	975.09	910.44	871.47	746.60	645.64
345.0	1122.11	1108.82	1077.79	1035.25	977.64	912.05	839.37	749.85	645.26
360.0	1122.11	1120.35	1101.87	1067.55	1019.14	957.54	890.65	815.84	721.67
C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	616.94	493.73	359.96	224.42	124.97	73.05	53.69	35.20	17.60
15.0	616.72	496.56	364.02	228.84	124.58	73.33	53.90	35.34	17.67
30.0	618.58	494.68	363.71	228.32	126.55	73.45	53.98	35.40	17.70
45.0	616.81	492.92	361.94	230.97	125.66	72.57	53.10	34.51	16.81
60.0	619.07	495.08	364.00	229.38	126.65	72.62	53.14	34.54	16.83
75.0	617.29	492.42	360.46	225.84	124.88	72.62	53.14	34.54	17.71
90.0	619.55	494.58	360.74	226.02	125.86	72.68	53.18	34.57	16.84
105.0	617.78	496.35	357.20	226.02	124.09	71.79	52.29	34.57	16.84
120.0	618.18	493.30	357.80	222.30	123.99	71.74	52.25	33.65	16.83
135.0	615.52	489.76	355.14	223.18	121.33	70.85	52.25	34.54	16.83
150.0	616.41	491.53	352.49	220.53	122.22	71.74	52.25	33.65	16.83
165.0	614.24	488.38	354.54	218.04	120.54	70.91	52.29	34.57	16.84
180.0	524.53	389.00	254.35	140.81	79.21	57.21	38.72	22.00	5.28
195.0	521.30	389.65	250.93	140.48	80.40	57.43	38.88	21.21	4.42
210.0	517.69	385.84	254.86	142.48	79.65	57.52	39.82	21.24	5.31
225.0	518.58	387.61	252.21	145.13	80.53	58.41	38.94	22.12	5.31
240.0	519.87	385.26	255.07	143.47	80.59	57.57	39.85	22.14	5.31
255.0	518.99	388.80	253.29	141.70	81.48	58.45	39.85	22.14	5.31
270.0	522.06	388.22	255.27	142.70	80.66	59.39	39.89	22.16	6.20
285.0	522.06	391.76	253.49	143.59	81.54	58.50	48.75	22.16	6.20
300.0	520.76	389.68	255.95	189.53	81.48	58.45	39.85	22.14	6.20
315.0	582.75	390.57	255.95	142.59	80.59	58.45	39.85	23.03	6.20
330.0	529.62	393.23	257.72	144.36	81.48	58.45	39.85	23.03	6.20
345.0	528.26	392.65	257.04	143.59	82.43	59.39	39.89	22.16	6.20
360.0	616.94	493.73	359.96	224.42	124.97	73.05	53.69	35.20	17.60

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	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	0.88	0.88
60.0	0.89	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	0.89	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	0.89	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	0.89	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	0.00	0.00	0.00	0.88	0.88	0.88	0.88	0.88	0.88
195.0	0.00	0.00	0.00	0.88	0.88	0.88	0.88	0.88	0.88
210.0	0.00	0.00	0.00	0.00	0.88	0.88	0.88	0.88	0.88
225.0	0.00	0.00	0.00	0.88	0.88	0.88	0.88	0.88	0.88
240.0	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89
255.0	0.00	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89
270.0	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89
285.0	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89
300.0	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89
315.0	0.00	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89
330.0	0.00	0.00	0.00	0.89	0.89	0.89	0.89	0.89	0.89
345.0	0.00	0.00	0.00	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	1.76	2.64	3.52	4.40	4.40	4.40
15.0	0.88	0.88	1.77	1.77	2.65	3.53	4.42	4.42	4.42
30.0	0.88	0.88	1.77	1.77	2.65	3.54	4.42	4.42	4.42
45.0	0.88	0.88	1.77	1.77	2.65	3.54	4.42	4.42	4.42
60.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	4.43
75.0	0.89	1.77	1.77	1.77	2.66	3.54	3.54	4.43	4.43
90.0	0.89	1.77	1.77	1.77	2.66	3.55	4.43	4.43	4.43
105.0	0.89	0.89	1.77	1.77	2.66	3.55	4.43	4.43	4.43
120.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	4.43
135.0	0.89	1.77	1.77	1.77	2.66	3.54	4.43	4.43	4.43
150.0	0.89	0.89	1.77	1.77	2.66	3.54	4.43	4.43	4.43
165.0	0.89	1.77	1.77	1.77	2.66	3.55	4.43	4.43	4.43
180.0	0.88	0.88	0.88	1.76	2.64	2.64	3.52	4.40	4.40
195.0	0.88	0.88	0.88	1.77	2.65	2.65	3.53	4.42	4.42
210.0	0.88	0.88	0.88	1.77	2.65	2.65	3.54	4.42	4.42
225.0	0.88	0.88	0.88	1.77	2.65	2.65	3.54	4.42	4.42
240.0	0.89	0.89	0.89	1.77	2.66	2.66	3.54	4.43	4.43
255.0	0.89	0.89	0.89	1.77	2.66	2.66	3.54	4.43	4.43
270.0	0.89	0.89	0.89	1.77	2.66	3.55	3.55	4.43	4.43
285.0	0.89	0.89	0.89	1.77	2.66	2.66	3.55	4.43	4.43
300.0	0.89	0.89	1.77	1.77	2.66	2.66	3.54	4.43	4.43
315.0	0.89	0.89	0.89	1.77	2.66	2.66	3.54	4.43	4.43
330.0	0.89	0.89	0.89	1.77	2.66	3.54	3.54	4.43	4.43
345.0	0.89	0.89	0.89	1.77	2.66	3.55	3.55	4.43	4.43
360.0	0.88	1.76	1.76	1.76	2.64	3.52	4.40	4.40	4.40

Intensity data(cd)

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C/γ(°)	180.0
0.0	5.28
15.0	5.30
30.0	5.31
45.0	5.31
60.0	5.31
75.0	5.31
90.0	5.32
105.0	5.32
120.0	5.31
135.0	5.31
150.0	5.31
165.0	5.32
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	5.28