

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P226260

Luminaire Tested: **LD2B15D010 EU2B15WW8050 2LBSW\***

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P226260  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14828)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B15D010 EU2B15WW8050 2LBSW\*  
Description: 1500 Lumen, 2inch Portfolio LED Downlight  
WALL WASH OPTIC  
WALL WASH LENSED TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1032.2 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 0.79 / 1.02  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

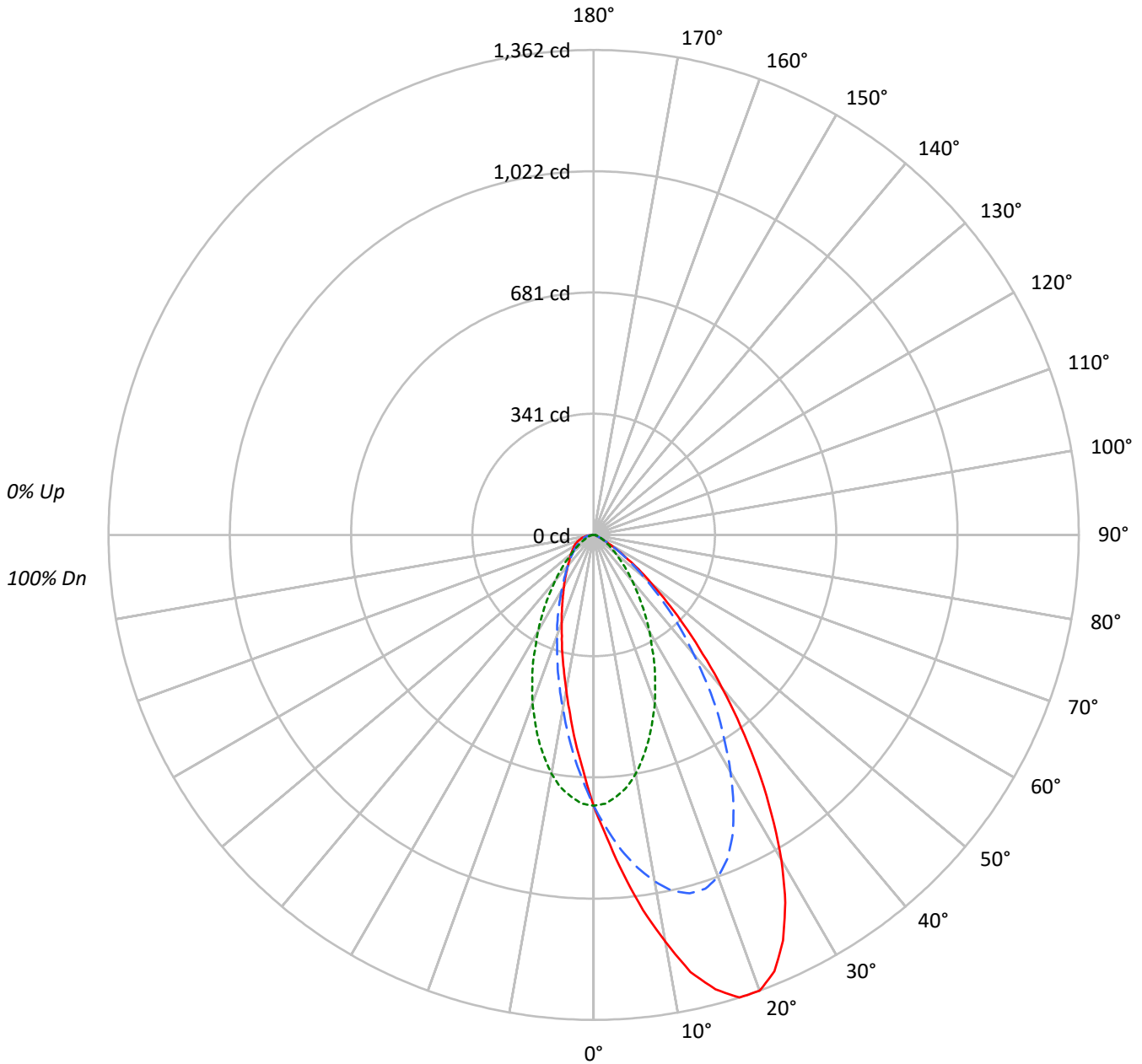
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81			
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	56	50	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	294577	294577	294577
5°	371367	286720	226996
10°	456214	267891	174241
15°	529815	239243	136584
20°	561506	206886	107668
25°	537313	172922	88640
30°	471824	139727	74425
35°	380181	110177	64167
40°	283565	85454	56986
45°	196383	64530	51876
50°	126547	47847	49353
55°	74352	36332	48420
60°	39664	29748	49580
65°	18789	23463	49310
70°	8720	20272	49265
75°	11524	19156	53578
80°	11376	17176	51305
85°	11555	22666	45332



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.9	7.0
10°-20°	200.6	19.4
20°-30°	261.6	25.3
30°-40°	226.5	21.9
40°-50°	143.4	13.9
50°-60°	71.8	7.0
60°-70°	33.0	3.2
70°-80°	17.7	1.7
80°-90°	5.7	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	534.0	51.7
0°-40°	760.5	73.7
0°-60°	975.7	94.5
0°-90°	1032.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1032.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	760	760	760	760	760	
5°	955	888	737	625	584	97
15°	1321	1042	597	389	341	372
25°	1257	924	405	233	207	569
35°	804	604	233	141	136	500
45°	358	300	118	92	95	282
55°	110	102	54	62	72	105
65°	20	23	26	44	54	24
75°	8	8	13	26	36	7
85°	3	3	5	8	10	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5
2.5°	850.1	855.2	855.2	857.8	847.5	850.1	850.1	845.0	837.3	832.2	824.5
5°	955.1	955.1	952.5	955.1	947.4	942.3	944.8	934.6	914.1	903.9	888.5
7.5°	1062.6	1057.5	1057.5	1054.9	1042.1	1034.5	1031.9	1014.0	985.8	965.3	942.3
10°	1159.9	1159.9	1154.8	1149.7	1131.8	1121.5	1113.8	1085.7	1054.9	1021.7	988.4
12.5°	1257.2	1252.1	1244.4	1234.2	1208.6	1198.3	1185.5	1152.2	1106.1	1067.7	1024.2
15°	1321.2	1323.8	1311.0	1298.2	1270.0	1254.7	1239.3	1198.3	1144.6	1095.9	1042.1
17.5°	1362.2	1359.6	1346.8	1331.5	1300.8	1282.8	1264.9	1216.3	1159.9	1101.0	1042.1
20°	1362.2	1362.2	1346.8	1331.5	1298.2	1277.7	1259.8	1208.6	1147.1	1085.7	1021.7
22.5°	1326.4	1321.2	1311.0	1295.6	1262.3	1244.4	1223.9	1172.7	1108.7	1049.8	983.2
25°	1257.2	1257.2	1244.4	1226.5	1198.3	1177.8	1159.9	1108.7	1047.3	988.4	924.4
27.5°	1165.0	1162.5	1149.7	1136.9	1106.1	1090.8	1072.9	1024.2	970.4	916.7	850.1
30°	1054.9	1049.8	1044.7	1024.2	1003.7	990.9	975.6	932.0	878.3	827.1	768.2
32.5°	929.5	937.2	924.4	911.5	893.6	880.8	868.0	834.7	786.1	740.0	683.7
35°	804.0	809.1	801.4	791.2	773.3	765.6	752.8	724.6	688.8	645.3	604.3
37.5°	678.5	678.5	678.5	670.9	660.6	652.9	645.3	619.6	588.9	555.6	517.2
40°	560.8	568.4	558.2	555.6	548.0	545.4	537.7	519.8	494.2	471.1	435.3
42.5°	453.2	453.2	455.8	450.7	448.1	443.0	437.9	427.6	409.7	389.2	366.2
45°	358.5	361.0	363.6	355.9	355.9	355.9	353.4	343.1	327.7	314.9	299.6
47.5°	279.1	279.1	281.7	279.1	279.1	279.1	274.0	274.0	263.7	250.9	238.1
50°	210.0	212.5	215.1	215.1	215.1	212.5	212.5	207.4	202.3	197.2	184.4
52.5°	158.8	158.8	156.2	158.8	158.8	158.8	158.8	156.2	153.6	148.5	140.8
55°	110.1	110.1	112.7	112.7	112.7	115.2	115.2	115.2	112.7	110.1	102.4
57.5°	76.8	76.8	76.8	79.4	81.9	81.9	81.9	81.9	79.4	76.8	74.3
60°	51.2	51.2	51.2	53.8	53.8	53.8	53.8	56.3	53.8	53.8	51.2
62.5°	33.3	33.3	33.3	33.3	33.3	35.8	35.8	35.8	35.8	35.8	33.3
65°	20.5	20.5	20.5	20.5	20.5	20.5	23.0	23.0	23.0	23.0	23.0
67.5°	12.8	12.8	12.8	12.8	12.8	15.4	15.4	15.4	15.4	15.4	15.4
70°	7.7	7.7	7.7	7.7	10.2	10.2	10.2	10.2	10.2	10.2	10.2
72.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
75°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	7.7	7.7	7.7
80°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	5.1	5.1	2.6
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5
2.5°	824.5	814.2	809.1	796.3	793.8	783.5	783.5	773.3	760.5	755.4	742.6
5°	878.3	857.8	847.5	824.5	816.8	801.4	793.8	773.3	752.8	737.4	719.5
7.5°	924.4	893.6	873.1	842.4	829.6	806.6	791.2	765.6	737.4	714.4	688.8
10°	960.2	919.2	888.5	847.5	832.2	804.0	781.0	745.1	709.3	681.1	650.4
12.5°	983.2	934.6	891.1	842.4	821.9	791.2	757.9	716.9	676.0	640.1	606.8
15°	993.5	934.6	883.4	824.5	801.4	768.2	729.8	681.1	635.0	596.6	560.8
17.5°	985.8	916.7	862.9	796.3	770.7	732.3	688.8	637.6	588.9	548.0	512.1
20°	960.2	888.5	827.1	757.9	729.8	691.3	642.7	591.5	542.8	501.9	463.5
22.5°	916.7	842.4	778.4	709.3	681.1	642.7	591.5	540.3	491.6	450.7	414.8
25°	862.9	783.5	719.5	652.9	622.2	588.9	537.7	486.5	440.4	404.6	368.7
27.5°	791.2	722.1	658.1	591.5	563.3	532.6	481.4	435.3	389.2	353.4	322.6
30°	714.4	647.8	594.0	530.0	504.4	473.7	430.2	384.1	345.7	312.4	284.2
32.5°	637.6	573.6	522.3	468.6	445.5	414.8	376.4	335.4	299.6	271.4	248.4
35°	558.2	504.4	455.8	404.6	386.6	361.0	325.2	289.3	258.6	233.0	210.0
37.5°	478.8	435.3	391.8	350.8	330.3	309.8	276.5	245.8	217.6	197.2	179.2
40°	407.1	368.7	332.9	294.5	276.5	261.2	233.0	207.4	186.9	169.0	153.6
42.5°	338.0	307.3	276.5	245.8	230.4	217.6	194.6	171.6	153.6	140.8	128.0
45°	276.5	253.5	227.9	199.7	192.0	176.7	158.8	143.4	128.0	117.8	107.5
47.5°	222.8	202.3	181.8	161.3	153.6	143.4	128.0	115.2	105.0	97.3	89.6
50°	174.1	158.8	146.0	128.0	122.9	112.7	102.4	92.2	84.5	79.4	74.3
52.5°	133.1	120.3	110.1	99.9	94.7	89.6	79.4	74.3	69.1	66.6	64.0
55°	97.3	89.6	81.9	74.3	71.7	66.6	61.5	56.3	53.8	53.8	53.8
57.5°	69.1	64.0	58.9	53.8	53.8	51.2	48.7	46.1	43.5	43.5	43.5
60°	48.7	46.1	43.5	41.0	38.4	38.4	35.8	38.4	35.8	38.4	38.4
62.5°	33.3	30.7	30.7	28.2	28.2	28.2	28.2	28.2	30.7	30.7	33.3
65°	20.5	20.5	20.5	20.5	20.5	20.5	23.0	23.0	23.0	25.6	25.6
67.5°	15.4	15.4	15.4	17.9	17.9	17.9	17.9	20.5	20.5	20.5	23.0
70°	10.2	12.8	12.8	12.8	12.8	12.8	15.4	15.4	15.4	17.9	17.9
72.5°	10.2	10.2	10.2	10.2	10.2	10.2	12.8	12.8	12.8	15.4	15.4
75°	7.7	10.2	10.2	10.2	10.2	10.2	10.2	12.8	12.8	12.8	15.4
77.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	10.2	10.2	10.2	10.2
80°	5.1	5.1	5.1	7.7	7.7	7.7	7.7	7.7	7.7	7.7	10.2
82.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	7.7
85°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	5.1	2.6	5.1	5.1
87.5°	0.0	0.0	0.0	2.6	0.0	2.6	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5
2.5°	737.4	729.8	732.3	716.9	719.5	709.3	704.1	696.5	691.3	683.7	686.2
5°	706.7	693.9	688.8	670.9	673.4	658.1	647.8	635.0	624.8	612.0	609.4
7.5°	668.3	647.8	640.1	622.2	619.6	599.2	586.4	571.0	558.2	545.4	540.3
10°	624.8	601.7	586.4	568.4	565.9	542.8	527.5	512.1	496.7	483.9	478.8
12.5°	578.7	553.1	535.2	514.7	509.5	489.1	471.1	455.8	440.4	427.6	419.9
15°	530.0	501.9	483.9	463.5	458.3	435.3	419.9	402.0	389.2	376.4	371.3
17.5°	481.4	453.2	432.7	414.8	409.7	386.6	368.7	355.9	340.6	332.9	325.2
20°	432.7	404.6	384.1	368.7	361.0	343.1	325.2	312.4	299.6	291.9	284.2
22.5°	384.1	358.5	340.6	325.2	320.1	302.1	286.8	274.0	266.3	256.1	250.9
25°	340.6	314.9	299.6	284.2	279.1	263.7	253.5	240.7	233.0	225.3	220.2
27.5°	299.6	276.5	261.2	248.4	245.8	233.0	220.2	212.5	204.8	199.7	197.2
30°	258.6	240.7	227.9	217.6	215.1	202.3	192.0	186.9	179.2	176.7	174.1
32.5°	227.9	210.0	199.7	189.5	186.9	176.7	171.6	163.9	158.8	156.2	156.2
35°	194.6	181.8	171.6	166.4	163.9	156.2	148.5	146.0	140.8	138.3	138.3
37.5°	166.4	156.2	148.5	140.8	140.8	135.7	130.6	128.0	125.5	125.5	122.9
40°	143.4	133.1	130.6	125.5	122.9	120.3	117.8	115.2	112.7	112.7	112.7
42.5°	120.3	115.2	110.1	107.5	107.5	105.0	102.4	102.4	99.9	102.4	102.4
45°	102.4	97.3	94.7	92.2	94.7	92.2	92.2	89.6	92.2	92.2	92.2
47.5°	87.1	84.5	81.9	81.9	81.9	81.9	81.9	81.9	81.9	84.5	84.5
50°	74.3	71.7	71.7	71.7	71.7	71.7	74.3	74.3	74.3	76.8	76.8
52.5°	61.5	61.5	61.5	61.5	64.0	64.0	66.6	66.6	69.1	69.1	71.7
55°	53.8	53.8	53.8	53.8	56.3	56.3	58.9	61.5	61.5	64.0	66.6
57.5°	46.1	46.1	48.7	48.7	51.2	51.2	53.8	56.3	56.3	58.9	61.5
60°	38.4	41.0	43.5	43.5	43.5	46.1	48.7	51.2	51.2	53.8	56.3
62.5°	33.3	35.8	38.4	38.4	38.4	41.0	43.5	46.1	46.1	48.7	51.2
65°	28.2	30.7	33.3	33.3	33.3	35.8	38.4	41.0	43.5	43.5	46.1
67.5°	25.6	25.6	28.2	28.2	30.7	33.3	33.3	35.8	38.4	41.0	43.5
70°	20.5	23.0	25.6	25.6	25.6	28.2	30.7	33.3	33.3	35.8	38.4
72.5°	17.9	17.9	20.5	20.5	23.0	25.6	25.6	28.2	30.7	30.7	33.3
75°	15.4	17.9	17.9	17.9	20.5	20.5	23.0	25.6	25.6	28.2	28.2
77.5°	12.8	12.8	15.4	15.4	15.4	17.9	17.9	20.5	20.5	23.0	23.0
80°	10.2	10.2	12.8	12.8	12.8	12.8	15.4	15.4	17.9	17.9	17.9
82.5°	7.7	7.7	7.7	7.7	10.2	10.2	10.2	10.2	12.8	12.8	12.8
85°	5.1	5.1	5.1	5.1	5.1	7.7	7.7	7.7	7.7	7.7	10.2
87.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P226260

CATALOG NUMBER: LD2B15D010 EU2B15WW8050 2LBSW\*

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	760.5	760.5	760.5	760.5	760.5	760.5	760.5	760.5
2.5°	678.5	678.5	676.0	673.4	670.9	668.3	665.7	663.2
5°	601.7	604.3	594.0	591.5	591.5	586.4	588.9	583.8
7.5°	530.0	530.0	522.3	519.8	517.2	512.1	509.5	507.0
10°	466.0	463.5	458.3	455.8	450.7	448.1	448.1	443.0
12.5°	409.7	407.1	402.0	399.4	394.3	391.8	389.2	386.6
15°	361.0	358.5	353.4	350.8	348.2	343.1	343.1	340.6
17.5°	314.9	312.4	309.8	304.7	304.7	299.6	297.0	297.0
20°	279.1	276.5	271.4	268.9	268.9	266.3	266.3	261.2
22.5°	245.8	243.3	240.7	238.1	238.1	235.6	233.0	233.0
25°	217.6	215.1	212.5	212.5	210.0	207.4	207.4	207.4
27.5°	192.0	192.0	189.5	189.5	189.5	186.9	186.9	184.4
30°	171.6	171.6	169.0	169.0	169.0	166.4	169.0	166.4
32.5°	153.6	153.6	153.6	153.6	153.6	151.1	151.1	151.1
35°	138.3	138.3	138.3	138.3	138.3	135.7	138.3	135.7
37.5°	122.9	125.5	122.9	122.9	125.5	122.9	122.9	122.9
40°	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7
42.5°	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
45°	92.2	94.7	94.7	94.7	94.7	94.7	94.7	94.7
47.5°	87.1	87.1	87.1	87.1	89.6	87.1	89.6	89.6
50°	79.4	79.4	79.4	81.9	81.9	81.9	81.9	81.9
52.5°	74.3	74.3	74.3	74.3	76.8	76.8	76.8	76.8
55°	66.6	69.1	69.1	69.1	71.7	71.7	71.7	71.7
57.5°	64.0	64.0	64.0	66.6	66.6	66.6	69.1	66.6
60°	58.9	58.9	61.5	61.5	61.5	64.0	64.0	64.0
62.5°	53.8	56.3	56.3	56.3	56.3	58.9	58.9	58.9
65°	48.7	51.2	51.2	51.2	53.8	53.8	53.8	53.8
67.5°	43.5	46.1	46.1	48.7	48.7	48.7	48.7	48.7
70°	38.4	41.0	41.0	41.0	43.5	43.5	43.5	43.5
72.5°	35.8	35.8	35.8	38.4	38.4	38.4	41.0	38.4
75°	30.7	33.3	33.3	33.3	33.3	33.3	35.8	35.8
77.5°	25.6	25.6	25.6	25.6	28.2	28.2	28.2	28.2
80°	20.5	20.5	20.5	20.5	23.0	23.0	23.0	23.0
82.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
85°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
87.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)