

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: P252321

Luminaire Tested: **LD6B60D010TE EU6B60709727 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252321
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709727 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3943.0 lumens
Efficiency: N/A
Efficacy: 63.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

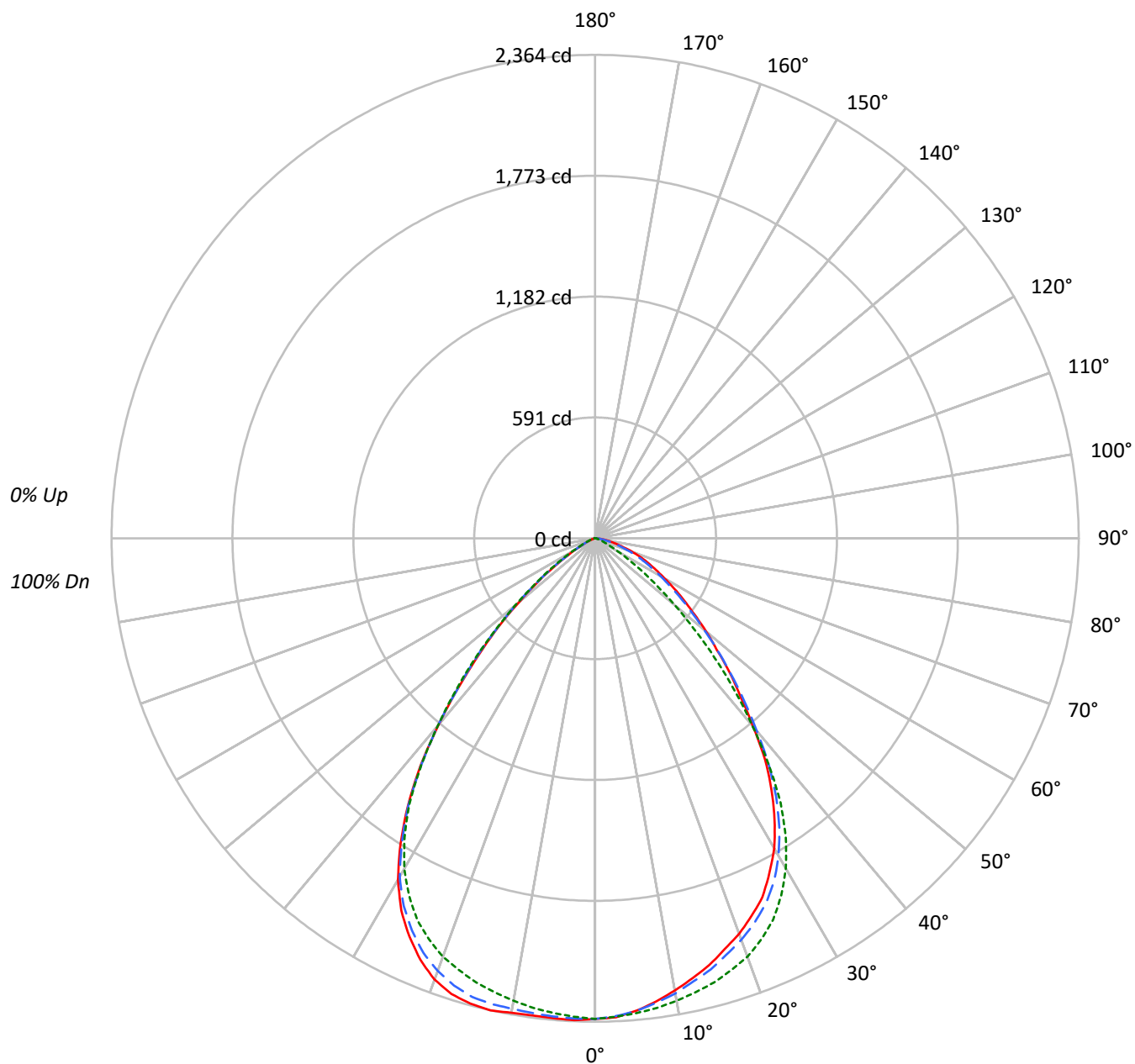
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252321

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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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90						
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80						
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72						
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64						
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58						
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52						
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47						
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43						
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40						
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	153335	153335	153335
5°	151871	152618	154288
10°	148738	152123	156071
15°	145898	151841	159122
20°	142875	151151	159427
25°	139356	148138	154674
30°	131931	140489	145190
35°	119817	125917	127048
40°	102258	101773	101287
45°	85898	76210	73857
50°	71738	51570	48972
55°	60375	31643	28732
60°	51110	16662	14444
65°	44259	8768	7009
70°	36815	5417	3796
75°	27198	3579	2143
80°	21340	2142	1052
85°	16992	2096	0



TEST NUMBER: P252321

CATALOG NUMBER: LD6B60D010TE EU6B60709727 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.5	5.6
10°-20°	634.2	16.1
20°-30°	936.5	23.8
30°-40°	965.2	24.5
40°-50°	666.6	16.9
50°-60°	328.6	8.3
60°-70°	133.1	3.4
70°-80°	47.5	1.2
80°-90°	9.8	0.2
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°	1792.2	45.5
0°-40°	2757.4	69.9
0°-60°	3752.6	95.2
0°-90°	3943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3943.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2350	2350	2350	2350	2350	
5°	2319	2319	2330	2347	2356	219
15°	2160	2183	2248	2322	2356	608
25°	1936	1973	2058	2118	2149	885
35°	1504	1541	1581	1590	1595	932
45°	931	937	826	815	800	720
55°	531	511	278	261	253	480
65°	287	258	57	45	45	285
75°	108	91	14	8	8	121
85°	23	17	3	0	0	28
90°	0	0	0	0	0	



TEST NUMBER: P252321

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3
2.5°	2344.6	2336.1	2341.8	2330.4	2344.6	2330.4	2333.2	2336.1	2333.2	2336.1	2338.9
5°	2319.0	2310.5	2319.0	2304.9	2319.0	2310.5	2310.5	2313.4	2313.4	2316.2	2319.0
7.5°	2285.0	2276.5	2285.0	2270.8	2287.8	2279.3	2279.3	2285.0	2282.1	2285.0	2290.7
10°	2245.2	2233.9	2242.4	2233.9	2250.9	2239.6	2245.2	2245.2	2245.2	2253.8	2259.4
12.5°	2202.7	2191.3	2202.7	2188.5	2205.5	2197.0	2199.8	2208.3	2211.2	2216.9	2219.7
15°	2160.1	2145.9	2151.6	2143.1	2160.1	2151.6	2154.4	2165.8	2165.8	2174.3	2182.8
17.5°	2106.2	2094.8	2106.2	2094.8	2109.0	2103.3	2109.0	2117.5	2117.5	2126.0	2134.5
20°	2057.9	2046.6	2055.1	2046.6	2063.6	2055.1	2057.9	2069.3	2072.1	2080.6	2089.1
22.5°	1998.3	1989.8	1995.5	1986.9	2004.0	1998.3	2001.1	2012.5	2015.3	2021.0	2035.2
25°	1935.9	1918.8	1927.3	1921.7	1938.7	1930.2	1935.9	1947.2	1952.9	1961.4	1972.8
27.5°	1845.0	1836.5	1842.2	1842.2	1856.4	1847.9	1850.7	1862.1	1870.6	1879.1	1893.3
30°	1751.3	1737.2	1742.8	1745.7	1757.0	1751.3	1757.0	1768.4	1771.2	1782.6	1793.9
32.5°	1632.1	1626.5	1637.8	1632.1	1637.8	1637.8	1640.6	1649.2	1654.8	1660.5	1674.7
35°	1504.4	1493.0	1504.4	1498.7	1512.9	1504.4	1512.9	1521.4	1521.4	1532.8	1541.3
37.5°	1365.3	1351.1	1356.8	1356.8	1362.5	1359.6	1359.6	1373.8	1376.7	1385.2	1393.7
40°	1200.7	1195.0	1206.4	1203.5	1206.4	1206.4	1209.2	1217.7	1223.4	1226.2	1229.1
42.5°	1053.1	1055.9	1058.8	1058.8	1058.8	1058.8	1058.8	1070.1	1067.3	1075.8	1078.6
45°	931.0	919.7	925.3	922.5	931.0	922.5	931.0	939.5	933.9	942.4	936.7
47.5°	806.1	806.1	806.1	803.3	809.0	806.1	811.8	814.6	814.6	814.6	811.8
50°	706.8	698.3	701.1	701.1	703.9	701.1	706.8	709.6	709.6	703.9	692.6
52.5°	610.3	607.4	607.4	613.1	613.1	610.3	610.3	610.3	610.3	601.8	596.1
55°	530.8	525.1	528.0	528.0	528.0	528.0	530.8	528.0	528.0	519.4	510.9
57.5°	459.8	454.2	454.2	454.2	457.0	454.2	454.2	454.2	451.3	442.8	431.5
60°	391.7	388.9	391.7	391.7	394.6	391.7	391.7	391.7	386.0	377.5	366.2
62.5°	334.9	334.9	334.9	337.8	337.8	334.9	334.9	332.1	329.3	317.9	306.6
65°	286.7	283.8	286.7	286.7	289.5	289.5	286.7	283.8	281.0	269.7	258.3
67.5°	238.4	235.6	238.4	238.4	241.3	238.4	238.4	238.4	229.9	224.2	212.9
70°	193.0	190.2	190.2	190.2	193.0	187.3	190.2	190.2	184.5	176.0	164.6
72.5°	147.6	147.6	147.6	147.6	147.6	147.6	144.8	144.8	139.1	130.6	124.9
75°	107.9	107.9	110.7	110.7	107.9	107.9	107.9	105.0	102.2	96.5	90.8
77.5°	79.5	79.5	79.5	79.5	76.6	76.6	76.6	73.8	71.0	68.1	62.4
80°	56.8	56.8	56.8	53.9	56.8	53.9	53.9	53.9	48.3	45.4	42.6
82.5°	39.7	36.9	36.9	36.9	36.9	36.9	36.9	34.1	34.1	31.2	28.4
85°	22.7	22.7	22.7	22.7	22.7	22.7	22.7	22.7	19.9	17.0	17.0
87.5°	11.4	14.2	14.2	14.2	14.2	14.2	14.2	11.4	11.4	11.4	8.5
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: P252321

CATALOG NUMBER: LD6B60D010TE EU6B60709727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3
2.5°	2338.9	2338.9	2344.6	2336.1	2350.3	2341.8	2338.9	2353.1	2344.6	2341.8	2347.4
5°	2319.0	2321.9	2324.7	2319.0	2333.2	2324.7	2324.7	2338.9	2333.2	2330.4	2338.9
7.5°	2293.5	2296.3	2302.0	2299.2	2310.5	2304.9	2307.7	2321.9	2316.2	2316.2	2324.7
10°	2262.3	2268.0	2273.6	2273.6	2287.8	2282.1	2282.1	2299.2	2293.5	2296.3	2307.7
12.5°	2225.4	2233.9	2242.4	2245.2	2259.4	2250.9	2253.8	2273.6	2270.8	2273.6	2285.0
15°	2185.6	2197.0	2205.5	2205.5	2222.5	2214.0	2222.5	2242.4	2236.7	2248.1	2262.3
17.5°	2140.2	2151.6	2162.9	2165.8	2182.8	2177.1	2188.5	2208.3	2208.3	2214.0	2231.1
20°	2097.6	2111.8	2117.5	2126.0	2143.1	2140.2	2145.9	2168.6	2168.6	2177.1	2194.2
22.5°	2040.9	2055.1	2066.4	2074.9	2089.1	2089.1	2097.6	2117.5	2117.5	2123.2	2140.2
25°	1978.4	1995.5	2004.0	2012.5	2026.7	2023.8	2032.4	2049.4	2052.2	2057.9	2074.9
27.5°	1899.0	1913.1	1924.5	1930.2	1950.0	1938.7	1947.2	1967.1	1964.2	1969.9	1984.1
30°	1799.6	1813.8	1825.1	1825.1	1842.2	1842.2	1850.7	1859.2	1859.2	1864.9	1876.2
32.5°	1683.2	1700.3	1700.3	1708.8	1720.1	1708.8	1720.1	1731.5	1725.8	1734.3	1742.8
35°	1549.8	1558.3	1561.2	1561.2	1569.7	1566.8	1564.0	1572.5	1566.8	1581.0	1589.6
37.5°	1388.0	1399.4	1393.7	1399.4	1396.5	1388.0	1388.0	1402.2	1390.9	1393.7	1402.2
40°	1231.9	1231.9	1229.1	1214.9	1217.7	1209.2	1206.4	1209.2	1197.8	1195.0	1206.4
42.5°	1070.1	1067.3	1058.8	1038.9	1041.7	1027.5	1016.2	1016.2	1010.5	1007.7	1010.5
45°	925.3	916.8	902.6	879.9	874.3	862.9	840.2	834.5	826.0	826.0	828.8
47.5°	791.9	780.6	757.9	732.3	718.1	703.9	681.2	672.7	658.5	652.9	658.5
50°	681.2	661.4	633.0	596.1	581.9	564.9	542.2	528.0	513.8	508.1	505.3
52.5°	579.1	550.7	522.3	476.9	465.5	448.5	417.3	403.1	388.9	377.5	377.5
55°	491.1	465.5	425.8	383.2	366.2	349.1	317.9	298.0	283.8	278.2	272.5
57.5°	411.6	383.2	346.3	300.9	283.8	266.8	235.6	215.7	201.5	193.0	187.3
60°	346.3	315.1	278.2	238.4	218.6	201.5	170.3	150.4	136.2	127.7	122.1
62.5°	283.8	258.3	221.4	184.5	167.5	150.4	124.9	105.0	90.8	85.2	76.6
65°	238.4	212.9	178.8	147.6	133.4	116.4	93.7	76.6	65.3	56.8	51.1
67.5°	193.0	173.1	144.8	116.4	102.2	90.8	71.0	56.8	45.4	39.7	36.9
70°	153.3	133.4	110.7	88.0	79.5	68.1	53.9	39.7	34.1	28.4	25.5
72.5°	113.5	99.3	82.3	65.3	56.8	51.1	36.9	31.2	22.7	19.9	17.0
75°	82.3	71.0	59.6	45.4	39.7	36.9	28.4	19.9	17.0	14.2	11.4
77.5°	56.8	51.1	39.7	31.2	28.4	25.5	19.9	14.2	11.4	8.5	8.5
80°	36.9	31.2	25.5	19.9	19.9	17.0	11.4	8.5	8.5	5.7	5.7
82.5°	22.7	19.9	17.0	14.2	11.4	11.4	8.5	5.7	5.7	2.8	2.8
85°	14.2	11.4	8.5	8.5	5.7	5.7	5.7	2.8	2.8	2.8	2.8
87.5°	5.7	5.7	5.7	2.8	2.8	2.8	2.8	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



TEST NUMBER: P252321

CATALOG NUMBER: LD6B60D010TE EU6B60709727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3
2.5°	2347.4	2347.4	2353.1	2344.6	2350.3	2350.3	2355.9	2344.6	2350.3	2353.1	2358.8
5°	2336.1	2338.9	2344.6	2341.8	2344.6	2344.6	2350.3	2336.1	2347.4	2347.4	2355.9
7.5°	2324.7	2324.7	2330.4	2327.6	2333.2	2336.1	2341.8	2330.4	2341.8	2341.8	2350.3
10°	2310.5	2310.5	2319.0	2316.2	2324.7	2327.6	2336.1	2324.7	2336.1	2338.9	2347.4
12.5°	2290.7	2293.5	2302.0	2302.0	2310.5	2316.2	2324.7	2319.0	2333.2	2336.1	2347.4
15°	2268.0	2273.6	2285.0	2282.1	2290.7	2299.2	2310.5	2302.0	2321.9	2327.6	2338.9
17.5°	2239.6	2245.2	2253.8	2253.8	2262.3	2268.0	2282.1	2276.5	2293.5	2296.3	2310.5
20°	2197.0	2205.5	2216.9	2214.0	2222.5	2228.2	2239.6	2233.9	2250.9	2256.6	2270.8
22.5°	2145.9	2151.6	2160.1	2160.1	2168.6	2174.3	2185.6	2177.1	2194.2	2197.0	2208.3
25°	2077.8	2083.5	2089.1	2092.0	2100.5	2103.3	2109.0	2103.3	2117.5	2120.4	2134.5
27.5°	1989.8	1992.6	2001.1	2001.1	2006.8	2009.7	2018.2	2006.8	2026.7	2026.7	2035.2
30°	1884.8	1881.9	1893.3	1887.6	1893.3	1893.3	1901.8	1896.1	1910.3	1904.6	1913.1
32.5°	1745.7	1751.3	1751.3	1745.7	1757.0	1754.2	1754.2	1748.5	1757.0	1759.9	1765.5
35°	1583.9	1592.4	1592.4	1595.2	1598.1	1589.6	1592.4	1575.4	1589.6	1592.4	1595.2
37.5°	1407.9	1399.4	1405.1	1396.5	1410.7	1393.7	1393.7	1382.3	1393.7	1393.7	1396.5
40°	1206.4	1203.5	1209.2	1203.5	1200.7	1197.8	1192.2	1183.7	1195.0	1189.3	1197.8
42.5°	1016.2	1013.3	1013.3	1007.7	1004.8	1004.8	999.1	993.5	990.6	990.6	1004.8
45°	820.3	826.0	820.3	817.5	823.2	817.5	820.3	809.0	814.6	809.0	814.6
47.5°	655.7	658.5	652.9	647.2	655.7	647.2	647.2	638.7	650.0	650.0	644.3
50°	508.1	505.3	499.6	505.3	502.4	502.4	502.4	493.9	499.6	491.1	496.7
52.5°	374.7	371.8	371.8	369.0	371.8	369.0	369.0	366.2	366.2	363.3	366.2
55°	272.5	269.7	264.0	264.0	264.0	266.8	264.0	261.1	261.1	258.3	261.1
57.5°	184.5	178.8	178.8	178.8	178.8	176.0	176.0	173.1	176.0	173.1	176.0
60°	119.2	119.2	113.5	113.5	113.5	113.5	113.5	110.7	113.5	113.5	113.5
62.5°	73.8	73.8	71.0	68.1	71.0	68.1	68.1	68.1	71.0	68.1	71.0
65°	48.3	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
67.5°	34.1	31.2	31.2	31.2	31.2	31.2	31.2	28.4	31.2	31.2	31.2
70°	22.7	22.7	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
72.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
75°	11.4	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	8.5	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	5.7	5.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
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: P252321

CATALOG NUMBER: LD6B60D010TE EU6B60709727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3	2350.3
2.5°	2350.3	2353.1	2347.4	2350.3	2344.6	2350.3	2353.1	2358.8
5°	2344.6	2347.4	2341.8	2347.4	2341.8	2347.4	2350.3	2355.9
7.5°	2338.9	2344.6	2338.9	2344.6	2338.9	2344.6	2347.4	2353.1
10°	2338.9	2347.4	2341.8	2350.3	2341.8	2347.4	2353.1	2355.9
12.5°	2338.9	2347.4	2344.6	2350.3	2347.4	2353.1	2358.8	2364.5
15°	2333.2	2341.8	2336.1	2344.6	2341.8	2344.6	2355.9	2355.9
17.5°	2302.0	2310.5	2310.5	2316.2	2316.2	2324.7	2330.4	2336.1
20°	2262.3	2270.8	2268.0	2276.5	2276.5	2285.0	2290.7	2296.3
22.5°	2202.7	2214.0	2211.2	2219.7	2216.9	2222.5	2233.9	2231.1
25°	2126.0	2140.2	2137.4	2143.1	2140.2	2140.2	2145.9	2148.7
27.5°	2032.4	2040.9	2038.0	2043.7	2038.0	2043.7	2049.4	2052.2
30°	1910.3	1916.0	1913.1	1916.0	1913.1	1918.8	1921.7	1927.3
32.5°	1762.7	1771.2	1762.7	1768.4	1765.5	1765.5	1776.9	1771.2
35°	1586.7	1589.6	1592.4	1592.4	1586.7	1589.6	1595.2	1595.2
37.5°	1390.9	1405.1	1388.0	1396.5	1393.7	1393.7	1393.7	1402.2
40°	1186.5	1189.3	1183.7	1183.7	1183.7	1180.8	1192.2	1189.3
42.5°	993.5	996.3	993.5	985.0	987.8	987.8	996.3	985.0
45°	806.1	811.8	809.0	809.0	803.3	803.3	806.1	800.5
47.5°	638.7	644.3	635.8	638.7	633.0	638.7	635.8	641.5
50°	485.4	491.1	488.2	491.1	491.1	485.4	493.9	482.5
52.5°	363.3	366.2	363.3	360.5	357.6	357.6	363.3	360.5
55°	258.3	255.5	255.5	255.5	258.3	258.3	255.5	252.6
57.5°	173.1	173.1	170.3	170.3	173.1	167.5	170.3	167.5
60°	110.7	110.7	110.7	110.7	107.9	110.7	110.7	110.7
62.5°	68.1	68.1	68.1	68.1	68.1	68.1	68.1	68.1
65°	45.4	45.4	45.4	45.4	45.4	45.4	45.4	45.4
67.5°	28.4	31.2	31.2	31.2	28.4	28.4	28.4	28.4
70°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
72.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
75°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
80°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.8	2.8	2.8	2.8	2.8	0.0	0.0	0.0
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)