

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: P252308

Luminaire Tested: **LD6B50D010TE EU6B30509727 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252308
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: LD6B50D010TE EU6B30509727 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: 3529.0 lumens
Efficiency: N/A
Efficacy: 60.0 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

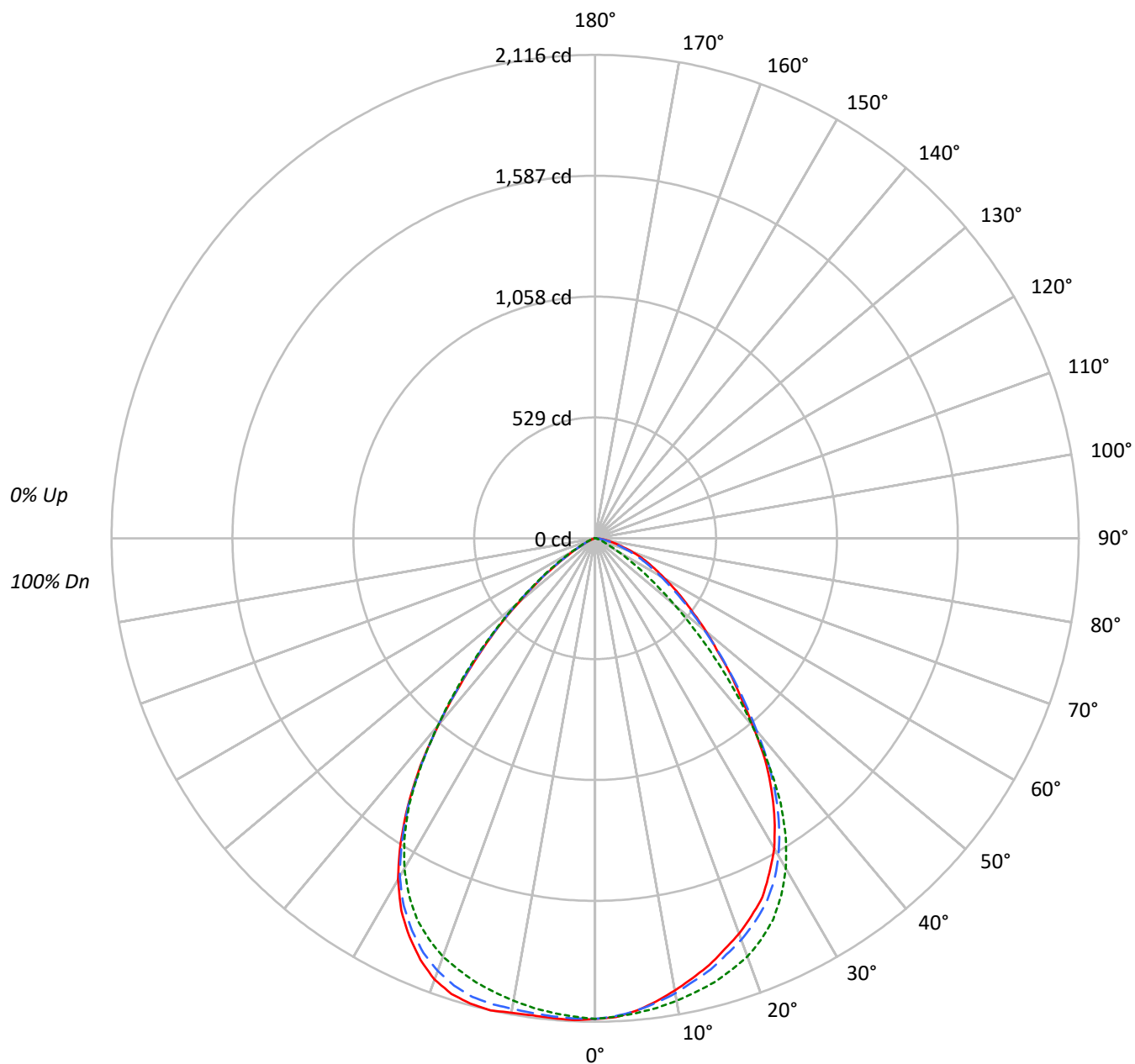
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	112	108	105	102	109	106	103	101		102	100	98			98	96	95			95
2	104	98	93	89	102	96	92	88		93	89	86			90	87	84			87
3	97	89	83	78	95	88	82	77		85	80	76			82	78	75			80
4	91	81	74	69	89	80	74	69		78	72	68			76	71	67			74
5	85	74	67	62	83	73	66	61		71	65	61			70	64	60			68
6	79	68	61	55	78	67	60	55		66	59	55			64	59	54			63
7	74	63	55	50	73	62	55	50		61	54	50			59	54	49			58
8	70	58	51	46	68	57	50	46		56	50	45			55	49	45			54
9	65	54	47	42	64	53	46	42		52	46	42			51	46	41			50
10	62	50	43	39	61	50	43	38		49	43	38			48	42	38			47

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	137234	137234	137234
5°	135931	136592	138092
10°	133123	136151	139689
15°	130579	135895	142419
20°	127872	135280	142688
25°	124721	132582	138434
30°	118085	125739	129950
35°	107233	112696	113708
40°	91519	91085	90659
45°	76884	68211	66098
50°	64207	46150	43836
55°	54040	28322	25717
60°	45747	14914	12931
65°	39612	7842	6268
70°	32962	4845	3395
75°	24325	3201	1916
80°	19086	1916	939
85°	15196	1871	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.2	5.6
10°-20°	567.6	16.1
20°-30°	838.2	23.8
30°-40°	863.8	24.5
40°-50°	596.6	16.9
50°-60°	294.1	8.3
60°-70°	119.2	3.4
70°-80°	42.5	1.2
80°-90°	8.8	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°	1604.1	45.5
0°-40°	2467.9	69.9
0°-60°	3358.6	95.2
0°-90°	3529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3529.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2104	2104	2104	2104	2104	
5°	2076	2076	2086	2101	2109	196
15°	1933	1954	2012	2078	2109	544
25°	1733	1766	1842	1895	1923	792
35°	1346	1380	1415	1423	1428	834
45°	833	838	739	729	716	644
55°	475	457	249	234	226	429
65°	257	231	51	41	41	255
75°	96	81	13	8	8	108
85°	20	15	2	0	0	25
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°	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5
2.5°	2098.4	2090.8	2095.9	2085.7	2098.4	2085.7	2088.3	2090.8	2088.3	2090.8	2093.3
5°	2075.6	2067.9	2075.6	2062.9	2075.6	2067.9	2067.9	2070.5	2070.5	2073.0	2075.6
7.5°	2045.1	2037.4	2045.1	2032.4	2047.6	2040.0	2040.0	2045.1	2042.5	2045.1	2050.2
10°	2009.5	1999.3	2007.0	1999.3	2014.6	2004.4	2009.5	2009.5	2009.5	2017.1	2022.2
12.5°	1971.4	1961.2	1971.4	1958.7	1973.9	1966.3	1968.9	1976.5	1979.0	1984.1	1986.6
15°	1933.3	1920.6	1925.7	1918.0	1933.3	1925.7	1928.2	1938.4	1938.4	1946.0	1953.6
17.5°	1885.0	1874.9	1885.0	1874.9	1887.6	1882.5	1887.6	1895.2	1895.2	1902.8	1910.4
20°	1841.8	1831.7	1839.3	1831.7	1846.9	1839.3	1841.8	1852.0	1854.5	1862.2	1869.8
22.5°	1788.5	1780.9	1785.9	1778.3	1793.6	1788.5	1791.0	1801.2	1803.7	1808.8	1821.5
25°	1732.6	1717.4	1725.0	1719.9	1735.1	1727.5	1732.6	1742.8	1747.8	1755.5	1765.6
27.5°	1651.3	1643.7	1648.8	1648.8	1661.5	1653.8	1656.4	1666.5	1674.2	1681.8	1694.5
30°	1567.5	1554.8	1559.8	1562.4	1572.5	1567.5	1572.5	1582.7	1585.2	1595.4	1605.6
32.5°	1460.8	1455.7	1465.8	1460.8	1465.8	1465.8	1468.4	1476.0	1481.1	1486.2	1498.9
35°	1346.4	1336.3	1346.4	1341.4	1354.1	1346.4	1354.1	1361.7	1361.7	1371.8	1379.5
37.5°	1222.0	1209.3	1214.3	1214.3	1219.4	1216.9	1216.9	1229.6	1232.1	1239.7	1247.4
40°	1074.6	1069.5	1079.7	1077.2	1079.7	1079.7	1082.2	1089.9	1094.9	1097.5	1100.0
42.5°	942.5	945.1	947.6	947.6	947.6	947.6	947.6	957.8	955.2	962.8	965.4
45°	833.3	823.1	828.2	825.6	833.3	825.6	833.3	840.9	835.8	843.4	838.4
47.5°	721.5	721.5	721.5	719.0	724.0	721.5	726.6	729.1	729.1	729.1	726.6
50°	632.6	625.0	627.5	627.5	630.0	627.5	632.6	635.1	635.1	630.0	619.9
52.5°	546.2	543.7	543.7	548.7	548.7	546.2	546.2	546.2	546.2	538.6	533.5
55°	475.1	470.0	472.5	472.5	472.5	472.5	475.1	472.5	472.5	464.9	457.3
57.5°	411.6	406.5	406.5	406.5	409.0	406.5	406.5	406.5	403.9	396.3	386.1
60°	350.6	348.0	350.6	350.6	353.1	350.6	350.6	350.6	345.5	337.9	327.7
62.5°	299.8	299.8	299.8	302.3	302.3	299.8	299.8	297.2	294.7	284.5	274.4
65°	256.6	254.0	256.6	256.6	259.1	259.1	256.6	254.0	251.5	241.3	231.2
67.5°	213.4	210.9	213.4	213.4	215.9	213.4	213.4	213.4	205.8	200.7	190.5
70°	172.8	170.2	170.2	170.2	172.8	167.7	170.2	170.2	165.1	157.5	147.3
72.5°	132.1	132.1	132.1	132.1	132.1	132.1	129.6	129.6	124.5	116.9	111.8
75°	96.5	96.5	99.1	99.1	96.5	96.5	96.5	94.0	91.5	86.4	81.3
77.5°	71.1	71.1	71.1	71.1	68.6	68.6	68.6	66.1	63.5	61.0	55.9
80°	50.8	50.8	50.8	48.3	50.8	48.3	48.3	48.3	43.2	40.6	38.1
82.5°	35.6	33.0	33.0	33.0	33.0	33.0	33.0	30.5	30.5	27.9	25.4
85°	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	17.8	15.2	15.2
87.5°	10.2	12.7	12.7	12.7	12.7	12.7	12.7	10.2	10.2	10.2	7.6
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5
2.5°	2093.3	2093.3	2098.4	2090.8	2103.5	2095.9	2093.3	2106.0	2098.4	2095.9	2101.0
5°	2075.6	2078.1	2080.6	2075.6	2088.3	2080.6	2080.6	2093.3	2088.3	2085.7	2093.3
7.5°	2052.7	2055.2	2060.3	2057.8	2067.9	2062.9	2065.4	2078.1	2073.0	2073.0	2080.6
10°	2024.7	2029.8	2034.9	2034.9	2047.6	2042.5	2042.5	2057.8	2052.7	2055.2	2065.4
12.5°	1991.7	1999.3	2007.0	2009.5	2022.2	2014.6	2017.1	2034.9	2032.4	2034.9	2045.1
15°	1956.2	1966.3	1973.9	1973.9	1989.2	1981.6	1989.2	2007.0	2001.9	2012.0	2024.7
17.5°	1915.5	1925.7	1935.8	1938.4	1953.6	1948.5	1958.7	1976.5	1976.5	1981.6	1996.8
20°	1877.4	1890.1	1895.2	1902.8	1918.0	1915.5	1920.6	1940.9	1940.9	1948.5	1963.8
22.5°	1826.6	1839.3	1849.5	1857.1	1869.8	1869.8	1877.4	1895.2	1895.2	1900.3	1915.5
25°	1770.7	1785.9	1793.6	1801.2	1813.9	1811.3	1819.0	1834.2	1836.8	1841.8	1857.1
27.5°	1699.6	1712.3	1722.4	1727.5	1745.3	1735.1	1742.8	1760.5	1758.0	1763.1	1775.8
30°	1610.7	1623.4	1633.5	1633.5	1648.8	1648.8	1656.4	1664.0	1664.0	1669.1	1679.2
32.5°	1506.5	1521.7	1521.7	1529.4	1539.5	1529.4	1539.5	1549.7	1544.6	1552.2	1559.8
35°	1387.1	1394.7	1397.3	1397.3	1404.9	1402.3	1399.8	1407.4	1402.3	1415.0	1422.7
37.5°	1242.3	1252.4	1247.4	1252.4	1249.9	1242.3	1242.3	1255.0	1244.8	1247.4	1255.0
40°	1102.6	1102.6	1100.0	1087.3	1089.9	1082.2	1079.7	1082.2	1072.1	1069.5	1079.7
42.5°	957.8	955.2	947.6	929.8	932.3	919.6	909.5	909.5	904.4	901.9	904.4
45°	828.2	820.6	807.9	787.5	782.5	772.3	752.0	746.9	739.3	739.3	741.8
47.5°	708.8	698.6	678.3	655.4	642.7	630.0	609.7	602.1	589.4	584.3	589.4
50°	609.7	591.9	566.5	533.5	520.8	505.6	485.2	472.5	459.8	454.7	452.2
52.5°	518.3	492.8	467.4	426.8	416.6	401.4	373.4	360.7	348.0	337.9	337.9
55°	439.5	416.6	381.1	343.0	327.7	312.5	284.5	266.7	254.0	249.0	243.9
57.5°	368.4	343.0	309.9	269.3	254.0	238.8	210.9	193.1	180.4	172.8	167.7
60°	309.9	282.0	249.0	213.4	195.6	180.4	152.4	134.6	121.9	114.3	109.2
62.5°	254.0	231.2	198.2	165.1	149.9	134.6	111.8	94.0	81.3	76.2	68.6
65°	213.4	190.5	160.0	132.1	119.4	104.2	83.8	68.6	58.4	50.8	45.7
67.5°	172.8	155.0	129.6	104.2	91.5	81.3	63.5	50.8	40.6	35.6	33.0
70°	137.2	119.4	99.1	78.8	71.1	61.0	48.3	35.6	30.5	25.4	22.9
72.5°	101.6	88.9	73.7	58.4	50.8	45.7	33.0	27.9	20.3	17.8	15.2
75°	73.7	63.5	53.3	40.6	35.6	33.0	25.4	17.8	15.2	12.7	10.2
77.5°	50.8	45.7	35.6	27.9	25.4	22.9	17.8	12.7	10.2	7.6	7.6
80°	33.0	27.9	22.9	17.8	17.8	15.2	10.2	7.6	7.6	5.1	5.1
82.5°	20.3	17.8	15.2	12.7	10.2	10.2	7.6	5.1	5.1	2.5	2.5
85°	12.7	10.2	7.6	7.6	5.1	5.1	5.1	2.5	2.5	2.5	2.5
87.5°	5.1	5.1	5.1	2.5	2.5	2.5	2.5	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5
2.5°	2101.0	2101.0	2106.0	2098.4	2103.5	2103.5	2108.6	2098.4	2103.5	2106.0	2111.1
5°	2090.8	2093.3	2098.4	2095.9	2098.4	2098.4	2103.5	2090.8	2101.0	2101.0	2108.6
7.5°	2080.6	2080.6	2085.7	2083.2	2088.3	2090.8	2095.9	2085.7	2095.9	2095.9	2103.5
10°	2067.9	2067.9	2075.6	2073.0	2080.6	2083.2	2090.8	2080.6	2090.8	2093.3	2101.0
12.5°	2050.2	2052.7	2060.3	2060.3	2067.9	2073.0	2080.6	2075.6	2088.3	2090.8	2101.0
15°	2029.8	2034.9	2045.1	2042.5	2050.2	2057.8	2067.9	2060.3	2078.1	2083.2	2093.3
17.5°	2004.4	2009.5	2017.1	2017.1	2024.7	2029.8	2042.5	2037.4	2052.7	2055.2	2067.9
20°	1966.3	1973.9	1984.1	1981.6	1989.2	1994.3	2004.4	1999.3	2014.6	2019.7	2032.4
22.5°	1920.6	1925.7	1933.3	1933.3	1940.9	1946.0	1956.2	1948.5	1963.8	1966.3	1976.5
25°	1859.6	1864.7	1869.8	1872.3	1879.9	1882.5	1887.6	1882.5	1895.2	1897.7	1910.4
27.5°	1780.9	1783.4	1791.0	1791.0	1796.1	1798.6	1806.3	1796.1	1813.9	1813.9	1821.5
30°	1686.9	1684.3	1694.5	1689.4	1694.5	1694.5	1702.1	1697.0	1709.7	1704.6	1712.3
32.5°	1562.4	1567.5	1567.5	1562.4	1572.5	1570.0	1570.0	1564.9	1572.5	1575.1	1580.2
35°	1417.6	1425.2	1425.2	1427.7	1430.3	1422.7	1425.2	1410.0	1422.7	1425.2	1427.7
37.5°	1260.1	1252.4	1257.5	1249.9	1262.6	1247.4	1247.4	1237.2	1247.4	1247.4	1249.9
40°	1079.7	1077.2	1082.2	1077.2	1074.6	1072.1	1067.0	1059.4	1069.5	1064.5	1072.1
42.5°	909.5	906.9	906.9	901.9	899.3	899.3	894.2	889.2	886.6	886.6	899.3
45°	734.2	739.3	734.2	731.7	736.7	731.7	734.2	724.0	729.1	724.0	729.1
47.5°	586.8	589.4	584.3	579.2	586.8	579.2	579.2	571.6	581.8	581.8	576.7
50°	454.7	452.2	447.1	452.2	449.7	449.7	449.7	442.0	447.1	439.5	444.6
52.5°	335.3	332.8	332.8	330.3	332.8	330.3	330.3	327.7	327.7	325.2	327.7
55°	243.9	241.3	236.3	236.3	236.3	238.8	236.3	233.7	233.7	231.2	233.7
57.5°	165.1	160.0	160.0	160.0	160.0	157.5	157.5	155.0	157.5	155.0	157.5
60°	106.7	106.7	101.6	101.6	101.6	101.6	101.6	99.1	101.6	101.6	101.6
62.5°	66.1	66.1	63.5	61.0	63.5	61.0	61.0	61.0	63.5	61.0	63.5
65°	43.2	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
67.5°	30.5	27.9	27.9	27.9	27.9	27.9	27.9	25.4	27.9	27.9	27.9
70°	20.3	20.3	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
72.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
75°	10.2	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
77.5°	7.6	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	5.1	5.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85°	2.5	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	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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: P252308

CATALOG NUMBER: LD6B50D010TE EU6B30509727 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5	2103.5
2.5°	2103.5	2106.0	2101.0	2103.5	2098.4	2103.5	2106.0	2111.1
5°	2098.4	2101.0	2095.9	2101.0	2095.9	2101.0	2103.5	2108.6
7.5°	2093.3	2098.4	2093.3	2098.4	2093.3	2098.4	2101.0	2106.0
10°	2093.3	2101.0	2095.9	2103.5	2095.9	2101.0	2106.0	2108.6
12.5°	2093.3	2101.0	2098.4	2103.5	2101.0	2106.0	2111.1	2116.2
15°	2088.3	2095.9	2090.8	2098.4	2095.9	2098.4	2108.6	2108.6
17.5°	2060.3	2067.9	2067.9	2073.0	2073.0	2080.6	2085.7	2090.8
20°	2024.7	2032.4	2029.8	2037.4	2037.4	2045.1	2050.2	2055.2
22.5°	1971.4	1981.6	1979.0	1986.6	1984.1	1989.2	1999.3	1996.8
25°	1902.8	1915.5	1913.0	1918.0	1915.5	1915.5	1920.6	1923.1
27.5°	1819.0	1826.6	1824.1	1829.1	1824.1	1829.1	1834.2	1836.8
30°	1709.7	1714.8	1712.3	1714.8	1712.3	1717.4	1719.9	1725.0
32.5°	1577.6	1585.2	1577.6	1582.7	1580.2	1580.2	1590.3	1585.2
35°	1420.1	1422.7	1425.2	1425.2	1420.1	1422.7	1427.7	1427.7
37.5°	1244.8	1257.5	1242.3	1249.9	1247.4	1247.4	1247.4	1255.0
40°	1061.9	1064.5	1059.4	1059.4	1059.4	1056.8	1067.0	1064.5
42.5°	889.2	891.7	889.2	881.5	884.1	884.1	891.7	881.5
45°	721.5	726.6	724.0	724.0	719.0	719.0	721.5	716.4
47.5°	571.6	576.7	569.1	571.6	566.5	571.6	569.1	574.1
50°	434.4	439.5	437.0	439.5	439.5	434.4	442.0	431.9
52.5°	325.2	327.7	325.2	322.6	320.1	320.1	325.2	322.6
55°	231.2	228.6	228.6	228.6	231.2	231.2	228.6	226.1
57.5°	155.0	155.0	152.4	152.4	155.0	149.9	152.4	149.9
60°	99.1	99.1	99.1	99.1	96.5	99.1	99.1	99.1
62.5°	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0
65°	40.6	40.6	40.6	40.6	40.6	40.6	40.6	40.6
67.5°	25.4	27.9	27.9	27.9	25.4	25.4	25.4	25.4
70°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
72.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
75°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	2.5	2.5	2.5	2.5	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)