

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: P252177

Luminaire Tested: **LD6B30D010 EU6B30509050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252177
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B30D010 EU6B30509050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3278.0 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

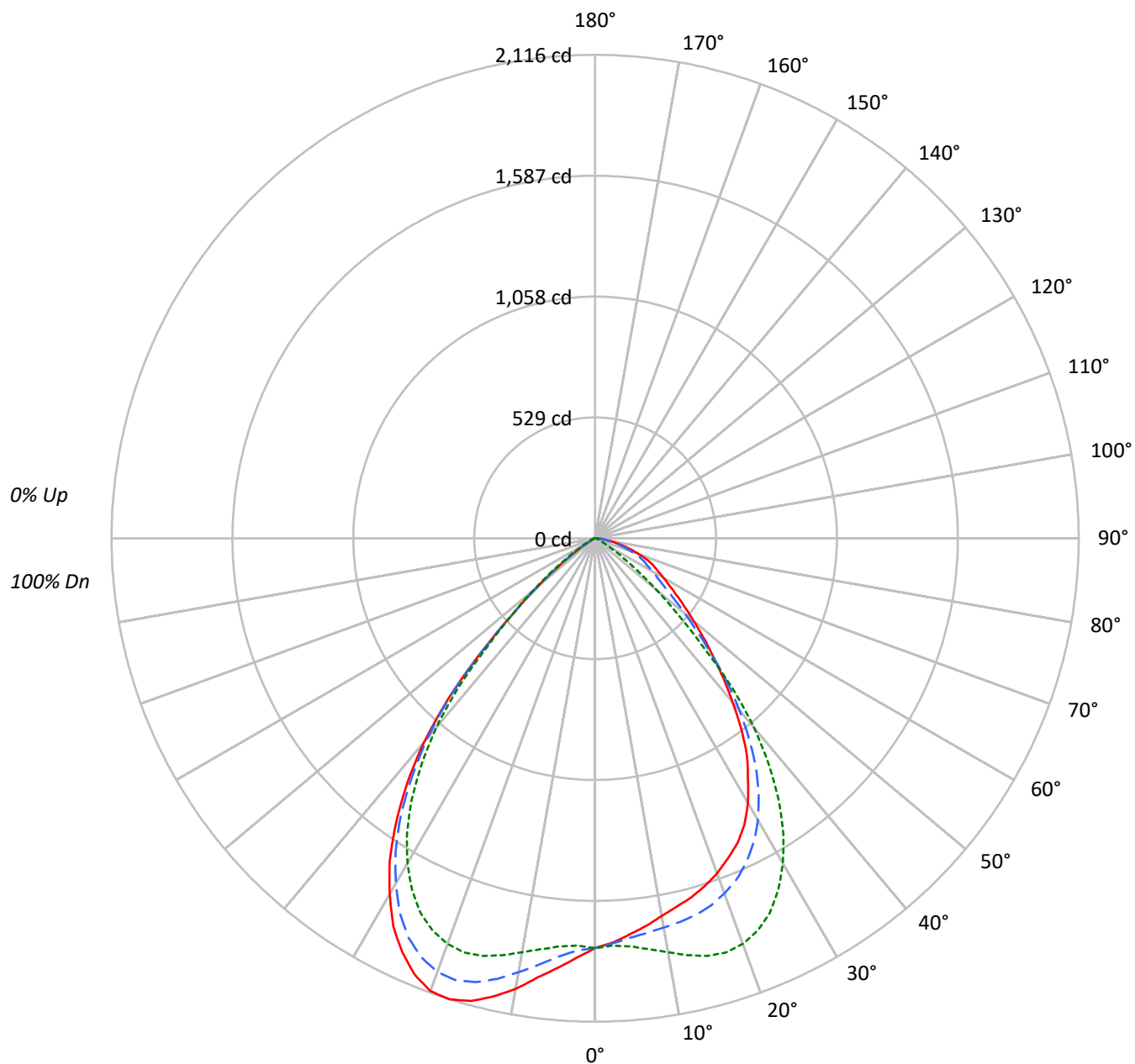
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	116996	116996	116996
5°	113965	117443	123619
10°	111196	121868	132660
15°	109891	127844	141622
20°	108321	131170	146409
25°	106012	130207	143776
30°	100743	123735	135359
35°	92172	111557	120844
40°	79724	92132	99141
45°	67224	60424	64852
50°	57071	34976	32885
55°	49535	16766	12671
60°	44742	7829	3132
65°	43410	4492	1065
70°	38913	3605	973
75°	31988	2596	429
80°	23820	1277	0
85°	20510	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	5.3
10°-20°	527.9	16.1
20°-30°	806.6	24.6
30°-40°	843.6	25.7
40°-50°	547.3	16.7
50°-60°	217.3	6.6
60°-70°	103.1	3.1
70°-80°	49.0	1.5
80°-90°	10.0	0.3
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°	1507.7	46.0
0°-40°	2351.3	71.7
0°-60°	3115.9	95.1
0°-90°	3278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3278.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1793	1793	1793	1793	1793	
5°	1740	1756	1793	1838	1888	164
15°	1627	1706	1893	2011	2097	459
25°	1473	1565	1809	1930	1997	674
35°	1157	1228	1401	1483	1517	716
45°	729	722	655	694	703	567
55°	436	370	147	115	111	395
65°	281	233	29	7	7	275
75°	127	103	10	3	2	137
85°	27	17	0	0	0	32
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°	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3
2.5°	1771.0	1774.5	1755.6	1750.5	1764.2	1769.3	1771.0	1765.9	1767.6	1774.5	1774.5
5°	1740.2	1743.6	1726.5	1721.3	1735.0	1738.5	1743.6	1741.9	1747.0	1757.3	1755.6
7.5°	1711.0	1716.2	1697.3	1690.5	1707.6	1716.2	1719.6	1719.6	1726.5	1740.2	1741.9
10°	1678.5	1685.3	1668.2	1664.7	1683.6	1692.2	1693.9	1697.3	1707.6	1726.5	1729.9
12.5°	1651.0	1657.9	1645.9	1640.7	1661.3	1669.9	1673.3	1680.2	1692.2	1716.2	1719.6
15°	1627.0	1632.2	1618.4	1615.0	1635.6	1645.9	1647.6	1657.9	1673.3	1700.7	1705.9
17.5°	1596.2	1599.6	1589.3	1585.9	1606.4	1616.7	1618.4	1630.5	1649.3	1676.7	1685.3
20°	1560.2	1563.6	1553.3	1549.9	1570.4	1582.4	1584.2	1594.4	1616.7	1645.9	1654.5
22.5°	1517.3	1524.2	1512.2	1508.7	1529.3	1539.6	1544.7	1553.3	1575.6	1604.7	1616.7
25°	1472.7	1472.7	1464.1	1462.4	1481.3	1493.3	1491.6	1503.6	1525.9	1555.0	1565.3
27.5°	1414.4	1412.7	1404.1	1402.4	1423.0	1433.3	1429.9	1441.9	1462.4	1491.6	1501.9
30°	1337.3	1340.7	1328.7	1325.3	1342.4	1359.6	1357.9	1369.9	1390.4	1417.9	1424.7
32.5°	1244.7	1248.1	1246.4	1241.3	1256.7	1265.3	1270.4	1279.0	1296.1	1325.3	1332.1
35°	1157.3	1152.1	1145.3	1145.3	1160.7	1174.4	1169.3	1179.5	1196.7	1225.8	1227.6
37.5°	1049.2	1047.5	1044.1	1040.7	1057.8	1061.3	1063.0	1069.8	1085.3	1109.3	1105.8
40°	936.1	937.8	936.1	929.2	939.5	953.2	951.5	955.0	968.7	985.8	980.7
42.5°	829.8	829.8	829.8	822.9	834.9	841.8	845.2	843.5	846.9	862.4	855.5
45°	728.6	730.4	728.6	726.9	728.6	732.1	728.6	726.9	726.9	732.1	721.8
47.5°	641.2	641.2	636.1	630.9	636.1	637.8	632.6	627.5	625.8	624.1	606.9
50°	562.3	560.6	558.9	550.3	555.5	557.2	550.3	546.9	540.1	531.5	510.9
52.5°	493.8	492.0	490.3	481.8	485.2	486.9	480.0	473.2	464.6	457.8	432.0
55°	435.5	433.8	433.8	428.6	425.2	428.6	421.8	416.6	404.6	396.0	370.3
57.5°	385.8	385.8	382.3	377.2	378.9	378.9	372.0	365.2	354.9	344.6	324.0
60°	342.9	342.9	342.9	337.7	337.7	337.7	334.3	327.5	318.9	308.6	288.0
62.5°	308.6	308.6	306.9	301.7	303.5	303.5	300.0	293.2	284.6	277.7	257.2
65°	281.2	281.2	281.2	276.0	276.0	277.7	274.3	267.5	260.6	252.0	233.2
67.5°	246.9	245.2	245.2	241.7	243.5	245.2	241.7	236.6	228.0	222.9	205.7
70°	204.0	205.7	207.4	202.3	204.0	204.0	202.3	197.2	192.0	186.9	171.4
72.5°	166.3	166.3	164.6	162.9	162.9	164.6	161.2	156.0	152.6	149.2	137.2
75°	126.9	125.2	126.9	123.4	123.4	123.4	120.0	118.3	116.6	111.4	102.9
77.5°	92.6	90.9	90.9	87.4	89.2	89.2	87.4	84.0	80.6	78.9	72.0
80°	63.4	63.4	63.4	61.7	61.7	60.0	60.0	58.3	54.9	53.1	49.7
82.5°	42.9	42.9	42.9	41.1	41.1	41.1	39.4	37.7	36.0	34.3	30.9
85°	27.4	27.4	27.4	25.7	25.7	25.7	24.0	24.0	22.3	20.6	17.1
87.5°	15.4	15.4	15.4	13.7	13.7	13.7	13.7	13.7	12.0	10.3	8.6
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°	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3
2.5°	1786.5	1762.5	1777.9	1777.9	1772.8	1786.5	1795.0	1801.9	1800.2	1784.8	1783.0
5°	1772.8	1752.2	1769.3	1771.0	1765.9	1784.8	1796.8	1805.3	1807.0	1793.3	1795.0
7.5°	1762.5	1745.3	1767.6	1774.5	1772.8	1789.9	1803.6	1817.3	1824.2	1813.9	1815.6
10°	1757.3	1743.6	1767.6	1777.9	1779.6	1798.5	1819.0	1837.9	1846.5	1839.6	1844.8
12.5°	1750.5	1741.9	1769.3	1784.8	1791.6	1810.5	1836.2	1858.5	1872.2	1868.8	1879.0
15°	1743.6	1736.7	1769.3	1791.6	1800.2	1817.3	1846.5	1879.0	1894.5	1892.8	1906.5
17.5°	1726.5	1724.7	1759.0	1783.0	1795.0	1815.6	1843.0	1882.5	1897.9	1901.3	1918.5
20°	1699.0	1699.0	1736.7	1762.5	1776.2	1795.0	1829.3	1867.0	1885.9	1889.3	1908.2
22.5°	1661.3	1664.7	1700.7	1726.5	1747.0	1760.7	1796.8	1836.2	1853.3	1858.5	1879.0
25°	1611.6	1615.0	1649.3	1675.0	1697.3	1712.7	1747.0	1783.0	1803.6	1808.8	1824.2
27.5°	1546.4	1553.3	1585.9	1611.6	1630.5	1640.7	1676.7	1714.5	1729.9	1735.0	1750.5
30°	1471.0	1472.7	1505.3	1527.6	1546.4	1555.0	1585.9	1625.3	1637.3	1642.5	1664.7
32.5°	1378.4	1376.7	1407.6	1428.1	1443.6	1453.9	1486.4	1512.2	1524.2	1532.7	1544.7
35°	1267.0	1265.3	1287.6	1311.6	1323.6	1327.0	1359.6	1387.0	1393.9	1400.7	1416.1
37.5°	1141.8	1141.8	1160.7	1172.7	1186.4	1191.5	1207.0	1237.8	1249.8	1248.1	1260.1
40°	1009.8	1003.0	1016.7	1028.7	1032.1	1033.8	1049.2	1073.3	1081.8	1081.8	1090.4
42.5°	870.9	860.7	862.4	869.2	872.7	860.7	870.9	886.4	881.2	888.1	889.8
45°	723.5	708.1	701.2	685.8	689.2	677.2	670.4	673.8	672.1	654.9	658.4
47.5°	603.5	576.1	564.1	541.8	536.6	522.9	514.3	498.9	485.2	485.2	476.6
50°	502.3	474.9	450.9	425.2	416.6	404.6	385.8	365.2	354.9	344.6	336.0
52.5°	421.8	392.6	363.5	336.0	324.0	308.6	282.9	262.3	243.5	233.2	222.9
55°	356.6	324.0	293.2	264.0	248.6	233.2	207.4	183.4	161.2	147.4	138.9
57.5°	306.9	276.0	243.5	212.6	198.9	181.7	154.3	128.6	108.0	92.6	84.0
60°	270.9	240.0	210.9	178.3	164.6	147.4	118.3	94.3	73.7	60.0	49.7
62.5°	240.0	212.6	181.7	152.6	138.9	121.7	94.3	70.3	51.4	37.7	29.1
65°	217.7	190.3	164.6	135.4	123.4	106.3	80.6	58.3	41.1	29.1	20.6
67.5°	192.0	168.0	142.3	118.3	106.3	92.6	68.6	49.7	34.3	24.0	17.1
70°	161.2	142.3	120.0	97.7	89.2	77.2	56.6	41.1	27.4	18.9	13.7
72.5°	128.6	113.2	96.0	78.9	72.0	60.0	46.3	32.6	20.6	13.7	10.3
75°	97.7	85.7	72.0	60.0	53.1	46.3	34.3	24.0	15.4	10.3	6.9
77.5°	66.9	61.7	51.4	41.1	37.7	32.6	22.3	15.4	10.3	6.9	3.4
80°	46.3	41.1	34.3	27.4	24.0	20.6	13.7	10.3	5.1	3.4	1.7
82.5°	29.1	24.0	20.6	17.1	15.4	12.0	8.6	5.1	3.4	1.7	1.7
85°	15.4	13.7	12.0	8.6	8.6	6.9	5.1	3.4	1.7	0.0	0.0
87.5°	8.6	6.9	5.1	3.4	3.4	1.7	1.7	1.7	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°	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3
2.5°	1803.6	1803.6	1801.9	1822.5	1798.5	1822.5	1810.5	1822.5	1805.3	1803.6	1805.3
5°	1817.3	1822.5	1824.2	1843.0	1820.8	1849.9	1839.6	1849.9	1837.9	1841.3	1846.5
7.5°	1844.8	1853.3	1851.6	1875.6	1853.3	1885.9	1879.0	1894.5	1882.5	1885.9	1892.8
10°	1875.6	1885.9	1887.6	1911.6	1891.0	1930.5	1921.9	1939.1	1928.8	1933.9	1942.5
12.5°	1911.6	1923.6	1925.3	1952.8	1930.5	1971.6	1966.5	1983.6	1975.1	1980.2	1990.5
15°	1939.1	1956.2	1959.6	1987.1	1963.1	2005.9	2002.5	2024.8	2011.1	2019.6	2028.2
17.5°	1952.8	1968.2	1975.1	2000.8	1980.2	2023.1	2019.6	2038.5	2028.2	2036.8	2047.1
20°	1944.2	1963.1	1968.2	1993.9	1973.3	2016.2	2011.1	2029.9	2019.6	2026.5	2036.8
22.5°	1913.3	1932.2	1939.1	1963.1	1944.2	1983.6	1981.9	1999.1	1985.3	1993.9	2002.5
25°	1858.5	1879.0	1882.5	1904.8	1884.2	1925.3	1921.9	1940.8	1930.5	1935.6	1947.6
27.5°	1779.6	1803.6	1808.8	1827.6	1812.2	1846.5	1846.5	1861.9	1849.9	1849.9	1861.9
30°	1685.3	1709.3	1712.7	1728.2	1714.5	1745.3	1747.0	1762.5	1743.6	1753.9	1755.6
32.5°	1570.4	1585.9	1596.2	1609.9	1589.3	1628.7	1623.6	1635.6	1625.3	1625.3	1633.9
35°	1431.6	1450.4	1455.6	1472.7	1455.6	1486.4	1486.4	1493.3	1483.0	1483.0	1496.7
37.5°	1280.7	1294.4	1296.1	1313.3	1299.6	1325.3	1323.6	1328.7	1318.4	1325.3	1325.3
40°	1104.1	1114.4	1117.8	1126.4	1124.7	1143.5	1141.8	1145.3	1140.1	1141.8	1145.3
42.5°	898.4	912.1	919.0	925.8	915.5	941.2	936.1	941.2	939.5	941.2	946.4
45°	661.8	672.1	677.2	678.9	675.5	690.9	702.9	692.6	694.4	690.9	697.8
47.5°	478.3	480.0	476.6	486.9	478.3	485.2	488.6	490.3	480.0	478.3	485.2
50°	327.5	336.0	324.0	329.2	327.5	334.3	330.9	332.6	322.3	327.5	324.0
52.5°	217.7	216.0	212.6	214.3	210.9	210.9	210.9	214.3	207.4	204.0	200.6
55°	132.0	128.6	121.7	120.0	120.0	121.7	118.3	114.9	114.9	113.2	113.2
57.5°	77.2	72.0	68.6	66.9	63.4	61.7	60.0	60.0	56.6	56.6	56.6
60°	42.9	37.7	34.3	30.9	30.9	29.1	27.4	25.7	25.7	25.7	24.0
62.5°	22.3	18.9	15.4	13.7	13.7	12.0	10.3	10.3	10.3	10.3	8.6
65°	15.4	12.0	10.3	8.6	8.6	6.9	6.9	6.9	6.9	6.9	6.9
67.5°	12.0	10.3	8.6	6.9	6.9	6.9	5.1	5.1	5.1	5.1	5.1
70°	10.3	6.9	6.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	6.9	6.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
75°	5.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	1.7	1.7	1.7	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0
80°	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	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



TEST NUMBER: P252177

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3	1793.3
2.5°	1820.8	1819.0	1820.8	1824.2	1817.3	1837.9	1827.6	1837.9
5°	1860.2	1861.9	1863.6	1868.8	1860.2	1885.9	1872.2	1887.6
7.5°	1911.6	1913.3	1915.1	1920.2	1915.1	1940.8	1925.3	1939.1
10°	1964.8	1968.2	1968.2	1976.8	1971.6	1995.6	1985.3	2002.5
12.5°	2014.5	2017.9	2021.3	2026.5	2023.1	2048.8	2040.2	2053.9
15°	2053.9	2060.8	2062.5	2069.4	2065.9	2093.4	2083.1	2096.8
17.5°	2072.8	2079.6	2079.6	2088.2	2084.8	2113.9	2100.2	2115.6
20°	2062.5	2067.6	2069.4	2077.9	2074.5	2103.6	2089.9	2108.8
22.5°	2029.9	2031.6	2033.3	2041.9	2040.2	2065.9	2053.9	2065.9
25°	1969.9	1975.1	1973.3	1980.2	1980.2	2000.8	1987.1	1997.3
27.5°	1884.2	1889.3	1889.3	1897.9	1891.0	1911.6	1897.9	1913.3
30°	1779.6	1784.8	1781.3	1788.2	1781.3	1801.9	1791.6	1796.8
32.5°	1654.5	1654.5	1656.2	1657.9	1654.5	1673.3	1663.0	1673.3
35°	1505.3	1508.7	1510.4	1512.2	1508.7	1522.4	1510.4	1517.3
37.5°	1337.3	1345.9	1344.1	1345.9	1340.7	1357.9	1347.6	1351.0
40°	1157.3	1157.3	1155.5	1159.0	1153.8	1167.5	1160.7	1164.1
42.5°	948.1	953.2	946.4	955.0	941.2	960.1	953.2	948.1
45°	711.5	704.6	702.9	704.6	699.5	701.2	706.4	702.9
47.5°	485.2	485.2	481.8	476.6	483.5	485.2	478.3	478.3
50°	325.7	325.7	322.3	320.6	324.0	322.3	318.9	324.0
52.5°	207.4	200.6	200.6	204.0	200.6	197.2	202.3	198.9
55°	113.2	109.7	109.7	113.2	109.7	109.7	108.0	111.4
57.5°	54.9	56.6	54.9	54.9	54.9	54.9	53.1	54.9
60°	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
62.5°	10.3	10.3	8.6	8.6	8.6	8.6	8.6	8.6
65°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
67.5°	5.1	5.1	5.1	5.1	5.1	6.9	5.1	5.1
70°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
72.5°	5.1	5.1	6.9	6.9	6.9	6.9	6.9	6.9
75°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	1.7
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)