

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: P252174

Luminaire Tested: **LD6B30D010 EU6B30509030 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252174
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 EU6B30509030 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3212.0 lumens
Efficiency: N/A
Efficacy: 114.7 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

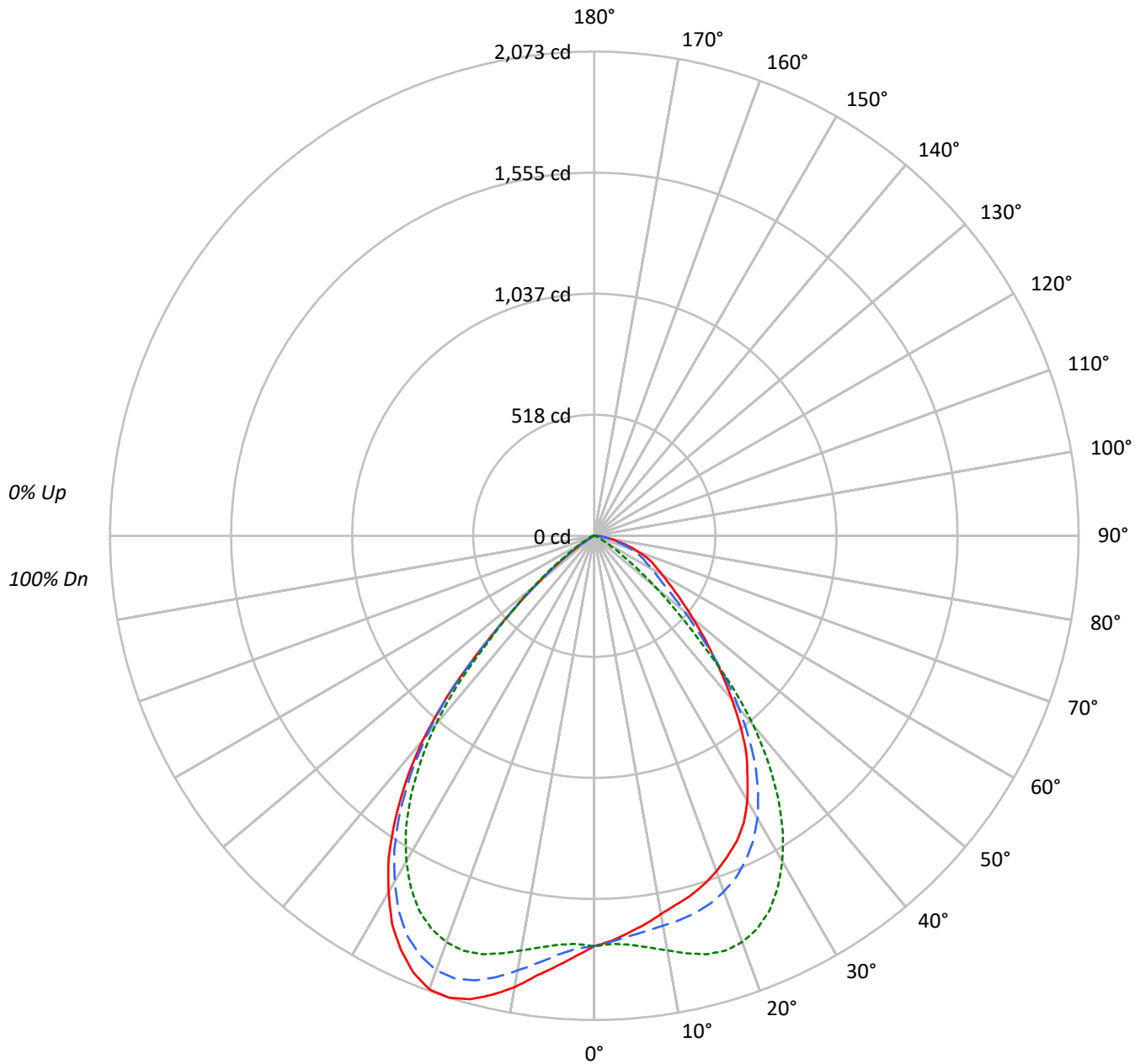
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	114641	114641	114641
5°	111667	115079	121130
10°	108957	119417	129990
15°	107682	125270	138772
20°	106134	128531	143458
25°	103882	127579	140882
30°	98717	121242	132632
35°	90316	109312	118407
40°	78114	90276	97148
45°	65877	59206	63552
50°	55925	34275	32225
55°	48534	16436	12421
60°	43842	7672	3066
65°	42530	4415	1034
70°	38131	3529	954
75°	31332	2546	429
80°	23369	1277	0
85°	20136	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.7	5.3
10°-20°	517.3	16.1
20°-30°	790.4	24.6
30°-40°	826.6	25.7
40°-50°	536.2	16.7
50°-60°	212.9	6.6
60°-70°	101.0	3.1
70°-80°	48.0	1.5
80°-90°	9.8	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°	1477.4	46.0
0°-40°	2304.0	71.7
0°-60°	3053.2	95.1
0°-90°	3212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1757	1757	1757	1757	1757	
5°	1705	1720	1757	1801	1850	161
15°	1594	1672	1855	1971	2055	449
25°	1443	1534	1772	1892	1957	661
35°	1134	1203	1372	1453	1487	701
45°	714	707	642	680	689	556
55°	427	363	144	113	109	387
65°	276	228	29	7	7	269
75°	124	101	10	3	2	134
85°	27	17	0	0	0	31
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°	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2
2.5°	1735.4	1738.7	1720.3	1715.2	1728.7	1733.7	1735.4	1730.3	1732.0	1738.7	1738.7
5°	1705.1	1708.5	1691.7	1686.7	1700.1	1703.5	1708.5	1706.8	1711.9	1721.9	1720.3
7.5°	1676.6	1681.6	1663.1	1656.4	1673.2	1681.6	1685.0	1685.0	1691.7	1705.1	1706.8
10°	1644.7	1651.4	1634.6	1631.2	1649.7	1658.1	1659.8	1663.1	1673.2	1691.7	1695.1
12.5°	1617.8	1624.5	1612.7	1607.7	1627.9	1636.3	1639.6	1646.3	1658.1	1681.6	1685.0
15°	1594.3	1599.3	1585.9	1582.5	1602.7	1612.7	1614.4	1624.5	1639.6	1666.5	1671.5
17.5°	1564.0	1567.4	1557.3	1553.9	1574.1	1584.2	1585.9	1597.6	1616.1	1643.0	1651.4
20°	1528.7	1532.1	1522.0	1518.7	1538.8	1550.6	1552.3	1562.3	1584.2	1612.7	1621.1
22.5°	1486.7	1493.5	1481.7	1478.3	1498.5	1508.6	1513.6	1522.0	1543.9	1572.4	1584.2
25°	1443.1	1443.1	1434.7	1433.0	1451.5	1463.2	1461.5	1473.3	1495.1	1523.7	1533.8
27.5°	1386.0	1384.3	1375.9	1374.2	1394.4	1404.4	1401.1	1412.8	1433.0	1461.5	1471.6
30°	1310.4	1313.7	1302.0	1298.6	1315.4	1332.2	1330.5	1342.3	1362.4	1389.3	1396.0
32.5°	1219.6	1223.0	1221.3	1216.3	1231.4	1239.8	1244.8	1253.2	1270.0	1298.6	1305.3
35°	1134.0	1128.9	1122.2	1122.2	1137.3	1150.8	1145.7	1155.8	1172.6	1201.2	1202.8
37.5°	1028.1	1026.4	1023.1	1019.7	1036.5	1039.9	1041.6	1048.3	1063.4	1086.9	1083.6
40°	917.2	918.9	917.2	910.5	920.6	934.0	932.4	935.7	949.2	966.0	960.9
42.5°	813.1	813.1	813.1	806.4	818.1	824.9	828.2	826.5	829.9	845.0	838.3
45°	714.0	715.7	714.0	712.3	714.0	717.3	714.0	712.3	712.3	717.3	707.3
47.5°	628.3	628.3	623.3	618.2	623.3	624.9	619.9	614.9	613.2	611.5	594.7
50°	551.0	549.3	547.7	539.3	544.3	546.0	539.3	535.9	529.2	520.8	500.6
52.5°	483.8	482.1	480.5	472.1	475.4	477.1	470.4	463.7	455.3	448.5	423.3
55°	426.7	425.0	425.0	420.0	416.6	420.0	413.3	408.2	396.5	388.1	362.9
57.5°	378.0	378.0	374.6	369.6	371.3	371.3	364.5	357.8	347.7	337.7	317.5
60°	336.0	336.0	336.0	330.9	330.9	330.9	327.6	320.9	312.5	302.4	282.2
62.5°	302.4	302.4	300.7	295.7	297.3	297.3	294.0	287.3	278.9	272.2	252.0
65°	275.5	275.5	275.5	270.5	270.5	272.2	268.8	262.1	255.4	247.0	228.5
67.5°	241.9	240.2	240.2	236.9	238.6	240.2	236.9	231.8	223.4	218.4	201.6
70°	199.9	201.6	203.3	198.2	199.9	199.9	198.2	193.2	188.2	183.1	168.0
72.5°	163.0	163.0	161.3	159.6	159.6	161.3	157.9	152.9	149.5	146.2	134.4
75°	124.3	122.6	124.3	121.0	121.0	121.0	117.6	115.9	114.2	109.2	100.8
77.5°	90.7	89.0	89.0	85.7	87.4	87.4	85.7	82.3	79.0	77.3	70.6
80°	62.2	62.2	62.2	60.5	60.5	58.8	58.8	57.1	53.8	52.1	48.7
82.5°	42.0	42.0	42.0	40.3	40.3	40.3	38.6	37.0	35.3	33.6	30.2
85°	26.9	26.9	26.9	25.2	25.2	25.2	23.5	23.5	21.8	20.2	16.8
87.5°	15.1	15.1	15.1	13.4	13.4	13.4	13.4	13.4	11.8	10.1	8.4
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°	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2
2.5°	1750.5	1727.0	1742.1	1742.1	1737.1	1750.5	1758.9	1765.6	1763.9	1748.8	1747.1
5°	1737.1	1716.9	1733.7	1735.4	1730.3	1748.8	1760.6	1769.0	1770.7	1757.2	1758.9
7.5°	1727.0	1710.2	1732.0	1738.7	1737.1	1753.9	1767.3	1780.7	1787.5	1777.4	1779.1
10°	1721.9	1708.5	1732.0	1742.1	1743.8	1762.3	1782.4	1800.9	1809.3	1802.6	1807.6
12.5°	1715.2	1706.8	1733.7	1748.8	1755.5	1774.0	1799.2	1821.1	1834.5	1831.1	1841.2
15°	1708.5	1701.8	1733.7	1755.5	1763.9	1780.7	1809.3	1841.2	1856.3	1854.7	1868.1
17.5°	1691.7	1690.0	1723.6	1747.1	1758.9	1779.1	1805.9	1844.6	1859.7	1863.1	1879.9
20°	1664.8	1664.8	1701.8	1727.0	1740.4	1758.9	1792.5	1829.5	1847.9	1851.3	1869.8
22.5°	1627.9	1631.2	1666.5	1691.7	1711.9	1725.3	1760.6	1799.2	1816.0	1821.1	1841.2
25°	1579.1	1582.5	1616.1	1641.3	1663.1	1678.3	1711.9	1747.1	1767.3	1772.3	1787.5
27.5°	1515.3	1522.0	1553.9	1579.1	1597.6	1607.7	1643.0	1679.9	1695.1	1700.1	1715.2
30°	1441.4	1443.1	1475.0	1496.8	1515.3	1523.7	1553.9	1592.6	1604.3	1609.4	1631.2
32.5°	1350.7	1349.0	1379.2	1399.4	1414.5	1424.6	1456.5	1481.7	1493.5	1501.9	1513.6
35°	1241.5	1239.8	1261.6	1285.2	1296.9	1300.3	1332.2	1359.1	1365.8	1372.5	1387.6
37.5°	1118.8	1118.8	1137.3	1149.1	1162.5	1167.6	1182.7	1212.9	1224.7	1223.0	1234.8
40°	989.5	982.8	996.2	1008.0	1011.3	1013.0	1028.1	1051.6	1060.0	1060.0	1068.4
42.5°	853.4	843.3	845.0	851.7	855.1	843.3	853.4	868.5	863.5	870.2	871.9
45°	708.9	693.8	687.1	672.0	675.3	663.6	656.9	660.2	658.5	641.7	645.1
47.5°	591.3	564.5	552.7	530.9	525.8	512.4	504.0	488.9	475.4	475.4	467.0
50°	492.2	465.3	441.8	416.6	408.2	396.5	378.0	357.8	347.7	337.7	329.3
52.5°	413.3	384.7	356.1	329.3	317.5	302.4	277.2	257.0	238.6	228.5	218.4
55°	349.4	317.5	287.3	258.7	243.6	228.5	203.3	179.8	157.9	144.5	136.1
57.5°	300.7	270.5	238.6	208.3	194.9	178.1	151.2	126.0	105.8	90.7	82.3
60°	265.4	235.2	206.6	174.7	161.3	144.5	115.9	92.4	72.2	58.8	48.7
62.5°	235.2	208.3	178.1	149.5	136.1	119.3	92.4	68.9	50.4	37.0	28.6
65°	213.4	186.5	161.3	132.7	121.0	104.2	79.0	57.1	40.3	28.6	20.2
67.5°	188.2	164.6	139.4	115.9	104.2	90.7	67.2	48.7	33.6	23.5	16.8
70°	157.9	139.4	117.6	95.8	87.4	75.6	55.4	40.3	26.9	18.5	13.4
72.5°	126.0	110.9	94.1	77.3	70.6	58.8	45.4	31.9	20.2	13.4	10.1
75°	95.8	84.0	70.6	58.8	52.1	45.4	33.6	23.5	15.1	10.1	6.7
77.5°	65.5	60.5	50.4	40.3	37.0	31.9	21.8	15.1	10.1	6.7	3.4
80°	45.4	40.3	33.6	26.9	23.5	20.2	13.4	10.1	5.0	3.4	1.7
82.5°	28.6	23.5	20.2	16.8	15.1	11.8	8.4	5.0	3.4	1.7	1.7
85°	15.1	13.4	11.8	8.4	8.4	6.7	5.0	3.4	1.7	0.0	0.0
87.5°	8.4	6.7	5.0	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°	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2
2.5°	1767.3	1767.3	1765.6	1785.8	1762.3	1785.8	1774.0	1785.8	1769.0	1767.3	1769.0
5°	1780.7	1785.8	1787.5	1805.9	1784.1	1812.7	1802.6	1812.7	1800.9	1804.3	1809.3
7.5°	1807.6	1816.0	1814.3	1837.9	1816.0	1847.9	1841.2	1856.3	1844.6	1847.9	1854.7
10°	1837.9	1847.9	1849.6	1873.1	1853.0	1891.6	1883.2	1900.0	1889.9	1895.0	1903.4
12.5°	1873.1	1884.9	1886.6	1913.5	1891.6	1931.9	1926.9	1943.7	1935.3	1940.3	1950.4
15°	1900.0	1916.8	1920.2	1947.1	1923.5	1965.5	1962.2	1984.0	1970.6	1979.0	1987.4
17.5°	1913.5	1928.6	1935.3	1960.5	1940.3	1982.3	1979.0	1997.4	1987.4	1995.8	2005.8
20°	1905.1	1923.5	1928.6	1953.8	1933.6	1975.6	1970.6	1989.0	1979.0	1985.7	1995.8
22.5°	1874.8	1893.3	1900.0	1923.5	1905.1	1943.7	1942.0	1958.8	1945.4	1953.8	1962.2
25°	1821.1	1841.2	1844.6	1866.4	1846.3	1886.6	1883.2	1901.7	1891.6	1896.7	1908.4
27.5°	1743.8	1767.3	1772.3	1790.8	1775.7	1809.3	1809.3	1824.4	1812.7	1812.7	1824.4
30°	1651.4	1674.9	1678.3	1693.4	1679.9	1710.2	1711.9	1727.0	1708.5	1718.6	1720.3
32.5°	1538.8	1553.9	1564.0	1577.5	1557.3	1595.9	1590.9	1602.7	1592.6	1592.6	1601.0
35°	1402.8	1421.2	1426.3	1443.1	1426.3	1456.5	1456.5	1463.2	1453.1	1453.1	1466.6
37.5°	1254.9	1268.4	1270.0	1286.8	1273.4	1298.6	1296.9	1302.0	1291.9	1298.6	1298.6
40°	1081.9	1092.0	1095.3	1103.7	1102.0	1120.5	1118.8	1122.2	1117.2	1118.8	1122.2
42.5°	880.3	893.7	900.4	907.2	897.1	922.3	917.2	922.3	920.6	922.3	927.3
45°	648.5	658.5	663.6	665.3	661.9	677.0	688.8	678.7	680.4	677.0	683.7
47.5°	468.7	470.4	467.0	477.1	468.7	475.4	478.8	480.5	470.4	468.7	475.4
50°	320.9	329.3	317.5	322.5	320.9	327.6	324.2	325.9	315.8	320.9	317.5
52.5°	213.4	211.7	208.3	210.0	206.6	206.6	206.6	210.0	203.3	199.9	196.6
55°	129.4	126.0	119.3	117.6	117.6	119.3	115.9	112.6	112.6	110.9	110.9
57.5°	75.6	70.6	67.2	65.5	62.2	60.5	58.8	58.8	55.4	55.4	55.4
60°	42.0	37.0	33.6	30.2	30.2	28.6	26.9	25.2	25.2	25.2	23.5
62.5°	21.8	18.5	15.1	13.4	13.4	11.8	10.1	10.1	10.1	10.1	8.4
65°	15.1	11.8	10.1	8.4	8.4	6.7	6.7	6.7	6.7	6.7	6.7
67.5°	11.8	10.1	8.4	6.7	6.7	6.7	5.0	5.0	5.0	5.0	5.0
70°	10.1	6.7	6.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
72.5°	6.7	6.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
75°	5.0	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: P252174

CATALOG NUMBER: LD6B30D010 EU6B30509030 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2	1757.2
2.5°	1784.1	1782.4	1784.1	1787.5	1780.7	1800.9	1790.8	1800.9
5°	1822.7	1824.4	1826.1	1831.1	1822.7	1847.9	1834.5	1849.6
7.5°	1873.1	1874.8	1876.5	1881.5	1876.5	1901.7	1886.6	1900.0
10°	1925.2	1928.6	1928.6	1937.0	1931.9	1955.5	1945.4	1962.2
12.5°	1973.9	1977.3	1980.6	1985.7	1982.3	2007.5	1999.1	2012.6
15°	2012.6	2019.3	2021.0	2027.7	2024.3	2051.2	2041.1	2054.6
17.5°	2031.0	2037.8	2037.8	2046.2	2042.8	2071.4	2057.9	2073.0
20°	2021.0	2026.0	2027.7	2036.1	2032.7	2061.3	2047.8	2066.3
22.5°	1989.0	1990.7	1992.4	2000.8	1999.1	2024.3	2012.6	2024.3
25°	1930.3	1935.3	1933.6	1940.3	1940.3	1960.5	1947.1	1957.1
27.5°	1846.3	1851.3	1851.3	1859.7	1853.0	1873.1	1859.7	1874.8
30°	1743.8	1748.8	1745.5	1752.2	1745.5	1765.6	1755.5	1760.6
32.5°	1621.1	1621.1	1622.8	1624.5	1621.1	1639.6	1629.5	1639.6
35°	1475.0	1478.3	1480.0	1481.7	1478.3	1491.8	1480.0	1486.7
37.5°	1310.4	1318.8	1317.1	1318.8	1313.7	1330.5	1320.4	1323.8
40°	1134.0	1134.0	1132.3	1135.6	1130.6	1144.0	1137.3	1140.7
42.5°	929.0	934.0	927.3	935.7	922.3	940.8	934.0	929.0
45°	697.2	690.5	688.8	690.5	685.4	687.1	692.1	688.8
47.5°	475.4	475.4	472.1	467.0	473.7	475.4	468.7	468.7
50°	319.2	319.2	315.8	314.1	317.5	315.8	312.5	317.5
52.5°	203.3	196.6	196.6	199.9	196.6	193.2	198.2	194.9
55°	110.9	107.5	107.5	110.9	107.5	107.5	105.8	109.2
57.5°	53.8	55.4	53.8	53.8	53.8	53.8	52.1	53.8
60°	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
62.5°	10.1	10.1	8.4	8.4	8.4	8.4	8.4	8.4
65°	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
67.5°	5.0	5.0	5.0	5.0	5.0	6.7	5.0	5.0
70°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
72.5°	5.0	5.0	6.7	6.7	6.7	6.7	6.7	6.7
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)