

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: P252603

Luminaire Tested: **LD6B40D010 EU6B30509030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30509030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 3556.0 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

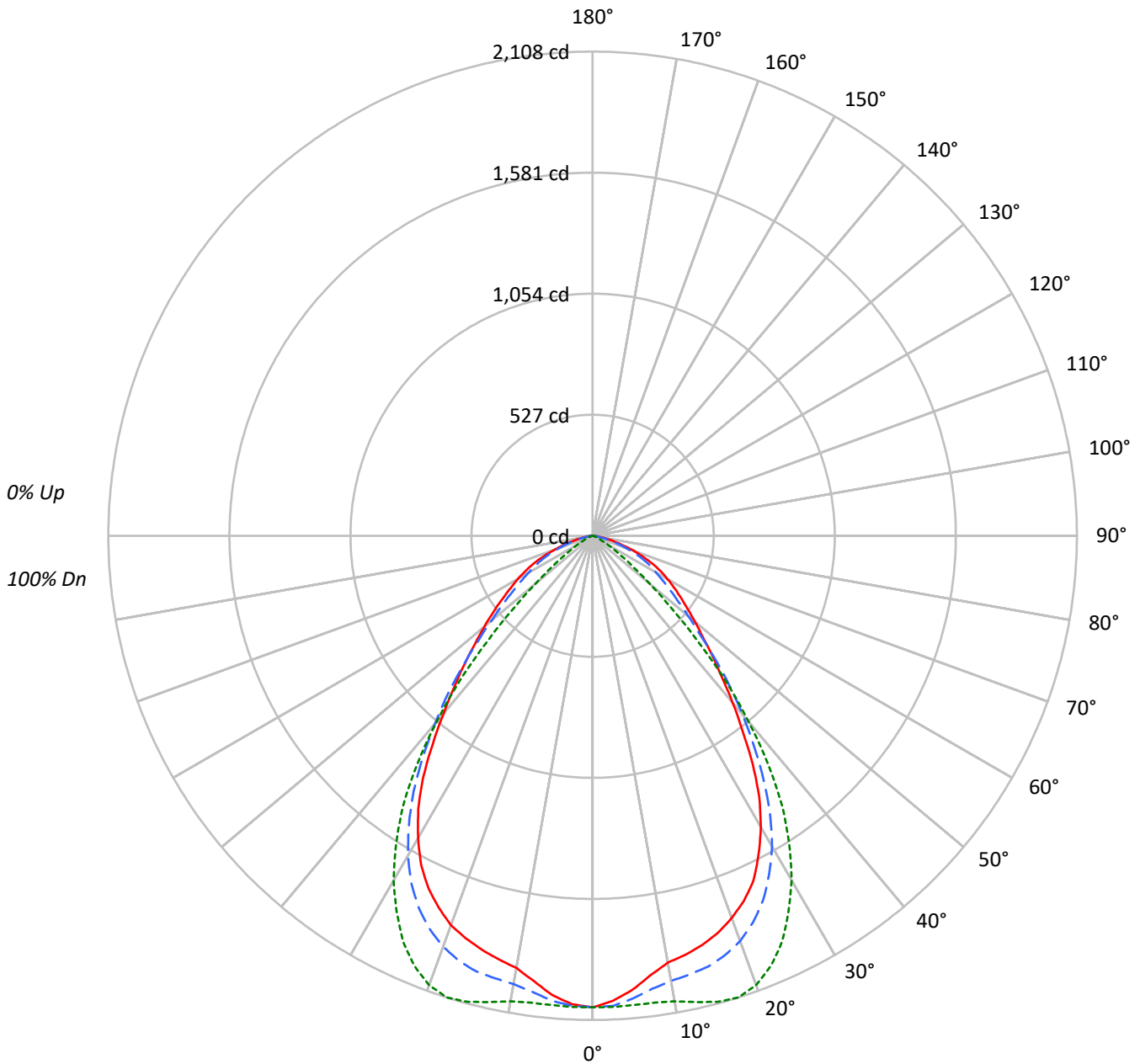
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79								
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50								
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38								
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	133946	133946	133946
5°	129945	134300	131504
10°	125002	136323	126572
15°	124561	141872	126006
20°	122929	144514	125234
25°	119258	140443	121820
30°	110318	130523	114431
35°	96784	114743	102454
40°	80652	89952	85907
45°	67888	59344	72483
50°	58777	32519	62390
55°	53186	17278	54529
60°	48930	8977	48930
65°	44336	4770	43240
70°	35766	2709	33057
75°	24526	1790	22737
80°	16043	902	14277
85°	10629	1797	8908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.4	5.4
10°-20°	553.6	15.6
20°-30°	817.9	23.0
30°-40°	826.2	23.2
40°-50°	569.4	16.0
50°-60°	327.0	9.2
60°-70°	190.3	5.4
70°-80°	69.4	2.0
80°-90°	10.6	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°	1562.9	44.0
0°-40°	2389.1	67.2
0°-60°	3285.6	92.4
0°-90°	3556.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3556.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2053	2053	2053	2053	2053	
5°	1984	2022	2051	2032	2008	186
15°	1844	1942	2100	1963	1866	520
25°	1657	1754	1951	1790	1692	755
35°	1215	1298	1441	1358	1286	754
45°	736	745	643	793	786	572
55°	468	411	152	427	479	421
65°	287	242	31	240	280	281
75°	97	78	7	76	90	110
85°	14	7	2	10	12	18
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°	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1
2.5°	2026.9	2029.3	2031.7	2029.3	2031.7	2041.2	2034.1	2038.8	2038.8	2041.2	2048.3
5°	1984.2	1984.2	1989.0	1986.6	1993.7	2003.2	1996.1	2003.2	2005.6	2010.3	2022.2
7.5°	1929.6	1929.6	1932.0	1932.0	1941.5	1951.0	1946.2	1955.7	1965.2	1974.7	1989.0
10°	1886.9	1891.7	1891.7	1894.0	1903.5	1915.4	1913.0	1924.9	1934.4	1948.6	1967.6
12.5°	1867.9	1870.3	1870.3	1875.0	1884.5	1896.4	1894.0	1905.9	1920.1	1936.8	1955.7
15°	1844.2	1848.9	1846.6	1851.3	1860.8	1872.7	1870.3	1882.2	1898.8	1915.4	1941.5
17.5°	1813.3	1815.7	1818.1	1818.1	1827.6	1837.1	1837.1	1848.9	1867.9	1886.9	1915.4
20°	1770.6	1775.4	1775.4	1777.7	1784.9	1799.1	1796.7	1808.6	1827.6	1846.6	1877.4
22.5°	1720.8	1723.1	1723.1	1725.5	1737.4	1744.5	1746.9	1756.4	1773.0	1794.3	1822.8
25°	1656.7	1659.1	1656.7	1663.8	1668.6	1682.8	1678.0	1689.9	1708.9	1725.5	1754.0
27.5°	1564.1	1568.9	1568.9	1571.2	1583.1	1595.0	1595.0	1606.8	1623.5	1635.3	1663.8
30°	1464.4	1471.6	1464.4	1476.3	1481.0	1490.5	1497.7	1504.8	1519.0	1535.6	1561.7
32.5°	1350.5	1348.1	1350.5	1355.3	1369.5	1376.6	1381.4	1388.5	1402.7	1417.0	1438.3
35°	1215.2	1220.0	1222.3	1231.8	1231.8	1243.7	1246.1	1250.8	1272.2	1281.7	1298.3
37.5°	1072.8	1077.6	1079.9	1084.7	1094.2	1098.9	1106.0	1113.2	1127.4	1144.0	1153.5
40°	947.0	947.0	949.4	954.1	961.3	963.6	970.8	980.2	989.7	1004.0	1013.5
42.5°	828.3	830.7	828.3	833.1	840.2	849.7	847.3	859.2	861.6	871.1	878.2
45°	735.8	735.8	731.0	735.8	735.8	745.3	742.9	747.6	745.3	750.0	745.3
47.5°	648.0	650.3	648.0	650.3	650.3	650.3	652.7	648.0	650.3	643.2	629.0
50°	579.1	581.5	576.8	579.1	576.8	574.4	576.8	569.6	567.3	557.8	543.5
52.5°	519.8	517.4	515.0	515.0	515.0	512.7	510.3	503.2	496.1	486.6	469.9
55°	467.6	465.2	462.8	462.8	458.1	455.7	455.7	448.6	441.5	429.6	410.6
57.5°	420.1	417.7	415.4	415.4	413.0	408.2	408.2	401.1	391.6	377.4	360.8
60°	375.0	375.0	375.0	372.6	372.6	367.9	367.9	360.8	351.3	337.0	318.0
62.5°	334.7	332.3	332.3	332.3	332.3	329.9	327.5	322.8	313.3	299.1	282.4
65°	287.2	287.2	287.2	287.2	284.8	284.8	284.8	277.7	272.9	258.7	242.1
67.5°	235.0	235.0	235.0	235.0	232.6	235.0	235.0	230.2	225.5	211.2	197.0
70°	187.5	185.1	182.8	185.1	182.8	182.8	185.1	180.4	178.0	166.1	151.9
72.5°	137.7	140.0	137.7	137.7	137.7	135.3	137.7	135.3	130.5	121.0	111.6
75°	97.3	99.7	99.7	97.3	97.3	97.3	94.9	94.9	90.2	83.1	78.3
77.5°	66.5	66.5	66.5	66.5	64.1	64.1	64.1	61.7	59.3	54.6	49.8
80°	42.7	42.7	42.7	42.7	40.3	40.3	40.3	38.0	38.0	33.2	28.5
82.5°	26.1	26.1	26.1	26.1	26.1	26.1	23.7	23.7	21.4	19.0	16.6
85°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	11.9	11.9	9.5	7.1
87.5°	4.7	4.7	7.1	7.1	7.1	7.1	7.1	7.1	4.7	4.7	4.7
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°	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1
2.5°	2043.6	2045.9	2045.9	2045.9	2053.1	2055.4	2048.3	2041.2	2055.4	2053.1	2057.8
5°	2019.8	2026.9	2031.7	2034.1	2041.2	2045.9	2038.8	2036.4	2048.3	2050.7	2053.1
7.5°	1991.3	2003.2	2015.1	2019.8	2029.3	2034.1	2031.7	2031.7	2045.9	2050.7	2050.7
10°	1972.4	1989.0	2003.2	2015.1	2026.9	2034.1	2034.1	2036.4	2053.1	2057.8	2062.5
12.5°	1967.6	1989.0	2008.0	2024.6	2034.1	2045.9	2048.3	2055.4	2072.0	2079.2	2079.2
15°	1955.7	1984.2	2008.0	2029.3	2043.6	2057.8	2062.5	2076.8	2095.8	2100.5	2105.3
17.5°	1934.4	1962.9	1991.3	2017.5	2036.4	2048.3	2062.5	2076.8	2100.5	2107.6	2110.0
20°	1896.4	1929.6	1958.1	1984.2	2003.2	2019.8	2034.1	2050.7	2072.0	2081.5	2083.9
22.5°	1839.4	1872.7	1901.2	1929.6	1948.6	1962.9	1977.1	1996.1	2017.5	2026.9	2026.9
25°	1770.6	1801.5	1832.3	1853.7	1872.7	1889.3	1896.4	1917.8	1939.1	1951.0	1951.0
27.5°	1682.8	1711.3	1739.8	1763.5	1775.4	1789.6	1801.5	1820.5	1837.1	1846.6	1856.1
30°	1571.2	1599.7	1625.8	1649.6	1663.8	1678.0	1689.9	1704.2	1720.8	1732.6	1735.0
32.5°	1450.2	1473.9	1500.0	1523.8	1538.0	1542.8	1554.6	1568.9	1583.1	1592.6	1595.0
35°	1317.3	1333.9	1350.5	1371.9	1386.1	1386.1	1398.0	1407.5	1419.3	1440.7	1436.0
37.5°	1160.6	1184.4	1196.2	1203.4	1212.8	1222.3	1224.7	1236.6	1250.8	1255.6	1262.7
40°	1013.5	1020.6	1027.7	1027.7	1037.2	1037.2	1037.2	1039.6	1053.8	1056.2	1065.7
42.5°	866.3	866.3	859.2	852.1	854.5	852.1	840.2	840.2	847.3	856.8	856.8
45°	728.7	712.0	690.7	674.1	662.2	657.5	643.2	643.2	640.8	643.2	652.7
47.5°	612.4	583.9	548.3	515.0	503.2	493.7	472.3	462.8	458.1	460.5	465.2
50°	515.0	484.2	443.8	403.5	382.1	370.3	344.2	327.5	325.2	320.4	329.9
52.5°	443.8	405.9	363.1	315.7	294.3	275.3	246.8	232.6	223.1	223.1	225.5
55°	382.1	341.8	294.3	246.8	225.5	211.2	182.8	163.8	154.3	151.9	159.0
57.5°	329.9	291.9	244.5	197.0	175.6	159.0	130.5	113.9	106.8	102.1	104.4
60°	289.6	251.6	204.1	159.0	140.0	121.0	97.3	78.3	68.8	68.8	71.2
62.5°	251.6	216.0	173.3	130.5	113.9	97.3	71.2	54.6	47.5	45.1	47.5
65°	213.6	180.4	144.8	109.2	92.6	78.3	57.0	42.7	33.2	30.9	33.2
67.5°	173.3	147.2	116.3	87.8	73.6	61.7	42.7	30.9	23.7	21.4	23.7
70°	135.3	111.6	87.8	64.1	54.6	45.1	30.9	23.7	16.6	14.2	16.6
72.5°	97.3	80.7	61.7	45.1	38.0	30.9	21.4	16.6	11.9	9.5	11.9
75°	66.5	54.6	40.3	28.5	23.7	21.4	14.2	9.5	7.1	7.1	7.1
77.5°	42.7	33.2	26.1	19.0	14.2	11.9	7.1	4.7	4.7	4.7	4.7
80°	23.7	19.0	14.2	9.5	7.1	7.1	4.7	4.7	2.4	2.4	2.4
82.5°	14.2	9.5	7.1	4.7	4.7	2.4	2.4	2.4	2.4	2.4	2.4
85°	7.1	4.7	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
87.5°	2.4	2.4	2.4	2.4	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1
2.5°	2048.3	2050.7	2043.6	2053.1	2045.9	2055.4	2055.4	2045.9	2048.3	2043.6	2053.1
5°	2043.6	2043.6	2038.8	2045.9	2036.4	2045.9	2043.6	2026.9	2031.7	2022.2	2031.7
7.5°	2043.6	2038.8	2031.7	2038.8	2026.9	2034.1	2024.6	2008.0	2003.2	1991.3	1991.3
10°	2050.7	2043.6	2034.1	2036.4	2024.6	2026.9	2012.7	1989.0	1981.9	1967.6	1962.9
12.5°	2067.3	2060.2	2045.9	2050.7	2034.1	2034.1	2015.1	1986.6	1972.4	1953.4	1948.6
15°	2091.0	2079.2	2062.5	2064.9	2048.3	2038.8	2015.1	1981.9	1962.9	1936.8	1929.6
17.5°	2095.8	2083.9	2062.5	2062.5	2041.2	2029.3	2000.8	1962.9	1939.1	1913.0	1898.8
20°	2069.7	2057.8	2034.1	2031.7	2012.7	1996.1	1965.2	1927.3	1903.5	1875.0	1863.2
22.5°	2015.1	2000.8	1979.5	1977.1	1958.1	1948.6	1915.4	1877.4	1853.7	1825.2	1815.7
25°	1934.4	1927.3	1905.9	1903.5	1886.9	1875.0	1846.6	1811.0	1789.6	1761.1	1751.6
27.5°	1839.4	1832.3	1811.0	1811.0	1792.0	1784.9	1758.7	1725.5	1708.9	1682.8	1670.9
30°	1725.5	1716.0	1704.2	1701.8	1685.2	1678.0	1654.3	1623.5	1606.8	1585.5	1580.7
32.5°	1590.2	1583.1	1576.0	1573.6	1557.0	1549.9	1533.3	1502.4	1488.2	1469.2	1462.1
35°	1433.6	1428.8	1421.7	1419.3	1412.2	1405.1	1388.5	1364.7	1357.6	1343.4	1336.3
37.5°	1253.2	1257.9	1253.2	1253.2	1246.1	1248.4	1234.2	1220.0	1212.8	1203.4	1198.6
40°	1058.6	1068.1	1075.2	1075.2	1072.8	1082.3	1079.9	1068.1	1065.7	1060.9	1058.6
42.5°	861.6	866.3	880.6	890.1	887.7	911.4	913.8	923.3	930.4	925.7	928.0
45°	655.1	669.3	688.3	697.8	709.7	740.5	757.1	776.1	792.7	802.2	799.9
47.5°	472.3	488.9	510.3	524.5	545.9	583.9	626.6	650.3	674.1	685.9	697.8
50°	341.8	358.4	384.5	405.9	420.1	472.3	517.4	548.3	574.4	591.0	602.9
52.5°	239.7	258.7	287.2	306.2	327.5	377.4	429.6	465.2	493.7	515.0	526.9
55°	166.1	187.5	213.6	232.6	256.3	308.6	358.4	396.4	427.2	446.2	460.5
57.5°	116.3	135.3	161.4	178.0	201.7	251.6	301.4	339.4	370.3	389.2	405.9
60°	78.3	97.3	123.4	140.0	159.0	208.9	254.0	294.3	322.8	341.8	358.4
62.5°	54.6	71.2	97.3	113.9	130.5	173.3	216.0	251.6	280.1	301.4	315.7
65°	42.7	57.0	78.3	92.6	109.2	144.8	180.4	211.2	239.7	261.1	270.6
67.5°	30.9	45.1	61.7	73.6	85.4	116.3	147.2	170.9	197.0	213.6	225.5
70°	21.4	30.9	45.1	54.6	64.1	87.8	111.6	132.9	151.9	163.8	173.3
72.5°	16.6	21.4	30.9	38.0	45.1	61.7	80.7	97.3	111.6	121.0	130.5
75°	9.5	14.2	21.4	26.1	30.9	42.7	54.6	66.5	76.0	83.1	87.8
77.5°	4.7	7.1	11.9	14.2	19.0	26.1	35.6	42.7	49.8	54.6	59.3
80°	4.7	4.7	7.1	7.1	9.5	14.2	19.0	23.7	28.5	33.2	35.6
82.5°	2.4	2.4	4.7	4.7	4.7	7.1	9.5	14.2	16.6	19.0	21.4
85°	2.4	2.4	2.4	2.4	2.4	4.7	4.7	7.1	9.5	11.9	11.9
87.5°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	4.7	4.7	4.7	7.1
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: P252603

CATALOG NUMBER: LD6B40D010 EU6B30509030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1	2053.1
2.5°	2045.9	2050.7	2048.3	2053.1	2045.9	2043.6	2048.3	2041.2
5°	2019.8	2022.2	2019.8	2019.8	2015.1	2010.3	2015.1	2008.0
7.5°	1979.5	1979.5	1972.4	1972.4	1962.9	1958.1	1958.1	1955.7
10°	1946.2	1939.1	1932.0	1934.4	1920.1	1915.4	1913.0	1910.6
12.5°	1929.6	1924.9	1913.0	1913.0	1898.8	1894.0	1891.7	1889.3
15°	1910.6	1901.2	1891.7	1889.3	1877.4	1872.7	1870.3	1865.6
17.5°	1877.4	1870.3	1858.4	1858.4	1846.6	1844.2	1839.4	1837.1
20°	1841.8	1832.3	1822.8	1822.8	1808.6	1808.6	1801.5	1803.8
22.5°	1792.0	1784.9	1775.4	1775.4	1763.5	1761.1	1754.0	1751.6
25°	1732.6	1723.1	1716.0	1713.6	1704.2	1699.4	1697.0	1692.3
27.5°	1654.3	1647.2	1640.1	1635.3	1623.5	1621.1	1614.0	1616.3
30°	1557.0	1552.3	1549.9	1545.1	1530.9	1526.1	1526.1	1519.0
32.5°	1450.2	1443.1	1438.3	1431.2	1419.3	1417.0	1409.8	1412.2
35°	1319.7	1310.2	1303.0	1305.4	1291.2	1288.8	1284.1	1286.4
37.5°	1184.4	1174.9	1165.4	1163.0	1151.1	1151.1	1144.0	1144.0
40°	1044.3	1034.8	1030.1	1030.1	1015.8	1018.2	1011.1	1008.7
42.5°	918.5	909.0	906.7	904.3	897.2	894.8	887.7	890.1
45°	799.9	797.5	797.5	792.7	785.6	783.2	785.6	785.6
47.5°	695.4	697.8	695.4	695.4	690.7	695.4	690.7	693.1
50°	607.6	612.4	612.4	612.4	610.0	612.4	612.4	614.7
52.5°	534.0	541.2	538.8	541.2	538.8	543.5	541.2	543.5
55°	469.9	474.7	477.1	479.4	479.4	479.4	479.4	479.4
57.5°	410.6	417.7	420.1	422.5	422.5	427.2	422.5	422.5
60°	363.1	370.3	372.6	375.0	375.0	377.4	372.6	375.0
62.5°	320.4	327.5	327.5	329.9	329.9	329.9	325.2	327.5
65°	277.7	280.1	282.4	282.4	280.1	280.1	277.7	280.1
67.5°	230.2	232.6	230.2	230.2	227.9	227.9	223.1	225.5
70°	178.0	178.0	180.4	178.0	175.6	178.0	175.6	173.3
72.5°	132.9	132.9	132.9	130.5	130.5	128.2	130.5	130.5
75°	90.2	90.2	92.6	92.6	92.6	92.6	90.2	90.2
77.5°	59.3	59.3	59.3	59.3	61.7	59.3	59.3	59.3
80°	38.0	38.0	40.3	40.3	38.0	38.0	38.0	38.0
82.5°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
85°	14.2	14.2	14.2	14.2	11.9	11.9	11.9	11.9
87.5°	7.1	7.1	7.1	7.1	7.1	7.1	4.7	4.7
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)