

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: P252606

Luminaire Tested: **LD6B40D010 EU6B30509050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252606
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 EU6B30509050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 3629.0 lumens
Efficiency: N/A
Efficacy: 84.4 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

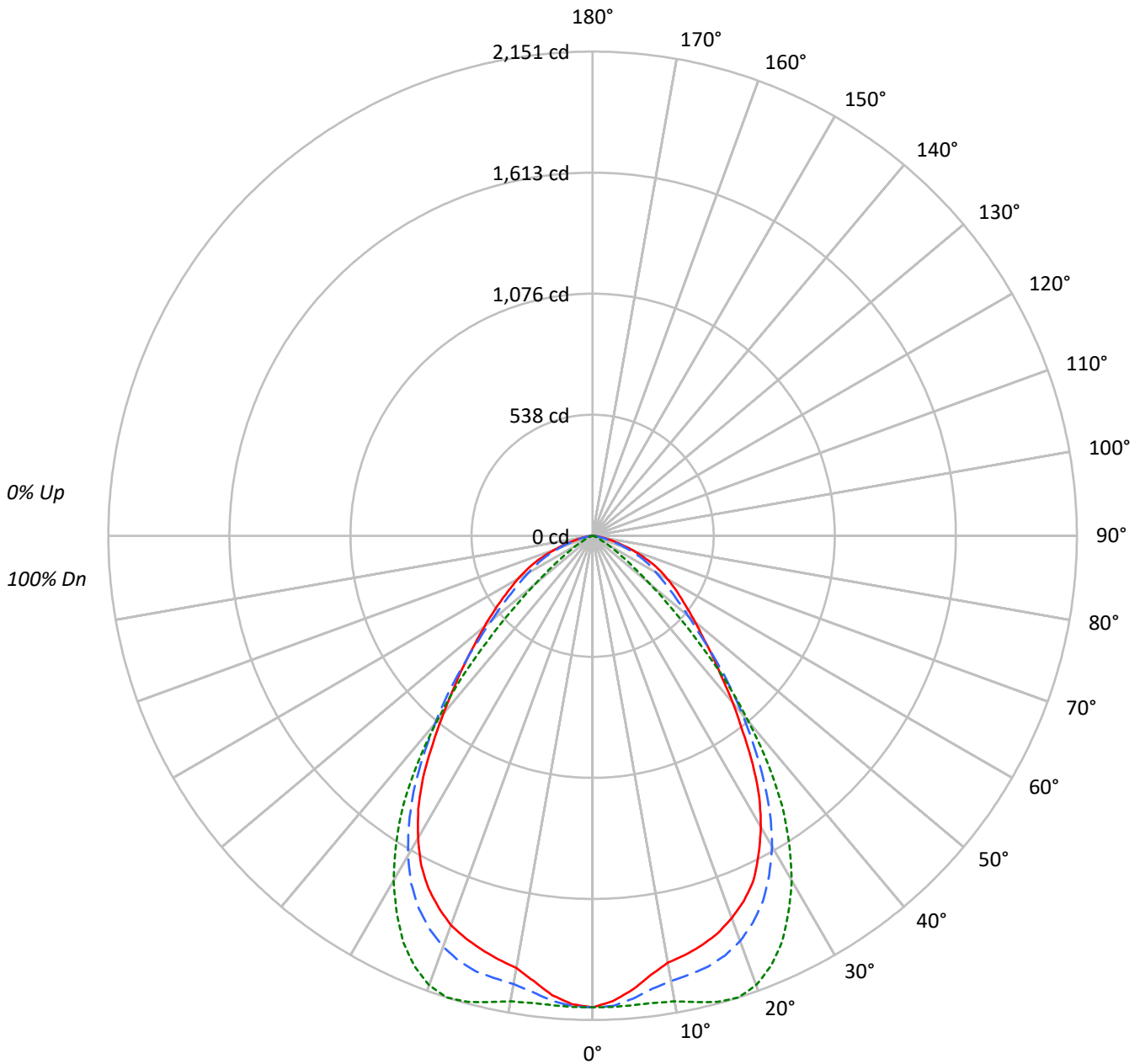
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79			79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			62
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			56
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50			50
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46			46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42			42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38			38
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35			35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	136692	136692	136692
5°	132617	137057	134202
10°	127565	139119	129175
15°	127114	144783	128587
20°	125456	147485	127809
25°	121705	143322	124318
30°	112586	133204	116782
35°	98775	117101	104557
40°	82313	91800	87669
45°	69281	60562	73968
50°	59984	33189	63669
55°	54278	17630	55655
60°	49935	9160	49935
65°	45247	4863	44120
70°	36510	2766	33725
75°	25031	1840	23190
80°	16381	902	14577
85°	10854	1797	9057



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.4	5.4
10°-20°	564.9	15.6
20°-30°	834.7	23.0
30°-40°	843.1	23.2
40°-50°	581.1	16.0
50°-60°	333.8	9.2
60°-70°	194.3	5.4
70°-80°	70.9	2.0
80°-90°	10.8	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°	1595.0	44.0
0°-40°	2438.2	67.2
0°-60°	3353.0	92.4
0°-90°	3629.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3629.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2095	2095	2095	2095	2095	
5°	2025	2064	2093	2073	2049	190
15°	1882	1981	2144	2003	1904	530
25°	1691	1790	1991	1826	1727	770
35°	1240	1325	1470	1386	1313	770
45°	751	761	656	809	802	584
55°	477	419	155	436	489	430
65°	293	247	32	245	286	287
75°	99	80	7	78	92	112
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°	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2
2.5°	2068.6	2071.0	2073.4	2071.0	2073.4	2083.1	2075.8	2080.7	2080.7	2083.1	2090.4
5°	2025.0	2025.0	2029.8	2027.4	2034.6	2044.3	2037.1	2044.3	2046.8	2051.6	2063.7
7.5°	1969.2	1969.2	1971.7	1971.7	1981.4	1991.0	1986.2	1995.9	2005.6	2015.3	2029.8
10°	1925.6	1930.5	1930.5	1932.9	1942.6	1954.7	1952.3	1964.4	1974.1	1988.6	2008.0
12.5°	1906.3	1908.7	1908.7	1913.5	1923.2	1935.3	1932.9	1945.0	1959.6	1976.5	1995.9
15°	1882.0	1886.9	1884.5	1889.3	1899.0	1911.1	1908.7	1920.8	1937.8	1954.7	1981.4
17.5°	1850.6	1853.0	1855.4	1855.4	1865.1	1874.8	1874.8	1886.9	1906.3	1925.6	1954.7
20°	1807.0	1811.8	1811.8	1814.2	1821.5	1836.0	1833.6	1845.7	1865.1	1884.5	1916.0
22.5°	1756.1	1758.5	1758.5	1760.9	1773.0	1780.3	1782.7	1792.4	1809.4	1831.2	1860.2
25°	1690.7	1693.1	1690.7	1698.0	1702.8	1717.3	1712.5	1724.6	1744.0	1760.9	1790.0
27.5°	1596.2	1601.1	1601.1	1603.5	1615.6	1627.7	1627.7	1639.8	1656.8	1668.9	1698.0
30°	1494.5	1501.8	1494.5	1506.6	1511.5	1521.1	1528.4	1535.7	1550.2	1567.2	1593.8
32.5°	1378.2	1375.8	1378.2	1383.1	1397.6	1404.9	1409.7	1417.0	1431.5	1446.1	1467.9
35°	1240.2	1245.0	1247.4	1257.1	1257.1	1269.2	1271.7	1276.5	1298.3	1308.0	1324.9
37.5°	1094.8	1099.7	1102.1	1106.9	1116.6	1121.5	1128.7	1136.0	1150.5	1167.5	1177.2
40°	966.5	966.5	968.9	973.7	981.0	983.4	990.7	1000.4	1010.1	1024.6	1034.3
42.5°	845.3	847.8	845.3	850.2	857.5	867.1	864.7	876.8	879.3	888.9	896.2
45°	750.9	750.9	746.0	750.9	750.9	760.6	758.1	763.0	760.6	765.4	760.6
47.5°	661.3	663.7	661.3	663.7	663.7	663.7	666.1	661.3	663.7	656.4	641.9
50°	591.0	593.4	588.6	591.0	588.6	586.2	588.6	581.3	578.9	569.2	554.7
52.5°	530.5	528.0	525.6	525.6	525.6	523.2	520.8	513.5	506.2	496.6	479.6
55°	477.2	474.8	472.3	472.3	467.5	465.1	465.1	457.8	450.5	438.4	419.0
57.5°	428.7	426.3	423.9	423.9	421.5	416.6	416.6	409.4	399.7	385.1	368.2
60°	382.7	382.7	382.7	380.3	380.3	375.4	375.4	368.2	358.5	344.0	324.6
62.5°	341.5	339.1	339.1	339.1	339.1	336.7	334.3	329.4	319.7	305.2	288.2
65°	293.1	293.1	293.1	293.1	290.7	290.7	290.7	283.4	278.6	264.0	247.1
67.5°	239.8	239.8	239.8	239.8	237.4	239.8	239.8	235.0	230.1	215.6	201.0
70°	191.4	188.9	186.5	188.9	186.5	186.5	188.9	184.1	181.7	169.6	155.0
72.5°	140.5	142.9	140.5	140.5	140.5	138.1	140.5	138.1	133.2	123.5	113.8
75°	99.3	101.7	101.7	99.3	99.3	99.3	96.9	96.9	92.0	84.8	79.9
77.5°	67.8	67.8	67.8	67.8	65.4	65.4	65.4	63.0	60.6	55.7	50.9
80°	43.6	43.6	43.6	43.6	41.2	41.2	41.2	38.8	38.8	33.9	29.1
82.5°	26.6	26.6	26.6	26.6	26.6	26.6	24.2	24.2	21.8	19.4	17.0
85°	14.5	14.5	14.5	14.5	14.5	14.5	14.5	12.1	12.1	9.7	7.3
87.5°	4.8	4.8	7.3	7.3	7.3	7.3	7.3	7.3	4.8	4.8	4.8
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°	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2
2.5°	2085.5	2087.9	2087.9	2087.9	2095.2	2097.6	2090.4	2083.1	2097.6	2095.2	2100.0
5°	2061.3	2068.6	2073.4	2075.8	2083.1	2087.9	2080.7	2078.2	2090.4	2092.8	2095.2
7.5°	2032.2	2044.3	2056.4	2061.3	2071.0	2075.8	2073.4	2073.4	2087.9	2092.8	2092.8
10°	2012.8	2029.8	2044.3	2056.4	2068.6	2075.8	2075.8	2078.2	2095.2	2100.0	2104.9
12.5°	2008.0	2029.8	2049.2	2066.1	2075.8	2087.9	2090.4	2097.6	2114.6	2121.8	2121.8
15°	1995.9	2025.0	2049.2	2071.0	2085.5	2100.0	2104.9	2119.4	2138.8	2143.6	2148.5
17.5°	1974.1	2003.2	2032.2	2058.9	2078.2	2090.4	2104.9	2119.4	2143.6	2150.9	2153.3
20°	1935.3	1969.2	1998.3	2025.0	2044.3	2061.3	2075.8	2092.8	2114.6	2124.3	2126.7
22.5°	1877.2	1911.1	1940.2	1969.2	1988.6	2003.2	2017.7	2037.1	2058.9	2068.6	2068.6
25°	1807.0	1838.4	1869.9	1891.7	1911.1	1928.1	1935.3	1957.1	1978.9	1991.0	1991.0
27.5°	1717.3	1746.4	1775.5	1799.7	1811.8	1826.3	1838.4	1857.8	1874.8	1884.5	1894.2
30°	1603.5	1632.6	1659.2	1683.4	1698.0	1712.5	1724.6	1739.1	1756.1	1768.2	1770.6
32.5°	1480.0	1504.2	1530.8	1555.1	1569.6	1574.4	1586.5	1601.1	1615.6	1625.3	1627.7
35°	1344.3	1361.3	1378.2	1400.0	1414.6	1414.6	1426.7	1436.4	1448.5	1470.3	1465.4
37.5°	1184.5	1208.7	1220.8	1228.1	1237.7	1247.4	1249.9	1262.0	1276.5	1281.3	1288.6
40°	1034.3	1041.5	1048.8	1048.8	1058.5	1058.5	1058.5	1060.9	1075.5	1077.9	1087.6
42.5°	884.1	884.1	876.8	869.6	872.0	869.6	857.5	857.5	864.7	874.4	874.4
45°	743.6	726.7	704.9	687.9	675.8	670.9	656.4	656.4	654.0	656.4	666.1
47.5°	624.9	595.9	559.5	525.6	513.5	503.8	482.0	472.3	467.5	469.9	474.8
50°	525.6	494.1	453.0	411.8	390.0	377.9	351.2	334.3	331.8	327.0	336.7
52.5°	453.0	414.2	370.6	322.2	300.4	281.0	251.9	237.4	227.7	227.7	230.1
55°	390.0	348.8	300.4	251.9	230.1	215.6	186.5	167.1	157.4	155.0	162.3
57.5°	336.7	297.9	249.5	201.0	179.2	162.3	133.2	116.3	109.0	104.2	106.6
60°	295.5	256.8	208.3	162.3	142.9	123.5	99.3	79.9	70.2	70.2	72.7
62.5°	256.8	220.4	176.8	133.2	116.3	99.3	72.7	55.7	48.4	46.0	48.4
65°	218.0	184.1	147.8	111.4	94.5	79.9	58.1	43.6	33.9	31.5	33.9
67.5°	176.8	150.2	118.7	89.6	75.1	63.0	43.6	31.5	24.2	21.8	24.2
70°	138.1	113.8	89.6	65.4	55.7	46.0	31.5	24.2	17.0	14.5	17.0
72.5°	99.3	82.4	63.0	46.0	38.8	31.5	21.8	17.0	12.1	9.7	12.1
75°	67.8	55.7	41.2	29.1	24.2	21.8	14.5	9.7	7.3	7.3	7.3
77.5°	43.6	33.9	26.6	19.4	14.5	12.1	7.3	4.8	4.8	4.8	4.8
80°	24.2	19.4	14.5	9.7	7.3	7.3	4.8	4.8	2.4	2.4	2.4
82.5°	14.5	9.7	7.3	4.8	4.8	2.4	2.4	2.4	2.4	2.4	2.4
85°	7.3	4.8	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°	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2
2.5°	2090.4	2092.8	2085.5	2095.2	2087.9	2097.6	2097.6	2087.9	2090.4	2085.5	2095.2
5°	2085.5	2085.5	2080.7	2087.9	2078.2	2087.9	2085.5	2068.6	2073.4	2063.7	2073.4
7.5°	2085.5	2080.7	2073.4	2080.7	2068.6	2075.8	2066.1	2049.2	2044.3	2032.2	2032.2
10°	2092.8	2085.5	2075.8	2078.2	2066.1	2068.6	2054.0	2029.8	2022.5	2008.0	2003.2
12.5°	2109.7	2102.5	2087.9	2092.8	2075.8	2075.8	2056.4	2027.4	2012.8	1993.5	1988.6
15°	2134.0	2121.8	2104.9	2107.3	2090.4	2080.7	2056.4	2022.5	2003.2	1976.5	1969.2
17.5°	2138.8	2126.7	2104.9	2104.9	2083.1	2071.0	2041.9	2003.2	1978.9	1952.3	1937.8
20°	2112.2	2100.0	2075.8	2073.4	2054.0	2037.1	2005.6	1966.8	1942.6	1913.5	1901.4
22.5°	2056.4	2041.9	2020.1	2017.7	1998.3	1988.6	1954.7	1916.0	1891.7	1862.7	1853.0
25°	1974.1	1966.8	1945.0	1942.6	1925.6	1913.5	1884.5	1848.1	1826.3	1797.3	1787.6
27.5°	1877.2	1869.9	1848.1	1848.1	1828.8	1821.5	1794.8	1760.9	1744.0	1717.3	1705.2
30°	1760.9	1751.3	1739.1	1736.7	1719.8	1712.5	1688.3	1656.8	1639.8	1618.0	1613.2
32.5°	1622.9	1615.6	1608.3	1605.9	1589.0	1581.7	1564.7	1533.3	1518.7	1499.3	1492.1
35°	1463.0	1458.2	1450.9	1448.5	1441.2	1433.9	1417.0	1392.8	1385.5	1371.0	1363.7
37.5°	1278.9	1283.8	1278.9	1278.9	1271.7	1274.1	1259.5	1245.0	1237.7	1228.1	1223.2
40°	1080.3	1090.0	1097.3	1097.3	1094.8	1104.5	1102.1	1090.0	1087.6	1082.7	1080.3
42.5°	879.3	884.1	898.6	908.3	905.9	930.1	932.5	942.2	949.5	944.7	947.1
45°	668.5	683.1	702.4	712.1	724.2	755.7	772.7	792.1	809.0	818.7	816.3
47.5°	482.0	499.0	520.8	535.3	557.1	595.9	639.5	663.7	687.9	700.0	712.1
50°	348.8	365.8	392.4	414.2	428.7	482.0	528.0	559.5	586.2	603.1	615.2
52.5°	244.6	264.0	293.1	312.5	334.3	385.1	438.4	474.8	503.8	525.6	537.7
55°	169.6	191.4	218.0	237.4	261.6	314.9	365.8	404.5	436.0	455.4	469.9
57.5°	118.7	138.1	164.7	181.7	205.9	256.8	307.6	346.4	377.9	397.2	414.2
60°	79.9	99.3	126.0	142.9	162.3	213.2	259.2	300.4	329.4	348.8	365.8
62.5°	55.7	72.7	99.3	116.3	133.2	176.8	220.4	256.8	285.8	307.6	322.2
65°	43.6	58.1	79.9	94.5	111.4	147.8	184.1	215.6	244.6	266.4	276.1
67.5°	31.5	46.0	63.0	75.1	87.2	118.7	150.2	174.4	201.0	218.0	230.1
70°	21.8	31.5	46.0	55.7	65.4	89.6	113.8	135.6	155.0	167.1	176.8
72.5°	17.0	21.8	31.5	38.8	46.0	63.0	82.4	99.3	113.8	123.5	133.2
75°	9.7	14.5	21.8	26.6	31.5	43.6	55.7	67.8	77.5	84.8	89.6
77.5°	4.8	7.3	12.1	14.5	19.4	26.6	36.3	43.6	50.9	55.7	60.6
80°	4.8	4.8	7.3	7.3	9.7	14.5	19.4	24.2	29.1	33.9	36.3
82.5°	2.4	2.4	4.8	4.8	4.8	7.3	9.7	14.5	17.0	19.4	21.8
85°	2.4	2.4	2.4	2.4	2.4	4.8	4.8	7.3	9.7	12.1	12.1
87.5°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	4.8	4.8	4.8	7.3
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: P252606

CATALOG NUMBER: LD6B40D010 EU6B30509050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2	2095.2
2.5°	2087.9	2092.8	2090.4	2095.2	2087.9	2085.5	2090.4	2083.1
5°	2061.3	2063.7	2061.3	2061.3	2056.4	2051.6	2056.4	2049.2
7.5°	2020.1	2020.1	2012.8	2012.8	2003.2	1998.3	1998.3	1995.9
10°	1986.2	1978.9	1971.7	1974.1	1959.6	1954.7	1952.3	1949.9
12.5°	1969.2	1964.4	1952.3	1952.3	1937.8	1932.9	1930.5	1928.1
15°	1949.9	1940.2	1930.5	1928.1	1916.0	1911.1	1908.7	1903.8
17.5°	1916.0	1908.7	1896.6	1896.6	1884.5	1882.0	1877.2	1874.8
20°	1879.6	1869.9	1860.2	1860.2	1845.7	1845.7	1838.4	1840.9
22.5°	1828.8	1821.5	1811.8	1811.8	1799.7	1797.3	1790.0	1787.6
25°	1768.2	1758.5	1751.3	1748.8	1739.1	1734.3	1731.9	1727.0
27.5°	1688.3	1681.0	1673.7	1668.9	1656.8	1654.4	1647.1	1649.5
30°	1589.0	1584.1	1581.7	1576.9	1562.3	1557.5	1557.5	1550.2
32.5°	1480.0	1472.7	1467.9	1460.6	1448.5	1446.1	1438.8	1441.2
35°	1346.7	1337.1	1329.8	1332.2	1317.7	1315.3	1310.4	1312.8
37.5°	1208.7	1199.0	1189.3	1186.9	1174.8	1174.8	1167.5	1167.5
40°	1065.8	1056.1	1051.2	1051.2	1036.7	1039.1	1031.9	1029.4
42.5°	937.4	927.7	925.3	922.9	915.6	913.2	905.9	908.3
45°	816.3	813.9	813.9	809.0	801.7	799.3	801.7	801.7
47.5°	709.7	712.1	709.7	709.7	704.9	709.7	704.9	707.3
50°	620.1	624.9	624.9	624.9	622.5	624.9	624.9	627.3
52.5°	545.0	552.3	549.8	552.3	549.8	554.7	552.3	554.7
55°	479.6	484.4	486.9	489.3	489.3	489.3	489.3	489.3
57.5°	419.0	426.3	428.7	431.2	431.2	436.0	431.2	431.2
60°	370.6	377.9	380.3	382.7	382.7	385.1	380.3	382.7
62.5°	327.0	334.3	334.3	336.7	336.7	336.7	331.8	334.3
65°	283.4	285.8	288.2	288.2	285.8	285.8	283.4	285.8
67.5°	235.0	237.4	235.0	235.0	232.5	232.5	227.7	230.1
70°	181.7	181.7	184.1	181.7	179.2	181.7	179.2	176.8
72.5°	135.6	135.6	135.6	133.2	133.2	130.8	133.2	133.2
75°	92.0	92.0	94.5	94.5	94.5	94.5	92.0	92.0
77.5°	60.6	60.6	60.6	60.6	63.0	60.6	60.6	60.6
80°	38.8	38.8	41.2	41.2	38.8	38.8	38.8	38.8
82.5°	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
85°	14.5	14.5	14.5	14.5	12.1	12.1	12.1	12.1
87.5°	7.3	7.3	7.3	7.3	7.3	7.3	4.8	4.8
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)