

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: P252191

Luminaire Tested: **LD6B40D010 EU6B30509727 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252191
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: LD6B40D010 EU6B30509727 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3798.0 lumens
Efficiency: N/A
Efficacy: 88.3 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

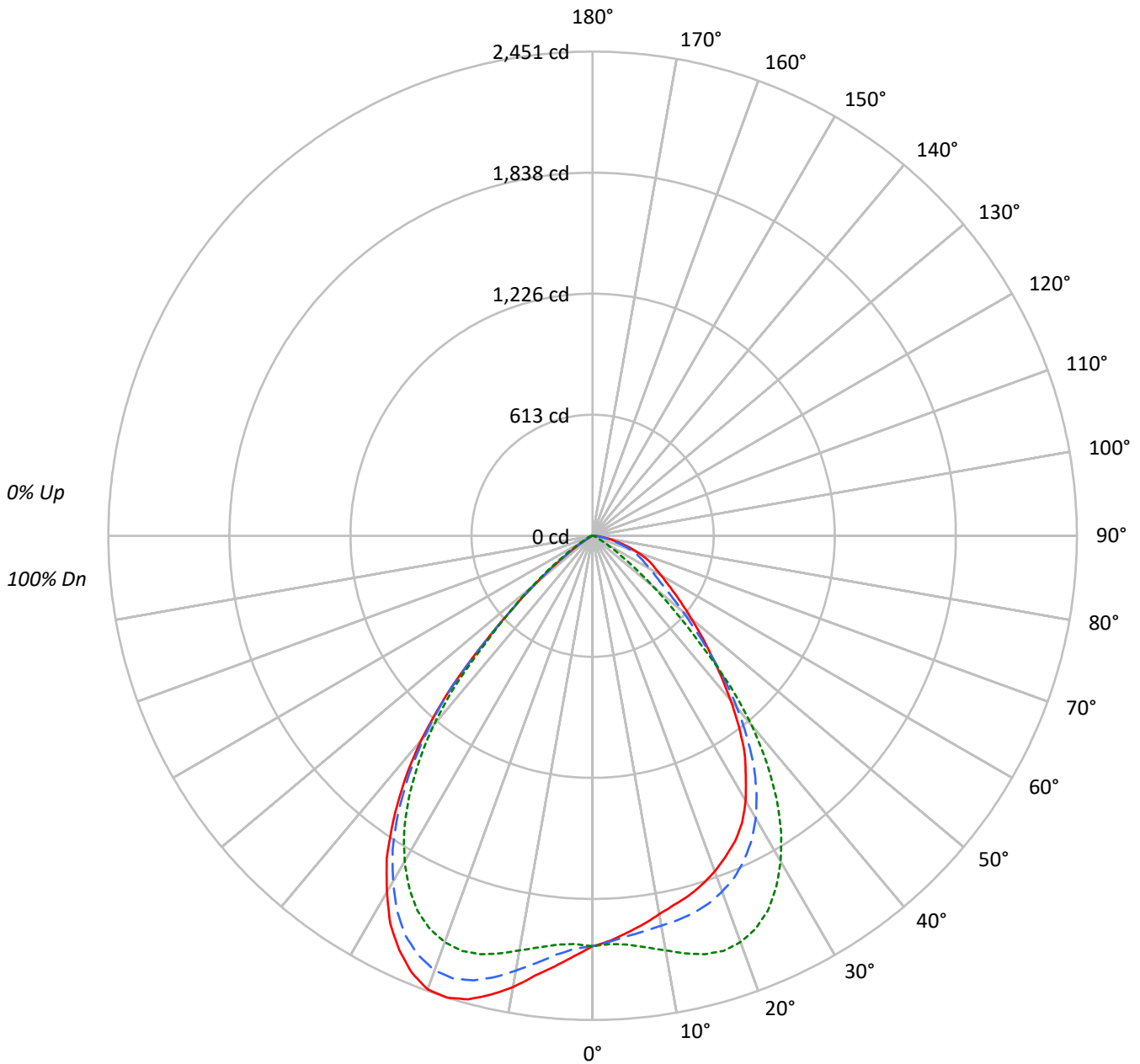
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

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	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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65					65			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48					48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44					44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40					40			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	135557	135557	135557
5°	132041	136075	143233
10°	128831	141199	153706
15°	127324	148120	164087
20°	125504	151977	169633
25°	122828	150859	166588
30°	116722	143359	156829
35°	106787	129254	140014
40°	92371	106747	114871
45°	77889	70010	75140
50°	66125	40528	38102
55°	57395	19427	14684
60°	51840	9068	3627
65°	50295	5218	1220
70°	45093	4177	1145
75°	37054	3000	504
80°	27614	1503	0
85°	23804	0	0



TEST NUMBER: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.7	5.3
10°-20°	611.7	16.1
20°-30°	934.5	24.6
30°-40°	977.4	25.7
40°-50°	634.1	16.7
50°-60°	251.8	6.6
60°-70°	119.4	3.1
70°-80°	56.8	1.5
80°-90°	11.6	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°	1746.9	46.0
0°-40°	2724.3	71.7
0°-60°	3610.2	95.1
0°-90°	3798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3798.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2078	2078	2078	2078	2078	
5°	2016	2034	2078	2130	2187	190
15°	1885	1976	2193	2330	2429	531
25°	1706	1814	2096	2237	2314	781
35°	1341	1422	1623	1718	1758	829
45°	844	836	759	804	814	657
55°	505	429	171	133	129	457
65°	326	270	34	8	8	318
75°	147	119	12	4	2	159
85°	32	20	0	0	0	37
90°	0	0	0	0	0	



TEST NUMBER: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2052.0	2056.0	2034.1	2028.1	2044.0	2050.0	2052.0	2046.0	2048.0	2056.0	2056.0
5°	2016.2	2020.2	2000.3	1994.4	2010.3	2014.2	2020.2	2018.2	2024.2	2036.1	2034.1
7.5°	1982.5	1988.4	1966.6	1958.6	1978.5	1988.4	1992.4	1992.4	2000.3	2016.2	2018.2
10°	1944.7	1952.7	1932.8	1928.8	1950.7	1960.6	1962.6	1966.6	1978.5	2000.3	2004.3
12.5°	1912.9	1920.9	1907.0	1901.0	1924.9	1934.8	1938.8	1946.7	1960.6	1988.4	1992.4
15°	1885.1	1891.1	1875.2	1871.2	1895.1	1907.0	1909.0	1920.9	1938.8	1970.5	1976.5
17.5°	1849.4	1853.3	1841.4	1837.4	1861.3	1873.2	1875.2	1889.1	1910.9	1942.7	1952.7
20°	1807.7	1811.6	1799.7	1795.7	1819.6	1833.5	1835.5	1847.4	1873.2	1907.0	1916.9
22.5°	1758.0	1765.9	1752.0	1748.1	1771.9	1783.8	1789.8	1799.7	1825.5	1859.3	1873.2
25°	1706.3	1706.3	1696.4	1694.4	1716.3	1730.2	1728.2	1742.1	1767.9	1801.7	1813.6
27.5°	1638.8	1636.8	1626.9	1624.9	1648.7	1660.7	1656.7	1670.6	1694.4	1728.2	1740.1
30°	1549.4	1553.4	1539.5	1535.5	1555.4	1575.2	1573.3	1587.2	1611.0	1642.8	1650.7
32.5°	1442.1	1446.1	1444.1	1438.2	1456.1	1466.0	1471.9	1481.9	1501.7	1535.5	1543.5
35°	1340.8	1334.9	1326.9	1326.9	1344.8	1360.7	1354.7	1366.7	1386.5	1420.3	1422.3
37.5°	1215.7	1213.7	1209.7	1205.8	1225.6	1229.6	1231.6	1239.5	1257.4	1285.2	1281.2
40°	1084.6	1086.6	1084.6	1076.6	1088.6	1104.5	1102.5	1106.4	1122.3	1142.2	1136.2
42.5°	961.4	961.4	961.4	953.5	967.4	975.3	979.3	977.3	981.3	999.2	991.2
45°	844.2	846.2	844.2	842.2	844.2	848.2	844.2	842.2	842.2	848.2	836.3
47.5°	742.9	742.9	737.0	731.0	737.0	739.0	733.0	727.0	725.0	723.1	703.2
50°	651.5	649.6	647.6	637.6	643.6	645.6	637.6	633.7	625.7	615.8	592.0
52.5°	572.1	570.1	568.1	558.2	562.2	564.1	556.2	548.3	538.3	530.4	500.6
55°	504.6	502.6	502.6	496.6	492.6	496.6	488.7	482.7	468.8	458.9	429.1
57.5°	446.9	446.9	443.0	437.0	439.0	439.0	431.1	423.1	411.2	399.3	375.4
60°	397.3	397.3	397.3	391.3	391.3	391.3	387.4	379.4	369.5	357.6	333.7
62.5°	357.6	357.6	355.6	349.6	351.6	351.6	347.6	339.7	329.7	321.8	298.0
65°	325.8	325.8	325.8	319.8	319.8	321.8	317.8	309.9	301.9	292.0	270.2
67.5°	286.0	284.1	284.1	280.1	282.1	284.1	280.1	274.1	264.2	258.2	238.4
70°	236.4	238.4	240.4	234.4	236.4	236.4	234.4	228.4	222.5	216.5	198.6
72.5°	192.7	192.7	190.7	188.7	188.7	190.7	186.7	180.8	176.8	172.8	158.9
75°	147.0	145.0	147.0	143.0	143.0	143.0	139.1	137.1	135.1	129.1	119.2
77.5°	107.3	105.3	105.3	101.3	103.3	103.3	101.3	97.3	93.4	91.4	83.4
80°	73.5	73.5	73.5	71.5	71.5	69.5	69.5	67.5	63.6	61.6	57.6
82.5°	49.7	49.7	49.7	47.7	47.7	47.7	45.7	43.7	41.7	39.7	35.8
85°	31.8	31.8	31.8	29.8	29.8	29.8	27.8	27.8	25.8	23.8	19.9
87.5°	17.9	17.9	17.9	15.9	15.9	15.9	15.9	15.9	13.9	11.9	9.9
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: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2069.9	2042.0	2059.9	2059.9	2054.0	2069.9	2079.8	2087.7	2085.8	2067.9	2065.9
5°	2054.0	2030.1	2050.0	2052.0	2046.0	2067.9	2081.8	2091.7	2093.7	2077.8	2079.8
7.5°	2042.0	2022.2	2048.0	2056.0	2054.0	2073.8	2089.7	2105.6	2113.6	2101.6	2103.6
10°	2036.1	2020.2	2048.0	2059.9	2061.9	2083.8	2107.6	2129.5	2139.4	2131.4	2137.4
12.5°	2028.1	2018.2	2050.0	2067.9	2075.8	2097.7	2127.5	2153.3	2169.2	2165.2	2177.1
15°	2020.2	2012.3	2050.0	2075.8	2085.8	2105.6	2139.4	2177.1	2195.0	2193.0	2208.9
17.5°	2000.3	1998.3	2038.1	2065.9	2079.8	2103.6	2135.4	2181.1	2199.0	2203.0	2222.8
20°	1968.6	1968.6	2012.3	2042.0	2057.9	2079.8	2119.5	2163.2	2185.1	2189.0	2210.9
22.5°	1924.9	1928.8	1970.5	2000.3	2024.2	2040.1	2081.8	2127.5	2147.3	2153.3	2177.1
25°	1867.2	1871.2	1910.9	1940.7	1966.6	1984.4	2024.2	2065.9	2089.7	2095.7	2113.6
27.5°	1791.8	1799.7	1837.4	1867.2	1889.1	1901.0	1942.7	1986.4	2004.3	2010.3	2028.1
30°	1704.4	1706.3	1744.1	1769.9	1791.8	1801.7	1837.4	1883.1	1897.0	1903.0	1928.8
32.5°	1597.1	1595.1	1630.9	1654.7	1672.6	1684.5	1722.2	1752.0	1765.9	1775.9	1789.8
35°	1468.0	1466.0	1491.8	1519.6	1533.5	1537.5	1575.2	1607.0	1615.0	1622.9	1640.8
37.5°	1323.0	1323.0	1344.8	1358.7	1374.6	1380.6	1398.4	1434.2	1448.1	1446.1	1460.0
40°	1170.0	1162.1	1178.0	1191.9	1195.8	1197.8	1215.7	1243.5	1253.4	1253.4	1263.4
42.5°	1009.1	997.2	999.2	1007.1	1011.1	997.2	1009.1	1027.0	1021.0	1029.0	1031.0
45°	838.3	820.4	812.4	794.6	798.5	784.6	776.7	780.7	778.7	758.8	762.8
47.5°	699.2	667.4	653.5	627.7	621.8	605.9	595.9	578.1	562.2	562.2	552.2
50°	582.0	550.2	522.4	492.6	482.7	468.8	446.9	423.1	411.2	399.3	389.3
52.5°	488.7	454.9	421.1	389.3	375.4	357.6	327.8	303.9	282.1	270.2	258.2
55°	413.2	375.4	339.7	305.9	288.0	270.2	240.4	212.5	186.7	170.8	160.9
57.5°	355.6	319.8	282.1	246.3	230.4	210.6	178.8	149.0	125.1	107.3	97.3
60°	313.9	278.1	244.3	206.6	190.7	170.8	137.1	109.3	85.4	69.5	57.6
62.5°	278.1	246.3	210.6	176.8	160.9	141.0	109.3	81.4	59.6	43.7	33.8
65°	252.3	220.5	190.7	156.9	143.0	123.2	93.4	67.5	47.7	33.8	23.8
67.5°	222.5	194.7	164.9	137.1	123.2	107.3	79.5	57.6	39.7	27.8	19.9
70°	186.7	164.9	139.1	113.2	103.3	89.4	65.6	47.7	31.8	21.9	15.9
72.5°	149.0	131.1	111.2	91.4	83.4	69.5	53.6	37.7	23.8	15.9	11.9
75°	113.2	99.3	83.4	69.5	61.6	53.6	39.7	27.8	17.9	11.9	7.9
77.5°	77.5	71.5	59.6	47.7	43.7	37.7	25.8	17.9	11.9	7.9	4.0
80°	53.6	47.7	39.7	31.8	27.8	23.8	15.9	11.9	6.0	4.0	2.0
82.5°	33.8	27.8	23.8	19.9	17.9	13.9	9.9	6.0	4.0	2.0	2.0
85°	17.9	15.9	13.9	9.9	9.9	7.9	6.0	4.0	2.0	0.0	0.0
87.5°	9.9	7.9	6.0	4.0	4.0	2.0	2.0	2.0	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: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2089.7	2089.7	2087.7	2111.6	2083.8	2111.6	2097.7	2111.6	2091.7	2089.7	2091.7
5°	2105.6	2111.6	2113.6	2135.4	2109.6	2143.4	2131.4	2143.4	2129.5	2133.4	2139.4
7.5°	2137.4	2147.3	2145.3	2173.2	2147.3	2185.1	2177.1	2195.0	2181.1	2185.1	2193.0
10°	2173.2	2185.1	2187.1	2214.9	2191.0	2236.7	2226.8	2246.7	2234.7	2240.7	2250.6
12.5°	2214.9	2228.8	2230.8	2262.5	2236.7	2284.4	2278.4	2298.3	2288.4	2294.3	2306.2
15°	2246.7	2266.5	2270.5	2302.3	2274.5	2324.1	2320.2	2346.0	2330.1	2340.0	2349.9
17.5°	2262.5	2280.4	2288.4	2318.2	2294.3	2344.0	2340.0	2361.9	2349.9	2359.9	2371.8
20°	2252.6	2274.5	2280.4	2310.2	2286.4	2336.0	2330.1	2351.9	2340.0	2348.0	2359.9
22.5°	2216.9	2238.7	2246.7	2274.5	2252.6	2298.3	2296.3	2316.2	2300.3	2310.2	2320.2
25°	2153.3	2177.1	2181.1	2206.9	2183.1	2230.8	2226.8	2248.6	2236.7	2242.7	2256.6
27.5°	2061.9	2089.7	2095.7	2117.5	2099.7	2139.4	2139.4	2157.3	2143.4	2143.4	2157.3
30°	1952.7	1980.5	1984.4	2002.3	1986.4	2022.2	2024.2	2042.0	2020.2	2032.1	2034.1
32.5°	1819.6	1837.4	1849.4	1865.3	1841.4	1887.1	1881.1	1895.1	1883.1	1883.1	1893.1
35°	1658.7	1680.5	1686.5	1706.3	1686.5	1722.2	1722.2	1730.2	1718.3	1718.3	1734.2
37.5°	1483.9	1499.8	1501.7	1521.6	1505.7	1535.5	1533.5	1539.5	1527.6	1535.5	1535.5
40°	1279.3	1291.2	1295.2	1305.1	1303.1	1324.9	1323.0	1326.9	1321.0	1323.0	1326.9
42.5°	1040.9	1056.8	1064.7	1072.7	1060.8	1090.6	1084.6	1090.6	1088.6	1090.6	1096.5
45°	766.8	778.7	784.6	786.6	782.7	800.5	814.4	802.5	804.5	800.5	808.5
47.5°	554.2	556.2	552.2	564.1	554.2	562.2	566.1	568.1	556.2	554.2	562.2
50°	379.4	389.3	375.4	381.4	379.4	387.4	383.4	385.4	373.4	379.4	375.4
52.5°	252.3	250.3	246.3	248.3	244.3	244.3	244.3	248.3	240.4	236.4	232.4
55°	153.0	149.0	141.0	139.1	139.1	141.0	137.1	133.1	133.1	131.1	131.1
57.5°	89.4	83.4	79.5	77.5	73.5	71.5	69.5	69.5	65.6	65.6	65.6
60°	49.7	43.7	39.7	35.8	35.8	33.8	31.8	29.8	29.8	29.8	27.8
62.5°	25.8	21.9	17.9	15.9	15.9	13.9	11.9	11.9	11.9	11.9	9.9
65°	17.9	13.9	11.9	9.9	9.9	7.9	7.9	7.9	7.9	7.9	7.9
67.5°	13.9	11.9	9.9	7.9	7.9	7.9	6.0	6.0	6.0	6.0	6.0
70°	11.9	7.9	7.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
72.5°	7.9	7.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
75°	6.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
80°	2.0	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: P252191

CATALOG NUMBER: LD6B40D010 EU6B30509727 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8	2077.8
2.5°	2109.6	2107.6	2109.6	2113.6	2105.6	2129.5	2117.5	2129.5
5°	2155.3	2157.3	2159.2	2165.2	2155.3	2185.1	2169.2	2187.1
7.5°	2214.9	2216.9	2218.8	2224.8	2218.8	2248.6	2230.8	2246.7
10°	2276.4	2280.4	2280.4	2290.4	2284.4	2312.2	2300.3	2320.2
12.5°	2334.1	2338.0	2342.0	2348.0	2344.0	2373.8	2363.9	2379.7
15°	2379.7	2387.7	2389.7	2397.6	2393.6	2425.4	2413.5	2429.4
17.5°	2401.6	2409.5	2409.5	2419.5	2415.5	2449.3	2433.4	2451.3
20°	2389.7	2395.6	2397.6	2407.6	2403.6	2437.3	2421.5	2443.3
22.5°	2351.9	2353.9	2355.9	2365.8	2363.9	2393.6	2379.7	2393.6
25°	2282.4	2288.4	2286.4	2294.3	2294.3	2318.2	2302.3	2314.2
27.5°	2183.1	2189.0	2189.0	2199.0	2191.0	2214.9	2199.0	2216.9
30°	2061.9	2067.9	2063.9	2071.8	2063.9	2087.7	2075.8	2081.8
32.5°	1916.9	1916.9	1918.9	1920.9	1916.9	1938.8	1926.8	1938.8
35°	1744.1	1748.1	1750.0	1752.0	1748.1	1763.9	1750.0	1758.0
37.5°	1549.4	1559.3	1557.4	1559.3	1553.4	1573.3	1561.3	1565.3
40°	1340.8	1340.8	1338.9	1342.8	1336.9	1352.8	1344.8	1348.8
42.5°	1098.5	1104.5	1096.5	1106.4	1090.6	1112.4	1104.5	1098.5
45°	824.4	816.4	814.4	816.4	810.5	812.4	818.4	814.4
47.5°	562.2	562.2	558.2	552.2	560.2	562.2	554.2	554.2
50°	377.4	377.4	373.4	371.5	375.4	373.4	369.5	375.4
52.5°	240.4	232.4	232.4	236.4	232.4	228.4	234.4	230.4
55°	131.1	127.1	127.1	131.1	127.1	127.1	125.1	129.1
57.5°	63.6	65.6	63.6	63.6	63.6	63.6	61.6	63.6
60°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
62.5°	11.9	11.9	9.9	9.9	9.9	9.9	9.9	9.9
65°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
67.5°	6.0	6.0	6.0	6.0	6.0	7.9	6.0	6.0
70°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
72.5°	6.0	6.0	7.9	7.9	7.9	7.9	7.9	7.9
75°	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)