

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: P252185

Luminaire Tested: **LD6B40D010 EU6B30509024 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252185
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 EU6B30509024 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3843.0 lumens
Efficiency: N/A
Efficacy: 89.3 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

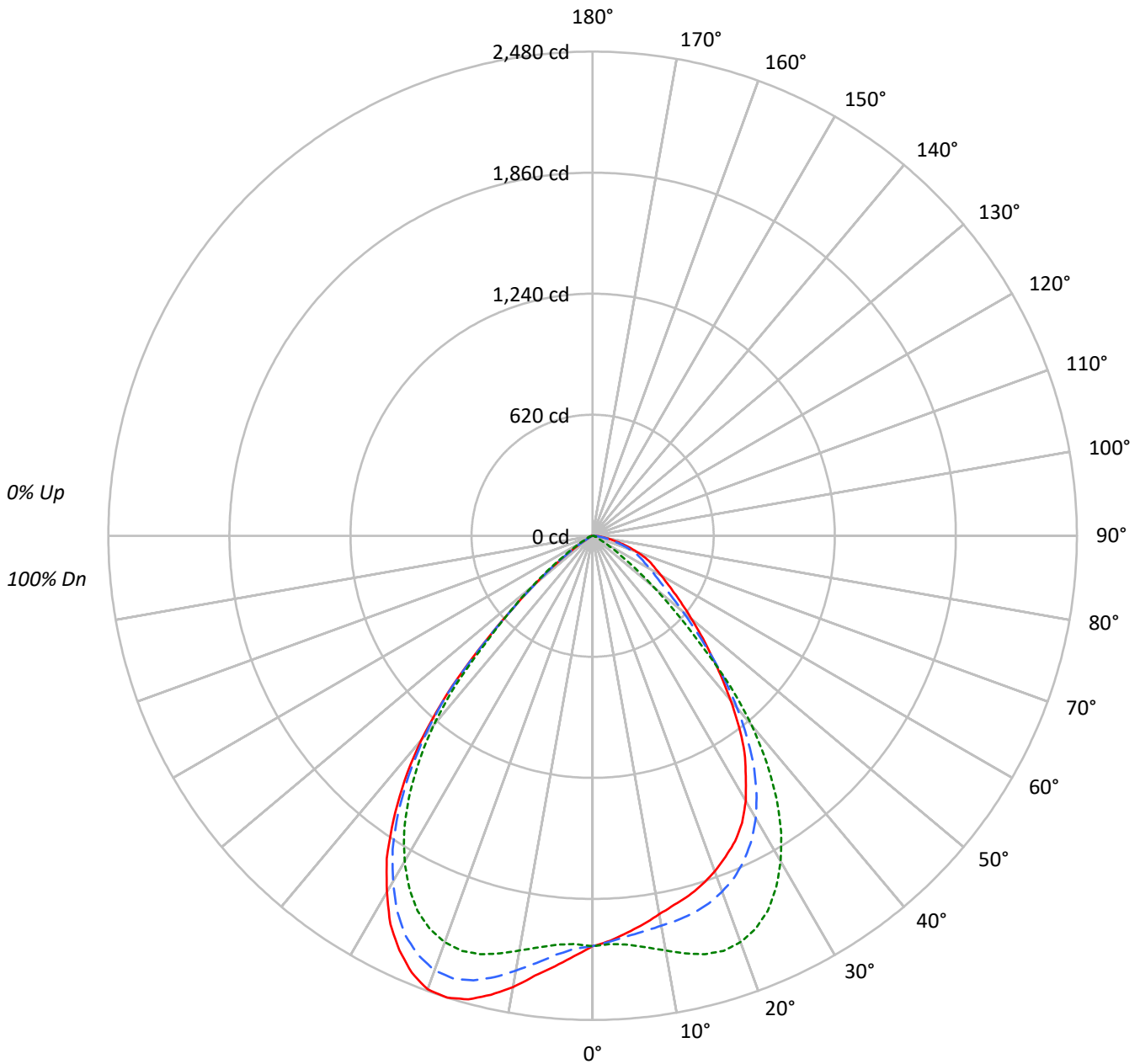
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 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	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°	137162	137162	137162
5°	133606	137686	144929
10°	130361	142875	155522
15°	128836	149876	166032
20°	126990	153782	171646
25°	124289	152644	168560
30°	118108	145054	158682
35°	108053	130784	141671
40°	93461	108016	116234
45°	78812	70840	76035
50°	66917	41005	38558
55°	58066	19666	14855
60°	52453	9173	3667
65°	50881	5280	1235
70°	45628	4216	1145
75°	37483	3050	504
80°	27953	1503	0
85°	24103	0	0



TEST NUMBER: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.1	5.3
10°-20°	618.9	16.1
20°-30°	945.6	24.6
30°-40°	989.0	25.7
40°-50°	641.6	16.7
50°-60°	254.7	6.6
60°-70°	120.8	3.1
70°-80°	57.5	1.5
80°-90°	11.7	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°	1767.6	46.0
0°-40°	2756.6	71.7
0°-60°	3653.0	95.1
0°-90°	3843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3843.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2102	2102	2102	2102	2102	
5°	2040	2058	2102	2155	2213	193
15°	1908	2000	2219	2358	2458	538
25°	1727	1835	2120	2263	2342	791
35°	1357	1439	1642	1739	1779	839
45°	854	846	768	814	824	665
55°	510	434	173	135	131	463
65°	330	273	34	8	8	322
75°	149	121	12	4	2	160
85°	32	20	0	0	0	37
90°	0	0	0	0	0	



TEST NUMBER: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4
2.5°	2076.3	2080.3	2058.2	2052.2	2068.3	2074.3	2076.3	2070.3	2072.3	2080.3	2080.3
5°	2040.1	2044.1	2024.0	2018.0	2034.1	2038.1	2044.1	2042.1	2048.2	2060.2	2058.2
7.5°	2005.9	2012.0	1989.9	1981.8	2001.9	2012.0	2016.0	2016.0	2024.0	2040.1	2042.1
10°	1967.8	1975.8	1955.7	1951.7	1973.8	1983.8	1985.8	1989.9	2001.9	2024.0	2028.1
12.5°	1935.6	1943.6	1929.6	1923.5	1947.7	1957.7	1961.7	1969.8	1983.8	2012.0	2016.0
15°	1907.5	1913.5	1897.4	1893.4	1917.5	1929.6	1931.6	1943.6	1961.7	1993.9	1999.9
17.5°	1871.3	1875.3	1863.2	1859.2	1883.3	1895.4	1897.4	1911.5	1933.6	1965.7	1975.8
20°	1829.1	1833.1	1821.0	1817.0	1841.1	1855.2	1857.2	1869.3	1895.4	1929.6	1939.6
22.5°	1778.8	1786.9	1772.8	1768.8	1792.9	1804.9	1811.0	1821.0	1847.2	1881.3	1895.4
25°	1726.6	1726.6	1716.5	1714.5	1736.6	1750.7	1748.7	1762.7	1788.9	1823.0	1835.1
27.5°	1658.2	1656.2	1646.2	1644.2	1668.3	1680.3	1676.3	1690.4	1714.5	1748.7	1760.7
30°	1567.8	1571.8	1557.7	1553.7	1573.8	1593.9	1591.9	1606.0	1630.1	1662.2	1670.3
32.5°	1459.2	1463.3	1461.2	1455.2	1473.3	1483.4	1489.4	1499.4	1519.5	1553.7	1561.7
35°	1356.7	1350.7	1342.7	1342.7	1360.7	1376.8	1370.8	1382.9	1403.0	1437.1	1439.1
37.5°	1230.1	1228.1	1224.1	1220.0	1240.1	1244.2	1246.2	1254.2	1272.3	1300.4	1296.4
40°	1097.4	1099.5	1097.4	1089.4	1101.5	1117.5	1115.5	1119.6	1135.6	1155.7	1149.7
42.5°	972.8	972.8	972.8	964.8	978.9	986.9	990.9	988.9	992.9	1011.0	1003.0
45°	854.2	856.2	854.2	852.2	854.2	858.3	854.2	852.2	852.2	858.3	846.2
47.5°	751.7	751.7	745.7	739.7	745.7	747.7	741.7	735.6	733.6	731.6	711.5
50°	659.3	657.3	655.2	645.2	651.2	653.2	645.2	641.2	633.1	623.1	599.0
52.5°	578.9	576.9	574.9	564.8	568.8	570.8	562.8	554.8	544.7	536.7	506.5
55°	510.5	508.5	508.5	502.5	498.5	502.5	494.5	488.4	474.4	464.3	434.2
57.5°	452.2	452.2	448.2	442.2	444.2	444.2	436.2	428.1	416.1	404.0	379.9
60°	402.0	402.0	402.0	396.0	396.0	396.0	391.9	383.9	373.9	361.8	337.7
62.5°	361.8	361.8	359.8	353.8	355.8	355.8	351.7	343.7	333.7	325.6	301.5
65°	329.6	329.6	329.6	323.6	323.6	325.6	321.6	313.6	305.5	295.5	273.4
67.5°	289.4	287.4	287.4	283.4	285.4	287.4	283.4	277.4	267.3	261.3	241.2
70°	239.2	241.2	243.2	237.2	239.2	239.2	237.2	231.1	225.1	219.1	201.0
72.5°	195.0	195.0	193.0	190.9	190.9	193.0	188.9	182.9	178.9	174.9	160.8
75°	148.7	146.7	148.7	144.7	144.7	144.7	140.7	138.7	136.7	130.6	120.6
77.5°	108.5	106.5	106.5	102.5	104.5	104.5	102.5	98.5	94.5	92.5	84.4
80°	74.4	74.4	74.4	72.4	72.4	70.3	70.3	68.3	64.3	62.3	58.3
82.5°	50.2	50.2	50.2	48.2	48.2	48.2	46.2	44.2	42.2	40.2	36.2
85°	32.2	32.2	32.2	30.1	30.1	30.1	28.1	28.1	26.1	24.1	20.1
87.5°	18.1	18.1	18.1	16.1	16.1	16.1	16.1	16.1	14.1	12.1	10.0
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: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4
2.5°	2094.4	2066.2	2084.3	2084.3	2078.3	2094.4	2104.4	2112.5	2110.5	2092.4	2090.4
5°	2078.3	2054.2	2074.3	2076.3	2070.3	2092.4	2106.4	2116.5	2118.5	2102.4	2104.4
7.5°	2066.2	2046.1	2072.3	2080.3	2078.3	2098.4	2114.5	2130.6	2138.6	2126.5	2128.6
10°	2060.2	2044.1	2072.3	2084.3	2086.3	2108.5	2132.6	2154.7	2164.7	2156.7	2162.7
12.5°	2052.2	2042.1	2074.3	2092.4	2100.4	2122.5	2152.7	2178.8	2194.9	2190.9	2202.9
15°	2044.1	2036.1	2074.3	2100.4	2110.5	2130.6	2164.7	2202.9	2221.0	2219.0	2235.1
17.5°	2024.0	2022.0	2062.2	2090.4	2104.4	2128.6	2160.7	2206.9	2225.0	2229.1	2249.2
20°	1991.9	1991.9	2036.1	2066.2	2082.3	2104.4	2144.6	2188.9	2211.0	2215.0	2237.1
22.5°	1947.7	1951.7	1993.9	2024.0	2048.2	2064.2	2106.4	2152.7	2172.8	2178.8	2202.9
25°	1889.4	1893.4	1933.6	1963.7	1989.9	2008.0	2048.2	2090.4	2114.5	2120.5	2138.6
27.5°	1813.0	1821.0	1859.2	1889.4	1911.5	1923.5	1965.7	2010.0	2028.1	2034.1	2052.2
30°	1724.6	1726.6	1764.7	1790.9	1813.0	1823.0	1859.2	1905.4	1919.5	1925.5	1951.7
32.5°	1616.0	1614.0	1650.2	1674.3	1692.4	1704.5	1742.6	1772.8	1786.9	1796.9	1811.0
35°	1485.4	1483.4	1509.5	1537.6	1551.7	1555.7	1593.9	1626.1	1634.1	1642.1	1660.2
37.5°	1338.6	1338.6	1360.7	1374.8	1390.9	1396.9	1415.0	1451.2	1465.3	1463.3	1477.3
40°	1183.9	1175.8	1191.9	1206.0	1210.0	1212.0	1230.1	1258.2	1268.3	1268.3	1278.3
42.5°	1021.1	1009.0	1011.0	1019.1	1023.1	1009.0	1021.1	1039.2	1033.1	1041.2	1043.2
45°	848.2	830.1	822.1	804.0	808.0	793.9	785.9	789.9	787.9	767.8	771.8
47.5°	707.5	675.3	661.3	635.1	629.1	613.0	603.0	584.9	568.8	568.8	558.8
50°	588.9	556.8	528.6	498.5	488.4	474.4	452.2	428.1	416.1	404.0	394.0
52.5°	494.5	460.3	426.1	394.0	379.9	361.8	331.6	307.5	285.4	273.4	261.3
55°	418.1	379.9	343.7	309.5	291.4	273.4	243.2	215.1	188.9	172.9	162.8
57.5°	359.8	323.6	285.4	249.2	233.2	213.1	180.9	150.7	126.6	108.5	98.5
60°	317.6	281.4	247.2	209.0	193.0	172.9	138.7	110.5	86.4	70.3	58.3
62.5°	281.4	249.2	213.1	178.9	162.8	142.7	110.5	82.4	60.3	44.2	34.2
65°	255.3	223.1	193.0	158.8	144.7	124.6	94.5	68.3	48.2	34.2	24.1
67.5°	225.1	197.0	166.8	138.7	124.6	108.5	80.4	58.3	40.2	28.1	20.1
70°	188.9	166.8	140.7	114.6	104.5	90.4	66.3	48.2	32.2	22.1	16.1
72.5°	150.7	132.7	112.6	92.5	84.4	70.3	54.3	38.2	24.1	16.1	12.1
75°	114.6	100.5	84.4	70.3	62.3	54.3	40.2	28.1	18.1	12.1	8.0
77.5°	78.4	72.4	60.3	48.2	44.2	38.2	26.1	18.1	12.1	8.0	4.0
80°	54.3	48.2	40.2	32.2	28.1	24.1	16.1	12.1	6.0	4.0	2.0
82.5°	34.2	28.1	24.1	20.1	18.1	14.1	10.0	6.0	4.0	2.0	2.0
85°	18.1	16.1	14.1	10.0	10.0	8.0	6.0	4.0	2.0	0.0	0.0
87.5°	10.0	8.0	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: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4
2.5°	2114.5	2114.5	2112.5	2136.6	2108.5	2136.6	2122.5	2136.6	2116.5	2114.5	2116.5
5°	2130.6	2136.6	2138.6	2160.7	2134.6	2168.8	2156.7	2168.8	2154.7	2158.7	2164.7
7.5°	2162.7	2172.8	2170.8	2198.9	2172.8	2211.0	2202.9	2221.0	2206.9	2211.0	2219.0
10°	2198.9	2211.0	2213.0	2241.1	2217.0	2263.2	2253.2	2273.3	2261.2	2267.2	2277.3
12.5°	2241.1	2255.2	2257.2	2289.4	2263.2	2311.5	2305.4	2325.5	2315.5	2321.5	2333.6
15°	2273.3	2293.4	2297.4	2329.6	2301.4	2351.7	2347.6	2373.8	2357.7	2367.7	2377.8
17.5°	2289.4	2307.4	2315.5	2345.6	2321.5	2371.8	2367.7	2389.8	2377.8	2387.8	2399.9
20°	2279.3	2301.4	2307.4	2337.6	2313.5	2363.7	2357.7	2379.8	2367.7	2375.8	2387.8
22.5°	2243.1	2265.2	2273.3	2301.4	2279.3	2325.5	2323.5	2343.6	2327.5	2337.6	2347.6
25°	2178.8	2202.9	2206.9	2233.1	2209.0	2257.2	2253.2	2275.3	2263.2	2269.3	2283.3
27.5°	2086.3	2114.5	2120.5	2142.6	2124.5	2164.7	2164.7	2182.8	2168.8	2168.8	2182.8
30°	1975.8	2003.9	2008.0	2026.0	2010.0	2046.1	2048.2	2066.2	2044.1	2056.2	2058.2
32.5°	1841.1	1859.2	1871.3	1887.4	1863.2	1909.5	1903.4	1917.5	1905.4	1905.4	1915.5
35°	1678.3	1700.4	1706.5	1726.6	1706.5	1742.6	1742.6	1750.7	1738.6	1738.6	1754.7
37.5°	1501.4	1517.5	1519.5	1539.6	1523.6	1553.7	1551.7	1557.7	1545.7	1553.7	1553.7
40°	1294.4	1306.5	1310.5	1320.5	1318.5	1340.6	1338.6	1342.7	1336.6	1338.6	1342.7
42.5°	1053.2	1069.3	1077.3	1085.4	1073.3	1103.5	1097.4	1103.5	1101.5	1103.5	1109.5
45°	775.8	787.9	793.9	795.9	791.9	810.0	824.1	812.0	814.0	810.0	818.1
47.5°	560.8	562.8	558.8	570.8	560.8	568.8	572.8	574.9	562.8	560.8	568.8
50°	383.9	394.0	379.9	385.9	383.9	391.9	387.9	389.9	377.9	383.9	379.9
52.5°	255.3	253.3	249.2	251.2	247.2	247.2	247.2	251.2	243.2	239.2	235.2
55°	154.8	150.7	142.7	140.7	140.7	142.7	138.7	134.7	134.7	132.7	132.7
57.5°	90.4	84.4	80.4	78.4	74.4	72.4	70.3	70.3	66.3	66.3	66.3
60°	50.2	44.2	40.2	36.2	36.2	34.2	32.2	30.1	30.1	30.1	28.1
62.5°	26.1	22.1	18.1	16.1	16.1	14.1	12.1	12.1	12.1	12.1	10.0
65°	18.1	14.1	12.1	10.0	10.0	8.0	8.0	8.0	8.0	8.0	8.0
67.5°	14.1	12.1	10.0	8.0	8.0	8.0	6.0	6.0	6.0	6.0	6.0
70°	12.1	8.0	8.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
72.5°	8.0	8.0	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: P252185

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4	2102.4
2.5°	2134.6	2132.6	2134.6	2138.6	2130.6	2154.7	2142.6	2154.7
5°	2180.8	2182.8	2184.8	2190.9	2180.8	2211.0	2194.9	2213.0
7.5°	2241.1	2243.1	2245.1	2251.2	2245.1	2275.3	2257.2	2273.3
10°	2303.4	2307.4	2307.4	2317.5	2311.5	2339.6	2327.5	2347.6
12.5°	2361.7	2365.7	2369.7	2375.8	2371.8	2401.9	2391.9	2407.9
15°	2407.9	2416.0	2418.0	2426.0	2422.0	2454.2	2442.1	2458.2
17.5°	2430.0	2438.1	2438.1	2448.1	2444.1	2478.3	2462.2	2480.3
20°	2418.0	2424.0	2426.0	2436.1	2432.1	2466.2	2450.1	2472.3
22.5°	2379.8	2381.8	2383.8	2393.9	2391.9	2422.0	2407.9	2422.0
25°	2309.5	2315.5	2313.5	2321.5	2321.5	2345.6	2329.6	2341.6
27.5°	2209.0	2215.0	2215.0	2225.0	2217.0	2241.1	2225.0	2243.1
30°	2086.3	2092.4	2088.4	2096.4	2088.4	2112.5	2100.4	2106.4
32.5°	1939.6	1939.6	1941.6	1943.6	1939.6	1961.7	1949.7	1961.7
35°	1764.7	1768.8	1770.8	1772.8	1768.8	1784.8	1770.8	1778.8
37.5°	1567.8	1577.8	1575.8	1577.8	1571.8	1591.9	1579.8	1583.9
40°	1356.7	1356.7	1354.7	1358.7	1352.7	1368.8	1360.7	1364.8
42.5°	1111.5	1117.5	1109.5	1119.6	1103.5	1125.6	1117.5	1111.5
45°	834.1	826.1	824.1	826.1	820.1	822.1	828.1	824.1
47.5°	568.8	568.8	564.8	558.8	566.8	568.8	560.8	560.8
50°	381.9	381.9	377.9	375.9	379.9	377.9	373.9	379.9
52.5°	243.2	235.2	235.2	239.2	235.2	231.1	237.2	233.2
55°	132.7	128.6	128.6	132.7	128.6	128.6	126.6	130.6
57.5°	64.3	66.3	64.3	64.3	64.3	64.3	62.3	64.3
60°	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
62.5°	12.1	12.1	10.0	10.0	10.0	10.0	10.0	10.0
65°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
67.5°	6.0	6.0	6.0	6.0	6.0	8.0	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	8.0	8.0	8.0	8.0	8.0	8.0
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)