

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: PORTFOLIO

Report Number: P252173

Luminaire Tested: **LE\_6B30D010 EC6B30509027 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252173  
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: PORTFOLIO  
Catalog Number: LE\_6B30D010 EC6B30509027 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3862.5 lumens  
Efficiency: N/A  
Efficacy: 137.9 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

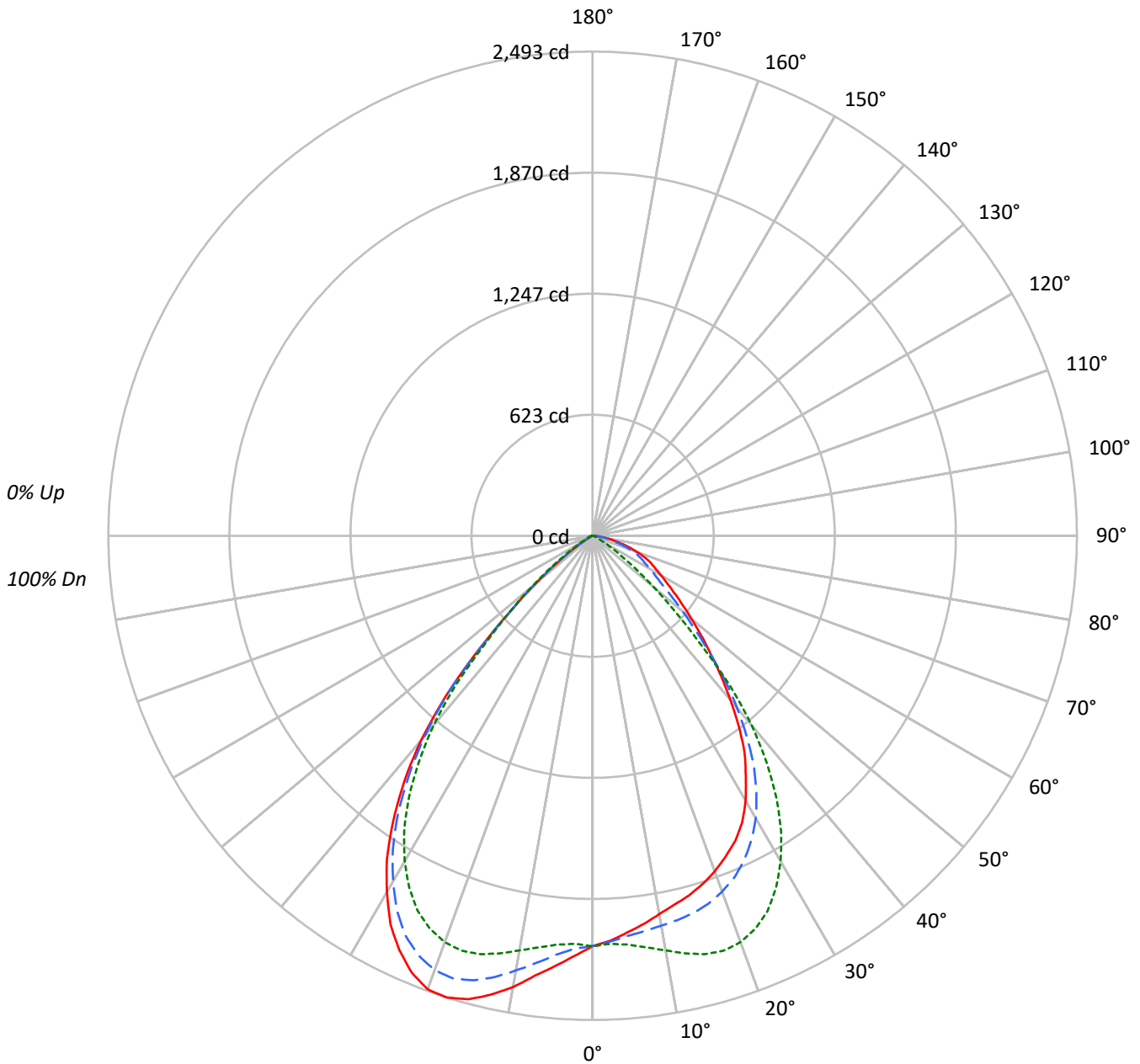
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252173

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	137860	137860	137860
5°	134287	138387	145662
10°	131023	143597	156310
15°	129485	150632	166869
20°	127636	154560	172514
25°	124923	153415	169417
30°	118710	145800	159488
35°	108603	131453	142396
40°	93938	108569	116830
45°	79218	71209	76413
50°	67252	41208	38751
55°	58362	19769	14923
60°	52714	9238	3680
65°	51128	5310	1250
70°	45856	4235	1145
75°	37685	3050	504
80°	28103	1503	0
85°	24253	0	0



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CATALOG NUMBER: LE\_6B30D010 EC6B30509027 6LBSW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.1	5.3
10°-20°	622.0	16.1
20°-30°	950.4	24.6
30°-40°	994.1	25.7
40°-50°	644.8	16.7
50°-60°	256.0	6.6
60°-70°	121.4	3.1
70°-80°	57.8	1.5
80°-90°	11.8	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°	1776.6	46.0
0°-40°	2770.6	71.7
0°-60°	3671.5	95.1
0°-90°	3862.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3862.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2113	2113	2113	2113	2113	
5°	2050	2069	2113	2166	2224	194
15°	1917	2010	2230	2370	2471	540
25°	1735	1844	2131	2275	2354	795
35°	1364	1446	1650	1748	1788	843
45°	859	850	772	818	828	668
55°	513	436	174	135	131	465
65°	331	275	34	8	8	324
75°	150	121	12	4	2	161
85°	32	20	0	0	0	38
90°	0	0	0	0	0	



TEST NUMBER: P252173

CATALOG NUMBER: LE\_6B30D010 EC6B30509027 6LBSW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1
2.5°	2086.9	2090.9	2068.6	2062.6	2078.8	2084.8	2086.9	2080.8	2082.8	2090.9	2090.9
5°	2050.5	2054.5	2034.2	2028.2	2044.4	2048.5	2054.5	2052.5	2058.5	2070.6	2068.6
7.5°	2016.1	2022.1	2000.0	1991.9	2012.1	2022.1	2026.2	2026.2	2034.2	2050.5	2052.5
10°	1977.8	1985.9	1965.6	1961.6	1983.8	1993.9	1995.9	2000.0	2012.1	2034.2	2038.4
12.5°	1945.4	1953.5	1939.4	1933.2	1957.5	1967.6	1971.6	1979.8	1993.9	2022.1	2026.2
15°	1917.1	1923.2	1907.0	1903.0	1927.2	1939.4	1941.4	1953.5	1971.6	2004.0	2010.1
17.5°	1880.8	1884.9	1872.8	1868.6	1892.9	1905.0	1907.0	1921.1	1943.4	1975.8	1985.9
20°	1838.4	1842.4	1830.2	1826.2	1850.5	1864.6	1866.6	1878.8	1905.0	1939.4	1949.5
22.5°	1787.9	1795.9	1781.8	1777.8	1802.0	1814.1	1820.1	1830.2	1856.5	1890.9	1905.0
25°	1735.4	1735.4	1725.2	1723.2	1745.4	1759.6	1757.5	1771.6	1798.0	1832.2	1844.4
27.5°	1666.6	1664.6	1654.5	1652.5	1676.8	1688.9	1684.9	1699.0	1723.2	1757.5	1769.6
30°	1575.8	1579.8	1565.6	1561.6	1581.8	1602.0	1600.0	1614.1	1638.4	1670.6	1678.8
32.5°	1466.6	1470.6	1468.6	1462.6	1480.8	1490.9	1497.0	1507.0	1527.2	1561.6	1569.6
35°	1363.6	1357.5	1349.5	1349.5	1367.6	1383.9	1377.8	1389.9	1410.1	1444.4	1446.5
37.5°	1236.4	1234.4	1230.2	1226.2	1246.5	1250.5	1252.5	1260.6	1278.8	1307.0	1303.0
40°	1103.0	1105.0	1103.0	1094.9	1107.0	1123.2	1121.2	1125.2	1141.4	1161.6	1155.5
42.5°	977.8	977.8	977.8	969.6	983.9	991.9	996.0	993.9	998.0	1016.1	1008.0
45°	858.6	860.6	858.6	856.5	858.6	862.6	858.6	856.5	856.5	862.6	850.5
47.5°	755.5	755.5	749.5	743.4	749.5	751.5	745.5	739.4	737.4	735.4	715.1
50°	662.6	660.6	658.6	648.5	654.5	656.5	648.5	644.4	636.4	626.2	602.0
52.5°	581.8	579.8	577.8	567.6	571.8	573.8	565.6	557.6	547.5	539.4	509.1
55°	513.1	511.1	511.1	505.0	501.0	505.0	497.0	490.9	476.8	466.6	436.4
57.5°	454.5	454.5	450.5	444.4	446.5	446.5	438.4	430.2	418.1	406.0	381.8
60°	404.0	404.0	404.0	398.0	398.0	398.0	393.9	385.9	375.8	363.6	339.4
62.5°	363.6	363.6	361.6	355.5	357.6	357.6	353.5	345.5	335.4	327.2	303.0
65°	331.2	331.2	331.2	325.2	325.2	327.2	323.2	315.1	307.1	297.0	274.8
67.5°	290.9	288.9	288.9	284.9	286.9	288.9	284.9	278.8	268.6	262.6	242.4
70°	240.4	242.4	244.5	238.4	240.4	240.4	238.4	232.4	226.2	220.2	202.0
72.5°	196.0	196.0	193.9	191.9	191.9	193.9	189.9	183.9	179.8	175.8	161.6
75°	149.5	147.5	149.5	145.5	145.5	145.5	141.4	139.4	137.4	131.2	121.2
77.5°	109.1	107.1	107.1	103.0	105.0	105.0	103.0	99.0	95.0	92.9	84.9
80°	74.8	74.8	74.8	72.8	72.8	70.8	70.8	68.6	64.6	62.6	58.6
82.5°	50.5	50.5	50.5	48.5	48.5	48.5	46.5	44.5	42.4	40.4	36.4
85°	32.4	32.4	32.4	30.2	30.2	30.2	28.2	28.2	26.2	24.2	20.2
87.5°	18.1	18.1	18.1	16.1	16.1	16.1	16.1	16.1	14.1	12.1	10.1
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: P252173

CATALOG NUMBER: LE\_6B30D010 EC6B30509027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1
2.5°	2105.0	2076.8	2094.9	2094.9	2088.9	2105.0	2115.1	2123.2	2121.1	2103.0	2101.0
5°	2088.9	2064.6	2084.8	2086.9	2080.8	2103.0	2117.1	2127.2	2129.2	2113.1	2115.1
7.5°	2076.8	2056.5	2082.8	2090.9	2088.9	2109.0	2125.2	2141.4	2149.5	2137.4	2139.4
10°	2070.6	2054.5	2082.8	2094.9	2096.9	2119.1	2143.4	2165.6	2175.8	2167.6	2173.8
12.5°	2062.6	2052.5	2084.8	2103.0	2111.1	2133.2	2163.6	2189.9	2206.0	2202.0	2214.1
15°	2054.5	2046.4	2084.8	2111.1	2121.1	2141.4	2175.8	2214.1	2232.2	2230.2	2246.4
17.5°	2034.2	2032.2	2072.8	2101.0	2115.1	2139.4	2171.6	2218.1	2236.4	2240.4	2260.6
20°	2002.0	2002.0	2046.4	2076.8	2092.9	2115.1	2155.5	2200.0	2222.1	2226.2	2248.5
22.5°	1957.5	1961.6	2004.0	2034.2	2058.5	2074.8	2117.1	2163.6	2183.8	2189.9	2214.1
25°	1899.0	1903.0	1943.4	1973.8	2000.0	2018.1	2058.5	2101.0	2125.2	2131.2	2149.5
27.5°	1822.2	1830.2	1868.6	1899.0	1921.1	1933.2	1975.8	2020.1	2038.4	2044.4	2062.6
30°	1733.2	1735.4	1773.8	1800.0	1822.2	1832.2	1868.6	1915.1	1929.2	1935.4	1961.6
32.5°	1624.2	1622.2	1658.5	1682.8	1701.0	1713.1	1751.5	1781.8	1795.9	1806.0	1820.1
35°	1492.9	1490.9	1517.1	1545.4	1559.6	1563.6	1602.0	1634.4	1642.4	1650.5	1668.6
37.5°	1345.4	1345.4	1367.6	1381.8	1398.0	1404.0	1422.2	1458.5	1472.8	1470.6	1484.9
40°	1189.9	1181.8	1198.0	1212.1	1216.1	1218.1	1236.4	1264.6	1274.8	1274.8	1284.9
42.5°	1026.2	1014.1	1016.1	1024.2	1028.2	1014.1	1026.2	1044.4	1038.4	1046.5	1048.5
45°	852.5	834.4	826.2	808.1	812.1	798.0	789.9	793.9	791.9	771.8	775.8
47.5°	711.1	678.8	664.6	638.4	632.2	616.1	606.0	587.9	571.8	571.8	561.6
50°	591.9	559.6	531.2	501.0	490.9	476.8	454.5	430.2	418.1	406.0	396.0
52.5°	497.0	462.6	428.2	396.0	381.8	363.6	333.4	309.1	286.9	274.8	262.6
55°	420.2	381.8	345.5	311.1	292.9	274.8	244.5	216.1	189.9	173.8	163.6
57.5°	361.6	325.2	286.9	250.5	234.4	214.1	181.9	151.5	127.2	109.1	99.0
60°	319.1	282.9	248.5	210.1	193.9	173.8	139.4	111.1	86.9	70.8	58.6
62.5°	282.9	250.5	214.1	179.8	163.6	143.4	111.1	82.9	60.6	44.5	34.4
65°	256.5	224.2	193.9	159.6	145.5	125.2	95.0	68.6	48.5	34.4	24.2
67.5°	226.2	198.0	167.6	139.4	125.2	109.1	80.8	58.6	40.4	28.2	20.2
70°	189.9	167.6	141.4	115.1	105.0	90.9	66.6	48.5	32.4	22.2	16.1
72.5°	151.5	133.4	113.1	92.9	84.9	70.8	54.5	38.4	24.2	16.1	12.1
75°	115.1	101.0	84.9	70.8	62.6	54.5	40.4	28.2	18.1	12.1	8.1
77.5°	78.8	72.8	60.6	48.5	44.5	38.4	26.2	18.1	12.1	8.1	4.0
80°	54.5	48.5	40.4	32.4	28.2	24.2	16.1	12.1	6.0	4.0	2.0
82.5°	34.4	28.2	24.2	20.2	18.1	14.1	10.1	6.0	4.0	2.0	2.0
85°	18.1	16.1	14.1	10.1	10.1	8.1	6.0	4.0	2.0	0.0	0.0
87.5°	10.1	8.1	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: P252173

CATALOG NUMBER: LE\_6B30D010 EC6B30509027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1
2.5°	2125.2	2125.2	2123.2	2147.4	2119.1	2147.4	2133.2	2147.4	2127.2	2125.2	2127.2
5°	2141.4	2147.4	2149.5	2171.6	2145.4	2179.8	2167.6	2179.8	2165.6	2169.6	2175.8
7.5°	2173.8	2183.8	2181.8	2210.0	2183.8	2222.1	2214.1	2232.2	2218.1	2222.1	2230.2
10°	2210.0	2222.1	2224.2	2252.5	2228.2	2274.8	2264.6	2284.8	2272.6	2278.8	2288.9
12.5°	2252.5	2266.6	2268.6	2301.0	2274.8	2323.2	2317.1	2337.4	2327.2	2333.2	2345.4
15°	2284.8	2305.0	2309.0	2341.4	2313.1	2363.6	2359.5	2385.9	2369.6	2379.8	2389.9
17.5°	2301.0	2319.1	2327.2	2357.5	2333.2	2383.8	2379.8	2402.0	2389.9	2400.0	2412.1
20°	2290.9	2313.1	2319.1	2349.5	2325.2	2375.8	2369.6	2391.9	2379.8	2387.9	2400.0
22.5°	2254.5	2276.8	2284.8	2313.1	2290.9	2337.4	2335.2	2355.5	2339.4	2349.5	2359.5
25°	2189.9	2214.1	2218.1	2244.4	2220.1	2268.6	2264.6	2286.9	2274.8	2280.8	2294.9
27.5°	2096.9	2125.2	2131.2	2153.5	2135.4	2175.8	2175.8	2193.9	2179.8	2179.8	2193.9
30°	1985.9	2014.1	2018.1	2036.4	2020.1	2056.5	2058.5	2076.8	2054.5	2066.6	2068.6
32.5°	1850.5	1868.6	1880.8	1896.9	1872.8	1919.1	1913.1	1927.2	1915.1	1915.1	1925.2
35°	1686.9	1709.0	1715.1	1735.4	1715.1	1751.5	1751.5	1759.6	1747.5	1747.5	1763.6
37.5°	1509.1	1525.2	1527.2	1547.5	1531.2	1561.6	1559.6	1565.6	1553.5	1561.6	1561.6
40°	1301.0	1313.1	1317.1	1327.2	1325.2	1347.5	1345.4	1349.5	1343.4	1345.4	1349.5
42.5°	1058.6	1074.8	1082.8	1090.9	1078.8	1109.1	1103.0	1109.1	1107.0	1109.1	1115.1
45°	779.8	791.9	798.0	800.0	796.0	814.1	828.2	816.1	818.1	814.1	822.2
47.5°	563.6	565.6	561.6	573.8	563.6	571.8	575.8	577.8	565.6	563.6	571.8
50°	385.9	396.0	381.8	387.9	385.9	393.9	389.9	391.9	379.8	385.9	381.8
52.5°	256.5	254.5	250.5	252.5	248.5	248.5	248.5	252.5	244.5	240.4	236.4
55°	155.5	151.5	143.4	141.4	141.4	143.4	139.4	135.4	135.4	133.4	133.4
57.5°	90.9	84.9	80.8	78.8	74.8	72.8	70.8	70.8	66.6	66.6	66.6
60°	50.5	44.5	40.4	36.4	36.4	34.4	32.4	30.2	30.2	30.2	28.2
62.5°	26.2	22.2	18.1	16.1	16.1	14.1	12.1	12.1	12.1	12.1	10.1
65°	18.1	14.1	12.1	10.1	10.1	8.1	8.1	8.1	8.1	8.1	8.1
67.5°	14.1	12.1	10.1	8.1	8.1	8.1	6.0	6.0	6.0	6.0	6.0
70°	12.1	8.1	8.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
72.5°	8.1	8.1	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: P252173

CATALOG NUMBER: LE\_6B30D010 EC6B30509027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1	2113.1
2.5°	2145.4	2143.4	2145.4	2149.5	2141.4	2165.6	2153.5	2165.6
5°	2191.9	2193.9	2195.9	2202.0	2191.9	2222.1	2206.0	2224.2
7.5°	2252.5	2254.5	2256.5	2262.6	2256.5	2286.9	2268.6	2284.8
10°	2315.1	2319.1	2319.1	2329.2	2323.2	2351.5	2339.4	2359.5
12.5°	2373.8	2377.8	2381.8	2387.9	2383.8	2414.1	2404.0	2420.1
15°	2420.1	2428.2	2430.2	2438.4	2434.2	2466.6	2454.5	2470.6
17.5°	2442.4	2450.5	2450.5	2460.5	2456.5	2490.9	2474.8	2492.9
20°	2430.2	2436.4	2438.4	2448.5	2444.4	2478.8	2462.6	2484.8
22.5°	2391.9	2393.9	2395.9	2406.0	2404.0	2434.2	2420.1	2434.2
25°	2321.1	2327.2	2325.2	2333.2	2333.2	2357.5	2341.4	2353.5
27.5°	2220.1	2226.2	2226.2	2236.4	2228.2	2252.5	2236.4	2254.5
30°	2096.9	2103.0	2099.0	2107.0	2099.0	2123.2	2111.1	2117.1
32.5°	1949.5	1949.5	1951.5	1953.5	1949.5	1971.6	1959.5	1971.6
35°	1773.8	1777.8	1779.8	1781.8	1777.8	1793.9	1779.8	1787.9
37.5°	1575.8	1585.9	1583.8	1585.9	1579.8	1600.0	1587.9	1591.9
40°	1363.6	1363.6	1361.6	1365.6	1359.6	1375.8	1367.6	1371.8
42.5°	1117.1	1123.2	1115.1	1125.2	1109.1	1131.2	1123.2	1117.1
45°	838.4	830.2	828.2	830.2	824.2	826.2	832.2	828.2
47.5°	571.8	571.8	567.6	561.6	569.6	571.8	563.6	563.6
50°	383.9	383.9	379.8	377.8	381.8	379.8	375.8	381.8
52.5°	244.5	236.4	236.4	240.4	236.4	232.4	238.4	234.4
55°	133.4	129.2	129.2	133.4	129.2	129.2	127.2	131.2
57.5°	64.6	66.6	64.6	64.6	64.6	64.6	62.6	64.6
60°	28.2	28.2	28.2	28.2	28.2	28.2	28.2	28.2
62.5°	12.1	12.1	10.1	10.1	10.1	10.1	10.1	10.1
65°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
67.5°	6.0	6.0	6.0	6.0	6.0	8.1	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	8.1	8.1	8.1	8.1	8.1	8.1
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)