

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: P252174

Luminaire Tested: **LE\_6B30D010 EC6B30509030 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252174  
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 EC6B30509030 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE 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: 4015.0 lumens  
Efficiency: N/A  
Efficacy: 143.4 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

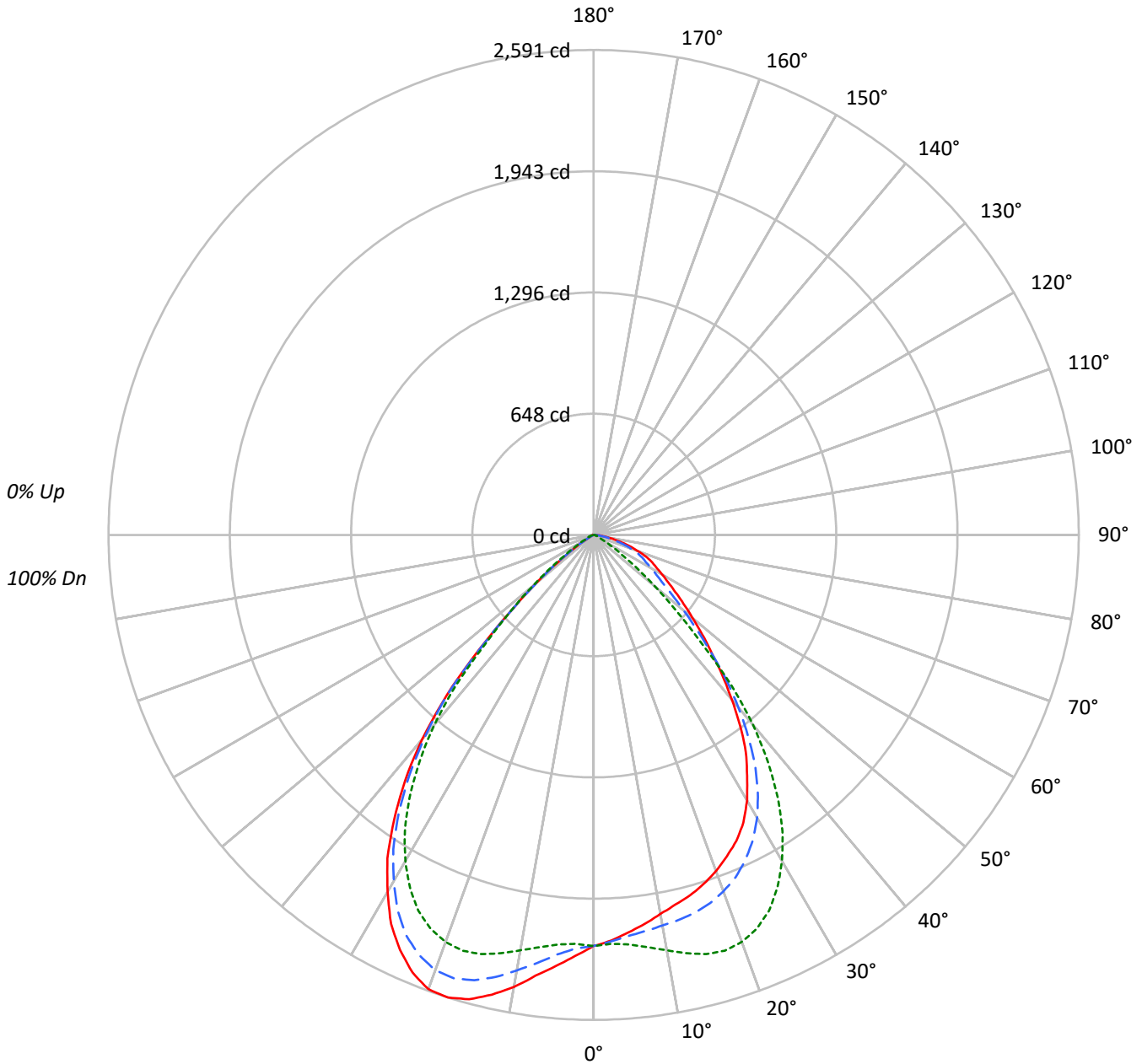
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	143301	143301	143301
5°	139585	143848	151412
10°	136197	149268	162491
15°	134605	156590	173462
20°	132669	160662	179325
25°	129854	159476	176104
30°	123396	151556	165794
35°	112896	136637	148011
40°	97642	112844	121438
45°	82346	74005	79439
50°	69911	42842	40284
55°	60671	20542	15526
60°	54802	9590	3836
65°	53166	5527	1297
70°	47669	4406	1183
75°	39172	3176	529
80°	29230	1578	0
85°	25151	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.2	5.3
10°-20°	646.6	16.1
20°-30°	987.9	24.6
30°-40°	1033.3	25.7
40°-50°	670.3	16.7
50°-60°	266.1	6.6
60°-70°	126.2	3.1
70°-80°	60.0	1.5
80°-90°	12.2	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°	1846.7	46.0
0°-40°	2880.0	71.7
0°-60°	3816.5	95.1
0°-90°	4015.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4015.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2196	2196	2196	2196	2196	
5°	2131	2150	2196	2251	2312	201
15°	1993	2089	2318	2463	2568	562
25°	1804	1917	2215	2364	2446	826
35°	1418	1504	1716	1816	1858	877
45°	892	884	802	850	861	694
55°	533	454	181	141	136	483
65°	344	286	36	8	8	336
75°	155	126	13	4	2	168
85°	34	21	0	0	0	39
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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2169.2	2173.4	2150.4	2144.0	2160.9	2167.1	2169.2	2162.9	2165.0	2173.4	2173.4
5°	2131.4	2135.6	2114.6	2108.4	2125.1	2129.4	2135.6	2133.5	2139.9	2152.4	2150.4
7.5°	2095.8	2102.0	2078.9	2070.5	2091.5	2102.0	2106.2	2106.2	2114.6	2131.4	2133.5
10°	2055.9	2064.2	2043.2	2039.0	2062.1	2072.6	2074.8	2078.9	2091.5	2114.6	2118.9
12.5°	2022.2	2030.6	2015.9	2009.6	2034.9	2045.4	2049.5	2057.9	2072.6	2102.0	2106.2
15°	1992.9	1999.1	1982.4	1978.1	2003.4	2015.9	2018.0	2030.6	2049.5	2083.1	2089.4
17.5°	1955.0	1959.2	1946.6	1942.4	1967.6	1980.2	1982.4	1997.0	2020.1	2053.8	2064.2
20°	1910.9	1915.1	1902.5	1898.4	1923.5	1938.2	1940.4	1952.9	1980.2	2015.9	2026.4
22.5°	1858.4	1866.9	1852.1	1847.9	1873.1	1885.8	1892.0	1902.5	1929.9	1965.5	1980.2
25°	1803.9	1803.9	1793.4	1791.2	1814.4	1829.0	1826.9	1841.6	1868.9	1904.6	1917.2
27.5°	1732.5	1730.4	1719.9	1717.8	1743.0	1755.5	1751.4	1766.0	1791.2	1826.9	1839.5
30°	1638.0	1642.1	1627.5	1623.2	1644.2	1665.2	1663.1	1677.9	1703.0	1736.6	1745.0
32.5°	1524.5	1528.8	1526.6	1520.4	1539.2	1549.8	1556.0	1566.5	1587.5	1623.2	1631.6
35°	1417.5	1411.1	1402.8	1402.8	1421.6	1438.5	1432.1	1444.8	1465.8	1501.5	1503.5
37.5°	1285.1	1283.0	1278.9	1274.6	1295.6	1299.9	1302.0	1310.4	1329.2	1358.6	1354.5
40°	1146.5	1148.6	1146.5	1138.1	1150.8	1167.5	1165.5	1169.6	1186.5	1207.5	1201.1
42.5°	1016.4	1016.4	1016.4	1008.0	1022.6	1031.1	1035.2	1033.1	1037.4	1056.2	1047.9
45°	892.5	894.6	892.5	890.4	892.5	896.6	892.5	890.4	890.4	896.6	884.1
47.5°	785.4	785.4	779.1	772.8	779.1	781.1	774.9	768.6	766.5	764.4	743.4
50°	688.8	686.6	684.6	674.1	680.4	682.5	674.1	669.9	661.5	651.0	625.8
52.5°	604.8	602.6	600.6	590.1	594.2	596.4	588.0	579.6	569.1	560.6	529.1
55°	533.4	531.2	531.2	525.0	520.8	525.0	516.6	510.2	495.6	485.1	453.6
57.5°	472.5	472.5	468.2	462.0	464.1	464.1	455.6	447.2	434.6	422.1	396.9
60°	420.0	420.0	420.0	413.6	413.6	413.6	409.5	401.1	390.6	378.0	352.8
62.5°	378.0	378.0	375.9	369.6	371.6	371.6	367.5	359.1	348.6	340.2	315.0
65°	344.4	344.4	344.4	338.1	338.1	340.2	336.0	327.6	319.2	308.8	285.6
67.5°	302.4	300.2	300.2	296.1	298.2	300.2	296.1	289.8	279.2	273.0	252.0
70°	249.9	252.0	254.1	247.8	249.9	249.9	247.8	241.5	235.2	228.9	210.0
72.5°	203.8	203.8	201.6	199.5	199.5	201.6	197.4	191.1	186.9	182.8	168.0
75°	155.4	153.2	155.4	151.2	151.2	151.2	147.0	144.9	142.8	136.5	126.0
77.5°	113.4	111.2	111.2	107.1	109.2	109.2	107.1	102.9	98.8	96.6	88.2
80°	77.8	77.8	77.8	75.6	75.6	73.5	73.5	71.4	67.2	65.1	60.9
82.5°	52.5	52.5	52.5	50.4	50.4	50.4	48.2	46.2	44.1	42.0	37.8
85°	33.6	33.6	33.6	31.5	31.5	31.5	29.4	29.4	27.2	25.2	21.0
87.5°	18.9	18.9	18.9	16.8	16.8	16.8	16.8	16.8	14.8	12.6	10.5
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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2188.1	2158.8	2177.6	2177.6	2171.4	2188.1	2198.6	2207.0	2204.9	2186.0	2183.9
5°	2171.4	2146.1	2167.1	2169.2	2162.9	2186.0	2200.8	2211.2	2213.4	2196.5	2198.6
7.5°	2158.8	2137.8	2165.0	2173.4	2171.4	2192.4	2209.1	2225.9	2234.4	2221.8	2223.9
10°	2152.4	2135.6	2165.0	2177.6	2179.8	2202.9	2228.0	2251.1	2261.6	2253.2	2259.5
12.5°	2144.0	2133.5	2167.1	2186.0	2194.4	2217.5	2249.0	2276.4	2293.1	2288.9	2301.5
15°	2135.6	2127.2	2167.1	2194.4	2204.9	2225.9	2261.6	2301.5	2320.4	2318.4	2335.1
17.5°	2114.6	2112.5	2154.5	2183.9	2198.6	2223.9	2257.4	2305.8	2324.6	2328.9	2349.9
20°	2081.0	2081.0	2127.2	2158.8	2175.5	2198.6	2240.6	2286.9	2309.9	2314.1	2337.2
22.5°	2034.9	2039.0	2083.1	2114.6	2139.9	2156.6	2200.8	2249.0	2270.0	2276.4	2301.5
25°	1973.9	1978.1	2020.1	2051.6	2078.9	2097.9	2139.9	2183.9	2209.1	2215.4	2234.4
27.5°	1894.1	1902.5	1942.4	1973.9	1997.0	2009.6	2053.8	2099.9	2118.9	2125.1	2144.0
30°	1801.8	1803.9	1843.8	1871.0	1894.1	1904.6	1942.4	1990.8	2005.4	2011.8	2039.0
32.5°	1688.4	1686.2	1724.0	1749.2	1768.1	1780.8	1820.6	1852.1	1866.9	1877.4	1892.0
35°	1551.9	1549.8	1577.0	1606.5	1621.1	1625.4	1665.2	1698.9	1707.2	1715.6	1734.5
37.5°	1398.5	1398.5	1421.6	1436.4	1453.1	1459.5	1478.4	1516.1	1530.9	1528.8	1543.5
40°	1236.9	1228.5	1245.2	1260.0	1264.1	1266.2	1285.1	1314.5	1325.0	1325.0	1335.5
42.5°	1066.8	1054.1	1056.2	1064.6	1068.9	1054.1	1066.8	1085.6	1079.4	1087.8	1089.9
45°	886.1	867.2	858.9	840.0	844.1	829.5	821.1	825.2	823.1	802.1	806.4
47.5°	739.1	705.6	690.9	663.6	657.2	640.5	630.0	611.1	594.2	594.2	583.8
50°	615.2	581.6	552.2	520.8	510.2	495.6	472.5	447.2	434.6	422.1	411.6
52.5°	516.6	480.9	445.1	411.6	396.9	378.0	346.5	321.2	298.2	285.6	273.0
55°	436.8	396.9	359.1	323.4	304.5	285.6	254.1	224.8	197.4	180.6	170.1
57.5°	375.9	338.1	298.2	260.4	243.6	222.6	189.0	157.5	132.2	113.4	102.9
60°	331.8	294.0	258.2	218.4	201.6	180.6	144.9	115.5	90.2	73.5	60.9
62.5°	294.0	260.4	222.6	186.9	170.1	149.1	115.5	86.1	63.0	46.2	35.8
65°	266.8	233.1	201.6	165.9	151.2	130.2	98.8	71.4	50.4	35.8	25.2
67.5°	235.2	205.8	174.2	144.9	130.2	113.4	84.0	60.9	42.0	29.4	21.0
70°	197.4	174.2	147.0	119.8	109.2	94.5	69.2	50.4	33.6	23.1	16.8
72.5°	157.5	138.6	117.6	96.6	88.2	73.5	56.8	39.9	25.2	16.8	12.6
75°	119.8	105.0	88.2	73.5	65.1	56.8	42.0	29.4	18.9	12.6	8.4
77.5°	81.9	75.6	63.0	50.4	46.2	39.9	27.2	18.9	12.6	8.4	4.2
80°	56.8	50.4	42.0	33.6	29.4	25.2	16.8	12.6	6.2	4.2	2.1
82.5°	35.8	29.4	25.2	21.0	18.9	14.8	10.5	6.2	4.2	2.1	2.1
85°	18.9	16.8	14.8	10.5	10.5	8.4	6.2	4.2	2.1	0.0	0.0
87.5°	10.5	8.4	6.2	4.2	4.2	2.1	2.1	2.1	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°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2209.1	2209.1	2207.0	2232.2	2202.9	2232.2	2217.5	2232.2	2211.2	2209.1	2211.2
5°	2225.9	2232.2	2234.4	2257.4	2230.1	2265.9	2253.2	2265.9	2251.1	2255.4	2261.6
7.5°	2259.5	2270.0	2267.9	2297.4	2270.0	2309.9	2301.5	2320.4	2305.8	2309.9	2318.4
10°	2297.4	2309.9	2312.0	2341.4	2316.2	2364.5	2354.0	2375.0	2362.4	2368.8	2379.2
12.5°	2341.4	2356.1	2358.2	2391.9	2364.5	2414.9	2408.6	2429.6	2419.1	2425.4	2438.0
15°	2375.0	2396.0	2400.2	2433.9	2404.4	2456.9	2452.8	2480.0	2463.2	2473.8	2484.2
17.5°	2391.9	2410.8	2419.1	2450.6	2425.4	2477.9	2473.8	2496.8	2484.2	2494.8	2507.2
20°	2381.4	2404.4	2410.8	2442.2	2417.0	2469.5	2463.2	2486.2	2473.8	2482.1	2494.8
22.5°	2343.5	2366.6	2375.0	2404.4	2381.4	2429.6	2427.5	2448.5	2431.8	2442.2	2452.8
25°	2276.4	2301.5	2305.8	2333.0	2307.9	2358.2	2354.0	2377.1	2364.5	2370.9	2385.5
27.5°	2179.8	2209.1	2215.4	2238.5	2219.6	2261.6	2261.6	2280.5	2265.9	2265.9	2280.5
30°	2064.2	2093.6	2097.9	2116.8	2099.9	2137.8	2139.9	2158.8	2135.6	2148.2	2150.4
32.5°	1923.5	1942.4	1955.0	1971.9	1946.6	1994.9	1988.6	2003.4	1990.8	1990.8	2001.2
35°	1753.5	1776.5	1782.9	1803.9	1782.9	1820.6	1820.6	1829.0	1816.4	1816.4	1833.2
37.5°	1568.6	1585.5	1587.5	1608.5	1591.8	1623.2	1621.1	1627.5	1614.9	1623.2	1623.2
40°	1352.4	1365.0	1369.1	1379.6	1377.5	1400.6	1398.5	1402.8	1396.5	1398.5	1402.8
42.5°	1100.4	1117.1	1125.5	1134.0	1121.4	1152.9	1146.5	1152.9	1150.8	1152.9	1159.1
45°	810.6	823.1	829.5	831.6	827.4	846.2	861.0	848.4	850.5	846.2	854.6
47.5°	585.9	588.0	583.8	596.4	585.9	594.2	598.5	600.6	588.0	585.9	594.2
50°	401.1	411.6	396.9	403.1	401.1	409.5	405.2	407.4	394.8	401.1	396.9
52.5°	266.8	264.6	260.4	262.5	258.2	258.2	258.2	262.5	254.1	249.9	245.8
55°	161.8	157.5	149.1	147.0	147.0	149.1	144.9	140.8	140.8	138.6	138.6
57.5°	94.5	88.2	84.0	81.9	77.8	75.6	73.5	73.5	69.2	69.2	69.2
60°	52.5	46.2	42.0	37.8	37.8	35.8	33.6	31.5	31.5	31.5	29.4
62.5°	27.2	23.1	18.9	16.8	16.8	14.8	12.6	12.6	12.6	12.6	10.5
65°	18.9	14.8	12.6	10.5	10.5	8.4	8.4	8.4	8.4	8.4	8.4
67.5°	14.8	12.6	10.5	8.4	8.4	8.4	6.2	6.2	6.2	6.2	6.2
70°	12.6	8.4	8.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
72.5°	8.4	8.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
75°	6.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0
80°	2.1	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: P252174

CATALOG NUMBER: LE\_6B30D010 EC6B30509030 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5	2196.5
2.5°	2230.1	2228.0	2230.1	2234.4	2225.9	2251.1	2238.5	2251.1
5°	2278.4	2280.5	2282.6	2288.9	2278.4	2309.9	2293.1	2312.0
7.5°	2341.4	2343.5	2345.6	2351.9	2345.6	2377.1	2358.2	2375.0
10°	2406.5	2410.8	2410.8	2421.2	2414.9	2444.4	2431.8	2452.8
12.5°	2467.4	2471.6	2475.8	2482.1	2477.9	2509.4	2498.9	2515.8
15°	2515.8	2524.1	2526.2	2534.6	2530.4	2564.0	2551.4	2568.2
17.5°	2538.8	2547.2	2547.2	2557.8	2553.5	2589.2	2572.4	2591.2
20°	2526.2	2532.5	2534.6	2545.1	2540.9	2576.6	2559.8	2582.9
22.5°	2486.2	2488.4	2490.5	2501.0	2498.9	2530.4	2515.8	2530.4
25°	2412.9	2419.1	2417.0	2425.4	2425.4	2450.6	2433.9	2446.4
27.5°	2307.9	2314.1	2314.1	2324.6	2316.2	2341.4	2324.6	2343.5
30°	2179.8	2186.0	2181.9	2190.2	2181.9	2207.0	2194.4	2200.8
32.5°	2026.4	2026.4	2028.5	2030.6	2026.4	2049.5	2036.9	2049.5
35°	1843.8	1847.9	1850.0	1852.1	1847.9	1864.8	1850.0	1858.4
37.5°	1638.0	1648.5	1646.4	1648.5	1642.1	1663.1	1650.5	1654.8
40°	1417.5	1417.5	1415.4	1419.5	1413.2	1430.0	1421.6	1425.9
42.5°	1161.2	1167.5	1159.1	1169.6	1152.9	1176.0	1167.5	1161.2
45°	871.5	863.1	861.0	863.1	856.8	858.9	865.1	861.0
47.5°	594.2	594.2	590.1	583.8	592.1	594.2	585.9	585.9
50°	399.0	399.0	394.8	392.6	396.9	394.8	390.6	396.9
52.5°	254.1	245.8	245.8	249.9	245.8	241.5	247.8	243.6
55°	138.6	134.4	134.4	138.6	134.4	134.4	132.2	136.5
57.5°	67.2	69.2	67.2	67.2	67.2	67.2	65.1	67.2
60°	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
62.5°	12.6	12.6	10.5	10.5	10.5	10.5	10.5	10.5
65°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
67.5°	6.2	6.2	6.2	6.2	6.2	8.4	6.2	6.2
70°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
72.5°	6.2	6.2	8.4	8.4	8.4	8.4	8.4	8.4
75°	4.2	4.2	4.2	2.1	2.1	2.1	2.1	2.1
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)