

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: P252601

Luminaire Tested: **LE\_6B40D010 EC6B30509024 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252601  
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: PORTFOLIO  
Catalog Number: LE\_6B40D010 EC6B30509024 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE 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: 3761.2 lumens  
Efficiency: N/A  
Efficacy: 87.5 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

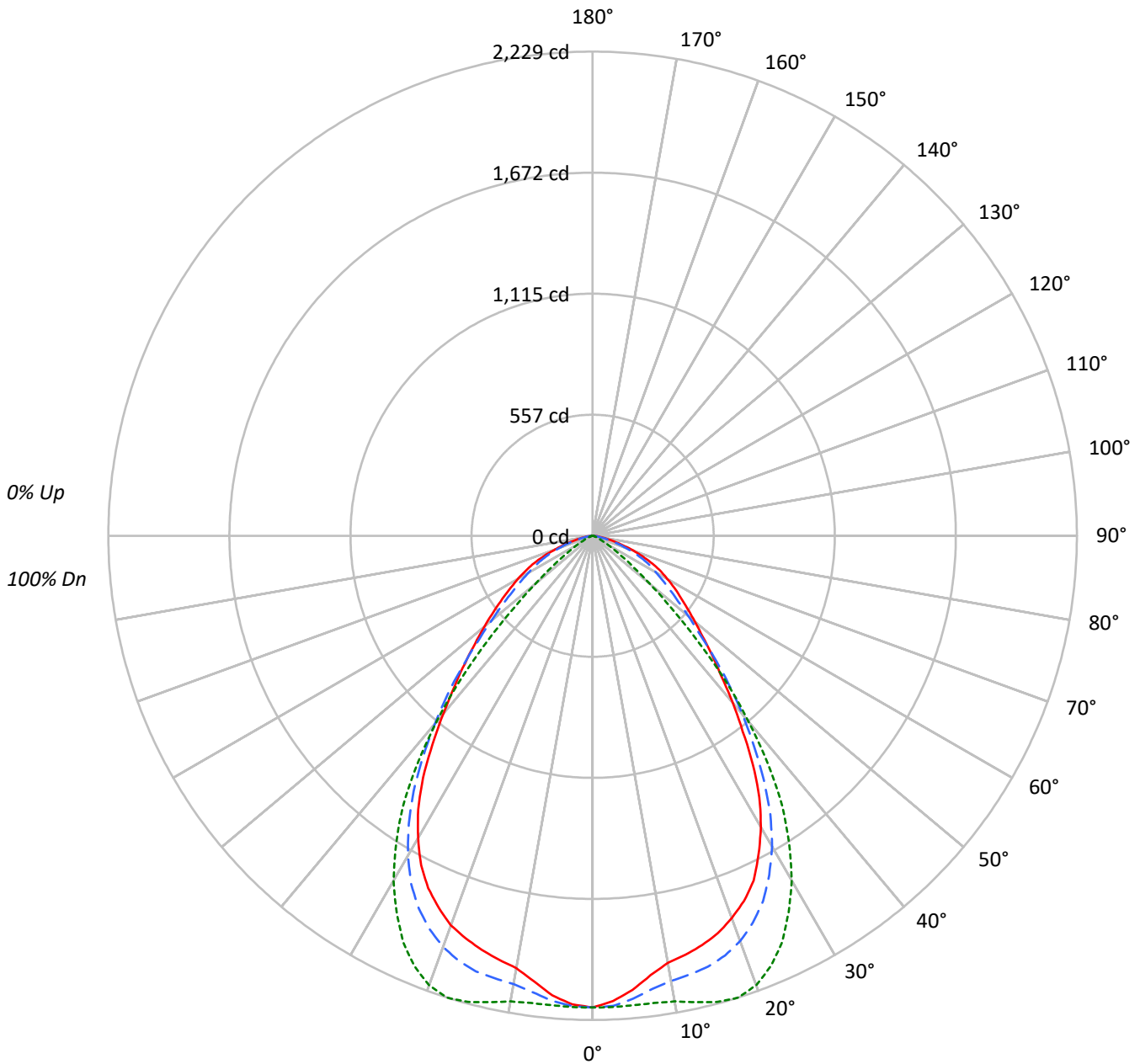
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	141670	141670	141670
5°	137450	142047	139094
10°	132223	144193	133879
15°	131748	150065	133274
20°	130024	152852	132468
25°	126132	148548	128853
30°	116691	138056	121046
35°	102375	121370	108364
40°	85302	95138	90872
45°	71800	62777	76672
50°	62167	34397	65993
55°	56258	18267	57679
60°	51749	9499	51749
65°	46898	5033	45725
70°	37845	2880	34946
75°	25938	1891	24048
80°	16982	939	15066
85°	11303	1871	9357



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.5	5.4
10°-20°	585.5	15.6
20°-30°	865.1	23.0
30°-40°	873.8	23.2
40°-50°	602.3	16.0
50°-60°	345.9	9.2
60°-70°	201.3	5.4
70°-80°	73.4	2.0
80°-90°	11.2	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°	1653.2	44.0
0°-40°	2527.0	67.2
0°-60°	3475.2	92.4
0°-90°	3761.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.2	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2172	2172	2172	2172	2172	
5°	2099	2139	2169	2149	2124	197
15°	1951	2054	2222	2076	1973	550
25°	1752	1855	2064	1893	1790	798
35°	1285	1373	1524	1436	1361	798
45°	778	788	680	838	831	605
55°	495	434	161	452	507	445
65°	304	256	33	254	296	297
75°	103	83	8	80	95	116
85°	15	8	2	10	12	19
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°	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5
2.5°	2144.0	2146.5	2149.0	2146.5	2149.0	2159.0	2151.5	2156.5	2156.5	2159.0	2166.5
5°	2098.8	2098.8	2103.8	2101.2	2108.8	2118.9	2111.2	2118.9	2121.4	2126.4	2138.9
7.5°	2041.0	2041.0	2043.5	2043.5	2053.6	2063.6	2058.6	2068.6	2078.6	2088.8	2103.8
10°	1995.9	2000.9	2000.9	2003.4	2013.4	2026.0	2023.5	2036.0	2046.0	2061.1	2081.1
12.5°	1975.8	1978.2	1978.2	1983.2	1993.4	2005.9	2003.4	2015.9	2031.0	2048.5	2068.6
15°	1950.6	1955.6	1953.1	1958.1	1968.2	1980.8	1978.2	1990.8	2008.4	2026.0	2053.6
17.5°	1918.0	1920.5	1923.0	1923.0	1933.0	1943.1	1943.1	1955.6	1975.8	1995.9	2026.0
20°	1872.8	1877.9	1877.9	1880.4	1887.9	1902.9	1900.4	1913.0	1933.0	1953.1	1985.8
22.5°	1820.1	1822.6	1822.6	1825.1	1837.6	1845.2	1847.8	1857.8	1875.4	1897.9	1928.0
25°	1752.2	1754.9	1752.2	1759.9	1764.9	1779.9	1774.9	1787.5	1807.5	1825.1	1855.2
27.5°	1654.4	1659.4	1659.4	1661.9	1674.5	1687.0	1687.0	1699.6	1717.1	1729.8	1759.9
30°	1549.0	1556.5	1549.0	1561.5	1566.5	1576.6	1584.1	1591.6	1606.8	1624.2	1651.9
32.5°	1428.5	1426.0	1428.5	1433.5	1448.5	1456.1	1461.1	1468.6	1483.8	1498.8	1521.4
35°	1285.4	1290.4	1292.9	1302.9	1302.9	1315.5	1318.0	1323.0	1345.6	1355.6	1373.2
37.5°	1134.8	1139.8	1142.2	1147.2	1157.4	1162.4	1169.9	1177.4	1192.5	1210.0	1220.1
40°	1001.6	1001.6	1004.2	1009.2	1016.8	1019.2	1026.8	1036.9	1046.9	1061.9	1072.0
42.5°	876.1	878.6	876.1	881.1	888.8	898.8	896.2	908.8	911.2	921.4	928.9
45°	778.2	778.2	773.2	778.2	778.2	788.2	785.8	790.8	788.2	793.2	788.2
47.5°	685.4	687.9	685.4	687.9	687.9	687.9	690.4	685.4	687.9	680.4	665.2
50°	612.5	615.1	610.0	612.5	610.0	607.5	610.0	602.5	600.0	590.0	574.9
52.5°	549.8	547.2	544.8	544.8	544.8	542.2	539.8	532.2	524.8	514.6	497.1
55°	494.6	492.0	489.5	489.5	484.5	482.0	482.0	474.5	467.0	454.4	434.2
57.5°	444.4	441.9	439.4	439.4	436.9	431.8	431.8	424.2	414.2	399.1	381.6
60°	396.6	396.6	396.6	394.1	394.1	389.1	389.1	381.6	371.5	356.5	336.4
62.5°	354.0	351.5	351.5	351.5	351.5	349.0	346.5	341.4	331.4	316.4	298.8
65°	303.8	303.8	303.8	303.8	301.2	301.2	301.2	293.8	288.8	273.6	256.1
67.5°	248.5	248.5	248.5	248.5	246.0	248.5	248.5	243.5	238.5	223.4	208.4
70°	198.4	195.9	193.2	195.9	193.2	193.2	195.9	190.8	188.2	175.8	160.6
72.5°	145.6	148.1	145.6	145.6	145.6	143.1	145.6	143.1	138.1	128.0	118.0
75°	102.9	105.5	105.5	102.9	102.9	102.9	100.4	100.4	95.4	87.9	82.9
77.5°	70.2	70.2	70.2	70.2	67.8	67.8	67.8	65.2	62.8	57.8	52.8
80°	45.2	45.2	45.2	45.2	42.6	42.6	42.6	40.1	40.1	35.1	30.1
82.5°	27.6	27.6	27.6	27.6	27.6	27.6	25.1	25.1	22.6	20.1	17.6
85°	15.1	15.1	15.1	15.1	15.1	15.1	15.1	12.5	12.5	10.0	7.5
87.5°	5.0	5.0	7.5	7.5	7.5	7.5	7.5	7.5	5.0	5.0	5.0
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5
2.5°	2161.5	2164.0	2164.0	2164.0	2171.5	2174.1	2166.5	2159.0	2174.1	2171.5	2176.6
5°	2136.4	2144.0	2149.0	2151.5	2159.0	2164.0	2156.5	2154.0	2166.5	2169.0	2171.5
7.5°	2106.2	2118.9	2131.4	2136.4	2146.5	2151.5	2149.0	2149.0	2164.0	2169.0	2169.0
10°	2086.2	2103.8	2118.9	2131.4	2144.0	2151.5	2151.5	2154.0	2171.5	2176.6	2181.6
12.5°	2081.1	2103.8	2123.9	2141.4	2151.5	2164.0	2166.5	2174.1	2191.6	2199.1	2199.1
15°	2068.6	2098.8	2123.9	2146.5	2161.5	2176.6	2181.6	2196.6	2216.8	2221.8	2226.8
17.5°	2046.0	2076.1	2106.2	2133.9	2154.0	2166.5	2181.6	2196.6	2221.8	2229.2	2231.8
20°	2005.9	2041.0	2071.1	2098.8	2118.9	2136.4	2151.5	2169.0	2191.6	2201.6	2204.2
22.5°	1945.6	1980.8	2010.9	2041.0	2061.1	2076.1	2091.2	2111.2	2133.9	2144.0	2144.0
25°	1872.8	1905.5	1938.1	1960.6	1980.8	1998.4	2005.9	2028.5	2051.0	2063.6	2063.6
27.5°	1779.9	1810.0	1840.1	1865.2	1877.9	1892.9	1905.5	1925.5	1943.1	1953.1	1963.2
30°	1661.9	1692.0	1719.6	1744.8	1759.9	1774.9	1787.5	1802.5	1820.1	1832.6	1835.1
32.5°	1533.9	1559.0	1586.6	1611.8	1626.8	1631.8	1644.4	1659.4	1674.5	1684.5	1687.0
35°	1393.2	1410.9	1428.5	1451.0	1466.1	1466.1	1478.6	1488.8	1501.2	1523.9	1518.9
37.5°	1227.6	1252.8	1265.2	1272.8	1282.9	1292.9	1295.4	1308.0	1323.0	1328.0	1335.6
40°	1072.0	1079.5	1087.0	1087.0	1097.1	1097.1	1097.1	1099.6	1114.6	1117.1	1127.2
42.5°	916.4	916.4	908.8	901.2	903.8	901.2	888.8	888.8	896.2	906.2	906.2
45°	770.8	753.1	730.5	713.0	700.4	695.4	680.4	680.4	677.9	680.4	690.4
47.5°	647.8	617.6	579.9	544.8	532.2	522.1	499.6	489.5	484.5	487.0	492.0
50°	544.8	512.1	469.5	426.8	404.1	391.6	364.0	346.5	343.9	338.9	349.0
52.5°	469.5	429.2	384.1	333.9	311.2	291.2	261.1	246.0	236.0	236.0	238.5
55°	404.1	361.5	311.2	261.1	238.5	223.4	193.2	173.2	163.1	160.6	168.2
57.5°	349.0	308.8	258.6	208.4	185.8	168.2	138.1	120.5	113.0	108.0	110.5
60°	306.2	266.1	215.9	168.2	148.1	128.0	102.9	82.9	72.8	72.8	75.4
62.5°	266.1	228.5	183.2	138.1	120.5	102.9	75.4	57.8	50.2	47.8	50.2
65°	226.0	190.8	153.1	115.5	97.9	82.9	60.2	45.2	35.1	32.6	35.1
67.5°	183.2	155.6	123.0	92.9	77.9	65.2	45.2	32.6	25.1	22.6	25.1
70°	143.1	118.0	92.9	67.8	57.8	47.8	32.6	25.1	17.6	15.1	17.6
72.5°	102.9	85.4	65.2	47.8	40.1	32.6	22.6	17.6	12.5	10.0	12.5
75°	70.2	57.8	42.6	30.1	25.1	22.6	15.1	10.0	7.5	7.5	7.5
77.5°	45.2	35.1	27.6	20.1	15.1	12.5	7.5	5.0	5.0	5.0	5.0
80°	25.1	20.1	15.1	10.0	7.5	7.5	5.0	5.0	2.5	2.5	2.5
82.5°	15.1	10.0	7.5	5.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5
85°	7.5	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
87.5°	2.5	2.5	2.5	2.5	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°	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5
2.5°	2166.5	2169.0	2161.5	2171.5	2164.0	2174.1	2174.1	2164.0	2166.5	2161.5	2171.5
5°	2161.5	2161.5	2156.5	2164.0	2154.0	2164.0	2161.5	2144.0	2149.0	2138.9	2149.0
7.5°	2161.5	2156.5	2149.0	2156.5	2144.0	2151.5	2141.4	2123.9	2118.9	2106.2	2106.2
10°	2169.0	2161.5	2151.5	2154.0	2141.4	2144.0	2128.9	2103.8	2096.2	2081.1	2076.1
12.5°	2186.6	2179.1	2164.0	2169.0	2151.5	2151.5	2131.4	2101.2	2086.2	2066.1	2061.1
15°	2211.8	2199.1	2181.6	2184.1	2166.5	2156.5	2131.4	2096.2	2076.1	2048.5	2041.0
17.5°	2216.8	2204.2	2181.6	2181.6	2159.0	2146.5	2116.4	2076.1	2051.0	2023.5	2008.4
20°	2189.1	2176.6	2151.5	2149.0	2128.9	2111.2	2078.6	2038.5	2013.4	1983.2	1970.8
22.5°	2131.4	2116.4	2093.8	2091.2	2071.1	2061.1	2026.0	1985.8	1960.6	1930.5	1920.5
25°	2046.0	2038.5	2015.9	2013.4	1995.9	1983.2	1953.1	1915.5	1892.9	1862.8	1852.8
27.5°	1945.6	1938.1	1915.5	1915.5	1895.4	1887.9	1860.2	1825.1	1807.5	1779.9	1767.4
30°	1825.1	1815.1	1802.5	1800.0	1782.4	1774.9	1749.8	1717.1	1699.6	1677.0	1672.0
32.5°	1682.0	1674.5	1667.0	1664.5	1646.9	1639.4	1621.8	1589.1	1574.1	1554.0	1546.5
35°	1516.4	1511.2	1503.8	1501.2	1493.8	1486.2	1468.6	1443.5	1436.0	1420.9	1413.4
37.5°	1325.5	1330.5	1325.5	1325.5	1318.0	1320.5	1305.5	1290.4	1282.9	1272.8	1267.8
40°	1119.6	1129.8	1137.2	1137.2	1134.8	1144.8	1142.2	1129.8	1127.2	1122.1	1119.6
42.5°	911.2	916.4	931.4	941.4	938.9	964.0	966.5	976.6	984.1	979.1	981.6
45°	692.9	708.0	728.0	738.1	750.6	783.2	800.9	820.9	838.5	848.5	846.0
47.5°	499.6	517.1	539.8	554.9	577.4	617.6	662.8	687.9	713.0	725.5	738.1
50°	361.5	379.1	406.8	429.2	444.4	499.6	547.2	579.9	607.5	625.1	637.6
52.5°	253.5	273.6	303.8	323.9	346.5	399.1	454.4	492.0	522.1	544.8	557.4
55°	175.8	198.4	226.0	246.0	271.1	326.4	379.1	419.2	451.9	472.0	487.0
57.5°	123.0	143.1	170.8	188.2	213.4	266.1	318.9	359.0	391.6	411.8	429.2
60°	82.9	102.9	130.5	148.1	168.2	220.9	268.6	311.2	341.4	361.5	379.1
62.5°	57.8	75.4	102.9	120.5	138.1	183.2	228.5	266.1	296.2	318.9	333.9
65°	45.2	60.2	82.9	97.9	115.5	153.1	190.8	223.4	253.5	276.1	286.2
67.5°	32.6	47.8	65.2	77.9	90.4	123.0	155.6	180.8	208.4	226.0	238.5
70°	22.6	32.6	47.8	57.8	67.8	92.9	118.0	140.6	160.6	173.2	183.2
72.5°	17.6	22.6	32.6	40.1	47.8	65.2	85.4	102.9	118.0	128.0	138.1
75°	10.0	15.1	22.6	27.6	32.6	45.2	57.8	70.2	80.4	87.9	92.9
77.5°	5.0	7.5	12.5	15.1	20.1	27.6	37.6	45.2	52.8	57.8	62.8
80°	5.0	5.0	7.5	7.5	10.0	15.1	20.1	25.1	30.1	35.1	37.6
82.5°	2.5	2.5	5.0	5.0	5.0	7.5	10.0	15.1	17.6	20.1	22.6
85°	2.5	2.5	2.5	2.5	2.5	5.0	5.0	7.5	10.0	12.5	12.5
87.5°	0.0	0.0	2.5	2.5	2.5	2.5	2.5	5.0	5.0	5.0	7.5
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: P252601

CATALOG NUMBER: LE\_6B40D010 EC6B30509024 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5	2171.5
2.5°	2164.0	2169.0	2166.5	2171.5	2164.0	2161.5	2166.5	2159.0
5°	2136.4	2138.9	2136.4	2136.4	2131.4	2126.4	2131.4	2123.9
7.5°	2093.8	2093.8	2086.2	2086.2	2076.1	2071.1	2071.1	2068.6
10°	2058.6	2051.0	2043.5	2046.0	2031.0	2026.0	2023.5	2020.9
12.5°	2041.0	2036.0	2023.5	2023.5	2008.4	2003.4	2000.9	1998.4
15°	2020.9	2010.9	2000.9	1998.4	1985.8	1980.8	1978.2	1973.2
17.5°	1985.8	1978.2	1965.8	1965.8	1953.1	1950.6	1945.6	1943.1
20°	1948.1	1938.1	1928.0	1928.0	1913.0	1913.0	1905.5	1908.0
22.5°	1895.4	1887.9	1877.9	1877.9	1865.2	1862.8	1855.2	1852.8
25°	1832.6	1822.6	1815.1	1812.5	1802.5	1797.5	1795.0	1790.0
27.5°	1749.8	1742.2	1734.8	1729.8	1717.1	1714.6	1707.1	1709.6
30°	1646.9	1641.9	1639.4	1634.4	1619.2	1614.2	1614.2	1606.8
32.5°	1533.9	1526.4	1521.4	1513.9	1501.2	1498.8	1491.2	1493.8
35°	1395.9	1385.8	1378.2	1380.8	1365.8	1363.1	1358.1	1360.6
37.5°	1252.8	1242.6	1232.6	1230.1	1217.6	1217.6	1210.0	1210.0
40°	1104.6	1094.6	1089.5	1089.5	1074.5	1077.0	1069.5	1067.0
42.5°	971.5	961.5	959.0	956.5	949.0	946.5	938.9	941.4
45°	846.0	843.5	843.5	838.5	831.0	828.5	831.0	831.0
47.5°	735.6	738.1	735.6	735.6	730.5	735.6	730.5	733.0
50°	642.6	647.8	647.8	647.8	645.2	647.8	647.8	650.2
52.5°	564.9	572.4	569.9	572.4	569.9	574.9	572.4	574.9
55°	497.1	502.1	504.6	507.1	507.1	507.1	507.1	507.1
57.5°	434.2	441.9	444.4	446.9	446.9	451.9	446.9	446.9
60°	384.1	391.6	394.1	396.6	396.6	399.1	394.1	396.6
62.5°	338.9	346.5	346.5	349.0	349.0	349.0	343.9	346.5
65°	293.8	296.2	298.8	298.8	296.2	296.2	293.8	296.2
67.5°	243.5	246.0	243.5	243.5	241.0	241.0	236.0	238.5
70°	188.2	188.2	190.8	188.2	185.8	188.2	185.8	183.2
72.5°	140.6	140.6	140.6	138.1	138.1	135.6	138.1	138.1
75°	95.4	95.4	97.9	97.9	97.9	97.9	95.4	95.4
77.5°	62.8	62.8	62.8	62.8	65.2	62.8	62.8	62.8
80°	40.1	40.1	42.6	42.6	40.1	40.1	40.1	40.1
82.5°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
85°	15.1	15.1	15.1	15.1	12.5	12.5	12.5	12.5
87.5°	7.5	7.5	7.5	7.5	7.5	7.5	5.0	5.0
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)