

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: P252607

Luminaire Tested: **LE\_6B40D010 EC6B30509727 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252607  
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 EC6B30509727 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE 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: 3717.5 lumens  
Efficiency: N/A  
Efficacy: 86.5 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

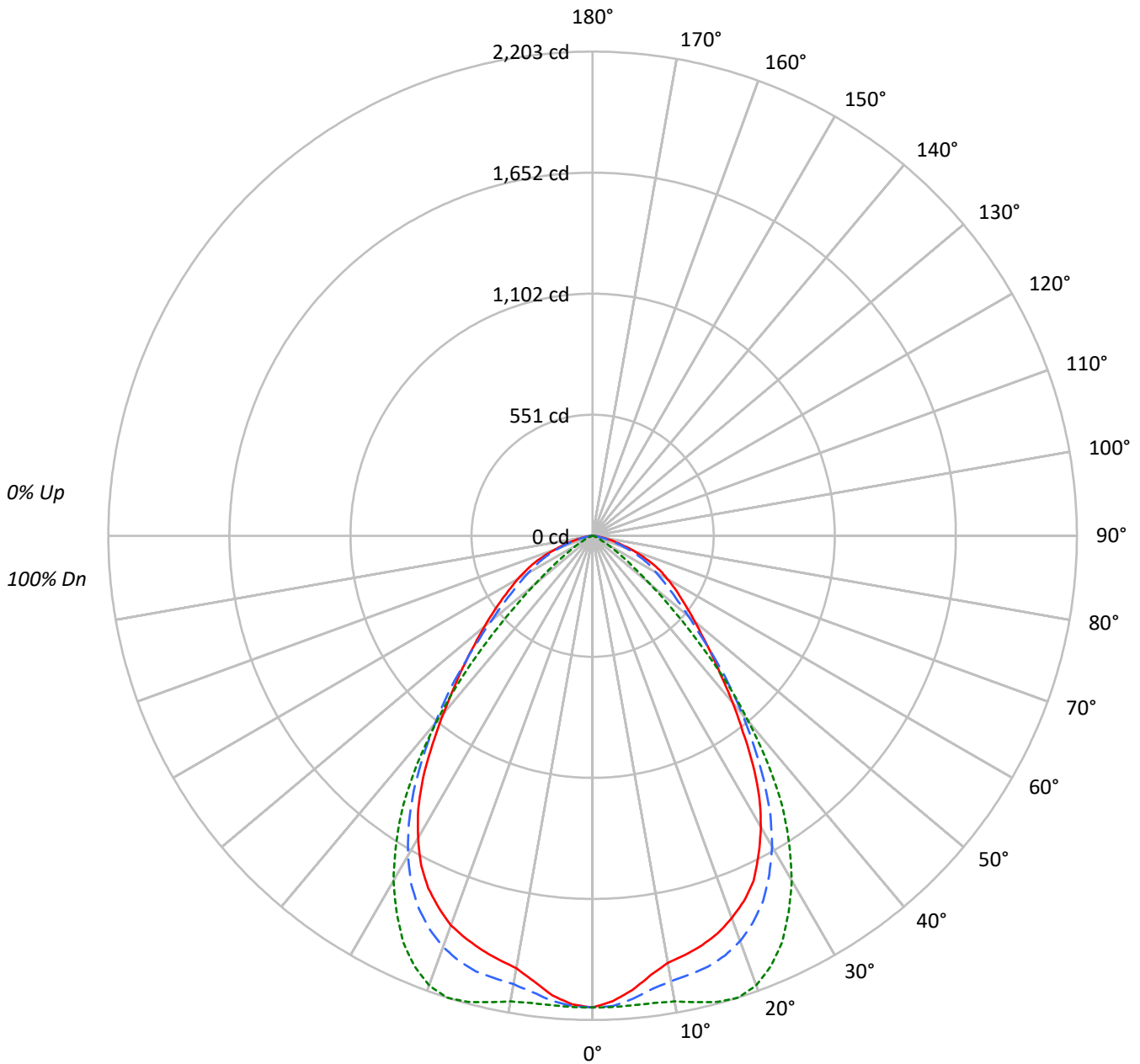
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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								
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89								
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79								
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70								
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62								
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56								
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50								
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46								
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42								
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38								
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35								

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

	0°	90°	180°
0°	140019	140019	140019
5°	135852	140404	137470
10°	130679	142511	132322
15°	130221	148316	131721
20°	128511	151081	130927
25°	124671	146821	127349
30°	115335	136459	119629
35°	101180	119952	107113
40°	84314	94031	89807
45°	70970	62038	75767
50°	61446	34001	65222
55°	55598	18062	57008
60°	51149	9395	51149
65°	46343	4971	45200
70°	37387	2842	34545
75°	25661	1891	23745
80°	16756	939	14953
85°	11153	1871	9282



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.1	5.4
10°-20°	578.7	15.6
20°-30°	855.1	23.0
30°-40°	863.7	23.2
40°-50°	595.3	16.0
50°-60°	341.9	9.2
60°-70°	199.0	5.4
70°-80°	72.6	2.0
80°-90°	11.1	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°	1633.9	44.0
0°-40°	2497.6	67.2
0°-60°	3434.8	92.4
0°-90°	3717.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3717.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2146	2146	2146	2146	2146	
5°	2074	2114	2144	2124	2099	195
15°	1928	2030	2196	2052	1950	543
25°	1732	1834	2040	1871	1769	789
35°	1270	1357	1506	1419	1345	789
45°	769	779	672	829	821	598
55°	489	429	159	447	501	440
65°	300	253	32	251	293	294
75°	102	82	8	79	94	115
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°	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2
2.5°	2119.0	2121.5	2124.0	2121.5	2124.0	2133.9	2126.5	2131.4	2131.4	2133.9	2141.4
5°	2074.4	2074.4	2079.2	2076.9	2084.2	2094.2	2086.8	2094.2	2096.6	2101.6	2114.0
7.5°	2017.2	2017.2	2019.8	2019.8	2029.6	2039.6	2034.6	2044.6	2054.5	2064.4	2079.2
10°	1972.6	1977.6	1977.6	1980.0	1990.0	2002.4	1999.9	2012.2	2022.2	2037.1	2057.0
12.5°	1952.8	1955.2	1955.2	1960.2	1970.1	1982.5	1980.0	1992.5	2007.4	2024.8	2044.6
15°	1928.0	1932.9	1930.4	1935.4	1945.4	1957.8	1955.2	1967.6	1985.0	2002.4	2029.6
17.5°	1895.8	1898.1	1900.6	1900.6	1910.6	1920.5	1920.5	1932.9	1952.8	1972.6	2002.4
20°	1851.0	1856.0	1856.0	1858.5	1865.9	1880.8	1878.4	1890.8	1910.6	1930.4	1962.6
22.5°	1798.9	1801.4	1801.4	1803.9	1816.2	1823.8	1826.2	1836.1	1853.5	1875.9	1905.6
25°	1731.9	1734.4	1731.9	1739.4	1744.4	1759.2	1754.2	1766.6	1786.5	1803.9	1833.6
27.5°	1635.1	1640.1	1640.1	1642.6	1655.0	1667.4	1667.4	1679.9	1697.2	1709.6	1739.4
30°	1531.0	1538.4	1531.0	1543.4	1548.2	1558.2	1565.6	1573.1	1588.0	1605.4	1632.6
32.5°	1411.9	1409.4	1411.9	1416.8	1431.8	1439.1	1444.1	1451.5	1466.4	1481.4	1503.6
35°	1270.4	1275.4	1277.9	1287.8	1287.8	1300.1	1302.6	1307.6	1330.0	1339.9	1357.2
37.5°	1121.5	1126.5	1129.0	1134.0	1143.9	1148.9	1156.2	1163.8	1178.6	1196.0	1205.9
40°	990.0	990.0	992.5	997.5	1004.9	1007.4	1014.9	1024.8	1034.8	1049.6	1059.5
42.5°	866.0	868.5	866.0	870.9	878.4	888.2	885.9	898.2	900.8	910.6	918.1
45°	769.2	769.2	764.2	769.2	769.2	779.1	776.6	781.6	779.1	784.1	779.1
47.5°	677.4	679.9	677.4	679.9	679.9	679.9	682.4	677.4	679.9	672.4	657.5
50°	605.4	607.9	603.0	605.4	603.0	600.5	603.0	595.5	593.0	583.1	568.2
52.5°	543.4	540.9	538.4	538.4	538.4	536.0	533.5	526.0	518.6	508.6	491.2
55°	488.8	486.4	483.9	483.9	478.9	476.4	476.4	469.0	461.5	449.1	429.2
57.5°	439.1	436.8	434.2	434.2	431.8	426.8	426.8	419.4	409.4	394.5	377.1
60°	392.0	392.0	392.0	389.5	389.5	384.6	384.6	377.1	367.2	352.4	332.5
62.5°	349.9	347.4	347.4	347.4	347.4	344.9	342.4	337.5	327.5	312.6	295.2
65°	300.2	300.2	300.2	300.2	297.8	297.8	297.8	290.2	285.4	270.5	253.1
67.5°	245.6	245.6	245.6	245.6	243.1	245.6	245.6	240.6	235.8	220.9	206.0
70°	196.0	193.5	191.0	193.5	191.0	191.0	193.5	188.6	186.1	173.8	158.8
72.5°	143.9	146.4	143.9	143.9	143.9	141.4	143.9	141.4	136.5	126.5	116.6
75°	101.8	104.2	104.2	101.8	101.8	101.8	99.2	99.2	94.2	86.9	81.9
77.5°	69.5	69.5	69.5	69.5	67.0	67.0	67.0	64.5	62.0	57.1	52.1
80°	44.6	44.6	44.6	44.6	42.1	42.1	42.1	39.8	39.8	34.8	29.8
82.5°	27.2	27.2	27.2	27.2	27.2	27.2	24.9	24.9	22.4	19.9	17.4
85°	14.9	14.9	14.9	14.9	14.9	14.9	14.9	12.4	12.4	9.9	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°	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2
2.5°	2136.4	2138.9	2138.9	2138.9	2146.2	2148.8	2141.4	2133.9	2148.8	2146.2	2151.2
5°	2111.5	2119.0	2124.0	2126.5	2133.9	2138.9	2131.4	2128.9	2141.4	2143.9	2146.2
7.5°	2081.8	2094.2	2106.6	2111.5	2121.5	2126.5	2124.0	2124.0	2138.9	2143.9	2143.9
10°	2061.9	2079.2	2094.2	2106.6	2119.0	2126.5	2126.5	2128.9	2146.2	2151.2	2156.2
12.5°	2057.0	2079.2	2099.1	2116.5	2126.5	2138.9	2141.4	2148.8	2166.1	2173.6	2173.6
15°	2044.6	2074.4	2099.1	2121.5	2136.4	2151.2	2156.2	2171.1	2191.0	2195.9	2200.9
17.5°	2022.2	2052.0	2081.8	2109.1	2128.9	2141.4	2156.2	2171.1	2195.9	2203.4	2205.9
20°	1982.5	2017.2	2047.0	2074.4	2094.2	2111.5	2126.5	2143.9	2166.1	2176.1	2178.5
22.5°	1923.0	1957.8	1987.5	2017.2	2037.1	2052.0	2066.9	2086.8	2109.1	2119.0	2119.0
25°	1851.0	1883.2	1915.5	1937.9	1957.8	1975.1	1982.5	2004.9	2027.2	2039.6	2039.6
27.5°	1759.2	1789.0	1818.8	1843.6	1856.0	1870.9	1883.2	1903.1	1920.5	1930.4	1940.4
30°	1642.6	1672.4	1699.6	1724.5	1739.4	1754.2	1766.6	1781.5	1798.9	1811.4	1813.8
32.5°	1516.0	1540.9	1568.1	1593.0	1607.9	1612.9	1625.2	1640.1	1655.0	1664.9	1667.4
35°	1377.1	1394.5	1411.9	1434.1	1449.0	1449.0	1461.5	1471.4	1483.8	1506.1	1501.1
37.5°	1213.4	1238.1	1250.5	1258.0	1267.9	1277.9	1280.4	1292.8	1307.6	1312.6	1320.0
40°	1059.5	1067.0	1074.4	1074.4	1084.4	1084.4	1084.4	1086.8	1101.6	1104.1	1114.1
42.5°	905.6	905.6	898.2	890.8	893.2	890.8	878.4	878.4	885.9	895.8	895.8
45°	761.8	744.4	722.0	704.6	692.2	687.2	672.4	672.4	670.0	672.4	682.4
47.5°	640.1	610.4	573.1	538.4	526.0	516.1	493.8	483.9	478.9	481.4	486.4
50°	538.4	506.1	464.0	421.9	399.5	387.1	359.8	342.4	339.9	335.0	344.9
52.5°	464.0	424.2	379.6	330.0	307.6	287.9	258.0	243.1	233.2	233.2	235.8
55°	399.5	357.2	307.6	258.0	235.8	220.9	191.0	171.2	161.2	158.8	166.2
57.5°	344.9	305.2	255.6	206.0	183.6	166.2	136.5	119.1	111.6	106.8	109.1
60°	302.8	263.0	213.4	166.2	146.4	126.5	101.8	81.9	72.0	72.0	74.5
62.5°	263.0	225.8	181.1	136.5	119.1	101.8	74.5	57.1	49.6	47.1	49.6
65°	223.4	188.6	151.4	114.1	96.8	81.9	59.5	44.6	34.8	32.2	34.8
67.5°	181.1	153.9	121.6	91.8	76.9	64.5	44.6	32.2	24.9	22.4	24.9
70°	141.4	116.6	91.8	67.0	57.1	47.1	32.2	24.9	17.4	14.9	17.4
72.5°	101.8	84.4	64.5	47.1	39.8	32.2	22.4	17.4	12.4	9.9	12.4
75°	69.5	57.1	42.1	29.8	24.9	22.4	14.9	9.9	7.5	7.5	7.5
77.5°	44.6	34.8	27.2	19.9	14.9	12.4	7.5	5.0	5.0	5.0	5.0
80°	24.9	19.9	14.9	9.9	7.5	7.5	5.0	5.0	2.5	2.5	2.5
82.5°	14.9	9.9	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°	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2
2.5°	2141.4	2143.9	2136.4	2146.2	2138.9	2148.8	2148.8	2138.9	2141.4	2136.4	2146.2
5°	2136.4	2136.4	2131.4	2138.9	2128.9	2138.9	2136.4	2119.0	2124.0	2114.0	2124.0
7.5°	2136.4	2131.4	2124.0	2131.4	2119.0	2126.5	2116.5	2099.1	2094.2	2081.8	2081.8
10°	2143.9	2136.4	2126.5	2128.9	2116.5	2119.0	2104.1	2079.2	2071.9	2057.0	2052.0
12.5°	2161.1	2153.8	2138.9	2143.9	2126.5	2126.5	2106.6	2076.9	2061.9	2042.1	2037.1
15°	2186.0	2173.6	2156.2	2158.8	2141.4	2131.4	2106.6	2071.9	2052.0	2024.8	2017.2
17.5°	2191.0	2178.5	2156.2	2156.2	2133.9	2121.5	2091.8	2052.0	2027.2	1999.9	1985.0
20°	2163.6	2151.2	2126.5	2124.0	2104.1	2086.8	2054.5	2014.8	1990.0	1960.2	1947.8
22.5°	2106.6	2091.8	2069.4	2066.9	2047.0	2037.1	2002.4	1962.6	1937.9	1908.1	1898.1
25°	2022.2	2014.8	1992.5	1990.0	1972.6	1960.2	1930.4	1893.2	1870.9	1841.1	1831.1
27.5°	1923.0	1915.5	1893.2	1893.2	1873.4	1865.9	1838.6	1803.9	1786.5	1759.2	1746.9
30°	1803.9	1794.0	1781.5	1779.1	1761.8	1754.2	1729.5	1697.2	1679.9	1657.5	1652.5
32.5°	1662.5	1655.0	1647.6	1645.1	1627.8	1620.2	1602.9	1570.6	1555.8	1535.9	1528.5
35°	1498.6	1493.8	1486.2	1483.8	1476.4	1468.9	1451.5	1426.8	1419.2	1404.4	1397.0
37.5°	1310.1	1315.1	1310.1	1310.1	1302.6	1305.1	1290.2	1275.4	1267.9	1258.0	1253.0
40°	1106.6	1116.6	1124.0	1124.0	1121.5	1131.5	1129.0	1116.6	1114.1	1109.1	1106.6
42.5°	900.8	905.6	920.5	930.5	928.0	952.8	955.2	965.2	972.6	967.8	970.1
45°	684.9	699.8	719.6	729.5	741.9	774.1	791.5	811.4	828.8	838.6	836.2
47.5°	493.8	511.1	533.5	548.4	570.8	610.4	655.0	679.9	704.6	717.1	729.5
50°	357.2	374.6	402.0	424.2	439.1	493.8	540.9	573.1	600.5	617.9	630.2
52.5°	250.6	270.5	300.2	320.1	342.4	394.5	449.1	486.4	516.1	538.4	550.9
55°	173.8	196.0	223.4	243.1	268.0	322.6	374.6	414.4	446.6	466.5	481.4
57.5°	121.6	141.4	168.8	186.1	210.9	263.0	315.1	354.9	387.1	406.9	424.2
60°	81.9	101.8	129.0	146.4	166.2	218.4	265.5	307.6	337.5	357.2	374.6
62.5°	57.1	74.5	101.8	119.1	136.5	181.1	225.8	263.0	292.8	315.1	330.0
65°	44.6	59.5	81.9	96.8	114.1	151.4	188.6	220.9	250.6	273.0	282.9
67.5°	32.2	47.1	64.5	76.9	89.4	121.6	153.9	178.6	206.0	223.4	235.8
70°	22.4	32.2	47.1	57.1	67.0	91.8	116.6	139.0	158.8	171.2	181.1
72.5°	17.4	22.4	32.2	39.8	47.1	64.5	84.4	101.8	116.6	126.5	136.5
75°	9.9	14.9	22.4	27.2	32.2	44.6	57.1	69.5	79.4	86.9	91.8
77.5°	5.0	7.5	12.4	14.9	19.9	27.2	37.2	44.6	52.1	57.1	62.0
80°	5.0	5.0	7.5	7.5	9.9	14.9	19.9	24.9	29.8	34.8	37.2
82.5°	2.5	2.5	5.0	5.0	5.0	7.5	9.9	14.9	17.4	19.9	22.4
85°	2.5	2.5	2.5	2.5	2.5	5.0	5.0	7.5	9.9	12.4	12.4
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: P252607

CATALOG NUMBER: LE\_6B40D010 EC6B30509727 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2	2146.2
2.5°	2138.9	2143.9	2141.4	2146.2	2138.9	2136.4	2141.4	2133.9
5°	2111.5	2114.0	2111.5	2111.5	2106.6	2101.6	2106.6	2099.1
7.5°	2069.4	2069.4	2061.9	2061.9	2052.0	2047.0	2047.0	2044.6
10°	2034.6	2027.2	2019.8	2022.2	2007.4	2002.4	1999.9	1997.4
12.5°	2017.2	2012.2	1999.9	1999.9	1985.0	1980.0	1977.6	1975.1
15°	1997.4	1987.5	1977.6	1975.1	1962.6	1957.8	1955.2	1950.2
17.5°	1962.6	1955.2	1942.9	1942.9	1930.4	1928.0	1923.0	1920.5
20°	1925.5	1915.5	1905.6	1905.6	1890.8	1890.8	1883.2	1885.8
22.5°	1873.4	1865.9	1856.0	1856.0	1843.6	1841.1	1833.6	1831.1
25°	1811.4	1801.4	1794.0	1791.5	1781.5	1776.6	1774.1	1769.1
27.5°	1729.5	1722.0	1714.5	1709.6	1697.2	1694.8	1687.2	1689.8
30°	1627.8	1622.8	1620.2	1615.2	1600.4	1595.5	1595.5	1588.0
32.5°	1516.0	1508.6	1503.6	1496.2	1483.8	1481.4	1473.9	1476.4
35°	1379.6	1369.6	1362.2	1364.8	1349.8	1347.4	1342.4	1344.9
37.5°	1238.1	1228.2	1218.2	1215.9	1203.4	1203.4	1196.0	1196.0
40°	1091.8	1081.9	1076.9	1076.9	1062.0	1064.5	1057.0	1054.5
42.5°	960.2	950.4	947.9	945.4	937.9	935.5	928.0	930.5
45°	836.2	833.8	833.8	828.8	821.2	818.9	821.2	821.2
47.5°	727.0	729.5	727.0	727.0	722.0	727.0	722.0	724.5
50°	635.2	640.1	640.1	640.1	637.6	640.1	640.1	642.6
52.5°	558.2	565.8	563.2	565.8	563.2	568.2	565.8	568.2
55°	491.2	496.2	498.8	501.2	501.2	501.2	501.2	501.2
57.5°	429.2	436.8	439.1	441.6	441.6	446.6	441.6	441.6
60°	379.6	387.1	389.5	392.0	392.0	394.5	389.5	392.0
62.5°	335.0	342.4	342.4	344.9	344.9	344.9	339.9	342.4
65°	290.2	292.8	295.2	295.2	292.8	292.8	290.2	292.8
67.5°	240.6	243.1	240.6	240.6	238.2	238.2	233.2	235.8
70°	186.1	186.1	188.6	186.1	183.6	186.1	183.6	181.1
72.5°	139.0	139.0	139.0	136.5	136.5	134.0	136.5	136.5
75°	94.2	94.2	96.8	96.8	96.8	96.8	94.2	94.2
77.5°	62.0	62.0	62.0	62.0	64.5	62.0	62.0	62.0
80°	39.8	39.8	42.1	42.1	39.8	39.8	39.8	39.8
82.5°	24.9	24.9	24.9	24.9	24.9	24.9	24.9	24.9
85°	14.9	14.9	14.9	14.9	12.4	12.4	12.4	12.4
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)