

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: P252289

Luminaire Tested: **LE_6B40D010 EC6B30509024 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252289
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30509024 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3487.5 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

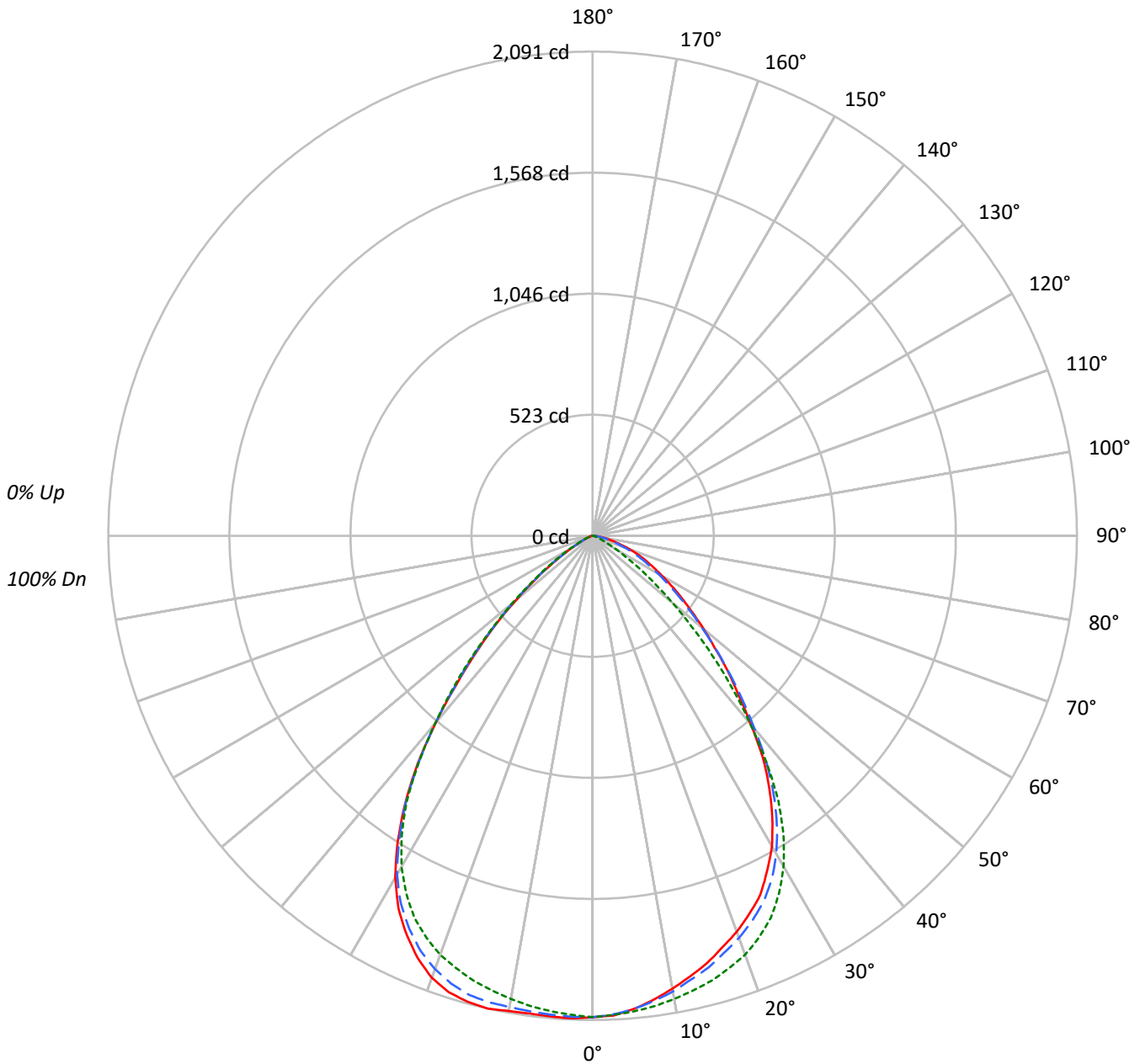
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	135622	135622	135622
5°	134326	134988	136468
10°	131560	134554	138046
15°	129039	134301	140744
20°	126365	133690	141014
25°	123253	131020	136808
30°	116691	124262	128413
35°	105974	111374	112378
40°	90446	90020	89586
45°	75980	67408	65323
50°	63445	45612	43319
55°	53403	27981	25422
60°	45212	14744	12774
65°	39149	7749	6190
70°	32580	4788	3357
75°	24048	3151	1891
80°	18860	1879	939
85°	15046	1871	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.9	5.6
10°-20°	560.9	16.1
20°-30°	828.3	23.8
30°-40°	853.7	24.5
40°-50°	589.6	16.9
50°-60°	290.6	8.3
60°-70°	117.7	3.4
70°-80°	42.0	1.2
80°-90°	8.7	0.2
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°	1585.2	45.5
0°-40°	2438.9	69.9
0°-60°	3319.1	95.2
0°-90°	3487.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3487.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2079	2079	2079	2079	2079	
5°	2051	2051	2061	2076	2084	194
15°	1910	1931	1988	2054	2084	538
25°	1712	1745	1820	1873	1900	783
35°	1331	1363	1398	1406	1411	824
45°	824	828	731	720	708	637
55°	470	452	246	231	224	424
65°	254	228	50	40	40	252
75°	95	80	12	8	8	107
85°	20	15	2	0	0	25
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°	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8
2.5°	2073.8	2066.2	2071.2	2061.2	2073.8	2061.2	2063.8	2066.2	2063.8	2066.2	2068.8
5°	2051.1	2043.6	2051.1	2038.6	2051.1	2043.6	2043.6	2046.1	2046.1	2048.6	2051.1
7.5°	2021.0	2013.5	2021.0	2008.5	2023.5	2016.0	2016.0	2021.0	2018.5	2021.0	2026.0
10°	1985.9	1975.9	1983.4	1975.9	1990.9	1980.9	1985.9	1985.9	1985.9	1993.4	1998.4
12.5°	1948.2	1938.1	1948.2	1935.6	1950.8	1943.2	1945.8	1953.2	1955.8	1960.8	1963.2
15°	1910.5	1898.0	1903.0	1895.5	1910.5	1903.0	1905.5	1915.6	1915.6	1923.1	1930.6
17.5°	1862.9	1852.8	1862.9	1852.8	1865.4	1860.4	1865.4	1872.9	1872.9	1880.4	1888.0
20°	1820.1	1810.1	1817.6	1810.1	1825.2	1817.6	1820.1	1830.2	1832.8	1840.2	1847.8
22.5°	1767.5	1759.9	1765.0	1757.4	1772.5	1767.5	1770.0	1780.0	1782.5	1787.5	1800.1
25°	1712.2	1697.1	1704.6	1699.6	1714.8	1707.2	1712.2	1722.2	1727.2	1734.9	1744.9
27.5°	1631.9	1624.4	1629.4	1629.4	1641.9	1634.4	1636.9	1647.0	1654.5	1662.0	1674.5
30°	1549.0	1536.5	1541.5	1544.0	1554.0	1549.0	1554.0	1564.1	1566.6	1576.6	1586.8
32.5°	1443.6	1438.6	1448.6	1443.6	1448.6	1448.6	1451.1	1458.6	1463.6	1468.8	1481.2
35°	1330.6	1320.6	1330.6	1325.6	1338.1	1330.6	1338.1	1345.6	1345.6	1355.8	1363.2
37.5°	1207.6	1195.0	1200.0	1200.0	1205.1	1202.6	1202.6	1215.1	1217.6	1225.1	1232.8
40°	1062.0	1057.0	1067.0	1064.5	1067.0	1067.0	1069.5	1077.0	1082.0	1084.6	1087.1
42.5°	931.4	934.0	936.5	936.5	936.5	936.5	936.5	946.5	944.0	951.5	954.0
45°	823.5	813.4	818.5	816.0	823.5	816.0	823.5	831.0	826.0	833.5	828.5
47.5°	713.0	713.0	713.0	710.5	715.5	713.0	718.0	720.5	720.5	720.5	718.0
50°	625.1	617.6	620.1	620.1	622.6	620.1	625.1	627.6	627.6	622.6	612.6
52.5°	539.8	537.2	537.2	542.2	542.2	539.8	539.8	539.8	539.8	532.2	527.2
55°	469.5	464.5	467.0	467.0	467.0	467.0	469.5	467.0	467.0	459.4	451.9
57.5°	406.8	401.8	401.8	401.8	404.2	401.8	401.8	401.8	399.1	391.6	381.6
60°	346.5	344.0	346.5	346.5	349.0	346.5	346.5	346.5	341.5	333.9	323.9
62.5°	296.2	296.2	296.2	298.8	298.8	296.2	296.2	293.8	291.2	281.1	271.1
65°	253.6	251.0	253.6	253.6	256.1	256.1	253.6	251.0	248.5	238.5	228.5
67.5°	210.9	208.4	210.9	210.9	213.4	210.9	210.9	210.9	203.4	198.4	188.2
70°	170.8	168.2	168.2	168.2	170.8	165.8	168.2	168.2	163.2	155.6	145.6
72.5°	130.5	130.5	130.5	130.5	130.5	130.5	128.0	128.0	123.0	115.5	110.5
75°	95.4	95.4	97.9	97.9	95.4	95.4	95.4	92.9	90.4	85.4	80.4
77.5°	70.2	70.2	70.2	70.2	67.8	67.8	67.8	65.2	62.8	60.2	55.2
80°	50.2	50.2	50.2	47.8	50.2	47.8	47.8	47.8	42.6	40.1	37.6
82.5°	35.1	32.6	32.6	32.6	32.6	32.6	32.6	30.1	30.1	27.6	25.1
85°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	17.6	15.1	15.1
87.5°	10.0	12.5	12.5	12.5	12.5	12.5	12.5	10.0	10.0	10.0	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8
2.5°	2068.8	2068.8	2073.8	2066.2	2078.8	2071.2	2068.8	2081.2	2073.8	2071.2	2076.2
5°	2051.1	2053.6	2056.1	2051.1	2063.8	2056.1	2056.1	2068.8	2063.8	2061.2	2068.8
7.5°	2028.5	2031.1	2036.1	2033.6	2043.6	2038.6	2041.1	2053.6	2048.6	2048.6	2056.1
10°	2000.9	2006.0	2011.0	2011.0	2023.5	2018.5	2018.5	2033.6	2028.5	2031.1	2041.1
12.5°	1968.2	1975.9	1983.4	1985.9	1998.4	1990.9	1993.4	2011.0	2008.5	2011.0	2021.0
15°	1933.1	1943.2	1950.8	1950.8	1965.8	1958.2	1965.8	1983.4	1978.4	1988.4	2000.9
17.5°	1893.0	1903.0	1913.1	1915.6	1930.6	1925.6	1935.6	1953.2	1953.2	1958.2	1973.4
20°	1855.4	1867.9	1872.9	1880.4	1895.5	1893.0	1898.0	1918.1	1918.1	1925.6	1940.6
22.5°	1805.1	1817.6	1827.8	1835.2	1847.8	1847.8	1855.4	1872.9	1872.9	1877.9	1893.0
25°	1749.9	1765.0	1772.5	1780.0	1792.5	1790.0	1797.6	1812.6	1815.1	1820.1	1835.2
27.5°	1679.6	1692.1	1702.1	1707.2	1724.8	1714.8	1722.2	1739.9	1737.4	1742.4	1754.9
30°	1591.8	1604.2	1614.2	1614.2	1629.4	1629.4	1636.9	1644.4	1644.4	1649.5	1659.5
32.5°	1488.8	1503.9	1503.9	1511.4	1521.4	1511.4	1521.4	1531.5	1526.4	1534.0	1541.5
35°	1370.8	1378.2	1380.9	1380.9	1388.4	1385.9	1383.4	1390.9	1385.9	1398.4	1405.9
37.5°	1227.6	1237.8	1232.8	1237.8	1235.2	1227.6	1227.6	1240.2	1230.1	1232.8	1240.2
40°	1089.6	1089.6	1087.1	1074.5	1077.0	1069.5	1067.0	1069.5	1059.5	1057.0	1067.0
42.5°	946.5	944.0	936.5	918.9	921.4	908.9	898.8	898.8	893.8	891.2	893.8
45°	818.5	810.9	798.4	778.2	773.2	763.2	743.1	738.1	730.6	730.6	733.1
47.5°	700.5	690.4	670.4	647.8	635.1	622.6	602.5	595.0	582.5	577.4	582.5
50°	602.5	585.0	559.9	527.2	514.6	499.6	479.5	467.0	454.4	449.4	446.9
52.5°	512.1	487.0	462.0	421.8	411.8	396.6	369.0	356.5	344.0	333.9	333.9
55°	434.4	411.8	376.6	338.9	323.9	308.8	281.1	263.6	251.0	246.0	241.0
57.5°	364.0	338.9	306.2	266.1	251.0	236.0	208.4	190.8	178.2	170.8	165.8
60°	306.2	278.6	246.0	210.9	193.4	178.2	150.6	133.0	120.5	113.0	108.0
62.5°	251.0	228.5	195.9	163.2	148.1	133.0	110.5	92.9	80.4	75.4	67.8
65°	210.9	188.2	158.1	130.5	118.0	102.9	82.9	67.8	57.8	50.2	45.2
67.5°	170.8	153.1	128.0	102.9	90.4	80.4	62.8	50.2	40.1	35.1	32.6
70°	135.6	118.0	97.9	77.9	70.2	60.2	47.8	35.1	30.1	25.1	22.6
72.5°	100.4	87.9	72.8	57.8	50.2	45.2	32.6	27.6	20.1	17.6	15.1
75°	72.8	62.8	52.8	40.1	35.1	32.6	25.1	17.6	15.1	12.5	10.0
77.5°	50.2	45.2	35.1	27.6	25.1	22.6	17.6	12.5	10.0	7.5	7.5
80°	32.6	27.6	22.6	17.6	17.6	15.1	10.0	7.5	7.5	5.0	5.0
82.5°	20.1	17.6	15.1	12.5	10.0	10.0	7.5	5.0	5.0	2.5	2.5
85°	12.5	10.0	7.5	7.5	5.0	5.0	5.0	2.5	2.5	2.5	2.5
87.5°	5.0	5.0	5.0	2.5	2.5	2.5	2.5	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°	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8
2.5°	2076.2	2076.2	2081.2	2073.8	2078.8	2078.8	2083.8	2073.8	2078.8	2081.2	2086.2
5°	2066.2	2068.8	2073.8	2071.2	2073.8	2073.8	2078.8	2066.2	2076.2	2076.2	2083.8
7.5°	2056.1	2056.1	2061.2	2058.6	2063.8	2066.2	2071.2	2061.2	2071.2	2071.2	2078.8
10°	2043.6	2043.6	2051.1	2048.6	2056.1	2058.6	2066.2	2056.1	2066.2	2068.8	2076.2
12.5°	2026.0	2028.5	2036.1	2036.1	2043.6	2048.6	2056.1	2051.1	2063.8	2066.2	2076.2
15°	2006.0	2011.0	2021.0	2018.5	2026.0	2033.6	2043.6	2036.1	2053.6	2058.6	2068.8
17.5°	1980.9	1985.9	1993.4	1993.4	2000.9	2006.0	2018.5	2013.5	2028.5	2031.1	2043.6
20°	1943.2	1950.8	1960.8	1958.2	1965.8	1970.8	1980.9	1975.9	1990.9	1995.9	2008.5
22.5°	1898.0	1903.0	1910.5	1910.5	1918.1	1923.1	1933.1	1925.6	1940.6	1943.2	1953.2
25°	1837.8	1842.8	1847.8	1850.2	1857.9	1860.4	1865.4	1860.4	1872.9	1875.4	1888.0
27.5°	1759.9	1762.4	1770.0	1770.0	1775.0	1777.5	1785.0	1775.0	1792.5	1792.5	1800.1
30°	1667.0	1664.5	1674.5	1669.5	1674.5	1674.5	1682.1	1677.1	1689.6	1684.6	1692.1
32.5°	1544.0	1549.0	1549.0	1544.0	1554.0	1551.5	1551.5	1546.5	1554.0	1556.6	1561.6
35°	1400.9	1408.5	1408.5	1411.0	1413.5	1405.9	1408.5	1393.4	1405.9	1408.5	1411.0
37.5°	1245.2	1237.8	1242.8	1235.2	1247.8	1232.8	1232.8	1222.6	1232.8	1232.8	1235.2
40°	1067.0	1064.5	1069.5	1064.5	1062.0	1059.5	1054.5	1046.9	1057.0	1051.9	1059.5
42.5°	898.8	896.2	896.2	891.2	888.8	888.8	883.8	878.8	876.2	876.2	888.8
45°	725.5	730.6	725.5	723.0	728.1	723.0	725.5	715.5	720.5	715.5	720.5
47.5°	580.0	582.5	577.4	572.4	580.0	572.4	572.4	564.9	574.9	574.9	569.9
50°	449.4	446.9	441.9	446.9	444.4	444.4	444.4	436.9	441.9	434.4	439.4
52.5°	331.4	328.9	328.9	326.4	328.9	326.4	326.4	323.9	323.9	321.4	323.9
55°	241.0	238.5	233.5	233.5	233.5	236.0	233.5	231.0	231.0	228.5	231.0
57.5°	163.2	158.1	158.1	158.1	158.1	155.6	155.6	153.1	155.6	153.1	155.6
60°	105.5	105.5	100.4	100.4	100.4	100.4	100.4	97.9	100.4	100.4	100.4
62.5°	65.2	65.2	62.8	60.2	62.8	60.2	60.2	60.2	62.8	60.2	62.8
65°	42.6	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
67.5°	30.1	27.6	27.6	27.6	27.6	27.6	27.6	25.1	27.6	27.6	27.6
70°	20.1	20.1	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
72.5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
75°	10.0	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
77.5°	7.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	5.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85°	2.5	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	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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: P252289

CATALOG NUMBER: LE_6B40D010 EC6B30509024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8	2078.8
2.5°	2078.8	2081.2	2076.2	2078.8	2073.8	2078.8	2081.2	2086.2
5°	2073.8	2076.2	2071.2	2076.2	2071.2	2076.2	2078.8	2083.8
7.5°	2068.8	2073.8	2068.8	2073.8	2068.8	2073.8	2076.2	2081.2
10°	2068.8	2076.2	2071.2	2078.8	2071.2	2076.2	2081.2	2083.8
12.5°	2068.8	2076.2	2073.8	2078.8	2076.2	2081.2	2086.2	2091.4
15°	2063.8	2071.2	2066.2	2073.8	2071.2	2073.8	2083.8	2083.8
17.5°	2036.1	2043.6	2043.6	2048.6	2048.6	2056.1	2061.2	2066.2
20°	2000.9	2008.5	2006.0	2013.5	2013.5	2021.0	2026.0	2031.1
22.5°	1948.2	1958.2	1955.8	1963.2	1960.8	1965.8	1975.9	1973.4
25°	1880.4	1893.0	1890.5	1895.5	1893.0	1893.0	1898.0	1900.5
27.5°	1797.6	1805.1	1802.6	1807.6	1802.6	1807.6	1812.6	1815.1
30°	1689.6	1694.6	1692.1	1694.6	1692.1	1697.1	1699.6	1704.6
32.5°	1559.1	1566.6	1559.1	1564.1	1561.6	1561.6	1571.6	1566.6
35°	1403.4	1405.9	1408.5	1408.5	1403.4	1405.9	1411.0	1411.0
37.5°	1230.1	1242.8	1227.6	1235.2	1232.8	1232.8	1232.8	1240.2
40°	1049.4	1051.9	1046.9	1046.9	1046.9	1044.4	1054.5	1051.9
42.5°	878.8	881.2	878.8	871.1	873.6	873.6	881.2	871.1
45°	713.0	718.0	715.5	715.5	710.5	710.5	713.0	708.0
47.5°	564.9	569.9	562.4	564.9	559.9	564.9	562.4	567.4
50°	429.2	434.4	431.9	434.4	434.4	429.2	436.9	426.8
52.5°	321.4	323.9	321.4	318.9	316.4	316.4	321.4	318.9
55°	228.5	226.0	226.0	226.0	228.5	228.5	226.0	223.5
57.5°	153.1	153.1	150.6	150.6	153.1	148.1	150.6	148.1
60°	97.9	97.9	97.9	97.9	95.4	97.9	97.9	97.9
62.5°	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
65°	40.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1
67.5°	25.1	27.6	27.6	27.6	25.1	25.1	25.1	25.1
70°	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
72.5°	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
75°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
77.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0
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)