

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: P252296

Luminaire Tested: **LE_6B40D010 EC6B30509730 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252296
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 EC6B30509730 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3602.5 lumens
Efficiency: N/A
Efficacy: 83.8 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

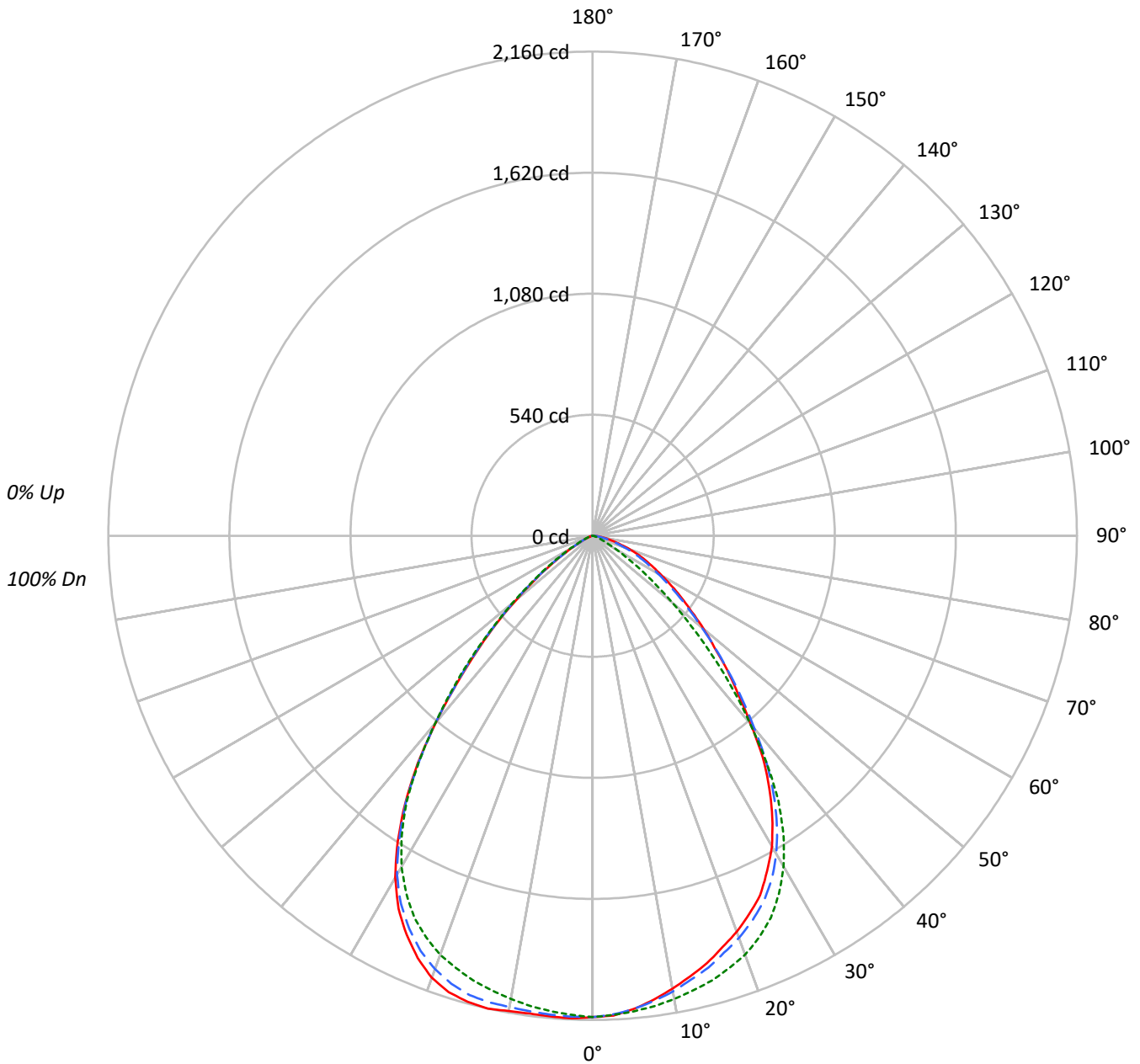
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	140085	140085	140085
5°	138760	139434	140967
10°	135899	138986	142597
15°	133294	138731	145384
20°	130538	138098	145659
25°	127313	135346	141314
30°	120541	128361	132655
35°	109471	115046	116081
40°	93427	92984	92541
45°	78480	69623	67482
50°	65546	47115	44750
55°	55166	28902	26252
60°	46699	15240	13192
65°	40430	8012	6406
70°	33648	4940	3453
75°	24829	3277	1966
80°	19499	1916	977
85°	15570	1946	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.4	5.6
10°-20°	579.4	16.1
20°-30°	855.6	23.8
30°-40°	881.8	24.5
40°-50°	609.1	16.9
50°-60°	300.2	8.3
60°-70°	121.6	3.4
70°-80°	43.3	1.2
80°-90°	9.0	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°	1637.5	45.5
0°-40°	2519.3	69.9
0°-60°	3428.5	95.2
0°-90°	3602.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3602.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2147	2147	2147	2147	2147	
5°	2119	2119	2129	2145	2152	200
15°	1974	1994	2054	2121	2152	556
25°	1769	1802	1880	1935	1963	809
35°	1374	1408	1444	1452	1458	852
45°	851	856	755	744	731	657
55°	485	467	254	239	231	438
65°	262	236	52	42	42	260
75°	98	83	13	8	8	111
85°	21	16	3	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°	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2
2.5°	2142.1	2134.4	2139.5	2129.1	2142.1	2129.1	2131.8	2134.4	2131.8	2134.4	2137.0
5°	2118.8	2111.0	2118.8	2105.9	2118.8	2111.0	2111.0	2113.6	2113.6	2116.2	2118.8
7.5°	2087.6	2079.9	2087.6	2074.8	2090.2	2082.5	2082.5	2087.6	2085.1	2087.6	2092.9
10°	2051.4	2041.0	2048.8	2041.0	2056.5	2046.1	2051.4	2051.4	2051.4	2059.1	2064.4
12.5°	2012.5	2002.1	2012.5	1999.5	2015.0	2007.2	2009.9	2017.6	2020.2	2025.4	2028.0
15°	1973.5	1960.6	1965.8	1958.0	1973.5	1965.8	1968.4	1978.8	1978.8	1986.5	1994.2
17.5°	1924.2	1913.9	1924.2	1913.9	1926.9	1921.8	1926.9	1934.6	1934.6	1942.4	1950.2
20°	1880.2	1869.9	1877.6	1869.9	1885.4	1877.6	1880.2	1890.6	1893.1	1901.0	1908.8
22.5°	1825.8	1818.0	1823.1	1815.4	1830.9	1825.8	1828.4	1838.8	1841.2	1846.5	1859.5
25°	1768.6	1753.1	1760.9	1755.8	1771.2	1763.5	1768.6	1779.0	1784.2	1792.0	1802.4
27.5°	1685.8	1677.9	1683.1	1683.1	1696.1	1688.2	1690.9	1701.2	1709.0	1716.8	1729.8
30°	1600.1	1587.1	1592.4	1594.9	1605.2	1600.1	1605.2	1615.6	1618.2	1628.6	1639.0
32.5°	1491.2	1486.0	1496.4	1491.2	1496.4	1496.4	1499.0	1506.8	1511.9	1517.1	1530.1
35°	1374.5	1364.1	1374.5	1369.2	1382.2	1374.5	1382.2	1390.0	1390.0	1400.4	1408.2
37.5°	1247.4	1234.5	1239.6	1239.6	1244.9	1242.2	1242.2	1255.2	1257.8	1265.6	1273.4
40°	1097.0	1091.8	1102.1	1099.6	1102.1	1102.1	1104.8	1112.5	1117.8	1120.4	1122.9
42.5°	962.1	964.8	967.4	967.4	967.4	967.4	967.4	977.8	975.1	982.9	985.5
45°	850.6	840.2	845.5	842.9	850.6	842.9	850.6	858.4	853.2	861.0	855.9
47.5°	736.5	736.5	736.5	733.9	739.1	736.5	741.8	744.2	744.2	744.2	741.8
50°	645.8	638.0	640.6	640.6	643.1	640.6	645.8	648.4	648.4	643.1	632.8
52.5°	557.6	555.0	555.0	560.1	560.1	557.6	557.6	557.6	557.6	549.8	544.6
55°	485.0	479.8	482.4	482.4	482.4	482.4	485.0	482.4	482.4	474.6	466.8
57.5°	420.1	415.0	415.0	415.0	417.5	415.0	415.0	415.0	412.4	404.6	394.2
60°	357.9	355.2	357.9	357.9	360.5	357.9	357.9	357.9	352.8	344.9	334.5
62.5°	306.0	306.0	306.0	308.6	308.6	306.0	306.0	303.4	300.9	290.5	280.1
65°	261.9	259.4	261.9	261.9	264.5	264.5	261.9	259.4	256.8	246.4	236.0
67.5°	217.9	215.2	217.9	217.9	220.4	217.9	217.9	217.9	210.1	204.9	194.5
70°	176.4	173.8	173.8	173.8	176.4	171.1	173.8	173.8	168.6	160.8	150.4
72.5°	134.9	134.9	134.9	134.9	134.9	134.9	132.2	132.2	127.1	119.2	114.1
75°	98.5	98.5	101.1	101.1	98.5	98.5	98.5	96.0	93.4	88.1	83.0
77.5°	72.6	72.6	72.6	72.6	70.0	70.0	70.0	67.4	64.9	62.2	57.0
80°	51.9	51.9	51.9	49.2	51.9	49.2	49.2	49.2	44.1	41.5	38.9
82.5°	36.2	33.8	33.8	33.8	33.8	33.8	33.8	31.1	31.1	28.5	25.9
85°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	18.1	15.5	15.5
87.5°	10.4	13.0	13.0	13.0	13.0	13.0	13.0	10.4	10.4	10.4	7.8
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°	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2
2.5°	2137.0	2137.0	2142.1	2134.4	2147.2	2139.5	2137.0	2149.9	2142.1	2139.5	2144.8
5°	2118.8	2121.4	2124.0	2118.8	2131.8	2124.0	2124.0	2137.0	2131.8	2129.1	2137.0
7.5°	2095.5	2098.0	2103.2	2100.6	2111.0	2105.9	2108.4	2121.4	2116.2	2116.2	2124.0
10°	2066.9	2072.1	2077.2	2077.2	2090.2	2085.1	2085.1	2100.6	2095.5	2098.0	2108.4
12.5°	2033.2	2041.0	2048.8	2051.4	2064.4	2056.5	2059.1	2077.2	2074.8	2077.2	2087.6
15°	1996.9	2007.2	2015.0	2015.0	2030.6	2022.9	2030.6	2048.8	2043.6	2054.0	2066.9
17.5°	1955.4	1965.8	1976.1	1978.8	1994.2	1989.1	1999.5	2017.6	2017.6	2022.9	2038.4
20°	1916.5	1929.5	1934.6	1942.4	1958.0	1955.4	1960.6	1981.4	1981.4	1989.1	2004.6
22.5°	1864.6	1877.6	1888.0	1895.8	1908.8	1908.8	1916.5	1934.6	1934.6	1939.9	1955.4
25°	1807.6	1823.1	1830.9	1838.8	1851.6	1849.1	1856.9	1872.4	1875.0	1880.2	1895.8
27.5°	1735.0	1747.9	1758.2	1763.5	1781.6	1771.2	1779.0	1797.2	1794.6	1799.8	1812.8
30°	1644.2	1657.1	1667.5	1667.5	1683.1	1683.1	1690.9	1698.6	1698.6	1703.9	1714.2
32.5°	1537.9	1553.4	1553.4	1561.2	1571.6	1561.2	1571.6	1582.0	1576.8	1584.5	1592.4
35°	1416.0	1423.8	1426.4	1426.4	1434.1	1431.5	1429.0	1436.8	1431.5	1444.5	1452.2
37.5°	1268.1	1278.5	1273.4	1278.5	1276.0	1268.1	1268.1	1281.1	1270.8	1273.4	1281.1
40°	1125.5	1125.5	1122.9	1110.0	1112.5	1104.8	1102.1	1104.8	1094.4	1091.8	1102.1
42.5°	977.8	975.1	967.4	949.1	951.8	938.8	928.4	928.4	923.2	920.6	923.2
45°	845.5	837.6	824.8	804.0	798.8	788.4	767.6	762.5	754.6	754.6	757.2
47.5°	723.5	713.1	692.4	669.1	656.1	643.1	622.4	614.6	601.6	596.5	601.6
50°	622.4	604.2	578.4	544.6	531.6	516.1	495.4	482.4	469.4	464.2	461.6
52.5°	529.0	503.1	477.1	435.6	425.4	409.8	381.2	368.2	355.2	344.9	344.9
55°	448.6	425.4	389.0	350.1	334.5	319.0	290.5	272.2	259.4	254.1	249.0
57.5°	376.0	350.1	316.4	274.9	259.4	243.8	215.2	197.1	184.1	176.4	171.1
60°	316.4	287.9	254.1	217.9	199.8	184.1	155.6	137.5	124.5	116.8	111.5
62.5°	259.4	236.0	202.2	168.6	153.0	137.5	114.1	96.0	83.0	77.8	70.0
65°	217.9	194.5	163.4	134.9	121.9	106.4	85.6	70.0	59.6	51.9	46.6
67.5°	176.4	158.2	132.2	106.4	93.4	83.0	64.9	51.9	41.5	36.2	33.8
70°	140.0	121.9	101.1	80.4	72.6	62.2	49.2	36.2	31.1	25.9	23.4
72.5°	103.8	90.8	75.2	59.6	51.9	46.6	33.8	28.5	20.8	18.1	15.5
75°	75.2	64.9	54.5	41.5	36.2	33.8	25.9	18.1	15.5	13.0	10.4
77.5°	51.9	46.6	36.2	28.5	25.9	23.4	18.1	13.0	10.4	7.8	7.8
80°	33.8	28.5	23.4	18.1	18.1	15.5	10.4	7.8	7.8	5.1	5.1
82.5°	20.8	18.1	15.5	13.0	10.4	10.4	7.8	5.1	5.1	2.6	2.6
85°	13.0	10.4	7.8	7.8	5.1	5.1	5.1	2.6	2.6	2.6	2.6
87.5°	5.1	5.1	5.1	2.6	2.6	2.6	2.6	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°	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2
2.5°	2144.8	2144.8	2149.9	2142.1	2147.2	2147.2	2152.5	2142.1	2147.2	2149.9	2155.1
5°	2134.4	2137.0	2142.1	2139.5	2142.1	2142.1	2147.2	2134.4	2144.8	2144.8	2152.5
7.5°	2124.0	2124.0	2129.1	2126.6	2131.8	2134.4	2139.5	2129.1	2139.5	2139.5	2147.2
10°	2111.0	2111.0	2118.8	2116.2	2124.0	2126.6	2134.4	2124.0	2134.4	2137.0	2144.8
12.5°	2092.9	2095.5	2103.2	2103.2	2111.0	2116.2	2124.0	2118.8	2131.8	2134.4	2144.8
15°	2072.1	2077.2	2087.6	2085.1	2092.9	2100.6	2111.0	2103.2	2121.4	2126.6	2137.0
17.5°	2046.1	2051.4	2059.1	2059.1	2066.9	2072.1	2085.1	2079.9	2095.5	2098.0	2111.0
20°	2007.2	2015.0	2025.4	2022.9	2030.6	2035.8	2046.1	2041.0	2056.5	2061.8	2074.8
22.5°	1960.6	1965.8	1973.5	1973.5	1981.4	1986.5	1996.9	1989.1	2004.6	2007.2	2017.6
25°	1898.4	1903.5	1908.8	1911.4	1919.1	1921.8	1926.9	1921.8	1934.6	1937.2	1950.2
27.5°	1818.0	1820.5	1828.4	1828.4	1833.5	1836.1	1843.9	1833.5	1851.6	1851.6	1859.5
30°	1722.0	1719.4	1729.8	1724.6	1729.8	1729.8	1737.5	1732.4	1745.4	1740.1	1747.9
32.5°	1594.9	1600.1	1600.1	1594.9	1605.2	1602.8	1602.8	1597.5	1605.2	1607.9	1613.1
35°	1447.1	1454.9	1454.9	1457.5	1460.1	1452.2	1454.9	1439.4	1452.2	1454.9	1457.5
37.5°	1286.2	1278.5	1283.8	1276.0	1288.9	1273.4	1273.4	1263.0	1273.4	1273.4	1276.0
40°	1102.1	1099.6	1104.8	1099.6	1097.0	1094.4	1089.2	1081.4	1091.8	1086.6	1094.4
42.5°	928.4	925.9	925.9	920.6	918.0	918.0	912.9	907.6	905.1	905.1	918.0
45°	749.5	754.6	749.5	746.9	752.1	746.9	749.5	739.1	744.2	739.1	744.2
47.5°	599.1	601.6	596.5	591.2	599.1	591.2	591.2	583.5	593.9	593.9	588.8
50°	464.2	461.6	456.4	461.6	459.0	459.0	459.0	451.2	456.4	448.6	453.9
52.5°	342.4	339.8	339.8	337.1	339.8	337.1	337.1	334.5	334.5	332.0	334.5
55°	249.0	246.4	241.1	241.1	241.1	243.8	241.1	238.6	238.6	236.0	238.6
57.5°	168.6	163.4	163.4	163.4	163.4	160.8	160.8	158.2	160.8	158.2	160.8
60°	108.9	108.9	103.8	103.8	103.8	103.8	103.8	101.1	103.8	103.8	103.8
62.5°	67.4	67.4	64.9	62.2	64.9	62.2	62.2	62.2	64.9	62.2	64.9
65°	44.1	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
67.5°	31.1	28.5	28.5	28.5	28.5	28.5	28.5	25.9	28.5	28.5	28.5
70°	20.8	20.8	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
72.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
75°	10.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
77.5°	7.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	5.1	5.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	2.6	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	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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: P252296

CATALOG NUMBER: LE_6B40D010 EC6B30509730 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2	2147.2
2.5°	2147.2	2149.9	2144.8	2147.2	2142.1	2147.2	2149.9	2155.1
5°	2142.1	2144.8	2139.5	2144.8	2139.5	2144.8	2147.2	2152.5
7.5°	2137.0	2142.1	2137.0	2142.1	2137.0	2142.1	2144.8	2149.9
10°	2137.0	2144.8	2139.5	2147.2	2139.5	2144.8	2149.9	2152.5
12.5°	2137.0	2144.8	2142.1	2147.2	2144.8	2149.9	2155.1	2160.2
15°	2131.8	2139.5	2134.4	2142.1	2139.5	2142.1	2152.5	2152.5
17.5°	2103.2	2111.0	2111.0	2116.2	2116.2	2124.0	2129.1	2134.4
20°	2066.9	2074.8	2072.1	2079.9	2079.9	2087.6	2092.9	2098.0
22.5°	2012.5	2022.9	2020.2	2028.0	2025.4	2030.6	2041.0	2038.4
25°	1942.4	1955.4	1952.8	1958.0	1955.4	1955.4	1960.6	1963.1
27.5°	1856.9	1864.6	1862.0	1867.2	1862.0	1867.2	1872.4	1875.0
30°	1745.4	1750.5	1747.9	1750.5	1747.9	1753.1	1755.8	1760.9
32.5°	1610.5	1618.2	1610.5	1615.6	1613.1	1613.1	1623.5	1618.2
35°	1449.8	1452.2	1454.9	1454.9	1449.8	1452.2	1457.5	1457.5
37.5°	1270.8	1283.8	1268.1	1276.0	1273.4	1273.4	1273.4	1281.1
40°	1084.0	1086.6	1081.4	1081.4	1081.4	1078.9	1089.2	1086.6
42.5°	907.6	910.2	907.6	899.9	902.5	902.5	910.2	899.9
45°	736.5	741.8	739.1	739.1	733.9	733.9	736.5	731.4
47.5°	583.5	588.8	580.9	583.5	578.4	583.5	580.9	586.1
50°	443.5	448.6	446.0	448.6	448.6	443.5	451.2	440.9
52.5°	332.0	334.5	332.0	329.4	326.8	326.8	332.0	329.4
55°	236.0	233.4	233.4	233.4	236.0	236.0	233.4	230.8
57.5°	158.2	158.2	155.6	155.6	158.2	153.0	155.6	153.0
60°	101.1	101.1	101.1	101.1	98.5	101.1	101.1	101.1
62.5°	62.2	62.2	62.2	62.2	62.2	62.2	62.2	62.2
65°	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5
67.5°	25.9	28.5	28.5	28.5	25.9	25.9	25.9	25.9
70°	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1
72.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
75°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	2.6	2.6	2.6	2.6	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)