

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P857983

Luminaire Tested: **LX4C40D010 EX4C409050 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C40D010 EX4C409050 4LBSWNH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

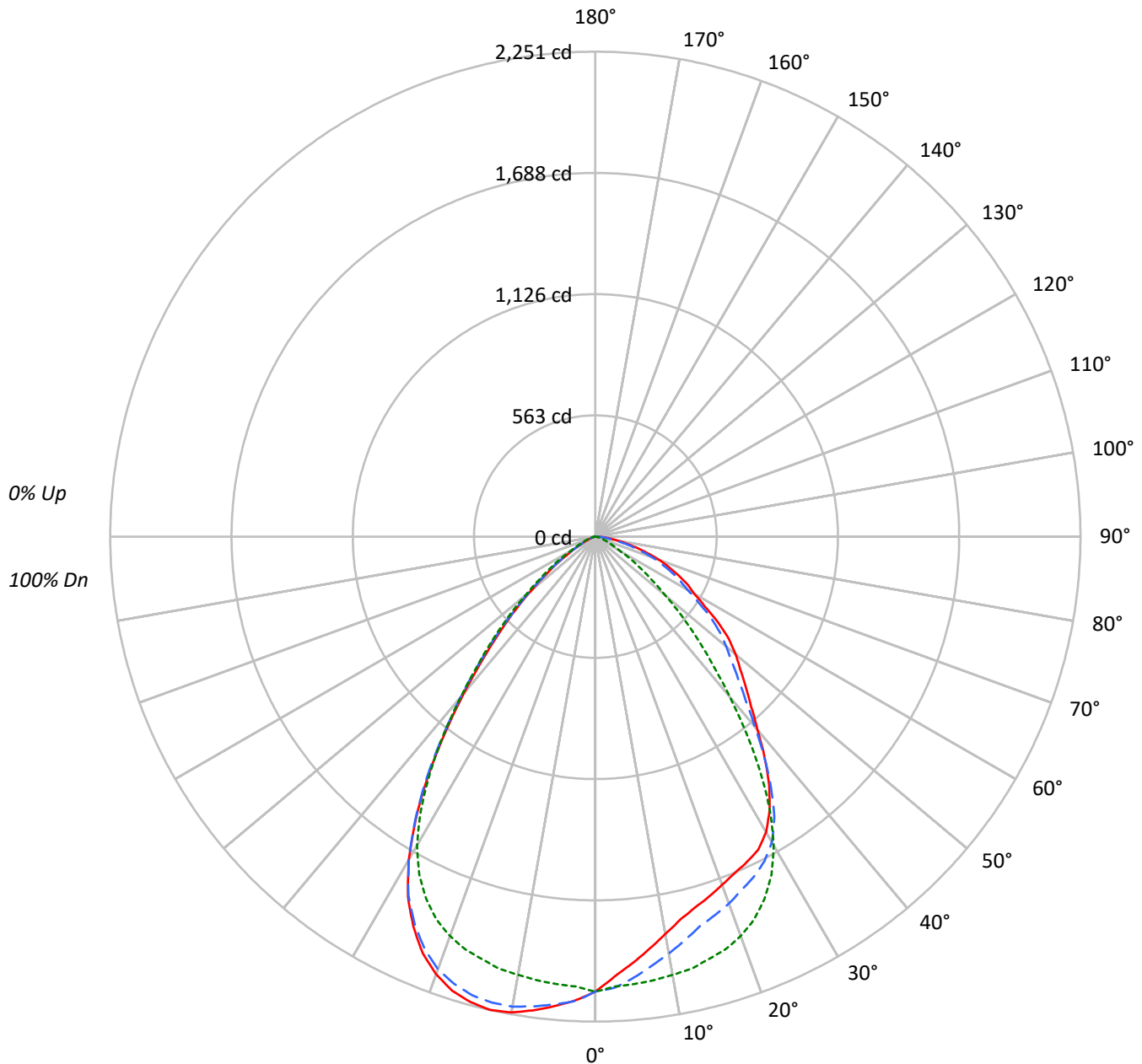
Lumens per Lamp: N/A
Luminaire Lumens: 3702.0 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	108	104	101	109	106	103	100		101	99	97			98	96	94			94
2	104	97	92	87	101	95	90	86		92	88	84			89	85	82			86
3	96	88	81	76	94	86	80	75		83	78	74			81	76	73			78
4	90	80	72	67	88	78	72	66		76	70	66			74	69	65			72
5	83	73	65	60	82	72	65	59		70	63	59			68	62	58			66
6	78	67	59	53	76	66	59	53		64	58	53			62	57	52			61
7	73	61	54	48	71	61	53	48		59	53	48			58	52	48			56
8	68	57	49	44	67	56	49	44		55	48	44			54	48	43			52
9	64	52	45	40	63	52	45	40		51	44	40			50	44	40			49
10	61	49	42	37	59	48	42	37		47	41	37			47	41	37			46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	259454	259454	259454
5°	245005	257091	269843
10°	233579	257681	279749
15°	226724	258228	284531
20°	224869	257959	282512
25°	225778	251601	270782
30°	224705	234734	245544
35°	210612	200413	202453
40°	187669	155386	151890
45°	171639	115851	108745
50°	162285	81152	73335
55°	149247	54789	46051
60°	130397	32089	25406
65°	123430	20552	14244
70°	112429	14691	8800
75°	93035	10348	6503
80°	73154	5801	3820
85°	65264	3947	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.5	5.4
10°-20°	572.5	15.5
20°-30°	848.6	22.9
30°-40°	849.8	23.0
40°-50°	593.9	16.0
50°-60°	353.4	9.5
60°-70°	184.4	5.0
70°-80°	82.0	2.2
80°-90°	17.9	0.5
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°	1620.6	43.8
0°-40°	2470.4	66.7
0°-60°	3417.7	92.3
0°-90°	3702.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3702.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2112	2112	2112	2112	2112	
5°	1987	2055	2085	2180	2188	186
15°	1783	1872	2030	2204	2237	505
25°	1666	1742	1856	1984	1998	767
35°	1404	1421	1336	1361	1350	871
45°	988	939	667	645	626	767
55°	697	653	256	223	215	618
65°	425	389	71	52	49	420
75°	196	171	22	14	14	212
85°	46	35	3	3	0	52
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°	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9
2.5°	2043.9	2068.4	2043.9	2052.1	2084.7	2054.8	2071.1	2071.1	2063.0	2082.0	2095.6
5°	1986.7	2011.2	1986.7	1997.6	2033.0	2003.0	2022.1	2016.7	2019.4	2035.8	2054.8
7.5°	1929.6	1948.6	1926.8	1940.5	1973.1	1948.6	1964.9	1964.9	1967.7	1992.1	2008.6
10°	1872.4	1888.8	1872.4	1883.3	1918.7	1897.0	1907.8	1910.5	1918.7	1940.5	1964.9
12.5°	1820.7	1834.3	1818.0	1834.3	1864.2	1842.5	1856.1	1858.8	1867.0	1891.5	1918.7
15°	1782.6	1796.3	1779.9	1793.5	1820.7	1804.4	1815.2	1820.7	1826.1	1847.9	1872.4
17.5°	1752.7	1763.6	1750.0	1766.3	1788.0	1769.1	1785.4	1785.4	1793.5	1815.2	1842.5
20°	1720.0	1730.9	1720.0	1733.6	1758.2	1741.8	1755.4	1755.4	1763.6	1788.0	1812.6
22.5°	1690.1	1695.5	1690.1	1701.0	1725.4	1711.9	1720.0	1722.7	1730.9	1752.7	1774.5
25°	1665.6	1676.4	1671.0	1681.9	1698.2	1684.7	1692.8	1695.5	1703.7	1722.7	1741.8
27.5°	1638.4	1643.8	1638.4	1652.0	1665.6	1654.7	1662.9	1660.1	1665.6	1681.9	1698.2
30°	1584.0	1589.4	1589.4	1597.5	1608.5	1603.0	1611.2	1603.0	1608.5	1622.0	1638.4
32.5°	1505.0	1507.8	1510.4	1518.7	1526.8	1518.7	1524.1	1524.1	1524.1	1535.0	1545.9
35°	1404.3	1409.7	1407.1	1412.5	1420.6	1418.0	1418.0	1415.2	1409.7	1415.2	1420.6
37.5°	1290.0	1281.8	1281.8	1290.0	1295.5	1284.6	1290.0	1284.6	1284.6	1287.3	1287.3
40°	1170.2	1162.1	1170.2	1173.0	1175.7	1170.2	1167.6	1162.1	1153.9	1156.7	1151.2
42.5°	1069.6	1064.1	1066.9	1066.9	1069.6	1064.1	1066.9	1056.0	1047.8	1042.3	1034.2
45°	987.9	979.8	987.9	982.5	982.5	979.8	977.0	971.6	960.7	952.6	938.9
47.5°	911.7	911.7	914.4	914.4	914.4	909.0	909.0	898.1	887.2	876.3	857.3
50°	849.1	843.7	854.5	854.5	846.4	843.7	846.4	832.8	824.7	811.0	791.9
52.5°	781.0	781.0	783.8	783.8	781.0	775.6	778.4	767.5	759.3	745.7	726.6
55°	696.8	691.3	699.4	699.4	696.8	694.0	696.8	688.5	680.4	669.6	653.1
57.5°	601.5	598.7	604.2	606.9	601.5	601.5	604.2	596.0	593.3	582.4	566.1
60°	530.7	528.0	533.4	536.2	530.7	530.7	530.7	519.8	514.3	503.4	492.6
62.5°	481.7	479.0	484.5	481.7	479.0	476.2	479.0	468.1	462.7	451.8	440.9
65°	424.6	427.3	430.0	430.0	427.3	424.6	424.6	419.2	413.7	402.8	389.2
67.5°	370.1	370.1	372.9	375.5	372.9	372.9	372.9	364.6	359.2	351.1	334.8
70°	313.0	310.2	318.5	318.5	313.0	315.7	313.0	310.2	304.8	293.9	280.4
72.5°	253.1	253.1	255.8	255.8	253.1	253.1	253.1	250.4	242.2	236.7	223.2
75°	196.0	196.0	198.6	201.4	196.0	196.0	198.6	193.2	187.8	179.7	171.4
77.5°	147.0	144.2	147.0	147.0	144.2	144.2	144.2	141.6	138.8	130.6	122.5
80°	103.4	100.7	103.4	103.4	103.4	100.7	100.7	97.9	97.9	92.5	84.4
82.5°	70.7	68.1	70.7	70.7	70.7	68.1	68.1	68.1	65.3	62.6	57.2
85°	46.3	43.5	43.5	46.3	43.5	43.5	43.5	43.5	40.9	38.1	35.4
87.5°	21.8	21.8	21.8	21.8	21.8	21.8	21.8	19.1	19.1	19.1	16.3
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°	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9
2.5°	2084.7	2079.3	2095.6	2090.2	2092.8	2079.3	2101.1	2090.2	2103.7	2090.2	2117.4
5°	2049.3	2043.9	2068.4	2065.6	2068.4	2057.5	2082.0	2079.3	2095.6	2084.7	2114.6
7.5°	2011.2	2005.8	2033.0	2035.8	2041.2	2030.3	2063.0	2063.0	2079.3	2076.5	2109.2
10°	1967.7	1970.4	1997.6	2003.0	2014.0	2008.6	2038.4	2046.6	2068.4	2065.6	2106.5
12.5°	1926.8	1926.8	1962.3	1973.1	1981.2	1978.6	2014.0	2024.9	2049.3	2054.8	2092.8
15°	1886.1	1888.8	1921.4	1937.7	1948.6	1945.9	1984.0	1997.6	2027.5	2030.3	2076.5
17.5°	1853.3	1850.7	1886.1	1899.6	1916.0	1913.3	1954.0	1970.4	2000.3	2008.6	2052.1
20°	1826.1	1823.5	1856.1	1872.4	1883.3	1880.6	1921.4	1940.5	1967.7	1973.1	2016.7
22.5°	1793.5	1788.0	1820.7	1834.3	1845.2	1842.5	1877.9	1891.5	1918.7	1924.2	1964.9
25°	1755.4	1750.0	1779.9	1788.0	1796.3	1790.8	1820.7	1828.9	1850.7	1856.1	1897.0
27.5°	1711.9	1698.2	1722.7	1722.7	1728.2	1720.0	1741.8	1750.0	1769.1	1769.1	1807.1
30°	1643.8	1624.8	1638.4	1635.7	1638.4	1627.5	1641.1	1643.8	1657.5	1654.7	1681.9
32.5°	1548.5	1521.3	1529.5	1521.3	1513.2	1496.9	1513.2	1507.8	1518.7	1507.8	1532.2
35°	1418.0	1390.7	1388.0	1377.1	1369.0	1355.3	1355.3	1341.8	1344.4	1336.3	1352.7
37.5°	1276.4	1241.1	1235.6	1213.9	1200.2	1183.9	1183.9	1173.0	1159.3	1153.9	1167.6
40°	1137.6	1099.5	1085.9	1050.5	1036.9	1020.5	1009.7	996.1	990.7	968.9	979.8
42.5°	1017.9	977.0	947.1	909.0	895.4	870.9	854.5	838.2	830.1	805.6	816.5
45°	917.2	868.2	835.6	786.5	767.5	740.3	715.7	696.8	677.7	666.8	661.3
47.5°	832.8	781.0	737.5	683.1	653.1	628.7	596.0	577.0	552.5	538.9	530.7
50°	762.1	704.9	655.9	593.3	563.4	536.2	498.0	468.1	446.4	424.6	419.2
52.5°	699.4	639.6	585.2	514.3	479.0	446.4	405.5	372.9	353.8	329.3	326.6
55°	625.9	574.3	514.3	440.9	405.5	372.9	329.3	296.7	272.2	255.8	250.4
57.5°	547.1	498.0	440.9	367.4	332.0	296.7	255.8	225.9	204.1	190.5	187.8
60°	473.6	427.3	372.9	299.4	263.9	234.1	190.5	160.6	141.6	130.6	125.1
62.5°	419.2	375.5	323.9	255.8	223.2	193.2	152.5	125.1	108.8	97.9	92.5
65°	367.4	323.9	277.6	215.0	187.8	160.6	122.5	97.9	81.6	70.7	65.3
67.5°	313.0	274.9	231.3	179.7	152.5	130.6	97.9	76.2	62.6	54.4	49.0
70°	258.5	223.2	187.8	144.2	125.1	103.4	76.2	59.9	46.3	40.9	35.4
72.5°	204.1	176.9	147.0	111.6	95.3	81.6	59.9	43.5	35.4	30.0	24.5
75°	152.5	133.4	108.8	84.4	70.7	59.9	43.5	32.6	27.2	21.8	19.1
77.5°	108.8	92.5	76.2	57.2	51.7	43.5	30.0	24.5	19.1	13.7	10.9
80°	73.5	65.3	51.7	40.9	32.6	30.0	21.8	16.3	10.9	8.2	8.2
82.5°	49.0	40.9	32.6	24.5	21.8	19.1	13.7	10.9	8.2	5.4	5.4
85°	30.0	24.5	19.1	13.7	13.7	10.9	8.2	5.4	2.8	2.8	2.8
87.5°	13.7	10.9	8.2	5.4	5.4	2.8	2.8	2.8	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°	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9
2.5°	2139.1	2122.8	2111.9	2125.5	2130.9	2122.8	2130.9	2144.6	2158.2	2160.9	2122.8
5°	2141.9	2125.5	2120.0	2136.4	2139.1	2136.4	2144.6	2163.7	2180.0	2185.4	2147.4
7.5°	2141.9	2130.9	2128.3	2147.4	2150.0	2147.4	2160.9	2182.7	2199.0	2209.9	2171.8
10°	2136.4	2130.9	2133.7	2150.0	2155.5	2155.5	2174.6	2199.0	2215.3	2226.2	2188.1
12.5°	2128.3	2128.3	2128.3	2147.4	2152.8	2155.5	2171.8	2204.4	2215.3	2231.6	2193.6
15°	2114.6	2114.6	2114.6	2133.7	2141.9	2141.9	2160.9	2190.9	2204.4	2220.8	2182.7
17.5°	2090.2	2090.2	2092.8	2109.2	2117.4	2117.4	2136.4	2169.1	2177.2	2196.3	2158.2
20°	2054.8	2054.8	2057.5	2073.8	2082.0	2076.5	2101.1	2128.3	2136.4	2152.8	2114.6
22.5°	2003.0	2003.0	2003.0	2019.4	2024.9	2022.1	2046.6	2071.1	2071.1	2092.8	2052.1
25°	1926.8	1932.3	1926.8	1943.2	1948.6	1945.9	1967.7	1989.5	1984.0	2008.6	1967.7
27.5°	1834.3	1831.6	1831.6	1845.2	1845.2	1842.5	1858.8	1883.3	1877.9	1894.2	1856.1
30°	1706.4	1714.5	1701.0	1720.0	1711.9	1706.4	1717.3	1739.1	1730.9	1744.5	1714.5
32.5°	1559.4	1548.5	1548.5	1548.5	1554.0	1540.4	1551.3	1562.2	1554.0	1567.6	1535.0
35°	1366.2	1369.0	1360.8	1363.5	1366.2	1349.9	1360.8	1371.6	1360.8	1369.0	1339.0
37.5°	1173.0	1175.7	1156.7	1167.6	1156.7	1151.2	1162.1	1167.6	1156.7	1164.8	1132.1
40°	979.8	974.4	971.6	971.6	974.4	960.7	968.9	977.0	968.9	974.4	944.4
42.5°	811.0	808.4	802.9	805.6	797.4	794.7	797.4	805.6	797.4	802.9	781.0
45°	664.0	658.6	650.5	653.1	653.1	639.6	647.7	653.1	645.0	647.7	628.7
47.5°	528.0	519.8	519.8	517.1	517.1	511.7	519.8	517.1	508.9	514.3	495.3
50°	411.0	405.5	405.5	405.5	405.5	397.3	400.1	405.5	397.3	397.3	386.4
52.5°	321.1	313.0	307.6	307.6	307.6	304.8	304.8	307.6	299.4	299.4	296.7
55°	242.2	239.5	231.3	231.3	231.3	223.2	225.9	225.9	223.2	223.2	215.0
57.5°	179.7	171.4	166.0	166.0	160.6	160.6	157.9	160.6	155.1	155.1	149.7
60°	119.7	114.3	111.6	108.8	108.8	106.2	108.8	106.2	106.2	103.4	100.7
62.5°	87.1	81.6	76.2	76.2	76.2	73.5	73.5	73.5	73.5	73.5	70.7
65°	62.6	57.2	57.2	54.4	54.4	51.7	51.7	51.7	51.7	51.7	49.0
67.5°	43.5	40.9	38.1	38.1	38.1	38.1	38.1	38.1	35.4	35.4	35.4
70°	32.6	30.0	27.2	27.2	27.2	27.2	27.2	24.5	27.2	27.2	24.5
72.5°	21.8	21.8	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
75°	16.3	16.3	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
77.5°	10.9	10.9	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
80°	8.2	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
82.5°	5.4	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	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: P857983

CATALOG NUMBER: LX4C40D010 EX4C409050 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9	2111.9
2.5°	2163.7	2160.9	2155.5	2163.7	2141.9	2133.7	2130.9	2155.5
5°	2193.6	2188.1	2188.1	2196.3	2171.8	2166.3	2160.9	2188.1
7.5°	2220.8	2215.3	2215.3	2223.5	2201.8	2196.3	2190.9	2218.1
10°	2237.1	2237.1	2237.1	2242.5	2223.5	2218.1	2215.3	2242.5
12.5°	2245.3	2245.3	2242.5	2253.4	2229.0	2229.0	2223.5	2250.7
15°	2234.4	2234.4	2234.4	2242.5	2220.8	2215.3	2215.3	2237.1
17.5°	2207.2	2207.2	2204.4	2212.6	2188.1	2188.1	2185.4	2209.9
20°	2166.3	2166.3	2160.9	2171.8	2147.4	2139.1	2136.4	2160.9
22.5°	2101.1	2098.3	2095.6	2101.1	2079.3	2073.8	2071.1	2092.8
25°	2016.7	2014.0	2008.6	2014.0	1989.5	1981.2	1981.2	1997.6
27.5°	1897.0	1897.0	1888.8	1897.0	1869.7	1867.0	1864.2	1883.3
30°	1750.0	1739.1	1733.6	1744.5	1717.3	1717.3	1711.9	1730.9
32.5°	1567.6	1556.7	1554.0	1559.4	1535.0	1526.8	1537.7	1548.5
35°	1358.1	1360.8	1349.9	1349.9	1328.1	1330.8	1333.6	1349.9
37.5°	1156.7	1151.2	1148.5	1151.2	1134.9	1129.5	1124.0	1140.4
40°	968.9	955.3	952.6	952.6	938.9	936.3	938.9	947.1
42.5°	791.9	789.3	778.4	783.8	770.2	775.6	772.9	772.9
45°	639.6	642.2	631.4	639.6	628.7	620.5	620.5	625.9
47.5°	506.2	506.2	503.4	503.4	495.3	498.0	492.6	500.8
50°	391.9	391.9	386.4	389.2	383.7	383.7	381.0	383.7
52.5°	299.4	296.7	296.7	293.9	288.5	291.3	293.9	288.5
55°	217.7	220.4	215.0	217.7	212.3	215.0	212.3	215.0
57.5°	149.7	152.5	147.0	152.5	147.0	149.7	147.0	147.0
60°	103.4	103.4	100.7	103.4	100.7	100.7	97.9	103.4
62.5°	70.7	70.7	70.7	70.7	70.7	68.1	70.7	70.7
65°	51.7	49.0	49.0	49.0	49.0	49.0	49.0	49.0
67.5°	35.4	35.4	35.4	35.4	35.4	35.4	35.4	35.4
70°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
72.5°	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
75°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
77.5°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
80°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
85°	2.8	2.8	2.8	0.0	2.8	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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)