

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: P858242

Luminaire Tested: **LX4C45D010 EX4C459835 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P858242
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: LX4C45D010 EX4C459835 4LBSWNH
Description:
Light Source: -
Ballast/Driver: -

Summary

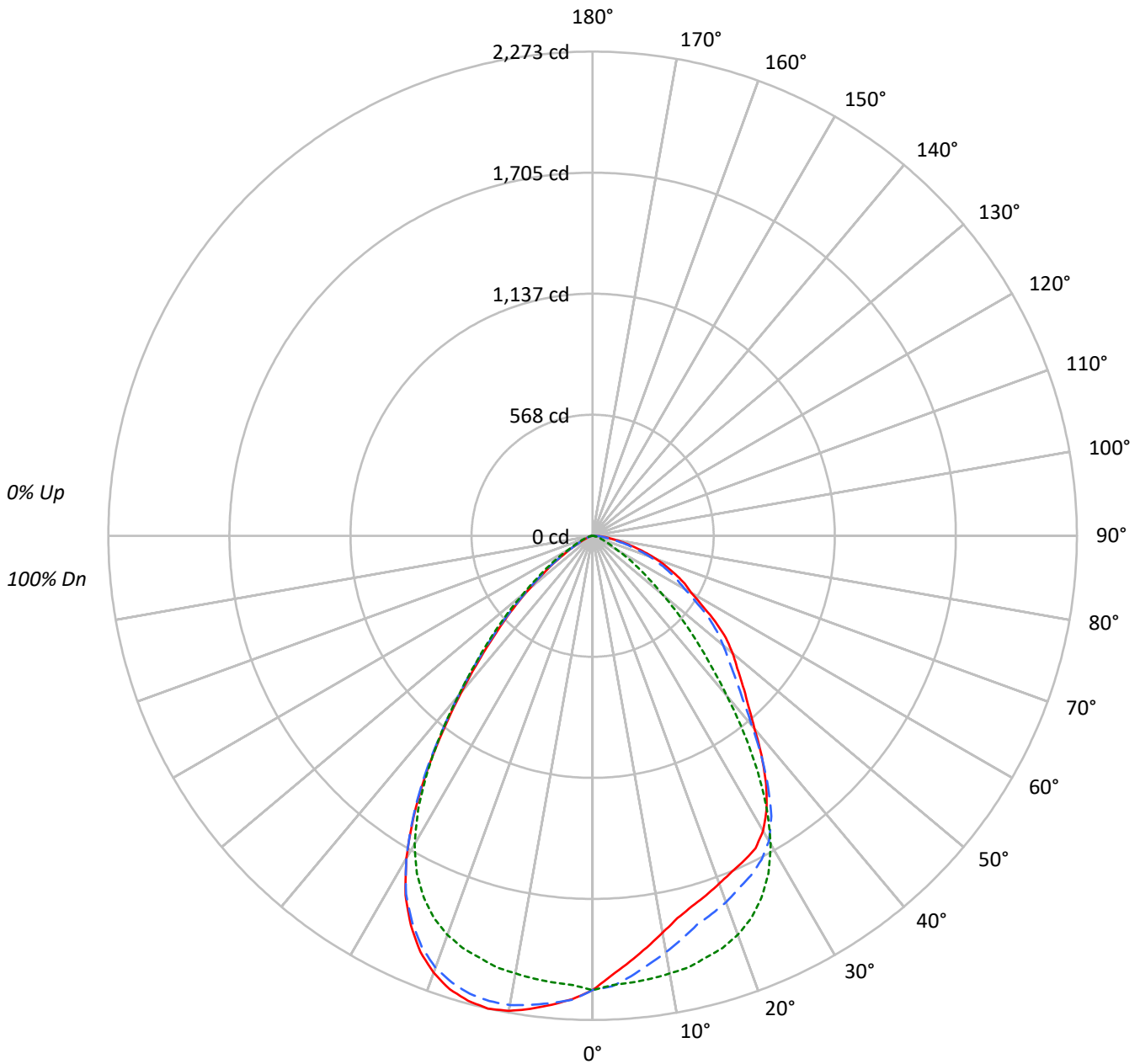
Lumens per Lamp: N/A
Luminaire Lumens: 3739.1 lumens
Efficiency: N/A
Efficacy: 75.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 49.6
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				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	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79			79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70			70
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62			62
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56			56
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50			50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46			46
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42			42
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38			38
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35			35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	262046	262046	262046
5°	247459	259668	272543
10°	235925	260263	282543
15°	228988	260810	287380
20°	227118	260548	285336
25°	228042	254123	273493
30°	226946	237075	247998
35°	212712	202423	204478
40°	189546	156942	153430
45°	173359	116997	109839
50°	163910	81955	74080
55°	150746	55346	46500
60°	131674	32409	25652
65°	124650	20756	14389
70°	113543	14835	8908
75°	93985	10443	6550
80°	73861	5872	3891
85°	65828	3947	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.5	5.4
10°-20°	578.2	15.5
20°-30°	857.1	22.9
30°-40°	858.3	23.0
40°-50°	599.8	16.0
50°-60°	356.9	9.5
60°-70°	186.3	5.0
70°-80°	82.9	2.2
80°-90°	18.1	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°	1636.8	43.8
0°-40°	2495.1	66.7
0°-60°	3451.9	92.3
0°-90°	3739.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3739.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2133	2133	2133	2133	2133	
5°	2007	2075	2106	2202	2210	188
15°	1800	1891	2051	2226	2260	510
25°	1682	1759	1875	2004	2018	775
35°	1418	1435	1350	1374	1363	879
45°	998	948	673	652	632	775
55°	704	660	258	225	217	624
65°	429	393	71	52	50	424
75°	198	173	22	14	14	214
85°	47	36	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°	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0
2.5°	2064.4	2089.1	2064.4	2072.7	2105.6	2075.4	2091.8	2091.8	2083.6	2102.8	2116.6
5°	2006.6	2031.4	2006.6	2017.6	2053.3	2023.1	2042.4	2036.8	2039.7	2056.2	2075.4
7.5°	1948.9	1968.1	1946.1	1960.0	1992.9	1968.1	1984.6	1984.6	1987.4	2012.0	2028.7
10°	1891.2	1907.7	1891.2	1902.2	1937.9	1916.0	1927.0	1929.6	1937.9	1960.0	1984.6
12.5°	1839.0	1852.7	1836.2	1852.7	1882.9	1860.9	1874.7	1877.4	1885.7	1910.5	1937.9
15°	1800.4	1814.2	1797.8	1811.5	1839.0	1822.5	1833.4	1839.0	1844.4	1866.4	1891.2
17.5°	1770.3	1781.3	1767.5	1783.9	1806.0	1786.8	1803.3	1803.3	1811.5	1833.4	1860.9
20°	1737.2	1748.2	1737.2	1751.0	1775.8	1759.3	1773.0	1773.0	1781.3	1806.0	1830.7
22.5°	1707.1	1712.5	1707.1	1718.0	1742.7	1729.0	1737.2	1740.0	1748.2	1770.3	1792.2
25°	1682.3	1693.2	1687.7	1698.8	1715.2	1701.5	1709.7	1712.5	1720.7	1740.0	1759.3
27.5°	1654.8	1660.2	1654.8	1668.5	1682.3	1671.2	1679.6	1676.7	1682.3	1698.8	1715.2
30°	1599.8	1605.3	1605.3	1613.5	1624.6	1619.1	1627.3	1619.1	1624.6	1638.3	1654.8
32.5°	1520.1	1522.9	1525.6	1533.9	1542.1	1533.9	1539.3	1539.3	1539.3	1550.4	1561.4
35°	1418.3	1423.8	1421.2	1426.7	1434.8	1432.1	1432.1	1429.4	1423.8	1429.4	1434.8
37.5°	1302.9	1294.6	1294.6	1302.9	1308.5	1297.5	1302.9	1297.5	1297.5	1300.2	1300.2
40°	1181.9	1173.8	1181.9	1184.8	1187.4	1181.9	1179.2	1173.8	1165.4	1168.3	1162.7
42.5°	1080.3	1074.7	1077.5	1077.5	1080.3	1074.7	1077.5	1066.5	1058.2	1052.8	1044.6
45°	997.8	989.6	997.8	992.3	992.3	989.6	986.8	981.3	970.3	962.1	948.4
47.5°	920.9	920.9	923.6	923.6	923.6	918.0	918.0	907.1	896.1	885.1	865.9
50°	857.6	852.1	863.1	863.1	854.9	852.1	854.9	841.1	833.0	819.2	799.9
52.5°	788.8	788.8	791.7	791.7	788.8	783.4	786.2	775.2	766.9	753.2	733.9
55°	703.8	698.2	706.4	706.4	703.8	700.9	703.8	695.5	687.3	676.3	659.7
57.5°	607.5	604.7	610.2	613.0	607.5	607.5	610.2	602.0	599.3	588.2	571.7
60°	535.9	533.3	538.8	541.6	535.9	535.9	535.9	525.0	519.4	508.5	497.5
62.5°	486.5	483.8	489.3	486.5	483.8	481.0	483.8	472.8	467.4	456.3	445.3
65°	428.8	431.5	434.4	434.4	431.5	428.8	428.8	423.4	417.9	406.9	393.1
67.5°	373.8	373.8	376.6	379.3	376.6	376.6	376.6	368.3	362.8	354.6	338.1
70°	316.1	313.4	321.7	321.7	316.1	318.9	316.1	313.4	307.8	296.9	283.2
72.5°	255.6	255.6	258.4	258.4	255.6	255.6	255.6	252.9	244.6	239.1	225.4
75°	198.0	198.0	200.6	203.4	198.0	198.0	200.6	195.1	189.7	181.5	173.2
77.5°	148.5	145.7	148.5	148.5	145.7	145.7	145.7	142.9	140.2	131.9	123.7
80°	104.4	101.7	104.4	104.4	104.4	101.7	101.7	98.9	98.9	93.5	85.3
82.5°	71.4	68.8	71.4	71.4	71.4	68.8	68.8	68.8	66.0	63.2	57.8
85°	46.7	44.0	44.0	46.7	44.0	44.0	44.0	44.0	41.3	38.4	35.8
87.5°	22.0	22.0	22.0	22.0	22.0	22.0	22.0	19.3	19.3	19.3	16.5
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°	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0
2.5°	2105.6	2100.1	2116.6	2111.1	2113.8	2100.1	2122.1	2111.1	2124.8	2111.1	2138.6
5°	2069.8	2064.4	2089.1	2086.3	2089.1	2078.1	2102.8	2100.1	2116.6	2105.6	2135.8
7.5°	2031.4	2025.9	2053.3	2056.2	2061.6	2050.6	2083.6	2083.6	2100.1	2097.3	2130.3
10°	1987.4	1990.1	2017.6	2023.1	2034.2	2028.7	2058.9	2067.1	2089.1	2086.3	2127.6
12.5°	1946.1	1946.1	1981.9	1992.9	2001.1	1998.4	2034.2	2045.1	2069.8	2075.4	2113.8
15°	1904.9	1907.7	1940.6	1957.1	1968.1	1965.4	2003.9	2017.6	2047.9	2050.6	2097.3
17.5°	1871.9	1869.2	1904.9	1918.7	1935.2	1932.5	1973.6	1990.1	2020.4	2028.7	2072.7
20°	1844.4	1841.7	1874.7	1891.2	1902.2	1899.5	1940.6	1960.0	1987.4	1992.9	2036.8
22.5°	1811.5	1806.0	1839.0	1852.7	1863.7	1860.9	1896.6	1910.5	1937.9	1943.5	1984.6
25°	1773.0	1767.5	1797.8	1806.0	1814.2	1808.7	1839.0	1847.2	1869.2	1874.7	1916.0
27.5°	1729.0	1715.2	1740.0	1740.0	1745.5	1737.2	1759.3	1767.5	1786.8	1786.8	1825.2
30°	1660.2	1641.1	1654.8	1652.0	1654.8	1643.7	1657.6	1660.2	1674.1	1671.2	1698.8
32.5°	1564.0	1536.6	1544.9	1536.6	1528.4	1511.9	1528.4	1522.9	1533.9	1522.9	1547.5
35°	1432.1	1404.7	1401.9	1390.8	1382.7	1368.9	1368.9	1355.2	1357.9	1349.7	1366.2
37.5°	1289.2	1253.5	1248.0	1226.1	1212.2	1195.7	1195.7	1184.8	1170.9	1165.4	1179.2
40°	1149.0	1110.5	1096.8	1061.1	1047.3	1030.8	1019.8	1006.1	1000.6	978.6	989.6
42.5°	1028.1	986.8	956.7	918.0	904.4	879.6	863.1	846.6	838.4	813.6	824.6
45°	926.3	876.9	843.9	794.4	775.2	747.7	722.9	703.8	684.4	673.4	668.0
47.5°	841.1	788.8	744.9	689.9	659.7	635.0	602.0	582.8	558.1	544.2	535.9
50°	769.7	712.0	662.5	599.3	569.0	541.6	503.0	472.8	450.9	428.8	423.4
52.5°	706.4	646.0	591.0	519.4	483.8	450.9	409.6	376.6	357.3	332.6	329.9
55°	632.2	580.1	519.4	445.3	409.6	376.6	332.6	299.6	274.8	258.4	252.9
57.5°	552.5	503.0	445.3	371.1	335.3	299.6	258.4	228.1	206.2	192.4	189.7
60°	478.3	431.5	376.6	302.4	266.5	236.4	192.4	162.2	142.9	131.9	126.4
62.5°	423.4	379.3	327.2	258.4	225.4	195.1	154.0	126.4	110.0	98.9	93.5
65°	371.1	327.2	280.4	217.1	189.7	162.2	123.7	98.9	82.4	71.4	66.0
67.5°	316.1	277.7	233.6	181.5	154.0	131.9	98.9	77.0	63.2	54.9	49.5
70°	261.1	225.4	189.7	145.7	126.4	104.4	77.0	60.5	46.7	41.3	35.8
72.5°	206.2	178.6	148.5	112.7	96.2	82.4	60.5	44.0	35.8	30.3	24.8
75°	154.0	134.7	110.0	85.3	71.4	60.5	44.0	33.0	27.5	22.0	19.3
77.5°	110.0	93.5	77.0	57.8	52.3	44.0	30.3	24.8	19.3	13.8	11.0
80°	74.3	66.0	52.3	41.3	33.0	30.3	22.0	16.5	11.0	8.3	8.3
82.5°	49.5	41.3	33.0	24.8	22.0	19.3	13.8	11.0	8.3	5.5	5.5
85°	30.3	24.8	19.3	13.8	13.8	11.0	8.3	5.5	2.8	2.8	2.8
87.5°	13.8	11.0	8.3	5.5	5.5	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°	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0
2.5°	2160.6	2144.1	2133.0	2146.8	2152.3	2144.1	2152.3	2166.0	2179.9	2182.5	2144.1
5°	2163.4	2146.8	2141.3	2157.7	2160.6	2157.7	2166.0	2185.3	2201.8	2207.3	2168.9
7.5°	2163.4	2152.3	2149.5	2168.9	2171.6	2168.9	2182.5	2204.6	2221.0	2232.0	2193.5
10°	2157.7	2152.3	2155.1	2171.6	2177.0	2177.0	2196.4	2221.0	2237.5	2248.5	2210.0
12.5°	2149.5	2149.5	2149.5	2168.9	2174.3	2177.0	2193.5	2226.5	2237.5	2254.0	2215.5
15°	2135.8	2135.8	2135.8	2155.1	2163.4	2163.4	2182.5	2212.9	2226.5	2243.0	2204.6
17.5°	2111.1	2111.1	2113.8	2130.3	2138.6	2138.6	2157.7	2190.8	2199.0	2218.3	2179.9
20°	2075.4	2075.4	2078.1	2094.6	2102.8	2097.3	2122.1	2149.5	2157.7	2174.3	2135.8
22.5°	2023.1	2023.1	2023.1	2039.7	2045.1	2042.4	2067.1	2091.8	2091.8	2113.8	2072.7
25°	1946.1	1951.7	1946.1	1962.6	1968.1	1965.4	1987.4	2009.4	2003.9	2028.7	1987.4
27.5°	1852.7	1849.9	1849.9	1863.7	1863.7	1860.9	1877.4	1902.2	1896.6	1913.1	1874.7
30°	1723.6	1731.7	1718.0	1737.2	1729.0	1723.6	1734.5	1756.5	1748.2	1762.0	1731.7
32.5°	1575.0	1564.0	1564.0	1564.0	1569.6	1555.8	1566.9	1577.8	1569.6	1583.3	1550.4
35°	1379.9	1382.7	1374.4	1377.2	1379.9	1363.4	1374.4	1385.4	1374.4	1382.7	1352.4
37.5°	1184.8	1187.4	1168.3	1179.2	1168.3	1162.7	1173.8	1179.2	1168.3	1176.5	1143.5
40°	989.6	984.1	981.3	981.3	984.1	970.3	978.6	986.8	978.6	984.1	953.8
42.5°	819.2	816.5	811.0	813.6	805.3	802.7	805.3	813.6	805.3	811.0	788.8
45°	670.7	665.2	656.9	659.7	659.7	646.0	654.2	659.7	651.5	654.2	635.0
47.5°	533.3	525.0	525.0	522.3	522.3	516.8	525.0	522.3	514.0	519.4	500.3
50°	415.1	409.6	409.6	409.6	409.6	401.3	404.0	409.6	401.3	401.3	390.3
52.5°	324.3	316.1	310.7	310.7	310.7	307.8	307.8	310.7	302.4	302.4	299.6
55°	244.6	241.9	233.6	233.6	233.6	225.4	228.1	228.1	225.4	225.4	217.1
57.5°	181.5	173.2	167.6	167.6	162.2	162.2	159.4	162.2	156.7	156.7	151.2
60°	120.9	115.4	112.7	110.0	110.0	107.2	110.0	107.2	107.2	104.4	101.7
62.5°	87.9	82.4	77.0	77.0	77.0	74.3	74.3	74.3	74.3	74.3	71.4
65°	63.2	57.8	57.8	54.9	54.9	52.3	52.3	52.3	52.3	52.3	49.5
67.5°	44.0	41.3	38.4	38.4	38.4	38.4	38.4	38.4	35.8	35.8	35.8
70°	33.0	30.3	27.5	27.5	27.5	27.5	27.5	24.8	27.5	27.5	24.8
72.5°	22.0	22.0	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
75°	16.5	16.5	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
77.5°	11.0	11.0	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
80°	8.3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
82.5°	5.5	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: P858242

CATALOG NUMBER: LX4C45D010 EX4C459835 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0	2133.0
2.5°	2185.3	2182.5	2177.0	2185.3	2163.4	2155.1	2152.3	2177.0
5°	2215.5	2210.0	2210.0	2218.3	2193.5	2188.1	2182.5	2210.0
7.5°	2243.0	2237.5	2237.5	2245.8	2223.8	2218.3	2212.9	2240.3
10°	2259.5	2259.5	2259.5	2264.9	2245.8	2240.3	2237.5	2264.9
12.5°	2267.8	2267.8	2264.9	2276.0	2251.3	2251.3	2245.8	2273.3
15°	2256.8	2256.8	2256.8	2264.9	2243.0	2237.5	2237.5	2259.5
17.5°	2229.4	2229.4	2226.5	2234.8	2210.0	2210.0	2207.3	2232.0
20°	2188.1	2188.1	2182.5	2193.5	2168.9	2160.6	2157.7	2182.5
22.5°	2122.1	2119.3	2116.6	2122.1	2100.1	2094.6	2091.8	2113.8
25°	2036.8	2034.2	2028.7	2034.2	2009.4	2001.1	2001.1	2017.6
27.5°	1916.0	1916.0	1907.7	1916.0	1888.4	1885.7	1882.9	1902.2
30°	1767.5	1756.5	1751.0	1762.0	1734.5	1734.5	1729.0	1748.2
32.5°	1583.3	1572.3	1569.6	1575.0	1550.4	1542.1	1553.1	1564.0
35°	1371.7	1374.4	1363.4	1363.4	1341.4	1344.1	1346.9	1363.4
37.5°	1168.3	1162.7	1160.0	1162.7	1146.2	1140.8	1135.3	1151.8
40°	978.6	964.9	962.1	962.1	948.4	945.6	948.4	956.7
42.5°	799.9	797.1	786.2	791.7	777.9	783.4	780.6	780.6
45°	646.0	648.7	637.7	646.0	635.0	626.7	626.7	632.2
47.5°	511.3	511.3	508.5	508.5	500.3	503.0	497.5	505.8
50°	395.8	395.8	390.3	393.1	387.6	387.6	384.8	387.6
52.5°	302.4	299.6	299.6	296.9	291.3	294.2	296.9	291.3
55°	219.9	222.6	217.1	219.9	214.5	217.1	214.5	217.1
57.5°	151.2	154.0	148.5	154.0	148.5	151.2	148.5	148.5
60°	104.4	104.4	101.7	104.4	101.7	101.7	98.9	104.4
62.5°	71.4	71.4	71.4	71.4	71.4	68.8	71.4	71.4
65°	52.3	49.5	49.5	49.5	49.5	49.5	49.5	49.5
67.5°	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
70°	24.8	24.8	24.8	24.8	24.8	24.8	24.8	24.8
72.5°	19.3	19.3	19.3	19.3	19.3	19.3	19.3	19.3
75°	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
77.5°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
80°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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)