

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: P858975

Luminaire Tested: **LX4C50D010 EX4C509030 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P858975
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C50D010 EX4C509030 4LBLWW*
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

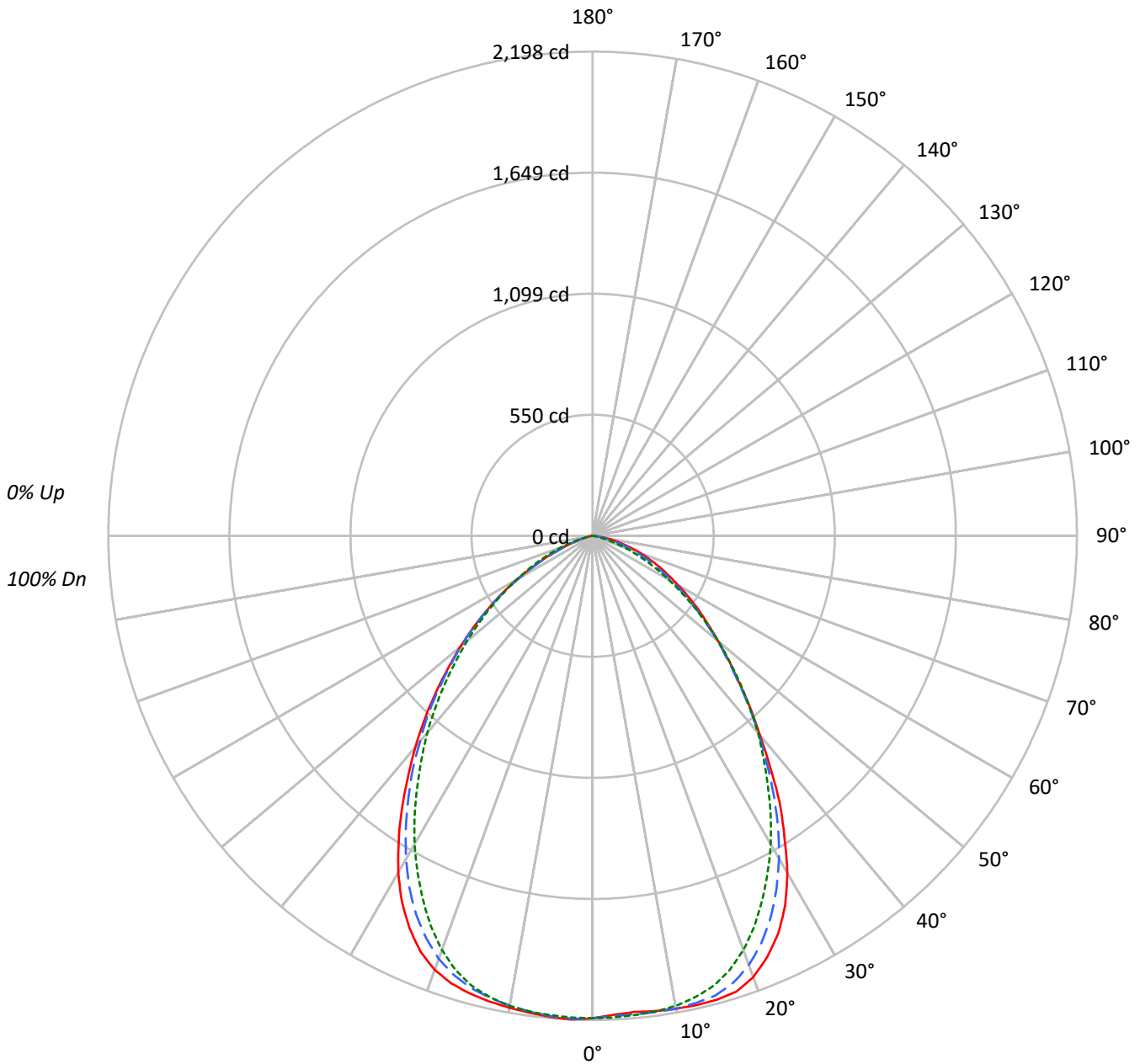
Lumens per Lamp: N/A
Luminaire Lumens: 4199.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
Input Voltage (V):
Input Current (A_{in}): 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	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68																			
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60																			
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54																			
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48																			
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43																			
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39																			
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36																			
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	269074	269074	269074
5°	267561	269386	270410
10°	271990	270355	271378
15°	277306	269154	273643
20°	278707	261607	274079
25°	270132	247060	266458
30°	250736	229258	250268
35°	222025	207972	226224
40°	189273	187301	200628
45°	162622	164463	174766
50°	141949	142255	149805
55°	125429	120138	124186
60°	109929	98013	97595
65°	97296	76017	67674
70°	83011	52299	40194
75°	67166	28100	18370
80°	45987	7004	4669
85°	13955	2255	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.2	5.0
10°-20°	602.6	14.4
20°-30°	870.7	20.7
30°-40°	900.1	21.4
40°-50°	743.7	17.7
50°-60°	513.3	12.2
60°-70°	268.7	6.4
70°-80°	84.6	2.0
80°-90°	7.2	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°	1681.4	40.0
0°-40°	2581.5	61.5
0°-60°	3838.5	91.4
0°-90°	4199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4199.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2190	2190	2190	2190	2190	
5°	2170	2180	2184	2188	2193	208
15°	2180	2160	2116	2126	2152	615
25°	1993	1912	1823	1896	1966	910
35°	1480	1431	1387	1459	1508	919
45°	936	932	947	990	1006	730
55°	586	568	561	576	580	526
65°	335	304	262	217	233	332
75°	142	111	59	40	39	152
85°	10	5	2	2	2	20
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°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2176.2	2177.0	2177.0	2178.7	2178.7	2178.7	2179.5	2179.5	2180.3	2181.1	2182.0
5°	2169.6	2169.6	2171.3	2172.1	2173.7	2174.6	2176.2	2177.0	2178.7	2179.5	2180.3
7.5°	2176.2	2176.2	2177.0	2177.9	2177.9	2178.7	2178.7	2179.5	2180.3	2181.1	2181.1
10°	2180.3	2180.3	2180.3	2180.3	2181.1	2181.1	2181.1	2180.3	2180.3	2180.3	2179.5
12.5°	2182.0	2182.0	2181.1	2180.3	2181.1	2180.3	2180.3	2177.9	2176.2	2174.6	2172.1
15°	2180.3	2180.3	2179.5	2178.7	2177.9	2176.2	2175.4	2171.3	2168.0	2163.1	2159.8
17.5°	2169.6	2168.0	2166.3	2164.7	2161.4	2158.9	2157.3	2149.9	2144.1	2135.9	2126.9
20°	2131.8	2130.2	2127.7	2123.6	2119.5	2116.2	2111.2	2100.5	2094.8	2082.5	2073.4
22.5°	2070.1	2068.5	2069.3	2061.9	2053.7	2048.7	2045.4	2036.4	2026.5	2010.9	2001.0
25°	1992.8	1987.9	1987.9	1976.4	1972.2	1969.0	1964.8	1954.1	1939.3	1925.4	1912.2
27.5°	1892.5	1885.9	1882.6	1880.9	1871.1	1863.7	1857.9	1849.7	1837.4	1825.0	1806.9
30°	1767.5	1766.6	1762.5	1755.1	1747.7	1744.4	1737.8	1723.9	1712.3	1703.3	1691.8
32.5°	1620.2	1619.4	1619.4	1619.4	1614.5	1613.7	1603.8	1596.4	1587.3	1573.4	1566.0
35°	1480.4	1479.6	1480.4	1468.1	1464.8	1462.3	1461.5	1456.6	1444.2	1437.6	1431.1
37.5°	1322.5	1325.0	1323.3	1320.0	1324.1	1316.7	1322.5	1311.8	1306.9	1305.2	1297.8
40°	1180.2	1186.8	1180.2	1181.0	1185.2	1177.8	1177.8	1176.1	1172.8	1171.2	1169.5
42.5°	1058.5	1050.3	1055.2	1051.1	1055.2	1052.7	1048.6	1051.1	1051.9	1048.6	1047.8
45°	936.0	937.6	939.2	936.8	936.8	934.3	940.9	936.8	936.8	937.6	931.8
47.5°	836.4	834.0	835.6	834.0	834.8	833.1	834.8	835.6	834.0	834.0	829.0
50°	742.7	741.0	746.8	741.9	741.9	741.0	741.9	740.2	737.7	737.7	739.4
52.5°	661.3	658.0	657.1	661.3	655.5	655.5	656.3	654.7	651.4	649.7	645.6
55°	585.6	584.8	585.6	582.3	580.7	580.7	576.5	574.9	574.1	570.0	567.5
57.5°	514.9	512.4	513.2	512.4	509.1	508.3	505.0	505.0	501.7	498.4	494.3
60°	447.4	447.4	449.9	446.6	444.1	442.5	440.8	439.2	433.4	427.7	422.7
62.5°	387.4	388.2	387.4	384.9	383.3	381.6	380.0	375.0	370.1	366.8	361.1
65°	334.7	333.9	331.4	329.8	325.7	325.7	322.4	319.9	314.2	309.2	303.5
67.5°	280.5	278.8	278.8	278.8	273.9	273.1	271.4	266.5	261.5	255.0	250.0
70°	231.1	232.8	230.3	227.8	225.4	224.5	222.1	217.1	211.4	204.8	200.7
72.5°	184.2	185.9	183.4	182.6	177.6	176.0	175.2	171.1	164.5	160.4	153.8
75°	141.5	142.3	140.6	139.0	135.7	134.9	130.8	127.5	123.4	116.8	111.0
77.5°	102.0	100.3	100.3	97.0	93.8	93.8	92.9	88.0	82.2	77.3	72.4
80°	65.0	64.2	61.7	60.0	57.6	56.7	55.9	51.8	47.7	44.4	41.1
82.5°	32.9	32.1	31.3	30.4	28.8	27.1	28.0	24.7	23.0	19.7	17.3
85°	9.9	10.7	10.7	9.9	9.0	9.0	9.0	8.2	6.6	5.8	4.9
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2182.8	2183.6	2184.4	2185.3	2185.3	2186.1	2186.9	2187.7	2188.5	2188.5	2189.4
5°	2181.1	2182.8	2182.8	2183.6	2183.6	2183.6	2184.4	2184.4	2184.4	2184.4	2185.3
7.5°	2182.0	2182.0	2182.0	2181.1	2181.1	2180.3	2180.3	2180.3	2178.7	2178.7	2178.7
10°	2177.9	2177.0	2176.2	2174.6	2173.7	2172.9	2171.3	2169.6	2168.0	2167.2	2165.5
12.5°	2169.6	2166.3	2163.1	2159.8	2158.1	2157.3	2154.0	2151.5	2149.1	2146.6	2145.0
15°	2153.2	2148.2	2142.5	2135.9	2134.3	2132.6	2126.9	2121.9	2118.6	2116.2	2112.1
17.5°	2120.3	2110.4	2103.8	2094.0	2089.9	2088.2	2079.2	2074.2	2068.5	2066.8	2063.5
20°	2061.9	2052.8	2040.5	2031.5	2026.5	2021.6	2014.2	2007.6	2001.0	2001.0	1996.9
22.5°	1988.7	1977.2	1961.5	1950.0	1949.2	1939.3	1932.8	1925.4	1922.9	1918.0	1918.0
25°	1896.6	1886.7	1869.4	1859.6	1854.6	1852.2	1841.5	1831.6	1826.7	1822.6	1825.8
27.5°	1794.6	1779.8	1766.6	1754.3	1750.2	1745.2	1735.4	1731.3	1722.2	1721.4	1720.6
30°	1677.8	1663.0	1649.8	1644.1	1635.9	1631.7	1624.3	1619.4	1616.1	1616.1	1614.5
32.5°	1555.3	1542.1	1535.5	1523.2	1519.1	1513.3	1508.4	1503.4	1505.1	1503.4	1504.3
35°	1422.8	1419.6	1407.2	1399.8	1399.8	1399.0	1390.8	1387.5	1385.8	1386.7	1390.8
37.5°	1297.0	1287.1	1278.9	1274.0	1278.1	1273.2	1272.3	1272.3	1277.3	1274.0	1280.6
40°	1162.9	1162.1	1158.8	1160.5	1161.3	1155.5	1157.2	1158.0	1161.3	1167.9	1168.7
42.5°	1046.2	1045.3	1045.3	1045.3	1043.7	1040.4	1043.7	1049.4	1048.6	1053.6	1057.7
45°	933.5	931.8	935.1	932.7	937.6	939.2	936.8	938.4	943.4	946.6	953.2
47.5°	830.7	830.7	831.5	833.1	828.2	832.3	834.0	837.3	839.7	841.4	844.7
50°	735.3	735.3	733.6	733.6	733.6	736.1	732.8	736.9	737.7	744.3	748.4
52.5°	647.3	643.2	645.6	644.0	640.7	639.0	640.7	641.5	646.4	648.1	653.0
55°	563.4	563.4	556.8	555.2	557.6	556.8	556.0	556.0	558.4	560.9	565.0
57.5°	489.4	484.4	479.5	478.7	476.2	477.0	477.0	476.2	474.6	475.4	476.2
60°	419.5	416.2	408.8	408.8	407.9	407.1	403.0	402.2	398.1	398.9	395.6
62.5°	355.3	353.7	343.8	340.5	340.5	338.0	333.9	333.1	327.3	327.3	324.0
65°	297.7	292.8	287.0	281.3	281.3	278.0	275.5	268.1	264.0	261.5	256.6
67.5°	245.1	237.7	231.9	227.0	223.7	222.9	217.1	212.2	205.6	201.5	194.1
70°	194.1	188.3	182.6	177.6	174.4	171.1	165.3	157.9	153.0	145.6	140.6
72.5°	146.4	141.5	136.5	129.9	125.8	123.4	117.6	111.0	102.8	97.9	91.3
75°	105.3	99.5	92.9	87.2	84.7	82.2	75.7	70.7	65.0	59.2	52.6
77.5°	68.3	61.7	56.7	50.2	49.3	47.7	41.1	36.2	32.1	28.8	24.7
80°	36.2	32.9	28.8	24.7	23.0	20.6	17.3	14.8	12.3	9.9	8.2
82.5°	15.6	13.2	10.7	9.0	8.2	7.4	5.8	4.9	4.1	4.1	3.3
85°	4.1	3.3	3.3	2.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0.8	0.8	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°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2190.2	2191.0	2191.8	2191.8	2192.7	2193.5	2193.5	2194.3	2195.1	2195.9	2195.9
5°	2186.1	2186.1	2186.1	2186.9	2186.9	2186.9	2186.9	2188.5	2188.5	2189.4	2190.2
7.5°	2177.9	2177.9	2177.9	2177.9	2177.0	2177.9	2177.0	2177.0	2178.7	2179.5	2180.3
10°	2164.7	2163.9	2163.9	2163.1	2163.1	2163.1	2163.9	2164.7	2165.5	2166.3	2168.8
12.5°	2144.1	2143.3	2143.3	2142.5	2142.5	2143.3	2144.1	2145.8	2149.1	2150.7	2154.0
15°	2111.2	2110.4	2111.2	2112.1	2113.7	2116.2	2118.6	2121.1	2126.0	2130.2	2134.3
17.5°	2063.5	2064.4	2065.2	2066.8	2069.3	2072.6	2079.2	2085.7	2091.5	2098.1	2104.7
20°	1997.7	2001.0	2001.9	2007.6	2009.3	2016.7	2024.1	2033.9	2043.0	2051.2	2060.2
22.5°	1918.8	1921.2	1924.5	1931.1	1935.2	1945.1	1954.1	1965.7	1975.5	1986.2	1999.4
25°	1829.1	1830.0	1839.8	1839.8	1849.7	1857.9	1868.6	1880.9	1895.8	1909.7	1918.8
27.5°	1727.2	1731.3	1738.7	1742.0	1749.4	1762.5	1771.6	1786.4	1801.2	1813.5	1823.4
30°	1620.2	1623.5	1635.9	1637.5	1643.3	1654.8	1667.1	1681.1	1692.6	1706.6	1715.6
32.5°	1507.6	1516.6	1524.0	1529.8	1531.4	1548.7	1555.3	1565.1	1578.3	1592.3	1601.3
35°	1398.2	1402.3	1413.0	1416.3	1421.2	1431.1	1444.2	1452.5	1459.0	1468.1	1478.8
37.5°	1282.2	1294.5	1297.0	1306.9	1308.5	1317.6	1324.1	1334.0	1342.2	1350.5	1352.1
40°	1174.5	1178.6	1187.6	1190.1	1191.7	1204.1	1212.3	1214.8	1218.9	1226.3	1236.1
42.5°	1065.1	1069.2	1079.1	1076.6	1084.0	1089.7	1093.9	1103.7	1107.8	1110.3	1110.3
45°	957.3	959.0	965.6	968.8	973.0	976.3	983.7	988.6	990.2	997.6	1000.1
47.5°	854.5	856.2	861.1	866.9	865.2	869.3	877.6	880.0	880.8	885.8	888.2
50°	753.4	757.5	764.1	762.4	767.3	769.8	777.2	778.9	778.9	779.7	780.5
52.5°	658.8	662.1	663.7	665.4	667.8	671.9	675.2	673.6	676.9	680.2	677.7
55°	565.0	567.5	571.6	573.2	573.2	574.1	572.4	579.8	576.5	575.7	576.5
57.5°	479.5	476.2	475.4	479.5	481.1	480.3	477.8	481.1	481.1	479.5	477.0
60°	396.4	394.0	393.1	394.0	390.7	388.2	389.8	388.2	384.1	382.4	383.3
62.5°	320.8	318.3	311.7	311.7	310.1	309.2	302.7	303.5	300.2	295.3	296.9
65°	250.8	244.3	241.0	240.2	234.4	229.5	227.8	222.1	217.1	216.3	217.1
67.5°	188.3	180.9	175.2	172.7	169.4	165.3	159.6	154.6	156.3	155.4	158.7
70°	130.8	125.8	120.1	116.0	117.6	112.7	109.4	109.4	110.2	111.0	112.7
72.5°	87.2	80.6	78.1	75.7	74.0	70.7	72.4	72.4	71.6	72.4	70.7
75°	49.3	46.1	43.6	42.8	41.1	41.1	41.1	41.1	40.3	39.5	39.5
77.5°	22.2	20.6	19.7	18.9	18.9	18.9	18.1	17.3	17.3	17.3	16.4
80°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
82.5°	3.3	3.3	4.1	4.1	4.1	3.3	4.1	4.1	3.3	3.3	4.1
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.8	0.8	0.8	0.0	0.8	0.8	0.8	0.8	0.0	0.8	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: P858975

CATALOG NUMBER: LX4C50D010 EX4C509030 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2	2190.2
2.5°	2196.8	2197.6	2197.6	2197.6	2198.4	2198.4	2198.4	2198.4
5°	2191.0	2191.8	2191.8	2191.8	2192.7	2192.7	2192.7	2192.7
7.5°	2181.1	2182.0	2182.0	2182.8	2182.8	2183.6	2183.6	2184.4
10°	2169.6	2171.3	2172.1	2172.9	2173.7	2174.6	2174.6	2175.4
12.5°	2157.3	2158.9	2159.8	2161.4	2163.1	2163.9	2164.7	2165.5
15°	2139.2	2142.5	2144.1	2145.0	2148.2	2149.9	2150.7	2151.5
17.5°	2110.4	2117.0	2119.5	2121.1	2124.4	2127.7	2130.2	2131.0
20°	2069.3	2076.7	2080.0	2084.1	2089.0	2093.1	2094.8	2096.4
22.5°	2011.7	2019.9	2024.9	2029.8	2033.9	2038.0	2044.6	2042.2
25°	1929.5	1943.5	1949.2	1951.7	1960.7	1965.7	1969.0	1965.7
27.5°	1837.4	1845.6	1850.5	1856.3	1862.9	1867.8	1869.4	1874.4
30°	1726.3	1740.3	1739.5	1745.2	1753.5	1758.4	1760.0	1764.2
32.5°	1611.2	1617.8	1622.7	1621.9	1625.2	1634.2	1630.9	1638.3
35°	1488.6	1489.5	1497.7	1496.9	1503.4	1503.4	1503.4	1508.4
37.5°	1357.9	1367.7	1363.6	1373.5	1370.2	1372.7	1372.7	1374.3
40°	1238.6	1241.9	1241.9	1245.2	1247.7	1245.2	1246.8	1251.0
42.5°	1115.2	1118.5	1119.4	1117.7	1120.2	1127.6	1121.8	1126.8
45°	1000.1	1002.6	1005.9	1003.4	1007.5	1005.0	1007.5	1005.9
47.5°	891.5	890.7	889.9	896.5	890.7	891.5	894.8	889.1
50°	780.5	785.4	782.2	784.6	786.3	786.3	783.8	783.8
52.5°	681.8	681.0	678.5	681.0	679.3	680.2	681.8	680.2
55°	579.8	583.1	581.5	580.7	581.5	581.5	586.4	579.8
57.5°	479.5	477.8	480.3	486.1	480.3	484.4	486.9	487.7
60°	384.1	384.1	389.0	386.6	391.5	395.6	398.9	397.2
62.5°	292.8	296.9	298.6	299.4	304.3	307.6	307.6	306.8
65°	217.1	222.9	222.9	226.2	227.8	227.8	229.5	232.8
67.5°	160.4	160.4	161.2	162.8	162.0	162.0	163.7	164.5
70°	111.9	110.2	112.7	111.9	111.9	111.0	111.9	111.9
72.5°	70.7	70.7	71.6	70.7	69.1	69.9	69.9	71.6
75°	37.8	39.5	37.8	37.8	38.7	37.0	37.8	38.7
77.5°	15.6	15.6	15.6	15.6	15.6	14.8	14.8	14.8
80°	7.4	7.4	7.4	7.4	7.4	7.4	6.6	6.6
82.5°	3.3	4.1	3.3	4.1	3.3	3.3	3.3	3.3
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	0.0	0.8	0.0	0.8	0.0	0.0	0.0	0.8
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)