

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: P879453

Luminaire Tested: **LD4C55D010 EU4559035 4LBDWWLI**

Issue Date: 10/1/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P879453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C55D010 EU4559035 4LBLDWWLI
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

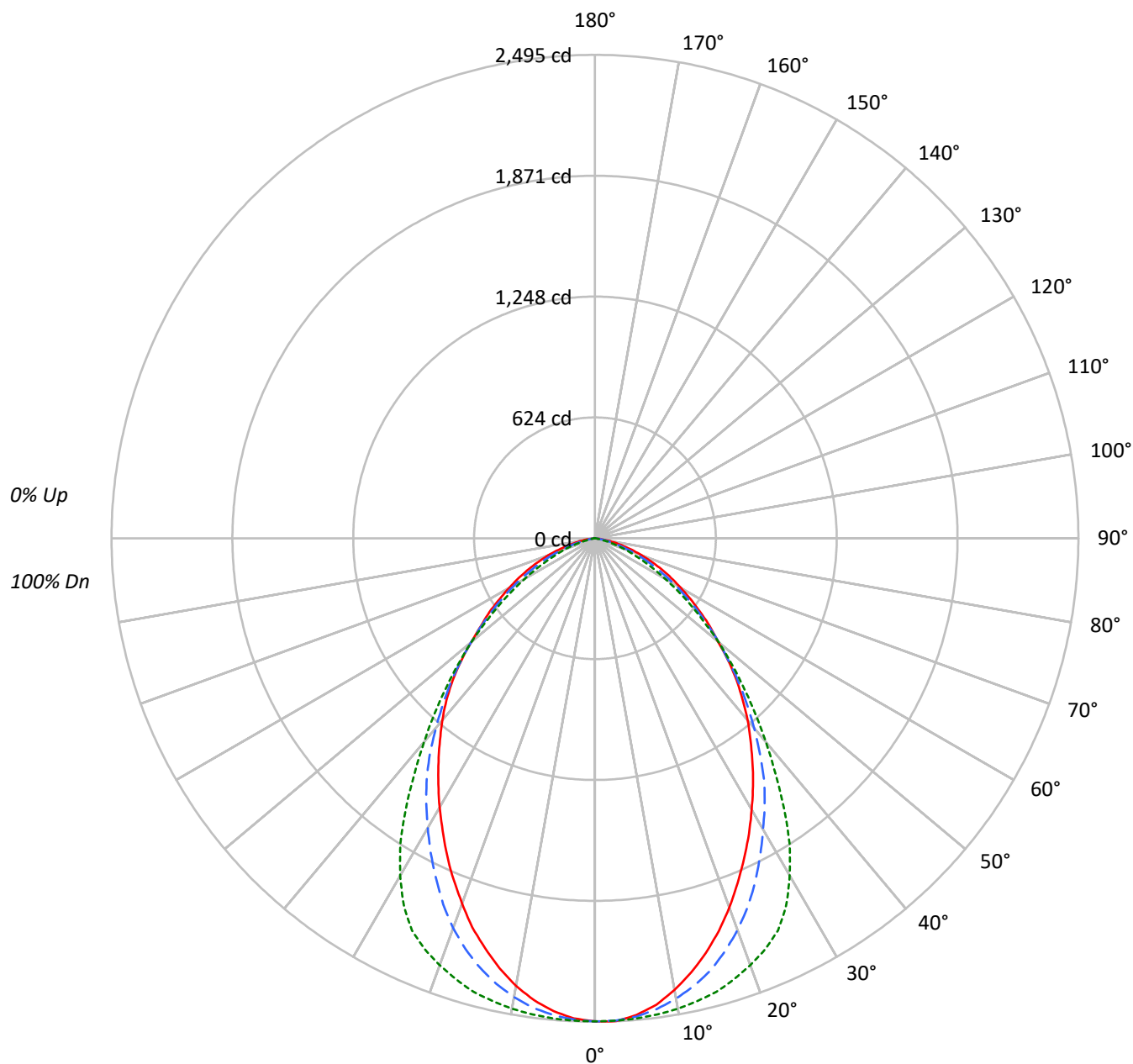
Lumens per Lamp: N/A
Luminaire Lumens: 4579.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
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					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77		
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67		
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59		
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35		
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	306298	306298	306298
5°	304484	306778	302178
10°	295205	307543	292648
15°	281656	308213	278566
20°	265006	306463	262090
25°	246843	302827	244824
30°	229358	285179	227499
35°	212697	255065	211152
40°	196634	219969	196490
45°	179162	187762	180621
50°	158252	158788	159132
55°	141793	129820	142393
60°	125311	103099	125556
65°	110319	78604	109244
70°	91416	56251	91416
75°	71248	32325	68590
80°	46199	7924	44218
85°	17056	2678	13109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.0	5.1
10°-20°	647.5	14.1
20°-30°	905.2	19.8
30°-40°	954.8	20.9
40°-50°	812.3	17.7
50°-60°	573.2	12.5
60°-70°	324.9	7.1
70°-80°	115.9	2.5
80°-90°	11.1	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°	1786.8	39.0
0°-40°	2741.6	59.9
0°-60°	4127.1	90.1
0°-90°	4579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4579.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2493	2493	2493	2493	2493	
5°	2469	2477	2488	2470	2450	232
15°	2214	2308	2423	2295	2190	621
25°	1821	1957	2234	1939	1806	838
35°	1418	1521	1701	1512	1408	887
45°	1031	1046	1081	1051	1040	793
55°	662	640	606	642	665	595
65°	380	325	270	326	376	376
75°	150	103	68	101	144	162
85°	12	5	2	5	9	22
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°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2495.1	2490.4	2490.4	2490.4	2490.4	2490.4	2490.4	2490.4	2490.4	2491.4	2491.4
5°	2469.0	2467.1	2466.2	2466.2	2466.2	2466.2	2467.1	2470.9	2472.7	2475.5	2477.4
7.5°	2428.0	2424.2	2426.1	2426.1	2428.0	2429.8	2432.6	2436.4	2442.0	2445.7	2450.3
10°	2366.4	2362.7	2367.4	2369.2	2374.8	2377.6	2382.3	2387.9	2399.1	2404.7	2412.1
12.5°	2294.6	2292.8	2294.6	2302.1	2307.7	2311.4	2317.0	2329.1	2340.3	2352.4	2365.5
15°	2214.5	2209.8	2212.6	2221.9	2231.2	2237.8	2242.4	2258.3	2273.2	2291.8	2307.7
17.5°	2124.9	2118.4	2125.9	2133.3	2145.5	2151.0	2157.6	2175.3	2195.8	2216.3	2234.0
20°	2027.0	2025.2	2029.8	2040.1	2052.2	2059.7	2065.3	2084.8	2102.6	2130.5	2151.0
22.5°	1925.4	1927.3	1931.0	1942.2	1950.6	1960.8	1969.2	1986.9	2007.5	2033.6	2059.7
25°	1821.0	1823.8	1830.3	1837.8	1851.7	1857.3	1867.6	1886.2	1904.0	1928.2	1957.1
27.5°	1720.3	1721.2	1728.7	1732.4	1745.5	1757.6	1762.2	1781.8	1802.3	1821.0	1846.2
30°	1616.8	1619.6	1624.2	1634.5	1647.6	1652.2	1657.8	1675.5	1691.4	1714.7	1734.3
32.5°	1517.9	1516.1	1521.7	1527.3	1542.2	1550.6	1553.4	1573.9	1587.9	1611.2	1629.8
35°	1418.2	1413.5	1421.9	1427.5	1440.6	1448.0	1451.7	1467.6	1480.7	1500.2	1520.7
37.5°	1318.4	1322.1	1325.9	1330.5	1337.1	1338.9	1350.1	1353.8	1370.6	1385.5	1396.7
40°	1226.1	1224.2	1222.4	1227.0	1235.4	1239.2	1240.1	1250.3	1254.1	1269.0	1277.4
42.5°	1127.3	1128.2	1127.3	1128.2	1132.9	1132.9	1135.7	1142.2	1145.0	1149.6	1159.9
45°	1031.2	1031.2	1028.4	1029.4	1030.3	1029.4	1030.3	1033.1	1038.7	1038.7	1046.2
47.5°	931.5	929.6	933.3	930.5	928.7	927.7	930.5	927.7	933.3	933.3	935.2
50°	828.0	828.0	832.6	831.7	833.6	829.8	830.8	830.8	831.7	830.8	834.5
52.5°	747.8	745.9	744.1	739.4	741.3	737.5	737.5	738.5	735.7	734.7	730.1
55°	662.0	663.9	661.1	659.2	659.2	655.5	654.5	649.0	645.2	642.4	639.6
57.5°	584.6	586.5	585.5	580.9	575.3	576.2	574.4	568.8	560.4	554.8	550.1
60°	510.0	511.9	510.0	505.4	503.5	499.8	498.8	491.4	484.8	477.4	471.8
62.5°	442.9	442.9	442.0	435.4	430.8	431.7	427.0	421.4	413.1	402.8	394.4
65°	379.5	378.6	373.9	371.1	367.4	362.7	359.9	351.5	345.0	336.6	325.4
67.5°	316.1	313.3	311.4	308.6	300.2	299.3	295.6	288.1	278.8	272.3	262.9
70°	254.5	253.6	249.9	249.9	243.4	240.6	235.0	228.4	220.0	210.7	203.3
72.5°	201.4	199.5	195.8	192.1	186.5	184.6	180.0	173.4	166.0	156.6	147.3
75°	150.1	148.3	147.3	142.7	138.0	133.3	131.5	124.9	117.5	111.0	102.6
77.5°	105.4	103.5	100.7	97.9	95.1	92.3	89.5	83.9	77.4	71.8	64.3
80°	65.3	63.4	61.5	60.6	57.8	56.9	53.1	50.3	44.8	41.0	36.4
82.5°	33.6	33.6	31.7	30.8	28.9	28.0	27.0	24.2	21.4	18.6	15.9
85°	12.1	12.1	11.2	10.3	10.3	9.3	9.3	8.4	6.5	6.5	4.7
87.5°	0.9	0.9	1.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	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°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2492.3	2491.4	2492.3	2492.3	2493.2	2493.2	2493.2	2492.3	2493.2	2492.3	2492.3
5°	2477.4	2480.2	2482.0	2483.9	2484.8	2485.8	2485.8	2486.7	2487.6	2487.6	2486.7
7.5°	2454.1	2459.7	2465.3	2469.0	2470.9	2472.7	2475.5	2477.4	2479.3	2478.3	2477.4
10°	2423.3	2432.6	2440.1	2447.6	2451.3	2454.1	2458.7	2462.5	2464.3	2465.3	2462.5
12.5°	2379.5	2392.5	2404.7	2416.8	2422.4	2426.1	2435.4	2442.0	2445.7	2445.7	2442.9
15°	2324.5	2343.1	2360.8	2376.7	2386.0	2391.6	2405.6	2414.9	2420.5	2423.3	2418.6
17.5°	2258.3	2279.7	2301.2	2321.7	2331.0	2339.4	2359.0	2372.0	2384.1	2386.0	2380.4
20°	2173.4	2200.5	2224.7	2249.9	2260.1	2273.2	2295.6	2317.0	2335.7	2344.1	2328.2
22.5°	2078.3	2108.2	2130.5	2161.3	2175.3	2189.3	2218.2	2245.2	2277.9	2295.6	2267.6
25°	1979.5	2004.7	2031.7	2061.5	2081.1	2096.0	2129.6	2164.1	2207.9	2234.0	2194.9
27.5°	1873.2	1895.6	1928.2	1960.8	1975.8	1994.4	2034.5	2071.8	2113.8	2137.1	2108.2
30°	1763.2	1791.1	1821.9	1851.7	1873.2	1890.9	1923.5	1955.2	1990.7	2010.3	1988.8
32.5°	1654.1	1681.1	1707.2	1739.9	1752.0	1767.8	1796.7	1823.8	1850.8	1868.5	1843.4
35°	1539.4	1563.6	1587.9	1610.3	1615.8	1634.5	1657.8	1673.7	1686.7	1700.7	1683.9
37.5°	1414.5	1433.1	1445.2	1469.5	1478.8	1481.6	1500.2	1511.4	1525.4	1528.2	1527.3
40°	1287.6	1304.4	1314.7	1329.6	1337.1	1337.1	1350.1	1360.4	1370.6	1371.6	1370.6
42.5°	1169.2	1177.6	1186.0	1195.3	1193.5	1204.7	1210.3	1214.9	1222.4	1222.4	1224.2
45°	1049.9	1056.4	1063.9	1065.7	1073.2	1073.2	1077.9	1079.7	1083.4	1080.7	1076.9
47.5°	938.9	941.7	942.7	951.0	952.9	946.4	952.0	952.9	952.0	952.0	950.1
50°	833.6	835.4	834.5	831.7	832.6	835.4	832.6	828.9	830.8	830.8	832.6
52.5°	731.0	727.3	725.4	725.4	721.7	721.7	717.0	715.2	714.2	710.5	715.2
55°	636.8	631.2	622.8	621.0	618.2	617.2	611.7	607.0	605.1	606.1	605.1
57.5°	546.4	538.0	532.4	530.5	527.7	522.1	515.6	511.0	510.0	508.2	508.2
60°	464.3	455.0	446.6	438.2	439.2	435.4	428.9	426.1	423.3	419.6	422.4
62.5°	389.7	379.5	370.2	361.8	356.2	353.4	348.7	344.1	341.3	338.5	342.2
65°	316.1	307.7	297.4	289.0	286.2	283.4	278.8	271.3	270.4	270.4	272.3
67.5°	249.9	240.6	231.2	225.6	221.9	218.2	216.3	212.6	209.8	207.9	208.9
70°	192.1	182.8	175.3	169.7	166.9	166.0	159.4	158.5	157.6	156.6	155.7
72.5°	139.9	132.4	125.9	122.1	118.4	115.6	113.8	111.0	110.0	110.0	110.0
75°	96.0	90.4	83.0	78.3	76.5	73.7	70.9	69.0	67.1	68.1	68.1
77.5°	57.8	52.2	47.6	43.8	42.9	40.1	37.3	35.4	32.6	32.6	33.6
80°	31.7	27.0	23.3	20.5	18.6	17.7	14.9	14.0	12.1	11.2	11.2
82.5°	14.0	11.2	9.3	8.4	7.5	6.5	5.6	4.7	4.7	3.7	4.7
85°	4.7	3.7	2.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	0.9	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2491.4	2491.4	2490.4	2490.4	2490.4	2488.6	2488.6	2487.6	2486.7	2485.8	2483.9
5°	2484.8	2483.9	2482.0	2481.1	2480.2	2477.4	2474.6	2472.7	2469.9	2466.2	2464.3
7.5°	2475.5	2472.7	2469.0	2467.1	2464.3	2457.8	2453.1	2448.5	2443.8	2437.3	2429.8
10°	2459.7	2454.1	2448.5	2444.8	2440.1	2431.7	2422.4	2414.9	2404.7	2395.3	2385.1
12.5°	2437.3	2430.8	2419.6	2414.0	2408.4	2396.3	2384.1	2368.3	2354.3	2341.3	2329.1
15°	2409.3	2397.2	2384.1	2376.7	2368.3	2348.7	2330.1	2313.3	2294.6	2278.8	2259.2
17.5°	2368.3	2350.6	2331.9	2323.5	2312.4	2290.0	2267.6	2244.3	2222.8	2203.3	2179.0
20°	2306.8	2287.2	2262.9	2249.9	2240.6	2210.7	2189.3	2163.2	2140.8	2116.5	2089.5
22.5°	2235.0	2207.9	2180.9	2162.2	2152.0	2122.1	2093.2	2069.9	2045.7	2017.7	1998.1
25°	2153.8	2120.3	2087.6	2069.0	2053.1	2021.4	1993.5	1969.2	1939.4	1915.2	1895.6
27.5°	2062.5	2024.2	1986.0	1967.4	1952.4	1917.9	1888.1	1862.9	1834.0	1812.6	1792.1
30°	1953.4	1918.9	1882.5	1867.6	1849.9	1814.5	1780.0	1757.6	1725.9	1703.5	1681.1
32.5°	1817.2	1794.9	1766.0	1745.5	1736.1	1703.5	1674.6	1647.6	1620.5	1602.8	1580.4
35°	1668.1	1648.5	1624.2	1613.1	1600.9	1580.4	1557.1	1533.8	1512.4	1495.6	1475.1
37.5°	1517.0	1497.4	1482.5	1470.4	1462.9	1444.3	1430.3	1412.6	1397.7	1381.8	1370.6
40°	1360.4	1354.8	1338.9	1333.3	1331.5	1311.0	1298.8	1284.8	1275.5	1266.2	1259.7
42.5°	1221.4	1212.1	1200.0	1200.9	1195.3	1184.1	1175.8	1166.4	1159.9	1155.2	1148.7
45°	1084.4	1076.9	1071.3	1076.0	1066.7	1062.9	1056.4	1055.5	1050.8	1042.4	1039.6
47.5°	953.8	952.9	953.8	951.0	949.2	947.3	948.3	943.6	938.9	936.1	932.4
50°	834.5	835.4	837.3	840.1	833.6	836.4	835.4	834.5	834.5	831.7	833.6
52.5°	718.9	719.8	721.7	724.5	725.4	725.4	728.2	730.1	733.8	738.5	738.5
55°	609.8	616.3	620.0	624.7	621.9	627.5	630.3	638.7	641.5	641.5	645.2
57.5°	512.8	519.3	522.1	527.7	529.6	534.3	541.7	546.4	552.9	558.5	564.1
60°	424.2	427.0	434.5	442.9	441.0	452.2	457.8	465.3	473.7	477.4	484.8
62.5°	345.0	348.7	354.3	357.1	363.6	369.2	382.3	389.7	397.2	406.5	414.0
65°	274.1	277.9	283.4	289.0	291.8	300.2	306.8	319.8	326.3	336.6	345.0
67.5°	209.8	215.4	220.0	223.8	225.6	234.0	244.3	249.9	262.0	272.3	278.8
70°	156.6	161.3	166.9	166.0	169.7	176.2	183.7	192.1	201.4	210.7	218.2
72.5°	109.1	113.8	117.5	118.4	122.1	126.8	132.4	138.9	146.4	155.7	166.0
75°	69.0	69.9	73.7	75.5	77.4	83.0	87.6	94.2	100.7	108.2	114.7
77.5°	34.5	37.3	39.2	41.0	42.0	46.6	51.3	56.9	62.5	69.9	76.5
80°	13.1	14.0	16.8	17.7	19.6	22.4	26.1	28.9	33.6	39.2	42.9
82.5°	4.7	5.6	6.5	6.5	7.5	9.3	10.3	13.1	15.9	17.7	19.6
85°	1.9	1.9	1.9	1.9	1.9	2.8	2.8	3.7	4.7	5.6	5.6
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: P879453

CATALOG NUMBER: LD4C55D010 EU4559035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2	2493.2
2.5°	2483.0	2483.0	2482.0	2481.1	2481.1	2481.1	2480.2	2480.2
5°	2460.6	2457.8	2456.9	2455.0	2454.1	2453.1	2450.3	2450.3
7.5°	2424.2	2420.5	2417.7	2414.9	2411.2	2408.4	2408.4	2404.7
10°	2375.8	2368.3	2364.6	2360.8	2356.2	2350.6	2348.7	2345.9
12.5°	2317.0	2302.1	2298.4	2291.8	2284.4	2280.7	2274.1	2274.1
15°	2244.3	2228.4	2220.0	2216.3	2207.0	2200.5	2197.7	2190.2
17.5°	2159.4	2147.3	2134.3	2128.7	2118.4	2110.0	2106.3	2105.4
20°	2073.7	2054.1	2045.7	2037.3	2025.2	2017.7	2012.1	2004.7
22.5°	1974.8	1957.1	1945.0	1939.4	1929.1	1916.1	1906.8	1906.8
25°	1870.4	1854.5	1848.0	1835.9	1823.8	1819.1	1807.9	1806.1
27.5°	1770.6	1754.8	1741.7	1735.2	1721.2	1714.7	1705.4	1701.6
30°	1667.1	1648.5	1639.2	1638.2	1621.4	1614.9	1607.5	1603.7
32.5°	1563.6	1547.8	1538.5	1532.9	1525.4	1514.2	1507.7	1504.0
35°	1461.1	1450.8	1442.4	1435.9	1423.8	1418.2	1412.6	1407.9
37.5°	1353.8	1344.5	1340.8	1335.2	1329.6	1319.3	1317.5	1313.8
40°	1250.3	1238.2	1238.2	1234.5	1228.9	1228.0	1225.2	1225.2
42.5°	1142.2	1136.6	1135.7	1136.6	1132.9	1131.0	1128.2	1134.7
45°	1035.0	1037.8	1033.1	1034.0	1032.2	1035.9	1035.9	1039.6
47.5°	936.1	932.4	934.3	936.1	938.9	938.9	938.0	937.1
50°	830.8	834.5	838.2	833.6	835.4	836.4	831.7	832.6
52.5°	740.3	741.3	744.1	741.3	744.1	743.1	745.0	741.3
55°	652.7	652.7	656.4	657.3	658.3	661.1	662.0	664.8
57.5°	567.8	572.5	577.2	576.2	580.0	583.7	580.9	583.7
60°	494.2	497.9	502.6	504.4	507.2	509.1	509.1	511.0
62.5°	419.6	427.0	430.8	434.5	434.5	438.2	442.0	442.9
65°	352.4	360.8	363.6	366.4	368.3	372.0	376.7	375.8
67.5°	289.0	294.6	298.4	300.2	305.8	307.7	311.4	315.2
70°	226.6	234.0	236.8	240.6	245.2	249.0	252.7	254.5
72.5°	173.4	179.0	180.9	184.6	189.3	193.0	194.9	197.7
75°	121.2	130.5	131.5	134.3	138.0	142.7	145.5	144.5
77.5°	80.2	86.7	87.6	91.4	95.1	98.8	99.8	100.7
80°	47.6	51.3	52.2	54.1	56.9	58.7	60.6	62.5
82.5°	22.4	24.2	26.1	26.1	28.0	29.8	29.8	30.8
85°	7.5	7.5	8.4	8.4	9.3	9.3	10.3	9.3
87.5°	0.9	0.9	0.0	0.9	0.9	0.9	0.9	0.9
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)