

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: P#

Luminaire Tested: **LD4C55D010 EX4C559030 4LBSQLWWH**

Issue Date: 2/18/2022

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: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P219529)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C55D010 EX4C559030 4LBSQLWWH
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

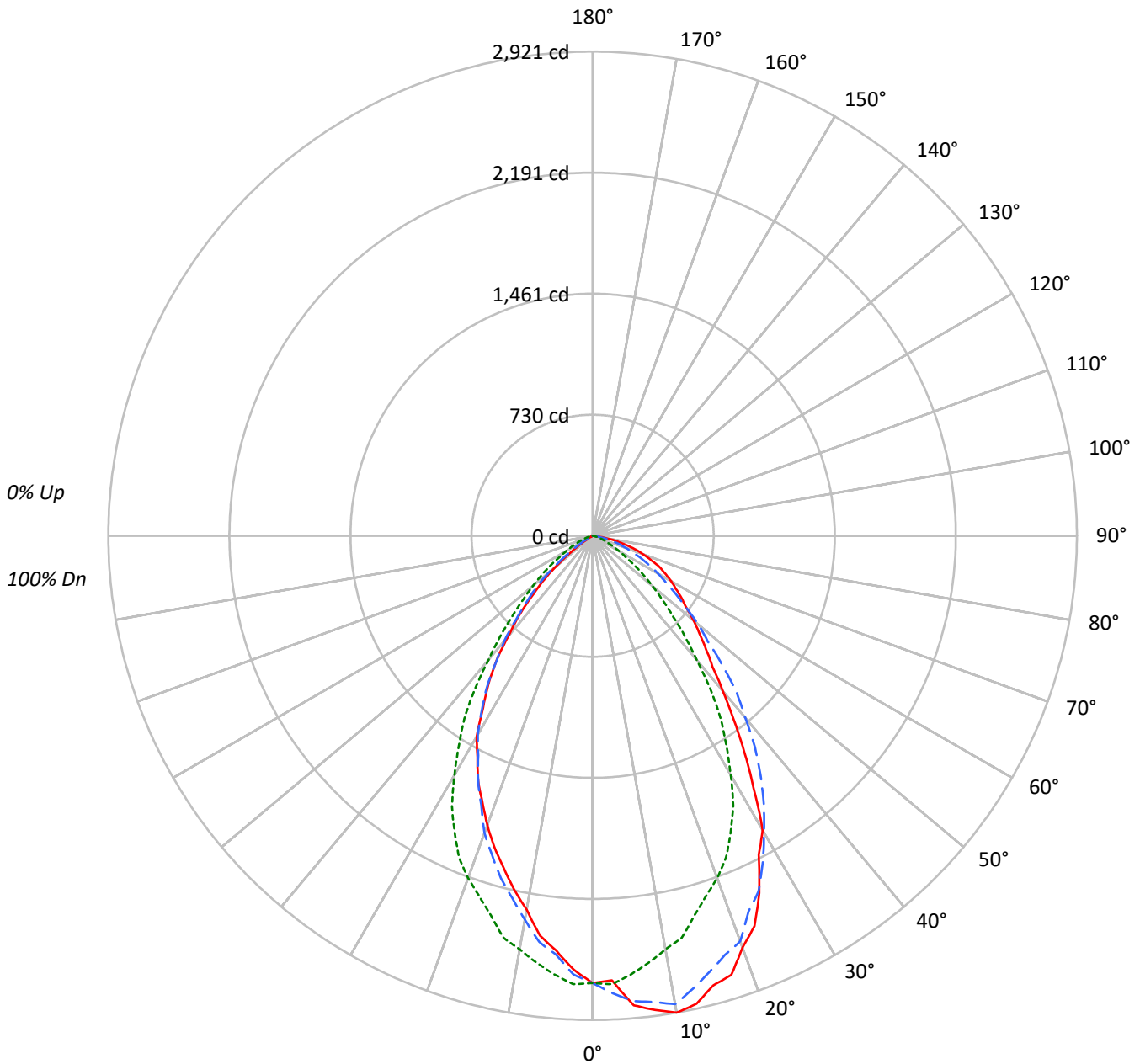
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3867.0 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
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									
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	84	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	70	66	64																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53																			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48																			
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44																			
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41																			
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	260298	260298	260298
5°	275395	257234	243442
10°	286192	248157	224378
15°	280469	236845	207117
20°	271366	225529	190648
25°	253128	209723	173919
30°	228503	185608	155704
35°	188219	158889	129170
40°	153605	122645	99418
45°	131980	93145	71503
50°	119443	70897	45168
55°	109917	51140	16334
60°	105501	34948	2489
65°	101896	23630	753
70°	91236	16419	931
75°	74785	8463	0
80°	46731	3612	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.8	6.5
10°-20°	681.0	17.6
20°-30°	909.3	23.5
30°-40°	863.2	22.3
40°-50°	596.7	15.4
50°-60°	329.7	8.5
60°-70°	163.7	4.2
70°-80°	64.5	1.7
80°-90°	6.1	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°	1843.1	47.7
0°-40°	2706.3	70.0
0°-60°	3632.6	93.9
0°-90°	3867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3867.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2698	2698	2698	2698	2698	
5°	2843	2818	2656	2536	2513	272
15°	2808	2724	2371	2138	2073	794
25°	2378	2368	1970	1634	1634	1084
35°	1598	1766	1349	1110	1097	1001
45°	967	1110	683	560	524	754
55°	653	615	304	155	97	588
65°	446	323	104	3	3	433
75°	201	123	23	0	0	214
85°	0	3	0	0	0	18
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°	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7
2.5°	2684.8	2759.2	2765.6	2759.2	2768.9	2765.6	2781.9	2765.6	2785.2	2756.0	2762.5
5°	2843.3	2814.2	2875.6	2843.3	2843.3	2840.2	2830.4	2827.1	2840.2	2798.1	2817.5
7.5°	2885.4	2927.5	2982.5	2914.5	2917.7	2917.7	2898.3	2891.9	2891.9	2814.2	2836.9
10°	2921.0	2895.0	2924.2	2898.3	2921.0	2917.7	2930.6	2888.6	2917.7	2872.5	2869.2
12.5°	2891.9	2882.1	2921.0	2878.9	2866.0	2869.2	2853.1	2843.3	2853.1	2801.2	2798.1
15°	2807.7	2817.5	2875.6	2830.4	2823.9	2817.5	2798.1	2765.6	2791.6	2720.4	2723.7
17.5°	2778.7	2762.5	2772.2	2733.3	2743.1	2736.6	2733.3	2704.3	2697.7	2652.5	2652.5
20°	2642.8	2678.3	2678.3	2652.5	2652.5	2649.3	2607.2	2633.1	2603.9	2591.0	2603.9
22.5°	2548.9	2552.2	2552.2	2529.5	2532.8	2519.9	2497.2	2481.0	2497.2	2481.0	2455.1
25°	2377.6	2384.1	2422.8	2380.8	2374.3	2387.2	2367.8	2358.1	2354.9	2316.1	2367.8
27.5°	2170.5	2235.1	2232.0	2215.8	2235.1	2209.3	2199.7	2202.8	2212.6	2209.3	2222.2
30°	2050.9	2060.5	2070.3	2057.3	2060.5	2050.9	2050.9	2054.0	2079.9	2070.3	2067.0
32.5°	1808.2	1840.5	1866.5	1866.5	1869.7	1879.4	1876.1	1944.0	1960.3	1927.9	1921.5
35°	1597.9	1620.6	1643.2	1646.5	1688.6	1691.7	1695.0	1714.4	1759.7	1769.4	1766.1
37.5°	1397.5	1420.0	1426.5	1455.6	1478.3	1500.9	1526.8	1552.7	1591.5	1623.8	1607.7
40°	1219.5	1229.2	1245.4	1258.3	1303.5	1303.5	1316.5	1368.3	1410.4	1436.2	1432.9
42.5°	1070.7	1073.9	1086.8	1109.5	1151.6	1141.8	1151.6	1187.2	1248.5	1251.8	1287.5
45°	967.2	963.9	973.7	976.8	1002.8	1015.7	1022.2	1048.1	1099.8	1106.2	1109.5
47.5°	873.4	870.1	886.4	892.8	902.4	915.4	915.4	918.7	938.1	954.3	941.4
50°	795.7	795.7	795.7	802.2	818.4	815.1	818.4	831.4	841.0	834.5	831.4
52.5°	711.6	724.5	734.3	737.6	740.7	740.7	744.0	737.6	734.3	724.5	705.1
55°	653.4	666.3	666.3	666.3	666.3	679.3	663.2	666.3	666.3	640.5	614.6
57.5°	595.3	608.2	617.8	604.9	617.8	604.9	598.4	595.3	588.7	562.8	524.0
60°	546.7	553.2	549.9	546.7	553.2	543.4	537.0	524.0	517.6	482.0	456.1
62.5°	491.7	494.9	498.2	491.7	485.3	482.0	469.0	449.6	436.7	407.6	384.9
65°	446.3	436.7	433.4	430.2	423.8	414.0	404.4	381.7	372.0	346.1	323.4
67.5°	378.4	375.2	381.7	372.0	355.9	355.9	346.1	326.7	304.0	287.9	265.2
70°	323.4	320.2	313.8	304.0	300.9	287.9	287.9	265.2	258.8	229.6	210.2
72.5°	265.2	265.2	255.5	245.9	236.1	229.6	226.5	210.2	200.6	184.4	168.2
75°	200.6	200.6	197.3	187.6	181.1	174.6	171.5	158.5	148.8	132.7	122.9
77.5°	142.3	142.3	129.4	122.9	126.1	119.6	113.2	110.0	106.7	97.1	84.1
80°	84.1	80.9	71.2	74.4	71.2	71.2	67.9	64.6	58.2	51.7	45.2
82.5°	22.7	25.9	25.9	25.9	29.1	22.7	22.7	22.7	25.9	25.9	16.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3
87.5°	3.3	6.5	12.9	12.9	12.9	12.9	12.9	9.8	9.8	9.8	6.5
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°	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7
2.5°	2730.2	2726.9	2730.2	2707.5	2759.2	2720.4	2713.9	2707.5	2730.2	2707.5	2675.1
5°	2788.3	2756.0	2746.2	2736.6	2765.6	2720.4	2710.8	2713.9	2697.7	2655.8	2658.9
7.5°	2807.7	2778.7	2749.5	2688.1	2713.9	2704.3	2678.3	2658.9	2633.1	2597.5	2591.0
10°	2814.2	2781.9	2739.8	2720.4	2681.6	2668.7	2658.9	2626.6	2594.3	2532.8	2516.6
12.5°	2794.8	2756.0	2704.3	2688.1	2658.9	2616.9	2594.3	2561.9	2532.8	2484.3	2448.7
15°	2710.8	2678.3	2662.2	2607.2	2594.3	2568.3	2523.1	2477.8	2435.8	2371.0	2351.6
17.5°	2613.7	2600.8	2584.5	2542.5	2539.3	2513.4	2471.4	2432.5	2377.6	2277.2	2244.9
20°	2513.4	2513.4	2461.6	2445.5	2477.8	2426.0	2393.7	2358.1	2244.9	2196.4	2138.2
22.5°	2439.1	2403.4	2374.3	2348.4	2351.6	2319.3	2274.0	2202.8	2160.8	2102.6	2034.7
25°	2293.4	2306.4	2241.7	2232.0	2241.7	2167.2	2144.7	2086.4	2024.9	1969.9	1918.2
27.5°	2202.8	2167.2	2125.3	2089.7	2089.7	2060.5	1995.9	1982.9	1889.0	1837.3	1772.6
30°	2067.0	2041.1	2005.5	1953.8	1947.3	1924.7	1872.9	1840.5	1743.6	1665.9	1630.3
32.5°	1895.5	1885.9	1856.7	1798.6	1779.2	1753.2	1688.6	1633.6	1588.3	1500.9	1458.9
35°	1772.6	1737.1	1675.6	1627.1	1610.9	1565.6	1513.8	1475.0	1426.5	1348.9	1293.9
37.5°	1588.3	1552.7	1494.4	1436.2	1436.2	1391.0	1319.8	1281.0	1213.1	1167.7	1122.5
40°	1426.5	1381.2	1323.1	1255.1	1245.4	1180.6	1151.6	1086.8	1044.8	973.7	967.2
42.5°	1245.4	1203.3	1151.6	1099.8	1061.0	1028.7	954.3	905.7	860.5	824.9	815.1
45°	1080.4	1025.4	980.1	915.4	876.6	837.8	789.3	757.0	721.3	682.6	659.9
47.5°	938.1	892.8	828.1	769.9	731.1	711.6	656.6	621.1	592.0	566.1	549.9
50°	792.6	737.6	702.0	637.2	630.7	585.5	540.3	511.1	494.9	472.3	449.6
52.5°	682.6	630.7	582.2	533.8	507.8	491.7	449.6	420.5	397.9	381.7	368.8
55°	575.7	530.5	491.7	443.2	427.0	404.4	355.9	349.4	326.7	304.0	287.9
57.5°	494.9	452.8	407.6	375.2	346.1	330.0	291.1	265.2	252.3	232.9	216.7
60°	420.5	375.2	339.6	300.9	287.9	265.2	236.1	213.5	197.3	181.1	165.0
62.5°	352.6	313.8	275.0	242.6	223.2	210.2	187.6	168.2	152.1	139.1	126.1
65°	291.1	255.5	223.2	190.9	181.1	165.0	148.8	132.7	119.6	103.5	90.6
67.5°	239.4	207.1	174.6	152.1	142.3	135.9	116.5	100.2	90.6	80.9	67.9
70°	187.6	165.0	139.1	119.6	110.0	100.2	87.3	77.7	64.6	58.2	48.5
72.5°	145.6	126.1	103.5	87.3	80.9	74.4	61.5	51.7	45.2	38.8	32.3
75°	103.5	87.3	74.4	58.2	55.0	51.7	42.1	35.6	29.1	22.7	19.4
77.5°	71.2	58.2	45.2	38.8	35.6	29.1	25.9	19.4	16.2	12.9	9.8
80°	38.8	29.1	22.7	19.4	16.2	12.9	12.9	9.8	6.5	6.5	3.3
82.5°	12.9	9.8	6.5	3.3	3.3	3.3	3.3	3.3	3.3	0.0	3.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	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°	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7
2.5°	2694.5	2658.9	2668.7	2668.7	2662.2	2662.2	2655.8	2646.0	2649.3	2629.8	2587.8
5°	2665.4	2620.1	2613.7	2620.1	2594.3	2587.8	2574.9	2594.3	2536.0	2558.7	2532.8
7.5°	2581.4	2539.3	2529.5	2552.2	2519.9	2500.4	2497.2	2523.1	2471.4	2445.5	2416.4
10°	2487.5	2471.4	2442.2	2426.0	2416.4	2419.5	2393.7	2361.4	2351.6	2345.1	2319.3
12.5°	2403.4	2367.8	2342.0	2322.6	2316.1	2316.1	2274.0	2267.6	2238.4	2232.0	2193.2
15°	2303.1	2261.1	2244.9	2219.0	2196.4	2209.3	2160.8	2147.8	2138.2	2096.1	2102.6
17.5°	2215.8	2170.5	2131.7	2115.5	2096.1	2076.7	2031.4	2041.1	2018.4	2018.4	1960.3
20°	2102.6	2054.0	2024.9	1992.6	1992.6	1966.7	1934.4	1937.6	1908.4	1879.4	1827.6
22.5°	1982.9	1931.1	1895.5	1882.6	1850.3	1843.8	1805.0	1795.3	1756.5	1759.7	1714.4
25°	1856.7	1805.0	1756.5	1759.7	1730.6	1717.7	1695.0	1649.8	1633.6	1614.2	1601.2
27.5°	1707.9	1672.3	1630.3	1627.1	1572.1	1575.3	1546.2	1533.3	1494.4	1504.2	1475.0
30°	1572.1	1520.4	1481.5	1471.8	1449.2	1442.7	1397.5	1377.9	1384.5	1358.5	1342.5
32.5°	1432.9	1355.4	1339.2	1319.8	1306.8	1290.6	1258.3	1271.2	1242.1	1248.5	1222.7
35°	1248.5	1216.2	1174.2	1174.2	1161.2	1148.3	1125.7	1138.7	1109.5	1096.6	1070.7
37.5°	1093.3	1064.3	1022.2	1035.1	1012.4	993.1	973.7	976.8	951.0	947.8	921.8
40°	925.1	908.9	879.9	879.9	863.7	863.7	853.9	844.3	828.1	808.7	779.5
42.5°	766.6	753.7	740.7	744.0	721.3	740.7	714.9	731.1	679.3	676.1	656.6
45°	650.1	621.1	624.3	611.3	598.4	604.9	582.2	588.7	559.6	553.2	533.8
47.5°	527.3	517.6	498.2	491.7	491.7	482.0	472.3	469.0	456.1	439.9	414.0
50°	433.4	397.9	391.3	381.7	375.2	375.2	362.3	342.9	346.1	330.0	304.0
52.5°	339.6	310.5	297.6	294.4	281.5	275.0	258.8	245.9	236.1	229.6	213.5
55°	262.0	236.1	220.0	220.0	200.6	200.6	177.9	168.2	155.2	142.3	132.7
57.5°	197.3	184.4	168.2	155.2	148.8	132.7	119.6	103.5	93.8	74.4	61.5
60°	148.8	135.9	119.6	110.0	103.5	87.3	71.2	58.2	35.6	29.1	25.9
62.5°	110.0	97.1	80.9	74.4	67.9	55.0	38.8	19.4	9.8	9.8	9.8
65°	80.9	64.6	51.7	45.2	38.8	29.1	12.9	6.5	3.3	3.3	3.3
67.5°	55.0	42.1	29.1	25.9	19.4	9.8	3.3	3.3	3.3	3.3	3.3
70°	35.6	25.9	12.9	9.8	6.5	3.3	3.3	3.3	3.3	3.3	3.3
72.5°	22.7	12.9	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	12.9	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.3
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: P#

CATALOG NUMBER: LD4C55D010 EX4C559030 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7	2697.7
2.5°	2633.1	2610.4	2623.3	2594.3	2607.2	2629.8	2613.7	2620.1
5°	2542.5	2529.5	2513.4	2471.4	2503.7	2529.5	2516.6	2513.4
7.5°	2445.5	2400.1	2422.8	2409.9	2403.4	2429.3	2400.1	2432.5
10°	2345.1	2312.8	2309.7	2287.0	2287.0	2306.4	2309.7	2290.1
12.5°	2196.4	2180.3	2180.3	2177.0	2173.7	2193.2	2196.4	2186.7
15°	2089.7	2083.2	2067.0	2063.8	2044.4	2073.4	2076.7	2073.4
17.5°	1960.3	1963.4	1947.3	1947.3	1960.3	1969.9	1944.0	1969.9
20°	1872.9	1856.7	1850.3	1821.1	1837.3	1853.6	1853.6	1856.7
22.5°	1746.7	1720.9	1730.6	1714.4	1704.6	1727.3	1727.3	1737.1
25°	1604.4	1604.4	1610.9	1601.2	1607.7	1620.6	1610.9	1633.6
27.5°	1468.6	1481.5	1481.5	1468.6	1475.0	1513.8	1530.0	1504.2
30°	1342.5	1345.6	1355.4	1348.9	1368.3	1381.2	1377.9	1397.5
32.5°	1200.1	1216.2	1222.7	1213.1	1219.5	1248.5	1232.5	1229.2
35°	1090.1	1061.0	1057.8	1061.0	1073.9	1080.4	1073.9	1096.6
37.5°	931.6	921.8	908.9	912.2	921.8	934.9	941.4	957.4
40°	779.5	766.6	766.6	763.4	753.7	789.3	789.3	789.3
42.5°	647.0	643.7	627.6	627.6	640.5	650.1	643.7	666.3
45°	530.5	517.6	507.8	507.8	517.6	517.6	527.3	524.0
47.5°	417.3	404.4	407.6	397.9	407.6	420.5	404.4	407.6
50°	313.8	313.8	307.3	313.8	310.5	313.8	307.3	300.9
52.5°	213.5	242.6	245.9	232.9	203.8	177.9	161.7	174.6
55°	122.9	110.0	110.0	106.7	100.2	97.1	87.3	97.1
57.5°	61.5	55.0	55.0	55.0	51.7	48.5	42.1	42.1
60°	25.9	22.7	22.7	19.4	16.2	12.9	9.8	12.9
62.5°	9.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5
65°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
67.5°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
70°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)