

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 EX4C559035 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 EX4C559035 4LBSQLWWH
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

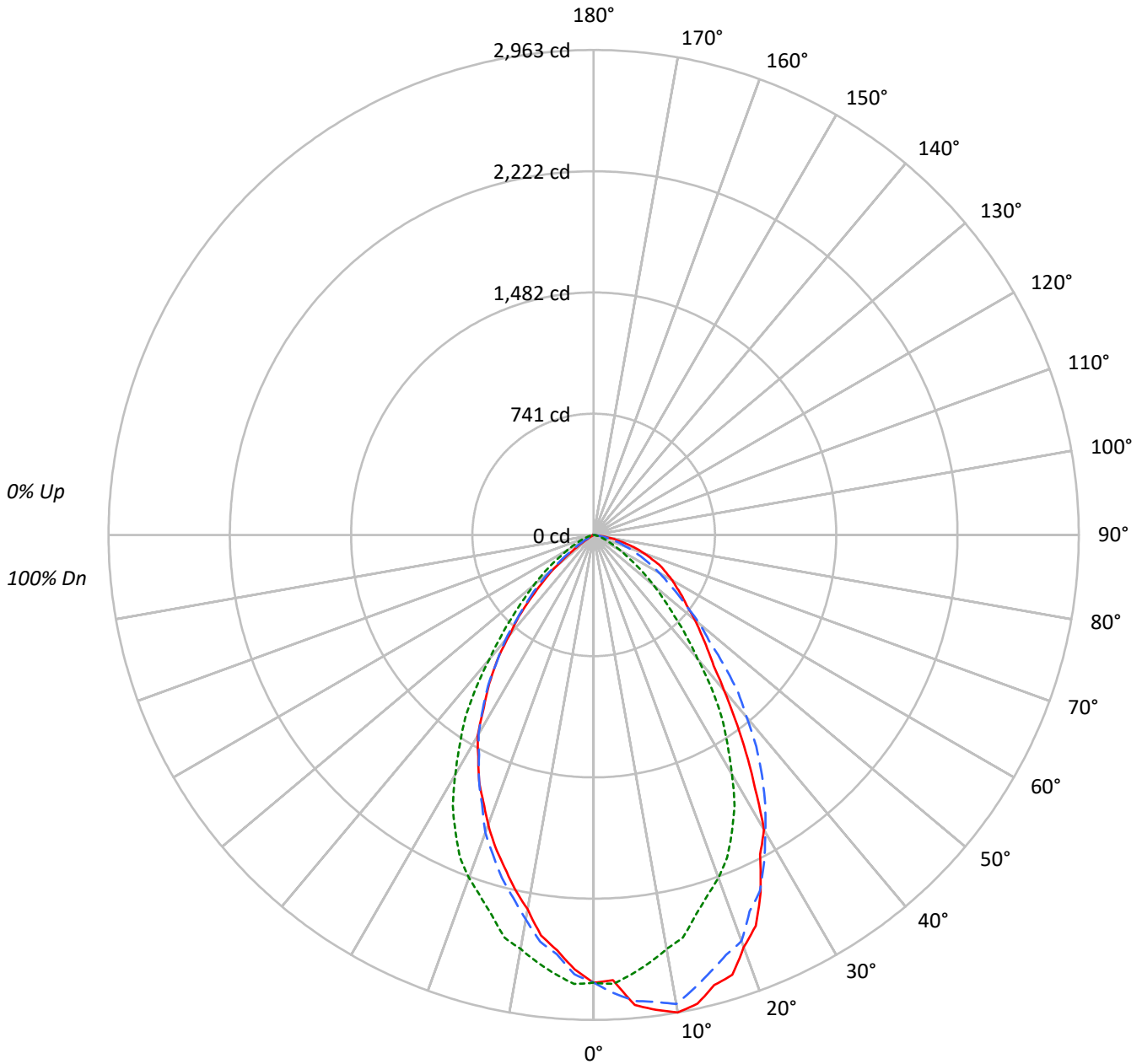
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3922.0 lumens
Efficiency: N/A
Efficacy: 61.4 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°	264003	264003	264003
5°	279318	260886	246909
10°	290268	251694	227572
15°	284454	240212	210064
20°	275227	228733	193359
25°	256727	212704	176389
30°	231745	188248	157910
35°	190904	161150	131007
40°	155797	124383	100829
45°	133863	94468	72526
50°	121154	71903	45799
55°	111482	51880	16570
60°	107006	35450	2528
65°	103357	23973	753
70°	92534	16645	931
75°	75866	8575	0
80°	47398	3667	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.4	6.5
10°-20°	690.7	17.6
20°-30°	922.3	23.5
30°-40°	875.5	22.3
40°-50°	605.2	15.4
50°-60°	334.4	8.5
60°-70°	166.0	4.2
70°-80°	65.4	1.7
80°-90°	6.2	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°	1869.3	47.7
0°-40°	2744.8	70.0
0°-60°	3684.3	93.9
0°-90°	3922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3922.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2736	2736	2736	2736	2736	
5°	2884	2858	2694	2572	2549	276
15°	2848	2762	2405	2169	2103	806
25°	2411	2402	1998	1657	1657	1099
35°	1621	1791	1368	1125	1112	1015
45°	981	1125	692	568	532	765
55°	663	623	308	158	98	596
65°	453	328	105	3	3	439
75°	204	125	23	0	0	217
85°	0	3	0	0	0	19
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°	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1
2.5°	2723.0	2798.4	2805.0	2798.4	2808.3	2805.0	2821.4	2805.0	2824.8	2795.2	2801.8
5°	2883.8	2854.2	2916.5	2883.8	2883.8	2880.5	2870.7	2867.3	2880.5	2837.9	2857.5
7.5°	2926.4	2969.1	3024.9	2956.0	2959.2	2959.2	2939.5	2933.0	2933.0	2854.2	2877.2
10°	2962.6	2936.2	2965.8	2939.5	2962.6	2959.2	2972.3	2929.6	2959.2	2913.3	2910.0
12.5°	2933.0	2923.1	2962.6	2919.9	2906.8	2910.0	2893.7	2883.8	2893.7	2841.1	2837.9
15°	2847.6	2857.5	2916.5	2870.7	2864.1	2857.5	2837.9	2805.0	2831.3	2759.1	2762.4
17.5°	2818.2	2801.8	2811.7	2772.2	2782.1	2775.5	2772.2	2742.8	2736.1	2690.2	2690.2
20°	2680.4	2716.4	2716.4	2690.2	2690.2	2687.0	2644.3	2670.5	2641.0	2627.9	2641.0
22.5°	2585.2	2588.5	2588.5	2565.5	2568.9	2555.7	2532.7	2516.3	2532.7	2516.3	2490.1
25°	2411.4	2418.0	2457.3	2414.6	2408.1	2421.2	2401.5	2391.6	2388.4	2349.1	2401.5
27.5°	2201.4	2266.9	2263.7	2247.3	2266.9	2240.7	2230.9	2234.2	2244.1	2240.7	2253.8
30°	2080.0	2089.8	2099.7	2086.6	2089.8	2080.0	2080.0	2083.3	2109.5	2099.7	2096.4
32.5°	1833.9	1866.7	1893.0	1893.0	1896.2	1906.1	1902.8	1971.7	1988.1	1955.4	1948.8
35°	1620.7	1643.7	1666.6	1669.9	1712.6	1715.8	1719.1	1738.8	1784.7	1794.6	1791.2
37.5°	1417.3	1440.2	1446.8	1476.3	1499.3	1522.2	1548.6	1574.8	1614.1	1646.9	1630.6
40°	1236.9	1246.6	1263.1	1276.2	1322.1	1322.1	1335.2	1387.8	1430.4	1456.7	1453.3
42.5°	1086.0	1089.2	1102.3	1125.3	1168.0	1158.1	1168.0	1204.1	1266.3	1269.6	1305.8
45°	981.0	977.6	987.5	990.7	1017.1	1030.2	1036.7	1063.0	1115.4	1122.0	1125.3
47.5°	885.8	882.5	899.0	905.5	915.3	928.4	928.4	931.7	951.4	967.9	954.7
50°	807.1	807.1	807.1	813.6	830.1	826.7	830.1	843.2	852.9	846.4	843.2
52.5°	721.7	734.8	744.7	748.1	751.3	751.3	754.6	748.1	744.7	734.8	715.2
55°	662.7	675.8	675.8	675.8	675.8	688.9	672.6	675.8	675.8	649.6	623.4
57.5°	603.7	616.8	626.6	613.5	626.6	613.5	606.9	603.7	597.0	570.8	531.5
60°	554.5	561.0	557.7	554.5	561.0	551.1	544.6	531.5	524.9	488.8	462.6
62.5°	498.7	501.9	505.3	498.7	492.2	488.8	475.7	456.0	442.9	413.4	390.4
65°	452.7	442.9	439.6	436.4	429.8	419.9	410.1	387.1	377.2	351.0	328.0
67.5°	383.8	380.6	387.1	377.2	360.9	360.9	351.0	331.4	308.4	292.0	269.0
70°	328.0	324.8	318.2	308.4	305.1	292.0	292.0	269.0	262.5	232.9	213.2
72.5°	269.0	269.0	259.1	249.4	239.5	232.9	229.7	213.2	203.5	187.0	170.6
75°	203.5	203.5	200.1	190.2	183.7	177.1	173.9	160.8	150.9	134.6	124.7
77.5°	144.3	144.3	131.2	124.7	127.9	121.3	114.8	111.6	108.2	98.5	85.3
80°	85.3	82.0	72.2	75.4	72.2	72.2	68.9	65.6	59.0	52.4	45.9
82.5°	23.0	26.2	26.2	26.2	29.6	23.0	23.0	23.0	26.2	26.2	16.5
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	6.6	13.1	13.1	13.1	13.1	13.1	9.9	9.9	9.9	6.6
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°	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1
2.5°	2769.0	2765.6	2769.0	2746.0	2798.4	2759.1	2752.5	2746.0	2769.0	2746.0	2713.2
5°	2828.0	2795.2	2785.3	2775.5	2805.0	2759.1	2749.3	2752.5	2736.1	2693.5	2696.7
7.5°	2847.6	2818.2	2788.6	2726.3	2752.5	2742.8	2716.4	2696.7	2670.5	2634.4	2627.9
10°	2854.2	2821.4	2778.7	2759.1	2719.8	2706.6	2696.7	2664.0	2631.2	2568.9	2552.4
12.5°	2834.5	2795.2	2742.8	2726.3	2696.7	2654.1	2631.2	2598.3	2568.9	2519.6	2483.5
15°	2749.3	2716.4	2700.1	2644.3	2631.2	2604.8	2559.0	2513.1	2470.4	2404.7	2385.1
17.5°	2650.9	2637.7	2621.3	2578.6	2575.4	2549.2	2506.5	2467.1	2411.4	2309.6	2276.8
20°	2549.2	2549.2	2496.6	2480.3	2513.1	2460.5	2427.7	2391.6	2276.8	2227.6	2168.6
22.5°	2473.7	2437.6	2408.1	2381.8	2385.1	2352.3	2306.4	2234.2	2191.5	2132.5	2063.6
25°	2326.1	2339.2	2273.6	2263.7	2273.6	2198.0	2175.2	2116.0	2053.7	1997.9	1945.5
27.5°	2234.2	2198.0	2155.5	2119.4	2119.4	2089.8	2024.3	2011.2	1915.9	1863.5	1797.8
30°	2096.4	2070.1	2034.0	1981.6	1975.0	1952.0	1899.6	1866.7	1768.4	1689.6	1653.4
32.5°	1922.5	1912.7	1883.1	1824.1	1804.5	1778.1	1712.6	1656.8	1610.9	1522.2	1479.7
35°	1797.8	1761.8	1699.5	1650.2	1633.8	1587.9	1535.3	1496.0	1446.8	1368.1	1312.3
37.5°	1610.9	1574.8	1515.7	1456.7	1456.7	1410.8	1338.5	1299.2	1230.3	1184.3	1138.4
40°	1446.8	1400.9	1341.9	1273.0	1263.1	1197.4	1168.0	1102.3	1059.6	987.5	981.0
42.5°	1263.1	1220.4	1168.0	1115.4	1076.1	1043.3	967.9	918.6	872.7	836.6	826.7
45°	1095.7	1040.0	994.1	928.4	889.1	849.7	800.5	767.7	731.6	692.3	669.3
47.5°	951.4	905.5	839.8	780.8	741.5	721.7	665.9	629.9	600.4	574.2	557.7
50°	803.8	748.1	711.9	646.3	639.7	593.8	547.9	518.4	501.9	479.0	456.0
52.5°	692.3	639.7	590.5	541.4	515.0	498.7	456.0	426.5	403.6	387.1	374.0
55°	583.9	538.0	498.7	449.5	433.0	410.1	360.9	354.4	331.4	308.4	292.0
57.5°	501.9	459.2	413.4	380.6	351.0	334.7	295.2	269.0	255.9	236.2	219.8
60°	426.5	380.6	344.5	305.1	292.0	269.0	239.5	216.6	200.1	183.7	167.3
62.5°	357.6	318.2	278.9	246.0	226.3	213.2	190.2	170.6	154.2	141.1	127.9
65°	295.2	259.1	226.3	193.6	183.7	167.3	150.9	134.6	121.3	105.0	91.9
67.5°	242.8	210.0	177.1	154.2	144.3	137.8	118.1	101.7	91.9	82.0	68.9
70°	190.2	167.3	141.1	121.3	111.6	101.7	88.6	78.8	65.6	59.0	49.2
72.5°	147.7	127.9	105.0	88.6	82.0	75.4	62.3	52.4	45.9	39.3	32.8
75°	105.0	88.6	75.4	59.0	55.8	52.4	42.7	36.1	29.6	23.0	19.7
77.5°	72.2	59.0	45.9	39.3	36.1	29.6	26.2	19.7	16.5	13.1	9.9
80°	39.3	29.6	23.0	19.7	16.5	13.1	13.1	9.9	6.6	6.6	3.3
82.5°	13.1	9.9	6.6	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°	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1
2.5°	2732.9	2696.7	2706.6	2706.6	2700.1	2700.1	2693.5	2683.6	2687.0	2667.2	2624.6
5°	2703.3	2657.4	2650.9	2657.4	2631.2	2624.6	2611.5	2631.2	2572.1	2595.1	2568.9
7.5°	2618.1	2575.4	2565.5	2588.5	2555.7	2536.0	2532.7	2559.0	2506.5	2480.3	2450.7
10°	2522.8	2506.5	2477.0	2460.5	2450.7	2453.9	2427.7	2395.0	2385.1	2378.5	2352.3
12.5°	2437.6	2401.5	2375.3	2355.6	2349.1	2349.1	2306.4	2299.8	2270.3	2263.7	2224.4
15°	2335.8	2293.3	2276.8	2250.6	2227.6	2240.7	2191.5	2178.4	2168.6	2125.9	2132.5
17.5°	2247.3	2201.4	2162.0	2145.6	2125.9	2106.3	2060.3	2070.1	2047.1	2047.1	1988.1
20°	2132.5	2083.3	2053.7	2020.9	2020.9	1994.7	1961.9	1965.1	1935.6	1906.1	1853.6
22.5°	2011.2	1958.6	1922.5	1909.4	1876.6	1870.0	1830.7	1820.8	1781.5	1784.7	1738.8
25°	1883.1	1830.7	1781.5	1784.7	1755.2	1742.1	1719.1	1673.2	1656.8	1637.1	1624.0
27.5°	1732.2	1696.1	1653.4	1650.2	1594.4	1597.7	1568.2	1555.1	1515.7	1525.6	1496.0
30°	1594.4	1542.0	1502.5	1492.8	1469.8	1463.2	1417.3	1397.5	1404.2	1377.9	1361.5
32.5°	1453.3	1374.7	1358.2	1338.5	1325.4	1309.0	1276.2	1289.3	1259.7	1266.3	1240.1
35°	1266.3	1233.5	1190.9	1190.9	1177.7	1164.6	1141.8	1154.9	1125.3	1112.2	1086.0
37.5°	1108.9	1079.4	1036.7	1049.9	1026.8	1007.2	987.5	990.7	964.5	961.3	934.9
40°	938.3	921.8	892.4	892.4	876.0	876.0	866.1	856.3	839.8	820.2	790.6
42.5°	777.5	764.4	751.3	754.6	731.6	751.3	725.1	741.5	688.9	685.7	665.9
45°	659.4	629.9	633.2	620.0	606.9	613.5	590.5	597.0	567.6	561.0	541.4
47.5°	534.8	524.9	505.3	498.7	498.7	488.8	479.0	475.7	462.6	446.1	419.9
50°	439.6	403.6	396.9	387.1	380.6	380.6	367.5	347.8	351.0	334.7	308.4
52.5°	344.5	314.9	301.8	298.6	285.5	278.9	262.5	249.4	239.5	232.9	216.6
55°	265.7	239.5	223.1	223.1	203.5	203.5	180.5	170.6	157.5	144.3	134.6
57.5°	200.1	187.0	170.6	157.5	150.9	134.6	121.3	105.0	95.1	75.4	62.3
60°	150.9	137.8	121.3	111.6	105.0	88.6	72.2	59.0	36.1	29.6	26.2
62.5°	111.6	98.5	82.0	75.4	68.9	55.8	39.3	19.7	9.9	9.9	9.9
65°	82.0	65.6	52.4	45.9	39.3	29.6	13.1	6.6	3.3	3.3	3.3
67.5°	55.8	42.7	29.6	26.2	19.7	9.9	3.3	3.3	3.3	3.3	3.3
70°	36.1	26.2	13.1	9.9	6.6	3.3	3.3	3.3	3.3	3.3	3.3
72.5°	23.0	13.1	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	13.1	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.6	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 EX4C559035 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1	2736.1
2.5°	2670.5	2647.5	2660.6	2631.2	2644.3	2667.2	2650.9	2657.4
5°	2578.6	2565.5	2549.2	2506.5	2539.3	2565.5	2552.4	2549.2
7.5°	2480.3	2434.3	2457.3	2444.2	2437.6	2463.8	2434.3	2467.1
10°	2378.5	2345.7	2342.5	2319.5	2319.5	2339.2	2342.5	2322.7
12.5°	2227.6	2211.3	2211.3	2207.9	2204.6	2224.4	2227.6	2217.8
15°	2119.4	2112.8	2096.4	2093.2	2073.5	2102.9	2106.3	2102.9
17.5°	1988.1	1991.4	1975.0	1975.0	1988.1	1997.9	1971.7	1997.9
20°	1899.6	1883.1	1876.6	1847.0	1863.5	1879.9	1879.9	1883.1
22.5°	1771.6	1745.3	1755.2	1738.8	1728.9	1751.9	1751.9	1761.8
25°	1627.2	1627.2	1633.8	1624.0	1630.6	1643.7	1633.8	1656.8
27.5°	1489.4	1502.5	1502.5	1489.4	1496.0	1535.3	1551.8	1525.6
30°	1361.5	1364.8	1374.7	1368.1	1387.8	1400.9	1397.5	1417.3
32.5°	1217.2	1233.5	1240.1	1230.3	1236.9	1266.3	1250.0	1246.6
35°	1105.6	1076.1	1072.9	1076.1	1089.2	1095.7	1089.2	1112.2
37.5°	944.8	934.9	921.8	925.2	934.9	948.2	954.7	971.1
40°	790.6	777.5	777.5	774.3	764.4	800.5	800.5	800.5
42.5°	656.2	652.8	636.5	636.5	649.6	659.4	652.8	675.8
45°	538.0	524.9	515.0	515.0	524.9	524.9	534.8	531.5
47.5°	423.3	410.1	413.4	403.6	413.4	426.5	410.1	413.4
50°	318.2	318.2	311.7	318.2	314.9	318.2	311.7	305.1
52.5°	216.6	246.0	249.4	236.2	206.7	180.5	164.0	177.1
55°	124.7	111.6	111.6	108.2	101.7	98.5	88.6	98.5
57.5°	62.3	55.8	55.8	55.8	52.4	49.2	42.7	42.7
60°	26.2	23.0	23.0	19.7	16.5	13.1	9.9	13.1
62.5°	9.9	6.6	6.6	6.6	6.6	6.6	6.6	6.6
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)