

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 EX4C559050 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 EX4C559050 4LBSQLWWH
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

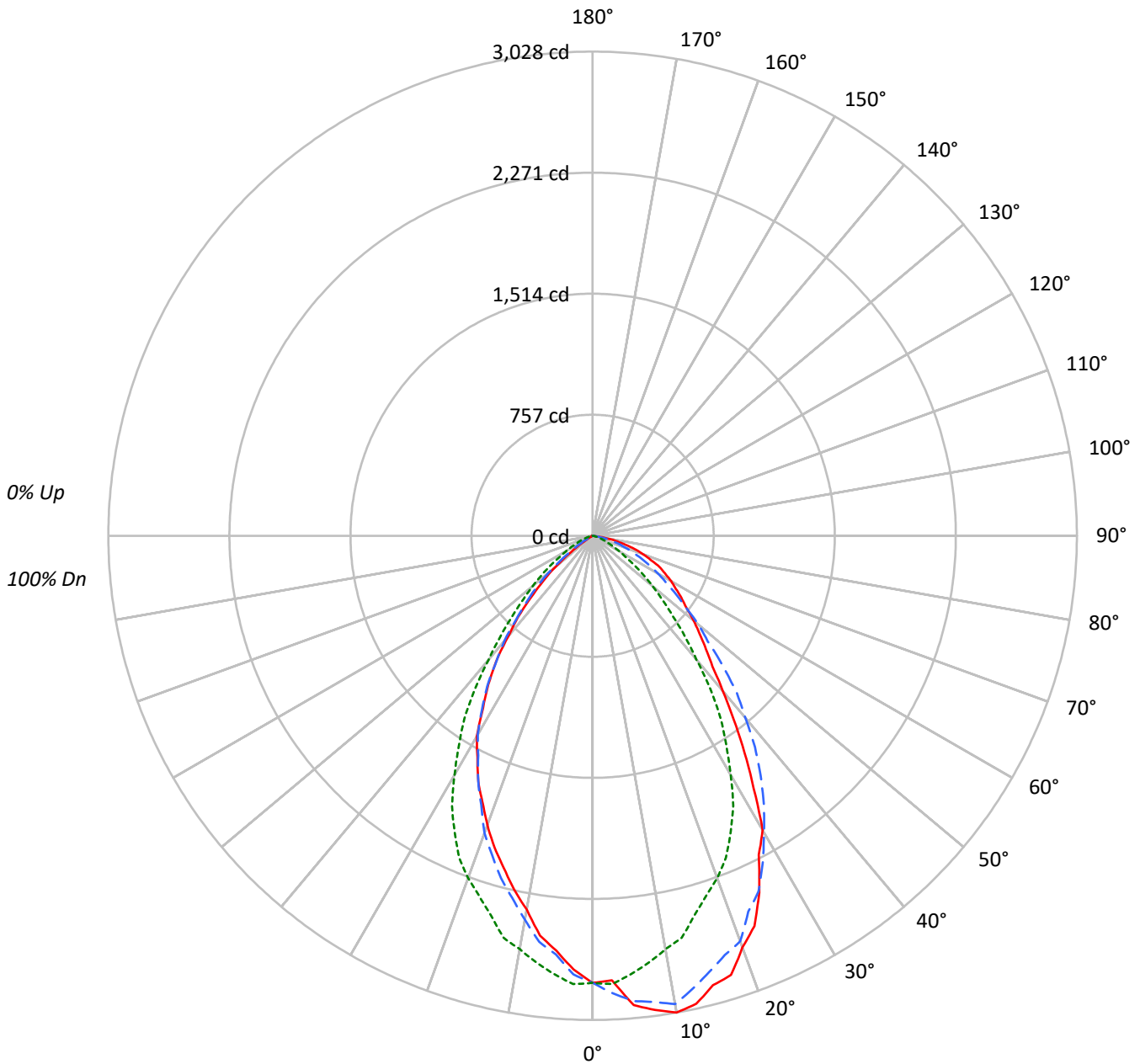
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4008.0 lumens
Efficiency: N/A
Efficacy: 62.7 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

TEST NUMBER: P#
CATALOG NUMBER: LD4C55D010 EX4C559050 4LBSQLWWH

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559050 4LBSQLWWH

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90			90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80			80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72			72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64			64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58			58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53			53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48			48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44			44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41			41
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38			38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	269793	269793	269793
5°	285439	266610	252323
10°	296627	257210	232559
15°	290698	245476	214669
20°	281265	233744	197600
25°	262359	217367	180254
30°	236837	192370	161375
35°	195086	164684	133881
40°	159210	127116	103046
45°	136797	96543	74109
50°	123811	73479	46804
55°	113921	53007	16923
60°	109341	36222	2586
65°	105617	24498	776
70°	94565	17012	959
75°	77506	8761	0
80°	48453	3723	0
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559050 4LBSQLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.0	6.5
10°-20°	705.8	17.6
20°-30°	942.5	23.5
30°-40°	894.7	22.3
40°-50°	618.4	15.4
50°-60°	341.7	8.5
60°-70°	169.7	4.2
70°-80°	66.8	1.7
80°-90°	6.4	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°	1910.3	47.7
0°-40°	2804.9	70.0
0°-60°	3765.1	93.9
0°-90°	4008.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4008.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2796	2796	2796	2796	2796	
5°	2947	2920	2753	2628	2605	282
15°	2910	2823	2457	2216	2149	823
25°	2464	2454	2042	1693	1693	1123
35°	1656	1830	1398	1150	1137	1038
45°	1002	1150	708	580	543	782
55°	677	637	315	161	101	610
65°	463	335	107	3	3	449
75°	208	127	24	0	0	222
85°	0	3	0	0	0	19
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559050 4LBSQLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1
2.5°	2782.7	2859.8	2866.5	2859.8	2869.9	2866.5	2883.3	2866.5	2886.7	2856.5	2863.2
5°	2947.0	2916.8	2980.5	2947.0	2947.0	2943.7	2933.6	2930.2	2943.7	2900.1	2920.2
7.5°	2990.6	3034.2	3091.2	3020.8	3024.1	3024.1	3004.0	2997.3	2997.3	2916.8	2940.3
10°	3027.5	3000.6	3030.8	3004.0	3027.5	3024.1	3037.5	2993.9	3024.1	2977.2	2973.8
12.5°	2997.3	2987.2	3027.5	2983.9	2970.5	2973.8	2957.1	2947.0	2957.1	2903.4	2900.1
15°	2910.1	2920.2	2980.5	2933.6	2926.9	2920.2	2900.1	2866.5	2893.4	2819.6	2823.0
17.5°	2880.0	2863.2	2873.3	2833.0	2843.1	2836.4	2833.0	2802.9	2796.1	2749.2	2749.2
20°	2739.2	2776.0	2776.0	2749.2	2749.2	2745.9	2702.3	2729.1	2698.9	2685.5	2698.9
22.5°	2641.9	2645.3	2645.3	2621.8	2625.2	2611.8	2588.3	2571.5	2588.3	2571.5	2544.7
25°	2464.3	2471.0	2511.2	2467.6	2460.9	2474.3	2454.2	2444.1	2440.8	2400.6	2454.2
27.5°	2249.7	2316.6	2313.4	2296.5	2316.6	2289.8	2279.9	2283.1	2293.3	2289.8	2303.2
30°	2125.7	2135.6	2145.8	2132.4	2135.6	2125.7	2125.7	2128.9	2155.7	2145.8	2142.3
32.5°	1874.1	1907.6	1934.5	1934.5	1937.8	1947.9	1944.5	2014.9	2031.7	1998.2	1991.5
35°	1656.2	1679.7	1703.1	1706.5	1750.1	1753.4	1756.8	1776.9	1823.8	1833.9	1830.5
37.5°	1448.4	1471.8	1478.5	1508.7	1532.2	1555.6	1582.5	1609.3	1649.5	1683.0	1666.3
40°	1264.0	1274.0	1290.8	1304.2	1351.1	1351.1	1364.5	1418.2	1461.8	1488.6	1485.2
42.5°	1109.8	1113.1	1126.5	1150.0	1193.6	1183.5	1193.6	1230.5	1294.1	1297.5	1334.4
45°	1002.5	999.1	1009.2	1012.5	1039.4	1052.8	1059.5	1086.3	1139.9	1146.6	1150.0
47.5°	905.3	901.9	918.7	925.4	935.4	948.7	948.7	952.2	972.3	989.1	975.7
50°	824.8	824.8	824.8	831.5	848.3	844.9	848.3	861.7	871.6	864.9	861.7
52.5°	737.5	750.9	761.0	764.5	767.7	767.7	771.2	764.5	761.0	750.9	730.8
55°	677.2	690.6	690.6	690.6	690.6	704.0	687.4	690.6	690.6	663.8	637.1
57.5°	617.0	630.4	640.3	626.9	640.3	626.9	620.2	617.0	610.1	583.3	543.1
60°	566.6	573.3	569.9	566.6	573.3	563.2	556.5	543.1	536.4	499.5	472.7
62.5°	509.6	512.9	516.3	509.6	502.9	499.5	486.1	466.0	452.6	422.4	398.9
65°	462.6	452.6	449.2	445.9	439.2	429.1	419.1	395.6	385.5	358.7	335.2
67.5°	392.2	388.9	395.6	385.5	368.8	368.8	358.7	338.6	315.1	298.4	274.9
70°	335.2	331.9	325.2	315.1	311.8	298.4	298.4	274.9	268.2	238.0	217.9
72.5°	274.9	274.9	264.8	254.8	244.7	238.0	234.7	217.9	207.9	191.1	174.3
75°	207.9	207.9	204.5	194.4	187.7	181.0	177.7	164.3	154.2	137.5	127.4
77.5°	147.5	147.5	134.1	127.4	130.7	124.0	117.3	114.0	110.6	100.6	87.2
80°	87.2	83.8	73.8	77.1	73.8	73.8	70.4	67.0	60.3	53.6	46.9
82.5°	23.5	26.8	26.8	26.8	30.2	23.5	23.5	23.5	26.8	26.8	16.8
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4
87.5°	3.4	6.7	13.4	13.4	13.4	13.4	13.4	10.1	10.1	10.1	6.7
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 EX4C559050 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1
2.5°	2829.7	2826.3	2829.7	2806.2	2859.8	2819.6	2812.9	2806.2	2829.7	2806.2	2772.7
5°	2890.0	2856.5	2846.4	2836.4	2866.5	2819.6	2809.6	2812.9	2796.1	2752.6	2755.9
7.5°	2910.1	2880.0	2849.8	2786.1	2812.9	2802.9	2776.0	2755.9	2729.1	2692.2	2685.5
10°	2916.8	2883.3	2839.7	2819.6	2779.4	2766.0	2755.9	2722.4	2688.9	2625.2	2608.4
12.5°	2896.7	2856.5	2802.9	2786.1	2755.9	2712.3	2688.9	2655.3	2625.2	2574.9	2538.0
15°	2809.6	2776.0	2759.3	2702.3	2688.9	2662.0	2615.1	2568.2	2524.6	2457.4	2437.4
17.5°	2709.0	2695.6	2678.8	2635.2	2631.9	2605.1	2561.5	2521.2	2464.3	2360.2	2326.8
20°	2605.1	2605.1	2551.4	2534.7	2568.2	2514.5	2481.0	2444.1	2326.8	2276.4	2216.2
22.5°	2528.0	2491.1	2460.9	2434.1	2437.4	2403.9	2357.0	2283.1	2239.5	2179.2	2108.8
25°	2377.1	2390.5	2323.5	2313.4	2323.5	2246.2	2222.9	2162.4	2098.7	2041.7	1988.1
27.5°	2283.1	2246.2	2202.8	2165.8	2165.8	2135.6	2068.6	2055.3	1957.9	1904.3	1837.2
30°	2142.3	2115.5	2078.6	2025.0	2018.3	1994.8	1941.2	1907.6	1807.1	1726.6	1689.7
32.5°	1964.6	1954.6	1924.4	1864.1	1844.0	1817.1	1750.1	1693.1	1646.2	1555.6	1512.1
35°	1837.2	1800.4	1736.7	1686.4	1669.6	1622.7	1569.0	1528.8	1478.5	1398.1	1341.1
37.5°	1646.2	1609.3	1548.9	1488.6	1488.6	1441.7	1367.9	1327.7	1257.3	1210.3	1163.4
40°	1478.5	1431.6	1371.3	1300.9	1290.8	1223.7	1193.6	1126.5	1082.9	1009.2	1002.5
42.5°	1290.8	1247.2	1193.6	1139.9	1099.7	1066.2	989.1	938.8	891.9	855.0	844.9
45°	1119.8	1062.8	1015.9	948.7	908.6	868.4	818.1	784.6	747.7	707.5	683.9
47.5°	972.3	925.4	858.2	798.0	757.8	737.5	680.5	643.8	613.5	586.7	569.9
50°	821.5	764.5	727.6	660.4	653.7	606.8	560.0	529.7	512.9	489.5	466.0
52.5°	707.5	653.7	603.4	553.3	526.3	509.6	466.0	435.8	412.4	395.6	382.2
55°	596.7	549.8	509.6	459.3	442.5	419.1	368.8	362.1	338.6	315.1	298.4
57.5°	512.9	469.3	422.4	388.9	358.7	342.0	301.7	274.9	261.5	241.4	224.6
60°	435.8	388.9	352.0	311.8	298.4	274.9	244.7	221.3	204.5	187.7	171.0
62.5°	365.4	325.2	285.0	251.4	231.3	217.9	194.4	174.3	157.6	144.2	130.7
65°	301.7	264.8	231.3	197.8	187.7	171.0	154.2	137.5	124.0	107.3	93.9
67.5°	248.1	214.6	181.0	157.6	147.5	140.8	120.7	103.9	93.9	83.8	70.4
70°	194.4	171.0	144.2	124.0	114.0	103.9	90.5	80.5	67.0	60.3	50.3
72.5°	150.9	130.7	107.3	90.5	83.8	77.1	63.7	53.6	46.9	40.2	33.5
75°	107.3	90.5	77.1	60.3	57.0	53.6	43.6	36.9	30.2	23.5	20.1
77.5°	73.8	60.3	46.9	40.2	36.9	30.2	26.8	20.1	16.8	13.4	10.1
80°	40.2	30.2	23.5	20.1	16.8	13.4	13.4	10.1	6.7	6.7	3.4
82.5°	13.4	10.1	6.7	3.4	3.4	3.4	3.4	3.4	3.4	0.0	3.4
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°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	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: P#

CATALOG NUMBER: LD4C55D010 EX4C559050 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1
2.5°	2792.8	2755.9	2766.0	2766.0	2759.3	2759.3	2752.6	2742.5	2745.9	2725.7	2682.2
5°	2762.6	2715.7	2709.0	2715.7	2688.9	2682.2	2668.8	2688.9	2628.5	2652.0	2625.2
7.5°	2675.5	2631.9	2621.8	2645.3	2611.8	2591.6	2588.3	2615.1	2561.5	2534.7	2504.5
10°	2578.2	2561.5	2531.3	2514.5	2504.5	2507.8	2481.0	2447.5	2437.4	2430.7	2403.9
12.5°	2491.1	2454.2	2427.4	2407.3	2400.6	2400.6	2357.0	2350.3	2320.1	2313.4	2273.2
15°	2387.0	2343.6	2326.8	2300.0	2276.4	2289.8	2239.5	2226.1	2216.2	2172.5	2179.2
17.5°	2296.5	2249.7	2209.5	2192.6	2172.5	2152.5	2105.4	2115.5	2092.0	2092.0	2031.7
20°	2179.2	2128.9	2098.7	2065.2	2065.2	2038.4	2004.9	2008.2	1978.0	1947.9	1894.2
22.5°	2055.3	2001.5	1964.6	1951.2	1917.7	1911.0	1870.8	1860.7	1820.5	1823.8	1776.9
25°	1924.4	1870.8	1820.5	1823.8	1793.7	1780.3	1756.8	1709.9	1693.1	1673.0	1659.6
27.5°	1770.2	1733.3	1689.7	1686.4	1629.4	1632.7	1602.6	1589.2	1548.9	1559.0	1528.8
30°	1629.4	1575.8	1535.5	1525.5	1502.0	1495.3	1448.4	1428.2	1435.0	1408.1	1391.4
32.5°	1485.2	1404.8	1388.0	1367.9	1354.5	1337.7	1304.2	1317.6	1287.4	1294.1	1267.3
35°	1294.1	1260.6	1217.0	1217.0	1203.6	1190.2	1166.8	1180.2	1150.0	1136.6	1109.8
37.5°	1133.2	1103.1	1059.5	1072.9	1049.4	1029.3	1009.2	1012.5	985.7	982.4	955.4
40°	958.9	942.1	912.0	912.0	895.2	895.2	885.0	875.1	858.2	838.2	807.9
42.5°	794.5	781.1	767.7	771.2	747.7	767.7	741.0	757.8	704.0	700.8	680.5
45°	673.8	643.8	647.0	633.6	620.2	626.9	603.4	610.1	580.0	573.3	553.3
47.5°	546.6	536.4	516.3	509.6	509.6	499.5	489.5	486.1	472.7	455.9	429.1
50°	449.2	412.4	405.6	395.6	388.9	388.9	375.5	355.4	358.7	342.0	315.1
52.5°	352.0	321.8	308.4	305.1	291.7	285.0	268.2	254.8	244.7	238.0	221.3
55°	271.5	244.7	228.0	228.0	207.9	207.9	184.4	174.3	160.9	147.5	137.5
57.5°	204.5	191.1	174.3	160.9	154.2	137.5	124.0	107.3	97.2	77.1	63.7
60°	154.2	140.8	124.0	114.0	107.3	90.5	73.8	60.3	36.9	30.2	26.8
62.5°	114.0	100.6	83.8	77.1	70.4	57.0	40.2	20.1	10.1	10.1	10.1
65°	83.8	67.0	53.6	46.9	40.2	30.2	13.4	6.7	3.4	3.4	3.4
67.5°	57.0	43.6	30.2	26.8	20.1	10.1	3.4	3.4	3.4	3.4	3.4
70°	36.9	26.8	13.4	10.1	6.7	3.4	3.4	3.4	3.4	3.4	3.4
72.5°	23.5	13.4	6.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	13.4	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.4	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	3.4	3.4	3.4
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 EX4C559050 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1	2796.1
2.5°	2729.1	2705.6	2719.0	2688.9	2702.3	2725.7	2709.0	2715.7
5°	2635.2	2621.8	2605.1	2561.5	2595.0	2621.8	2608.4	2605.1
7.5°	2534.7	2487.7	2511.2	2497.8	2491.1	2517.9	2487.7	2521.2
10°	2430.7	2397.2	2393.9	2370.4	2370.4	2390.5	2393.9	2373.6
12.5°	2276.4	2259.8	2259.8	2256.4	2252.9	2273.2	2276.4	2266.5
15°	2165.8	2159.2	2142.3	2139.1	2119.0	2149.0	2152.5	2149.0
17.5°	2031.7	2035.0	2018.3	2018.3	2031.7	2041.7	2014.9	2041.7
20°	1941.2	1924.4	1917.7	1887.5	1904.3	1921.1	1921.1	1924.4
22.5°	1810.4	1783.6	1793.7	1776.9	1766.8	1790.3	1790.3	1800.4
25°	1662.9	1662.9	1669.6	1659.6	1666.3	1679.7	1669.6	1693.1
27.5°	1522.1	1535.5	1535.5	1522.1	1528.8	1569.0	1585.8	1559.0
30°	1391.4	1394.7	1404.8	1398.1	1418.2	1431.6	1428.2	1448.4
32.5°	1243.9	1260.6	1267.3	1257.3	1264.0	1294.1	1277.4	1274.0
35°	1129.9	1099.7	1096.4	1099.7	1113.1	1119.8	1113.1	1136.6
37.5°	965.6	955.4	942.1	945.5	955.4	969.0	975.7	992.4
40°	807.9	794.5	794.5	791.3	781.1	818.1	818.1	818.1
42.5°	670.5	667.1	650.5	650.5	663.8	673.8	667.1	690.6
45°	549.8	536.4	526.3	526.3	536.4	536.4	546.6	543.1
47.5°	432.5	419.1	422.4	412.4	422.4	435.8	419.1	422.4
50°	325.2	325.2	318.5	325.2	321.8	325.2	318.5	311.8
52.5°	221.3	251.4	254.8	241.4	211.2	184.4	167.6	181.0
55°	127.4	114.0	114.0	110.6	103.9	100.6	90.5	100.6
57.5°	63.7	57.0	57.0	57.0	53.6	50.3	43.6	43.6
60°	26.8	23.5	23.5	20.1	16.8	13.4	10.1	13.4
62.5°	10.1	6.7	6.7	6.7	6.7	6.7	6.7	6.7
65°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
67.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
70°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)