

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 EX4C559027 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 EX4C559027 4LBSQLWWH
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

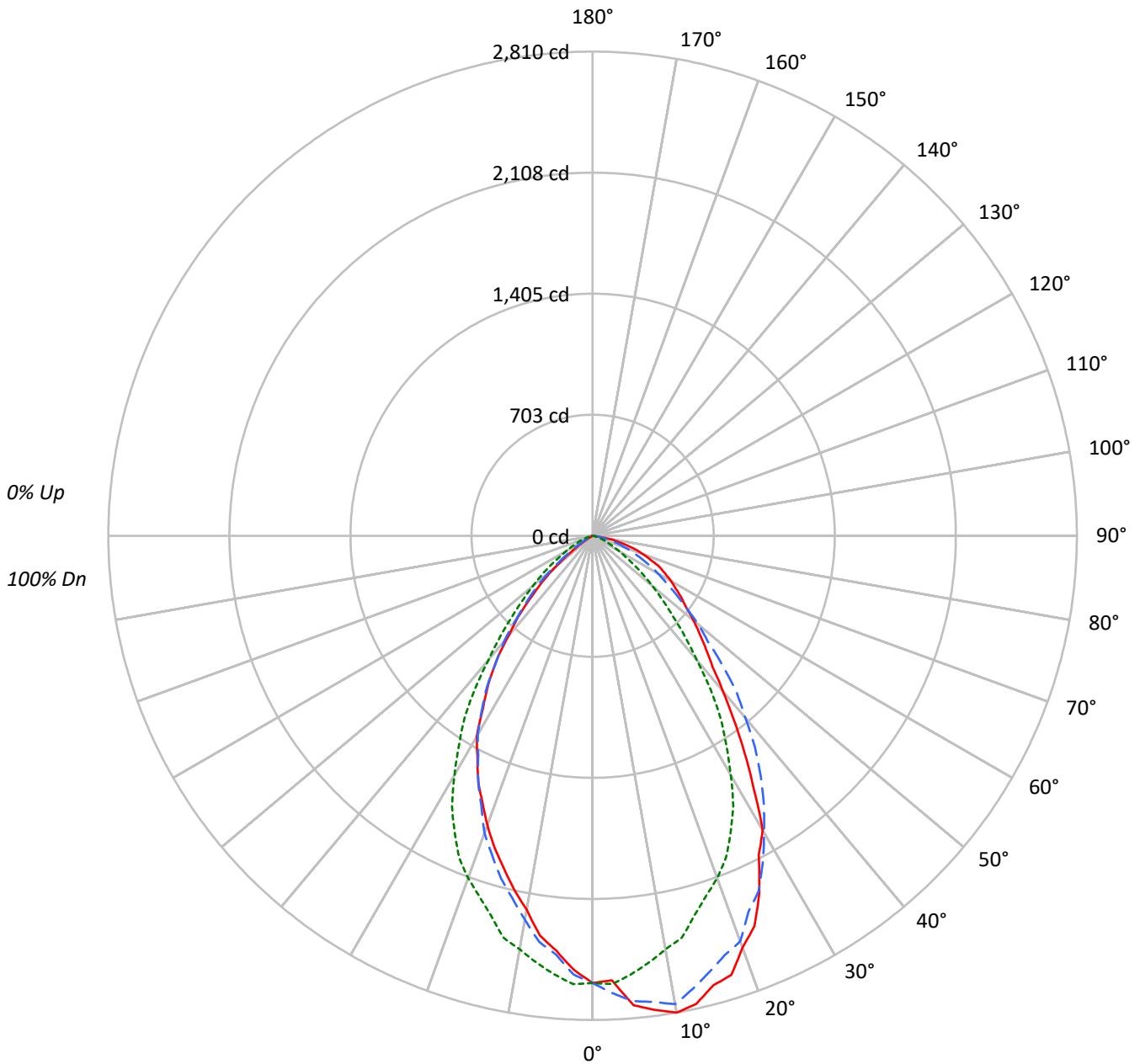
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3720.0 lumens
Efficiency: N/A
Efficacy: 58.2 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 (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

TEST NUMBER: P#
CATALOG NUMBER: LD4C55D010 EX4C559027 4LBSQLWWH

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559027 4LBSQLWWH

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°	250408	250408	250408
5°	264925	247451	234192
10°	275316	238722	215854
15°	269810	227845	199246
20°	261057	216955	183399
25°	243504	201749	167308
30°	219812	178544	149776
35°	181069	152846	124258
40°	147773	117984	95639
45°	126959	89597	68787
50°	114909	68210	43442
55°	105745	49205	15712
60°	101487	33617	2393
65°	98037	22740	731
70°	87766	15798	903
75°	71951	8127	0
80°	45008	3445	0
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559027 4LBSQLWWH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	6.5
10°-20°	655.1	17.6
20°-30°	874.8	23.5
30°-40°	830.4	22.3
40°-50°	574.0	15.4
50°-60°	317.2	8.5
60°-70°	157.5	4.2
70°-80°	62.1	1.7
80°-90°	5.9	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°	1773.0	47.7
0°-40°	2603.4	70.0
0°-60°	3494.5	93.9
0°-90°	3720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3720.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2595	2595	2595	2595	2595	
5°	2735	2710	2555	2440	2418	262
15°	2701	2620	2281	2057	1995	764
25°	2287	2278	1895	1572	1572	1043
35°	1537	1699	1298	1067	1055	963
45°	930	1067	657	538	504	726
55°	629	591	292	149	93	566
65°	429	311	100	3	3	417
75°	193	118	22	0	0	206
85°	0	3	0	0	0	18
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C55D010 EX4C559027 4LBSQLWWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2
2.5°	2582.7	2654.3	2660.5	2654.3	2663.7	2660.5	2676.1	2660.5	2679.3	2651.2	2657.5
5°	2735.2	2707.2	2766.3	2735.2	2735.2	2732.2	2722.8	2719.6	2732.2	2691.7	2710.4
7.5°	2775.7	2816.2	2869.1	2803.7	2806.8	2806.8	2788.1	2781.9	2781.9	2707.2	2729.0
10°	2810.0	2785.0	2813.0	2788.1	2810.0	2806.8	2819.2	2778.8	2806.8	2763.3	2760.1
12.5°	2781.9	2772.5	2810.0	2769.5	2757.1	2760.1	2744.6	2735.2	2744.6	2694.8	2691.7
15°	2701.0	2710.4	2766.3	2722.8	2716.6	2710.4	2691.7	2660.5	2685.5	2617.0	2620.1
17.5°	2673.1	2657.5	2666.8	2629.4	2638.8	2632.6	2629.4	2601.5	2595.2	2551.6	2551.6
20°	2542.4	2576.5	2576.5	2551.6	2551.6	2548.6	2508.1	2533.0	2504.9	2492.5	2504.9
22.5°	2452.0	2455.2	2455.2	2433.4	2436.5	2424.1	2402.3	2386.7	2402.3	2386.7	2361.8
25°	2287.2	2293.4	2330.7	2290.3	2284.0	2296.5	2277.8	2268.4	2265.4	2228.1	2277.8
27.5°	2088.0	2150.2	2147.1	2131.5	2150.2	2125.3	2116.0	2119.1	2128.5	2125.3	2137.7
30°	1972.9	1982.2	1991.6	1979.1	1982.2	1972.9	1972.9	1976.0	2000.8	1991.6	1988.4
32.5°	1739.5	1770.5	1795.5	1795.5	1798.6	1808.0	1804.8	1870.1	1885.7	1854.7	1848.4
35°	1537.2	1559.0	1580.7	1583.9	1624.4	1627.4	1630.6	1649.2	1692.8	1702.1	1699.0
37.5°	1344.3	1366.0	1372.3	1400.3	1422.1	1443.8	1468.8	1493.7	1531.0	1562.1	1546.6
40°	1173.2	1182.4	1198.0	1210.5	1254.0	1254.0	1266.4	1316.3	1356.8	1381.6	1378.5
42.5°	1030.0	1033.1	1045.5	1067.3	1107.8	1098.4	1107.8	1142.1	1201.1	1204.3	1238.5
45°	930.4	927.3	936.7	939.7	964.7	977.1	983.3	1008.2	1058.0	1064.2	1067.3
47.5°	840.2	837.1	852.7	858.9	868.1	880.6	880.6	883.7	902.4	918.0	905.6
50°	765.5	765.5	765.5	771.7	787.3	784.1	787.3	799.7	809.0	802.8	799.7
52.5°	684.5	697.0	706.4	709.5	712.6	712.6	715.7	709.5	706.4	697.0	678.3
55°	628.6	641.0	641.0	641.0	641.0	653.5	638.0	641.0	641.0	616.1	591.3
57.5°	572.6	585.1	594.3	581.9	594.3	581.9	575.7	572.6	566.3	541.4	504.1
60°	525.9	532.1	529.0	525.9	532.1	522.8	516.5	504.1	497.9	463.6	438.8
62.5°	473.0	476.1	479.2	473.0	466.8	463.6	451.2	432.5	420.1	392.1	370.2
65°	429.4	420.1	416.9	413.9	407.7	398.3	389.0	367.2	357.8	332.9	311.1
67.5°	364.0	361.0	367.2	357.8	342.3	342.3	332.9	314.3	292.5	277.0	255.2
70°	311.1	308.1	301.9	292.5	289.4	277.0	277.0	255.2	248.9	220.9	202.3
72.5°	255.2	255.2	245.8	236.5	227.1	220.9	217.9	202.3	193.0	177.4	161.8
75°	193.0	193.0	189.8	180.4	174.2	168.0	164.9	152.5	143.1	127.6	118.3
77.5°	136.9	136.9	124.5	118.3	121.3	115.1	108.9	105.8	102.7	93.4	81.0
80°	81.0	77.8	68.5	71.6	68.5	68.5	65.3	62.2	56.0	49.7	43.5
82.5°	21.8	24.9	24.9	24.9	28.0	21.8	21.8	21.8	24.9	24.9	15.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2
87.5°	3.2	6.2	12.4	12.4	12.4	12.4	12.4	9.4	9.4	9.4	6.2
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 EX4C559027 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2
2.5°	2626.4	2623.2	2626.4	2604.5	2654.3	2617.0	2610.8	2604.5	2626.4	2604.5	2573.5
5°	2682.3	2651.2	2641.8	2632.6	2660.5	2617.0	2607.7	2610.8	2595.2	2554.8	2557.9
7.5°	2701.0	2673.1	2645.0	2585.9	2610.8	2601.5	2576.5	2557.9	2533.0	2498.7	2492.5
10°	2707.2	2676.1	2635.6	2617.0	2579.7	2567.2	2557.9	2526.8	2495.7	2436.5	2420.9
12.5°	2688.5	2651.2	2601.5	2585.9	2557.9	2517.4	2495.7	2464.5	2436.5	2389.9	2355.6
15°	2607.7	2576.5	2561.0	2508.1	2495.7	2470.7	2427.2	2383.6	2343.2	2280.9	2262.2
17.5°	2514.3	2501.9	2486.3	2445.8	2442.8	2417.9	2377.4	2340.0	2287.2	2190.7	2159.6
20°	2417.9	2417.9	2368.0	2352.6	2383.6	2333.8	2302.7	2268.4	2159.6	2112.9	2056.9
22.5°	2346.3	2312.1	2284.0	2259.2	2262.2	2231.1	2187.6	2119.1	2078.6	2022.7	1957.3
25°	2206.3	2218.7	2156.5	2147.1	2156.5	2084.8	2063.1	2007.0	1947.9	1895.0	1845.3
27.5°	2119.1	2084.8	2044.5	2010.2	2010.2	1982.2	1920.0	1907.6	1817.2	1767.5	1705.2
30°	1988.4	1963.5	1929.3	1879.5	1873.3	1851.5	1801.7	1770.5	1677.3	1602.5	1568.3
32.5°	1823.4	1814.2	1786.1	1730.2	1711.5	1686.5	1624.4	1571.5	1527.9	1443.8	1403.5
35°	1705.2	1671.1	1611.9	1565.2	1549.6	1506.1	1456.2	1418.9	1372.3	1297.6	1244.7
37.5°	1527.9	1493.7	1437.6	1381.6	1381.6	1338.1	1269.6	1232.3	1166.9	1123.3	1079.8
40°	1372.3	1328.7	1272.8	1207.4	1198.0	1135.7	1107.8	1045.5	1005.0	936.7	930.4
42.5°	1198.0	1157.6	1107.8	1058.0	1020.7	989.6	918.0	871.3	827.8	793.5	784.1
45°	1039.3	986.4	942.9	880.6	843.3	806.0	759.3	728.2	693.9	656.6	634.8
47.5°	902.4	858.9	796.6	740.6	703.3	684.5	631.6	597.5	569.5	544.6	529.0
50°	762.4	709.5	675.3	613.0	606.8	563.2	519.7	491.7	476.1	454.4	432.5
52.5°	656.6	606.8	560.1	513.5	488.5	473.0	432.5	404.5	382.8	367.2	354.8
55°	553.8	510.3	473.0	426.3	410.7	389.0	342.3	336.1	314.3	292.5	277.0
57.5°	476.1	435.6	392.1	361.0	332.9	317.5	280.0	255.2	242.7	224.1	208.5
60°	404.5	361.0	326.7	289.4	277.0	255.2	227.1	205.4	189.8	174.2	158.7
62.5°	339.2	301.9	264.6	233.3	214.7	202.3	180.4	161.8	146.3	133.9	121.3
65°	280.0	245.8	214.7	183.6	174.2	158.7	143.1	127.6	115.1	99.6	87.2
67.5°	230.3	199.2	168.0	146.3	136.9	130.7	112.0	96.4	87.2	77.8	65.3
70°	180.4	158.7	133.9	115.1	105.8	96.4	84.0	74.7	62.2	56.0	46.7
72.5°	140.1	121.3	99.6	84.0	77.8	71.6	59.1	49.7	43.5	37.3	31.1
75°	99.6	84.0	71.6	56.0	52.9	49.7	40.5	34.3	28.0	21.8	18.7
77.5°	68.5	56.0	43.5	37.3	34.3	28.0	24.9	18.7	15.6	12.4	9.4
80°	37.3	28.0	21.8	18.7	15.6	12.4	12.4	9.4	6.2	6.2	3.2
82.5°	12.4	9.4	6.2	3.2	3.2	3.2	3.2	3.2	3.2	0.0	3.2
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°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	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 EX4C559027 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2
2.5°	2592.1	2557.9	2567.2	2567.2	2561.0	2561.0	2554.8	2545.4	2548.6	2529.8	2489.5
5°	2564.1	2520.5	2514.3	2520.5	2495.7	2489.5	2477.0	2495.7	2439.6	2461.4	2436.5
7.5°	2483.2	2442.8	2433.4	2455.2	2424.1	2405.3	2402.3	2427.2	2377.4	2352.6	2324.5
10°	2392.9	2377.4	2349.4	2333.8	2324.5	2327.6	2302.7	2271.6	2262.2	2256.0	2231.1
12.5°	2312.1	2277.8	2252.9	2234.3	2228.1	2228.1	2187.6	2181.4	2153.3	2147.1	2109.8
15°	2215.5	2175.2	2159.6	2134.7	2112.9	2125.3	2078.6	2066.2	2056.9	2016.4	2022.7
17.5°	2131.5	2088.0	2050.7	2035.1	2016.4	1997.8	1954.1	1963.5	1941.7	1941.7	1885.7
20°	2022.7	1976.0	1947.9	1916.8	1916.8	1892.0	1860.9	1863.9	1835.9	1808.0	1758.1
22.5°	1907.6	1857.7	1823.4	1811.0	1779.9	1773.7	1736.4	1727.0	1689.7	1692.8	1649.2
25°	1786.1	1736.4	1689.7	1692.8	1664.8	1652.4	1630.6	1587.1	1571.5	1552.8	1540.4
27.5°	1643.0	1608.8	1568.3	1565.2	1512.3	1515.4	1487.5	1475.0	1437.6	1447.0	1418.9
30°	1512.3	1462.6	1425.2	1415.9	1394.1	1387.9	1344.3	1325.6	1331.9	1306.9	1291.4
32.5°	1378.5	1303.9	1288.3	1269.6	1257.2	1241.6	1210.5	1222.9	1194.9	1201.1	1176.2
35°	1201.1	1170.0	1129.5	1129.5	1117.1	1104.7	1083.0	1095.4	1067.3	1054.9	1030.0
37.5°	1051.7	1023.8	983.3	995.8	974.0	955.3	936.7	939.7	914.8	911.8	886.8
40°	890.0	874.4	846.4	846.4	830.8	830.8	821.4	812.2	796.6	777.9	749.9
42.5°	737.5	725.0	712.6	715.7	693.9	712.6	687.7	703.3	653.5	650.4	631.6
45°	625.4	597.5	600.5	588.1	575.7	581.9	560.1	566.3	538.4	532.1	513.5
47.5°	507.3	497.9	479.2	473.0	473.0	463.6	454.4	451.2	438.8	423.2	398.3
50°	416.9	382.8	376.5	367.2	361.0	361.0	348.5	329.9	332.9	317.5	292.5
52.5°	326.7	298.7	286.3	283.2	270.8	264.6	248.9	236.5	227.1	220.9	205.4
55°	252.0	227.1	211.6	211.6	193.0	193.0	171.2	161.8	149.3	136.9	127.6
57.5°	189.8	177.4	161.8	149.3	143.1	127.6	115.1	99.6	90.2	71.6	59.1
60°	143.1	130.7	115.1	105.8	99.6	84.0	68.5	56.0	34.3	28.0	24.9
62.5°	105.8	93.4	77.8	71.6	65.3	52.9	37.3	18.7	9.4	9.4	9.4
65°	77.8	62.2	49.7	43.5	37.3	28.0	12.4	6.2	3.2	3.2	3.2
67.5°	52.9	40.5	28.0	24.9	18.7	9.4	3.2	3.2	3.2	3.2	3.2
70°	34.3	24.9	12.4	9.4	6.2	3.2	3.2	3.2	3.2	3.2	3.2
72.5°	21.8	12.4	6.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	12.4	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.2	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	3.2	3.2	3.2
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 EX4C559027 4LBSQLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2	2595.2
2.5°	2533.0	2511.2	2523.6	2495.7	2508.1	2529.8	2514.3	2520.5
5°	2445.8	2433.4	2417.9	2377.4	2408.5	2433.4	2420.9	2417.9
7.5°	2352.6	2308.9	2330.7	2318.3	2312.1	2336.9	2308.9	2340.0
10°	2256.0	2224.9	2221.9	2200.0	2200.0	2218.7	2221.9	2203.1
12.5°	2112.9	2097.4	2097.4	2094.2	2091.0	2109.8	2112.9	2103.6
15°	2010.2	2004.0	1988.4	1985.3	1966.7	1994.6	1997.8	1994.6
17.5°	1885.7	1888.8	1873.3	1873.3	1885.7	1895.0	1870.1	1895.0
20°	1801.7	1786.1	1779.9	1751.9	1767.5	1783.1	1783.1	1786.1
22.5°	1680.3	1655.5	1664.8	1649.2	1639.8	1661.7	1661.7	1671.1
25°	1543.4	1543.4	1549.6	1540.4	1546.6	1559.0	1549.6	1571.5
27.5°	1412.7	1425.2	1425.2	1412.7	1418.9	1456.2	1471.9	1447.0
30°	1291.4	1294.5	1303.9	1297.6	1316.3	1328.7	1325.6	1344.3
32.5°	1154.5	1170.0	1176.2	1166.9	1173.2	1201.1	1185.6	1182.4
35°	1048.7	1020.7	1017.6	1020.7	1033.1	1039.3	1033.1	1054.9
37.5°	896.2	886.8	874.4	877.5	886.8	899.4	905.6	921.1
40°	749.9	737.5	737.5	734.4	725.0	759.3	759.3	759.3
42.5°	622.4	619.2	603.7	603.7	616.1	625.4	619.2	641.0
45°	510.3	497.9	488.5	488.5	497.9	497.9	507.3	504.1
47.5°	401.5	389.0	392.1	382.8	392.1	404.5	389.0	392.1
50°	301.9	301.9	295.6	301.9	298.7	301.9	295.6	289.4
52.5°	205.4	233.3	236.5	224.1	196.0	171.2	155.6	168.0
55°	118.3	105.8	105.8	102.7	96.4	93.4	84.0	93.4
57.5°	59.1	52.9	52.9	52.9	49.7	46.7	40.5	40.5
60°	24.9	21.8	21.8	18.7	15.6	12.4	9.4	12.4
62.5°	9.4	6.2	6.2	6.2	6.2	6.2	6.2	6.2
65°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
67.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
70°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
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)