

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 4LBSQLWWLI**

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

Luminaire Equipment: Sample No. Condition Description

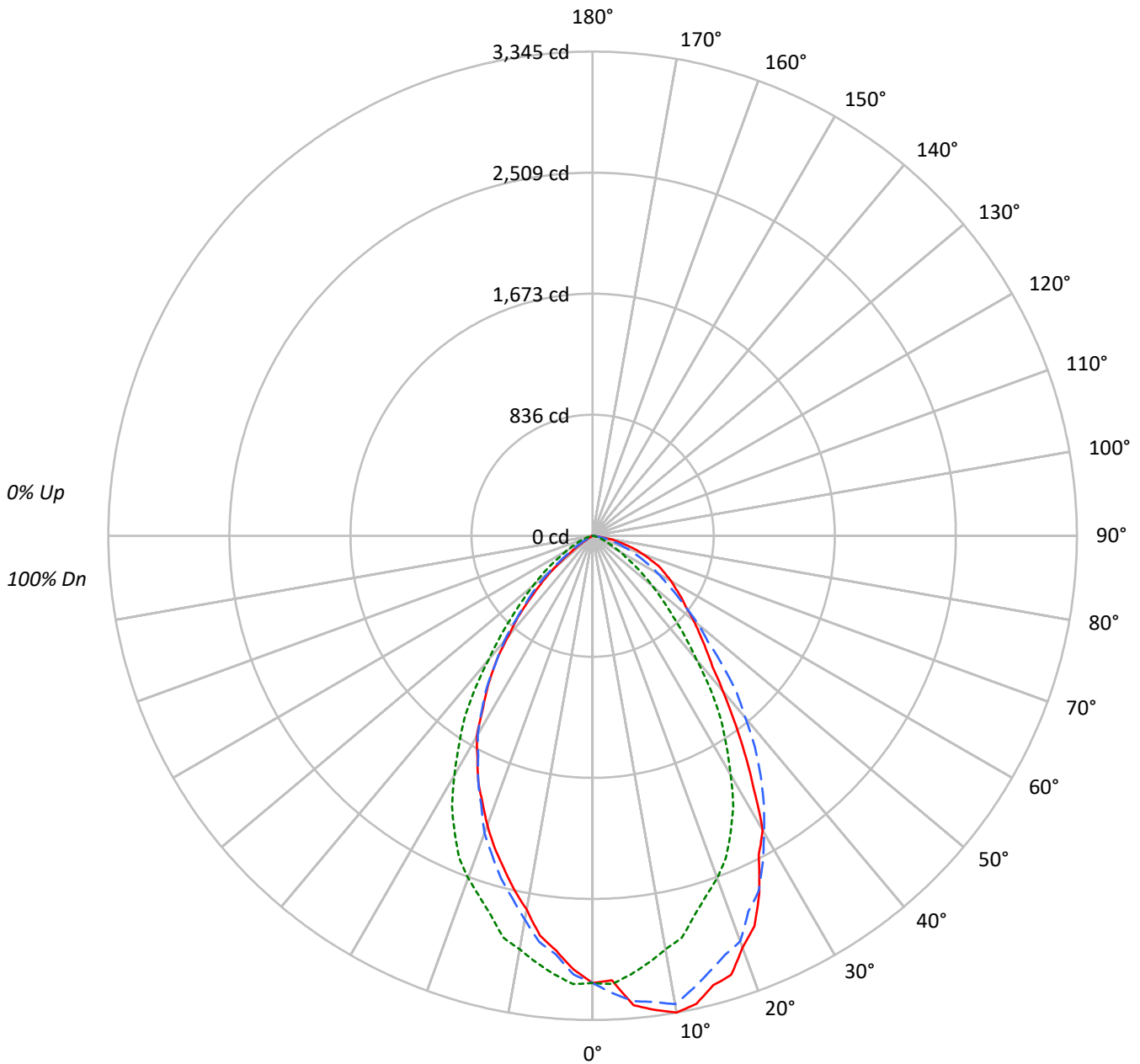
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4428.0 lumens
Efficiency: N/A
Efficacy: 69.3 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°	298064	298064	298064
5°	315349	294544	278765
10°	327715	284164	256936
15°	321155	271209	237165
20°	310734	258244	218311
25°	289847	240150	199140
30°	261649	212526	178288
35°	215534	181940	147910
40°	175887	140430	113840
45°	151125	106654	81887
50°	136780	81180	51713
55°	125865	58559	18706
60°	120804	40024	2856
65°	116690	27078	868
70°	104467	18789	1072
75°	85633	9693	0
80°	53565	4112	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.4	6.5
10°-20°	779.8	17.6
20°-30°	1041.2	23.5
30°-40°	988.4	22.3
40°-50°	683.2	15.4
50°-60°	377.5	8.5
60°-70°	187.5	4.2
70°-80°	73.9	1.7
80°-90°	7.0	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°	2110.4	47.7
0°-40°	3098.9	70.0
0°-60°	4159.6	93.9
0°-90°	4428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4428.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3089	3089	3089	3089	3089	
5°	3256	3226	3041	2904	2878	312
15°	3215	3119	2715	2448	2374	909
25°	2722	2711	2256	1870	1870	1241
35°	1830	2022	1545	1270	1256	1146
45°	1108	1270	782	641	600	864
55°	748	704	348	178	111	673
65°	511	370	119	4	4	496
75°	230	141	26	0	0	245
85°	0	4	0	0	0	21
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°	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1
2.5°	3074.3	3159.5	3166.9	3159.5	3170.6	3166.9	3185.4	3166.9	3189.2	3155.8	3163.2
5°	3255.8	3222.4	3292.8	3255.8	3255.8	3252.2	3241.0	3237.2	3252.2	3204.0	3226.2
7.5°	3304.0	3352.2	3415.1	3337.4	3341.0	3341.0	3318.8	3311.4	3311.4	3222.4	3248.4
10°	3344.8	3315.0	3348.4	3318.8	3344.8	3341.0	3355.8	3307.6	3341.0	3289.2	3285.4
12.5°	3311.4	3300.2	3344.8	3296.6	3281.8	3285.4	3267.0	3255.8	3267.0	3207.6	3204.0
15°	3215.0	3226.2	3292.8	3241.0	3233.6	3226.2	3204.0	3166.9	3196.6	3115.0	3118.8
17.5°	3181.8	3163.2	3174.4	3129.9	3141.0	3133.6	3129.9	3096.6	3089.1	3037.3	3037.3
20°	3026.2	3066.9	3066.9	3037.3	3037.3	3033.6	2985.5	3015.1	2981.7	2966.9	2981.7
22.5°	2918.7	2922.5	2922.5	2896.5	2900.3	2885.5	2859.5	2840.9	2859.5	2840.9	2811.3
25°	2722.5	2729.9	2774.3	2726.1	2718.7	2733.5	2711.3	2700.2	2696.5	2652.1	2711.3
27.5°	2485.4	2559.4	2555.8	2537.2	2559.4	2529.8	2518.8	2522.4	2533.6	2529.8	2544.6
30°	2348.4	2359.4	2370.6	2355.8	2359.4	2348.4	2348.4	2352.0	2381.6	2370.6	2366.8
32.5°	2070.5	2107.5	2137.3	2137.3	2140.9	2152.1	2148.3	2226.1	2244.6	2207.6	2200.2
35°	1829.8	1855.7	1881.6	1885.3	1933.5	1937.1	1940.9	1963.1	2014.9	2026.1	2022.3
37.5°	1600.2	1626.0	1633.4	1666.8	1692.8	1718.6	1748.4	1778.0	1822.4	1859.4	1840.9
40°	1396.4	1407.5	1426.1	1440.9	1492.7	1492.7	1507.5	1566.8	1615.0	1644.6	1640.8
42.5°	1226.1	1229.7	1244.5	1270.5	1318.7	1307.5	1318.7	1359.4	1429.7	1433.5	1474.2
45°	1107.5	1103.7	1114.9	1118.6	1148.3	1163.1	1170.5	1200.1	1259.3	1266.7	1270.5
47.5°	1000.1	996.4	1014.9	1022.3	1033.4	1048.2	1048.2	1051.9	1074.1	1092.7	1077.9
50°	911.2	911.2	911.2	918.6	937.2	933.4	937.2	952.0	963.0	955.6	952.0
52.5°	814.8	829.6	840.8	844.6	848.2	848.2	852.0	844.6	840.8	829.6	807.4
55°	748.2	763.0	763.0	763.0	763.0	777.8	759.4	763.0	763.0	733.4	703.8
57.5°	681.6	696.4	707.4	692.6	707.4	692.6	685.2	681.6	674.1	644.5	600.1
60°	626.0	633.4	629.7	626.0	633.4	622.3	614.9	600.1	592.7	551.9	522.3
62.5°	563.0	566.7	570.4	563.0	555.6	551.9	537.1	514.9	500.1	466.7	440.7
65°	511.1	500.1	496.3	492.7	485.3	474.1	463.1	437.1	425.9	396.3	370.3
67.5°	433.3	429.7	437.1	425.9	407.5	407.5	396.3	374.1	348.1	329.7	303.7
70°	370.3	366.7	359.3	348.1	344.5	329.7	329.7	303.7	296.3	262.9	240.7
72.5°	303.7	303.7	292.6	281.5	270.4	262.9	259.3	240.7	229.7	211.1	192.6
75°	229.7	229.7	225.9	214.8	207.4	200.0	196.3	181.5	170.4	151.9	140.8
77.5°	163.0	163.0	148.2	140.8	144.4	137.0	129.6	126.0	122.2	111.2	96.4
80°	96.4	92.6	81.6	85.2	81.6	81.6	77.8	74.0	66.6	59.2	51.8
82.5°	26.0	29.6	29.6	29.6	33.4	26.0	26.0	26.0	29.6	29.6	18.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8
87.5°	3.8	7.4	14.8	14.8	14.8	14.8	14.8	11.2	11.2	11.2	7.4
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°	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1
2.5°	3126.2	3122.5	3126.2	3100.2	3159.5	3115.0	3107.6	3100.2	3126.2	3100.2	3063.2
5°	3192.8	3155.8	3144.7	3133.6	3166.9	3115.0	3104.0	3107.6	3089.1	3041.0	3044.7
7.5°	3215.0	3181.8	3148.4	3078.0	3107.6	3096.6	3066.9	3044.7	3015.1	2974.3	2966.9
10°	3222.4	3185.4	3137.3	3115.0	3070.6	3055.8	3044.7	3007.7	2970.7	2900.3	2881.7
12.5°	3200.2	3155.8	3096.6	3078.0	3044.7	2996.5	2970.7	2933.5	2900.3	2844.7	2803.9
15°	3104.0	3066.9	3048.4	2985.5	2970.7	2940.9	2889.1	2837.3	2789.1	2715.0	2692.8
17.5°	2992.9	2978.1	2959.5	2911.3	2907.7	2878.1	2829.9	2785.3	2722.5	2607.6	2570.6
20°	2878.1	2878.1	2818.7	2800.3	2837.3	2777.9	2740.9	2700.2	2570.6	2515.0	2448.4
22.5°	2792.9	2752.1	2718.7	2689.1	2692.8	2655.8	2604.0	2522.4	2474.2	2407.6	2329.8
25°	2626.2	2641.0	2566.9	2555.8	2566.9	2481.6	2455.8	2389.0	2318.7	2255.7	2196.5
27.5°	2522.4	2481.6	2433.6	2392.8	2392.8	2359.4	2285.4	2270.6	2163.1	2103.9	2029.7
30°	2366.8	2337.2	2296.5	2237.2	2229.8	2203.9	2144.7	2107.5	1996.5	1907.5	1866.8
32.5°	2170.5	2159.5	2126.1	2059.5	2037.3	2007.5	1933.5	1870.5	1818.7	1718.6	1670.6
35°	2029.7	1989.1	1918.7	1863.1	1844.6	1792.8	1733.4	1689.0	1633.4	1544.6	1481.6
37.5°	1818.7	1778.0	1711.2	1644.6	1644.6	1592.8	1511.2	1466.8	1389.0	1337.1	1285.3
40°	1633.4	1581.6	1515.0	1437.2	1426.1	1351.9	1318.7	1244.5	1196.3	1114.9	1107.5
42.5°	1426.1	1377.9	1318.7	1259.3	1214.9	1177.9	1092.7	1037.1	985.3	944.6	933.4
45°	1237.1	1174.1	1122.3	1048.2	1003.8	959.4	903.8	866.8	826.0	781.6	755.6
47.5°	1074.1	1022.3	948.2	881.6	837.2	814.8	751.8	711.2	677.8	648.2	629.7
50°	907.6	844.6	803.8	729.6	722.2	670.4	618.6	585.3	566.7	540.8	514.9
52.5°	781.6	722.2	666.7	611.2	581.5	563.0	514.9	481.5	455.7	437.1	422.3
55°	659.3	607.5	563.0	507.5	488.9	463.1	407.5	400.1	374.1	348.1	329.7
57.5°	566.7	518.5	466.7	429.7	396.3	377.9	333.3	303.7	288.9	266.7	248.1
60°	481.5	429.7	388.9	344.5	329.7	303.7	270.4	244.5	225.9	207.4	188.9
62.5°	403.7	359.3	314.9	277.8	255.5	240.7	214.8	192.6	174.1	159.3	144.4
65°	333.3	292.6	255.5	218.5	207.4	188.9	170.4	151.9	137.0	118.6	103.8
67.5°	274.1	237.1	200.0	174.1	163.0	155.6	133.4	114.8	103.8	92.6	77.8
70°	214.8	188.9	159.3	137.0	126.0	114.8	100.0	89.0	74.0	66.6	55.6
72.5°	166.7	144.4	118.6	100.0	92.6	85.2	70.4	59.2	51.8	44.4	37.0
75°	118.6	100.0	85.2	66.6	63.0	59.2	48.2	40.8	33.4	26.0	22.2
77.5°	81.6	66.6	51.8	44.4	40.8	33.4	29.6	22.2	18.6	14.8	11.2
80°	44.4	33.4	26.0	22.2	18.6	14.8	14.8	11.2	7.4	7.4	3.8
82.5°	14.8	11.2	7.4	3.8	3.8	3.8	3.8	3.8	3.8	0.0	3.8
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°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	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°	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1
2.5°	3085.4	3044.7	3055.8	3055.8	3048.4	3048.4	3041.0	3029.9	3033.6	3011.3	2963.3
5°	3052.1	3000.3	2992.9	3000.3	2970.7	2963.3	2948.5	2970.7	2903.9	2929.9	2900.3
7.5°	2955.9	2907.7	2896.5	2922.5	2885.5	2863.1	2859.5	2889.1	2829.9	2800.3	2766.9
10°	2848.3	2829.9	2796.5	2777.9	2766.9	2770.5	2740.9	2703.9	2692.8	2685.4	2655.8
12.5°	2752.1	2711.3	2681.7	2659.5	2652.1	2652.1	2604.0	2596.6	2563.2	2555.8	2511.4
15°	2637.2	2589.2	2570.6	2541.0	2515.0	2529.8	2474.2	2459.4	2448.4	2400.2	2407.6
17.5°	2537.2	2485.4	2441.0	2422.4	2400.2	2378.0	2326.1	2337.2	2311.3	2311.3	2244.6
20°	2407.6	2352.0	2318.7	2281.7	2281.7	2252.0	2215.0	2218.7	2185.3	2152.1	2092.7
22.5°	2270.6	2211.3	2170.5	2155.7	2118.7	2111.3	2066.9	2055.7	2011.3	2014.9	1963.1
25°	2126.1	2066.9	2011.3	2014.9	1981.7	1966.9	1940.9	1889.1	1870.5	1848.3	1833.5
27.5°	1955.7	1914.9	1866.8	1863.1	1800.2	1803.8	1770.6	1755.8	1711.2	1722.4	1689.0
30°	1800.2	1741.0	1696.4	1685.4	1659.4	1652.0	1600.2	1577.8	1585.4	1555.6	1537.2
32.5°	1640.8	1552.0	1533.4	1511.2	1496.4	1477.9	1440.9	1455.7	1422.3	1429.7	1400.1
35°	1429.7	1392.7	1344.5	1344.5	1329.7	1314.9	1289.1	1303.9	1270.5	1255.7	1226.1
37.5°	1251.9	1218.7	1170.5	1185.3	1159.3	1137.1	1114.9	1118.6	1088.9	1085.3	1055.6
40°	1059.3	1040.8	1007.5	1007.5	989.0	989.0	977.8	966.8	948.2	926.0	892.6
42.5°	877.8	863.0	848.2	852.0	826.0	848.2	818.6	837.2	777.8	774.2	751.8
45°	744.4	711.2	714.8	700.0	685.2	692.6	666.7	674.1	640.8	633.4	611.2
47.5°	603.8	592.7	570.4	563.0	563.0	551.9	540.8	537.1	522.3	503.7	474.1
50°	496.3	455.7	448.1	437.1	429.7	429.7	414.9	392.7	396.3	377.9	348.1
52.5°	388.9	355.5	340.7	337.1	322.3	314.9	296.3	281.5	270.4	262.9	244.5
55°	300.0	270.4	251.9	251.9	229.7	229.7	203.7	192.6	177.8	163.0	151.9
57.5°	225.9	211.1	192.6	177.8	170.4	151.9	137.0	118.6	107.4	85.2	70.4
60°	170.4	155.6	137.0	126.0	118.6	100.0	81.6	66.6	40.8	33.4	29.6
62.5°	126.0	111.2	92.6	85.2	77.8	63.0	44.4	22.2	11.2	11.2	11.2
65°	92.6	74.0	59.2	51.8	44.4	33.4	14.8	7.4	3.8	3.8	3.8
67.5°	63.0	48.2	33.4	29.6	22.2	11.2	3.8	3.8	3.8	3.8	3.8
70°	40.8	29.6	14.8	11.2	7.4	3.8	3.8	3.8	3.8	3.8	3.8
72.5°	26.0	14.8	7.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	14.8	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	7.4	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	3.8	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	3.8	3.8	3.8
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 4LBSQLWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1	3089.1
2.5°	3015.1	2989.1	3003.9	2970.7	2985.5	3011.3	2992.9	3000.3
5°	2911.3	2896.5	2878.1	2829.9	2866.9	2896.5	2881.7	2878.1
7.5°	2800.3	2748.3	2774.3	2759.5	2752.1	2781.7	2748.3	2785.3
10°	2685.4	2648.4	2644.7	2618.8	2618.8	2641.0	2644.7	2622.4
12.5°	2515.0	2496.6	2496.6	2492.8	2489.0	2511.4	2515.0	2504.0
15°	2392.8	2385.4	2366.8	2363.2	2341.0	2374.2	2378.0	2374.2
17.5°	2244.6	2248.3	2229.8	2229.8	2244.6	2255.7	2226.1	2255.7
20°	2144.7	2126.1	2118.7	2085.3	2103.9	2122.5	2122.5	2126.1
22.5°	2000.1	1970.5	1981.7	1963.1	1951.9	1977.9	1977.9	1989.1
25°	1837.2	1837.2	1844.6	1833.5	1840.9	1855.7	1844.6	1870.5
27.5°	1681.6	1696.4	1696.4	1681.6	1689.0	1733.4	1752.0	1722.4
30°	1537.2	1540.8	1552.0	1544.6	1566.8	1581.6	1577.8	1600.2
32.5°	1374.2	1392.7	1400.1	1389.0	1396.4	1429.7	1411.2	1407.5
35°	1248.3	1214.9	1211.3	1214.9	1229.7	1237.1	1229.7	1255.7
37.5°	1066.7	1055.6	1040.8	1044.5	1055.6	1070.5	1077.9	1096.3
40°	892.6	877.8	877.8	874.2	863.0	903.8	903.8	903.8
42.5°	740.8	737.0	718.6	718.6	733.4	744.4	737.0	763.0
45°	607.5	592.7	581.5	581.5	592.7	592.7	603.8	600.1
47.5°	477.9	463.1	466.7	455.7	466.7	481.5	463.1	466.7
50°	359.3	359.3	351.9	359.3	355.5	359.3	351.9	344.5
52.5°	244.5	277.8	281.5	266.7	233.3	203.7	185.2	200.0
55°	140.8	126.0	126.0	122.2	114.8	111.2	100.0	111.2
57.5°	70.4	63.0	63.0	63.0	59.2	55.6	48.2	48.2
60°	29.6	26.0	26.0	22.2	18.6	14.8	11.2	14.8
62.5°	11.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
65°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
67.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
70°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
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)