

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: P859325

Luminaire Tested: **LX4C65D010 EX4C659027 4LBLWW\***

Issue Date: 2/9/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P859325  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/9/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LX4C65D010 EX4C659027 4LBLWW\*  
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS  
AND 4LRLWW TRIM WITH \* FINISH  
Light Source: -  
Ballast/Driver: -

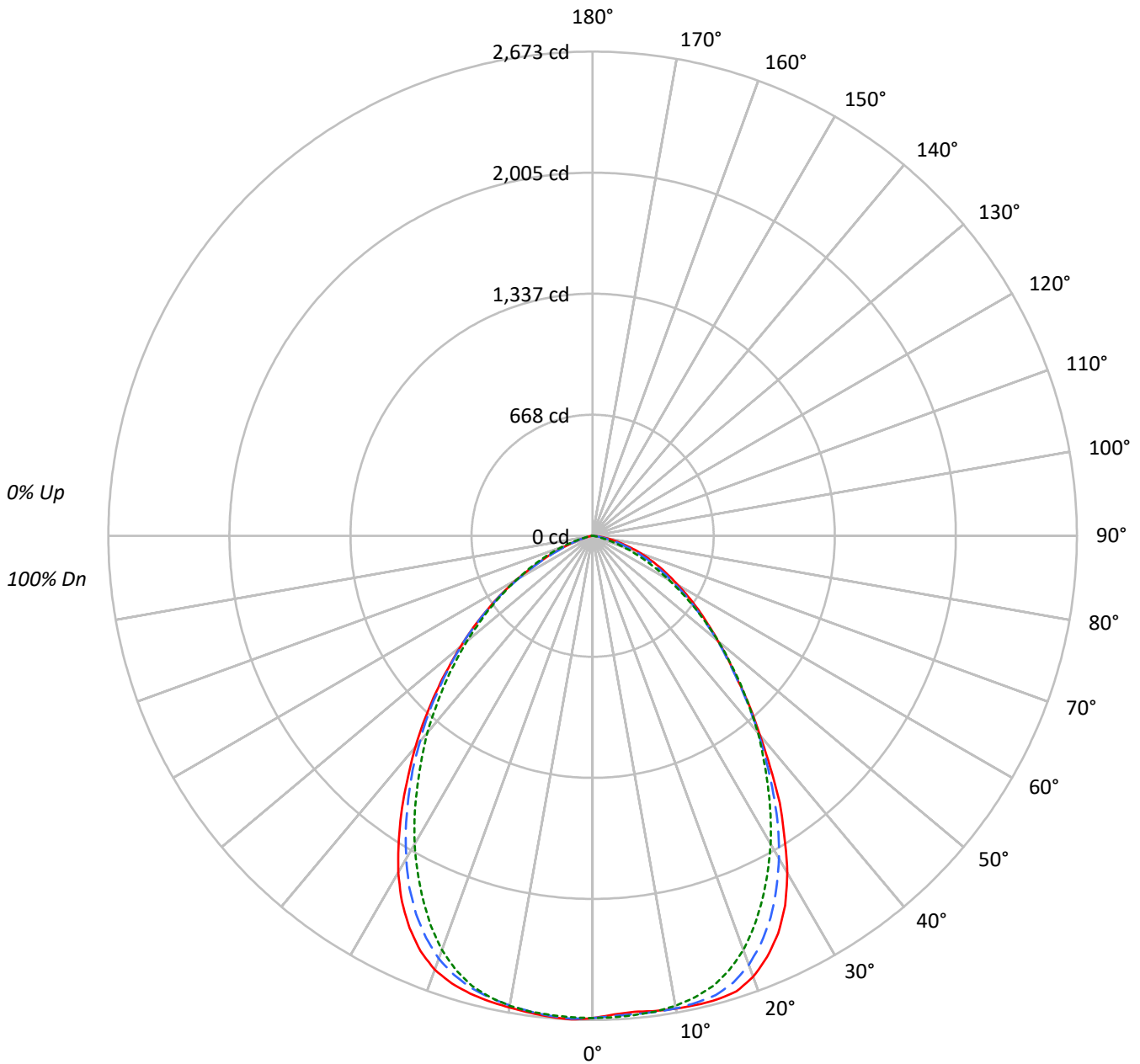
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5105.0 lumens  
Efficiency: N/A  
Efficacy: 70.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 72.4  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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				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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89		
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78		
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54		
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48		
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43		
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39		
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36		
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	327134	327134	327134
5°	325301	327521	328754
10°	330684	328688	329935
15°	337148	327227	332696
20°	338847	318059	333225
25°	328420	300360	323946
30°	304827	278725	304259
35°	269928	252830	275027
40°	230120	227715	243913
45°	197700	199959	212468
50°	172568	172950	182124
55°	152481	146055	150981
60°	133665	119168	118676
65°	118313	92441	82267
70°	100935	63578	48851
75°	81643	34176	22309
80°	55891	8490	5660
85°	16915	2819	2819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.1	5.0
10°-20°	732.6	14.4
20°-30°	1058.5	20.7
30°-40°	1094.3	21.4
40°-50°	904.2	17.7
50°-60°	624.0	12.2
60°-70°	326.7	6.4
70°-80°	102.9	2.0
80°-90°	8.7	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°	2044.2	40.0
0°-40°	3138.5	61.5
0°-60°	4666.7	91.4
0°-90°	5105.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5105.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2663	2663	2663	2663	2663	
5°	2638	2651	2656	2661	2666	253
15°	2651	2626	2573	2585	2616	748
25°	2423	2325	2216	2305	2390	1106
35°	1800	1740	1686	1774	1834	1117
45°	1138	1133	1151	1204	1223	887
55°	712	690	682	701	705	640
65°	407	369	318	264	283	403
75°	172	135	72	49	47	184
85°	12	6	2	2	2	25
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°	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8
2.5°	2645.8	2646.8	2646.8	2648.8	2648.8	2648.8	2649.8	2649.8	2650.8	2651.8	2652.8
5°	2637.8	2637.8	2639.8	2640.8	2642.8	2643.8	2645.8	2646.8	2648.8	2649.8	2650.8
7.5°	2645.8	2645.8	2646.8	2647.8	2647.8	2648.8	2648.8	2649.8	2650.8	2651.8	2651.8
10°	2650.8	2650.8	2650.8	2650.8	2651.8	2651.8	2651.8	2650.8	2650.8	2650.8	2649.8
12.5°	2652.8	2652.8	2651.8	2650.8	2651.8	2650.8	2650.8	2647.8	2645.8	2643.8	2640.8
15°	2650.8	2650.8	2649.8	2648.8	2647.8	2645.8	2644.8	2639.8	2635.8	2629.8	2625.8
17.5°	2637.8	2635.8	2633.8	2631.8	2627.8	2624.8	2622.8	2613.8	2606.8	2596.8	2585.8
20°	2591.8	2589.8	2586.8	2581.8	2576.8	2572.8	2566.8	2553.8	2546.8	2531.8	2520.8
22.5°	2516.8	2514.8	2515.8	2506.8	2496.8	2490.8	2486.8	2475.8	2463.8	2444.8	2432.8
25°	2422.8	2416.8	2416.8	2402.8	2397.8	2393.8	2388.8	2375.8	2357.8	2340.8	2324.8
27.5°	2300.8	2292.8	2288.8	2286.8	2274.8	2265.8	2258.8	2248.8	2233.8	2218.8	2196.8
30°	2148.8	2147.8	2142.8	2133.8	2124.8	2120.8	2112.8	2095.8	2081.8	2070.8	2056.8
32.5°	1969.8	1968.8	1968.8	1968.8	1962.8	1961.8	1949.8	1940.8	1929.8	1912.8	1903.8
35°	1799.8	1798.8	1799.8	1784.8	1780.8	1777.8	1776.8	1770.8	1755.8	1747.8	1739.8
37.5°	1607.9	1610.9	1608.9	1604.9	1609.9	1600.9	1607.9	1594.9	1588.9	1586.9	1577.9
40°	1434.9	1442.9	1434.9	1435.9	1440.9	1431.9	1431.9	1429.9	1425.9	1423.9	1421.9
42.5°	1286.9	1276.9	1282.9	1277.9	1282.9	1279.9	1274.9	1277.9	1278.9	1274.9	1273.9
45°	1137.9	1139.9	1141.9	1138.9	1138.9	1135.9	1143.9	1138.9	1138.9	1139.9	1132.9
47.5°	1016.9	1013.9	1015.9	1013.9	1014.9	1012.9	1014.9	1015.9	1013.9	1013.9	1007.9
50°	902.9	900.9	907.9	901.9	901.9	900.9	901.9	899.9	896.9	896.9	898.9
52.5°	803.9	799.9	798.9	803.9	796.9	796.9	797.9	795.9	791.9	789.9	784.9
55°	711.9	710.9	711.9	707.9	705.9	705.9	700.9	698.9	697.9	692.9	689.9
57.5°	625.9	622.9	623.9	622.9	618.9	617.9	613.9	613.9	609.9	605.9	600.9
60°	544.0	544.0	547.0	543.0	540.0	538.0	536.0	534.0	527.0	520.0	514.0
62.5°	471.0	472.0	471.0	468.0	466.0	464.0	462.0	456.0	450.0	446.0	439.0
65°	407.0	406.0	403.0	401.0	396.0	396.0	392.0	389.0	382.0	376.0	369.0
67.5°	341.0	339.0	339.0	339.0	333.0	332.0	330.0	324.0	318.0	310.0	304.0
70°	281.0	283.0	280.0	277.0	274.0	273.0	270.0	264.0	257.0	249.0	244.0
72.5°	224.0	226.0	223.0	222.0	216.0	214.0	213.0	208.0	200.0	195.0	187.0
75°	172.0	173.0	171.0	169.0	165.0	164.0	159.0	155.0	150.0	142.0	135.0
77.5°	124.0	122.0	122.0	118.0	114.0	114.0	113.0	107.0	100.0	94.0	88.0
80°	79.0	78.0	75.0	73.0	70.0	69.0	68.0	63.0	58.0	54.0	50.0
82.5°	40.0	39.0	38.0	37.0	35.0	33.0	34.0	30.0	28.0	24.0	21.0
85°	12.0	13.0	13.0	12.0	11.0	11.0	11.0	10.0	8.0	7.0	6.0
87.5°	0.0	0.0	0.0	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	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°	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8
2.5°	2653.8	2654.8	2655.8	2656.8	2656.8	2657.8	2658.8	2659.8	2660.8	2660.8	2661.8
5°	2651.8	2653.8	2653.8	2654.8	2654.8	2654.8	2655.8	2655.8	2655.8	2655.8	2656.8
7.5°	2652.8	2652.8	2652.8	2651.8	2651.8	2650.8	2650.8	2650.8	2648.8	2648.8	2648.8
10°	2647.8	2646.8	2645.8	2643.8	2642.8	2641.8	2639.8	2637.8	2635.8	2634.8	2632.8
12.5°	2637.8	2633.8	2629.8	2625.8	2623.8	2622.8	2618.8	2615.8	2612.8	2609.8	2607.8
15°	2617.8	2611.8	2604.8	2596.8	2594.8	2592.8	2585.8	2579.8	2575.8	2572.8	2567.8
17.5°	2577.8	2565.8	2557.8	2545.8	2540.8	2538.8	2527.8	2521.8	2514.8	2512.8	2508.8
20°	2506.8	2495.8	2480.8	2469.8	2463.8	2457.8	2448.8	2440.8	2432.8	2432.8	2427.8
22.5°	2417.8	2403.8	2384.8	2370.8	2369.8	2357.8	2349.8	2340.8	2337.8	2331.8	2331.8
25°	2305.8	2293.8	2272.8	2260.8	2254.8	2251.8	2238.8	2226.8	2220.8	2215.8	2219.8
27.5°	2181.8	2163.8	2147.8	2132.8	2127.8	2121.8	2109.8	2104.8	2093.8	2092.8	2091.8
30°	2039.8	2021.8	2005.8	1998.8	1988.8	1983.8	1974.8	1968.8	1964.8	1964.8	1962.8
32.5°	1890.8	1874.8	1866.8	1851.8	1846.8	1839.8	1833.8	1827.8	1829.8	1827.8	1828.8
35°	1729.8	1725.8	1710.8	1701.8	1701.8	1700.8	1690.8	1686.8	1684.8	1685.8	1690.8
37.5°	1576.9	1564.9	1554.9	1548.9	1553.9	1547.9	1546.9	1546.9	1552.9	1548.9	1556.9
40°	1413.9	1412.9	1408.9	1410.9	1411.9	1404.9	1406.9	1407.9	1411.9	1419.9	1420.9
42.5°	1271.9	1270.9	1270.9	1270.9	1268.9	1264.9	1268.9	1275.9	1274.9	1280.9	1285.9
45°	1134.9	1132.9	1136.9	1133.9	1139.9	1141.9	1138.9	1140.9	1146.9	1150.9	1158.9
47.5°	1009.9	1009.9	1010.9	1012.9	1006.9	1011.9	1013.9	1017.9	1020.9	1022.9	1026.9
50°	893.9	893.9	891.9	891.9	891.9	894.9	890.9	895.9	896.9	904.9	909.9
52.5°	786.9	781.9	784.9	782.9	778.9	776.9	778.9	779.9	785.9	787.9	793.9
55°	684.9	684.9	676.9	674.9	677.9	676.9	675.9	675.9	678.9	681.9	686.9
57.5°	594.9	588.9	582.9	581.9	578.9	579.9	579.9	578.9	576.9	577.9	578.9
60°	510.0	506.0	497.0	497.0	496.0	495.0	490.0	489.0	484.0	485.0	481.0
62.5°	432.0	430.0	418.0	414.0	414.0	411.0	406.0	405.0	398.0	398.0	394.0
65°	362.0	356.0	349.0	342.0	342.0	338.0	335.0	326.0	321.0	318.0	312.0
67.5°	298.0	289.0	282.0	276.0	272.0	271.0	264.0	258.0	250.0	245.0	236.0
70°	236.0	229.0	222.0	216.0	212.0	208.0	201.0	192.0	186.0	177.0	171.0
72.5°	178.0	172.0	166.0	158.0	153.0	150.0	143.0	135.0	125.0	119.0	111.0
75°	128.0	121.0	113.0	106.0	103.0	100.0	92.0	86.0	79.0	72.0	64.0
77.5°	83.0	75.0	69.0	61.0	60.0	58.0	50.0	44.0	39.0	35.0	30.0
80°	44.0	40.0	35.0	30.0	28.0	25.0	21.0	18.0	15.0	12.0	10.0
82.5°	19.0	16.0	13.0	11.0	10.0	9.0	7.0	6.0	5.0	5.0	4.0
85°	5.0	4.0	4.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	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°	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8
2.5°	2662.8	2663.8	2664.8	2664.8	2665.8	2666.8	2666.8	2667.8	2668.8	2669.8	2669.8
5°	2657.8	2657.8	2657.8	2658.8	2658.8	2658.8	2658.8	2660.8	2660.8	2661.8	2662.8
7.5°	2647.8	2647.8	2647.8	2647.8	2646.8	2647.8	2646.8	2646.8	2648.8	2649.8	2650.8
10°	2631.8	2630.8	2630.8	2629.8	2629.8	2629.8	2630.8	2631.8	2632.8	2633.8	2636.8
12.5°	2606.8	2605.8	2605.8	2604.8	2604.8	2605.8	2606.8	2608.8	2612.8	2614.8	2618.8
15°	2566.8	2565.8	2566.8	2567.8	2569.8	2572.8	2575.8	2578.8	2584.8	2589.8	2594.8
17.5°	2508.8	2509.8	2510.8	2512.8	2515.8	2519.8	2527.8	2535.8	2542.8	2550.8	2558.8
20°	2428.8	2432.8	2433.8	2440.8	2442.8	2451.8	2460.8	2472.8	2483.8	2493.8	2504.8
22.5°	2332.8	2335.8	2339.8	2347.8	2352.8	2364.8	2375.8	2389.8	2401.8	2414.8	2430.8
25°	2223.8	2224.8	2236.8	2236.8	2248.8	2258.8	2271.8	2286.8	2304.8	2321.8	2332.8
27.5°	2099.8	2104.8	2113.8	2117.8	2126.8	2142.8	2153.8	2171.8	2189.8	2204.8	2216.8
30°	1969.8	1973.8	1988.8	1990.8	1997.8	2011.8	2026.8	2043.8	2057.8	2074.8	2085.8
32.5°	1832.8	1843.8	1852.8	1859.8	1861.8	1882.8	1890.8	1902.8	1918.8	1935.8	1946.8
35°	1699.8	1704.8	1717.8	1721.8	1727.8	1739.8	1755.8	1765.8	1773.8	1784.8	1797.8
37.5°	1558.9	1573.9	1576.9	1588.9	1590.9	1601.9	1609.9	1621.9	1631.9	1641.9	1643.9
40°	1427.9	1432.9	1443.9	1446.9	1448.9	1463.9	1473.9	1476.9	1481.9	1490.9	1502.9
42.5°	1294.9	1299.9	1311.9	1308.9	1317.9	1324.9	1329.9	1341.9	1346.9	1349.9	1349.9
45°	1163.9	1165.9	1173.9	1177.9	1182.9	1186.9	1195.9	1201.9	1203.9	1212.9	1215.9
47.5°	1038.9	1040.9	1046.9	1053.9	1051.9	1056.9	1066.9	1069.9	1070.9	1076.9	1079.9
50°	915.9	920.9	928.9	926.9	932.9	935.9	944.9	946.9	946.9	947.9	948.9
52.5°	800.9	804.9	806.9	808.9	811.9	816.9	820.9	818.9	822.9	826.9	823.9
55°	686.9	689.9	694.9	696.9	696.9	697.9	695.9	704.9	700.9	699.9	700.9
57.5°	582.9	578.9	577.9	582.9	584.9	583.9	580.9	584.9	584.9	582.9	579.9
60°	482.0	479.0	478.0	479.0	475.0	472.0	474.0	472.0	467.0	465.0	466.0
62.5°	390.0	387.0	379.0	379.0	377.0	376.0	368.0	369.0	365.0	359.0	361.0
65°	305.0	297.0	293.0	292.0	285.0	279.0	277.0	270.0	264.0	263.0	264.0
67.5°	229.0	220.0	213.0	210.0	206.0	201.0	194.0	188.0	190.0	189.0	193.0
70°	159.0	153.0	146.0	141.0	143.0	137.0	133.0	133.0	134.0	135.0	137.0
72.5°	106.0	98.0	95.0	92.0	90.0	86.0	88.0	88.0	87.0	88.0	86.0
75°	60.0	56.0	53.0	52.0	50.0	50.0	50.0	50.0	49.0	48.0	48.0
77.5°	27.0	25.0	24.0	23.0	23.0	23.0	22.0	21.0	21.0	21.0	20.0
80°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
82.5°	4.0	4.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	4.0	5.0
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	0.0	1.0	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: P859325

CATALOG NUMBER: LX4C65D010 EX4C659027 4LBLWW\*

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8	2662.8
2.5°	2670.8	2671.8	2671.8	2671.8	2672.8	2672.8	2672.8	2672.8
5°	2663.8	2664.8	2664.8	2664.8	2665.8	2665.8	2665.8	2665.8
7.5°	2651.8	2652.8	2652.8	2653.8	2653.8	2654.8	2654.8	2655.8
10°	2637.8	2639.8	2640.8	2641.8	2642.8	2643.8	2643.8	2644.8
12.5°	2622.8	2624.8	2625.8	2627.8	2629.8	2630.8	2631.8	2632.8
15°	2600.8	2604.8	2606.8	2607.8	2611.8	2613.8	2614.8	2615.8
17.5°	2565.8	2573.8	2576.8	2578.8	2582.8	2586.8	2589.8	2590.8
20°	2515.8	2524.8	2528.8	2533.8	2539.8	2544.8	2546.8	2548.8
22.5°	2445.8	2455.8	2461.8	2467.8	2472.8	2477.8	2485.8	2482.8
25°	2345.8	2362.8	2369.8	2372.8	2383.8	2389.8	2393.8	2389.8
27.5°	2233.8	2243.8	2249.8	2256.8	2264.8	2270.8	2272.8	2278.8
30°	2098.8	2115.8	2114.8	2121.8	2131.8	2137.8	2139.8	2144.8
32.5°	1958.8	1966.8	1972.8	1971.8	1975.8	1986.8	1982.8	1991.8
35°	1809.8	1810.8	1820.8	1819.8	1827.8	1827.8	1827.8	1833.8
37.5°	1650.9	1662.9	1657.9	1669.8	1665.8	1668.8	1668.8	1670.8
40°	1505.9	1509.9	1509.9	1513.9	1516.9	1513.9	1515.9	1520.9
42.5°	1355.9	1359.9	1360.9	1358.9	1361.9	1370.9	1363.9	1369.9
45°	1215.9	1218.9	1222.9	1219.9	1224.9	1221.9	1224.9	1222.9
47.5°	1083.9	1082.9	1081.9	1089.9	1082.9	1083.9	1087.9	1080.9
50°	948.9	954.9	950.9	953.9	955.9	955.9	952.9	952.9
52.5°	828.9	827.9	824.9	827.9	825.9	826.9	828.9	826.9
55°	704.9	708.9	706.9	705.9	706.9	706.9	712.9	704.9
57.5°	582.9	580.9	583.9	590.9	583.9	588.9	591.9	592.9
60°	467.0	467.0	473.0	470.0	476.0	481.0	485.0	483.0
62.5°	356.0	361.0	363.0	364.0	370.0	374.0	374.0	373.0
65°	264.0	271.0	271.0	275.0	277.0	277.0	279.0	283.0
67.5°	195.0	195.0	196.0	198.0	197.0	197.0	199.0	200.0
70°	136.0	134.0	137.0	136.0	136.0	135.0	136.0	136.0
72.5°	86.0	86.0	87.0	86.0	84.0	85.0	85.0	87.0
75°	46.0	48.0	46.0	46.0	47.0	45.0	46.0	47.0
77.5°	19.0	19.0	19.0	19.0	19.0	18.0	18.0	18.0
80°	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0
82.5°	4.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	0.0	1.0	0.0	1.0	0.0	0.0	0.0	1.0
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)