

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: P879468

Luminaire Tested: **LD4C65D010 EU4659027 4LBDWWH**

Issue Date: 10/1/2024

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: P879468
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C65D010 EU4659027 4LBLDWWH
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBLDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

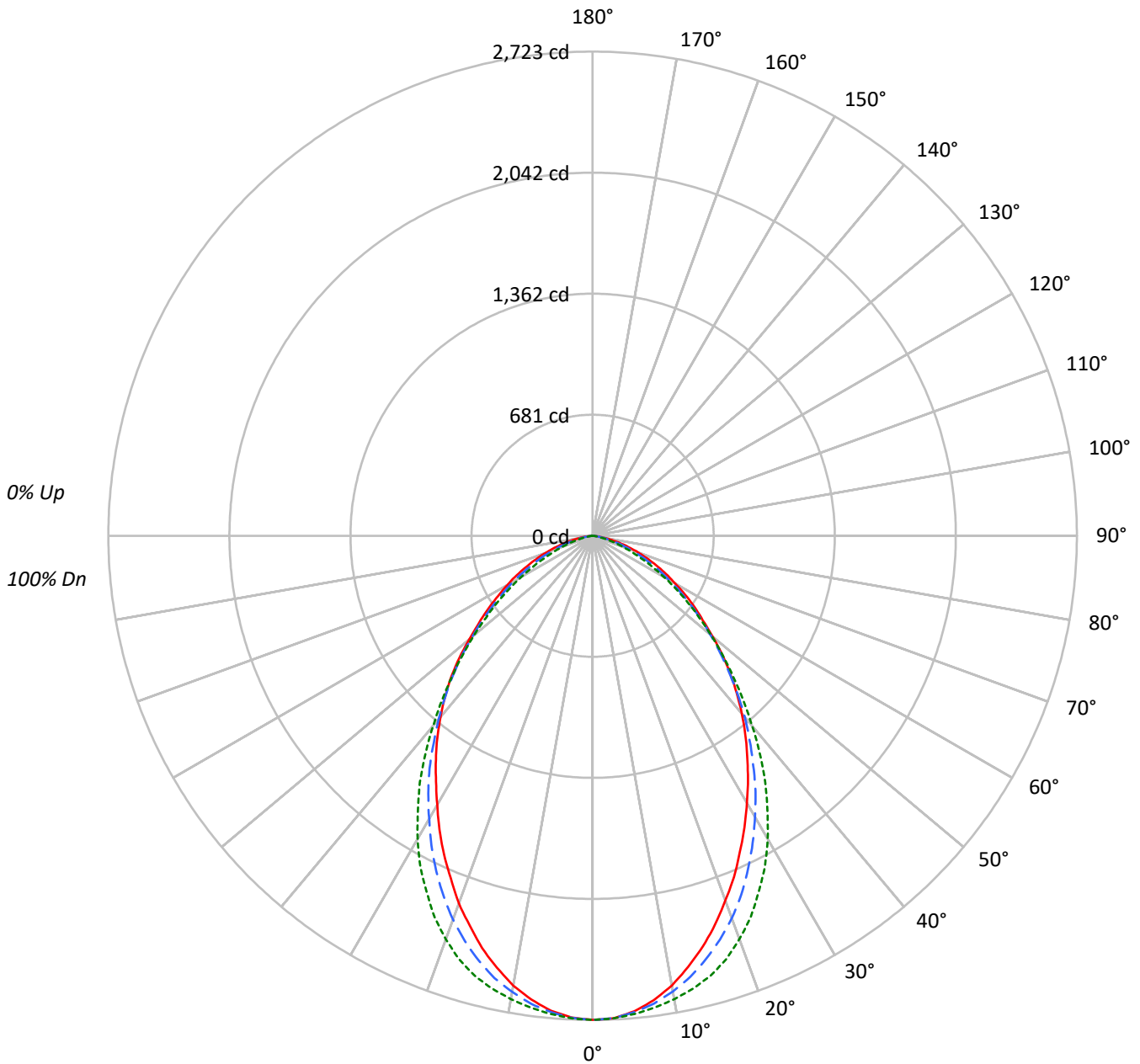
Lumens per Lamp: N/A
Luminaire Lumens: 4870.0 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72.4
Input Voltage (V): NR
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				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	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77			77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67			67
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59			59
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52			52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47			47
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42			42
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38			38
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35			35
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32			32

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	334493	334493	334493
5°	331085	332934	330715
10°	320317	330048	320442
15°	304334	325816	305351
20°	285244	315575	287597
25°	265658	299411	268098
30°	246097	279292	247941
35°	227049	253880	230484
40°	209432	223705	213281
45°	189708	193878	195441
50°	168172	166069	172377
55°	149911	139844	153338
60°	131183	113517	136097
65°	114825	87790	118895
70°	96625	64297	101653
75°	75472	41771	79744
80°	49524	21932	54476
85°	16915	9867	22553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.2	5.2
10°-20°	694.5	14.3
20°-30°	955.1	19.6
30°-40°	996.4	20.5
40°-50°	852.5	17.5
50°-60°	609.7	12.5
60°-70°	353.9	7.3
70°-80°	136.4	2.8
80°-90°	17.4	0.4
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°	1903.8	39.1
0°-40°	2900.2	59.6
0°-60°	4362.4	89.6
0°-90°	4870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4870.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2723	2723	2723	2723	2723	
5°	2685	2690	2700	2690	2682	253
15°	2393	2465	2562	2474	2401	671
25°	1960	2068	2209	2081	1978	902
35°	1514	1574	1693	1599	1537	948
45°	1092	1083	1116	1110	1125	842
55°	700	665	653	683	716	626
65°	395	349	302	361	409	394
75°	159	119	88	126	168	171
85°	12	9	7	10	16	23
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°	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7
2.5°	2715.7	2713.7	2714.7	2714.7	2714.7	2713.7	2715.7	2715.7	2714.7	2714.7	2714.7
5°	2684.7	2682.7	2683.7	2684.7	2684.7	2684.7	2685.7	2686.7	2687.7	2688.7	2689.7
7.5°	2634.7	2631.7	2634.7	2638.7	2638.7	2639.7	2640.7	2641.7	2644.7	2649.7	2652.7
10°	2567.7	2567.7	2568.7	2571.7	2576.7	2575.7	2578.7	2583.7	2589.7	2596.7	2601.7
12.5°	2482.8	2484.8	2487.8	2490.8	2495.8	2498.8	2503.8	2509.8	2519.8	2529.7	2540.7
15°	2392.8	2393.8	2394.8	2401.8	2406.8	2413.8	2417.8	2429.8	2438.8	2452.8	2464.8
17.5°	2291.8	2290.8	2293.8	2299.8	2311.8	2314.8	2319.8	2332.8	2345.8	2364.8	2380.8
20°	2181.8	2187.8	2191.8	2199.8	2206.8	2214.8	2218.8	2234.8	2249.8	2267.8	2288.8
22.5°	2077.8	2072.8	2079.8	2088.8	2094.8	2100.8	2107.8	2124.8	2140.8	2162.8	2183.8
25°	1959.8	1962.8	1967.8	1974.8	1982.8	1990.8	1998.8	2016.8	2025.8	2048.8	2067.8
27.5°	1847.8	1852.8	1854.8	1863.8	1870.8	1876.8	1880.8	1901.8	1909.8	1929.8	1948.8
30°	1734.8	1739.8	1739.8	1749.8	1754.8	1760.8	1770.8	1784.8	1796.8	1810.8	1824.8
32.5°	1625.8	1625.8	1629.8	1638.8	1643.8	1650.8	1653.8	1663.8	1675.8	1689.8	1704.8
35°	1513.9	1516.9	1520.8	1520.8	1529.8	1533.8	1537.8	1547.8	1555.8	1561.8	1573.8
37.5°	1410.9	1410.9	1407.9	1412.9	1418.9	1417.9	1423.9	1428.9	1433.9	1440.9	1450.9
40°	1305.9	1305.9	1301.9	1304.9	1308.9	1307.9	1305.9	1310.9	1314.9	1319.9	1329.9
42.5°	1198.9	1196.9	1195.9	1195.9	1197.9	1195.9	1197.9	1198.9	1198.9	1198.9	1204.9
45°	1091.9	1096.9	1090.9	1088.9	1085.9	1082.9	1081.9	1082.9	1086.9	1081.9	1082.9
47.5°	986.9	988.9	984.9	981.9	978.9	976.9	978.9	972.9	974.9	975.9	971.9
50°	879.9	875.9	875.9	872.9	873.9	872.9	870.9	868.9	868.9	863.9	860.9
52.5°	780.9	782.9	784.9	777.9	778.9	773.9	774.9	769.9	769.9	763.9	765.9
55°	699.9	696.9	696.9	693.9	692.9	687.9	686.9	683.9	676.9	672.9	664.9
57.5°	615.9	614.9	610.9	611.9	605.9	604.9	602.9	597.9	592.9	587.9	578.9
60°	533.9	534.9	534.9	532.9	529.9	524.9	525.9	518.9	511.9	503.0	495.0
62.5°	466.0	463.0	462.0	460.0	454.0	454.0	449.0	444.0	437.0	428.0	421.0
65°	395.0	396.0	393.0	390.0	384.0	383.0	379.0	375.0	368.0	359.0	349.0
67.5°	331.0	329.0	328.0	325.0	319.0	318.0	315.0	306.0	300.0	291.0	283.0
70°	269.0	267.0	268.0	263.0	257.0	254.0	253.0	246.0	237.0	230.0	222.0
72.5°	211.0	211.0	210.0	205.0	202.0	200.0	196.0	188.0	183.0	175.0	169.0
75°	159.0	158.0	156.0	153.0	149.0	147.0	145.0	140.0	133.0	124.0	119.0
77.5°	110.0	111.0	109.0	108.0	103.0	100.0	99.0	96.0	90.0	84.0	79.0
80°	70.0	69.0	68.0	66.0	65.0	64.0	61.0	59.0	53.0	50.0	47.0
82.5°	38.0	36.0	36.0	35.0	33.0	32.0	31.0	29.0	28.0	26.0	24.0
85°	12.0	13.0	12.0	12.0	12.0	11.0	11.0	11.0	10.0	10.0	9.0
87.5°	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0
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°	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7
2.5°	2714.7	2715.7	2715.7	2716.7	2716.7	2716.7	2716.7	2716.7	2716.7	2716.7	2716.7
5°	2692.7	2692.7	2694.7	2696.7	2696.7	2696.7	2697.7	2699.7	2699.7	2699.7	2698.7
7.5°	2656.7	2660.7	2664.7	2668.7	2669.7	2670.7	2672.7	2676.7	2676.7	2676.7	2676.7
10°	2609.7	2618.7	2623.7	2629.7	2632.7	2634.7	2640.7	2641.7	2644.7	2645.7	2644.7
12.5°	2549.7	2561.7	2572.7	2582.7	2586.7	2590.7	2596.7	2602.7	2605.7	2608.7	2607.7
15°	2482.8	2495.8	2512.8	2523.8	2531.7	2537.7	2546.7	2554.7	2559.7	2561.7	2561.7
17.5°	2401.8	2417.8	2435.8	2453.8	2458.8	2468.8	2478.8	2489.8	2495.8	2496.8	2495.8
20°	2311.8	2329.8	2344.8	2362.8	2373.8	2378.8	2392.8	2406.8	2412.8	2413.8	2412.8
22.5°	2204.8	2221.8	2241.8	2260.8	2269.8	2278.8	2293.8	2307.8	2315.8	2321.8	2315.8
25°	2085.8	2109.8	2128.8	2144.8	2157.8	2166.8	2185.8	2196.8	2209.8	2208.8	2209.8
27.5°	1968.8	1988.8	2009.8	2028.8	2036.8	2046.8	2061.8	2079.8	2090.8	2097.8	2096.8
30°	1848.8	1864.8	1882.8	1899.8	1912.8	1920.8	1942.8	1950.8	1964.8	1968.8	1965.8
32.5°	1721.8	1732.8	1750.8	1773.8	1778.8	1786.8	1800.8	1820.8	1825.8	1827.8	1828.8
35°	1586.8	1607.8	1622.8	1636.8	1640.8	1647.8	1663.8	1678.8	1683.8	1692.8	1688.8
37.5°	1461.9	1473.9	1480.9	1494.9	1506.9	1512.9	1520.8	1530.8	1540.8	1544.8	1543.8
40°	1336.9	1342.9	1348.9	1363.9	1364.9	1364.9	1376.9	1390.9	1390.9	1394.9	1394.9
42.5°	1208.9	1209.9	1217.9	1225.9	1227.9	1229.9	1241.9	1243.9	1249.9	1252.9	1256.9
45°	1084.9	1090.9	1095.9	1096.9	1101.9	1102.9	1105.9	1108.9	1117.9	1115.9	1117.9
47.5°	971.9	974.9	977.9	977.9	980.9	979.9	984.9	981.9	987.9	989.9	992.9
50°	860.9	865.9	862.9	864.9	863.9	866.9	864.9	864.9	864.9	868.9	871.9
52.5°	758.9	759.9	756.9	757.9	757.9	755.9	757.9	756.9	755.9	755.9	756.9
55°	664.9	660.9	658.9	654.9	649.9	655.9	652.9	650.9	654.9	652.9	654.9
57.5°	573.9	568.9	564.9	562.9	555.9	559.9	555.9	553.9	553.9	553.9	558.9
60°	488.0	483.0	478.0	472.0	471.0	469.0	467.0	462.0	463.0	462.0	464.0
62.5°	413.0	403.0	396.0	391.0	390.0	387.0	384.0	379.0	380.0	380.0	381.0
65°	344.0	333.0	323.0	316.0	316.0	311.0	306.0	306.0	300.0	302.0	303.0
67.5°	275.0	266.0	256.0	251.0	248.0	244.0	241.0	239.0	236.0	236.0	238.0
70°	213.0	204.0	199.0	191.0	190.0	187.0	183.0	180.0	179.0	179.0	178.0
72.5°	161.0	153.0	147.0	142.0	139.0	136.0	132.0	131.0	129.0	129.0	131.0
75°	112.0	107.0	102.0	97.0	95.0	94.0	91.0	89.0	89.0	88.0	89.0
77.5°	75.0	70.0	65.0	63.0	61.0	59.0	58.0	57.0	54.0	54.0	54.0
80°	43.0	41.0	39.0	36.0	36.0	35.0	33.0	32.0	31.0	31.0	31.0
82.5°	22.0	21.0	19.0	18.0	18.0	18.0	17.0	17.0	16.0	16.0	16.0
85°	9.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0	8.0	7.0	8.0
87.5°	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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°	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7
2.5°	2716.7	2715.7	2715.7	2715.7	2715.7	2715.7	2714.7	2714.7	2713.7	2713.7	2713.7
5°	2699.7	2698.7	2697.7	2696.7	2695.7	2694.7	2693.7	2692.7	2689.7	2688.7	2686.7
7.5°	2675.7	2673.7	2670.7	2669.7	2667.7	2664.7	2660.7	2658.7	2654.7	2649.7	2647.7
10°	2643.7	2639.7	2636.7	2631.7	2630.7	2626.7	2616.7	2611.7	2604.7	2598.7	2591.7
12.5°	2604.7	2600.7	2593.7	2586.7	2582.7	2573.7	2564.7	2556.7	2547.7	2534.7	2524.8
15°	2556.7	2550.7	2536.7	2534.7	2528.7	2514.8	2502.8	2487.8	2473.8	2459.8	2447.8
17.5°	2492.8	2479.8	2472.8	2463.8	2456.8	2438.8	2425.8	2408.8	2389.8	2373.8	2356.8
20°	2408.8	2394.8	2382.8	2377.8	2368.8	2352.8	2336.8	2315.8	2296.8	2276.8	2261.8
22.5°	2308.8	2299.8	2281.8	2275.8	2264.8	2248.8	2229.8	2209.8	2191.8	2169.8	2149.8
25°	2201.8	2188.8	2174.8	2162.8	2154.8	2139.8	2115.8	2100.8	2080.8	2056.8	2041.8
27.5°	2087.8	2072.8	2052.8	2044.8	2037.8	2017.8	1997.8	1978.8	1962.8	1941.8	1928.8
30°	1955.8	1944.8	1931.8	1921.8	1911.8	1895.8	1877.8	1855.8	1838.8	1828.8	1810.8
32.5°	1821.8	1812.8	1795.8	1790.8	1779.8	1766.8	1753.8	1737.8	1719.8	1704.8	1690.8
35°	1678.8	1669.8	1657.8	1648.8	1644.8	1635.8	1621.8	1607.8	1598.8	1581.8	1574.8
37.5°	1535.8	1532.8	1520.8	1511.9	1508.9	1497.9	1490.9	1480.9	1467.9	1463.9	1455.9
40°	1388.9	1386.9	1379.9	1378.9	1372.9	1369.9	1359.9	1351.9	1345.9	1342.9	1337.9
42.5°	1253.9	1251.9	1245.9	1246.9	1240.9	1238.9	1237.9	1230.9	1225.9	1219.9	1220.9
45°	1120.9	1118.9	1114.9	1112.9	1115.9	1114.9	1112.9	1109.9	1109.9	1110.9	1107.9
47.5°	992.9	994.9	990.9	992.9	992.9	989.9	989.9	993.9	994.9	996.9	998.9
50°	871.9	877.9	875.9	878.9	879.9	880.9	877.9	882.9	881.9	890.9	888.9
52.5°	761.9	762.9	766.9	767.9	768.9	769.9	774.9	778.9	779.9	783.9	790.9
55°	655.9	656.9	664.9	664.9	669.9	670.9	677.9	679.9	682.9	693.9	695.9
57.5°	555.9	561.9	565.9	567.9	570.9	575.9	579.9	588.9	593.9	600.9	607.9
60°	466.0	473.0	478.0	480.0	484.0	490.0	495.0	505.0	513.9	521.9	526.9
62.5°	383.0	389.0	393.0	400.0	400.0	405.0	417.0	423.0	433.0	440.0	449.0
65°	309.0	313.0	320.0	320.0	324.0	332.0	342.0	351.0	361.0	371.0	380.0
67.5°	242.0	245.0	249.0	253.0	255.0	265.0	273.0	286.0	295.0	302.0	313.0
70°	183.0	185.0	190.0	194.0	197.0	204.0	213.0	222.0	231.0	239.0	250.0
72.5°	131.0	135.0	140.0	143.0	145.0	150.0	159.0	168.0	176.0	184.0	190.0
75°	90.0	93.0	95.0	98.0	101.0	105.0	111.0	117.0	126.0	134.0	141.0
77.5°	56.0	59.0	62.0	63.0	64.0	68.0	72.0	78.0	84.0	90.0	95.0
80°	33.0	34.0	35.0	36.0	38.0	41.0	43.0	47.0	51.0	55.0	60.0
82.5°	17.0	18.0	19.0	19.0	19.0	20.0	23.0	25.0	26.0	28.0	31.0
85°	7.0	7.0	7.0	8.0	8.0	9.0	9.0	10.0	10.0	11.0	12.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P879468

CATALOG NUMBER: LD4C65D010 EU4659027 4LBDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7	2722.7
2.5°	2712.7	2712.7	2712.7	2711.7	2712.7	2712.7	2712.7	2711.7
5°	2686.7	2684.7	2684.7	2683.7	2682.7	2682.7	2683.7	2681.7
7.5°	2643.7	2640.7	2638.7	2638.7	2637.7	2636.7	2636.7	2631.7
10°	2587.7	2581.7	2581.7	2579.7	2571.7	2570.7	2568.7	2568.7
12.5°	2517.8	2510.8	2506.8	2501.8	2496.8	2492.8	2491.8	2487.8
15°	2434.8	2425.8	2418.8	2416.8	2408.8	2402.8	2402.8	2400.8
17.5°	2344.8	2330.8	2325.8	2320.8	2309.8	2308.8	2306.8	2297.8
20°	2242.8	2229.8	2222.8	2217.8	2210.8	2200.8	2198.8	2199.8
22.5°	2135.8	2117.8	2111.8	2106.8	2099.8	2090.8	2090.8	2083.8
25°	2024.8	2008.8	2002.8	1996.8	1985.8	1981.8	1976.8	1977.8
27.5°	1911.8	1896.8	1891.8	1880.8	1873.8	1868.8	1863.8	1863.8
30°	1793.8	1785.8	1777.8	1776.8	1762.8	1756.8	1751.8	1747.8
32.5°	1679.8	1669.8	1665.8	1661.8	1654.8	1646.8	1645.8	1638.8
35°	1567.8	1557.8	1552.8	1548.8	1540.8	1537.8	1534.8	1536.8
37.5°	1449.9	1447.9	1444.9	1439.9	1434.9	1433.9	1429.9	1434.9
40°	1333.9	1332.9	1328.9	1329.9	1329.9	1327.9	1329.9	1329.9
42.5°	1221.9	1221.9	1217.9	1219.9	1220.9	1222.9	1225.9	1227.9
45°	1112.9	1111.9	1112.9	1114.9	1112.9	1117.9	1121.9	1124.9
47.5°	1000.9	1001.9	1005.9	1006.9	1008.9	1015.9	1015.9	1015.9
50°	893.9	898.9	896.9	902.9	901.9	905.9	901.9	901.9
52.5°	791.9	796.9	797.9	798.9	804.9	805.9	805.9	804.9
55°	700.9	707.9	704.9	709.9	712.9	714.9	717.9	715.9
57.5°	616.9	619.9	622.9	623.9	627.9	629.9	631.9	629.9
60°	533.9	539.9	544.9	545.9	547.9	549.9	550.9	553.9
62.5°	456.0	466.0	468.0	469.0	474.0	477.0	479.0	481.0
65°	387.0	394.0	399.0	402.0	406.0	406.0	409.0	409.0
67.5°	320.0	327.0	330.0	332.0	338.0	339.0	344.0	344.0
70°	259.0	264.0	266.0	269.0	275.0	279.0	281.0	283.0
72.5°	200.0	206.0	209.0	213.0	217.0	220.0	221.0	224.0
75°	146.0	155.0	156.0	160.0	163.0	167.0	169.0	168.0
77.5°	102.0	105.0	109.0	111.0	114.0	117.0	120.0	120.0
80°	63.0	67.0	68.0	69.0	73.0	75.0	77.0	77.0
82.5°	33.0	35.0	37.0	38.0	40.0	40.0	41.0	42.0
85°	13.0	14.0	14.0	14.0	15.0	16.0	16.0	16.0
87.5°	2.0	3.0	2.0	2.0	3.0	3.0	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)