

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: P879461

Luminaire Tested: **LD4C60D010 EU4609030 4LBLDWWLI**

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: P879461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C60D010 EU4609030 4LBLDWWLI
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

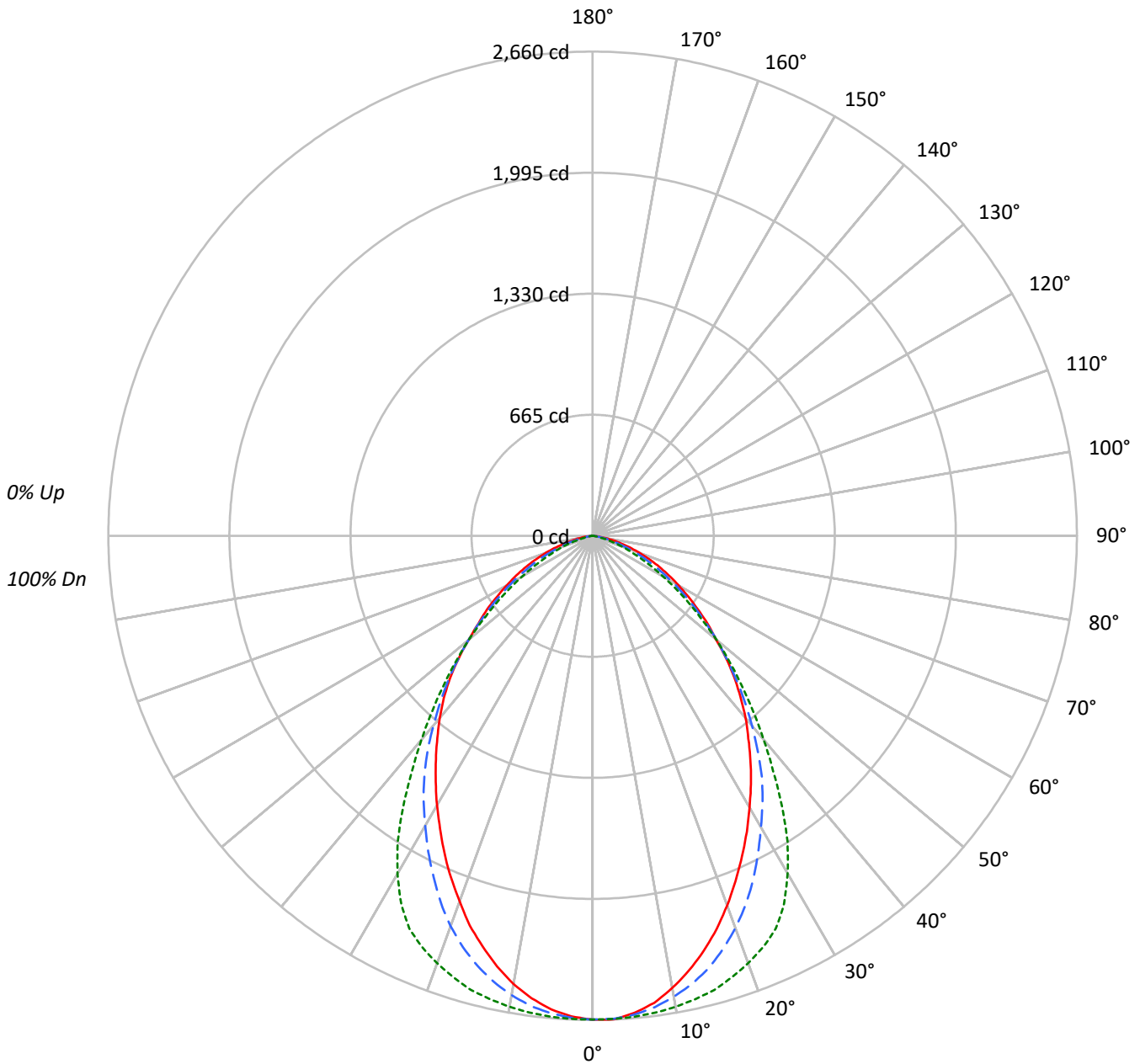
Lumens per Lamp: N/A
Luminaire Lumens: 4881.0 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V): NR
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: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBLDWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBLDWWLI

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	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			88
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77			77
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67			67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			53
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	45	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°	326508	326508	326508
5°	324561	327015	322119
10°	314679	327827	311947
15°	300226	328537	296944
20°	282485	326675	279374
25°	263124	322808	260968
30°	244480	303975	242508
35°	226719	271892	225085
40°	209609	234467	209448
45°	190976	200132	192540
50°	168688	169261	169624
55°	151153	138366	151774
60°	133591	109905	133837
65°	117587	83779	116424
70°	97451	59986	97451
75°	75947	34461	73147
80°	49241	8419	47118
85°	18184	2819	13955



TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBLDWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.5	5.1
10°-20°	690.2	14.1
20°-30°	964.9	19.8
30°-40°	1017.8	20.9
40°-50°	865.9	17.7
50°-60°	611.0	12.5
60°-70°	346.3	7.1
70°-80°	123.6	2.5
80°-90°	11.8	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°	1904.6	39.0
0°-40°	2922.4	59.9
0°-60°	4399.3	90.1
0°-90°	4881.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4881.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2658	2658	2658	2658	2658	
5°	2632	2641	2652	2633	2612	248
15°	2360	2460	2583	2446	2335	662
25°	1941	2086	2381	2067	1925	893
35°	1512	1621	1813	1612	1501	945
45°	1099	1115	1152	1120	1108	845
55°	706	682	646	684	709	634
65°	404	347	288	348	400	401
75°	160	109	73	107	154	173
85°	13	5	2	5	10	23
90°	0	0	0	0	0	



TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBLDWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7
2.5°	2659.7	2654.7	2654.7	2654.7	2654.7	2654.7	2654.7	2654.7	2654.7	2655.7	2655.7
5°	2631.8	2629.8	2628.9	2628.9	2628.9	2628.9	2629.8	2633.8	2635.8	2638.8	2640.8
7.5°	2588.1	2584.1	2586.1	2586.1	2588.1	2590.1	2593.1	2597.0	2603.0	2607.0	2612.0
10°	2522.5	2518.5	2523.5	2525.5	2531.5	2534.4	2539.4	2545.4	2557.3	2563.3	2571.2
12.5°	2446.0	2444.0	2446.0	2453.9	2459.9	2463.9	2469.8	2482.7	2494.7	2507.6	2521.5
15°	2360.5	2355.5	2358.5	2368.5	2378.4	2385.3	2390.3	2407.2	2423.1	2443.0	2459.9
17.5°	2265.1	2258.1	2266.1	2274.0	2287.0	2292.9	2299.9	2318.8	2340.6	2362.5	2381.4
20°	2160.7	2158.7	2163.7	2174.6	2187.6	2195.5	2201.5	2222.3	2241.2	2271.1	2292.9
22.5°	2052.4	2054.4	2058.4	2070.3	2079.2	2090.2	2099.1	2118.0	2139.9	2167.7	2195.5
25°	1941.1	1944.1	1951.0	1959.0	1973.9	1979.8	1990.8	2010.6	2029.5	2055.4	2086.2
27.5°	1833.7	1834.7	1842.7	1846.7	1860.6	1873.5	1878.5	1899.3	1921.2	1941.1	1967.9
30°	1723.4	1726.4	1731.4	1742.3	1756.2	1761.2	1767.1	1786.0	1802.9	1827.8	1848.6
32.5°	1618.1	1616.1	1622.0	1628.0	1643.9	1652.8	1655.8	1677.7	1692.6	1717.5	1737.3
35°	1511.7	1506.7	1515.7	1521.7	1535.6	1543.5	1547.5	1564.4	1578.3	1599.2	1621.0
37.5°	1405.4	1409.3	1413.3	1418.3	1425.2	1427.2	1439.2	1443.1	1461.0	1476.9	1488.9
40°	1307.0	1305.0	1303.0	1308.0	1316.9	1320.9	1321.9	1332.8	1336.8	1352.7	1361.6
42.5°	1201.6	1202.6	1201.6	1202.6	1207.6	1207.6	1210.6	1217.5	1220.5	1225.5	1236.4
45°	1099.2	1099.2	1096.3	1097.3	1098.3	1097.3	1098.3	1101.2	1107.2	1107.2	1115.2
47.5°	992.9	990.9	994.9	991.9	989.9	988.9	991.9	988.9	994.9	994.9	996.9
50°	882.6	882.6	887.5	886.6	888.5	884.6	885.6	885.6	886.6	885.6	889.5
52.5°	797.1	795.1	793.1	788.2	790.1	786.2	786.2	787.2	784.2	783.2	778.2
55°	705.7	707.7	704.7	702.7	702.7	698.7	697.7	691.8	687.8	684.8	681.8
57.5°	623.2	625.2	624.2	619.2	613.2	614.2	612.2	606.3	597.3	591.4	586.4
60°	543.7	545.6	543.7	538.7	536.7	532.7	531.7	523.8	516.8	508.9	502.9
62.5°	472.1	472.1	471.1	464.1	459.2	460.2	455.2	449.2	440.3	429.4	420.4
65°	404.5	403.5	398.6	395.6	391.6	386.6	383.6	374.7	367.7	358.8	346.9
67.5°	336.9	333.9	332.0	329.0	320.0	319.0	315.1	307.1	297.2	290.2	280.3
70°	271.3	270.3	266.4	266.4	259.4	256.4	250.5	243.5	234.6	224.6	216.7
72.5°	214.7	212.7	208.7	204.7	198.8	196.8	191.8	184.9	176.9	167.0	157.0
75°	160.0	158.0	157.0	152.1	147.1	142.1	140.1	133.2	125.2	118.3	109.3
77.5°	112.3	110.3	107.3	104.4	101.4	98.4	95.4	89.5	82.5	76.5	68.6
80°	69.6	67.6	65.6	64.6	61.6	60.6	56.7	53.7	47.7	43.7	38.8
82.5°	35.8	35.8	33.8	32.8	30.8	29.8	28.8	25.8	22.9	19.9	16.9
85°	12.9	12.9	11.9	10.9	10.9	9.9	9.9	8.9	7.0	7.0	5.0
87.5°	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	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



TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBDWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7
2.5°	2656.7	2655.7	2656.7	2656.7	2657.7	2657.7	2657.7	2656.7	2657.7	2656.7	2656.7
5°	2640.8	2643.8	2645.7	2647.7	2648.7	2649.7	2649.7	2650.7	2651.7	2651.7	2650.7
7.5°	2615.9	2621.9	2627.9	2631.8	2633.8	2635.8	2638.8	2640.8	2642.8	2641.8	2640.8
10°	2583.1	2593.1	2601.0	2609.0	2613.0	2615.9	2620.9	2624.9	2626.9	2627.9	2624.9
12.5°	2536.4	2550.3	2563.3	2576.2	2582.1	2586.1	2596.1	2603.0	2607.0	2607.0	2604.0
15°	2477.8	2497.7	2516.5	2533.4	2543.4	2549.3	2564.2	2574.2	2580.2	2583.1	2578.2
17.5°	2407.2	2430.1	2452.9	2474.8	2484.7	2493.7	2514.6	2528.5	2541.4	2543.4	2537.4
20°	2316.8	2345.6	2371.4	2398.3	2409.2	2423.1	2447.0	2469.8	2489.7	2498.7	2481.8
22.5°	2215.4	2247.2	2271.1	2303.8	2318.8	2333.7	2364.5	2393.3	2428.1	2447.0	2417.2
25°	2110.0	2136.9	2165.7	2197.5	2218.4	2234.3	2270.1	2306.8	2353.5	2381.4	2339.6
27.5°	1996.7	2020.6	2055.4	2090.2	2106.1	2125.9	2168.7	2208.4	2253.2	2278.0	2247.2
30°	1879.5	1909.3	1942.1	1973.9	1996.7	2015.6	2050.4	2084.2	2122.0	2142.8	2120.0
32.5°	1763.2	1792.0	1819.8	1854.6	1867.5	1884.4	1915.2	1944.1	1972.9	1991.8	1964.9
35°	1640.9	1666.8	1692.6	1716.5	1722.4	1742.3	1767.1	1784.0	1798.0	1812.9	1795.0
37.5°	1507.7	1527.6	1540.5	1566.4	1576.3	1579.3	1599.2	1611.1	1626.0	1629.0	1628.0
40°	1372.6	1390.5	1401.4	1417.3	1425.2	1425.2	1439.2	1450.1	1461.0	1462.0	1461.0
42.5°	1246.3	1255.3	1264.2	1274.2	1272.2	1284.1	1290.1	1295.0	1303.0	1303.0	1305.0
45°	1119.1	1126.1	1134.0	1136.0	1144.0	1144.0	1148.9	1150.9	1154.9	1151.9	1147.9
47.5°	1000.9	1003.8	1004.8	1013.8	1015.8	1008.8	1014.8	1015.8	1014.8	1014.8	1012.8
50°	888.5	890.5	889.5	886.6	887.5	890.5	887.5	883.6	885.6	885.6	887.5
52.5°	779.2	775.2	773.3	773.3	769.3	769.3	764.3	762.3	761.3	757.3	762.3
55°	678.8	672.9	663.9	661.9	659.0	658.0	652.0	647.0	645.0	646.0	645.0
57.5°	582.4	573.5	567.5	565.5	562.5	556.6	549.6	544.7	543.7	541.7	541.7
60°	495.0	485.0	476.1	467.1	468.1	464.1	457.2	454.2	451.2	447.3	450.2
62.5°	415.4	404.5	394.6	385.6	379.7	376.7	371.7	366.7	363.8	360.8	364.8
65°	336.9	328.0	317.1	308.1	305.1	302.1	297.2	289.2	288.2	288.2	290.2
67.5°	266.4	256.4	246.5	240.5	236.5	232.6	230.6	226.6	223.6	221.6	222.6
70°	204.7	194.8	186.9	180.9	177.9	176.9	170.0	169.0	168.0	167.0	166.0
72.5°	149.1	141.1	134.2	130.2	126.2	123.2	121.3	118.3	117.3	117.3	117.3
75°	102.4	96.4	88.5	83.5	81.5	78.5	75.5	73.5	71.6	72.6	72.6
77.5°	61.6	55.7	50.7	46.7	45.7	42.7	39.8	37.8	34.8	34.8	35.8
80°	33.8	28.8	24.8	21.9	19.9	18.9	15.9	14.9	12.9	11.9	11.9
82.5°	14.9	11.9	9.9	8.9	8.0	7.0	6.0	5.0	5.0	4.0	5.0
85°	5.0	4.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
87.5°	1.0	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



TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBDWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7
2.5°	2655.7	2655.7	2654.7	2654.7	2654.7	2652.7	2652.7	2651.7	2650.7	2649.7	2647.7
5°	2648.7	2647.7	2645.7	2644.8	2643.8	2640.8	2637.8	2635.8	2632.8	2628.9	2626.9
7.5°	2638.8	2635.8	2631.8	2629.8	2626.9	2619.9	2614.9	2610.0	2605.0	2598.0	2590.1
10°	2621.9	2615.9	2610.0	2606.0	2601.0	2592.1	2582.1	2574.2	2563.3	2553.3	2542.4
12.5°	2598.0	2591.1	2579.2	2573.2	2567.2	2554.3	2541.4	2524.5	2509.6	2495.7	2482.7
15°	2568.2	2555.3	2541.4	2533.4	2524.5	2503.6	2483.7	2465.9	2446.0	2429.1	2408.2
17.5°	2524.5	2505.6	2485.7	2476.8	2464.9	2441.0	2417.2	2392.3	2369.4	2348.6	2322.7
20°	2458.9	2438.0	2412.2	2398.3	2388.3	2356.5	2333.7	2305.8	2282.0	2256.1	2227.3
22.5°	2382.4	2353.5	2324.7	2304.8	2293.9	2262.1	2231.3	2206.4	2180.6	2150.8	2129.9
25°	2295.9	2260.1	2225.3	2205.5	2188.6	2154.8	2124.9	2099.1	2067.3	2041.5	2020.6
27.5°	2198.5	2157.7	2117.0	2097.1	2081.2	2044.4	2012.6	1985.8	1955.0	1932.1	1910.3
30°	2082.2	2045.4	2006.7	1990.8	1971.9	1934.1	1897.3	1873.5	1839.7	1815.8	1792.0
32.5°	1937.1	1913.2	1882.4	1860.6	1850.6	1815.8	1785.0	1756.2	1727.4	1708.5	1684.7
35°	1778.1	1757.2	1731.4	1719.4	1706.5	1684.7	1659.8	1635.0	1612.1	1594.2	1572.3
37.5°	1617.1	1596.2	1580.3	1567.4	1559.4	1539.5	1524.6	1505.8	1489.8	1473.0	1461.0
40°	1450.1	1444.1	1427.2	1421.3	1419.3	1397.4	1384.5	1369.6	1359.6	1349.7	1342.8
42.5°	1302.0	1292.1	1279.1	1280.1	1274.2	1262.2	1253.3	1243.4	1236.4	1231.4	1224.5
45°	1155.9	1147.9	1142.0	1147.0	1137.0	1133.0	1126.1	1125.1	1120.1	1111.2	1108.2
47.5°	1016.8	1015.8	1016.8	1013.8	1011.8	1009.8	1010.8	1005.8	1000.9	997.9	993.9
50°	889.5	890.5	892.5	895.5	888.5	891.5	890.5	889.5	889.5	886.6	888.5
52.5°	766.3	767.3	769.3	772.3	773.3	773.3	776.2	778.2	782.2	787.2	787.2
55°	650.0	657.0	660.9	665.9	662.9	668.9	671.9	680.8	683.8	683.8	687.8
57.5°	546.6	553.6	556.6	562.5	564.5	569.5	577.5	582.4	589.4	595.3	601.3
60°	452.2	455.2	463.2	472.1	470.1	482.0	488.0	496.0	504.9	508.9	516.8
62.5°	367.7	371.7	377.7	380.7	387.6	393.6	407.5	415.4	423.4	433.3	441.3
65°	292.2	296.2	302.1	308.1	311.1	320.0	327.0	340.9	347.9	358.8	367.7
67.5°	223.6	229.6	234.6	238.5	240.5	249.5	260.4	266.4	279.3	290.2	297.2
70°	167.0	171.9	177.9	176.9	180.9	187.8	195.8	204.7	214.7	224.6	232.6
72.5°	116.3	121.3	125.2	126.2	130.2	135.2	141.1	148.1	156.0	166.0	176.9
75°	73.5	74.5	78.5	80.5	82.5	88.5	93.4	100.4	107.3	115.3	122.2
77.5°	36.8	39.8	41.7	43.7	44.7	49.7	54.7	60.6	66.6	74.5	81.5
80°	13.9	14.9	17.9	18.9	20.9	23.9	27.8	30.8	35.8	41.7	45.7
82.5°	5.0	6.0	7.0	7.0	8.0	9.9	10.9	13.9	16.9	18.9	20.9
85°	2.0	2.0	2.0	2.0	2.0	3.0	3.0	4.0	5.0	6.0	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



TEST NUMBER: P879461

CATALOG NUMBER: LD4C60D010 EU4609030 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7	2657.7
2.5°	2646.7	2646.7	2645.7	2644.8	2644.8	2644.8	2643.8	2643.8
5°	2622.9	2619.9	2618.9	2616.9	2615.9	2614.9	2612.0	2612.0
7.5°	2584.1	2580.2	2577.2	2574.2	2570.2	2567.2	2567.2	2563.3
10°	2532.4	2524.5	2520.5	2516.5	2511.6	2505.6	2503.6	2500.6
12.5°	2469.8	2453.9	2450.0	2443.0	2435.0	2431.1	2424.1	2424.1
15°	2392.3	2375.4	2366.5	2362.5	2352.5	2345.6	2342.6	2334.7
17.5°	2301.9	2288.9	2275.0	2269.1	2258.1	2249.2	2245.2	2244.2
20°	2210.4	2189.6	2180.6	2171.7	2158.7	2150.8	2144.8	2136.9
22.5°	2105.1	2086.2	2073.3	2067.3	2056.4	2042.5	2032.5	2032.5
25°	1993.8	1976.9	1969.9	1957.0	1944.1	1939.1	1927.2	1925.2
27.5°	1887.4	1870.5	1856.6	1849.6	1834.7	1827.8	1817.8	1813.9
30°	1777.1	1757.2	1747.3	1746.3	1728.4	1721.4	1713.5	1709.5
32.5°	1666.8	1649.9	1639.9	1634.0	1626.0	1614.1	1607.1	1603.2
35°	1557.4	1546.5	1537.6	1530.6	1517.7	1511.7	1505.8	1500.8
37.5°	1443.1	1433.2	1429.2	1423.3	1417.3	1406.4	1404.4	1400.4
40°	1332.8	1319.9	1319.9	1315.9	1310.0	1309.0	1306.0	1306.0
42.5°	1217.5	1211.6	1210.6	1211.6	1207.6	1205.6	1202.6	1209.6
45°	1103.2	1106.2	1101.2	1102.2	1100.2	1104.2	1104.2	1108.2
47.5°	997.9	993.9	995.9	997.9	1000.9	1000.9	999.9	998.9
50°	885.6	889.5	893.5	888.5	890.5	891.5	886.6	887.5
52.5°	789.2	790.1	793.1	790.1	793.1	792.1	794.1	790.1
55°	695.7	695.7	699.7	700.7	701.7	704.7	705.7	708.6
57.5°	605.3	610.3	615.2	614.2	618.2	622.2	619.2	622.2
60°	526.8	530.7	535.7	537.7	540.7	542.7	542.7	544.7
62.5°	447.3	455.2	459.2	463.2	463.2	467.1	471.1	472.1
65°	375.7	384.6	387.6	390.6	392.6	396.6	401.5	400.5
67.5°	308.1	314.1	318.0	320.0	326.0	328.0	332.0	335.9
70°	241.5	249.5	252.4	256.4	261.4	265.4	269.3	271.3
72.5°	184.9	190.8	192.8	196.8	201.8	205.7	207.7	210.7
75°	129.2	139.1	140.1	143.1	147.1	152.1	155.0	154.1
77.5°	85.5	92.4	93.4	97.4	101.4	105.4	106.3	107.3
80°	50.7	54.7	55.7	57.6	60.6	62.6	64.6	66.6
82.5°	23.9	25.8	27.8	27.8	29.8	31.8	31.8	32.8
85°	8.0	8.0	8.9	8.9	9.9	9.9	10.9	9.9
87.5°	1.0	1.0	0.0	1.0	1.0	1.0	1.0	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)