

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: P879466

Luminaire Tested: **LD4C60D010 EU4609050 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: P879466
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: LD4C60D010 EU4609050 4LBLDWWH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

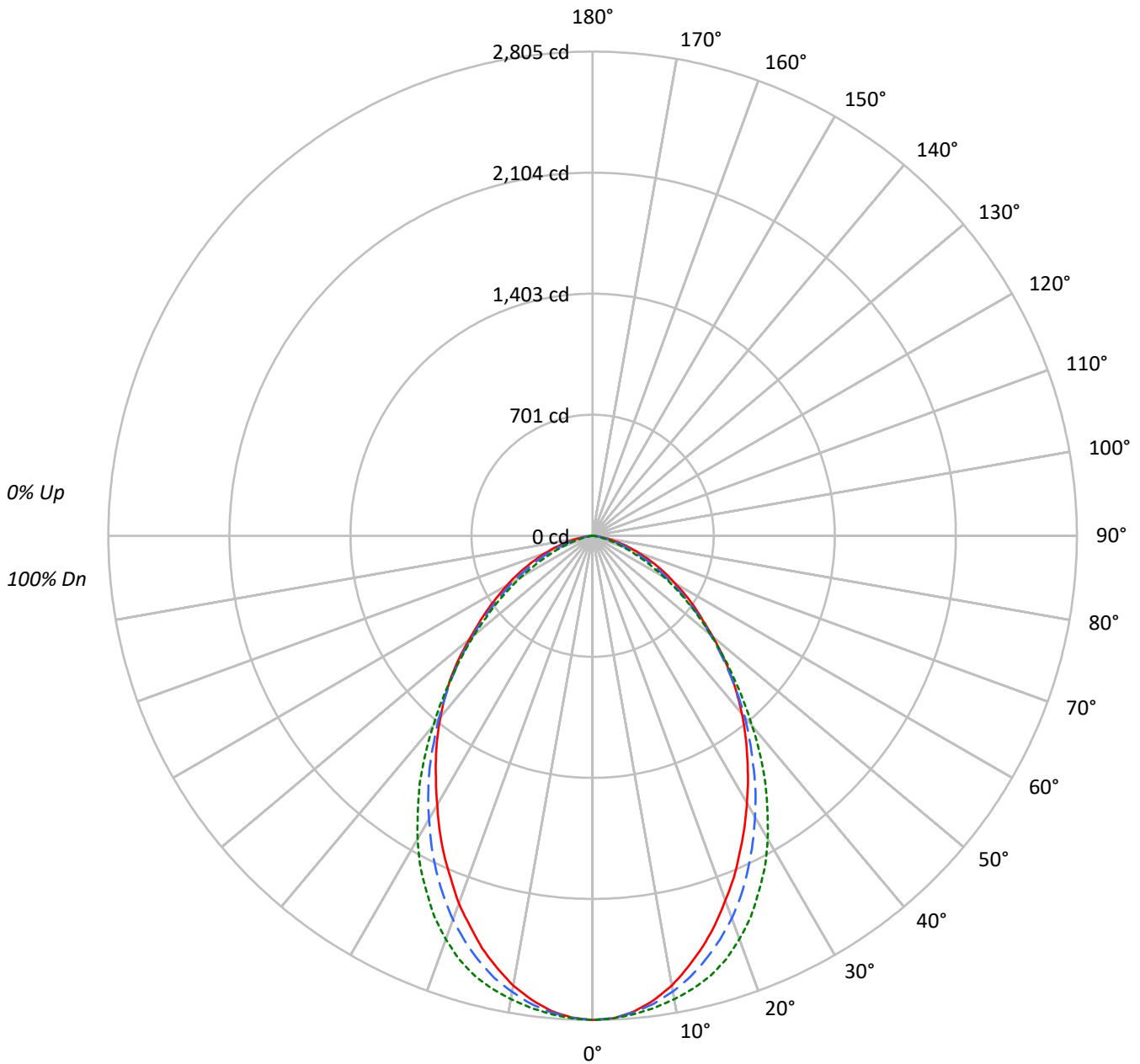
Lumens per Lamp: N/A
Luminaire Lumens: 5017.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
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

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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								
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77								
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67								
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59								
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52								
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47								
7	71	59	51	45	69	58	50	45	56	50	45	55	49	44	54	48	44	42								
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38								
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35								
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	344592	344592	344592
5°	341086	342985	340704
10°	329998	340015	330122
15°	313517	335660	314560
20°	293847	325093	296278
25°	273683	308453	276191
30°	253530	287718	255431
35°	233888	261544	237443
40°	215751	230457	219712
45°	195441	199733	201331
50°	173256	171077	177575
55°	154451	144063	157964
60°	135163	116932	140225
65°	118284	90436	122470
70°	99534	66236	104707
75°	77751	43005	82165
80°	51010	22569	56104
85°	17479	10149	23258



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.8	5.2
10°-20°	715.4	14.3
20°-30°	984.0	19.6
30°-40°	1026.5	20.5
40°-50°	878.2	17.5
50°-60°	628.2	12.5
60°-70°	364.5	7.3
70°-80°	140.5	2.8
80°-90°	17.9	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°	1961.2	39.1
0°-40°	2987.7	59.6
0°-60°	4494.1	89.6
0°-90°	5017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5017.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2805	2805	2805	2805	2805	
5°	2766	2771	2781	2771	2763	260
15°	2465	2539	2639	2548	2473	691
25°	2019	2130	2276	2144	2038	929
35°	1560	1621	1744	1647	1583	977
45°	1125	1116	1150	1143	1159	867
55°	721	685	673	704	738	645
65°	407	360	311	372	421	406
75°	164	123	91	130	173	176
85°	12	9	7	10	16	24
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°	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9
2.5°	2797.7	2795.6	2796.7	2796.7	2796.7	2795.6	2797.7	2797.7	2796.7	2796.7	2796.7
5°	2765.8	2763.7	2764.7	2765.8	2765.8	2765.8	2766.8	2767.8	2768.9	2769.9	2770.9
7.5°	2714.3	2711.2	2714.3	2718.4	2718.4	2719.4	2720.4	2721.5	2724.6	2729.7	2732.8
10°	2645.3	2645.3	2646.3	2649.4	2654.5	2653.5	2656.6	2661.7	2667.9	2675.1	2680.3
12.5°	2557.7	2559.8	2562.8	2565.9	2571.1	2574.2	2579.3	2585.5	2595.8	2606.1	2617.4
15°	2465.0	2466.0	2467.0	2474.3	2479.4	2486.6	2490.7	2503.1	2512.4	2526.8	2539.2
17.5°	2361.0	2359.9	2363.0	2369.2	2381.6	2384.6	2389.8	2403.2	2416.6	2436.1	2452.6
20°	2247.6	2253.8	2257.9	2266.2	2273.4	2281.6	2285.8	2302.2	2317.7	2336.2	2357.9
22.5°	2140.5	2135.4	2142.6	2151.8	2158.0	2164.2	2171.4	2188.9	2205.4	2228.1	2249.7
25°	2019.0	2022.1	2027.2	2034.4	2042.7	2050.9	2059.1	2077.7	2086.9	2110.6	2130.2
27.5°	1903.6	1908.7	1910.8	1920.1	1927.3	1933.5	1937.6	1959.2	1967.5	1988.1	2007.6
30°	1787.2	1792.3	1792.3	1802.6	1807.8	1814.0	1824.3	1838.7	1851.1	1865.5	1879.9
32.5°	1674.9	1674.9	1679.0	1688.3	1693.5	1700.7	1703.8	1714.1	1726.4	1740.8	1756.3
35°	1559.5	1562.6	1566.8	1566.8	1576.0	1580.1	1584.3	1594.6	1602.8	1609.0	1621.4
37.5°	1453.4	1453.4	1450.4	1455.5	1461.7	1460.7	1466.8	1472.0	1477.1	1484.3	1494.7
40°	1345.3	1345.3	1341.2	1344.3	1348.4	1347.3	1345.3	1350.4	1354.6	1359.7	1370.0
42.5°	1235.1	1233.0	1232.0	1232.0	1234.0	1232.0	1234.0	1235.1	1235.1	1235.1	1241.2
45°	1124.9	1130.0	1123.8	1121.8	1118.7	1115.6	1114.5	1115.6	1119.7	1114.5	1115.6
47.5°	1016.7	1018.8	1014.6	1011.5	1008.5	1006.4	1008.5	1002.3	1004.3	1005.4	1001.2
50°	906.5	902.4	902.4	899.3	900.3	899.3	897.2	895.1	895.1	890.0	886.9
52.5°	804.5	806.6	808.6	801.4	802.4	797.3	798.3	793.2	793.2	787.0	789.0
55°	721.1	718.0	718.0	714.9	713.8	708.7	707.7	704.6	697.4	693.2	685.0
57.5°	634.5	633.5	629.4	630.4	624.2	623.2	621.1	616.0	610.8	605.7	596.4
60°	550.1	551.1	551.1	549.0	545.9	540.8	541.8	534.6	527.4	518.1	509.9
62.5°	480.0	476.9	475.9	473.8	467.7	467.7	462.5	457.4	450.1	440.9	433.7
65°	406.9	407.9	404.8	401.7	395.6	394.5	390.4	386.3	379.1	369.8	359.5
67.5°	341.0	338.9	337.9	334.8	328.6	327.6	324.5	315.2	309.0	299.8	291.5
70°	277.1	275.0	276.1	270.9	264.7	261.6	260.6	253.4	244.1	236.9	228.7
72.5°	217.3	217.3	216.3	211.2	208.1	206.0	201.9	193.7	188.5	180.3	174.1
75°	163.8	162.8	160.7	157.6	153.5	151.4	149.4	144.2	137.0	127.7	122.6
77.5°	113.3	114.3	112.3	111.2	106.1	103.0	102.0	98.9	92.7	86.5	81.4
80°	72.1	71.1	70.0	68.0	67.0	65.9	62.8	60.8	54.6	51.5	48.4
82.5°	39.1	37.1	37.1	36.1	34.0	33.0	31.9	29.9	28.8	26.8	24.7
85°	12.4	13.4	12.4	12.4	12.4	11.3	11.3	11.3	10.3	10.3	9.3
87.5°	1.0	2.1	1.0	1.0	2.1	1.0	1.0	2.1	1.0	1.0	2.1
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°	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9
2.5°	2796.7	2797.7	2797.7	2798.7	2798.7	2798.7	2798.7	2798.7	2798.7	2798.7	2798.7
5°	2774.0	2774.0	2776.1	2778.1	2778.1	2778.1	2779.2	2781.2	2781.2	2781.2	2780.2
7.5°	2736.9	2741.1	2745.2	2749.3	2750.3	2751.4	2753.4	2757.5	2757.5	2757.5	2757.5
10°	2688.5	2697.8	2702.9	2709.1	2712.2	2714.3	2720.4	2721.5	2724.6	2725.6	2724.6
12.5°	2626.7	2639.1	2650.4	2660.7	2664.8	2668.9	2675.1	2681.3	2684.4	2687.5	2686.5
15°	2557.7	2571.1	2588.6	2599.9	2608.2	2614.4	2623.6	2631.9	2637.0	2639.1	2639.1
17.5°	2474.3	2490.7	2509.3	2527.8	2533.0	2543.3	2553.6	2564.9	2571.1	2572.1	2571.1
20°	2381.6	2400.1	2415.5	2434.1	2445.4	2450.6	2465.0	2479.4	2485.6	2486.6	2485.6
22.5°	2271.3	2288.8	2309.4	2329.0	2338.3	2347.6	2363.0	2377.4	2385.7	2391.9	2385.7
25°	2148.8	2173.5	2193.0	2209.5	2222.9	2232.2	2251.8	2263.1	2276.5	2275.5	2276.5
27.5°	2028.2	2048.8	2070.5	2090.0	2098.3	2108.6	2124.0	2142.6	2153.9	2161.1	2160.1
30°	1904.6	1921.1	1939.6	1957.2	1970.5	1978.8	2001.5	2009.7	2024.1	2028.2	2025.1
32.5°	1773.8	1785.1	1803.7	1827.4	1832.5	1840.8	1855.2	1875.8	1880.9	1883.0	1884.0
35°	1634.7	1656.4	1671.8	1686.2	1690.4	1697.6	1714.1	1729.5	1734.7	1743.9	1739.8
37.5°	1506.0	1518.3	1525.6	1540.0	1552.3	1558.5	1566.8	1577.1	1587.4	1591.5	1590.4
40°	1377.2	1383.4	1389.6	1405.0	1406.1	1406.1	1418.4	1432.8	1432.8	1437.0	1437.0
42.5°	1245.4	1246.4	1254.6	1262.9	1264.9	1267.0	1279.4	1281.4	1287.6	1290.7	1294.8
45°	1117.6	1123.8	1129.0	1130.0	1135.2	1136.2	1139.3	1142.4	1151.6	1149.6	1151.6
47.5°	1001.2	1004.3	1007.4	1007.4	1010.5	1009.5	1014.6	1011.5	1017.7	1019.8	1022.9
50°	886.9	892.1	889.0	891.0	890.0	893.1	891.0	891.0	891.0	895.1	898.2
52.5°	781.8	782.9	779.8	780.8	780.8	778.7	780.8	779.8	778.7	778.7	779.8
55°	685.0	680.9	678.8	674.7	669.6	675.7	672.6	670.6	674.7	672.6	674.7
57.5°	591.3	586.1	582.0	579.9	572.7	576.8	572.7	570.7	570.7	570.7	575.8
60°	502.7	497.5	492.4	486.2	485.2	483.1	481.0	475.9	476.9	475.9	478.0
62.5°	425.4	415.1	407.9	402.8	401.7	398.6	395.6	390.4	391.4	391.4	392.5
65°	354.3	343.0	332.7	325.5	325.5	320.4	315.2	315.2	309.0	311.1	312.1
67.5°	283.3	274.0	263.7	258.6	255.5	251.3	248.2	246.2	243.1	243.1	245.2
70°	219.4	210.1	205.0	196.7	195.7	192.6	188.5	185.4	184.4	184.4	183.4
72.5°	165.8	157.6	151.4	146.3	143.2	140.1	136.0	134.9	132.9	132.9	134.9
75°	115.4	110.2	105.1	99.9	97.9	96.8	93.7	91.7	91.7	90.6	91.7
77.5°	77.3	72.1	67.0	64.9	62.8	60.8	59.7	58.7	55.6	55.6	55.6
80°	44.3	42.2	40.2	37.1	37.1	36.1	34.0	33.0	31.9	31.9	31.9
82.5°	22.7	21.6	19.6	18.5	18.5	18.5	17.5	17.5	16.5	16.5	16.5
85°	9.3	8.2	7.2	7.2	7.2	7.2	7.2	7.2	8.2	7.2	8.2
87.5°	1.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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°	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9
2.5°	2798.7	2797.7	2797.7	2797.7	2797.7	2797.7	2796.7	2796.7	2795.6	2795.6	2795.6
5°	2781.2	2780.2	2779.2	2778.1	2777.1	2776.1	2775.0	2774.0	2770.9	2769.9	2767.8
7.5°	2756.5	2754.4	2751.4	2750.3	2748.3	2745.2	2741.1	2739.0	2734.9	2729.7	2727.7
10°	2723.5	2719.4	2716.3	2711.2	2710.1	2706.0	2695.7	2690.6	2683.4	2677.2	2670.0
12.5°	2683.4	2679.2	2672.0	2664.8	2660.7	2651.4	2642.2	2633.9	2624.7	2611.3	2601.0
15°	2633.9	2627.7	2613.3	2611.3	2605.1	2590.7	2578.3	2562.8	2548.4	2534.0	2521.6
17.5°	2568.0	2554.6	2547.4	2538.1	2530.9	2512.4	2499.0	2481.5	2461.9	2445.4	2427.9
20°	2481.5	2467.0	2454.7	2449.5	2440.3	2423.8	2407.3	2385.7	2366.1	2345.5	2330.0
22.5°	2378.5	2369.2	2350.6	2344.5	2333.1	2316.7	2297.1	2276.5	2257.9	2235.3	2214.7
25°	2268.2	2254.9	2240.4	2228.1	2219.8	2204.4	2179.7	2164.2	2143.6	2118.9	2103.4
27.5°	2150.8	2135.4	2114.8	2106.5	2099.3	2078.7	2058.1	2038.5	2022.1	2000.4	1987.0
30°	2014.8	2003.5	1990.1	1979.8	1969.5	1953.0	1934.5	1911.8	1894.3	1884.0	1865.5
32.5°	1876.8	1867.5	1850.0	1844.9	1833.5	1820.2	1806.8	1790.3	1771.7	1756.3	1741.9
35°	1729.5	1720.2	1707.9	1698.6	1694.5	1685.2	1670.8	1656.4	1647.1	1629.6	1622.4
37.5°	1582.2	1579.1	1566.8	1557.5	1554.4	1543.1	1535.9	1525.6	1512.2	1508.0	1499.8
40°	1430.8	1428.7	1421.5	1420.5	1414.3	1411.2	1400.9	1392.7	1386.5	1383.4	1378.3
42.5°	1291.7	1289.7	1283.5	1284.5	1278.3	1276.3	1275.2	1268.0	1262.9	1256.7	1257.7
45°	1154.7	1152.7	1148.5	1146.5	1149.6	1148.5	1146.5	1143.4	1143.4	1144.4	1141.3
47.5°	1022.9	1024.9	1020.8	1022.9	1022.9	1019.8	1019.8	1023.9	1024.9	1027.0	1029.1
50°	898.2	904.4	902.4	905.4	906.5	907.5	904.4	909.6	908.5	917.8	915.7
52.5°	784.9	786.0	790.1	791.1	792.1	793.2	798.3	802.4	803.5	807.6	814.8
55°	675.7	676.8	685.0	685.0	690.2	691.2	698.4	700.5	703.5	714.9	716.9
57.5°	572.7	578.9	583.0	585.1	588.2	593.3	597.4	606.7	611.9	619.1	626.3
60°	480.0	487.2	492.4	494.4	498.6	504.7	509.9	520.2	529.5	537.7	542.9
62.5°	394.5	400.7	404.8	412.0	412.0	417.2	429.5	435.7	446.0	453.2	462.5
65°	318.3	322.4	329.6	329.6	333.7	342.0	352.3	361.6	371.9	382.2	391.4
67.5°	249.3	252.4	256.5	260.6	262.7	273.0	281.2	294.6	303.9	311.1	322.4
70°	188.5	190.6	195.7	199.8	202.9	210.1	219.4	228.7	237.9	246.2	257.5
72.5°	134.9	139.1	144.2	147.3	149.4	154.5	163.8	173.1	181.3	189.5	195.7
75°	92.7	95.8	97.9	100.9	104.0	108.2	114.3	120.5	129.8	138.0	145.2
77.5°	57.7	60.8	63.9	64.9	65.9	70.0	74.2	80.3	86.5	92.7	97.9
80°	34.0	35.0	36.1	37.1	39.1	42.2	44.3	48.4	52.5	56.7	61.8
82.5°	17.5	18.5	19.6	19.6	19.6	20.6	23.7	25.8	26.8	28.8	31.9
85°	7.2	7.2	7.2	8.2	8.2	9.3	9.3	10.3	10.3	11.3	12.4
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P879466

CATALOG NUMBER: LD4C60D010 EU4609050 4LBDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9	2804.9
2.5°	2794.6	2794.6	2794.6	2793.6	2794.6	2794.6	2794.6	2793.6
5°	2767.8	2765.8	2765.8	2764.7	2763.7	2763.7	2764.7	2762.7
7.5°	2723.5	2720.4	2718.4	2718.4	2717.4	2716.3	2716.3	2711.2
10°	2665.9	2659.7	2659.7	2657.6	2649.4	2648.3	2646.3	2646.3
12.5°	2593.7	2586.5	2582.4	2577.3	2572.1	2568.0	2567.0	2562.8
15°	2508.3	2499.0	2491.8	2489.7	2481.5	2475.3	2475.3	2473.2
17.5°	2415.5	2401.1	2396.0	2390.8	2379.5	2378.5	2376.4	2367.1
20°	2310.5	2297.1	2289.9	2284.7	2277.5	2267.2	2265.2	2266.2
22.5°	2200.3	2181.7	2175.5	2170.4	2163.2	2153.9	2153.9	2146.7
25°	2085.9	2069.4	2063.3	2057.1	2045.7	2041.6	2036.5	2037.5
27.5°	1969.5	1954.1	1948.9	1937.6	1930.4	1925.2	1920.1	1920.1
30°	1848.0	1839.7	1831.5	1830.5	1816.0	1809.9	1804.7	1800.6
32.5°	1730.5	1720.2	1716.1	1712.0	1704.8	1696.5	1695.5	1688.3
35°	1615.2	1604.9	1599.7	1595.6	1587.4	1584.3	1581.2	1583.2
37.5°	1493.6	1491.6	1488.5	1483.3	1478.2	1477.1	1473.0	1478.2
40°	1374.1	1373.1	1369.0	1370.0	1370.0	1368.0	1370.0	1370.0
42.5°	1258.8	1258.8	1254.6	1256.7	1257.7	1259.8	1262.9	1264.9
45°	1146.5	1145.5	1146.5	1148.5	1146.5	1151.6	1155.8	1158.8
47.5°	1031.1	1032.1	1036.3	1037.3	1039.4	1046.6	1046.6	1046.6
50°	920.9	926.0	924.0	930.2	929.1	933.3	929.1	929.1
52.5°	815.8	821.0	822.0	823.0	829.2	830.2	830.2	829.2
55°	722.1	729.3	726.2	731.4	734.4	736.5	739.6	737.5
57.5°	635.6	638.7	641.7	642.8	646.9	649.0	651.0	649.0
60°	550.1	556.2	561.4	562.4	564.5	566.5	567.6	570.7
62.5°	469.7	480.0	482.1	483.1	488.3	491.3	493.4	495.5
65°	398.6	405.9	411.0	414.1	418.2	418.2	421.3	421.3
67.5°	329.6	336.8	339.9	342.0	348.2	349.2	354.3	354.3
70°	266.8	271.9	274.0	277.1	283.3	287.4	289.5	291.5
72.5°	206.0	212.2	215.3	219.4	223.5	226.6	227.6	230.7
75°	150.4	159.7	160.7	164.8	167.9	172.0	174.1	173.1
77.5°	105.1	108.2	112.3	114.3	117.4	120.5	123.6	123.6
80°	64.9	69.0	70.0	71.1	75.2	77.3	79.3	79.3
82.5°	34.0	36.1	38.1	39.1	41.2	41.2	42.2	43.3
85°	13.4	14.4	14.4	14.4	15.5	16.5	16.5	16.5
87.5°	2.1	3.1	2.1	2.1	3.1	3.1	3.1	3.1
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)