

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: P879459

Luminaire Tested: **LD4C60D010 EU4609027 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: P879459
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 EU4609027 4LBLDWWLI
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

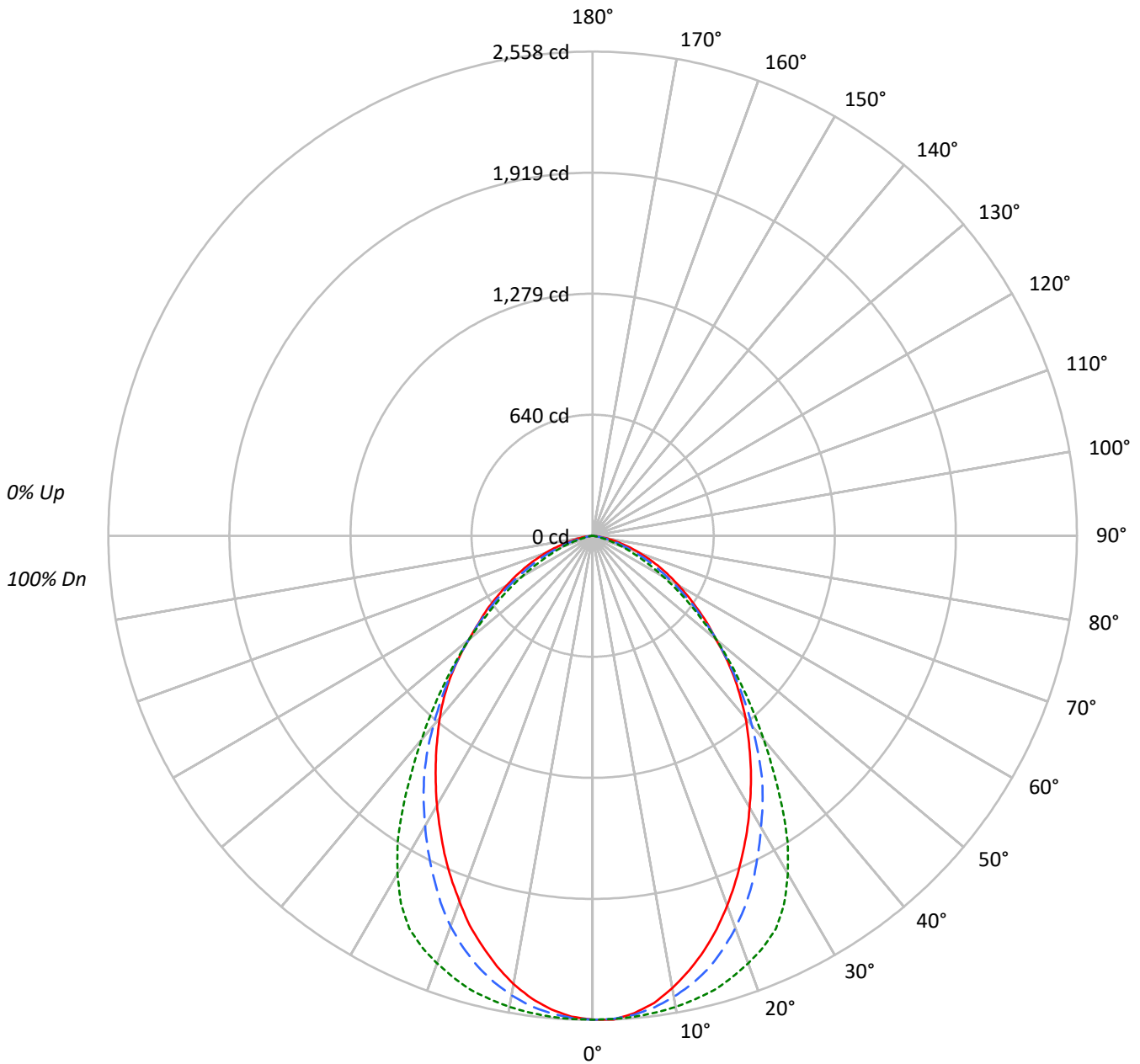
Lumens per Lamp: N/A
Luminaire Lumens: 4695.0 lumens
Efficiency: N/A
Efficacy: 65.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V): NR
Input Current (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			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88			
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77			
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67			
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59			
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53			
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	45	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°	314063	314063	314063
5°	312192	314559	309836
10°	302690	315327	300058
15°	288779	316022	285624
20°	271726	314216	268719
25°	253093	310500	251019
30°	235160	292400	233273
35°	218081	261529	216506
40°	201622	225534	201462
45°	183714	192505	185208
50°	162247	162801	163164
55°	145391	133097	145991
60°	128480	105703	128726
65°	113110	80581	112005
70°	93751	57687	93751
75°	73052	33132	70346
80°	47331	8136	45350
85°	17479	2678	13532



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.0	5.1
10°-20°	663.9	14.1
20°-30°	928.1	19.8
30°-40°	979.0	20.9
40°-50°	832.9	17.7
50°-60°	587.7	12.5
60°-70°	333.1	7.1
70°-80°	118.9	2.5
80°-90°	11.4	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°	1832.0	39.0
0°-40°	2811.0	59.9
0°-60°	4231.6	90.1
0°-90°	4695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4695.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2556	2556	2556	2556	2556	
5°	2532	2540	2551	2532	2512	238
15°	2270	2366	2485	2353	2246	637
25°	1867	2007	2291	1988	1852	859
35°	1454	1559	1744	1551	1444	909
45°	1057	1073	1108	1077	1066	813
55°	679	656	621	658	682	610
65°	389	334	277	335	385	385
75°	154	105	70	103	148	166
85°	12	5	2	5	10	22
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°	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4
2.5°	2558.3	2553.5	2553.5	2553.5	2553.5	2553.5	2553.5	2553.5	2553.5	2554.5	2554.5
5°	2531.5	2529.6	2528.7	2528.7	2528.7	2528.7	2529.6	2533.5	2535.4	2538.2	2540.1
7.5°	2489.5	2485.7	2487.6	2487.6	2489.5	2491.4	2494.3	2498.1	2503.8	2507.6	2512.4
10°	2426.4	2422.6	2427.3	2429.2	2435.0	2437.9	2442.6	2448.4	2459.8	2465.6	2473.2
12.5°	2352.8	2350.9	2352.8	2360.4	2366.2	2370.0	2375.7	2388.1	2399.6	2412.0	2425.4
15°	2270.5	2265.8	2268.6	2278.2	2287.8	2294.4	2299.2	2315.5	2330.8	2349.9	2366.2
17.5°	2178.8	2172.1	2179.7	2187.4	2199.8	2205.5	2212.2	2230.4	2251.4	2272.5	2290.6
20°	2078.4	2076.5	2081.3	2091.8	2104.2	2111.8	2117.6	2137.7	2155.8	2184.5	2205.5
22.5°	1974.2	1976.1	1979.9	1991.4	2000.0	2010.5	2019.1	2037.3	2058.3	2085.1	2111.8
25°	1867.1	1870.0	1876.7	1884.3	1898.7	1904.4	1914.9	1934.0	1952.2	1977.1	2006.7
27.5°	1763.9	1764.8	1772.5	1776.3	1789.7	1802.1	1806.9	1827.0	1848.0	1867.1	1892.9
30°	1657.7	1660.6	1665.4	1675.9	1689.3	1694.1	1699.8	1718.0	1734.2	1758.1	1778.2
32.5°	1556.4	1554.5	1560.2	1566.0	1581.3	1589.9	1592.7	1613.8	1628.1	1652.0	1671.1
35°	1454.1	1449.3	1457.9	1463.7	1477.1	1484.7	1488.5	1504.8	1518.2	1538.2	1559.3
37.5°	1351.8	1355.6	1359.5	1364.2	1370.9	1372.8	1384.3	1388.1	1405.4	1420.6	1432.1
40°	1257.2	1255.3	1253.3	1258.1	1266.7	1270.6	1271.5	1282.0	1285.8	1301.1	1309.7
42.5°	1155.8	1156.8	1155.8	1156.8	1161.6	1161.6	1164.4	1171.1	1174.0	1178.8	1189.3
45°	1057.4	1057.4	1054.5	1055.4	1056.4	1055.4	1056.4	1059.3	1065.0	1065.0	1072.7
47.5°	955.1	953.2	957.0	954.1	952.2	951.2	954.1	951.2	957.0	957.0	958.9
50°	848.9	848.9	853.7	852.8	854.7	850.9	851.8	851.8	852.8	851.8	855.6
52.5°	766.7	764.8	762.9	758.1	760.0	756.2	756.2	757.2	754.3	753.3	748.6
55°	678.8	680.7	677.8	675.9	675.9	672.1	671.1	665.4	661.6	658.7	655.8
57.5°	599.4	601.3	600.4	595.6	589.9	590.8	588.9	583.2	574.6	568.8	564.1
60°	522.9	524.9	522.9	518.2	516.3	512.4	511.5	503.8	497.1	489.5	483.7
62.5°	454.1	454.1	453.2	446.5	441.7	442.6	437.9	432.1	423.5	413.0	404.4
65°	389.1	388.1	383.4	380.5	376.7	371.9	369.0	360.4	353.7	345.1	333.7
67.5°	324.1	321.2	319.3	316.4	307.8	306.9	303.1	295.4	285.9	279.2	269.6
70°	261.0	260.0	256.2	256.2	249.5	246.7	240.9	234.2	225.6	216.1	208.4
72.5°	206.5	204.6	200.8	196.9	191.2	189.3	184.5	177.8	170.2	160.6	151.1
75°	153.9	152.0	151.1	146.3	141.5	136.7	134.8	128.1	120.5	113.8	105.2
77.5°	108.0	106.1	103.3	100.4	97.5	94.6	91.8	86.0	79.3	73.6	66.0
80°	66.9	65.0	63.1	62.1	59.3	58.3	54.5	51.6	45.9	42.1	37.3
82.5°	34.4	34.4	32.5	31.5	29.6	28.7	27.7	24.9	22.0	19.1	16.3
85°	12.4	12.4	11.5	10.5	10.5	9.6	9.6	8.6	6.7	6.7	4.8
87.5°	1.0	1.0	1.9	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4
2.5°	2555.4	2554.5	2555.4	2555.4	2556.4	2556.4	2556.4	2555.4	2556.4	2555.4	2555.4
5°	2540.1	2543.0	2544.9	2546.8	2547.8	2548.8	2548.8	2549.7	2550.7	2550.7	2549.7
7.5°	2516.2	2522.0	2527.7	2531.5	2533.5	2535.4	2538.2	2540.1	2542.1	2541.1	2540.1
10°	2484.7	2494.3	2501.9	2509.6	2513.4	2516.2	2521.0	2524.9	2526.8	2527.7	2524.9
12.5°	2439.8	2453.1	2465.6	2478.0	2483.7	2487.6	2497.1	2503.8	2507.6	2507.6	2504.8
15°	2383.4	2402.5	2420.6	2436.9	2446.5	2452.2	2466.5	2476.1	2481.8	2484.7	2479.9
17.5°	2315.5	2337.5	2359.5	2380.5	2390.1	2398.7	2418.7	2432.1	2444.5	2446.5	2440.7
20°	2228.5	2256.2	2281.1	2306.9	2317.4	2330.8	2353.7	2375.7	2394.8	2403.4	2387.2
22.5°	2131.0	2161.6	2184.5	2216.1	2230.4	2244.7	2274.4	2302.1	2335.6	2353.7	2325.0
25°	2029.6	2055.4	2083.2	2113.8	2133.8	2149.1	2183.6	2218.9	2263.9	2290.6	2250.5
27.5°	1920.6	1943.6	1977.1	2010.5	2025.8	2044.9	2086.0	2124.3	2167.3	2191.2	2161.6
30°	1807.8	1836.5	1868.1	1898.7	1920.6	1938.8	1972.3	2004.8	2041.1	2061.2	2039.2
32.5°	1696.0	1723.7	1750.5	1783.9	1796.4	1812.6	1842.3	1870.0	1897.7	1915.9	1890.1
35°	1578.4	1603.2	1628.1	1651.0	1656.8	1675.9	1699.8	1716.1	1729.4	1743.8	1726.6
37.5°	1450.3	1469.4	1481.8	1506.7	1516.2	1519.1	1538.2	1549.7	1564.0	1566.9	1566.0
40°	1320.3	1337.5	1348.0	1363.3	1370.9	1370.9	1384.3	1394.8	1405.4	1406.3	1405.4
42.5°	1198.9	1207.5	1216.1	1225.6	1223.7	1235.2	1240.9	1245.7	1253.3	1253.3	1255.3
45°	1076.5	1083.2	1090.8	1092.7	1100.4	1100.4	1105.2	1107.1	1110.9	1108.0	1104.2
47.5°	962.7	965.6	966.5	975.1	977.1	970.4	976.1	977.1	976.1	976.1	974.2
50°	854.7	856.6	855.6	852.8	853.7	856.6	853.7	849.9	851.8	851.8	853.7
52.5°	749.5	745.7	743.8	743.8	740.0	740.0	735.2	733.3	732.3	728.5	733.3
55°	653.0	647.2	638.6	636.7	633.8	632.9	627.1	622.4	620.5	621.4	620.5
57.5°	560.2	551.6	545.9	544.0	541.1	535.4	528.7	523.9	522.9	521.0	521.0
60°	476.1	466.5	457.9	449.3	450.3	446.5	439.8	436.9	434.0	430.2	433.1
62.5°	399.6	389.1	379.5	370.9	365.2	362.3	357.6	352.8	349.9	347.0	350.9
65°	324.1	315.5	305.0	296.4	293.5	290.6	285.9	278.2	277.2	277.2	279.2
67.5°	256.2	246.7	237.1	231.4	227.5	223.7	221.8	218.0	215.1	213.2	214.1
70°	196.9	187.4	179.7	174.0	171.1	170.2	163.5	162.5	161.6	160.6	159.7
72.5°	143.4	135.8	129.1	125.2	121.4	118.5	116.6	113.8	112.8	112.8	112.8
75°	98.5	92.7	85.1	80.3	78.4	75.5	72.7	70.7	68.8	69.8	69.8
77.5°	59.3	53.5	48.8	44.9	44.0	41.1	38.2	36.3	33.5	33.5	34.4
80°	32.5	27.7	23.9	21.0	19.1	18.2	15.3	14.3	12.4	11.5	11.5
82.5°	14.3	11.5	9.6	8.6	7.6	6.7	5.7	4.8	4.8	3.8	4.8
85°	4.8	3.8	2.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4
2.5°	2554.5	2554.5	2553.5	2553.5	2553.5	2551.6	2551.6	2550.7	2549.7	2548.8	2546.8
5°	2547.8	2546.8	2544.9	2544.0	2543.0	2540.1	2537.3	2535.4	2532.5	2528.7	2526.8
7.5°	2538.2	2535.4	2531.5	2529.6	2526.8	2520.1	2515.3	2510.5	2505.7	2499.0	2491.4
10°	2522.0	2516.2	2510.5	2506.7	2501.9	2493.3	2483.7	2476.1	2465.6	2456.0	2445.5
12.5°	2499.0	2492.3	2480.9	2475.1	2469.4	2457.0	2444.5	2428.3	2414.0	2400.6	2388.1
15°	2470.4	2457.9	2444.5	2436.9	2428.3	2408.2	2389.1	2371.9	2352.8	2336.5	2316.4
17.5°	2428.3	2410.1	2391.0	2382.4	2370.9	2348.0	2325.0	2301.1	2279.2	2259.1	2234.2
20°	2365.2	2345.1	2320.3	2306.9	2297.3	2266.7	2244.7	2218.0	2195.0	2170.2	2142.4
22.5°	2291.6	2263.9	2236.1	2217.0	2206.5	2175.9	2146.3	2122.4	2097.5	2068.8	2048.8
25°	2208.4	2174.0	2140.5	2121.4	2105.2	2072.7	2044.0	2019.1	1988.5	1963.7	1943.6
27.5°	2114.7	2075.5	2036.3	2017.2	2001.9	1966.5	1935.9	1910.1	1880.5	1858.5	1837.5
30°	2002.9	1967.5	1930.2	1914.9	1896.7	1860.4	1825.0	1802.1	1769.6	1746.6	1723.7
32.5°	1863.3	1840.3	1810.7	1789.7	1780.1	1746.6	1717.0	1689.3	1661.6	1643.4	1620.5
35°	1710.3	1690.2	1665.4	1653.9	1641.5	1620.5	1596.6	1572.7	1550.7	1533.5	1512.4
37.5°	1555.4	1535.4	1520.1	1507.6	1500.0	1480.9	1466.5	1448.4	1433.1	1416.8	1405.4
40°	1394.8	1389.1	1372.8	1367.1	1365.2	1344.2	1331.7	1317.4	1307.8	1298.3	1291.6
42.5°	1252.4	1242.8	1230.4	1231.4	1225.6	1214.1	1205.5	1196.0	1189.3	1184.5	1177.8
45°	1111.9	1104.2	1098.5	1103.2	1093.7	1089.9	1083.2	1082.2	1077.4	1068.8	1066.0
47.5°	978.0	977.1	978.0	975.1	973.2	971.3	972.3	967.5	962.7	959.8	956.0
50°	855.6	856.6	858.5	861.4	854.7	857.6	856.6	855.6	855.6	852.8	854.7
52.5°	737.1	738.0	740.0	742.8	743.8	743.8	746.7	748.6	752.4	757.2	757.2
55°	625.2	631.9	635.8	640.5	637.7	643.4	646.3	654.9	657.7	657.7	661.6
57.5°	525.8	532.5	535.4	541.1	543.0	547.8	555.4	560.2	566.9	572.7	578.4
60°	435.0	437.9	445.5	454.1	452.2	463.7	469.4	477.1	485.7	489.5	497.1
62.5°	353.7	357.6	363.3	366.2	372.8	378.6	392.0	399.6	407.3	416.8	424.5
65°	281.1	284.9	290.6	296.4	299.2	307.8	314.5	327.9	334.6	345.1	353.7
67.5°	215.1	220.8	225.6	229.4	231.4	240.0	250.5	256.2	268.6	279.2	285.9
70°	160.6	165.4	171.1	170.2	174.0	180.7	188.3	196.9	206.5	216.1	223.7
72.5°	111.9	116.6	120.5	121.4	125.2	130.0	135.8	142.4	150.1	159.7	170.2
75°	70.7	71.7	75.5	77.4	79.3	85.1	89.9	96.6	103.3	110.9	117.6
77.5°	35.4	38.2	40.2	42.1	43.0	47.8	52.6	58.3	64.1	71.7	78.4
80°	13.4	14.3	17.2	18.2	20.1	22.9	26.8	29.6	34.4	40.2	44.0
82.5°	4.8	5.7	6.7	6.7	7.6	9.6	10.5	13.4	16.3	18.2	20.1
85°	1.9	1.9	1.9	1.9	1.9	2.9	2.9	3.8	4.8	5.7	5.7
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: P879459

CATALOG NUMBER: LD4C60D010 EU4609027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4	2556.4
2.5°	2545.9	2545.9	2544.9	2544.0	2544.0	2544.0	2543.0	2543.0
5°	2522.9	2520.1	2519.1	2517.2	2516.2	2515.3	2512.4	2512.4
7.5°	2485.7	2481.8	2479.0	2476.1	2472.3	2469.4	2469.4	2465.6
10°	2435.9	2428.3	2424.5	2420.6	2415.9	2410.1	2408.2	2405.3
12.5°	2375.7	2360.4	2356.6	2349.9	2342.3	2338.4	2331.7	2331.7
15°	2301.1	2284.9	2276.3	2272.5	2262.9	2256.2	2253.3	2245.7
17.5°	2214.1	2201.7	2188.3	2182.6	2172.1	2163.5	2159.7	2158.7
20°	2126.2	2106.1	2097.5	2088.9	2076.5	2068.8	2063.1	2055.4
22.5°	2024.9	2006.7	1994.3	1988.5	1978.0	1964.6	1955.1	1955.1
25°	1917.8	1901.5	1894.8	1882.4	1870.0	1865.2	1853.7	1851.8
27.5°	1815.5	1799.2	1785.8	1779.2	1764.8	1758.1	1748.6	1744.7
30°	1709.4	1690.2	1680.7	1679.7	1662.5	1655.8	1648.2	1644.4
32.5°	1603.2	1587.0	1577.4	1571.7	1564.0	1552.6	1545.9	1542.1
35°	1498.1	1487.6	1479.0	1472.3	1459.8	1454.1	1448.4	1443.6
37.5°	1388.1	1378.6	1374.8	1369.0	1363.3	1352.8	1350.9	1347.0
40°	1282.0	1269.6	1269.6	1265.8	1260.0	1259.1	1256.2	1256.2
42.5°	1171.1	1165.4	1164.4	1165.4	1161.6	1159.7	1156.8	1163.5
45°	1061.2	1064.1	1059.3	1060.2	1058.3	1062.1	1062.1	1066.0
47.5°	959.8	956.0	957.9	959.8	962.7	962.7	961.8	960.8
50°	851.8	855.6	859.5	854.7	856.6	857.6	852.8	853.7
52.5°	759.1	760.0	762.9	760.0	762.9	761.9	763.9	760.0
55°	669.2	669.2	673.0	674.0	675.0	677.8	678.8	681.6
57.5°	582.2	587.0	591.8	590.8	594.6	598.5	595.6	598.5
60°	506.7	510.5	515.3	517.2	520.1	522.0	522.0	523.9
62.5°	430.2	437.9	441.7	445.5	445.5	449.3	453.2	454.1
65°	361.4	370.0	372.8	375.7	377.6	381.5	386.2	385.3
67.5°	296.4	302.1	305.9	307.8	313.6	315.5	319.3	323.1
70°	232.3	240.0	242.8	246.7	251.4	255.3	259.1	261.0
72.5°	177.8	183.6	185.5	189.3	194.1	197.9	199.8	202.7
75°	124.3	133.8	134.8	137.7	141.5	146.3	149.1	148.2
77.5°	82.2	88.9	89.9	93.7	97.5	101.3	102.3	103.3
80°	48.8	52.6	53.5	55.4	58.3	60.2	62.1	64.1
82.5°	22.9	24.9	26.8	26.8	28.7	30.6	30.6	31.5
85°	7.6	7.6	8.6	8.6	9.6	9.6	10.5	9.6
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



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













(END OF REPORT)