

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: P879464

Luminaire Tested: **LD4C60D010 EU4609040 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: P879464
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 EU4609040 4LBLDWWH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

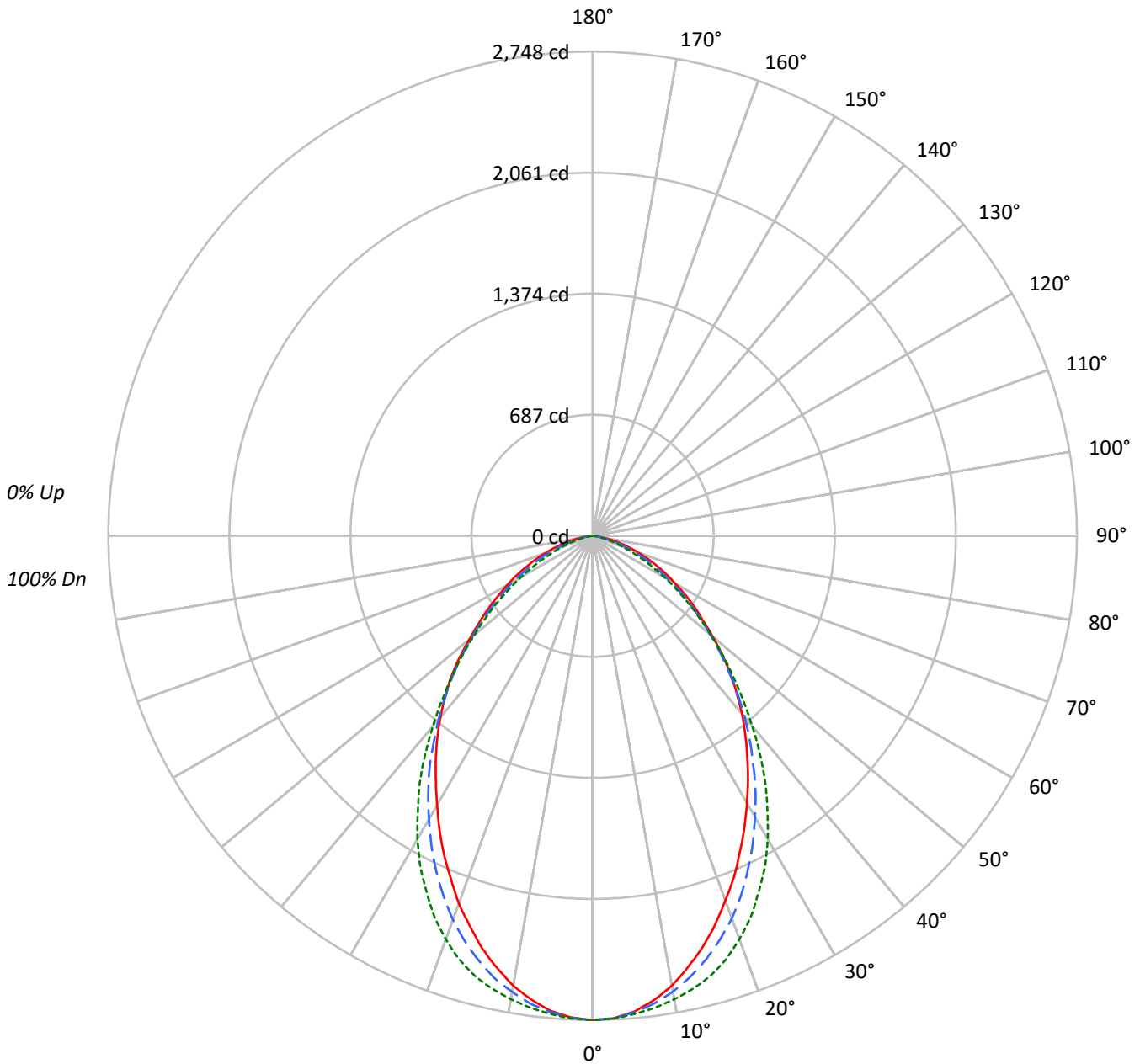
Lumens per Lamp: N/A
Luminaire Lumens: 4916.0 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
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				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°	337650	337650	337650
5°	334217	336079	333847
10°	323349	333166	323473
15°	307208	328894	308226
20°	287937	318556	290317
25°	268166	302231	270633
30°	248423	281931	250282
35°	229179	256280	232673
40°	211405	225806	215286
45°	191497	195702	197283
50°	169758	167637	174001
55°	151324	141172	154794
60°	132436	114573	137399
65°	115901	88604	119999
70°	97523	64907	102587
75°	76184	42151	80504
80°	50019	22144	54972
85°	17056	10008	22694



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.6	5.2
10°-20°	701.0	14.3
20°-30°	964.2	19.6
30°-40°	1005.8	20.5
40°-50°	860.5	17.5
50°-60°	615.5	12.5
60°-70°	357.2	7.3
70°-80°	137.7	2.8
80°-90°	17.5	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°	1921.7	39.1
0°-40°	2927.6	59.6
0°-60°	4403.6	89.6
0°-90°	4916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4916.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2748	2748	2748	2748	2748	
5°	2710	2715	2725	2715	2707	255
15°	2415	2488	2586	2497	2423	677
25°	1978	2087	2230	2100	1996	910
35°	1528	1589	1709	1614	1551	957
45°	1102	1093	1126	1120	1136	850
55°	706	671	659	689	723	632
65°	399	352	305	364	413	397
75°	160	120	89	127	170	173
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°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2741.4	2739.4	2740.4	2740.4	2740.4	2739.4	2741.4	2741.4	2740.4	2740.4	2740.4
5°	2710.1	2708.1	2709.1	2710.1	2710.1	2710.1	2711.1	2712.1	2713.1	2714.1	2715.1
7.5°	2659.6	2656.6	2659.6	2663.7	2663.7	2664.7	2665.7	2666.7	2669.7	2674.8	2677.8
10°	2592.0	2592.0	2593.0	2596.0	2601.1	2600.1	2603.1	2608.1	2614.2	2621.3	2626.3
12.5°	2506.2	2508.2	2511.3	2514.3	2519.3	2522.4	2527.4	2533.5	2543.6	2553.6	2564.7
15°	2415.4	2416.4	2417.4	2424.4	2429.5	2436.6	2440.6	2452.7	2461.8	2475.9	2488.0
17.5°	2313.4	2312.4	2315.4	2321.5	2333.6	2336.6	2341.7	2354.8	2367.9	2387.1	2403.3
20°	2202.4	2208.4	2212.5	2220.6	2227.6	2235.7	2239.7	2255.9	2271.0	2289.2	2310.4
22.5°	2097.4	2092.4	2099.4	2108.5	2114.6	2120.6	2127.7	2144.9	2161.0	2183.2	2204.4
25°	1978.3	1981.3	1986.4	1993.5	2001.5	2009.6	2017.7	2035.9	2044.9	2068.1	2087.3
27.5°	1865.3	1870.3	1872.3	1881.4	1888.5	1894.5	1898.6	1919.8	1927.9	1948.0	1967.2
30°	1751.2	1756.3	1756.3	1766.4	1771.4	1777.5	1787.6	1801.7	1813.8	1827.9	1842.1
32.5°	1641.2	1641.2	1645.2	1654.3	1659.4	1666.4	1669.5	1679.6	1691.7	1705.8	1720.9
35°	1528.1	1531.2	1535.2	1535.2	1544.3	1548.3	1552.4	1562.5	1570.5	1576.6	1588.7
37.5°	1424.2	1424.2	1421.2	1426.2	1432.3	1431.3	1437.3	1442.4	1447.4	1454.5	1464.6
40°	1318.2	1318.2	1314.2	1317.2	1321.2	1320.2	1318.2	1323.3	1327.3	1332.3	1342.4
42.5°	1210.2	1208.2	1207.2	1207.2	1209.2	1207.2	1209.2	1210.2	1210.2	1210.2	1216.3
45°	1102.2	1107.3	1101.2	1099.2	1096.1	1093.1	1092.1	1093.1	1097.2	1092.1	1093.1
47.5°	996.2	998.2	994.2	991.2	988.1	986.1	988.1	982.1	984.1	985.1	981.1
50°	888.2	884.2	884.2	881.2	882.2	881.2	879.1	877.1	877.1	872.1	869.0
52.5°	788.3	790.3	792.3	785.3	786.3	781.2	782.2	777.2	777.2	771.1	773.2
55°	706.5	703.5	703.5	700.5	699.5	694.4	693.4	690.4	683.3	679.3	671.2
57.5°	621.8	620.7	616.7	617.7	611.7	610.7	608.6	603.6	598.5	593.5	584.4
60°	539.0	540.0	540.0	538.0	535.0	529.9	530.9	523.9	516.8	507.7	499.6
62.5°	470.4	467.3	466.3	464.3	458.2	458.2	453.2	448.1	441.1	432.0	424.9
65°	398.7	399.7	396.7	393.6	387.6	386.6	382.5	378.5	371.4	362.4	352.3
67.5°	334.1	332.1	331.1	328.0	322.0	321.0	317.9	308.9	302.8	293.7	285.6
70°	271.5	269.5	270.5	265.5	259.4	256.4	255.4	248.3	239.2	232.1	224.1
72.5°	213.0	213.0	212.0	206.9	203.9	201.9	197.8	189.8	184.7	176.6	170.6
75°	160.5	159.5	157.5	154.4	150.4	148.4	146.4	141.3	134.2	125.2	120.1
77.5°	111.0	112.0	110.0	109.0	104.0	100.9	99.9	96.9	90.8	84.8	79.7
80°	70.7	69.6	68.6	66.6	65.6	64.6	61.6	59.6	53.5	50.5	47.4
82.5°	38.4	36.3	36.3	35.3	33.3	32.3	31.3	29.3	28.3	26.2	24.2
85°	12.1	13.1	12.1	12.1	12.1	11.1	11.1	11.1	10.1	10.1	9.1
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°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2740.4	2741.4	2741.4	2742.4	2742.4	2742.4	2742.4	2742.4	2742.4	2742.4	2742.4
5°	2718.2	2718.2	2720.2	2722.2	2722.2	2722.2	2723.2	2725.2	2725.2	2725.2	2724.2
7.5°	2681.8	2685.9	2689.9	2693.9	2695.0	2696.0	2698.0	2702.0	2702.0	2702.0	2702.0
10°	2634.4	2643.5	2648.5	2654.6	2657.6	2659.6	2665.7	2666.7	2669.7	2670.7	2669.7
12.5°	2573.8	2585.9	2597.0	2607.1	2611.2	2615.2	2621.3	2627.3	2630.4	2633.4	2632.4
15°	2506.2	2519.3	2536.5	2547.6	2555.7	2561.7	2570.8	2578.9	2583.9	2585.9	2585.9
17.5°	2424.4	2440.6	2458.8	2476.9	2482.0	2492.1	2502.2	2513.3	2519.3	2520.3	2519.3
20°	2333.6	2351.8	2366.9	2385.1	2396.2	2401.2	2415.4	2429.5	2435.6	2436.6	2435.6
22.5°	2225.6	2242.8	2263.0	2282.1	2291.2	2300.3	2315.4	2329.6	2337.6	2343.7	2337.6
25°	2105.5	2129.7	2148.9	2165.0	2178.2	2187.3	2206.4	2217.5	2230.7	2229.6	2230.7
27.5°	1987.4	2007.6	2028.8	2048.0	2056.0	2066.1	2081.3	2099.4	2110.5	2117.6	2116.6
30°	1866.3	1882.4	1900.6	1917.8	1930.9	1939.0	1961.2	1969.2	1983.4	1987.4	1984.4
32.5°	1738.1	1749.2	1767.4	1790.6	1795.6	1803.7	1817.8	1838.0	1843.1	1845.1	1846.1
35°	1601.8	1623.0	1638.2	1652.3	1656.3	1663.4	1679.6	1694.7	1699.7	1708.8	1704.8
37.5°	1475.7	1487.8	1494.8	1509.0	1521.1	1527.1	1535.2	1545.3	1555.4	1559.4	1558.4
40°	1349.5	1355.6	1361.6	1376.7	1377.8	1377.8	1389.9	1404.0	1404.0	1408.0	1408.0
42.5°	1220.3	1221.3	1229.4	1237.5	1239.5	1241.5	1253.6	1255.6	1261.7	1264.7	1268.7
45°	1095.1	1101.2	1106.2	1107.3	1112.3	1113.3	1116.3	1119.4	1128.4	1126.4	1128.4
47.5°	981.1	984.1	987.1	987.1	990.2	989.2	994.2	991.2	997.2	999.3	1002.3
50°	869.0	874.1	871.1	873.1	872.1	875.1	873.1	873.1	873.1	877.1	880.1
52.5°	766.1	767.1	764.1	765.1	765.1	763.1	765.1	764.1	763.1	763.1	764.1
55°	671.2	667.2	665.2	661.1	656.1	662.1	659.1	657.1	661.1	659.1	661.1
57.5°	579.4	574.3	570.3	568.3	561.2	565.2	561.2	559.2	559.2	559.2	564.2
60°	492.6	487.5	482.5	476.4	475.4	473.4	471.4	466.3	467.3	466.3	468.3
62.5°	416.9	406.8	399.7	394.7	393.6	390.6	387.6	382.5	383.6	383.6	384.6
65°	347.2	336.1	326.0	319.0	319.0	313.9	308.9	308.9	302.8	304.8	305.8
67.5°	277.6	268.5	258.4	253.3	250.3	246.3	243.3	241.2	238.2	238.2	240.2
70°	215.0	205.9	200.9	192.8	191.8	188.7	184.7	181.7	180.7	180.7	179.7
72.5°	162.5	154.4	148.4	143.3	140.3	137.3	133.2	132.2	130.2	130.2	132.2
75°	113.0	108.0	103.0	97.9	95.9	94.9	91.9	89.8	89.8	88.8	89.8
77.5°	75.7	70.7	65.6	63.6	61.6	59.6	58.5	57.5	54.5	54.5	54.5
80°	43.4	41.4	39.4	36.3	36.3	35.3	33.3	32.3	31.3	31.3	31.3
82.5°	22.2	21.2	19.2	18.2	18.2	18.2	17.2	17.2	16.1	16.1	16.1
85°	9.1	8.1	7.1	7.1	7.1	7.1	7.1	7.1	8.1	7.1	8.1
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°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2742.4	2741.4	2741.4	2741.4	2741.4	2741.4	2740.4	2740.4	2739.4	2739.4	2739.4
5°	2725.2	2724.2	2723.2	2722.2	2721.2	2720.2	2719.2	2718.2	2715.1	2714.1	2712.1
7.5°	2701.0	2699.0	2696.0	2695.0	2692.9	2689.9	2685.9	2683.9	2679.8	2674.8	2672.7
10°	2668.7	2664.7	2661.6	2656.6	2655.6	2651.6	2641.5	2636.4	2629.3	2623.3	2616.2
12.5°	2629.3	2625.3	2618.2	2611.2	2607.1	2598.1	2589.0	2580.9	2571.8	2558.7	2548.6
15°	2580.9	2574.8	2560.7	2558.7	2552.6	2538.5	2526.4	2511.3	2497.1	2483.0	2470.9
17.5°	2516.3	2503.2	2496.1	2487.0	2480.0	2461.8	2448.7	2431.5	2412.3	2396.2	2379.0
20°	2431.5	2417.4	2405.3	2400.2	2391.1	2375.0	2358.8	2337.6	2318.5	2298.3	2283.1
22.5°	2330.6	2321.5	2303.3	2297.3	2286.2	2270.0	2250.8	2230.7	2212.5	2190.3	2170.1
25°	2222.6	2209.5	2195.3	2183.2	2175.1	2160.0	2135.8	2120.6	2100.4	2076.2	2061.1
27.5°	2107.5	2092.4	2072.2	2064.1	2057.0	2036.9	2016.7	1997.5	1981.3	1960.1	1947.0
30°	1974.3	1963.2	1950.1	1940.0	1929.9	1913.7	1895.6	1873.3	1856.2	1846.1	1827.9
32.5°	1839.0	1829.9	1812.8	1807.7	1796.6	1783.5	1770.4	1754.2	1736.1	1720.9	1706.8
35°	1694.7	1685.6	1673.5	1664.4	1660.4	1651.3	1637.2	1623.0	1613.9	1596.8	1589.7
37.5°	1550.4	1547.3	1535.2	1526.1	1523.1	1512.0	1504.9	1494.8	1481.7	1477.7	1469.6
40°	1402.0	1400.0	1392.9	1391.9	1385.8	1382.8	1372.7	1364.6	1358.6	1355.6	1350.5
42.5°	1265.7	1263.7	1257.6	1258.7	1252.6	1250.6	1249.6	1242.5	1237.5	1231.4	1232.4
45°	1131.5	1129.5	1125.4	1123.4	1126.4	1125.4	1123.4	1120.4	1120.4	1121.4	1118.4
47.5°	1002.3	1004.3	1000.3	1002.3	1002.3	999.3	999.3	1003.3	1004.3	1006.3	1008.3
50°	880.1	886.2	884.2	887.2	888.2	889.2	886.2	891.3	890.2	899.3	897.3
52.5°	769.1	770.1	774.2	775.2	776.2	777.2	782.2	786.3	787.3	791.3	798.4
55°	662.1	663.1	671.2	671.2	676.3	677.3	684.3	686.4	689.4	700.5	702.5
57.5°	561.2	567.3	571.3	573.3	576.3	581.4	585.4	594.5	599.6	606.6	613.7
60°	470.4	477.4	482.5	484.5	488.5	494.6	499.6	509.7	518.8	526.9	531.9
62.5°	386.6	392.6	396.7	403.7	403.7	408.8	420.9	427.0	437.0	444.1	453.2
65°	311.9	315.9	323.0	323.0	327.0	335.1	345.2	354.3	364.4	374.5	383.6
67.5°	244.3	247.3	251.3	255.4	257.4	267.5	275.6	288.7	297.8	304.8	315.9
70°	184.7	186.7	191.8	195.8	198.8	205.9	215.0	224.1	233.2	241.2	252.3
72.5°	132.2	136.3	141.3	144.3	146.4	151.4	160.5	169.6	177.6	185.7	191.8
75°	90.8	93.9	95.9	98.9	101.9	106.0	112.0	118.1	127.2	135.3	142.3
77.5°	56.5	59.6	62.6	63.6	64.6	68.6	72.7	78.7	84.8	90.8	95.9
80°	33.3	34.3	35.3	36.3	38.4	41.4	43.4	47.4	51.5	55.5	60.6
82.5°	17.2	18.2	19.2	19.2	19.2	20.2	23.2	25.2	26.2	28.3	31.3
85°	7.1	7.1	7.1	8.1	8.1	9.1	9.1	10.1	10.1	11.1	12.1
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: P879464

CATALOG NUMBER: LD4C60D010 EU4609040 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4	2748.4
2.5°	2738.4	2738.4	2738.4	2737.3	2738.4	2738.4	2738.4	2737.3
5°	2712.1	2710.1	2710.1	2709.1	2708.1	2708.1	2709.1	2707.1
7.5°	2668.7	2665.7	2663.7	2663.7	2662.7	2661.6	2661.6	2656.6
10°	2612.2	2606.1	2606.1	2604.1	2596.0	2595.0	2593.0	2593.0
12.5°	2541.5	2534.5	2530.4	2525.4	2520.3	2516.3	2515.3	2511.3
15°	2457.8	2448.7	2441.6	2439.6	2431.5	2425.5	2425.5	2423.4
17.5°	2366.9	2352.8	2347.7	2342.7	2331.6	2330.6	2328.6	2319.5
20°	2264.0	2250.8	2243.8	2238.7	2231.7	2221.6	2219.6	2220.6
22.5°	2156.0	2137.8	2131.7	2126.7	2119.6	2110.5	2110.5	2103.5
25°	2043.9	2027.8	2021.7	2015.7	2004.6	2000.5	1995.5	1996.5
27.5°	1929.9	1914.7	1909.7	1898.6	1891.5	1886.5	1881.4	1881.4
30°	1810.8	1802.7	1794.6	1793.6	1779.5	1773.4	1768.4	1764.3
32.5°	1695.7	1685.6	1681.6	1677.5	1670.5	1662.4	1661.4	1654.3
35°	1582.7	1572.6	1567.5	1563.5	1555.4	1552.4	1549.3	1551.4
37.5°	1463.6	1461.5	1458.5	1453.5	1448.4	1447.4	1443.4	1448.4
40°	1346.5	1345.5	1341.4	1342.4	1342.4	1340.4	1342.4	1342.4
42.5°	1233.4	1233.4	1229.4	1231.4	1232.4	1234.4	1237.5	1239.5
45°	1123.4	1122.4	1123.4	1125.4	1123.4	1128.4	1132.5	1135.5
47.5°	1010.4	1011.4	1015.4	1016.4	1018.4	1025.5	1025.5	1025.5
50°	902.4	907.4	905.4	911.4	910.4	914.5	910.4	910.4
52.5°	799.4	804.4	805.5	806.5	812.5	813.5	813.5	812.5
55°	707.6	714.6	711.6	716.6	719.7	721.7	724.7	722.7
57.5°	622.8	625.8	628.8	629.8	633.9	635.9	637.9	635.9
60°	539.0	545.0	550.1	551.1	553.1	555.1	556.1	559.2
62.5°	460.3	470.4	472.4	473.4	478.4	481.5	483.5	485.5
65°	390.6	397.7	402.7	405.8	409.8	409.8	412.8	412.8
67.5°	323.0	330.1	333.1	335.1	341.2	342.2	347.2	347.2
70°	261.4	266.5	268.5	271.5	277.6	281.6	283.6	285.6
72.5°	201.9	207.9	211.0	215.0	219.0	222.1	223.1	226.1
75°	147.4	156.4	157.5	161.5	164.5	168.6	170.6	169.6
77.5°	103.0	106.0	110.0	112.0	115.1	118.1	121.1	121.1
80°	63.6	67.6	68.6	69.6	73.7	75.7	77.7	77.7
82.5°	33.3	35.3	37.3	38.4	40.4	40.4	41.4	42.4
85°	13.1	14.1	14.1	14.1	15.1	16.1	16.1	16.1
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)