

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: P858762

Luminaire Tested: **LD4C35W2N2765D010 4LBSWNL1_6500K**

Issue Date: 11/9/2023



Test Information

Test Method: LM-79-08
Report Number: P858762
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251556)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 11/9/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C35W2N2765D010 4LBSWNLI_6500K
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 6500K, W2N2765 LEDS
AND 4LBSWNLI TRIM WITH FINISH

Light Source: -
Ballast/Driver: -

Summary

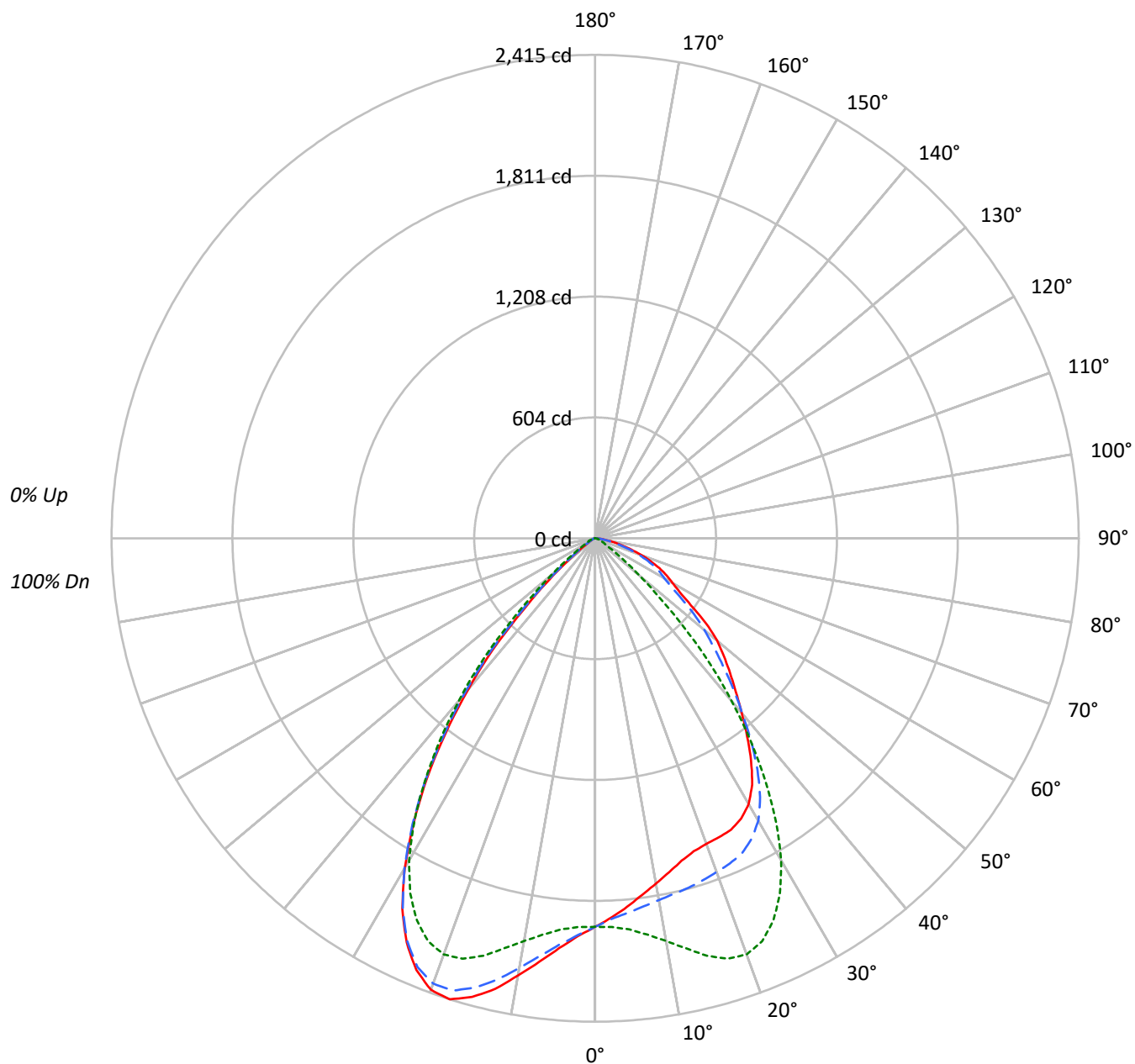
Lumens per Lamp: N/A
Luminaire Lumens: 3582.0 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 52.8
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	108	105	102	109	106	103	101	102	100	98		98	96	95		95
2	104	98	93	89	102	96	92	88	93	89	86		90	87	84		87
3	97	89	83	78	95	88	82	77	85	80	76		82	78	75		80
4	91	81	75	69	89	80	74	69	78	72	68		76	71	67		74
5	85	75	67	62	83	74	67	62	72	66	61		70	65	60		68
6	79	69	61	56	78	68	61	56	66	60	55		64	59	55		63
7	75	63	56	51	73	62	55	51	61	55	50		60	54	50		58
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54
9	66	54	47	42	65	54	47	42	53	46	42		52	46	42		51
10	62	51	44	39	61	50	43	39	49	43	39		48	43	39		47

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	238471	238471	238471
5°	227814	241885	253441
10°	218435	254799	276605
15°	212072	274597	301676
20°	212358	289218	313745
25°	217767	285449	301933
30°	217484	263489	269603
35°	203698	222700	219670
40°	182457	169868	158497
45°	165540	107858	88486
50°	152079	54719	37786
55°	124850	24439	12487
60°	109585	13710	6855
65°	103110	10291	5174
70°	88291	8190	4562
75°	67356	6028	3607
80°	48392	3608	1839
85°	35663	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.5	5.3
10°-20°	587.6	16.4
20°-30°	909.1	25.4
30°-40°	895.8	25.0
40°-50°	550.0	15.4
50°-60°	244.6	6.8
60°-70°	136.6	3.8
70°-80°	59.1	1.7
80°-90°	10.6	0.3
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°	1685.3	47.0
0°-40°	2581.1	72.1
0°-60°	3375.7	94.2
0°-90°	3582.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3582.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1941	1941	1941	1941	1941	
5°	1847	1878	1961	2037	2055	173
15°	1667	1807	2159	2324	2372	473
25°	1606	1736	2106	2220	2227	737
35°	1358	1414	1485	1480	1465	843
45°	953	905	621	542	509	738
55°	583	527	114	66	58	536
65°	355	319	35	20	18	347
75°	142	122	13	8	8	156
85°	25	20	0	0	0	31
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°	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1
2.5°	1895.4	1895.4	1895.4	1895.4	1900.5	1893.0	1900.5	1900.5	1908.1	1910.6	1903.1
5°	1847.3	1844.8	1847.3	1847.3	1852.4	1849.9	1857.4	1862.5	1872.7	1877.8	1877.8
7.5°	1796.7	1796.7	1796.7	1801.7	1809.3	1806.8	1814.3	1822.0	1837.2	1847.3	1854.9
10°	1751.0	1748.5	1756.1	1758.6	1766.2	1766.2	1778.9	1786.5	1804.2	1824.6	1834.7
12.5°	1707.9	1705.4	1710.5	1718.1	1730.7	1730.7	1740.9	1753.6	1778.9	1801.7	1819.4
15°	1667.4	1670.0	1677.5	1682.6	1697.8	1697.8	1710.5	1725.7	1753.6	1781.5	1806.8
17.5°	1639.5	1642.1	1647.1	1654.7	1670.0	1670.0	1682.6	1700.4	1730.7	1761.1	1791.6
20°	1624.3	1626.9	1632.0	1639.5	1652.2	1654.7	1664.9	1685.2	1713.0	1745.9	1773.8
22.5°	1616.8	1621.8	1626.9	1632.0	1644.6	1644.6	1657.3	1672.5	1700.4	1733.3	1758.6
25°	1606.5	1611.6	1614.2	1621.8	1632.0	1632.0	1639.5	1657.3	1682.6	1710.5	1735.8
27.5°	1578.7	1583.8	1586.3	1593.9	1604.1	1601.5	1611.6	1624.3	1647.1	1672.5	1692.7
30°	1533.1	1535.7	1540.7	1543.2	1550.8	1550.8	1558.4	1571.1	1586.3	1609.1	1629.4
32.5°	1459.6	1464.7	1467.2	1469.7	1477.4	1474.8	1477.4	1484.9	1500.1	1520.5	1533.1
35°	1358.2	1368.4	1368.4	1373.4	1376.0	1373.4	1373.4	1383.6	1391.2	1406.4	1414.0
37.5°	1246.7	1254.4	1251.8	1256.9	1259.5	1251.8	1256.9	1259.5	1269.6	1277.1	1279.7
40°	1137.7	1140.3	1140.3	1140.3	1140.3	1137.7	1140.3	1142.8	1150.4	1150.4	1142.8
42.5°	1039.0	1041.5	1041.5	1036.4	1041.5	1039.0	1039.0	1039.0	1039.0	1028.8	1021.2
45°	952.8	955.4	955.4	952.8	952.8	947.7	945.2	942.7	935.0	922.4	904.6
47.5°	871.7	876.7	879.3	874.3	871.7	866.6	866.6	851.4	841.3	826.1	800.8
50°	795.7	800.8	800.8	795.7	795.7	788.1	780.5	775.4	760.2	742.5	712.0
52.5°	699.4	707.0	707.0	704.5	704.5	694.4	691.8	681.7	668.9	648.7	623.4
55°	582.9	593.0	590.4	587.9	582.9	582.9	582.9	575.2	567.6	552.4	527.1
57.5°	499.2	501.8	501.8	499.2	499.2	494.1	494.1	486.6	484.0	468.8	448.5
60°	446.0	446.0	448.5	446.0	443.5	440.9	438.4	433.4	425.7	415.6	400.4
62.5°	402.9	405.5	405.5	402.9	400.4	397.8	395.3	390.3	385.2	377.6	362.4
65°	354.7	359.8	357.3	354.7	352.2	349.7	349.7	344.6	339.5	334.5	319.3
67.5°	301.5	304.1	306.6	301.5	301.5	299.0	299.0	294.0	291.4	281.3	271.1
70°	245.8	248.3	248.3	245.8	245.8	243.2	243.2	240.8	238.2	230.6	220.5
72.5°	192.6	195.1	192.6	190.0	190.0	190.0	187.5	185.0	182.5	177.4	169.8
75°	141.9	141.9	144.5	141.9	139.4	139.4	136.8	136.8	131.7	129.3	121.6
77.5°	101.4	103.8	101.4	101.4	98.8	96.3	96.3	93.7	93.7	91.2	86.2
80°	68.4	68.4	71.0	68.4	65.9	68.4	65.9	63.3	63.3	60.9	55.8
82.5°	43.1	45.6	43.1	43.1	43.1	43.1	43.1	40.5	40.5	38.0	35.4
85°	25.3	25.3	25.3	25.3	25.3	25.3	25.3	22.8	22.8	22.8	20.3
87.5°	12.7	12.7	10.1	10.1	12.7	12.7	12.7	10.1	10.1	10.1	10.1
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°	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1
2.5°	1913.2	1915.7	1920.8	1928.4	1928.4	1923.3	1936.0	1936.0	1941.1	1943.6	1953.7
5°	1893.0	1898.0	1908.1	1920.8	1923.3	1920.8	1938.5	1946.2	1953.7	1961.4	1976.5
7.5°	1875.2	1885.3	1903.1	1920.8	1928.4	1928.4	1956.3	1966.4	1981.6	1996.8	2014.6
10°	1865.1	1880.2	1905.6	1933.5	1941.1	1948.7	1981.6	2001.9	2022.1	2042.5	2067.8
12.5°	1852.4	1880.2	1913.2	1948.7	1963.8	1974.0	2019.6	2045.0	2072.8	2098.2	2131.1
15°	1849.9	1882.8	1925.9	1971.5	1991.7	2006.9	2057.7	2093.1	2126.1	2159.0	2192.0
17.5°	1839.7	1880.2	1933.5	1984.2	2009.5	2029.8	2088.0	2131.1	2169.2	2202.1	2240.1
20°	1827.0	1872.7	1931.0	1986.7	2014.6	2034.8	2098.2	2138.8	2181.8	2212.2	2247.7
22.5°	1809.3	1854.9	1913.2	1968.9	1994.3	2012.0	2075.3	2110.9	2148.9	2179.3	2212.2
25°	1778.9	1822.0	1872.7	1918.3	1943.6	1958.8	2014.6	2047.5	2075.3	2105.8	2136.2
27.5°	1735.8	1768.8	1811.8	1844.8	1860.0	1875.2	1920.8	1948.7	1974.0	1999.4	2019.6
30°	1659.7	1685.2	1715.5	1743.4	1758.6	1761.1	1804.2	1819.4	1839.7	1857.4	1872.7
32.5°	1558.4	1578.7	1596.4	1611.6	1621.8	1624.3	1657.3	1662.3	1682.6	1682.6	1705.4
35°	1429.2	1439.3	1452.0	1452.0	1459.6	1452.0	1474.8	1479.9	1482.4	1484.9	1502.7
37.5°	1282.2	1287.3	1294.9	1279.7	1279.7	1272.1	1279.7	1284.8	1274.6	1274.6	1287.3
40°	1142.8	1132.7	1122.5	1107.4	1099.8	1084.5	1084.5	1071.9	1064.3	1059.2	1061.8
42.5°	1008.6	985.7	962.9	929.9	914.8	899.6	884.4	866.6	861.5	848.9	841.3
45°	879.3	846.4	816.0	762.8	732.4	717.1	684.2	648.7	626.0	620.8	600.5
47.5°	770.3	722.2	671.5	608.2	577.8	549.9	501.8	471.4	440.9	425.7	413.0
50°	674.0	631.0	565.1	496.7	458.7	430.8	377.6	342.1	309.2	286.3	271.1
52.5°	590.4	542.3	481.5	402.9	365.0	334.5	276.2	235.7	207.8	185.0	167.3
55°	496.7	458.7	397.8	324.3	286.3	250.9	200.1	157.2	129.3	114.1	101.4
57.5°	428.3	395.3	337.1	266.1	230.6	197.7	146.9	111.5	88.7	73.5	65.9
60°	382.6	352.2	301.5	233.1	200.1	169.8	121.6	88.7	68.4	55.8	50.6
62.5°	344.6	314.2	268.6	205.2	177.4	146.9	103.8	73.5	55.8	45.6	38.0
65°	301.5	273.7	233.1	177.4	152.0	126.7	88.7	60.9	45.6	35.4	30.4
67.5°	255.9	230.6	195.1	146.9	126.7	106.4	71.0	50.6	38.0	30.4	25.3
70°	207.8	187.5	154.6	119.1	101.4	83.6	58.3	40.5	27.9	22.8	20.3
72.5°	159.6	141.9	119.1	91.2	76.0	63.3	43.1	30.4	22.8	17.8	15.2
75°	114.1	101.4	83.6	65.9	55.8	45.6	33.0	22.8	15.2	12.7	10.1
77.5°	78.5	71.0	58.3	45.6	38.0	33.0	22.8	15.2	12.7	10.1	7.6
80°	50.6	45.6	38.0	27.9	22.8	20.3	12.7	10.1	7.6	5.1	5.1
82.5°	30.4	27.9	22.8	15.2	12.7	10.1	7.6	5.1	5.1	2.6	2.6
85°	17.8	15.2	10.1	7.6	7.6	5.1	5.1	2.6	2.6	0.0	0.0
87.5°	7.6	5.1	5.1	2.6	2.6	2.6	2.6	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°	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1
2.5°	1948.7	1961.4	1958.8	1966.4	1963.8	1963.8	1976.5	1971.5	1984.2	1984.2	1986.7
5°	1976.5	1994.3	1994.3	2006.9	2004.4	2009.5	2022.1	2022.1	2037.4	2042.5	2042.5
7.5°	2017.1	2039.9	2045.0	2057.7	2060.1	2070.3	2080.5	2083.0	2103.2	2108.3	2110.9
10°	2072.8	2100.7	2108.3	2121.0	2126.1	2136.2	2148.9	2154.0	2179.3	2181.8	2192.0
12.5°	2141.3	2171.6	2179.3	2194.5	2197.0	2209.7	2227.4	2232.5	2257.8	2265.5	2273.0
15°	2207.2	2235.0	2247.7	2262.9	2265.5	2280.6	2295.8	2300.9	2323.7	2333.9	2341.5
17.5°	2252.7	2285.7	2293.3	2313.6	2313.6	2326.2	2341.5	2346.6	2369.3	2376.9	2382.0
20°	2262.9	2293.3	2303.5	2318.7	2321.1	2328.8	2341.5	2346.6	2366.8	2369.3	2376.9
22.5°	2224.8	2255.3	2260.4	2275.6	2278.1	2285.7	2295.8	2293.3	2318.7	2316.1	2318.7
25°	2143.8	2171.6	2171.6	2189.4	2186.9	2194.5	2199.5	2197.0	2219.8	2219.8	2219.8
27.5°	2027.2	2052.6	2055.1	2067.8	2060.1	2062.7	2067.8	2065.2	2080.5	2080.5	2080.5
30°	1882.8	1903.1	1895.4	1905.6	1900.5	1905.6	1900.5	1898.0	1903.1	1908.1	1905.6
32.5°	1702.8	1718.1	1718.1	1720.6	1720.6	1705.4	1700.4	1700.4	1697.8	1695.3	1695.3
35°	1495.0	1507.8	1502.7	1502.7	1500.1	1484.9	1477.4	1472.3	1479.9	1464.7	1474.8
37.5°	1282.2	1284.8	1277.1	1274.6	1261.9	1261.9	1249.3	1239.1	1244.2	1241.7	1231.6
40°	1049.1	1059.2	1044.0	1039.0	1046.6	1036.4	1023.8	1011.1	1021.2	1008.6	1013.6
42.5°	821.0	818.5	813.4	813.4	813.4	798.2	795.7	793.1	795.7	785.6	778.0
45°	593.0	585.4	577.8	577.8	567.6	562.5	562.5	555.0	542.3	542.3	527.1
47.5°	400.4	382.6	377.6	375.1	370.0	370.0	365.0	359.8	357.3	344.6	344.6
50°	261.0	243.2	238.2	235.7	238.2	233.1	228.0	223.0	217.9	215.4	210.4
52.5°	157.2	149.5	144.5	141.9	136.8	134.3	131.7	126.7	124.2	124.2	121.6
55°	93.7	86.2	76.0	76.0	76.0	73.5	71.0	68.4	65.9	65.9	63.3
57.5°	58.3	53.2	48.2	45.6	45.6	45.6	43.1	43.1	43.1	43.1	40.5
60°	43.1	38.0	35.4	35.4	35.4	33.0	33.0	33.0	33.0	30.4	30.4
62.5°	33.0	30.4	27.9	27.9	25.3	25.3	25.3	25.3	25.3	25.3	22.8
65°	27.9	22.8	22.8	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
67.5°	20.3	17.8	17.8	17.8	17.8	15.2	15.2	15.2	15.2	15.2	15.2
70°	15.2	15.2	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
72.5°	12.7	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
75°	10.1	10.1	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
77.5°	7.6	7.6	7.6	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	5.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P858762

CATALOG NUMBER: LD4C35W2N2765D010 4LBSWNL1_6500K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1	1941.1
2.5°	1986.7	1999.4	1986.7	1986.7	1994.3	1991.7	1996.8	1989.3
5°	2045.0	2062.7	2050.0	2047.5	2060.1	2057.7	2060.1	2055.1
7.5°	2115.9	2133.7	2121.0	2121.0	2133.7	2131.1	2138.8	2133.7
10°	2197.0	2217.3	2199.5	2202.1	2219.8	2217.3	2217.3	2217.3
12.5°	2280.6	2300.9	2290.8	2290.8	2303.5	2306.0	2308.5	2306.0
15°	2349.0	2369.3	2356.7	2356.7	2374.4	2371.9	2374.4	2371.9
17.5°	2389.6	2409.9	2394.7	2394.7	2409.9	2409.9	2412.4	2415.0
20°	2379.4	2402.3	2389.6	2384.5	2402.3	2402.3	2399.8	2399.8
22.5°	2321.1	2341.5	2331.3	2326.2	2338.9	2333.9	2331.3	2333.9
25°	2219.8	2240.1	2219.8	2219.8	2229.9	2227.4	2229.9	2227.4
27.5°	2083.0	2098.2	2077.9	2075.3	2085.6	2080.5	2077.9	2085.6
30°	1900.5	1915.7	1905.6	1898.0	1910.6	1903.1	1898.0	1900.5
32.5°	1692.7	1702.8	1697.8	1685.2	1692.7	1687.6	1685.2	1687.6
35°	1464.7	1477.4	1457.1	1454.5	1467.2	1457.1	1452.0	1464.7
37.5°	1229.0	1244.2	1226.5	1229.0	1221.4	1223.9	1218.9	1226.5
40°	1006.0	1003.5	998.5	995.9	998.5	990.8	995.9	988.3
42.5°	765.2	770.3	767.8	765.2	767.8	757.7	752.6	762.8
45°	532.1	529.7	524.6	519.4	519.4	516.9	516.9	509.3
47.5°	342.1	339.5	329.4	332.0	337.1	332.0	324.3	334.5
50°	207.8	205.2	205.2	202.7	207.8	202.7	197.7	197.7
52.5°	116.6	116.6	114.1	114.1	114.1	114.1	111.5	109.0
55°	63.3	60.9	60.9	60.9	58.3	58.3	58.3	58.3
57.5°	40.5	40.5	40.5	40.5	40.5	40.5	38.0	38.0
60°	30.4	30.4	30.4	30.4	27.9	30.4	27.9	27.9
62.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	22.8
65°	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
67.5°	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
70°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
72.5°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
75°	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	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



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)