

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: P244156

Luminaire Tested: **LD8B40D010 ER8B409730 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B40D010 ER8B409730 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3427.0 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

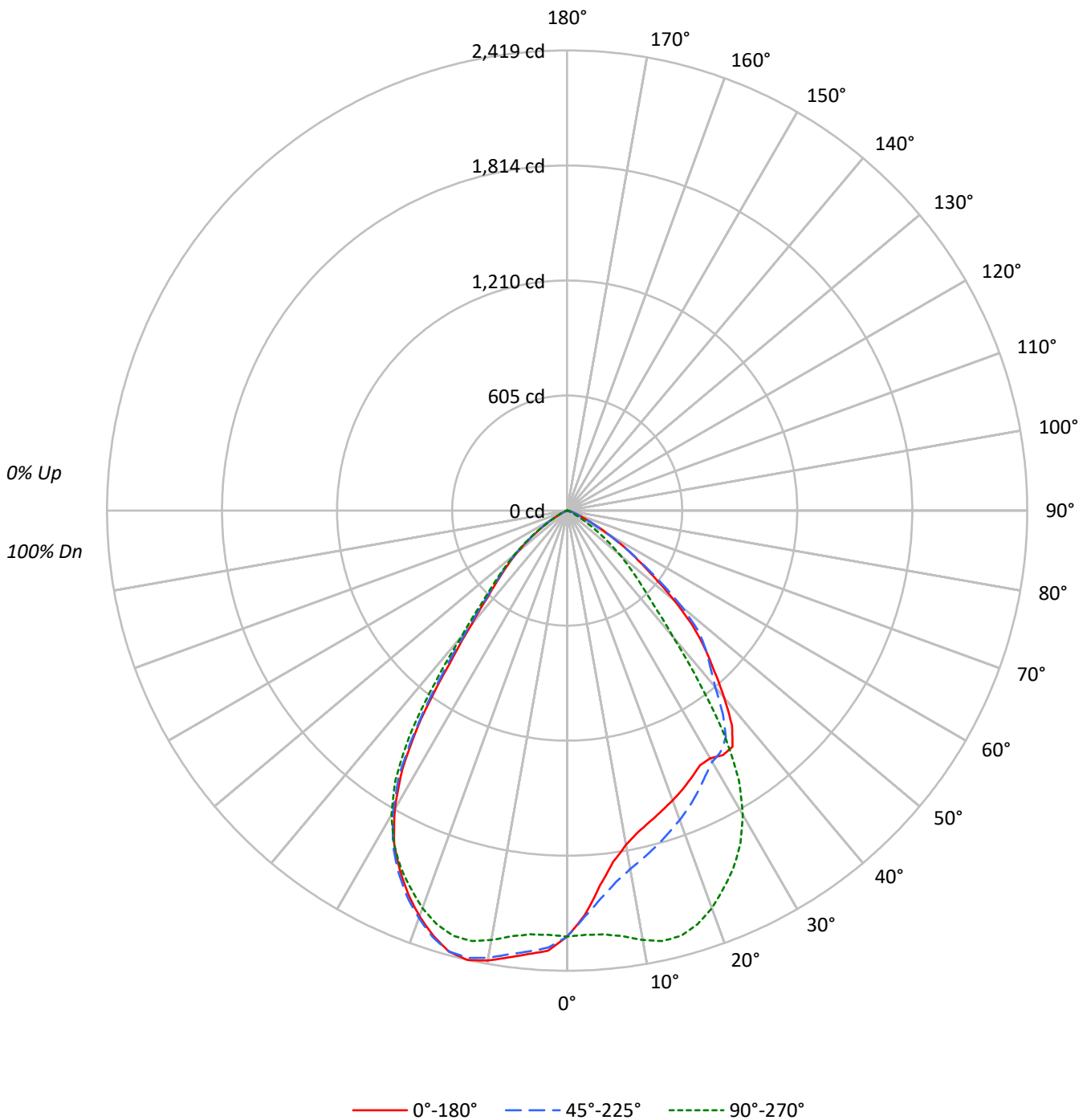
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91		
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82		
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74		
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67		
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60		
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55		
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50		
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46		
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42		
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.7	6.1
10°-20°	602.7	17.6
20°-30°	874.7	25.5
30°-40°	861.5	25.1
40°-50°	540.0	15.8
50°-60°	260.6	7.6
60°-70°	63.1	1.8
70°-80°	12.7	0.4
80°-90°	2.9	0.1
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°	1686.1	49.2
0°-40°	2547.6	74.3
0°-60°	3348.3	97.7
0°-90°	3427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3427.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2239	2239	2239	2239	2239	
5°	1979	2046	2236	2326	2341	183
15°	1691	1824	2314	2399	2401	478
25°	1548	1629	2071	2099	2084	716
35°	1516	1454	1445	1363	1341	917
45°	1024	1031	546	524	509	782
55°	455	469	199	196	187	418
65°	106	105	29	25	22	121
75°	26	22	6	3	2	29
85°	8	6	1	0	0	8
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°	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8
2.5°	2128.2	2114.7	2089.4	2120.0	2120.0	2102.9	2137.0	2116.4	2132.9	2158.8	2135.8
5°	1978.8	1967.6	1946.4	1978.8	1982.9	1967.0	2008.2	1992.9	2017.0	2048.8	2045.9
7.5°	1860.6	1846.4	1827.0	1860.6	1867.0	1856.4	1895.9	1888.8	1920.6	1961.7	1968.8
10°	1783.5	1768.8	1751.7	1782.3	1787.0	1780.0	1820.0	1815.9	1847.0	1894.7	1913.5
12.5°	1728.8	1716.4	1697.6	1730.0	1735.3	1725.3	1762.9	1761.1	1793.5	1843.5	1867.0
15°	1690.6	1675.9	1658.8	1686.4	1693.5	1682.3	1718.2	1714.7	1747.6	1797.0	1823.5
17.5°	1654.7	1641.2	1623.5	1649.4	1656.4	1644.7	1680.0	1674.1	1702.3	1749.4	1776.4
20°	1621.2	1606.4	1590.6	1617.0	1621.2	1607.6	1642.9	1635.3	1660.6	1704.1	1730.6
22.5°	1586.4	1571.2	1554.7	1580.6	1584.7	1571.2	1603.5	1594.7	1618.2	1657.6	1681.7
25°	1548.2	1534.1	1517.6	1541.7	1545.3	1530.6	1564.7	1553.5	1574.1	1608.8	1628.8
27.5°	1510.0	1496.4	1478.2	1502.9	1504.7	1490.6	1521.7	1506.4	1523.5	1555.3	1572.3
30°	1503.5	1488.2	1469.4	1489.4	1490.0	1471.7	1501.2	1482.9	1492.3	1515.9	1525.9
32.5°	1524.1	1508.8	1489.4	1505.9	1504.1	1484.1	1512.3	1490.0	1492.9	1505.3	1502.9
35°	1515.9	1497.6	1474.7	1492.3	1492.3	1468.2	1496.4	1470.0	1467.0	1468.8	1454.1
37.5°	1422.3	1408.2	1386.4	1403.5	1401.7	1383.5	1405.3	1383.5	1373.5	1369.4	1342.9
40°	1284.7	1267.6	1251.2	1269.4	1271.2	1251.7	1280.0	1255.3	1252.3	1240.6	1209.4
42.5°	1145.3	1139.4	1123.5	1138.8	1147.0	1130.6	1154.1	1142.3	1144.1	1141.2	1111.7
45°	1023.5	1013.5	1001.7	1019.4	1024.7	1016.5	1040.0	1032.9	1040.0	1054.7	1030.6
47.5°	892.3	882.3	869.4	888.2	897.6	882.3	902.3	900.0	910.6	935.9	933.5
50°	734.1	727.0	724.7	727.0	732.9	725.9	740.0	740.6	747.6	782.3	784.7
52.5°	581.2	579.4	571.2	578.8	578.8	567.6	581.8	575.3	582.3	605.9	621.2
55°	454.7	452.9	447.6	454.7	447.1	442.9	447.1	440.6	435.3	453.5	469.4
57.5°	354.1	348.2	341.8	344.7	344.1	335.3	340.0	332.3	328.2	334.7	348.8
60°	252.3	250.6	244.7	247.6	250.0	243.5	248.2	244.7	237.6	242.9	243.5
62.5°	167.6	168.8	165.3	165.9	164.1	162.9	165.9	167.6	165.9	163.5	164.1
65°	106.5	105.9	105.3	105.9	107.1	104.7	106.5	107.6	105.9	105.9	105.3
67.5°	70.6	68.8	67.1	68.2	69.4	67.6	69.4	68.8	69.4	68.8	67.1
70°	47.6	47.1	46.5	47.1	47.1	45.9	47.1	46.5	47.1	46.5	44.7
72.5°	34.7	34.7	34.1	34.7	34.7	33.5	34.1	32.9	33.5	32.9	31.8
75°	25.9	25.9	25.3	25.9	25.3	24.7	25.3	24.7	23.5	23.5	22.4
77.5°	18.8	18.8	18.8	18.8	18.8	18.2	18.2	17.6	17.1	16.5	16.5
80°	14.1	13.5	13.5	13.5	13.5	12.9	13.5	12.9	12.4	11.8	11.2
82.5°	10.0	10.6	10.0	10.0	10.0	9.4	10.0	9.4	9.4	8.8	7.6
85°	7.6	7.6	7.6	7.6	7.6	7.1	7.1	7.1	6.5	6.5	5.9
87.5°	4.1	4.1	4.1	4.7	4.1	4.1	4.1	3.5	3.5	2.9	2.9
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°	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8
2.5°	2166.4	2169.4	2162.9	2172.9	2211.7	2180.6	2193.5	2197.6	2227.0	2232.3	2228.8
5°	2084.1	2097.0	2105.3	2127.6	2170.6	2148.2	2171.1	2185.8	2223.5	2235.8	2238.8
7.5°	2019.4	2046.4	2066.4	2102.9	2153.5	2136.4	2171.1	2195.3	2241.1	2257.0	2264.7
10°	1971.1	2012.3	2047.0	2097.0	2154.1	2142.9	2188.2	2222.3	2273.5	2292.3	2301.7
12.5°	1934.7	1984.7	2031.1	2094.7	2156.4	2151.1	2205.8	2244.7	2298.8	2317.6	2328.8
15°	1894.7	1952.3	2006.4	2077.6	2144.1	2142.9	2201.7	2242.9	2298.2	2314.1	2324.7
17.5°	1847.0	1908.8	1968.2	2045.3	2111.1	2112.3	2171.7	2212.3	2266.4	2279.4	2286.4
20°	1798.8	1860.0	1919.4	1998.8	2063.5	2065.3	2123.5	2161.1	2212.9	2223.5	2225.3
22.5°	1747.6	1804.7	1864.1	1942.9	2005.3	2006.4	2064.1	2099.4	2143.5	2148.8	2153.5
25°	1689.4	1745.3	1801.1	1879.4	1938.8	1942.3	1994.7	2025.9	2066.4	2070.6	2072.3
27.5°	1628.8	1674.7	1728.2	1795.3	1855.3	1852.9	1902.3	1937.6	1974.1	1971.7	1971.1
30°	1567.6	1605.9	1638.8	1703.5	1747.6	1749.4	1795.9	1812.9	1851.1	1846.4	1845.9
32.5°	1524.7	1534.7	1543.5	1576.4	1618.2	1603.5	1635.3	1656.4	1682.9	1681.2	1681.7
35°	1445.9	1427.6	1401.2	1405.9	1431.2	1408.2	1425.3	1424.7	1451.7	1445.3	1452.9
37.5°	1311.2	1259.4	1200.6	1167.0	1171.7	1142.9	1137.0	1151.2	1160.6	1142.3	1148.8
40°	1167.6	1091.2	999.4	922.9	918.8	882.9	876.5	862.3	880.6	865.3	870.0
42.5°	1061.7	960.6	840.0	747.0	727.0	697.0	679.4	677.0	682.3	671.8	668.8
45°	980.6	872.9	734.7	628.2	605.9	573.5	555.9	549.4	550.0	546.5	543.5
47.5°	885.3	777.0	637.0	528.2	502.9	472.3	454.7	450.6	452.9	448.2	444.7
50°	753.5	656.5	528.8	429.4	407.1	384.7	370.6	366.5	365.9	362.3	360.0
52.5°	611.8	531.2	420.6	337.6	317.6	295.9	285.9	280.6	281.2	277.6	274.1
55°	473.5	423.5	325.9	255.3	237.1	220.0	210.6	204.1	202.3	198.8	197.1
57.5°	352.3	318.8	244.1	184.1	173.5	157.1	147.6	140.0	138.8	137.1	136.5
60°	247.1	222.9	171.8	131.2	118.8	108.8	99.4	91.8	88.2	87.6	85.9
62.5°	160.0	145.3	112.9	87.6	78.2	71.2	61.8	56.5	54.1	51.8	52.4
65°	99.4	88.2	70.6	56.5	51.2	45.9	38.8	34.1	31.8	29.4	30.0
67.5°	61.8	55.3	44.7	36.5	32.9	28.8	23.5	20.0	18.2	16.5	15.3
70°	41.8	35.9	30.6	25.9	23.5	20.6	17.1	14.1	12.9	11.8	10.6
72.5°	29.4	26.5	22.4	19.4	17.6	15.3	12.9	11.2	10.0	8.8	7.6
75°	21.2	18.8	16.5	14.1	12.9	11.8	10.0	8.8	7.6	6.5	5.3
77.5°	15.3	13.5	11.8	10.6	10.0	8.2	7.1	6.5	5.9	4.7	3.5
80°	10.6	9.4	7.6	7.1	7.1	5.9	5.3	4.7	4.1	2.9	2.4
82.5°	7.1	6.5	5.9	5.3	4.7	4.1	4.1	2.9	2.4	1.8	1.2
85°	5.3	4.7	4.1	3.5	3.5	2.9	2.4	1.8	1.8	1.2	0.6
87.5°	2.9	2.9	2.4	1.8	1.8	1.2	1.2	0.6	0.6	0.6	0.6
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°	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8
2.5°	2258.8	2260.6	2270.6	2262.9	2282.3	2296.4	2289.4	2305.3	2300.0	2298.8	2317.0
5°	2274.1	2278.2	2291.7	2284.7	2305.8	2321.1	2314.1	2331.7	2326.4	2325.3	2344.1
7.5°	2303.5	2307.6	2319.4	2313.5	2335.8	2349.4	2340.6	2360.0	2352.9	2352.3	2370.6
10°	2340.6	2346.4	2356.4	2350.6	2371.1	2382.9	2374.1	2392.9	2386.4	2383.5	2403.5
12.5°	2368.2	2372.3	2382.3	2377.6	2397.6	2406.4	2398.8	2417.0	2408.8	2406.4	2424.1
15°	2361.7	2365.8	2374.1	2370.0	2388.8	2397.0	2387.0	2407.0	2398.8	2394.1	2410.0
17.5°	2320.6	2322.9	2328.8	2324.7	2344.7	2350.0	2338.8	2358.8	2351.1	2342.9	2358.2
20°	2260.0	2258.8	2262.3	2260.6	2277.0	2280.0	2272.9	2287.6	2278.8	2274.1	2282.9
22.5°	2184.7	2183.5	2185.8	2181.1	2197.6	2199.4	2188.8	2206.4	2197.6	2188.8	2203.5
25°	2101.1	2094.7	2093.5	2095.3	2106.4	2108.2	2097.0	2110.0	2098.8	2091.7	2105.9
27.5°	1998.2	1990.0	1988.2	1990.0	2001.1	1992.9	1983.5	1992.9	1981.7	1975.3	1984.1
30°	1871.1	1859.4	1854.1	1850.6	1862.3	1859.4	1837.6	1848.2	1830.6	1821.1	1827.6
32.5°	1700.0	1693.5	1679.4	1671.2	1682.3	1660.0	1646.4	1646.4	1639.4	1623.5	1627.0
35°	1462.3	1452.3	1439.4	1432.3	1434.1	1404.1	1381.7	1386.4	1362.9	1358.8	1360.6
37.5°	1161.7	1145.3	1140.6	1125.9	1129.4	1102.9	1072.3	1072.9	1060.6	1047.6	1043.5
40°	872.9	870.0	865.3	852.9	857.6	828.8	817.0	817.6	809.4	800.0	804.7
42.5°	674.7	665.3	662.3	658.2	659.4	654.7	639.4	641.2	634.1	631.8	629.4
45°	548.2	538.2	531.2	534.7	534.7	529.4	523.5	527.1	523.5	518.8	521.2
47.5°	451.8	442.3	438.8	438.2	442.3	438.8	432.9	434.1	433.5	431.8	430.6
50°	360.6	358.2	355.3	353.5	355.3	354.1	348.8	351.8	353.5	347.6	349.4
52.5°	274.7	274.7	274.1	270.0	273.5	270.0	269.4	270.6	268.8	266.5	265.9
55°	201.2	199.4	196.5	195.9	197.1	195.9	194.7	195.3	196.5	190.6	190.6
57.5°	137.6	136.5	134.7	134.7	137.1	134.1	132.4	134.7	132.4	130.0	130.0
60°	88.2	87.6	85.9	85.9	85.9	85.3	83.5	84.1	85.3	81.8	82.4
62.5°	52.9	51.2	50.6	50.0	50.6	50.0	50.0	49.4	48.8	48.8	47.1
65°	28.8	27.6	26.5	27.1	27.1	26.5	26.5	26.5	25.3	24.7	24.1
67.5°	14.7	13.5	13.5	12.9	12.9	12.9	12.9	12.4	12.4	12.4	11.8
70°	9.4	8.8	8.2	8.2	8.2	7.6	7.6	7.6	7.6	7.6	7.1
72.5°	6.5	5.9	5.3	5.3	5.3	4.7	4.7	4.7	4.7	4.1	4.1
75°	4.7	4.1	3.5	3.5	3.5	2.9	2.9	2.9	2.9	2.9	2.9
77.5°	2.9	2.4	2.4	2.4	2.4	1.8	1.8	1.8	1.8	1.8	1.2
80°	1.8	1.8	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6
82.5°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0
87.5°	0.6	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: P244156

CATALOG NUMBER: LD8B40D010 ER8B409730 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8	2238.8
2.5°	2310.6	2305.8	2308.8	2330.6	2321.1	2318.2	2293.5	2315.3
5°	2338.2	2334.7	2334.7	2359.4	2348.2	2345.8	2321.7	2340.6
7.5°	2364.1	2360.6	2361.1	2386.4	2377.6	2374.1	2350.0	2368.8
10°	2397.6	2395.3	2395.8	2420.0	2410.6	2407.0	2382.3	2401.7
12.5°	2417.6	2414.1	2414.1	2440.0	2429.4	2424.1	2400.6	2419.4
15°	2402.3	2397.0	2397.0	2422.9	2411.1	2403.5	2382.9	2400.6
17.5°	2350.0	2344.7	2344.7	2367.0	2358.2	2347.0	2325.8	2342.3
20°	2277.0	2270.6	2268.8	2294.7	2282.3	2272.3	2253.5	2269.4
22.5°	2194.7	2191.7	2186.4	2212.3	2201.1	2190.6	2170.6	2182.9
25°	2095.9	2091.1	2085.9	2111.1	2100.0	2089.4	2073.5	2083.5
27.5°	1972.9	1973.5	1970.6	1990.6	1979.4	1973.5	1954.1	1970.6
30°	1824.1	1817.6	1815.3	1838.8	1828.2	1820.6	1796.4	1812.3
32.5°	1630.0	1620.6	1608.2	1634.7	1616.4	1610.0	1589.4	1612.3
35°	1347.6	1344.7	1333.5	1355.9	1345.9	1334.1	1321.2	1340.6
37.5°	1041.7	1044.1	1042.9	1048.8	1042.9	1035.3	1021.2	1014.1
40°	795.3	789.4	784.7	795.3	782.9	782.9	774.7	783.5
42.5°	623.5	621.2	627.0	629.4	622.3	621.2	620.0	619.4
45°	514.7	514.7	515.9	518.2	515.9	514.7	511.2	508.8
47.5°	424.1	426.5	424.1	431.8	427.6	426.5	419.4	422.3
50°	343.5	340.6	343.5	345.9	346.5	342.9	339.4	341.2
52.5°	266.5	261.8	260.6	264.1	261.8	261.8	259.4	258.8
55°	187.6	189.4	186.5	189.4	188.2	186.5	184.7	187.1
57.5°	127.1	127.6	126.5	128.2	125.3	125.9	125.3	124.7
60°	82.4	80.0	80.0	81.8	78.8	78.8	78.2	78.2
62.5°	47.1	46.5	46.5	45.9	45.3	45.3	45.3	44.1
65°	24.1	23.5	22.9	22.9	22.9	22.9	22.4	22.4
67.5°	11.8	11.2	11.2	11.8	11.2	11.2	11.2	11.2
70°	7.1	7.1	6.5	7.1	6.5	6.5	6.5	6.5
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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

(END OF REPORT)