

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: P245452

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245452
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: LSR8B40D010 EC8B409730 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3304.0 lumens
Efficiency: N/A
Efficacy: 80.8 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

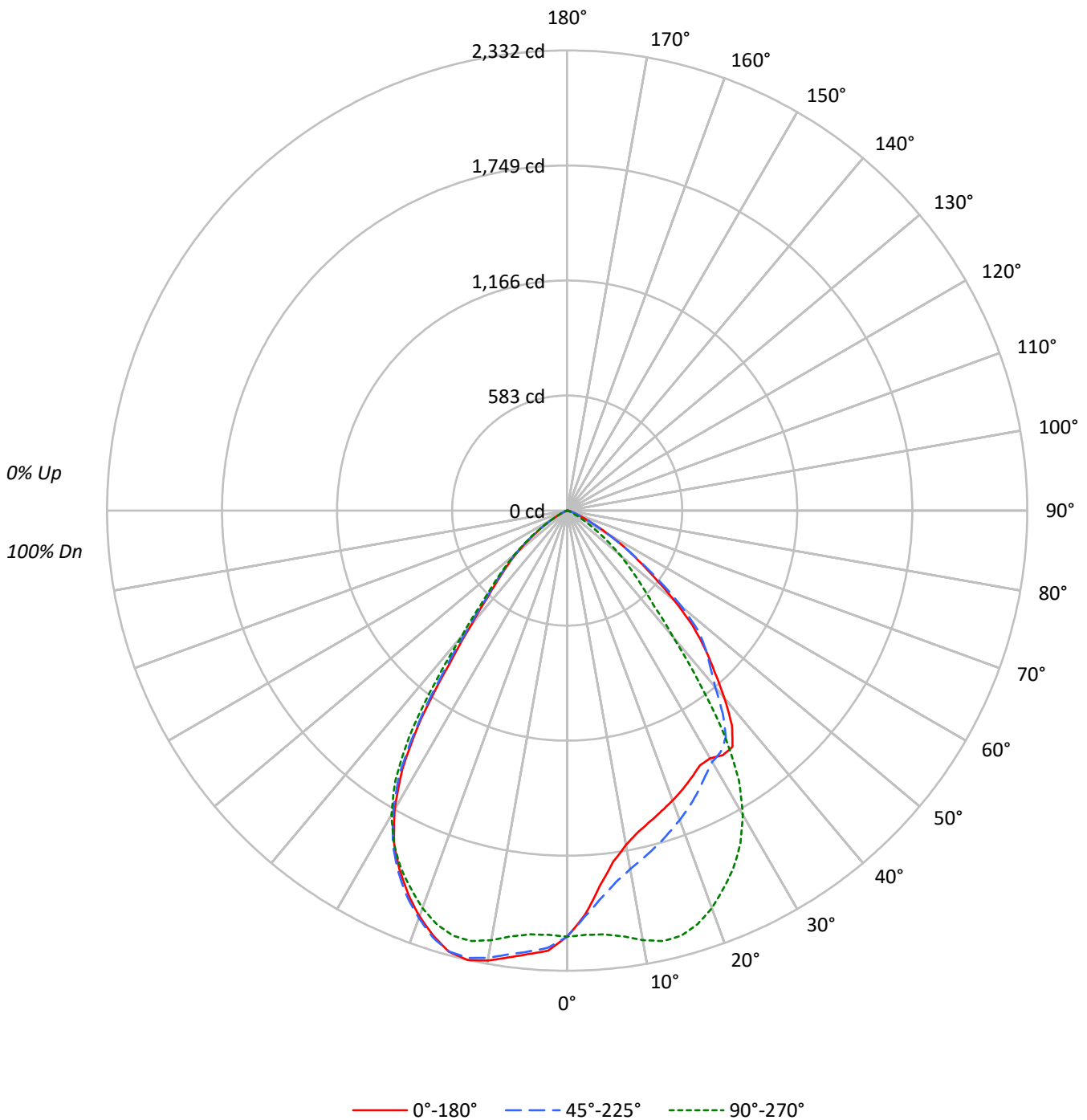
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

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	0
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°			



TEST NUMBER: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.2	6.1
10°-20°	581.1	17.6
20°-30°	843.3	25.5
30°-40°	830.6	25.1
40°-50°	520.7	15.8
50°-60°	251.2	7.6
60°-70°	60.8	1.8
70°-80°	12.3	0.4
80°-90°	2.8	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°	1625.6	49.2
0°-40°	2456.2	74.3
0°-60°	3228.1	97.7
0°-90°	3304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3304.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2158	2158	2158	2158	2158	
5°	1908	1972	2156	2243	2256	177
15°	1630	1758	2231	2313	2314	461
25°	1493	1570	1996	2024	2009	691
35°	1462	1402	1393	1314	1292	884
45°	987	994	527	505	491	754
55°	438	453	192	189	180	403
65°	103	102	28	24	22	117
75°	25	22	6	3	2	28
85°	7	6	1	0	0	8
90°	0	0	0	0	0	



TEST NUMBER: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4
2.5°	2051.8	2038.8	2014.4	2043.9	2043.9	2027.4	2060.3	2040.5	2056.4	2081.3	2059.2
5°	1907.8	1897.0	1876.6	1907.8	1911.7	1896.4	1936.1	1921.4	1944.6	1975.3	1972.4
7.5°	1793.8	1780.2	1761.5	1793.8	1800.0	1789.8	1827.8	1821.0	1851.6	1891.3	1898.1
10°	1719.5	1705.3	1688.9	1718.4	1722.9	1716.1	1754.7	1750.7	1780.7	1826.7	1844.8
12.5°	1666.7	1654.8	1636.7	1667.9	1673.0	1663.3	1699.6	1697.9	1729.1	1777.3	1800.0
15°	1629.9	1615.7	1599.3	1625.9	1632.7	1621.9	1656.5	1653.1	1684.9	1732.5	1758.1
17.5°	1595.3	1582.2	1565.2	1590.2	1597.0	1585.7	1619.7	1614.0	1641.2	1686.6	1712.7
20°	1563.0	1548.8	1533.5	1559.0	1563.0	1549.9	1583.9	1576.6	1601.0	1642.9	1668.4
22.5°	1529.5	1514.8	1498.9	1523.8	1527.8	1514.8	1546.0	1537.4	1560.1	1598.1	1621.4
25°	1492.6	1479.0	1463.2	1486.4	1489.8	1475.6	1508.5	1497.7	1517.6	1551.1	1570.3
27.5°	1455.8	1442.7	1425.2	1449.0	1450.7	1437.1	1467.1	1452.4	1468.8	1499.4	1515.9
30°	1449.5	1434.8	1416.7	1435.9	1436.5	1418.9	1447.3	1429.7	1438.8	1461.5	1471.1
32.5°	1469.4	1454.6	1435.9	1451.8	1450.1	1430.8	1458.1	1436.5	1439.3	1451.2	1449.0
35°	1461.5	1443.9	1421.8	1438.8	1438.8	1415.5	1442.7	1417.2	1414.4	1416.1	1401.9
37.5°	1371.3	1357.7	1336.7	1353.1	1351.4	1333.9	1354.8	1333.9	1324.2	1320.2	1294.7
40°	1238.6	1222.1	1206.3	1223.8	1225.5	1206.8	1234.0	1210.2	1207.4	1196.0	1166.0
42.5°	1104.2	1098.5	1083.2	1097.9	1105.9	1090.0	1112.7	1101.3	1103.0	1100.2	1071.8
45°	986.8	977.1	965.8	982.8	987.9	980.0	1002.7	995.9	1002.7	1016.8	993.6
47.5°	860.3	850.7	838.2	856.3	865.4	850.7	870.0	867.7	877.9	902.3	900.0
50°	707.8	701.0	698.7	701.0	706.6	699.8	713.4	714.0	720.8	754.3	756.5
52.5°	560.3	558.6	550.7	558.0	558.0	547.3	560.9	554.6	561.4	584.1	598.9
55°	438.4	436.7	431.6	438.4	431.0	427.0	431.0	424.8	419.7	437.2	452.6
57.5°	341.4	335.7	329.5	332.3	331.8	323.3	327.8	320.4	316.4	322.7	336.3
60°	243.3	241.6	235.9	238.8	241.0	234.8	239.3	235.9	229.1	234.2	234.8
62.5°	161.6	162.8	159.4	159.9	158.2	157.1	159.9	161.6	159.9	157.7	158.2
65°	102.6	102.1	101.5	102.1	103.2	100.9	102.6	103.8	102.1	102.1	101.5
67.5°	68.1	66.4	64.7	65.8	66.9	65.2	66.9	66.4	66.9	66.4	64.7
70°	45.9	45.4	44.8	45.4	45.4	44.2	45.4	44.8	45.4	44.8	43.1
72.5°	33.5	33.5	32.9	33.5	33.5	32.3	32.9	31.8	32.3	31.8	30.6
75°	25.0	25.0	24.4	25.0	24.4	23.8	24.4	23.8	22.7	22.7	21.6
77.5°	18.1	18.1	18.1	18.1	18.1	17.6	17.6	17.0	16.4	15.9	15.9
80°	13.6	13.0	13.0	13.0	13.0	12.5	13.0	12.5	11.9	11.3	10.8
82.5°	9.6	10.2	9.6	9.6	9.6	9.1	9.6	9.1	9.1	8.5	7.4
85°	7.4	7.4	7.4	7.4	7.4	6.8	6.8	6.8	6.2	6.2	5.7
87.5°	4.0	4.0	4.0	4.5	4.0	4.0	4.0	3.4	3.4	2.8	2.8
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: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4
2.5°	2088.7	2091.5	2085.3	2094.9	2132.3	2102.3	2114.8	2118.7	2147.1	2152.2	2148.8
5°	2009.3	2021.8	2029.7	2051.3	2092.7	2071.1	2093.2	2107.4	2143.7	2155.6	2158.4
7.5°	1946.9	1973.0	1992.3	2027.4	2076.2	2059.8	2093.2	2116.5	2160.7	2176.0	2183.4
10°	1900.4	1940.1	1973.6	2021.8	2076.8	2066.0	2109.7	2142.6	2191.9	2210.0	2219.1
12.5°	1865.2	1913.4	1958.2	2019.5	2079.0	2073.9	2126.7	2164.1	2216.3	2234.4	2245.2
15°	1826.7	1882.3	1934.4	2003.0	2067.1	2066.0	2122.7	2162.4	2215.7	2231.0	2241.2
17.5°	1780.7	1840.3	1897.6	1971.9	2035.4	2036.5	2093.8	2132.9	2185.1	2197.6	2204.4
20°	1734.2	1793.2	1850.5	1927.1	1989.4	1991.1	2047.3	2083.6	2133.5	2143.7	2145.4
22.5°	1684.9	1739.9	1797.2	1873.2	1933.3	1934.4	1990.0	2024.0	2066.6	2071.7	2076.2
25°	1628.8	1682.6	1736.5	1811.9	1869.2	1872.6	1923.1	1953.1	1992.3	1996.2	1997.9
27.5°	1570.3	1614.6	1666.2	1730.8	1788.7	1786.4	1834.0	1868.1	1903.2	1901.0	1900.4
30°	1511.4	1548.2	1580.0	1642.4	1684.9	1686.6	1731.4	1747.8	1784.7	1780.2	1779.6
32.5°	1470.0	1479.6	1488.1	1519.9	1560.1	1546.0	1576.6	1597.0	1622.5	1620.8	1621.4
35°	1394.0	1376.4	1350.9	1355.4	1379.8	1357.7	1374.1	1373.6	1399.6	1393.4	1400.8
37.5°	1264.1	1214.2	1157.5	1125.2	1129.7	1101.9	1096.2	1109.8	1118.9	1101.3	1107.6
40°	1125.7	1052.0	963.5	889.8	885.8	851.2	845.0	831.4	849.0	834.2	838.8
42.5°	1023.6	926.1	809.8	720.2	701.0	672.0	655.0	652.7	657.9	647.6	644.8
45°	945.4	841.6	708.3	605.7	584.1	552.9	535.9	529.7	530.3	526.8	524.0
47.5°	853.5	749.2	614.2	509.3	484.9	455.4	438.4	434.4	436.7	432.1	428.7
50°	726.5	632.9	509.8	414.0	392.4	370.9	357.3	353.3	352.7	349.3	347.1
52.5°	589.8	512.1	405.5	325.5	306.2	285.3	275.6	270.5	271.1	267.7	264.3
55°	456.5	408.3	314.2	246.1	228.5	212.1	203.0	196.8	195.1	191.7	190.0
57.5°	339.7	307.4	235.4	177.5	167.3	151.4	142.3	135.0	133.8	132.1	131.6
60°	238.2	214.9	165.6	126.5	114.6	104.9	95.8	88.5	85.1	84.5	82.8
62.5°	154.3	140.1	108.9	84.5	75.4	68.6	59.5	54.4	52.2	49.9	50.5
65°	95.8	85.1	68.1	54.4	49.3	44.2	37.4	32.9	30.6	28.4	28.9
67.5°	59.5	53.3	43.1	35.2	31.8	27.8	22.7	19.3	17.6	15.9	14.7
70°	40.3	34.6	29.5	25.0	22.7	19.8	16.4	13.6	12.5	11.3	10.2
72.5°	28.4	25.5	21.6	18.7	17.0	14.7	12.5	10.8	9.6	8.5	7.4
75°	20.4	18.1	15.9	13.6	12.5	11.3	9.6	8.5	7.4	6.2	5.1
77.5°	14.7	13.0	11.3	10.2	9.6	7.9	6.8	6.2	5.7	4.5	3.4
80°	10.2	9.1	7.4	6.8	6.8	5.7	5.1	4.5	4.0	2.8	2.3
82.5°	6.8	6.2	5.7	5.1	4.5	4.0	4.0	2.8	2.3	1.7	1.1
85°	5.1	4.5	4.0	3.4	3.4	2.8	2.3	1.7	1.7	1.1	0.6
87.5°	2.8	2.8	2.3	1.7	1.7	1.1	1.1	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



TEST NUMBER: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4
2.5°	2177.7	2179.4	2189.1	2181.7	2200.4	2214.0	2207.2	2222.5	2217.4	2216.3	2233.9
5°	2192.5	2196.4	2209.5	2202.7	2223.1	2237.8	2231.0	2248.0	2242.9	2241.8	2259.9
7.5°	2220.8	2224.8	2236.1	2230.5	2252.0	2265.1	2256.5	2275.3	2268.5	2267.9	2285.5
10°	2256.5	2262.2	2271.9	2266.2	2286.0	2297.4	2288.9	2307.0	2300.8	2297.9	2317.2
12.5°	2283.2	2287.2	2296.8	2292.3	2311.6	2320.1	2312.7	2330.3	2322.3	2320.1	2337.1
15°	2277.0	2280.9	2288.9	2284.9	2303.1	2311.0	2301.3	2320.6	2312.7	2308.2	2323.5
17.5°	2237.3	2239.5	2245.2	2241.2	2260.5	2265.6	2254.8	2274.1	2266.8	2258.8	2273.6
20°	2178.9	2177.7	2181.1	2179.4	2195.3	2198.1	2191.3	2205.5	2197.0	2192.5	2201.0
22.5°	2106.3	2105.1	2107.4	2102.9	2118.7	2120.4	2110.2	2127.2	2118.7	2110.2	2124.4
25°	2025.7	2019.5	2018.4	2020.1	2030.8	2032.5	2021.8	2034.2	2023.5	2016.7	2030.3
27.5°	1926.5	1918.5	1916.8	1918.5	1929.3	1921.4	1912.3	1921.4	1910.6	1904.4	1912.9
30°	1804.0	1792.6	1787.5	1784.1	1795.5	1792.6	1771.7	1781.9	1764.9	1755.8	1762.0
32.5°	1639.0	1632.7	1619.1	1611.2	1621.9	1600.4	1587.4	1587.4	1580.5	1565.2	1568.6
35°	1409.8	1400.2	1387.7	1380.9	1382.6	1353.7	1332.2	1336.7	1314.0	1310.0	1311.7
37.5°	1120.1	1104.2	1099.6	1085.5	1088.9	1063.3	1033.8	1034.4	1022.5	1010.0	1006.1
40°	841.6	838.8	834.2	822.3	826.9	799.1	787.7	788.3	780.3	771.3	775.8
42.5°	650.5	641.4	638.6	634.6	635.7	631.2	616.5	618.2	611.3	609.1	606.8
45°	528.6	518.9	512.1	515.5	515.5	510.4	504.7	508.1	504.7	500.2	502.5
47.5°	435.5	426.5	423.1	422.5	426.5	423.1	417.4	418.5	418.0	416.3	415.1
50°	347.6	345.4	342.5	340.8	342.5	341.4	336.3	339.1	340.8	335.2	336.9
52.5°	264.8	264.8	264.3	260.3	263.7	260.3	259.7	260.9	259.2	256.9	256.3
55°	194.0	192.3	189.4	188.8	190.0	188.8	187.7	188.3	189.4	183.7	183.7
57.5°	132.7	131.6	129.9	129.9	132.1	129.3	127.6	129.9	127.6	125.3	125.3
60°	85.1	84.5	82.8	82.8	82.8	82.2	80.5	81.1	82.2	78.8	79.4
62.5°	51.0	49.3	48.8	48.2	48.8	48.2	48.2	47.6	47.1	47.1	45.4
65°	27.8	26.7	25.5	26.1	26.1	25.5	25.5	25.5	24.4	23.8	23.3
67.5°	14.2	13.0	13.0	12.5	12.5	12.5	12.5	11.9	11.9	11.9	11.3
70°	9.1	8.5	7.9	7.9	7.9	7.4	7.4	7.4	7.4	7.4	6.8
72.5°	6.2	5.7	5.1	5.1	5.1	4.5	4.5	4.5	4.5	4.0	4.0
75°	4.5	4.0	3.4	3.4	3.4	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.8	2.3	2.3	2.3	2.3	1.7	1.7	1.7	1.7	1.7	1.1
80°	1.7	1.7	1.1	1.1	1.1	1.1	0.6	0.6	0.6	0.6	0.6
82.5°	1.1	1.1	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: P245452

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4	2158.4
2.5°	2227.6	2223.1	2225.9	2246.9	2237.8	2235.0	2211.2	2232.2
5°	2254.3	2250.9	2250.9	2274.7	2263.9	2261.7	2238.4	2256.5
7.5°	2279.2	2275.8	2276.4	2300.8	2292.3	2288.9	2265.6	2283.8
10°	2311.6	2309.3	2309.9	2333.1	2324.0	2320.6	2296.8	2315.5
12.5°	2330.8	2327.4	2327.4	2352.4	2342.2	2337.1	2314.4	2332.5
15°	2316.1	2311.0	2311.0	2335.9	2324.6	2317.2	2297.4	2314.4
17.5°	2265.6	2260.5	2260.5	2282.1	2273.6	2262.8	2242.4	2258.2
20°	2195.3	2189.1	2187.4	2212.3	2200.4	2190.8	2172.6	2187.9
22.5°	2115.9	2113.1	2108.0	2132.9	2122.1	2111.9	2092.7	2104.6
25°	2020.6	2016.1	2011.0	2035.4	2024.6	2014.4	1999.1	2008.7
27.5°	1902.1	1902.7	1899.8	1919.1	1908.3	1902.7	1884.0	1899.8
30°	1758.6	1752.4	1750.1	1772.8	1762.6	1755.2	1732.0	1747.3
32.5°	1571.5	1562.4	1550.5	1576.0	1558.4	1552.2	1532.3	1554.5
35°	1299.3	1296.4	1285.6	1307.2	1297.6	1286.2	1273.7	1292.5
37.5°	1004.4	1006.6	1005.5	1011.2	1005.5	998.1	984.5	977.7
40°	766.7	761.1	756.5	766.7	754.8	754.8	746.9	755.4
42.5°	601.1	598.9	604.5	606.8	600.0	598.9	597.7	597.2
45°	496.2	496.2	497.4	499.6	497.4	496.2	492.8	490.6
47.5°	408.9	411.2	408.9	416.3	412.3	411.2	404.4	407.2
50°	331.2	328.4	331.2	333.5	334.0	330.6	327.2	328.9
52.5°	256.9	252.4	251.2	254.6	252.4	252.4	250.1	249.5
55°	180.9	182.6	179.8	182.6	181.5	179.8	178.1	180.3
57.5°	122.5	123.1	121.9	123.6	120.8	121.4	120.8	120.2
60°	79.4	77.1	77.1	78.8	76.0	76.0	75.4	75.4
62.5°	45.4	44.8	44.8	44.2	43.7	43.7	43.7	42.5
65°	23.3	22.7	22.1	22.1	22.1	22.1	21.6	21.6
67.5°	11.3	10.8	10.8	11.3	10.8	10.8	10.8	10.8
70°	6.8	6.8	6.2	6.8	6.2	6.2	6.2	6.2
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	1.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)