

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: P245446

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245446
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 EC8B409727 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3123.0 lumens
Efficiency: N/A
Efficacy: 76.4 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

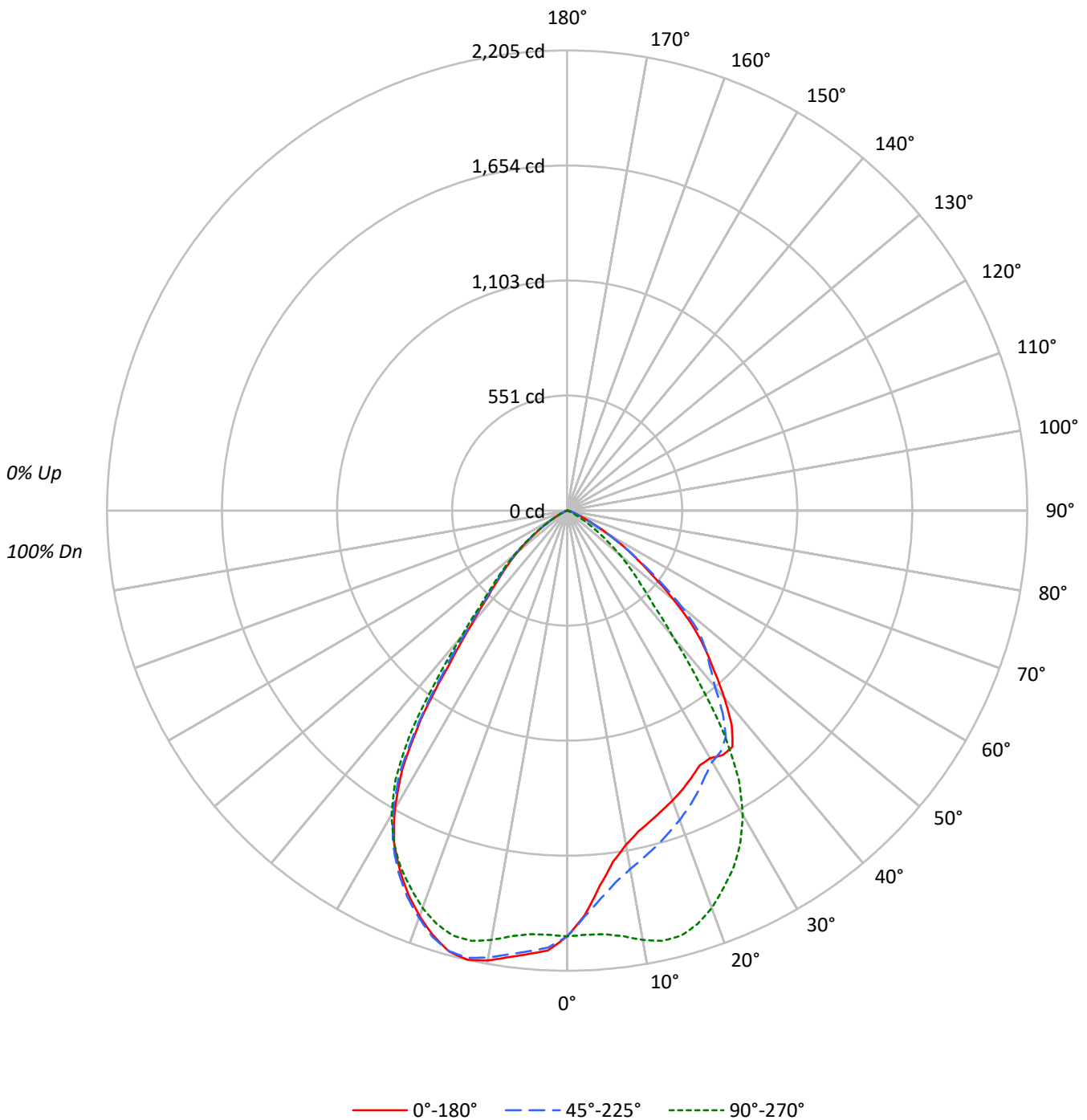
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 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	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: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.2	6.1
10°-20°	549.2	17.6
20°-30°	797.1	25.5
30°-40°	785.1	25.1
40°-50°	492.1	15.8
50°-60°	237.5	7.6
60°-70°	57.5	1.8
70°-80°	11.6	0.4
80°-90°	2.7	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°	1536.5	49.2
0°-40°	2321.6	74.3
0°-60°	3051.3	97.7
0°-90°	3123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3123.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2040	2040	2040	2040	2040	
5°	1803	1864	2038	2120	2133	167
15°	1541	1662	2109	2186	2188	436
25°	1411	1484	1887	1913	1899	653
35°	1381	1325	1317	1242	1222	836
45°	933	939	498	477	464	713
55°	414	428	181	179	170	381
65°	97	96	27	23	20	111
75°	24	20	6	3	2	26
85°	7	5	1	0	0	7
90°	0	0	0	0	0	



TEST NUMBER: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2
2.5°	1939.4	1927.1	1904.0	1931.9	1931.9	1916.4	1947.5	1928.7	1943.7	1967.3	1946.4
5°	1803.3	1793.1	1773.8	1803.3	1807.0	1792.5	1830.1	1816.1	1838.1	1867.0	1864.4
7.5°	1695.5	1682.6	1665.0	1695.5	1701.4	1691.8	1727.7	1721.2	1750.2	1787.7	1794.1
10°	1625.3	1611.9	1596.3	1624.2	1628.5	1622.1	1658.5	1654.8	1683.2	1726.6	1743.8
12.5°	1575.4	1564.2	1547.0	1576.5	1581.3	1572.2	1606.5	1604.9	1634.4	1680.0	1701.4
15°	1540.6	1527.2	1511.7	1536.8	1543.3	1533.1	1565.8	1562.6	1592.6	1637.6	1661.7
17.5°	1507.9	1495.6	1479.5	1503.1	1509.5	1498.8	1530.9	1525.6	1551.3	1594.2	1618.9
20°	1477.3	1463.9	1449.5	1473.6	1477.3	1465.0	1497.2	1490.2	1513.3	1552.9	1577.0
22.5°	1445.7	1431.8	1416.8	1440.4	1444.1	1431.8	1461.3	1453.2	1474.7	1510.6	1532.6
25°	1410.9	1398.0	1383.0	1405.0	1408.2	1394.8	1425.9	1415.7	1434.5	1466.1	1484.3
27.5°	1376.0	1363.7	1347.1	1369.6	1371.2	1358.3	1386.8	1372.8	1388.4	1417.3	1432.9
30°	1370.1	1356.2	1339.0	1357.3	1357.8	1341.2	1368.0	1351.4	1359.9	1381.4	1390.5
32.5°	1388.9	1375.0	1357.3	1372.3	1370.7	1352.4	1378.2	1357.8	1360.5	1371.7	1369.6
35°	1381.4	1364.8	1343.9	1359.9	1359.9	1338.0	1363.7	1339.6	1336.9	1338.5	1325.1
37.5°	1296.2	1283.3	1263.5	1279.0	1277.4	1260.8	1280.6	1260.8	1251.7	1247.9	1223.8
40°	1170.7	1155.2	1140.2	1156.8	1158.4	1140.7	1166.4	1143.9	1141.2	1130.5	1102.1
42.5°	1043.7	1038.3	1023.8	1037.8	1045.3	1030.3	1051.7	1041.0	1042.6	1039.9	1013.1
45°	932.7	923.6	912.9	929.0	933.8	926.3	947.7	941.3	947.7	961.1	939.2
47.5°	813.2	804.1	792.3	809.4	818.0	804.1	822.3	820.2	829.8	852.8	850.7
50°	669.0	662.6	660.4	662.6	667.9	661.5	674.3	674.9	681.3	712.9	715.1
52.5°	529.6	528.0	520.5	527.5	527.5	517.3	530.1	524.3	530.7	552.1	566.1
55°	414.4	412.8	407.9	414.4	407.4	403.6	407.4	401.5	396.7	413.3	427.8
57.5°	322.7	317.3	311.4	314.1	313.6	305.5	309.8	302.9	299.1	305.0	317.9
60°	230.0	228.4	223.0	225.7	227.8	221.9	226.2	223.0	216.6	221.4	221.9
62.5°	152.8	153.8	150.6	151.2	149.6	148.5	151.2	152.8	151.2	149.0	149.6
65°	97.0	96.5	96.0	96.5	97.6	95.4	97.0	98.1	96.5	96.5	96.0
67.5°	64.3	62.7	61.1	62.2	63.3	61.6	63.3	62.7	63.3	62.7	61.1
70°	43.4	42.9	42.3	42.9	42.9	41.8	42.9	42.3	42.9	42.3	40.7
72.5°	31.6	31.6	31.1	31.6	31.6	30.6	31.1	30.0	30.6	30.0	28.9
75°	23.6	23.6	23.0	23.6	23.0	22.5	23.0	22.5	21.4	21.4	20.4
77.5°	17.2	17.2	17.2	17.2	17.2	16.6	16.6	16.1	15.5	15.0	15.0
80°	12.9	12.3	12.3	12.3	12.3	11.8	12.3	11.8	11.3	10.7	10.2
82.5°	9.1	9.6	9.1	9.1	9.1	8.6	9.1	8.6	8.6	8.0	7.0
85°	7.0	7.0	7.0	7.0	7.0	6.4	6.4	6.4	5.9	5.9	5.4
87.5°	3.8	3.8	3.8	4.3	3.8	3.8	3.8	3.2	3.2	2.7	2.7
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: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2
2.5°	1974.3	1976.9	1971.0	1980.2	2015.5	1987.1	1998.9	2002.7	2029.5	2034.3	2031.1
5°	1899.2	1911.0	1918.5	1938.9	1978.0	1957.6	1978.5	1991.9	2026.3	2037.5	2040.2
7.5°	1840.2	1864.9	1883.1	1916.4	1962.5	1946.9	1978.5	2000.5	2042.3	2056.8	2063.8
10°	1796.3	1833.8	1865.4	1911.0	1963.0	1952.8	1994.1	2025.2	2071.8	2089.0	2097.5
12.5°	1763.1	1808.6	1851.0	1908.9	1965.1	1960.3	2010.2	2045.6	2094.9	2112.0	2122.2
15°	1726.6	1779.1	1828.5	1893.3	1953.9	1952.8	2006.4	2043.9	2094.3	2108.8	2118.5
17.5°	1683.2	1739.5	1793.6	1863.8	1923.9	1924.9	1979.1	2016.1	2065.4	2077.2	2083.6
20°	1639.2	1695.0	1749.1	1821.5	1880.5	1882.1	1935.1	1969.4	2016.6	2026.3	2027.9
22.5°	1592.6	1644.6	1698.7	1770.6	1827.4	1828.5	1881.0	1913.1	1953.4	1958.2	1962.5
25°	1539.5	1590.4	1641.4	1712.7	1766.8	1770.0	1817.7	1846.1	1883.1	1886.9	1888.5
27.5°	1484.3	1526.1	1574.9	1636.0	1690.7	1688.5	1733.6	1765.7	1799.0	1796.8	1796.3
30°	1428.6	1463.4	1493.4	1552.4	1592.6	1594.2	1636.5	1652.1	1686.9	1682.6	1682.1
32.5°	1389.4	1398.5	1406.6	1436.6	1474.7	1461.3	1490.2	1509.5	1533.6	1532.0	1532.6
35°	1317.6	1301.0	1276.9	1281.2	1304.2	1283.3	1298.8	1298.3	1323.0	1317.1	1324.0
37.5°	1194.8	1147.7	1094.1	1063.5	1067.8	1041.5	1036.2	1049.0	1057.6	1041.0	1046.9
40°	1064.1	994.4	910.7	841.1	837.3	804.6	798.7	785.8	802.5	788.5	792.8
42.5°	967.6	875.4	765.5	680.8	662.6	635.2	619.1	617.0	621.8	612.2	609.5
45°	893.6	795.5	669.5	572.5	552.1	522.6	506.6	500.7	501.2	498.0	495.3
47.5°	806.7	708.1	580.5	481.4	458.3	430.4	414.4	410.6	412.8	408.5	405.3
50°	686.7	598.2	481.9	391.3	370.9	350.6	337.7	334.0	333.4	330.2	328.1
52.5°	557.5	484.0	383.3	307.7	289.5	269.6	260.5	255.7	256.2	253.0	249.8
55°	431.5	386.0	297.0	232.6	216.0	200.5	191.9	186.0	184.4	181.2	179.6
57.5°	321.1	290.5	222.5	167.8	158.1	143.1	134.5	127.6	126.5	124.9	124.4
60°	225.1	203.2	156.5	119.5	108.3	99.2	90.6	83.6	80.4	79.9	78.3
62.5°	145.8	132.4	102.9	79.9	71.3	64.9	56.3	51.5	49.3	47.2	47.7
65°	90.6	80.4	64.3	51.5	46.6	41.8	35.4	31.1	28.9	26.8	27.3
67.5°	56.3	50.4	40.7	33.2	30.0	26.3	21.4	18.2	16.6	15.0	13.9
70°	38.1	32.7	27.9	23.6	21.4	18.8	15.5	12.9	11.8	10.7	9.6
72.5°	26.8	24.1	20.4	17.7	16.1	13.9	11.8	10.2	9.1	8.0	7.0
75°	19.3	17.2	15.0	12.9	11.8	10.7	9.1	8.0	7.0	5.9	4.8
77.5°	13.9	12.3	10.7	9.6	9.1	7.5	6.4	5.9	5.4	4.3	3.2
80°	9.6	8.6	7.0	6.4	6.4	5.4	4.8	4.3	3.8	2.7	2.1
82.5°	6.4	5.9	5.4	4.8	4.3	3.8	3.8	2.7	2.1	1.6	1.1
85°	4.8	4.3	3.8	3.2	3.2	2.7	2.1	1.6	1.6	1.1	0.5
87.5°	2.7	2.7	2.1	1.6	1.6	1.1	1.1	0.5	0.5	0.5	0.5
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: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2
2.5°	2058.4	2060.0	2069.1	2062.2	2079.9	2092.7	2086.3	2100.8	2095.9	2094.9	2111.5
5°	2072.4	2076.1	2088.4	2082.0	2101.3	2115.2	2108.8	2124.9	2120.1	2119.0	2136.1
7.5°	2099.2	2102.9	2113.6	2108.3	2128.6	2141.0	2132.9	2150.6	2144.2	2143.6	2160.3
10°	2132.9	2138.3	2147.4	2142.0	2160.8	2171.5	2163.5	2180.6	2174.7	2172.1	2190.3
12.5°	2158.1	2161.9	2171.0	2166.7	2184.9	2193.0	2186.0	2202.6	2195.1	2193.0	2209.0
15°	2152.2	2156.0	2163.5	2159.7	2176.9	2184.4	2175.3	2193.5	2186.0	2181.7	2196.2
17.5°	2114.7	2116.8	2122.2	2118.5	2136.7	2141.5	2131.3	2149.5	2142.6	2135.1	2149.0
20°	2059.5	2058.4	2061.6	2060.0	2075.0	2077.7	2071.3	2084.7	2076.6	2072.4	2080.4
22.5°	1990.9	1989.8	1991.9	1987.7	2002.7	2004.3	1994.6	2010.7	2002.7	1994.6	2008.0
25°	1914.8	1908.9	1907.8	1909.4	1919.6	1921.2	1911.0	1922.8	1912.6	1906.2	1919.0
27.5°	1820.9	1813.4	1811.8	1813.4	1823.6	1816.1	1807.5	1816.1	1805.9	1800.0	1808.1
30°	1705.2	1694.4	1689.6	1686.4	1697.1	1694.4	1674.6	1684.3	1668.2	1659.6	1665.5
32.5°	1549.2	1543.3	1530.4	1522.9	1533.1	1512.7	1500.4	1500.4	1494.0	1479.5	1482.7
35°	1332.6	1323.5	1311.7	1305.3	1306.9	1279.5	1259.2	1263.5	1242.0	1238.3	1239.9
37.5°	1058.7	1043.7	1039.4	1026.0	1029.2	1005.1	977.2	977.7	966.5	954.7	950.9
40°	795.5	792.8	788.5	777.3	781.6	755.3	744.6	745.1	737.6	729.0	733.3
42.5°	614.8	606.3	603.6	599.8	600.9	596.6	582.7	584.3	577.9	575.7	573.6
45°	499.6	490.5	484.0	487.3	487.3	482.4	477.1	480.3	477.1	472.8	474.9
47.5°	411.7	403.1	399.9	399.4	403.1	399.9	394.5	395.6	395.1	393.5	392.4
50°	328.6	326.5	323.8	322.2	323.8	322.7	317.9	320.6	322.2	316.8	318.4
52.5°	250.3	250.3	249.8	246.0	249.3	246.0	245.5	246.6	245.0	242.8	242.3
55°	183.3	181.7	179.0	178.5	179.6	178.5	177.4	178.0	179.0	173.7	173.7
57.5°	125.4	124.4	122.8	122.8	124.9	122.2	120.6	122.8	120.6	118.5	118.5
60°	80.4	79.9	78.3	78.3	78.3	77.7	76.1	76.7	77.7	74.5	75.0
62.5°	48.2	46.6	46.1	45.6	46.1	45.6	45.6	45.0	44.5	44.5	42.9
65°	26.3	25.2	24.1	24.7	24.7	24.1	24.1	24.1	23.0	22.5	22.0
67.5°	13.4	12.3	12.3	11.8	11.8	11.8	11.8	11.3	11.3	11.3	10.7
70°	8.6	8.0	7.5	7.5	7.5	7.0	7.0	7.0	7.0	7.0	6.4
72.5°	5.9	5.4	4.8	4.8	4.8	4.3	4.3	4.3	4.3	3.8	3.8
75°	4.3	3.8	3.2	3.2	3.2	2.7	2.7	2.7	2.7	2.7	2.7
77.5°	2.7	2.1	2.1	2.1	2.1	1.6	1.6	1.6	1.6	1.6	1.1
80°	1.6	1.6	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.5
82.5°	1.1	1.1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
87.5°	0.5	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: P245446

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2	2040.2
2.5°	2105.6	2101.3	2104.0	2123.8	2115.2	2112.6	2090.0	2109.9
5°	2130.8	2127.6	2127.6	2150.1	2139.9	2137.8	2115.8	2132.9
7.5°	2154.4	2151.2	2151.7	2174.7	2166.7	2163.5	2141.5	2158.7
10°	2184.9	2182.8	2183.3	2205.3	2196.7	2193.5	2171.0	2188.7
12.5°	2203.2	2199.9	2199.9	2223.5	2213.9	2209.0	2187.6	2204.8
15°	2189.2	2184.4	2184.4	2208.0	2197.3	2190.3	2171.5	2187.6
17.5°	2141.5	2136.7	2136.7	2157.1	2149.0	2138.8	2119.5	2134.5
20°	2075.0	2069.1	2067.5	2091.1	2079.9	2070.7	2053.6	2068.1
22.5°	2000.0	1997.3	1992.5	2016.1	2005.9	1996.2	1978.0	1989.3
25°	1909.9	1905.6	1900.8	1923.9	1913.7	1904.0	1889.6	1898.7
27.5°	1797.9	1798.4	1795.8	1814.0	1803.8	1798.4	1780.7	1795.8
30°	1662.3	1656.4	1654.2	1675.7	1666.0	1659.1	1637.1	1651.6
32.5°	1485.4	1476.8	1465.6	1489.7	1473.1	1467.2	1448.4	1469.3
35°	1228.1	1225.4	1215.2	1235.6	1226.5	1215.8	1204.0	1221.6
37.5°	949.3	951.5	950.4	955.8	950.4	943.4	930.6	924.1
40°	724.7	719.4	715.1	724.7	713.5	713.5	706.0	714.0
42.5°	568.2	566.1	571.4	573.6	567.1	566.1	565.0	564.5
45°	469.0	469.0	470.1	472.3	470.1	469.0	465.8	463.7
47.5°	386.5	388.6	386.5	393.5	389.7	388.6	382.2	384.9
50°	313.1	310.4	313.1	315.2	315.7	312.5	309.3	310.9
52.5°	242.8	238.5	237.5	240.7	238.5	238.5	236.4	235.9
55°	171.0	172.6	169.9	172.6	171.5	169.9	168.3	170.5
57.5°	115.8	116.3	115.2	116.9	114.2	114.7	114.2	113.6
60°	75.0	72.9	72.9	74.5	71.8	71.8	71.3	71.3
62.5°	42.9	42.3	42.3	41.8	41.3	41.3	41.3	40.2
65°	22.0	21.4	20.9	20.9	20.9	20.9	20.4	20.4
67.5°	10.7	10.2	10.2	10.7	10.2	10.2	10.2	10.2
70°	6.4	6.4	5.9	6.4	5.9	5.9	5.9	5.9
72.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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)