

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: P244150

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244150
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 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3239.0 lumens
Efficiency: N/A
Efficacy: 79.2 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

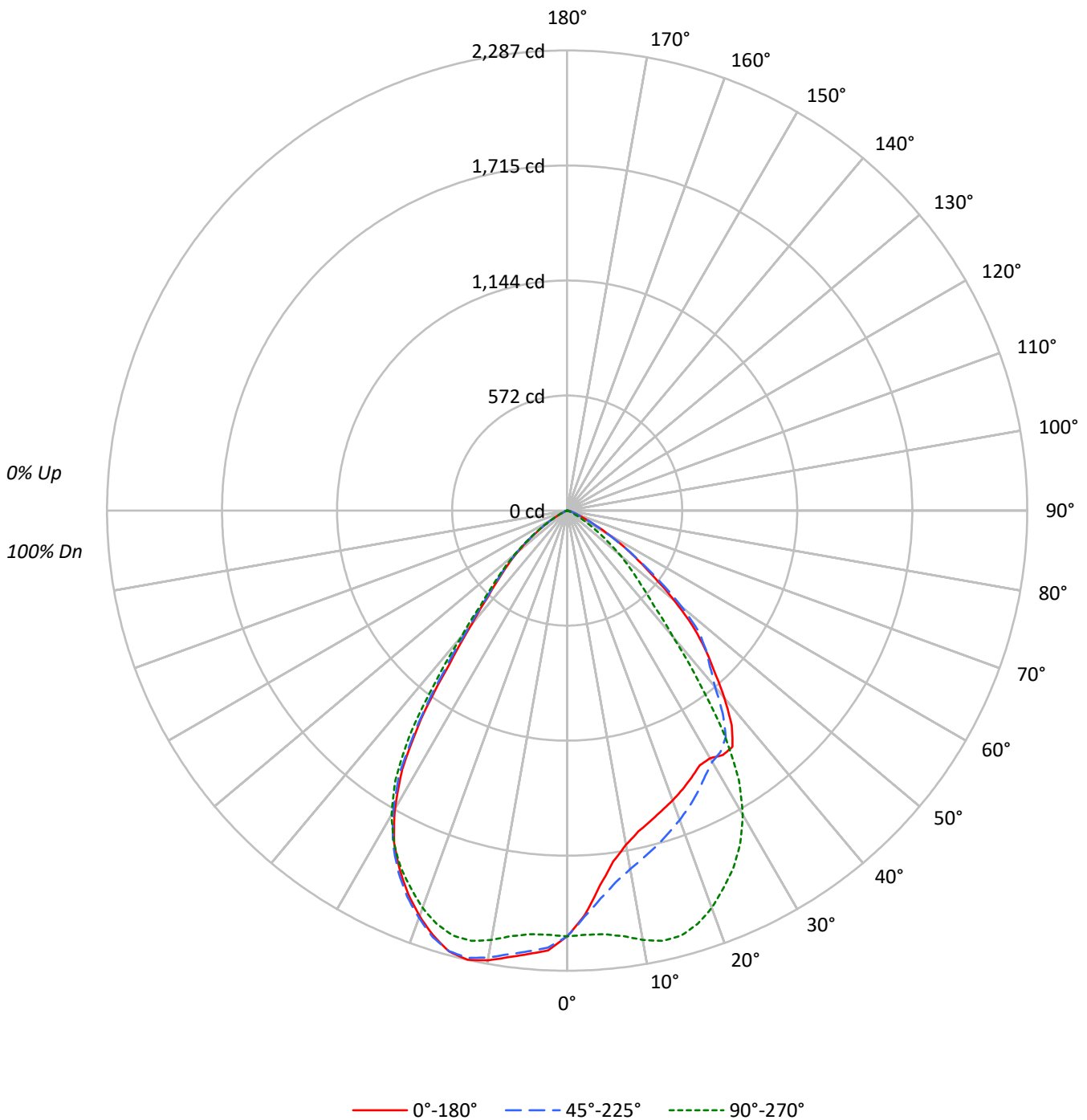
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.2	6.1
10°-20°	569.6	17.6
20°-30°	826.8	25.5
30°-40°	814.3	25.1
40°-50°	510.4	15.8
50°-60°	246.3	7.6
60°-70°	59.6	1.8
70°-80°	12.0	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°	1593.6	49.2
0°-40°	2407.9	74.3
0°-60°	3164.6	97.7
0°-90°	3239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3239.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2116	2116	2116	2116	2116	
5°	1870	1934	2113	2199	2212	173
15°	1598	1724	2187	2267	2269	452
25°	1463	1539	1957	1984	1969	677
35°	1433	1374	1366	1288	1267	867
45°	967	974	516	495	481	740
55°	430	444	188	186	177	395
65°	101	100	28	24	21	115
75°	24	21	6	3	2	27
85°	7	6	1	0	0	7
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°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2011.5	1998.7	1974.8	2003.7	2003.7	1987.5	2019.8	2000.3	2015.9	2040.4	2018.7
5°	1870.2	1859.7	1839.7	1870.2	1874.1	1859.1	1898.0	1883.6	1906.4	1936.4	1933.6
7.5°	1758.5	1745.1	1726.8	1758.5	1764.6	1754.6	1791.8	1785.2	1815.2	1854.1	1860.8
10°	1685.7	1671.8	1655.6	1684.6	1689.0	1682.3	1720.1	1716.2	1745.7	1790.7	1808.5
12.5°	1634.0	1622.3	1604.5	1635.1	1640.1	1630.6	1666.2	1664.5	1695.1	1742.4	1764.6
15°	1597.8	1583.9	1567.8	1593.9	1600.6	1590.0	1624.0	1620.6	1651.7	1698.4	1723.5
17.5°	1563.9	1551.1	1534.4	1558.9	1565.6	1554.5	1587.8	1582.3	1608.9	1653.4	1679.0
20°	1532.2	1518.3	1503.3	1528.3	1532.2	1519.4	1552.8	1545.6	1569.5	1610.6	1635.6
22.5°	1499.4	1485.0	1469.4	1493.9	1497.7	1485.0	1515.5	1507.2	1529.4	1566.7	1589.5
25°	1463.3	1449.9	1434.4	1457.2	1460.5	1446.6	1478.8	1468.3	1487.7	1520.5	1539.4
27.5°	1427.1	1414.4	1397.1	1420.5	1422.1	1408.8	1438.3	1423.8	1439.9	1470.0	1486.1
30°	1421.0	1406.6	1388.8	1407.7	1408.2	1391.0	1418.8	1401.6	1410.5	1432.7	1442.2
32.5°	1440.5	1426.0	1407.7	1423.3	1421.6	1402.7	1429.4	1408.2	1411.0	1422.7	1420.5
35°	1432.7	1415.5	1393.8	1410.5	1410.5	1387.7	1414.4	1389.3	1386.6	1388.2	1374.3
37.5°	1344.3	1331.0	1310.4	1326.5	1324.8	1307.6	1328.2	1307.6	1298.2	1294.3	1269.3
40°	1214.2	1198.1	1182.5	1199.8	1201.4	1183.1	1209.8	1186.4	1183.6	1172.5	1143.0
42.5°	1082.4	1076.9	1061.9	1076.3	1084.1	1068.5	1090.8	1079.7	1081.3	1078.6	1050.8
45°	967.4	957.9	946.8	963.5	968.5	960.7	982.9	976.3	982.9	996.8	974.0
47.5°	843.4	833.9	821.7	839.5	848.4	833.9	852.8	850.6	860.6	884.5	882.3
50°	693.8	687.2	684.9	687.2	692.7	686.1	699.4	700.0	706.6	739.4	741.6
52.5°	549.3	547.6	539.8	547.1	547.1	536.5	549.8	543.7	550.4	572.6	587.1
55°	429.8	428.1	423.1	429.8	422.5	418.6	422.5	416.4	411.4	428.6	443.7
57.5°	334.7	329.1	323.0	325.8	325.2	316.9	321.3	314.1	310.2	316.3	329.7
60°	238.5	236.8	231.3	234.1	236.3	230.2	234.6	231.3	224.6	229.6	230.2
62.5°	158.4	159.6	156.2	156.8	155.1	154.0	156.8	158.4	156.8	154.6	155.1
65°	100.6	100.1	99.5	100.1	101.2	99.0	100.6	101.7	100.1	100.1	99.5
67.5°	66.7	65.0	63.4	64.5	65.6	63.9	65.6	65.0	65.6	65.0	63.4
70°	45.0	44.5	43.9	44.5	44.5	43.4	44.5	43.9	44.5	43.9	42.3
72.5°	32.8	32.8	32.2	32.8	32.8	31.7	32.2	31.1	31.7	31.1	30.0
75°	24.5	24.5	23.9	24.5	23.9	23.4	23.9	23.4	22.2	22.2	21.1
77.5°	17.8	17.8	17.8	17.8	17.8	17.2	17.2	16.7	16.1	15.6	15.6
80°	13.3	12.8	12.8	12.8	12.8	12.2	12.8	12.2	11.7	11.1	10.6
82.5°	9.5	10.0	9.5	9.5	9.5	8.9	9.5	8.9	8.9	8.3	7.2
85°	7.2	7.2	7.2	7.2	7.2	6.7	6.7	6.7	6.1	6.1	5.6
87.5°	3.9	3.9	3.9	4.4	3.9	3.9	3.9	3.3	3.3	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2047.6	2050.4	2044.3	2053.7	2090.4	2060.9	2073.2	2077.1	2104.9	2109.9	2106.5
5°	1969.8	1982.0	1989.8	2010.9	2051.5	2030.4	2052.0	2065.9	2101.5	2113.2	2116.0
7.5°	1908.6	1934.2	1953.1	1987.5	2035.4	2019.2	2052.0	2074.8	2118.2	2133.2	2140.4
10°	1863.0	1901.9	1934.7	1982.0	2035.9	2025.4	2068.2	2100.4	2148.8	2166.6	2175.5
12.5°	1828.5	1875.8	1919.7	1979.8	2038.1	2033.1	2084.8	2121.5	2172.7	2190.5	2201.0
15°	1790.7	1845.2	1896.4	1963.6	2026.5	2025.4	2080.9	2119.9	2172.1	2187.1	2197.1
17.5°	1745.7	1804.1	1860.2	1933.1	1995.3	1996.4	2052.6	2091.0	2142.1	2154.3	2161.0
20°	1700.1	1757.9	1814.1	1889.1	1950.3	1952.0	2007.0	2042.6	2091.5	2101.5	2103.2
22.5°	1651.7	1705.7	1761.8	1836.3	1895.3	1896.4	1950.9	1984.2	2025.9	2030.9	2035.4
25°	1596.7	1649.5	1702.3	1776.3	1832.4	1835.8	1885.3	1914.7	1953.1	1957.0	1958.6
27.5°	1539.4	1582.8	1633.4	1696.8	1753.5	1751.3	1798.0	1831.3	1865.8	1863.6	1863.0
30°	1481.6	1517.8	1548.9	1610.1	1651.7	1653.4	1697.3	1713.5	1749.6	1745.1	1744.6
32.5°	1441.0	1450.5	1458.8	1490.0	1529.4	1515.5	1545.6	1565.6	1590.6	1588.9	1589.5
35°	1366.5	1349.3	1324.3	1328.7	1352.6	1331.0	1347.1	1346.5	1372.1	1366.0	1373.2
37.5°	1239.2	1190.3	1134.7	1103.0	1107.5	1080.2	1074.7	1088.0	1096.9	1079.7	1085.8
40°	1103.6	1031.3	944.6	872.3	868.4	834.5	828.4	815.0	832.3	817.8	822.3
42.5°	1003.5	907.9	793.9	706.1	687.2	658.8	642.1	639.9	644.9	634.9	632.1
45°	926.8	825.0	694.4	593.8	572.6	542.1	525.4	519.3	519.8	516.5	513.7
47.5°	836.7	734.4	602.1	499.2	475.3	446.4	429.8	425.9	428.1	423.6	420.3
50°	712.2	620.4	499.8	405.8	384.7	363.6	350.3	346.4	345.8	342.5	340.2
52.5°	578.2	502.0	397.5	319.1	300.2	279.6	270.2	265.2	265.7	262.4	259.1
55°	447.5	400.3	308.0	241.3	224.1	207.9	199.0	192.9	191.2	187.9	186.2
57.5°	333.0	301.3	230.7	174.0	164.0	148.4	139.5	132.3	131.2	129.5	129.0
60°	233.5	210.7	162.3	124.0	112.3	102.9	94.0	86.7	83.4	82.8	81.2
62.5°	151.2	137.3	106.7	82.8	73.9	67.3	58.4	53.4	51.1	48.9	49.5
65°	94.0	83.4	66.7	53.4	48.4	43.4	36.7	32.2	30.0	27.8	28.4
67.5°	58.4	52.3	42.3	34.5	31.1	27.2	22.2	18.9	17.2	15.6	14.5
70°	39.5	33.9	28.9	24.5	22.2	19.5	16.1	13.3	12.2	11.1	10.0
72.5°	27.8	25.0	21.1	18.3	16.7	14.5	12.2	10.6	9.5	8.3	7.2
75°	20.0	17.8	15.6	13.3	12.2	11.1	9.5	8.3	7.2	6.1	5.0
77.5°	14.5	12.8	11.1	10.0	9.5	7.8	6.7	6.1	5.6	4.4	3.3
80°	10.0	8.9	7.2	6.7	6.7	5.6	5.0	4.4	3.9	2.8	2.2
82.5°	6.7	6.1	5.6	5.0	4.4	3.9	3.9	2.8	2.2	1.7	1.1
85°	5.0	4.4	3.9	3.3	3.3	2.8	2.2	1.7	1.7	1.1	0.6
87.5°	2.8	2.8	2.2	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2134.9	2136.5	2146.0	2138.8	2157.1	2170.5	2163.8	2178.8	2173.8	2172.7	2189.9
5°	2149.3	2153.2	2166.0	2159.3	2179.4	2193.8	2187.1	2203.8	2198.8	2197.7	2215.5
7.5°	2177.1	2181.0	2192.1	2186.6	2207.7	2220.5	2212.2	2230.5	2223.8	2223.3	2240.5
10°	2212.2	2217.7	2227.2	2221.6	2241.1	2252.2	2243.8	2261.6	2255.5	2252.7	2271.6
12.5°	2238.3	2242.2	2251.6	2247.2	2266.1	2274.4	2267.2	2284.4	2276.6	2274.4	2291.1
15°	2232.2	2236.1	2243.8	2240.0	2257.7	2265.5	2256.1	2275.0	2267.2	2262.7	2277.8
17.5°	2193.3	2195.5	2201.0	2197.1	2216.0	2221.0	2210.5	2229.4	2222.2	2214.4	2228.8
20°	2136.0	2134.9	2138.2	2136.5	2152.1	2154.9	2148.2	2162.1	2153.8	2149.3	2157.7
22.5°	2064.8	2063.7	2065.9	2061.5	2077.1	2078.7	2068.7	2085.4	2077.1	2068.7	2082.6
25°	1985.9	1979.8	1978.7	1980.3	1990.9	1992.6	1982.0	1994.2	1983.7	1977.0	1990.3
27.5°	1888.6	1880.8	1879.1	1880.8	1891.4	1883.6	1874.7	1883.6	1873.0	1866.9	1875.2
30°	1768.5	1757.4	1752.4	1749.0	1760.2	1757.4	1736.8	1746.8	1730.1	1721.2	1727.4
32.5°	1606.7	1600.6	1587.3	1579.5	1590.0	1568.9	1556.1	1556.1	1549.5	1534.4	1537.8
35°	1382.1	1372.7	1360.4	1353.8	1355.4	1327.1	1305.9	1310.4	1288.2	1284.3	1285.9
37.5°	1098.0	1082.4	1078.0	1064.1	1067.4	1042.4	1013.5	1014.1	1002.4	990.2	986.3
40°	825.0	822.3	817.8	806.1	810.6	783.3	772.2	772.8	765.0	756.1	760.5
42.5°	637.7	628.8	626.0	622.1	623.2	618.8	604.3	606.0	599.3	597.1	594.9
45°	518.2	508.7	502.0	505.4	505.4	500.4	494.8	498.1	494.8	490.4	492.6
47.5°	427.0	418.1	414.7	414.2	418.1	414.7	409.2	410.3	409.7	408.1	407.0
50°	340.8	338.6	335.8	334.1	335.8	334.7	329.7	332.5	334.1	328.6	330.2
52.5°	259.6	259.6	259.1	255.2	258.5	255.2	254.6	255.7	254.1	251.8	251.3
55°	190.1	188.5	185.7	185.1	186.2	185.1	184.0	184.6	185.7	180.1	180.1
57.5°	130.1	129.0	127.3	127.3	129.5	126.8	125.1	127.3	125.1	122.9	122.9
60°	83.4	82.8	81.2	81.2	81.2	80.6	78.9	79.5	80.6	77.3	77.8
62.5°	50.0	48.4	47.8	47.3	47.8	47.3	47.3	46.7	46.1	46.1	44.5
65°	27.2	26.1	25.0	25.6	25.6	25.0	25.0	25.0	23.9	23.4	22.8
67.5°	13.9	12.8	12.8	12.2	12.2	12.2	12.2	11.7	11.7	11.7	11.1
70°	8.9	8.3	7.8	7.8	7.8	7.2	7.2	7.2	7.2	7.2	6.7
72.5°	6.1	5.6	5.0	5.0	5.0	4.4	4.4	4.4	4.4	3.9	3.9
75°	4.4	3.9	3.3	3.3	3.3	2.8	2.8	2.8	2.8	2.8	2.8
77.5°	2.8	2.2	2.2	2.2	2.2	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: P244150

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2183.8	2179.4	2182.1	2202.7	2193.8	2191.0	2167.7	2188.2
5°	2209.9	2206.6	2206.6	2229.9	2219.4	2217.2	2194.4	2212.2
7.5°	2234.4	2231.1	2231.6	2255.5	2247.2	2243.8	2221.0	2238.8
10°	2266.1	2263.9	2264.4	2287.2	2278.3	2275.0	2251.6	2270.0
12.5°	2285.0	2281.6	2281.6	2306.1	2296.1	2291.1	2268.9	2286.7
15°	2270.5	2265.5	2265.5	2290.0	2278.9	2271.6	2252.2	2268.9
17.5°	2221.0	2216.0	2216.0	2237.2	2228.8	2218.3	2198.3	2213.8
20°	2152.1	2146.0	2144.3	2168.8	2157.1	2147.7	2129.9	2144.9
22.5°	2074.3	2071.5	2066.5	2091.0	2080.4	2070.4	2051.5	2063.2
25°	1980.9	1976.4	1971.4	1995.3	1984.8	1974.8	1959.7	1969.2
27.5°	1864.7	1865.2	1862.5	1881.4	1870.8	1865.2	1846.9	1862.5
30°	1724.0	1717.9	1715.7	1737.9	1727.9	1720.7	1697.9	1712.9
32.5°	1540.6	1531.7	1520.0	1545.0	1527.8	1521.7	1502.2	1523.9
35°	1273.7	1270.9	1260.4	1281.5	1272.0	1260.9	1248.7	1267.0
37.5°	984.6	986.8	985.7	991.3	985.7	978.5	965.1	958.5
40°	751.7	746.1	741.6	751.7	740.0	740.0	732.2	740.5
42.5°	589.3	587.1	592.7	594.9	588.2	587.1	586.0	585.4
45°	486.5	486.5	487.6	489.8	487.6	486.5	483.1	480.9
47.5°	400.8	403.1	400.8	408.1	404.2	403.1	396.4	399.2
50°	324.7	321.9	324.7	326.9	327.5	324.1	320.8	322.5
52.5°	251.8	247.4	246.3	249.6	247.4	247.4	245.2	244.6
55°	177.4	179.0	176.2	179.0	177.9	176.2	174.6	176.8
57.5°	120.1	120.6	119.5	121.2	118.4	119.0	118.4	117.9
60°	77.8	75.6	75.6	77.3	74.5	74.5	73.9	73.9
62.5°	44.5	43.9	43.9	43.4	42.8	42.8	42.8	41.7
65°	22.8	22.2	21.7	21.7	21.7	21.7	21.1	21.1
67.5°	11.1	10.6	10.6	11.1	10.6	10.6	10.6	10.6
70°	6.7	6.7	6.1	6.7	6.1	6.1	6.1	6.1
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
75°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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)