

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: P246244

Luminaire Tested: **LSR8B40D010 EC8B40930 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246244
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40930 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3642.1 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

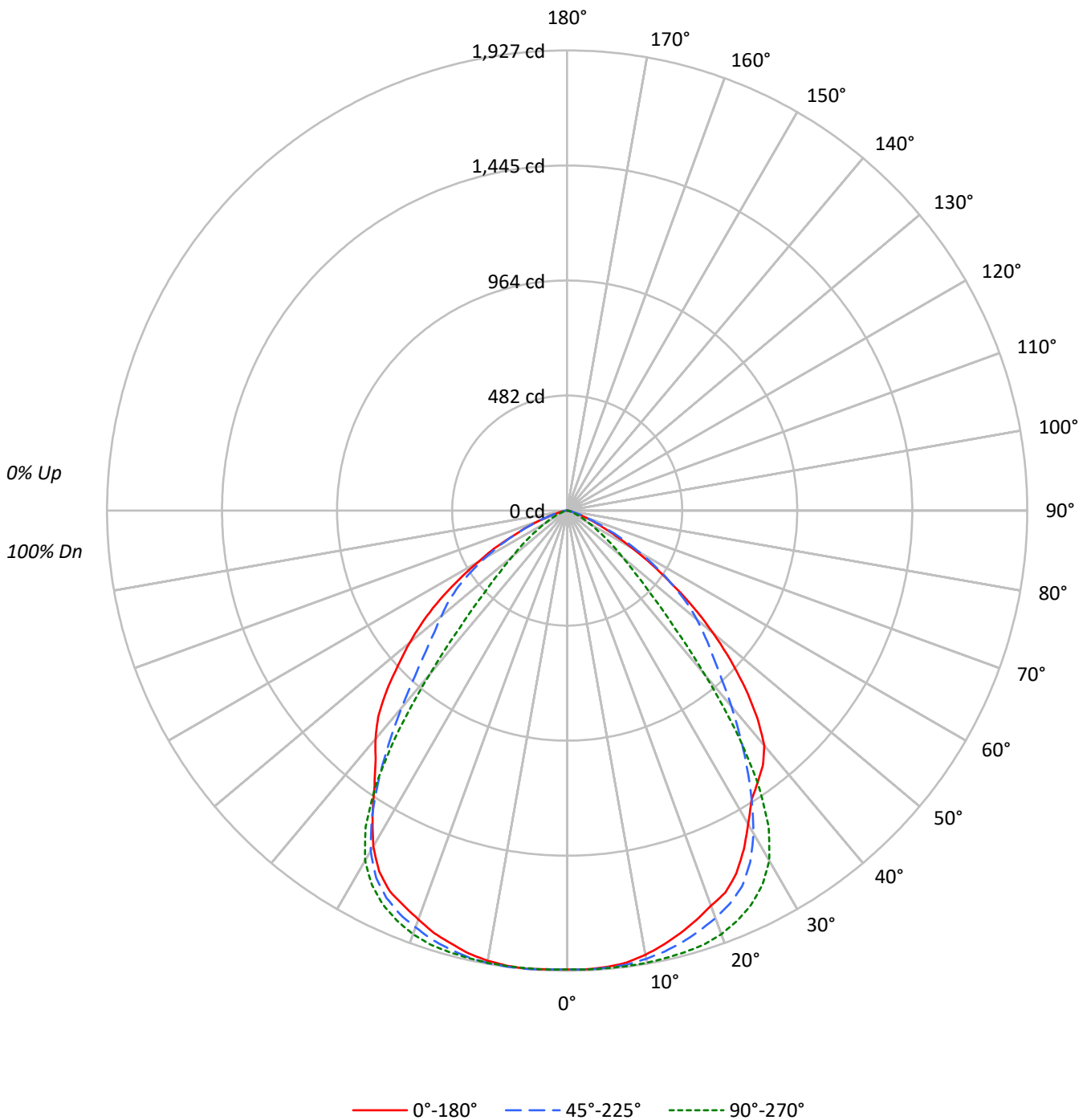
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

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°	183.4	5.0
10°-20°	532.6	14.6
20°-30°	808.4	22.2
30°-40°	849.1	23.3
40°-50°	636.6	17.5
50°-60°	408.4	11.2
60°-70°	174.7	4.8
70°-80°	41.3	1.1
80°-90°	7.7	0.2
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°	1524.4	41.9
0°-40°	2373.5	65.2
0°-60°	3418.4	93.9
0°-90°	3642.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3642.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1922	1922	1922	1922	1922	
5°	1919	1922	1924	1927	1926	182
15°	1832	1870	1913	1901	1877	517
25°	1676	1735	1823	1790	1759	766
35°	1390	1313	1392	1375	1406	873
45°	1056	863	496	839	1071	809
55°	534	534	185	557	651	485
65°	161	190	59	244	248	172
75°	25	29	8	50	48	36
85°	8	5	4	8	11	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6
2.5°	1922.7	1924.8	1923.7	1923.7	1922.7	1923.7	1923.7	1925.8	1925.8	1923.7	1922.7
5°	1918.6	1920.6	1920.6	1918.6	1918.6	1923.7	1920.6	1922.7	1922.7	1921.6	1921.6
7.5°	1909.3	1909.3	1913.4	1910.3	1910.3	1913.4	1912.4	1914.4	1916.5	1917.6	1917.6
10°	1888.7	1890.7	1891.8	1891.8	1892.8	1895.8	1898.0	1902.1	1904.1	1906.1	1907.3
12.5°	1862.9	1865.9	1867.0	1865.9	1869.0	1873.2	1878.3	1883.5	1886.6	1890.7	1893.8
15°	1831.9	1831.9	1834.0	1837.1	1839.1	1845.4	1850.4	1856.7	1864.9	1870.1	1875.2
17.5°	1797.9	1800.0	1803.0	1803.0	1807.2	1817.5	1820.6	1829.9	1839.1	1844.3	1854.6
20°	1760.8	1762.8	1765.9	1767.9	1773.1	1781.4	1787.5	1795.8	1806.2	1815.5	1825.8
22.5°	1731.8	1727.8	1729.8	1731.8	1737.0	1744.3	1751.5	1761.8	1772.1	1781.4	1791.7
25°	1676.1	1677.2	1680.3	1682.4	1688.6	1694.7	1703.0	1715.4	1724.7	1735.0	1746.3
27.5°	1600.9	1601.9	1607.1	1607.1	1612.2	1622.5	1627.7	1638.0	1650.3	1660.6	1674.1
30°	1515.3	1517.3	1517.3	1521.4	1524.6	1529.7	1534.9	1545.2	1551.4	1560.7	1579.3
32.5°	1436.9	1438.9	1437.9	1436.9	1433.8	1432.8	1431.7	1433.8	1435.9	1438.9	1446.1
35°	1390.5	1385.3	1381.2	1373.9	1365.7	1355.4	1346.1	1333.8	1322.3	1313.0	1302.8
37.5°	1346.1	1345.1	1338.9	1328.5	1312.0	1293.5	1271.9	1245.0	1218.2	1189.3	1161.5
40°	1284.2	1281.1	1275.9	1261.5	1243.0	1220.2	1191.4	1158.3	1115.1	1070.7	1025.3
42.5°	1179.0	1180.0	1173.8	1162.5	1145.0	1123.2	1093.4	1057.3	1010.9	958.2	899.5
45°	1056.2	1056.2	1054.2	1044.9	1032.6	1015.0	992.3	962.4	917.0	863.4	800.4
47.5°	928.3	929.4	926.3	924.3	919.0	907.7	891.2	868.6	836.5	784.9	722.0
50°	798.4	798.4	803.5	802.5	802.5	798.4	791.2	777.7	749.9	708.6	649.8
52.5°	668.5	670.5	673.6	677.6	682.8	691.1	682.8	676.6	659.1	627.1	576.6
55°	534.3	536.4	541.6	548.7	554.9	563.2	565.2	565.2	556.0	534.3	496.2
57.5°	419.8	416.7	420.8	427.0	435.3	443.6	449.7	456.9	455.9	441.4	410.5
60°	315.7	316.7	319.7	326.0	332.2	339.3	347.6	353.8	356.9	349.6	330.0
62.5°	230.0	230.0	234.2	240.3	243.5	253.8	259.0	262.0	265.1	264.0	251.7
65°	161.0	163.0	165.0	168.2	171.2	177.5	180.5	186.6	188.8	189.8	180.5
67.5°	113.4	110.4	112.4	114.5	117.6	121.7	127.9	127.9	131.0	131.0	124.8
70°	72.2	72.2	73.2	76.3	78.4	79.5	81.5	83.5	86.7	85.6	85.6
72.5°	48.5	47.4	48.5	49.5	50.6	53.6	53.6	54.7	56.7	57.7	53.6
75°	24.8	25.8	27.8	26.8	29.9	27.8	28.9	31.9	30.9	28.9	28.9
77.5°	20.6	20.6	20.6	19.6	21.6	21.6	20.6	22.6	21.6	21.6	20.6
80°	14.5	15.5	14.5	13.5	14.5	13.5	13.5	13.5	13.5	13.5	12.3
82.5°	11.3	9.3	10.3	9.3	10.3	10.3	9.3	8.3	8.3	9.3	8.3
85°	8.3	6.2	7.2	7.2	6.2	6.2	6.2	6.2	6.2	5.2	5.2
87.5°	5.2	3.1	3.1	3.1	4.1	4.1	4.1	3.1	4.1	4.1	2.0
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: P246244

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6
2.5°	1924.8	1923.7	1925.8	1924.8	1924.8	1923.7	1924.8	1923.7	1925.8	1921.6	1922.7
5°	1924.8	1922.7	1923.7	1924.8	1925.8	1923.7	1923.7	1923.7	1925.8	1923.7	1924.8
7.5°	1920.6	1919.6	1922.7	1924.8	1923.7	1922.7	1924.8	1923.7	1925.8	1924.8	1926.8
10°	1912.4	1913.4	1915.5	1918.6	1919.6	1920.6	1922.7	1922.7	1925.8	1921.6	1923.7
12.5°	1900.0	1904.1	1909.3	1911.3	1915.5	1915.5	1917.6	1918.6	1920.6	1919.6	1922.7
15°	1884.5	1889.7	1895.8	1901.0	1906.1	1909.3	1912.4	1913.4	1916.5	1913.4	1914.4
17.5°	1865.9	1872.2	1881.4	1887.7	1895.8	1899.0	1903.1	1905.1	1908.3	1906.1	1907.3
20°	1840.1	1847.4	1857.7	1867.0	1872.2	1879.4	1884.5	1887.7	1889.7	1887.7	1888.7
22.5°	1804.0	1814.3	1827.8	1835.0	1845.4	1851.6	1852.6	1859.7	1864.9	1859.7	1861.9
25°	1761.8	1772.1	1782.4	1797.9	1807.2	1814.3	1821.6	1822.6	1827.8	1826.8	1825.8
27.5°	1691.6	1705.0	1722.5	1735.0	1747.3	1758.7	1766.9	1768.9	1774.2	1772.1	1773.1
30°	1595.7	1610.2	1626.7	1646.3	1663.8	1675.1	1685.4	1692.7	1697.9	1694.7	1693.7
32.5°	1459.5	1474.0	1491.5	1511.1	1531.7	1548.2	1560.7	1570.0	1576.1	1574.0	1569.0
35°	1303.8	1307.9	1319.3	1334.8	1352.3	1369.9	1381.2	1391.5	1398.7	1400.8	1400.8
37.5°	1143.9	1130.5	1122.2	1122.2	1132.5	1139.8	1150.1	1156.3	1167.6	1171.8	1174.9
40°	989.2	958.2	929.4	907.7	893.3	892.2	892.2	895.3	905.7	919.0	931.4
42.5°	851.0	801.5	757.1	716.9	688.0	671.5	664.3	665.3	673.6	685.9	706.6
45°	740.6	678.8	623.1	574.5	535.4	509.5	497.2	496.2	502.3	516.8	539.4
47.5°	655.0	589.0	526.1	470.4	428.1	400.2	385.7	381.7	385.7	399.2	426.0
50°	583.8	515.8	450.8	393.0	347.6	318.7	305.4	300.2	305.4	316.7	343.5
52.5°	517.8	447.6	386.9	331.1	282.6	257.8	243.5	240.3	243.5	256.8	278.5
55°	441.4	381.7	321.8	266.1	223.9	199.1	187.8	184.6	187.8	200.1	222.9
57.5°	366.2	314.6	262.0	211.4	175.3	153.7	143.4	139.2	146.5	154.7	181.5
60°	296.1	254.8	210.4	166.0	136.2	116.6	108.3	107.3	109.3	119.6	138.2
62.5°	232.0	198.1	163.0	126.9	102.1	93.8	83.5	82.5	84.5	90.8	105.3
65°	167.1	145.5	118.6	92.8	73.2	61.9	57.7	58.9	60.9	65.0	78.4
67.5°	116.6	101.1	82.5	65.0	50.6	45.4	41.3	40.2	41.3	48.5	55.7
70°	78.4	69.1	55.7	49.5	35.1	27.8	28.9	25.8	29.9	29.9	36.1
72.5°	51.6	45.4	37.1	28.9	24.8	19.6	19.6	18.6	20.6	21.6	26.8
75°	26.8	20.6	20.6	14.5	10.3	5.2	9.3	8.3	7.2	8.3	10.3
77.5°	18.6	15.5	14.5	11.3	10.3	8.3	8.3	8.3	8.3	9.3	10.3
80°	11.3	11.3	8.3	7.2	6.2	5.2	6.2	6.2	6.2	6.2	7.2
82.5°	7.2	6.2	6.2	5.2	5.2	4.1	4.1	4.1	4.1	4.1	6.2
85°	6.2	4.1	4.1	3.1	4.1	7.2	3.1	4.1	4.1	4.1	3.1
87.5°	2.0	3.1	3.1	3.1	2.0	1.0	2.0	3.1	3.1	5.2	4.1
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: P246244

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6	1921.6
2.5°	1924.8	1925.8	1925.8	1924.8	1924.8	1922.7	1926.8	1923.7	1924.8	1928.9	1925.8
5°	1926.8	1927.9	1927.9	1926.8	1926.8	1926.8	1927.9	1927.9	1926.8	1925.8	1927.9
7.5°	1930.9	1929.9	1929.9	1927.9	1927.9	1925.8	1927.9	1924.8	1926.8	1924.8	1927.9
10°	1925.8	1926.8	1925.8	1924.8	1924.8	1923.7	1923.7	1920.6	1921.6	1918.6	1920.6
12.5°	1922.7	1921.6	1921.6	1919.6	1917.6	1915.5	1914.4	1911.3	1911.3	1904.1	1907.3
15°	1914.4	1915.5	1912.4	1908.3	1906.1	1901.0	1899.0	1894.8	1890.7	1885.5	1886.6
17.5°	1907.3	1904.1	1900.0	1895.8	1887.7	1883.5	1879.4	1873.2	1871.1	1864.9	1862.9
20°	1885.5	1883.5	1878.3	1871.1	1865.9	1856.7	1852.6	1846.4	1841.2	1835.0	1831.9
22.5°	1857.7	1855.6	1849.4	1842.3	1834.0	1829.9	1825.8	1814.3	1809.2	1803.0	1802.0
25°	1822.6	1819.5	1813.3	1805.1	1801.0	1789.7	1785.5	1777.2	1775.2	1768.9	1767.9
27.5°	1768.9	1764.9	1757.6	1747.3	1740.1	1732.8	1728.8	1722.5	1720.5	1714.3	1713.3
30°	1688.6	1683.4	1668.9	1664.8	1652.5	1645.2	1645.2	1637.0	1638.0	1633.9	1633.9
32.5°	1561.7	1553.4	1542.0	1533.9	1525.6	1521.4	1521.4	1518.4	1520.4	1520.4	1522.4
35°	1393.5	1382.2	1376.0	1370.9	1370.9	1374.9	1387.3	1390.5	1396.7	1401.8	1406.0
37.5°	1177.9	1176.9	1184.1	1190.4	1205.9	1223.3	1245.0	1263.6	1281.1	1293.5	1305.9
40°	944.9	970.7	991.3	1020.1	1043.9	1078.0	1117.1	1149.0	1179.0	1200.7	1223.3
42.5°	737.5	770.5	813.8	856.1	898.5	944.9	996.5	1040.7	1080.0	1109.9	1133.6
45°	574.5	619.9	672.5	726.2	780.9	838.6	892.2	937.6	978.9	1009.8	1033.6
47.5°	463.1	512.6	572.5	631.2	693.1	754.0	813.8	853.1	887.0	911.8	933.5
50°	382.7	435.3	498.2	565.2	627.1	688.0	739.5	777.7	805.6	827.3	840.6
52.5°	319.7	375.4	442.5	509.5	571.5	627.1	673.6	702.4	725.2	740.6	753.0
55°	264.0	317.7	380.6	443.6	504.4	557.0	595.1	616.9	634.4	643.7	650.9
57.5°	215.6	265.1	322.8	380.6	433.3	476.5	506.5	528.1	536.4	543.6	542.6
60°	169.2	215.6	268.1	317.7	363.1	398.2	419.8	432.1	438.4	441.4	439.4
62.5°	133.1	175.3	215.6	259.0	291.9	321.8	342.5	342.5	345.5	346.6	349.6
65°	99.0	131.0	166.0	198.1	224.9	244.5	255.8	259.0	263.0	262.0	260.0
67.5°	73.2	97.0	122.7	146.5	165.0	177.5	185.6	192.9	191.9	189.8	188.8
70°	50.6	66.0	88.7	103.1	116.6	128.9	131.0	132.1	133.1	134.1	132.1
72.5°	35.1	46.4	58.9	71.2	79.5	84.5	89.8	90.8	90.8	90.8	89.8
75°	17.5	23.8	35.1	40.2	47.4	49.5	53.6	53.6	56.7	52.6	51.6
77.5°	15.5	18.6	24.8	28.9	31.9	35.1	36.1	39.2	38.1	36.1	37.1
80°	9.3	11.3	15.5	17.5	21.6	22.6	23.8	24.8	23.8	24.8	24.8
82.5°	7.2	8.3	10.3	10.3	13.5	13.5	14.5	14.5	15.5	15.5	15.5
85°	4.1	7.2	6.2	12.3	8.3	8.3	10.3	12.3	10.3	10.3	12.3
87.5°	4.1	4.1	3.1	4.1	4.1	4.1	5.2	6.2	6.2	7.2	6.2
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: P246244

CATALOG NUMBER: LSR8B40D010 EC8B40930 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1921.6	1921.6	1921.6	1921.6
2.5°	1924.8	1926.8	1923.7	1922.7
5°	1927.9	1927.9	1925.8	1925.8
7.5°	1927.9	1927.9	1924.8	1922.7
10°	1919.6	1919.6	1916.5	1914.4
12.5°	1904.1	1904.1	1903.1	1900.0
15°	1884.5	1884.5	1880.4	1877.3
17.5°	1857.7	1859.7	1854.6	1854.6
20°	1828.8	1827.8	1823.6	1821.6
22.5°	1798.9	1796.9	1795.8	1789.7
25°	1766.9	1764.9	1761.8	1758.7
27.5°	1712.3	1711.2	1708.2	1704.0
30°	1628.7	1627.7	1623.5	1623.5
32.5°	1520.4	1519.4	1515.3	1516.3
35°	1408.0	1412.1	1410.0	1406.0
37.5°	1314.1	1317.2	1319.3	1317.2
40°	1235.7	1245.0	1246.0	1248.1
42.5°	1152.2	1164.5	1168.6	1170.8
45°	1052.1	1063.5	1072.8	1070.7
47.5°	949.9	958.2	966.5	960.4
50°	852.0	857.1	860.3	860.3
52.5°	759.1	759.1	758.1	759.1
55°	653.0	653.0	648.8	650.9
57.5°	541.6	543.6	540.4	535.4
60°	438.4	433.3	431.1	428.1
62.5°	341.5	341.5	334.2	343.5
65°	255.8	252.7	249.6	248.5
67.5°	185.6	184.6	181.5	180.5
70°	131.0	126.9	125.9	123.8
72.5°	87.7	87.7	85.6	85.6
75°	53.6	48.5	47.4	48.5
77.5°	37.1	36.1	36.1	35.1
80°	24.8	23.8	25.8	22.6
82.5°	15.5	16.5	15.5	16.5
85°	10.3	12.3	11.3	11.3
87.5°	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)