

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: P246167

Luminaire Tested: **LSR8B50D010 EC8B509727 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246167  
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: LSR8B50D010 EC8B509727 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3439.0 lumens  
Efficiency: N/A  
Efficacy: 64.9 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

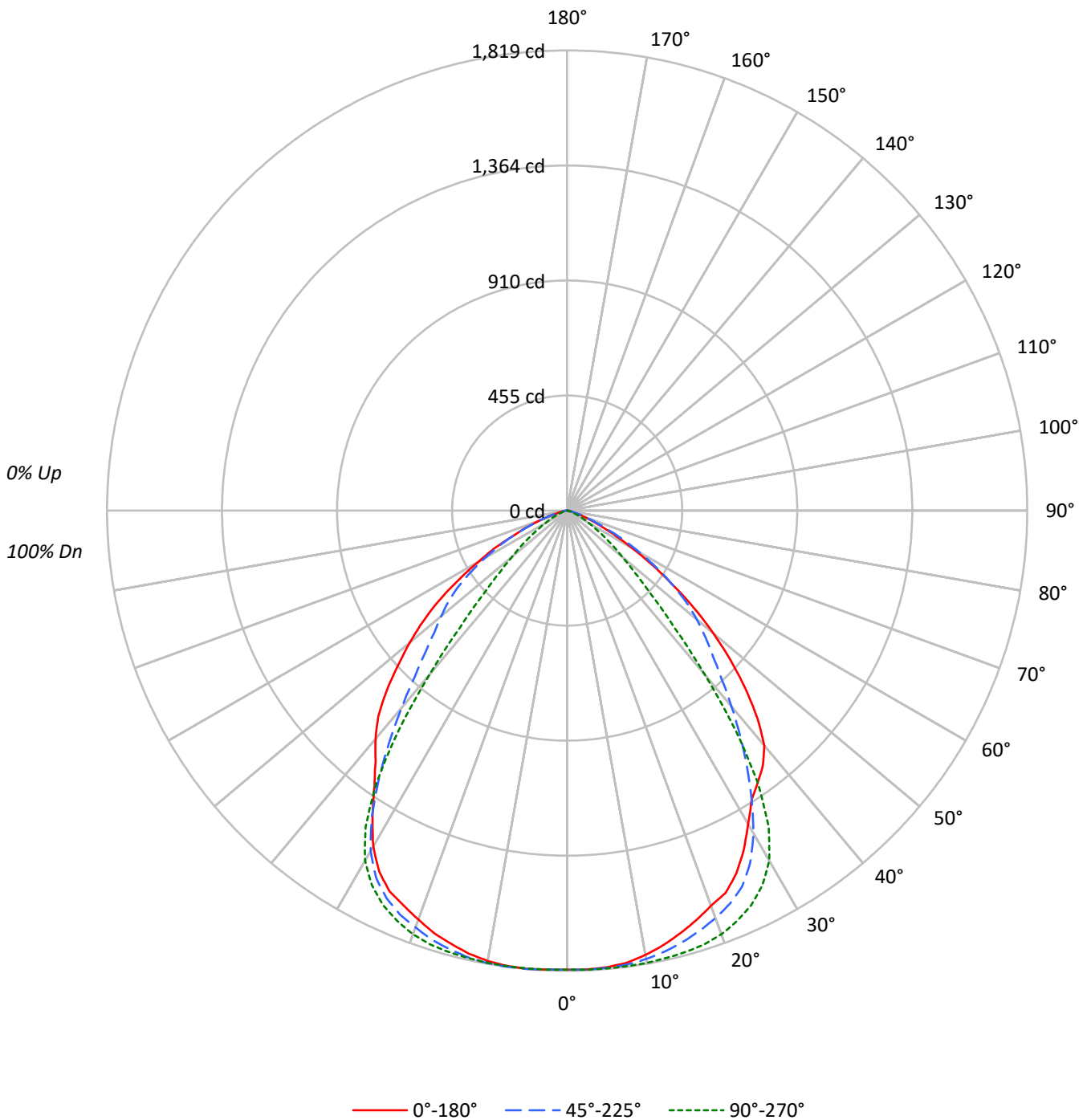
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	173.2	5.0
10°-20°	502.9	14.6
20°-30°	763.3	22.2
30°-40°	801.7	23.3
40°-50°	601.1	17.5
50°-60°	385.7	11.2
60°-70°	165.0	4.8
70°-80°	39.0	1.1
80°-90°	7.2	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°	1439.4	41.9
0°-40°	2241.1	65.2
0°-60°	3227.8	93.9
0°-90°	3439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3439.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1814	1814	1814	1814	1814	
5°	1812	1814	1816	1819	1818	172
15°	1730	1766	1807	1795	1773	488
25°	1583	1638	1721	1690	1661	723
35°	1313	1240	1314	1298	1328	824
45°	997	815	468	792	1011	764
55°	504	504	174	526	615	458
65°	152	179	56	231	235	162
75°	23	27	8	47	46	34
85°	8	5	4	8	11	8
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°	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5
2.5°	1815.5	1817.4	1816.4	1816.4	1815.5	1816.4	1816.4	1818.4	1818.4	1816.4	1815.5
5°	1811.6	1813.5	1813.5	1811.6	1811.6	1816.4	1813.5	1815.5	1815.5	1814.5	1814.5
7.5°	1802.8	1802.8	1806.7	1803.8	1803.8	1806.7	1805.7	1807.7	1809.6	1810.6	1810.6
10°	1783.3	1785.3	1786.2	1786.2	1787.2	1790.1	1792.1	1796.0	1797.9	1799.9	1800.9
12.5°	1759.0	1761.9	1762.9	1761.9	1764.8	1768.7	1773.6	1778.5	1781.4	1785.3	1788.2
15°	1729.7	1729.7	1731.7	1734.6	1736.6	1742.4	1747.3	1753.1	1760.9	1765.8	1770.7
17.5°	1697.6	1699.6	1702.5	1702.5	1706.4	1716.1	1719.0	1727.8	1736.6	1741.4	1751.2
20°	1662.6	1664.5	1667.4	1669.4	1674.2	1682.0	1687.9	1695.7	1705.4	1714.2	1723.9
22.5°	1635.3	1631.4	1633.3	1635.3	1640.2	1647.0	1653.8	1663.5	1673.3	1682.0	1691.8
25°	1582.7	1583.7	1586.6	1588.5	1594.4	1600.2	1608.0	1619.7	1628.5	1638.2	1648.9
27.5°	1511.6	1512.6	1517.4	1517.4	1522.3	1532.0	1536.9	1546.6	1558.3	1568.1	1580.7
30°	1430.8	1432.7	1432.7	1436.6	1439.5	1444.4	1449.2	1459.0	1464.8	1473.6	1491.1
32.5°	1356.7	1358.7	1357.7	1356.7	1353.8	1352.8	1351.8	1353.8	1355.8	1358.7	1365.5
35°	1312.9	1308.0	1304.1	1297.3	1289.5	1279.8	1271.0	1259.3	1248.6	1239.8	1230.1
37.5°	1271.0	1270.0	1264.2	1254.5	1238.9	1221.3	1200.9	1175.6	1150.2	1123.0	1096.7
40°	1212.6	1209.6	1204.8	1191.2	1173.6	1152.2	1124.9	1093.8	1052.8	1011.0	968.1
42.5°	1113.2	1114.2	1108.4	1097.6	1081.1	1060.6	1032.4	998.3	954.5	904.8	849.3
45°	997.3	997.3	995.4	986.6	974.9	958.4	936.9	908.7	865.9	815.2	755.8
47.5°	876.6	877.5	874.6	872.7	867.8	857.1	841.5	820.1	789.9	741.2	681.8
50°	753.9	753.9	758.7	757.7	757.7	753.9	747.0	734.4	708.1	669.1	613.6
52.5°	631.1	633.1	636.0	639.9	644.8	652.5	644.8	638.9	622.4	592.2	544.4
55°	504.5	506.5	511.3	518.1	524.0	531.8	533.7	533.7	525.0	504.5	468.5
57.5°	396.4	393.5	397.4	403.2	411.0	418.8	424.6	431.5	430.5	416.9	387.6
60°	298.0	299.0	301.9	307.8	313.6	320.4	328.2	334.1	337.0	330.2	311.7
62.5°	217.2	217.2	221.1	226.9	229.9	239.6	244.5	247.4	250.3	249.3	237.6
65°	151.9	153.9	155.8	158.8	161.7	167.5	170.4	176.3	178.2	179.2	170.4
67.5°	107.1	104.2	106.2	108.1	111.0	114.9	120.8	120.8	123.7	123.7	117.8
70°	68.2	68.2	69.2	72.1	74.0	75.0	77.0	78.9	81.8	80.8	80.8
72.5°	45.8	44.8	45.8	46.8	47.7	50.6	50.6	51.6	53.6	54.5	50.6
75°	23.4	24.4	26.3	25.3	28.2	26.3	27.3	30.2	29.2	27.3	27.3
77.5°	19.5	19.5	19.5	18.5	20.4	20.4	19.5	21.4	20.4	20.4	19.5
80°	13.6	14.6	13.6	12.7	13.6	12.7	12.7	12.7	12.7	12.7	11.7
82.5°	10.7	8.8	9.7	8.8	9.7	9.7	8.8	7.8	7.8	8.8	7.8
85°	7.8	5.8	6.8	6.8	5.8	5.8	5.8	5.8	5.8	4.9	4.9
87.5°	4.9	2.9	2.9	2.9	3.9	3.9	3.9	2.9	3.9	3.9	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5
2.5°	1817.4	1816.4	1818.4	1817.4	1817.4	1816.4	1817.4	1816.4	1818.4	1814.5	1815.5
5°	1817.4	1815.5	1816.4	1817.4	1818.4	1816.4	1816.4	1816.4	1818.4	1816.4	1817.4
7.5°	1813.5	1812.5	1815.5	1817.4	1816.4	1815.5	1817.4	1816.4	1818.4	1817.4	1819.3
10°	1805.7	1806.7	1808.6	1811.6	1812.5	1813.5	1815.5	1815.5	1818.4	1814.5	1816.4
12.5°	1794.0	1797.9	1802.8	1804.7	1808.6	1808.6	1810.6	1811.6	1813.5	1812.5	1815.5
15°	1779.4	1784.3	1790.1	1795.0	1799.9	1802.8	1805.7	1806.7	1809.6	1806.7	1807.7
17.5°	1761.9	1767.7	1776.5	1782.3	1790.1	1793.1	1796.9	1798.9	1801.8	1799.9	1800.9
20°	1737.5	1744.4	1754.1	1762.9	1767.7	1774.5	1779.4	1782.3	1784.3	1782.3	1783.3
22.5°	1703.5	1713.2	1725.9	1732.7	1742.4	1748.3	1749.2	1756.0	1760.9	1756.0	1758.0
25°	1663.5	1673.3	1683.0	1697.6	1706.4	1713.2	1720.0	1721.0	1725.9	1724.9	1723.9
27.5°	1597.3	1610.0	1626.5	1638.2	1649.9	1660.6	1668.4	1670.3	1675.2	1673.3	1674.2
30°	1506.7	1520.4	1535.9	1554.4	1571.0	1581.7	1591.4	1598.3	1603.1	1600.2	1599.2
32.5°	1378.2	1391.8	1408.4	1426.8	1446.3	1461.9	1473.6	1482.4	1488.2	1486.3	1481.4
35°	1231.1	1235.0	1245.7	1260.3	1276.9	1293.4	1304.1	1313.9	1320.7	1322.6	1322.6
37.5°	1080.1	1067.5	1059.7	1059.7	1069.4	1076.2	1086.0	1091.8	1102.5	1106.4	1109.3
40°	934.0	904.8	877.5	857.1	843.5	842.5	842.5	845.4	855.1	867.8	879.5
42.5°	803.5	756.8	714.9	676.9	649.6	634.1	627.2	628.2	636.0	647.7	667.2
45°	699.3	640.9	588.3	542.5	505.5	481.1	469.5	468.5	474.3	487.9	509.4
47.5°	618.5	556.1	496.7	444.1	404.2	377.9	364.3	360.4	364.3	376.9	402.2
50°	551.3	487.0	425.6	371.1	328.2	301.0	288.3	283.4	288.3	299.0	324.3
52.5°	488.9	422.7	365.2	312.6	266.9	243.5	229.9	226.9	229.9	242.5	263.0
55°	416.9	360.4	303.9	251.3	211.4	188.0	177.3	174.3	177.3	189.0	210.4
57.5°	345.8	297.1	247.4	199.7	165.6	145.1	135.4	131.5	138.3	146.1	171.4
60°	279.5	240.6	198.7	156.8	128.6	110.1	102.3	101.3	103.2	113.0	130.5
62.5°	219.2	187.0	153.9	119.8	96.4	88.6	78.9	77.9	79.9	85.7	99.4
65°	157.8	137.3	112.0	87.7	69.2	58.4	54.5	55.5	57.5	61.4	74.0
67.5°	110.1	95.4	77.9	61.4	47.7	42.8	39.0	38.0	39.0	45.8	52.6
70°	74.0	65.3	52.6	46.8	33.1	26.3	27.3	24.4	28.2	28.2	34.1
72.5°	48.7	42.8	35.1	27.3	23.4	18.5	18.5	17.5	19.5	20.4	25.3
75°	25.3	19.5	19.5	13.6	9.7	4.9	8.8	7.8	6.8	7.8	9.7
77.5°	17.5	14.6	13.6	10.7	9.7	7.8	7.8	7.8	7.8	8.8	9.7
80°	10.7	10.7	7.8	6.8	5.8	4.9	5.8	5.8	5.8	5.8	6.8
82.5°	6.8	5.8	5.8	4.9	4.9	3.9	3.9	3.9	3.9	3.9	5.8
85°	5.8	3.9	3.9	2.9	3.9	6.8	2.9	3.9	3.9	3.9	2.9
87.5°	2.0	2.9	2.9	2.9	2.0	1.0	2.0	2.9	2.9	4.9	3.9
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5	1814.5
2.5°	1817.4	1818.4	1818.4	1817.4	1817.4	1815.5	1819.3	1816.4	1817.4	1821.3	1818.4
5°	1819.3	1820.3	1820.3	1819.3	1819.3	1819.3	1820.3	1820.3	1819.3	1818.4	1820.3
7.5°	1823.3	1822.3	1822.3	1820.3	1820.3	1818.4	1820.3	1817.4	1819.3	1817.4	1820.3
10°	1818.4	1819.3	1818.4	1817.4	1817.4	1816.4	1816.4	1813.5	1814.5	1811.6	1813.5
12.5°	1815.5	1814.5	1814.5	1812.5	1810.6	1808.6	1807.7	1804.7	1804.7	1797.9	1800.9
15°	1807.7	1808.6	1805.7	1801.8	1799.9	1795.0	1793.1	1789.2	1785.3	1780.4	1781.4
17.5°	1800.9	1797.9	1794.0	1790.1	1782.3	1778.5	1774.5	1768.7	1766.8	1760.9	1759.0
20°	1780.4	1778.5	1773.6	1766.8	1761.9	1753.1	1749.2	1743.4	1738.5	1732.7	1729.7
22.5°	1754.1	1752.1	1746.3	1739.5	1731.7	1727.8	1723.9	1713.2	1708.3	1702.5	1701.5
25°	1721.0	1718.1	1712.2	1704.4	1700.5	1689.8	1685.9	1678.1	1676.2	1670.3	1669.4
27.5°	1670.3	1666.4	1659.6	1649.9	1643.1	1636.3	1632.4	1626.5	1624.6	1618.7	1617.8
30°	1594.4	1589.5	1575.9	1572.0	1560.3	1553.5	1553.5	1545.7	1546.6	1542.8	1542.8
32.5°	1474.6	1466.8	1456.1	1448.3	1440.5	1436.6	1436.6	1433.7	1435.6	1435.6	1437.6
35°	1315.8	1305.1	1299.3	1294.4	1294.4	1298.3	1310.0	1312.9	1318.7	1323.6	1327.5
37.5°	1112.3	1111.3	1118.1	1124.0	1138.6	1155.1	1175.6	1193.1	1209.6	1221.3	1233.0
40°	892.1	916.5	936.0	963.3	985.6	1017.8	1054.8	1085.0	1113.2	1133.7	1155.1
42.5°	696.4	727.5	768.5	808.4	848.3	892.1	940.9	982.7	1019.7	1048.0	1070.4
45°	542.5	585.3	635.0	685.7	737.3	791.8	842.5	885.3	924.3	953.5	975.9
47.5°	437.3	484.1	540.5	596.1	654.5	712.0	768.5	805.5	837.6	861.0	881.4
50°	361.3	411.0	470.4	533.7	592.2	649.6	698.3	734.4	760.7	781.1	793.8
52.5°	301.9	354.5	417.8	481.1	539.6	592.2	636.0	663.3	684.7	699.3	711.0
55°	249.3	300.0	359.4	418.8	476.3	525.9	562.0	582.4	599.0	607.7	614.6
57.5°	203.6	250.3	304.8	359.4	409.1	450.0	478.2	498.7	506.5	513.3	512.3
60°	159.7	203.6	253.2	300.0	342.8	375.9	396.4	408.1	413.9	416.9	414.9
62.5°	125.6	165.6	203.6	244.5	275.6	303.9	323.4	323.4	326.3	327.3	330.2
65°	93.5	123.7	156.8	187.0	212.3	230.8	241.6	244.5	248.4	247.4	245.4
67.5°	69.2	91.6	115.9	138.3	155.8	167.5	175.3	182.1	181.2	179.2	178.2
70°	47.7	62.3	83.8	97.4	110.1	121.8	123.7	124.7	125.6	126.6	124.7
72.5°	33.1	43.8	55.5	67.2	75.0	79.9	84.7	85.7	85.7	85.7	84.7
75°	16.6	22.4	33.1	38.0	44.8	46.8	50.6	50.6	53.6	49.7	48.7
77.5°	14.6	17.5	23.4	27.3	30.2	33.1	34.1	37.0	36.0	34.1	35.1
80°	8.8	10.7	14.6	16.6	20.4	21.4	22.4	23.4	22.4	23.4	23.4
82.5°	6.8	7.8	9.7	9.7	12.7	12.7	13.6	13.6	14.6	14.6	14.6
85°	3.9	6.8	5.8	11.7	7.8	7.8	9.7	11.7	9.7	9.7	11.7
87.5°	3.9	3.9	2.9	3.9	3.9	3.9	4.9	5.8	5.8	6.8	5.8
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: P246167

CATALOG NUMBER: LSR8B50D010 EC8B509727 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1814.5	1814.5	1814.5	1814.5
2.5°	1817.4	1819.3	1816.4	1815.5
5°	1820.3	1820.3	1818.4	1818.4
7.5°	1820.3	1820.3	1817.4	1815.5
10°	1812.5	1812.5	1809.6	1807.7
12.5°	1797.9	1797.9	1796.9	1794.0
15°	1779.4	1779.4	1775.5	1772.6
17.5°	1754.1	1756.0	1751.2	1751.2
20°	1726.8	1725.9	1722.0	1720.0
22.5°	1698.6	1696.6	1695.7	1689.8
25°	1668.4	1666.4	1663.5	1660.6
27.5°	1616.8	1615.8	1612.9	1609.0
30°	1537.9	1536.9	1533.0	1533.0
32.5°	1435.6	1434.6	1430.8	1431.7
35°	1329.4	1333.4	1331.4	1327.5
37.5°	1240.8	1243.8	1245.7	1243.8
40°	1166.8	1175.6	1176.5	1178.5
42.5°	1087.9	1099.6	1103.5	1105.4
45°	993.4	1004.2	1012.9	1011.0
47.5°	897.0	904.8	912.6	906.8
50°	804.5	809.4	812.3	812.3
52.5°	716.8	716.8	715.9	716.8
55°	616.5	616.5	612.6	614.6
57.5°	511.3	513.3	510.3	505.5
60°	413.9	409.1	407.1	404.2
62.5°	322.4	322.4	315.6	324.3
65°	241.6	238.6	235.7	234.7
67.5°	175.3	174.3	171.4	170.4
70°	123.7	119.8	118.8	116.9
72.5°	82.8	82.8	80.8	80.8
75°	50.6	45.8	44.8	45.8
77.5°	35.1	34.1	34.1	33.1
80°	23.4	22.4	24.4	21.4
82.5°	14.6	15.6	14.6	15.6
85°	9.7	11.7	10.7	10.7
87.5°	5.8	5.8	5.8	5.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)