

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: P246238

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246238
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 EC8B40927 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3454.9 lumens
Efficiency: N/A
Efficacy: 84.5 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

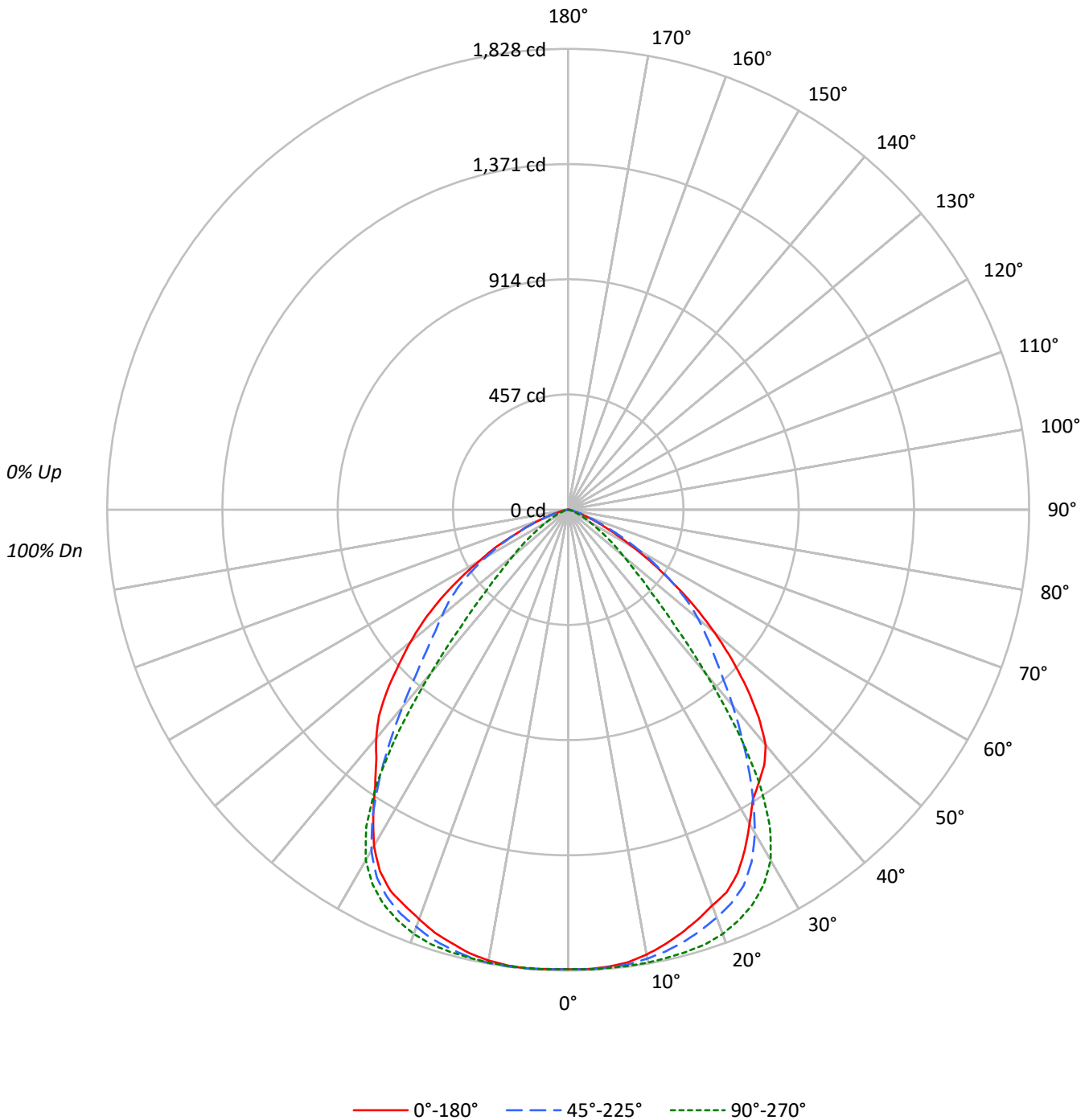
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	174.0	5.0
10°-20°	505.2	14.6
20°-30°	766.8	22.2
30°-40°	805.4	23.3
40°-50°	603.8	17.5
50°-60°	387.4	11.2
60°-70°	165.7	4.8
70°-80°	39.2	1.1
80°-90°	7.3	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°	1446.0	41.9
0°-40°	2251.4	65.2
0°-60°	3242.7	93.9
0°-90°	3454.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3454.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1823	1823	1823	1823	1823	
5°	1820	1823	1825	1828	1827	173
15°	1738	1774	1815	1803	1781	490
25°	1590	1646	1729	1698	1668	726
35°	1319	1246	1320	1304	1334	828
45°	1002	819	471	796	1016	767
55°	507	507	175	528	617	460
65°	153	180	56	232	236	163
75°	24	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°	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8
2.5°	1823.8	1825.8	1824.9	1824.9	1823.8	1824.9	1824.9	1826.8	1826.8	1824.9	1823.8
5°	1819.9	1821.8	1821.8	1819.9	1819.9	1824.9	1821.8	1823.8	1823.8	1822.8	1822.8
7.5°	1811.1	1811.1	1815.1	1812.2	1812.2	1815.1	1814.1	1816.0	1818.0	1819.0	1819.0
10°	1791.6	1793.5	1794.5	1794.5	1795.5	1798.4	1800.3	1804.3	1806.2	1808.2	1809.1
12.5°	1767.2	1770.1	1771.0	1770.1	1773.0	1776.8	1781.8	1786.6	1789.6	1793.5	1796.4
15°	1737.7	1737.7	1739.7	1742.6	1744.6	1750.5	1755.3	1761.2	1769.1	1773.9	1778.8
17.5°	1705.5	1707.4	1710.3	1710.3	1714.3	1724.1	1727.0	1735.8	1744.6	1749.5	1759.3
20°	1670.3	1672.2	1675.1	1677.0	1682.0	1689.8	1695.7	1703.5	1713.3	1722.0	1731.8
22.5°	1642.8	1638.9	1640.8	1642.8	1647.7	1654.5	1661.4	1671.2	1681.0	1689.8	1699.5
25°	1590.0	1591.0	1593.9	1595.8	1601.8	1607.6	1615.4	1627.2	1636.0	1645.8	1656.6
27.5°	1518.5	1519.5	1524.5	1524.5	1529.3	1539.1	1544.0	1553.7	1565.6	1575.3	1588.0
30°	1437.4	1439.3	1439.3	1443.3	1446.2	1451.0	1456.0	1465.8	1471.6	1480.4	1498.0
32.5°	1363.0	1365.0	1364.0	1363.0	1360.0	1359.1	1358.1	1360.0	1362.0	1365.0	1371.8
35°	1319.0	1314.1	1310.2	1303.3	1295.4	1285.6	1276.9	1265.2	1254.4	1245.6	1235.8
37.5°	1276.9	1275.9	1270.0	1260.2	1244.6	1227.0	1206.4	1181.0	1155.6	1128.1	1101.7
40°	1218.1	1215.2	1210.4	1196.7	1179.0	1157.5	1130.2	1098.8	1057.7	1015.6	972.6
42.5°	1118.4	1119.4	1113.5	1102.7	1086.1	1065.5	1037.1	1002.9	958.8	909.0	853.2
45°	1001.9	1001.9	1000.0	991.1	979.4	962.8	941.3	912.9	869.8	819.0	759.3
47.5°	880.6	881.6	878.6	876.7	871.8	861.1	845.4	823.8	793.6	744.6	684.9
50°	757.4	757.4	762.2	761.3	761.3	757.4	750.5	737.8	711.3	672.2	616.4
52.5°	634.1	636.0	638.9	642.8	647.8	655.5	647.8	641.8	625.3	594.9	547.0
55°	506.8	508.8	513.7	520.5	526.4	534.3	536.2	536.2	527.4	506.8	470.6
57.5°	398.2	395.3	399.3	405.1	412.9	420.8	426.6	433.5	432.4	418.7	389.5
60°	299.4	300.4	303.3	309.2	315.1	321.9	329.7	335.6	338.5	331.7	313.1
62.5°	218.2	218.2	222.1	227.9	231.0	240.8	245.6	248.5	251.4	250.4	238.7
65°	152.7	154.6	156.6	159.5	162.5	168.3	171.2	177.1	179.1	180.0	171.2
67.5°	107.7	104.7	106.6	108.6	111.5	115.4	121.4	121.4	124.2	124.2	118.4
70°	68.5	68.5	69.5	72.4	74.4	75.4	77.3	79.2	82.2	81.2	81.2
72.5°	46.0	45.0	46.0	47.0	47.9	50.8	50.8	51.9	53.8	54.8	50.8
75°	23.5	24.4	26.4	25.4	28.4	26.4	27.3	30.4	29.4	27.3	27.3
77.5°	19.6	19.6	19.6	18.6	20.6	20.6	19.6	21.5	20.6	20.6	19.6
80°	13.7	14.6	13.7	12.7	13.7	12.7	12.7	12.7	12.7	12.7	11.7
82.5°	10.8	8.8	9.8	8.8	9.8	9.8	8.8	7.9	7.9	8.8	7.9
85°	7.9	5.9	6.9	6.9	5.9	5.9	5.9	5.9	5.9	4.8	4.8
87.5°	4.8	2.9	2.9	2.9	3.9	3.9	3.9	2.9	3.9	3.9	1.9
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8
2.5°	1825.8	1824.9	1826.8	1825.8	1825.8	1824.9	1825.8	1824.9	1826.8	1822.8	1823.8
5°	1825.8	1823.8	1824.9	1825.8	1826.8	1824.9	1824.9	1824.9	1826.8	1824.9	1825.8
7.5°	1821.8	1820.9	1823.8	1825.8	1824.9	1823.8	1825.8	1824.9	1826.8	1825.8	1827.8
10°	1814.1	1815.1	1817.0	1819.9	1820.9	1821.8	1823.8	1823.8	1826.8	1822.8	1824.9
12.5°	1802.4	1806.2	1811.1	1813.0	1817.0	1817.0	1819.0	1819.9	1821.8	1820.9	1823.8
15°	1787.6	1792.6	1798.4	1803.3	1808.2	1811.1	1814.1	1815.1	1818.0	1815.1	1816.0
17.5°	1770.1	1775.9	1784.7	1790.6	1798.4	1801.4	1805.3	1807.2	1810.1	1808.2	1809.1
20°	1745.6	1752.4	1762.2	1771.0	1775.9	1782.8	1787.6	1790.6	1792.6	1790.6	1791.6
22.5°	1711.4	1721.1	1733.8	1740.7	1750.5	1756.4	1757.4	1764.1	1769.1	1764.1	1766.1
25°	1671.2	1681.0	1690.8	1705.5	1714.3	1721.1	1728.0	1728.9	1733.8	1732.8	1731.8
27.5°	1604.7	1617.4	1634.1	1645.8	1657.5	1668.3	1676.1	1678.0	1683.0	1681.0	1682.0
30°	1513.7	1527.4	1543.0	1561.6	1578.3	1589.0	1598.9	1605.6	1610.6	1607.6	1606.6
32.5°	1384.5	1398.3	1414.8	1433.5	1453.0	1468.7	1480.4	1489.2	1495.1	1493.1	1488.3
35°	1236.8	1240.6	1251.4	1266.1	1282.7	1299.4	1310.2	1320.0	1326.8	1328.7	1328.7
37.5°	1085.1	1072.4	1064.6	1064.6	1074.4	1081.2	1091.0	1096.9	1107.6	1111.5	1114.4
40°	938.4	909.0	881.6	861.1	847.4	846.3	846.3	849.3	859.0	871.8	883.6
42.5°	807.2	760.3	718.2	680.1	652.6	637.0	630.1	631.1	638.9	650.7	670.3
45°	702.6	643.8	591.0	544.9	507.8	483.3	471.6	470.6	476.6	490.2	511.8
47.5°	621.3	558.7	499.0	446.2	406.0	379.7	366.0	362.0	366.0	378.7	404.1
50°	553.8	489.3	427.6	372.8	329.7	302.4	289.6	284.7	289.6	300.4	325.8
52.5°	491.2	424.7	367.0	314.1	268.1	244.6	231.0	227.9	231.0	243.7	264.2
55°	418.7	362.0	305.3	252.4	212.3	188.9	178.1	175.2	178.1	189.8	211.4
57.5°	347.4	298.5	248.5	200.6	166.4	145.8	136.0	132.1	138.9	146.8	172.2
60°	280.8	241.6	199.6	157.5	129.2	110.6	102.7	101.7	103.7	113.5	131.1
62.5°	220.2	187.9	154.6	120.4	96.9	89.0	79.2	78.3	80.2	86.1	99.8
65°	158.5	137.9	112.5	88.1	69.5	58.7	54.8	55.8	57.7	61.6	74.4
67.5°	110.6	95.9	78.3	61.6	47.9	43.1	39.2	38.1	39.2	46.0	52.9
70°	74.4	65.6	52.9	47.0	33.3	26.4	27.3	24.4	28.4	28.4	34.2
72.5°	48.9	43.1	35.2	27.3	23.5	18.6	18.6	17.7	19.6	20.6	25.4
75°	25.4	19.6	19.6	13.7	9.8	4.8	8.8	7.9	6.9	7.9	9.8
77.5°	17.7	14.6	13.7	10.8	9.8	7.9	7.9	7.9	7.9	8.8	9.8
80°	10.8	10.8	7.9	6.9	5.9	4.8	5.9	5.9	5.9	5.9	6.9
82.5°	6.9	5.9	5.9	4.8	4.8	3.9	3.9	3.9	3.9	3.9	5.9
85°	5.9	3.9	3.9	2.9	3.9	6.9	2.9	3.9	3.9	3.9	2.9
87.5°	1.9	2.9	2.9	2.9	1.9	1.0	1.9	2.9	2.9	4.8	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



TEST NUMBER: P246238

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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8	1822.8
2.5°	1825.8	1826.8	1826.8	1825.8	1825.8	1823.8	1827.8	1824.9	1825.8	1829.7	1826.8
5°	1827.8	1828.7	1828.7	1827.8	1827.8	1827.8	1828.7	1828.7	1827.8	1826.8	1828.7
7.5°	1831.7	1830.7	1830.7	1828.7	1828.7	1826.8	1828.7	1825.8	1827.8	1825.8	1828.7
10°	1826.8	1827.8	1826.8	1825.8	1825.8	1824.9	1824.9	1821.8	1822.8	1819.9	1821.8
12.5°	1823.8	1822.8	1822.8	1820.9	1819.0	1817.0	1816.0	1813.0	1813.0	1806.2	1809.1
15°	1816.0	1817.0	1814.1	1810.1	1808.2	1803.3	1801.4	1797.4	1793.5	1788.6	1789.6
17.5°	1809.1	1806.2	1802.4	1798.4	1790.6	1786.6	1782.8	1776.8	1774.9	1769.1	1767.2
20°	1788.6	1786.6	1781.8	1774.9	1770.1	1761.2	1757.4	1751.4	1746.6	1740.7	1737.7
22.5°	1762.2	1760.2	1754.3	1747.5	1739.7	1735.8	1731.8	1721.1	1716.2	1710.3	1709.3
25°	1728.9	1726.0	1720.1	1712.2	1708.4	1697.6	1693.7	1685.9	1683.9	1678.0	1677.0
27.5°	1678.0	1674.1	1667.2	1657.5	1650.6	1643.8	1639.9	1634.1	1632.0	1626.2	1625.2
30°	1601.8	1596.8	1583.1	1579.3	1567.5	1560.6	1560.6	1552.8	1553.7	1549.9	1549.9
32.5°	1481.4	1473.5	1462.8	1455.0	1447.1	1443.3	1443.3	1440.2	1442.2	1442.2	1444.2
35°	1321.9	1311.2	1305.2	1300.4	1300.4	1304.3	1316.0	1319.0	1324.8	1329.8	1333.7
37.5°	1117.4	1116.4	1123.3	1129.2	1143.8	1160.4	1181.0	1198.6	1215.2	1227.0	1238.7
40°	896.3	920.7	940.3	967.7	990.2	1022.5	1059.6	1090.0	1118.4	1139.0	1160.4
42.5°	699.6	730.9	772.0	812.1	852.2	896.3	945.2	987.3	1024.4	1052.8	1075.3
45°	544.9	588.0	638.0	688.8	740.7	795.5	846.3	889.4	928.6	957.9	980.4
47.5°	439.3	486.3	543.0	598.8	657.6	715.3	772.0	809.2	841.5	864.9	885.5
50°	363.0	412.9	472.6	536.2	594.9	652.6	701.6	737.8	764.2	784.7	797.4
52.5°	303.3	356.2	419.7	483.3	542.0	594.9	638.9	666.3	687.8	702.6	714.3
55°	250.4	301.4	361.0	420.8	478.5	528.4	564.5	585.1	601.8	610.5	617.4
57.5°	204.5	251.4	306.2	361.0	411.0	452.0	480.4	501.0	508.8	515.7	514.7
60°	160.4	204.5	254.4	301.4	344.4	377.7	398.2	410.0	415.8	418.7	416.8
62.5°	126.2	166.4	204.5	245.6	276.9	305.3	324.9	324.9	327.8	328.7	331.7
65°	93.9	124.2	157.5	187.9	213.3	231.9	242.7	245.6	249.5	248.5	246.6
67.5°	69.5	92.0	116.4	138.9	156.6	168.3	176.1	183.0	182.0	180.0	179.1
70°	47.9	62.7	84.1	97.9	110.6	122.3	124.2	125.2	126.2	127.2	125.2
72.5°	33.3	44.0	55.8	67.5	75.4	80.2	85.2	86.1	86.1	86.1	85.2
75°	16.7	22.5	33.3	38.1	45.0	47.0	50.8	50.8	53.8	49.9	48.9
77.5°	14.6	17.7	23.5	27.3	30.4	33.3	34.2	37.1	36.2	34.2	35.2
80°	8.8	10.8	14.6	16.7	20.6	21.5	22.5	23.5	22.5	23.5	23.5
82.5°	6.9	7.9	9.8	9.8	12.7	12.7	13.7	13.7	14.6	14.6	14.6
85°	3.9	6.9	5.9	11.7	7.9	7.9	9.8	11.7	9.8	9.8	11.7
87.5°	3.9	3.9	2.9	3.9	3.9	3.9	4.8	5.9	5.9	6.9	5.9
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: P246238

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1822.8	1822.8	1822.8	1822.8
2.5°	1825.8	1827.8	1824.9	1823.8
5°	1828.7	1828.7	1826.8	1826.8
7.5°	1828.7	1828.7	1825.8	1823.8
10°	1820.9	1820.9	1818.0	1816.0
12.5°	1806.2	1806.2	1805.3	1802.4
15°	1787.6	1787.6	1783.7	1780.8
17.5°	1762.2	1764.1	1759.3	1759.3
20°	1734.8	1733.8	1729.9	1728.0
22.5°	1706.4	1704.5	1703.5	1697.6
25°	1676.1	1674.1	1671.2	1668.3
27.5°	1624.3	1623.3	1620.3	1616.4
30°	1545.0	1544.0	1540.1	1540.1
32.5°	1442.2	1441.2	1437.4	1438.3
35°	1335.6	1339.5	1337.5	1333.7
37.5°	1246.5	1249.5	1251.4	1249.5
40°	1172.1	1181.0	1181.9	1184.0
42.5°	1092.9	1104.6	1108.6	1110.5
45°	998.0	1008.8	1017.6	1015.6
47.5°	901.1	909.0	916.8	910.9
50°	808.2	813.0	816.1	816.1
52.5°	720.1	720.1	719.2	720.1
55°	619.3	619.3	615.5	617.4
57.5°	513.7	515.7	512.7	507.8
60°	415.8	411.0	408.9	406.0
62.5°	323.9	323.9	317.0	325.8
65°	242.7	239.7	236.8	235.8
67.5°	176.1	175.2	172.2	171.2
70°	124.2	120.4	119.4	117.4
72.5°	83.1	83.1	81.2	81.2
75°	50.8	46.0	45.0	46.0
77.5°	35.2	34.2	34.2	33.3
80°	23.5	22.5	24.4	21.5
82.5°	14.6	15.6	14.6	15.6
85°	9.8	11.7	10.8	10.8
87.5°	5.9	5.9	5.9	5.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)