

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: P244222

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B409727 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE 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: 3219.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

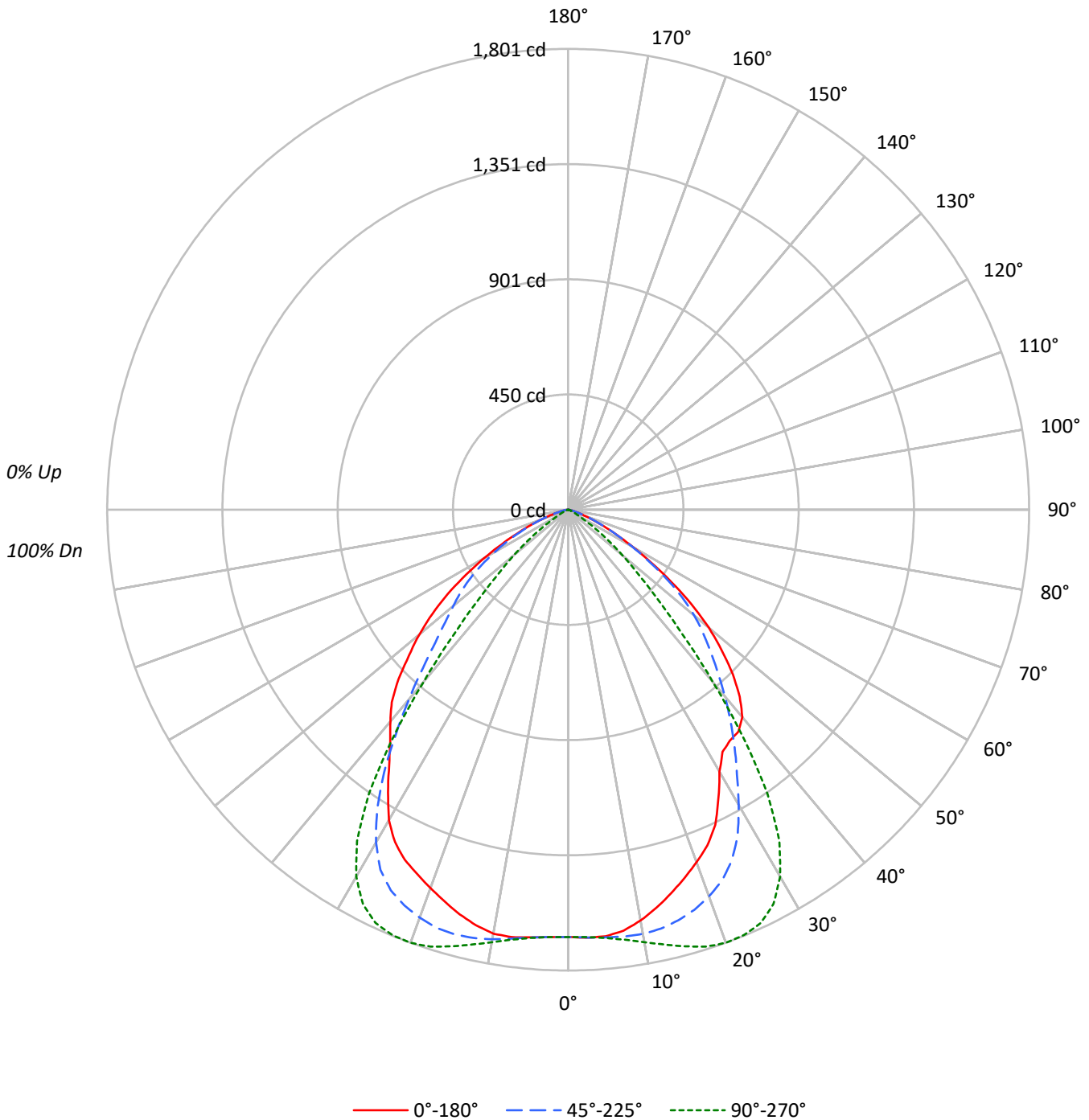
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38
10	60	48	41	36	59	48	41	36	47	41	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°	160.6	5.0
10°-20°	475.7	14.8
20°-30°	725.8	22.5
30°-40°	757.4	23.5
40°-50°	568.9	17.7
50°-60°	350.0	10.9
60°-70°	142.4	4.4
70°-80°	33.6	1.0
80°-90°	4.6	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°	1362.1	42.3
0°-40°	2119.5	65.8
0°-60°	3038.4	94.4
0°-90°	3219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3219.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1670	1670	1670	1670	1670	
5°	1674	1678	1680	1678	1678	158
15°	1552	1661	1766	1718	1637	437
25°	1360	1512	1782	1641	1510	618
35°	1102	1133	1357	1254	1219	696
45°	909	787	491	733	938	694
55°	491	466	128	466	575	441
65°	153	155	20	208	221	160
75°	27	27	4	47	49	32
85°	3	3	1	6	8	4
90°	0	0	0	0	0	



TEST NUMBER: P244222

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9
2.5°	1674.3	1671.7	1674.3	1674.3	1675.2	1673.5	1674.3	1675.2	1673.5	1673.5	1673.5
5°	1673.5	1671.7	1673.5	1672.6	1674.3	1674.3	1676.1	1676.1	1677.9	1677.9	1680.6
7.5°	1659.3	1655.7	1659.3	1661.9	1663.7	1667.3	1671.7	1675.2	1678.8	1682.3	1686.8
10°	1630.0	1630.0	1632.7	1638.0	1643.3	1649.5	1657.5	1666.4	1675.2	1683.2	1691.2
12.5°	1593.7	1591.0	1596.3	1603.4	1611.4	1621.2	1633.6	1646.9	1661.1	1677.0	1689.4
15°	1552.0	1549.4	1555.6	1562.7	1572.4	1586.6	1601.7	1619.4	1639.8	1661.1	1681.4
17.5°	1509.5	1508.6	1514.8	1524.6	1532.5	1547.6	1567.1	1588.4	1611.4	1639.8	1666.4
20°	1466.1	1465.2	1471.4	1479.4	1490.0	1504.2	1523.7	1548.5	1576.0	1607.9	1638.9
22.5°	1420.8	1421.7	1427.0	1435.9	1444.8	1459.8	1480.2	1505.1	1535.2	1569.7	1604.3
25°	1359.7	1355.3	1362.3	1371.2	1386.3	1398.7	1418.2	1444.8	1475.8	1512.1	1552.9
27.5°	1271.0	1270.2	1276.4	1284.3	1297.6	1312.7	1334.0	1361.5	1394.3	1434.1	1474.0
30°	1182.4	1184.2	1186.8	1194.8	1203.7	1218.8	1240.0	1263.1	1294.1	1332.2	1374.8
32.5°	1122.1	1122.1	1125.7	1131.0	1137.2	1145.2	1160.3	1177.1	1201.0	1227.6	1258.6
35°	1101.7	1098.2	1101.7	1102.6	1103.5	1105.3	1107.9	1113.3	1121.2	1132.8	1144.3
37.5°	1092.9	1090.2	1090.2	1086.7	1082.2	1076.9	1069.8	1061.9	1053.0	1041.5	1032.6
40°	1058.3	1056.5	1054.8	1051.2	1041.5	1030.8	1019.3	1000.7	980.3	951.9	923.6
42.5°	991.9	990.1	989.2	982.1	973.2	960.8	947.5	928.0	902.3	866.0	825.2
45°	909.4	905.9	903.2	897.0	890.8	880.2	867.8	850.0	824.3	787.1	738.3
47.5°	813.7	811.9	811.0	808.4	802.2	795.9	788.0	773.8	750.7	715.3	664.8
50°	717.1	713.5	715.3	714.4	711.8	707.3	702.0	692.3	674.5	642.6	596.5
52.5°	606.3	606.3	605.4	608.0	608.9	608.0	608.9	598.3	583.2	559.3	520.3
55°	491.0	491.0	493.7	497.3	500.8	501.7	500.8	496.4	485.7	466.2	431.7
57.5°	382.9	381.1	386.5	391.8	395.3	398.9	396.2	392.7	386.5	370.5	343.9
60°	291.6	291.6	295.2	298.7	302.2	305.8	304.9	304.0	298.7	288.1	266.8
62.5°	214.5	215.4	215.4	218.0	221.6	225.1	227.8	225.1	222.5	215.4	201.2
65°	153.3	152.4	153.3	156.0	158.7	162.2	164.0	163.1	160.4	155.1	144.5
67.5°	102.8	101.9	105.5	106.4	108.1	111.7	110.8	111.7	110.8	106.4	97.5
70°	67.4	65.6	67.4	66.5	69.1	70.0	71.8	72.7	71.8	69.1	66.5
72.5°	41.7	40.8	41.7	42.6	43.4	44.3	46.1	46.1	45.2	43.4	39.9
75°	26.6	23.9	24.8	23.1	24.8	24.8	26.6	27.5	26.6	26.6	24.8
77.5°	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.9	17.7	16.0	15.1
80°	8.0	8.0	8.9	8.9	8.9	9.8	8.9	8.9	8.9	9.8	7.1
82.5°	6.2	5.3	5.3	5.3	6.2	5.3	5.3	5.3	5.3	5.3	5.3
85°	2.7	3.5	2.7	1.8	2.7	2.7	3.5	2.7	2.7	2.7	3.5
87.5°	0.9	0.9	0.0	0.0	0.0	0.9	0.0	0.9	0.9	1.8	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: P244222

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9
2.5°	1674.3	1672.6	1672.6	1671.7	1673.5	1671.7	1672.6	1671.7	1671.7	1673.5	1671.7
5°	1680.6	1681.4	1679.7	1678.8	1681.4	1681.4	1681.4	1679.7	1679.7	1680.6	1679.7
7.5°	1689.4	1691.2	1692.1	1693.0	1694.7	1695.6	1695.6	1694.7	1693.8	1696.5	1693.0
10°	1699.2	1701.8	1707.1	1709.8	1714.2	1714.2	1716.0	1716.0	1714.2	1716.0	1715.1
12.5°	1695.6	1711.6	1720.4	1726.6	1732.8	1738.2	1739.9	1740.8	1739.9	1743.5	1739.9
15°	1701.8	1715.1	1729.3	1739.9	1751.5	1757.7	1759.4	1766.5	1768.3	1769.2	1763.9
17.5°	1692.1	1716.0	1731.1	1747.0	1763.9	1775.4	1786.0	1790.5	1791.4	1793.1	1786.0
20°	1669.9	1696.5	1719.5	1742.6	1762.1	1779.8	1788.7	1801.1	1797.6	1804.6	1794.9
22.5°	1639.8	1669.9	1699.2	1729.3	1749.7	1771.0	1789.6	1798.4	1802.9	1802.9	1792.2
25°	1591.9	1627.4	1659.3	1690.3	1721.3	1747.0	1768.3	1781.6	1784.3	1783.4	1771.0
27.5°	1517.5	1555.6	1592.8	1628.3	1666.4	1696.5	1721.3	1737.3	1741.7	1741.7	1728.4
30°	1414.6	1455.4	1491.8	1534.3	1573.3	1607.0	1641.6	1655.7	1663.7	1663.7	1648.6
32.5°	1292.3	1326.9	1360.6	1402.2	1444.8	1482.9	1515.7	1535.2	1544.9	1544.0	1530.8
35°	1159.4	1176.2	1201.9	1232.9	1271.0	1306.5	1338.4	1357.0	1373.9	1373.0	1360.6
37.5°	1026.4	1022.0	1024.6	1036.2	1060.1	1084.9	1109.7	1127.5	1141.6	1147.9	1145.2
40°	896.1	873.1	850.9	842.9	844.7	853.6	866.9	880.2	896.1	904.1	907.6
42.5°	779.1	740.1	701.1	671.9	655.0	649.7	655.9	660.3	670.1	681.6	693.1
45°	685.2	632.9	581.5	536.3	507.9	491.0	487.5	491.0	496.4	507.9	523.0
47.5°	608.0	546.9	489.3	438.7	397.1	374.9	368.7	367.0	372.3	382.9	403.3
50°	539.8	478.6	414.8	356.3	312.9	288.1	279.2	275.7	281.9	289.8	308.4
52.5°	465.3	405.1	339.5	282.7	237.5	211.8	202.1	196.8	200.3	211.0	229.6
55°	384.7	328.8	269.5	211.0	167.5	143.6	132.1	128.5	132.1	143.6	162.2
57.5°	304.0	257.0	207.4	152.4	113.4	89.5	78.0	74.5	84.2	88.6	108.1
60°	237.5	199.4	156.9	111.7	78.0	59.4	47.9	45.2	49.6	57.6	73.6
62.5°	178.2	154.2	120.5	79.8	57.6	38.1	31.9	29.3	31.9	38.1	50.5
65°	129.4	110.8	84.2	58.5	39.0	28.4	21.3	19.5	22.2	26.6	37.2
67.5°	88.6	74.5	58.5	40.8	26.6	17.7	15.1	15.1	16.0	19.5	27.5
70°	57.6	48.8	37.2	26.6	17.7	13.3	11.5	9.8	11.5	14.2	18.6
72.5°	36.3	31.0	23.9	18.6	13.3	9.8	8.0	7.1	8.9	10.6	14.2
75°	22.2	16.9	12.4	9.8	7.1	7.1	7.1	3.5	4.4	7.1	8.9
77.5°	13.3	11.5	9.8	8.0	6.2	3.5	3.5	3.5	4.4	5.3	8.0
80°	7.1	6.2	4.4	4.4	3.5	2.7	3.5	2.7	1.8	4.4	5.3
82.5°	4.4	3.5	3.5	3.5	4.4	1.8	2.7	1.8	2.7	3.5	2.7
85°	2.7	2.7	2.7	1.8	4.4	1.8	1.8	0.9	0.9	1.8	1.8
87.5°	0.0	0.9	0.9	0.0	0.9	0.0	0.9	0.9	0.9	0.9	0.9
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: P244222

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9	1669.9
2.5°	1672.6	1671.7	1672.6	1671.7	1671.7	1671.7	1672.6	1672.6	1671.7	1671.7	1673.5
5°	1679.7	1679.7	1679.7	1678.8	1677.9	1677.9	1679.7	1679.7	1677.0	1679.7	1679.7
7.5°	1694.7	1692.1	1694.7	1691.2	1689.4	1690.3	1691.2	1689.4	1687.6	1688.5	1688.5
10°	1714.2	1711.6	1711.6	1708.9	1706.3	1704.5	1702.7	1698.3	1693.8	1693.0	1689.4
12.5°	1737.3	1732.8	1730.2	1724.9	1720.4	1714.2	1708.9	1701.8	1693.0	1686.8	1680.6
15°	1760.3	1753.2	1747.0	1738.2	1728.4	1717.8	1706.3	1694.7	1680.6	1668.1	1657.5
17.5°	1778.9	1769.2	1757.7	1743.5	1729.3	1713.3	1696.5	1679.7	1659.3	1643.3	1630.9
20°	1785.1	1771.0	1755.9	1737.3	1718.7	1696.5	1675.2	1653.1	1630.0	1613.2	1599.0
22.5°	1777.2	1760.3	1741.7	1722.2	1697.4	1673.5	1648.6	1622.9	1602.5	1579.5	1566.2
25°	1755.0	1734.6	1714.2	1691.2	1667.3	1640.7	1614.1	1587.5	1562.7	1550.3	1533.4
27.5°	1709.8	1687.6	1665.5	1641.6	1614.1	1587.5	1560.0	1534.3	1513.0	1496.2	1486.4
30°	1630.0	1604.3	1578.6	1552.9	1529.0	1501.5	1475.8	1454.5	1433.2	1420.0	1410.2
32.5°	1507.7	1484.7	1459.0	1434.1	1412.0	1388.9	1367.7	1349.1	1334.0	1325.1	1318.0
35°	1342.8	1319.8	1300.3	1282.6	1263.9	1254.2	1240.9	1230.3	1224.1	1220.5	1219.6
37.5°	1135.4	1122.1	1115.9	1112.4	1108.8	1106.2	1107.9	1112.4	1115.9	1122.1	1129.2
40°	913.8	925.4	928.9	941.3	952.8	967.9	984.8	1004.3	1020.2	1040.6	1054.8
42.5°	711.8	733.0	757.8	784.4	812.8	840.3	874.0	905.0	933.3	959.0	981.2
45°	546.9	579.7	616.9	655.0	693.1	733.0	773.8	811.9	845.6	873.1	896.1
47.5°	426.3	462.7	510.6	557.5	603.6	650.6	695.8	735.7	764.0	790.6	811.0
50°	337.7	379.4	431.7	485.7	536.3	585.9	633.7	671.0	699.3	720.6	735.7
52.5°	261.5	311.1	364.3	421.0	475.1	529.2	573.5	608.0	631.1	649.7	661.2
55°	195.0	243.8	300.5	359.0	413.9	466.2	507.9	538.0	558.4	569.0	575.2
57.5°	140.9	185.3	242.0	300.5	350.1	399.8	433.4	460.9	472.4	478.6	481.3
60°	102.8	143.6	194.1	244.6	291.6	331.5	360.8	379.4	388.2	391.8	390.9
62.5°	75.3	110.8	154.2	196.8	234.9	267.7	290.7	303.1	307.6	309.3	306.7
65°	57.6	85.1	122.3	155.1	184.4	208.3	225.1	233.1	235.8	234.9	233.1
67.5°	42.6	63.8	91.3	116.1	137.4	156.0	164.9	172.0	173.7	171.1	168.4
70°	30.1	47.0	66.5	83.3	99.3	109.9	119.7	120.5	120.5	119.7	117.9
72.5°	21.3	32.8	45.2	56.7	66.5	74.5	78.0	80.7	79.8	78.9	77.1
75°	14.2	20.4	32.8	35.5	44.3	47.0	50.5	50.5	51.4	48.8	48.8
77.5°	8.9	14.2	19.5	23.1	26.6	30.1	31.9	31.9	32.8	31.9	31.9
80°	5.3	8.9	10.6	16.0	16.0	18.6	19.5	20.4	18.6	21.3	18.6
82.5°	3.5	5.3	8.0	8.0	9.8	11.5	11.5	12.4	12.4	11.5	11.5
85°	2.7	3.5	4.4	5.3	5.3	6.2	5.3	5.3	6.2	7.1	6.2
87.5°	0.9	1.8	0.9	1.8	1.8	3.5	2.7	2.7	2.7	3.5	3.5
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: P244222

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1669.9	1669.9	1669.9	1669.9
2.5°	1671.7	1672.6	1671.7	1671.7
5°	1679.7	1678.8	1679.7	1677.9
7.5°	1685.9	1685.9	1685.0	1685.0
10°	1685.9	1682.3	1682.3	1682.3
12.5°	1672.6	1668.1	1665.5	1663.7
15°	1649.5	1641.6	1638.0	1637.1
17.5°	1619.4	1612.3	1607.9	1605.2
20°	1584.8	1577.7	1572.4	1573.3
22.5°	1554.7	1546.7	1543.2	1541.4
25°	1524.6	1514.8	1512.1	1510.4
27.5°	1475.8	1470.5	1467.8	1465.2
30°	1401.3	1398.7	1394.3	1400.5
32.5°	1315.4	1310.9	1307.4	1310.1
35°	1220.5	1217.9	1220.5	1218.8
37.5°	1133.7	1136.3	1139.9	1141.6
40°	1065.4	1075.2	1078.7	1080.5
42.5°	997.2	1008.7	1015.8	1020.2
45°	913.0	924.5	932.4	937.8
47.5°	826.1	835.9	843.8	842.9
50°	747.2	752.5	756.1	759.6
52.5°	667.4	667.4	668.3	668.3
55°	577.0	575.2	574.4	575.2
57.5°	477.7	476.0	475.1	472.4
60°	387.3	382.0	378.5	378.5
62.5°	303.1	296.9	294.3	293.4
65°	227.8	226.9	221.6	220.7
67.5°	164.9	161.3	157.8	158.7
70°	116.1	110.8	110.8	109.0
72.5°	75.3	72.7	71.8	71.8
75°	47.0	47.0	45.2	48.8
77.5°	31.0	31.0	30.1	31.0
80°	18.6	18.6	18.6	17.7
82.5°	11.5	12.4	11.5	11.5
85°	6.2	7.1	5.3	8.0
87.5°	3.5	4.4	3.5	4.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)