

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: P245524

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245524
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 EC8B409730 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3312.0 lumens
Efficiency: N/A
Efficacy: 81.0 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

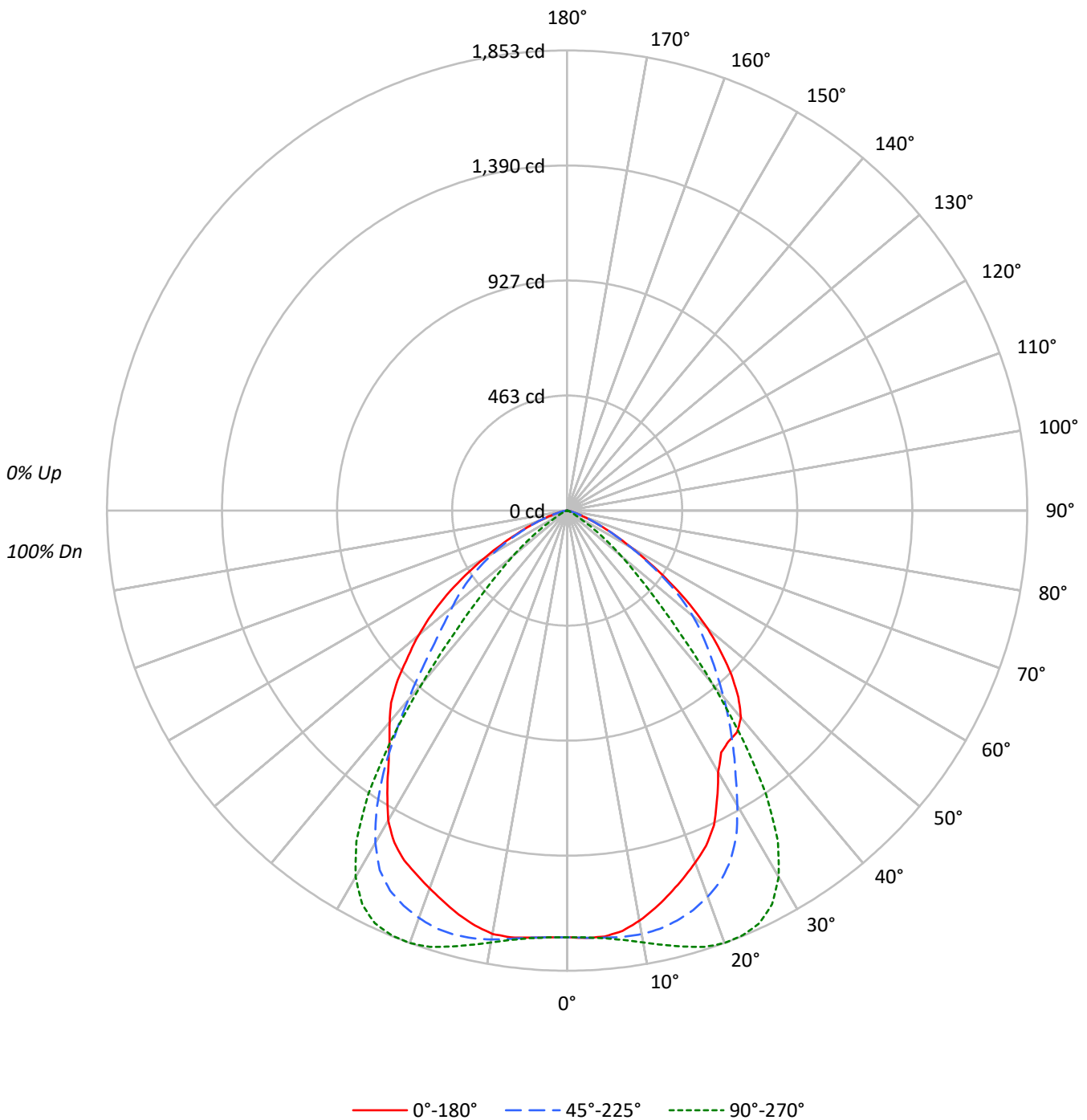
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	165.2	5.0
10°-20°	489.5	14.8
20°-30°	746.7	22.5
30°-40°	779.2	23.5
40°-50°	585.3	17.7
50°-60°	360.1	10.9
60°-70°	146.6	4.4
70°-80°	34.5	1.0
80°-90°	4.7	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°	1401.5	42.3
0°-40°	2180.7	65.8
0°-60°	3126.2	94.4
0°-90°	3312.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3312.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1718	1718	1718	1718	1718	
5°	1722	1726	1728	1726	1726	163
15°	1597	1709	1818	1767	1684	450
25°	1399	1556	1833	1688	1554	636
35°	1134	1166	1396	1290	1254	716
45°	936	810	505	754	965	714
55°	505	480	132	480	592	454
65°	158	160	20	214	227	165
75°	27	27	4	48	50	33
85°	3	3	1	6	8	4
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°	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1
2.5°	1722.7	1720.0	1722.7	1722.7	1723.6	1721.8	1722.7	1723.6	1721.8	1721.8	1721.8
5°	1721.8	1720.0	1721.8	1720.9	1722.7	1722.7	1724.6	1724.6	1726.4	1726.4	1729.1
7.5°	1707.2	1703.6	1707.2	1710.0	1711.8	1715.4	1720.0	1723.6	1727.3	1730.9	1735.5
10°	1677.1	1677.1	1679.9	1685.3	1690.8	1697.2	1705.4	1714.5	1723.6	1731.8	1740.0
12.5°	1639.7	1637.0	1642.5	1649.8	1658.0	1668.0	1680.8	1694.5	1709.0	1725.4	1738.2
15°	1596.9	1594.1	1600.5	1607.8	1617.8	1632.4	1647.9	1666.2	1687.2	1709.0	1730.0
17.5°	1553.1	1552.2	1558.6	1568.6	1576.8	1592.3	1612.4	1634.2	1658.0	1687.2	1714.5
20°	1508.4	1507.5	1513.9	1522.1	1533.0	1547.6	1567.7	1593.2	1621.5	1654.3	1686.2
22.5°	1461.9	1462.8	1468.3	1477.4	1486.5	1502.0	1523.0	1548.5	1579.5	1615.1	1650.7
25°	1399.0	1394.4	1401.7	1410.8	1426.3	1439.1	1459.2	1486.5	1518.4	1555.8	1597.8
27.5°	1307.8	1306.8	1313.3	1321.4	1335.1	1350.6	1372.5	1400.8	1434.5	1475.6	1516.6
30°	1216.6	1218.4	1221.1	1229.3	1238.5	1254.0	1275.9	1299.6	1331.5	1370.7	1414.5
32.5°	1154.6	1154.6	1158.2	1163.7	1170.1	1178.3	1193.8	1211.1	1235.7	1263.1	1295.0
35°	1133.6	1129.9	1133.6	1134.5	1135.4	1137.2	1140.0	1145.4	1153.6	1165.5	1177.4
37.5°	1124.5	1121.7	1121.7	1118.1	1113.5	1108.0	1100.8	1092.5	1083.4	1071.6	1062.5
40°	1088.9	1087.1	1085.2	1081.6	1071.6	1060.6	1048.8	1029.6	1008.6	979.5	950.3
42.5°	1020.5	1018.7	1017.8	1010.5	1001.3	988.6	974.9	954.8	928.4	891.0	849.0
45°	935.7	932.0	929.3	922.9	916.5	905.6	892.8	874.6	848.1	809.8	759.7
47.5°	837.2	835.4	834.5	831.7	825.3	818.9	810.8	796.2	772.4	736.0	684.0
50°	737.8	734.1	736.0	735.1	732.3	727.8	722.3	712.3	694.0	661.2	613.8
52.5°	623.8	623.8	622.9	625.6	626.5	625.6	626.5	615.6	600.1	575.4	535.3
55°	505.2	505.2	508.0	511.6	515.3	516.2	515.3	510.7	499.8	479.7	444.1
57.5°	394.0	392.2	397.6	403.1	406.7	410.4	407.6	404.0	397.6	381.2	353.8
60°	300.0	300.0	303.7	307.3	311.0	314.6	313.7	312.8	307.3	296.4	274.5
62.5°	220.7	221.6	221.6	224.3	228.0	231.6	234.4	231.6	228.9	221.6	207.0
65°	157.8	156.8	157.8	160.5	163.3	166.9	168.7	167.8	165.1	159.6	148.7
67.5°	105.8	104.9	108.5	109.4	111.3	114.9	114.0	114.9	114.0	109.4	100.3
70°	69.3	67.5	69.3	68.4	71.1	72.1	73.9	74.8	73.9	71.1	68.4
72.5°	42.9	42.0	42.9	43.8	44.7	45.6	47.4	47.4	46.5	44.7	41.0
75°	27.4	24.6	25.5	23.7	25.5	25.5	27.4	28.3	27.4	27.4	25.5
77.5°	16.4	16.4	16.4	16.4	16.4	16.4	16.4	17.3	18.2	16.4	15.5
80°	8.2	8.2	9.1	9.1	9.1	10.0	9.1	9.1	9.1	10.0	7.3
82.5°	6.4	5.5	5.5	5.5	6.4	5.5	5.5	5.5	5.5	5.5	5.5
85°	2.7	3.6	2.7	1.8	2.7	2.7	3.6	2.7	2.7	2.7	3.6
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1
2.5°	1722.7	1720.9	1720.9	1720.0	1721.8	1720.0	1720.9	1720.0	1720.0	1721.8	1720.0
5°	1729.1	1730.0	1728.2	1727.3	1730.0	1730.0	1730.0	1728.2	1728.2	1729.1	1728.2
7.5°	1738.2	1740.0	1741.0	1741.9	1743.7	1744.6	1744.6	1743.7	1742.8	1745.5	1741.9
10°	1748.3	1751.0	1756.5	1759.2	1763.8	1763.8	1765.6	1765.6	1763.8	1765.6	1764.7
12.5°	1744.6	1761.0	1770.1	1776.5	1782.9	1788.4	1790.2	1791.1	1790.2	1793.9	1790.2
15°	1751.0	1764.7	1779.3	1790.2	1802.1	1808.4	1810.3	1817.6	1819.4	1820.3	1814.8
17.5°	1741.0	1765.6	1781.1	1797.5	1814.8	1826.7	1837.6	1842.2	1843.1	1844.9	1837.6
20°	1718.1	1745.5	1769.2	1792.9	1813.0	1831.2	1840.4	1853.1	1849.5	1856.8	1846.7
22.5°	1687.2	1718.1	1748.3	1779.3	1800.2	1822.1	1841.3	1850.4	1855.0	1855.0	1844.0
25°	1637.9	1674.4	1707.2	1739.1	1771.1	1797.5	1819.4	1833.1	1835.8	1834.9	1822.1
27.5°	1561.3	1600.5	1638.8	1675.3	1714.5	1745.5	1771.1	1787.5	1792.0	1792.0	1778.4
30°	1455.5	1497.5	1534.9	1578.6	1618.8	1653.4	1689.0	1703.6	1711.8	1711.8	1696.3
32.5°	1329.7	1365.2	1399.9	1442.7	1486.5	1525.7	1559.5	1579.5	1589.6	1588.7	1575.0
35°	1192.9	1210.2	1236.6	1268.6	1307.8	1344.2	1377.1	1396.2	1413.6	1412.6	1399.9
37.5°	1056.1	1051.5	1054.2	1066.1	1090.7	1116.3	1141.8	1160.0	1174.6	1181.0	1178.3
40°	922.0	898.3	875.5	867.3	869.1	878.2	891.9	905.6	922.0	930.2	933.9
42.5°	801.6	761.5	721.4	691.3	673.9	668.5	674.9	679.4	689.5	701.3	713.2
45°	705.0	651.2	598.3	551.7	522.6	505.2	501.6	505.2	510.7	522.6	538.1
47.5°	625.6	562.7	503.4	451.4	408.6	385.8	379.4	377.6	383.0	394.0	414.9
50°	555.4	492.5	426.8	366.6	321.9	296.4	287.3	283.6	290.0	298.2	317.4
52.5°	478.8	416.8	349.3	290.9	244.4	218.0	207.9	202.5	206.1	217.1	236.2
55°	395.8	338.3	277.2	217.1	172.4	147.7	135.9	132.2	135.9	147.7	166.9
57.5°	312.8	264.5	213.4	156.8	116.7	92.1	80.2	76.6	86.6	91.2	111.3
60°	244.4	205.2	161.4	114.9	80.2	61.1	49.2	46.5	51.1	59.3	75.7
62.5°	183.3	158.7	124.0	82.1	59.3	39.2	32.8	30.1	32.8	39.2	52.0
65°	133.2	114.0	86.6	60.2	40.1	29.2	21.9	20.1	22.8	27.4	38.3
67.5°	91.2	76.6	60.2	42.0	27.4	18.2	15.5	15.5	16.4	20.1	28.3
70°	59.3	50.2	38.3	27.4	18.2	13.7	11.8	10.0	11.8	14.6	19.1
72.5°	37.4	31.9	24.6	19.1	13.7	10.0	8.2	7.3	9.1	10.9	14.6
75°	22.8	17.3	12.8	10.0	7.3	7.3	7.3	3.6	4.6	7.3	9.1
77.5°	13.7	11.8	10.0	8.2	6.4	3.6	3.6	3.6	4.6	5.5	8.2
80°	7.3	6.4	4.6	4.6	3.6	2.7	3.6	2.7	1.8	4.6	5.5
82.5°	4.6	3.6	3.6	3.6	4.6	1.8	2.7	1.8	2.7	3.6	2.7
85°	2.7	2.7	2.7	1.8	4.6	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1	1718.1
2.5°	1720.9	1720.0	1720.9	1720.0	1720.0	1720.0	1720.9	1720.9	1720.0	1720.0	1721.8
5°	1728.2	1728.2	1728.2	1727.3	1726.4	1726.4	1728.2	1728.2	1725.4	1728.2	1728.2
7.5°	1743.7	1741.0	1743.7	1740.0	1738.2	1739.1	1740.0	1738.2	1736.4	1737.3	1737.3
10°	1763.8	1761.0	1761.0	1758.3	1755.5	1753.7	1751.9	1747.3	1742.8	1741.9	1738.2
12.5°	1787.5	1782.9	1780.2	1774.7	1770.1	1763.8	1758.3	1751.0	1741.9	1735.5	1729.1
15°	1811.2	1803.9	1797.5	1788.4	1778.4	1767.4	1755.5	1743.7	1729.1	1716.3	1705.4
17.5°	1830.3	1820.3	1808.4	1793.9	1779.3	1762.8	1745.5	1728.2	1707.2	1690.8	1678.0
20°	1836.7	1822.1	1806.6	1787.5	1768.3	1745.5	1723.6	1700.8	1677.1	1659.8	1645.2
22.5°	1828.5	1811.2	1792.0	1772.0	1746.4	1721.8	1696.3	1669.8	1648.8	1625.1	1611.5
25°	1805.7	1784.7	1763.8	1740.0	1715.4	1688.1	1660.7	1633.4	1607.8	1595.0	1577.7
27.5°	1759.2	1736.4	1713.6	1689.0	1660.7	1633.4	1605.1	1578.6	1556.7	1539.4	1529.4
30°	1677.1	1650.7	1624.2	1597.8	1573.1	1544.9	1518.4	1496.5	1474.7	1461.0	1451.0
32.5°	1551.3	1527.6	1501.1	1475.6	1452.8	1429.1	1407.2	1388.0	1372.5	1363.4	1356.1
35°	1381.6	1357.9	1337.9	1319.6	1300.5	1290.4	1276.8	1265.8	1259.4	1255.8	1254.9
37.5°	1168.2	1154.6	1148.2	1144.5	1140.9	1138.2	1140.0	1144.5	1148.2	1154.6	1161.8
40°	940.2	952.1	955.8	968.5	980.4	995.9	1013.2	1033.3	1049.7	1070.6	1085.2
42.5°	732.3	754.2	779.7	807.1	836.3	864.6	899.2	931.1	960.3	986.7	1009.6
45°	562.7	596.4	634.7	673.9	713.2	754.2	796.2	835.4	870.0	898.3	922.0
47.5°	438.7	476.1	525.3	573.6	621.1	669.4	715.9	756.9	786.1	813.5	834.5
50°	347.5	390.3	444.1	499.8	551.7	602.8	652.1	690.4	719.6	741.4	756.9
52.5°	269.0	320.1	374.8	433.2	488.8	544.5	590.0	625.6	649.3	668.5	680.3
55°	200.6	250.8	309.2	369.3	425.9	479.7	522.6	553.6	574.6	585.5	591.9
57.5°	145.0	190.6	249.0	309.2	360.2	411.3	446.0	474.2	486.1	492.5	495.2
60°	105.8	147.7	199.7	251.7	300.0	341.1	371.2	390.3	399.5	403.1	402.2
62.5°	77.5	114.0	158.7	202.5	241.7	275.4	299.1	311.9	316.5	318.3	315.5
65°	59.3	87.5	125.9	159.6	189.7	214.3	231.6	239.9	242.6	241.7	239.9
67.5°	43.8	65.7	93.9	119.5	141.4	160.5	169.6	176.9	178.7	176.0	173.3
70°	31.0	48.3	68.4	85.7	102.1	113.1	123.1	124.0	124.0	123.1	121.3
72.5°	21.9	33.7	46.5	58.4	68.4	76.6	80.2	83.0	82.1	81.2	79.3
75°	14.6	21.0	33.7	36.5	45.6	48.3	52.0	52.0	52.9	50.2	50.2
77.5°	9.1	14.6	20.1	23.7	27.4	31.0	32.8	32.8	33.7	32.8	32.8
80°	5.5	9.1	10.9	16.4	16.4	19.1	20.1	21.0	19.1	21.9	19.1
82.5°	3.6	5.5	8.2	8.2	10.0	11.8	11.8	12.8	12.8	11.8	11.8
85°	2.7	3.6	4.6	5.5	5.5	6.4	5.5	5.5	6.4	7.3	6.4
87.5°	0.9	1.8	0.9	1.8	1.8	3.6	2.7	2.7	2.7	3.6	3.6
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: P245524

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1718.1	1718.1	1718.1	1718.1
2.5°	1720.0	1720.9	1720.0	1720.0
5°	1728.2	1727.3	1728.2	1726.4
7.5°	1734.6	1734.6	1733.7	1733.7
10°	1734.6	1730.9	1730.9	1730.9
12.5°	1720.9	1716.3	1713.6	1711.8
15°	1697.2	1689.0	1685.3	1684.4
17.5°	1666.2	1658.9	1654.3	1651.6
20°	1630.6	1623.3	1617.8	1618.8
22.5°	1599.6	1591.4	1587.7	1585.9
25°	1568.6	1558.6	1555.8	1554.0
27.5°	1518.4	1513.0	1510.2	1507.5
30°	1441.8	1439.1	1434.5	1440.9
32.5°	1353.4	1348.8	1345.2	1347.9
35°	1255.8	1253.0	1255.8	1254.0
37.5°	1166.4	1169.1	1172.8	1174.6
40°	1096.2	1106.2	1109.9	1111.7
42.5°	1026.0	1037.8	1045.1	1049.7
45°	939.3	951.2	959.4	964.9
47.5°	850.0	860.0	868.2	867.3
50°	768.8	774.3	777.9	781.6
52.5°	686.7	686.7	687.6	687.6
55°	593.7	591.9	591.0	591.9
57.5°	491.5	489.7	488.8	486.1
60°	398.5	393.1	389.4	389.4
62.5°	311.9	305.5	302.8	301.9
65°	234.4	233.5	228.0	227.1
67.5°	169.6	166.0	162.3	163.3
70°	119.5	114.0	114.0	112.2
72.5°	77.5	74.8	73.9	73.9
75°	48.3	48.3	46.5	50.2
77.5°	31.9	31.9	31.0	31.9
80°	19.1	19.1	19.1	18.2
82.5°	11.8	12.8	11.8	11.8
85°	6.4	7.3	5.5	8.2
87.5°	3.6	4.6	3.6	4.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)