

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: P245518

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBDW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245518
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 8LBDW0WH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3130.0 lumens
Efficiency: N/A
Efficacy: 76.5 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

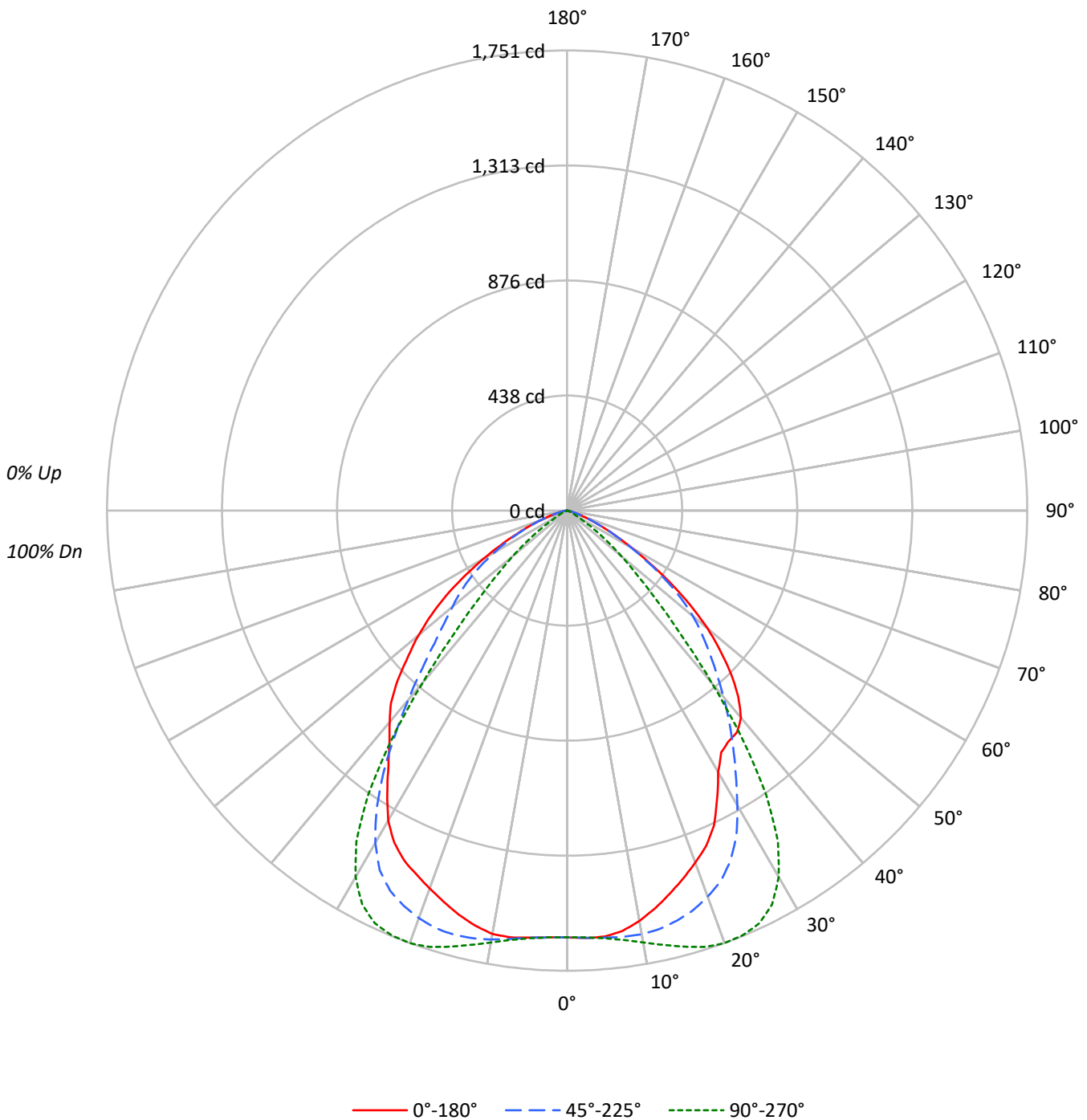
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	156.2	5.0
10°-20°	462.6	14.8
20°-30°	705.7	22.5
30°-40°	736.4	23.5
40°-50°	553.2	17.7
50°-60°	340.3	10.9
60°-70°	138.5	4.4
70°-80°	32.6	1.0
80°-90°	4.5	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°	1324.4	42.3
0°-40°	2060.9	65.8
0°-60°	2954.4	94.4
0°-90°	3130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3130.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1624	1624	1624	1624	1624	
5°	1627	1632	1633	1632	1632	154
15°	1509	1615	1718	1670	1592	425
25°	1322	1470	1732	1595	1469	601
35°	1071	1102	1320	1220	1185	676
45°	884	765	478	713	912	675
55°	478	453	125	453	559	429
65°	149	151	19	202	215	156
75°	26	26	3	46	47	31
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°	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7
2.5°	1628.1	1625.5	1628.1	1628.1	1628.9	1627.2	1628.1	1628.9	1627.2	1627.2	1627.2
5°	1627.2	1625.5	1627.2	1626.3	1628.1	1628.1	1629.8	1629.8	1631.5	1631.5	1634.1
7.5°	1613.4	1610.0	1613.4	1616.0	1617.7	1621.2	1625.5	1628.9	1632.4	1635.8	1640.1
10°	1585.0	1585.0	1587.5	1592.7	1597.9	1603.9	1611.7	1620.3	1628.9	1636.7	1644.4
12.5°	1549.6	1547.0	1552.2	1559.1	1566.9	1576.3	1588.4	1601.3	1615.1	1630.6	1642.7
15°	1509.1	1506.5	1512.6	1519.5	1528.9	1542.7	1557.4	1574.6	1594.4	1615.1	1635.0
17.5°	1467.7	1466.9	1472.9	1482.4	1490.2	1504.8	1523.8	1544.4	1566.9	1594.4	1620.3
20°	1425.5	1424.7	1430.7	1438.5	1448.8	1462.6	1481.5	1505.7	1532.4	1563.4	1593.6
22.5°	1381.6	1382.4	1387.6	1396.2	1404.8	1419.5	1439.3	1463.4	1492.7	1526.3	1560.0
25°	1322.1	1317.8	1324.7	1333.3	1347.9	1360.0	1379.0	1404.8	1435.0	1470.3	1510.0
27.5°	1235.9	1235.0	1241.1	1248.8	1261.8	1276.4	1297.1	1323.8	1355.7	1394.5	1433.3
30°	1149.7	1151.4	1154.0	1161.8	1170.4	1185.1	1205.7	1228.2	1258.3	1295.4	1336.7
32.5°	1091.1	1091.1	1094.6	1099.7	1105.8	1113.5	1128.2	1144.5	1167.8	1193.7	1223.8
35°	1071.3	1067.8	1071.3	1072.1	1073.0	1074.7	1077.3	1082.5	1090.2	1101.5	1112.7
37.5°	1062.7	1060.1	1060.1	1056.6	1052.3	1047.2	1040.3	1032.5	1023.9	1012.7	1004.1
40°	1029.1	1027.3	1025.6	1022.2	1012.7	1002.3	991.1	973.0	953.2	925.6	898.1
42.5°	964.4	962.7	961.8	954.9	946.3	934.3	921.3	902.4	877.4	842.0	802.4
45°	884.3	880.8	878.2	872.2	866.2	855.8	843.8	826.5	801.5	765.3	717.9
47.5°	791.2	789.5	788.6	786.0	780.0	773.9	766.2	752.4	730.0	695.5	646.4
50°	697.2	693.8	695.5	694.7	692.1	687.8	682.6	673.1	655.9	624.8	580.0
52.5°	589.5	589.5	588.7	591.2	592.1	591.2	592.1	581.8	567.1	543.8	505.9
55°	477.5	477.5	480.1	483.5	486.9	487.8	486.9	482.6	472.3	453.3	419.7
57.5°	372.3	370.6	375.8	380.9	384.4	387.8	385.2	381.8	375.8	360.3	334.4
60°	283.6	283.6	287.0	290.4	293.9	297.3	296.5	295.6	290.4	280.1	259.4
62.5°	208.6	209.4	209.4	212.0	215.5	218.9	221.5	218.9	216.3	209.4	195.6
65°	149.1	148.2	149.1	151.7	154.3	157.7	159.4	158.6	156.0	150.8	140.5
67.5°	100.0	99.1	102.6	103.4	105.1	108.6	107.7	108.6	107.7	103.4	94.8
70°	65.5	63.8	65.5	64.6	67.2	68.1	69.8	70.7	69.8	67.2	64.6
72.5°	40.5	39.6	40.5	41.4	42.2	43.1	44.8	44.8	43.9	42.2	38.8
75°	25.9	23.3	24.1	22.4	24.1	24.1	25.9	26.7	25.9	25.9	24.1
77.5°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	16.4	17.2	15.5	14.7
80°	7.8	7.8	8.6	8.6	8.6	9.5	8.6	8.6	8.6	9.5	6.9
82.5°	6.0	5.2	5.2	5.2	6.0	5.2	5.2	5.2	5.2	5.2	5.2
85°	2.6	3.4	2.6	1.7	2.6	2.6	3.4	2.6	2.6	2.6	3.4
87.5°	0.9	0.9	0.0	0.0	0.0	0.9	0.0	0.9	0.9	1.7	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°	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7
2.5°	1628.1	1626.3	1626.3	1625.5	1627.2	1625.5	1626.3	1625.5	1625.5	1627.2	1625.5
5°	1634.1	1635.0	1633.2	1632.4	1635.0	1635.0	1635.0	1633.2	1633.2	1634.1	1633.2
7.5°	1642.7	1644.4	1645.3	1646.2	1647.9	1648.7	1648.7	1647.9	1647.0	1649.6	1646.2
10°	1652.2	1654.8	1659.9	1662.5	1666.8	1666.8	1668.6	1668.6	1666.8	1668.6	1667.7
12.5°	1648.7	1664.2	1672.9	1678.9	1684.9	1690.1	1691.8	1692.7	1691.8	1695.3	1691.8
15°	1654.8	1667.7	1681.5	1691.8	1703.0	1709.1	1710.8	1717.7	1719.4	1720.3	1715.1
17.5°	1645.3	1668.6	1683.2	1698.7	1715.1	1726.3	1736.6	1741.0	1741.8	1743.5	1736.6
20°	1623.7	1649.6	1672.0	1694.4	1713.4	1730.6	1739.2	1751.3	1747.9	1754.8	1745.3
22.5°	1594.4	1623.7	1652.2	1681.5	1701.3	1722.0	1740.1	1748.7	1753.0	1753.0	1742.7
25°	1547.9	1582.4	1613.4	1643.6	1673.7	1698.7	1719.4	1732.3	1734.9	1734.1	1722.0
27.5°	1475.5	1512.6	1548.8	1583.2	1620.3	1649.6	1673.7	1689.2	1693.6	1693.6	1680.6
30°	1375.5	1415.2	1450.5	1491.9	1529.8	1562.6	1596.2	1610.0	1617.7	1617.7	1603.1
32.5°	1256.6	1290.2	1323.0	1363.5	1404.8	1441.9	1473.8	1492.7	1502.2	1501.4	1488.4
35°	1127.3	1143.7	1168.7	1198.8	1235.9	1270.4	1301.4	1319.5	1335.9	1335.0	1323.0
37.5°	998.0	993.7	996.3	1007.5	1030.8	1054.9	1079.0	1096.3	1110.1	1116.1	1113.5
40°	871.3	848.9	827.4	819.6	821.3	830.0	842.9	855.8	871.3	879.1	882.5
42.5°	757.6	719.7	681.7	653.3	636.9	631.7	637.8	642.1	651.6	662.8	674.0
45°	666.2	615.4	565.4	521.4	493.8	477.5	474.0	477.5	482.6	493.8	508.5
47.5°	591.2	531.8	475.8	426.6	386.1	364.6	358.5	356.8	362.0	372.3	392.1
50°	524.9	465.4	403.4	346.5	304.2	280.1	271.5	268.0	274.1	281.8	299.9
52.5°	452.5	393.9	330.1	274.9	231.0	206.0	196.5	191.3	194.8	205.1	223.2
55°	374.0	319.7	262.0	205.1	162.9	139.6	128.4	125.0	128.4	139.6	157.7
57.5°	295.6	249.9	201.7	148.2	110.3	87.1	75.8	72.4	81.9	86.2	105.1
60°	231.0	193.9	152.6	108.6	75.8	57.7	46.5	43.9	48.3	56.0	71.5
62.5°	173.2	150.0	117.2	77.6	56.0	37.1	31.0	28.4	31.0	37.1	49.1
65°	125.8	107.7	81.9	56.9	37.9	27.6	20.7	19.0	21.6	25.9	36.2
67.5°	86.2	72.4	56.9	39.6	25.9	17.2	14.7	14.7	15.5	19.0	26.7
70°	56.0	47.4	36.2	25.9	17.2	12.9	11.2	9.5	11.2	13.8	18.1
72.5°	35.3	30.2	23.3	18.1	12.9	9.5	7.8	6.9	8.6	10.3	13.8
75°	21.6	16.4	12.1	9.5	6.9	6.9	6.9	3.4	4.3	6.9	8.6
77.5°	12.9	11.2	9.5	7.8	6.0	3.4	3.4	3.4	4.3	5.2	7.8
80°	6.9	6.0	4.3	4.3	3.4	2.6	3.4	2.6	1.7	4.3	5.2
82.5°	4.3	3.4	3.4	3.4	4.3	1.7	2.6	1.7	2.6	3.4	2.6
85°	2.6	2.6	2.6	1.7	4.3	1.7	1.7	0.9	0.9	1.7	1.7
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°	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7	1623.7
2.5°	1626.3	1625.5	1626.3	1625.5	1625.5	1625.5	1626.3	1626.3	1625.5	1625.5	1627.2
5°	1633.2	1633.2	1633.2	1632.4	1631.5	1631.5	1633.2	1633.2	1630.6	1633.2	1633.2
7.5°	1647.9	1645.3	1647.9	1644.4	1642.7	1643.6	1644.4	1642.7	1641.0	1641.8	1641.8
10°	1666.8	1664.2	1664.2	1661.7	1659.1	1657.3	1655.6	1651.3	1647.0	1646.2	1642.7
12.5°	1689.2	1684.9	1682.4	1677.2	1672.9	1666.8	1661.7	1654.8	1646.2	1640.1	1634.1
15°	1711.7	1704.8	1698.7	1690.1	1680.6	1670.3	1659.1	1647.9	1634.1	1622.0	1611.7
17.5°	1729.7	1720.3	1709.1	1695.3	1681.5	1666.0	1649.6	1633.2	1613.4	1597.9	1585.8
20°	1735.8	1722.0	1707.3	1689.2	1671.1	1649.6	1628.9	1607.4	1585.0	1568.6	1554.8
22.5°	1728.0	1711.7	1693.6	1674.6	1650.5	1627.2	1603.1	1578.1	1558.2	1535.8	1522.9
25°	1706.5	1686.7	1666.8	1644.4	1621.2	1595.3	1569.5	1543.6	1519.5	1507.4	1491.0
27.5°	1662.5	1641.0	1619.4	1596.2	1569.5	1543.6	1516.9	1491.9	1471.2	1454.8	1445.3
30°	1585.0	1560.0	1535.0	1510.0	1486.7	1460.0	1435.0	1414.3	1393.6	1380.7	1371.2
32.5°	1466.0	1443.6	1418.6	1394.5	1373.0	1350.5	1329.8	1311.8	1297.1	1288.5	1281.6
35°	1305.7	1283.3	1264.3	1247.1	1229.0	1219.5	1206.6	1196.3	1190.2	1186.8	1185.9
37.5°	1104.0	1091.1	1085.1	1081.6	1078.2	1075.6	1077.3	1081.6	1085.1	1091.1	1098.0
40°	888.6	899.8	903.2	915.3	926.5	941.1	957.5	976.5	992.0	1011.8	1025.6
42.5°	692.1	712.8	736.9	762.7	790.3	817.0	849.8	880.0	907.5	932.5	954.1
45°	531.8	563.6	599.9	636.9	674.0	712.8	752.4	789.5	822.2	848.9	871.3
47.5°	414.6	449.9	496.4	542.1	586.9	632.6	676.6	715.3	742.9	768.8	788.6
50°	328.4	368.9	419.7	472.3	521.4	569.7	616.2	652.4	680.0	700.7	715.3
52.5°	254.2	302.5	354.2	409.4	462.0	514.5	557.6	591.2	613.6	631.7	642.9
55°	189.6	237.0	292.2	349.1	402.5	453.3	493.8	523.2	543.0	553.3	559.3
57.5°	137.0	180.1	235.3	292.2	340.4	388.7	421.4	448.2	459.4	465.4	468.0
60°	100.0	139.6	188.7	237.9	283.6	322.3	350.8	368.9	377.5	380.9	380.1
62.5°	73.3	107.7	150.0	191.3	228.4	260.3	282.7	294.8	299.1	300.8	298.2
65°	56.0	82.7	118.9	150.8	179.3	202.5	218.9	226.7	229.3	228.4	226.7
67.5°	41.4	62.1	88.8	112.9	133.6	151.7	160.3	167.2	168.9	166.3	163.8
70°	29.3	45.7	64.6	81.0	96.5	106.9	116.3	117.2	117.2	116.3	114.6
72.5°	20.7	31.9	43.9	55.2	64.6	72.4	75.8	78.4	77.6	76.7	75.0
75°	13.8	19.8	31.9	34.5	43.1	45.7	49.1	49.1	50.0	47.4	47.4
77.5°	8.6	13.8	19.0	22.4	25.9	29.3	31.0	31.0	31.9	31.0	31.0
80°	5.2	8.6	10.3	15.5	15.5	18.1	19.0	19.8	18.1	20.7	18.1
82.5°	3.4	5.2	7.8	7.8	9.5	11.2	11.2	12.1	12.1	11.2	11.2
85°	2.6	3.4	4.3	5.2	5.2	6.0	5.2	5.2	6.0	6.9	6.0
87.5°	0.9	1.7	0.9	1.7	1.7	3.4	2.6	2.6	2.6	3.4	3.4
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: P245518

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0WH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1623.7	1623.7	1623.7	1623.7
2.5°	1625.5	1626.3	1625.5	1625.5
5°	1633.2	1632.4	1633.2	1631.5
7.5°	1639.3	1639.3	1638.4	1638.4
10°	1639.3	1635.8	1635.8	1635.8
12.5°	1626.3	1622.0	1619.4	1617.7
15°	1603.9	1596.2	1592.7	1591.8
17.5°	1574.6	1567.7	1563.4	1560.8
20°	1541.0	1534.1	1528.9	1529.8
22.5°	1511.7	1504.0	1500.5	1498.8
25°	1482.4	1472.9	1470.3	1468.6
27.5°	1435.0	1429.8	1427.2	1424.7
30°	1362.6	1360.0	1355.7	1361.7
32.5°	1279.0	1274.7	1271.2	1273.8
35°	1186.8	1184.2	1186.8	1185.1
37.5°	1102.3	1104.9	1108.4	1110.1
40°	1036.0	1045.4	1048.9	1050.6
42.5°	969.6	980.8	987.7	992.0
45°	887.7	898.9	906.7	911.9
47.5°	803.3	812.7	820.5	819.6
50°	726.6	731.7	735.2	738.6
52.5°	649.0	649.0	649.8	649.8
55°	561.1	559.3	558.5	559.3
57.5°	464.5	462.8	462.0	459.4
60°	376.6	371.5	368.0	368.0
62.5°	294.8	288.7	286.1	285.3
65°	221.5	220.6	215.5	214.6
67.5°	160.3	156.9	153.4	154.3
70°	112.9	107.7	107.7	106.0
72.5°	73.3	70.7	69.8	69.8
75°	45.7	45.7	43.9	47.4
77.5°	30.2	30.2	29.3	30.2
80°	18.1	18.1	18.1	17.2
82.5°	11.2	12.1	11.2	11.2
85°	6.0	6.9	5.2	7.8
87.5°	3.4	4.3	3.4	4.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)