

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: P244660

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244660
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 EC8B409730 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3286.0 lumens
Efficiency: N/A
Efficacy: 80.3 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

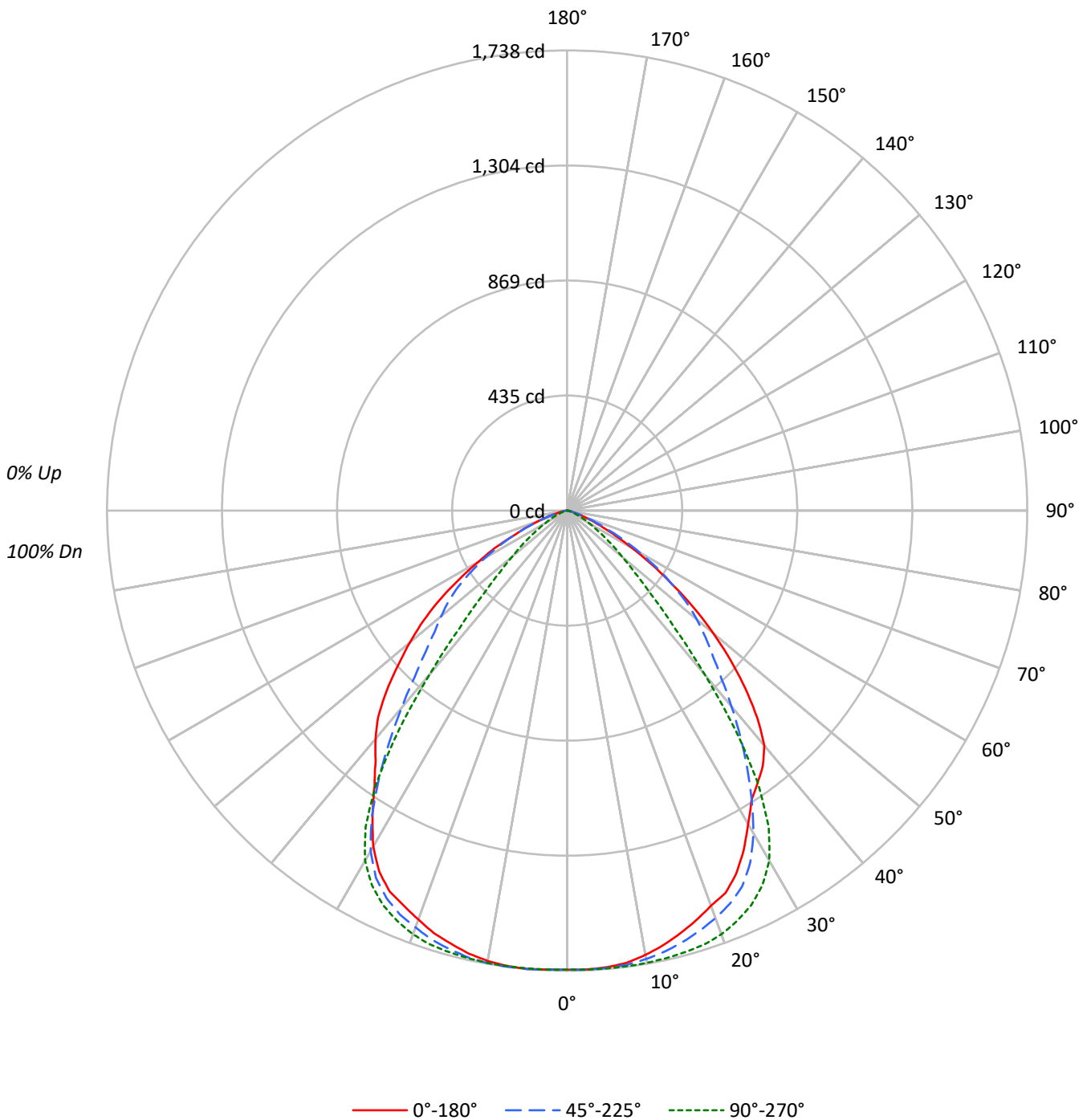
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	165.5	5.0
10°-20°	480.5	14.6
20°-30°	729.3	22.2
30°-40°	766.0	23.3
40°-50°	574.3	17.5
50°-60°	368.5	11.2
60°-70°	157.6	4.8
70°-80°	37.2	1.1
80°-90°	6.9	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°	1375.3	41.9
0°-40°	2141.4	65.2
0°-60°	3084.2	93.9
0°-90°	3286.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3286.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1734	1734	1734	1734	1734	
5°	1731	1734	1736	1738	1738	164
15°	1653	1687	1726	1715	1694	466
25°	1512	1565	1644	1615	1587	691
35°	1254	1185	1255	1240	1268	787
45°	953	779	448	757	966	730
55°	482	482	167	502	587	437
65°	145	171	53	221	224	155
75°	22	26	7	45	44	32
85°	7	5	4	7	10	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°	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8
2.5°	1734.7	1736.6	1735.6	1735.6	1734.7	1735.6	1735.6	1737.5	1737.5	1735.6	1734.7
5°	1731.0	1732.8	1732.8	1731.0	1731.0	1735.6	1732.8	1734.7	1734.7	1733.8	1733.8
7.5°	1722.6	1722.6	1726.3	1723.5	1723.5	1726.3	1725.4	1727.2	1729.1	1730.0	1730.0
10°	1704.0	1705.8	1706.8	1706.8	1707.7	1710.5	1712.4	1716.1	1717.9	1719.8	1720.7
12.5°	1680.7	1683.5	1684.4	1683.5	1686.3	1690.0	1694.7	1699.3	1702.1	1705.8	1708.6
15°	1652.8	1652.8	1654.7	1657.5	1659.3	1664.9	1669.5	1675.1	1682.6	1687.2	1691.9
17.5°	1622.1	1624.0	1626.7	1626.7	1630.5	1639.8	1642.6	1650.9	1659.3	1664.0	1673.3
20°	1588.6	1590.4	1593.2	1595.1	1599.8	1607.2	1612.8	1620.2	1629.5	1637.9	1647.2
22.5°	1562.5	1558.8	1560.7	1562.5	1567.2	1573.7	1580.2	1589.5	1598.8	1607.2	1616.5
25°	1512.3	1513.2	1516.0	1517.8	1523.4	1529.0	1536.5	1547.6	1556.0	1565.3	1575.5
27.5°	1444.3	1445.3	1449.9	1449.9	1454.6	1463.9	1468.5	1477.8	1489.0	1498.3	1510.4
30°	1367.1	1368.9	1368.9	1372.7	1375.5	1380.1	1384.8	1394.1	1399.7	1408.0	1424.8
32.5°	1296.4	1298.2	1297.3	1296.4	1293.6	1292.6	1291.7	1293.6	1295.4	1298.2	1304.7
35°	1254.5	1249.8	1246.1	1239.6	1232.2	1222.8	1214.5	1203.3	1193.1	1184.7	1175.4
37.5°	1214.5	1213.5	1208.0	1198.6	1183.7	1167.0	1147.5	1123.3	1099.1	1073.0	1047.9
40°	1158.6	1155.8	1151.2	1138.2	1121.4	1100.9	1074.9	1045.1	1006.0	966.0	925.0
42.5°	1063.7	1064.6	1059.1	1048.8	1033.0	1013.4	986.5	953.9	912.0	864.5	811.5
45°	953.0	953.0	951.1	942.7	931.6	915.7	895.3	868.3	827.3	778.9	722.2
47.5°	837.6	838.5	835.7	833.8	829.2	819.0	804.1	783.6	754.7	708.2	651.4
50°	720.3	720.3	725.0	724.0	724.0	720.3	713.8	701.7	676.6	639.3	586.3
52.5°	603.0	604.9	607.7	611.4	616.1	623.5	616.1	610.5	594.7	565.8	520.2
55°	482.1	483.9	488.6	495.1	500.7	508.1	510.0	510.0	501.6	482.1	447.6
57.5°	378.8	376.0	379.7	385.3	392.7	400.2	405.8	412.3	411.3	398.3	370.4
60°	284.8	285.7	288.5	294.1	299.7	306.2	313.6	319.2	322.0	315.5	297.8
62.5°	207.5	207.5	211.2	216.8	219.6	228.9	233.6	236.4	239.2	238.2	227.1
65°	145.2	147.0	148.9	151.7	154.5	160.1	162.9	168.4	170.3	171.2	162.9
67.5°	102.4	99.6	101.4	103.3	106.1	109.8	115.4	115.4	118.2	118.2	112.6
70°	65.1	65.1	66.1	68.9	70.7	71.7	73.5	75.4	78.2	77.2	77.2
72.5°	43.7	42.8	43.7	44.7	45.6	48.4	48.4	49.3	51.2	52.1	48.4
75°	22.3	23.3	25.1	24.2	27.0	25.1	26.1	28.9	27.9	26.1	26.1
77.5°	18.6	18.6	18.6	17.7	19.5	19.5	18.6	20.5	19.5	19.5	18.6
80°	13.0	14.0	13.0	12.1	13.0	12.1	12.1	12.1	12.1	12.1	11.2
82.5°	10.2	8.4	9.3	8.4	9.3	9.3	8.4	7.4	7.4	8.4	7.4
85°	7.4	5.6	6.5	6.5	5.6	5.6	5.6	5.6	5.6	4.6	4.6
87.5°	4.6	2.8	2.8	2.8	3.7	3.7	3.7	2.8	3.7	3.7	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



TEST NUMBER: P244660

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8
2.5°	1736.6	1735.6	1737.5	1736.6	1736.6	1735.6	1736.6	1735.6	1737.5	1733.8	1734.7
5°	1736.6	1734.7	1735.6	1736.6	1737.5	1735.6	1735.6	1735.6	1737.5	1735.6	1736.6
7.5°	1732.8	1731.9	1734.7	1736.6	1735.6	1734.7	1736.6	1735.6	1737.5	1736.6	1738.4
10°	1725.4	1726.3	1728.2	1731.0	1731.9	1732.8	1734.7	1734.7	1737.5	1733.8	1735.6
12.5°	1714.2	1717.9	1722.6	1724.4	1728.2	1728.2	1730.0	1731.0	1732.8	1731.9	1734.7
15°	1700.3	1704.9	1710.5	1715.2	1719.8	1722.6	1725.4	1726.3	1729.1	1726.3	1727.2
17.5°	1683.5	1689.1	1697.5	1703.0	1710.5	1713.3	1717.0	1718.9	1721.7	1719.8	1720.7
20°	1660.2	1666.8	1676.1	1684.4	1689.1	1695.6	1700.3	1703.0	1704.9	1703.0	1704.0
22.5°	1627.7	1637.0	1649.1	1655.6	1664.9	1670.5	1671.4	1677.9	1682.6	1677.9	1679.8
25°	1589.5	1598.8	1608.1	1622.1	1630.5	1637.0	1643.5	1644.4	1649.1	1648.1	1647.2
27.5°	1526.2	1538.3	1554.1	1565.3	1576.5	1586.7	1594.2	1596.0	1600.7	1598.8	1599.8
30°	1439.7	1452.7	1467.6	1485.3	1501.1	1511.3	1520.6	1527.2	1531.8	1529.0	1528.1
32.5°	1316.8	1329.9	1345.7	1363.4	1382.0	1396.9	1408.0	1416.4	1422.0	1420.1	1415.5
35°	1176.3	1180.0	1190.3	1204.2	1220.0	1235.9	1246.1	1255.4	1261.9	1263.8	1263.8
37.5°	1032.1	1020.0	1012.5	1012.5	1021.8	1028.3	1037.6	1043.2	1053.5	1057.2	1060.0
40°	892.5	864.5	838.5	819.0	805.9	805.0	805.0	807.8	817.1	829.2	840.4
42.5°	767.8	723.1	683.1	646.8	620.7	605.8	599.3	600.3	607.7	618.9	637.5
45°	668.2	612.4	562.1	518.4	483.0	459.7	448.6	447.6	453.2	466.2	486.7
47.5°	591.0	531.4	474.6	424.4	386.2	361.1	348.1	344.3	348.1	360.1	384.4
50°	526.7	465.3	406.7	354.6	313.6	287.6	275.5	270.8	275.5	285.7	309.9
52.5°	467.2	403.9	349.0	298.7	255.0	232.7	219.6	216.8	219.6	231.7	251.3
55°	398.3	344.3	290.4	240.1	202.0	179.6	169.4	166.6	169.4	180.6	201.0
57.5°	330.4	283.8	236.4	190.8	158.2	138.7	129.4	125.6	132.1	139.6	163.8
60°	267.1	229.9	189.8	149.8	122.8	105.2	97.7	96.8	98.6	108.0	124.7
62.5°	209.4	178.7	147.0	114.5	92.1	84.7	75.4	74.5	76.3	81.9	94.9
65°	150.8	131.2	107.0	83.8	66.1	55.8	52.1	53.1	54.9	58.6	70.7
67.5°	105.2	91.2	74.5	58.6	45.6	40.9	37.2	36.3	37.2	43.7	50.3
70°	70.7	62.3	50.3	44.7	31.7	25.1	26.1	23.3	27.0	27.0	32.6
72.5°	46.5	40.9	33.5	26.1	22.3	17.7	17.7	16.8	18.6	19.5	24.2
75°	24.2	18.6	18.6	13.0	9.3	4.6	8.4	7.4	6.5	7.4	9.3
77.5°	16.8	14.0	13.0	10.2	9.3	7.4	7.4	7.4	7.4	8.4	9.3
80°	10.2	10.2	7.4	6.5	5.6	4.6	5.6	5.6	5.6	5.6	6.5
82.5°	6.5	5.6	5.6	4.6	4.6	3.7	3.7	3.7	3.7	3.7	5.6
85°	5.6	3.7	3.7	2.8	3.7	6.5	2.8	3.7	3.7	3.7	2.8
87.5°	1.9	2.8	2.8	2.8	1.9	0.9	1.9	2.8	2.8	4.6	3.7
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: P244660

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8	1733.8
2.5°	1736.6	1737.5	1737.5	1736.6	1736.6	1734.7	1738.4	1735.6	1736.6	1740.3	1737.5
5°	1738.4	1739.3	1739.3	1738.4	1738.4	1738.4	1739.3	1739.3	1738.4	1737.5	1739.3
7.5°	1742.1	1741.2	1741.2	1739.3	1739.3	1737.5	1739.3	1736.6	1738.4	1736.6	1739.3
10°	1737.5	1738.4	1737.5	1736.6	1736.6	1735.6	1735.6	1732.8	1733.8	1731.0	1732.8
12.5°	1734.7	1733.8	1733.8	1731.9	1730.0	1728.2	1727.2	1724.4	1724.4	1717.9	1720.7
15°	1727.2	1728.2	1725.4	1721.7	1719.8	1715.2	1713.3	1709.6	1705.8	1701.2	1702.1
17.5°	1720.7	1717.9	1714.2	1710.5	1703.0	1699.3	1695.6	1690.0	1688.1	1682.6	1680.7
20°	1701.2	1699.3	1694.7	1688.1	1683.5	1675.1	1671.4	1665.8	1661.2	1655.6	1652.8
22.5°	1676.1	1674.2	1668.6	1662.1	1654.7	1650.9	1647.2	1637.0	1632.3	1626.7	1625.8
25°	1644.4	1641.6	1636.0	1628.6	1624.9	1614.6	1610.9	1603.5	1601.6	1596.0	1595.1
27.5°	1596.0	1592.3	1585.8	1576.5	1570.0	1563.5	1559.7	1554.1	1552.3	1546.7	1545.8
30°	1523.4	1518.8	1505.8	1502.0	1490.9	1484.3	1484.3	1476.9	1477.8	1474.1	1474.1
32.5°	1409.0	1401.5	1391.3	1383.8	1376.4	1372.7	1372.7	1369.9	1371.7	1371.7	1373.6
35°	1257.3	1247.1	1241.5	1236.8	1236.8	1240.5	1251.7	1254.5	1260.1	1264.7	1268.5
37.5°	1062.8	1061.9	1068.4	1073.9	1087.9	1103.7	1123.3	1140.0	1155.8	1167.0	1178.2
40°	852.5	875.7	894.3	920.4	941.8	972.5	1007.9	1036.7	1063.7	1083.3	1103.7
42.5°	665.4	695.2	734.3	772.4	810.6	852.5	899.0	939.0	974.4	1001.4	1022.8
45°	518.4	559.3	606.8	655.2	704.5	756.6	805.0	845.9	883.2	911.1	932.5
47.5°	417.8	462.5	516.5	569.5	625.4	680.3	734.3	769.6	800.3	822.7	842.2
50°	345.3	392.7	449.5	510.0	565.8	620.7	667.3	701.7	726.8	746.4	758.5
52.5°	288.5	338.7	399.2	459.7	515.6	565.8	607.7	633.8	654.2	668.2	679.3
55°	238.2	286.6	343.4	400.2	455.1	502.5	537.0	556.5	572.3	580.7	587.2
57.5°	194.5	239.2	291.3	343.4	390.9	430.0	456.9	476.5	483.9	490.4	489.5
60°	152.6	194.5	242.0	286.6	327.6	359.2	378.8	389.9	395.5	398.3	396.4
62.5°	120.0	158.2	194.5	233.6	263.4	290.4	309.0	309.0	311.8	312.7	315.5
65°	89.3	118.2	149.8	178.7	202.9	220.6	230.8	233.6	237.3	236.4	234.5
67.5°	66.1	87.5	110.7	132.1	148.9	160.1	167.5	174.0	173.1	171.2	170.3
70°	45.6	59.6	80.0	93.1	105.2	116.3	118.2	119.1	120.0	121.0	119.1
72.5°	31.7	41.9	53.1	64.2	71.7	76.3	81.0	81.9	81.9	81.9	81.0
75°	15.8	21.4	31.7	36.3	42.8	44.7	48.4	48.4	51.2	47.5	46.5
77.5°	14.0	16.8	22.3	26.1	28.9	31.7	32.6	35.4	34.4	32.6	33.5
80°	8.4	10.2	14.0	15.8	19.5	20.5	21.4	22.3	21.4	22.3	22.3
82.5°	6.5	7.4	9.3	9.3	12.1	12.1	13.0	13.0	14.0	14.0	14.0
85°	3.7	6.5	5.6	11.2	7.4	7.4	9.3	11.2	9.3	9.3	11.2
87.5°	3.7	3.7	2.8	3.7	3.7	3.7	4.6	5.6	5.6	6.5	5.6
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: P244660

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1733.8	1733.8	1733.8	1733.8
2.5°	1736.6	1738.4	1735.6	1734.7
5°	1739.3	1739.3	1737.5	1737.5
7.5°	1739.3	1739.3	1736.6	1734.7
10°	1731.9	1731.9	1729.1	1727.2
12.5°	1717.9	1717.9	1717.0	1714.2
15°	1700.3	1700.3	1696.5	1693.7
17.5°	1676.1	1677.9	1673.3	1673.3
20°	1650.0	1649.1	1645.4	1643.5
22.5°	1623.0	1621.2	1620.2	1614.6
25°	1594.2	1592.3	1589.5	1586.7
27.5°	1544.8	1543.9	1541.1	1537.4
30°	1469.5	1468.5	1464.8	1464.8
32.5°	1371.7	1370.8	1367.1	1368.0
35°	1270.3	1274.0	1272.2	1268.5
37.5°	1185.6	1188.4	1190.3	1188.4
40°	1114.9	1123.3	1124.2	1126.1
42.5°	1039.5	1050.7	1054.4	1056.3
45°	949.2	959.5	967.9	966.0
47.5°	857.1	864.5	872.0	866.4
50°	768.7	773.3	776.1	776.1
52.5°	685.0	685.0	684.0	685.0
55°	589.1	589.1	585.4	587.2
57.5°	488.6	490.4	487.6	483.0
60°	395.5	390.9	389.0	386.2
62.5°	308.0	308.0	301.5	309.9
65°	230.8	228.0	225.2	224.3
67.5°	167.5	166.6	163.8	162.9
70°	118.2	114.5	113.5	111.7
72.5°	79.1	79.1	77.2	77.2
75°	48.4	43.7	42.8	43.7
77.5°	33.5	32.6	32.6	31.7
80°	22.3	21.4	23.3	20.5
82.5°	14.0	14.9	14.0	14.9
85°	9.3	11.2	10.2	10.2
87.5°	5.6	5.6	5.6	5.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)