

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: P246100

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246100
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3212.0 lumens
Efficiency: N/A
Efficacy: 78.5 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

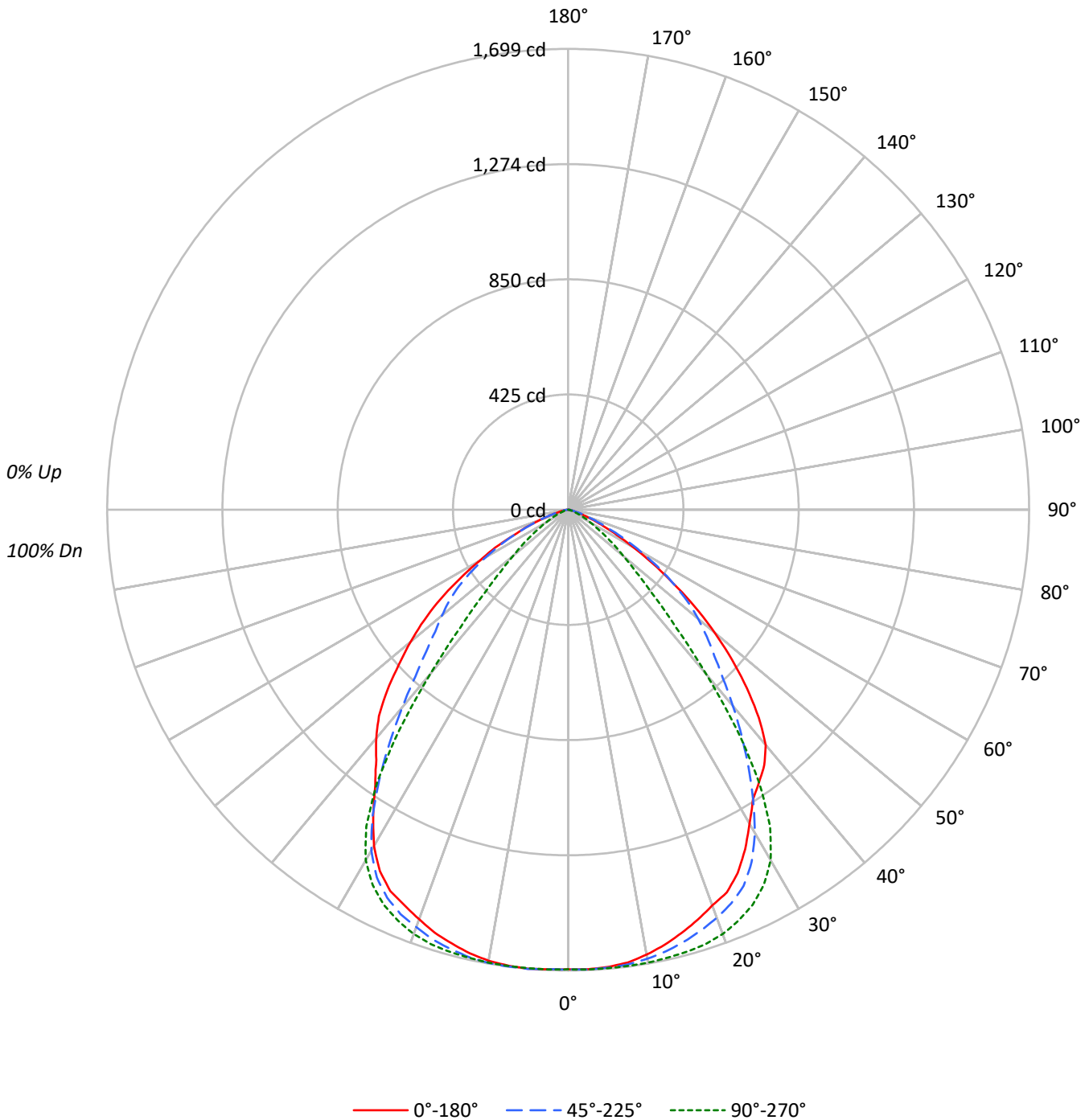
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	161.7	5.0
10°-20°	469.7	14.6
20°-30°	712.9	22.2
30°-40°	748.8	23.3
40°-50°	561.4	17.5
50°-60°	360.2	11.2
60°-70°	154.1	4.8
70°-80°	36.4	1.1
80°-90°	6.8	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°	1344.4	41.9
0°-40°	2093.2	65.2
0°-60°	3014.7	93.9
0°-90°	3212.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1695	1695	1695	1695	1695	
5°	1692	1695	1696	1699	1698	161
15°	1616	1649	1687	1676	1656	456
25°	1478	1530	1607	1578	1551	675
35°	1226	1158	1227	1213	1240	770
45°	932	761	438	740	944	713
55°	471	471	163	491	574	427
65°	142	167	52	216	219	152
75°	22	26	7	44	43	32
85°	7	4	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°	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7
2.5°	1695.6	1697.5	1696.5	1696.5	1695.6	1696.5	1696.5	1698.4	1698.4	1696.5	1695.6
5°	1692.0	1693.8	1693.8	1692.0	1692.0	1696.5	1693.8	1695.6	1695.6	1694.7	1694.7
7.5°	1683.8	1683.8	1687.4	1684.7	1684.7	1687.4	1686.5	1688.3	1690.2	1691.1	1691.1
10°	1665.6	1667.4	1668.3	1668.3	1669.3	1672.0	1673.8	1677.4	1679.2	1681.1	1682.0
12.5°	1642.9	1645.6	1646.5	1645.6	1648.3	1652.0	1656.5	1661.1	1663.8	1667.4	1670.2
15°	1615.6	1615.6	1617.4	1620.1	1622.0	1627.4	1631.9	1637.4	1644.7	1649.2	1653.8
17.5°	1585.6	1587.4	1590.1	1590.1	1593.8	1602.8	1605.6	1613.8	1622.0	1626.5	1635.6
20°	1552.8	1554.6	1557.4	1559.2	1563.7	1571.0	1576.5	1583.7	1592.8	1601.0	1610.1
22.5°	1527.3	1523.7	1525.5	1527.3	1531.9	1538.3	1544.6	1553.7	1562.8	1571.0	1580.1
25°	1478.2	1479.1	1481.9	1483.7	1489.1	1494.6	1501.9	1512.8	1521.0	1530.1	1540.1
27.5°	1411.8	1412.7	1417.3	1417.3	1421.8	1430.9	1435.5	1444.6	1455.5	1464.6	1476.4
30°	1336.3	1338.1	1338.1	1341.8	1344.5	1349.0	1353.6	1362.7	1368.1	1376.3	1392.7
32.5°	1267.2	1269.0	1268.1	1267.2	1264.4	1263.5	1262.6	1264.4	1266.3	1269.0	1275.3
35°	1226.2	1221.7	1218.1	1211.7	1204.4	1195.3	1187.1	1176.2	1166.2	1158.0	1148.9
37.5°	1187.1	1186.2	1180.8	1171.6	1157.1	1140.7	1121.6	1098.0	1074.3	1048.8	1024.3
40°	1132.5	1129.8	1125.3	1112.5	1096.1	1076.1	1050.7	1021.6	983.3	944.2	904.2
42.5°	1039.7	1040.7	1035.2	1025.2	1009.7	990.6	964.2	932.4	891.5	845.1	793.2
45°	931.5	931.5	929.7	921.5	910.6	895.1	875.1	848.7	808.7	761.4	705.9
47.5°	818.7	819.6	816.9	815.1	810.5	800.5	786.0	765.9	737.7	692.3	636.8
50°	704.1	704.1	708.6	707.7	707.7	704.1	697.7	685.9	661.3	624.9	573.1
52.5°	589.5	591.3	594.0	597.7	602.2	609.5	602.2	596.7	581.3	553.1	508.5
55°	471.2	473.0	477.6	483.9	489.4	496.7	498.5	498.5	490.3	471.2	437.6
57.5°	370.2	367.5	371.2	376.6	383.9	391.2	396.6	403.0	402.1	389.3	362.1
60°	278.4	279.3	282.0	287.5	292.9	299.3	306.6	312.0	314.8	308.4	291.1
62.5°	202.9	202.9	206.5	211.9	214.7	223.8	228.3	231.1	233.8	232.9	222.0
65°	141.9	143.7	145.5	148.3	151.0	156.5	159.2	164.6	166.5	167.4	159.2
67.5°	100.1	97.3	99.2	101.0	103.7	107.4	112.8	112.8	115.5	115.5	110.1
70°	63.7	63.7	64.6	67.3	69.1	70.0	71.9	73.7	76.4	75.5	75.5
72.5°	42.8	41.8	42.8	43.7	44.6	47.3	47.3	48.2	50.0	50.9	47.3
75°	21.8	22.7	24.6	23.7	26.4	24.6	25.5	28.2	27.3	25.5	25.5
77.5°	18.2	18.2	18.2	17.3	19.1	19.1	18.2	20.0	19.1	19.1	18.2
80°	12.7	13.6	12.7	11.8	12.7	11.8	11.8	11.8	11.8	11.8	10.9
82.5°	10.0	8.2	9.1	8.2	9.1	9.1	8.2	7.3	7.3	8.2	7.3
85°	7.3	5.5	6.4	6.4	5.5	5.5	5.5	5.5	5.5	4.5	4.5
87.5°	4.5	2.7	2.7	2.7	3.6	3.6	3.6	2.7	3.6	3.6	1.8
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°	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7
2.5°	1697.5	1696.5	1698.4	1697.5	1697.5	1696.5	1697.5	1696.5	1698.4	1694.7	1695.6
5°	1697.5	1695.6	1696.5	1697.5	1698.4	1696.5	1696.5	1696.5	1698.4	1696.5	1697.5
7.5°	1693.8	1692.9	1695.6	1697.5	1696.5	1695.6	1697.5	1696.5	1698.4	1697.5	1699.3
10°	1686.5	1687.4	1689.3	1692.0	1692.9	1693.8	1695.6	1695.6	1698.4	1694.7	1696.5
12.5°	1675.6	1679.2	1683.8	1685.6	1689.3	1689.3	1691.1	1692.0	1693.8	1692.9	1695.6
15°	1662.0	1666.5	1672.0	1676.5	1681.1	1683.8	1686.5	1687.4	1690.2	1687.4	1688.3
17.5°	1645.6	1651.0	1659.2	1664.7	1672.0	1674.7	1678.3	1680.2	1682.9	1681.1	1682.0
20°	1622.8	1629.2	1638.3	1646.5	1651.0	1657.4	1662.0	1664.7	1666.5	1664.7	1665.6
22.5°	1591.0	1600.1	1611.9	1618.3	1627.4	1632.9	1633.8	1640.1	1644.7	1640.1	1642.0
25°	1553.7	1562.8	1571.9	1585.6	1593.8	1600.1	1606.5	1607.4	1611.9	1611.0	1610.1
27.5°	1491.9	1503.7	1519.1	1530.1	1541.0	1551.0	1558.3	1560.1	1564.6	1562.8	1563.7
30°	1407.3	1420.0	1434.6	1451.8	1467.3	1477.3	1486.4	1492.8	1497.3	1494.6	1493.7
32.5°	1287.2	1299.9	1315.4	1332.7	1350.9	1365.4	1376.3	1384.5	1390.0	1388.2	1383.6
35°	1149.8	1153.5	1163.5	1177.1	1192.6	1208.0	1218.1	1227.1	1233.5	1235.3	1235.3
37.5°	1008.8	997.0	989.7	989.7	998.8	1005.2	1014.3	1019.7	1029.8	1033.4	1036.1
40°	872.4	845.1	819.6	800.5	787.8	786.9	786.9	789.6	798.7	810.5	821.4
42.5°	750.5	706.8	667.7	632.2	606.8	592.2	585.8	586.7	594.0	604.9	623.1
45°	653.1	598.6	549.4	506.7	472.1	449.4	438.5	437.6	443.0	455.7	475.8
47.5°	577.6	519.4	463.9	414.8	377.5	352.9	340.2	336.6	340.2	352.0	375.7
50°	514.9	454.8	397.5	346.6	306.6	281.1	269.3	264.7	269.3	279.3	302.9
52.5°	456.6	394.8	341.1	292.0	249.2	227.4	214.7	211.9	214.7	226.5	245.6
55°	389.3	336.6	283.8	234.7	197.4	175.6	165.6	162.8	165.6	176.5	196.5
57.5°	322.9	277.4	231.1	186.5	154.6	135.5	126.4	122.8	129.2	136.4	160.1
60°	261.1	224.7	185.6	146.5	120.1	102.8	95.5	94.6	96.4	105.5	121.9
62.5°	204.7	174.7	143.7	111.9	90.1	82.8	73.7	72.8	74.6	80.0	92.8
65°	147.4	128.3	104.6	81.9	64.6	54.6	50.9	51.9	53.7	57.3	69.1
67.5°	102.8	89.1	72.8	57.3	44.6	40.0	36.4	35.5	36.4	42.8	49.1
70°	69.1	60.9	49.1	43.7	30.9	24.6	25.5	22.7	26.4	26.4	31.8
72.5°	45.5	40.0	32.7	25.5	21.8	17.3	17.3	16.4	18.2	19.1	23.7
75°	23.7	18.2	18.2	12.7	9.1	4.5	8.2	7.3	6.4	7.3	9.1
77.5°	16.4	13.6	12.7	10.0	9.1	7.3	7.3	7.3	7.3	8.2	9.1
80°	10.0	10.0	7.3	6.4	5.5	4.5	5.5	5.5	5.5	5.5	6.4
82.5°	6.4	5.5	5.5	4.5	4.5	3.6	3.6	3.6	3.6	3.6	5.5
85°	5.5	3.6	3.6	2.7	3.6	6.4	2.7	3.6	3.6	3.6	2.7
87.5°	1.8	2.7	2.7	2.7	1.8	0.9	1.8	2.7	2.7	4.5	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7	1694.7
2.5°	1697.5	1698.4	1698.4	1697.5	1697.5	1695.6	1699.3	1696.5	1697.5	1701.1	1698.4
5°	1699.3	1700.2	1700.2	1699.3	1699.3	1699.3	1700.2	1700.2	1699.3	1698.4	1700.2
7.5°	1702.9	1702.0	1702.0	1700.2	1700.2	1698.4	1700.2	1697.5	1699.3	1697.5	1700.2
10°	1698.4	1699.3	1698.4	1697.5	1697.5	1696.5	1696.5	1693.8	1694.7	1692.0	1693.8
12.5°	1695.6	1694.7	1694.7	1692.9	1691.1	1689.3	1688.3	1685.6	1685.6	1679.2	1682.0
15°	1688.3	1689.3	1686.5	1682.9	1681.1	1676.5	1674.7	1671.1	1667.4	1662.9	1663.8
17.5°	1682.0	1679.2	1675.6	1672.0	1664.7	1661.1	1657.4	1652.0	1650.1	1644.7	1642.9
20°	1662.9	1661.1	1656.5	1650.1	1645.6	1637.4	1633.8	1628.3	1623.8	1618.3	1615.6
22.5°	1638.3	1636.5	1631.0	1624.7	1617.4	1613.8	1610.1	1600.1	1595.6	1590.1	1589.2
25°	1607.4	1604.7	1599.2	1591.9	1588.3	1578.3	1574.6	1567.4	1565.5	1560.1	1559.2
27.5°	1560.1	1556.4	1550.1	1541.0	1534.6	1528.2	1524.6	1519.1	1517.3	1511.9	1511.0
30°	1489.1	1484.6	1471.8	1468.2	1457.3	1450.9	1450.9	1443.6	1444.6	1440.9	1440.9
32.5°	1377.2	1370.0	1360.0	1352.7	1345.4	1341.8	1341.8	1339.0	1340.9	1340.9	1342.7
35°	1229.0	1219.0	1213.5	1209.0	1209.0	1212.6	1223.5	1226.2	1231.7	1236.2	1239.9
37.5°	1038.8	1037.9	1044.3	1049.8	1063.4	1078.9	1098.0	1114.4	1129.8	1140.7	1151.6
40°	833.3	856.0	874.2	899.7	920.6	950.6	985.2	1013.4	1039.7	1058.9	1078.9
42.5°	650.4	679.5	717.7	755.0	792.3	833.3	878.8	917.9	952.4	978.8	999.7
45°	506.7	546.7	593.1	640.4	688.6	739.6	786.9	826.9	863.3	890.6	911.5
47.5°	408.4	452.1	504.9	556.7	611.3	665.0	717.7	752.3	782.3	804.1	823.3
50°	337.5	383.9	439.4	498.5	553.1	606.8	652.2	685.9	710.5	729.6	741.4
52.5°	282.0	331.1	390.3	449.4	503.9	553.1	594.0	619.5	639.5	653.1	664.1
55°	232.9	280.2	335.7	391.2	444.8	491.2	524.9	544.0	559.4	567.6	574.0
57.5°	190.1	233.8	284.7	335.7	382.1	420.3	446.7	465.8	473.0	479.4	478.5
60°	149.2	190.1	236.5	280.2	320.2	351.1	370.2	381.1	386.6	389.3	387.5
62.5°	117.3	154.6	190.1	228.3	257.4	283.8	302.0	302.0	304.7	305.6	308.4
65°	87.3	115.5	146.5	174.7	198.3	215.6	225.6	228.3	232.0	231.1	229.2
67.5°	64.6	85.5	108.2	129.2	145.5	156.5	163.7	170.1	169.2	167.4	166.5
70°	44.6	58.2	78.2	91.0	102.8	113.7	115.5	116.4	117.3	118.3	116.4
72.5°	30.9	40.9	51.9	62.8	70.0	74.6	79.1	80.0	80.0	80.0	79.1
75°	15.5	20.9	30.9	35.5	41.8	43.7	47.3	47.3	50.0	46.4	45.5
77.5°	13.6	16.4	21.8	25.5	28.2	30.9	31.8	34.6	33.7	31.8	32.7
80°	8.2	10.0	13.6	15.5	19.1	20.0	20.9	21.8	20.9	21.8	21.8
82.5°	6.4	7.3	9.1	9.1	11.8	11.8	12.7	12.7	13.6	13.6	13.6
85°	3.6	6.4	5.5	10.9	7.3	7.3	9.1	10.9	9.1	9.1	10.9
87.5°	3.6	3.6	2.7	3.6	3.6	3.6	4.5	5.5	5.5	6.4	5.5
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: P246100

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1694.7	1694.7	1694.7	1694.7
2.5°	1697.5	1699.3	1696.5	1695.6
5°	1700.2	1700.2	1698.4	1698.4
7.5°	1700.2	1700.2	1697.5	1695.6
10°	1692.9	1692.9	1690.2	1688.3
12.5°	1679.2	1679.2	1678.3	1675.6
15°	1662.0	1662.0	1658.3	1655.6
17.5°	1638.3	1640.1	1635.6	1635.6
20°	1612.8	1611.9	1608.3	1606.5
22.5°	1586.5	1584.6	1583.7	1578.3
25°	1558.3	1556.4	1553.7	1551.0
27.5°	1510.1	1509.1	1506.4	1502.8
30°	1436.4	1435.5	1431.8	1431.8
32.5°	1340.9	1339.9	1336.3	1337.2
35°	1241.7	1245.3	1243.5	1239.9
37.5°	1158.9	1161.7	1163.5	1161.7
40°	1089.8	1098.0	1098.9	1100.7
42.5°	1016.1	1027.0	1030.7	1032.5
45°	927.9	937.9	946.1	944.2
47.5°	837.8	845.1	852.4	846.9
50°	751.4	755.9	758.7	758.7
52.5°	669.5	669.5	668.6	669.5
55°	575.8	575.8	572.2	574.0
57.5°	477.6	479.4	476.7	472.1
60°	386.6	382.1	380.2	377.5
62.5°	301.1	301.1	294.7	302.9
65°	225.6	222.9	220.1	219.2
67.5°	163.7	162.8	160.1	159.2
70°	115.5	111.9	111.0	109.2
72.5°	77.3	77.3	75.5	75.5
75°	47.3	42.8	41.8	42.8
77.5°	32.7	31.8	31.8	30.9
80°	21.8	20.9	22.7	20.0
82.5°	13.6	14.6	13.6	14.6
85°	9.1	10.9	10.0	10.0
87.5°	5.5	5.5	5.5	5.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)