

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: P246244

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246244
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3249.0 lumens
Efficiency: N/A
Efficacy: 79.4 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

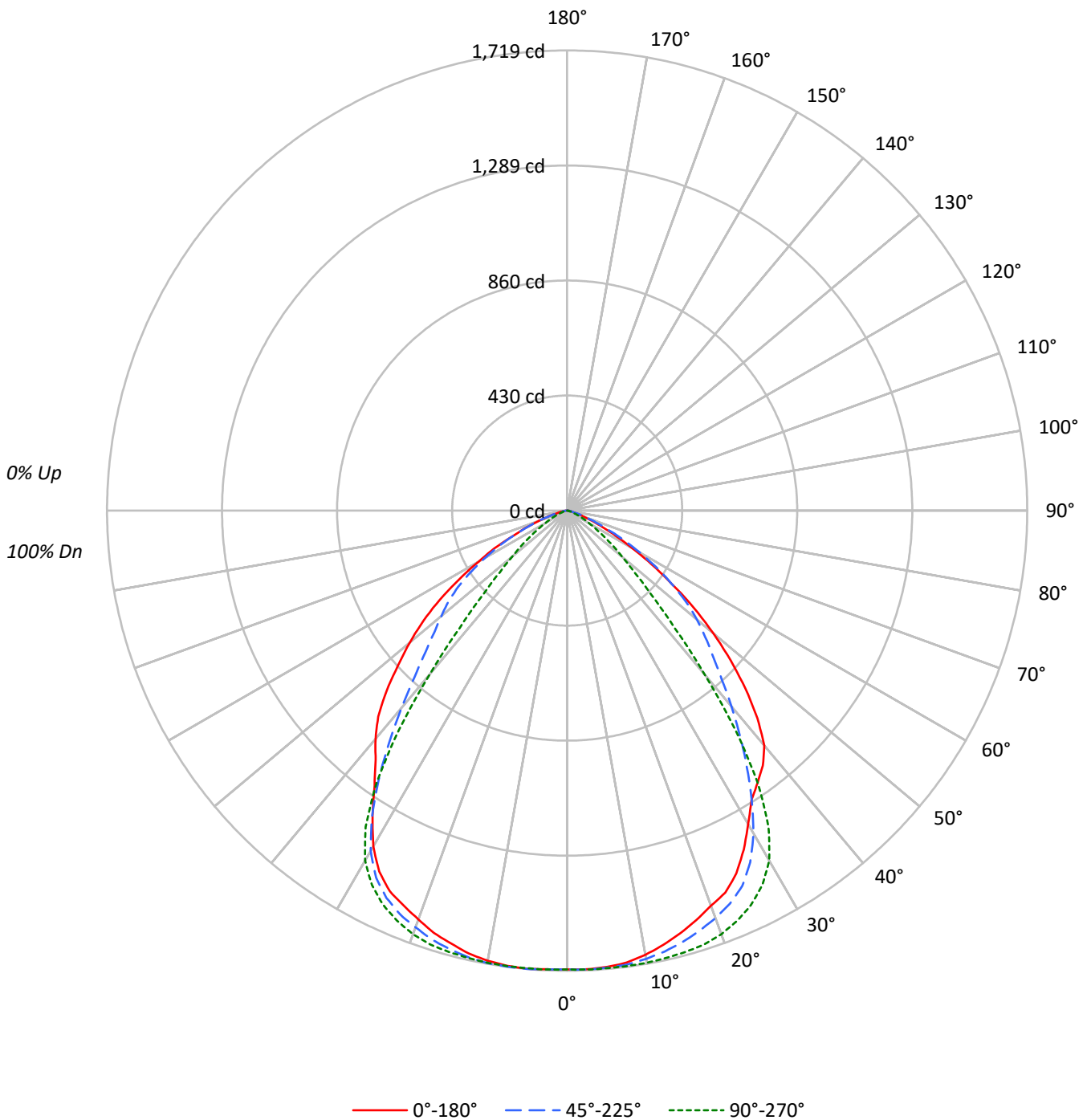
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	163.6	5.0
10°-20°	475.1	14.6
20°-30°	721.1	22.2
30°-40°	757.4	23.3
40°-50°	567.9	17.5
50°-60°	364.3	11.2
60°-70°	155.9	4.8
70°-80°	36.8	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°	1359.9	41.9
0°-40°	2117.3	65.2
0°-60°	3049.5	93.9
0°-90°	3249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3249.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1714	1714	1714	1714	1714	
5°	1712	1714	1716	1719	1718	163
15°	1634	1668	1707	1696	1675	461
25°	1495	1548	1626	1596	1569	683
35°	1240	1171	1241	1226	1254	778
45°	942	770	443	748	955	722
55°	477	477	165	497	581	432
65°	144	169	52	218	222	153
75°	22	26	7	44	43	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°	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2
2.5°	1715.2	1717.0	1716.1	1716.1	1715.2	1716.1	1716.1	1717.9	1717.9	1716.1	1715.2
5°	1711.5	1713.3	1713.3	1711.5	1711.5	1716.1	1713.3	1715.2	1715.2	1714.2	1714.2
7.5°	1703.2	1703.2	1706.9	1704.1	1704.1	1706.9	1706.0	1707.8	1709.6	1710.6	1710.6
10°	1684.8	1686.6	1687.6	1687.6	1688.5	1691.2	1693.1	1696.8	1698.6	1700.4	1701.4
12.5°	1661.8	1664.5	1665.5	1664.5	1667.3	1671.0	1675.6	1680.2	1683.0	1686.6	1689.4
15°	1634.2	1634.2	1636.0	1638.8	1640.6	1646.2	1650.7	1656.3	1663.6	1668.2	1672.8
17.5°	1603.8	1605.7	1608.4	1608.4	1612.1	1621.3	1624.1	1632.4	1640.6	1645.2	1654.4
20°	1570.7	1572.5	1575.3	1577.1	1581.7	1589.1	1594.6	1602.0	1611.2	1619.5	1628.7
22.5°	1544.9	1541.3	1543.1	1544.9	1549.5	1556.0	1562.4	1571.6	1580.8	1589.1	1598.3
25°	1495.2	1496.2	1498.9	1500.8	1506.3	1511.8	1519.2	1530.2	1538.5	1547.7	1557.8
27.5°	1428.1	1429.0	1433.6	1433.6	1438.2	1447.4	1452.0	1461.2	1472.2	1481.4	1493.4
30°	1351.7	1353.5	1353.5	1357.2	1360.0	1364.6	1369.2	1378.4	1383.9	1392.2	1408.8
32.5°	1281.8	1283.6	1282.7	1281.8	1279.0	1278.1	1277.2	1279.0	1280.9	1283.6	1290.0
35°	1240.4	1235.8	1232.1	1225.6	1218.3	1209.1	1200.8	1189.8	1179.6	1171.3	1162.2
37.5°	1200.8	1199.9	1194.4	1185.1	1170.4	1153.9	1134.6	1110.6	1086.7	1060.9	1036.1
40°	1145.6	1142.8	1138.2	1125.3	1108.8	1088.5	1062.8	1033.3	994.7	955.1	914.6
42.5°	1051.7	1052.6	1047.1	1037.0	1021.4	1002.0	975.4	943.2	901.8	854.8	802.4
45°	942.2	942.2	940.4	932.1	921.1	905.4	885.2	858.5	818.0	770.2	714.0
47.5°	828.1	829.1	826.3	824.5	819.8	809.7	795.0	774.8	746.2	700.2	644.1
50°	712.2	712.2	716.8	715.9	715.9	712.2	705.8	693.8	669.0	632.1	579.7
52.5°	596.3	598.1	600.9	604.5	609.1	616.5	609.1	603.6	588.0	559.4	514.4
55°	476.6	478.5	483.1	489.5	495.0	502.4	504.2	504.2	496.0	476.6	442.6
57.5°	374.5	371.7	375.4	380.9	388.3	395.7	401.2	407.6	406.7	393.8	366.2
60°	281.6	282.5	285.2	290.8	296.3	302.7	310.1	315.6	318.4	311.9	294.4
62.5°	205.2	205.2	208.9	214.4	217.2	226.4	231.0	233.7	236.5	235.5	224.5
65°	143.6	145.4	147.2	150.0	152.7	158.3	161.0	166.5	168.4	169.3	161.0
67.5°	101.2	98.5	100.3	102.1	104.9	108.6	114.1	114.1	116.9	116.9	111.3
70°	64.4	64.4	65.3	68.1	69.9	70.9	72.7	74.5	77.3	76.4	76.4
72.5°	43.3	42.3	43.3	44.2	45.1	47.8	47.8	48.8	50.6	51.5	47.8
75°	22.1	23.0	24.8	23.9	26.7	24.8	25.8	28.5	27.6	25.8	25.8
77.5°	18.4	18.4	18.4	17.5	19.3	19.3	18.4	20.2	19.3	19.3	18.4
80°	12.9	13.8	12.9	12.0	12.9	12.0	12.0	12.0	12.0	12.0	11.0
82.5°	10.1	8.3	9.2	8.3	9.2	9.2	8.3	7.4	7.4	8.3	7.4
85°	7.4	5.5	6.4	6.4	5.5	5.5	5.5	5.5	5.5	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	1.8
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°	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2
2.5°	1717.0	1716.1	1717.9	1717.0	1717.0	1716.1	1717.0	1716.1	1717.9	1714.2	1715.2
5°	1717.0	1715.2	1716.1	1717.0	1717.9	1716.1	1716.1	1716.1	1717.9	1716.1	1717.0
7.5°	1713.3	1712.4	1715.2	1717.0	1716.1	1715.2	1717.0	1716.1	1717.9	1717.0	1718.8
10°	1706.0	1706.9	1708.7	1711.5	1712.4	1713.3	1715.2	1715.2	1717.9	1714.2	1716.1
12.5°	1694.9	1698.6	1703.2	1705.0	1708.7	1708.7	1710.6	1711.5	1713.3	1712.4	1715.2
15°	1681.1	1685.7	1691.2	1695.8	1700.4	1703.2	1706.0	1706.9	1709.6	1706.9	1707.8
17.5°	1664.5	1670.1	1678.3	1683.9	1691.2	1694.0	1697.7	1699.5	1702.3	1700.4	1701.4
20°	1641.5	1648.0	1657.2	1665.5	1670.1	1676.5	1681.1	1683.9	1685.7	1683.9	1684.8
22.5°	1609.3	1618.5	1630.5	1636.9	1646.2	1651.7	1652.6	1659.0	1663.6	1659.0	1660.9
25°	1571.6	1580.8	1590.0	1603.8	1612.1	1618.5	1625.0	1625.9	1630.5	1629.6	1628.7
27.5°	1509.0	1521.0	1536.6	1547.7	1558.7	1568.9	1576.2	1578.0	1582.7	1580.8	1581.7
30°	1423.5	1436.4	1451.1	1468.6	1484.2	1494.3	1503.5	1510.0	1514.6	1511.8	1510.9
32.5°	1302.0	1314.9	1330.5	1348.0	1366.4	1381.1	1392.2	1400.5	1406.0	1404.1	1399.6
35°	1163.1	1166.7	1176.9	1190.7	1206.3	1222.0	1232.1	1241.3	1247.7	1249.6	1249.6
37.5°	1020.4	1008.5	1001.1	1001.1	1010.3	1016.8	1026.0	1031.5	1041.6	1045.3	1048.1
40°	882.4	854.8	829.1	809.7	796.9	795.9	795.9	798.7	807.9	819.8	830.9
42.5°	759.1	715.0	675.4	639.5	613.7	599.0	592.6	593.5	600.9	611.9	630.3
45°	660.7	605.5	555.8	512.5	477.6	454.5	443.5	442.6	448.1	461.0	481.2
47.5°	584.3	525.4	469.3	419.6	381.9	357.0	344.1	340.5	344.1	356.1	380.0
50°	520.8	460.1	402.1	350.6	310.1	284.3	272.4	267.8	272.4	282.5	306.4
52.5°	461.9	399.3	345.1	295.4	252.1	230.0	217.2	214.4	217.2	229.1	248.4
55°	393.8	340.5	287.1	237.4	199.7	177.6	167.5	164.7	167.5	178.5	198.8
57.5°	326.7	280.6	233.7	188.6	156.4	137.1	127.9	124.2	130.7	138.0	161.9
60°	264.1	227.3	187.7	148.1	121.5	104.0	96.6	95.7	97.5	106.7	123.3
62.5°	207.0	176.7	145.4	113.2	91.1	83.7	74.5	73.6	75.4	81.0	93.9
65°	149.1	129.8	105.8	82.8	65.3	55.2	51.5	52.5	54.3	58.0	69.9
67.5°	104.0	90.2	73.6	58.0	45.1	40.5	36.8	35.9	36.8	43.3	49.7
70°	69.9	61.6	49.7	44.2	31.3	24.8	25.8	23.0	26.7	26.7	32.2
72.5°	46.0	40.5	33.1	25.8	22.1	17.5	17.5	16.6	18.4	19.3	23.9
75°	23.9	18.4	18.4	12.9	9.2	4.6	8.3	7.4	6.4	7.4	9.2
77.5°	16.6	13.8	12.9	10.1	9.2	7.4	7.4	7.4	7.4	8.3	9.2
80°	10.1	10.1	7.4	6.4	5.5	4.6	5.5	5.5	5.5	5.5	6.4
82.5°	6.4	5.5	5.5	4.6	4.6	3.7	3.7	3.7	3.7	3.7	5.5
85°	5.5	3.7	3.7	2.8	3.7	6.4	2.8	3.7	3.7	3.7	2.8
87.5°	1.8	2.8	2.8	2.8	1.8	0.9	1.8	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2	1714.2
2.5°	1717.0	1717.9	1717.9	1717.0	1717.0	1715.2	1718.8	1716.1	1717.0	1720.7	1717.9
5°	1718.8	1719.8	1719.8	1718.8	1718.8	1718.8	1719.8	1719.8	1718.8	1717.9	1719.8
7.5°	1722.5	1721.6	1721.6	1719.8	1719.8	1717.9	1719.8	1717.0	1718.8	1717.0	1719.8
10°	1717.9	1718.8	1717.9	1717.0	1717.0	1716.1	1716.1	1713.3	1714.2	1711.5	1713.3
12.5°	1715.2	1714.2	1714.2	1712.4	1710.6	1708.7	1707.8	1705.0	1705.0	1698.6	1701.4
15°	1707.8	1708.7	1706.0	1702.3	1700.4	1695.8	1694.0	1690.3	1686.6	1682.0	1683.0
17.5°	1701.4	1698.6	1694.9	1691.2	1683.9	1680.2	1676.5	1671.0	1669.1	1663.6	1661.8
20°	1682.0	1680.2	1675.6	1669.1	1664.5	1656.3	1652.6	1647.1	1642.5	1636.9	1634.2
22.5°	1657.2	1655.3	1649.8	1643.4	1636.0	1632.4	1628.7	1618.5	1613.9	1608.4	1607.5
25°	1625.9	1623.1	1617.6	1610.3	1606.6	1596.5	1592.8	1585.4	1583.6	1578.0	1577.1
27.5°	1578.0	1574.4	1567.9	1558.7	1552.3	1545.8	1542.2	1536.6	1534.8	1529.3	1528.4
30°	1506.3	1501.7	1488.8	1485.1	1474.1	1467.6	1467.6	1460.3	1461.2	1457.5	1457.5
32.5°	1393.1	1385.7	1375.6	1368.3	1360.9	1357.2	1357.2	1354.5	1356.3	1356.3	1358.1
35°	1243.1	1233.0	1227.5	1222.9	1222.9	1226.5	1237.6	1240.4	1245.9	1250.5	1254.2
37.5°	1050.8	1049.9	1056.3	1061.9	1075.7	1091.3	1110.6	1127.2	1142.8	1153.9	1164.9
40°	842.9	865.9	884.3	910.0	931.2	961.6	996.5	1025.0	1051.7	1071.1	1091.3
42.5°	657.9	687.3	726.0	763.7	801.5	842.9	888.9	928.4	963.4	990.1	1011.2
45°	512.5	553.0	599.9	647.8	696.6	748.1	795.9	836.4	873.2	900.8	922.0
47.5°	413.1	457.3	510.7	563.1	618.3	672.6	726.0	761.0	791.3	813.4	832.7
50°	341.4	388.3	444.4	504.2	559.4	613.7	659.7	693.8	718.6	738.0	749.9
52.5°	285.2	334.9	394.7	454.5	509.8	559.4	600.9	626.6	646.9	660.7	671.7
55°	235.5	283.4	339.5	395.7	450.0	496.9	530.9	550.3	565.9	574.2	580.6
57.5°	192.3	236.5	288.0	339.5	386.5	425.1	451.8	471.1	478.5	484.9	484.0
60°	150.9	192.3	239.2	283.4	323.9	355.2	374.5	385.5	391.1	393.8	392.0
62.5°	118.7	156.4	192.3	231.0	260.4	287.1	305.5	305.5	308.2	309.2	311.9
65°	88.3	116.9	148.1	176.7	200.6	218.1	228.2	231.0	234.6	233.7	231.9
67.5°	65.3	86.5	109.5	130.7	147.2	158.3	165.6	172.1	171.2	169.3	168.4
70°	45.1	58.9	79.1	92.0	104.0	115.0	116.9	117.8	118.7	119.6	117.8
72.5°	31.3	41.4	52.5	63.5	70.9	75.4	80.1	81.0	81.0	81.0	80.1
75°	15.6	21.2	31.3	35.9	42.3	44.2	47.8	47.8	50.6	46.9	46.0
77.5°	13.8	16.6	22.1	25.8	28.5	31.3	32.2	35.0	34.0	32.2	33.1
80°	8.3	10.1	13.8	15.6	19.3	20.2	21.2	22.1	21.2	22.1	22.1
82.5°	6.4	7.4	9.2	9.2	12.0	12.0	12.9	12.9	13.8	13.8	13.8
85°	3.7	6.4	5.5	11.0	7.4	7.4	9.2	11.0	9.2	9.2	11.0
87.5°	3.7	3.7	2.8	3.7	3.7	3.7	4.6	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: P246244

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1714.2	1714.2	1714.2	1714.2
2.5°	1717.0	1718.8	1716.1	1715.2
5°	1719.8	1719.8	1717.9	1717.9
7.5°	1719.8	1719.8	1717.0	1715.2
10°	1712.4	1712.4	1709.6	1707.8
12.5°	1698.6	1698.6	1697.7	1694.9
15°	1681.1	1681.1	1677.4	1674.7
17.5°	1657.2	1659.0	1654.4	1654.4
20°	1631.4	1630.5	1626.8	1625.0
22.5°	1604.7	1602.9	1602.0	1596.5
25°	1576.2	1574.4	1571.6	1568.9
27.5°	1527.5	1526.5	1523.8	1520.1
30°	1452.9	1452.0	1448.3	1448.3
32.5°	1356.3	1355.4	1351.7	1352.6
35°	1256.0	1259.7	1257.8	1254.2
37.5°	1172.3	1175.0	1176.9	1175.0
40°	1102.3	1110.6	1111.5	1113.4
42.5°	1027.8	1038.8	1042.5	1044.4
45°	938.5	948.7	957.0	955.1
47.5°	847.4	854.8	862.2	856.7
50°	760.0	764.6	767.4	767.4
52.5°	677.2	677.2	676.3	677.2
55°	582.5	582.5	578.8	580.6
57.5°	483.1	484.9	482.1	477.6
60°	391.1	386.5	384.6	381.9
62.5°	304.6	304.6	298.1	306.4
65°	228.2	225.4	222.7	221.7
67.5°	165.6	164.7	161.9	161.0
70°	116.9	113.2	112.3	110.4
72.5°	78.2	78.2	76.4	76.4
75°	47.8	43.3	42.3	43.3
77.5°	33.1	32.2	32.2	31.3
80°	22.1	21.2	23.0	20.2
82.5°	13.8	14.7	13.8	14.7
85°	9.2	11.0	10.1	10.1
87.5°	5.5	5.5	5.5	5.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)