

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: P244654

Luminaire Tested: **LSR8B40D010 EC8B409727 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244654
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 EC8B409727 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3106.0 lumens
Efficiency: N/A
Efficacy: 75.9 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

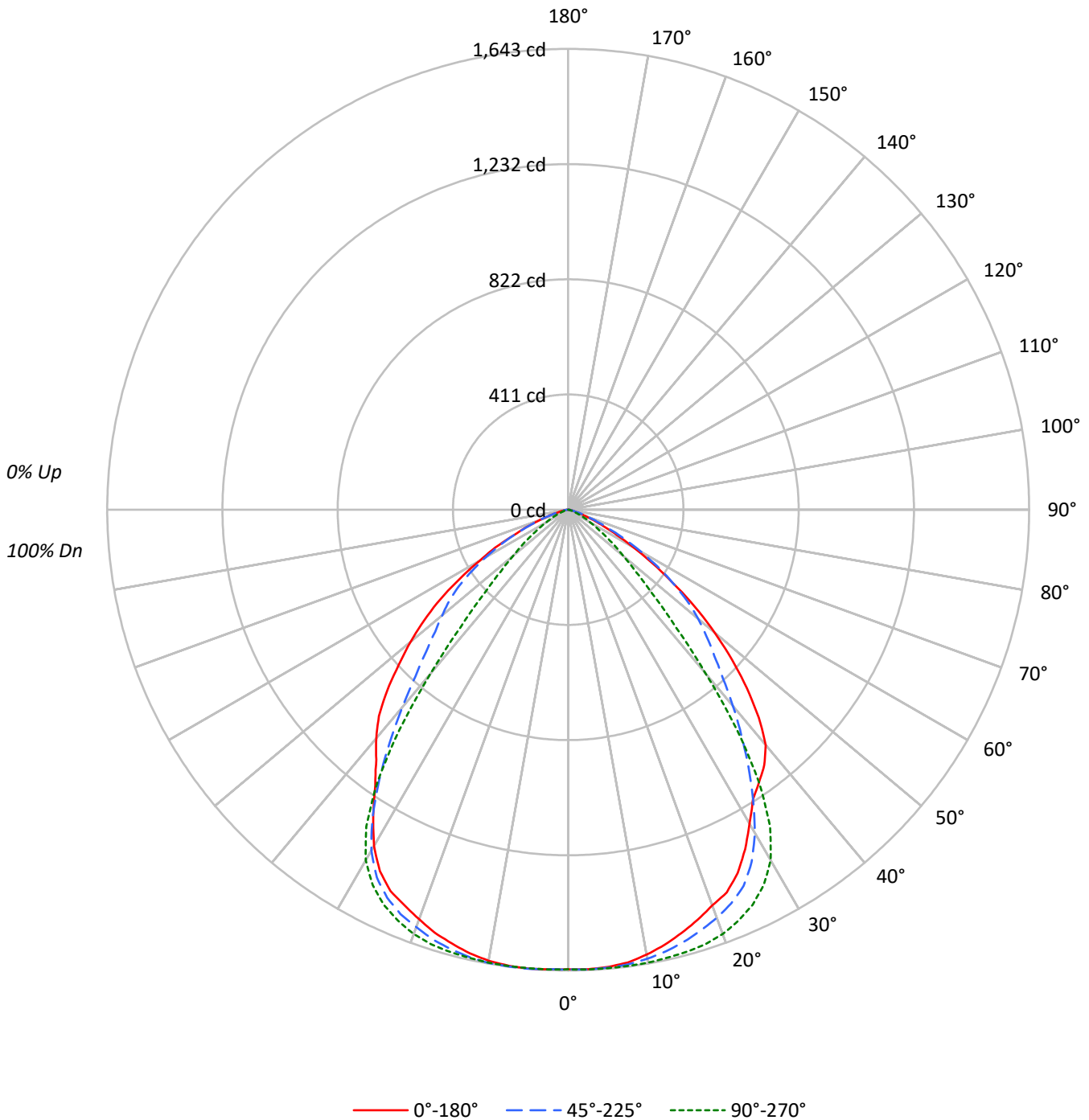
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	156.4	5.0
10°-20°	454.2	14.6
20°-30°	689.4	22.2
30°-40°	724.1	23.3
40°-50°	542.9	17.5
50°-60°	348.3	11.2
60°-70°	149.0	4.8
70°-80°	35.2	1.1
80°-90°	6.5	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°	1300.0	41.9
0°-40°	2024.1	65.2
0°-60°	2915.2	93.9
0°-90°	3106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3106.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1639	1639	1639	1639	1639	
5°	1636	1639	1641	1643	1642	155
15°	1562	1595	1632	1621	1601	441
25°	1429	1480	1554	1526	1500	653
35°	1186	1120	1187	1173	1199	744
45°	901	736	423	715	913	690
55°	456	456	158	475	555	413
65°	137	162	50	208	212	147
75°	21	25	7	42	41	31
85°	7	4	4	7	10	7
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°	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8
2.5°	1639.7	1641.4	1640.6	1640.6	1639.7	1640.6	1640.6	1642.3	1642.3	1640.6	1639.7
5°	1636.1	1637.9	1637.9	1636.1	1636.1	1640.6	1637.9	1639.7	1639.7	1638.8	1638.8
7.5°	1628.2	1628.2	1631.7	1629.1	1629.1	1631.7	1630.9	1632.6	1634.4	1635.3	1635.3
10°	1610.6	1612.4	1613.3	1613.3	1614.2	1616.8	1618.6	1622.1	1623.8	1625.6	1626.5
12.5°	1588.7	1591.3	1592.2	1591.3	1593.9	1597.4	1601.9	1606.2	1608.9	1612.4	1615.0
15°	1562.2	1562.2	1564.0	1566.7	1568.4	1573.7	1578.1	1583.4	1590.4	1594.8	1599.2
17.5°	1533.2	1535.0	1537.6	1537.6	1541.2	1549.9	1552.6	1560.5	1568.4	1572.8	1581.6
20°	1501.6	1503.3	1506.0	1507.7	1512.1	1519.2	1524.4	1531.5	1540.3	1548.2	1557.0
22.5°	1476.9	1473.4	1475.2	1476.9	1481.3	1487.5	1493.7	1502.4	1511.2	1519.2	1528.0
25°	1429.4	1430.3	1433.0	1434.7	1440.0	1445.3	1452.3	1462.9	1470.8	1479.6	1489.2
27.5°	1365.2	1366.1	1370.5	1370.5	1374.9	1383.7	1388.1	1396.9	1407.5	1416.2	1427.7
30°	1292.2	1294.0	1294.0	1297.5	1300.1	1304.5	1308.9	1317.7	1323.0	1330.9	1346.8
32.5°	1225.4	1227.1	1226.2	1225.4	1222.7	1221.8	1220.9	1222.7	1224.5	1227.1	1233.3
35°	1185.8	1181.4	1177.9	1171.7	1164.7	1155.9	1147.9	1137.4	1127.7	1119.8	1111.0
37.5°	1147.9	1147.1	1141.8	1133.0	1118.9	1103.1	1084.6	1061.7	1038.9	1014.2	990.5
40°	1095.2	1092.5	1088.1	1075.8	1060.0	1040.6	1016.0	987.8	950.9	913.1	874.4
42.5°	1005.4	1006.3	1001.0	991.4	976.4	957.9	932.4	901.6	862.1	817.2	767.1
45°	900.8	900.8	899.0	891.1	880.5	865.6	846.2	820.7	782.0	736.3	682.6
47.5°	791.7	792.6	789.9	788.2	783.8	774.1	760.0	740.7	713.4	669.4	615.7
50°	680.9	680.9	685.2	684.4	684.4	680.9	674.7	663.3	639.5	604.3	554.2
52.5°	570.0	571.8	574.4	577.9	582.3	589.4	582.3	577.0	562.1	534.8	491.7
55°	455.7	457.4	461.8	468.0	473.3	480.3	482.0	482.0	474.1	455.7	423.1
57.5°	358.0	355.4	358.9	364.2	371.2	378.3	383.5	389.7	388.8	376.5	350.1
60°	269.2	270.1	272.7	278.0	283.3	289.4	296.4	301.7	304.4	298.2	281.5
62.5°	196.2	196.2	199.7	204.9	207.6	216.4	220.8	223.4	226.1	225.2	214.6
65°	137.2	139.0	140.7	143.4	146.0	151.3	153.9	159.2	161.0	161.9	153.9
67.5°	96.8	94.1	95.9	97.6	100.3	103.8	109.1	109.1	111.7	111.7	106.4
70°	61.6	61.6	62.5	65.1	66.9	67.7	69.5	71.2	73.9	73.0	73.0
72.5°	41.3	40.5	41.3	42.2	43.1	45.7	45.7	46.6	48.4	49.3	45.7
75°	21.1	22.0	23.7	22.9	25.5	23.7	24.6	27.3	26.4	24.6	24.6
77.5°	17.6	17.6	17.6	16.7	18.5	18.5	17.6	19.3	18.5	18.5	17.6
80°	12.3	13.2	12.3	11.4	12.3	11.4	11.4	11.4	11.4	11.4	10.5
82.5°	9.7	7.9	8.8	7.9	8.8	8.8	7.9	7.0	7.0	7.9	7.0
85°	7.0	5.3	6.2	6.2	5.3	5.3	5.3	5.3	5.3	4.4	4.4
87.5°	4.4	2.6	2.6	2.6	3.5	3.5	3.5	2.6	3.5	3.5	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°	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8
2.5°	1641.4	1640.6	1642.3	1641.4	1641.4	1640.6	1641.4	1640.6	1642.3	1638.8	1639.7
5°	1641.4	1639.7	1640.6	1641.4	1642.3	1640.6	1640.6	1640.6	1642.3	1640.6	1641.4
7.5°	1637.9	1637.0	1639.7	1641.4	1640.6	1639.7	1641.4	1640.6	1642.3	1641.4	1643.2
10°	1630.9	1631.7	1633.5	1636.1	1637.0	1637.9	1639.7	1639.7	1642.3	1638.8	1640.6
12.5°	1620.3	1623.8	1628.2	1630.0	1633.5	1633.5	1635.3	1636.1	1637.9	1637.0	1639.7
15°	1607.1	1611.5	1616.8	1621.2	1625.6	1628.2	1630.9	1631.7	1634.4	1631.7	1632.6
17.5°	1591.3	1596.6	1604.5	1609.8	1616.8	1619.4	1622.9	1624.7	1627.4	1625.6	1626.5
20°	1569.3	1575.5	1584.2	1592.2	1596.6	1602.7	1607.1	1609.8	1611.5	1609.8	1610.6
22.5°	1538.5	1547.3	1558.7	1564.9	1573.7	1579.0	1579.9	1586.0	1590.4	1586.0	1587.8
25°	1502.4	1511.2	1520.0	1533.2	1541.2	1547.3	1553.5	1554.3	1558.7	1557.9	1557.0
27.5°	1442.6	1454.1	1469.0	1479.6	1490.1	1499.8	1506.8	1508.6	1513.0	1511.2	1512.1
30°	1360.8	1373.1	1387.2	1403.9	1418.9	1428.5	1437.3	1443.5	1447.9	1445.3	1444.4
32.5°	1244.7	1257.0	1272.0	1288.7	1306.3	1320.3	1330.9	1338.8	1344.1	1342.3	1338.0
35°	1111.9	1115.4	1125.1	1138.3	1153.2	1168.2	1177.9	1186.6	1192.8	1194.6	1194.6
37.5°	975.5	964.1	957.1	957.1	965.9	972.0	980.8	986.1	995.8	999.3	1001.9
40°	843.6	817.2	792.6	774.1	761.8	760.9	760.9	763.5	772.3	783.8	794.3
42.5°	725.7	683.5	645.7	611.4	586.7	572.7	566.5	567.4	574.4	585.0	602.6
45°	631.6	578.8	531.3	490.0	456.5	434.5	424.0	423.1	428.4	440.7	460.1
47.5°	558.6	502.3	448.6	401.1	365.1	341.3	329.0	325.5	329.0	340.4	363.3
50°	497.9	439.8	384.4	335.1	296.4	271.8	260.4	256.0	260.4	270.1	292.9
52.5°	441.6	381.8	329.9	282.4	241.0	219.9	207.6	204.9	207.6	219.0	237.5
55°	376.5	325.5	274.4	226.9	190.9	169.8	160.1	157.5	160.1	170.7	190.0
57.5°	312.3	268.3	223.4	180.3	149.5	131.1	122.3	118.7	124.9	131.9	154.8
60°	252.5	217.3	179.4	141.6	116.1	99.4	92.4	91.5	93.2	102.0	117.9
62.5°	197.9	168.9	139.0	108.2	87.1	80.0	71.2	70.4	72.1	77.4	89.7
65°	142.5	124.0	101.2	79.2	62.5	52.8	49.3	50.1	51.9	55.4	66.9
67.5°	99.4	86.2	70.4	55.4	43.1	38.7	35.2	34.3	35.2	41.3	47.5
70°	66.9	58.9	47.5	42.2	29.9	23.7	24.6	22.0	25.5	25.5	30.8
72.5°	44.0	38.7	31.7	24.6	21.1	16.7	16.7	15.8	17.6	18.5	22.9
75°	22.9	17.6	17.6	12.3	8.8	4.4	7.9	7.0	6.2	7.0	8.8
77.5°	15.8	13.2	12.3	9.7	8.8	7.0	7.0	7.0	7.0	7.9	8.8
80°	9.7	9.7	7.0	6.2	5.3	4.4	5.3	5.3	5.3	5.3	6.2
82.5°	6.2	5.3	5.3	4.4	4.4	3.5	3.5	3.5	3.5	3.5	5.3
85°	5.3	3.5	3.5	2.6	3.5	6.2	2.6	3.5	3.5	3.5	2.6
87.5°	1.8	2.6	2.6	2.6	1.8	0.9	1.8	2.6	2.6	4.4	3.5
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°	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8	1638.8
2.5°	1641.4	1642.3	1642.3	1641.4	1641.4	1639.7	1643.2	1640.6	1641.4	1644.9	1642.3
5°	1643.2	1644.1	1644.1	1643.2	1643.2	1643.2	1644.1	1644.1	1643.2	1642.3	1644.1
7.5°	1646.7	1645.8	1645.8	1644.1	1644.1	1642.3	1644.1	1641.4	1643.2	1641.4	1644.1
10°	1642.3	1643.2	1642.3	1641.4	1641.4	1640.6	1640.6	1637.9	1638.8	1636.1	1637.9
12.5°	1639.7	1638.8	1638.8	1637.0	1635.3	1633.5	1632.6	1630.0	1630.0	1623.8	1626.5
15°	1632.6	1633.5	1630.9	1627.4	1625.6	1621.2	1619.4	1615.9	1612.4	1608.0	1608.9
17.5°	1626.5	1623.8	1620.3	1616.8	1609.8	1606.2	1602.7	1597.4	1595.7	1590.4	1588.7
20°	1608.0	1606.2	1601.9	1595.7	1591.3	1583.4	1579.9	1574.6	1570.2	1564.9	1562.2
22.5°	1584.2	1582.5	1577.2	1571.1	1564.0	1560.5	1557.0	1547.3	1542.9	1537.6	1536.7
25°	1554.3	1551.7	1546.4	1539.4	1535.9	1526.2	1522.7	1515.6	1513.9	1508.6	1507.7
27.5°	1508.6	1505.1	1498.9	1490.1	1484.0	1477.8	1474.3	1469.0	1467.3	1462.0	1461.1
30°	1440.0	1435.6	1423.3	1419.8	1409.2	1403.0	1403.0	1396.0	1396.9	1393.4	1393.4
32.5°	1331.8	1324.8	1315.1	1308.0	1301.0	1297.5	1297.5	1294.8	1296.6	1296.6	1298.4
35°	1188.4	1178.7	1173.4	1169.1	1169.1	1172.6	1183.1	1185.8	1191.1	1195.4	1199.0
37.5°	1004.6	1003.7	1009.8	1015.1	1028.3	1043.3	1061.7	1077.6	1092.5	1103.1	1113.6
40°	805.8	827.8	845.3	870.0	890.2	919.2	952.7	979.9	1005.4	1023.9	1043.3
42.5°	628.9	657.1	694.1	730.1	766.2	805.8	849.8	887.6	921.0	946.5	966.7
45°	490.0	528.7	573.5	619.3	665.9	715.2	760.9	799.6	834.8	861.2	881.4
47.5°	395.0	437.2	488.2	538.3	591.1	643.0	694.1	727.5	756.5	777.6	796.1
50°	326.3	371.2	424.9	482.0	534.8	586.7	630.7	663.3	687.0	705.5	716.9
52.5°	272.7	320.2	377.4	434.5	487.3	534.8	574.4	599.0	618.4	631.6	642.1
55°	225.2	270.9	324.6	378.3	430.1	475.0	507.5	526.0	541.0	548.9	555.1
57.5°	183.9	226.1	275.3	324.6	369.5	406.4	431.9	450.4	457.4	463.6	462.7
60°	144.3	183.9	228.7	270.9	309.6	339.5	358.0	368.6	373.8	376.5	374.7
62.5°	113.5	149.5	183.9	220.8	248.9	274.4	292.1	292.1	294.7	295.6	298.2
65°	84.4	111.7	141.6	168.9	191.8	208.5	218.2	220.8	224.3	223.4	221.7
67.5°	62.5	82.7	104.7	124.9	140.7	151.3	158.3	164.5	163.6	161.9	161.0
70°	43.1	56.3	75.7	88.0	99.4	110.0	111.7	112.6	113.5	114.4	112.6
72.5°	29.9	39.6	50.1	60.7	67.7	72.1	76.5	77.4	77.4	77.4	76.5
75°	15.0	20.2	29.9	34.3	40.5	42.2	45.7	45.7	48.4	44.9	44.0
77.5°	13.2	15.8	21.1	24.6	27.3	29.9	30.8	33.4	32.5	30.8	31.7
80°	7.9	9.7	13.2	15.0	18.5	19.3	20.2	21.1	20.2	21.1	21.1
82.5°	6.2	7.0	8.8	8.8	11.4	11.4	12.3	12.3	13.2	13.2	13.2
85°	3.5	6.2	5.3	10.5	7.0	7.0	8.8	10.5	8.8	8.8	10.5
87.5°	3.5	3.5	2.6	3.5	3.5	3.5	4.4	5.3	5.3	6.2	5.3
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: P244654

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1638.8	1638.8	1638.8	1638.8
2.5°	1641.4	1643.2	1640.6	1639.7
5°	1644.1	1644.1	1642.3	1642.3
7.5°	1644.1	1644.1	1641.4	1639.7
10°	1637.0	1637.0	1634.4	1632.6
12.5°	1623.8	1623.8	1622.9	1620.3
15°	1607.1	1607.1	1603.6	1601.0
17.5°	1584.2	1586.0	1581.6	1581.6
20°	1559.6	1558.7	1555.2	1553.5
22.5°	1534.1	1532.4	1531.5	1526.2
25°	1506.8	1505.1	1502.4	1499.8
27.5°	1460.2	1459.3	1456.7	1453.2
30°	1389.0	1388.1	1384.6	1384.6
32.5°	1296.6	1295.7	1292.2	1293.1
35°	1200.7	1204.2	1202.5	1199.0
37.5°	1120.7	1123.3	1125.1	1123.3
40°	1053.8	1061.7	1062.6	1064.4
42.5°	982.6	993.1	996.7	998.4
45°	897.2	906.9	914.8	913.1
47.5°	810.1	817.2	824.2	819.0
50°	726.6	731.0	733.6	733.6
52.5°	647.4	647.4	646.5	647.4
55°	556.8	556.8	553.3	555.1
57.5°	461.8	463.6	460.9	456.5
60°	373.8	369.5	367.7	365.1
62.5°	291.2	291.2	285.0	292.9
65°	218.2	215.5	212.9	212.0
67.5°	158.3	157.5	154.8	153.9
70°	111.7	108.2	107.3	105.6
72.5°	74.8	74.8	73.0	73.0
75°	45.7	41.3	40.5	41.3
77.5°	31.7	30.8	30.8	29.9
80°	21.1	20.2	22.0	19.3
82.5°	13.2	14.1	13.2	14.1
85°	8.8	10.5	9.7	9.7
87.5°	5.3	5.3	5.3	5.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)