

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: P246166

Luminaire Tested: **LSR8B40D010 EC8B40927 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246166
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 EC8B40927 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3092.7 lumens
Efficiency: N/A
Efficacy: 75.6 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

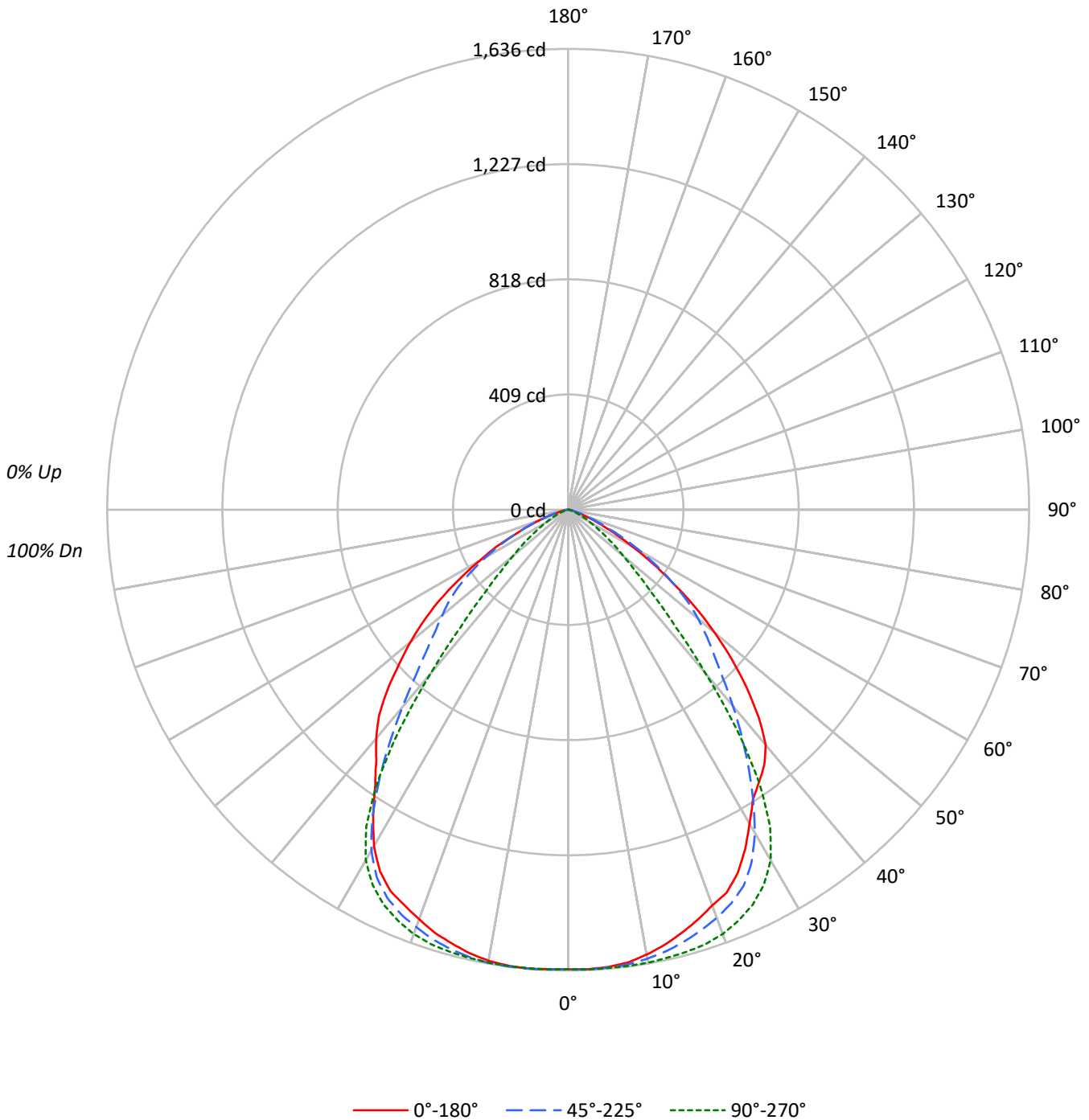
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	155.7	5.0
10°-20°	452.2	14.6
20°-30°	686.4	22.2
30°-40°	721.0	23.3
40°-50°	540.5	17.5
50°-60°	346.8	11.2
60°-70°	148.4	4.8
70°-80°	35.1	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°	1294.4	41.9
0°-40°	2015.4	65.2
0°-60°	2902.7	93.9
0°-90°	3092.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3092.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1632	1632	1632	1632	1632	
5°	1629	1632	1634	1636	1635	155
15°	1556	1588	1625	1614	1594	439
25°	1423	1473	1548	1520	1493	650
35°	1181	1115	1182	1168	1194	741
45°	897	733	421	712	909	687
55°	454	454	157	473	553	412
65°	137	161	50	208	211	146
75°	21	24	7	42	41	31
85°	7	4	4	7	10	7
90°	0	0	0	0	0	



TEST NUMBER: P246166

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7
2.5°	1632.6	1634.4	1633.5	1633.5	1632.6	1633.5	1633.5	1635.3	1635.3	1633.5	1632.6
5°	1629.1	1630.8	1630.8	1629.1	1629.1	1633.5	1630.8	1632.6	1632.6	1631.7	1631.7
7.5°	1621.2	1621.2	1624.7	1622.1	1622.1	1624.7	1623.8	1625.6	1627.3	1628.2	1628.2
10°	1603.7	1605.5	1606.4	1606.4	1607.2	1609.9	1611.6	1615.0	1616.9	1618.5	1619.4
12.5°	1581.9	1584.4	1585.4	1584.4	1587.0	1590.5	1594.9	1599.3	1602.0	1605.5	1608.1
15°	1555.5	1555.5	1557.2	1559.9	1561.7	1566.9	1571.3	1576.6	1583.6	1587.9	1592.3
17.5°	1526.6	1528.4	1531.0	1531.0	1534.5	1543.3	1545.9	1553.7	1561.7	1566.0	1574.8
20°	1495.1	1496.8	1499.5	1501.2	1505.6	1512.6	1517.9	1524.8	1533.6	1541.5	1550.2
22.5°	1470.6	1467.1	1468.8	1470.6	1475.0	1481.1	1487.2	1495.9	1504.7	1512.6	1521.3
25°	1423.2	1424.1	1426.8	1428.5	1433.8	1439.1	1446.1	1456.5	1464.4	1473.2	1482.9
27.5°	1359.3	1360.2	1364.6	1364.6	1369.0	1377.7	1382.1	1390.8	1401.4	1410.2	1421.6
30°	1286.7	1288.4	1288.4	1292.0	1294.5	1298.9	1303.3	1312.1	1317.3	1325.1	1341.0
32.5°	1220.1	1221.9	1221.0	1220.1	1217.5	1216.6	1215.7	1217.5	1219.2	1221.9	1227.9
35°	1180.7	1176.3	1172.8	1166.6	1159.6	1150.9	1143.0	1132.5	1122.9	1115.0	1106.2
37.5°	1143.0	1142.1	1136.8	1128.1	1114.1	1098.3	1080.0	1057.2	1034.4	1009.9	986.2
40°	1090.5	1087.8	1083.5	1071.2	1055.4	1036.1	1011.6	983.6	946.8	909.1	870.6
42.5°	1001.1	1002.0	996.8	987.1	972.2	953.8	928.5	897.8	858.4	813.7	763.8
45°	896.8	896.8	895.2	887.3	876.7	861.9	842.6	817.2	778.6	733.1	679.6
47.5°	788.3	789.2	786.5	784.8	780.4	770.7	756.8	737.4	710.3	666.6	613.1
50°	677.9	677.9	682.3	681.4	681.4	677.9	671.8	660.4	636.8	601.8	551.8
52.5°	567.6	569.4	571.9	575.4	579.8	586.8	579.8	574.5	559.7	532.5	489.6
55°	453.7	455.4	459.8	466.0	471.3	478.2	479.9	479.9	472.0	453.7	421.3
57.5°	356.5	353.8	357.4	362.6	369.7	376.7	381.8	388.0	387.1	374.8	348.6
60°	268.0	268.9	271.5	276.8	282.0	288.1	295.2	300.4	303.1	296.9	280.2
62.5°	195.3	195.3	198.8	204.1	206.7	215.4	219.8	222.5	225.1	224.2	213.8
65°	136.7	138.4	140.2	142.8	145.4	150.6	153.2	158.5	160.3	161.2	153.2
67.5°	96.3	93.7	95.5	97.2	99.9	103.4	108.6	108.6	111.3	111.3	106.0
70°	61.3	61.3	62.2	64.8	66.6	67.4	69.2	71.0	73.6	72.7	72.7
72.5°	41.2	40.3	41.2	42.1	43.0	45.6	45.6	46.5	48.2	49.1	45.6
75°	21.0	21.9	23.6	22.7	25.4	23.6	24.5	27.1	26.3	24.5	24.5
77.5°	17.6	17.6	17.6	16.7	18.3	18.3	17.6	19.2	18.3	18.3	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	6.1	6.1	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



TEST NUMBER: P246166

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7
2.5°	1634.4	1633.5	1635.3	1634.4	1634.4	1633.5	1634.4	1633.5	1635.3	1631.7	1632.6
5°	1634.4	1632.6	1633.5	1634.4	1635.3	1633.5	1633.5	1633.5	1635.3	1633.5	1634.4
7.5°	1630.8	1630.0	1632.6	1634.4	1633.5	1632.6	1634.4	1633.5	1635.3	1634.4	1636.1
10°	1623.8	1624.7	1626.5	1629.1	1630.0	1630.8	1632.6	1632.6	1635.3	1631.7	1633.5
12.5°	1613.4	1616.9	1621.2	1622.9	1626.5	1626.5	1628.2	1629.1	1630.8	1630.0	1632.6
15°	1600.2	1604.6	1609.9	1614.3	1618.5	1621.2	1623.8	1624.7	1627.3	1624.7	1625.6
17.5°	1584.4	1589.7	1597.6	1602.8	1609.9	1612.5	1616.0	1617.8	1620.3	1618.5	1619.4
20°	1562.5	1568.7	1577.5	1585.4	1589.7	1595.8	1600.2	1602.8	1604.6	1602.8	1603.7
22.5°	1531.9	1540.7	1552.0	1558.1	1566.9	1572.2	1573.1	1579.2	1583.6	1579.2	1581.0
25°	1495.9	1504.7	1513.5	1526.6	1534.5	1540.7	1546.8	1547.7	1552.0	1551.1	1550.2
27.5°	1436.4	1447.8	1462.7	1473.2	1483.8	1493.3	1500.4	1502.1	1506.5	1504.7	1505.6
30°	1355.0	1367.2	1381.3	1397.9	1412.8	1422.3	1431.1	1437.3	1441.7	1439.1	1438.2
32.5°	1239.3	1251.6	1266.5	1283.2	1300.6	1314.7	1325.1	1333.0	1338.3	1336.6	1332.2
35°	1107.1	1110.6	1120.3	1133.3	1148.3	1163.1	1172.8	1181.5	1187.7	1189.5	1189.5
37.5°	971.3	960.0	953.0	953.0	961.6	967.8	976.6	981.8	991.5	995.0	997.6
40°	839.9	813.7	789.2	770.7	758.5	757.6	757.6	760.3	769.1	780.4	790.9
42.5°	722.6	680.5	642.9	608.7	584.2	570.2	564.1	565.0	571.9	582.4	600.0
45°	628.9	576.3	529.0	487.8	454.6	432.7	422.2	421.3	426.5	438.8	458.1
47.5°	556.2	500.1	446.7	399.4	363.5	339.9	327.6	324.1	327.6	339.0	361.7
50°	495.8	438.0	382.7	333.7	295.2	270.7	259.2	254.9	259.2	268.9	291.6
52.5°	439.6	380.1	328.5	281.1	240.0	218.9	206.7	204.1	206.7	218.1	236.5
55°	374.8	324.1	273.3	226.0	190.1	169.1	159.4	156.8	159.4	169.9	189.2
57.5°	311.0	267.2	222.5	179.5	149.0	130.5	121.7	118.2	124.3	131.4	154.1
60°	251.3	216.3	178.6	141.0	115.6	99.0	91.9	91.1	92.8	101.6	117.3
62.5°	197.1	168.2	138.4	107.8	86.7	79.6	71.0	70.1	71.8	77.1	89.3
65°	141.9	123.5	100.7	78.9	62.2	52.5	49.1	49.9	51.6	55.2	66.6
67.5°	99.0	85.8	70.1	55.2	43.0	38.6	35.0	34.2	35.0	41.2	47.2
70°	66.6	58.7	47.2	42.1	29.8	23.6	24.5	21.9	25.4	25.4	30.6
72.5°	43.8	38.6	31.5	24.5	21.0	16.7	16.7	15.8	17.6	18.3	22.7
75°	22.7	17.6	17.6	12.3	8.8	4.4	7.9	7.0	6.1	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	6.1	5.3	4.4	5.3	5.3	5.3	5.3	6.1
82.5°	6.1	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	6.1	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



TEST NUMBER: P246166

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7	1631.7
2.5°	1634.4	1635.3	1635.3	1634.4	1634.4	1632.6	1636.1	1633.5	1634.4	1637.9	1635.3
5°	1636.1	1637.0	1637.0	1636.1	1636.1	1636.1	1637.0	1637.0	1636.1	1635.3	1637.0
7.5°	1639.6	1638.8	1638.8	1637.0	1637.0	1635.3	1637.0	1634.4	1636.1	1634.4	1637.0
10°	1635.3	1636.1	1635.3	1634.4	1634.4	1633.5	1633.5	1630.8	1631.7	1629.1	1630.8
12.5°	1632.6	1631.7	1631.7	1630.0	1628.2	1626.5	1625.6	1622.9	1622.9	1616.9	1619.4
15°	1625.6	1626.5	1623.8	1620.3	1618.5	1614.3	1612.5	1609.0	1605.5	1601.1	1602.0
17.5°	1619.4	1616.9	1613.4	1609.9	1602.8	1599.3	1595.8	1590.5	1588.8	1583.6	1581.9
20°	1601.1	1599.3	1594.9	1588.8	1584.4	1576.6	1573.1	1567.8	1563.4	1558.1	1555.5
22.5°	1577.5	1575.7	1570.4	1564.3	1557.2	1553.7	1550.2	1540.7	1536.3	1531.0	1530.1
25°	1547.7	1545.1	1539.8	1532.8	1529.2	1519.6	1516.2	1509.1	1507.4	1502.1	1501.2
27.5°	1502.1	1498.6	1492.4	1483.8	1477.6	1471.5	1467.9	1462.7	1460.9	1455.6	1454.9
30°	1433.8	1429.4	1417.2	1413.7	1403.1	1397.0	1397.0	1389.9	1390.8	1387.4	1387.4
32.5°	1326.0	1319.1	1309.4	1302.4	1295.4	1292.0	1292.0	1289.2	1291.0	1291.0	1292.7
35°	1183.3	1173.7	1168.4	1164.0	1164.0	1167.5	1178.0	1180.7	1186.0	1190.2	1193.9
37.5°	1000.2	999.3	1005.5	1010.7	1023.9	1038.8	1057.2	1072.9	1087.8	1098.3	1108.8
40°	802.2	824.2	841.7	866.2	886.4	915.3	948.6	975.7	1001.1	1019.5	1038.8
42.5°	626.3	654.3	691.1	727.0	762.9	802.2	846.1	883.8	917.0	942.4	962.6
45°	487.8	526.4	571.1	616.6	663.1	712.1	757.6	796.2	831.2	857.5	877.6
47.5°	393.3	435.3	486.1	536.1	588.6	640.2	691.1	724.4	753.2	774.2	792.7
50°	324.9	369.7	423.0	479.9	532.5	584.2	628.0	660.4	684.0	702.4	713.8
52.5°	271.5	318.8	375.8	432.7	485.2	532.5	571.9	596.5	615.7	628.9	639.3
55°	224.2	269.8	323.2	376.7	428.3	473.0	505.4	523.8	538.6	546.5	552.7
57.5°	183.0	225.1	274.2	323.2	367.9	404.7	430.1	448.4	455.4	461.6	460.7
60°	143.7	183.0	227.7	269.8	308.2	338.1	356.5	367.0	372.3	374.8	373.2
62.5°	113.0	149.0	183.0	219.8	247.8	273.3	290.8	290.8	293.4	294.3	296.9
65°	84.0	111.3	141.0	168.2	190.9	207.6	217.2	219.8	223.3	222.5	220.7
67.5°	62.2	82.4	104.2	124.3	140.2	150.6	157.6	163.8	162.9	161.2	160.3
70°	43.0	56.0	75.4	87.6	99.0	109.5	111.3	112.0	113.0	113.8	112.0
72.5°	29.8	39.4	49.9	60.4	67.4	71.8	76.2	77.1	77.1	77.1	76.2
75°	14.8	20.1	29.8	34.2	40.3	42.1	45.6	45.6	48.2	44.7	43.8
77.5°	13.2	15.8	21.0	24.5	27.1	29.8	30.6	33.3	32.4	30.6	31.5
80°	7.9	9.7	13.2	14.8	18.3	19.2	20.1	21.0	20.1	21.0	21.0
82.5°	6.1	7.0	8.8	8.8	11.4	11.4	12.3	12.3	13.2	13.2	13.2
85°	3.5	6.1	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	6.1	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: P246166

CATALOG NUMBER: LSR8B40D010 EC8B40927 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1631.7	1631.7	1631.7	1631.7
2.5°	1634.4	1636.1	1633.5	1632.6
5°	1637.0	1637.0	1635.3	1635.3
7.5°	1637.0	1637.0	1634.4	1632.6
10°	1630.0	1630.0	1627.3	1625.6
12.5°	1616.9	1616.9	1616.0	1613.4
15°	1600.2	1600.2	1596.7	1594.1
17.5°	1577.5	1579.2	1574.8	1574.8
20°	1553.0	1552.0	1548.6	1546.8
22.5°	1527.5	1525.7	1524.8	1519.6
25°	1500.4	1498.6	1495.9	1493.3
27.5°	1454.0	1453.0	1450.5	1447.0
30°	1383.0	1382.1	1378.6	1378.6
32.5°	1291.0	1290.1	1286.7	1287.6
35°	1195.5	1199.0	1197.3	1193.9
37.5°	1115.9	1118.5	1120.3	1118.5
40°	1049.3	1057.2	1058.1	1059.8
42.5°	978.3	988.9	992.4	994.0
45°	893.4	903.0	910.9	909.1
47.5°	806.6	813.7	820.7	815.4
50°	723.5	727.9	730.5	730.5
52.5°	644.6	644.6	643.7	644.6
55°	554.4	554.4	550.9	552.7
57.5°	459.8	461.6	459.0	454.6
60°	372.3	367.9	366.1	363.5
62.5°	289.9	289.9	283.8	291.6
65°	217.2	214.5	212.0	211.0
67.5°	157.6	156.8	154.1	153.2
70°	111.3	107.8	106.9	105.1
72.5°	74.5	74.5	72.7	72.7
75°	45.6	41.2	40.3	41.2
77.5°	31.5	30.6	30.6	29.8
80°	21.0	20.1	21.9	19.2
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)