

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: P246172

Luminaire Tested: **LSR8B40D010 EC8B409730 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P246172  
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 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2908.0 lumens  
Efficiency: N/A  
Efficacy: 71.1 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

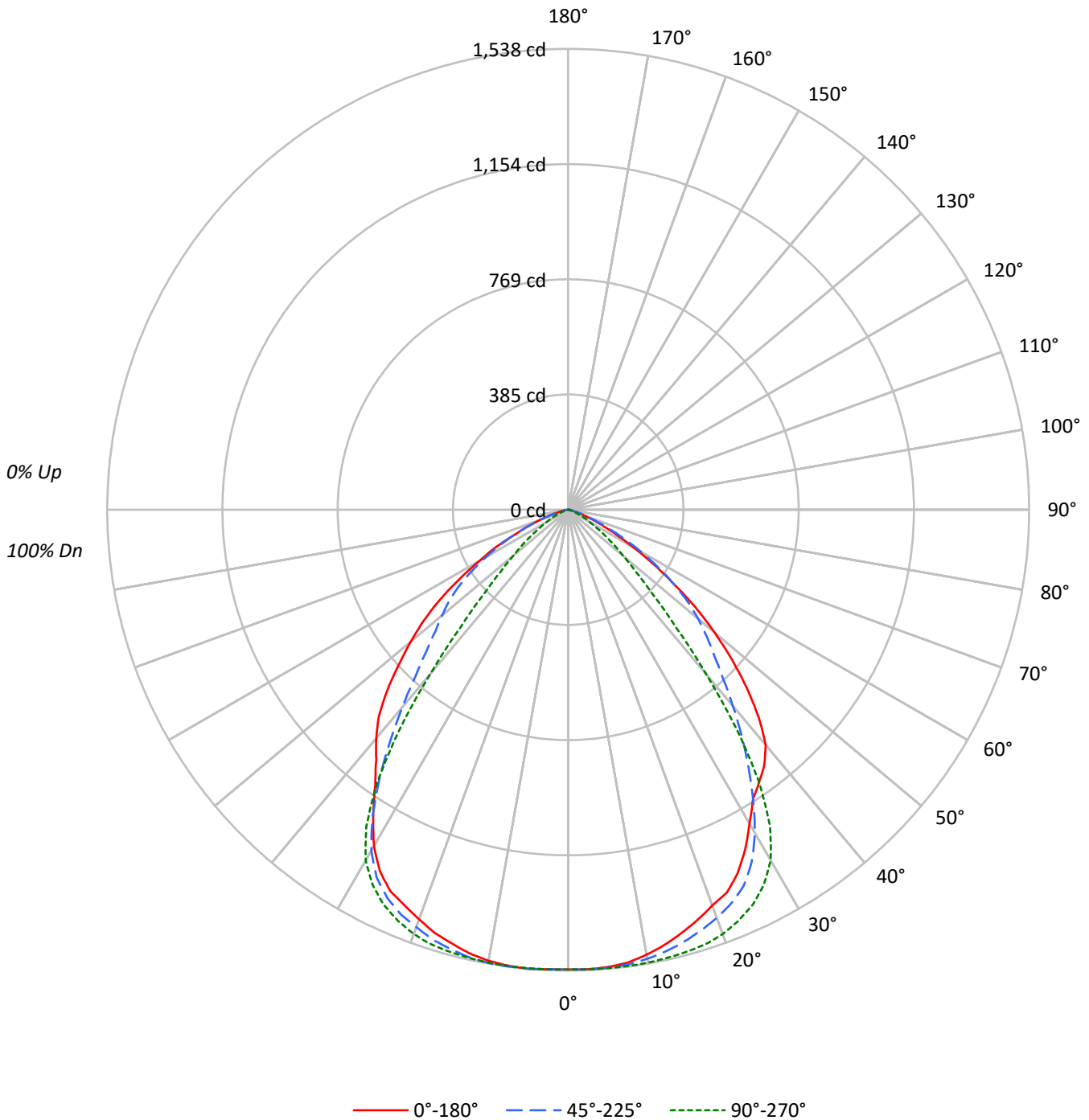
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

### Luminous Intensity Polar Plot





TEST NUMBER: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**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°			



TEST NUMBER: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.4	5.0
10°-20°	425.2	14.6
20°-30°	645.4	22.2
30°-40°	677.9	23.3
40°-50°	508.3	17.5
50°-60°	326.1	11.2
60°-70°	139.5	4.8
70°-80°	33.0	1.1
80°-90°	6.1	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°	1217.1	41.9
0°-40°	1895.0	65.2
0°-60°	2729.4	93.9
0°-90°	2908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2908.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1534	1534	1534	1534	1534	
5°	1532	1534	1536	1538	1538	146
15°	1463	1493	1528	1518	1499	413
25°	1338	1385	1455	1429	1404	611
35°	1110	1048	1111	1098	1122	697
45°	843	689	396	670	855	646
55°	427	427	147	445	520	387
65°	128	152	47	195	198	137
75°	20	23	7	40	39	29
85°	7	4	3	7	9	7
90°	0	0	0	0	0	



TEST NUMBER: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3
2.5°	1535.1	1536.8	1536.0	1536.0	1535.1	1536.0	1536.0	1537.6	1537.6	1536.0	1535.1
5°	1531.8	1533.5	1533.5	1531.8	1531.8	1536.0	1533.5	1535.1	1535.1	1534.3	1534.3
7.5°	1524.4	1524.4	1527.7	1525.3	1525.3	1527.7	1526.9	1528.6	1530.2	1531.0	1531.0
10°	1508.0	1509.6	1510.4	1510.4	1511.3	1513.7	1515.4	1518.7	1520.3	1522.0	1522.8
12.5°	1487.4	1489.8	1490.7	1489.8	1492.3	1495.6	1499.7	1503.8	1506.3	1509.6	1512.1
15°	1462.7	1462.7	1464.3	1466.8	1468.4	1473.4	1477.5	1482.4	1489.0	1493.1	1497.3
17.5°	1435.5	1437.1	1439.6	1439.6	1442.9	1451.1	1453.6	1461.0	1468.4	1472.6	1480.8
20°	1405.9	1407.5	1410.0	1411.6	1415.7	1422.3	1427.3	1433.8	1442.1	1449.5	1457.7
22.5°	1382.8	1379.5	1381.1	1382.8	1386.9	1392.7	1398.4	1406.7	1414.9	1422.3	1430.6
25°	1338.3	1339.1	1341.6	1343.2	1348.2	1353.1	1359.7	1369.6	1377.0	1385.3	1394.3
27.5°	1278.2	1279.0	1283.1	1283.1	1287.2	1295.5	1299.6	1307.8	1317.7	1326.0	1336.7
30°	1209.8	1211.5	1211.5	1214.8	1217.2	1221.4	1225.5	1233.7	1238.7	1246.1	1260.9
32.5°	1147.2	1148.9	1148.1	1147.2	1144.8	1143.9	1143.1	1144.8	1146.4	1148.9	1154.6
35°	1110.2	1106.1	1102.8	1097.0	1090.4	1082.2	1074.8	1064.9	1055.8	1048.4	1040.2
37.5°	1074.8	1073.9	1069.0	1060.8	1047.6	1032.8	1015.5	994.1	972.6	949.6	927.4
40°	1025.4	1022.9	1018.8	1007.2	992.4	974.3	951.2	924.9	890.3	854.9	818.6
42.5°	941.3	942.2	937.2	928.2	914.2	896.9	873.0	844.2	807.1	765.1	718.2
45°	843.3	843.3	841.7	834.3	824.4	810.4	792.3	768.4	732.2	689.3	639.1
47.5°	741.2	742.0	739.6	737.9	733.8	724.7	711.6	693.5	667.9	626.7	576.5
50°	637.5	637.5	641.6	640.7	640.7	637.5	631.7	621.0	598.7	565.8	518.9
52.5°	533.7	535.3	537.8	541.1	545.2	551.8	545.2	540.3	526.3	500.7	460.4
55°	426.6	428.3	432.4	438.1	443.1	449.7	451.3	451.3	443.9	426.6	396.1
57.5°	335.2	332.7	336.0	341.0	347.6	354.1	359.1	364.8	364.0	352.5	327.8
60°	252.0	252.8	255.3	260.3	265.2	271.0	277.5	282.5	285.0	279.2	263.5
62.5°	183.7	183.7	186.9	191.9	194.4	202.6	206.7	209.2	211.7	210.8	201.0
65°	128.5	130.1	131.8	134.2	136.7	141.6	144.1	149.1	150.7	151.5	144.1
67.5°	90.6	88.1	89.8	91.4	93.9	97.2	102.1	102.1	104.6	104.6	99.6
70°	57.7	57.7	58.5	60.9	62.6	63.4	65.1	66.7	69.2	68.4	68.4
72.5°	38.7	37.9	38.7	39.5	40.4	42.8	42.8	43.6	45.3	46.1	42.8
75°	19.8	20.6	22.2	21.4	23.9	22.2	23.1	25.5	24.7	23.1	23.1
77.5°	16.5	16.5	16.5	15.7	17.3	17.3	16.5	18.1	17.3	17.3	16.5
80°	11.5	12.4	11.5	10.7	11.5	10.7	10.7	10.7	10.7	10.7	9.9
82.5°	9.1	7.4	8.2	7.4	8.2	8.2	7.4	6.6	6.6	7.4	6.6
85°	6.6	4.9	5.8	5.8	4.9	4.9	4.9	4.9	4.9	4.1	4.1
87.5°	4.1	2.5	2.5	2.5	3.3	3.3	3.3	2.5	3.3	3.3	1.7
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: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3
2.5°	1536.8	1536.0	1537.6	1536.8	1536.8	1536.0	1536.8	1536.0	1537.6	1534.3	1535.1
5°	1536.8	1535.1	1536.0	1536.8	1537.6	1536.0	1536.0	1536.0	1537.6	1536.0	1536.8
7.5°	1533.5	1532.7	1535.1	1536.8	1536.0	1535.1	1536.8	1536.0	1537.6	1536.8	1538.4
10°	1526.9	1527.7	1529.4	1531.8	1532.7	1533.5	1535.1	1535.1	1537.6	1534.3	1536.0
12.5°	1517.0	1520.3	1524.4	1526.1	1529.4	1529.4	1531.0	1531.8	1533.5	1532.7	1535.1
15°	1504.7	1508.8	1513.7	1517.9	1522.0	1524.4	1526.9	1527.7	1530.2	1527.7	1528.6
17.5°	1489.8	1494.8	1502.2	1507.1	1513.7	1516.2	1519.5	1521.1	1523.6	1522.0	1522.8
20°	1469.2	1475.0	1483.3	1490.7	1494.8	1500.5	1504.7	1507.1	1508.8	1507.1	1508.0
22.5°	1440.4	1448.7	1459.4	1465.1	1473.4	1478.3	1479.1	1484.9	1489.0	1484.9	1486.6
25°	1406.7	1414.9	1423.1	1435.5	1442.9	1448.7	1454.4	1455.3	1459.4	1458.5	1457.7
27.5°	1350.7	1361.4	1375.4	1385.3	1395.1	1404.2	1410.8	1412.4	1416.6	1414.9	1415.7
30°	1274.1	1285.6	1298.8	1314.4	1328.4	1337.5	1345.7	1351.5	1355.6	1353.1	1352.3
32.5°	1165.4	1176.9	1190.9	1206.5	1223.0	1236.2	1246.1	1253.5	1258.4	1256.8	1252.7
35°	1041.0	1044.3	1053.4	1065.7	1079.7	1093.7	1102.8	1111.0	1116.8	1118.4	1118.4
37.5°	913.3	902.6	896.1	896.1	904.3	910.0	918.3	923.2	932.3	935.6	938.1
40°	789.8	765.1	742.0	724.7	713.2	712.4	712.4	714.9	723.1	733.8	743.7
42.5°	679.4	639.9	604.5	572.4	549.3	536.2	530.4	531.2	537.8	547.7	564.1
45°	591.3	541.9	497.4	458.7	427.4	406.8	397.0	396.1	401.1	412.6	430.7
47.5°	523.0	470.3	420.0	375.5	341.8	319.5	308.0	304.7	308.0	318.7	340.1
50°	466.1	411.8	359.9	313.8	277.5	254.5	243.8	239.7	243.8	252.8	274.2
52.5°	413.4	357.4	308.8	264.4	225.7	205.9	194.4	191.9	194.4	205.1	222.4
55°	352.5	304.7	257.0	212.5	178.7	159.0	149.9	147.4	149.9	159.8	177.9
57.5°	292.4	251.2	209.2	168.8	140.0	122.7	114.5	111.2	116.9	123.5	144.9
60°	236.4	203.4	168.0	132.6	108.7	93.1	86.5	85.6	87.3	95.5	110.4
62.5°	185.3	158.1	130.1	101.3	81.5	74.9	66.7	65.9	67.5	72.5	84.0
65°	133.4	116.1	94.7	74.1	58.5	49.4	46.1	47.0	48.6	51.9	62.6
67.5°	93.1	80.7	65.9	51.9	40.4	36.2	32.9	32.1	32.9	38.7	44.5
70°	62.6	55.2	44.5	39.5	28.0	22.2	23.1	20.6	23.9	23.9	28.8
72.5°	41.2	36.2	29.6	23.1	19.8	15.7	15.7	14.8	16.5	17.3	21.4
75°	21.4	16.5	16.5	11.5	8.2	4.1	7.4	6.6	5.8	6.6	8.2
77.5°	14.8	12.4	11.5	9.1	8.2	6.6	6.6	6.6	6.6	7.4	8.2
80°	9.1	9.1	6.6	5.8	4.9	4.1	4.9	4.9	4.9	4.9	5.8
82.5°	5.8	4.9	4.9	4.1	4.1	3.3	3.3	3.3	3.3	3.3	4.9
85°	4.9	3.3	3.3	2.5	3.3	5.8	2.5	3.3	3.3	3.3	2.5
87.5°	1.7	2.5	2.5	2.5	1.7	0.8	1.7	2.5	2.5	4.1	3.3
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: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3	1534.3
2.5°	1536.8	1537.6	1537.6	1536.8	1536.8	1535.1	1538.4	1536.0	1536.8	1540.1	1537.6
5°	1538.4	1539.3	1539.3	1538.4	1538.4	1538.4	1539.3	1539.3	1538.4	1537.6	1539.3
7.5°	1541.7	1540.9	1540.9	1539.3	1539.3	1537.6	1539.3	1536.8	1538.4	1536.8	1539.3
10°	1537.6	1538.4	1537.6	1536.8	1536.8	1536.0	1536.0	1533.5	1534.3	1531.8	1533.5
12.5°	1535.1	1534.3	1534.3	1532.7	1531.0	1529.4	1528.6	1526.1	1526.1	1520.3	1522.8
15°	1528.6	1529.4	1526.9	1523.6	1522.0	1517.9	1516.2	1512.9	1509.6	1505.5	1506.3
17.5°	1522.8	1520.3	1517.0	1513.7	1507.1	1503.8	1500.5	1495.6	1494.0	1489.0	1487.4
20°	1505.5	1503.8	1499.7	1494.0	1489.8	1482.4	1479.1	1474.2	1470.1	1465.1	1462.7
22.5°	1483.3	1481.6	1476.7	1470.9	1464.3	1461.0	1457.7	1448.7	1444.5	1439.6	1438.8
25°	1455.3	1452.8	1447.8	1441.3	1438.0	1428.9	1425.6	1419.0	1417.4	1412.4	1411.6
27.5°	1412.4	1409.1	1403.4	1395.1	1389.4	1383.6	1380.3	1375.4	1373.7	1368.8	1368.0
30°	1348.2	1344.1	1332.5	1329.3	1319.4	1313.6	1313.6	1307.0	1307.8	1304.5	1304.5
32.5°	1246.9	1240.3	1231.2	1224.6	1218.1	1214.8	1214.8	1212.3	1213.9	1213.9	1215.6
35°	1112.6	1103.6	1098.6	1094.5	1094.5	1097.8	1107.7	1110.2	1115.1	1119.2	1122.5
37.5°	940.5	939.7	945.5	950.4	962.8	976.8	994.1	1008.9	1022.9	1032.8	1042.6
40°	754.4	775.0	791.5	814.5	833.4	860.6	891.9	917.5	941.3	958.6	976.8
42.5°	588.8	615.2	649.8	683.6	717.3	754.4	795.6	831.0	862.3	886.2	905.1
45°	458.7	495.0	537.0	579.8	623.4	669.6	712.4	748.6	781.6	806.3	825.2
47.5°	369.8	409.3	457.1	504.0	553.4	602.0	649.8	681.1	708.3	728.0	745.3
50°	305.5	347.6	397.8	451.3	500.7	549.3	590.5	621.0	643.2	660.5	671.2
52.5°	255.3	299.8	353.3	406.8	456.3	500.7	537.8	560.9	579.0	591.3	601.2
55°	210.8	253.7	303.9	354.1	402.7	444.7	475.2	492.5	506.5	513.9	519.7
57.5°	172.1	211.7	257.8	303.9	345.9	380.5	404.4	421.7	428.3	434.0	433.2
60°	135.1	172.1	214.1	253.7	289.9	317.9	335.2	345.1	350.0	352.5	350.8
62.5°	106.2	140.0	172.1	206.7	233.1	257.0	273.4	273.4	275.9	276.7	279.2
65°	79.1	104.6	132.6	158.1	179.5	195.2	204.3	206.7	210.0	209.2	207.5
67.5°	58.5	77.4	98.0	116.9	131.8	141.6	148.2	154.0	153.2	151.5	150.7
70°	40.4	52.7	70.8	82.4	93.1	103.0	104.6	105.4	106.2	107.1	105.4
72.5°	28.0	37.1	47.0	56.8	63.4	67.5	71.7	72.5	72.5	72.5	71.7
75°	14.0	18.9	28.0	32.1	37.9	39.5	42.8	42.8	45.3	42.0	41.2
77.5°	12.4	14.8	19.8	23.1	25.5	28.0	28.8	31.3	30.5	28.8	29.6
80°	7.4	9.1	12.4	14.0	17.3	18.1	18.9	19.8	18.9	19.8	19.8
82.5°	5.8	6.6	8.2	8.2	10.7	10.7	11.5	11.5	12.4	12.4	12.4
85°	3.3	5.8	4.9	9.9	6.6	6.6	8.2	9.9	8.2	8.2	9.9
87.5°	3.3	3.3	2.5	3.3	3.3	3.3	4.1	4.9	4.9	5.8	4.9
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: P246172

CATALOG NUMBER: LSR8B40D010 EC8B409730 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1534.3	1534.3	1534.3	1534.3
2.5°	1536.8	1538.4	1536.0	1535.1
5°	1539.3	1539.3	1537.6	1537.6
7.5°	1539.3	1539.3	1536.8	1535.1
10°	1532.7	1532.7	1530.2	1528.6
12.5°	1520.3	1520.3	1519.5	1517.0
15°	1504.7	1504.7	1501.4	1498.9
17.5°	1483.3	1484.9	1480.8	1480.8
20°	1460.2	1459.4	1456.1	1454.4
22.5°	1436.3	1434.7	1433.8	1428.9
25°	1410.8	1409.1	1406.7	1404.2
27.5°	1367.1	1366.3	1363.8	1360.6
30°	1300.4	1299.6	1296.3	1296.3
32.5°	1213.9	1213.1	1209.8	1210.7
35°	1124.2	1127.5	1125.8	1122.5
37.5°	1049.2	1051.7	1053.4	1051.7
40°	986.6	994.1	994.9	996.5
42.5°	919.9	929.8	933.1	934.7
45°	840.0	849.1	856.5	854.9
47.5°	758.5	765.1	771.7	766.7
50°	680.3	684.4	686.9	686.9
52.5°	606.2	606.2	605.3	606.2
55°	521.3	521.3	518.0	519.7
57.5°	432.4	434.0	431.5	427.4
60°	350.0	345.9	344.2	341.8
62.5°	272.6	272.6	266.8	274.2
65°	204.3	201.8	199.3	198.5
67.5°	148.2	147.4	144.9	144.1
70°	104.6	101.3	100.5	98.8
72.5°	70.0	70.0	68.4	68.4
75°	42.8	38.7	37.9	38.7
77.5°	29.6	28.8	28.8	28.0
80°	19.8	18.9	20.6	18.1
82.5°	12.4	13.2	12.4	13.2
85°	8.2	9.9	9.1	9.1
87.5°	4.9	4.9	4.9	4.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)