

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 EC8B409727 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 EC8B409727 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: 2749.0 lumens
Efficiency: N/A
Efficacy: 67.2 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

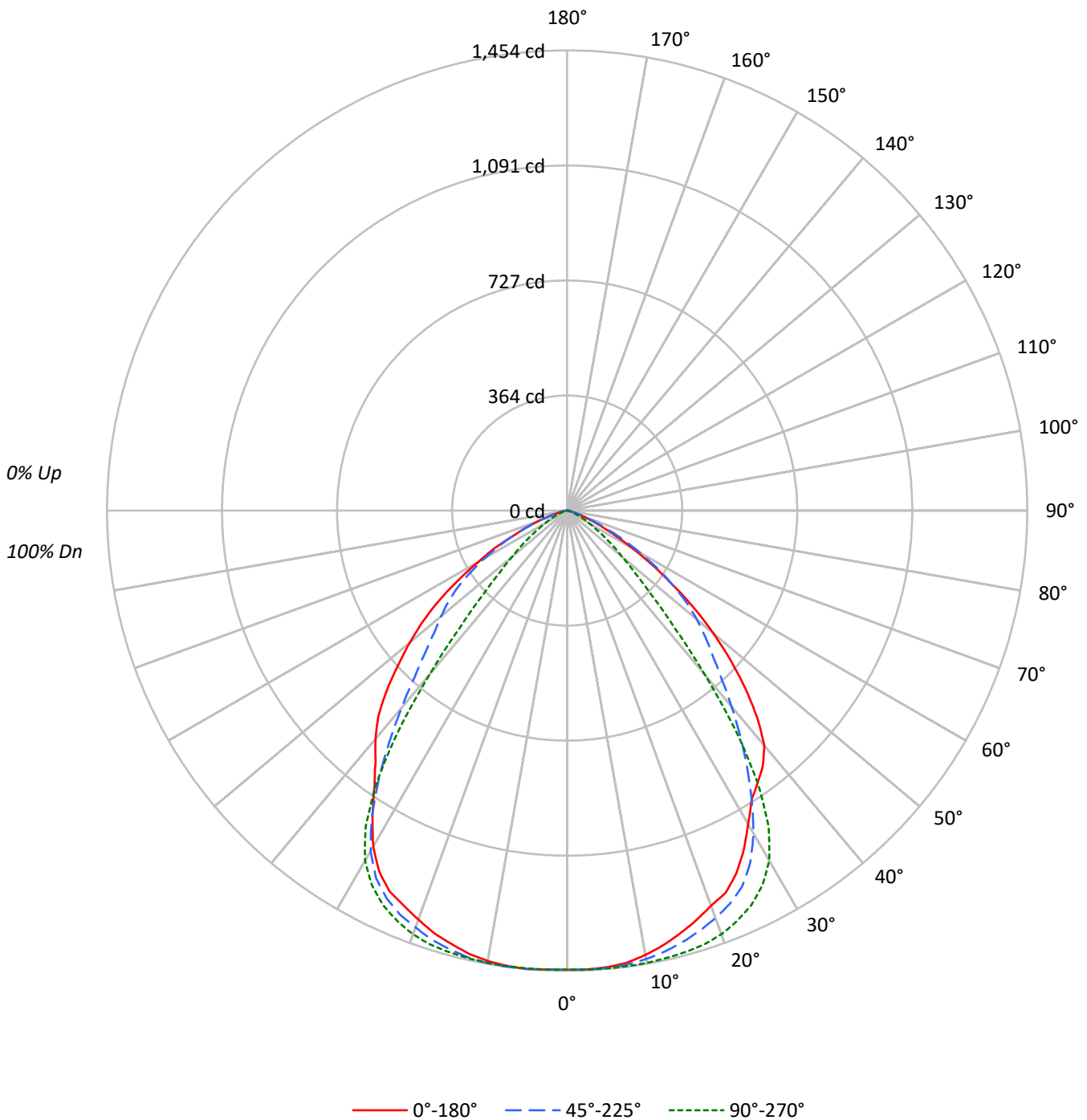
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	138.4	5.0
10°-20°	402.0	14.6
20°-30°	610.2	22.2
30°-40°	640.9	23.3
40°-50°	480.5	17.5
50°-60°	308.3	11.2
60°-70°	131.9	4.8
70°-80°	31.2	1.1
80°-90°	5.8	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°	1150.6	41.9
0°-40°	1791.4	65.2
0°-60°	2580.2	93.9
0°-90°	2749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2749.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1450	1450	1450	1450	1450	
5°	1448	1450	1452	1454	1454	138
15°	1383	1412	1444	1435	1417	390
25°	1265	1310	1376	1351	1327	578
35°	1050	991	1050	1038	1061	659
45°	797	652	374	633	808	611
55°	403	403	139	420	491	366
65°	122	143	44	184	188	130
75°	19	22	6	37	37	27
85°	6	4	3	6	9	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°	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4
2.5°	1451.2	1452.8	1452.0	1452.0	1451.2	1452.0	1452.0	1453.6	1453.6	1452.0	1451.2
5°	1448.1	1449.6	1449.6	1448.1	1448.1	1452.0	1449.6	1451.2	1451.2	1450.4	1450.4
7.5°	1441.1	1441.1	1444.2	1441.9	1441.9	1444.2	1443.4	1445.0	1446.5	1447.3	1447.3
10°	1425.5	1427.1	1427.9	1427.9	1428.6	1431.0	1432.5	1435.6	1437.2	1438.7	1439.5
12.5°	1406.1	1408.4	1409.2	1408.4	1410.7	1413.8	1417.7	1421.6	1424.0	1427.1	1429.4
15°	1382.7	1382.7	1384.2	1386.6	1388.2	1392.8	1396.7	1401.4	1407.6	1411.5	1415.4
17.5°	1357.0	1358.6	1360.9	1360.9	1364.0	1371.8	1374.1	1381.1	1388.2	1392.0	1399.8
20°	1329.0	1330.5	1332.9	1334.4	1338.3	1344.5	1349.2	1355.4	1363.2	1370.2	1378.0
22.5°	1307.2	1304.1	1305.6	1307.2	1311.1	1316.5	1322.0	1329.7	1337.5	1344.5	1352.3
25°	1265.1	1265.9	1268.3	1269.8	1274.5	1279.2	1285.4	1294.7	1301.7	1309.5	1318.1
27.5°	1208.3	1209.1	1213.0	1213.0	1216.9	1224.6	1228.5	1236.3	1245.7	1253.5	1263.6
30°	1143.7	1145.2	1145.2	1148.4	1150.7	1154.6	1158.5	1166.3	1170.9	1177.9	1192.0
32.5°	1084.5	1086.1	1085.3	1084.5	1082.2	1081.4	1080.6	1082.2	1083.7	1086.1	1091.5
35°	1049.5	1045.6	1042.5	1037.0	1030.8	1023.0	1016.0	1006.7	998.1	991.1	983.3
37.5°	1016.0	1015.2	1010.5	1002.8	990.3	976.3	960.0	939.7	919.5	897.7	876.6
40°	969.3	966.9	963.1	952.2	938.1	921.0	899.2	874.3	841.6	808.1	773.9
42.5°	889.9	890.7	886.0	877.4	864.2	847.8	825.3	798.0	763.0	723.3	678.9
45°	797.2	797.2	795.7	788.7	779.3	766.1	749.0	726.4	692.1	651.6	604.1
47.5°	700.7	701.5	699.1	697.6	693.7	685.1	672.7	655.5	631.4	592.5	545.0
50°	602.6	602.6	606.5	605.7	605.7	602.6	597.2	587.0	566.0	534.9	490.5
52.5°	504.5	506.1	508.4	511.5	515.4	521.6	515.4	510.7	497.5	473.3	435.2
55°	403.3	404.8	408.7	414.2	418.9	425.1	426.6	426.6	419.6	403.3	374.5
57.5°	316.9	314.5	317.7	322.3	328.6	334.8	339.4	344.9	344.1	333.2	309.9
60°	238.2	239.0	241.3	246.0	250.7	256.1	262.4	267.0	269.4	263.9	249.1
62.5°	173.6	173.6	176.7	181.4	183.7	191.5	195.4	197.8	200.1	199.3	190.0
65°	121.5	123.0	124.6	126.9	129.2	133.9	136.2	140.9	142.5	143.3	136.2
67.5°	85.6	83.3	84.9	86.4	88.8	91.9	96.5	96.5	98.9	98.9	94.2
70°	54.5	54.5	55.3	57.6	59.2	59.9	61.5	63.1	65.4	64.6	64.6
72.5°	36.6	35.8	36.6	37.4	38.2	40.5	40.5	41.3	42.8	43.6	40.5
75°	18.7	19.5	21.0	20.2	22.6	21.0	21.8	24.1	23.4	21.8	21.8
77.5°	15.6	15.6	15.6	14.8	16.3	16.3	15.6	17.1	16.3	16.3	15.6
80°	10.9	11.7	10.9	10.1	10.9	10.1	10.1	10.1	10.1	10.1	9.3
82.5°	8.6	7.0	7.8	7.0	7.8	7.8	7.0	6.2	6.2	7.0	6.2
85°	6.2	4.7	5.4	5.4	4.7	4.7	4.7	4.7	4.7	3.9	3.9
87.5°	3.9	2.3	2.3	2.3	3.1	3.1	3.1	2.3	3.1	3.1	1.6
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 EC8B409727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4
2.5°	1452.8	1452.0	1453.6	1452.8	1452.8	1452.0	1452.8	1452.0	1453.6	1450.4	1451.2
5°	1452.8	1451.2	1452.0	1452.8	1453.6	1452.0	1452.0	1452.0	1453.6	1452.0	1452.8
7.5°	1449.6	1448.9	1451.2	1452.8	1452.0	1451.2	1452.8	1452.0	1453.6	1452.8	1454.3
10°	1443.4	1444.2	1445.8	1448.1	1448.9	1449.6	1451.2	1451.2	1453.6	1450.4	1452.0
12.5°	1434.1	1437.2	1441.1	1442.6	1445.8	1445.8	1447.3	1448.1	1449.6	1448.9	1451.2
15°	1422.4	1426.3	1431.0	1434.9	1438.7	1441.1	1443.4	1444.2	1446.5	1444.2	1445.0
17.5°	1408.4	1413.1	1420.1	1424.7	1431.0	1433.3	1436.4	1438.0	1440.3	1438.7	1439.5
20°	1388.9	1394.4	1402.2	1409.2	1413.1	1418.5	1422.4	1424.7	1426.3	1424.7	1425.5
22.5°	1361.7	1369.5	1379.6	1385.0	1392.8	1397.5	1398.3	1403.7	1407.6	1403.7	1405.3
25°	1329.7	1337.5	1345.3	1357.0	1364.0	1369.5	1374.9	1375.7	1379.6	1378.8	1378.0
27.5°	1276.8	1286.9	1300.2	1309.5	1318.9	1327.4	1333.7	1335.2	1339.1	1337.5	1338.3
30°	1204.4	1215.3	1227.8	1242.6	1255.8	1264.3	1272.1	1277.6	1281.5	1279.2	1278.4
32.5°	1101.6	1112.5	1125.8	1140.6	1156.1	1168.6	1177.9	1184.9	1189.6	1188.1	1184.2
35°	984.1	987.2	995.8	1007.4	1020.7	1033.9	1042.5	1050.2	1055.7	1057.3	1057.3
37.5°	863.4	853.3	847.1	847.1	854.8	860.3	868.1	872.7	881.3	884.4	886.8
40°	746.6	723.3	701.5	685.1	674.2	673.4	673.4	675.8	683.6	693.7	703.0
42.5°	642.3	604.9	571.5	541.1	519.3	506.8	501.4	502.2	508.4	517.7	533.3
45°	559.0	512.3	470.2	433.6	404.1	384.6	375.3	374.5	379.1	390.0	407.2
47.5°	494.4	444.5	397.1	355.0	323.1	302.1	291.2	288.1	291.2	301.3	321.5
50°	440.7	389.3	340.2	296.6	262.4	240.6	230.4	226.6	230.4	239.0	259.2
52.5°	390.8	337.9	292.0	249.9	213.3	194.6	183.7	181.4	183.7	193.9	210.2
55°	333.2	288.1	242.9	200.9	169.0	150.3	141.7	139.4	141.7	151.0	168.2
57.5°	276.4	237.5	197.8	159.6	132.4	116.0	108.2	105.1	110.5	116.8	137.0
60°	223.4	192.3	158.8	125.3	102.8	88.0	81.7	81.0	82.5	90.3	104.3
62.5°	175.2	149.5	123.0	95.8	77.1	70.8	63.1	62.3	63.8	68.5	79.4
65°	126.1	109.8	89.5	70.1	55.3	46.7	43.6	44.4	45.9	49.1	59.2
67.5°	88.0	76.3	62.3	49.1	38.2	34.3	31.1	30.4	31.1	36.6	42.0
70°	59.2	52.2	42.0	37.4	26.5	21.0	21.8	19.5	22.6	22.6	27.2
72.5°	38.9	34.3	28.0	21.8	18.7	14.8	14.8	14.0	15.6	16.3	20.2
75°	20.2	15.6	15.6	10.9	7.8	3.9	7.0	6.2	5.4	6.2	7.8
77.5°	14.0	11.7	10.9	8.6	7.8	6.2	6.2	6.2	6.2	7.0	7.8
80°	8.6	8.6	6.2	5.4	4.7	3.9	4.7	4.7	4.7	4.7	5.4
82.5°	5.4	4.7	4.7	3.9	3.9	3.1	3.1	3.1	3.1	3.1	4.7
85°	4.7	3.1	3.1	2.3	3.1	5.4	2.3	3.1	3.1	3.1	2.3
87.5°	1.6	2.3	2.3	2.3	1.6	0.8	1.6	2.3	2.3	3.9	3.1
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 EC8B409727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4	1450.4
2.5°	1452.8	1453.6	1453.6	1452.8	1452.8	1451.2	1454.3	1452.0	1452.8	1455.9	1453.6
5°	1454.3	1455.1	1455.1	1454.3	1454.3	1454.3	1455.1	1455.1	1454.3	1453.6	1455.1
7.5°	1457.4	1456.7	1456.7	1455.1	1455.1	1453.6	1455.1	1452.8	1454.3	1452.8	1455.1
10°	1453.6	1454.3	1453.6	1452.8	1452.8	1452.0	1452.0	1449.6	1450.4	1448.1	1449.6
12.5°	1451.2	1450.4	1450.4	1448.9	1447.3	1445.8	1445.0	1442.6	1442.6	1437.2	1439.5
15°	1445.0	1445.8	1443.4	1440.3	1438.7	1434.9	1433.3	1430.2	1427.1	1423.2	1424.0
17.5°	1439.5	1437.2	1434.1	1431.0	1424.7	1421.6	1418.5	1413.8	1412.3	1407.6	1406.1
20°	1423.2	1421.6	1417.7	1412.3	1408.4	1401.4	1398.3	1393.6	1389.7	1385.0	1382.7
22.5°	1402.2	1400.6	1395.9	1390.5	1384.2	1381.1	1378.0	1369.5	1365.6	1360.9	1360.1
25°	1375.7	1373.4	1368.7	1362.5	1359.3	1350.8	1347.7	1341.4	1339.9	1335.2	1334.4
27.5°	1335.2	1332.1	1326.6	1318.9	1313.4	1308.0	1304.8	1300.2	1298.6	1293.9	1293.2
30°	1274.5	1270.6	1259.7	1256.6	1247.2	1241.8	1241.8	1235.5	1236.3	1233.2	1233.2
32.5°	1178.7	1172.5	1163.9	1157.7	1151.5	1148.4	1148.4	1146.0	1147.6	1147.6	1149.1
35°	1051.8	1043.3	1038.6	1034.7	1034.7	1037.8	1047.1	1049.5	1054.2	1058.0	1061.2
37.5°	889.1	888.3	893.8	898.4	910.1	923.4	939.7	953.7	966.9	976.3	985.6
40°	713.1	732.6	748.2	770.0	787.9	813.6	843.2	867.3	889.9	906.2	923.4
42.5°	556.7	581.6	614.3	646.2	678.1	713.1	752.1	785.6	815.1	837.7	855.6
45°	433.6	467.9	507.6	548.1	589.4	633.0	673.4	707.7	738.8	762.2	780.1
47.5°	349.6	386.9	432.1	476.5	523.2	569.1	614.3	643.9	669.5	688.2	704.6
50°	288.8	328.6	376.0	426.6	473.3	519.3	558.2	587.0	608.0	624.4	634.5
52.5°	241.3	283.4	334.0	384.6	431.3	473.3	508.4	530.2	547.3	559.0	568.3
55°	199.3	239.8	287.3	334.8	380.7	420.4	449.2	465.6	478.8	485.8	491.3
57.5°	162.7	200.1	243.7	287.3	327.0	359.7	382.3	398.6	404.8	410.3	409.5
60°	127.7	162.7	202.4	239.8	274.0	300.5	316.9	326.2	330.9	333.2	331.7
62.5°	100.4	132.4	162.7	195.4	220.3	242.9	258.5	258.5	260.8	261.6	263.9
65°	74.7	98.9	125.3	149.5	169.7	184.5	193.1	195.4	198.5	197.8	196.2
67.5°	55.3	73.2	92.6	110.5	124.6	133.9	140.1	145.6	144.8	143.3	142.5
70°	38.2	49.8	67.0	77.9	88.0	97.3	98.9	99.6	100.4	101.2	99.6
72.5°	26.5	35.0	44.4	53.7	59.9	63.8	67.7	68.5	68.5	68.5	67.7
75°	13.2	17.9	26.5	30.4	35.8	37.4	40.5	40.5	42.8	39.7	38.9
77.5°	11.7	14.0	18.7	21.8	24.1	26.5	27.2	29.6	28.8	27.2	28.0
80°	7.0	8.6	11.7	13.2	16.3	17.1	17.9	18.7	17.9	18.7	18.7
82.5°	5.4	6.2	7.8	7.8	10.1	10.1	10.9	10.9	11.7	11.7	11.7
85°	3.1	5.4	4.7	9.3	6.2	6.2	7.8	9.3	7.8	7.8	9.3
87.5°	3.1	3.1	2.3	3.1	3.1	3.1	3.9	4.7	4.7	5.4	4.7
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: P246166

CATALOG NUMBER: LSR8B40D010 EC8B409727 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1450.4	1450.4	1450.4	1450.4
2.5°	1452.8	1454.3	1452.0	1451.2
5°	1455.1	1455.1	1453.6	1453.6
7.5°	1455.1	1455.1	1452.8	1451.2
10°	1448.9	1448.9	1446.5	1445.0
12.5°	1437.2	1437.2	1436.4	1434.1
15°	1422.4	1422.4	1419.3	1417.0
17.5°	1402.2	1403.7	1399.8	1399.8
20°	1380.4	1379.6	1376.5	1374.9
22.5°	1357.8	1356.2	1355.4	1350.8
25°	1333.7	1332.1	1329.7	1327.4
27.5°	1292.4	1291.6	1289.3	1286.2
30°	1229.3	1228.5	1225.4	1225.4
32.5°	1147.6	1146.8	1143.7	1144.5
35°	1062.7	1065.8	1064.3	1061.2
37.5°	991.9	994.2	995.8	994.2
40°	932.7	939.7	940.5	942.0
42.5°	869.6	879.0	882.1	883.6
45°	794.1	802.7	809.7	808.1
47.5°	717.0	723.3	729.5	724.8
50°	643.1	647.0	649.3	649.3
52.5°	573.0	573.0	572.2	573.0
55°	492.8	492.8	489.7	491.3
57.5°	408.7	410.3	408.0	404.1
60°	330.9	327.0	325.4	323.1
62.5°	257.7	257.7	252.3	259.2
65°	193.1	190.7	188.4	187.6
67.5°	140.1	139.4	137.0	136.2
70°	98.9	95.8	95.0	93.4
72.5°	66.2	66.2	64.6	64.6
75°	40.5	36.6	35.8	36.6
77.5°	28.0	27.2	27.2	26.5
80°	18.7	17.9	19.5	17.1
82.5°	11.7	12.5	11.7	12.5
85°	7.8	9.3	8.6	8.6
87.5°	4.7	4.7	4.7	4.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)