

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: P244130

Luminaire Tested: **LSR8B20D010 EC8B20935 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B20D010 EC8B20935 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1977.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

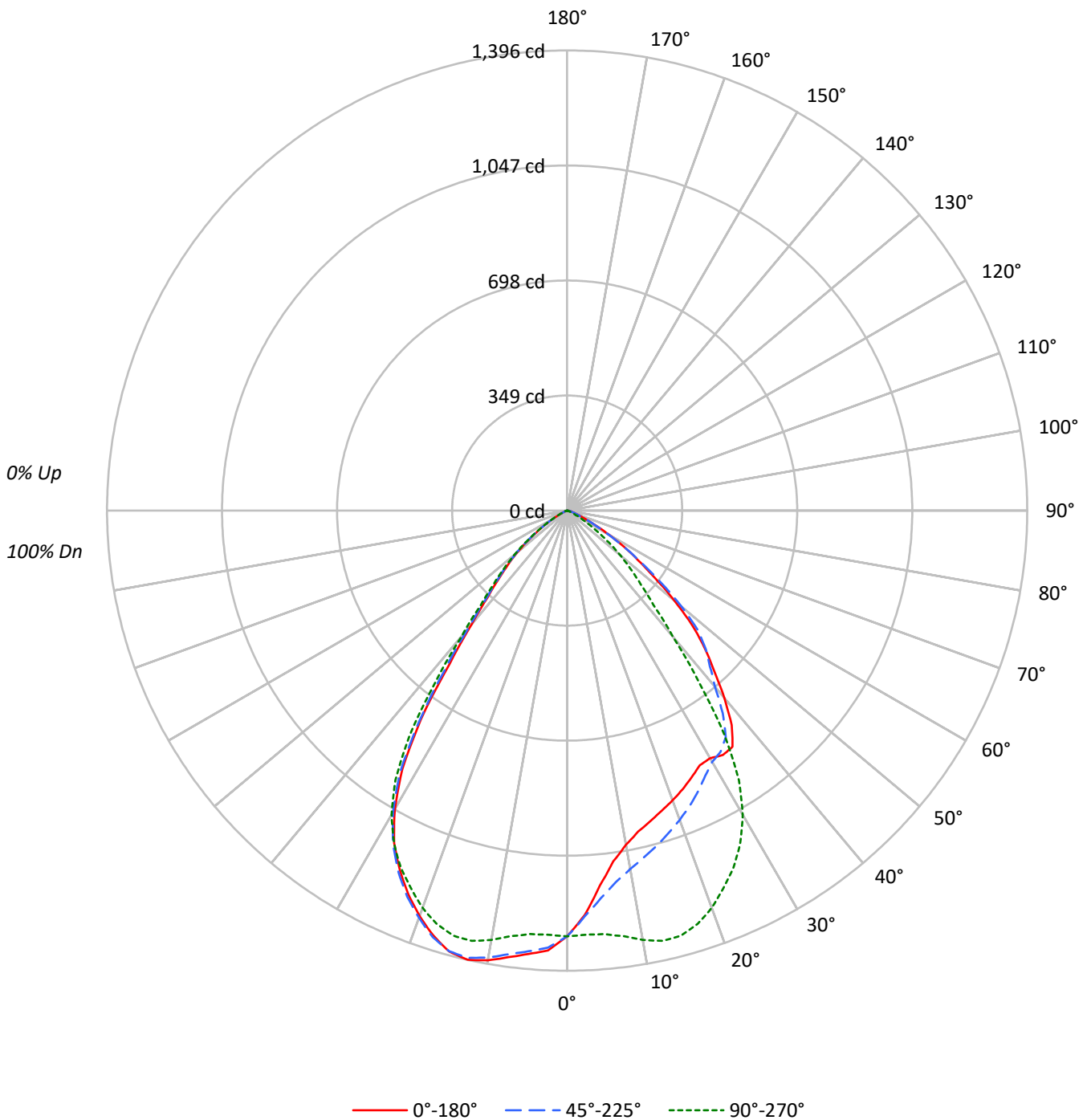
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	99	95	91	103	98	93	90	94	91	88	91	88	86	88	86	84	82					82			
3	99	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	76	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	76	72	68	67					67			
5	86	76	69	64	84	75	69	64	73	68	63	72	66	63	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	39825	39825	39825
5°	35334	39925	41794
10°	32217	41407	43383
15°	31136	42619	44212
20°	30689	42092	42962
25°	30387	40642	40894
30°	30885	37928	37227
35°	32920	31388	29114
40°	29832	20095	18195
45°	25751	13746	12799
50°	20316	10026	9441
55°	14102	6166	5801
60°	8980	3121	2781
65°	4480	1240	941
70°	2479	613	334
75°	1775	441	167
80°	1438	302	53
85°	1557	248	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.4	6.1
10°-20°	347.7	17.6
20°-30°	504.6	25.5
30°-40°	497.0	25.1
40°-50°	311.5	15.8
50°-60°	150.3	7.6
60°-70°	36.4	1.8
70°-80°	7.4	0.4
80°-90°	1.7	0.1
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°	972.7	49.2
0°-40°	1469.7	74.3
0°-60°	1931.6	97.7
0°-90°	1977.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1977.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1292	1292	1292	1292	1292	
5°	1142	1180	1290	1342	1350	106
15°	975	1052	1335	1384	1385	276
25°	893	940	1194	1211	1202	413
35°	874	839	834	786	773	529
45°	590	594	315	302	294	451
55°	262	271	115	113	108	241
65°	61	61	17	15	13	70
75°	15	13	4	2	1	17
85°	4	3	1	0	0	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5
2.5°	1227.7	1219.9	1205.3	1223.0	1223.0	1213.1	1232.8	1221.0	1230.5	1245.4	1232.1
5°	1141.5	1135.1	1122.9	1141.5	1143.9	1134.8	1158.5	1149.7	1163.6	1181.9	1180.2
7.5°	1073.3	1065.2	1054.0	1073.3	1077.1	1071.0	1093.7	1089.6	1108.0	1131.7	1135.8
10°	1028.9	1020.4	1010.6	1028.2	1030.9	1026.8	1049.9	1047.5	1065.5	1093.0	1103.9
12.5°	997.3	990.2	979.3	998.0	1001.1	995.3	1017.0	1016.0	1034.7	1063.5	1077.1
15°	975.3	966.8	956.9	972.9	977.0	970.5	991.2	989.2	1008.2	1036.7	1052.0
17.5°	954.6	946.8	936.6	951.5	955.6	948.8	969.2	965.8	982.1	1009.2	1024.8
20°	935.2	926.7	917.6	932.8	935.2	927.4	947.8	943.4	958.0	983.1	998.3
22.5°	915.2	906.4	896.9	911.8	914.2	906.4	925.0	920.0	933.5	956.3	970.2
25°	893.1	885.0	875.5	889.4	891.5	883.0	902.6	896.2	908.1	928.1	939.6
27.5°	871.1	863.3	852.8	867.0	868.0	859.9	877.9	869.1	878.9	897.2	907.1
30°	867.4	858.5	847.7	859.2	859.6	849.0	866.0	855.5	860.9	874.5	880.3
32.5°	879.2	870.4	859.2	868.7	867.7	856.2	872.4	859.6	861.2	868.4	867.0
35°	874.5	864.0	850.7	860.9	860.9	847.0	863.3	848.0	846.3	847.3	838.9
37.5°	820.5	812.4	799.8	809.7	808.7	798.1	810.7	798.1	792.4	790.0	774.7
40°	741.1	731.3	721.8	732.3	733.3	722.1	738.4	724.2	722.5	715.7	697.7
42.5°	660.7	657.3	648.1	657.0	661.7	652.2	665.8	659.0	660.0	658.3	641.4
45°	590.5	584.7	577.9	588.1	591.1	586.4	600.0	595.9	600.0	608.4	594.5
47.5°	514.8	509.0	501.5	512.4	517.8	509.0	520.5	519.2	525.3	539.9	538.5
50°	423.5	419.4	418.1	419.4	422.8	418.7	426.9	427.2	431.3	451.3	452.7
52.5°	335.3	334.3	329.5	333.9	333.9	327.5	335.6	331.9	335.9	349.5	358.3
55°	262.3	261.3	258.2	262.3	257.9	255.5	257.9	254.2	251.1	261.6	270.8
57.5°	204.3	200.9	197.2	198.9	198.5	193.4	196.1	191.7	189.4	193.1	201.2
60°	145.6	144.6	141.2	142.9	144.2	140.5	143.2	141.2	137.1	140.1	140.5
62.5°	96.7	97.4	95.4	95.7	94.7	94.0	95.7	96.7	95.7	94.3	94.7
65°	61.4	61.1	60.7	61.1	61.8	60.4	61.4	62.1	61.1	61.1	60.7
67.5°	40.7	39.7	38.7	39.4	40.0	39.0	40.0	39.7	40.0	39.7	38.7
70°	27.5	27.1	26.8	27.1	27.1	26.5	27.1	26.8	27.1	26.8	25.8
72.5°	20.0	20.0	19.7	20.0	20.0	19.3	19.7	19.0	19.3	19.0	18.3
75°	14.9	14.9	14.6	14.9	14.6	14.3	14.6	14.3	13.6	13.6	12.9
77.5°	10.9	10.9	10.9	10.9	10.9	10.5	10.5	10.2	9.8	9.5	9.5
80°	8.1	7.8	7.8	7.8	7.8	7.5	7.8	7.5	7.1	6.8	6.4
82.5°	5.8	6.1	5.8	5.8	5.8	5.4	5.8	5.4	5.4	5.1	4.4
85°	4.4	4.4	4.4	4.4	4.4	4.1	4.1	4.1	3.7	3.7	3.4
87.5°	2.4	2.4	2.4	2.7	2.4	2.4	2.4	2.0	2.0	1.7	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5
2.5°	1249.8	1251.5	1247.8	1253.5	1275.9	1257.9	1265.4	1267.8	1284.7	1287.8	1285.8
5°	1202.3	1209.8	1214.5	1227.4	1252.2	1239.3	1252.5	1261.0	1282.7	1289.8	1291.5
7.5°	1165.0	1180.6	1192.1	1213.1	1242.3	1232.5	1252.5	1266.4	1292.9	1302.1	1306.5
10°	1137.1	1160.9	1180.9	1209.8	1242.7	1236.2	1262.4	1282.0	1311.6	1322.4	1327.8
12.5°	1116.1	1144.9	1171.7	1208.4	1244.0	1241.0	1272.5	1294.9	1326.1	1337.0	1343.5
15°	1093.0	1126.3	1157.5	1198.6	1236.9	1236.2	1270.2	1293.9	1325.8	1335.0	1341.1
17.5°	1065.5	1101.2	1135.4	1179.9	1217.9	1218.6	1252.8	1276.3	1307.5	1314.9	1319.0
20°	1037.7	1073.0	1107.3	1153.1	1190.4	1191.4	1225.0	1246.7	1276.6	1282.7	1283.7
22.5°	1008.2	1041.1	1075.4	1120.8	1156.8	1157.5	1190.7	1211.1	1236.6	1239.6	1242.3
25°	974.6	1006.8	1039.1	1084.2	1118.5	1120.5	1150.7	1168.7	1192.1	1194.5	1195.5
27.5°	939.6	966.1	997.0	1035.7	1070.3	1068.9	1097.4	1117.8	1138.8	1137.5	1137.1
30°	904.3	926.4	945.4	982.7	1008.2	1009.2	1036.0	1045.9	1067.9	1065.2	1064.9
32.5°	879.6	885.3	890.4	909.4	933.5	925.0	943.4	955.6	970.9	969.8	970.2
35°	834.1	823.6	808.3	811.0	825.6	812.4	822.2	821.9	837.5	833.8	838.2
37.5°	756.4	726.5	692.6	673.3	676.0	659.3	655.9	664.1	669.5	659.0	662.7
40°	673.6	629.5	576.5	532.4	530.1	509.4	505.6	497.5	508.0	499.2	501.9
42.5°	612.5	554.1	484.6	431.0	419.4	402.1	391.9	390.6	393.6	387.5	385.8
45°	565.7	503.6	423.8	362.4	349.5	330.9	320.7	316.9	317.3	315.2	313.6
47.5°	510.7	448.3	367.5	304.7	290.1	272.5	262.3	259.9	261.3	258.6	256.5
50°	434.7	378.7	305.1	247.7	234.8	221.9	213.8	211.4	211.1	209.0	207.7
52.5°	352.9	306.4	242.6	194.8	183.2	170.7	164.9	161.9	162.2	160.2	158.1
55°	273.2	244.3	188.0	147.3	136.8	126.9	121.5	117.8	116.7	114.7	113.7
57.5°	203.3	183.9	140.8	106.2	100.1	90.6	85.2	80.8	80.1	79.1	78.7
60°	142.5	128.6	99.1	75.7	68.5	62.8	57.3	52.9	50.9	50.6	49.5
62.5°	92.3	83.8	65.2	50.6	45.1	41.1	35.6	32.6	31.2	29.9	30.2
65°	57.3	50.9	40.7	32.6	29.5	26.5	22.4	19.7	18.3	17.0	17.3
67.5°	35.6	31.9	25.8	21.0	19.0	16.6	13.6	11.5	10.5	9.5	8.8
70°	24.1	20.7	17.6	14.9	13.6	11.9	9.8	8.1	7.5	6.8	6.1
72.5°	17.0	15.3	12.9	11.2	10.2	8.8	7.5	6.4	5.8	5.1	4.4
75°	12.2	10.9	9.5	8.1	7.5	6.8	5.8	5.1	4.4	3.7	3.1
77.5°	8.8	7.8	6.8	6.1	5.8	4.8	4.1	3.7	3.4	2.7	2.0
80°	6.1	5.4	4.4	4.1	4.1	3.4	3.1	2.7	2.4	1.7	1.4
82.5°	4.1	3.7	3.4	3.1	2.7	2.4	2.4	1.7	1.4	1.0	0.7
85°	3.1	2.7	2.4	2.0	2.0	1.7	1.4	1.0	1.0	0.7	0.3
87.5°	1.7	1.7	1.4	1.0	1.0	0.7	0.7	0.3	0.3	0.3	0.3
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5
2.5°	1303.1	1304.1	1309.9	1305.4	1316.6	1324.8	1320.7	1329.9	1326.8	1326.1	1336.7
5°	1311.9	1314.3	1322.1	1318.0	1330.2	1339.0	1335.0	1345.1	1342.1	1341.4	1352.3
7.5°	1328.9	1331.2	1338.0	1334.6	1347.5	1355.3	1350.2	1361.4	1357.4	1357.0	1367.5
10°	1350.2	1353.6	1359.4	1356.0	1367.9	1374.7	1369.6	1380.4	1376.7	1375.0	1386.5
12.5°	1366.2	1368.6	1374.3	1371.6	1383.2	1388.2	1383.8	1394.4	1389.6	1388.2	1398.4
15°	1362.5	1364.8	1369.6	1367.2	1378.1	1382.8	1377.0	1388.6	1383.8	1381.1	1390.3
17.5°	1338.7	1340.1	1343.5	1341.1	1352.6	1355.7	1349.2	1360.8	1356.3	1351.6	1360.4
20°	1303.8	1303.1	1305.1	1304.1	1313.6	1315.3	1311.2	1319.7	1314.6	1311.9	1317.0
22.5°	1260.3	1259.6	1261.0	1258.3	1267.8	1268.8	1262.7	1272.9	1267.8	1262.7	1271.2
25°	1212.1	1208.4	1207.7	1208.7	1215.2	1216.2	1209.8	1217.2	1210.8	1206.7	1214.8
27.5°	1152.7	1148.0	1147.0	1148.0	1154.4	1149.7	1144.3	1149.7	1143.2	1139.5	1144.6
30°	1079.4	1072.7	1069.6	1067.6	1074.4	1072.7	1060.1	1066.2	1056.0	1050.6	1054.3
32.5°	980.7	977.0	968.8	964.1	970.5	957.6	949.8	949.8	945.7	936.6	938.6
35°	843.6	837.8	830.4	826.3	827.3	810.0	797.1	799.8	786.3	783.9	784.9
37.5°	670.2	660.7	658.0	649.5	651.5	636.3	618.6	619.0	611.8	604.4	602.0
40°	503.6	501.9	499.2	492.0	494.8	478.1	471.3	471.7	466.9	461.5	464.2
42.5°	389.2	383.8	382.1	379.7	380.4	377.7	368.9	369.9	365.8	364.5	363.1
45°	316.3	310.5	306.4	308.5	308.5	305.4	302.0	304.1	302.0	299.3	300.7
47.5°	260.6	255.2	253.1	252.8	255.2	253.1	249.8	250.4	250.1	249.1	248.4
50°	208.0	206.7	205.0	203.9	205.0	204.3	201.2	202.9	203.9	200.6	201.6
52.5°	158.5	158.5	158.1	155.8	157.8	155.8	155.4	156.1	155.1	153.7	153.4
55°	116.1	115.0	113.3	113.0	113.7	113.0	112.3	112.7	113.3	109.9	109.9
57.5°	79.4	78.7	77.7	77.7	79.1	77.4	76.4	77.7	76.4	75.0	75.0
60°	50.9	50.6	49.5	49.5	49.5	49.2	48.2	48.5	49.2	47.2	47.5
62.5°	30.5	29.5	29.2	28.8	29.2	28.8	28.8	28.5	28.2	28.2	27.1
65°	16.6	15.9	15.3	15.6	15.6	15.3	15.3	15.3	14.6	14.3	13.9
67.5°	8.5	7.8	7.8	7.5	7.5	7.5	7.5	7.1	7.1	7.1	6.8
70°	5.4	5.1	4.8	4.8	4.8	4.4	4.4	4.4	4.4	4.4	4.1
72.5°	3.7	3.4	3.1	3.1	3.1	2.7	2.7	2.7	2.7	2.4	2.4
75°	2.7	2.4	2.0	2.0	2.0	1.7	1.7	1.7	1.7	1.7	1.7
77.5°	1.7	1.4	1.4	1.4	1.4	1.0	1.0	1.0	1.0	1.0	0.7
80°	1.0	1.0	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3
82.5°	0.7	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
87.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P244130

CATALOG NUMBER: LSR8B20D010 EC8B20935 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5	1291.5
2.5°	1332.9	1330.2	1331.9	1344.5	1339.0	1337.3	1323.1	1335.6
5°	1348.9	1346.8	1346.8	1361.1	1354.7	1353.3	1339.4	1350.2
7.5°	1363.8	1361.8	1362.1	1376.7	1371.6	1369.6	1355.7	1366.5
10°	1383.2	1381.8	1382.1	1396.1	1390.6	1388.6	1374.3	1385.5
12.5°	1394.7	1392.7	1392.7	1407.6	1401.5	1398.4	1384.9	1395.7
15°	1385.9	1382.8	1382.8	1397.7	1391.0	1386.5	1374.7	1384.9
17.5°	1355.7	1352.6	1352.6	1365.5	1360.4	1354.0	1341.8	1351.3
20°	1313.6	1309.9	1308.8	1323.8	1316.6	1310.9	1300.0	1309.2
22.5°	1266.1	1264.4	1261.3	1276.3	1269.8	1263.7	1252.2	1259.3
25°	1209.1	1206.4	1203.3	1217.9	1211.4	1205.3	1196.2	1201.9
27.5°	1138.2	1138.5	1136.8	1148.3	1141.9	1138.5	1127.3	1136.8
30°	1052.3	1048.6	1047.2	1060.8	1054.7	1050.3	1036.3	1045.5
32.5°	940.3	934.9	927.8	943.0	932.5	928.8	916.9	930.1
35°	777.4	775.7	769.3	782.2	776.4	769.6	762.2	773.4
37.5°	601.0	602.3	601.7	605.0	601.7	597.2	589.1	585.0
40°	458.8	455.4	452.7	458.8	451.7	451.7	446.9	452.0
42.5°	359.7	358.3	361.7	363.1	359.0	358.3	357.7	357.3
45°	296.9	296.9	297.6	299.0	297.6	296.9	294.9	293.5
47.5°	244.7	246.0	244.7	249.1	246.7	246.0	242.0	243.6
50°	198.2	196.5	198.2	199.5	199.9	197.8	195.8	196.8
52.5°	153.7	151.0	150.3	152.4	151.0	151.0	149.6	149.3
55°	108.2	109.3	107.6	109.3	108.6	107.6	106.6	107.9
57.5°	73.3	73.6	73.0	74.0	72.3	72.6	72.3	71.9
60°	47.5	46.2	46.2	47.2	45.5	45.5	45.1	45.1
62.5°	27.1	26.8	26.8	26.5	26.1	26.1	26.1	25.5
65°	13.9	13.6	13.2	13.2	13.2	13.2	12.9	12.9
67.5°	6.8	6.4	6.4	6.8	6.4	6.4	6.4	6.4
70°	4.1	4.1	3.7	4.1	3.7	3.7	3.7	3.7
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)