

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: P245438

Luminaire Tested: **LSR8B20D010 EC8B20950 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245438
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 EC8B20950 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2062.0 lumens
Efficiency: N/A
Efficacy: 96.8 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

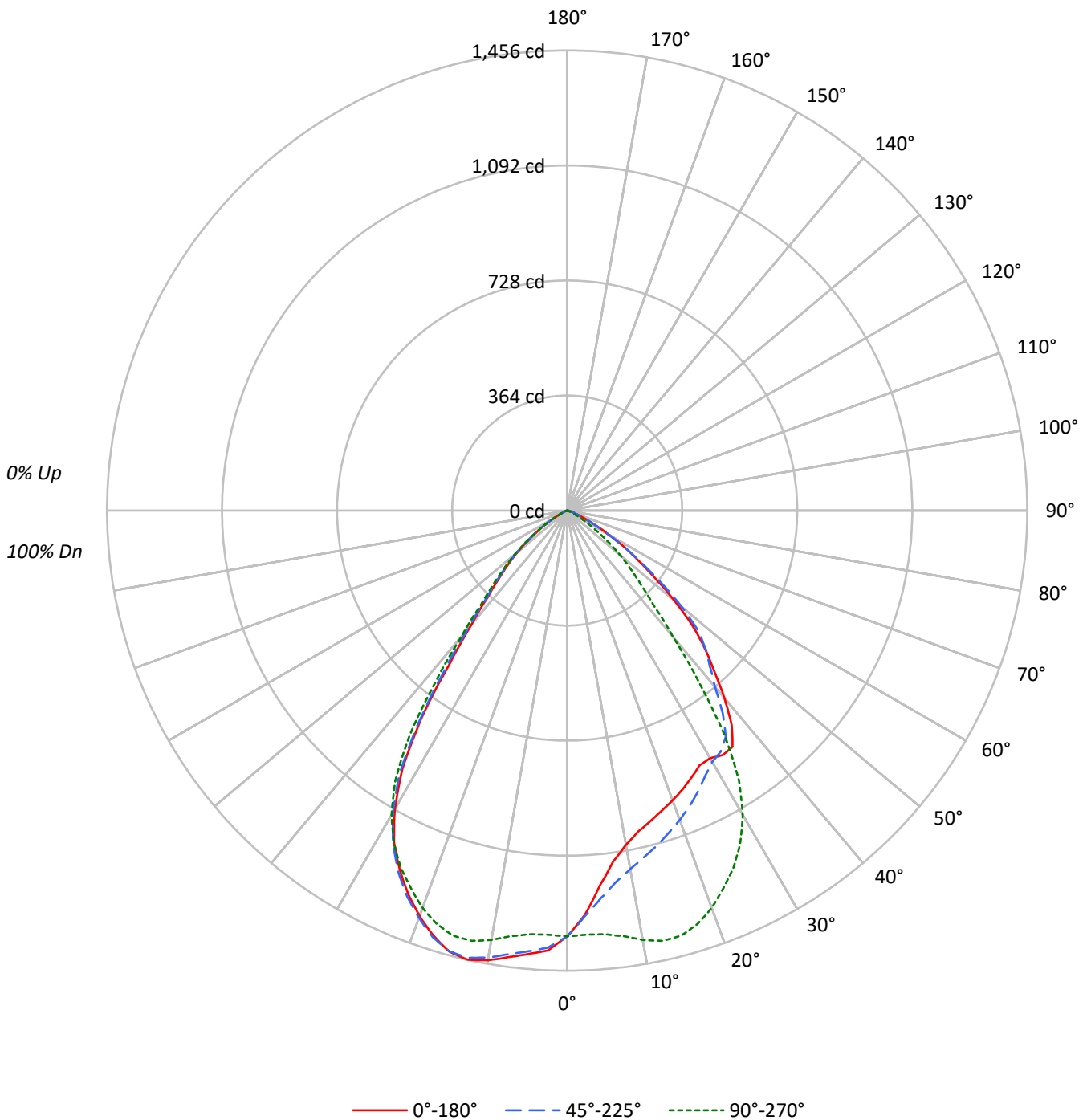
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	41540	41540	41540
5°	36854	41643	43593
10°	33601	43189	45249
15°	32473	44451	46111
20°	32008	43904	44809
25°	31693	42387	42653
30°	32210	39559	38829
35°	34335	32735	30364
40°	31116	20956	18976
45°	26855	14339	13353
50°	21190	10458	9849
55°	14709	6430	6054
60°	9362	3250	2905
65°	4677	1291	978
70°	2588	640	352
75°	1859	465	167
80°	1509	320	71
85°	1628	248	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.5	6.1
10°-20°	362.6	17.6
20°-30°	526.3	25.5
30°-40°	518.4	25.1
40°-50°	324.9	15.8
50°-60°	156.8	7.6
60°-70°	37.9	1.8
70°-80°	7.7	0.4
80°-90°	1.8	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°	1014.5	49.2
0°-40°	1532.9	74.3
0°-60°	2014.6	97.7
0°-90°	2062.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2062.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1347	1347	1347	1347	1347	
5°	1191	1231	1345	1400	1408	110
15°	1017	1097	1392	1443	1444	288
25°	932	980	1246	1263	1254	431
35°	912	875	870	820	807	552
45°	616	620	329	315	306	471
55°	274	282	120	118	113	252
65°	64	63	18	15	13	73
75°	16	13	4	2	1	17
85°	5	4	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°	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1
2.5°	1280.5	1272.4	1257.2	1275.6	1275.6	1265.3	1285.8	1273.4	1283.4	1298.9	1285.1
5°	1190.6	1183.9	1171.2	1190.6	1193.1	1183.5	1208.3	1199.1	1213.6	1232.7	1231.0
7.5°	1119.5	1111.0	1099.3	1119.5	1123.4	1117.0	1140.7	1136.5	1155.6	1180.4	1184.6
10°	1073.1	1064.3	1054.0	1072.4	1075.2	1071.0	1095.1	1092.6	1111.3	1140.0	1151.3
12.5°	1040.2	1032.8	1021.4	1040.9	1044.1	1038.1	1060.7	1059.7	1079.1	1109.2	1123.4
15°	1017.2	1008.4	998.1	1014.7	1019.0	1012.2	1033.8	1031.7	1051.5	1081.3	1097.2
17.5°	995.6	987.5	976.9	992.4	996.7	989.6	1010.8	1007.3	1024.3	1052.6	1068.9
20°	975.4	966.6	957.0	973.0	975.4	967.3	988.5	983.9	999.1	1025.3	1041.3
22.5°	954.6	945.4	935.4	951.0	953.5	945.4	964.8	959.5	973.7	997.4	1011.9
25°	931.5	923.1	913.1	927.7	929.8	920.9	941.5	934.7	947.1	968.0	980.0
27.5°	908.5	900.4	889.4	904.3	905.4	896.9	915.6	906.4	916.7	935.8	946.1
30°	904.6	895.4	884.1	896.2	896.5	885.5	903.2	892.3	897.9	912.1	918.1
32.5°	917.0	907.8	896.2	906.1	905.0	893.0	910.0	896.5	898.3	905.7	904.3
35°	912.1	901.1	887.3	897.9	897.9	883.4	900.4	884.5	882.7	883.8	874.9
37.5°	855.8	847.3	834.2	844.5	843.4	832.4	845.5	832.4	826.4	824.0	808.0
40°	773.0	762.7	752.8	763.8	764.8	753.2	770.2	755.3	753.5	746.4	727.7
42.5°	689.1	685.6	676.0	685.2	690.2	680.3	694.4	687.3	688.4	686.6	668.9
45°	615.8	609.8	602.7	613.4	616.5	611.6	625.8	621.5	625.8	634.6	620.1
47.5°	536.9	530.9	523.1	534.4	540.1	530.9	542.9	541.5	547.9	563.1	561.7
50°	441.7	437.5	436.0	437.5	441.0	436.8	445.2	445.6	449.8	470.7	472.1
52.5°	349.7	348.6	343.7	348.3	348.3	341.5	350.0	346.1	350.4	364.5	373.8
55°	273.6	272.5	269.3	273.6	269.0	266.5	269.0	265.1	261.9	272.9	282.4
57.5°	213.1	209.5	205.6	207.4	207.0	201.7	204.6	200.0	197.5	201.4	209.9
60°	151.8	150.8	147.2	149.0	150.4	146.5	149.4	147.2	143.0	146.2	146.5
62.5°	100.9	101.6	99.5	99.8	98.7	98.0	99.8	100.9	99.8	98.4	98.7
65°	64.1	63.7	63.4	63.7	64.4	63.0	64.1	64.8	63.7	63.7	63.4
67.5°	42.5	41.4	40.3	41.1	41.8	40.7	41.8	41.4	41.8	41.4	40.3
70°	28.7	28.3	28.0	28.3	28.3	27.6	28.3	28.0	28.3	28.0	26.9
72.5°	20.9	20.9	20.5	20.9	20.9	20.2	20.5	19.8	20.2	19.8	19.1
75°	15.6	15.6	15.2	15.6	15.2	14.9	15.2	14.9	14.2	14.2	13.4
77.5°	11.3	11.3	11.3	11.3	11.3	11.0	11.0	10.6	10.3	9.9	9.9
80°	8.5	8.1	8.1	8.1	8.1	7.8	8.1	7.8	7.4	7.1	6.7
82.5°	6.0	6.4	6.0	6.0	6.0	5.7	6.0	5.7	5.7	5.3	4.6
85°	4.6	4.6	4.6	4.6	4.6	4.2	4.2	4.2	3.9	3.9	3.5
87.5°	2.5	2.5	2.5	2.8	2.5	2.5	2.5	2.1	2.1	1.8	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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1
2.5°	1303.5	1305.3	1301.4	1307.4	1330.8	1312.0	1319.8	1322.3	1340.0	1343.2	1341.0
5°	1254.0	1261.8	1266.7	1280.2	1306.0	1292.6	1306.4	1315.2	1337.9	1345.3	1347.1
7.5°	1215.0	1231.3	1243.4	1265.3	1295.7	1285.5	1306.4	1320.9	1348.5	1358.0	1362.6
10°	1186.0	1210.8	1231.7	1261.8	1296.1	1289.4	1316.6	1337.2	1367.9	1379.3	1384.9
12.5°	1164.1	1194.2	1222.1	1260.3	1297.5	1294.3	1327.2	1350.6	1383.2	1394.5	1401.2
15°	1140.0	1174.7	1207.3	1250.1	1290.1	1289.4	1324.8	1349.5	1382.8	1392.4	1398.7
17.5°	1111.3	1148.5	1184.3	1230.6	1270.3	1271.0	1306.7	1331.1	1363.7	1371.5	1375.7
20°	1082.3	1119.1	1154.9	1202.7	1241.6	1242.7	1277.7	1300.3	1331.5	1337.9	1338.9
22.5°	1051.5	1085.9	1121.6	1169.0	1206.6	1207.3	1241.9	1263.2	1289.7	1292.9	1295.7
25°	1016.5	1050.1	1083.7	1130.8	1166.6	1168.7	1200.2	1218.9	1243.4	1245.8	1246.9
27.5°	980.0	1007.6	1039.9	1080.2	1116.3	1114.9	1144.6	1165.8	1187.8	1186.4	1186.0
30°	943.2	966.2	986.1	1025.0	1051.5	1052.6	1080.6	1090.8	1113.8	1111.0	1110.6
32.5°	917.4	923.4	928.7	948.5	973.7	964.8	983.9	996.7	1012.6	1011.5	1011.9
35°	870.0	859.0	843.1	845.9	861.1	847.3	857.6	857.2	873.5	869.6	874.2
37.5°	788.9	757.8	722.4	702.2	705.0	687.7	684.1	692.6	698.3	687.3	691.2
40°	702.6	656.5	601.3	555.3	552.8	531.3	527.4	518.9	529.8	520.6	523.5
42.5°	638.8	578.0	505.4	449.5	437.5	419.4	408.8	407.4	410.6	404.2	402.4
45°	590.0	525.2	442.1	378.0	364.5	345.1	334.5	330.6	330.9	328.8	327.0
47.5°	532.7	467.5	383.3	317.8	302.6	284.2	273.6	271.1	272.5	269.7	267.6
50°	453.4	395.0	318.2	258.4	244.9	231.5	223.0	220.5	220.1	218.0	216.6
52.5°	368.1	319.6	253.1	203.2	191.1	178.0	172.0	168.8	169.2	167.1	164.9
55°	284.9	254.8	196.1	153.6	142.6	132.4	126.7	122.8	121.8	119.6	118.6
57.5°	212.0	191.8	146.9	110.8	104.4	94.5	88.8	84.2	83.5	82.5	82.1
60°	148.7	134.1	103.3	78.9	71.5	65.5	59.8	55.2	53.1	52.7	51.7
62.5°	96.3	87.4	68.0	52.7	47.1	42.8	37.2	34.0	32.6	31.1	31.5
65°	59.8	53.1	42.5	34.0	30.8	27.6	23.4	20.5	19.1	17.7	18.1
67.5°	37.2	33.3	26.9	21.9	19.8	17.3	14.2	12.0	11.0	9.9	9.2
70°	25.1	21.6	18.4	15.6	14.2	12.4	10.3	8.5	7.8	7.1	6.4
72.5°	17.7	15.9	13.4	11.7	10.6	9.2	7.8	6.7	6.0	5.3	4.6
75°	12.7	11.3	9.9	8.5	7.8	7.1	6.0	5.3	4.6	3.9	3.2
77.5°	9.2	8.1	7.1	6.4	6.0	5.0	4.2	3.9	3.5	2.8	2.1
80°	6.4	5.7	4.6	4.2	4.2	3.5	3.2	2.8	2.5	1.8	1.4
82.5°	4.2	3.9	3.5	3.2	2.8	2.5	2.5	1.8	1.4	1.1	0.7
85°	3.2	2.8	2.5	2.1	2.1	1.8	1.4	1.1	1.1	0.7	0.4
87.5°	1.8	1.8	1.4	1.1	1.1	0.7	0.7	0.4	0.4	0.4	0.4
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°	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1
2.5°	1359.1	1360.2	1366.2	1361.6	1373.3	1381.7	1377.5	1387.1	1383.9	1383.2	1394.1
5°	1368.3	1370.8	1378.9	1374.7	1387.4	1396.6	1392.4	1403.0	1399.8	1399.1	1410.4
7.5°	1386.0	1388.5	1395.6	1392.0	1405.5	1413.6	1408.3	1420.0	1415.7	1415.4	1426.3
10°	1408.3	1411.8	1417.8	1414.3	1426.7	1433.8	1428.5	1439.8	1435.9	1434.1	1446.2
12.5°	1424.9	1427.4	1433.4	1430.6	1442.6	1447.9	1443.3	1454.3	1449.3	1447.9	1458.6
15°	1421.0	1423.5	1428.5	1426.0	1437.3	1442.3	1436.3	1448.3	1443.3	1440.5	1450.1
17.5°	1396.3	1397.7	1401.2	1398.7	1410.8	1414.0	1407.2	1419.3	1414.7	1409.7	1418.9
20°	1359.8	1359.1	1361.2	1360.2	1370.1	1371.8	1367.6	1376.4	1371.1	1368.3	1373.6
22.5°	1314.5	1313.8	1315.2	1312.4	1322.3	1323.3	1317.0	1327.6	1322.3	1317.0	1325.8
25°	1264.2	1260.3	1259.6	1260.7	1267.4	1268.5	1261.8	1269.6	1262.8	1258.6	1267.1
27.5°	1202.3	1197.3	1196.3	1197.3	1204.1	1199.1	1193.5	1199.1	1192.4	1188.5	1193.8
30°	1125.9	1118.8	1115.6	1113.5	1120.5	1118.8	1105.7	1112.1	1101.4	1095.8	1099.7
32.5°	1022.9	1019.0	1010.5	1005.5	1012.2	998.8	990.7	990.7	986.4	976.9	979.0
35°	879.9	873.9	866.1	861.8	862.9	844.8	831.4	834.2	820.1	817.6	818.6
37.5°	699.0	689.1	686.3	677.4	679.5	663.6	645.2	645.6	638.1	630.4	627.9
40°	525.2	523.5	520.6	513.2	516.0	498.7	491.6	492.0	487.0	481.3	484.2
42.5°	406.0	400.3	398.5	396.0	396.8	393.9	384.7	385.8	381.5	380.1	378.7
45°	329.9	323.8	319.6	321.7	321.7	318.5	315.0	317.1	315.0	312.2	313.6
47.5°	271.8	266.2	264.0	263.7	266.2	264.0	260.5	261.2	260.8	259.8	259.1
50°	217.0	215.5	213.8	212.7	213.8	213.1	209.9	211.7	212.7	209.2	210.2
52.5°	165.3	165.3	164.9	162.5	164.6	162.5	162.1	162.8	161.7	160.3	160.0
55°	121.0	120.0	118.2	117.9	118.6	117.9	117.2	117.5	118.2	114.7	114.7
57.5°	82.8	82.1	81.1	81.1	82.5	80.7	79.6	81.1	79.6	78.2	78.2
60°	53.1	52.7	51.7	51.7	51.7	51.3	50.3	50.6	51.3	49.2	49.6
62.5°	31.9	30.8	30.4	30.1	30.4	30.1	30.1	29.7	29.4	29.4	28.3
65°	17.3	16.6	15.9	16.3	16.3	15.9	15.9	15.9	15.2	14.9	14.5
67.5°	8.8	8.1	8.1	7.8	7.8	7.8	7.8	7.4	7.4	7.4	7.1
70°	5.7	5.3	5.0	5.0	5.0	4.6	4.6	4.6	4.6	4.6	4.2
72.5°	3.9	3.5	3.2	3.2	3.2	2.8	2.8	2.8	2.8	2.5	2.5
75°	2.8	2.5	2.1	2.1	2.1	1.8	1.8	1.8	1.8	1.8	1.8
77.5°	1.8	1.4	1.4	1.4	1.4	1.1	1.1	1.1	1.1	1.1	0.7
80°	1.1	1.1	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4
82.5°	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0
87.5°	0.4	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: P245438

CATALOG NUMBER: LSR8B20D010 EC8B20950 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1	1347.1
2.5°	1390.2	1387.4	1389.2	1402.3	1396.6	1394.8	1380.0	1393.1
5°	1406.9	1404.8	1404.8	1419.6	1412.9	1411.5	1397.0	1408.3
7.5°	1422.5	1420.3	1420.7	1435.9	1430.6	1428.5	1414.0	1425.3
10°	1442.6	1441.2	1441.6	1456.1	1450.4	1448.3	1433.4	1445.1
12.5°	1454.7	1452.5	1452.5	1468.1	1461.7	1458.6	1444.4	1455.7
15°	1445.5	1442.3	1442.3	1457.8	1450.8	1446.2	1433.8	1444.4
17.5°	1414.0	1410.8	1410.8	1424.2	1418.9	1412.2	1399.4	1409.4
20°	1370.1	1366.2	1365.1	1380.7	1373.3	1367.2	1355.9	1365.5
22.5°	1320.5	1318.7	1315.6	1331.1	1324.4	1318.0	1306.0	1313.4
25°	1261.1	1258.2	1255.0	1270.3	1263.5	1257.2	1247.6	1253.6
27.5°	1187.1	1187.4	1185.7	1197.7	1191.0	1187.4	1175.8	1185.7
30°	1097.5	1093.6	1092.2	1106.4	1100.0	1095.4	1080.9	1090.5
32.5°	980.7	975.1	967.6	983.6	972.6	968.7	956.3	970.1
35°	810.9	809.1	802.4	815.8	809.8	802.7	794.9	806.6
37.5°	626.8	628.2	627.5	631.1	627.5	622.9	614.4	610.2
40°	478.5	475.0	472.1	478.5	471.1	471.1	466.1	471.4
42.5°	375.2	373.8	377.3	378.7	374.5	373.8	373.0	372.7
45°	309.7	309.7	310.4	311.8	310.4	309.7	307.6	306.2
47.5°	255.2	256.6	255.2	259.8	257.3	256.6	252.4	254.1
50°	206.7	204.9	206.7	208.1	208.5	206.3	204.2	205.3
52.5°	160.3	157.5	156.8	158.9	157.5	157.5	156.1	155.7
55°	112.9	114.0	112.2	114.0	113.3	112.2	111.1	112.6
57.5°	76.4	76.8	76.1	77.2	75.4	75.7	75.4	75.0
60°	49.6	48.1	48.1	49.2	47.4	47.4	47.1	47.1
62.5°	28.3	28.0	28.0	27.6	27.3	27.3	27.3	26.5
65°	14.5	14.2	13.8	13.8	13.8	13.8	13.4	13.4
67.5°	7.1	6.7	6.7	7.1	6.7	6.7	6.7	6.7
70°	4.2	4.2	3.9	4.2	3.9	3.9	3.9	3.9
72.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.7
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)