

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: P245444

Luminaire Tested: **LSR8B20D010 EC8B20927 8LBSW0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P245444
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 EC8B20927 8LBSW0WH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1751.6 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.2 / 1.11
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

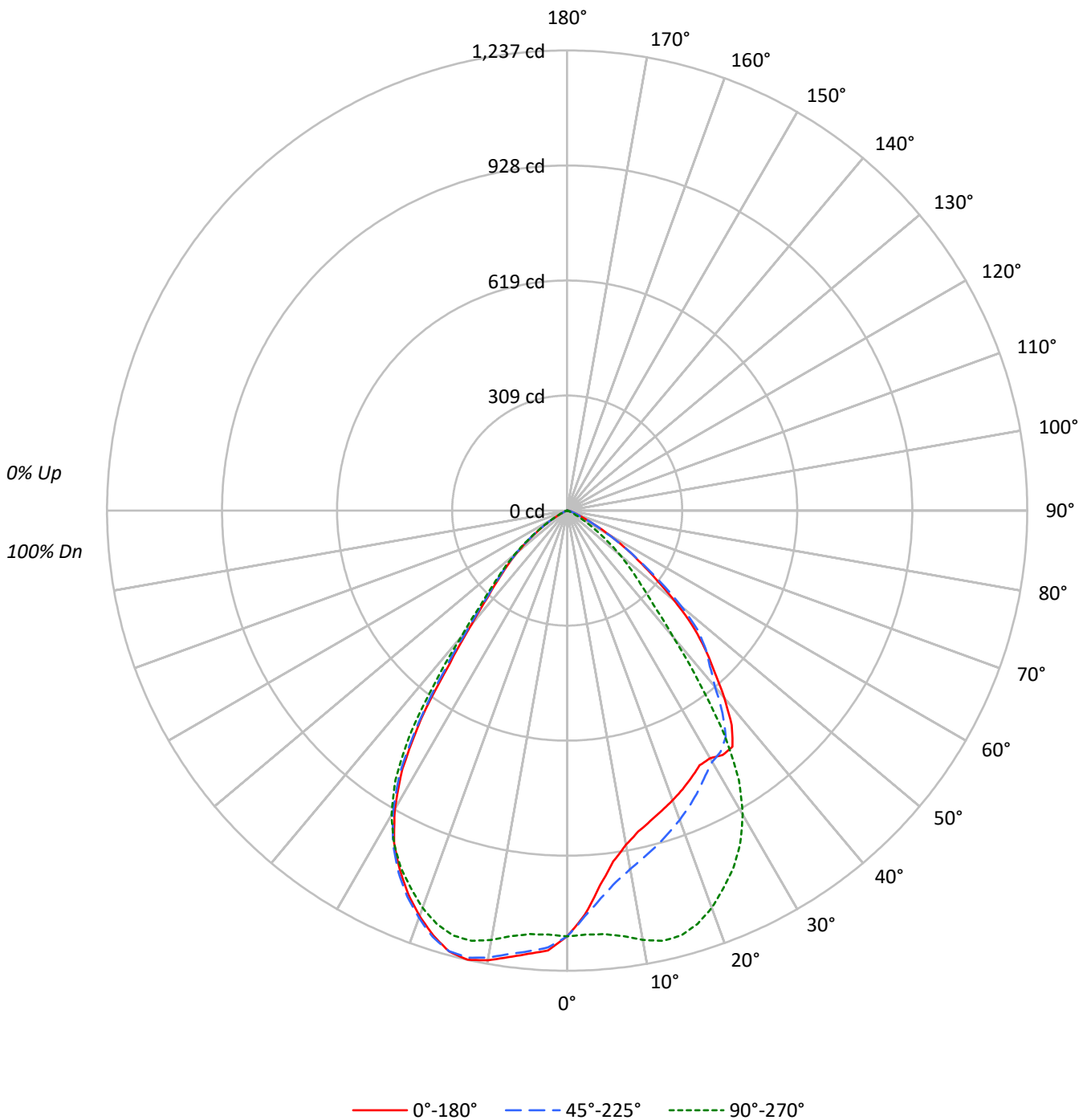
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

Luminous Intensity Polar Plot





TEST NUMBER: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

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

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: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.7	6.1
10°-20°	308.0	17.6
20°-30°	447.1	25.5
30°-40°	440.4	25.1
40°-50°	276.0	15.8
50°-60°	133.2	7.6
60°-70°	32.2	1.8
70°-80°	6.5	0.4
80°-90°	1.5	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°	861.8	49.2
0°-40°	1302.2	74.3
0°-60°	1711.4	97.7
0°-90°	1751.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1751.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1144	1144	1144	1144	1144	
5°	1011	1046	1143	1189	1196	94
15°	864	932	1183	1226	1227	244
25°	791	832	1058	1073	1065	366
35°	775	743	739	697	685	469
45°	523	527	279	268	260	400
55°	232	240	102	100	96	214
65°	54	54	15	13	12	62
75°	13	12	3	2	1	15
85°	4	3	1	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1087.8	1080.9	1068.0	1083.6	1083.6	1074.8	1092.3	1081.8	1090.2	1103.4	1091.7
5°	1011.4	1005.8	994.8	1011.4	1013.5	1005.4	1026.4	1018.6	1031.0	1047.1	1045.7
7.5°	951.0	943.8	933.9	951.0	954.3	948.8	969.0	965.4	981.7	1002.7	1006.3
10°	911.6	904.0	895.4	911.0	913.4	909.8	930.3	928.1	944.1	968.4	978.1
12.5°	883.7	877.3	867.7	884.2	887.0	881.8	901.1	900.1	916.6	942.3	954.3
15°	864.1	856.6	847.8	862.0	865.6	859.8	878.2	876.4	893.2	918.6	932.1
17.5°	845.8	838.8	829.8	843.1	846.7	840.6	858.7	855.7	870.1	894.2	908.0
20°	828.6	821.1	812.9	826.5	828.6	821.7	839.7	835.9	848.7	871.0	884.6
22.5°	810.9	803.0	794.6	807.9	810.0	803.0	819.6	815.1	827.1	847.2	859.6
25°	791.3	784.1	775.7	788.1	789.9	782.3	799.8	794.0	804.6	822.3	832.5
27.5°	771.8	764.9	755.6	768.2	769.1	761.8	777.8	769.9	778.7	794.9	803.7
30°	768.5	760.6	751.1	761.3	761.5	752.3	767.2	757.9	762.8	774.8	779.8
32.5°	778.9	771.2	761.3	769.7	768.8	758.6	773.0	761.5	763.1	769.4	768.2
35°	774.8	765.4	753.8	762.8	762.8	750.5	764.9	751.4	749.8	750.7	743.2
37.5°	727.0	719.8	708.6	717.4	716.5	707.2	718.3	707.2	702.0	700.0	686.4
40°	656.7	647.9	639.4	648.8	649.7	639.8	654.2	641.6	640.1	634.1	618.2
42.5°	585.3	582.4	574.2	582.1	586.2	577.9	589.8	583.9	584.8	583.3	568.2
45°	523.1	518.1	512.0	521.0	523.8	519.5	531.6	528.0	531.6	539.1	526.7
47.5°	456.1	451.0	444.4	453.9	458.8	451.0	461.2	460.0	465.4	478.4	477.1
50°	375.2	371.6	370.5	371.6	374.6	371.0	378.2	378.6	382.2	399.8	401.1
52.5°	297.0	296.1	291.9	295.9	295.9	290.1	297.3	294.1	297.7	309.7	317.5
55°	232.4	231.5	228.8	232.4	228.5	226.4	228.5	225.2	222.5	231.9	240.0
57.5°	181.0	178.0	174.7	176.2	175.8	171.3	173.8	169.9	167.7	171.1	178.3
60°	129.0	128.0	125.1	126.6	127.8	124.4	126.9	125.1	121.5	124.2	124.4
62.5°	85.7	86.3	84.5	84.8	83.9	83.2	84.8	85.7	84.8	83.6	83.9
65°	54.4	54.1	53.8	54.1	54.7	53.6	54.4	55.0	54.1	54.1	53.8
67.5°	36.1	35.2	34.3	34.9	35.4	34.5	35.4	35.2	35.4	35.2	34.3
70°	24.3	24.1	23.7	24.1	24.1	23.4	24.1	23.7	24.1	23.7	22.8
72.5°	17.8	17.8	17.4	17.8	17.8	17.1	17.4	16.9	17.1	16.9	16.2
75°	13.3	13.3	12.9	13.3	12.9	12.6	12.9	12.6	12.0	12.0	11.5
77.5°	9.7	9.7	9.7	9.7	9.7	9.3	9.3	9.0	8.8	8.4	8.4
80°	7.2	6.9	6.9	6.9	6.9	6.6	6.9	6.6	6.3	6.0	5.7
82.5°	5.1	5.4	5.1	5.1	5.1	4.8	5.1	4.8	4.8	4.5	3.9
85°	3.9	3.9	3.9	3.9	3.9	3.6	3.6	3.6	3.3	3.3	3.0
87.5°	2.1	2.1	2.1	2.4	2.1	2.1	2.1	1.8	1.8	1.5	1.5
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: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1107.3	1108.8	1105.5	1110.6	1130.5	1114.5	1121.2	1123.2	1138.3	1141.0	1139.2
5°	1065.3	1071.8	1076.1	1087.4	1109.5	1098.0	1109.7	1117.2	1136.5	1142.8	1144.4
7.5°	1032.2	1046.0	1056.3	1074.8	1100.7	1092.0	1109.7	1122.1	1145.5	1153.6	1157.5
10°	1007.6	1028.6	1046.2	1071.8	1101.0	1095.3	1118.5	1135.9	1162.0	1171.7	1176.5
12.5°	988.9	1014.4	1038.1	1070.7	1102.2	1099.5	1127.5	1147.3	1175.0	1184.6	1190.2
15°	968.4	997.9	1025.6	1061.9	1095.9	1095.3	1125.3	1146.4	1174.6	1182.8	1188.2
17.5°	944.1	975.6	1006.0	1045.4	1079.1	1079.7	1110.0	1130.7	1158.4	1165.0	1168.6
20°	919.5	950.6	981.0	1021.6	1054.7	1055.6	1085.4	1104.6	1131.1	1136.5	1137.4
22.5°	893.2	922.4	952.8	993.0	1025.0	1025.6	1055.0	1073.0	1095.6	1098.3	1100.7
25°	863.4	892.0	920.6	960.6	991.0	992.8	1019.5	1035.4	1056.3	1058.3	1059.2
27.5°	832.5	856.0	883.4	917.6	948.3	947.0	972.3	990.3	1009.0	1007.8	1007.6
30°	801.2	820.8	837.7	870.8	893.2	894.2	917.9	926.7	946.1	943.8	943.4
32.5°	779.3	784.5	789.0	805.7	827.1	819.6	835.9	846.7	860.2	859.3	859.6
35°	739.0	729.7	716.2	718.5	731.5	719.8	728.4	728.2	742.1	738.7	742.6
37.5°	670.2	643.7	613.7	596.5	598.9	584.2	581.2	588.4	593.2	583.9	587.1
40°	596.8	557.8	510.9	471.7	469.6	451.2	448.0	440.8	450.1	442.2	444.7
42.5°	542.7	491.0	429.3	381.8	371.6	356.3	347.3	346.0	348.8	343.3	341.9
45°	501.2	446.2	375.5	321.1	309.7	293.2	284.2	280.8	281.1	279.3	277.8
47.5°	452.5	397.1	325.6	270.0	257.1	241.4	232.4	230.3	231.5	229.0	227.2
50°	385.1	335.6	270.3	219.5	208.0	196.6	189.5	187.3	187.0	185.2	184.0
52.5°	312.6	271.5	215.0	172.6	162.3	151.2	146.1	143.4	143.7	141.9	140.1
55°	242.0	216.4	166.6	130.5	121.2	112.5	107.7	104.3	103.4	101.6	100.7
57.5°	180.1	162.9	124.8	94.0	88.6	80.3	75.5	71.6	71.0	70.1	69.8
60°	126.2	114.0	87.8	67.0	60.8	55.6	50.8	46.9	45.1	44.8	43.9
62.5°	81.8	74.2	57.7	44.8	39.9	36.3	31.6	28.9	27.7	26.4	26.8
65°	50.8	45.1	36.1	28.9	26.2	23.4	19.8	17.4	16.2	15.1	15.3
67.5°	31.6	28.2	22.8	18.7	16.9	14.7	12.0	10.2	9.3	8.4	7.8
70°	21.4	18.3	15.6	13.3	12.0	10.6	8.8	7.2	6.6	6.0	5.4
72.5°	15.1	13.5	11.5	9.9	9.0	7.8	6.6	5.7	5.1	4.5	3.9
75°	10.8	9.7	8.4	7.2	6.6	6.0	5.1	4.5	3.9	3.3	2.7
77.5°	7.8	6.9	6.0	5.4	5.1	4.2	3.6	3.3	3.0	2.4	1.8
80°	5.4	4.8	3.9	3.6	3.6	3.0	2.7	2.4	2.1	1.5	1.2
82.5°	3.6	3.3	3.0	2.7	2.4	2.1	2.1	1.5	1.2	0.9	0.6
85°	2.7	2.4	2.1	1.8	1.8	1.5	1.2	0.9	0.9	0.6	0.3
87.5°	1.5	1.5	1.2	0.9	0.9	0.6	0.6	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



TEST NUMBER: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1154.5	1155.4	1160.6	1156.6	1166.5	1173.7	1170.1	1178.3	1175.6	1175.0	1184.3
5°	1162.4	1164.5	1171.4	1167.8	1178.6	1186.4	1182.8	1191.8	1189.1	1188.4	1198.1
7.5°	1177.4	1179.4	1185.5	1182.5	1194.0	1200.8	1196.3	1206.2	1202.6	1202.3	1211.6
10°	1196.3	1199.4	1204.4	1201.4	1212.0	1217.9	1213.4	1223.1	1219.7	1218.3	1228.5
12.5°	1210.5	1212.5	1217.7	1215.2	1225.5	1230.0	1226.0	1235.4	1231.2	1230.0	1239.0
15°	1207.1	1209.3	1213.4	1211.4	1221.0	1225.1	1220.1	1230.3	1226.0	1223.7	1231.8
17.5°	1186.1	1187.3	1190.2	1188.2	1198.5	1201.2	1195.4	1205.7	1201.7	1197.6	1205.3
20°	1155.1	1154.5	1156.3	1155.4	1163.8	1165.4	1161.8	1169.2	1164.7	1162.4	1166.9
22.5°	1116.7	1116.0	1117.2	1114.9	1123.2	1124.2	1118.7	1127.8	1123.2	1118.7	1126.2
25°	1073.9	1070.7	1070.0	1070.9	1076.6	1077.5	1071.8	1078.4	1072.8	1069.1	1076.4
27.5°	1021.4	1017.1	1016.2	1017.1	1022.8	1018.6	1013.8	1018.6	1013.0	1009.6	1014.1
30°	956.4	950.4	947.7	945.9	951.9	950.4	939.3	944.7	935.7	930.8	934.1
32.5°	869.0	865.6	858.4	854.2	859.8	848.5	841.5	841.5	837.9	829.8	831.6
35°	747.4	742.3	735.8	732.2	733.1	717.6	706.3	708.6	696.6	694.5	695.5
37.5°	593.8	585.3	583.0	575.4	577.2	563.7	548.1	548.4	542.1	535.5	533.4
40°	446.2	444.7	442.2	435.9	438.4	423.7	417.6	417.9	413.7	408.9	411.3
42.5°	344.8	340.1	338.5	336.5	337.0	334.7	326.8	327.7	324.1	322.9	321.8
45°	280.2	275.1	271.5	273.3	273.3	270.6	267.6	269.4	267.6	265.2	266.4
47.5°	230.8	226.1	224.3	224.0	226.1	224.3	221.3	221.8	221.6	220.7	220.0
50°	184.3	183.2	181.6	180.7	181.6	181.0	178.3	179.8	180.7	177.6	178.5
52.5°	140.4	140.4	140.1	138.0	139.8	138.0	137.7	138.3	137.4	136.2	135.9
55°	102.8	101.9	100.5	100.1	100.7	100.1	99.6	99.8	100.5	97.4	97.4
57.5°	70.3	69.8	68.9	68.9	70.1	68.5	67.6	68.9	67.6	66.5	66.5
60°	45.1	44.8	43.9	43.9	43.9	43.6	42.6	43.0	43.6	41.7	42.1
62.5°	27.1	26.2	25.9	25.5	25.9	25.5	25.5	25.2	25.0	25.0	24.1
65°	14.7	14.2	13.5	13.8	13.8	13.5	13.5	13.5	12.9	12.6	12.4
67.5°	7.5	6.9	6.9	6.6	6.6	6.6	6.6	6.3	6.3	6.3	6.0
70°	4.8	4.5	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.9	3.6
72.5°	3.3	3.0	2.7	2.7	2.7	2.4	2.4	2.4	2.4	2.1	2.1
75°	2.4	2.1	1.8	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.5
77.5°	1.5	1.2	1.2	1.2	1.2	0.9	0.9	0.9	0.9	0.9	0.6
80°	0.9	0.9	0.6	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3
82.5°	0.6	0.6	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: P245444

CATALOG NUMBER: LSR8B20D010 EC8B20927 8LBSW0WH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1181.0	1178.6	1180.1	1191.1	1186.4	1184.9	1172.2	1183.4
5°	1195.1	1193.3	1193.3	1205.9	1200.3	1199.0	1186.6	1196.3
7.5°	1208.4	1206.6	1206.8	1219.7	1215.2	1213.4	1201.2	1210.7
10°	1225.5	1224.2	1224.6	1236.9	1232.1	1230.3	1217.7	1227.6
12.5°	1235.7	1233.9	1233.9	1247.2	1241.7	1239.0	1227.0	1236.6
15°	1227.9	1225.1	1225.1	1238.4	1232.4	1228.5	1217.9	1227.0
17.5°	1201.2	1198.5	1198.5	1209.8	1205.3	1199.6	1188.8	1197.2
20°	1163.8	1160.6	1159.6	1172.8	1166.5	1161.4	1151.8	1160.0
22.5°	1121.7	1120.3	1117.6	1130.7	1125.1	1119.6	1109.5	1115.8
25°	1071.2	1068.9	1066.2	1079.1	1073.4	1068.0	1059.9	1064.9
27.5°	1008.4	1008.7	1007.2	1017.4	1011.7	1008.7	998.8	1007.2
30°	932.3	929.0	927.8	939.8	934.4	930.5	918.2	926.3
32.5°	833.2	828.3	822.0	835.5	826.2	822.9	812.4	824.1
35°	688.8	687.3	681.6	693.0	687.9	681.9	675.2	685.2
37.5°	532.5	533.7	533.0	536.1	533.0	529.2	521.9	518.3
40°	406.5	403.5	401.1	406.5	400.2	400.2	396.0	400.5
42.5°	318.7	317.5	320.5	321.8	318.2	317.5	316.9	316.6
45°	263.0	263.0	263.7	264.8	263.7	263.0	261.2	260.1
47.5°	216.8	218.0	216.8	220.7	218.6	218.0	214.3	215.9
50°	175.6	174.0	175.6	176.7	177.1	175.3	173.5	174.4
52.5°	136.2	133.8	133.2	135.0	133.8	133.8	132.6	132.3
55°	96.0	96.9	95.3	96.9	96.2	95.3	94.4	95.6
57.5°	64.9	65.2	64.7	65.6	64.0	64.4	64.0	63.8
60°	42.1	40.8	40.8	41.7	40.3	40.3	39.9	39.9
62.5°	24.1	23.7	23.7	23.4	23.2	23.2	23.2	22.5
65°	12.4	12.0	11.7	11.7	11.7	11.7	11.5	11.5
67.5°	6.0	5.7	5.7	6.0	5.7	5.7	5.7	5.7
70°	3.6	3.6	3.3	3.6	3.3	3.3	3.3	3.3
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	0.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)