

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: P244148

Luminaire Tested: **LSR8B20D010 EC8B209727 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244148
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 EC8B209727 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1614.0 lumens
Efficiency: N/A
Efficacy: 75.8 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

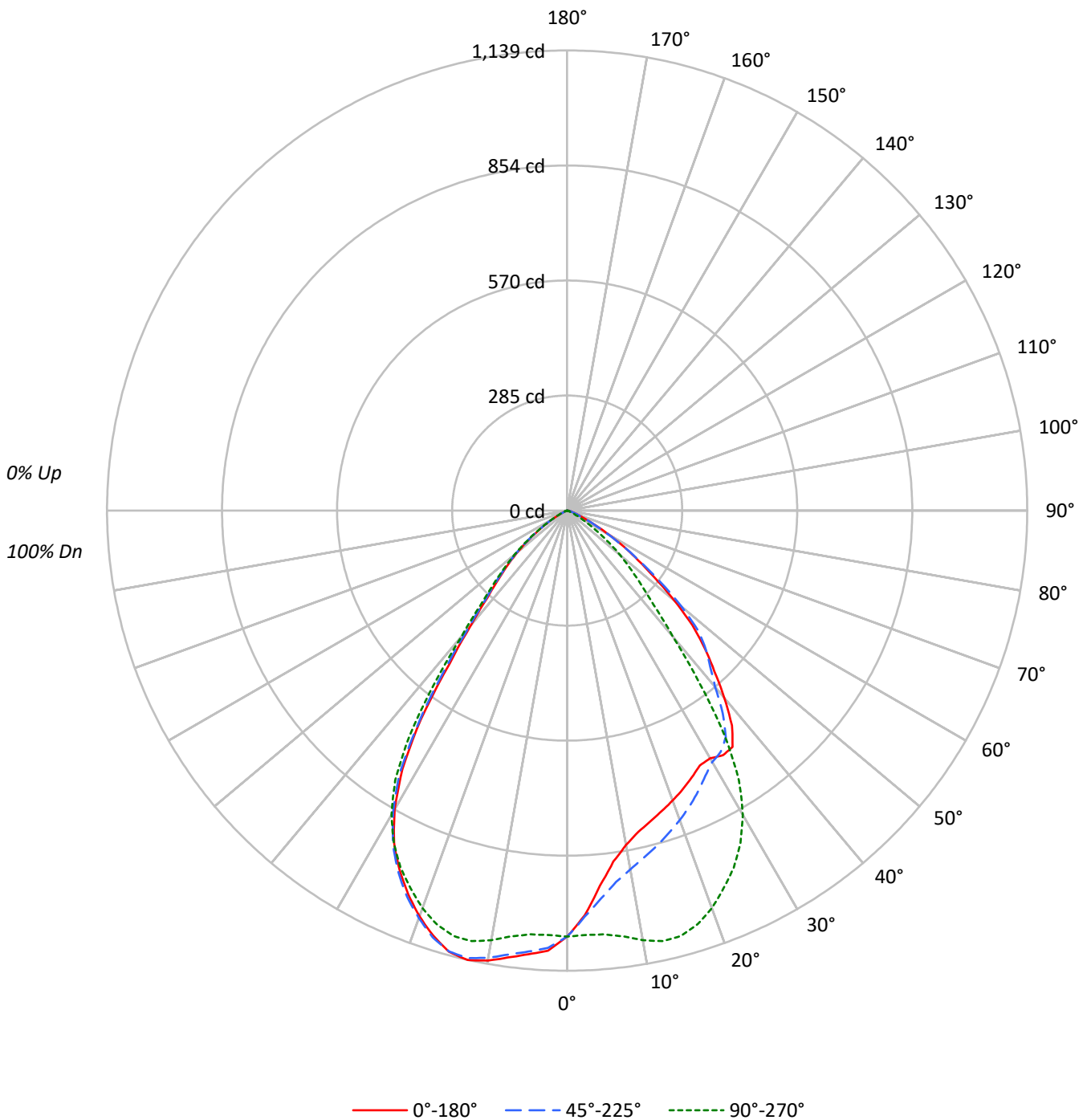
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSW0LI

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: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	6.1
10°-20°	283.8	17.6
20°-30°	412.0	25.5
30°-40°	405.8	25.1
40°-50°	254.3	15.8
50°-60°	122.7	7.6
60°-70°	29.7	1.8
70°-80°	6.0	0.4
80°-90°	1.4	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°	794.1	49.2
0°-40°	1199.8	74.3
0°-60°	1576.9	97.7
0°-90°	1614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1614.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1054	1054	1054	1054	1054	
5°	932	964	1053	1096	1102	86
15°	796	859	1090	1130	1131	225
25°	729	767	975	988	981	337
35°	714	685	681	642	631	432
45°	482	485	257	247	240	369
55°	214	221	94	92	88	197
65°	50	50	14	12	10	57
75°	12	10	3	1	1	14
85°	4	3	1	0	0	4
90°	0	0	0	0	0	



TEST NUMBER: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4
2.5°	1002.3	995.9	984.0	998.4	998.4	990.4	1006.5	996.8	1004.5	1016.7	1005.9
5°	931.9	926.7	916.7	931.9	933.9	926.4	945.8	938.6	950.0	964.9	963.5
7.5°	876.3	869.6	860.5	876.3	879.3	874.3	892.9	889.6	904.5	923.9	927.2
10°	840.0	833.0	825.0	839.4	841.6	838.3	857.1	855.2	869.9	892.3	901.2
12.5°	814.2	808.4	799.5	814.8	817.3	812.5	830.3	829.4	844.7	868.2	879.3
15°	796.2	789.3	781.2	794.3	797.6	792.3	809.2	807.6	823.1	846.3	858.8
17.5°	779.3	772.9	764.6	776.8	780.1	774.6	791.2	788.4	801.7	823.9	836.6
20°	763.5	756.6	749.1	761.6	763.5	757.1	773.8	770.2	782.1	802.6	815.0
22.5°	747.2	740.0	732.2	744.4	746.3	740.0	755.2	751.0	762.1	780.7	792.0
25°	729.2	722.5	714.7	726.1	727.8	720.8	736.9	731.6	741.3	757.7	767.1
27.5°	711.1	704.8	696.2	707.8	708.7	702.0	716.7	709.5	717.5	732.5	740.5
30°	708.1	700.9	692.0	701.5	701.7	693.1	707.0	698.4	702.8	713.9	718.6
32.5°	717.8	710.6	701.5	709.2	708.4	699.0	712.3	701.7	703.1	708.9	707.8
35°	713.9	705.3	694.5	702.8	702.8	691.5	704.8	692.3	690.9	691.8	684.8
37.5°	669.9	663.2	653.0	661.0	660.2	651.6	661.8	651.6	646.9	644.9	632.5
40°	605.0	597.0	589.3	597.8	598.7	589.5	602.8	591.2	589.8	584.3	569.6
42.5°	539.4	536.6	529.1	536.3	540.2	532.5	543.5	538.0	538.8	537.4	523.6
45°	482.0	477.3	471.8	480.1	482.6	478.7	489.8	486.5	489.8	496.7	485.4
47.5°	420.3	415.6	409.5	418.3	422.8	415.6	425.0	423.9	428.8	440.8	439.7
50°	345.7	342.4	341.3	342.4	345.2	341.9	348.5	348.8	352.1	368.5	369.6
52.5°	273.7	272.9	269.0	272.6	272.6	267.3	274.0	270.9	274.3	285.3	292.5
55°	214.1	213.3	210.8	214.1	210.5	208.6	210.5	207.5	205.0	213.6	221.1
57.5°	166.8	164.0	161.0	162.3	162.1	157.9	160.1	156.5	154.6	157.6	164.3
60°	118.8	118.0	115.2	116.6	117.7	114.7	116.9	115.2	111.9	114.4	114.7
62.5°	79.0	79.5	77.8	78.1	77.3	76.7	78.1	79.0	78.1	77.0	77.3
65°	50.1	49.9	49.6	49.9	50.4	49.3	50.1	50.7	49.9	49.9	49.6
67.5°	33.2	32.4	31.6	32.1	32.7	31.9	32.7	32.4	32.7	32.4	31.6
70°	22.4	22.2	21.9	22.2	22.2	21.6	22.2	21.9	22.2	21.9	21.1
72.5°	16.3	16.3	16.1	16.3	16.3	15.8	16.1	15.5	15.8	15.5	15.0
75°	12.2	12.2	11.9	12.2	11.9	11.6	11.9	11.6	11.1	11.1	10.5
77.5°	8.9	8.9	8.9	8.9	8.9	8.6	8.6	8.3	8.0	7.8	7.8
80°	6.6	6.4	6.4	6.4	6.4	6.1	6.4	6.1	5.8	5.5	5.3
82.5°	4.7	5.0	4.7	4.7	4.7	4.4	4.7	4.4	4.4	4.2	3.6
85°	3.6	3.6	3.6	3.6	3.6	3.3	3.3	3.3	3.0	3.0	2.8
87.5°	1.9	1.9	1.9	2.2	1.9	1.9	1.9	1.7	1.7	1.4	1.4
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: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4
2.5°	1020.3	1021.7	1018.7	1023.4	1041.6	1027.0	1033.1	1035.0	1048.9	1051.3	1049.7
5°	981.5	987.6	991.5	1002.0	1022.3	1011.7	1022.5	1029.5	1047.2	1053.0	1054.4
7.5°	951.1	963.8	973.2	990.4	1014.2	1006.2	1022.5	1033.9	1055.5	1063.0	1066.6
10°	928.3	947.7	964.1	987.6	1014.5	1009.2	1030.6	1046.6	1070.7	1079.6	1084.0
12.5°	911.2	934.7	956.6	986.5	1015.6	1013.1	1038.9	1057.2	1082.7	1091.5	1096.8
15°	892.3	919.5	945.0	978.5	1009.8	1009.2	1036.9	1056.3	1082.4	1089.9	1094.8
17.5°	869.9	899.0	927.0	963.2	994.3	994.8	1022.8	1041.9	1067.4	1073.5	1076.8
20°	847.2	876.0	904.0	941.4	971.8	972.7	1000.1	1017.8	1042.2	1047.2	1048.0
22.5°	823.1	849.9	877.9	915.0	944.4	945.0	972.1	988.7	1009.5	1012.0	1014.2
25°	795.6	822.0	848.3	885.1	913.1	914.8	939.4	954.1	973.2	975.2	976.0
27.5°	767.1	788.7	813.9	845.5	873.8	872.7	895.9	912.6	929.7	928.6	928.3
30°	738.3	756.3	771.8	802.3	823.1	823.9	845.8	853.8	871.8	869.6	869.3
32.5°	718.1	722.8	726.9	742.5	762.1	755.2	770.2	780.1	792.6	791.8	792.0
35°	681.0	672.4	659.9	662.1	674.0	663.2	671.3	671.0	683.7	680.7	684.3
37.5°	617.5	593.1	565.4	549.6	551.9	538.3	535.5	542.2	546.6	538.0	541.0
40°	549.9	513.9	470.7	434.7	432.7	415.8	412.8	406.1	414.7	407.5	409.7
42.5°	500.0	452.4	395.6	351.8	342.4	328.3	320.0	318.9	321.4	316.4	315.0
45°	461.8	411.1	346.0	295.9	285.3	270.1	261.8	258.8	259.0	257.4	256.0
47.5°	416.9	366.0	300.0	248.8	236.9	222.5	214.1	212.2	213.3	211.1	209.4
50°	354.9	309.2	249.1	202.2	191.7	181.2	174.5	172.6	172.3	170.7	169.5
52.5°	288.1	250.2	198.1	159.0	149.6	139.3	134.6	132.1	132.4	130.8	129.1
55°	223.0	199.5	153.5	120.2	111.6	103.6	99.2	96.1	95.3	93.6	92.8
57.5°	165.9	150.2	115.0	86.7	81.7	74.0	69.5	65.9	65.4	64.5	64.3
60°	116.4	105.0	80.9	61.8	56.0	51.3	46.8	43.2	41.6	41.3	40.4
62.5°	75.4	68.4	53.2	41.3	36.8	33.5	29.1	26.6	25.5	24.4	24.7
65°	46.8	41.6	33.2	26.6	24.1	21.6	18.3	16.1	15.0	13.9	14.1
67.5°	29.1	26.0	21.1	17.2	15.5	13.6	11.1	9.4	8.6	7.8	7.2
70°	19.7	16.9	14.4	12.2	11.1	9.7	8.0	6.6	6.1	5.5	5.0
72.5°	13.9	12.5	10.5	9.1	8.3	7.2	6.1	5.3	4.7	4.2	3.6
75°	10.0	8.9	7.8	6.6	6.1	5.5	4.7	4.2	3.6	3.0	2.5
77.5°	7.2	6.4	5.5	5.0	4.7	3.9	3.3	3.0	2.8	2.2	1.7
80°	5.0	4.4	3.6	3.3	3.3	2.8	2.5	2.2	1.9	1.4	1.1
82.5°	3.3	3.0	2.8	2.5	2.2	1.9	1.9	1.4	1.1	0.8	0.6
85°	2.5	2.2	1.9	1.7	1.7	1.4	1.1	0.8	0.8	0.6	0.3
87.5°	1.4	1.4	1.1	0.8	0.8	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: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4
2.5°	1063.8	1064.6	1069.4	1065.8	1074.9	1081.5	1078.2	1085.7	1083.2	1082.7	1091.2
5°	1071.0	1073.0	1079.3	1076.0	1086.0	1093.2	1089.9	1098.2	1095.7	1095.1	1104.0
7.5°	1084.9	1086.8	1092.3	1089.6	1100.1	1106.5	1102.3	1111.5	1108.1	1107.9	1116.4
10°	1102.3	1105.1	1109.8	1107.0	1116.7	1122.3	1118.1	1127.0	1123.9	1122.5	1132.0
12.5°	1115.3	1117.3	1122.0	1119.8	1129.2	1133.3	1129.7	1138.3	1134.5	1133.3	1141.7
15°	1112.3	1114.2	1118.1	1116.2	1125.0	1128.9	1124.2	1133.6	1129.7	1127.5	1135.0
17.5°	1092.9	1094.0	1096.8	1094.8	1104.3	1106.8	1101.5	1110.9	1107.3	1103.4	1110.6
20°	1064.4	1063.8	1065.5	1064.6	1072.4	1073.8	1070.5	1077.4	1073.2	1071.0	1075.2
22.5°	1028.9	1028.4	1029.5	1027.2	1035.0	1035.8	1030.8	1039.2	1035.0	1030.8	1037.8
25°	989.6	986.5	986.0	986.8	992.1	992.9	987.6	993.7	988.5	985.1	991.8
27.5°	941.1	937.2	936.4	937.2	942.5	938.6	934.2	938.6	933.3	930.3	934.4
30°	881.2	875.7	873.2	871.6	877.1	875.7	865.5	870.4	862.1	857.7	860.7
32.5°	800.6	797.6	790.9	787.1	792.3	781.8	775.4	775.4	772.1	764.6	766.3
35°	688.7	684.0	677.9	674.6	675.4	661.3	650.8	653.0	641.9	639.9	640.8
37.5°	547.1	539.4	537.2	530.2	531.9	519.4	505.0	505.3	499.5	493.4	491.5
40°	411.1	409.7	407.5	401.7	403.9	390.3	384.8	385.1	381.2	376.8	379.0
42.5°	317.8	313.3	311.9	310.0	310.6	308.3	301.1	302.0	298.6	297.5	296.4
45°	258.2	253.5	250.2	251.8	251.8	249.3	246.6	248.2	246.6	244.3	245.5
47.5°	212.8	208.3	206.7	206.4	208.3	206.7	203.9	204.5	204.2	203.3	202.8
50°	169.8	168.7	167.3	166.5	167.3	166.8	164.3	165.7	166.5	163.7	164.6
52.5°	129.4	129.4	129.1	127.2	128.8	127.2	126.9	127.4	126.6	125.5	125.2
55°	94.7	93.9	92.5	92.3	92.8	92.3	91.7	92.0	92.5	89.8	89.8
57.5°	64.8	64.3	63.4	63.4	64.5	63.2	62.3	63.4	62.3	61.2	61.2
60°	41.6	41.3	40.4	40.4	40.4	40.2	39.3	39.6	40.2	38.5	38.8
62.5°	24.9	24.1	23.8	23.5	23.8	23.5	23.5	23.3	23.0	23.0	22.2
65°	13.6	13.0	12.5	12.7	12.7	12.5	12.5	12.5	11.9	11.6	11.4
67.5°	6.9	6.4	6.4	6.1	6.1	6.1	6.1	5.8	5.8	5.8	5.5
70°	4.4	4.2	3.9	3.9	3.9	3.6	3.6	3.6	3.6	3.6	3.3
72.5°	3.0	2.8	2.5	2.5	2.5	2.2	2.2	2.2	2.2	1.9	1.9
75°	2.2	1.9	1.7	1.7	1.7	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.4	1.1	1.1	1.1	1.1	0.8	0.8	0.8	0.8	0.8	0.6
80°	0.8	0.8	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: P244148

CATALOG NUMBER: LSR8B20D010 EC8B209727 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4	1054.4
2.5°	1088.2	1086.0	1087.4	1097.6	1093.2	1091.8	1080.2	1090.4
5°	1101.2	1099.6	1099.6	1111.2	1105.9	1104.8	1093.5	1102.3
7.5°	1113.4	1111.7	1112.0	1123.9	1119.8	1118.1	1106.8	1115.6
10°	1129.2	1128.1	1128.4	1139.7	1135.3	1133.6	1122.0	1131.1
12.5°	1138.6	1136.9	1136.9	1149.1	1144.2	1141.7	1130.6	1139.4
15°	1131.4	1128.9	1128.9	1141.1	1135.6	1132.0	1122.3	1130.6
17.5°	1106.8	1104.3	1104.3	1114.8	1110.6	1105.4	1095.4	1103.2
20°	1072.4	1069.4	1068.5	1080.7	1074.9	1070.2	1061.3	1068.8
22.5°	1033.6	1032.2	1029.7	1041.9	1036.7	1031.7	1022.3	1028.1
25°	987.1	984.9	982.4	994.3	989.0	984.0	976.5	981.3
27.5°	929.2	929.5	928.1	937.5	932.2	929.5	920.3	928.1
30°	859.1	856.0	854.9	866.0	861.0	857.4	846.1	853.5
32.5°	767.7	763.2	757.4	769.9	761.3	758.2	748.5	759.4
35°	634.7	633.3	628.0	638.6	633.9	628.3	622.2	631.4
37.5°	490.6	491.7	491.2	494.0	491.2	487.6	480.9	477.6
40°	374.6	371.8	369.6	374.6	368.7	368.7	364.9	369.0
42.5°	293.7	292.5	295.3	296.4	293.1	292.5	292.0	291.7
45°	242.4	242.4	243.0	244.1	243.0	242.4	240.7	239.6
47.5°	199.7	200.9	199.7	203.3	201.4	200.9	197.5	198.9
50°	161.8	160.4	161.8	162.9	163.2	161.5	159.8	160.7
52.5°	125.5	123.3	122.7	124.4	123.3	123.3	122.2	121.9
55°	88.4	89.2	87.8	89.2	88.7	87.8	87.0	88.1
57.5°	59.8	60.1	59.6	60.4	59.0	59.3	59.0	58.7
60°	38.8	37.7	37.7	38.5	37.1	37.1	36.8	36.8
62.5°	22.2	21.9	21.9	21.6	21.3	21.3	21.3	20.8
65°	11.4	11.1	10.8	10.8	10.8	10.8	10.5	10.5
67.5°	5.5	5.3	5.3	5.5	5.3	5.3	5.3	5.3
70°	3.3	3.3	3.0	3.3	3.0	3.0	3.0	3.0
72.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	0.8	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)