

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 EC8B20927 8LBSWOLI**

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 EC8B20927 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: 1815.7 lumens
Efficiency: N/A
Efficacy: 85.2 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

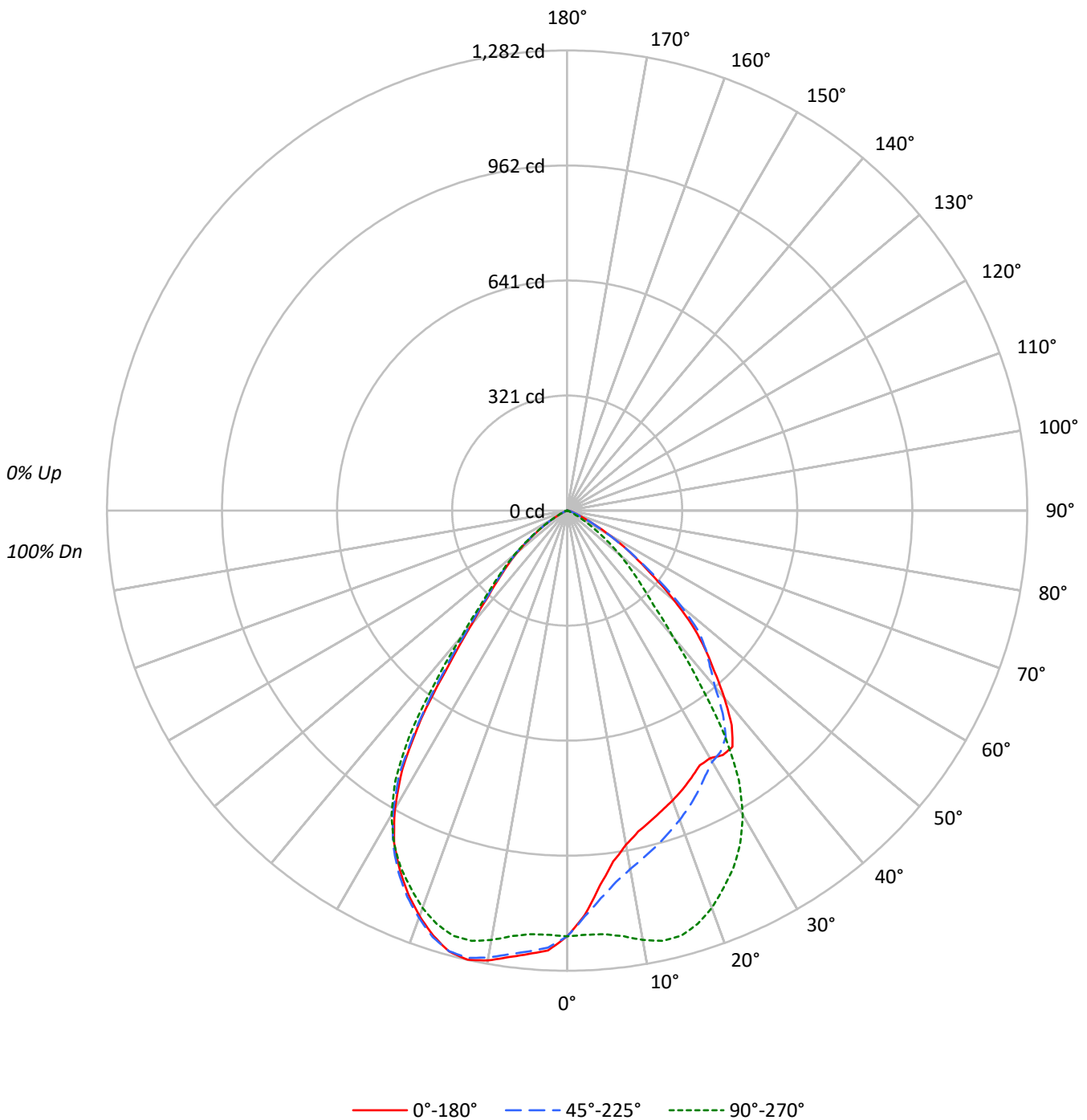
Input Watts (W): 21.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	6.1
10°-20°	319.3	17.6
20°-30°	463.5	25.5
30°-40°	456.5	25.1
40°-50°	286.1	15.8
50°-60°	138.1	7.6
60°-70°	33.4	1.8
70°-80°	6.7	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°	893.3	49.2
0°-40°	1349.8	74.3
0°-60°	1774.0	97.7
0°-90°	1815.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1815.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1186	1186	1186	1186	1186	
5°	1048	1084	1185	1233	1240	97
15°	896	966	1226	1271	1272	253
25°	820	863	1097	1112	1104	380
35°	803	770	766	722	710	486
45°	542	546	290	277	270	415
55°	241	249	105	104	99	222
65°	56	56	16	13	12	64
75°	14	12	3	2	1	15
85°	4	3	1	0	0	4
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°	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2
2.5°	1127.6	1120.4	1107.0	1123.2	1123.2	1114.2	1132.3	1121.4	1130.1	1143.8	1131.6
5°	1048.4	1042.5	1031.3	1048.4	1050.6	1042.2	1064.0	1055.9	1068.8	1085.5	1083.9
7.5°	985.8	978.3	968.1	985.8	989.2	983.6	1004.5	1000.8	1017.6	1039.4	1043.1
10°	945.0	937.1	928.1	944.3	946.8	943.1	964.2	962.1	978.6	1003.8	1013.8
12.5°	916.0	909.4	899.4	916.6	919.5	914.1	934.1	933.1	950.3	976.7	989.2
15°	895.7	888.0	878.8	893.6	897.3	891.3	910.4	908.6	926.0	952.1	966.2
17.5°	876.7	869.5	860.2	873.9	877.6	871.4	890.1	887.0	901.9	926.9	941.2
20°	858.9	851.2	842.7	856.8	858.9	851.7	870.5	866.5	879.9	902.9	916.9
22.5°	840.6	832.5	823.7	837.4	839.6	832.5	849.6	844.9	857.4	878.3	891.0
25°	820.4	812.8	804.0	816.9	818.8	810.9	829.0	823.0	834.0	852.4	863.0
27.5°	800.0	792.9	783.2	796.3	797.3	789.8	806.3	798.2	807.2	824.1	833.1
30°	796.6	788.5	778.5	789.2	789.4	779.7	795.4	785.7	790.6	803.1	808.4
32.5°	807.5	799.4	789.2	797.8	796.9	786.4	801.3	789.4	791.0	797.5	796.3
35°	803.1	793.5	781.3	790.6	790.6	777.9	792.9	778.8	777.3	778.3	770.4
37.5°	753.6	746.1	734.6	743.6	742.7	733.1	744.5	733.1	727.8	725.5	711.6
40°	680.6	671.6	663.0	672.5	673.5	663.2	678.2	665.1	663.5	657.3	640.8
42.5°	606.8	603.7	595.2	603.3	607.7	599.1	611.4	605.2	606.2	604.6	589.1
45°	542.2	537.0	530.8	540.1	542.9	538.5	551.0	547.3	551.0	558.8	546.1
47.5°	472.8	467.6	460.7	470.6	475.6	467.6	478.1	476.9	482.4	495.9	494.7
50°	388.9	385.2	384.0	385.2	388.3	384.6	392.1	392.4	396.1	414.6	415.8
52.5°	307.9	307.0	302.6	306.7	306.7	300.7	308.2	304.8	308.6	321.0	329.1
55°	240.9	240.0	237.2	240.9	236.8	234.7	236.8	233.4	230.6	240.3	248.7
57.5°	187.6	184.5	181.1	182.6	182.4	177.6	180.1	176.1	173.9	177.3	184.8
60°	133.6	132.8	129.6	131.2	132.4	129.0	131.5	129.6	125.9	128.7	129.0
62.5°	88.9	89.4	87.5	87.9	87.0	86.3	87.9	88.9	87.9	86.6	87.0
65°	56.4	56.1	55.8	56.1	56.7	55.5	56.4	57.0	56.1	56.1	55.8
67.5°	37.4	36.4	35.6	36.1	36.8	35.9	36.8	36.4	36.8	36.4	35.6
70°	25.2	25.0	24.6	25.0	25.0	24.3	25.0	24.6	25.0	24.6	23.7
72.5°	18.3	18.3	18.1	18.3	18.3	17.8	18.1	17.4	17.8	17.4	16.9
75°	13.7	13.7	13.4	13.7	13.4	13.0	13.4	13.0	12.5	12.5	11.8
77.5°	10.0	10.0	10.0	10.0	10.0	9.7	9.7	9.3	9.0	8.8	8.8
80°	7.4	7.2	7.2	7.2	7.2	6.9	7.2	6.9	6.5	6.2	6.0
82.5°	5.3	5.6	5.3	5.3	5.3	5.0	5.3	5.0	5.0	4.7	4.0
85°	4.0	4.0	4.0	4.0	4.0	3.7	3.7	3.7	3.4	3.4	3.2
87.5°	2.1	2.1	2.1	2.5	2.1	2.1	2.1	1.9	1.9	1.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2
2.5°	1147.8	1149.4	1146.0	1151.3	1171.8	1155.4	1162.2	1164.4	1180.0	1182.7	1180.9
5°	1104.2	1111.0	1115.4	1127.2	1150.1	1138.2	1150.3	1158.2	1178.1	1184.6	1186.2
7.5°	1070.0	1084.3	1094.9	1114.2	1141.0	1132.0	1150.3	1163.1	1187.4	1195.9	1199.9
10°	1044.3	1066.2	1084.6	1111.0	1141.3	1135.4	1159.4	1177.4	1204.5	1214.6	1219.5
12.5°	1025.1	1051.5	1076.2	1109.8	1142.6	1139.7	1168.8	1189.4	1218.0	1227.9	1233.9
15°	1003.8	1034.4	1063.1	1100.8	1136.0	1135.4	1166.5	1188.3	1217.7	1226.1	1231.6
17.5°	978.6	1011.4	1042.9	1083.6	1118.6	1119.1	1150.6	1172.1	1200.8	1207.7	1211.4
20°	953.1	985.5	1017.0	1059.1	1093.3	1094.3	1125.1	1145.0	1172.5	1178.1	1179.0
22.5°	926.0	956.1	987.6	1029.4	1062.4	1063.1	1093.6	1112.3	1135.7	1138.5	1141.0
25°	895.0	924.8	954.3	995.7	1027.2	1029.1	1056.8	1073.4	1094.9	1097.1	1098.0
27.5°	863.0	887.3	915.6	951.2	983.0	981.8	1007.9	1026.7	1045.9	1044.7	1044.3
30°	830.6	850.8	868.3	902.6	926.0	926.9	951.5	960.5	980.8	978.3	978.0
32.5°	807.9	813.2	817.8	835.3	857.4	849.6	866.5	877.6	891.7	890.8	891.0
35°	766.1	756.4	742.4	744.9	758.2	746.1	755.2	754.9	769.2	765.8	769.8
37.5°	694.7	667.2	636.1	618.3	620.9	605.6	602.4	610.0	614.9	605.2	608.6
40°	618.6	578.1	529.5	489.0	486.8	467.8	464.4	456.9	466.5	458.4	460.9
42.5°	562.5	509.0	445.0	395.8	385.2	369.3	360.0	358.8	361.6	356.0	354.4
45°	519.5	462.5	389.2	332.9	321.0	303.9	294.5	291.2	291.4	289.6	288.0
47.5°	469.0	411.8	337.5	279.9	266.5	250.3	240.9	238.7	240.0	237.5	235.6
50°	399.3	347.8	280.2	227.5	215.7	203.8	196.3	194.2	193.8	192.0	190.7
52.5°	324.1	281.5	222.9	178.9	168.3	156.7	151.4	148.6	149.0	147.2	145.2
55°	250.9	224.4	172.7	135.2	125.6	116.6	111.6	108.1	107.2	105.3	104.4
57.5°	186.6	169.0	129.4	97.5	91.9	83.2	78.2	74.1	73.6	72.6	72.3
60°	131.0	118.1	91.0	69.5	63.0	57.7	52.6	48.6	46.8	46.5	45.4
62.5°	84.8	77.0	59.8	46.5	41.4	37.7	32.7	29.9	28.7	27.4	27.8
65°	52.6	46.8	37.4	29.9	27.1	24.3	20.6	18.1	16.9	15.6	15.9
67.5°	32.7	29.2	23.7	19.3	17.4	15.3	12.5	10.6	9.7	8.8	8.1
70°	22.2	19.0	16.2	13.7	12.5	10.9	9.0	7.4	6.9	6.2	5.6
72.5°	15.6	14.1	11.8	10.2	9.3	8.1	6.9	6.0	5.3	4.7	4.0
75°	11.2	10.0	8.8	7.4	6.9	6.2	5.3	4.7	4.0	3.4	2.8
77.5°	8.1	7.2	6.2	5.6	5.3	4.4	3.7	3.4	3.2	2.5	1.9
80°	5.6	5.0	4.0	3.7	3.7	3.2	2.8	2.5	2.1	1.6	1.2
82.5°	3.7	3.4	3.2	2.8	2.5	2.1	2.1	1.6	1.2	0.9	0.7
85°	2.8	2.5	2.1	1.9	1.9	1.6	1.2	0.9	0.9	0.7	0.3
87.5°	1.6	1.6	1.2	0.9	0.9	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°	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2
2.5°	1196.8	1197.7	1203.1	1199.0	1209.3	1216.7	1213.0	1221.4	1218.6	1218.0	1227.6
5°	1204.9	1207.1	1214.2	1210.5	1221.8	1229.9	1226.1	1235.5	1232.7	1232.0	1242.0
7.5°	1220.5	1222.6	1228.8	1225.8	1237.6	1244.8	1240.1	1250.4	1246.6	1246.4	1256.0
10°	1240.1	1243.2	1248.5	1245.4	1256.3	1262.6	1257.9	1267.9	1264.4	1262.8	1273.5
12.5°	1254.7	1257.0	1262.2	1259.8	1270.4	1275.0	1270.9	1280.6	1276.3	1275.0	1284.4
15°	1251.3	1253.5	1257.9	1255.7	1265.6	1270.0	1264.7	1275.3	1270.9	1268.4	1276.9
17.5°	1229.5	1230.8	1233.9	1231.6	1242.3	1245.1	1239.2	1249.8	1245.7	1241.3	1249.4
20°	1197.4	1196.8	1198.7	1197.7	1206.4	1208.0	1204.3	1212.1	1207.4	1204.9	1209.6
22.5°	1157.5	1157.0	1158.2	1155.6	1164.4	1165.3	1159.6	1169.1	1164.4	1159.6	1167.5
25°	1113.3	1109.8	1109.2	1110.1	1116.1	1117.0	1111.0	1117.9	1112.1	1108.2	1115.8
27.5°	1058.7	1054.4	1053.4	1054.4	1060.3	1055.9	1051.0	1055.9	1050.0	1046.6	1051.2
30°	991.4	985.2	982.4	980.6	986.7	985.2	973.7	979.2	969.9	964.9	968.3
32.5°	900.7	897.3	889.8	885.5	891.3	879.5	872.3	872.3	868.6	860.2	862.1
35°	774.8	769.5	762.6	758.9	759.8	744.0	732.2	734.6	722.1	719.9	720.9
37.5°	615.5	606.8	604.4	596.5	598.4	584.3	568.1	568.5	561.9	555.1	552.9
40°	462.5	460.9	458.4	451.9	454.4	439.1	432.9	433.2	428.8	423.9	426.4
42.5°	357.5	352.5	350.9	348.8	349.4	346.8	338.7	339.8	335.9	334.7	333.4
45°	290.5	285.2	281.5	283.3	283.3	280.5	277.4	279.2	277.4	274.8	276.2
47.5°	239.4	234.3	232.5	232.2	234.3	232.5	229.4	230.1	229.7	228.7	228.2
50°	191.0	189.8	188.2	187.3	188.2	187.6	184.8	186.4	187.3	184.2	185.2
52.5°	145.6	145.6	145.2	143.1	144.9	143.1	142.8	143.3	142.4	141.2	140.8
55°	106.5	105.6	104.1	103.8	104.4	103.8	103.2	103.5	104.1	101.0	101.0
57.5°	72.9	72.3	71.3	71.3	72.6	71.1	70.1	71.3	70.1	68.9	68.9
60°	46.8	46.5	45.4	45.4	45.4	45.2	44.2	44.6	45.2	43.3	43.6
62.5°	28.0	27.1	26.8	26.4	26.8	26.4	26.4	26.2	25.9	25.9	25.0
65°	15.3	14.6	14.1	14.3	14.3	14.1	14.1	14.1	13.4	13.0	12.8
67.5°	7.8	7.2	7.2	6.9	6.9	6.9	6.9	6.5	6.5	6.5	6.2
70°	5.0	4.7	4.4	4.4	4.4	4.0	4.0	4.0	4.0	4.0	3.7
72.5°	3.4	3.2	2.8	2.8	2.8	2.5	2.5	2.5	2.5	2.1	2.1
75°	2.5	2.1	1.9	1.9	1.9	1.6	1.6	1.6	1.6	1.6	1.6
77.5°	1.6	1.2	1.2	1.2	1.2	0.9	0.9	0.9	0.9	0.9	0.7
80°	0.9	0.9	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



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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2	1186.2
2.5°	1224.2	1221.8	1223.3	1234.8	1229.9	1228.3	1215.2	1226.7
5°	1238.9	1237.0	1237.0	1250.1	1244.1	1242.9	1230.2	1240.1
7.5°	1252.6	1250.7	1251.0	1264.4	1259.8	1257.9	1245.1	1255.0
10°	1270.4	1269.1	1269.4	1282.2	1277.2	1275.3	1262.2	1272.5
12.5°	1280.9	1279.0	1279.0	1292.7	1287.2	1284.4	1271.9	1281.8
15°	1272.8	1270.0	1270.0	1283.7	1277.6	1273.5	1262.6	1271.9
17.5°	1245.1	1242.3	1242.3	1254.1	1249.4	1243.6	1232.3	1241.1
20°	1206.4	1203.1	1202.1	1215.8	1209.3	1204.0	1194.0	1202.4
22.5°	1162.8	1161.2	1158.4	1172.1	1166.3	1160.7	1150.1	1156.6
25°	1110.5	1108.0	1105.2	1118.6	1112.6	1107.0	1098.6	1104.0
27.5°	1045.4	1045.7	1044.1	1054.7	1048.7	1045.7	1035.3	1044.1
30°	966.5	963.0	961.8	974.2	968.6	964.6	951.9	960.2
32.5°	863.7	858.6	852.1	866.1	856.5	853.0	842.1	854.3
35°	714.0	712.5	706.5	718.4	713.1	706.8	700.0	710.3
37.5°	551.9	553.2	552.6	555.8	552.6	548.6	541.0	537.3
40°	421.4	418.3	415.8	421.4	414.8	414.8	410.5	415.1
42.5°	330.4	329.1	332.2	333.4	329.7	329.1	328.5	328.2
45°	272.7	272.7	273.4	274.6	273.4	272.7	270.8	269.6
47.5°	224.7	226.0	224.7	228.7	226.6	226.0	222.2	223.8
50°	182.0	180.5	182.0	183.3	183.6	181.7	179.8	180.8
52.5°	141.2	138.7	138.0	140.0	138.7	138.7	137.5	137.1
55°	99.4	100.4	98.8	100.4	99.8	98.8	97.9	99.1
57.5°	67.3	67.6	67.0	68.0	66.4	66.7	66.4	66.0
60°	43.6	42.4	42.4	43.3	41.7	41.7	41.4	41.4
62.5°	25.0	24.6	24.6	24.3	24.0	24.0	24.0	23.4
65°	12.8	12.5	12.2	12.2	12.2	12.2	11.8	11.8
67.5°	6.2	6.0	6.0	6.2	6.0	6.0	6.0	6.0
70°	3.7	3.7	3.4	3.7	3.4	3.4	3.4	3.4
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	0.7	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)