

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: P245450

Luminaire Tested: **LSR8B20D010 EC8B20930 8LBSW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245450  
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 EC8B20930 8LBSW0WH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1846.3 lumens  
Efficiency: N/A  
Efficacy: 86.7 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

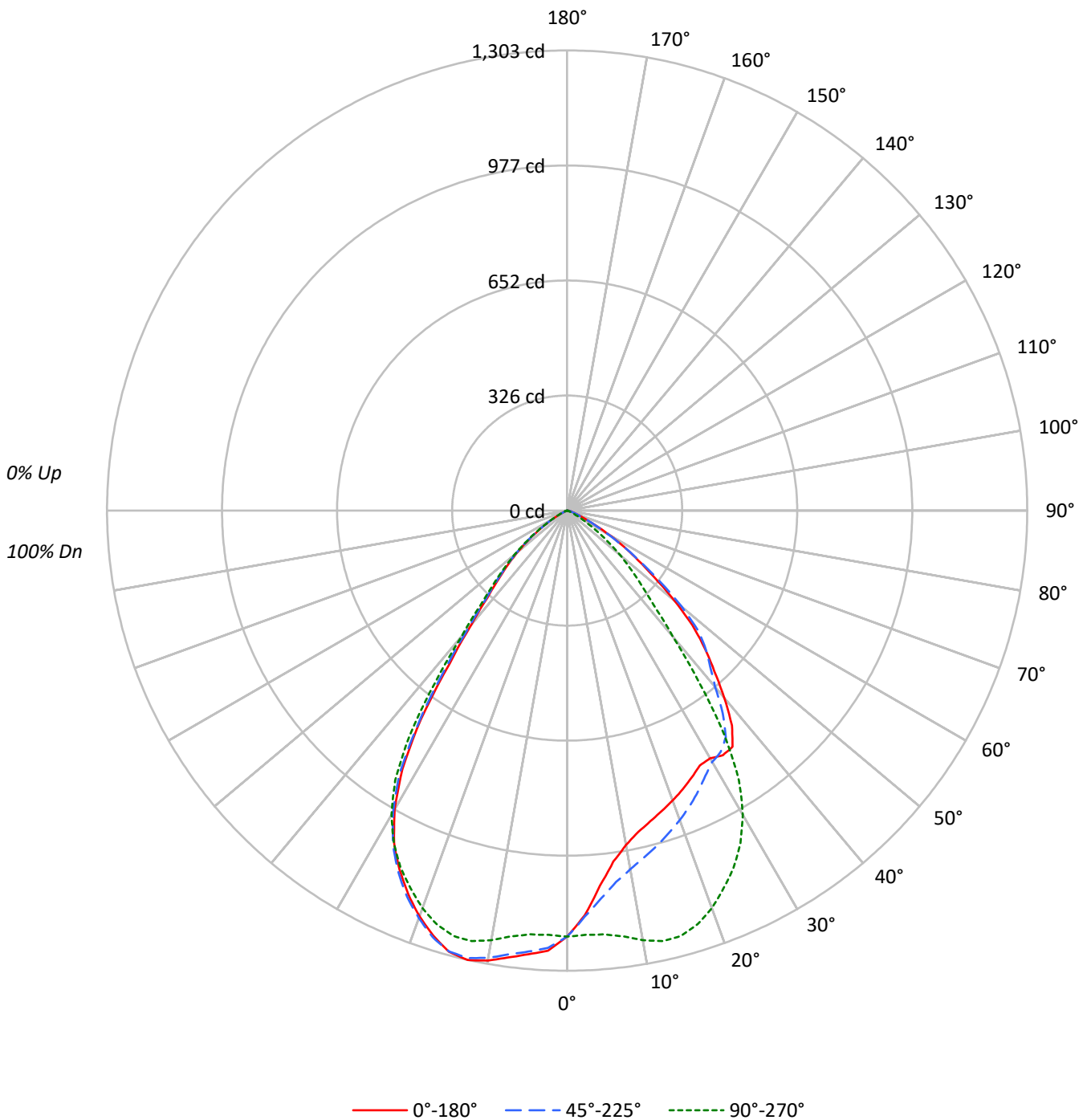
Input Watts (W): 21.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	112.4	6.1
10°-20°	324.7	17.6
20°-30°	471.3	25.5
30°-40°	464.1	25.1
40°-50°	290.9	15.8
50°-60°	140.4	7.6
60°-70°	34.0	1.8
70°-80°	6.9	0.4
80°-90°	1.6	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°	908.4	49.2
0°-40°	1372.5	74.3
0°-60°	1803.9	97.7
0°-90°	1846.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1846.3	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1206	1206	1206	1206	1206	
5°	1066	1102	1204	1253	1261	99
15°	911	982	1247	1292	1293	257
25°	834	878	1116	1131	1122	386
35°	817	783	779	734	722	494
45°	551	555	294	282	274	422
55°	245	253	107	106	101	225
65°	57	57	16	14	12	65
75°	14	12	4	2	1	16
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°	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2
2.5°	1146.6	1139.3	1125.6	1142.1	1142.1	1132.9	1151.3	1140.3	1149.1	1163.0	1150.7
5°	1066.1	1060.0	1048.7	1066.1	1068.3	1059.7	1081.9	1073.7	1086.7	1103.7	1102.2
7.5°	1002.4	994.8	984.4	1002.4	1005.9	1000.2	1021.3	1017.5	1034.7	1056.9	1060.7
10°	960.8	953.0	943.8	960.2	962.7	958.9	980.5	978.3	995.1	1020.8	1030.9
12.5°	931.4	924.7	914.6	932.0	934.9	929.5	949.7	948.8	966.2	993.2	1005.9
15°	910.8	902.9	893.7	908.6	912.4	906.3	925.7	923.8	941.5	968.1	982.4
17.5°	891.4	884.1	874.6	888.6	892.4	886.0	905.1	902.0	917.1	942.4	957.1
20°	873.4	865.5	856.9	871.1	873.4	866.1	885.1	881.0	894.7	918.1	932.3
22.5°	854.7	846.5	837.6	851.5	853.8	846.5	863.8	859.1	871.8	893.0	906.0
25°	834.1	826.5	817.7	830.7	832.5	824.6	843.0	836.9	848.0	866.8	877.5
27.5°	813.5	806.2	796.4	809.7	810.6	803.1	819.8	811.6	820.8	837.9	847.1
30°	810.0	801.7	791.7	802.4	802.7	792.9	808.7	798.9	804.0	816.6	822.0
32.5°	821.1	812.8	802.4	811.3	810.4	799.5	814.7	802.7	804.3	810.9	809.7
35°	816.6	806.9	794.5	804.0	804.0	791.0	806.2	792.0	790.4	791.3	783.4
37.5°	766.3	758.7	746.9	756.1	755.2	745.4	757.1	745.4	740.0	737.7	723.5
40°	692.1	682.9	674.1	683.9	684.8	674.4	689.6	676.3	674.7	668.3	651.5
42.5°	617.0	613.9	605.3	613.5	618.0	609.0	621.8	615.4	616.3	614.8	599.0
45°	551.4	546.0	539.6	549.2	552.1	547.6	560.3	556.5	560.3	568.2	555.2
47.5°	480.8	475.3	468.4	478.6	483.6	475.3	486.2	484.8	490.5	504.2	502.9
50°	395.5	391.7	390.4	391.7	394.8	391.1	398.6	399.0	402.8	421.5	422.7
52.5°	313.1	312.2	307.7	311.9	311.9	305.8	313.4	310.0	313.8	326.4	334.6
55°	244.9	244.0	241.1	244.9	240.9	238.7	240.9	237.3	234.5	244.4	252.9
57.5°	190.8	187.7	184.1	185.7	185.4	180.6	183.2	179.0	176.8	180.4	187.9
60°	136.0	135.0	131.8	133.4	134.6	131.2	133.7	131.8	128.0	130.9	131.2
62.5°	90.4	90.9	89.0	89.3	88.4	87.8	89.3	90.4	89.3	88.1	88.4
65°	57.4	57.1	56.7	57.1	57.7	56.4	57.4	58.0	57.1	57.1	56.7
67.5°	38.0	37.1	36.1	36.8	37.4	36.4	37.4	37.1	37.4	37.1	36.1
70°	25.7	25.3	25.0	25.3	25.3	24.8	25.3	25.0	25.3	25.0	24.1
72.5°	18.7	18.7	18.4	18.7	18.7	18.0	18.4	17.7	18.0	17.7	17.2
75°	13.9	13.9	13.7	13.9	13.7	13.3	13.7	13.3	12.7	12.7	12.0
77.5°	10.1	10.1	10.1	10.1	10.1	9.9	9.9	9.5	9.2	8.9	8.9
80°	7.6	7.3	7.3	7.3	7.3	7.0	7.3	7.0	6.6	6.4	6.1
82.5°	5.4	5.7	5.4	5.4	5.4	5.0	5.4	5.0	5.0	4.7	4.1
85°	4.1	4.1	4.1	4.1	4.1	3.8	3.8	3.8	3.5	3.5	3.1
87.5°	2.2	2.2	2.2	2.6	2.2	2.2	2.2	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°	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2
2.5°	1167.2	1168.8	1165.3	1170.7	1191.5	1174.8	1181.8	1184.0	1199.8	1202.6	1200.7
5°	1122.8	1129.7	1134.2	1146.2	1169.4	1157.3	1169.7	1177.6	1197.9	1204.5	1206.2
7.5°	1087.9	1102.5	1113.3	1132.9	1160.2	1151.0	1169.7	1182.7	1207.4	1215.9	1220.1
10°	1061.9	1084.1	1102.8	1129.7	1160.5	1154.5	1178.8	1197.2	1224.8	1235.0	1240.1
12.5°	1042.3	1069.2	1094.3	1128.5	1161.8	1158.9	1188.4	1209.3	1238.5	1248.6	1254.6
15°	1020.8	1051.8	1081.0	1119.3	1155.1	1154.5	1186.1	1208.3	1238.1	1246.7	1252.4
17.5°	995.1	1028.4	1060.4	1101.8	1137.4	1138.0	1170.0	1191.8	1221.0	1228.1	1231.9
20°	969.1	1002.1	1034.0	1076.8	1111.7	1112.7	1144.0	1164.3	1192.2	1197.9	1198.8
22.5°	941.5	972.2	1004.3	1046.8	1080.3	1081.0	1112.0	1131.1	1154.9	1157.7	1160.2
25°	910.1	940.3	970.3	1012.5	1044.5	1046.5	1074.6	1091.4	1113.3	1115.5	1116.4
27.5°	877.5	902.2	931.1	967.2	999.5	998.3	1024.8	1043.9	1063.5	1062.3	1061.9
30°	844.6	865.2	882.9	917.8	941.5	942.4	967.5	976.7	997.4	994.8	994.4
32.5°	821.5	826.8	831.6	849.3	871.8	863.8	881.0	892.4	906.7	905.8	906.0
35°	779.0	769.1	754.9	757.5	771.0	758.7	767.9	767.5	782.1	778.6	782.8
37.5°	706.3	678.5	646.8	628.8	631.2	615.8	612.6	620.1	625.3	615.4	618.9
40°	629.1	587.9	538.4	497.3	495.0	475.6	472.2	464.5	474.4	466.1	468.7
42.5°	572.0	517.5	452.5	402.4	391.7	375.5	366.0	364.8	367.6	361.9	360.3
45°	528.3	470.3	395.8	338.4	326.4	308.9	299.5	295.9	296.3	294.4	292.8
47.5°	477.0	418.6	343.3	284.6	270.9	254.5	244.9	242.7	244.0	241.5	239.6
50°	405.9	353.7	284.8	231.4	219.3	207.3	199.7	197.4	197.1	195.2	193.9
52.5°	329.6	286.2	226.6	181.9	171.2	159.4	154.0	151.1	151.4	149.5	147.6
55°	255.1	228.1	175.5	137.5	127.7	118.5	113.4	110.0	109.0	107.2	106.2
57.5°	189.8	171.7	131.5	99.2	93.5	84.6	79.6	75.4	74.8	73.9	73.5
60°	133.1	120.1	92.5	70.6	64.0	58.6	53.6	49.4	47.5	47.2	46.3
62.5°	86.2	78.2	60.9	47.2	42.1	38.3	33.3	30.4	29.1	27.9	28.2
65°	53.6	47.5	38.0	30.4	27.6	24.8	21.0	18.4	17.2	15.8	16.1
67.5°	33.3	29.8	24.1	19.6	17.7	15.6	12.7	10.8	9.9	8.9	8.3
70°	22.5	19.3	16.5	13.9	12.7	11.1	9.2	7.6	7.0	6.4	5.7
72.5°	15.8	14.2	12.0	10.4	9.5	8.3	7.0	6.1	5.4	4.7	4.1
75°	11.4	10.1	8.9	7.6	7.0	6.4	5.4	4.7	4.1	3.5	2.8
77.5°	8.3	7.3	6.4	5.7	5.4	4.5	3.8	3.5	3.1	2.6	1.9
80°	5.7	5.0	4.1	3.8	3.8	3.1	2.8	2.6	2.2	1.6	1.2
82.5°	3.8	3.5	3.1	2.8	2.6	2.2	2.2	1.6	1.2	0.9	0.7
85°	2.8	2.6	2.2	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°	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2
2.5°	1217.0	1217.9	1223.2	1219.1	1229.6	1237.2	1233.4	1242.0	1239.2	1238.5	1248.3
5°	1225.1	1227.4	1234.7	1230.9	1242.3	1250.5	1246.7	1256.2	1253.4	1252.7	1262.9
7.5°	1240.9	1243.2	1249.6	1246.4	1258.4	1265.7	1261.0	1271.4	1267.6	1267.3	1277.2
10°	1261.0	1264.2	1269.5	1266.4	1277.5	1283.8	1279.1	1289.2	1285.7	1284.1	1294.9
12.5°	1275.8	1278.1	1283.4	1281.0	1291.7	1296.4	1292.3	1302.2	1297.8	1296.4	1306.0
15°	1272.3	1274.6	1279.1	1276.8	1286.9	1291.4	1286.0	1296.8	1292.3	1289.8	1298.3
17.5°	1250.1	1251.5	1254.6	1252.4	1263.1	1266.1	1260.0	1270.8	1266.6	1262.2	1270.4
20°	1217.5	1217.0	1218.9	1217.9	1226.7	1228.3	1224.5	1232.4	1227.7	1225.1	1230.0
22.5°	1176.9	1176.4	1177.6	1175.0	1184.0	1184.9	1179.2	1188.7	1184.0	1179.2	1187.1
25°	1132.0	1128.5	1127.8	1128.8	1134.8	1135.8	1129.7	1136.7	1130.8	1126.9	1134.6
27.5°	1076.5	1072.1	1071.1	1072.1	1078.1	1073.7	1068.6	1073.7	1067.6	1064.2	1068.9
30°	1008.1	1001.7	998.9	997.0	1003.3	1001.7	990.1	995.7	986.3	981.1	984.6
32.5°	915.9	912.4	904.8	900.3	906.3	894.3	887.0	887.0	883.2	874.6	876.5
35°	787.8	782.5	775.5	771.7	772.6	756.5	744.5	746.9	734.3	732.0	733.0
37.5°	625.9	617.0	614.5	606.6	608.5	594.2	577.8	578.0	571.4	564.4	562.2
40°	470.3	468.7	466.1	459.5	462.1	446.5	440.2	440.6	436.1	431.0	433.5
42.5°	363.5	358.4	356.8	354.6	355.2	352.7	344.5	345.4	341.6	340.3	339.1
45°	295.4	290.0	286.2	288.1	288.1	285.2	282.0	283.9	282.0	279.5	280.8
47.5°	243.4	238.3	236.4	236.1	238.3	236.4	233.3	233.8	233.5	232.6	231.9
50°	194.3	193.0	191.5	190.5	191.5	190.8	187.9	189.6	190.5	187.3	188.2
52.5°	148.0	148.0	147.6	145.5	147.4	145.5	145.2	145.7	144.8	143.6	143.3
55°	108.4	107.4	105.8	105.5	106.2	105.5	104.9	105.3	105.8	102.7	102.7
57.5°	74.2	73.5	72.5	72.5	73.9	72.3	71.3	72.5	71.3	70.1	70.1
60°	47.5	47.2	46.3	46.3	46.3	46.0	45.0	45.3	46.0	44.1	44.4
62.5°	28.5	27.6	27.2	26.9	27.2	26.9	26.9	26.6	26.3	26.3	25.3
65°	15.6	14.9	14.2	14.6	14.6	14.2	14.2	14.2	13.7	13.3	13.0
67.5°	8.0	7.3	7.3	7.0	7.0	7.0	7.0	6.6	6.6	6.6	6.4
70°	5.0	4.7	4.5	4.5	4.5	4.1	4.1	4.1	4.1	4.1	3.8
72.5°	3.5	3.1	2.8	2.8	2.8	2.6	2.6	2.6	2.6	2.2	2.2
75°	2.6	2.2	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°	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2	1206.2
2.5°	1244.8	1242.3	1243.9	1255.6	1250.5	1248.9	1235.6	1247.3
5°	1259.7	1257.8	1257.8	1271.1	1265.0	1263.8	1250.8	1261.0
7.5°	1273.7	1271.8	1272.1	1285.7	1281.0	1279.1	1266.1	1276.1
10°	1291.7	1290.4	1290.7	1303.7	1298.7	1296.8	1283.4	1294.0
12.5°	1302.5	1300.6	1300.6	1314.5	1308.8	1306.0	1293.3	1303.4
15°	1294.2	1291.4	1291.4	1305.3	1299.0	1294.9	1283.8	1293.3
17.5°	1266.1	1263.1	1263.1	1275.2	1270.4	1264.5	1253.1	1261.9
20°	1226.7	1223.2	1222.3	1236.2	1229.6	1224.2	1214.0	1222.7
22.5°	1182.3	1180.7	1177.9	1191.8	1185.9	1180.2	1169.4	1176.0
25°	1129.2	1126.6	1123.7	1137.4	1131.3	1125.6	1117.1	1122.5
27.5°	1062.9	1063.3	1061.6	1072.5	1066.4	1063.3	1052.7	1061.6
30°	982.7	979.2	978.0	990.6	984.9	980.9	967.9	976.4
32.5°	878.2	873.0	866.4	880.7	870.9	867.3	856.3	868.7
35°	726.1	724.4	718.4	730.4	725.1	718.8	711.7	722.3
37.5°	561.3	562.5	561.8	565.1	561.8	557.7	550.2	546.4
40°	428.4	425.3	422.7	428.4	421.8	421.8	417.3	422.2
42.5°	336.0	334.6	337.9	339.1	335.3	334.6	334.1	333.7
45°	277.3	277.3	277.9	279.2	277.9	277.3	275.4	274.1
47.5°	228.5	229.8	228.5	232.6	230.4	229.8	226.0	227.6
50°	185.1	183.5	185.1	186.3	186.6	184.7	182.8	183.8
52.5°	143.6	141.0	140.3	142.3	141.0	141.0	139.8	139.5
55°	101.1	102.0	100.4	102.0	101.5	100.4	99.5	100.8
57.5°	68.5	68.7	68.2	69.1	67.5	67.8	67.5	67.1
60°	44.4	43.0	43.0	44.1	42.5	42.5	42.1	42.1
62.5°	25.3	25.0	25.0	24.8	24.4	24.4	24.4	23.8
65°	13.0	12.7	12.3	12.3	12.3	12.3	12.0	12.0
67.5°	6.4	6.1	6.1	6.4	6.1	6.1	6.1	6.1
70°	3.8	3.8	3.5	3.8	3.5	3.5	3.5	3.5
72.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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)