

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: NEO-RAY

Report Number: P333711-930

Luminaire Tested: **S125RDIW-S1090D1050U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333711-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIW-S1090D1050U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6407.1 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse

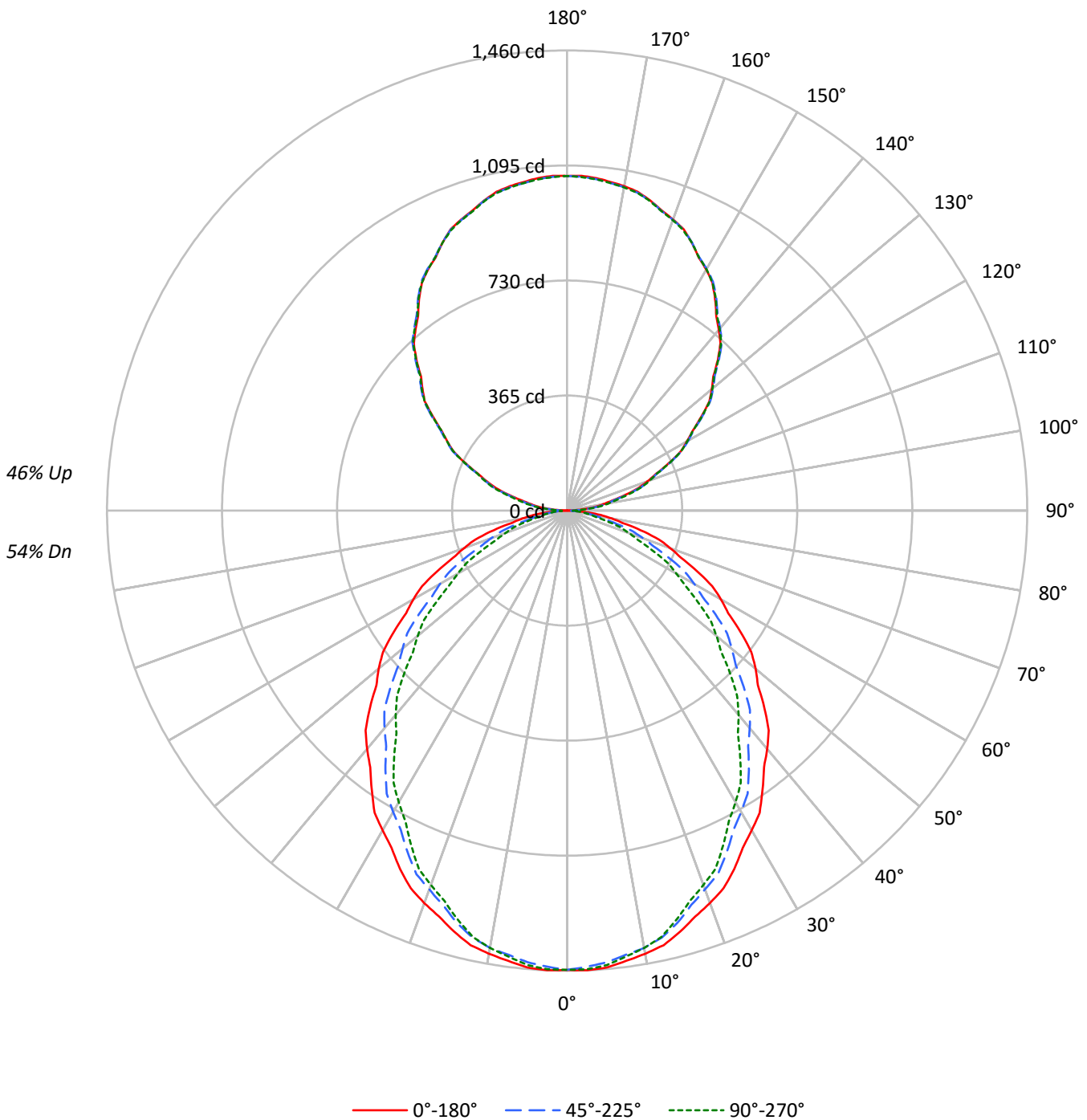
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	53	52	51	46
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	60	53	48	52	47	43	45	41	37	37	34	32	28
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	29	25	30	26	23	26	22	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	18	22	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9412	9412	9412
5°	9433	9326	9383
10°	9362	9239	9239
15°	9250	9052	8978
20°	9108	8790	8685
25°	8941	8533	8345
30°	8733	8232	7970
35°	8521	7923	7550
40°	8323	7599	7136
45°	8082	7238	6685
50°	7840	6845	6215
55°	7560	6469	5713
60°	7279	6013	5174
65°	6946	5483	4557
70°	6567	4823	3928
75°	6041	4065	3266
80°	5322	3195	2741
85°	4483	2608	2445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.0	2.1
10°-20°	382.9	6.0
20°-30°	555.3	8.7
30°-40°	632.9	9.9
40°-50°	616.9	9.6
50°-60°	519.3	8.1
60°-70°	364.0	5.7
70°-80°	187.1	2.9
80°-90°	49.6	0.8
90°-100°	71.1	1.1
100°-110°	210.0	3.3
110°-120°	355.6	5.6
120°-130°	468.0	7.3
130°-140°	524.4	8.2
140°-150°	514.0	8.0
150°-160°	431.7	6.7
160°-170°	287.0	4.5
170°-180°	100.4	1.6
0°-30°	1075.3	16.8
0°-40°	1708.1	26.7
0°-60°	2844.3	44.4
0°-90°	3445.0	53.8
90°-120°	636.7	9.9
90°-150°	2143.1	33.4
90°-180°	2962.0	46.2
0°-180°	6407.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1450	1438	1449	1447	138
15°	1384	1376	1354	1352	1343	390
25°	1255	1237	1198	1183	1171	577
35°	1081	1053	1005	974	958	676
45°	885	851	792	750	732	682
55°	671	635	574	527	507	600
65°	454	416	359	316	298	450
75°	242	208	163	140	131	256
85°	60	42	35	34	33	68
90°	1	7	13	17	20	6
95°	54	56	64	69	71	57
105°	188	193	198	202	205	201
115°	356	359	361	360	359	352
125°	520	524	525	524	523	465
135°	676	680	682	681	678	521
145°	819	822	824	824	822	512
155°	937	937	938	940	937	431
165°	1019	1017	1018	1021	1016	287
175°	1059	1056	1056	1060	1055	101
180°	1062	1062	1062	1062	1062	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1459.9	1459.3	1458.7	1458.1	1457.5	1456.3	1454.3	1452.4	1450.4	1448.5	1450.4
5°	1455.1	1454.1	1453.1	1452.1	1451.2	1449.3	1446.6	1443.9	1441.2	1438.5	1441.0
7.5°	1440.7	1439.8	1438.8	1437.9	1437.0	1434.9	1431.7	1428.5	1425.2	1422.0	1423.8
10°	1427.5	1426.8	1426.0	1425.3	1424.6	1422.5	1419.1	1415.7	1412.3	1408.8	1409.6
12.5°	1412.5	1411.6	1410.7	1409.7	1408.8	1406.1	1401.5	1396.9	1392.3	1387.6	1388.2
15°	1383.5	1382.0	1380.5	1379.1	1377.6	1374.4	1369.2	1364.1	1358.9	1353.8	1353.6
17.5°	1350.7	1348.4	1346.2	1343.9	1341.7	1337.3	1330.9	1324.5	1317.9	1311.5	1310.3
20°	1325.2	1322.7	1320.3	1317.8	1315.4	1310.3	1302.4	1294.6	1286.8	1279.0	1277.7
22.5°	1297.0	1294.5	1292.1	1289.6	1287.2	1281.9	1273.7	1265.4	1257.2	1249.0	1246.6
25°	1254.7	1251.1	1247.4	1243.7	1240.1	1233.7	1224.7	1215.6	1206.6	1197.5	1194.3
27.5°	1206.3	1201.8	1197.3	1192.9	1188.5	1181.5	1171.7	1162.0	1152.3	1142.6	1138.2
30°	1171.1	1166.4	1161.8	1157.2	1152.5	1145.0	1134.7	1124.5	1114.2	1103.9	1098.3
32.5°	1136.7	1131.3	1125.8	1120.5	1115.0	1107.1	1096.6	1086.1	1075.6	1065.2	1059.0
35°	1080.8	1075.0	1069.1	1063.2	1057.4	1048.9	1037.9	1026.9	1015.9	1004.9	997.8
37.5°	1026.0	1018.9	1011.7	1004.6	997.4	988.2	976.8	965.5	954.1	942.8	934.3
40°	987.2	979.9	972.6	965.2	957.9	948.4	936.6	924.9	913.1	901.4	892.1
42.5°	946.7	939.2	931.7	924.1	916.6	906.8	894.6	882.6	870.4	858.3	849.4
45°	884.9	877.8	870.7	863.6	856.6	846.3	832.8	819.4	805.9	792.5	782.7
47.5°	820.8	813.3	805.8	798.4	790.9	780.4	766.9	753.3	739.7	726.2	716.1
50°	780.3	772.3	764.2	756.1	748.0	737.0	723.1	709.1	695.2	681.3	671.0
52.5°	736.3	728.1	719.7	711.5	703.3	692.5	679.4	666.2	653.1	639.9	628.8
55°	671.4	663.6	655.7	647.9	640.1	629.3	615.6	601.9	588.2	574.5	563.5
57.5°	605.8	597.5	589.1	580.7	572.3	561.6	548.4	535.2	522.0	508.7	498.0
60°	563.5	555.0	546.4	537.9	529.3	518.4	505.2	492.0	478.7	465.5	454.8
62.5°	518.6	510.5	502.3	494.1	485.9	475.2	461.8	448.3	435.0	421.5	411.6
65°	454.5	446.2	437.9	429.6	421.3	410.7	397.7	384.7	371.8	358.8	349.0
67.5°	390.9	382.6	374.3	366.0	357.7	347.3	334.8	322.5	310.1	297.6	288.7
70°	347.8	339.5	331.2	322.9	314.5	304.3	292.0	279.8	267.6	255.4	247.8
72.5°	305.6	297.4	289.3	281.2	273.0	263.3	251.8	240.4	228.9	217.5	210.5
75°	242.1	234.8	227.5	220.1	212.8	204.0	193.7	183.4	173.2	162.9	157.5
77.5°	179.2	173.3	167.5	161.6	155.7	148.6	140.5	132.2	124.0	115.8	112.0
80°	143.1	137.2	131.3	125.5	119.6	113.2	106.4	99.5	92.7	85.9	83.6
82.5°	107.9	102.6	97.3	92.0	86.7	81.8	77.0	72.3	67.7	62.9	62.0
85°	60.5	56.1	51.7	47.3	42.9	40.1	38.9	37.7	36.4	35.2	35.0
87.5°	20.4	19.3	18.3	17.2	16.1	15.6	15.7	15.7	15.8	15.8	16.1
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.7	11.9	13.2	14.1
92.5°	20.0	21.0	22.0	23.1	24.1	25.4	27.0	28.5	30.2	31.7	32.9
95°	53.7	54.1	54.5	54.8	55.2	56.3	58.1	59.9	61.8	63.6	64.9
97.5°	89.2	89.4	89.5	89.7	89.8	91.2	93.7	96.2	98.7	101.3	102.5
100°	115.7	115.7	115.7	115.7	115.7	116.8	119.2	121.6	124.0	126.4	128.1
102.5°	144.1	144.8	145.5	146.3	147.0	148.0	149.2	150.4	151.6	152.9	154.7
105°	188.3	189.2	190.2	191.1	192.0	193.1	194.1	195.3	196.3	197.5	198.5
107.5°	237.3	238.1	239.1	240.0	240.9	241.8	242.6	243.5	244.3	245.2	245.7
110°	270.9	271.9	272.8	273.7	274.7	275.4	275.9	276.5	277.0	277.6	278.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	305.3	305.8	306.3	306.8	307.2	307.9	308.5	309.2	309.9	310.6	310.9
115°	356.0	356.8	357.5	358.2	359.0	359.5	359.9	360.3	360.6	361.0	360.9
117.5°	406.9	407.2	407.6	407.9	408.3	408.6	409.0	409.3	409.6	409.9	410.1
120°	438.6	439.6	440.5	441.4	442.3	442.9	443.0	443.3	443.4	443.6	443.6
122.5°	473.0	473.4	473.7	474.0	474.3	474.7	475.2	475.7	476.2	476.7	476.5
125°	519.6	520.7	521.8	522.9	524.0	524.6	524.9	525.1	525.2	525.4	525.1
127.5°	569.2	569.8	570.5	571.0	571.7	572.1	572.3	572.6	572.7	573.0	572.8
130°	598.9	599.8	600.8	601.7	602.6	603.2	603.6	604.0	604.4	604.7	604.5
132.5°	628.7	630.1	631.7	633.2	634.7	635.4	635.4	635.3	635.2	635.1	635.0
135°	675.7	676.9	677.9	679.1	680.2	680.8	681.0	681.2	681.3	681.5	681.5
137.5°	720.1	721.1	722.2	723.3	724.3	725.0	725.5	725.9	726.3	726.7	726.8
140°	748.4	749.3	750.3	751.2	752.1	752.8	753.4	754.0	754.5	755.0	755.5
142.5°	776.9	777.6	778.4	779.2	780.0	780.7	781.4	782.1	782.8	783.5	783.7
145°	818.6	819.4	820.1	820.8	821.6	822.2	822.8	823.4	823.9	824.4	824.4
147.5°	857.4	857.8	858.2	858.5	858.9	859.4	859.8	860.2	860.7	861.1	861.6
150°	883.1	883.0	882.7	882.6	882.4	882.6	883.4	884.1	884.8	885.6	885.6
152.5°	904.2	904.5	904.7	905.1	905.3	905.6	905.9	906.1	906.4	906.8	907.2
155°	936.8	936.8	936.8	936.8	936.8	936.9	937.1	937.3	937.4	937.7	938.4
157.5°	965.9	965.5	965.1	964.7	964.3	964.2	964.3	964.5	964.7	964.9	965.6
160°	983.1	982.5	981.9	981.5	980.9	980.7	980.9	981.0	981.2	981.5	982.2
162.5°	998.3	997.8	997.4	997.0	996.6	996.5	996.5	996.5	996.6	996.6	997.5
165°	1018.6	1018.2	1017.8	1017.5	1017.1	1017.0	1017.2	1017.4	1017.6	1017.7	1018.5
167.5°	1035.8	1035.0	1034.3	1033.6	1032.8	1032.5	1032.5	1032.5	1032.5	1032.5	1033.6
170°	1045.1	1044.3	1043.6	1042.8	1042.1	1041.7	1041.7	1041.7	1041.7	1041.7	1042.8
172.5°	1051.7	1050.9	1050.2	1049.5	1048.7	1048.3	1048.3	1048.3	1048.3	1048.3	1049.5
175°	1059.1	1058.3	1057.6	1056.9	1056.1	1055.7	1055.7	1055.7	1055.7	1055.7	1056.9
177.5°	1062.9	1062.3	1061.7	1061.1	1060.5	1060.1	1060.0	1059.9	1059.7	1059.6	1060.5
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1452.4	1454.3	1456.3	1457.1	1456.9	1456.8	1456.5	1456.4
5°	1443.4	1445.9	1448.3	1449.3	1448.8	1448.3	1447.8	1447.3
7.5°	1425.5	1427.2	1428.9	1429.5	1428.9	1428.4	1427.8	1427.3
10°	1410.3	1411.0	1411.8	1411.8	1411.0	1410.3	1409.6	1408.8
12.5°	1388.8	1389.3	1389.8	1389.5	1388.4	1387.3	1386.2	1385.0
15°	1353.3	1353.1	1352.8	1351.6	1349.4	1347.2	1345.0	1342.8
17.5°	1309.0	1307.8	1306.6	1305.1	1303.3	1301.5	1299.7	1297.9
20°	1276.5	1275.3	1274.1	1272.4	1270.2	1268.0	1265.8	1263.6
22.5°	1244.2	1241.8	1239.4	1237.3	1235.5	1233.7	1231.8	1230.0
25°	1191.2	1188.0	1184.8	1181.9	1179.2	1176.5	1173.8	1171.1
27.5°	1133.8	1129.4	1124.9	1121.4	1118.8	1116.1	1113.5	1111.0
30°	1092.7	1087.0	1081.4	1077.5	1075.3	1073.1	1070.9	1068.7
32.5°	1052.8	1046.5	1040.3	1035.8	1033.1	1030.3	1027.4	1024.7
35°	990.7	983.6	976.5	971.3	967.8	964.4	961.0	957.6
37.5°	925.8	917.3	908.7	902.9	899.5	896.2	892.8	889.5
40°	882.8	873.5	864.2	858.1	855.2	852.2	849.3	846.4
42.5°	840.5	831.5	822.6	816.0	811.7	807.5	803.2	798.8
45°	772.9	763.1	753.3	746.6	742.9	739.2	735.6	731.9
47.5°	706.0	695.9	685.9	678.8	674.7	670.7	666.7	662.6
50°	660.7	650.4	640.2	633.2	629.6	625.9	622.2	618.6
52.5°	617.8	606.7	595.7	588.3	584.7	581.0	577.3	573.6
55°	552.5	541.5	530.5	523.0	519.1	515.2	511.3	507.4
57.5°	487.2	476.5	465.7	458.5	455.1	451.6	448.1	444.7
60°	444.0	433.3	422.5	415.3	411.6	408.0	404.3	400.6
62.5°	401.6	391.6	381.6	374.8	371.1	367.5	363.8	360.1
65°	339.2	329.5	319.7	312.9	309.2	305.6	301.9	298.2
67.5°	279.7	270.8	261.8	255.8	252.9	250.0	247.0	244.1
70°	240.2	232.6	225.0	219.7	216.8	213.9	210.9	208.0
72.5°	203.5	196.5	189.5	185.0	183.0	181.1	179.1	177.2
75°	152.1	146.8	141.4	137.8	136.1	134.4	132.6	130.9
77.5°	108.3	104.5	100.7	98.2	96.9	95.6	94.4	93.1
80°	81.4	79.2	77.0	75.7	75.2	74.7	74.2	73.7
82.5°	60.9	59.8	58.9	58.2	57.9	57.6	57.3	57.0
85°	34.7	34.5	34.2	34.0	33.8	33.5	33.3	33.0
87.5°	16.2	16.4	16.6	16.6	16.6	16.5	16.4	16.3
90°	15.1	16.0	16.9	17.6	18.2	18.8	19.2	19.8
92.5°	34.2	35.4	36.6	37.3	37.7	38.2	38.6	39.0
95°	66.2	67.4	68.7	69.5	70.0	70.3	70.7	71.0
97.5°	103.7	104.9	106.2	106.8	107.0	107.3	107.5	107.7
100°	129.7	131.3	133.0	134.0	134.4	134.8	135.1	135.5
102.5°	156.5	158.2	160.0	161.2	161.7	162.2	162.7	163.2
105°	199.7	200.7	201.9	202.7	203.3	203.7	204.3	204.9
107.5°	246.3	246.9	247.4	247.7	247.6	247.6	247.5	247.5
110°	278.7	279.2	279.8	280.0	279.8	279.6	279.4	279.2





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	311.1	311.4	311.6	311.6	311.3	311.0	310.6	310.3
115°	360.6	360.4	360.3	360.1	359.9	359.7	359.5	359.4
117.5°	410.2	410.3	410.5	410.2	409.4	408.7	408.0	407.2
120°	443.6	443.6	443.6	443.3	442.5	441.8	441.1	440.3
122.5°	476.4	476.2	476.1	475.7	475.2	474.5	473.9	473.4
125°	524.6	524.3	523.9	523.7	523.5	523.3	523.1	522.9
127.5°	572.6	572.4	572.3	572.0	571.6	571.3	570.9	570.5
130°	604.4	604.1	604.0	603.7	603.3	603.0	602.6	602.3
132.5°	634.7	634.5	634.4	634.1	633.5	633.0	632.5	631.9
135°	681.5	681.5	681.5	681.2	680.4	679.7	679.0	678.2
137.5°	727.1	727.3	727.5	727.2	726.3	725.4	724.4	723.5
140°	755.8	756.2	756.5	756.3	755.4	754.4	753.5	752.6
142.5°	783.9	784.2	784.4	784.0	783.1	782.2	781.3	780.3
145°	824.4	824.4	824.4	824.2	823.6	823.0	822.6	822.0
147.5°	862.0	862.4	862.9	862.5	861.3	860.0	858.8	857.5
150°	885.6	885.6	885.6	885.4	885.0	884.7	884.3	883.9
152.5°	907.6	908.1	908.5	908.4	907.8	907.1	906.4	905.7
155°	939.1	939.9	940.6	940.4	939.6	938.7	937.8	936.8
157.5°	966.4	967.1	967.8	967.6	966.4	965.2	963.9	962.8
160°	982.9	983.7	984.4	984.2	983.3	982.4	981.5	980.6
162.5°	998.4	999.2	1000.1	1000.0	999.0	997.9	996.9	995.8
165°	1019.2	1019.9	1020.7	1020.5	1019.5	1018.3	1017.2	1016.1
167.5°	1034.7	1035.8	1036.9	1036.9	1035.8	1034.6	1033.5	1032.3
170°	1043.9	1045.1	1046.1	1046.0	1044.7	1043.5	1042.2	1040.9
172.5°	1050.5	1051.7	1052.7	1052.7	1051.6	1050.4	1049.3	1048.1
175°	1057.9	1059.1	1060.2	1060.1	1058.8	1057.5	1056.2	1054.9
177.5°	1061.4	1062.3	1063.1	1063.0	1062.0	1060.9	1060.0	1058.9
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5

(END OF REPORT)