

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: P333711-935

Luminaire Tested: **S125RDIW-S1090D1050U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333711-935  
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-S1090D1050U935-4F0-1E-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: 6766.3 lumens  
Efficiency: N/A  
Efficacy: 110.6 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

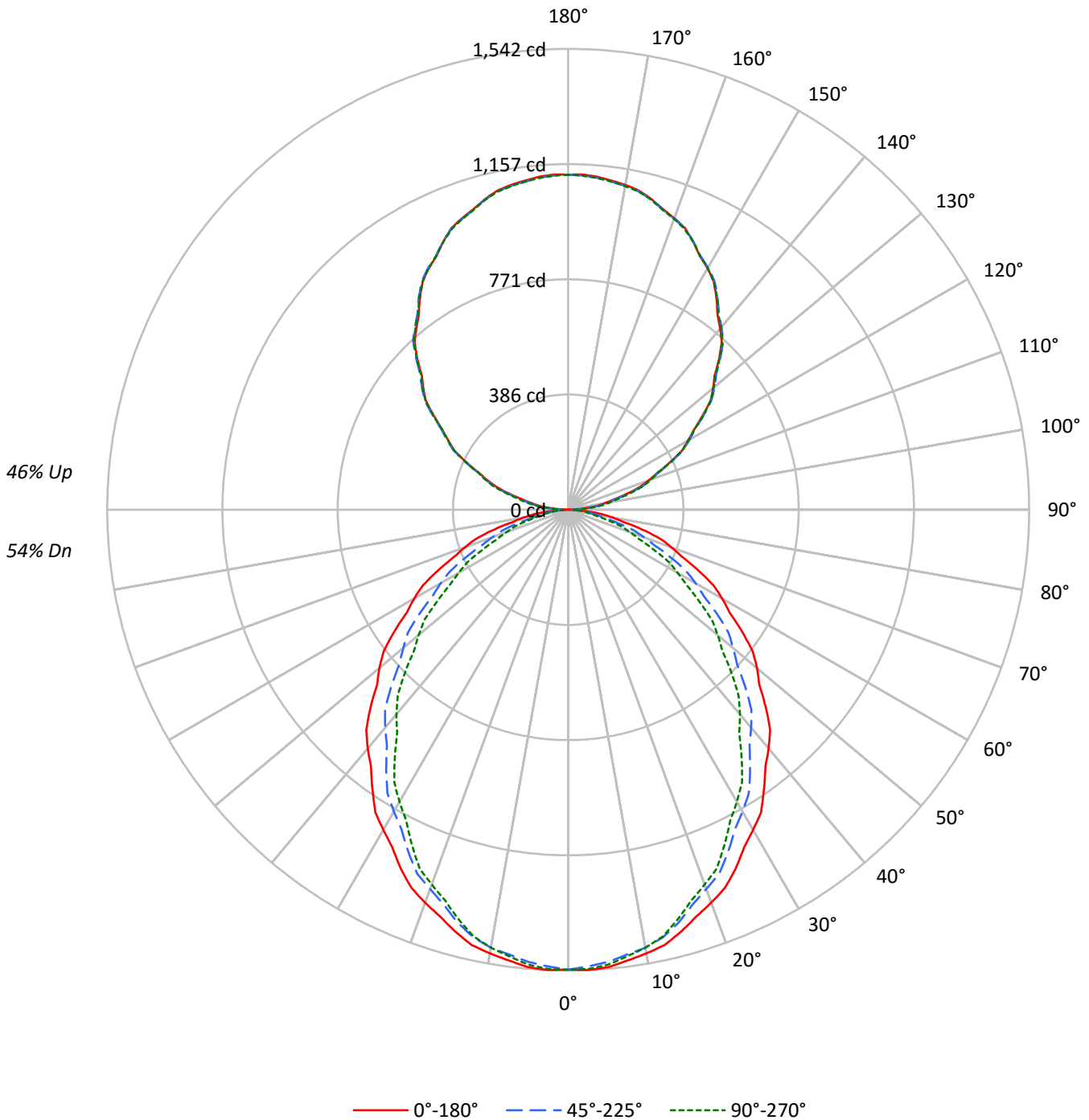
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	9939	9939	9939
5°	9962	9848	9909
10°	9886	9757	9757
15°	9768	9559	9482
20°	9619	9283	9171
25°	9443	9012	8813
30°	9223	8694	8416
35°	8999	8367	7972
40°	8790	8025	7535
45°	8535	7644	7059
50°	8280	7229	6563
55°	7983	6831	6033
60°	7687	6350	5465
65°	7335	5790	4814
70°	6936	5093	4147
75°	6381	4292	3451
80°	5620	3373	2894
85°	4735	2757	2586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	2.1
10°-20°	404.4	6.0
20°-30°	586.4	8.7
30°-40°	668.3	9.9
40°-50°	651.5	9.6
50°-60°	548.4	8.1
60°-70°	384.4	5.7
70°-80°	197.6	2.9
80°-90°	52.4	0.8
90°-100°	75.1	1.1
100°-110°	221.7	3.3
110°-120°	375.6	5.6
120°-130°	494.3	7.3
130°-140°	553.8	8.2
140°-150°	542.8	8.0
150°-160°	455.9	6.7
160°-170°	303.0	4.5
170°-180°	106.1	1.6
0°-30°	1135.5	16.8
0°-40°	1803.9	26.7
0°-60°	3003.7	44.4
0°-90°	3638.1	53.8
90°-120°	672.4	9.9
90°-150°	2263.2	33.4
90°-180°	3128.0	46.2
0°-180°	6766.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1537	1532	1519	1530	1528	146
15°	1461	1453	1430	1428	1418	412
25°	1325	1306	1265	1250	1237	609
35°	1141	1112	1061	1028	1011	714
45°	934	899	837	792	773	721
55°	709	670	607	556	536	634
65°	480	439	379	334	315	475
75°	256	220	172	147	138	271
85°	64	44	37	36	35	72
90°	1	8	14	18	21	6
95°	57	59	67	73	75	61
105°	199	203	208	214	216	212
115°	376	379	381	380	380	372
125°	549	554	555	553	552	491
135°	714	719	720	720	716	550
145°	864	868	871	870	868	540
155°	989	989	990	993	989	455
165°	1076	1074	1075	1078	1073	303
175°	1118	1115	1115	1120	1114	106
180°	1121	1121	1121	1121	1121	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1541.7	1541.1	1540.5	1539.8	1539.2	1537.9	1535.9	1533.8	1531.7	1529.7	1531.7
5°	1536.6	1535.6	1534.6	1533.5	1532.5	1530.5	1527.7	1524.8	1522.0	1519.1	1521.7
7.5°	1521.5	1520.5	1519.5	1518.5	1517.5	1515.4	1511.9	1508.6	1505.1	1501.8	1503.6
10°	1507.5	1506.8	1506.0	1505.2	1504.4	1502.3	1498.7	1495.0	1491.4	1487.8	1488.6
12.5°	1491.7	1490.7	1489.8	1488.8	1487.8	1484.9	1480.1	1475.2	1470.3	1465.4	1466.0
15°	1461.0	1459.5	1457.9	1456.4	1454.8	1451.4	1446.0	1440.5	1435.1	1429.7	1429.4
17.5°	1426.4	1424.0	1421.7	1419.3	1416.9	1412.3	1405.5	1398.7	1391.8	1385.0	1383.7
20°	1399.5	1396.9	1394.3	1391.7	1389.1	1383.7	1375.4	1367.2	1358.9	1350.7	1349.4
22.5°	1369.7	1367.1	1364.5	1361.9	1359.3	1353.8	1345.1	1336.4	1327.7	1319.0	1316.5
25°	1325.1	1321.2	1317.3	1313.5	1309.6	1302.9	1293.3	1283.8	1274.2	1264.6	1261.3
27.5°	1273.9	1269.2	1264.5	1259.8	1255.1	1247.7	1237.4	1227.2	1216.9	1206.7	1202.0
30°	1236.7	1231.8	1226.9	1222.0	1217.1	1209.2	1198.3	1187.5	1176.6	1165.8	1159.9
32.5°	1200.4	1194.7	1189.0	1183.3	1177.5	1169.2	1158.0	1147.0	1135.9	1124.9	1118.4
35°	1141.4	1135.2	1129.0	1122.8	1116.6	1107.7	1096.1	1084.4	1072.8	1061.2	1053.7
37.5°	1083.5	1076.0	1068.4	1060.9	1053.3	1043.6	1031.6	1019.6	1007.6	995.7	986.6
40°	1042.6	1034.8	1027.1	1019.3	1011.6	1001.5	989.1	976.7	964.3	951.9	942.1
42.5°	999.8	991.9	984.0	975.9	968.0	957.6	944.8	932.0	919.2	906.4	897.0
45°	934.5	927.0	919.5	912.1	904.6	893.7	879.5	865.3	851.1	836.9	826.6
47.5°	866.9	858.9	851.0	843.2	835.3	824.1	809.9	795.5	781.2	766.9	756.2
50°	824.1	815.5	807.0	798.5	790.0	778.3	763.6	748.9	734.2	719.5	708.6
52.5°	777.6	768.9	760.1	751.4	742.7	731.3	717.5	703.5	689.7	675.8	664.1
55°	709.0	700.8	692.5	684.2	676.0	664.6	650.1	635.7	621.2	606.7	595.1
57.5°	639.7	630.9	622.1	613.2	604.4	593.1	579.1	565.2	551.2	537.3	525.9
60°	595.1	586.1	577.0	568.0	559.0	547.4	533.5	519.5	505.6	491.6	480.3
62.5°	547.7	539.1	530.5	521.8	513.2	501.8	487.7	473.5	459.3	445.1	434.6
65°	480.0	471.2	462.4	453.7	444.9	433.7	420.0	406.3	392.6	378.9	368.6
67.5°	412.8	404.1	395.3	386.5	377.7	366.8	353.6	340.5	327.4	314.3	304.9
70°	367.3	358.5	349.7	341.0	332.2	321.3	308.4	295.5	282.6	269.7	261.7
72.5°	322.7	314.1	305.5	297.0	288.3	278.0	266.0	253.8	241.8	229.7	222.3
75°	255.7	248.0	240.2	232.5	224.7	215.4	204.6	193.7	182.9	172.0	166.3
77.5°	189.2	183.0	176.8	170.7	164.5	157.0	148.4	139.7	131.0	122.3	118.3
80°	151.1	144.9	138.7	132.5	126.3	119.6	112.4	105.1	97.9	90.7	88.3
82.5°	113.9	108.3	102.7	97.2	91.6	86.4	81.4	76.4	71.5	66.5	65.4
85°	63.9	59.2	54.6	49.9	45.3	42.4	41.1	39.8	38.5	37.2	36.9
87.5°	21.5	20.4	19.3	18.2	17.0	16.4	16.5	16.6	16.7	16.7	17.0
90°	0.9	2.4	4.0	5.5	7.1	8.5	9.9	11.3	12.6	13.9	14.9
92.5°	21.1	22.2	23.2	24.4	25.5	26.9	28.5	30.1	31.9	33.5	34.8
95°	56.7	57.1	57.5	57.9	58.3	59.4	61.4	63.3	65.3	67.2	68.5
97.5°	94.2	94.4	94.5	94.7	94.9	96.3	98.9	101.6	104.3	106.9	108.2
100°	122.2	122.2	122.2	122.2	122.2	123.4	125.9	128.5	131.0	133.5	135.3
102.5°	152.1	152.9	153.7	154.5	155.2	156.3	157.6	158.9	160.1	161.4	163.3
105°	198.9	199.8	200.9	201.8	202.8	203.9	205.0	206.2	207.3	208.5	209.7
107.5°	250.6	251.5	252.5	253.5	254.4	255.4	256.2	257.2	258.0	258.9	259.5
110°	286.1	287.1	288.1	289.0	290.1	290.8	291.4	292.0	292.6	293.2	293.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	322.4	323.0	323.5	324.0	324.4	325.1	325.8	326.6	327.3	328.0	328.3
115°	376.0	376.8	377.5	378.3	379.1	379.7	380.0	380.5	380.8	381.3	381.1
117.5°	429.7	430.1	430.4	430.8	431.2	431.5	431.9	432.2	432.6	432.9	433.1
120°	463.2	464.3	465.2	466.1	467.1	467.7	467.9	468.1	468.3	468.5	468.5
122.5°	499.6	499.9	500.2	500.6	500.9	501.4	501.9	502.4	502.9	503.4	503.3
125°	548.7	549.9	551.0	552.2	553.4	554.1	554.3	554.5	554.7	554.8	554.5
127.5°	601.1	601.8	602.4	603.0	603.7	604.2	604.4	604.7	604.9	605.1	604.9
130°	632.5	633.4	634.5	635.4	636.4	637.1	637.5	637.8	638.3	638.6	638.4
132.5°	663.9	665.5	667.1	668.7	670.3	671.1	671.0	670.9	670.8	670.7	670.5
135°	713.6	714.8	715.9	717.1	718.3	718.9	719.2	719.4	719.5	719.7	719.7
137.5°	760.4	761.6	762.7	763.8	764.9	765.7	766.1	766.5	767.0	767.4	767.6
140°	790.4	791.3	792.4	793.3	794.3	795.0	795.7	796.3	796.8	797.4	797.8
142.5°	820.4	821.2	822.1	822.9	823.7	824.5	825.2	826.0	826.6	827.4	827.6
145°	864.5	865.3	866.1	866.9	867.6	868.3	868.9	869.5	870.1	870.6	870.6
147.5°	905.4	905.9	906.3	906.6	907.1	907.6	908.0	908.4	909.0	909.4	909.9
150°	932.6	932.5	932.2	932.0	931.9	932.1	932.9	933.7	934.4	935.2	935.2
152.5°	954.9	955.2	955.5	955.8	956.1	956.3	956.7	956.9	957.3	957.6	958.0
155°	989.3	989.3	989.3	989.3	989.3	989.4	989.6	989.8	990.0	990.2	991.0
157.5°	1020.0	1019.6	1019.2	1018.7	1018.3	1018.2	1018.4	1018.6	1018.8	1019.0	1019.8
160°	1038.2	1037.6	1037.0	1036.5	1035.9	1035.7	1035.9	1036.0	1036.2	1036.5	1037.2
162.5°	1054.2	1053.8	1053.3	1052.9	1052.5	1052.3	1052.4	1052.4	1052.5	1052.5	1053.4
165°	1075.7	1075.3	1074.9	1074.5	1074.1	1074.0	1074.3	1074.4	1074.6	1074.8	1075.6
167.5°	1093.8	1093.0	1092.3	1091.5	1090.7	1090.4	1090.4	1090.4	1090.4	1090.4	1091.5
170°	1103.6	1102.9	1102.1	1101.3	1100.5	1100.1	1100.1	1100.1	1100.1	1100.1	1101.3
172.5°	1110.6	1109.8	1109.1	1108.3	1107.5	1107.1	1107.1	1107.1	1107.1	1107.1	1108.3
175°	1118.4	1117.7	1116.9	1116.1	1115.3	1114.9	1114.9	1114.9	1114.9	1114.9	1116.1
177.5°	1122.5	1121.8	1121.2	1120.6	1120.0	1119.6	1119.4	1119.3	1119.1	1119.0	1119.9
180°	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1533.8	1535.9	1537.9	1538.8	1538.6	1538.4	1538.2	1538.0
5°	1524.3	1526.9	1529.5	1530.5	1530.0	1529.5	1529.0	1528.4
7.5°	1505.4	1507.2	1509.0	1509.6	1509.0	1508.5	1507.9	1507.3
10°	1489.4	1490.1	1490.9	1490.9	1490.1	1489.4	1488.6	1487.8
12.5°	1466.6	1467.1	1467.7	1467.4	1466.2	1465.1	1463.9	1462.7
15°	1429.2	1428.9	1428.7	1427.4	1425.0	1422.7	1420.4	1418.1
17.5°	1382.4	1381.1	1379.8	1378.3	1376.3	1374.4	1372.5	1370.6
20°	1348.1	1346.8	1345.5	1343.7	1341.4	1339.0	1336.7	1334.4
22.5°	1314.0	1311.4	1308.9	1306.7	1304.8	1302.9	1300.9	1299.0
25°	1257.9	1254.6	1251.2	1248.1	1245.3	1242.4	1239.6	1236.7
27.5°	1197.3	1192.7	1187.9	1184.2	1181.5	1178.7	1176.0	1173.3
30°	1153.9	1148.0	1142.0	1137.9	1135.6	1133.2	1130.9	1128.6
32.5°	1111.8	1105.2	1098.6	1093.9	1091.0	1088.0	1085.0	1082.1
35°	1046.2	1038.7	1031.2	1025.7	1022.1	1018.5	1014.9	1011.2
37.5°	977.7	968.7	959.7	953.5	949.9	946.4	942.9	939.4
40°	932.3	922.5	912.7	906.2	903.1	900.0	896.9	893.8
42.5°	887.6	878.1	868.7	861.8	857.2	852.7	848.2	843.6
45°	816.2	805.9	795.6	788.4	784.5	780.7	776.8	772.9
47.5°	745.6	734.9	724.4	716.9	712.6	708.3	704.0	699.7
50°	697.8	686.9	676.1	668.7	664.9	661.0	657.1	653.2
52.5°	652.5	640.8	629.0	621.3	617.4	613.5	609.7	605.8
55°	583.5	571.9	560.3	552.3	548.2	544.1	539.9	535.8
57.5°	514.5	503.2	491.8	484.2	480.6	476.9	473.2	469.6
60°	468.9	457.5	446.2	438.6	434.7	430.8	427.0	423.1
62.5°	424.1	413.5	403.0	395.8	391.9	388.1	384.2	380.3
65°	358.3	347.9	337.6	330.5	326.6	322.7	318.8	315.0
67.5°	295.4	285.9	276.5	270.2	267.1	264.0	260.9	257.8
70°	253.7	245.6	237.6	232.0	228.9	225.8	222.7	219.6
72.5°	214.9	207.5	200.1	195.4	193.3	191.2	189.2	187.1
75°	160.7	155.0	149.3	145.5	143.7	141.9	140.1	138.3
77.5°	114.3	110.4	106.3	103.7	102.4	101.0	99.7	98.3
80°	86.0	83.7	81.4	79.9	79.4	78.9	78.4	77.8
82.5°	64.3	63.2	62.2	61.5	61.1	60.8	60.5	60.2
85°	36.7	36.4	36.2	35.9	35.6	35.4	35.1	34.9
87.5°	17.1	17.3	17.5	17.6	17.5	17.4	17.3	17.2
90°	15.9	16.9	17.8	18.6	19.2	19.8	20.3	20.9
92.5°	36.1	37.4	38.7	39.4	39.9	40.3	40.7	41.2
95°	69.9	71.2	72.6	73.4	73.9	74.2	74.6	75.0
97.5°	109.5	110.8	112.1	112.8	113.0	113.3	113.6	113.7
100°	137.0	138.7	140.4	141.5	141.9	142.3	142.7	143.1
102.5°	165.2	167.1	169.0	170.2	170.7	171.3	171.9	172.4
105°	210.9	212.0	213.2	214.0	214.6	215.2	215.8	216.4
107.5°	260.1	260.7	261.2	261.6	261.5	261.5	261.4	261.4
110°	294.3	294.9	295.5	295.7	295.5	295.2	295.1	294.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	328.6	328.8	329.1	329.1	328.7	328.4	328.0	327.7
115°	380.8	380.6	380.5	380.3	380.0	379.9	379.7	379.5
117.5°	433.2	433.3	433.5	433.2	432.4	431.6	430.8	430.1
120°	468.5	468.5	468.5	468.1	467.4	466.6	465.8	465.0
122.5°	503.1	502.9	502.7	502.4	501.8	501.1	500.5	499.9
125°	554.1	553.7	553.3	553.0	552.8	552.6	552.4	552.2
127.5°	604.7	604.5	604.3	604.1	603.6	603.3	602.9	602.5
130°	638.3	638.0	637.8	637.6	637.1	636.8	636.4	636.0
132.5°	670.3	670.1	669.9	669.6	669.0	668.5	668.0	667.4
135°	719.7	719.7	719.7	719.4	718.6	717.8	717.0	716.3
137.5°	767.8	768.1	768.3	767.9	767.0	766.0	765.0	764.1
140°	798.1	798.6	798.9	798.7	797.7	796.7	795.7	794.8
142.5°	827.9	828.1	828.4	827.9	827.0	826.0	825.1	824.1
145°	870.6	870.6	870.6	870.4	869.8	869.2	868.7	868.1
147.5°	910.3	910.8	911.3	910.9	909.6	908.2	906.9	905.6
150°	935.2	935.2	935.2	935.0	934.6	934.3	933.8	933.5
152.5°	958.5	959.0	959.4	959.3	958.6	957.9	957.2	956.5
155°	991.8	992.6	993.3	993.2	992.2	991.3	990.3	989.3
157.5°	1020.5	1021.3	1022.1	1021.8	1020.5	1019.3	1018.0	1016.8
160°	1038.0	1038.8	1039.6	1039.4	1038.5	1037.5	1036.6	1035.5
162.5°	1054.4	1055.2	1056.2	1056.1	1055.0	1053.9	1052.7	1051.6
165°	1076.3	1077.1	1077.9	1077.7	1076.6	1075.4	1074.3	1073.1
167.5°	1092.7	1093.8	1095.0	1095.0	1093.8	1092.6	1091.4	1090.2
170°	1102.4	1103.6	1104.7	1104.7	1103.3	1102.0	1100.6	1099.2
172.5°	1109.4	1110.6	1111.7	1111.7	1110.5	1109.3	1108.1	1106.9
175°	1117.2	1118.4	1119.6	1119.5	1118.2	1116.8	1115.4	1114.0
177.5°	1120.8	1121.8	1122.7	1122.6	1121.5	1120.4	1119.4	1118.3
180°	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0

(END OF REPORT)