

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: P333447-935

Luminaire Tested: **S125DIW-S1090D1050U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333447-935
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: S125DIW-S1090D1050U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6953.7 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

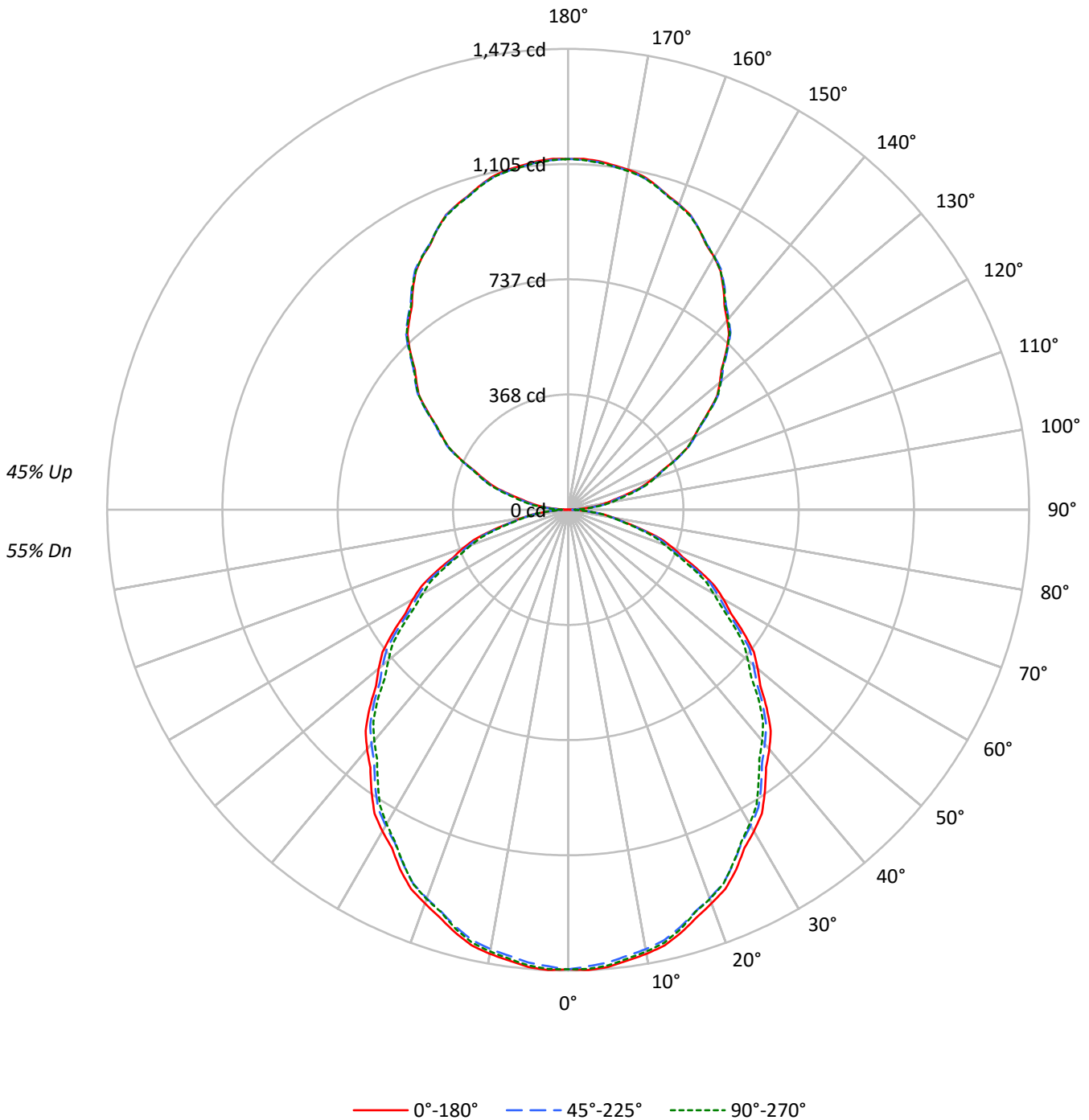
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43	39
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	27	24
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9489	9489	9489
5°	9510	9419	9479
10°	9452	9353	9406
15°	9349	9240	9279
20°	9203	9082	9099
25°	9045	8896	8888
30°	8850	8694	8651
35°	8642	8476	8358
40°	8427	8241	8123
45°	8195	8026	7867
50°	7941	7766	7533
55°	7696	7473	7264
60°	7401	7177	6921
65°	7051	6820	6589
70°	6717	6409	6190
75°	6119	5916	5712
80°	5449	5359	5229
85°	4735	4824	4565



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.5	2.0
10°-20°	391.3	5.6
20°-30°	577.8	8.3
30°-40°	674.2	9.7
40°-50°	677.1	9.7
50°-60°	594.4	8.5
60°-70°	442.9	6.4
70°-80°	253.2	3.6
80°-90°	76.1	1.1
90°-100°	75.1	1.1
100°-110°	221.7	3.2
110°-120°	375.6	5.4
120°-130°	494.3	7.1
130°-140°	553.8	8.0
140°-150°	542.8	7.8
150°-160°	455.9	6.6
160°-170°	303.0	4.4
170°-180°	106.1	1.5
0°-30°	1107.6	15.9
0°-40°	1781.8	25.6
0°-60°	3053.3	43.9
0°-90°	3825.5	55.0
90°-120°	672.4	9.7
90°-150°	2263.2	32.5
90°-180°	3128.0	45.0
0°-180°	6953.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1467	1464	1453	1463	1462	139
15°	1398	1394	1382	1388	1388	394
25°	1269	1263	1248	1250	1247	584
35°	1096	1091	1075	1069	1060	685
45°	897	892	879	865	861	691
55°	684	679	664	653	645	610
65°	461	458	446	436	431	458
75°	245	243	237	234	229	261
85°	64	65	65	64	62	71
90°	1	8	14	18	21	7
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°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1472.9	1472.3	1471.6	1471.0	1470.4	1469.0	1467.0	1464.9	1462.8	1460.8	1462.8
5°	1466.9	1466.4	1465.9	1465.3	1464.8	1463.3	1460.7	1458.1	1455.5	1452.9	1455.3
7.5°	1453.4	1452.9	1452.3	1451.8	1451.3	1449.6	1446.7	1443.9	1441.1	1438.2	1440.5
10°	1441.3	1440.8	1440.3	1439.8	1439.2	1437.5	1434.7	1431.8	1429.0	1426.2	1428.2
12.5°	1426.4	1425.5	1424.5	1423.6	1422.7	1420.9	1418.2	1415.7	1413.0	1410.3	1412.0
15°	1398.3	1397.5	1396.7	1395.9	1395.2	1393.4	1390.5	1387.7	1384.8	1382.0	1383.3
17.5°	1366.0	1364.9	1363.7	1362.5	1361.4	1359.3	1356.4	1353.5	1350.6	1347.6	1349.2
20°	1339.0	1338.5	1338.0	1337.5	1337.0	1335.0	1331.6	1328.3	1324.9	1321.5	1323.4
22.5°	1312.0	1311.1	1310.2	1309.2	1308.3	1306.2	1303.1	1299.9	1296.8	1293.7	1294.9
25°	1269.3	1268.0	1266.7	1265.4	1264.1	1261.8	1258.4	1255.1	1251.7	1248.4	1248.9
27.5°	1219.3	1218.5	1217.7	1216.9	1216.2	1214.1	1210.6	1207.1	1203.7	1200.2	1200.3
30°	1186.7	1185.9	1185.2	1184.4	1183.6	1181.3	1177.4	1173.5	1169.7	1165.8	1165.3
32.5°	1151.4	1150.2	1149.0	1147.8	1146.7	1144.4	1140.8	1137.4	1133.9	1130.5	1129.5
35°	1096.1	1095.0	1094.0	1093.0	1091.9	1089.6	1086.0	1082.4	1078.7	1075.1	1073.8
37.5°	1038.6	1037.3	1036.0	1034.7	1033.5	1031.1	1027.7	1024.3	1020.9	1017.5	1015.5
40°	999.6	998.3	997.0	995.7	994.5	992.0	988.3	984.7	981.1	977.5	975.2
42.5°	957.8	956.7	955.6	954.5	953.4	951.1	947.4	943.8	940.2	936.6	934.4
45°	897.3	896.3	895.3	894.2	893.2	891.1	888.0	884.9	881.8	878.7	875.6
47.5°	832.2	832.2	832.3	832.4	832.4	830.6	826.9	823.1	819.4	815.7	812.5
50°	790.4	789.6	788.8	788.1	787.3	785.3	782.2	779.1	776.0	772.9	769.6
52.5°	747.6	747.0	746.5	745.9	745.4	743.4	740.1	736.8	733.5	730.1	727.2
55°	683.5	682.7	681.9	681.1	680.4	678.1	674.5	670.9	667.3	663.7	661.3
57.5°	615.8	615.4	615.0	614.6	614.2	612.4	609.3	606.3	603.3	600.2	597.2
60°	573.0	572.0	570.9	569.9	568.9	567.0	564.1	561.3	558.4	555.6	553.0
62.5°	528.4	527.5	526.8	525.9	525.1	523.5	521.0	518.6	516.2	513.8	510.9
65°	461.4	460.9	460.4	459.9	459.3	457.7	454.9	452.0	449.2	446.3	444.0
67.5°	396.6	395.5	394.4	393.3	392.3	390.6	388.5	386.4	384.3	382.2	380.2
70°	355.7	354.4	353.1	351.8	350.5	348.7	346.4	344.1	341.7	339.4	337.9
72.5°	311.1	310.1	309.3	308.4	307.5	306.3	304.9	303.3	301.9	300.3	298.6
75°	245.2	244.7	244.2	243.7	243.1	242.3	241.0	239.7	238.4	237.1	236.3
77.5°	184.6	184.3	184.2	184.0	183.7	183.3	182.5	181.8	181.2	180.4	179.9
80°	146.5	146.5	146.5	146.5	146.5	146.2	145.7	145.2	144.6	144.1	143.9
82.5°	113.0	112.5	112.2	111.8	111.3	111.1	111.0	110.9	110.7	110.6	110.2
85°	63.9	64.1	64.4	64.7	64.9	65.1	65.1	65.1	65.1	65.1	64.8
87.5°	25.3	25.6	25.9	26.2	26.5	26.7	26.8	26.9	26.9	26.9	27.1
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°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1464.9	1467.0	1469.0	1470.0	1469.8	1469.6	1469.4	1469.2
5°	1457.6	1459.9	1462.2	1463.3	1463.0	1462.8	1462.5	1462.2
7.5°	1442.8	1445.1	1447.3	1448.4	1448.1	1447.9	1447.6	1447.3
10°	1430.3	1432.4	1434.4	1435.4	1435.1	1434.9	1434.6	1434.3
12.5°	1413.7	1415.3	1416.9	1417.8	1417.7	1417.6	1417.6	1417.6
15°	1384.6	1385.9	1387.2	1387.8	1387.8	1387.8	1387.8	1387.8
17.5°	1350.8	1352.4	1354.0	1354.2	1352.9	1351.6	1350.3	1349.0
20°	1325.2	1327.0	1328.8	1329.0	1327.7	1326.5	1325.2	1323.9
22.5°	1296.1	1297.3	1298.4	1298.6	1297.7	1296.8	1296.0	1295.0
25°	1249.4	1249.9	1250.4	1250.3	1249.5	1248.7	1247.9	1247.2
27.5°	1200.4	1200.5	1200.7	1200.3	1199.5	1198.8	1198.0	1197.2
30°	1164.8	1164.2	1163.7	1163.1	1162.4	1161.6	1160.8	1160.0
32.5°	1128.6	1127.7	1126.8	1125.6	1124.2	1122.8	1121.4	1120.0
35°	1072.5	1071.3	1070.0	1068.3	1066.3	1064.2	1062.1	1060.1
37.5°	1013.7	1011.8	1009.9	1008.3	1007.1	1005.9	1004.7	1003.6
40°	972.8	970.5	968.2	966.6	965.9	965.1	964.3	963.5
42.5°	932.4	930.2	928.2	926.4	925.3	924.1	922.9	921.7
45°	872.5	869.4	866.3	864.4	863.6	862.8	862.0	861.3
47.5°	809.4	806.2	803.1	800.6	798.8	797.0	795.2	793.4
50°	766.2	762.8	759.5	756.9	755.1	753.3	751.5	749.7
52.5°	724.3	721.3	718.4	715.9	713.9	711.9	709.9	707.8
55°	659.0	656.7	654.4	652.3	650.5	648.7	646.9	645.1
57.5°	594.3	591.2	588.2	586.3	585.3	584.3	583.3	582.3
60°	550.4	547.9	545.3	543.0	541.2	539.4	537.6	535.8
62.5°	508.2	505.4	502.6	500.5	499.1	497.7	496.3	494.9
65°	441.7	439.4	437.0	435.3	434.3	433.3	432.2	431.2
67.5°	378.2	376.3	374.3	373.0	372.4	371.8	371.2	370.6
70°	336.3	334.8	333.2	331.9	330.9	329.8	328.8	327.8
72.5°	296.9	295.1	293.3	292.0	290.9	289.9	288.9	287.8
75°	235.6	234.8	234.0	233.1	232.0	231.0	230.0	228.9
77.5°	179.4	179.0	178.6	178.0	177.2	176.5	175.7	175.0
80°	143.6	143.4	143.1	142.7	142.2	141.6	141.1	140.6
82.5°	109.7	109.3	108.8	108.5	108.4	108.3	108.2	108.1
85°	64.6	64.3	64.1	63.6	63.1	62.6	62.1	61.6
87.5°	27.4	27.6	27.7	27.7	27.4	27.1	26.8	26.5
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)