

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: P333453-935

Luminaire Tested: **S125DIW-S1090D1340U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333453-935
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-S1090D1340U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7830.9 lumens
Efficiency: N/A
Efficacy: 112.2 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

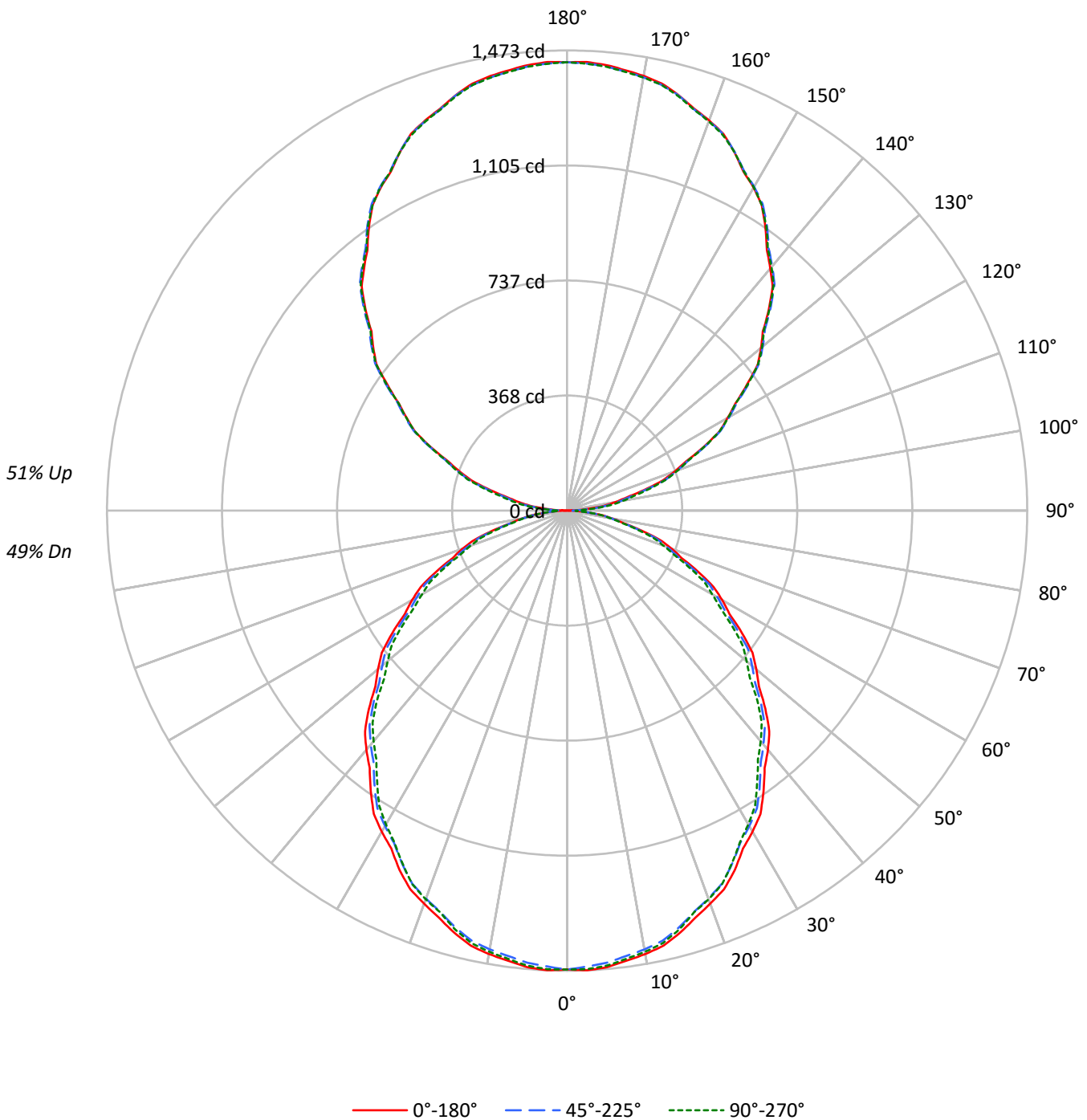
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.8
10°-20°	391.3	5.0
20°-30°	577.8	7.4
30°-40°	674.2	8.6
40°-50°	677.1	8.6
50°-60°	594.4	7.6
60°-70°	442.9	5.7
70°-80°	253.2	3.2
80°-90°	76.8	1.0
90°-100°	96.1	1.2
100°-110°	283.9	3.6
110°-120°	480.8	6.1
120°-130°	632.7	8.1
130°-140°	709.0	9.1
140°-150°	694.9	8.9
150°-160°	583.6	7.5
160°-170°	388.0	5.0
170°-180°	135.8	1.7
0°-30°	1107.6	14.1
0°-40°	1781.8	22.8
0°-60°	3053.3	39.0
0°-90°	3826.2	48.9
90°-120°	860.8	11.0
90°-150°	2897.4	37.0
90°-180°	4005.0	51.1
0°-180°	7830.9	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	10	18	23	27	7
95°	73	75	86	94	96	77
105°	255	260	267	273	277	272
115°	481	486	488	487	486	476
125°	702	709	710	708	707	629
135°	914	920	921	921	917	704
145°	1107	1111	1115	1114	1111	692
155°	1266	1267	1268	1272	1266	583
165°	1377	1375	1376	1380	1374	388
175°	1432	1428	1427	1433	1426	136
180°	1435	1435	1435	1435	1435	



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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	25.7	26.1	26.5	26.9	27.2	27.3	27.5	27.6	27.7	28.0
90°	1.1	3.1	5.1	7.1	9.0	10.9	12.7	14.4	16.1	17.9	19.1
92.5°	27.0	28.4	29.8	31.2	32.5	34.4	36.5	38.7	40.7	42.9	44.5
95°	72.6	73.1	73.6	74.0	74.6	76.1	78.5	81.0	83.5	86.0	87.7
97.5°	120.6	120.8	121.1	121.2	121.4	123.2	126.7	130.1	133.5	136.9	138.5
100°	156.4	156.4	156.4	156.4	156.4	158.0	161.2	164.5	167.6	170.9	173.1
102.5°	194.8	195.8	196.7	197.8	198.7	200.1	201.7	203.4	205.0	206.6	209.1
105°	254.7	255.9	257.1	258.4	259.6	261.0	262.4	264.0	265.4	266.9	268.5
107.5°	320.7	322.0	323.2	324.5	325.7	326.9	328.0	329.2	330.4	331.5	332.3
110°	366.4	367.6	368.9	370.1	371.3	372.3	373.1	373.8	374.5	375.2	376.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	412.8	413.5	414.1	414.7	415.3	416.2	417.1	418.0	419.0	419.9	420.3
115°	481.4	482.3	483.4	484.3	485.3	486.1	486.6	487.1	487.6	488.1	487.8
117.5°	550.2	550.6	551.0	551.5	552.0	552.4	552.8	553.3	553.7	554.2	554.4
120°	593.1	594.3	595.6	596.8	598.1	598.7	599.0	599.3	599.5	599.8	599.8
122.5°	639.6	640.0	640.4	640.8	641.3	641.9	642.5	643.2	643.8	644.5	644.2
125°	702.5	704.0	705.5	707.0	708.4	709.3	709.6	709.8	710.1	710.3	709.8
127.5°	769.5	770.3	771.2	772.1	772.9	773.4	773.8	774.0	774.4	774.6	774.4
130°	809.7	811.0	812.2	813.5	814.7	815.5	816.1	816.6	817.0	817.5	817.3
132.5°	849.9	852.0	854.0	856.0	858.1	859.0	858.9	858.8	858.8	858.7	858.4
135°	913.6	915.1	916.5	918.1	919.5	920.4	920.7	920.9	921.2	921.4	921.4
137.5°	973.4	974.9	976.4	977.8	979.2	980.2	980.8	981.3	981.9	982.4	982.7
140°	1011.8	1013.1	1014.3	1015.6	1016.8	1017.8	1018.6	1019.3	1020.0	1020.8	1021.3
142.5°	1050.3	1051.4	1052.4	1053.4	1054.5	1055.4	1056.4	1057.3	1058.3	1059.2	1059.5
145°	1106.8	1107.8	1108.8	1109.7	1110.8	1111.6	1112.4	1113.1	1113.9	1114.7	1114.7
147.5°	1159.1	1159.6	1160.2	1160.7	1161.2	1161.8	1162.4	1163.0	1163.6	1164.2	1164.8
150°	1193.9	1193.7	1193.4	1193.2	1192.9	1193.3	1194.3	1195.3	1196.3	1197.3	1197.3
152.5°	1222.5	1222.9	1223.2	1223.6	1223.9	1224.3	1224.7	1225.0	1225.5	1225.9	1226.5
155°	1266.5	1266.5	1266.5	1266.5	1266.5	1266.6	1266.9	1267.1	1267.4	1267.7	1268.6
157.5°	1305.8	1305.3	1304.8	1304.2	1303.6	1303.5	1303.7	1304.0	1304.2	1304.5	1305.4
160°	1329.0	1328.4	1327.6	1326.8	1326.1	1325.9	1326.1	1326.4	1326.5	1326.8	1327.8
162.5°	1349.6	1349.1	1348.5	1348.0	1347.5	1347.2	1347.2	1347.3	1347.3	1347.4	1348.6
165°	1377.1	1376.6	1376.1	1375.6	1375.1	1375.0	1375.2	1375.4	1375.7	1376.0	1377.0
167.5°	1400.3	1399.3	1398.4	1397.3	1396.4	1395.9	1395.9	1395.9	1395.9	1395.9	1397.3
170°	1412.8	1411.9	1410.8	1409.9	1408.9	1408.3	1408.3	1408.3	1408.3	1408.3	1409.9
172.5°	1421.8	1420.7	1419.8	1418.8	1417.8	1417.3	1417.3	1417.3	1417.3	1417.3	1418.8
175°	1431.8	1430.8	1429.9	1428.8	1427.9	1427.4	1427.4	1427.4	1427.4	1427.4	1428.8
177.5°	1436.9	1436.1	1435.4	1434.6	1433.7	1433.3	1433.0	1432.9	1432.7	1432.4	1433.7
180°	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2



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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°	28.2	28.5	28.8	28.8	28.5	28.2	28.0	27.6
90°	20.3	21.6	22.8	23.8	24.5	25.3	26.1	26.8
92.5°	46.1	47.8	49.4	50.5	51.1	51.7	52.2	52.7
95°	89.5	91.2	93.0	94.0	94.5	95.1	95.6	96.1
97.5°	140.2	141.8	143.4	144.5	144.7	145.1	145.3	145.7
100°	175.4	177.5	179.8	181.2	181.7	182.2	182.7	183.1
102.5°	211.5	213.9	216.4	217.9	218.6	219.3	220.0	220.7
105°	269.9	271.4	272.9	274.0	274.7	275.5	276.2	277.0
107.5°	332.9	333.7	334.5	334.8	334.8	334.7	334.7	334.6
110°	376.8	377.5	378.2	378.5	378.2	378.0	377.7	377.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	420.6	420.9	421.3	421.3	420.9	420.4	419.9	419.5
115°	487.6	487.3	487.1	486.8	486.6	486.3	486.1	485.9
117.5°	554.6	554.7	555.0	554.6	553.6	552.6	551.6	550.6
120°	599.8	599.8	599.8	599.3	598.2	597.3	596.2	595.3
122.5°	644.0	643.9	643.6	643.2	642.3	641.5	640.8	640.0
125°	709.3	708.9	708.3	708.0	707.7	707.5	707.2	707.0
127.5°	774.1	773.9	773.7	773.3	772.8	772.3	771.8	771.3
130°	817.0	816.8	816.6	816.1	815.7	815.2	814.7	814.2
132.5°	858.2	857.9	857.6	857.2	856.5	855.7	855.1	854.4
135°	921.4	921.4	921.4	920.9	919.9	918.9	917.9	917.0
137.5°	983.0	983.3	983.6	983.1	981.9	980.6	979.4	978.2
140°	1021.8	1022.3	1022.8	1022.4	1021.1	1019.9	1018.7	1017.4
142.5°	1059.8	1060.1	1060.4	1060.0	1058.7	1057.5	1056.2	1055.0
145°	1114.7	1114.7	1114.7	1114.2	1113.5	1112.8	1112.0	1111.3
147.5°	1165.4	1166.0	1166.6	1166.1	1164.3	1162.7	1161.0	1159.3
150°	1197.3	1197.3	1197.3	1197.0	1196.5	1196.0	1195.5	1195.1
152.5°	1227.0	1227.6	1228.2	1228.1	1227.2	1226.3	1225.4	1224.5
155°	1269.6	1270.6	1271.6	1271.4	1270.2	1269.0	1267.7	1266.5
157.5°	1306.5	1307.4	1308.5	1308.1	1306.5	1304.8	1303.2	1301.6
160°	1328.8	1329.8	1330.8	1330.7	1329.5	1328.2	1327.0	1325.7
162.5°	1349.8	1350.9	1352.1	1352.0	1350.6	1349.1	1347.7	1346.3
165°	1377.9	1379.0	1379.9	1379.7	1378.2	1376.7	1375.2	1373.7
167.5°	1398.9	1400.3	1401.8	1401.8	1400.2	1398.7	1397.1	1395.6
170°	1411.4	1412.8	1414.3	1414.2	1412.5	1410.7	1408.9	1407.2
172.5°	1420.3	1421.8	1423.2	1423.2	1421.7	1420.1	1418.6	1417.0
175°	1430.3	1431.8	1433.3	1433.1	1431.4	1429.7	1428.0	1426.2
177.5°	1434.9	1436.1	1437.3	1437.2	1435.7	1434.3	1433.0	1431.6
180°	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2

(END OF REPORT)