

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: P333284-935

Luminaire Tested: **S125DIP-S1090D1035U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333284-935
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: S125DIP-S1090D1035U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6907.7 lumens
Efficiency: N/A
Efficacy: 114.2 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

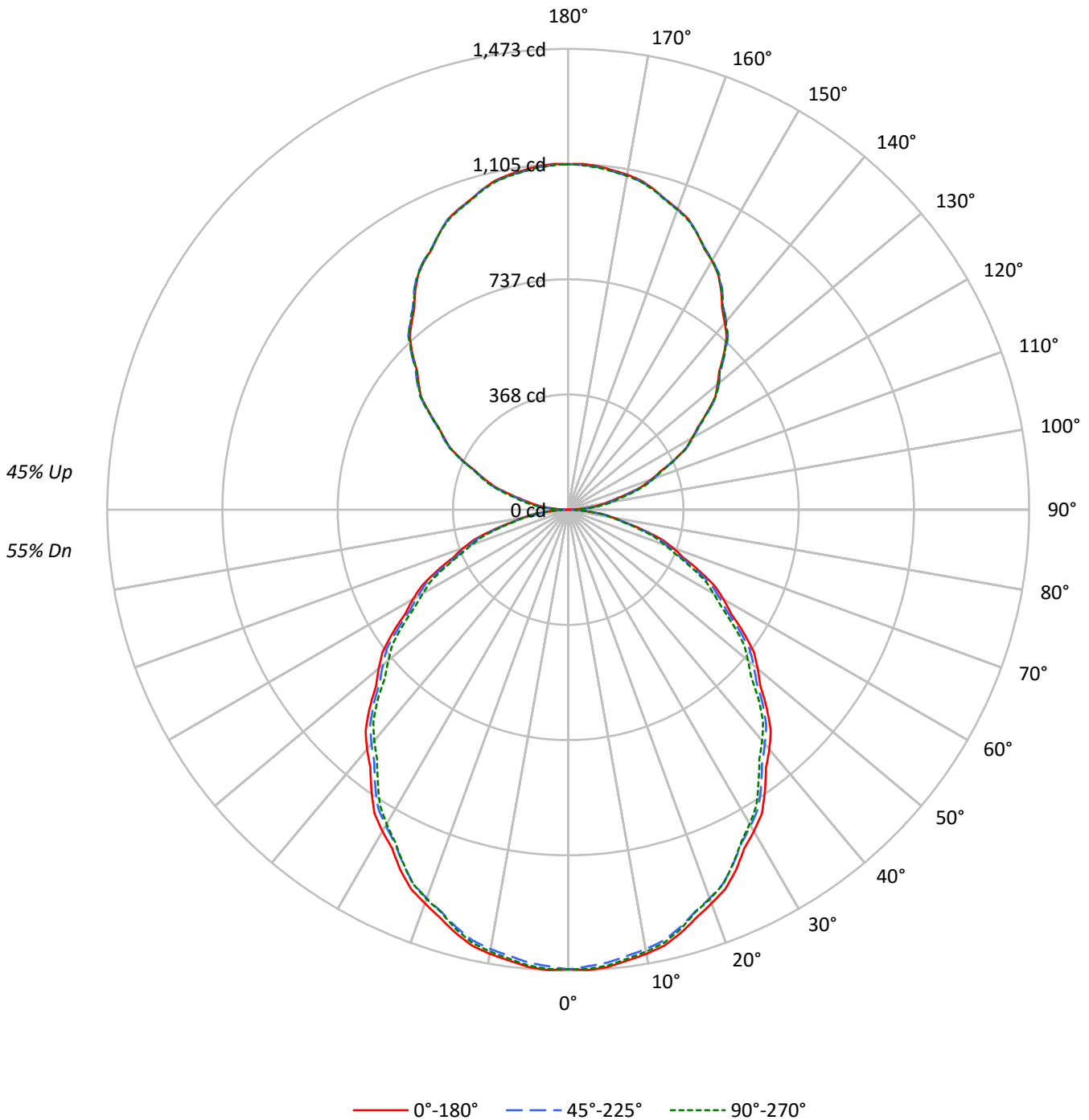
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	91	87	92	88	85	81	76	73	71	64	62	61	54	53	51	46
2	90	83	76	71	83	77	71	67	66	62	59	56	53	51	47	45	43	39
3	82	73	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	28	24
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	34	29	51	40	32	28	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	48	35	28	23	44	33	27	22	29	24	20	26	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	5.7
20°-30°	577.8	8.4
30°-40°	674.2	9.8
40°-50°	677.1	9.8
50°-60°	594.4	8.6
60°-70°	442.9	6.4
70°-80°	253.2	3.7
80°-90°	76.1	1.1
90°-100°	74.0	1.1
100°-110°	218.5	3.2
110°-120°	370.0	5.4
120°-130°	487.0	7.0
130°-140°	545.7	7.9
140°-150°	534.8	7.7
150°-160°	449.2	6.5
160°-170°	298.6	4.3
170°-180°	104.5	1.5
0°-30°	1107.6	16.0
0°-40°	1781.8	25.8
0°-60°	3053.3	44.2
0°-90°	3825.4	55.4
90°-120°	662.5	9.6
90°-150°	2229.9	32.3
90°-180°	3082.0	44.6
0°-180°	6907.7	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°	56	58	66	72	74	60
105°	196	200	205	210	213	209
115°	370	374	376	375	374	366
125°	541	546	547	545	544	484
135°	703	708	709	709	706	542
145°	852	855	858	858	855	532
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



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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	26.8	26.9	26.9	27.1
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	20.8	21.9	22.9	24.0	25.1	26.4	28.1	29.7	31.3	33.0	34.3
95°	55.9	56.2	56.7	57.0	57.4	58.5	60.4	62.3	64.3	66.2	67.5
97.5°	92.8	93.0	93.2	93.3	93.4	94.9	97.5	100.1	102.7	105.4	106.7
100°	120.4	120.4	120.4	120.4	120.4	121.6	124.1	126.6	129.1	131.5	133.2
102.5°	149.9	150.7	151.4	152.2	153.0	153.9	155.2	156.5	157.7	159.0	160.9
105°	196.0	196.9	197.9	198.9	199.8	200.9	202.0	203.1	204.3	205.4	206.6
107.5°	246.8	247.8	248.7	249.8	250.7	251.6	252.4	253.4	254.3	255.1	255.7
110°	282.0	282.9	283.9	284.8	285.8	286.5	287.1	287.7	288.3	288.8	289.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	317.7	318.2	318.7	319.2	319.7	320.3	321.1	321.8	322.4	323.2	323.5
115°	370.5	371.3	372.0	372.8	373.5	374.1	374.4	374.9	375.2	375.7	375.5
117.5°	423.4	423.8	424.1	424.5	424.8	425.2	425.5	425.9	426.2	426.5	426.7
120°	456.4	457.4	458.3	459.3	460.3	460.8	461.0	461.2	461.4	461.6	461.6
122.5°	492.2	492.6	492.9	493.3	493.6	494.0	494.5	495.0	495.5	495.9	495.8
125°	540.7	541.8	542.9	544.2	545.3	546.0	546.1	546.3	546.5	546.7	546.3
127.5°	592.3	592.9	593.6	594.2	594.9	595.3	595.6	595.7	596.0	596.2	596.0
130°	623.2	624.1	625.1	626.0	627.0	627.7	628.1	628.4	628.8	629.2	629.0
132.5°	654.1	655.7	657.3	658.8	660.4	661.2	661.1	661.0	660.9	660.8	660.6
135°	703.2	704.3	705.4	706.5	707.7	708.4	708.6	708.8	708.9	709.1	709.1
137.5°	749.2	750.3	751.4	752.5	753.6	754.4	754.8	755.3	755.7	756.0	756.3
140°	778.8	779.7	780.7	781.6	782.6	783.3	783.9	784.5	785.1	785.7	786.0
142.5°	808.3	809.2	809.9	810.7	811.6	812.4	813.0	813.8	814.5	815.2	815.5
145°	851.9	852.6	853.3	854.1	854.9	855.6	856.2	856.7	857.3	857.9	857.9
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.5
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



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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°	27.3	27.5	27.7	27.6	27.4	27.0	26.8	26.4
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	35.6	36.8	38.1	38.9	39.3	39.7	40.1	40.6
95°	68.9	70.2	71.5	72.4	72.8	73.2	73.5	74.0
97.5°	107.9	109.2	110.5	111.2	111.4	111.7	111.8	112.1
100°	134.9	136.6	138.4	139.5	139.8	140.2	140.6	140.9
102.5°	162.7	164.6	166.5	167.7	168.2	168.8	169.4	169.9
105°	207.8	208.9	210.0	210.9	211.5	212.1	212.6	213.2
107.5°	256.2	256.8	257.4	257.7	257.6	257.6	257.6	257.5
110°	290.0	290.5	291.1	291.3	291.1	290.9	290.8	290.5



TEST NUMBER: P333284-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	323.7	324.0	324.3	324.3	323.9	323.6	323.2	322.9
115°	375.2	375.1	374.9	374.7	374.4	374.3	374.1	373.9
117.5°	426.8	427.0	427.1	426.8	426.0	425.3	424.6	423.8
120°	461.6	461.6	461.6	461.2	460.5	459.7	458.9	458.1
122.5°	495.7	495.5	495.3	495.0	494.4	493.8	493.2	492.6
125°	546.0	545.5	545.2	544.8	544.7	544.5	544.3	544.2
127.5°	595.8	595.6	595.5	595.1	594.8	594.3	594.0	593.7
130°	628.8	628.6	628.4	628.2	627.8	627.4	627.0	626.6
132.5°	660.5	660.3	660.0	659.7	659.2	658.7	658.1	657.5
135°	709.1	709.1	709.1	708.8	708.0	707.2	706.5	705.7
137.5°	756.6	756.7	757.0	756.6	755.7	754.8	753.8	752.9
140°	786.4	786.8	787.2	786.9	785.9	785.0	784.0	783.1
142.5°	815.7	815.9	816.1	815.8	814.9	813.9	813.0	811.9
145°	857.9	857.9	857.9	857.6	857.0	856.4	855.8	855.3
147.5°	896.9	897.4	897.9	897.4	896.1	894.8	893.5	892.3
150°	921.4	921.4	921.4	921.3	920.9	920.5	920.2	919.7
152.5°	944.4	944.9	945.3	945.2	944.5	943.8	943.1	942.5
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)