

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: P333730-930

Luminaire Tested: **S125RDIW-S1270D1050U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333730-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1270D1050U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7394.1 lumens
Efficiency: N/A
Efficacy: 109.7 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

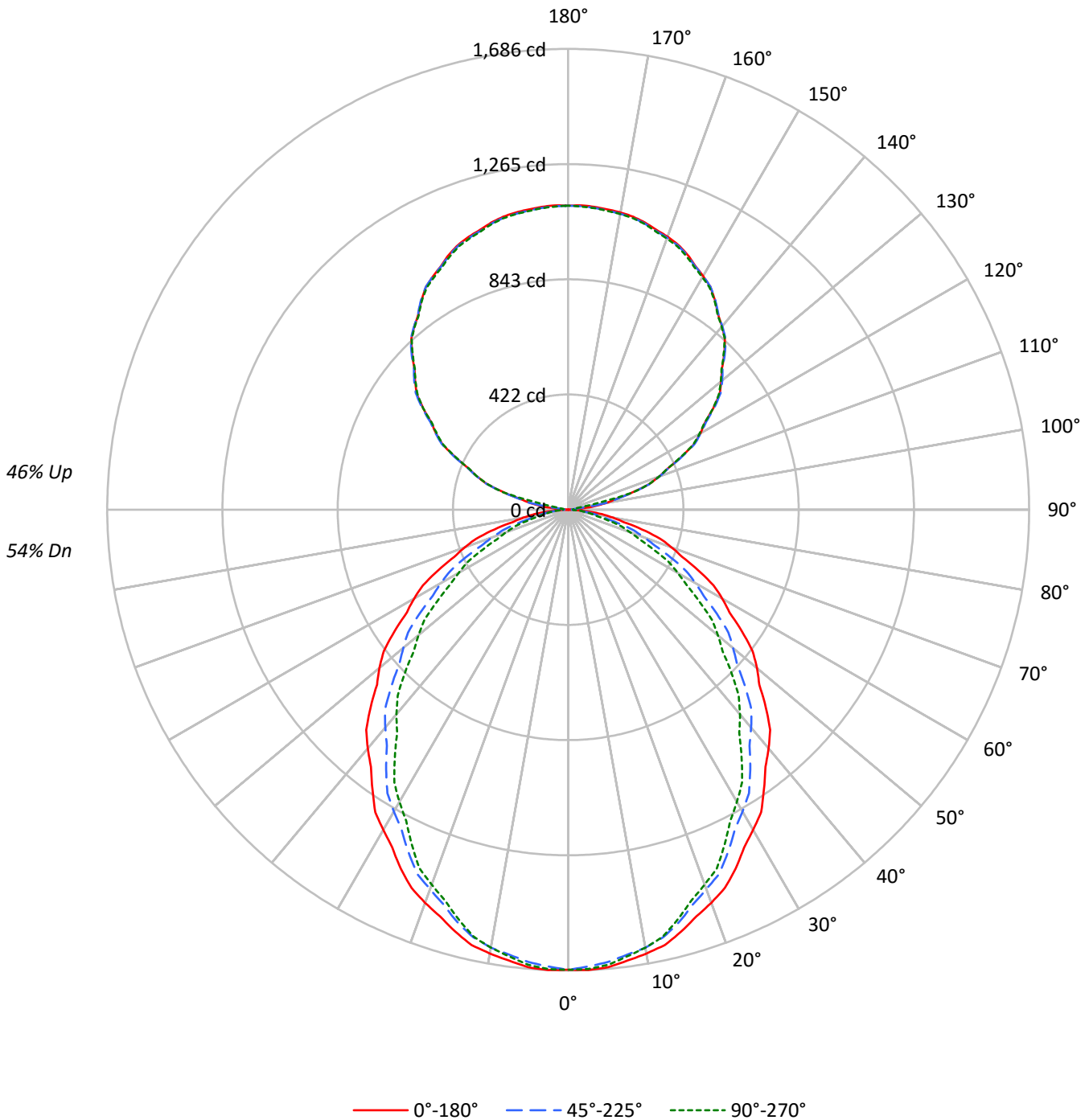
Input Watts (W): 67.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	29
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	21	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°	10869	10869	10869
5°	10895	10771	10836
10°	10812	10670	10670
15°	10683	10454	10369
20°	10519	10152	10030
25°	10326	9855	9638
30°	10086	9508	9205
35°	9842	9150	8719
40°	9613	8777	8241
45°	9334	8360	7721
50°	9055	7905	7178
55°	8731	7472	6598
60°	8407	6945	5977
65°	8023	6333	5265
70°	7585	5569	4538
75°	6977	4694	3773
80°	6148	3686	3169
85°	5187	3016	2831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.3	2.1
10°-20°	442.3	6.0
20°-30°	641.3	8.7
30°-40°	730.9	9.9
40°-50°	712.5	9.6
50°-60°	599.7	8.1
60°-70°	420.4	5.7
70°-80°	216.1	2.9
80°-90°	56.9	0.8
90°-100°	40.4	0.5
100°-110°	249.1	3.4
110°-120°	451.8	6.1
120°-130°	579.9	7.8
130°-140°	623.7	8.4
140°-150°	585.4	7.9
150°-160°	473.6	6.4
160°-170°	306.3	4.1
170°-180°	105.6	1.4
0°-30°	1241.9	16.8
0°-40°	1972.8	26.7
0°-60°	3284.9	44.4
0°-90°	3978.3	53.8
90°-120°	741.4	10.0
90°-150°	2530.3	34.2
90°-180°	3416.0	46.2
0°-180°	7394.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1680	1675	1661	1673	1672	159
15°	1598	1589	1564	1562	1551	450
25°	1449	1428	1383	1367	1352	666
35°	1248	1216	1161	1125	1106	781
45°	1022	983	915	866	845	788
55°	775	733	664	608	586	693
65°	525	480	414	365	344	520
75°	280	241	188	161	151	296
85°	70	48	41	39	38	79
90°	1	7	13	17	20	5
95°	47	43	13	17	17	60
105°	242	246	246	246	245	257
115°	455	459	460	457	452	451
125°	647	653	653	650	647	578
135°	807	812	811	809	804	622
145°	936	937	938	938	933	585
155°	1031	1026	1027	1029	1023	475
165°	1088	1083	1084	1088	1082	307
175°	1112	1108	1108	1114	1107	106
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1686.0	1685.4	1684.7	1684.0	1683.3	1681.9	1679.6	1677.3	1675.1	1672.8	1675.1
5°	1680.5	1679.4	1678.2	1677.1	1675.9	1673.8	1670.7	1667.6	1664.5	1661.4	1664.2
7.5°	1663.9	1662.9	1661.8	1660.7	1659.6	1657.3	1653.5	1649.8	1646.1	1642.3	1644.3
10°	1648.7	1647.8	1647.0	1646.2	1645.3	1642.9	1638.9	1635.0	1631.0	1627.1	1627.9
12.5°	1631.4	1630.4	1629.2	1628.2	1627.1	1623.9	1618.6	1613.3	1607.9	1602.6	1603.3
15°	1597.8	1596.1	1594.5	1592.8	1591.1	1587.2	1581.3	1575.4	1569.5	1563.5	1563.3
17.5°	1559.9	1557.4	1554.8	1552.2	1549.6	1544.5	1537.1	1529.6	1522.2	1514.7	1513.3
20°	1530.5	1527.6	1524.8	1522.0	1519.1	1513.2	1504.2	1495.2	1486.1	1477.1	1475.7
22.5°	1497.9	1495.1	1492.2	1489.5	1486.6	1480.5	1471.0	1461.5	1452.0	1442.5	1439.7
25°	1449.1	1444.9	1440.6	1436.4	1432.2	1424.8	1414.4	1403.9	1393.4	1383.0	1379.3
27.5°	1393.2	1388.0	1382.9	1377.8	1372.6	1364.5	1353.2	1342.1	1330.9	1319.7	1314.6
30°	1352.5	1347.1	1341.7	1336.4	1331.1	1322.4	1310.5	1298.7	1286.8	1275.0	1268.4
32.5°	1312.9	1306.6	1300.3	1294.0	1287.8	1278.6	1266.5	1254.4	1242.3	1230.2	1223.0
35°	1248.3	1241.5	1234.7	1227.9	1221.2	1211.4	1198.7	1186.0	1173.3	1160.6	1152.3
37.5°	1185.0	1176.7	1168.5	1160.3	1151.9	1141.3	1128.2	1115.1	1102.0	1088.8	1079.0
40°	1140.2	1131.7	1123.2	1114.8	1106.4	1095.3	1081.7	1068.2	1054.6	1041.1	1030.4
42.5°	1093.5	1084.8	1076.0	1067.3	1058.7	1047.3	1033.3	1019.3	1005.3	991.2	981.0
45°	1022.0	1013.8	1005.6	997.4	989.2	977.4	961.8	946.3	930.7	915.3	903.9
47.5°	948.0	939.4	930.7	922.1	913.5	901.3	885.7	870.0	854.4	838.7	827.0
50°	901.2	891.9	882.6	873.3	864.0	851.3	835.1	819.0	802.9	786.8	774.9
52.5°	850.4	840.8	831.3	821.7	812.2	799.8	784.6	769.5	754.2	739.1	726.3
55°	775.4	766.4	757.3	748.3	739.2	726.8	711.0	695.2	679.4	663.6	650.9
57.5°	699.6	690.0	680.3	670.7	661.0	648.6	633.3	618.0	602.8	587.5	575.1
60°	650.9	640.9	631.0	621.2	611.3	598.7	583.4	568.2	552.9	537.7	525.3
62.5°	599.0	589.5	580.1	570.6	561.3	548.8	533.3	517.8	502.3	486.8	475.3
65°	525.0	515.4	505.8	496.2	486.6	474.3	459.3	444.3	429.3	414.4	403.1
67.5°	451.5	441.9	432.3	422.7	413.1	401.1	386.8	372.4	358.1	343.7	333.4
70°	401.7	392.1	382.5	372.8	363.3	351.4	337.3	323.2	309.0	294.9	286.2
72.5°	352.9	343.5	334.1	324.7	315.4	304.0	290.8	277.6	264.4	251.2	243.1
75°	279.6	271.2	262.7	254.2	245.7	235.6	223.7	211.9	200.0	188.1	181.9
77.5°	206.9	200.2	193.4	186.6	179.9	171.7	162.2	152.7	143.2	133.7	129.4
80°	165.3	158.5	151.7	144.9	138.1	130.8	122.9	115.0	107.0	99.1	96.6
82.5°	124.6	118.5	112.3	106.2	100.2	94.4	88.9	83.6	78.1	72.7	71.5
85°	70.0	64.8	59.8	54.6	49.6	46.3	44.9	43.5	42.1	40.7	40.4
87.5°	23.6	22.3	21.0	19.6	18.4	17.8	17.8	17.9	17.9	17.9	18.1
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.6	11.9	13.2	14.1
92.5°	12.7	11.7	10.7	9.6	8.6	8.6	9.8	10.9	12.1	13.2	14.1
95°	47.0	46.5	45.9	45.3	44.8	41.0	34.1	27.1	20.1	13.2	14.1
97.5°	98.2	99.1	100.1	101.1	102.1	95.7	81.9	68.2	54.4	40.6	35.4
100°	137.7	138.3	138.8	139.3	139.9	140.6	141.3	142.0	142.8	143.5	116.2
102.5°	178.0	178.6	179.4	180.0	180.8	181.3	181.7	182.1	182.6	183.0	177.9
105°	242.4	243.1	243.9	244.6	245.3	245.7	245.7	245.7	245.7	245.7	245.7
107.5°	309.4	309.4	309.4	309.4	309.4	309.6	309.9	310.3	310.6	311.0	311.0
110°	352.9	352.9	352.9	352.9	352.9	353.1	353.4	353.8	354.2	354.6	354.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	393.8	394.3	394.7	395.1	395.6	395.9	396.2	396.3	396.6	396.8	396.1
115°	455.2	456.1	457.0	457.9	458.9	459.3	459.6	459.7	459.9	460.1	459.3
117.5°	518.7	518.6	518.6	518.5	518.5	518.9	519.5	520.2	520.9	521.6	520.7
120°	558.2	558.1	557.8	557.7	557.5	557.7	558.2	558.8	559.3	559.9	559.5
122.5°	593.2	593.9	594.6	595.3	596.0	596.5	596.7	597.0	597.2	597.5	597.1
125°	647.3	648.6	649.9	651.1	652.4	653.1	653.1	653.1	653.1	653.1	652.3
127.5°	698.9	699.9	700.7	701.6	702.5	703.0	702.9	702.8	702.6	702.5	702.1
130°	730.6	731.5	732.4	733.3	734.3	734.7	735.0	735.2	735.3	735.5	735.0
132.5°	762.2	763.3	764.3	765.4	766.5	766.8	766.4	766.0	765.6	765.2	765.1
135°	807.2	808.4	809.4	810.6	811.6	812.0	811.6	811.3	810.9	810.6	810.2
137.5°	848.6	849.6	850.5	851.5	852.5	852.8	852.5	852.2	851.7	851.4	851.5
140°	875.7	876.0	876.4	876.8	877.2	877.3	877.1	876.9	876.7	876.5	876.9
142.5°	900.1	900.3	900.6	900.7	901.0	901.2	901.5	901.7	902.0	902.2	902.3
145°	935.9	936.3	936.6	937.0	937.3	937.5	937.5	937.5	937.5	937.5	937.8
147.5°	967.2	967.2	967.1	967.0	966.9	967.0	967.2	967.4	967.7	967.8	968.1
150°	987.0	986.7	986.3	985.9	985.5	985.5	985.9	986.3	986.7	987.0	987.4
152.5°	1006.2	1005.3	1004.5	1003.7	1002.9	1002.7	1003.1	1003.5	1003.8	1004.1	1004.5
155°	1030.7	1029.6	1028.5	1027.4	1026.3	1026.0	1026.3	1026.7	1027.0	1027.4	1027.9
157.5°	1049.7	1049.0	1048.4	1047.7	1047.0	1046.8	1046.8	1046.8	1046.8	1046.8	1047.5
160°	1062.9	1061.8	1060.7	1059.6	1058.5	1058.0	1058.2	1058.4	1058.6	1058.7	1059.5
162.5°	1073.4	1072.4	1071.2	1070.2	1069.0	1068.5	1068.8	1068.9	1069.1	1069.3	1070.3
165°	1087.6	1086.5	1085.4	1084.3	1083.2	1082.7	1083.0	1083.1	1083.3	1083.5	1084.6
167.5°	1098.1	1097.1	1095.9	1094.8	1093.6	1093.2	1093.3	1093.5	1093.7	1093.9	1095.2
170°	1104.1	1102.9	1101.6	1100.2	1098.9	1098.5	1098.6	1098.8	1098.9	1099.2	1100.7
172.5°	1108.1	1106.8	1105.5	1104.2	1102.9	1102.4	1102.8	1103.1	1103.4	1103.8	1105.1
175°	1112.3	1111.3	1110.1	1109.1	1107.9	1107.5	1107.7	1107.8	1108.1	1108.2	1109.7
177.5°	1114.4	1113.5	1112.6	1111.7	1110.8	1110.4	1110.6	1110.8	1110.8	1111.0	1112.1
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0	1683.0
2.5°	1677.3	1679.6	1681.9	1682.9	1682.7	1682.5	1682.2	1682.0
5°	1667.0	1669.9	1672.7	1673.8	1673.2	1672.7	1672.1	1671.5
7.5°	1646.3	1648.3	1650.2	1650.9	1650.2	1649.7	1649.0	1648.5
10°	1628.7	1629.6	1630.4	1630.4	1629.6	1628.7	1627.9	1627.1
12.5°	1603.9	1604.5	1605.2	1604.8	1603.5	1602.2	1600.9	1599.6
15°	1562.9	1562.7	1562.4	1561.0	1558.4	1555.9	1553.3	1550.8
17.5°	1511.9	1510.4	1509.0	1507.3	1505.2	1503.1	1501.0	1498.9
20°	1474.2	1472.8	1471.5	1469.4	1466.9	1464.4	1461.8	1459.3
22.5°	1437.0	1434.2	1431.4	1429.0	1426.9	1424.8	1422.7	1420.7
25°	1375.7	1372.0	1368.3	1364.9	1361.8	1358.7	1355.6	1352.5
27.5°	1309.5	1304.3	1299.2	1295.1	1292.1	1289.1	1286.1	1283.1
30°	1262.0	1255.5	1249.0	1244.5	1241.9	1239.3	1236.8	1234.3
32.5°	1215.9	1208.7	1201.5	1196.3	1193.1	1189.8	1186.7	1183.4
35°	1144.2	1136.0	1127.8	1121.7	1117.8	1113.8	1109.9	1105.9
37.5°	1069.2	1059.4	1049.5	1042.7	1038.9	1035.0	1031.2	1027.4
40°	1019.6	1008.9	998.2	991.1	987.7	984.3	980.9	977.5
42.5°	970.7	960.4	950.1	942.5	937.5	932.5	927.6	922.6
45°	892.6	881.3	870.0	862.3	858.0	853.8	849.5	845.3
47.5°	815.5	803.8	792.1	784.0	779.3	774.6	769.9	765.2
50°	763.1	751.2	739.4	731.3	727.1	722.8	718.6	714.4
52.5°	713.5	700.7	687.9	679.5	675.2	671.0	666.8	662.5
55°	638.1	625.4	612.7	604.1	599.6	595.0	590.5	586.0
57.5°	562.6	550.2	537.8	529.6	525.5	521.5	517.6	513.6
60°	512.8	500.4	488.0	479.6	475.4	471.2	466.9	462.7
62.5°	463.8	452.2	440.8	432.8	428.6	424.4	420.1	415.9
65°	391.8	380.5	369.2	361.4	357.2	352.9	348.7	344.5
67.5°	323.0	312.7	302.4	295.5	292.1	288.7	285.4	281.9
70°	277.4	268.6	259.9	253.8	250.4	247.0	243.6	240.3
72.5°	235.1	227.0	218.8	213.7	211.4	209.2	206.9	204.6
75°	175.7	169.5	163.3	159.1	157.2	155.2	153.3	151.2
77.5°	125.0	120.7	116.3	113.4	111.9	110.5	109.0	107.5
80°	94.1	91.6	88.9	87.4	86.8	86.3	85.8	85.2
82.5°	70.4	69.1	68.0	67.2	66.9	66.5	66.2	65.9
85°	40.1	39.9	39.5	39.3	39.0	38.7	38.4	38.2
87.5°	18.3	18.4	18.6	18.7	18.5	18.4	18.3	18.2
90°	15.0	16.0	16.9	17.6	18.2	18.7	19.2	19.8
92.5°	15.0	16.0	16.9	17.4	17.7	17.9	18.2	18.5
95°	15.0	16.0	16.9	17.3	17.3	17.3	17.3	17.3
97.5°	30.2	25.0	19.9	17.3	17.3	17.3	17.3	17.3
100°	88.9	61.6	34.2	20.2	19.5	18.8	18.0	17.3
102.5°	172.7	167.5	162.4	153.6	141.1	128.7	116.2	103.7
105°	245.7	245.7	245.7	245.6	245.5	245.2	245.1	244.9
107.5°	311.1	311.1	311.2	311.0	310.4	309.8	309.2	308.8
110°	353.4	352.9	352.4	352.2	352.4	352.5	352.7	352.9



TEST NUMBER: P333730-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	395.4	394.7	394.0	393.5	393.3	393.0	392.7	392.5
115°	458.6	457.9	457.1	456.2	455.2	454.0	453.0	451.8
117.5°	519.8	518.8	517.8	517.1	516.7	516.2	515.7	515.2
120°	559.1	558.8	558.4	557.7	556.8	556.0	555.1	554.1
122.5°	596.7	596.4	596.0	595.3	594.3	593.2	592.2	591.1
125°	651.6	650.9	650.1	649.5	649.0	648.4	647.8	647.3
127.5°	701.7	701.3	700.9	700.0	698.7	697.3	695.9	694.6
130°	734.4	733.9	733.3	732.5	731.6	730.8	729.9	729.0
132.5°	765.0	764.8	764.8	764.3	763.4	762.4	761.5	760.6
135°	809.8	809.4	809.1	808.4	807.2	806.2	805.0	804.0
137.5°	851.6	851.7	851.7	851.3	850.4	849.4	848.5	847.5
140°	877.3	877.6	878.0	877.6	876.5	875.4	874.3	873.2
142.5°	902.4	902.5	902.5	902.0	900.9	899.8	898.7	897.6
145°	937.9	938.1	938.2	937.8	936.7	935.6	934.5	933.4
147.5°	968.3	968.6	968.7	968.2	966.9	965.6	964.3	963.0
150°	987.7	988.1	988.5	987.9	986.4	985.0	983.5	982.0
152.5°	1004.9	1005.3	1005.6	1005.2	1003.8	1002.5	1001.2	999.9
155°	1028.5	1029.1	1029.6	1029.2	1027.7	1026.2	1024.7	1023.3
157.5°	1048.1	1048.6	1049.2	1048.8	1047.3	1045.9	1044.4	1042.9
160°	1060.2	1060.9	1061.7	1061.3	1059.9	1058.4	1057.0	1055.5
162.5°	1071.4	1072.4	1073.4	1073.1	1071.5	1069.9	1068.3	1066.7
165°	1085.7	1086.8	1087.9	1087.7	1086.2	1084.8	1083.3	1081.8
167.5°	1096.5	1097.8	1099.2	1099.0	1097.3	1095.7	1094.1	1092.4
170°	1102.1	1103.6	1105.1	1104.9	1103.3	1101.6	1100.0	1098.3
172.5°	1106.4	1107.7	1109.1	1108.9	1107.3	1105.5	1103.9	1102.3
175°	1111.2	1112.6	1114.1	1114.0	1112.3	1110.7	1109.1	1107.4
177.5°	1113.0	1114.1	1115.2	1115.1	1113.9	1112.7	1111.6	1110.4
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3

(END OF REPORT)