

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: P333710-935

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333710-935
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-S1090D1050U935-4F0-1E-UDD-F
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, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7245.4 lumens
Efficiency: N/A
Efficacy: 118.4 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

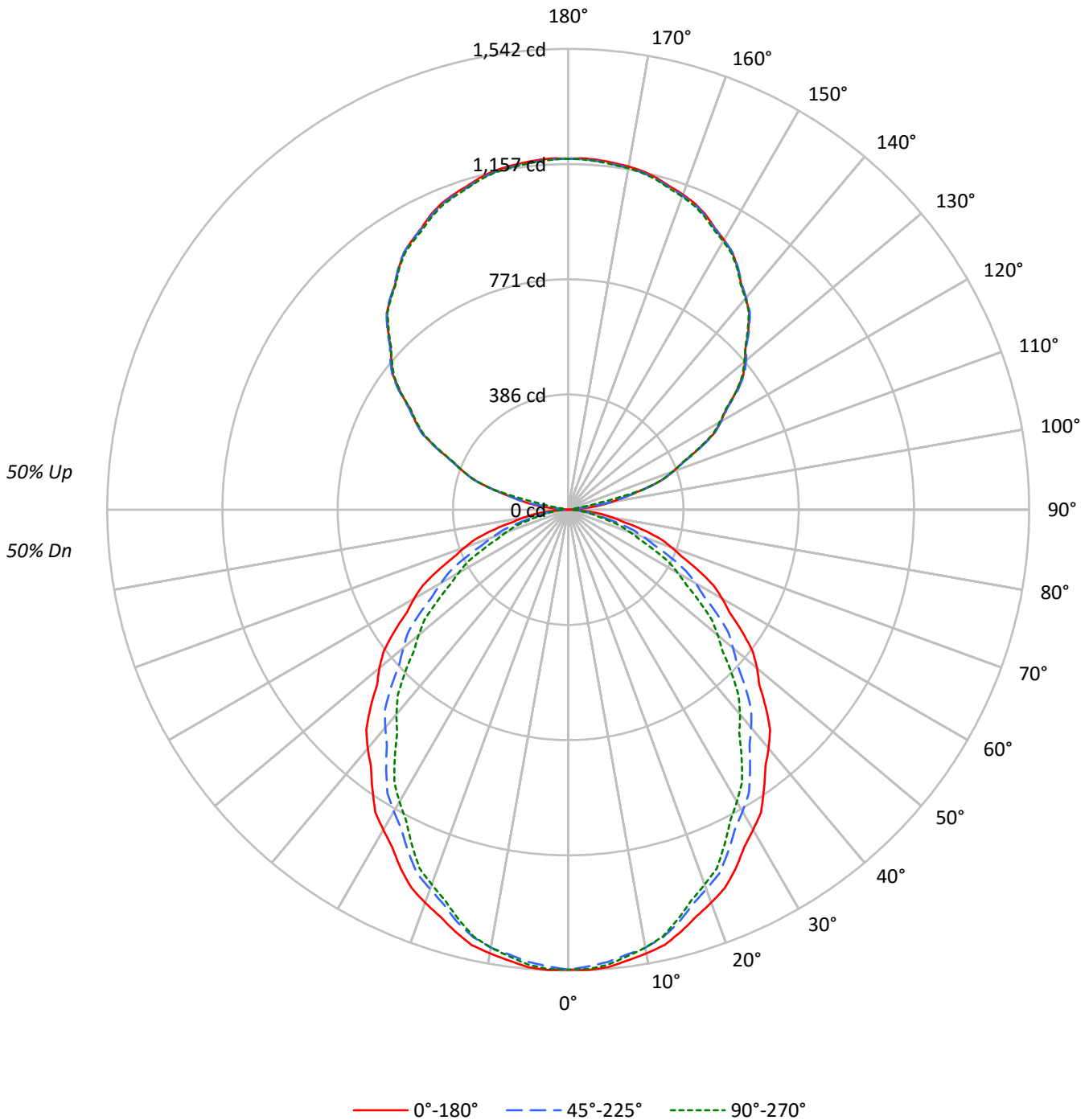
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83		69	69	69		56	56	56	50
1	98	94	90	87	90	87	83	81	74	71	69		61	60	58		50	49	48	43
2	89	82	76	71	82	76	71	66	65	61	57		54	51	49		44	42	41	36
3	82	72	65	59	75	67	61	56	57	52	49		48	45	42		39	37	35	31
4	75	64	56	50	69	60	53	47	51	46	42		43	39	36		35	33	30	27
5	69	57	49	43	63	53	46	41	46	40	36		39	34	31		32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31		35	31	27		29	26	23	20
7	59	46	39	33	54	43	36	31	37	32	28		32	27	24		27	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25		29	25	22		24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22		27	23	20		23	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20		25	21	18		21	18	15	13

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	2.0
10°-20°	404.4	5.6
20°-30°	586.4	8.1
30°-40°	668.3	9.2
40°-50°	651.5	9.0
50°-60°	548.4	7.6
60°-70°	384.4	5.3
70°-80°	197.6	2.7
80°-90°	52.3	0.7
90°-100°	42.7	0.6
100°-110°	263.1	3.6
110°-120°	477.1	6.6
120°-130°	612.4	8.5
130°-140°	658.7	9.1
140°-150°	618.2	8.5
150°-160°	500.1	6.9
160°-170°	323.4	4.5
170°-180°	111.6	1.5
0°-30°	1135.5	15.7
0°-40°	1803.9	24.9
0°-60°	3003.7	41.5
0°-90°	3638.1	50.2
90°-120°	782.9	10.8
90°-150°	2672.2	36.9
90°-180°	3607.0	49.8
0°-180°	7245.4	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	5
95°	50	45	14	18	18	63
105°	256	259	260	259	259	271
115°	481	485	486	482	477	476
125°	684	689	690	686	684	610
135°	852	857	856	854	849	657
145°	988	990	990	991	986	618
155°	1088	1084	1085	1087	1081	501
165°	1149	1144	1144	1149	1142	324
175°	1175	1170	1170	1177	1170	112
180°	1175	1175	1175	1175	1175	



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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	11.2	12.6	13.9	14.9
92.5°	13.4	12.3	11.3	10.2	9.0	9.1	10.3	11.5	12.7	13.9	14.9
95°	49.6	49.1	48.5	47.9	47.4	43.3	36.0	28.7	21.3	13.9	14.9
97.5°	103.7	104.7	105.7	106.8	107.8	101.1	86.5	72.0	57.4	42.9	37.4
100°	145.4	146.0	146.5	147.1	147.7	148.4	149.2	150.0	150.8	151.5	122.7
102.5°	188.0	188.6	189.4	190.1	190.9	191.5	191.9	192.3	192.9	193.3	187.9
105°	256.0	256.8	257.5	258.3	259.1	259.5	259.5	259.5	259.5	259.5	259.5
107.5°	326.7	326.7	326.7	326.7	326.7	326.9	327.3	327.7	328.0	328.5	328.5
110°	372.7	372.7	372.7	372.7	372.7	372.9	373.2	373.7	374.0	374.4	373.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	415.9	416.4	416.8	417.2	417.8	418.1	418.4	418.5	418.8	419.0	418.3
115°	480.7	481.6	482.6	483.5	484.6	485.1	485.3	485.5	485.7	485.9	485.1
117.5°	547.8	547.7	547.7	547.6	547.6	547.9	548.6	549.4	550.1	550.9	549.8
120°	589.5	589.4	589.1	588.9	588.8	588.9	589.5	590.1	590.6	591.2	590.9
122.5°	626.5	627.2	627.9	628.6	629.4	629.9	630.2	630.4	630.7	630.9	630.6
125°	683.5	684.9	686.3	687.6	689.0	689.7	689.7	689.7	689.7	689.7	688.9
127.5°	738.0	739.1	740.0	741.0	741.9	742.4	742.3	742.2	742.0	741.9	741.5
130°	771.5	772.5	773.4	774.4	775.4	775.9	776.2	776.4	776.5	776.7	776.2
132.5°	804.9	806.1	807.2	808.3	809.4	809.8	809.3	808.9	808.5	808.1	808.0
135°	852.5	853.7	854.8	856.0	857.1	857.6	857.1	856.8	856.4	856.0	855.6
137.5°	896.2	897.2	898.2	899.2	900.3	900.6	900.3	899.9	899.5	899.1	899.2
140°	924.8	925.1	925.6	925.9	926.3	926.4	926.3	926.0	925.8	925.7	926.0
142.5°	950.5	950.8	951.1	951.2	951.5	951.7	952.0	952.3	952.5	952.8	952.9
145°	988.3	988.8	989.1	989.5	989.9	990.1	990.1	990.1	990.1	990.1	990.3
147.5°	1021.4	1021.4	1021.3	1021.2	1021.1	1021.2	1021.4	1021.7	1021.9	1022.1	1022.4
150°	1042.3	1042.0	1041.6	1041.2	1040.8	1040.8	1041.2	1041.6	1042.0	1042.3	1042.8
152.5°	1062.6	1061.7	1060.8	1060.0	1059.1	1058.9	1059.3	1059.7	1060.1	1060.4	1060.8
155°	1088.5	1087.4	1086.2	1085.0	1083.8	1083.5	1083.8	1084.3	1084.6	1085.0	1085.5
157.5°	1108.5	1107.8	1107.2	1106.5	1105.7	1105.4	1105.4	1105.4	1105.5	1105.5	1106.2
160°	1122.5	1121.3	1120.2	1119.0	1117.8	1117.3	1117.5	1117.8	1117.9	1118.1	1118.9
162.5°	1133.6	1132.5	1131.3	1130.1	1128.9	1128.4	1128.7	1128.9	1129.0	1129.2	1130.3
165°	1148.6	1147.5	1146.2	1145.1	1143.9	1143.4	1143.7	1143.8	1144.0	1144.2	1145.4
167.5°	1159.7	1158.6	1157.4	1156.2	1154.9	1154.4	1154.6	1154.8	1155.0	1155.2	1156.6
170°	1166.0	1164.7	1163.3	1161.9	1160.5	1160.0	1160.2	1160.4	1160.5	1160.8	1162.4
172.5°	1170.2	1168.8	1167.4	1166.1	1164.8	1164.2	1164.6	1164.9	1165.3	1165.6	1167.0
175°	1174.7	1173.5	1172.3	1171.2	1170.0	1169.6	1169.8	1169.9	1170.2	1170.4	1171.9
177.5°	1176.8	1175.9	1174.9	1174.0	1173.1	1172.7	1172.9	1173.0	1173.1	1173.3	1174.4
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7



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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°	15.8	16.9	17.8	18.6	19.2	19.7	20.3	20.9
92.5°	15.8	16.9	17.8	18.4	18.7	18.9	19.2	19.5
95°	15.8	16.9	17.8	18.3	18.3	18.3	18.3	18.3
97.5°	31.9	26.4	21.0	18.3	18.3	18.3	18.3	18.3
100°	93.8	65.0	36.2	21.4	20.6	19.8	19.0	18.3
102.5°	182.4	176.9	171.5	162.2	149.0	135.9	122.7	109.5
105°	259.5	259.5	259.5	259.4	259.2	259.0	258.8	258.6
107.5°	328.6	328.6	328.6	328.4	327.8	327.2	326.6	326.1
110°	373.2	372.7	372.1	372.0	372.1	372.3	372.5	372.7



TEST NUMBER: P333710-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	417.6	416.8	416.1	415.6	415.3	415.0	414.7	414.5
115°	484.3	483.5	482.8	481.8	480.7	479.5	478.4	477.2
117.5°	548.9	547.9	546.8	546.0	545.6	545.1	544.6	544.1
120°	590.5	590.1	589.7	589.0	588.1	587.1	586.2	585.1
122.5°	630.2	629.8	629.4	628.7	627.6	626.5	625.3	624.2
125°	688.1	687.3	686.6	685.9	685.4	684.8	684.2	683.5
127.5°	741.1	740.6	740.2	739.3	737.9	736.4	734.9	733.6
130°	775.6	775.0	774.4	773.6	772.7	771.7	770.8	769.8
132.5°	807.9	807.7	807.6	807.1	806.2	805.1	804.2	803.2
135°	855.2	854.8	854.5	853.7	852.5	851.4	850.2	849.0
137.5°	899.3	899.4	899.5	899.1	898.0	897.0	896.0	895.0
140°	926.4	926.8	927.2	926.8	925.7	924.5	923.3	922.1
142.5°	953.0	953.0	953.1	952.6	951.4	950.3	949.1	948.0
145°	990.5	990.7	990.8	990.4	989.2	988.1	986.9	985.8
147.5°	1022.6	1022.9	1023.0	1022.5	1021.1	1019.7	1018.3	1016.9
150°	1043.1	1043.5	1043.9	1043.3	1041.7	1040.2	1038.6	1037.1
152.5°	1061.2	1061.6	1062.0	1061.5	1060.1	1058.7	1057.3	1055.9
155°	1086.2	1086.8	1087.4	1086.8	1085.3	1083.7	1082.2	1080.6
157.5°	1106.8	1107.4	1108.0	1107.6	1106.0	1104.5	1102.9	1101.4
160°	1119.6	1120.4	1121.2	1120.8	1119.3	1117.8	1116.2	1114.7
162.5°	1131.4	1132.5	1133.6	1133.2	1131.5	1129.9	1128.2	1126.4
165°	1146.5	1147.7	1148.8	1148.7	1147.1	1145.6	1144.0	1142.5
167.5°	1158.0	1159.3	1160.8	1160.6	1158.8	1157.1	1155.4	1153.7
170°	1163.9	1165.4	1167.0	1166.8	1165.1	1163.4	1161.7	1159.9
172.5°	1168.5	1169.8	1171.2	1171.0	1169.3	1167.5	1165.8	1164.1
175°	1173.5	1175.0	1176.6	1176.5	1174.7	1172.9	1171.2	1169.5
177.5°	1175.4	1176.6	1177.7	1177.6	1176.3	1175.1	1173.9	1172.6
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7

(END OF REPORT)