

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: P333608

Luminaire Tested: **S125RDIP-S1090D1205U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333608
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: S125RDIP-S1090D1205U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8392.6 lumens
Efficiency: N/A
Efficacy: 128.3 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

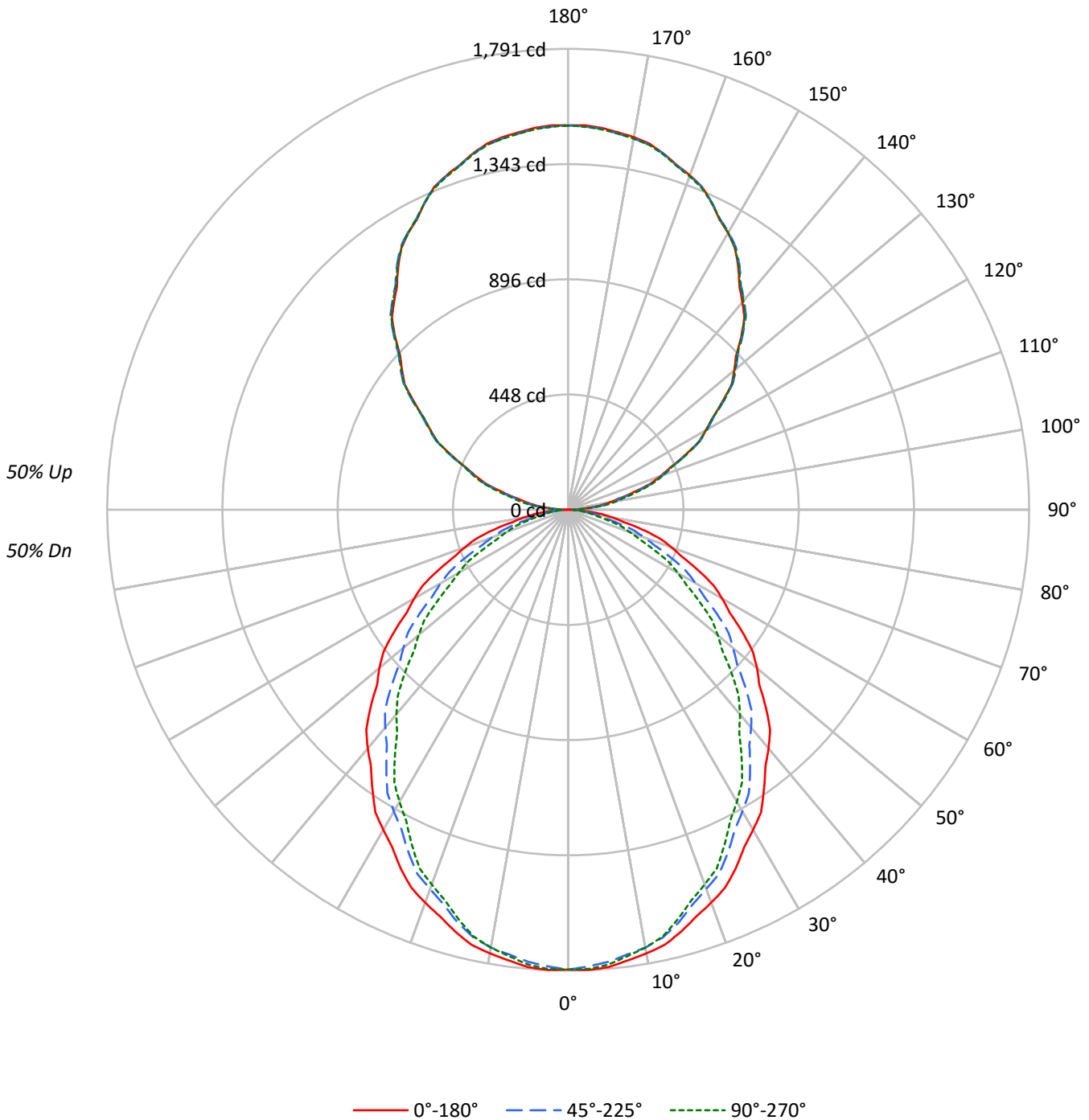
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43
2	89	82	76	71	82	76	71	66	65	61	58	54	51	49	44	43	41	36
3	82	72	65	59	75	67	61	56	57	52	49	48	45	42	40	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	21
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	25	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	24	44	33	27	22	29	24	20	25	21	18	21	18	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11544	11544	11544
5°	11570	11439	11509
10°	11482	11332	11332
15°	11346	11102	11012
20°	11171	10781	10652
25°	10967	10467	10236
30°	10712	10097	9775
35°	10452	9717	9260
40°	10209	9321	8752
45°	9913	8878	8199
50°	9616	8396	7623
55°	9272	7935	7007
60°	8928	7375	6347
65°	8520	6725	5590
70°	8055	5914	4817
75°	7411	4986	4007
80°	6527	3916	3362
85°	5498	3201	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	2.0
10°-20°	469.7	5.6
20°-30°	681.1	8.1
30°-40°	776.2	9.2
40°-50°	756.6	9.0
50°-60°	636.9	7.6
60°-70°	446.5	5.3
70°-80°	229.5	2.7
80°-90°	61.2	0.7
90°-100°	100.0	1.2
100°-110°	295.3	3.5
110°-120°	500.2	6.0
120°-130°	658.3	7.8
130°-140°	737.7	8.8
140°-150°	723.0	8.6
150°-160°	607.3	7.2
160°-170°	403.7	4.8
170°-180°	141.3	1.7
0°-30°	1318.9	15.7
0°-40°	2095.1	25.0
0°-60°	3488.6	41.6
0°-90°	4225.8	50.4
90°-120°	895.6	10.7
90°-150°	3014.6	35.9
90°-180°	4167.0	49.7
0°-180°	8392.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1785	1779	1764	1777	1775	169
15°	1697	1688	1660	1659	1647	478
25°	1539	1517	1469	1451	1436	708
35°	1326	1292	1232	1194	1174	830
45°	1085	1044	972	920	898	837
55°	824	778	705	646	622	736
65°	558	510	440	388	366	552
75°	297	256	200	171	161	314
85°	74	51	43	42	40	83
90°	1	10	19	24	28	8
95°	76	78	90	97	100	81
105°	265	271	278	284	288	283
115°	501	505	508	507	506	495
125°	731	738	739	737	736	654
135°	951	957	959	958	954	732
145°	1152	1156	1160	1160	1156	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1790.6	1789.9	1789.2	1788.4	1787.7	1786.2	1783.8	1781.4	1779.0	1776.6	1779.0
5°	1784.7	1783.5	1782.3	1781.1	1779.9	1777.6	1774.3	1771.0	1767.7	1764.4	1767.4
7.5°	1767.1	1766.0	1764.8	1763.7	1762.5	1760.0	1756.0	1752.1	1748.1	1744.2	1746.3
10°	1750.9	1750.0	1749.1	1748.2	1747.3	1744.8	1740.6	1736.4	1732.2	1728.0	1728.9
12.5°	1732.5	1731.4	1730.3	1729.1	1728.0	1724.6	1719.0	1713.3	1707.7	1702.0	1702.7
15°	1696.9	1695.1	1693.3	1691.5	1689.7	1685.7	1679.4	1673.1	1666.8	1660.5	1660.2
17.5°	1656.7	1653.9	1651.2	1648.4	1645.6	1640.3	1632.4	1624.5	1616.5	1608.6	1607.1
20°	1625.4	1622.4	1619.4	1616.4	1613.4	1607.1	1597.5	1587.9	1578.3	1568.7	1567.2
22.5°	1590.8	1587.8	1584.8	1581.8	1578.8	1572.3	1562.2	1552.1	1542.0	1531.9	1529.0
25°	1539.0	1534.5	1530.0	1525.5	1521.0	1513.2	1502.1	1491.0	1479.9	1468.8	1464.9
27.5°	1479.6	1474.1	1468.6	1463.2	1457.7	1449.1	1437.2	1425.3	1413.4	1401.5	1396.1
30°	1436.4	1430.7	1425.0	1419.3	1413.6	1404.4	1391.8	1379.2	1366.6	1354.0	1347.1
32.5°	1394.2	1387.6	1380.9	1374.3	1367.6	1357.9	1345.0	1332.2	1319.3	1306.5	1298.9
35°	1325.7	1318.5	1311.3	1304.1	1296.9	1286.5	1273.0	1259.5	1246.0	1232.5	1223.8
37.5°	1258.4	1249.7	1240.9	1232.2	1223.4	1212.1	1198.1	1184.2	1170.3	1156.4	1145.9
40°	1210.9	1201.9	1192.9	1183.9	1174.9	1163.2	1148.8	1134.4	1120.0	1105.6	1094.2
42.5°	1161.2	1152.0	1142.8	1133.5	1124.3	1112.2	1097.3	1082.5	1067.6	1052.7	1041.8
45°	1085.4	1076.7	1068.0	1059.3	1050.6	1038.0	1021.5	1005.0	988.5	972.0	960.0
47.5°	1006.8	997.6	988.4	979.3	970.1	957.2	940.6	923.9	907.3	890.7	878.3
50°	957.1	947.2	937.3	927.4	917.5	904.0	886.9	869.8	852.7	835.6	823.0
52.5°	903.1	893.0	882.8	872.7	862.6	849.4	833.3	817.1	801.0	784.9	771.3
55°	823.5	813.9	804.3	794.7	785.1	771.9	755.1	738.3	721.5	704.7	691.2
57.5°	743.0	732.8	722.5	712.2	702.0	688.8	672.6	656.4	640.2	624.0	610.8
60°	691.2	680.7	670.2	659.7	649.2	635.8	619.6	603.4	587.2	571.0	557.8
62.5°	636.1	626.1	616.1	606.0	596.0	582.8	566.4	549.9	533.5	517.0	504.8
65°	557.5	547.3	537.1	526.9	516.7	503.7	487.8	471.9	456.0	440.1	428.1
67.5°	479.5	469.3	459.1	448.9	438.7	426.0	410.7	395.5	380.3	365.0	354.1
70°	426.6	416.4	406.2	396.0	385.8	373.2	358.2	343.2	328.2	313.2	303.9
72.5°	374.8	364.8	354.8	344.9	334.9	322.9	308.9	294.8	280.8	266.8	258.2
75°	297.0	288.0	279.0	270.0	261.0	250.2	237.6	225.0	212.4	199.8	193.2
77.5°	219.8	212.6	205.4	198.2	191.0	182.3	172.3	162.2	152.1	142.0	137.4
80°	175.5	168.3	161.1	153.9	146.7	138.9	130.5	122.1	113.7	105.3	102.6
82.5°	132.3	125.8	119.3	112.9	106.4	100.3	94.5	88.7	83.0	77.2	76.0
85°	74.2	68.8	63.4	58.0	52.6	49.2	47.7	46.2	44.7	43.2	42.9
87.5°	25.1	23.8	22.5	21.3	20.0	19.4	19.6	19.7	19.8	19.9	20.2
90°	1.2	3.2	5.3	7.4	9.4	11.4	13.2	15.0	16.8	18.6	19.9
92.5°	28.1	29.6	31.0	32.5	33.9	35.7	38.0	40.2	42.4	44.6	46.3
95°	75.5	76.0	76.6	77.1	77.6	79.1	81.7	84.3	86.9	89.5	91.3
97.5°	125.5	125.7	125.9	126.1	126.3	128.2	131.8	135.3	138.9	142.5	144.2
100°	162.7	162.7	162.7	162.7	162.7	164.4	167.7	171.1	174.4	177.8	180.1
102.5°	202.7	203.7	204.7	205.8	206.8	208.2	209.9	211.6	213.3	215.0	217.5
105°	264.9	266.2	267.5	268.8	270.1	271.5	273.1	274.6	276.2	277.7	279.3
107.5°	333.7	335.0	336.3	337.6	338.9	340.1	341.3	342.5	343.7	344.9	345.7
110°	381.2	382.4	383.7	385.0	386.3	387.3	388.1	388.9	389.7	390.4	391.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	429.5	430.2	430.8	431.5	432.2	433.0	434.0	435.0	435.9	436.9	437.3
115°	500.8	501.9	502.9	503.9	505.0	505.7	506.3	506.8	507.3	507.8	507.6
117.5°	572.4	572.9	573.4	573.8	574.3	574.7	575.2	575.7	576.1	576.6	576.8
120°	617.0	618.3	619.6	620.9	622.2	623.0	623.2	623.5	623.8	624.0	624.0
122.5°	665.4	665.9	666.3	666.8	667.2	667.8	668.5	669.2	669.8	670.5	670.3
125°	730.9	732.5	734.0	735.6	737.1	738.0	738.3	738.5	738.8	739.1	738.5
127.5°	800.7	801.5	802.4	803.3	804.2	804.8	805.1	805.4	805.7	806.0	805.7
130°	842.5	843.8	845.1	846.4	847.6	848.6	849.1	849.6	850.1	850.6	850.4
132.5°	884.3	886.4	888.6	890.7	892.8	893.8	893.7	893.6	893.5	893.4	893.1
135°	950.6	952.1	953.7	955.2	956.8	957.7	957.9	958.2	958.4	958.7	958.7
137.5°	1012.8	1014.3	1015.8	1017.3	1018.8	1019.9	1020.4	1021.0	1021.6	1022.1	1022.4
140°	1052.8	1054.1	1055.4	1056.7	1058.0	1059.0	1059.8	1060.6	1061.3	1062.1	1062.6
142.5°	1092.8	1093.9	1095.0	1096.0	1097.1	1098.2	1099.1	1100.1	1101.1	1102.1	1102.4
145°	1151.6	1152.6	1153.7	1154.7	1155.7	1156.6	1157.4	1158.2	1158.9	1159.7	1159.7
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1211.9
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1781.4	1783.8	1786.2	1787.2	1787.0	1786.8	1786.5	1786.3
5°	1770.4	1773.4	1776.4	1777.6	1777.0	1776.4	1775.8	1775.2
7.5°	1748.4	1750.5	1752.6	1753.3	1752.6	1752.0	1751.3	1750.6
10°	1729.8	1730.7	1731.6	1731.6	1730.7	1729.8	1728.9	1728.0
12.5°	1703.4	1704.0	1704.7	1704.3	1702.9	1701.6	1700.2	1698.8
15°	1659.9	1659.6	1659.3	1657.8	1655.1	1652.4	1649.7	1647.0
17.5°	1605.6	1604.1	1602.6	1600.8	1598.5	1596.3	1594.1	1591.9
20°	1565.7	1564.2	1562.7	1560.6	1557.9	1555.2	1552.5	1549.8
22.5°	1526.1	1523.1	1520.2	1517.6	1515.4	1513.2	1510.9	1508.7
25°	1461.0	1457.1	1453.2	1449.6	1446.3	1443.0	1439.7	1436.4
27.5°	1390.6	1385.2	1379.7	1375.4	1372.2	1369.0	1365.8	1362.7
30°	1340.2	1333.3	1326.4	1321.6	1318.9	1316.2	1313.5	1310.8
32.5°	1291.3	1283.6	1276.0	1270.5	1267.1	1263.7	1260.2	1256.8
35°	1215.1	1206.4	1197.7	1191.3	1187.1	1182.9	1178.7	1174.5
37.5°	1135.5	1125.1	1114.6	1107.4	1103.3	1099.2	1095.1	1091.0
40°	1082.8	1071.4	1060.0	1052.5	1048.9	1045.3	1041.7	1038.1
42.5°	1030.9	1019.9	1009.0	1000.9	995.6	990.4	985.1	979.8
45°	948.0	936.0	924.0	915.7	911.2	906.7	902.2	897.7
47.5°	866.0	853.6	841.3	832.6	827.6	822.6	817.7	812.7
50°	810.4	797.8	785.2	776.7	772.2	767.7	763.2	758.7
52.5°	757.8	744.2	730.6	721.6	717.1	712.6	708.1	703.6
55°	677.7	664.2	650.7	641.5	636.7	631.9	627.1	622.3
57.5°	597.6	584.4	571.2	562.4	558.2	553.9	549.6	545.4
60°	544.6	531.4	518.2	509.4	504.9	500.4	495.9	491.4
62.5°	492.6	480.3	468.1	459.7	455.2	450.7	446.2	441.7
65°	416.1	404.1	392.1	383.8	379.3	374.8	370.3	365.8
67.5°	343.1	332.1	321.1	313.8	310.2	306.6	303.0	299.4
70°	294.6	285.3	276.0	269.5	265.9	262.3	258.7	255.1
72.5°	249.6	241.0	232.4	226.9	224.5	222.1	219.7	217.3
75°	186.6	180.0	173.4	169.0	166.9	164.8	162.7	160.6
77.5°	132.8	128.2	123.5	120.4	118.9	117.3	115.8	114.2
80°	99.9	97.2	94.5	92.8	92.2	91.6	91.0	90.4
82.5°	74.7	73.4	72.2	71.4	71.0	70.6	70.3	69.9
85°	42.6	42.3	42.0	41.7	41.4	41.1	40.8	40.5
87.5°	20.4	20.7	21.0	21.0	21.0	20.9	20.8	20.7
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	48.0	49.7	51.4	52.6	53.1	53.7	54.3	54.8
95°	93.1	94.9	96.7	97.9	98.4	98.9	99.4	99.9
97.5°	145.9	147.6	149.3	150.3	150.6	150.9	151.2	151.5
100°	182.4	184.8	187.1	188.5	189.0	189.5	190.1	190.6
102.5°	220.0	222.6	225.1	226.7	227.5	228.2	228.9	229.6
105°	280.8	282.4	283.9	285.1	285.9	286.6	287.4	288.2
107.5°	346.4	347.2	348.0	348.4	348.3	348.3	348.2	348.1
110°	392.0	392.8	393.5	393.8	393.5	393.3	393.0	392.8



TEST NUMBER: P333608

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	437.7	438.0	438.4	438.3	437.9	437.4	436.9	436.5
115°	507.3	507.0	506.8	506.5	506.3	506.0	505.7	505.5
117.5°	577.0	577.2	577.4	577.0	576.0	575.0	573.9	572.9
120°	624.0	624.0	624.0	623.5	622.5	621.4	620.4	619.4
122.5°	670.1	669.9	669.7	669.2	668.3	667.5	666.7	665.9
125°	738.0	737.5	737.0	736.6	736.4	736.1	735.8	735.6
127.5°	805.5	805.2	805.0	804.6	804.1	803.5	803.0	802.5
130°	850.1	849.8	849.6	849.2	848.7	848.2	847.6	847.1
132.5°	892.9	892.6	892.3	891.9	891.1	890.4	889.7	889.0
135°	958.7	958.7	958.7	958.2	957.1	956.1	955.1	954.0
137.5°	1022.8	1023.1	1023.4	1022.9	1021.6	1020.3	1019.0	1017.7
140°	1063.1	1063.7	1064.2	1063.8	1062.5	1061.2	1059.9	1058.6
142.5°	1102.7	1103.0	1103.3	1102.8	1101.5	1100.3	1099.0	1097.7
145°	1159.7	1159.7	1159.7	1159.3	1158.6	1157.8	1157.0	1156.2
147.5°	1212.6	1213.2	1213.8	1213.2	1211.5	1209.7	1208.0	1206.2
150°	1245.7	1245.7	1245.7	1245.5	1244.9	1244.4	1243.9	1243.4
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1275.9	1275.0	1274.1
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)