

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: P333638-840

Luminaire Tested: **S125RDIP-S1270D1205U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333638-840
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-S1270D1205U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 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: 9136.0 lumens
Efficiency: N/A
Efficacy: 127.4 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

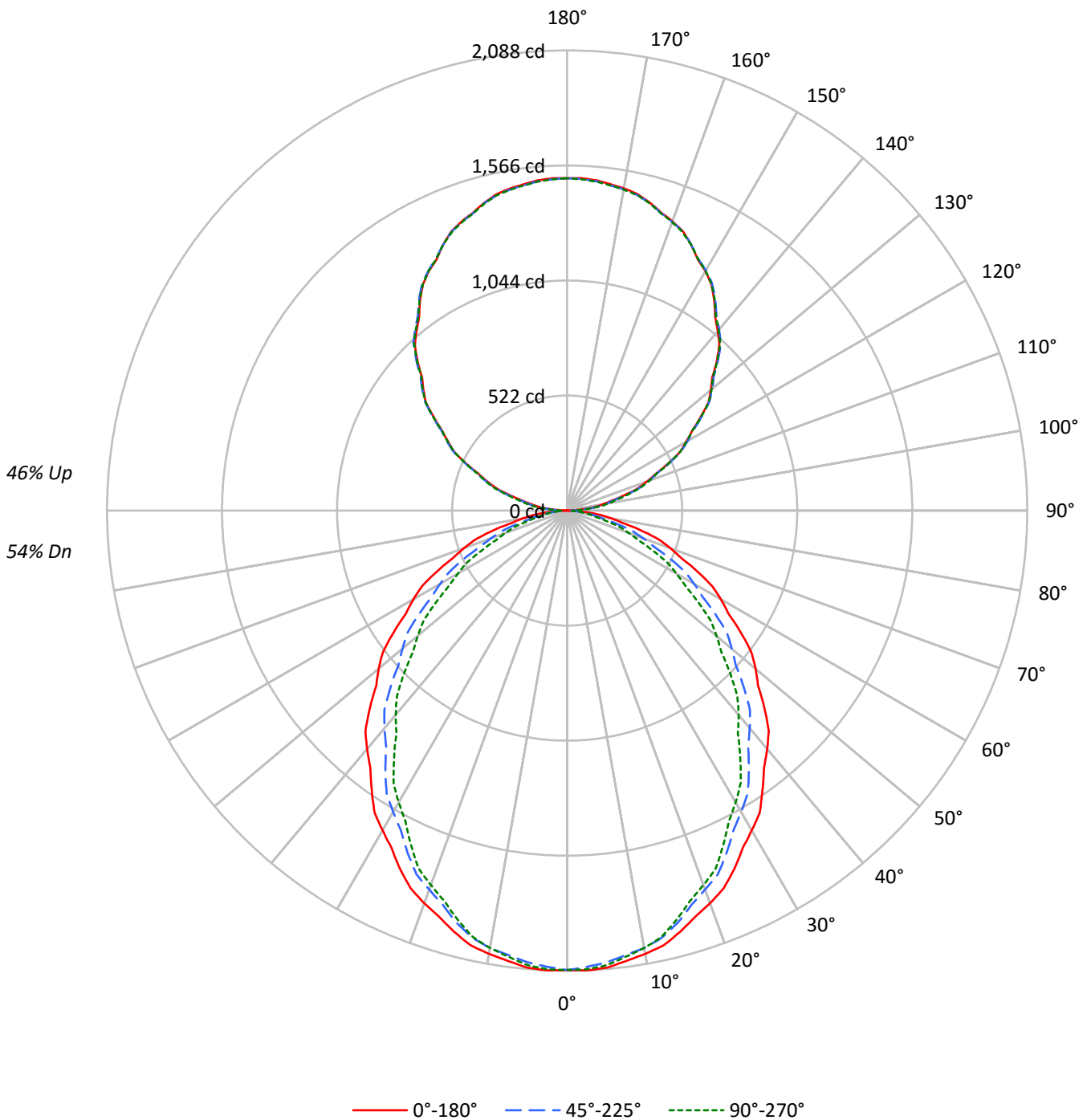
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	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	54	48	52	47	43	45	41	37	38	35	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	29	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	19	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13464	13464	13464
5°	13494	13341	13422
10°	13392	13217	13217
15°	13233	12948	12843
20°	13029	12575	12423
25°	12790	12207	11938
30°	12493	11777	11401
35°	12191	11334	10800
40°	11907	10871	10208
45°	11562	10355	9563
50°	11216	9792	8890
55°	10815	9254	8173
60°	10413	8603	7403
65°	9938	7844	6521
70°	9396	6898	5620
75°	8644	5814	4674
80°	7613	4567	3924
85°	6417	3735	3505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.0	2.1
10°-20°	547.8	6.0
20°-30°	794.4	8.7
30°-40°	905.3	9.9
40°-50°	882.5	9.7
50°-60°	742.8	8.1
60°-70°	520.7	5.7
70°-80°	267.7	2.9
80°-90°	70.9	0.8
90°-100°	101.0	1.1
100°-110°	298.2	3.3
110°-120°	505.2	5.5
120°-130°	664.8	7.3
130°-140°	745.0	8.2
140°-150°	730.1	8.0
150°-160°	613.2	6.7
160°-170°	407.6	4.5
170°-180°	142.7	1.6
0°-30°	1538.2	16.8
0°-40°	2443.5	26.7
0°-60°	4068.9	44.5
0°-90°	4928.1	53.9
90°-120°	904.4	9.9
90°-150°	3044.3	33.3
90°-180°	4208.0	46.1
0°-180°	9136.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2085	2085	2085	2085	2085	
5°	2082	2075	2058	2073	2070	197
15°	1979	1968	1937	1934	1921	558
25°	1795	1769	1713	1693	1675	826
35°	1546	1507	1438	1393	1370	968
45°	1266	1218	1134	1073	1047	976
55°	960	908	822	754	726	859
65°	650	595	513	452	427	644
75°	346	298	233	200	187	367
85°	87	59	50	49	47	97
90°	1	10	19	24	28	8
95°	76	79	90	98	101	81
105°	268	274	280	287	291	286
115°	506	510	513	512	510	500
125°	738	745	746	744	743	661
135°	960	967	968	968	963	740
145°	1163	1168	1171	1171	1168	727
155°	1331	1331	1332	1336	1331	613
165°	1447	1445	1446	1450	1443	408
175°	1504	1500	1500	1506	1498	143
180°	1508	1508	1508	1508	1508	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2088.4	2087.6	2086.7	2085.9	2085.1	2083.3	2080.4	2077.6	2074.9	2072.0	2074.9
5°	2081.5	2080.1	2078.7	2077.3	2075.9	2073.3	2069.4	2065.6	2061.7	2057.9	2061.3
7.5°	2061.0	2059.7	2058.4	2057.0	2055.7	2052.8	2048.1	2043.5	2038.9	2034.3	2036.7
10°	2042.1	2041.0	2040.0	2039.0	2037.9	2035.0	2030.0	2025.2	2020.2	2015.4	2016.4
12.5°	2020.7	2019.4	2018.0	2016.7	2015.4	2011.4	2004.9	1998.3	1991.7	1985.1	1985.9
15°	1979.1	1977.0	1975.0	1972.9	1970.8	1966.0	1958.6	1951.4	1944.0	1936.6	1936.3
17.5°	1932.2	1929.0	1925.8	1922.6	1919.3	1913.1	1903.9	1894.6	1885.4	1876.1	1874.4
20°	1895.7	1892.2	1888.6	1885.2	1881.7	1874.3	1863.2	1852.0	1840.8	1829.6	1827.9
22.5°	1855.4	1851.9	1848.4	1844.9	1841.4	1833.8	1822.0	1810.3	1798.5	1786.8	1783.3
25°	1794.9	1789.7	1784.4	1779.2	1773.9	1764.8	1751.9	1739.0	1726.0	1713.0	1708.5
27.5°	1725.7	1719.3	1712.9	1706.6	1700.2	1690.1	1676.2	1662.3	1648.5	1634.7	1628.3
30°	1675.3	1668.6	1661.9	1655.4	1648.7	1638.0	1623.3	1608.6	1593.9	1579.2	1571.1
32.5°	1626.2	1618.4	1610.6	1602.9	1595.1	1583.7	1568.7	1553.8	1538.7	1523.8	1514.9
35°	1546.2	1537.7	1529.3	1521.0	1512.6	1500.5	1484.7	1469.1	1453.3	1437.5	1427.3
37.5°	1467.7	1457.5	1447.3	1437.1	1426.8	1413.6	1397.5	1381.2	1364.9	1348.7	1336.6
40°	1412.3	1401.8	1391.3	1380.8	1370.4	1356.7	1339.9	1323.1	1306.3	1289.5	1276.3
42.5°	1354.4	1343.6	1332.8	1322.0	1311.3	1297.2	1279.9	1262.5	1245.2	1227.8	1215.1
45°	1265.9	1255.8	1245.6	1235.5	1225.3	1210.6	1191.3	1172.2	1152.9	1133.7	1119.6
47.5°	1174.3	1163.6	1152.9	1142.2	1131.5	1116.4	1097.0	1077.6	1058.2	1038.8	1024.4
50°	1116.3	1104.8	1093.2	1081.7	1070.2	1054.4	1034.4	1014.5	994.5	974.6	959.9
52.5°	1053.3	1041.5	1029.7	1017.8	1006.0	990.7	971.9	953.1	934.2	915.4	899.6
55°	960.5	949.3	938.1	926.9	915.6	900.3	880.7	861.1	841.5	821.9	806.2
57.5°	866.6	854.6	842.6	830.7	818.7	803.3	784.5	765.5	746.6	727.7	712.4
60°	806.2	793.9	781.6	769.4	757.2	741.5	722.7	703.8	684.9	666.0	650.7
62.5°	741.9	730.2	718.5	706.8	695.2	679.7	660.6	641.4	622.2	603.0	588.8
65°	650.3	638.3	626.5	614.6	602.7	587.4	569.0	550.4	531.8	513.3	499.3
67.5°	559.3	547.3	535.4	523.6	511.7	496.9	479.1	461.3	443.5	425.8	412.9
70°	497.6	485.6	473.7	461.8	450.0	435.3	417.8	400.3	382.7	365.3	354.5
72.5°	437.1	425.5	413.8	402.2	390.6	376.6	360.2	343.9	327.5	311.1	301.1
75°	346.4	335.9	325.4	314.9	304.4	291.9	277.1	262.5	247.7	233.0	225.3
77.5°	256.3	247.9	239.5	231.2	222.8	212.7	200.9	189.1	177.4	165.6	160.3
80°	204.7	196.3	187.9	179.5	171.1	162.0	152.2	142.4	132.6	122.8	119.7
82.5°	154.3	146.7	139.2	131.6	124.1	116.9	110.2	103.5	96.7	90.1	88.6
85°	86.6	80.3	74.0	67.7	61.4	57.4	55.6	53.9	52.1	50.4	50.0
87.5°	29.2	27.7	26.2	24.5	23.0	22.3	22.4	22.5	22.5	22.6	22.9
90°	1.2	3.2	5.4	7.5	9.5	11.5	13.3	15.1	17.0	18.8	20.1
92.5°	28.4	29.9	31.3	32.8	34.2	36.1	38.4	40.6	42.8	45.0	46.8
95°	76.2	76.7	77.4	77.9	78.4	79.9	82.5	85.1	87.8	90.4	92.2
97.5°	126.7	126.9	127.1	127.3	127.5	129.5	133.1	136.6	140.3	143.9	145.6
100°	164.3	164.3	164.3	164.3	164.3	166.0	169.4	172.8	176.1	179.6	181.9
102.5°	204.7	205.7	206.7	207.8	208.8	210.3	212.0	213.7	215.4	217.1	219.6
105°	267.5	268.8	270.1	271.5	272.8	274.2	275.8	277.3	278.9	280.4	282.1
107.5°	337.0	338.3	339.6	340.9	342.2	343.5	344.7	345.9	347.1	348.3	349.1
110°	385.0	386.2	387.5	388.8	390.1	391.1	391.9	392.7	393.5	394.3	395.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	433.7	434.4	435.0	435.8	436.5	437.3	438.3	439.3	440.2	441.2	441.6
115°	505.7	506.9	507.9	508.9	510.0	510.7	511.3	511.8	512.3	512.8	512.6
117.5°	578.0	578.6	579.1	579.5	580.0	580.4	580.9	581.4	581.8	582.3	582.5
120°	623.1	624.4	625.7	627.0	628.3	629.1	629.3	629.7	630.0	630.2	630.2
122.5°	672.0	672.5	672.9	673.4	673.8	674.4	675.1	675.8	676.4	677.1	676.9
125°	738.1	739.7	741.2	742.9	744.4	745.3	745.6	745.8	746.1	746.4	745.8
127.5°	808.6	809.4	810.3	811.2	812.1	812.7	813.0	813.3	813.6	814.0	813.6
130°	850.8	852.1	853.4	854.7	856.0	857.0	857.5	858.0	858.5	859.0	858.8
132.5°	893.0	895.1	897.4	899.5	901.6	902.6	902.5	902.4	902.3	902.2	901.9
135°	960.0	961.5	963.1	964.6	966.2	967.1	967.3	967.7	967.9	968.2	968.2
137.5°	1022.8	1024.3	1025.8	1027.3	1028.9	1030.0	1030.5	1031.1	1031.7	1032.2	1032.5
140°	1063.2	1064.5	1065.8	1067.1	1068.4	1069.4	1070.3	1071.1	1071.8	1072.6	1073.1
142.5°	1103.6	1104.7	1105.8	1106.8	1107.9	1109.0	1109.9	1111.0	1112.0	1113.0	1113.3
145°	1163.0	1164.0	1165.1	1166.1	1167.1	1168.0	1168.8	1169.6	1170.3	1171.1	1171.1
147.5°	1217.9	1218.4	1219.0	1219.6	1220.1	1220.7	1221.4	1222.0	1222.6	1223.2	1223.9
150°	1254.5	1254.3	1253.9	1253.7	1253.4	1253.8	1254.9	1255.9	1257.0	1258.0	1258.0
152.5°	1284.5	1284.9	1285.3	1285.7	1286.0	1286.4	1286.8	1287.2	1287.7	1288.1	1288.7
155°	1330.8	1330.8	1330.8	1330.8	1330.8	1330.9	1331.2	1331.4	1331.7	1331.9	1333.0
157.5°	1372.1	1371.5	1370.9	1370.4	1369.8	1369.6	1369.9	1370.2	1370.4	1370.7	1371.7
160°	1396.4	1395.7	1394.9	1394.1	1393.3	1393.1	1393.3	1393.6	1393.9	1394.1	1395.1
162.5°	1418.1	1417.5	1416.9	1416.3	1415.7	1415.5	1415.5	1415.6	1415.6	1415.7	1416.9
165°	1446.9	1446.4	1445.9	1445.4	1444.8	1444.7	1445.0	1445.2	1445.5	1445.7	1446.8
167.5°	1471.4	1470.3	1469.3	1468.2	1467.1	1466.6	1466.6	1466.6	1466.6	1466.6	1468.2
170°	1484.5	1483.5	1482.4	1481.4	1480.4	1479.8	1479.8	1479.8	1479.8	1479.8	1481.4
172.5°	1493.9	1492.9	1491.8	1490.8	1489.8	1489.1	1489.1	1489.1	1489.1	1489.1	1490.8
175°	1504.4	1503.4	1502.4	1501.3	1500.3	1499.8	1499.8	1499.8	1499.8	1499.8	1501.3
177.5°	1509.8	1509.0	1508.1	1507.3	1506.5	1506.0	1505.8	1505.6	1505.3	1505.1	1506.4
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7	2084.7
2.5°	2077.6	2080.4	2083.3	2084.5	2084.3	2084.0	2083.7	2083.4
5°	2064.9	2068.4	2071.8	2073.3	2072.5	2071.8	2071.1	2070.4
7.5°	2039.1	2041.6	2044.1	2044.9	2044.1	2043.4	2042.6	2041.8
10°	2017.4	2018.5	2019.5	2019.5	2018.5	2017.4	2016.4	2015.4
12.5°	1986.7	1987.4	1988.2	1987.8	1986.2	1984.6	1983.0	1981.4
15°	1935.9	1935.6	1935.2	1933.5	1930.4	1927.2	1924.0	1920.9
17.5°	1872.7	1870.9	1869.2	1867.0	1864.4	1861.8	1859.3	1856.6
20°	1826.0	1824.3	1822.6	1820.1	1816.9	1813.8	1810.7	1807.6
22.5°	1779.9	1776.5	1773.0	1770.0	1767.5	1764.8	1762.2	1759.7
25°	1703.9	1699.4	1694.9	1690.6	1686.8	1682.9	1679.1	1675.3
27.5°	1621.9	1615.6	1609.2	1604.2	1600.4	1596.7	1593.0	1589.3
30°	1563.2	1555.1	1547.0	1541.5	1538.3	1535.1	1532.0	1528.8
32.5°	1506.0	1497.1	1488.2	1481.8	1477.8	1473.8	1469.9	1465.8
35°	1417.2	1407.0	1396.9	1389.4	1384.5	1379.6	1374.7	1369.8
37.5°	1324.3	1312.2	1300.0	1291.5	1286.8	1282.0	1277.3	1272.5
40°	1262.9	1249.6	1236.4	1227.6	1223.4	1219.2	1215.0	1210.8
42.5°	1202.3	1189.6	1176.9	1167.4	1161.2	1155.1	1148.9	1142.8
45°	1105.6	1091.7	1077.6	1068.0	1062.8	1057.5	1052.3	1047.0
47.5°	1010.1	995.6	981.2	971.1	965.2	959.5	953.6	947.9
50°	945.2	930.5	915.8	905.8	900.6	895.3	890.1	884.8
52.5°	883.7	868.0	852.1	841.6	836.4	831.1	825.9	820.6
55°	790.4	774.7	758.9	748.2	742.7	737.0	731.4	725.9
57.5°	696.9	681.6	666.1	656.0	651.0	646.0	641.1	636.1
60°	635.2	619.9	604.4	594.1	588.9	583.6	578.3	573.1
62.5°	574.5	560.2	545.9	536.1	530.9	525.6	520.4	515.1
65°	485.3	471.3	457.3	447.7	442.4	437.2	431.9	426.7
67.5°	400.1	387.3	374.6	366.0	361.8	357.6	353.5	349.2
70°	343.6	332.8	321.9	314.4	310.1	306.0	301.7	297.6
72.5°	291.1	281.1	271.0	264.7	261.9	259.1	256.3	253.5
75°	217.6	210.0	202.3	197.1	194.7	192.3	189.9	187.3
77.5°	154.8	149.5	144.1	140.5	138.7	136.8	135.0	133.2
80°	116.5	113.4	110.2	108.3	107.6	106.8	106.2	105.5
82.5°	87.2	85.6	84.2	83.2	82.8	82.4	82.0	81.6
85°	49.7	49.4	49.0	48.7	48.3	48.0	47.6	47.3
87.5°	23.1	23.4	23.7	23.7	23.6	23.5	23.4	23.2
90°	21.4	22.7	24.0	25.0	25.9	26.6	27.4	28.2
92.5°	48.5	50.2	51.9	53.1	53.6	54.2	54.8	55.3
95°	94.0	95.8	97.7	98.9	99.4	99.9	100.4	100.9
97.5°	147.3	149.1	150.8	151.8	152.1	152.4	152.7	153.0
100°	184.2	186.6	188.9	190.4	190.9	191.4	192.0	192.5
102.5°	222.2	224.8	227.3	228.9	229.7	230.5	231.2	231.9
105°	283.6	285.2	286.7	287.9	288.7	289.4	290.2	291.0
107.5°	349.8	350.6	351.4	351.8	351.7	351.7	351.6	351.5
110°	395.9	396.7	397.4	397.7	397.4	397.2	396.9	396.7



TEST NUMBER: P333638-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	442.0	442.3	442.7	442.6	442.2	441.7	441.2	440.8
115°	512.3	512.0	511.8	511.5	511.3	511.0	510.7	510.5
117.5°	582.7	582.9	583.1	582.7	581.7	580.7	579.6	578.6
120°	630.2	630.2	630.2	629.7	628.6	627.5	626.5	625.5
122.5°	676.7	676.5	676.3	675.8	674.9	674.1	673.3	672.5
125°	745.3	744.8	744.3	743.9	743.7	743.4	743.1	742.9
127.5°	813.4	813.1	812.9	812.5	812.0	811.4	810.9	810.4
130°	858.5	858.2	858.0	857.6	857.1	856.6	856.0	855.5
132.5°	901.7	901.4	901.1	900.7	899.9	899.2	898.5	897.8
135°	968.2	968.2	968.2	967.7	966.5	965.5	964.5	963.4
137.5°	1032.9	1033.2	1033.5	1033.0	1031.7	1030.4	1029.1	1027.7
140°	1073.6	1074.2	1074.7	1074.3	1073.0	1071.7	1070.4	1069.0
142.5°	1113.6	1113.9	1114.2	1113.7	1112.4	1111.2	1109.8	1108.5
145°	1171.1	1171.1	1171.1	1170.7	1170.0	1169.2	1168.4	1167.6
147.5°	1224.6	1225.2	1225.8	1225.2	1223.5	1221.6	1219.9	1218.1
150°	1258.0	1258.0	1258.0	1257.8	1257.2	1256.7	1256.2	1255.7
152.5°	1289.3	1289.9	1290.5	1290.4	1289.5	1288.5	1287.6	1286.7
155°	1334.0	1335.0	1336.2	1336.0	1334.6	1333.3	1332.1	1330.8
157.5°	1372.7	1373.8	1374.8	1374.5	1372.8	1371.1	1369.4	1367.7
160°	1396.2	1397.2	1398.3	1398.2	1396.8	1395.5	1394.2	1393.0
162.5°	1418.3	1419.5	1420.8	1420.6	1419.1	1417.5	1416.0	1414.5
165°	1447.8	1448.9	1450.0	1449.7	1448.1	1446.5	1445.0	1443.4
167.5°	1469.8	1471.4	1472.9	1472.9	1471.3	1469.7	1468.0	1466.4
170°	1482.9	1484.5	1486.0	1485.9	1484.1	1482.3	1480.5	1478.6
172.5°	1492.3	1493.9	1495.4	1495.4	1493.8	1492.2	1490.6	1488.9
175°	1502.9	1504.4	1506.0	1505.9	1504.1	1502.3	1500.4	1498.5
177.5°	1507.6	1508.9	1510.2	1510.1	1508.6	1507.1	1505.7	1504.2
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9

(END OF REPORT)