

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: P333639-935

Luminaire Tested: **S125RDIP-S1270D1205U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333639-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDIP-S1270D1205U935-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7922.8 lumens  
Efficiency: N/A  
Efficacy: 110.5 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

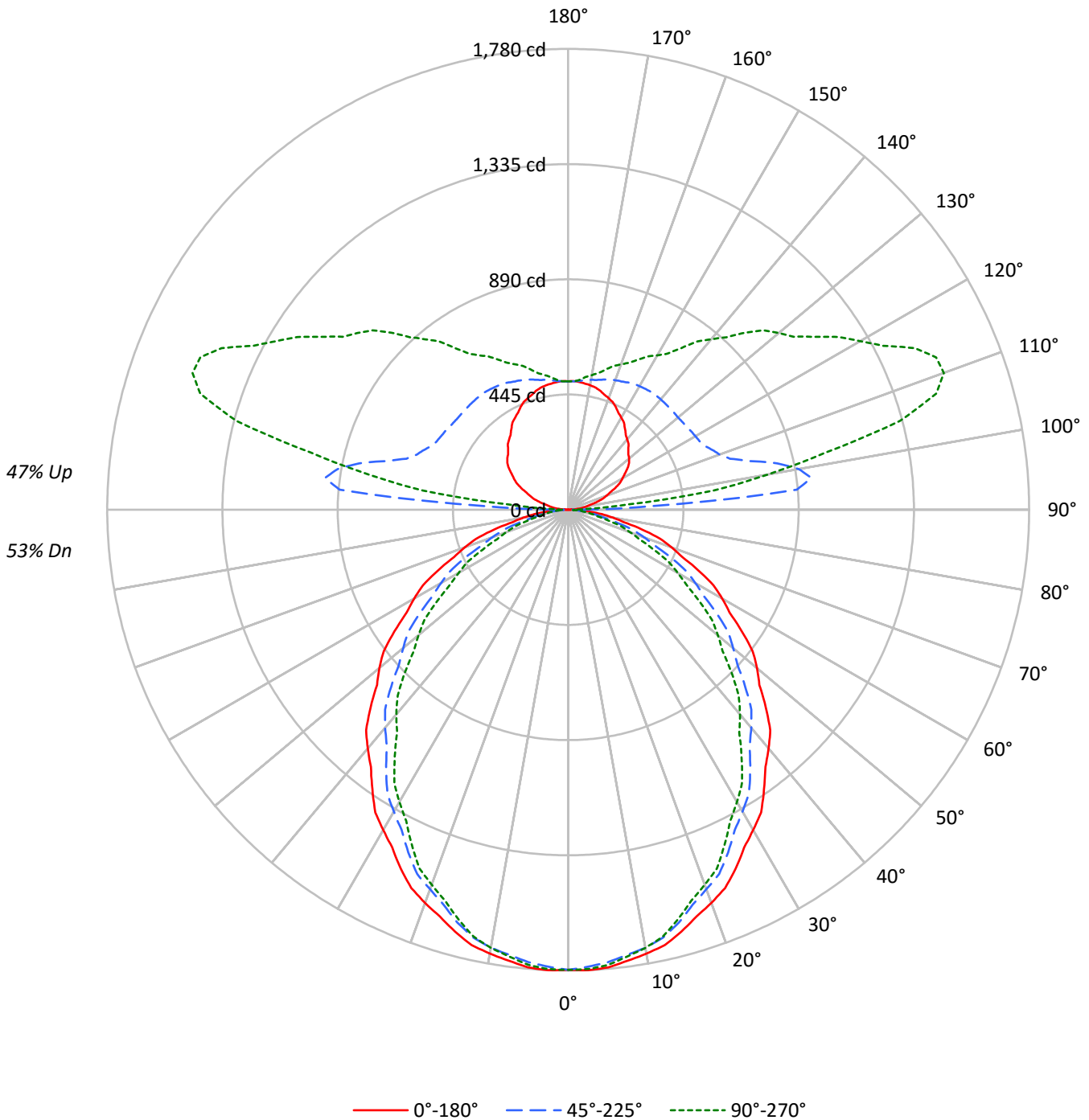
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20						20								20		
RC	80					70						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		71	71	71		59	59	59	53
1	99	94	91	87		91	88	84	81		75	73	70		63	62	60		52	51	50	45
2	90	83	77	72		83	77	72	67		66	62	59		56	53	50		46	44	43	38
3	82	73	66	60		76	68	61	56		58	53	50		49	46	43		41	39	37	33
4	75	65	57	51		70	60	53	48		52	47	42		44	40	37		37	34	32	28
5	69	58	50	44		64	54	47	41		47	41	37		40	35	32		33	30	28	25
6	64	52	44	38		59	48	41	36		42	36	32		36	32	28		30	27	24	22
7	59	47	39	33		55	44	37	32		38	33	28		33	28	25		28	24	22	19
8	55	43	35	30		51	40	33	28		35	29	25		30	26	22		26	22	20	17
9	51	39	32	26		47	37	30	25		32	27	23		28	23	20		24	20	18	16
10	48	36	29	24		44	34	27	23		30	24	20		26	21	18		22	19	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11479	11479	11479
5°	11505	11374	11444
10°	11418	11269	11269
15°	11282	11040	10950
20°	11109	10721	10592
25°	10905	10408	10178
30°	10651	10041	9721
35°	10394	9663	9208
40°	10151	9269	8703
45°	9858	8828	8153
50°	9562	8349	7580
55°	9221	7891	6969
60°	8878	7334	6311
65°	8472	6687	5559
70°	8010	5880	4791
75°	7369	4956	3985
80°	6490	3894	3347
85°	5476	3186	2986



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.1	2.1
10°-20°	467.1	5.9
20°-30°	677.3	8.5
30°-40°	771.9	9.7
40°-50°	752.4	9.5
50°-60°	633.3	8.0
60°-70°	444.0	5.6
70°-80°	228.2	2.9
80°-90°	60.4	0.8
90°-100°	359.7	4.5
100°-110°	773.2	9.8
110°-120°	725.6	9.2
120°-130°	588.1	7.4
130°-140°	471.9	6.0
140°-150°	356.1	4.5
150°-160°	250.7	3.2
160°-170°	147.8	1.9
170°-180°	48.1	0.6
0°-30°	1311.5	16.6
0°-40°	2083.3	26.3
0°-60°	3469.1	43.8
0°-90°	4201.6	53.0
90°-120°	1858.5	23.5
90°-150°	3274.7	41.3
90°-180°	3721.0	47.0
0°-180°	7922.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1777	1777	1777	1777	1777	
5°	1775	1769	1754	1767	1765	168
15°	1687	1678	1651	1649	1638	475
25°	1530	1509	1460	1443	1428	704
35°	1318	1284	1226	1188	1168	825
45°	1079	1038	967	915	893	832
55°	819	774	701	642	619	732
65°	554	507	438	386	364	549
75°	295	254	199	170	160	313
85°	74	51	43	42	40	83
90°	1	9	16	21	23	5
95°	33	98	886	402	235	35
105°	113	158	725	1428	1326	119
115°	202	244	582	1255	1477	199
125°	280	328	558	998	1164	248
135°	328	395	554	837	966	255
145°	382	438	556	693	762	239
155°	436	469	542	613	639	201
165°	476	489	520	552	560	134
175°	495	495	499	505	503	47
180°	496	496	496	496	496	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1780.5	1779.9	1779.1	1778.4	1777.7	1776.2	1773.7	1771.3	1769.0	1766.6	1769.0
5°	1774.7	1773.5	1772.3	1771.1	1769.9	1767.6	1764.4	1761.1	1757.8	1754.5	1757.5
7.5°	1757.2	1756.1	1755.0	1753.8	1752.7	1750.2	1746.2	1742.2	1738.4	1734.4	1736.5
10°	1741.1	1740.2	1739.3	1738.4	1737.5	1735.0	1730.8	1726.6	1722.4	1718.3	1719.2
12.5°	1722.9	1721.7	1720.5	1719.4	1718.3	1714.9	1709.3	1703.7	1698.1	1692.5	1693.2
15°	1687.4	1685.6	1683.9	1682.0	1680.2	1676.2	1669.9	1663.7	1657.4	1651.1	1650.9
17.5°	1647.4	1644.7	1641.9	1639.2	1636.4	1631.1	1623.2	1615.3	1607.5	1599.6	1598.1
20°	1616.3	1613.3	1610.2	1607.3	1604.3	1598.0	1588.5	1579.0	1569.4	1559.9	1558.4
22.5°	1581.9	1578.9	1575.9	1573.0	1569.9	1563.5	1553.4	1543.4	1533.4	1523.4	1520.4
25°	1530.3	1525.9	1521.4	1516.9	1512.4	1504.7	1493.7	1482.6	1471.5	1460.5	1456.6
27.5°	1471.3	1465.9	1460.4	1455.0	1449.6	1441.0	1429.1	1417.3	1405.5	1393.7	1388.3
30°	1428.3	1422.6	1416.9	1411.4	1405.7	1396.5	1384.0	1371.5	1358.9	1346.4	1339.5
32.5°	1386.5	1379.8	1373.2	1366.6	1359.9	1350.2	1337.5	1324.7	1311.9	1299.2	1291.6
35°	1318.3	1311.0	1303.9	1296.8	1289.6	1279.3	1265.8	1252.5	1239.1	1225.6	1216.9
37.5°	1251.4	1242.7	1234.0	1225.3	1216.5	1205.2	1191.5	1177.6	1163.7	1149.9	1139.5
40°	1204.1	1195.2	1186.2	1177.2	1168.4	1156.7	1142.4	1128.1	1113.7	1099.4	1088.1
42.5°	1154.8	1145.6	1136.3	1127.1	1118.0	1106.0	1091.2	1076.4	1061.6	1046.8	1036.0
45°	1079.3	1070.7	1062.0	1053.3	1044.7	1032.2	1015.7	999.4	982.9	966.6	954.6
47.5°	1001.2	992.0	982.9	973.8	964.7	951.8	935.3	918.8	902.2	885.7	873.4
50°	951.7	941.9	932.0	922.2	912.4	899.0	881.9	865.0	847.9	831.0	818.4
52.5°	898.0	887.9	877.9	867.8	857.7	844.6	828.6	812.6	796.5	780.5	767.0
55°	818.9	809.3	799.8	790.2	780.7	767.6	750.9	734.2	717.5	700.8	687.3
57.5°	738.8	728.7	718.4	708.3	698.0	684.9	668.8	652.6	636.5	620.4	607.3
60°	687.3	676.8	666.4	656.0	645.6	632.2	616.1	600.0	583.9	567.8	554.7
62.5°	632.6	622.6	612.6	602.6	592.7	579.5	563.2	546.8	530.5	514.1	502.0
65°	554.4	544.2	534.2	524.0	513.8	500.8	485.1	469.2	453.4	437.6	425.7
67.5°	476.8	466.7	456.5	446.4	436.3	423.6	408.5	393.3	378.2	363.0	352.1
70°	424.2	414.1	403.9	393.7	383.7	371.1	356.2	341.3	326.3	311.4	302.2
72.5°	372.6	362.7	352.8	342.9	333.0	321.1	307.1	293.2	279.2	265.3	256.8
75°	295.3	286.4	277.4	268.5	259.5	248.8	236.3	223.8	211.2	198.6	192.1
77.5°	218.5	211.4	204.2	197.1	189.9	181.3	171.3	161.3	151.3	141.2	136.6
80°	174.5	167.4	160.2	153.0	145.9	138.1	129.8	121.4	113.0	104.7	102.0
82.5°	131.6	125.1	118.6	112.2	105.8	99.7	93.9	88.3	82.5	76.8	75.5
85°	73.9	68.4	63.1	57.7	52.3	48.9	47.4	46.0	44.4	43.0	42.6
87.5°	24.9	23.4	22.1	20.9	19.6	19.0	19.0	19.2	19.1	19.3	19.5
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.6	52.9	82.1	136.6	228.3	327.8	322.5	261.1
95°	33.0	34.0	42.0	53.0	75.0	120.0	227.1	447.2	723.3	886.4	867.4
97.5°	54.8	56.1	61.6	72.7	92.5	124.8	195.7	357.0	645.9	946.6	1097.5
100°	70.0	72.1	76.0	87.0	106.1	136.0	194.1	324.2	576.3	903.4	1153.5
102.5°	86.9	88.1	91.3	103.1	120.5	149.6	201.3	310.6	523.4	827.3	1119.9
105°	113.0	113.0	118.0	128.0	144.0	172.1	216.1	305.1	472.2	725.3	1012.4
107.5°	138.6	140.7	145.4	153.7	170.3	195.4	238.1	314.4	450.6	655.0	902.8
110°	157.0	159.1	163.1	172.1	187.1	213.1	254.1	323.1	444.2	622.2	840.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.5	177.5	180.6	189.7	204.7	229.9	269.3	334.3	444.2	603.0	793.9
115°	202.1	204.1	207.1	216.1	231.1	256.1	293.2	351.1	447.2	582.3	743.3
117.5°	226.1	229.1	232.3	241.3	258.3	282.5	317.5	370.4	453.8	572.0	713.1
120°	242.1	245.1	249.1	258.1	275.1	300.1	335.2	383.1	460.2	567.2	696.3
122.5°	258.9	261.1	264.3	273.3	292.0	316.9	352.0	397.6	465.8	563.3	681.9
125°	280.1	282.1	287.1	296.1	315.1	341.1	374.2	417.2	475.2	558.3	662.3
127.5°	296.7	299.7	306.2	317.5	337.8	363.8	395.5	435.2	485.8	555.9	644.3
130°	307.1	310.1	318.1	331.1	352.1	378.2	409.1	447.2	492.2	554.2	632.3
132.5°	315.1	318.9	328.6	343.2	365.0	391.0	422.0	457.6	499.4	554.2	622.7
135°	328.1	332.2	344.1	360.2	381.2	408.2	439.2	472.2	509.2	554.2	611.3
137.5°	344.6	347.6	358.8	374.8	395.4	423.2	451.4	483.0	518.2	555.4	601.1
140°	354.1	357.1	369.2	385.2	404.2	431.2	460.2	490.3	522.2	556.2	596.2
142.5°	365.3	367.6	378.8	394.8	413.0	438.4	465.8	494.2	524.6	557.1	592.3
145°	382.2	384.2	394.2	408.2	426.2	449.2	475.2	500.2	527.3	556.2	586.3
147.5°	399.8	401.0	409.6	422.6	438.2	458.4	481.2	503.9	528.2	553.6	580.1
150°	410.2	412.2	419.2	432.2	446.2	463.2	485.2	506.3	528.2	551.2	575.2
152.5°	421.4	422.6	428.8	440.2	453.4	468.8	489.2	507.8	527.4	548.0	569.6
155°	436.2	436.2	442.2	452.2	462.2	476.2	493.2	509.2	525.2	542.3	560.3
157.5°	449.4	449.2	454.0	462.6	471.4	482.0	496.6	510.2	522.6	536.2	551.5
160°	458.2	457.2	461.2	468.2	476.2	485.2	498.3	510.2	520.2	532.3	544.2
162.5°	465.4	464.4	468.4	474.6	481.0	488.4	499.8	509.5	517.8	527.4	537.9
165°	476.2	474.2	477.3	482.2	486.2	492.2	500.2	508.2	514.2	520.2	528.2
167.5°	483.5	482.4	484.2	487.0	489.8	493.6	500.2	505.8	508.6	513.2	518.8
170°	488.2	487.2	488.2	490.3	492.2	495.2	500.2	504.2	506.3	509.2	513.2
172.5°	491.5	489.7	490.6	492.6	493.8	495.2	499.4	502.7	503.0	504.5	507.6
175°	495.2	493.2	494.2	495.2	495.2	495.2	498.3	500.2	499.2	499.2	500.2
177.5°	497.1	495.4	495.4	496.2	495.4	495.4	497.1	497.8	496.2	496.2	497.1
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4	1777.4
2.5°	1771.3	1773.7	1776.2	1777.2	1777.0	1776.8	1776.5	1776.2
5°	1760.5	1763.5	1766.4	1767.6	1767.0	1766.4	1765.8	1765.2
7.5°	1738.5	1740.7	1742.8	1743.4	1742.8	1742.1	1741.5	1740.9
10°	1720.0	1721.0	1721.8	1721.8	1721.0	1720.0	1719.2	1718.3
12.5°	1693.8	1694.4	1695.1	1694.8	1693.4	1692.0	1690.7	1689.3
15°	1650.5	1650.3	1649.9	1648.5	1645.8	1643.1	1640.4	1637.7
17.5°	1596.6	1595.1	1593.6	1591.8	1589.6	1587.3	1585.2	1582.9
20°	1556.9	1555.4	1553.9	1551.8	1549.1	1546.4	1543.8	1541.1
22.5°	1517.5	1514.6	1511.7	1509.1	1506.9	1504.7	1502.4	1500.3
25°	1452.8	1448.9	1445.0	1441.4	1438.1	1434.9	1431.6	1428.3
27.5°	1382.9	1377.4	1372.0	1367.7	1364.5	1361.3	1358.1	1355.0
30°	1332.7	1325.9	1319.0	1314.2	1311.6	1308.8	1306.1	1303.5
32.5°	1284.0	1276.4	1268.9	1263.3	1260.0	1256.5	1253.2	1249.7
35°	1208.3	1199.6	1191.0	1184.6	1180.4	1176.2	1172.1	1167.9
37.5°	1129.1	1118.8	1108.4	1101.1	1097.1	1093.0	1089.0	1084.9
40°	1076.8	1065.4	1054.1	1046.6	1043.0	1039.5	1035.9	1032.3
42.5°	1025.1	1014.3	1003.4	995.3	990.1	984.8	979.6	974.3
45°	942.6	930.7	918.8	910.6	906.1	901.6	897.2	892.7
47.5°	861.2	848.9	836.5	827.9	822.9	818.0	813.0	808.1
50°	805.9	793.3	780.8	772.3	767.8	763.4	758.9	754.4
52.5°	753.5	740.0	726.5	717.6	713.1	708.6	704.1	699.6
55°	673.9	660.5	647.0	637.9	633.2	628.4	623.6	618.9
57.5°	594.2	581.1	567.9	559.3	555.0	550.8	546.6	542.3
60°	541.6	528.5	515.3	506.5	502.0	497.6	493.1	488.6
62.5°	489.8	477.6	465.5	457.1	452.6	448.2	443.7	439.2
65°	413.8	401.8	389.9	381.7	377.2	372.7	368.2	363.8
67.5°	341.1	330.2	319.3	312.0	308.5	304.9	301.4	297.7
70°	292.9	283.7	274.5	268.0	264.4	260.9	257.3	253.7
72.5°	248.2	239.7	231.1	225.7	223.3	220.9	218.5	216.1
75°	185.5	179.0	172.5	168.1	166.0	163.9	161.9	159.7
77.5°	132.0	127.4	122.9	119.8	118.2	116.7	115.1	113.6
80°	99.4	96.7	93.9	92.3	91.7	91.1	90.6	90.0
82.5°	74.3	73.0	71.8	70.9	70.6	70.3	69.9	69.6
85°	42.4	42.1	41.8	41.5	41.2	40.9	40.6	40.3
87.5°	19.7	19.9	20.1	20.4	20.1	19.9	19.9	19.6
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	177.3	128.6	96.9	82.1	69.2	66.8	65.4	63.8
95°	719.3	567.2	444.2	360.2	289.1	259.1	251.2	235.1
97.5°	1071.3	964.7	844.8	727.9	666.1	610.1	581.1	568.3
100°	1230.5	1181.6	1078.5	974.4	905.4	833.4	796.3	780.3
102.5°	1284.2	1314.4	1265.0	1194.6	1120.7	1069.4	1029.2	1017.3
105°	1252.6	1389.7	1433.7	1422.6	1390.6	1357.6	1337.6	1325.6
107.5°	1139.7	1322.6	1435.6	1487.9	1504.1	1503.9	1497.3	1489.3
110°	1056.4	1246.6	1387.6	1472.7	1517.7	1536.7	1543.7	1543.7





TEST NUMBER: P333639-935

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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	990.8	1171.3	1314.0	1414.2	1480.1	1512.7	1530.1	1537.3
115°	908.4	1063.5	1200.5	1309.6	1387.6	1435.6	1463.6	1476.6
117.5°	855.1	988.9	1106.9	1206.9	1285.0	1334.6	1362.4	1370.4
120°	826.4	946.4	1056.4	1144.5	1218.6	1266.5	1293.6	1301.6
122.5°	804.8	916.0	1014.1	1096.5	1162.5	1206.5	1233.6	1240.8
125°	773.4	875.4	962.4	1034.5	1090.5	1131.5	1153.5	1163.6
127.5°	741.3	836.5	917.8	985.2	1036.0	1072.3	1093.1	1097.5
130°	721.3	809.3	887.4	952.4	1002.5	1035.4	1055.5	1061.4
132.5°	701.3	783.8	854.5	917.2	967.2	1000.2	1018.6	1025.5
135°	675.3	744.3	808.4	865.4	909.4	942.5	960.4	966.5
137.5°	653.3	709.1	762.3	810.8	850.2	880.2	896.8	903.4
140°	641.3	688.3	734.3	776.4	813.4	839.4	854.4	859.4
142.5°	630.9	670.7	710.3	746.7	778.2	800.1	814.3	818.6
145°	617.3	648.2	679.3	706.3	730.3	747.3	758.4	762.3
147.5°	604.5	629.6	653.5	673.9	692.9	706.5	712.9	714.7
150°	597.3	619.3	638.3	656.3	671.3	683.3	687.3	688.3
152.5°	589.3	608.9	626.3	640.3	652.9	662.5	666.5	667.5
155°	577.2	593.2	607.3	618.3	628.3	635.2	638.3	639.3
157.5°	565.2	578.4	589.3	597.9	605.6	611.5	614.2	614.1
160°	557.2	567.2	577.2	584.3	591.2	596.2	598.3	597.3
162.5°	548.5	557.7	566.0	572.2	577.6	581.9	582.3	582.0
165°	536.2	543.2	549.2	554.2	558.3	560.3	560.3	560.3
167.5°	524.6	529.3	533.8	537.4	539.4	541.2	540.4	540.3
170°	518.2	521.2	524.3	526.2	528.2	529.3	529.3	528.2
172.5°	511.0	514.0	516.3	517.5	517.8	519.6	518.1	517.0
175°	503.3	503.3	505.2	505.2	505.2	506.3	504.2	503.3
177.5°	497.8	498.6	498.6	498.6	497.8	498.6	496.2	496.2
180°	496.2	496.2	496.2	496.2	496.2	496.2	496.2	496.2

(END OF REPORT)