

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: P333620-935

Luminaire Tested: **S125RDIP-S1270D590U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333620-935
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-S1270D590U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5961.5 lumens
Efficiency: N/A
Efficacy: 108.2 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: Semi-Direct

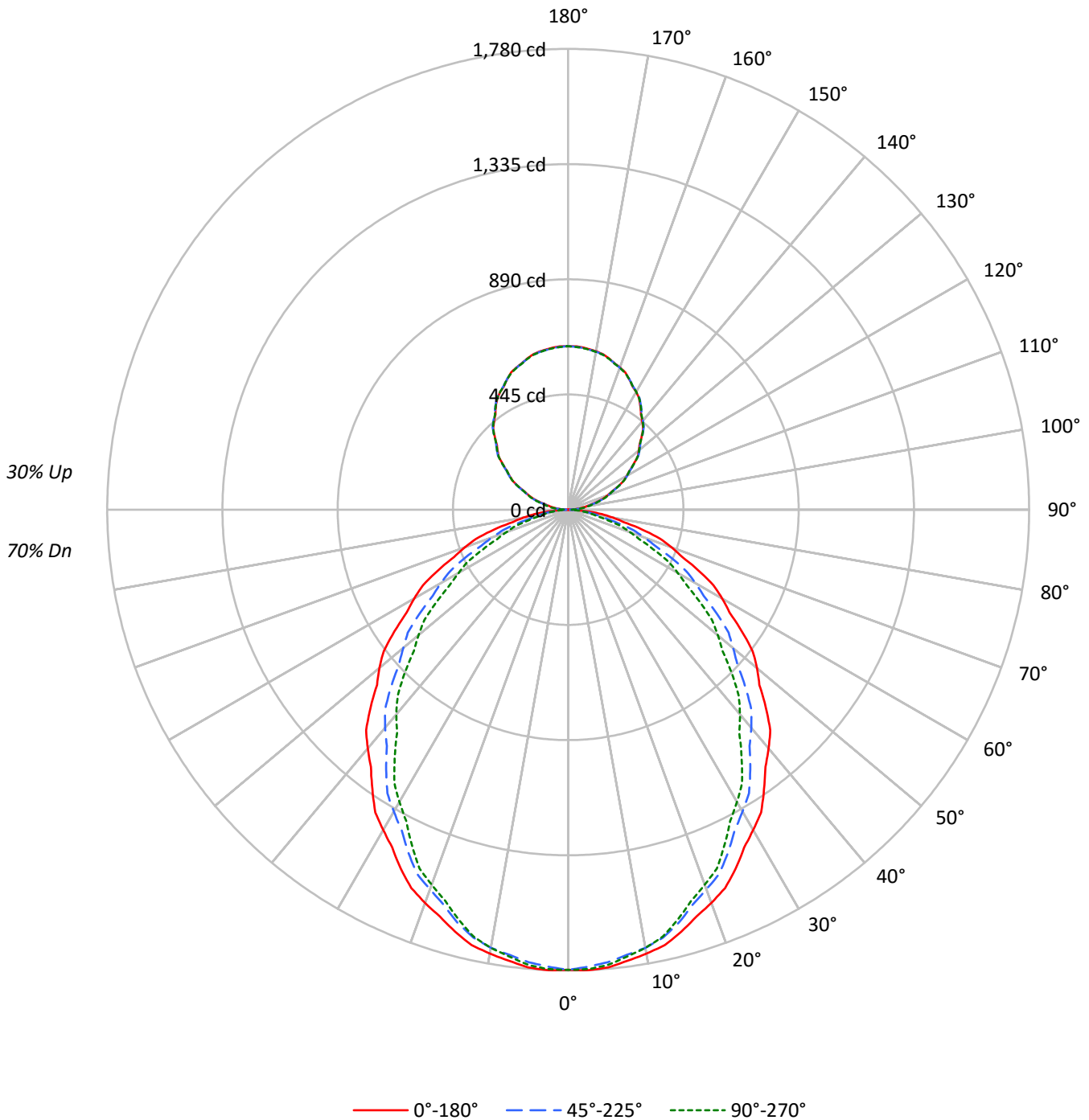
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	70
1	103	98	94	91	97	93	90	87	84	81	79	75	73	71	67	65	64	60
2	94	86	80	75	88	82	76	72	74	69	66	66	63	60	59	57	54	51
3	86	76	69	63	81	72	66	60	65	60	56	59	55	51	53	49	47	43
4	79	68	60	53	74	64	57	51	58	52	48	53	48	44	47	43	40	37
5	72	61	52	46	68	58	50	45	52	46	41	47	42	38	43	39	35	33
6	67	55	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	29
7	62	49	41	36	59	47	40	34	43	37	32	39	34	30	36	31	28	26
8	58	45	37	32	55	43	36	31	39	33	29	36	31	27	33	28	25	23
9	54	41	34	28	51	40	32	28	36	30	26	33	28	24	30	26	23	21
10	50	38	31	26	48	36	30	25	34	28	24	31	26	22	28	24	21	19

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	2.8
10°-20°	467.1	7.8
20°-30°	677.3	11.4
30°-40°	771.9	12.9
40°-50°	752.4	12.6
50°-60°	633.3	10.6
60°-70°	444.0	7.4
70°-80°	228.2	3.8
80°-90°	59.0	1.0
90°-100°	42.3	0.7
100°-110°	124.8	2.1
110°-120°	211.4	3.5
120°-130°	278.3	4.7
130°-140°	311.8	5.2
140°-150°	305.6	5.1
150°-160°	256.7	4.3
160°-170°	170.6	2.9
170°-180°	59.7	1.0
0°-30°	1311.5	22.0
0°-40°	2083.3	34.9
0°-60°	3469.1	58.2
0°-90°	4200.2	70.5
90°-120°	378.5	6.3
90°-150°	1274.2	21.4
90°-180°	1761.0	29.5
0°-180°	5961.5	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°	0	4	8	10	12	5
95°	32	33	38	41	42	34
105°	112	114	117	120	122	120
115°	212	214	215	214	214	209
125°	309	312	312	311	311	277
135°	402	405	405	405	403	310
145°	487	489	490	490	489	304
155°	557	557	558	559	557	256
165°	606	605	605	607	604	171
175°	630	628	628	630	627	60
180°	631	631	631	631	631	



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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°	24.8	23.3	21.8	20.3	18.9	18.0	17.9	17.8	17.7	17.7	17.8
90°	0.5	1.4	2.2	3.1	4.0	4.8	5.6	6.4	7.1	7.8	8.4
92.5°	11.9	12.5	13.1	13.7	14.3	15.1	16.0	17.0	17.9	18.9	19.5
95°	31.9	32.1	32.4	32.5	32.8	33.5	34.5	35.6	36.8	37.8	38.6
97.5°	53.0	53.1	53.2	53.3	53.4	54.2	55.7	57.2	58.7	60.2	61.0
100°	68.8	68.8	68.8	68.8	68.8	69.5	70.9	72.3	73.7	75.2	76.1
102.5°	85.7	86.1	86.5	87.0	87.4	88.0	88.7	89.5	90.1	90.8	92.0
105°	112.0	112.5	113.0	113.7	114.2	114.8	115.5	116.1	116.8	117.4	118.0
107.5°	141.0	141.6	142.2	142.7	143.3	143.8	144.3	144.7	145.3	145.8	146.1
110°	161.1	161.6	162.2	162.7	163.3	163.8	164.0	164.4	164.7	165.1	165.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	181.5	181.8	182.1	182.4	182.7	183.0	183.5	183.8	184.3	184.7	184.9
115°	211.7	212.2	212.6	213.0	213.4	213.8	214.0	214.2	214.4	214.6	214.6
117.5°	241.9	242.1	242.4	242.5	242.7	243.0	243.1	243.3	243.5	243.7	243.8
120°	260.8	261.4	261.9	262.4	263.0	263.3	263.5	263.6	263.6	263.7	263.7
122.5°	281.3	281.5	281.6	281.8	282.1	282.2	282.6	282.8	283.1	283.4	283.4
125°	308.9	309.6	310.2	310.9	311.6	311.9	312.0	312.2	312.3	312.4	312.2
127.5°	338.5	338.8	339.1	339.5	339.9	340.2	340.3	340.4	340.5	340.7	340.6
130°	356.1	356.6	357.2	357.7	358.3	358.7	358.9	359.1	359.3	359.6	359.5
132.5°	373.8	374.7	375.6	376.4	377.4	377.8	377.7	377.7	377.6	377.6	377.5
135°	401.7	402.4	403.1	403.7	404.4	404.8	404.9	405.0	405.1	405.2	405.2
137.5°	428.1	428.8	429.4	430.0	430.7	431.1	431.4	431.5	431.8	432.0	432.1
140°	445.0	445.6	446.1	446.6	447.2	447.6	448.0	448.3	448.6	448.9	449.2
142.5°	461.9	462.4	462.8	463.3	463.7	464.2	464.6	465.0	465.5	465.8	466.0
145°	486.7	487.2	487.7	488.1	488.5	488.9	489.2	489.6	489.9	490.2	490.2
147.5°	509.7	510.0	510.2	510.5	510.7	510.9	511.2	511.5	511.8	512.0	512.3
150°	525.0	525.0	524.9	524.8	524.6	524.8	525.2	525.6	526.1	526.5	526.5
152.5°	537.6	537.8	538.0	538.1	538.2	538.4	538.6	538.7	538.9	539.2	539.4
155°	557.0	557.0	557.0	557.0	557.0	557.1	557.2	557.2	557.4	557.5	557.9
157.5°	574.3	574.0	573.8	573.6	573.3	573.3	573.3	573.5	573.6	573.7	574.1
160°	584.5	584.2	583.8	583.5	583.2	583.1	583.2	583.3	583.4	583.5	583.9
162.5°	593.6	593.3	593.1	592.8	592.5	592.5	592.5	592.5	592.5	592.5	593.1
165°	605.6	605.4	605.2	604.9	604.8	604.7	604.8	604.9	605.0	605.1	605.5
167.5°	615.9	615.4	614.9	614.5	614.1	613.9	613.9	613.9	613.9	613.9	614.5
170°	621.3	620.9	620.4	620.0	619.6	619.4	619.4	619.4	619.4	619.4	620.0
172.5°	625.3	624.8	624.4	624.0	623.5	623.3	623.3	623.3	623.3	623.3	624.0
175°	629.6	629.2	628.8	628.4	627.9	627.8	627.8	627.8	627.8	627.8	628.4
177.5°	632.0	631.6	631.3	630.9	630.5	630.3	630.3	630.2	630.1	630.0	630.5
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2



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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°	17.9	18.0	18.1	18.1	17.9	17.7	17.6	17.4
90°	9.0	9.5	10.1	10.5	10.8	11.1	11.5	11.8
92.5°	20.3	21.0	21.8	22.2	22.5	22.7	22.9	23.2
95°	39.3	40.1	40.9	41.3	41.6	41.8	42.0	42.3
97.5°	61.6	62.4	63.1	63.5	63.6	63.8	63.9	64.1
100°	77.1	78.1	79.0	79.6	79.9	80.2	80.3	80.6
102.5°	93.0	94.1	95.1	95.8	96.2	96.4	96.8	97.0
105°	118.7	119.3	120.0	120.5	120.8	121.1	121.5	121.8
107.5°	146.5	146.8	147.1	147.2	147.2	147.2	147.1	147.1
110°	165.7	166.0	166.3	166.4	166.3	166.3	166.1	166.0



TEST NUMBER: P333620-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	185.0	185.1	185.3	185.3	185.1	184.9	184.7	184.5
115°	214.4	214.3	214.2	214.1	214.0	213.9	213.8	213.7
117.5°	243.9	244.0	244.1	243.9	243.5	243.1	242.6	242.1
120°	263.7	263.7	263.7	263.6	263.1	262.7	262.3	261.8
122.5°	283.3	283.2	283.1	282.8	282.5	282.1	281.8	281.5
125°	311.9	311.8	311.5	311.3	311.3	311.2	311.0	310.9
127.5°	340.4	340.4	340.3	340.1	339.8	339.7	339.4	339.2
130°	359.3	359.2	359.1	359.0	358.7	358.5	358.3	358.1
132.5°	377.4	377.3	377.2	376.9	376.7	376.3	376.1	375.7
135°	405.2	405.2	405.2	405.0	404.6	404.2	403.7	403.3
137.5°	432.3	432.4	432.6	432.4	431.8	431.3	430.8	430.2
140°	449.4	449.6	449.8	449.6	449.1	448.6	448.0	447.5
142.5°	466.1	466.2	466.3	466.1	465.6	465.0	464.5	464.0
145°	490.2	490.2	490.2	490.0	489.7	489.4	489.0	488.7
147.5°	512.6	512.8	513.1	512.8	512.0	511.3	510.6	509.9
150°	526.5	526.5	526.5	526.4	526.2	526.0	525.8	525.6
152.5°	539.7	539.9	540.2	540.1	539.7	539.3	538.9	538.6
155°	558.4	558.8	559.2	559.2	558.6	558.1	557.5	557.0
157.5°	574.5	575.0	575.4	575.3	574.5	573.9	573.2	572.4
160°	584.4	584.8	585.2	585.2	584.7	584.1	583.6	583.1
162.5°	593.6	594.1	594.7	594.6	594.0	593.3	592.7	592.0
165°	606.0	606.4	606.9	606.7	606.1	605.5	604.8	604.2
167.5°	615.2	615.9	616.5	616.5	615.8	615.1	614.4	613.8
170°	620.7	621.3	622.0	621.9	621.2	620.4	619.7	618.9
172.5°	624.7	625.3	625.9	625.9	625.3	624.6	623.9	623.2
175°	629.0	629.6	630.3	630.3	629.6	628.8	628.0	627.2
177.5°	631.0	631.5	632.1	632.1	631.5	630.9	630.2	629.6
180°	631.2	631.2	631.2	631.2	631.2	631.2	631.2	631.2

(END OF REPORT)