

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: P333726-935

Luminaire Tested: **S125RDIW-S1270D770U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333726-935
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-S1270D770U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6843.5 lumens
Efficiency: N/A
Efficacy: 114.4 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: Semi-Direct

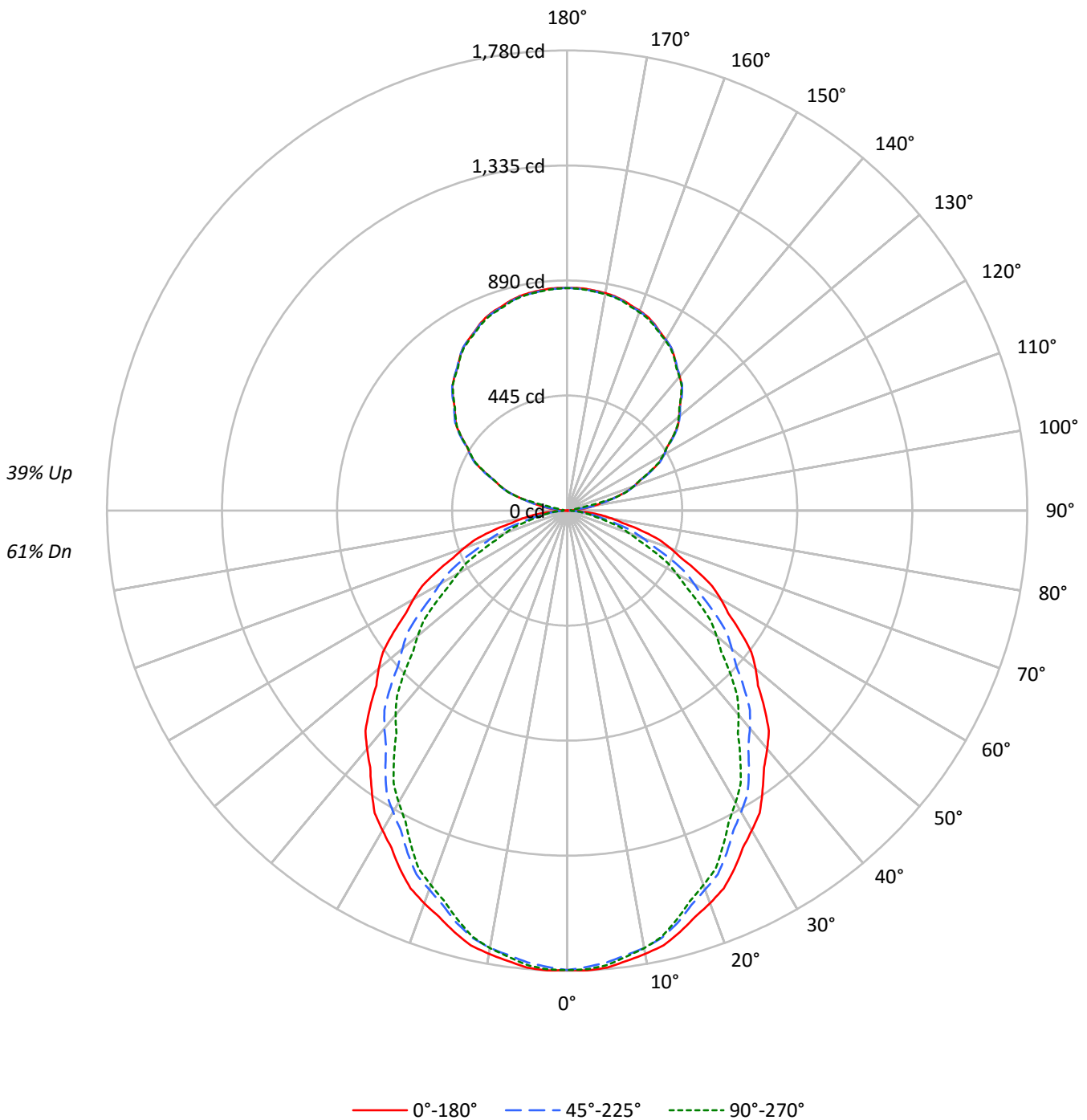
Input Watts (W): 59.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	59	58	57	52
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	62	57	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	39	36	33
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	37	45	39	34	39	35	31	34	31	28	25
7	60	48	40	34	57	45	38	33	41	35	30	36	31	27	32	28	25	22
8	56	44	36	31	53	41	34	29	37	31	27	33	28	25	29	25	22	20
9	52	40	33	27	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

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	2.4
10°-20°	467.1	6.8
20°-30°	677.3	9.9
30°-40°	771.9	11.3
40°-50°	752.4	11.0
50°-60°	633.3	9.3
60°-70°	444.0	6.5
70°-80°	228.2	3.3
80°-90°	59.4	0.9
90°-100°	31.3	0.5
100°-110°	192.7	2.8
110°-120°	349.6	5.1
120°-130°	448.6	6.6
130°-140°	482.6	7.1
140°-150°	452.9	6.6
150°-160°	366.4	5.4
160°-170°	237.0	3.5
170°-180°	81.7	1.2
0°-30°	1311.5	19.2
0°-40°	2083.3	30.4
0°-60°	3469.1	50.7
0°-90°	4200.7	61.4
90°-120°	573.6	8.4
90°-150°	1957.7	28.6
90°-180°	2643.0	38.6
0°-180°	6843.5	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°	1	6	10	13	15	5
95°	36	33	10	13	13	46
105°	188	190	190	190	190	199
115°	352	355	356	353	350	349
125°	501	505	505	503	501	447
135°	625	628	627	626	622	481
145°	724	725	725	726	722	453
155°	798	794	795	796	792	367
165°	842	838	838	842	837	238
175°	861	857	858	862	857	82
180°	861	861	861	861	861	



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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	23.4	22.0	20.5	19.0	18.3	18.3	18.3	18.2	18.2	18.3
90°	0.6	1.8	2.9	4.0	5.2	6.2	7.2	8.3	9.2	10.2	10.9
92.5°	9.8	9.0	8.3	7.4	6.6	6.7	7.6	8.4	9.3	10.2	10.9
95°	36.3	35.9	35.5	35.1	34.7	31.8	26.3	21.0	15.6	10.2	10.9
97.5°	75.9	76.7	77.5	78.2	79.0	74.0	63.4	52.7	42.0	31.4	27.4
100°	106.5	106.9	107.4	107.8	108.2	108.7	109.3	109.9	110.5	111.0	89.9
102.5°	137.7	138.2	138.8	139.3	139.8	140.3	140.6	140.9	141.3	141.6	137.7
105°	187.5	188.1	188.7	189.2	189.9	190.1	190.1	190.1	190.1	190.1	190.1
107.5°	239.4	239.4	239.4	239.4	239.4	239.5	239.8	240.0	240.4	240.6	240.6
110°	273.0	273.0	273.0	273.0	273.0	273.2	273.5	273.8	274.1	274.3	273.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	304.7	305.1	305.4	305.7	306.1	306.3	306.5	306.7	306.9	307.0	306.4
115°	352.1	352.8	353.6	354.3	355.0	355.4	355.6	355.7	355.9	356.0	355.4
117.5°	401.3	401.2	401.2	401.2	401.1	401.4	402.0	402.5	403.0	403.6	402.9
120°	431.9	431.8	431.6	431.4	431.4	431.4	431.9	432.3	432.7	433.2	432.9
122.5°	458.9	459.5	460.0	460.5	461.2	461.5	461.7	461.8	462.1	462.3	462.0
125°	500.8	501.8	502.8	503.8	504.8	505.2	505.2	505.2	505.2	505.2	504.7
127.5°	540.7	541.5	542.2	542.9	543.5	543.9	543.8	543.7	543.6	543.5	543.2
130°	565.2	565.9	566.6	567.4	568.1	568.5	568.6	568.8	568.9	569.0	568.6
132.5°	589.7	590.6	591.4	592.2	593.1	593.3	593.0	592.6	592.4	592.0	591.9
135°	624.6	625.4	626.3	627.2	628.0	628.3	628.0	627.7	627.4	627.2	626.8
137.5°	656.6	657.4	658.1	658.8	659.5	659.8	659.5	659.3	659.0	658.8	658.8
140°	677.5	677.8	678.1	678.4	678.6	678.7	678.6	678.5	678.3	678.1	678.5
142.5°	696.4	696.5	696.7	696.9	697.1	697.2	697.5	697.7	697.8	698.1	698.1
145°	724.1	724.4	724.7	725.0	725.2	725.4	725.4	725.4	725.4	725.4	725.5
147.5°	748.4	748.3	748.2	748.2	748.1	748.2	748.4	748.5	748.6	748.8	749.0
150°	763.6	763.4	763.1	762.8	762.5	762.5	762.8	763.1	763.4	763.6	764.0
152.5°	778.4	777.8	777.2	776.6	775.9	775.8	776.1	776.4	776.6	776.9	777.2
155°	797.5	796.6	795.7	794.9	794.1	793.8	794.1	794.4	794.6	794.9	795.3
157.5°	812.1	811.7	811.1	810.6	810.1	809.9	809.9	809.9	809.9	809.9	810.5
160°	822.3	821.5	820.6	819.8	819.0	818.6	818.7	818.9	819.0	819.2	819.8
162.5°	830.5	829.7	828.8	827.9	827.1	826.7	826.9	827.1	827.2	827.3	828.1
165°	841.5	840.6	839.8	839.0	838.1	837.8	837.8	838.0	838.2	838.3	839.1
167.5°	849.6	848.8	847.9	847.1	846.1	845.8	845.9	846.0	846.2	846.4	847.3
170°	854.3	853.3	852.2	851.3	850.2	849.8	850.0	850.2	850.2	850.4	851.5
172.5°	857.3	856.4	855.3	854.3	853.3	853.0	853.3	853.5	853.8	854.0	855.0
175°	860.7	859.8	858.9	858.1	857.2	856.9	857.0	857.1	857.3	857.5	858.6
177.5°	862.1	861.4	860.8	860.1	859.5	859.1	859.3	859.4	859.5	859.6	860.4
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7



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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°	18.4	18.6	18.7	18.7	18.6	18.4	18.3	18.1
90°	11.6	12.3	13.0	13.6	14.0	14.5	14.9	15.3
92.5°	11.6	12.3	13.0	13.5	13.7	13.9	14.1	14.3
95°	11.6	12.3	13.0	13.4	13.4	13.4	13.4	13.4
97.5°	23.4	19.4	15.4	13.4	13.4	13.4	13.4	13.4
100°	68.8	47.6	26.5	15.7	15.1	14.6	13.9	13.4
102.5°	133.6	129.7	125.6	118.8	109.2	99.5	89.9	80.2
105°	190.1	190.1	190.1	190.0	189.9	189.8	189.6	189.5
107.5°	240.7	240.7	240.7	240.6	240.1	239.7	239.3	238.8
110°	273.5	273.0	272.6	272.5	272.6	272.8	272.9	273.0



TEST NUMBER: P333726-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	305.9	305.4	304.8	304.4	304.3	304.1	303.8	303.7
115°	354.8	354.3	353.7	353.0	352.1	351.3	350.4	349.6
117.5°	402.1	401.4	400.6	400.1	399.7	399.3	399.0	398.6
120°	432.7	432.3	432.0	431.5	430.8	430.2	429.5	428.7
122.5°	461.7	461.4	461.2	460.5	459.8	458.9	458.1	457.3
125°	504.1	503.6	503.0	502.5	502.0	501.6	501.3	500.8
127.5°	542.9	542.6	542.3	541.7	540.5	539.5	538.5	537.4
130°	568.3	567.8	567.4	566.8	566.1	565.4	564.6	564.0
132.5°	591.9	591.8	591.7	591.3	590.6	589.9	589.2	588.5
135°	626.5	626.3	626.0	625.4	624.6	623.7	622.8	622.0
137.5°	658.9	658.9	659.0	658.7	657.9	657.2	656.4	655.7
140°	678.7	679.0	679.3	679.0	678.1	677.3	676.5	675.6
142.5°	698.2	698.3	698.3	697.9	697.1	696.2	695.3	694.5
145°	725.7	725.8	725.9	725.6	724.7	723.8	723.1	722.2
147.5°	749.2	749.3	749.5	749.1	748.1	747.1	746.1	745.0
150°	764.2	764.5	764.8	764.4	763.2	762.1	761.0	759.8
152.5°	777.5	777.7	778.1	777.7	776.6	775.7	774.6	773.6
155°	795.7	796.2	796.6	796.3	795.1	794.0	792.9	791.7
157.5°	810.9	811.3	811.8	811.4	810.3	809.2	808.0	806.9
160°	820.3	820.9	821.4	821.1	820.0	818.9	817.8	816.6
162.5°	828.9	829.7	830.5	830.3	829.1	827.8	826.6	825.3
165°	840.0	840.9	841.7	841.5	840.4	839.3	838.2	837.0
167.5°	848.3	849.4	850.4	850.3	849.0	847.7	846.4	845.2
170°	852.6	853.9	855.0	854.9	853.6	852.3	851.0	849.8
172.5°	856.0	857.0	858.1	857.9	856.7	855.4	854.1	852.8
175°	859.7	860.8	861.9	861.9	860.7	859.4	858.1	856.8
177.5°	861.2	861.9	862.8	862.7	861.8	860.9	860.0	859.1
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7

(END OF REPORT)