

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: P333739-935

Luminaire Tested: **S125RDIW-S1270D1560U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333739-935
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: S125RDIW-S1270D1560U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8858.7 lumens
Efficiency: N/A
Efficacy: 106.9 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

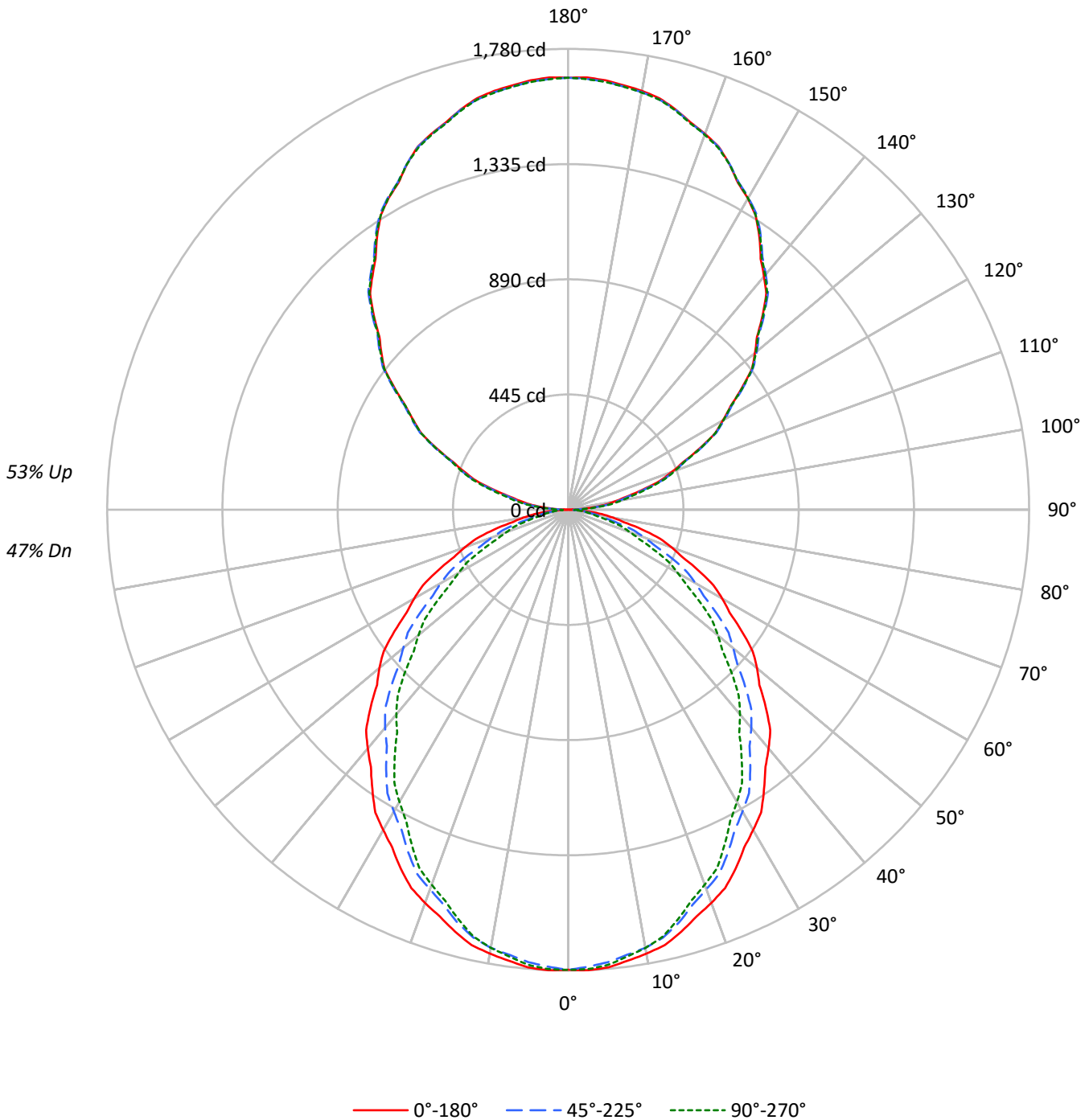
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54
1	97	93	89	86	89	86	83	80	72	70	68	59	58	56	48	47	46
2	89	82	76	71	81	75	70	66	63	60	56	52	50	47	42	41	39
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22
7	58	46	38	33	53	43	36	31	37	31	27	31	27	23	25	22	20
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15

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	1.9
10°-20°	467.1	5.3
20°-30°	677.3	7.6
30°-40°	771.9	8.7
40°-50°	752.4	8.5
50°-60°	633.3	7.1
60°-70°	444.0	5.0
70°-80°	228.2	2.6
80°-90°	61.3	0.7
90°-100°	111.8	1.3
100°-110°	330.0	3.7
110°-120°	559.0	6.3
120°-130°	735.7	8.3
130°-140°	824.3	9.3
140°-150°	807.9	9.1
150°-160°	678.6	7.7
160°-170°	451.1	5.1
170°-180°	157.9	1.8
0°-30°	1311.5	14.8
0°-40°	2083.3	23.5
0°-60°	3469.1	39.2
0°-90°	4202.5	47.4
90°-120°	1000.8	11.3
90°-150°	3368.6	38.0
90°-180°	4656.0	52.6
0°-180°	8858.7	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	12	21	27	31	8
95°	84	88	100	109	112	90
105°	296	303	310	318	322	316
115°	560	565	568	566	565	553
125°	817	824	826	823	822	731
135°	1062	1070	1071	1071	1066	818
145°	1287	1292	1296	1296	1292	804
155°	1473	1473	1474	1478	1473	678
165°	1601	1599	1600	1604	1597	451
175°	1665	1660	1660	1666	1658	158
180°	1669	1669	1669	1669	1669	



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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°	25.0	23.8	22.6	21.4	20.1	19.6	19.8	20.0	20.1	20.2	20.6
90°	1.3	3.6	5.9	8.3	10.5	12.7	14.7	16.7	18.8	20.8	22.2
92.5°	31.4	33.1	34.7	36.2	37.9	40.0	42.4	44.9	47.4	49.9	51.7
95°	84.4	85.0	85.6	86.1	86.7	88.4	91.4	94.2	97.1	100.0	102.0
97.5°	140.3	140.4	140.7	140.9	141.2	143.3	147.2	151.3	155.2	159.2	161.1
100°	181.8	181.8	181.8	181.8	181.8	183.7	187.4	191.1	194.9	198.6	201.3
102.5°	226.4	227.6	228.8	229.9	231.1	232.6	234.5	236.4	238.3	240.2	243.1
105°	296.1	297.5	298.9	300.4	301.9	303.4	305.1	306.9	308.6	310.4	312.1
107.5°	372.9	374.4	375.8	377.3	378.7	380.1	381.4	382.7	384.1	385.4	386.2
110°	425.9	427.4	428.8	430.2	431.7	432.8	433.7	434.5	435.4	436.3	437.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	479.9	480.7	481.5	482.2	482.9	483.9	484.9	486.0	487.2	488.3	488.6
115°	559.6	560.9	562.0	563.1	564.3	565.2	565.8	566.3	566.9	567.5	567.1
117.5°	639.6	640.2	640.7	641.2	641.7	642.2	642.7	643.3	643.8	644.4	644.5
120°	689.5	691.0	692.4	693.9	695.3	696.1	696.5	696.7	697.0	697.3	697.3
122.5°	743.6	744.1	744.6	745.1	745.6	746.2	747.0	747.8	748.5	749.2	749.0
125°	816.7	818.5	820.3	822.0	823.7	824.8	825.0	825.3	825.6	825.9	825.3
127.5°	894.7	895.7	896.6	897.6	898.6	899.3	899.7	900.0	900.3	900.7	900.3
130°	941.4	942.9	944.3	945.7	947.2	948.2	948.8	949.3	949.9	950.5	950.2
132.5°	988.2	990.6	992.9	995.3	997.6	998.8	998.7	998.5	998.4	998.3	998.0
135°	1062.2	1063.9	1065.7	1067.4	1069.1	1070.1	1070.4	1070.7	1071.0	1071.3	1071.3
137.5°	1131.8	1133.5	1135.1	1136.8	1138.5	1139.6	1140.3	1140.9	1141.5	1142.2	1142.5
140°	1176.5	1177.9	1179.3	1180.8	1182.2	1183.4	1184.2	1185.2	1186.0	1186.9	1187.4
142.5°	1221.2	1222.4	1223.6	1224.8	1226.0	1227.1	1228.2	1229.3	1230.5	1231.5	1231.8
145°	1286.9	1288.0	1289.2	1290.3	1291.5	1292.4	1293.3	1294.2	1295.0	1295.9	1295.9
147.5°	1347.6	1348.2	1348.8	1349.5	1350.1	1350.8	1351.5	1352.2	1352.9	1353.6	1354.3
150°	1388.1	1387.8	1387.6	1387.2	1387.0	1387.4	1388.5	1389.7	1390.9	1392.1	1392.1
152.5°	1421.3	1421.8	1422.2	1422.5	1423.0	1423.4	1423.9	1424.4	1424.8	1425.3	1426.0
155°	1472.6	1472.6	1472.6	1472.6	1472.6	1472.7	1473.0	1473.3	1473.5	1473.9	1475.0
157.5°	1518.2	1517.6	1517.0	1516.3	1515.7	1515.5	1515.8	1516.1	1516.4	1516.7	1517.9
160°	1545.2	1544.4	1543.5	1542.7	1541.8	1541.5	1541.8	1542.1	1542.4	1542.7	1543.8
162.5°	1569.2	1568.5	1567.9	1567.3	1566.6	1566.3	1566.3	1566.4	1566.5	1566.5	1568.0
165°	1601.1	1600.5	1599.9	1599.4	1598.8	1598.6	1599.0	1599.2	1599.5	1599.8	1600.9
167.5°	1628.1	1626.9	1625.8	1624.6	1623.5	1622.9	1622.9	1622.9	1622.9	1622.9	1624.6
170°	1642.6	1641.5	1640.3	1639.2	1638.1	1637.4	1637.4	1637.4	1637.4	1637.4	1639.2
172.5°	1653.0	1651.9	1650.7	1649.6	1648.4	1647.9	1647.9	1647.9	1647.9	1647.9	1649.6
175°	1664.7	1663.5	1662.4	1661.2	1660.1	1659.5	1659.5	1659.5	1659.5	1659.5	1661.2
177.5°	1670.7	1669.7	1668.9	1667.9	1667.0	1666.4	1666.2	1665.9	1665.7	1665.5	1666.9
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6



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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°	20.8	21.1	21.4	21.5	21.4	21.4	21.4	21.3
90°	23.7	25.1	26.5	27.7	28.6	29.4	30.3	31.2
92.5°	53.6	55.5	57.5	58.7	59.4	60.0	60.6	61.3
95°	104.0	106.1	108.1	109.3	109.9	110.6	111.1	111.7
97.5°	163.0	164.9	166.8	168.0	168.3	168.7	169.0	169.4
100°	203.9	206.5	209.1	210.7	211.2	211.8	212.4	212.9
102.5°	245.9	248.7	251.5	253.4	254.2	254.9	255.8	256.6
105°	313.8	315.6	317.3	318.6	319.4	320.3	321.2	322.0
107.5°	387.1	388.0	388.8	389.3	389.2	389.2	389.1	389.0
110°	438.1	438.9	439.8	440.1	439.8	439.5	439.2	438.9



TEST NUMBER: P333739-935

CATALOG NUMBER: S125RDIW-S1270D1560U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	489.0	489.5	489.8	489.8	489.3	488.8	488.3	487.8
115°	566.9	566.6	566.3	566.0	565.8	565.4	565.2	564.9
117.5°	644.8	645.1	645.2	644.8	643.6	642.5	641.4	640.2
120°	697.3	697.3	697.3	696.7	695.6	694.4	693.3	692.2
122.5°	748.8	748.6	748.3	747.8	746.8	745.9	744.9	744.1
125°	824.8	824.1	823.5	823.1	822.9	822.5	822.3	822.0
127.5°	900.1	899.8	899.5	899.1	898.5	897.9	897.3	896.7
130°	949.9	949.7	949.3	948.9	948.4	947.8	947.2	946.7
132.5°	997.7	997.5	997.1	996.6	995.8	995.0	994.2	993.3
135°	1071.3	1071.3	1071.3	1070.7	1069.5	1068.4	1067.2	1066.1
137.5°	1142.9	1143.2	1143.6	1143.1	1141.6	1140.1	1138.7	1137.2
140°	1188.0	1188.6	1189.1	1188.7	1187.3	1185.9	1184.4	1182.9
142.5°	1232.2	1232.5	1233.0	1232.3	1230.9	1229.5	1228.0	1226.6
145°	1295.9	1295.9	1295.9	1295.5	1294.6	1293.7	1292.9	1292.0
147.5°	1355.0	1355.6	1356.3	1355.7	1353.8	1351.8	1349.9	1347.9
150°	1392.1	1392.1	1392.1	1391.7	1391.1	1390.6	1390.0	1389.4
152.5°	1426.7	1427.4	1428.1	1427.9	1426.8	1425.8	1424.8	1423.7
155°	1476.1	1477.3	1478.4	1478.3	1476.9	1475.4	1473.9	1472.6
157.5°	1519.0	1520.2	1521.3	1521.0	1519.0	1517.1	1515.2	1513.3
160°	1545.0	1546.1	1547.3	1547.1	1545.7	1544.2	1542.8	1541.4
162.5°	1569.3	1570.7	1572.1	1571.9	1570.3	1568.6	1566.9	1565.2
165°	1602.1	1603.3	1604.4	1604.1	1602.4	1600.7	1599.0	1597.2
167.5°	1626.3	1628.1	1629.8	1629.8	1628.0	1626.3	1624.4	1622.6
170°	1640.9	1642.6	1644.3	1644.3	1642.2	1640.2	1638.1	1636.2
172.5°	1651.3	1653.0	1654.8	1654.8	1652.9	1651.1	1649.3	1647.6
175°	1663.0	1664.7	1666.5	1666.3	1664.3	1662.2	1660.3	1658.2
177.5°	1668.3	1669.7	1671.0	1670.9	1669.3	1667.7	1666.0	1664.5
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6

(END OF REPORT)