

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: P333486-935

Luminaire Tested: **S125DIW-S1270D1560U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333486-935
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: S125DIW-S1270D1560U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9613.9 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

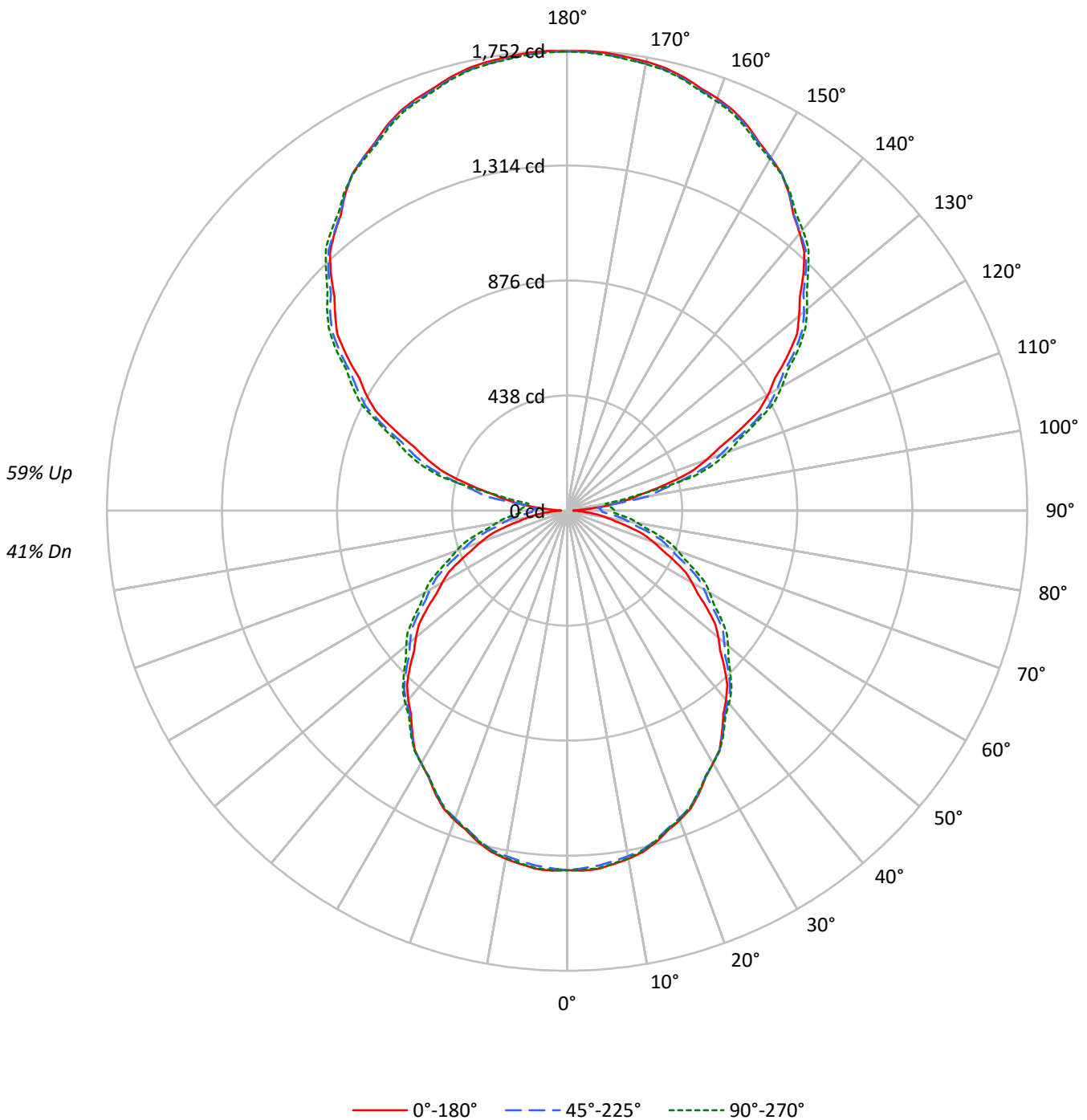
Input Watts (W): 82.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333486-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	95	91	87	83	87	83	79	76	68	65	63	54	53	51	42	41	40	34
2	86	79	73	67	78	72	67	62	59	55	52	47	44	42	36	34	33	28
3	79	69	62	56	71	63	57	51	52	47	43	42	38	35	32	30	28	23
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	24	20
5	66	54	46	40	60	50	42	37	41	36	31	33	29	26	26	23	20	17
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	23	20	18	15
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14	12
9	48	36	29	23	44	33	26	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	30	24	20	26	20	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8843	8843	8843
5°	8860	8680	8707
10°	8797	8525	8512
15°	8694	8339	8263
20°	8552	8110	8015
25°	8384	7865	7709
30°	8181	7595	7431
35°	7991	7346	7176
40°	7797	7085	6920
45°	7579	6861	6693
50°	7370	6618	6491
55°	7119	6390	6255
60°	6846	6128	6014
65°	6558	5855	5742
70°	6233	5481	5463
75°	5719	5122	5121
80°	5046	4687	4749
85°	4423	4393	4630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.5	1.3
10°-20°	367.5	3.8
20°-30°	546.6	5.7
30°-40°	647.5	6.7
40°-50°	669.4	7.0
50°-60°	616.7	6.4
60°-70°	498.5	5.2
70°-80°	333.8	3.5
80°-90°	176.8	1.8
90°-100°	160.7	1.7
100°-110°	463.2	4.8
110°-120°	758.2	7.9
120°-130°	938.7	9.8
130°-140°	992.3	10.3
140°-150°	922.6	9.6
150°-160°	744.4	7.7
160°-170°	481.4	5.0
170°-180°	166.0	1.7
0°-30°	1043.6	10.9
0°-40°	1691.1	17.6
0°-60°	2977.2	31.0
0°-90°	3986.3	41.5
90°-120°	1382.1	14.4
90°-150°	4235.7	44.1
90°-180°	5628.0	58.5
0°-180°	9613.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1369	1366	1357	1367	1367	130
15°	1308	1308	1299	1307	1302	368
25°	1188	1191	1184	1189	1183	547
35°	1028	1037	1034	1037	1038	643
45°	847	861	868	877	879	653
55°	651	672	694	708	714	582
65°	448	479	511	531	537	445
75°	247	282	325	351	358	262
85°	74	118	165	194	205	79
90°	23	76	131	167	181	17
95°	91	120	119	153	164	108
105°	393	421	460	486	495	417
115°	724	740	776	794	795	717
125°	1023	1032	1057	1073	1076	913
135°	1272	1278	1285	1299	1299	980
145°	1472	1474	1474	1481	1479	920
155°	1620	1613	1615	1618	1608	746
165°	1710	1702	1703	1710	1700	483
175°	1748	1741	1742	1751	1741	166
180°	1748	1748	1748	1748	1748	



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CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1372.4	1372.0	1371.5	1371.1	1370.5	1369.5	1367.8	1366.1	1364.5	1362.8	1364.5
5°	1369.2	1368.6	1368.0	1367.4	1366.8	1365.5	1363.4	1361.3	1359.3	1357.2	1359.5
7.5°	1357.2	1356.9	1356.7	1356.4	1356.2	1355.0	1352.9	1350.7	1348.6	1346.4	1348.5
10°	1346.4	1346.4	1346.4	1346.4	1346.4	1345.2	1342.8	1340.5	1338.1	1335.7	1337.7
12.5°	1331.4	1331.6	1331.9	1332.1	1332.3	1331.5	1329.6	1327.7	1325.8	1323.9	1325.5
15°	1307.5	1307.8	1308.1	1308.4	1308.7	1307.8	1305.7	1303.6	1301.6	1299.4	1301.2
17.5°	1276.3	1276.9	1277.6	1278.2	1278.8	1278.0	1275.9	1273.8	1271.7	1269.6	1271.0
20°	1253.8	1254.4	1255.0	1255.6	1256.2	1255.4	1253.4	1251.3	1249.1	1247.1	1248.0
22.5°	1228.0	1229.1	1230.2	1231.2	1232.3	1231.7	1229.3	1227.0	1224.7	1222.4	1223.5
25°	1188.0	1189.0	1189.8	1190.7	1191.6	1191.2	1189.4	1187.6	1185.8	1184.0	1185.2
27.5°	1143.5	1144.8	1146.1	1147.4	1148.7	1148.3	1146.3	1144.3	1142.3	1140.2	1141.1
30°	1110.2	1112.0	1113.7	1115.5	1117.3	1117.3	1115.5	1113.7	1112.0	1110.2	1110.8
32.5°	1080.1	1081.7	1083.2	1084.8	1086.3	1086.4	1085.1	1083.8	1082.4	1081.2	1081.8
35°	1028.3	1030.4	1032.4	1034.6	1036.6	1037.2	1036.3	1035.4	1034.6	1033.6	1034.6
37.5°	976.5	978.4	980.2	982.2	984.1	984.9	984.6	984.3	984.0	983.7	984.9
40°	941.0	943.4	945.8	948.2	950.5	951.6	951.3	951.0	950.7	950.5	951.6
42.5°	902.3	905.4	908.5	911.6	914.8	916.6	917.3	918.0	918.6	919.3	920.7
45°	847.1	850.3	853.6	856.9	860.1	862.5	864.1	865.6	867.0	868.5	870.6
47.5°	790.4	793.4	796.5	799.5	802.5	805.4	808.0	810.5	813.0	815.6	818.7
50°	751.7	755.0	758.3	761.6	764.9	768.2	771.5	774.7	778.0	781.3	784.5
52.5°	710.9	715.0	718.9	722.9	726.9	730.9	734.9	738.9	742.9	746.9	750.4
55°	651.1	655.8	660.6	665.4	670.1	674.9	679.7	684.5	689.2	694.1	697.3
57.5°	589.9	595.6	601.3	607.0	612.8	618.4	623.9	629.3	634.8	640.3	644.1
60°	549.1	555.0	560.9	567.0	572.9	578.9	584.9	590.8	596.8	602.7	607.2
62.5°	509.3	515.3	521.2	527.2	533.1	539.4	545.8	552.2	558.7	565.2	570.1
65°	448.3	455.2	462.1	469.0	475.8	482.8	490.0	497.1	504.3	511.4	515.9
67.5°	390.9	397.5	404.2	410.8	417.4	424.4	431.6	438.9	446.2	453.5	458.9
70°	349.0	355.9	362.7	369.6	376.4	383.7	391.5	399.3	407.1	414.8	420.5
72.5°	308.2	315.3	322.4	329.5	336.7	344.4	352.8	361.4	369.8	378.3	384.4
75°	247.0	254.8	262.5	270.3	278.0	286.7	296.2	305.7	315.3	324.9	330.8
77.5°	188.2	197.2	206.1	215.1	224.0	233.1	242.3	251.4	260.6	269.8	276.4
80°	151.7	160.7	169.6	178.6	187.5	197.0	207.2	217.3	227.5	237.6	244.2
82.5°	118.4	127.9	137.2	146.7	156.1	166.0	176.4	186.8	197.2	207.5	213.9
85°	73.9	83.7	93.5	103.4	113.2	123.4	133.8	144.2	154.6	165.1	171.7
87.5°	42.1	52.2	62.2	72.2	82.1	92.5	103.0	113.6	124.1	134.7	141.8
90°	22.8	34.6	46.5	58.3	70.2	82.1	94.4	106.5	118.6	130.8	139.1
92.5°	39.3	46.5	53.7	61.0	68.2	77.8	90.1	102.2	114.3	126.5	134.6
95°	91.4	98.2	105.1	112.0	118.9	121.9	121.1	120.4	119.5	118.7	126.7
97.5°	170.0	178.6	187.2	195.7	204.2	202.6	190.7	178.8	166.9	155.1	153.2
100°	231.2	238.3	245.5	252.6	259.8	268.6	279.3	290.1	300.7	311.4	274.7
102.5°	293.4	300.3	307.1	314.0	320.9	329.3	339.3	349.4	359.4	369.4	367.2
105°	393.1	399.1	405.0	411.0	416.8	424.3	433.3	442.2	451.2	460.0	466.1
107.5°	496.8	500.8	504.9	508.9	513.0	519.6	528.7	538.0	547.1	556.3	562.2
110°	564.1	567.7	571.3	574.9	578.4	584.7	593.7	602.5	611.5	620.4	625.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	628.4	632.0	635.5	639.1	642.7	648.7	657.1	665.6	674.0	682.5	686.8
115°	723.5	727.0	730.6	734.1	737.6	743.4	751.5	759.5	767.5	775.6	779.8
117.5°	822.0	823.3	824.6	825.9	827.2	832.1	840.5	848.9	857.4	865.8	869.4
120°	884.2	884.8	885.4	886.0	886.6	890.8	898.5	906.2	914.0	921.7	926.2
122.5°	938.1	939.6	941.1	942.6	944.1	948.4	955.4	962.4	969.5	976.5	980.8
125°	1022.8	1024.5	1026.2	1027.9	1029.7	1033.5	1039.5	1045.4	1051.5	1057.4	1061.0
127.5°	1102.6	1103.7	1104.9	1106.0	1107.2	1110.1	1114.8	1119.6	1124.3	1128.9	1132.7
130°	1152.4	1153.5	1154.7	1155.8	1156.9	1159.8	1164.2	1168.7	1173.1	1177.6	1180.9
132.5°	1201.1	1202.6	1204.3	1205.9	1207.6	1209.6	1212.2	1214.8	1217.4	1220.0	1224.0
135°	1271.6	1273.0	1274.5	1275.8	1277.3	1278.8	1280.3	1281.8	1283.3	1284.8	1288.1
137.5°	1336.4	1337.6	1338.9	1340.1	1341.4	1342.3	1342.8	1343.2	1343.8	1344.3	1347.9
140°	1377.8	1378.4	1379.0	1379.6	1380.1	1380.4	1380.4	1380.4	1380.4	1380.4	1384.3
142.5°	1416.2	1416.3	1416.4	1416.5	1416.6	1416.9	1417.4	1417.8	1418.2	1418.8	1421.7
145°	1472.4	1472.7	1473.0	1473.3	1473.5	1473.7	1473.7	1473.7	1473.7	1473.7	1475.5
147.5°	1520.4	1520.2	1520.1	1520.0	1519.8	1520.0	1520.4	1520.7	1521.0	1521.4	1522.2
150°	1551.4	1550.8	1550.3	1549.7	1549.1	1549.1	1549.7	1550.3	1550.8	1551.4	1552.0
152.5°	1581.5	1580.3	1579.0	1577.7	1576.4	1576.1	1576.7	1577.3	1577.9	1578.4	1579.0
155°	1620.1	1618.4	1616.7	1615.0	1613.3	1612.7	1613.3	1613.8	1614.4	1615.0	1615.8
157.5°	1649.9	1648.9	1647.9	1646.8	1645.8	1645.3	1645.4	1645.5	1645.5	1645.5	1646.5
160°	1670.7	1669.0	1667.2	1665.5	1663.8	1663.0	1663.4	1663.6	1663.9	1664.2	1665.3
162.5°	1687.3	1685.6	1683.9	1682.0	1680.3	1679.6	1679.9	1680.2	1680.5	1680.8	1682.4
165°	1709.6	1707.9	1706.1	1704.3	1702.6	1701.9	1702.2	1702.5	1702.8	1703.1	1704.8
167.5°	1726.1	1724.4	1722.6	1720.8	1719.0	1718.3	1718.6	1718.8	1719.2	1719.4	1721.5
170°	1735.5	1733.5	1731.5	1729.4	1727.4	1726.6	1726.8	1727.2	1727.4	1727.7	1730.0
172.5°	1741.7	1739.7	1737.7	1735.7	1733.6	1732.9	1733.5	1734.0	1734.5	1735.0	1737.1
175°	1748.4	1746.7	1745.0	1743.3	1741.5	1740.9	1741.1	1741.4	1741.7	1742.0	1744.3
177.5°	1751.5	1750.2	1748.8	1747.4	1746.0	1745.4	1745.7	1745.9	1746.1	1746.4	1748.0
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1366.1	1367.8	1369.5	1370.2	1369.9	1369.8	1369.5	1369.2
5°	1361.9	1364.3	1366.8	1367.8	1367.4	1367.2	1366.8	1366.6
7.5°	1350.6	1352.7	1354.8	1355.6	1355.4	1355.0	1354.8	1354.4
10°	1339.9	1342.0	1344.0	1345.0	1344.6	1344.4	1344.0	1343.8
12.5°	1327.1	1328.7	1330.3	1330.8	1330.0	1329.2	1328.4	1327.7
15°	1303.0	1304.8	1306.6	1306.9	1305.7	1304.5	1303.3	1302.1
17.5°	1272.4	1273.8	1275.1	1275.5	1274.7	1274.0	1273.3	1272.6
20°	1248.9	1249.7	1250.7	1251.1	1251.1	1251.1	1251.1	1251.1
22.5°	1224.7	1225.8	1226.9	1227.1	1226.4	1225.7	1224.9	1224.3
25°	1186.4	1187.6	1188.8	1188.6	1187.1	1185.6	1184.1	1182.7
27.5°	1141.9	1142.7	1143.6	1143.8	1143.1	1142.6	1142.1	1141.6
30°	1111.4	1112.0	1112.6	1112.7	1112.4	1112.1	1111.8	1111.5
32.5°	1082.4	1083.0	1083.6	1083.7	1083.4	1083.1	1082.8	1082.5
35°	1035.4	1036.3	1037.2	1037.7	1037.7	1037.7	1037.7	1037.7
37.5°	986.1	987.3	988.5	989.0	988.9	988.8	988.7	988.5
40°	952.8	954.0	955.2	956.1	956.7	957.3	957.9	958.5
42.5°	922.1	923.6	925.0	925.7	925.9	926.0	926.2	926.3
45°	872.7	874.8	876.8	878.0	878.4	878.7	879.0	879.3
47.5°	821.7	824.8	827.9	829.7	830.3	831.0	831.6	832.3
50°	787.8	791.1	794.4	796.5	797.4	798.3	799.2	800.0
52.5°	754.0	757.5	761.0	763.1	763.7	764.4	765.1	765.7
55°	700.6	703.9	707.1	709.4	710.6	711.8	713.0	714.2
57.5°	647.8	651.6	655.4	657.7	658.6	659.4	660.4	661.2
60°	611.7	616.1	620.6	623.3	624.2	625.1	626.0	626.9
62.5°	575.1	580.0	585.0	588.0	589.1	590.3	591.4	592.5
65°	520.4	524.9	529.3	532.2	533.4	534.6	535.8	536.9
67.5°	464.3	469.8	475.2	478.6	480.2	481.7	483.4	484.9
70°	426.1	431.8	437.5	441.2	443.0	444.8	446.6	448.3
72.5°	390.5	396.7	402.9	406.6	407.9	409.2	410.5	411.8
75°	336.8	342.8	348.7	352.5	354.0	355.4	357.0	358.4
77.5°	282.9	289.5	296.1	300.0	301.2	302.3	303.5	304.7
80°	250.7	257.3	263.9	267.8	268.9	270.1	271.3	272.5
82.5°	220.2	226.5	232.8	237.0	239.2	241.3	243.5	245.6
85°	178.2	184.8	191.4	195.9	198.2	200.6	203.0	205.3
87.5°	149.0	156.1	163.2	167.9	170.2	172.5	174.7	176.9
90°	147.4	155.8	164.0	169.6	172.6	175.6	178.5	181.4
92.5°	142.7	150.7	158.8	164.0	166.5	169.0	171.5	174.0
95°	134.7	142.8	150.8	155.8	157.9	160.0	162.0	164.1
97.5°	151.4	149.5	147.7	147.7	149.7	151.8	153.8	155.8
100°	238.2	201.5	164.8	146.8	147.5	148.1	148.8	149.4
102.5°	365.2	363.1	360.9	351.0	333.2	315.5	297.6	279.8
105°	472.0	477.9	484.0	487.8	489.7	491.5	493.2	495.0
107.5°	568.2	574.2	580.1	583.6	584.6	585.6	586.6	587.5
110°	630.0	634.8	639.6	643.3	645.6	648.0	650.3	652.7



TEST NUMBER: P333486-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	691.1	695.5	699.8	702.8	704.6	706.2	707.9	709.6
115°	784.0	788.2	792.5	794.6	794.6	794.7	794.8	794.9
117.5°	873.0	876.6	880.1	882.5	883.8	885.1	886.4	887.7
120°	930.7	935.1	939.7	942.1	942.5	942.8	943.1	943.5
122.5°	985.0	989.3	993.5	995.7	995.8	995.9	996.1	996.2
125°	1064.6	1068.2	1071.9	1074.0	1074.6	1075.2	1075.9	1076.5
127.5°	1136.5	1140.3	1144.1	1145.8	1145.4	1145.0	1144.6	1144.2
130°	1184.2	1187.6	1190.8	1192.6	1192.6	1192.7	1192.7	1192.7
132.5°	1228.0	1232.0	1236.0	1237.9	1237.7	1237.5	1237.3	1237.2
135°	1291.4	1294.7	1298.0	1299.6	1299.3	1299.1	1298.8	1298.6
137.5°	1351.5	1355.2	1358.8	1360.5	1360.2	1359.9	1359.5	1359.3
140°	1388.2	1392.0	1395.9	1397.6	1397.0	1396.5	1395.9	1395.4
142.5°	1424.6	1427.5	1430.4	1431.6	1431.1	1430.6	1430.0	1429.4
145°	1477.2	1479.0	1480.8	1481.4	1480.9	1480.3	1479.8	1479.3
147.5°	1523.0	1523.9	1524.7	1524.3	1522.8	1521.2	1519.7	1518.2
150°	1552.6	1553.2	1553.8	1553.1	1551.0	1549.0	1547.0	1545.0
152.5°	1579.6	1580.1	1580.7	1580.0	1578.0	1576.0	1573.9	1571.9
155°	1616.7	1617.6	1618.4	1617.6	1615.4	1613.1	1610.8	1608.4
157.5°	1647.4	1648.3	1649.2	1648.6	1646.2	1643.9	1641.6	1639.3
160°	1666.5	1667.7	1668.8	1668.3	1665.9	1663.6	1661.3	1659.1
162.5°	1684.0	1685.7	1687.2	1686.8	1684.3	1681.7	1679.2	1676.6
165°	1706.5	1708.3	1710.0	1709.7	1707.4	1705.1	1702.8	1700.5
167.5°	1723.5	1725.6	1727.7	1727.4	1724.8	1722.3	1719.7	1717.1
170°	1732.3	1734.7	1736.9	1736.8	1734.2	1731.6	1729.0	1726.4
172.5°	1739.1	1741.2	1743.3	1743.0	1740.4	1737.8	1735.3	1732.7
175°	1746.5	1748.9	1751.2	1751.0	1748.4	1745.8	1743.3	1740.7
177.5°	1749.6	1751.2	1752.8	1752.7	1750.8	1749.0	1747.1	1745.3
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4

(END OF REPORT)