

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: P333487-935

Luminaire Tested: **S125DIW-S1270D1560U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333487-935  
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: S125DIW-S1270D1560U935-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8900.8 lumens  
Efficiency: N/A  
Efficacy: 107.4 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

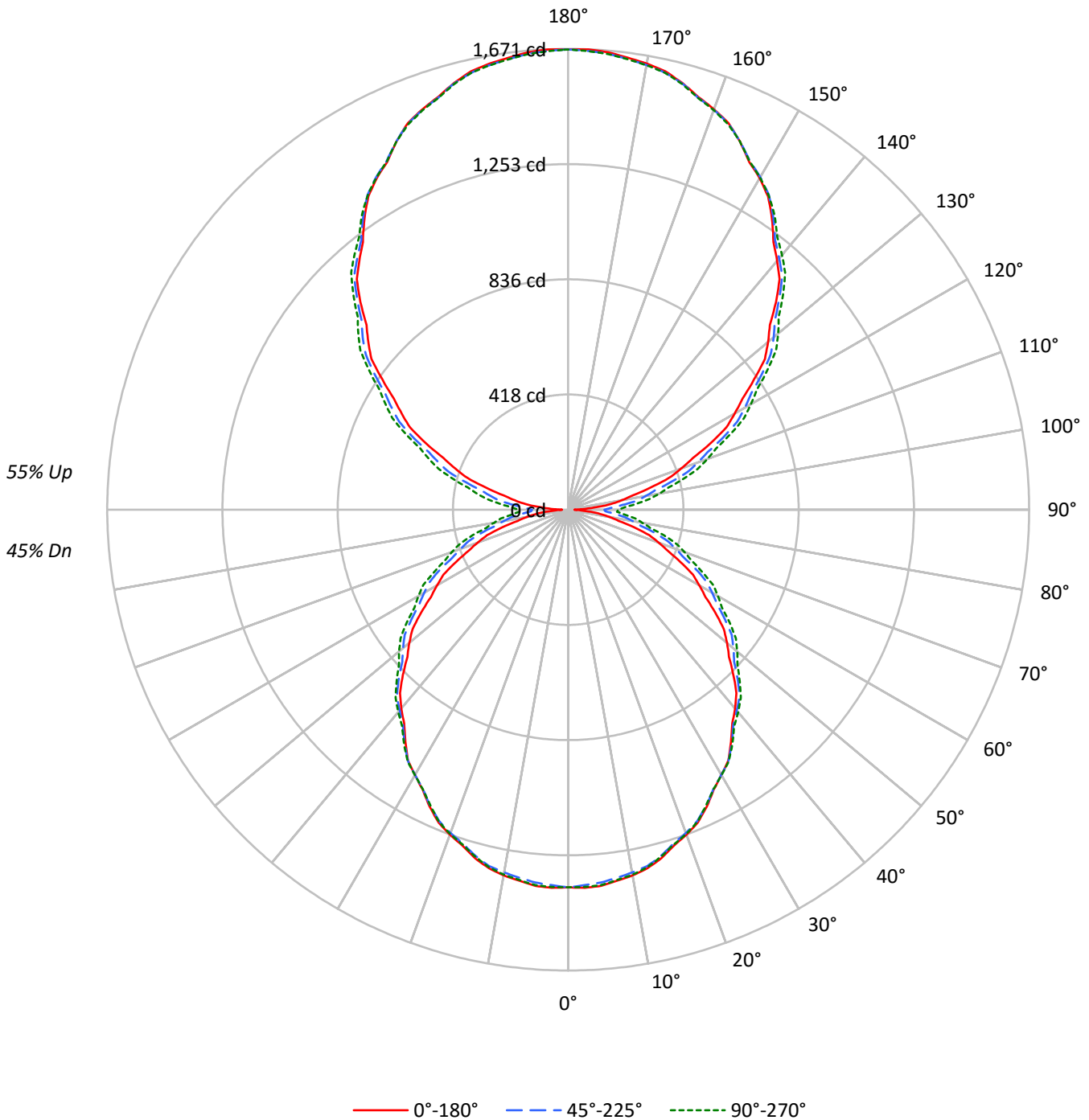
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

### Luminous Intensity Polar Plot





TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	21	19	16
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	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



TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.5	1.5
10°-20°	367.5	4.1
20°-30°	546.6	6.1
30°-40°	647.5	7.3
40°-50°	669.4	7.5
50°-60°	616.7	6.9
60°-70°	498.5	5.6
70°-80°	333.8	3.8
80°-90°	176.8	2.0
90°-100°	208.9	2.3
100°-110°	401.7	4.5
110°-120°	607.0	6.8
120°-130°	762.9	8.6
130°-140°	836.2	9.4
140°-150°	810.3	9.1
150°-160°	678.6	7.6
160°-170°	451.1	5.1
170°-180°	157.9	1.8
0°-30°	1043.6	11.7
0°-40°	1691.1	19.0
0°-60°	2977.2	33.4
0°-90°	3986.3	44.8
90°-120°	1217.5	13.7
90°-150°	3627.0	40.7
90°-180°	4915.0	55.2
0°-180°	8900.8	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	182	19
95°	102	141	198	235	249	104
105°	308	337	384	418	432	329
115°	568	584	620	642	650	561
125°	822	830	857	875	881	736
135°	1065	1072	1082	1099	1101	821
145°	1288	1292	1296	1302	1304	805
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	



TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**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	58.4	70.2	82.2	94.4	106.5	118.7	130.9	139.1
92.5°	50.7	61.2	71.6	82.1	92.6	104.2	117.1	129.9	142.8	155.7	164.2
95°	101.9	110.2	118.6	126.8	135.2	145.9	158.9	171.9	184.9	197.9	206.6
97.5°	156.1	163.3	170.5	177.7	184.9	195.4	209.2	222.9	236.7	250.5	258.6
100°	196.6	202.9	209.1	215.3	221.6	231.4	244.7	258.0	271.3	284.6	293.4
102.5°	240.1	247.1	254.1	261.0	267.9	277.0	288.2	299.5	310.6	321.8	330.7
105°	308.2	314.4	320.6	326.8	333.0	341.5	352.1	362.8	373.5	384.2	391.8
107.5°	383.4	388.9	394.4	399.9	405.4	413.1	423.0	433.0	442.9	452.8	459.6
110°	435.3	440.3	445.4	450.4	455.4	462.5	471.7	481.0	490.2	499.4	505.9



TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	489.3	492.9	496.5	500.2	503.8	510.2	519.4	528.7	537.9	547.1	552.8
115°	567.7	570.9	574.2	577.5	580.7	586.5	594.8	603.1	611.5	619.8	624.9
117.5°	646.4	648.2	650.1	652.0	653.9	658.8	666.7	674.5	682.3	690.3	695.5
120°	696.2	698.5	700.9	703.3	705.6	710.3	717.5	724.6	731.8	738.9	744.0
122.5°	749.2	750.1	751.1	752.0	752.9	757.1	764.5	771.8	779.2	786.6	791.2
125°	822.2	823.5	825.0	826.5	827.9	831.7	838.0	844.2	850.5	856.8	860.9
127.5°	898.7	899.4	900.1	900.8	901.5	904.4	909.6	914.9	920.2	925.3	929.4
130°	945.5	946.6	947.8	948.9	950.0	953.0	957.8	962.5	967.2	972.0	975.9
132.5°	991.1	993.4	995.7	998.1	1000.4	1003.1	1006.2	1009.3	1012.4	1015.5	1019.3
135°	1064.9	1066.3	1067.7	1069.2	1070.7	1072.5	1074.9	1077.3	1079.6	1082.0	1085.9
137.5°	1134.2	1135.7	1137.1	1138.5	1140.0	1141.5	1143.1	1144.8	1146.4	1148.1	1151.9
140°	1177.8	1179.2	1180.7	1182.2	1183.6	1184.9	1186.0	1187.2	1188.4	1189.6	1193.4
142.5°	1222.4	1223.5	1224.4	1225.4	1226.4	1227.4	1228.6	1229.8	1230.9	1232.1	1235.2
145°	1288.1	1289.0	1289.9	1290.7	1291.6	1292.4	1293.3	1294.2	1295.0	1295.9	1297.4
147.5°	1347.6	1348.2	1348.8	1349.5	1350.1	1350.8	1351.5	1352.2	1352.9	1353.6	1354.8
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



TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**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	168.0	170.2	172.5	174.7	177.0
90°	147.5	155.8	164.1	169.7	172.6	175.6	178.6	181.5
92.5°	172.7	181.2	189.8	195.4	198.1	200.8	203.5	206.3
95°	215.2	223.7	232.3	237.9	240.6	243.2	245.9	248.6
97.5°	266.8	275.0	283.2	288.4	290.8	293.2	295.6	297.9
100°	302.3	311.2	320.0	325.6	328.0	330.4	332.8	335.1
102.5°	339.6	348.4	357.2	363.0	365.6	368.2	370.7	373.4
105°	399.6	407.3	415.0	420.3	423.3	426.2	429.1	432.1
107.5°	466.3	473.1	479.9	484.1	485.9	487.8	489.6	491.4
110°	512.5	519.0	525.6	529.7	531.5	533.3	535.1	536.9





TEST NUMBER: P333487-935

CATALOG NUMBER: S125DIW-S1270D1560U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	558.7	564.6	570.4	574.1	575.7	577.2	578.8	580.3
115°	630.0	635.1	640.2	643.4	644.9	646.4	647.9	649.5
117.5°	700.9	706.1	711.4	714.5	715.4	716.3	717.1	718.1
120°	749.1	754.1	759.2	762.1	762.7	763.4	764.0	764.6
122.5°	795.7	800.4	804.9	807.7	808.6	809.4	810.3	811.1
125°	865.1	869.4	873.5	876.2	877.4	878.7	879.9	881.1
127.5°	933.6	937.7	941.8	944.5	945.6	946.8	948.0	949.1
130°	979.8	983.7	987.6	990.0	990.8	991.8	992.7	993.6
132.5°	1023.3	1027.2	1031.0	1033.2	1033.6	1034.1	1034.6	1035.0
135°	1089.8	1093.6	1097.5	1099.7	1100.0	1100.4	1100.6	1101.0
137.5°	1155.8	1159.7	1163.6	1165.4	1165.1	1164.8	1164.6	1164.3
140°	1197.2	1201.1	1205.0	1206.8	1206.5	1206.3	1206.0	1205.7
142.5°	1238.4	1241.5	1244.7	1246.1	1245.9	1245.6	1245.4	1245.1
145°	1298.9	1300.4	1301.9	1302.8	1303.1	1303.5	1303.8	1304.2
147.5°	1355.9	1357.1	1358.2	1358.1	1356.7	1355.3	1353.8	1352.5
150°	1392.1	1392.1	1392.1	1391.9	1391.6	1391.3	1391.0	1390.8
152.5°	1426.7	1427.4	1428.1	1427.9	1426.9	1425.9	1425.0	1424.0
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)