

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: P333474-935

Luminaire Tested: **S125DIW-S1270D1050U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333474-935  
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-S1270D1050U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1050 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7850.7 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

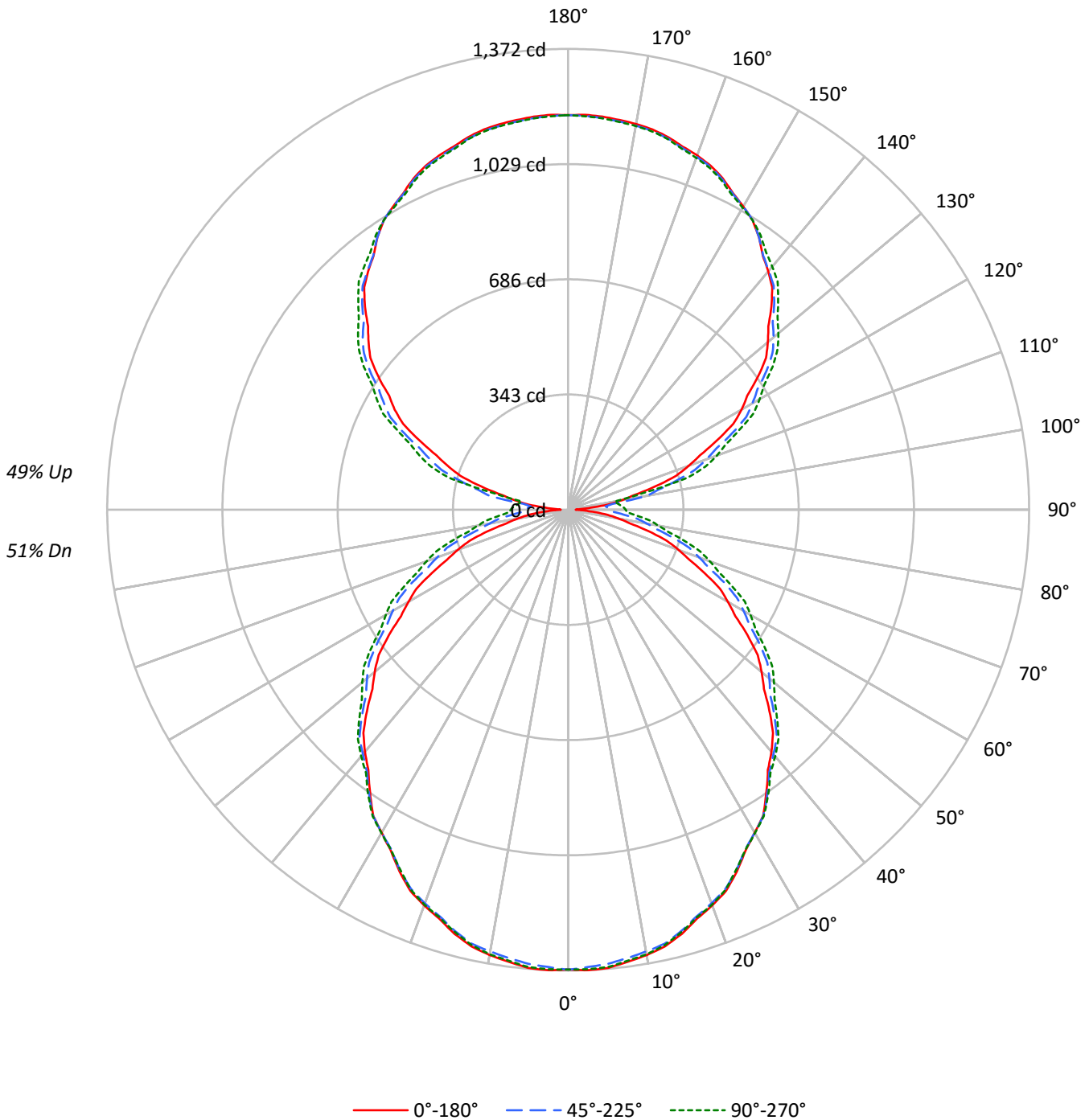
Input Watts (W): 67.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333474-935

CATALOG NUMBER: S125DIW-S1270D1050U935-4F0-1E-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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	89	85	82	79	72	70	67	60	58	57	49	48	46	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	47	43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	20	27	22	18	23	19	16	19	16	14	12

**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	1.6
10°-20°	367.5	4.7
20°-30°	546.6	7.0
30°-40°	647.5	8.2
40°-50°	669.4	8.5
50°-60°	616.7	7.9
60°-70°	498.5	6.3
70°-80°	333.8	4.3
80°-90°	175.6	2.2
90°-100°	139.8	1.8
100°-110°	334.7	4.3
110°-120°	525.2	6.7
120°-130°	639.6	8.1
130°-140°	670.6	8.5
140°-150°	620.7	7.9
150°-160°	500.1	6.4
160°-170°	323.4	4.1
170°-180°	111.6	1.4
0°-30°	1043.6	13.3
0°-40°	1691.1	21.5
0°-60°	2977.2	37.9
0°-90°	3985.1	50.8
90°-120°	999.7	12.7
90°-150°	2930.5	37.3
90°-180°	3866.0	49.2
0°-180°	7850.7	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°	22	72	124	158	171	16
95°	67	98	112	144	155	77
105°	268	294	333	359	369	284
115°	489	504	538	558	562	484
125°	689	695	721	738	743	615
135°	855	859	867	882	884	659
145°	990	990	990	997	998	618
155°	1088	1084	1085	1087	1081	501
165°	1149	1144	1144	1149	1142	324
175°	1175	1170	1170	1177	1170	112
180°	1175	1175	1175	1175	1175	



TEST NUMBER: P333474-935

CATALOG NUMBER: S125DIW-S1270D1050U935-4F0-1E-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°	42.0	51.9	61.7	71.6	81.5	91.6	102.0	112.4	122.9	133.3	140.3
90°	22.4	33.4	44.5	55.6	66.7	78.0	89.5	101.0	112.5	124.0	131.8
92.5°	32.7	40.5	48.2	56.0	63.7	73.4	85.0	96.5	108.1	119.7	127.3
95°	67.1	74.3	81.5	88.6	95.8	100.7	103.6	106.3	109.2	111.9	119.4
97.5°	119.5	127.5	135.5	143.5	151.5	153.2	148.4	143.7	138.9	134.1	134.9
100°	160.1	167.0	173.8	180.7	187.6	196.1	206.5	216.8	227.1	237.5	214.9
102.5°	201.6	208.1	214.6	221.2	227.7	235.8	245.6	255.4	265.2	274.9	275.5
105°	268.1	273.6	279.2	284.7	290.2	297.6	306.5	315.5	324.3	333.3	339.3
107.5°	337.2	341.2	345.3	349.4	353.4	359.9	368.9	377.9	386.8	395.9	401.8
110°	382.1	385.6	389.3	392.9	396.4	402.6	411.3	420.1	428.8	437.6	442.6



TEST NUMBER: P333474-935

CATALOG NUMBER: S125DIW-S1270D1050U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	425.2	428.6	432.0	435.2	438.6	444.4	452.8	461.2	469.5	477.9	482.5
115°	488.7	491.8	494.8	497.9	500.9	506.4	514.4	522.4	530.3	538.3	542.9
117.5°	554.4	555.8	557.1	558.4	559.7	564.5	572.6	580.7	588.7	596.8	600.8
120°	596.2	596.9	597.6	598.3	599.1	603.1	610.5	618.0	625.4	632.9	637.6
122.5°	632.1	633.3	634.4	635.5	636.7	640.8	647.6	654.5	661.4	668.3	672.7
125°	689.0	690.0	691.0	692.1	693.2	696.6	702.7	708.6	714.5	720.6	724.5
127.5°	742.1	742.8	743.5	744.1	744.8	747.5	752.3	757.1	761.8	766.6	770.6
130°	775.6	776.2	776.9	777.6	778.3	780.8	785.1	789.5	793.8	798.2	801.8
132.5°	807.9	809.0	810.0	811.1	812.2	814.1	816.9	819.7	822.5	825.3	829.3
135°	855.2	856.1	857.0	857.8	858.7	859.9	861.6	863.3	865.0	866.8	870.2
137.5°	898.6	899.4	900.2	901.0	901.7	902.4	903.1	903.8	904.4	905.1	908.7
140°	926.1	926.5	926.9	927.3	927.6	927.9	928.0	928.2	928.2	928.3	932.0
142.5°	951.9	951.9	951.9	951.9	951.8	952.0	952.4	952.7	953.0	953.4	956.2
145°	989.7	989.8	989.9	990.0	990.1	990.1	990.1	990.1	990.1	990.1	991.8
147.5°	1021.4	1021.4	1021.3	1021.2	1021.1	1021.2	1021.4	1021.7	1021.9	1022.1	1022.9
150°	1042.3	1042.0	1041.6	1041.2	1040.8	1040.8	1041.2	1041.6	1042.0	1042.3	1042.8
152.5°	1062.6	1061.7	1060.8	1060.0	1059.1	1058.9	1059.3	1059.7	1060.1	1060.4	1060.8
155°	1088.5	1087.4	1086.2	1085.0	1083.8	1083.5	1083.8	1084.3	1084.6	1085.0	1085.5
157.5°	1108.5	1107.8	1107.2	1106.5	1105.7	1105.4	1105.4	1105.4	1105.5	1105.5	1106.2
160°	1122.5	1121.3	1120.2	1119.0	1117.8	1117.3	1117.5	1117.8	1117.9	1118.1	1118.9
162.5°	1133.6	1132.5	1131.3	1130.1	1128.9	1128.4	1128.7	1128.9	1129.0	1129.2	1130.3
165°	1148.6	1147.5	1146.2	1145.1	1143.9	1143.4	1143.7	1143.8	1144.0	1144.2	1145.4
167.5°	1159.7	1158.6	1157.4	1156.2	1154.9	1154.4	1154.6	1154.8	1155.0	1155.2	1156.6
170°	1166.0	1164.7	1163.3	1161.9	1160.5	1160.0	1160.2	1160.4	1160.5	1160.8	1162.4
172.5°	1170.2	1168.8	1167.4	1166.1	1164.8	1164.2	1164.6	1164.9	1165.3	1165.6	1167.0
175°	1174.7	1173.5	1172.3	1171.2	1170.0	1169.6	1169.8	1169.9	1170.2	1170.4	1171.9
177.5°	1176.8	1175.9	1174.9	1174.0	1173.1	1172.7	1172.9	1173.0	1173.1	1173.3	1174.4
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7



TEST NUMBER: P333474-935

CATALOG NUMBER: S125DIW-S1270D1050U935-4F0-1E-UDD-D

**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°	147.4	154.5	161.5	166.1	168.3	170.6	172.7	175.0
90°	139.7	147.5	155.3	160.6	163.2	165.9	168.6	171.3
92.5°	134.9	142.5	150.1	155.1	157.4	159.8	162.1	164.5
95°	127.0	134.5	142.1	146.9	149.0	151.0	153.1	155.2
97.5°	135.8	136.6	137.3	138.8	140.8	142.8	144.8	146.9
100°	192.3	169.7	147.1	136.4	137.4	138.4	139.4	140.4
102.5°	276.0	276.6	277.2	271.8	260.5	249.1	237.7	226.4
105°	345.3	351.2	357.2	361.1	363.0	364.9	366.8	368.7
107.5°	407.8	413.7	419.7	423.3	424.5	425.8	427.1	428.3
110°	447.7	452.8	457.9	461.6	463.8	466.1	468.4	470.7





TEST NUMBER: P333474-935

CATALOG NUMBER: S125DIW-S1270D1050U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	487.2	491.9	496.6	499.8	501.7	503.5	505.3	507.1
115°	547.4	552.1	556.6	559.2	559.9	560.5	561.1	561.8
117.5°	604.9	609.0	613.0	615.8	617.3	618.9	620.4	621.9
120°	642.2	647.0	651.6	654.4	655.2	656.0	656.9	657.6
122.5°	677.2	681.7	686.0	688.6	689.3	690.0	690.6	691.3
125°	728.6	732.5	736.5	739.0	739.9	740.8	741.8	742.6
127.5°	774.6	778.6	782.6	784.7	785.0	785.3	785.6	785.9
130°	805.4	809.0	812.6	814.7	815.2	815.7	816.2	816.7
132.5°	833.4	837.5	841.5	843.7	844.0	844.3	844.6	844.8
135°	873.7	877.2	880.7	882.6	883.0	883.3	883.6	883.9
137.5°	912.3	915.8	919.5	921.4	921.5	921.7	922.0	922.1
140°	935.6	939.4	943.1	944.9	944.9	944.9	944.9	944.9
142.5°	959.2	962.0	964.9	966.3	966.4	966.4	966.5	966.5
145°	993.4	995.1	996.9	997.7	997.7	997.7	997.8	997.8
147.5°	1023.6	1024.2	1024.9	1024.9	1024.1	1023.2	1022.4	1021.5
150°	1043.1	1043.5	1043.9	1043.4	1042.2	1040.9	1039.7	1038.5
152.5°	1061.2	1061.6	1062.0	1061.5	1060.1	1058.9	1057.6	1056.2
155°	1086.2	1086.8	1087.4	1086.8	1085.3	1083.7	1082.2	1080.6
157.5°	1106.8	1107.4	1108.0	1107.6	1106.0	1104.5	1102.9	1101.4
160°	1119.6	1120.4	1121.2	1120.8	1119.3	1117.8	1116.2	1114.7
162.5°	1131.4	1132.5	1133.6	1133.2	1131.5	1129.9	1128.2	1126.4
165°	1146.5	1147.7	1148.8	1148.7	1147.1	1145.6	1144.0	1142.5
167.5°	1158.0	1159.3	1160.8	1160.6	1158.8	1157.1	1155.4	1153.7
170°	1163.9	1165.4	1167.0	1166.8	1165.1	1163.4	1161.7	1159.9
172.5°	1168.5	1169.8	1171.2	1171.0	1169.3	1167.5	1165.8	1164.1
175°	1173.5	1175.0	1176.6	1176.5	1174.7	1172.9	1171.2	1169.5
177.5°	1175.4	1176.6	1177.7	1177.6	1176.3	1175.1	1173.9	1172.6
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7

(END OF REPORT)