

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: P333601-930

Luminaire Tested: **S125RDIP-S1090D1035U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333601-930  
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: S125RDIP-S1090D1035U930-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6817.2 lumens  
Efficiency: N/A  
Efficacy: 112.7 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

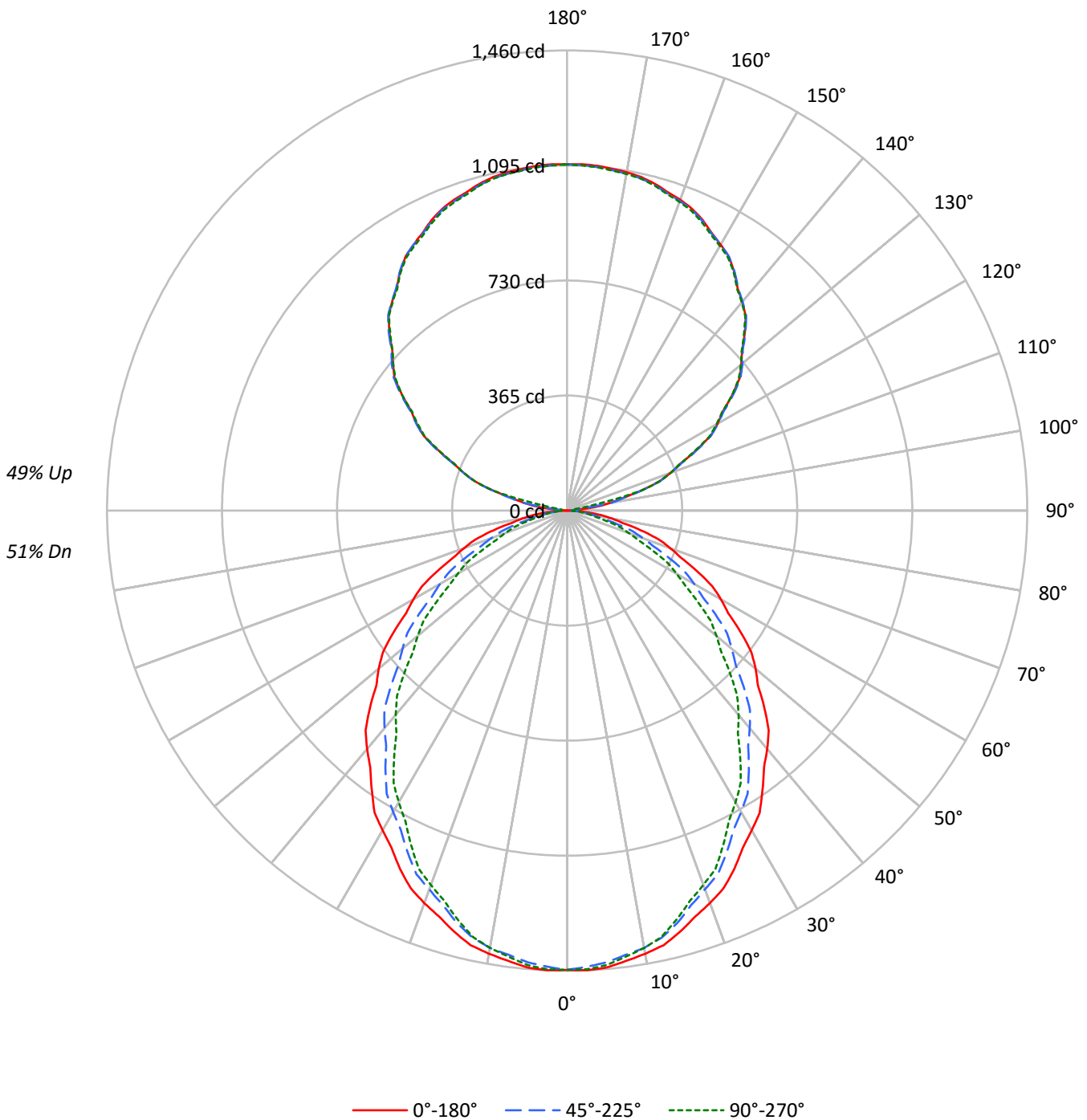
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**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	98	94	90	87	90	87	84	81	74	71	69	62	60	58	50	49	48	43
2	90	82	76	71	82	76	71	66	65	61	58	54	52	49	45	43	41	36
3	82	72	65	59	75	67	61	56	57	53	49	48	45	42	40	37	35	31
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	36	33	30	27
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	32	29	27	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	21
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9412	9412	9412
5°	9433	9326	9383
10°	9362	9239	9239
15°	9250	9052	8978
20°	9108	8790	8685
25°	8941	8533	8345
30°	8733	8232	7970
35°	8521	7923	7550
40°	8323	7599	7136
45°	8082	7238	6685
50°	7840	6845	6215
55°	7560	6469	5713
60°	7279	6013	5174
65°	6946	5483	4557
70°	6567	4823	3928
75°	6041	4065	3266
80°	5322	3195	2741
85°	4483	2608	2445



TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.0	2.0
10°-20°	382.9	5.6
20°-30°	555.3	8.1
30°-40°	632.9	9.3
40°-50°	616.9	9.0
50°-60°	519.3	7.6
60°-70°	364.0	5.3
70°-80°	187.1	2.7
80°-90°	49.5	0.7
90°-100°	39.9	0.6
100°-110°	245.9	3.6
110°-120°	446.1	6.5
120°-130°	572.5	8.4
130°-140°	615.7	9.0
140°-150°	578.0	8.5
150°-160°	467.5	6.9
160°-170°	302.4	4.4
170°-180°	104.3	1.5
0°-30°	1075.3	15.8
0°-40°	1708.1	25.1
0°-60°	2844.3	41.7
0°-90°	3444.9	50.5
90°-120°	731.9	10.7
90°-150°	2498.1	36.6
90°-180°	3372.0	49.5
0°-180°	6817.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1450	1438	1449	1447	138
15°	1384	1376	1354	1352	1343	390
25°	1255	1237	1198	1183	1171	577
35°	1081	1053	1005	974	958	676
45°	885	851	792	750	732	682
55°	671	635	574	527	507	600
65°	454	416	359	316	298	450
75°	242	208	163	140	131	256
85°	60	42	35	34	33	68
90°	1	7	13	17	20	5
95°	46	42	13	17	17	59
105°	239	242	243	243	242	254
115°	449	453	454	451	446	445
125°	639	644	645	642	639	571
135°	797	802	800	798	794	614
145°	924	926	926	926	922	578
155°	1018	1013	1014	1016	1010	469
165°	1074	1069	1070	1074	1068	303
175°	1098	1094	1094	1100	1093	105
180°	1098	1098	1098	1098	1098	



TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1459.9	1459.3	1458.7	1458.1	1457.5	1456.3	1454.3	1452.4	1450.4	1448.5	1450.4
5°	1455.1	1454.1	1453.1	1452.1	1451.2	1449.3	1446.6	1443.9	1441.2	1438.5	1441.0
7.5°	1440.7	1439.8	1438.8	1437.9	1437.0	1434.9	1431.7	1428.5	1425.2	1422.0	1423.8
10°	1427.5	1426.8	1426.0	1425.3	1424.6	1422.5	1419.1	1415.7	1412.3	1408.8	1409.6
12.5°	1412.5	1411.6	1410.7	1409.7	1408.8	1406.1	1401.5	1396.9	1392.3	1387.6	1388.2
15°	1383.5	1382.0	1380.5	1379.1	1377.6	1374.4	1369.2	1364.1	1358.9	1353.8	1353.6
17.5°	1350.7	1348.4	1346.2	1343.9	1341.7	1337.3	1330.9	1324.5	1317.9	1311.5	1310.3
20°	1325.2	1322.7	1320.3	1317.8	1315.4	1310.3	1302.4	1294.6	1286.8	1279.0	1277.7
22.5°	1297.0	1294.5	1292.1	1289.6	1287.2	1281.9	1273.7	1265.4	1257.2	1249.0	1246.6
25°	1254.7	1251.1	1247.4	1243.7	1240.1	1233.7	1224.7	1215.6	1206.6	1197.5	1194.3
27.5°	1206.3	1201.8	1197.3	1192.9	1188.5	1181.5	1171.7	1162.0	1152.3	1142.6	1138.2
30°	1171.1	1166.4	1161.8	1157.2	1152.5	1145.0	1134.7	1124.5	1114.2	1103.9	1098.3
32.5°	1136.7	1131.3	1125.8	1120.5	1115.0	1107.1	1096.6	1086.1	1075.6	1065.2	1059.0
35°	1080.8	1075.0	1069.1	1063.2	1057.4	1048.9	1037.9	1026.9	1015.9	1004.9	997.8
37.5°	1026.0	1018.9	1011.7	1004.6	997.4	988.2	976.8	965.5	954.1	942.8	934.3
40°	987.2	979.9	972.6	965.2	957.9	948.4	936.6	924.9	913.1	901.4	892.1
42.5°	946.7	939.2	931.7	924.1	916.6	906.8	894.6	882.6	870.4	858.3	849.4
45°	884.9	877.8	870.7	863.6	856.6	846.3	832.8	819.4	805.9	792.5	782.7
47.5°	820.8	813.3	805.8	798.4	790.9	780.4	766.9	753.3	739.7	726.2	716.1
50°	780.3	772.3	764.2	756.1	748.0	737.0	723.1	709.1	695.2	681.3	671.0
52.5°	736.3	728.1	719.7	711.5	703.3	692.5	679.4	666.2	653.1	639.9	628.8
55°	671.4	663.6	655.7	647.9	640.1	629.3	615.6	601.9	588.2	574.5	563.5
57.5°	605.8	597.5	589.1	580.7	572.3	561.6	548.4	535.2	522.0	508.7	498.0
60°	563.5	555.0	546.4	537.9	529.3	518.4	505.2	492.0	478.7	465.5	454.8
62.5°	518.6	510.5	502.3	494.1	485.9	475.2	461.8	448.3	435.0	421.5	411.6
65°	454.5	446.2	437.9	429.6	421.3	410.7	397.7	384.7	371.8	358.8	349.0
67.5°	390.9	382.6	374.3	366.0	357.7	347.3	334.8	322.5	310.1	297.6	288.7
70°	347.8	339.5	331.2	322.9	314.5	304.3	292.0	279.8	267.6	255.4	247.8
72.5°	305.6	297.4	289.3	281.2	273.0	263.3	251.8	240.4	228.9	217.5	210.5
75°	242.1	234.8	227.5	220.1	212.8	204.0	193.7	183.4	173.2	162.9	157.5
77.5°	179.2	173.3	167.5	161.6	155.7	148.6	140.5	132.2	124.0	115.8	112.0
80°	143.1	137.2	131.3	125.5	119.6	113.2	106.4	99.5	92.7	85.9	83.6
82.5°	107.9	102.6	97.3	92.0	86.7	81.8	77.0	72.3	67.7	62.9	62.0
85°	60.5	56.1	51.7	47.3	42.9	40.1	38.9	37.7	36.4	35.2	35.0
87.5°	20.4	19.3	18.3	17.2	16.1	15.6	15.7	15.7	15.7	15.8	16.0
90°	0.8	2.3	3.7	5.1	6.6	8.0	9.2	10.5	11.7	13.0	13.9
92.5°	12.6	11.5	10.5	9.5	8.5	8.6	9.6	10.8	11.9	13.0	13.9
95°	46.4	45.8	45.3	44.8	44.3	40.5	33.7	26.7	19.9	13.0	13.9
97.5°	96.9	97.8	98.8	99.8	100.8	94.5	80.9	67.3	53.6	40.0	35.0
100°	135.9	136.5	137.1	137.5	138.1	138.8	139.5	140.2	140.9	141.6	114.7
102.5°	175.7	176.3	177.1	177.7	178.4	179.0	179.4	179.9	180.3	180.8	175.6
105°	239.3	240.0	240.8	241.5	242.2	242.6	242.6	242.6	242.6	242.6	242.6
107.5°	305.4	305.4	305.4	305.4	305.4	305.6	306.0	306.3	306.7	307.0	307.1
110°	348.4	348.4	348.4	348.4	348.4	348.6	348.9	349.4	349.7	350.0	349.5



TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	388.8	389.2	389.6	390.1	390.5	390.9	391.1	391.3	391.5	391.8	391.0
115°	449.4	450.3	451.2	452.1	453.0	453.6	453.7	453.9	454.0	454.2	453.6
117.5°	512.0	512.0	511.9	511.9	511.9	512.3	512.9	513.6	514.3	514.9	514.0
120°	551.1	550.9	550.7	550.6	550.4	550.6	551.1	551.6	552.2	552.8	552.4
122.5°	585.6	586.3	587.0	587.7	588.4	588.8	589.1	589.4	589.6	589.9	589.5
125°	639.0	640.3	641.6	642.9	644.1	644.7	644.7	644.7	644.7	644.7	644.0
127.5°	690.0	690.9	691.8	692.7	693.6	694.0	693.9	693.8	693.7	693.6	693.2
130°	721.2	722.2	723.1	724.0	724.9	725.4	725.6	725.8	725.9	726.1	725.6
132.5°	752.5	753.6	754.6	755.6	756.7	757.0	756.6	756.3	755.9	755.5	755.3
135°	797.0	798.0	799.2	800.2	801.3	801.7	801.3	801.0	800.5	800.2	799.8
137.5°	837.8	838.8	839.7	840.7	841.6	841.9	841.6	841.2	840.9	840.6	840.7
140°	864.5	864.9	865.3	865.6	865.9	866.1	865.8	865.7	865.5	865.4	865.7
142.5°	888.6	888.8	889.1	889.2	889.5	889.7	890.0	890.2	890.5	890.7	890.8
145°	924.0	924.3	924.6	925.0	925.4	925.6	925.6	925.6	925.6	925.6	925.8
147.5°	954.9	954.8	954.7	954.6	954.6	954.6	954.9	955.1	955.3	955.5	955.8
150°	974.4	974.0	973.7	973.3	973.0	973.0	973.3	973.7	974.0	974.4	974.8
152.5°	993.3	992.5	991.7	990.9	990.1	989.9	990.3	990.6	991.0	991.3	991.7
155°	1017.6	1016.5	1015.4	1014.3	1013.3	1012.8	1013.3	1013.6	1013.9	1014.3	1014.9
157.5°	1036.2	1035.6	1035.0	1034.4	1033.7	1033.4	1033.4	1033.5	1033.5	1033.6	1034.1
160°	1049.3	1048.2	1047.2	1046.0	1045.0	1044.5	1044.7	1044.9	1045.1	1045.2	1045.9
162.5°	1059.7	1058.7	1057.5	1056.5	1055.4	1054.9	1055.1	1055.3	1055.5	1055.6	1056.7
165°	1073.7	1072.6	1071.5	1070.5	1069.4	1068.9	1069.1	1069.3	1069.5	1069.7	1070.7
167.5°	1084.2	1083.0	1081.9	1080.8	1079.7	1079.2	1079.4	1079.5	1079.7	1079.9	1081.2
170°	1090.0	1088.8	1087.4	1086.2	1084.9	1084.4	1084.6	1084.8	1084.9	1085.2	1086.5
172.5°	1093.9	1092.7	1091.4	1090.1	1088.8	1088.4	1088.7	1089.0	1089.3	1089.6	1091.0
175°	1098.1	1097.1	1096.0	1094.9	1093.8	1093.4	1093.6	1093.7	1093.9	1094.1	1095.5
177.5°	1100.1	1099.3	1098.4	1097.5	1096.7	1096.3	1096.4	1096.6	1096.7	1096.8	1097.9
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1



TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1452.4	1454.3	1456.3	1457.1	1456.9	1456.8	1456.5	1456.4
5°	1443.4	1445.9	1448.3	1449.3	1448.8	1448.3	1447.8	1447.3
7.5°	1425.5	1427.2	1428.9	1429.5	1428.9	1428.4	1427.8	1427.3
10°	1410.3	1411.0	1411.8	1411.8	1411.0	1410.3	1409.6	1408.8
12.5°	1388.8	1389.3	1389.8	1389.5	1388.4	1387.3	1386.2	1385.0
15°	1353.3	1353.1	1352.8	1351.6	1349.4	1347.2	1345.0	1342.8
17.5°	1309.0	1307.8	1306.6	1305.1	1303.3	1301.5	1299.7	1297.9
20°	1276.5	1275.3	1274.1	1272.4	1270.2	1268.0	1265.8	1263.6
22.5°	1244.2	1241.8	1239.4	1237.3	1235.5	1233.7	1231.8	1230.0
25°	1191.2	1188.0	1184.8	1181.9	1179.2	1176.5	1173.8	1171.1
27.5°	1133.8	1129.4	1124.9	1121.4	1118.8	1116.1	1113.5	1111.0
30°	1092.7	1087.0	1081.4	1077.5	1075.3	1073.1	1070.9	1068.7
32.5°	1052.8	1046.5	1040.3	1035.8	1033.1	1030.3	1027.4	1024.7
35°	990.7	983.6	976.5	971.3	967.8	964.4	961.0	957.6
37.5°	925.8	917.3	908.7	902.9	899.5	896.2	892.8	889.5
40°	882.8	873.5	864.2	858.1	855.2	852.2	849.3	846.4
42.5°	840.5	831.5	822.6	816.0	811.7	807.5	803.2	798.8
45°	772.9	763.1	753.3	746.6	742.9	739.2	735.6	731.9
47.5°	706.0	695.9	685.9	678.8	674.7	670.7	666.7	662.6
50°	660.7	650.4	640.2	633.2	629.6	625.9	622.2	618.6
52.5°	617.8	606.7	595.7	588.3	584.7	581.0	577.3	573.6
55°	552.5	541.5	530.5	523.0	519.1	515.2	511.3	507.4
57.5°	487.2	476.5	465.7	458.5	455.1	451.6	448.1	444.7
60°	444.0	433.3	422.5	415.3	411.6	408.0	404.3	400.6
62.5°	401.6	391.6	381.6	374.8	371.1	367.5	363.8	360.1
65°	339.2	329.5	319.7	312.9	309.2	305.6	301.9	298.2
67.5°	279.7	270.8	261.8	255.8	252.9	250.0	247.0	244.1
70°	240.2	232.6	225.0	219.7	216.8	213.9	210.9	208.0
72.5°	203.5	196.5	189.5	185.0	183.0	181.1	179.1	177.2
75°	152.1	146.8	141.4	137.8	136.1	134.4	132.6	130.9
77.5°	108.3	104.5	100.7	98.2	96.9	95.6	94.4	93.1
80°	81.4	79.2	77.0	75.7	75.2	74.7	74.2	73.7
82.5°	60.9	59.8	58.9	58.2	57.9	57.6	57.3	57.0
85°	34.7	34.5	34.2	34.0	33.8	33.5	33.3	33.0
87.5°	16.1	16.4	16.6	16.6	16.5	16.4	16.3	16.2
90°	14.8	15.7	16.6	17.4	17.9	18.4	19.0	19.6
92.5°	14.8	15.7	16.6	17.2	17.4	17.7	18.0	18.3
95°	14.8	15.7	16.6	17.1	17.1	17.1	17.1	17.1
97.5°	29.8	24.8	19.6	17.1	17.1	17.1	17.1	17.1
100°	87.7	60.8	33.8	20.0	19.2	18.5	17.9	17.1
102.5°	170.5	165.4	160.3	151.6	139.3	127.0	114.7	102.4
105°	242.6	242.6	242.6	242.5	242.3	242.1	242.0	241.7
107.5°	307.1	307.2	307.2	307.0	306.4	305.9	305.3	304.8
110°	348.9	348.4	347.9	347.7	347.9	348.1	348.2	348.4





TEST NUMBER: P333601-930

CATALOG NUMBER: S125RDIP-S1090D1035U930-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.4	389.6	389.0	388.5	388.2	388.0	387.8	387.5
115°	452.8	452.1	451.3	450.5	449.4	448.3	447.2	446.1
117.5°	513.1	512.2	511.2	510.5	510.1	509.6	509.1	508.6
120°	552.0	551.6	551.3	550.7	549.8	548.9	548.0	547.1
122.5°	589.1	588.8	588.4	587.7	586.7	585.6	584.6	583.5
125°	643.3	642.5	641.8	641.2	640.7	640.1	639.6	639.0
127.5°	692.8	692.4	691.9	691.1	689.7	688.4	687.1	685.7
130°	725.0	724.5	724.0	723.3	722.4	721.5	720.6	719.6
132.5°	755.2	755.1	755.0	754.5	753.6	752.7	751.8	750.9
135°	799.5	799.2	798.7	798.0	797.0	795.9	794.8	793.7
137.5°	840.7	840.8	840.9	840.4	839.5	838.5	837.6	836.7
140°	866.1	866.4	866.7	866.4	865.4	864.2	863.2	862.1
142.5°	890.9	891.0	891.0	890.6	889.4	888.4	887.3	886.1
145°	925.9	926.1	926.3	925.9	924.8	923.7	922.6	921.5
147.5°	955.9	956.2	956.4	955.9	954.6	953.2	951.9	950.6
150°	975.2	975.5	975.8	975.3	973.9	972.4	970.9	969.6
152.5°	992.1	992.5	992.8	992.3	991.0	989.7	988.4	987.1
155°	1015.4	1015.9	1016.5	1016.0	1014.6	1013.1	1011.7	1010.2
157.5°	1034.7	1035.3	1035.8	1035.4	1034.0	1032.5	1031.0	1029.6
160°	1046.7	1047.4	1048.1	1047.7	1046.4	1044.9	1043.4	1042.0
162.5°	1057.7	1058.7	1059.7	1059.4	1057.9	1056.2	1054.7	1053.0
165°	1071.8	1072.9	1074.0	1073.8	1072.4	1070.9	1069.5	1068.0
167.5°	1082.6	1083.9	1085.2	1085.0	1083.4	1081.7	1080.1	1078.5
170°	1088.0	1089.5	1091.0	1090.8	1089.2	1087.6	1086.0	1084.3
172.5°	1092.3	1093.6	1094.9	1094.7	1093.1	1091.4	1089.8	1088.3
175°	1097.0	1098.5	1099.8	1099.8	1098.1	1096.5	1094.9	1093.2
177.5°	1098.9	1099.9	1100.9	1100.8	1099.7	1098.5	1097.4	1096.2
180°	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1	1098.1

(END OF REPORT)