

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: P333714-930

Luminaire Tested: **S125RDIW-S1090D1340U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333714-930
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: S125RDIW-S1090D1340U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7818.5 lumens
Efficiency: N/A
Efficacy: 112.0 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

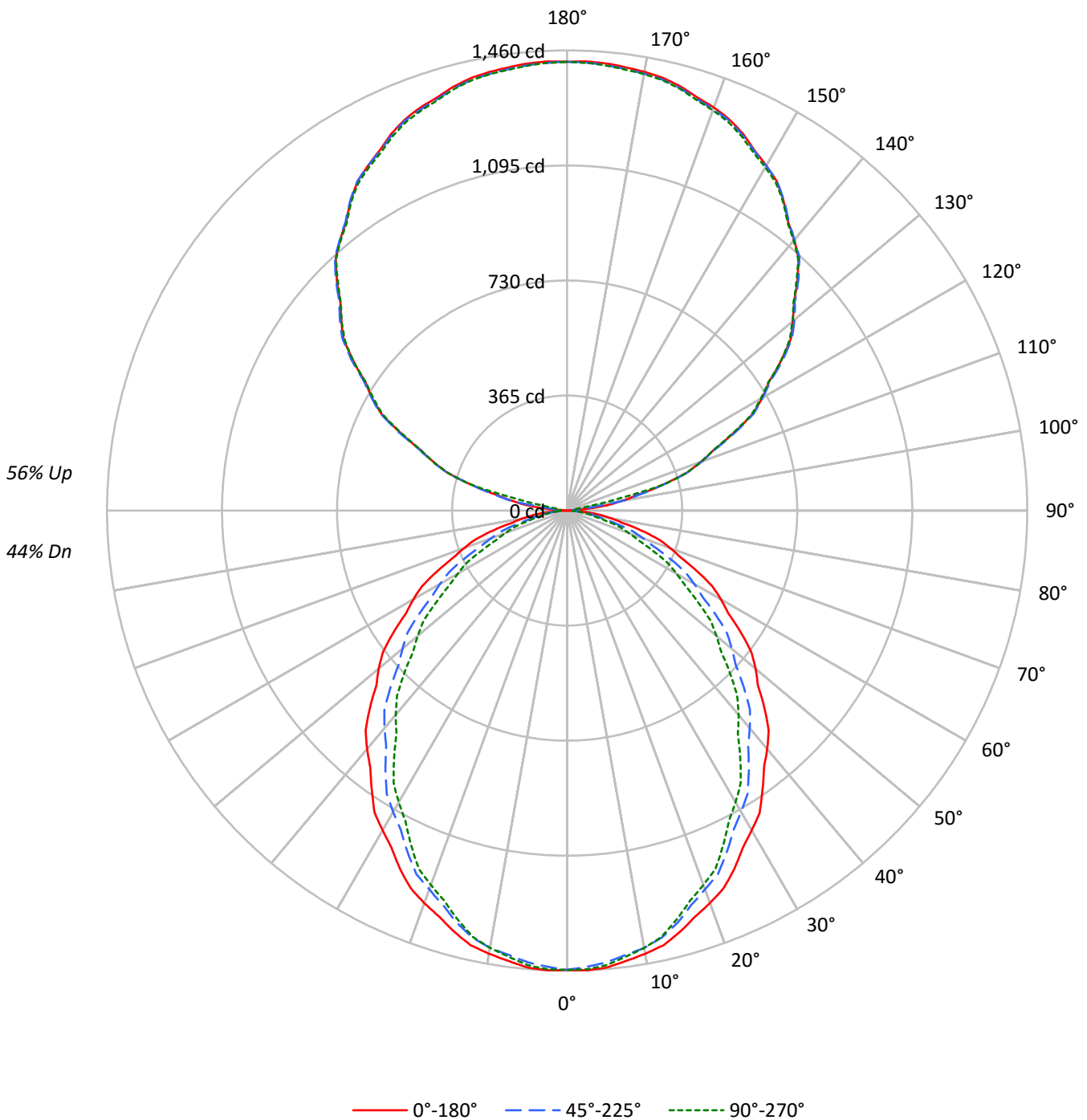
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	65	62	58	55	50	48	46	40	38	37	32
3	80	71	64	58	73	66	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20
6	62	50	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	27	22	19	23	19	16	19	16	14	12

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: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	1.8
10°-20°	382.9	4.9
20°-30°	555.3	7.1
30°-40°	632.9	8.1
40°-50°	616.9	7.9
50°-60°	519.3	6.6
60°-70°	364.0	4.7
70°-80°	187.1	2.4
80°-90°	50.2	0.6
90°-100°	51.7	0.7
100°-110°	318.9	4.1
110°-120°	578.4	7.4
120°-130°	742.3	9.5
130°-140°	798.4	10.2
140°-150°	749.4	9.6
150°-160°	606.3	7.8
160°-170°	392.1	5.0
170°-180°	135.2	1.7
0°-30°	1075.3	13.8
0°-40°	1708.1	21.8
0°-60°	2844.3	36.4
0°-90°	3445.6	44.1
90°-120°	949.1	12.1
90°-150°	3239.3	41.4
90°-180°	4373.0	55.9
0°-180°	7818.5	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	10	17	22	25	5
95°	60	55	17	22	22	77
105°	310	314	314	314	314	329
115°	583	588	589	585	578	577
125°	829	836	836	832	829	740
135°	1034	1039	1038	1035	1029	796
145°	1198	1200	1200	1201	1195	749
155°	1320	1314	1315	1318	1310	608
165°	1392	1386	1387	1393	1385	393
175°	1424	1418	1419	1426	1418	136
180°	1424	1424	1424	1424	1424	



TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-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°	20.5	19.5	18.5	17.4	16.5	16.1	16.2	16.3	16.5	16.6	16.8
90°	1.1	2.9	4.8	6.7	8.6	10.4	12.0	13.6	15.2	16.9	18.1
92.5°	16.2	14.9	13.6	12.3	11.0	11.1	12.6	13.9	15.4	16.9	18.1
95°	60.2	59.4	58.8	58.0	57.3	52.5	43.6	34.7	25.8	16.9	18.1
97.5°	125.6	126.9	128.2	129.4	130.7	122.5	104.8	87.2	69.5	51.9	45.3
100°	176.3	177.0	177.7	178.4	179.1	179.9	180.8	181.8	182.7	183.7	148.7
102.5°	227.8	228.7	229.6	230.5	231.4	232.1	232.7	233.3	233.7	234.3	227.7
105°	310.4	311.3	312.3	313.2	314.1	314.5	314.5	314.5	314.5	314.5	314.5
107.5°	396.1	396.1	396.1	396.1	396.1	396.3	396.8	397.2	397.7	398.2	398.2
110°	451.8	451.8	451.8	451.8	451.8	452.0	452.5	453.0	453.5	453.9	453.2



TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	504.2	504.8	505.3	505.8	506.4	506.9	507.1	507.4	507.7	507.9	507.0
115°	582.7	583.8	585.1	586.2	587.4	588.1	588.3	588.6	588.8	589.1	588.1
117.5°	664.0	663.9	663.9	663.8	663.8	664.2	665.1	666.0	666.9	667.8	666.6
120°	714.6	714.4	714.2	714.0	713.7	714.0	714.6	715.3	716.1	716.7	716.3
122.5°	759.4	760.3	761.2	762.1	763.0	763.6	763.9	764.3	764.6	764.9	764.4
125°	828.7	830.3	831.9	833.6	835.2	836.0	836.0	836.0	836.0	836.0	835.1
127.5°	894.7	895.9	897.1	898.2	899.4	899.9	899.8	899.7	899.5	899.4	898.9
130°	935.2	936.5	937.6	938.8	940.0	940.7	940.9	941.1	941.3	941.6	940.9
132.5°	975.8	977.1	978.5	979.9	981.2	981.7	981.1	980.6	980.2	979.6	979.5
135°	1033.5	1034.9	1036.2	1037.6	1039.1	1039.5	1039.1	1038.6	1038.1	1037.6	1037.2
137.5°	1086.5	1087.6	1088.8	1090.1	1091.3	1091.7	1091.3	1090.9	1090.5	1090.1	1090.1
140°	1121.0	1121.5	1122.0	1122.4	1122.9	1123.1	1122.8	1122.6	1122.3	1122.1	1122.6
142.5°	1152.3	1152.6	1152.8	1153.2	1153.4	1153.7	1154.1	1154.4	1154.7	1155.0	1155.1
145°	1198.1	1198.6	1199.1	1199.5	1200.0	1200.2	1200.2	1200.2	1200.2	1200.2	1200.4
147.5°	1238.2	1238.1	1238.0	1238.0	1237.9	1238.0	1238.2	1238.5	1238.8	1239.1	1239.3
150°	1263.6	1263.1	1262.7	1262.2	1261.7	1261.7	1262.2	1262.7	1263.1	1263.6	1264.0
152.5°	1288.0	1287.0	1286.0	1285.0	1283.9	1283.6	1284.1	1284.6	1285.1	1285.5	1286.0
155°	1319.5	1318.1	1316.7	1315.3	1313.9	1313.4	1313.9	1314.3	1314.8	1315.3	1316.0
157.5°	1343.8	1343.0	1342.1	1341.2	1340.4	1340.0	1340.0	1340.1	1340.2	1340.2	1340.9
160°	1360.7	1359.3	1357.9	1356.4	1355.0	1354.5	1354.7	1354.9	1355.2	1355.4	1356.3
162.5°	1374.2	1372.8	1371.3	1369.9	1368.6	1368.0	1368.2	1368.5	1368.6	1368.9	1370.2
165°	1392.4	1390.9	1389.5	1388.1	1386.7	1386.1	1386.3	1386.6	1386.8	1387.1	1388.5
167.5°	1405.8	1404.4	1403.0	1401.5	1400.0	1399.5	1399.6	1399.9	1400.1	1400.4	1402.1
170°	1413.5	1411.9	1410.1	1408.5	1406.9	1406.1	1406.4	1406.6	1406.9	1407.1	1409.0
172.5°	1418.5	1416.9	1415.3	1413.6	1411.9	1411.4	1411.8	1412.2	1412.6	1413.0	1414.7
175°	1424.0	1422.6	1421.2	1419.8	1418.4	1417.8	1418.1	1418.3	1418.5	1418.7	1420.6
177.5°	1426.5	1425.4	1424.3	1423.2	1422.0	1421.6	1421.8	1422.0	1422.1	1422.3	1423.7
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0



TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-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°	17.0	17.3	17.5	17.6	17.5	17.5	17.4	17.4
90°	19.2	20.4	21.6	22.5	23.2	23.9	24.6	25.4
92.5°	19.2	20.4	21.6	22.3	22.7	23.0	23.3	23.6
95°	19.2	20.4	21.6	22.2	22.2	22.2	22.2	22.2
97.5°	38.7	32.1	25.4	22.2	22.2	22.2	22.2	22.2
100°	113.7	78.8	43.9	25.9	24.9	24.1	23.1	22.2
102.5°	221.1	214.5	207.9	196.6	180.7	164.7	148.7	132.8
105°	314.5	314.5	314.5	314.5	314.2	314.0	313.7	313.5
107.5°	398.3	398.4	398.4	398.0	397.3	396.6	395.9	395.3
110°	452.5	451.8	451.1	450.9	451.1	451.3	451.6	451.8



TEST NUMBER: P333714-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	506.1	505.3	504.4	503.8	503.4	503.1	502.8	502.5
115°	587.2	586.2	585.3	584.1	582.7	581.3	579.8	578.5
117.5°	665.4	664.1	662.9	661.9	661.4	660.8	660.1	659.6
120°	715.8	715.3	714.9	714.0	712.9	711.7	710.5	709.4
122.5°	763.9	763.4	763.0	762.1	760.8	759.4	758.0	756.7
125°	834.1	833.2	832.3	831.4	830.8	830.1	829.3	828.7
127.5°	898.4	897.8	897.3	896.2	894.5	892.8	891.0	889.2
130°	940.2	939.5	938.8	937.8	936.7	935.5	934.3	933.2
132.5°	979.3	979.2	979.0	978.4	977.2	976.1	974.9	973.7
135°	1036.7	1036.2	1035.8	1034.9	1033.5	1032.0	1030.6	1029.2
137.5°	1090.2	1090.3	1090.4	1089.8	1088.6	1087.4	1086.1	1084.9
140°	1123.1	1123.5	1124.0	1123.5	1122.1	1120.7	1119.3	1117.9
142.5°	1155.2	1155.4	1155.4	1154.8	1153.3	1151.9	1150.6	1149.2
145°	1200.7	1200.9	1201.2	1200.6	1199.1	1197.8	1196.4	1195.0
147.5°	1239.7	1239.9	1240.2	1239.5	1237.8	1236.1	1234.4	1232.7
150°	1264.5	1264.9	1265.4	1264.7	1262.8	1260.9	1259.1	1257.2
152.5°	1286.5	1286.9	1287.4	1286.8	1285.1	1283.4	1281.7	1280.0
155°	1316.7	1317.4	1318.1	1317.5	1315.6	1313.8	1311.9	1310.0
157.5°	1341.7	1342.5	1343.2	1342.6	1340.8	1338.9	1337.0	1335.1
160°	1357.3	1358.2	1359.2	1358.7	1356.8	1354.9	1353.1	1351.2
162.5°	1371.5	1372.9	1374.2	1373.8	1371.7	1369.6	1367.6	1365.5
165°	1389.8	1391.3	1392.7	1392.4	1390.6	1388.7	1386.8	1384.9
167.5°	1403.8	1405.4	1407.1	1406.9	1404.8	1402.7	1400.6	1398.5
170°	1410.9	1412.8	1414.6	1414.5	1412.4	1410.3	1408.2	1406.1
172.5°	1416.4	1418.1	1419.8	1419.6	1417.5	1415.4	1413.2	1411.1
175°	1422.5	1424.3	1426.2	1426.1	1424.0	1421.9	1419.8	1417.6
177.5°	1425.0	1426.3	1427.6	1427.5	1426.0	1424.5	1422.9	1421.5
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0

(END OF REPORT)