

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: P333715-930

Luminaire Tested: **S125RDIW-S1090D1340U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333715-930
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: S125RDIW-S1090D1340U930-4F0-1E-UDD-F1
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, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7237.7 lumens
Efficiency: N/A
Efficacy: 103.7 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

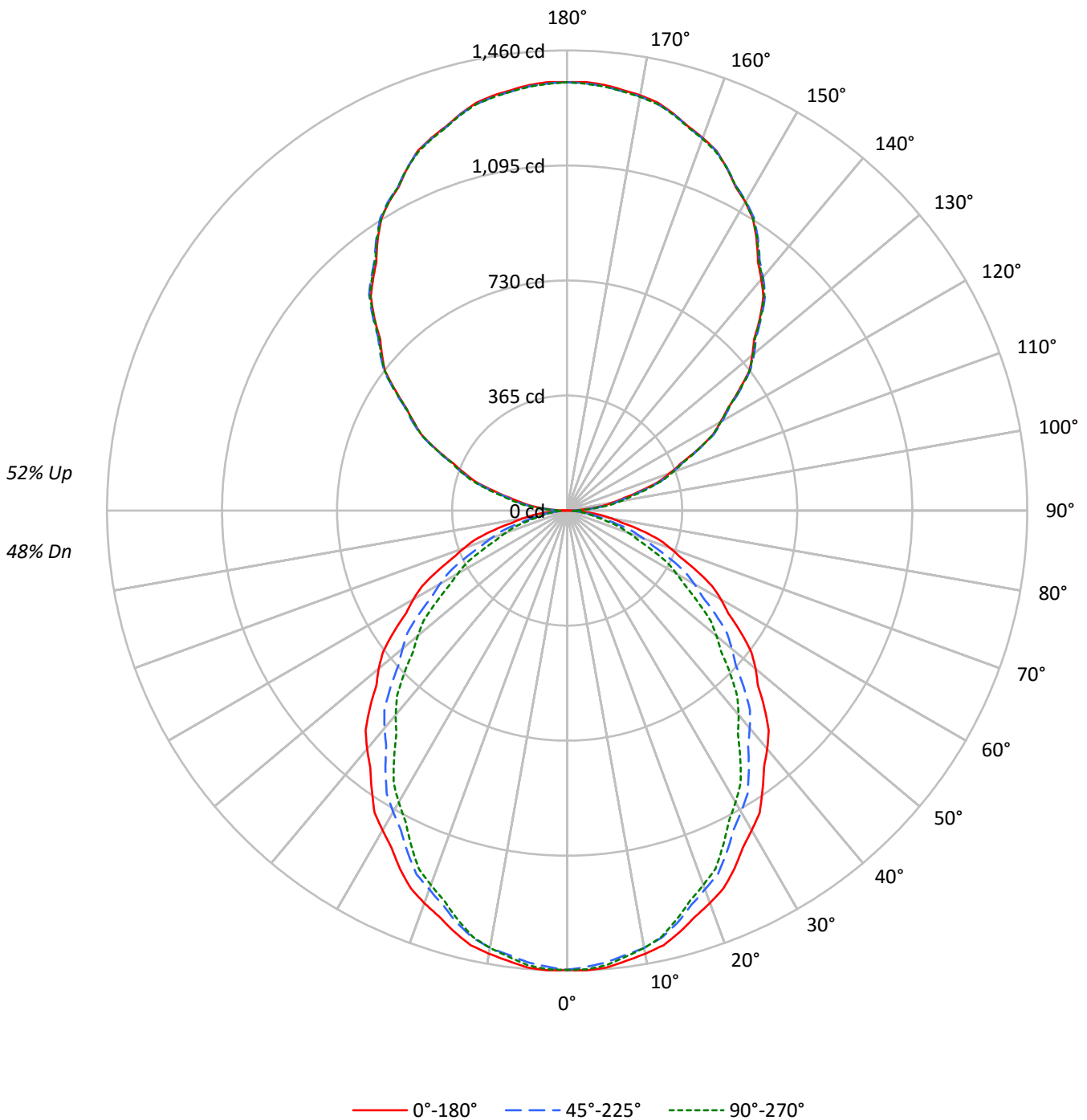
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	75	70	66	63	60	56	53	50	47	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	1.9
10°-20°	382.9	5.3
20°-30°	555.3	7.7
30°-40°	632.9	8.7
40°-50°	616.9	8.5
50°-60°	519.3	7.2
60°-70°	364.0	5.0
70°-80°	187.1	2.6
80°-90°	50.2	0.7
90°-100°	91.0	1.3
100°-110°	268.8	3.7
110°-120°	455.3	6.3
120°-130°	599.1	8.3
130°-140°	671.4	9.3
140°-150°	658.0	9.1
150°-160°	552.7	7.6
160°-170°	367.4	5.1
170°-180°	128.6	1.8
0°-30°	1075.3	14.9
0°-40°	1708.1	23.6
0°-60°	2844.3	39.3
0°-90°	3445.6	47.6
90°-120°	815.1	11.3
90°-150°	2743.6	37.9
90°-180°	3792.0	52.4
0°-180°	7237.7	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	7
95°	69	71	81	89	91	73
105°	241	246	253	259	262	258
115°	456	460	462	461	460	451
125°	665	671	673	671	669	596
135°	865	871	872	872	868	667
145°	1048	1052	1056	1055	1052	655
155°	1199	1199	1200	1204	1199	552
165°	1304	1302	1303	1307	1301	368
175°	1356	1352	1352	1357	1350	129
180°	1359	1359	1359	1359	1359	



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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	17.0	18.1
92.5°	25.6	26.9	28.2	29.5	30.8	32.5	34.6	36.6	38.6	40.6	42.2
95°	68.7	69.2	69.7	70.1	70.6	72.1	74.4	76.7	79.1	81.4	83.1
97.5°	114.2	114.4	114.6	114.8	115.0	116.7	119.9	123.2	126.5	129.6	131.2
100°	148.1	148.1	148.1	148.1	148.1	149.6	152.6	155.7	158.7	161.8	164.0
102.5°	184.4	185.4	186.3	187.3	188.2	189.5	191.0	192.6	194.1	195.7	198.0
105°	241.2	242.3	243.4	244.7	245.8	247.1	248.5	250.0	251.4	252.7	254.2
107.5°	303.7	304.9	306.1	307.3	308.4	309.6	310.6	311.7	312.8	313.9	314.6
110°	346.9	348.1	349.3	350.4	351.6	352.5	353.3	353.9	354.7	355.3	356.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	390.9	391.5	392.1	392.7	393.3	394.1	394.9	395.8	396.7	397.6	397.9
115°	455.8	456.7	457.7	458.6	459.6	460.3	460.7	461.2	461.7	462.2	461.9
117.5°	521.0	521.4	521.8	522.2	522.7	523.1	523.5	523.9	524.3	524.8	525.0
120°	561.6	562.7	563.9	565.1	566.3	567.0	567.2	567.4	567.7	567.9	567.9
122.5°	605.6	606.0	606.4	606.8	607.2	607.8	608.4	609.0	609.6	610.3	610.0
125°	665.2	666.6	668.1	669.4	670.8	671.6	671.9	672.1	672.4	672.6	672.1
127.5°	728.6	729.4	730.3	731.1	731.9	732.4	732.7	733.0	733.3	733.5	733.3
130°	766.7	767.9	769.1	770.3	771.4	772.3	772.7	773.2	773.6	774.1	773.9
132.5°	804.8	806.7	808.7	810.6	812.5	813.4	813.3	813.3	813.2	813.1	812.9
135°	865.1	866.5	867.9	869.4	870.7	871.6	871.8	872.0	872.3	872.5	872.5
137.5°	921.8	923.2	924.5	925.9	927.2	928.1	928.7	929.2	929.8	930.3	930.5
140°	958.1	959.4	960.5	961.7	962.9	963.8	964.5	965.2	965.9	966.6	967.1
142.5°	994.6	995.6	996.5	997.5	998.5	999.4	1000.3	1001.2	1002.1	1003.0	1003.3
145°	1048.1	1049.0	1049.9	1050.8	1051.8	1052.6	1053.4	1054.0	1054.8	1055.5	1055.5
147.5°	1097.6	1098.0	1098.6	1099.1	1099.6	1100.2	1100.7	1101.3	1101.9	1102.4	1103.0
150°	1130.6	1130.3	1130.1	1129.8	1129.6	1129.9	1130.9	1131.9	1132.8	1133.8	1133.8
152.5°	1157.6	1158.0	1158.3	1158.6	1158.9	1159.3	1159.7	1160.0	1160.4	1160.8	1161.4
155°	1199.3	1199.3	1199.3	1199.3	1199.3	1199.4	1199.6	1199.9	1200.1	1200.4	1201.3
157.5°	1236.5	1236.0	1235.5	1234.9	1234.4	1234.3	1234.5	1234.8	1235.0	1235.3	1236.2
160°	1258.5	1257.8	1257.1	1256.4	1255.7	1255.5	1255.7	1256.0	1256.1	1256.4	1257.4
162.5°	1278.0	1277.5	1276.9	1276.4	1275.9	1275.7	1275.7	1275.8	1275.8	1275.9	1277.0
165°	1304.0	1303.5	1303.0	1302.6	1302.1	1302.0	1302.2	1302.4	1302.7	1302.9	1303.9
167.5°	1326.0	1325.0	1324.1	1323.1	1322.3	1321.8	1321.8	1321.8	1321.8	1321.8	1323.1
170°	1337.8	1336.9	1335.9	1335.1	1334.1	1333.6	1333.6	1333.6	1333.6	1333.6	1335.1
172.5°	1346.3	1345.3	1344.4	1343.5	1342.6	1342.1	1342.1	1342.1	1342.1	1342.1	1343.5
175°	1355.8	1354.9	1354.0	1353.0	1352.1	1351.6	1351.6	1351.6	1351.6	1351.6	1353.0
177.5°	1360.7	1359.9	1359.2	1358.5	1357.6	1357.2	1357.0	1356.8	1356.7	1356.4	1357.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0



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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	20.5	21.6	22.6	23.2	24.0	24.7	25.4
92.5°	43.7	45.2	46.8	47.9	48.3	48.9	49.4	49.9
95°	84.7	86.3	88.1	89.0	89.5	90.0	90.5	91.0
97.5°	132.7	134.3	135.8	136.8	137.1	137.4	137.6	137.9
100°	166.1	168.1	170.2	171.5	172.0	172.5	173.0	173.4
102.5°	200.2	202.5	204.9	206.4	207.0	207.7	208.3	209.0
105°	255.6	257.0	258.4	259.4	260.2	260.9	261.5	262.3
107.5°	315.3	316.0	316.7	317.1	317.0	316.9	316.9	316.8
110°	356.8	357.4	358.2	358.4	358.2	357.9	357.7	357.4



TEST NUMBER: P333715-930

CATALOG NUMBER: S125RDIW-S1090D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	398.3	398.6	398.9	398.9	398.5	398.1	397.6	397.2
115°	461.7	461.5	461.2	461.0	460.7	460.5	460.3	460.1
117.5°	525.1	525.3	525.5	525.1	524.2	523.3	522.4	521.4
120°	567.9	567.9	567.9	567.4	566.5	565.6	564.6	563.7
122.5°	609.8	609.7	609.4	609.0	608.2	607.5	606.7	606.0
125°	671.6	671.2	670.7	670.4	670.2	669.9	669.7	669.4
127.5°	733.0	732.8	732.6	732.2	731.8	731.3	730.8	730.3
130°	773.6	773.5	773.2	772.8	772.4	771.9	771.4	770.9
132.5°	812.6	812.4	812.1	811.7	811.1	810.3	809.7	809.0
135°	872.5	872.5	872.5	872.0	871.1	870.2	869.2	868.3
137.5°	930.8	931.1	931.4	930.9	929.8	928.5	927.4	926.3
140°	967.6	968.0	968.5	968.2	966.9	965.8	964.7	963.4
142.5°	1003.6	1003.9	1004.1	1003.7	1002.5	1001.4	1000.1	999.0
145°	1055.5	1055.5	1055.5	1055.1	1054.4	1053.7	1053.0	1052.3
147.5°	1103.5	1104.1	1104.6	1104.2	1102.5	1101.0	1099.3	1097.8
150°	1133.8	1133.8	1133.8	1133.5	1133.0	1132.5	1132.0	1131.6
152.5°	1161.9	1162.5	1163.0	1162.9	1162.0	1161.2	1160.3	1159.5
155°	1202.2	1203.1	1204.1	1204.0	1202.8	1201.7	1200.4	1199.3
157.5°	1237.1	1238.0	1239.0	1238.7	1237.1	1235.6	1234.0	1232.5
160°	1258.3	1259.2	1260.1	1260.0	1258.9	1257.7	1256.5	1255.3
162.5°	1278.1	1279.2	1280.3	1280.3	1278.9	1277.5	1276.2	1274.8
165°	1304.8	1305.8	1306.7	1306.4	1305.0	1303.7	1302.2	1300.8
167.5°	1324.6	1326.0	1327.4	1327.4	1325.9	1324.5	1323.0	1321.5
170°	1336.4	1337.8	1339.2	1339.1	1337.5	1335.9	1334.2	1332.5
172.5°	1344.9	1346.3	1347.7	1347.7	1346.2	1344.8	1343.3	1341.8
175°	1354.4	1355.8	1357.2	1357.1	1355.4	1353.8	1352.2	1350.5
177.5°	1358.7	1359.8	1361.0	1360.9	1359.5	1358.2	1356.9	1355.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0

(END OF REPORT)