

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: P333714-935

Luminaire Tested: **S125RDIW-S1090D1340U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333714-935  
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: S125RDIW-S1090D1340U935-4F0-1E-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: 8256.8 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

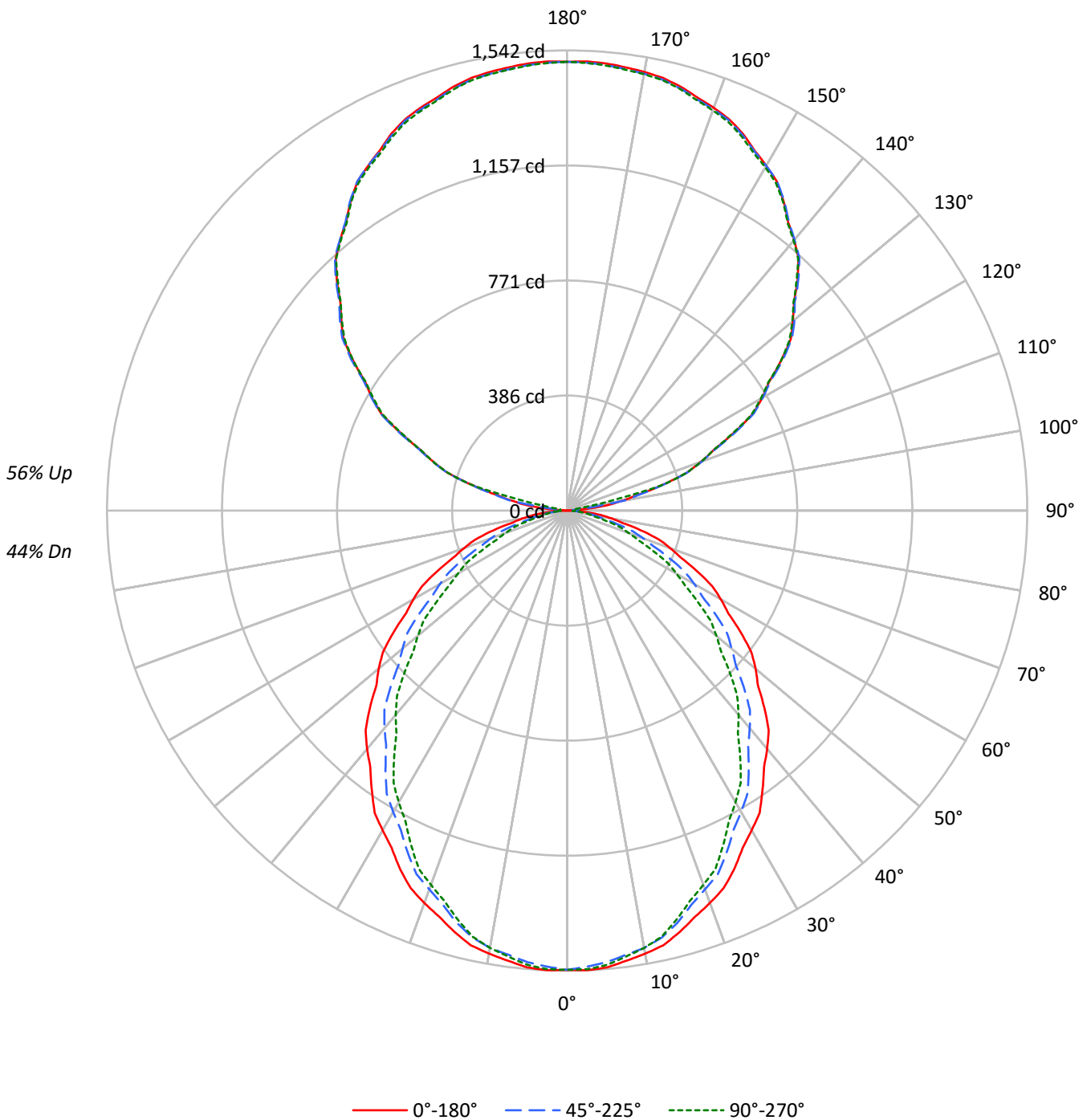
Input Watts (W): 69.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	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°	9939	9939	9939
5°	9962	9848	9909
10°	9886	9757	9757
15°	9768	9559	9482
20°	9619	9283	9171
25°	9443	9012	8813
30°	9223	8694	8416
35°	8999	8367	7972
40°	8790	8025	7535
45°	8535	7644	7059
50°	8280	7229	6563
55°	7983	6831	6033
60°	7687	6350	5465
65°	7335	5790	4814
70°	6936	5093	4147
75°	6381	4292	3451
80°	5620	3373	2894
85°	4735	2757	2586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.7	1.8
10°-20°	404.4	4.9
20°-30°	586.4	7.1
30°-40°	668.3	8.1
40°-50°	651.5	7.9
50°-60°	548.4	6.6
60°-70°	384.4	4.7
70°-80°	197.6	2.4
80°-90°	53.0	0.6
90°-100°	54.6	0.7
100°-110°	336.8	4.1
110°-120°	610.9	7.4
120°-130°	783.9	9.5
130°-140°	843.2	10.2
140°-150°	791.5	9.6
150°-160°	640.2	7.8
160°-170°	414.1	5.0
170°-180°	142.8	1.7
0°-30°	1135.5	13.8
0°-40°	1803.9	21.8
0°-60°	3003.7	36.4
0°-90°	3638.7	44.1
90°-120°	1002.3	12.1
90°-150°	3420.9	41.4
90°-180°	4618.0	55.9
0°-180°	8256.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1539	1539	1539	1539	1539	
5°	1537	1532	1519	1530	1528	146
15°	1461	1453	1430	1428	1418	412
25°	1325	1306	1265	1250	1237	609
35°	1141	1112	1061	1028	1011	714
45°	934	899	837	792	773	721
55°	709	670	607	556	536	634
65°	480	439	379	334	315	475
75°	256	220	172	147	138	271
85°	64	44	37	36	35	72
90°	1	10	18	23	27	6
95°	64	58	18	23	23	81
105°	328	332	332	332	331	347
115°	615	621	622	617	611	610
125°	875	882	883	878	875	781
135°	1091	1098	1096	1093	1087	841
145°	1265	1267	1268	1268	1262	791
155°	1393	1387	1389	1392	1384	642
165°	1470	1464	1465	1471	1463	415
175°	1504	1498	1498	1506	1497	143
180°	1504	1504	1504	1504	1504	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1541.7	1541.1	1540.5	1539.8	1539.2	1537.9	1535.9	1533.8	1531.7	1529.7	1531.7
5°	1536.6	1535.6	1534.6	1533.5	1532.5	1530.5	1527.7	1524.8	1522.0	1519.1	1521.7
7.5°	1521.5	1520.5	1519.5	1518.5	1517.5	1515.4	1511.9	1508.6	1505.1	1501.8	1503.6
10°	1507.5	1506.8	1506.0	1505.2	1504.4	1502.3	1498.7	1495.0	1491.4	1487.8	1488.6
12.5°	1491.7	1490.7	1489.8	1488.8	1487.8	1484.9	1480.1	1475.2	1470.3	1465.4	1466.0
15°	1461.0	1459.5	1457.9	1456.4	1454.8	1451.4	1446.0	1440.5	1435.1	1429.7	1429.4
17.5°	1426.4	1424.0	1421.7	1419.3	1416.9	1412.3	1405.5	1398.7	1391.8	1385.0	1383.7
20°	1399.5	1396.9	1394.3	1391.7	1389.1	1383.7	1375.4	1367.2	1358.9	1350.7	1349.4
22.5°	1369.7	1367.1	1364.5	1361.9	1359.3	1353.8	1345.1	1336.4	1327.7	1319.0	1316.5
25°	1325.1	1321.2	1317.3	1313.5	1309.6	1302.9	1293.3	1283.8	1274.2	1264.6	1261.3
27.5°	1273.9	1269.2	1264.5	1259.8	1255.1	1247.7	1237.4	1227.2	1216.9	1206.7	1202.0
30°	1236.7	1231.8	1226.9	1222.0	1217.1	1209.2	1198.3	1187.5	1176.6	1165.8	1159.9
32.5°	1200.4	1194.7	1189.0	1183.3	1177.5	1169.2	1158.0	1147.0	1135.9	1124.9	1118.4
35°	1141.4	1135.2	1129.0	1122.8	1116.6	1107.7	1096.1	1084.4	1072.8	1061.2	1053.7
37.5°	1083.5	1076.0	1068.4	1060.9	1053.3	1043.6	1031.6	1019.6	1007.6	995.7	986.6
40°	1042.6	1034.8	1027.1	1019.3	1011.6	1001.5	989.1	976.7	964.3	951.9	942.1
42.5°	999.8	991.9	984.0	975.9	968.0	957.6	944.8	932.0	919.2	906.4	897.0
45°	934.5	927.0	919.5	912.1	904.6	893.7	879.5	865.3	851.1	836.9	826.6
47.5°	866.9	858.9	851.0	843.2	835.3	824.1	809.9	795.5	781.2	766.9	756.2
50°	824.1	815.5	807.0	798.5	790.0	778.3	763.6	748.9	734.2	719.5	708.6
52.5°	777.6	768.9	760.1	751.4	742.7	731.3	717.5	703.5	689.7	675.8	664.1
55°	709.0	700.8	692.5	684.2	676.0	664.6	650.1	635.7	621.2	606.7	595.1
57.5°	639.7	630.9	622.1	613.2	604.4	593.1	579.1	565.2	551.2	537.3	525.9
60°	595.1	586.1	577.0	568.0	559.0	547.4	533.5	519.5	505.6	491.6	480.3
62.5°	547.7	539.1	530.5	521.8	513.2	501.8	487.7	473.5	459.3	445.1	434.6
65°	480.0	471.2	462.4	453.7	444.9	433.7	420.0	406.3	392.6	378.9	368.6
67.5°	412.8	404.1	395.3	386.5	377.7	366.8	353.6	340.5	327.4	314.3	304.9
70°	367.3	358.5	349.7	341.0	332.2	321.3	308.4	295.5	282.6	269.7	261.7
72.5°	322.7	314.1	305.5	297.0	288.3	278.0	266.0	253.8	241.8	229.7	222.3
75°	255.7	248.0	240.2	232.5	224.7	215.4	204.6	193.7	182.9	172.0	166.3
77.5°	189.2	183.0	176.8	170.7	164.5	157.0	148.4	139.7	131.0	122.3	118.3
80°	151.1	144.9	138.7	132.5	126.3	119.6	112.4	105.1	97.9	90.7	88.3
82.5°	113.9	108.3	102.7	97.2	91.6	86.4	81.4	76.4	71.5	66.5	65.4
85°	63.9	59.2	54.6	49.9	45.3	42.4	41.1	39.8	38.5	37.2	36.9
87.5°	21.6	20.6	19.5	18.4	17.4	17.0	17.1	17.2	17.4	17.5	17.7
90°	1.1	3.1	5.1	7.1	9.0	10.9	12.7	14.4	16.1	17.8	19.1
92.5°	17.1	15.8	14.4	13.0	11.6	11.7	13.3	14.7	16.3	17.8	19.1
95°	63.5	62.8	62.1	61.3	60.5	55.4	46.1	36.7	27.2	17.8	19.1
97.5°	132.7	134.0	135.3	136.6	138.0	129.3	110.7	92.1	73.4	54.8	47.9
100°	186.1	186.9	187.6	188.4	189.2	190.0	191.0	192.0	193.0	194.0	157.0
102.5°	240.6	241.5	242.5	243.4	244.4	245.1	245.7	246.3	246.8	247.5	240.5
105°	327.8	328.7	329.8	330.7	331.7	332.2	332.2	332.2	332.2	332.2	332.2
107.5°	418.3	418.3	418.3	418.3	418.3	418.5	419.0	419.5	420.0	420.5	420.5
110°	477.2	477.2	477.2	477.2	477.2	477.3	477.9	478.4	478.9	479.3	478.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	532.4	533.0	533.6	534.2	534.8	535.3	535.5	535.8	536.1	536.4	535.5
115°	615.4	616.6	617.9	619.1	620.4	621.0	621.3	621.6	621.8	622.1	621.0
117.5°	701.2	701.1	701.1	701.0	701.0	701.5	702.4	703.4	704.3	705.2	704.0
120°	754.7	754.5	754.2	754.0	753.7	754.0	754.7	755.4	756.2	756.9	756.5
122.5°	801.9	802.9	803.8	804.8	805.7	806.4	806.8	807.1	807.4	807.8	807.3
125°	875.1	876.8	878.6	880.3	882.0	882.9	882.9	882.9	882.9	882.9	881.9
127.5°	944.9	946.2	947.4	948.6	949.9	950.4	950.2	950.1	949.9	949.8	949.3
130°	987.7	988.9	990.2	991.4	992.6	993.4	993.7	993.9	994.1	994.4	993.7
132.5°	1030.5	1031.9	1033.4	1034.8	1036.2	1036.7	1036.1	1035.6	1035.1	1034.5	1034.4
135°	1091.4	1092.9	1094.3	1095.8	1097.3	1097.8	1097.3	1096.8	1096.3	1095.8	1095.4
137.5°	1147.4	1148.6	1149.9	1151.2	1152.4	1152.9	1152.4	1152.0	1151.6	1151.2	1151.2
140°	1183.9	1184.4	1184.9	1185.3	1185.9	1186.0	1185.8	1185.5	1185.3	1185.0	1185.5
142.5°	1216.9	1217.2	1217.5	1217.8	1218.1	1218.4	1218.7	1219.1	1219.4	1219.8	1219.9
145°	1265.2	1265.8	1266.3	1266.8	1267.2	1267.5	1267.5	1267.5	1267.5	1267.5	1267.7
147.5°	1307.6	1307.5	1307.4	1307.3	1307.3	1307.3	1307.6	1307.9	1308.2	1308.5	1308.8
150°	1334.4	1333.9	1333.4	1332.9	1332.4	1332.4	1332.9	1333.4	1333.9	1334.4	1334.9
152.5°	1360.2	1359.2	1358.1	1357.0	1355.9	1355.6	1356.1	1356.6	1357.1	1357.5	1358.1
155°	1393.4	1392.0	1390.5	1389.1	1387.5	1387.1	1387.5	1388.0	1388.5	1389.1	1389.7
157.5°	1419.1	1418.2	1417.3	1416.4	1415.6	1415.1	1415.1	1415.2	1415.3	1415.3	1416.1
160°	1436.9	1435.5	1434.0	1432.4	1431.0	1430.4	1430.6	1430.9	1431.2	1431.4	1432.4
162.5°	1451.2	1449.8	1448.2	1446.7	1445.3	1444.7	1444.9	1445.2	1445.4	1445.6	1447.0
165°	1470.4	1468.9	1467.4	1465.9	1464.5	1463.8	1464.0	1464.3	1464.6	1464.8	1466.3
167.5°	1484.6	1483.2	1481.6	1480.1	1478.5	1477.9	1478.1	1478.3	1478.6	1478.9	1480.7
170°	1492.7	1491.0	1489.2	1487.5	1485.7	1485.0	1485.2	1485.5	1485.7	1486.0	1488.0
172.5°	1498.1	1496.3	1494.6	1492.8	1491.1	1490.5	1490.9	1491.3	1491.8	1492.2	1494.0
175°	1503.8	1502.4	1500.9	1499.3	1497.9	1497.3	1497.5	1497.8	1498.1	1498.2	1500.2
177.5°	1506.5	1505.3	1504.2	1503.0	1501.8	1501.2	1501.5	1501.7	1501.8	1502.0	1503.5
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1533.8	1535.9	1537.9	1538.8	1538.6	1538.4	1538.2	1538.0
5°	1524.3	1526.9	1529.5	1530.5	1530.0	1529.5	1529.0	1528.4
7.5°	1505.4	1507.2	1509.0	1509.6	1509.0	1508.5	1507.9	1507.3
10°	1489.4	1490.1	1490.9	1490.9	1490.1	1489.4	1488.6	1487.8
12.5°	1466.6	1467.1	1467.7	1467.4	1466.2	1465.1	1463.9	1462.7
15°	1429.2	1428.9	1428.7	1427.4	1425.0	1422.7	1420.4	1418.1
17.5°	1382.4	1381.1	1379.8	1378.3	1376.3	1374.4	1372.5	1370.6
20°	1348.1	1346.8	1345.5	1343.7	1341.4	1339.0	1336.7	1334.4
22.5°	1314.0	1311.4	1308.9	1306.7	1304.8	1302.9	1300.9	1299.0
25°	1257.9	1254.6	1251.2	1248.1	1245.3	1242.4	1239.6	1236.7
27.5°	1197.3	1192.7	1187.9	1184.2	1181.5	1178.7	1176.0	1173.3
30°	1153.9	1148.0	1142.0	1137.9	1135.6	1133.2	1130.9	1128.6
32.5°	1111.8	1105.2	1098.6	1093.9	1091.0	1088.0	1085.0	1082.1
35°	1046.2	1038.7	1031.2	1025.7	1022.1	1018.5	1014.9	1011.2
37.5°	977.7	968.7	959.7	953.5	949.9	946.4	942.9	939.4
40°	932.3	922.5	912.7	906.2	903.1	900.0	896.9	893.8
42.5°	887.6	878.1	868.7	861.8	857.2	852.7	848.2	843.6
45°	816.2	805.9	795.6	788.4	784.5	780.7	776.8	772.9
47.5°	745.6	734.9	724.4	716.9	712.6	708.3	704.0	699.7
50°	697.8	686.9	676.1	668.7	664.9	661.0	657.1	653.2
52.5°	652.5	640.8	629.0	621.3	617.4	613.5	609.7	605.8
55°	583.5	571.9	560.3	552.3	548.2	544.1	539.9	535.8
57.5°	514.5	503.2	491.8	484.2	480.6	476.9	473.2	469.6
60°	468.9	457.5	446.2	438.6	434.7	430.8	427.0	423.1
62.5°	424.1	413.5	403.0	395.8	391.9	388.1	384.2	380.3
65°	358.3	347.9	337.6	330.5	326.6	322.7	318.8	315.0
67.5°	295.4	285.9	276.5	270.2	267.1	264.0	260.9	257.8
70°	253.7	245.6	237.6	232.0	228.9	225.8	222.7	219.6
72.5°	214.9	207.5	200.1	195.4	193.3	191.2	189.2	187.1
75°	160.7	155.0	149.3	145.5	143.7	141.9	140.1	138.3
77.5°	114.3	110.4	106.3	103.7	102.4	101.0	99.7	98.3
80°	86.0	83.7	81.4	79.9	79.4	78.9	78.4	77.8
82.5°	64.3	63.2	62.2	61.5	61.1	60.8	60.5	60.2
85°	36.7	36.4	36.2	35.9	35.6	35.4	35.1	34.9
87.5°	18.0	18.3	18.5	18.6	18.5	18.5	18.4	18.3
90°	20.3	21.5	22.8	23.8	24.5	25.2	26.0	26.8
92.5°	20.3	21.5	22.8	23.6	23.9	24.3	24.6	25.0
95°	20.3	21.5	22.8	23.4	23.4	23.4	23.4	23.4
97.5°	40.9	33.9	26.9	23.4	23.4	23.4	23.4	23.4
100°	120.1	83.3	46.3	27.4	26.3	25.4	24.4	23.4
102.5°	233.5	226.5	219.6	207.6	190.8	173.9	157.0	140.3
105°	332.2	332.2	332.2	332.1	331.8	331.6	331.3	331.1
107.5°	420.6	420.7	420.7	420.3	419.6	418.9	418.1	417.4
110°	477.9	477.2	476.4	476.1	476.4	476.6	476.9	477.2





TEST NUMBER: P333714-935

CATALOG NUMBER: S125RDIW-S1090D1340U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	534.5	533.6	532.7	532.0	531.7	531.3	531.0	530.6
115°	620.1	619.1	618.1	616.8	615.4	613.9	612.3	610.9
117.5°	702.7	701.4	700.1	699.0	698.4	697.8	697.2	696.5
120°	756.0	755.4	754.9	754.1	752.9	751.6	750.4	749.2
122.5°	806.8	806.2	805.8	804.8	803.4	801.9	800.5	799.1
125°	880.9	879.9	878.9	878.0	877.4	876.6	875.8	875.1
127.5°	948.7	948.1	947.6	946.4	944.6	942.8	940.9	939.1
130°	992.9	992.1	991.4	990.4	989.2	987.9	986.7	985.5
132.5°	1034.2	1034.1	1033.9	1033.2	1032.0	1030.8	1029.5	1028.3
135°	1094.8	1094.3	1093.8	1092.9	1091.4	1089.9	1088.4	1086.9
137.5°	1151.3	1151.4	1151.5	1150.9	1149.6	1148.3	1147.0	1145.7
140°	1186.0	1186.5	1187.0	1186.5	1185.0	1183.5	1182.1	1180.5
142.5°	1220.0	1220.1	1220.2	1219.5	1218.0	1216.5	1215.0	1213.6
145°	1268.0	1268.3	1268.5	1267.9	1266.4	1264.9	1263.4	1262.0
147.5°	1309.2	1309.4	1309.8	1309.0	1307.2	1305.4	1303.6	1301.8
150°	1335.4	1335.8	1336.4	1335.6	1333.6	1331.6	1329.6	1327.7
152.5°	1358.6	1359.1	1359.5	1358.9	1357.1	1355.4	1353.6	1351.8
155°	1390.5	1391.2	1392.0	1391.4	1389.4	1387.4	1385.4	1383.5
157.5°	1416.9	1417.7	1418.5	1417.9	1415.9	1413.9	1412.0	1410.0
160°	1433.4	1434.3	1435.4	1434.9	1432.9	1430.9	1428.9	1426.9
162.5°	1448.4	1449.8	1451.2	1450.8	1448.6	1446.4	1444.2	1442.1
165°	1467.7	1469.3	1470.8	1470.5	1468.5	1466.5	1464.6	1462.6
167.5°	1482.5	1484.2	1486.0	1485.7	1483.5	1481.4	1479.1	1476.9
170°	1490.0	1491.9	1493.9	1493.8	1491.6	1489.4	1487.1	1484.9
172.5°	1495.8	1497.6	1499.3	1499.2	1496.9	1494.7	1492.5	1490.2
175°	1502.2	1504.2	1506.1	1506.1	1503.8	1501.6	1499.3	1497.1
177.5°	1504.9	1506.2	1507.6	1507.5	1505.9	1504.3	1502.7	1501.2
180°	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8	1503.8

(END OF REPORT)