

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: P333601-927

Luminaire Tested: **S125RDIP-S1090D1035U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333601-927  
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-S1090D1035U927-4F0-1E-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: 6623.9 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

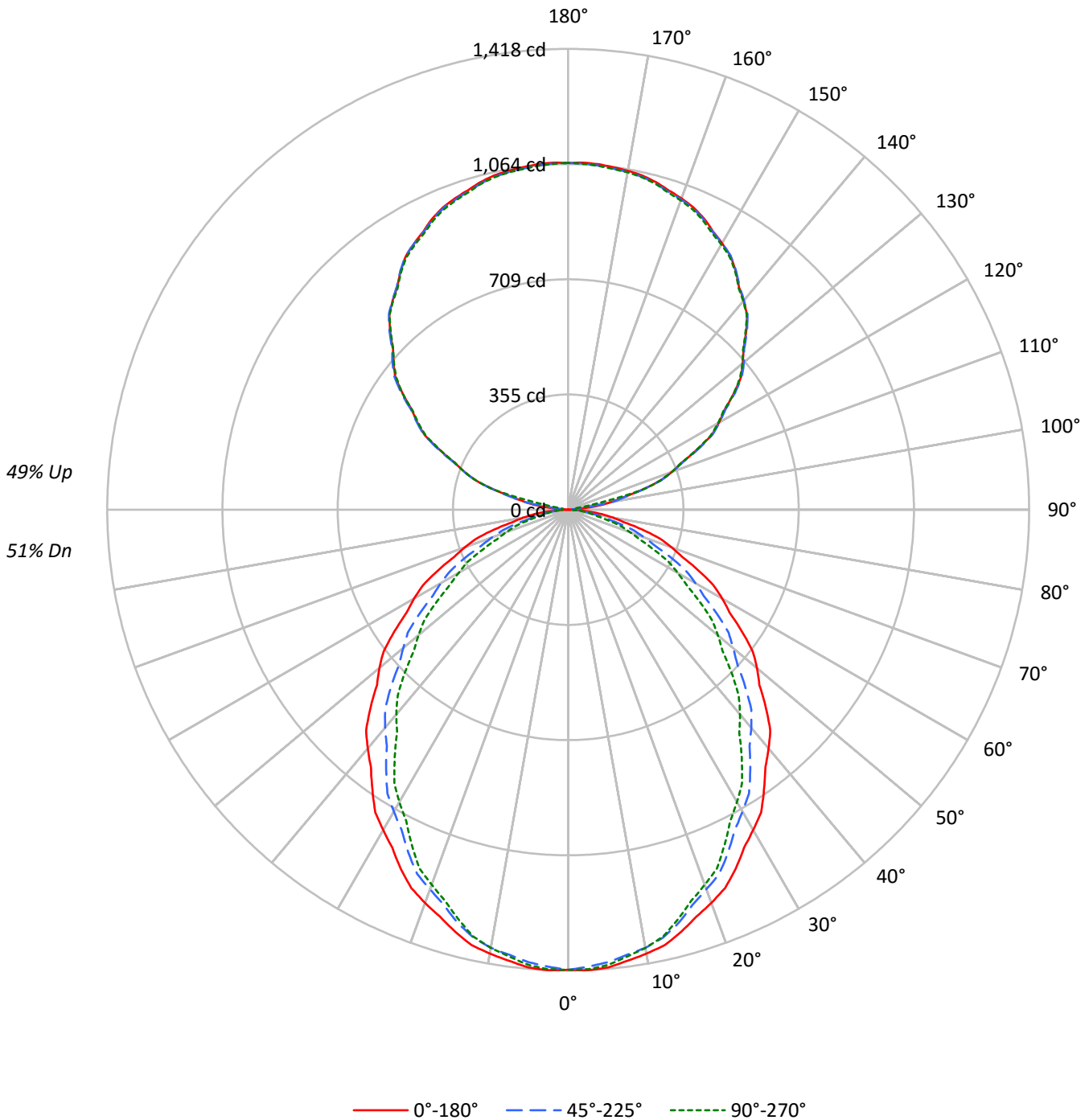
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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						51														
1	98	94	90	87	90	87	84	81	74	71	69	62	60	58	50	49	48	43						43														
2	90	82	76	71	82	76	71	66	65	61	58	54	52	49	45	43	41	36						36														
3	82	72	65	59	75	67	61	56	57	53	49	48	45	42	40	37	35	31						31														
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	36	33	30	27						27														
5	69	57	49	43	63	53	46	41	46	40	36	39	35	31	32	29	27	23						23														
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	21						21														
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18						18														
8	55	42	35	29	50	40	33	28	34	29	25	29	25	22	25	21	19	16						16														
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15						15														
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	16	14						14														

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

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.1	2.0
10°-20°	372.1	5.6
20°-30°	539.6	8.1
30°-40°	614.9	9.3
40°-50°	599.4	9.0
50°-60°	504.6	7.6
60°-70°	353.7	5.3
70°-80°	181.8	2.7
80°-90°	48.1	0.7
90°-100°	38.8	0.6
100°-110°	239.0	3.6
110°-120°	433.4	6.5
120°-130°	556.2	8.4
130°-140°	598.3	9.0
140°-150°	561.6	8.5
150°-160°	454.3	6.9
160°-170°	293.8	4.4
170°-180°	101.3	1.5
0°-30°	1044.8	15.8
0°-40°	1659.7	25.1
0°-60°	2763.6	41.7
0°-90°	3347.2	50.5
90°-120°	711.2	10.7
90°-150°	2427.2	36.6
90°-180°	3277.0	49.5
0°-180°	6623.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	7	13	17	19	5
95°	45	41	13	16	17	57
105°	232	236	236	236	235	246
115°	437	440	441	438	434	433
125°	621	626	626	623	621	554
135°	774	779	778	776	771	597
145°	898	899	899	900	895	561
155°	989	984	986	987	982	455
165°	1043	1039	1039	1043	1038	295
175°	1067	1063	1063	1069	1062	102
180°	1067	1067	1067	1067	1067	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.8	18.8	17.7	16.7	15.6	15.1	15.2	15.3	15.3	15.4	15.5
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	12.2	11.2	10.2	9.2	8.2	8.3	9.3	10.5	11.6	12.7	13.5
95°	45.1	44.5	44.0	43.5	43.0	39.4	32.7	26.0	19.3	12.7	13.5
97.5°	94.1	95.1	96.0	97.0	97.9	91.8	78.6	65.4	52.1	38.9	34.0
100°	132.1	132.6	133.2	133.6	134.2	134.8	135.5	136.3	136.9	137.6	111.5
102.5°	170.7	171.3	172.1	172.7	173.3	173.9	174.4	174.8	175.2	175.6	170.6
105°	232.5	233.2	233.9	234.6	235.4	235.7	235.7	235.7	235.7	235.7	235.7
107.5°	296.8	296.8	296.8	296.8	296.8	296.9	297.3	297.6	298.0	298.3	298.4
110°	338.5	338.5	338.5	338.5	338.5	338.7	339.1	339.5	339.8	340.1	339.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.8	378.2	378.6	379.1	379.5	379.8	380.0	380.2	380.4	380.6	379.9
115°	436.7	437.5	438.4	439.3	440.1	440.7	440.8	441.0	441.2	441.3	440.7
117.5°	497.5	497.5	497.4	497.4	497.4	497.7	498.4	499.0	499.7	500.3	499.5
120°	535.5	535.3	535.1	535.0	534.8	535.0	535.5	536.0	536.5	537.1	536.7
122.5°	569.0	569.7	570.4	571.0	571.7	572.1	572.4	572.7	572.9	573.1	572.7
125°	620.9	622.1	623.4	624.6	625.8	626.5	626.5	626.5	626.5	626.5	625.7
127.5°	670.4	671.3	672.2	673.0	673.9	674.3	674.2	674.1	674.0	673.9	673.5
130°	700.8	701.7	702.6	703.5	704.3	704.8	705.0	705.2	705.4	705.5	705.0
132.5°	731.2	732.2	733.2	734.2	735.2	735.5	735.1	734.8	734.4	734.0	733.9
135°	774.4	775.4	776.5	777.5	778.6	779.0	778.6	778.2	777.8	777.5	777.1
137.5°	814.0	815.0	815.9	816.8	817.7	818.0	817.7	817.4	817.1	816.7	816.8
140°	840.0	840.3	840.7	841.1	841.4	841.5	841.3	841.1	841.0	840.8	841.1
142.5°	863.4	863.6	863.9	864.0	864.3	864.5	864.7	865.0	865.2	865.5	865.5
145°	897.8	898.1	898.4	898.8	899.1	899.4	899.4	899.4	899.4	899.4	899.5
147.5°	927.8	927.7	927.6	927.6	927.5	927.6	927.8	928.0	928.2	928.4	928.7
150°	946.8	946.4	946.1	945.7	945.4	945.4	945.7	946.1	946.4	946.8	947.1
152.5°	965.1	964.4	963.6	962.8	962.0	961.9	962.2	962.5	962.9	963.2	963.6
155°	988.7	987.7	986.6	985.6	984.5	984.1	984.5	984.8	985.2	985.6	986.1
157.5°	1006.9	1006.2	1005.7	1005.0	1004.4	1004.1	1004.1	1004.2	1004.2	1004.2	1004.8
160°	1019.5	1018.5	1017.5	1016.4	1015.3	1014.9	1015.1	1015.3	1015.4	1015.6	1016.3
162.5°	1029.7	1028.6	1027.5	1026.5	1025.5	1025.0	1025.2	1025.4	1025.6	1025.7	1026.7
165°	1043.3	1042.2	1041.2	1040.1	1039.1	1038.6	1038.8	1038.9	1039.2	1039.3	1040.4
167.5°	1053.4	1052.3	1051.2	1050.1	1049.1	1048.6	1048.8	1048.9	1049.1	1049.3	1050.6
170°	1059.1	1057.9	1056.6	1055.4	1054.2	1053.7	1053.8	1054.0	1054.2	1054.4	1055.7
172.5°	1062.9	1061.7	1060.4	1059.2	1058.0	1057.6	1057.8	1058.1	1058.4	1058.8	1060.0
175°	1067.0	1066.0	1064.9	1063.8	1062.8	1062.4	1062.6	1062.7	1062.9	1063.0	1064.5
177.5°	1068.9	1068.1	1067.2	1066.4	1065.6	1065.2	1065.3	1065.5	1065.6	1065.7	1066.8
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	15.7	15.9	16.1	16.1	16.0	15.9	15.8	15.8
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	14.4	15.3	16.2	16.7	17.0	17.2	17.5	17.7
95°	14.4	15.3	16.2	16.6	16.6	16.6	16.6	16.6
97.5°	29.0	24.1	19.1	16.6	16.6	16.6	16.6	16.6
100°	85.2	59.1	32.9	19.4	18.7	18.0	17.3	16.6
102.5°	165.6	160.7	155.7	147.3	135.4	123.4	111.5	99.5
105°	235.7	235.7	235.7	235.6	235.4	235.3	235.1	234.9
107.5°	298.4	298.5	298.5	298.3	297.7	297.2	296.7	296.1
110°	339.1	338.5	338.0	337.9	338.0	338.2	338.3	338.5





TEST NUMBER: P333601-927

CATALOG NUMBER: S125RDIP-S1090D1035U927-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.3	378.6	378.0	377.5	377.2	377.0	376.8	376.5
115°	440.0	439.3	438.6	437.7	436.7	435.5	434.5	433.5
117.5°	498.5	497.6	496.7	496.0	495.6	495.1	494.6	494.2
120°	536.4	536.0	535.7	535.0	534.2	533.3	532.4	531.6
122.5°	572.4	572.1	571.7	571.0	570.1	569.0	568.0	567.0
125°	625.0	624.3	623.6	623.1	622.5	621.9	621.5	620.9
127.5°	673.1	672.7	672.3	671.5	670.2	668.9	667.7	666.3
130°	704.5	703.9	703.5	702.7	701.9	701.0	700.1	699.2
132.5°	733.8	733.7	733.6	733.1	732.2	731.3	730.5	729.6
135°	776.8	776.5	776.1	775.4	774.4	773.3	772.2	771.2
137.5°	816.9	817.0	817.1	816.6	815.7	814.8	813.9	812.9
140°	841.5	841.9	842.2	841.9	840.8	839.7	838.7	837.7
142.5°	865.6	865.7	865.8	865.3	864.2	863.2	862.1	861.0
145°	899.7	899.8	900.0	899.6	898.6	897.5	896.4	895.4
147.5°	928.8	929.1	929.3	928.8	927.5	926.2	925.0	923.7
150°	947.5	947.8	948.2	947.7	946.3	944.8	943.4	942.1
152.5°	963.9	964.3	964.6	964.2	962.9	961.6	960.4	959.1
155°	986.6	987.1	987.7	987.2	985.8	984.4	983.0	981.6
157.5°	1005.4	1005.9	1006.5	1006.1	1004.6	1003.2	1001.8	1000.4
160°	1017.0	1017.7	1018.4	1018.0	1016.7	1015.3	1013.8	1012.4
162.5°	1027.7	1028.6	1029.7	1029.4	1027.9	1026.3	1024.8	1023.2
165°	1041.4	1042.5	1043.5	1043.4	1042.0	1040.5	1039.2	1037.8
167.5°	1051.9	1053.1	1054.4	1054.2	1052.7	1051.1	1049.5	1047.9
170°	1057.2	1058.6	1060.0	1059.9	1058.3	1056.8	1055.2	1053.6
172.5°	1061.3	1062.6	1063.8	1063.7	1062.1	1060.5	1058.9	1057.4
175°	1065.9	1067.3	1068.7	1068.6	1067.0	1065.4	1063.8	1062.2
177.5°	1067.7	1068.7	1069.7	1069.6	1068.5	1067.4	1066.3	1065.1
180°	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0	1067.0

(END OF REPORT)