

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: P333603-927

Luminaire Tested: **S125RDIP-S1090D1035U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333603-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,  
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-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6288.7 lumens  
Efficiency: N/A  
Efficacy: 103.9 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

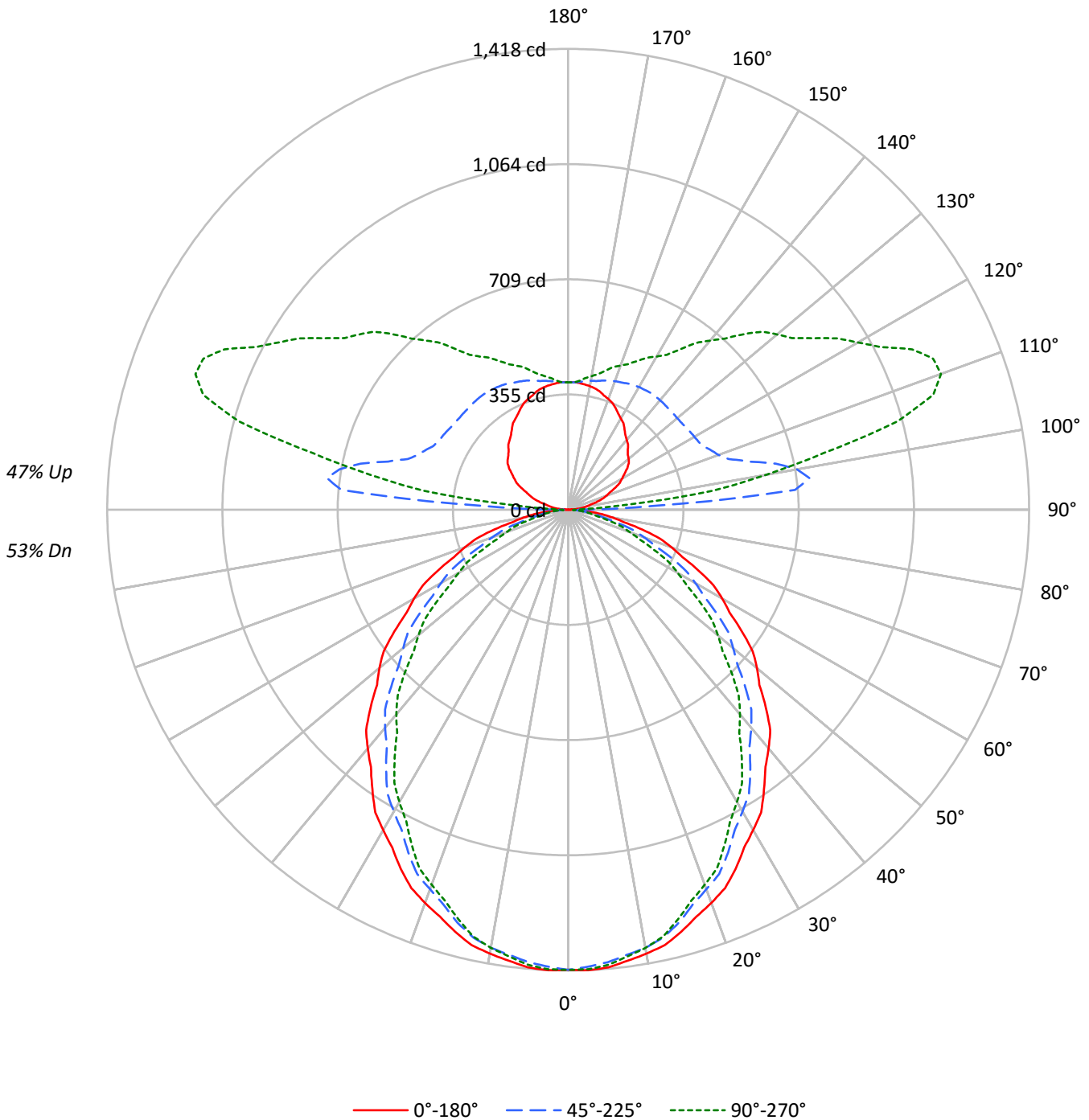
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20				20				20				20				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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	99	94	91	87	91	88	84	81	75	73	70	63	62	60	53	51	50	45
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	38
3	82	73	66	60	76	68	62	56	58	54	50	50	46	43	41	39	37	33
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	30	28	25
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	31	27	25	22
7	59	47	39	33	55	44	37	32	38	33	28	33	28	25	28	24	22	19
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20	17
9	51	39	32	26	47	37	30	25	32	27	23	28	23	20	24	20	18	16
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	22	19	16	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	2.1
10°-20°	372.1	5.9
20°-30°	539.6	8.6
30°-40°	614.9	9.8
40°-50°	599.4	9.5
50°-60°	504.6	8.0
60°-70°	353.7	5.6
70°-80°	181.8	2.9
80°-90°	48.1	0.8
90°-100°	284.3	4.5
100°-110°	611.2	9.7
110°-120°	573.6	9.1
120°-130°	464.9	7.4
130°-140°	373.0	5.9
140°-150°	281.5	4.5
150°-160°	198.2	3.2
160°-170°	116.8	1.9
170°-180°	38.0	0.6
0°-30°	1044.8	16.6
0°-40°	1659.7	26.4
0°-60°	2763.6	43.9
0°-90°	3347.2	53.2
90°-120°	1469.1	23.4
90°-150°	2588.5	41.2
90°-180°	2941.0	46.8
0°-180°	6288.7	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	18	4
95°	26	77	701	318	186	28
105°	89	125	573	1129	1048	94
115°	160	193	460	992	1167	157
125°	221	259	441	789	920	196
135°	259	312	438	662	764	201
145°	302	346	440	548	603	189
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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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	18.7	17.7	16.6	15.6	15.2	15.1	15.3	15.2	15.4	15.5
90°	0.8	1.6	3.2	4.8	6.3	7.9	8.7	10.3	11.1	12.7	13.5
92.5°	9.7	11.7	18.4	28.1	41.7	64.9	108.1	180.5	259.0	254.9	206.4
95°	26.1	26.9	33.2	41.9	59.3	94.9	179.5	353.5	571.8	700.7	685.6
97.5°	43.3	44.3	48.7	57.4	73.0	98.7	154.7	282.2	510.6	748.3	867.5
100°	55.4	57.0	60.1	68.8	83.8	107.6	153.4	256.2	455.5	714.1	911.8
102.5°	68.7	69.6	72.1	81.4	95.2	118.3	159.1	245.5	413.8	654.0	885.3
105°	89.4	89.4	93.3	101.2	113.9	136.0	170.8	241.2	373.3	573.3	800.3
107.5°	109.6	111.2	114.9	121.4	134.6	154.6	188.2	248.5	356.2	517.8	713.6
110°	124.1	125.7	128.9	136.0	147.9	168.4	200.9	255.4	351.1	491.9	664.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	138.7	140.3	142.8	150.0	161.8	181.7	212.9	264.3	351.1	476.7	627.6
115°	159.8	161.3	163.7	170.8	182.7	202.5	231.7	277.6	353.5	460.3	587.6
117.5°	178.7	181.1	183.6	190.8	204.2	223.3	251.0	292.8	358.7	452.2	563.7
120°	191.4	193.8	196.9	204.1	217.5	237.3	264.9	302.9	363.8	448.4	550.4
122.5°	204.7	206.4	208.9	216.0	230.8	250.6	278.2	314.3	368.2	445.2	539.0
125°	221.4	223.0	227.0	234.1	249.1	269.7	295.8	329.8	375.7	441.2	523.6
127.5°	234.6	236.9	242.0	251.0	267.0	287.6	312.7	344.0	384.0	439.3	509.3
130°	242.8	245.2	251.5	261.7	278.4	298.9	323.4	353.5	389.1	438.1	499.8
132.5°	249.1	252.1	259.7	271.2	288.5	309.0	333.6	361.7	394.7	438.1	492.2
135°	259.4	262.5	272.0	284.7	301.3	322.7	347.1	373.3	402.5	438.1	483.2
137.5°	272.4	274.7	283.6	296.3	312.5	334.5	356.8	381.8	409.6	439.0	475.2
140°	280.0	282.3	291.8	304.4	319.5	340.9	363.8	387.5	412.8	439.7	471.3
142.5°	288.8	290.6	299.4	312.0	326.5	346.5	368.2	390.6	414.7	440.3	468.2
145°	302.1	303.6	311.6	322.7	336.9	355.1	375.7	395.4	416.8	439.7	463.4
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.5
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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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	15.8	16.0	16.2	16.0	15.8	15.8	15.6
90°	14.3	15.1	15.8	17.4	17.4	17.4	18.2	18.2
92.5°	140.1	101.7	76.5	64.9	54.7	52.8	51.7	50.5
95°	568.6	448.4	351.1	284.7	228.5	204.9	198.5	185.8
97.5°	846.8	762.5	667.7	575.4	526.6	482.2	459.3	449.2
100°	972.7	934.0	852.5	770.2	715.7	658.8	629.5	616.9
102.5°	1015.1	1038.9	999.9	944.2	885.9	845.4	813.6	804.1
105°	990.1	1098.4	1133.2	1124.5	1099.2	1073.2	1057.3	1047.8
107.5°	900.9	1045.4	1134.8	1176.1	1188.9	1188.7	1183.5	1177.2
110°	835.1	985.3	1096.9	1164.1	1199.7	1214.7	1220.2	1220.2





TEST NUMBER: P333603-927

CATALOG NUMBER: S125RDIP-S1090D1035U927-4F0-1E-UDD-F4

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	783.2	925.9	1038.6	1117.9	1169.9	1195.7	1209.5	1215.1
115°	718.0	840.7	949.0	1035.1	1096.9	1134.8	1157.0	1167.3
117.5°	676.0	781.6	875.0	954.0	1015.7	1054.9	1076.9	1083.2
120°	653.2	748.1	835.1	904.7	963.2	1001.2	1022.5	1028.9
122.5°	636.1	724.1	801.5	866.7	918.9	953.7	975.1	980.8
125°	611.3	692.0	760.7	817.7	862.0	894.4	911.8	919.7
127.5°	586.0	661.3	725.5	778.8	819.0	847.6	864.0	867.5
130°	570.2	639.8	701.5	752.9	792.4	818.5	834.3	839.1
132.5°	554.4	619.5	675.5	725.0	764.5	790.7	805.2	810.6
135°	533.8	588.4	639.0	684.0	718.8	745.0	759.1	763.9
137.5°	516.4	560.5	602.6	640.9	672.0	695.8	708.9	714.1
140°	506.9	544.1	580.4	613.7	642.9	663.5	675.3	679.3
142.5°	498.7	530.1	561.5	590.3	615.1	632.5	643.7	647.1
145°	487.9	512.5	536.9	558.3	577.3	590.7	599.4	602.6
147.5°	477.8	497.7	516.6	532.7	547.7	558.5	563.6	565.0
150°	472.1	489.5	504.5	518.8	530.6	540.1	543.3	544.1
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	526.8	527.6
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

(END OF REPORT)