

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: P333601-935

Luminaire Tested: **S125RDIP-S1090D1035U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333601-935
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: S125RDIP-S1090D1035U935-4F0-1E-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: 7199.3 lumens
Efficiency: N/A
Efficacy: 119.0 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

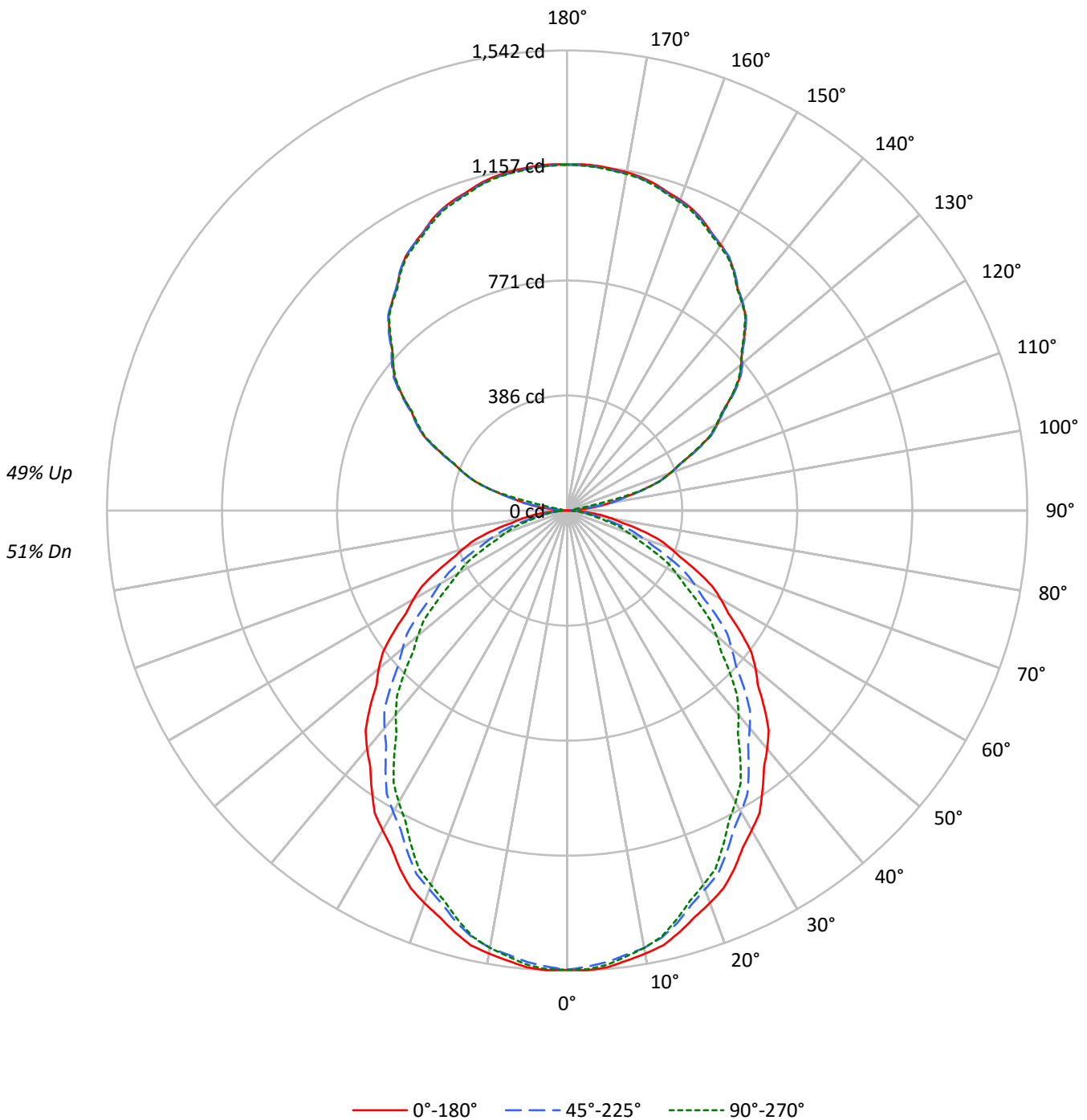
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	99	99	99	84	84	84		70	70	70		57	57	57	51
1	98	94	90	87	90	87	84	81	74	71	69		62	60	58		50	49	48	43
2	90	82	76	71	82	76	71	66	65	61	58		54	52	49		45	43	41	36
3	82	72	65	59	75	67	61	56	57	53	49		48	45	42		40	37	35	31
4	75	64	56	50	69	60	53	47	51	46	42		43	39	36		36	33	30	27
5	69	57	49	43	63	53	46	41	46	40	36		39	35	31		32	29	27	23
6	63	51	43	38	58	48	41	36	41	36	31		35	31	27		29	26	23	21
7	59	47	39	33	54	43	36	31	37	32	28		32	28	24		27	23	21	18
8	55	42	35	29	50	40	33	28	34	29	25		29	25	22		25	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22		27	23	20		23	19	17	15
10	47	35	28	24	44	33	27	22	29	24	20		25	21	18		21	18	16	14

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	2.0
10°-20°	404.4	5.6
20°-30°	586.4	8.1
30°-40°	668.3	9.3
40°-50°	651.5	9.0
50°-60°	548.4	7.6
60°-70°	384.4	5.3
70°-80°	197.6	2.7
80°-90°	52.3	0.7
90°-100°	42.2	0.6
100°-110°	259.7	3.6
110°-120°	471.1	6.5
120°-130°	604.6	8.4
130°-140°	650.2	9.0
140°-150°	610.3	8.5
150°-160°	493.7	6.9
160°-170°	319.3	4.4
170°-180°	110.1	1.5
0°-30°	1135.5	15.8
0°-40°	1803.9	25.1
0°-60°	3003.7	41.7
0°-90°	3638.0	50.5
90°-120°	772.9	10.7
90°-150°	2638.1	36.6
90°-180°	3561.0	49.5
0°-180°	7199.3	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	8	14	18	21	5
95°	49	45	14	18	18	62
105°	253	256	256	256	255	268
115°	475	479	480	476	471	470
125°	675	681	681	678	675	603
135°	842	846	845	843	838	649
145°	976	977	978	978	973	610
155°	1075	1070	1071	1073	1067	495
165°	1134	1129	1130	1134	1128	320
175°	1160	1155	1155	1161	1154	110
180°	1160	1160	1160	1160	1160	



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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°	21.5	20.4	19.3	18.2	17.0	16.4	16.5	16.6	16.6	16.7	16.9
90°	0.9	2.4	3.9	5.4	7.0	8.4	9.7	11.1	12.4	13.8	14.7
92.5°	13.3	12.1	11.1	10.0	9.0	9.0	10.2	11.4	12.6	13.8	14.7
95°	49.0	48.4	47.9	47.3	46.8	42.8	35.6	28.2	21.0	13.8	14.7
97.5°	102.3	103.3	104.4	105.4	106.4	99.8	85.4	71.0	56.7	42.3	36.9
100°	143.5	144.1	144.7	145.3	145.9	146.5	147.3	148.1	148.8	149.6	121.1
102.5°	185.5	186.2	187.0	187.7	188.4	189.0	189.5	189.9	190.4	190.9	185.5
105°	252.7	253.5	254.3	255.0	255.8	256.1	256.1	256.1	256.1	256.1	256.1
107.5°	322.5	322.5	322.5	322.5	322.5	322.7	323.1	323.5	323.9	324.3	324.3
110°	367.9	367.9	367.9	367.9	367.9	368.2	368.5	368.9	369.3	369.6	369.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	410.6	411.0	411.5	412.0	412.4	412.8	413.0	413.2	413.5	413.7	412.9
115°	474.6	475.5	476.5	477.4	478.4	479.0	479.1	479.3	479.5	479.7	479.0
117.5°	540.7	540.7	540.6	540.6	540.6	541.0	541.7	542.3	543.1	543.8	542.9
120°	582.0	581.8	581.6	581.4	581.3	581.4	582.0	582.6	583.2	583.8	583.3
122.5°	618.5	619.1	619.9	620.6	621.4	621.8	622.2	622.4	622.7	622.9	622.5
125°	674.9	676.1	677.5	678.9	680.2	680.9	680.9	680.9	680.9	680.9	680.1
127.5°	728.7	729.6	730.6	731.5	732.5	732.9	732.8	732.7	732.5	732.5	732.0
130°	761.6	762.7	763.6	764.6	765.5	766.0	766.3	766.5	766.6	766.8	766.3
132.5°	794.7	795.8	796.9	798.0	799.1	799.4	799.0	798.7	798.2	797.8	797.6
135°	841.6	842.7	844.0	845.1	846.2	846.6	846.2	845.8	845.4	845.1	844.6
137.5°	884.8	885.8	886.7	887.8	888.7	889.1	888.7	888.4	888.0	887.7	887.8
140°	913.0	913.3	913.8	914.1	914.5	914.6	914.4	914.2	914.0	913.9	914.2
142.5°	938.4	938.7	938.9	939.1	939.4	939.6	939.9	940.1	940.4	940.6	940.7
145°	975.8	976.1	976.5	976.9	977.2	977.5	977.5	977.5	977.5	977.5	977.7
147.5°	1008.4	1008.3	1008.2	1008.1	1008.1	1008.1	1008.4	1008.7	1008.8	1009.1	1009.4
150°	1029.1	1028.6	1028.3	1027.9	1027.5	1027.5	1027.9	1028.3	1028.6	1029.1	1029.4
152.5°	1049.0	1048.2	1047.3	1046.5	1045.6	1045.4	1045.8	1046.1	1046.5	1046.9	1047.3
155°	1074.6	1073.5	1072.3	1071.2	1070.1	1069.6	1070.1	1070.4	1070.7	1071.2	1071.8
157.5°	1094.3	1093.6	1093.0	1092.4	1091.7	1091.3	1091.3	1091.4	1091.4	1091.5	1092.1
160°	1108.1	1107.0	1105.9	1104.7	1103.5	1103.0	1103.3	1103.5	1103.6	1103.8	1104.6
162.5°	1119.1	1118.0	1116.8	1115.7	1114.6	1114.0	1114.2	1114.5	1114.7	1114.8	1115.9
165°	1133.9	1132.7	1131.6	1130.5	1129.4	1128.9	1129.0	1129.2	1129.5	1129.6	1130.8
167.5°	1145.0	1143.8	1142.5	1141.3	1140.2	1139.7	1139.9	1140.1	1140.2	1140.5	1141.9
170°	1151.1	1149.8	1148.4	1147.1	1145.7	1145.2	1145.4	1145.6	1145.7	1146.0	1147.5
172.5°	1155.2	1153.9	1152.5	1151.2	1149.9	1149.4	1149.7	1150.0	1150.4	1150.7	1152.1
175°	1159.7	1158.6	1157.4	1156.2	1155.1	1154.7	1154.9	1155.0	1155.2	1155.4	1156.9
177.5°	1161.7	1160.9	1159.9	1159.0	1158.1	1157.7	1157.9	1158.0	1158.2	1158.3	1159.4
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7



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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°	17.0	17.3	17.5	17.5	17.4	17.3	17.2	17.1
90°	15.7	16.6	17.6	18.3	18.9	19.5	20.1	20.7
92.5°	15.7	16.6	17.6	18.2	18.4	18.7	19.0	19.3
95°	15.7	16.6	17.6	18.1	18.1	18.1	18.1	18.1
97.5°	31.5	26.2	20.8	18.1	18.1	18.1	18.1	18.1
100°	92.6	64.2	35.7	21.1	20.3	19.5	18.9	18.1
102.5°	180.0	174.7	169.3	160.1	147.1	134.1	121.1	108.1
105°	256.1	256.1	256.1	256.1	255.9	255.7	255.5	255.3
107.5°	324.3	324.4	324.4	324.2	323.6	323.0	322.4	321.8
110°	368.5	367.9	367.4	367.2	367.4	367.6	367.7	367.9



TEST NUMBER: P333601-935

CATALOG NUMBER: S125RDIP-S1090D1035U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	412.2	411.5	410.8	410.3	410.0	409.7	409.5	409.2
115°	478.2	477.4	476.6	475.7	474.6	473.4	472.3	471.1
117.5°	541.8	540.9	539.8	539.1	538.6	538.1	537.6	537.1
120°	583.0	582.6	582.2	581.5	580.6	579.6	578.7	577.7
122.5°	622.2	621.8	621.4	620.6	619.6	618.5	617.3	616.2
125°	679.3	678.6	677.8	677.2	676.6	676.0	675.5	674.9
127.5°	731.6	731.2	730.7	729.9	728.4	727.0	725.7	724.2
130°	765.7	765.1	764.6	763.8	762.8	761.9	761.0	759.9
132.5°	797.5	797.5	797.3	796.8	795.8	794.9	793.9	793.0
135°	844.3	844.0	843.5	842.7	841.6	840.5	839.3	838.2
137.5°	887.9	887.9	888.0	887.5	886.6	885.5	884.6	883.6
140°	914.6	915.0	915.3	915.0	913.9	912.7	911.5	910.4
142.5°	940.8	940.9	941.0	940.5	939.3	938.1	937.0	935.8
145°	977.8	978.0	978.2	977.8	976.6	975.4	974.3	973.2
147.5°	1009.5	1009.8	1010.0	1009.4	1008.1	1006.7	1005.3	1003.9
150°	1029.8	1030.2	1030.5	1030.0	1028.5	1026.9	1025.4	1023.9
152.5°	1047.7	1048.1	1048.4	1047.9	1046.5	1045.2	1043.8	1042.4
155°	1072.3	1072.9	1073.5	1073.0	1071.4	1069.9	1068.4	1066.9
157.5°	1092.7	1093.3	1093.9	1093.5	1091.9	1090.4	1088.8	1087.4
160°	1105.4	1106.1	1106.9	1106.5	1105.0	1103.5	1101.9	1100.4
162.5°	1117.0	1118.0	1119.1	1118.8	1117.1	1115.4	1113.8	1112.1
165°	1131.9	1133.1	1134.2	1134.0	1132.5	1130.9	1129.5	1127.9
167.5°	1143.2	1144.6	1146.0	1145.8	1144.1	1142.4	1140.7	1138.9
170°	1149.0	1150.6	1152.1	1151.9	1150.2	1148.6	1146.9	1145.1
172.5°	1153.5	1154.9	1156.2	1156.1	1154.3	1152.6	1150.9	1149.3
175°	1158.5	1160.0	1161.5	1161.4	1159.7	1158.0	1156.2	1154.5
177.5°	1160.5	1161.6	1162.6	1162.5	1161.3	1160.1	1158.9	1157.6
180°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7

(END OF REPORT)