

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: P333595-935

Luminaire Tested: **S125RDIP-S1090D810U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333595-935  
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-S1090D810U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 810 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6426.8 lumens  
Efficiency: N/A  
Efficacy: 118.1 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

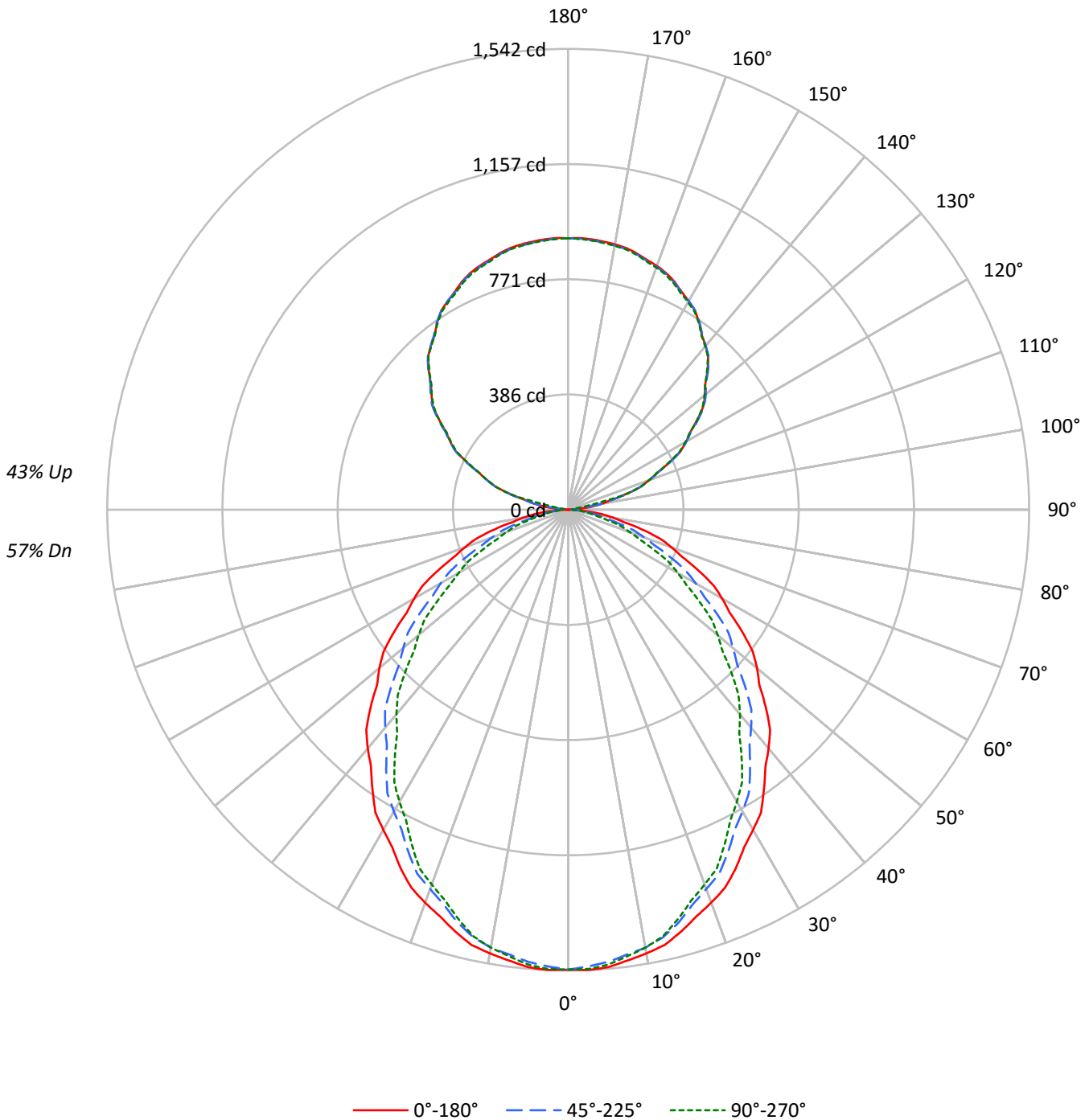
Input Watts (W): 54.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	100	95	91	88	92	89	85	82	77	74	72	66	64	62	55	54	53	48
2	91	83	77	72	84	78	73	68	68	63	60	58	55	52	49	47	45	41
3	83	74	66	60	77	69	62	57	60	55	51	51	48	45	44	41	39	35
4	76	65	57	51	71	61	54	49	53	48	43	46	42	38	39	36	33	30
5	70	58	50	44	65	55	47	42	48	42	38	41	37	33	35	32	29	26
6	64	52	44	38	60	49	42	37	43	37	33	37	33	29	32	29	26	23
7	60	47	39	34	55	45	37	32	39	33	29	34	30	26	29	26	23	21
8	55	43	35	30	52	41	34	29	36	30	26	31	27	23	27	23	21	18
9	52	39	32	27	48	37	30	26	33	27	23	29	24	21	25	21	19	17
10	48	36	29	24	45	34	28	23	30	25	21	27	22	19	23	20	17	15

**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	2.3
10°-20°	404.4	6.3
20°-30°	586.4	9.1
30°-40°	668.3	10.4
40°-50°	651.5	10.1
50°-60°	548.4	8.5
60°-70°	384.4	6.0
70°-80°	197.6	3.1
80°-90°	51.8	0.8
90°-100°	33.0	0.5
100°-110°	203.4	3.2
110°-120°	369.0	5.7
120°-130°	473.5	7.4
130°-140°	509.3	7.9
140°-150°	478.1	7.4
150°-160°	386.7	6.0
160°-170°	250.1	3.9
170°-180°	86.3	1.3
0°-30°	1135.5	17.7
0°-40°	1803.9	28.1
0°-60°	3003.7	46.7
0°-90°	3637.5	56.6
90°-120°	605.4	9.4
90°-150°	2066.3	32.2
90°-180°	2789.0	43.4
0°-180°	6426.8	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	6	11	14	16	5
95°	38	35	11	14	14	49
105°	198	200	201	201	200	210
115°	372	375	376	373	369	368
125°	529	533	533	531	529	472
135°	659	663	662	660	656	508
145°	764	766	766	766	762	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



TEST NUMBER: P333595-935

CATALOG NUMBER: S125RDIP-S1090D810U935-4F0-1E-UDD-F

**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	20.3	19.1	17.9	16.7	16.1	16.1	16.1	16.1	16.1	16.3
90°	0.7	1.9	3.1	4.3	5.4	6.5	7.7	8.7	9.7	10.8	11.5
92.5°	10.3	9.6	8.7	7.8	7.1	7.1	8.0	9.0	9.8	10.8	11.5
95°	38.4	38.0	37.5	37.0	36.6	33.5	27.8	22.1	16.4	10.8	11.5
97.5°	80.2	80.9	81.7	82.6	83.3	78.2	66.9	55.6	44.3	33.1	28.9
100°	112.4	112.9	113.3	113.8	114.3	114.8	115.4	116.0	116.6	117.2	94.9
102.5°	145.3	145.9	146.5	147.0	147.6	148.0	148.4	148.8	149.1	149.5	145.3
105°	197.9	198.5	199.1	199.8	200.4	200.6	200.6	200.6	200.6	200.6	200.6
107.5°	252.6	252.6	252.6	252.6	252.6	252.8	253.0	253.4	253.7	254.0	254.0
110°	288.2	288.2	288.2	288.2	288.2	288.3	288.6	289.0	289.2	289.6	289.1



TEST NUMBER: P333595-935

CATALOG NUMBER: S125RDIP-S1090D810U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	321.6	321.9	322.3	322.7	323.0	323.3	323.5	323.6	323.8	324.0	323.5
115°	371.7	372.5	373.2	373.9	374.7	375.1	375.3	375.4	375.6	375.7	375.1
117.5°	423.5	423.5	423.4	423.4	423.4	423.7	424.2	424.8	425.4	425.9	425.2
120°	455.8	455.7	455.6	455.4	455.2	455.4	455.8	456.3	456.8	457.2	456.9
122.5°	484.4	485.0	485.5	486.1	486.6	487.1	487.2	487.5	487.7	487.9	487.6
125°	528.6	529.6	530.6	531.8	532.8	533.3	533.3	533.3	533.3	533.3	532.7
127.5°	570.8	571.4	572.2	573.0	573.7	574.0	573.9	573.9	573.8	573.7	573.3
130°	596.6	597.4	598.1	598.8	599.6	600.0	600.2	600.3	600.5	600.6	600.2
132.5°	622.4	623.3	624.1	625.0	625.9	626.2	625.9	625.5	625.2	624.8	624.7
135°	659.2	660.1	661.0	661.9	662.8	663.1	662.8	662.5	662.2	661.9	661.6
137.5°	693.0	693.8	694.6	695.3	696.1	696.4	696.1	695.9	695.6	695.3	695.3
140°	715.1	715.4	715.7	716.0	716.3	716.4	716.2	716.1	715.9	715.7	716.1
142.5°	735.0	735.2	735.4	735.6	735.7	735.9	736.2	736.3	736.6	736.8	736.8
145°	764.2	764.6	764.8	765.2	765.4	765.6	765.6	765.6	765.6	765.6	765.8
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.6
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



TEST NUMBER: P333595-935

CATALOG NUMBER: S125RDIP-S1090D810U935-4F0-1E-UDD-F

**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°	16.4	16.5	16.7	16.7	16.6	16.4	16.4	16.3
90°	12.3	13.0	13.8	14.4	14.8	15.2	15.7	16.2
92.5°	12.3	13.0	13.8	14.2	14.5	14.6	14.9	15.1
95°	12.3	13.0	13.8	14.1	14.1	14.1	14.1	14.1
97.5°	24.7	20.5	16.3	14.1	14.1	14.1	14.1	14.1
100°	72.6	50.3	28.0	16.5	15.9	15.3	14.7	14.1
102.5°	141.0	136.8	132.6	125.4	115.2	105.0	94.9	84.7
105°	200.6	200.6	200.6	200.6	200.4	200.3	200.1	200.0
107.5°	254.1	254.1	254.1	253.9	253.5	253.0	252.5	252.1
110°	288.6	288.2	287.7	287.6	287.7	287.9	288.0	288.2





TEST NUMBER: P333595-935

CATALOG NUMBER: S125RDIP-S1090D810U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	322.9	322.3	321.8	321.3	321.2	320.9	320.7	320.6
115°	374.5	373.9	373.3	372.6	371.7	370.7	369.9	369.0
117.5°	424.4	423.6	422.8	422.2	421.9	421.5	421.1	420.7
120°	456.6	456.3	456.0	455.5	454.7	454.0	453.2	452.5
122.5°	487.3	487.0	486.7	486.1	485.3	484.4	483.5	482.7
125°	532.1	531.5	530.9	530.4	529.9	529.4	529.0	528.6
127.5°	573.0	572.7	572.4	571.6	570.6	569.5	568.3	567.2
130°	599.7	599.3	598.8	598.2	597.4	596.8	596.0	595.2
132.5°	624.7	624.6	624.5	624.1	623.4	622.6	621.8	621.1
135°	661.3	661.0	660.7	660.1	659.2	658.3	657.4	656.5
137.5°	695.4	695.4	695.5	695.2	694.4	693.6	692.8	692.1
140°	716.4	716.7	717.0	716.7	715.7	714.9	713.9	713.1
142.5°	736.9	736.9	737.0	736.6	735.7	734.8	733.9	733.0
145°	765.9	766.0	766.2	765.8	764.9	764.1	763.1	762.2
147.5°	790.7	790.9	791.1	790.7	789.5	788.5	787.4	786.4
150°	806.6	806.9	807.2	806.8	805.6	804.3	803.1	801.9
152.5°	820.6	820.9	821.2	820.8	819.8	818.6	817.6	816.5
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

(END OF REPORT)