

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: P333602-940

Luminaire Tested: **S125RDIP-S1090D1035U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1090D1035U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6959.9 lumens
Efficiency: N/A
Efficacy: 115.0 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

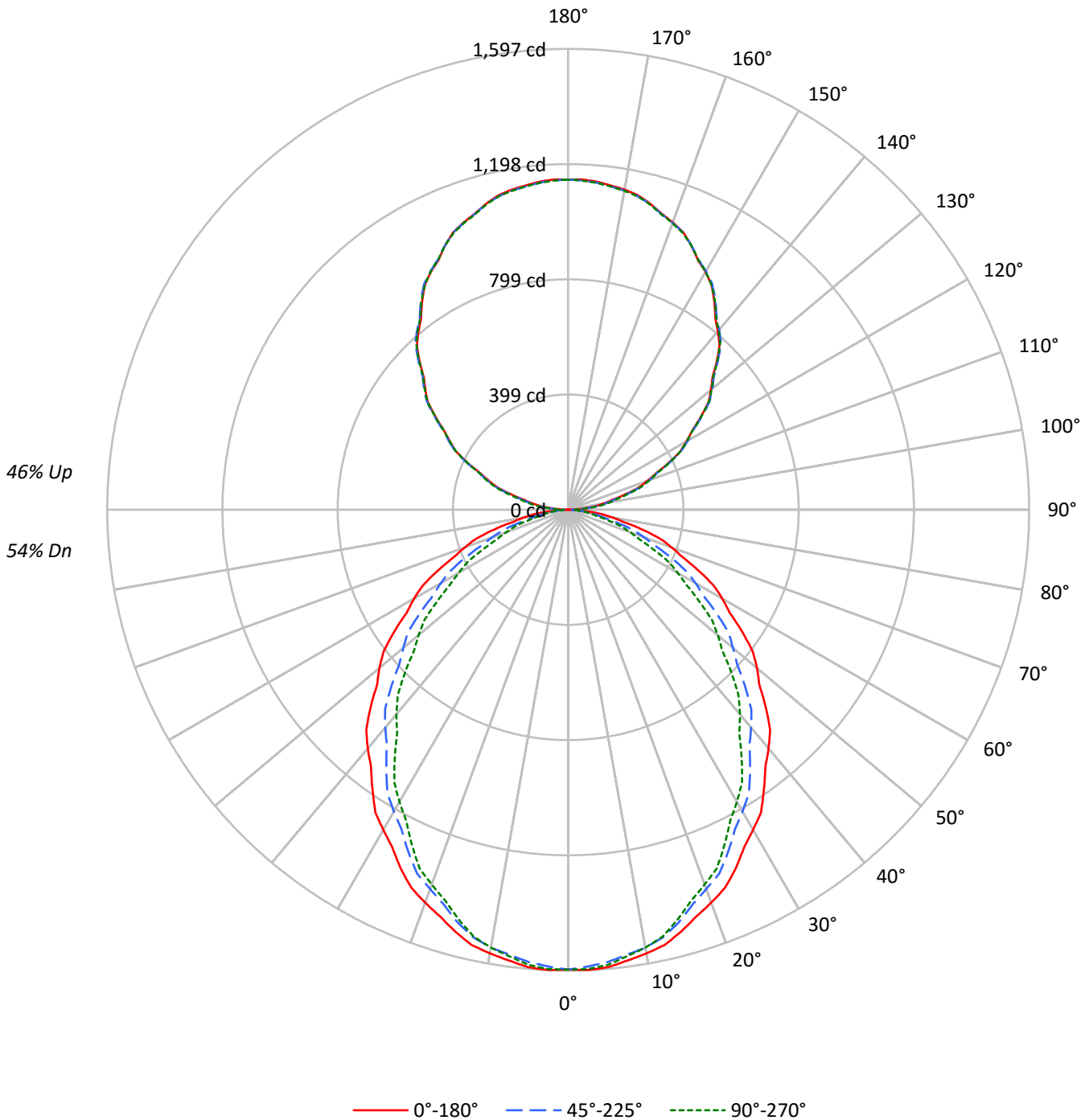
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	30	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10293	10293	10293
5°	10317	10200	10263
10°	10239	10105	10105
15°	10117	9900	9819
20°	9961	9614	9498
25°	9779	9333	9128
30°	9552	9004	8717
35°	9320	8665	8257
40°	9104	8312	7804
45°	8840	7916	7311
50°	8575	7486	6797
55°	8268	7076	6248
60°	7962	6577	5660
65°	7597	5997	4985
70°	7183	5274	4296
75°	6608	4447	3573
80°	5821	3492	2998
85°	4905	2853	2675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.9	2.2
10°-20°	418.8	6.0
20°-30°	607.3	8.7
30°-40°	692.2	9.9
40°-50°	674.7	9.7
50°-60°	567.9	8.2
60°-70°	398.1	5.7
70°-80°	204.6	2.9
80°-90°	54.2	0.8
90°-100°	76.6	1.1
100°-110°	226.3	3.3
110°-120°	383.2	5.5
120°-130°	504.3	7.2
130°-140°	565.1	8.1
140°-150°	553.9	8.0
150°-160°	465.2	6.7
160°-170°	309.2	4.4
170°-180°	108.2	1.6
0°-30°	1176.0	16.9
0°-40°	1868.2	26.8
0°-60°	3110.9	44.7
0°-90°	3767.8	54.1
90°-120°	686.1	9.9
90°-150°	2309.5	33.2
90°-180°	3192.0	45.9
0°-180°	6959.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1591	1586	1573	1585	1583	151
15°	1513	1505	1481	1479	1469	426
25°	1372	1353	1310	1294	1281	631
35°	1182	1152	1099	1065	1047	740
45°	968	931	867	820	800	746
55°	734	694	628	576	555	657
65°	497	455	392	346	326	492
75°	265	228	178	153	143	280
85°	66	45	38	37	36	74
90°	1	8	14	19	21	6
95°	58	60	69	75	77	62
105°	203	208	213	218	221	217
115°	384	387	389	388	387	379
125°	560	565	566	564	564	501
135°	728	733	734	734	731	561
145°	882	886	888	888	886	551
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



TEST NUMBER: P333602-940

CATALOG NUMBER: S125RDIP-S1090D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1596.7	1596.1	1595.4	1594.7	1594.1	1592.8	1590.6	1588.5	1586.4	1584.2	1586.4
5°	1591.4	1590.4	1589.3	1588.2	1587.2	1585.1	1582.2	1579.2	1576.3	1573.3	1576.0
7.5°	1575.7	1574.8	1573.7	1572.7	1571.6	1569.4	1565.8	1562.4	1558.8	1555.3	1557.2
10°	1561.3	1560.5	1559.7	1558.9	1558.1	1555.9	1552.1	1548.4	1544.6	1540.9	1541.7
12.5°	1544.9	1543.9	1542.9	1541.9	1540.9	1537.8	1532.9	1527.8	1522.8	1517.7	1518.3
15°	1513.1	1511.5	1509.9	1508.3	1506.7	1503.2	1497.5	1491.9	1486.3	1480.7	1480.4
17.5°	1477.3	1474.8	1472.4	1469.9	1467.4	1462.7	1455.6	1448.6	1441.5	1434.4	1433.1
20°	1449.4	1446.7	1444.0	1441.4	1438.7	1433.1	1424.5	1415.9	1407.4	1398.8	1397.5
22.5°	1418.5	1415.9	1413.2	1410.5	1407.8	1402.0	1393.0	1384.0	1375.0	1366.0	1363.4
25°	1372.3	1368.3	1364.3	1360.3	1356.3	1349.3	1339.4	1329.5	1319.6	1309.7	1306.3
27.5°	1319.4	1314.5	1309.6	1304.8	1299.8	1292.2	1281.6	1271.0	1260.3	1249.7	1244.9
30°	1280.9	1275.8	1270.7	1265.6	1260.5	1252.3	1241.1	1229.8	1218.6	1207.4	1201.2
32.5°	1243.2	1237.3	1231.4	1225.5	1219.5	1210.9	1199.4	1187.9	1176.4	1165.0	1158.2
35°	1182.1	1175.7	1169.3	1162.9	1156.5	1147.2	1135.1	1123.1	1111.1	1099.0	1091.3
37.5°	1122.1	1114.4	1106.5	1098.8	1090.9	1080.8	1068.4	1056.0	1043.6	1031.2	1021.8
40°	1079.8	1071.7	1063.7	1055.7	1047.7	1037.2	1024.4	1011.6	998.7	985.9	975.7
42.5°	1035.5	1027.3	1019.0	1010.8	1002.6	991.8	978.5	965.3	952.0	938.7	929.0
45°	967.9	960.1	952.3	944.6	936.8	925.6	910.9	896.2	881.5	866.7	856.0
47.5°	897.8	889.6	881.4	873.3	865.0	853.5	838.7	823.9	809.0	794.2	783.2
50°	853.5	844.6	835.8	827.0	818.1	806.1	790.9	775.6	760.4	745.1	733.9
52.5°	805.3	796.3	787.2	778.2	769.2	757.4	743.1	728.6	714.3	699.9	687.8
55°	734.3	725.8	717.2	708.6	700.1	688.3	673.3	658.4	643.4	628.4	616.4
57.5°	662.5	653.4	644.3	635.1	626.0	614.2	599.8	585.3	570.9	556.4	544.7
60°	616.4	607.0	597.6	588.3	578.9	566.9	552.5	538.1	523.6	509.2	497.4
62.5°	567.2	558.3	549.4	540.4	531.5	519.7	505.1	490.4	475.7	461.0	450.1
65°	497.1	488.0	478.9	469.8	460.7	449.2	435.0	420.8	406.6	392.4	381.7
67.5°	427.6	418.5	409.4	400.3	391.2	379.9	366.2	352.7	339.1	325.5	315.8
70°	380.4	371.3	362.2	353.1	344.0	332.8	319.4	306.0	292.7	279.3	271.0
72.5°	334.2	325.3	316.4	307.6	298.6	287.9	275.4	262.9	250.4	237.9	230.2
75°	264.8	256.8	248.8	240.8	232.7	223.1	211.9	200.6	189.4	178.2	172.3
77.5°	196.0	189.6	183.2	176.7	170.3	162.6	153.6	144.6	135.6	126.6	122.5
80°	156.5	150.1	143.7	137.2	130.8	123.9	116.4	108.9	101.4	93.9	91.5
82.5°	118.0	112.2	106.4	100.7	94.9	89.4	84.3	79.1	74.0	68.8	67.8
85°	66.2	61.3	56.5	51.7	46.9	43.9	42.5	41.2	39.9	38.5	38.3
87.5°	22.3	21.1	20.0	18.8	17.6	17.0	17.1	17.2	17.2	17.3	17.5
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	21.6	22.6	23.7	24.9	25.9	27.4	29.1	30.8	32.5	34.2	35.5
95°	57.9	58.2	58.7	59.0	59.5	60.6	62.6	64.6	66.6	68.6	69.9
97.5°	96.1	96.3	96.5	96.7	96.8	98.3	100.9	103.7	106.4	109.1	110.5
100°	124.7	124.7	124.7	124.7	124.7	125.9	128.5	131.1	133.7	136.2	137.9
102.5°	155.2	156.0	156.9	157.7	158.5	159.4	160.8	162.1	163.4	164.7	166.7
105°	203.0	203.9	204.9	206.0	207.0	208.0	209.2	210.4	211.6	212.8	213.9
107.5°	255.7	256.6	257.6	258.7	259.7	260.6	261.4	262.4	263.3	264.2	264.8
110°	292.0	293.0	294.0	295.0	296.0	296.8	297.3	297.9	298.5	299.1	299.7



TEST NUMBER: P333602-940

CATALOG NUMBER: S125RDIP-S1090D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.0	329.6	330.0	330.6	331.1	331.7	332.5	333.2	333.9	334.7	335.0
115°	383.7	384.5	385.3	386.1	386.8	387.4	387.8	388.3	388.6	389.1	388.9
117.5°	438.5	438.9	439.3	439.6	440.0	440.3	440.7	441.0	441.4	441.8	441.9
120°	472.7	473.7	474.7	475.7	476.7	477.2	477.4	477.7	477.9	478.0	478.0
122.5°	509.8	510.1	510.5	510.9	511.2	511.6	512.1	512.6	513.2	513.6	513.5
125°	560.0	561.2	562.3	563.6	564.7	565.4	565.6	565.8	566.0	566.2	565.8
127.5°	613.4	614.0	614.7	615.4	616.1	616.5	616.8	617.0	617.2	617.5	617.2
130°	645.4	646.4	647.4	648.4	649.3	650.1	650.5	650.9	651.2	651.7	651.5
132.5°	677.4	679.1	680.7	682.3	683.9	684.7	684.7	684.6	684.5	684.4	684.2
135°	728.3	729.4	730.6	731.7	733.0	733.7	733.9	734.1	734.2	734.4	734.4
137.5°	776.0	777.0	778.2	779.4	780.5	781.3	781.8	782.2	782.7	783.0	783.3
140°	806.6	807.5	808.5	809.5	810.5	811.3	811.9	812.5	813.1	813.7	814.0
142.5°	837.1	838.0	838.8	839.6	840.5	841.3	842.0	842.8	843.6	844.3	844.5
145°	882.3	883.1	883.8	884.6	885.4	886.1	886.7	887.3	887.9	888.5	888.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.4
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



TEST NUMBER: P333602-940

CATALOG NUMBER: S125RDIP-S1090D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1588.5	1590.6	1592.8	1593.7	1593.5	1593.3	1593.0	1592.9
5°	1578.7	1581.4	1584.0	1585.1	1584.6	1584.0	1583.5	1583.0
7.5°	1559.1	1560.9	1562.8	1563.4	1562.8	1562.3	1561.7	1561.0
10°	1542.5	1543.3	1544.1	1544.1	1543.3	1542.5	1541.7	1540.9
12.5°	1518.9	1519.5	1520.1	1519.7	1518.5	1517.3	1516.1	1514.8
15°	1480.2	1479.9	1479.6	1478.3	1475.9	1473.5	1471.1	1468.6
17.5°	1431.7	1430.4	1429.1	1427.5	1425.4	1423.4	1421.5	1419.5
20°	1396.2	1394.8	1393.5	1391.6	1389.2	1386.8	1384.4	1382.0
22.5°	1360.8	1358.2	1355.6	1353.3	1351.3	1349.3	1347.3	1345.3
25°	1302.8	1299.3	1295.8	1292.6	1289.7	1286.7	1283.8	1280.9
27.5°	1240.0	1235.2	1230.3	1226.5	1223.6	1220.8	1217.9	1215.1
30°	1195.1	1188.9	1182.8	1178.5	1176.1	1173.7	1171.3	1168.9
32.5°	1151.5	1144.6	1137.8	1132.9	1129.9	1126.9	1123.7	1120.7
35°	1083.5	1075.8	1068.0	1062.3	1058.5	1054.8	1051.1	1047.3
37.5°	1012.5	1003.3	993.9	987.5	983.8	980.2	976.5	972.9
40°	965.5	955.4	945.2	938.5	935.3	932.1	928.9	925.7
42.5°	919.3	909.5	899.7	892.5	887.8	883.2	878.4	873.7
45°	845.3	834.6	823.9	816.5	812.5	808.5	804.5	800.5
47.5°	772.2	761.2	750.2	742.4	738.0	733.5	729.2	724.7
50°	722.6	711.4	700.2	692.6	688.6	684.6	680.6	676.5
52.5°	675.7	663.6	651.5	643.5	639.4	635.4	631.4	627.4
55°	604.3	592.3	580.2	572.0	567.8	563.5	559.2	554.9
57.5°	532.9	521.1	509.3	501.5	497.8	493.9	490.1	486.3
60°	485.6	473.9	462.1	454.2	450.2	446.2	442.2	438.2
62.5°	439.3	428.3	417.4	409.9	405.9	401.9	397.9	393.9
65°	371.0	360.3	349.6	342.2	338.2	334.2	330.2	326.2
67.5°	305.9	296.1	286.3	279.8	276.6	273.4	270.2	267.0
70°	262.7	254.4	246.1	240.3	237.1	233.9	230.7	227.5
72.5°	222.6	214.9	207.2	202.3	200.2	198.0	195.9	193.8
75°	166.4	160.5	154.6	150.7	148.8	147.0	145.1	143.2
77.5°	118.4	114.3	110.1	107.4	106.0	104.6	103.3	101.8
80°	89.1	86.7	84.3	82.8	82.2	81.7	81.1	80.6
82.5°	66.6	65.5	64.4	63.7	63.3	63.0	62.7	62.3
85°	38.0	37.7	37.5	37.2	36.9	36.6	36.4	36.1
87.5°	17.7	17.9	18.1	18.1	18.0	17.9	17.8	17.7
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	36.8	38.1	39.4	40.3	40.8	41.1	41.6	42.0
95°	71.3	72.7	74.1	75.0	75.3	75.8	76.2	76.6
97.5°	111.7	113.1	114.4	115.1	115.4	115.7	115.8	116.1
100°	139.7	141.5	143.3	144.5	144.8	145.2	145.6	146.0
102.5°	168.5	170.5	172.5	173.7	174.2	174.8	175.4	175.9
105°	215.2	216.3	217.5	218.4	219.0	219.6	220.2	220.8
107.5°	265.4	266.0	266.6	266.9	266.8	266.8	266.8	266.7
110°	300.3	300.9	301.5	301.7	301.5	301.3	301.1	300.9



TEST NUMBER: P333602-940

CATALOG NUMBER: S125RDIP-S1090D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	335.3	335.6	335.8	335.8	335.5	335.1	334.7	334.4
115°	388.6	388.4	388.3	388.1	387.8	387.6	387.4	387.3
117.5°	442.0	442.2	442.4	442.0	441.2	440.5	439.7	438.9
120°	478.0	478.0	478.0	477.7	476.9	476.1	475.3	474.5
122.5°	513.4	513.2	513.0	512.6	512.0	511.4	510.8	510.1
125°	565.4	565.0	564.6	564.3	564.1	563.9	563.7	563.6
127.5°	617.1	616.9	616.7	616.4	616.0	615.5	615.2	614.8
130°	651.2	651.0	650.9	650.6	650.1	649.8	649.3	649.0
132.5°	684.0	683.9	683.6	683.2	682.7	682.2	681.6	681.0
135°	734.4	734.4	734.4	734.1	733.3	732.5	731.6	730.8
137.5°	783.5	783.7	784.0	783.6	782.7	781.7	780.7	779.7
140°	814.5	814.8	815.3	814.9	814.0	813.0	812.0	811.0
142.5°	844.8	845.0	845.3	844.9	843.9	842.9	842.0	840.9
145°	888.5	888.5	888.5	888.1	887.6	887.0	886.4	885.8
147.5°	928.9	929.4	929.9	929.4	928.1	926.8	925.4	924.1
150°	954.3	954.3	954.3	954.1	953.8	953.3	953.0	952.5
152.5°	978.1	978.6	979.0	978.9	978.2	977.5	976.8	976.1
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)