

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: P333603-935

Luminaire Tested: **S125RDIP-S1090D1035U935-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333603-935
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-S1090D1035U935-4F0-1E-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: 6835.0 lumens
Efficiency: N/A
Efficacy: 113.0 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

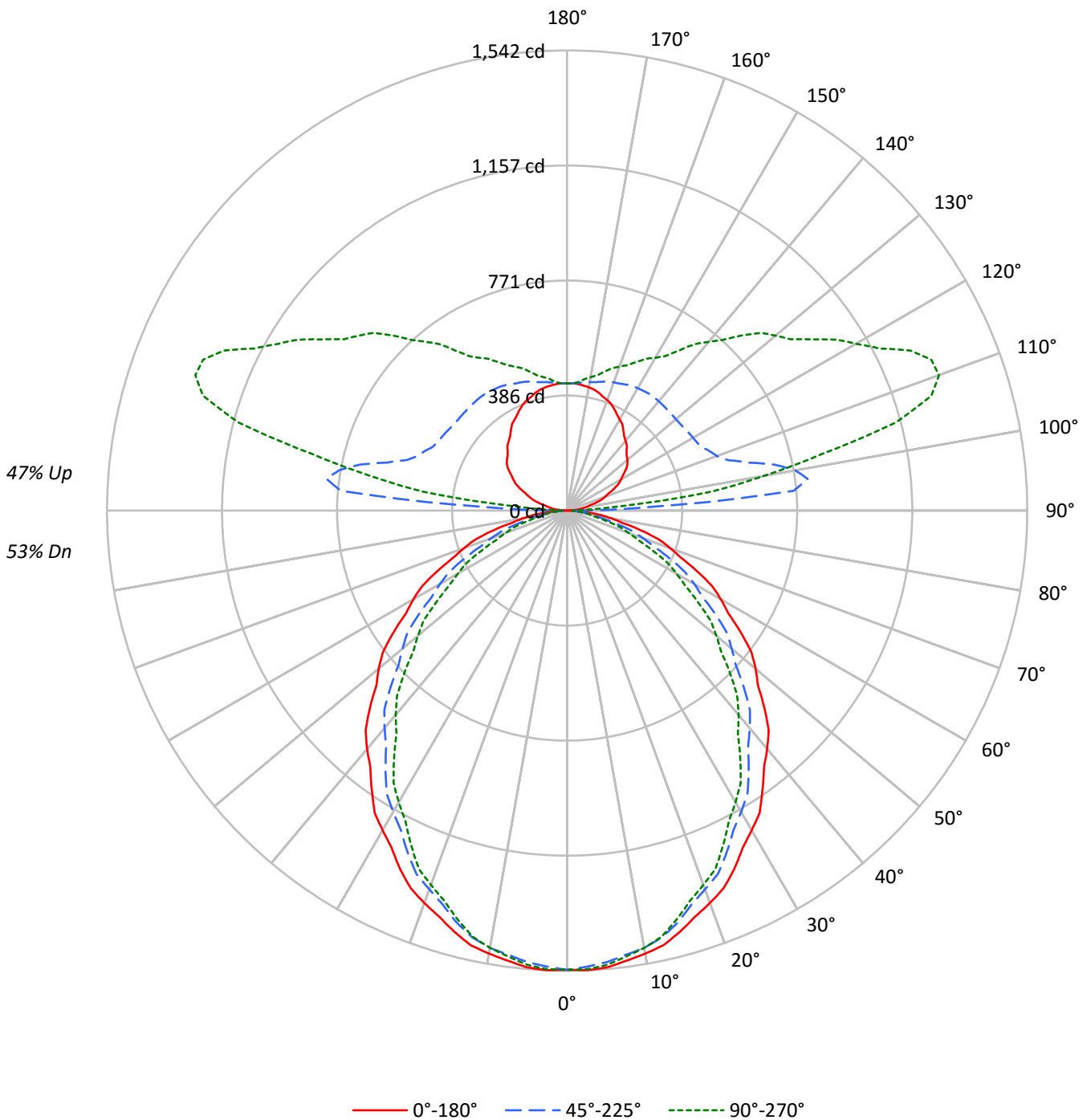
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	2.1
10°-20°	404.4	5.9
20°-30°	586.4	8.6
30°-40°	668.3	9.8
40°-50°	651.5	9.5
50°-60°	548.4	8.0
60°-70°	384.4	5.6
70°-80°	197.6	2.9
80°-90°	52.3	0.8
90°-100°	309.0	4.5
100°-110°	664.3	9.7
110°-120°	623.4	9.1
120°-130°	505.2	7.4
130°-140°	405.5	5.9
140°-150°	306.0	4.5
150°-160°	215.4	3.2
160°-170°	126.9	1.9
170°-180°	41.3	0.6
0°-30°	1135.5	16.6
0°-40°	1803.9	26.4
0°-60°	3003.7	43.9
0°-90°	3638.0	53.2
90°-120°	1596.7	23.4
90°-150°	2813.4	41.2
90°-180°	3197.0	46.8
0°-180°	6835.0	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	20	5
95°	28	84	762	346	202	30
105°	97	136	623	1227	1139	102
115°	174	209	500	1078	1269	171
125°	241	282	480	858	1000	213
135°	282	339	476	719	830	219
145°	328	376	478	595	655	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



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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	20.3	19.2	18.1	17.0	16.5	16.4	16.6	16.5	16.7	16.9
90°	0.9	1.7	3.4	5.2	6.9	8.6	9.5	11.2	12.1	13.8	14.6
92.5°	10.5	12.7	20.0	30.6	45.4	70.5	117.4	196.1	281.5	277.1	224.3
95°	28.3	29.2	36.1	45.5	64.5	103.1	195.1	384.2	621.5	761.6	745.2
97.5°	47.1	48.1	53.0	62.4	79.4	107.3	168.2	306.7	554.9	813.3	942.9
100°	60.2	61.9	65.3	74.7	91.1	116.9	166.8	278.4	495.1	776.1	991.0
102.5°	74.6	75.6	78.4	88.5	103.5	128.5	173.0	266.8	449.7	710.8	962.2
105°	97.1	97.1	101.4	110.0	123.8	147.8	185.6	262.2	405.7	623.1	869.9
107.5°	119.2	120.9	124.9	132.0	146.3	168.0	204.6	270.1	387.1	562.8	775.6
110°	134.9	136.6	140.1	147.8	160.7	183.0	218.3	277.6	381.6	534.6	721.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.8	152.5	155.2	163.0	175.8	197.5	231.4	287.2	381.6	518.1	682.1
115°	173.7	175.3	177.9	185.6	198.5	220.1	251.8	301.7	384.2	500.2	638.6
117.5°	194.2	196.8	199.6	207.3	222.0	242.7	272.9	318.2	389.9	491.5	612.7
120°	208.0	210.6	214.0	221.8	236.3	257.9	287.9	329.2	395.4	487.3	598.2
122.5°	222.5	224.3	227.0	234.8	250.8	272.3	302.4	341.6	400.2	483.9	585.8
125°	240.6	242.4	246.7	254.4	270.8	293.1	321.5	358.4	408.3	479.6	569.0
127.5°	254.9	257.5	263.0	272.9	290.2	312.5	339.8	373.8	417.4	477.5	553.5
130°	263.9	266.5	273.4	284.5	302.6	324.9	351.5	384.2	422.9	476.1	543.2
132.5°	270.8	274.0	282.2	294.8	313.6	335.9	362.6	393.1	429.0	476.1	534.9
135°	281.9	285.3	295.7	309.4	327.4	350.7	377.3	405.7	437.5	476.1	525.1
137.5°	296.0	298.6	308.2	322.0	339.7	363.6	387.8	415.0	445.2	477.2	516.4
140°	304.3	306.9	317.2	330.9	347.2	370.5	395.4	421.2	448.7	477.9	512.3
142.5°	313.9	315.8	325.4	339.1	354.8	376.6	400.2	424.6	450.7	478.5	508.9
145°	328.3	330.0	338.6	350.7	366.2	385.9	408.3	429.7	453.0	477.9	503.7
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.3
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



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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	17.2	17.4	17.7	17.4	17.2	17.2	17.0
90°	15.5	16.4	17.2	18.9	18.9	18.9	19.8	19.8
92.5°	152.3	110.6	83.2	70.5	59.5	57.4	56.2	54.8
95°	618.0	487.3	381.6	309.4	248.4	222.7	215.8	202.0
97.5°	920.4	828.7	725.7	625.3	572.3	524.1	499.2	488.2
100°	1057.2	1015.1	926.5	837.2	777.8	716.0	684.2	670.5
102.5°	1103.3	1129.2	1086.8	1026.2	962.9	918.9	884.2	873.9
105°	1076.1	1193.9	1231.7	1222.2	1194.7	1166.4	1149.2	1138.8
107.5°	979.1	1136.3	1233.4	1278.2	1292.2	1292.0	1286.3	1279.4
110°	907.7	1070.9	1192.1	1265.2	1303.9	1320.2	1326.2	1326.2



TEST NUMBER: P333603-935

CATALOG NUMBER: S125RDIP-S1090D1035U935-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	851.3	1006.3	1128.9	1215.0	1271.5	1299.6	1314.6	1320.7
115°	780.4	913.7	1031.4	1125.1	1192.1	1233.4	1257.5	1268.7
117.5°	734.7	849.5	951.0	1036.9	1104.0	1146.6	1170.4	1177.3
120°	710.0	813.1	907.7	983.3	1046.9	1088.1	1111.4	1118.3
122.5°	691.4	787.0	871.2	942.0	998.8	1036.6	1059.8	1066.0
125°	664.4	752.1	826.8	888.7	936.9	972.1	991.0	999.6
127.5°	636.9	718.8	788.5	846.4	890.1	921.2	939.1	942.9
130°	619.7	695.3	762.4	818.3	861.3	889.6	906.8	912.0
132.5°	602.5	673.3	734.2	788.0	831.0	859.4	875.1	881.0
135°	580.1	639.5	694.5	743.5	781.3	809.7	825.1	830.3
137.5°	561.3	609.2	655.0	696.5	730.4	756.2	770.5	776.1
140°	551.0	591.3	630.9	667.0	698.8	721.2	734.0	738.3
142.5°	542.0	576.2	610.3	641.5	668.6	687.4	699.6	703.3
145°	530.3	557.0	583.6	606.8	627.4	642.0	651.5	655.0
147.5°	519.4	541.0	561.5	578.9	595.3	607.0	612.5	614.1
150°	513.2	532.0	548.4	563.9	576.7	587.0	590.5	591.3
152.5°	506.3	523.1	538.0	550.1	560.9	569.2	572.6	573.4
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

(END OF REPORT)