

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

Luminaire Tested: **S125RDIP-S1090D1035U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602
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-S1090D1035U835-4F0-1E-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: 7805.1 lumens
Efficiency: N/A
Efficacy: 129.0 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

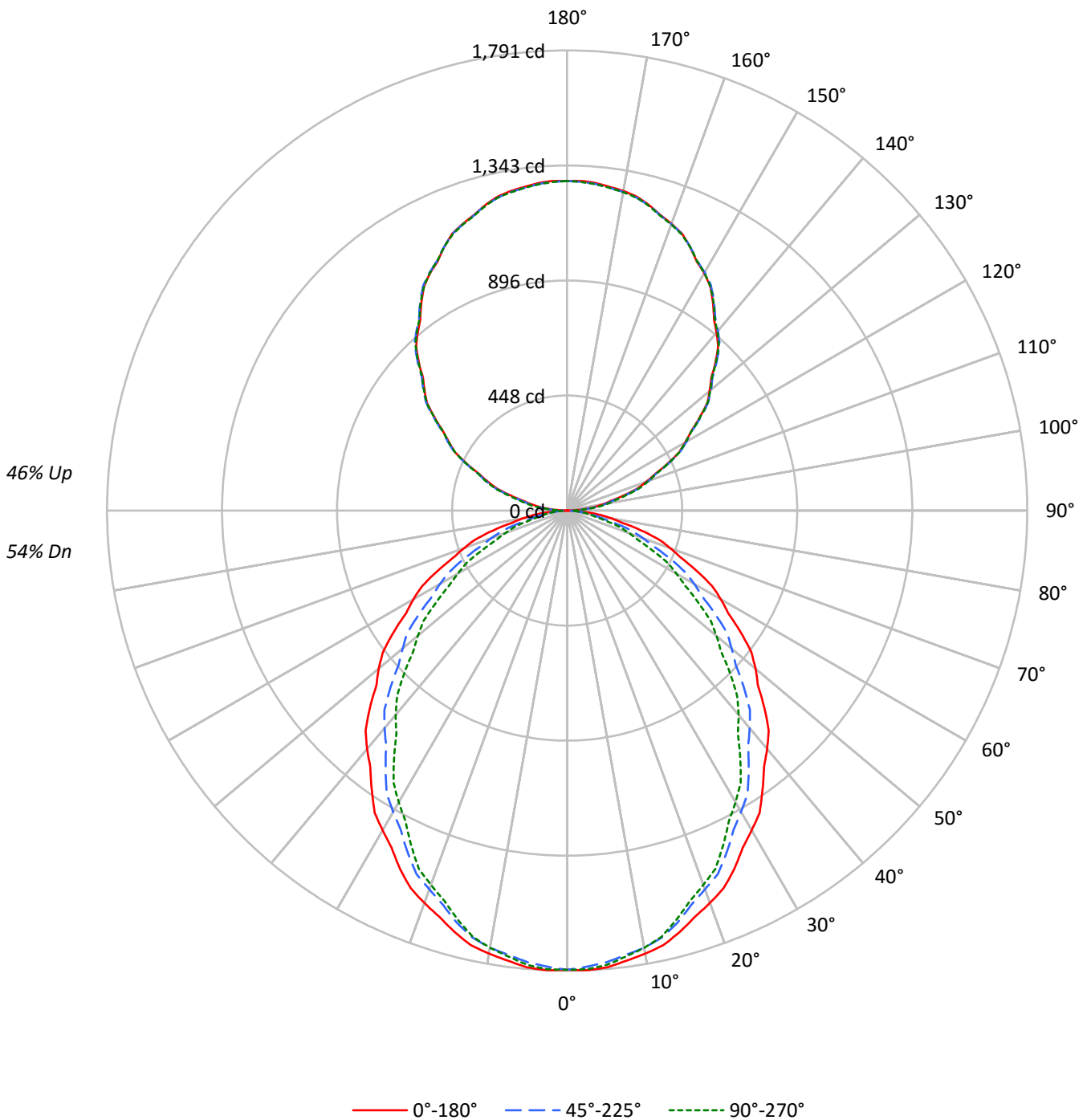
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11544	11544	11544
5°	11570	11439	11509
10°	11482	11332	11332
15°	11346	11102	11012
20°	11171	10781	10652
25°	10967	10467	10236
30°	10712	10097	9775
35°	10452	9717	9260
40°	10209	9321	8752
45°	9913	8878	8199
50°	9616	8396	7623
55°	9272	7935	7007
60°	8928	7375	6347
65°	8520	6725	5590
70°	8055	5914	4817
75°	7411	4986	4007
80°	6527	3916	3362
85°	5498	3201	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.1	2.2
10°-20°	469.7	6.0
20°-30°	681.1	8.7
30°-40°	776.2	9.9
40°-50°	756.6	9.7
50°-60°	636.9	8.2
60°-70°	446.5	5.7
70°-80°	229.5	2.9
80°-90°	60.8	0.8
90°-100°	85.9	1.1
100°-110°	253.7	3.3
110°-120°	429.8	5.5
120°-130°	565.6	7.2
130°-140°	633.8	8.1
140°-150°	621.1	8.0
150°-160°	521.7	6.7
160°-170°	346.8	4.4
170°-180°	121.4	1.6
0°-30°	1318.9	16.9
0°-40°	2095.1	26.8
0°-60°	3488.6	44.7
0°-90°	4225.3	54.1
90°-120°	769.4	9.9
90°-150°	2589.9	33.2
90°-180°	3580.0	45.9
0°-180°	7805.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1785	1779	1764	1777	1775	169
15°	1697	1688	1660	1659	1647	478
25°	1539	1517	1469	1451	1436	708
35°	1326	1292	1232	1194	1174	830
45°	1085	1044	972	920	898	837
55°	824	778	705	646	622	736
65°	558	510	440	388	366	552
75°	297	256	200	171	161	314
85°	74	51	43	42	40	83
90°	1	9	16	21	24	7
95°	65	67	77	84	86	69
105°	228	233	239	244	248	243
115°	430	434	436	435	434	425
125°	628	634	635	633	632	562
135°	817	822	824	823	820	629
145°	989	993	996	996	993	618
155°	1132	1132	1133	1137	1132	521
165°	1231	1229	1230	1233	1228	347
175°	1280	1276	1276	1281	1275	122
180°	1283	1283	1283	1283	1283	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1790.6	1789.9	1789.2	1788.4	1787.7	1786.2	1783.8	1781.4	1779.0	1776.6	1779.0
5°	1784.7	1783.5	1782.3	1781.1	1779.9	1777.6	1774.3	1771.0	1767.7	1764.4	1767.4
7.5°	1767.1	1766.0	1764.8	1763.7	1762.5	1760.0	1756.0	1752.1	1748.1	1744.2	1746.3
10°	1750.9	1750.0	1749.1	1748.2	1747.3	1744.8	1740.6	1736.4	1732.2	1728.0	1728.9
12.5°	1732.5	1731.4	1730.3	1729.1	1728.0	1724.6	1719.0	1713.3	1707.7	1702.0	1702.7
15°	1696.9	1695.1	1693.3	1691.5	1689.7	1685.7	1679.4	1673.1	1666.8	1660.5	1660.2
17.5°	1656.7	1653.9	1651.2	1648.4	1645.6	1640.3	1632.4	1624.5	1616.5	1608.6	1607.1
20°	1625.4	1622.4	1619.4	1616.4	1613.4	1607.1	1597.5	1587.9	1578.3	1568.7	1567.2
22.5°	1590.8	1587.8	1584.8	1581.8	1578.8	1572.3	1562.2	1552.1	1542.0	1531.9	1529.0
25°	1539.0	1534.5	1530.0	1525.5	1521.0	1513.2	1502.1	1491.0	1479.9	1468.8	1464.9
27.5°	1479.6	1474.1	1468.6	1463.2	1457.7	1449.1	1437.2	1425.3	1413.4	1401.5	1396.1
30°	1436.4	1430.7	1425.0	1419.3	1413.6	1404.4	1391.8	1379.2	1366.6	1354.0	1347.1
32.5°	1394.2	1387.6	1380.9	1374.3	1367.6	1357.9	1345.0	1332.2	1319.3	1306.5	1298.9
35°	1325.7	1318.5	1311.3	1304.1	1296.9	1286.5	1273.0	1259.5	1246.0	1232.5	1223.8
37.5°	1258.4	1249.7	1240.9	1232.2	1223.4	1212.1	1198.1	1184.2	1170.3	1156.4	1145.9
40°	1210.9	1201.9	1192.9	1183.9	1174.9	1163.2	1148.8	1134.4	1120.0	1105.6	1094.2
42.5°	1161.2	1152.0	1142.8	1133.5	1124.3	1112.2	1097.3	1082.5	1067.6	1052.7	1041.8
45°	1085.4	1076.7	1068.0	1059.3	1050.6	1038.0	1021.5	1005.0	988.5	972.0	960.0
47.5°	1006.8	997.6	988.4	979.3	970.1	957.2	940.6	923.9	907.3	890.7	878.3
50°	957.1	947.2	937.3	927.4	917.5	904.0	886.9	869.8	852.7	835.6	823.0
52.5°	903.1	893.0	882.8	872.7	862.6	849.4	833.3	817.1	801.0	784.9	771.3
55°	823.5	813.9	804.3	794.7	785.1	771.9	755.1	738.3	721.5	704.7	691.2
57.5°	743.0	732.8	722.5	712.2	702.0	688.8	672.6	656.4	640.2	624.0	610.8
60°	691.2	680.7	670.2	659.7	649.2	635.8	619.6	603.4	587.2	571.0	557.8
62.5°	636.1	626.1	616.1	606.0	596.0	582.8	566.4	549.9	533.5	517.0	504.8
65°	557.5	547.3	537.1	526.9	516.7	503.7	487.8	471.9	456.0	440.1	428.1
67.5°	479.5	469.3	459.1	448.9	438.7	426.0	410.7	395.5	380.3	365.0	354.1
70°	426.6	416.4	406.2	396.0	385.8	373.2	358.2	343.2	328.2	313.2	303.9
72.5°	374.8	364.8	354.8	344.9	334.9	322.9	308.9	294.8	280.8	266.8	258.2
75°	297.0	288.0	279.0	270.0	261.0	250.2	237.6	225.0	212.4	199.8	193.2
77.5°	219.8	212.6	205.4	198.2	191.0	182.3	172.3	162.2	152.1	142.0	137.4
80°	175.5	168.3	161.1	153.9	146.7	138.9	130.5	122.1	113.7	105.3	102.6
82.5°	132.3	125.8	119.3	112.9	106.4	100.3	94.5	88.7	83.0	77.2	76.0
85°	74.2	68.8	63.4	58.0	52.6	49.2	47.7	46.2	44.7	43.2	42.9
87.5°	25.0	23.7	22.4	21.1	19.7	19.1	19.2	19.3	19.3	19.4	19.6
90°	1.0	2.8	4.5	6.3	8.1	9.8	11.3	12.9	14.4	16.0	17.1
92.5°	24.2	25.4	26.6	27.9	29.1	30.7	32.6	34.5	36.4	38.3	39.8
95°	64.9	65.3	65.8	66.2	66.7	68.0	70.2	72.4	74.7	76.9	78.4
97.5°	107.8	108.0	108.2	108.4	108.5	110.2	113.2	116.3	119.3	122.4	123.9
100°	139.8	139.8	139.8	139.8	139.8	141.2	144.1	147.0	149.9	152.7	154.7
102.5°	174.1	175.0	175.9	176.8	177.7	178.8	180.3	181.8	183.2	184.7	186.9
105°	227.6	228.7	229.8	231.0	232.1	233.3	234.6	235.9	237.3	238.6	239.9
107.5°	286.7	287.8	288.9	290.1	291.2	292.2	293.2	294.3	295.3	296.3	297.0
110°	327.5	328.6	329.7	330.8	331.9	332.8	333.4	334.1	334.8	335.4	336.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.0	369.6	370.1	370.7	371.3	372.0	372.9	373.7	374.5	375.4	375.7
115°	430.3	431.2	432.1	433.0	433.8	434.5	434.9	435.4	435.8	436.3	436.1
117.5°	491.8	492.2	492.6	493.0	493.4	493.8	494.2	494.6	495.0	495.4	495.6
120°	530.1	531.2	532.3	533.5	534.6	535.2	535.4	535.7	535.9	536.1	536.1
122.5°	571.7	572.1	572.5	572.9	573.3	573.7	574.3	574.9	575.5	576.0	575.9
125°	628.0	629.3	630.6	632.0	633.3	634.1	634.3	634.5	634.7	635.0	634.5
127.5°	687.9	688.6	689.4	690.1	690.9	691.4	691.7	691.9	692.2	692.5	692.2
130°	723.8	724.9	726.0	727.1	728.2	729.0	729.5	729.9	730.3	730.8	730.6
132.5°	759.7	761.6	763.4	765.2	767.0	767.9	767.8	767.7	767.6	767.5	767.3
135°	816.7	818.0	819.3	820.6	822.0	822.8	823.0	823.2	823.4	823.6	823.6
137.5°	870.2	871.4	872.7	874.0	875.3	876.2	876.7	877.2	877.7	878.1	878.4
140°	904.5	905.6	906.7	907.8	908.9	909.8	910.5	911.2	911.8	912.5	912.9
142.5°	938.8	939.8	940.7	941.6	942.6	943.5	944.3	945.2	946.0	946.8	947.1
145°	989.4	990.3	991.1	992.0	992.9	993.7	994.4	995.0	995.7	996.4	996.4
147.5°	1036.1	1036.6	1037.1	1037.6	1038.0	1038.6	1039.1	1039.6	1040.1	1040.7	1041.2
150°	1067.2	1067.0	1066.8	1066.6	1066.4	1066.7	1067.6	1068.5	1069.3	1070.2	1070.2
152.5°	1092.8	1093.1	1093.4	1093.7	1094.0	1094.4	1094.7	1095.1	1095.4	1095.8	1096.3
155°	1132.1	1132.1	1132.1	1132.1	1132.1	1132.2	1132.5	1132.7	1132.9	1133.1	1134.0
157.5°	1167.3	1166.8	1166.3	1165.8	1165.3	1165.2	1165.4	1165.6	1165.9	1166.1	1167.0
160°	1188.0	1187.4	1186.7	1186.0	1185.4	1185.2	1185.4	1185.6	1185.8	1186.0	1186.9
162.5°	1206.4	1205.9	1205.4	1204.9	1204.5	1204.2	1204.3	1204.3	1204.4	1204.4	1205.5
165°	1231.0	1230.5	1230.1	1229.6	1229.2	1229.1	1229.3	1229.5	1229.7	1230.0	1230.9
167.5°	1251.7	1250.8	1250.0	1249.1	1248.2	1247.7	1247.7	1247.7	1247.7	1247.7	1249.1
170°	1262.9	1262.0	1261.1	1260.3	1259.4	1258.9	1258.9	1258.9	1258.9	1258.9	1260.3
172.5°	1270.9	1270.0	1269.1	1268.2	1267.4	1266.9	1266.9	1266.9	1266.9	1266.9	1268.2
175°	1279.9	1279.0	1278.1	1277.2	1276.3	1275.9	1275.9	1275.9	1275.9	1275.9	1277.2
177.5°	1284.5	1283.8	1283.1	1282.3	1281.6	1281.2	1281.0	1280.8	1280.7	1280.5	1281.6
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4	1787.4
2.5°	1781.4	1783.8	1786.2	1787.2	1787.0	1786.8	1786.5	1786.3
5°	1770.4	1773.4	1776.4	1777.6	1777.0	1776.4	1775.8	1775.2
7.5°	1748.4	1750.5	1752.6	1753.3	1752.6	1752.0	1751.3	1750.6
10°	1729.8	1730.7	1731.6	1731.6	1730.7	1729.8	1728.9	1728.0
12.5°	1703.4	1704.0	1704.7	1704.3	1702.9	1701.6	1700.2	1698.8
15°	1659.9	1659.6	1659.3	1657.8	1655.1	1652.4	1649.7	1647.0
17.5°	1605.6	1604.1	1602.6	1600.8	1598.5	1596.3	1594.1	1591.9
20°	1565.7	1564.2	1562.7	1560.6	1557.9	1555.2	1552.5	1549.8
22.5°	1526.1	1523.1	1520.2	1517.6	1515.4	1513.2	1510.9	1508.7
25°	1461.0	1457.1	1453.2	1449.6	1446.3	1443.0	1439.7	1436.4
27.5°	1390.6	1385.2	1379.7	1375.4	1372.2	1369.0	1365.8	1362.7
30°	1340.2	1333.3	1326.4	1321.6	1318.9	1316.2	1313.5	1310.8
32.5°	1291.3	1283.6	1276.0	1270.5	1267.1	1263.7	1260.2	1256.8
35°	1215.1	1206.4	1197.7	1191.3	1187.1	1182.9	1178.7	1174.5
37.5°	1135.5	1125.1	1114.6	1107.4	1103.3	1099.2	1095.1	1091.0
40°	1082.8	1071.4	1060.0	1052.5	1048.9	1045.3	1041.7	1038.1
42.5°	1030.9	1019.9	1009.0	1000.9	995.6	990.4	985.1	979.8
45°	948.0	936.0	924.0	915.7	911.2	906.7	902.2	897.7
47.5°	866.0	853.6	841.3	832.6	827.6	822.6	817.7	812.7
50°	810.4	797.8	785.2	776.7	772.2	767.7	763.2	758.7
52.5°	757.8	744.2	730.6	721.6	717.1	712.6	708.1	703.6
55°	677.7	664.2	650.7	641.5	636.7	631.9	627.1	622.3
57.5°	597.6	584.4	571.2	562.4	558.2	553.9	549.6	545.4
60°	544.6	531.4	518.2	509.4	504.9	500.4	495.9	491.4
62.5°	492.6	480.3	468.1	459.7	455.2	450.7	446.2	441.7
65°	416.1	404.1	392.1	383.8	379.3	374.8	370.3	365.8
67.5°	343.1	332.1	321.1	313.8	310.2	306.6	303.0	299.4
70°	294.6	285.3	276.0	269.5	265.9	262.3	258.7	255.1
72.5°	249.6	241.0	232.4	226.9	224.5	222.1	219.7	217.3
75°	186.6	180.0	173.4	169.0	166.9	164.8	162.7	160.6
77.5°	132.8	128.2	123.5	120.4	118.9	117.3	115.8	114.2
80°	99.9	97.2	94.5	92.8	92.2	91.6	91.0	90.4
82.5°	74.7	73.4	72.2	71.4	71.0	70.6	70.3	69.9
85°	42.6	42.3	42.0	41.7	41.4	41.1	40.8	40.5
87.5°	19.8	20.1	20.3	20.3	20.2	20.1	20.0	19.9
90°	18.2	19.3	20.4	21.3	22.0	22.6	23.3	24.0
92.5°	41.3	42.7	44.2	45.2	45.7	46.1	46.6	47.1
95°	80.0	81.5	83.1	84.1	84.5	85.0	85.4	85.9
97.5°	125.3	126.8	128.3	129.1	129.4	129.7	129.9	130.2
100°	156.7	158.7	160.7	162.0	162.4	162.8	163.3	163.7
102.5°	189.0	191.2	193.4	194.8	195.4	196.0	196.7	197.3
105°	241.3	242.6	243.9	244.9	245.6	246.3	246.9	247.6
107.5°	297.6	298.3	299.0	299.3	299.2	299.2	299.2	299.1
110°	336.8	337.4	338.1	338.3	338.1	337.9	337.7	337.4



TEST NUMBER: P333602

CATALOG NUMBER: S125RDIP-S1090D1035U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.0	376.3	376.6	376.6	376.2	375.8	375.4	375.0
115°	435.8	435.6	435.4	435.2	434.9	434.7	434.5	434.3
117.5°	495.7	495.9	496.1	495.7	494.8	494.0	493.1	492.2
120°	536.1	536.1	536.1	535.7	534.8	533.9	533.0	532.1
122.5°	575.7	575.5	575.3	574.9	574.2	573.5	572.8	572.1
125°	634.1	633.6	633.2	632.8	632.6	632.4	632.2	632.0
127.5°	692.0	691.8	691.6	691.2	690.8	690.3	689.9	689.5
130°	730.3	730.1	729.9	729.6	729.1	728.7	728.2	727.8
132.5°	767.1	766.9	766.6	766.2	765.6	765.0	764.4	763.7
135°	823.6	823.6	823.6	823.2	822.3	821.4	820.5	819.6
137.5°	878.7	878.9	879.2	878.8	877.7	876.6	875.5	874.4
140°	913.4	913.8	914.3	913.9	912.8	911.7	910.6	909.5
142.5°	947.4	947.6	947.9	947.5	946.4	945.3	944.2	943.0
145°	996.4	996.4	996.4	996.0	995.4	994.7	994.0	993.4
147.5°	1041.7	1042.3	1042.8	1042.3	1040.8	1039.3	1037.8	1036.3
150°	1070.2	1070.2	1070.2	1070.0	1069.6	1069.1	1068.7	1068.2
152.5°	1096.9	1097.4	1097.9	1097.8	1097.0	1096.2	1095.4	1094.6
155°	1134.9	1135.8	1136.7	1136.6	1135.5	1134.3	1133.2	1132.1
157.5°	1167.8	1168.7	1169.6	1169.3	1167.9	1166.4	1164.9	1163.5
160°	1187.8	1188.7	1189.6	1189.5	1188.4	1187.3	1186.2	1185.0
162.5°	1206.5	1207.6	1208.7	1208.6	1207.3	1206.0	1204.7	1203.4
165°	1231.7	1232.6	1233.5	1233.3	1232.0	1230.6	1229.3	1228.0
167.5°	1250.4	1251.7	1253.1	1253.0	1251.7	1250.3	1248.9	1247.5
170°	1261.6	1262.9	1264.2	1264.1	1262.6	1261.0	1259.5	1257.9
172.5°	1269.6	1270.9	1272.2	1272.2	1270.8	1269.5	1268.1	1266.7
175°	1278.6	1279.9	1281.2	1281.1	1279.6	1278.0	1276.4	1274.9
177.5°	1282.6	1283.7	1284.7	1284.7	1283.4	1282.2	1280.9	1279.7
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9

(END OF REPORT)