

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: P333607

Luminaire Tested: **S125RDIP-S1090D1205U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333607
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-S1090D1205U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9040.2 lumens
Efficiency: N/A
Efficacy: 138.2 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

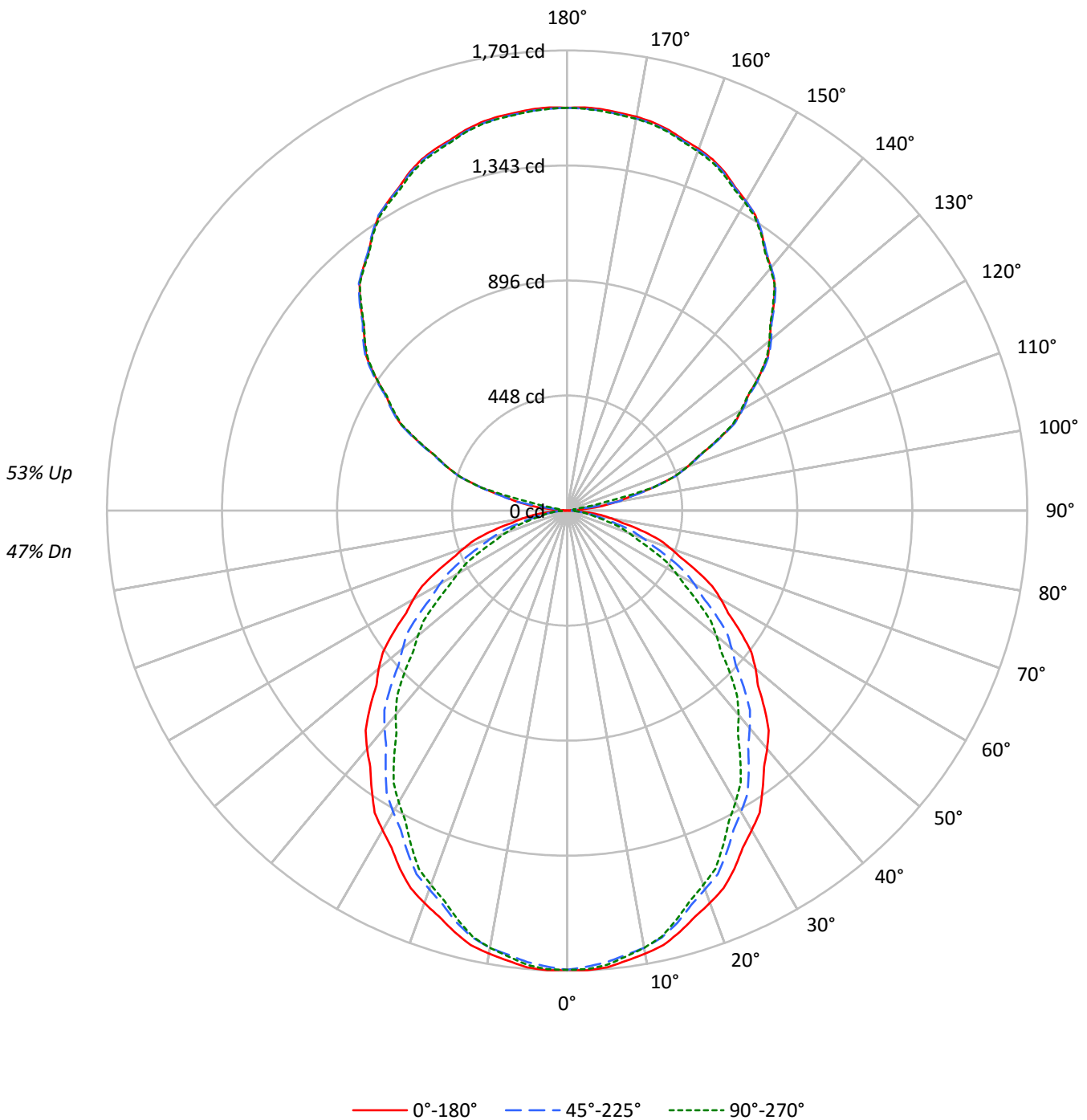
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45	40
2	89	81	75	70	81	75	70	66	63	59	56	52	49	47	42	40	38	34
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33	29
4	74	64	56	50	68	59	52	47	50	45	40	41	37	34	33	31	28	25
5	68	57	49	43	62	52	45	40	45	39	35	37	33	30	30	27	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22	19
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	31	26	46	36	29	24	30	25	21	26	22	19	21	18	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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	1.9
10°-20°	469.7	5.2
20°-30°	681.1	7.5
30°-40°	776.2	8.6
40°-50°	756.6	8.4
50°-60°	636.9	7.0
60°-70°	446.5	4.9
70°-80°	229.5	2.5
80°-90°	61.2	0.7
90°-100°	57.0	0.6
100°-110°	351.1	3.9
110°-120°	636.8	7.0
120°-130°	817.3	9.0
130°-140°	879.1	9.7
140°-150°	825.1	9.1
150°-160°	667.5	7.4
160°-170°	431.7	4.8
170°-180°	148.9	1.6
0°-30°	1318.9	14.6
0°-40°	2095.1	23.2
0°-60°	3488.6	38.6
0°-90°	4225.8	46.7
90°-120°	1044.9	11.6
90°-150°	3566.4	39.5
90°-180°	4814.0	53.3
0°-180°	9040.2	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	10	19	24	28	6
95°	66	60	19	24	24	84
105°	342	346	346	346	345	362
115°	642	647	648	644	637	636
125°	912	920	920	916	912	815
135°	1138	1144	1142	1140	1133	877
145°	1319	1321	1321	1322	1316	825
155°	1453	1446	1448	1451	1442	669
165°	1533	1526	1527	1533	1525	433
175°	1568	1561	1562	1570	1561	149
180°	1568	1568	1568	1568	1568	



TEST NUMBER: P333607

CATALOG NUMBER: S125RDIP-S1090D1205U835-4F0-1E-UDD-F

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°	25.1	23.8	22.5	21.3	20.0	19.4	19.6	19.7	19.8	19.9	20.2
90°	1.2	3.2	5.3	7.4	9.4	11.4	13.2	15.0	16.8	18.6	19.9
92.5°	17.9	16.5	15.0	13.6	12.1	12.2	13.8	15.4	17.0	18.6	19.9
95°	66.2	65.5	64.7	63.9	63.1	57.9	48.0	38.2	28.4	18.6	19.9
97.5°	138.3	139.7	141.1	142.5	143.9	134.9	115.4	96.0	76.6	57.2	49.9
100°	194.1	194.9	195.6	196.4	197.2	198.1	199.1	200.2	201.2	202.2	163.7
102.5°	250.8	251.8	252.8	253.7	254.7	255.5	256.1	256.8	257.4	258.0	250.7
105°	341.7	342.7	343.7	344.8	345.8	346.3	346.3	346.3	346.3	346.3	346.3
107.5°	436.1	436.1	436.1	436.1	436.1	436.3	436.8	437.3	437.9	438.4	438.4
110°	497.4	497.4	497.4	497.4	497.4	497.7	498.2	498.7	499.2	499.7	499.0



TEST NUMBER: P333607

CATALOG NUMBER: S125RDIP-S1090D1205U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	555.1	555.7	556.3	556.9	557.5	558.0	558.3	558.6	558.9	559.2	558.3
115°	641.5	642.8	644.1	645.4	646.7	647.5	647.7	648.0	648.2	648.5	647.5
117.5°	731.0	731.0	730.9	730.9	730.8	731.3	732.3	733.2	734.2	735.2	733.9
120°	786.8	786.5	786.3	786.0	785.8	786.0	786.8	787.6	788.3	789.1	788.6
122.5°	836.1	837.1	838.0	839.0	840.0	840.7	841.0	841.4	841.8	842.1	841.6
125°	912.3	914.1	915.9	917.7	919.5	920.4	920.4	920.4	920.4	920.4	919.4
127.5°	985.1	986.4	987.6	988.9	990.2	990.8	990.6	990.5	990.3	990.2	989.6
130°	1029.7	1031.0	1032.3	1033.6	1034.9	1035.6	1035.9	1036.2	1036.4	1036.7	1035.9
132.5°	1074.3	1075.8	1077.3	1078.8	1080.3	1080.8	1080.2	1079.6	1079.1	1078.5	1078.4
135°	1137.8	1139.3	1140.9	1142.4	1144.0	1144.5	1144.0	1143.5	1142.9	1142.4	1141.9
137.5°	1196.1	1197.5	1198.8	1200.1	1201.5	1201.9	1201.5	1201.0	1200.5	1200.1	1200.2
140°	1234.2	1234.8	1235.3	1235.8	1236.3	1236.4	1236.2	1235.9	1235.7	1235.4	1235.9
142.5°	1268.6	1268.9	1269.3	1269.6	1269.9	1270.2	1270.6	1270.9	1271.3	1271.7	1271.8
145°	1319.1	1319.6	1320.1	1320.6	1321.1	1321.4	1321.4	1321.4	1321.4	1321.4	1321.7
147.5°	1363.2	1363.1	1363.0	1362.9	1362.8	1362.9	1363.2	1363.5	1363.9	1364.2	1364.5
150°	1391.1	1390.6	1390.1	1389.6	1389.1	1389.1	1389.6	1390.1	1390.6	1391.1	1391.6
152.5°	1418.1	1417.0	1415.8	1414.7	1413.5	1413.2	1413.8	1414.3	1414.8	1415.3	1415.8
155°	1452.7	1451.2	1449.6	1448.1	1446.5	1446.0	1446.5	1447.0	1447.6	1448.1	1448.9
157.5°	1479.5	1478.5	1477.6	1476.7	1475.7	1475.3	1475.4	1475.4	1475.5	1475.5	1476.3
160°	1498.1	1496.5	1495.0	1493.4	1491.9	1491.2	1491.5	1491.7	1492.0	1492.2	1493.3
162.5°	1512.9	1511.4	1509.8	1508.3	1506.7	1506.1	1506.3	1506.6	1506.9	1507.1	1508.6
165°	1532.9	1531.4	1529.8	1528.3	1526.7	1526.1	1526.3	1526.6	1526.8	1527.1	1528.7
167.5°	1547.8	1546.2	1544.6	1543.0	1541.4	1540.7	1541.0	1541.2	1541.5	1541.8	1543.6
170°	1556.2	1554.4	1552.5	1550.7	1548.9	1548.2	1548.4	1548.7	1548.9	1549.2	1551.3
172.5°	1561.7	1559.9	1558.1	1556.3	1554.5	1553.8	1554.3	1554.8	1555.2	1555.7	1557.6
175°	1567.8	1566.2	1564.7	1563.1	1561.6	1560.9	1561.2	1561.5	1561.7	1562.0	1564.0
177.5°	1570.6	1569.3	1568.1	1566.9	1565.6	1565.1	1565.3	1565.5	1565.7	1565.9	1567.4
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8



TEST NUMBER: P333607

CATALOG NUMBER: S125RDIP-S1090D1205U835-4F0-1E-UDD-F

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°	20.4	20.7	21.0	21.0	21.0	20.9	20.8	20.7
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	21.2	22.5	23.8	24.6	24.9	25.3	25.7	26.0
95°	21.2	22.5	23.8	24.4	24.4	24.4	24.4	24.4
97.5°	42.6	35.3	28.0	24.4	24.4	24.4	24.4	24.4
100°	125.3	86.8	48.3	28.5	27.5	26.5	25.4	24.4
102.5°	243.4	236.2	228.9	216.5	198.9	181.3	163.8	146.2
105°	346.3	346.3	346.3	346.2	345.9	345.7	345.4	345.2
107.5°	438.5	438.5	438.6	438.2	437.4	436.7	435.9	435.1
110°	498.2	497.4	496.6	496.4	496.6	496.9	497.2	497.4



TEST NUMBER: P333607

CATALOG NUMBER: S125RDIP-S1090D1205U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	557.3	556.3	555.3	554.6	554.3	553.9	553.6	553.2
115°	646.4	645.4	644.4	643.1	641.5	640.0	638.4	636.9
117.5°	732.5	731.2	729.8	728.8	728.1	727.5	726.8	726.1
120°	788.1	787.6	787.1	786.2	784.9	783.6	782.3	781.0
122.5°	841.1	840.6	840.1	839.0	837.5	836.0	834.6	833.1
125°	918.4	917.3	916.3	915.4	914.6	913.9	913.1	912.3
127.5°	989.0	988.5	987.9	986.7	984.8	982.8	980.9	979.0
130°	1035.1	1034.3	1033.6	1032.5	1031.2	1030.0	1028.7	1027.4
132.5°	1078.2	1078.0	1077.9	1077.2	1075.9	1074.6	1073.3	1072.0
135°	1141.4	1140.9	1140.4	1139.3	1137.8	1136.2	1134.7	1133.1
137.5°	1200.3	1200.4	1200.5	1199.9	1198.5	1197.2	1195.8	1194.5
140°	1236.4	1236.9	1237.5	1236.9	1235.4	1233.9	1232.3	1230.8
142.5°	1271.9	1272.0	1272.1	1271.4	1269.8	1268.3	1266.7	1265.2
145°	1321.9	1322.2	1322.4	1321.8	1320.2	1318.7	1317.1	1315.6
147.5°	1364.8	1365.1	1365.4	1364.6	1362.8	1360.9	1359.1	1357.2
150°	1392.2	1392.7	1393.2	1392.4	1390.4	1388.3	1386.2	1384.2
152.5°	1416.3	1416.9	1417.4	1416.7	1414.8	1413.0	1411.1	1409.3
155°	1449.6	1450.4	1451.2	1450.5	1448.5	1446.4	1444.3	1442.3
157.5°	1477.2	1478.0	1478.8	1478.2	1476.1	1474.1	1472.0	1469.9
160°	1494.3	1495.3	1496.4	1495.9	1493.8	1491.7	1489.7	1487.6
162.5°	1510.0	1511.5	1512.9	1512.5	1510.2	1507.9	1505.7	1503.4
165°	1530.2	1531.8	1533.3	1533.0	1531.0	1528.9	1526.8	1524.8
167.5°	1545.5	1547.3	1549.2	1549.0	1546.6	1544.3	1542.0	1539.7
170°	1553.3	1555.4	1557.5	1557.3	1555.0	1552.7	1550.4	1548.0
172.5°	1559.4	1561.3	1563.1	1562.9	1560.6	1558.3	1555.9	1553.6
175°	1566.1	1568.2	1570.2	1570.1	1567.8	1565.5	1563.1	1560.8
177.5°	1568.8	1570.3	1571.7	1571.6	1570.0	1568.3	1566.6	1565.0
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8

(END OF REPORT)