

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: P333293

Luminaire Tested: **S125DIP-S1090D1205U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333293
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: S125DIP-S1090D1205U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8610.2 lumens
Efficiency: N/A
Efficacy: 131.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

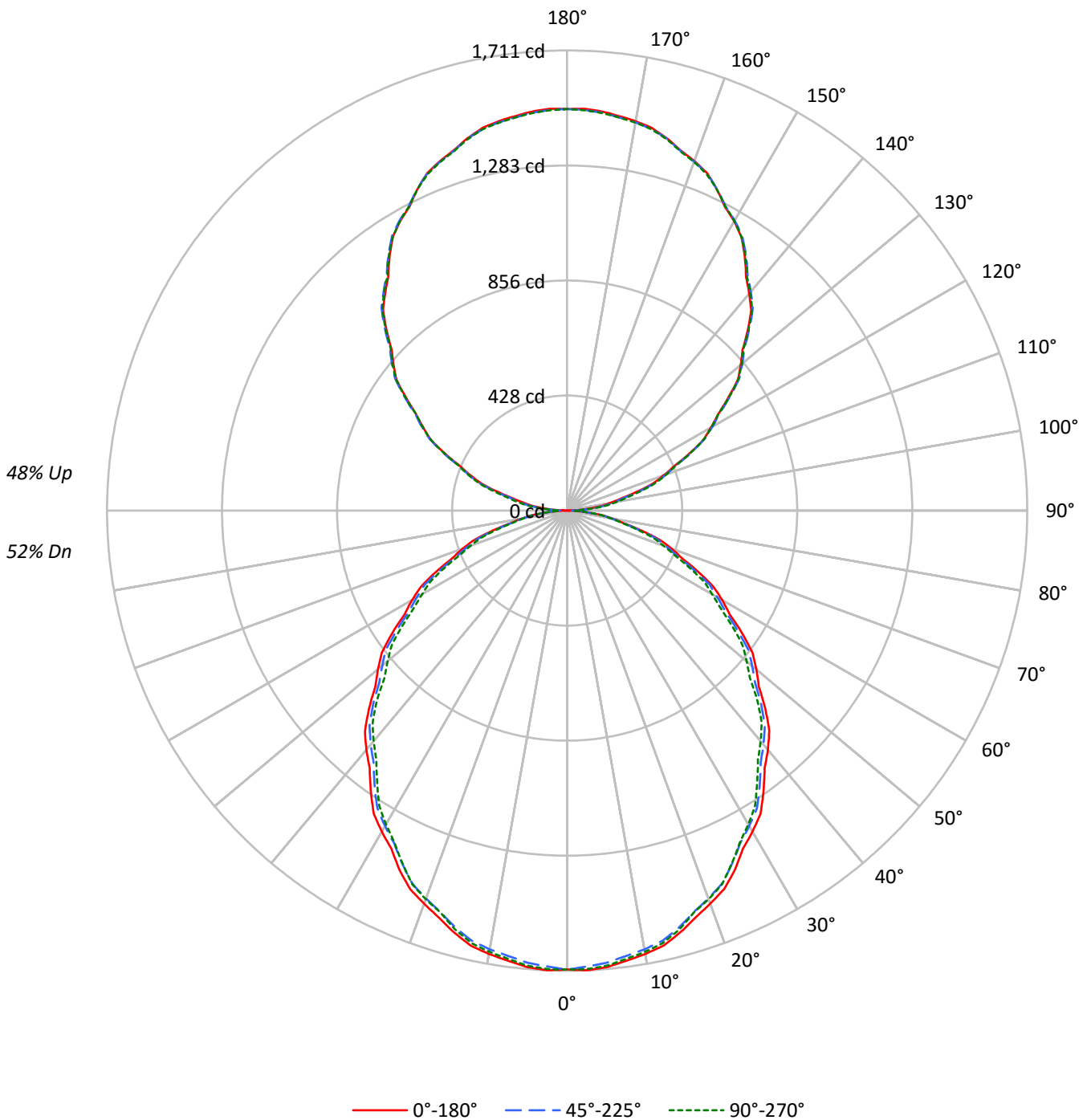
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	94	90	86	91	87	83	80	74	71	69	62	60	58	51	50	49	43
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41	36
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	40	37	35	31
4	74	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26
5	68	57	48	42	63	53	45	40	45	40	35	38	34	31	32	29	26	23
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	20
7	58	46	38	32	54	43	36	31	37	31	27	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16
9	50	38	31	25	46	36	29	24	31	25	22	27	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	25	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11021	11021	11021
5°	11045	10940	11010
10°	10978	10863	10925
15°	10858	10732	10777
20°	10689	10549	10568
25°	10505	10332	10322
30°	10279	10097	10047
35°	10037	9845	9707
40°	9788	9571	9435
45°	9519	9322	9136
50°	9224	9020	8748
55°	8938	8679	8436
60°	8596	8335	8038
65°	8189	7922	7653
70°	7801	7444	7189
75°	7107	6872	6635
80°	6326	6226	6073
85°	5498	5602	5298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.9	1.9
10°-20°	454.5	5.3
20°-30°	671.0	7.8
30°-40°	783.0	9.1
40°-50°	786.4	9.1
50°-60°	690.3	8.0
60°-70°	514.4	6.0
70°-80°	294.1	3.4
80°-90°	88.8	1.0
90°-100°	100.0	1.2
100°-110°	295.3	3.4
110°-120°	500.2	5.8
120°-130°	658.3	7.6
130°-140°	737.7	8.6
140°-150°	723.0	8.4
150°-160°	607.3	7.1
160°-170°	403.7	4.7
170°-180°	141.3	1.6
0°-30°	1286.4	14.9
0°-40°	2069.4	24.0
0°-60°	3546.2	41.2
0°-90°	4443.5	51.6
90°-120°	895.6	10.4
90°-150°	3014.6	35.0
90°-180°	4167.0	48.4
0°-180°	8610.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1706	1706	1706	1706	1706	
5°	1704	1700	1688	1699	1698	162
15°	1624	1619	1605	1612	1612	458
25°	1474	1467	1450	1452	1448	678
35°	1273	1267	1249	1242	1231	796
45°	1042	1036	1021	1005	1000	803
55°	794	789	771	759	749	708
65°	536	533	518	507	501	532
75°	285	282	275	271	266	304
85°	74	76	76	74	72	83
90°	1	10	19	24	28	8
95°	76	78	90	97	100	81
105°	265	271	278	284	288	283
115°	501	505	508	507	506	495
125°	731	738	739	737	736	654
135°	951	957	959	958	954	732
145°	1152	1156	1160	1160	1156	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1710.7	1710.0	1709.2	1708.5	1707.8	1706.2	1703.8	1701.4	1699.0	1696.6	1699.0
5°	1703.7	1703.1	1702.5	1701.9	1701.3	1699.5	1696.5	1693.5	1690.5	1687.5	1690.2
7.5°	1688.0	1687.4	1686.8	1686.2	1685.6	1683.6	1680.3	1677.0	1673.7	1670.4	1673.1
10°	1674.0	1673.4	1672.8	1672.2	1671.6	1669.6	1666.3	1663.0	1659.7	1656.4	1658.8
12.5°	1656.7	1655.6	1654.5	1653.4	1652.4	1650.3	1647.2	1644.2	1641.1	1638.0	1640.0
15°	1624.0	1623.1	1622.2	1621.3	1620.4	1618.3	1615.0	1611.7	1608.4	1605.1	1606.6
17.5°	1586.5	1585.2	1583.8	1582.5	1581.2	1578.8	1575.4	1572.0	1568.6	1565.1	1567.0
20°	1555.2	1554.6	1554.0	1553.4	1552.8	1550.5	1546.6	1542.7	1538.8	1534.9	1537.0
22.5°	1523.8	1522.8	1521.7	1520.6	1519.5	1517.1	1513.5	1509.8	1506.2	1502.5	1503.9
25°	1474.2	1472.7	1471.2	1469.7	1468.2	1465.5	1461.6	1457.7	1453.8	1449.9	1450.5
27.5°	1416.1	1415.2	1414.3	1413.4	1412.5	1410.1	1406.0	1402.0	1398.0	1394.0	1394.1
30°	1378.3	1377.4	1376.5	1375.6	1374.7	1372.0	1367.5	1363.0	1358.5	1354.0	1353.4
32.5°	1337.3	1335.9	1334.5	1333.1	1331.8	1329.1	1325.0	1321.0	1317.0	1313.0	1311.9
35°	1273.0	1271.8	1270.6	1269.4	1268.2	1265.5	1261.3	1257.1	1252.9	1248.7	1247.2
37.5°	1206.3	1204.8	1203.3	1201.8	1200.3	1197.6	1193.6	1189.7	1185.7	1181.8	1179.5
40°	1161.0	1159.5	1158.0	1156.5	1155.0	1152.1	1147.9	1143.7	1139.5	1135.3	1132.6
42.5°	1112.4	1111.1	1109.9	1108.6	1107.3	1104.6	1100.4	1096.2	1092.0	1087.8	1085.3
45°	1042.2	1041.0	1039.8	1038.6	1037.4	1035.0	1031.4	1027.8	1024.2	1020.6	1017.0
47.5°	966.6	966.6	966.7	966.8	966.8	964.7	960.4	956.0	951.7	947.4	943.7
50°	918.0	917.1	916.2	915.3	914.4	912.1	908.5	904.9	901.3	897.7	893.8
52.5°	868.3	867.6	867.0	866.3	865.7	863.4	859.6	855.7	851.9	848.0	844.6
55°	793.8	792.9	792.0	791.1	790.2	787.6	783.4	779.2	775.0	770.8	768.1
57.5°	715.2	714.7	714.3	713.8	713.3	711.3	707.7	704.2	700.7	697.1	693.6
60°	665.5	664.3	663.1	661.9	660.7	658.5	655.2	651.9	648.6	645.3	642.3
62.5°	613.7	612.7	611.8	610.8	609.9	608.0	605.1	602.3	599.5	596.7	593.4
65°	535.9	535.3	534.7	534.1	533.5	531.6	528.3	525.0	521.7	518.4	515.7
67.5°	460.6	459.3	458.1	456.8	455.6	453.7	451.2	448.8	446.3	443.9	441.6
70°	413.1	411.6	410.1	408.6	407.1	405.0	402.3	399.6	396.9	394.2	392.4
72.5°	361.3	360.2	359.2	358.2	357.2	355.8	354.1	352.3	350.6	348.8	346.8
75°	284.8	284.2	283.6	283.0	282.4	281.4	279.9	278.4	276.9	275.4	274.5
77.5°	214.4	214.1	213.9	213.7	213.4	212.9	212.0	211.2	210.4	209.5	209.0
80°	170.1	170.1	170.1	170.1	170.1	169.8	169.2	168.6	168.0	167.4	167.1
82.5°	131.2	130.7	130.3	129.8	129.3	129.0	128.9	128.8	128.6	128.5	128.0
85°	74.2	74.5	74.8	75.1	75.4	75.6	75.6	75.6	75.6	75.6	75.3
87.5°	29.4	29.8	30.2	30.6	31.0	31.3	31.4	31.6	31.7	31.8	32.1
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°	28.1	29.6	31.0	32.5	33.9	35.7	38.0	40.2	42.4	44.6	46.3
95°	75.5	76.0	76.6	77.1	77.6	79.1	81.7	84.3	86.9	89.5	91.3
97.5°	125.5	125.7	125.9	126.1	126.3	128.2	131.8	135.3	138.9	142.5	144.2
100°	162.7	162.7	162.7	162.7	162.7	164.4	167.7	171.1	174.4	177.8	180.1
102.5°	202.7	203.7	204.7	205.8	206.8	208.2	209.9	211.6	213.3	215.0	217.5
105°	264.9	266.2	267.5	268.8	270.1	271.5	273.1	274.6	276.2	277.7	279.3
107.5°	333.7	335.0	336.3	337.6	338.9	340.1	341.3	342.5	343.7	344.9	345.7
110°	381.2	382.4	383.7	385.0	386.3	387.3	388.1	388.9	389.7	390.4	391.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	429.5	430.2	430.8	431.5	432.2	433.0	434.0	435.0	435.9	436.9	437.3
115°	500.8	501.9	502.9	503.9	505.0	505.7	506.3	506.8	507.3	507.8	507.6
117.5°	572.4	572.9	573.4	573.8	574.3	574.7	575.2	575.7	576.1	576.6	576.8
120°	617.0	618.3	619.6	620.9	622.2	623.0	623.2	623.5	623.8	624.0	624.0
122.5°	665.4	665.9	666.3	666.8	667.2	667.8	668.5	669.2	669.8	670.5	670.3
125°	730.9	732.5	734.0	735.6	737.1	738.0	738.3	738.5	738.8	739.1	738.5
127.5°	800.7	801.5	802.4	803.3	804.2	804.8	805.1	805.4	805.7	806.0	805.7
130°	842.5	843.8	845.1	846.4	847.6	848.6	849.1	849.6	850.1	850.6	850.4
132.5°	884.3	886.4	888.6	890.7	892.8	893.8	893.7	893.6	893.5	893.4	893.1
135°	950.6	952.1	953.7	955.2	956.8	957.7	957.9	958.2	958.4	958.7	958.7
137.5°	1012.8	1014.3	1015.8	1017.3	1018.8	1019.9	1020.4	1021.0	1021.6	1022.1	1022.4
140°	1052.8	1054.1	1055.4	1056.7	1058.0	1059.0	1059.8	1060.6	1061.3	1062.1	1062.6
142.5°	1092.8	1093.9	1095.0	1096.0	1097.1	1098.2	1099.1	1100.1	1101.1	1102.1	1102.4
145°	1151.6	1152.6	1153.7	1154.7	1155.7	1156.6	1157.4	1158.2	1158.9	1159.7	1159.7
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1211.9
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4	1706.4
2.5°	1701.4	1703.8	1706.2	1707.3	1707.1	1706.8	1706.6	1706.4
5°	1692.9	1695.6	1698.3	1699.5	1699.2	1698.9	1698.6	1698.3
7.5°	1675.7	1678.4	1681.0	1682.2	1681.9	1681.6	1681.3	1681.0
10°	1661.2	1663.6	1666.0	1667.1	1666.8	1666.5	1666.2	1665.9
12.5°	1641.9	1643.8	1645.7	1646.7	1646.6	1646.5	1646.5	1646.4
15°	1608.1	1609.6	1611.1	1611.9	1611.9	1611.9	1611.9	1611.9
17.5°	1568.9	1570.7	1572.6	1572.8	1571.3	1569.8	1568.3	1566.8
20°	1539.1	1541.2	1543.3	1543.6	1542.1	1540.6	1539.1	1537.6
22.5°	1505.3	1506.7	1508.0	1508.2	1507.2	1506.2	1505.2	1504.1
25°	1451.1	1451.7	1452.3	1452.1	1451.2	1450.3	1449.4	1448.5
27.5°	1394.2	1394.3	1394.5	1394.1	1393.2	1392.3	1391.4	1390.5
30°	1352.8	1352.2	1351.6	1350.9	1350.0	1349.1	1348.2	1347.3
32.5°	1310.8	1309.7	1308.7	1307.3	1305.7	1304.1	1302.4	1300.8
35°	1245.7	1244.2	1242.7	1240.8	1238.4	1236.0	1233.6	1231.2
37.5°	1177.3	1175.1	1172.9	1171.1	1169.7	1168.3	1166.9	1165.6
40°	1129.9	1127.2	1124.5	1122.7	1121.8	1120.9	1120.0	1119.1
42.5°	1082.9	1080.4	1078.0	1076.0	1074.7	1073.3	1071.9	1070.5
45°	1013.4	1009.8	1006.2	1003.9	1003.0	1002.1	1001.2	1000.3
47.5°	940.1	936.4	932.8	929.9	927.8	925.7	923.6	921.5
50°	889.9	886.0	882.1	879.1	877.0	874.9	872.8	870.7
52.5°	841.2	837.8	834.4	831.5	829.1	826.8	824.5	822.1
55°	765.4	762.7	760.0	757.6	755.5	753.4	751.3	749.2
57.5°	690.2	686.7	683.2	680.9	679.8	678.6	677.5	676.3
60°	639.3	636.3	633.3	630.7	628.6	626.5	624.4	622.3
62.5°	590.2	587.0	583.7	581.3	579.7	578.1	576.4	574.8
65°	513.0	510.3	507.6	505.6	504.4	503.2	502.0	500.8
67.5°	439.3	437.0	434.7	433.2	432.5	431.8	431.1	430.4
70°	390.6	388.8	387.0	385.5	384.3	383.1	381.9	380.7
72.5°	344.8	342.7	340.7	339.1	337.9	336.7	335.5	334.3
75°	273.6	272.7	271.8	270.7	269.5	268.3	267.1	265.9
77.5°	208.4	207.9	207.4	206.7	205.8	205.0	204.1	203.3
80°	166.8	166.5	166.2	165.7	165.1	164.5	163.9	163.3
82.5°	127.4	126.9	126.4	126.0	125.9	125.8	125.7	125.5
85°	75.0	74.7	74.4	73.9	73.3	72.7	72.1	71.5
87.5°	32.3	32.6	32.8	32.8	32.5	32.1	31.8	31.5
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	48.0	49.7	51.4	52.6	53.1	53.7	54.3	54.8
95°	93.1	94.9	96.7	97.9	98.4	98.9	99.4	99.9
97.5°	145.9	147.6	149.3	150.3	150.6	150.9	151.2	151.5
100°	182.4	184.8	187.1	188.5	189.0	189.5	190.1	190.6
102.5°	220.0	222.6	225.1	226.7	227.5	228.2	228.9	229.6
105°	280.8	282.4	283.9	285.1	285.9	286.6	287.4	288.2
107.5°	346.4	347.2	348.0	348.4	348.3	348.3	348.2	348.1
110°	392.0	392.8	393.5	393.8	393.5	393.3	393.0	392.8



TEST NUMBER: P333293

CATALOG NUMBER: S125DIP-S1090D1205U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	437.7	438.0	438.4	438.3	437.9	437.4	436.9	436.5
115°	507.3	507.0	506.8	506.5	506.3	506.0	505.7	505.5
117.5°	577.0	577.2	577.4	577.0	576.0	575.0	573.9	572.9
120°	624.0	624.0	624.0	623.5	622.5	621.4	620.4	619.4
122.5°	670.1	669.9	669.7	669.2	668.3	667.5	666.7	665.9
125°	738.0	737.5	737.0	736.6	736.4	736.1	735.8	735.6
127.5°	805.5	805.2	805.0	804.6	804.1	803.5	803.0	802.5
130°	850.1	849.8	849.6	849.2	848.7	848.2	847.6	847.1
132.5°	892.9	892.6	892.3	891.9	891.1	890.4	889.7	889.0
135°	958.7	958.7	958.7	958.2	957.1	956.1	955.1	954.0
137.5°	1022.8	1023.1	1023.4	1022.9	1021.6	1020.3	1019.0	1017.7
140°	1063.1	1063.7	1064.2	1063.8	1062.5	1061.2	1059.9	1058.6
142.5°	1102.7	1103.0	1103.3	1102.8	1101.5	1100.3	1099.0	1097.7
145°	1159.7	1159.7	1159.7	1159.3	1158.6	1157.8	1157.0	1156.2
147.5°	1212.6	1213.2	1213.8	1213.2	1211.5	1209.7	1208.0	1206.2
150°	1245.7	1245.7	1245.7	1245.5	1244.9	1244.4	1243.9	1243.4
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1275.9	1275.0	1274.1
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)