

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: P333453

Luminaire Tested: **S125DIW-S1090D1340U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333453
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: S125DIW-S1090D1340U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9095.1 lumens
Efficiency: N/A
Efficacy: 130.3 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

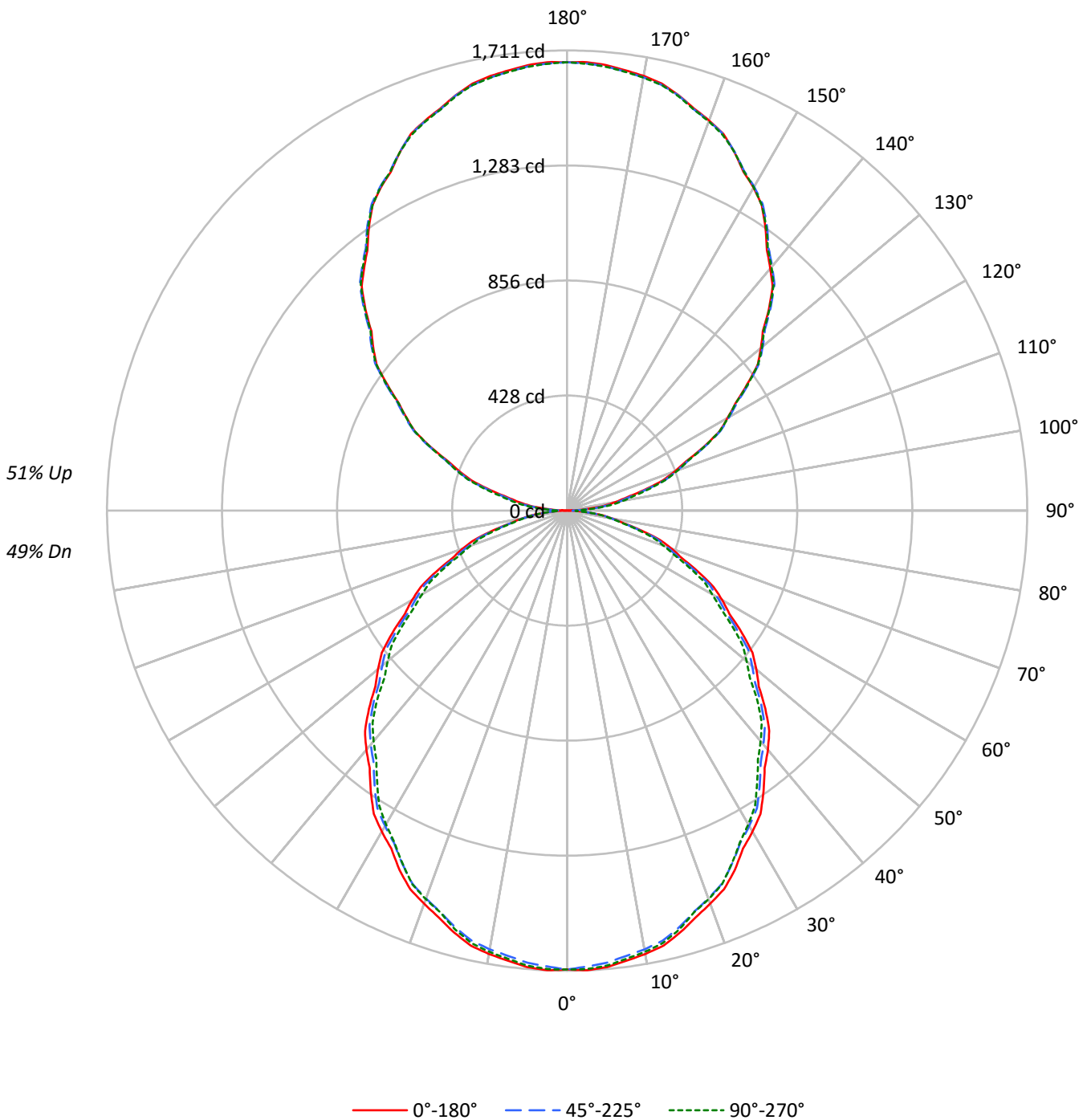
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49					49			
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41					41			
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34					34			
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29					29			
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25					25			
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22					22			
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19					19			
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17					17			
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15					15			
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14					14			
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12					12			

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	1.8
10°-20°	454.5	5.0
20°-30°	671.0	7.4
30°-40°	783.0	8.6
40°-50°	786.4	8.6
50°-60°	690.3	7.6
60°-70°	514.4	5.7
70°-80°	294.1	3.2
80°-90°	89.2	1.0
90°-100°	111.6	1.2
100°-110°	329.7	3.6
110°-120°	558.4	6.1
120°-130°	734.9	8.1
130°-140°	823.5	9.1
140°-150°	807.1	8.9
150°-160°	677.9	7.5
160°-170°	450.6	5.0
170°-180°	157.7	1.7
0°-30°	1286.4	14.1
0°-40°	2069.4	22.8
0°-60°	3546.2	39.0
0°-90°	4443.9	48.9
90°-120°	999.7	11.0
90°-150°	3365.1	37.0
90°-180°	4651.0	51.1
0°-180°	9095.1	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	12	21	27	31	9
95°	84	88	100	109	112	90
105°	296	302	310	318	322	316
115°	559	564	567	566	564	553
125°	816	823	825	822	821	730
135°	1061	1068	1070	1070	1065	818
145°	1286	1291	1295	1294	1291	803
155°	1471	1471	1472	1477	1471	677
165°	1599	1597	1598	1603	1596	451
175°	1663	1658	1658	1665	1656	158
180°	1667	1667	1667	1667	1667	



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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	29.9	30.3	30.8	31.3	31.6	31.7	31.9	32.1	32.2	32.5
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.8	22.2
92.5°	31.4	33.0	34.6	36.2	37.8	39.9	42.4	44.9	47.3	49.8	51.7
95°	84.3	84.9	85.5	86.0	86.6	88.4	91.2	94.1	97.0	99.9	101.9
97.5°	140.1	140.3	140.6	140.8	141.0	143.1	147.1	151.1	155.1	159.0	160.9
100°	181.6	181.6	181.6	181.6	181.6	183.5	187.2	191.0	194.7	198.5	201.1
102.5°	226.2	227.4	228.5	229.7	230.8	232.4	234.3	236.2	238.1	240.0	242.8
105°	295.8	297.2	298.6	300.1	301.5	303.1	304.8	306.6	308.3	310.0	311.8
107.5°	372.5	374.0	375.4	376.9	378.3	379.7	381.0	382.3	383.7	385.0	385.9
110°	425.5	426.9	428.4	429.8	431.2	432.4	433.3	434.1	435.0	435.8	436.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	479.4	480.2	480.9	481.7	482.4	483.4	484.4	485.5	486.6	487.7	488.1
115°	559.1	560.2	561.4	562.5	563.7	564.6	565.1	565.7	566.3	566.9	566.6
117.5°	639.0	639.5	640.0	640.5	641.1	641.6	642.1	642.6	643.1	643.7	643.9
120°	688.8	690.2	691.7	693.1	694.6	695.4	695.7	696.0	696.3	696.6	696.6
122.5°	742.8	743.3	743.8	744.3	744.8	745.5	746.2	747.0	747.7	748.5	748.2
125°	815.9	817.6	819.4	821.1	822.8	823.8	824.1	824.4	824.7	825.0	824.4
127.5°	893.7	894.7	895.7	896.7	897.7	898.3	898.7	899.0	899.4	899.7	899.4
130°	940.4	941.9	943.3	944.8	946.2	947.2	947.8	948.4	948.9	949.5	949.2
132.5°	987.1	989.5	991.9	994.2	996.6	997.7	997.6	997.5	997.4	997.3	997.0
135°	1061.1	1062.8	1064.5	1066.3	1068.0	1069.0	1069.3	1069.6	1069.9	1070.2	1070.2
137.5°	1130.6	1132.3	1134.0	1135.6	1137.3	1138.4	1139.1	1139.7	1140.4	1141.0	1141.3
140°	1175.2	1176.7	1178.1	1179.6	1181.0	1182.1	1183.0	1183.9	1184.7	1185.6	1186.2
142.5°	1219.9	1221.1	1222.3	1223.5	1224.7	1225.8	1226.9	1228.0	1229.1	1230.2	1230.6
145°	1285.5	1286.6	1287.8	1288.9	1290.1	1291.1	1292.0	1292.8	1293.7	1294.6	1294.6
147.5°	1346.2	1346.8	1347.5	1348.1	1348.7	1349.4	1350.1	1350.8	1351.5	1352.2	1352.9
150°	1386.7	1386.4	1386.1	1385.8	1385.5	1385.9	1387.1	1388.3	1389.4	1390.6	1390.6
152.5°	1419.9	1420.3	1420.7	1421.1	1421.5	1421.9	1422.4	1422.8	1423.3	1423.8	1424.5
155°	1471.0	1471.0	1471.0	1471.0	1471.0	1471.1	1471.4	1471.7	1472.0	1472.3	1473.4
157.5°	1516.6	1516.0	1515.4	1514.7	1514.1	1513.9	1514.2	1514.5	1514.8	1515.1	1516.2
160°	1543.6	1542.8	1541.9	1541.0	1540.2	1539.9	1540.2	1540.5	1540.7	1541.0	1542.2
162.5°	1567.5	1566.9	1566.2	1565.6	1565.0	1564.7	1564.7	1564.8	1564.8	1564.9	1566.3
165°	1599.4	1598.8	1598.2	1597.7	1597.1	1597.0	1597.2	1597.5	1597.8	1598.1	1599.3
167.5°	1626.4	1625.2	1624.1	1622.9	1621.8	1621.2	1621.2	1621.2	1621.2	1621.2	1622.9
170°	1640.9	1639.8	1638.6	1637.5	1636.3	1635.7	1635.7	1635.7	1635.7	1635.7	1637.5
172.5°	1651.3	1650.1	1649.0	1647.8	1646.7	1646.1	1646.1	1646.1	1646.1	1646.1	1647.8
175°	1663.0	1661.8	1660.7	1659.5	1658.4	1657.8	1657.8	1657.8	1657.8	1657.8	1659.5
177.5°	1668.9	1668.0	1667.1	1666.2	1665.2	1664.7	1664.4	1664.2	1664.0	1663.7	1665.1
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9



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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°	32.8	33.1	33.4	33.4	33.1	32.8	32.5	32.1
90°	23.6	25.1	26.5	27.7	28.5	29.4	30.3	31.1
92.5°	53.6	55.5	57.4	58.7	59.3	60.0	60.6	61.2
95°	103.9	105.9	108.0	109.2	109.8	110.4	111.0	111.6
97.5°	162.8	164.7	166.6	167.8	168.1	168.5	168.8	169.2
100°	203.7	206.2	208.8	210.4	211.0	211.6	212.2	212.7
102.5°	245.6	248.4	251.3	253.1	253.9	254.7	255.5	256.3
105°	313.5	315.2	316.9	318.2	319.1	320.0	320.8	321.7
107.5°	386.7	387.6	388.5	388.9	388.8	388.7	388.7	388.6
110°	437.6	438.4	439.3	439.6	439.3	439.0	438.7	438.4



TEST NUMBER: P333453

CATALOG NUMBER: S125DIW-S1090D1340U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	488.5	488.9	489.3	489.3	488.8	488.3	487.7	487.2
115°	566.3	566.0	565.7	565.4	565.1	564.8	564.6	564.3
117.5°	644.1	644.3	644.6	644.1	643.0	641.8	640.7	639.5
120°	696.6	696.6	696.6	696.0	694.8	693.7	692.5	691.4
122.5°	748.0	747.8	747.5	747.0	746.0	745.1	744.2	743.3
125°	823.8	823.3	822.7	822.3	822.0	821.7	821.4	821.1
127.5°	899.1	898.8	898.6	898.1	897.6	897.0	896.4	895.8
130°	948.9	948.7	948.4	947.9	947.4	946.8	946.2	945.6
132.5°	996.7	996.4	996.1	995.6	994.8	993.9	993.1	992.3
135°	1070.2	1070.2	1070.2	1069.6	1068.4	1067.3	1066.1	1065.0
137.5°	1141.7	1142.0	1142.4	1141.8	1140.4	1138.9	1137.5	1136.1
140°	1186.8	1187.3	1187.9	1187.5	1186.0	1184.6	1183.2	1181.7
142.5°	1230.9	1231.3	1231.6	1231.1	1229.6	1228.2	1226.7	1225.3
145°	1294.6	1294.6	1294.6	1294.1	1293.3	1292.4	1291.5	1290.7
147.5°	1353.5	1354.2	1354.9	1354.3	1352.3	1350.4	1348.4	1346.5
150°	1390.6	1390.6	1390.6	1390.3	1389.7	1389.1	1388.5	1388.0
152.5°	1425.1	1425.8	1426.5	1426.4	1425.3	1424.3	1423.2	1422.2
155°	1474.6	1475.7	1476.9	1476.7	1475.3	1473.9	1472.4	1471.0
157.5°	1517.4	1518.5	1519.7	1519.3	1517.4	1515.5	1513.6	1511.7
160°	1543.3	1544.5	1545.6	1545.5	1544.1	1542.6	1541.2	1539.7
162.5°	1567.7	1569.0	1570.4	1570.3	1568.6	1566.9	1565.3	1563.6
165°	1600.4	1601.6	1602.7	1602.4	1600.7	1599.0	1597.2	1595.5
167.5°	1624.7	1626.4	1628.1	1628.1	1626.3	1624.5	1622.7	1620.9
170°	1639.2	1640.9	1642.6	1642.5	1640.5	1638.5	1636.4	1634.4
172.5°	1649.6	1651.3	1653.0	1653.0	1651.2	1649.4	1647.6	1645.8
175°	1661.2	1663.0	1664.7	1664.5	1662.5	1660.5	1658.5	1656.5
177.5°	1666.5	1667.9	1669.3	1669.2	1667.5	1665.9	1664.3	1662.7
180°	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9	1666.9

(END OF REPORT)