

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: P333284

Luminaire Tested: **S125DIP-S1090D1035U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333284
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-S1090D1035U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8022.8 lumens
Efficiency: N/A
Efficacy: 132.6 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

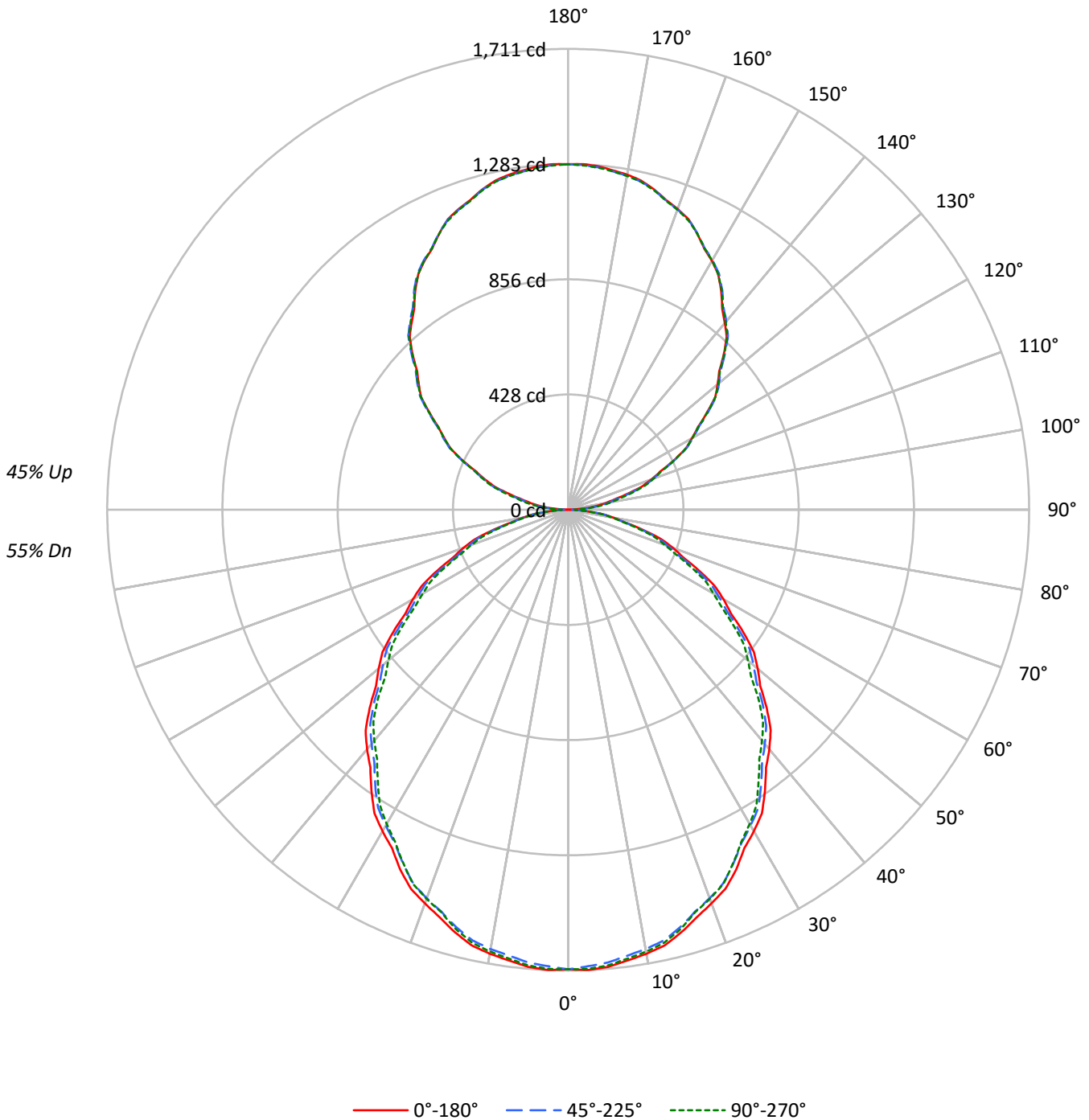
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																				
1	99	95	91	87	92	88	85	81	76	73	71	64	62	61	54	53	51	46																				
2	90	83	76	71	83	77	71	67	66	62	59	56	53	51	47	45	43	39																				
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33																				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28																				
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	28	24																				
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24	21																				
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22	19																				
8	55	42	34	29	51	40	32	28	35	29	25	30	25	22	26	22	19	17																				
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17	15																				
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	18	16	14																				

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	2.0
10°-20°	454.5	5.7
20°-30°	671.0	8.4
30°-40°	783.0	9.8
40°-50°	786.4	9.8
50°-60°	690.3	8.6
60°-70°	514.4	6.4
70°-80°	294.1	3.7
80°-90°	88.4	1.1
90°-100°	85.9	1.1
100°-110°	253.7	3.2
110°-120°	429.8	5.4
120°-130°	565.6	7.0
130°-140°	633.8	7.9
140°-150°	621.1	7.7
150°-160°	521.7	6.5
160°-170°	346.8	4.3
170°-180°	121.4	1.5
0°-30°	1286.4	16.0
0°-40°	2069.4	25.8
0°-60°	3546.2	44.2
0°-90°	4443.0	55.4
90°-120°	769.4	9.6
90°-150°	2589.9	32.3
90°-180°	3580.0	44.6
0°-180°	8022.8	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	9	16	21	24	8
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°	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	29.7	30.1	30.4	30.8	31.0	31.1	31.1	31.2	31.3	31.5
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°	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°	31.7	31.9	32.2	32.1	31.8	31.4	31.1	30.7
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: P333284

CATALOG NUMBER: S125DIP-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)