

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: P333283

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333283  
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: S125DIP-S1090D1035U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8579.2 lumens  
Efficiency: N/A  
Efficacy: 141.8 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

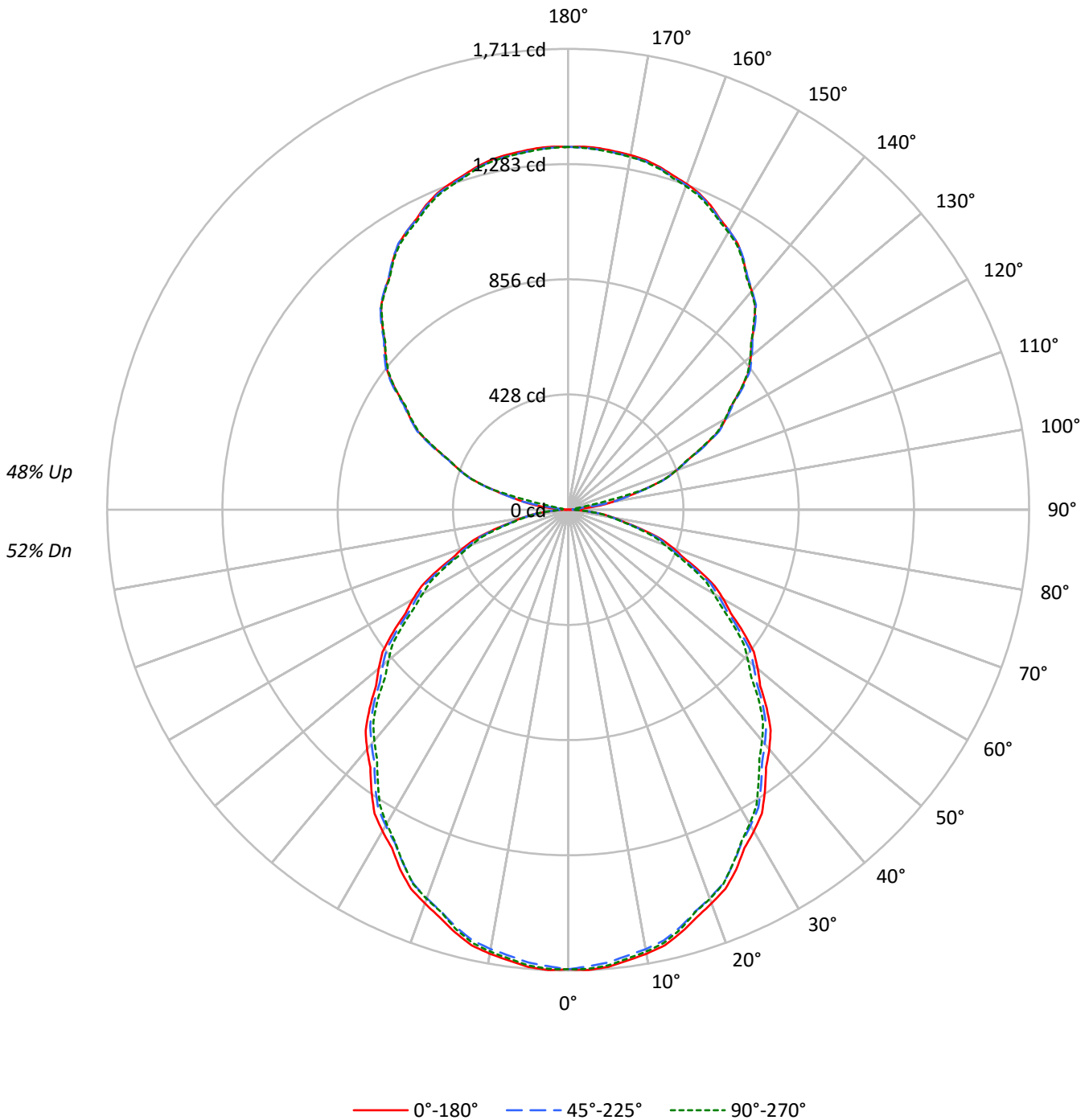
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**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	59		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	65	59	75	67	60	55	57	52	48		48	44	41		40	37	35	31
4	75	64	56	50	69	59	52	47	51	45	41		43	39	35		35	32	30	26
5	68	57	49	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		32	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	47	36	29	24	31	25	22		27	22	19		22	19	17	14
10	47	35	28	23	44	33	26	22	29	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



TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**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	9.2
50°-60°	690.3	8.0
60°-70°	514.4	6.0
70°-80°	294.1	3.4
80°-90°	88.4	1.0
90°-100°	49.0	0.6
100°-110°	301.7	3.5
110°-120°	547.1	6.4
120°-130°	702.2	8.2
130°-140°	755.2	8.8
140°-150°	708.9	8.3
150°-160°	573.4	6.7
160°-170°	370.9	4.3
170°-180°	127.9	1.5
0°-30°	1286.4	15.0
0°-40°	2069.4	24.1
0°-60°	3546.2	41.3
0°-90°	4443.0	51.8
90°-120°	897.7	10.5
90°-150°	3064.0	35.7
90°-180°	4136.0	48.2
0°-180°	8579.2	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	9	16	21	24	6
95°	57	52	16	21	21	73
105°	294	297	298	297	296	311
115°	551	556	557	553	547	546
125°	784	790	791	787	784	700
135°	978	983	982	979	974	753
145°	1133	1135	1135	1136	1130	708
155°	1248	1243	1244	1246	1239	575
165°	1317	1311	1312	1317	1310	372
175°	1347	1341	1342	1349	1341	128
180°	1347	1347	1347	1347	1347	



TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**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°	15.4	14.1	12.9	11.6	10.4	10.5	11.8	13.2	14.6	16.0	17.1
95°	56.9	56.2	55.6	54.9	54.3	49.7	41.3	32.8	24.4	16.0	17.1
97.5°	118.8	120.0	121.2	122.4	123.6	115.9	99.2	82.5	65.8	49.1	42.9
100°	166.7	167.4	168.1	168.7	169.4	170.2	171.1	172.0	172.8	173.7	140.7
102.5°	215.5	216.3	217.2	218.0	218.8	219.5	220.1	220.6	221.1	221.7	215.4
105°	293.5	294.4	295.3	296.2	297.1	297.5	297.5	297.5	297.5	297.5	297.5
107.5°	374.6	374.6	374.6	374.6	374.6	374.8	375.3	375.7	376.2	376.6	376.7
110°	427.3	427.3	427.3	427.3	427.3	427.6	428.0	428.5	428.9	429.3	428.7



TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	476.9	477.4	477.9	478.5	479.0	479.4	479.7	479.9	480.2	480.5	479.6
115°	551.2	552.3	553.4	554.5	555.6	556.3	556.5	556.7	556.9	557.1	556.3
117.5°	628.0	628.0	627.9	627.9	627.9	628.3	629.1	629.9	630.8	631.6	630.5
120°	676.0	675.7	675.5	675.3	675.1	675.3	676.0	676.6	677.3	678.0	677.5
122.5°	718.3	719.1	720.0	720.8	721.7	722.2	722.6	722.9	723.2	723.5	723.0
125°	783.8	785.3	786.9	788.5	790.0	790.8	790.8	790.8	790.8	790.8	789.9
127.5°	846.3	847.4	848.5	849.6	850.7	851.2	851.1	851.0	850.8	850.7	850.2
130°	884.6	885.8	886.9	888.0	889.1	889.7	890.0	890.2	890.4	890.6	890.0
132.5°	923.0	924.3	925.6	926.8	928.1	928.5	928.0	927.6	927.1	926.6	926.4
135°	977.5	978.8	980.2	981.5	982.8	983.3	982.8	982.4	981.9	981.5	981.0
137.5°	1027.6	1028.8	1029.9	1031.1	1032.2	1032.6	1032.2	1031.8	1031.4	1031.0	1031.1
140°	1060.4	1060.8	1061.3	1061.7	1062.1	1062.3	1062.0	1061.8	1061.6	1061.4	1061.8
142.5°	1089.9	1090.2	1090.5	1090.7	1091.0	1091.3	1091.6	1091.9	1092.2	1092.5	1092.6
145°	1133.3	1133.7	1134.1	1134.6	1135.0	1135.3	1135.3	1135.3	1135.3	1135.3	1135.5
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.3
150°	1195.2	1194.7	1194.3	1193.8	1193.4	1193.4	1193.8	1194.3	1194.7	1195.2	1195.6
152.5°	1218.3	1217.4	1216.4	1215.4	1214.4	1214.2	1214.6	1215.0	1215.5	1215.9	1216.4
155°	1248.1	1246.8	1245.4	1244.1	1242.8	1242.3	1242.8	1243.2	1243.6	1244.1	1244.8
157.5°	1271.0	1270.2	1269.5	1268.7	1267.9	1267.5	1267.5	1267.6	1267.6	1267.7	1268.4
160°	1287.0	1285.7	1284.4	1283.0	1281.7	1281.1	1281.4	1281.6	1281.8	1282.0	1282.9
162.5°	1299.8	1298.5	1297.1	1295.8	1294.5	1293.9	1294.1	1294.4	1294.6	1294.8	1296.1
165°	1317.0	1315.6	1314.3	1313.0	1311.7	1311.1	1311.3	1311.5	1311.8	1312.0	1313.3
167.5°	1329.8	1328.4	1327.0	1325.6	1324.3	1323.7	1323.9	1324.1	1324.3	1324.6	1326.2
170°	1336.9	1335.4	1333.8	1332.3	1330.7	1330.1	1330.3	1330.5	1330.7	1331.0	1332.7
172.5°	1341.7	1340.2	1338.6	1337.1	1335.5	1335.0	1335.3	1335.7	1336.1	1336.5	1338.1
175°	1346.9	1345.6	1344.3	1342.9	1341.6	1341.1	1341.3	1341.5	1341.7	1341.9	1343.7
177.5°	1349.3	1348.3	1347.2	1346.1	1345.1	1344.6	1344.8	1345.0	1345.2	1345.3	1346.6
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9



TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**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°	18.2	19.3	20.4	21.1	21.4	21.7	22.1	22.4
95°	18.2	19.3	20.4	21.0	21.0	21.0	21.0	21.0
97.5°	36.6	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.6	74.6	41.5	24.5	23.6	22.7	21.9	21.0
102.5°	209.1	202.9	196.6	186.0	170.9	155.8	140.7	125.6
105°	297.5	297.5	297.5	297.4	297.2	297.0	296.8	296.5
107.5°	376.7	376.8	376.8	376.5	375.8	375.2	374.5	373.8
110°	428.0	427.3	426.7	426.5	426.7	426.9	427.1	427.3





TEST NUMBER: P333283

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	478.8	477.9	477.1	476.5	476.2	475.9	475.6	475.3
115°	555.4	554.5	553.6	552.5	551.2	549.8	548.5	547.2
117.5°	629.3	628.2	627.0	626.1	625.6	625.0	624.4	623.8
120°	677.1	676.6	676.2	675.4	674.3	673.2	672.1	671.0
122.5°	722.6	722.2	721.7	720.8	719.6	718.3	717.0	715.7
125°	789.0	788.1	787.2	786.5	785.8	785.1	784.5	783.8
127.5°	849.7	849.2	848.7	847.7	846.0	844.4	842.8	841.1
130°	889.3	888.6	888.0	887.1	886.0	884.9	883.8	882.6
132.5°	926.3	926.2	926.0	925.4	924.3	923.2	922.1	921.0
135°	980.6	980.2	979.7	978.8	977.5	976.2	974.8	973.5
137.5°	1031.2	1031.3	1031.4	1030.8	1029.7	1028.5	1027.4	1026.2
140°	1062.3	1062.7	1063.1	1062.7	1061.4	1060.0	1058.7	1057.4
142.5°	1092.7	1092.8	1092.9	1092.3	1090.9	1089.6	1088.3	1086.9
145°	1135.7	1135.9	1136.1	1135.6	1134.3	1132.9	1131.6	1130.3
147.5°	1172.5	1172.8	1173.1	1172.4	1170.8	1169.2	1167.6	1166.0
150°	1196.1	1196.5	1196.9	1196.3	1194.5	1192.7	1190.9	1189.2
152.5°	1216.8	1217.3	1217.7	1217.1	1215.5	1213.9	1212.3	1210.7
155°	1245.4	1246.1	1246.8	1246.2	1244.4	1242.6	1240.9	1239.1
157.5°	1269.1	1269.8	1270.5	1270.0	1268.2	1266.4	1264.6	1262.9
160°	1283.8	1284.7	1285.6	1285.1	1283.4	1281.6	1279.8	1278.0
162.5°	1297.3	1298.5	1299.8	1299.4	1297.5	1295.5	1293.6	1291.6
165°	1314.6	1316.0	1317.3	1317.1	1315.3	1313.5	1311.8	1310.0
167.5°	1327.8	1329.4	1331.0	1330.8	1328.8	1326.8	1324.8	1322.8
170°	1334.5	1336.3	1338.1	1337.9	1335.9	1334.0	1332.0	1330.0
172.5°	1339.7	1341.3	1342.9	1342.7	1340.7	1338.7	1336.7	1334.8
175°	1345.5	1347.3	1349.0	1348.9	1346.9	1344.9	1342.9	1340.9
177.5°	1347.8	1349.1	1350.3	1350.2	1348.8	1347.4	1346.0	1344.5
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9

(END OF REPORT)