

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: P333248

Luminaire Tested: **S125DIP-S850D1205U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333248
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-S850D1205U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 7586.0 lumens
Efficiency: N/A
Efficacy: 133.3 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

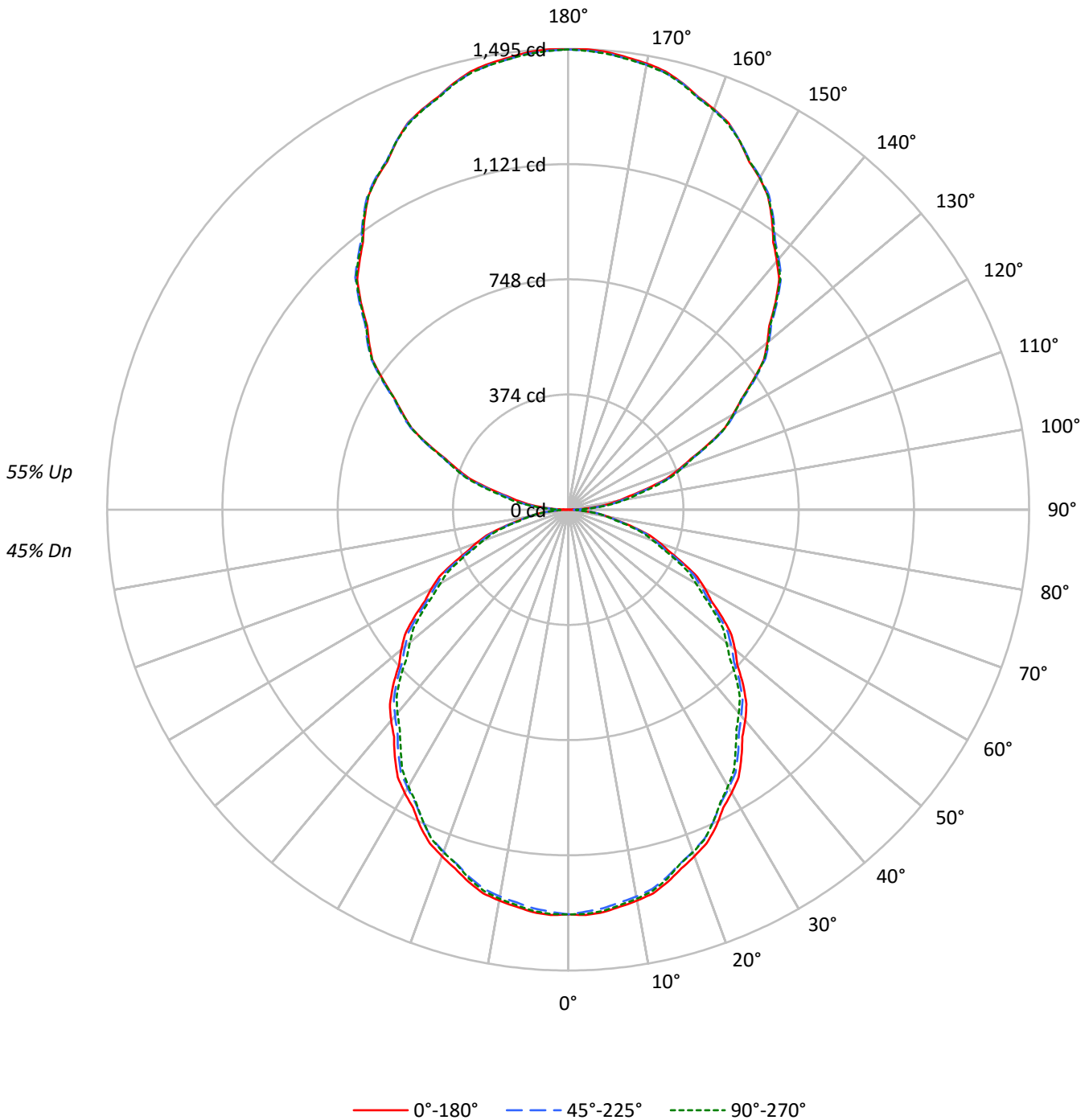
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	45	44	43	38
2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	37	32
3	80	71	63	58	73	65	59	54	54	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	28	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8478	8478	8478
5°	8497	8416	8470
10°	8445	8357	8405
15°	8354	8256	8291
20°	8223	8115	8130
25°	8082	7948	7941
30°	7908	7768	7730
35°	7722	7574	7468
40°	7530	7363	7259
45°	7323	7172	7029
50°	7095	6939	6731
55°	6876	6677	6490
60°	6613	6412	6185
65°	6301	6094	5888
70°	6001	5727	5531
75°	5467	5288	5105
80°	4868	4790	4675
85°	4231	4313	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.6
10°-20°	349.6	4.6
20°-30°	516.2	6.8
30°-40°	602.4	7.9
40°-50°	605.0	8.0
50°-60°	531.1	7.0
60°-70°	395.7	5.2
70°-80°	226.3	3.0
80°-90°	69.1	0.9
90°-100°	100.0	1.3
100°-110°	295.3	3.9
110°-120°	500.2	6.6
120°-130°	658.3	8.7
130°-140°	737.7	9.7
140°-150°	723.0	9.5
150°-160°	607.3	8.0
160°-170°	403.7	5.3
170°-180°	141.3	1.9
0°-30°	989.7	13.0
0°-40°	1592.1	21.0
0°-60°	2728.2	36.0
0°-90°	3419.3	45.1
90°-120°	895.6	11.8
90°-150°	3014.6	39.7
90°-180°	4167.0	54.9
0°-180°	7586.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1311	1308	1298	1307	1306	124
15°	1249	1246	1235	1240	1240	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	961	955	947	612
45°	802	797	785	773	770	618
55°	611	607	593	584	576	545
65°	412	410	399	390	385	409
75°	219	217	212	209	205	234
85°	57	58	58	57	55	64
90°	1	10	19	24	28	7
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	



TEST NUMBER: P333248

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1316.1	1315.5	1315.0	1314.4	1313.8	1312.6	1310.8	1309.0	1307.1	1305.3	1307.1
5°	1310.7	1310.2	1309.7	1309.3	1308.8	1307.4	1305.1	1302.8	1300.5	1298.2	1300.3
7.5°	1298.6	1298.2	1297.7	1297.2	1296.8	1295.3	1292.7	1290.2	1287.7	1285.1	1287.1
10°	1287.8	1287.4	1286.9	1286.4	1286.0	1284.5	1281.9	1279.4	1276.9	1274.3	1276.2
12.5°	1274.5	1273.7	1272.9	1272.0	1271.2	1269.6	1267.3	1264.9	1262.5	1260.2	1261.7
15°	1249.4	1248.7	1248.0	1247.3	1246.6	1245.0	1242.5	1239.9	1237.4	1234.8	1236.0
17.5°	1220.5	1219.5	1218.5	1217.5	1216.5	1214.6	1212.0	1209.4	1206.7	1204.1	1205.5
20°	1196.4	1196.0	1195.5	1195.0	1194.6	1192.8	1189.8	1186.8	1183.8	1180.8	1182.5
22.5°	1172.3	1171.5	1170.7	1169.8	1169.0	1167.2	1164.4	1161.5	1158.7	1155.9	1157.0
25°	1134.1	1133.0	1131.8	1130.6	1129.5	1127.4	1124.4	1121.4	1118.4	1115.4	1115.9
27.5°	1089.4	1088.8	1088.1	1087.4	1086.7	1084.8	1081.7	1078.6	1075.5	1072.4	1072.5
30°	1060.4	1059.7	1059.0	1058.3	1057.6	1055.5	1052.1	1048.6	1045.1	1041.7	1041.2
32.5°	1028.8	1027.7	1026.7	1025.6	1024.6	1022.5	1019.4	1016.3	1013.2	1010.1	1009.3
35°	979.4	978.4	977.5	976.6	975.7	973.6	970.4	967.1	963.9	960.7	959.5
37.5°	928.1	926.9	925.7	924.6	923.4	921.3	918.3	915.2	912.2	909.2	907.4
40°	893.2	892.0	890.9	889.7	888.5	886.4	883.1	879.9	876.7	873.4	871.4
42.5°	855.8	854.8	853.8	852.9	851.9	849.8	846.6	843.3	840.1	836.9	835.0
45°	801.8	800.8	799.9	799.0	798.1	796.2	793.5	790.7	787.9	785.2	782.4
47.5°	743.6	743.7	743.7	743.7	743.8	742.2	738.8	735.5	732.2	728.9	726.0
50°	706.2	705.5	704.8	704.1	703.5	701.7	699.0	696.2	693.4	690.6	687.6
52.5°	668.0	667.5	667.0	666.5	666.0	664.2	661.3	658.3	655.4	652.4	649.8
55°	610.7	610.0	609.3	608.6	607.9	605.9	602.7	599.5	596.2	593.0	590.9
57.5°	550.2	549.9	549.5	549.1	548.8	547.2	544.5	541.8	539.0	536.3	533.6
60°	512.0	511.1	510.2	509.2	508.3	506.6	504.0	501.5	499.0	496.4	494.1
62.5°	472.1	471.4	470.7	469.9	469.2	467.7	465.6	463.4	461.2	459.0	456.6
65°	412.3	411.8	411.4	410.9	410.5	409.0	406.4	403.9	401.3	398.8	396.7
67.5°	354.4	353.4	352.4	351.4	350.5	349.0	347.2	345.3	343.4	341.5	339.7
70°	317.8	316.6	315.5	314.3	313.2	311.6	309.5	307.4	305.3	303.3	301.9
72.5°	277.9	277.1	276.3	275.6	274.8	273.7	272.4	271.0	269.7	268.4	266.8
75°	219.1	218.7	218.2	217.8	217.3	216.5	215.3	214.2	213.0	211.9	211.2
77.5°	164.9	164.7	164.6	164.4	164.2	163.8	163.1	162.5	161.8	161.2	160.8
80°	130.9	130.9	130.9	130.9	130.9	130.6	130.2	129.7	129.2	128.8	128.6
82.5°	100.9	100.6	100.2	99.8	99.5	99.2	99.1	99.1	99.0	98.9	98.5
85°	57.1	57.4	57.6	57.8	58.0	58.2	58.2	58.2	58.2	58.2	57.9
87.5°	22.7	23.1	23.5	23.9	24.3	24.6	24.8	25.0	25.1	25.3	25.6
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



TEST NUMBER: P333248

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-F1

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



TEST NUMBER: P333248

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1309.0	1310.8	1312.6	1313.5	1313.3	1313.1	1312.9	1312.7
5°	1302.4	1304.4	1306.5	1307.4	1307.2	1307.0	1306.7	1306.5
7.5°	1289.2	1291.2	1293.2	1294.1	1293.9	1293.7	1293.4	1293.2
10°	1278.0	1279.9	1281.7	1282.5	1282.3	1282.0	1281.8	1281.6
12.5°	1263.1	1264.6	1266.1	1266.8	1266.8	1266.7	1266.7	1266.6
15°	1237.2	1238.3	1239.5	1240.0	1240.0	1240.0	1240.0	1240.0
17.5°	1207.0	1208.4	1209.8	1210.0	1208.8	1207.7	1206.5	1205.4
20°	1184.1	1185.7	1187.3	1187.5	1186.4	1185.2	1184.1	1182.9
22.5°	1158.0	1159.1	1160.2	1160.3	1159.5	1158.7	1157.9	1157.2
25°	1116.3	1116.8	1117.3	1117.1	1116.5	1115.8	1115.1	1114.4
27.5°	1072.6	1072.7	1072.8	1072.5	1071.8	1071.1	1070.4	1069.7
30°	1040.8	1040.3	1039.8	1039.3	1038.6	1037.9	1037.2	1036.5
32.5°	1008.4	1007.6	1006.8	1005.7	1004.5	1003.2	1002.0	1000.8
35°	958.4	957.2	956.1	954.6	952.7	950.9	949.0	947.2
37.5°	905.7	904.0	902.3	900.9	899.9	898.8	897.8	896.7
40°	869.3	867.2	865.1	863.7	863.0	862.4	861.7	861.0
42.5°	833.1	831.2	829.3	827.8	826.8	825.7	824.6	823.6
45°	779.6	776.8	774.1	772.3	771.7	771.0	770.3	769.6
47.5°	723.2	720.4	717.6	715.4	713.8	712.2	710.5	708.9
50°	684.6	681.6	678.6	676.3	674.7	673.1	671.5	669.9
52.5°	647.2	644.5	641.9	639.7	637.9	636.1	634.3	632.5
55°	588.9	586.8	584.7	582.9	581.2	579.6	578.0	576.4
57.5°	531.0	528.3	525.6	523.8	522.9	522.1	521.2	520.3
60°	491.8	489.5	487.2	485.2	483.6	482.0	480.4	478.8
62.5°	454.1	451.6	449.1	447.2	446.0	444.7	443.5	442.2
65°	394.7	392.6	390.5	389.0	388.1	387.2	386.2	385.3
67.5°	338.0	336.2	334.5	333.3	332.8	332.2	331.6	331.1
70°	300.5	299.1	297.7	296.6	295.6	294.7	293.8	292.9
72.5°	265.2	263.7	262.1	260.8	259.9	259.0	258.1	257.1
75°	210.5	209.8	209.1	208.3	207.4	206.4	205.5	204.6
77.5°	160.4	159.9	159.5	159.0	158.3	157.7	157.1	156.4
80°	128.3	128.1	127.9	127.5	127.1	126.6	126.1	125.7
82.5°	98.0	97.6	97.2	97.0	96.9	96.8	96.7	96.6
85°	57.7	57.5	57.2	56.9	56.4	56.0	55.5	55.0
87.5°	25.8	26.1	26.4	26.4	26.2	25.9	25.7	25.5
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: P333248

CATALOG NUMBER: S125DIP-S850D1205U835-4F0-1E-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)