

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: P333238

Luminaire Tested: **S125DIP-S850D1035U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333238  
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-S850D1035U835-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 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: 7555.0 lumens  
Efficiency: N/A  
Efficacy: 145.3 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

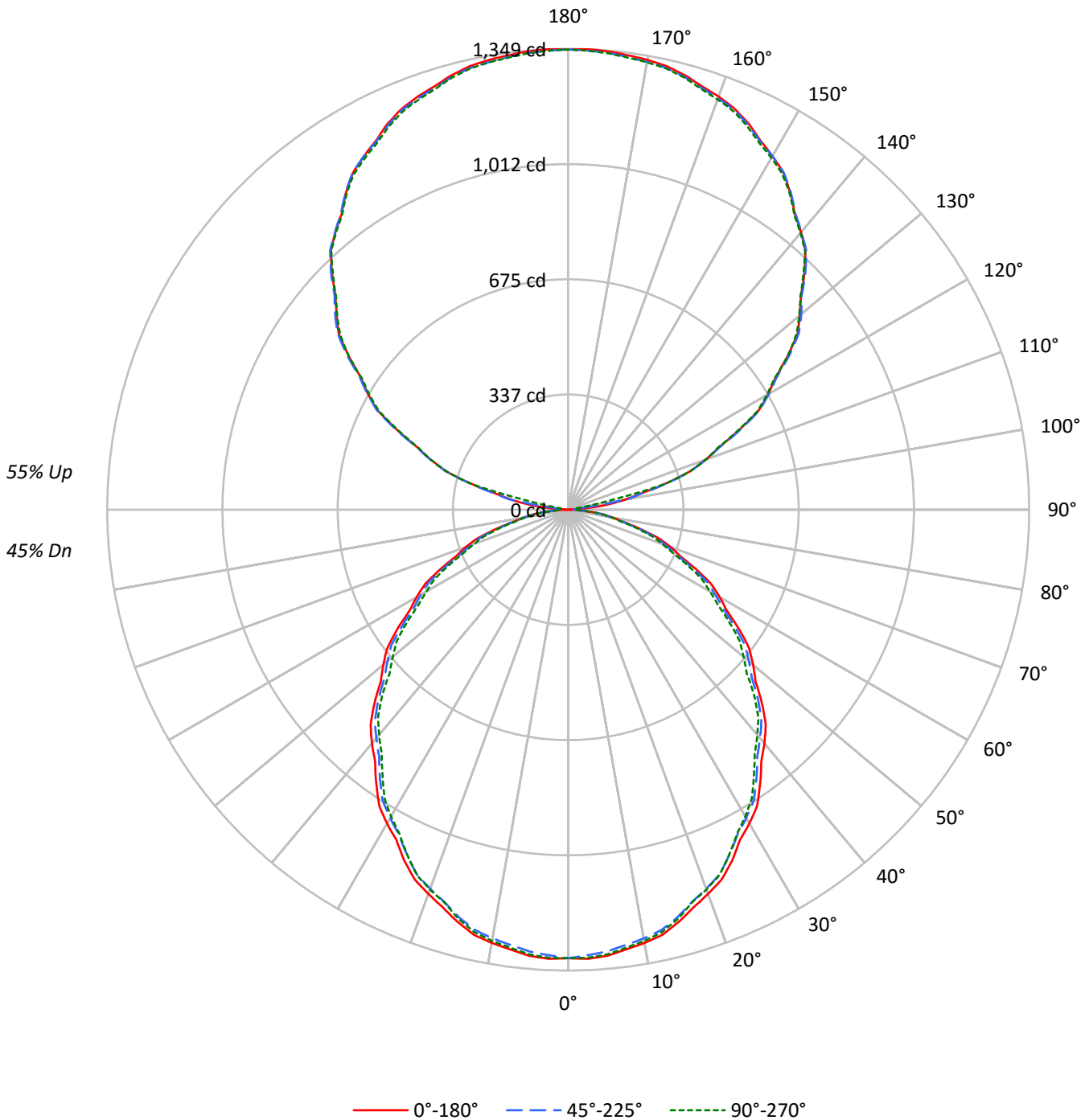
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45																				
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	46	45	44	38																				
2	88	81	74	69	80	74	69	64	62	58	55	51	48	45	40	38	37	32																				
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	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	29	26	23	20																				
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18																				
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16																				
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	21	18	20	17	15	13																				
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	8.0
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°	68.6	0.9
90°-100°	49.0	0.6
100°-110°	301.7	4.0
110°-120°	547.1	7.2
120°-130°	702.2	9.3
130°-140°	755.2	10.0
140°-150°	708.9	9.4
150°-160°	573.4	7.6
160°-170°	370.9	4.9
170°-180°	127.9	1.7
0°-30°	989.7	13.1
0°-40°	1592.1	21.1
0°-60°	2728.2	36.1
0°-90°	3418.8	45.3
90°-120°	897.7	11.9
90°-150°	3064.0	40.6
90°-180°	4136.0	54.7
0°-180°	7555.0	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	9	16	21	24	5
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	



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**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°	22.6	23.0	23.3	23.7	24.1	24.3	24.4	24.5	24.7	24.8	25.0
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



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**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



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**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°	25.2	25.5	25.7	25.7	25.4	25.2	25.0	24.7
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: P333238

CATALOG NUMBER: S125DIP-S850D1035U835-4F0-1E-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)