

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: P333257-935

Luminaire Tested: **S125DIP-S1090D365U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333257-935  
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-S1090D365U935-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4915.1 lumens  
Efficiency: N/A  
Efficacy: 113.0 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: Semi-Direct

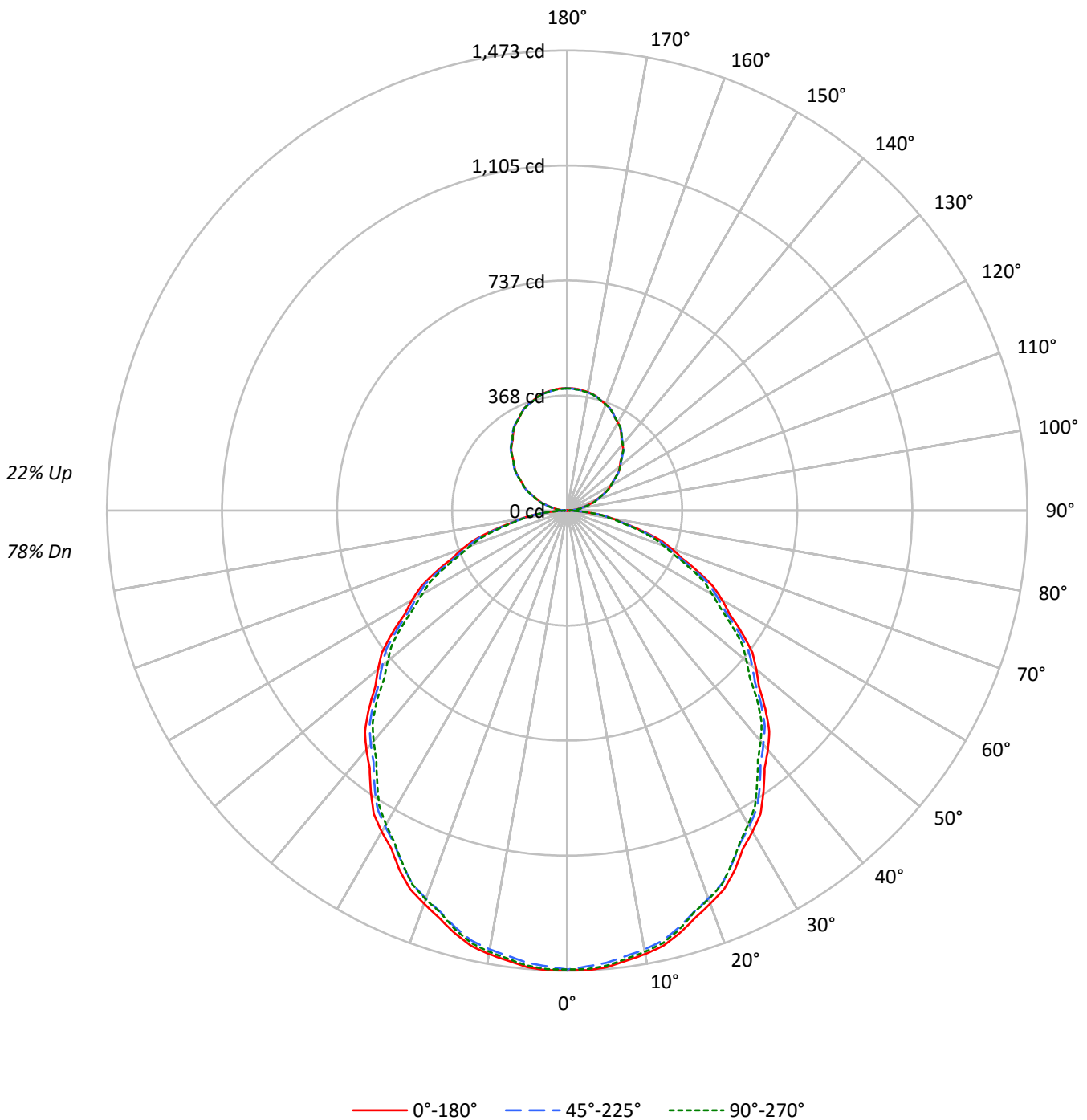
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82	78																				
1	104	99	95	92	99	95	91	88	87	84	81	79	77	75	72	70	69	65																				
2	95	87	80	75	90	83	77	72	76	71	67	69	66	62	63	60	58	55																				
3	86	76	69	62	82	73	66	60	67	61	57	61	57	53	56	52	49	46																				
4	79	68	59	53	75	65	57	51	60	53	48	55	50	45	50	46	42	40																				
5	73	60	52	46	69	58	50	44	53	47	42	49	44	39	45	41	37	34																				
6	67	54	46	40	64	52	44	39	48	42	37	45	39	35	41	36	33	30																				
7	62	49	41	35	59	47	40	34	44	37	32	41	35	31	38	33	29	27																				
8	58	45	37	31	55	43	36	30	40	34	29	37	32	27	35	30	26	24																				
9	54	41	33	28	51	40	32	27	37	31	26	34	29	25	32	27	24	22																				
10	51	38	30	25	48	37	30	25	34	28	24	32	26	23	30	25	21	20																				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9489	9489	9489
5°	9510	9419	9479
10°	9452	9353	9406
15°	9349	9240	9279
20°	9203	9082	9099
25°	9045	8896	8888
30°	8850	8694	8651
35°	8642	8476	8358
40°	8427	8241	8123
45°	8195	8026	7867
50°	7941	7766	7533
55°	7696	7473	7264
60°	7401	7177	6921
65°	7051	6820	6589
70°	6717	6409	6190
75°	6119	5916	5712
80°	5449	5359	5229
85°	4735	4824	4565



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.5	2.8
10°-20°	391.3	8.0
20°-30°	577.8	11.8
30°-40°	674.2	13.7
40°-50°	677.1	13.8
50°-60°	594.4	12.1
60°-70°	442.9	9.0
70°-80°	253.2	5.2
80°-90°	74.5	1.5
90°-100°	26.2	0.5
100°-110°	77.3	1.6
110°-120°	131.0	2.7
120°-130°	172.4	3.5
130°-140°	193.2	3.9
140°-150°	189.3	3.9
150°-160°	159.0	3.2
160°-170°	105.7	2.2
170°-180°	37.0	0.8
0°-30°	1107.6	22.5
0°-40°	1781.8	36.3
0°-60°	3053.3	62.1
0°-90°	3823.9	77.8
90°-120°	234.5	4.8
90°-150°	789.5	16.1
90°-180°	1091.0	22.2
0°-180°	4915.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1469	1469	1469	1469	1469	
5°	1467	1464	1453	1463	1462	139
15°	1398	1394	1382	1388	1388	394
25°	1269	1263	1248	1250	1247	584
35°	1096	1091	1075	1069	1060	685
45°	897	892	879	865	861	691
55°	684	679	664	653	645	610
65°	461	458	446	436	431	458
75°	245	243	237	234	229	261
85°	64	65	65	64	62	71
90°	0	3	5	6	7	5
95°	20	21	23	26	26	21
105°	69	71	73	74	76	74
115°	131	132	133	133	132	130
125°	191	193	194	193	193	171
135°	249	251	251	251	250	192
145°	302	303	304	304	303	188
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1472.9	1472.3	1471.6	1471.0	1470.4	1469.0	1467.0	1464.9	1462.8	1460.8	1462.8
5°	1466.9	1466.4	1465.9	1465.3	1464.8	1463.3	1460.7	1458.1	1455.5	1452.9	1455.3
7.5°	1453.4	1452.9	1452.3	1451.8	1451.3	1449.6	1446.7	1443.9	1441.1	1438.2	1440.5
10°	1441.3	1440.8	1440.3	1439.8	1439.2	1437.5	1434.7	1431.8	1429.0	1426.2	1428.2
12.5°	1426.4	1425.5	1424.5	1423.6	1422.7	1420.9	1418.2	1415.7	1413.0	1410.3	1412.0
15°	1398.3	1397.5	1396.7	1395.9	1395.2	1393.4	1390.5	1387.7	1384.8	1382.0	1383.3
17.5°	1366.0	1364.9	1363.7	1362.5	1361.4	1359.3	1356.4	1353.5	1350.6	1347.6	1349.2
20°	1339.0	1338.5	1338.0	1337.5	1337.0	1335.0	1331.6	1328.3	1324.9	1321.5	1323.4
22.5°	1312.0	1311.1	1310.2	1309.2	1308.3	1306.2	1303.1	1299.9	1296.8	1293.7	1294.9
25°	1269.3	1268.0	1266.7	1265.4	1264.1	1261.8	1258.4	1255.1	1251.7	1248.4	1248.9
27.5°	1219.3	1218.5	1217.7	1216.9	1216.2	1214.1	1210.6	1207.1	1203.7	1200.2	1200.3
30°	1186.7	1185.9	1185.2	1184.4	1183.6	1181.3	1177.4	1173.5	1169.7	1165.8	1165.3
32.5°	1151.4	1150.2	1149.0	1147.8	1146.7	1144.4	1140.8	1137.4	1133.9	1130.5	1129.5
35°	1096.1	1095.0	1094.0	1093.0	1091.9	1089.6	1086.0	1082.4	1078.7	1075.1	1073.8
37.5°	1038.6	1037.3	1036.0	1034.7	1033.5	1031.1	1027.7	1024.3	1020.9	1017.5	1015.5
40°	999.6	998.3	997.0	995.7	994.5	992.0	988.3	984.7	981.1	977.5	975.2
42.5°	957.8	956.7	955.6	954.5	953.4	951.1	947.4	943.8	940.2	936.6	934.4
45°	897.3	896.3	895.3	894.2	893.2	891.1	888.0	884.9	881.8	878.7	875.6
47.5°	832.2	832.2	832.3	832.4	832.4	830.6	826.9	823.1	819.4	815.7	812.5
50°	790.4	789.6	788.8	788.1	787.3	785.3	782.2	779.1	776.0	772.9	769.6
52.5°	747.6	747.0	746.5	745.9	745.4	743.4	740.1	736.8	733.5	730.1	727.2
55°	683.5	682.7	681.9	681.1	680.4	678.1	674.5	670.9	667.3	663.7	661.3
57.5°	615.8	615.4	615.0	614.6	614.2	612.4	609.3	606.3	603.3	600.2	597.2
60°	573.0	572.0	570.9	569.9	568.9	567.0	564.1	561.3	558.4	555.6	553.0
62.5°	528.4	527.5	526.8	525.9	525.1	523.5	521.0	518.6	516.2	513.8	510.9
65°	461.4	460.9	460.4	459.9	459.3	457.7	454.9	452.0	449.2	446.3	444.0
67.5°	396.6	395.5	394.4	393.3	392.3	390.6	388.5	386.4	384.3	382.2	380.2
70°	355.7	354.4	353.1	351.8	350.5	348.7	346.4	344.1	341.7	339.4	337.9
72.5°	311.1	310.1	309.3	308.4	307.5	306.3	304.9	303.3	301.9	300.3	298.6
75°	245.2	244.7	244.2	243.7	243.1	242.3	241.0	239.7	238.4	237.1	236.3
77.5°	184.6	184.3	184.2	184.0	183.7	183.3	182.5	181.8	181.2	180.4	179.9
80°	146.5	146.5	146.5	146.5	146.5	146.2	145.7	145.2	144.6	144.1	143.9
82.5°	113.0	112.5	112.2	111.8	111.3	111.1	111.0	110.9	110.7	110.6	110.2
85°	63.9	64.1	64.4	64.7	64.9	65.1	65.1	65.1	65.1	65.1	64.8
87.5°	25.1	25.3	25.4	25.5	25.6	25.6	25.5	25.4	25.2	25.1	25.2
90°	0.3	0.9	1.4	1.9	2.5	3.0	3.4	4.0	4.4	4.9	5.2
92.5°	7.4	7.7	8.1	8.5	8.9	9.4	9.9	10.5	11.1	11.7	12.1
95°	19.8	19.9	20.1	20.1	20.3	20.8	21.4	22.0	22.7	23.4	23.9
97.5°	32.9	32.9	33.0	33.1	33.1	33.6	34.5	35.5	36.3	37.3	37.8
100°	42.6	42.6	42.6	42.6	42.6	43.0	43.9	44.8	45.7	46.6	47.2
102.5°	53.0	53.4	53.6	53.9	54.2	54.5	54.9	55.4	55.9	56.3	57.0
105°	69.4	69.7	70.1	70.4	70.8	71.1	71.5	71.9	72.3	72.8	73.1
107.5°	87.4	87.7	88.1	88.4	88.8	89.1	89.4	89.7	90.0	90.3	90.5
110°	99.8	100.1	100.5	100.8	101.2	101.4	101.6	101.9	102.0	102.3	102.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	112.4	112.6	112.8	113.0	113.1	113.4	113.7	113.9	114.2	114.4	114.5
115°	131.1	131.4	131.7	132.0	132.2	132.4	132.6	132.7	132.9	133.0	132.9
117.5°	149.9	150.0	150.2	150.2	150.4	150.5	150.7	150.8	150.8	151.0	151.0
120°	161.6	162.0	162.3	162.6	162.9	163.2	163.2	163.2	163.3	163.4	163.4
122.5°	174.3	174.4	174.5	174.6	174.7	174.9	175.0	175.2	175.4	175.6	175.6
125°	191.4	191.8	192.3	192.6	193.0	193.3	193.4	193.4	193.5	193.6	193.4
127.5°	209.7	209.9	210.2	210.3	210.6	210.8	210.9	210.9	211.0	211.0	211.0
130°	220.6	220.9	221.3	221.6	222.0	222.2	222.3	222.5	222.7	222.7	222.7
132.5°	231.6	232.1	232.7	233.2	233.8	234.1	234.0	234.0	234.0	233.9	233.8
135°	248.9	249.3	249.8	250.1	250.6	250.8	250.9	250.9	251.0	251.1	251.1
137.5°	265.3	265.6	266.0	266.4	266.8	267.1	267.3	267.3	267.5	267.7	267.8
140°	275.7	276.0	276.4	276.7	277.1	277.3	277.5	277.8	277.9	278.1	278.3
142.5°	286.2	286.5	286.7	287.1	287.3	287.6	287.8	288.1	288.3	288.6	288.7
145°	301.6	301.9	302.1	302.4	302.6	302.9	303.1	303.3	303.5	303.7	303.7
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.4
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2	1469.2
2.5°	1464.9	1467.0	1469.0	1470.0	1469.8	1469.6	1469.4	1469.2
5°	1457.6	1459.9	1462.2	1463.3	1463.0	1462.8	1462.5	1462.2
7.5°	1442.8	1445.1	1447.3	1448.4	1448.1	1447.9	1447.6	1447.3
10°	1430.3	1432.4	1434.4	1435.4	1435.1	1434.9	1434.6	1434.3
12.5°	1413.7	1415.3	1416.9	1417.8	1417.7	1417.6	1417.6	1417.6
15°	1384.6	1385.9	1387.2	1387.8	1387.8	1387.8	1387.8	1387.8
17.5°	1350.8	1352.4	1354.0	1354.2	1352.9	1351.6	1350.3	1349.0
20°	1325.2	1327.0	1328.8	1329.0	1327.7	1326.5	1325.2	1323.9
22.5°	1296.1	1297.3	1298.4	1298.6	1297.7	1296.8	1296.0	1295.0
25°	1249.4	1249.9	1250.4	1250.3	1249.5	1248.7	1247.9	1247.2
27.5°	1200.4	1200.5	1200.7	1200.3	1199.5	1198.8	1198.0	1197.2
30°	1164.8	1164.2	1163.7	1163.1	1162.4	1161.6	1160.8	1160.0
32.5°	1128.6	1127.7	1126.8	1125.6	1124.2	1122.8	1121.4	1120.0
35°	1072.5	1071.3	1070.0	1068.3	1066.3	1064.2	1062.1	1060.1
37.5°	1013.7	1011.8	1009.9	1008.3	1007.1	1005.9	1004.7	1003.6
40°	972.8	970.5	968.2	966.6	965.9	965.1	964.3	963.5
42.5°	932.4	930.2	928.2	926.4	925.3	924.1	922.9	921.7
45°	872.5	869.4	866.3	864.4	863.6	862.8	862.0	861.3
47.5°	809.4	806.2	803.1	800.6	798.8	797.0	795.2	793.4
50°	766.2	762.8	759.5	756.9	755.1	753.3	751.5	749.7
52.5°	724.3	721.3	718.4	715.9	713.9	711.9	709.9	707.8
55°	659.0	656.7	654.4	652.3	650.5	648.7	646.9	645.1
57.5°	594.3	591.2	588.2	586.3	585.3	584.3	583.3	582.3
60°	550.4	547.9	545.3	543.0	541.2	539.4	537.6	535.8
62.5°	508.2	505.4	502.6	500.5	499.1	497.7	496.3	494.9
65°	441.7	439.4	437.0	435.3	434.3	433.3	432.2	431.2
67.5°	378.2	376.3	374.3	373.0	372.4	371.8	371.2	370.6
70°	336.3	334.8	333.2	331.9	330.9	329.8	328.8	327.8
72.5°	296.9	295.1	293.3	292.0	290.9	289.9	288.9	287.8
75°	235.6	234.8	234.0	233.1	232.0	231.0	230.0	228.9
77.5°	179.4	179.0	178.6	178.0	177.2	176.5	175.7	175.0
80°	143.6	143.4	143.1	142.7	142.2	141.6	141.1	140.6
82.5°	109.7	109.3	108.8	108.5	108.4	108.3	108.2	108.1
85°	64.6	64.3	64.1	63.6	63.1	62.6	62.1	61.6
87.5°	25.3	25.3	25.4	25.2	24.9	24.5	24.1	23.8
90°	5.5	5.9	6.2	6.5	6.7	6.9	7.1	7.3
92.5°	12.6	13.0	13.4	13.8	13.9	14.0	14.2	14.4
95°	24.4	24.9	25.3	25.7	25.7	25.9	26.0	26.2
97.5°	38.2	38.7	39.1	39.3	39.4	39.5	39.6	39.7
100°	47.8	48.4	49.0	49.3	49.5	49.7	49.8	49.9
102.5°	57.6	58.3	59.0	59.4	59.6	59.8	59.9	60.1
105°	73.5	74.0	74.4	74.6	74.8	75.1	75.3	75.5
107.5°	90.7	90.9	91.1	91.3	91.2	91.2	91.2	91.2
110°	102.6	102.9	103.1	103.1	103.1	103.0	102.9	102.9





TEST NUMBER: P333257-935

CATALOG NUMBER: S125DIP-S1090D365U935-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	114.6	114.7	114.8	114.8	114.7	114.5	114.4	114.3
115°	132.9	132.8	132.7	132.7	132.6	132.5	132.4	132.3
117.5°	151.1	151.2	151.2	151.1	150.8	150.6	150.3	150.0
120°	163.4	163.4	163.4	163.2	163.0	162.7	162.5	162.2
122.5°	175.5	175.4	175.4	175.2	175.0	174.8	174.6	174.4
125°	193.3	193.1	193.0	192.9	192.9	192.8	192.7	192.6
127.5°	210.9	210.9	210.8	210.7	210.6	210.4	210.3	210.2
130°	222.7	222.6	222.5	222.4	222.2	222.1	222.0	221.9
132.5°	233.8	233.8	233.7	233.6	233.3	233.2	233.0	232.8
135°	251.1	251.1	251.1	250.9	250.6	250.4	250.1	249.9
137.5°	267.9	267.9	268.0	267.9	267.5	267.2	266.8	266.5
140°	278.4	278.5	278.7	278.6	278.3	277.9	277.6	277.2
142.5°	288.8	288.9	289.0	288.8	288.4	288.1	287.8	287.5
145°	303.7	303.7	303.7	303.6	303.4	303.2	303.0	302.8
147.5°	317.5	317.7	317.9	317.7	317.3	316.8	316.3	315.9
150°	326.2	326.2	326.2	326.1	326.1	325.9	325.7	325.6
152.5°	334.3	334.5	334.7	334.6	334.4	334.2	333.9	333.6
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

(END OF REPORT)