

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: P333292-935

Luminaire Tested: **S125DIP-S1090D1205U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333292-935  
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-S1090D1205U935-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7971.1 lumens  
Efficiency: N/A  
Efficacy: 121.9 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

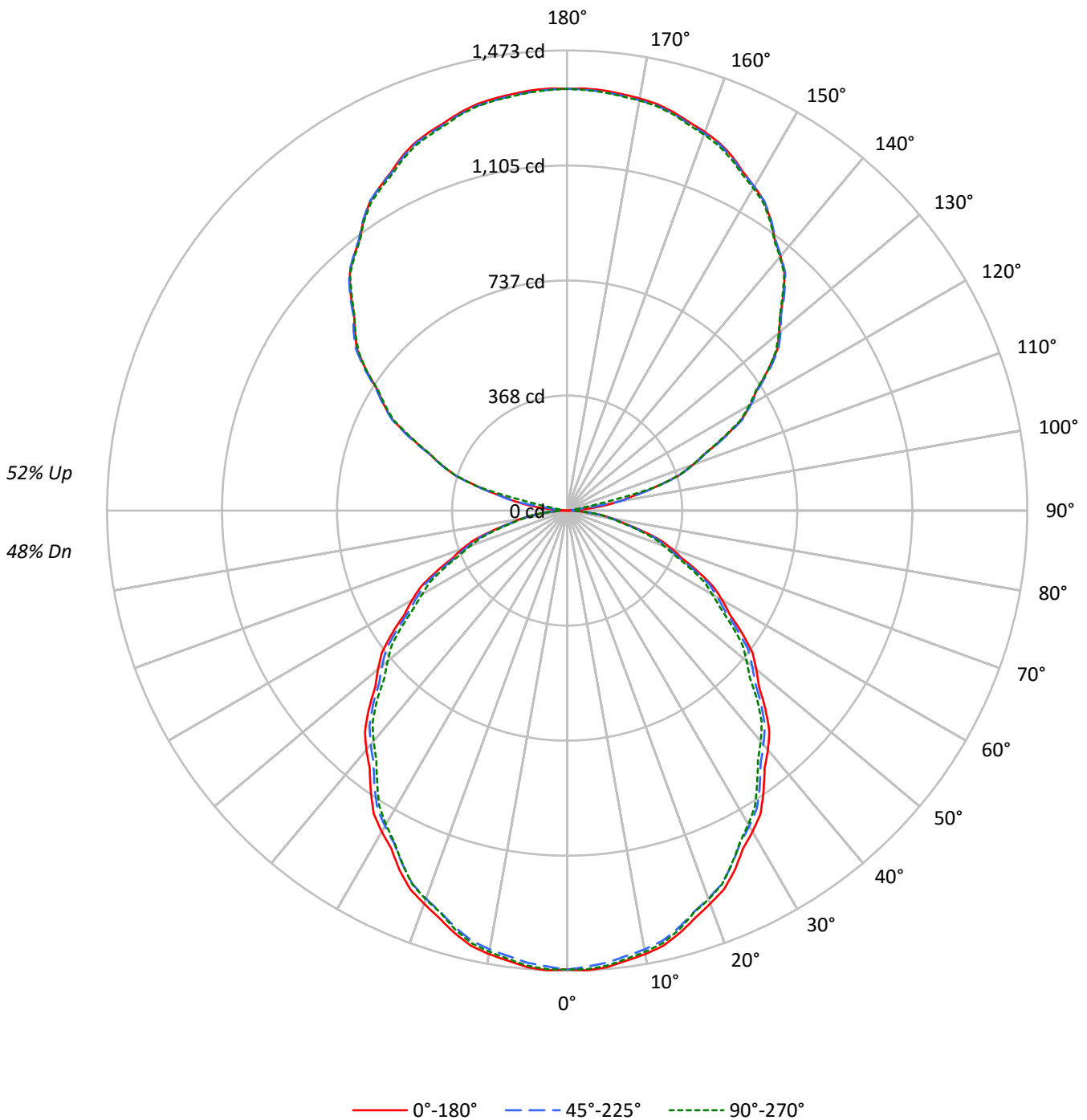
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82		68	68	68		54	54	54	48
1	97	93	89	86	89	86	82	79	72	70	67		59	58	56		48	47	46	40
2	89	81	75	70	81	75	69	65	63	59	56		52	49	47		42	40	38	34
3	81	71	64	58	74	66	59	54	56	51	47		46	43	40		37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40		41	37	34		33	30	28	24
5	68	56	48	42	62	52	45	39	44	39	34		37	33	29		30	27	25	21
6	62	50	42	36	57	47	39	34	40	34	30		33	29	26		27	24	22	19
7	58	45	37	32	53	42	35	30	36	30	26		30	26	23		25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23		28	23	20		23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21		25	21	18		21	18	15	13
10	47	34	27	22	43	32	26	21	28	22	19		23	19	16		20	16	14	12

**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	1.7
10°-20°	391.3	4.9
20°-30°	577.8	7.2
30°-40°	674.2	8.5
40°-50°	677.1	8.5
50°-60°	594.4	7.5
60°-70°	442.9	5.6
70°-80°	253.2	3.2
80°-90°	76.5	1.0
90°-100°	49.1	0.6
100°-110°	302.3	3.8
110°-120°	548.3	6.9
120°-130°	703.7	8.8
130°-140°	756.9	9.5
140°-150°	710.4	8.9
150°-160°	574.7	7.2
160°-170°	371.7	4.7
170°-180°	128.2	1.6
0°-30°	1107.6	13.9
0°-40°	1781.8	22.4
0°-60°	3053.3	38.3
0°-90°	3825.8	48.0
90°-120°	899.7	11.3
90°-150°	3070.7	38.5
90°-180°	4145.0	52.0
0°-180°	7971.1	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°	1	9	16	21	24	6
95°	57	52	16	21	21	73
105°	294	298	298	298	297	312
115°	552	557	558	554	548	547
125°	786	792	792	789	786	701
135°	980	985	984	981	976	755
145°	1136	1138	1138	1138	1133	710
155°	1251	1245	1247	1249	1242	576
165°	1320	1314	1315	1320	1313	373
175°	1350	1344	1345	1352	1344	128
180°	1350	1350	1350	1350	1350	



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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°	25.3	25.7	26.0	26.3	26.7	26.9	27.0	27.2	27.3	27.4	27.6
90°	1.0	2.8	4.6	6.4	8.1	9.8	11.4	12.9	14.5	16.0	17.1
92.5°	15.4	14.2	12.9	11.7	10.4	10.5	11.9	13.3	14.6	16.0	17.1
95°	57.0	56.4	55.7	55.0	54.3	49.9	41.3	32.9	24.5	16.0	17.1
97.5°	119.1	120.3	121.5	122.7	123.9	116.1	99.4	82.7	66.0	49.2	43.0
100°	167.1	167.8	168.4	169.1	169.8	170.6	171.4	172.4	173.2	174.1	140.9
102.5°	215.9	216.8	217.7	218.4	219.3	220.0	220.5	221.1	221.6	222.1	215.9
105°	294.2	295.1	295.9	296.9	297.7	298.2	298.2	298.2	298.2	298.2	298.2
107.5°	375.5	375.5	375.5	375.5	375.5	375.7	376.1	376.5	377.0	377.5	377.5
110°	428.3	428.3	428.3	428.3	428.3	428.5	429.0	429.4	429.8	430.2	429.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	477.9	478.5	479.0	479.5	480.0	480.4	480.7	481.0	481.2	481.5	480.7
115°	552.3	553.5	554.6	555.7	556.8	557.5	557.7	557.9	558.1	558.4	557.5
117.5°	629.4	629.4	629.3	629.3	629.2	629.6	630.5	631.3	632.1	633.0	631.9
120°	677.4	677.2	677.0	676.7	676.6	676.7	677.4	678.1	678.7	679.4	679.0
122.5°	719.9	720.7	721.5	722.4	723.2	723.8	724.1	724.4	724.8	725.0	724.6
125°	785.5	787.0	788.6	790.1	791.7	792.5	792.5	792.5	792.5	792.5	791.6
127.5°	848.2	849.3	850.3	851.4	852.6	853.1	852.9	852.8	852.6	852.6	852.0
130°	886.6	887.7	888.8	889.9	891.0	891.7	891.9	892.2	892.3	892.6	891.9
132.5°	925.0	926.3	927.6	928.8	930.1	930.6	930.1	929.5	929.1	928.6	928.5
135°	979.6	980.9	982.3	983.6	985.0	985.4	985.0	984.6	984.0	983.6	983.2
137.5°	1029.8	1031.0	1032.2	1033.3	1034.5	1034.8	1034.5	1034.1	1033.6	1033.3	1033.4
140°	1062.6	1063.2	1063.6	1064.0	1064.5	1064.5	1064.4	1064.1	1063.9	1063.7	1064.1
142.5°	1092.3	1092.5	1092.9	1093.1	1093.4	1093.6	1094.0	1094.2	1094.6	1094.9	1095.0
145°	1135.7	1136.2	1136.6	1137.0	1137.5	1137.7	1137.7	1137.7	1137.7	1137.7	1138.0
147.5°	1173.7	1173.6	1173.5	1173.5	1173.4	1173.5	1173.7	1174.0	1174.3	1174.6	1174.8
150°	1197.7	1197.3	1196.9	1196.4	1196.0	1196.0	1196.4	1196.9	1197.3	1197.7	1198.2
152.5°	1221.0	1220.0	1219.0	1218.1	1217.0	1216.8	1217.3	1217.7	1218.1	1218.6	1219.0
155°	1250.8	1249.5	1248.1	1246.8	1245.4	1245.0	1245.4	1245.9	1246.4	1246.8	1247.5
157.5°	1273.8	1273.0	1272.2	1271.4	1270.6	1270.2	1270.3	1270.3	1270.4	1270.4	1271.1
160°	1289.9	1288.5	1287.2	1285.8	1284.5	1283.9	1284.2	1284.4	1284.6	1284.8	1285.7
162.5°	1302.6	1301.3	1299.9	1298.6	1297.3	1296.8	1296.9	1297.2	1297.4	1297.6	1298.9
165°	1319.8	1318.5	1317.2	1315.9	1314.5	1314.0	1314.1	1314.4	1314.6	1314.8	1316.2
167.5°	1332.7	1331.3	1329.9	1328.5	1327.1	1326.5	1326.8	1327.0	1327.2	1327.5	1329.0
170°	1339.9	1338.3	1336.7	1335.2	1333.6	1333.0	1333.2	1333.4	1333.6	1333.9	1335.7
172.5°	1344.6	1343.1	1341.5	1340.0	1338.4	1337.8	1338.3	1338.7	1339.0	1339.5	1341.1
175°	1349.9	1348.5	1347.2	1345.8	1344.5	1343.9	1344.2	1344.5	1344.6	1344.9	1346.6
177.5°	1352.3	1351.2	1350.1	1349.1	1348.0	1347.6	1347.7	1347.9	1348.1	1348.2	1349.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9



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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°	27.8	28.1	28.2	28.2	28.0	27.6	27.4	27.1
90°	18.3	19.4	20.5	21.4	22.0	22.6	23.3	24.0
92.5°	18.3	19.4	20.5	21.2	21.4	21.8	22.1	22.4
95°	18.3	19.4	20.5	21.0	21.0	21.0	21.0	21.0
97.5°	36.7	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.9	74.7	41.6	24.5	23.7	22.8	21.9	21.0
102.5°	209.6	203.4	197.1	186.4	171.3	156.1	141.0	125.9
105°	298.2	298.2	298.2	298.1	297.8	297.6	297.4	297.2
107.5°	377.5	377.5	377.6	377.3	376.6	376.0	375.3	374.6
110°	429.0	428.3	427.6	427.4	427.6	427.8	428.1	428.3





TEST NUMBER: P333292-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	479.8	479.0	478.1	477.5	477.3	476.9	476.6	476.3
115°	556.6	555.7	554.8	553.7	552.3	551.0	549.7	548.4
117.5°	630.7	629.6	628.4	627.5	626.9	626.4	625.8	625.2
120°	678.6	678.1	677.7	676.9	675.8	674.7	673.6	672.4
122.5°	724.2	723.8	723.3	722.4	721.1	719.8	718.6	717.3
125°	790.7	789.8	788.9	788.2	787.5	786.9	786.2	785.5
127.5°	851.5	851.1	850.6	849.5	847.9	846.2	844.6	842.9
130°	891.2	890.5	889.9	889.0	887.9	886.8	885.7	884.6
132.5°	928.3	928.2	928.1	927.5	926.3	925.2	924.1	923.0
135°	982.7	982.3	981.9	980.9	979.6	978.3	977.0	975.6
137.5°	1033.5	1033.5	1033.6	1033.1	1031.9	1030.8	1029.6	1028.5
140°	1064.5	1065.0	1065.5	1065.0	1063.7	1062.4	1061.0	1059.7
142.5°	1095.1	1095.2	1095.3	1094.7	1093.3	1092.0	1090.6	1089.3
145°	1138.2	1138.4	1138.6	1138.1	1136.7	1135.4	1134.0	1132.7
147.5°	1175.1	1175.4	1175.6	1174.9	1173.4	1171.7	1170.2	1168.5
150°	1198.7	1199.1	1199.5	1198.9	1197.1	1195.3	1193.5	1191.8
152.5°	1219.4	1220.0	1220.4	1219.8	1218.1	1216.6	1215.0	1213.4
155°	1248.1	1248.8	1249.5	1248.9	1247.2	1245.4	1243.5	1241.8
157.5°	1271.9	1272.6	1273.2	1272.7	1270.9	1269.2	1267.4	1265.6
160°	1286.6	1287.5	1288.4	1288.0	1286.2	1284.4	1282.6	1280.8
162.5°	1300.1	1301.4	1302.6	1302.3	1300.3	1298.3	1296.4	1294.4
165°	1317.5	1318.9	1320.2	1319.9	1318.2	1316.4	1314.6	1312.9
167.5°	1330.7	1332.2	1333.9	1333.7	1331.6	1329.6	1327.7	1325.7
170°	1337.4	1339.2	1341.0	1340.8	1338.9	1336.9	1334.9	1332.8
172.5°	1342.6	1344.3	1345.8	1345.7	1343.7	1341.7	1339.6	1337.6
175°	1348.4	1350.2	1351.9	1351.9	1349.9	1347.9	1345.8	1343.8
177.5°	1350.7	1352.0	1353.2	1353.1	1351.8	1350.3	1348.8	1347.5
180°	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9	1349.9

(END OF REPORT)