

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: P333293-935

Luminaire Tested: **S125DIP-S1090D1205U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333293-935
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-S1090D1205U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 7413.4 lumens
Efficiency: N/A
Efficacy: 113.4 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

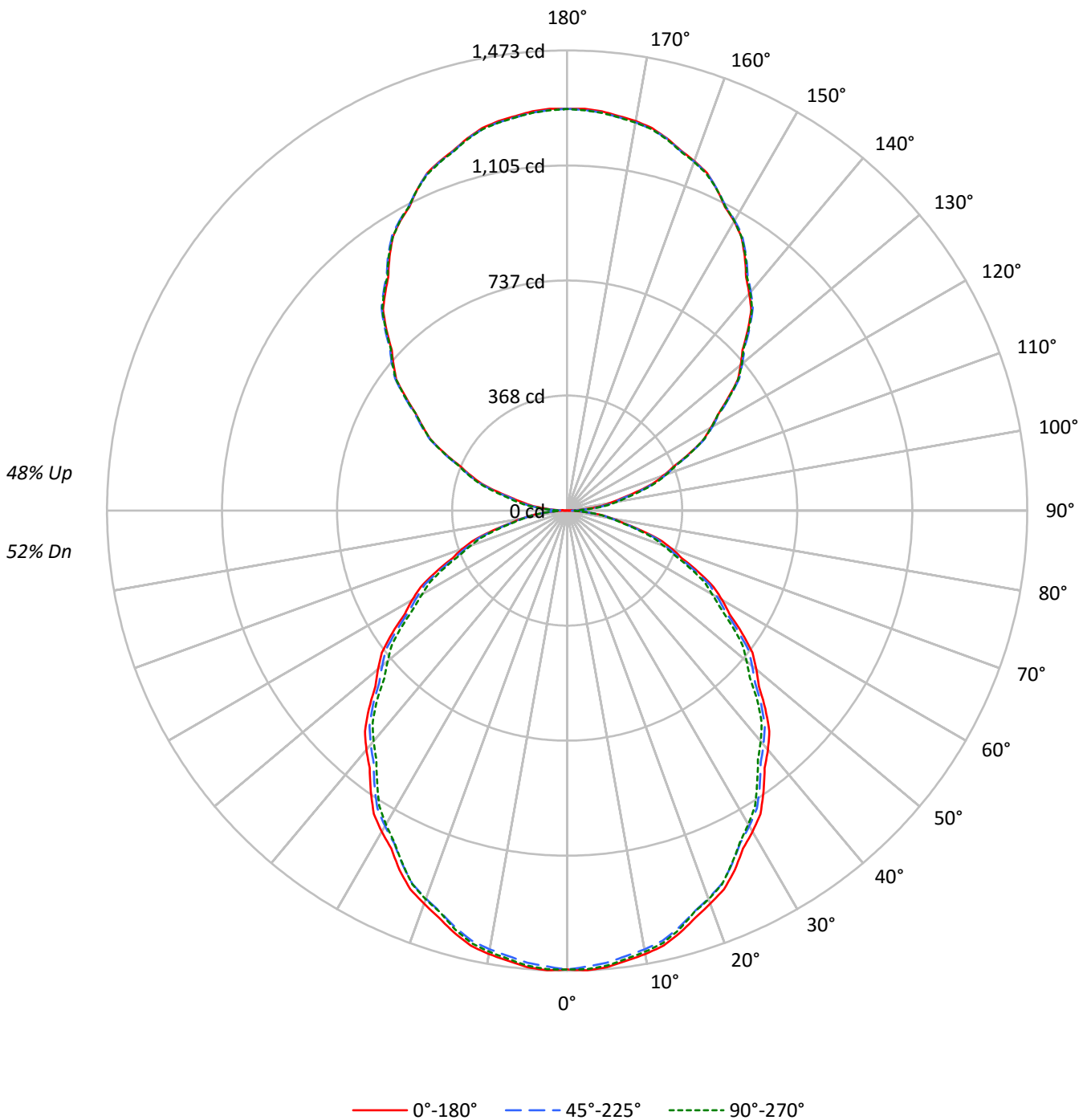
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	58	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	64	59	75	67	60	55	57	52	48	48	44	41	40	37	35	31
4	74	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26
5	68	57	48	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	31	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	46	36	29	24	31	25	22	27	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	25	20	17	21	17	15	13

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	1.9
10°-20°	391.3	5.3
20°-30°	577.8	7.8
30°-40°	674.2	9.1
40°-50°	677.1	9.1
50°-60°	594.4	8.0
60°-70°	442.9	6.0
70°-80°	253.2	3.4
80°-90°	76.5	1.0
90°-100°	86.1	1.2
100°-110°	254.3	3.4
110°-120°	430.7	5.8
120°-130°	566.8	7.6
130°-140°	635.1	8.6
140°-150°	622.5	8.4
150°-160°	522.8	7.1
160°-170°	347.5	4.7
170°-180°	121.6	1.6
0°-30°	1107.6	14.9
0°-40°	1781.8	24.0
0°-60°	3053.3	41.2
0°-90°	3825.8	51.6
90°-120°	771.1	10.4
90°-150°	2595.6	35.0
90°-180°	3588.0	48.4
0°-180°	7413.4	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	7
95°	65	67	77	84	86	69
105°	228	233	239	245	248	244
115°	431	435	437	436	435	426
125°	629	635	636	634	633	563
135°	818	824	825	825	821	631
145°	992	995	998	998	996	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



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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°	24.2	25.5	26.7	28.0	29.2	30.7	32.7	34.6	36.5	38.4	39.9
95°	65.0	65.4	66.0	66.4	66.8	68.1	70.3	72.6	74.8	77.1	78.6
97.5°	108.1	108.2	108.4	108.6	108.7	110.4	113.5	116.5	119.6	122.7	124.2
100°	140.1	140.1	140.1	140.1	140.1	141.5	144.4	147.3	150.2	153.1	155.1
102.5°	174.5	175.4	176.2	177.2	178.1	179.3	180.7	182.2	183.7	185.1	187.3
105°	228.1	229.2	230.3	231.4	232.6	233.8	235.1	236.4	237.8	239.1	240.5
107.5°	287.3	288.4	289.6	290.7	291.8	292.8	293.9	294.9	295.9	297.0	297.6
110°	328.2	329.2	330.4	331.5	332.6	333.5	334.2	334.8	335.5	336.1	336.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.8	370.4	370.9	371.5	372.1	372.8	373.7	374.5	375.3	376.2	376.5
115°	431.2	432.1	433.0	433.9	434.8	435.4	435.9	436.4	436.8	437.2	437.0
117.5°	492.8	493.3	493.7	494.0	494.5	494.8	495.2	495.7	496.0	496.5	496.6
120°	531.2	532.4	533.5	534.6	535.7	536.4	536.6	536.8	537.1	537.3	537.3
122.5°	572.9	573.3	573.7	574.1	574.5	575.0	575.6	576.2	576.7	577.3	577.1
125°	629.3	630.7	632.0	633.4	634.6	635.4	635.7	635.8	636.1	636.4	635.8
127.5°	689.4	690.1	690.9	691.6	692.4	692.9	693.2	693.4	693.7	694.0	693.7
130°	725.4	726.5	727.6	728.8	729.8	730.6	731.1	731.5	731.9	732.4	732.2
132.5°	761.4	763.2	765.1	766.9	768.7	769.6	769.5	769.4	769.3	769.2	769.0
135°	818.5	819.8	821.1	822.4	823.8	824.6	824.8	825.0	825.2	825.4	825.4
137.5°	872.0	873.3	874.6	875.9	877.2	878.1	878.6	879.1	879.6	880.0	880.3
140°	906.5	907.6	908.7	909.8	910.9	911.8	912.5	913.2	913.8	914.5	914.9
142.5°	940.9	941.8	942.8	943.7	944.6	945.6	946.3	947.2	948.0	948.9	949.2
145°	991.5	992.4	993.3	994.2	995.1	995.8	996.5	997.2	997.8	998.5	998.5
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.4
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



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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°	41.3	42.8	44.3	45.3	45.7	46.2	46.8	47.2
95°	80.2	81.7	83.3	84.3	84.7	85.2	85.6	86.0
97.5°	125.6	127.1	128.5	129.4	129.7	129.9	130.2	130.4
100°	157.0	159.1	161.1	162.3	162.7	163.2	163.7	164.1
102.5°	189.4	191.7	193.8	195.2	195.9	196.5	197.1	197.7
105°	241.8	243.1	244.4	245.5	246.2	246.8	247.5	248.1
107.5°	298.3	298.9	299.6	300.0	299.9	299.9	299.8	299.7
110°	337.5	338.2	338.8	339.1	338.8	338.6	338.4	338.2



TEST NUMBER: P333293-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.9	377.1	377.5	377.4	377.0	376.6	376.2	375.8
115°	436.8	436.5	436.4	436.1	435.9	435.7	435.4	435.2
117.5°	496.8	497.0	497.1	496.8	495.9	495.1	494.1	493.3
120°	537.3	537.3	537.3	536.8	536.0	535.0	534.2	533.3
122.5°	577.0	576.8	576.6	576.2	575.4	574.7	574.0	573.3
125°	635.4	635.0	634.6	634.2	634.0	633.8	633.5	633.4
127.5°	693.5	693.3	693.1	692.8	692.3	691.8	691.4	691.0
130°	731.9	731.7	731.5	731.2	730.7	730.3	729.8	729.4
132.5°	768.8	768.5	768.3	767.9	767.2	766.6	766.0	765.4
135°	825.4	825.4	825.4	825.0	824.1	823.2	822.3	821.4
137.5°	880.6	880.9	881.1	880.7	879.6	878.5	877.4	876.2
140°	915.3	915.8	916.3	915.9	914.8	913.7	912.6	911.5
142.5°	949.4	949.7	949.9	949.5	948.4	947.4	946.2	945.1
145°	998.5	998.5	998.5	998.2	997.6	996.9	996.2	995.5
147.5°	1044.0	1044.6	1045.1	1044.6	1043.1	1041.6	1040.1	1038.5
150°	1072.5	1072.5	1072.5	1072.4	1071.9	1071.4	1071.0	1070.6
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.5	1097.8	1097.0
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)