

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: P333284-940

Luminaire Tested: **S125DIP-S1090D1035U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333284-940
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-S1090D1035U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7154.0 lumens
Efficiency: N/A
Efficacy: 118.2 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

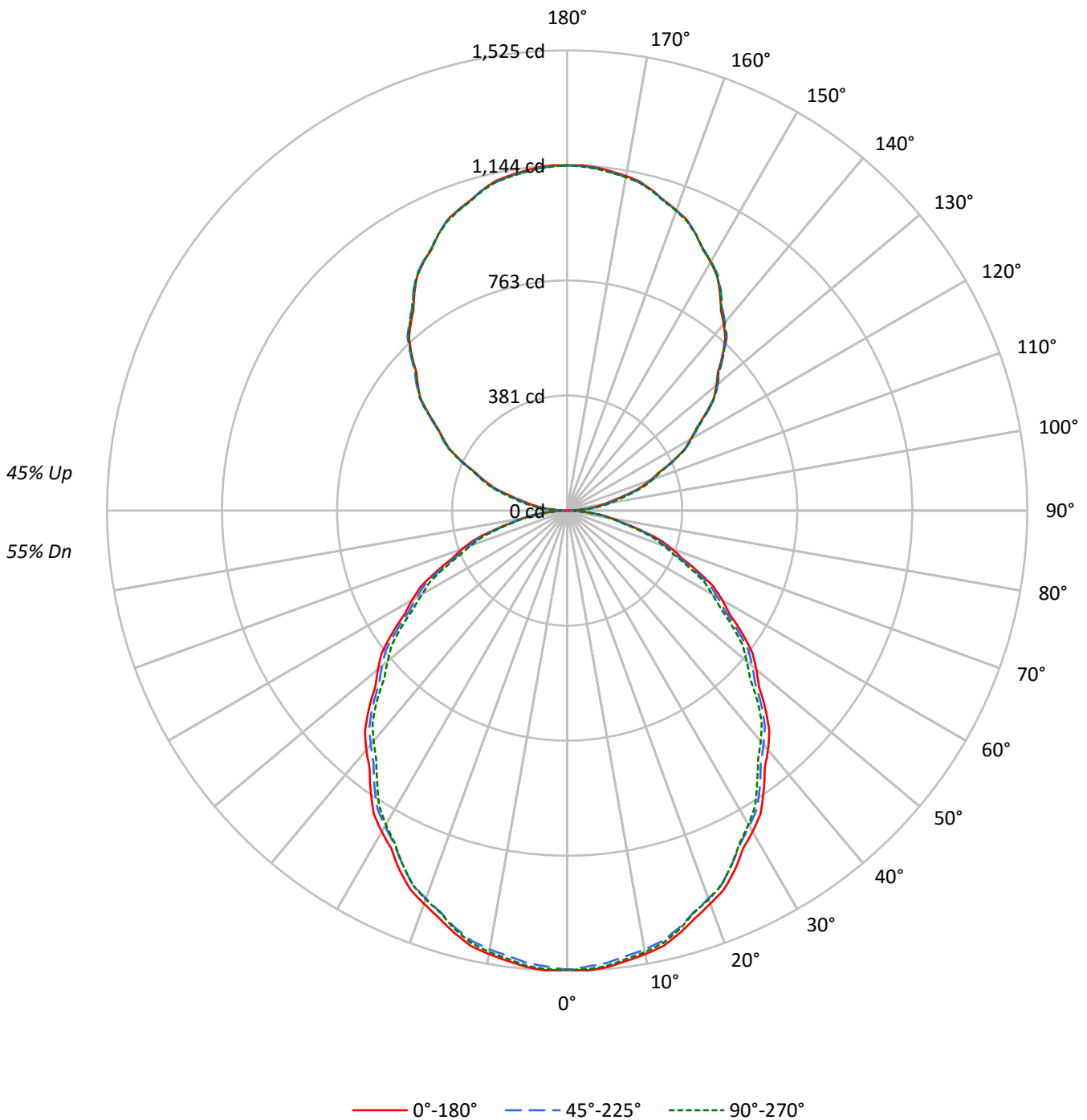
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20						20								20		
RC	80					70						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		101	101	101	101		86	86	86		73	73	73		61	61	61	55
1	99	95	91	87		92	88	85	81		76	73	71		64	62	61		54	53	51	46
2	90	83	76	71		83	77	71	67		66	62	59		56	53	51		47	45	43	39
3	82	73	65	59		76	68	61	56		58	53	49		50	46	43		42	39	37	33
4	75	64	56	50		69	60	53	47		52	46	42		44	40	37		37	34	32	28
5	69	57	49	43		64	53	46	41		46	41	36		40	35	32		34	30	28	24
6	64	51	43	37		59	48	41	35		42	36	32		36	31	28		31	27	24	21
7	59	46	38	33		54	43	36	31		38	32	28		33	28	25		28	24	22	19
8	55	42	34	29		51	40	32	28		35	29	25		30	25	22		26	22	19	17
9	51	38	31	26		47	36	29	25		32	26	22		28	23	20		24	20	17	15
10	48	35	28	23		44	33	27	22		29	24	20		26	21	18		22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9827	9827	9827
5°	9849	9756	9818
10°	9789	9686	9742
15°	9682	9570	9610
20°	9531	9407	9423
25°	9368	9213	9204
30°	9165	9004	8959
35°	8949	8779	8656
40°	8728	8535	8413
45°	8488	8312	8147
50°	8225	8043	7801
55°	7970	7739	7523
60°	7665	7432	7167
65°	7303	7065	6825
70°	6956	6637	6411
75°	6338	6128	5916
80°	5642	5553	5415
85°	4905	4994	4728



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.5	2.0
10°-20°	405.3	5.7
20°-30°	598.4	8.4
30°-40°	698.2	9.8
40°-50°	701.3	9.8
50°-60°	615.6	8.6
60°-70°	458.7	6.4
70°-80°	262.3	3.7
80°-90°	78.8	1.1
90°-100°	76.6	1.1
100°-110°	226.3	3.2
110°-120°	383.2	5.4
120°-130°	504.3	7.0
130°-140°	565.1	7.9
140°-150°	553.9	7.7
150°-160°	465.2	6.5
160°-170°	309.2	4.3
170°-180°	108.2	1.5
0°-30°	1147.1	16.0
0°-40°	1845.3	25.8
0°-60°	3162.2	44.2
0°-90°	3961.9	55.4
90°-120°	686.1	9.6
90°-150°	2309.5	32.3
90°-180°	3192.0	44.6
0°-180°	7154.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1522	1522	1522	1522	1522	
5°	1519	1516	1505	1515	1514	144
15°	1448	1444	1431	1437	1437	408
25°	1315	1308	1293	1295	1292	605
35°	1135	1130	1114	1107	1098	710
45°	929	924	910	896	892	716
55°	708	703	687	677	668	632
65°	478	475	462	452	447	474
75°	254	251	246	242	237	271
85°	66	67	67	66	64	74
90°	1	8	14	19	21	7
95°	58	60	69	75	77	62
105°	203	208	213	218	221	217
115°	384	387	389	388	387	379
125°	560	565	566	564	564	501
135°	728	733	734	734	731	561
145°	882	886	888	888	886	551
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6
2.5°	1525.4	1524.8	1524.1	1523.5	1522.9	1521.4	1519.3	1517.2	1515.0	1512.9	1515.0
5°	1519.2	1518.7	1518.1	1517.6	1517.1	1515.5	1512.8	1510.1	1507.4	1504.8	1507.2
7.5°	1505.2	1504.7	1504.1	1503.6	1503.1	1501.3	1498.3	1495.4	1492.5	1489.5	1491.9
10°	1492.7	1492.2	1491.7	1491.1	1490.6	1488.8	1485.9	1482.9	1480.0	1477.0	1479.2
12.5°	1477.3	1476.3	1475.3	1474.4	1473.5	1471.6	1468.8	1466.2	1463.4	1460.6	1462.4
15°	1448.1	1447.3	1446.5	1445.7	1444.9	1443.1	1440.1	1437.2	1434.2	1431.3	1432.6
17.5°	1414.7	1413.5	1412.3	1411.1	1410.0	1407.8	1404.8	1401.8	1398.7	1395.6	1397.3
20°	1386.8	1386.3	1385.7	1385.2	1384.6	1382.6	1379.1	1375.6	1372.2	1368.7	1370.6
22.5°	1358.8	1357.9	1356.9	1355.9	1355.0	1352.8	1349.6	1346.3	1343.1	1339.8	1341.0
25°	1314.6	1313.2	1311.9	1310.5	1309.2	1306.8	1303.3	1299.8	1296.4	1292.9	1293.4
27.5°	1262.8	1261.9	1261.1	1260.3	1259.5	1257.4	1253.7	1250.2	1246.6	1243.0	1243.1
30°	1229.0	1228.2	1227.4	1226.6	1225.8	1223.4	1219.4	1215.4	1211.4	1207.4	1206.8
32.5°	1192.5	1191.2	1190.0	1188.7	1187.6	1185.2	1181.5	1177.9	1174.4	1170.8	1169.8
35°	1135.1	1134.1	1133.0	1131.9	1130.9	1128.5	1124.7	1121.0	1117.2	1113.5	1112.1
37.5°	1075.7	1074.3	1073.0	1071.7	1070.3	1067.9	1064.3	1060.9	1057.3	1053.8	1051.8
40°	1035.3	1033.9	1032.6	1031.3	1029.9	1027.3	1023.6	1019.8	1016.1	1012.4	1010.0
42.5°	991.9	990.8	989.7	988.6	987.4	985.0	981.2	977.5	973.7	970.0	967.8
45°	929.3	928.3	927.2	926.1	925.1	922.9	919.7	916.5	913.3	910.1	906.9
47.5°	861.9	861.9	862.0	862.1	862.1	860.2	856.4	852.5	848.6	844.8	841.5
50°	818.6	817.8	817.0	816.2	815.4	813.3	810.1	806.9	803.7	800.5	797.0
52.5°	774.3	773.6	773.1	772.5	772.0	769.9	766.5	763.0	759.6	756.2	753.1
55°	707.8	707.0	706.2	705.4	704.6	702.3	698.6	694.8	691.1	687.3	684.9
57.5°	637.8	637.3	636.9	636.5	636.1	634.3	631.1	627.9	624.8	621.6	618.5
60°	593.4	592.4	591.3	590.2	589.2	587.2	584.2	581.3	578.4	575.4	572.7
62.5°	547.2	546.4	545.5	544.7	543.9	542.2	539.6	537.1	534.6	532.1	529.1
65°	477.9	477.3	476.8	476.3	475.7	474.0	471.1	468.1	465.2	462.3	459.9
67.5°	410.7	409.6	408.5	407.3	406.3	404.6	402.3	400.2	398.0	395.8	393.8
70°	368.4	367.0	365.7	364.4	363.0	361.1	358.7	356.3	353.9	351.5	349.9
72.5°	322.2	321.2	320.3	319.4	318.5	317.3	315.8	314.1	312.6	311.0	309.2
75°	254.0	253.4	252.9	252.4	251.8	250.9	249.6	248.3	246.9	245.6	244.8
77.5°	191.2	190.9	190.7	190.6	190.3	189.8	189.0	188.3	187.6	186.8	186.4
80°	151.7	151.7	151.7	151.7	151.7	151.4	150.9	150.3	149.8	149.3	149.0
82.5°	117.0	116.5	116.2	115.7	115.3	115.0	114.9	114.9	114.7	114.6	114.1
85°	66.2	66.4	66.7	67.0	67.2	67.4	67.4	67.4	67.4	67.4	67.1
87.5°	26.2	26.5	26.8	27.1	27.5	27.6	27.7	27.7	27.8	27.9	28.1
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	21.6	22.6	23.7	24.9	25.9	27.4	29.1	30.8	32.5	34.2	35.5
95°	57.9	58.2	58.7	59.0	59.5	60.6	62.6	64.6	66.6	68.6	69.9
97.5°	96.1	96.3	96.5	96.7	96.8	98.3	100.9	103.7	106.4	109.1	110.5
100°	124.7	124.7	124.7	124.7	124.7	125.9	128.5	131.1	133.7	136.2	137.9
102.5°	155.2	156.0	156.9	157.7	158.5	159.4	160.8	162.1	163.4	164.7	166.7
105°	203.0	203.9	204.9	206.0	207.0	208.0	209.2	210.4	211.6	212.8	213.9
107.5°	255.7	256.6	257.6	258.7	259.7	260.6	261.4	262.4	263.3	264.2	264.8
110°	292.0	293.0	294.0	295.0	296.0	296.8	297.3	297.9	298.5	299.1	299.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.0	329.6	330.0	330.6	331.1	331.7	332.5	333.2	333.9	334.7	335.0
115°	383.7	384.5	385.3	386.1	386.8	387.4	387.8	388.3	388.6	389.1	388.9
117.5°	438.5	438.9	439.3	439.6	440.0	440.3	440.7	441.0	441.4	441.8	441.9
120°	472.7	473.7	474.7	475.7	476.7	477.2	477.4	477.7	477.9	478.0	478.0
122.5°	509.8	510.1	510.5	510.9	511.2	511.6	512.1	512.6	513.2	513.6	513.5
125°	560.0	561.2	562.3	563.6	564.7	565.4	565.6	565.8	566.0	566.2	565.8
127.5°	613.4	614.0	614.7	615.4	616.1	616.5	616.8	617.0	617.2	617.5	617.2
130°	645.4	646.4	647.4	648.4	649.3	650.1	650.5	650.9	651.2	651.7	651.5
132.5°	677.4	679.1	680.7	682.3	683.9	684.7	684.7	684.6	684.5	684.4	684.2
135°	728.3	729.4	730.6	731.7	733.0	733.7	733.9	734.1	734.2	734.4	734.4
137.5°	776.0	777.0	778.2	779.4	780.5	781.3	781.8	782.2	782.7	783.0	783.3
140°	806.6	807.5	808.5	809.5	810.5	811.3	811.9	812.5	813.1	813.7	814.0
142.5°	837.1	838.0	838.8	839.6	840.5	841.3	842.0	842.8	843.6	844.3	844.5
145°	882.3	883.1	883.8	884.6	885.4	886.1	886.7	887.3	887.9	888.5	888.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.4
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6	1521.6
2.5°	1517.2	1519.3	1521.4	1522.4	1522.2	1522.0	1521.8	1521.6
5°	1509.6	1512.0	1514.4	1515.5	1515.2	1514.9	1514.7	1514.4
7.5°	1494.2	1496.6	1499.0	1500.0	1499.8	1499.5	1499.2	1499.0
10°	1481.3	1483.5	1485.6	1486.6	1486.3	1486.0	1485.8	1485.5
12.5°	1464.1	1465.8	1467.5	1468.4	1468.3	1468.2	1468.2	1468.1
15°	1434.0	1435.3	1436.6	1437.3	1437.3	1437.3	1437.3	1437.3
17.5°	1399.0	1400.6	1402.3	1402.5	1401.1	1399.8	1398.5	1397.1
20°	1372.4	1374.3	1376.2	1376.4	1375.1	1373.8	1372.4	1371.1
22.5°	1342.3	1343.5	1344.7	1344.9	1344.0	1343.1	1342.2	1341.2
25°	1294.0	1294.5	1295.0	1294.9	1294.1	1293.2	1292.4	1291.6
27.5°	1243.2	1243.3	1243.5	1243.1	1242.3	1241.5	1240.7	1239.9
30°	1206.3	1205.8	1205.2	1204.6	1203.8	1203.0	1202.2	1201.4
32.5°	1168.9	1167.9	1167.0	1165.7	1164.3	1162.9	1161.4	1159.9
35°	1110.8	1109.5	1108.1	1106.4	1104.3	1102.2	1100.0	1097.9
37.5°	1049.8	1047.8	1045.9	1044.3	1043.0	1041.8	1040.5	1039.4
40°	1007.5	1005.1	1002.7	1001.1	1000.3	999.5	998.7	997.9
42.5°	965.6	963.4	961.3	959.5	958.3	957.1	955.8	954.6
45°	903.7	900.4	897.2	895.2	894.4	893.6	892.8	892.0
47.5°	838.3	835.0	831.8	829.2	827.3	825.5	823.6	821.7
50°	793.5	790.1	786.6	783.9	782.0	780.2	778.3	776.4
52.5°	750.1	747.1	744.0	741.5	739.3	737.3	735.2	733.1
55°	682.5	680.1	677.7	675.6	673.7	671.8	669.9	668.1
57.5°	615.5	612.3	609.2	607.2	606.2	605.1	604.1	603.1
60°	570.1	567.4	564.7	562.4	560.5	558.7	556.8	554.9
62.5°	526.3	523.4	520.5	518.4	516.9	515.5	514.0	512.6
65°	457.4	455.0	452.6	450.8	449.8	448.7	447.6	446.6
67.5°	391.7	389.7	387.6	386.3	385.7	385.0	384.4	383.8
70°	348.3	346.7	345.1	343.8	342.7	341.6	340.5	339.5
72.5°	307.5	305.6	303.8	302.4	301.3	300.2	299.2	298.1
75°	244.0	243.2	242.4	241.4	240.3	239.2	238.2	237.1
77.5°	185.8	185.4	184.9	184.3	183.5	182.8	182.0	181.3
80°	148.7	148.5	148.2	147.8	147.2	146.7	146.2	145.6
82.5°	113.6	113.2	112.7	112.4	112.3	112.2	112.1	111.9
85°	66.9	66.6	66.3	65.9	65.4	64.8	64.3	63.8
87.5°	28.3	28.4	28.7	28.6	28.4	28.0	27.7	27.4
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	36.8	38.1	39.4	40.3	40.8	41.1	41.6	42.0
95°	71.3	72.7	74.1	75.0	75.3	75.8	76.2	76.6
97.5°	111.7	113.1	114.4	115.1	115.4	115.7	115.8	116.1
100°	139.7	141.5	143.3	144.5	144.8	145.2	145.6	146.0
102.5°	168.5	170.5	172.5	173.7	174.2	174.8	175.4	175.9
105°	215.2	216.3	217.5	218.4	219.0	219.6	220.2	220.8
107.5°	265.4	266.0	266.6	266.9	266.8	266.8	266.8	266.7
110°	300.3	300.9	301.5	301.7	301.5	301.3	301.1	300.9



TEST NUMBER: P333284-940

CATALOG NUMBER: S125DIP-S1090D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	335.3	335.6	335.8	335.8	335.5	335.1	334.7	334.4
115°	388.6	388.4	388.3	388.1	387.8	387.6	387.4	387.3
117.5°	442.0	442.2	442.4	442.0	441.2	440.5	439.7	438.9
120°	478.0	478.0	478.0	477.7	476.9	476.1	475.3	474.5
122.5°	513.4	513.2	513.0	512.6	512.0	511.4	510.8	510.1
125°	565.4	565.0	564.6	564.3	564.1	563.9	563.7	563.6
127.5°	617.1	616.9	616.7	616.4	616.0	615.5	615.2	614.8
130°	651.2	651.0	650.9	650.6	650.1	649.8	649.3	649.0
132.5°	684.0	683.9	683.6	683.2	682.7	682.2	681.6	681.0
135°	734.4	734.4	734.4	734.1	733.3	732.5	731.6	730.8
137.5°	783.5	783.7	784.0	783.6	782.7	781.7	780.7	779.7
140°	814.5	814.8	815.3	814.9	814.0	813.0	812.0	811.0
142.5°	844.8	845.0	845.3	844.9	843.9	842.9	842.0	840.9
145°	888.5	888.5	888.5	888.1	887.6	887.0	886.4	885.8
147.5°	928.9	929.4	929.9	929.4	928.1	926.8	925.4	924.1
150°	954.3	954.3	954.3	954.1	953.8	953.3	953.0	952.5
152.5°	978.1	978.6	979.0	978.9	978.2	977.5	976.8	976.1
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)