

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: P333453-930

Luminaire Tested: **S125DIW-S1090D1340U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333453-930
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: S125DIW-S1090D1340U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7415.2 lumens
Efficiency: N/A
Efficacy: 106.2 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

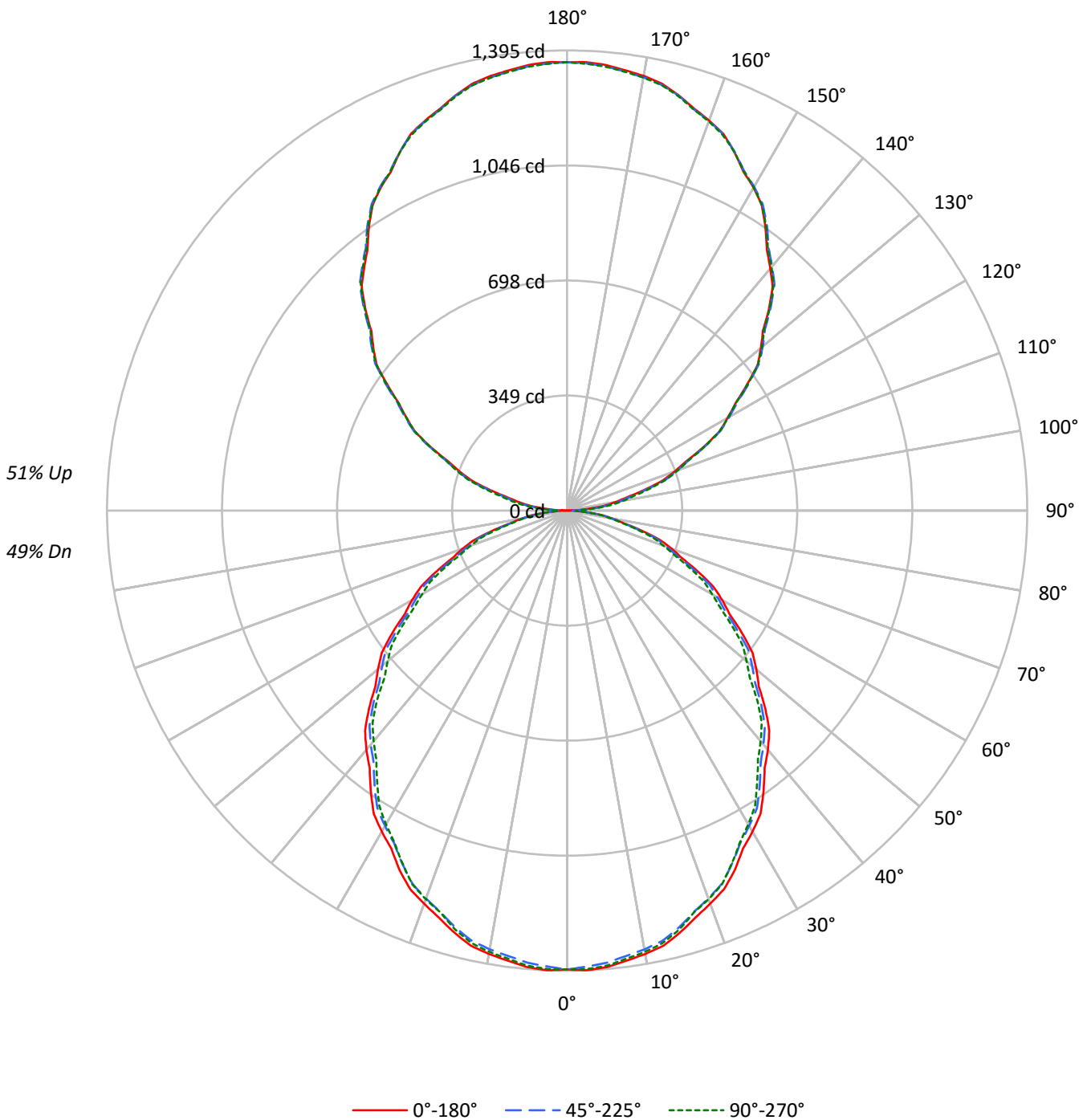
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8985	8985	8985
5°	9005	8919	8976
10°	8950	8857	8907
15°	8852	8750	8787
20°	8715	8601	8616
25°	8565	8424	8416
30°	8380	8232	8192
35°	8183	8027	7914
40°	7981	7804	7692
45°	7761	7600	7448
50°	7519	7354	7133
55°	7287	7076	6877
60°	7009	6795	6554
65°	6677	6460	6240
70°	6360	6069	5861
75°	5794	5602	5410
80°	5159	5077	4950
85°	4483	4565	4320



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	1.8
10°-20°	370.5	5.0
20°-30°	547.1	7.4
30°-40°	638.4	8.6
40°-50°	641.2	8.6
50°-60°	562.8	7.6
60°-70°	419.4	5.7
70°-80°	239.8	3.2
80°-90°	72.7	1.0
90°-100°	91.0	1.2
100°-110°	268.8	3.6
110°-120°	455.3	6.1
120°-130°	599.1	8.1
130°-140°	671.4	9.1
140°-150°	658.0	8.9
150°-160°	552.7	7.5
160°-170°	367.4	5.0
170°-180°	128.6	1.7
0°-30°	1048.8	14.1
0°-40°	1687.2	22.8
0°-60°	2891.2	39.0
0°-90°	3623.1	48.9
90°-120°	815.1	11.0
90°-150°	2743.6	37.0
90°-180°	3792.0	51.1
0°-180°	7415.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1389	1386	1376	1385	1385	132
15°	1324	1320	1309	1314	1314	373
25°	1202	1196	1182	1184	1181	553
35°	1038	1033	1018	1012	1004	649
45°	850	845	832	819	816	655
55°	647	643	628	619	611	578
65°	437	434	423	413	408	433
75°	232	230	224	221	217	248
85°	60	62	62	60	58	68
90°	1	10	17	22	25	7
95°	69	71	81	89	91	73
105°	241	246	253	259	262	258
115°	456	460	462	461	460	451
125°	665	671	673	671	669	596
135°	865	871	872	872	868	667
145°	1048	1052	1056	1055	1052	655
155°	1199	1199	1200	1204	1199	552
165°	1304	1302	1303	1307	1301	368
175°	1356	1352	1352	1357	1350	129
180°	1359	1359	1359	1359	1359	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1394.7	1394.2	1393.5	1392.9	1392.4	1391.1	1389.1	1387.2	1385.2	1383.2	1385.2
5°	1389.0	1388.5	1388.0	1387.6	1387.1	1385.6	1383.2	1380.7	1378.3	1375.8	1378.0
7.5°	1376.2	1375.7	1375.2	1374.8	1374.3	1372.6	1369.9	1367.3	1364.6	1361.9	1364.1
10°	1364.8	1364.3	1363.8	1363.3	1362.9	1361.2	1358.5	1355.8	1353.2	1350.5	1352.4
12.5°	1350.7	1349.8	1348.9	1348.0	1347.2	1345.5	1343.0	1340.5	1338.0	1335.5	1337.1
15°	1324.0	1323.3	1322.6	1321.8	1321.1	1319.4	1316.7	1314.0	1311.3	1308.6	1309.9
17.5°	1293.5	1292.4	1291.3	1290.2	1289.2	1287.2	1284.4	1281.7	1278.9	1276.0	1277.6
20°	1268.0	1267.5	1267.0	1266.5	1266.0	1264.1	1260.9	1257.8	1254.6	1251.4	1253.1
22.5°	1242.4	1241.5	1240.6	1239.7	1238.8	1236.9	1234.0	1230.9	1228.0	1225.0	1226.1
25°	1201.9	1200.7	1199.5	1198.2	1197.0	1194.8	1191.6	1188.5	1185.3	1182.1	1182.6
27.5°	1154.5	1153.8	1153.1	1152.3	1151.6	1149.7	1146.3	1143.0	1139.8	1136.5	1136.6
30°	1123.7	1123.0	1122.3	1121.5	1120.8	1118.6	1114.9	1111.3	1107.6	1103.9	1103.4
32.5°	1090.3	1089.2	1088.0	1086.9	1085.8	1083.6	1080.3	1077.0	1073.7	1070.5	1069.6
35°	1037.9	1036.9	1035.9	1034.9	1034.0	1031.8	1028.3	1024.9	1021.5	1018.1	1016.8
37.5°	983.5	982.3	981.0	979.8	978.6	976.4	973.1	970.0	966.7	963.5	961.6
40°	946.6	945.3	944.1	942.9	941.7	939.3	935.9	932.5	929.0	925.6	923.4
42.5°	906.9	905.9	904.9	903.8	902.8	900.6	897.2	893.7	890.3	886.9	884.8
45°	849.7	848.7	847.7	846.8	845.8	843.8	840.9	838.0	835.0	832.1	829.2
47.5°	788.1	788.1	788.1	788.2	788.2	786.5	783.0	779.4	775.9	772.4	769.4
50°	748.4	747.7	747.0	746.2	745.5	743.6	740.7	737.8	734.8	731.9	728.7
52.5°	707.9	707.4	706.9	706.3	705.8	703.9	700.8	697.7	694.6	691.4	688.6
55°	647.2	646.5	645.7	645.0	644.2	642.1	638.7	635.3	631.9	628.4	626.2
57.5°	583.1	582.7	582.4	582.0	581.6	579.9	577.0	574.1	571.3	568.3	565.5
60°	542.6	541.6	540.6	539.6	538.7	536.9	534.2	531.5	528.8	526.1	523.7
62.5°	500.3	499.5	498.8	498.0	497.3	495.7	493.3	491.1	488.8	486.5	483.8
65°	436.9	436.4	435.9	435.5	435.0	433.4	430.7	428.0	425.3	422.7	420.4
67.5°	375.5	374.5	373.5	372.4	371.5	369.9	367.9	365.9	363.9	361.9	360.0
70°	336.8	335.6	334.4	333.1	331.9	330.2	328.0	325.8	323.6	321.4	319.9
72.5°	294.6	293.7	292.9	292.0	291.2	290.1	288.7	287.2	285.8	284.4	282.7
75°	232.2	231.7	231.2	230.7	230.2	229.4	228.2	227.0	225.8	224.5	223.8
77.5°	174.8	174.6	174.4	174.2	174.0	173.6	172.8	172.2	171.5	170.8	170.4
80°	138.7	138.7	138.7	138.7	138.7	138.4	137.9	137.5	137.0	136.5	136.2
82.5°	107.0	106.6	106.2	105.8	105.4	105.2	105.1	105.0	104.8	104.8	104.4
85°	60.5	60.7	61.0	61.2	61.5	61.6	61.6	61.6	61.6	61.6	61.4
87.5°	24.0	24.4	24.7	25.1	25.5	25.8	25.8	26.0	26.2	26.3	26.5
90°	1.1	2.9	4.8	6.7	8.6	10.4	12.0	13.6	15.2	17.0	18.1
92.5°	25.6	26.9	28.2	29.5	30.8	32.5	34.6	36.6	38.6	40.6	42.2
95°	68.7	69.2	69.7	70.1	70.6	72.1	74.4	76.7	79.1	81.4	83.1
97.5°	114.2	114.4	114.6	114.8	115.0	116.7	119.9	123.2	126.5	129.6	131.2
100°	148.1	148.1	148.1	148.1	148.1	149.6	152.6	155.7	158.7	161.8	164.0
102.5°	184.4	185.4	186.3	187.3	188.2	189.5	191.0	192.6	194.1	195.7	198.0
105°	241.2	242.3	243.4	244.7	245.8	247.1	248.5	250.0	251.4	252.7	254.2
107.5°	303.7	304.9	306.1	307.3	308.4	309.6	310.6	311.7	312.8	313.9	314.6
110°	346.9	348.1	349.3	350.4	351.6	352.5	353.3	353.9	354.7	355.3	356.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	390.9	391.5	392.1	392.7	393.3	394.1	394.9	395.8	396.7	397.6	397.9
115°	455.8	456.7	457.7	458.6	459.6	460.3	460.7	461.2	461.7	462.2	461.9
117.5°	521.0	521.4	521.8	522.2	522.7	523.1	523.5	523.9	524.3	524.8	525.0
120°	561.6	562.7	563.9	565.1	566.3	567.0	567.2	567.4	567.7	567.9	567.9
122.5°	605.6	606.0	606.4	606.8	607.2	607.8	608.4	609.0	609.6	610.3	610.0
125°	665.2	666.6	668.1	669.4	670.8	671.6	671.9	672.1	672.4	672.6	672.1
127.5°	728.6	729.4	730.3	731.1	731.9	732.4	732.7	733.0	733.3	733.5	733.3
130°	766.7	767.9	769.1	770.3	771.4	772.3	772.7	773.2	773.6	774.1	773.9
132.5°	804.8	806.7	808.7	810.6	812.5	813.4	813.3	813.3	813.2	813.1	812.9
135°	865.1	866.5	867.9	869.4	870.7	871.6	871.8	872.0	872.3	872.5	872.5
137.5°	921.8	923.2	924.5	925.9	927.2	928.1	928.7	929.2	929.8	930.3	930.5
140°	958.1	959.4	960.5	961.7	962.9	963.8	964.5	965.2	965.9	966.6	967.1
142.5°	994.6	995.6	996.5	997.5	998.5	999.4	1000.3	1001.2	1002.1	1003.0	1003.3
145°	1048.1	1049.0	1049.9	1050.8	1051.8	1052.6	1053.4	1054.0	1054.8	1055.5	1055.5
147.5°	1097.6	1098.0	1098.6	1099.1	1099.6	1100.2	1100.7	1101.3	1101.9	1102.4	1103.0
150°	1130.6	1130.3	1130.1	1129.8	1129.6	1129.9	1130.9	1131.9	1132.8	1133.8	1133.8
152.5°	1157.6	1158.0	1158.3	1158.6	1158.9	1159.3	1159.7	1160.0	1160.4	1160.8	1161.4
155°	1199.3	1199.3	1199.3	1199.3	1199.3	1199.4	1199.6	1199.9	1200.1	1200.4	1201.3
157.5°	1236.5	1236.0	1235.5	1234.9	1234.4	1234.3	1234.5	1234.8	1235.0	1235.3	1236.2
160°	1258.5	1257.8	1257.1	1256.4	1255.7	1255.5	1255.7	1256.0	1256.1	1256.4	1257.4
162.5°	1278.0	1277.5	1276.9	1276.4	1275.9	1275.7	1275.7	1275.8	1275.8	1275.9	1277.0
165°	1304.0	1303.5	1303.0	1302.6	1302.1	1302.0	1302.2	1302.4	1302.7	1302.9	1303.9
167.5°	1326.0	1325.0	1324.1	1323.1	1322.3	1321.8	1321.8	1321.8	1321.8	1321.8	1323.1
170°	1337.8	1336.9	1335.9	1335.1	1334.1	1333.6	1333.6	1333.6	1333.6	1333.6	1335.1
172.5°	1346.3	1345.3	1344.4	1343.5	1342.6	1342.1	1342.1	1342.1	1342.1	1342.1	1343.5
175°	1355.8	1354.9	1354.0	1353.0	1352.1	1351.6	1351.6	1351.6	1351.6	1351.6	1353.0
177.5°	1360.7	1359.9	1359.2	1358.5	1357.6	1357.2	1357.0	1356.8	1356.7	1356.4	1357.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1387.2	1389.1	1391.1	1392.0	1391.8	1391.6	1391.4	1391.2
5°	1380.2	1382.4	1384.6	1385.6	1385.4	1385.1	1384.9	1384.6
7.5°	1366.2	1368.4	1370.5	1371.5	1371.3	1371.0	1370.8	1370.5
10°	1354.4	1356.3	1358.3	1359.2	1358.9	1358.7	1358.5	1358.2
12.5°	1338.6	1340.2	1341.7	1342.6	1342.5	1342.4	1342.4	1342.3
15°	1311.1	1312.3	1313.5	1314.2	1314.2	1314.2	1314.2	1314.2
17.5°	1279.1	1280.6	1282.1	1282.3	1281.1	1279.9	1278.6	1277.4
20°	1254.8	1256.5	1258.3	1258.5	1257.3	1256.1	1254.8	1253.6
22.5°	1227.3	1228.4	1229.5	1229.6	1228.8	1228.0	1227.2	1226.3
25°	1183.1	1183.6	1184.1	1183.9	1183.2	1182.4	1181.7	1181.0
27.5°	1136.7	1136.8	1136.9	1136.6	1135.9	1135.1	1134.4	1133.7
30°	1102.9	1102.4	1102.0	1101.4	1100.7	1099.9	1099.2	1098.5
32.5°	1068.7	1067.8	1067.0	1065.8	1064.5	1063.2	1061.8	1060.5
35°	1015.6	1014.4	1013.2	1011.6	1009.7	1007.7	1005.8	1003.8
37.5°	959.9	958.1	956.3	954.8	953.7	952.5	951.4	950.3
40°	921.2	919.0	916.8	915.3	914.6	913.9	913.1	912.4
42.5°	882.9	880.8	878.9	877.3	876.2	875.1	873.9	872.8
45°	826.2	823.3	820.4	818.5	817.7	817.0	816.3	815.5
47.5°	766.5	763.4	760.5	758.1	756.4	754.7	753.0	751.3
50°	725.5	722.4	719.2	716.7	715.0	713.3	711.6	709.9
52.5°	685.8	683.1	680.3	677.9	676.0	674.1	672.2	670.3
55°	624.0	621.8	619.6	617.7	616.0	614.2	612.5	610.8
57.5°	562.7	559.9	557.0	555.1	554.2	553.3	552.4	551.4
60°	521.2	518.8	516.3	514.2	512.5	510.8	509.1	507.4
62.5°	481.2	478.6	475.9	473.9	472.6	471.3	469.9	468.6
65°	418.2	416.0	413.8	412.2	411.2	410.3	409.3	408.3
67.5°	358.2	356.3	354.4	353.2	352.6	352.0	351.5	350.9
70°	318.5	317.0	315.5	314.3	313.3	312.3	311.4	310.4
72.5°	281.1	279.4	277.8	276.5	275.5	274.5	273.5	272.6
75°	223.1	222.3	221.6	220.7	219.7	218.7	217.8	216.8
77.5°	169.9	169.5	169.1	168.5	167.8	167.1	166.4	165.8
80°	136.0	135.7	135.5	135.1	134.6	134.1	133.6	133.1
82.5°	103.9	103.5	103.1	102.7	102.6	102.6	102.5	102.3
85°	61.1	60.9	60.7	60.3	59.8	59.3	58.8	58.3
87.5°	26.7	27.0	27.2	27.2	27.0	26.7	26.5	26.2
90°	19.2	20.5	21.6	22.6	23.2	24.0	24.7	25.4
92.5°	43.7	45.2	46.8	47.9	48.3	48.9	49.4	49.9
95°	84.7	86.3	88.1	89.0	89.5	90.0	90.5	91.0
97.5°	132.7	134.3	135.8	136.8	137.1	137.4	137.6	137.9
100°	166.1	168.1	170.2	171.5	172.0	172.5	173.0	173.4
102.5°	200.2	202.5	204.9	206.4	207.0	207.7	208.3	209.0
105°	255.6	257.0	258.4	259.4	260.2	260.9	261.5	262.3
107.5°	315.3	316.0	316.7	317.1	317.0	316.9	316.9	316.8
110°	356.8	357.4	358.2	358.4	358.2	357.9	357.7	357.4



TEST NUMBER: P333453-930

CATALOG NUMBER: S125DIW-S1090D1340U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	398.3	398.6	398.9	398.9	398.5	398.1	397.6	397.2
115°	461.7	461.5	461.2	461.0	460.7	460.5	460.3	460.1
117.5°	525.1	525.3	525.5	525.1	524.2	523.3	522.4	521.4
120°	567.9	567.9	567.9	567.4	566.5	565.6	564.6	563.7
122.5°	609.8	609.7	609.4	609.0	608.2	607.5	606.7	606.0
125°	671.6	671.2	670.7	670.4	670.2	669.9	669.7	669.4
127.5°	733.0	732.8	732.6	732.2	731.8	731.3	730.8	730.3
130°	773.6	773.5	773.2	772.8	772.4	771.9	771.4	770.9
132.5°	812.6	812.4	812.1	811.7	811.1	810.3	809.7	809.0
135°	872.5	872.5	872.5	872.0	871.1	870.2	869.2	868.3
137.5°	930.8	931.1	931.4	930.9	929.8	928.5	927.4	926.3
140°	967.6	968.0	968.5	968.2	966.9	965.8	964.7	963.4
142.5°	1003.6	1003.9	1004.1	1003.7	1002.5	1001.4	1000.1	999.0
145°	1055.5	1055.5	1055.5	1055.1	1054.4	1053.7	1053.0	1052.3
147.5°	1103.5	1104.1	1104.6	1104.2	1102.5	1101.0	1099.3	1097.8
150°	1133.8	1133.8	1133.8	1133.5	1133.0	1132.5	1132.0	1131.6
152.5°	1161.9	1162.5	1163.0	1162.9	1162.0	1161.2	1160.3	1159.5
155°	1202.2	1203.1	1204.1	1204.0	1202.8	1201.7	1200.4	1199.3
157.5°	1237.1	1238.0	1239.0	1238.7	1237.1	1235.6	1234.0	1232.5
160°	1258.3	1259.2	1260.1	1260.0	1258.9	1257.7	1256.5	1255.3
162.5°	1278.1	1279.2	1280.3	1280.3	1278.9	1277.5	1276.2	1274.8
165°	1304.8	1305.8	1306.7	1306.4	1305.0	1303.7	1302.2	1300.8
167.5°	1324.6	1326.0	1327.4	1327.4	1325.9	1324.5	1323.0	1321.5
170°	1336.4	1337.8	1339.2	1339.1	1337.5	1335.9	1334.2	1332.5
172.5°	1344.9	1346.3	1347.7	1347.7	1346.2	1344.8	1343.3	1341.8
175°	1354.4	1355.8	1357.2	1357.1	1355.4	1353.8	1352.2	1350.5
177.5°	1358.7	1359.8	1361.0	1360.9	1359.5	1358.2	1356.9	1355.6
180°	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0	1359.0

(END OF REPORT)