

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: P333447-930

Luminaire Tested: **S125DIW-S1090D1050U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333447-930
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-S1090D1050U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6584.6 lumens
Efficiency: N/A
Efficacy: 107.6 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

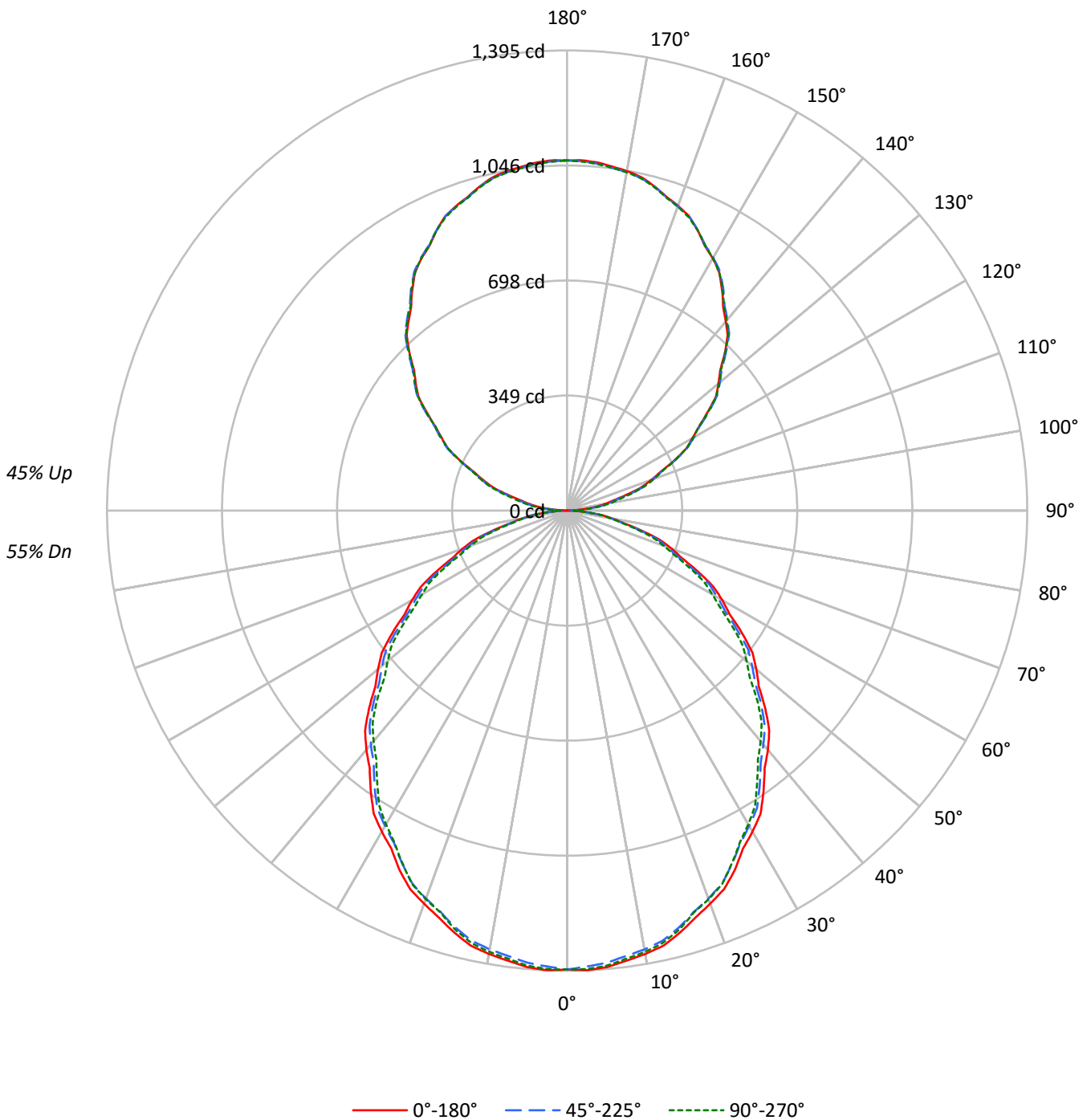
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43	39
3	82	72	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	27	24
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	30	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	34	29	51	39	32	27	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	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

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



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	2.0
10°-20°	370.5	5.6
20°-30°	547.1	8.3
30°-40°	638.4	9.7
40°-50°	641.2	9.7
50°-60°	562.8	8.5
60°-70°	419.4	6.4
70°-80°	239.8	3.6
80°-90°	72.1	1.1
90°-100°	71.1	1.1
100°-110°	210.0	3.2
110°-120°	355.6	5.4
120°-130°	468.0	7.1
130°-140°	524.4	8.0
140°-150°	514.0	7.8
150°-160°	431.7	6.6
160°-170°	287.0	4.4
170°-180°	100.4	1.5
0°-30°	1048.8	15.9
0°-40°	1687.2	25.6
0°-60°	2891.2	43.9
0°-90°	3622.4	55.0
90°-120°	636.7	9.7
90°-150°	2143.1	32.5
90°-180°	2962.0	45.0
0°-180°	6584.6	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	7	13	17	20	6
95°	54	56	64	69	71	57
105°	188	193	198	202	205	201
115°	356	359	361	360	359	352
125°	520	524	525	524	523	465
135°	676	680	682	681	678	521
145°	819	822	824	824	822	512
155°	937	937	938	940	937	431
165°	1019	1017	1018	1021	1016	287
175°	1059	1056	1056	1060	1055	101
180°	1062	1062	1062	1062	1062	



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

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	24.2	24.5	24.8	25.1	25.3	25.4	25.4	25.4	25.5	25.7
90°	0.8	2.3	3.8	5.2	6.7	8.1	9.4	10.7	11.9	13.2	14.1
92.5°	20.0	21.0	22.0	23.1	24.1	25.4	27.0	28.5	30.2	31.7	32.9
95°	53.7	54.1	54.5	54.8	55.2	56.3	58.1	59.9	61.8	63.6	64.9
97.5°	89.2	89.4	89.5	89.7	89.8	91.2	93.7	96.2	98.7	101.3	102.5
100°	115.7	115.7	115.7	115.7	115.7	116.8	119.2	121.6	124.0	126.4	128.1
102.5°	144.1	144.8	145.5	146.3	147.0	148.0	149.2	150.4	151.6	152.9	154.7
105°	188.3	189.2	190.2	191.1	192.0	193.1	194.1	195.3	196.3	197.5	198.5
107.5°	237.3	238.1	239.1	240.0	240.9	241.8	242.6	243.5	244.3	245.2	245.7
110°	270.9	271.9	272.8	273.7	274.7	275.4	275.9	276.5	277.0	277.6	278.1



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	305.3	305.8	306.3	306.8	307.2	307.9	308.5	309.2	309.9	310.6	310.9
115°	356.0	356.8	357.5	358.2	359.0	359.5	359.9	360.3	360.6	361.0	360.9
117.5°	406.9	407.2	407.6	407.9	408.3	408.6	409.0	409.3	409.6	409.9	410.1
120°	438.6	439.6	440.5	441.4	442.3	442.9	443.0	443.3	443.4	443.6	443.6
122.5°	473.0	473.4	473.7	474.0	474.3	474.7	475.2	475.7	476.2	476.7	476.5
125°	519.6	520.7	521.8	522.9	524.0	524.6	524.9	525.1	525.2	525.4	525.1
127.5°	569.2	569.8	570.5	571.0	571.7	572.1	572.3	572.6	572.7	573.0	572.8
130°	598.9	599.8	600.8	601.7	602.6	603.2	603.6	604.0	604.4	604.7	604.5
132.5°	628.7	630.1	631.7	633.2	634.7	635.4	635.4	635.3	635.2	635.1	635.0
135°	675.7	676.9	677.9	679.1	680.2	680.8	681.0	681.2	681.3	681.5	681.5
137.5°	720.1	721.1	722.2	723.3	724.3	725.0	725.5	725.9	726.3	726.7	726.8
140°	748.4	749.3	750.3	751.2	752.1	752.8	753.4	754.0	754.5	755.0	755.5
142.5°	776.9	777.6	778.4	779.2	780.0	780.7	781.4	782.1	782.8	783.5	783.7
145°	818.6	819.4	820.1	820.8	821.6	822.2	822.8	823.4	823.9	824.4	824.4
147.5°	857.4	857.8	858.2	858.5	858.9	859.4	859.8	860.2	860.7	861.1	861.6
150°	883.1	883.0	882.7	882.6	882.4	882.6	883.4	884.1	884.8	885.6	885.6
152.5°	904.2	904.5	904.7	905.1	905.3	905.6	905.9	906.1	906.4	906.8	907.2
155°	936.8	936.8	936.8	936.8	936.8	936.9	937.1	937.3	937.4	937.7	938.4
157.5°	965.9	965.5	965.1	964.7	964.3	964.2	964.3	964.5	964.7	964.9	965.6
160°	983.1	982.5	981.9	981.5	980.9	980.7	980.9	981.0	981.2	981.5	982.2
162.5°	998.3	997.8	997.4	997.0	996.6	996.5	996.5	996.5	996.6	996.6	997.5
165°	1018.6	1018.2	1017.8	1017.5	1017.1	1017.0	1017.2	1017.4	1017.6	1017.7	1018.5
167.5°	1035.8	1035.0	1034.3	1033.6	1032.8	1032.5	1032.5	1032.5	1032.5	1032.5	1033.6
170°	1045.1	1044.3	1043.6	1042.8	1042.1	1041.7	1041.7	1041.7	1041.7	1041.7	1042.8
172.5°	1051.7	1050.9	1050.2	1049.5	1048.7	1048.3	1048.3	1048.3	1048.3	1048.3	1049.5
175°	1059.1	1058.3	1057.6	1056.9	1056.1	1055.7	1055.7	1055.7	1055.7	1055.7	1056.9
177.5°	1062.9	1062.3	1061.7	1061.1	1060.5	1060.1	1060.0	1059.9	1059.7	1059.6	1060.5
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

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°	25.9	26.1	26.3	26.3	25.9	25.7	25.4	25.1
90°	15.1	16.0	16.9	17.6	18.2	18.8	19.2	19.8
92.5°	34.2	35.4	36.6	37.3	37.7	38.2	38.6	39.0
95°	66.2	67.4	68.7	69.5	70.0	70.3	70.7	71.0
97.5°	103.7	104.9	106.2	106.8	107.0	107.3	107.5	107.7
100°	129.7	131.3	133.0	134.0	134.4	134.8	135.1	135.5
102.5°	156.5	158.2	160.0	161.2	161.7	162.2	162.7	163.2
105°	199.7	200.7	201.9	202.7	203.3	203.7	204.3	204.9
107.5°	246.3	246.9	247.4	247.7	247.6	247.6	247.5	247.5
110°	278.7	279.2	279.8	280.0	279.8	279.6	279.4	279.2



TEST NUMBER: P333447-930

CATALOG NUMBER: S125DIW-S1090D1050U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	311.1	311.4	311.6	311.6	311.3	311.0	310.6	310.3
115°	360.6	360.4	360.3	360.1	359.9	359.7	359.5	359.4
117.5°	410.2	410.3	410.5	410.2	409.4	408.7	408.0	407.2
120°	443.6	443.6	443.6	443.3	442.5	441.8	441.1	440.3
122.5°	476.4	476.2	476.1	475.7	475.2	474.5	473.9	473.4
125°	524.6	524.3	523.9	523.7	523.5	523.3	523.1	522.9
127.5°	572.6	572.4	572.3	572.0	571.6	571.3	570.9	570.5
130°	604.4	604.1	604.0	603.7	603.3	603.0	602.6	602.3
132.5°	634.7	634.5	634.4	634.1	633.5	633.0	632.5	631.9
135°	681.5	681.5	681.5	681.2	680.4	679.7	679.0	678.2
137.5°	727.1	727.3	727.5	727.2	726.3	725.4	724.4	723.5
140°	755.8	756.2	756.5	756.3	755.4	754.4	753.5	752.6
142.5°	783.9	784.2	784.4	784.0	783.1	782.2	781.3	780.3
145°	824.4	824.4	824.4	824.2	823.6	823.0	822.6	822.0
147.5°	862.0	862.4	862.9	862.5	861.3	860.0	858.8	857.5
150°	885.6	885.6	885.6	885.4	885.0	884.7	884.3	883.9
152.5°	907.6	908.1	908.5	908.4	907.8	907.1	906.4	905.7
155°	939.1	939.9	940.6	940.4	939.6	938.7	937.8	936.8
157.5°	966.4	967.1	967.8	967.6	966.4	965.2	963.9	962.8
160°	982.9	983.7	984.4	984.2	983.3	982.4	981.5	980.6
162.5°	998.4	999.2	1000.1	1000.0	999.0	997.9	996.9	995.8
165°	1019.2	1019.9	1020.7	1020.5	1019.5	1018.3	1017.2	1016.1
167.5°	1034.7	1035.8	1036.9	1036.9	1035.8	1034.6	1033.5	1032.3
170°	1043.9	1045.1	1046.1	1046.0	1044.7	1043.5	1042.2	1040.9
172.5°	1050.5	1051.7	1052.7	1052.7	1051.6	1050.4	1049.3	1048.1
175°	1057.9	1059.1	1060.2	1060.1	1058.8	1057.5	1056.2	1054.9
177.5°	1061.4	1062.3	1063.1	1063.0	1062.0	1060.9	1060.0	1058.9
180°	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5	1061.5

(END OF REPORT)