

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: P333602-930

Luminaire Tested: **S125RDIP-S1090D1035U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602-930
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: S125RDIP-S1090D1035U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6363.5 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

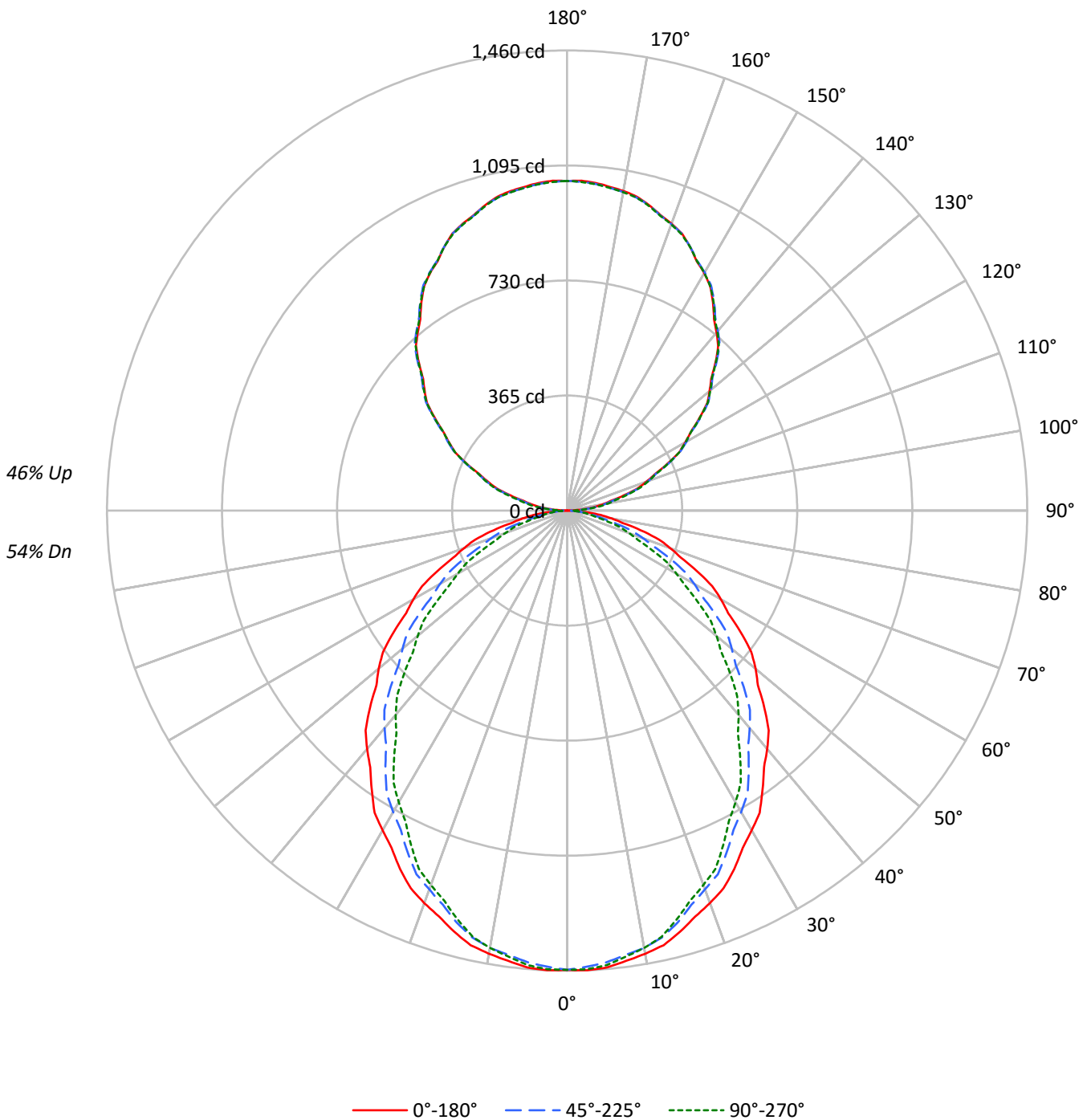
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	30	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9412	9412	9412
5°	9433	9326	9383
10°	9362	9239	9239
15°	9250	9052	8978
20°	9108	8790	8685
25°	8941	8533	8345
30°	8733	8232	7970
35°	8521	7923	7550
40°	8323	7599	7136
45°	8082	7238	6685
50°	7840	6845	6215
55°	7560	6469	5713
60°	7279	6013	5174
65°	6946	5483	4557
70°	6567	4823	3928
75°	6041	4065	3266
80°	5322	3195	2741
85°	4483	2608	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	2.2
10°-20°	382.9	6.0
20°-30°	555.3	8.7
30°-40°	632.9	9.9
40°-50°	616.9	9.7
50°-60°	519.3	8.2
60°-70°	364.0	5.7
70°-80°	187.1	2.9
80°-90°	49.5	0.8
90°-100°	70.1	1.1
100°-110°	206.9	3.3
110°-120°	350.4	5.5
120°-130°	461.1	7.2
130°-140°	516.7	8.1
140°-150°	506.4	8.0
150°-160°	425.3	6.7
160°-170°	282.7	4.4
170°-180°	98.9	1.6
0°-30°	1075.3	16.9
0°-40°	1708.1	26.8
0°-60°	2844.3	44.7
0°-90°	3444.9	54.1
90°-120°	627.3	9.9
90°-150°	2111.6	33.2
90°-180°	2919.0	45.9
0°-180°	6363.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1450	1438	1449	1447	138
15°	1384	1376	1354	1352	1343	390
25°	1255	1237	1198	1183	1171	577
35°	1081	1053	1005	974	958	676
45°	885	851	792	750	732	682
55°	671	635	574	527	507	600
65°	454	416	359	316	298	450
75°	242	208	163	140	131	256
85°	60	42	35	34	33	68
90°	1	7	13	17	20	6
95°	53	55	63	68	70	56
105°	186	190	194	199	202	198
115°	351	354	356	355	354	347
125°	512	517	518	516	515	458
135°	666	670	672	671	668	513
145°	807	810	812	812	810	504
155°	923	923	924	927	923	425
165°	1004	1002	1003	1006	1001	283
175°	1044	1040	1040	1045	1039	99
180°	1046	1046	1046	1046	1046	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1459.9	1459.3	1458.7	1458.1	1457.5	1456.3	1454.3	1452.4	1450.4	1448.5	1450.4
5°	1455.1	1454.1	1453.1	1452.1	1451.2	1449.3	1446.6	1443.9	1441.2	1438.5	1441.0
7.5°	1440.7	1439.8	1438.8	1437.9	1437.0	1434.9	1431.7	1428.5	1425.2	1422.0	1423.8
10°	1427.5	1426.8	1426.0	1425.3	1424.6	1422.5	1419.1	1415.7	1412.3	1408.8	1409.6
12.5°	1412.5	1411.6	1410.7	1409.7	1408.8	1406.1	1401.5	1396.9	1392.3	1387.6	1388.2
15°	1383.5	1382.0	1380.5	1379.1	1377.6	1374.4	1369.2	1364.1	1358.9	1353.8	1353.6
17.5°	1350.7	1348.4	1346.2	1343.9	1341.7	1337.3	1330.9	1324.5	1317.9	1311.5	1310.3
20°	1325.2	1322.7	1320.3	1317.8	1315.4	1310.3	1302.4	1294.6	1286.8	1279.0	1277.7
22.5°	1297.0	1294.5	1292.1	1289.6	1287.2	1281.9	1273.7	1265.4	1257.2	1249.0	1246.6
25°	1254.7	1251.1	1247.4	1243.7	1240.1	1233.7	1224.7	1215.6	1206.6	1197.5	1194.3
27.5°	1206.3	1201.8	1197.3	1192.9	1188.5	1181.5	1171.7	1162.0	1152.3	1142.6	1138.2
30°	1171.1	1166.4	1161.8	1157.2	1152.5	1145.0	1134.7	1124.5	1114.2	1103.9	1098.3
32.5°	1136.7	1131.3	1125.8	1120.5	1115.0	1107.1	1096.6	1086.1	1075.6	1065.2	1059.0
35°	1080.8	1075.0	1069.1	1063.2	1057.4	1048.9	1037.9	1026.9	1015.9	1004.9	997.8
37.5°	1026.0	1018.9	1011.7	1004.6	997.4	988.2	976.8	965.5	954.1	942.8	934.3
40°	987.2	979.9	972.6	965.2	957.9	948.4	936.6	924.9	913.1	901.4	892.1
42.5°	946.7	939.2	931.7	924.1	916.6	906.8	894.6	882.6	870.4	858.3	849.4
45°	884.9	877.8	870.7	863.6	856.6	846.3	832.8	819.4	805.9	792.5	782.7
47.5°	820.8	813.3	805.8	798.4	790.9	780.4	766.9	753.3	739.7	726.2	716.1
50°	780.3	772.3	764.2	756.1	748.0	737.0	723.1	709.1	695.2	681.3	671.0
52.5°	736.3	728.1	719.7	711.5	703.3	692.5	679.4	666.2	653.1	639.9	628.8
55°	671.4	663.6	655.7	647.9	640.1	629.3	615.6	601.9	588.2	574.5	563.5
57.5°	605.8	597.5	589.1	580.7	572.3	561.6	548.4	535.2	522.0	508.7	498.0
60°	563.5	555.0	546.4	537.9	529.3	518.4	505.2	492.0	478.7	465.5	454.8
62.5°	518.6	510.5	502.3	494.1	485.9	475.2	461.8	448.3	435.0	421.5	411.6
65°	454.5	446.2	437.9	429.6	421.3	410.7	397.7	384.7	371.8	358.8	349.0
67.5°	390.9	382.6	374.3	366.0	357.7	347.3	334.8	322.5	310.1	297.6	288.7
70°	347.8	339.5	331.2	322.9	314.5	304.3	292.0	279.8	267.6	255.4	247.8
72.5°	305.6	297.4	289.3	281.2	273.0	263.3	251.8	240.4	228.9	217.5	210.5
75°	242.1	234.8	227.5	220.1	212.8	204.0	193.7	183.4	173.2	162.9	157.5
77.5°	179.2	173.3	167.5	161.6	155.7	148.6	140.5	132.2	124.0	115.8	112.0
80°	143.1	137.2	131.3	125.5	119.6	113.2	106.4	99.5	92.7	85.9	83.6
82.5°	107.9	102.6	97.3	92.0	86.7	81.8	77.0	72.3	67.7	62.9	62.0
85°	60.5	56.1	51.7	47.3	42.9	40.1	38.9	37.7	36.4	35.2	35.0
87.5°	20.4	19.3	18.3	17.2	16.1	15.6	15.7	15.7	15.7	15.8	16.0
90°	0.8	2.3	3.7	5.1	6.6	8.0	9.2	10.5	11.7	13.0	13.9
92.5°	19.7	20.7	21.7	22.7	23.7	25.0	26.6	28.1	29.7	31.2	32.4
95°	52.9	53.2	53.6	54.0	54.4	55.4	57.2	59.0	60.9	62.7	63.9
97.5°	87.9	88.1	88.2	88.4	88.5	89.8	92.3	94.8	97.3	99.8	101.0
100°	114.0	114.0	114.0	114.0	114.0	115.1	117.5	119.8	122.2	124.5	126.1
102.5°	141.9	142.7	143.4	144.1	144.9	145.8	147.0	148.2	149.4	150.6	152.4
105°	185.6	186.5	187.4	188.3	189.2	190.2	191.3	192.3	193.5	194.5	195.6
107.5°	233.7	234.6	235.5	236.5	237.4	238.2	239.0	239.9	240.8	241.6	242.1
110°	267.0	267.9	268.8	269.7	270.6	271.3	271.8	272.4	273.0	273.5	274.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	300.8	301.3	301.7	302.2	302.7	303.3	304.0	304.7	305.3	306.1	306.3
115°	350.8	351.6	352.3	353.0	353.7	354.2	354.6	355.0	355.3	355.7	355.6
117.5°	401.0	401.3	401.6	401.9	402.3	402.6	402.9	403.2	403.6	403.9	404.1
120°	432.2	433.1	434.0	435.0	435.9	436.3	436.5	436.8	436.9	437.1	437.1
122.5°	466.1	466.4	466.8	467.1	467.4	467.7	468.2	468.7	469.2	469.6	469.5
125°	512.0	513.1	514.1	515.3	516.3	517.0	517.1	517.3	517.5	517.7	517.3
127.5°	560.8	561.4	562.1	562.6	563.3	563.7	563.9	564.1	564.4	564.6	564.4
130°	590.1	591.0	591.9	592.8	593.7	594.4	594.8	595.1	595.4	595.8	595.7
132.5°	619.4	620.9	622.4	623.9	625.3	626.1	626.0	625.9	625.8	625.7	625.6
135°	665.9	666.9	668.0	669.0	670.2	670.8	671.0	671.2	671.3	671.5	671.5
137.5°	709.5	710.5	711.5	712.6	713.6	714.4	714.8	715.2	715.6	715.9	716.2
140°	737.4	738.3	739.2	740.1	741.0	741.8	742.3	742.9	743.4	744.0	744.3
142.5°	765.4	766.2	767.0	767.7	768.5	769.2	769.9	770.6	771.3	771.9	772.2
145°	806.7	807.4	808.0	808.8	809.5	810.2	810.7	811.2	811.8	812.4	812.4
147.5°	844.7	845.1	845.5	846.0	846.3	846.8	847.2	847.6	848.0	848.5	848.9
150°	870.1	869.9	869.8	869.6	869.4	869.7	870.4	871.1	871.8	872.5	872.5
152.5°	891.0	891.2	891.4	891.7	891.9	892.3	892.5	892.8	893.1	893.4	893.8
155°	923.0	923.0	923.0	923.0	923.0	923.1	923.3	923.5	923.7	923.8	924.5
157.5°	951.7	951.3	950.9	950.5	950.1	950.0	950.1	950.3	950.6	950.7	951.5
160°	968.6	968.1	967.5	966.9	966.5	966.3	966.5	966.6	966.8	966.9	967.7
162.5°	983.6	983.2	982.8	982.4	982.0	981.8	981.9	981.9	981.9	981.9	982.8
165°	1003.6	1003.2	1002.9	1002.5	1002.2	1002.1	1002.2	1002.4	1002.6	1002.8	1003.6
167.5°	1020.5	1019.8	1019.1	1018.4	1017.7	1017.2	1017.2	1017.2	1017.2	1017.2	1018.4
170°	1029.6	1028.9	1028.2	1027.5	1026.8	1026.4	1026.4	1026.4	1026.4	1026.4	1027.5
172.5°	1036.2	1035.4	1034.7	1034.0	1033.3	1032.9	1032.9	1032.9	1032.9	1032.9	1034.0
175°	1043.5	1042.8	1042.0	1041.3	1040.6	1040.2	1040.2	1040.2	1040.2	1040.2	1041.3
177.5°	1047.3	1046.7	1046.1	1045.5	1044.9	1044.6	1044.4	1044.2	1044.2	1044.0	1044.9
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3	1457.3
2.5°	1452.4	1454.3	1456.3	1457.1	1456.9	1456.8	1456.5	1456.4
5°	1443.4	1445.9	1448.3	1449.3	1448.8	1448.3	1447.8	1447.3
7.5°	1425.5	1427.2	1428.9	1429.5	1428.9	1428.4	1427.8	1427.3
10°	1410.3	1411.0	1411.8	1411.8	1411.0	1410.3	1409.6	1408.8
12.5°	1388.8	1389.3	1389.8	1389.5	1388.4	1387.3	1386.2	1385.0
15°	1353.3	1353.1	1352.8	1351.6	1349.4	1347.2	1345.0	1342.8
17.5°	1309.0	1307.8	1306.6	1305.1	1303.3	1301.5	1299.7	1297.9
20°	1276.5	1275.3	1274.1	1272.4	1270.2	1268.0	1265.8	1263.6
22.5°	1244.2	1241.8	1239.4	1237.3	1235.5	1233.7	1231.8	1230.0
25°	1191.2	1188.0	1184.8	1181.9	1179.2	1176.5	1173.8	1171.1
27.5°	1133.8	1129.4	1124.9	1121.4	1118.8	1116.1	1113.5	1111.0
30°	1092.7	1087.0	1081.4	1077.5	1075.3	1073.1	1070.9	1068.7
32.5°	1052.8	1046.5	1040.3	1035.8	1033.1	1030.3	1027.4	1024.7
35°	990.7	983.6	976.5	971.3	967.8	964.4	961.0	957.6
37.5°	925.8	917.3	908.7	902.9	899.5	896.2	892.8	889.5
40°	882.8	873.5	864.2	858.1	855.2	852.2	849.3	846.4
42.5°	840.5	831.5	822.6	816.0	811.7	807.5	803.2	798.8
45°	772.9	763.1	753.3	746.6	742.9	739.2	735.6	731.9
47.5°	706.0	695.9	685.9	678.8	674.7	670.7	666.7	662.6
50°	660.7	650.4	640.2	633.2	629.6	625.9	622.2	618.6
52.5°	617.8	606.7	595.7	588.3	584.7	581.0	577.3	573.6
55°	552.5	541.5	530.5	523.0	519.1	515.2	511.3	507.4
57.5°	487.2	476.5	465.7	458.5	455.1	451.6	448.1	444.7
60°	444.0	433.3	422.5	415.3	411.6	408.0	404.3	400.6
62.5°	401.6	391.6	381.6	374.8	371.1	367.5	363.8	360.1
65°	339.2	329.5	319.7	312.9	309.2	305.6	301.9	298.2
67.5°	279.7	270.8	261.8	255.8	252.9	250.0	247.0	244.1
70°	240.2	232.6	225.0	219.7	216.8	213.9	210.9	208.0
72.5°	203.5	196.5	189.5	185.0	183.0	181.1	179.1	177.2
75°	152.1	146.8	141.4	137.8	136.1	134.4	132.6	130.9
77.5°	108.3	104.5	100.7	98.2	96.9	95.6	94.4	93.1
80°	81.4	79.2	77.0	75.7	75.2	74.7	74.2	73.7
82.5°	60.9	59.8	58.9	58.2	57.9	57.6	57.3	57.0
85°	34.7	34.5	34.2	34.0	33.8	33.5	33.3	33.0
87.5°	16.1	16.4	16.6	16.6	16.5	16.4	16.3	16.2
90°	14.8	15.7	16.6	17.4	17.9	18.4	19.0	19.6
92.5°	33.7	34.8	36.0	36.9	37.3	37.6	38.0	38.4
95°	65.2	66.4	67.8	68.6	68.9	69.3	69.6	70.0
97.5°	102.2	103.4	104.6	105.3	105.5	105.7	105.9	106.2
100°	127.8	129.4	131.0	132.1	132.4	132.7	133.1	133.5
102.5°	154.1	155.9	157.7	158.8	159.3	159.8	160.4	160.9
105°	196.7	197.8	198.9	199.7	200.2	200.8	201.3	201.9
107.5°	242.6	243.2	243.8	244.0	243.9	243.9	243.9	243.9
110°	274.6	275.1	275.7	275.8	275.7	275.5	275.3	275.1



TEST NUMBER: P333602-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	306.6	306.8	307.0	307.0	306.7	306.4	306.1	305.7
115°	355.3	355.1	355.0	354.8	354.6	354.4	354.2	354.1
117.5°	404.1	404.3	404.5	404.1	403.4	402.8	402.0	401.3
120°	437.1	437.1	437.1	436.8	436.0	435.3	434.6	433.8
122.5°	469.4	469.2	469.0	468.7	468.1	467.6	467.0	466.4
125°	517.0	516.6	516.2	515.9	515.8	515.6	515.4	515.3
127.5°	564.2	564.0	563.9	563.5	563.2	562.8	562.5	562.1
130°	595.4	595.3	595.1	594.8	594.4	594.1	593.7	593.4
132.5°	625.4	625.3	625.0	624.7	624.2	623.7	623.2	622.6
135°	671.5	671.5	671.5	671.2	670.4	669.7	669.0	668.2
137.5°	716.4	716.6	716.8	716.5	715.6	714.7	713.8	712.9
140°	744.7	745.0	745.4	745.1	744.2	743.3	742.4	741.5
142.5°	772.4	772.6	772.8	772.5	771.6	770.7	769.8	768.8
145°	812.4	812.4	812.4	812.0	811.5	811.0	810.4	809.9
147.5°	849.3	849.8	850.2	849.8	848.6	847.3	846.1	844.9
150°	872.5	872.5	872.5	872.4	872.0	871.6	871.3	870.9
152.5°	894.3	894.7	895.1	895.0	894.4	893.7	893.1	892.4
155°	925.3	926.0	926.8	926.7	925.8	924.8	923.9	923.0
157.5°	952.1	952.8	953.6	953.3	952.2	951.0	949.7	948.6
160°	968.4	969.1	969.9	969.8	968.9	968.0	967.1	966.1
162.5°	983.7	984.6	985.5	985.4	984.3	983.3	982.2	981.1
165°	1004.2	1004.9	1005.7	1005.5	1004.4	1003.3	1002.2	1001.2
167.5°	1019.5	1020.5	1021.7	1021.6	1020.5	1019.4	1018.2	1017.1
170°	1028.6	1029.6	1030.7	1030.6	1029.4	1028.1	1026.9	1025.6
172.5°	1035.1	1036.2	1037.2	1037.2	1036.1	1035.0	1033.9	1032.7
175°	1042.4	1043.5	1044.6	1044.5	1043.3	1042.0	1040.6	1039.4
177.5°	1045.7	1046.6	1047.4	1047.4	1046.4	1045.4	1044.3	1043.3
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9

(END OF REPORT)