

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: P333607-930

Luminaire Tested: **S125RDIP-S1090D1205U930-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333607-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIP-S1090D1205U930-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7370.5 lumens
Efficiency: N/A
Efficacy: 112.7 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

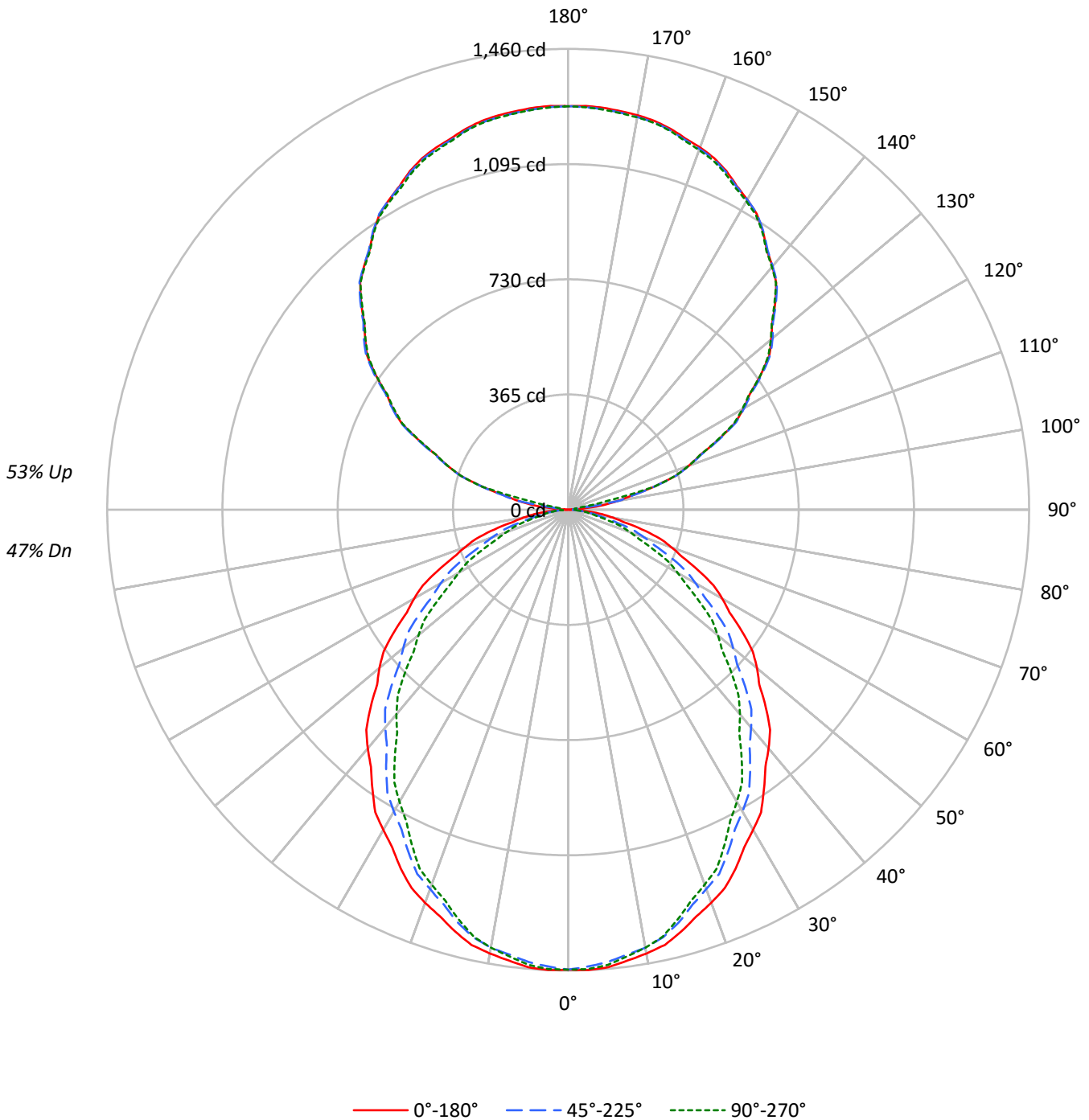
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45	40
2	89	81	75	70	81	75	70	66	63	59	56	52	49	47	42	40	38	34
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33	29
4	74	64	56	50	68	59	52	47	50	45	40	41	37	34	33	31	28	25
5	68	57	49	43	62	52	45	40	45	39	35	37	33	30	30	27	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22	19
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	31	26	46	36	29	24	30	25	21	26	22	19	21	18	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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	1.9
10°-20°	382.9	5.2
20°-30°	555.3	7.5
30°-40°	632.9	8.6
40°-50°	616.9	8.4
50°-60°	519.3	7.0
60°-70°	364.0	4.9
70°-80°	187.1	2.5
80°-90°	49.9	0.7
90°-100°	46.5	0.6
100°-110°	286.3	3.9
110°-120°	519.2	7.0
120°-130°	666.3	9.0
130°-140°	716.7	9.7
140°-150°	672.7	9.1
150°-160°	544.2	7.4
160°-170°	351.9	4.8
170°-180°	121.4	1.6
0°-30°	1075.3	14.6
0°-40°	1708.1	23.2
0°-60°	2844.3	38.6
0°-90°	3445.3	46.7
90°-120°	851.9	11.6
90°-150°	2907.7	39.5
90°-180°	3925.0	53.3
0°-180°	7370.5	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	8	15	20	23	5
95°	54	49	15	20	20	69
105°	279	282	282	282	281	295
115°	523	528	529	525	519	518
125°	744	750	750	747	744	664
135°	928	933	931	929	924	715
145°	1076	1077	1077	1078	1073	672
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



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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°	20.5	19.4	18.3	17.4	16.3	15.8	16.0	16.1	16.1	16.2	16.5
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	14.6	13.5	12.2	11.1	9.9	9.9	11.3	12.6	13.9	15.2	16.2
95°	54.0	53.4	52.7	52.1	51.4	47.2	39.1	31.1	23.2	15.2	16.2
97.5°	112.8	113.9	115.0	116.2	117.3	110.0	94.1	78.3	62.5	46.6	40.7
100°	158.2	158.9	159.5	160.1	160.8	161.5	162.3	163.2	164.0	164.9	133.5
102.5°	204.5	205.3	206.1	206.8	207.7	208.3	208.8	209.4	209.9	210.3	204.4
105°	278.6	279.4	280.2	281.1	281.9	282.3	282.3	282.3	282.3	282.3	282.3
107.5°	355.6	355.6	355.6	355.6	355.6	355.7	356.1	356.5	357.0	357.4	357.4
110°	405.5	405.5	405.5	405.5	405.5	405.8	406.2	406.6	407.0	407.4	406.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	452.6	453.1	453.6	454.0	454.5	454.9	455.2	455.4	455.7	455.9	455.2
115°	523.0	524.1	525.1	526.2	527.3	527.9	528.1	528.3	528.5	528.7	527.9
117.5°	596.0	596.0	595.9	595.9	595.8	596.2	597.0	597.8	598.6	599.4	598.3
120°	641.5	641.2	641.1	640.8	640.7	640.8	641.5	642.1	642.7	643.4	642.9
122.5°	681.7	682.5	683.2	684.0	684.9	685.4	685.7	686.0	686.3	686.6	686.2
125°	743.8	745.3	746.7	748.2	749.7	750.4	750.4	750.4	750.4	750.4	749.6
127.5°	803.2	804.2	805.2	806.2	807.3	807.8	807.6	807.6	807.4	807.3	806.8
130°	839.5	840.6	841.6	842.7	843.8	844.3	844.6	844.8	845.0	845.2	844.6
132.5°	875.9	877.1	878.3	879.5	880.8	881.2	880.7	880.2	879.8	879.3	879.2
135°	927.6	928.9	930.2	931.4	932.7	933.1	932.7	932.3	931.8	931.4	931.0
137.5°	975.2	976.3	977.4	978.4	979.6	979.9	979.6	979.2	978.8	978.4	978.5
140°	1006.2	1006.7	1007.1	1007.5	1008.0	1008.0	1007.9	1007.6	1007.5	1007.2	1007.6
142.5°	1034.3	1034.5	1034.9	1035.1	1035.3	1035.6	1035.9	1036.2	1036.5	1036.8	1036.9
145°	1075.5	1075.9	1076.3	1076.7	1077.1	1077.3	1077.3	1077.3	1077.3	1077.3	1077.6
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.5
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



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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°	16.6	16.9	17.1	17.1	17.1	17.0	17.0	16.9
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	17.3	18.3	19.4	20.1	20.3	20.6	21.0	21.2
95°	17.3	18.3	19.4	19.9	19.9	19.9	19.9	19.9
97.5°	34.7	28.8	22.8	19.9	19.9	19.9	19.9	19.9
100°	102.2	70.8	39.4	23.2	22.4	21.6	20.7	19.9
102.5°	198.4	192.6	186.6	176.5	162.2	147.8	133.5	119.2
105°	282.3	282.3	282.3	282.3	282.0	281.8	281.6	281.4
107.5°	357.5	357.5	357.6	357.3	356.6	356.0	355.4	354.7
110°	406.2	405.5	404.9	404.7	404.9	405.1	405.4	405.5



TEST NUMBER: P333607-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	454.4	453.6	452.7	452.2	451.9	451.6	451.3	451.0
115°	527.0	526.2	525.4	524.3	523.0	521.8	520.5	519.3
117.5°	597.2	596.1	595.0	594.2	593.6	593.1	592.6	592.0
120°	642.5	642.1	641.7	641.0	639.9	638.9	637.8	636.7
122.5°	685.7	685.3	684.9	684.0	682.8	681.6	680.4	679.2
125°	748.8	747.9	747.1	746.3	745.7	745.1	744.4	743.8
127.5°	806.3	805.9	805.4	804.5	802.9	801.3	799.7	798.2
130°	843.9	843.3	842.7	841.8	840.7	839.8	838.7	837.6
132.5°	879.1	878.9	878.8	878.2	877.2	876.1	875.1	874.0
135°	930.6	930.2	929.8	928.9	927.6	926.3	925.1	923.8
137.5°	978.6	978.7	978.8	978.3	977.1	976.1	974.9	973.9
140°	1008.0	1008.4	1008.9	1008.4	1007.2	1006.0	1004.7	1003.5
142.5°	1037.0	1037.1	1037.1	1036.6	1035.3	1034.0	1032.7	1031.5
145°	1077.7	1078.0	1078.2	1077.7	1076.4	1075.1	1073.8	1072.6
147.5°	1112.7	1113.0	1113.2	1112.6	1111.1	1109.5	1108.1	1106.5
150°	1135.1	1135.5	1135.9	1135.2	1133.6	1131.9	1130.2	1128.5
152.5°	1154.7	1155.2	1155.6	1155.0	1153.5	1152.0	1150.5	1149.0
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)