

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: P333608-930

Luminaire Tested: **S125RDIP-S1090D1205U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333608-930
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-S1090D1205U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6842.4 lumens
Efficiency: N/A
Efficacy: 104.6 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

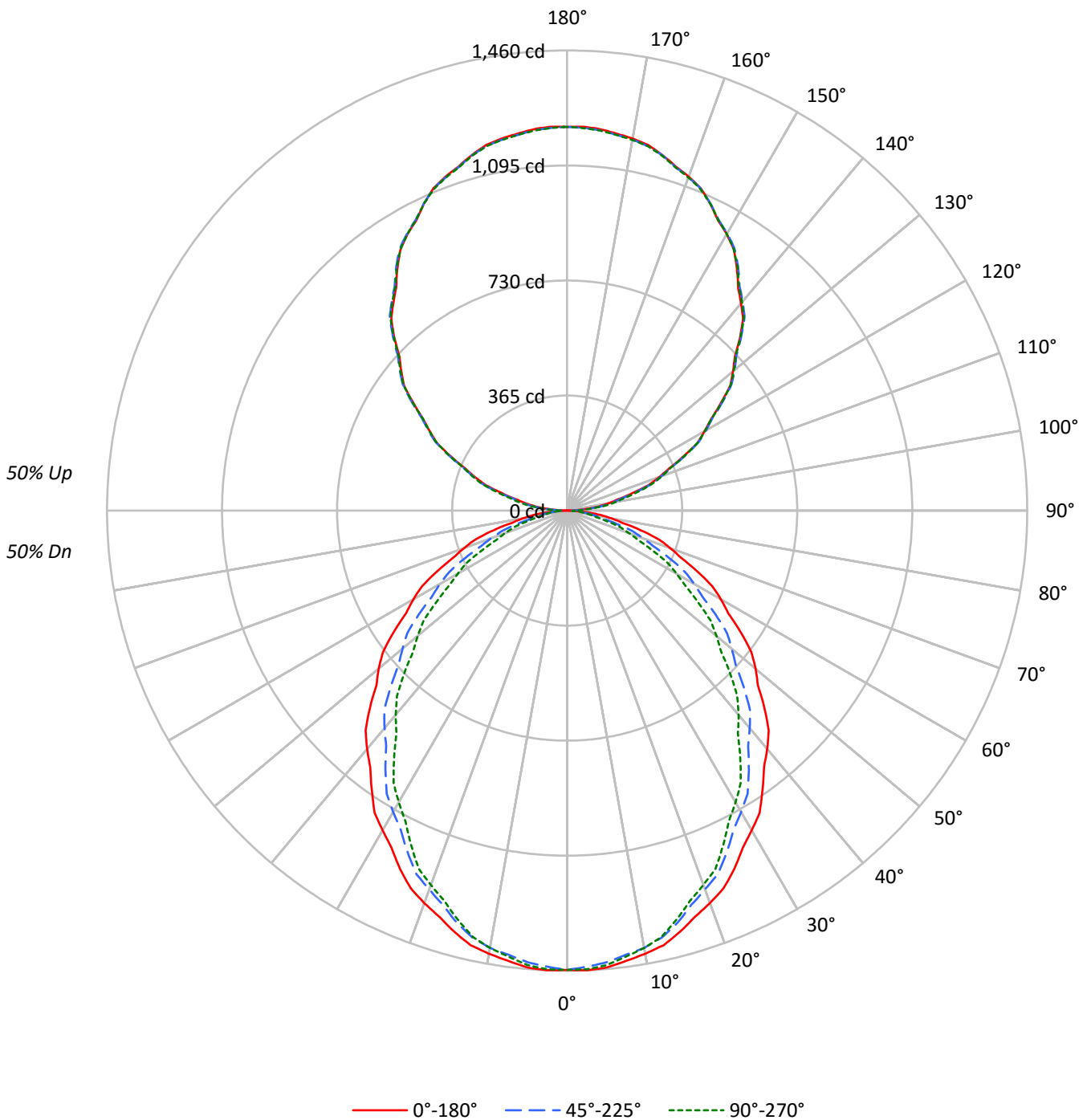
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	50	30	10	0																			
RCR																																														
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50																												
1	98	94	90	87	90	87	84	81	74	71	69	61	60	58	50	49	48	43																												
2	89	82	76	71	82	76	71	66	65	61	58	54	51	49	44	43	41	36																												
3	82	72	65	59	75	67	61	56	57	52	49	48	45	42	40	37	35	31																												
4	75	64	56	50	69	60	53	47	51	46	42	43	39	36	35	33	30	27																												
5	69	57	49	43	63	53	46	41	46	40	36	39	34	31	32	29	26	23																												
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	21																												
7	59	47	39	33	54	43	36	31	37	32	28	32	28	24	27	23	21	18																												
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	25	21	19	16																												
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15																												
10	47	35	28	24	44	33	27	22	29	24	20	25	21	18	21	18	15	14																												

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	2.0
10°-20°	382.9	5.6
20°-30°	555.3	8.1
30°-40°	632.9	9.2
40°-50°	616.9	9.0
50°-60°	519.3	7.6
60°-70°	364.0	5.3
70°-80°	187.1	2.7
80°-90°	49.9	0.7
90°-100°	81.5	1.2
100°-110°	240.8	3.5
110°-120°	407.8	6.0
120°-130°	536.7	7.8
130°-140°	601.4	8.8
140°-150°	589.4	8.6
150°-160°	495.1	7.2
160°-170°	329.1	4.8
170°-180°	115.2	1.7
0°-30°	1075.3	15.7
0°-40°	1708.1	25.0
0°-60°	2844.3	41.6
0°-90°	3445.3	50.4
90°-120°	730.2	10.7
90°-150°	2457.8	35.9
90°-180°	3397.0	49.6
0°-180°	6842.4	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	6
95°	62	64	73	79	81	66
105°	216	221	226	232	235	231
115°	408	412	414	413	412	404
125°	596	601	603	601	600	533
135°	775	780	782	781	778	597
145°	939	943	946	945	943	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



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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°	22.9	24.1	25.3	26.5	27.6	29.1	31.0	32.8	34.6	36.4	37.7
95°	61.6	62.0	62.5	62.9	63.3	64.5	66.6	68.7	70.8	73.0	74.4
97.5°	102.3	102.5	102.6	102.8	103.0	104.5	107.5	110.3	113.2	116.2	117.6
100°	132.6	132.6	132.6	132.6	132.6	134.0	136.7	139.5	142.2	145.0	146.8
102.5°	165.3	166.1	166.9	167.8	168.6	169.7	171.1	172.5	173.9	175.3	177.3
105°	216.0	217.0	218.1	219.2	220.2	221.4	222.7	223.9	225.2	226.4	227.7
107.5°	272.1	273.1	274.2	275.2	276.3	277.3	278.3	279.2	280.2	281.2	281.8
110°	310.8	311.8	312.8	313.9	315.0	315.8	316.4	317.1	317.7	318.3	318.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	350.2	350.7	351.2	351.8	352.4	353.0	353.8	354.7	355.4	356.2	356.5
115°	408.3	409.2	410.0	410.8	411.7	412.3	412.8	413.2	413.6	414.0	413.8
117.5°	466.7	467.1	467.5	467.8	468.2	468.6	469.0	469.4	469.7	470.1	470.3
120°	503.0	504.1	505.2	506.2	507.3	507.9	508.1	508.3	508.6	508.7	508.7
122.5°	542.5	542.9	543.2	543.6	544.0	544.5	545.0	545.6	546.1	546.7	546.5
125°	595.9	597.2	598.4	599.7	601.0	601.7	601.9	602.1	602.3	602.6	602.1
127.5°	652.8	653.5	654.2	654.9	655.7	656.2	656.4	656.6	656.9	657.1	656.9
130°	686.9	687.9	689.0	690.1	691.0	691.9	692.3	692.7	693.1	693.5	693.3
132.5°	721.0	722.7	724.5	726.2	727.9	728.7	728.6	728.6	728.5	728.4	728.1
135°	775.0	776.2	777.6	778.8	780.1	780.8	781.0	781.2	781.4	781.6	781.6
137.5°	825.7	827.0	828.2	829.4	830.6	831.5	831.9	832.4	832.9	833.3	833.6
140°	858.3	859.4	860.5	861.5	862.6	863.4	864.1	864.7	865.3	865.9	866.3
142.5°	891.0	891.9	892.8	893.6	894.5	895.4	896.1	896.9	897.7	898.5	898.8
145°	938.9	939.7	940.6	941.4	942.2	943.0	943.6	944.3	944.9	945.5	945.5
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.1
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



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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°	39.1	40.5	41.9	42.9	43.3	43.8	44.3	44.7
95°	75.9	77.4	78.8	79.8	80.2	80.6	81.0	81.4
97.5°	119.0	120.3	121.7	122.5	122.8	123.0	123.3	123.5
100°	148.7	150.7	152.5	153.7	154.1	154.5	155.0	155.4
102.5°	179.4	181.5	183.5	184.8	185.5	186.1	186.6	187.2
105°	228.9	230.2	231.5	232.4	233.1	233.7	234.3	235.0
107.5°	282.4	283.1	283.7	284.1	284.0	284.0	283.9	283.8
110°	319.6	320.2	320.8	321.1	320.8	320.7	320.4	320.2



TEST NUMBER: P333608-930

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	356.9	357.1	357.4	357.3	357.0	356.6	356.2	355.9
115°	413.6	413.4	413.2	412.9	412.8	412.5	412.3	412.1
117.5°	470.4	470.6	470.8	470.4	469.6	468.8	467.9	467.1
120°	508.7	508.7	508.7	508.3	507.5	506.6	505.8	505.0
122.5°	546.3	546.2	546.0	545.6	544.9	544.2	543.6	542.9
125°	601.7	601.3	600.9	600.5	600.4	600.1	599.9	599.7
127.5°	656.7	656.5	656.3	656.0	655.6	655.1	654.7	654.3
130°	693.1	692.8	692.7	692.4	691.9	691.5	691.0	690.6
132.5°	728.0	727.7	727.5	727.2	726.5	725.9	725.4	724.8
135°	781.6	781.6	781.6	781.2	780.3	779.5	778.7	777.8
137.5°	833.9	834.1	834.4	834.0	832.9	831.8	830.8	829.7
140°	866.7	867.2	867.6	867.3	866.3	865.2	864.1	863.1
142.5°	899.0	899.3	899.5	899.1	898.1	897.1	896.0	895.0
145°	945.5	945.5	945.5	945.2	944.6	944.0	943.3	942.6
147.5°	988.6	989.1	989.6	989.1	987.7	986.3	984.9	983.4
150°	1015.6	1015.6	1015.6	1015.5	1015.0	1014.6	1014.2	1013.7
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.2	1039.5	1038.8
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)