

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: P333284-930

Luminaire Tested: **S125DIP-S1090D1035U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333284-930
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: S125DIP-S1090D1035U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

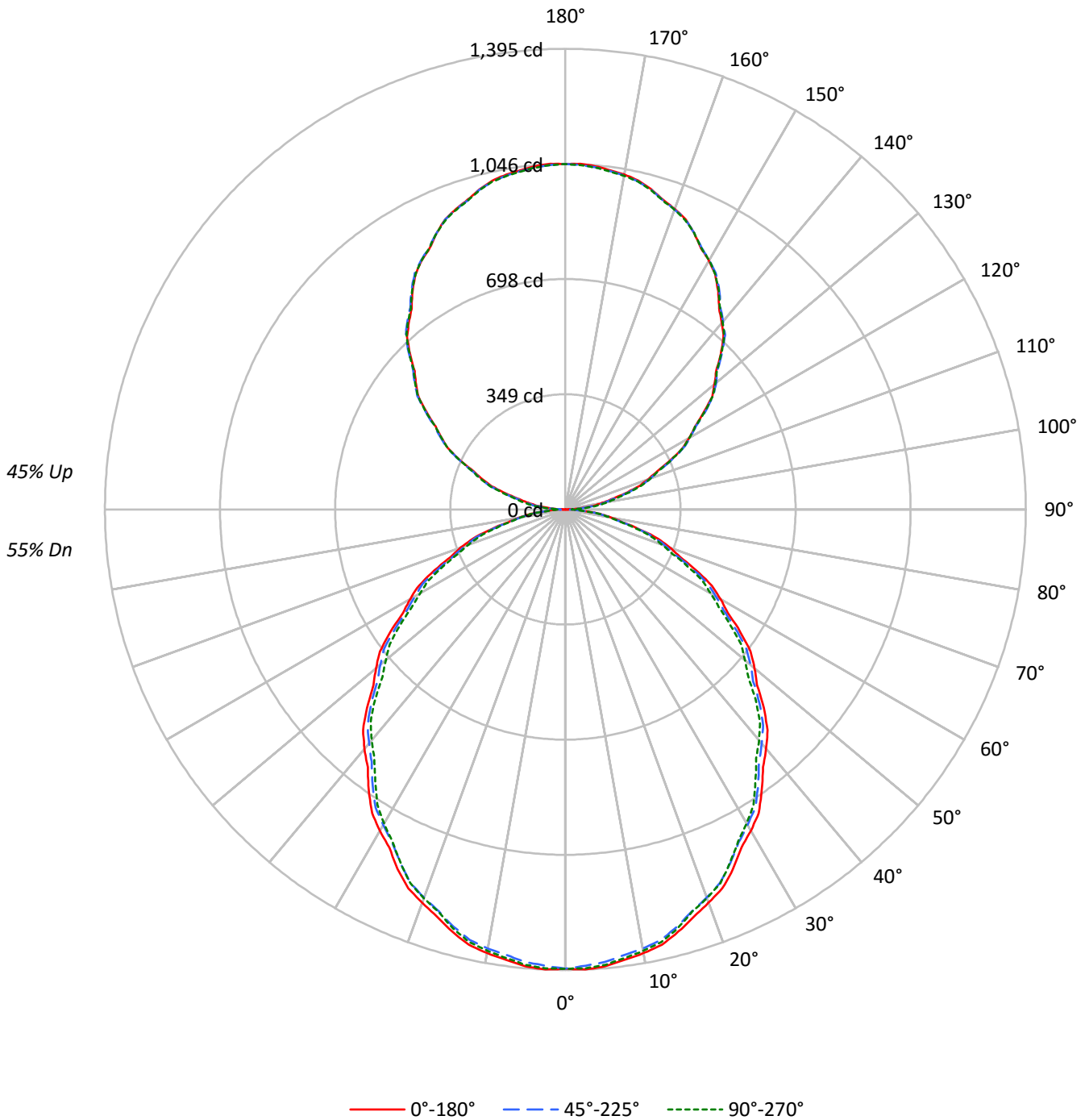
Lumens per Lamp: N/A
Luminaire Lumens: 6541.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
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	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	95	91	87	92	88	85	81	76	73	71	64	62	61	54	53	51	46				
2	90	83	76	71	83	77	71	67	66	62	59	56	53	51	47	45	43	39				
3	82	73	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	28	24				
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24	21				
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22	19				
8	55	42	34	29	51	40	32	28	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	48	35	28	23	44	33	27	22	29	24	20	26	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	2.0
10°-20°	370.5	5.7
20°-30°	547.1	8.4
30°-40°	638.4	9.8
40°-50°	641.2	9.8
50°-60°	562.8	8.6
60°-70°	419.4	6.4
70°-80°	239.8	3.7
80°-90°	72.0	1.1
90°-100°	70.1	1.1
100°-110°	206.9	3.2
110°-120°	350.4	5.4
120°-130°	461.1	7.0
130°-140°	516.7	7.9
140°-150°	506.4	7.7
150°-160°	425.3	6.5
160°-170°	282.7	4.3
170°-180°	98.9	1.5
0°-30°	1048.8	16.0
0°-40°	1687.2	25.8
0°-60°	2891.2	44.2
0°-90°	3622.4	55.4
90°-120°	627.3	9.6
90°-150°	2111.6	32.3
90°-180°	2919.0	44.6
0°-180°	6541.0	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°	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°	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	3.7	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°	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°	25.8	26.0	26.3	26.2	25.9	25.6	25.4	25.0
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: P333284-930

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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)