

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: P333711-927

Luminaire Tested: **S125RDIW-S1090D1050U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333711-927
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: S125RDIW-S1090D1050U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6225.5 lumens
Efficiency: N/A
Efficacy: 101.7 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

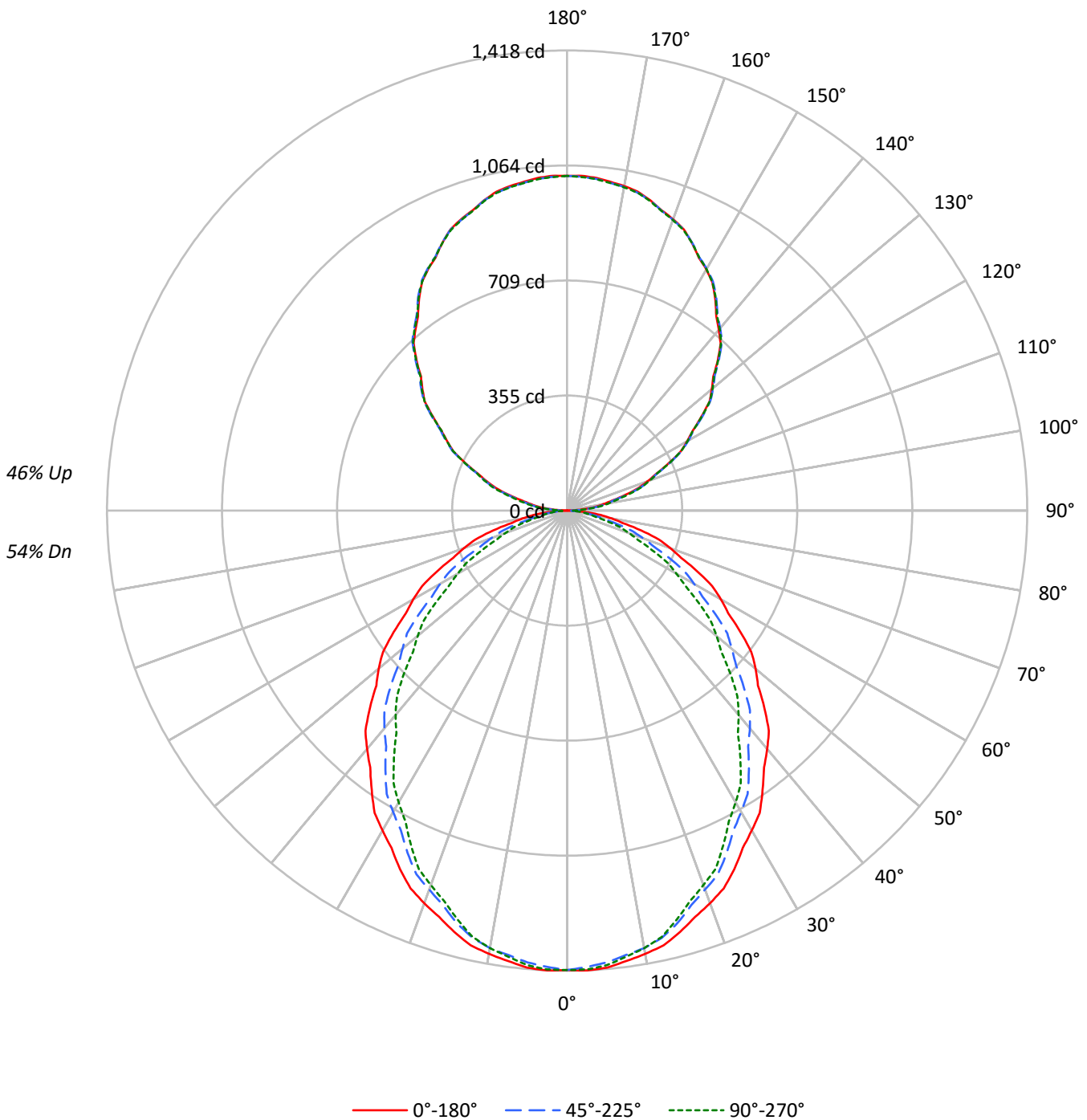
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	85	85	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	60	53	52	51	46
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	60	53	48	52	47	43	45	41	37	37	34	32	28
5	69	58	50	44	64	54	47	41	47	41	37	40	36	32	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	28	31	27	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	29	25	30	26	23	26	22	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	20	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	2.1
10°-20°	372.1	6.0
20°-30°	539.6	8.7
30°-40°	614.9	9.9
40°-50°	599.4	9.6
50°-60°	504.6	8.1
60°-70°	353.7	5.7
70°-80°	181.8	2.9
80°-90°	48.2	0.8
90°-100°	69.1	1.1
100°-110°	204.0	3.3
110°-120°	345.5	5.6
120°-130°	454.7	7.3
130°-140°	509.6	8.2
140°-150°	499.4	8.0
150°-160°	419.5	6.7
160°-170°	278.8	4.5
170°-180°	97.6	1.6
0°-30°	1044.8	16.8
0°-40°	1659.7	26.7
0°-60°	2763.6	44.4
0°-90°	3347.3	53.8
90°-120°	618.6	9.9
90°-150°	2082.3	33.4
90°-180°	2878.0	46.2
0°-180°	6225.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	7	13	17	19	6
95°	52	54	62	67	69	56
105°	183	187	192	196	199	195
115°	346	349	351	350	349	342
125°	505	509	510	509	508	452
135°	657	661	662	662	659	506
145°	795	799	801	801	799	497
155°	910	910	911	914	910	419
165°	990	988	989	992	987	279
175°	1029	1026	1026	1030	1025	98
180°	1031	1031	1031	1031	1031	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.8	18.8	17.7	16.7	15.7	15.1	15.2	15.3	15.4	15.4	15.6
90°	0.8	2.2	3.6	5.1	6.5	7.8	9.1	10.4	11.6	12.8	13.7
92.5°	19.4	20.4	21.4	22.4	23.4	24.7	26.2	27.7	29.3	30.8	32.0
95°	52.2	52.5	52.9	53.2	53.6	54.7	56.5	58.2	60.0	61.8	63.1
97.5°	86.7	86.8	87.0	87.1	87.3	88.6	91.0	93.5	95.9	98.4	99.6
100°	112.4	112.4	112.4	112.4	112.4	113.5	115.8	118.2	120.5	122.8	124.5
102.5°	140.0	140.7	141.4	142.1	142.8	143.8	145.0	146.2	147.3	148.5	150.3
105°	183.0	183.9	184.8	185.7	186.6	187.6	188.6	189.7	190.8	191.9	192.9
107.5°	230.5	231.4	232.3	233.2	234.1	235.0	235.8	236.6	237.4	238.2	238.8
110°	263.2	264.2	265.1	265.9	266.9	267.6	268.1	268.6	269.2	269.7	270.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	296.7	297.1	297.6	298.1	298.5	299.1	299.8	300.5	301.1	301.8	302.1
115°	345.9	346.7	347.4	348.1	348.8	349.4	349.7	350.1	350.4	350.8	350.6
117.5°	395.4	395.7	396.0	396.3	396.7	397.0	397.4	397.7	398.0	398.3	398.5
120°	426.2	427.1	428.0	428.9	429.8	430.3	430.5	430.7	430.9	431.0	431.0
122.5°	459.6	459.9	460.3	460.6	460.9	461.3	461.8	462.2	462.7	463.2	463.0
125°	504.9	506.0	507.0	508.1	509.1	509.8	510.0	510.2	510.3	510.5	510.2
127.5°	553.0	553.7	554.3	554.8	555.5	555.9	556.1	556.3	556.5	556.7	556.6
130°	581.9	582.8	583.8	584.6	585.5	586.1	586.5	586.8	587.2	587.6	587.4
132.5°	610.9	612.3	613.8	615.2	616.7	617.4	617.3	617.3	617.2	617.1	617.0
135°	656.6	657.7	658.7	659.8	660.9	661.5	661.7	661.9	662.0	662.2	662.2
137.5°	699.7	700.7	701.7	702.7	703.8	704.5	704.9	705.3	705.7	706.1	706.2
140°	727.2	728.1	729.0	729.9	730.8	731.5	732.1	732.6	733.1	733.6	734.0
142.5°	754.9	755.6	756.4	757.1	757.9	758.6	759.2	759.9	760.6	761.3	761.4
145°	795.4	796.1	796.9	797.6	798.3	798.9	799.5	800.0	800.6	801.1	801.1
147.5°	833.1	833.5	833.9	834.2	834.6	835.0	835.4	835.8	836.3	836.7	837.2
150°	858.1	857.9	857.7	857.5	857.4	857.6	858.3	859.0	859.8	860.5	860.5
152.5°	878.6	878.8	879.1	879.4	879.6	879.9	880.2	880.4	880.7	881.1	881.5
155°	910.2	910.2	910.2	910.2	910.2	910.3	910.5	910.7	910.9	911.1	911.8
157.5°	938.5	938.1	937.7	937.3	936.9	936.8	937.0	937.2	937.4	937.5	938.3
160°	955.2	954.7	954.1	953.6	953.1	952.9	953.1	953.2	953.4	953.6	954.3
162.5°	969.9	969.6	969.2	968.8	968.4	968.2	968.3	968.3	968.4	968.4	969.2
165°	989.8	989.4	989.0	988.6	988.2	988.2	988.4	988.6	988.7	988.9	989.6
167.5°	1006.4	1005.7	1005.0	1004.2	1003.5	1003.2	1003.2	1003.2	1003.2	1003.2	1004.2
170°	1015.4	1014.7	1014.0	1013.3	1012.6	1012.2	1012.2	1012.2	1012.2	1012.2	1013.3
172.5°	1021.8	1021.1	1020.4	1019.7	1019.0	1018.6	1018.6	1018.6	1018.6	1018.6	1019.7
175°	1029.0	1028.3	1027.6	1026.9	1026.2	1025.8	1025.8	1025.8	1025.8	1025.8	1026.9
177.5°	1032.8	1032.1	1031.6	1031.0	1030.5	1030.1	1029.9	1029.8	1029.7	1029.5	1030.4
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	15.8	15.9	16.1	16.2	16.1	16.0	15.9	15.8
90°	14.7	15.5	16.4	17.1	17.7	18.2	18.7	19.3
92.5°	33.2	34.4	35.6	36.3	36.7	37.1	37.5	37.9
95°	64.3	65.5	66.8	67.6	68.0	68.3	68.7	69.0
97.5°	100.8	102.0	103.1	103.8	104.0	104.3	104.5	104.6
100°	126.0	127.6	129.2	130.2	130.6	130.9	131.3	131.7
102.5°	152.0	153.8	155.5	156.6	157.1	157.6	158.1	158.6
105°	194.0	195.0	196.1	196.9	197.5	198.0	198.5	199.1
107.5°	239.3	239.9	240.3	240.7	240.6	240.6	240.5	240.5
110°	270.8	271.3	271.9	272.0	271.9	271.6	271.5	271.3



TEST NUMBER: P333711-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	302.3	302.5	302.8	302.8	302.5	302.1	301.8	301.5
115°	350.4	350.2	350.1	349.9	349.7	349.5	349.4	349.2
117.5°	398.5	398.7	398.9	398.5	397.8	397.1	396.4	395.7
120°	431.0	431.0	431.0	430.7	430.0	429.3	428.6	427.9
122.5°	462.9	462.7	462.6	462.2	461.7	461.1	460.5	459.9
125°	509.8	509.5	509.1	508.8	508.7	508.4	508.3	508.1
127.5°	556.3	556.2	556.0	555.8	555.4	555.1	554.7	554.4
130°	587.2	587.0	586.8	586.6	586.2	585.9	585.5	585.2
132.5°	616.7	616.6	616.4	616.1	615.5	615.1	614.6	614.0
135°	662.2	662.2	662.2	661.9	661.2	660.4	659.7	659.0
137.5°	706.5	706.7	706.9	706.5	705.7	704.8	703.9	703.0
140°	734.4	734.7	735.1	734.8	734.0	733.0	732.1	731.3
142.5°	761.7	761.9	762.2	761.8	760.9	760.0	759.1	758.2
145°	801.1	801.1	801.1	800.8	800.3	799.7	799.2	798.7
147.5°	837.6	838.0	838.4	838.0	836.9	835.6	834.4	833.2
150°	860.5	860.5	860.5	860.3	859.9	859.6	859.2	858.9
152.5°	881.9	882.3	882.7	882.6	882.0	881.4	880.7	880.0
155°	912.5	913.2	913.9	913.8	912.9	912.0	911.2	910.2
157.5°	939.0	939.7	940.4	940.2	939.0	937.8	936.6	935.5
160°	955.1	955.8	956.5	956.3	955.5	954.6	953.7	952.8
162.5°	970.1	970.9	971.8	971.7	970.7	969.6	968.6	967.6
165°	990.3	991.0	991.7	991.6	990.5	989.4	988.4	987.3
167.5°	1005.4	1006.4	1007.5	1007.5	1006.4	1005.3	1004.2	1003.1
170°	1014.3	1015.4	1016.4	1016.4	1015.1	1013.9	1012.6	1011.4
172.5°	1020.7	1021.8	1022.9	1022.9	1021.8	1020.6	1019.5	1018.4
175°	1027.9	1029.0	1030.2	1030.0	1028.8	1027.5	1026.3	1025.0
177.5°	1031.3	1032.1	1032.9	1032.8	1031.9	1030.9	1029.9	1028.9
180°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4

(END OF REPORT)