

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: P333280-830

Luminaire Tested: **S125DIP-S1090D1035U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333280-830
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: S125DIP-S1090D1035U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7921.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

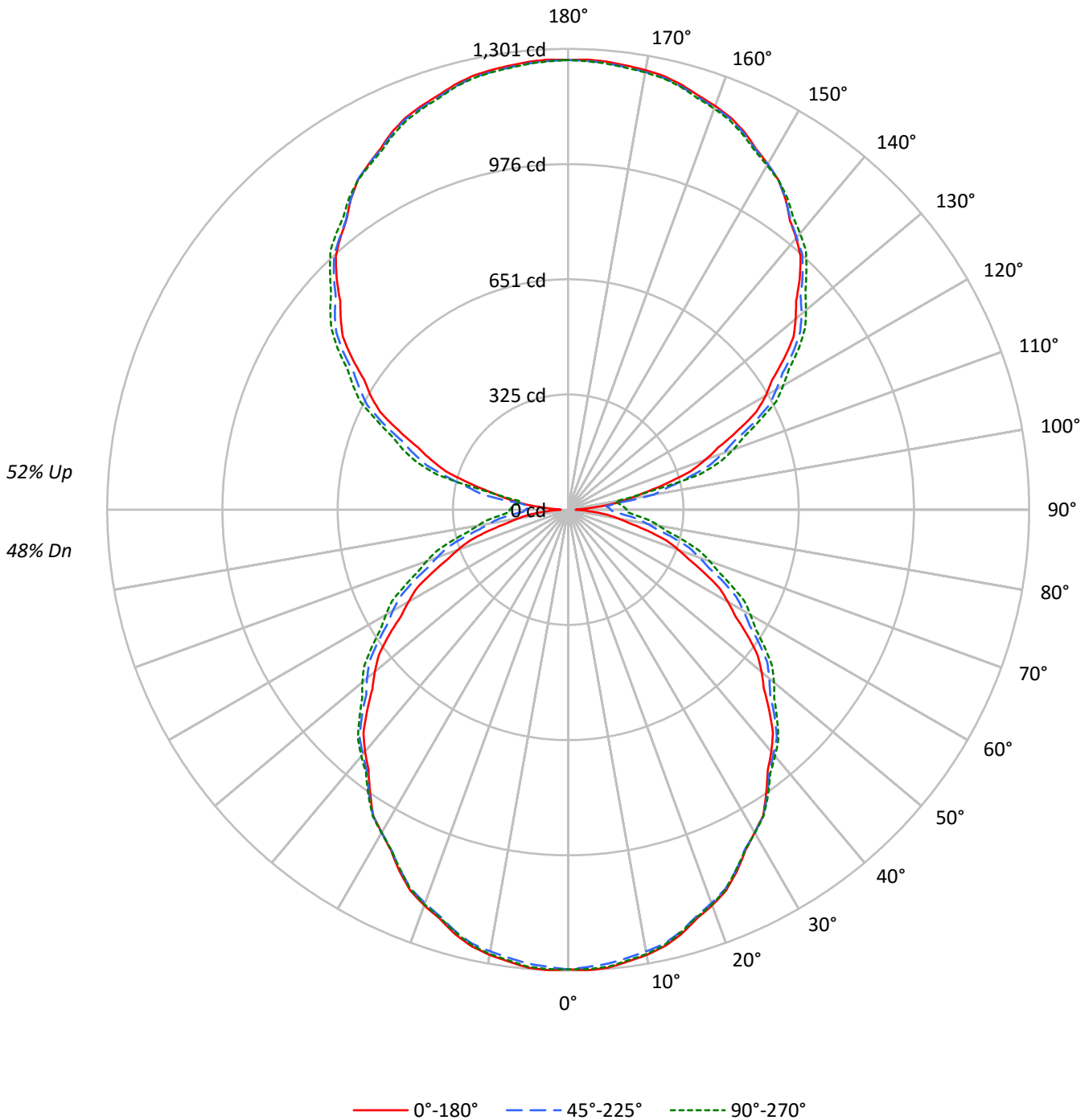
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333280-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	92	88	84	89	85	81	78	71	68	66	58	56	55	47	45	44	39
2	88	80	73	68	80	74	68	63	62	58	54	51	48	45	41	39	37	32
3	80	70	62	56	73	64	58	53	54	49	45	45	41	38	36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38	40	36	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	29	25	23	20
6	61	49	41	35	56	45	38	33	38	33	28	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	23	18	15	19	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8382	8382	8382
5°	8399	8227	8253
10°	8339	8080	8068
15°	8240	7905	7833
20°	8107	7687	7597
25°	7947	7455	7307
30°	7754	7199	7044
35°	7574	6964	6802
40°	7390	6715	6559
45°	7184	6503	6343
50°	6986	6274	6153
55°	6748	6056	5928
60°	6488	5808	5700
65°	6217	5549	5444
70°	5908	5194	5179
75°	5420	4854	4854
80°	4780	4442	4501
85°	4183	4164	4388



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.7	1.5
10°-20°	348.4	4.4
20°-30°	518.1	6.5
30°-40°	613.7	7.7
40°-50°	634.5	8.0
50°-60°	584.5	7.4
60°-70°	472.5	6.0
70°-80°	316.4	4.0
80°-90°	166.7	2.1
90°-100°	138.2	1.7
100°-110°	352.2	4.4
110°-120°	561.2	7.1
120°-130°	687.6	8.7
130°-140°	723.1	9.1
140°-150°	670.4	8.5
150°-160°	540.5	6.8
160°-170°	349.6	4.4
170°-180°	120.6	1.5
0°-30°	989.2	12.5
0°-40°	1602.9	20.2
0°-60°	2821.9	35.6
0°-90°	3777.6	47.7
90°-120°	1051.6	13.3
90°-150°	3132.8	39.6
90°-180°	4143.0	52.3
0°-180°	7921.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1295	1286	1296	1295	123
15°	1239	1240	1232	1239	1234	349
25°	1126	1129	1122	1127	1121	518
35°	975	983	980	983	984	610
45°	803	816	823	832	833	619
55°	617	637	658	671	677	551
65°	425	454	485	503	509	422
75°	234	268	308	332	340	248
85°	70	112	156	183	195	75
90°	21	70	119	152	165	16
95°	70	99	108	139	150	81
105°	288	313	350	375	384	305
115°	527	542	575	593	596	522
125°	744	750	775	790	795	664
135°	924	928	935	949	951	712
145°	1069	1070	1070	1077	1077	668
155°	1176	1171	1173	1175	1168	542
165°	1241	1236	1237	1242	1235	351
175°	1270	1264	1265	1271	1264	121
180°	1270	1270	1270	1270	1270	



TEST NUMBER: P333280-830

CATALOG NUMBER: S125DIP-S1090D1035U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1300.9	1300.4	1300.0	1299.6	1299.1	1298.1	1296.5	1294.9	1293.4	1291.8	1293.4
5°	1297.9	1297.3	1296.8	1296.2	1295.6	1294.3	1292.3	1290.3	1288.4	1286.4	1288.6
7.5°	1286.4	1286.2	1285.9	1285.7	1285.5	1284.4	1282.3	1280.3	1278.3	1276.2	1278.2
10°	1276.2	1276.2	1276.2	1276.2	1276.2	1275.1	1272.8	1270.5	1268.3	1266.0	1268.0
12.5°	1262.0	1262.2	1262.4	1262.6	1262.9	1262.1	1260.3	1258.5	1256.7	1254.8	1256.4
15°	1239.3	1239.6	1239.9	1240.2	1240.5	1239.6	1237.7	1235.7	1233.7	1231.7	1233.4
17.5°	1209.8	1210.3	1210.9	1211.4	1212.0	1211.4	1209.4	1207.4	1205.4	1203.4	1204.8
20°	1188.5	1189.0	1189.6	1190.1	1190.7	1190.0	1188.0	1186.0	1184.0	1182.0	1182.9
22.5°	1163.9	1165.0	1166.0	1167.1	1168.1	1167.4	1165.3	1163.1	1160.8	1158.7	1159.7
25°	1126.1	1126.9	1127.8	1128.6	1129.4	1129.1	1127.4	1125.7	1124.0	1122.3	1123.4
27.5°	1083.8	1085.1	1086.3	1087.6	1088.8	1088.4	1086.6	1084.6	1082.7	1080.8	1081.6
30°	1052.3	1054.0	1055.6	1057.3	1059.0	1059.0	1057.3	1055.6	1054.0	1052.3	1052.8
32.5°	1023.8	1025.2	1026.7	1028.2	1029.6	1029.7	1028.5	1027.3	1026.1	1024.8	1025.4
35°	974.7	976.7	978.6	980.6	982.6	983.2	982.3	981.5	980.6	979.8	980.6
37.5°	925.6	927.4	929.2	930.9	932.7	933.6	933.3	933.0	932.7	932.5	933.6
40°	891.9	894.2	896.5	898.7	901.0	902.0	901.7	901.4	901.2	900.9	902.0
42.5°	855.3	858.3	861.2	864.1	867.0	868.8	869.5	870.1	870.7	871.4	872.7
45°	802.9	806.0	809.1	812.2	815.3	817.6	819.0	820.4	821.8	823.2	825.2
47.5°	749.2	752.1	755.0	757.8	760.7	763.4	765.8	768.3	770.7	773.1	776.0
50°	712.6	715.7	718.8	721.9	725.0	728.1	731.2	734.3	737.4	740.6	743.7
52.5°	673.8	677.7	681.5	685.2	689.0	692.8	696.6	700.4	704.2	707.9	711.3
55°	617.1	621.6	626.1	630.7	635.2	639.7	644.2	648.8	653.3	657.8	660.9
57.5°	559.1	564.5	570.0	575.4	580.8	586.2	591.4	596.5	601.7	606.9	610.5
60°	520.4	526.0	531.7	537.3	543.0	548.7	554.3	560.0	565.6	571.3	575.5
62.5°	482.8	488.4	494.1	499.7	505.4	511.2	517.4	523.5	529.6	535.6	540.4
65°	425.0	431.5	438.0	444.5	451.0	457.6	464.4	471.2	478.0	484.7	489.0
67.5°	370.5	376.8	383.0	389.4	395.6	402.2	409.2	416.0	422.9	429.8	435.0
70°	330.8	337.3	343.8	350.3	356.8	363.7	371.1	378.4	385.8	393.1	398.5
72.5°	292.2	298.9	305.6	312.4	319.1	326.4	334.5	342.5	350.5	358.5	364.4
75°	234.1	241.5	248.8	256.2	263.5	271.7	280.8	289.8	298.9	307.9	313.6
77.5°	178.4	186.9	195.4	203.9	212.4	220.9	229.6	238.4	247.0	255.7	261.9
80°	143.7	152.2	160.7	169.2	177.7	186.7	196.3	205.9	215.6	225.2	231.4
82.5°	112.3	121.1	130.1	139.0	148.0	157.3	167.2	177.0	186.9	196.7	202.7
85°	69.9	79.3	88.6	97.9	107.3	116.9	126.8	136.7	146.6	156.5	162.7
87.5°	39.9	49.3	58.6	68.1	77.4	87.1	97.0	106.9	116.8	126.7	133.4
90°	21.3	32.0	42.7	53.4	64.2	75.1	86.1	97.3	108.3	119.4	127.0
92.5°	32.8	40.1	47.2	54.4	61.6	70.8	81.9	93.0	104.2	115.4	122.6
95°	70.2	76.9	83.6	90.4	97.1	101.2	102.9	104.6	106.3	107.9	115.2
97.5°	127.0	134.8	142.5	150.2	158.0	158.6	152.2	145.7	139.3	132.8	132.9
100°	171.2	177.8	184.3	190.9	197.5	205.7	215.6	225.5	235.3	245.2	220.0
102.5°	216.0	222.3	228.7	234.9	241.2	249.0	258.4	267.7	276.9	286.3	286.1
105°	288.1	293.5	298.9	304.3	309.5	316.5	325.0	333.5	342.0	350.4	356.1
107.5°	363.1	366.8	370.7	374.6	378.4	384.7	393.1	401.7	410.3	418.9	424.5
110°	411.7	415.1	418.5	421.9	425.3	431.1	439.5	447.8	456.1	464.5	469.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	458.4	461.6	464.8	468.1	471.3	476.8	484.7	492.7	500.7	508.6	512.9
115°	527.2	530.2	533.2	536.2	539.2	544.5	552.0	559.6	567.2	574.8	579.0
117.5°	598.3	599.6	600.9	602.1	603.3	607.8	615.6	623.4	631.1	638.9	642.5
120°	643.5	644.1	644.8	645.4	646.0	649.9	657.0	664.2	671.3	678.4	682.9
122.5°	682.4	683.5	684.8	686.0	687.1	691.0	697.6	704.2	710.7	717.3	721.4
125°	743.9	745.0	746.2	747.4	748.6	752.0	757.6	763.3	768.9	774.6	778.3
127.5°	801.5	802.3	803.0	803.8	804.6	807.2	811.7	816.2	820.7	825.2	829.0
130°	837.6	838.4	839.1	839.9	840.7	843.1	847.3	851.5	855.6	859.8	863.2
132.5°	872.8	873.9	875.1	876.2	877.4	879.2	881.8	884.5	887.0	889.7	893.4
135°	923.9	924.8	925.9	926.8	927.7	929.1	930.6	932.2	933.7	935.3	938.5
137.5°	970.9	971.8	972.6	973.5	974.3	975.1	975.6	976.2	976.8	977.4	980.8
140°	1000.7	1001.2	1001.5	1002.0	1002.4	1002.7	1002.7	1002.8	1002.9	1003.0	1006.4
142.5°	1028.6	1028.6	1028.6	1028.7	1028.7	1028.9	1029.3	1029.5	1029.9	1030.3	1033.0
145°	1069.4	1069.6	1069.7	1069.8	1070.0	1070.1	1070.1	1070.1	1070.1	1070.1	1071.7
147.5°	1103.9	1103.8	1103.7	1103.6	1103.5	1103.6	1103.9	1104.2	1104.4	1104.7	1105.3
150°	1126.5	1126.1	1125.7	1125.2	1124.8	1124.8	1125.2	1125.7	1126.1	1126.5	1126.9
152.5°	1148.3	1147.5	1146.5	1145.6	1144.6	1144.4	1144.8	1145.2	1145.7	1146.0	1146.5
155°	1176.4	1175.2	1173.8	1172.6	1171.4	1170.9	1171.4	1171.8	1172.1	1172.6	1173.3
157.5°	1198.0	1197.2	1196.6	1195.8	1195.0	1194.7	1194.7	1194.8	1194.8	1194.9	1195.5
160°	1213.1	1211.8	1210.6	1209.3	1208.1	1207.5	1207.8	1208.0	1208.2	1208.3	1209.2
162.5°	1225.1	1223.9	1222.6	1221.3	1220.1	1219.6	1219.7	1220.0	1220.2	1220.4	1221.6
165°	1241.3	1240.0	1238.8	1237.6	1236.3	1235.8	1236.0	1236.1	1236.4	1236.6	1237.8
167.5°	1253.4	1252.1	1250.8	1249.4	1248.2	1247.6	1247.8	1248.0	1248.2	1248.5	1250.0
170°	1260.1	1258.7	1257.2	1255.7	1254.2	1253.7	1253.9	1254.1	1254.2	1254.5	1256.1
172.5°	1264.6	1263.2	1261.7	1260.3	1258.8	1258.3	1258.6	1259.0	1259.3	1259.7	1261.2
175°	1269.5	1268.3	1267.1	1265.7	1264.5	1264.0	1264.2	1264.4	1264.6	1264.8	1266.5
177.5°	1271.8	1270.8	1269.8	1268.8	1267.8	1267.3	1267.5	1267.7	1267.9	1268.0	1269.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9	1297.9
2.5°	1294.9	1296.5	1298.1	1298.7	1298.5	1298.3	1298.1	1297.9
5°	1290.9	1293.2	1295.4	1296.5	1296.2	1295.9	1295.6	1295.3
7.5°	1280.2	1282.1	1284.1	1285.0	1284.7	1284.4	1284.1	1283.8
10°	1270.0	1272.0	1273.9	1274.8	1274.5	1274.2	1273.9	1273.7
12.5°	1257.9	1259.4	1260.9	1261.3	1260.7	1259.9	1259.1	1258.4
15°	1235.1	1236.8	1238.5	1238.8	1237.7	1236.5	1235.4	1234.3
17.5°	1206.1	1207.3	1208.6	1208.9	1208.2	1207.6	1206.9	1206.3
20°	1183.7	1184.6	1185.4	1185.9	1185.9	1185.9	1185.9	1185.9
22.5°	1160.8	1161.9	1162.9	1163.1	1162.4	1161.8	1161.1	1160.5
25°	1124.5	1125.7	1126.8	1126.6	1125.2	1123.8	1122.4	1121.0
27.5°	1082.3	1083.2	1083.9	1084.1	1083.5	1083.1	1082.5	1082.0
30°	1053.4	1054.0	1054.5	1054.7	1054.4	1054.1	1053.9	1053.6
32.5°	1026.0	1026.5	1027.1	1027.2	1026.9	1026.6	1026.3	1026.1
35°	981.5	982.3	983.2	983.5	983.5	983.5	983.5	983.5
37.5°	934.7	935.9	937.0	937.5	937.4	937.3	937.1	937.0
40°	903.1	904.3	905.4	906.3	906.8	907.4	908.0	908.5
42.5°	874.0	875.4	876.8	877.5	877.6	877.7	877.9	878.0
45°	827.2	829.2	831.1	832.3	832.5	832.8	833.1	833.4
47.5°	778.9	781.7	784.7	786.4	787.0	787.7	788.2	788.9
50°	746.8	749.9	753.0	755.0	755.8	756.7	757.5	758.4
52.5°	714.6	717.9	721.3	723.3	723.9	724.5	725.2	725.8
55°	664.0	667.1	670.2	672.4	673.5	674.7	675.8	676.9
57.5°	614.1	617.6	621.2	623.4	624.2	625.1	625.9	626.8
60°	579.8	584.0	588.2	590.8	591.6	592.5	593.3	594.2
62.5°	545.1	549.8	554.5	557.3	558.5	559.5	560.5	561.7
65°	493.2	497.5	501.7	504.4	505.6	506.7	507.8	509.0
67.5°	440.1	445.3	450.4	453.7	455.2	456.7	458.1	459.6
70°	403.9	409.3	414.6	418.2	419.9	421.6	423.3	425.0
72.5°	370.2	376.1	381.8	385.4	386.6	387.9	389.1	390.4
75°	319.2	324.9	330.5	334.0	335.5	336.9	338.3	339.7
77.5°	268.2	274.4	280.6	284.3	285.4	286.5	287.7	288.8
80°	237.6	243.8	250.1	253.7	254.9	256.0	257.1	258.3
82.5°	208.7	214.7	220.6	224.7	226.8	228.8	230.8	232.8
85°	168.9	175.1	181.3	185.6	187.8	190.1	192.4	194.6
87.5°	140.2	146.8	153.5	158.0	160.0	162.1	164.3	166.4
90°	134.5	142.0	149.6	154.7	157.3	159.9	162.5	165.1
92.5°	130.0	137.3	144.6	149.4	151.7	153.9	156.3	158.5
95°	122.4	129.8	137.0	141.7	143.6	145.6	147.6	149.6
97.5°	132.9	133.0	133.0	133.9	135.9	137.8	139.8	141.7
100°	194.7	169.5	144.3	132.1	133.0	133.8	134.7	135.5
102.5°	285.9	285.7	285.5	279.2	266.6	254.1	241.6	229.1
105°	361.7	367.4	373.1	376.7	378.5	380.3	382.1	383.8
107.5°	430.2	435.7	441.4	444.8	445.9	447.0	448.2	449.3
110°	474.0	478.7	483.4	486.9	489.1	491.3	493.5	495.7



TEST NUMBER: P333280-830

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	517.3	521.6	526.0	529.0	530.7	532.3	534.0	535.7
115°	583.2	587.5	591.7	594.1	594.6	595.0	595.4	595.9
117.5°	646.3	650.0	653.7	656.3	657.7	659.0	660.4	661.8
120°	687.2	691.6	696.0	698.5	699.2	699.8	700.5	701.2
122.5°	725.7	729.8	734.0	736.2	736.8	737.3	737.7	738.2
125°	782.0	785.7	789.4	791.6	792.4	793.1	794.0	794.8
127.5°	832.6	836.4	840.1	842.1	842.2	842.3	842.4	842.4
130°	866.5	869.8	873.2	875.0	875.3	875.7	876.1	876.5
132.5°	897.3	901.2	904.9	906.9	907.1	907.2	907.4	907.5
135°	941.8	945.1	948.3	950.0	950.2	950.4	950.5	950.6
137.5°	984.2	987.6	991.1	992.8	992.9	992.9	992.9	993.0
140°	1010.0	1013.5	1017.0	1018.8	1018.6	1018.5	1018.4	1018.2
142.5°	1035.8	1038.5	1041.2	1042.5	1042.5	1042.3	1042.2	1042.1
145°	1073.3	1074.9	1076.5	1077.2	1077.1	1077.0	1076.9	1076.8
147.5°	1106.1	1106.7	1107.5	1107.3	1106.4	1105.3	1104.4	1103.3
150°	1127.4	1127.8	1128.1	1127.7	1126.2	1124.9	1123.5	1122.1
152.5°	1146.9	1147.4	1147.7	1147.3	1145.8	1144.3	1142.8	1141.4
155°	1173.8	1174.5	1175.2	1174.6	1172.9	1171.2	1169.6	1167.9
157.5°	1196.2	1196.8	1197.5	1197.0	1195.3	1193.6	1191.9	1190.3
160°	1210.0	1210.9	1211.7	1211.3	1209.7	1208.0	1206.3	1204.6
162.5°	1222.8	1223.9	1225.1	1224.7	1222.9	1221.1	1219.3	1217.4
165°	1239.1	1240.4	1241.6	1241.4	1239.7	1238.0	1236.4	1234.7
167.5°	1251.5	1253.0	1254.5	1254.3	1252.5	1250.6	1248.7	1246.8
170°	1257.8	1259.5	1261.2	1261.0	1259.1	1257.4	1255.5	1253.6
172.5°	1262.7	1264.2	1265.7	1265.6	1263.7	1261.8	1259.9	1258.1
175°	1268.2	1269.9	1271.5	1271.4	1269.5	1267.6	1265.7	1263.9
177.5°	1270.4	1271.6	1272.7	1272.6	1271.3	1270.0	1268.7	1267.2
180°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5

(END OF REPORT)