

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: P333451-935

Luminaire Tested: **S125DIW-S1090D1340U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333451-935
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: S125DIW-S1090D1340U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7679.9 lumens
Efficiency: N/A
Efficacy: 110.0 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

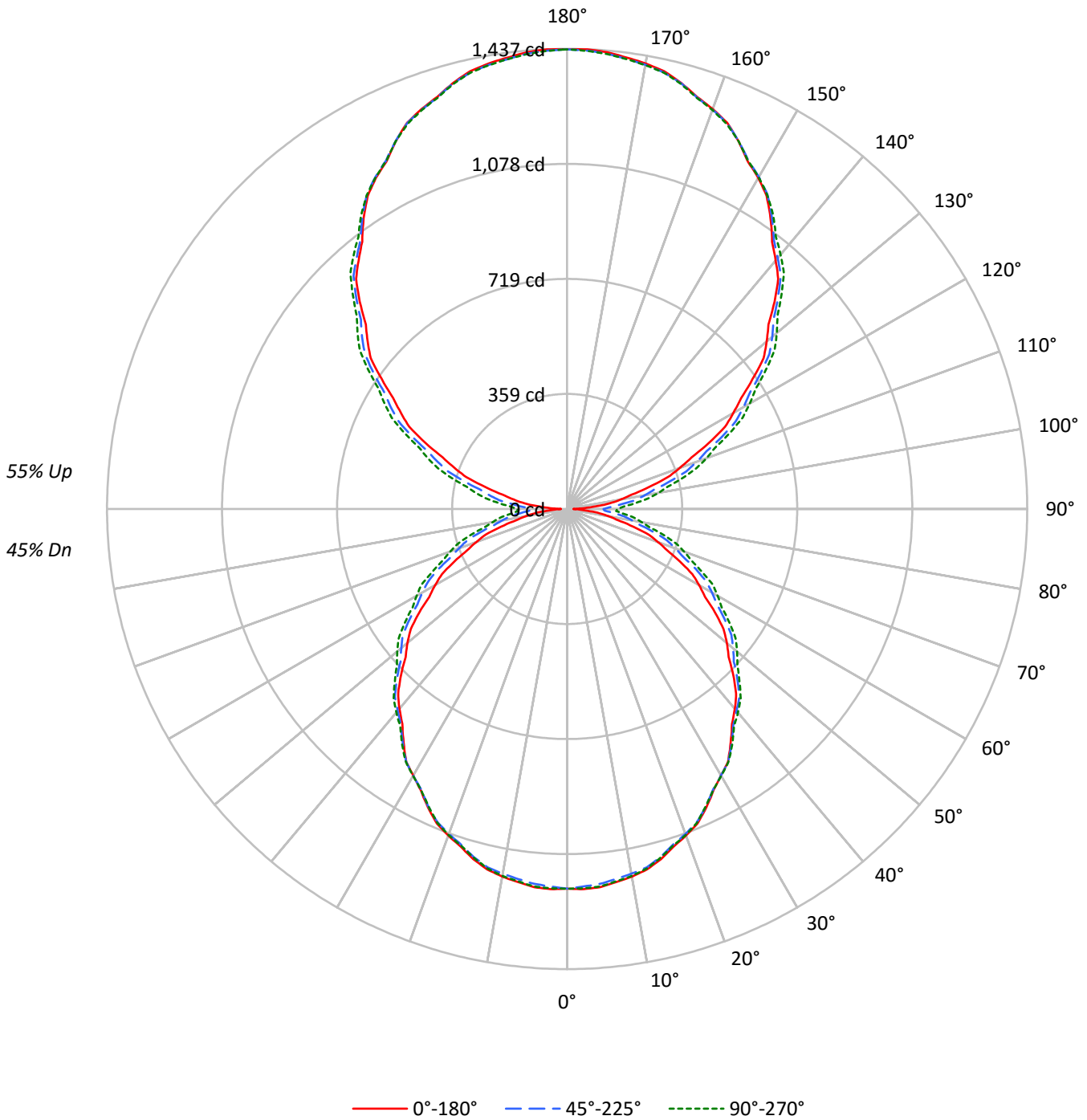
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.5
10°-20°	318.2	4.1
20°-30°	473.3	6.2
30°-40°	560.6	7.3
40°-50°	579.6	7.5
50°-60°	533.9	7.0
60°-70°	431.6	5.6
70°-80°	289.0	3.8
80°-90°	153.0	2.0
90°-100°	180.2	2.3
100°-110°	345.9	4.5
110°-120°	522.3	6.8
120°-130°	656.3	8.5
130°-140°	719.3	9.4
140°-150°	697.0	9.1
150°-160°	583.6	7.6
160°-170°	388.0	5.1
170°-180°	135.8	1.8
0°-30°	903.6	11.8
0°-40°	1464.2	19.1
0°-60°	2577.8	33.6
0°-90°	3451.5	44.9
90°-120°	1048.5	13.7
90°-150°	3121.1	40.6
90°-180°	4228.0	55.1
0°-180°	7679.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	20	66	113	144	157	16
95°	88	121	171	203	215	89
105°	265	290	331	360	372	283
115°	488	502	533	552	559	483
125°	707	714	737	753	758	633
135°	916	922	931	945	947	706
145°	1108	1111	1115	1120	1122	692
155°	1266	1267	1268	1272	1266	583
165°	1377	1375	1376	1380	1374	388
175°	1432	1428	1427	1433	1426	136
180°	1435	1435	1435	1435	1435	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.5	45.1	53.8	62.5	71.1	80.1	89.2	98.3	107.5	116.6	122.8
90°	19.7	30.0	40.2	50.5	60.7	71.1	81.6	92.1	102.6	113.2	120.4
92.5°	43.7	52.8	61.8	70.9	79.9	90.0	101.1	112.3	123.4	134.5	141.9
95°	87.7	94.9	102.1	109.3	116.6	125.8	137.1	148.4	159.5	170.8	178.2
97.5°	134.3	140.6	146.8	153.1	159.3	168.4	180.3	192.2	204.1	215.9	223.0
100°	169.2	174.6	180.0	185.5	190.9	199.3	210.8	222.3	233.8	245.3	253.0
102.5°	206.6	212.7	218.6	224.6	230.7	238.5	248.2	257.9	267.6	277.3	284.9
105°	265.1	270.4	275.9	281.2	286.6	293.9	303.2	312.4	321.6	330.9	337.5
107.5°	329.8	334.6	339.3	344.1	348.9	355.5	364.1	372.6	381.3	389.9	395.7
110°	374.4	378.8	383.1	387.4	391.8	398.0	406.0	414.0	421.9	429.9	435.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	420.9	424.0	427.1	430.3	433.4	438.9	446.9	455.0	462.9	470.9	475.9
115°	488.4	491.1	494.0	496.7	499.6	504.5	511.8	519.0	526.2	533.4	537.8
117.5°	555.9	557.6	559.2	560.9	562.5	566.7	573.5	580.3	587.1	593.9	598.6
120°	598.8	600.9	602.9	604.9	606.9	611.1	617.3	623.4	629.6	635.8	640.2
122.5°	644.4	645.2	646.0	646.8	647.6	651.3	657.6	664.0	670.4	676.7	680.7
125°	707.1	708.3	709.6	710.8	712.0	715.4	720.8	726.3	731.7	737.0	740.7
127.5°	773.0	773.6	774.2	774.7	775.3	777.9	782.5	787.0	791.5	796.1	799.6
130°	813.2	814.2	815.2	816.1	817.2	819.7	823.8	827.9	832.0	836.1	839.5
132.5°	852.5	854.5	856.4	858.4	860.4	862.7	865.5	868.1	870.8	873.5	876.9
135°	915.9	917.1	918.3	919.6	920.8	922.5	924.5	926.6	928.7	930.7	934.1
137.5°	975.5	976.8	978.0	979.2	980.5	981.8	983.3	984.6	986.1	987.5	990.8
140°	1013.1	1014.3	1015.5	1016.8	1018.0	1019.1	1020.1	1021.1	1022.1	1023.1	1026.5
142.5°	1051.5	1052.3	1053.1	1054.0	1054.8	1055.7	1056.7	1057.7	1058.7	1059.7	1062.4
145°	1107.9	1108.7	1109.4	1110.2	1110.9	1111.6	1112.4	1113.1	1113.9	1114.7	1115.9
147.5°	1159.1	1159.6	1160.2	1160.7	1161.2	1161.8	1162.4	1163.0	1163.6	1164.2	1165.2
150°	1193.9	1193.7	1193.4	1193.2	1192.9	1193.3	1194.3	1195.3	1196.3	1197.3	1197.3
152.5°	1222.5	1222.9	1223.2	1223.6	1223.9	1224.3	1224.7	1225.0	1225.5	1225.9	1226.5
155°	1266.5	1266.5	1266.5	1266.5	1266.5	1266.6	1266.9	1267.1	1267.4	1267.7	1268.6
157.5°	1305.8	1305.3	1304.8	1304.2	1303.6	1303.5	1303.7	1304.0	1304.2	1304.5	1305.4
160°	1329.0	1328.4	1327.6	1326.8	1326.1	1325.9	1326.1	1326.4	1326.5	1326.8	1327.8
162.5°	1349.6	1349.1	1348.5	1348.0	1347.5	1347.2	1347.2	1347.3	1347.3	1347.4	1348.6
165°	1377.1	1376.6	1376.1	1375.6	1375.1	1375.0	1375.2	1375.4	1375.7	1376.0	1377.0
167.5°	1400.3	1399.3	1398.4	1397.3	1396.4	1395.9	1395.9	1395.9	1395.9	1395.9	1397.3
170°	1412.8	1411.9	1410.8	1409.9	1408.9	1408.3	1408.3	1408.3	1408.3	1408.3	1409.9
172.5°	1421.8	1420.7	1419.8	1418.8	1417.8	1417.3	1417.3	1417.3	1417.3	1417.3	1418.8
175°	1431.8	1430.8	1429.9	1428.8	1427.9	1427.4	1427.4	1427.4	1427.4	1427.4	1428.8
177.5°	1436.9	1436.1	1435.4	1434.6	1433.7	1433.3	1433.0	1432.9	1432.7	1432.4	1433.7
180°	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	128.9	135.1	141.3	145.4	147.3	149.3	151.3	153.2
90°	127.5	134.7	141.9	146.8	149.3	151.9	154.5	157.0
92.5°	149.2	156.6	163.9	168.8	171.2	173.6	175.9	178.2
95°	185.7	193.1	200.5	205.3	207.7	210.0	212.3	214.6
97.5°	230.1	237.1	244.2	248.7	250.8	252.9	254.9	257.0
100°	260.6	268.2	275.9	280.8	282.8	284.8	286.9	289.0
102.5°	292.6	300.2	307.9	312.8	315.0	317.4	319.6	321.8
105°	344.1	350.9	357.5	362.1	364.6	367.2	369.7	372.3
107.5°	401.6	407.4	413.3	417.0	418.5	420.1	421.6	423.2
110°	441.2	446.9	452.5	456.1	457.7	459.3	460.8	462.4



TEST NUMBER: P333451-935

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	481.0	486.0	491.0	494.2	495.6	497.0	498.3	499.7
115°	542.2	546.6	551.0	553.9	555.2	556.5	557.8	559.0
117.5°	603.1	607.7	612.3	615.0	615.7	616.5	617.3	618.0
120°	644.5	648.9	653.3	655.8	656.3	656.9	657.5	658.1
122.5°	684.8	688.7	692.7	695.1	695.8	696.5	697.3	698.1
125°	744.3	748.0	751.6	754.0	755.0	756.0	757.1	758.1
127.5°	803.2	806.8	810.4	812.6	813.6	814.6	815.6	816.7
130°	842.8	846.3	849.6	851.7	852.5	853.3	854.1	854.9
132.5°	880.3	883.6	887.0	888.9	889.2	889.7	890.0	890.4
135°	937.5	940.8	944.2	946.0	946.2	946.6	946.8	947.2
137.5°	994.2	997.6	1000.9	1002.5	1002.2	1002.0	1001.9	1001.6
140°	1029.8	1033.1	1036.5	1038.0	1037.8	1037.6	1037.4	1037.2
142.5°	1065.1	1067.9	1070.6	1071.9	1071.7	1071.4	1071.3	1071.0
145°	1117.2	1118.5	1119.8	1120.6	1120.8	1121.2	1121.5	1121.7
147.5°	1166.2	1167.3	1168.2	1168.1	1166.9	1165.7	1164.5	1163.2
150°	1197.3	1197.3	1197.3	1197.1	1196.9	1196.7	1196.4	1196.2
152.5°	1227.0	1227.6	1228.2	1228.1	1227.3	1226.4	1225.6	1224.8
155°	1269.6	1270.6	1271.6	1271.4	1270.2	1269.0	1267.7	1266.5
157.5°	1306.5	1307.4	1308.5	1308.1	1306.5	1304.8	1303.2	1301.6
160°	1328.8	1329.8	1330.8	1330.7	1329.5	1328.2	1327.0	1325.7
162.5°	1349.8	1350.9	1352.1	1352.0	1350.6	1349.1	1347.7	1346.3
165°	1377.9	1379.0	1379.9	1379.7	1378.2	1376.7	1375.2	1373.7
167.5°	1398.9	1400.3	1401.8	1401.8	1400.2	1398.7	1397.1	1395.6
170°	1411.4	1412.8	1414.3	1414.2	1412.5	1410.7	1408.9	1407.2
172.5°	1420.3	1421.8	1423.2	1423.2	1421.7	1420.1	1418.6	1417.0
175°	1430.3	1431.8	1433.3	1433.1	1431.4	1429.7	1428.0	1426.2
177.5°	1434.9	1436.1	1437.3	1437.2	1435.7	1434.3	1433.0	1431.6
180°	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2	1435.2

(END OF REPORT)