

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: P333280-840

Luminaire Tested: **S125DIP-S1090D1035U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333280-840
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-S1090D1035U840-4F0-1E-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: 8486.8 lumens
Efficiency: N/A
Efficacy: 140.3 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

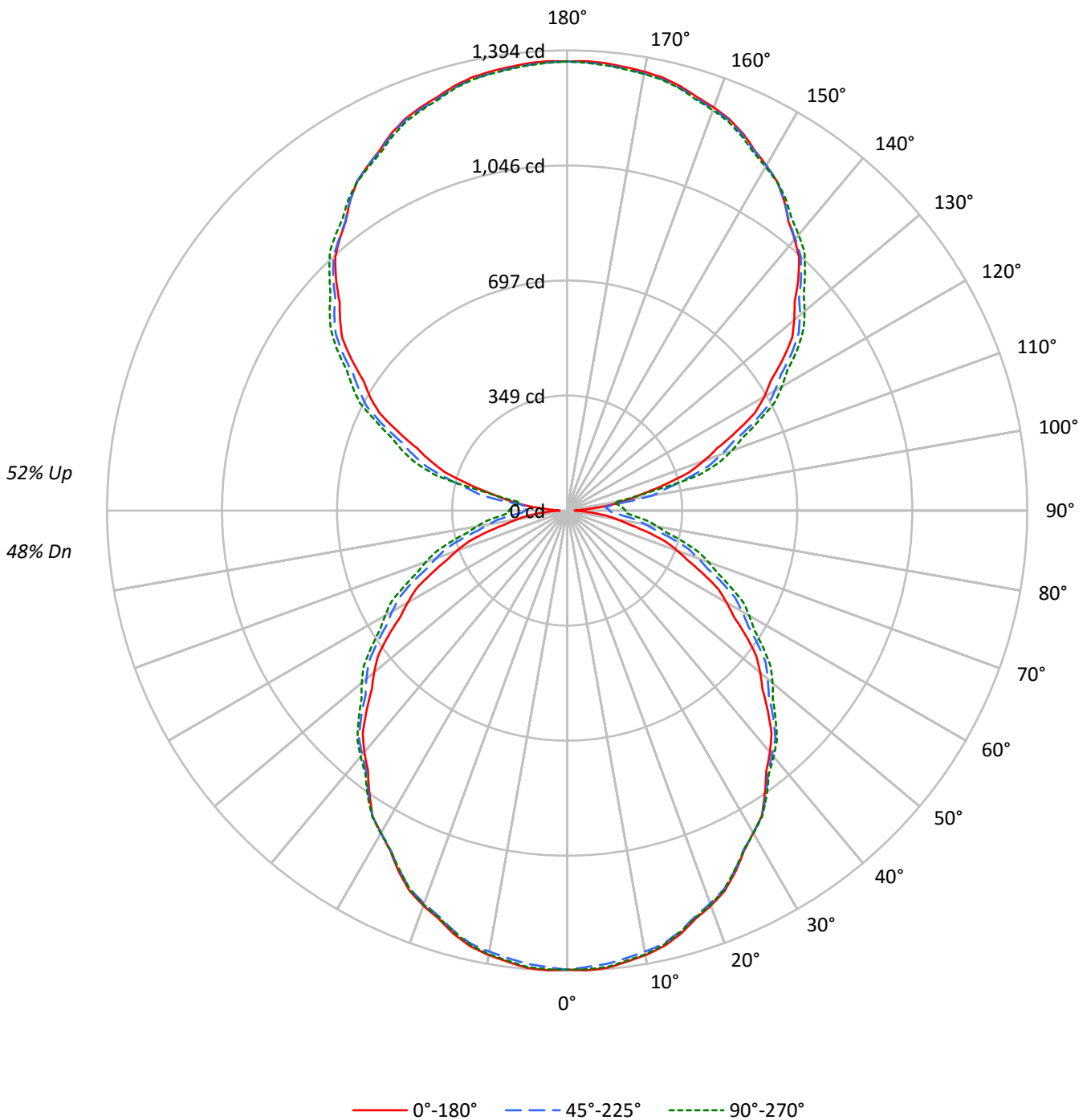
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333280-840

CATALOG NUMBER: S125DIP-S1090D1035U840-4F0-1E-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°	8981	8981	8981
5°	8999	8815	8843
10°	8935	8658	8644
15°	8829	8469	8392
20°	8685	8236	8140
25°	8515	7987	7828
30°	8308	7712	7547
35°	8115	7461	7288
40°	7918	7195	7027
45°	7696	6968	6796
50°	7485	6722	6592
55°	7230	6489	6352
60°	6950	6223	6107
65°	6660	5946	5832
70°	6332	5566	5549
75°	5809	5201	5201
80°	5122	4760	4822
85°	4483	4460	4702



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	1.5
10°-20°	373.3	4.4
20°-30°	555.1	6.5
30°-40°	657.5	7.7
40°-50°	679.8	8.0
50°-60°	626.3	7.4
60°-70°	506.2	6.0
70°-80°	339.0	4.0
80°-90°	178.6	2.1
90°-100°	148.1	1.7
100°-110°	377.4	4.4
110°-120°	601.3	7.1
120°-130°	736.8	8.7
130°-140°	774.8	9.1
140°-150°	718.3	8.5
150°-160°	579.1	6.8
160°-170°	374.5	4.4
170°-180°	129.2	1.5
0°-30°	1059.9	12.5
0°-40°	1717.4	20.2
0°-60°	3023.5	35.6
0°-90°	4047.4	47.7
90°-120°	1126.7	13.3
90°-150°	3356.6	39.6
90°-180°	4439.0	52.3
0°-180°	8486.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1391	1387	1378	1389	1388	132
15°	1328	1329	1320	1327	1322	374
25°	1206	1210	1202	1207	1201	555
35°	1044	1053	1050	1054	1054	653
45°	860	875	882	891	893	664
55°	661	683	705	719	725	591
65°	455	487	519	539	545	452
75°	251	287	330	356	364	266
85°	75	120	168	197	208	80
90°	23	75	128	163	177	17
95°	75	106	116	149	160	87
105°	309	335	376	402	411	327
115°	565	581	616	635	638	560
125°	797	804	830	847	852	711
135°	990	995	1002	1017	1018	763
145°	1146	1146	1146	1154	1154	716
155°	1260	1255	1256	1259	1251	580
165°	1330	1324	1325	1330	1323	376
175°	1360	1355	1355	1362	1354	129
180°	1360	1360	1360	1360	1360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1393.8	1393.3	1392.8	1392.4	1391.9	1390.8	1389.1	1387.4	1385.7	1384.0	1385.7
5°	1390.6	1390.0	1389.4	1388.8	1388.2	1386.7	1384.6	1382.5	1380.4	1378.3	1380.7
7.5°	1378.3	1378.1	1377.8	1377.6	1377.4	1376.1	1373.9	1371.7	1369.6	1367.4	1369.5
10°	1367.4	1367.4	1367.4	1367.4	1367.4	1366.1	1363.7	1361.3	1358.9	1356.5	1358.6
12.5°	1352.1	1352.3	1352.6	1352.8	1353.1	1352.2	1350.3	1348.4	1346.5	1344.4	1346.2
15°	1327.9	1328.2	1328.5	1328.8	1329.1	1328.2	1326.1	1323.9	1321.8	1319.7	1321.5
17.5°	1296.2	1296.8	1297.4	1298.0	1298.6	1297.9	1295.8	1293.6	1291.5	1289.4	1290.8
20°	1273.3	1273.9	1274.6	1275.2	1275.8	1275.0	1272.8	1270.7	1268.6	1266.5	1267.4
22.5°	1247.1	1248.2	1249.3	1250.4	1251.5	1250.8	1248.5	1246.2	1243.7	1241.4	1242.5
25°	1206.5	1207.4	1208.3	1209.2	1210.1	1209.7	1207.9	1206.1	1204.3	1202.4	1203.7
27.5°	1161.2	1162.6	1163.9	1165.3	1166.6	1166.2	1164.2	1162.1	1160.0	1158.0	1158.8
30°	1127.4	1129.2	1131.0	1132.9	1134.7	1134.7	1132.9	1131.0	1129.2	1127.4	1128.0
32.5°	1096.9	1098.4	1100.0	1101.7	1103.2	1103.3	1102.0	1100.7	1099.3	1098.0	1098.6
35°	1044.3	1046.4	1048.5	1050.7	1052.8	1053.4	1052.5	1051.6	1050.7	1049.8	1050.7
37.5°	991.7	993.6	995.5	997.4	999.4	1000.3	1000.0	999.7	999.4	999.1	1000.3
40°	955.6	958.1	960.5	962.9	965.3	966.4	966.1	965.8	965.5	965.2	966.4
42.5°	916.4	919.6	922.7	925.8	929.0	930.9	931.6	932.2	932.9	933.6	935.0
45°	860.2	863.5	866.9	870.2	873.5	876.0	877.5	879.0	880.5	882.0	884.1
47.5°	802.7	805.8	808.9	811.9	815.1	817.9	820.5	823.1	825.8	828.3	831.4
50°	763.5	766.8	770.1	773.5	776.8	780.1	783.5	786.8	790.1	793.5	796.8
52.5°	722.0	726.1	730.1	734.2	738.2	742.3	746.4	750.4	754.5	758.5	762.1
55°	661.2	666.0	670.9	675.7	680.5	685.4	690.2	695.1	699.9	704.8	708.1
57.5°	599.1	604.8	610.7	616.5	622.3	628.0	633.6	639.1	644.7	650.3	654.1
60°	557.5	563.6	569.7	575.7	581.8	587.8	593.9	600.0	606.0	612.1	616.6
62.5°	517.3	523.3	529.4	535.4	541.5	547.8	554.3	560.9	567.4	573.9	579.0
65°	455.3	462.3	469.3	476.3	483.2	490.3	497.6	504.8	512.1	519.4	523.9
67.5°	397.0	403.7	410.4	417.2	423.8	430.9	438.4	445.8	453.1	460.5	466.1
70°	354.5	361.4	368.4	375.4	382.3	389.7	397.6	405.5	413.3	421.2	427.0
72.5°	313.1	320.2	327.4	334.7	341.8	349.7	358.4	367.0	375.6	384.2	390.4
75°	250.9	258.7	266.6	274.5	282.4	291.1	300.8	310.5	320.2	329.9	336.0
77.5°	191.2	200.3	209.3	218.4	227.5	236.7	246.0	255.4	264.7	274.0	280.6
80°	154.0	163.1	172.2	181.3	190.4	200.1	210.4	220.7	231.0	241.3	247.9
82.5°	120.3	129.8	139.4	149.0	158.5	168.5	179.2	189.7	200.3	210.8	217.2
85°	74.9	84.9	94.9	104.9	114.9	125.2	135.8	146.4	157.0	167.6	174.3
87.5°	42.7	52.8	62.8	72.9	82.9	93.3	103.9	114.5	125.1	135.7	142.9
90°	22.8	34.3	45.7	57.3	68.8	80.5	92.3	104.2	116.0	127.9	136.0
92.5°	35.1	42.9	50.6	58.3	66.0	75.8	87.8	99.7	111.6	123.6	131.4
95°	75.2	82.4	89.6	96.8	104.0	108.5	110.3	112.1	113.9	115.6	123.4
97.5°	136.0	144.4	152.7	161.0	169.3	170.0	163.1	156.1	149.3	142.3	142.4
100°	183.4	190.5	197.4	204.5	211.6	220.4	231.0	241.6	252.1	262.7	235.7
102.5°	231.5	238.2	245.0	251.7	258.4	266.8	276.8	286.8	296.7	306.7	306.5
105°	308.7	314.5	320.2	326.0	331.6	339.1	348.2	357.3	366.4	375.5	381.5
107.5°	389.0	393.0	397.2	401.3	405.5	412.1	421.2	430.4	439.6	448.8	454.8
110°	441.1	444.7	448.4	452.0	455.7	461.9	470.9	479.8	488.7	497.7	502.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	491.1	494.5	498.0	501.5	504.9	510.9	519.4	527.9	536.4	544.9	549.6
115°	564.8	568.0	571.3	574.5	577.7	583.4	591.5	599.6	607.7	615.8	620.4
117.5°	641.1	642.4	643.8	645.1	646.4	651.3	659.5	667.9	676.2	684.5	688.4
120°	689.4	690.1	690.8	691.5	692.2	696.3	704.0	711.7	719.2	726.9	731.6
122.5°	731.1	732.4	733.7	735.0	736.2	740.3	747.4	754.5	761.4	768.5	773.0
125°	797.0	798.2	799.5	800.8	802.0	805.7	811.7	817.8	823.8	829.9	833.8
127.5°	858.8	859.6	860.4	861.2	862.0	864.8	869.7	874.5	879.3	884.1	888.2
130°	897.5	898.3	899.1	899.9	900.7	903.3	907.9	912.3	916.8	921.2	924.8
132.5°	935.1	936.3	937.6	938.8	940.1	942.0	944.8	947.7	950.4	953.2	957.3
135°	989.9	990.9	992.0	993.0	994.0	995.4	997.0	998.8	1000.4	1002.1	1005.5
137.5°	1040.3	1041.2	1042.1	1043.0	1043.9	1044.7	1045.3	1045.9	1046.5	1047.2	1050.9
140°	1072.2	1072.7	1073.1	1073.6	1074.0	1074.3	1074.3	1074.4	1074.5	1074.6	1078.3
142.5°	1102.1	1102.1	1102.1	1102.2	1102.2	1102.4	1102.8	1103.1	1103.5	1103.9	1106.8
145°	1145.8	1146.0	1146.1	1146.2	1146.4	1146.5	1146.5	1146.5	1146.5	1146.5	1148.2
147.5°	1182.8	1182.7	1182.6	1182.5	1182.3	1182.5	1182.8	1183.1	1183.3	1183.6	1184.3
150°	1207.0	1206.5	1206.1	1205.6	1205.2	1205.2	1205.6	1206.1	1206.5	1207.0	1207.4
152.5°	1230.3	1229.4	1228.4	1227.4	1226.4	1226.2	1226.6	1227.0	1227.5	1227.9	1228.4
155°	1260.4	1259.1	1257.7	1256.4	1255.1	1254.6	1255.1	1255.5	1255.9	1256.4	1257.1
157.5°	1283.5	1282.7	1282.0	1281.2	1280.4	1280.0	1280.0	1280.1	1280.1	1280.2	1280.9
160°	1299.7	1298.4	1297.1	1295.7	1294.3	1293.7	1294.0	1294.2	1294.4	1294.6	1295.6
162.5°	1312.6	1311.3	1309.9	1308.6	1307.3	1306.7	1306.9	1307.2	1307.4	1307.6	1308.9
165°	1330.0	1328.6	1327.3	1326.0	1324.6	1324.0	1324.2	1324.4	1324.7	1324.9	1326.3
167.5°	1342.9	1341.5	1340.1	1338.7	1337.4	1336.8	1337.0	1337.2	1337.4	1337.7	1339.3
170°	1350.1	1348.6	1347.0	1345.4	1343.8	1343.2	1343.4	1343.6	1343.8	1344.1	1345.8
172.5°	1354.9	1353.4	1351.8	1350.3	1348.7	1348.2	1348.5	1348.9	1349.3	1349.7	1351.3
175°	1360.2	1358.9	1357.6	1356.1	1354.8	1354.3	1354.5	1354.7	1354.9	1355.1	1357.0
177.5°	1362.6	1361.6	1360.5	1359.4	1358.4	1357.9	1358.1	1358.3	1358.5	1358.6	1359.9
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6	1390.6
2.5°	1387.4	1389.1	1390.8	1391.5	1391.3	1391.0	1390.8	1390.6
5°	1383.1	1385.5	1388.0	1389.1	1388.8	1388.5	1388.2	1387.9
7.5°	1371.6	1373.7	1375.8	1376.7	1376.4	1376.1	1375.8	1375.5
10°	1360.7	1362.8	1364.9	1365.8	1365.5	1365.2	1364.9	1364.6
12.5°	1347.8	1349.4	1351.0	1351.4	1350.7	1349.9	1349.1	1348.3
15°	1323.3	1325.1	1327.0	1327.3	1326.1	1324.8	1323.6	1322.4
17.5°	1292.2	1293.5	1294.9	1295.3	1294.5	1293.8	1293.1	1292.4
20°	1268.3	1269.2	1270.1	1270.6	1270.6	1270.6	1270.6	1270.6
22.5°	1243.7	1244.9	1246.0	1246.2	1245.5	1244.8	1244.1	1243.3
25°	1204.9	1206.1	1207.3	1207.1	1205.6	1204.1	1202.5	1201.0
27.5°	1159.6	1160.5	1161.3	1161.5	1160.9	1160.4	1159.8	1159.3
30°	1128.6	1129.2	1129.8	1130.0	1129.7	1129.4	1129.1	1128.8
32.5°	1099.2	1099.8	1100.4	1100.6	1100.2	1099.9	1099.6	1099.3
35°	1051.6	1052.5	1053.4	1053.8	1053.8	1053.8	1053.8	1053.8
37.5°	1001.5	1002.7	1003.9	1004.4	1004.3	1004.2	1004.0	1003.9
40°	967.7	968.9	970.1	971.0	971.6	972.2	972.8	973.4
42.5°	936.4	938.0	939.4	940.2	940.3	940.4	940.6	940.7
45°	886.3	888.4	890.5	891.7	892.0	892.3	892.6	892.9
47.5°	834.6	837.6	840.7	842.5	843.2	843.9	844.6	845.3
50°	800.1	803.4	806.8	808.9	809.8	810.7	811.6	812.5
52.5°	765.7	769.2	772.8	775.0	775.6	776.3	777.0	777.6
55°	711.4	714.8	718.1	720.4	721.6	722.9	724.1	725.3
57.5°	657.9	661.8	665.6	667.9	668.8	669.7	670.7	671.6
60°	621.2	625.7	630.3	633.0	633.9	634.8	635.7	636.6
62.5°	584.0	589.1	594.1	597.1	598.3	599.5	600.6	601.8
65°	528.5	533.0	537.6	540.5	541.7	542.9	544.1	545.3
67.5°	471.5	477.1	482.6	486.1	487.7	489.3	490.8	492.4
70°	432.7	438.5	444.2	448.1	449.9	451.7	453.5	455.3
72.5°	396.7	402.9	409.1	412.9	414.2	415.6	416.9	418.3
75°	342.0	348.1	354.2	357.9	359.4	360.9	362.4	364.0
77.5°	287.3	294.0	300.6	304.6	305.8	307.0	308.2	309.4
80°	254.6	261.3	267.9	271.9	273.1	274.3	275.5	276.7
82.5°	223.6	230.0	236.4	240.8	243.0	245.1	247.3	249.4
85°	181.0	187.6	194.3	198.8	201.3	203.7	206.1	208.5
87.5°	150.2	157.3	164.5	169.3	171.5	173.7	176.0	178.2
90°	144.1	152.2	160.3	165.7	168.5	171.3	174.1	176.9
92.5°	139.3	147.1	154.9	160.1	162.5	164.9	167.4	169.9
95°	131.2	139.1	146.8	151.8	153.9	156.0	158.1	160.3
97.5°	142.4	142.5	142.5	143.5	145.6	147.6	149.8	151.8
100°	208.6	181.6	154.6	141.6	142.5	143.4	144.3	145.2
102.5°	306.3	306.1	305.9	299.1	285.7	272.3	258.8	245.5
105°	387.6	393.6	399.7	403.6	405.6	407.5	409.4	411.2
107.5°	460.9	466.9	472.9	476.6	477.8	479.0	480.2	481.4
110°	507.9	512.9	518.0	521.7	524.0	526.3	528.8	531.1



TEST NUMBER: P333280-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	554.2	558.9	563.6	566.8	568.6	570.4	572.2	574.0
115°	624.9	629.4	634.0	636.5	637.0	637.5	637.9	638.4
117.5°	692.5	696.4	700.4	703.2	704.7	706.1	707.6	709.0
120°	736.3	741.0	745.7	748.4	749.1	749.8	750.5	751.2
122.5°	777.5	781.9	786.4	788.8	789.4	789.9	790.4	790.9
125°	837.9	841.8	845.8	848.2	849.0	849.8	850.7	851.5
127.5°	892.1	896.2	900.1	902.2	902.3	902.4	902.5	902.6
130°	928.4	931.9	935.5	937.5	937.9	938.3	938.7	939.1
132.5°	961.4	965.5	969.6	971.7	971.9	972.0	972.2	972.3
135°	1009.1	1012.6	1016.0	1017.8	1018.0	1018.2	1018.3	1018.5
137.5°	1054.5	1058.1	1061.9	1063.7	1063.8	1063.8	1063.8	1063.9
140°	1082.2	1085.9	1089.6	1091.6	1091.4	1091.3	1091.2	1091.0
142.5°	1109.7	1112.7	1115.6	1117.0	1116.9	1116.7	1116.6	1116.5
145°	1149.9	1151.7	1153.4	1154.2	1154.1	1154.0	1153.8	1153.7
147.5°	1185.1	1185.8	1186.6	1186.4	1185.4	1184.3	1183.3	1182.1
150°	1207.9	1208.3	1208.7	1208.2	1206.7	1205.3	1203.8	1202.2
152.5°	1228.8	1229.3	1229.7	1229.2	1227.6	1226.1	1224.5	1222.9
155°	1257.7	1258.4	1259.1	1258.5	1256.7	1254.9	1253.1	1251.3
157.5°	1281.6	1282.3	1283.0	1282.5	1280.7	1278.9	1277.1	1275.4
160°	1296.5	1297.4	1298.3	1297.8	1296.1	1294.2	1292.4	1290.6
162.5°	1310.1	1311.3	1312.6	1312.2	1310.3	1308.3	1306.4	1304.3
165°	1327.6	1329.0	1330.3	1330.1	1328.3	1326.5	1324.7	1322.9
167.5°	1340.9	1342.5	1344.1	1343.9	1341.9	1339.9	1337.9	1335.8
170°	1347.7	1349.5	1351.3	1351.1	1349.1	1347.2	1345.1	1343.1
172.5°	1352.9	1354.5	1356.1	1355.9	1353.9	1351.9	1349.9	1348.0
175°	1358.8	1360.6	1362.3	1362.2	1360.2	1358.2	1356.1	1354.1
177.5°	1361.1	1362.4	1363.6	1363.5	1362.1	1360.7	1359.3	1357.8
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2

(END OF REPORT)