

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: P333638-927

Luminaire Tested: **S125RDIP-S1270D1205U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333638-927
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: S125RDIP-S1270D1205U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7166.7 lumens
Efficiency: N/A
Efficacy: 100.0 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

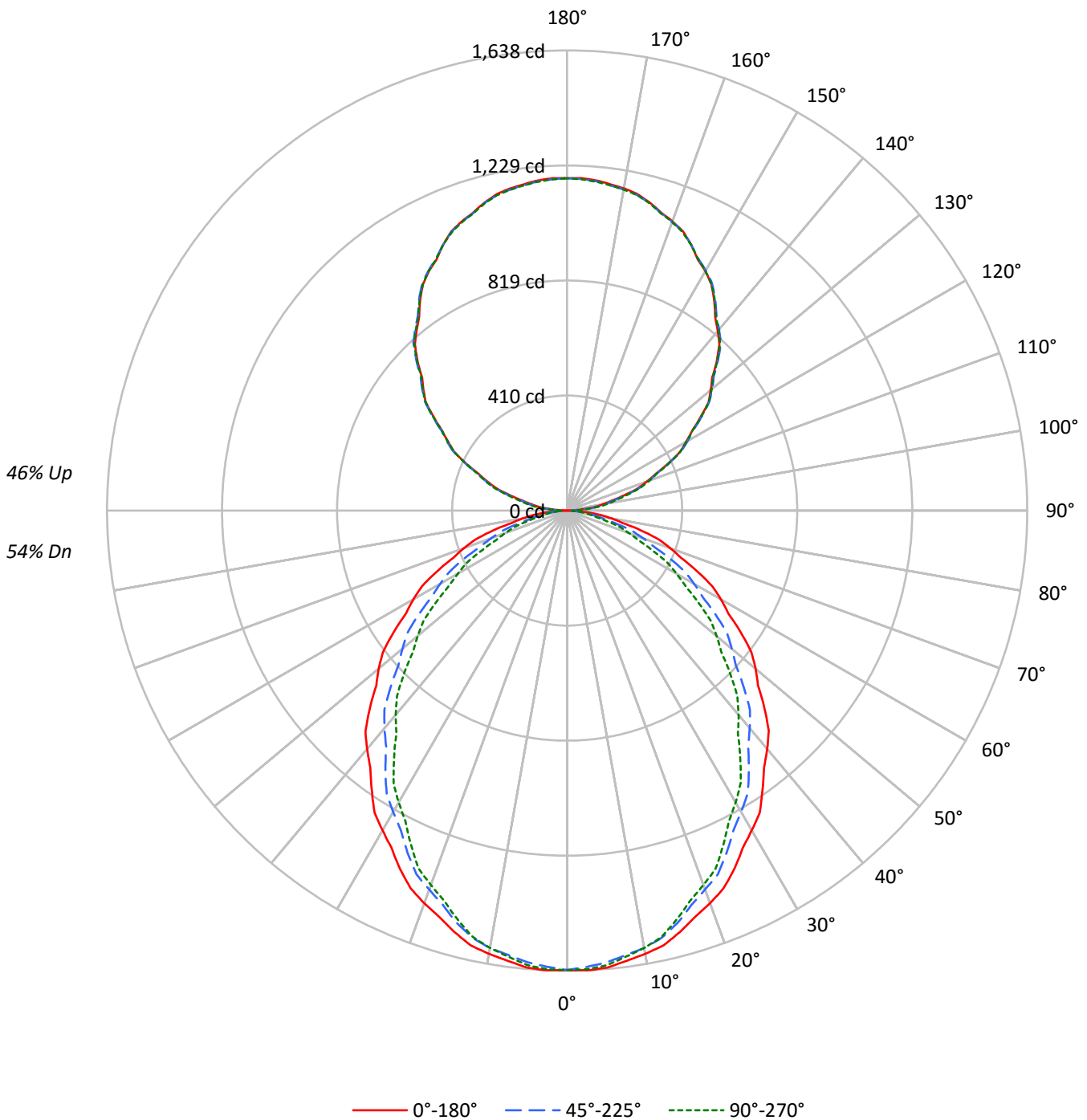
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	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	54	48	52	47	43	45	41	37	38	35	32	29
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	29	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	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10561	10561	10561
5°	10585	10466	10529
10°	10506	10368	10368
15°	10380	10158	10075
20°	10221	9864	9745
25°	10033	9576	9365
30°	9801	9238	8944
35°	9563	8891	8472
40°	9340	8528	8008
45°	9070	8122	7501
50°	8799	7681	6974
55°	8483	7260	6411
60°	8169	6748	5807
65°	7795	6154	5115
70°	7370	5410	4409
75°	6780	4561	3666
80°	5973	3582	3080
85°	5039	2927	2749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.8	2.1
10°-20°	429.7	6.0
20°-30°	623.1	8.7
30°-40°	710.2	9.9
40°-50°	692.3	9.7
50°-60°	582.7	8.1
60°-70°	408.5	5.7
70°-80°	210.0	2.9
80°-90°	55.6	0.8
90°-100°	79.2	1.1
100°-110°	234.0	3.3
110°-120°	396.3	5.5
120°-130°	521.5	7.3
130°-140°	584.4	8.2
140°-150°	572.7	8.0
150°-160°	481.1	6.7
160°-170°	319.8	4.5
170°-180°	111.9	1.6
0°-30°	1206.6	16.8
0°-40°	1916.8	26.7
0°-60°	3191.8	44.5
0°-90°	3865.9	53.9
90°-120°	709.5	9.9
90°-150°	2388.1	33.3
90°-180°	3301.0	46.1
0°-180°	7166.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1635	1635	1635	1635	1635	
5°	1633	1627	1614	1626	1624	155
15°	1552	1544	1519	1517	1507	437
25°	1408	1388	1344	1328	1314	648
35°	1213	1182	1128	1093	1074	759
45°	993	955	889	842	821	766
55°	753	712	645	591	569	674
65°	510	467	403	355	335	505
75°	272	234	183	157	147	288
85°	68	47	40	38	37	76
90°	1	8	15	19	22	6
95°	60	62	71	77	79	64
105°	210	215	220	225	228	224
115°	397	400	402	401	400	392
125°	579	584	586	584	583	518
135°	753	758	760	759	756	580
145°	912	916	919	919	916	570
155°	1044	1044	1045	1048	1044	481
165°	1135	1133	1134	1137	1132	320
175°	1180	1177	1176	1181	1176	112
180°	1183	1183	1183	1183	1183	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1638.2	1637.6	1636.9	1636.3	1635.6	1634.2	1632.0	1629.8	1627.6	1625.4	1627.6
5°	1632.8	1631.7	1630.6	1629.5	1628.4	1626.4	1623.3	1620.3	1617.3	1614.3	1617.0
7.5°	1616.8	1615.7	1614.7	1613.6	1612.6	1610.3	1606.6	1603.0	1599.4	1595.8	1597.7
10°	1602.0	1601.1	1600.3	1599.5	1598.6	1596.3	1592.4	1588.6	1584.8	1581.0	1581.8
12.5°	1585.2	1584.1	1583.0	1582.0	1581.0	1577.9	1572.7	1567.6	1562.3	1557.2	1557.8
15°	1552.5	1550.9	1549.3	1547.6	1545.9	1542.2	1536.4	1530.7	1525.0	1519.2	1518.9
17.5°	1515.7	1513.2	1510.7	1508.2	1505.6	1500.7	1493.5	1486.2	1479.0	1471.7	1470.4
20°	1487.1	1484.3	1481.5	1478.8	1476.1	1470.3	1461.6	1452.8	1444.0	1435.2	1433.8
22.5°	1455.5	1452.7	1449.9	1447.2	1444.5	1438.5	1429.3	1420.1	1410.8	1401.6	1398.9
25°	1408.0	1403.9	1399.8	1395.7	1391.5	1384.4	1374.3	1364.1	1353.9	1343.8	1340.2
27.5°	1353.7	1348.7	1343.7	1338.7	1333.7	1325.8	1314.9	1304.0	1293.2	1282.3	1277.3
30°	1314.2	1308.9	1303.7	1298.5	1293.3	1284.9	1273.4	1261.9	1250.3	1238.8	1232.5
32.5°	1275.7	1269.6	1263.5	1257.4	1251.3	1242.3	1230.6	1218.9	1207.0	1195.3	1188.4
35°	1212.9	1206.3	1199.7	1193.1	1186.5	1177.0	1164.7	1152.4	1140.0	1127.7	1119.7
37.5°	1151.4	1143.4	1135.4	1127.4	1119.3	1108.9	1096.2	1083.5	1070.7	1058.0	1048.5
40°	1107.9	1099.6	1091.4	1083.2	1075.0	1064.2	1051.1	1037.9	1024.7	1011.5	1001.2
42.5°	1062.5	1054.0	1045.5	1037.0	1028.6	1017.6	1004.0	990.4	976.8	963.1	953.2
45°	993.0	985.1	977.1	969.2	961.2	949.7	934.5	919.5	904.4	889.3	878.3
47.5°	921.1	912.8	904.4	896.0	887.6	875.8	860.5	845.3	830.1	814.9	803.6
50°	875.7	866.6	857.5	848.5	839.5	827.1	811.4	795.8	780.1	764.5	753.0
52.5°	826.2	817.0	807.7	798.4	789.2	777.1	762.4	747.7	732.8	718.1	705.7
55°	753.4	744.7	735.9	727.1	718.3	706.2	690.9	675.5	660.1	644.8	632.4
57.5°	679.8	670.4	661.0	651.6	642.2	630.2	615.4	600.5	585.7	570.8	558.8
60°	632.4	622.7	613.1	603.6	594.0	581.7	566.9	552.1	537.3	522.4	510.4
62.5°	582.0	572.8	563.6	554.4	545.3	533.2	518.2	503.1	488.1	473.0	461.8
65°	510.1	500.7	491.5	482.1	472.8	460.8	446.3	431.7	417.2	402.7	391.7
67.5°	438.7	429.4	420.0	410.7	401.4	389.8	375.8	361.9	347.9	334.0	323.9
70°	390.3	381.0	371.6	362.3	353.0	341.4	327.7	314.0	300.2	286.5	278.1
72.5°	342.9	333.7	324.6	315.5	306.4	295.4	282.6	269.7	256.9	244.1	236.2
75°	271.7	263.5	255.2	247.0	238.8	228.9	217.4	205.9	194.3	182.8	176.7
77.5°	201.1	194.5	187.9	181.3	174.8	166.8	157.6	148.4	139.2	129.9	125.7
80°	160.6	154.0	147.4	140.8	134.2	127.1	119.4	111.7	104.0	96.3	93.9
82.5°	121.0	115.1	109.2	103.2	97.4	91.7	86.4	81.2	75.9	70.7	69.5
85°	68.0	63.0	58.1	53.1	48.2	45.0	43.6	42.3	40.9	39.5	39.2
87.5°	22.9	21.7	20.5	19.3	18.1	17.5	17.6	17.7	17.7	17.7	18.0
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	22.3	23.4	24.6	25.7	26.9	28.3	30.1	31.8	33.6	35.3	36.7
95°	59.8	60.2	60.7	61.1	61.5	62.7	64.7	66.8	68.8	70.9	72.3
97.5°	99.4	99.6	99.7	99.9	100.1	101.6	104.4	107.2	110.0	112.9	114.2
100°	128.9	128.9	128.9	128.9	128.9	130.2	132.8	135.5	138.2	140.9	142.7
102.5°	160.6	161.4	162.2	163.0	163.8	164.9	166.3	167.6	169.0	170.3	172.3
105°	209.8	210.9	211.9	212.9	214.0	215.1	216.3	217.5	218.8	220.0	221.3
107.5°	264.4	265.4	266.4	267.4	268.5	269.4	270.4	271.3	272.3	273.2	273.9
110°	302.0	302.9	304.0	305.0	306.0	306.8	307.4	308.1	308.7	309.3	309.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	340.2	340.8	341.3	341.8	342.4	343.0	343.8	344.6	345.3	346.1	346.4
115°	396.7	397.6	398.4	399.2	400.1	400.6	401.1	401.5	401.9	402.3	402.1
117.5°	453.4	453.8	454.2	454.6	455.0	455.3	455.7	456.1	456.4	456.8	456.9
120°	488.8	489.8	490.8	491.9	492.9	493.5	493.7	493.9	494.2	494.3	494.3
122.5°	527.1	527.5	527.8	528.2	528.5	529.0	529.6	530.1	530.6	531.2	531.0
125°	579.0	580.3	581.5	582.7	583.9	584.6	584.9	585.0	585.3	585.5	585.0
127.5°	634.3	634.9	635.6	636.4	637.1	637.5	637.8	638.0	638.3	638.5	638.3
130°	667.4	668.4	669.5	670.5	671.5	672.2	672.6	673.0	673.4	673.8	673.7
132.5°	700.5	702.2	703.9	705.6	707.3	708.1	708.0	707.9	707.8	707.7	707.5
135°	753.0	754.2	755.5	756.7	758.0	758.7	758.8	759.1	759.2	759.5	759.5
137.5°	802.3	803.5	804.7	805.9	807.1	807.9	808.3	808.8	809.3	809.7	809.9
140°	834.0	835.0	836.1	837.1	838.1	838.9	839.6	840.2	840.7	841.4	841.8
142.5°	865.7	866.6	867.4	868.2	869.1	870.0	870.7	871.5	872.3	873.1	873.3
145°	912.3	913.1	913.9	914.7	915.5	916.2	916.9	917.5	918.1	918.7	918.7
147.5°	955.4	955.8	956.2	956.7	957.1	957.6	958.1	958.6	959.1	959.6	960.0
150°	984.0	983.9	983.7	983.5	983.3	983.6	984.4	985.2	986.0	986.8	986.8
152.5°	1007.7	1007.9	1008.2	1008.5	1008.8	1009.1	1009.4	1009.7	1010.1	1010.4	1010.9
155°	1043.9	1043.9	1043.9	1043.9	1043.9	1044.0	1044.3	1044.4	1044.7	1044.8	1045.7
157.5°	1076.3	1075.9	1075.4	1075.0	1074.5	1074.4	1074.6	1074.8	1075.0	1075.2	1076.0
160°	1095.4	1094.9	1094.2	1093.6	1093.0	1092.8	1093.0	1093.2	1093.4	1093.6	1094.4
162.5°	1112.4	1112.0	1111.5	1111.0	1110.6	1110.4	1110.4	1110.5	1110.5	1110.6	1111.5
165°	1135.0	1134.6	1134.2	1133.9	1133.4	1133.3	1133.5	1133.7	1133.9	1134.1	1135.0
167.5°	1154.2	1153.3	1152.5	1151.8	1150.9	1150.5	1150.5	1150.5	1150.5	1150.5	1151.8
170°	1164.5	1163.7	1162.8	1162.1	1161.3	1160.8	1160.8	1160.8	1160.8	1160.8	1162.1
172.5°	1171.9	1171.1	1170.2	1169.4	1168.6	1168.2	1168.2	1168.2	1168.2	1168.2	1169.4
175°	1180.1	1179.3	1178.5	1177.7	1176.9	1176.5	1176.5	1176.5	1176.5	1176.5	1177.7
177.5°	1184.4	1183.8	1183.0	1182.4	1181.8	1181.4	1181.2	1181.1	1180.8	1180.7	1181.7
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3	1635.3
2.5°	1629.8	1632.0	1634.2	1635.1	1635.0	1634.7	1634.5	1634.3
5°	1619.8	1622.5	1625.2	1626.4	1625.8	1625.2	1624.7	1624.1
7.5°	1599.6	1601.6	1603.5	1604.1	1603.5	1602.9	1602.3	1601.7
10°	1582.5	1583.4	1584.2	1584.2	1583.4	1582.5	1581.8	1581.0
12.5°	1558.5	1559.0	1559.6	1559.3	1558.1	1556.8	1555.5	1554.3
15°	1518.6	1518.4	1518.1	1516.7	1514.3	1511.8	1509.3	1506.8
17.5°	1469.0	1467.6	1466.3	1464.6	1462.5	1460.5	1458.5	1456.4
20°	1432.4	1431.1	1429.7	1427.8	1425.3	1422.8	1420.4	1417.9
22.5°	1396.2	1393.5	1390.8	1388.5	1386.5	1384.4	1382.4	1380.4
25°	1336.6	1333.1	1329.5	1326.2	1323.2	1320.2	1317.2	1314.2
27.5°	1272.3	1267.3	1262.3	1258.4	1255.5	1252.5	1249.6	1246.7
30°	1226.2	1219.9	1213.5	1209.2	1206.7	1204.2	1201.7	1199.3
32.5°	1181.4	1174.4	1167.4	1162.4	1159.3	1156.1	1153.0	1149.9
35°	1111.7	1103.7	1095.8	1089.9	1086.1	1082.2	1078.4	1074.5
37.5°	1038.9	1029.4	1019.8	1013.1	1009.4	1005.7	1002.0	998.2
40°	990.7	980.2	969.9	963.0	959.6	956.4	953.1	949.8
42.5°	943.2	933.2	923.2	915.8	910.9	906.1	901.3	896.4
45°	867.3	856.3	845.3	837.8	833.7	829.6	825.5	821.3
47.5°	792.3	781.0	769.7	761.8	757.2	752.7	748.1	743.5
50°	741.5	729.9	718.4	710.6	706.5	702.3	698.2	694.1
52.5°	693.2	680.9	668.4	660.2	656.1	652.0	647.8	643.7
55°	620.0	607.7	595.3	586.9	582.6	578.1	573.8	569.4
57.5°	546.7	534.6	522.5	514.6	510.6	506.8	502.9	499.0
60°	498.3	486.2	474.1	466.0	461.9	457.8	453.7	449.6
62.5°	450.7	439.4	428.3	420.6	416.5	412.3	408.2	404.1
65°	380.7	369.7	358.7	351.2	347.1	342.9	338.8	334.7
67.5°	313.9	303.8	293.8	287.1	283.8	280.5	277.3	273.9
70°	269.5	261.0	252.5	246.6	243.3	240.0	236.7	233.5
72.5°	228.4	220.5	212.6	207.6	205.4	203.3	201.1	198.8
75°	170.7	164.7	158.7	154.6	152.7	150.8	148.9	146.9
77.5°	121.4	117.2	113.0	110.2	108.8	107.3	105.9	104.5
80°	91.4	89.0	86.4	84.9	84.4	83.8	83.3	82.8
82.5°	68.4	67.2	66.1	65.3	65.0	64.6	64.3	64.0
85°	39.0	38.7	38.4	38.2	37.9	37.6	37.3	37.1
87.5°	18.1	18.4	18.6	18.6	18.5	18.5	18.4	18.2
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	38.0	39.4	40.7	41.7	42.1	42.5	43.0	43.4
95°	73.8	75.2	76.6	77.6	78.0	78.3	78.7	79.1
97.5°	115.6	116.9	118.3	119.1	119.3	119.5	119.8	120.0
100°	144.5	146.4	148.2	149.3	149.7	150.1	150.6	151.0
102.5°	174.3	176.3	178.3	179.6	180.2	180.8	181.3	181.9
105°	222.4	223.7	224.9	225.9	226.5	227.0	227.7	228.3
107.5°	274.4	275.0	275.7	276.0	275.9	275.9	275.8	275.8
110°	310.5	311.2	311.7	312.0	311.7	311.6	311.3	311.2



TEST NUMBER: P333638-927

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	346.7	347.0	347.3	347.2	346.9	346.5	346.1	345.8
115°	401.9	401.6	401.5	401.2	401.1	400.8	400.6	400.4
117.5°	457.1	457.2	457.4	457.1	456.3	455.5	454.6	453.8
120°	494.3	494.3	494.3	493.9	493.1	492.3	491.5	490.7
122.5°	530.8	530.7	530.5	530.1	529.4	528.8	528.1	527.5
125°	584.6	584.2	583.8	583.5	583.4	583.1	582.9	582.7
127.5°	638.1	637.9	637.7	637.4	637.0	636.5	636.1	635.7
130°	673.4	673.2	673.0	672.7	672.3	671.9	671.5	671.1
132.5°	707.3	707.1	706.9	706.5	705.9	705.4	704.8	704.3
135°	759.5	759.5	759.5	759.1	758.2	757.4	756.6	755.7
137.5°	810.2	810.5	810.7	810.3	809.3	808.3	807.2	806.2
140°	842.2	842.6	843.0	842.7	841.7	840.7	839.6	838.6
142.5°	873.5	873.8	874.0	873.6	872.6	871.6	870.6	869.6
145°	918.7	918.7	918.7	918.4	917.8	917.2	916.6	915.9
147.5°	960.6	961.1	961.6	961.1	959.7	958.3	957.0	955.5
150°	986.8	986.8	986.8	986.7	986.2	985.8	985.4	985.0
152.5°	1011.4	1011.9	1012.3	1012.3	1011.5	1010.7	1010.0	1009.3
155°	1046.5	1047.3	1048.1	1048.0	1046.9	1045.9	1045.0	1043.9
157.5°	1076.8	1077.7	1078.5	1078.2	1076.9	1075.5	1074.2	1072.9
160°	1095.3	1096.1	1096.9	1096.8	1095.7	1094.7	1093.7	1092.7
162.5°	1112.5	1113.5	1114.5	1114.4	1113.2	1112.0	1110.8	1109.6
165°	1135.8	1136.5	1137.4	1137.2	1136.0	1134.7	1133.5	1132.3
167.5°	1152.9	1154.2	1155.4	1155.4	1154.1	1152.9	1151.6	1150.3
170°	1163.2	1164.5	1165.7	1165.6	1164.2	1162.8	1161.3	1159.9
172.5°	1170.6	1171.9	1173.1	1173.1	1171.8	1170.5	1169.3	1168.0
175°	1178.9	1180.1	1181.4	1181.3	1179.9	1178.5	1176.9	1175.5
177.5°	1182.6	1183.7	1184.6	1184.6	1183.4	1182.3	1181.1	1180.0
180°	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9	1182.9

(END OF REPORT)