

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: P333631-830

Luminaire Tested: **S125RDIP-S1270D1035U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333631-830
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: S125RDIP-S1270D1035U830-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8497.7 lumens
Efficiency: N/A
Efficacy: 127.2 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

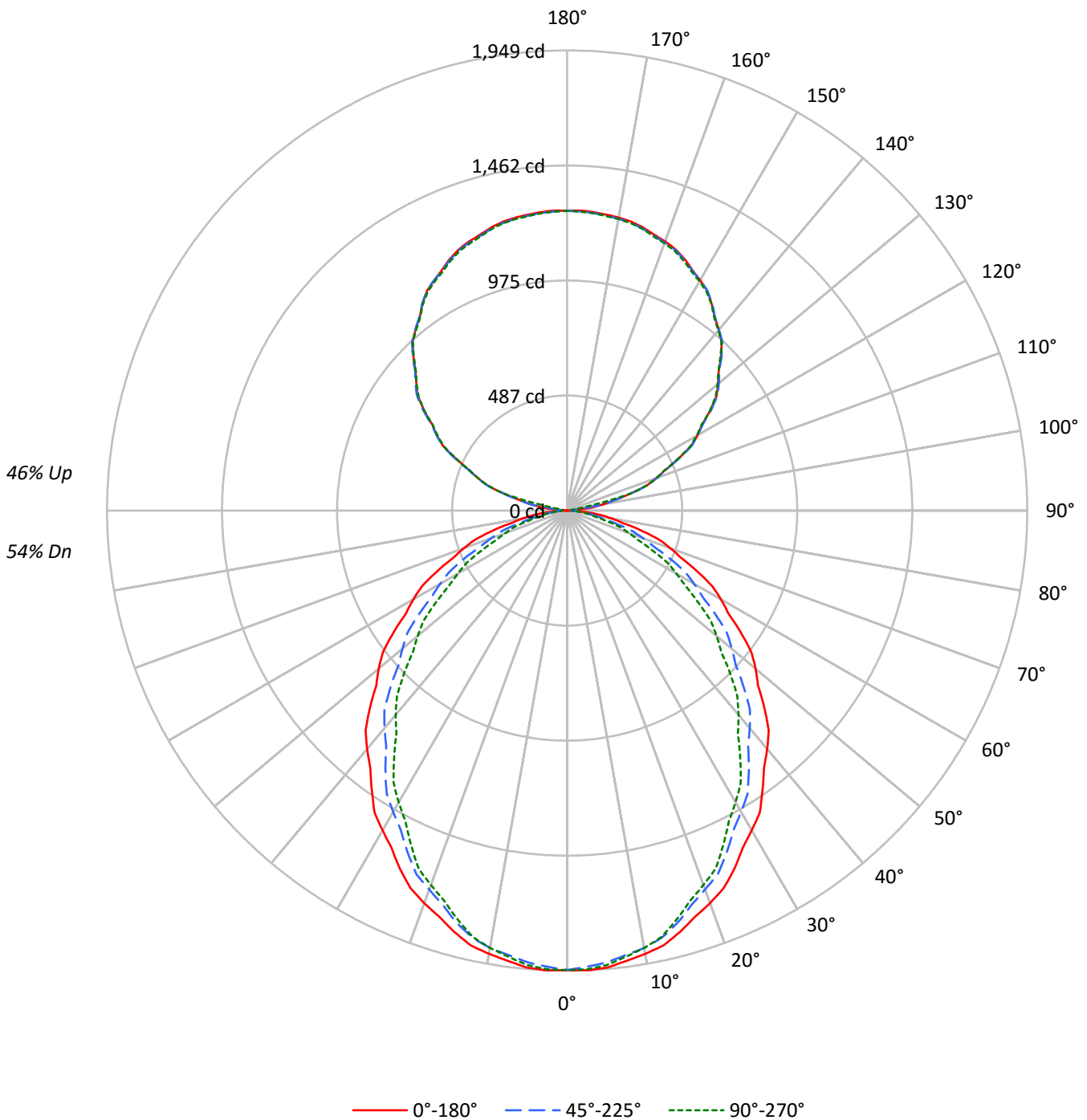
Input Watts (W): 66.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	84	77	72	67	66	62	59	56	54	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	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	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	30	25	30	26	23	26	23	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	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12566	12566	12566
5°	12595	12452	12528
10°	12499	12336	12336
15°	12351	12085	11987
20°	12160	11736	11595
25°	11938	11393	11142
30°	11660	10992	10641
35°	11378	10578	10080
40°	11113	10146	9528
45°	10791	9664	8925
50°	10468	9139	8298
55°	10094	8637	7629
60°	9719	8029	6909
65°	9274	7321	6085
70°	8769	6437	5246
75°	8067	5425	4362
80°	7107	4262	3663
85°	5995	3483	3268



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	2.2
10°-20°	511.3	6.0
20°-30°	741.4	8.7
30°-40°	845.0	9.9
40°-50°	823.6	9.7
50°-60°	693.3	8.2
60°-70°	486.0	5.7
70°-80°	249.8	2.9
80°-90°	65.7	0.8
90°-100°	46.1	0.5
100°-110°	284.3	3.3
110°-120°	515.7	6.1
120°-130°	661.8	7.8
130°-140°	711.8	8.4
140°-150°	668.2	7.9
150°-160°	540.5	6.4
160°-170°	349.6	4.1
170°-180°	120.6	1.4
0°-30°	1435.7	16.9
0°-40°	2280.6	26.8
0°-60°	3797.6	44.7
0°-90°	4599.2	54.1
90°-120°	846.1	10.0
90°-150°	2887.9	34.0
90°-180°	3899.0	45.9
0°-180°	8497.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1943	1936	1921	1934	1932	184
15°	1847	1837	1808	1805	1793	520
25°	1675	1651	1599	1580	1564	770
35°	1443	1406	1342	1300	1278	903
45°	1182	1137	1058	1001	977	911
55°	896	847	767	703	678	802
65°	607	555	479	422	398	601
75°	323	278	217	186	175	342
85°	81	55	47	46	44	91
90°	1	8	15	20	23	6
95°	54	49	15	20	20	68
105°	277	280	280	280	280	293
115°	520	524	525	521	516	515
125°	739	745	745	742	739	660
135°	921	927	925	923	918	710
145°	1068	1070	1070	1071	1065	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	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1949.2	1948.4	1947.6	1946.8	1946.1	1944.4	1941.7	1939.1	1936.5	1933.9	1936.5
5°	1942.8	1941.4	1940.1	1938.8	1937.5	1935.0	1931.5	1927.9	1924.3	1920.7	1923.9
7.5°	1923.6	1922.4	1921.2	1919.9	1918.6	1915.9	1911.6	1907.2	1903.0	1898.7	1900.9
10°	1906.0	1905.0	1904.0	1903.1	1902.1	1899.3	1894.7	1890.2	1885.6	1881.0	1882.0
12.5°	1886.0	1884.8	1883.5	1882.3	1881.0	1877.4	1871.2	1865.1	1858.9	1852.8	1853.5
15°	1847.2	1845.2	1843.3	1841.4	1839.4	1834.9	1828.1	1821.3	1814.4	1807.5	1807.2
17.5°	1803.4	1800.4	1797.4	1794.4	1791.4	1785.6	1777.0	1768.3	1759.7	1751.1	1749.5
20°	1769.3	1766.0	1762.7	1759.5	1756.2	1749.4	1739.0	1728.5	1718.1	1707.6	1706.0
22.5°	1731.7	1728.4	1725.1	1721.9	1718.6	1711.6	1700.5	1689.6	1678.6	1667.6	1664.4
25°	1675.3	1670.4	1665.5	1660.6	1655.7	1647.2	1635.1	1623.1	1610.9	1598.8	1594.6
27.5°	1610.6	1604.7	1598.7	1592.8	1586.9	1577.4	1564.4	1551.5	1538.6	1525.7	1519.8
30°	1563.6	1557.4	1551.1	1545.0	1538.8	1528.8	1515.0	1501.4	1487.6	1473.9	1466.4
32.5°	1517.8	1510.5	1503.3	1496.0	1488.7	1478.1	1464.1	1450.2	1436.2	1422.2	1413.9
35°	1443.1	1435.2	1427.4	1419.6	1411.7	1400.4	1385.7	1371.1	1356.4	1341.7	1332.2
37.5°	1369.9	1360.4	1350.9	1341.3	1331.7	1319.4	1304.3	1289.1	1273.9	1258.8	1247.5
40°	1318.1	1308.3	1298.5	1288.7	1279.0	1266.2	1250.6	1234.9	1219.2	1203.5	1191.2
42.5°	1264.1	1254.1	1244.0	1233.9	1223.9	1210.7	1194.6	1178.4	1162.2	1145.9	1134.1
45°	1181.5	1172.1	1162.5	1153.1	1143.6	1129.9	1111.9	1094.0	1076.0	1058.1	1045.0
47.5°	1096.0	1086.0	1076.0	1066.0	1056.0	1042.0	1023.9	1005.8	987.7	969.6	956.1
50°	1041.9	1031.1	1020.3	1009.6	998.8	984.1	965.4	946.9	928.2	909.6	895.9
52.5°	983.1	972.0	961.0	950.0	939.0	924.6	907.1	889.6	871.9	854.4	839.6
55°	896.5	886.0	875.5	865.1	854.6	840.3	822.0	803.7	785.4	767.1	752.4
57.5°	808.8	797.7	786.5	775.3	764.1	749.8	732.2	714.4	696.8	679.2	664.9
60°	752.4	740.9	729.5	718.1	706.7	692.1	674.5	656.9	639.2	621.6	607.3
62.5°	692.5	681.6	670.6	659.7	648.8	634.4	616.5	598.6	580.7	562.8	549.5
65°	606.9	595.8	584.8	573.6	562.5	548.3	531.0	513.7	496.3	479.1	466.0
67.5°	522.0	510.9	499.7	488.7	477.6	463.7	447.1	430.6	414.0	397.4	385.4
70°	464.4	453.3	442.1	431.0	420.0	406.2	389.9	373.6	357.2	340.9	330.8
72.5°	407.9	397.1	386.3	375.4	364.6	351.5	336.2	320.9	305.7	290.4	281.1
75°	323.3	313.5	303.7	293.9	284.1	272.4	258.6	245.0	231.2	217.4	210.3
77.5°	239.2	231.4	223.6	215.7	207.9	198.5	187.5	176.5	165.6	154.6	149.6
80°	191.1	183.2	175.4	167.5	159.7	151.2	142.0	132.9	123.8	114.6	111.7
82.5°	144.0	137.0	129.9	122.8	115.8	109.1	102.8	96.6	90.3	84.1	82.7
85°	80.9	74.9	69.1	63.2	57.3	53.5	51.9	50.3	48.6	47.0	46.7
87.5°	27.2	25.7	24.2	22.7	21.2	20.5	20.5	20.5	20.6	20.6	20.8
90°	0.9	2.6	4.2	5.9	7.6	9.2	10.7	12.2	13.6	15.1	16.1
92.5°	14.5	13.3	12.2	10.9	9.8	9.9	11.1	12.4	13.8	15.1	16.1
95°	53.6	53.0	52.4	51.7	51.2	46.8	38.9	30.9	23.0	15.1	16.1
97.5°	112.0	113.1	114.2	115.4	116.5	109.2	93.5	77.8	62.0	46.3	40.4
100°	157.1	157.8	158.4	159.0	159.7	160.4	161.3	162.1	162.9	163.7	132.6
102.5°	203.1	203.9	204.7	205.5	206.2	206.9	207.5	207.9	208.4	209.0	203.0
105°	276.6	277.5	278.3	279.2	280.0	280.4	280.4	280.4	280.4	280.4	280.4
107.5°	353.1	353.1	353.1	353.1	353.1	353.3	353.7	354.1	354.6	355.0	355.1
110°	402.7	402.7	402.7	402.7	402.7	403.0	403.4	403.9	404.3	404.6	404.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	449.5	450.0	450.4	451.0	451.5	451.9	452.1	452.3	452.6	452.9	452.0
115°	519.5	520.6	521.6	522.6	523.7	524.3	524.5	524.7	524.9	525.1	524.3
117.5°	591.9	591.9	591.8	591.8	591.8	592.2	593.0	593.7	594.6	595.3	594.3
120°	637.2	636.9	636.7	636.5	636.3	636.5	637.2	637.7	638.4	639.0	638.6
122.5°	677.0	677.8	678.6	679.4	680.2	680.7	681.1	681.4	681.6	681.9	681.5
125°	738.8	740.2	741.7	743.2	744.6	745.4	745.4	745.4	745.4	745.4	744.5
127.5°	797.7	798.7	799.7	800.8	801.8	802.3	802.2	802.1	801.9	801.8	801.3
130°	833.8	834.9	835.9	837.0	838.0	838.6	838.9	839.1	839.2	839.4	838.9
132.5°	870.0	871.2	872.4	873.5	874.8	875.2	874.7	874.3	873.8	873.4	873.2
135°	921.3	922.6	923.9	925.1	926.3	926.8	926.3	926.0	925.5	925.1	924.6
137.5°	968.6	969.7	970.7	971.9	972.9	973.3	972.9	972.5	972.1	971.8	971.9
140°	999.5	999.8	1000.3	1000.7	1001.1	1001.3	1001.0	1000.8	1000.6	1000.4	1000.8
142.5°	1027.3	1027.6	1027.8	1028.0	1028.3	1028.6	1028.9	1029.2	1029.4	1029.7	1029.8
145°	1068.2	1068.6	1068.9	1069.4	1069.8	1070.1	1070.1	1070.1	1070.1	1070.1	1070.3
147.5°	1103.9	1103.8	1103.7	1103.6	1103.5	1103.6	1103.9	1104.2	1104.4	1104.7	1104.9
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°	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7	1945.7
2.5°	1939.1	1941.7	1944.4	1945.5	1945.3	1945.0	1944.7	1944.5
5°	1927.2	1930.5	1933.7	1935.0	1934.4	1933.7	1933.1	1932.4
7.5°	1903.2	1905.5	1907.8	1908.6	1907.8	1907.1	1906.4	1905.7
10°	1882.9	1884.0	1884.9	1884.9	1884.0	1882.9	1882.0	1881.0
12.5°	1854.3	1854.9	1855.7	1855.3	1853.8	1852.3	1850.8	1849.3
15°	1806.9	1806.6	1806.2	1804.6	1801.7	1798.7	1795.7	1792.8
17.5°	1747.9	1746.2	1744.6	1742.6	1740.1	1737.7	1735.3	1732.9
20°	1704.3	1702.7	1701.1	1698.7	1695.8	1692.9	1690.0	1687.1
22.5°	1661.2	1658.0	1654.8	1652.0	1649.6	1647.2	1644.7	1642.4
25°	1590.4	1586.1	1581.9	1577.9	1574.3	1570.7	1567.2	1563.6
27.5°	1513.8	1507.9	1501.9	1497.2	1493.7	1490.3	1486.8	1483.4
30°	1459.0	1451.4	1443.9	1438.7	1435.8	1432.8	1429.8	1426.9
32.5°	1405.6	1397.3	1389.0	1383.0	1379.3	1375.5	1371.9	1368.1
35°	1322.8	1313.2	1303.8	1296.8	1292.2	1287.6	1283.1	1278.5
37.5°	1236.1	1224.7	1213.3	1205.4	1201.0	1196.6	1192.1	1187.7
40°	1178.7	1166.3	1154.0	1145.8	1141.8	1137.9	1134.0	1130.1
42.5°	1122.2	1110.3	1098.4	1089.6	1083.8	1078.1	1072.3	1066.6
45°	1031.9	1018.9	1005.8	996.8	991.9	987.0	982.1	977.2
47.5°	942.7	929.3	915.8	906.3	900.9	895.5	890.0	884.7
50°	882.2	868.5	854.8	845.5	840.6	835.7	830.8	825.9
52.5°	824.8	810.1	795.3	785.5	780.6	775.7	770.8	765.9
55°	737.7	723.0	708.3	698.3	693.1	687.9	682.7	677.5
57.5°	650.4	636.1	621.7	612.3	607.6	602.9	598.3	593.7
60°	592.9	578.5	564.1	554.5	549.6	544.7	539.8	534.9
62.5°	536.2	522.8	509.5	500.4	495.5	490.6	485.7	480.8
65°	453.0	439.9	426.8	417.8	412.9	408.0	403.1	398.2
67.5°	373.4	361.5	349.6	341.6	337.7	333.8	329.9	325.9
70°	320.7	310.6	300.5	293.4	289.5	285.6	281.6	277.8
72.5°	271.7	262.4	253.0	247.0	244.4	241.9	239.2	236.6
75°	203.1	196.0	188.8	184.0	181.7	179.5	177.2	174.8
77.5°	144.5	139.5	134.5	131.1	129.4	127.7	126.0	124.3
80°	108.8	105.8	102.8	101.0	100.4	99.7	99.2	98.5
82.5°	81.3	79.9	78.6	77.7	77.3	76.9	76.5	76.2
85°	46.4	46.1	45.7	45.4	45.1	44.8	44.4	44.1
87.5°	21.0	21.3	21.5	21.5	21.4	21.2	21.1	21.0
90°	17.2	18.2	19.2	20.1	20.7	21.3	22.0	22.6
92.5°	17.2	18.2	19.2	19.9	20.2	20.5	20.8	21.1
95°	17.2	18.2	19.2	19.8	19.8	19.8	19.8	19.8
97.5°	34.5	28.7	22.7	19.8	19.8	19.8	19.8	19.8
100°	101.4	70.3	39.1	23.1	22.2	21.4	20.6	19.8
102.5°	197.1	191.2	185.3	175.3	161.1	146.8	132.6	118.4
105°	280.4	280.4	280.4	280.3	280.1	279.9	279.7	279.5
107.5°	355.1	355.2	355.2	354.9	354.2	353.6	353.0	352.3
110°	403.4	402.7	402.2	402.0	402.2	402.4	402.6	402.7



TEST NUMBER: P333631-830

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	451.3	450.4	449.7	449.1	448.8	448.6	448.3	448.0
115°	523.5	522.6	521.8	520.8	519.5	518.2	517.0	515.8
117.5°	593.1	592.1	591.0	590.1	589.7	589.1	588.5	588.0
120°	638.2	637.7	637.3	636.6	635.6	634.5	633.5	632.4
122.5°	681.1	680.7	680.2	679.4	678.3	677.0	675.8	674.6
125°	743.7	742.8	742.0	741.3	740.6	740.0	739.4	738.8
127.5°	800.9	800.4	799.9	799.0	797.4	795.9	794.4	792.8
130°	838.2	837.5	837.0	836.1	835.1	834.1	833.0	831.9
132.5°	873.1	873.0	872.8	872.2	871.2	870.2	869.1	868.1
135°	924.3	923.9	923.4	922.6	921.3	920.1	918.8	917.6
137.5°	971.9	972.0	972.1	971.6	970.5	969.4	968.4	967.2
140°	1001.3	1001.6	1002.0	1001.6	1000.4	999.1	997.9	996.6
142.5°	1029.9	1030.0	1030.1	1029.5	1028.2	1027.0	1025.8	1024.4
145°	1070.4	1070.6	1070.8	1070.4	1069.1	1067.8	1066.6	1065.4
147.5°	1105.1	1105.4	1105.7	1105.0	1103.5	1102.0	1100.5	1099.0
150°	1127.4	1127.8	1128.1	1127.6	1125.9	1124.2	1122.5	1120.9
152.5°	1146.9	1147.4	1147.7	1147.2	1145.7	1144.2	1142.6	1141.1
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)