

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: P333608-840

Luminaire Tested: **S125RDIP-S1090D1205U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333608-840
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-S1090D1205U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 8475.4 lumens
Efficiency: N/A
Efficacy: 129.6 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

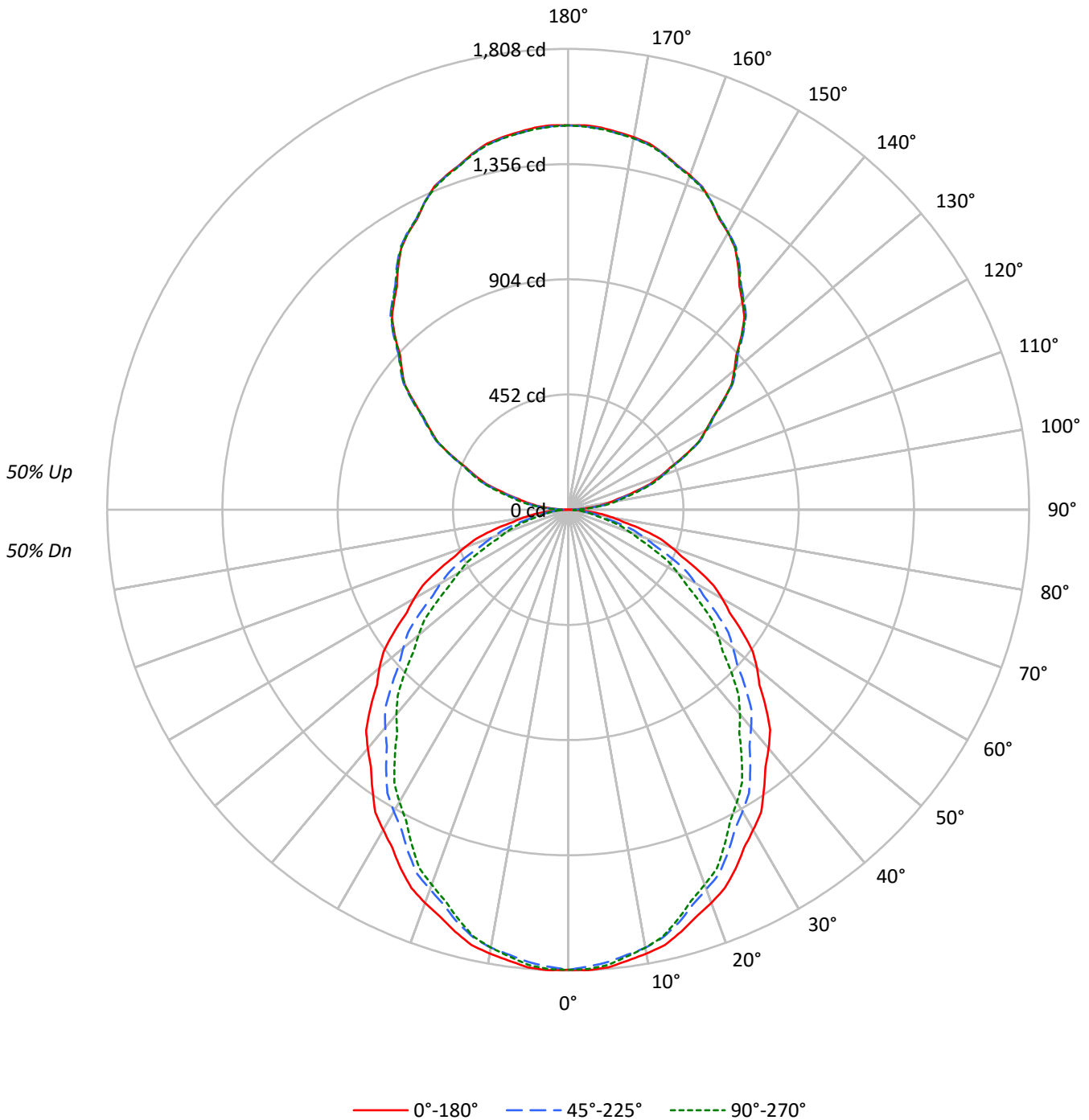
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	84	84	84		69	69	69		56	56	56	50
1	98	94	90	87	90	87	84	81	74	71	69		61	60	58		50	49	48	43
2	89	82	76	71	82	76	71	66	65	61	58		54	51	49		44	43	41	36
3	82	72	65	59	75	67	61	56	57	52	49		48	45	42		40	37	35	31
4	75	64	56	50	69	60	53	47	51	46	42		43	39	36		35	33	30	27
5	69	57	49	43	63	53	46	41	46	40	36		39	34	31		32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31		35	31	27		29	26	23	21
7	59	47	39	33	54	43	36	31	37	32	28		32	28	24		27	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25		29	25	22		25	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22		27	23	20		23	19	17	15
10	47	35	28	24	44	33	27	22	29	24	20		25	21	18		21	18	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11657	11657	11657
5°	11684	11551	11622
10°	11596	11444	11444
15°	11457	11212	11120
20°	11281	10888	10757
25°	11075	10570	10337
30°	10818	10197	9871
35°	10555	9813	9351
40°	10309	9413	8838
45°	10011	8965	8280
50°	9711	8478	7698
55°	9364	8014	7076
60°	9016	7448	6409
65°	8604	6791	5645
70°	8135	5973	4864
75°	7483	5036	4047
80°	6590	3954	3396
85°	5550	3231	3031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.7	2.0
10°-20°	474.3	5.6
20°-30°	687.8	8.1
30°-40°	783.9	9.2
40°-50°	764.1	9.0
50°-60°	643.2	7.6
60°-70°	450.9	5.3
70°-80°	231.8	2.7
80°-90°	61.8	0.7
90°-100°	101.0	1.2
100°-110°	298.2	3.5
110°-120°	505.2	6.0
120°-130°	664.8	7.8
130°-140°	745.0	8.8
140°-150°	730.1	8.6
150°-160°	613.2	7.2
160°-170°	407.6	4.8
170°-180°	142.7	1.7
0°-30°	1331.9	15.7
0°-40°	2115.8	25.0
0°-60°	3523.1	41.6
0°-90°	4267.5	50.4
90°-120°	904.4	10.7
90°-150°	3044.3	35.9
90°-180°	4208.0	49.6
0°-180°	8475.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1805	1805	1805	1805	1805	
5°	1802	1796	1782	1794	1793	171
15°	1714	1704	1677	1675	1663	483
25°	1554	1532	1483	1466	1451	715
35°	1339	1304	1245	1206	1186	838
45°	1096	1055	982	929	907	845
55°	832	786	712	652	628	744
65°	563	515	444	392	369	558
75°	300	258	202	173	162	317
85°	75	51	44	42	41	84
90°	1	10	19	24	28	8
95°	76	79	90	98	101	81
105°	268	274	280	287	291	286
115°	506	510	513	512	510	500
125°	738	745	746	744	743	661
135°	960	967	968	968	963	740
145°	1163	1168	1171	1171	1168	727
155°	1331	1331	1332	1336	1331	613
165°	1447	1445	1446	1450	1443	408
175°	1504	1500	1500	1506	1498	143
180°	1508	1508	1508	1508	1508	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0
2.5°	1808.3	1807.6	1806.9	1806.0	1805.3	1803.8	1801.4	1799.0	1796.5	1794.1	1796.5
5°	1802.3	1801.1	1799.9	1798.7	1797.5	1795.1	1791.8	1788.5	1785.1	1781.8	1784.8
7.5°	1784.5	1783.4	1782.2	1781.1	1779.9	1777.4	1773.3	1769.4	1765.3	1761.4	1763.5
10°	1768.2	1767.3	1766.4	1765.4	1764.5	1762.0	1757.8	1753.5	1749.3	1745.0	1746.0
12.5°	1749.6	1748.5	1747.4	1746.2	1745.0	1741.6	1736.0	1730.2	1724.5	1718.8	1719.5
15°	1713.6	1711.8	1710.0	1708.2	1706.4	1702.3	1696.0	1689.6	1683.2	1676.9	1676.6
17.5°	1673.0	1670.2	1667.5	1664.7	1661.8	1656.5	1648.5	1640.5	1632.4	1624.5	1623.0
20°	1641.4	1638.4	1635.4	1632.3	1629.3	1623.0	1613.3	1603.6	1593.9	1584.2	1582.7
22.5°	1606.5	1603.5	1600.4	1597.4	1594.4	1587.8	1577.6	1567.4	1557.2	1547.0	1544.1
25°	1554.2	1549.6	1545.1	1540.5	1536.0	1528.1	1516.9	1505.7	1494.5	1483.3	1479.4
27.5°	1494.2	1488.6	1483.1	1477.6	1472.1	1463.4	1451.4	1439.4	1427.3	1415.3	1409.9
30°	1450.6	1444.8	1439.1	1433.3	1427.5	1418.3	1405.5	1392.8	1380.1	1367.4	1360.4
32.5°	1408.0	1401.3	1394.5	1387.9	1381.1	1371.3	1358.3	1345.3	1332.3	1319.4	1311.7
35°	1338.8	1331.5	1324.2	1317.0	1309.7	1299.2	1285.6	1271.9	1258.3	1244.7	1235.9
37.5°	1270.8	1262.0	1253.1	1244.4	1235.5	1224.1	1209.9	1195.9	1181.8	1167.8	1157.2
40°	1222.8	1213.8	1204.7	1195.6	1186.5	1174.7	1160.1	1145.6	1131.0	1116.5	1105.0
42.5°	1172.7	1163.4	1154.1	1144.7	1135.4	1123.2	1108.1	1093.2	1078.1	1063.1	1052.1
45°	1096.1	1087.3	1078.5	1069.8	1061.0	1048.2	1031.6	1014.9	998.3	981.6	969.5
47.5°	1016.7	1007.4	998.2	989.0	979.7	966.6	949.9	933.0	916.3	899.5	887.0
50°	966.5	956.5	946.5	936.5	926.6	912.9	895.6	878.4	861.1	843.8	831.1
52.5°	912.0	901.8	891.5	881.3	871.1	857.8	841.5	825.2	808.9	792.6	778.9
55°	831.6	821.9	812.2	802.5	792.8	779.5	762.5	745.6	728.6	711.7	698.0
57.5°	750.3	740.0	729.6	719.2	708.9	695.6	679.2	662.9	646.5	630.2	616.8
60°	698.0	687.4	676.8	666.2	655.6	642.1	625.7	609.4	593.0	576.6	563.3
62.5°	642.4	632.3	622.2	612.0	601.9	588.5	572.0	555.3	538.8	522.1	509.8
65°	563.0	552.7	542.4	532.1	521.8	508.7	492.6	476.6	460.5	444.4	432.3
67.5°	484.2	473.9	463.6	453.3	443.0	430.2	414.8	399.4	384.1	368.6	357.6
70°	430.8	420.5	410.2	399.9	389.6	376.9	361.7	346.6	331.4	316.3	306.9
72.5°	378.5	368.4	358.3	348.3	338.2	326.1	311.9	297.7	283.6	269.4	260.7
75°	299.9	290.8	281.8	272.7	263.6	252.7	239.9	227.2	214.5	201.8	195.1
77.5°	222.0	214.7	207.4	200.2	192.9	184.1	174.0	163.8	153.6	143.4	138.8
80°	177.2	170.0	162.7	155.4	148.1	140.3	131.8	123.3	114.8	106.3	103.6
82.5°	133.6	127.0	120.5	114.0	107.4	101.3	95.4	89.6	83.8	78.0	76.7
85°	74.9	69.5	64.0	58.6	53.1	49.7	48.2	46.7	45.1	43.6	43.3
87.5°	25.3	24.0	22.7	21.5	20.2	19.6	19.8	19.9	20.0	20.1	20.4
90°	1.2	3.2	5.4	7.5	9.5	11.5	13.3	15.1	17.0	18.8	20.1
92.5°	28.4	29.9	31.3	32.8	34.2	36.1	38.4	40.6	42.8	45.0	46.8
95°	76.2	76.7	77.4	77.9	78.4	79.9	82.5	85.1	87.8	90.4	92.2
97.5°	126.7	126.9	127.1	127.3	127.5	129.5	133.1	136.6	140.3	143.9	145.6
100°	164.3	164.3	164.3	164.3	164.3	166.0	169.4	172.8	176.1	179.6	181.9
102.5°	204.7	205.7	206.7	207.8	208.8	210.3	212.0	213.7	215.4	217.1	219.6
105°	267.5	268.8	270.1	271.5	272.8	274.2	275.8	277.3	278.9	280.4	282.1
107.5°	337.0	338.3	339.6	340.9	342.2	343.5	344.7	345.9	347.1	348.3	349.1
110°	385.0	386.2	387.5	388.8	390.1	391.1	391.9	392.7	393.5	394.3	395.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	433.7	434.4	435.0	435.8	436.5	437.3	438.3	439.3	440.2	441.2	441.6
115°	505.7	506.9	507.9	508.9	510.0	510.7	511.3	511.8	512.3	512.8	512.6
117.5°	578.0	578.6	579.1	579.5	580.0	580.4	580.9	581.4	581.8	582.3	582.5
120°	623.1	624.4	625.7	627.0	628.3	629.1	629.3	629.7	630.0	630.2	630.2
122.5°	672.0	672.5	672.9	673.4	673.8	674.4	675.1	675.8	676.4	677.1	676.9
125°	738.1	739.7	741.2	742.9	744.4	745.3	745.6	745.8	746.1	746.4	745.8
127.5°	808.6	809.4	810.3	811.2	812.1	812.7	813.0	813.3	813.6	814.0	813.6
130°	850.8	852.1	853.4	854.7	856.0	857.0	857.5	858.0	858.5	859.0	858.8
132.5°	893.0	895.1	897.4	899.5	901.6	902.6	902.5	902.4	902.3	902.2	901.9
135°	960.0	961.5	963.1	964.6	966.2	967.1	967.3	967.7	967.9	968.2	968.2
137.5°	1022.8	1024.3	1025.8	1027.3	1028.9	1030.0	1030.5	1031.1	1031.7	1032.2	1032.5
140°	1063.2	1064.5	1065.8	1067.1	1068.4	1069.4	1070.3	1071.1	1071.8	1072.6	1073.1
142.5°	1103.6	1104.7	1105.8	1106.8	1107.9	1109.0	1109.9	1111.0	1112.0	1113.0	1113.3
145°	1163.0	1164.0	1165.1	1166.1	1167.1	1168.0	1168.8	1169.6	1170.3	1171.1	1171.1
147.5°	1217.9	1218.4	1219.0	1219.6	1220.1	1220.7	1221.4	1222.0	1222.6	1223.2	1223.9
150°	1254.5	1254.3	1253.9	1253.7	1253.4	1253.8	1254.9	1255.9	1257.0	1258.0	1258.0
152.5°	1284.5	1284.9	1285.3	1285.7	1286.0	1286.4	1286.8	1287.2	1287.7	1288.1	1288.7
155°	1330.8	1330.8	1330.8	1330.8	1330.8	1330.9	1331.2	1331.4	1331.7	1331.9	1333.0
157.5°	1372.1	1371.5	1370.9	1370.4	1369.8	1369.6	1369.9	1370.2	1370.4	1370.7	1371.7
160°	1396.4	1395.7	1394.9	1394.1	1393.3	1393.1	1393.3	1393.6	1393.9	1394.1	1395.1
162.5°	1418.1	1417.5	1416.9	1416.3	1415.7	1415.5	1415.5	1415.6	1415.6	1415.7	1416.9
165°	1446.9	1446.4	1445.9	1445.4	1444.8	1444.7	1445.0	1445.2	1445.5	1445.7	1446.8
167.5°	1471.4	1470.3	1469.3	1468.2	1467.1	1466.6	1466.6	1466.6	1466.6	1466.6	1468.2
170°	1484.5	1483.5	1482.4	1481.4	1480.4	1479.8	1479.8	1479.8	1479.8	1479.8	1481.4
172.5°	1493.9	1492.9	1491.8	1490.8	1489.8	1489.1	1489.1	1489.1	1489.1	1489.1	1490.8
175°	1504.4	1503.4	1502.4	1501.3	1500.3	1499.8	1499.8	1499.8	1499.8	1499.8	1501.3
177.5°	1509.8	1509.0	1508.1	1507.3	1506.5	1506.0	1505.8	1505.6	1505.3	1505.1	1506.4
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0	1805.0
2.5°	1799.0	1801.4	1803.8	1804.8	1804.6	1804.4	1804.1	1803.9
5°	1787.9	1790.9	1793.9	1795.1	1794.5	1793.9	1793.3	1792.7
7.5°	1765.6	1767.8	1769.9	1770.6	1769.9	1769.3	1768.6	1767.9
10°	1746.9	1747.8	1748.7	1748.7	1747.8	1746.9	1746.0	1745.0
12.5°	1720.2	1720.8	1721.5	1721.1	1719.7	1718.4	1717.0	1715.6
15°	1676.3	1676.0	1675.7	1674.2	1671.4	1668.7	1666.0	1663.2
17.5°	1621.4	1619.9	1618.4	1616.6	1614.3	1612.0	1609.8	1607.6
20°	1581.1	1579.6	1578.1	1576.0	1573.3	1570.5	1567.8	1565.1
22.5°	1541.2	1538.1	1535.2	1532.6	1530.3	1528.1	1525.8	1523.6
25°	1475.4	1471.5	1467.5	1463.9	1460.6	1457.2	1453.9	1450.6
27.5°	1404.3	1398.9	1393.3	1389.0	1385.7	1382.5	1379.3	1376.1
30°	1353.4	1346.5	1339.5	1334.6	1331.9	1329.2	1326.5	1323.7
32.5°	1304.0	1296.3	1288.6	1283.0	1279.6	1276.2	1272.6	1269.2
35°	1227.1	1218.3	1209.5	1203.1	1198.8	1194.6	1190.3	1186.1
37.5°	1146.7	1136.2	1125.6	1118.3	1114.2	1110.0	1105.9	1101.8
40°	1093.5	1082.0	1070.5	1062.9	1059.2	1055.6	1052.0	1048.3
42.5°	1041.1	1030.0	1019.0	1010.8	1005.4	1000.2	994.8	989.5
45°	957.4	945.2	933.1	924.7	920.2	915.6	911.1	906.6
47.5°	874.5	862.0	849.6	840.8	835.8	830.7	825.8	820.7
50°	818.4	805.7	792.9	784.4	779.8	775.3	770.7	766.2
52.5°	765.3	751.5	737.8	728.7	724.2	719.6	715.1	710.5
55°	684.4	670.8	657.1	647.8	643.0	638.1	633.3	628.4
57.5°	603.5	590.2	576.8	567.9	563.7	559.4	555.0	550.8
60°	550.0	536.6	523.3	514.4	509.9	505.3	500.8	496.2
62.5°	497.5	485.0	472.7	464.2	459.7	455.1	450.6	446.1
65°	420.2	408.1	396.0	387.6	383.0	378.5	374.0	369.4
67.5°	346.5	335.4	324.3	316.9	313.3	309.6	306.0	302.4
70°	297.5	288.1	278.7	272.2	268.5	264.9	261.3	257.6
72.5°	252.1	243.4	234.7	229.1	226.7	224.3	221.9	219.4
75°	188.4	181.8	175.1	170.7	168.5	166.4	164.3	162.2
77.5°	134.1	129.5	124.7	121.6	120.1	118.5	116.9	115.3
80°	100.9	98.2	95.4	93.7	93.1	92.5	91.9	91.3
82.5°	75.4	74.1	72.9	72.1	71.7	71.3	71.0	70.6
85°	43.0	42.7	42.4	42.1	41.8	41.5	41.2	40.9
87.5°	20.6	20.9	21.2	21.2	21.2	21.1	21.0	20.9
90°	21.4	22.7	24.0	25.0	25.9	26.6	27.4	28.2
92.5°	48.5	50.2	51.9	53.1	53.6	54.2	54.8	55.3
95°	94.0	95.8	97.7	98.9	99.4	99.9	100.4	100.9
97.5°	147.3	149.1	150.8	151.8	152.1	152.4	152.7	153.0
100°	184.2	186.6	188.9	190.4	190.9	191.4	192.0	192.5
102.5°	222.2	224.8	227.3	228.9	229.7	230.5	231.2	231.9
105°	283.6	285.2	286.7	287.9	288.7	289.4	290.2	291.0
107.5°	349.8	350.6	351.4	351.8	351.7	351.7	351.6	351.5
110°	395.9	396.7	397.4	397.7	397.4	397.2	396.9	396.7



TEST NUMBER: P333608-840

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	442.0	442.3	442.7	442.6	442.2	441.7	441.2	440.8
115°	512.3	512.0	511.8	511.5	511.3	511.0	510.7	510.5
117.5°	582.7	582.9	583.1	582.7	581.7	580.7	579.6	578.6
120°	630.2	630.2	630.2	629.7	628.6	627.5	626.5	625.5
122.5°	676.7	676.5	676.3	675.8	674.9	674.1	673.3	672.5
125°	745.3	744.8	744.3	743.9	743.7	743.4	743.1	742.9
127.5°	813.4	813.1	812.9	812.5	812.0	811.4	810.9	810.4
130°	858.5	858.2	858.0	857.6	857.1	856.6	856.0	855.5
132.5°	901.7	901.4	901.1	900.7	899.9	899.2	898.5	897.8
135°	968.2	968.2	968.2	967.7	966.5	965.5	964.5	963.4
137.5°	1032.9	1033.2	1033.5	1033.0	1031.7	1030.4	1029.1	1027.7
140°	1073.6	1074.2	1074.7	1074.3	1073.0	1071.7	1070.4	1069.0
142.5°	1113.6	1113.9	1114.2	1113.7	1112.4	1111.2	1109.8	1108.5
145°	1171.1	1171.1	1171.1	1170.7	1170.0	1169.2	1168.4	1167.6
147.5°	1224.6	1225.2	1225.8	1225.2	1223.5	1221.6	1219.9	1218.1
150°	1258.0	1258.0	1258.0	1257.8	1257.2	1256.7	1256.2	1255.7
152.5°	1289.3	1289.9	1290.5	1290.4	1289.5	1288.5	1287.6	1286.7
155°	1334.0	1335.0	1336.2	1336.0	1334.6	1333.3	1332.1	1330.8
157.5°	1372.7	1373.8	1374.8	1374.5	1372.8	1371.1	1369.4	1367.7
160°	1396.2	1397.2	1398.3	1398.2	1396.8	1395.5	1394.2	1393.0
162.5°	1418.3	1419.5	1420.8	1420.6	1419.1	1417.5	1416.0	1414.5
165°	1447.8	1448.9	1450.0	1449.7	1448.1	1446.5	1445.0	1443.4
167.5°	1469.8	1471.4	1472.9	1472.9	1471.3	1469.7	1468.0	1466.4
170°	1482.9	1484.5	1486.0	1485.9	1484.1	1482.3	1480.5	1478.6
172.5°	1492.3	1493.9	1495.4	1495.4	1493.8	1492.2	1490.6	1488.9
175°	1502.9	1504.4	1506.0	1505.9	1504.1	1502.3	1500.4	1498.5
177.5°	1507.6	1508.9	1510.2	1510.1	1508.6	1507.1	1505.7	1504.2
180°	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9	1507.9

(END OF REPORT)