

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: P333338-940

Luminaire Tested: **S125DIP-S1270D1205U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333338-940
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: S125DIP-S1270D1205U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8291.3 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

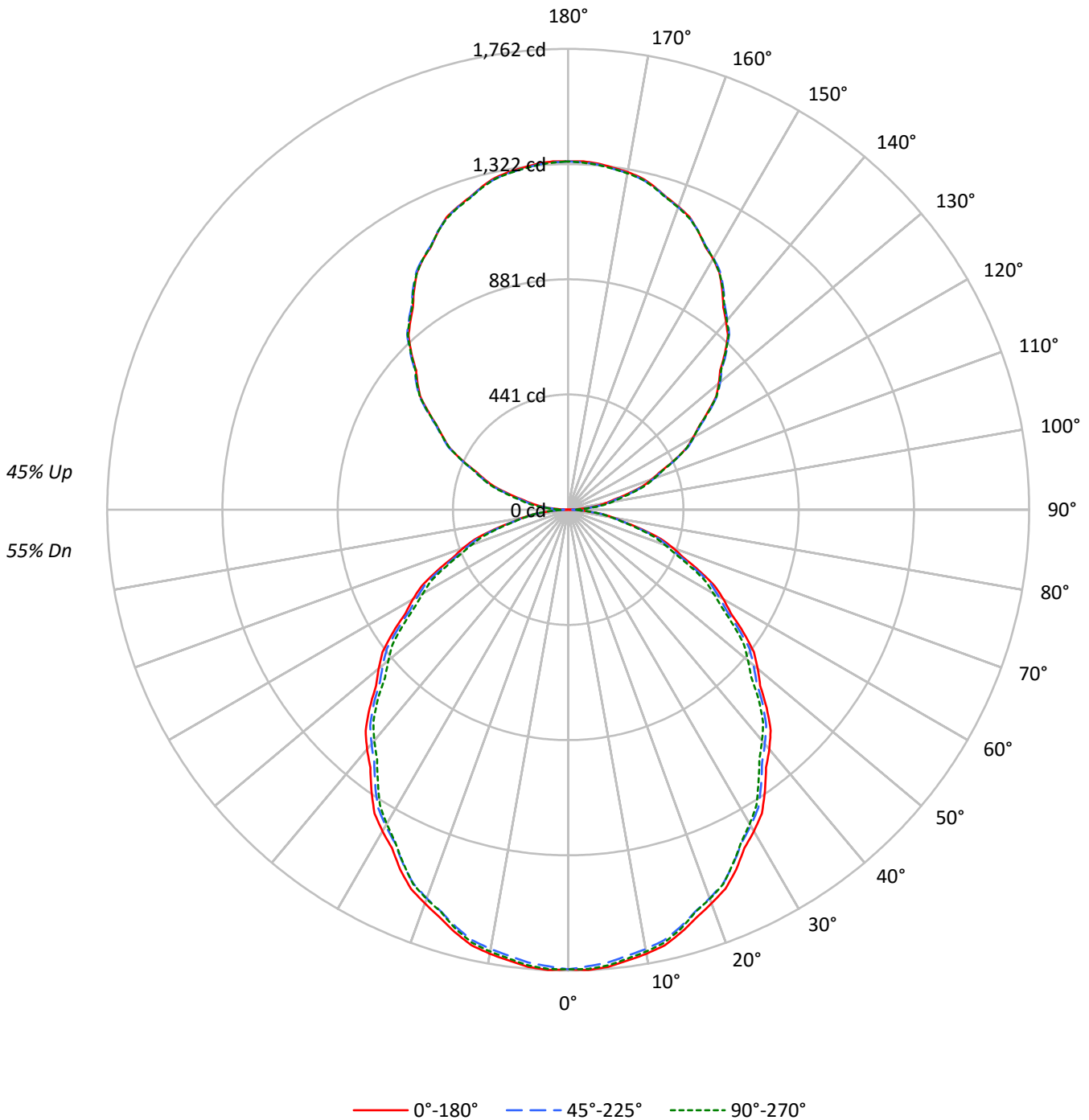
Input Watts (W): 71.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55				
1	99	94	91	87	92	88	84	81	76	73	71	64	62	61	54	52	51	46				
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43	39				
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	28	24				
6	64	51	43	37	59	48	41	35	42	36	32	36	31	28	31	27	24	21				
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	22	19				
8	55	42	34	29	51	40	32	27	35	29	25	30	25	22	26	22	19	17				
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17	15				
10	47	35	28	23	44	33	27	22	29	24	20	26	21	18	22	18	16	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11349	11349	11349
5°	11374	11267	11339
10°	11305	11187	11252
15°	11183	11053	11099
20°	11008	10864	10883
25°	10819	10641	10630
30°	10586	10399	10347
35°	10336	10139	9996
40°	10080	9857	9716
45°	9803	9600	9409
50°	9499	9289	9010
55°	9205	8939	8688
60°	8853	8584	8280
65°	8436	8159	7882
70°	8033	7666	7404
75°	7321	7079	6832
80°	6512	6412	6259
85°	5669	5765	5461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	2.0
10°-20°	468.1	5.6
20°-30°	691.1	8.3
30°-40°	806.4	9.7
40°-50°	809.9	9.8
50°-60°	710.9	8.6
60°-70°	529.7	6.4
70°-80°	302.9	3.7
80°-90°	91.0	1.1
90°-100°	89.2	1.1
100°-110°	263.4	3.2
110°-120°	446.1	5.4
120°-130°	587.0	7.1
130°-140°	657.8	7.9
140°-150°	644.7	7.8
150°-160°	541.5	6.5
160°-170°	359.9	4.3
170°-180°	126.0	1.5
0°-30°	1324.8	16.0
0°-40°	2131.2	25.7
0°-60°	3652.1	44.0
0°-90°	4575.8	55.2
90°-120°	798.6	9.6
90°-150°	2688.1	32.4
90°-180°	3716.0	44.8
0°-180°	8291.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1757	1757	1757	1757	1757	
5°	1754	1751	1738	1750	1749	166
15°	1672	1668	1653	1660	1660	471
25°	1518	1511	1493	1496	1492	698
35°	1311	1305	1286	1279	1268	820
45°	1073	1067	1051	1035	1030	827
55°	818	812	794	781	772	730
65°	552	548	534	522	516	548
75°	293	290	284	279	274	313
85°	76	78	78	76	74	85
90°	1	9	17	22	25	8
95°	67	70	80	87	89	72
105°	236	242	248	254	257	252
115°	447	451	453	452	451	442
125°	652	658	659	657	656	584
135°	848	854	855	855	851	653
145°	1027	1031	1034	1034	1031	642
155°	1175	1175	1176	1180	1175	541
165°	1278	1276	1277	1280	1274	360
175°	1328	1324	1324	1330	1323	126
180°	1332	1332	1332	1332	1332	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1761.8	1761.0	1760.3	1759.5	1758.8	1757.2	1754.7	1752.2	1749.8	1747.3	1749.8
5°	1754.5	1753.9	1753.3	1752.7	1752.0	1750.2	1747.1	1744.0	1741.0	1737.9	1740.6
7.5°	1738.4	1737.8	1737.1	1736.5	1735.9	1733.9	1730.5	1727.2	1723.8	1720.4	1723.1
10°	1723.9	1723.3	1722.7	1722.1	1721.4	1719.5	1716.1	1712.7	1709.2	1705.8	1708.3
12.5°	1706.1	1705.0	1704.0	1702.8	1701.7	1699.6	1696.4	1693.3	1690.1	1686.9	1689.0
15°	1672.5	1671.6	1670.6	1669.7	1668.8	1666.6	1663.2	1659.8	1656.4	1653.1	1654.6
17.5°	1633.9	1632.5	1631.1	1629.8	1628.4	1625.9	1622.5	1618.9	1615.4	1611.9	1613.8
20°	1601.6	1601.0	1600.4	1599.7	1599.1	1596.8	1592.8	1588.8	1584.7	1580.7	1582.9
22.5°	1569.3	1568.3	1567.1	1566.0	1564.9	1562.5	1558.7	1555.0	1551.1	1547.4	1548.8
25°	1518.2	1516.6	1515.1	1513.6	1512.0	1509.2	1505.2	1501.2	1497.2	1493.2	1493.8
27.5°	1458.4	1457.5	1456.5	1455.6	1454.7	1452.2	1448.0	1443.9	1439.8	1435.6	1435.7
30°	1419.5	1418.5	1417.6	1416.7	1415.8	1413.0	1408.4	1403.7	1399.1	1394.5	1393.8
32.5°	1377.2	1375.8	1374.4	1373.0	1371.5	1368.8	1364.6	1360.5	1356.3	1352.2	1351.1
35°	1311.0	1309.8	1308.6	1307.3	1306.1	1303.3	1299.0	1294.7	1290.3	1286.0	1284.5
37.5°	1242.3	1240.8	1239.3	1237.7	1236.2	1233.3	1229.3	1225.2	1221.1	1217.1	1214.8
40°	1195.6	1194.1	1192.6	1191.0	1189.5	1186.5	1182.2	1177.9	1173.6	1169.2	1166.4
42.5°	1145.6	1144.3	1143.0	1141.7	1140.4	1137.6	1133.3	1128.9	1124.6	1120.3	1117.8
45°	1073.3	1072.1	1070.9	1069.6	1068.4	1065.9	1062.2	1058.5	1054.8	1051.1	1047.3
47.5°	995.4	995.5	995.6	995.6	995.7	993.5	989.1	984.6	980.2	975.7	972.0
50°	945.4	944.5	943.5	942.6	941.6	939.3	935.7	931.9	928.3	924.5	920.5
52.5°	894.2	893.6	892.9	892.2	891.5	889.2	885.2	881.3	877.4	873.3	869.9
55°	817.5	816.5	815.6	814.7	813.8	811.2	806.8	802.5	798.2	793.9	791.0
57.5°	736.6	736.1	735.6	735.1	734.6	732.5	728.9	725.2	721.6	717.9	714.3
60°	685.4	684.2	683.0	681.7	680.5	678.1	674.8	671.4	668.0	664.6	661.5
62.5°	632.0	631.1	630.1	629.0	628.0	626.2	623.2	620.3	617.4	614.5	611.2
65°	552.0	551.3	550.7	550.1	549.5	547.4	544.0	540.6	537.3	533.9	531.1
67.5°	474.4	473.1	471.8	470.5	469.2	467.3	464.8	462.2	459.7	457.1	454.8
70°	425.4	423.9	422.3	420.8	419.3	417.1	414.3	411.5	408.8	406.0	404.1
72.5°	372.0	371.0	370.0	368.9	367.8	366.4	364.6	362.8	361.1	359.3	357.1
75°	293.4	292.7	292.1	291.5	290.9	289.8	288.3	286.7	285.2	283.7	282.7
77.5°	220.8	220.5	220.3	220.1	219.8	219.3	218.4	217.5	216.6	215.8	215.3
80°	175.1	175.1	175.1	175.1	175.1	174.9	174.2	173.6	173.0	172.4	172.1
82.5°	135.1	134.6	134.1	133.7	133.1	132.9	132.7	132.6	132.5	132.3	131.8
85°	76.5	76.8	77.0	77.4	77.7	77.8	77.8	77.8	77.8	77.8	77.6
87.5°	30.2	30.6	30.9	31.3	31.7	31.9	32.0	32.1	32.2	32.2	32.5
90°	1.1	2.9	4.7	6.6	8.4	10.2	11.8	13.4	15.0	16.6	17.7
92.5°	25.1	26.4	27.6	29.0	30.2	31.8	33.9	35.8	37.8	39.8	41.3
95°	67.3	67.8	68.3	68.8	69.2	70.5	72.9	75.2	77.5	79.8	81.4
97.5°	111.9	112.1	112.3	112.4	112.6	114.3	117.5	120.6	123.9	127.1	128.6
100°	145.1	145.1	145.1	145.1	145.1	146.6	149.5	152.6	155.5	158.5	160.6
102.5°	180.7	181.6	182.5	183.5	184.4	185.7	187.2	188.7	190.2	191.7	193.9
105°	236.2	237.4	238.5	239.7	240.9	242.1	243.5	244.9	246.3	247.6	249.1
107.5°	297.6	298.7	299.9	301.0	302.2	303.3	304.3	305.4	306.5	307.6	308.3
110°	339.9	341.0	342.1	343.3	344.5	345.4	346.1	346.8	347.5	348.1	348.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	383.0	383.6	384.1	384.8	385.4	386.1	387.0	387.9	388.7	389.6	389.9
115°	446.6	447.5	448.4	449.3	450.3	450.9	451.5	451.9	452.4	452.8	452.6
117.5°	510.4	510.9	511.3	511.7	512.1	512.5	512.9	513.4	513.7	514.2	514.3
120°	550.2	551.3	552.5	553.7	554.8	555.5	555.7	556.0	556.2	556.4	556.4
122.5°	593.3	593.8	594.1	594.6	594.9	595.5	596.1	596.7	597.3	597.9	597.7
125°	651.8	653.2	654.5	655.9	657.3	658.1	658.4	658.5	658.8	659.1	658.5
127.5°	714.0	714.7	715.5	716.3	717.1	717.6	717.9	718.2	718.5	718.7	718.5
130°	751.3	752.4	753.6	754.7	755.8	756.7	757.2	757.6	758.0	758.5	758.3
132.5°	788.5	790.4	792.4	794.2	796.1	797.0	796.9	796.8	796.7	796.7	796.4
135°	847.7	849.0	850.4	851.8	853.2	854.0	854.2	854.4	854.6	854.9	854.9
137.5°	903.1	904.5	905.8	907.1	908.5	909.5	909.9	910.4	911.0	911.4	911.7
140°	938.8	940.0	941.1	942.3	943.4	944.3	945.0	945.7	946.4	947.1	947.5
142.5°	974.5	975.4	976.4	977.3	978.3	979.3	980.1	981.0	981.9	982.8	983.0
145°	1026.9	1027.8	1028.8	1029.7	1030.6	1031.4	1032.1	1032.8	1033.4	1034.1	1034.1
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1080.7
150°	1107.7	1107.5	1107.2	1107.1	1106.8	1107.1	1108.0	1108.9	1109.9	1110.8	1110.8
152.5°	1134.3	1134.5	1134.9	1135.2	1135.5	1135.9	1136.2	1136.6	1137.0	1137.4	1137.9
155°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.2	1175.5	1175.6	1175.9	1176.1	1177.1
157.5°	1211.6	1211.0	1210.5	1210.1	1209.5	1209.3	1209.6	1209.9	1210.1	1210.3	1211.2
160°	1233.1	1232.4	1231.7	1231.0	1230.3	1230.1	1230.3	1230.6	1230.8	1231.0	1231.9
162.5°	1252.1	1251.7	1251.2	1250.6	1250.1	1249.9	1249.9	1250.0	1250.0	1250.1	1251.2
165°	1277.6	1277.2	1276.8	1276.3	1275.8	1275.7	1275.9	1276.1	1276.4	1276.6	1277.6
167.5°	1299.2	1298.2	1297.4	1296.5	1295.5	1295.0	1295.0	1295.0	1295.0	1295.0	1296.5
170°	1310.8	1309.9	1308.9	1308.1	1307.2	1306.6	1306.6	1306.6	1306.6	1306.6	1308.1
172.5°	1319.1	1318.2	1317.2	1316.3	1315.5	1314.9	1314.9	1314.9	1314.9	1314.9	1316.3
175°	1328.4	1327.5	1326.6	1325.6	1324.7	1324.3	1324.3	1324.3	1324.3	1324.3	1325.6
177.5°	1333.2	1332.5	1331.7	1331.0	1330.3	1329.8	1329.6	1329.5	1329.2	1329.0	1330.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3	1757.3
2.5°	1752.2	1754.7	1757.2	1758.3	1758.1	1757.8	1757.6	1757.3
5°	1743.4	1746.2	1749.0	1750.2	1749.9	1749.6	1749.3	1749.0
7.5°	1725.7	1728.5	1731.2	1732.4	1732.1	1731.8	1731.5	1731.2
10°	1710.8	1713.3	1715.7	1716.8	1716.5	1716.2	1715.9	1715.7
12.5°	1691.0	1692.9	1694.9	1695.9	1695.8	1695.7	1695.7	1695.6
15°	1656.2	1657.7	1659.2	1660.0	1660.0	1660.0	1660.0	1660.0
17.5°	1615.7	1617.7	1619.5	1619.7	1618.2	1616.7	1615.1	1613.6
20°	1585.1	1587.2	1589.4	1589.7	1588.1	1586.6	1585.1	1583.5
22.5°	1550.2	1551.7	1553.1	1553.3	1552.2	1551.1	1550.1	1549.1
25°	1494.4	1495.0	1495.7	1495.5	1494.6	1493.6	1492.7	1491.7
27.5°	1435.8	1436.0	1436.1	1435.7	1434.8	1433.9	1432.9	1432.0
30°	1393.2	1392.6	1392.0	1391.2	1390.3	1389.4	1388.4	1387.5
32.5°	1350.0	1348.9	1347.7	1346.3	1344.7	1343.0	1341.3	1339.7
35°	1282.9	1281.4	1279.9	1277.8	1275.3	1272.9	1270.4	1267.9
37.5°	1212.5	1210.2	1207.9	1206.0	1204.6	1203.2	1201.8	1200.3
40°	1163.7	1160.9	1158.1	1156.3	1155.3	1154.4	1153.4	1152.5
42.5°	1115.3	1112.7	1110.2	1108.2	1106.8	1105.4	1103.9	1102.5
45°	1043.7	1039.9	1036.3	1033.9	1033.0	1032.1	1031.1	1030.2
47.5°	968.1	964.4	960.6	957.7	955.5	953.3	951.2	949.0
50°	916.5	912.5	908.5	905.4	903.2	901.1	898.9	896.7
52.5°	866.3	862.8	859.3	856.3	853.9	851.5	849.1	846.7
55°	788.3	785.5	782.7	780.2	778.1	776.0	773.7	771.6
57.5°	710.8	707.2	703.6	701.2	700.1	698.9	697.7	696.5
60°	658.4	655.3	652.2	649.6	647.4	645.2	643.1	641.0
62.5°	607.8	604.5	601.2	598.7	597.0	595.3	593.6	592.0
65°	528.3	525.5	522.7	520.8	519.5	518.3	517.0	515.8
67.5°	452.5	450.0	447.7	446.2	445.4	444.7	444.0	443.2
70°	402.3	400.4	398.5	397.0	395.7	394.5	393.3	392.1
72.5°	355.1	352.9	350.9	349.2	347.9	346.7	345.4	344.2
75°	281.8	280.8	279.9	278.8	277.6	276.3	275.1	273.8
77.5°	214.6	214.1	213.6	212.9	212.0	211.1	210.3	209.4
80°	171.7	171.5	171.1	170.7	170.0	169.4	168.8	168.3
82.5°	131.3	130.7	130.1	129.8	129.7	129.6	129.4	129.3
85°	77.2	77.0	76.6	76.2	75.5	74.9	74.3	73.7
87.5°	32.7	32.9	33.2	33.1	32.7	32.4	32.0	31.7
90°	18.9	20.1	21.2	22.1	22.8	23.5	24.2	24.9
92.5°	42.8	44.3	45.8	46.9	47.3	47.9	48.4	48.9
95°	83.0	84.6	86.2	87.3	87.7	88.2	88.6	89.1
97.5°	130.1	131.6	133.1	134.0	134.3	134.6	134.8	135.1
100°	162.6	164.8	166.8	168.1	168.5	169.0	169.5	170.0
102.5°	196.2	198.5	200.7	202.2	202.9	203.5	204.1	204.7
105°	250.4	251.8	253.2	254.2	254.9	255.6	256.3	257.0
107.5°	308.9	309.6	310.3	310.7	310.6	310.6	310.5	310.4
110°	349.6	350.3	350.9	351.2	350.9	350.7	350.4	350.3



TEST NUMBER: P333338-940

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.3	390.6	390.9	390.8	390.5	390.0	389.6	389.2
115°	452.4	452.1	451.9	451.7	451.5	451.2	450.9	450.8
117.5°	514.5	514.7	514.9	514.5	513.6	512.7	511.8	510.9
120°	556.4	556.4	556.4	556.0	555.1	554.1	553.2	552.3
122.5°	597.5	597.4	597.2	596.7	595.9	595.2	594.5	593.8
125°	658.1	657.6	657.2	656.8	656.7	656.4	656.1	655.9
127.5°	718.3	718.0	717.8	717.5	717.0	716.5	716.0	715.6
130°	758.0	757.8	757.6	757.2	756.8	756.3	755.8	755.4
132.5°	796.2	795.9	795.7	795.3	794.6	794.0	793.4	792.7
135°	854.9	854.9	854.9	854.4	853.5	852.6	851.7	850.7
137.5°	912.0	912.3	912.6	912.1	911.0	909.8	908.7	907.5
140°	948.0	948.5	949.0	948.6	947.4	946.3	945.1	944.0
142.5°	983.3	983.6	983.8	983.4	982.2	981.1	980.0	978.8
145°	1034.1	1034.1	1034.1	1033.8	1033.1	1032.4	1031.7	1031.0
147.5°	1081.3	1081.8	1082.4	1081.8	1080.3	1078.7	1077.2	1075.6
150°	1110.8	1110.8	1110.8	1110.6	1110.1	1109.6	1109.2	1108.8
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.7	1136.9	1136.1
155°	1177.9	1178.8	1179.8	1179.6	1178.5	1177.3	1176.3	1175.1
157.5°	1212.1	1213.1	1214.0	1213.7	1212.2	1210.7	1209.2	1207.6
160°	1232.9	1233.8	1234.7	1234.6	1233.4	1232.3	1231.1	1230.0
162.5°	1252.3	1253.4	1254.5	1254.4	1253.0	1251.7	1250.4	1249.0
165°	1278.4	1279.3	1280.3	1280.1	1278.7	1277.3	1275.9	1274.5
167.5°	1297.8	1299.2	1300.6	1300.6	1299.1	1297.7	1296.3	1294.9
170°	1309.4	1310.8	1312.2	1312.1	1310.5	1308.9	1307.2	1305.6
172.5°	1317.7	1319.1	1320.4	1320.4	1319.0	1317.6	1316.2	1314.7
175°	1327.0	1328.4	1329.8	1329.7	1328.1	1326.5	1324.8	1323.2
177.5°	1331.2	1332.4	1333.5	1333.4	1332.1	1330.8	1329.5	1328.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5

(END OF REPORT)