

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: P332805-930

Luminaire Tested: **S124DIW-S1020D470U930-4F0-1E-UDD-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332805-930  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIW-S1020D470U930-4F0-1E-UDD-A  
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

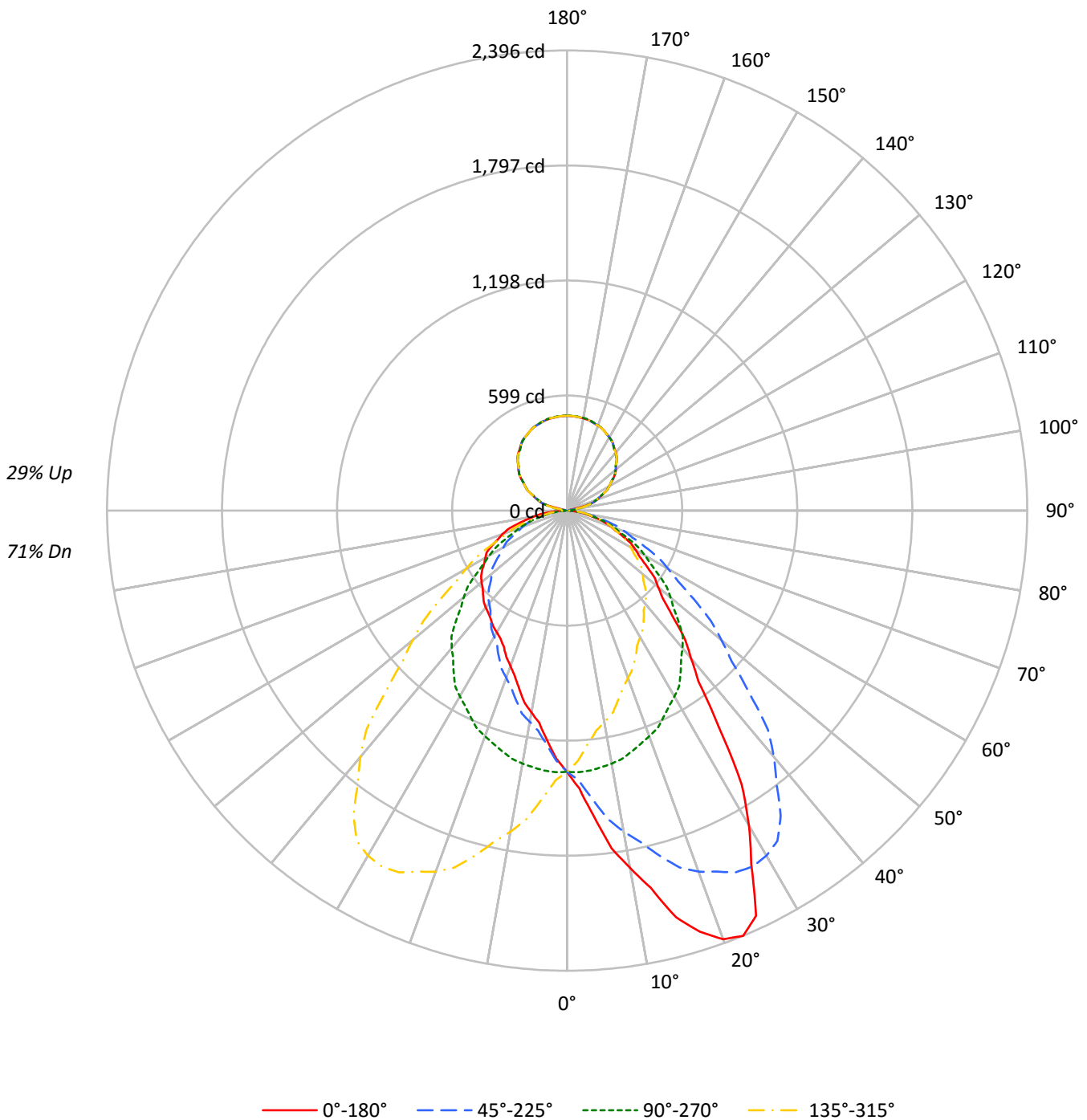
Lumens per Lamp: N/A  
Luminaire Lumens: 5283.4 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.31 / 1.23 / 1.41  
Luminous Opening: Rectangular (W 4' x L: 0.33' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	103	98	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	60
2	94	86	80	75	89	82	77	72	74	70	66	66	63	60	60	57	55	51
3	86	76	69	63	81	73	66	60	66	60	56	59	55	51	53	50	47	44
4	79	68	60	54	74	65	57	52	59	53	48	53	48	44	48	44	41	38
5	73	61	52	46	69	58	50	45	53	46	42	48	43	39	43	39	36	33
6	67	55	46	40	63	52	45	39	48	41	37	43	38	34	39	35	32	29
7	62	50	41	36	59	47	40	35	43	37	32	40	34	30	36	32	28	26
8	58	45	37	32	55	43	36	31	40	33	29	36	31	27	33	29	25	23
9	54	41	34	29	51	40	33	28	36	30	26	33	28	25	31	26	23	21
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	10984	10984	10984	10984
5°	12935	11012	9720	11012
10°	15488	10964	8751	10964
15°	18324	10853	8037	10853
20°	20405	10740	7399	10740
25°	20735	10573	6959	10573
30°	17643	10413	6820	10413
35°	13565	10154	6821	10154
40°	10572	9848	6949	9848
45°	8816	9388	7066	9388
50°	7759	8828	7304	8828
55°	7108	8155	7600	8155
60°	6660	7553	7953	7553
65°	6202	6879	8246	6879
70°	5667	6212	8434	6212
75°	5062	5468	8334	5468
80°	4245	4482	8071	4482
85°	3131	3242	7725	3242



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.5	2.5
10°-20°	408.6	7.7
20°-30°	647.9	12.3
30°-40°	721.0	13.6
40°-50°	656.3	12.4
50°-60°	536.3	10.2
60°-70°	382.9	7.2
70°-80°	210.8	4.0
80°-90°	59.0	1.1
90°-100°	16.9	0.3
100°-110°	107.7	2.0
110°-120°	206.1	3.9
120°-130°	261.6	5.0
130°-140°	279.9	5.3
140°-150°	261.7	5.0
150°-160°	211.1	4.0
160°-170°	136.1	2.6
170°-180°	46.9	0.9
0°-30°	1189.0	22.5
0°-40°	1910.0	36.2
0°-60°	3102.6	58.7
0°-90°	3755.3	71.1
90°-120°	330.7	6.3
90°-150°	1134.0	21.5
90°-180°	1528.0	28.9
0°-180°	5283.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1361	1361	1361	1361	1361	
5°	1596	1359	1199	1359	1596	162
15°	2192	1299	962	1299	2192	619
25°	2328	1187	781	1187	2328	1026
35°	1376	1030	692	1030	1376	874
45°	772	822	619	822	772	608
55°	505	579	540	579	505	456
65°	325	360	432	360	325	321
75°	162	175	267	175	162	173
85°	34	35	83	35	34	41
90°	11	1	11	1	11	6
95°	11	20	11	20	11	9
105°	105	111	105	111	105	92
115°	209	208	209	208	209	207
125°	294	292	294	292	294	262
135°	365	362	365	362	365	281
145°	420	418	420	418	420	262
155°	458	458	458	458	458	211
165°	481	483	481	483	481	136
175°	491	494	491	494	491	47
180°	494	494	494	494	494	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1448.1	1447.6	1443.1	1442.2	1439.0	1435.0	1434.1	1426.9	1412.4	1405.7	1403.9
5°	1596.2	1607.4	1592.8	1590.0	1588.3	1569.7	1560.1	1548.8	1522.9	1507.7	1495.8
7.5°	1772.9	1774.3	1767.9	1762.7	1748.3	1732.1	1707.8	1681.9	1651.0	1618.9	1594.6
10°	1889.3	1893.8	1886.4	1885.3	1856.6	1838.5	1802.5	1772.1	1737.1	1698.2	1662.7
12.5°	2011.9	2005.6	2001.9	1977.8	1972.5	1939.5	1897.6	1866.3	1812.4	1767.7	1720.4
15°	2192.5	2180.1	2172.2	2138.9	2122.6	2077.0	2032.4	1998.1	1927.6	1860.5	1809.8
17.5°	2298.4	2310.9	2292.6	2278.9	2236.7	2204.7	2159.2	2087.0	2031.9	1948.6	1884.6
20°	2375.1	2376.2	2366.1	2352.0	2318.7	2278.2	2228.5	2149.6	2083.7	2000.8	1912.9
22.5°	2395.8	2396.1	2391.8	2378.6	2353.4	2320.5	2270.5	2204.7	2124.8	2034.7	1946.8
25°	2327.8	2325.5	2330.6	2345.2	2335.7	2325.5	2296.8	2247.7	2173.3	2078.0	1983.4
27.5°	2074.8	2090.3	2119.0	2155.1	2189.8	2216.3	2223.7	2213.7	2167.6	2089.2	1990.1
30°	1892.6	1911.8	1933.2	1969.3	2039.1	2079.2	2123.2	2156.4	2137.8	2075.3	1982.8
32.5°	1692.5	1697.2	1729.0	1770.0	1834.0	1911.0	1980.7	2048.2	2070.6	2037.8	1960.7
35°	1376.4	1384.2	1418.6	1459.2	1537.6	1631.7	1736.5	1830.1	1907.3	1938.3	1898.8
37.5°	1123.2	1145.8	1170.1	1213.7	1282.7	1367.4	1476.3	1597.4	1712.5	1789.6	1802.7
40°	1003.2	1017.3	1034.8	1068.0	1126.7	1210.1	1303.7	1442.3	1564.6	1675.1	1711.2
42.5°	908.6	916.8	927.5	957.6	1002.2	1085.2	1170.6	1292.6	1415.4	1547.4	1607.9
45°	772.2	780.6	798.7	816.1	849.9	907.4	986.9	1087.2	1210.6	1338.1	1449.6
47.5°	673.6	679.1	689.7	708.5	737.2	775.1	839.8	923.6	1038.0	1161.6	1280.5
50°	617.8	622.2	630.7	647.6	669.6	703.4	756.4	834.7	924.3	1048.9	1165.6
52.5°	573.6	575.4	581.6	593.0	610.5	639.0	682.4	747.2	830.5	941.6	1057.8
55°	505.0	507.3	512.9	521.4	536.5	554.6	587.8	636.3	709.1	805.4	906.3
57.5°	448.7	450.2	454.9	458.2	470.8	485.4	510.9	545.6	600.7	682.4	772.5
60°	412.5	411.5	417.1	419.9	428.4	440.8	460.5	493.7	541.6	607.6	690.4
62.5°	377.4	375.9	380.6	384.3	389.1	399.7	415.8	441.9	480.8	540.4	612.0
65°	324.7	322.4	325.2	329.7	334.2	339.9	351.7	374.8	405.8	448.7	503.3
67.5°	271.7	274.0	274.5	276.7	279.3	287.0	295.1	311.4	333.3	367.6	413.9
70°	240.1	240.7	243.0	243.0	244.6	251.4	258.1	267.7	289.1	320.7	358.5
72.5°	208.6	210.9	210.0	211.8	213.0	217.5	222.5	231.6	249.9	273.4	305.2
75°	162.3	164.0	164.0	164.6	166.2	168.0	171.9	178.6	191.6	209.1	231.1
77.5°	118.4	118.6	119.4	121.4	121.4	124.1	127.0	132.5	138.8	150.8	164.2
80°	91.3	92.5	91.9	93.0	93.0	95.2	96.4	103.1	106.0	113.8	124.6
82.5°	66.9	68.1	68.0	69.5	70.4	70.9	72.5	75.2	78.0	85.0	89.4
85°	33.8	35.0	33.8	35.0	36.6	37.2	38.9	39.5	41.7	43.4	47.4
87.5°	12.1	13.5	13.5	13.9	14.7	15.1	15.4	14.9	16.6	17.0	18.6
90°	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1	8.6	8.2	7.5
92.5°	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8	8.3	7.8	7.2
95°	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1	8.6	8.2	8.1
97.5°	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9	9.8	9.8	18.9
100°	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5	14.8	16.2	27.6
102.5°	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2	63.3	78.4	79.8
105°	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8	116.0	115.3	114.9
107.5°	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5	144.1	143.7	143.2
110°	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3	163.1	163.0	162.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5	181.6	181.6	181.3
115°	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7	208.6	208.4	208.5
117.5°	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1	236.1	236.2	236.0
120°	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1	252.9	252.7	252.8
122.5°	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8	269.7	269.6	269.5
125°	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1	292.9	292.6	292.8
127.5°	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3	316.4	316.4	316.1
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5	330.4	330.4	330.1
132.5°	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4	344.3	344.2	343.9
135°	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5	363.4	363.2	362.9
137.5°	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9	381.7	381.6	381.2
140°	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3	393.1	392.8	392.6
142.5°	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7	403.6	403.4	403.3
145°	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8	418.7	418.7	418.7
147.5°	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0	431.9	431.9	431.9
150°	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8	447.7	447.5	447.7
155°	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7	457.4	457.1	457.3
157.5°	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3	465.9	465.5	465.7
160°	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7	471.2	470.8	470.8
162.5°	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1	475.6	475.2	475.2
165°	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4	481.8	481.1	481.1
167.5°	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0	486.2	485.5	485.6
170°	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8	489.1	488.4	488.4
172.5°	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5	490.9	490.2	490.2
175°	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7	492.9	492.2	492.1
177.5°	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5	493.9	493.4	493.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1404.4	1398.0	1393.5	1389.9	1380.0	1374.1	1369.6	1363.3	1356.1	1348.4	1339.0
5°	1484.0	1464.8	1450.7	1429.4	1409.1	1392.1	1374.7	1358.9	1339.7	1318.9	1303.7
7.5°	1567.7	1539.3	1502.8	1471.0	1435.4	1404.4	1376.7	1348.3	1318.7	1290.1	1263.9
10°	1621.0	1584.4	1543.8	1495.8	1450.7	1410.7	1373.5	1337.5	1302.5	1267.5	1237.7
12.5°	1678.2	1632.6	1572.6	1516.6	1466.1	1412.6	1367.7	1323.5	1281.3	1244.6	1209.7
15°	1755.1	1689.1	1619.8	1544.9	1478.4	1415.8	1354.4	1298.6	1251.2	1202.7	1169.0
17.5°	1802.4	1720.8	1641.5	1563.2	1482.6	1403.8	1337.5	1273.1	1213.8	1165.7	1123.1
20°	1833.4	1752.3	1653.7	1575.3	1479.5	1398.3	1321.7	1250.1	1188.1	1136.9	1092.8
22.5°	1860.5	1766.8	1668.1	1565.0	1469.6	1383.5	1299.6	1227.6	1164.2	1110.2	1068.0
25°	1875.2	1767.5	1660.4	1557.9	1449.6	1347.6	1271.5	1187.0	1119.3	1062.4	1017.3
27.5°	1876.7	1761.6	1640.5	1526.5	1414.8	1319.8	1223.8	1148.2	1078.0	1017.8	974.5
30°	1871.8	1751.8	1621.5	1498.1	1385.9	1282.8	1199.4	1117.1	1045.5	985.8	940.7
32.5°	1856.0	1731.0	1597.2	1466.6	1350.3	1249.4	1163.4	1085.1	1015.3	956.4	909.1
35°	1810.4	1686.9	1544.3	1408.5	1289.6	1187.6	1109.8	1030.3	960.4	904.6	859.0
37.5°	1739.0	1627.4	1482.5	1341.9	1225.1	1122.6	1045.5	973.7	910.7	854.0	807.2
40°	1676.7	1578.7	1433.3	1296.3	1170.1	1072.6	1000.5	934.5	872.0	818.4	773.9
42.5°	1605.1	1519.6	1385.5	1240.4	1118.7	1020.8	950.4	891.2	832.3	782.8	738.3
45°	1477.2	1420.9	1294.6	1160.5	1033.7	941.3	874.2	822.3	772.7	724.2	687.1
47.5°	1330.2	1302.3	1196.0	1068.6	948.3	857.1	799.0	751.1	707.6	666.5	633.7
50°	1231.5	1218.0	1126.1	1003.2	888.3	802.6	744.0	702.9	665.6	629.6	598.6
52.5°	1134.1	1133.7	1050.8	938.3	831.9	749.4	691.2	652.8	620.5	591.3	563.4
55°	985.2	1001.0	936.2	835.8	740.6	666.2	613.8	579.4	556.8	532.6	511.8
57.5°	848.5	874.7	821.2	732.8	653.4	584.8	539.2	513.3	489.3	474.7	459.5
60°	759.2	784.0	742.3	667.9	593.0	534.3	490.9	467.8	446.9	436.8	426.1
62.5°	679.9	702.0	671.1	602.1	537.0	480.6	444.0	421.8	407.7	396.6	389.6
65°	566.5	585.1	558.6	508.4	452.6	407.5	377.6	360.1	346.7	342.1	334.2
67.5°	457.9	474.8	460.5	417.8	373.1	339.0	315.6	298.8	290.8	286.9	281.3
70°	393.4	410.3	395.1	357.9	323.5	294.8	272.8	263.2	254.8	253.1	245.2
72.5°	338.8	350.3	335.2	306.1	276.6	252.4	235.4	225.3	220.9	217.9	213.6
75°	254.2	264.3	254.2	231.6	210.8	193.9	179.2	175.3	170.2	168.5	165.7
77.5°	179.9	188.7	180.9	166.8	151.2	138.2	130.3	125.2	124.1	121.2	122.5
80°	137.5	143.2	135.8	126.3	113.8	104.8	99.2	96.4	93.0	91.9	94.1
82.5°	98.7	101.3	97.5	91.1	81.9	76.0	72.2	68.9	68.2	68.4	68.4
85°	51.3	50.7	50.1	44.5	41.7	37.7	35.5	35.0	34.4	35.5	36.6
87.5°	18.5	18.8	18.3	16.3	14.8	13.2	12.6	12.0	12.6	13.2	13.9
90°	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1	2.0	2.9	3.8
92.5°	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6	4.7	4.7	4.8
95°	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3	17.5	14.8	12.0
97.5°	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1	44.9	46.6	48.3
100°	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6	62.0	63.6	65.1
102.5°	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1	81.2	82.3	83.3
105°	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2	111.7	112.2	112.7
107.5°	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1	140.4	140.6	140.9
110°	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6	159.9	160.1	160.4





TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6	179.0	179.4	179.9
115°	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7	207.9	208.1	208.4
117.5°	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9	234.2	234.6	234.9
120°	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6	251.9	252.3	252.6
122.5°	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2	268.4	268.6	268.8
125°	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9	292.2	292.5	292.9
127.5°	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4	314.5	314.5	314.6
130°	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8	328.9	329.1	329.1
132.5°	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2	342.3	342.4	342.6
135°	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1	362.0	361.9	361.8
137.5°	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8	379.8	379.8	379.8
140°	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3	391.4	391.6	391.8
142.5°	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6	401.9	402.3	402.5
145°	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5	417.8	418.0	418.2
147.5°	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2	430.6	431.0	431.5
150°	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4	439.7	440.0	440.3
152.5°	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0	447.3	447.5	447.8
155°	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8	457.9	458.0	458.0
157.5°	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9	466.8	466.8	466.8
160°	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2	472.0	471.7	471.5
162.5°	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0	476.6	476.3	476.0
165°	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9	482.5	482.1	481.7
167.5°	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6	487.2	486.8	486.4
170°	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3	489.8	489.3	488.9
172.5°	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1	491.6	491.1	490.6
175°	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0	493.5	493.0	492.5
177.5°	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9	494.5	494.0	493.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1334.4	1330.4	1324.5	1316.4	1309.6	1302.4	1300.6	1297.9	1303.3	1298.8	1297.5
5°	1290.7	1278.9	1263.6	1246.2	1236.0	1221.4	1218.5	1212.9	1207.3	1206.7	1201.1
7.5°	1244.4	1227.0	1207.1	1189.3	1172.8	1156.7	1146.3	1144.0	1135.7	1130.8	1125.2
10°	1214.6	1193.2	1170.1	1153.2	1134.0	1117.1	1105.3	1098.5	1092.8	1086.6	1081.0
12.5°	1179.4	1156.7	1137.6	1119.3	1096.6	1083.7	1064.2	1052.5	1051.4	1051.5	1036.8
15°	1138.5	1116.0	1086.6	1060.7	1048.3	1023.5	1012.8	999.3	990.8	982.4	975.7
17.5°	1091.8	1063.6	1040.8	1011.1	987.3	967.6	953.6	945.4	932.7	920.7	912.1
20°	1062.4	1032.6	1008.3	976.7	950.8	926.6	914.8	903.5	893.9	883.8	874.2
22.5°	1032.7	1001.4	971.8	941.1	917.0	891.4	880.0	864.7	855.6	849.9	840.3
25°	985.8	951.9	918.1	888.8	864.1	841.5	826.3	814.4	804.3	799.8	793.6
27.5°	934.8	901.2	868.5	835.3	807.1	790.8	778.6	769.6	763.9	757.8	755.0
30°	902.4	867.4	832.5	801.4	775.5	759.2	748.0	741.8	737.2	734.4	731.6
32.5°	869.4	834.9	798.2	769.9	746.7	732.1	723.6	717.4	715.1	714.1	713.1
35°	816.7	781.7	748.0	722.6	700.6	695.0	687.6	684.2	683.1	687.1	688.8
37.5°	765.6	733.2	702.1	677.4	663.1	654.8	652.3	652.5	656.5	660.0	664.1
40°	732.7	701.2	671.8	650.4	636.9	631.9	630.7	633.5	638.1	642.0	646.5
42.5°	700.7	669.6	642.9	622.9	613.4	608.8	609.5	612.3	618.6	623.5	630.2
45°	651.0	625.1	599.2	582.8	574.9	576.0	576.0	581.1	587.3	594.6	601.9
47.5°	604.2	578.0	556.8	543.0	538.9	537.9	541.1	547.7	556.6	565.7	575.9
50°	572.7	547.8	529.2	516.8	512.3	514.0	518.5	524.7	535.4	546.7	557.4
52.5°	540.6	518.0	500.8	489.3	486.2	489.3	493.7	503.5	512.9	525.1	538.0
55°	490.9	471.7	458.2	449.8	448.7	450.4	455.4	466.1	479.6	494.9	507.3
57.5°	441.4	425.4	413.0	407.2	407.7	409.3	417.7	430.4	444.8	461.1	477.0
60°	408.1	393.4	383.3	378.8	379.3	382.7	392.8	404.7	422.7	438.5	455.4
62.5°	376.5	363.6	353.9	349.9	349.1	356.5	366.2	378.5	396.6	414.2	432.4
65°	325.8	315.6	307.8	305.5	307.2	312.8	325.2	341.5	356.8	375.4	394.5
67.5°	276.1	267.8	262.4	263.4	265.5	273.8	284.2	298.2	315.5	334.8	353.8
70°	244.6	236.7	232.2	232.8	236.2	246.3	255.4	269.4	288.0	307.8	323.5
72.5°	212.1	206.9	202.9	205.3	208.6	215.6	226.9	241.0	257.4	275.7	292.4
75°	162.9	162.9	160.6	162.3	167.4	174.1	182.6	197.3	213.6	228.3	241.8
77.5°	120.8	119.6	121.1	123.1	126.0	134.0	143.7	154.2	166.5	181.2	192.3
80°	92.5	93.0	95.8	99.2	100.4	106.6	116.7	126.3	135.8	148.2	158.9
82.5°	69.5	70.0	71.5	75.7	76.9	83.6	90.1	99.6	108.4	116.7	125.6
85°	37.7	37.7	40.6	42.2	45.1	49.6	53.6	59.2	67.1	72.7	81.1
87.5°	15.4	15.5	17.4	18.5	20.0	22.3	23.4	28.5	30.3	32.7	36.8
90°	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1	9.6	10.1	10.4
92.5°	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8	9.3	9.8	10.0
95°	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1	9.6	10.1	10.4
97.5°	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9	9.9	9.9	10.0
100°	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5	12.1	10.7	10.0
102.5°	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2	33.2	18.1	10.6
105°	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8	117.5	118.2	117.2
107.5°	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5	144.8	145.2	145.5
110°	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3	163.5	163.6	163.8



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5	181.5	181.4	181.6
115°	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7	208.9	209.0	209.1
117.5°	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1	236.1	236.0	236.0
120°	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1	253.2	253.4	253.4
122.5°	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8	269.9	269.9	269.9
125°	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1	293.3	293.6	293.8
127.5°	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3	316.3	316.3	316.2
130°	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5	330.6	330.7	330.7
132.5°	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4	344.5	344.5	344.5
135°	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5	363.7	363.9	364.0
137.5°	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9	382.0	382.3	382.3
140°	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3	393.5	393.8	394.0
142.5°	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7	404.0	404.1	404.2
145°	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8	418.9	419.0	419.1
147.5°	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0	432.0	432.1	432.2
150°	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4	440.4	440.4	440.5
152.5°	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8	447.9	448.1	448.1
155°	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7	458.0	458.4	458.4
157.5°	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3	466.7	467.1	467.1
160°	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7	472.2	472.7	472.7
162.5°	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1	476.6	477.1	477.1
165°	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4	483.1	483.7	483.6
167.5°	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0	487.7	488.4	488.4
170°	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8	490.4	491.1	491.1
172.5°	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5	492.2	492.8	492.8
175°	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7	494.4	495.1	495.0
177.5°	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5	495.0	495.5	495.4
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1296.6	1295.7	1292.5	1292.1	1292.5	1295.7	1296.6	1297.5	1298.8	1303.3	1297.9
5°	1197.7	1194.9	1193.2	1199.4	1193.2	1194.9	1197.7	1201.1	1206.7	1207.3	1212.9
7.5°	1123.2	1121.0	1116.0	1114.4	1116.0	1121.0	1123.2	1125.2	1130.8	1135.7	1144.0
10°	1075.4	1073.1	1068.6	1067.5	1068.6	1073.1	1075.4	1081.0	1086.6	1092.8	1098.5
12.5°	1029.4	1024.9	1024.0	1025.1	1024.0	1024.9	1029.4	1036.8	1051.5	1051.4	1052.5
15°	968.3	966.0	959.9	961.6	959.9	966.0	968.3	975.7	982.4	990.8	999.3
17.5°	908.1	905.4	897.9	904.5	897.9	905.4	908.1	912.1	920.7	932.7	945.4
20°	870.3	865.7	861.8	861.2	861.8	865.7	870.3	874.2	883.8	893.9	903.5
22.5°	834.1	830.1	829.7	826.1	829.7	830.1	834.1	840.3	849.9	855.6	864.7
25°	789.0	785.1	784.0	781.2	784.0	785.1	789.0	793.6	799.8	804.3	814.4
27.5°	754.5	752.5	750.5	751.4	750.5	752.5	754.5	755.0	757.8	763.9	769.6
30°	733.3	732.7	731.6	731.6	731.6	732.7	733.3	731.6	734.4	737.2	741.8
32.5°	715.7	715.6	716.2	716.2	716.2	715.6	715.7	713.1	714.1	715.1	717.4
35°	691.0	692.7	693.8	692.1	693.8	692.7	691.0	688.8	687.1	683.1	684.2
37.5°	668.7	670.3	672.0	673.8	672.0	670.3	668.7	664.1	660.0	656.5	652.5
40°	651.5	655.5	656.6	659.4	656.6	655.5	651.5	646.5	642.0	638.1	633.5
42.5°	635.3	639.7	642.6	643.2	642.6	639.7	635.3	630.2	623.5	618.6	612.3
45°	610.4	614.9	618.9	618.9	618.9	614.9	610.4	601.9	594.6	587.3	581.1
47.5°	584.6	591.1	595.1	596.1	595.1	591.1	584.6	575.9	565.7	556.6	547.7
50°	567.0	574.9	578.9	581.6	578.9	574.9	567.0	557.4	546.7	535.4	524.7
52.5°	549.8	557.7	563.0	564.5	563.0	557.7	549.8	538.0	525.1	512.9	503.5
55°	520.2	531.5	537.7	540.0	537.7	531.5	520.2	507.3	494.9	479.6	466.1
57.5°	492.3	502.6	509.9	511.5	509.9	502.6	492.3	477.0	461.1	444.8	430.4
60°	470.6	481.9	490.9	492.6	490.9	481.9	470.6	455.4	438.5	422.7	404.7
62.5°	448.5	460.2	468.4	472.8	468.4	460.2	448.5	432.4	414.2	396.6	378.5
65°	410.3	422.2	430.1	431.7	430.1	422.2	410.3	394.5	375.4	356.8	341.5
67.5°	368.6	380.4	385.6	388.9	385.6	380.4	368.6	353.8	334.8	315.5	298.2
70°	339.3	348.9	354.5	357.3	354.5	348.9	339.3	323.5	307.8	288.0	269.4
72.5°	305.9	315.9	322.5	323.1	322.5	315.9	305.9	292.4	275.7	257.4	241.0
75°	254.8	263.7	267.2	267.2	267.2	263.7	254.8	241.8	228.3	213.6	197.3
77.5°	201.6	206.3	210.6	211.5	210.6	206.3	201.6	192.3	181.2	166.5	154.2
80°	167.4	170.2	173.6	173.6	173.6	170.2	167.4	158.9	148.2	135.8	126.3
82.5°	132.2	134.6	137.9	137.5	137.9	134.6	132.2	125.6	116.7	108.4	99.6
85°	80.1	85.1	84.5	83.4	84.5	85.1	80.1	81.1	72.7	67.1	59.2
87.5°	38.2	38.6	40.0	41.0	40.0	38.6	38.2	36.8	32.7	30.3	28.5
90°	10.6	10.8	10.9	11.1	10.9	10.8	10.6	10.4	10.1	9.6	9.1
92.5°	10.1	10.1	10.2	10.2	10.2	10.1	10.1	10.0	9.8	9.3	8.8
95°	10.4	10.5	10.6	10.7	10.6	10.5	10.4	10.4	10.1	9.6	9.1
97.5°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	9.9	9.9	9.9
100°	10.1	10.2	10.3	10.4	10.3	10.2	10.1	10.0	10.7	12.1	13.5
102.5°	10.6	10.6	10.6	10.7	10.6	10.6	10.6	10.6	18.1	33.2	48.2
105°	114.1	111.2	108.3	105.3	108.3	111.2	114.1	117.2	118.2	117.5	116.8
107.5°	145.9	146.1	146.4	146.8	146.4	146.1	145.9	145.5	145.2	144.8	144.5
110°	164.0	164.3	164.5	164.8	164.5	164.3	164.0	163.8	163.6	163.5	163.3



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	181.9	182.2	182.5	182.8	182.5	182.2	181.9	181.6	181.4	181.5	181.5
115°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.0	208.9	208.7
117.5°	235.9	235.9	235.9	235.9	235.9	235.9	235.9	236.0	236.0	236.1	236.1
120°	253.2	253.1	252.9	252.7	252.9	253.1	253.2	253.4	253.4	253.2	253.1
122.5°	269.8	269.6	269.5	269.3	269.5	269.6	269.8	269.9	269.9	269.9	269.8
125°	293.8	293.9	294.0	294.1	294.0	293.9	293.8	293.8	293.6	293.3	293.1
127.5°	316.1	316.0	316.0	315.9	316.0	316.0	316.1	316.2	316.3	316.3	316.3
130°	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.7	330.6	330.5
132.5°	344.5	344.5	344.4	344.3	344.4	344.5	344.5	344.5	344.5	344.5	344.4
135°	364.2	364.4	364.5	364.7	364.5	364.4	364.2	364.0	363.9	363.7	363.5
137.5°	382.3	382.2	382.2	382.1	382.2	382.2	382.3	382.3	382.3	382.0	381.9
140°	394.0	394.1	394.2	394.3	394.2	394.1	394.0	394.0	393.8	393.5	393.3
142.5°	404.2	404.3	404.3	404.3	404.3	404.3	404.2	404.2	404.1	404.0	403.7
145°	419.2	419.4	419.6	419.7	419.6	419.4	419.2	419.1	419.0	418.9	418.8
147.5°	432.3	432.4	432.4	432.5	432.4	432.4	432.3	432.2	432.1	432.0	432.0
150°	440.6	440.7	440.8	440.8	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	448.1	448.0	447.9	447.9	447.9	448.0	448.1	448.1	448.1	447.9	447.8
155°	458.2	458.0	457.7	457.5	457.7	458.0	458.2	458.4	458.4	458.0	457.7
157.5°	466.7	466.3	465.9	465.5	465.9	466.3	466.7	467.1	467.1	466.7	466.3
160°	472.2	471.7	471.2	470.8	471.2	471.7	472.2	472.7	472.7	472.2	471.7
162.5°	476.5	476.0	475.4	474.9	475.4	476.0	476.5	477.1	477.1	476.6	476.1
165°	482.9	482.2	481.4	480.7	481.4	482.2	482.9	483.6	483.7	483.1	482.4
167.5°	487.5	486.7	485.9	485.1	485.9	486.7	487.5	488.4	488.4	487.7	487.0
170°	490.2	489.3	488.5	487.7	488.5	489.3	490.2	491.1	491.1	490.4	489.8
172.5°	491.9	491.0	490.1	489.2	490.1	491.0	491.9	492.8	492.8	492.2	491.5
175°	494.0	493.0	492.0	491.1	492.0	493.0	494.0	495.0	495.1	494.4	493.7
177.5°	494.6	493.8	493.0	492.3	493.0	493.8	494.6	495.4	495.5	495.0	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1300.6	1302.4	1309.6	1316.4	1324.5	1330.4	1334.4	1339.0	1348.4	1356.1	1363.3
5°	1218.5	1221.4	1236.0	1246.2	1263.6	1278.9	1290.7	1303.7	1318.9	1339.7	1358.9
7.5°	1146.3	1156.7	1172.8	1189.3	1207.1	1227.0	1244.4	1263.9	1290.1	1318.7	1348.3
10°	1105.3	1117.1	1134.0	1153.2	1170.1	1193.2	1214.6	1237.7	1267.5	1302.5	1337.5
12.5°	1064.2	1083.7	1096.6	1119.3	1137.6	1156.7	1179.4	1209.7	1244.6	1281.3	1323.5
15°	1012.8	1023.5	1048.3	1060.7	1086.6	1116.0	1138.5	1169.0	1202.7	1251.2	1298.6
17.5°	953.6	967.6	987.3	1011.1	1040.8	1063.6	1091.8	1123.1	1165.7	1213.8	1273.1
20°	914.8	926.6	950.8	976.7	1008.3	1032.6	1062.4	1092.8	1136.9	1188.1	1250.1
22.5°	880.0	891.4	917.0	941.1	971.8	1001.4	1032.7	1068.0	1110.2	1164.2	1227.6
25°	826.3	841.5	864.1	888.8	918.1	951.9	985.8	1017.3	1062.4	1119.3	1187.0
27.5°	778.6	790.8	807.1	835.3	868.5	901.2	934.8	974.5	1017.8	1078.0	1148.2
30°	748.0	759.2	775.5	801.4	832.5	867.4	902.4	940.7	985.8	1045.5	1117.1
32.5°	723.6	732.1	746.7	769.9	798.2	834.9	869.4	909.1	956.4	1015.3	1085.1
35°	687.6	695.0	700.6	722.6	748.0	781.7	816.7	859.0	904.6	960.4	1030.3
37.5°	652.3	654.8	663.1	677.4	702.1	733.2	765.6	807.2	854.0	910.7	973.7
40°	630.7	631.9	636.9	650.4	671.8	701.2	732.7	773.9	818.4	872.0	934.5
42.5°	609.5	608.8	613.4	622.9	642.9	669.6	700.7	738.3	782.8	832.3	891.2
45°	576.0	576.0	574.9	582.8	599.2	625.1	651.0	687.1	724.2	772.7	822.3
47.5°	541.1	537.9	538.9	543.0	556.8	578.0	604.2	633.7	666.5	707.6	751.1
50°	518.5	514.0	512.3	516.8	529.2	547.8	572.7	598.6	629.6	665.6	702.9
52.5°	493.7	489.3	486.2	489.3	500.8	518.0	540.6	563.4	591.3	620.5	652.8
55°	455.4	450.4	448.7	449.8	458.2	471.7	490.9	511.8	532.6	556.8	579.4
57.5°	417.7	409.3	407.7	407.2	413.0	425.4	441.4	459.5	474.7	489.3	513.3
60°	392.8	382.7	379.3	378.8	383.3	393.4	408.1	426.1	436.8	446.9	467.8
62.5°	366.2	356.5	349.1	349.9	353.9	363.6	376.5	389.6	396.6	407.7	421.8
65°	325.2	312.8	307.2	305.5	307.8	315.6	325.8	334.2	342.1	346.7	360.1
67.5°	284.2	273.8	265.5	263.4	262.4	267.8	276.1	281.3	286.9	290.8	298.8
70°	255.4	246.3	236.2	232.8	232.2	236.7	244.6	245.2	253.1	254.8	263.2
72.5°	226.9	215.6	208.6	205.3	202.9	206.9	212.1	213.6	217.9	220.9	225.3
75°	182.6	174.1	167.4	162.3	160.6	162.9	162.9	165.7	168.5	170.2	175.3
77.5°	143.7	134.0	126.0	123.1	121.1	119.6	120.8	122.5	121.2	124.1	125.2
80°	116.7	106.6	100.4	99.2	95.8	93.0	92.5	94.1	91.9	93.0	96.4
82.5°	90.1	83.6	76.9	75.7	71.5	70.0	69.5	68.4	68.4	68.2	68.9
85°	53.6	49.6	45.1	42.2	40.6	37.7	37.7	36.6	35.5	34.4	35.0
87.5°	23.4	22.3	20.0	18.5	17.4	15.5	15.4	13.9	13.2	12.6	12.0
90°	8.6	8.2	7.5	6.8	6.2	5.5	4.7	3.8	2.9	2.0	1.1
92.5°	8.3	7.8	7.2	6.5	5.9	5.2	4.9	4.8	4.7	4.7	4.6
95°	8.6	8.2	8.1	8.0	7.9	7.8	9.1	12.0	14.8	17.5	20.3
97.5°	9.8	9.8	18.9	28.0	37.3	46.4	50.1	48.3	46.6	44.9	43.1
100°	14.8	16.2	27.6	38.9	50.2	61.6	66.5	65.1	63.6	62.0	60.6
102.5°	63.3	78.4	79.8	81.3	82.8	84.2	84.5	83.3	82.3	81.2	80.1
105°	116.0	115.3	114.9	114.5	114.1	113.7	113.2	112.7	112.2	111.7	111.2
107.5°	144.1	143.7	143.2	142.6	142.0	141.5	141.1	140.9	140.6	140.4	140.1
110°	163.1	163.0	162.5	162.0	161.4	160.9	160.6	160.4	160.1	159.9	159.6



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	181.6	181.6	181.3	181.1	180.9	180.7	180.3	179.9	179.4	179.0	178.6
115°	208.6	208.4	208.5	208.6	208.6	208.7	208.6	208.4	208.1	207.9	207.7
117.5°	236.1	236.2	236.0	235.8	235.6	235.5	235.2	234.9	234.6	234.2	233.9
120°	252.9	252.7	252.8	252.9	253.0	253.1	252.9	252.6	252.3	251.9	251.6
122.5°	269.7	269.6	269.5	269.4	269.2	269.1	269.0	268.8	268.6	268.4	268.2
125°	292.9	292.6	292.8	292.9	293.1	293.3	293.2	292.9	292.5	292.2	291.9
127.5°	316.4	316.4	316.1	315.7	315.3	315.0	314.7	314.6	314.5	314.5	314.4
130°	330.4	330.4	330.1	329.9	329.6	329.4	329.2	329.1	329.1	328.9	328.8
132.5°	344.3	344.2	343.9	343.6	343.3	343.0	342.8	342.6	342.4	342.3	342.2
135°	363.4	363.2	362.9	362.6	362.2	361.9	361.7	361.8	361.9	362.0	362.1
137.5°	381.7	381.6	381.2	380.8	380.4	380.1	379.9	379.8	379.8	379.8	379.8
140°	393.1	392.8	392.6	392.5	392.2	392.1	391.9	391.8	391.6	391.4	391.3
142.5°	403.6	403.4	403.3	403.2	403.1	403.0	402.8	402.5	402.3	401.9	401.6
145°	418.7	418.7	418.7	418.7	418.7	418.7	418.5	418.2	418.0	417.8	417.5
147.5°	431.9	431.9	431.9	432.0	432.1	432.2	432.0	431.5	431.0	430.6	430.2
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.7	440.3	440.0	439.7	439.4
152.5°	447.7	447.5	447.7	447.8	448.0	448.1	448.1	447.8	447.5	447.3	447.0
155°	457.4	457.1	457.3	457.5	457.8	458.0	458.1	458.0	458.0	457.9	457.8
157.5°	465.9	465.5	465.7	465.9	466.3	466.5	466.7	466.8	466.8	466.8	466.9
160°	471.2	470.8	470.8	470.9	471.0	471.1	471.2	471.5	471.7	472.0	472.2
162.5°	475.6	475.2	475.2	475.3	475.4	475.5	475.7	476.0	476.3	476.6	477.0
165°	481.8	481.1	481.1	481.1	481.1	481.1	481.3	481.7	482.1	482.5	482.9
167.5°	486.2	485.5	485.6	485.6	485.7	485.7	485.9	486.4	486.8	487.2	487.6
170°	489.1	488.4	488.4	488.3	488.2	488.1	488.4	488.9	489.3	489.8	490.3
172.5°	490.9	490.2	490.2	490.1	490.0	489.9	490.2	490.6	491.1	491.6	492.1
175°	492.9	492.2	492.1	492.0	492.0	491.9	492.0	492.5	493.0	493.5	494.0
177.5°	493.9	493.4	493.3	493.2	493.0	492.9	493.1	493.5	494.0	494.5	494.9
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



TEST NUMBER: P332805-930

CATALOG NUMBER: S124DIW-S1020D470U930-4F0-1E-UDD-A

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1369.6	1374.1	1380.0	1389.9	1393.5	1398.0	1404.4	1403.9	1405.7	1412.4	1426.9
5°	1374.7	1392.1	1409.1	1429.4	1450.7	1464.8	1484.0	1495.8	1507.7	1522.9	1548.8
7.5°	1376.7	1404.4	1435.4	1471.0	1502.8	1539.3	1567.7	1594.6	1618.9	1651.0	1681.9
10°	1373.5	1410.7	1450.7	1495.8	1543.8	1584.4	1621.0	1662.7	1698.2	1737.1	1772.1
12.5°	1367.7	1412.6	1466.1	1516.6	1572.6	1632.6	1678.2	1720.4	1767.7	1812.4	1866.3
15°	1354.4	1415.8	1478.4	1544.9	1619.8	1689.1	1755.1	1809.8	1860.5	1927.6	1998.1
17.5°	1337.5	1403.8	1482.6	1563.2	1641.5	1720.8	1802.4	1884.6	1948.6	2031.9	2087.0
20°	1321.7	1398.3	1479.5	1575.3	1653.7	1752.3	1833.4	1912.9	2000.8	2083.7	2149.6
22.5°	1299.6	1383.5	1469.6	1565.0	1668.1	1766.8	1860.5	1946.8	2034.7	2124.8	2204.7
25°	1271.5	1347.6	1449.6	1557.9	1660.4	1767.5	1875.2	1983.4	2078.0	2173.3	2247.7
27.5°	1223.8	1319.8	1414.8	1526.5	1640.5	1761.6	1876.7	1990.1	2089.2	2167.6	2213.7
30°	1199.4	1282.8	1385.9	1498.1	1621.5	1751.8	1871.8	1982.8	2075.3	2137.8	2156.4
32.5°	1163.4	1249.4	1350.3	1466.6	1597.2	1731.0	1856.0	1960.7	2037.8	2070.6	2048.2
35°	1109.8	1187.6	1289.6	1408.5	1544.3	1686.9	1810.4	1898.8	1938.3	1907.3	1830.1
37.5°	1045.5	1122.6	1225.1	1341.9	1482.5	1627.4	1739.0	1802.7	1789.6	1712.5	1597.4
40°	1000.5	1072.6	1170.1	1296.3	1433.3	1578.7	1676.7	1711.2	1675.1	1564.6	1442.3
42.5°	950.4	1020.8	1118.7	1240.4	1385.5	1519.6	1605.1	1607.9	1547.4	1415.4	1292.6
45°	874.2	941.3	1033.7	1160.5	1294.6	1420.9	1477.2	1449.6	1338.1	1210.6	1087.2
47.5°	799.0	857.1	948.3	1068.6	1196.0	1302.3	1330.2	1280.5	1161.6	1038.0	923.6
50°	744.0	802.6	888.3	1003.2	1126.1	1218.0	1231.5	1165.6	1048.9	924.3	834.7
52.5°	691.2	749.4	831.9	938.3	1050.8	1133.7	1134.1	1057.8	941.6	830.5	747.2
55°	613.8	666.2	740.6	835.8	936.2	1001.0	985.2	906.3	805.4	709.1	636.3
57.5°	539.2	584.8	653.4	732.8	821.2	874.7	848.5	772.5	682.4	600.7	545.6
60°	490.9	534.3	593.0	667.9	742.3	784.0	759.2	690.4	607.6	541.6	493.7
62.5°	444.0	480.6	537.0	602.1	671.1	702.0	679.9	612.0	540.4	480.8	441.9
65°	377.6	407.5	452.6	508.4	558.6	585.1	566.5	503.3	448.7	405.8	374.8
67.5°	315.6	339.0	373.1	417.8	460.5	474.8	457.9	413.9	367.6	333.3	311.4
70°	272.8	294.8	323.5	357.9	395.1	410.3	393.4	358.5	320.7	289.1	267.7
72.5°	235.4	252.4	276.6	306.1	335.2	350.3	338.8	305.2	273.4	249.9	231.6
75°	179.2	193.9	210.8	231.6	254.2	264.3	254.2	231.1	209.1	191.6	178.6
77.5°	130.3	138.2	151.2	166.8	180.9	188.7	179.9	164.2	150.8	138.8	132.5
80°	99.2	104.8	113.8	126.3	135.8	143.2	137.5	124.6	113.8	106.0	103.1
82.5°	72.2	76.0	81.9	91.1	97.5	101.3	98.7	89.4	85.0	78.0	75.2
85°	35.5	37.7	41.7	44.5	50.1	50.7	51.3	47.4	43.4	41.7	39.5
87.5°	12.6	13.2	14.8	16.3	18.3	18.8	18.5	18.6	17.0	16.6	14.9
90°	2.0	2.9	3.8	4.7	5.5	6.2	6.8	7.5	8.2	8.6	9.1
92.5°	4.7	4.7	4.8	4.9	5.2	5.9	6.5	7.2	7.8	8.3	8.8
95°	17.5	14.8	12.0	9.1	7.8	7.9	8.0	8.1	8.2	8.6	9.1
97.5°	44.9	46.6	48.3	50.1	46.4	37.3	28.0	18.9	9.8	9.8	9.9
100°	62.0	63.6	65.1	66.5	61.6	50.2	38.9	27.6	16.2	14.8	13.5
102.5°	81.2	82.3	83.3	84.5	84.2	82.8	81.3	79.8	78.4	63.3	48.2
105°	111.7	112.2	112.7	113.2	113.7	114.1	114.5	114.9	115.3	116.0	116.8
107.5°	140.4	140.6	140.9	141.1	141.5	142.0	142.6	143.2	143.7	144.1	144.5
110°	159.9	160.1	160.4	160.6	160.9	161.4	162.0	162.5	163.0	163.1	163.3





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**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	179.0	179.4	179.9	180.3	180.7	180.9	181.1	181.3	181.6	181.6	181.5
115°	207.9	208.1	208.4	208.6	208.7	208.6	208.6	208.5	208.4	208.6	208.7
117.5°	234.2	234.6	234.9	235.2	235.5	235.6	235.8	236.0	236.2	236.1	236.1
120°	251.9	252.3	252.6	252.9	253.1	253.0	252.9	252.8	252.7	252.9	253.1
122.5°	268.4	268.6	268.8	269.0	269.1	269.2	269.4	269.5	269.6	269.7	269.8
125°	292.2	292.5	292.9	293.2	293.3	293.1	292.9	292.8	292.6	292.9	293.1
127.5°	314.5	314.5	314.6	314.7	315.0	315.3	315.7	316.1	316.4	316.4	316.3
130°	328.9	329.1	329.1	329.2	329.4	329.6	329.9	330.1	330.4	330.4	330.5
132.5°	342.3	342.4	342.6	342.8	343.0	343.3	343.6	343.9	344.2	344.3	344.4
135°	362.0	361.9	361.8	361.7	361.9	362.2	362.6	362.9	363.2	363.4	363.5
137.5°	379.8	379.8	379.8	379.9	380.1	380.4	380.8	381.2	381.6	381.7	381.9
140°	391.4	391.6	391.8	391.9	392.1	392.2	392.5	392.6	392.8	393.1	393.3
142.5°	401.9	402.3	402.5	402.8	403.0	403.1	403.2	403.3	403.4	403.6	403.7
145°	417.8	418.0	418.2	418.5	418.7	418.7	418.7	418.7	418.7	418.7	418.8
147.5°	430.6	431.0	431.5	432.0	432.2	432.1	432.0	431.9	431.9	431.9	432.0
150°	439.7	440.0	440.3	440.7	440.8	440.7	440.6	440.5	440.4	440.4	440.4
152.5°	447.3	447.5	447.8	448.1	448.1	448.0	447.8	447.7	447.5	447.7	447.8
155°	457.9	458.0	458.0	458.1	458.0	457.8	457.5	457.3	457.1	457.4	457.7
157.5°	466.8	466.8	466.8	466.7	466.5	466.3	465.9	465.7	465.5	465.9	466.3
160°	472.0	471.7	471.5	471.2	471.1	471.0	470.9	470.8	470.8	471.2	471.7
162.5°	476.6	476.3	476.0	475.7	475.5	475.4	475.3	475.2	475.2	475.6	476.1
165°	482.5	482.1	481.7	481.3	481.1	481.1	481.1	481.1	481.1	481.8	482.4
167.5°	487.2	486.8	486.4	485.9	485.7	485.7	485.6	485.6	485.5	486.2	487.0
170°	489.8	489.3	488.9	488.4	488.1	488.2	488.3	488.4	488.4	489.1	489.8
172.5°	491.6	491.1	490.6	490.2	489.9	490.0	490.1	490.2	490.2	490.9	491.5
175°	493.5	493.0	492.5	492.0	491.9	492.0	492.0	492.1	492.2	492.9	493.7
177.5°	494.5	494.0	493.5	493.1	492.9	493.0	493.2	493.3	493.4	493.9	494.5
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0	494.0



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6	1360.6
2.5°	1434.1	1435.0	1439.0	1442.2	1443.1	1447.6	1448.1
5°	1560.1	1569.7	1588.3	1590.0	1592.8	1607.4	1596.2
7.5°	1707.8	1732.1	1748.3	1762.7	1767.9	1774.3	1772.9
10°	1802.5	1838.5	1856.6	1885.3	1886.4	1893.8	1889.3
12.5°	1897.6	1939.5	1972.5	1977.8	2001.9	2005.6	2011.9
15°	2032.4	2077.0	2122.6	2138.9	2172.2	2180.1	2192.5
17.5°	2159.2	2204.7	2236.7	2278.9	2292.6	2310.9	2298.4
20°	2228.5	2278.2	2318.7	2352.0	2366.1	2376.2	2375.1
22.5°	2270.5	2320.5	2353.4	2378.6	2391.8	2396.1	2395.8
25°	2296.8	2325.5	2335.7	2345.2	2330.6	2325.5	2327.8
27.5°	2223.7	2216.3	2189.8	2155.1	2119.0	2090.3	2074.8
30°	2123.2	2079.2	2039.1	1969.3	1933.2	1911.8	1892.6
32.5°	1980.7	1911.0	1834.0	1770.0	1729.0	1697.2	1692.5
35°	1736.5	1631.7	1537.6	1459.2	1418.6	1384.2	1376.4
37.5°	1476.3	1367.4	1282.7	1213.7	1170.1	1145.8	1123.2
40°	1303.7	1210.1	1126.7	1068.0	1034.8	1017.3	1003.2
42.5°	1170.6	1085.2	1002.2	957.6	927.5	916.8	908.6
45°	986.9	907.4	849.9	816.1	798.7	780.6	772.2
47.5°	839.8	775.1	737.2	708.5	689.7	679.1	673.6
50°	756.4	703.4	669.6	647.6	630.7	622.2	617.8
52.5°	682.4	639.0	610.5	593.0	581.6	575.4	573.6
55°	587.8	554.6	536.5	521.4	512.9	507.3	505.0
57.5°	510.9	485.4	470.8	458.2	454.9	450.2	448.7
60°	460.5	440.8	428.4	419.9	417.1	411.5	412.5
62.5°	415.8	399.7	389.1	384.3	380.6	375.9	377.4
65°	351.7	339.9	334.2	329.7	325.2	322.4	324.7
67.5°	295.1	287.0	279.3	276.7	274.5	274.0	271.7
70°	258.1	251.4	244.6	243.0	243.0	240.7	240.1
72.5°	222.5	217.5	213.0	211.8	210.0	210.9	208.6
75°	171.9	168.0	166.2	164.6	164.0	164.0	162.3
77.5°	127.0	124.1	121.4	121.4	119.4	118.6	118.4
80°	96.4	95.2	93.0	93.0	91.9	92.5	91.3
82.5°	72.5	70.9	70.4	69.5	68.0	68.1	66.9
85°	38.9	37.2	36.6	35.0	33.8	35.0	33.8
87.5°	15.4	15.1	14.7	13.9	13.5	13.5	12.1
90°	9.6	10.1	10.4	10.6	10.8	10.9	11.1
92.5°	9.3	9.8	10.0	10.1	10.1	10.2	10.2
95°	9.6	10.1	10.4	10.4	10.5	10.6	10.7
97.5°	9.9	9.9	10.0	10.1	10.2	10.3	10.4
100°	12.1	10.7	10.0	10.1	10.2	10.3	10.4
102.5°	33.2	18.1	10.6	10.6	10.6	10.6	10.7
105°	117.5	118.2	117.2	114.1	111.2	108.3	105.3
107.5°	144.8	145.2	145.5	145.9	146.1	146.4	146.8
110°	163.5	163.6	163.8	164.0	164.3	164.5	164.8



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**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
112.5°	181.5	181.4	181.6	181.9	182.2	182.5	182.8
115°	208.9	209.0	209.1	209.1	209.1	209.1	209.1
117.5°	236.1	236.0	236.0	235.9	235.9	235.9	235.9
120°	253.2	253.4	253.4	253.2	253.1	252.9	252.7
122.5°	269.9	269.9	269.9	269.8	269.6	269.5	269.3
125°	293.3	293.6	293.8	293.8	293.9	294.0	294.1
127.5°	316.3	316.3	316.2	316.1	316.0	316.0	315.9
130°	330.6	330.7	330.7	330.7	330.7	330.7	330.7
132.5°	344.5	344.5	344.5	344.5	344.5	344.4	344.3
135°	363.7	363.9	364.0	364.2	364.4	364.5	364.7
137.5°	382.0	382.3	382.3	382.3	382.2	382.2	382.1
140°	393.5	393.8	394.0	394.0	394.1	394.2	394.3
142.5°	404.0	404.1	404.2	404.2	404.3	404.3	404.3
145°	418.9	419.0	419.1	419.2	419.4	419.6	419.7
147.5°	432.0	432.1	432.2	432.3	432.4	432.4	432.5
150°	440.4	440.4	440.5	440.6	440.7	440.8	440.8
152.5°	447.9	448.1	448.1	448.1	448.0	447.9	447.9
155°	458.0	458.4	458.4	458.2	458.0	457.7	457.5
157.5°	466.7	467.1	467.1	466.7	466.3	465.9	465.5
160°	472.2	472.7	472.7	472.2	471.7	471.2	470.8
162.5°	476.6	477.1	477.1	476.5	476.0	475.4	474.9
165°	483.1	483.7	483.6	482.9	482.2	481.4	480.7
167.5°	487.7	488.4	488.4	487.5	486.7	485.9	485.1
170°	490.4	491.1	491.1	490.2	489.3	488.5	487.7
172.5°	492.2	492.8	492.8	491.9	491.0	490.1	489.2
175°	494.4	495.1	495.0	494.0	493.0	492.0	491.1
177.5°	495.0	495.5	495.4	494.6	493.8	493.0	492.3
180°	494.0	494.0	494.0	494.0	494.0	494.0	494.0

(END OF REPORT)