

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: P332806-935

Luminaire Tested: **S124DIW-S1020D470U935-4F0-1E-UDD-A1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332806-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D470U935-4F0-1E-UDD-A1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, ASYMMETRIC DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5365.4 lumens
Efficiency: N/A
Efficacy: 116.1 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

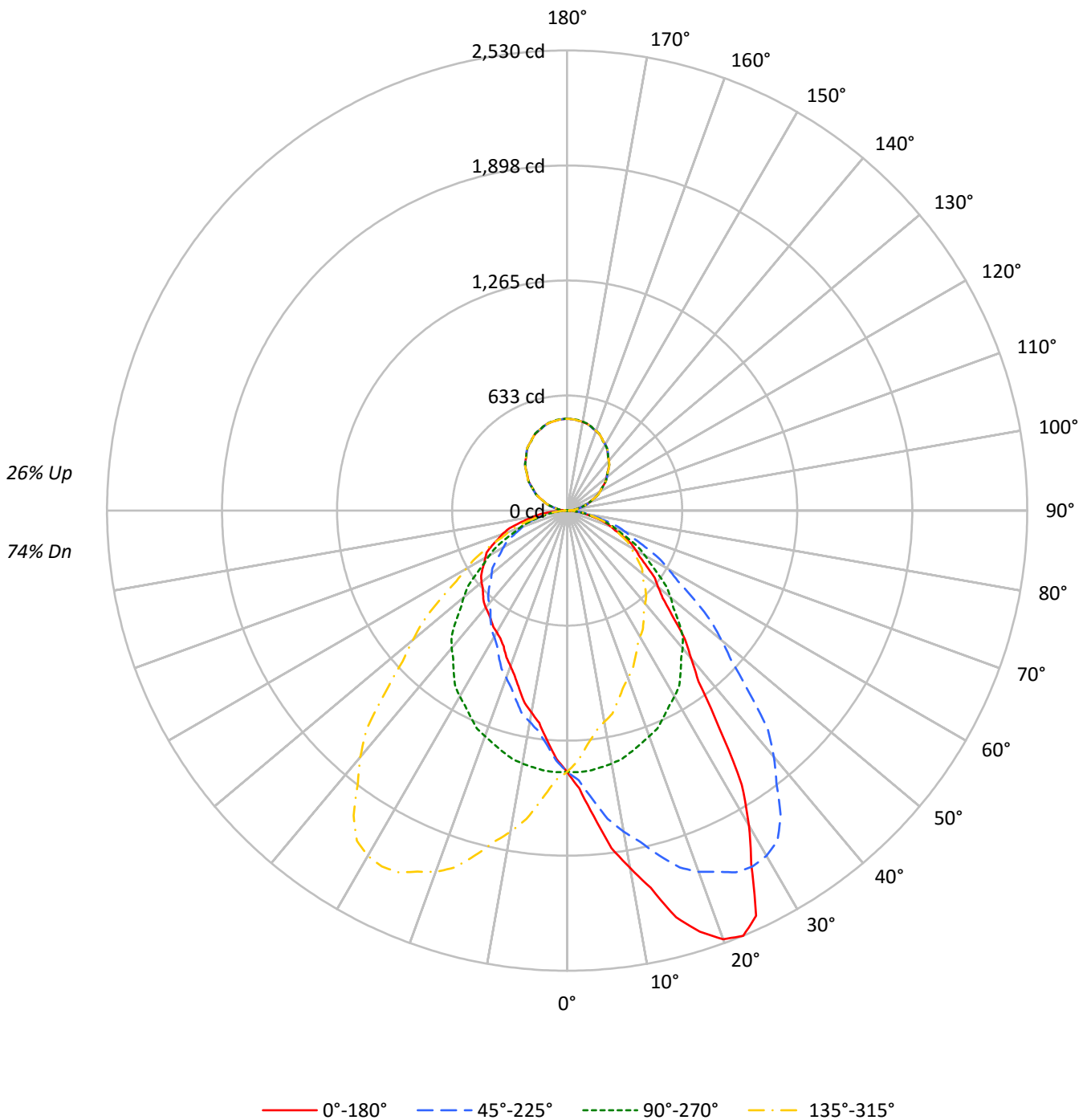
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	113	113	113	107	107	107	107	97	97	97	87	87	87	78	78	78	74
1	103	99	95	92	98	94	91	88	85	83	80	77	75	73	70	68	67	63
2	95	87	81	75	90	83	77	73	75	71	67	68	65	62	62	59	57	53
3	86	77	69	63	82	73	67	61	67	61	57	61	56	53	55	52	49	45
4	79	68	60	54	75	65	58	52	60	54	49	54	49	45	49	45	42	39
5	73	61	53	47	69	59	51	45	54	47	42	49	44	40	45	40	37	34
6	68	55	47	41	64	53	45	40	48	42	37	44	39	35	41	36	33	30
7	63	50	42	36	59	48	40	35	44	38	33	41	35	31	37	33	29	27
8	58	46	38	32	55	44	36	31	40	34	30	37	32	28	34	30	26	24
9	54	42	34	29	52	40	33	28	37	31	27	34	29	25	32	27	24	22
10	51	39	31	26	48	37	30	25	34	28	24	32	27	23	29	25	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11599	11599	11599	11599
5°	13661	11629	10264	11629
10°	16356	11579	9241	11579
15°	19351	11462	8487	11462
20°	21549	11342	7814	11342
25°	21896	11166	7349	11166
30°	18632	10997	7202	10997
35°	14325	10723	7203	10723
40°	11166	10400	7339	10400
45°	9310	9914	7462	9914
50°	8194	9323	7714	9323
55°	7506	8612	8025	8612
60°	7035	7976	8399	7976
65°	6550	7265	8709	7265
70°	5986	6559	8908	6559
75°	5346	5774	8799	5774
80°	4482	4733	8522	4733
85°	3307	3418	8160	3418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.0	2.6
10°-20°	431.5	8.0
20°-30°	684.2	12.8
30°-40°	761.4	14.2
40°-50°	693.1	12.9
50°-60°	566.4	10.6
60°-70°	404.3	7.5
70°-80°	222.6	4.1
80°-90°	62.3	1.2
90°-100°	33.3	0.6
100°-110°	98.6	1.8
110°-120°	167.3	3.1
120°-130°	220.6	4.1
130°-140°	247.7	4.6
140°-150°	243.4	4.5
150°-160°	204.8	3.8
160°-170°	136.2	2.5
170°-180°	47.7	0.9
0°-30°	1255.6	23.4
0°-40°	2017.1	37.6
0°-60°	3276.5	61.1
0°-90°	3965.8	73.9
90°-120°	299.1	5.6
90°-150°	1010.9	18.8
90°-180°	1400.0	26.1
0°-180°	5365.4	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1437	1437	1437	1437	1437	
5°	1686	1435	1267	1435	1686	171
15°	2315	1371	1016	1371	2315	654
25°	2458	1254	825	1254	2458	1084
35°	1454	1088	731	1088	1454	923
45°	816	868	654	868	816	642
55°	533	612	570	612	533	482
65°	343	380	456	380	343	339
75°	171	185	282	185	171	182
85°	36	37	88	37	36	44
90°	12	1	12	1	12	7
95°	31	23	31	23	31	32
105°	95	91	95	91	95	100
115°	169	170	169	170	169	167
125°	246	248	246	248	246	219
135°	320	320	320	320	320	247
145°	389	388	389	388	389	243
155°	444	445	444	445	444	205
165°	483	484	483	484	483	136
175°	501	504	501	504	501	48
180°	504	504	504	504	504	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1529.2	1528.8	1524.0	1523.0	1519.7	1515.4	1514.5	1506.8	1491.6	1484.5	1482.6
5°	1685.7	1697.5	1682.0	1679.1	1677.3	1657.7	1647.5	1635.6	1608.3	1592.2	1579.7
7.5°	1872.3	1873.7	1867.0	1861.5	1846.3	1829.2	1803.5	1776.2	1743.5	1709.6	1683.9
10°	1995.2	1999.9	1992.2	1991.0	1960.7	1941.6	1903.5	1871.4	1834.4	1793.4	1755.9
12.5°	2124.7	2118.0	2114.1	2088.6	2083.0	2048.2	2004.0	1970.9	1914.0	1866.7	1816.8
15°	2315.4	2302.3	2294.0	2258.8	2241.6	2193.4	2146.3	2110.1	2035.7	1964.8	1911.2
17.5°	2427.2	2440.4	2421.1	2406.7	2362.1	2328.2	2280.2	2204.0	2145.8	2057.8	1990.2
20°	2508.3	2509.4	2498.7	2483.8	2448.7	2405.9	2353.5	2270.1	2200.5	2113.0	2020.2
22.5°	2530.1	2530.4	2525.8	2511.9	2485.4	2450.6	2397.8	2328.2	2243.9	2148.7	2055.9
25°	2458.2	2455.8	2461.3	2476.7	2466.6	2455.8	2425.5	2373.7	2295.2	2194.5	2094.6
27.5°	2191.1	2207.5	2237.7	2275.9	2312.6	2340.5	2348.4	2337.8	2289.1	2206.3	2101.6
30°	1998.7	2019.0	2041.6	2079.7	2153.4	2195.7	2242.2	2277.3	2257.6	2191.6	2094.0
32.5°	1787.3	1792.3	1825.9	1869.2	1936.8	2018.1	2091.7	2163.0	2186.7	2152.1	2070.6
35°	1453.5	1461.8	1498.1	1541.0	1623.8	1723.1	1833.8	1932.7	2014.2	2046.9	2005.3
37.5°	1186.1	1210.0	1235.7	1281.8	1354.6	1444.1	1559.1	1687.0	1808.5	1889.9	1903.8
40°	1059.5	1074.4	1092.8	1127.9	1189.8	1277.9	1376.7	1523.2	1652.3	1769.0	1807.1
42.5°	959.5	968.2	979.5	1011.2	1058.4	1146.0	1236.2	1365.0	1494.7	1634.2	1698.1
45°	815.5	824.4	843.4	861.9	897.6	958.3	1042.2	1148.1	1278.5	1413.1	1530.9
47.5°	711.4	717.1	728.4	748.2	778.5	818.6	886.8	975.3	1096.1	1226.8	1352.3
50°	652.4	657.1	666.1	683.9	707.1	742.8	798.7	881.5	976.1	1107.7	1230.9
52.5°	605.7	607.6	614.2	626.3	644.7	674.8	720.7	789.1	877.1	994.4	1117.1
55°	533.3	535.7	541.7	550.6	566.6	585.7	620.8	672.0	748.8	850.6	957.1
57.5°	473.8	475.4	480.4	483.9	497.1	512.6	539.6	576.2	634.4	720.7	815.8
60°	435.7	434.5	440.5	443.4	452.4	465.5	486.3	521.4	572.0	641.6	729.1
62.5°	398.6	396.9	401.9	405.8	411.0	422.1	439.1	466.7	507.7	570.7	646.3
65°	342.9	340.4	343.5	348.2	352.9	359.0	371.4	395.8	428.5	473.8	531.5
67.5°	286.9	289.4	289.9	292.2	295.0	303.1	311.7	328.9	352.0	388.2	437.1
70°	253.6	254.2	256.6	256.6	258.3	265.4	272.6	282.8	305.3	338.7	378.6
72.5°	220.2	222.7	221.8	223.7	225.0	229.7	235.0	244.6	263.9	288.7	322.4
75°	171.4	173.2	173.2	173.8	175.6	177.4	181.5	188.6	202.3	220.8	244.0
77.5°	125.0	125.3	126.1	128.2	128.2	131.0	134.1	139.9	146.6	159.3	173.4
80°	96.4	97.6	97.0	98.2	98.2	100.6	101.8	108.9	111.9	120.2	131.6
82.5°	70.7	71.9	71.8	73.4	74.4	74.9	76.5	79.4	82.4	89.7	94.4
85°	35.7	36.9	35.7	36.9	38.7	39.3	41.1	41.7	44.1	45.8	50.0
87.5°	12.8	14.2	14.2	14.6	15.5	15.9	16.3	15.8	17.6	17.9	19.6
90°	11.7	11.5	11.4	11.2	11.0	10.7	10.2	9.6	9.1	8.6	7.9
92.5°	17.3	17.2	17.1	17.0	16.9	16.7	16.4	16.1	15.8	15.4	15.0
95°	30.8	30.8	30.8	30.8	30.8	30.7	30.4	30.1	29.9	29.6	29.0
97.5°	48.3	48.3	48.3	48.3	48.3	48.1	47.9	47.5	47.2	46.9	46.1
100°	60.4	60.4	60.4	60.4	60.4	60.4	60.2	60.0	59.8	59.7	58.9
102.5°	74.2	74.1	74.0	74.0	74.0	73.8	73.5	73.3	73.0	72.8	72.1
105°	95.2	95.0	94.7	94.5	94.2	93.9	93.7	93.4	93.1	92.8	92.5
107.5°	115.6	115.6	115.7	115.7	115.7	115.6	115.4	115.1	114.9	114.6	114.6
110°	130.3	130.0	129.8	129.5	129.2	129.2	129.4	129.6	129.8	129.9	130.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	145.3	145.3	145.2	145.2	145.1	145.1	145.1	145.2	145.2	145.3	145.3
115°	168.6	168.7	168.8	168.8	168.9	169.0	169.1	169.2	169.3	169.4	169.5
117.5°	190.7	190.9	191.1	191.2	191.4	191.7	191.9	192.3	192.5	192.8	193.0
120°	207.6	207.4	207.2	207.1	206.9	207.0	207.4	207.8	208.3	208.7	209.0
122.5°	221.6	221.9	222.2	222.6	222.8	223.2	223.4	223.8	224.0	224.4	224.5
125°	245.8	246.0	246.2	246.3	246.5	246.7	246.8	247.0	247.2	247.4	247.5
127.5°	268.2	268.4	268.5	268.6	268.7	268.9	269.1	269.2	269.4	269.6	269.8
130°	282.8	283.2	283.5	283.9	284.2	284.5	284.6	284.8	285.0	285.2	285.2
132.5°	298.5	298.6	298.8	298.9	299.0	299.2	299.4	299.5	299.7	299.9	300.0
135°	319.9	320.2	320.5	320.7	321.0	321.2	321.3	321.5	321.7	321.8	321.8
137.5°	342.5	342.4	342.3	342.3	342.2	342.3	342.6	342.8	343.0	343.3	343.1
140°	356.2	356.3	356.4	356.5	356.5	356.6	356.7	356.8	356.9	357.0	357.0
142.5°	370.0	370.0	370.0	370.0	370.0	370.1	370.1	370.1	370.1	370.1	370.1
145°	388.6	388.8	389.1	389.3	389.6	389.8	389.9	389.9	390.0	390.1	390.0
147.5°	407.5	407.6	407.7	407.8	407.9	407.9	407.9	408.0	408.1	408.2	408.3
150°	419.0	419.1	419.2	419.3	419.4	419.4	419.4	419.4	419.4	419.4	419.4
152.5°	429.6	429.9	430.1	430.3	430.5	430.6	430.3	430.2	429.9	429.7	429.6
155°	444.4	444.7	445.1	445.4	445.7	445.7	445.4	445.1	444.7	444.4	444.4
157.5°	457.5	457.9	458.1	458.5	458.7	458.7	458.5	458.2	458.0	457.7	457.7
160°	465.0	465.5	466.0	466.4	466.8	466.9	466.7	466.4	466.1	465.9	466.0
162.5°	472.9	473.3	473.7	474.2	474.6	474.6	474.2	473.6	473.2	472.7	472.8
165°	483.0	483.4	483.7	484.1	484.4	484.3	483.8	483.3	482.8	482.2	482.4
167.5°	490.3	490.8	491.4	491.9	492.4	492.4	491.9	491.4	490.9	490.3	490.3
170°	494.3	494.9	495.5	496.1	496.7	496.8	496.3	495.8	495.2	494.7	494.6
172.5°	497.7	498.3	498.9	499.6	500.2	500.2	499.6	499.0	498.4	497.8	497.8
175°	501.4	502.0	502.6	503.2	503.8	503.8	503.2	502.6	502.0	501.4	501.4
177.5°	503.3	503.8	504.4	504.9	505.4	505.5	505.0	504.5	504.0	503.5	503.5
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1483.1	1476.4	1471.6	1467.8	1457.3	1451.1	1446.4	1439.7	1432.1	1424.0	1414.0
5°	1567.2	1547.0	1532.1	1509.5	1488.1	1470.2	1451.7	1435.0	1414.8	1392.8	1376.7
7.5°	1655.6	1625.6	1587.0	1553.5	1515.9	1483.2	1453.9	1423.8	1392.7	1362.4	1334.7
10°	1711.8	1673.2	1630.3	1579.7	1532.1	1489.8	1450.5	1412.5	1375.5	1338.6	1307.1
12.5°	1772.3	1724.1	1660.8	1601.6	1548.3	1491.8	1444.3	1397.7	1353.1	1314.3	1277.6
15°	1853.5	1783.8	1710.6	1631.5	1561.3	1495.2	1430.3	1371.4	1321.4	1270.1	1234.5
17.5°	1903.4	1817.2	1733.5	1650.8	1565.7	1482.5	1412.5	1344.5	1281.9	1231.1	1186.0
20°	1936.2	1850.5	1746.4	1663.6	1562.5	1476.7	1395.8	1320.2	1254.7	1200.6	1154.1
22.5°	1964.8	1865.8	1761.6	1652.7	1552.0	1461.0	1372.4	1296.4	1229.5	1172.4	1127.9
25°	1980.3	1866.6	1753.5	1645.2	1530.9	1423.1	1342.8	1253.5	1182.1	1122.0	1074.4
27.5°	1981.9	1860.4	1732.4	1612.1	1494.1	1393.8	1292.4	1212.5	1138.4	1074.9	1029.2
30°	1976.7	1849.9	1712.4	1582.1	1463.6	1354.7	1266.6	1179.7	1104.1	1041.0	993.4
32.5°	1960.1	1828.0	1686.7	1548.8	1426.0	1319.5	1228.6	1145.9	1072.2	1010.0	960.1
35°	1911.9	1781.5	1630.9	1487.5	1361.8	1254.1	1172.0	1088.0	1014.3	955.3	907.1
37.5°	1836.5	1718.6	1565.6	1417.1	1293.7	1185.5	1104.1	1028.3	961.7	901.9	852.5
40°	1770.7	1667.2	1513.6	1369.0	1235.7	1132.7	1056.5	986.9	920.8	864.3	817.3
42.5°	1695.1	1604.8	1463.2	1309.9	1181.4	1078.0	1003.7	941.2	878.9	826.6	779.6
45°	1560.0	1500.6	1367.2	1225.5	1091.7	994.0	923.2	868.4	816.1	764.8	725.6
47.5°	1404.8	1375.3	1263.1	1128.5	1001.4	905.2	843.8	793.2	747.3	703.9	669.3
50°	1300.5	1286.2	1189.2	1059.5	938.1	847.6	785.7	742.3	702.9	664.9	632.1
52.5°	1197.7	1197.2	1109.7	990.9	878.6	791.4	730.0	689.4	655.3	624.4	595.0
55°	1040.4	1057.1	988.7	882.7	782.1	703.5	648.2	611.9	588.1	562.5	540.4
57.5°	896.0	923.7	867.2	773.9	690.0	617.6	569.4	542.1	516.8	501.3	485.3
60°	801.8	827.9	783.9	705.3	626.2	564.3	518.4	494.0	472.0	461.3	450.0
62.5°	718.0	741.3	708.7	635.8	567.1	507.6	468.9	445.5	430.6	418.9	411.4
65°	598.2	617.9	589.9	536.9	477.9	430.3	398.8	380.3	366.1	361.3	352.9
67.5°	483.5	501.4	486.3	441.3	394.0	358.0	333.3	315.6	307.1	303.0	297.0
70°	415.4	433.3	417.2	378.0	341.6	311.3	288.1	277.9	269.1	267.3	258.9
72.5°	357.8	370.0	354.0	323.2	292.1	266.6	248.6	238.0	233.3	230.1	225.6
75°	268.5	279.1	268.5	244.6	222.6	204.7	189.2	185.1	179.8	178.0	175.0
77.5°	190.0	199.2	191.1	176.2	159.7	145.9	137.6	132.2	131.0	127.9	129.4
80°	145.3	151.2	143.4	133.4	120.2	110.7	104.8	101.8	98.2	97.0	99.4
82.5°	104.3	106.9	103.0	96.2	86.4	80.2	76.2	72.8	72.0	72.2	72.2
85°	54.2	53.6	53.0	47.0	44.1	39.9	37.5	36.9	36.3	37.5	38.7
87.5°	19.5	19.9	19.3	17.2	15.6	13.9	13.3	12.7	13.3	13.9	14.6
90°	7.2	6.5	5.8	5.0	4.0	3.1	2.2	1.2	2.2	3.1	4.0
92.5°	14.5	14.0	13.5	12.7	11.6	10.5	9.5	8.4	9.5	10.5	11.6
95°	28.4	27.8	27.2	26.5	25.7	25.0	24.2	23.4	24.2	25.0	25.7
97.5°	45.5	44.8	44.1	43.4	42.8	42.1	41.5	40.9	41.5	42.1	42.8
100°	58.1	57.3	56.6	56.1	55.6	55.3	54.9	54.6	54.9	55.3	55.6
102.5°	71.4	70.7	70.0	69.6	69.4	69.2	69.1	69.0	69.1	69.2	69.4
105°	92.1	91.8	91.4	91.3	91.2	91.1	91.0	90.9	91.0	91.1	91.2
107.5°	114.5	114.5	114.4	114.3	114.3	114.2	114.0	113.9	114.0	114.2	114.3
110°	130.1	130.2	130.3	130.2	130.0	129.8	129.7	129.5	129.7	129.8	130.0



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	145.5	145.7	145.9	145.9	145.9	145.9	145.8	145.8	145.8	145.9	145.9
115°	169.7	169.9	170.0	170.1	170.1	170.1	170.1	170.1	170.1	170.1	170.1
117.5°	193.0	193.2	193.3	193.3	193.3	193.2	193.1	193.0	193.1	193.2	193.3
120°	209.2	209.5	209.7	209.7	209.4	209.1	208.7	208.4	208.7	209.1	209.4
122.5°	224.5	224.7	224.8	224.8	224.6	224.5	224.4	224.3	224.4	224.5	224.6
125°	247.5	247.6	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7	247.7
127.5°	269.8	270.0	270.2	270.1	269.8	269.6	269.3	269.1	269.3	269.6	269.8
130°	285.2	285.2	285.2	285.1	284.8	284.6	284.3	284.0	284.3	284.6	284.8
132.5°	300.0	300.1	300.1	300.1	299.9	299.7	299.5	299.3	299.5	299.7	299.9
135°	321.8	321.8	321.8	321.6	321.1	320.6	320.0	319.5	320.0	320.6	321.1
137.5°	343.0	342.9	342.7	342.5	342.2	342.0	341.8	341.6	341.8	342.0	342.2
140°	357.0	357.0	357.0	356.9	356.7	356.5	356.4	356.2	356.4	356.5	356.7
142.5°	370.2	370.3	370.4	370.3	370.1	370.0	369.8	369.6	369.8	370.0	370.1
145°	389.9	389.9	389.8	389.6	389.3	388.9	388.6	388.2	388.6	388.9	389.3
147.5°	408.3	408.4	408.5	408.3	407.9	407.4	407.0	406.7	407.0	407.4	407.9
150°	419.4	419.4	419.4	419.2	418.9	418.5	418.2	417.8	418.2	418.5	418.9
152.5°	429.6	429.5	429.5	429.3	429.1	428.9	428.7	428.4	428.7	428.9	429.1
155°	444.5	444.6	444.7	444.8	444.8	444.8	444.8	444.8	444.8	444.8	444.8
157.5°	457.8	457.8	457.8	457.9	458.1	458.2	458.3	458.5	458.3	458.2	458.1
160°	466.1	466.1	466.2	466.3	466.4	466.5	466.6	466.7	466.6	466.5	466.4
162.5°	472.9	472.9	473.0	473.2	473.5	473.6	473.9	474.2	473.9	473.6	473.5
165°	482.6	482.8	482.9	483.1	483.4	483.6	483.9	484.1	483.9	483.6	483.4
167.5°	490.3	490.3	490.3	490.4	490.9	491.2	491.5	491.9	491.5	491.2	490.9
170°	494.6	494.5	494.4	494.6	495.0	495.4	495.8	496.3	495.8	495.4	495.0
172.5°	497.8	497.7	497.7	497.9	498.3	498.7	499.0	499.4	499.0	498.7	498.3
175°	501.5	501.6	501.7	502.0	502.4	502.8	503.3	503.7	503.3	502.8	502.4
177.5°	503.5	503.5	503.5	503.7	504.0	504.4	504.7	505.1	504.7	504.4	504.0
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1409.2	1405.0	1398.8	1390.2	1383.0	1375.4	1373.6	1370.6	1376.4	1371.6	1370.2
5°	1363.0	1350.6	1334.5	1316.0	1305.3	1289.9	1286.9	1280.9	1275.0	1274.4	1268.4
7.5°	1314.1	1295.8	1274.7	1255.9	1238.5	1221.6	1210.6	1208.2	1199.4	1194.2	1188.3
10°	1282.7	1260.1	1235.7	1217.8	1197.6	1179.7	1167.3	1160.1	1154.1	1147.5	1141.6
12.5°	1245.5	1221.5	1201.4	1182.1	1158.0	1144.4	1123.9	1111.5	1110.3	1110.4	1094.9
15°	1202.3	1178.5	1147.5	1120.2	1107.1	1080.9	1069.6	1055.3	1046.4	1037.4	1030.4
17.5°	1153.0	1123.3	1099.2	1067.7	1042.7	1021.8	1007.0	998.4	985.0	972.3	963.2
20°	1122.0	1090.5	1064.8	1031.5	1004.1	978.5	966.0	954.2	944.0	933.3	923.2
22.5°	1090.5	1057.6	1026.2	993.9	968.5	941.4	929.4	913.2	903.5	897.6	887.4
25°	1041.0	1005.3	969.6	938.7	912.5	888.6	872.6	860.1	849.4	844.6	838.1
27.5°	987.2	951.7	917.2	882.1	852.4	835.1	822.3	812.8	806.7	800.3	797.4
30°	953.0	916.0	879.2	846.4	819.0	801.8	789.9	783.3	778.5	775.6	772.6
32.5°	918.2	881.8	842.9	813.0	788.5	773.2	764.1	757.6	755.2	754.1	753.0
35°	862.5	825.5	789.9	763.1	739.9	733.9	726.2	722.6	721.4	725.6	727.4
37.5°	808.6	774.3	741.4	715.4	700.3	691.6	688.9	689.1	693.3	697.0	701.3
40°	773.8	740.5	709.5	686.9	672.6	667.3	666.1	669.0	673.8	678.0	682.7
42.5°	739.9	707.1	679.0	657.8	647.8	642.9	643.7	646.6	653.3	658.4	665.6
45°	687.5	660.1	632.7	615.4	607.1	608.3	608.3	613.6	620.2	627.9	635.7
47.5°	638.1	610.4	588.0	573.4	569.1	568.1	571.4	578.4	587.8	597.4	608.2
50°	604.8	578.5	558.9	545.8	541.1	542.9	547.6	554.1	565.4	577.4	588.7
52.5°	570.9	547.1	528.9	516.8	513.4	516.7	521.4	531.8	541.7	554.5	568.2
55°	518.4	498.2	483.9	475.0	473.8	475.6	481.0	492.2	506.5	522.6	535.7
57.5°	466.1	449.3	436.2	430.0	430.6	432.2	441.1	454.5	469.8	486.9	503.8
60°	430.9	415.4	404.8	400.0	400.5	404.2	414.8	427.4	446.4	463.0	481.0
62.5°	397.6	384.0	373.8	369.5	368.7	376.5	386.8	399.8	418.8	437.4	456.7
65°	344.1	333.3	325.0	322.6	324.4	330.4	343.5	360.7	376.8	396.4	416.6
67.5°	291.6	282.8	277.2	278.2	280.3	289.1	300.1	315.0	333.2	353.5	373.6
70°	258.3	249.9	245.2	245.8	249.4	260.1	269.7	284.5	304.2	325.0	341.6
72.5°	224.0	218.5	214.3	216.8	220.3	227.7	239.6	254.5	271.8	291.2	308.8
75°	172.0	172.0	169.6	171.4	176.8	183.9	192.9	208.4	225.6	241.1	255.4
77.5°	127.6	126.3	127.9	130.0	133.1	141.5	151.8	162.8	175.8	191.3	203.1
80°	97.6	98.2	101.2	104.8	106.0	112.5	123.2	133.4	143.4	156.5	167.8
82.5°	73.4	74.0	75.5	80.0	81.2	88.3	95.1	105.2	114.4	123.2	132.6
85°	39.9	39.9	42.9	44.6	47.6	52.3	56.6	62.5	70.9	76.8	85.7
87.5°	16.3	16.4	18.4	19.5	21.1	23.6	24.7	30.0	32.0	34.5	38.8
90°	5.0	5.8	6.5	7.2	7.9	8.6	9.1	9.6	10.2	10.7	11.0
92.5°	12.7	13.5	14.0	14.5	15.0	15.4	15.8	16.1	16.4	16.7	16.9
95°	26.5	27.2	27.8	28.4	29.0	29.6	29.9	30.1	30.4	30.7	30.8
97.5°	43.4	44.1	44.8	45.5	46.1	46.9	47.2	47.5	47.9	48.1	48.3
100°	56.1	56.6	57.3	58.1	58.9	59.7	59.8	60.0	60.2	60.4	60.4
102.5°	69.6	70.0	70.7	71.4	72.1	72.8	73.0	73.3	73.5	73.8	74.0
105°	91.3	91.4	91.8	92.1	92.5	92.8	93.1	93.4	93.7	93.9	94.2
107.5°	114.3	114.4	114.5	114.5	114.6	114.6	114.9	115.1	115.4	115.6	115.7
110°	130.2	130.3	130.2	130.1	130.0	129.9	129.8	129.6	129.4	129.2	129.2



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	145.9	145.9	145.7	145.5	145.3	145.3	145.2	145.2	145.1	145.1	145.1
115°	170.1	170.0	169.9	169.7	169.5	169.4	169.3	169.2	169.1	169.0	168.9
117.5°	193.3	193.3	193.2	193.0	193.0	192.8	192.5	192.3	191.9	191.7	191.4
120°	209.7	209.7	209.5	209.2	209.0	208.7	208.3	207.8	207.4	207.0	206.9
122.5°	224.8	224.8	224.7	224.5	224.5	224.4	224.0	223.8	223.4	223.2	222.8
125°	247.7	247.7	247.6	247.5	247.5	247.4	247.2	247.0	246.8	246.7	246.5
127.5°	270.1	270.2	270.0	269.8	269.8	269.6	269.4	269.2	269.1	268.9	268.7
130°	285.1	285.2	285.2	285.2	285.2	285.2	285.0	284.8	284.6	284.5	284.2
132.5°	300.1	300.1	300.1	300.0	300.0	299.9	299.7	299.5	299.4	299.2	299.0
135°	321.6	321.8	321.8	321.8	321.8	321.8	321.7	321.5	321.3	321.2	321.0
137.5°	342.5	342.7	342.9	343.0	343.1	343.3	343.0	342.8	342.6	342.3	342.2
140°	356.9	357.0	357.0	357.0	357.0	357.0	356.9	356.8	356.7	356.6	356.5
142.5°	370.3	370.4	370.3	370.2	370.1	370.1	370.1	370.1	370.1	370.1	370.0
145°	389.6	389.8	389.9	389.9	390.0	390.1	390.0	389.9	389.9	389.8	389.6
147.5°	408.3	408.5	408.4	408.3	408.3	408.2	408.1	408.0	407.9	407.9	407.9
150°	419.2	419.4	419.4	419.4	419.4	419.4	419.4	419.4	419.4	419.4	419.4
152.5°	429.3	429.5	429.5	429.6	429.6	429.7	429.9	430.2	430.3	430.6	430.5
155°	444.8	444.7	444.6	444.5	444.4	444.4	444.7	445.1	445.4	445.7	445.7
157.5°	457.9	457.8	457.8	457.8	457.7	457.7	458.0	458.2	458.5	458.7	458.7
160°	466.3	466.2	466.1	466.1	466.0	465.9	466.1	466.4	466.7	466.9	466.8
162.5°	473.2	473.0	472.9	472.9	472.8	472.7	473.2	473.6	474.2	474.6	474.6
165°	483.1	482.9	482.8	482.6	482.4	482.2	482.8	483.3	483.8	484.3	484.4
167.5°	490.4	490.3	490.3	490.3	490.3	490.3	490.9	491.4	491.9	492.4	492.4
170°	494.6	494.4	494.5	494.6	494.6	494.7	495.2	495.8	496.3	496.8	496.7
172.5°	497.9	497.7	497.7	497.8	497.8	497.8	498.4	499.0	499.6	500.2	500.2
175°	502.0	501.7	501.6	501.5	501.4	501.4	502.0	502.6	503.2	503.8	503.8
177.5°	503.7	503.5	503.5	503.5	503.5	503.5	504.0	504.5	505.0	505.5	505.4
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1369.2	1368.3	1364.9	1364.5	1364.9	1368.3	1369.2	1370.2	1371.6	1376.4	1370.6
5°	1264.8	1261.9	1260.1	1266.6	1260.1	1261.9	1264.8	1268.4	1274.4	1275.0	1280.9
7.5°	1186.1	1183.8	1178.5	1176.9	1178.5	1183.8	1186.1	1188.3	1194.2	1199.4	1208.2
10°	1135.7	1133.2	1128.5	1127.3	1128.5	1133.2	1135.7	1141.6	1147.5	1154.1	1160.1
12.5°	1087.1	1082.4	1081.4	1082.5	1081.4	1082.4	1087.1	1094.9	1110.4	1110.3	1111.5
15°	1022.6	1020.2	1013.7	1015.5	1013.7	1020.2	1022.6	1030.4	1037.4	1046.4	1055.3
17.5°	959.0	956.1	948.2	955.2	948.2	956.1	959.0	963.2	972.3	985.0	998.4
20°	919.0	914.2	910.1	909.5	910.1	914.2	919.0	923.2	933.3	944.0	954.2
22.5°	880.9	876.7	876.2	872.4	876.2	876.7	880.9	887.4	897.6	903.5	913.2
25°	833.3	829.1	827.9	825.0	827.9	829.1	833.3	838.1	844.6	849.4	860.1
27.5°	796.8	794.7	792.6	793.5	792.6	794.7	796.8	797.4	800.3	806.7	812.8
30°	774.4	773.8	772.6	772.6	772.6	773.8	774.4	772.6	775.6	778.5	783.3
32.5°	755.8	755.7	756.4	756.4	756.4	755.7	755.8	753.0	754.1	755.2	757.6
35°	729.7	731.5	732.7	730.9	732.7	731.5	729.7	727.4	725.6	721.4	722.6
37.5°	706.2	707.9	709.6	711.6	709.6	707.9	706.2	701.3	697.0	693.3	689.1
40°	688.0	692.2	693.4	696.4	693.4	692.2	688.0	682.7	678.0	673.8	669.0
42.5°	670.9	675.5	678.6	679.2	678.6	675.5	670.9	665.6	658.4	653.3	646.6
45°	644.6	649.4	653.6	653.6	653.6	649.4	644.6	635.7	627.9	620.2	613.6
47.5°	617.3	624.2	628.4	629.5	628.4	624.2	617.3	608.2	597.4	587.8	578.4
50°	598.8	607.1	611.3	614.2	611.3	607.1	598.8	588.7	577.4	565.4	554.1
52.5°	580.7	589.0	594.6	596.2	594.6	589.0	580.7	568.2	554.5	541.7	531.8
55°	549.4	561.3	567.8	570.2	567.8	561.3	549.4	535.7	522.6	506.5	492.2
57.5°	519.9	530.8	538.5	540.2	538.5	530.8	519.9	503.8	486.9	469.8	454.5
60°	497.0	508.9	518.4	520.2	518.4	508.9	497.0	481.0	463.0	446.4	427.4
62.5°	473.6	486.0	494.6	499.3	494.6	486.0	473.6	456.7	437.4	418.8	399.8
65°	433.3	445.8	454.2	455.9	454.2	445.8	433.3	416.6	396.4	376.8	360.7
67.5°	389.3	401.7	407.3	410.7	407.3	401.7	389.3	373.6	353.5	333.2	315.0
70°	358.3	368.4	374.4	377.4	374.4	368.4	358.3	341.6	325.0	304.2	284.5
72.5°	323.0	333.6	340.6	341.2	340.6	333.6	323.0	308.8	291.2	271.8	254.5
75°	269.1	278.5	282.1	282.1	282.1	278.5	269.1	255.4	241.1	225.6	208.4
77.5°	212.9	217.8	222.4	223.3	222.4	217.8	212.9	203.1	191.3	175.8	162.8
80°	176.8	179.8	183.3	183.3	183.3	179.8	176.8	167.8	156.5	143.4	133.4
82.5°	139.7	142.2	145.7	145.3	145.7	142.2	139.7	132.6	123.2	114.4	105.2
85°	84.6	89.9	89.3	88.1	89.3	89.9	84.6	85.7	76.8	70.9	62.5
87.5°	40.3	40.8	42.3	43.3	42.3	40.8	40.3	38.8	34.5	32.0	30.0
90°	11.2	11.4	11.5	11.7	11.5	11.4	11.2	11.0	10.7	10.2	9.6
92.5°	17.0	17.1	17.2	17.3	17.2	17.1	17.0	16.9	16.7	16.4	16.1
95°	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.8	30.7	30.4	30.1
97.5°	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.1	47.9	47.5
100°	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.2	60.0
102.5°	74.0	74.0	74.1	74.2	74.1	74.0	74.0	74.0	73.8	73.5	73.3
105°	94.5	94.7	95.0	95.2	95.0	94.7	94.5	94.2	93.9	93.7	93.4
107.5°	115.7	115.7	115.6	115.6	115.6	115.7	115.7	115.7	115.6	115.4	115.1
110°	129.5	129.8	130.0	130.3	130.0	129.8	129.5	129.2	129.2	129.4	129.6



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
112.5°	145.2	145.2	145.3	145.3	145.3	145.2	145.2	145.1	145.1	145.1	145.2
115°	168.8	168.8	168.7	168.6	168.7	168.8	168.8	168.9	169.0	169.1	169.2
117.5°	191.2	191.1	190.9	190.7	190.9	191.1	191.2	191.4	191.7	191.9	192.3
120°	207.1	207.2	207.4	207.6	207.4	207.2	207.1	206.9	207.0	207.4	207.8
122.5°	222.6	222.2	221.9	221.6	221.9	222.2	222.6	222.8	223.2	223.4	223.8
125°	246.3	246.2	246.0	245.8	246.0	246.2	246.3	246.5	246.7	246.8	247.0
127.5°	268.6	268.5	268.4	268.2	268.4	268.5	268.6	268.7	268.9	269.1	269.2
130°	283.9	283.5	283.2	282.8	283.2	283.5	283.9	284.2	284.5	284.6	284.8
132.5°	298.9	298.8	298.6	298.5	298.6	298.8	298.9	299.0	299.2	299.4	299.5
135°	320.7	320.5	320.2	319.9	320.2	320.5	320.7	321.0	321.2	321.3	321.5
137.5°	342.3	342.3	342.4	342.5	342.4	342.3	342.3	342.2	342.3	342.6	342.8
140°	356.5	356.4	356.3	356.2	356.3	356.4	356.5	356.5	356.6	356.7	356.8
142.5°	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.0	370.1	370.1	370.1
145°	389.3	389.1	388.8	388.6	388.8	389.1	389.3	389.6	389.8	389.9	389.9
147.5°	407.8	407.7	407.6	407.5	407.6	407.7	407.8	407.9	407.9	407.9	408.0
150°	419.3	419.2	419.1	419.0	419.1	419.2	419.3	419.4	419.4	419.4	419.4
152.5°	430.3	430.1	429.9	429.6	429.9	430.1	430.3	430.5	430.6	430.3	430.2
155°	445.4	445.1	444.7	444.4	444.7	445.1	445.4	445.7	445.7	445.4	445.1
157.5°	458.5	458.1	457.9	457.5	457.9	458.1	458.5	458.7	458.7	458.5	458.2
160°	466.4	466.0	465.5	465.0	465.5	466.0	466.4	466.8	466.9	466.7	466.4
162.5°	474.2	473.7	473.3	472.9	473.3	473.7	474.2	474.6	474.6	474.2	473.6
165°	484.1	483.7	483.4	483.0	483.4	483.7	484.1	484.4	484.3	483.8	483.3
167.5°	491.9	491.4	490.8	490.3	490.8	491.4	491.9	492.4	492.4	491.9	491.4
170°	496.1	495.5	494.9	494.3	494.9	495.5	496.1	496.7	496.8	496.3	495.8
172.5°	499.6	498.9	498.3	497.7	498.3	498.9	499.6	500.2	500.2	499.6	499.0
175°	503.2	502.6	502.0	501.4	502.0	502.6	503.2	503.8	503.8	503.2	502.6
177.5°	504.9	504.4	503.8	503.3	503.8	504.4	504.9	505.4	505.5	505.0	504.5
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1373.6	1375.4	1383.0	1390.2	1398.8	1405.0	1409.2	1414.0	1424.0	1432.1	1439.7
5°	1286.9	1289.9	1305.3	1316.0	1334.5	1350.6	1363.0	1376.7	1392.8	1414.8	1435.0
7.5°	1210.6	1221.6	1238.5	1255.9	1274.7	1295.8	1314.1	1334.7	1362.4	1392.7	1423.8
10°	1167.3	1179.7	1197.6	1217.8	1235.7	1260.1	1282.7	1307.1	1338.6	1375.5	1412.5
12.5°	1123.9	1144.4	1158.0	1182.1	1201.4	1221.5	1245.5	1277.6	1314.3	1353.1	1397.7
15°	1069.6	1080.9	1107.1	1120.2	1147.5	1178.5	1202.3	1234.5	1270.1	1321.4	1371.4
17.5°	1007.0	1021.8	1042.7	1067.7	1099.2	1123.3	1153.0	1186.0	1231.1	1281.9	1344.5
20°	966.0	978.5	1004.1	1031.5	1064.8	1090.5	1122.0	1154.1	1200.6	1254.7	1320.2
22.5°	929.4	941.4	968.5	993.9	1026.2	1057.6	1090.5	1127.9	1172.4	1229.5	1296.4
25°	872.6	888.6	912.5	938.7	969.6	1005.3	1041.0	1074.4	1122.0	1182.1	1253.5
27.5°	822.3	835.1	852.4	882.1	917.2	951.7	987.2	1029.2	1074.9	1138.4	1212.5
30°	789.9	801.8	819.0	846.4	879.2	916.0	953.0	993.4	1041.0	1104.1	1179.7
32.5°	764.1	773.2	788.5	813.0	842.9	881.8	918.2	960.1	1010.0	1072.2	1145.9
35°	726.2	733.9	739.9	763.1	789.9	825.5	862.5	907.1	955.3	1014.3	1088.0
37.5°	688.9	691.6	700.3	715.4	741.4	774.3	808.6	852.5	901.9	961.7	1028.3
40°	666.1	667.3	672.6	686.9	709.5	740.5	773.8	817.3	864.3	920.8	986.9
42.5°	643.7	642.9	647.8	657.8	679.0	707.1	739.9	779.6	826.6	878.9	941.2
45°	608.3	608.3	607.1	615.4	632.7	660.1	687.5	725.6	764.8	816.1	868.4
47.5°	571.4	568.1	569.1	573.4	588.0	610.4	638.1	669.3	703.9	747.3	793.2
50°	547.6	542.9	541.1	545.8	558.9	578.5	604.8	632.1	664.9	702.9	742.3
52.5°	521.4	516.7	513.4	516.8	528.9	547.1	570.9	595.0	624.4	655.3	689.4
55°	481.0	475.6	473.8	475.0	483.9	498.2	518.4	540.4	562.5	588.1	611.9
57.5°	441.1	432.2	430.6	430.0	436.2	449.3	466.1	485.3	501.3	516.8	542.1
60°	414.8	404.2	400.5	400.0	404.8	415.4	430.9	450.0	461.3	472.0	494.0
62.5°	386.8	376.5	368.7	369.5	373.8	384.0	397.6	411.4	418.9	430.6	445.5
65°	343.5	330.4	324.4	322.6	325.0	333.3	344.1	352.9	361.3	366.1	380.3
67.5°	300.1	289.1	280.3	278.2	277.2	282.8	291.6	297.0	303.0	307.1	315.6
70°	269.7	260.1	249.4	245.8	245.2	249.9	258.3	258.9	267.3	269.1	277.9
72.5°	239.6	227.7	220.3	216.8	214.3	218.5	224.0	225.6	230.1	233.3	238.0
75°	192.9	183.9	176.8	171.4	169.6	172.0	172.0	175.0	178.0	179.8	185.1
77.5°	151.8	141.5	133.1	130.0	127.9	126.3	127.6	129.4	127.9	131.0	132.2
80°	123.2	112.5	106.0	104.8	101.2	98.2	97.6	99.4	97.0	98.2	101.8
82.5°	95.1	88.3	81.2	80.0	75.5	74.0	73.4	72.2	72.2	72.0	72.8
85°	56.6	52.3	47.6	44.6	42.9	39.9	39.9	38.7	37.5	36.3	36.9
87.5°	24.7	23.6	21.1	19.5	18.4	16.4	16.3	14.6	13.9	13.3	12.7
90°	9.1	8.6	7.9	7.2	6.5	5.8	5.0	4.0	3.1	2.2	1.2
92.5°	15.8	15.4	15.0	14.5	14.0	13.5	12.7	11.6	10.5	9.5	8.4
95°	29.9	29.6	29.0	28.4	27.8	27.2	26.5	25.7	25.0	24.2	23.4
97.5°	47.2	46.9	46.1	45.5	44.8	44.1	43.4	42.8	42.1	41.5	40.9
100°	59.8	59.7	58.9	58.1	57.3	56.6	56.1	55.6	55.3	54.9	54.6
102.5°	73.0	72.8	72.1	71.4	70.7	70.0	69.6	69.4	69.2	69.1	69.0
105°	93.1	92.8	92.5	92.1	91.8	91.4	91.3	91.2	91.1	91.0	90.9
107.5°	114.9	114.6	114.6	114.5	114.5	114.4	114.3	114.3	114.2	114.0	113.9
110°	129.8	129.9	130.0	130.1	130.2	130.3	130.2	130.0	129.8	129.7	129.5



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
112.5°	145.2	145.3	145.3	145.5	145.7	145.9	145.9	145.9	145.9	145.8	145.8
115°	169.3	169.4	169.5	169.7	169.9	170.0	170.1	170.1	170.1	170.1	170.1
117.5°	192.5	192.8	193.0	193.0	193.2	193.3	193.3	193.3	193.2	193.1	193.0
120°	208.3	208.7	209.0	209.2	209.5	209.7	209.7	209.4	209.1	208.7	208.4
122.5°	224.0	224.4	224.5	224.5	224.7	224.8	224.8	224.6	224.5	224.4	224.3
125°	247.2	247.4	247.5	247.5	247.6	247.7	247.7	247.7	247.7	247.7	247.7
127.5°	269.4	269.6	269.8	269.8	270.0	270.2	270.1	269.8	269.6	269.3	269.1
130°	285.0	285.2	285.2	285.2	285.2	285.2	285.1	284.8	284.6	284.3	284.0
132.5°	299.7	299.9	300.0	300.0	300.1	300.1	300.1	299.9	299.7	299.5	299.3
135°	321.7	321.8	321.8	321.8	321.8	321.8	321.6	321.1	320.6	320.0	319.5
137.5°	343.0	343.3	343.1	343.0	342.9	342.7	342.5	342.2	342.0	341.8	341.6
140°	356.9	357.0	357.0	357.0	357.0	357.0	356.9	356.7	356.5	356.4	356.2
142.5°	370.1	370.1	370.1	370.2	370.3	370.4	370.3	370.1	370.0	369.8	369.6
145°	390.0	390.1	390.0	389.9	389.9	389.8	389.6	389.3	388.9	388.6	388.2
147.5°	408.1	408.2	408.3	408.3	408.4	408.5	408.3	407.9	407.4	407.0	406.7
150°	419.4	419.4	419.4	419.4	419.4	419.4	419.2	418.9	418.5	418.2	417.8
152.5°	429.9	429.7	429.6	429.6	429.5	429.5	429.3	429.1	428.9	428.7	428.4
155°	444.7	444.4	444.4	444.5	444.6	444.7	444.8	444.8	444.8	444.8	444.8
157.5°	458.0	457.7	457.7	457.8	457.8	457.8	457.9	458.1	458.2	458.3	458.5
160°	466.1	465.9	466.0	466.1	466.1	466.2	466.3	466.4	466.5	466.6	466.7
162.5°	473.2	472.7	472.8	472.9	472.9	473.0	473.2	473.5	473.6	473.9	474.2
165°	482.8	482.2	482.4	482.6	482.8	482.9	483.1	483.4	483.6	483.9	484.1
167.5°	490.9	490.3	490.3	490.3	490.3	490.3	490.4	490.9	491.2	491.5	491.9
170°	495.2	494.7	494.6	494.6	494.5	494.4	494.6	495.0	495.4	495.8	496.3
172.5°	498.4	497.8	497.8	497.8	497.7	497.7	497.9	498.3	498.7	499.0	499.4
175°	502.0	501.4	501.4	501.5	501.6	501.7	502.0	502.4	502.8	503.3	503.7
177.5°	504.0	503.5	503.5	503.5	503.5	503.5	503.7	504.0	504.4	504.7	505.1
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



TEST NUMBER: P332806-935

CATALOG NUMBER: S124DIW-S1020D470U935-4F0-1E-UDD-A1

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1446.4	1451.1	1457.3	1467.8	1471.6	1476.4	1483.1	1482.6	1484.5	1491.6	1506.8
5°	1451.7	1470.2	1488.1	1509.5	1532.1	1547.0	1567.2	1579.7	1592.2	1608.3	1635.6
7.5°	1453.9	1483.2	1515.9	1553.5	1587.0	1625.6	1655.6	1683.9	1709.6	1743.5	1776.2
10°	1450.5	1489.8	1532.1	1579.7	1630.3	1673.2	1711.8	1755.9	1793.4	1834.4	1871.4
12.5°	1444.3	1491.8	1548.3	1601.6	1660.8	1724.1	1772.3	1816.8	1866.7	1914.0	1970.9
15°	1430.3	1495.2	1561.3	1631.5	1710.6	1783.8	1853.5	1911.2	1964.8	2035.7	2110.1
17.5°	1412.5	1482.5	1565.7	1650.8	1733.5	1817.2	1903.4	1990.2	2057.8	2145.8	2204.0
20°	1395.8	1476.7	1562.5	1663.6	1746.4	1850.5	1936.2	2020.2	2113.0	2200.5	2270.1
22.5°	1372.4	1461.0	1552.0	1652.7	1761.6	1865.8	1964.8	2055.9	2148.7	2243.9	2328.2
25°	1342.8	1423.1	1530.9	1645.2	1753.5	1866.6	1980.3	2094.6	2194.5	2295.2	2373.7
27.5°	1292.4	1393.8	1494.1	1612.1	1732.4	1860.4	1981.9	2101.6	2206.3	2289.1	2337.8
30°	1266.6	1354.7	1463.6	1582.1	1712.4	1849.9	1976.7	2094.0	2191.6	2257.6	2277.3
32.5°	1228.6	1319.5	1426.0	1548.8	1686.7	1828.0	1960.1	2070.6	2152.1	2186.7	2163.0
35°	1172.0	1254.1	1361.8	1487.5	1630.9	1781.5	1911.9	2005.3	2046.9	2014.2	1932.7
37.5°	1104.1	1185.5	1293.7	1417.1	1565.6	1718.6	1836.5	1903.8	1889.9	1808.5	1687.0
40°	1056.5	1132.7	1235.7	1369.0	1513.6	1667.2	1770.7	1807.1	1769.0	1652.3	1523.2
42.5°	1003.7	1078.0	1181.4	1309.9	1463.2	1604.8	1695.1	1698.1	1634.2	1494.7	1365.0
45°	923.2	994.0	1091.7	1225.5	1367.2	1500.6	1560.0	1530.9	1413.1	1278.5	1148.1
47.5°	843.8	905.2	1001.4	1128.5	1263.1	1375.3	1404.8	1352.3	1226.8	1096.1	975.3
50°	785.7	847.6	938.1	1059.5	1189.2	1286.2	1300.5	1230.9	1107.7	976.1	881.5
52.5°	730.0	791.4	878.6	990.9	1109.7	1197.2	1197.7	1117.1	994.4	877.1	789.1
55°	648.2	703.5	782.1	882.7	988.7	1057.1	1040.4	957.1	850.6	748.8	672.0
57.5°	569.4	617.6	690.0	773.9	867.2	923.7	896.0	815.8	720.7	634.4	576.2
60°	518.4	564.3	626.2	705.3	783.9	827.9	801.8	729.1	641.6	572.0	521.4
62.5°	468.9	507.6	567.1	635.8	708.7	741.3	718.0	646.3	570.7	507.7	466.7
65°	398.8	430.3	477.9	536.9	589.9	617.9	598.2	531.5	473.8	428.5	395.8
67.5°	333.3	358.0	394.0	441.3	486.3	501.4	483.5	437.1	388.2	352.0	328.9
70°	288.1	311.3	341.6	378.0	417.2	433.3	415.4	378.6	338.7	305.3	282.8
72.5°	248.6	266.6	292.1	323.2	354.0	370.0	357.8	322.4	288.7	263.9	244.6
75°	189.2	204.7	222.6	244.6	268.5	279.1	268.5	244.0	220.8	202.3	188.6
77.5°	137.6	145.9	159.7	176.2	191.1	199.2	190.0	173.4	159.3	146.6	139.9
80°	104.8	110.7	120.2	133.4	143.4	151.2	145.3	131.6	120.2	111.9	108.9
82.5°	76.2	80.2	86.4	96.2	103.0	106.9	104.3	94.4	89.7	82.4	79.4
85°	37.5	39.9	44.1	47.0	53.0	53.6	54.2	50.0	45.8	44.1	41.7
87.5°	13.3	13.9	15.6	17.2	19.3	19.9	19.5	19.6	17.9	17.6	15.8
90°	2.2	3.1	4.0	5.0	5.8	6.5	7.2	7.9	8.6	9.1	9.6
92.5°	9.5	10.5	11.6	12.7	13.5	14.0	14.5	15.0	15.4	15.8	16.1
95°	24.2	25.0	25.7	26.5	27.2	27.8	28.4	29.0	29.6	29.9	30.1
97.5°	41.5	42.1	42.8	43.4	44.1	44.8	45.5	46.1	46.9	47.2	47.5
100°	54.9	55.3	55.6	56.1	56.6	57.3	58.1	58.9	59.7	59.8	60.0
102.5°	69.1	69.2	69.4	69.6	70.0	70.7	71.4	72.1	72.8	73.0	73.3
105°	91.0	91.1	91.2	91.3	91.4	91.8	92.1	92.5	92.8	93.1	93.4
107.5°	114.0	114.2	114.3	114.3	114.4	114.5	114.5	114.6	114.6	114.9	115.1
110°	129.7	129.8	130.0	130.2	130.3	130.2	130.1	130.0	129.9	129.8	129.6



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CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
112.5°	145.8	145.9	145.9	145.9	145.9	145.7	145.5	145.3	145.3	145.2	145.2
115°	170.1	170.1	170.1	170.1	170.0	169.9	169.7	169.5	169.4	169.3	169.2
117.5°	193.1	193.2	193.3	193.3	193.3	193.2	193.0	193.0	192.8	192.5	192.3
120°	208.7	209.1	209.4	209.7	209.7	209.5	209.2	209.0	208.7	208.3	207.8
122.5°	224.4	224.5	224.6	224.8	224.8	224.7	224.5	224.5	224.4	224.0	223.8
125°	247.7	247.7	247.7	247.7	247.7	247.6	247.5	247.5	247.4	247.2	247.0
127.5°	269.3	269.6	269.8	270.1	270.2	270.0	269.8	269.8	269.6	269.4	269.2
130°	284.3	284.6	284.8	285.1	285.2	285.2	285.2	285.2	285.2	285.0	284.8
132.5°	299.5	299.7	299.9	300.1	300.1	300.1	300.0	300.0	299.9	299.7	299.5
135°	320.0	320.6	321.1	321.6	321.8	321.8	321.8	321.8	321.8	321.7	321.5
137.5°	341.8	342.0	342.2	342.5	342.7	342.9	343.0	343.1	343.3	343.0	342.8
140°	356.4	356.5	356.7	356.9	357.0	357.0	357.0	357.0	357.0	356.9	356.8
142.5°	369.8	370.0	370.1	370.3	370.4	370.3	370.2	370.1	370.1	370.1	370.1
145°	388.6	388.9	389.3	389.6	389.8	389.9	389.9	390.0	390.1	390.0	389.9
147.5°	407.0	407.4	407.9	408.3	408.5	408.4	408.3	408.3	408.2	408.1	408.0
150°	418.2	418.5	418.9	419.2	419.4	419.4	419.4	419.4	419.4	419.4	419.4
152.5°	428.7	428.9	429.1	429.3	429.5	429.5	429.6	429.6	429.7	429.9	430.2
155°	444.8	444.8	444.8	444.8	444.7	444.6	444.5	444.4	444.4	444.7	445.1
157.5°	458.3	458.2	458.1	457.9	457.8	457.8	457.8	457.7	457.7	458.0	458.2
160°	466.6	466.5	466.4	466.3	466.2	466.1	466.1	466.0	465.9	466.1	466.4
162.5°	473.9	473.6	473.5	473.2	473.0	472.9	472.9	472.8	472.7	473.2	473.6
165°	483.9	483.6	483.4	483.1	482.9	482.8	482.6	482.4	482.2	482.8	483.3
167.5°	491.5	491.2	490.9	490.4	490.3	490.3	490.3	490.3	490.3	490.9	491.4
170°	495.8	495.4	495.0	494.6	494.4	494.5	494.6	494.6	494.7	495.2	495.8
172.5°	499.0	498.7	498.3	497.9	497.7	497.7	497.8	497.8	497.8	498.4	499.0
175°	503.3	502.8	502.4	502.0	501.7	501.6	501.5	501.4	501.4	502.0	502.6
177.5°	504.7	504.4	504.0	503.7	503.5	503.5	503.5	503.5	503.5	504.0	504.5
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5	504.5



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8	1436.8
2.5°	1514.5	1515.4	1519.7	1523.0	1524.0	1528.8	1529.2
5°	1647.5	1657.7	1677.3	1679.1	1682.0	1697.5	1685.7
7.5°	1803.5	1829.2	1846.3	1861.5	1867.0	1873.7	1872.3
10°	1903.5	1941.6	1960.7	1991.0	1992.2	1999.9	1995.2
12.5°	2004.0	2048.2	2083.0	2088.6	2114.1	2118.0	2124.7
15°	2146.3	2193.4	2241.6	2258.8	2294.0	2302.3	2315.4
17.5°	2280.2	2328.2	2362.1	2406.7	2421.1	2440.4	2427.2
20°	2353.5	2405.9	2448.7	2483.8	2498.7	2509.4	2508.3
22.5°	2397.8	2450.6	2485.4	2511.9	2525.8	2530.4	2530.1
25°	2425.5	2455.8	2466.6	2476.7	2461.3	2455.8	2458.2
27.5°	2348.4	2340.5	2312.6	2275.9	2237.7	2207.5	2191.1
30°	2242.2	2195.7	2153.4	2079.7	2041.6	2019.0	1998.7
32.5°	2091.7	2018.1	1936.8	1869.2	1825.9	1792.3	1787.3
35°	1833.8	1723.1	1623.8	1541.0	1498.1	1461.8	1453.5
37.5°	1559.1	1444.1	1354.6	1281.8	1235.7	1210.0	1186.1
40°	1376.7	1277.9	1189.8	1127.9	1092.8	1074.4	1059.5
42.5°	1236.2	1146.0	1058.4	1011.2	979.5	968.2	959.5
45°	1042.2	958.3	897.6	861.9	843.4	824.4	815.5
47.5°	886.8	818.6	778.5	748.2	728.4	717.1	711.4
50°	798.7	742.8	707.1	683.9	666.1	657.1	652.4
52.5°	720.7	674.8	644.7	626.3	614.2	607.6	605.7
55°	620.8	585.7	566.6	550.6	541.7	535.7	533.3
57.5°	539.6	512.6	497.1	483.9	480.4	475.4	473.8
60°	486.3	465.5	452.4	443.4	440.5	434.5	435.7
62.5°	439.1	422.1	411.0	405.8	401.9	396.9	398.6
65°	371.4	359.0	352.9	348.2	343.5	340.4	342.9
67.5°	311.7	303.1	295.0	292.2	289.9	289.4	286.9
70°	272.6	265.4	258.3	256.6	256.6	254.2	253.6
72.5°	235.0	229.7	225.0	223.7	221.8	222.7	220.2
75°	181.5	177.4	175.6	173.8	173.2	173.2	171.4
77.5°	134.1	131.0	128.2	128.2	126.1	125.3	125.0
80°	101.8	100.6	98.2	98.2	97.0	97.6	96.4
82.5°	76.5	74.9	74.4	73.4	71.8	71.9	70.7
85°	41.1	39.3	38.7	36.9	35.7	36.9	35.7
87.5°	16.3	15.9	15.5	14.6	14.2	14.2	12.8
90°	10.2	10.7	11.0	11.2	11.4	11.5	11.7
92.5°	16.4	16.7	16.9	17.0	17.1	17.2	17.3
95°	30.4	30.7	30.8	30.8	30.8	30.8	30.8
97.5°	47.9	48.1	48.3	48.3	48.3	48.3	48.3
100°	60.2	60.4	60.4	60.4	60.4	60.4	60.4
102.5°	73.5	73.8	74.0	74.0	74.0	74.1	74.2
105°	93.7	93.9	94.2	94.5	94.7	95.0	95.2
107.5°	115.4	115.6	115.7	115.7	115.7	115.6	115.6
110°	129.4	129.2	129.2	129.5	129.8	130.0	130.3



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CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
112.5°	145.1	145.1	145.1	145.2	145.2	145.3	145.3
115°	169.1	169.0	168.9	168.8	168.8	168.7	168.6
117.5°	191.9	191.7	191.4	191.2	191.1	190.9	190.7
120°	207.4	207.0	206.9	207.1	207.2	207.4	207.6
122.5°	223.4	223.2	222.8	222.6	222.2	221.9	221.6
125°	246.8	246.7	246.5	246.3	246.2	246.0	245.8
127.5°	269.1	268.9	268.7	268.6	268.5	268.4	268.2
130°	284.6	284.5	284.2	283.9	283.5	283.2	282.8
132.5°	299.4	299.2	299.0	298.9	298.8	298.6	298.5
135°	321.3	321.2	321.0	320.7	320.5	320.2	319.9
137.5°	342.6	342.3	342.2	342.3	342.3	342.4	342.5
140°	356.7	356.6	356.5	356.5	356.4	356.3	356.2
142.5°	370.1	370.1	370.0	370.0	370.0	370.0	370.0
145°	389.9	389.8	389.6	389.3	389.1	388.8	388.6
147.5°	407.9	407.9	407.9	407.8	407.7	407.6	407.5
150°	419.4	419.4	419.4	419.3	419.2	419.1	419.0
152.5°	430.3	430.6	430.5	430.3	430.1	429.9	429.6
155°	445.4	445.7	445.7	445.4	445.1	444.7	444.4
157.5°	458.5	458.7	458.7	458.5	458.1	457.9	457.5
160°	466.7	466.9	466.8	466.4	466.0	465.5	465.0
162.5°	474.2	474.6	474.6	474.2	473.7	473.3	472.9
165°	483.8	484.3	484.4	484.1	483.7	483.4	483.0
167.5°	491.9	492.4	492.4	491.9	491.4	490.8	490.3
170°	496.3	496.8	496.7	496.1	495.5	494.9	494.3
172.5°	499.6	500.2	500.2	499.6	498.9	498.3	497.7
175°	503.2	503.8	503.8	503.2	502.6	502.0	501.4
177.5°	505.0	505.5	505.4	504.9	504.4	503.8	503.3
180°	504.5	504.5	504.5	504.5	504.5	504.5	504.5

(END OF REPORT)