

# TEST REPORT FROM RFI GLOBAL SERVICES LTD

Test of: 7505 + MorphoRapID 12xx

To: FCC Part 15.109: 2008 Subpart B & RSS-Gen Issue 2 June 2007

# Test Report Serial No: RFI/RPT1/RP74872JD11A

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Checked By:	A. HENRIQUES
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Date of Issue:	23 June 2009

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RFI Global Services Ltd

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# 1. Customer Information

Company Name:	Coppernic
Address:	Les Fontaines de la Duranne 185 avenue Archimède 13857 Aix en Provence Cedex 3 France

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## 2. Summary of Testing

#### 2.1. General Information

Specification Reference:	47CFR15.109
Specification Title:	Code of Federal Regulations Volume 47 (Telecommunications) 2008: Part 15 Subpart B (Radio Frequency Devices) – Section 15.109
Specification Reference:	RSS-GEN Issue 2 June 2007
Specification Title:	General Requirements and Information for the Certification of Radiocommunication Equipment
Site Registration No:	FCC: 209735; Industry Canada: 3245B-2
Location of Testing:	RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.
Test Dates:	17 February to 19 February 2009

### 2.2. Summary of Test Results

FCC Reference (47CFR)	IC Reference	Measurement	Port Type	Result
Part 15.109(a)	RSS-Gen 4.10/6	Receiver/Idle Mode Radiated Spurious Emissions	Enclosure	<b>②</b>
Key to Results				
= Complied	= Did not comply			

## 2.3. Deviations from the Test Specification

For the measurements contained within this test report, there were no deviations from, additions to, or exclusions from the test specification identified above, nor from the requirements defined in the basic standards called up within it.

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## 3. Equipment Under Test (EUT)

### 3.1. Identification of Equipment Under Test (EUT)

Brand Name:	Coppernic
Model Name or Number:	7505 + MorphoRapID 12xx
Serial Number:	CH0FA8370155
IMEI Number:	354114010704816
Hardware Version Number:	В
Software Version Number:	A2
FCC ID Number:	XGKMR12XX
IC Number:	8402A-MR12XX

Description: Lithium-lon rechargeable battery	
Model Name or Number:	CH3000
Serial Number:	Not stated

Description:	Desktop docking station		
Model Name or Number:	CH4000		
Serial Number:	CH5IT8110455		

#### 3.2. Description of EUT

The equipment under test was a HSDPA/EDGE/GSM, WiFi & *Bluetooth* handheld terminal with fingerprint reader, imager, RFID and Smartcard accessories

#### 3.3. Modifications Incorporated in the EUT

No modifications were applied to the EUT during testing.

#### 3.4. Support Equipment

No support equipment was used to exercise the EUT during testing.

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# 4. Operation and Monitoring of the EUT during Testing

#### 4.1. Operating Modes

The EUT was tested in the following operating mode(s):

• Standby/Idle/Receive mode

#### 4.2. Configuration and Peripherals

The EUT was tested in the following configuration:

- RX/Idle mode radiated spurious emissions tests were performed with the following modules enabled but not transmitting:
  Bluetooth, RFID, Fingerprint scanner, Imager, GPS, GSM (not connected to a network but scanning all supported bands) and WiFi.
- The GPS receiver was enabled during all radiated spurious emissions tests.

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## 5. Measurements, Examinations and Derived Results

#### **5.1. General Comments**

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to Section 6. Measurement Uncertainty for details.

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## 5.2. Receiver/Idle Mode Radiated Emissions

# **Test Summary:**

FCC Part:	15.109	
Test Method Used:	As detailed in ANSI C63.4 Section 8 and relevant annexes	
Frequency Range:	9 kHz to 12.75 GHz	

# **Environmental Conditions:**

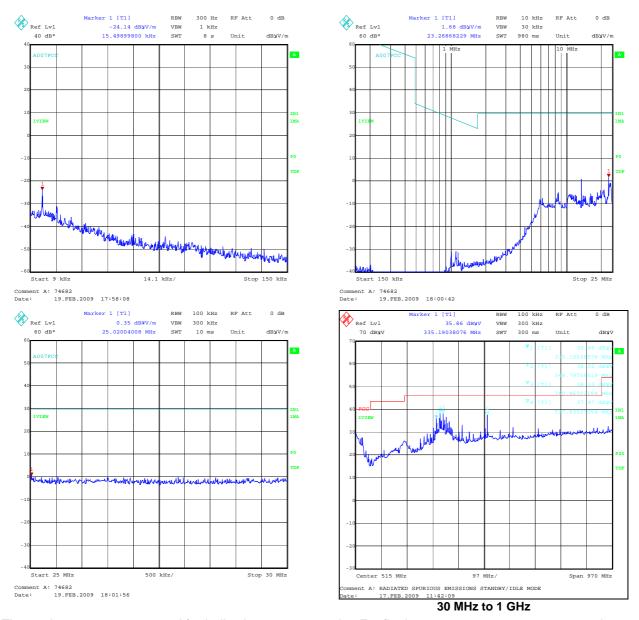
Temperature (°C):	24
Relative Humidity (%):	31

#### Results:

Frequency (MHz)	Antenna Polarity	Quasi Peak Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
335.872	Vertical	35.2	46.0	10.8	Complied
347.929	Vertical	37.6	46.0	8.4	Complied
359.950	Vertical	37.4	46.0	8.6	Complied
371.974	Vertical	36.9	46.0	9.1	Complied
527.965	Vertical	37.1	46.0	8.9	Complied

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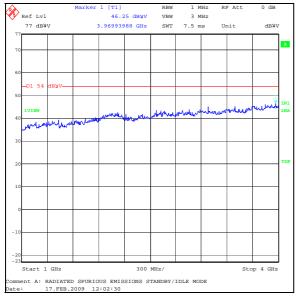
#### Receiver/Idle Mode Radiated Emissions (continued)

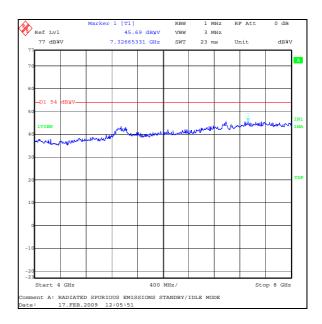


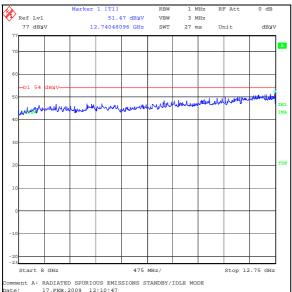
These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

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### Receiver/Idle Mode Radiated Emissions (continued)







These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

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#### **6. Measurement Uncertainty**

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor such that a confidence level of approximately 95% is maintained. For the purposes of this document "approximately" is interpreted as meaning "effectively" or "for most practical purposes".

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
Radiated Spurious Emissions	9 kHz to 30 MHz	95%	±2.94 dB
Radiated Spurious Emissions	30 MHz to 26.5 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty, the published guidance of the appropriate accreditation body is followed.

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# **Appendix 1. Test Equipment Used**

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A007	Antenna	Rohde & Schwarz	HFH2-Z2	880 458/020	29 Mar 2009	12
A1299	Antenna	Schaffner	CBL6143	5094	28 Jul 2008	12
A1534	Pre Amplifier	Hewlett Packard	8449B OPT H02	3008A00405	Calibrated before use	-
A1818	Antenna	EMCO	3115	00075692	25 Oct 2008	12
K0001	5m SA Chamber	Rainford EMC	N/A	N/A	13 Aug 2008	12
K0002	3m RSE Chamber	Rainford EMC	N/A	N/A	26 Aug 2008	12
M1124	Spectrum Analyser	Rohde & Schwarz	ESIB26	100046K	09 Mar 2009	12
M1273	Test Receiver	Rhode & Schwarz	ESIB 26	100275	01 Apr 2009	12

**NB** In accordance with UKAS requirements, all the measurement equipment is on a calibration schedule.

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