

FCC LISTED,
REGISTRATION
NUMBER: 905266

IC LISTED,
REGISTRATION
NUMBER: IC 4621

**CENTRO DE
TECNOLOGÍA DE LAS
COMUNICACIONES, S.A.**

Parque Tecnológico de Andalucía,
c/Severo Ochoa nº 2
29590 Campanillas/ Málaga/ España
Tel. 952 61 91 00 - Fax 952 61 91 13
MÁLAGA, C.I.F. A29 507 456
Registro Mercantil Tomo 1169 Libro 82
Folio 133 Hoja MA3729

TEST REPORT

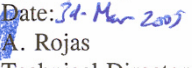
Report No.: 21888RET.101

TEST NAME: FCC PART 15.247 TESTING FOR BLUETOOTH RADIO DEVICE

Product : MOBILE PHONE WITH BLUETOOTH
Trade Mark : SONY ERICSSON
Model/type Ref. : K750
Manufacturer : SONY ERICSSON MOBILE COMMUNICATIONS AB
Requested by : SONY ERICSSON MOBILE COMMUNICATIONS AB
Other identification of the product : Industry Canada (IC): 4170B-A1022011
FCC ID: PY7A1022011
Type AAB-1022011-BV
Standard(s) : USA FCC Part 15.247, 15.205, 15.209
CANADA RSS-210

This test report includes 2 annexes and therefore the total number of pages is 51.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, and must not be reproduced except in full without the written approval of Centro de Tecnología de las Comunicaciones, S.A. (CETECOM).

Date: 2005-03-31	Test operator	Revised by:	Approved by:	Page: 1 of 7
	A. Llamas 	 J.C. Soler Consultant	 A. Rojas Technical Director	

INDEX

1. COMPETENCE AND GUARANTEES	3
2. GENERAL CONDITIONS	3
3. CHARACTERISTICS OF THE TEST	3
3.1 TEST REQUESTED.....	3
3.2 REQUIREMENTS AND METHOD	3
4. IDENTIFICATION DATA SUPPLIED BY THE APPLICANT.....	4
4.1 APPLICANT.....	4
4.2 REPRESENTATIVE	4
4.3 TEST SAMPLES SUPPLIER.....	4
4.4 IDENTIFICATION OF ITEM/ITEMS TESTED	5
5. USAGE OF SAMPLES, PERIOD OF TESTING AND ENVIRONMENTAL CONDITIONS	5
5.1 USAGE OF SAMPLES	5
5.2 PERIOD OF TESTING	5
5.3 ENVIROMENTAL CONDITIONS.....	6
6. TEST RESULTS	7
7. REMARKS AND COMMENTS.....	7
8. SUMMARY.....	7

ANNEXES

ANNEX A. TEST RESULTS

ANNEX B. PHOTOGRAPHS

Report No.:
21888RET.101

Date: 2005-03-31

Page: 2 of 7

1. COMPETENCE AND GUARANTEES

Centro de Tecnología de las Comunicaciones (CETECOM), S.A. is a laboratory with a measurement facility in compliance with the requirements of Section 2.948 of the FCC rules and has been added to the list of facilities whose measurements data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Registration Number: 905266.

Centro de Tecnología de las Comunicaciones (CETECOM), S.A. is a laboratory with a measurement site in compliance with the requirements of RSS 212, Issue 1 (Provisional) and has been added to the list of filed sites of the Canadian Certification and Engineering Bureau. Reference File Number: IC 4621.

In order to assure the traceability to other national and international laboratories, CETECOM has a calibration and maintenance programme for its measuring equipment.

CETECOM guarantees the reliability of the data presented in this report, which is the result of measurements and tests performed to the item under test on the date and under the conditions stated on the report and is based on the knowledge and technical facilities available at CETECOM at the time of execution of the test.

CETECOM is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the item under test and the results of the test.

2. GENERAL CONDITIONS

1. This report only refers to the item that has undergone the test.
2. This report does not constitute or imply by its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without written approval of CETECOM.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of CETECOM and the Accreditation Bodies.

3. CHARACTERISTICS OF THE TEST

3.1 TEST REQUESTED

Measurements for frequency hopping spread spectrum equipment (Bluetooth) operating in the 2400 MHz -2483.5 MHz band and using, according to FCC Part 15.247.

3.2 REQUIREMENTS AND METHOD

The test has been carried out according to FCC parts 15.33, 15.35, 15.205, 15.209, 15.247 and the document DA 00-705:"Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum Systems".

The testing was performed according to the procedure in ANSI C63.4. Radiated testing was performed in Cetecom's semi-anechoic chamber. This site has been fully described in a report submitted to the FCC and was accepted in a letter dated July 25, 2002.

The instrumentation used to perform the testing is listed below:

1. Semianechoic Absorber Lined Chamber IR 11. BS.
2. Control Chamber IR 12.BC.
3. Antenna mast EM 1072 NMT.
4. Rotating table EM 1084-4. ON.
5. Multi device controller ETS 2090.
6. Bluetooth test set Anritsu MT8852A
7. Bilog antenna CHASE CBL6111.
8. Antenna tripod EMCO 11968C.
9. Double-ridge Guide Horn antenna 1-18 GHz HP 11966E.
10. Double-ridge Guide Horn antenna 18-40 GHz Agilent 119665J.
11. RF pre-amplifier Miteq JS4-12002600-30-5A.
12. Semianechoic Absorber Lined Chamber IR 11. BS.
13. RF pre-amplifier Miteq AFS5-04001300-15-10P-6.
14. Spectrum analyzer R&S ESIB 26.
15. Spectrum analyzer R&S FSM.

4. IDENTIFICATION DATA SUPPLIED BY THE APPLICANT

Identification data in this section has been supplied by the client.

4.1 APPLICANT

Name or Company: SONY ERICSSON MOBILE COMMUNICATIONS AB

V.A.T.: ---

Address: Nya Vattentorget

City: Lund

Postal code: 22188

Country: SWEDEN

Telephone: +46 46193559

Fax: +46 46193295

4.2 REPRESENTATIVE

Name: Hakan Sjöberg / Bo Johansson

4.3 TEST SAMPLES SUPPLIER

Name or Company: SONY ERICSSON MOBILE COMMUNICATIONS AB

Address: Same as indicated in point 4.1.

Samples undergoing test have been selected by: **the client.**

4.4 IDENTIFICATION OF ITEM/ITEMS TESTED

Product: MOBILE PHONE WITH BLUETOOTH

Trade mark: SONY ERICSSON **Model:** K750

Other identification of the product: Type AAB-1022011-BV

HW Version: FP1.3 **SW Version:** ITP test software

Manufacturer: SONY ERICSSON MOBILE COMMUNICATIONS AB

Country of manufacture: SWEDEN

Manufacture site: Data not available

Description: GSM 900 / 1800 / 1900 mobile phone with Bluetooth support

5. USAGE OF SAMPLES, PERIOD OF TESTING AND ENVIRONMENTAL CONDITIONS

5.1 USAGE OF SAMPLES

Sample M/01 is formed by the following elements:

<u>Control No.</u>	<u>Description</u>	<u>Model</u>	<u>Serial No.</u>	<u>Date of reception</u>
21888/02	Mobile cellular phone with Bluetooth and integral antenna	K750	Prototype	11/03/05

Sample M/02 is formed by the following elements:

<u>Control No.</u>	<u>Description</u>	<u>Model</u>	<u>Serial No.</u>	<u>Date of reception</u>
21888/01	Mobile cellular phone with Bluetooth and antenna connector	K750	Prototype	11/03/05

1. Sample M/01 has undergone following test(s).
Radiated measurements indicated in annex A.
2. Sample M/02 has undergone following test(s).
All tests indicated in annex A, except radiated measurements.

5.2 PERIOD OF TESTING

The performed test started on 2005-03-21 and finished on 2005-03-23.

The tests as detailed in this report have been performed at CETECOM.

5.3 ENVIROMENTAL CONDITIONS

In the control chamber the following limits were not exceeded during the test:

Temperature	Min. = 25 °C Max. = 26 °C
Relative humidity	Min. = 51 % Max. = 52 %
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω

In the semianechoic chamber (21 meters x 11 meters x 8 meters) the following limits were no exceeded during the test.

Temperature	Min. = 26 °C Max. = 26 °C
Relative humidity	Min. = 50 % Max. = 50 %
Air pressure	Min. = 1019 mbar Max. = 1019 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω
Normal site attenuation (NSA)	< ±4 dB at 10 m distance between item under test and receiver antenna, (30 MHz to 1000 MHz)
Field homogeneity	More than 75% of illuminated surface is between 0 and 6 dB (26 MHz to 1000 MHz).

In the chamber for conducted measurements the following limits were no exceeded during the test:

Temperature	Min. = 19 °C Max. = 20 °C
Relative humidity	Min. = 45 % Max. = 47 %
Air pressure	Min. = 1020 mbar Max. = 1020 mbar
Shielding effectiveness	> 100 dB
Electric insulation	> 10 kΩ
Reference resistance to earth	< 0,5 Ω

6. TEST RESULTS

Abbreviations used in the VERDICT column of the following tables are:

P	Pass
F	Fail
NA	not applicable
NM	not measured

FCC PART 15 PARAGRAPH	VERDICT			
	NA	P	F	NM
15.247 Subclause (a) (1). 20 dB Bandwidth and Carrier frequency separation		P		
15.247 Subclause (a) (1) (iii). Number of hopping channels		P		
15.247 Subclause (a) (1) (iii). Time of occupancy (Dwell Time)		P		
15.247 Subclause (b). Maximum peak output power and antenna gain		P		
15.247 Subclause (d). Band-edge of conducted emissions (Transmitter)		P		
15.247 Subclause (d). Emission limitations conducted (Transmitter)		P		
15.247 Subclause (d). Emission limitations radiated (Transmitter)		P		

7. REMARKS AND COMMENTS

None.

8. SUMMARY

Based on the results of the performed test, stated in annex A the item under test is **IN COMPLIANCE** with the specifications listed in section 3.1 “TEST REQUESTED”.

NOTE: The results presented in this Test Report apply only to the particular item under test declared in section 4.4 “IDENTIFICATION OF ITEM/ITEMS TESTED” of this document, as presented for test on the date(s) declared in section 5, “USAGE OF SAMPLES, PERIOD OF TESTING AND ENVIRONMENTAL CONDITIONS”.