



**MOTOROLA**

**MOBILE DEVICES BUSINESS**

**PRODUCT SAFETY AND COMPLIANCE  
EMC LABORATORY**

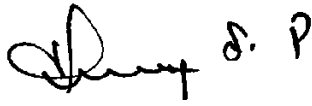
**EMC TEST REPORT**

**Test Report Number** – 19265-1 Supplement

**Report Date** – November 6, 2006

The test results contained herein relate only to the model(s) identified. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics.

As the responsible EMC Engineer, I hereby declare that the equipment tested as specified in this report conforms to the requirements indicated.

Signature: 

Name: Thanigaiselvan Palaniswami

Title: EMC Engineer

Date: November 6, 2006

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**THIS REPORT MUST NOT BE USED TO CLAIM PRODUCT ENDORSEMENT BY A2LA OR ANY AGENCY OF THE U.S. GOVERNMENT.**

A2LA Certificate Number: 1651-01

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**Test Report Details**

Tests Performed By: Motorola Mobile Devices business (MDb)  
Product Safety and Compliance Group  
600 North US Hwy 45  
Libertyville, IL 60048  
PH (847) 523-6167 Fax (847) 523-4538  
Motorola MDb FRN: 0004321311  
FCC Registration Number: 316588  
Industry Canada Number: IC3908-1

Tests Requested By: Motorola Inc.  
Mobile Devices business  
600 North US Hwy 45  
Libertyville, IL 60048

Signaling Capability: GSM 850 & 1900, Bluetooth, RFID

FCC ID : IHDT56FP2

Serial Numbers: 004401022601815

Testing Complete Date: November 6, 2006

**Applicable Standards**

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47:

  X   Part 15 Subpart B – Unintentional Radiators

Applicable Standards: ANSI 63.4 2003

**Summary of Testing**

Test #	Test Name	Pass/Fail
1	Frequency Stability	Pass
2	Occupied Bandwidth	Pass

Test #	Test Name	Margin with respect to the Limit
1	Frequency Stability	See results
2	Occupied Bandwidth	See results

The margin with respect to the limit is the minimum margin for all modes and bands.

**General and Special Conditions**

The EUT was tested using a fully charged battery.  
 All testing was done in an indoor controlled environment with an average temperature of 22° C and relative humidity of 50%.

**Equipment List**

Manufacturer	Equipment Type	Model No.	Serial Number	Calibration Due Date
Rohde Schwarz	Receiver	ESI26	100001	3/08/07
Thermotron	Environmental Chamber	S-4	31580	1/31/07
Hewlett Packard	EMC Analyzer	E7405	US39440191	1/05/07

All equipment is on a one-year calibration cycle.

## **FREQUENCY STABILITY**

### **Measurement Procedure**

The equipment under test is placed in an environmental chamber. The antenna port of the Equipment Under Test is coupled to the input of the measurement equipment through a coupling antenna. A power supply is attached as the primary voltage supply.

Frequency measurements are made at the extremes of the temperature range  $-30^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  and at intervals of  $10^{\circ}\text{C}$  with the primary supply voltage set to the nominal battery operating voltage. A period of time sufficient to stabilize all components of the equipment is allowed at each frequency measurement. The maximum variation of frequency is measured.

At room temperature, the primary supply voltage is reduced to the battery operating endpoint of the equipment under test. The maximum variation of frequency is measured. A battery eliminator was used for the input supply voltage.

### **Measurement Results**

Attached

**Measurement Results**

Operating Mode – RFID Transmission ON.

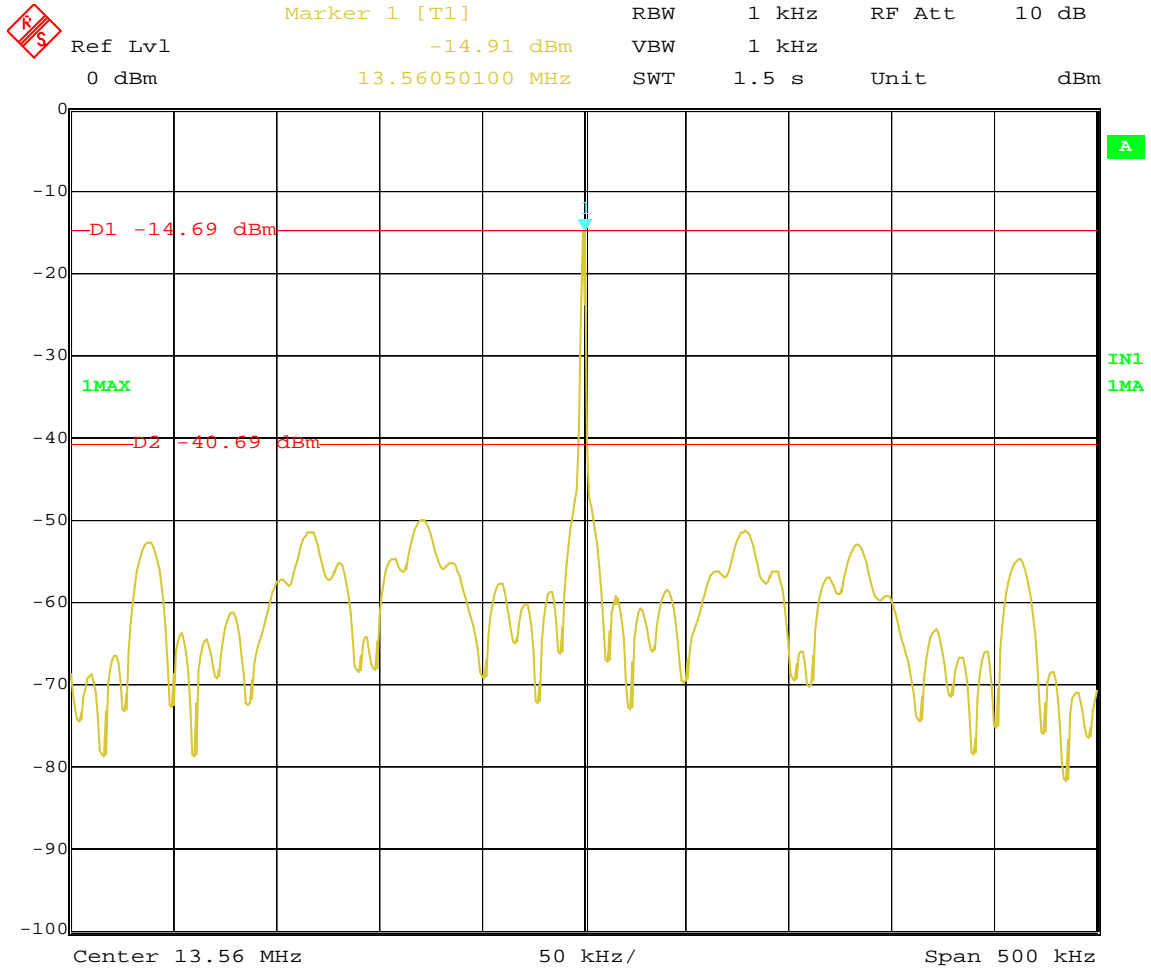
Temperature	Measured Frequency	Frequency Tolerance	Frequency Deviation	Voltage	Result
Centigrade	MHz	kHz	Hz	Volts	
-30	13.559500	±1.35	500	3.8	Pass
-20	13.560500	±1.35	500	3.8	Pass
-10	13.560500	±1.35	500	3.8	Pass
0	13.559500	±1.35	-500	3.8	Pass
10	13.560500	±1.35	500	3.8	Pass
20	13.560500	±1.35	500	3.8	Pass
30	13.560000	±1.35	0	3.8	Pass
40	13.561000	±1.35	1000	3.8	Pass
50	13.560500	±1.35	500	3.8	Pass
60	13.560000	±1.35	0	3.8	Pass
Battery Operating Endpoint					
20	13.561000	±1.35	1000	3.35	Pass

**OCCUPIED BANDWIDTH****Measurement Procedure**


The RF output port of the equipment under test is coupled to the input of the EMI receiver through a coupling antenna. The analyzer is set for Peak Detector and the trace is set for Max Hold. A fully charged battery was used for the supply voltage.

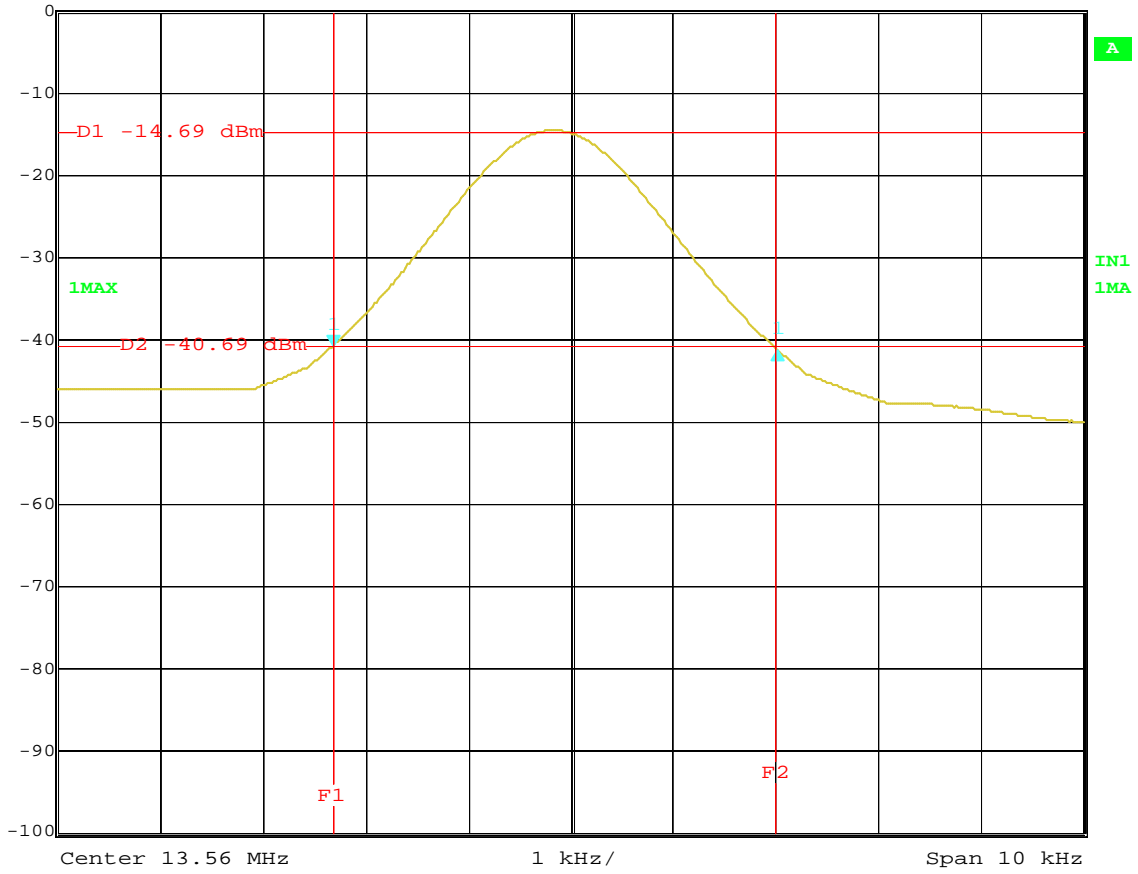
**Measurement Results**

Occupied Bandwidth = 4.23 kHz



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 Delta 1 [T1] RBW 1 kHz RF Att 10 dB  
Ref Lvl -0.61 dB VBW 1 kHz  
0 dBm 4.32865731 kHz SWT 1.5 s Unit dBm



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**End of Test Report**