

FCC Part 15C Compliance Test Report

Test Report no.:	FCC_BT_RM267V.pdf	Date of Report:	16-05-2007
Number of pages:	22	Contact person:	Mark Pope

Testing laboratory: Vertu
Beacon Hill Road
Church Crookham
Hampshire, UK

Tested devices/ accessories: **Phone: model: Ascent Ti**
Type: RM-267V
Battery: BL-5CV


FCC ID: P7Q RM-267V **IC:** 4229A-RM267V

Supplement reports:

Testing has been carried out in accordance with: CFR 47, FCC rules Part 15 Subpart C, ANSI C63.4 (2003) and IC standard RSS-210. Deviations, modifications or clarifications (if any) to above mentioned documents are written in each section under "Test method and limit".

Test Results: The EUT complies with the requirements in respect of all parameters subject to the test. The test results relate only to devices specified in this document.

Date and signature for the contents:

 Date: 16th May 2007

Oli Bailey, Engineer

1. Summary for FCC Part 15C Compliance Test Report

Testing completed	04-05-2007
Contact person	Mark Pope
Notes	None
Document name	FCC_BT_RM267V.pdf

1.1. EUT, Accessory and Test Equipment Information

The EUT is a dual-mode, quad band (GSM850/900/1800/1900) mobile phone with GPRS,EGPRS and Bluetooth. Bluetooth is tested with maximum rated TX power.

Product	Type	SN	HW	SW
Phone	RM-267V	3ZA002156	B4.2	wk14
Agilent Power Supply	E3613A	007877	-	-
Rohde&Schwarz Test Set	CMU200	007744	-	-
Rohde&Schwarz Vector Signal Analyser	FSIQ26	008069	-	-
HP Directional Coupler 300kHz - 6GHz	86205A	-	-	-
Battery	BL-5CV	-	-	-

1.2. Summary of Test Results

Bluetooth:

Section in CFR 47	Section in RSS-210	Name of the test	Result
15.247(b)(1)	6.2.2(o)(a3)	Peak output power	Passed
15.247(c)	6.2.2(o)(e1)	Band edge compliance of RF emissions	Passed
15.247(c)	6.2.2(o)(e1)	Spurious RF conducted emissions	Passed
15.247(a)(1)	6.2.2(o)(a3)	20 dB bandwidth	Passed
15.247(a)(1)	6.2.2(o)(a1)	Carrier frequency separation	Passed
15.247(a)(1)(iii)	Amend I(ii)	Number of hopping frequencies	Passed
15.247(a)(1)(iii)	Amend I(ii)	Time of occupancy	Passed

PASSED

The EUT complies with the essential requirements in the standard.

FAILED

The EUT does not comply with the essential requirements in the standard.

NP

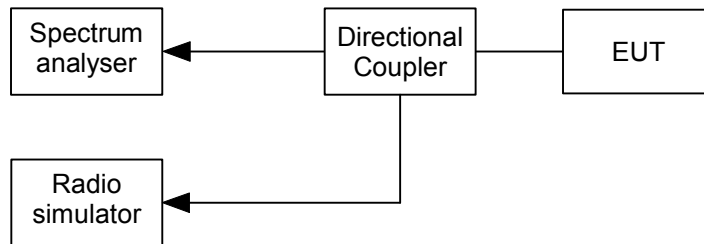
The test was not performed by Vertu.

CONTENTS

1.	Summary for FCC Part 15C Compliance Test Report	2
1.1.	EUT, Accessory and Test Equipment Information	2
1.2.	Summary of Test Results	2
2.	Test setups	4
2.1.	Conducted RF test setup	4
3.	Peak output power (FCC §15.247(b)(1), RSS-210 6.2.2(o)(a3))	5
3.1.	Test method and limit	5
3.2.	Bluetooth Test results	6
3.2.1	GFSK modulation, PRBS packet type	6
4.	Band edge compliance of RF emissions (FCC §15.247(c), RSS-210 6.2.2(o)(e1))	8
4.1.	Test method and limit	8
4.2.	Bluetooth Test results	9
4.2.1	GFSK modulation, PRBS packet type	9
5.	Spurious RF conducted emissions (FCC §15.247(c), RSS-210 6.2.2(o)(e1))	11
5.1.	Test method and limit	11
5.2.	Bluetooth Test results	12
5.2.1	GFSK modulation, PRBS packet type	12
6.	20 dB bandwidth (FCC §15.247(a)(1), RSS-210 6.2.2(o)(a3))	14
6.1.	Test method and limit	14
6.2.	Bluetooth Test results	15
6.2.1	GFSK modulation, PRBS packet type	15
7.	Carrier frequency separation (FCC §15.247(a)(1), RSS-210 6.2.2(o)(a1))	17
7.1.	Test method and limit	17
7.2.	Bluetooth Test results	18
7.2.1	GFSK modulation, PRBS packet type	18
8.	Number of hopping frequencies (FCC §15.247(a)(1)(iii), RSS-210 Amend I(ii))	19
8.1.	Test method and limit	19
8.2.	Bluetooth Test results	20
8.2.1	GFSK modulation, PRBS packet type	20
9.	Time of occupancy (FCC §15.247(a)(1)(iii), RSS-210 Amend I(ii))	21
9.1.	Test method and limit	21
9.2.	Bluetooth test results	22
9.2.1	GFSK modulation, PRBS packet type	22

2. Test Setups

2.1. Conducted RF test setup



3. Peak output power
(FCC §15.247(b)(1), RSS-210 6.2.2(o)(a3))

EUT with DUT number	RM-267V PSN 3Z002156
Accessories with DUT numbers	BL-5CV
Result	Passed
Remarks	-
Temp [°C]	23.4
Date of measurements	03-05-2007
Measured by	Oli Bailey

3.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

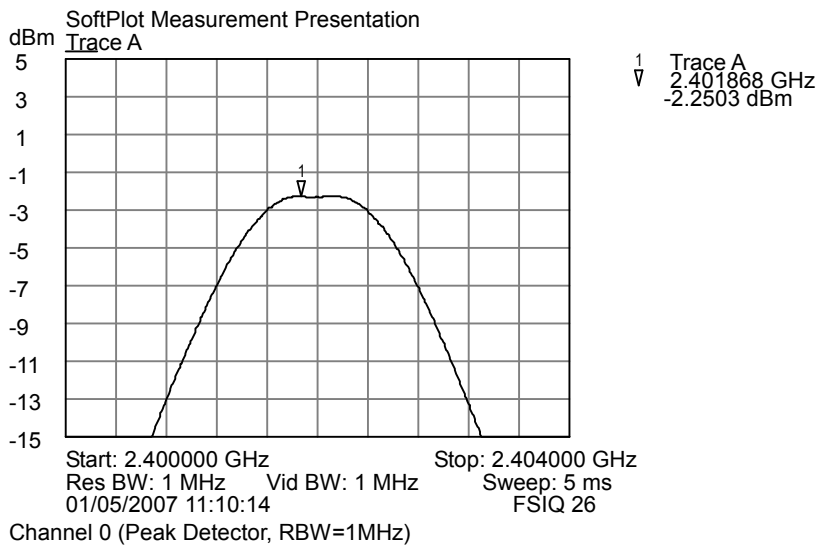
Limits for peak output power measurements

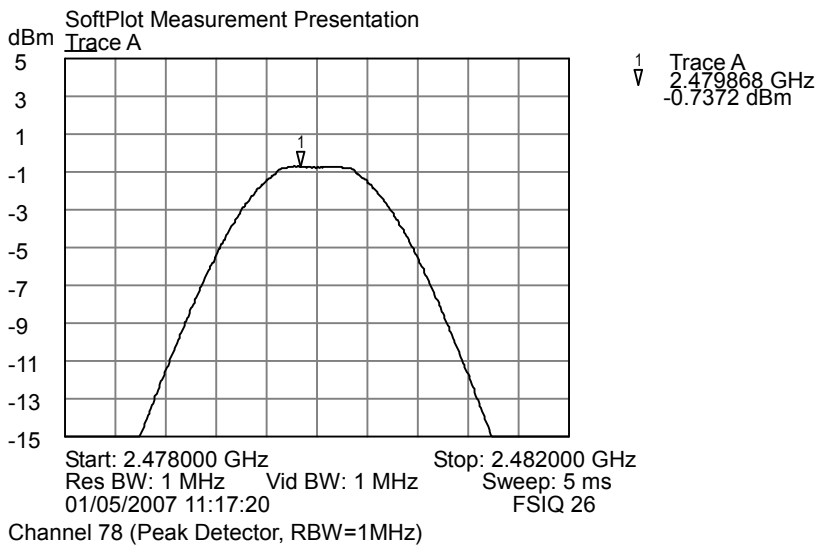
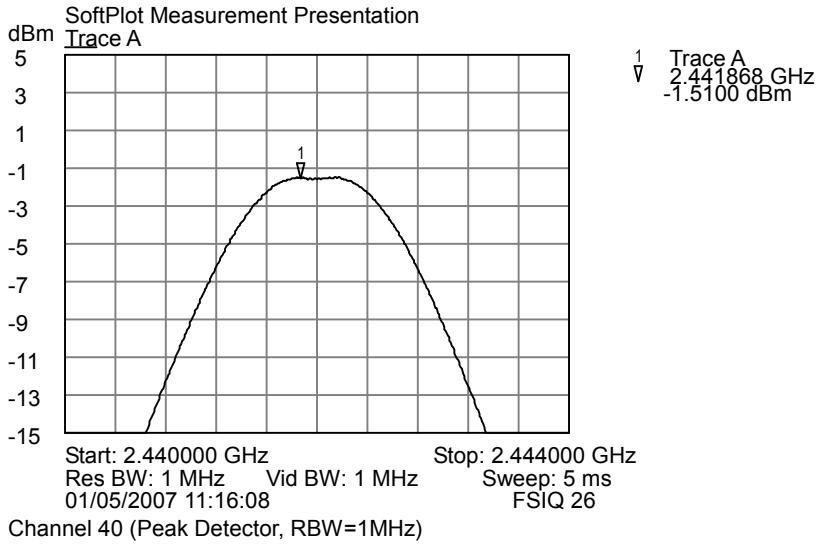
Frequency range [MHz]	Limit [W]	Limit [dBm]
2400 – 2483.5	≤ 1	≤ 30

3.2. Bluetooth Test results

3.2.1 GSKF modulation, PRBS packet type

Channel	P [dBm]	P [mW]	Result
0	-2.25	0.596	Passed
40	-1.51	0.706	Passed
78	-0.74	0.843	Passed





4. Band edge compliance of RF emissions (FCC §15.247(c), RSS-210 6.2.2(o)(e1))

EUT with DUT number	RM-267V PSN 3Z002156
Accessories	BL-5CV
Result	Passed
Remarks	None
Temp [°C]	22
Date of measurements	03-05-2007
Measured by	Oli Bailey

4.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

Limits for band edge compliance of RF emissions measurements (3 m measurement distance)

Frequency range [MHz]	Limit Average [dBμV/m]	Limit Peak [dBμV/m]
Below 2390 and above 2483.5	≤ 54	≤ 74

4.2. Bluetooth Test results

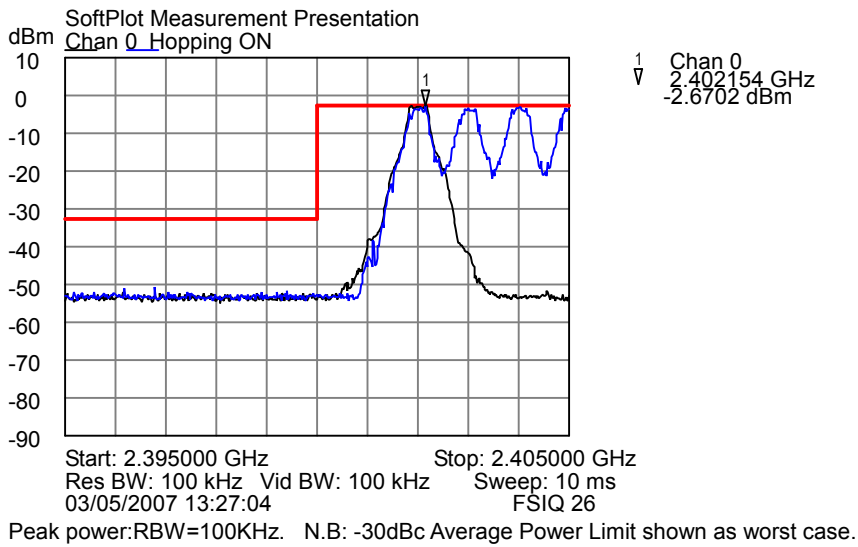
4.2.1 GFSK modulation, PRBS packet type

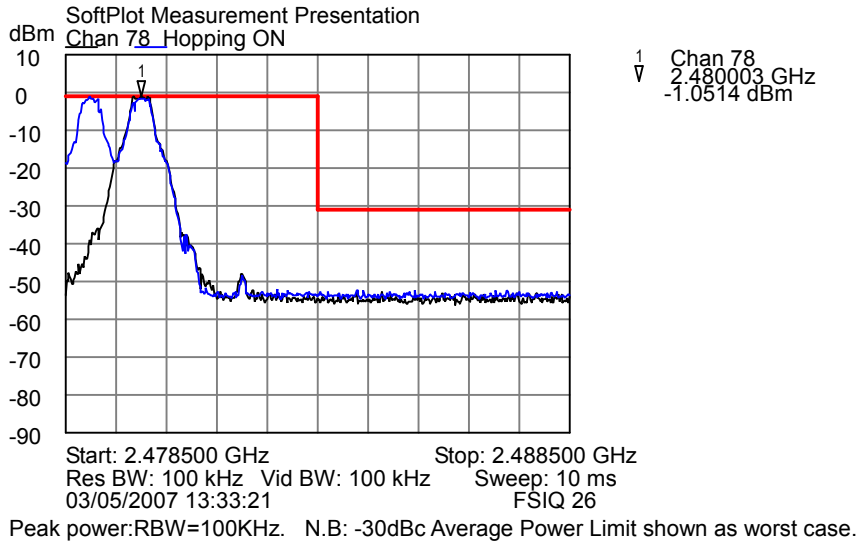
Average (RBW: 100 kHz)

Channel	Result
0	Passed
78	Passed
Hopping on, low end	Passed
Hopping on, high end	Passed

Peak (RBW: 100 kHz)

Channel	Result
0	Passed
78	Passed
Hopping on, low end	Passed
Hopping on, high end	Passed





5. Spurious RF conducted emissions
(FCC §15.247(c), RSS-210 6.2.2(o)(e1))

EUT with DUT number	RM-267V PSN 3ZA002156
Accessories with DUT numbers	BL-5CV
Result	Passed
Remarks	-
Temp [°c]	21.7
Date of measurements	03-05-2007
Measured by	Oli Bailey

5.1. Test method and limit

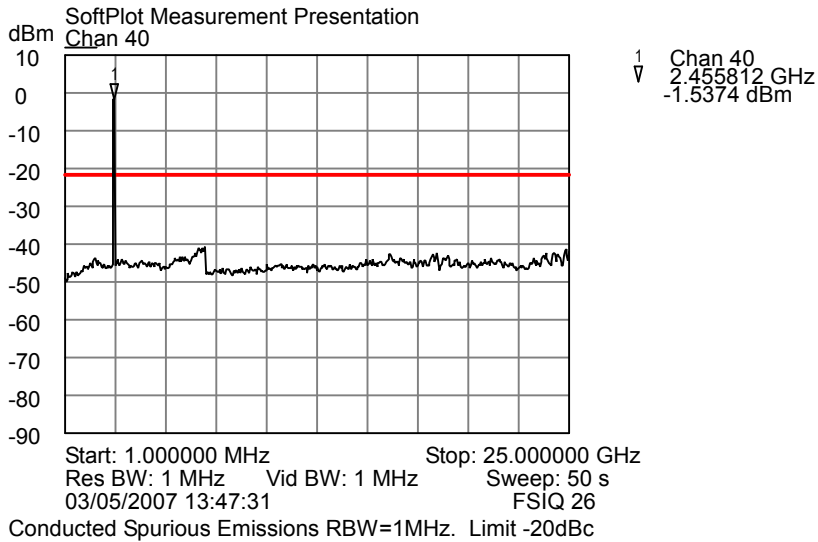
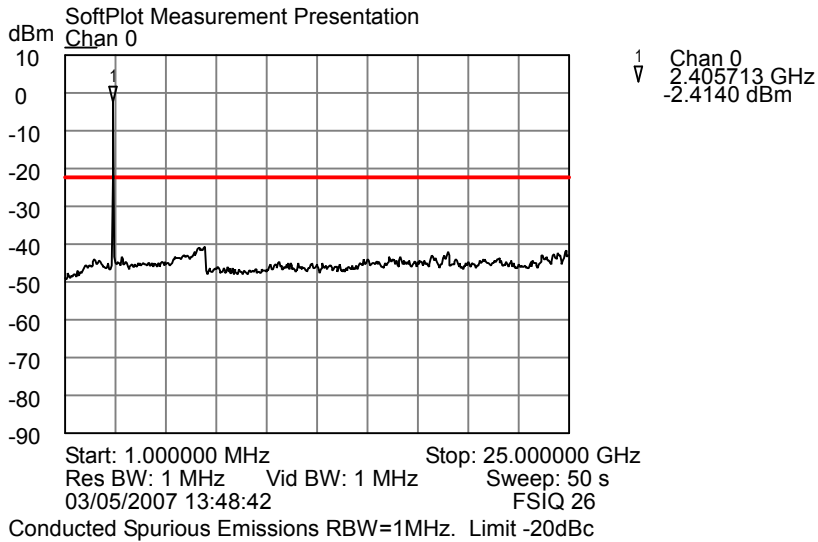
The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

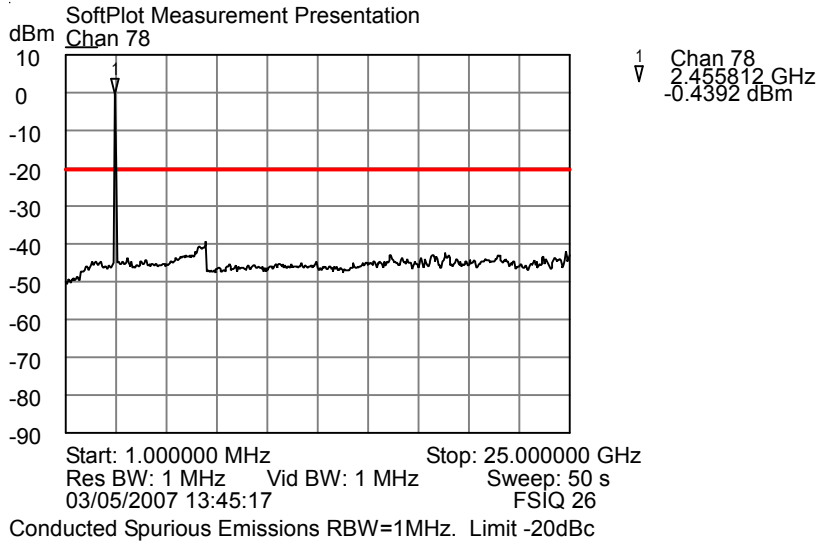
Limits for spurious RF conducted emissions measurements

Frequency range [MHz]	Limit [dBc]
1 – 25000	≤ -20

5.2. Bluetooth Test results

5.2.1 GFSK modulation, PRBS packet type





6. 20 dB bandwidth
 (FCC §15.247(a)(1), RSS-210 6.2.2(o)(a3))

EUT with DUT number	RM-267V PSN 3Z002156
Accessories with DUT numbers	BL-5CV
Result	Passed
Remarks	-
Temp [°C]	21.7
Date of measurements	03-05-2007
Measured by	Oli Bailey

6.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

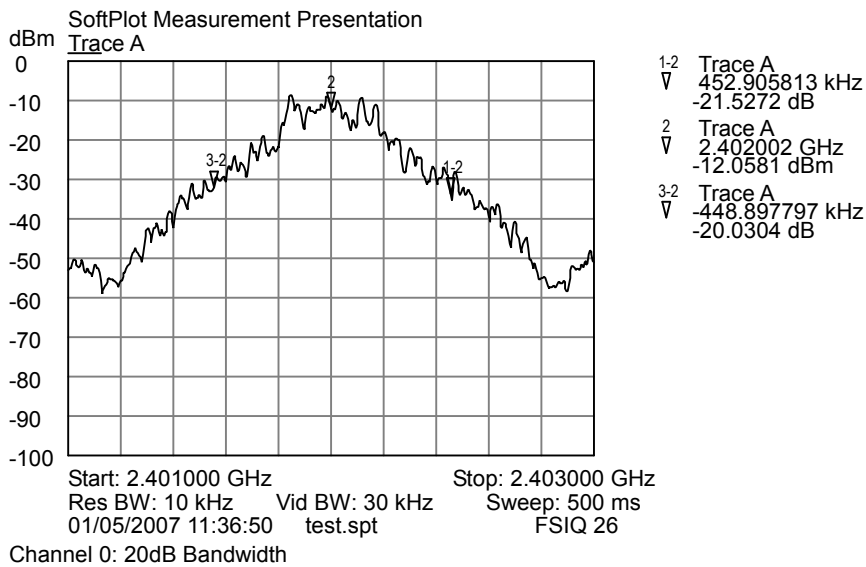
Limits for 20 dB bandwidth measurements

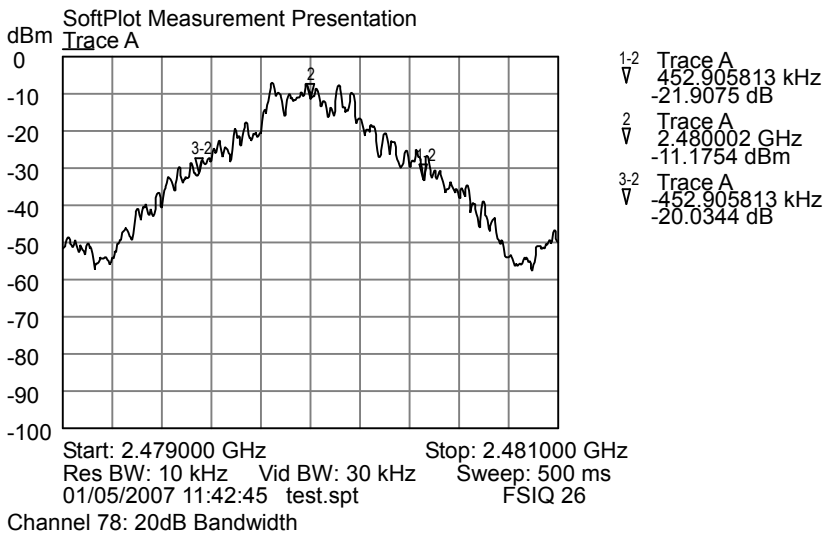
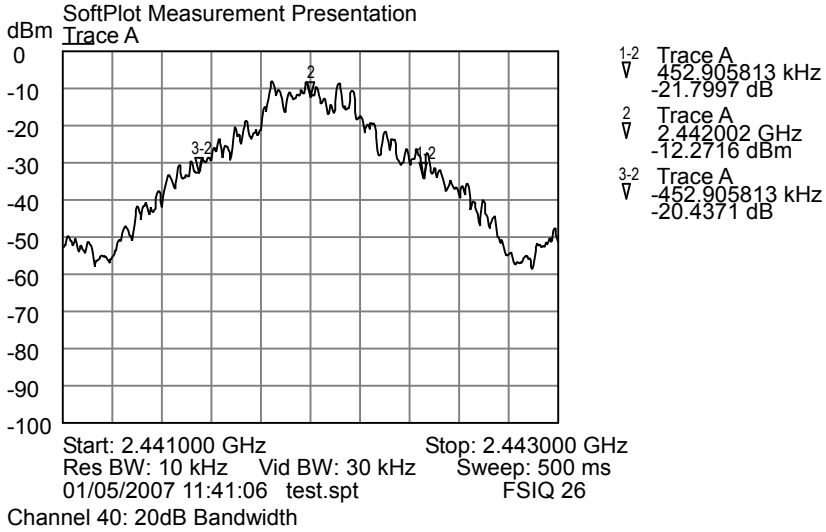
Limit [MHz]
≤ 1

6.2. Bluetooth Test results

6.2.1 GFSK modulation, PRBS packet type

Channel	20 dB bandwidth [kHz]	Result
0	901.804	Passed
40	905.812	Passed
78	905.812	Passed





7. Carrier frequency separation
(FCC §15.247(a)(1), RSS-210 6.2.2(o)(a1))

EUT with DUT number	RM-267V PSN 3ZA002156
Accessories with DUT numbers	BL-5CV
Result	Passed
Remarks	-
Temp [°C]	21.7
Date of measurements	03-05-2007
Measured by	Oli Bailey

7.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

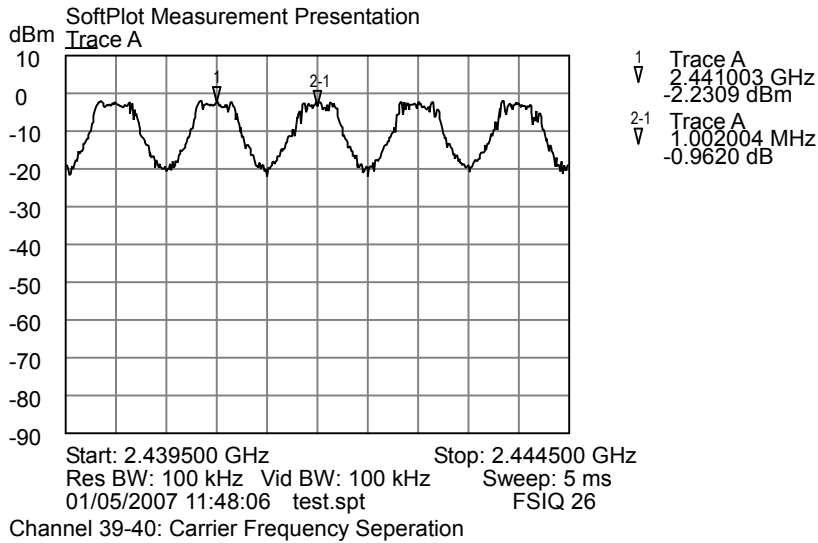
Limits for carrier frequency separation measurements

Limit [MHz]
≥ 0.025 or 20 dB bandwidth

7.2. Bluetooth Test results

7.2.1 GFSK modulation, PRBS packet type

Carrier frequency separation [kHz]	Result
1002.004	Passed



8. Number of hopping frequencies
 (FCC §15.247(a)(1)(iii), RSS-210 Amend I(ii))

EUT with DUT number	RM-267V PSN 3ZA002156
Accessories	BL-5CV
Result	Passed
Remarks	-
Temp [°C]	21.7
Date of measurements	03-05-2007
Measured by	Oli Bailey

8.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210.

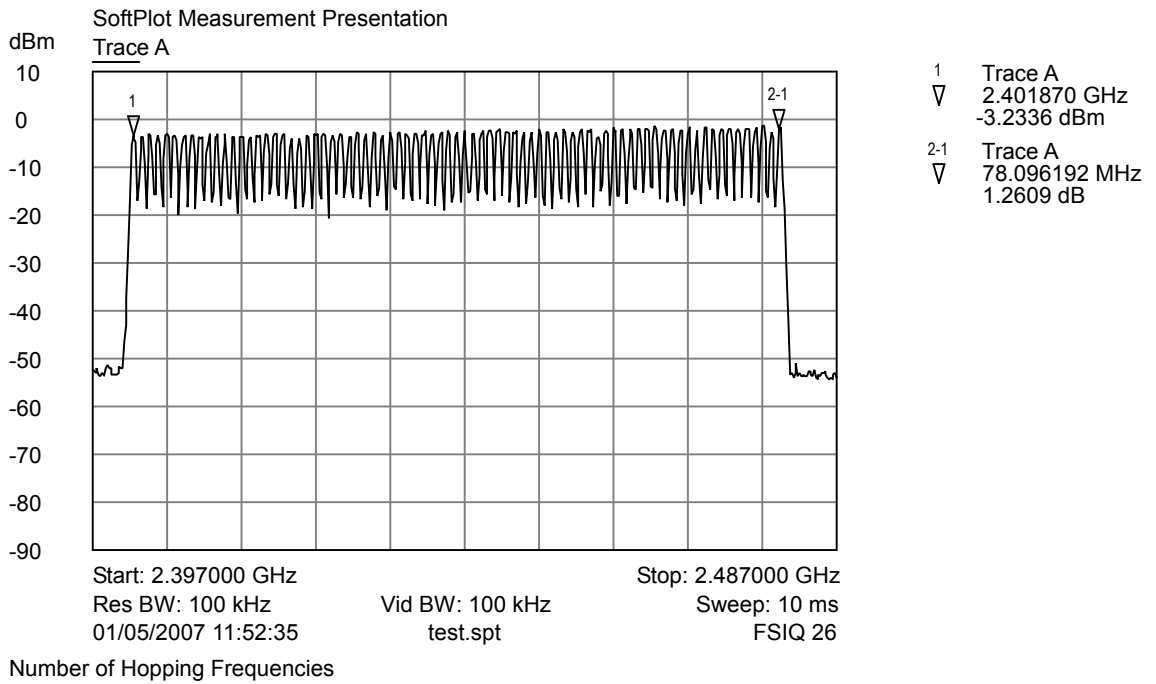
Limits for number of hopping frequencies measurements

Limit [number]
≥ 75

8.2. Bluetooth Test results

8.2.1 GFSK modulation, PRBS packet type

Measured number of hopping frequencies	Result
79	Passed



9. Time of occupancy
(FCC §15.247(a)(1)(iii), RSS-210 Amend I(ii))

EUT with DUT number	RM-267V PSN 3ZA002156
Accessories	BL-5CV
Result	Passed
Remarks	-
Temp [°C]	21.7
Date of measurements	03-05-2007
Measured by	Oli Bailey

9.1. Test method and limit

The measurement is made according to FCC rules part 15.247 and IC standard RSS-210 as follows:

The total time of occupancy is get by multiplying the measured number of transmissions occurred during 31.6 second period with the duration of one transmission.

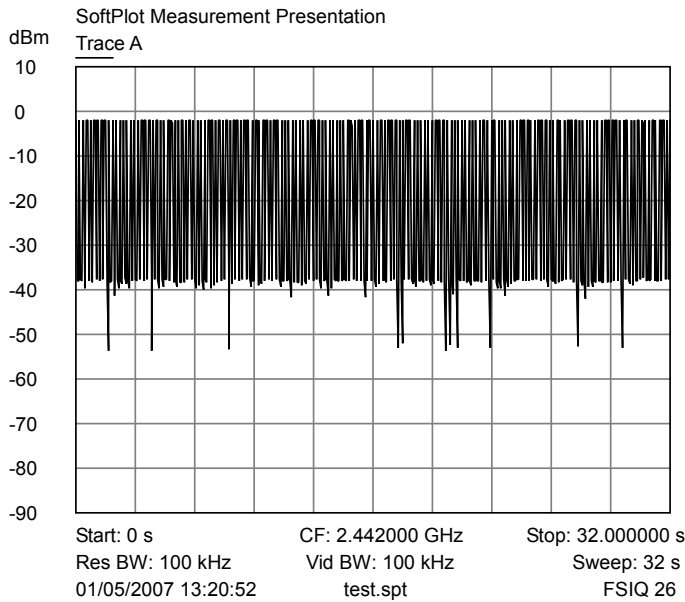
Limits for time of occupancy measurements

Limit [s]
≤ 0.4

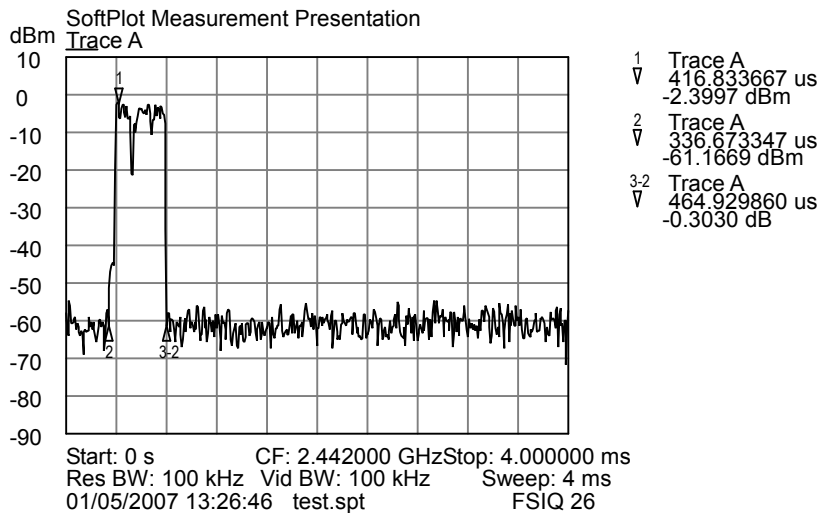
9.2. Bluetooth test results

9.2.1 GFSK modulation, PRBS packet type

Measured number of transmissions	Duration of one transmission [μ s]	Time of occupancy [s]	Result
159	464.930	0.0739	Passed



Number of Transmissions; Hopping ON; Channel 40



Duration of One Transmission; Hopping ON; Channel 40