

MEASUREMENT AND TECHNICAL REPORT

CARDIONET
510 Market Street
San Diego, CA 92101

DATE: 16 January 2004

This Report Concerns:	Original Grant: ☒ X	Class II Change:
Equipment Type:	CardioNet System Sensor, S/N CN0340093	
Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?	Yes: ☐ Defer until:	No: ☒ X
Company Name agrees to notify the Commission by:	N/A	
of the intended date of announcement of the product so that the grant can be issued on that date.		
Transition Rules Request per 15.37?	Yes: ☐	*No: ☒ X
(*) FCC Part 15, Paragraphs 15.2471(a), (b); (c); (d)		
Report Prepared by: TÜV AMERICA, INC. 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone: 858 678 1400 Fax: 858 546 0364		

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1 GENERAL INFORMATION

1.1 Product Description

General Equipment Description

EUT Description: Heart Monitoring Device
EUT Name: CardioNet System
Model No.: _____ Monitor: CNM880272
Serial No.: _____ Sensor: CN0340093

EUT Specifications and Requirements

Length: 5.8" Width: 3" Height: 1.1" Weight: 12.8oz.

Power Requirements

Voltage: 15V DC out (If battery powered, make sure battery life is sufficient to complete testing.)

of Phases: 1 phase 100-240 VAC,
60Hz., 400mA input

Current (Amps/phase(max)): 1.5A Current (Amps/phase(nominal)): 1A

Typical Installation and/or Operating Environment: Home

EUT Power Cable: Removable and unshielded

EUT Interface Ports and Cables

Interface				Shielding								
	Analog	Digital	Qty	Yes	No							
Type						Type	Termination	Connector Type	Port Termination	Length (in meters)	Removable	Permanent
Special Interface on bottom of Monitor (not shipped to customer)	☐	☒	1	☒	☐	Foil over braid	Coaxial	Mmi BB-25	TTL	0.5	☒	☐

EUT Operating Modes to be Tested

1. Normal Operating Mode where Monitor and Sensor communicate FHSS.
2. Special Operation Mode where Monitor and Sensor can each independently transmit on low, mid & High bands.

EUT System Components

Description	Model #	Serial #	FCC ID #
CARDIONET MONITOR	DFMA		QBI-1006
CARDIONET SENSOR	DFMA		QBI-1006

Support Equipment : NONE
Oscillator Frequencies

Frequency	Derived Frequency	Component # / Location	Description of Use
3.68MHz	3.68MHz	YZ on Sensor	MicroProcessor
25MHz	25MHz	Y1 on Sensor	RF Reference crystal for PLL
3.68MHz	3.68MHz	Y3 on Monitor	MicroProcessor
25MHz	25MHz	Y4 on Monitor	RF Reference crystal for PLL
3.68MHz	3.68MHz	Y1 on Monitor	MicroProcessor
37.8MHz	300MHz	Y2 on Monitor	MicroProcessor
24.6MHz	24.6MHz	Y5 on Monitor	Audio Codes
20MHz	20MHz	Y6 on Monitor	LAN
12MHz	12MHz	Y7 on Monitor	USB
32.8kHz	32.8kHz	Y8 on Monitor	Real-Time Clock

Power Supply

Manufacturer	Model #	Serial #	Type
FNWO	FW7555M/IS	None	☒ Switched-mode: (Frequency) 95 kHz ☐ Linear ☐ Other:

Power Line Filters - None, Sensor is battery operated. Monitor is powered from mains w/non-OGM wall adapter.

Critical EMI Components (Capacitors, ferrites, etc.) - None

EMC Critical Detail: Shielding of currents on Monitor and Sensor PWB using cans.

1 GENERAL INFORMATION (continued)

1.2 Related Submittal/Grant

None

1.3 Tested System Details

The FCC IDs for all equipment, plus descriptions of all cables used in the tested system are:

None

1.4 Test Methodology

Purpose of Test: To demonstrate compliance with the ANSI C63.4 setup.

TEST	FCC CFR 47 #	PASS/FAIL
Radiated	15.207(a)	Pass
Frequency Channel Separation	15.247(a)(1)	Pass
Time of Occupancy / Number of Hopping Frequencies /		
Channel Bandwidth	15.247(a)(1)(i)	Pass
RF Power Output	15.247(b)(2)	Pass
Radiated Spurious Emissions	15.247(c); 15.205(a)	Pass
Conducted Spurious Modulation	15.247(c)	Pass
Peak Power Density	15.247(d)	Pass

Tests were performed according to the procedures in FCC/ANSI C63.4 and CSA 108.8 -M1983.

1.5 Test Facility

The open area test site and conducted measurement data were tested by:

TÜV AMERICA, INC.
10040 Mesa Rim Road
San Diego, CA 92121-2912
Phone: 858 678 1400
Fax: 858 546 0364

The Test Site Data and performance comply with ANSI 63.4 and are registered with the FCC, 7435 Oakland Mills Rd, Columbia Maryland 21046. All Measurement Data is acquired according to the content of FCC Measurement Procedure and ANSI C63.4, unless supplemented with additional requirements as noted in the test report.

2. SYSTEM TEST CONFIGURATION

2.1 Justification

The EUT was initially tested for FCC emission in the following configuration:

See Test Setup Photos exhibit.

2.2 EUT Exercise Software

None

2.3 Special Accessories

None

2.4 Modification

None

2.5 Configuration of Tested System

See Test Setup Photos exhibit.

Report No. SC305425-03

3. RADIATED EMISSION EQUIPMENT, 15.207(a)

3.1 EQUIPMENT

Emissions Test Conditions: RADIATED EMISSIONS

The *RADIATED EMISSIONS* measurements were performed at the following test location :

☐ - Test not applicable

■ - Canyon #1 (3- and 10-Meter Open Area Test Site), Carroll Canyon, San Diego

Testing was performed at a test distance of:

10 meters

Test Equipment Used :

Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
ESVS30	427	EMC Receiver	Rohde & Schwarz	833825/003	04/04
LPB25020/	739	Bilog Antenna	Antenna Research	1170	05/04

Remarks: _____

3.2 FIELD STRENGTH CALCULATION

If a preamplifier was used during the Radiated Emission Testing, it is required that the amplifier gain must be subtracted from the Spectrum Analyzer (Meter) Reading. In addition, a correction factor for the antenna, cable used and a distance factor, if any, must be applied to the Meter Reading before a true field strength reading can be obtained. In the automatic measurement, these considerations are automatically presented as a part of the print out. In the case of manual measurements and for greater efficiency and convenience, instead of using these correlation factors for each meter reading, the specification limit was modified to reflect these correlation factors at each frequency value so that the meter readings can be compared directly to the modified specification limit. This modified specification limit is referred to as the "Corrected Meter Reading Limit" or simply the CMRL, which is the actual field strength present at the antenna. The quantity can be derived in the following manner:

$$\text{Corrected Meter Reading Limit (CMRL)} = \text{SAR} + \text{AF} + \text{CL} - \text{AG} - \text{DC}$$

Where, SAR = Spectrum Analyzer Reading

AF = Antenna Factor

CL = Cable Loss

AG = Amplifier Gain (if any)

DC = Distance Correction (if any)

Assume the following situation: A meter reading of 29.4 dBuV was obtained from a Class A computing device measured at 83 MHz. Assume an antenna factor of 9.2 dB, a cable loss of 1.4 dB and amplifier gain of 20.0 dB at 83 MHz. The final field strength would be determined as follows:

$$\text{CMRL} = 29.4 \text{ dBuV} + 9.2 \text{ dB} - 1.4 \text{ dB} - 20 \text{ dB/M} - 0.0 \text{ dB}$$

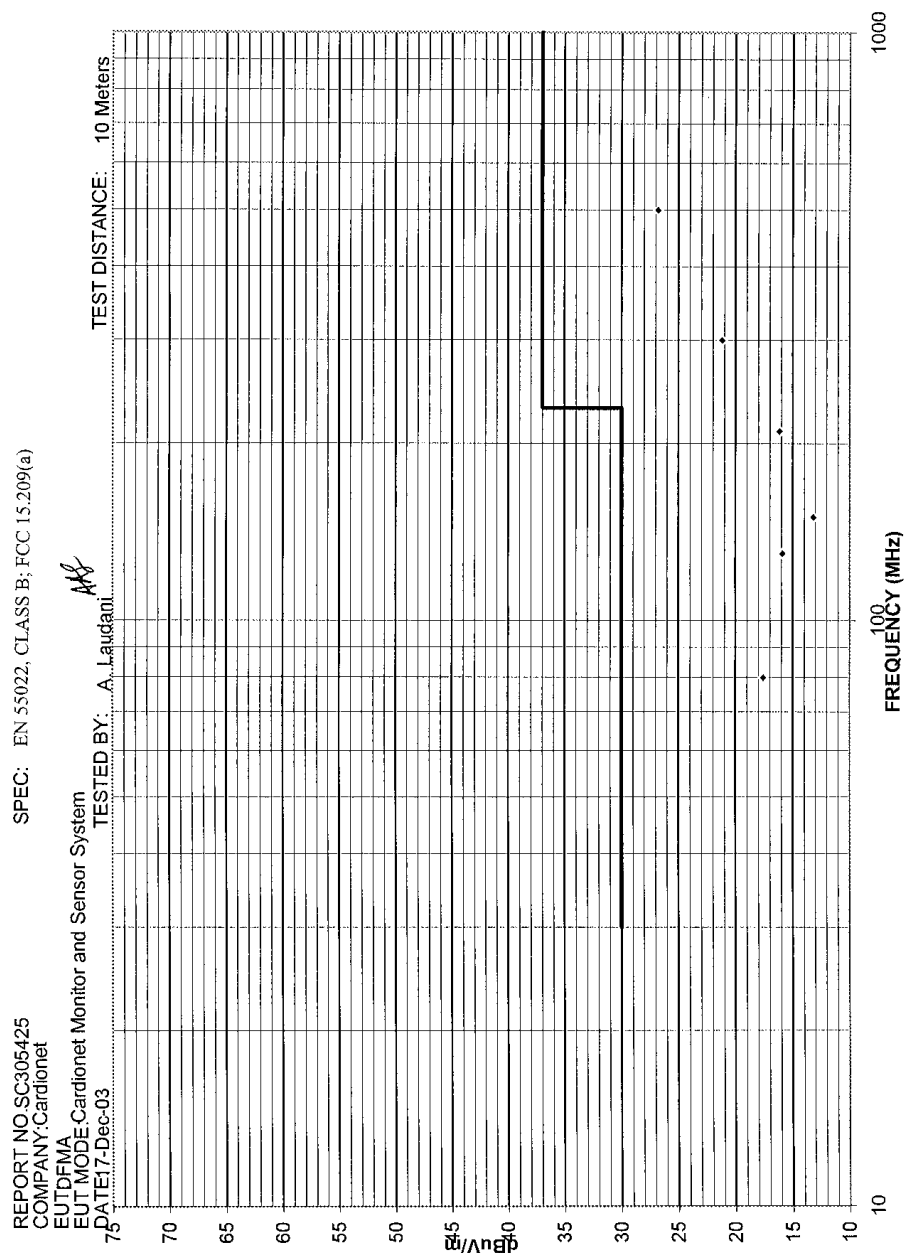
$$\text{CMRL} = 20.0 \text{ dBuV/M}$$

This result is well below the FCC and CSA Class A limit of 29.5 dBuV/m at 83 MHz.

For the manual mode of measurement, a table of corrected meter reading limit was used to permit immediate comparison of the meter reading to determine if the measure emission amplitude exceeded the specification limit at that specific frequency.

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3.3 DATA



REPORT No: SC305425

SPEC: EN 55022, CLASS B; FCC 15.209(a)

CUSTOMER: Cardionet

TEST DIST: 10 Meters

E U T: DFMA

TEST SITE: 1

EUT MODE: Cardionet Monitor and Sensor System

BICONICAL: 739

DATE: 17-Dec-03 TESTED BY: A. Laudani

LOG PERIODIC: 739

NOTES: Quasi-Peak with 120 KHz measurement bandwidth.
7.4 Vdc / 1.5 Vdc

RCVR: 427

[illegible]

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4. FREQUENCY CHANNEL SEPARATION, 15.247(a)(1)

4.1 EQUIPMENT

Emissions Test Conditions: FREQUENCY CHANNEL SEPARATION

The *Frequency Channel Separation* measurements were performed at the following test location :

☐ - Test not applicable

■ - TR 2, Test Room

Testing was performed at a test distance of:

10 meters

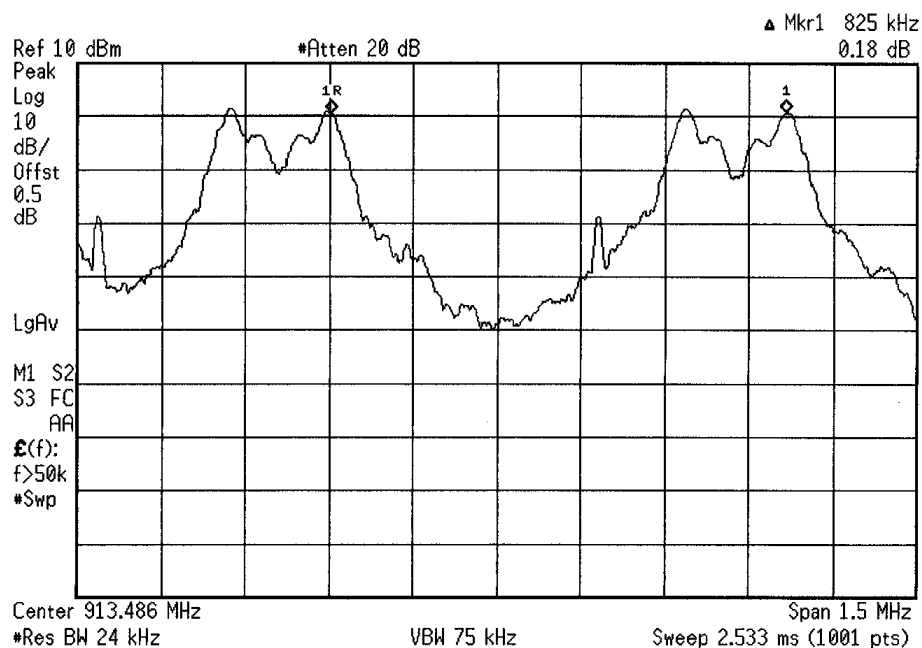
Test Equipment Used :

Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
E4440A	7500	Spectrum Analyzer	Agilent	MY43362168	01/05

Remarks: _____

Report No. SC305425-03

4.2 DATA



SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 15.247 (a) (1) Frequency Channel Separation
Limit = -20 dB Bandwidth (438 kHz.) EUT Complies

January 8, 2004
Engineer: MJL
Location: TR2

Report No. SC305425-03

5. NUMBER OF HOPPING FREQUENCIES / TIME OF OCCUPANCY / CHANNEL BANDWIDTH, 15.247(a)(1)(i)

5.1 EQUIPMENT

Emissions Test Conditions: NUMBER OF HOPPING FREQUENCIES / TIME OF OCCUPANCY / CHANNEL BANDWIDTH

The Number Of Hopping Frequencies / Time Of Occupancy / Channel Bandwidth measurements were performed at the following test location :

☐ - Test not applicable

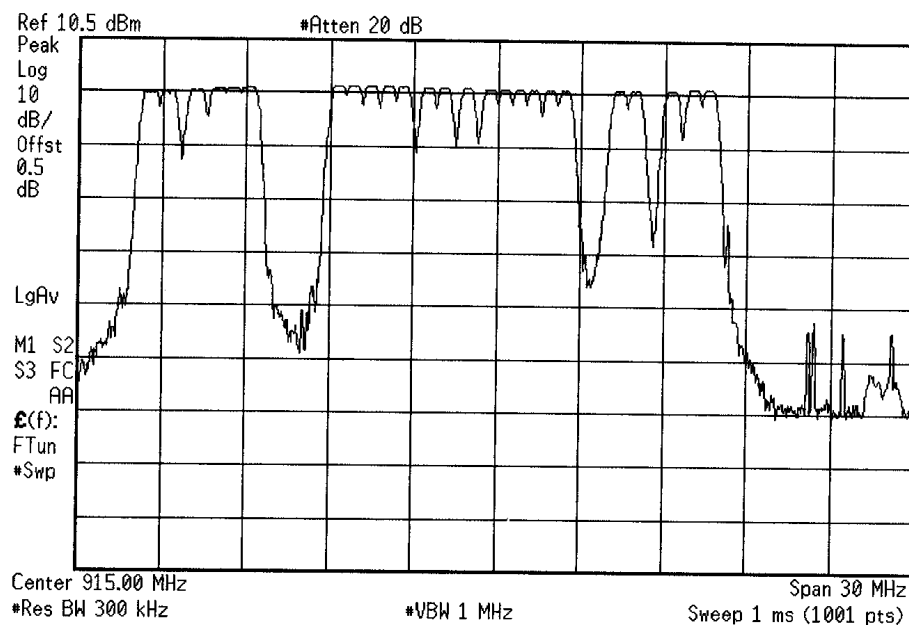
■ - TR-2, Test Room San Diego

Test Equipment Used :

Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
E4440A	7500	Spectrum Analyzer	Agilent	MY43362168	01/05

Remarks: _____

5.1 DATA NUMBER OF HOPPING FREQUENCIES



SC 305425

CardioNet
Model: DFMA Sensor

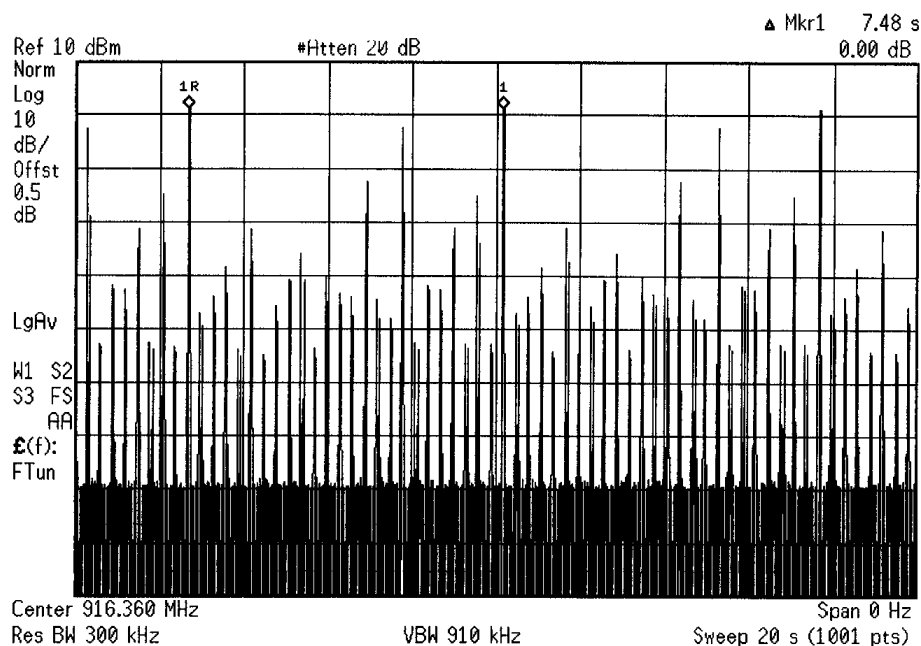
FCC 47 Part 15.247 (a) (1) (i) Number of Hopping Frequencies
Limit = 20 dB bandwidth >250 kHz. – at least 25 hopping frequencies

EUT Complies

January 8, 2004
Engineer: MJL
Location: TR2

Report No. SC305425-03

5.2 DATA TIME OF OCCUPANCY

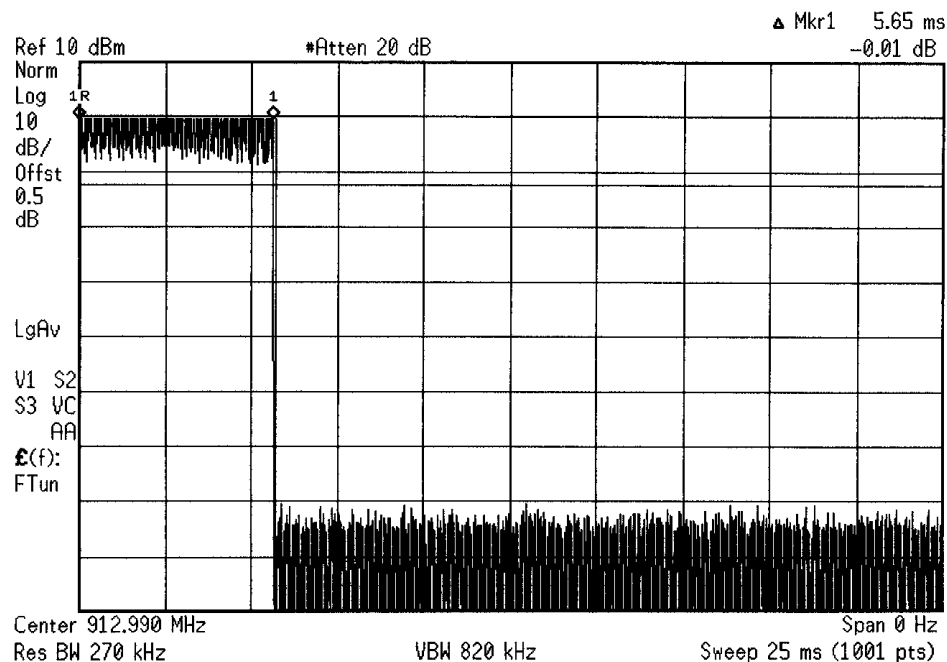


SC305425
CardioNet
MODEL DFMA Sensor

Jan. 8, 2004
TECH/ENGR: ML
LOCATION: TR2

FCC 47 Part 15.247 (a)(1)(i) Time of Occupancy
Limit = 0.4 seconds in 20 seconds
6 events x 5.65 ms = 33.9 ms < 400 ms
EUT Complies.

Report No. SC305425-03



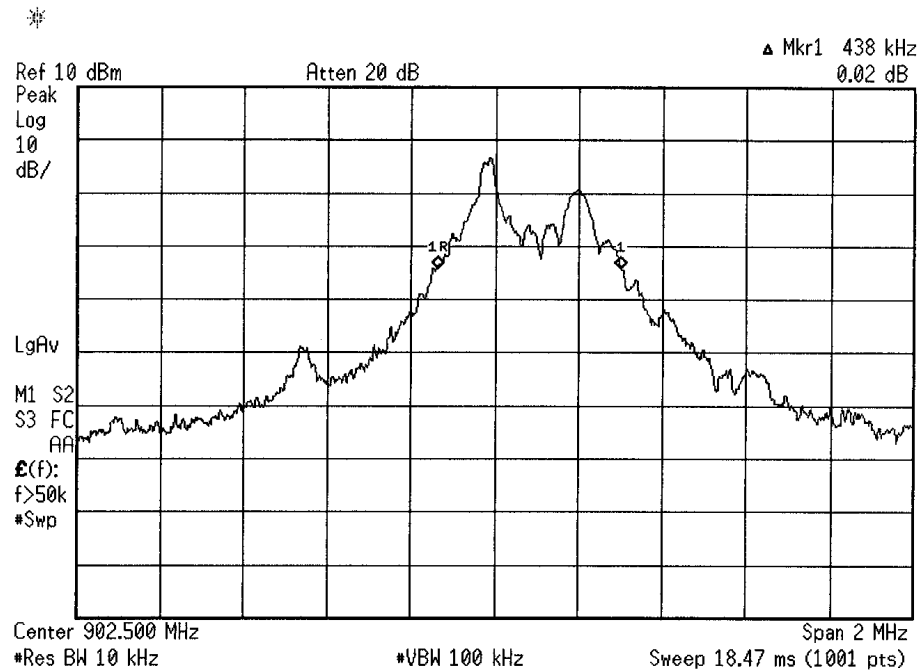
SC305425
CardioNet
MODEL DFMA Sensor

Jan. 8, 2004
TECH/ENGR: ML
LOCATION: TR2

FCC 47 Part 15.247 (a)(1)(i) Time of Occupancy
Limit = 0.4 seconds in 20 seconds
6 events x 5.65 ms = 33.9 ms < 400 ms
EUT Complies.

Report No. SC305425-03

5.2 DATA CHANNEL BANDWIDTH



SC 305425

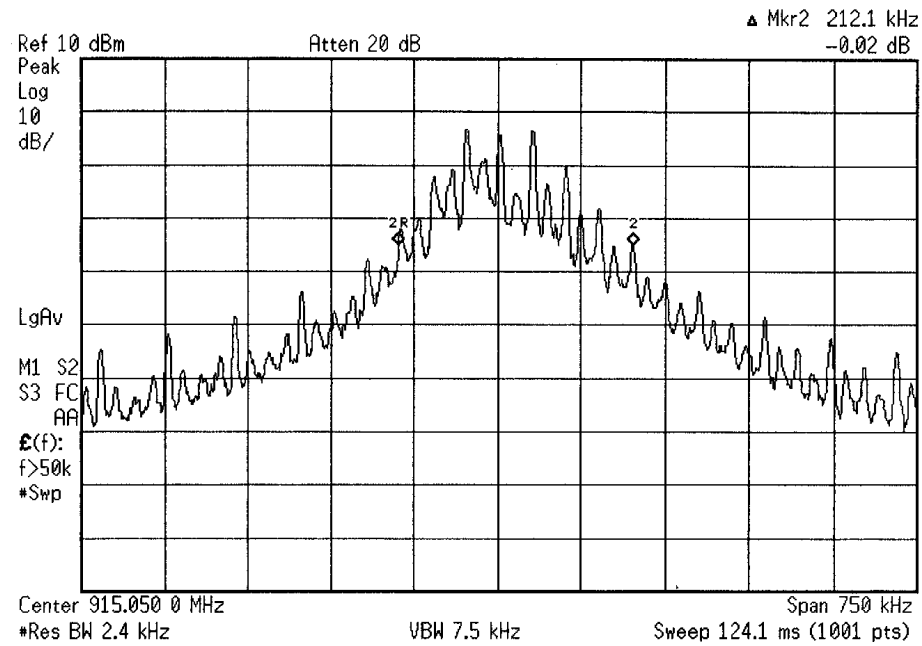
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (1) (i) 20 dB Bandwidth
Limit = Maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

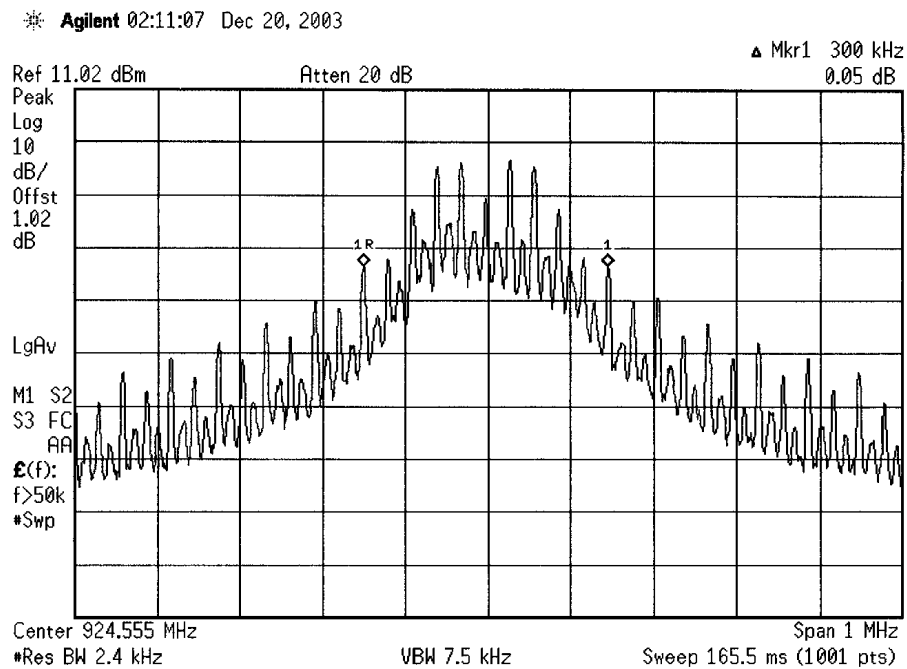
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (1) (i) 20 dB Bandwidth
Limit = Maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (1) (i) 20 dB Bandwidth
Limit = Maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

6. RF POWER OUTPUT, 15.247(b)(2)

6.1 EQUIPMENT

The *RF POWER OUTPUT* measurements were performed at the following test location :

☐ - Test not applicable

■ - TR 2, Test Room

Test Equipment Used :

Model No.	Prop. No.	Description	Manufacturer	Serial No.	Cal Date
E4440A	7500	Spectrum Analyzer	Agilent	MY43362168	01/05

Remarks: _____

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6.2 DATA

PEAK OUTPUT POWER

SHEET 1 OF 1

TEST REPORT # SC305425

TEST AREA TestRoom 2



DATE Jan. 8, 2004

EUT MODEL # DFMA

TEMPERATURE 23 °C

SPECIFICATION (S):

EUT LOT # n/a

HUMIDITY 38 %

FCC 15.247(b)(2)

EUT DESCRIPTION Cardionet Sensor

AIR PRESSURE 100.1 kPa

Limit = 0.25 Watt (24.0 dBm)

Frequency	POWER LEVEL (DBM)	COMPLIES	REMARKS
902.5 MHz	2.25	YES	
915.0 MHz	2.88	YES	
922.0 MHz	3.22	YES	

NOTES: Not Modulated.

Test Equipment : 8, 9

TESTED BY:

M. Lyon

REVIEWED BY:

FREQ STAB.doc
5/23/02

Report No. SC305425-03

7. RADIATED SPURIOUS EMISSIONS, 15.247(c); 15.205(a)

7.1 EQUIPMENT

The *Radiated Spurious EMISSIONS* measurements were performed at the following test location :

☐ - Test not applicable

Roof #1, San Diego

Testing was performed at a test distance of:

3 meters

Model #	Prop #	Description	Manufacturer	Serial #	Cal Due Date
HP8566B	744	Spectrum Analyzer	Hewlett Packard	2618A02913	01/05
N/M/N	719	Pre-amplifier	TUV	--	NCR
FF6549-1	783	900 MHz High Pass Filter	Sage	008	NCR
3115	453	Horn Antenna	Electro Mechanics Co.	9412-434	01/05
3146	244	Log Periodic Antenna	EMCO	1063	06/04

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8. CONDUCTED SPURIOUS MODULATION, 15.247(c)

8.1 EQUIPMENT

The *CONDUCTED SPURIOUS* measurements were performed at the following test location :

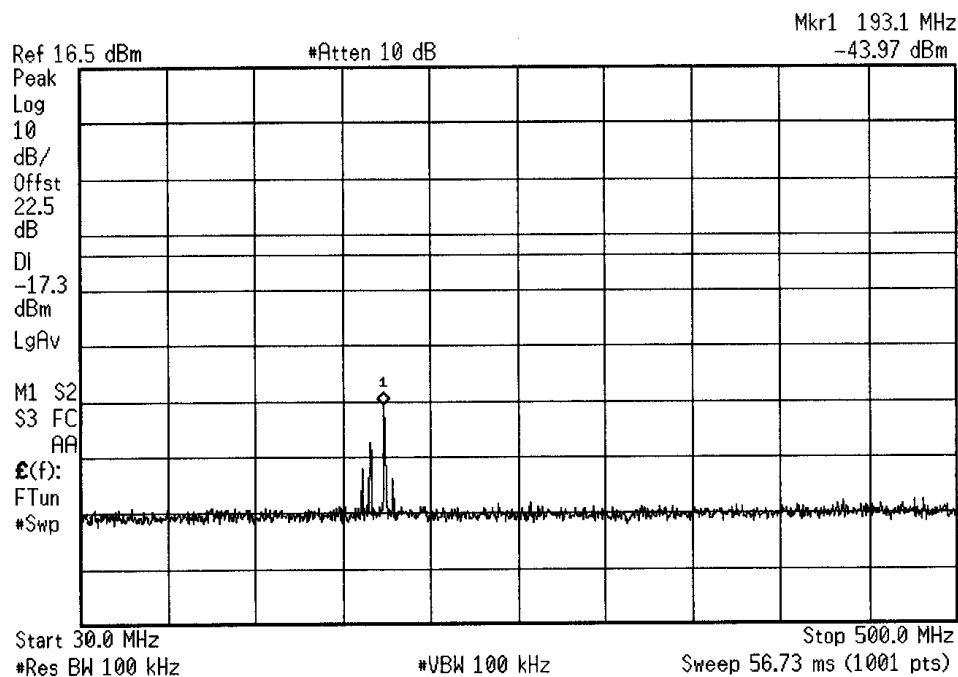
☐ - Test not applicable

■ - TR 2, Test Room

Model #	Prop #	Description	Manufacturer	Serial #	Cal Due Date
E440A	7500	Spectrum Analyzer	Agilent	MY43362168	01/05
20 dB	750	20 dB Attenuator Pad	Singer	--	NCR

Report No. SC305425-03

8.2 DATA



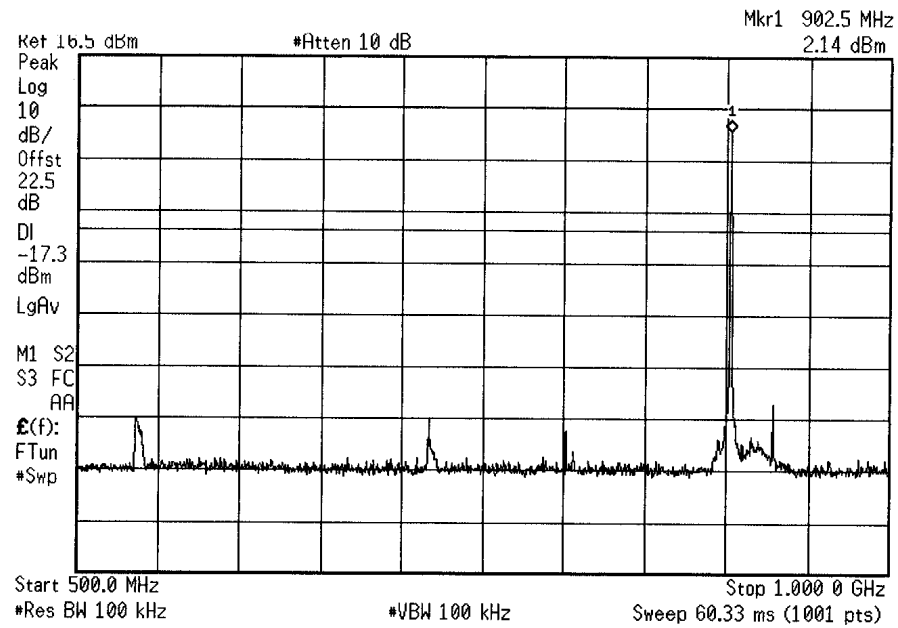
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



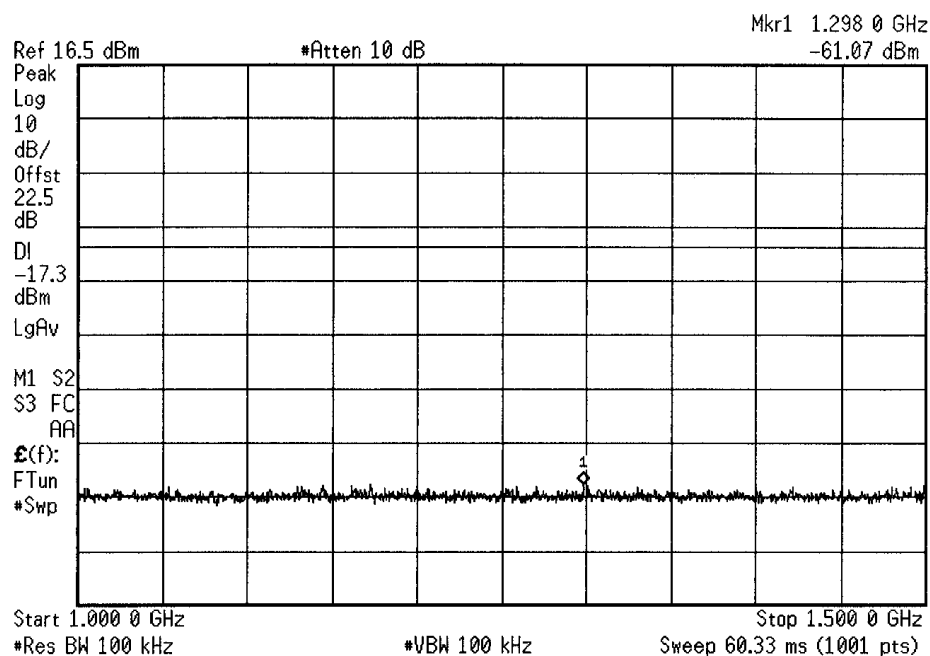
SC 305425

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Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

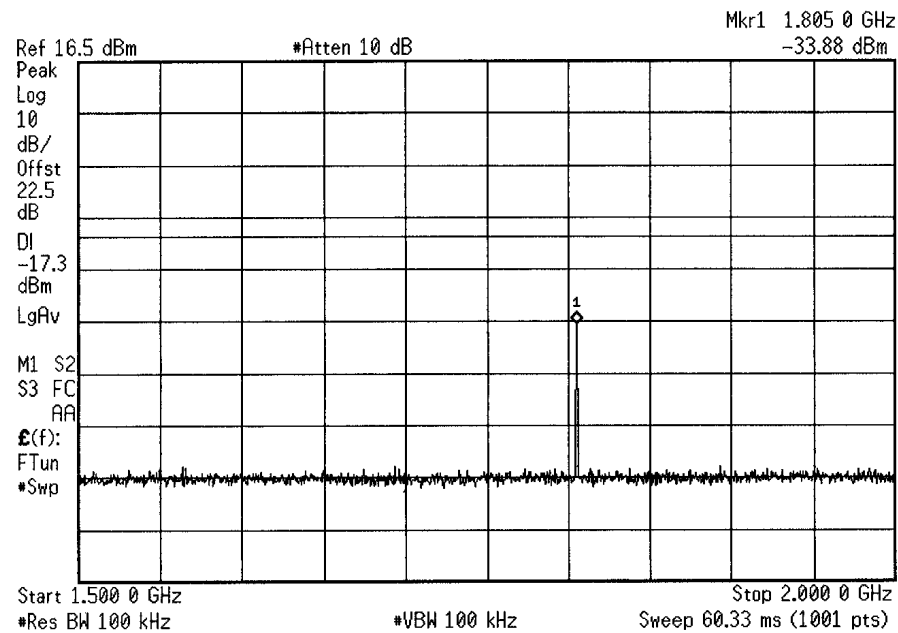


SC 305425

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EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2



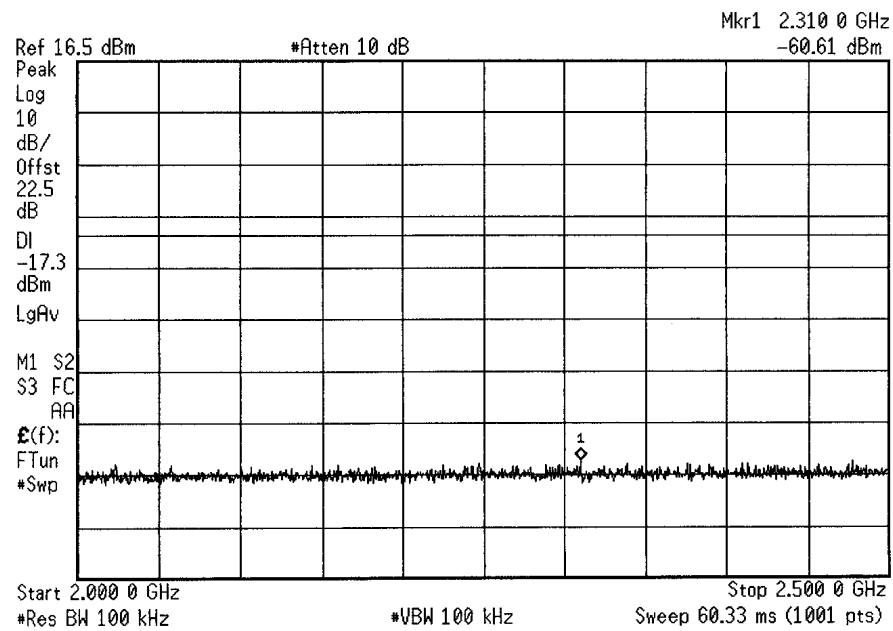
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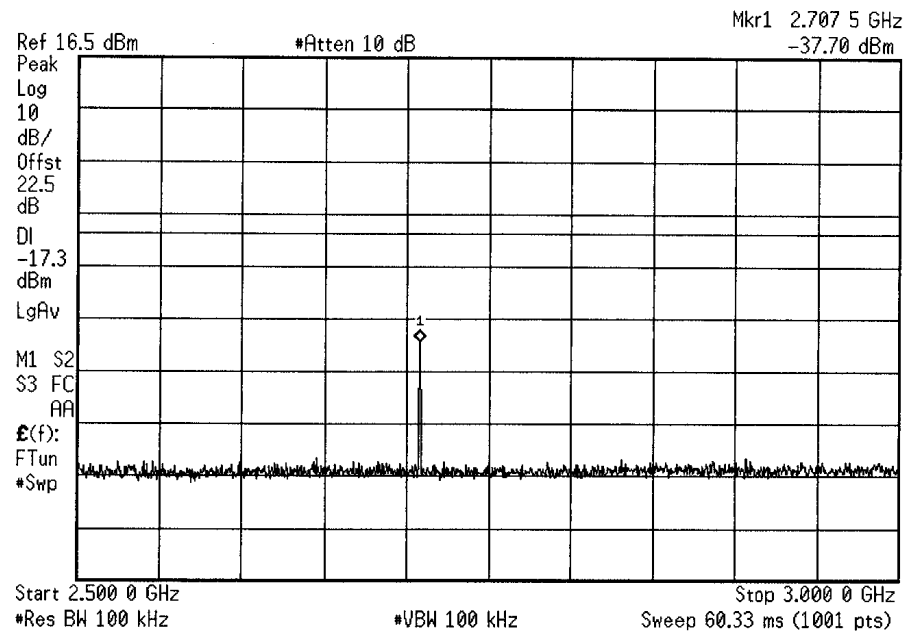
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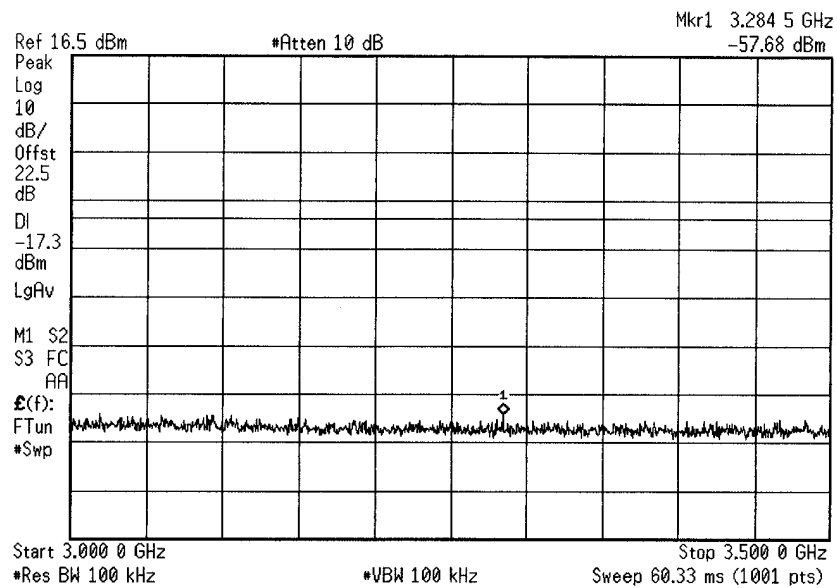
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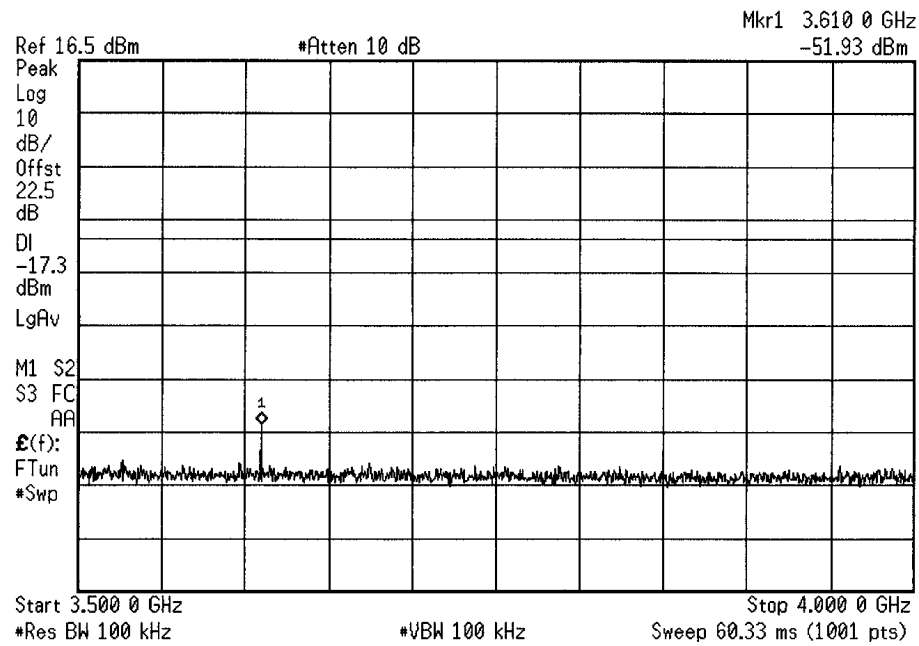
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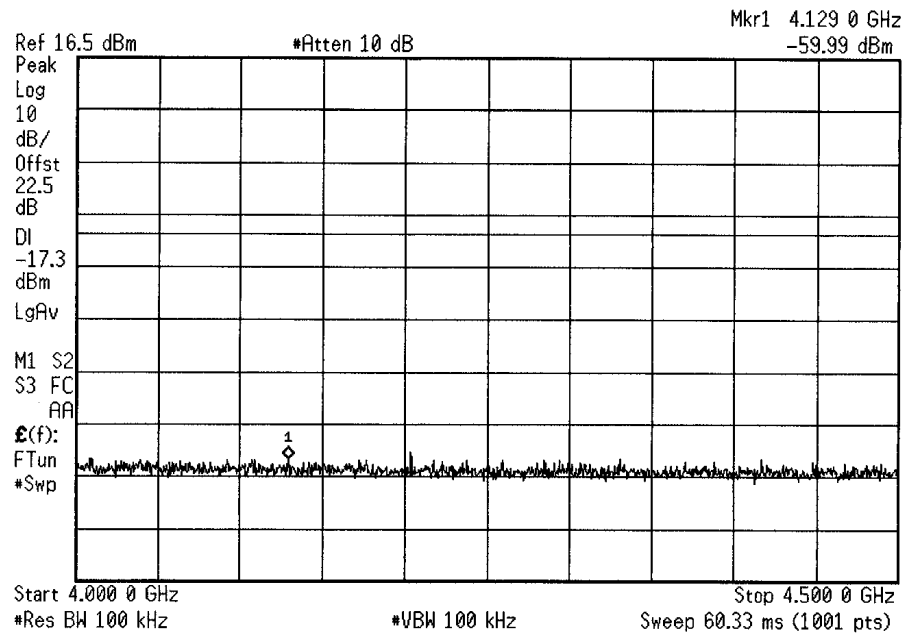
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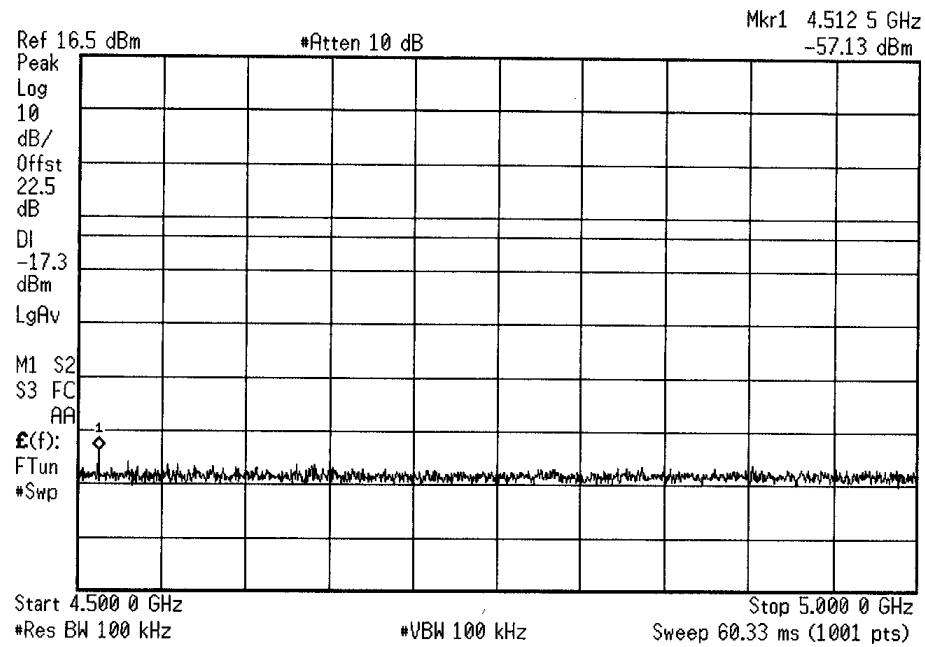
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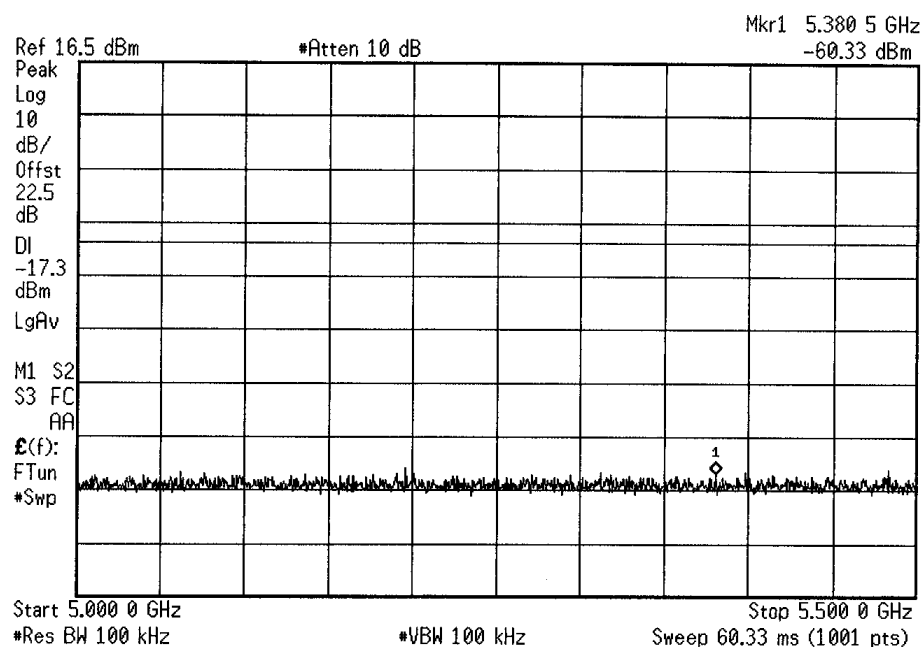
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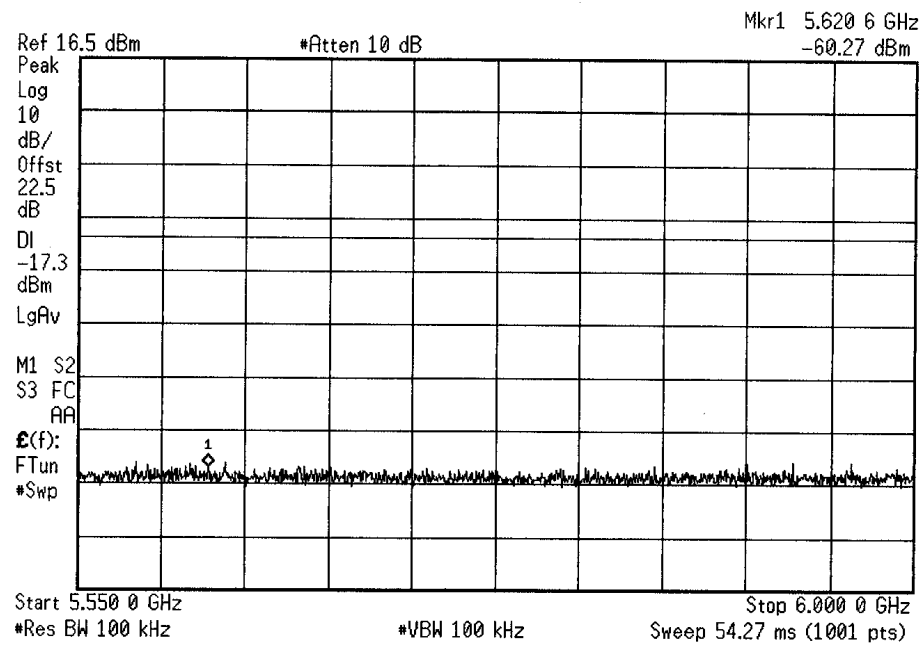


SC 305425

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Engineer: MJL
Location: TR 2



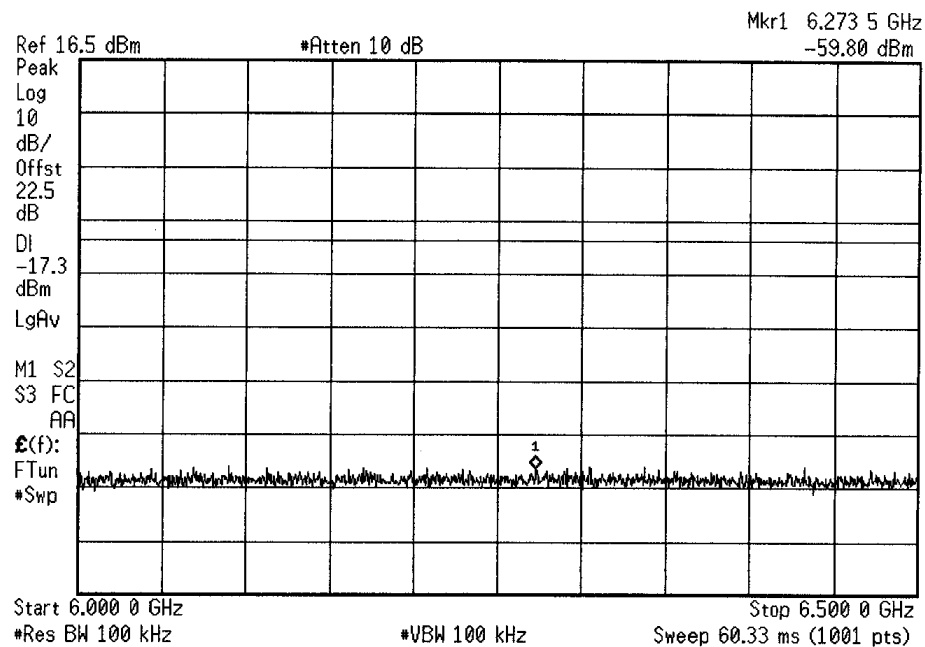
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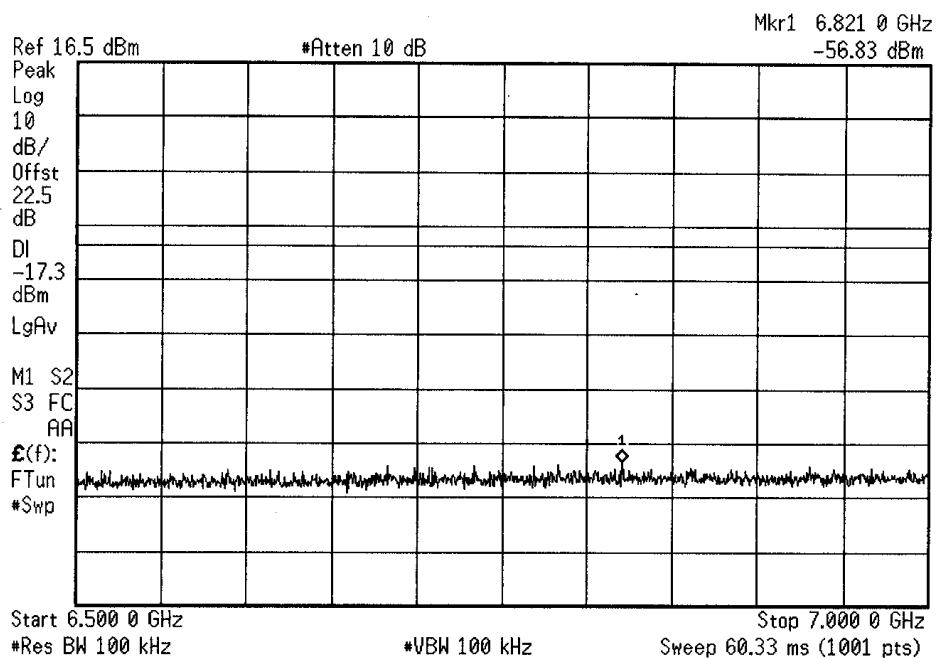
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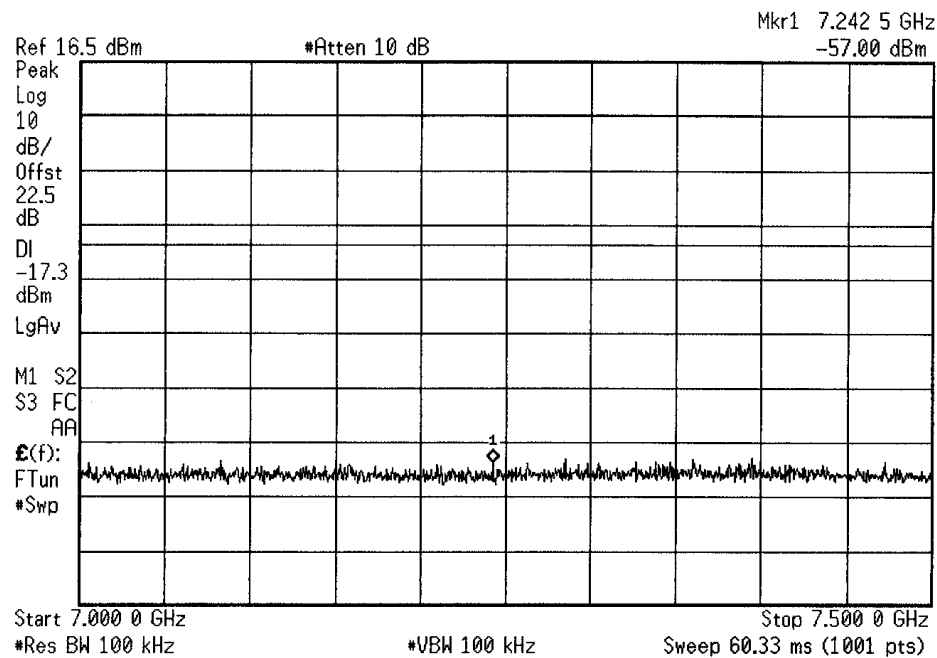
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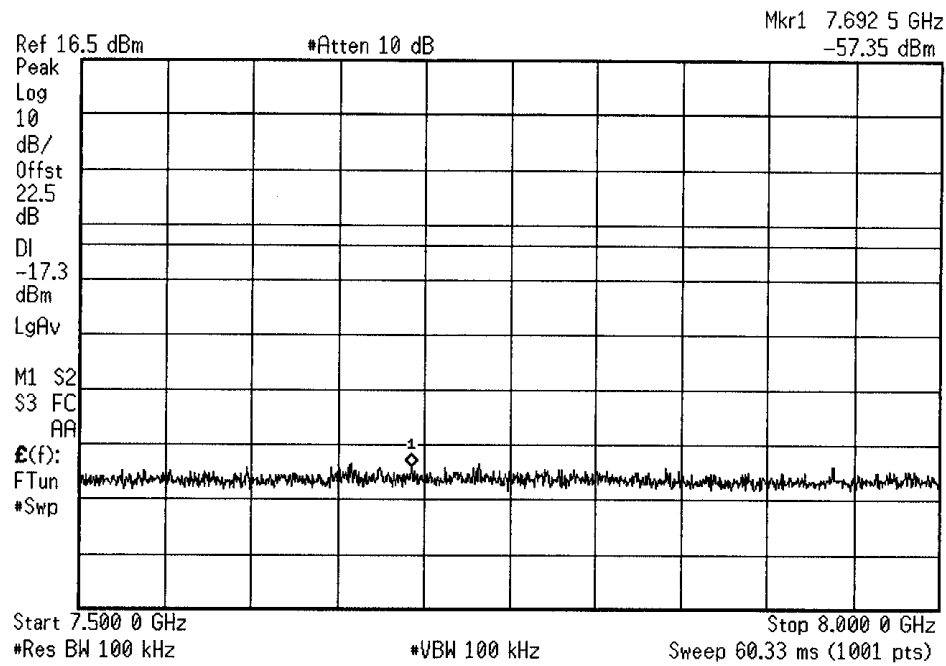
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Location: TR 2

Report No. SC305425-03



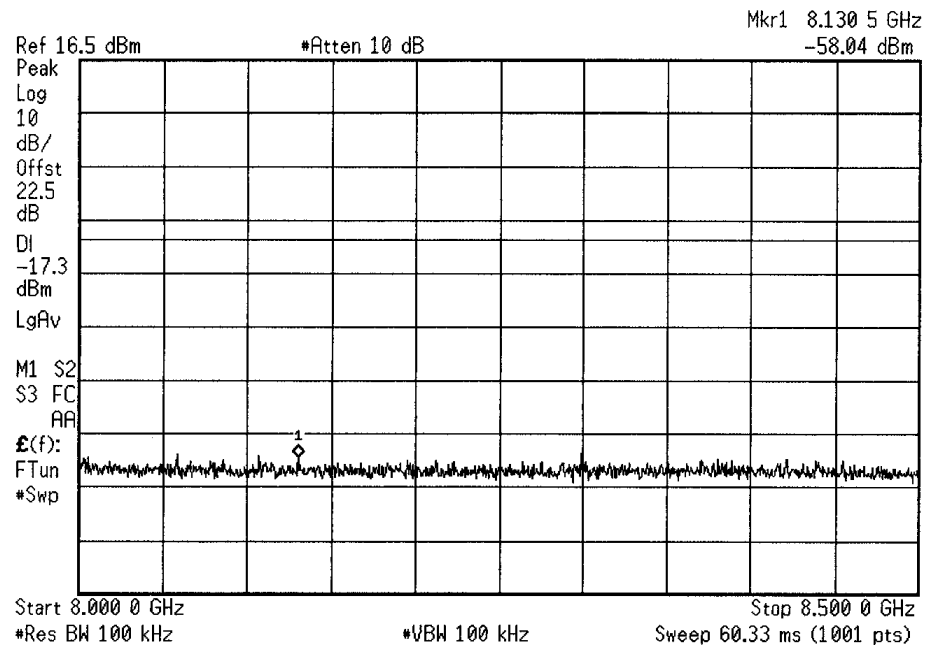
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



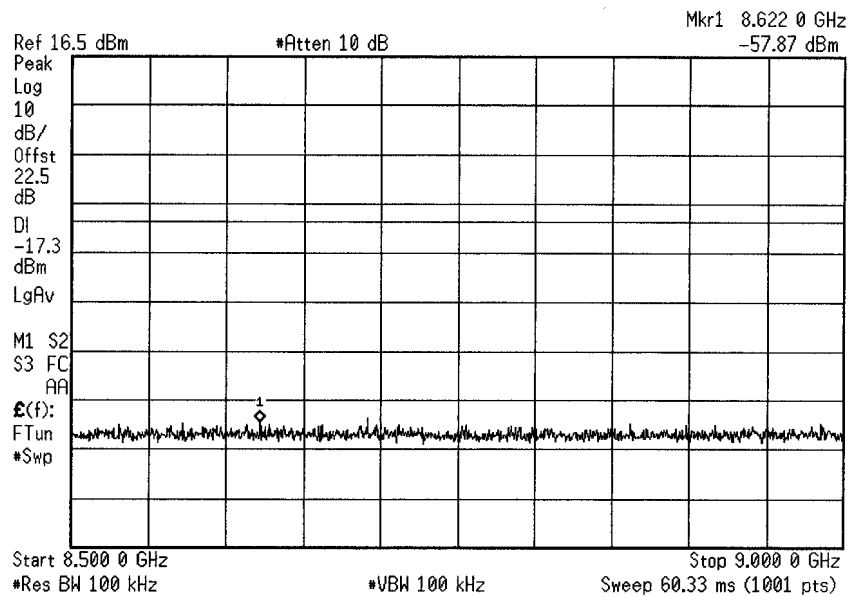
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



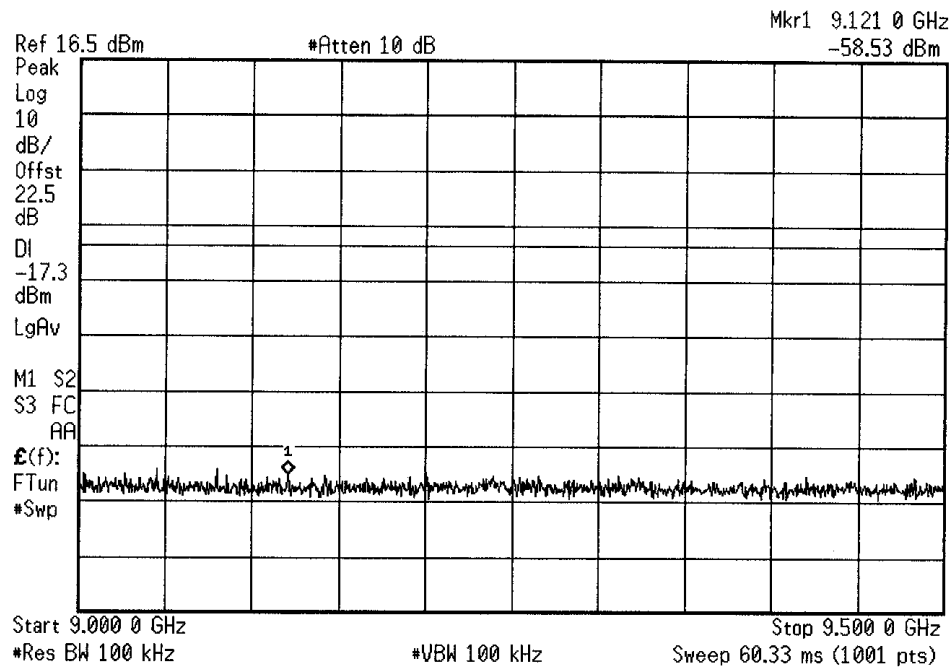
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



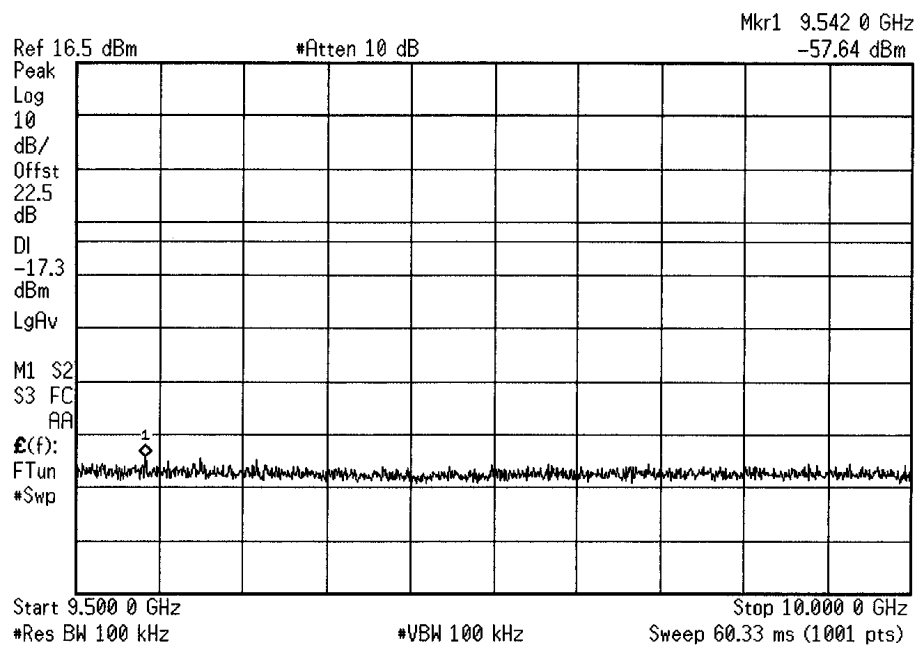
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

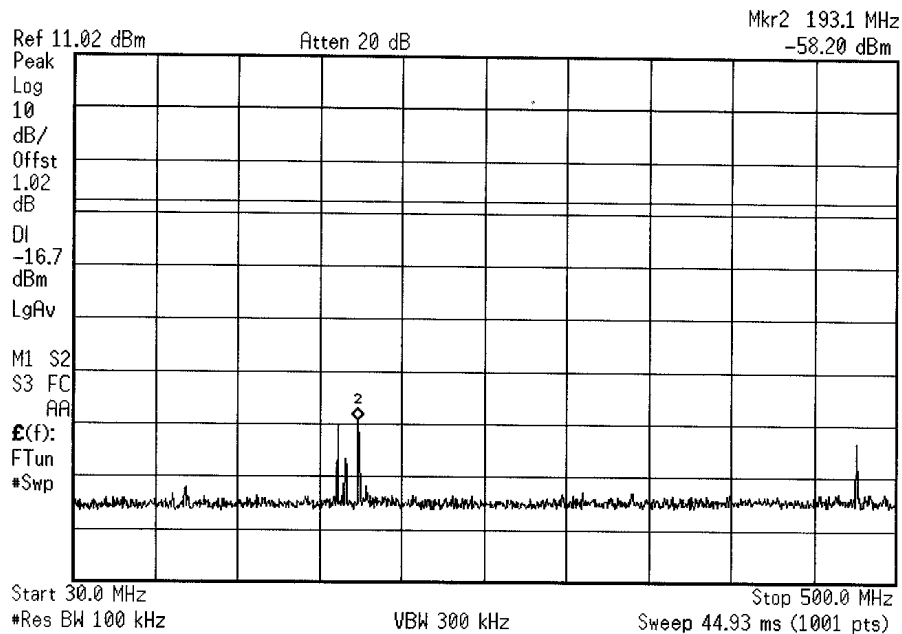
CardioNet
Model: DFMA Monitor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Low channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

Agilent 01:53:09 Dec 20, 2003



SC 305425

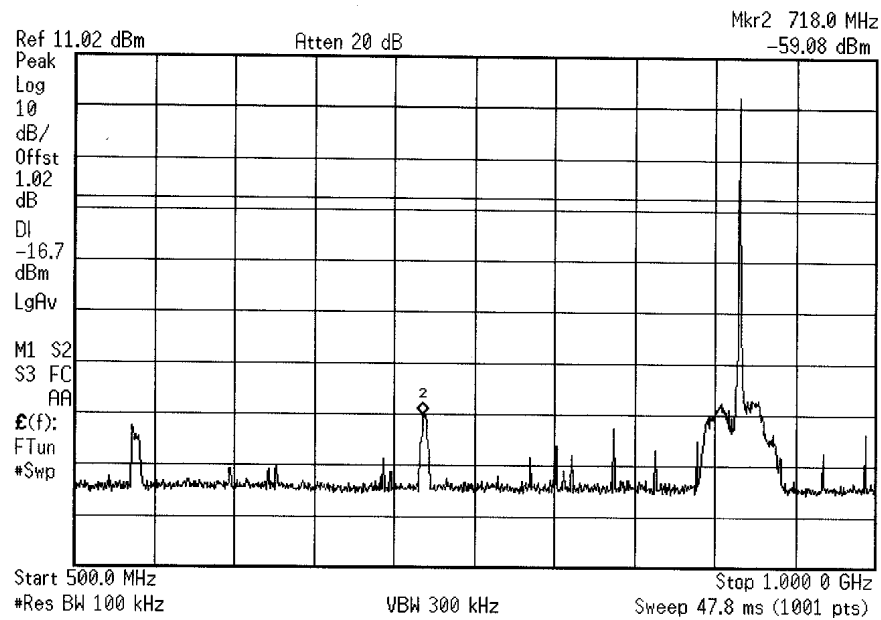
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:54:13 Dec 20, 2003



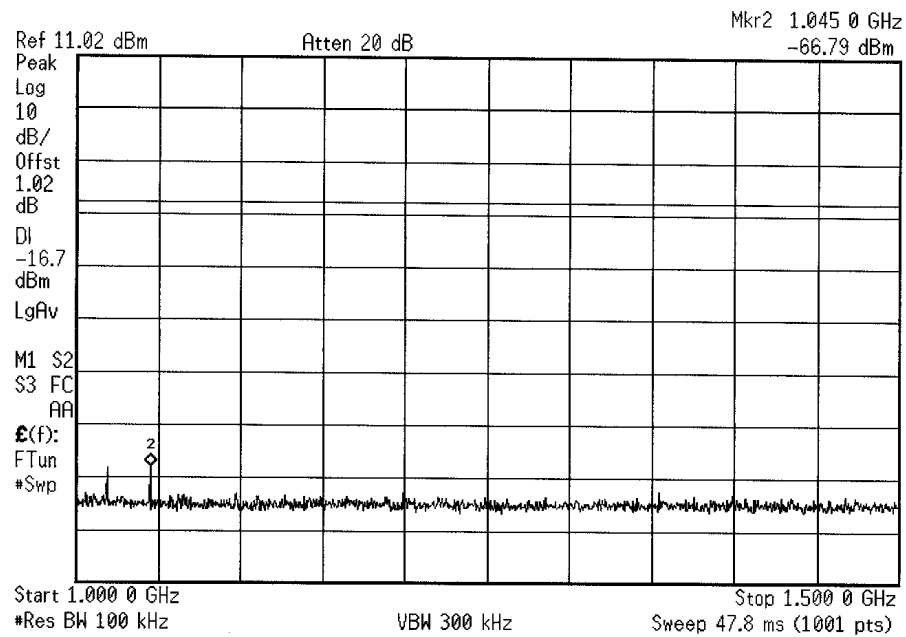
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

* Agilent 01:55:13 Dec 20, 2003



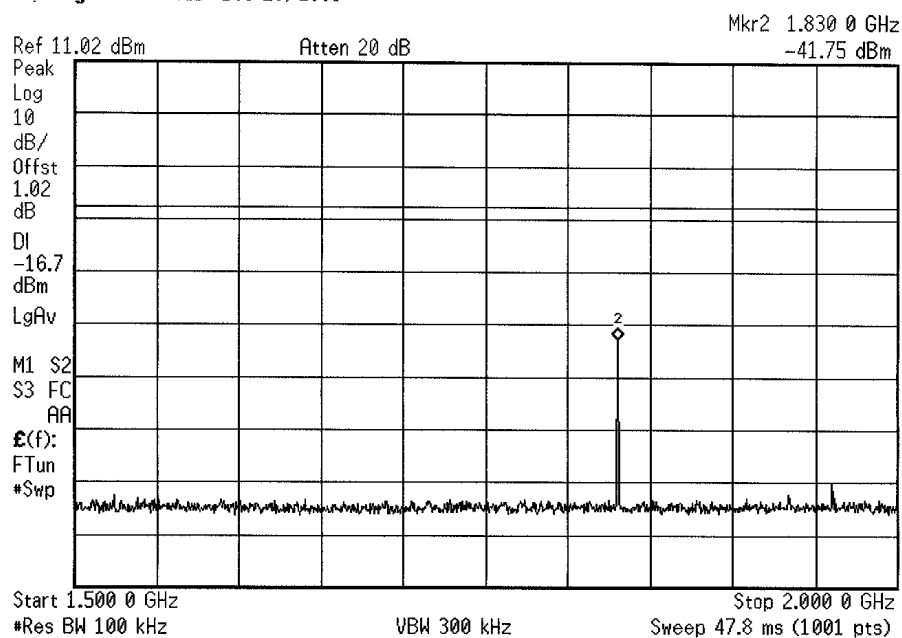
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

✱ Agilent 01:56:25 Dec 20, 2003



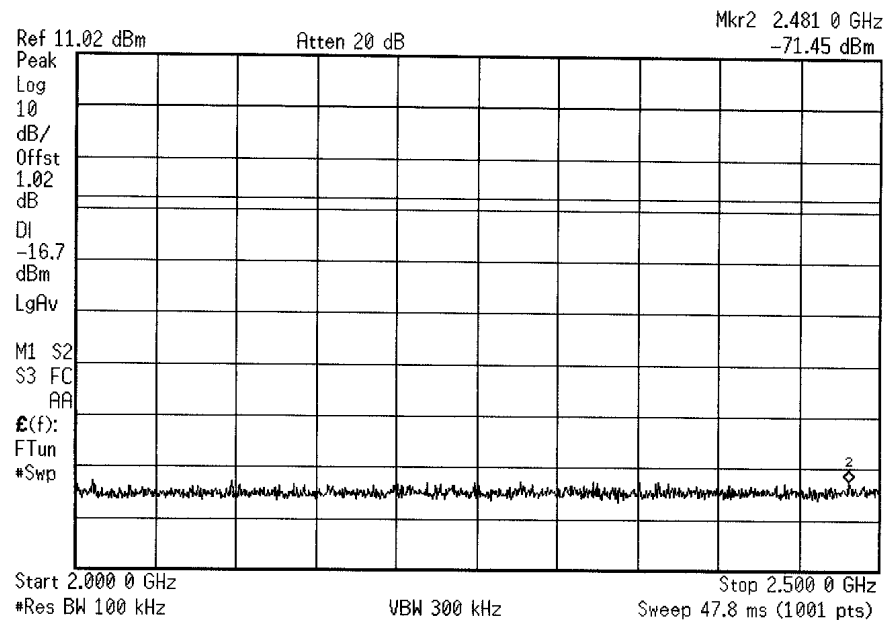
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

* Agilent 01:57:29 Dec 20, 2003

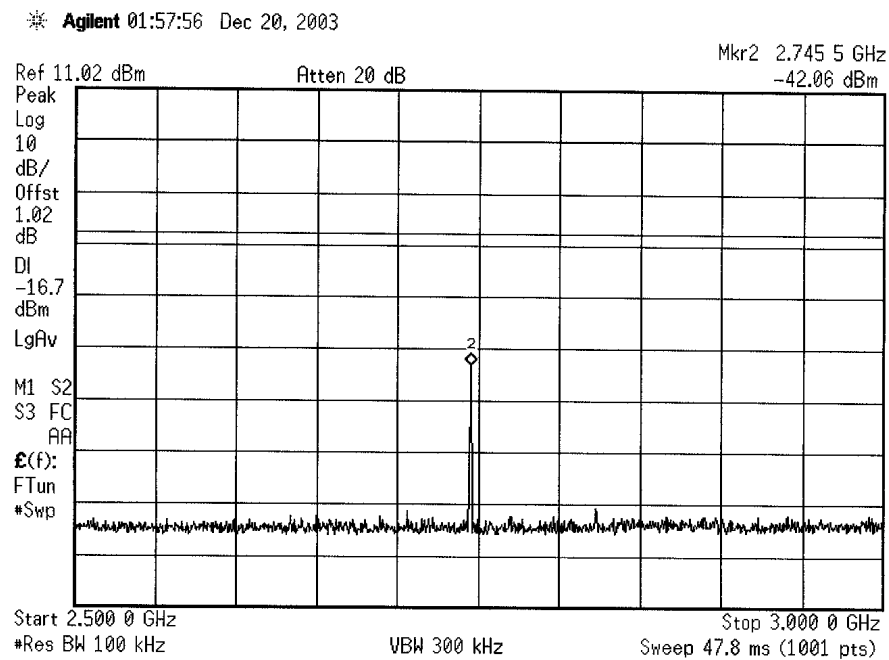


SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2



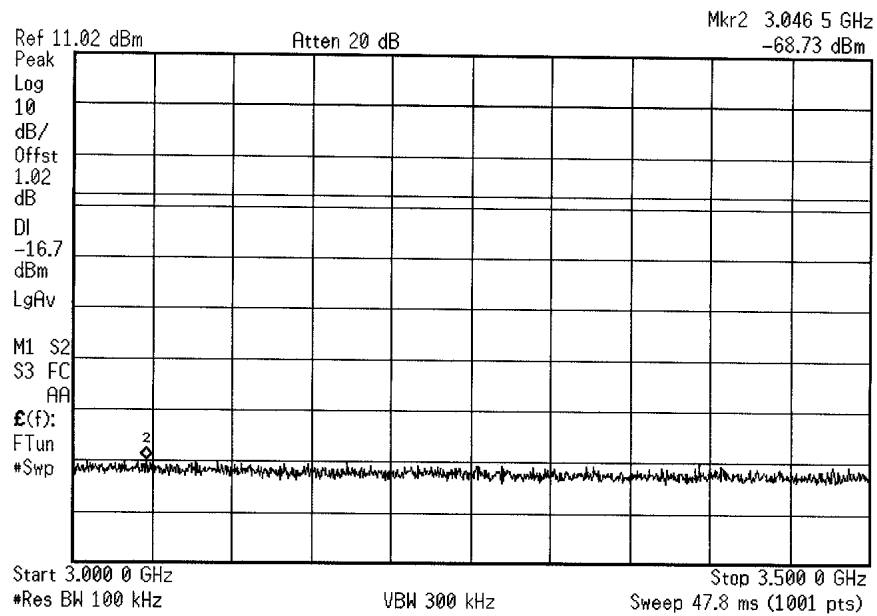
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

✱ Agilent 01:59:05 Dec 20, 2003



SC 305425

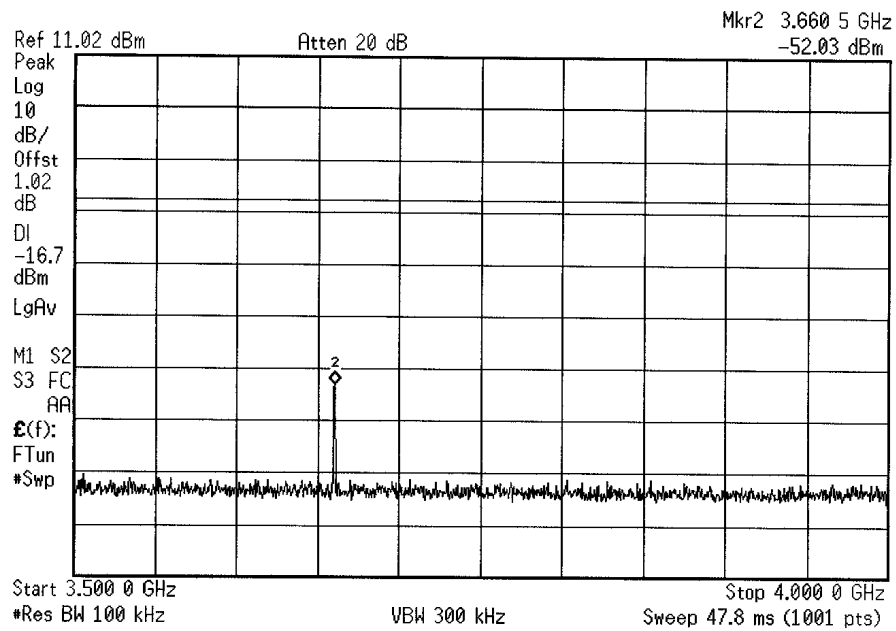
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:59:26 Dec 20, 2003



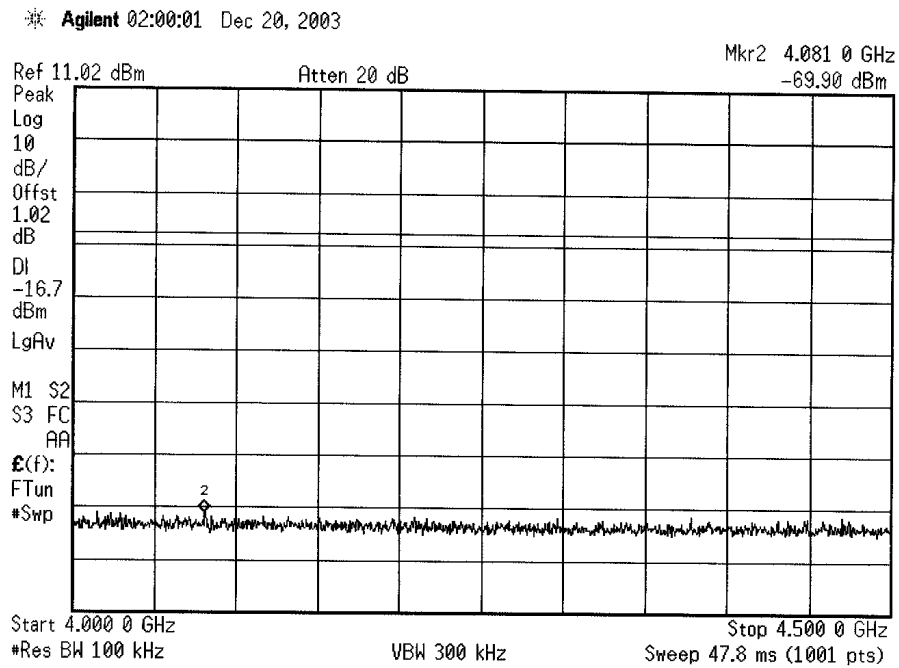
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

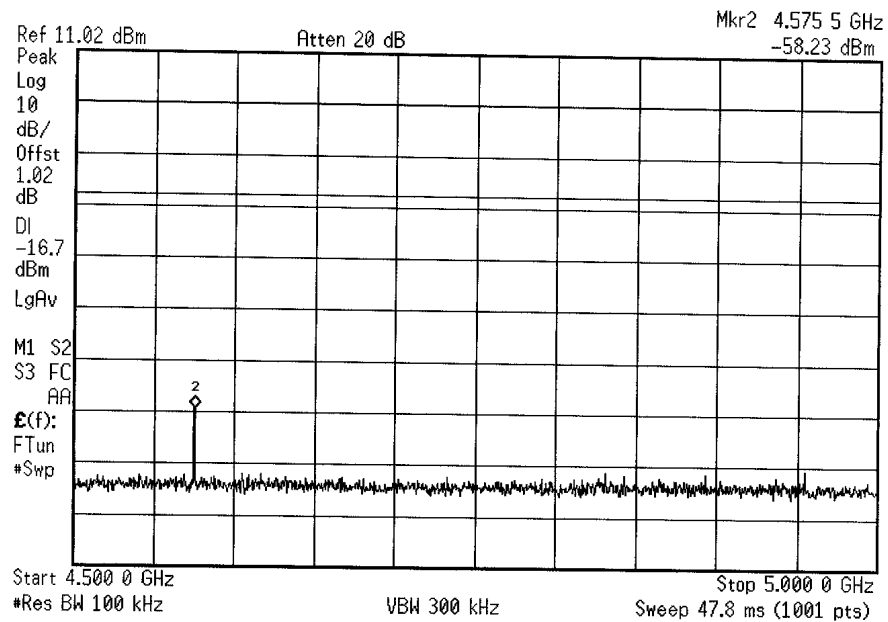
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 02:00:39 Dec 20, 2003



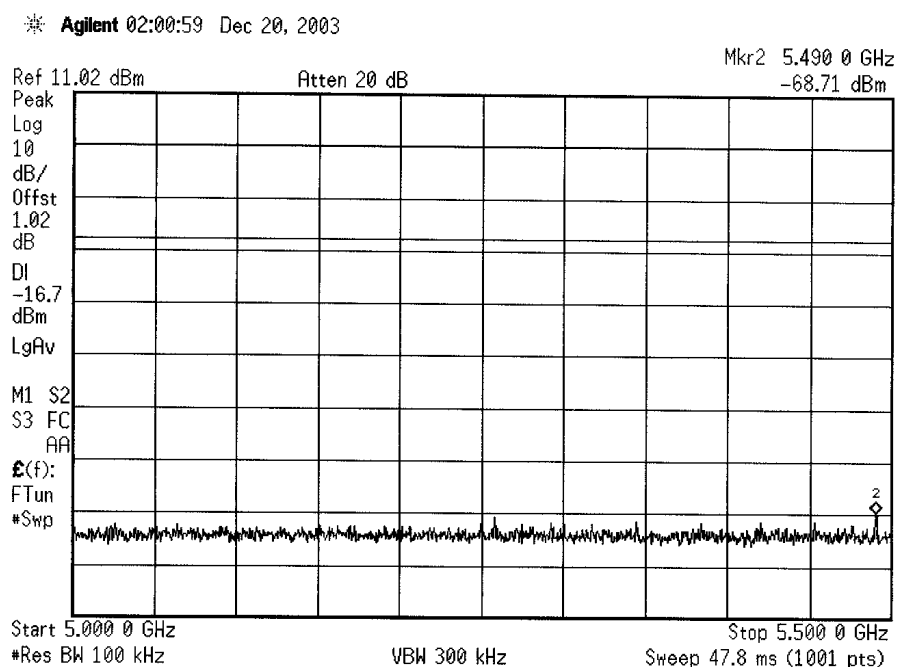
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

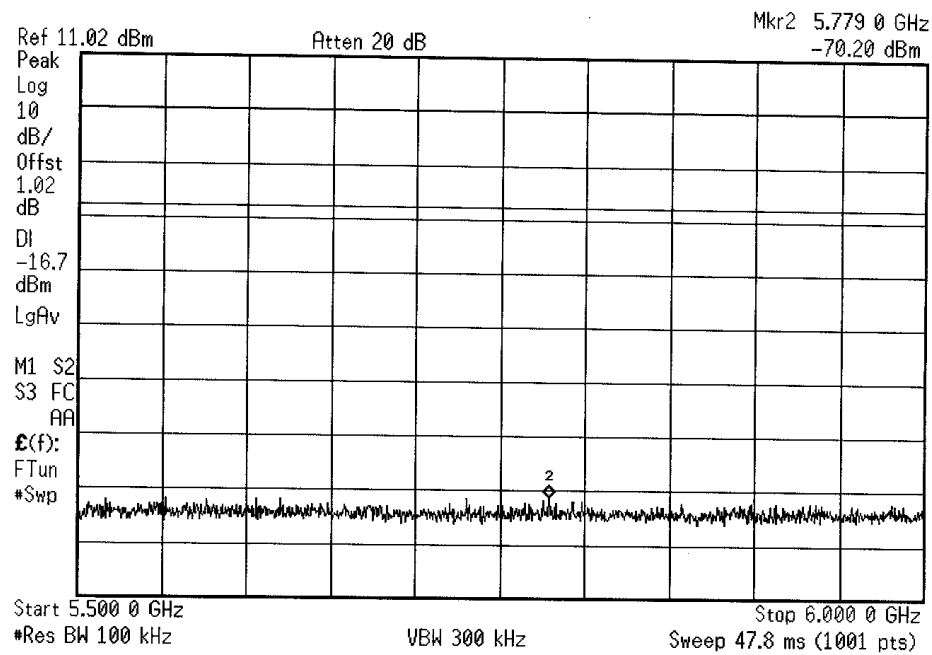
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

✱ Agilent 02:01:47 Dec 20, 2003



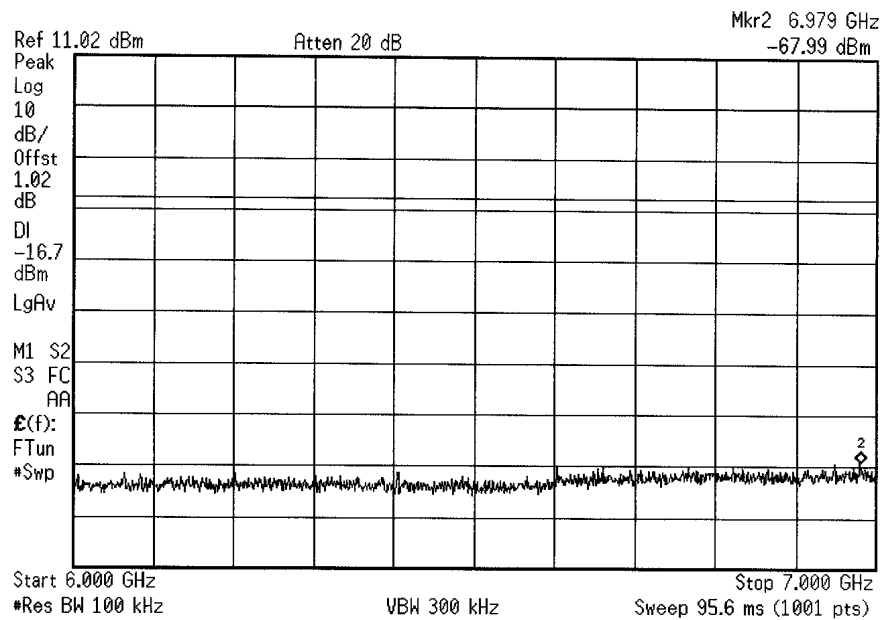
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

* Agilent 02:02:05 Dec 20, 2003

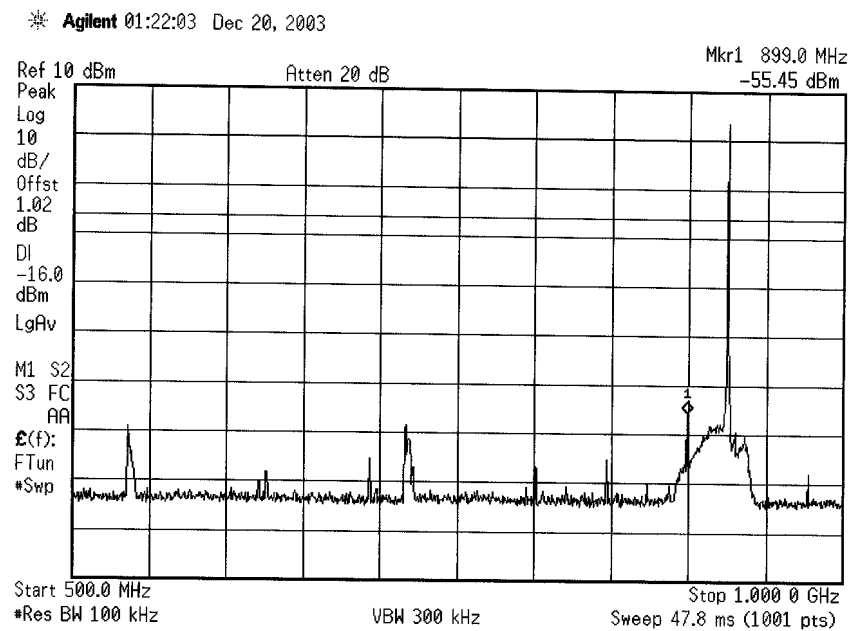


SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
Mid channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2



SC 305425

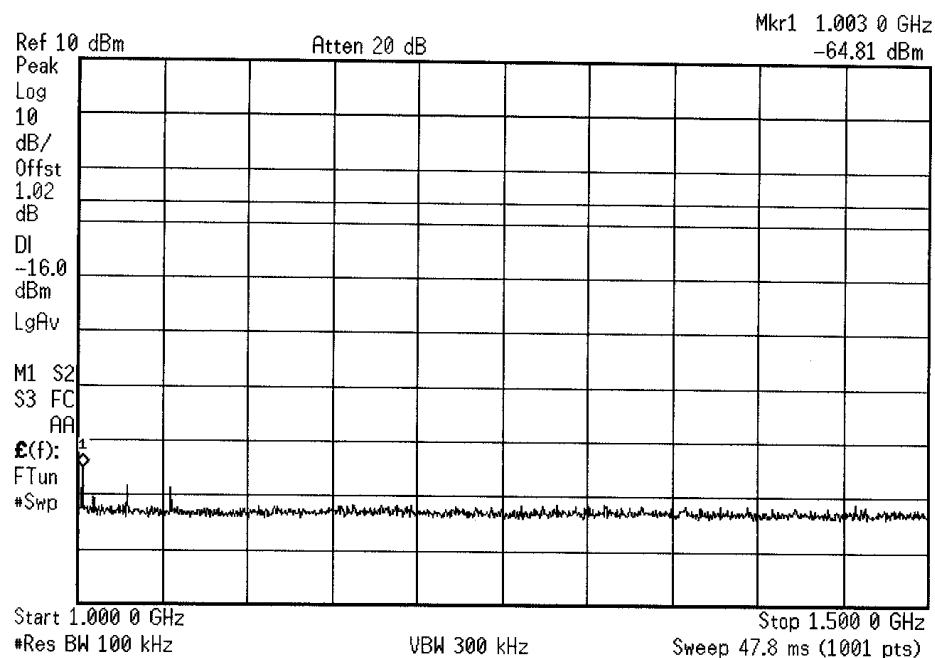
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:19:46 Dec 20, 2003



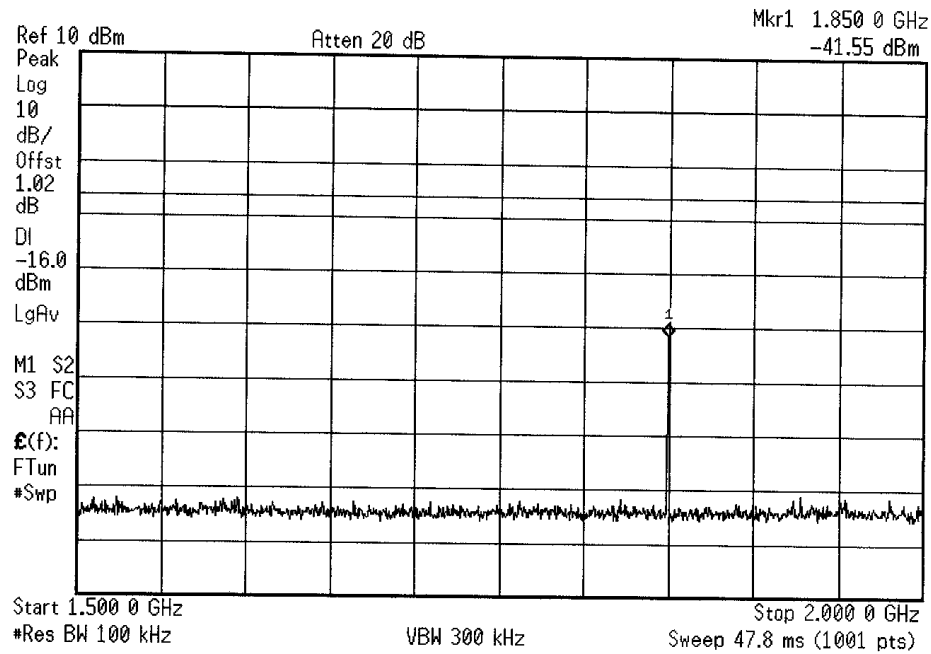
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

✱ Agilent 01:22:49 Dec 20, 2003



SC 305425

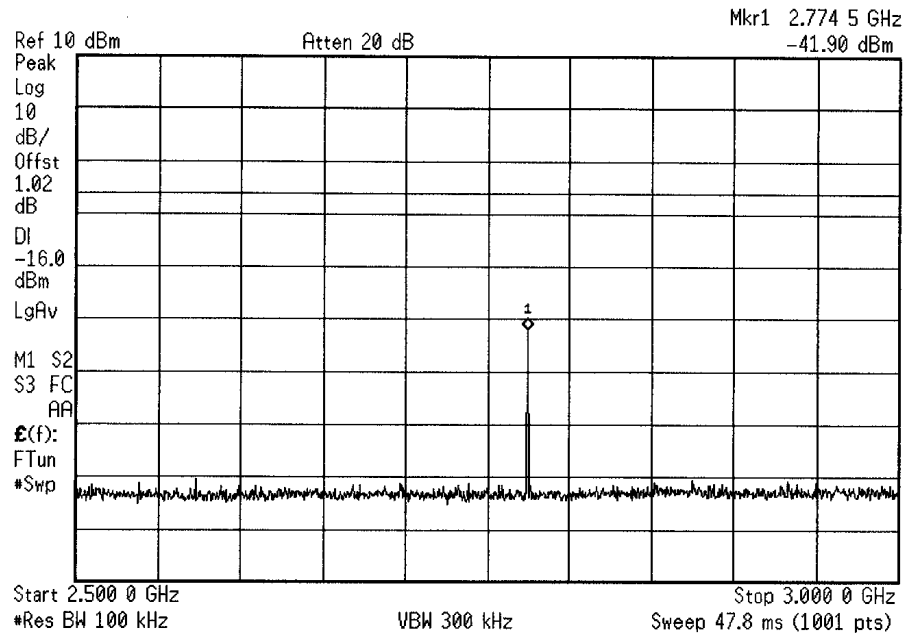
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:23:10 Dec 20, 2003



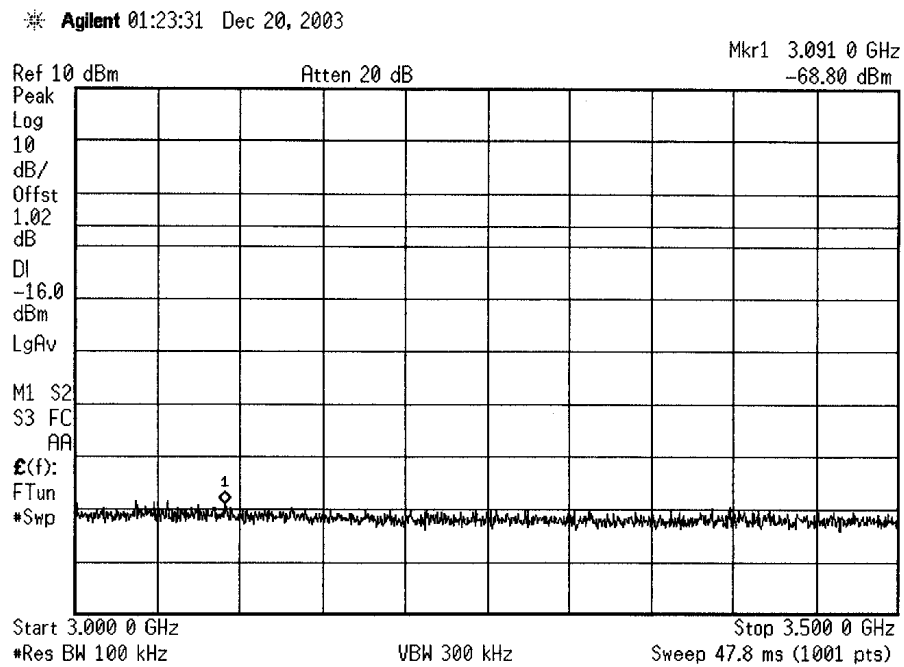
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03



SC 305425

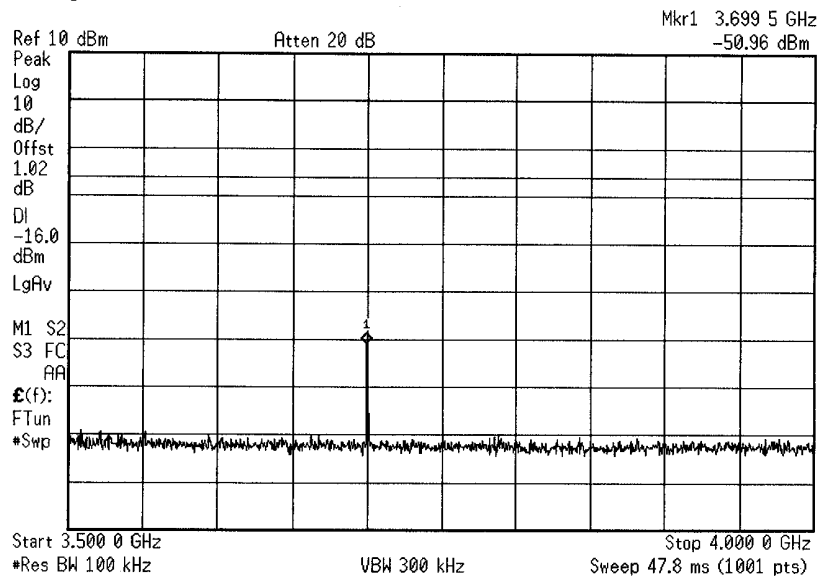
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

✱ Agilent 01:23:50 Dec 20, 2003



SC 305425

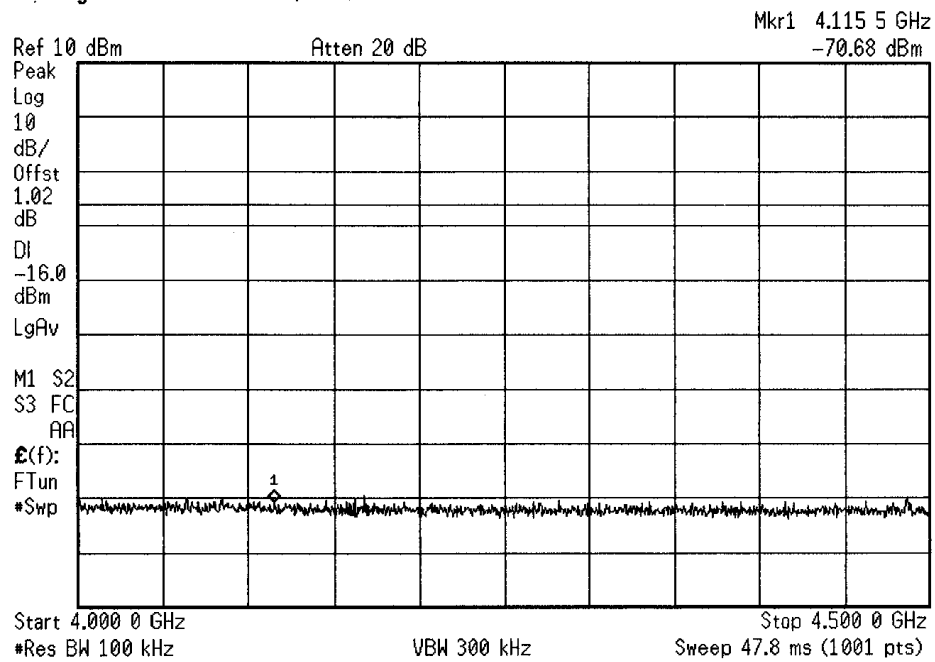
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:24:29 Dec 20, 2003



SC 305425

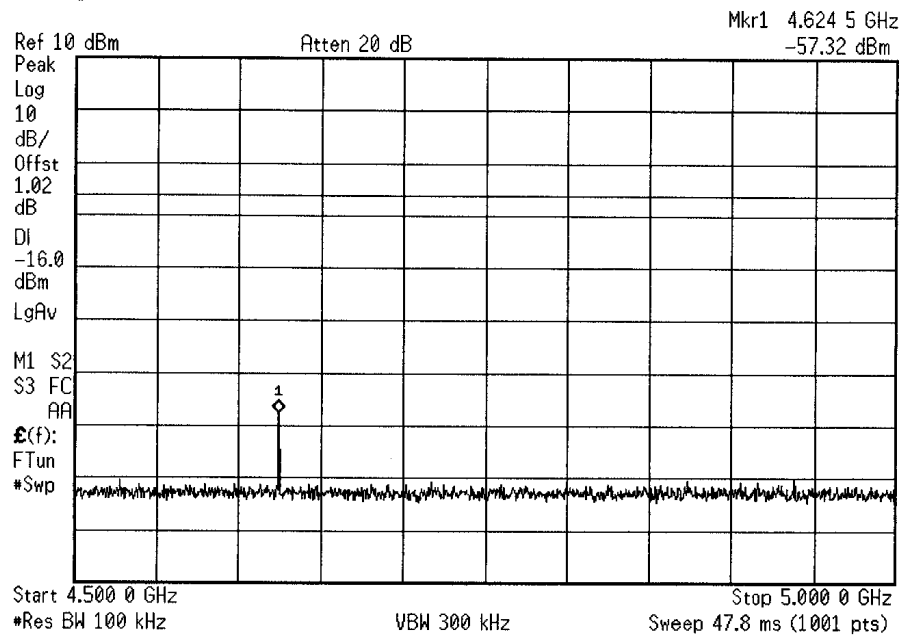
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

✱ Agilent 01:25:12 Dec 20, 2003



SC 305425

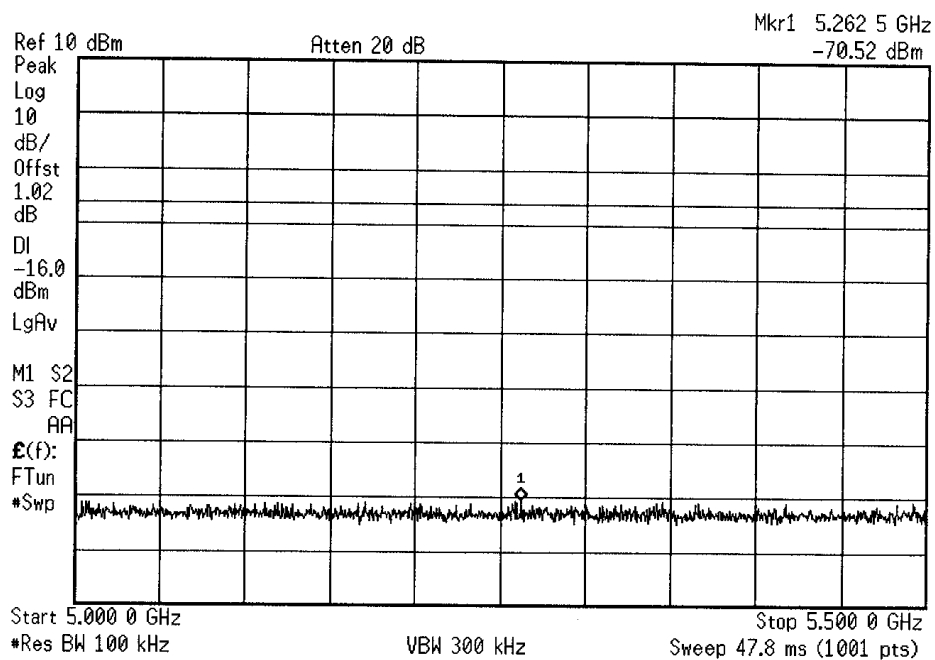
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:25:33 Dec 20, 2003



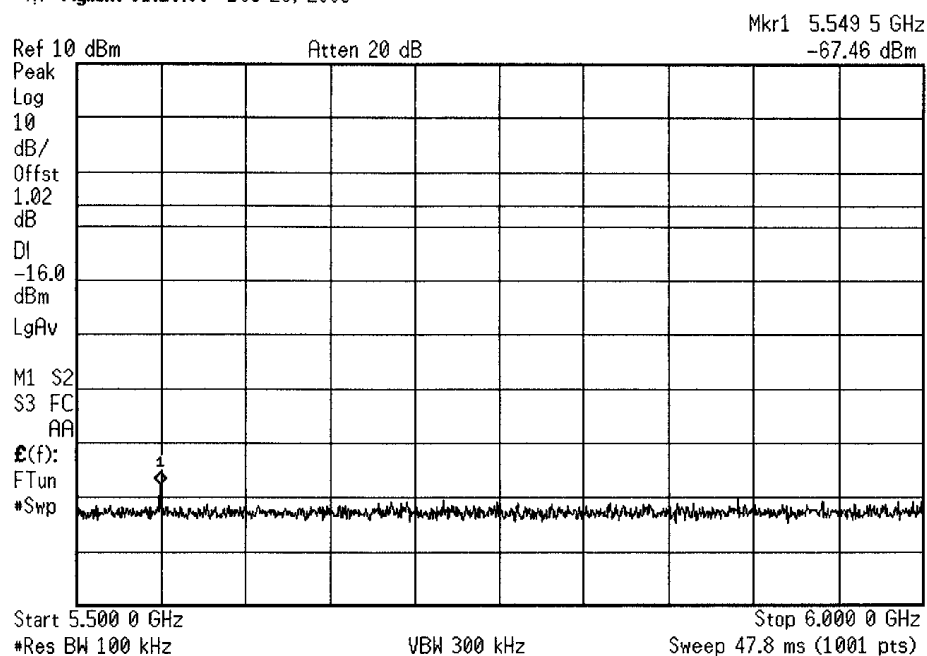
SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

※ Agilent 01:26:00 Dec 20, 2003



SC 305425

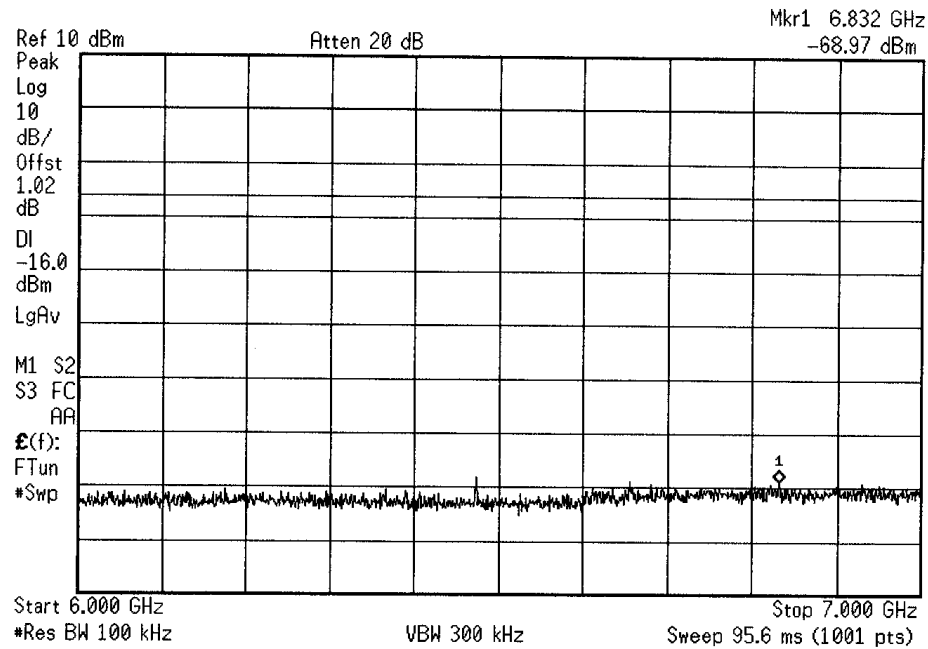
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:26:25 Dec 20, 2003



SC 305425

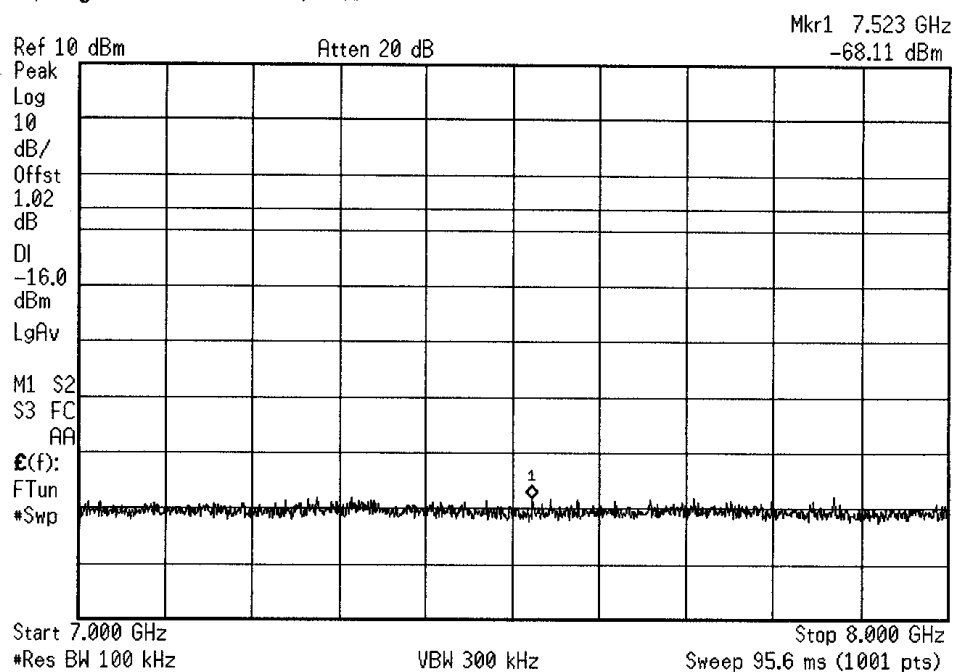
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:26:45 Dec 20, 2003



SC 305425

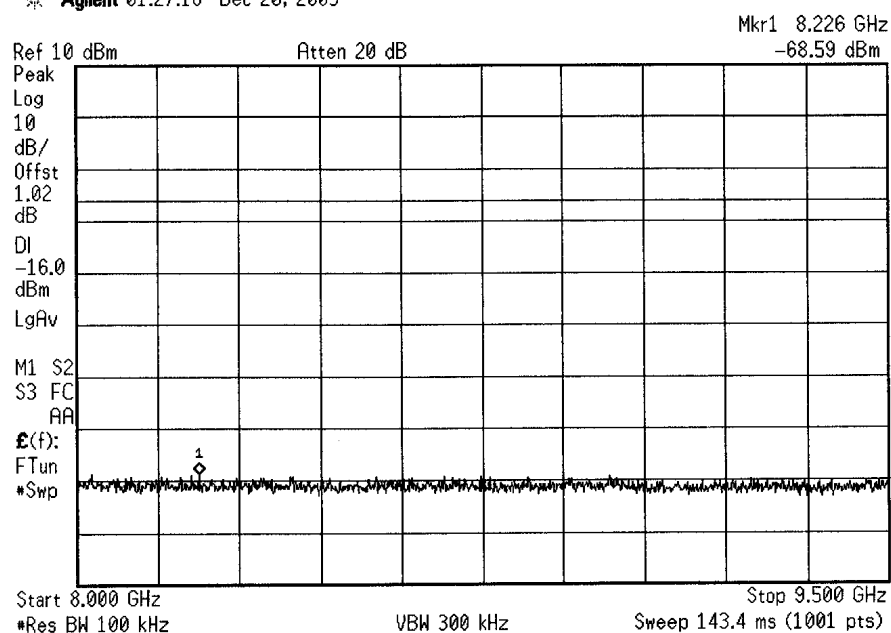
CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

* Agilent 01:27:18 Dec 20, 2003



SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (c) Conductive Spurious Emissions
Limit = 20 dB below peak power of intentional radiator
High channel
EUT complies

January 8, 2004
Engineer: MJL
Location: TR 2

Report No. SC305425-03

9. PEAK POWER DENSITY, 15.247(d)

9.1 EQUIPMENT

The *CONDUCTED SPURIOUS* measurements were performed at the following test location :

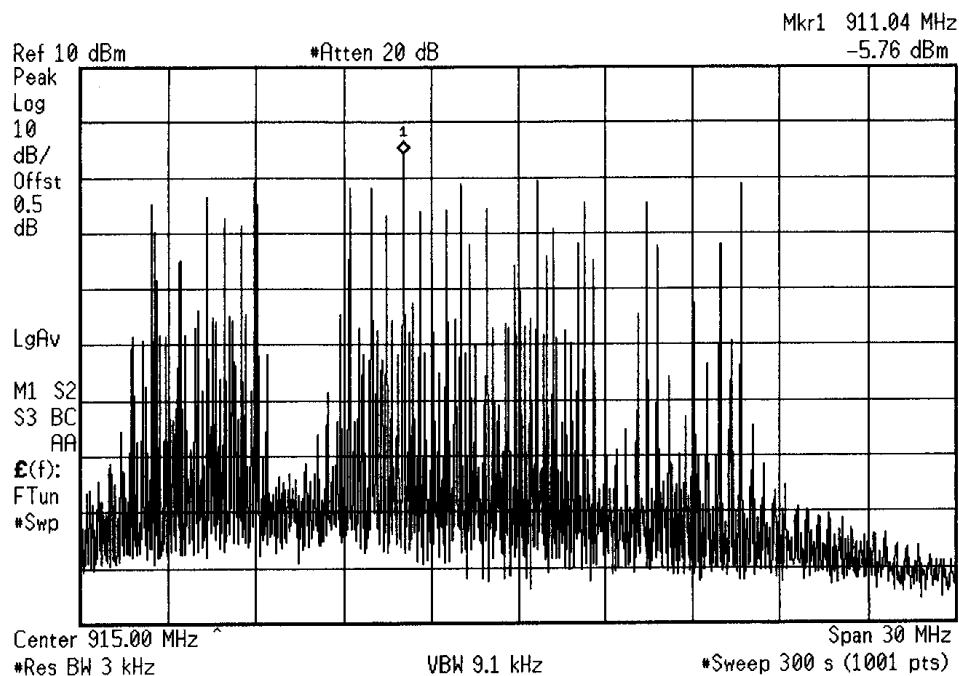
☐ - Test not applicable

■ - TR 2, Test Room

Model #	Prop #	Description	Manufacturer	Serial #	Cal Due Date
HP8566B	744	Spectrum Analyzer	Hewlett Packard	2618A02913	01/05
E440A	7500	Spectrum Analyzer	Agilent	MY43362168	01/05
20 dB	750	20 dB Attenuator Pad	Singer	--	NCR
437B	572	Power Meter	Hewlett Packard	3125019308	05/04
8482A	574	Power Sensor	Hewlett Packard	3318A27679	04/04
N/M/N	719	Pre-amplifier	TUV	--	NCR
FF6548-2	877	2000 MHz High Pass Filter	Sage	005	NCR
FF6549-1	783	900 MHz High Pass Filter	Sage	008	NCR
B8M50702	6815	High Pass Filter	Micro-Tronics	008	NCR
3115	798	Horn Antenna	Electro Mechanics Co.	9908-5927	06/04
3115	453	Horn Antenna	Electro Mechanics Co.	9412-434	01/05
3146	244	Log Periodic Antenna	EMCO	1063	06/04
UHA 9105	6651	Dipole Antenna	Schwarzbeck	247	02/05
8350B	6707	Sweep Oscillator	Hewlett Packard	--	6707

Report No. SC305425-03

9.2 DATA



SC 305425

CardioNet
Model: DFMA Sensor

FCC 47 Part 15.247 (d) Peak Power Spectral Density
Limit = intentional radiator not greater than 8 dBm in any 3 kHz. band
EUT Complies

January 8, 2004
Engineer: MJL
Location: TR2

Report No. SC305425-03

12. ATTESTATION STATEMENT

GENERAL REMARKS:

SUMMARY:

All tests were performed per CFR 47, *Part 15, Paragraphs 15.2471(a), (b); (c); (d).*

■ - Performed

The Equipment Under Test

■ - **Fulfills** the requirements of CFR 47, *Part 15, Paragraphs 15.2471(a), (b); (c); (d).*

- TÜV PRODUCT SERVICE, INC. -

Responsible Engineer:



Jim Owen
EMC Engineer

Responsible Engineer:



Alan Laudani
EMC Engineer