



VITALCOM, INC. ADDENDUM TO FC01-035

FOR THE

AMBULATORY TRANSCEIVER, DT-4500

**FCC PART 95 SUBPART H &
FCC PART 15 SUBPART C SECTION 15.209**

COMPLIANCE

DATE OF ISSUE: JUNE 5, 2001

PREPARED FOR:

VitalCom, Inc.
15222 Del Amo Avenue
Tustin, CA 92780

P.O. No.: 3008
W.O. No.: 76248

PREPARED BY:

Joyce Walker
CKC Laboratories, Inc.
5473A Clouds Rest
Mariposa, CA 95338

Date of test: April 18-May 11, 2001

Report No.: FC01-035A

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CKC Laboratories, Inc. has received Certificates of Accreditation from the following agencies:

A2LA (USA); DATech (Germany); BSMI (Taiwan); Nemko (Norway); and GOST (Russia).

CKC Laboratories, Inc has received test site Registration Acceptance from the following agencies:

FCC (USA); VCCI (Japan); and Industry Canada.

CKC Laboratories, Inc. has received Letters of Acceptance through an MRA for the following agencies:

ACA/NATA (Australia); SABS (South Africa); SWEDAC (Sweden); Radio Communications Agency (RA); HOKLAS (Hong Kong); Bakom (Swiss); BIPT (Belgium); Denmark Telestyrelsen; RvA (Netherlands); SEE (Luxembourg) SITTEL (Bolivia); and UKAS (UK).

ADMINISTRATIVE INFORMATION

DATE OF TEST: April 18-May 11, 2001

DATE OF RECEIPT: April 18, 2001

PURPOSE OF TEST: To demonstrate the compliance of the Ambulatory Transceiver, DT-4500 with the requirements for FCC Part 95 Subpart H and FCC Part 15 Subpart C Section 15.209 devices.
The addendum is to correct 2.1033(c)(6) & (7) and to add 2.1033 (4)(8) & (9)

TEST METHOD: FCC Part 95, ANSI C63.4 (1992)

MANUFACTURER: VitalCom, Inc.
15222 Del Amo Avenue
Tustin, CA 92780

REPRESENTATIVE: Gus Testa

TEST LOCATION: CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92621

SUMMARY OF RESULTS

As received, the VitalCom, Inc. Ambulatory Transceiver, DT-4500 was found to be fully compliant with the following standards and specifications:

United States

- FCC Part 95 Subpart H
- FCC Part 15 Subpart C Section 15.209

The results in this report apply only to the items tested, as identified herein.

MODIFICATIONS REQUIRED FOR COMPLIANCE

No modifications to the EUT were necessary for compliance.

APPROVALS

QUALITY ASSURANCE:



Dennis Ward, Quality Manager



Septimiu Apahidean, EMC/Lab Manager

TEST PERSONNEL:



Stuart Yamamoto, EMC Engineer

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was a production unit. ECG Transceiver.

EQUIPMENT UNDER TEST

Ambulatory Transceiver

Manuf: VitalCom, Inc.
Model: DT-4500
Serial: 006003 (ID# 156)
FCC ID: BQI01DT-4500 (Pending)

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Test Box

Manuf: VitalCom, Inc.
Model: NA
Serial: NA
FCC ID: NA

Computer

Manuf: Compaq
Model: Contura
Serial: 7530HPE52263
FCC ID: CNT75MB2CC

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

FREQUENCY RANGE TESTED

Radiated Emissions: 7 MHz – 10 GHz

2.1033(c)(4) Type of Emission

230KF7D

2.1033(c)(5) FREQUENCY RANGE

608 MHz – 614 MHz.

2.1033(c)(6) OPERATING POWER

0.000354 watts

2.1033(c)(7) MAXIMUM POWER RATING

0.000798 watts.

2.1033(c)(8) DC VOLTAGES

Not applicable.

2.1033(c)(9) TUNE-UP PROCEDURE

Not applicable.

2.1046/95.115(a)(1) RF POWER OUTPUT

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(a)(1) Fundamental Frequency Field Strength
 Work Order #: 76248 Date: 04/19/2001
 Test Type: Maximixed Emissions Time: 11:19:24
 Equipment: Ambulatory ECG Transceiver Sequence#: 1
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003

Test Equipment Used – rf Power Output

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02462	HP	8568B	2928A04874	032901	032902
QP Adapter	02325	HP	85650A	2521A00932	032901	032902
Bilog Antenna	00851	Schaffner-Chase EMC	CBL6111C	2629	090500	090501
Pre-amp	02320	HP	8447D	2443A03665	020601	020602
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#20	091500	091501
Antenna extension cable HF (70ft)	NA	Andrew	LDF1-50	Cable#18	091500	091501

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. The EUT has five lead wires coming from it which are connected to Electrodes. Voltage to EUT supplied by 9 VDC internal battery. 17°C 45% 100kPa

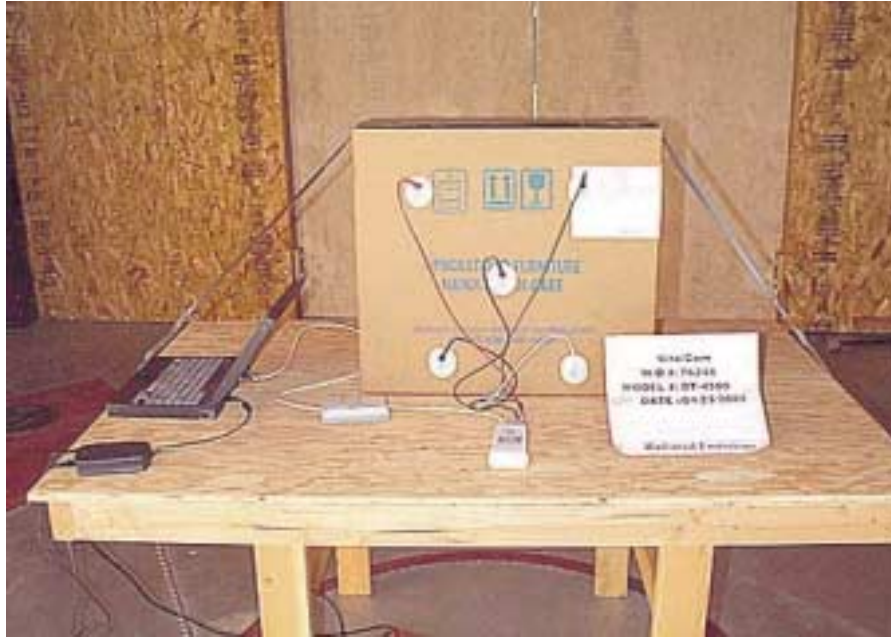
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB		Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	608.682M	80.8	+1.5	+20.2		+0.0	102.5	106.0	-3.5	Horiz
								Y axis		
2	612.918M	78.5	+1.5	+20.4		+0.0	100.4	106.0	-5.6	Vert
								Y axis		
3	608.682M	78.4	+1.5	+20.2		+0.0	100.1	106.0	-5.9	Vert
								Z axis		
4	612.913M	78.2	+1.5	+20.4		+0.0	100.1	106.0	-5.9	Horiz
								Y axis		

5	612.914M	77.7	+1.5	+20.4	+0.0	99.6	106.0	-6.4	Horiz
							X axis		
6	611.275M	77.6	+1.5	+20.3	+0.0	99.4	106.0	-6.6	Horiz
							X axis		
7	612.913M	77.3	+1.5	+20.4	+0.0	99.2	106.0	-6.8	Vert
							Z axis		
8	608.683M	77.4	+1.5	+20.2	+0.0	99.1	106.0	-6.9	Vert
							Y axis		
9	608.682M	77.4	+1.5	+20.2	+0.0	99.1	106.0	-6.9	Horiz
							Z axis		
10	611.276M	76.8	+1.5	+20.3	+0.0	98.6	106.0	-7.4	Vert
							Z axis		
11	612.916M	76.5	+1.5	+20.4	+0.0	98.4	106.0	-7.6	Horiz
							Z axis		
12	608.686M	76.4	+1.5	+20.2	+0.0	98.1	106.0	-7.9	Vert
							X axis		
13	611.279M	76.0	+1.5	+20.3	+0.0	97.8	106.0	-8.2	Vert
							Y axis		
14	612.914M	75.0	+1.5	+20.4	+0.0	96.9	106.0	-9.1	Vert
							X axis		
15	608.684M	74.7	+1.5	+20.2	+0.0	96.4	106.0	-9.6	Horiz
							X axis		
16	611.279M	73.9	+1.5	+20.3	+0.0	95.7	106.0	-10.3	Horiz
							Y axis		
17	611.275M	73.0	+1.5	+20.3	+0.0	94.8	106.0	-11.2	Vert
							X axis		
18	611.280M	70.5	+1.5	+20.3	+0.0	92.3	106.0	-13.7	Horiz
							Z axis		

ANALYZER BANDWIDTH SETTINGS DURING 2.1046/95.1115(a)(1) TESTING			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz

TEST SETUP PHOTOGRAPHS – RF POWER OUTPUT



Front View



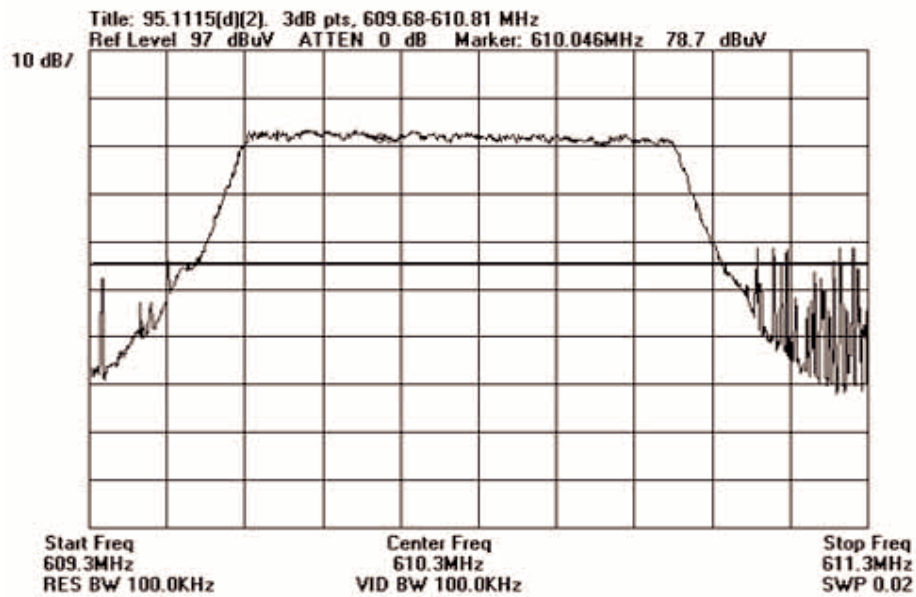
Back View

2.1047 MODULATION CHARACTERISTICS

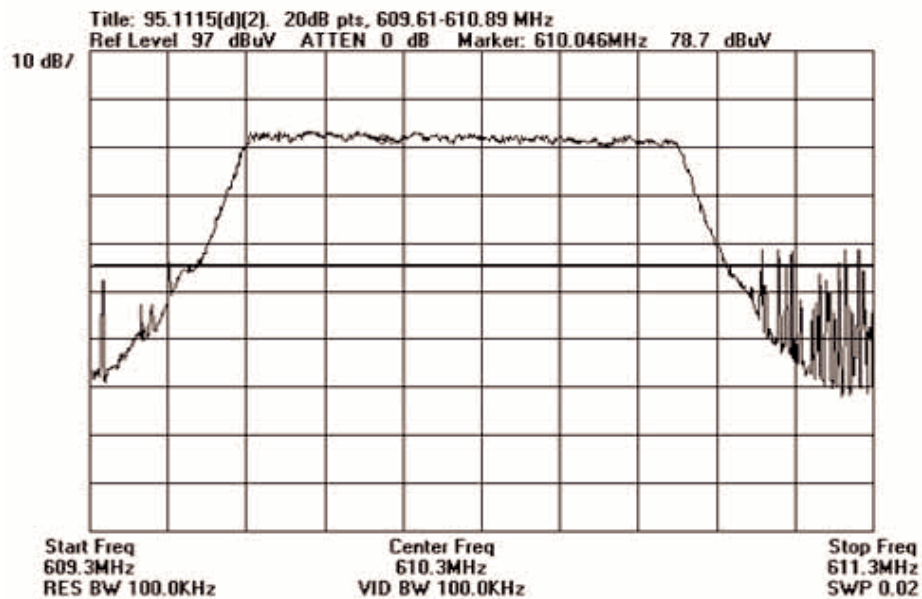
Not applicable.

2.1049/95.1115(d)(2) CHANNEL USE 608-614 MHz

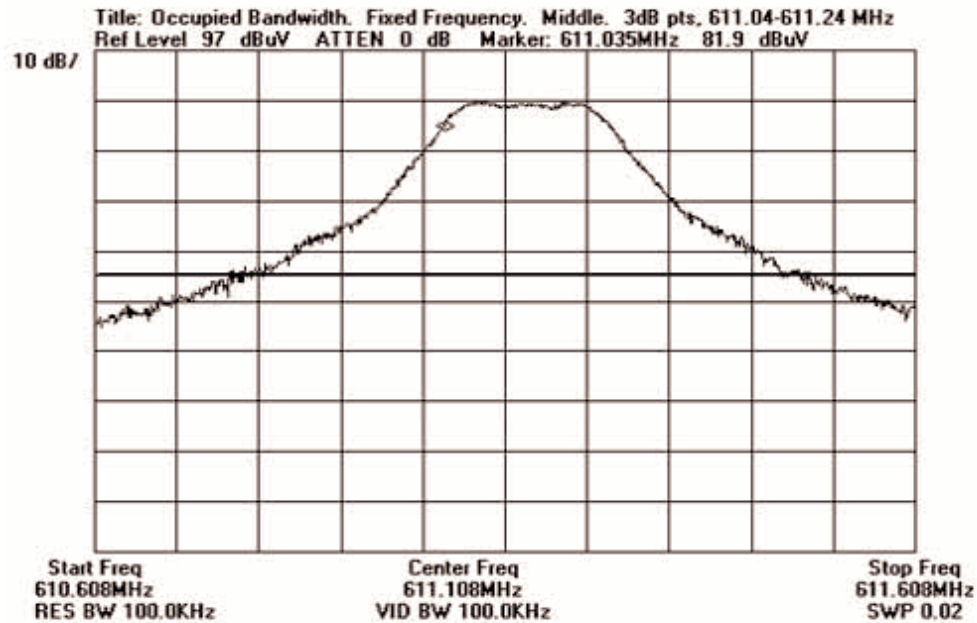
95.1115(d)(2) 3 dB BANDWIDTH PLOT



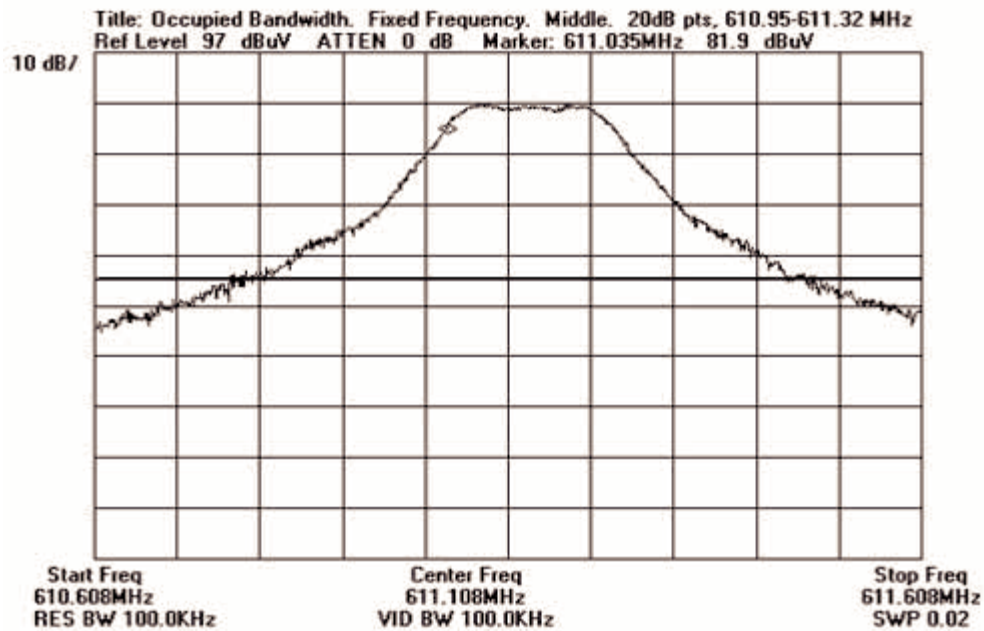
95.1115(d)(2) 20 dB BANDWIDTH PLOT



95.1115(d)(2) 3 dB OCCUPIED BANDWIDTH PLOT



95.1115(d)(2) 20 dB OCCUPIED BANDWIDTH PLOT



TEST CONDITIONS – OCCUPIED BANDWIDTH

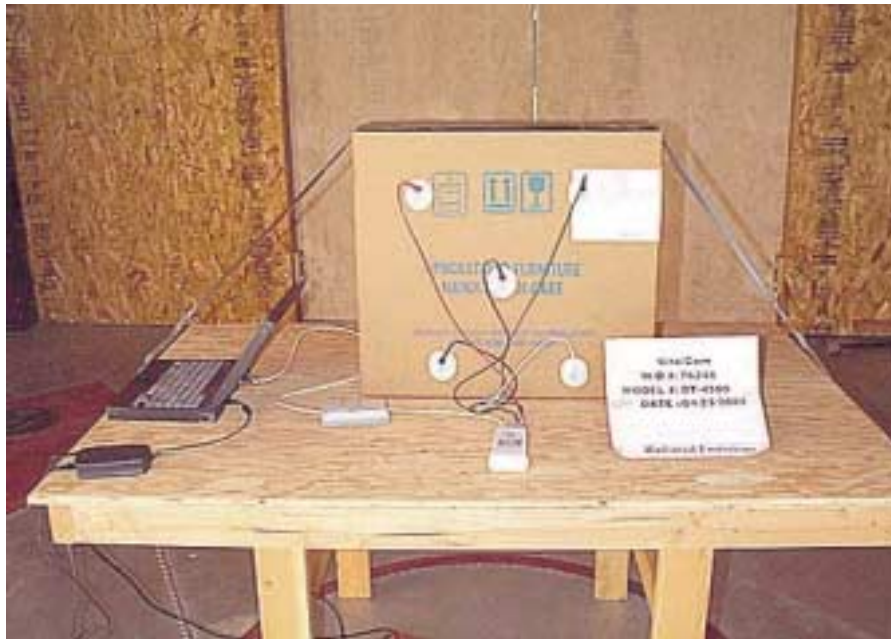
Channel Use Test FHSS per 95.1115(d)(2) 100 kHz bandwidth. Took measurements and plots for both 3 dB point and 20 dB point. Took measurements and plots with EUT set at 1.5 MHz bands.

TEST EQUIPMENT USED – CHANNEL USE 608-614 MHz

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02462	HP	8568B	2928A04874	032901	032902
QP Adapter	02325	HP	85650A	2521A00932	032901	032902
Bilog Antenna	00851	Schaffner-Chase EMC	CBL6111C	2629	090500	090501
Pre-amp	02320	HP	8447D	2443A03665	020601	020602
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#20	091500	091501
Antenna extension cable HF (70ft)	NA	Andrew	LDF1-50	Cable#18	091500	091501

ANALYZER BANDWIDTH SETTINGS DURING 2.1049/95.1115(d)(2) TESTING			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	608 MHz	614 MHz	120 kHz

TEST SETUP PHOTOGRAPHS – CHANNEL USE 608-614 MHz



Front View



Back View

2.1051/95.1115(b)(1) & (2) SPURIOUS EMISSIONS AT ANTENNA TERMINAL

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: **VitalCom**

Specification:

Work Order #: **76248**

Date: 05/11/2001

Test Type: **Maximized Emissions**

Time: 14:37:36

Equipment: **Ambulatory ECG Transceiver**

Sequence#: 29

Manufacturer: VitalCom

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom	DT-4500	006003

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom		

Test Conditions / Notes:

The EUT along with the support equipment are located on the non conductive tabletop. The EUT's serial port is connected a Test Box which is connected to laptop PC via shielded serial cable. The antenna/ECG leadset port of the EUT has a short custom made coaxial cable connected to it. This cable was specifically designed for the antenna terminal tests and has a BNC connector for direct connection to the spectrum analyzer. Voltage to EUT supplied by 9 Vdc internal battery. Temperature: 20°C, Humidity: 35%, Pressure: 100kPa. Antenna Terminal Testing. Data below is for the fundamental frequency of the EUT when set at the low, mid, and high channels.
Note: There is no limit line for this test. Margin reading is corrected amplitude reading in dBuV.

Measurement Data:

Reading listed by margin.

Test Distance: None

#	Freq MHz	Rdng dBμV	DC Bl dB	Dist Table	Corr dBμV
1	608.676M	114.7	+0.8	+0.0	115.5
Low Channel, Fundamental Frequency					
2	612.907M	114.6	+0.8	+0.0	115.4
High Channel, Fundamental Frequency					
3	611.266M	114.6	+0.8	+0.0	115.4
Mid Channel, Fundamental Frequency					

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: **VitalCom**

Specification:

Work Order #: **76248**

Date: 05/11/2001

Test Type: **Maximized Emissions**

Time: 15:23:45

Equipment: **Ambulatory ECG Transceiver**

Sequence#: 30

Manufacturer: VitalCom

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom	DT-4500	006003

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom		

Test Conditions / Notes:

The EUT along with the support equipment are located on the non conductive tabletop. The EUT's serial port is connected a Test Box which is connected to laptop PC via shielded serial cable. The antenna/ECG leadset port of the EUT has a short custom made coaxial cable connected to it. This cable was specifically designed for the antenna terminal tests and has a BNC connector for direct connection to the spectrum analyzer. Voltage to EUT supplied by 9 Vdc internal battery. Temperature: 20°C, Humidity: 35%, Pressure: 100kPa. Antenna Terminal Testing. Frequency range is 7 MHz - 10 GHz. Data below is for the spurious emissions of the EUT when set at the low channel. **Note: There is no limit line for this test. Margin reading is corrected amplitude reading in dBuV.**

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	DC Bl dB	Dist Table	Corr dB μ V
1	1217.293M	60.0	+0.8	+0.0	60.8
2	535.205M	55.3	+0.8	+0.0	56.1
3	461.743M	54.4	+0.8	+0.0	55.2
4	367.321M	54.4	+0.8	+0.0	55.2
5	601.023M	54.1	+0.8	+0.0	54.9
6	616.246M	53.4	+0.8	+0.0	54.2
7	1825.963M	52.6	+0.8	+0.0	53.4

8	125.910M	52.5	+0.8	+0.0	53.3
9	1951.009M	52.1	+0.8	+0.0	52.9
10	440.714M	52.1	+0.8	+0.0	52.9
11	75.530M	51.6	+0.8	+0.0	52.4
12	388.353M	51.5	+0.8	+0.0	52.3
13	293.731M	51.5	+0.8	+0.0	52.3
14	314.870M	51.4	+0.8	+0.0	52.2
15	682.078M	51.3	+0.8	+0.0	52.1
16	514.191M	51.2	+0.8	+0.0	52.0
17	571.756M	50.8	+0.8	+0.0	51.6
18	2434.795M	50.7	+0.8	+0.0	51.5
19	755.564M	50.7	+0.8	+0.0	51.5

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: **VitalCom**

Specification:

Work Order #: **76248**

Date: 05/11/2001

Test Type: **Maximized Emissions**

Time: 15:52:20

Equipment: **Ambulatory ECG Transceiver**

Sequence#: 31

Manufacturer: VitalCom

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom	DT-4500	006003

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom		

Test Conditions / Notes:

The EUT along with the support equipment are located on the non conductive tabletop. The EUT's serial port is connected a Test Box which is connected to laptop PC via shielded serial cable. The antenna/ECG leadset port of the EUT has a short custom made coaxial cable connected to it. This cable was specifically designed for the antenna terminal tests and has a BNC connector for direct connection to the spectrum analyzer. Voltage to EUT supplied by 9 Vdc internal battery. Temperature: 20°C, Humidity: 35%, Pressure: 100kPa. Antenna Terminal Testing. Frequency range is 7 MHz - 10 GHz. Data below is for the spurious emissions of the EUT when set at the mid channel. **Note: There is no limit line for this test. Margin reading is corrected amplitude reading in dBuV.**

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dBμV	DC BI		Dist Table	Corr dBμV
				dB		
1	464.343M	54.9		+0.8	+0.0	55.7
2	1222.480M	54.1		+0.8	+0.0	54.9
3	537.847M	53.8		+0.8	+0.0	54.6
4	125.823M	53.0		+0.8	+0.0	53.8
5	75.577M	51.9		+0.8	+0.0	52.7
6	567.275M	51.2		+0.8	+0.0	52.0
7	1951.104M	51.0		+0.8	+0.0	51.8
8	758.073M	51.0		+0.8	+0.0	51.8

9	1833.825M	50.9	+0.8	+0.0	51.7
10	317.413M	50.5	+0.8	+0.0	51.3
11	2445.565M	50.5	+0.8	+0.0	51.3
12	571.546M	50.2	+0.8	+0.0	51.0

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: **VitalCom**

Specification:

Work Order #: **76248**

Date: 05/11/2001

Test Type: **Maximized Emissions**

Time: 16:06:06

Equipment: **Ambulatory ECG Transceiver**

Sequence#: 32

Manufacturer: VitalCom

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom	DT-4500	006003

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom		

Test Conditions / Notes:

The EUT along with the support equipment are located on the non conductive tabletop. The EUT's serial port is connected a Test Box which is connected to laptop PC via shielded serial cable. The antenna/ECG leadset port of the EUT has a short custom made coaxial cable connected to it. This cable was specifically designed for the antenna terminal tests and has a BNC connector for direct connection to the spectrum analyzer. Voltage to EUT supplied by 9 Vdc internal battery. Temperature: 20°C, Humidity: 35%, Pressure: 100kPa. Antenna Terminal Testing. Frequency range is 7 MHz - 10 GHz. Data below is for the spurious emissions of the EUT when set at the high channel. **Note: There is no limit line for this test. Margin reading is corrected amplitude reading in dBuV.**

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	DC BI		Corr dB μ V
			dB	Dist Table	
1	1225.800M	60.6	+0.8	+0.0	61.4
2	440.727M	54.8	+0.8	+0.0	55.6
3	539.412M	54.5	+0.8	+0.0	55.3
4	126.003M	52.8	+0.8	+0.0	53.6
5	1838.726M	52.5	+0.8	+0.0	53.3
6	465.972M	52.3	+0.8	+0.0	53.1
7	75.432M	51.9	+0.8	+0.0	52.7
8	367.306M	51.7	+0.8	+0.0	52.5

9	392.549M	51.5	+0.8	+0.0	52.3
10	686.385M	51.2	+0.8	+0.0	52.0
11	293.816M	50.5	+0.8	+0.0	51.3
12	2451.496M	50.0	+0.8	+0.0	50.8
13	319.072M	49.6	+0.8	+0.0	50.4

TEST EQUIPMENT USED – SPURIOUS EMISSIONS AT ANTENNA TERMINAL

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	HP	E7405A	US40240225	041001	041002
DC Block	NA	Weinschel	7003	G7658	051001	051002

ANALYZER BANDWIDTH SETTINGS DURING 2.1051/95.1115(b)(1) & (2) TESTING

TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	7 MHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1 GHz	10 GHz	1 MHz

TEST SETUP PHOTOGRAPH – SPURIOUS EMISSIONS AT ANTENNA TERMINAL



2.1053/95.1115(b)(1) FIELD STRENGTH OF SPURIOUS RADIATION < 960 MHz

Low Channel – 7-30 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 09:35:40
 Equipment: Ambulatory ECG Transceiver Sequence#: 6
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.999M	29.4	+0.2	+10.2			+0.0	39.8	106.0	-66.2	None
2	8.002M	28.1	+0.2	+10.2			+0.0	38.5	106.0	-67.5	None
3	7.371M	28.0	+0.2	+10.1			+0.0	38.3	106.0	-67.7	None
4	7.011M	23.9	+0.2	+10.1			+0.0	34.2	106.0	-71.8	None
5	19.999M	22.9	+0.3	+8.8			+0.0	32.0	106.0	-74.0	None
6	29.999M	26.2	+0.4	+5.1			+0.0	31.7	106.0	-74.3	None

Low Channel – 7-30 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 09:27:41
 Equipment: Ambulatory ECG Transceiver Sequence#: 5
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	7.002M	30.9	+0.2	+10.1			+0.0	41.2	106.0	-64.8	None
2	10.000M	30.4	+0.2	+10.2			+0.0	40.8	106.0	-65.2	None
3	8.001M	28.7	+0.2	+10.2			+0.0	39.1	106.0	-66.9	None
4	7.371M	28.1	+0.2	+10.1			+0.0	38.4	106.0	-67.6	None
5	30.000M	26.6	+0.4	+5.1			+0.0	32.1	106.0	-73.9	None
6	20.002M	21.0	+0.3	+8.8			+0.0	30.1	106.0	-75.9	None

Low Channel – 7-30 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 09:51:41
 Equipment: Ambulatory ECG Transceiver Sequence#: 7
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	8.002M	29.1	+0.2	+10.2			-20.0	19.5	29.5	-10.0	None
2	7.367M	26.2	+0.2	+10.1			-20.0	16.5	29.5	-13.0	None
3	9.997M	25.8	+0.2	+10.2			-20.0	16.2	29.5	-13.3	None
4	19.999M	26.6	+0.3	+8.8			-20.0	15.7	29.5	-13.8	None
5	7.011M	24.4	+0.2	+10.1			-20.0	14.7	29.5	-14.8	None
6	30.002M	26.6	+0.4	+0.0			-20.0	7.0	29.5	-22.5	None

Low Channel – 30-1000 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/19/2001
 Test Type: Maximized Emissions Time: 16:28:33
 Equipment: Ambulatory ECG Transceiver Sequence#: 3
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 17°C 45% 100kPa. **X axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	597.992M	58.0	+1.5	+19.8	-28.0	+0.0	51.3	106.0	-54.7	Horiz
Emissions is related to Transmitter										
2	150.118M QP	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
Source is support laptop computer										
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
Source is support laptop computer										
4	149.991M QP	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz
6	375.244M QP	52.8	+1.2	+15.0	-28.1	+0.0	40.9	106.0	-65.2	Horiz
^	375.166M	55.5	+1.2	+15.0	-28.1	+0.0	43.6	106.0	-62.4	Horiz

8	250.183M	55.3	+0.9	+12.2	-28.0	+0.0	40.4	106.0	-65.6	Horiz
9	325.224M	53.1	+1.1	+13.8	-28.1	+0.0	39.9	106.0	-66.1	Horiz
	QP									
^	325.228M	55.9	+1.1	+13.8	-28.1	+0.0	42.7	106.0	-63.3	Horiz
11	286.384M	53.7	+1.0	+12.7	-28.1	+0.0	39.3	106.0	-66.7	Horiz
	QP									
^	286.382M	58.3	+1.0	+12.7	-28.1	+0.0	43.9	106.0	-62.1	Horiz
13	362.766M	51.5	+1.2	+14.6	-28.1	+0.0	39.2	106.0	-66.8	Horiz
	QP									
^	362.769M	58.0	+1.2	+14.6	-28.1	+0.0	45.7	106.0	-60.3	Horiz
15	274.971M	53.5	+1.0	+12.3	-28.0	+0.0	38.8	106.0	-67.2	Horiz
	QP									
^	275.015M	58.4	+1.0	+12.3	-28.0	+0.0	43.7	106.0	-62.3	Horiz
17	599.830M	44.0	+1.5	+19.8	-28.0	+0.0	37.3	106.0	-68.7	Horiz
18	300.192M	50.4	+1.1	+13.1	-28.3	+0.0	36.3	106.0	-69.7	Horiz
	QP									
^	300.210M	57.8	+1.1	+13.1	-28.3	+0.0	43.7	106.0	-62.3	Horiz
20	650.098M	41.2	+1.6	+20.3	-27.4	+0.0	35.7	106.0	-70.3	Horiz
21	75.074M	52.8	+0.6	+6.2	-28.2	+0.0	31.4	106.0	-74.6	Vert

Low Channel – 30-1000 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/19/2001
 Test Type: Maximized Emissions Time: 14:53:57
 Equipment: Ambulatory ECG Transceiver Sequence#: 2
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 17°C 45% 100kPa. **Y axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	597.992M	58.0	+1.5	+19.8	-28.0	+0.0	51.3	106.0	-54.7	Horiz
								Emissions is related to Transmitter		
2	150.118M QP	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
								Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
								Source is support laptop computer		
4	275.201M QP	56.6	+1.0	+12.3	-28.0	+0.0	41.9	106.0	-64.1	Horiz
^	275.204M	59.8	+1.0	+12.3	-28.0	+0.0	45.1	106.0	-60.9	Horiz
6	149.991M QP	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz

8	286.397M	53.3	+1.0	+12.7	-28.1	+0.0	38.9	106.0	-67.1	Horiz
QP										
^	286.421M	56.2	+1.0	+12.7	-28.1	+0.0	41.8	106.0	-64.2	Horiz
10	375.160M	50.7	+1.2	+15.0	-28.1	+0.0	38.8	106.0	-67.2	Horiz
QP										
^	375.102M	53.8	+1.2	+15.0	-28.1	+0.0	41.9	106.0	-64.1	Horiz
12	362.688M	51.0	+1.2	+14.6	-28.1	+0.0	38.7	106.0	-67.3	Horiz
13	325.229M	51.7	+1.1	+13.8	-28.1	+0.0	38.5	106.0	-67.5	Horiz
QP										
^	325.251M	54.8	+1.1	+13.8	-28.1	+0.0	41.6	106.0	-64.4	Horiz
15	250.146M	52.1	+0.9	+12.2	-28.0	+0.0	37.2	106.0	-68.8	Horiz
16	650.047M	42.4	+1.6	+20.3	-27.4	+0.0	36.9	106.0	-69.1	Horiz
17	599.772M	43.3	+1.5	+19.8	-28.0	+0.0	36.6	106.0	-69.4	Horiz
18	300.079M	50.5	+1.1	+13.1	-28.3	+0.0	36.4	106.0	-69.6	Horiz
QP										
^	300.126M	55.7	+1.1	+13.1	-28.3	+0.0	41.6	106.0	-64.4	Horiz
20	225.164M	53.8	+0.9	+9.3	-28.0	+0.0	36.0	106.0	-70.0	Horiz
21	75.042M	53.2	+0.6	+6.2	-28.2	+0.0	31.8	106.0	-74.2	Vert
22	616.338M	36.2	+1.5	+20.5	-27.8	+0.0	30.4	106.0	-75.6	Horiz
23	41.409M	43.7	+0.5	+12.1	-28.2	+0.0	28.1	106.0	-77.9	Horiz
24	50.383M	46.4	+0.5	+7.2	-28.1	+0.0	26.0	106.0	-80.0	Vert

Low Channel – 30-1000 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/19/2001
 Time: 17:06:43
 Sequence#: 4
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 17°C 45% 100kPa. **Z axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	597.992M	58.0	+1.5	+19.8	-28.0	+0.0	51.3	106.0	-54.7	Horiz
								Emissions is related to Transmitter		
2	150.118M QP	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
								Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
								Source is support laptop computer		
4	149.991M QP	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz
6	250.056M	55.0	+0.9	+12.2	-28.0	+0.0	40.1	106.0	-65.9	Horiz
7	286.389M QP	54.5	+1.0	+12.7	-28.1	+0.0	40.1	106.0	-65.9	Horiz
^	286.387M	57.6	+1.0	+12.7	-28.1	+0.0	43.2	106.0	-62.8	Horiz

9	375.246M	51.8	+1.2	+15.0	-28.1	+0.0	39.9	106.0	-66.1	Horiz
QP										
^	375.219M	54.1	+1.2	+15.0	-28.1	+0.0	42.2	106.0	-63.8	Horiz
11	275.190M	54.4	+1.0	+12.3	-28.0	+0.0	39.7	106.0	-66.3	Horiz
QP										
^	275.198M	58.6	+1.0	+12.3	-28.0	+0.0	43.9	106.0	-62.1	Horiz
13	325.228M	52.6	+1.1	+13.8	-28.1	+0.0	39.4	106.0	-66.7	Horiz
QP										
^	325.216M	55.7	+1.1	+13.8	-28.1	+0.0	42.5	106.0	-63.5	Horiz
15	362.630M	51.5	+1.2	+14.6	-28.1	+0.0	39.2	106.0	-66.8	Horiz
QP										
^	362.679M	55.6	+1.2	+14.6	-28.1	+0.0	43.3	106.0	-62.7	Horiz
17	225.115M	55.0	+0.9	+9.3	-28.0	+0.0	37.2	106.0	-68.8	Horiz
18	300.084M	51.2	+1.1	+13.1	-28.3	+0.0	37.1	106.0	-68.9	Horiz
QP										
^	300.012M	56.6	+1.1	+13.1	-28.3	+0.0	42.5	106.0	-63.5	Horiz
20	599.910M	42.9	+1.5	+19.8	-28.0	+0.0	36.2	106.0	-69.8	Horiz
21	650.124M	38.1	+1.6	+20.3	-27.4	+0.0	32.6	106.0	-73.4	Horiz
22	616.338M	36.2	+1.5	+20.5	-27.8	+0.0	30.4	106.0	-75.6	Horiz
23	75.142M	49.9	+0.6	+6.2	-28.2	+0.0	28.5	106.0	-77.5	Vert
24	41.409M	43.7	+0.5	+12.1	-28.2	+0.0	28.1	106.0	-77.9	Horiz
25	50.383M	46.4	+0.5	+7.2	-28.1	+0.0	26.0	106.0	-80.0	Vert

Mid Channel – 7-30 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 10:22:57
 Equipment: Ambulatory ECG Transceiver Sequence#: 10
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.998M	27.2	+0.2	+10.2			+0.0	37.6	106.0	-68.4	None
2	7.995M	27.1	+0.2	+10.2			+0.0	37.5	106.0	-68.5	None
3	7.018M	26.4	+0.2	+10.1			+0.0	36.7	106.0	-69.3	None
4	20.000M	27.5	+0.3	+8.8			+0.0	36.6	106.0	-69.4	None
5	7.375M	25.4	+0.2	+10.1			+0.0	35.7	106.0	-70.3	None
6	30.027M	27.9	+0.4	+0.0			+0.0	28.3	106.0	-77.7	None

Mid Channel – 7-30 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 10:11:37
 Equipment: Ambulatory ECG Transceiver Sequence#: 9
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.997M	28.6	+0.2	+10.2			+0.0	39.0	106.0	-67.0	None
2	7.993M	28.2	+0.2	+10.2			+0.0	38.6	106.0	-67.4	None
3	7.372M	26.7	+0.2	+10.1			+0.0	37.0	106.0	-69.0	None
4	19.999M	26.0	+0.3	+8.8			+0.0	35.1	106.0	-70.9	None
5	7.018M	24.7	+0.2	+10.1			+0.0	35.0	106.0	-71.0	None
6	30.024M	30.1	+0.4	+0.0			+0.0	30.5	106.0	-75.5	None

Mid Channel – 7-30 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 10:03:01
 Equipment: Ambulatory ECG Transceiver Sequence#: 8
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.997M	28.1	+0.2	+10.2			+0.0	38.5	106.0	-67.5	None
2	7.369M	27.6	+0.2	+10.1			+0.0	37.9	106.0	-68.1	None
3	7.992M	26.0	+0.2	+10.2			+0.0	36.4	106.0	-69.6	None
4	19.999M	26.8	+0.3	+8.8			+0.0	35.9	106.0	-70.1	None
5	7.018M	24.3	+0.2	+10.1			+0.0	34.6	106.0	-71.4	None
6	30.003M	30.7	+0.4	+0.0			+0.0	31.1	106.0	-74.9	None

Mid Channel – 30-1000 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/20/2001
 Time: 17:30:02
 Sequence#: 16
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
	QP							Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
								Source is support laptop computer		
3	149.991M	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
	QP									
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz
5	375.484M	52.1	+1.2	+15.0	-28.1	+0.0	40.2	106.0	-65.8	Horiz
6	371.076M	52.2	+1.2	+14.8	-28.1	+0.0	40.1	106.0	-65.9	Horiz
7	300.102M	54.1	+1.1	+13.1	-28.3	+0.0	40.0	106.0	-66.0	Horiz
8	325.015M	50.4	+1.1	+13.8	-28.1	+0.0	37.2	106.0	-68.8	Horiz

9	650.394M	41.7	+1.6	+20.3	-27.4	+0.0	36.2	106.0	-69.8	Horiz
10	250.007M	50.7	+0.9	+12.2	-28.0	+0.0	35.8	106.0	-70.2	Horiz
11	524.760M	43.1	+1.4	+18.6	-27.8	+0.0	35.3	106.0	-70.7	Horiz
12	275.286M	48.2	+1.0	+12.3	-28.0	+0.0	33.5	106.0	-72.5	Horiz
13	307.045M	47.3	+1.1	+13.2	-28.3	+0.0	33.3	106.0	-72.7	Horiz
14	286.404M	47.0	+1.0	+12.7	-28.1	+0.0	32.6	106.0	-73.4	Horiz
15	75.040M	52.5	+0.6	+6.2	-28.2	+0.0	31.1	106.0	-74.9	Vert
16	226.814M	47.8	+0.9	+9.4	-28.0	+0.0	30.1	106.0	-75.9	Horiz
17	201.419M	46.1	+0.9	+8.4	-28.2	+0.0	27.2	106.0	-78.8	Vert

Mid Channel – 30-1000 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/20/2001
 Time: 16:28:46
 Sequence#: 14
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
	QP							Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
								Source is support laptop computer		
3	325.236M	55.8	+1.1	+13.8	-28.1	+0.0	42.6	106.0	-63.4	Horiz
	QP									
^	325.242M	56.9	+1.1	+13.8	-28.1	+0.0	43.7	106.0	-62.3	Horiz
5	149.991M	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
	QP									
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz
7	371.122M	52.6	+1.2	+14.8	-28.1	+0.0	40.5	106.0	-65.5	Horiz
8	300.192M	54.4	+1.1	+13.1	-28.3	+0.0	40.3	106.0	-65.7	Horiz

9	275.200M	53.9	+1.0	+12.3	-28.0	+0.0	39.2	106.0	-66.8	Horiz
10	375.231M	50.3	+1.2	+15.0	-28.1	+0.0	38.4	106.0	-67.6	Horiz
11	650.499M	43.8	+1.6	+20.3	-27.4	+0.0	38.3	106.0	-67.7	Horiz
12	250.113M	52.3	+0.9	+12.2	-28.0	+0.0	37.4	106.0	-68.6	Horiz
13	306.876M	51.2	+1.1	+13.2	-28.3	+0.0	37.2	106.0	-68.8	Horiz
14	226.624M	53.7	+0.9	+9.4	-28.0	+0.0	36.0	106.0	-70.0	Horiz
15	286.404M	49.4	+1.0	+12.7	-28.1	+0.0	35.0	106.0	-71.0	Horiz
	QP									
^	286.418M	55.6	+1.0	+12.7	-28.1	+0.0	41.2	106.0	-64.8	Horiz
17	524.808M	41.3	+1.4	+18.6	-27.8	+0.0	33.5	106.0	-72.5	Horiz
18	75.062M	52.2	+0.6	+6.2	-28.2	+0.0	30.8	106.0	-75.2	Vert
19	201.423M	46.3	+0.9	+8.4	-28.2	+0.0	27.4	106.0	-78.6	Vert

Mid Channel – 30-1000 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 17:11:49
 Equipment: Ambulatory ECG Transceiver Sequence#: 15
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M	60.3	+0.7	+10.6	-27.9	+0.0	43.7	106.0	-62.3	Vert
	QP							Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	106.0	-60.4	Vert
								Source is support laptop computer		
3	149.991M	57.5	+0.7	+10.6	-27.9	+0.0	40.9	106.0	-65.1	Horiz
	QP									
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	106.0	-63.2	Horiz
5	300.073M	54.5	+1.1	+13.1	-28.3	+0.0	40.4	106.0	-65.6	Horiz
6	375.323M	52.1	+1.2	+15.0	-28.1	+0.0	40.2	106.0	-65.8	Horiz
7	371.150M	52.1	+1.2	+14.8	-28.1	+0.0	40.0	106.0	-66.0	Horiz
8	250.010M	52.1	+0.9	+12.2	-28.0	+0.0	37.2	106.0	-68.8	Horiz

9	650.533M	42.2	+1.6	+20.3	-27.4	+0.0	36.7	106.0	-69.3	Horiz
10	325.252M	49.6	+1.1	+13.8	-28.1	+0.0	36.4	106.0	-69.6	Horiz
11	275.253M	48.3	+1.0	+12.3	-28.0	+0.0	33.6	106.0	-72.4	Horiz
12	524.850M	41.2	+1.4	+18.6	-27.8	+0.0	33.4	106.0	-72.6	Horiz
13	306.884M	47.3	+1.1	+13.2	-28.3	+0.0	33.3	106.0	-72.7	Horiz
14	286.467M	46.5	+1.0	+12.7	-28.1	+0.0	32.1	106.0	-73.9	Horiz
15	75.062M	52.1	+0.6	+6.2	-28.2	+0.0	30.7	106.0	-75.3	Vert
16	226.662M	47.3	+0.9	+9.4	-28.0	+0.0	29.6	106.0	-76.4	Horiz
17	201.399M	46.8	+0.9	+8.4	-28.2	+0.0	27.9	106.0	-78.1	Vert

High Channel – 7-30 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 11:06:01
 Equipment: Ambulatory ECG Transceiver Sequence#: 13
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	7.997M	27.1	+0.2	+10.2			+0.0	37.5	106.0	-68.5	None
2	20.001M	28.3	+0.3	+8.8			+0.0	37.4	106.0	-68.6	None
3	7.019M	26.7	+0.2	+10.1			+0.0	37.0	106.0	-69.0	None
4	10.001M	26.5	+0.2	+10.2			+0.0	36.9	106.0	-69.1	None
5	7.376M	25.4	+0.2	+10.1			+0.0	35.7	106.0	-70.3	None
6	30.048M	32.1	+0.4	+0.0			+0.0	32.5	106.0	-73.5	None

High Channel – 7-30 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 10:52:32
 Equipment: Ambulatory ECG Transceiver Sequence#: 12
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Hi Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	7.018M	28.0	+0.2	+10.1			+0.0	38.3	106.0	-67.7	None
2	20.001M	28.9	+0.3	+8.8			+0.0	38.0	106.0	-68.0	None
3	7.995M	26.5	+0.2	+10.2			+0.0	36.9	106.0	-69.1	None
4	7.376M	26.2	+0.2	+10.1			+0.0	36.5	106.0	-69.5	None
5	10.000M	25.9	+0.2	+10.2			+0.0	36.3	106.0	-69.7	None
6	30.045M	30.3	+0.4	+0.0			+0.0	30.7	106.0	-75.3	None

High Channel – 7-30 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248 Date: 04/20/2001
 Test Type: Maximized Emissions Time: 10:42:42
 Equipment: Ambulatory ECG Transceiver Sequence#: 11
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Hi Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.998M	27.4	+0.2	+10.2			+0.0	37.8	106.0	-68.2	None
2	7.019M	26.7	+0.2	+10.1			+0.0	37.0	106.0	-69.0	None
3	7.375M	26.6	+0.2	+10.1			+0.0	36.9	106.0	-69.1	None
4	20.001M	27.6	+0.3	+8.8			+0.0	36.7	106.0	-69.3	None
5	7.995M	26.2	+0.2	+10.2			+0.0	36.6	106.0	-69.4	None
6	30.057M	28.8	+0.4	+0.0			+0.0	29.2	106.0	-76.8	None

High Channel – 30-1000 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/23/2001
 Time: 17:39:30
 Sequence#: 28
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **X axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Log_3 dB	Bilog dB	Pream dB	Bicon dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M QP	60.3	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	43.7	106.0	-62.3	Vert
Source is support laptop computer											
^	150.069M	62.2	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	45.6	106.0	-60.4	Vert
Source is support laptop computer											
3	149.991M QP	57.5	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	40.9	106.0	-65.1	Horiz
^	149.989M	59.4	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	42.8	106.0	-63.2	Horiz
5	242.340M	50.1	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	40.0	106.0	-66.0	Horiz
6	236.041M	49.2	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	39.0	106.0	-67.0	Horiz
7	450.226M	49.7	+1.2 +16.1	+0.0	-28.6	+0.0	+0.0	38.4	106.0	-67.6	Horiz
8	236.048M	48.4	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	38.2	106.0	-67.8	Vert

9	251.740M	47.8	+0.9 +0.0	+0.0	-28.0	+17.3	+0.0	38.0	106.0	-68.0	Horiz
10	146.367M	47.9	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	37.9	106.0	-68.1	Vert
11	306.847M	43.5	+1.1 +21.3	+0.0	-28.3	+0.0	+0.0	37.6	106.0	-68.4	Horiz
12	242.322M	47.2	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	37.1	106.0	-68.9	Vert
13	374.760M	48.6	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	36.7	106.0	-69.3	Horiz
^	374.766M	55.4	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	43.5	106.0	-62.5	Horiz
15	658.488M	41.5	+1.6 +20.3	+0.0	-27.4	+0.0	+0.0	36.0	106.0	-70.0	Horiz
16	524.971M	42.3	+1.4 +17.7	+0.0	-27.8	+0.0	+0.0	33.6	106.0	-72.4	Horiz
17	146.458M	42.4	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	32.4	106.0	-73.6	Horiz
18	670.508M	35.5	+1.6 +21.1	+0.0	-27.4	+0.0	+0.0	30.8	106.0	-75.2	Horiz

High Channel – 30-1000 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/23/2001
 Time: 17:12:48
 Sequence#: 26
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Y axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Log_3 dB	Bilog dB	Pream dB	Bicon dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M	60.3	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	43.7	106.0	-62.3	Vert
	QP								Source is support laptop computer		
^	150.069M	62.2	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	45.6	106.0	-60.4	Vert
									Source is support laptop computer		
3	149.991M	57.5	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	40.9	106.0	-65.1	Horiz
	QP										
^	149.989M	59.4	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	42.8	106.0	-63.2	Horiz
5	242.338M	50.6	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	40.5	106.0	-65.5	Horiz
6	235.976M	50.1	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	39.9	106.0	-66.1	Horiz
7	450.244M	51.1	+1.2 +16.1	+0.0	-28.6	+0.0	+0.0	39.8	106.0	-66.2	Horiz
8	236.057M	49.7	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	39.5	106.0	-66.5	Vert

9	658.564M	45.0	+1.6 +20.3	+0.0	-27.4	+0.0	+0.0	39.5	106.0	-66.5	Horiz
10	251.767M	48.4	+0.9 +0.0	+0.0	-28.0	+17.3	+0.0	38.6	106.0	-67.4	Horiz
11	242.365M	48.5	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	38.4	106.0	-67.6	Vert
12	306.853M	43.9	+1.1 +21.3	+0.0	-28.3	+0.0	+0.0	38.0	106.0	-68.0	Horiz
13	634.550M	44.2	+1.6 +19.5	+0.0	-27.6	+0.0	+0.0	37.7	106.0	-68.3	Horiz
14	146.355M	45.7	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	35.7	106.0	-70.3	Vert
^	146.343M	48.9	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	38.9	106.0	-67.1	Vert
16	375.006M	47.1	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	35.2	106.0	-70.8	Horiz
^	374.954M	53.1	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	41.2	106.0	-64.8	Horiz
18	146.370M	44.6	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	34.6	106.0	-71.4	Horiz
19	524.933M	43.3	+1.4 +17.7	+0.0	-27.8	+0.0	+0.0	34.6	106.0	-71.4	Horiz
20	670.567M	38.7	+1.6 +21.1	+0.0	-27.4	+0.0	+0.0	34.0	106.0	-72.0	Horiz

High Channel – 30-1000 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(1) Undesired Emissions < 960 MHz
 Work Order #: 76248
 Test Type: Maximized Emissions
 Equipment: Ambulatory ECG Transceiver
 Manufacturer: VitalCom, Inc.
 Model: DT-4500
 S/N: 006003 (ID# 156)

Date: 04/23/2001
 Time: 16:31:18
 Sequence#: 27
 Tested By: Stuart Yamamoto

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Z axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Log_3 dB	Bilog dB	Pream dB	Bicon dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M QP	60.3	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	43.7	106.0	-62.3	Vert
Source is support laptop computer											
^	150.069M	62.2	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	45.6	106.0	-60.4	Vert
Source is support laptop computer											
3	149.991M QP	57.5	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	40.9	106.0	-65.1	Horiz
^	149.989M	59.4	+0.7 +0.0	+10.6	-27.9	+0.0	+0.0	42.8	106.0	-63.2	Horiz
5	236.104M	50.9	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	40.7	106.0	-65.3	Horiz
6	242.364M	50.8	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	40.7	106.0	-65.3	Horiz
7	634.549M	45.2	+1.6 +19.5	+0.0	-27.6	+0.0	+0.0	38.7	106.0	-67.3	Horiz
8	236.095M	48.9	+0.9 +0.0	+0.0	-28.0	+16.9	+0.0	38.7	106.0	-67.3	Vert

9	306.866M	44.5	+1.1 +21.3	+0.0	-28.3	+0.0	+0.0	38.6	106.0	-67.4	Horiz
10	146.368M	48.4	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	38.4	106.0	-67.6	Vert
11	251.801M	47.5	+0.9 +0.0	+0.0	-28.0	+17.3	+0.0	37.7	106.0	-68.3	Horiz
12	242.343M	47.3	+0.9 +0.0	+0.0	-28.0	+17.0	+0.0	37.2	106.0	-68.8	Vert
13	450.253M	48.2	+1.2 +16.1	+0.0	-28.6	+0.0	+0.0	36.9	106.0	-69.1	Horiz
14	375.010M	48.7	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	36.8	106.0	-69.2	Horiz
^	375.007M	53.3	+1.2 +15.0	+0.0	-28.1	+0.0	+0.0	41.4	106.0	-64.6	Horiz
16	524.922M	44.2	+1.4 +17.7	+0.0	-27.8	+0.0	+0.0	35.5	106.0	-70.5	Horiz
17	670.549M	39.8	+1.6 +21.1	+0.0	-27.4	+0.0	+0.0	35.1	106.0	-70.9	Horiz
18	658.547M	39.8	+1.6 +20.3	+0.0	-27.4	+0.0	+0.0	34.3	106.0	-71.7	Horiz
19	146.438M	43.5	+0.7 +0.0	+0.0	-27.9	+17.2	+0.0	33.5	106.0	-72.5	Horiz

TEST EQUIPMENT USED
FIELD STRENGTH OF SPURIOUS RADIATION < 960 MHz

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	HP	E7405A	US40240225	041001	041002
Spectrum Analyzer	02462	HP	8568B	2928A04874	032901	032902
QP Adapter	02325	HP	85650A	2521A00932	032901	032902
Bilog Antenna	00851	Schaffner-Chase EMC	CBL6111C	2629	090500	090501
Bicon Antenna	00306	A.H. System	SAS-200/540	220	092000	092001
Log Periodic Antenna	00300	A.H. System	SAS-200/516	331	092000	092001
Pre-amp	02320	HP	8447D	2443A03665	020601	020602
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#20	091500	091501
Antenna extension cable HF (70ft)	NA	Andrew	LDF1-50	Cable#18	091500	091501
Magnetic Loop Antenna	00314	EMCO	6502	2014	081700	081701

ANALYZER BANDWIDTH SETTINGS DURING 2.1053/95.1115(b)(1) TESTING			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	7 MHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz

TEST SETUP PHOTOGRAPHS
FIELD STRENGTH OF SPURIOUS RADIATION < 960 MHz



Front View



Back View

2.1053/95.1115(b)(2) FIELD STRENGTH OF SPURIOUS RADIATION > 960 MHz

Low Channel – 1-10 GHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 14:31:23
 Equipment: Ambulatory ECG Transceiver Sequence#: 24
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **X axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	1217.368M	58.2	-39.9	+25.2	+2.1	+3.2	+0.0	48.8	114.0	-65.2	Vert
Ave											
^	1217.368M	65.4	-39.9	+25.2	+2.1	+3.2	+0.0	56.0	114.0	-58.0	Vert
3	2434.788M	51.2	-39.2	+28.4	+3.1	+4.6	+0.0	48.1	114.0	-65.9	Horiz
4	1217.389M	57.2	-39.9	+25.2	+2.1	+3.2	+0.0	47.8	114.0	-66.2	Horiz
Ave											
^	1217.389M	65.4	-39.9	+25.2	+2.1	+3.2	+0.0	56.0	114.0	-58.0	Horiz
6	2434.632M	50.7	-39.2	+28.4	+3.1	+4.6	+0.0	47.6	114.0	-66.4	Vert
7	1825.966M	39.2	-39.1	+27.7	+2.7	+3.9	+0.0	34.4	114.0	-79.6	Horiz
Ave											
^	1825.966M	54.4	-39.1	+27.7	+2.7	+3.9	+0.0	49.6	114.0	-64.4	Horiz

9	1826.140M	37.6	-39.1	+27.7	+2.7	+3.9	+0.0	32.8	114.0	-81.2	Vert
	Ave										
^	1826.140M	54.1	-39.1	+27.7	+2.7	+3.9	+0.0	49.3	114.0	-64.7	Vert

Low Channel – 1-10 GHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer:	VitalCom, Inc.		
Specification:	95.1115(b)(2) Undesired Emissions > 960 MHz		
Work Order #:	76248	Date:	04/23/2001
Test Type:	Maximized Emissions	Time:	14:28:34
Equipment:	Ambulatory ECG Transceiver	Sequence#:	23
Manufacturer:	VitalCom, Inc.	Tested By:	Stuart Yamamoto
Model:	DT-4500		
S/N:	006003 (ID# 156)		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Y axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	1217.336M	59.7	-39.9	+25.2	+2.1	+3.2	+0.0	50.3	114.0	-63.7	Vert
	Ave										
^	1217.336M	66.7	-39.9	+25.2	+2.1	+3.2	+0.0	57.3	114.0	-56.7	Vert
3	2434.786M	50.2	-39.2	+28.4	+3.1	+4.6	+0.0	47.1	114.0	-66.9	Vert
4	2434.516M	50.0	-39.2	+28.4	+3.1	+4.6	+0.0	46.9	114.0	-67.1	Horiz
5	1217.325M	52.8	-39.9	+25.2	+2.1	+3.2	+0.0	43.4	114.0	-70.6	Horiz
	Ave										
^	1217.325M	62.2	-39.9	+25.2	+2.1	+3.2	+0.0	52.8	114.0	-61.2	Horiz
7	1825.890M	43.7	-39.1	+27.7	+2.7	+3.9	+0.0	38.9	114.0	-75.1	Vert
	Ave										
^	1825.890M	59.8	-39.1	+27.7	+2.7	+3.9	+0.0	55.0	114.0	-59.0	Vert
9	1826.155M	39.6	-39.1	+27.7	+2.7	+3.9	+0.0	34.8	114.0	-79.2	Horiz
	Ave										
^	1826.155M	57.1	-39.1	+27.7	+2.7	+3.9	+0.0	52.3	114.0	-61.7	Horiz

Low Channel – 1-10 GHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer:	VitalCom, Inc.		
Specification:	95.1115(b)(2) Undesired Emissions > 960 MHz		
Work Order #:	76248		Date: 04/23/2001
Test Type:	Maximized Emissions		Time: 14:53:17
Equipment:	Ambulatory ECG Transceiver	Sequence#:	25
Manufacturer:	VitalCom, Inc.	Tested By:	Stuart Yamamoto
Model:	DT-4500		
S/N:	006003 (ID# 156)		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Z axis. Low Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	1217.486M	60.9	-39.9	+25.2	+2.1	+3.2	+0.0	51.5	114.0	-62.5	Vert
	Ave										
^	1217.417M	65.3	-39.9	+25.2	+2.1	+3.2	+0.0	55.9	114.0	-58.1	Vert
3	1217.322M	58.7	-39.9	+25.2	+2.1	+3.2	+0.0	49.3	114.0	-64.7	Horiz
	Ave										
^	1217.322M	65.2	-39.9	+25.2	+2.1	+3.2	+0.0	55.8	114.0	-58.2	Horiz
5	2434.288M	51.0	-39.2	+28.4	+3.1	+4.6	+0.0	47.9	114.0	-66.1	Horiz
6	2434.596M	50.7	-39.2	+28.4	+3.1	+4.6	+0.0	47.6	114.0	-66.4	Vert
7	1826.016M	49.1	-39.1	+27.7	+2.7	+3.9	+0.0	44.3	114.0	-69.7	Vert
	Ave										
^	1826.016M	55.5	-39.1	+27.7	+2.7	+3.9	+0.0	50.7	114.0	-63.3	Vert
9	1825.809M	37.6	-39.1	+27.7	+2.7	+3.9	+0.0	32.8	114.0	-81.2	Horiz
	Ave										
^	1825.809M	54.3	-39.1	+27.7	+2.7	+3.9	+0.0	49.5	114.0	-64.5	Horiz

Mid Channel – 1-10 GHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 13:40:31
 Equipment: Ambulatory ECG Transceiver Sequence#: 22
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **X axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.638M	51.4	-39.2	+28.4	+3.2	+4.6	+0.0	48.4	114.0	-65.6	Vert
2	2444.590M	50.4	-39.2	+28.4	+3.2	+4.6	+0.0	47.4	114.0	-66.6	Horiz
3	1832.611M	51.7	-39.1	+27.7	+2.7	+3.9	+0.0	46.9	114.0	-67.1	Vert
4	1832.499M	51.1	-39.1	+27.7	+2.7	+3.9	+0.0	46.3	114.0	-67.7	Horiz
5	1222.433M	49.2	-39.9	+25.2	+2.1	+3.2	+0.0	39.8	114.0	-74.2	Vert
^	1222.433M	60.3	-39.9	+25.2	+2.1	+3.2	+0.0	50.9	114.0	-63.1	Vert
7	1222.446M	47.3	-39.9	+25.2	+2.1	+3.2	+0.0	37.9	114.0	-76.1	Horiz
^	1222.446M	58.6	-39.9	+25.2	+2.1	+3.2	+0.0	49.2	114.0	-64.8	Horiz

Mid Channel – 1-10 GHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 13:07:23
 Equipment: Ambulatory ECG Transceiver Sequence#: 20
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Y axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.560M	51.4	-39.2	+28.4	+3.2	+4.6	+0.0	48.4	114.0	-65.6	Horiz
2	1222.470M	57.7	-39.9	+25.2	+2.1	+3.2	+0.0	48.3	114.0	-65.7	Horiz
3	2444.571M	50.8	-39.2	+28.4	+3.2	+4.6	+0.0	47.8	114.0	-66.2	Vert
4	1832.390M	51.8	-39.1	+27.7	+2.7	+3.9	+0.0	47.0	114.0	-67.0	Horiz
5	1832.506M	50.8	-39.1	+27.7	+2.7	+3.9	+0.0	46.0	114.0	-68.0	Vert
6	1222.465M	50.7	-39.9	+25.2	+2.1	+3.2	+0.0	41.3	114.0	-72.7	Vert
Ave											
^	1222.465M	58.9	-39.9	+25.2	+2.1	+3.2	+0.0	49.5	114.0	-64.5	Vert

Mid Channel – 1-10 GHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 13:20:54
 Equipment: Ambulatory ECG Transceiver Sequence#: 21
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.729M	50.9	-39.2	+28.4	+3.2	+4.6	+0.0	47.9	114.0	-66.1	Vert
2	2444.360M	50.8	-39.2	+28.4	+3.2	+4.6	+0.0	47.8	114.0	-66.2	Horiz
3	1222.536M	57.1	-39.9	+25.2	+2.1	+3.2	+0.0	47.7	114.0	-66.3	Horiz
4	1832.545M	51.5	-39.1	+27.7	+2.7	+3.9	+0.0	46.7	114.0	-67.3	Horiz
5	1832.447M	50.5	-39.1	+27.7	+2.7	+3.9	+0.0	45.7	114.0	-68.3	Vert
6	1222.430M	53.7	-39.9	+25.2	+2.1	+3.2	+0.0	44.3	114.0	-69.7	Vert
Ave											
^	1222.430M	60.7	-39.9	+25.2	+2.1	+3.2	+0.0	51.3	114.0	-62.7	Vert

High Channel – 1-10 GHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 12:28:22
 Equipment: Ambulatory ECG Transceiver Sequence#: 18
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **X axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	1225.836M Ave	60.5	-39.9	+25.2	+2.1	+3.2	+0.0	51.1	114.0	-62.9	Vert
^	1225.836M	66.8	-39.9	+25.2	+2.1	+3.2	+0.0	57.4	114.0	-56.6	Vert
3	1225.788M Ave	59.8	-39.9	+25.2	+2.1	+3.2	+0.0	50.4	114.0	-63.6	Horiz
^	1225.788M	65.2	-39.9	+25.2	+2.1	+3.2	+0.0	55.8	114.0	-58.2	Horiz
5	1838.708M	53.3	-39.1	+27.8	+2.7	+3.9	+0.0	48.6	114.0	-65.4	Horiz
6	2451.442M	50.8	-39.2	+28.5	+3.2	+4.6	+0.0	47.9	114.0	-66.1	Vert
7	2451.894M	50.8	-39.2	+28.5	+3.2	+4.6	+0.0	47.9	114.0	-66.1	Horiz
8	1049.895M	56.3	-40.7	+24.5	+2.0	+3.0	+0.0	45.1	114.0	-68.9	Vert
9	1049.793M	50.9	-40.7	+24.5	+2.0	+3.0	+0.0	39.7	114.0	-74.3	Horiz

10	1838.749M	40.8	-39.1	+27.8	+2.7	+3.9	+0.0	36.1	114.0	-77.9	Vert
Ave											
^	1838.749M	59.2	-39.1	+27.8	+2.7	+3.9	+0.0	54.5	114.0	-59.5	Vert

High Channel – 1-10 GHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.
 Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz
 Work Order #: 76248 Date: 04/23/2001
 Test Type: Maximized Emissions Time: 12:00:12
 Equipment: Ambulatory ECG Transceiver Sequence#: 17
 Manufacturer: VitalCom, Inc. Tested By: Stuart Yamamoto
 Model: DT-4500
 S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Y axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	1225.797M	60.9	-39.9	+25.2	+2.1	+3.2	+0.0	51.5	114.0	-62.5	Vert
Ave											
^	1225.797M	65.4	-39.9	+25.2	+2.1	+3.2	+0.0	56.0	114.0	-58.0	Vert
3	1225.813M	60.3	-39.9	+25.2	+2.1	+3.2	+0.0	50.9	114.0	-63.1	Horiz
Ave											
^	1225.790M	66.1	-39.9	+25.2	+2.1	+3.2	+0.0	56.7	114.0	-57.3	Horiz
5	1838.823M	53.7	-39.1	+27.8	+2.7	+3.9	+0.0	49.0	114.0	-65.0	Horiz
6	2451.536M	50.5	-39.2	+28.5	+3.2	+4.6	+0.0	47.6	114.0	-66.4	Vert
7	2451.718M	49.7	-39.2	+28.5	+3.2	+4.6	+0.0	46.8	114.0	-67.2	Horiz
8	1050.000M	55.8	-40.7	+24.5	+2.0	+3.0	+0.0	44.6	114.0	-69.4	Vert

9	1838.685M	46.3	-39.1	+27.8	+2.7	+3.9	+0.0	41.6	114.0	-72.4	Vert
	Ave										
^	1838.685M	61.0	-39.1	+27.8	+2.7	+3.9	+0.0	56.3	114.0	-57.7	Vert
11	1049.865M	49.3	-40.7	+24.5	+2.0	+3.0	+0.0	38.1	114.0	-75.9	Horiz

High Channel – 1-10 GHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.	
Specification: 95.1115(b)(2) Undesired Emissions > 960 MHz	
Work Order #: 76248	Date: 04/23/2001
Test Type: Maximized Emissions	Time: 12:48:26
Equipment: Ambulatory ECG Transceiver	Sequence#: 19
Manufacturer: VitalCom, Inc.	Tested By: Stuart Yamamoto
Model: DT-4500	
S/N: 006003 (ID# 156)	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Z axis. High Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	1225.737M	60.7	-39.9	+25.2	+2.1	+3.2	+0.0	51.3	114.0	-62.7	Horiz
	Ave										
^	1225.737M	66.5	-39.9	+25.2	+2.1	+3.2	+0.0	57.1	114.0	-56.9	Horiz
3	1225.817M	60.7	-39.9	+25.2	+2.1	+3.2	+0.0	51.3	114.0	-62.7	Vert
	Ave										
^	1225.737M	66.1	-39.9	+25.2	+2.1	+3.2	+0.0	56.7	114.0	-57.3	Vert
5	2451.355M	51.2	-39.2	+28.5	+3.2	+4.6	+0.0	48.3	114.0	-65.7	Vert
6	2451.769M	51.0	-39.2	+28.5	+3.2	+4.6	+0.0	48.1	114.0	-65.9	Horiz
7	1838.699M	51.9	-39.1	+27.8	+2.7	+3.9	+0.0	47.2	114.0	-66.8	Horiz
8	1050.018M	56.7	-40.7	+24.5	+2.0	+3.0	+0.0	45.5	114.0	-68.5	Vert
9	1049.644M	49.5	-40.7	+24.5	+2.0	+3.0	+0.0	38.3	114.0	-75.7	Horiz

10	1838.667M	37.7	-39.1	+27.8	+2.7	+3.9	+0.0	33.0	114.0	-81.0	Vert
	Ave										
^	1838.667M	56.0	-39.1	+27.8	+2.7	+3.9	+0.0	51.3	114.0	-62.7	Vert

TEST EQUIPMENT USED
FIELD STRENGTH OF SPURIOUS RADIATION > 960 MHz

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	HP	E7405A	US40240225	041001	041002
Spectrum Analyzer	02462	HP	8568B	2928A04874	032901	032902
QP Adapter	02325	HP	85650A	2521A00932	032901	032902
Pre-amp	02320	HP	8447D	2443A03665	020601	020602
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#20	091500	091501
Antenna extension cable HF (70ft)	NA	Andrew	LDF1-50	Cable#18	091500	091501
Horn Antenna	01646	EMCO	3115	9603-4683	022801	022802
Microwave Pre-amp	00787	HP	83017A	3123A00282	030801	030802

ANALYZER BANDWIDTH SETTINGS DURING 2.1053/95.1115(b)(2) TESTING			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	1 GHz	10 GHz	1 MHz

TEST SETUP PHOTOGRAPHS
FIELD STRENGTH OF SPURIOUS RADIATION > 960 MHz



Front View



Back View

15.209 RADIATED EMISSIONS-DIGITAL SECTION OF TRANSCEIVER

Mid Channel – 7-30 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.

Specification: FCC 15.209

Work Order #: 76248

Date: 04/20/2001

Test Type: Maximized Emissions

Time: 10:22:57

Equipment: Ambulatory ECG Transceiver

Sequence#: 10

Manufacturer: VitalCom, Inc.

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. Mid Channel.**

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.998M	27.2	+0.2	+10.2			-20.0	17.6	29.5	-11.9	None
2	7.995M	27.1	+0.2	+10.2			-20.0	17.5	29.5	-12.0	None
3	7.018M	26.4	+0.2	+10.1			-20.0	16.7	29.5	-12.8	None
4	20.000M	27.5	+0.3	+8.8			-20.0	16.6	29.5	-12.9	None
5	7.375M	25.4	+0.2	+10.1			-20.0	15.7	29.5	-13.8	None
6	30.027M	27.9	+0.4	+0.0			-20.0	8.3	29.5	-21.2	None

Mid Channel – 7-30 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.	
Specification: FCC 15.209	
Work Order #: 76248	Date: 04/20/2001
Test Type: Maximized Emissions	Time: 10:11:37
Equipment: Ambulatory ECG Transceiver	Sequence#: 8
Manufacturer: VitalCom, Inc.	Tested By: Stuart Yamamoto
Model: DT-4500	
S/N: 006003 (ID# 156)	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.997M	28.6	+0.2	+10.2			-20.0	19.0	29.5	-10.5	None
2	7.993M	28.2	+0.2	+10.2			-20.0	18.6	29.5	-10.9	None
3	7.372M	26.7	+0.2	+10.1			-20.0	17.0	29.5	-12.5	None
4	19.999M	26.0	+0.3	+8.8			-20.0	15.1	29.5	-14.4	None
5	7.018M	24.7	+0.2	+10.1			-20.0	15.0	29.5	-14.5	None
6	30.024M	30.1	+0.4	+0.0			-20.0	10.5	29.5	-19.0	None

Mid Channel – 7-30 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer:	VitalCom, Inc.		
Specification:	FCC 15.209		
Work Order #:	76248	Date:	04/20/2001
Test Type:	Maximized Emissions	Time:	10:03:01
Equipment:	Ambulatory ECG Transceiver	Sequence#:	9
Manufacturer:	VitalCom, Inc.	Tested By:	Stuart Yamamoto
Model:	DT-4500		
S/N:	006003 (ID# 156)		

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Mag L				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	9.997M	28.1	+0.2	+10.2			-20.0	18.5	29.5	-11.0	None
2	7.369M	27.6	+0.2	+10.1			-20.0	17.9	29.5	-11.6	None
3	7.992M	26.0	+0.2	+10.2			-20.0	16.4	29.5	-13.1	None
4	19.999M	26.8	+0.3	+8.8			-20.0	15.9	29.5	-13.6	None
5	7.018M	24.3	+0.2	+10.1			-20.0	14.6	29.5	-14.9	None
6	30.003M	30.7	+0.4	+0.0			-20.0	11.1	29.5	-18.4	None

Mid Channel – 30-1000 MHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.	Date: 04/20/2001
Specification: FCC 15.209	Time: 17:30:02
Work Order #: 76248	Sequence#: 16
Test Type: Maximized Emissions	Tested By: Stuart Yamamoto
Equipment: Ambulatory ECG Transceiver	
Manufacturer: VitalCom, Inc.	
Model: DT-4500	
S/N: 006003 (ID# 156)	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **X axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Bilog Pream				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	150.118M	60.3	+0.7	+10.6	-27.9		+0.0	43.7	43.5	+0.2	Vert
	QP								Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9		+0.0	45.6	43.5	+2.1	Vert
									Source is support laptop computer		
3	149.991M	57.5	+0.7	+10.6	-27.9		+0.0	40.9	43.5	-2.6	Horiz
	QP										
^	149.989M	59.4	+0.7	+10.6	-27.9		+0.0	42.8	43.5	-0.7	Horiz
5	375.484M	52.1	+1.2	+15.0	-28.1		+0.0	40.2	46.0	-5.8	Horiz
6	371.076M	52.2	+1.2	+14.8	-28.1		+0.0	40.1	46.0	-5.9	Horiz
7	300.102M	54.1	+1.1	+13.1	-28.3		+0.0	40.0	46.0	-6.0	Horiz

8	325.015M	50.4	+1.1	+13.8	-28.1	+0.0	37.2	46.0	-8.8	Horiz
9	75.040M	52.5	+0.6	+6.2	-28.2	+0.0	31.1	40.0	-8.9	Vert
10	650.394M	41.7	+1.6	+20.3	-27.4	+0.0	36.2	46.0	-9.8	Horiz
11	250.007M	50.7	+0.9	+12.2	-28.0	+0.0	35.8	46.0	-10.2	Horiz
12	524.760M	43.1	+1.4	+18.6	-27.8	+0.0	35.3	46.0	-10.7	Horiz
13	275.286M	48.2	+1.0	+12.3	-28.0	+0.0	33.5	46.0	-12.5	Horiz
14	307.045M	47.3	+1.1	+13.2	-28.3	+0.0	33.3	46.0	-12.7	Horiz
15	286.404M	47.0	+1.0	+12.7	-28.1	+0.0	32.6	46.0	-13.4	Horiz
16	226.814M	47.8	+0.9	+9.4	-28.0	+0.0	30.1	46.0	-15.9	Horiz
17	201.419M	46.1	+0.9	+8.4	-28.2	+0.0	27.2	43.5	-16.3	Vert

Mid Channel – 30-1000 MHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.

Specification: FCC 15.209

Work Order #: 76248

Date: 04/20/2001

Test Type: Maximized Emissions

Time: 16:28:46

Equipment: Ambulatory ECG Transceiver

Sequence#: 14

Manufacturer: VitalCom, Inc.

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Y axis. Mid Channel.**

Measurement Data:

Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable dB	Bilog dB	Pream dB	Dist Table dB	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	150.118M	60.3	+0.7	+10.6	-27.9	+0.0	43.7	43.5	+0.2	Vert
	QP							Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9	+0.0	45.6	43.5	+2.1	Vert
								Source is support laptop computer		
3	149.991M	57.5	+0.7	+10.6	-27.9	+0.0	40.9	43.5	-2.6	Horiz
	QP									
^	149.989M	59.4	+0.7	+10.6	-27.9	+0.0	42.8	43.5	-0.7	Horiz
5	325.236M	55.8	+1.1	+13.8	-28.1	+0.0	42.6	46.0	-3.4	Horiz
	QP									
^	325.242M	56.9	+1.1	+13.8	-28.1	+0.0	43.7	46.0	-2.3	Horiz
7	371.122M	52.6	+1.2	+14.8	-28.1	+0.0	40.5	46.0	-5.5	Horiz

8	300.192M	54.4	+1.1	+13.1	-28.3	+0.0	40.3	46.0	-5.7	Horiz
9	275.200M	53.9	+1.0	+12.3	-28.0	+0.0	39.2	46.0	-6.8	Horiz
10	375.231M	50.3	+1.2	+15.0	-28.1	+0.0	38.4	46.0	-7.6	Horiz
11	650.499M	43.8	+1.6	+20.3	-27.4	+0.0	38.3	46.0	-7.7	Horiz
12	250.113M	52.3	+0.9	+12.2	-28.0	+0.0	37.4	46.0	-8.6	Horiz
13	306.876M	51.2	+1.1	+13.2	-28.3	+0.0	37.2	46.0	-8.8	Horiz
14	75.062M	52.2	+0.6	+6.2	-28.2	+0.0	30.8	40.0	-9.2	Vert
15	226.624M	53.7	+0.9	+9.4	-28.0	+0.0	36.0	46.0	-10.0	Horiz
16	286.404M	49.4	+1.0	+12.7	-28.1	+0.0	35.0	46.0	-11.0	Horiz
	QP									
^	286.418M	55.6	+1.0	+12.7	-28.1	+0.0	41.2	46.0	-4.8	Horiz
18	524.808M	41.3	+1.4	+18.6	-27.8	+0.0	33.5	46.0	-12.5	Horiz
19	201.423M	46.3	+0.9	+8.4	-28.2	+0.0	27.4	43.5	-16.1	Vert

Mid Channel – 30-1000 MHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.	Date: 04/20/2001
Specification: FCC 15.209	Time: 17:11:49
Work Order #: 76248	Sequence#: 15
Test Type: Maximized Emissions	Tested By: Stuart Yamamoto
Equipment: Ambulatory ECG Transceiver	
Manufacturer: VitalCom, Inc.	
Model: DT-4500	
S/N: 006003 (ID# 156)	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 16°C 60% 100kPa. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	Cable Bilog Pream				Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	150.118M	60.3	+0.7	+10.6	-27.9		+0.0	43.7	43.5	+0.2	Vert
	QP								Source is support laptop computer		
^	150.069M	62.2	+0.7	+10.6	-27.9		+0.0	45.6	43.5	+2.1	Vert
									Source is support laptop computer		
3	149.991M	57.5	+0.7	+10.6	-27.9		+0.0	40.9	43.5	-2.6	Horiz
	QP										
^	149.989M	59.4	+0.7	+10.6	-27.9		+0.0	42.8	43.5	-0.7	Horiz
5	300.073M	54.5	+1.1	+13.1	-28.3		+0.0	40.4	46.0	-5.6	Horiz
6	375.323M	52.1	+1.2	+15.0	-28.1		+0.0	40.2	46.0	-5.8	Horiz
7	371.150M	52.1	+1.2	+14.8	-28.1		+0.0	40.0	46.0	-6.0	Horiz

8	250.010M	52.1	+0.9	+12.2	-28.0	+0.0	37.2	46.0	-8.8	Horiz
9	650.533M	42.2	+1.6	+20.3	-27.4	+0.0	36.7	46.0	-9.3	Horiz
10	75.062M	52.1	+0.6	+6.2	-28.2	+0.0	30.7	40.0	-9.3	Vert
11	325.252M	49.6	+1.1	+13.8	-28.1	+0.0	36.4	46.0	-9.6	Horiz
12	275.253M	48.3	+1.0	+12.3	-28.0	+0.0	33.6	46.0	-12.4	Horiz
13	524.850M	41.2	+1.4	+18.6	-27.8	+0.0	33.4	46.0	-12.6	Horiz
14	306.884M	47.3	+1.1	+13.2	-28.3	+0.0	33.3	46.0	-12.7	Horiz
15	286.467M	46.5	+1.0	+12.7	-28.1	+0.0	32.1	46.0	-13.9	Horiz
16	201.399M	46.8	+0.9	+8.4	-28.2	+0.0	27.9	43.5	-15.6	Vert
17	226.662M	47.3	+0.9	+9.4	-28.0	+0.0	29.6	46.0	-16.4	Horiz

Mid Channel – 1-10 GHz – X Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.

Specification: FCC 15.209

Work Order #: 76248

Date: 04/23/2001

Test Type: Maximized Emissions

Time: 13:40:31

Equipment: Ambulatory ECG Transceiver

Sequence#: 22

Manufacturer: VitalCom, Inc.

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **X axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.638M	51.4	-39.2	+28.4	+3.2	+4.6	+0.0	48.4	54.0	-5.6	Vert
2	2444.590M	50.4	-39.2	+28.4	+3.2	+4.6	+0.0	47.4	54.0	-6.6	Horiz
3	1832.611M	51.7	-39.1	+27.7	+2.7	+3.9	+0.0	46.9	54.0	-7.1	Vert
4	1832.499M	51.1	-39.1	+27.7	+2.7	+3.9	+0.0	46.3	54.0	-7.7	Horiz
5	1222.433M	49.2	-39.9	+25.2	+2.1	+3.2	+0.0	39.8	54.0	-14.2	Vert
^	1222.433M	60.3	-39.9	+25.2	+2.1	+3.2	+0.0	50.9	54.0	-3.1	Vert
7	1222.446M	47.3	-39.9	+25.2	+2.1	+3.2	+0.0	37.9	54.0	-16.1	Horiz
^	1222.446M	58.6	-39.9	+25.2	+2.1	+3.2	+0.0	49.2	54.0	-4.8	Horiz

Mid Channel – 1-10 GHz – Y Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.

Specification: FCC 15.209

Work Order #: 76248

Date: 04/23/2001

Test Type: Maximized Emissions

Time: 13:20:54

Equipment: Ambulatory ECG Transceiver

Sequence#: 20

Manufacturer: VitalCom, Inc.

Tested By: Stuart Yamamoto

Model: DT-4500

S/N: 006003 (ID# 156)

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. 21°C, 35%, 100kPa. **Y axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.729M	50.9	-39.2	+28.4	+3.2	+4.6	+0.0	47.9	54.0	-6.1	Vert
2	2444.360M	50.8	-39.2	+28.4	+3.2	+4.6	+0.0	47.8	54.0	-6.2	Horiz
3	1222.536M	57.1	-39.9	+25.2	+2.1	+3.2	+0.0	47.7	54.0	-6.3	Horiz
4	1832.545M	51.5	-39.1	+27.7	+2.7	+3.9	+0.0	46.7	54.0	-7.3	Horiz
5	1832.447M	50.5	-39.1	+27.7	+2.7	+3.9	+0.0	45.7	54.0	-8.3	Vert
6	1222.430M	53.7	-39.9	+25.2	+2.1	+3.2	+0.0	44.3	54.0	-9.7	Vert
Ave											
^	1222.430M	60.7	-39.9	+25.2	+2.1	+3.2	+0.0	51.3	54.0	-2.7	Vert

Mid Channel – 1-10 GHz – Z Axis

Test Location: CKC • 110 N Olinda Place • Brea CA, 92823 • 714-993-6112

Customer: VitalCom, Inc.	
Specification: FCC 15.209	
Work Order #: 76248	Date: 04/23/2001
Test Type: Maximized Emissions	Time: 13:07:23
Equipment: Ambulatory ECG Transceiver	Sequence#: 21
Manufacturer: VitalCom, Inc.	Tested By: Stuart Yamamoto
Model: DT-4500	
S/N: 006003 (ID# 156)	

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Ambulatory ECG Transceiver*	VitalCom, Inc.	DT-4500	006003 (ID# 156)

Support Devices:

Function	Manufacturer	Model #	S/N
Computer	Compaq	Contura	7530HPE52263
Test Box	VitalCom, Inc.		

Test Conditions / Notes:

The EUT along with the support equipment are located on the wooden tabletop. The EUT's serial port is connected to a Test Box that is connected to laptop PC via shielded serial cable. Connected to the EUT is an ECG leadset that is terminated to electrodes. Antennas are integrated with the leads of the leadset. Voltage to EUT supplied by 9 VDC internal battery. **Z axis. Mid Channel.**

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	HP 83 dB	Horn dB	Cable dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2444.560M	51.4	-39.2	+28.4	+3.2	+4.6	+0.0	48.4	54.0	-5.6	Horiz
2	1222.470M	57.7	-39.9	+25.2	+2.1	+3.2	+0.0	48.3	54.0	-5.7	Horiz
3	2444.571M	50.8	-39.2	+28.4	+3.2	+4.6	+0.0	47.8	54.0	-6.2	Vert
4	1832.390M	51.8	-39.1	+27.7	+2.7	+3.9	+0.0	47.0	54.0	-7.0	Horiz
5	1832.506M	50.8	-39.1	+27.7	+2.7	+3.9	+0.0	46.0	54.0	-8.0	Vert
6	1222.465M	50.7	-39.9	+25.2	+2.1	+3.2	+0.0	41.3	54.0	-12.7	Vert
Ave											
^	1222.465M	58.9	-39.9	+25.2	+2.1	+3.2	+0.0	49.5	54.0	-4.5	Vert

TEST EQUIPMENT USED – RADIATED EMISSIONS-DIGITAL SECTION OF TRANSCEIVER

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	HP	E7405A	US40240225	041001	041002
Spectrum Analyzer	02462	HP	8568B	2928A04874	032901	032902
QP Adapter	02325	HP	85650A	2521A00932	032901	032902
Bilog Antenna	00851	Schaffner-Chase EMC	CBL6111C	2629	090500	090501
Bicon Antenna	00306	A.H. System	SAS-200/540	220	092000	092001
Log Periodic Antenna	00300	A.H. System	SAS-200/516	331	092000	092001
Pre-amp	02320	HP	8447D	2443A03665	020601	020602
Antenna cable (3 meter site D)	NA	Andrew	LDF1-50	Cable#20	091500	091501
Antenna extension cable HF (70ft)	NA	Andrew	LDF1-50	Cable#18	091500	091501
Horn Antenna	01646	EMCO	3115	9603-4683	022801	022802
Magnetic Loop Antenna	00314	EMCO	6502	2014	081700	081701
Microwave Pre-amp	00787	HP	83017A	3123A00282	030801	030802

ANALYZER BANDWIDTH SETTINGS DURING 15.209 RADIATED EMISSIONS TESTING

TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	7 MHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1 GHz	10 GHz	1 MHz

TEST SETUP PHOTOGRAPHS – RADIATED EMISSIONS-DIGITAL SECTION OF TRANSCEIVER



Front View



Back View

APPENDIX A

EXPLANATION OF DATA SHEET HEADINGS

A typical data sheet will display the following in column format:

#	Freq MHz	Rdng dBμV	DC Bl HP 83 dB	Bilog Mag L Horn dB	Log 3 Bicon Pream dB	Cable dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
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Heading Explanation of Heading

#	Reading number.
Freq	The frequency in MHz of the obtained reading.
Rdng	Reading obtained on the spectrum analyzer in dBμV.
DC Bl	DC Block factor in dB.
Bilog	Biconilog (or bilog) antenna factor in dB.
Pream	Preamplifier factor or gain in dB.
Cable	Cable loss in dB of the coaxial cable on the OATS and/or the cable loss in dB of the high frequency coaxial cable on the OATS.
HP 83	Microwave preamplifier factor or gain in dB.
Mag L	Magnetic loop antenna factor in dB.
Horn	Horn antenna factor in dB.
Dist	Distance factor in dB used when testing at a different test distance than the one stated in the spec.
Corr	Corrected reading in dBμV/m (field strength).
Spec	Specification limit (dB) stated in the FCC regulations.
Margin	The closeness to the specified limit in dB; + is over and - is under the limit.
Polar	Polarity of the antenna with respect to earth.
Log 3	Log periodic antenna factor in dB.
Bicon	Bicon antenna factor in dB.