

RETLIF TESTING LABORATORIES
TEST REPORT R-4128N9
June 10, 2003

FCC PART 15.209 COMPLIANCE TEST REPORT
ON

SECURE CARE 430kHz ADULT NON-ID TRANSMITTER

APPLICANT Secure Care Products, Inc. 39 Chenell Drive Concord, NH 03303	MANUFACTURER SAME
--	--------------------------

TEST SPECIFICATION: FCC Rules and Regulations Part 15, Subpart C, Para. 15.209

TEST PROCEDURE: ANSI C63.4:2001

TEST SAMPLE DESCRIPTION

BRANDNAME: Secure Care MODEL: Part #A20080903

TYPE: Adult Non-Id Transmitter

POWER REQUIREMENTS: 3VDC Internal Lithium Battery (tested with new battery installed)

FREQUENCY OF OPERATION: 430kHz

MODULATION: AM

APPLICABLE RULE SECTION: Part 15, Subpart C, Section 15.209

TESTS PERFORMED

Field Strength of Fundamental Emission 430kHz

Field Strength of Spurious Emissions 9kHz-1GHz

TEST SAMPLE OPERATION

The Secure Care 430kHz Transmitter continuously transmits at 430kHz.

TEST SAMPLE / TEST PROGRAM

15.203 ANTENNA REQUIREMENTS

The device uses a permanently attached internal antenna. The antenna is totally enclosed inside the case.

15.205 RESTRICTED BANDS OF OPERATION

No emissions from the EUT were observed in any of the restricted bands.

15.207 CONDUCTED EMISSIONS

Not applicable (battery operated device).

15.209 RADIATED EMISSIONS

Fundamental Frequency

430kHz

Out of Band, Spurious, Harmonics

9kHz - 1000MHz

No spurious emissions were observed within 20dB of the specified limit at a test distance of 3 meters throughout the required frequency range. The measurements taken at 430kHz were performed at 3 meters and extrapolated to the 300 meter limit using the 40dB/decade extrapolation factor specified for frequencies less than 30MHz.

Determination of Field Strength Limit:

Fundamental Frequency: 430kHz

Where F = the frequency in kHz, the formula for calculating the maximum permitted fundamental field strength at 300 meters is:

$$2400/(F)$$

$$2400/(430) = 5.58\mu\text{V/M} = 14.9\text{dBuV/M}$$

Unwanted emissions cannot exceed the level of the fundamental emissions.

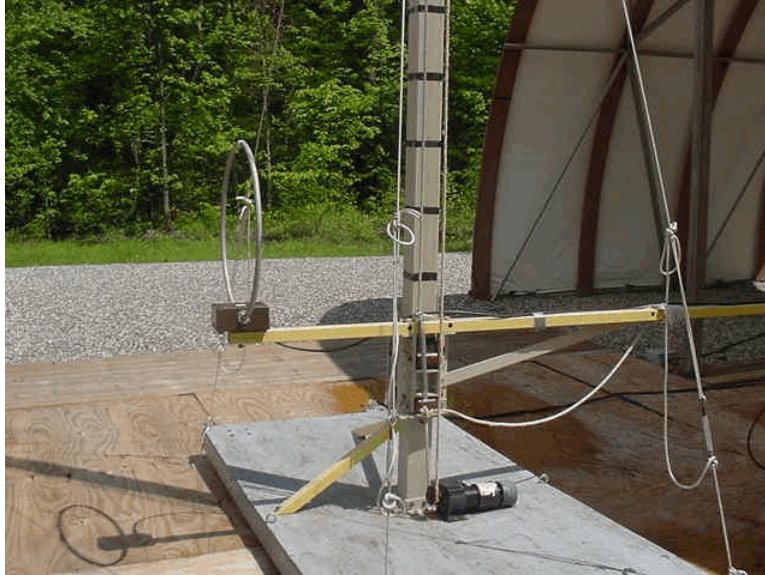
Duty Cycle:

No Duty Cycle Factor was used. The test sample operates at 100% duty cycle and the maximized peak signal of the 430kHz fundamental frequency met the average limit specified in 15.209.

TEST RESULTS

The maximized peak field strength at 430kHz was below the average limit specified in 15.209 and therefore also met the peak emission requirement specified in 15.35. The test sample was tested in 3 orientations (x, y & z axis). Test data reported is for the worst case orientation. No harmonic or spurious emissions were observed.

Radiated Emissions Setup Photographs



Radiated Emissions Setup Photographs



RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

Test Method:	Out of Band Emissions 9kHz to 1 GHz		
Customer:	Secure Care Products, Inc.	Job No:	R-4128N9
Test Sample:	430 kHz Transmitter		
Model No:	Adult Non ID Transmitter	Serial No:	n/a
Test Specification:	FCC Part 15, Subpart C Paragraph: 15.209		
Operating Mode:	Continuously Transmitting		
Technician:	T. Firkowski	Date:	5/27/2003
Notes:	Detector Function: Peak @ 3m		

Transmit Frequency	Test Frequency	Antenna/EUT Position	Meter Reading	Correction Factor	Corrected Reading	Converted to 300m	Converted Reading	Limit at 300 Meters
kHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	dBuV/m	uV/m	uV/m
430.00	0.009	-	-	-	-	-	-	2400/F(kHz)
430.00	0.490	-	-	-	-	-	-	2400/F(kHz)
Transmit Frequency	Test Frequency	Antenna/EUT Position	Meter Reading	Correction Factor	Corrected Reading	Converted to 30m	Converted Reading	Limit at 30 Meters
kHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	dBuV/m	uV/m	uV/m
430.00	0.490	-	-	-	-	-	-	24000/F(kHz)
	1.705	-	-	-	-	-	-	24000/F(kHz)
	1.705	-	-	-	-	-	-	30.00
	27.120	-	-	-	-	-	-	
430.00	30.000	-	-	-	-	-	-	30.00
Transmit Frequency	Test Frequency	Antenna/EUT Position	Meter Reading	Correction Factor	Corrected Reading	Converted to 3m	Converted Reading	Limit at 3 Meters
kHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	dBuV/m	uV/m	uV/m
430.00	30.0	-	-	-	-	-	-	100.00
	88.0	-	-	-	-	-	-	100.00
	88.0	-	-	-	-	-	-	150.00
	216.0	-	-	-	-	-	-	150.00
	216.0	-	-	-	-	-	-	200.00
	960.0	-	-	-	-	-	-	200.00
	960.0	-	-	-	-	-	-	500.00
430.00	1000.0	-	-	-	-	-	-	500.00

No EUT emissions were observed at the stated test distance throughout the given frequency spectrum.

TEST EQUIPMENT LIST

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
3207	Loop Antenna, Active	EMCO	10 KHz - 30 MHz	6502	5/14/03	5/14/04
4029	Test Site Attenuation	Retlif	3 / 10 Meters	RNH	8/8/02	8/8/03
4202	Biconilog	EMCO	26 MHz - 2 GHz	3142	7/25/02	7/25/03
713	EMI Test Receiver	Rohde & Schwarz	20 Hz - 26.5 GHz	ES126	1/29/03	1/29/04