



# Retlif Testing Laboratories

101 New Boston Road, Goffstown, NH 03045  
603-497-4600 - Fax: 603-497-5281

CORPORATE OFFICE  
795 Marconi Avenue  
Ronkonkoma, NY 11779  
631-737-1500 Fax 631-737-1497  
(A NY Corporation)

BRANCH LABORATORIES  
3131 Delwiler Road  
Harleysville, PA 19438  
215-256-4133 Fax 215-256-4130

WASHINGTON  
REGULATORY OFFICE  
703-533-1614 Fax 703-533-1612



## FCC Part 15 Test Report on

Wearable Help Button  
Model: EF2-4

Applicant Name: EveryFit, Inc.

Customer P.O: 1001

Equipment Authorization: Certification

Date of Report: July 24, 2013

Test Report No: R-5742N-1

Test Start Date: June 3, 2013

Test Finish Date: July 1, 2013

Test Technician: M. Seamans

Laboratory Supervisor: T. Hannemann

Branch Manager: S. Wentworth

Report Prepared By: J. Ramsey

Our letters, procedures and reports are for the exclusive use of the customer to whom they are addressed and their communication or the use of the name of Retlif Testing Laboratories must receive our prior written approval. Our letters, procedures and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar products. The letters, procedures and reports and the name of Retlif Testing Laboratories or insignia are not to be used under any circumstances in advertising to the general public. This test report shall not be reproduced, except in full, without the written approval of Retlif Testing Laboratories.

## TECHNICAL INFORMATION

MANUFACTURER		APPLICANT	
Name:	EveryFit, Inc.	Name:	EveryFit, Inc.
Address:	33 Richdale Ave., Suite 109	Address:	33 Richdale Ave., Suite 109
City, State, Zip:	Cambridge, MA 02140	City, State, Zip:	Cambridge, MA 02140

### TEST SPECIFICATION:

FCC Rules and Regulations Part 15, Subpart C, Section 15.231

### TEST PROCEDURE: ANSI C63.4:2003

### TEST SAMPLE DESCRIPTION

TEST SAMPLE: Wearable Help Button

BRANDNAME(s): QMedic

MODEL: EF2-4

FCC ID: 2AAOUEF2REV4QMW

TYPE: Wearable Device

POWER REQUIREMENTS: 3VDC via one (1) internal CR2032 battery

FREQUENCY OF OPERATION: 315MHz

The Wearable Help Button is a body worn device used for ensuring the safety of older adults in the event of a medical emergency. Once a health emergency has been detected the device transmits an emergency safety signal to the base station which then initiates a phone call to a call center.

### SUPPORT EQUIPMENT:

No support equipment was utilized during the course of this testing program.

**PURPOSE:**

The purpose of this test program was to demonstrate compliance of the Wearable Help Button to the requirements of FCC Part 15.231.

**Tests Performed**

The test methods performed on the Wearable Help Button are shown below:

<b>FCC Part 15, Subpart C</b>	<b>Test Method</b>
15.231(b)	Field Strength of Fundamental Emissions
15.231(b)	Duty Cycle Determination
15.231(b)(3)	Field Strength of Spurious Emissions
15.231(c)	Bandwidth of Emissions

**General Test Requirements**

1. The measurement procedures of ANSI C63.4:2003 were utilized as specified in FCC Part 15, Subpart C, Section 15.31(a)(3).
2. All radiated emissions measurements were performed on an Open Area Test Site (OATS), listed with the FCC, in accordance with FCC Section 15.31(d).
3. The level of the fundamental field strength was recorded with a new battery installed in the EUT, in accordance with FCC Section 15.231(b).
4. All measurements were performed at the specified 3 meter test distance as required by FCC Section 15.31(f).
5. The EUT was rotated throughout 360 degrees for all radiated emissions measurements as specified in FCC Section 15.31(f)(5).
6. All readily accessible EUT controls were adjusted in such a manner as to maximize the level of emissions in accordance with FCC Section 15.31(g).
7. Appropriate accessories were attached to all EUT ports during the performance of radiated emissions measurements as required by FCC Section 15.31(i).
8. All measurements were taken with a peak detector function as specified in FCC Section 15.35(a). The duty cycle, calculated in accordance with FCC Section 15.35(c), was applied to the peak readings in order to obtain the average value of emissions. The peak value of emissions was verified to meet the 20 dB requirement of FCC Section 15.35(b).
9. The EUT utilizes an internal loop antenna and is in compliance with 15.203.
10. The device is used in personal safety applications and uses supervision transmissions to maintain system integrity. The maximum total duration of these transmissions is 150msec per hour which meets the 2 second limit specified in 15.231 (a)(3).

## Certification and Signatures

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.



---

Scott Wentworth  
Branch Manager  
NVLAP Approved Signatory



---

Todd Hannemann  
Laboratory Supervisor  
iNARTE Certified Technician ATL-0255-T

### Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

### Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

## Revision History

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document.

Revision	Date	Pages Affected
-	July 24, 2013	Original Release

## **Requirements and Test Results**

### **Requirement:**

#### **FCC Section 15.231(b) - Field Strength of Emissions**

In addition to the provisions of Section 15.205, the field strength of emissions from intentional radiators operated under this Section shall not exceed the limits specified in Table 1.

Table 1 - Test Limits, Field Strength of Emissions

<b>Fundamental Frequency (MHz)</b>	<b>Field Strength of Fundamental microvolts/meter @ 3 meters (watts, e.i.r.p.) Quasi Peak or Average</b>	<b>Field Strength of Spurious Emissions microvolts/meter @ 3 meters Quasi Peak or Average</b>
40.66 to 40.70	2,250	225
70 to 130	1,250 (470 nW)	125
130 to 174	1,250 to 3,750**	125 to 375**
174 to 260	3,750 (4.2 $\mu$ W)	375
260 to 470	3,750 to 12,500**	375 to 1,250**
Above 470	12,500 (47 $\mu$ W)	1,250
<b>**Linear Interpolations</b> For 130-174 MHz: FS (microvolts/m) = (56.82 x F) - 6,136 For 260-470 MHz: FS (microvolts/m) = (41.67 x F) - 7,083 The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.		

The Fundamental and Harmonic Emissions limits for a device operating at 315 MHz are listed in Table 2.

Table 2 - Fundamental and Harmonic Limits

<b>Frequency of Operation MHz</b>	<b>Fundamental <math>\mu</math>V/m</b>	<b>Harmonics <math>\mu</math>V/m</b>
315	6042	604

- **Results:**  
The Fundamental and Harmonics field strengths did not exceed the limits specified in Table 2 at a test distance of 3 meters. See Table 3 for the worst case Fundamental and Harmonic emissions test results.

## Requirements and Test Results (con't)

### Field Strength Calculation:

The final average field strength of the emission was calculated by subtracting the duty cycle factor in dB from the maximized corrected peak reading in dBuV/m.

The maximized peak field strength of the emission was obtained as follows:

$$P_C = M_R + C_F$$

Where:

$P_C$  = Corrected Peak Reading in dB $\mu$ V/m

$M_R$  = Uncorrected Meter Reading in dB $\mu$ V

$C_F$  = Correction Factor in dB (Antenna Factor + Cable Loss)

The final average field strength of the emission was obtained as follows:

$$A_F = P_C - D_F$$

Where:

$A_F$  = Average Field Strength in dB $\mu$ V/m

$P_C$  = Corrected Peak Reading in dB $\mu$ V/m

$D_F$  = Duty Cycle Factor in dB

Example: For the Wearable Help Button at a frequency of 315 MHz:

$$M_R = 75.10 \text{ dB}\mu\text{V}$$

$$C_F = 16.5 \text{ dB}$$

$$P_C = 75.10 \text{ dB}\mu\text{V} + 16.5 \text{ dB} = 91.6 \text{ dB}\mu\text{V/m}$$

$$D_F = 16.474 \text{ dB}$$

$$A_F = 91.6 \text{ dB}\mu\text{V/m} - 16.474 \text{ dB} = 75.126 \text{ dB}\mu\text{V/m}$$

$$75.126 \text{ dB}\mu\text{V/m} = 5705 \text{ }\mu\text{V/m}$$

Table 3 - Fundamental and Harmonics Test Results

<b>Fundamental Frequency MHz</b>	<b>Maximum Fundamental <math>\mu</math>V/m</b>	<b>Maximum Harmonics <math>\mu</math>V/m</b>
315	5705	403 at 2835 MHz

## Requirements and Test Results (con't)

### Requirement:

#### FCC Section 15.231(b)(2) - Duty Cycle Determination-Pulsed Operation

Intentional radiators operating under the provisions of the Section shall demonstrate compliance with the limits on the field strength emissions, as shown in Table 1, based on the average value of the measured emissions. As an alternative, compliance with the limits in the Table 1 may be based on the use of measurement instrumentation with a CISPR quasi-peak detector. The specific method of measurement employed shall be specified in the application for equipment authorization. If average emission measurements are employed, the provisions in Section 15.35 for averaging pulsed emissions and for limiting peak emissions apply. Further, compliance with the provisions of Section 15.205 shall be demonstrated using the measurement instrumentation specified in that Section.

The duty cycle of the Wearable Help Button was evaluated in all possible channels and operating modes and the worst case duty cycle was determined. The following calculations were used to determine the duty cycle correction factor. As the transmitter cycle time exceeded 100msec, 100msec was used as the cycle time for the duty cycle calculation and the maximum on time within any 100msec period was recorded as the on time.

#### For the Wearable Help Button at a frequency of 315 MHz:

$$\begin{aligned}\text{Transmitter On Time} &= \underline{15.00} \text{ milliseconds (maximum per cycle)} \\ \text{Transmitter Cycle Time} &= \underline{100} \text{ milliseconds} \\ \text{Transmitter Duty Cycle} &= \underline{15} \%\end{aligned}$$

#### CALCULATION

There was 1 pulse within the 100 msec cycle time:

$$\begin{aligned}\text{On time} &= 15\text{msec} \\ \text{Duty Cycle (15/100)} &= 15\% \\ \text{Correction Factor} &= 20 \log (0.15) = -16.47\text{dB}\end{aligned}$$



## Requirements and Test Results (con't)

### Requirement:

#### **FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions**

The limits on the field strength of the spurious emissions specified in Table 1 are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in Table 1 or to the general limits shown in Section 15.209, whichever limit permits a higher field strength.

- Results:  
No spurious emissions exceeded the specified limit.

### Requirement:

#### **FCC Section 15.231(c) - Bandwidth of Emissions**

The bandwidth of the emissions shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

- Results:  
The emission bandwidth was measured and did not exceed the specified limits. See Table 3 for the worst case occupied bandwidth test results.

Table 4 – Occupied Bandwidth Test Results

<b>Fundamental Frequency MHz</b>	<b>Occupied Bandwidth kHz</b>	<b>Occupied Bandwidth Limit kHz</b>
315	109.22	787.5 kHz

## Equipment Lists

### FCC Section 15.231(b) - Field Strength of Fundamental & Harmonic Emissions

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5GHz	8449B	6/26/2013	6/30/2014
3258	EMCO	DOUBLE RIDGED GUIDE ANTENNA	1 GHZ - 18GHZ	3115	2/24/2012	8/31/2013
4029	RETLIF	OPEN AREA TEST SITE	3 / 10 Meters	RNH	7/24/2012	7/24/2015
8165	EMCO	BICONILOG	26 - 2000 MHz	3142	5/20/2013	11/30/2014
R444	AGILENT / HP	SPECTRUM ANALYZER	100 Hz - 26.5 GHz	E7405A;A	7/6/2012	7/6/2013

### FCC Section 15.231(b) - Duty Cycle Determination - Pulsed Operation

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5070	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 40 GHz	ESIB40	11/6/2012	11/30/2013

### FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5GHz	8449B	5/30/2012	6/30/2013
3207	EMCO	ACTIVE LOOP	10 KHZ - 30 MHZ	6502	9/17/2012	9/30/2013
3258	EMCO	DOUBLE RIDGED GUIDE ANTENNA	1 GHZ - 18GHZ	3115	2/24/2012	8/31/2013
4029	RETLIF	OPEN AREA TEST SITE	3 / 10 Meters	RNH	7/24/2012	7/24/2015
5053	EMCO	BICONILOG ANTENNA	26 MHz - 3 GHz	3142C	11/14/2011	6/30/2013
5070	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 40 GHz	ESIB40	11/6/2012	11/30/2013
5152	GENERAL TECHNICS	Control Computer		INDUSTRIAL PC	No Calibration Required	

### FCC Section 15.231(c) - Bandwidth of Emission

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5070	ROHDE & SCHWARZ	EMI TEST RECEIVER	20 Hz - 40 GHz	ESIB40	11/6/2012	11/30/2013

**FCC Section 15.231(b) - Field Strength of Fundamental & Harmonic Emissions**

**Photographs**

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW



Horizontal Antenna Polarization, 30 to 1000 MHz



Vertical Antenna Polarization, 30 to 1000 MHz

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

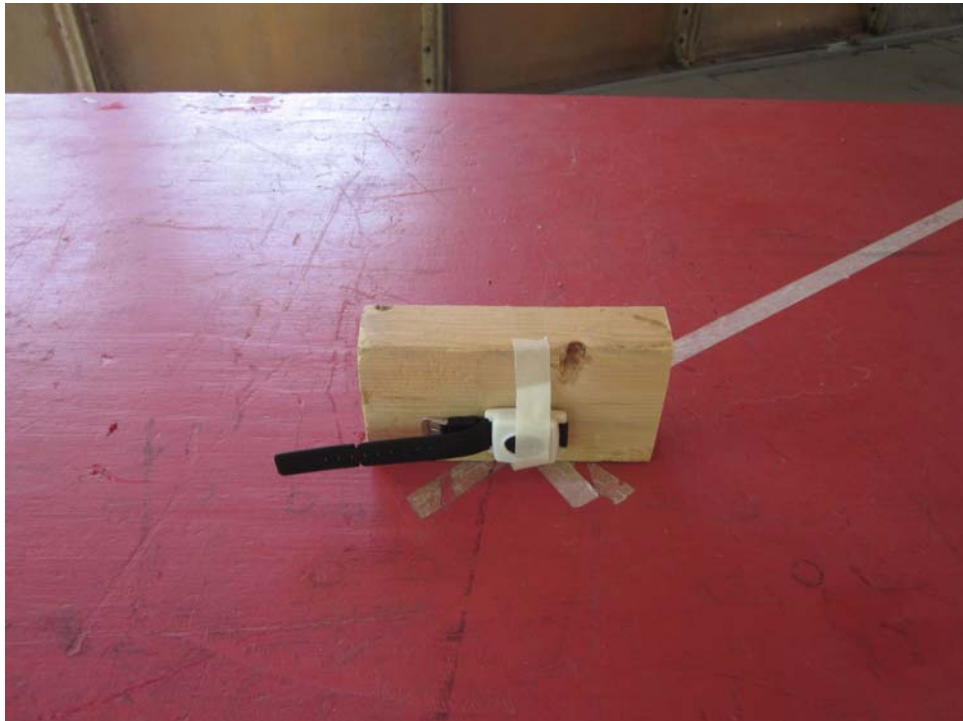


Horizontal Antenna Polarization, 1 to 3.2 GHz

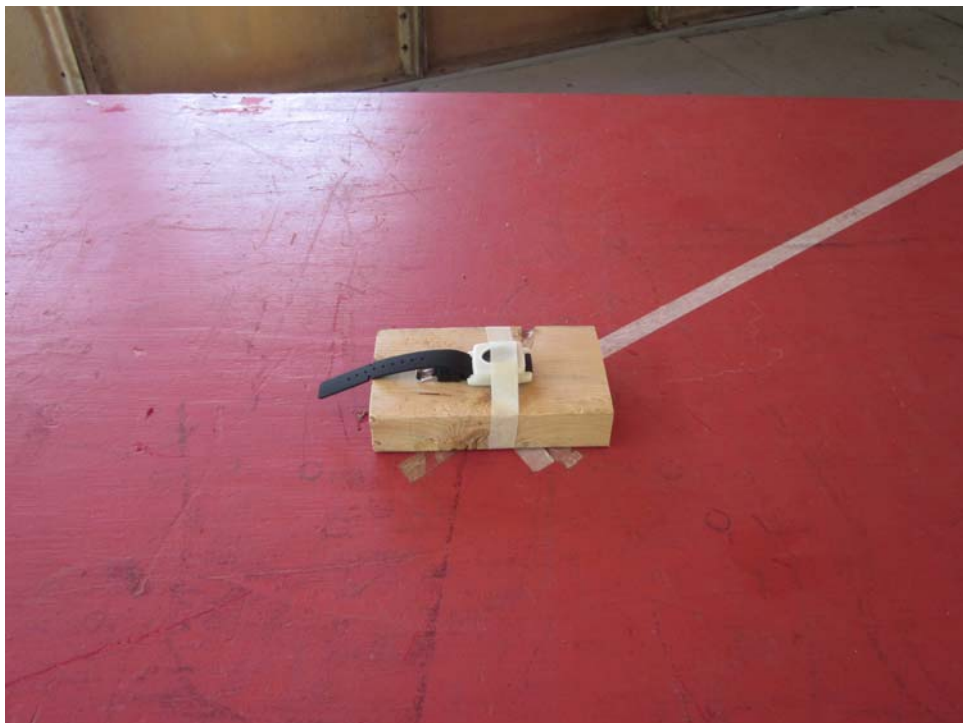


Vertical Antenna Polarization, 1 to 3.2 GHz

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

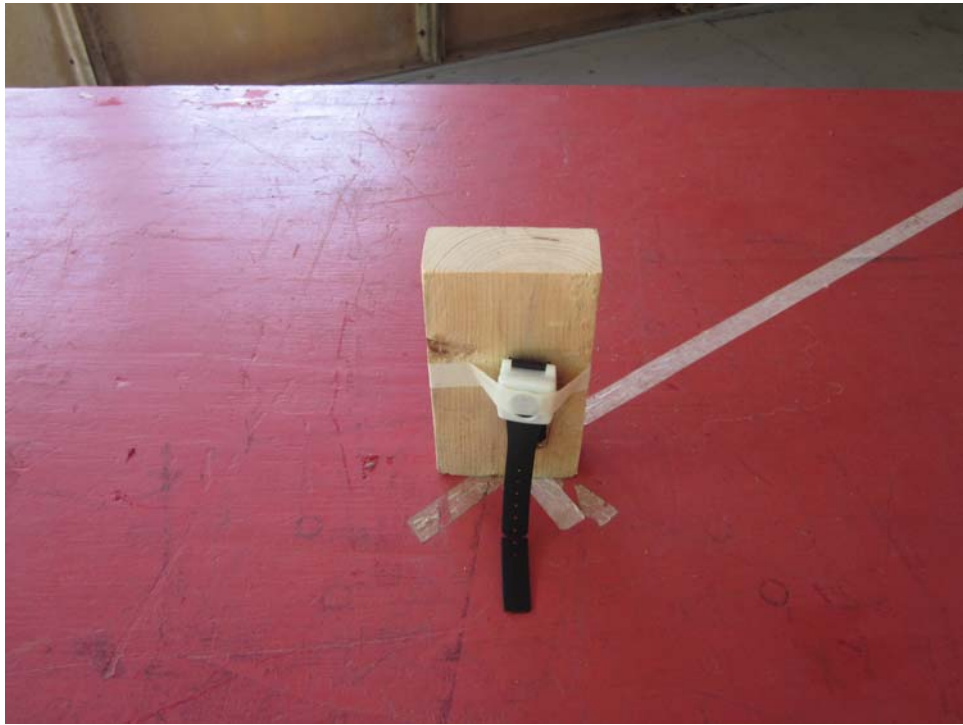


X Axis



Y Axis

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW



Z Axis

**FCC Section 15.231(b) - Field Strength of Fundamental & Harmonic Emissions  
Test Data**

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW



Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)						
Customer:	EveryFit, Inc.				Job No.:	R-5742N-1	
Test Sample:	Wearable Help Button						
Model No.:	EF2-4						
Operating Mode:	Continuously transmitting at 315 MHz						
Technician:	M. Seamans				Date:	July 1 <sup>st</sup> , 2013	
Notes:	Detector: Peak, Unless otherwise specified				Test Distance: 3 Meters		
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)/Meters	X / Y / Z	dBμV	dB	dBμV/m	uV/m	uV/m
315	V / 1.0	X	68.39	16.50	84.89	17559.01	60420
315	V / 1.0	Y	55.11	16.50	71.61	3806.27	
315	V / 2.0	Z	71.24	16.50	87.74	24378.11	
315	H / 1.0	X	68.25	16.50	84.75	17278.26	
315	H / 1.0	Y	75.10	16.50	91.60	38018.94	
315	H / 2.5	Z	69.85	16.50	86.35	20773.04	60420
630	V / 1.0	X	22.03	26.23	48.26	258.82	6042
630	V / 1.0	Y	21.75	26.23	47.98	250.61	
630	V / 1.0	Z	22.32	26.23	48.55	267.61	
630	H / 1.0	X	22.09	26.23	48.32	260.62	
630	H / 1.0	Y	23.57	26.23	49.80	309.03	
630	H / 1.0	Z	21.68	26.23	47.91	248.60	6042
945	V / 1.0	X	21.63	32.67	54.30	518.80	6042
945	V / 1.0	Y	21.73	32.67	54.40	524.81	
945	V / 1.0	Z	22.34	32.67	55.01	562.99	
945	H / 1.0	X	21.33	32.67	54.00	501.19	
945	H / 1.0	Y	21.53	32.67	54.20	512.86	
945	H / 1.0	Z	22.53	32.67	55.20	575.44	6042
1260.00	V / 1.5	X	46.04	-6.71	39.33	92.61	6042
1260.00	V / 1.0	Y	45.41	-6.71	38.70	86.13	
1260.00	V / 1.0	Z	46.16	-6.71	39.45	93.90	
1260.00	H / 1.0	X	45.63	-6.71	38.92	88.34	
1260.00	H / 1.0	Y	44.75	-6.71	38.04	79.83	
1260.00	H / 1.0	Z	45.67	-6.71	38.96	88.75	6042
1575.00	V / 1.0	X	56.03	-6.41	49.62	302.80	5000
1575.00	V / 1.0	Y	61.72	-6.41	55.31	582.98	
1575.00	V / 1.0	Z	57.84	-6.41	51.43	372.95	
1575.00	H / 1.0	X	52.82	-6.41	46.41	209.24	
1575.00	H / 1.0	Y	53.29	-6.41	46.88	220.88	
1575.00	H / 1.0	Z	51.53	-6.41	45.12	180.36	5000

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)						
Customer:	EveryFit, Inc.				Job No.:	R-5742N-1	
Test Sample:	Wearable Help Button						
Model No.:	EF2-4						
Operating Mode:	Continuously transmitting at 315 MHz						
Technician:	M. Seamans				Date:	July 1st, 2013	
Notes:	Detector: Peak, Unless otherwise specified				Test Distance: 3 Meters		
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)-Meters	X / Y / Z	dBμV	dB	dBμV/m	uV/m	uV/m
1890.00	V / 1.0	X	45.17	-3.96	41.21	114.99	6042
1890.00	V / 1.0	Y	44.90	-3.96	40.94	111.47	
1890.00	V / 1.0	Z	45.04	-3.96	41.08	113.28	
1890.00	H / 1.0	X	44.60	-3.96	40.64	107.68	
1890.00	H / 1.0	Y	49.28	-3.96	45.32	184.57	
1890.00	H / 1.0	Z	43.70	-3.96	39.74	97.08	6042
2205.00	V / 1.0	X	55.91	-3.11	52.80	436.67	5000
2205.00	V / 1.0	Y	62.17	-3.11	59.06	897.74	
2205.00	V / 1.0	Z	63.50	-3.11	60.39	1046.29	
2205.00	H / 1.0	X	58.23	-3.11	55.12	570.36	
2205.00	H / 1.0	Y	55.59	-3.11	52.48	420.87	
2205.00	H / 1.0	Z	66.30	-3.11	63.19	1444.28	5000
2520.00	V / 1.0	X	55.94	-1.71	54.23	514.81	6042
2520.00	V / 1.0	Y	50.25	-1.71	48.54	267.39	
2520.00	V / 1.0	Z	56.13	-1.71	54.42	526.20	
2520.00	H / 1.0	X	46.93	-1.71	45.22	182.45	
2520.00	H / 1.0	Y	52.31	-1.71	50.60	338.96	
2520.00	H / 1.0	Z	58.91	-1.71	57.20	724.69	6042
2835.00	V / 1.0	X	55.04	0.47	55.51	596.55	5000
2835.00	V / 1.0	Y	55.56	0.47	56.03	633.36	
2835.00	V / 1.0	Z	62.85	0.47	63.32	1466.05	
2835.00	H / 1.0	X	55.40	0.47	55.87	621.80	
2835.00	H / 1.0	Y	55.56	0.47	56.03	633.36	
2835.00	H / 1.0	Z	68.11	0.47	68.58	2686.27	5000
3150.00	V / 1.0	X	47.98	2.14	50.12	320.74	6042
3150.00	V / 1.0	Y	47.06	2.14	49.20	288.50	
3150.00	V / 1.0	Z	45.24	2.14	47.38	233.96	
3150.00	H / 1.0	X	47.99	2.14	50.13	321.11	
3150.00	H / 1.0	Y	47.46	2.14	49.60	302.10	
3150.00	H / 1.0	Z	47.78	2.14	49.92	313.44	6042
	The frequency range was scanned from 30 MHz to 3.2 GHz. All emissions not recorded were more						
	than 20 dB below the specified limit.						

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)						
Customer:	EveryFit, Inc.				Job No.:	R-5742N-1	
Test Sample:	Wearable Help Button						
Model No.:	EF2-4						
Operating Mode:	Continuously transmitting at 315 MHz						
Technician:	M. Seamans				Date:	July 1st, 2013	
Notes:	Average values calculated from Peak readings			Duty Cycle: 15 %		Correction: -16.474 dB	
Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBµV/m	dB	dBµV/m	uV/m	uV/m
315	V / 1.0	X	84.89	-16.474	68.4	2634.9	6042
315	V / 1.0	Y	71.61	-16.474	55.1	571.2	
315	V / 2.0	Z	87.74	-16.474	71.3	3658.1	
315	H / 1.0	X	84.75	-16.474	68.3	2592.7	
315	H / 1.0	Y	91.60	-16.474	75.1	5705.0	
315	H / 2.5	Z	86.35	-16.474	69.9	3117.2	6042
630	V / 1.0	X	48.26	-16.474	31.8	38.8	604
630	V / 1.0	Y	47.98	-16.474	31.5	37.6	
630	V / 1.0	Z	48.55	-16.474	32.1	40.2	
630	H / 1.0	X	48.32	-16.474	31.8	39.1	
630	H / 1.0	Y	49.80	-16.474	33.3	46.4	
630	H / 1.0	Z	47.91	-16.474	31.4	37.3	604
945	V / 1.0	X	54.30	-16.474	37.8	77.9	604
945	V / 1.0	Y	54.40	-16.474	37.9	78.8	
945	V / 1.0	Z	55.01	-16.474	38.5	84.5	
945	H / 1.0	X	54.00	-16.474	37.5	75.2	
945	H / 1.0	Y	54.20	-16.474	37.7	77.0	
945	H / 1.0	Z	55.20	-16.474	38.7	86.3	604
1260.00	V / 1.5	X	39.33	-16.474	22.9	13.9	604
1260.00	V / 1.0	Y	38.70	-16.474	22.2	12.9	
1260.00	V / 1.0	Z	39.45	-16.474	23.0	14.1	
1260.00	H / 1.0	X	38.92	-16.474	22.4	13.3	
1260.00	H / 1.0	Y	38.04	-16.474	21.6	12.0	
1260.00	H / 1.0	Z	38.96	-16.474	22.5	13.3	604
1575.00	V / 1.0	X	49.62	-16.474	33.1	45.4	500
1575.00	V / 1.0	Y	55.31	-16.474	38.8	87.5	
1575.00	V / 1.0	Z	51.43	-16.474	35.0	56.0	
1575.00	H / 1.0	X	46.41	-16.474	29.9	31.4	
1575.00	H / 1.0	Y	46.88	-16.474	30.4	33.1	
1575.00	H / 1.0	Z	45.12	-16.474	28.6	27.1	500

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

Test Method:	FCC Part 15 Subpart C, Field Strength of Emissions, Paragraph 15.231(b)						
Customer:	EveryFit, Inc.				Job No.:	R-5742N-1	
Test Sample:	Wearable Help Button						
Model No.:	13745						
Operating Mode:	Continuously transmitting at 315 MHz						
Technician:	M. Seamans				Date:	July 1st, 2013	
Notes:	Average values calculated from Peak readings			Duty Cycle: 15 %		Correction: -16.474 dB	
Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading	Converted Reading	Avg. Limit
MHz	(V/H)-Meters	X / Y / Z	dBµV/m	dB	dBµV/m	uV/m	uV/m
1890.00	V / 1.0	X	41.21	-16.474	24.7	17.3	604
1890.00	V / 1.0	Y	40.94	-16.474	24.5	16.7	
1890.00	V / 1.0	Z	41.08	-16.474	24.6	17.0	
1890.00	H / 1.0	X	40.64	-16.474	24.2	16.2	
1890.00	H / 1.0	Y	45.32	-16.474	28.8	27.7	
1890.00	H / 1.0	Z	39.74	-16.474	23.3	14.6	604
2205.00	V / 1.0	X	52.80	-16.474	36.3	65.5	500
2205.00	V / 1.0	Y	59.06	-16.474	42.6	134.7	
2205.00	V / 1.0	Z	60.39	-16.474	43.9	157.0	
2205.00	H / 1.0	X	55.12	-16.474	38.6	85.6	
2205.00	H / 1.0	Y	52.48	-16.474	36.0	63.2	
2205.00	H / 1.0	Z	63.19	-16.474	46.7	216.7	500
2520.00	V / 1.0	X	54.23	-16.474	37.8	77.3	604
2520.00	V / 1.0	Y	48.54	-16.474	32.1	40.1	
2520.00	V / 1.0	Z	54.42	-16.474	37.9	79.0	
2520.00	H / 1.0	X	45.22	-16.474	28.7	27.4	
2520.00	H / 1.0	Y	50.60	-16.474	34.1	50.9	
2520.00	H / 1.0	Z	57.20	-16.474	40.7	108.7	604
2835.00	V / 1.0	X	55.51	-16.474	39.0	89.5	500
2835.00	V / 1.0	Y	56.03	-16.474	39.6	95.0	
2835.00	V / 1.0	Z	63.32	-16.474	46.8	220.0	
2835.00	H / 1.0	X	55.87	-16.474	39.4	93.3	
2835.00	H / 1.0	Y	56.03	-16.474	39.6	95.0	
2835.00	H / 1.0	Z	68.58	-16.474	52.1	403.1	500
3150.00	V / 1.0	X	50.12	-16.474	33.6	48.1	604
3150.00	V / 1.0	Y	49.20	-16.474	32.7	43.3	
3150.00	V / 1.0	Z	47.38	-16.474	30.9	35.1	
3150.00	H / 1.0	X	50.13	-16.474	33.7	48.2	
3150.00	H / 1.0	Y	49.60	-16.474	33.1	45.3	
3150.00	H / 1.0	Z	49.92	-16.474	33.4	47.0	604
	The frequency range was scanned from 30 MHz to 3.2 GHz. All emissions not recorded were more						
	than 20 dB below the specified limit.						

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

**FCC Section 15.231(b) - Duty Cycle Determination - Pulsed Operation**

**Test Photograph**

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW



Test Setup

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

**FCC Section 15.231(b) - Duty Cycle Determination - Pulsed Operation**

**Test Data**

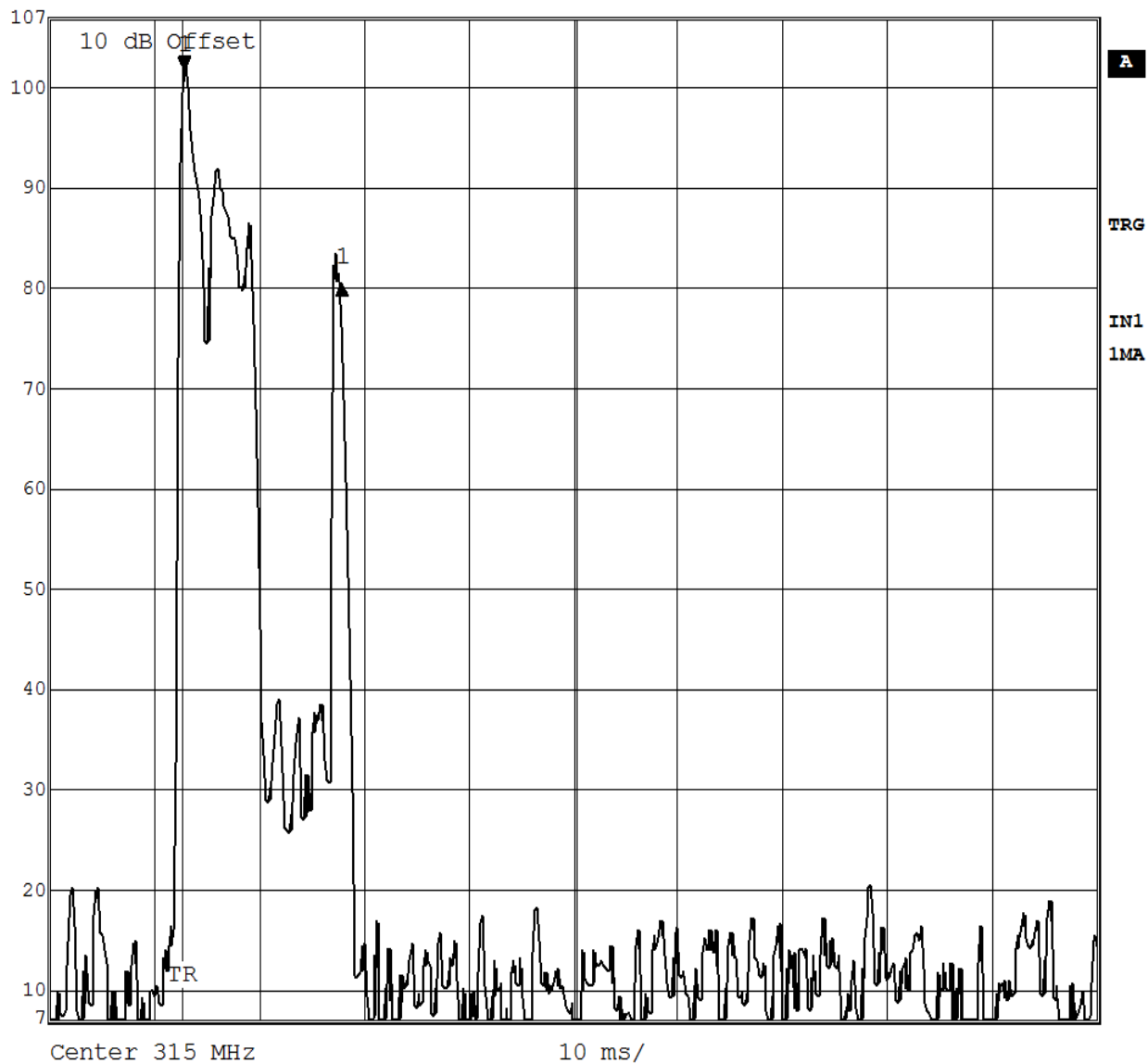
Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

**Duty Cycle Determination**  
**FCC Part 15, Subpart C, Section 15.231 (b)**





Delta 1 [T1] RBW 1 kHz RF Att 20 dB  
Ref Lvl -21.20 dB VBW 3 kHz  
107 dBV 15.005810 ms SWT 100 ms Unit dBV



Date: 4.JUN.2013 09:33:50

**Test Method: FCC Part 15.231(b), Duty Cycle Determination**

**Notes:** Measurement of cycle time = 100.00mSec. Pulse width = 15.005810ms; 1 pulse

Customer	EveryFit, Inc.
Test Sample	Wearable Help Button
Model Number	EF2-4
Date June, 4th, 2013	Tech: M. Seamans

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

**FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions  
Test Photographs**



Test Setup, 9 kHz – 30 MHz



Horizontal Antenna Polarization, 30 to 1000 MHz



Vertical Antenna Polarization, 30 to 1000 MHz

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW



Horizontal Antenna Polarization, 1 to 3.2 GHz



Vertical Antenna Polarization, 1 to 3.2 GHz

Retlif Testing Laboratories, Test Report R-5742N-1, EveryFit, Inc.  
FCC ID: 2AAOUEF2REV4QMW

**FCC Section 15.231(b)(3) - Field Strength of Spurious Emissions  
Test Data**

Test Method	FCC Part 15 Subpart C, Field Strength of Spurious Emissions, Section 15.231(b).						
Customer	EveryFit, Inc.				Job No	R-5742N-1	
Test Sample	Wearable Help Button						
Model No	EF2-4				Serial No	N/A	
Operating Mode	Continuously transmitting at 315.MHz						
Technician	M. Seamans				Date	June 4 <sup>th</sup> , 2013	
Notes:	Test Distance: 3 Meters Detector: Quasi-Peak from 30 MHz to 1 GHz, Average above 1 GHz						
Transmit Frequency	Test Frequency	Antenna/ EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit At 300 Meters
MHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	uV/m	uV/m
315.00	0.009	-	-	-	-	-	2400/F(kHz)
		-	-	-	-	-	
315.00	0.490	-	-	-	-	-	2400/F(kHz)
Transmit Frequency	Test Frequency	Antenna/ EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit At 30 Meters
MHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	uV/m	uV/m
315.00	0.490	-	-	-	-	-	24000/F(kHz)
		-	-	-	-	-	
	1.705	-	-	-	-	-	24000/F(kHz)
	1.705	-	-	-	-	-	30.00
		-	-	-	-	-	
315.00	30.00	-	-	-	-	-	30.00
Transmit Frequency	Test Frequency	Antenna/ EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit At 3 Meters
MHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	uV/m	uV/m
315.00	30.00	-	-	-	-	-	100.00
		-	-	-	-	-	
	*35.00	V	9.36	16.24	25.60	19.05	
		-	-	-	-	-	
	88.00	-	-	-	-	-	100.00
	88.00	-	-	-	-	-	150.00
		-	-	-	-	-	
	*110.00	V	9.67	10.03	19.70	9.66	
	*195.00	V	9.80	12.40	22.20	12.88	
	*205.00	H	8.08	12.32	20.40	10.47	
		-	-	-	-	-	
	216.00	-	-	-	-	-	150.00
	216.00	-	-	-	-	-	200.00
		-	-	-	-	-	
	*600.00	H	7.82	24.18	31.70	38.46	
	*600.00	V	7.52	24.18	32.00	39.81	
		-	-	-	-	-	
	*995.00	V	9.15	29.15	38.30	82.22	200.00
	*995.00	H	9.15	29.15	38.30	82.22	500.00
		-	-	-	-	-	
315.00		-	-	-	-	-	

Test Method	FCC Part 15 Subpart C, Field Strength of Spurious Emissions, Section 15.231(b).						
Customer	EveryFit, Inc.				Job No	R-5742N-1	
Test Sample	Wearable Help Button						
Model No	EF2-4				Serial No	N/A	
Operating Mode	Continuously transmitting at 315.MHz						
Technician	M. Seamans				Date	June 4 <sup>th</sup> , 2013	
Notes:	Test Distance: 3 Meters Detector: Quasi-Peak from 30 MHz to 1 GHz, Average above 1 GHz						
Transmit Frequency	Test Frequency	Antenna/ EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit At 3 Meters
MHz	MHz	Polarization/Axis	dBuV	dB	dBuV/m	uV/m	uV/m
315.00	960.00	-	-	-	-	-	200.00
	960.00	-	-	-	-	-	500.00
		-	-	-	-	-	
		-	-	-	-	-	
	*1050.00	V	7.9	29.10	37.00	70.79	
	*1050.00	H	8.1	29.10	37.20	72.44	
		-	-	-	-	-	
	*1500.00	V	5.2	33.20	38.40	83.18	
	*1500.00	H	5.1	33.20	38.30	82.22	
		-	-	-	-	-	
	*1950.00	V	4.6	37.7	42.30	130.32	
	*1950.00	H	4.6	37.7	42.30	130.32	
		-	-	-	-	-	
		-	-	-	-	-	
		-	-	-	-	-	
		-	-	-	-	-	
		-	-	-	-	-	
		-	-	-	-	-	
315.00	3200.00	-	-	-	-	-	500.00
	The frequency range was scanned from 9 kHz to 3.2 GHz.						
	The emissions observed from the EUT do not exceed the specified limits.						
	Emissions not recorded were more than 20dB under the specified limit.						
	*Noise Floor Measurements (minimum sensitivity of the receiver system).						



**FCC Section 15.231(c) - Bandwidth of Emission  
Test Photograph**

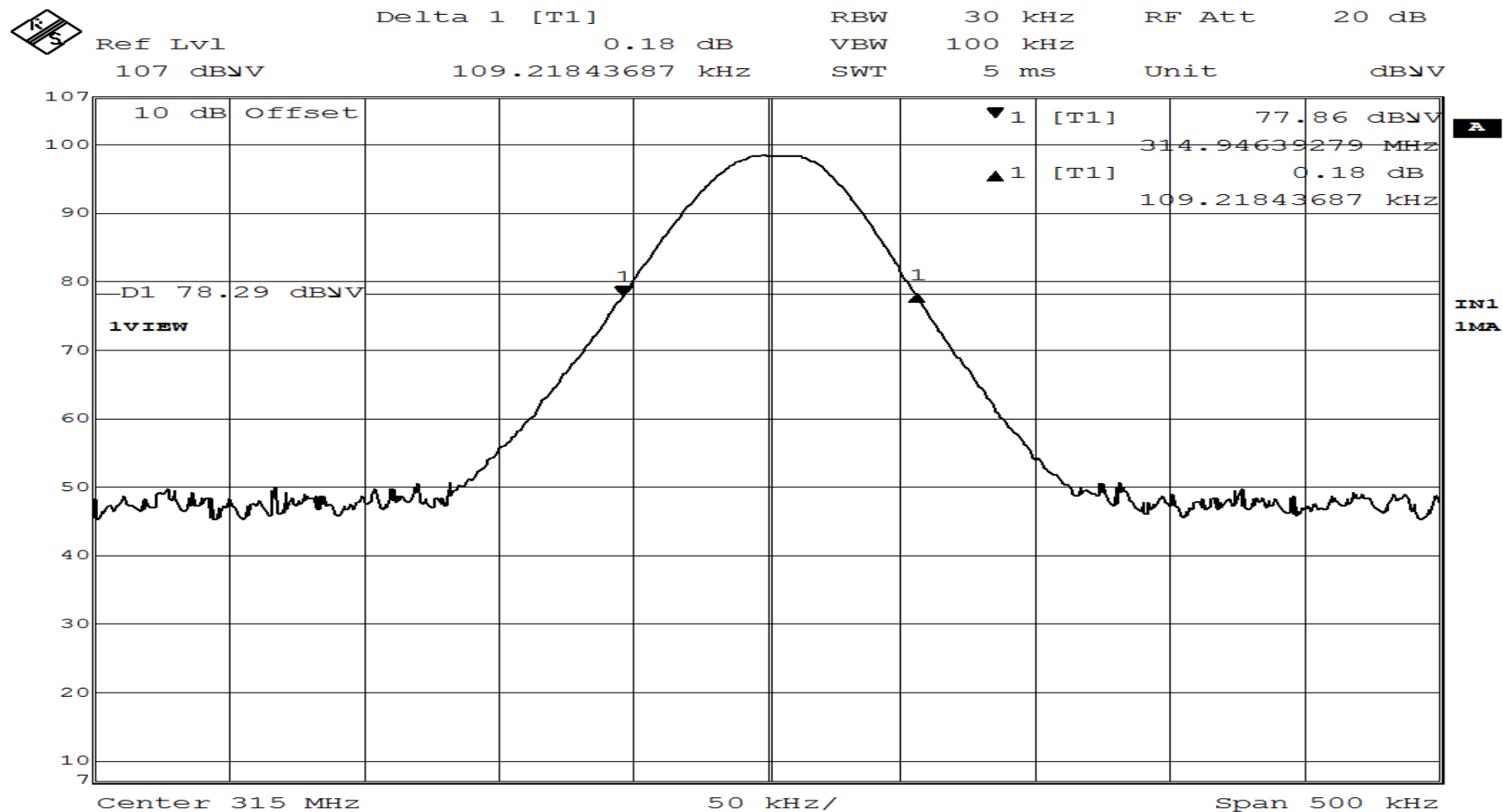


Test Setup

**FCC Section 15.231(c) - Bandwidth of Emission  
Test Data**

FCC Section 15.231(c) Bandwidth of Emission

Customer: EveryFit, Inc.  
 Test Sample: Wearable Help Button  
 Model Number: EF2-4  
 Test Specification: FCC Part 15, Subpart C, Section 15.231  
 Mode of Operation: Transmitting at 315 MHz  
 Technician/Date: M. Seamans / June 3<sup>rd</sup>, 2013



Date: 3.JUN.2013 10:01:39