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FCC Part 15 Class II Permissive Change Test Report
on

Personal Emergency Response Button
Model: REV.12

Applicant Name:	EveryFit, Inc.
Customer P.O:	1055
Equipment Authorization:	Class II Permissive Change
Date of Report:	July 22, 2016
Test Report No:	R-6109N
Test Start Date:	June 23, 2016
Test Finish Date:	July 11, 2016
Test Technician:	M. Seamans
EMC Test Engineer:	T. Hannemann
Branch Manager:	S. Wentworth
Report Prepared By:	J. Ramsey

TECHNICAL INFORMATION

MANUFACTURER		APPLICANT	
Name:	EveryFit, Inc.	Name:	EveryFit, Inc.
Address:	44 School St., Suite 350	Address:	44 School St., Suite 350
City, State, Zip:	Boston, MA 02108	City, State, Zip:	Boston, MA 02108

TEST SPECIFICATION:

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

TEST PROCEDURE: ANSI C63.4: 2009

TEST SAMPLE DESCRIPTION

TEST SAMPLE: Personal Emergency Response Button

BRANDNAME(s): QMedic

PART NO. QM-12

MODEL: REV.12

FCC ID: 2AAOUQMWV4REV12

TYPE: Wearable Help Button Device

POWER REQUIREMENTS: 3.3VDC via one (1) internal CR2032 battery

FREQUENCY OF OPERATION: 315MHz

The Personal Emergency Response Button is a body worn device, worn on the wrist or neck, used for ensuring the safety of older adults in the event of a medical emergency. The device monitors safety using an accelerometer embedded in the device. The device is activated by pressing a button and transmits an emergency safety signal at 315MHz to the base station which initiates a phone call to a call center. Supervision transmissions are used to check system and data integrity.

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 Personal Emergency Response Button to the requirements of FCC Part 15.231 fundamental and spurious emissions field strength for a Class II Permissive Change. A change was made to the duty cycle of the EUT. No other changes were made to the EUT.

Tests Performed

The test methods performed on the Personal Emergency Response Button are shown below:

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

General Test Requirements

1. The measurement procedures of ANSI C63.4: 2009 were utilized.
2. All radiated emissions measurements were performed on an Open Area Test Site (OATS), listed with the FCC.
3. The level of the fundamental field strength and spurious emissions were recorded with a new battery installed in the EUT.
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.
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 trace 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

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.

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 22, 2016	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

Fundamental Frequency (MHz)	Field Strength of Fundamental microvolts/meter @ 3 meters (watts, e.i.r.p.) Quasi Peak or Average	Field Strength of Spurious Emissions microvolts/meter @ 3 meters Quasi Peak or Average
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 µW)	375
260 to 470	3,750 to 12,500**	375 to 1,250**
Above 470	12,500 (47 µW)	1,250

**Linear Interpolations
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

Frequency of Operation MHz	Fundamental µV/m	Harmonics µV/m
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 dBµV/m
M_R = Uncorrected Meter Reading in dBµV
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 dBµV/m
P_C= Corrected Peak Reading in dBµV/m
D_F = Duty Cycle Factor in dB

Example: For the Personal Emergency Response Button at a frequency of 315 MHz:

M_R = 75.10 dBµV
C_F = 16.5 dB
P_C = 75.10 dBuV + 16.5dB = 91.6 dBµV/m
D_F = 16.474 dB

A_F = 91.6 dBuV/m – 16.474 dB = 75.126 dBuV/m

75.126 dBuV/m = 5705 uV/m

Table 3 - Fundamental and Harmonics Test Results

Fundamental Frequency MHz	Maximum Fundamental µV/m	Maximum Harmonics µV/m
315	5643	365 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 Personal Emergency Response 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 Personal Emergency Response Button at a frequency of 315 MHz:

Transmitter On Time = 11.09 milliseconds (maximum per cycle)
Transmitter Cycle Time = 100 milliseconds
Transmitter Duty Cycle = 11.09 %

CALCULATION

There was 1 pulse within the 100 msec cycle time:

On time = 11.09msec
Duty Cycle (11.09/100) = 11.09%
Correction Factor = 20 log (0.1109) = -19.1dB

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.

Equipment Lists

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

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
4029B	RETLIF	OPEN AREA TEST SITE, ATTENUATION	3 / 10 Meters	RNH	4/13/2016	4/30/2018
5053	ETS / EMCO	ANTENNA, BICONILOG	26 MHz - 3 GHz	3142C	2/24/2015	8/31/2016
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	11/17/2015	11/30/2016

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

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5030B	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	3/16/2016	3/31/2017
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	11/17/2015	11/30/2016

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

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
4029B	RETLIF	OPEN AREA TEST SITE, ATTENUATION	3 / 10 Meters	RNH	4/13/2016	4/30/2018
5053	ETS / EMCO	ANTENNA, BICONILOG	26 MHz - 3 GHz	3142C	2/24/2015	8/31/2016
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	11/17/2015	11/30/2016

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

Photographs

Horizontal Antenna Polarization, 30 to 1000 MHz

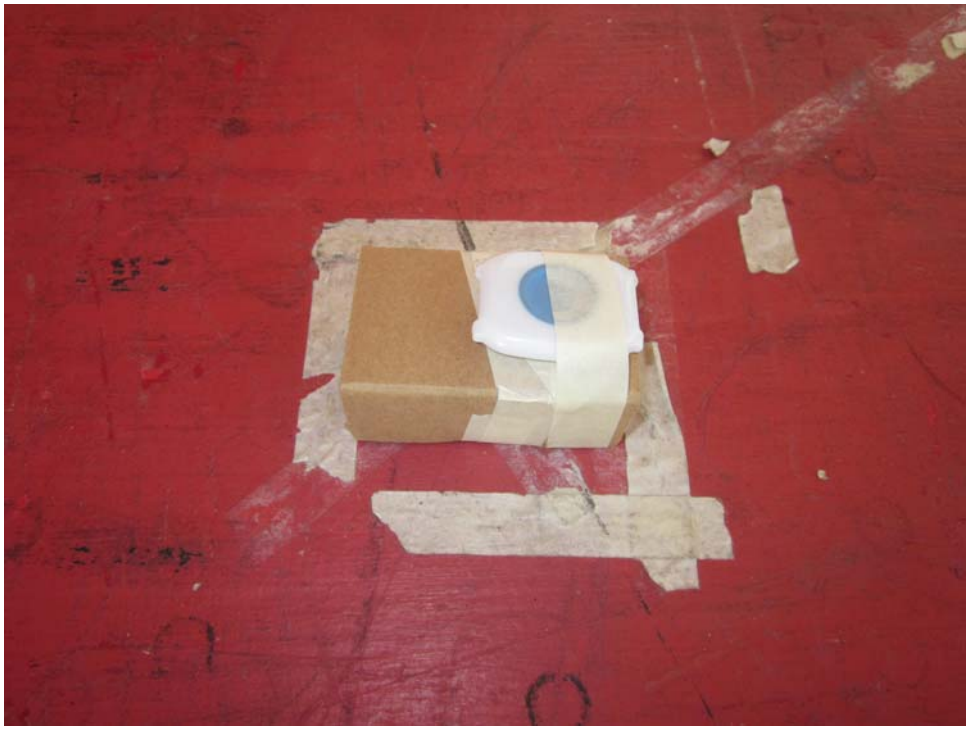
Vertical Antenna Polarization, 30 to 1000 MHz

Horizontal Antenna Polarization, 1 to 3.2 GHz

Vertical Antenna Polarization, 1 to 3.2 GHz

X Axis

Y Axis



Z Axis

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

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	**Field Strength of Spurious Emissions**	
Customer	EveryFit, Inc.	
Job Number	R-6109N	
Test Sample	Personal Emergency Response Button	
Part Number	QM-12	
Serial Number	2002	
Test Specification	FCC Part 15, Subpart C	Paragraph: 15.231(b), 15.205, 15.209
Operating Mode	Transmitting modulated signal at 315 MHz	
Technician	M. Seamans	
Date	June 23rd, 2016 / July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak
Average values calculated from Peak readings Duty Cycle: 11.09ms Correction: -19.097 dB

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading		Converted Reading	Limit at 3M
MHz		X/Y/Z	dBuV/m	dB	dBuV/m		uV/m	uV/m
630	V	X	44.71	-19.097	25.61		19.08	604.2
630	V	Y	45.25	-19.097	26.15		20.30	
630	V	Z	45.35	-19.097	26.25		20.54	
630	H	X	45.19	-19.097	26.09		20.16	
630	H	Y	45.76	-19.097	26.66		21.53	
630	**H**	**Z**	**45.98**	**-19.097**	**26.88**		**22.08**	604.2
945	V	X	53.75	-19.097	34.65		54.01	604.2
945	V	Y	51.20	-19.097	32.10		40.27	
945	V	Z	52.80	-19.097	33.70		48.42	
945	H	X	53.07	-19.097	33.97		49.95	
945	H	Y	53.84	-19.097	34.74		54.58	
945	**H**	**Z**	**53.99**	**-19.097**	**34.89**		**55.53**	604.2
1260	V	X	43.93	-19.097	24.83		17.44	604.2
1260	V	Y	50.75	-19.097	31.65		38.25	
1260	V	Z	48.81	-19.097	29.71		30.59	
1260	**H**	**X**	**51.86**	**-19.097**	**32.76**		**43.47**	
1260	H	Y	46.52	-19.097	27.42		23.50	
1260	H	Z	46.29	-19.097	27.19		22.89	604.2

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

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Technician	M. Seamans	
Date	July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak
Average values calculated from Peak readings Duty Cycle: 11.09ms Correction: -19.097 dB

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading		Converted Reading	Limit at 3M
MHz		X/Y/Z	dBuV/m	dB	dBuV/m		uV/m	uV/m
1575	V	X	56.15	-19.097	37.05		71.23	604.2
1575	**V**	**Y**	**57.80**	**-19.097**	**38.70**		**86.13**	
1575	V	Z	53.70	-19.097	34.60		53.72	
1575	H	X	53.46	-19.097	34.36		52.26	
1575	H	Y	56.83	-19.097	37.73		77.03	
1575	H	Z	54.58	-19.097	35.48		59.45	604.2
1890	V	X	55.65	-19.097	36.55		67.24	604.2
1890	V	Y	58.13	-19.097	39.03		89.46	
1890	**V**	**Z**	**60.69**	**-19.097**	**41.59**		**120.13**	
1890	H	X	60.43	-19.097	41.33		116.59	
1890	H	Y	59.81	-19.097	40.71		108.56	
1890	H	Z	55.57	-19.097	36.47		66.63	604.2
2205	**V**	**X**	**62.40**	**-19.097**	**43.30**		**146.27**	500
2205	V	Y	58.56	-19.097	39.46		94.00	
2205	V	Z	58.33	-19.097	39.23		91.55	
2205	H	X	54.42	-19.097	35.32		58.36	
2205	H	Y	53.78	-19.097	34.68		54.22	
2205	H	Z	57.24	-19.097	38.14		80.75	500

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

Data Sheet 2 of 6

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

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Job Number	R-6109N	
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Part Number	QM-12	
Serial Number	2002	
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Operating Mode	Transmitting modulated signal at 315 MHz	
Technician	M. Seamans	
Date	July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak
Average values calculated from Peak readings Duty Cycle: 11.09ms Correction: -19.097 dB

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Peak Reading	Duty Cycle Correction	Corrected Reading		Converted Reading	Limit at 3M
MHz		X/Y/Z	dBuV/m	dB	dBuV/m		uV/m	uV/m
2502	V	X	65.18	-19.097	46.08		201.44	604.2
2502	V	Y	65.91	-19.097	46.81		219.10	
2502	**V**	**Z**	**66.68**	**-19.097**	**47.58**		**239.41**	
2502	H	X	66.22	-19.097	47.12		227.06	
2502	H	Y	63.35	-19.097	44.25		163.17	
2502	H	Z	65.50	-19.097	46.40		209.00	604.2
2835	**V**	**X**	68.33	-19.097	49.23		289.50	604.2
2835	**V**	**Y**	**72.00**	**-19.097**	**52.90**		**441.72**	
2835	V	Z	69.56	-19.097	50.46		333.54	
2835	H	X	64.61	-19.097	45.51		188.65	
2835	H	Y	66.17	-19.097	47.07		225.76	
2835	H	Z	64.08	-19.097	44.98		177.48	604.2
3150	**V**	**X**	**67.58**	**-19.097**	**48.48**		**265.55**	500
3150	V	Y	65.79	-19.097	46.69		216.10	
3150	V	Z	66.29	-19.097	47.19		228.90	
3150	H	X	66.86	-19.097	47.76		244.43	
3150	H	Y	66.81	-19.097	47.71		243.02	
3150	H	Z	63.35	-19.097	44.25		163.17	500

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

Data Sheet 3 of 6

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
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Technician	M. Seamans	
Date	June 23rd, 2016 / July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz		X/Y/Z	dBuV/m	dB	dBuV/m		uV/m	uV/m
630	V	X	15.57	29.14	44.71		171.99	6042
630	V	Y	16.11	29.14	45.25		183.02	|
630	V	Z	16.21	29.14	45.35		185.14	|
630	H	X	16.05	29.14	45.19		181.76	|
630	H	Y	16.62	29.14	45.76		194.09	|
630	**H**	**Z**	**16.84**	**29.14**	**45.98**		**199.07**	6042
945	V	X	24.61	34.16	53.75		486.97	6042
945	V	Y	22.06	34.16	51.20		363.08	|
945	V	Z	23.66	34.16	52.80		436.52	|
945	H	X	23.93	34.16	53.07		450.30	|
945	H	Y	24.70	34.16	53.84		492.04	|
945	**H**	**Z**	**24.85**	**34.16**	**53.99**		**500.61**	6042
1260	V	X	52.17	-8.24	43.93		157.22	6042
1260	V	Y	58.99	-8.24	50.75		344.75	|
1260	V	Z	57.05	-8.24	48.81		275.74	|
1260	**H**	**X**	**60.10**	**-8.24**	**51.86**		**391.74**	|
1260	H	Y	54.76	-8.24	46.52		211.84	|
1260	H	Z	54.53	-8.24	46.29		206.30	6042

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

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Technician	M. Seamans	
Date	July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz		X/Y/Z	dBuV/m	dB	dBuV/m		uV/m	uV/m
1575	V	X	63.70	-7.55	56.15		641.95	5000
1575	**V**	**Y**	**65.35**	**-7.55**	**57.80**		**776.25**	
1575	V	Z	61.25	-7.55	53.70		484.17	
1575	H	X	61.01	-7.55	53.46		470.98	
1575	H	Y	64.38	-7.55	56.83		694.22	
1575	H	Z	62.13	-7.55	54.58		535.80	5000
1890	V	X	60.71	-5.06	55.65		606.04	6042
1890	V	Y	63.19	-5.06	58.13		806.31	
1890	**V**	**Z**	**65.75**	**-5.06**	**60.69**		**1082.68**	
1890	H	X	65.49	-5.06	60.43		1050.75	
1890	H	Y	64.87	-5.06	59.81		978.36	
1890	H	Z	60.63	-5.06	55.57		600.48	6042
2205	**V**	**X**	**67.35**	**-4.95**	**62.40**		**1318.26**	5000
2205	V	Y	63.51	-4.95	58.56		847.23	
2205	V	Z	63.28	-4.95	58.33		825.09	
2205	H	X	59.37	-4.95	54.42		526.02	
2205	H	Y	58.73	-4.95	53.78		488.65	
2205	H	Z	62.19	-4.95	57.24		727.78	5000

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

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Technician	M. Seamans	
Date	July 11th, 2016	

Notes: Test Distance: 3 meters Detector: Peak

TEST PARAMETERS

Test Frequency	Antenna Position	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading		Converted Reading	Limit at 3M
MHz		**X/Y/Z**	**dBuV/m**	**dB**	**dBuV/m**		**uV/m**	**uV/m**
2502	V	X	69.13	-3.95	65.18		1815.52	6042
2502	V	Y	69.86	-3.95	65.91		1974.69	
2502	**V**	**Z**	**70.63**	**-3.95**	**66.68**		**2157.74**	
2502	H	X	70.17	-3.95	66.22		2046.44	
2502	H	Y	67.30	-3.95	63.35		1470.62	
2502	H	Z	69.45	-3.95	65.50		1883.65	6042
2835	V	X	71.91	-3.58	68.33		2609.16	5000
2835	**V**	**Y**	**75.58**	**-3.58**	**72.00**		**3981.07**	
2835	V	Z	73.14	-3.58	69.56		3006.08	
2835	H	X	68.19	-3.58	64.61		1700.20	
2835	H	Y	69.75	-3.58	66.17		2034.70	
2835	H	Z	67.66	-3.58	64.08		1599.56	5000
3150	**V**	**X**	**69.54**	**-1.96**	**67.58**		**2393.32**	6042
3150	V	Y	67.75	-1.96	65.79		1947.60	
3150	V	Z	68.25	-1.96	66.29		2063.00	
3150	H	X	68.82	-1.96	66.86		2202.93	
3150	H	Y	68.77	-1.96	66.81		2190.28	
3150	H	Z	65.31	-1.96	63.35		1470.62	6042

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.

Data Sheet 6 of 6

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

Test Photograph

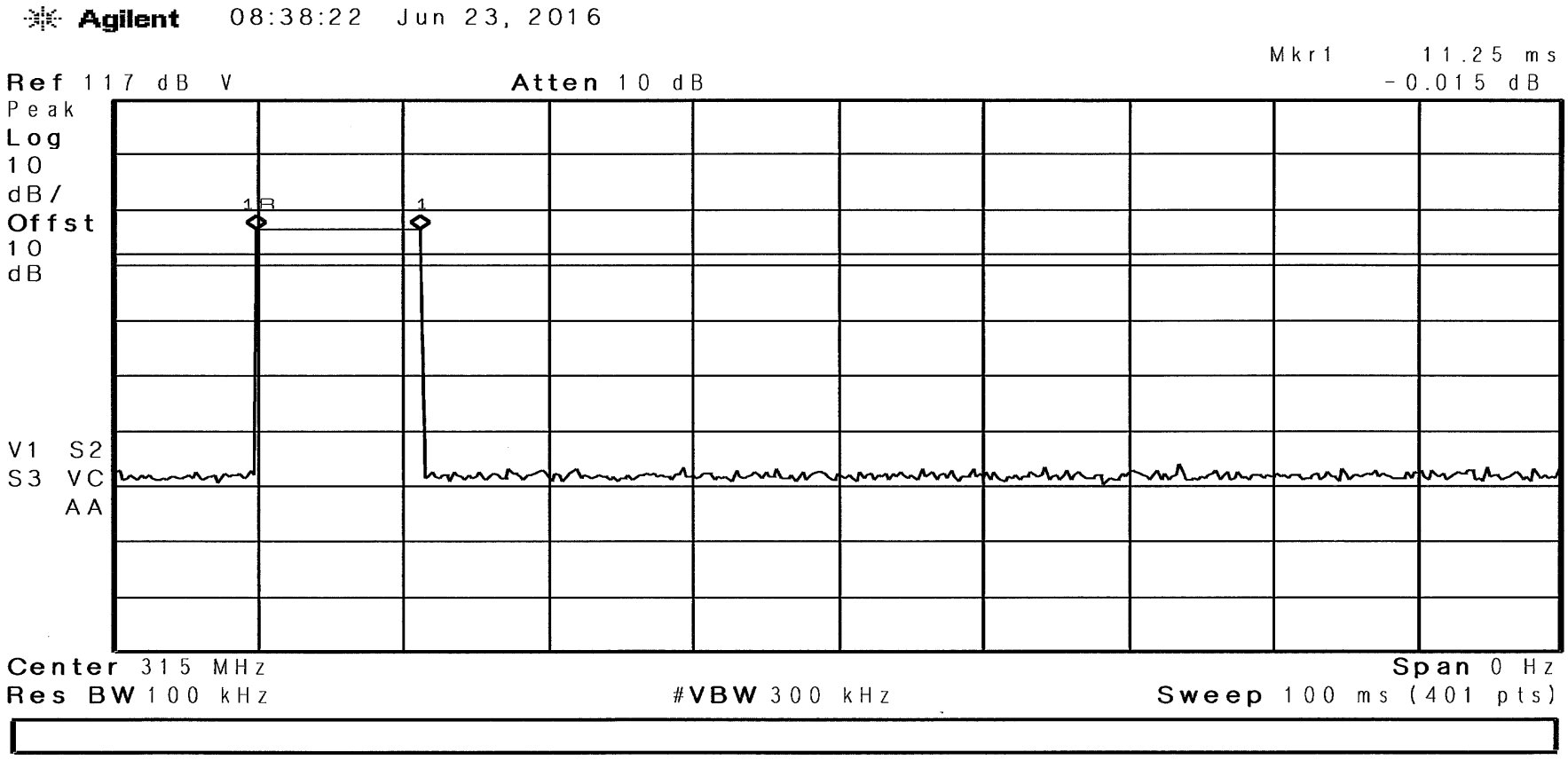
Test Setup

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

Test Data

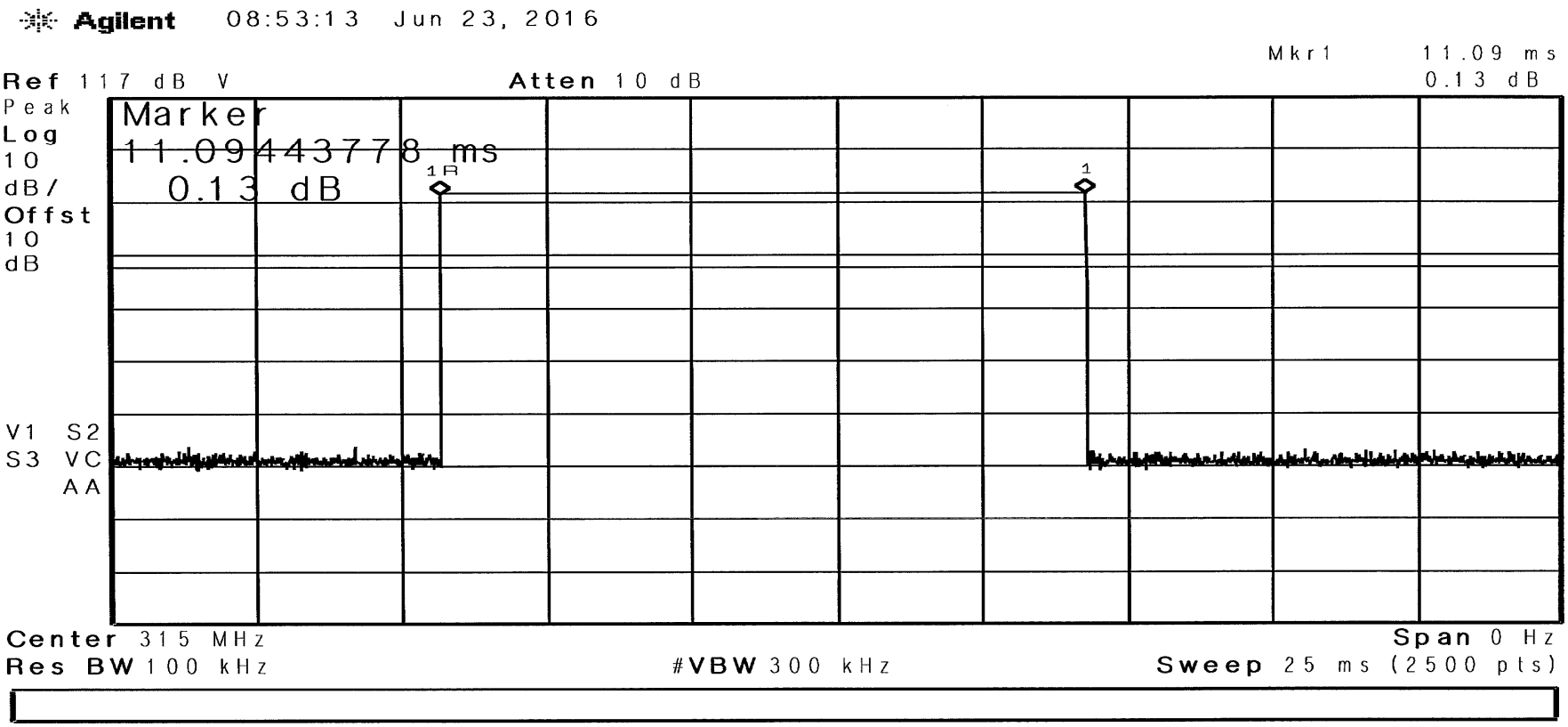
RETLIF TESTING LABORATORIES

Test Method:	Duty Cycle Determination		
Customer	EveryFit, Inc.	**Job No.**	R-6109N
Test Sample	Personal Emergency Response Button		
Part Number	QM-12	**Serial No.**	2002
Operating Mode	Transmitting modulated signal at 315 MHz		
Test Specification	FCC part 15.35		
Technician	M. Seamans	**Date**	June 23rd, 2016
Climatic Conditions	Temp: 23.3 °C Relative Humidity: 49.8 %		
Notes	Measured maximum transmit time: 11.09ms		



RETLIF TESTING LABORATORIES

Test Method:	Duty Cycle Determination		
Customer	EveryFit, Inc.	**Job No.**	R-6109N
Test Sample	Personal Emergency Response Button		
Part Number	QM-12	**Serial No.**	2002
Operating Mode	Transmitting modulated signal at 315 MHz		
Test Specification	FCC part 15.35		
Technician	M. Seamans	**Date**	June 23rd, 2016
Climatic Conditions	Temp: 23.3 °C Relative Humidity: 49.8 %		
Notes	Measured maximum transmit time: 11.09ms		



RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET	
Test Method	**Duty Cycle Determination**
Customer	EveryFit, Inc.
Job Number	R-6109N
Test Sample	Personal Emergency Response Button
Part Number	QM-12
Serial Number	2002
Test Specification	FCC part 15.35
Operating Mode	Transmitting modulated signal at 315 MHz
Technician	M. Seamans
Date	June 23rd, 2016
Notes: Measured maximum transmit time: 11.09ms	

TEST PARAMETERS

Measured on time	Measured time interval	Duty Cycle Factor Calculation	Result	Duty Cycle Factor Allowed
msec	msec		dB	dB
11.09	100	= $20*\text{Log}_{10}$ (11.09 ms/ 100 ms)	-19.097894	-19.097

Data Sheet 3 of 3

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

Horizontal Antenna Polarization, 30 to 1000 MHz

Vertical Antenna Polarization, 30 to 1000 MHz

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

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	**Field Strength of Emissions - Fundamental Field Strength**	
Customer	EveryFit, Inc.	
Job Number	R-6109N	
Test Sample	Personal Emergency Response Button	
Part Number	QM-12	
Serial Number	2002	
Test Specification	FCC Part 15, Subpart C	Paragraph: 15.231(b)
Operating Mode	Transmitting modulated signal at 315 MHz	
Technician	M. Seamans	
Date	June 23rd, 2016	

Notes: Test Distance: 3 meters Detector: Peak Resolution BW: 100 kHz

TEST PARAMETERS

Frequency	Antenna Position	Measured level	Correction Factor	Corrected Peak Reading	Duty Cycle Factor	Corrected Average Reading	Converted Average Reading	Average Limit at 3m
MHz	**(H/V)**	**dBuV**	**dB**	**dBuV/m**	**dB**	**dBuV/m**	**uV/m**	**uV/m**
315	H	74.76	18.82	93.58	-19.097	74.48	5296.63	6042

TEST PARAMETERS

Frequency	Antenna Position	Measured level	Correction Factor	Corrected Peak Reading			Converted Peak Reading	Peak Limit at 3m
MHz	**(H/V)**	**dBuV**	**dB**	**dBuV/m**			**uV/m**	**uV/m**
315	H	74.76	18.82	93.58			47752.93	60420

Peak Limit is 20dB higher than the Average limit.