



**F2 Labs**  
**16740 Peters Road**  
**Middlefield, Ohio 44062**  
**United States of America**  
[www.f2labs.com](http://www.f2labs.com)

## **CERTIFICATION TEST REPORT**

---

**Manufacturing Address:** Alternative Manufacturing, Inc.  
30B Summer Street  
Winthrop, Maine 04364 USA

**Applicant Address:** Cambridge Mobile Telematics  
1 Broadway, 14<sup>th</sup> Floor  
Cambridge, Massachusetts 02139 USA

**Product Description:** Bluetooth 4.0 Vehicle Tag

**Product Name:** **Drivewell Tag**

**Model(s):** **Lite, Premium**

**FCC ID:** **2AFGD-DWTAGV18 (Lite); 2AFGD-DWTAGV22 (Premium)**

**Testing Commenced:** July 30, 2015

**Testing Ended:** Aug. 3, 2015

**Summary of Test Results:** **In Compliance**

The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

**Standards:**

- **FCC Part 15 Subpart C, Section 15.247**



Order Number: F2LQ7421

Client: Cambridge Mobile Telematics  
Model(s): Lite, Premium

Evaluation Conducted by:

Joe Knepper, EMC Proj. Eng.

Report Reviewed by:

Ken Littell, EMC Tech. Mgr.

F2 Labs  
26501 Ridge Road  
Damascus, MD 20872  
Ph 301.253.4500  
Fax 301.253.5179

F2 Labs  
16740 Peters Road  
Middlefield, OH 44062  
Ph 440.632.5541  
Fax 440.632.5542

This test report may be reproduced in full; partial reproduction only may be made with the written consent of F2 Labs. The results in this report apply only to the equipment tested.



## TABLE OF CONTENTS

Section	Title	Page
1	ADMINISTRATIVE INFORMATION	4
2	SUMMARY OF TEST RESULTS/MODIFICATIONS	5
3	ENGINEERING STATEMENT	6
4	EUT INFORMATION AND DATA	7
5	LIST OF MEASUREMENT INSTRUMENTATION	8
6	Radiated Spurious Emissions	9
7	Photos/Exhibits – Product Photos, Test Setups	59



## 1 ADMINISTRATIVE INFORMATION

### 1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

### 1.2 Measurement Procedure:

All measurements were performed according to the 2009 version of ANSI C63.4 and recommended FCC procedure of measurement of DTS operating under Section 15.247 and in KDB558074. A list of the measurement equipment can be found in Section 6.

### 1.3 Uncertainty Budget:

Radiated Emission

- Combined Uncertainty (+ or -) 2.24 dB
- Expanded Uncertainty (+ or -) 4.48 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

### 1.4 Document History

Document Number	Description	Issue Date	Approved By
F2LQ7421-01E	First Issue	Aug. 20, 2015	K. Littell

**2 SUMMARY OF TEST RESULTS**

Test Name	Standard(s)	Results
Radiated Spurious Emissions with 6dBi Integral Antenna	CFR 47 Part 15.247(d) / Part 15.209 / KDB558074	Complies

Modifications Made to the Equipment
None



### 3 ENGINEERING STATEMENT

This report has been prepared on behalf of Cambridge Mobile Telematics, to provide documentation for the testing described herein. This equipment has been tested and found to comply with Part 15.247 of the FCC Rules using ANSI C63.4 2009 and KDB558074 standards. The test results found in this test report relate only to the items tested.



#### **4 EUT INFORMATION AND DATA**

##### **4.1 Equipment Under Test:**

Product: Drivewell Tag

Model(s): Lite, Premium

Serial No.: None Spec.

FCC ID: 2AFGD-DWTAGV18 (Lite); 2AFGD-DWTAGV22 (Premium)

The Lite and the Premium differ by using different BLE chips and the premium having an onboard flash to store data to relay at different times.

##### **4.2 Trade Name:**

Cambridge Mobile Telematics

##### **4.3 Power Supply: N/A**

##### **4.4 Applicable Rules:**

CFR 47, Part 15.247, subpart C

##### **4.5 Equipment Category:**

Radio Transmitter-DTS

##### **4.6 Antenna:**

-1.5dBi Integral Antenna

##### **4.7 Accessories:**

N/A

##### **4.8 Test Item Condition:**

The equipment to be tested was received in good condition.

##### **4.9 Testing Algorithm:**

The EUT was set up in a test mode to continuous transmit at high (2480 MHz), mid (2444 MHz) and low (2405 MHz) channels of the radio module. The highest emissions were recorded in the data tables.

**5 LIST OF MEASUREMENT INSTRUMENTATION**

Equipment Type	Asset Number	Manufacturer	Model	Serial Number	Calibration Due Date
Shielded Chamber	CL166	AlbatrossProjects	B83117-DF435-T261	US140023	Jan. 1, 2016
Shield Room	0175	Ray Proof	N/A	11645	Verified
Temp/Hum. Recorder	CL137	Extech	RH520	CH16992	May 7, 2016
Spectrum Analyzer	CL138	Agilent Technologies	E4407B	US41192779	Nov. 17, 2015
Receiver	CL151	Rohde & Schwarz	ESU40	100319	Nov. 12, 2015
Pre-Amplifier	CL045	Hewlett-Packard	8447D	2944A08445	Nov. 15, 2015
Software:	Tile Version 1.0 Software Verified: July 30, 2015				
Antenna, JB3 Combination	CL175	Sunol Sciences	JB3	A030315	Mar. 12, 2016
Pre-Amplifier	CL153	Agilent	83006-69007	MY39500791	May 6, 2016
Horn Antenna	CL098	Emco	3115	9809-5580	Dec. 3, 2015
Horn Antenna	CL114	AH Systems	SAS-572	237	Oct. 16, 2016





## **6 RADIATED SPURIOUS EMISSION**

The EUT antenna port was fitted with its integral/internal chip antenna. Radiated emissions were measured in a Semi-Anechoic Room. All emissions generated that fall in the restricted bands per FCC Part 15.205 were examined.

### **6.1 Requirements:**

All emissions that fall in the restricted bands defined in FCC Part 15.205 shall not exceed the maximum field strength listed in FCC Part 15.209(a).



## 6.2 Radiated Spurious Emission Test Data

<b>Test Date(s):</b>	July 30-Aug. 3, 2015	<b>Test Engineer:</b>	J. Knepper
<b>Standards:</b>	CFR 47 Part 15.247(d); Part 15.209 / KDB558074	<b>Air Temperature:</b>	22.9°C
		<b>Relative Humidity:</b>	44%

Notes: Plots are peak, max hold prescan data included only to determine what frequencies to investigate and measure. The EUT was initially placed in a semi-anechoic chamber, and rotated in all three orthogonal positions to maximize the emissions. The orthogonal position that showed the highest emissions was used. Characterization measurements were then performed to determine at which frequencies significant emissions occurred. These graphs are shown below.

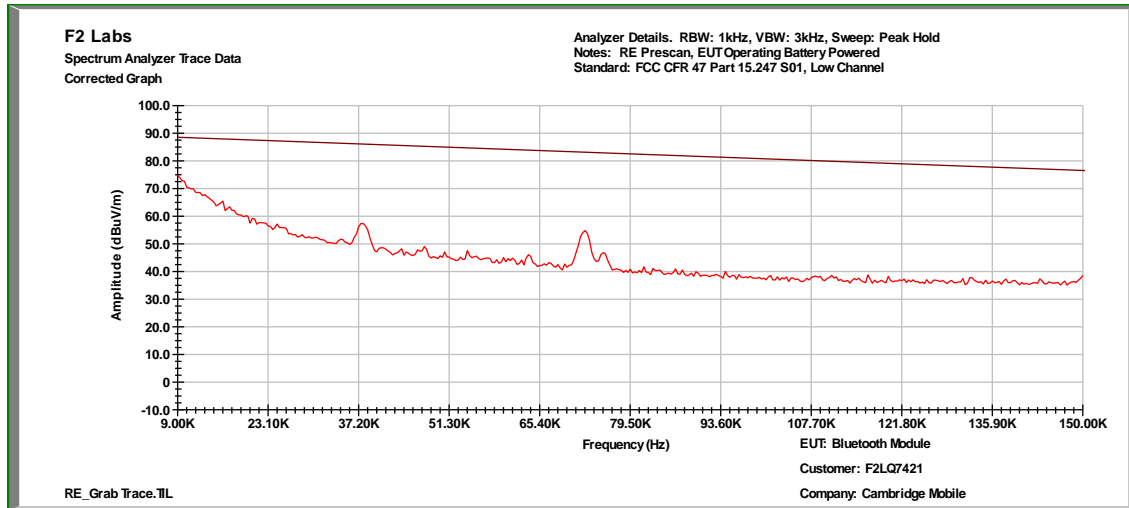
The equipment was fully exercised with all cabling attached to the EUT and was positioned in a semi-anechoic chamber for maximum emissions. While the equipment was energized, the receiving antenna was scanned from 1.0 meter to 4.0 meters in both vertical and horizontal polarities while the turntable was adjusted 360 degrees to determine the maximum field strength. The tables of measured results can be found below.

Some of the frequencies did not change with the EUT on or off. At those frequencies, the test distance was shortened to 1 meter and still no emissions from the EUT were visible or over the ambient or limit.

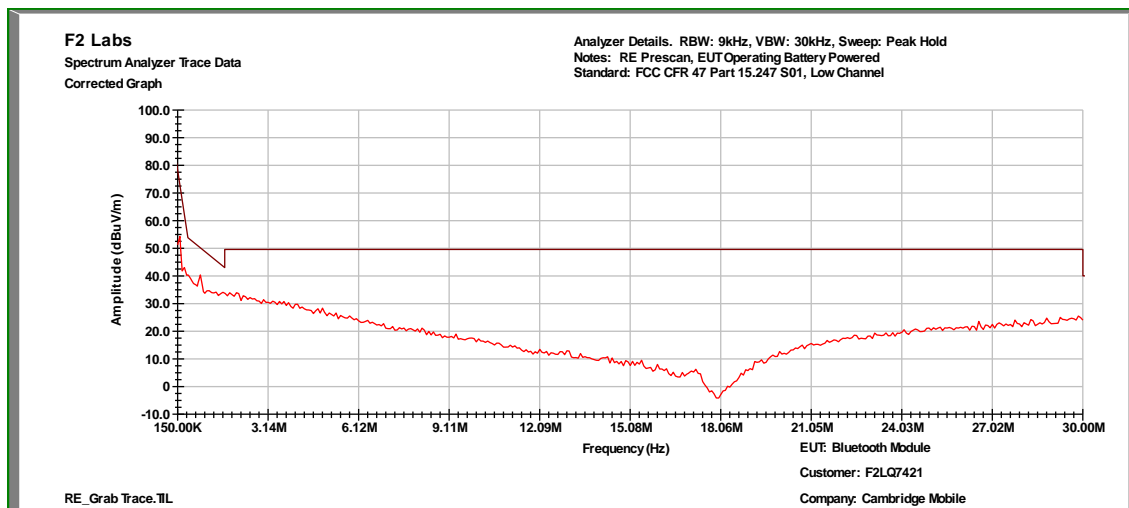
In the following plots, emissions to be found by the EUT were measured and listed in tables. The plots are for reference only and the limit lines are not actual limit lines but merely a guide.



### Lite, Radiated Spurious Emissions: Low Channel, 9k to 150k



### Lite, Radiated Spurious Emissions: Low Channel, 150k to 30 MHz



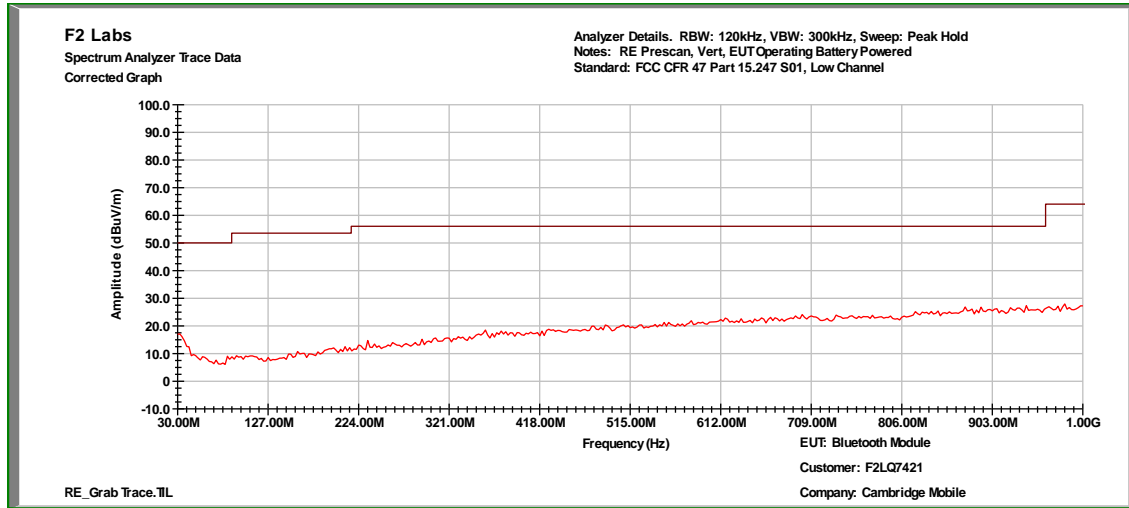


Order Number: F2LQ7421

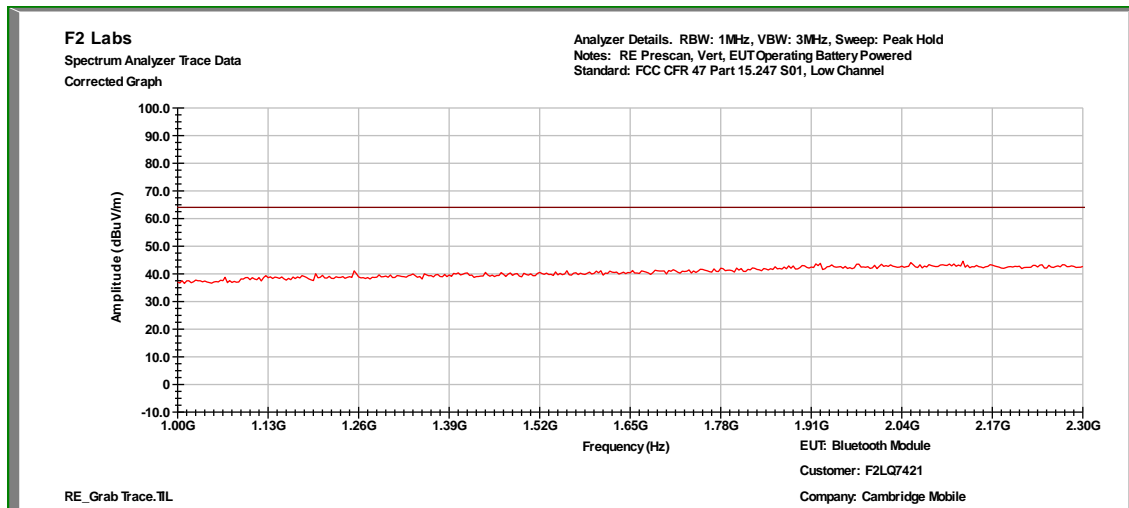
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Lite, Radiated Spurious Emissions: Low Channel, 30 MHz to 1 GHz, Vertical

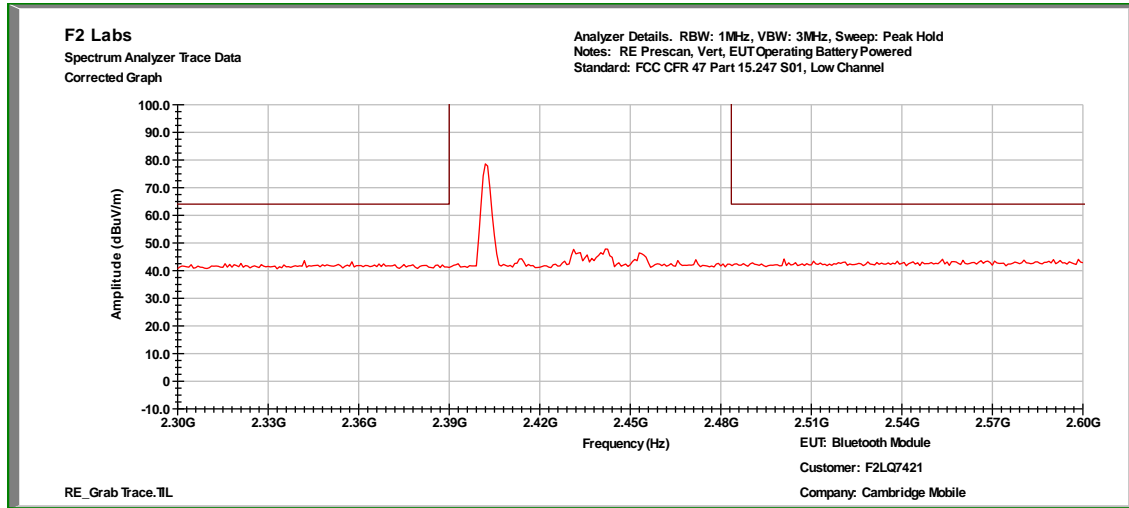


### Lite, Radiated Spurious Emissions: Low Channel, 1 GHz to 2.3 GHz, Vertical

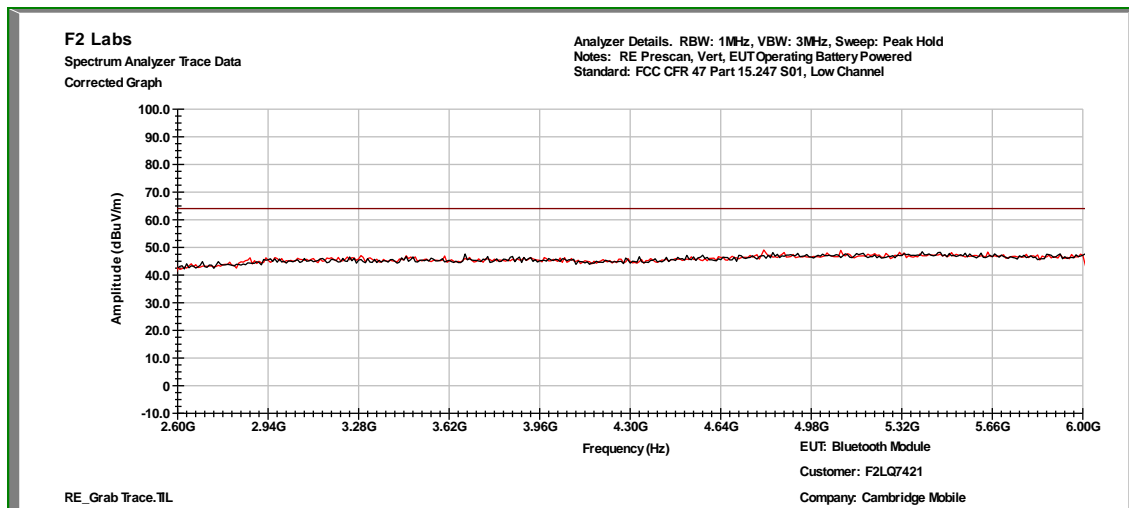




### Lite, Radiated Spurious Emissions: Low Channel, 2.3 GHz to 2.6 GHz, Vertical

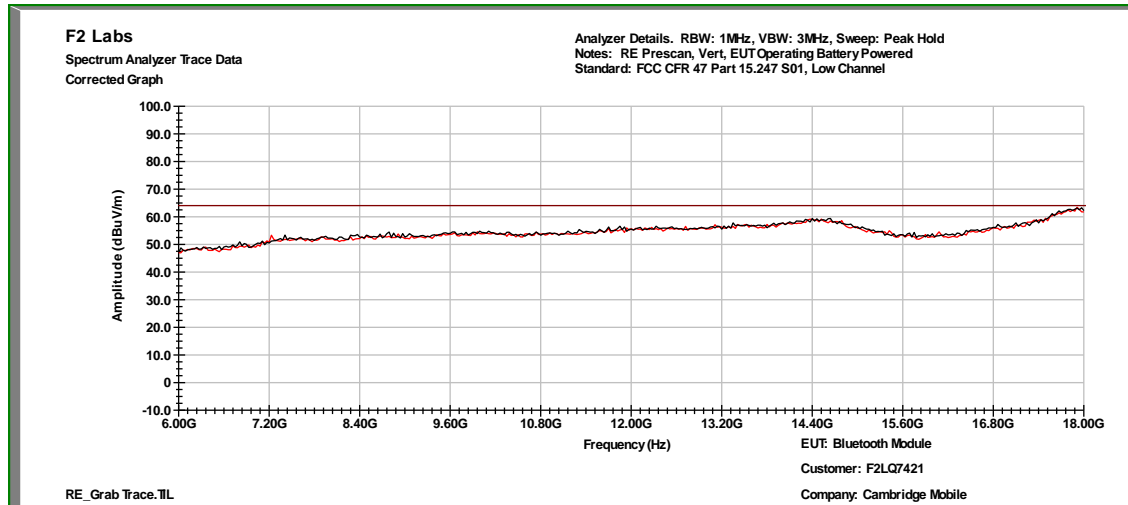


### Lite, Radiated Spurious Emissions: Low Channel, 2.6 GHz to 6 GHz, Vertical

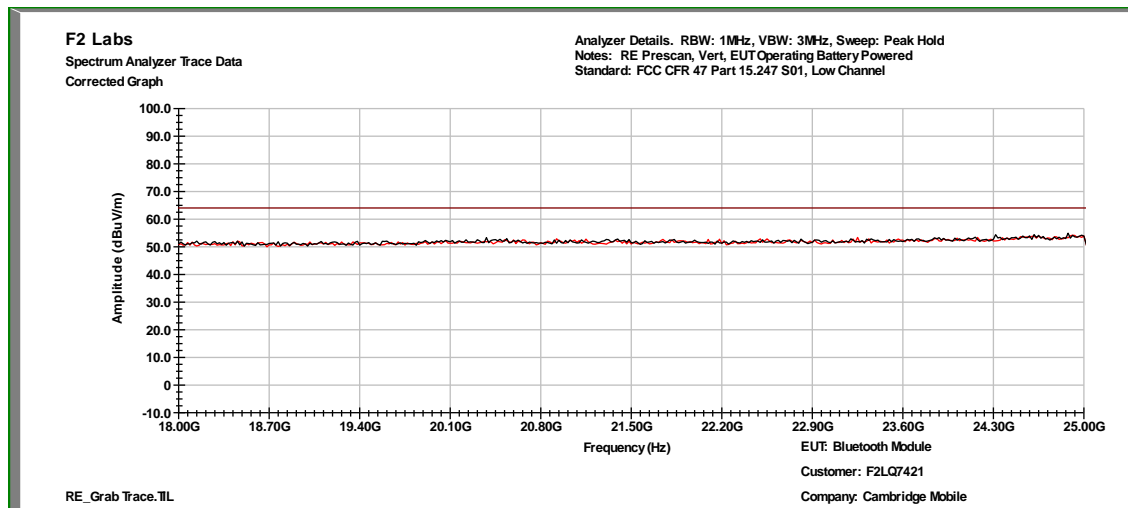




## Lite, Radiated Spurious Emissions: Low Channel, 6 GHz to 18 GHz, Vertical



## Lite, Radiated Spurious Emissions: Low Channel, 18 GHz to 25 GHz,, Vertical



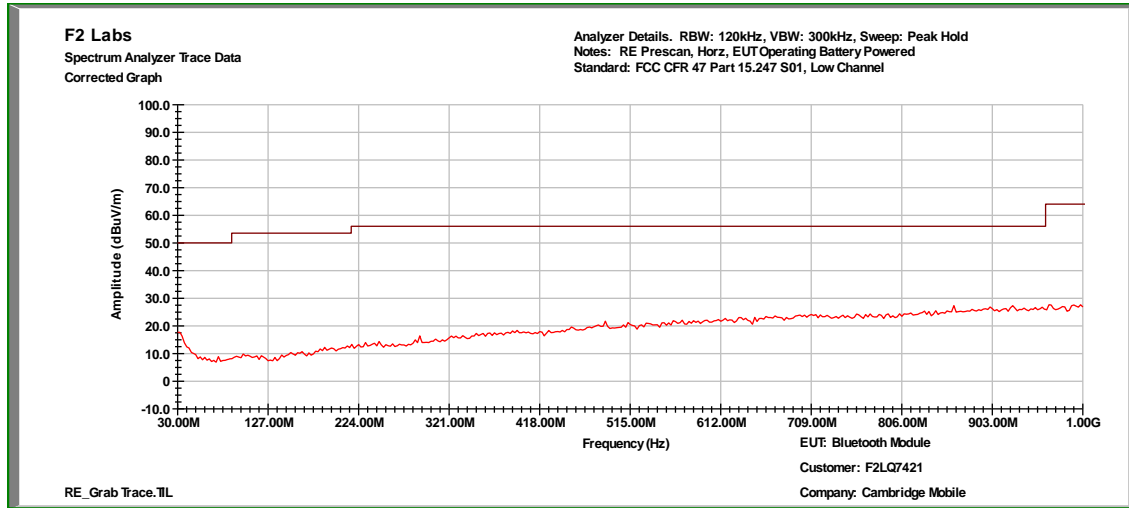


Order Number: F2LQ7421

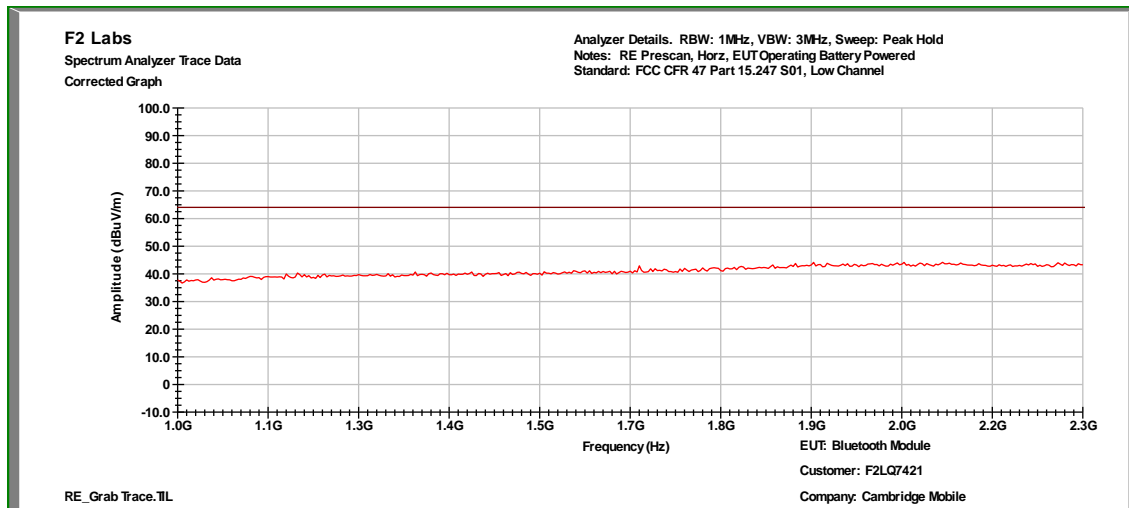
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Lite, Radiated Spurious Emissions: Low Channel, 30 MHz to 1 GHz, Horizontal

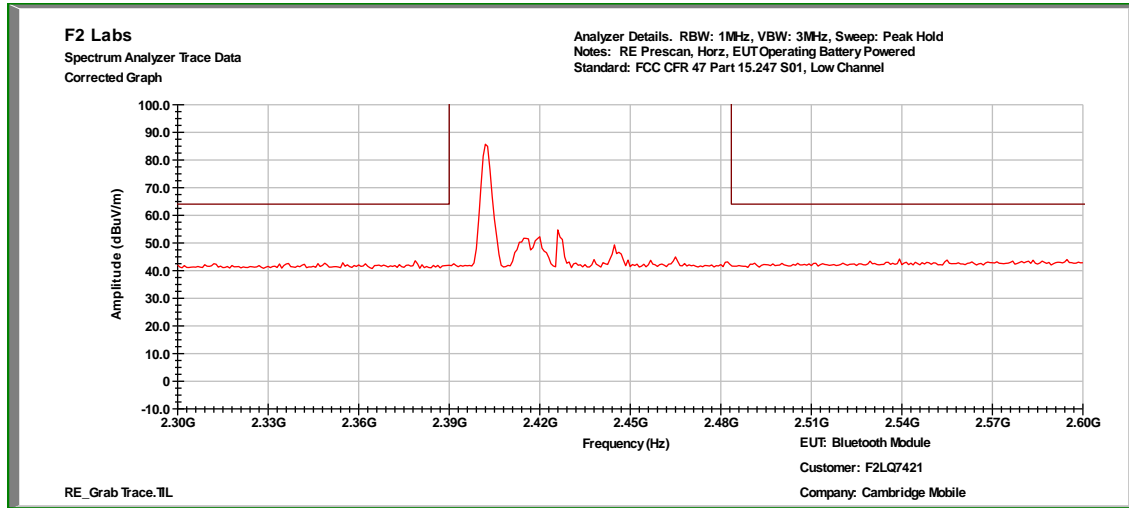


### Lite, Radiated Spurious Emissions: Low Channel, 1 GHz to 2.3 GHz, Horizontal

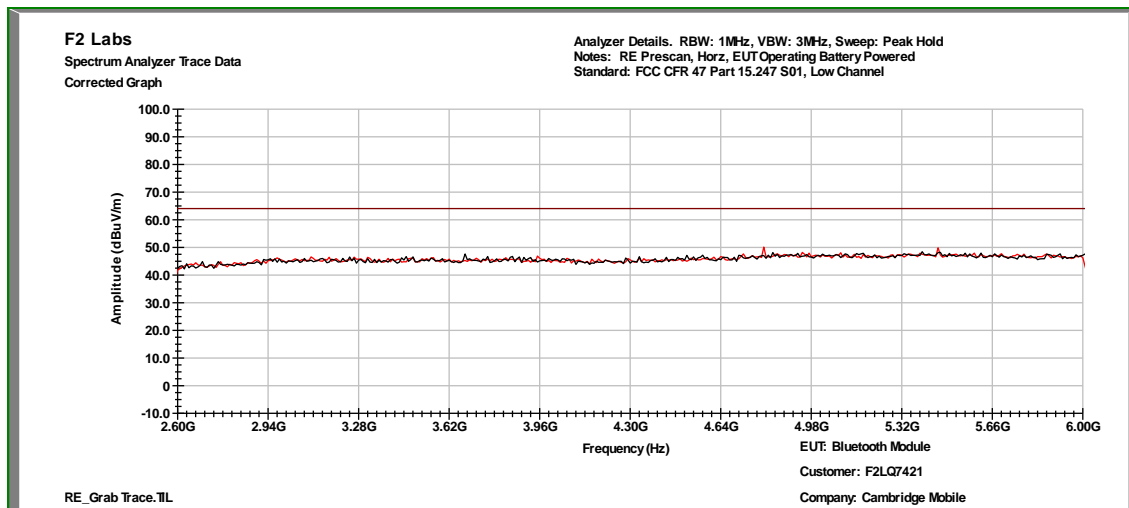




### Lite, Radiated Spurious Emissions: Low Channel, 2.3 GHz to 2.6 GHz, Horizontal



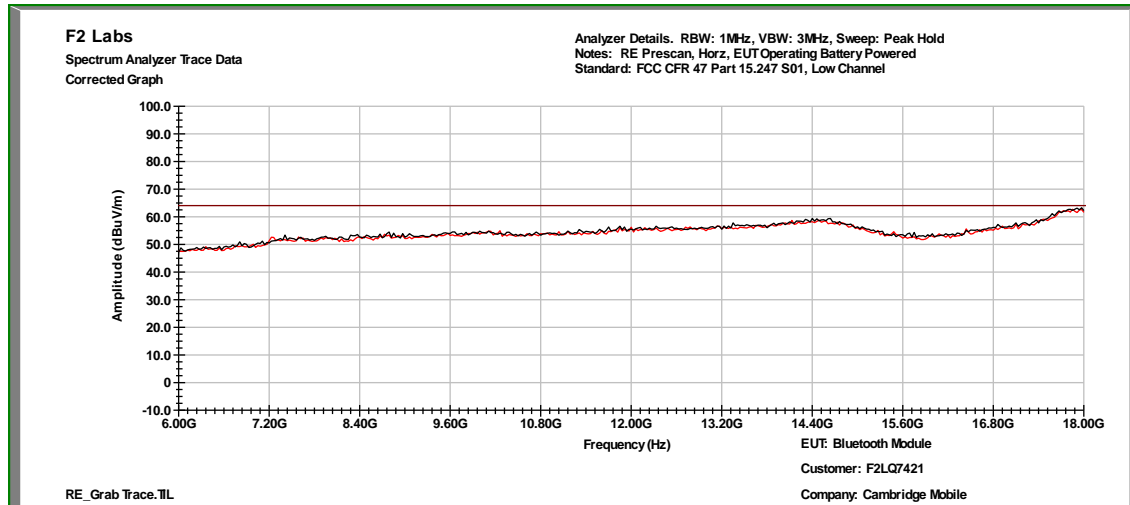
### Lite, Radiated Spurious Emissions: Low Channel, 2.6 GHz to 6 GHz, Horizontal



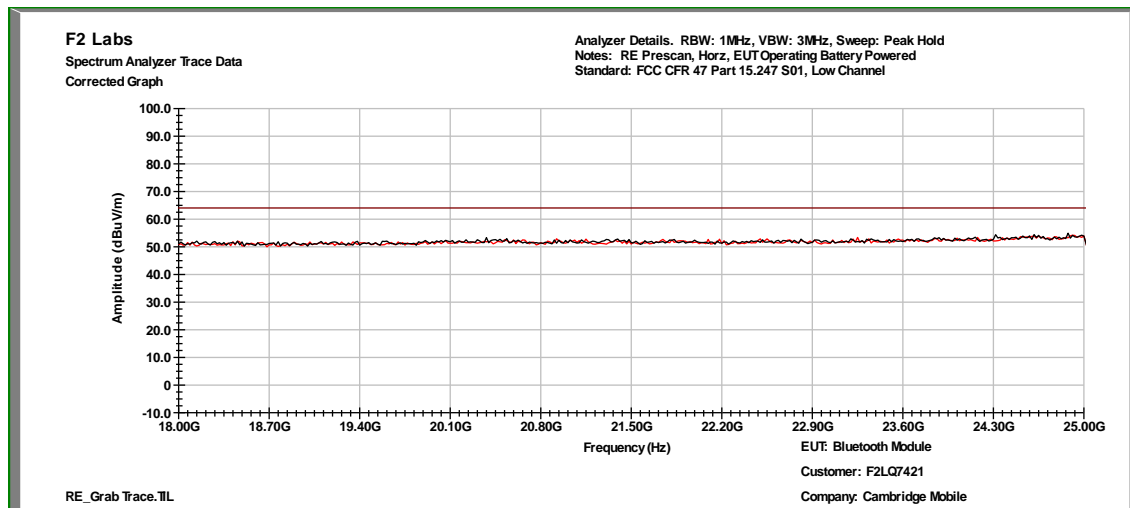




### Lite, Radiated Spurious Emissions: Low Channel, 6 GHz to 18 GHz, Horizontal

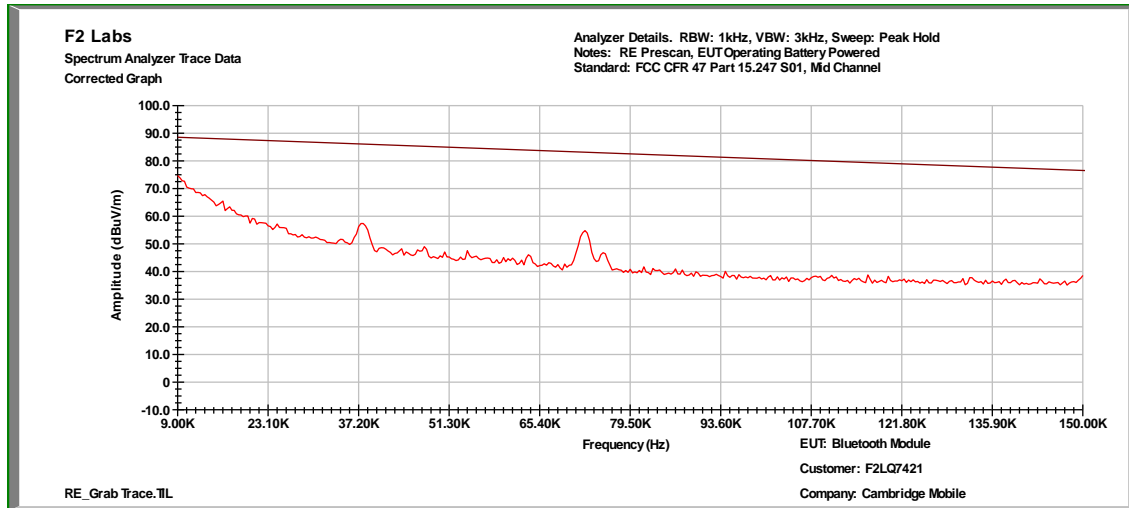


### Lite, Radiated Spurious Emissions: Low Channel, 18 GHz to 25 GHz, Horizontal

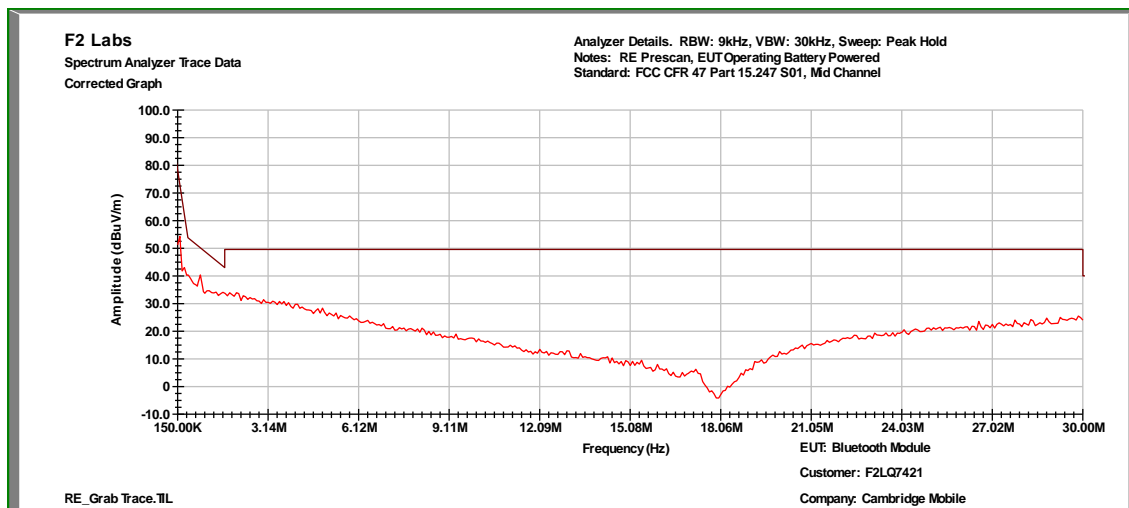




### Lite, Radiated Spurious Emissions: Mid Channel, 9k to 150k



### Lite, Radiated Spurious Emissions: Mid Channel, 150k to 30 MHz



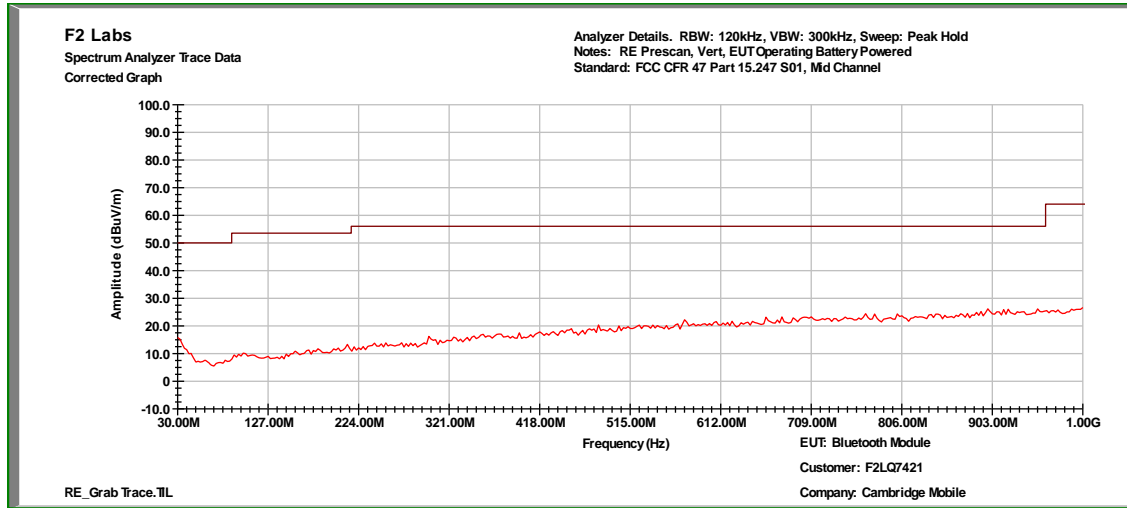


Order Number: F2LQ7421

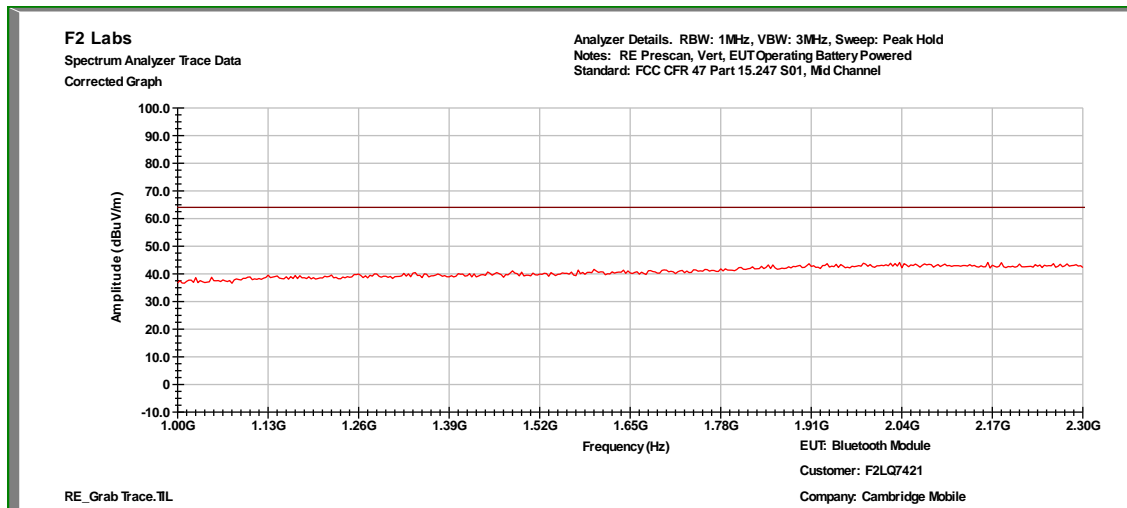
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

## Lite, Radiated Spurious Emissions: Mid Channel, 30 MHz to 1 GHz, Vertical

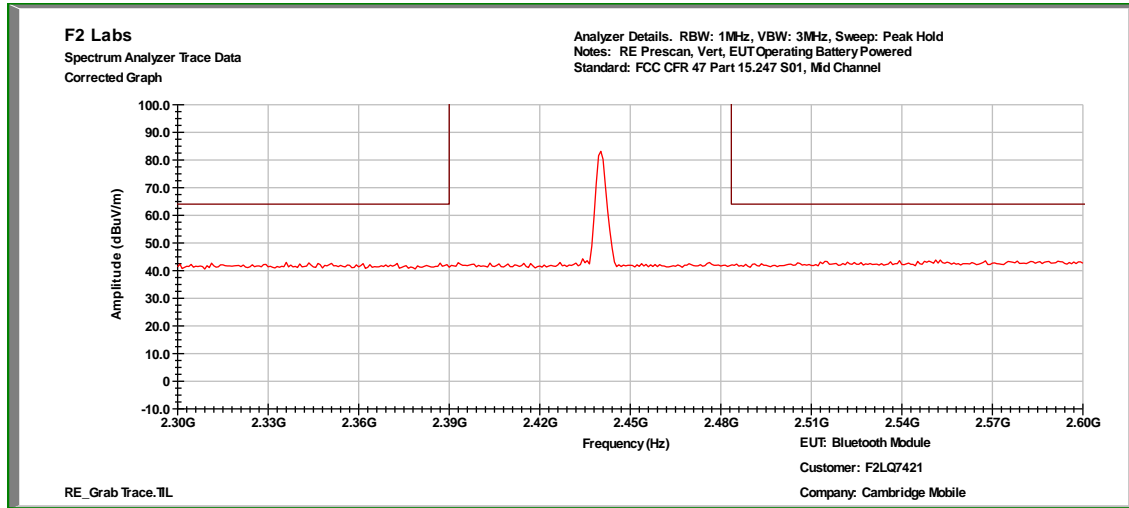


## Lite, Radiated Spurious Emissions: Mid Channel, 1 GHz to 2.3 GHz, Vertical

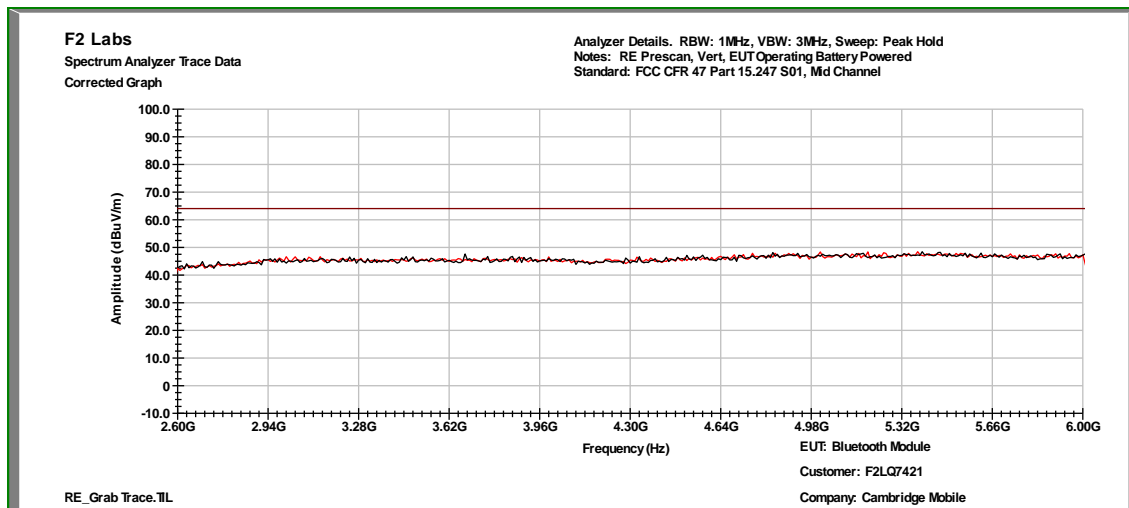




Lite, Radiated Spurious Emissions: Mid Channel, 2.3 GHz to 2.6 GHz, Vertical

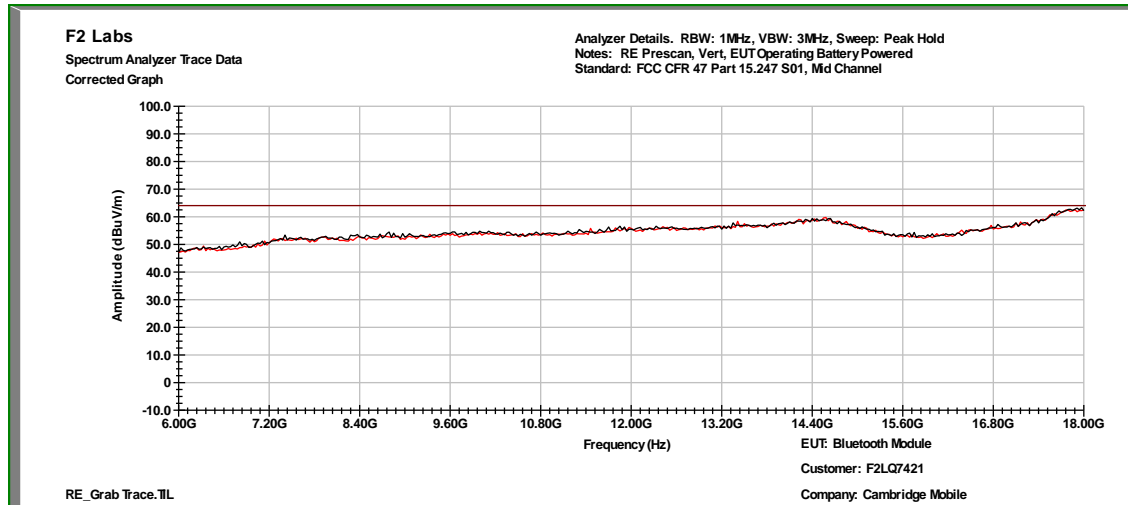


Lite, Radiated Spurious Emissions: Mid Channel, 2.6 GHz to 6 GHz, Vertical

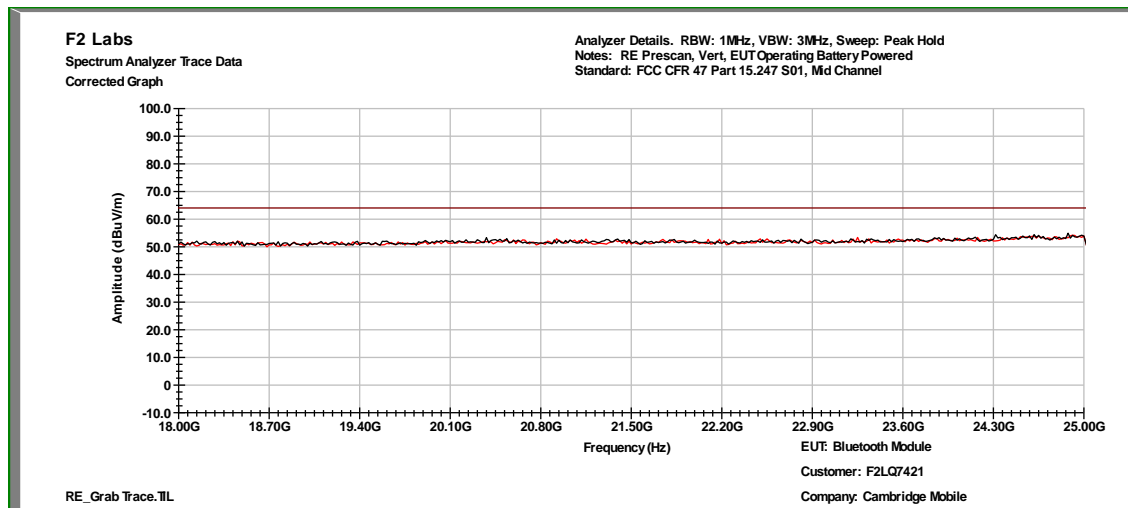




### Lite, Radiated Spurious Emissions: Mid Channel, 6 GHz to 18 GHz, Vertical

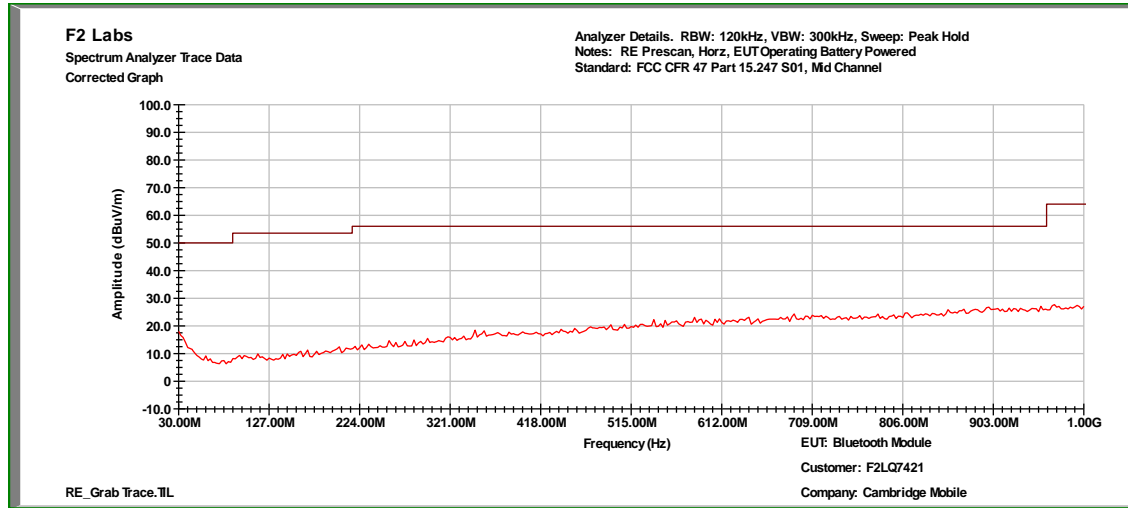


### Lite, Radiated Spurious Emissions: Mid Channel, 18 GHz to 25 GHz, Vertical

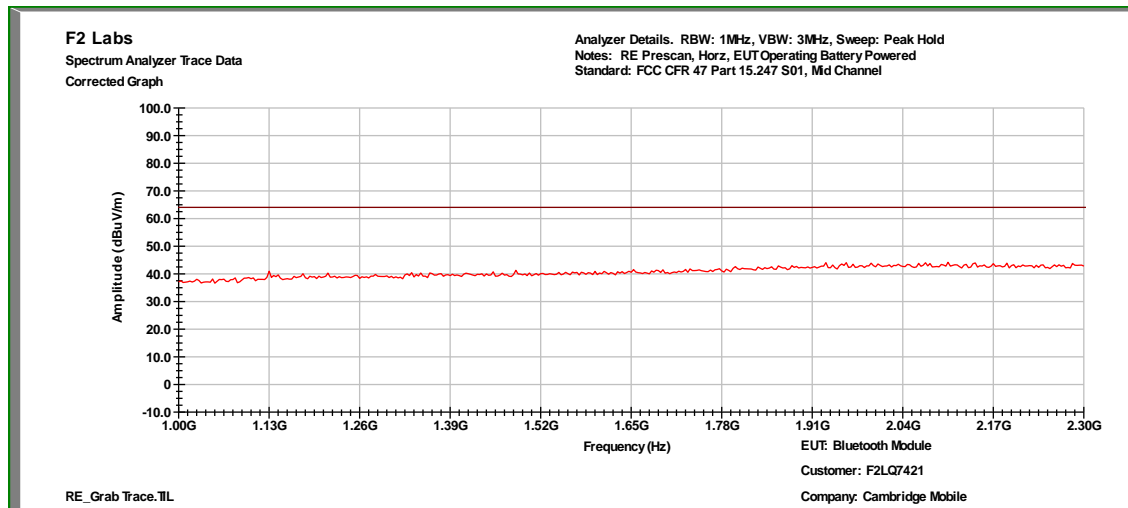




## Lite, Radiated Spurious Emissions: Mid Channel, 30 MHz to 1 GHz, Horizontal

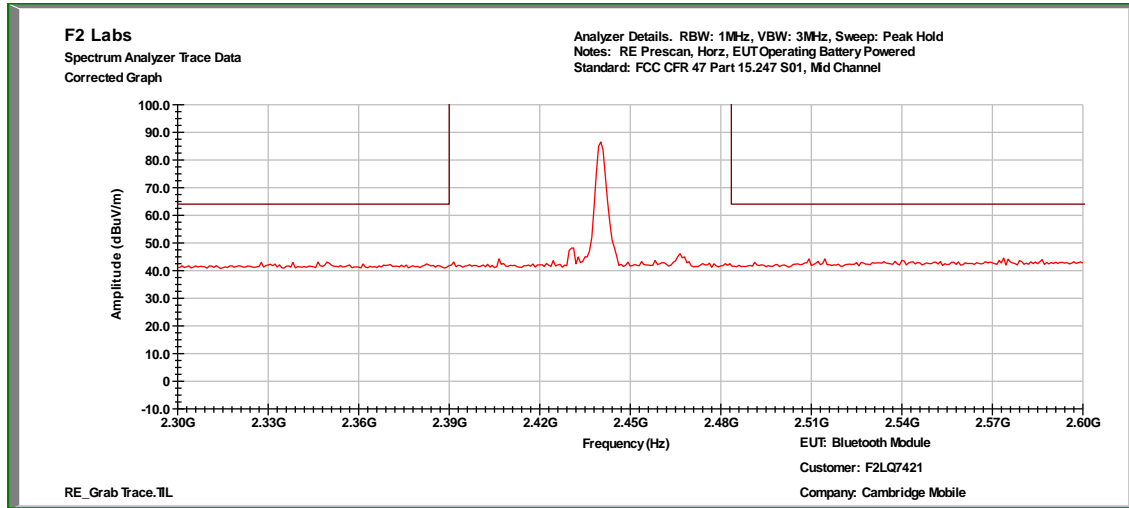


## Lite, Radiated Spurious Emissions: Mid Channel, 1 GHz to 2.3 GHz, Horizontal

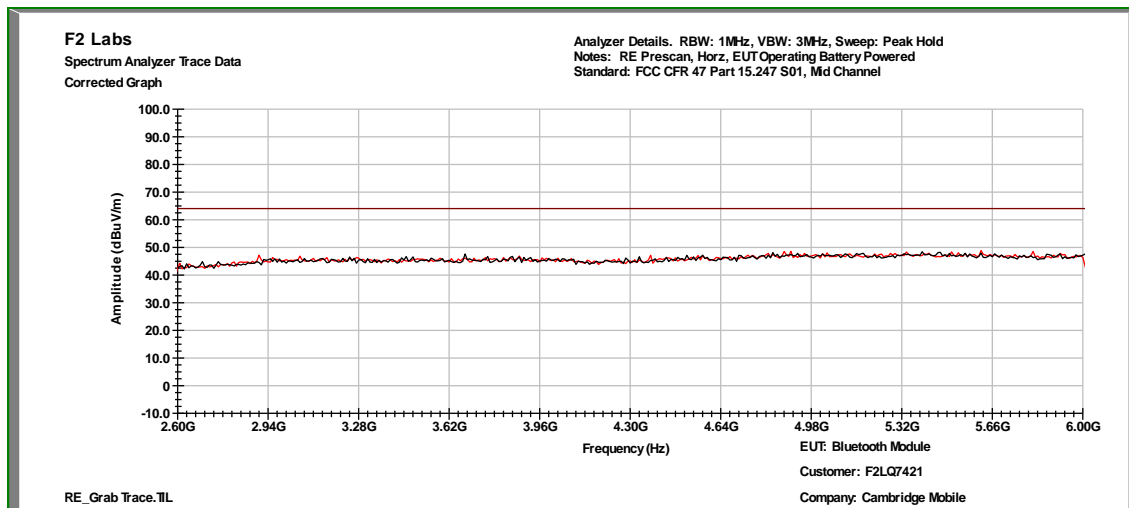




Lite, Radiated Spurious Emissions: Mid Channel, 2.3 GHz to 2.6 GHz, Horizontal

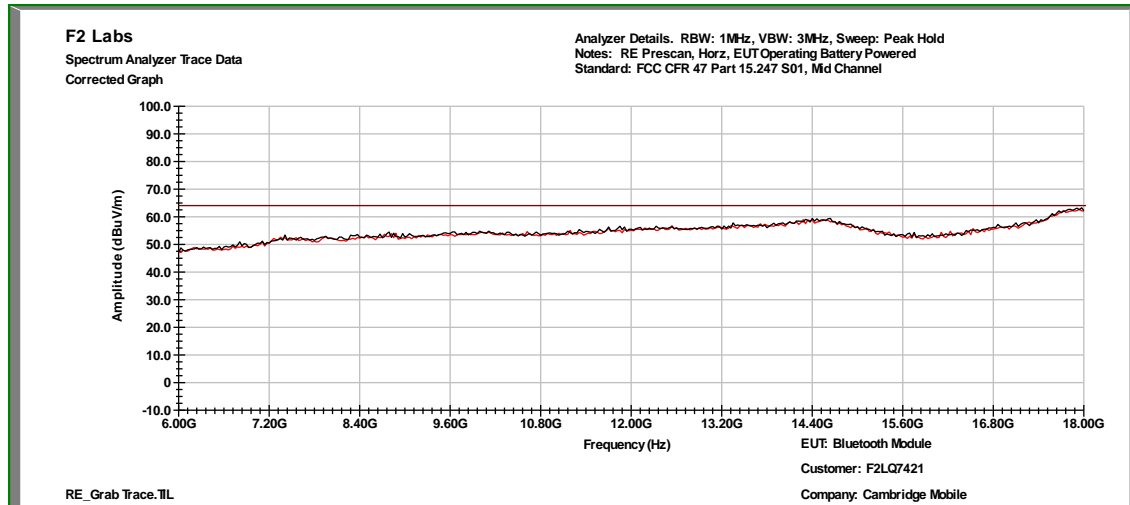


Lite, Radiated Spurious Emissions: Mid Channel, 2.6 GHz to 6 GHz, Horizontal

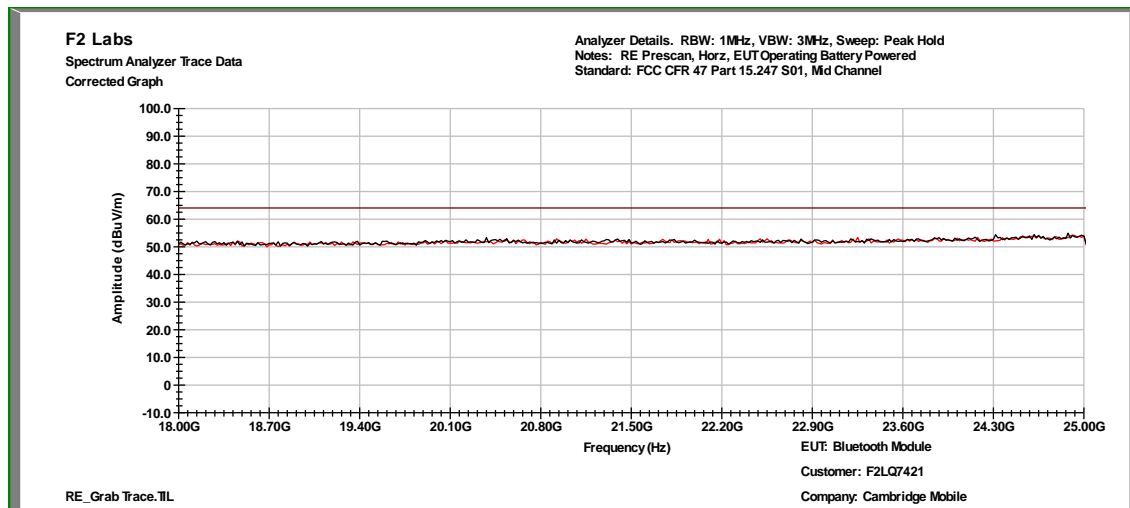




## Lite, Radiated Spurious Emissions: Mid Channel, 6 GHz to 18 GHz, Horizontal



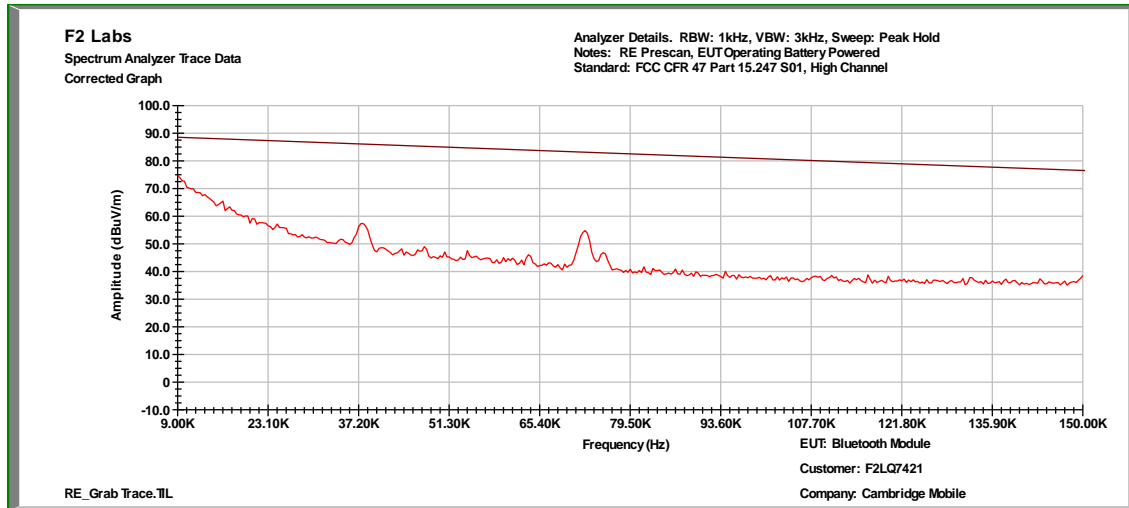
## Lite, Radiated Spurious Emissions: Mid Channel, 18 GHz to 25 GHz, Horizontal



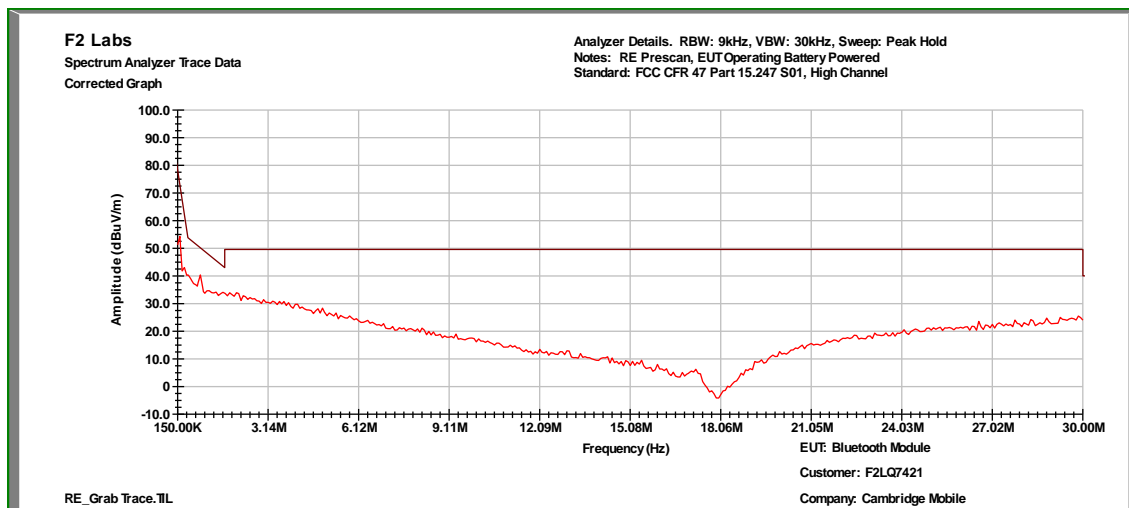




### Lite, Radiated Spurious Emissions: High Channel, 9k to 150k



### Lite, Radiated Spurious Emissions: High Channel, 150k to 30 MHz



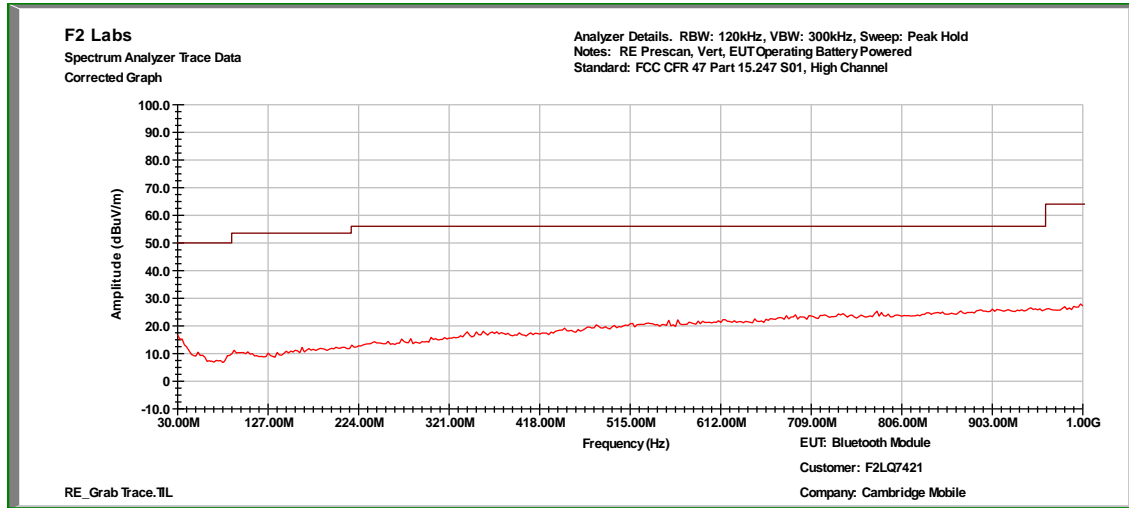


Order Number: F2LQ7421

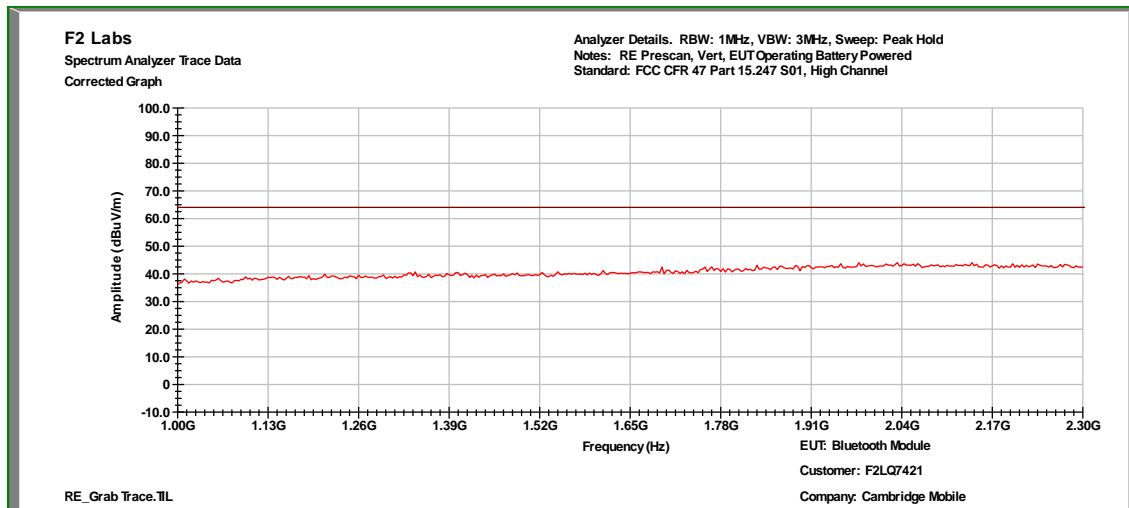
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Lite, Radiated Spurious Emissions: High Channel, 30 MHz to 1 GHz, Vertical

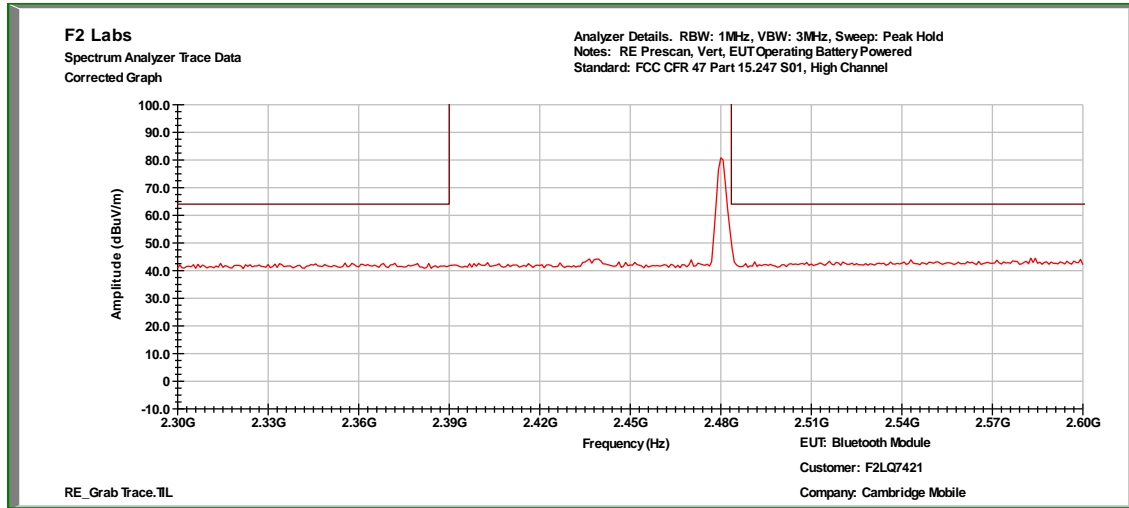


### Lite, Radiated Spurious Emissions: High Channel, 1 GHz to 2.3 GHz, Vertical

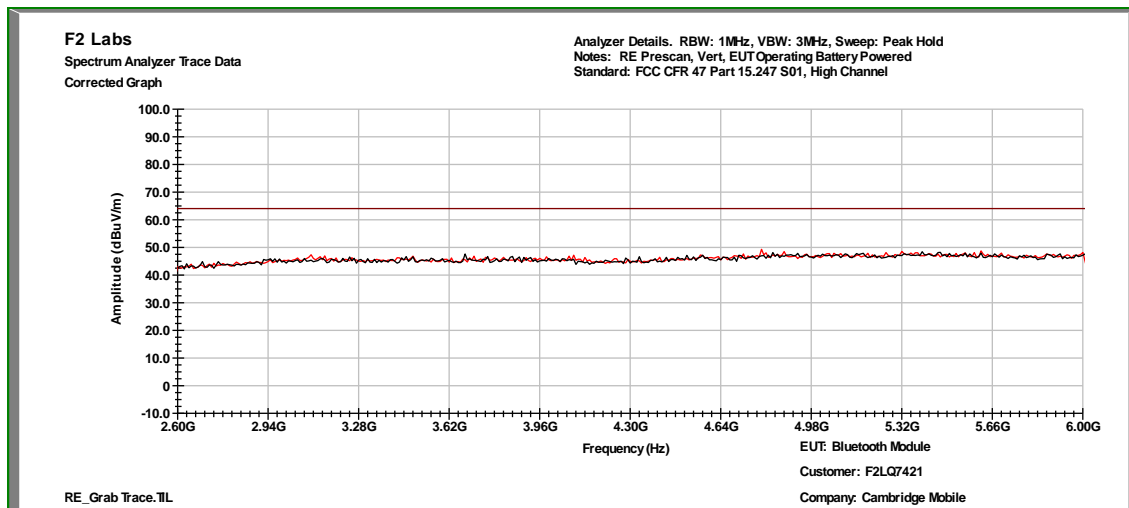




Lite, Radiated Spurious Emissions: High Channel, 2.3 GHz to 2.6 GHz, Vertical

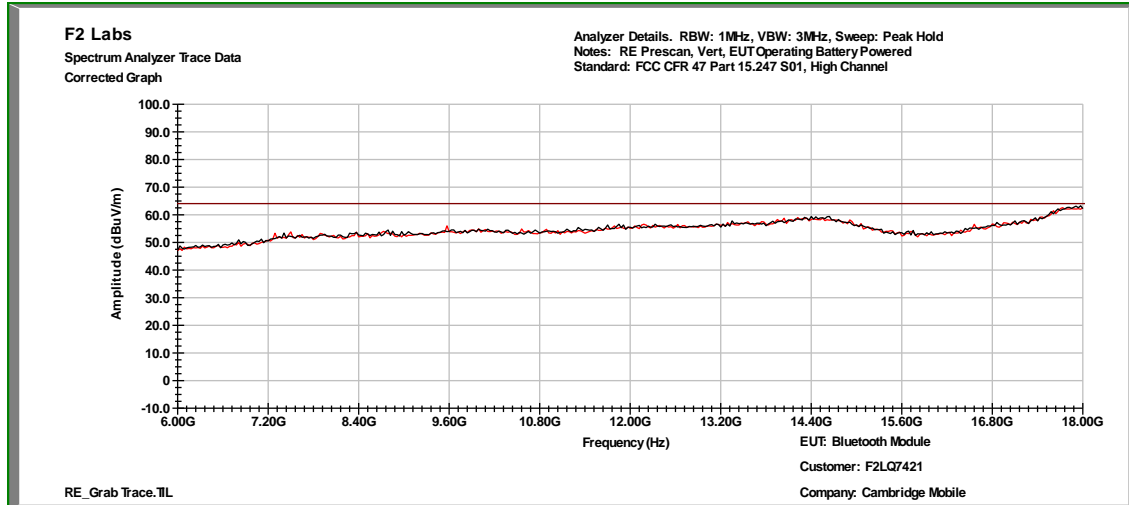


Lite, Radiated Spurious Emissions: High Channel, 2.6 GHz to 6 GHz, Vertical

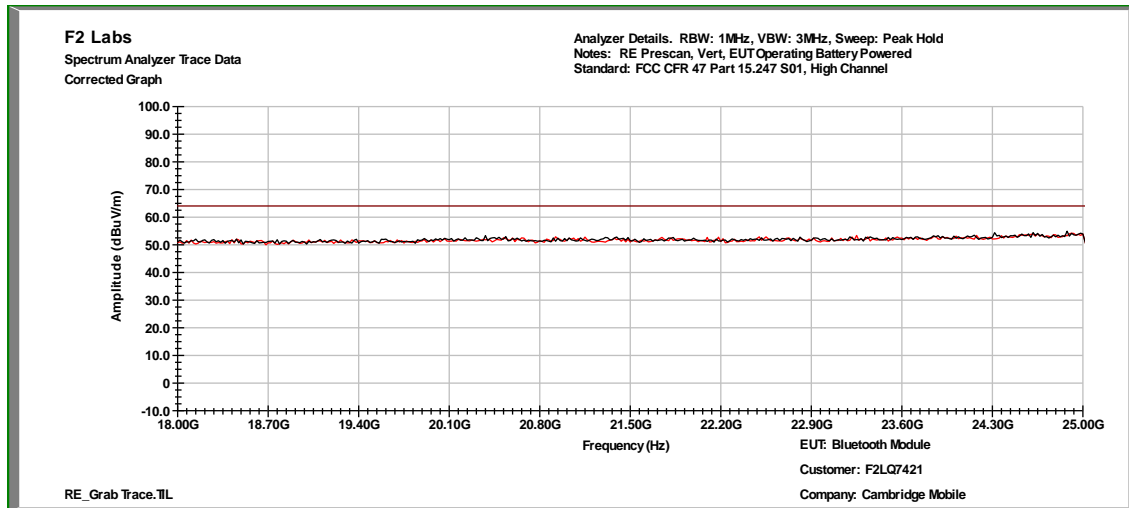




### Lite, Radiated Spurious Emissions: High Channel, 6 GHz to 18 GHz, Vertical

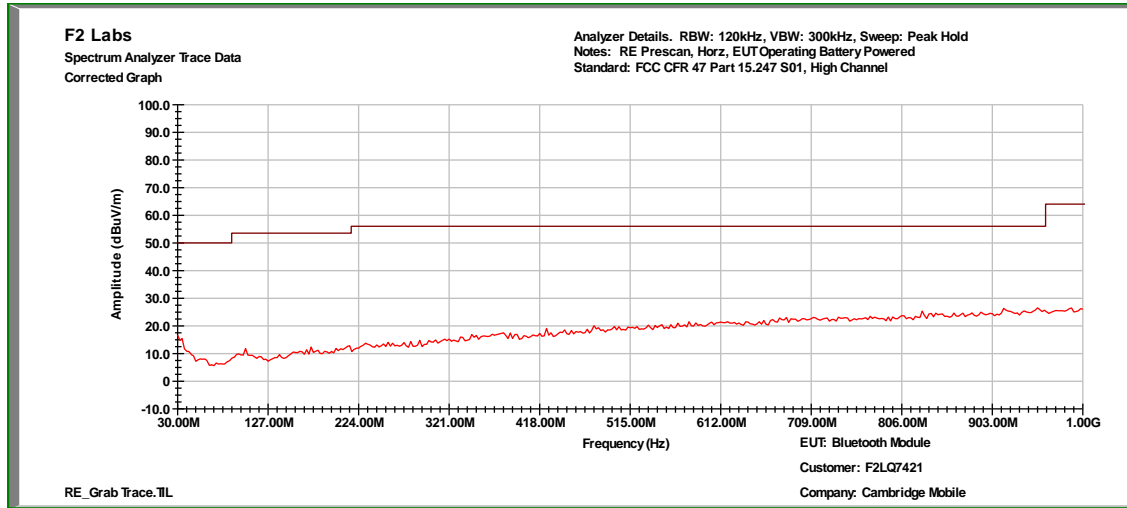


### Lite, Radiated Spurious Emissions: High Channel, 18 GHz to 25 GHz, Vertical

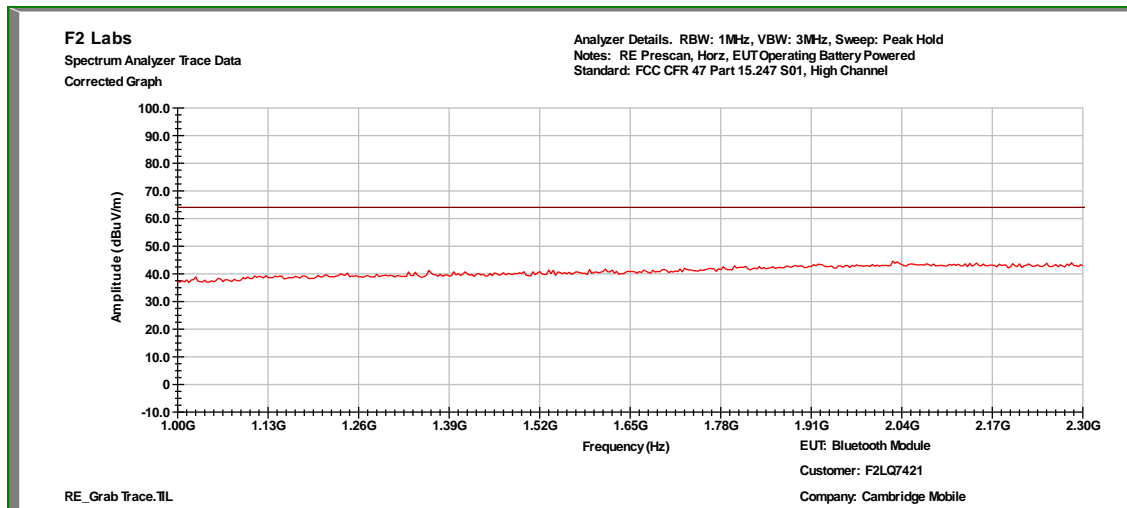




## Lite, Radiated Spurious Emissions: High Channel, 30 MHz to 1 GHz, Horizontal

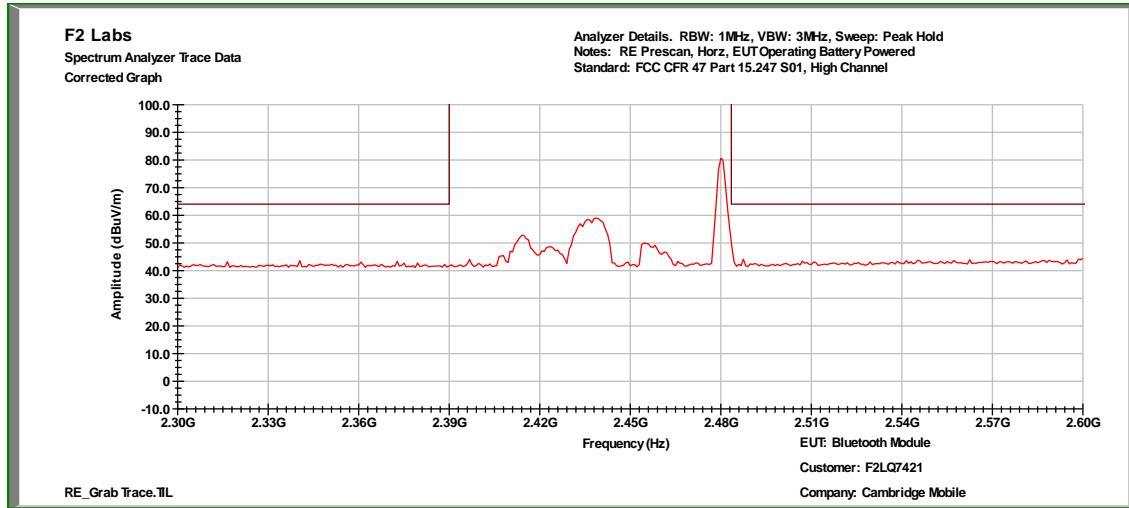


## Lite, Radiated Spurious Emissions: High Channel, 1 GHz to 2.3 GHz, Horizontal

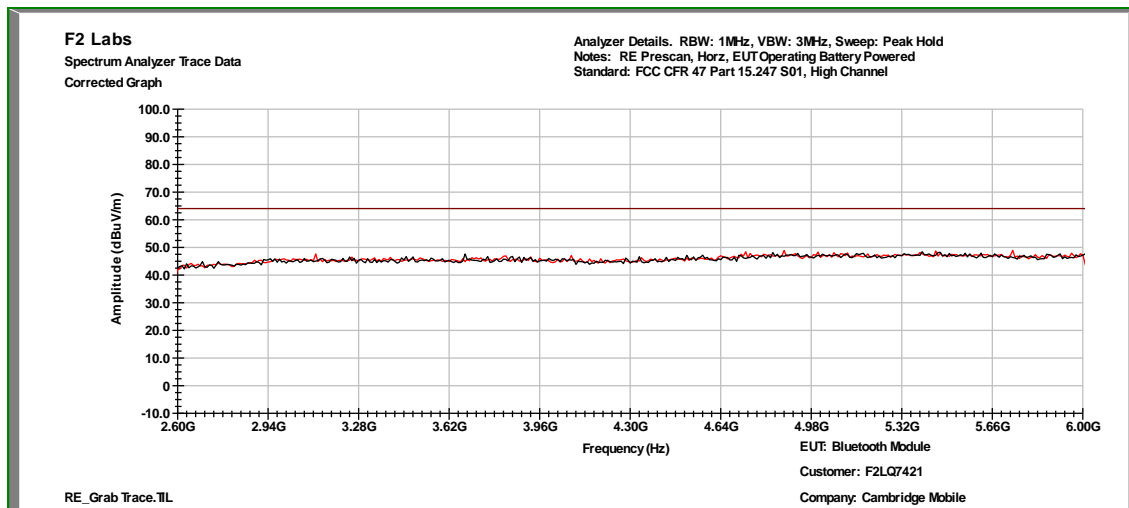




Lite, Radiated Spurious Emissions: High Channel, 2.3 GHz to 2.6 GHz, Horizontal

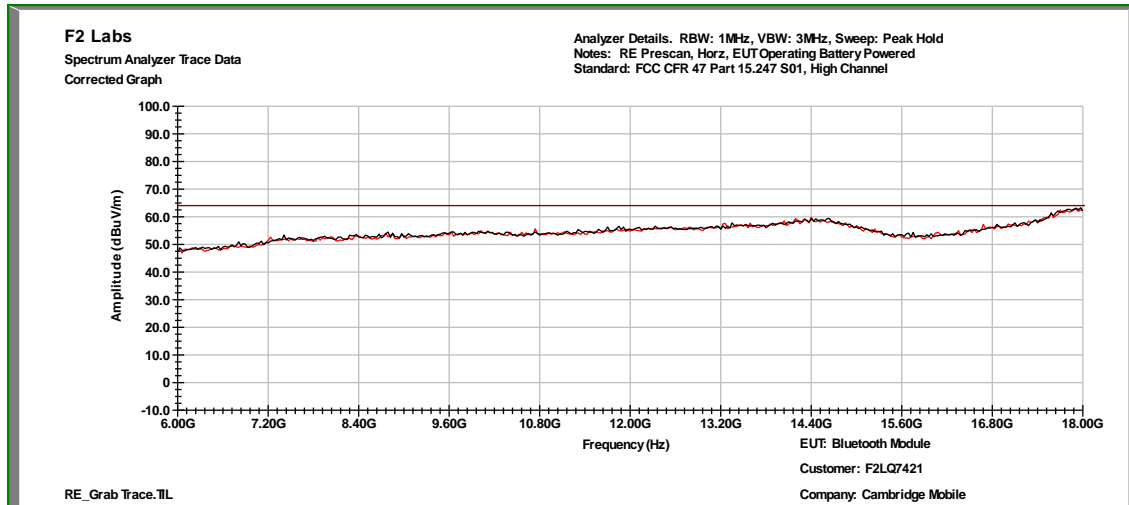


Lite, Radiated Spurious Emissions: High Channel, 2.6 GHz to 6 GHz, Horizontal

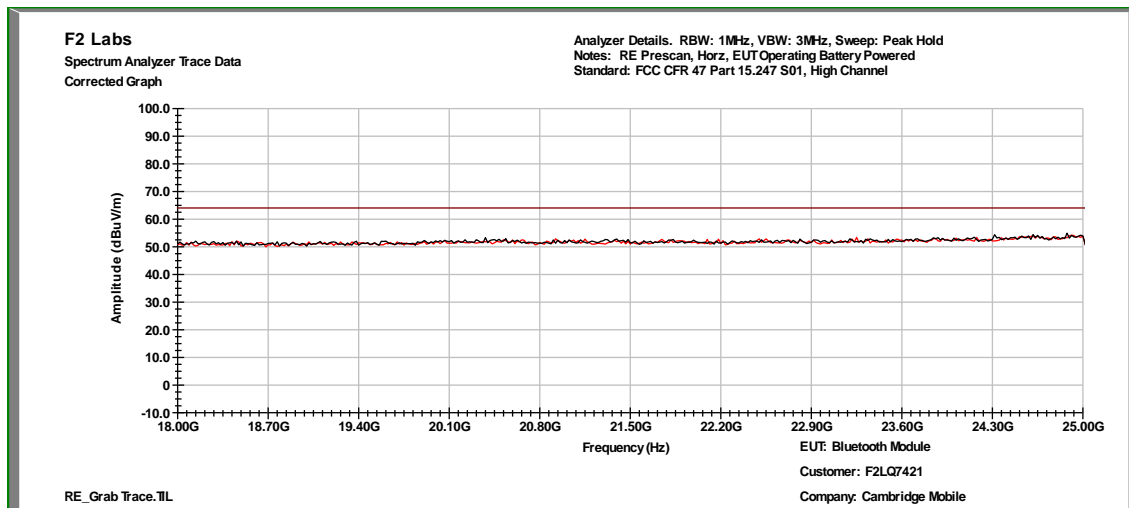


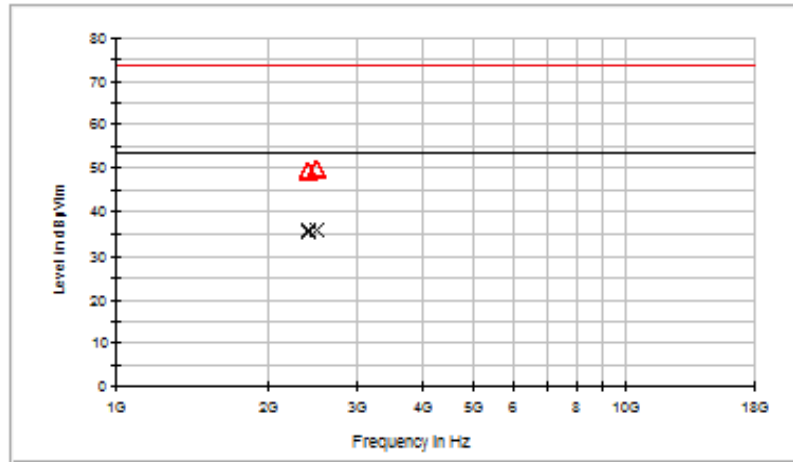


## Lite, Radiated Spurious Emissions: High Channel, 6 GHz to 18 GHz, Horizontal



## Lite, Radiated Spurious Emissions: High Channel, 18 GHz to 25 GHz, Horizontal



**Lite, Measurements****Lite, Low Channel - MaxPeak**

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	38.4	11.2	49.60	74.0	-24.4
2390.000000	H	38.1	11.2	49.30	74.0	-24.7
2483.500000	H	38.3	11.5	49.80	74.0	-24.2
2483.500000	V	38.5	11.5	50.00	74.0	-24.0

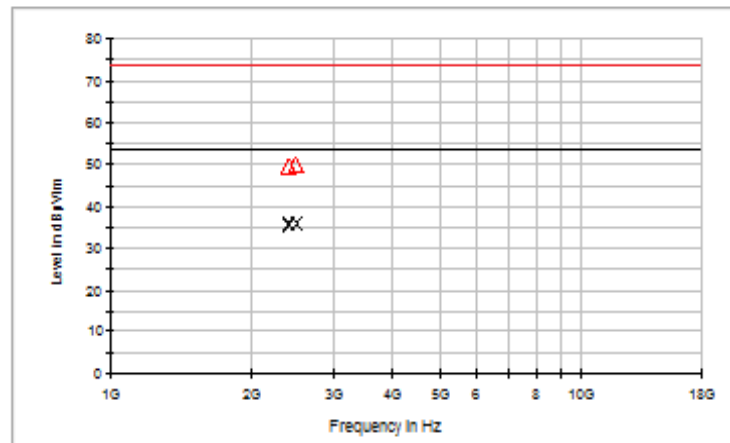
**Lite, Low Channel - Average**

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	24.6	11.2	35.80	54.0	-18.2
2390.000000	H	25.0	11.2	36.20	54.0	-17.8
2483.500000	H	24.7	11.5	36.20	54.0	-17.8
2483.500000	V	24.7	11.5	36.20	54.0	-17.8





## Lite, Mid Channel



## Lite, Mid Channel - MaxPeak

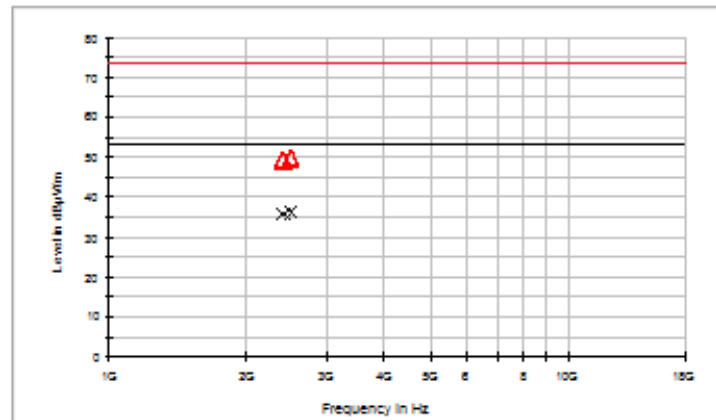
Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	38.6	11.2	49.80	74.0	-24.2
2390.000000	V	38.4	11.2	49.60	74.0	-24.4
2483.500000	H	38.4	11.5	49.90	74.0	-24.1
2483.500000	V	38.6	11.5	50.10	74.0	-23.9

## Lite, Mid Channel - Average

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	24.6	11.2	35.80	54.0	-18.2
2390.000000	V	25.0	11.2	36.20	54.0	-17.8
2483.500000	H	24.7	11.5	36.20	54.0	-17.8
2483.500000	V	24.7	11.5	36.20	54.0	-17.8



## Lite, High Channel



## Lite, High Channel - MaxPeak

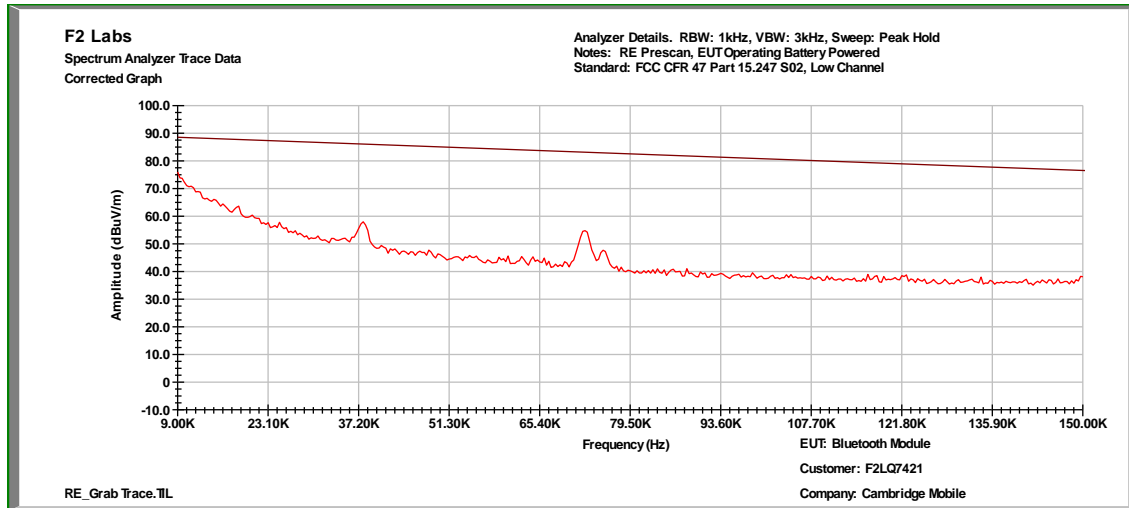
Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	38.2	11.2	49.40	74.0	-24.6
2390.000000	H	38.2	11.2	49.40	74.0	-24.6
2483.500000	V	38.7	11.5	50.20	74.0	-23.8
2483.500000	H	38.2	11.5	49.70	74.0	-24.3

## Lite, High Channel - Average

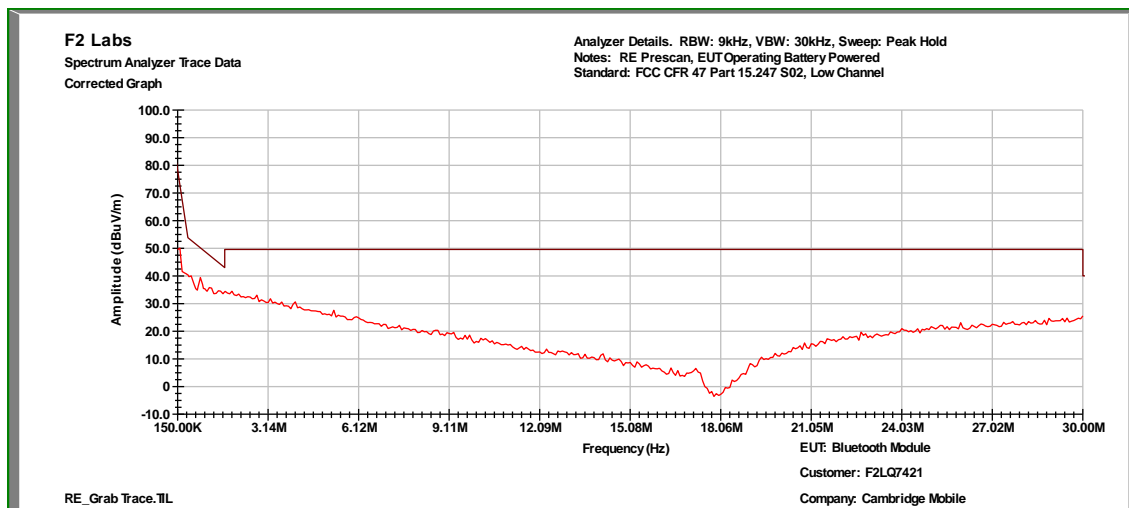
Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	24.6	11.2	35.80	54.0	-18.2
2390.000000	H	24.6	11.2	35.80	54.0	-18.2
2483.500000	V	24.7	11.5	36.20	54.0	-17.8
2483.500000	H	24.7	11.5	36.20	54.0	-17.8



### Premium, Radiated Spurious Emissions: Low Channel, 9k to 150k

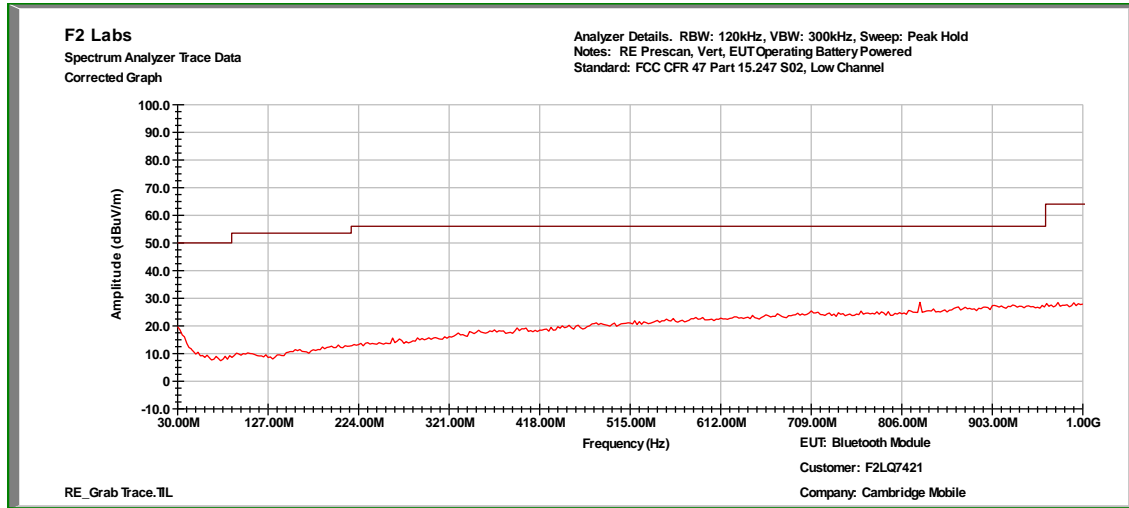


### Premium, Radiated Spurious Emissions: Low Channel, 150k to 30 MHz

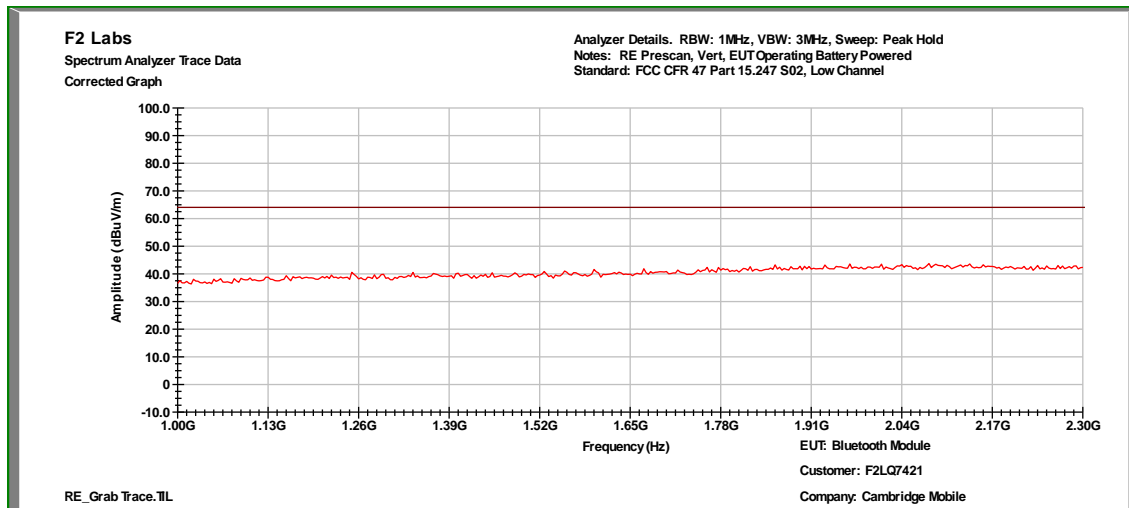




Premium, Radiated Spurious Emissions: Low Channel, 30 MHz to 1 GHz, Vertical



Premium, Radiated Spurious Emissions: Low Channel, 1 GHz to 2.3 GHz, Vertical



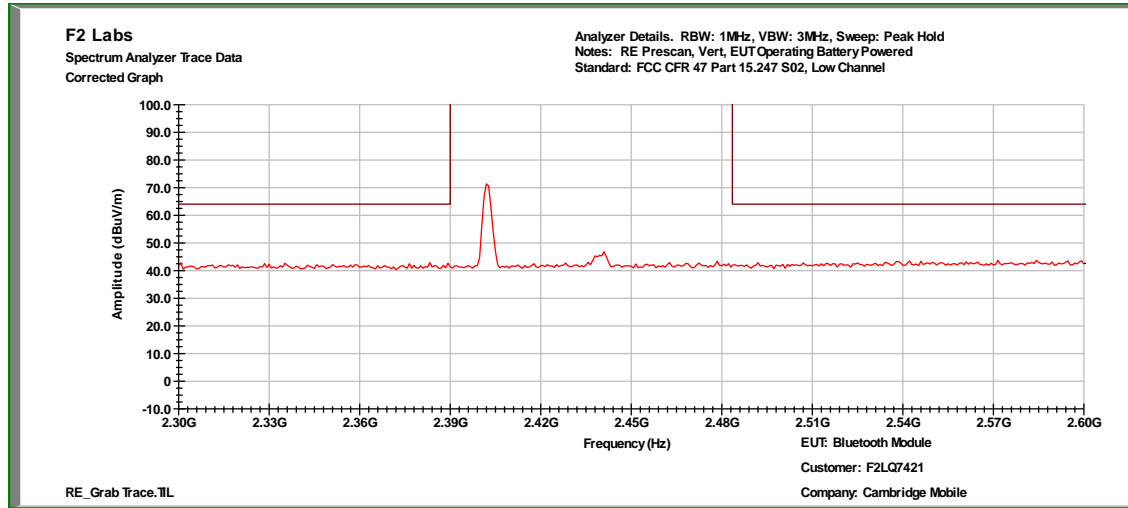


Order Number: F2LQ7421

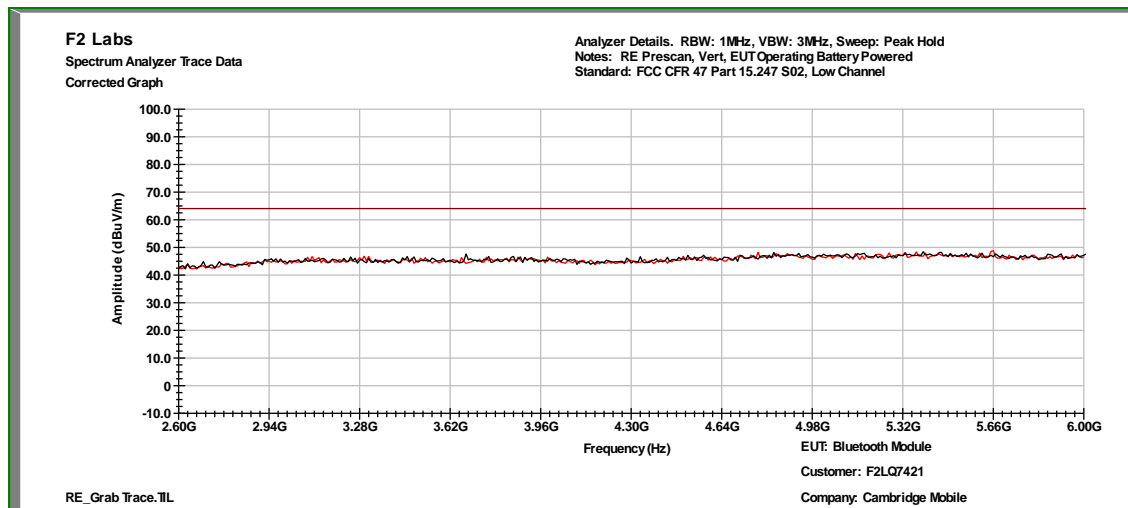
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Premium, Radiated Spurious Emissions: Low Channel, 2.3 GHz to 2.6 GHz, Vertical

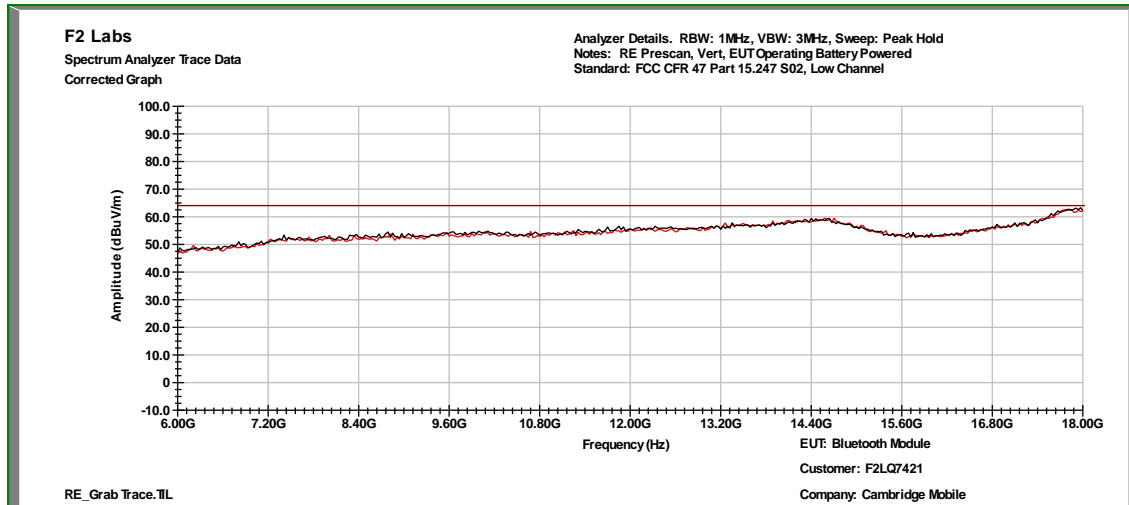


### Premium, Radiated Spurious Emissions: Low Channel, 2.6 GHz to 6 GHz, Vertical

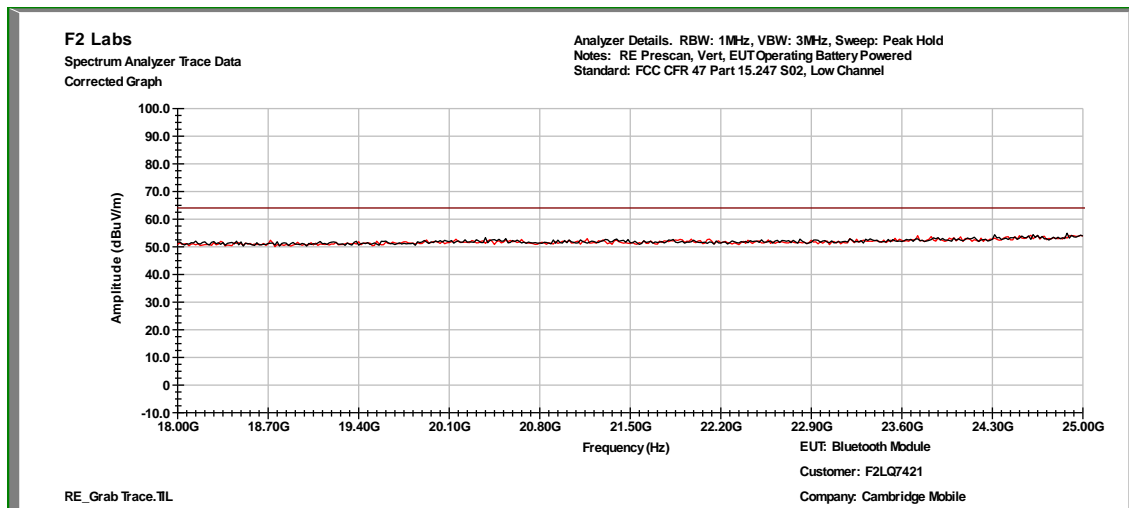




**Premium, Radiated Spurious Emissions: Low Channel, 6 GHz to 18 GHz, Vertical**

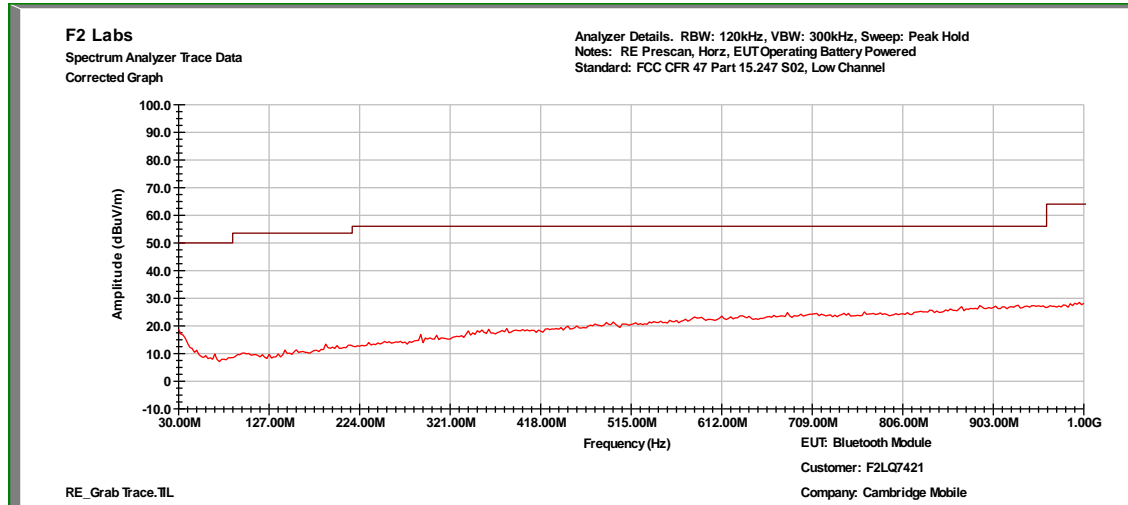


**Premium, Radiated Spurious Emissions: Low Channel, 18 GHz to 25 GHz, Vertical**

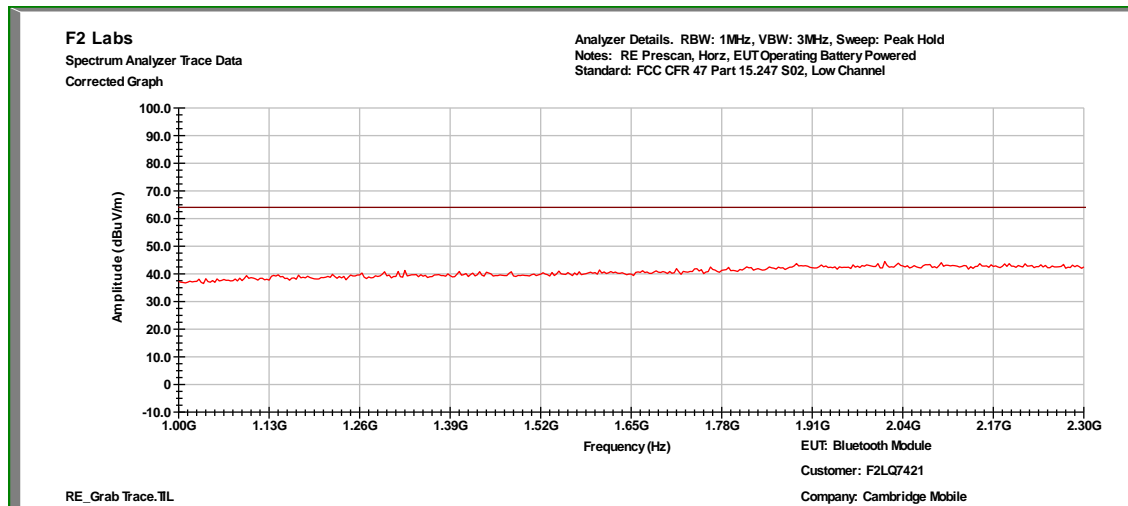




Premium, Radiated Spurious Emissions: Low Channel, 30 MHz to 1 GHz, Horizontal



Premium, Radiated Spurious Emissions: Low Channel, 1 GHz to 2.3 GHz, Horizontal



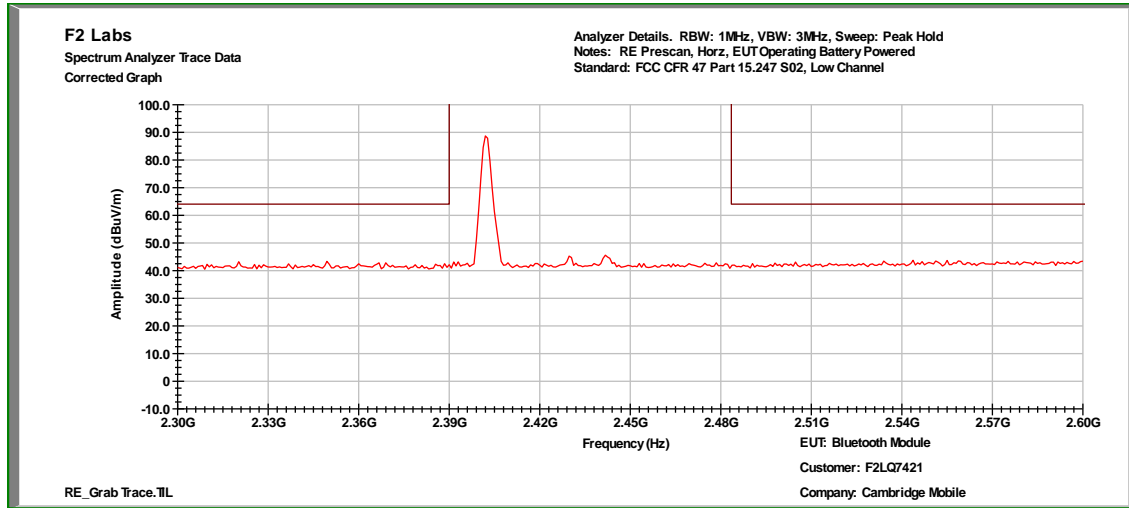


Order Number: F2LQ7421

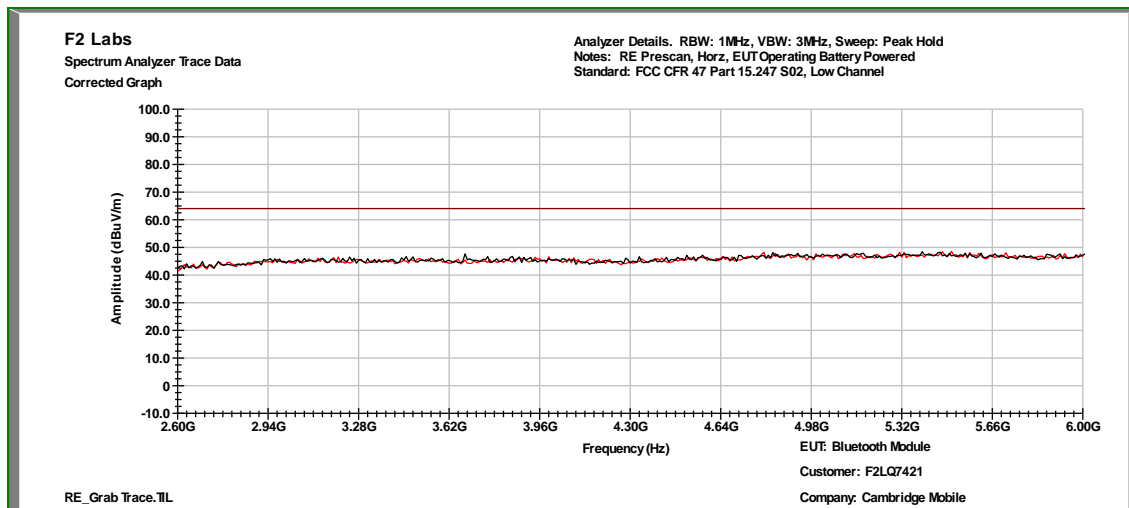
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

## Premium, Radiated Spurious Emissions: Low Channel, 2.3 GHz to 2.6 GHz, Horizontal



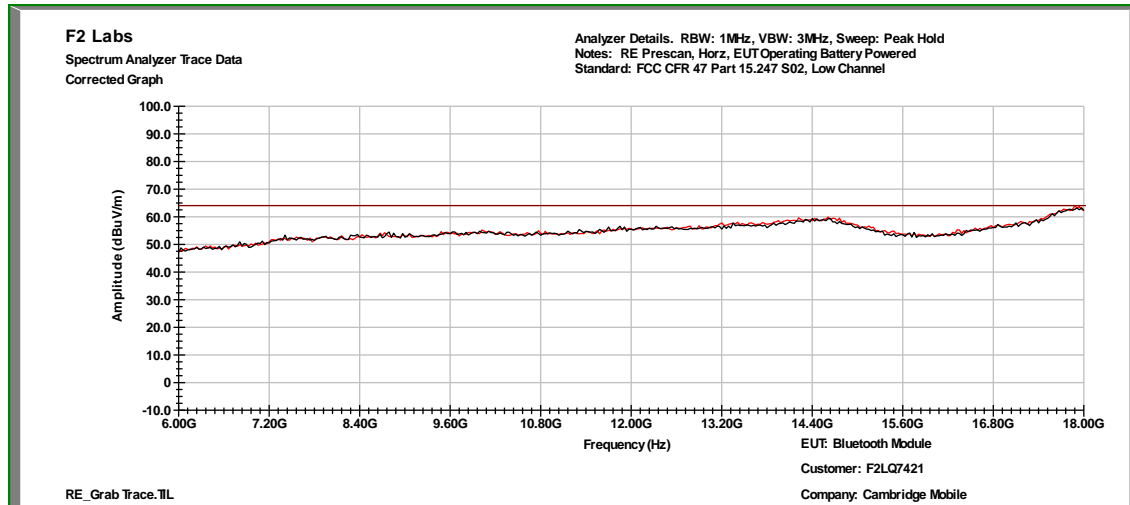
## Premium, Radiated Spurious Emissions: Low Channel, 2.6 GHz to 6 GHz, Horizontal



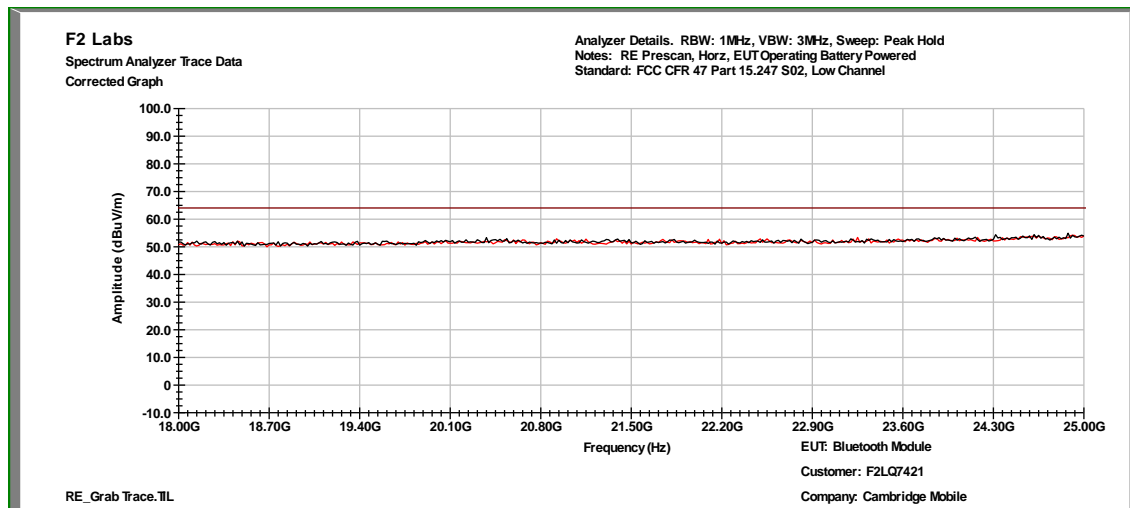




## Premium, Radiated Spurious Emissions: Low Channel, 6 GHz to 18 GHz, Horizontal



## Premium, Radiated Spurious Emissions: Low Channel, 18 GHz to 25 GHz, Horizontal



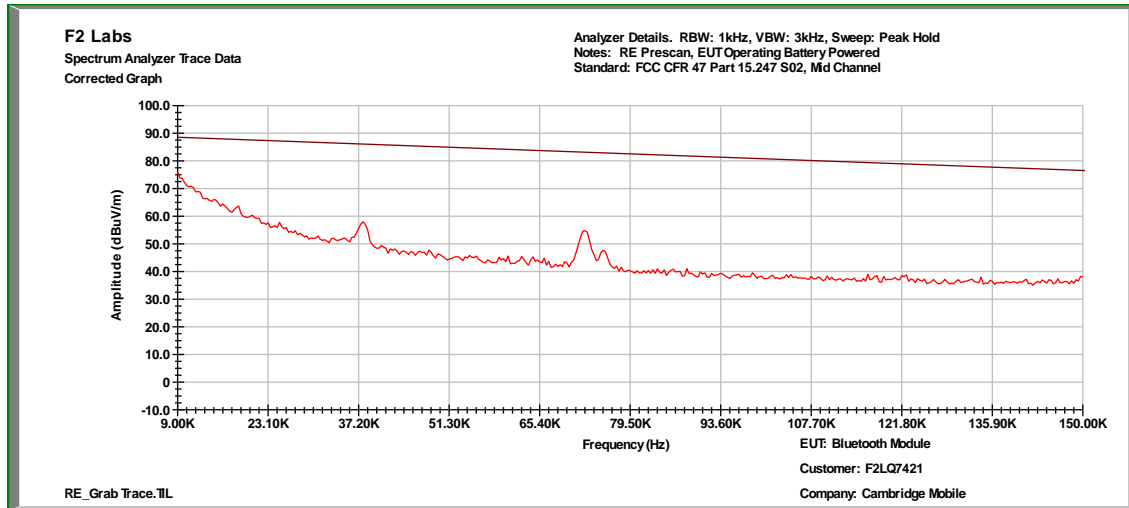


Order Number: F2LQ7421

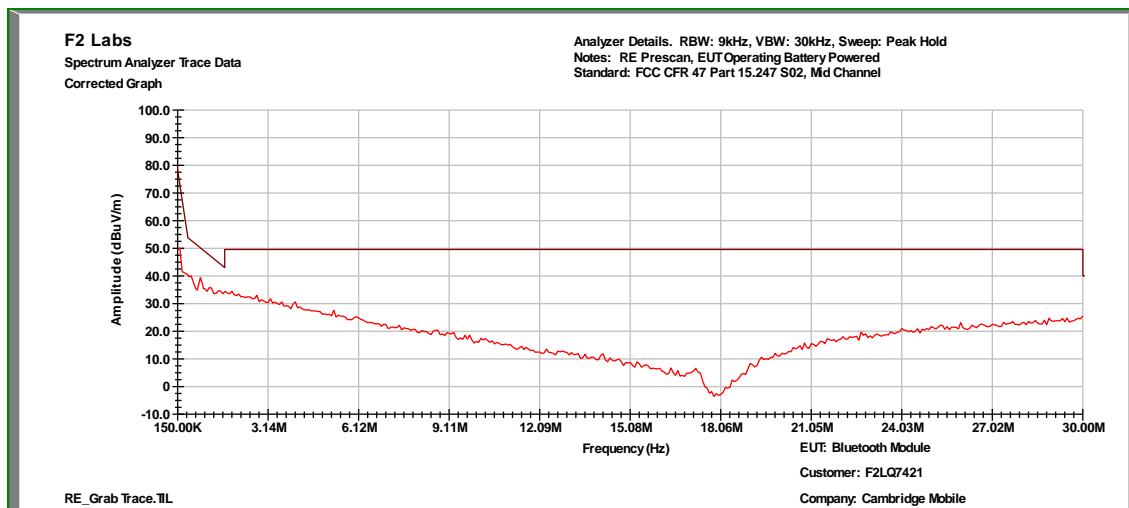
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Premium, Radiated Spurious Emissions: Mid Channel, 9k to 150k

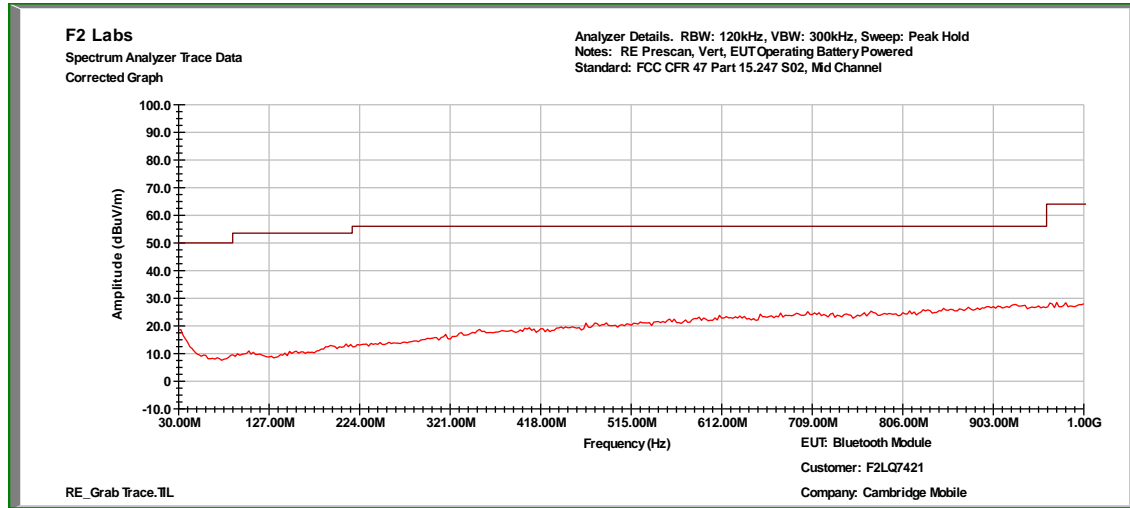


### Premium, Radiated Spurious Emissions: Mid Channel, 150k to 30 MHz

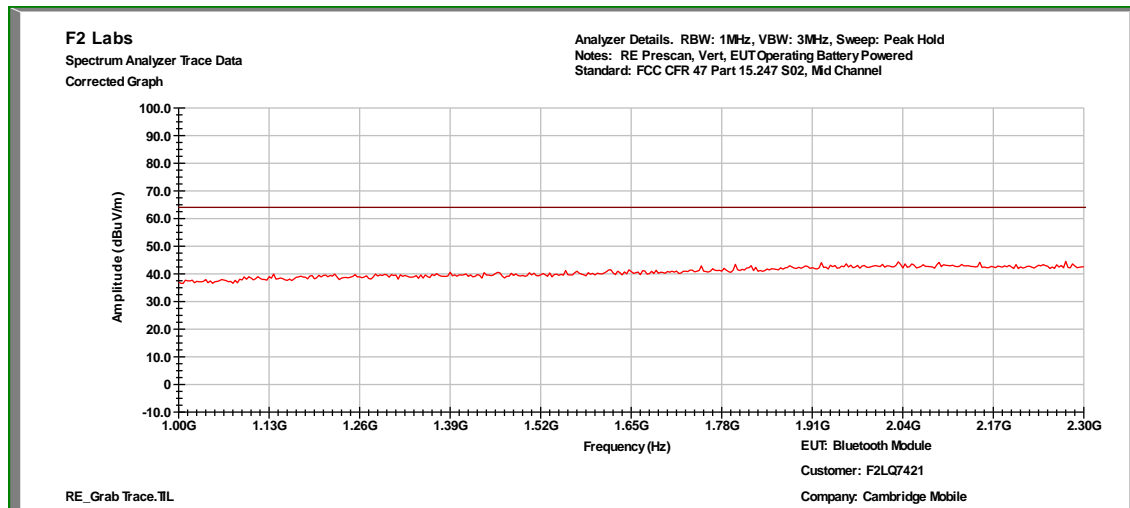




Premium, Radiated Spurious Emissions: Mid Channel, 30 MHz to 1 GHz, Vertical

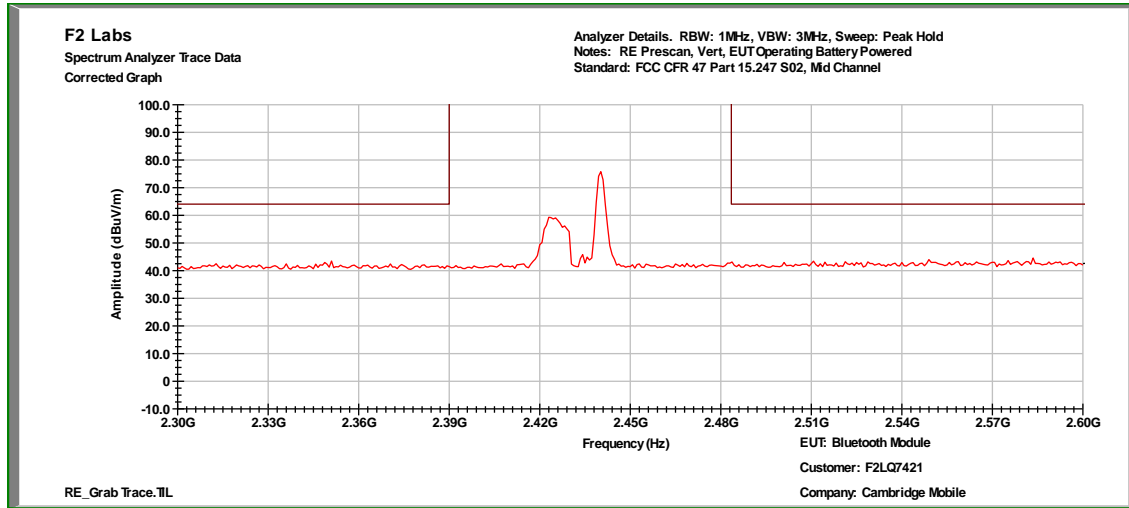


Premium, Radiated Spurious Emissions: Mid Channel, 1 GHz to 2.3 GHz, Vertical

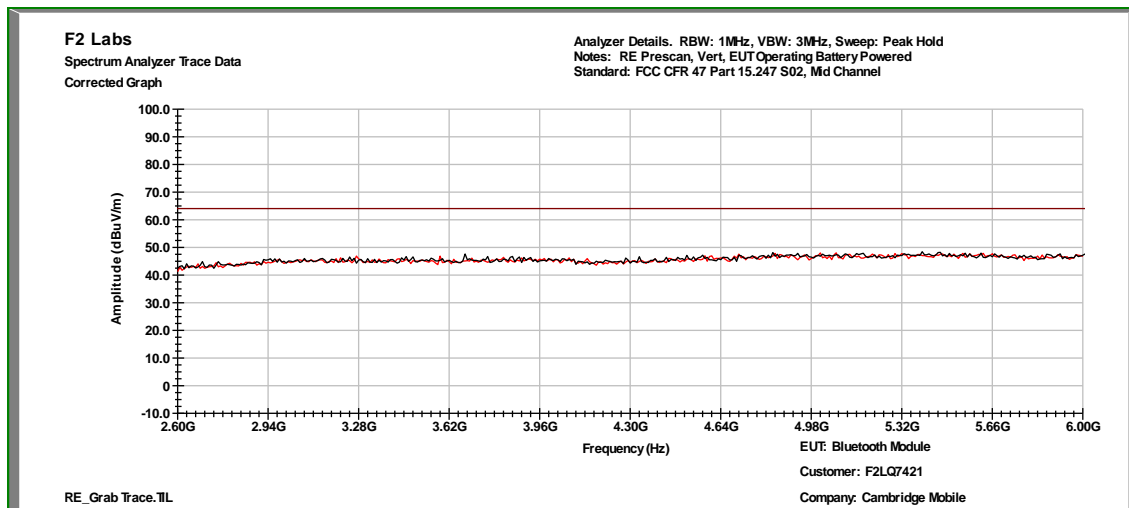




Premium, Radiated Spurious Emissions: Mid Channel, 2.3 GHz to 2.6 GHz, Vertical

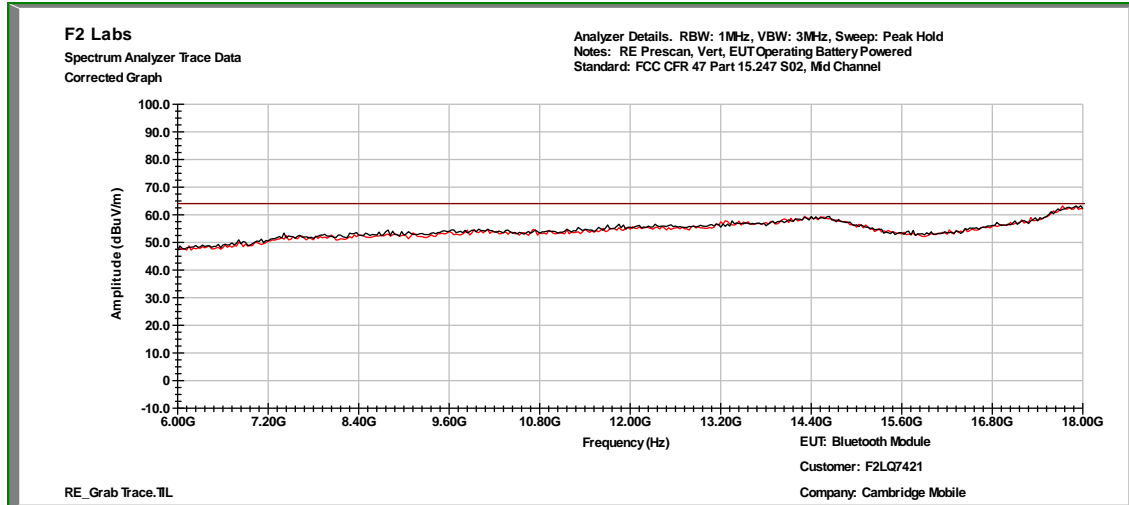


Premium, Radiated Spurious Emissions: Mid Channel, 2.6 GHz to 6 GHz, Vertical

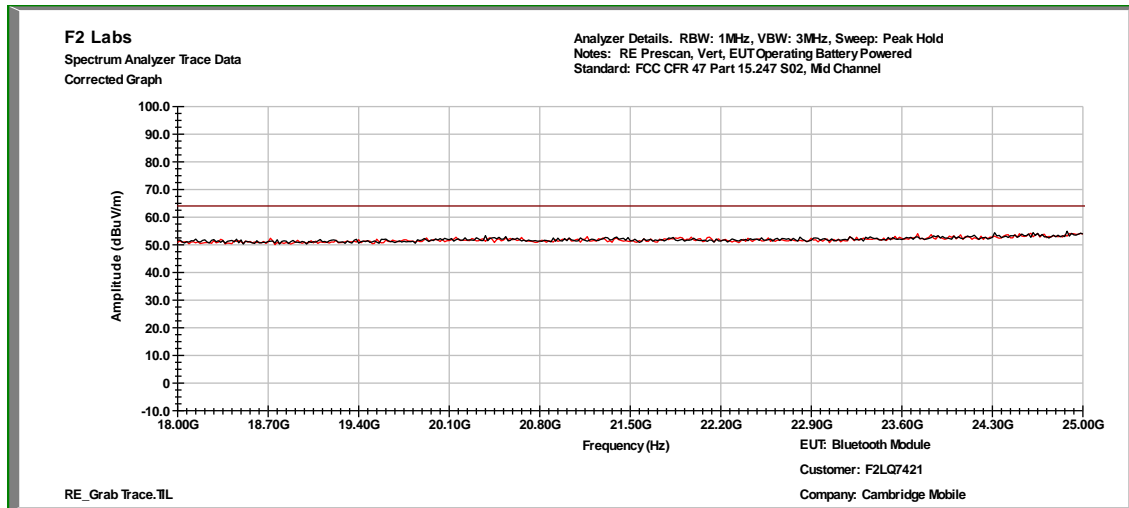




### Premium, Radiated Spurious Emissions: Mid Channel, 6 GHz to 18 GHz, Vertical



### Premium, Radiated Spurious Emissions: Mid Channel, 18 GHz to 25 GHz, Vertical



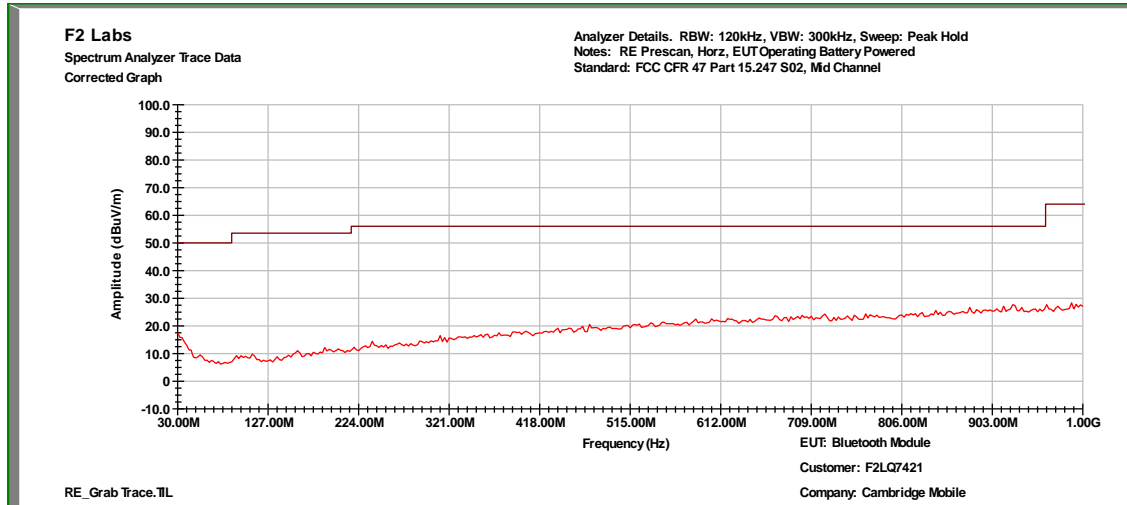


Order Number: F2LQ7421

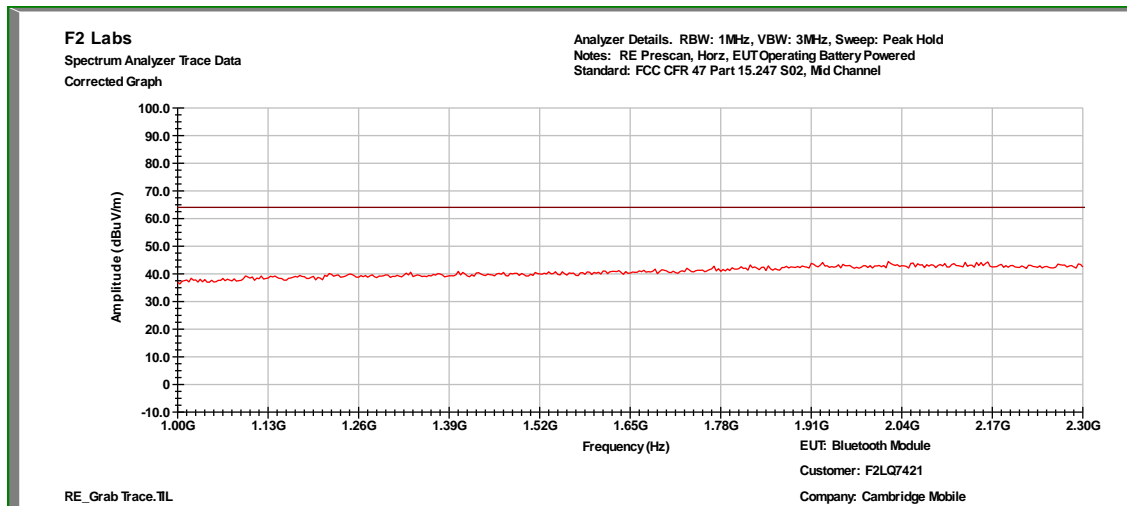
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

## Premium, Radiated Spurious Emissions: Mid Channel, 30 MHz to 1 GHz, Horizontal



## Premium, Radiated Spurious Emissions: Mid Channel, 1 GHz to 2.3 GHz, Horizontal



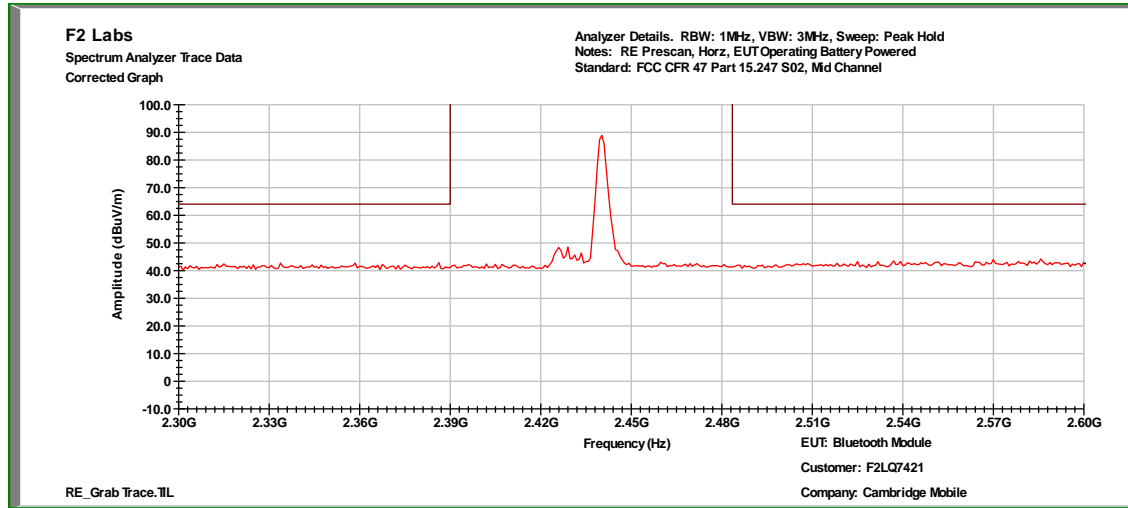


Order Number: F2LQ7421

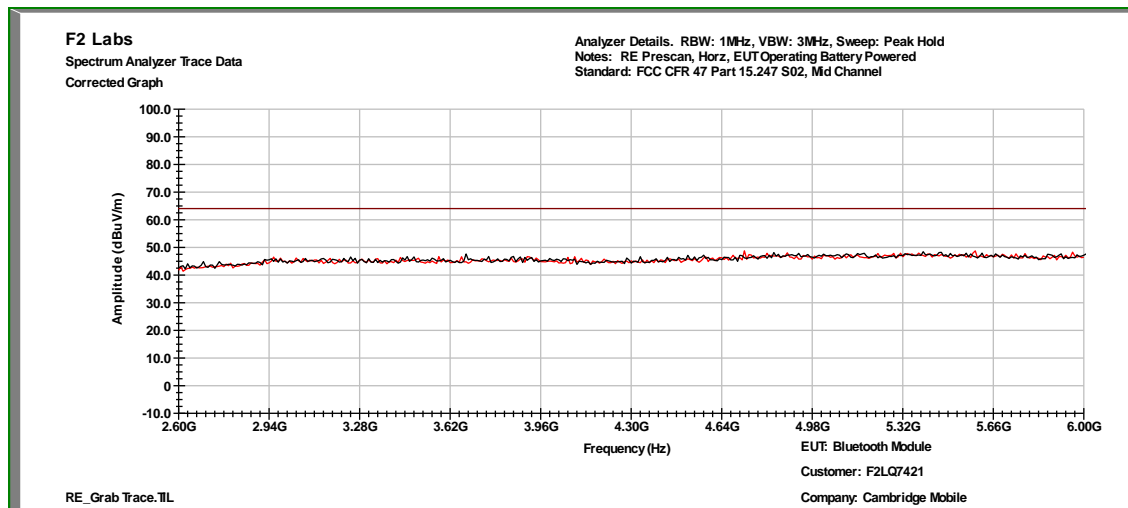
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

### Premium, Radiated Spurious Emissions: Mid Channel, 2.3 GHz to 2.6 GHz, Horizontal

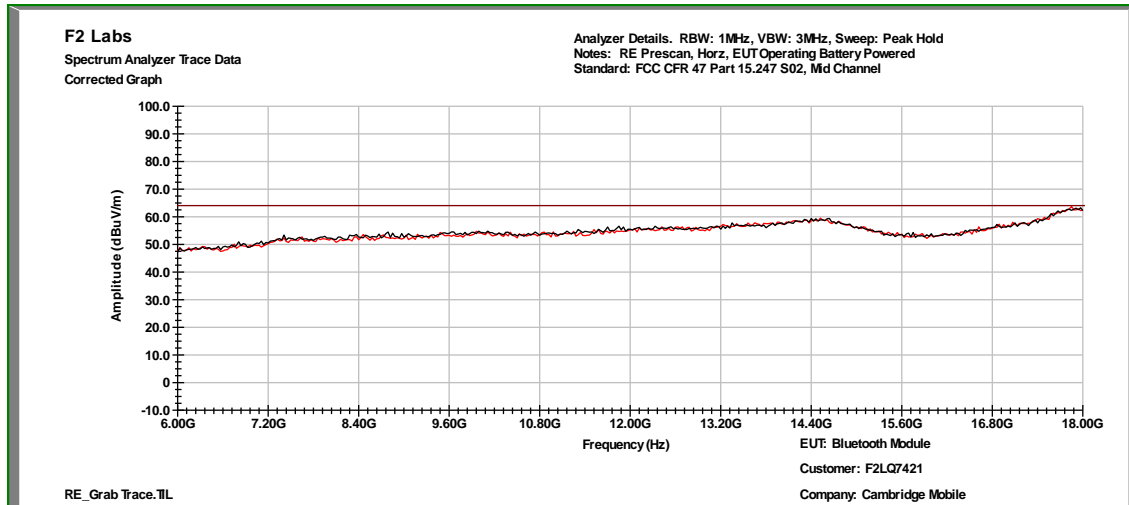


### Premium, Radiated Spurious Emissions: Mid Channel, 2.6 GHz to 6 GHz, Horizontal

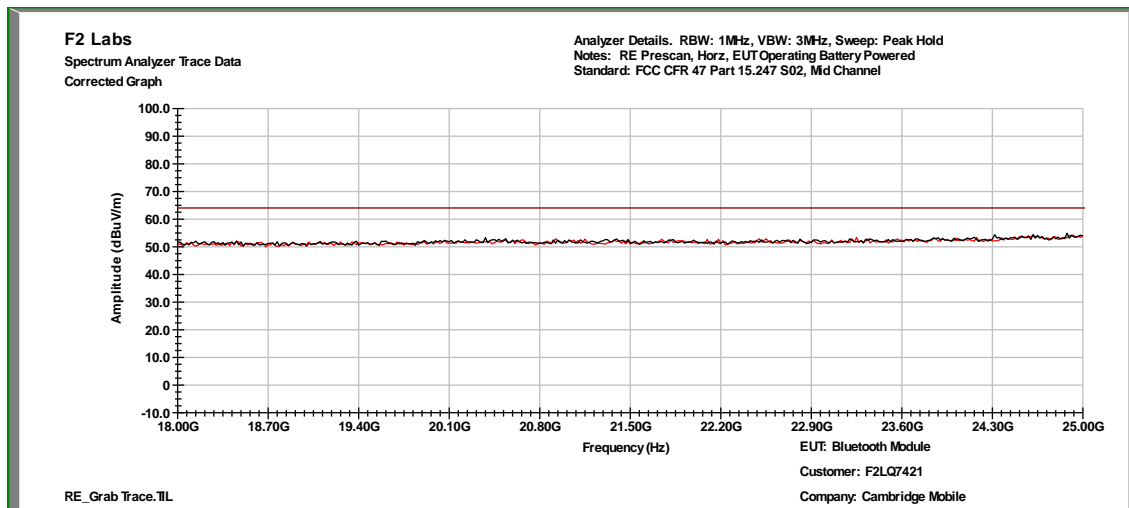




## Premium, Radiated Spurious Emissions: Mid Channel, 6 GHz to 18 GHz, Horizontal



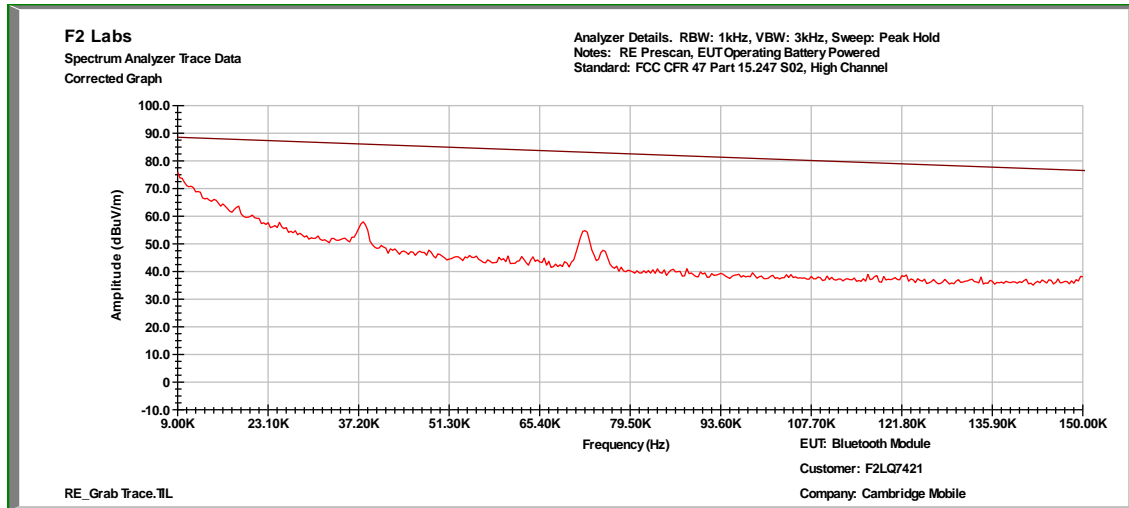
## Premium, Radiated Spurious Emissions: Mid Channel, 18 GHz to 25 GHz, Horizontal



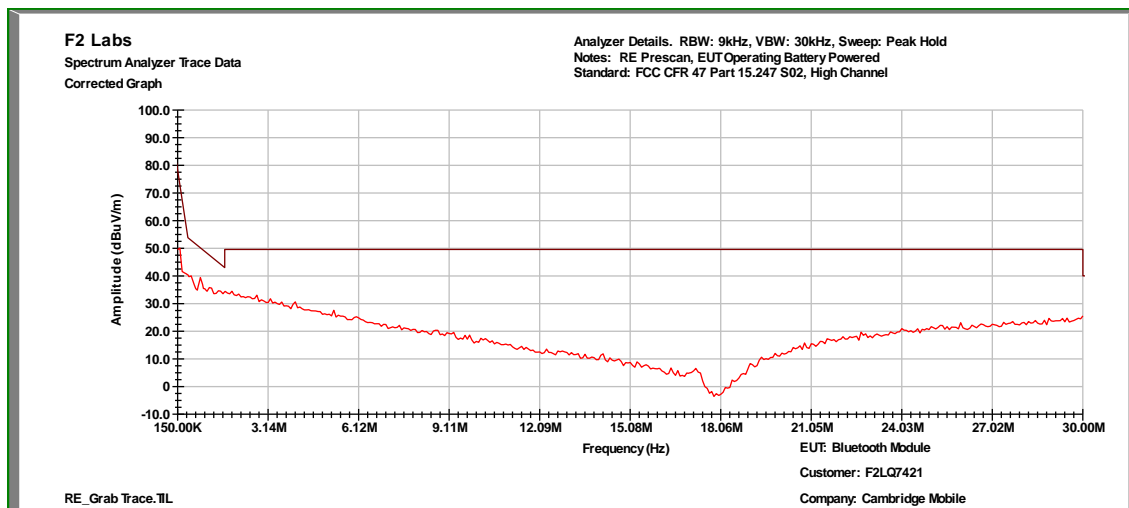




### Premium, Radiated Spurious Emissions: High Channel, 9k to 150k

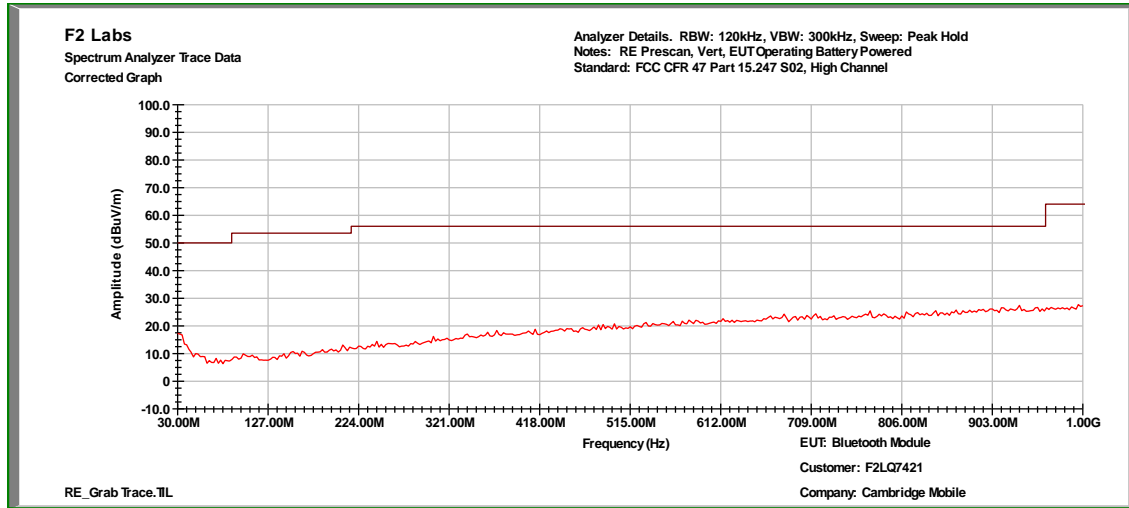


### Premium, Radiated Spurious Emissions: High Channel, 150k to 30 MHz

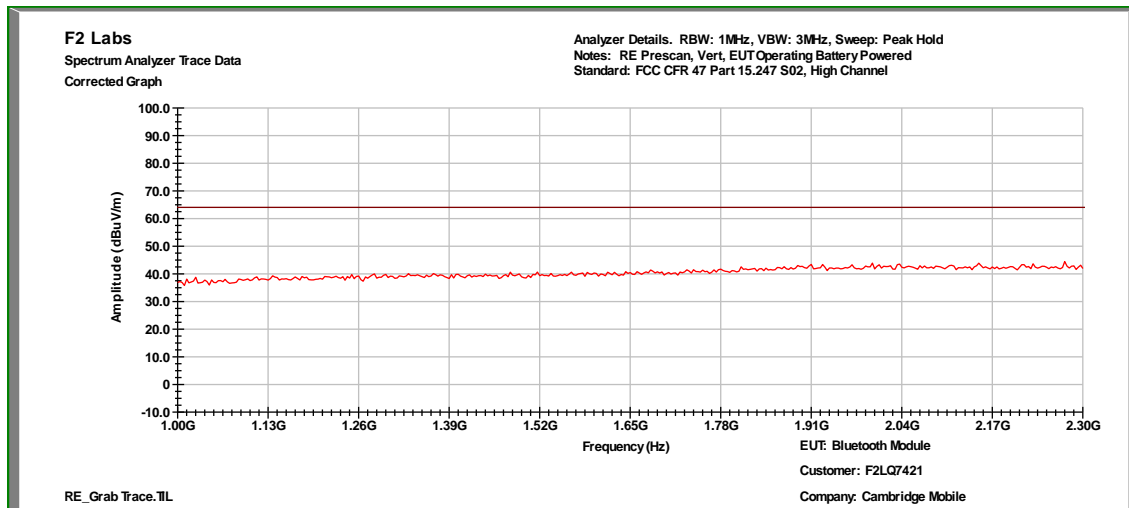




Premium, Radiated Spurious Emissions: High Channel, 30 MHz to 1 GHz, Vertical



Premium, Radiated Spurious Emissions: High Channel, 1 GHz to 2.3 GHz, Vertical



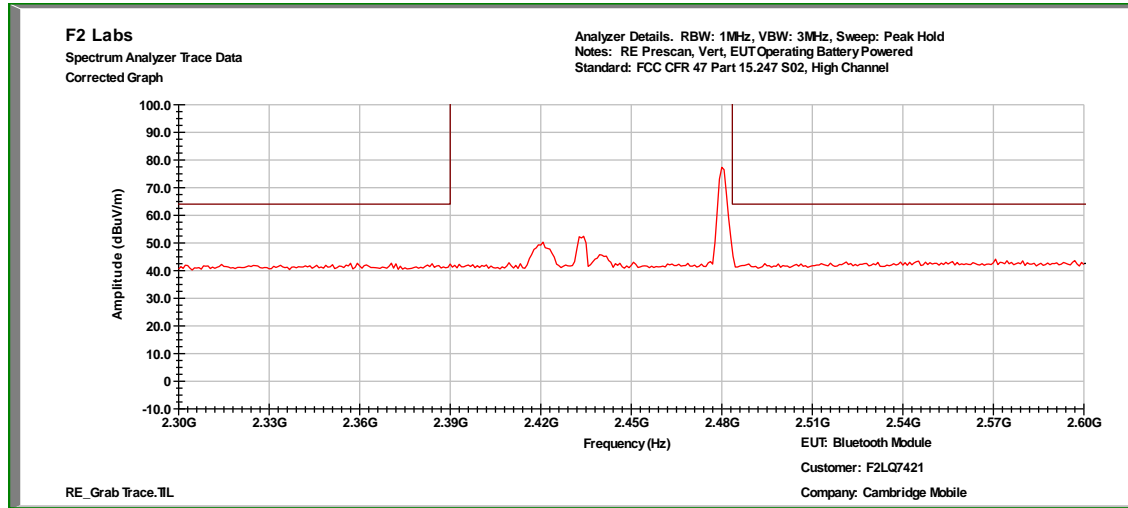


Order Number: F2LQ7421

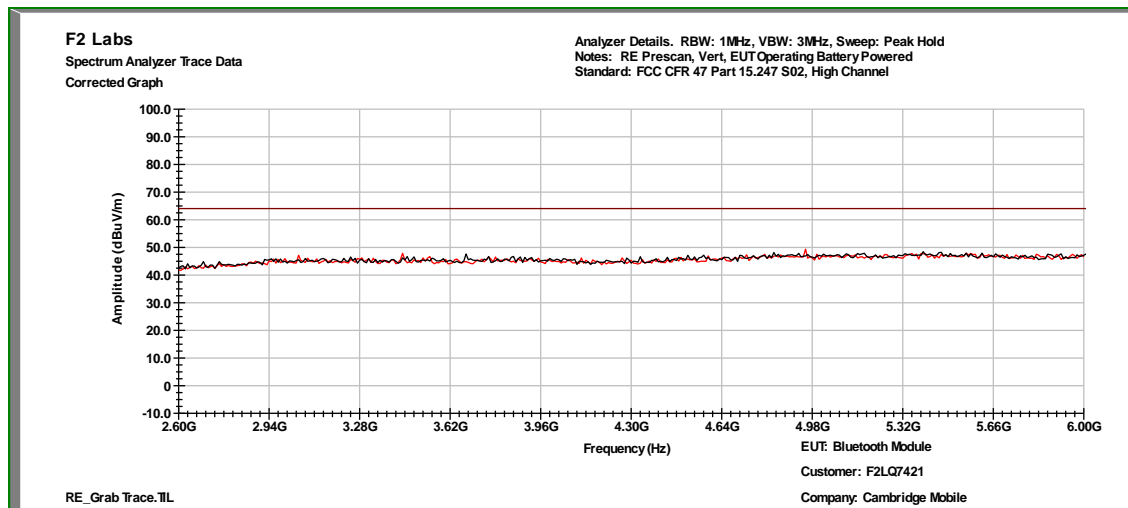
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

## Premium, Radiated Spurious Emissions: High Channel, 2.3 GHz to 2.6 GHz, Vertical

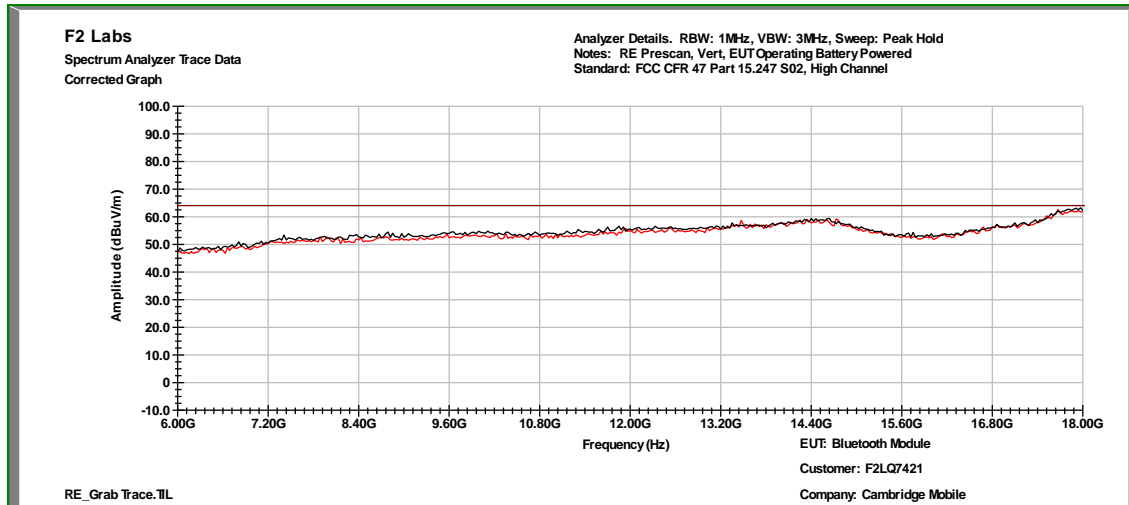


## Premium, Radiated Spurious Emissions: High Channel, 2.6 GHz to 6 GHz, Vertical

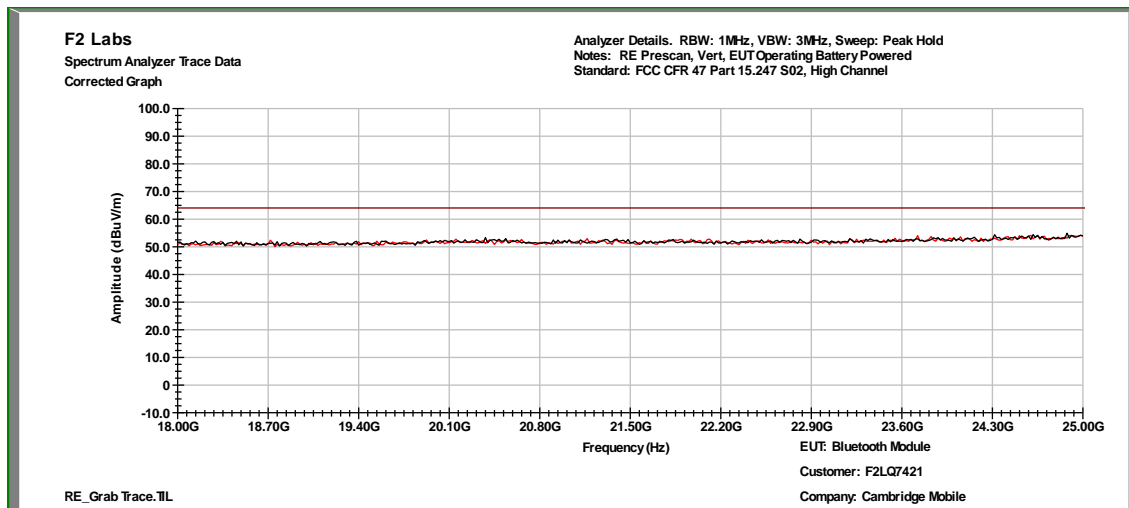




**Premium, Radiated Spurious Emissions: High Channel, 6 GHz to 18 GHz, Vertical**

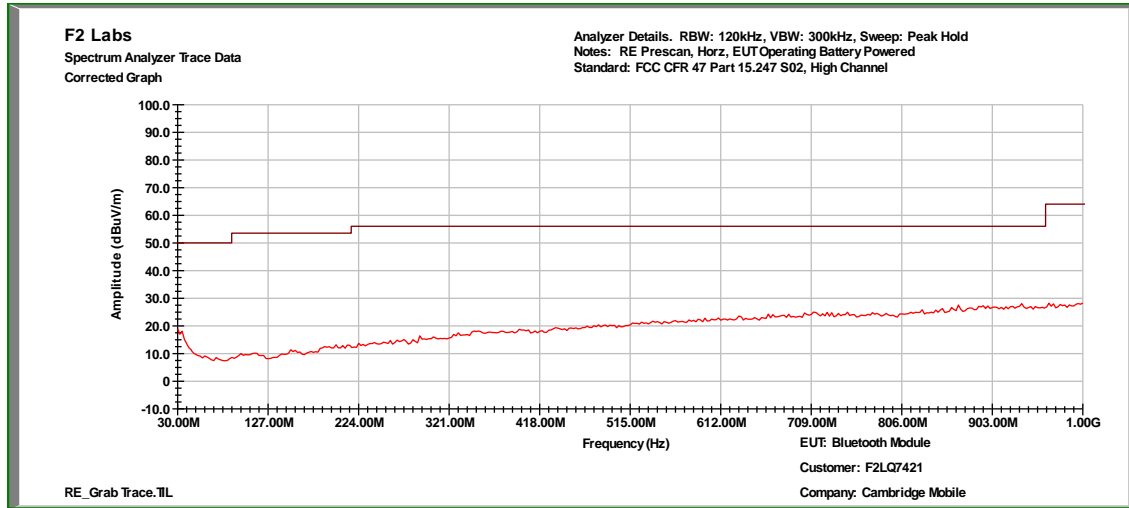


**Premium, Radiated Spurious Emissions: High Channel, 18 GHz to 25 GHz, Vertical**

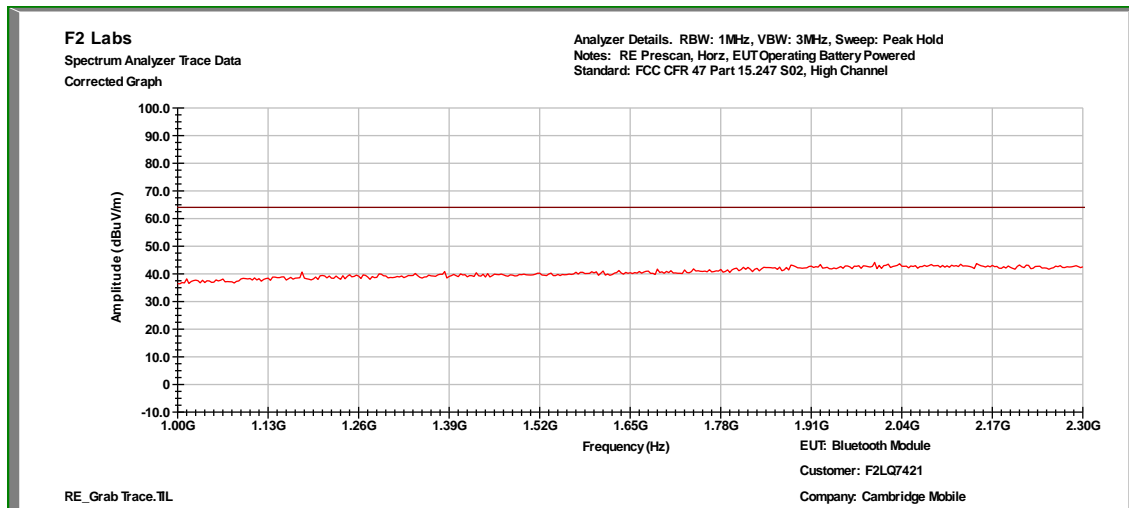




Premium, Radiated Spurious Emissions: High Channel, 30 MHz to 1 GHz, Horizontal



Premium, Radiated Spurious Emissions: High Channel, 1 GHz to 2.3 GHz, Horizontal



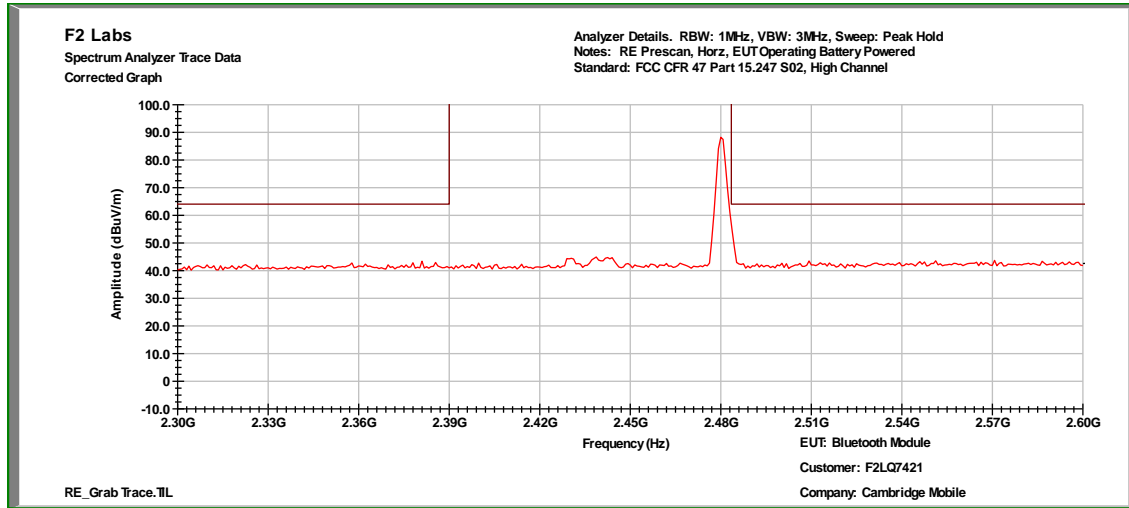


Order Number: F2LQ7421

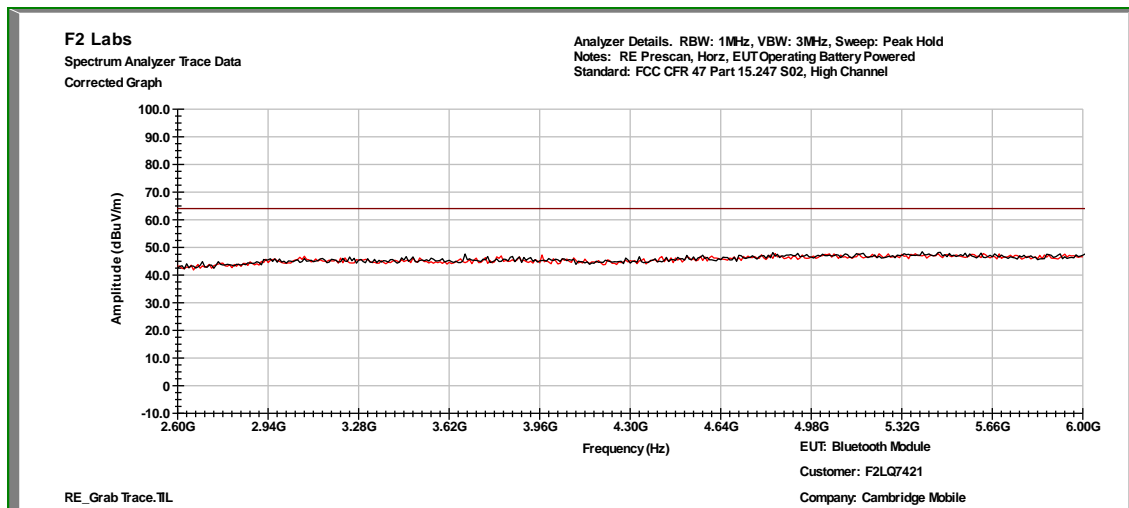
Client: Cambridge Mobile Telematics

Model(s): Lite, Premium

## Premium, Radiated Spurious Emissions: High Channel, 2.3 GHz to 2.6 GHz, Horizontal

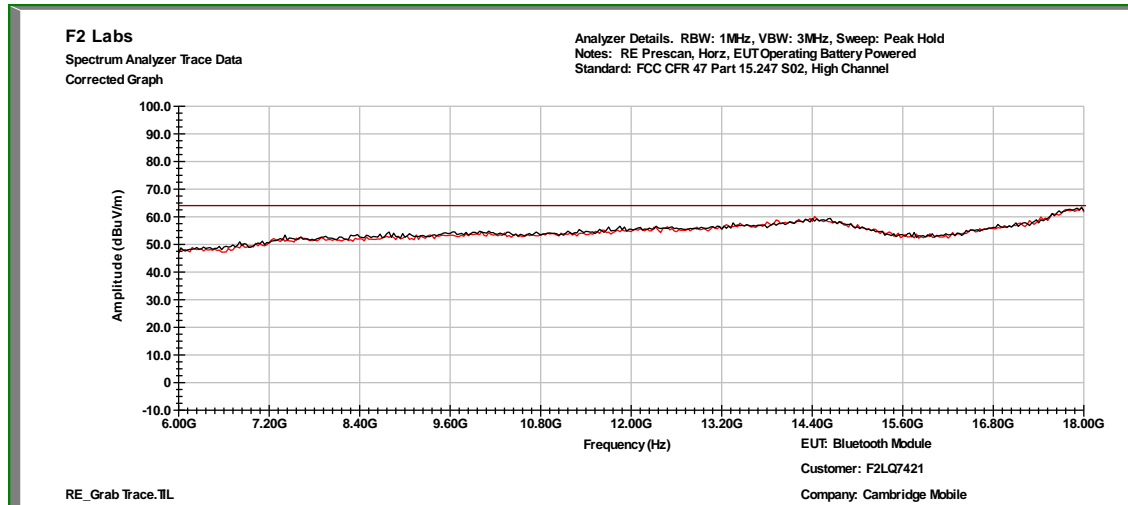


## Premium, Radiated Spurious Emissions: High Channel, 2.6 GHz to 6 GHz, Horizontal

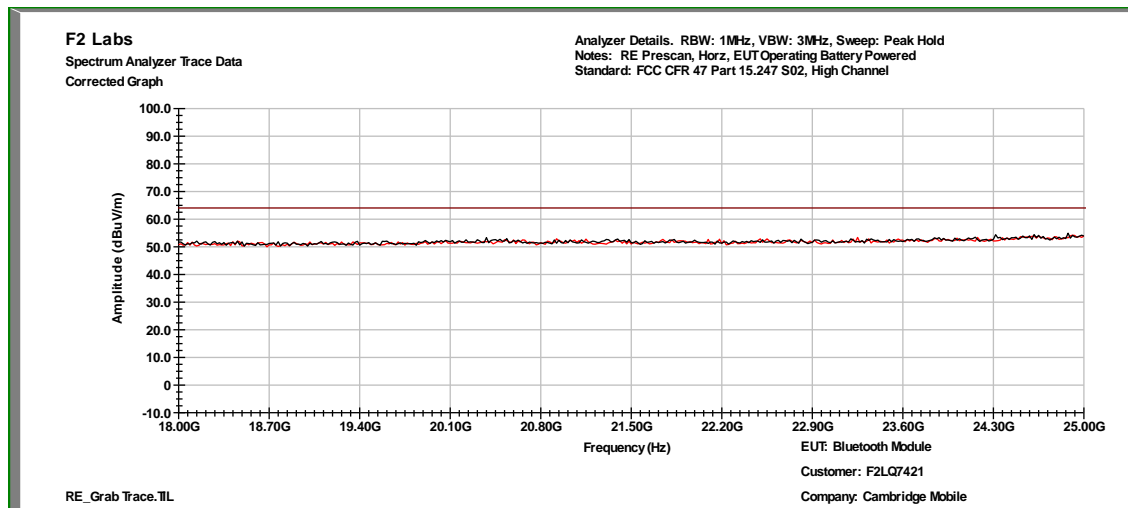


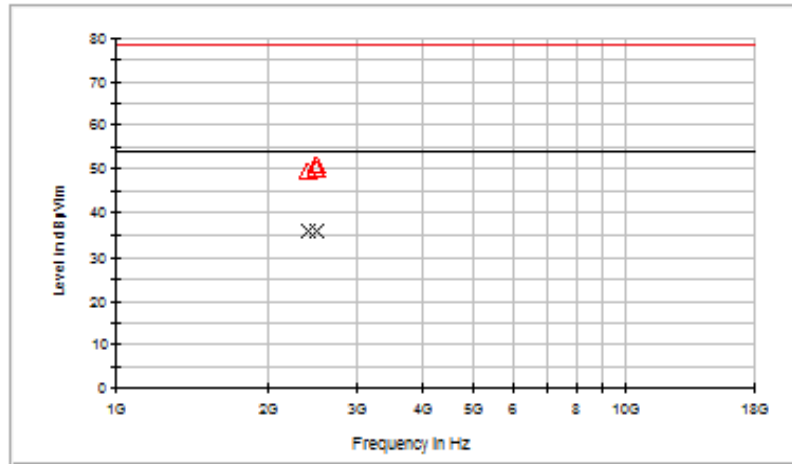


## Premium, Radiated Spurious Emissions: High Channel, 6 GHz to 18 GHz, Horizontal



## Premium, Radiated Spurious Emissions: High Channel, 18 GHz to 25 GHz, Horizontal



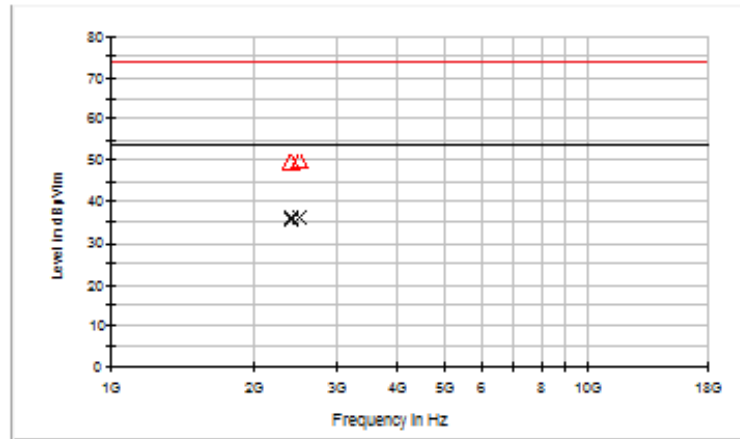
**Premium, Measurements****Premium, Low Channel - MaxPeak**

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	38.4	11.2	49.60	74.0	-24.4
2390.000000	V	38.4	11.2	49.60	74.0	-24.4
2483.500000	H	39.7	11.5	51.20	74.0	-22.8
2483.500000	V	38.4	11.5	49.90	74.0	-24.1

**Premium, Low Channel - Average**

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	24.8	11.2	36.00	54.0	-18.0
2390.000000	V	24.7	11.2	35.90	54.0	-18.1
2483.500000	H	24.8	11.5	36.30	54.0	-17.7
2483.500000	V	24.8	11.5	36.30	54.0	-17.7



**Premium, Mid Channel****Premium, Mid Channel - MaxPeak**

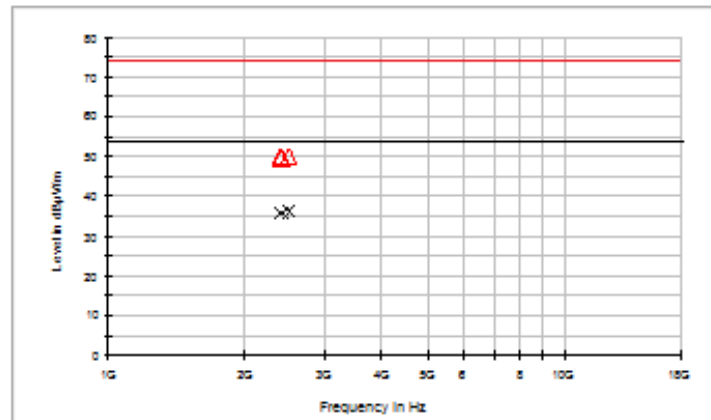
Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	38.4	11.2	49.60	74.0	-24.4
2390.000000	H	38.2	11.2	49.40	74.0	-24.6
2483.500000	V	38.5	11.5	50.00	74.0	-24.0
2483.500000	H	38.4	11.5	49.90	74.0	-24.1

**Premium, Mid Channel - Average**

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	V	24.7	11.2	35.90	54.0	-18.1
2390.000000	H	24.7	11.2	35.90	54.0	-18.1
2483.500000	V	24.8	11.5	36.30	54.0	-17.7
2483.500000	H	24.8	11.5	36.30	54.0	-17.7



## Premium, High Channel



## Premium, High Channel - MaxPeak

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	38.7	11.2	49.90	74.0	-24.1
2390.000000	V	38.2	11.2	49.40	74.0	-24.6
2483.500000	H	38.7	11.5	50.20	74.0	-23.8
2483.500000	V	38.7	11.5	50.20	74.0	-23.8

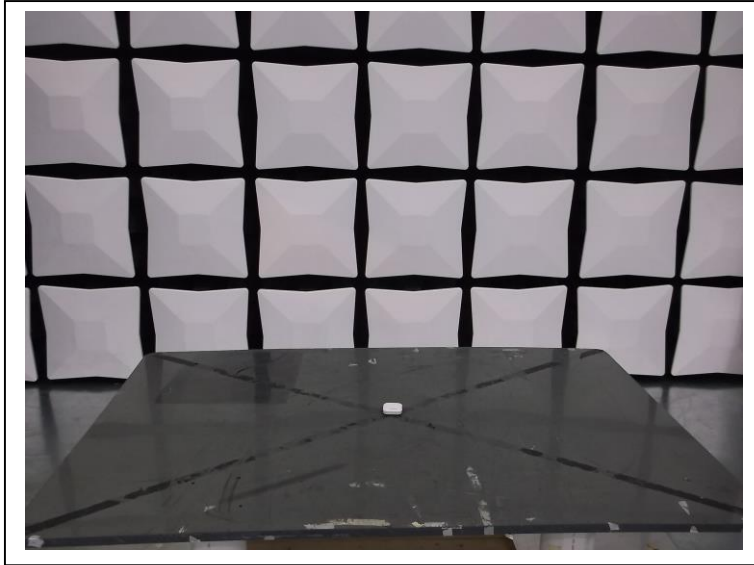
## Premium, High Channel - Average

Frequency (MHz)	Antenna Polarization	Reading (dBµV)	Cable Loss & Antenna Factor (dB)	Emission (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2390.000000	H	24.7	11.2	35.90	54.0	-18.1
2390.000000	V	24.7	11.2	35.90	54.0	-18.1
2483.500000	H	24.8	11.5	36.30	54.0	-17.7
2483.500000	V	24.8	11.5	36.30	54.0	-17.7



## 7 PHOTOGRAPHS/EXHIBITS – PRODUCT PHOTOS, TEST SETUPS

### Radiated Spurious Emission





Order Number: F2LQ7421

Client: Cambridge Mobile Telematics  
Model(s): Lite, Premium

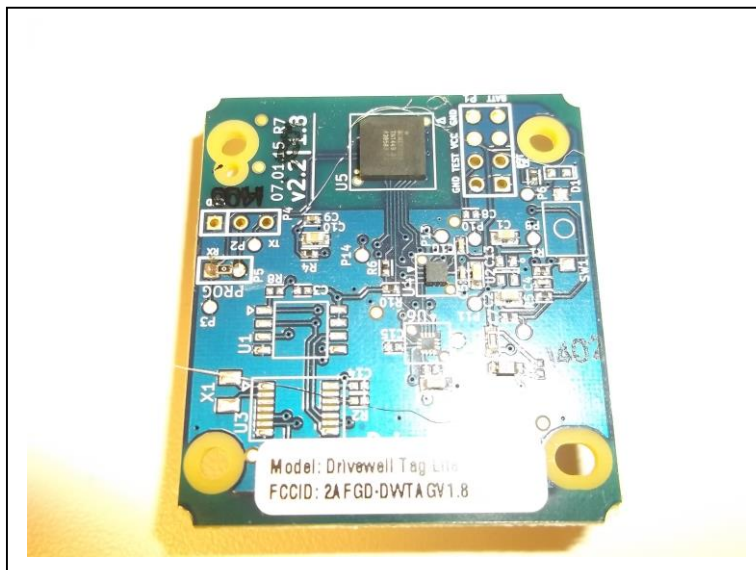
### Internal Photograph(s)





Order Number: F2LQ7421

Client: Cambridge Mobile Telematics  
Model(s): Lite, Premium





Order Number: F2LQ7421

Client: Cambridge Mobile Telematics  
Model(s): Lite, Premium

