Patrol Tag Inc., DBA Korner Safe

ADDENDUM TO TEST REPORT 96727-6

Tag
Model: Tag 1

Tested To The Following Standards:

FCC Part 15 Subpart C Section 15.247

Report No.: 96727-6A

Date of issue: May 6, 2015

A2LA ACCREDITED
Testing Certificates:
803.01, 803.02, 803.05, 803.06

This test report bears the accreditation symbol indicating that the testing performed herein meets the test and reporting requirements of ISO/IEC 17025 under the applicable scope of EMC testing for CKC Laboratories, Inc.

We strive to create long-term, trust based relationships by providing sound, adaptive, customer first testing services. We embrace each of our customers' unique EMC challenges, not as an interruption to set processes, but rather as the reason we are in business.

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ADMINISTRATIVE INFORMATION

Test Report Information

REPORT PREPARED FOR:

Patrol Tag Inc., DBA Korner Safe
1080 W. Ewing Place, Suite 300
Seattle, WA 98119

Representative: Chris Doughty

REPORT PREPARED BY:

Terri Rayle
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Project Number: 96727

DATE OF EQUIPMENT RECEIPT: February 11, 2015
DATE(S) OF TESTING: February 11, 2015

Revision History

Original: Testing of Tag, Model: Tag 1 to FCC Part 15 Subpart C Section 15.247.
Addendum A: To replace the Radiated Spurious Band Edge plots with RBW labeled incorrectly during original testing.

Report Authorization

The test data contained in this report documents the observed testing parameters pertaining to and are relevant for only the sample equipment tested in the agreed upon operational mode(s) and configuration(s) as identified herein. Compliance assessment remains the client's responsibility. This report may not be used to claim product endorsement by A2LA or any government agencies. This test report has been authorized for release under quality control from CKC Laboratories, Inc.

Steve Behm
Director of Quality Assurance & Engineering Services
CKC Laboratories, Inc.

Test Facility Information

Our laboratories are configured to effectively test a wide variety of product types. CKC utilizes first class test equipment, anechoic chambers, data acquisition and information services to create accurate, repeatable and affordable test results.

TEST LOCATION(S):
CKC Laboratories, Inc.
22116 23rd Drive S.E., Suite A
Bothell, WA 98021-4413

Software Versions

CKC Laboratories Proprietary Software	Version
EMITest Emissions	5.00.14
Immunity	5.00.07

Site Registration & Accreditation Information

Location	CB #	TAIWAN	CANADA	FCC	JAPAN
Bothell	US0081	SL2-IN-E-1145R	3082C-1	318736	A-0148

SUMMARY OF RESULTS

Standard / Specification: FCC Part 15 Subpart C

Test Procedure	Description	Modifications*	Results
15.247(a)(2)	Occupied Bandwidth	NA	Pass
15.247(b)(3)	RF Power Output	NA	Pass
15.247(d)	Conducted Spurious Emissions	NA	Pass
15.247(d)	Radiated Spurious Emissions and Band Edge	NA	Pass
15.247(e)	Power Spectral Density	NA	Pass

Modifications* During Testing

This list is a summary of the modifications made to the equipment during testing.

Summary of Conditions
No modifications were made during testing.

***Modifications listed above must be incorporated into all production units.**

Conditions During Testing

This list is a summary of the conditions noted to the equipment during testing.

Summary of Conditions
None

EQUIPMENT UNDER TEST (EUT)

EQUIPMENT UNDER TEST

Tag

Manuf: Patrol Tag Inc., DBA Korner Safe
Model: Tag 1
Serial: NA

PERIPHERAL DEVICES

The EUT was not tested with peripheral devices.

FCC PART 15 SUBPART C

15.247(a)(2) Occupied Bandwidth

Test Engineer: Steven M. Pittsford
Test Date: 02/11/2015

Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
02673	Spectrum Analyzer	E4446A	Agilent	10/04/2013	10/04/2015
P06241	Attenuator	54A-10	Weinschel	04/25/2014	04/25/2016
P06678	Cable	32026-29801-29801-144	Astrolab	09/18/2014	09/18/2016

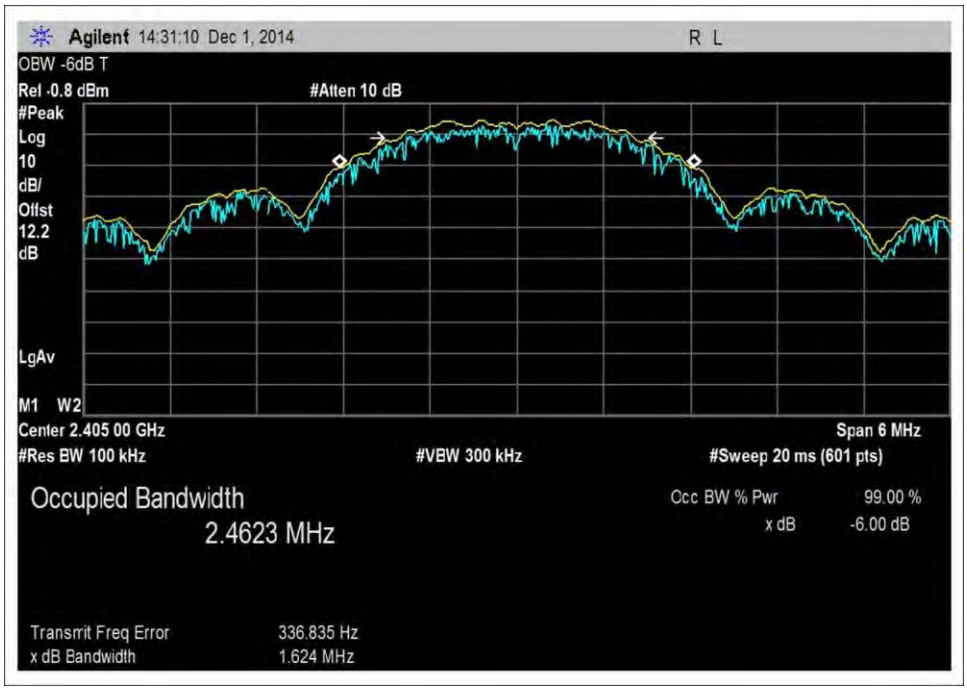
Test Conditions / Setup

Test Conditions:
Temp: 22°C
Humidity: 45%
Pressure: 102.0kPa
Test Method: KDB 558074 D01 DTS Meas Guidance v03r02 & ANSI 63.10 (2009)

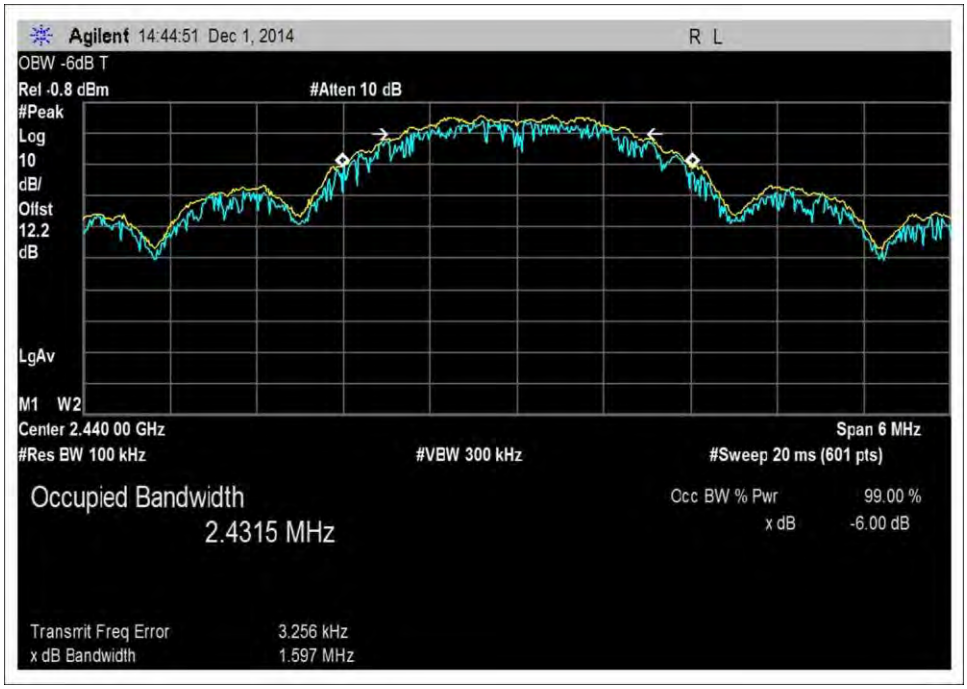
The EUT has a temporary antenna connector attached. The antenna connector is attached to the spectrum analyzer through an attenuator and a cable. The correction factors of the attenuators and cable are corrected for in the spectrum analyzer. The EUT uses a fresh battery per 15.31(e).

Frequency (MHz)	6dB Bandwidth (MHz)
2405	1.624
2440	1.597
2480	1.607

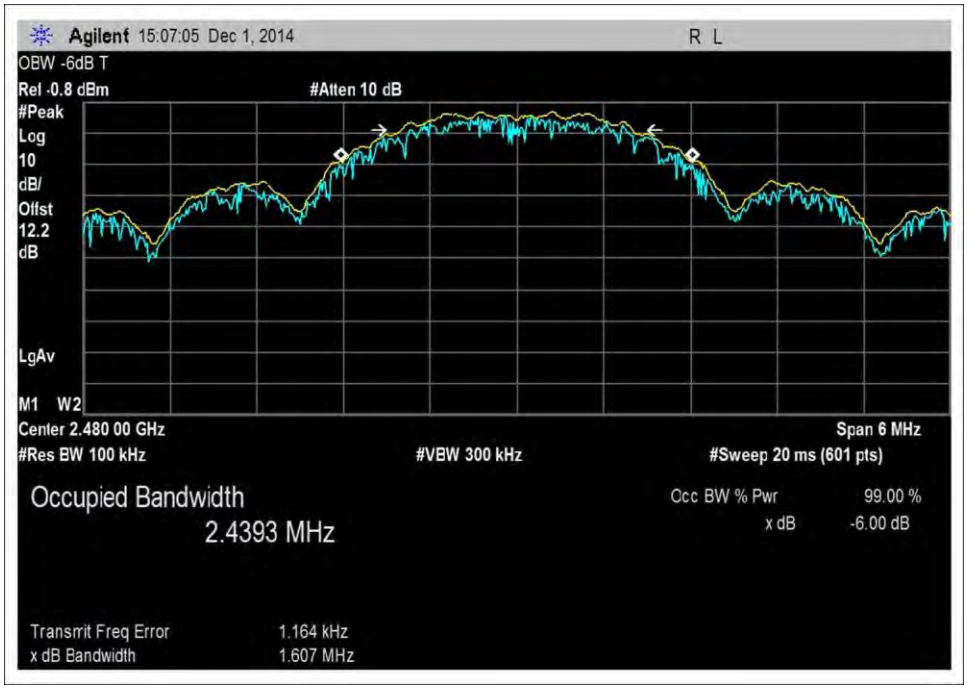
Test Data



Low Channel



Middle Channel



High Channel

Note: At the time of testing, the date stamp on the plots above was set on a default setting and should read 02/11/2015.

Test Setup Photo(s)

Test Setup #1

Test Setup #2

15.247(b)(3) RF Power Output

Test Engineer: Steven M. Pittsford
Test Date: 02/11/2015

Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
02673	Spectrum Analyzer	E4446A	Agilent	10/04/2013	10/04/2015
P06241	Attenuator	54A-10	Weinschel	04/25/2014	04/25/2016
P06678	Cable	32026-29801-29801-144	Astrolab	09/18/2014	09/18/2016

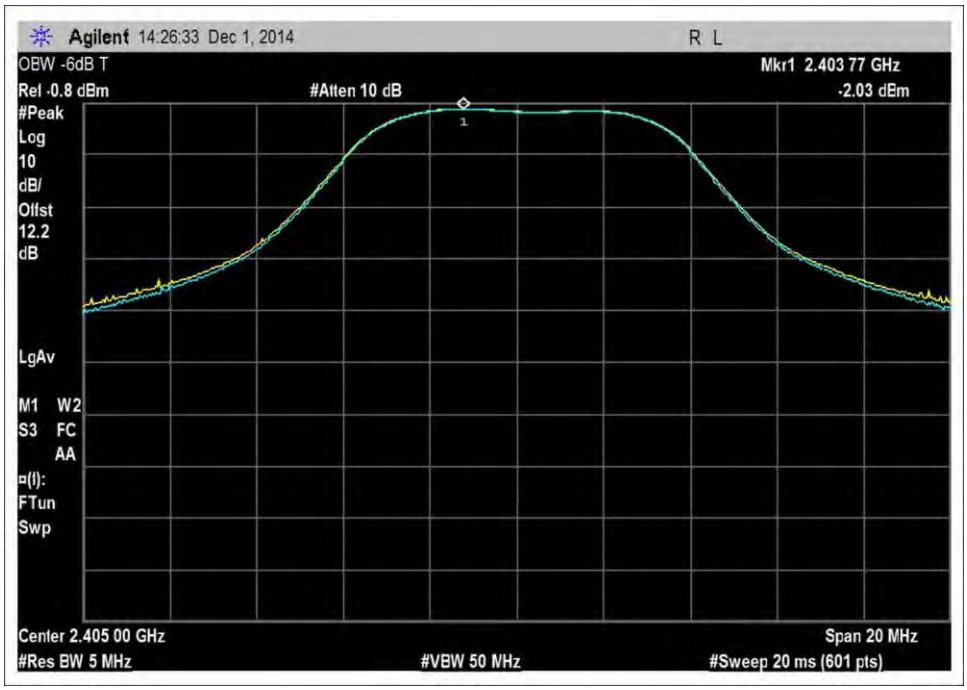
Test Conditions / Setup

Test Conditions:
Temp: 22°C
Humidity: 45%
Pressure: 102.0kPa
Test Method: KDB 558074 D01 DTS Meas Guidance v03r02 & ANSI 63.10 (2009)

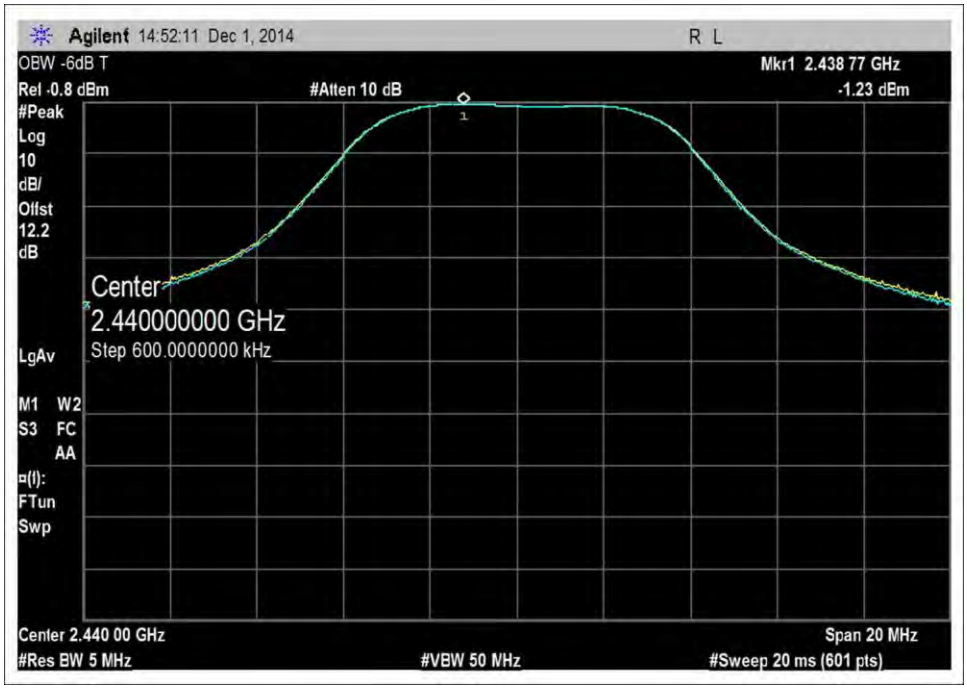
The EUT has a temporary antenna connector attached. The antenna connector is attached to the spectrum analyzer through an attenuator and a cable. The correction factors of the attenuators and cable are corrected for in the spectrum analyzer. The EUT uses a fresh battery per 15.31(e).

Frequency (MHz)	Corrections due to cable & Attenuator (dB)	Corrected Reading (dBm)	Conducted Power (Watts)
2405	12.2	-2.03	0.00063
2440	12.2	-1.23	0.00075
2480	12.2	0.05	0.00101

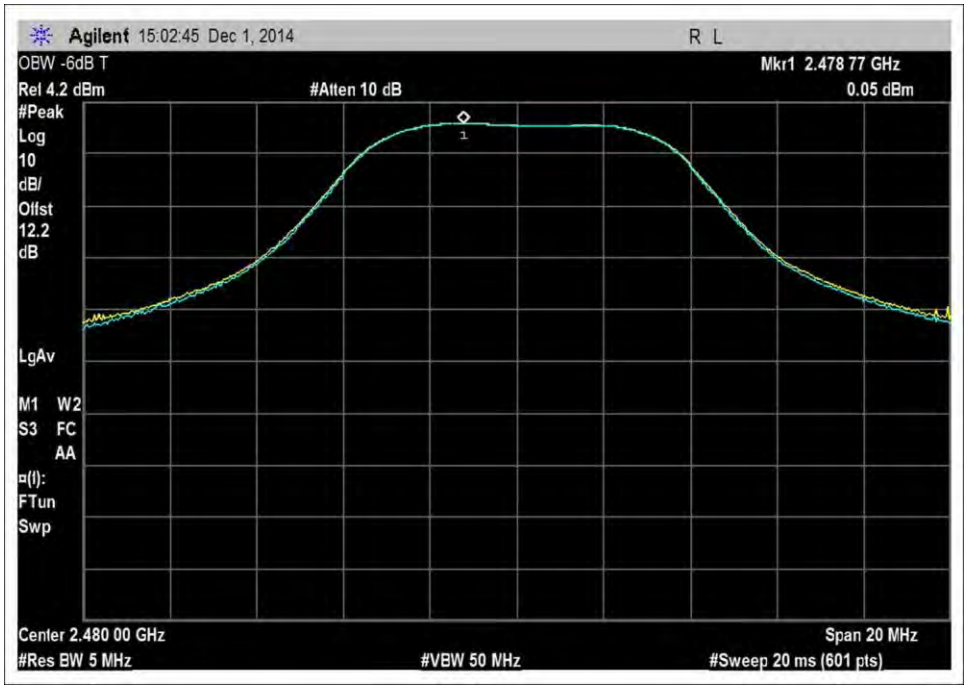
Test Data



Low Channel



Middle Channel



High Channel

Note: At the time of testing, the date stamp on the plots above was set on a default setting and should read 02/11/2015.

Test Setup Photo(s)

Test Setup #1

Test Setup #2

15.247(d) Conducted Spurious Emissions and Band Edge

Test Engineer: Steven M. Pittsford
Test Date: 02/11/2015

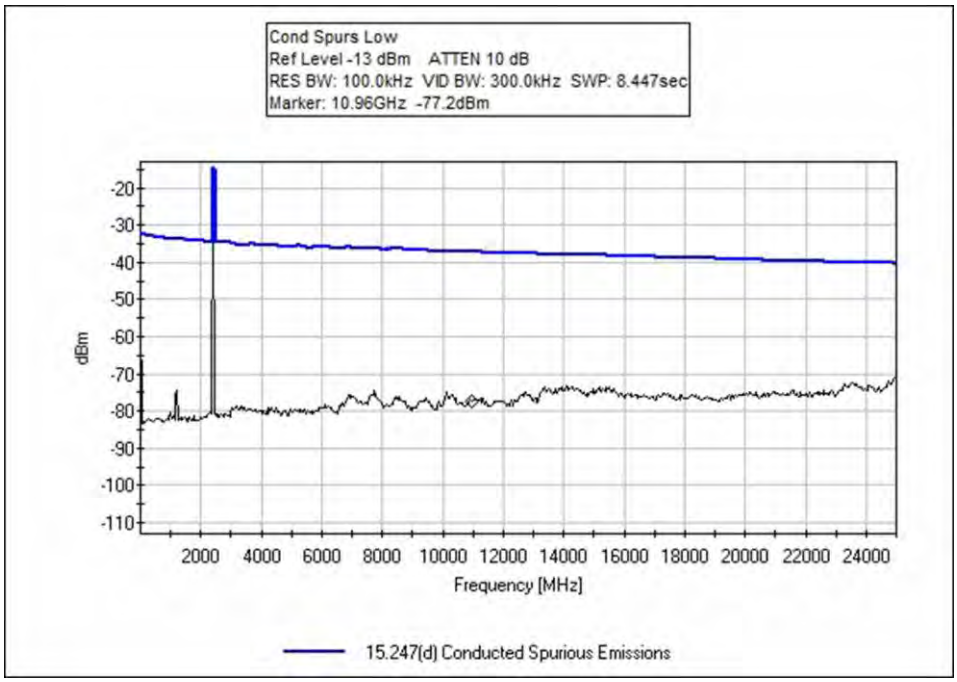
Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
02673	Spectrum Analyzer	E4446A	Agilent	10/04/2013	10/04/2015
P06241	Attenuator	54A-10	Weinschel	04/25/2014	04/25/2016
P06678	Cable	32026-29801-29801-144	Astrolab	09/18/2014	09/18/2016

Test Conditions / Setup

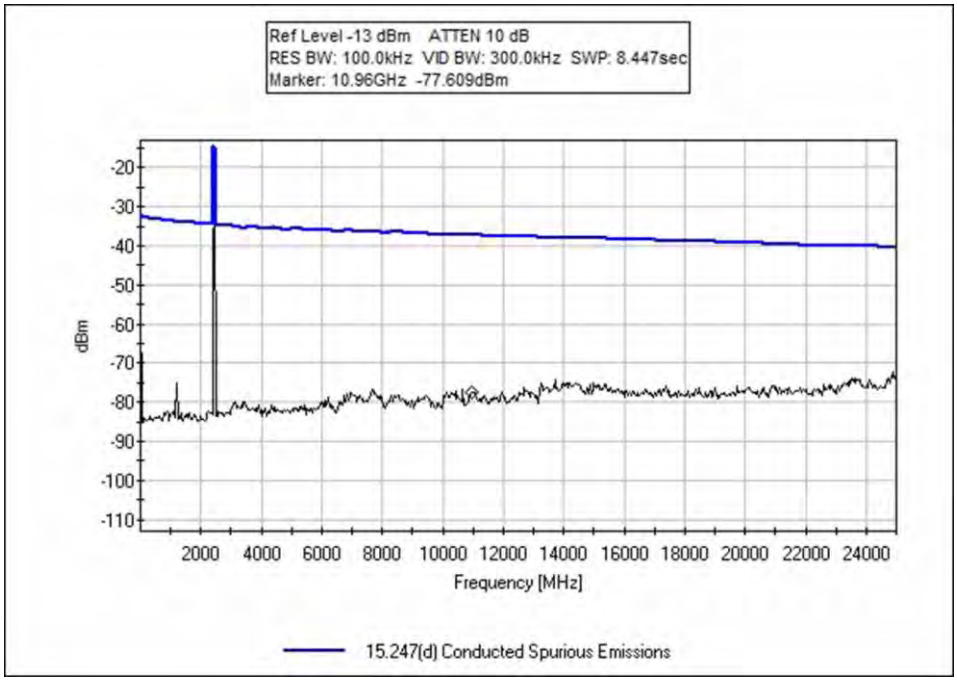
Test Conditions:
Temp: 22°C
Humidity: 45%
Pressure: 102.0kPa
Test Method: KDB 558074 D01 DTS Meas Guidance v03r02 & ANSI 63.10 (2009)

The EUT has a temporary antenna connector attached. The antenna connector is attached to the spectrum analyzer through an attenuator and a cable. The correction factors of the attenuators and cable are corrected for in the spectrum analyzer. The EUT uses a fresh battery per 15.31(e).

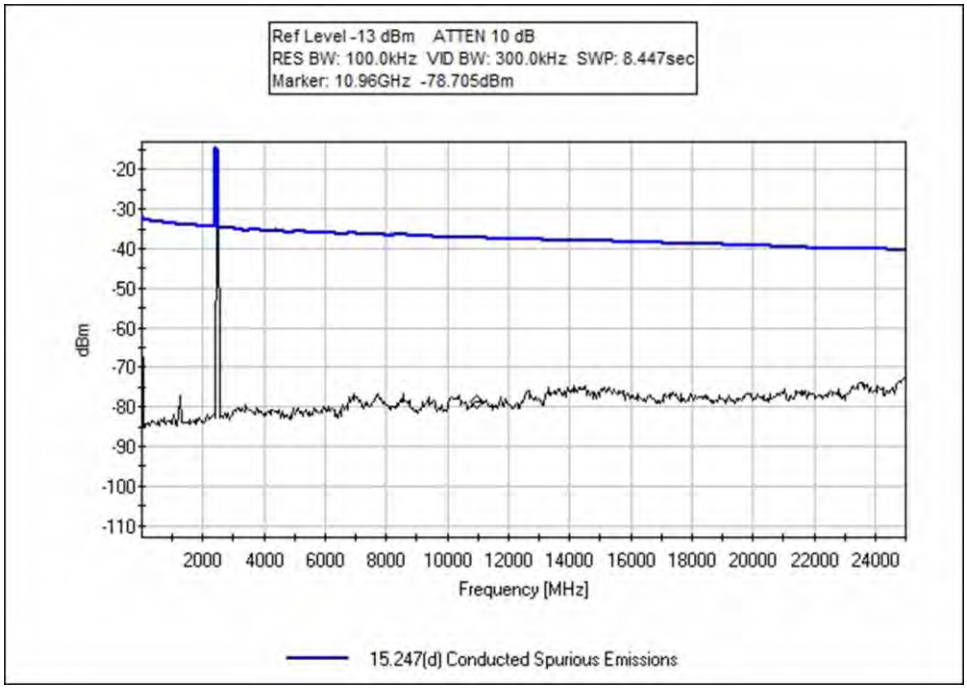
Test Data



Low Frequency

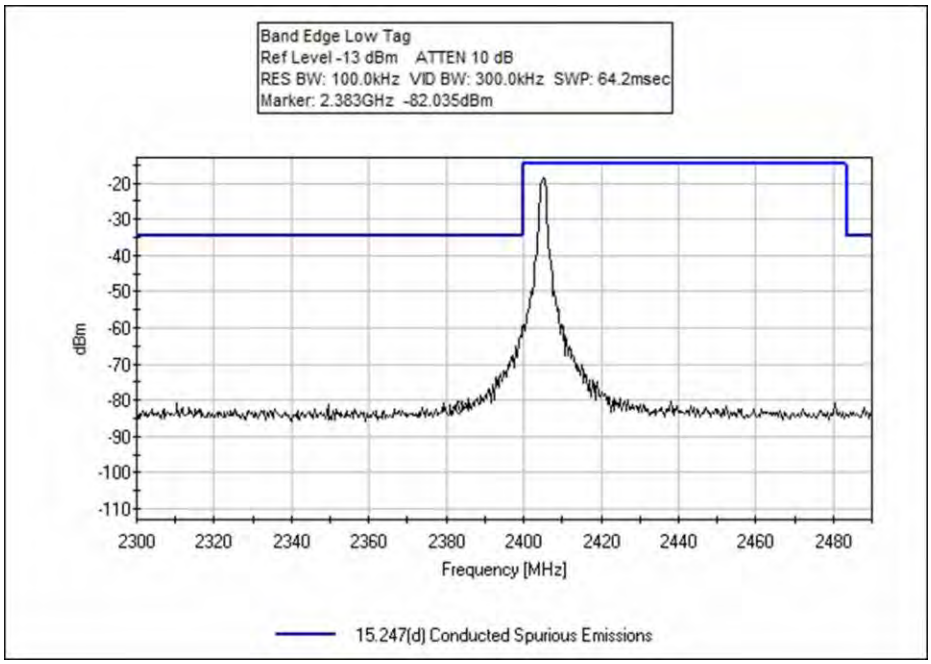


Middle Frequency

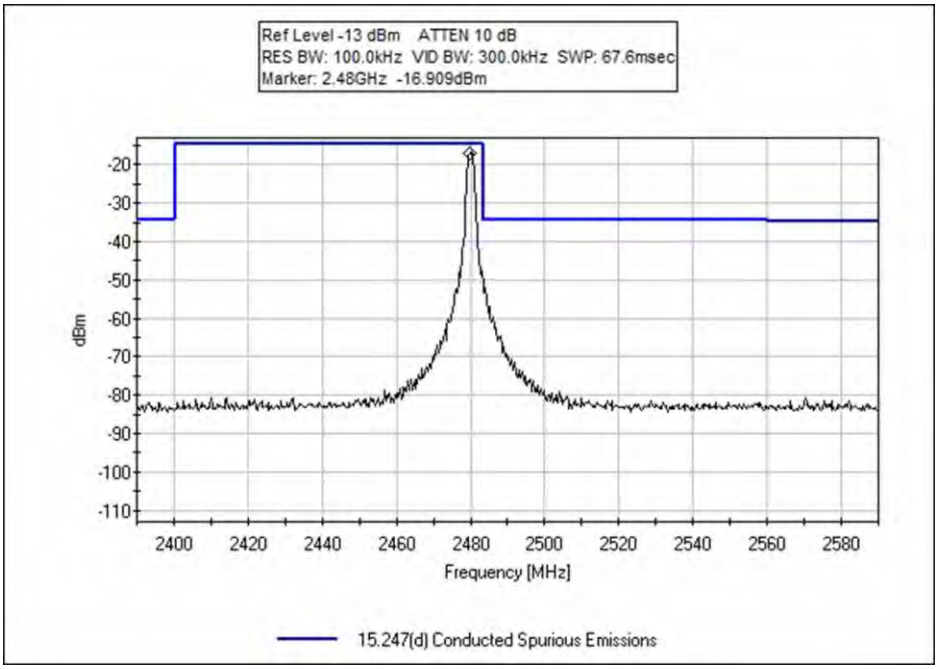


High Frequency

Band Edge Test Data

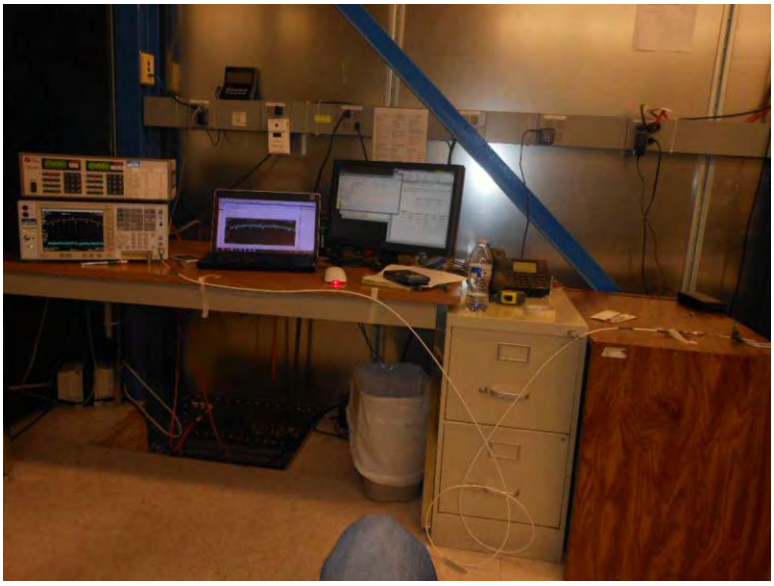


Low Frequency



High Frequency

Test Setup Photo(s)



Test Setup #1

Test Setup #2

15.247(d) Radiated Spurious Emissions and Band Edge

Test Data

Test Location: CKC Laboratories, Inc. • 22116 23rd Drive SE, Suite A • Bothell, WA 98021 • (425) 402-1717

Customer: **Patrol Tag Inc., DBA Korner Safe**
Specification: **15.247(d) / 15.209 Radiated Spurious Emissions**
Work Order #: **96727** Date: 2/11/2015
Test Type: **Maximized Emissions** Time: 15:20:09
Equipment: **Tag** Sequence#: 2
Manufacturer: Patrol Tag Inc., DBA Korner Safe Tested By: Steven Pittsford
Model: Tag 1
S/N:

***Test Equipment*:**

ID	Asset #	Description	Model	Calibration Date	Cal Due Date
T1	AN03209	Preamp	83051A	3/5/2013	3/5/2015
T2	AN01467	Horn Antenna-ANSI C63.5 Calibration	3115	9/16/2013	9/16/2015
T3	ANP05305	Cable	ETSI-50T	2/20/2014	2/20/2016
T4	ANP06505	Cable	32026-29080-29080-84	10/18/2013	10/18/2015
T5	AN00052	Loop Antenna	6502	5/20/2014	5/20/2016
T6	AN02307	Preamp	8447D	3/14/2014	3/14/2016
T7	AN01996	Biconilog Antenna	CBL6111C	7/16/2014	7/16/2016
T8	ANP05360	Cable	RG214	12/1/2014	12/1/2016
T9	ANP05963	Cable	RG-214	2/21/2014	2/21/2016
T10	AN02673	Spectrum Analyzer	E4446A	10/4/2013	10/4/2015
T11	AN02763-69	Waveguide	Multiple	5/21/2014	5/21/2016
T12	ANP06503	Cable	32026-29801-29801-36	5/1/2014	5/1/2016
T13	AN02742	Active Horn Antenna	AMFW-5F-18002650-20-10P	1/14/2015	1/14/2017
T14	ANP06678	Cable	32026-29801-29801-144	9/18/2014	9/18/2016

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Tag*	Patrol Tag Inc., DBA Korner Safe	Tag 1	

Support Devices:

Function	Manufacturer	Model #	S/N

Test Conditions / Notes:

Temperature: 22°C
Pressure: 102.0kPa
Humidity: 45%
Frequency: 9k-25GHz
Test Method: KDB 558074 D01 DTS Meas Guidance v03r02 & ANSI 63.10 (2009)

Mode: The EUT is Transmitting at Low, Mid and High Channels

The EUT is located on top of a Styrofoam table, 80cm over the ground plane.
The EUT is investigated in laying and standing axis with only the worst case being reported.

Ext Attn: 0 dB

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

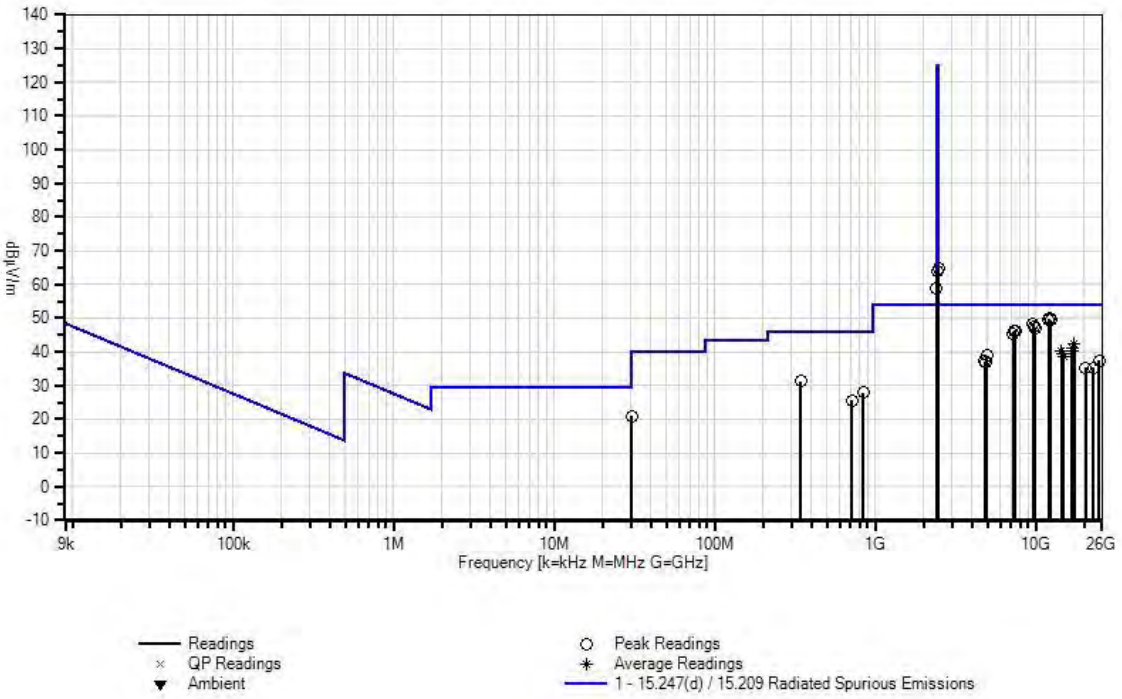
#	Freq	Rdng	T1 T5 T9 T13	T2 T6 T10 T14	T3 T7 T11	T4 T8 T12	Dist	Corr	Spec	Margin	Polar
	MHz	dBµV	dB	dB	dB	dB	Table	dBµV/m	dBµV/m	dB	Ant
1	12200.663 M	30.0	-29.0 +0.0 +0.0 +0.0	+38.3 +0.0 +0.0 +0.0	+7.0 +0.0 +0.0	+3.5 +0.0 +0.0	+0.0 130	49.8	54.0 Mid	-4.2	V & H 104
2	12025.055 M	29.7	-28.7 +0.0 +0.0 +0.0	+38.3 +0.0 +0.0 +0.0	+6.8 +0.0 +0.0	+3.6 +0.0 +0.0	+0.0 262	49.7	54.0 Low	-4.3	V & H 105
3	12402.040 M	30.0	-29.4 +0.0 +0.0 +0.0	+38.3 +0.0 +0.0 +0.0	+7.1 +0.0 +0.0	+3.5 +0.0 +0.0	+0.0	49.5	54.0 High	-4.5	V & H 104
4	9622.124M	29.6	-27.8 +0.0 +0.0 +0.0	+37.5 +0.0 +0.0 +0.0	+6.3 +0.0 +0.0	+2.9 +0.0 +0.0	+0.0 205	48.5	54.0 Low	-5.5	V & H 111
5	9760.411M	28.7	-27.8 +0.0 +0.0 +0.0	+37.4 +0.0 +0.0 +0.0	+6.3 +0.0 +0.0	+2.9 +0.0 +0.0	+0.0 238	47.5	54.0 Mid	-6.5	V & H 104
6	9921.405M	28.6	-27.9 +0.0 +0.0 +0.0	+37.3 +0.0 +0.0 +0.0	+6.3 +0.0 +0.0	+2.9 +0.0 +0.0	+0.0	47.2	54.0 High	-6.8	V & H 104
7	7438.820M	29.9	-28.2 +0.0 +0.0 +0.0	+37.5 +0.0 +0.0 +0.0	+4.7 +0.0 +0.0	+2.5 +0.0 +0.0	+0.0 44	46.4	54.0 High	-7.6	V & H 104

8	7319.613M	30.1	-28.2	+37.0	+4.8	+2.4	+0.0	46.1	54.0	-7.9	V & H
			+0.0	+0.0	+0.0	+0.0	360		Mid		105
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0							
9	7216.109M	29.9	-28.2	+36.6	+4.8	+2.4	+0.0	45.5	54.0	-8.5	V & H
			+0.0	+0.0	+0.0	+0.0			Low		106
			+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0							
10	17361.285	17.7	-30.0	+42.0	+8.6	+4.2	+0.0	42.5	54.0	-11.5	V & H
	M		+0.0	+0.0	+0.0	+0.0					
	Ave		+0.0	+0.0	+0.0	+0.0			High		104
			+0.0	+0.0							
^	17361.285	31.2	-30.0	+42.0	+8.6	+4.2	+0.0	56.0	54.0	+2.0	V & H
	M		+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0			High		104
			+0.0	+0.0							
12	17080.000	17.5	-30.2	+41.2	+8.4	+4.3	+0.0	41.2	54.0	-12.8	V & H
	M		+0.0	+0.0	+0.0	+0.0					
	Ave		+0.0	+0.0	+0.0	+0.0	360		Mid		104
			+0.0	+0.0							
^	17080.000	31.9	-30.2	+41.2	+8.4	+4.3	+0.0	55.6	54.0	+1.6	V & H
	M		+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0			Mid		104
			+0.0	+0.0							
14	14430.000	18.2	-31.1	+41.0	+8.1	+4.1	+0.0	40.3	54.0	-13.7	V & H
	M		+0.0	+0.0	+0.0	+0.0					
	Ave		+0.0	+0.0	+0.0	+0.0	360		Mid		104
			+0.0	+0.0							
^	14430.000	31.8	-31.1	+41.0	+8.1	+4.1	+0.0	53.9	54.0	-0.1	V & H
	M		+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0	360		Mid		104
			+0.0	+0.0							
16	16835.000	17.0	-30.5	+40.8	+8.3	+4.5	+0.0	40.1	54.0	-13.9	V & H
	M		+0.0	+0.0	+0.0	+0.0					
	Ave		+0.0	+0.0	+0.0	+0.0	254		Low		105
			+0.0	+0.0							
^	16835.000	31.1	-30.5	+40.8	+8.3	+4.5	+0.0	54.2	54.0	+0.2	V & H
	M		+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0	42		Low		105
			+0.0	+0.0							
18	14639.208	18.0	-31.0	+40.2	+8.3	+3.8	+0.0	39.3	54.0	-14.7	V & H
	M		+0.0	+0.0	+0.0	+0.0					
	Ave		+0.0	+0.0	+0.0	+0.0	360		Mid		104
			+0.0	+0.0							
^	14639.208	31.9	-31.0	+40.2	+8.3	+3.8	+0.0	53.2	54.0	-0.8	V & H
	M		+0.0	+0.0	+0.0	+0.0					
			+0.0	+0.0	+0.0	+0.0	14		Mid		104
			+0.0	+0.0							

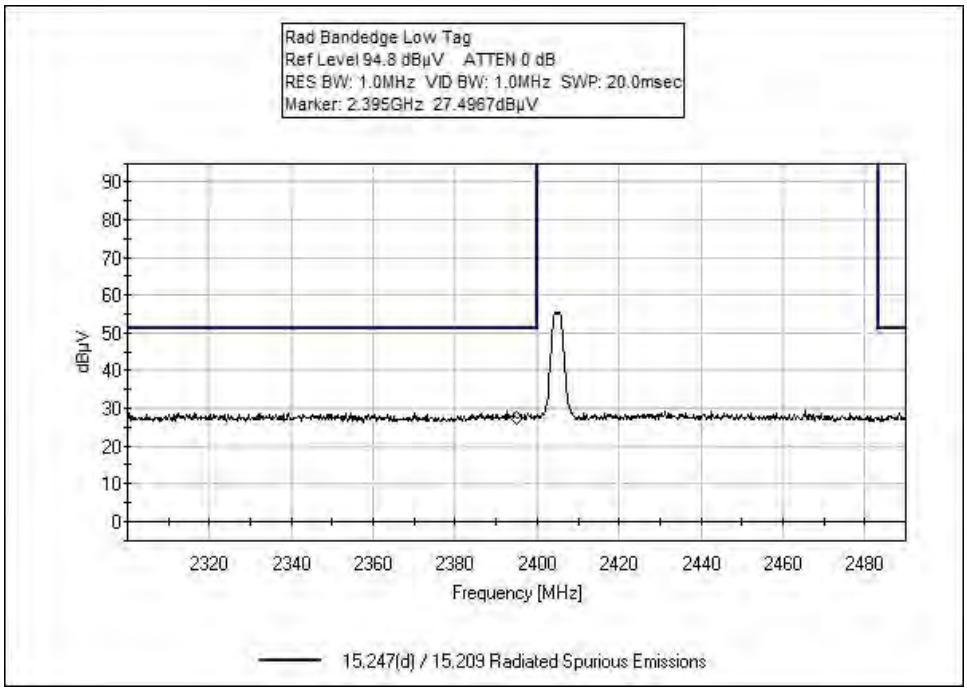
20	345.200M	41.3	+0.0 +0.0 +0.9 +0.0	+0.0 -27.2 +0.0 +0.0	+0.0 +15.1 +0.0	+0.0 +1.1 +0.0	+0.0	31.2	46.0	-14.8	V & H 99
21	4958.290M	30.6	-30.8 +0.0 +0.0 +0.0	+32.5 +0.0 +0.0 +0.0	+4.0 +0.0 +0.0	+2.6 +0.0 +0.0	+0.0 360	38.9	54.0 High	-15.1	V & H 104
22	14878.085 M Ave	18.1	-31.0 +0.0 +0.0 +0.0	+39.4 +0.0 +0.0 +0.0	+8.4 +0.0 +0.0	+3.7 +0.0 +0.0	+0.0	38.6	54.0 High	-15.4	V & H 104
^	14878.085 M	31.7	-31.0 +0.0 +0.0 +0.0	+39.4 +0.0 +0.0 +0.0	+8.4 +0.0 +0.0	+3.7 +0.0 +0.0	+0.0	52.2	54.0 High	-1.8	V & H 104
24	24762.000 M	36.8	+0.0 +0.0 +0.0 -12.3	+0.0 +0.0 +0.0 +7.8	+0.0 +0.0 +2.8	+0.0 +0.0 +2.4	+0.0	37.5	54.0	-16.5	V & H 104
25	4810.259M	29.8	-30.9 +0.0 +0.0 +0.0	+32.1 +0.0 +0.0 +0.0	+3.8 +0.0 +0.0	+2.5 +0.0 +0.0	+0.0	37.3	54.0 Low	-16.7	V & H 106
26	4879.229M	29.1	-30.9 +0.0 +0.0 +0.0	+32.3 +0.0 +0.0 +0.0	+3.9 +0.0 +0.0	+2.7 +0.0 +0.0	+0.0	37.1	54.0 Mid	-16.9	V & H 105
27	842.400M	29.2	+0.0 +0.0 +1.4 +0.0	+0.0 -27.5 +0.0 +0.0	+0.0 +23.0 +0.0	+0.0 +1.9 +0.0	+0.0 6	28.0	46.0	-18.0	V & H 103
28	22795.000 M	39.1	+0.0 +0.0 +0.0 -16.5	+0.0 +0.0 +0.0 +7.5	+0.0 +0.0 +3.0	+0.0 +0.0 +2.3	+0.0	35.4	54.0	-18.6	V & H 104
29	20478.000 M	37.3	+0.0 +0.0 +0.0 -13.9	+0.0 +0.0 +0.0 +7.0	+0.0 +0.0 +2.7	+0.0 +0.0 +2.2	+0.0	35.3	54.0	-18.7	V & H 104
30	30.540M	29.8	+0.0 +0.0 +0.2 +0.0	+0.0 -28.0 +0.0 +0.0	+0.0 +18.6 +0.0	+0.0 +0.3 +0.0	+0.0	20.9	40.0	-19.1	V & H 103
31	717.754M	29.7	+0.0 +0.0 +1.3 +0.0	+0.0 -28.0 +0.0 +0.0	+0.0 +21.0 +0.0	+0.0 +1.7 +0.0	+0.0 359	25.7	46.0	-20.3	V & H 103

32	309.000k	56.7	+0.0 +9.5 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.0 +0.0 +0.0	+0.0 +0.0 +0.0	-80.0 5	-13.8	17.8	-31.6	Perp 104
33	27.691M	24.1	+0.0 +4.6 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.3 +0.0 +0.0	+0.2 +0.0 +0.0	-40.0 360	-10.8	29.5	-40.3	Perp 104
34	27.691M	22.5	+0.0 +4.6 +0.0 +0.0	+0.0 +0.0 +0.0 +0.0	+0.3 +0.0 +0.0	+0.2 +0.0 +0.0	-40.0	-12.4	29.5	-41.9	Perp 104
35	2480.600M	63.0	-30.3 +0.0 +0.0 +0.0	+27.9 +0.0 +0.0 +0.0	+2.7 +0.0 +0.0	+1.4 +0.0 +0.0	+0.0	64.7	125.2 High	-60.5	V & H 111
36	2440.000M	62.1	-30.4 +0.0 +0.0 +0.0	+28.0 +0.0 +0.0 +0.0	+2.7 +0.0 +0.0	+1.4 +0.0 +0.0	+0.0 359	63.8	125.2 Mid	-61.4	V & H 104
37	2404.000M	57.1	-30.4 +0.0 +0.0 +0.0	+28.0 +0.0 +0.0 +0.0	+2.7 +0.0 +0.0	+1.4 +0.0 +0.0	+0.0 304	58.8	125.2 Low	-66.4	V & H 101

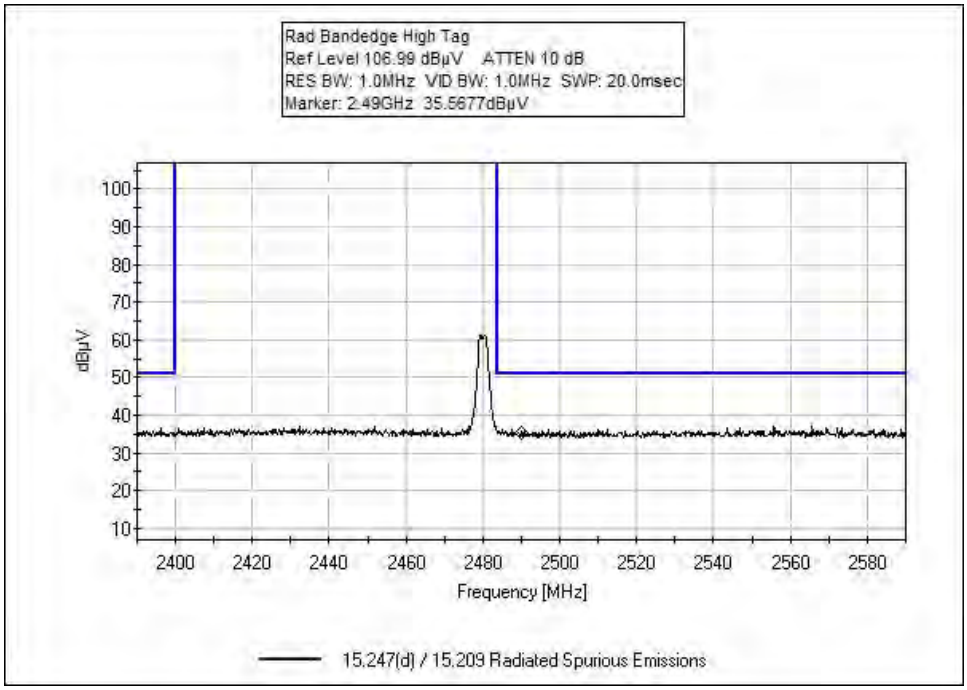
CKC Laboratories, Inc. Date: 2/11/2015 Time: 15:20:09 Patrol Tag Inc, DBA Korner Safe WO#: 96727
Test Distance: 3 Meters Sequence#: 2 V & H
Patrol Tag Inc, DBA Korner Safe Tag P/N: Tag 1



Test Data Band Edge



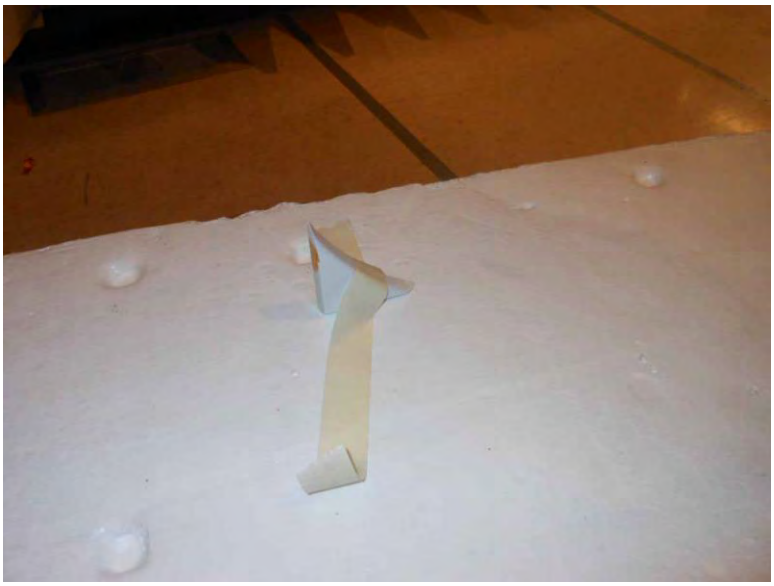
Low Frequency



High Frequency

Test Setup Photo(s)

Laying



Standing

15. 247(e) Power Spectral Density

Test Engineer: Steven M. Pittsford
Test Date: 02/11/2015

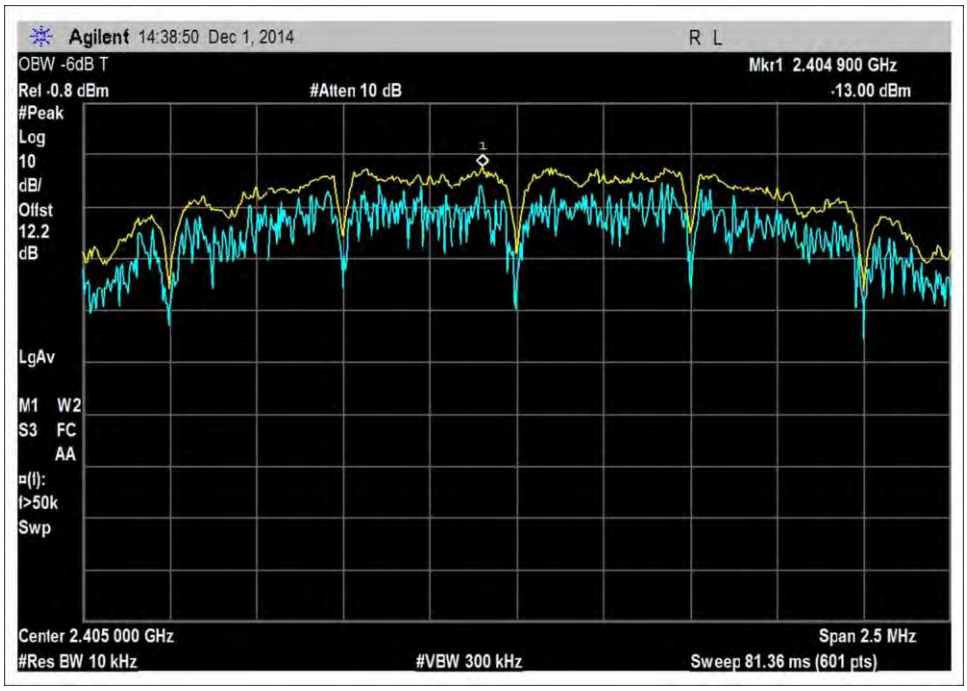
Test Equipment					
Asset #	**Description**	**Model**	**Manufacturer**	**Cal Date**	**Cal Due**
02673	Spectrum Analyzer	E4446A	Agilent	10/04/2013	10/04/2015
P06241	Attenuator	54A-10	Weinschel	04/25/2014	04/25/2016
P06678	Cable	32026-29801-29801-144	Astrolab	09/18/2014	09/18/2016

Test Conditions / Setup

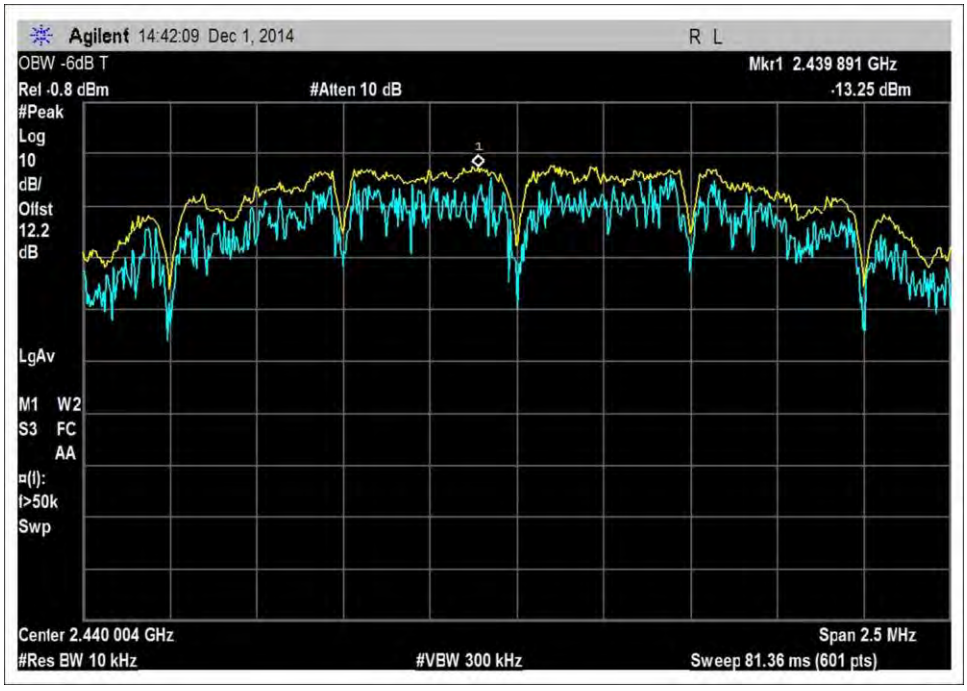
Test Conditions:
Temp: 22°C
Humidity: 45%
Pressure: 102.0kPa
Test Method: KDB 558074 D01 DTS Meas Guidance v03r02 & ANSI 63.10 (2009)

The EUT has a temporary antenna connector attached. The antenna connector is attached to the spectrum analyzer through an attenuator and a cable. The correction factors of the attenuators and cable are corrected for in the spectrum analyzer. The EUT uses a fresh battery per 15.31(e).

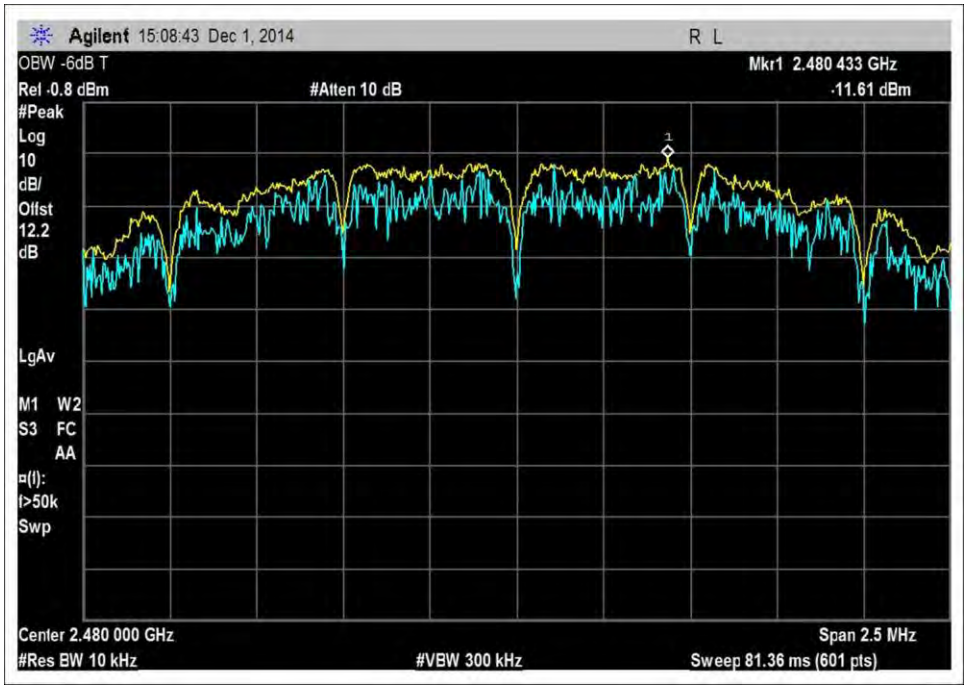
Test Data



Low Channel



Middle Channel



High Channel

Note: At the time of testing, the date stamp on the plots above was set on a default setting and should read 02/11/2015.

Test Setup Photo(s)

Test Setup #1

Test Setup #2

SUPPLEMENTAL INFORMATION

Measurement Uncertainty

Uncertainty Value	Parameter
4.73 dB	Radiated Emissions
3.34 dB	Mains Conducted Emissions
3.30 dB	Disturbance Power

Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

Emissions Test Details

TESTING PARAMETERS

Unless otherwise indicated, the following configuration parameters are used for equipment setup: The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. Cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the setup photographs. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables.

The emissions data was taken with a spectrum analyzer or receiver. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the table below. The corrected data was then compared to the applicable emission limits. Preliminary and final measurements were taken in order to ensure that all emissions from the EUT were found and maximized.

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula. This reading was then compared to the applicable specification limit.

SAMPLE CALCULATIONS		
	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed were used to collect the emissions data. A spectrum analyzer or receiver was used for all measurements. Unless otherwise specified, the following table shows the measuring equipment bandwidth settings that were used in designated frequency bands. For testing emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used.

MEASURING EQUIPMENT BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	>1 GHz	1 MHz

SPECTRUM ANALYZER/RECEIVER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the emissions tables indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "positive peak" detector mode. Whenever a "quasi-peak" or "average" reading was recorded, the measurement was annotated with a "QP" or an "Ave" on the appropriate rows of the data sheets. In cases where quasi-peak or average limits were employed and data exists for multiple measurement types for the same frequency then the peak measurement was retained in the report for reference, however the numbering for the affected row was removed and an arrow or carrot ("^") was placed in the far left-hand column indicating that the row above takes precedence for comparison to the limit. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data.

Peak

In this mode, the spectrum analyzer or receiver recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature called "peak hold," the measurement device had the ability to measure intermittent or low duty cycle transient emission peak levels. In this mode the measuring device made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

Quasi-peak measurements were taken using the quasi-peak detector when the true peak values exceeded or were within 2 dB of a quasi-peak specification limit. Additional QP measurements may have been taken at the discretion of the operator.

Average

Average measurements were taken using the average detector when the true peak values exceeded or were within 2 dB of an average specification limit. Additional average measurements may have been taken at the discretion of the operator. If the specification or test procedure requires trace averaging, then the averaging was performed using 100 samples or as required by the specification. All other average measurements are performed using video bandwidth averaging. To make these measurements, the test engineer reduces the video bandwidth on the measuring device until the modulation of the signal is filtered out. At this point the measuring device is set into the linear mode and the scan time is reduced.