**MET Laboratories, Inc.** ***Safety Certification - EMI - Telecom Environmental Simulation***
**914 WEST PATAPSCO AVENUE • BALTIMORE, MARYLAND 21230 • PHONE (410) 354-3300 • FAX (410) 354-3313**
**33439 WESTERN AVENUE • UNION CITY, CALIFORNIA 94587 • PHONE (510) 489-6300 • FAX (510) 489-6372**
**3162 BELICK STREET • SANTA CLARA, CALIFORNIA 95054 • PHONE (408) 748-3585 • FAX (510) 489-6372**
**13301 MCCALLEN PASS • AUSTIN, TEXAS 78753 • PHONE (512) 287-2500 • FAX (512) 287-2513**

August 15, 2017

Elecraft
125 Westridge Dr.
Watsonville, CA 95076

Dear Bob Wolbert,

Enclosed is the EMC test report for compliance testing of the Elecraft, KPA1500, tested to the requirements of FCC Part 97.307 (d) and (e).

Thank you for using the services of MET Laboratories, Inc. If you have any questions regarding these results or if MET can be of further service to you, please feel free to contact me.

Sincerely yours,
MET LABORATORIES, INC.

Joel Huna
Documentation Department

Reference: (\Elecraft\EMCS94106-FCC 97 Rev. 2)

**MET Laboratories, Inc.** *Safety Certification - EMI - Telecom Environmental Simulation*
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# Electromagnetic Compatibility
# Test Report

for the

**Elecraft**
**KPA1500**

Tested under

**FCC Part 97. 307 (d) and (e)**

**MET Report: EMCS94106-FCC 97 Rev. 2**
**August 15, 2017**

**Prepared for:**
**Elecraft**
**125 Westridge Dr.**
**Watsonville, CA 95076**

**Prepared by:**
**MET Laboratories, Inc.**
3162 Belick Street
Santa Clara, CA 95054

# Electromagnetic Compatibility
# Test Report

For the

**Elecraft**
**KPA1500**

Tested under

**FCC Part 97.307 (d) and (e)**

**MET Report: EMCS94106-FCC 97 Rev. 2**

Ajaz Khan
Electromagnetic Compatibility Lab

Joel Huna
Documentation Department

**Engineering Statement:** The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the applicable limits. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements per Test Summary (Section 1.0).

John Mason
Director, Electromagnetic Compatibility Lab

# Report Status Sheet

| Revision | Report Date | Reason for Revision |
|---|---|---|
| Ø | July 28, 2017 | Initial Issue. |
| 1 | August 11, 2017 | Customer Corrections. |
| 2 | August 15, 2017 | Typo Correction. |

# Table of Contents

# List of Tables



# List of Figures



# List of Photographs



# List of Terms and Abbreviations

| | | | |
|---|---|---|---|
| **AC** | **A**lternating **C**urrent | **kPa** | **k**ilo**pa**scal |
| **ACF** | **A**ntenna **C**orrection **F**actor | **kV** | **k**ilo**v**olt |
| **AV** | **Av**erage | **LISN** | **L**ine **I**mpedance **S**tabilization **N**etwork |
| **Cal** | **Cal**ibration | **MHz** | **M**ega**h**ertz |
| ***d*** | **M**easurement **D**istance | **µH** | **microh**enry |
| **dB** | **D**eci**b**els | **µF** | **microf**arad |
| **dBµA** | **D**eci**b**els above one **micro**amp | **µs** | **micros**econds |
| **dBµV** | **D**eci**b**els above one **micro**volt | **PRF** | **P**ulse **R**epetition **F**requency |
| **dBµA/m** | **D**eci**b**els above one **micro**amp **per m**eter | **RF** | **R**adio **F**requency |
| **dBµV/m** | **D**eci**b**els above one **micro**volt **per m**eter | **RMS** | **R**oot-**M**ean-**S**quare |
| **DC** | **D**irect **C**urrent | **V/m** | **V**olts **per m**eter |
| **E** | **E**lectric Field | **VCP** | **V**ertical **C**oupling **P**lane |
| **ESD** | **E**lectro**s**tatic **D**ischarge | **CE** | **C**onducted **E**missions |
| **EUT** | **E**quipment **U**nder **T**est | **RE** | **R**adiated **E**missions |
| ***f*** | **F**requency | **VF** | **V**oltage **F**luctuations |
| **CISPR** | **C**omite **I**nternational **S**pecial des **P**erturbations **R**adioelectriques (International Special Committee on Radio Interference) | **ESD** | **E**lectro**s**tatic **D**ischarge |
| **GRP** | **G**round **R**eference **P**lane | **QP** | **Q**uasi **P**eak |
| **H** | Magnetic Field | **RI** | **R**adiated **I**mmunity |
| **HCP** | **H**orizontal **C**oupling **P**lane | **EFT/B** | **E**lectrical **F**ast **T**ransient/**B**urst |
| **Hz** | **H**ert**z** | **CI** | **C**onducted **I**mmunity |
| **IEC** | **I**nternational **E**lectrotechnical **C**ommission | **MI** | **M**agnetic **I**mmunity |
| **kHz** | **k**ilo**h**ert**z** | **VDI** | **V**oltage **D**ips **I**nterruptions |

# 1.0 Testing Summary

## 1.1. Emissions Test Summary

The emissions tests specified below were performed with the following results:

| Radiated Emissions | | | |
|---|---|---|---|
| **Transmitting Frequency** | **Specification** | **Margin (dBc)** | **Compliance** |
| Below 30 MHz | FCC Part 97.307 (d) | >43 | **Compliant** |
| 30-225 MHz | FCC Part 19.307 (e) | >60 | **Compliant** |

# 2.0 Equipment Configuration

## 2.1. Overview

MET Laboratories, Inc. was contracted by Elecraft to perform testing on the KPA1500, under Elecraft, purchase order number 23533.

This document describes the test setups, test methods, required test equipment, and the test limit criteria used to perform compliance testing of the Elecraft, KPA1500.

In accordance with §2.955(a) (3), the following data is presented in support of the verification of the Elecraft, KPA1500. Elecraft should retain a copy of this document which should be kept on file for at least two years after the manufacturing of the KPA1500 has been **permanently** discontinued, as per §2.955(b).

The results obtained relate only to the item(s) tested.

| | |
|---|---|
| **Model(s) Tested:** | KPA1500 |
| **Model(s) Covered:** | KPA1500 |
| **Primary Power as Tested:** | Voltage: 240VAC/60Hz |
| **Equipment Emissions Class:** | B |
| **Highest frequency generated or used by the EUT:** | 48 MHz |
| **Evaluated by:** | Ajaz Khan |
| **Report Date:** | August 15, 2017 |

### 2.1.1. Test Site

All testing was performed at MET Laboratories, Inc., 3162 Belick Street, Santa Clara, CA 95054. All equipment used in making physical determinations is accurate and bears recent traceability to the National Institute of Standards and Technology.

MET Laboratories is an ISO/IEC 17025 accredited site by A2LA, (California #0591.02).

Radiated Emissions measurements were performed in a semi anechoic chamber. In accordance with §2.948(a) (3), a complete site description is contained at MET Laboratories.

### 2.1.2. Measurement Uncertainty

| Test Method | Typical Expanded Uncertainty (dB) | K | Confidence Level |
|---|---|---|---|
| **Radiated Emissions, (30 MHz – 1 GHz)** | ±3.45 | 2 | 95% |

**Table 1: Uncertainty Calculations Summary**

## 2.2. Detailed EUT Description and Test Setup

### 2.2.1. Description of Test Sample

The KPA1500, Equipment Under Test (EUT), is an External 1500W RF Power Amplifier for Amateur Radio Service, 1.8 to 54 MHz.

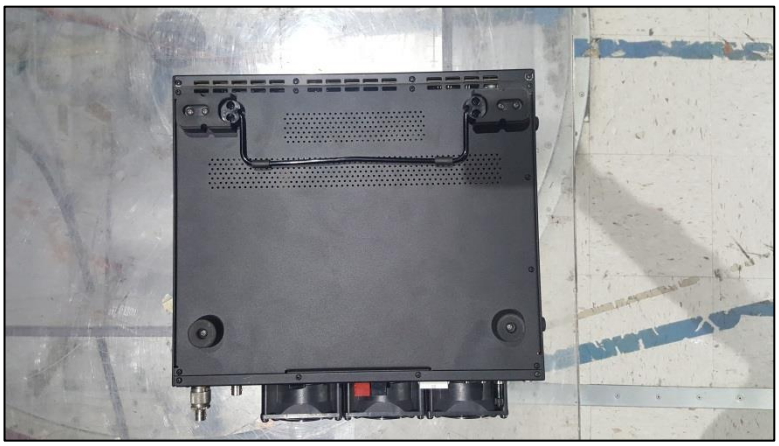

**Photograph 1. DUT External Photo, 1**

**Photograph 2. DUT External Photo, 2**

**Photograph 3. DUT External Photo, 3**

**Photograph 4. DUT External Photo, 4**

**Photograph 5. DUT External Photo, 5**



**Photograph 6. DUT External Photo, 6**


**Photograph 7. DUT External Photo, 7**


**Photograph 8. DUT External Photo, 8**

**Photograph 9. DUT External Photo, 9**

**Photograph 10. DUT External Photo, 10**

## 2.2.2. Block Diagram

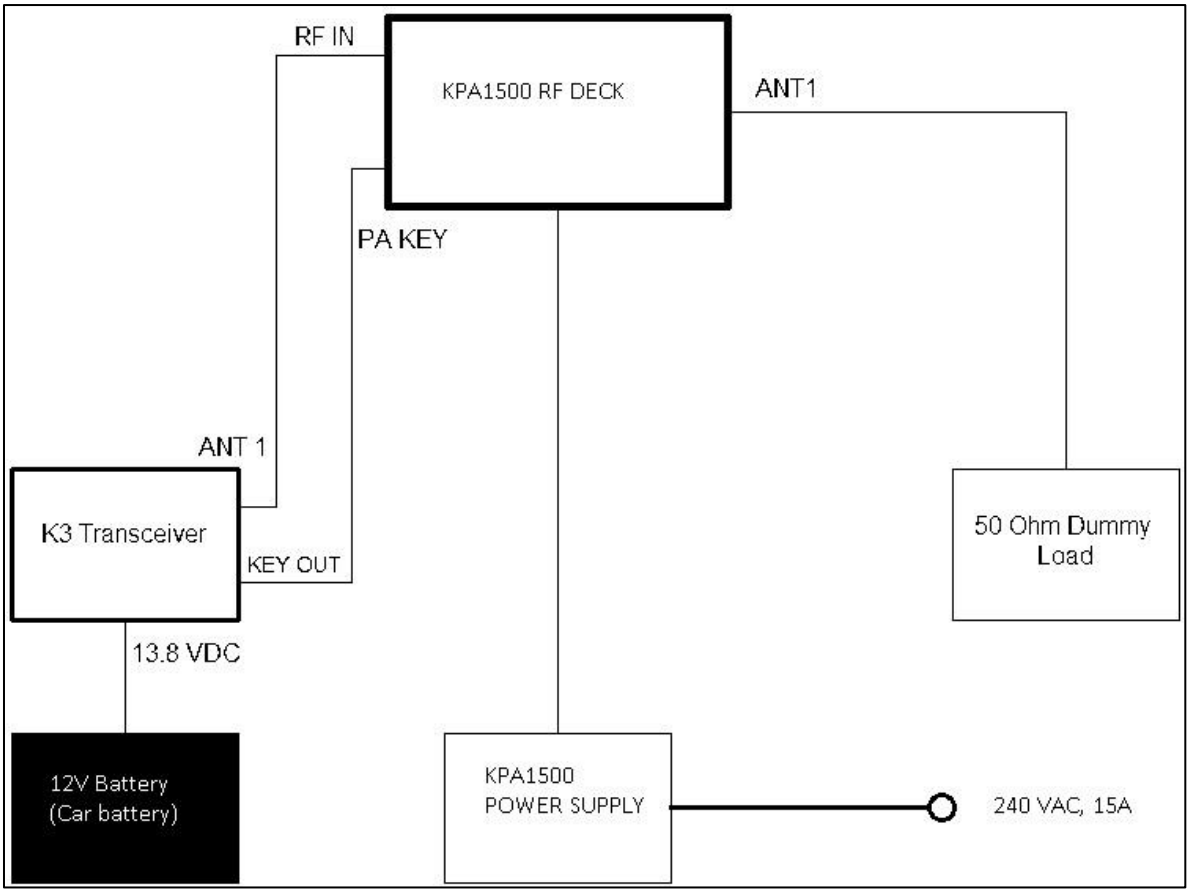



**Figure 1. Block Diagram of Test Configuration**

### 2.2.3. Equipment Configuration

The EUT was setup as outlined in Figure 1. All equipment incorporated as part of the EUT is included in the following list.

| Ref. ID | Slot # | Name / Description | Model Number | Part Number | Serial Number | Rev. # |
|---|---|---|---|---|---|---|
| 1 | | RF Deck | KPA1500 | RF Deck | 22 | |
| 2 | | Power Supply | KPA1500 | PS Unit | N/A | |

**Table 2. Equipment Configuration**

### 2.2.4. Support Equipment

Support equipment necessary for the operation and testing of the EUT is included in the following list.

| Ref. ID | Name / Description | Manufacturer | Model Number | *Customer Supplied Calibration Data |
|---|---|---|---|---|
| 3,4 | | 50 ohm Coaxial Cable with PL-259 connectors [note] | LMR400 | N/A |
| 5 | | Elecraft K3S/100 Transceiver | K3S/100 | Driver |
| Note: | Cables must be rated for 1500W at 52MHz. RG-58 or equivalent will not work! Elecraft will supply test cables. | | | |
| The 'Customer Supplied Calibration Data' column will be marked as either not applicable, not available, or will contain the calibration date supplied by the customer. | | | | |

**Table 3. Support Equipment**

### 2.2.5. Ports and Cabling Information

| Ref. ID | Port name on EUT | Cable Description or reason for no cable | Qty | Length as tested (m) | Max Length (m) | Shielded? (Y/N) | Termination Box ID & Port Name |
|---|---|---|---|---|---|---|---|
| 1 | INPUT | 50 ohm Coax to transceiver | 1 | 1 | N/A | Y | |
| 2 | ANT 1 | 50 ohm coax to load | 1 | 1 | N/A | Y | |
| | ANT 2 | None. Secondary output, not used in normal operation | | | | | |
| | TX SAMPLE | None. Not used in normal operation. | | | | | |
| | HV SUPPLY | Power Supply Input | 1 | 1.5 | | N | |
| | CONTROL | Power Supply Control line | 1 | 1.5 | | N | |
| | USB | None. Not used in normal operation. | | | | | |
| | ETHERNET | None. Not used in normal operation. | | | | | |
| | PC DATA | None. Not used in normal operation. | | | | | |
| | TUNE | None. Not used in normal operation. | | | | | |
| | AUX | None. Not used in normal operation. | | | | | |
| | KEY IN | Transmit Key Line | 1 | 1 | N/A | Y | |
| | ALC OUT | None. Not used in normal operation. | | | | | |
| | REM | None. Not used in normal operation. | | | | | |

**Table 4. Ports and Cabling Information**

## 2.2.6. Mode of Operation & Method of Monitoring EUT Operation

**The EUT was operated in the following manner:**

The KPA1500 is an External Power Amplifier per FCC regulations. It is a communications system device that accepts RF drive of approximately 50W and amplifies it linearly to 1500W. It has two modes: Operate and Standby. It bi-directionally passes the input signal through without modification when in Standby mode.
In operate mode, the KPA1500 has two sub-modes: Receive and Transmit. In receive mode, the signal from the antenna passes through the device in the reverse direction to the input, without amplification. When the KEY IN jack is shorted to ground, the KPA1500 is placed in transmit mode, where it amplifies the (approx) 50W drive signal from the "XCVR" jack and outputs the 1500W amplified signal to the ANT jack.

**Performance of the EUT was monitored in the following manner:**

RF output dropping from its nominal 1500W to a low value (less than 800W) is considered a failure. Power output is displayed on the RF deck front panel in two places: an LED bargraph and a digital (numeric) LCD display.
Note that the amplifier is not intended for continuous operation. If its duty cycle is exceeded, thermal protection will shut down the amplifier. This is NOT considered a failure as operation will resume after the heat sink cools. Please keep test transmissions to 10 minutes of power output at a time, with a 50% nominal duty cycle.

## 2.2.7. Modifications to EUT

No modifications were made to the EUT.

## 2.2.8. Disposition of EUT

The test sample including all support equipment (if any), submitted to the Electro-Magnetic Compatibility Lab for testing was returned to Elecraft upon completion of testing.

# 3.0 Electromagnetic Compatibility Emission Criteria

## 3.1. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz

### 3.1.1. Test Method, Test Requirements, and Test Procedures

#### 3.1.1.1. Test Method

TIA/EIA-603 and TIA/EIA-603-E

#### 3.1.1.2. Test Requirements

For transmitters installed after January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency a 30 MHz must be at least 43 dB below the mean power of the fundamental emission. For transmitters installed on or before January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must not exceed 50 mW and must be at least 40 dB below the mean power of the fundamental emission. For a transmitter of mean power less than 5 W installed on or before January 1, 2003, the attenuation must be at least 30 dB. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

#### 3.1.1.3. Test Procedure

The EUT was placed on top of an 80 centimeter high table inside a semi-anechoic chamber. A transceiver was connected to the input of the EUT and a 50 Ohm load was connected to the output. Various antennas were placed near the EUT and measurements were taken of the field strengths and frequencies. For final radiated measurements, the EUT was placed inside a semi-anechoic chamber, and located 10 meters from the antenna mast.

## 3.1.2. Test Results, Test Data, and Test Setup

### 3.1.2.1. Test Results

The EUT was **compliant** with the requirement(s) of this section. Measured emissions were below applicable limits.

| 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz | |
|---|---|
| **Ambient Temperature:** | 21.2°C |
| **Relative Humidity:** | 34% |
| **Atmospheric Pressure:** | 101.9kPa |

**Test Engineer(s):** Ajaz Khan

**Test Date(s):** July 6, 2017

### 3.1.2.2. Test Data

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 1.9 | 1.9 | - | - |
| | 3.8 | >43dB | yes |
| | 5.7 | >43dB | yes |
| | 7.6 | >43dB | yes |
| | 9.5 | >43dB | yes |
| | 11.4 | >43dB | yes |
| | 13.3 | >43dB | yes |
| | 15.2 | >43dB | yes |
| | 17.1 | >43dB | yes |
| | 19 | >43dB | yes |

**Table 5. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 1.9 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 3.75 | 3.75 | - | - |
| | 7.5 | >43dB | yes |
| | 11.25 | >43dB | yes |
| | 15 | >43dB | yes |
| | 18.75 | >43dB | yes |
| | 22.5 | >43dB | yes |
| | 26.25 | >43dB | yes |
| | 30 | >43dB | yes |
| | 33.75 | >43dB | yes |
| | 37.5 | >43dB | yes |

**Table 6. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 3.75 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 5.357 | 5.357 | - | - |
| | 10.714 | >43dB | yes |
| | 16.071 | >43dB | yes |
| | 21.428 | >43dB | yes |
| | 26.785 | >43dB | yes |
| | 32.142 | >43dB | yes |
| | 37.499 | >43dB | yes |
| | 42.856 | >43dB | yes |
| | 48.213 | >43dB | yes |
| | 53.57 | >43dB | yes |

**Table 7. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 5.357 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 7.15 | 7.15 | - | - |
| | 14.3 | >43dB | yes |
| | 21.45 | >43dB | yes |
| | 28.6 | >43dB | yes |
| | 35.75 | >43dB | yes |
| | 42.9 | >43dB | yes |
| | 50.05 | >43dB | yes |
| | 57.2 | >43dB | yes |
| | 64.35 | >43dB | yes |
| | 71.5 | >43dB | yes |

**Table 8. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 7.15 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 10.125 | 10.125 | - | - |
| | 20.25 | >43dB | yes |
| | 30.375 | >43dB | yes |
| | 40.5 | >43dB | yes |
| | 50.625 | >43dB | yes |
| | 60.75 | >43dB | yes |
| | 70.875 | >43dB | yes |
| | 81 | >43dB | yes |
| | 91.125 | >43dB | yes |
| | 101.25 | >43dB | yes |

**Table 9. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 10.125 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 14.175 | 14.175 | - | - |
| | 28.35 | >43dB | yes |
| | 42.525 | >43dB | yes |
| | 56.7 | >43dB | yes |
| | 70.875 | >43dB | yes |
| | 85.05 | >43dB | yes |
| | 99.225 | >43dB | yes |
| | 113.4 | >43dB | yes |
| | 127.575 | >43dB | yes |
| | 141.75 | >43dB | yes |

**Table 10. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 14.175 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 18.118 | 18.118 | - | - |
| | 36.236 | >43dB | yes |
| | 54.354 | >43dB | yes |
| | 72.472 | >43dB | yes |
| | 90.59 | >43dB | yes |
| | 108.708 | >43dB | yes |
| | 126.826 | >43dB | yes |
| | 144.944 | >43dB | yes |
| | 163.062 | >43dB | yes |
| | 181.18 | >43dB | yes |

**Table 11. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 18.118 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 21.225 | 21.225 | - | - |
| | 42.45 | >43dB | yes |
| | 63.675 | >43dB | yes |
| | 84.9 | >43dB | yes |
| | 106.125 | >43dB | yes |
| | 127.35 | >43dB | yes |
| | 148.575 | >43dB | yes |
| | 169.8 | >43dB | yes |
| | 191.025 | >43dB | yes |
| | 212.25 | >43dB | yes |

**Table 12. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 21.225 MHz, Test Results**

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 24.94 | 24.94 | - | - |
| | 49.88 | >43dB | yes |
| | 74.82 | >43dB | yes |
| | 99.76 | >43dB | yes |
| | 124.7 | >43dB | yes |
| | 149.64 | >43dB | yes |
| | 174.58 | >43dB | yes |
| | 199.52 | >43dB | yes |
| | 224.46 | >43dB | yes |
| | 249.4 | >43dB | yes |

**Table 13. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 24.94 MHz, Test Results**

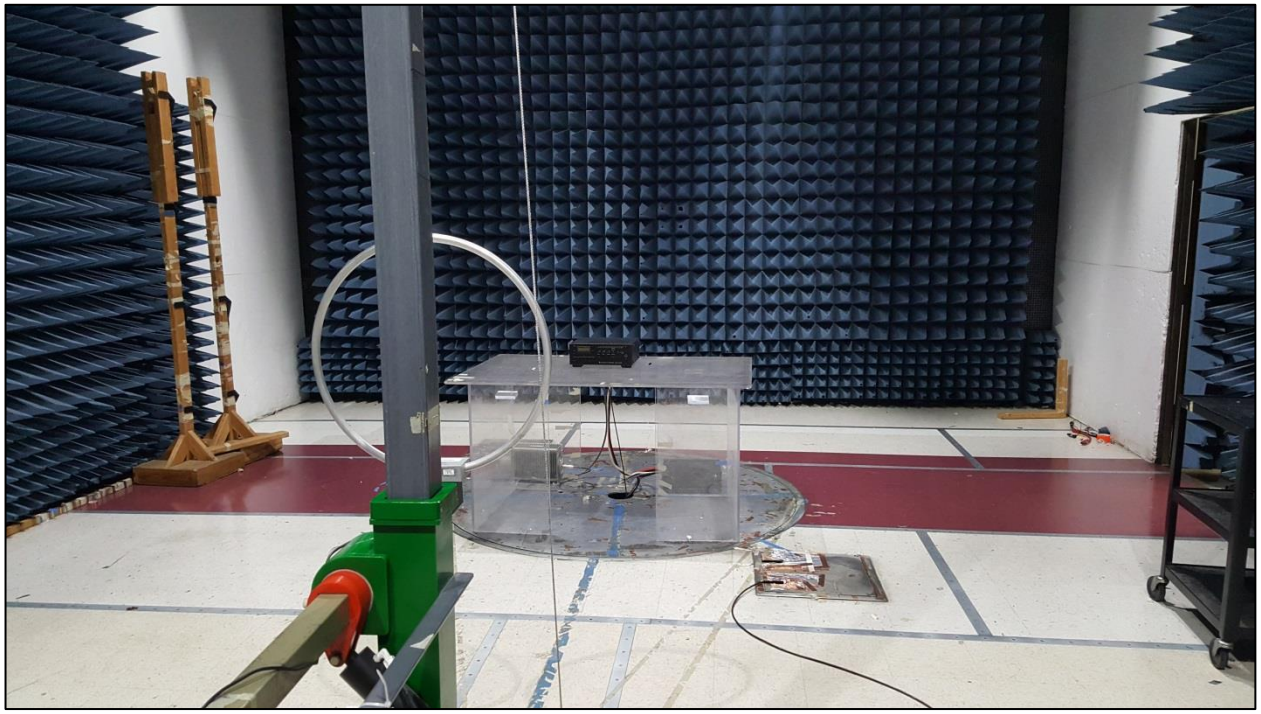
  

| Frequency | Harmonic | dB below Fundamental | >43dB |
|---|---|---|---|
| 28.85 | 28.85 | - | - |
| | 57.7 | >43dB | yes |
| | 86.55 | >43dB | yes |
| | 115.4 | >43dB | yes |
| | 144.25 | >43dB | yes |
| | 173.1 | >43dB | yes |
| | 201.95 | >43dB | yes |
| | 230.8 | >43dB | yes |
| | 259.65 | >43dB | yes |
| | 288.5 | >43dB | yes |

**Table 14. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz, 28.85 MHz, Test Results**

### 3.1.2.3. Test Setup Photograph



**Photograph 11. 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz Test Setup (Front View)**

## 3.2. 97.307(e) Radiated Spurious Emissions for TX Operating Above 30 MHz

### 3.2.1. Test Method, Test Requirements, and Test Procedures

#### 3.2.1.1. Test Method

TIA/EIA-603 and TIA/EIA-603-E

#### 3.2.1.2. Test Requirements

The mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency between 30-225 MHz must be at least 60 dB below the mean power of the fundamental. For a transmitter having a mean power of 25 W or less, the mean power of any spurious emission supplied to the antenna transmission line must not exceed 25 µW and must be at least 40 dB below the mean power of the fundamental emission, but need not be reduced below the power of 10 µW. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

#### 3.2.1.3. Test Procedure

The EUT was placed on top of an 80 centimeter high table inside a semi-anechoic chamber. A transceiver was connected to the input of the EUT and a 50 Ohm load was connected to the output. Various antennas were placed near the EUT and measurements were taken of the field strengths and frequencies. For final radiated measurements, the EUT was placed inside a semi-anechoic chamber, and located 10 meters from the antenna mast.

### 3.2.2. Test Results, Test Data, and Test Setup

#### 3.2.2.1. Test Results

The EUT was **compliant** with the requirement(s) of this section. Measured emissions were below applicable limits.

| **97.307(e) Radiated Spurious Emissions for TX Operating Below 30 MHz** | |
|---|---|
| **Ambient Temperature:** | 21.2°C |
| **Relative Humidity:** | 34% |
| **Atmospheric Pressure:** | 101.9kPa |

**Test Engineer(s):** Ajaz Khan

**Test Date(s):** July 6, 2017

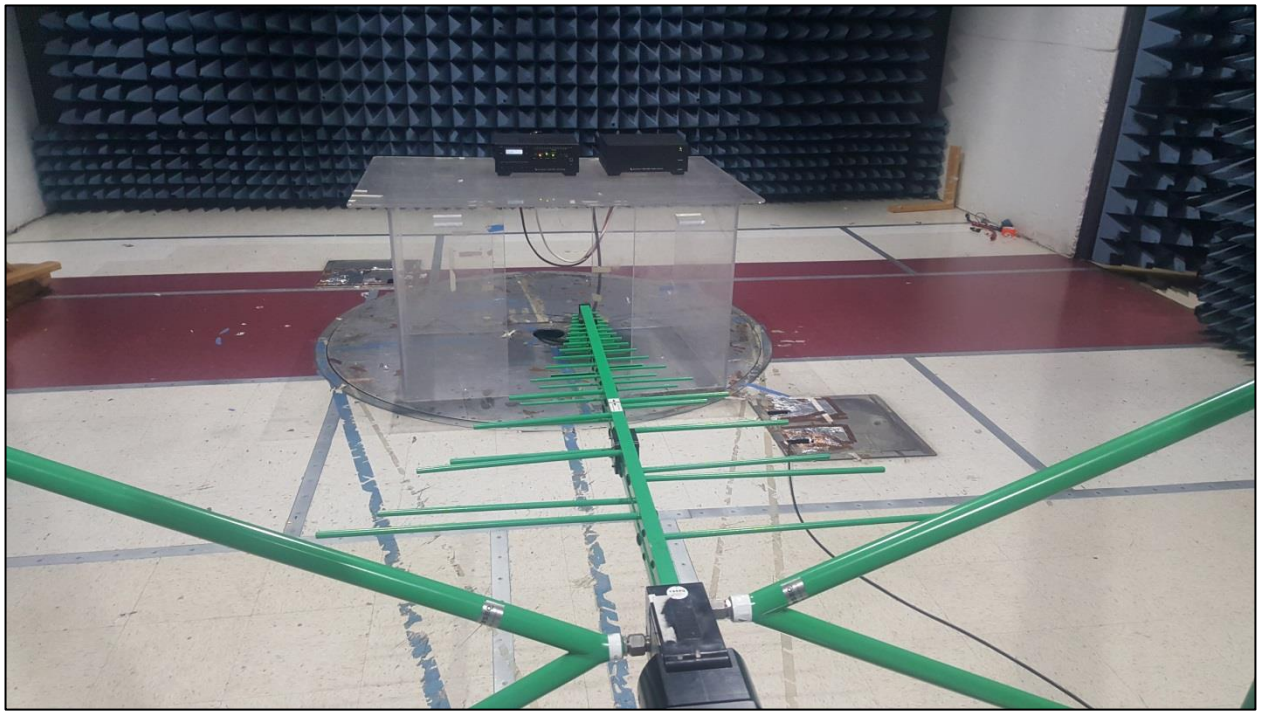
### 3.2.2.2. Test Data

| Frequency | Harmonic | dB below Fundamental | >60dB |
|---|---|---|---|
| 52 | 52 | - | - |
| | 104 | >60dB | yes |
| | 156 | >60dB | yes |
| | 208 | >60dB | yes |
| | 260 | >60dB | yes |
| | 312 | >60dB | yes |
| | 364 | >60dB | yes |
| | 416 | >60dB | yes |
| | 468 | >60dB | yes |
| | 520 | >60dB | yes |

**Table 15. 97.307(e) Radiated Spurious Emissions for TX Operating Between 30-225 MHz, 52 MHz, Test Results**

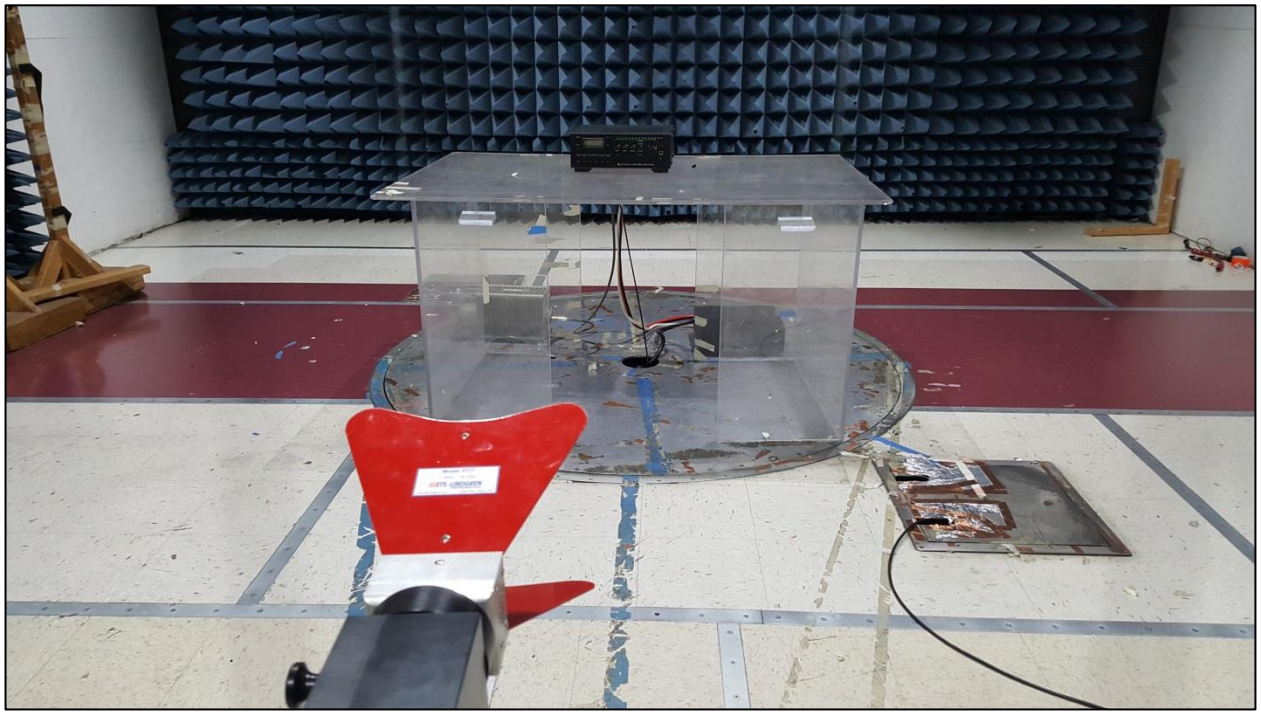
  

### 3.2.2.3. Test Setup Photograph



**Photograph 12. 97.307(e) Radiated Spurious Emissions for TX Operating Above 30 MHz Test Setup**



**Photograph 13. 97.307(e) Radiated Spurious Emissions for TX Operating Between 30-225 Test Setup (Front View)**

# 4.0 Test Equipment

Calibrated test equipment utilized during testing was maintained in a current state of calibration per the requirements of ISO/IEC 17025:2005.

| **Test Name: 97.307(d) Radiated Spurious Emissions for TX Operating Below 30 MHz** | | | | **Test Date(s): July 6, 2017** | |
|---|---|---|---|---|---|
| **MET Asset #** | **Equipment** | **Manufacturer** | **Model** | **Last Cal Date** | **Cal Due Date** |
| 1S2404 | Passive Loop Antenna | EMCO | 6512 | 08/11/2016 | 08/11/2018 |
| 1S3928 | EMI Tester Receiver | Rohde & Schwarz | ESR26 | 10/28/2016 | 10/28/2017 |
| 1S2600 | Bilog Antenna | Teseq | CBL6112D | 11/28/2016 | 11/28/2017 |
| 1S2482A | 5 Meter Chamber (FCC) | Panashield | 5 Meter Semi-Anechoic Chamber | Not Required | |
| 1S2164 | Load Resistor, Termaline Coaxial | BIRD | 18201 | Functional Verification | |
| **Test Name: 97.307(e) Radiated Spurious Emissions for TX Operating Below 30 MHz** | | | | **Test Date(s): July 6, 2017** | |
| **MET Asset #** | **Equipment** | **Manufacturer** | **Model** | **Last Cal Date** | **Cal Due Date** |
| 1S2404 | Passive Loop Antenna | EMCO | 6512 | 08/11/2016 | 08/11/2018 |
| 1S3928 | EMI Tester Receiver | Rohde & Schwarz | ESR26 | 10/28/2016 | 10/28/2017 |
| 1S2600 | Bilog Antenna | Teseq | CBL6112D | 11/28/2016 | 11/28/2017 |
| 1S2482A | 5 Meter Chamber (FCC) | Panashield | 5 Meter Semi-Anechoic Chamber | Not Required | |
| 1S2164 | Load Resistor, Termaline Coaxial | BIRD | 18201 | Functional Verification | |

**Table 16. Emissions Test Equipment List**