



## **Compliance Testing, LLC**

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

toll-free: (866) 311-3268

fax: (480) 926-3598

<http://www.ComplianceTesting.com>

[info@ComplianceTesting.com](mailto:info@ComplianceTesting.com)

### **Test Report**

**Prepared for: Becker Avionics, Inc**

**Model: TG660-50**

**Description: Aeronautical basestation radio used for emergencies**

**Serial Number: 10014**

**FCC ID: 2AHX9TG660**

**To**

**FCC Part 87**

**Date of Issue: February 12, 2018**

**On the behalf of the applicant:**

**Becker Avionics, Inc  
10376 USA Today Way  
Miramar, FL 33025**

**Attention of:**

**Arturo Garcia  
(954)450-3137  
[arturo@beckerusa.com](mailto:arturo@beckerusa.com)**

**Prepared by  
Compliance Testing, LLC  
1724 S. Nevada Way  
Mesa, AZ 85204  
(480) 926-3100 phone / (480) 926-3598 fax  
[www.compliancetesting.com](http://www.compliancetesting.com)  
Project No: p1810019**

**Kenneth Lee  
Project Test Engineer**

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All results contained herein relate only to the sample tested



### Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	February 9, 2018	Kenneth Lee	Original Document



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**ILAC / A2LA**

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009).

The tests results contained within this test report all fall within our scope of accreditation, unless noted in the table below

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.

Testing Certificate Number: **2152.01**



**FCC Site Reg. #349717**

**IC Site Reg. #2044A-2**

**Non-accredited tests contained in this report:**

**N/A**

## Standard Test Conditions Engineering Practices

Except as noted herein, the following conditions and procedures were observed during the testing:

All tests and measurement data shown were performed in accordance with FCC Rules and Regulations, Volume II; Part 2, Sub-part J, Sections 2.947, 2.1033(c), 2.1041, 2.1046, 2.1047, 2.1051, 2.1053, 2.1055, 2.1057 and the following individual Parts: FCC Part 87.

Measurement results, unless otherwise noted, are worst-case measurements.

Environmental Conditions		
Temperature (°C)	Humidity (%)	Pressure (mbar)
17-26	27-38	960-979

### EUT Description

**Model:** TG660-50

**Description:** Aeronautical basestation radio used for emergencies

**Software:** TG 660 M

**Software Revision:** V1.0130.10.13

**Serial Number:** 10014

### Additional Information:

This report is to show the Permissive Change to lower the Output Power of the device to a max of 25W was achieved.

The EUT is powered by 120 vac 60 Hz.

### EUT Operation during Tests

The EUT was operated under normal operating conditions at maximum output power.



## Test Results Summary

Specification	Test Name	Pass, Fail, N/A	Comments
2.1046, 87.131	Carrier Output Power (Conducted)	Pass	
2.1051, 87.139(a)(3)	Unwanted Emissions (Transmitter Conducted)	Pass	
2.1053	Field Strength of Spurious Radiation	N/A	See Note 1
2.1049, 87.139(a)	Emission Masks (Occupied Bandwidth)	N/A	See Note 1
2.1047	Audio Low Pass Filter Frequency Response	N/A	See Note 1
2.1047	Modulation Limiting	N/A	See Note 1
2.1049, 87.135	Occupied Bandwidth	N/A	See Note 1
2.1055, 87.133(a)	Frequency Stability (Temperature Variation)	N/A	See Note 1
2.1055, 87.133(a)	Frequency Stability (Voltage Variation)	N/A	See Note 1

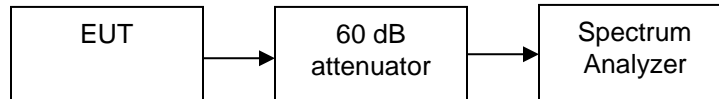
**Note 1:** This test was not performed as the Permissive Change made was to lower the Output Power.

**Carrier Output Power (Conducted)****Engineer:** Kenneth Lee**Test Date:** 2/9/2018**Test Procedure**

The Equipment Under Test (EUT) was connected directly to a spectrum analyzer with the RBW set to 100 kHz and the VBW set to 3 X RBW.

The EUT was connected to the spectrum analyzer through a 60 dB high power attenuator.

The CW signal was measured using the Peak detector.

**Output Power**

Tuned Frequency (MHz)	Measured Power (dBm)	Measured Power (W)	Limit (W)	Result
118.5	43.98	25	50	Pass
127.5	43.96	24.9	50	Pass
136.975	43.97	24.9	50	pass



## Conducted Spurious Emissions

Engineer: Kenneth Lee

Test Date: 2/9/2018

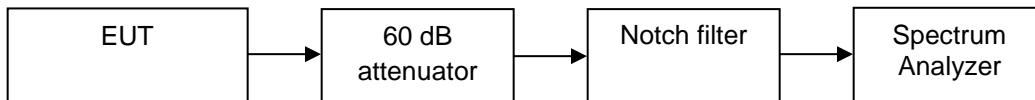
### Test Procedure

The EUT was connected as shown in the test setup.

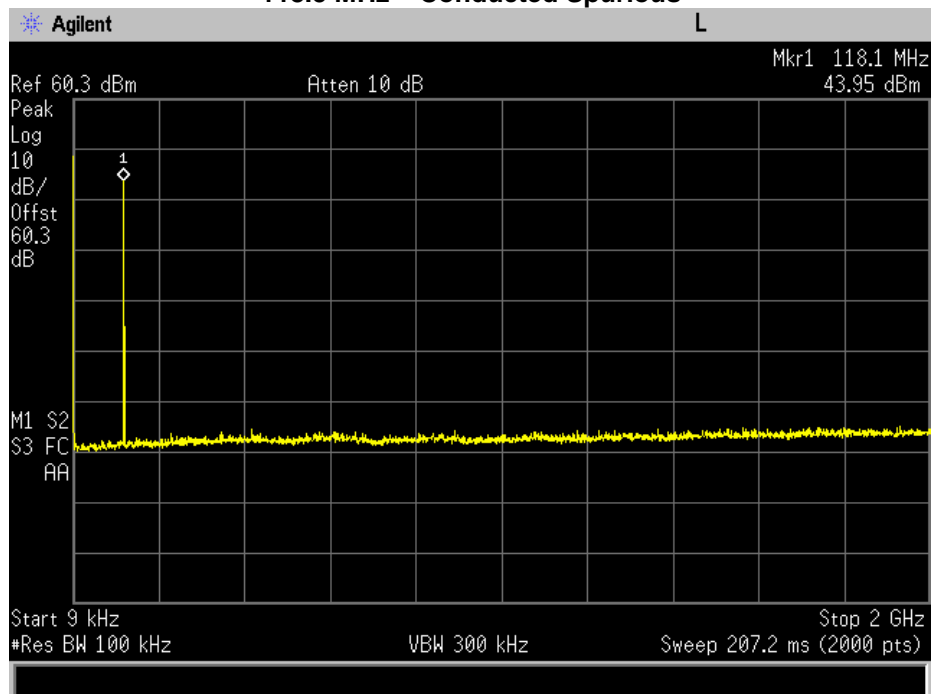
The RBW was set to 100 kHz, and a peak detector with max hold was used to measure the spurious signals.

The frequency of investigation was 9 kHz to 2 GHz.

### Test Setup



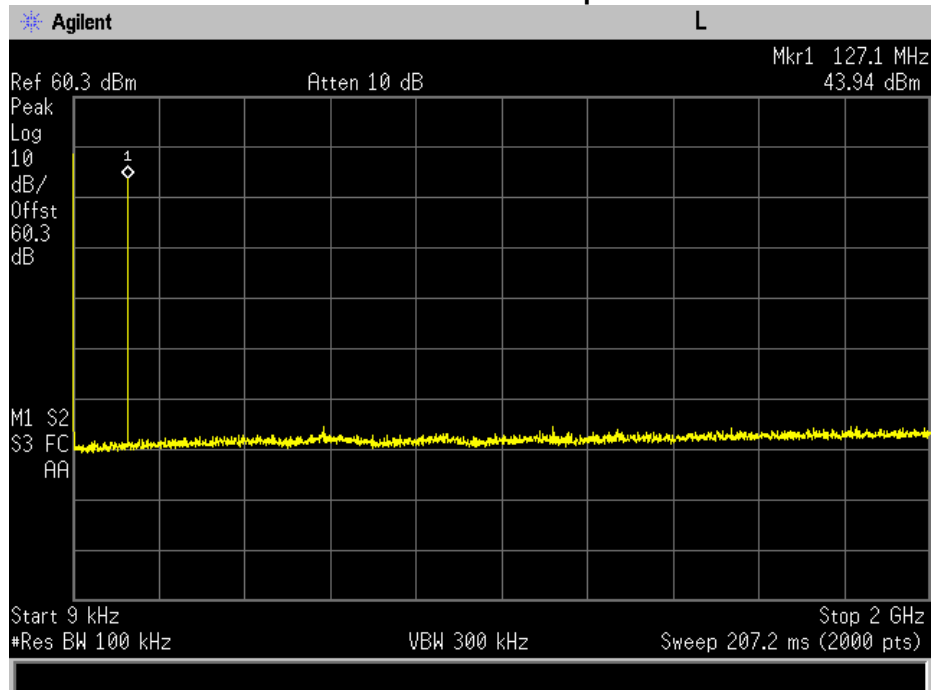
### 118.5 MHz – Conducted Spurious



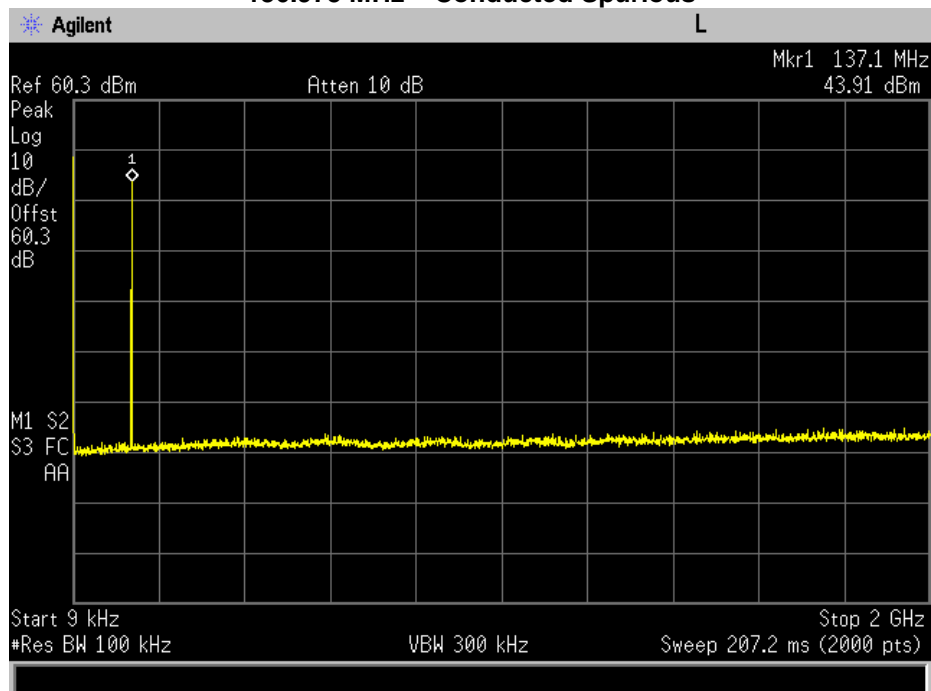




### 127.5 MHz – Conducted Spurious



### 136.975 MHz – Conducted Spurious





### Test Equipment Utilized

Description	Manufacturer	Model #	CT Asset #	Last Cal Date	Cal Due Date
Humidity / Temp Meter	Newport	IBTHX-W-5	i00282	5/26/16	5/26/17
PSA Spectrum Analyzer	Agilent	E4445A	i00471	9/6/17	9/6/18

In addition to the above listed equipment standard RF connectors and cables were utilized in the testing of the described equipment. Prior to testing these components were tested to verify proper operation.

END OF TEST REPORT