



Compliance Testing, LLC

Previously Flom Test Lab

EMI, EMC, RF Testing Experts Since 1963

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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
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Attention of:

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**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

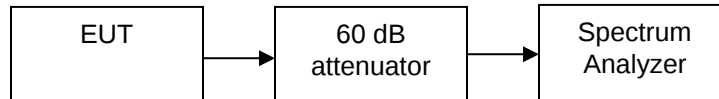
Note 1: This test was not performed as the Permissive Change made was to lower the Output Power.

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

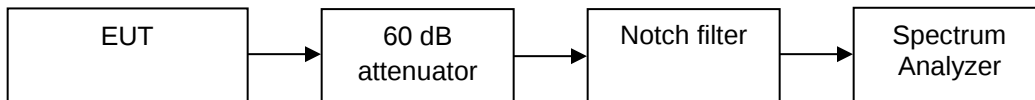
Test Procedure

The EUT was connected as shown in the test setup.

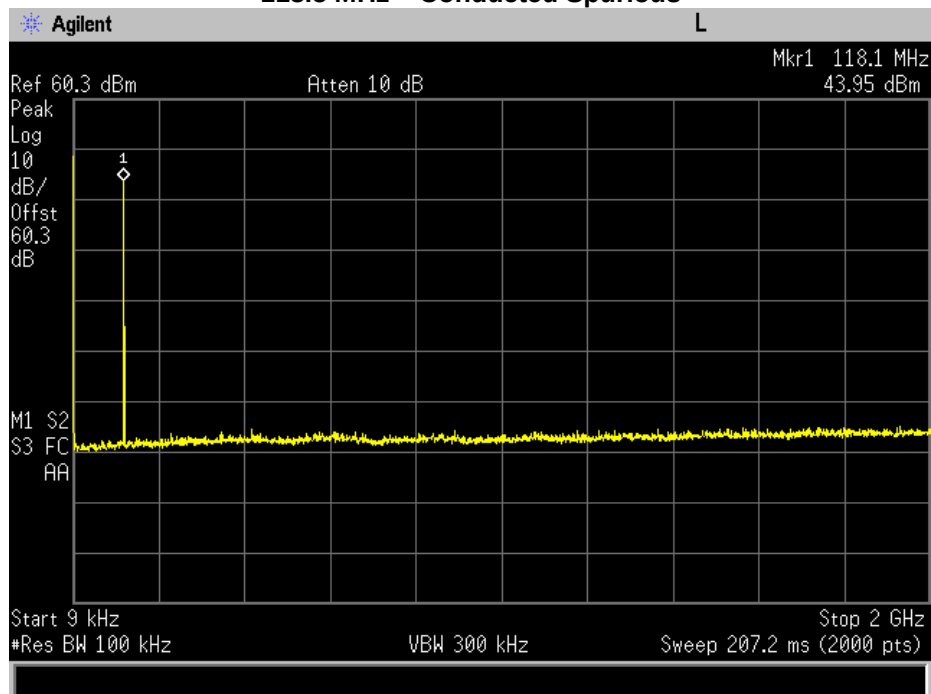
The RBW was set to 100 kHz, and a peak detector with max hold was used to measure the spurious signals.

The frequency of investigation was 9 kHz to 2 GHz.

Test Setup

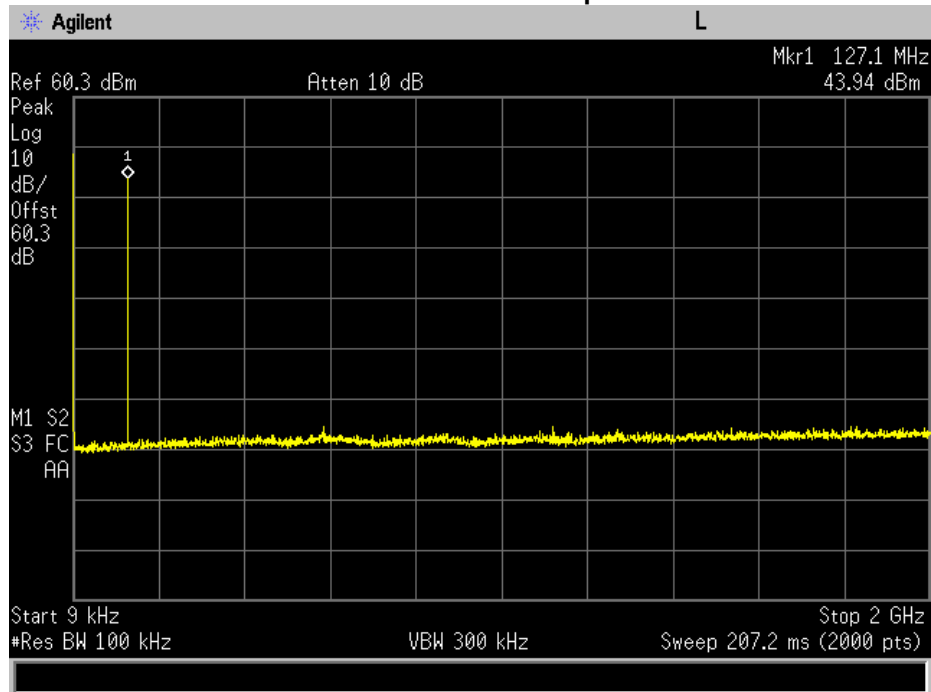


118.5 MHz – Conducted Spurious

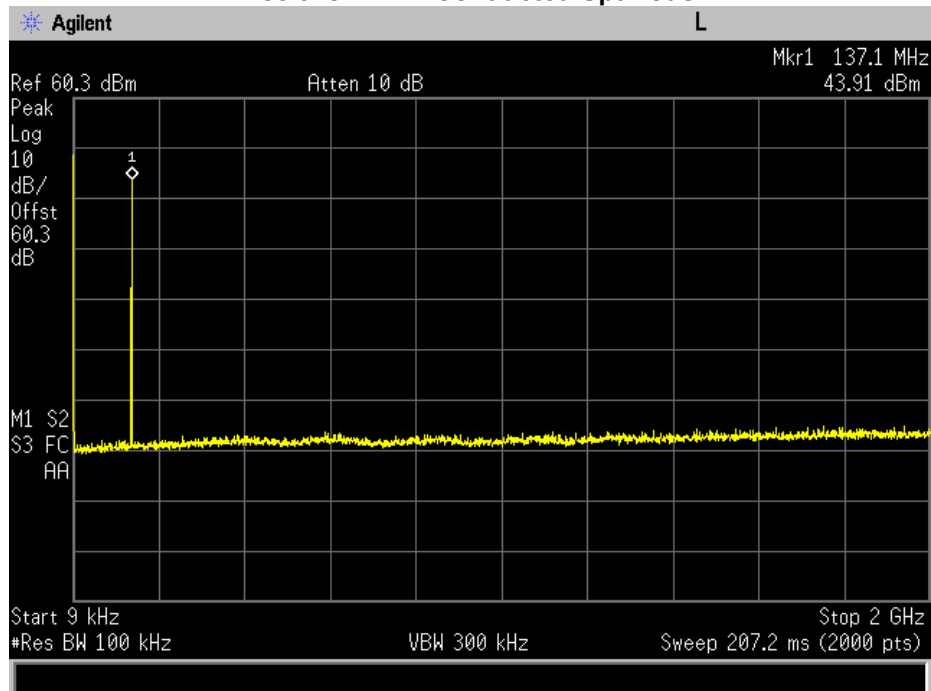




127.5 MHz – Conducted Spurious



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