

Auburn Broadcast Services, LLC

413 Kimberly Drive

Auburn, AL 36832

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AM Performance and NRSC-2 Emissions Compliance Measurements

For Radio Station WLWE-AM

Roanoke, Alabama

1360 KHz. 1000 Watts

February 22, 2023

EQUIPMENT

The equipment used to take the emission measurements and the equipment necessary to generate the performance measurement graphs contained in this report were completed using an Anritsu MS2721B spectrum analyzer, SN# 1010124, with a Scott LP-3 shielded loop antenna appropriate for the frequencies to be measured. A tunable notch filter is available for use when strong local signals are present.

LOCATION

The test equipment was set up at a location approximately one kilometer from the transmitter site and operated on vehicle battery power. Care was given to selecting a site remote from overhead power lines, cattle fences and other sources of potential interference to the received signals. In the case of a directional antenna system this distance may be increased to insure the pattern is formed by all of the radiating components. The selected site is within the major lobe(s) of the antenna pattern.

PROCEDURE

The spectrum analyzer was powered on and connected to the antenna. A ten (10) minute warm up time allows the instrument to stabilize prior to taking any measurements. A shielded loop antenna is attached to the analyzer and turned to provide maximum signal level into the analyzer. Measurements were then taken to verify the main channel occupied bandwidth and compliance with the NRSC-2 mask for AM broadcast stations. Measurements were made at the second and third harmonics to verify compliance with FCC rules. A sweep up to ten (10) times the operating frequency was performed to search for possible spurs or harmonics. Occupied bandwidth measurements were taken in compliance with FCC requirements 73.44 (a).

RESULTS

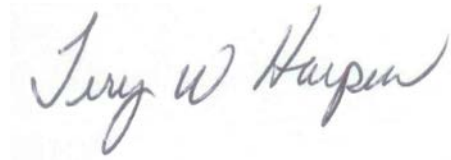
The emission performance measurements contained in this report indicate compliance with the FCC rules and regulations relating to occupied bandwidth, NRSC-2 compliance, and emissions purity.

QUALIFICATIONS

The equipment is owned by and was operated by Auburn Broadcast Services, LLC, Broadcast Technical Consultants, Auburn, Alabama. The system has current calibration with accuracy traceable to the NBS.

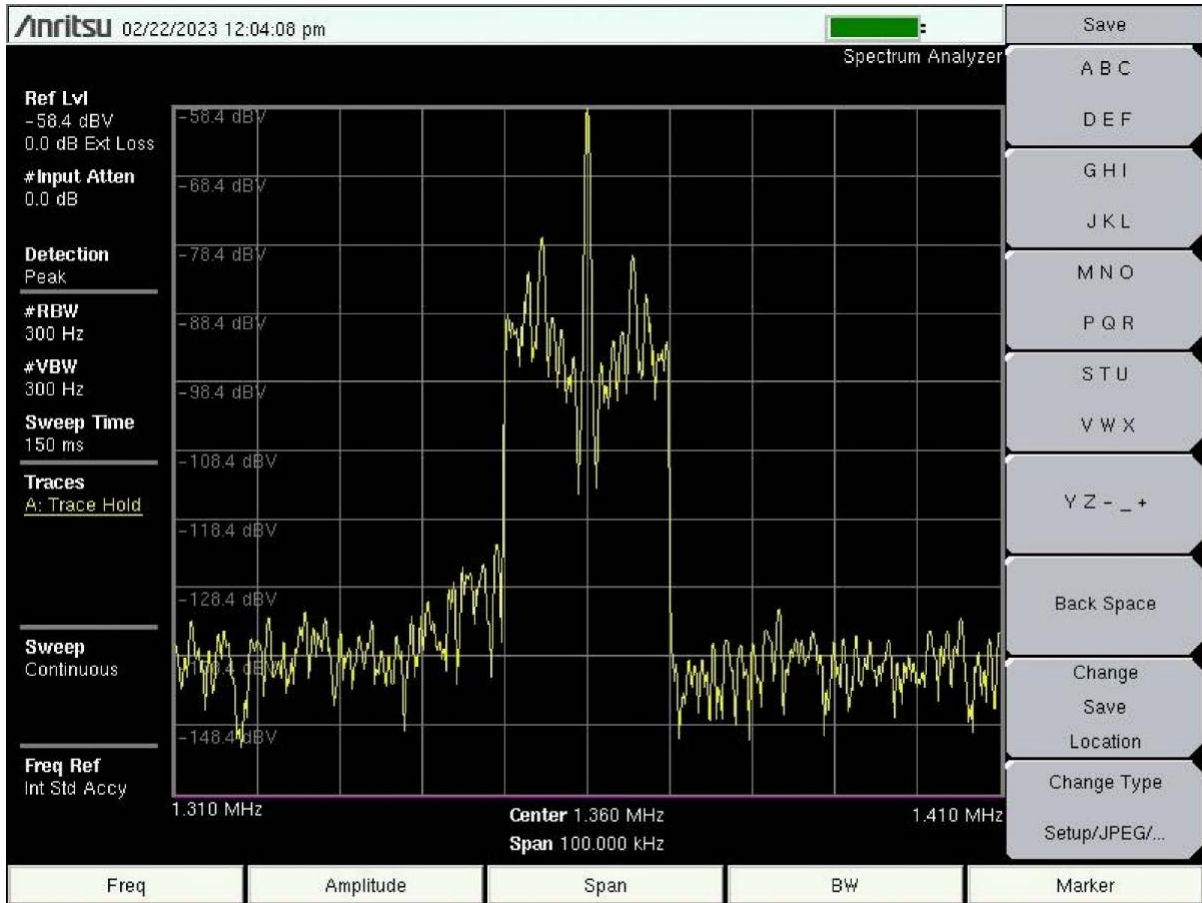
The data collection for the emission performance measurements contained in this report was performed by personnel familiar with the operation of the apparatus and FCC performance requirements for broadcast facilities.

Auburn Broadcast Services, LLC has, to the best of my knowledge and belief, made every effort to collect and present accurate and complete data in this report.

A handwritten signature in cursive script that reads "Terry W Harper". The signature is written in dark ink on a light-colored background.

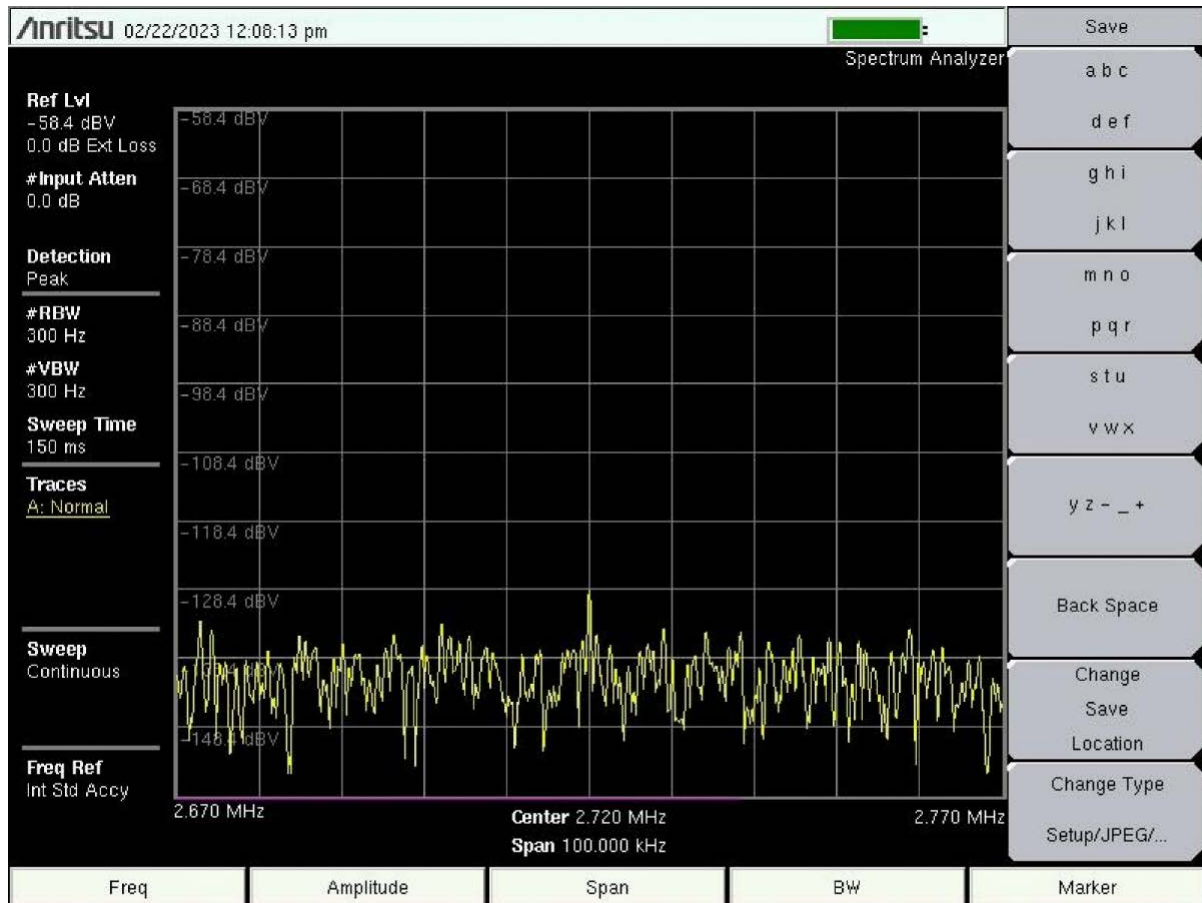
Terry W. Harper
FCC License # PG-6-17008

Occupied Bandwidth



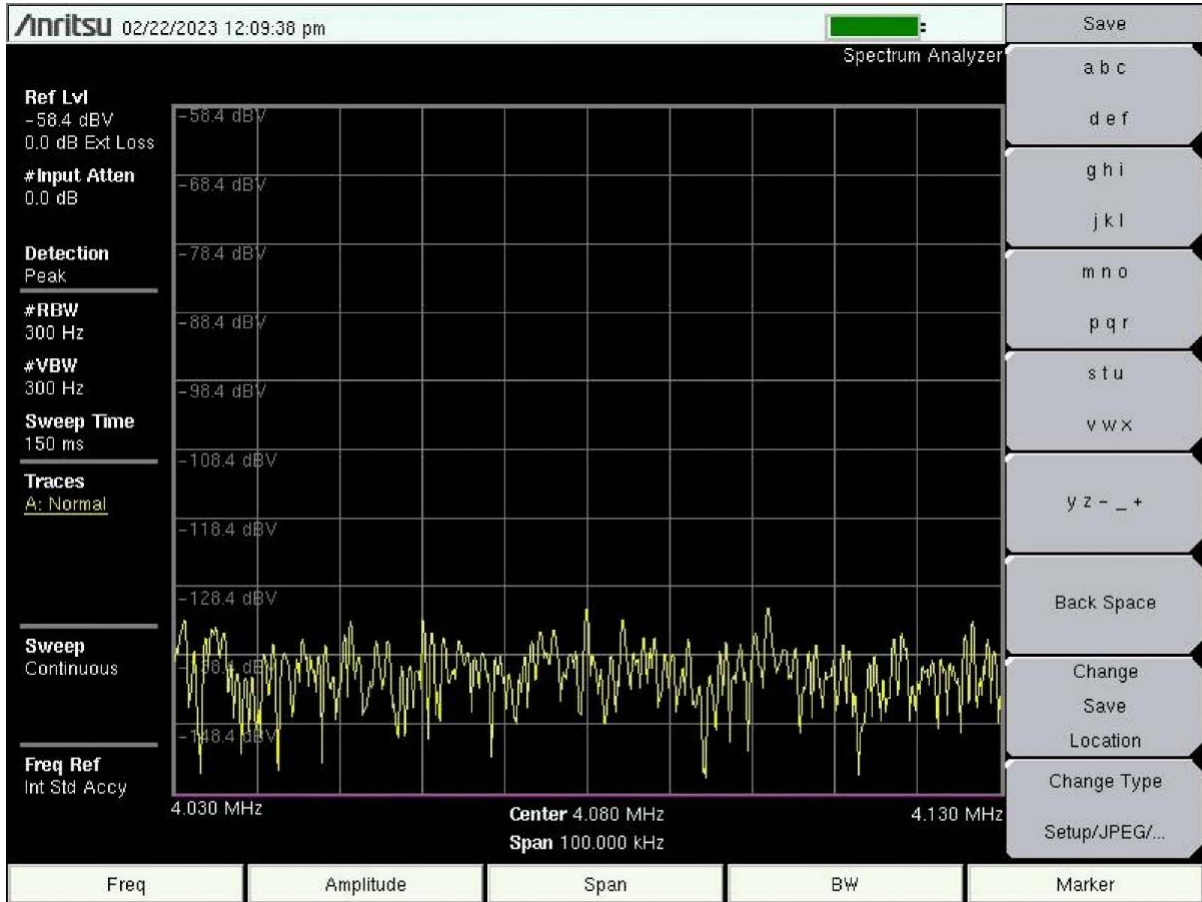
Notes: None

Second Harmonic



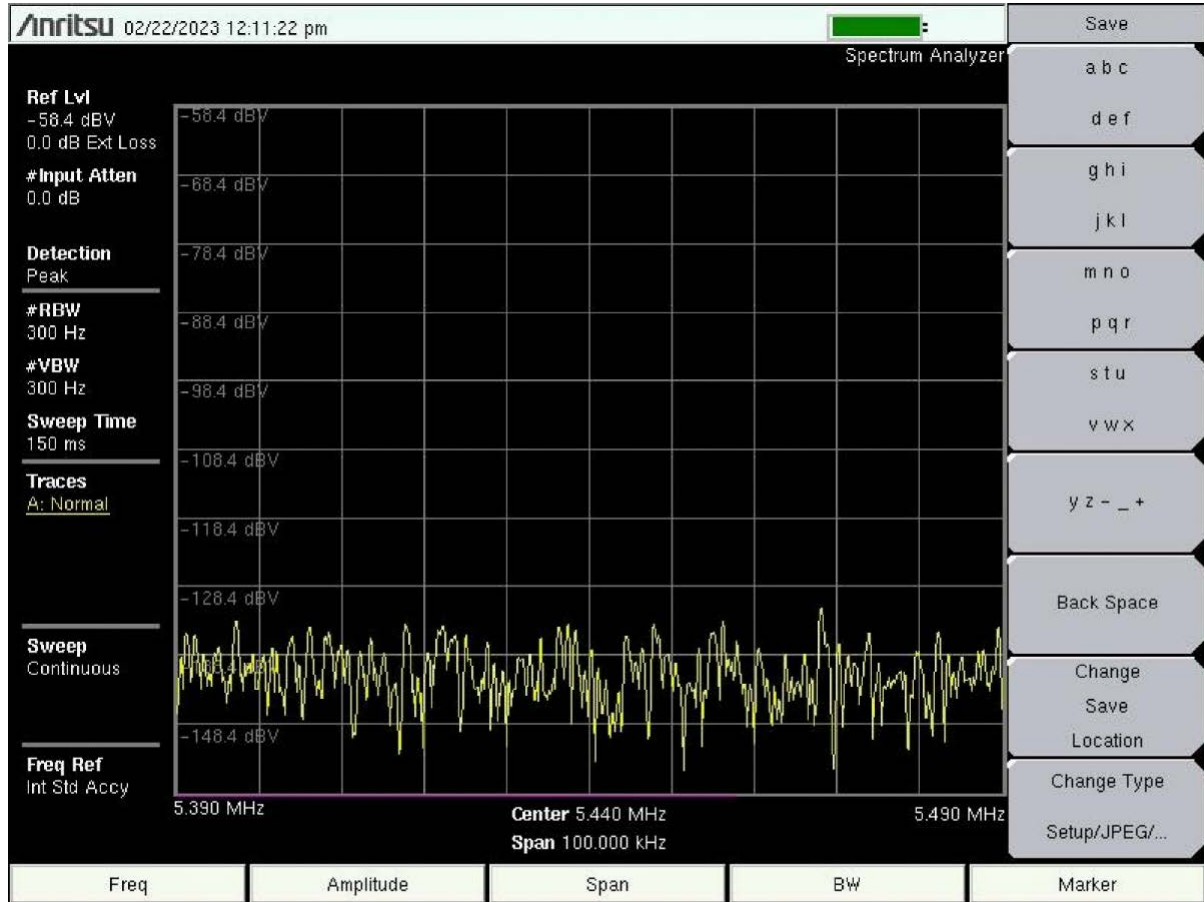
Notes:

Third Harmonic



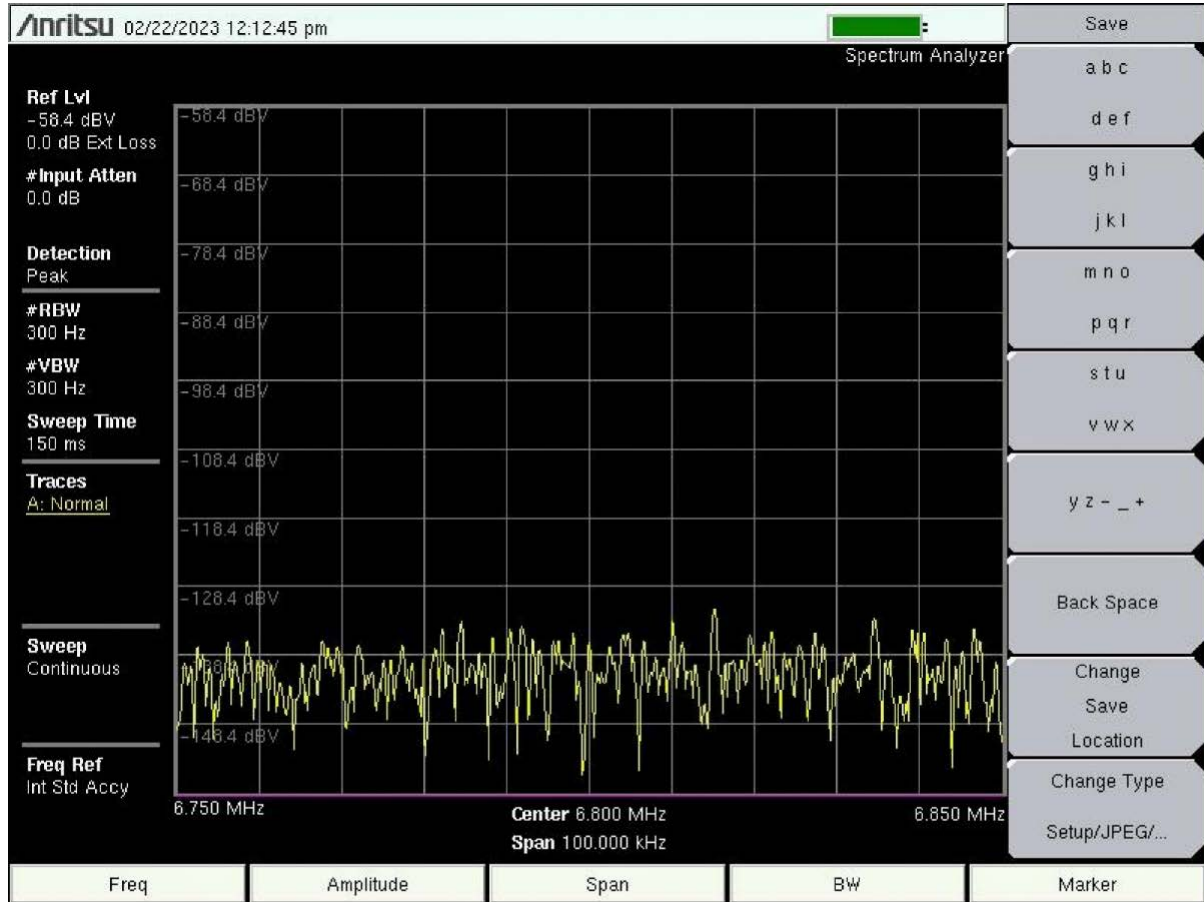
Notes:

Fourth Harmonic



Notes:

Fifth Harmonic



Notes:

Additional Harmonics: None measured

