# Annual KFMD-AM NRSC-2 Bandwidth Compliance, Harmonics and Spurious Emissions Measurements and Observations Report

Measurements Performed by
Eric Morris
on
August 25, 2015

# **Test Methodology**

NRSC measurements were made with a Spectrum Analyzer as prescribed by FCC rules 73.1590 and 73.44. Measurements were taken at full operating power with normal broadcast programming. Harmonics were measured with a Spectrum Analyzer and corrected by the calibration factor data supplied with the Scott Antenna. A tunable notch filter was used to attenuate the fundamental. A communications receiver was used to monitor activity of spurious emissions. The receiver continuously tunes AM broadcast through 12 megahertz.

# **Equipment Used**

Spectrum Analyzer: Anritzu MS2721A

Antenna:

Chris Scott LP-3 Shielded Loop Antenna

Multi-Band Communication Receiver

### Station

Call Sign: KFMD-AM

City of License: Bethel Heights, Arkansas

Frequency: 1340 Khz

Antenna Mode: ND

Power: 1000 Watts Date Measured: 8/25/2015

Location: Approximately 143m S of antenna bearing 187°.

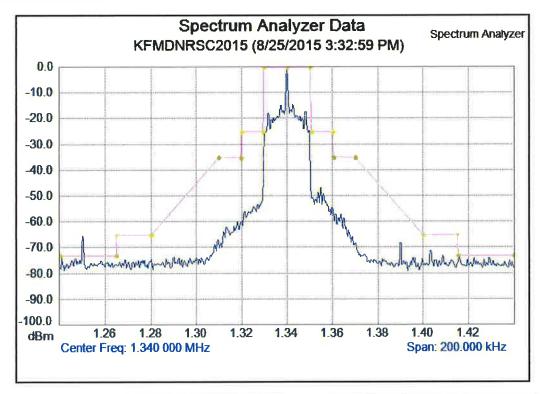
## Harmonic and Spurious Emission Measurements and Observations

Harmonics are required to be 73dB below the carrier level.

Second Harmonic: 2460 Khz >75dB below the carrier level Third Harmonic: 3690 Khz >75dB below the carrier level

No spurious emissions observed through 12 Mhz on a continuous tune communications receiver.

### **NRSC Measurement**



	Measu	rement Par	ameters		
Trace Mode	Max Hold				
Trace Mode	Max Hold	Preamp		ON	
Min Sweep Time	5E-05 S	Referen	ice Level Offset	-48.1 dB	
Input Attenuation	10.0 dB	RBW		300.0 Hz	
VBW	3.0 MHz	Detection	on	Peak	
Center Frequency	1.340 000 MHz	Start Fr	equency	1.240 000 MHz	
Stop Frequency	1.440 000 MHz	Frequer	ncy Span	200.000 000 kHz	
Reference Level	-48.100 dBm	Scale		10.0 dB/div	
70-5	Dev	ice Inform	ation		
Serial Number	648140	Base Ver. V1.78			
App Ver.	V1.79	Date	8/25/2015 3	8/25/2015 3:32:59 PM	
Device Name					

The proceeding Spectrum Analyzer Data shows the full NRSC mask the only excursion above the mask is a known carrier on 1250Khz.

### **Qualifications of Engineer**

Eric Morris, Broadcast Engineer 472601 E 715 Rd., Westville OK 74965 Ph. 479-841-6394

Eric Morris has served as a broadcast engineer for more than 25 years and holds a General Radiotelephone Operator License from the FCC and has been recognized as a Certified Senior Radio Engineer by the Society of Broadcast Engineers.

Eric Morris serves as the Chief Engineer or primary contract engineer for more than 12 radio stations in Arkansas and Oklahoma.

I hereby certify that the information contained in this report is true and accurate to the best of my ability.

Eric Morris

Date