# KRMS-AM Performance Measurement Results With NRSC Measurement

#### NRSC Measurement

In accordance with section 73.44 of the current FCC rules, the measurements were performed for Radio Station KRMS-AM on 6/20/2017. Both the NRSC occupied bandwidth and AM Harmonic radiation measurements were made. All measurements were conducted by Steven V. Morse, a certified Radio Broadcast Engineer.

The occupied bandwidth measurements were made with an IFR Com-120B digitally controlled spectrum analyzer, S# 8199. The analyzer was configured per the FCC part 73.44, with the center frequency being that of the station's carrier frequency of 1150 Khz. The antenna was a "Scott LP-3" standard H-Field loop Antenna hooked directly to the analyzer. Measurement was made with normal programming being broadcast at a daytime power level of .84 Kw non-directional and again with normal Nighttime power of 55 watts non-directional. The Com-120B was configured to measure and store the highest level received during any measurement period. The average stored data time for each measurement was about 12 minutes. This measurement from the new transmitter site and using new "Nautel" 1 KW AM Transmitter.

Analyzer screen data is included with this report.

## **HARMONICS**

Harmonic radiation measurements were made with a Potomac FIM 41 field intensity meter S#445

2nd Harmonic -89db

3rd Harmonic Not detectable

Frequency Measurement: 1,150,002 Hz. or +2.0 Hz

FCC allowed + or - 20Hz. from center carrier frequency.

I hereby state that I have conducted the measurements described above, and that to the best of my knowledge, I have performed all measurements in a manner acceptable to the Federal Communications Commission.

**KRMS- AM** is found to be <u>in</u> compliance with both the NRSC occupied bandwidth and Harmonic radiation limitations.

Steven V. Morse

## Equipment used for measurements:

## Spectrum Analyzer

IFR Com-120b

S# 50008199 Calibration Date 7/08

#### Field Intensity Meter

Potomac Instruments FIM-41

S# 445

Calibration Date 9/06

#### Antenna

Scott LP-3 Loop Antenna

**MEASUREMENT DATE: 6/20/17** 

STATION:

KRMS-AM

FREQUENCY: 1150 Khz

POWER:

840 Watts day / 55 Watts Night

#### **OCCUPIED BANDWIDTH**

KRMS meets the NRSC-2 requirements. See attached spectrum analyzer prints.

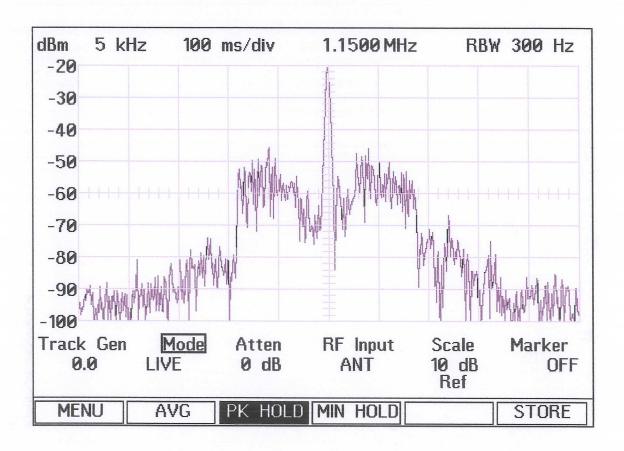
## **Spurious Emmisions:**

None were detected on the analyzer during the measurement period.

## Frequency Measurement of Main Carrier:

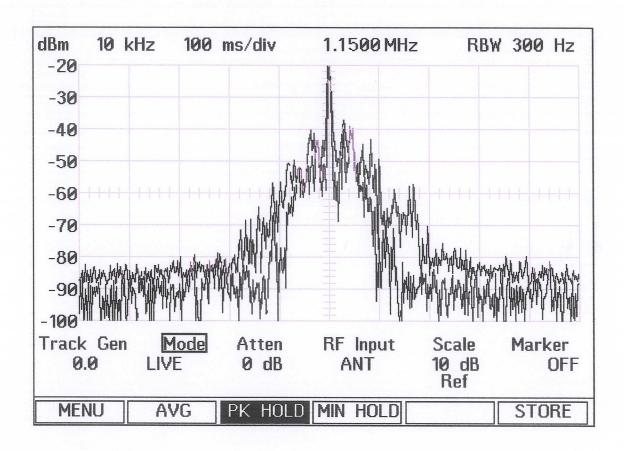
1,150,002 Hz or **+2.0 Hz** FCC Tolerance Allowed: +/- 20 hz

# NRSC Measurement 1 - KRMS 1150 Khz 6/20/17 Daytime Power of 840 watts



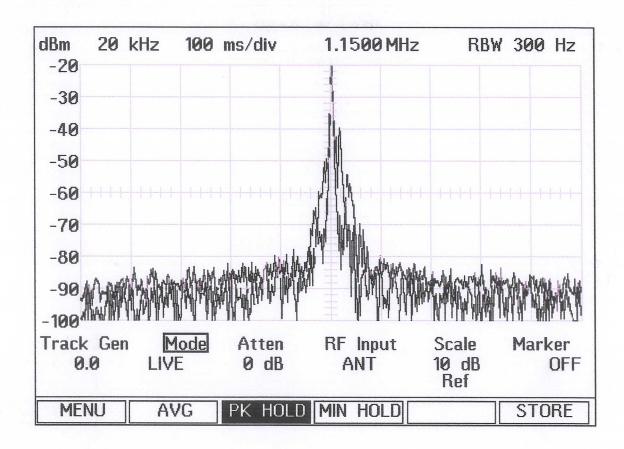
- A) 300 Hz resolution bandwidth
- B) 5 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter

# NRSC Measurement 2 - KRMS 1150 Khz 6/20/17 Daytime Power of 840 watts



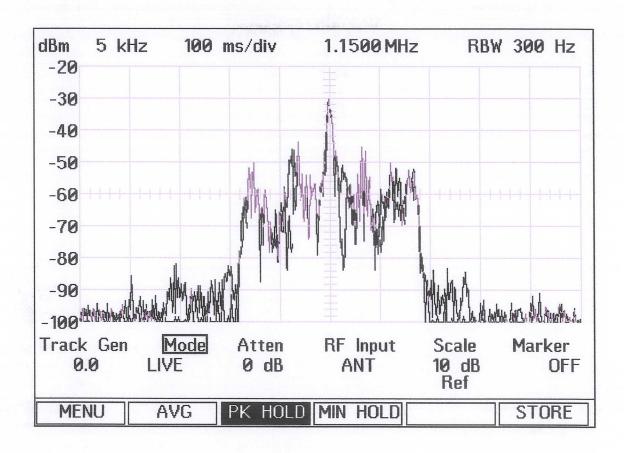
- A) 300 Hz resolution bandwidth
- B) 10 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter

# NRSC Measurement 3 - KRMS 1150 Khz 6/20/17 Daytime Power of 840 watts



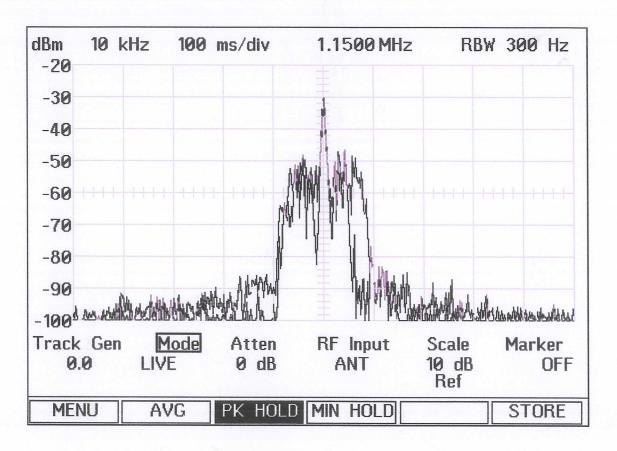
- A) 300 Hz resolution bandwidth
- B) 20 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter

# NRSC Measurement 4 - KRMS 1150 Khz 6/20/17 Nighttime Power of 55 watts



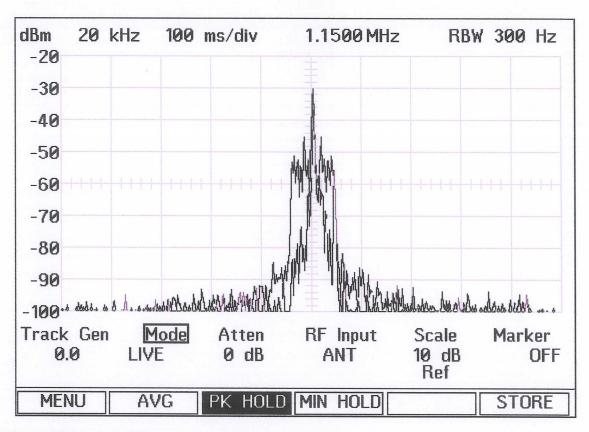
- A) 300 Hz resolution bandwidth
- B) 5 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter

# NRSC Measurement 5 - KRMS 1150 Khz 6/20/17 Nighttime Power of 55 watts



- A) 300 Hz resolution bandwidth
- B) 10 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter

# NRSC Measurement 6 - KRMS 1150 Khz 6/20/17 Nighttime Power of 55 watts



- A) 300 Hz resolution bandwidth
- B) 20 Khz Horizontal division
- C) 10 db / Vertical division
- D) Reference: Carrier peak @ -20 dbm
- E) Peak Hold: 12 Minute duration minimum
- F) No video filter