

Albert Broadcast Services, Inc.
PO Box 4170
Florence, SC 29502
(704) 507-4987

November 19, 2018

WOLH
Dave Baker
51 Commerce St.
Sumter, SC 29501

Re: 2018 NRSC Emissions Reports for WOLH-AM

Dear Dave:

I am pleased to enclose your 2018 NRSC Equipment Performance Measurements for station WOLH, certifying compliance with section 73.44 of the Federal Communications Commission rules and regulations regarding emission requirements.

This document or a copy thereof should be uploaded to the station public file for the station. If I can be of further service, please do not hesitate to contact me directly.

Cordially,

Stu Albert, President

AM Transmission System (NRSC) Emission
Measurements

WOLH

Florence, SC

October 15, 2018

AM Transmission System Emission Measurement

**WOLH
Florence, SC**

October 15, 2018

The radiated emissions of WOLH, 1230 KHz, Florence, SC were measured on October 15, 2018. The measurements were made by Albert Broadcast Services, Inc. utilizing an RF Spectrum Analyzer, Anritsu model MS2721B, serial number 720137. The analyzer was warmed for a period of 15 minutes to its normalized temperature before measurements began. The instrument was located one kilometer from the stations antenna. The receive antenna connected to the spectrum analyzer was a three-turn broadband, non pre-amplified loop antenna manufactured by Belar Corporation.

The spectrum analyzer was set to operate with no video filter, 300 Hz resolution filter bandwidth and with peak hold sampling for each measurement. Sweep resolutions of 5.0, 10.0 and 20.0 KHz per horizontal division were utilized where appropriate to allow various degrees of measurement resolution.

Emissions from 10.2 KHz to 20 KHz removed from the carrier were measured at greater than 25 dB below the un-modulated carrier level. Emissions 20 KHz to 30 KHz removed from the carrier were measured at greater than 35 dB below the un-modulated carrier. Emissions from 30 KHz to 60 KHz removed from the carrier were attenuated at least 5+1dB/KHz below the un-modulated carrier level. Emissions between 60KHz and 75KHz were measured at greater than 65 dB below the un-modulated carrier level. Emissions removed by more than 75 KHz were measured up to 5.0 MHz, using a Potomac FIM-41 field intensity meter, serial number 1542.

The measurements contained herein certify that the station was found in compliance with Federal Communication Communications Commission rule 73.44 regarding emission limitations at the time of measurement.

Steward R. Albert

Steward R. Albert, President
Albert Broadcast Services, Inc.

Harmonic Measurements

**WOLH
Florence, SC
10/15/2018**

The following tabulated results of Harmonic Ratio were measured by noting the dB scale reading at the carrier frequency, then tuning the field intensity meter to the desired harmonic and measuring the field strength, while noting the N number positions that the Full Scale switch of the field strength meter was moved to obtain an on scale reading. The Harmonic Ratio was then calculated using the formula:

$$\text{dB (Harmonic)} - \text{dB (Fundamental)} + (N \times 20) \text{dB}$$

Required level of attenuation: $43 + 10 \log(\text{power in watts})$ or 80 dB,
whichever is less.

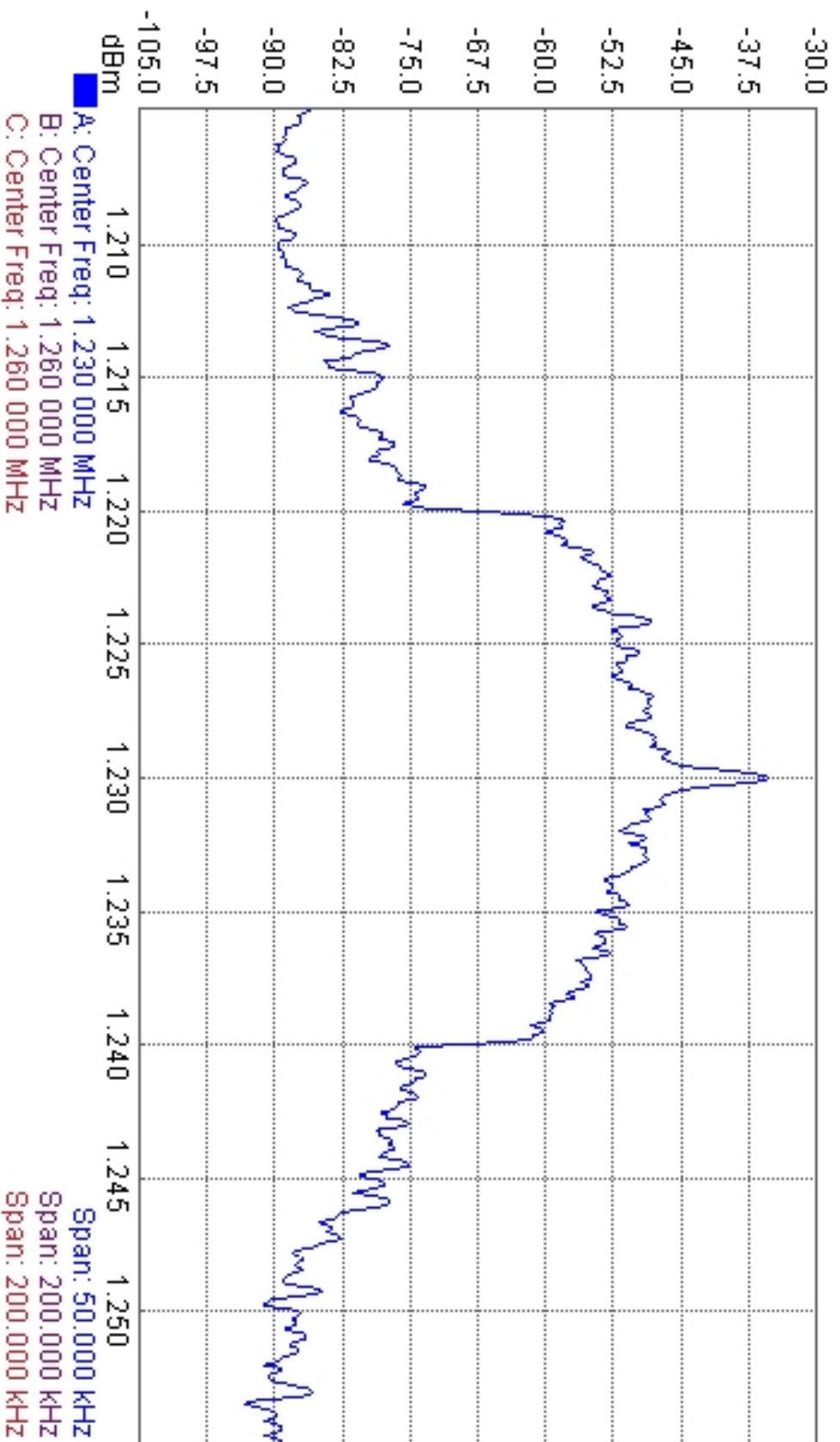
Station power: 1,000 watts
Attenuation Required: 73 dB

<u>Frequency</u>	<u>Measured Field Strength (dB)</u>	<u>Harmonic Ratio</u>
1230 KHz (Carrier)	250 mV/m (12.0 dB)	
2460 KHz		-88.0 dB
3690 KHz		> -86.0 dB
4920 KHz		> -88.0 dB

Spectrum Analyzer Data

Spectrum Analyzer

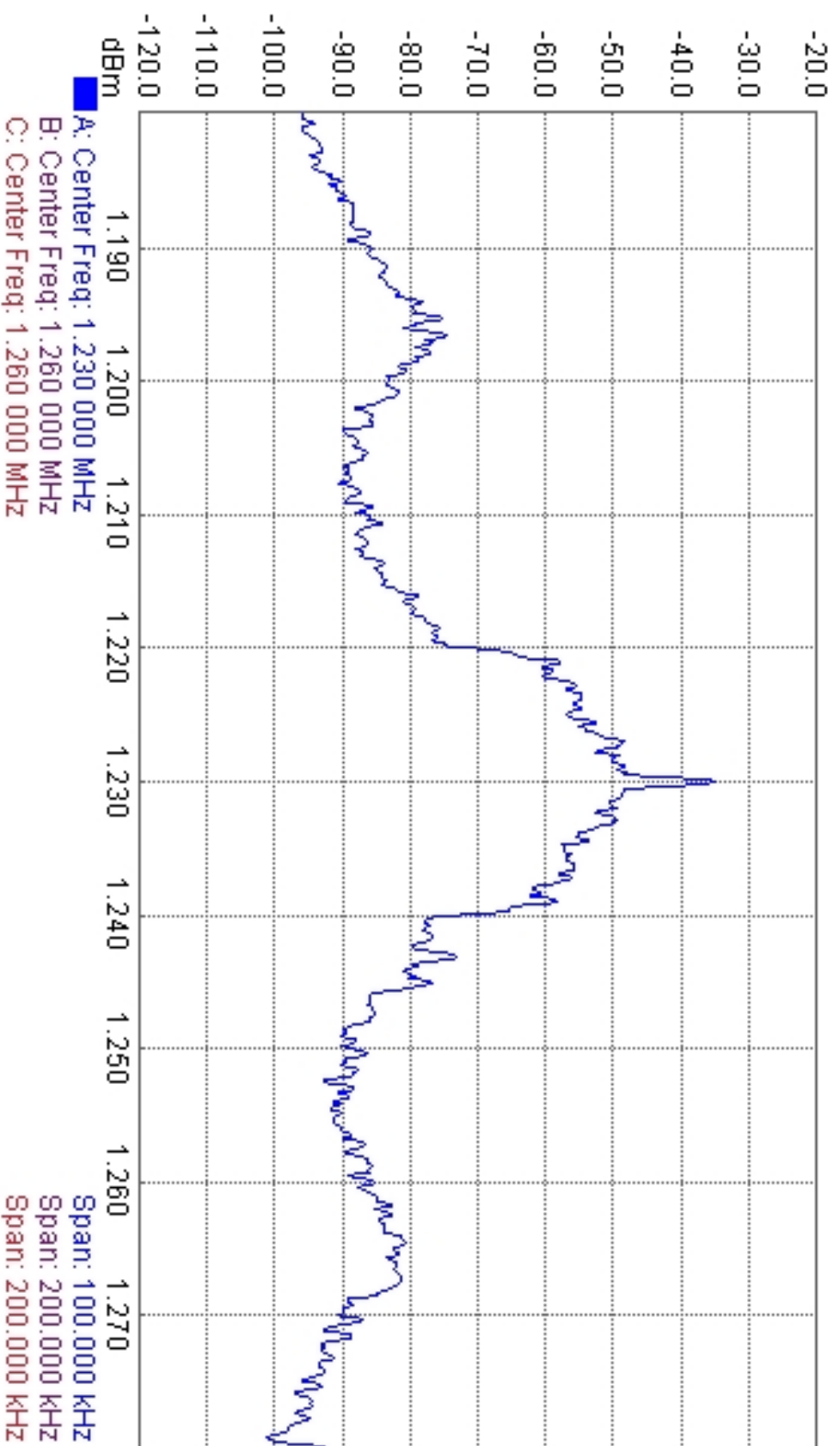
WOLH2018NRSC3 (10/15/2018 3:50:06 PM)



Measurement Parameters

Trace Mode	Max Hold	Stop Frequency	1.255 000 MHz
Preamplifier	OFF	Frequency Span	50.000 000 KHz
Min Sweep Time	0.001 S	Reference Level	-30.000 dBm
Reference Level Offset	0 dB	Scale	7.5 dB/div
Input Attenuation	0.0 dB	Serial Number	747076
RBW	300.0 Hz	Base Ver.	V5.71
VBW	3.0 MHz	App Ver.	V5.73
Detection	Peak	Model	MS2721B
Center Frequency	1.230 000 MHz	Options	25, 27
Start Frequency	1.205 000 MHz	Date	10/15/2018 3:50:06 PM
		Device Name	

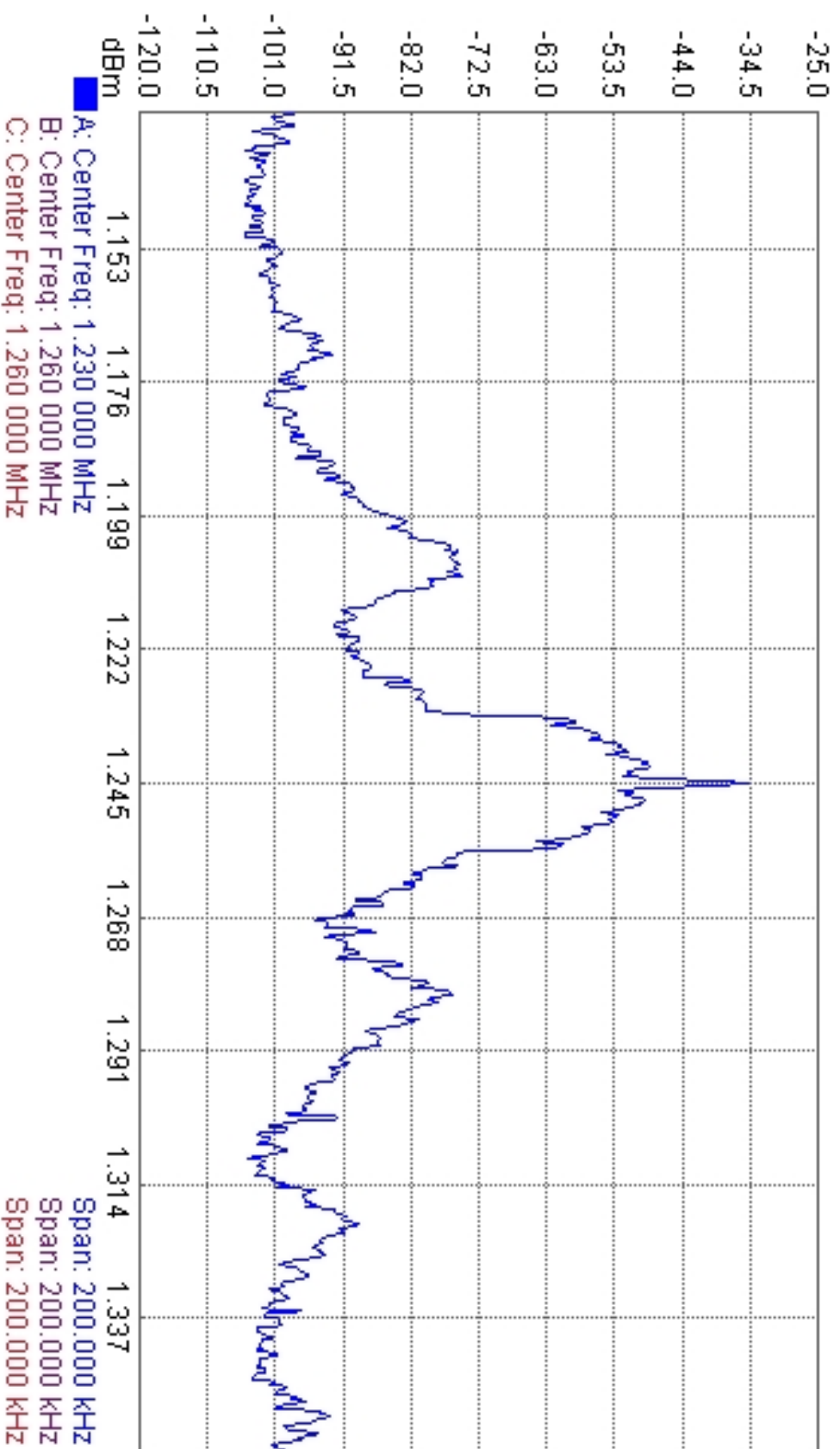
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Measurement Parameters

		Stop Frequency	1.280 000 MHz
Trace Mode	Max Hold	Frequency Span	100.000 000 kHz
Preampl	OFF	Reference Level	-20.000 dBm
Min Sweep Time	0.001 S	Scale	10.0 dB/div
Reference Level Offset	0 dB	Serial Number	747076
Input Attenuation	0.0 dB	Base Ver.	V5.71
RBW	300.0 Hz	App Ver.	V5.73
VBW	3.0 MHz	Model	MS2721B
Detection	Peak	Options	25, 27
Center Frequency	1.230 000 MHz	Date	10/15/2018 3:46:51 PM
Start Frequency	1.180 000 MHz	Device Name	

WOLH2018NRSC1a (10/15/2018 3:51:04 PM)



Measurement Parameters

Trace Mode	Max Hold	Stop Frequency	1.330 000 MHz
Preamplifier	OFF	Frequency Span	200.000 000 kHz
Min Sweep Time	0.001 S	Reference Level	-25.000 dBm
Reference Level Offset	0 dB	Scale	9.5 dB/div
Input Attenuation	0.0 dB	Serial Number	747076
RBW	300.0 Hz	Base Ver.	V5.71
VBW	3.0 MHz	App Ver.	V5.73
Detection	Peak	Model	MS2721B
Center Frequency	1.230 000 MHz	Options	25, 27
Start Frequency	1.130 000 MHz	Date	10/15/2018 3:51:04 PM
		Device Name	