

**Roger Taylor**

4205-40<sup>th</sup>

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**AM SPECTRUM  
EMISSIONS  
STUDY  
800kHz  
KDDD-AM  
10/14/21**

## **Qualifications & Procedures**

The licensee of the station contracted Roger Taylor to conduct measurements pursuant to Federal Code sub part 73.44 of the rules to determine ongoing compliance.

### **Qualifications**

Roger Taylor is owner/operator/supervisor  
He has more than 30 years of RF measurement and FCC compliance experience.  
Christopher Taylor is well experienced in conducting these measurements.

### **Equipment Description**

The following test equipment was used for meeting the requirements of 73.44 of the FCC Rules:

Anritsu MS2721B Spectrum Analyzer with no video filtering and 300 Hz Bandwidth resolution and peak hold time of 10 minutes.

Waveforms are transferred to a computer to be placed in the report  
Potomac FIM 41 Field Strength Meter for measurements of station's Carrier and Harmonics.

General Receiver to identify emissions above the mask as needed

A laboratory grade calibrated standard H-Field Antennae

### **Test Procedures**

(a) Measurements were conducted at a location approximately one km from the station's antenna. The general bearing is noted in the report.

(b) The station's field strength was measured on Potomac FIM-41 at the location for reference level. This station is an operating station and measurements were made per 73.44(d)(3). The station was operating at no less than 90% rated daytime power as per 73.44(ii)

(c) Second Harmonic Radiation was measured with the FIM-41 and is calculated as it is referenced to the carrier in decibels and entered in the report.

(d) Third Harmonic Radiation was measured with the FIM-41 and is calculated as it is referenced to the carrier in decibels and entered in the report.

(e) If spurious radiation from the station is suspected, additional tests are conducted as necessary to determine the extent of the emissions on the Radio Receiver. Any spurious radiation, if found, is detailed in the report.

(f) Photographs of the station's signal as observed on the spectrum analyzer are shown as Exhibit 1 and Exhibit 2 of this report. The station's compliance with 73.44(b) is noted in the report and shown in the exhibits. Other signals shown on the photographs are identified to ensure this station is not radiating them

Exhibit 1. The station's main carrier is shown in the center of the screen and is adjusted for reference that demonstrates sufficient parameters to determine mask compliance. Bandwidth is set to +/-20kHz per division with a resolution

bandwidth of 300Hz with signal strength setting at 10dB/division. The "Max Hold" feature is employed to capture peaks for a duration of 10 minutes.

Exhibit 2. The station's main carrier is shown in the center of the screen and is adjusted for reference that demonstrates sufficient parameters to determine mask compliance. Bandwidth is set to +/-5kHz per division with a resolution bandwidth of 300Hz with signal strength setting at 10dB/division. The "Max Hold" feature is employed to capture peaks for a duration of 10 minutes.

### **Discrepancies**

Any measurements taken which are not within the limits as prescribed by 73.44 of the FCC Rules and Regulations will be outlined in Exhibit 3 and its attachment will be noted on the *Report of Measurements & Data* of this report. The licensee will also be notified of their failure to comply in writing.

## Report of Measurements & Data

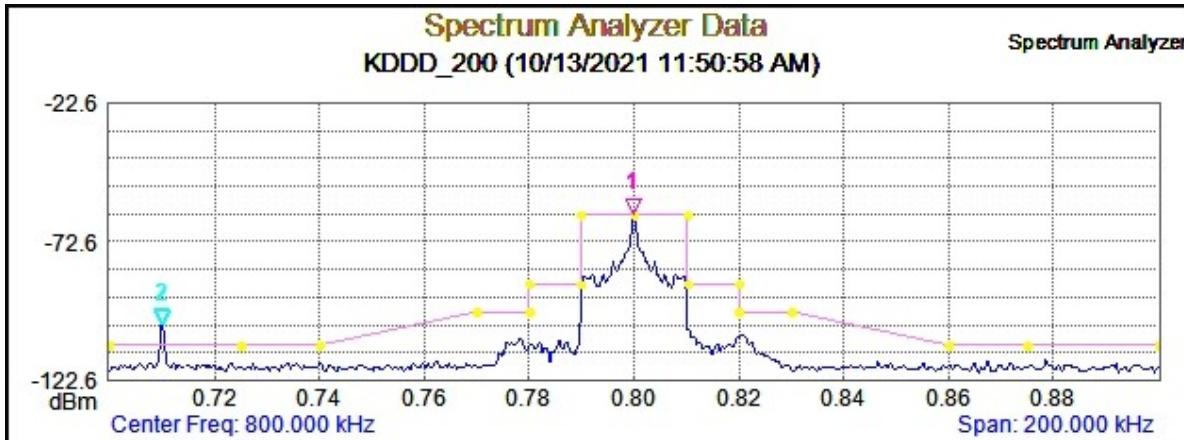
STATION:	<u>KDDD -AM</u>
CITY & STATE:	<u>Dumas TX</u>
FREQUENCY:	<u>800 kHz</u>
DAYTIME POWER:	<u>0.25 kW</u>
DISCRIPTION OF LOCATION WHERE MEASUREMENTS WERE TAKEN:	<u>1km bearing 90 degrees</u>
(b) SECOND HARMONIC FIELD STRENGTH IN -dB	<u>-79 dB</u>
(c) THIRD HARMONIC FIELD STRENGTH IN -dB	<u>-79 dB</u>
Any spurious emission is noted:	<u></u>
Does station meet 73.44(b)	<u>Yes</u>
Date of Measurements:	<u>10/13/ 2021</u>
Time of Measurements:	<u>11:54</u>

I hereby certify the measurement data  
contained in this exhibit was either taken  
by myself or under my direct supervision.  
All statements are true and correct to the  
best of my knowledge.



Roger Taylor  
Supervising Engineer

# KDDD-AM



Mkr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input type="checkbox"/>	<input type="checkbox"/>	800.000 0 kHz	-62.66 dBm	--	--
2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	710.000 0 kHz	-102.51 dBm	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
5	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
6	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

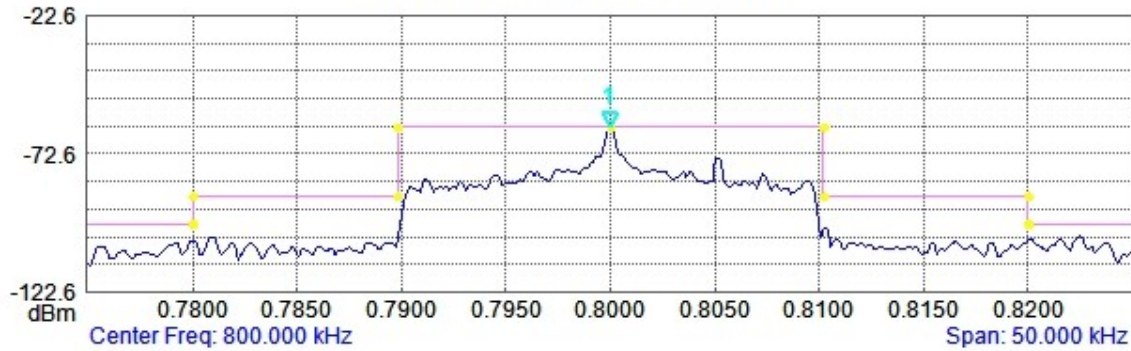
## Measurement Parameters

		Stop Frequency	900.000 000 kHz
Trace Mode	Max Hold	Frequency Span	200.000 000 kHz
Preamp	OFF	Reference Level	-22.600 dBm
Min Sweep Time	0.0002 S	Scale	10.0 dB/div
Reference Level Offset	-0.005 dB	Serial Number	1027112
Input Attenuation	0.0 dB	Base Ver.	V5.71
RBW	300.0 Hz	App Ver.	V5.73
VBW	30.0 kHz	Model	MS2721B
Detection	Peak	Options	20
Center Frequency	800.000 000 kHz	Date	10/13/2021 11:50:58 AM
Start Frequency	700.000 000 kHz	Device Name	RockTexTechnologies11-8-18

# KDDD-AM

Spectrum Analyzer Data  
KDDD\_50 (10/13/2021 11:54:09 AM)

Spectrum Analyzer



Mkr	Ref	Delta	Ref Freq	Ref Amp	Delta Freq	Delta Amp
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	800.000 0 kHz	-63.06 dBm	--	--
2	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
3	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
4	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
5	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--
6	<input type="checkbox"/>	<input type="checkbox"/>	--	--	--	--

## Measurement Parameters

		Stop Frequency	825.000 000 kHz
Trace Mode	Max Hold	Frequency Span	50.000 000 kHz
Preamp	OFF	Reference Level	-22.600 dBm
Min Sweep Time	0.0002 S	Scale	10.0 dB/div
Reference Level Offset	-0.005 dB	Serial Number	1027112
Input Attenuation	0.0 dB	Base Ver.	V5.71
RBW	300.0 Hz	App Ver.	V5.73
VBW	30.0 kHz	Model	MS2721B
Detection	Peak	Options	20
Center Frequency	800.000 000 kHz	Date	10/13/2021 11:54:09 AM
Start Frequency	775.000 000 kHz	Device Name	RockTexTechnologies11-8-18