



EDUCATIONAL MEDIA FOUNDATION

## Transmitter RF Proof of Performance

**K240ED**

**95.9 Mhz**

Tulsa

OK

FCC FIN 140535

W/O 50546

All measurements made by **S Guye**

Educational Media Foundation

Date of Proof: 10/24/2019

6:30a PST

A handwritten signature in black ink, appearing to read "S. Guye", is written over a horizontal line.

Engineer

1 of 4

10/24/2019

Date Signed

## Test Results

Equipment Tested	Make	Model	Serial
Processor	n/a	n/a	n/a
Exciter	n/a	n/a	n/a
Transmitter	Crown	FM250GR	A001018

Frequency	Assigned	Actual	Variance in Hz	Limit in HZ
Main Carrier (MHz)	95.9000000	95.9012667	1266.7	2000
Pilot (KHz)	19.0000	n/a	N/A	2

### Transmitter Operation Parameters

Transmitter Final Volts	41.00	Volts
Transmitter Final Current	4.37	Amps
External Power Meter Reading	0.116	K Watts
Transmitter Reflected Power		K Watts
Calculated SWR	#VALUE!	
Calculated Efficiency	281.3	Percent
TPo	0.521	K Watts
Indirect Power Calculation	0.116	K Watts

Licensed ERP(Kw) 0.250

### Modulation

Monitoring Time	n/a	Minutes
Modulation Maximum Peaks	n/a	%
Peaks Per Minute	n/a	Qty/Min
Pilot Injection	n/a	%

### Inter-Modulation

10MHz Span			20MHz Span		
Spike MHz	IM - db	Clearance	Spike MHz	IM - db	Clearance
		N/A	0.0	0.0	0
		N/A			N/A
		N/A	0.0	0.0	0

Harmonics			FCC Limit= -66.98 dBc		
Harmonic	Frequency	Reading	Correction*	dBc	Clearance dB
	95.9	-4.05	0.00		
X 2	191.8	-96.65	-0.07	-92.53	25.55
X 3	287.7	-96.42	-1.07	-91.30	24.32
X 4	383.6	-96.87	-2.69	-90.13	23.15
X 5	479.5	-95.27	-4.65	-86.57	19.59
X 6	575.4	-93.74	-6.94	-82.75	15.77
X 7	671.3	-94.60	-9.05	-81.50	14.52
X 8	767.2	-97.98	-10.69	-83.24	16.26
X 9	863.1	-98.75	-12.30	-82.40	15.42

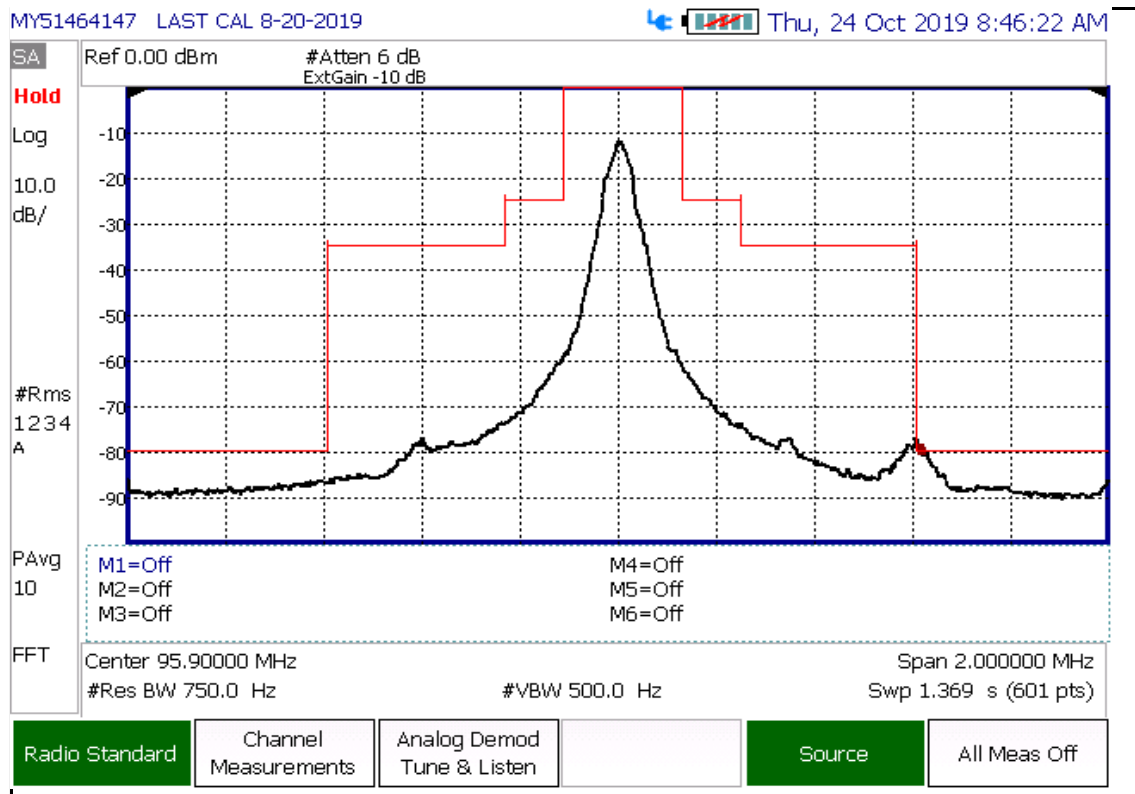
\*Correction value derived from directional sample port loss and test cable/filter loss

## Spurious Emissions Measurement

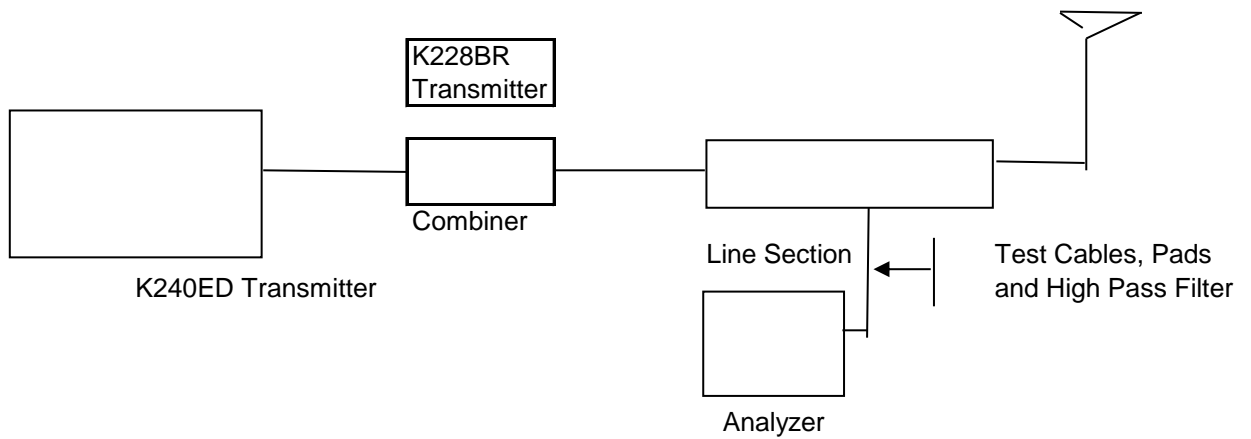
This transmitter emission were analyzed and found to be with in compliance of FCC Part 73.317.

## Occupied Bandwidth Measurement

The occupied bandwidth was measured with a spectrum analyzer for 10 minutes using averaging spectrum sweep. This station is operating with the permissible bandwidth.



## Test Setup for Proof



Filter	Mfg	Shively/Combiner
	Model	2930-2/3
	Ser #	33295-1

Equipment Used	Brand	Model	Ser #	Cal date	Cal due	Cal By
Spectrum Analyzer	Keysight	N9912A	MY51464147	8/20/2019	08/19/21	Keysight
Frequency Counter	Keysight	N9912A	MY51464147	8/20/2019	08/19/21	Keysight
					#VALUE!	
Line Section	Bird	PME7DD-V	095100576	n/a	#VALUE!	n/a
Sample Probe	Bird	n/a		n/a	n/a	n/a
					#VALUE!	
					#VALUE!	
					#VALUE!	
					#VALUE!	