

## Equipment Performance Measurements (FM)

Call Letters - KWNZ Community Of License Lovelock, NV  
 Technician - Kevin Fitzgerald Date & Time - 4/24/2013 7:00PM  
 Transmitter Make & Model - Armstrong FM 15000TA  
 Exciter Make & Model - Armstrong - FMX-30B  
 Frequency - 106.3 Frequency Calibrated? - Y  
 Analyzer Brand & Model - Winradio WR-6305e  
 Serial Number - 0309109129006FB Source Of Analyzer - Kevin Fitzgerald  
 Analyzer Calibration Date - 1/2011 Other \_\_\_\_\_  
 \* Measurements at transmitter site with wire antenna

### Measurements

1) 120 kHz to 240 kHz from the carrier:

Below Level Of Unmodulated Carrier      Below Level Of Unmodulated Carrier

Minus 120 kHz	<u>77dB</u>	Plus 120 kHz	<u>76dB</u>
Minus 180 kHz	<u>82dB</u>	Plus 180 kHz	<u>82dB</u>
Minus 240 kHz	<u>86dB</u>	Plus 240 kHz	<u>87dB</u>

Any point between 120 kHz and 240 kHz inclusive attenuated to a lower dB level of the unmodulated carrier than the 3 listed above: No

All points between 120 kHz and 240 kHz inclusive attenuated at least 25 dB below the level of the unmodulated carrier lower: Yes

2) 240 kHz to 600 kHz from the carrier:

Below Level Of Unmodulated Carrier      Below Level Of Unmodulated Carrier

Minus 240 kHz	<u>87dB</u>	Plus 240 kHz	<u>87dB</u>
Minus 300 kHz	<u>87dB</u>	Plus 300 kHz	<u>87dB</u>
Minus 350 kHz	<u>87dB</u>	Plus 350 kHz	<u>87dB</u>
Minus 400 kHz	<u>87dB</u>	Plus 400 kHz	<u>86dB</u>
Minus 500 kHz	<u>87dB</u>	Plus 500 kHz	<u>87dB</u>
Minus 600 kHz	<u>87dB</u>	Plus 600 kHz	<u>87dB</u>

Any point between 240 kHz and 600 kHz inclusive attenuated to a lower dB level of the unmodulated carrier than the 6 listed above: No

All points between 240 kHz and 600 kHz inclusive attenuated at least 35 dB below the level of the unmodulated carrier: Yes

3) Greater than 600 kHz from the carrier:

Based on the formula in 73.317(d) and a TPO of 13.3<sup>kw</sup> the minimum attenuation level is 84 dB.

Below level of Unmodulated carrier		Below level of Unmodulated carrier	
Minus 700 kHz	87 dB	Plus 700 kHz	87 dB
Minus 800 kHz	87 dB	Plus 800 kHz	87 dB
Minus 1 mHz	0 (KZTI)	Plus 1 mHz	0 (KNEZ)
Minus 1.5 mHz	87 dB	Plus 1.5 mHz	87 dB
Minus 2 mHz	87 dB	Plus 2 mHz	87 dB
Minus 3 mHz	87 dB	Plus 3 mHz	87 dB
Minus 5 mHz	87 dB	Plus 5 mHz	87 dB
Minus 6 mHz	87 dB	Plus 6 mHz	87 dB

Any point greater than 600 kHz from the carrier attenuated to a lower dB level of the unmodulated carrier than the 8 listed above: No

All points greater than 600 kHz from the carrier attenuated at least 84 dB below the level of the unmodulated carrier: Yes

Note: KZTI, 105.3 mHz received (minus 1 mHz). KNEZ, 107.3 mHz received (plus 1 mHz). No noise or interference was generated on 105.3 or 107.3 mHz.

Comments:

Scanned a wide range of points plus and minus 10 mHz, no spurious emissions. No intermod detected on any possible mixed or harmonic channels, especially none on 108.3 mHz, 108.5 mHz, or 101.9 mHz.

4) Preemphasis set at: 75 msec