

TYPE OF TEST: OCCUPIED BANDWIDTH

FCC PART: 2.1049 (c)(1) per 90.210 (b)(d)

MANUFACTURER: RITRON, INC.
505 West Carmel Drive
Carmel, IN 46032

MODEL: DTX-445

TYPE OF UNIT: UHF-FM Two Way Radio Transceiver Module

FCC ID: AIERIT17-445

DATE: 7 Apr 2011

PROCEDURE:

1. The DTX-445 was programmed for transmitter operation on 460.000 MHz. The transmitter was adjusted for a deviation of +/- 2.5 kHz at 1000 Hz for narrowband channels. The plot shows the occupied bandwidth for 12.5 kHz bandwidth operation with a 2400 bps pseudo-random audio frequency shift keying (AFSK) between 1200 Hz and 2400 Hz tones.
2. The RF output of the DTX-445 was measured with a HP8920A communications test set wattmeter at 10.0 watts. Power was set at +14 VDC.
3. The unit's antenna port was connected to the HP8560E spectrum analyzer via a 20 dB power attenuator.
4. The output of a pseudo-random 1200 and 2400 Hz phase continuous AFSK generator was applied to the auxiliary input of the DTX-445. The output was adjusted to a level 16 dB greater than that necessary to produce 50% of the rated system deviation at the frequency of maximum response.
5. The analyzer was centered on 460.000 MHz and the spectrum was captured in max hold mode on the spectrum analyzer. The spectral emissions lie well within the superimposed narrow band emission mask.

TYPE OF TEST: 12.5 kHz AFSK OCCUPIED BANDWIDTH

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12.5 kHz data:

