TYPE OF EXHIBIT: DESCRIPTION OF MEASUREMENT FACILITY

FCC PART: 2.948

MANUFACTURER: RITRON, Inc. MODEL: RQX-417NX

TYPE OF UNIT: VHF FM/NXDN 2-way callbox

FCC ID: AIERIT41-417 **DATE:** Nov 30, 2015

DESCRIPTION:

The emission measurements filed with this application were made on a site certified by RITRON, Inc. Data pertaining to this site is on file with the FCC and Industry Canada.

Firm Registration Number: 536261

Firm FRN: 0004-3348-76

FCC Reference: ANSI STD C63.4-2003

Industry Canada Radio Standard: Procedure 212

This site is used on a continuing basis exclusively by RITRON, Inc. and is utilized only for RF field strength measurements of equipment designed and manufactured by RITRON, Inc. It is not used for measurements by, or for, any other party on a contract basis or otherwise.

All other measurements are taken at RITRON's engineering laboratory in Carmel, IN.

PHOTO OF RITRON TEST SITE:



SIGNED:

Dennis Zimmerman Project Engineer RITRON, Inc. **TYPE OF EXHIBIT**: Manufacturer's Statement

FCC PART: 1.1310

MANUFACTURER: RITRON, Inc. MODEL: RQX-417NX

TYPE OF UNIT: UHF FM Callbox 2-Way Radio

FCC ID: AIERIT41-417
DATE: March 10, 2016

The RITRON model RQX-417NX is a UHF Transceiver Module designed for operation either as a 12.5 kHz channel bandwidth analog FM transceiver or as a digital transceiver supporting 4800 bps per 6.25 kHz channel bandwidth or 9600 bps 12.5 kHz channel bandwidth. Its output power varies from .5 watts to 2.5 Watts.

This product will be manufactured and marketed on a continuing basis in the United States of America by the applicant, RITRON, Inc. of Carmel, IN.

TYPE OF EXHIBIT: Statement of Certifying Engineer

FCC PART: 1.1310

MANUFACTURER: RITRON, Inc. MODEL: RQX-417NX

TYPE OF UNIT: UHF FM Callbox 2-Way Radio

FCC ID: AIERIT41-417
DATE: March 10, 2016

I, Dennis Zimmerman, am now, and have been for the past 18 years employed as a project engineer with RITRON, Inc. I have been employed in the two-way radio industry for the past 30 years. I received a BSEE degree from the University of Cincinnati in 1977.

I hereby certify that all the measurements and data herein were taken by me, or under my direct supervision and that they were obtained using sound and accepted engineering principles and that they accurately reflect the performance and characteristics of the unit tested.

Further, I attest that manufacturing controls exist such that this data are representative of units which will be manufactured by RITRON.

Dennis Zimmerman Project Engineer

TYPE OF EXHIBIT: STATEMENT OF OPERABILITY ON NATIONWIDE PUBLIC SAFETY INTEROPERABILITY CALLING CHANNEL

FCC PART: 90.203(j)(1)
MANUFACTURER: RITRON, Inc.
MODEL: RQX-417NX

TYPE OF UNIT: UHF FM Callbox 2-Way Radio

FCC ID: AIERIT41-417
DATE: March 10, 2016

I, Dennis Zimmerman, Project Engineer for RITRON, Inc., certify that this product, RQX-417NX, is capable of operating on the Nationwide Public Safety Interoperability Calling Channel in the 450-470MHz Band. (See 90.20(c)(d))

Dennis Zimmerman Project Engineer

TYPE OF EXHIBIT: STATEMENT CONCERNING SPECTRUM EFFICIENCY

FCC PART: 90.203(j)(3),(5)
MANUFACTURER: RITRON, Inc.
MODEL: RQX-417NX

TYPE OF UNIT: UHF FM Callbox 2-Way Radio

FCC ID: AIERIT41-417
DATE: March 10, 2016

I, Dennis Zimmerman, Senior Project Engineer for RITRON, Inc., certify that this product, RQX-417NX, meets a spectrum efficiency standard of one voice channel per 12.5 kHz of channel bandwidth and a minimum data rate of 4800 bps per 6.25 kHz of channel bandwidth.

Also, the RQX-417NX meets a spectrum efficiency standard of one voice channel per 6.25 kHz of channel bandwidth and a minimum data rate of 4800 bps per 6.25 kHz of channel bandwidth.

Dennis Zimmerman

Project Engineer

TYPE OF EXHIBIT: ANTI-DRUG ABUSE CERTIFICATION

FCC PART: 1.1310

MANUFACTURER: RITRON, Inc. MODEL: RQX-417NX

TYPE OF UNIT: UHF FM Callbox 2-Way Radio

FCC ID: AIERIT41-417
DATE: March 10, 2016

I, Dennis Zimmerman, certify that RITRON is not subject to a denial of Federal benefits, that include FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862 because of a conviction for possession or distribution of a controlled substance.

Dennis Zimmerman

Project Engineer