US Tech Test Report FCC Part 15.209 an IC RSS-210 Certification

FCC ID: KE3-3003274
IC: 2721A-3003274
Test Report Number: 18-0038
Issue date: May 25, 2018

Customer: Radio Systems Corp
Model: 300-3274

## **Extrapolation Factor Statement**

The EUT operates at below 30 MHz.

Therefore the following Extrapolation justification statement is being provided to show the justification for using 50 dB/decade.

FCC Part 15.31f(2) cited below; measurements were made at two distances to determine the appropriate factor to use.

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.

For products similar to the EUT measurements were taken at two distances to determine the extrapolation factor.

The distance and the measurement collected are presented below:

- 1. 1 meter= fundamental reading of 83.4 dBuV
- 2. 10 meter= fundamental reading of 34.0 dBuV

The results show a factor of 49.4 dB/decade. This factor was used to determine the fundamental emissions limit for the EUT.