# **OCCUPIED BANDWIDTH**

## Applicable Rules:

#### CFR47 §15.231(c): Periodic operation in the band 40.66-40.70 MHz and above 70 MHz.

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

#### **RSS-210 A1.1.3 Bandwidth of Momentary Signals**

For the purpose of Section A1.1, the 99% bandwidth shall be no wider than 0.25% of the centre frequency for devices operating between 70 MHz and 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the centre frequency.

The 5883H-AT radio transmits on a 344.94MHz carrier using OOK. The OBW measurement required is 20dB. The measured OBW limit is:

Occupied Bandwidth Limit @ 344.94 MHz (CFR47 §15.231(c) / RSS-210 A1.1.3) 862.35 KHz

### Highest measured OBW

Both antennas were measured and the results are shown below. The highest OBW of the two antennas is 159.22 kHz for Antenna 2.



RBW = 30KHz VBW = 100KHz OBW = **159.22 KHz** (Measured)