5800 RADIO 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 5800 radio transmits on a 344.94MHz carrier using OOK. The OBW measurement required is 20dB. The measured OBW is given below.

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

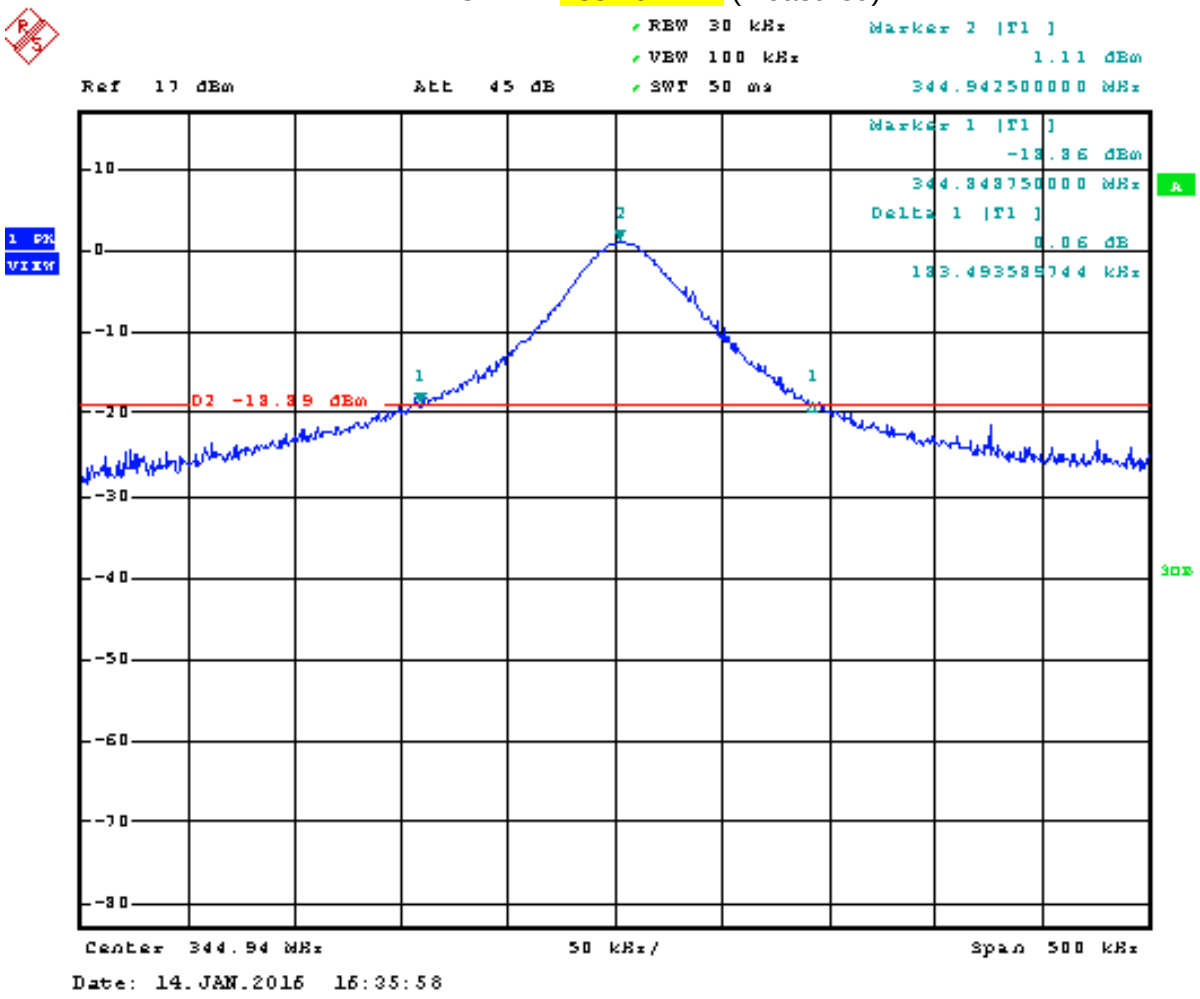
Highest measured OBW

Both antennas were measured and the results are shown below. The highest OBW of the two antennas is 184.294 kHz for Antenna 2.

5800 RADIO OCCUPIED BANDWIDTH CONT.

20 dB OBW, Antenna 1:

RBW = 30KHz
VBW = 100KHz
OBW = **183.494KHz** (Measured)



5800 RADIO OCCUPIED BANDWIDTH CONT.

20 dB OBW, Antenna 2:

RBW = 30KHz
VBW = 100KHz
OBW = **184.294KHz** (Measured)