

## RF6 AND WIFI DTS BANDWIDTHS FOR LCP300-L

### Applicable Rules:

**CFR47 §15.247(a)(2)** Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

**IC RSS-247 §5.2.1, C63.10**

5.2 Digital Transmission Systems (DTSs)

DTSs include systems that employ digital modulation techniques resulting in spectral characteristics similar to direct sequence systems. The following applies to the bands 902-928 MHz and 2400-2483.5 MHz

1. The minimum 6 dB bandwidth shall be 500 kHz.

### SUMMARY RESULTS:

#### DTS BANDWIDTH FOR RF6 RADIO

The maximum measured DTS bandwidth across the modulations and channels is **1.594MHz** (Ch 25, Ant 1). Measurements are shown below.

#### DTS BANDWIDTH FOR WIFI RADIO

The maximum measured 6dB bandwidth for 802.11b modulation is **10.596MHz** Ch 11, Ant 1).

The maximum measured 6dB bandwidth for 802.11g modulation is **16.486MHz** (Ch 6, Ant 1).

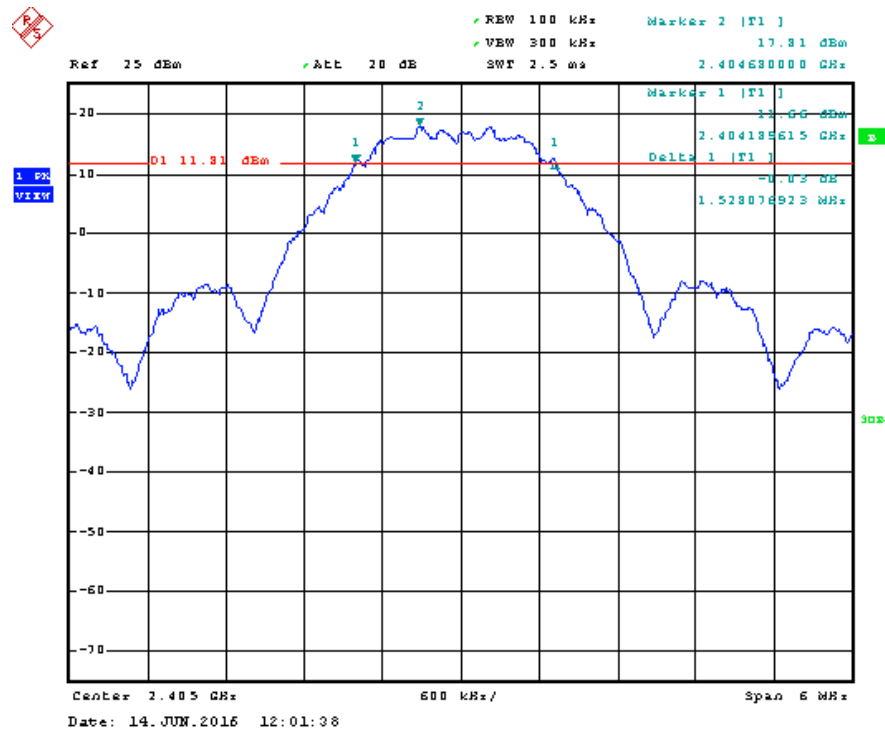
The maximum measured 6dB bandwidth for 802.11n modulation is **17.668MHz** (Ch 11, Ant 1).

Measurements are shown following the RF6 measurements.

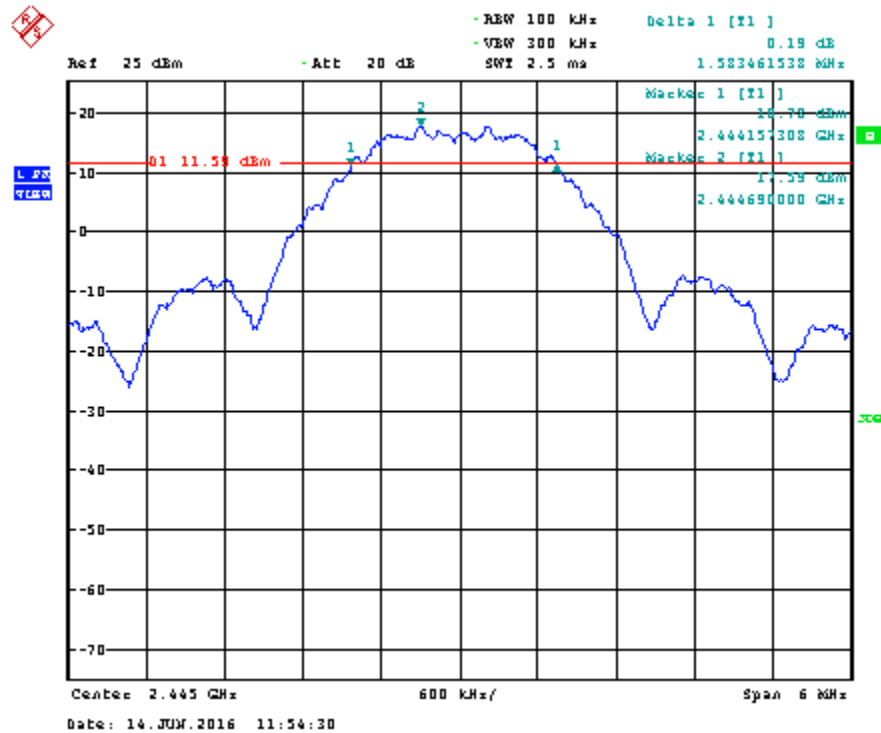
## DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO

The RF6 radio is 2405MHz – 2475MHz DSSS. The measured DTS bandwidths (6dB Occupied Bandwidths) are given below.

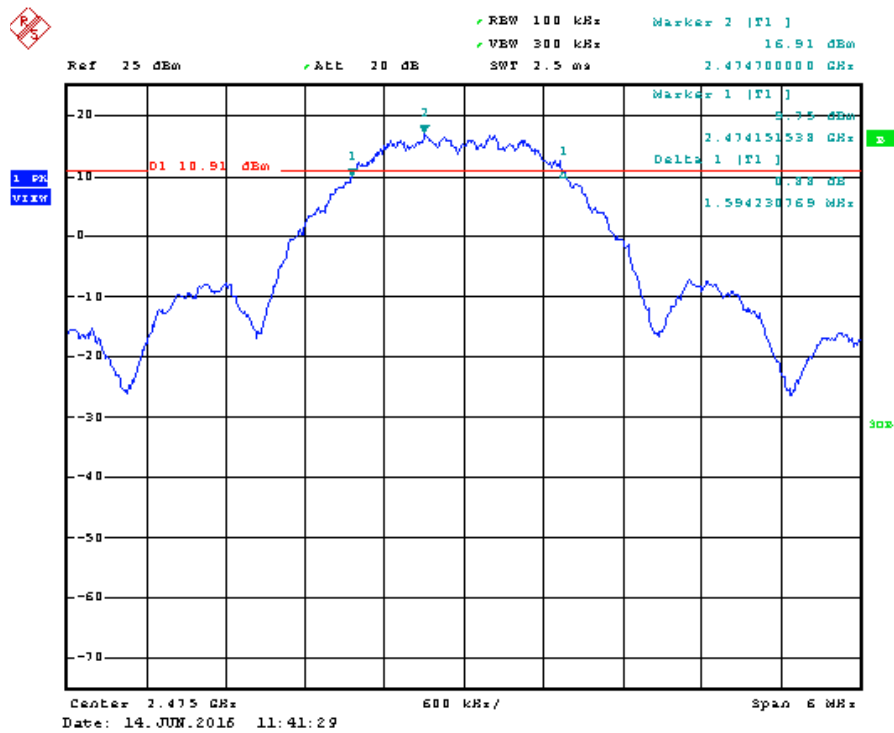
### Channel 11 ANT 1:

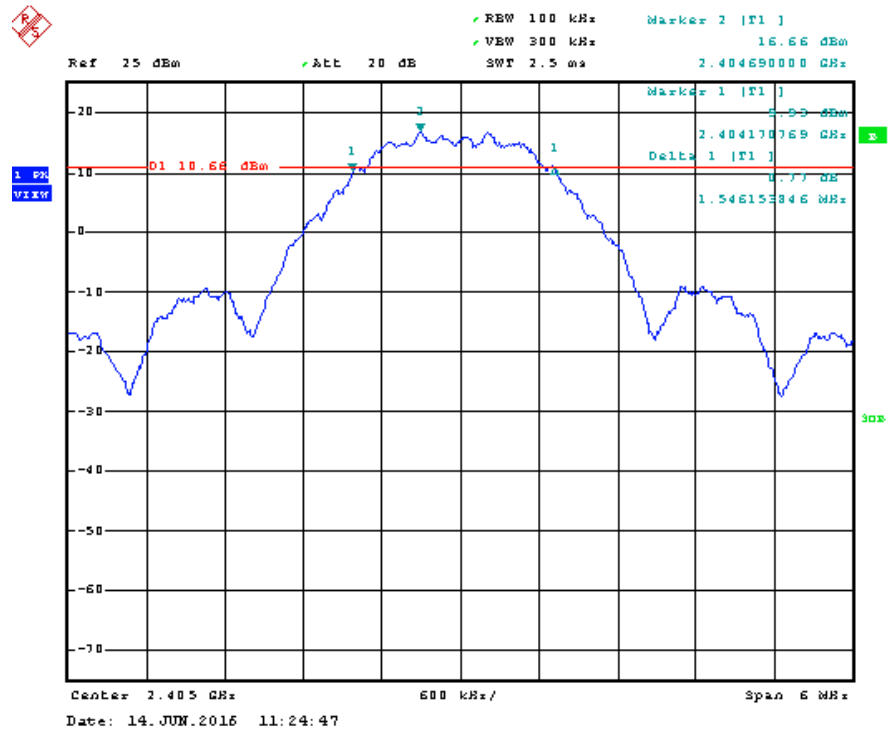


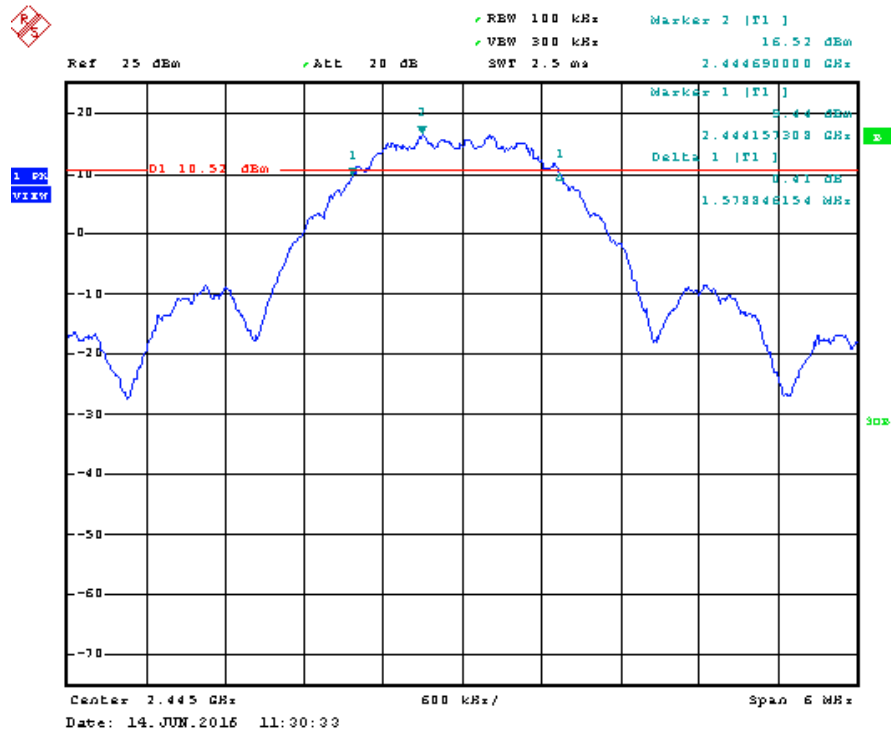
6dB Occupied Bandwidth: **1.528MHz**

**DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.****Channel 19 ANT 1:**

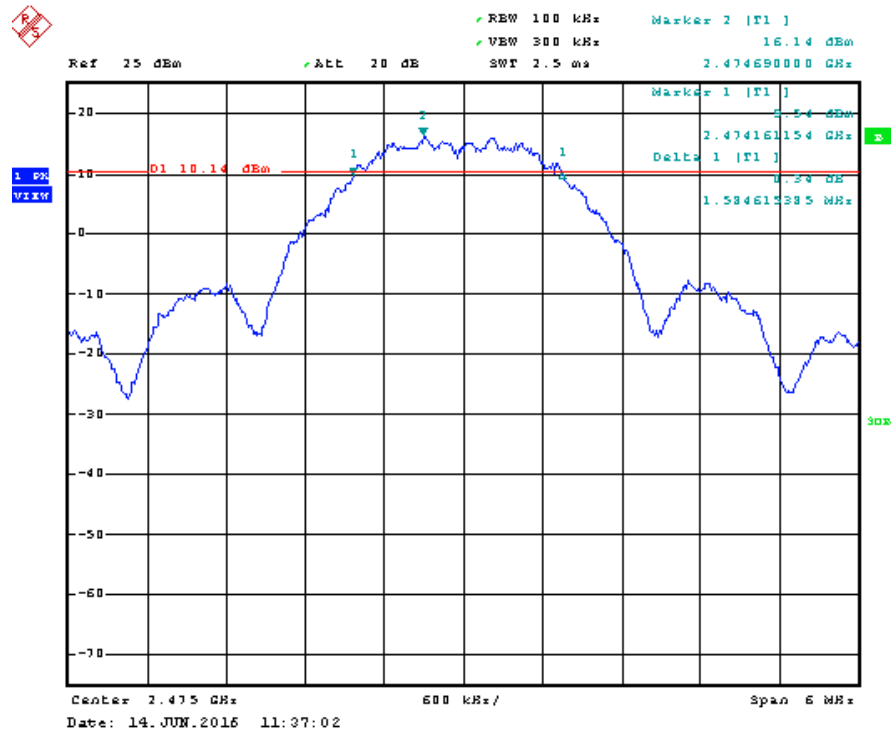
6dB Occupied Bandwidth: **1.583MHz**

**DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.****Channel 25 ANT 1:**6dB Occupied Bandwidth: **1.594MHz**

**DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.****Channel 11 ANT 2:**6dB Occupied Bandwidth: **1.546MHz**

**DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.****Channel 19 ANT 2:**

6dB Occupied Bandwidth: **1.578MHz**

**DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.****Channel 25 ANT 2:**6dB Occupied Bandwidth: **1.584MHz**

## DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO

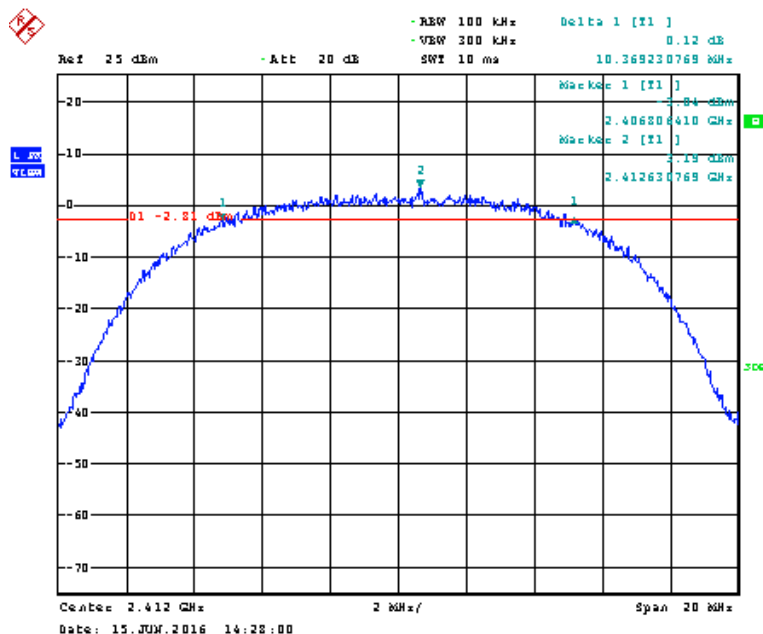
The Wi-Fi radio is 2412MHz – 2462MHz DSSS (802.11b), OFDM (802.11g), and OFDM (802.11N). The measured bandwidths, DTS (6dB Occupied Bandwidth) are given below.

The maximum measured 6dB bandwidth for 802.11b modulation is **10.596MHz** (Ch 11, Ant 1).

The maximum measured 6dB bandwidth for 802.11g modulation is **16.486MHz** (Ch 6, Ant 1).

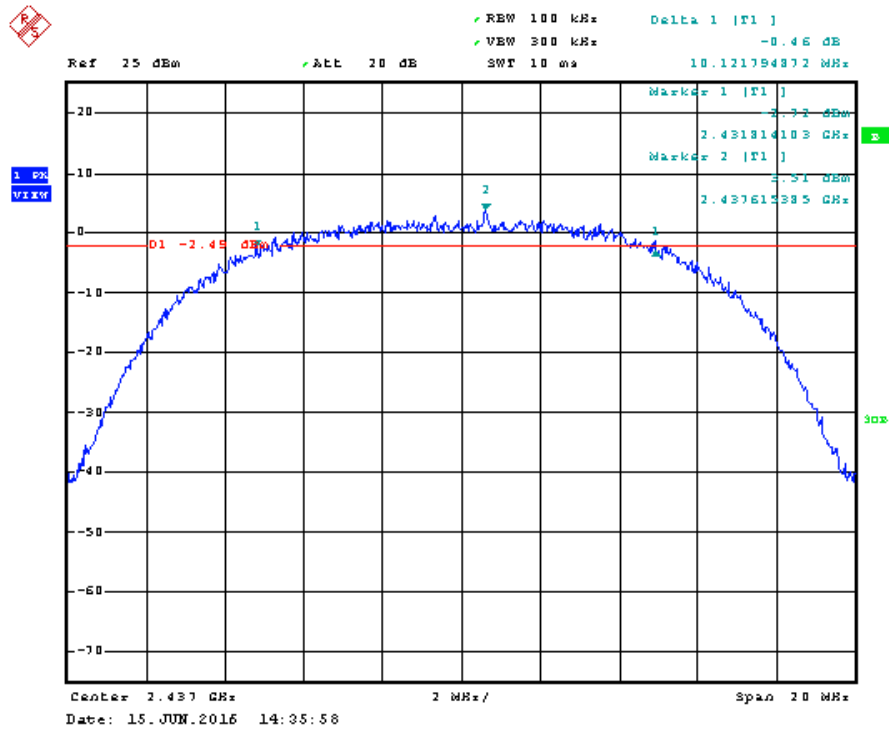
The maximum measured 6dB bandwidth for 802.11n modulation is **17.668MHz** (Ch 11, Ant 1).

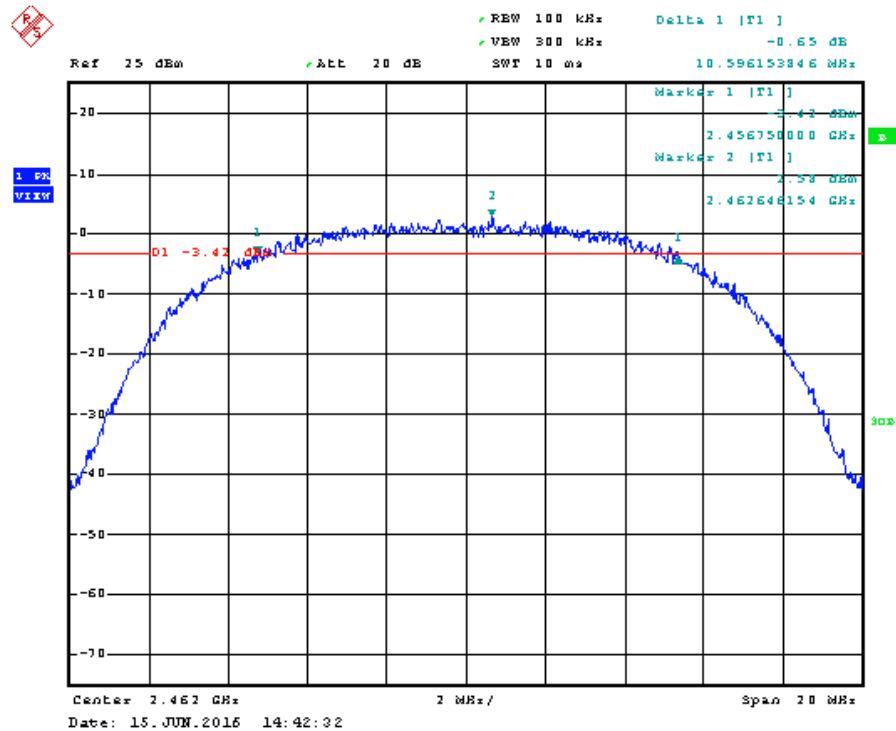
### B Mode Channel 1 ANT 1:



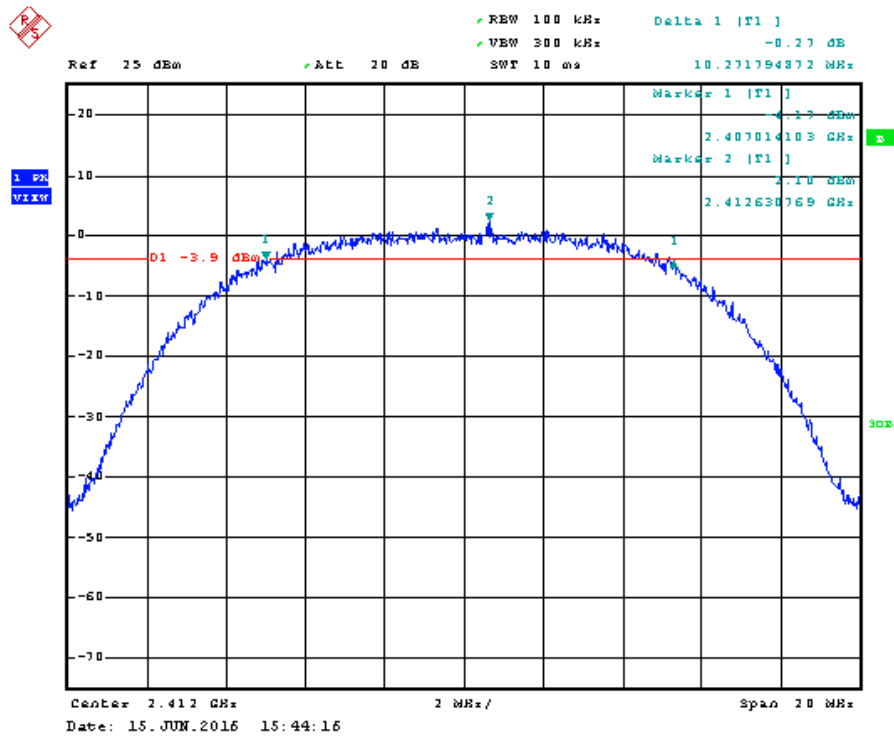
6dB Occupied Bandwidth: **10.369MHz**

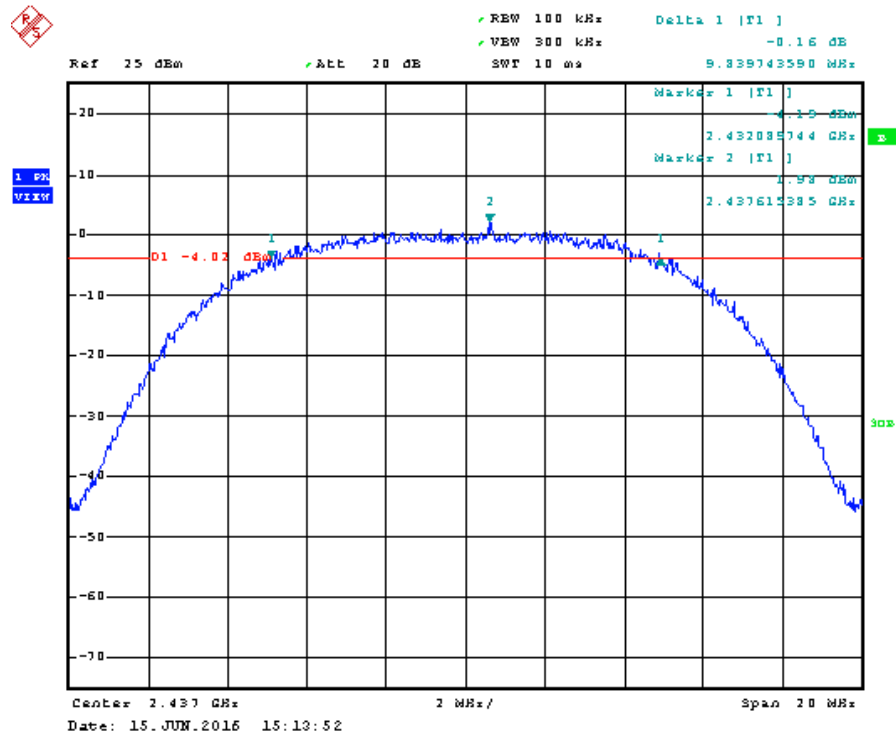


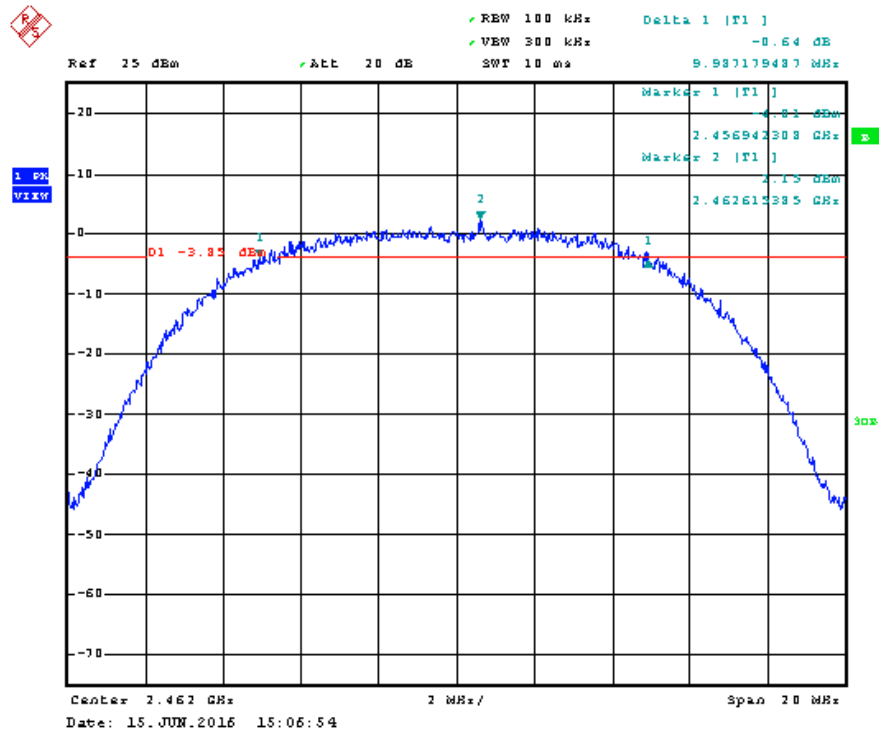
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****B Mode Channel 6 ANT 1:**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****B Mode Channel 11 ANT 1:**

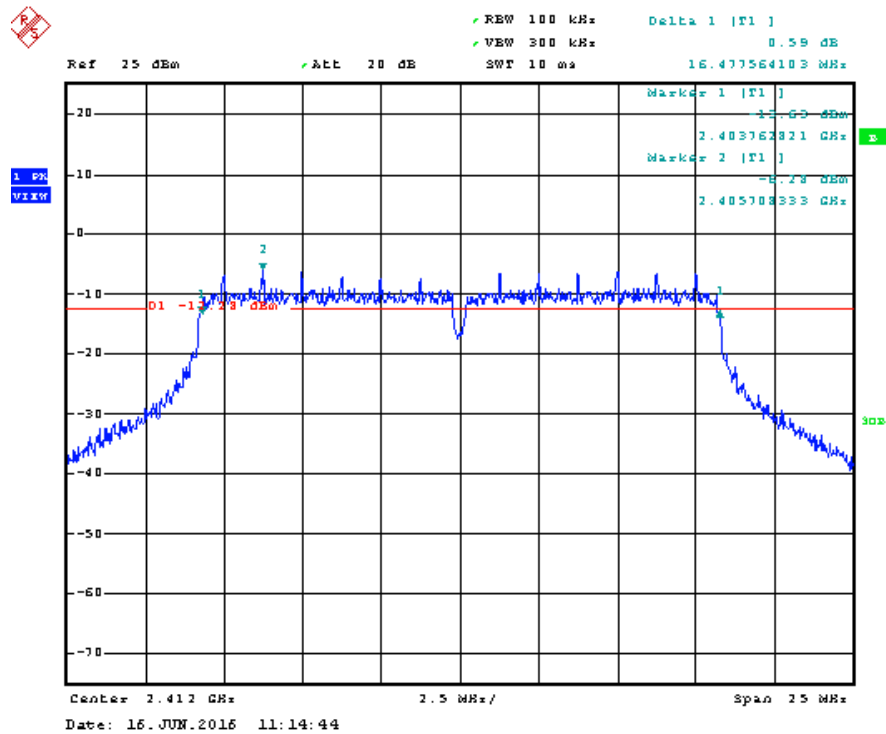
6dB Occupied Bandwidth: **10.596MHz**

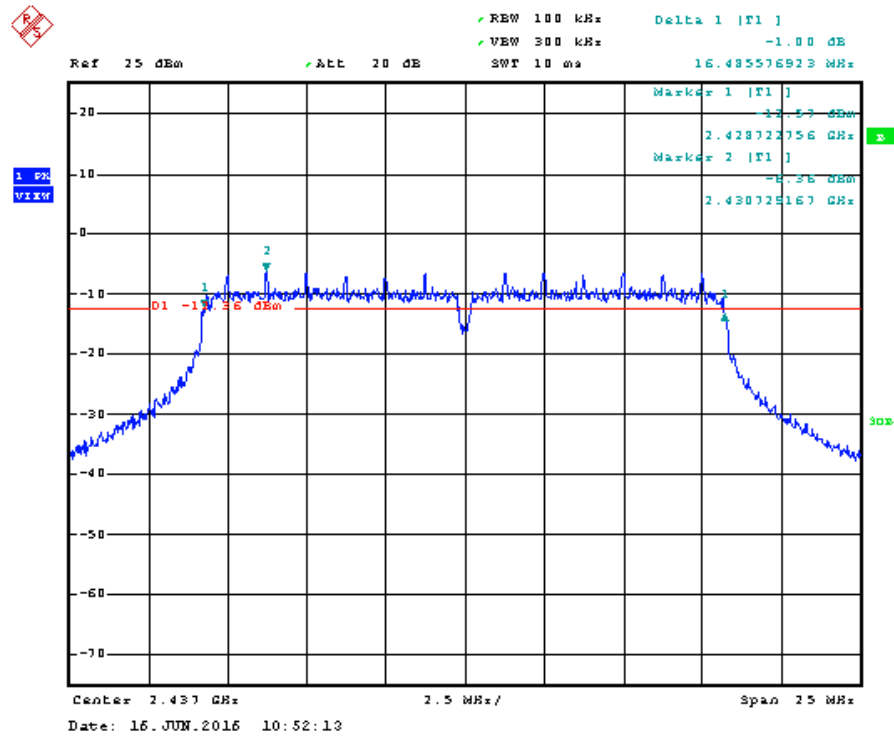
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****B Mode Channel 1 ANT 2:**6dB Occupied Bandwidth: **10.272MHz**

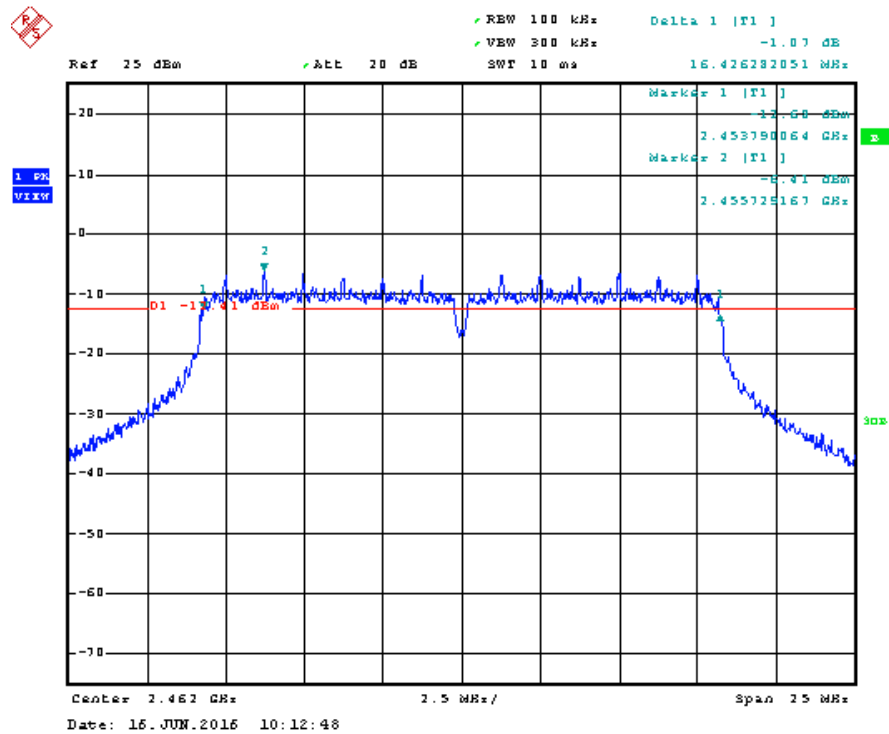
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****B Mode Channel 6 ANT 2:**6dB Occupied Bandwidth: **9.840MHz**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****B Mode Channel 11 ANT 2:**

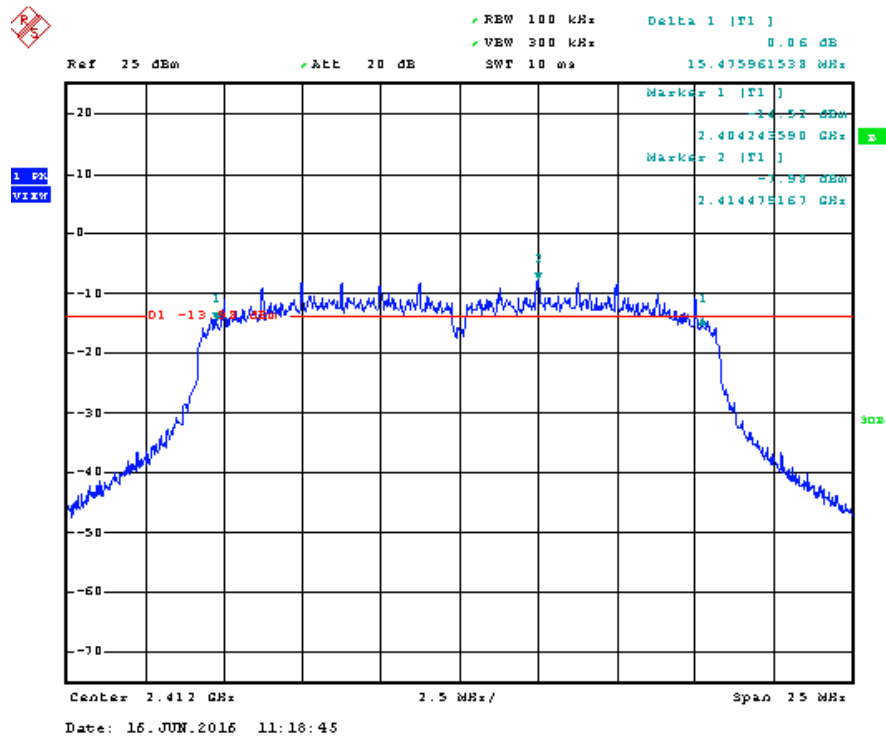
6dB Occupied Bandwidth: **9.987MHz**

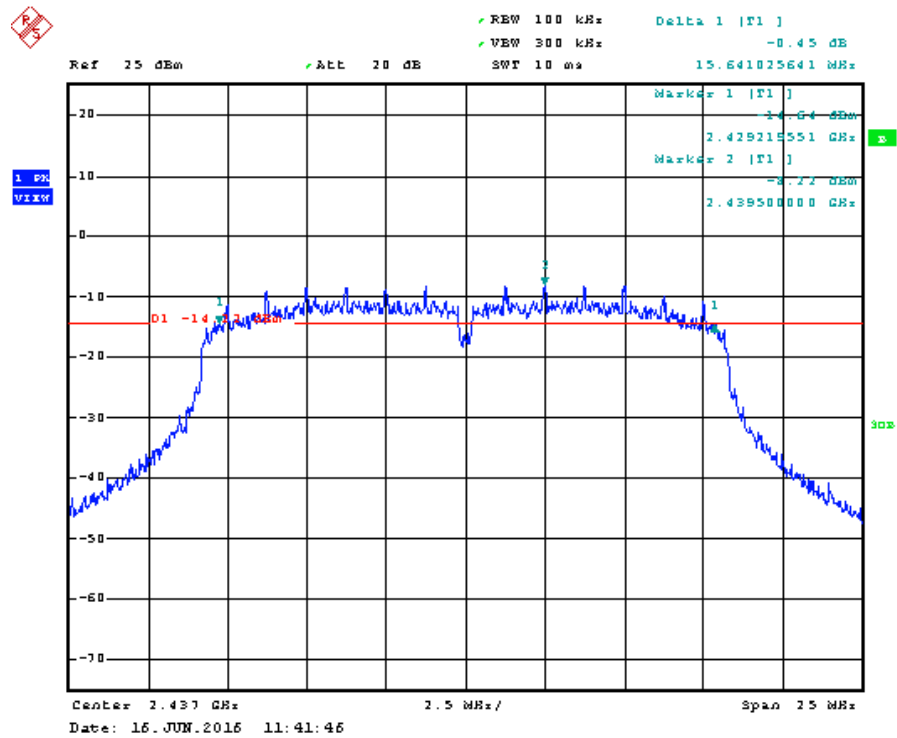
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 1 ANT 1:**6dB Occupied Bandwidth: **16.478MHz**

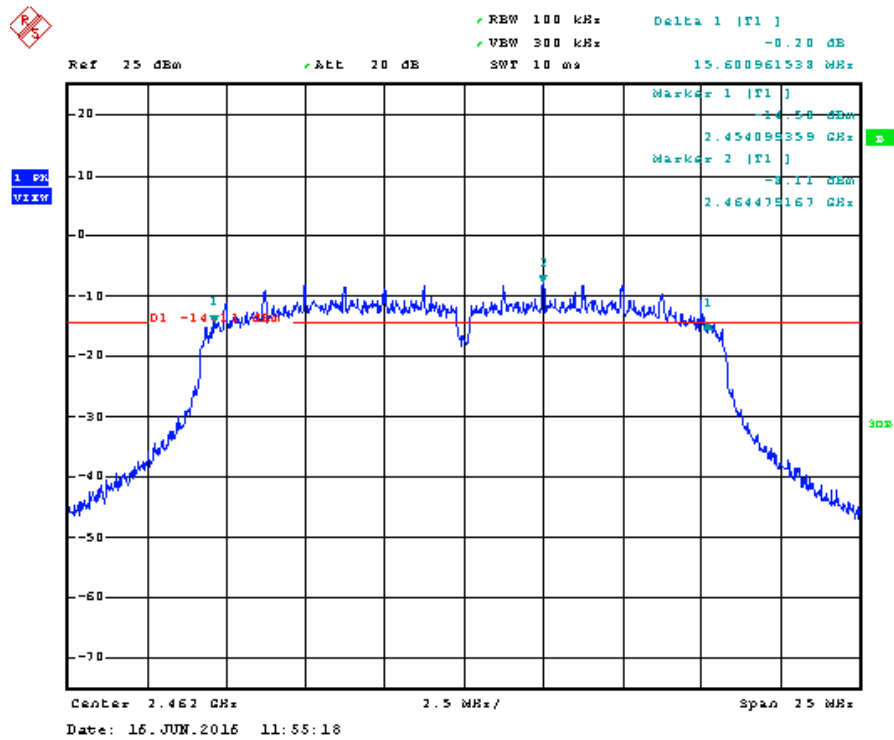
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 6 ANT 1:**6dB Occupied Bandwidth: **16.486MHz**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 11 ANT 1:**6dB Occupied Bandwidth: **16.426MHz**

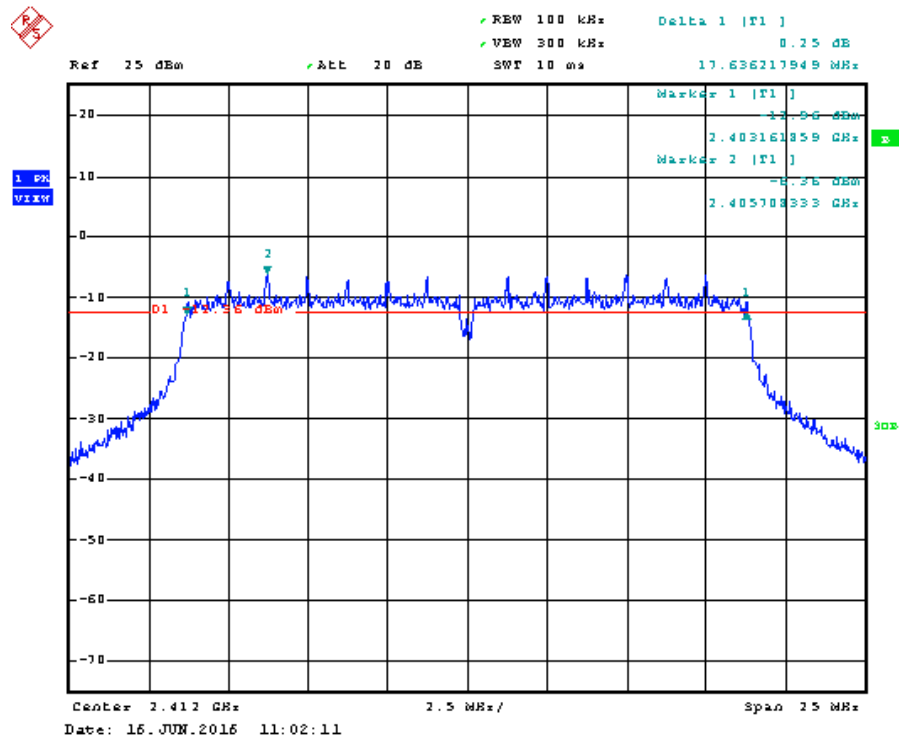


**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 1 ANT 2:**

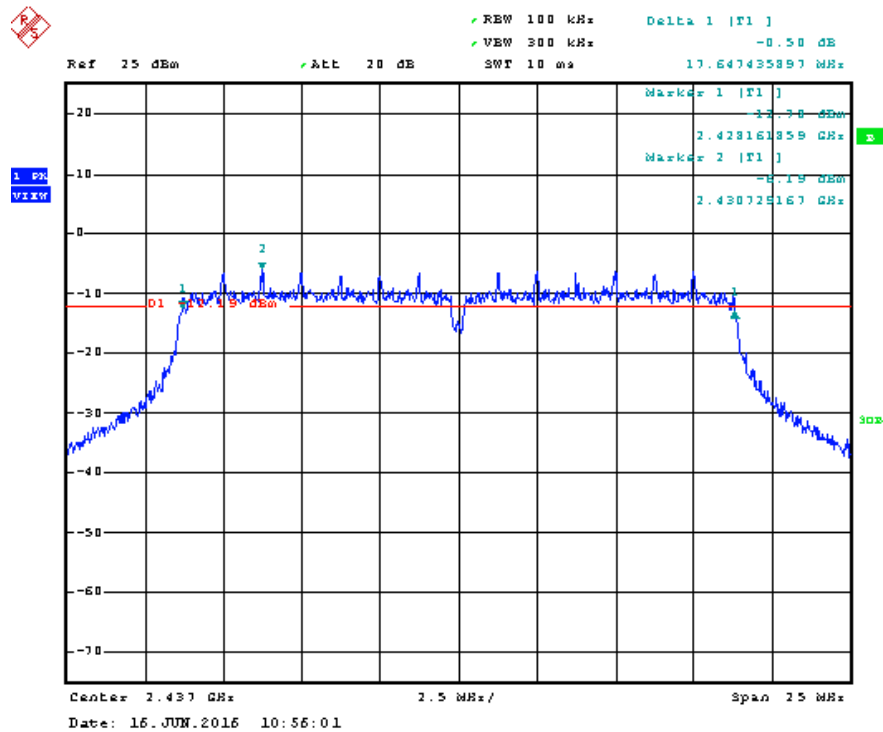
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 6 ANT 2:**6dB Occupied Bandwidth: **15.641MHz**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****G Mode Channel 11 ANT 2:**

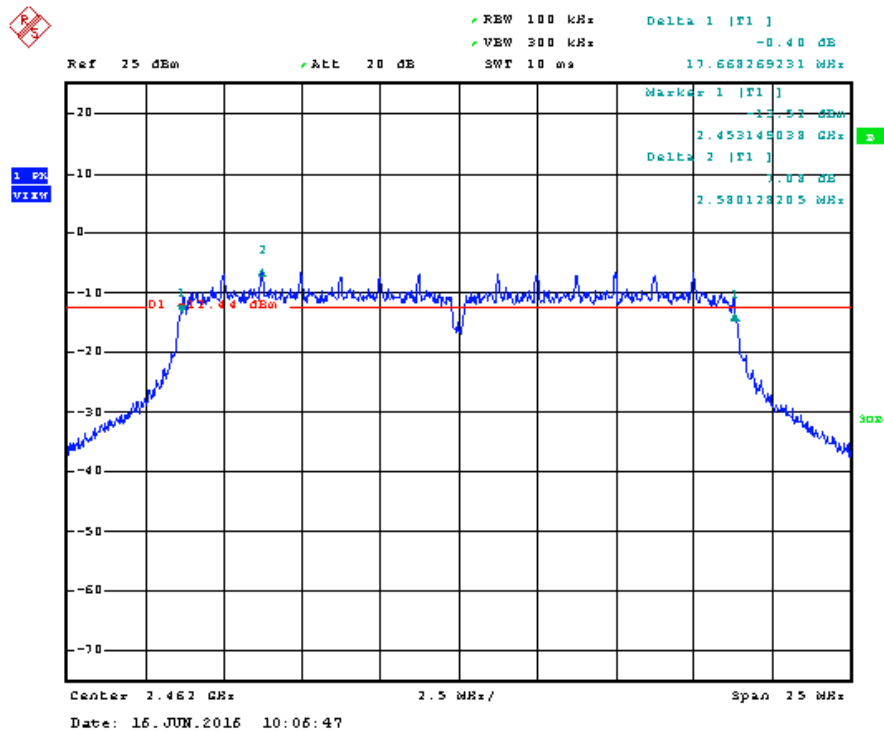
6dB Occupied Bandwidth: **15.601MHz**

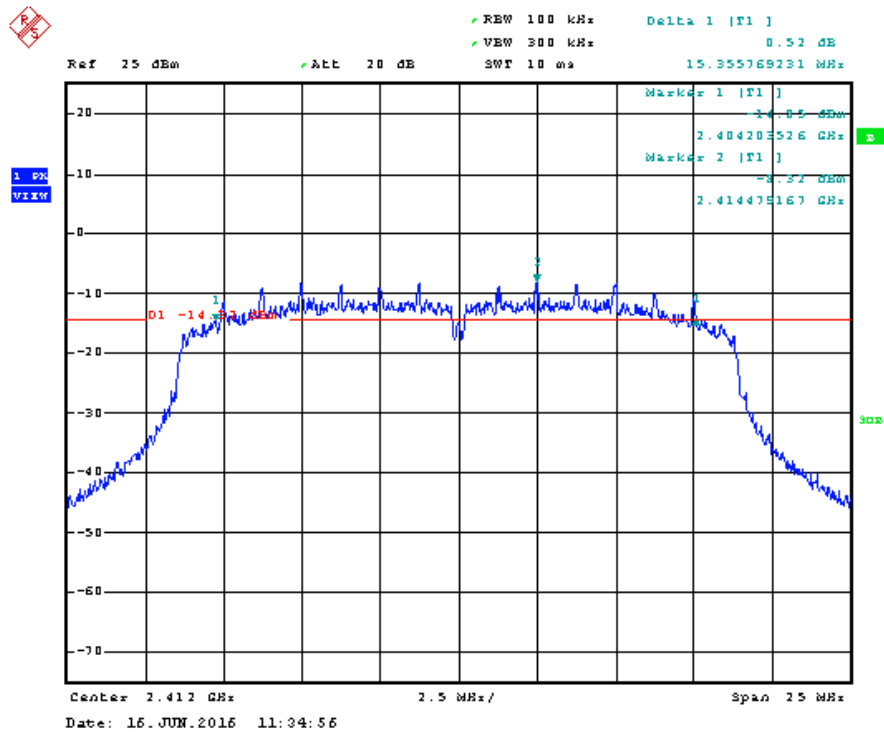
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 1 ANT 1:**

6dB Occupied Bandwidth: **17.636MHz**

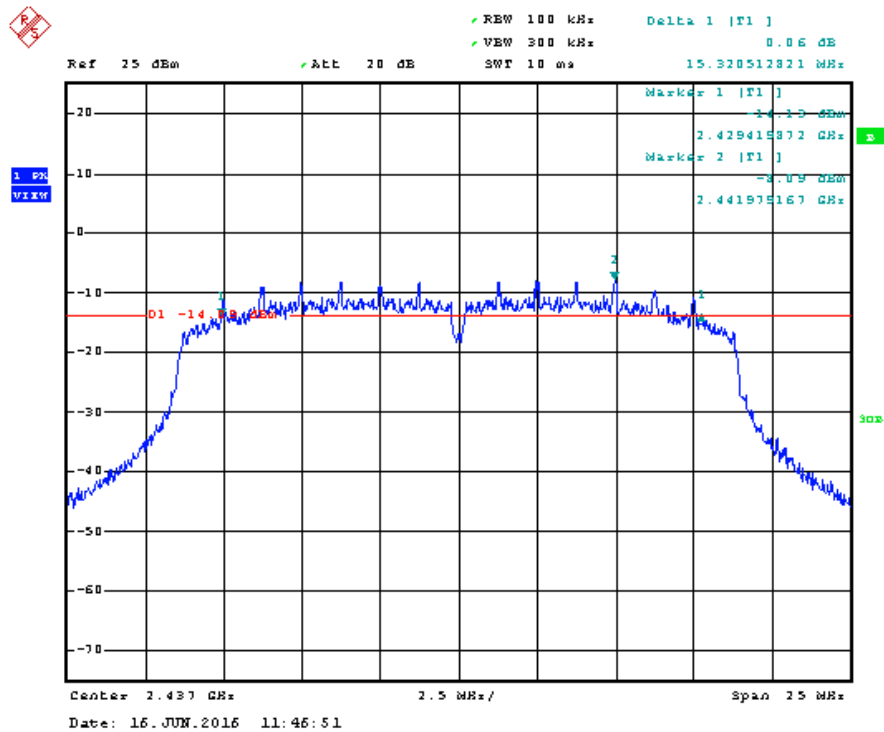
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 6 ANT 1:**

6dB Occupied Bandwidth: **17.647MHz**

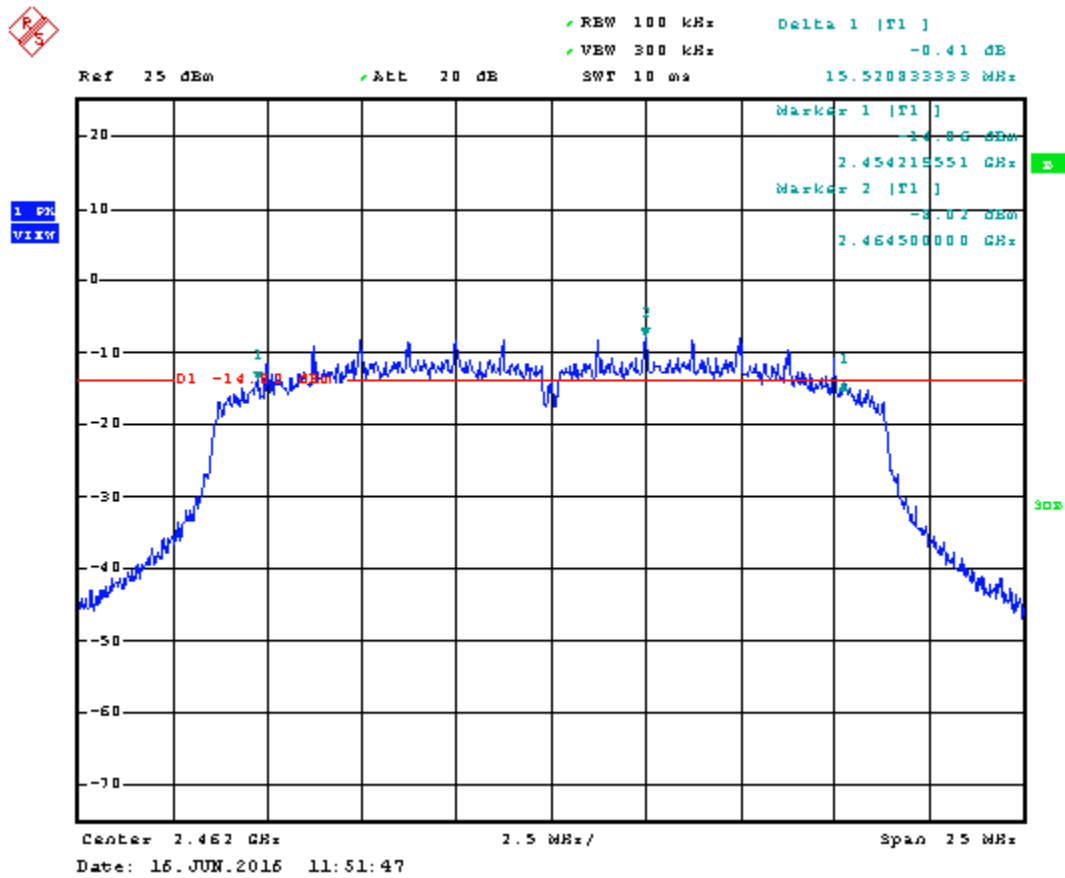
**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 11 ANT 1:**6dB Occupied Bandwidth: **17.668MHz**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 1 ANT 2:**

6dB Occupied Bandwidth: **15.355MHz**

**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 6 ANT 2:**



**DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.****N Mode Channel 11 ANT 2:**

6dB Occupied Bandwidth: **15.521MHz**