

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).

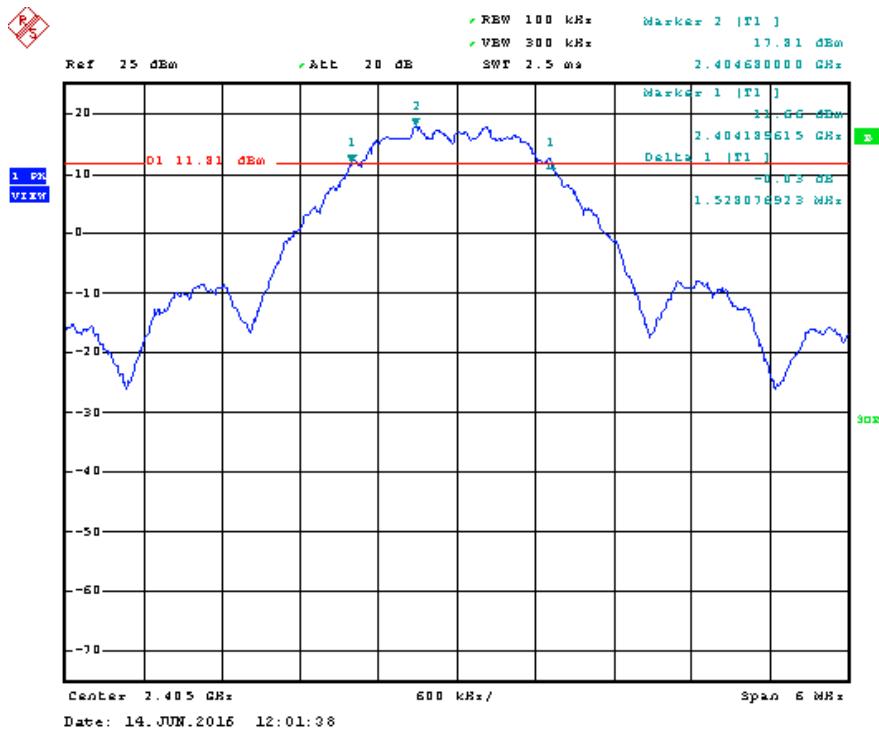
The maximum measured 6dB bandwidth for 802.11n modulation is **17.668MHz** (Ch 11, Ant 1).

Measurements are shown following the RF6 measurements.

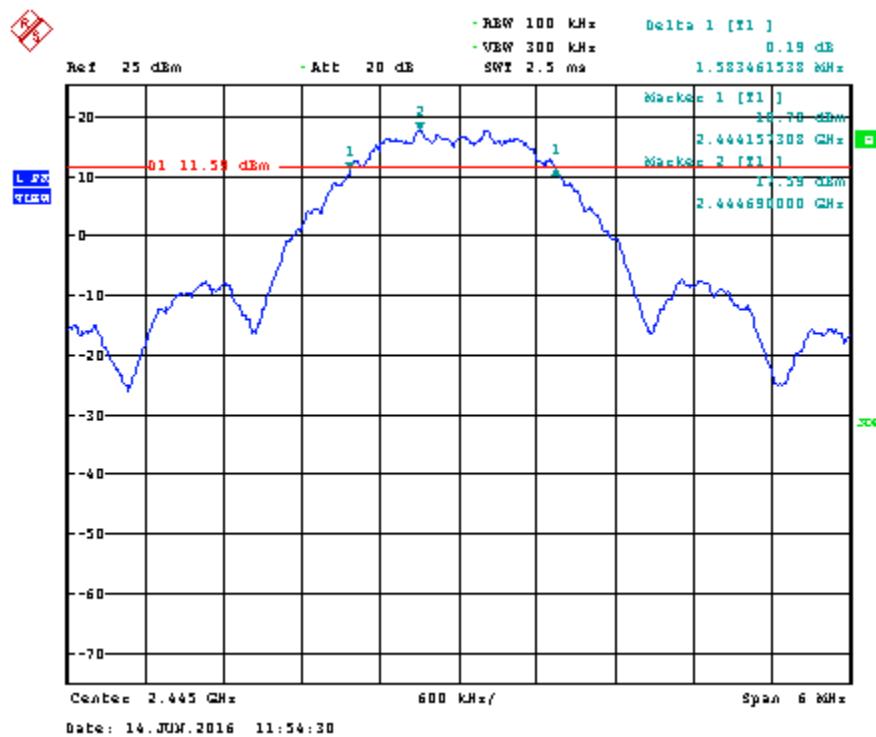
DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO

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

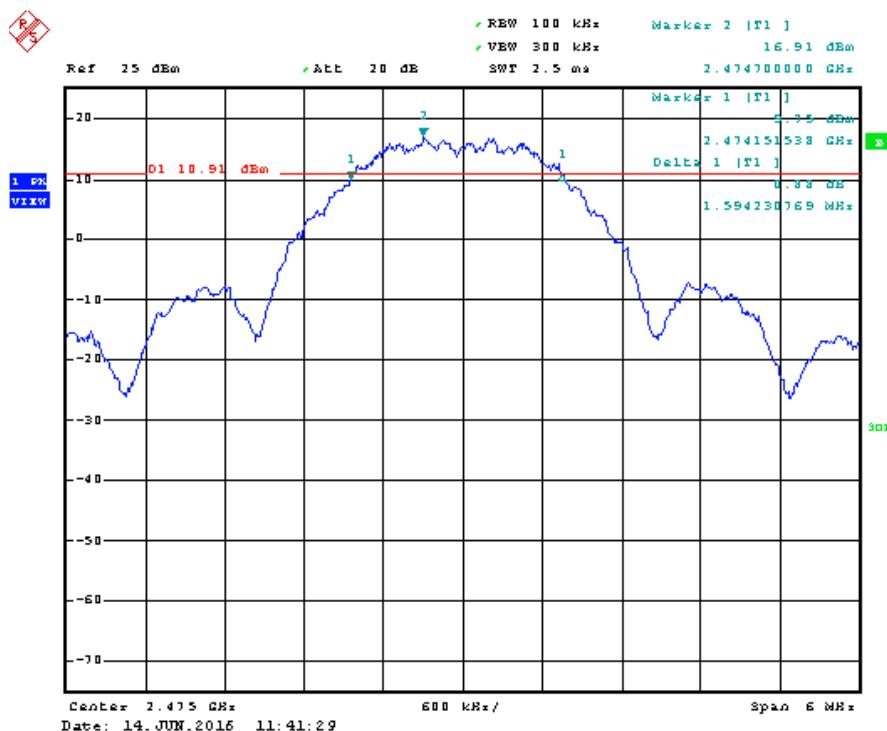
Channel 11 ANT 1:



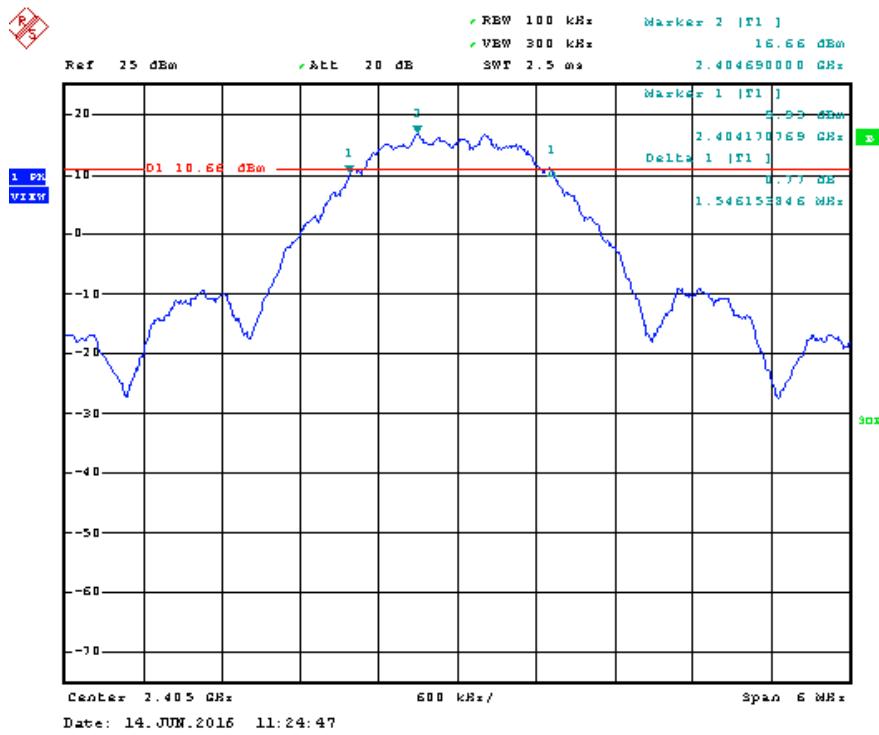
6dB Occupied Bandwidth: **1.528MHz**

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

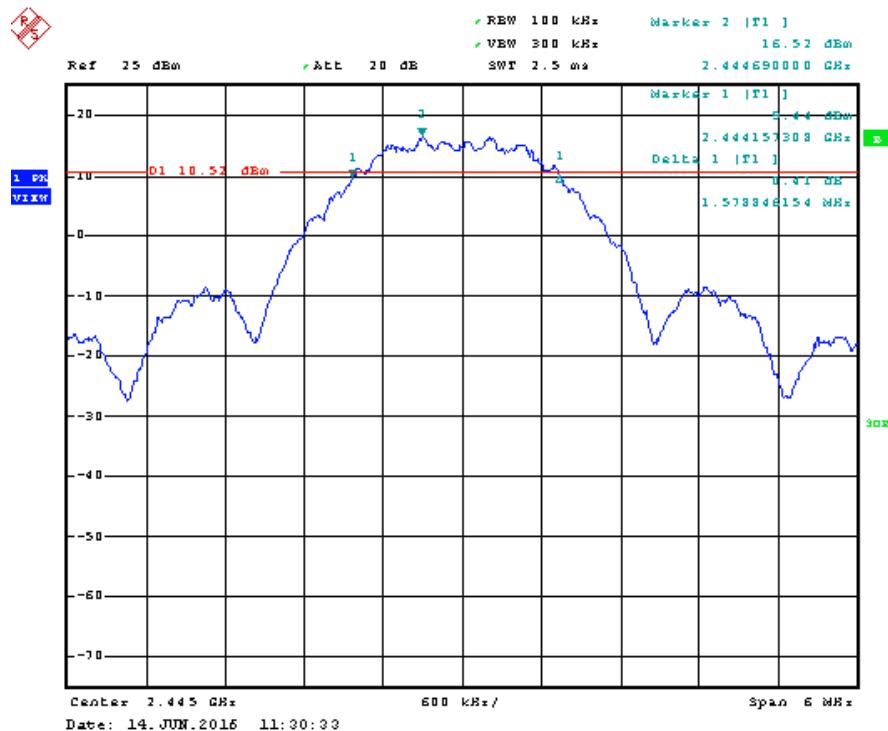
6dB Occupied Bandwidth: **1.583MHz**

DTS BANDWIDTH MEASUREMENTS FOR RF6 RADIO CONT.**Channel 25 ANT 1:**

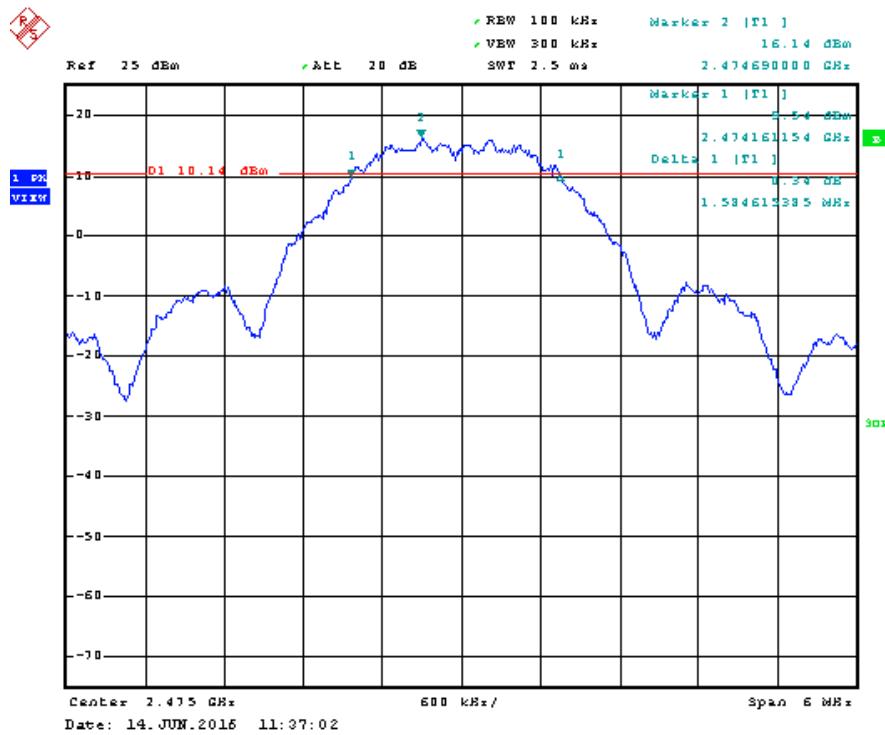
6dB Occupied Bandwidth: **1.594MHz**

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

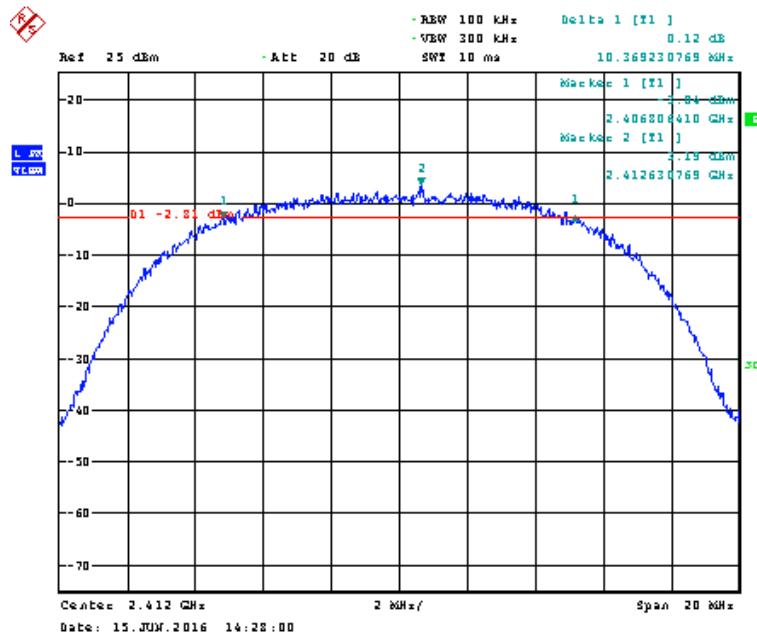
The Wi-Fi radio is 2412MHz – 2462MHz DSSS (802.11b), OFDM (802.11g), and OFDM (802.11N). The measured bandwidths, DTS (6dB Occupied Bandwidth) are given below.

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

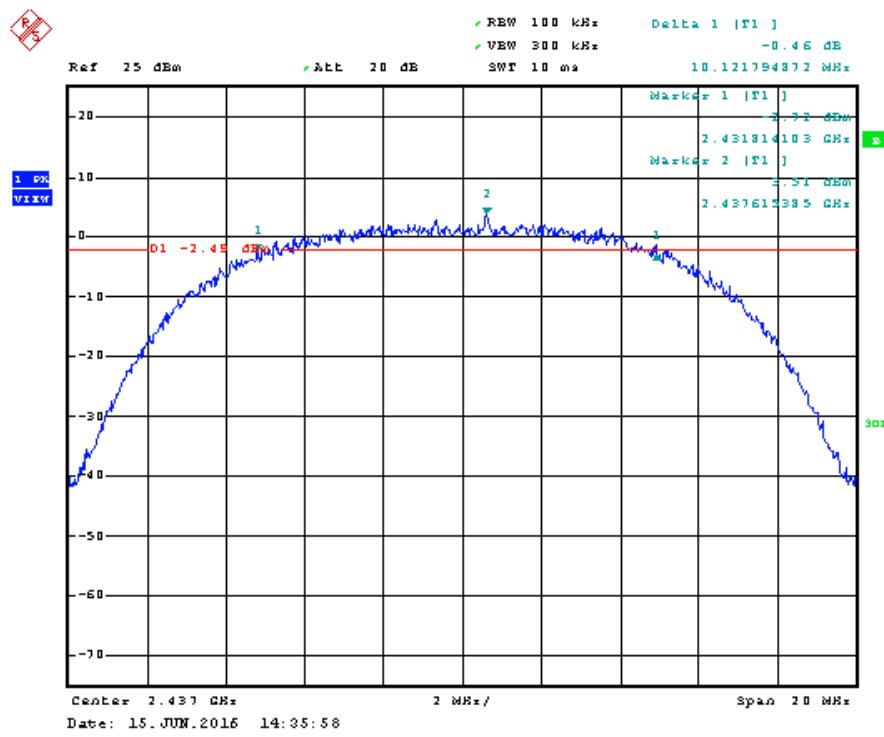
The maximum measured 6dB bandwidth for 802.11g modulation is **16.486MHz** (Ch 6, Ant 1).

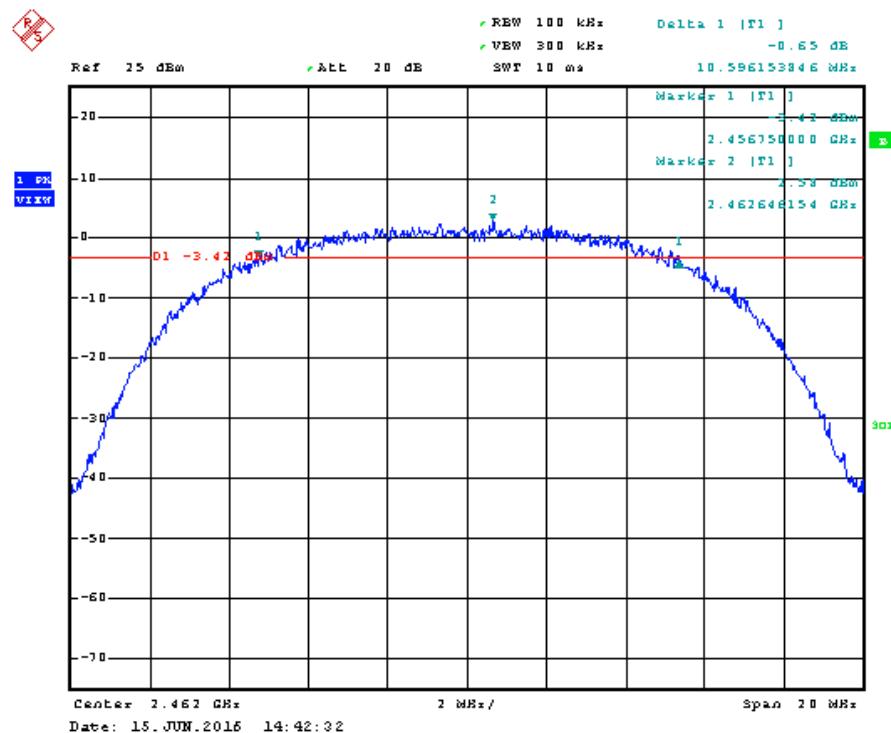
The maximum measured 6dB bandwidth for 802.11n modulation is **17.668MHz** (Ch 11, Ant 1).

B Mode Channel 1 ANT 1:

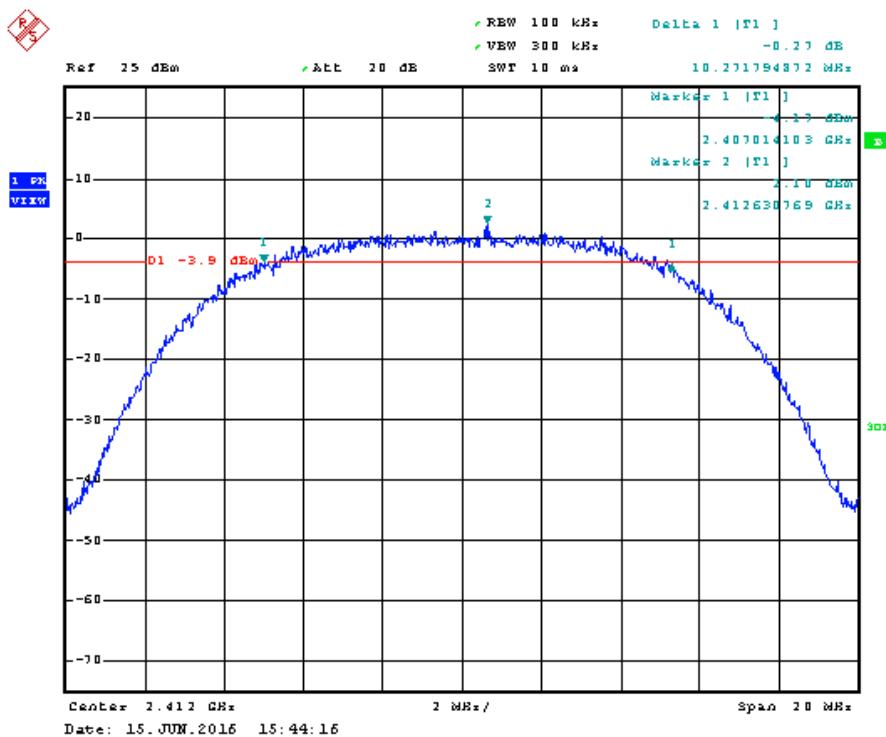


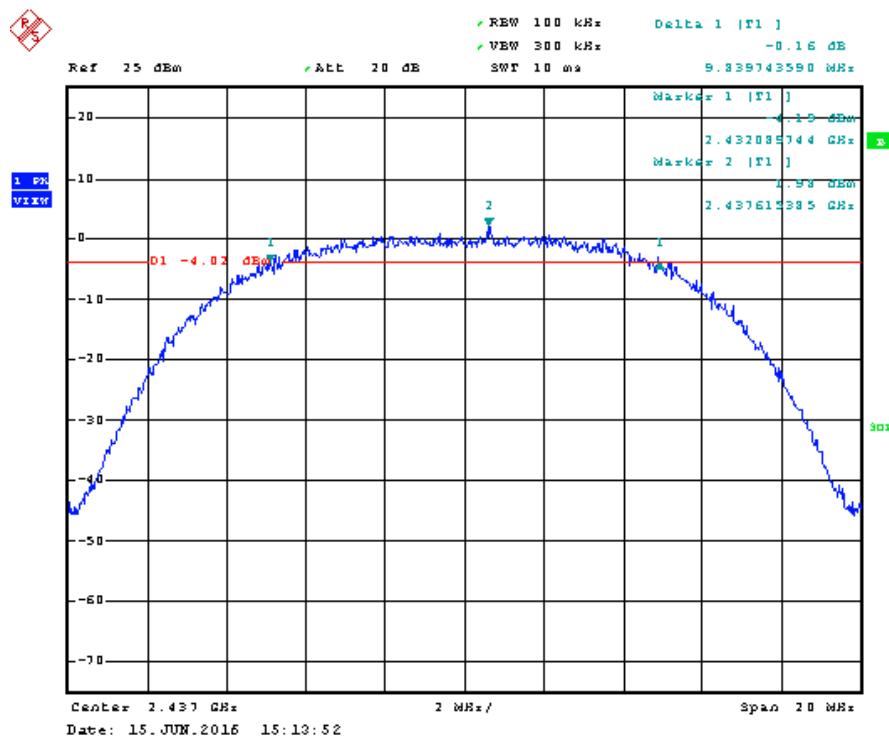
6dB Occupied Bandwidth: **10.369MHz**

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:**

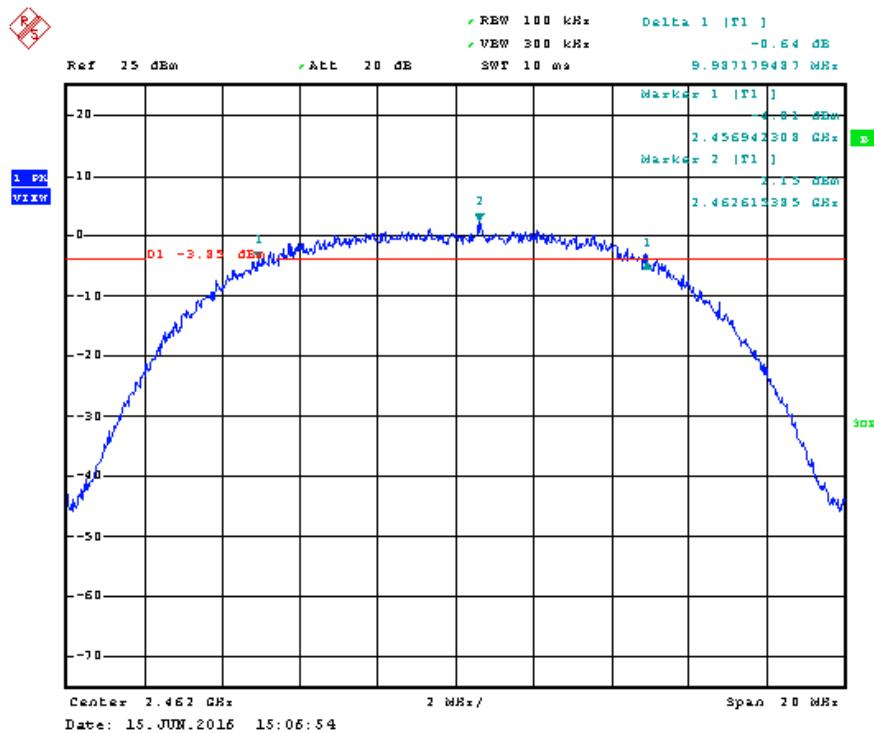
6dB Occupied Bandwidth: **10.596MHz**

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

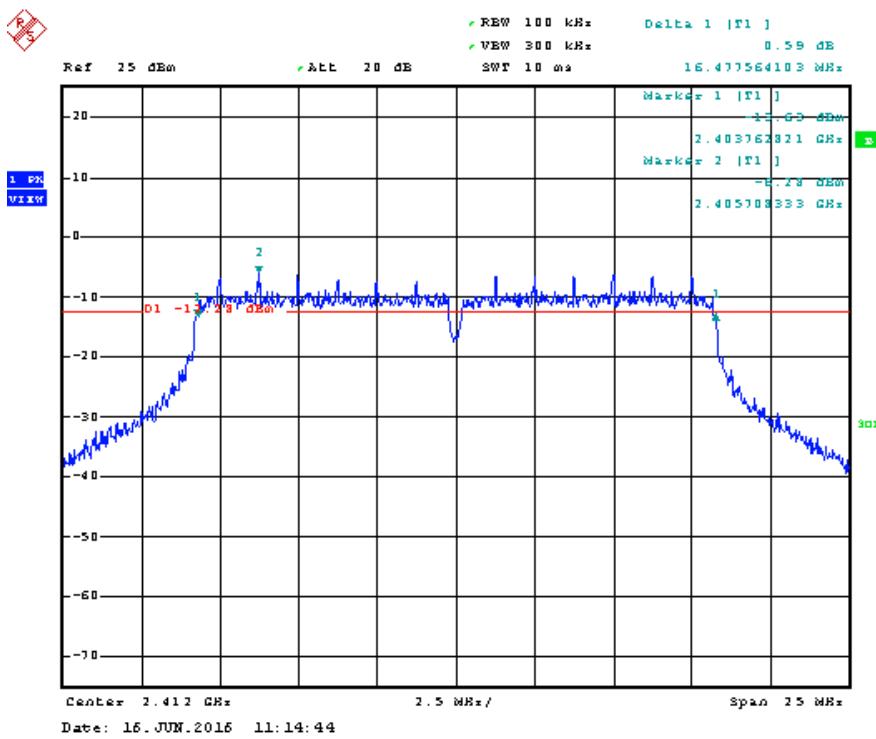
DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.**B Mode Channel 6 ANT 2:**

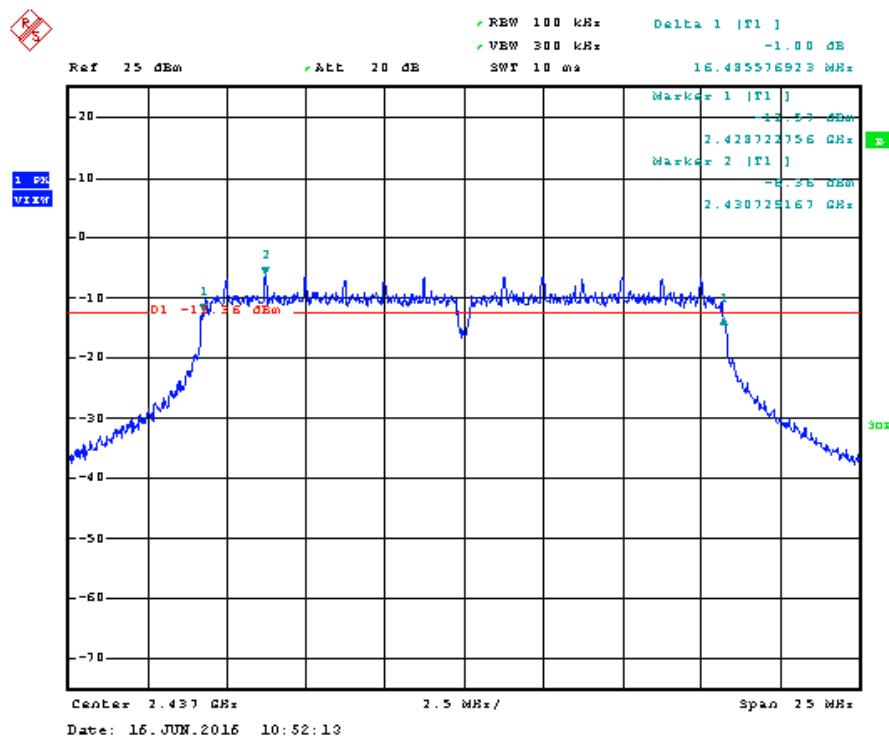
6dB Occupied Bandwidth: **9.840MHz**

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



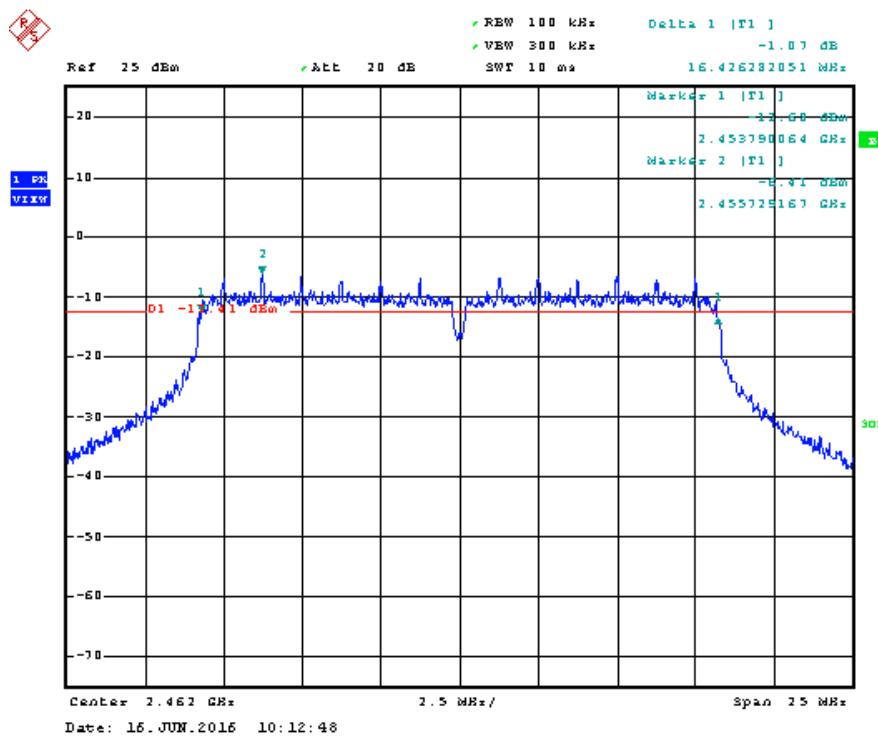
6dB Occupied Bandwidth: **9.987MHz**

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**

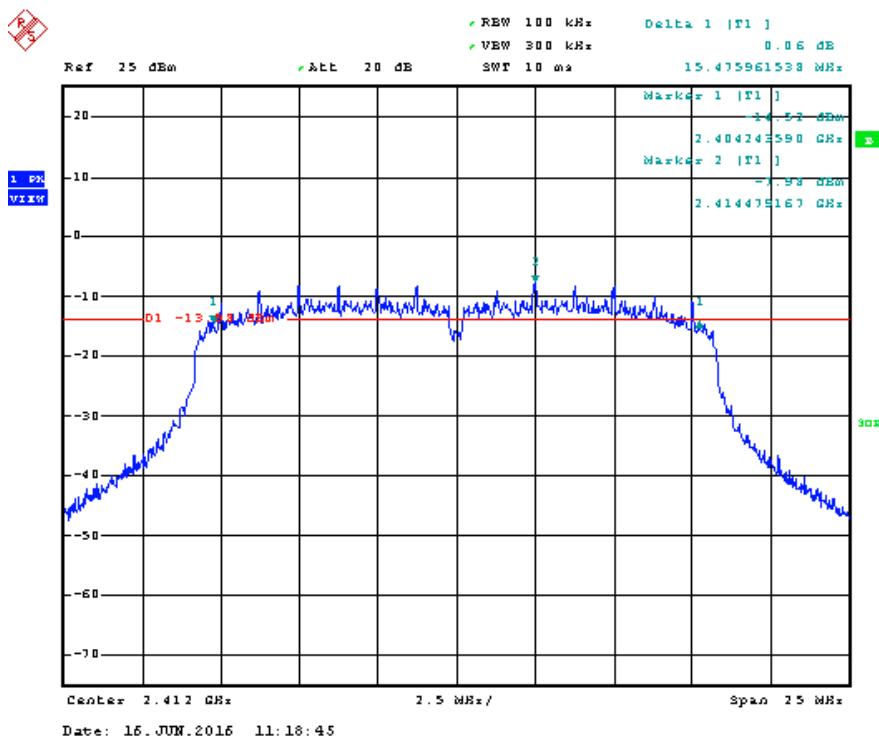
DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.

G Mode Channel 11 ANT 1:

6dB Occupied Bandwidth: **16.426MHz**

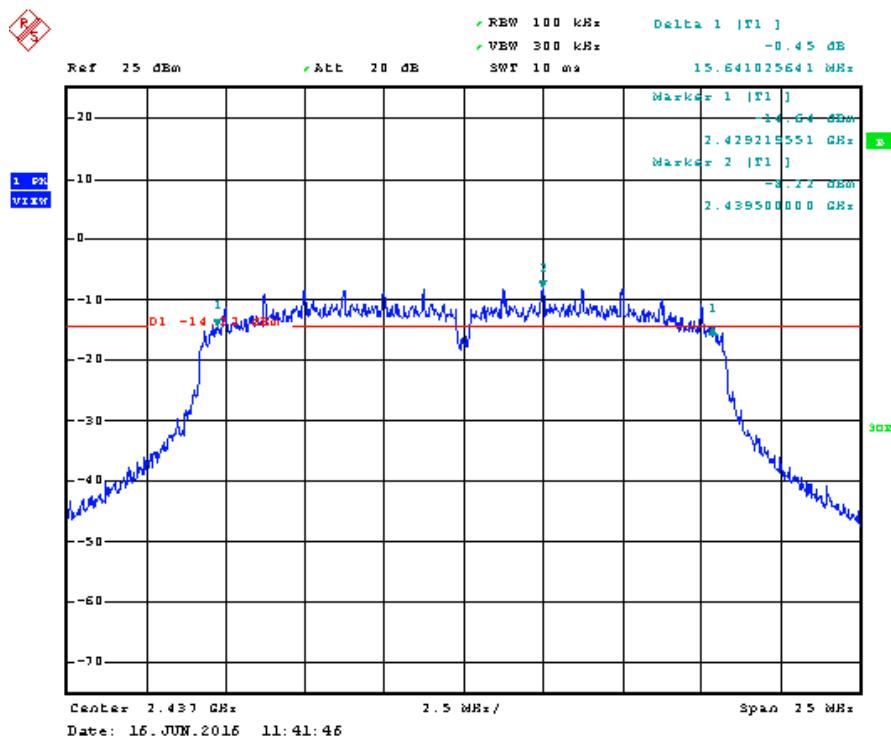
DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.

G Mode Channel 1 ANT 2:

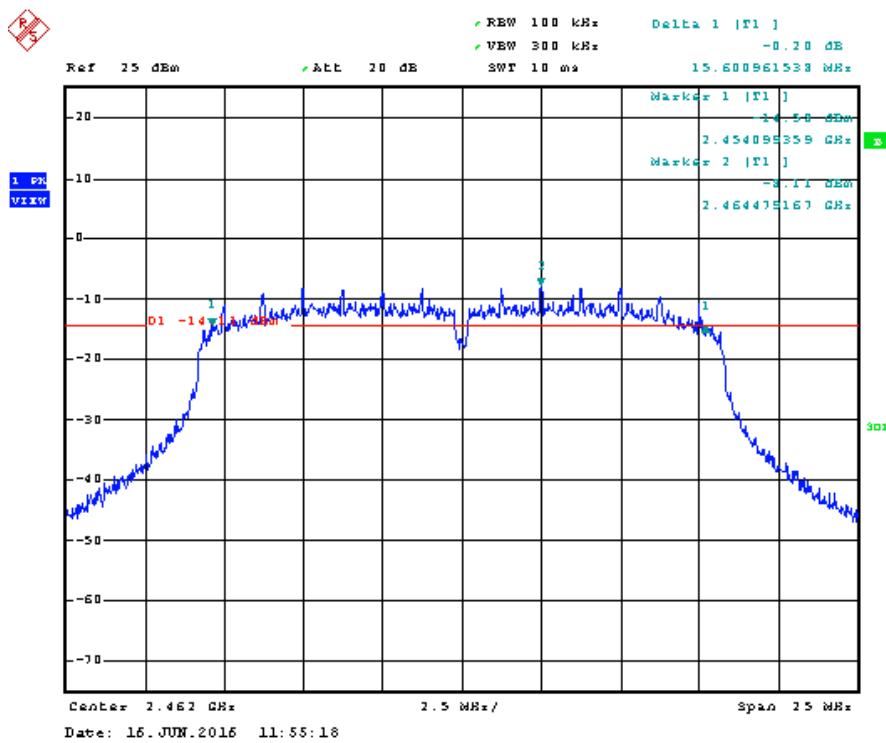
6dB Occupied Bandwidth: **15.476MHz**

DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.

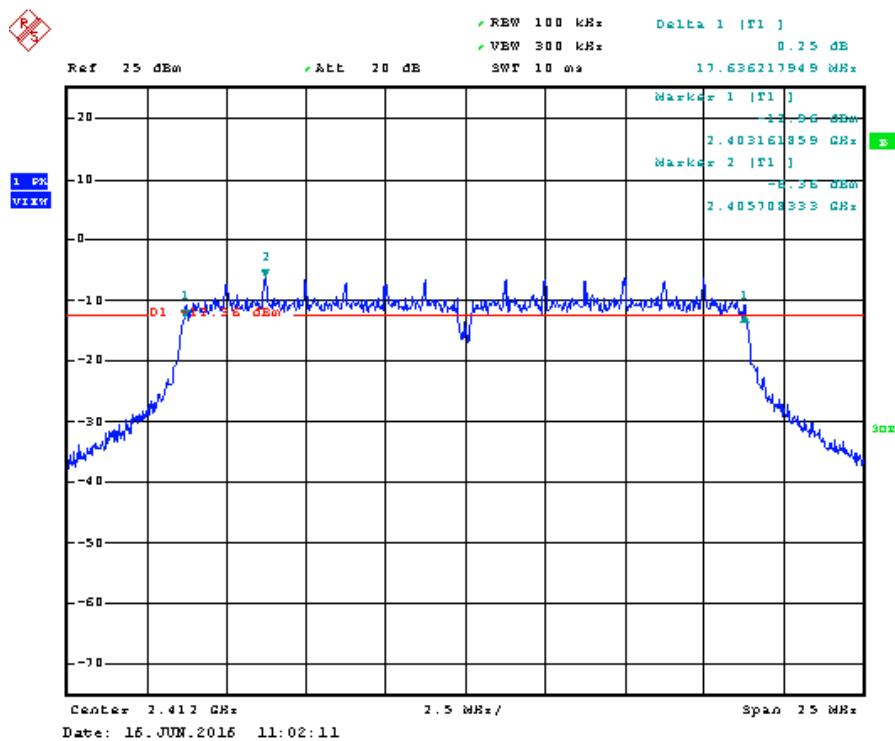
G Mode Channel 6 ANT 2:

6dB Occupied Bandwidth: **15.641MHz**

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

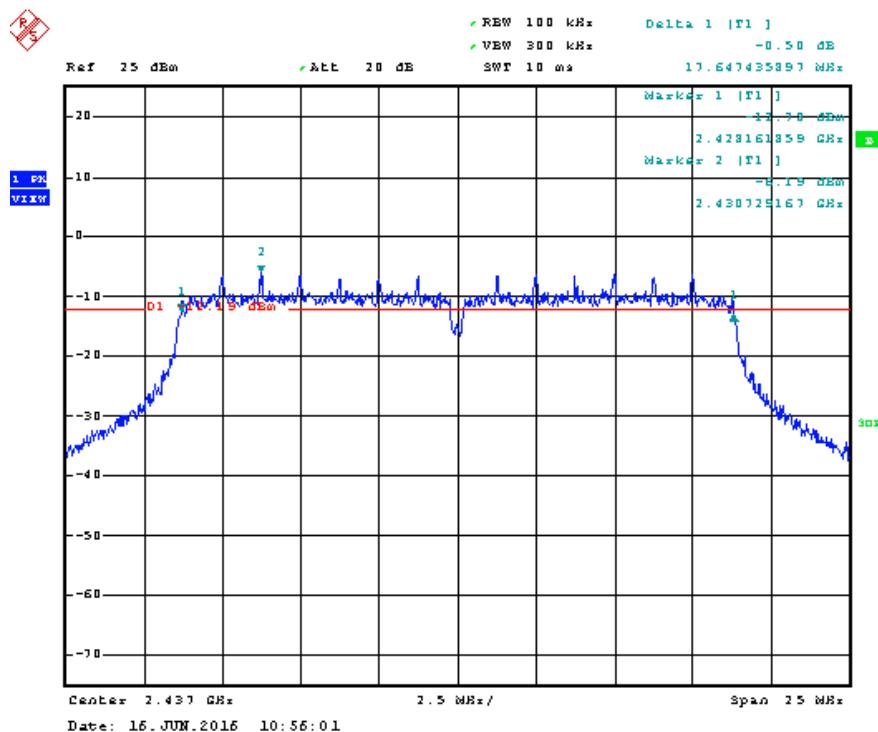


6dB Occupied Bandwidth: **15.601MHz**

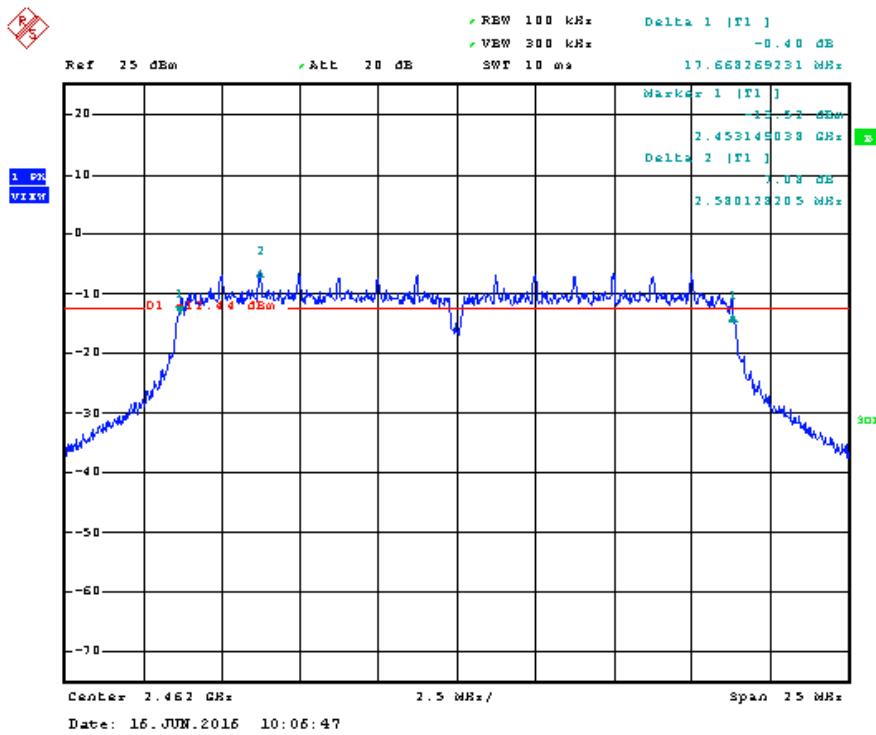
DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.**N Mode Channel 1 ANT 1:**6dB Occupied Bandwidth: **17.636MHz**

DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.

N Mode Channel 6 ANT 1:

6dB Occupied Bandwidth: **17.647MHz**

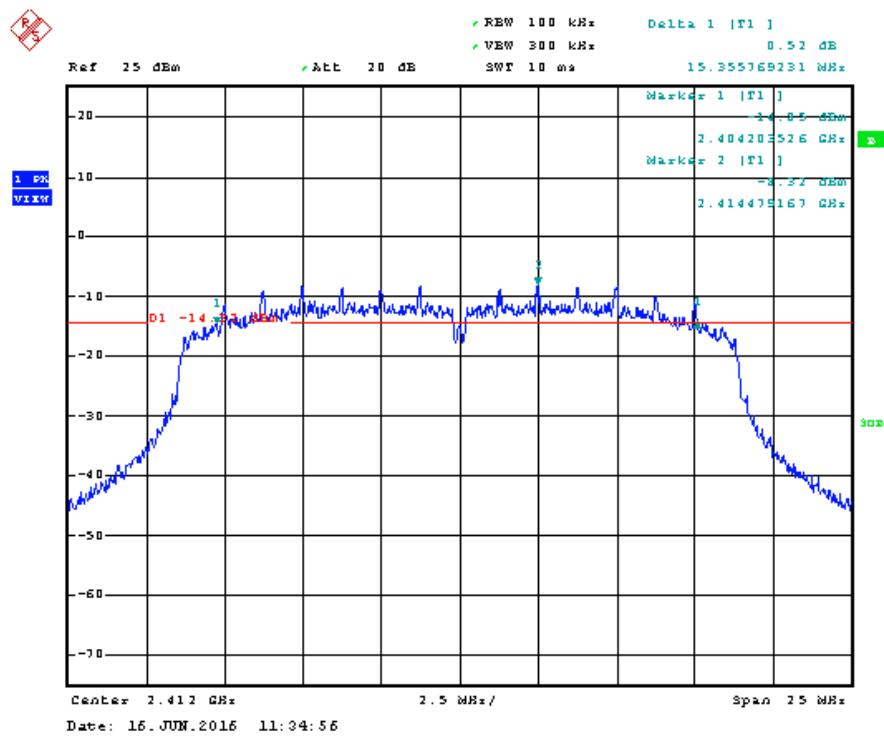
DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.
N Mode Channel 11 ANT 1:



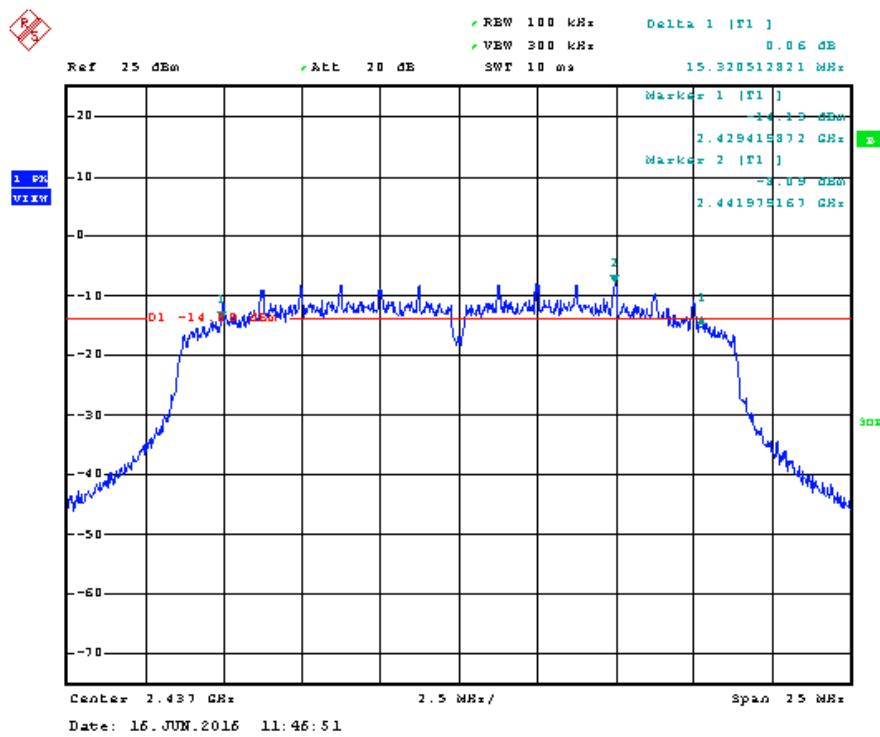
6dB Occupied Bandwidth: **17.668MHz**

DTS BANDWIDTH MEASUREMENTS FOR WIFI RADIO CONT.

N Mode Channel 1 ANT 2:

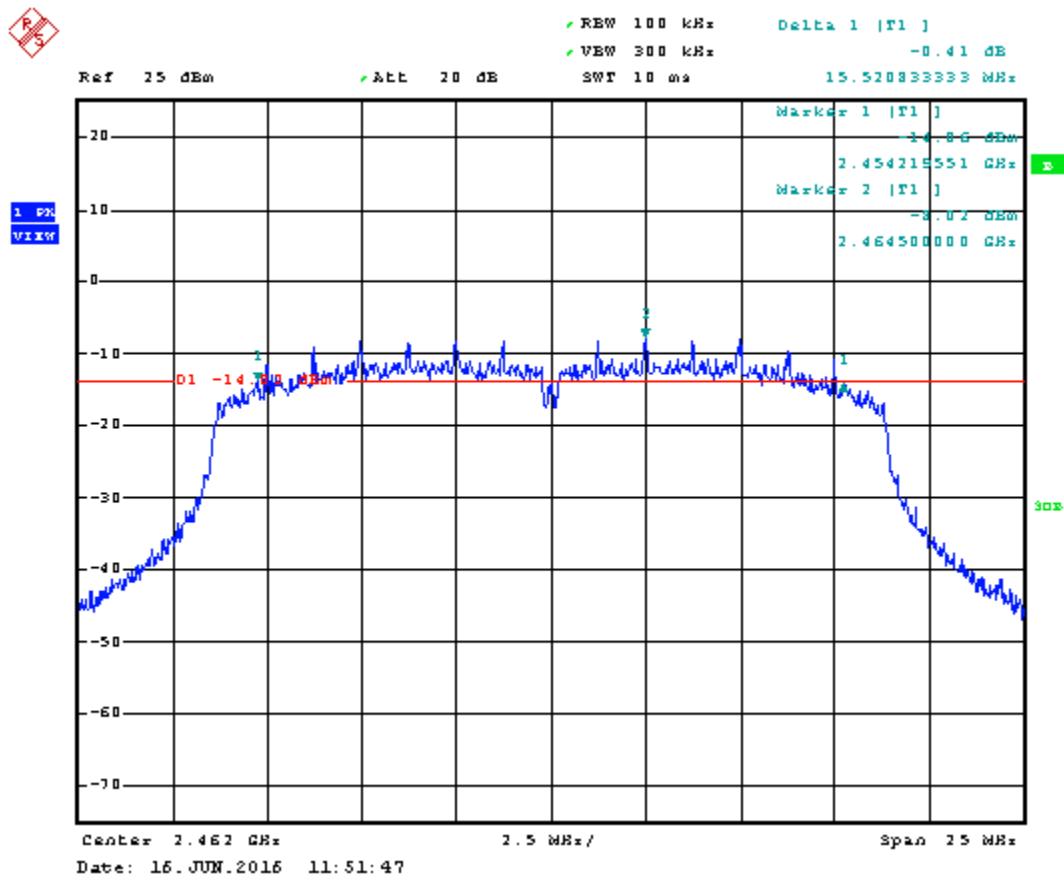
6dB Occupied Bandwidth: **15.355MHz**

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



6dB Occupied Bandwidth: **15.321MHz**

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



6dB Occupied Bandwidth: **15.521MHz**