

DTS BANDWIDTH FOR WIFI RADIO

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.

DTS Bandwidth:

The maximum measured DTS bandwidth across the modulations and channels is **17.634MHz**. Measurements are shown below. **DTS Bandwidth:**

The maximum measured DTS bandwidth across the modulations and channels is **17.634MHz**. Measurements are shown below.

99% Bandwidth:

The 99% Bandwidth, referred to as Occupied Bandwidth in the screen grabs, is also listed below each measurement. It used for some of the application forms.

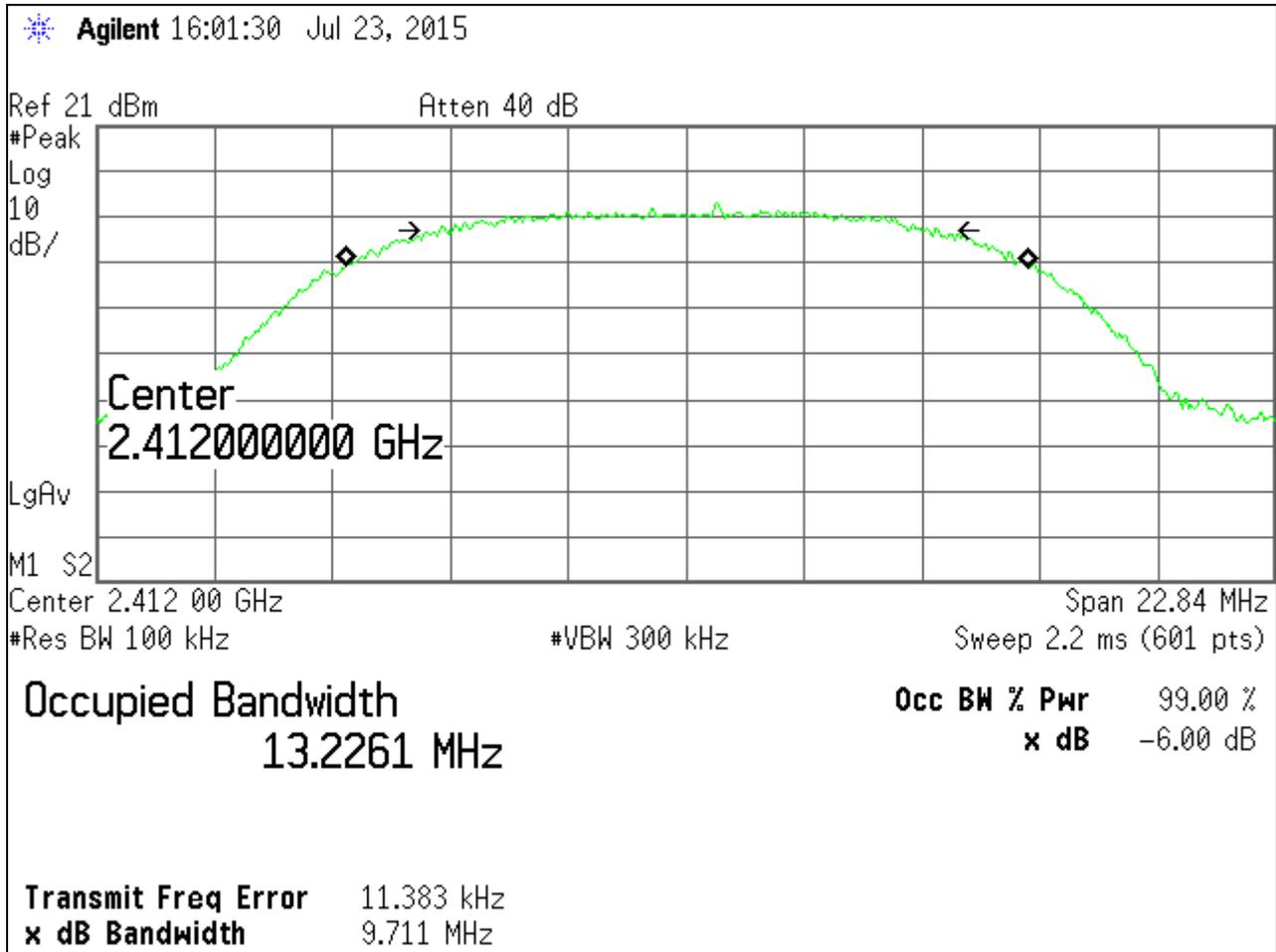
The maximum measured 99% bandwidth for 802.11b modulation is **13.8246MHz**.

The maximum measured 99% bandwidth for 802.11g modulation is **16.5461MHz**.

The maximum measured 99% bandwidth for 802.11n modulation is **17.7138MHz**.

OCCUPIED BANDWIDTH CONT.

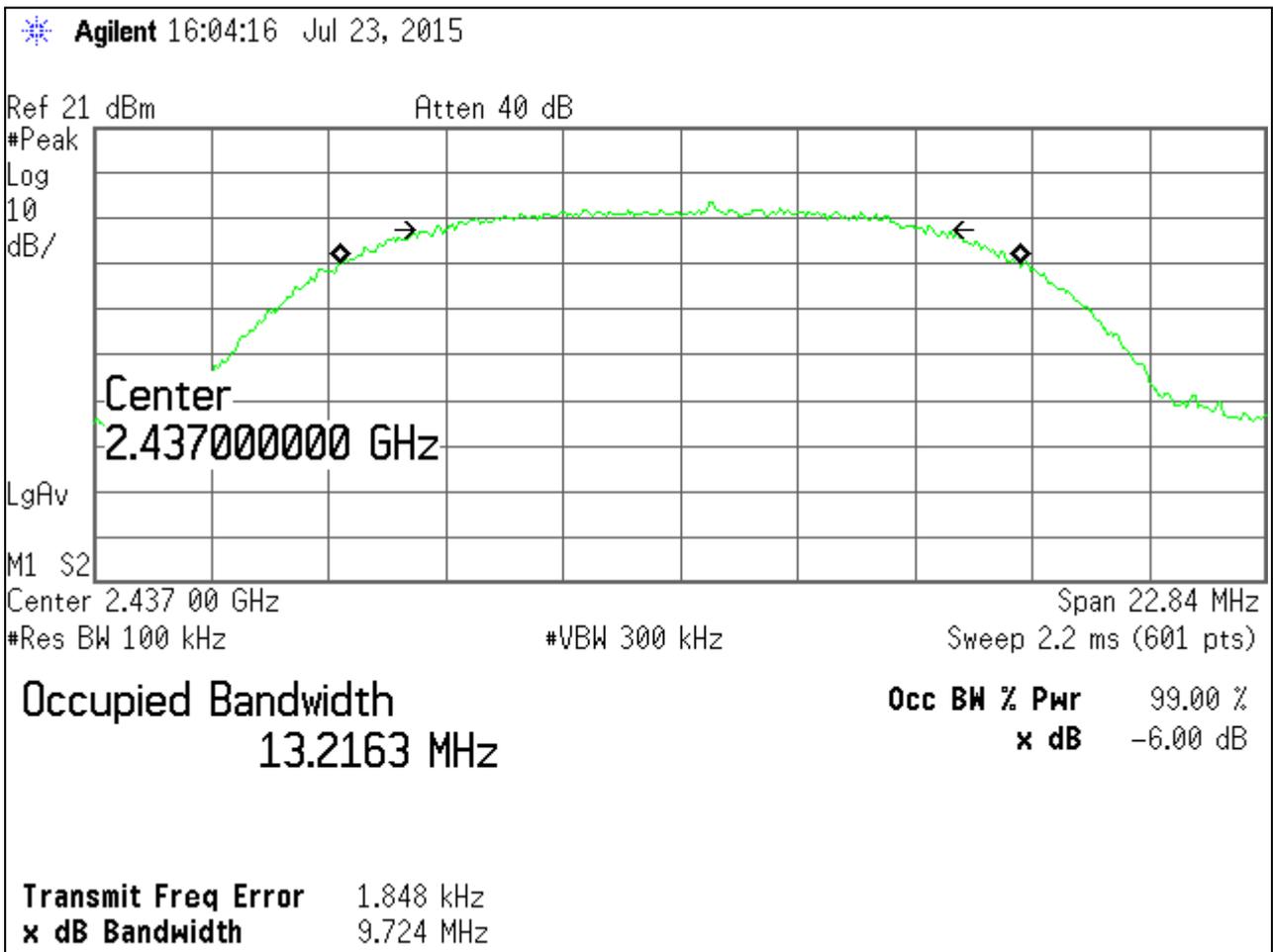
802.11b Ch 1 Ant 1:



6 dB DTS Bandwidth: 9.711 MHz
99% Bandwidth: 13.2261 MHz

OCCUPIED BANDWIDTH CONT.

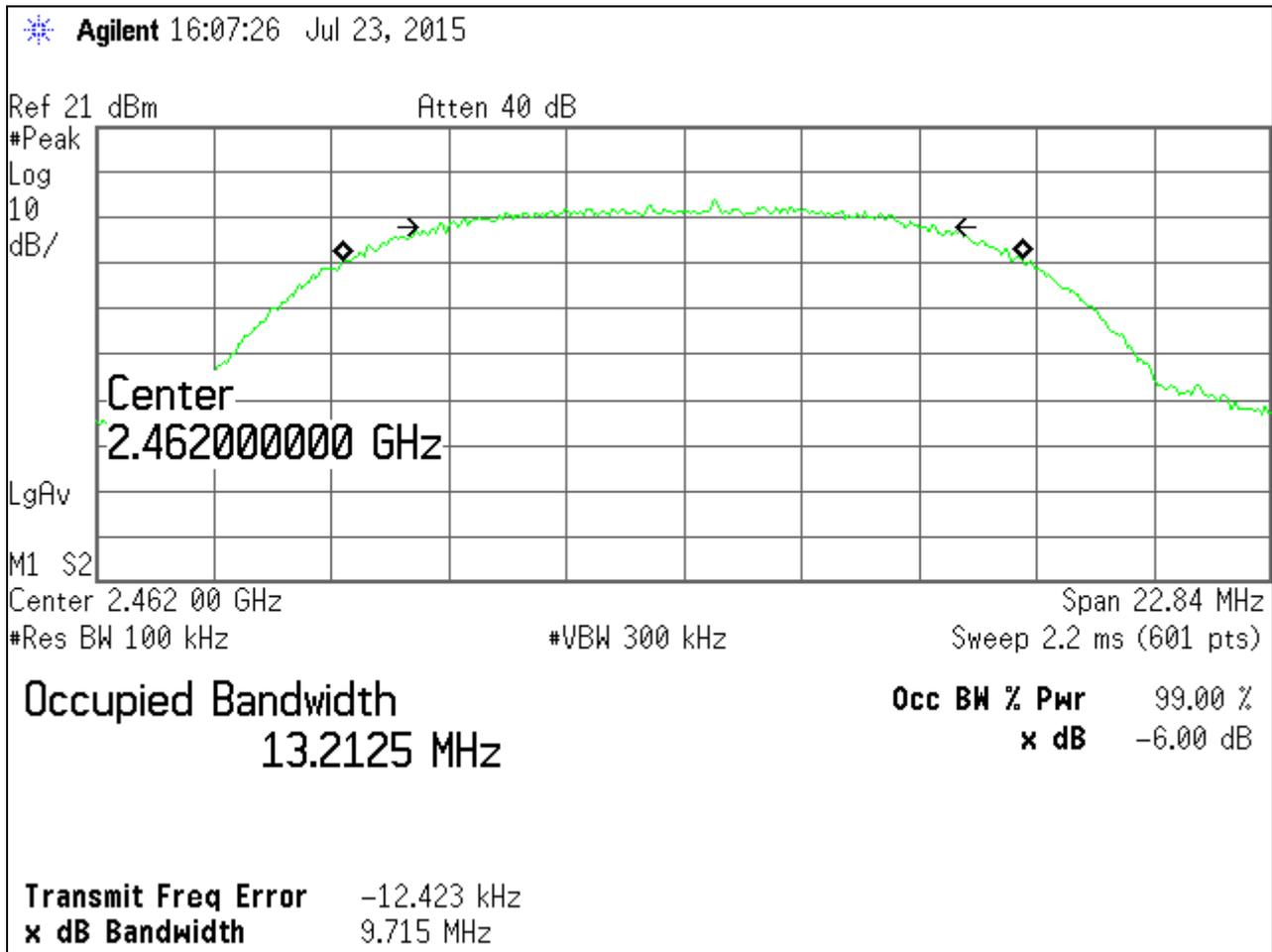
802.11b Ch 6 Ant 1:



6 dB DTS Bandwidth: 9.724 MHz
99% Bandwidth: 13.2163 MHz

OCCUPIED BANDWIDTH CONT.

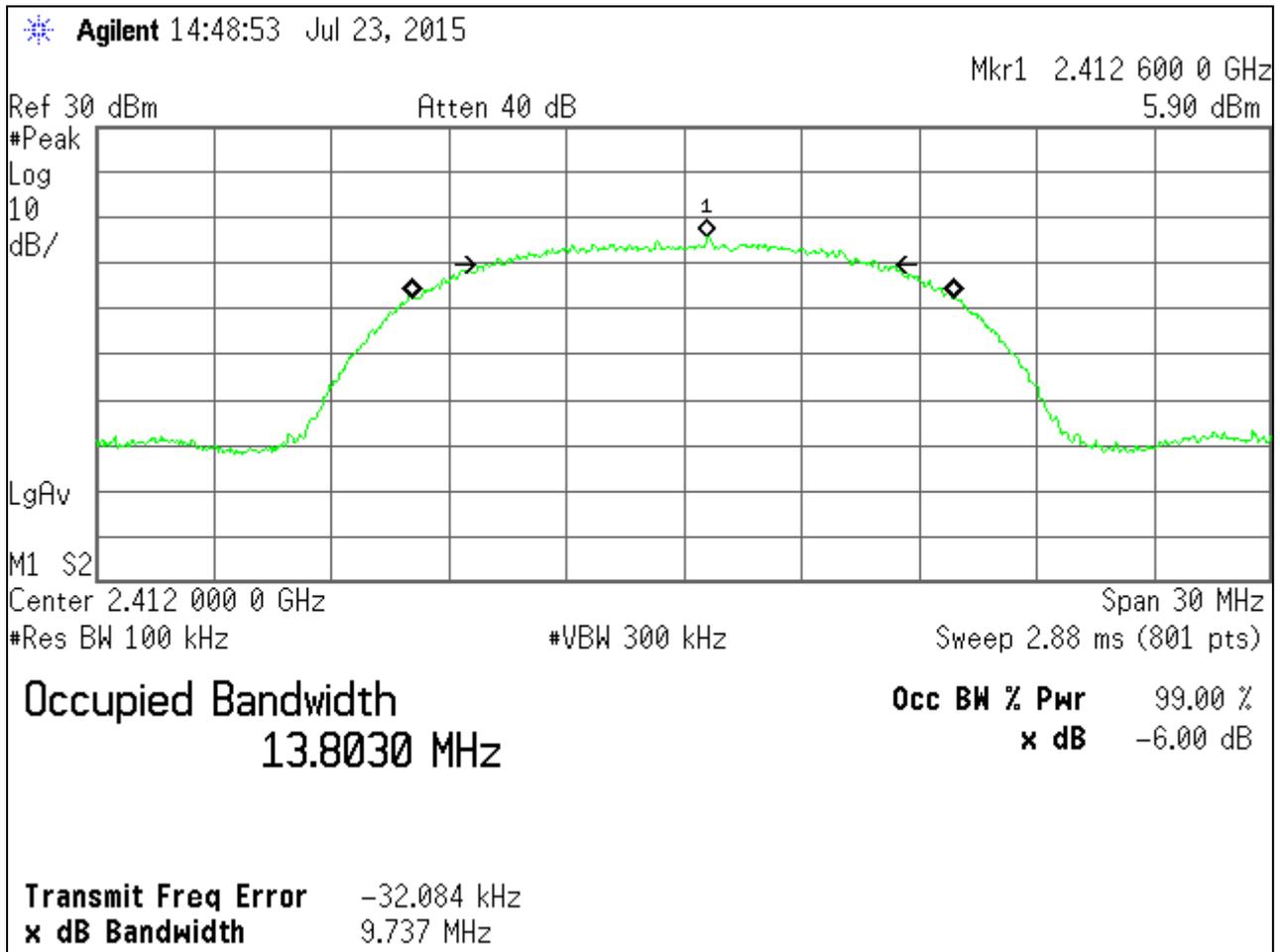
802.11b Ch 11 Ant1:



6 dB DTS Bandwidth: 9.715 MHz
 99% Bandwidth: 13.2125 MHz

OCCUPIED BANDWIDTH CONT.

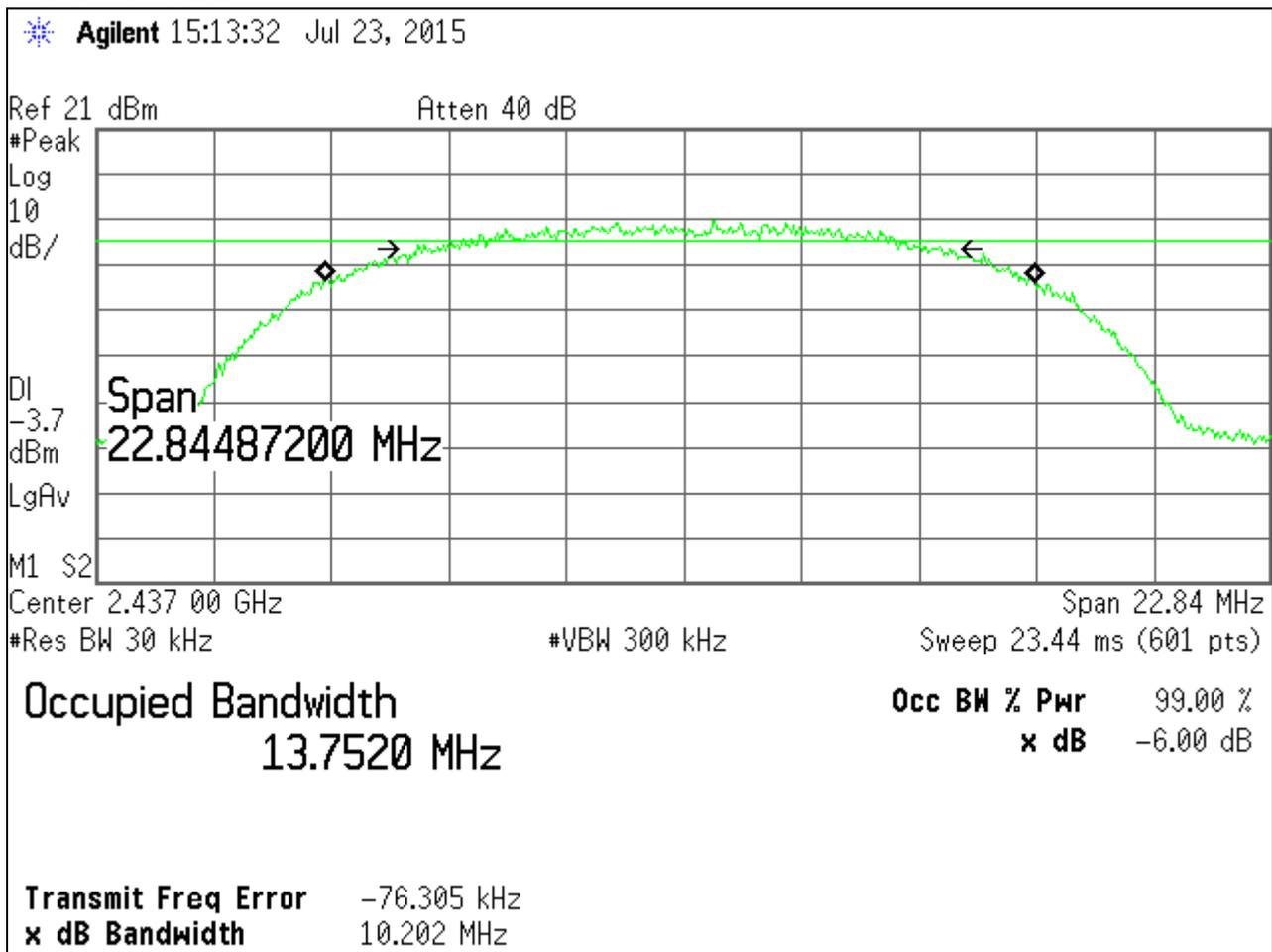
802.11b Ch 1 Ant 2:



6 dB DTS Bandwidth: 9.737 MHz
99% Bandwidth: 13.8030 MHz

OCCUPIED BANDWIDTH CONT.

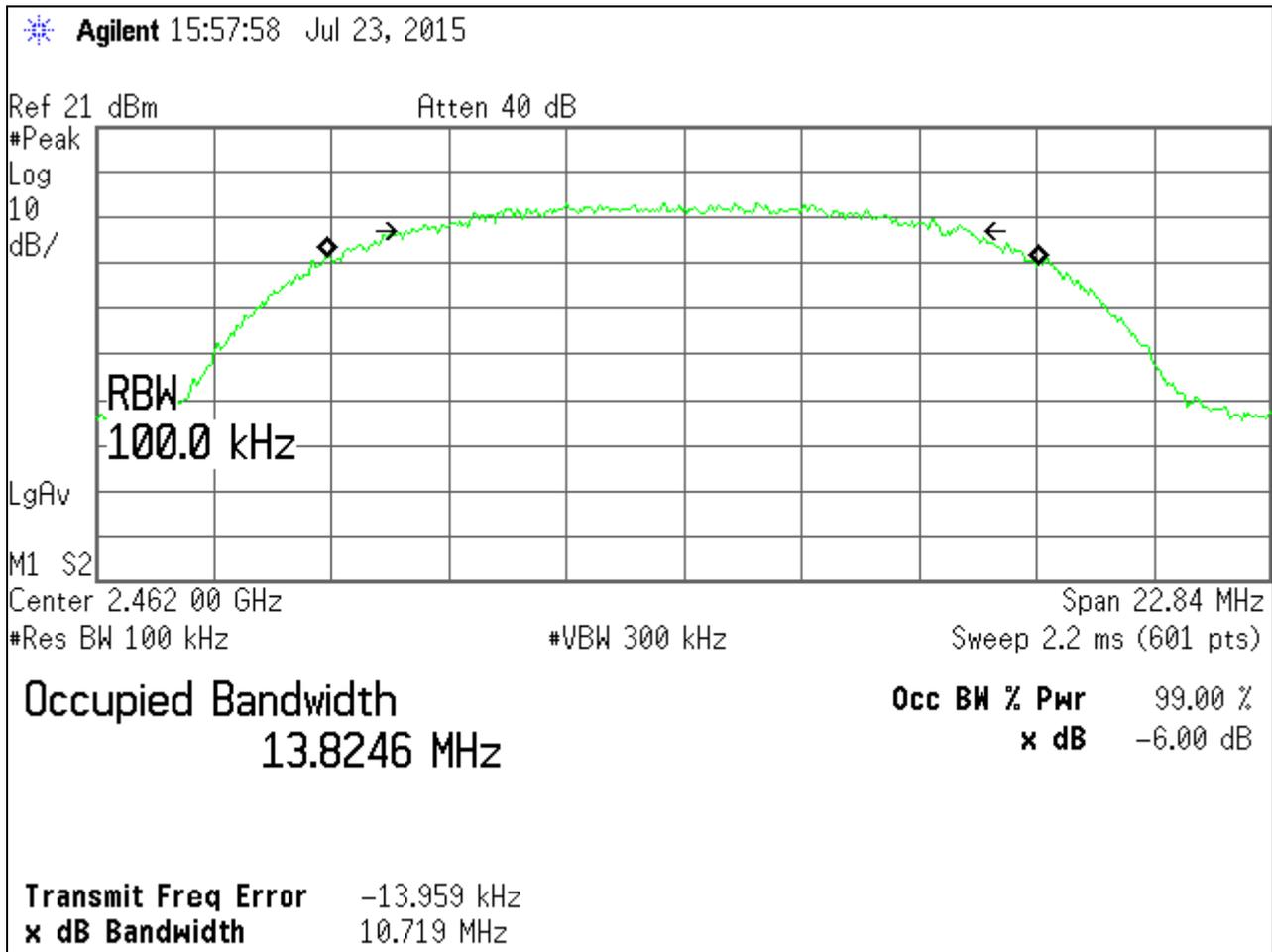
802.11b Ch 6 Ant 2:



6 dB DTS Bandwidth: 10.202 MHz
99% Bandwidth: 13.7520 MHz

OCCUPIED BANDWIDTH CONT.

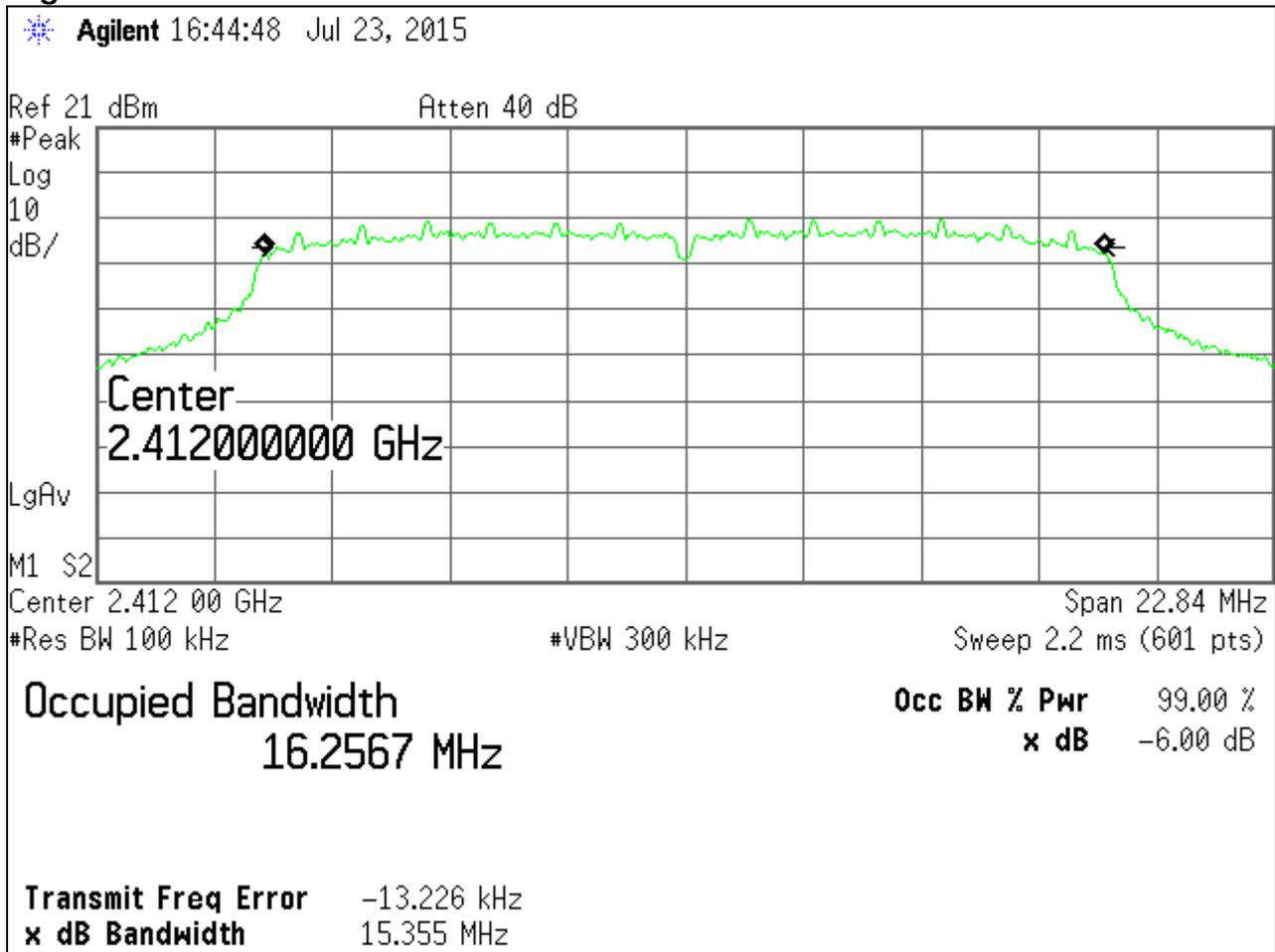
802.11b Ch 11 Ant 2:



6 dB DTS Bandwidth: 10.719 MHz
99% Bandwidth: 13.8246 MHz

OCCUPIED BANDWIDTH CONT.

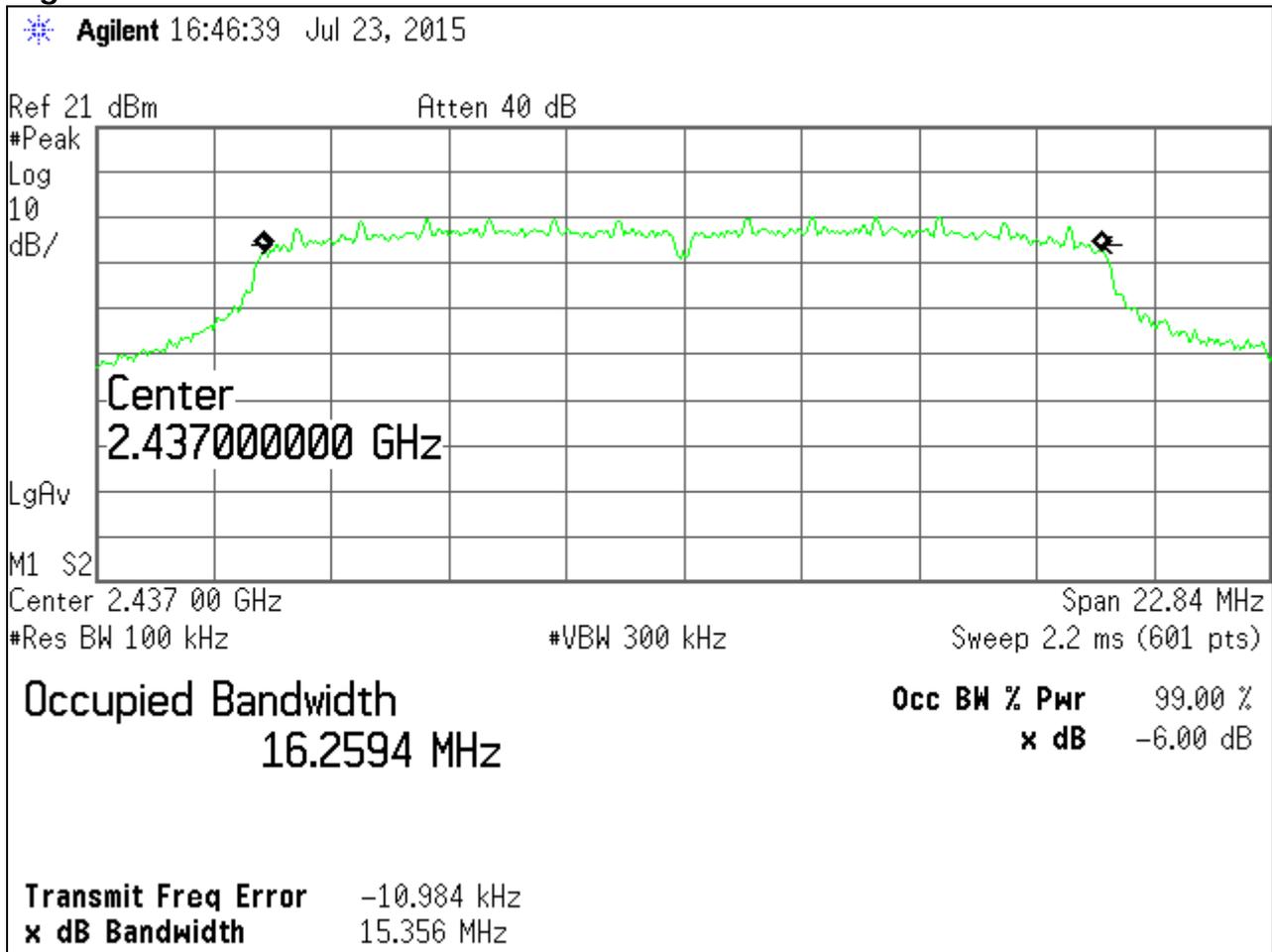
802.11g Ch 1 Ant 1:



6 dB DTS Bandwidth: 15.355 MHz
99% Bandwidth: 16.2567 MHz

OCCUPIED BANDWIDTH CONT.

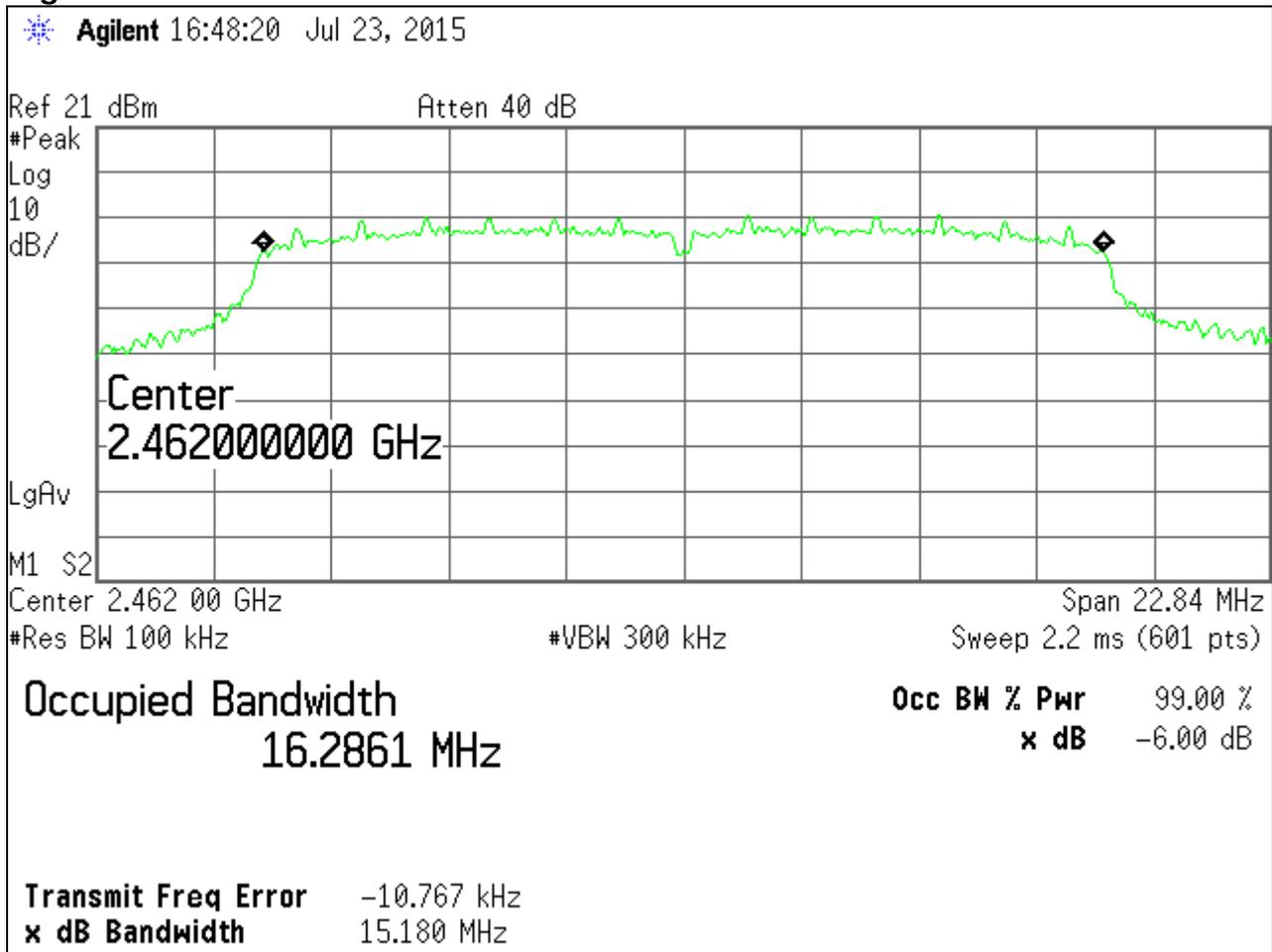
802.11g Ch 6 Ant 1:



6 dB DTS Bandwidth: 15.355 MHz
99% Bandwidth: 16.2594 MHz

OCCUPIED BANDWIDTH CONT.

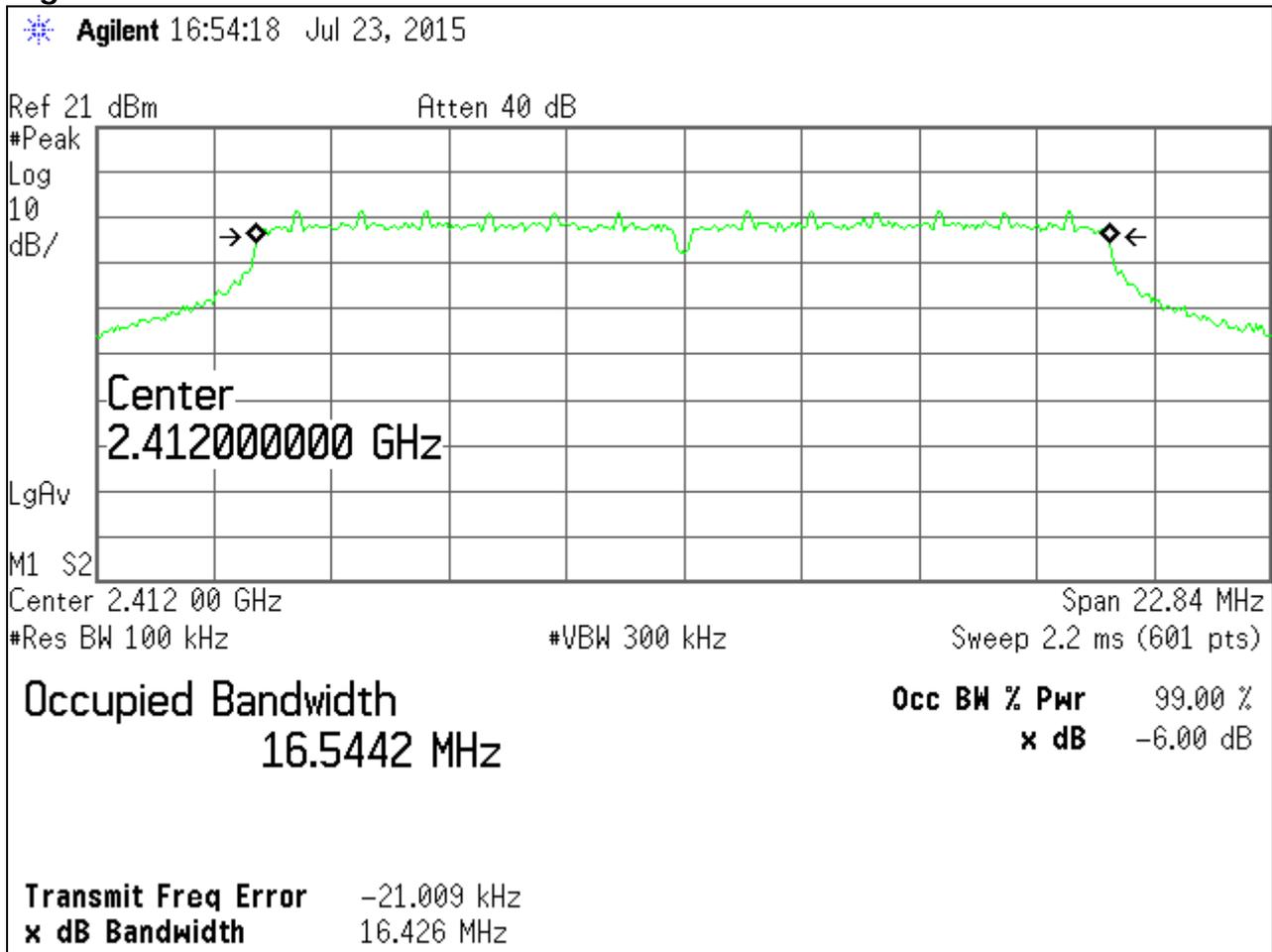
802.11g Ch 11 Ant 1:



6 dB DTS Bandwidth: 15.180 MHz
99% Bandwidth: 16.2861 MHz

OCCUPIED BANDWIDTH CONT.

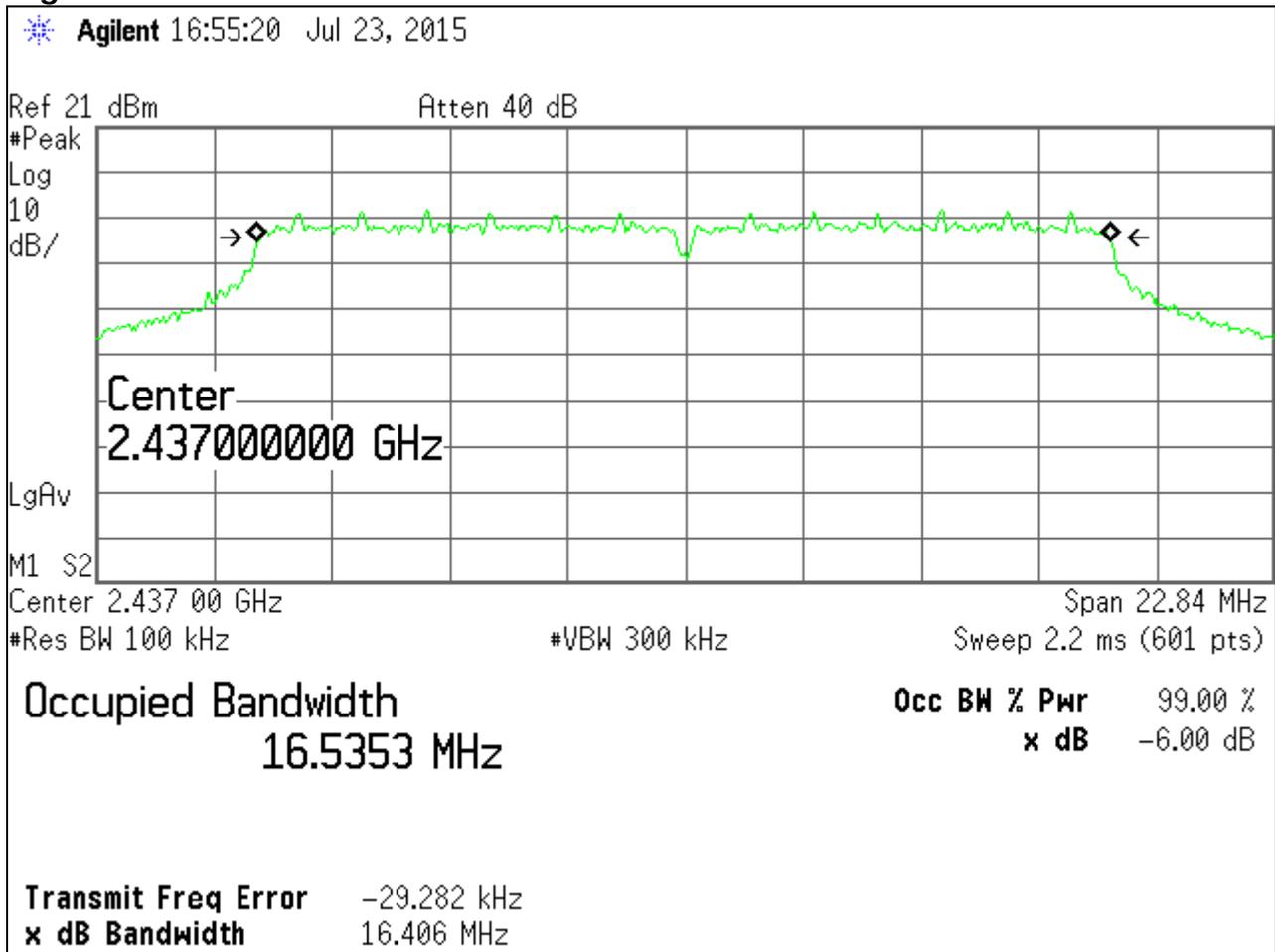
802.11g Ch 1 Ant 2:



6 dB DTS Bandwidth: 16.426 MHz
99% Bandwidth: 16.5442 MHz

OCCUPIED BANDWIDTH CONT.

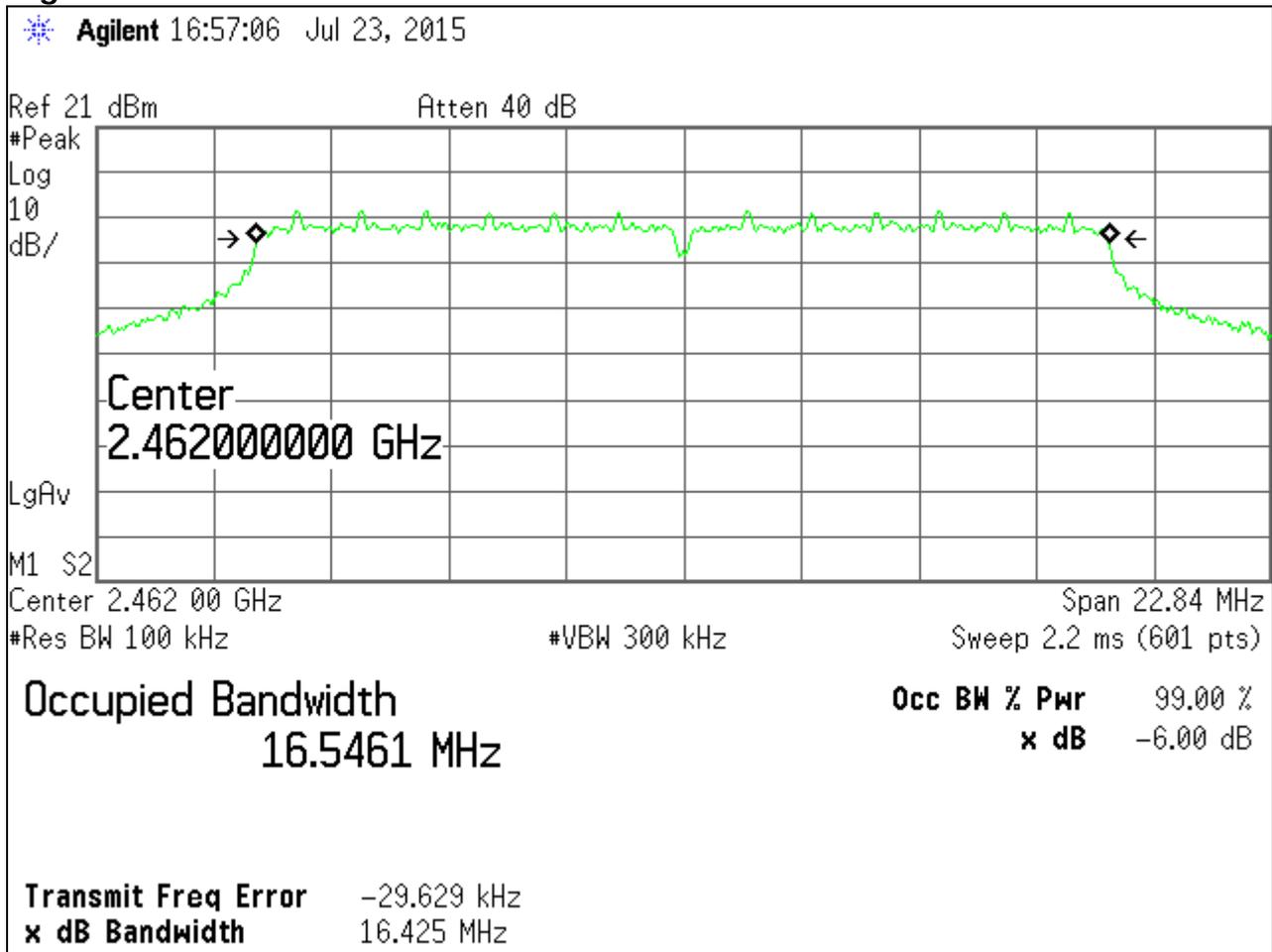
802.11g Ch 6 Ant 2:



6 dB DTS Bandwidth: 16.406 MHz
99% Bandwidth: 16.5353 MHz

OCCUPIED BANDWIDTH CONT.

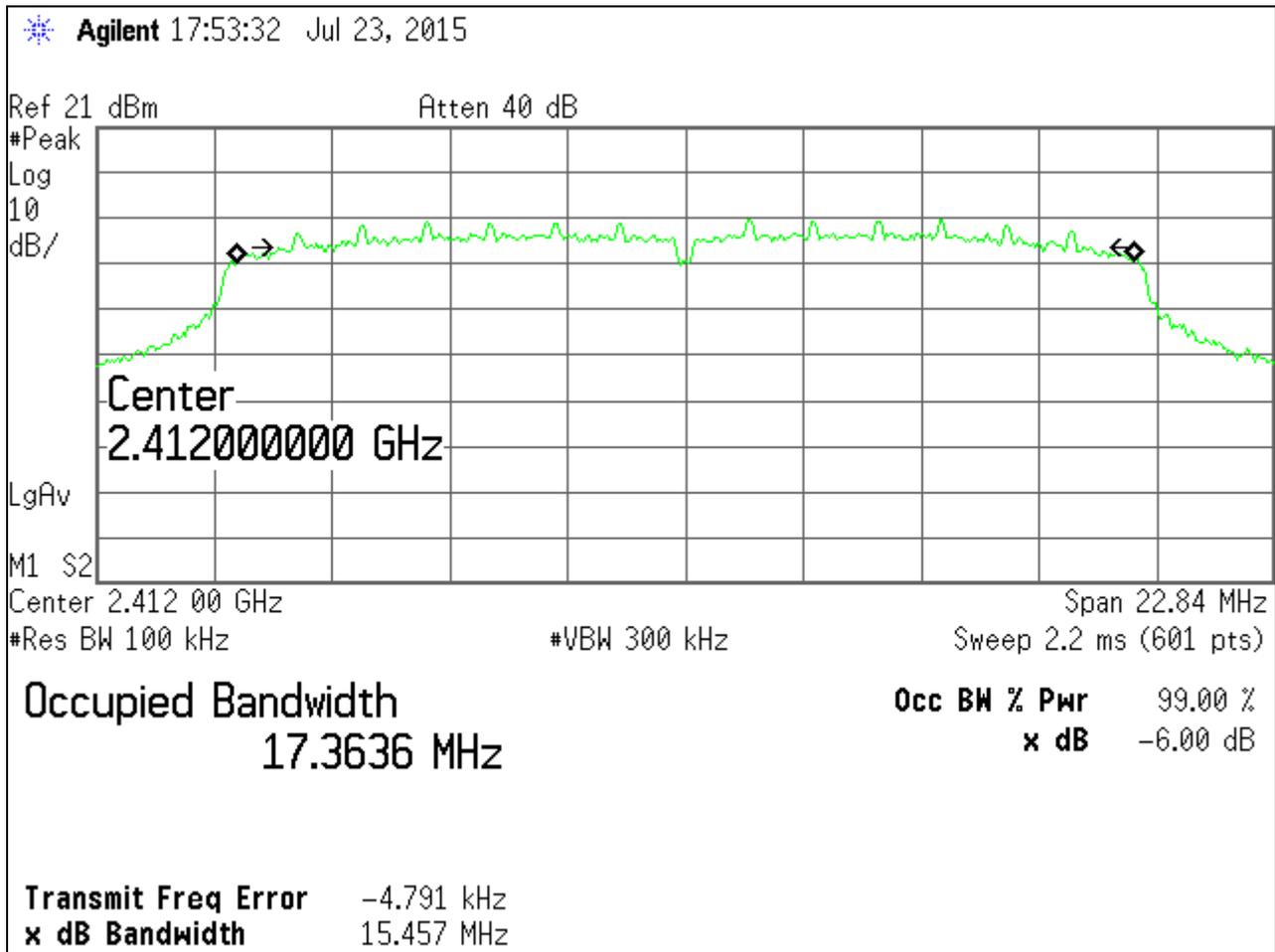
802.11g Ch 11 Ant 2:



6 dB DTS Bandwidth: 16.425 MHz
99% Bandwidth: 16.5461 MHz

OCCUPIED BANDWIDTH CONT.

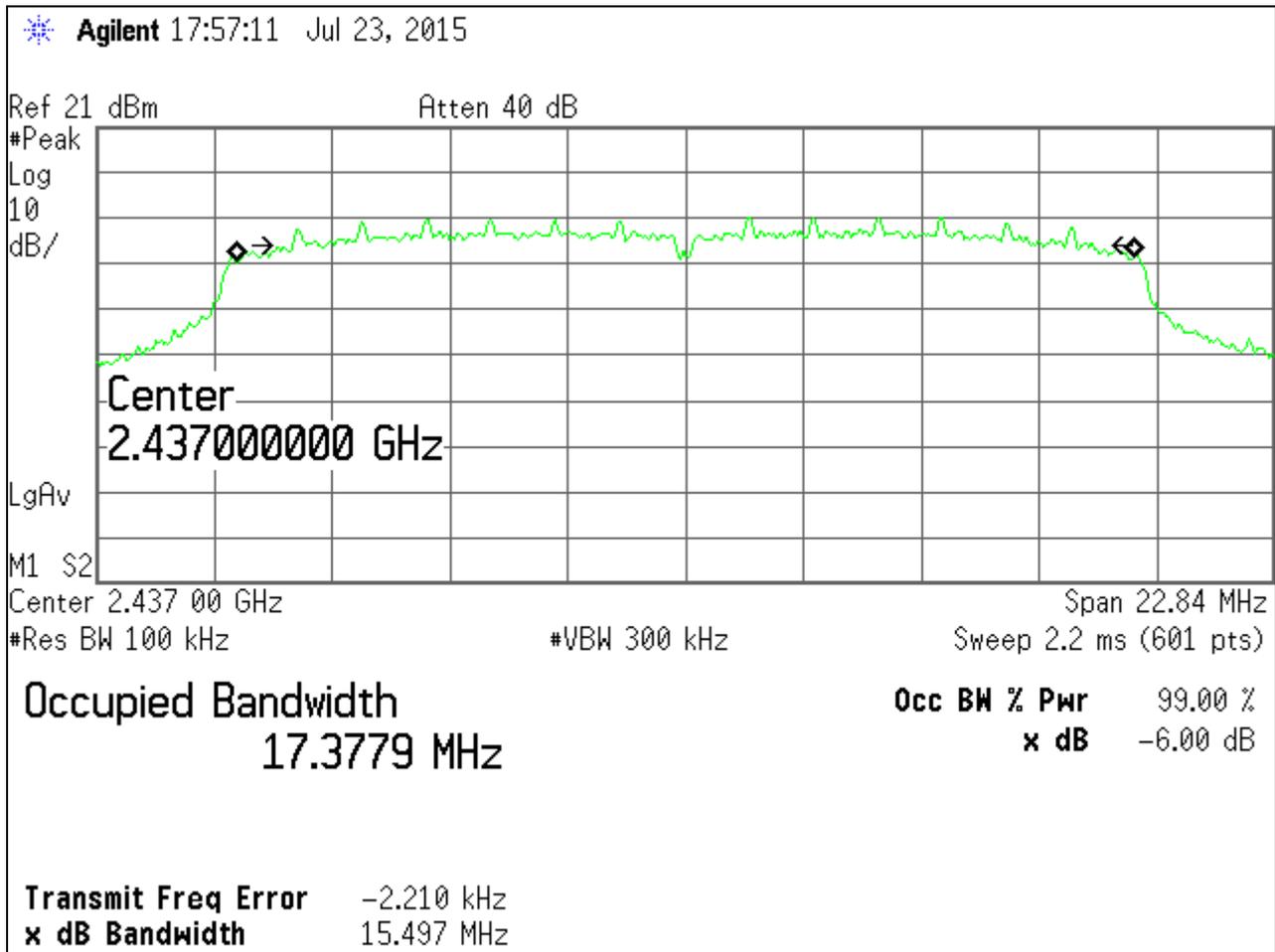
802.11n Ch 1 Ant 1:



6 dB DTS Bandwidth: 15.457 MHz
99% Bandwidth: 17.3636 MHz

OCCUPIED BANDWIDTH CONT.

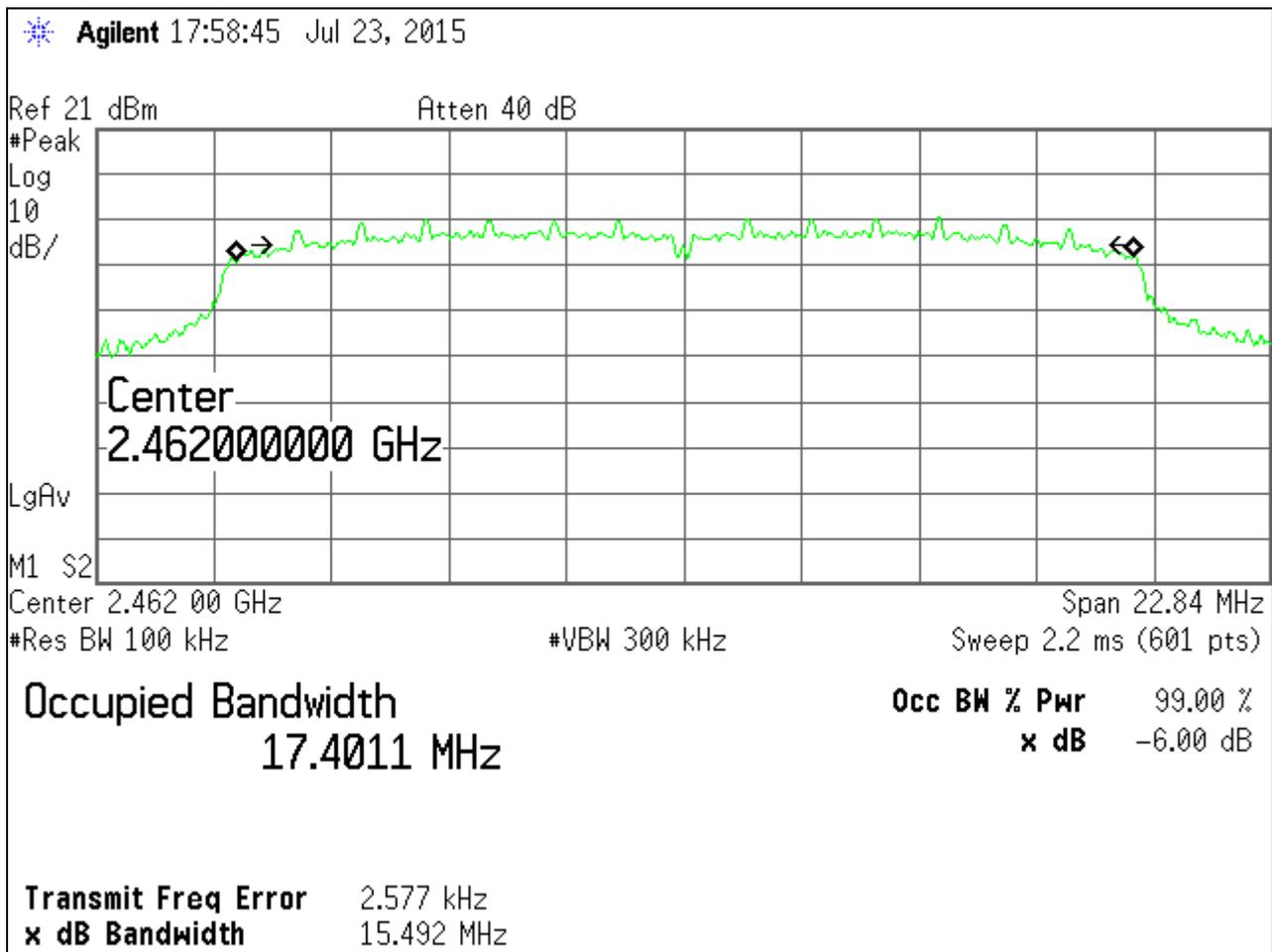
802.11n Ch 6 Ant 1:



6 dB DTS Bandwidth: 15.497 MHz
99% Bandwidth: 17.3779 MHz

OCCUPIED BANDWIDTH CONT.

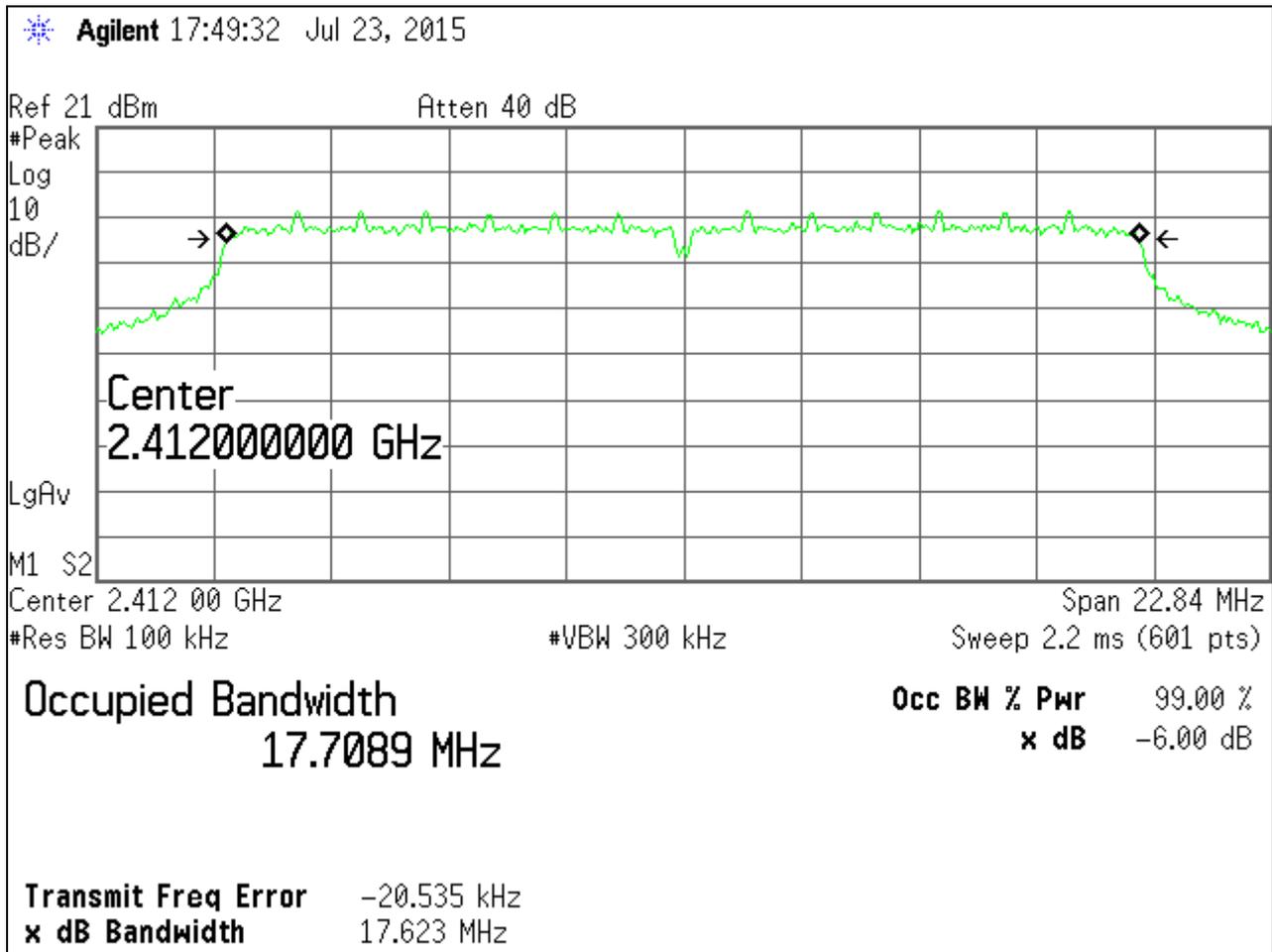
802.11n Ch 11 Ant 1:



6 dB DTS Bandwidth: 15.492 MHz
99% Bandwidth: 17.4011 MHz

OCCUPIED BANDWIDTH CONT.

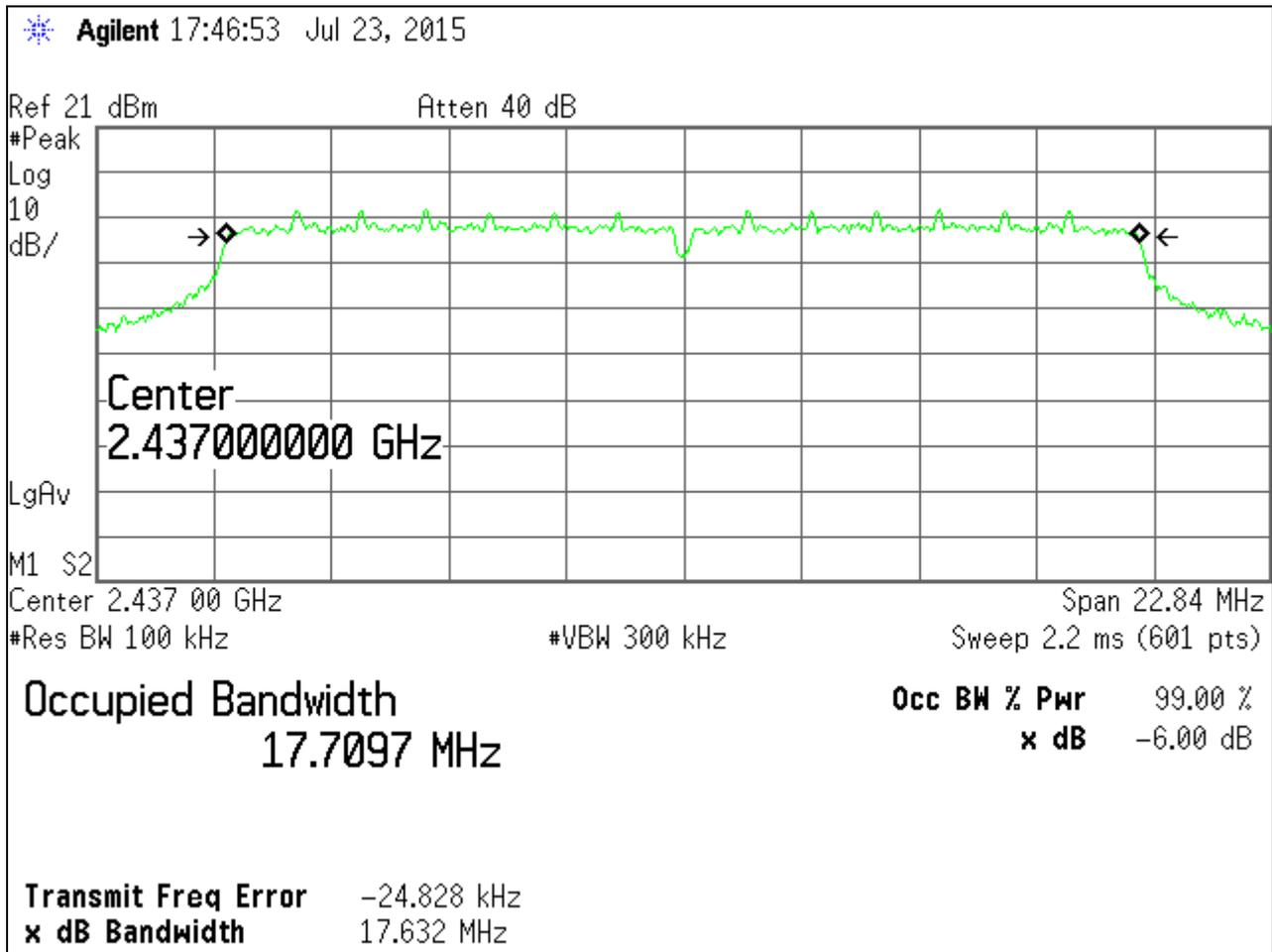
802.11n Ch 1 Ant 2:



6 dB DTS Bandwidth: 17.623 MHz
99% Bandwidth: 17.7089 MHz

OCCUPIED BANDWIDTH CONT.

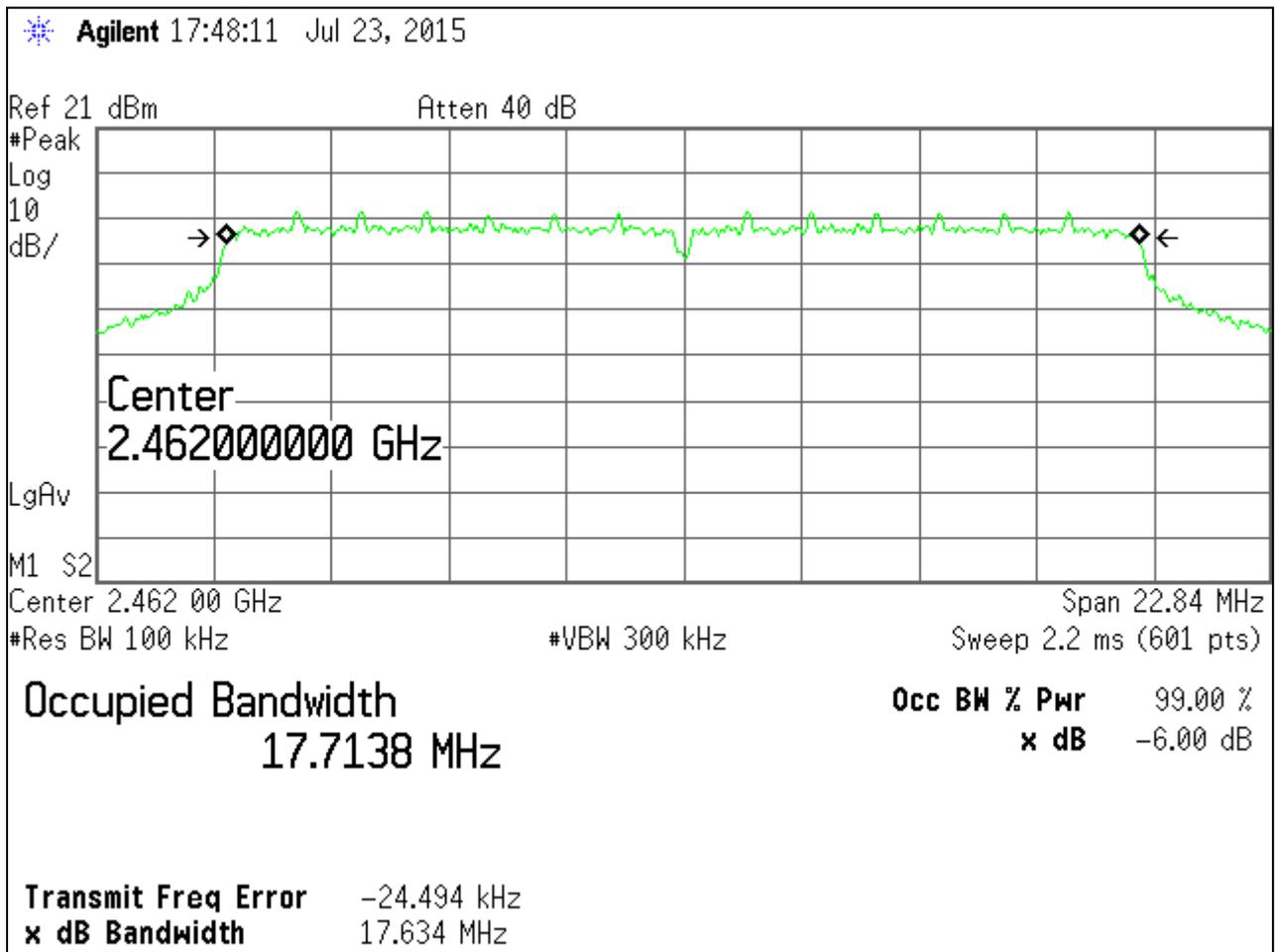
802.11n Ch 6 Ant 2:



6 dB DTS Bandwidth: 17.632 MHz
99% Bandwidth: 17.7097 MHz

OCCUPIED BANDWIDTH CONT.

802.11n Ch 11 Ant 2:



6 dB DTS Bandwidth: 17.634 MHz

99% Bandwidth: 17.7138 MHz