

26dB Bandwidth

Test Conditions / Setup

The Emissions Bandwidth measurements were made using the automatic bandwidth capability of the spectrum analyzer using the settings set out in KDB "789033 D01 General UNII Test Procedures v01r01" Section D) Emission bandwidth.

Emissions Bandwidth for Part 15, Subpart E, U-NII 5.25-5.35GHz Band – for 10MHz System Channel Width.

Engineer Name: C. Nicklas

Test Equipment					
Asset/Serial #	Description	Model	Manufacturer	Cal Date	Cal Due
02668	Spectrum Analyzer	E4446A	Agilent	2/23/2011	2/23/2013
P05843	Cable	32022-2-29094K-48TC	AstroLab	7/30/2010	7/30/2012
P05935	Attenuator	84A-10	Weinschel	10/19/2011	10/19/2013

Plot Name Key

- C1 – Chain 0
- C2 – Chain 2
- LO – LO Channel
- MID – MID Channel
- HI – HI Channel
- a – 802.11a
- n – 802.11n
- 10M – System 10MHz Channel Width
- 20 M– System 20MHz Channel Width

Test Data

Channel	Chain 0 – 26dB Bandwidth (MHz)		Chain 2 – 26dB Bandwidth (MHz)	
	802.11a	802.11n	802.11a	802.11n
LO – 5275	17.336	18.473	15.618	18.501
MID – 5300	17.343	19.096	16.301	18.290
HI – 5325	19.301	21.441	17.675	18.838

Worst Case 802.11a data rate is 24 Mbps, worst case 802.11n data rate is 13MCS HT20 2S

Emissions Bandwidth for Part 15, Subpart E, U-NII 5.25-5.35GHz Band – for 20MHz System Channel Width

Channel	Chain 0 – 26dB Bandwidth (MHz)		Chain 2 – 26dB Bandwidth (MHz)	
	802.11a	802.11n	802.11a	802.11n
LO – 5280	28.233	28.802	27.251	28.652
MID – 5300	29.500	32.156	27.001	27.901
HI – 5320	33.109	33.894	30.091	30.690

Worst Case 802.11a data rate is 9 Mbps, worst case 802.11n data rate is 6.5MCS HT20 1S

Emissions Bandwidth for Part 15, Subpart E, U-NII 5.47-5.725GHz Band – for 10MHz System Channel Width

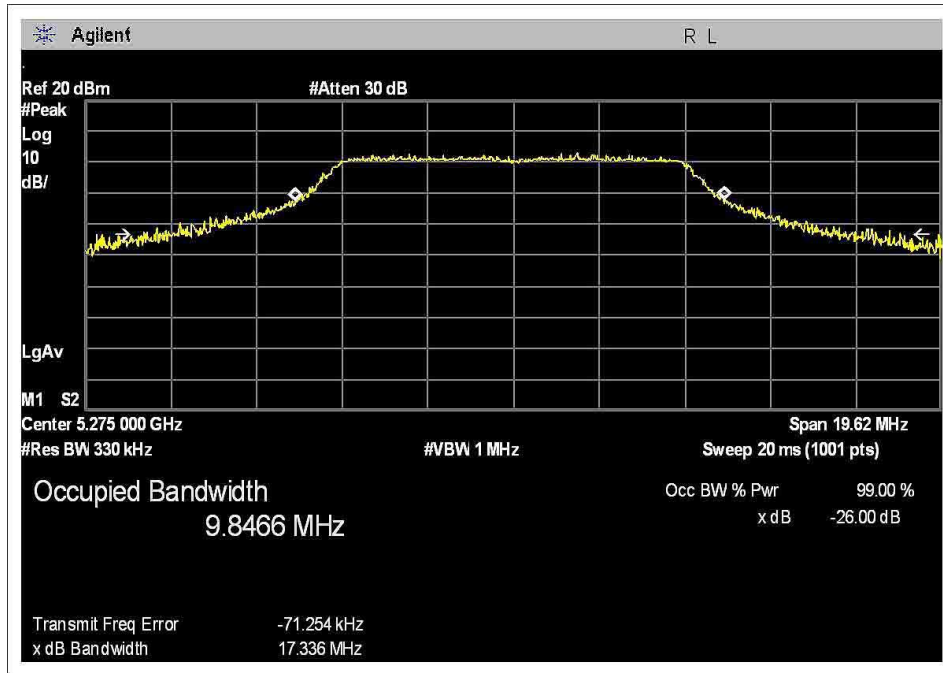
Channel	Chain 0 – 26dB Bandwidth (MHz)		Chain 2 – 26dB Bandwidth (MHz)	
	802.11a	802.11n	802.11a	802.11n
LO – 5495	20.132	21.710	17.970	18.413
MID – 5590	17.708	20.075	15.284	17.466
HI – 5705	18.496	19.429	15.290	17.851

Worst Case 802.11a data rate is 24 Mbps, worst case 802.11n data rate is 13MCS HT20 2S

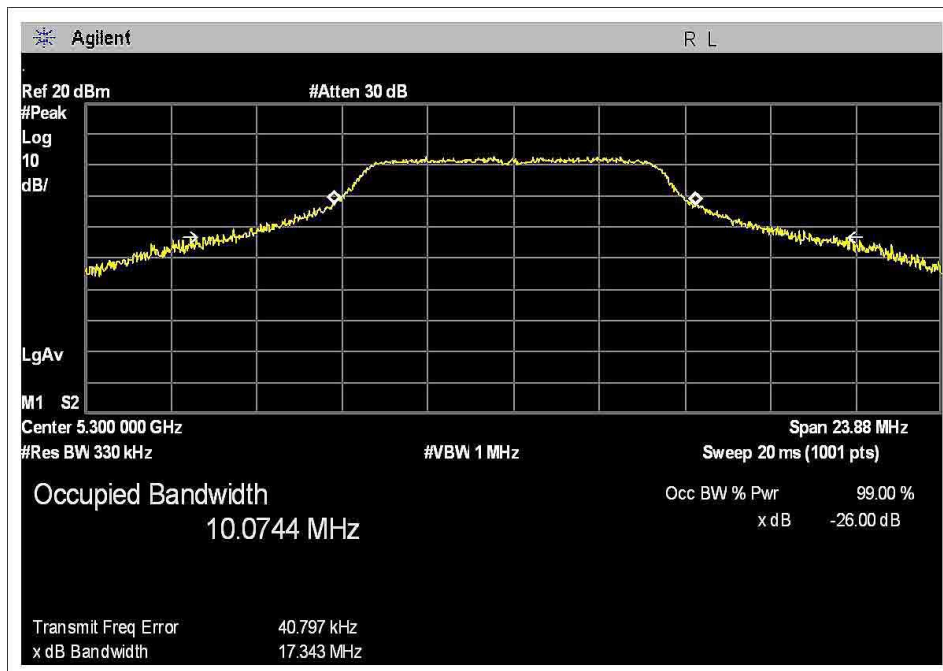
Emissions Bandwidth for Part 15, Subpart E, U-NII 5.47-5.725GHz Band – for 20MHz System Channel Width

Channel	Chain 0 – 26dB Bandwidth (MHz)		Chain 2 – 26dB Bandwidth (MHz)	
	802.11a	802.11n	802.11a	802.11n
LO – 5500	34.185	34.920	30.161	32.225
MID – 5590	29.940	31.749	26.485	26.064
HI – 5700	30.285	28.166	25.772	26.447

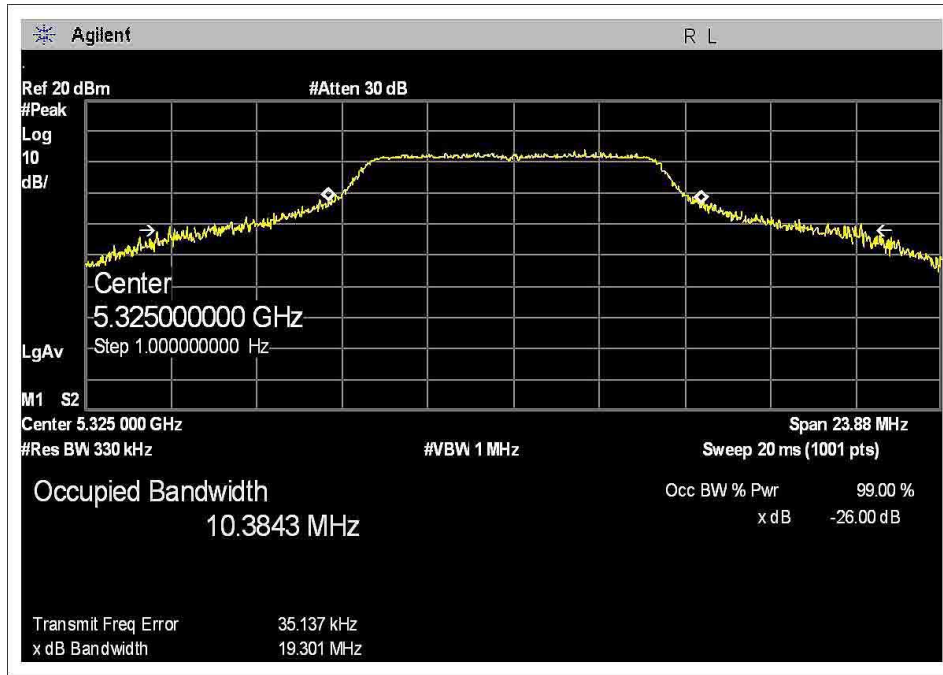
Worst Case 802.11a data rate is 24 Mbps, worst case 802.11n data rate is 6.5MCS HT20 1S



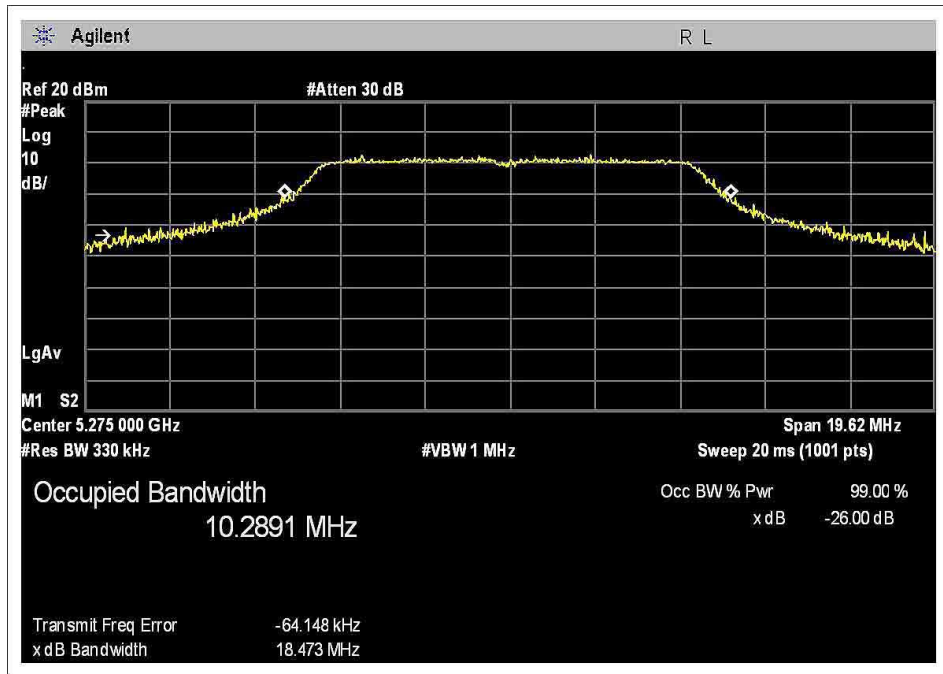
U5.25 C0 10MHz, LOW CHANNEL, 802.11a



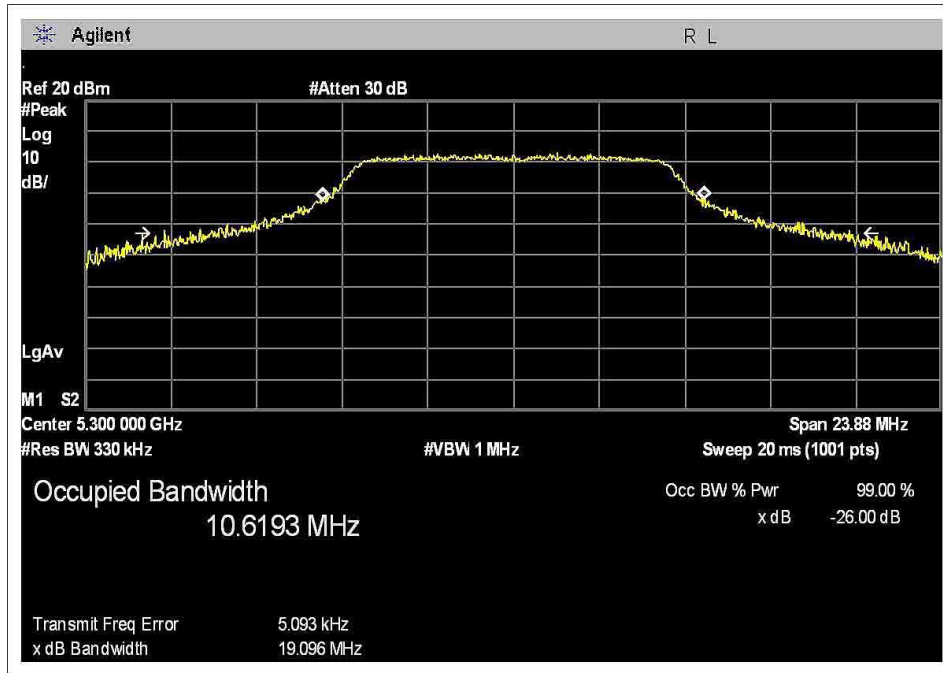
U5.25 C0 10MHz, MID CHANNEL, 802.11a



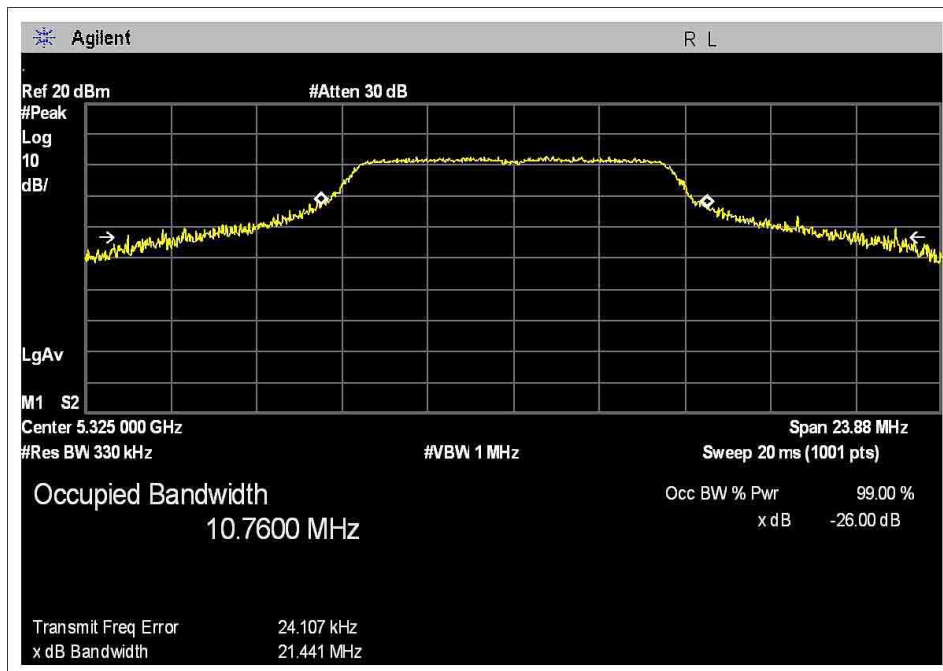
U5.25 C0 10MHz, HIGH CHANNEL, 802.11a



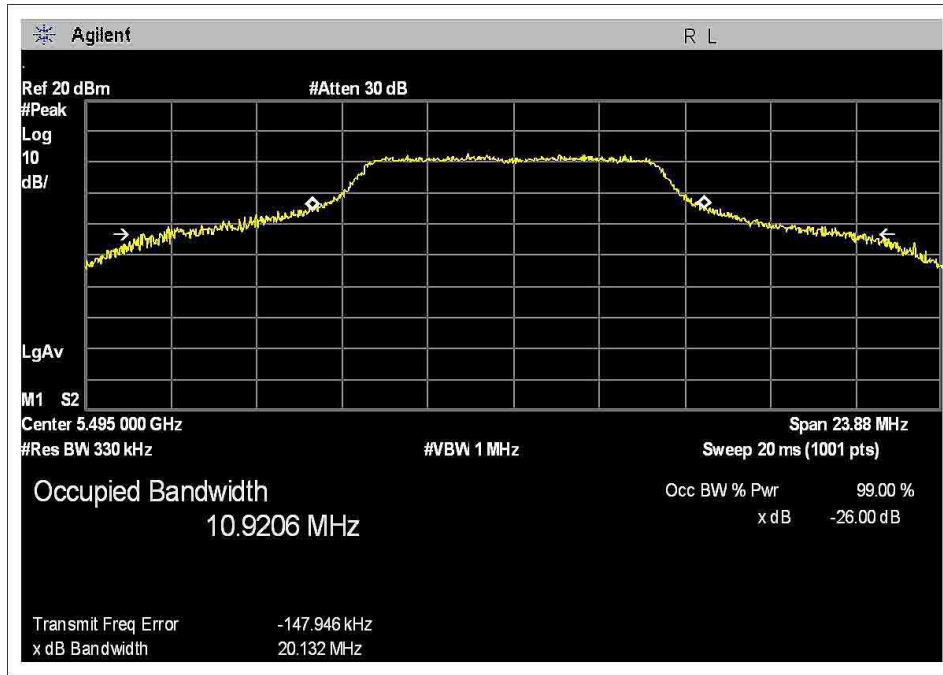
U5.25 C0 10MHz, LOW CHANNEL, 802.11n



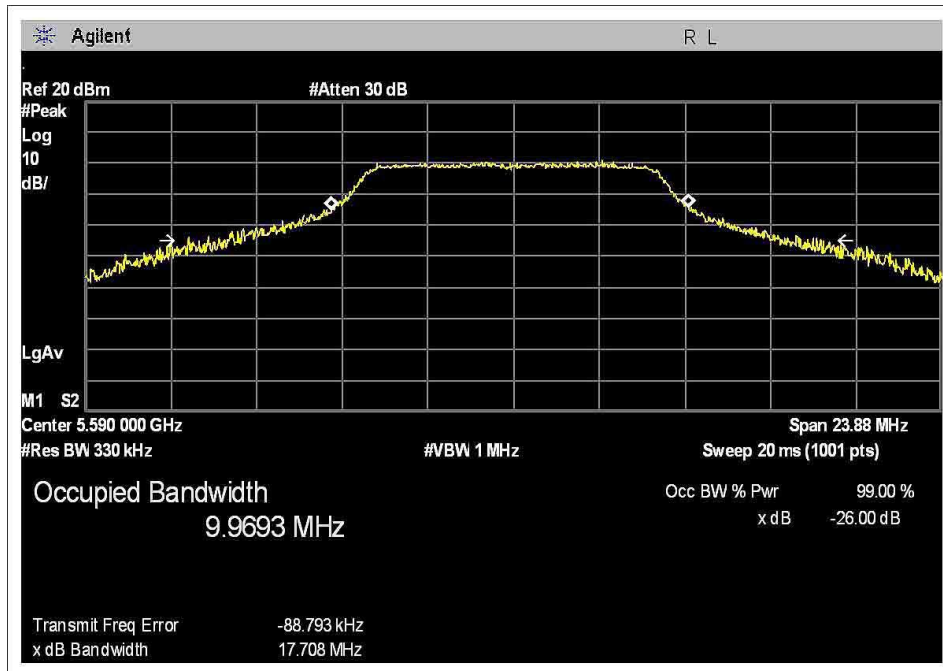
U5.25 C0 10MHz, MID CHANNEL, 802.11n



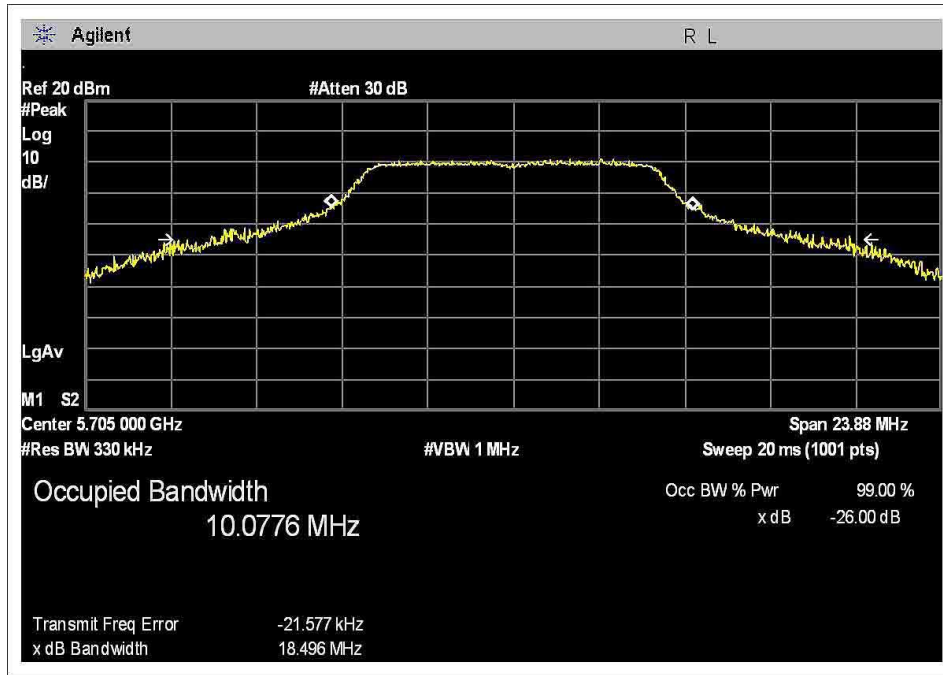
U5.25 C0 10MHz, HIGH CHANNEL, 802.11n



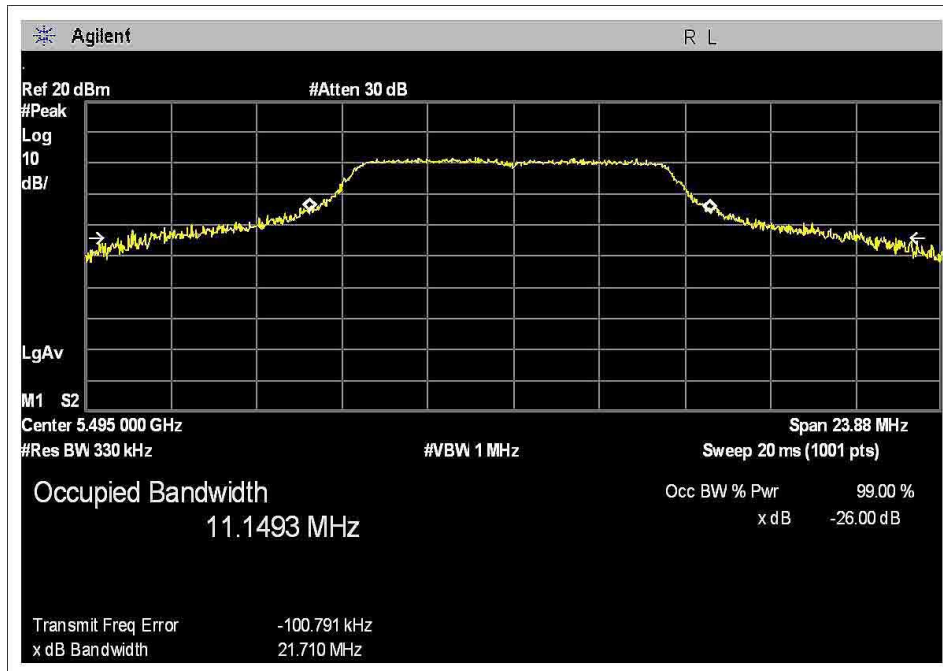
U5.47 C0 10MHz, LOW CHANNEL, 802.11a



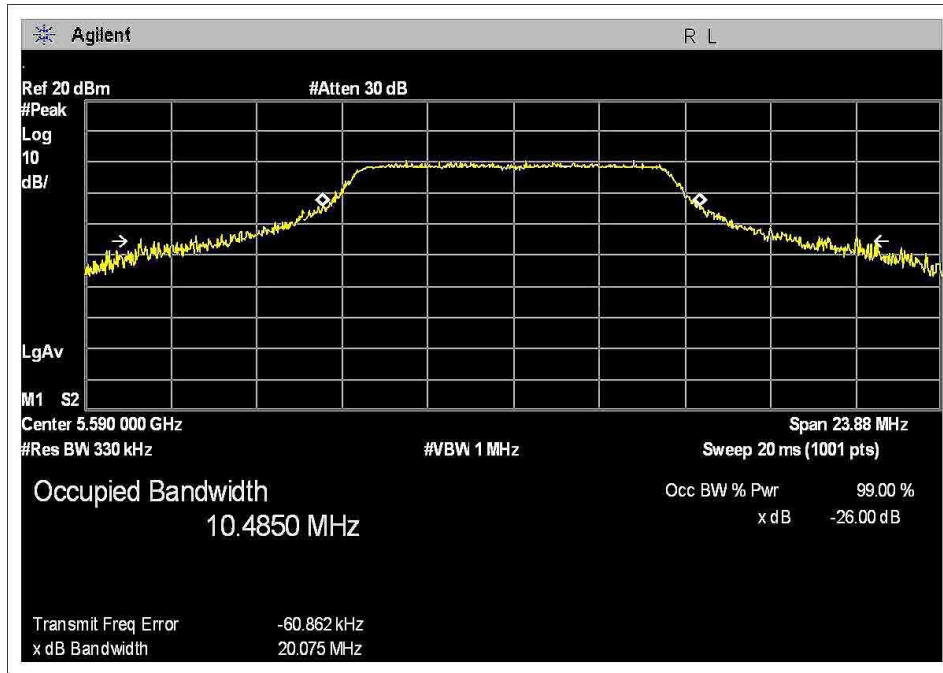
U5.47 C0 10MHz, MID CHANNEL, 802.11a



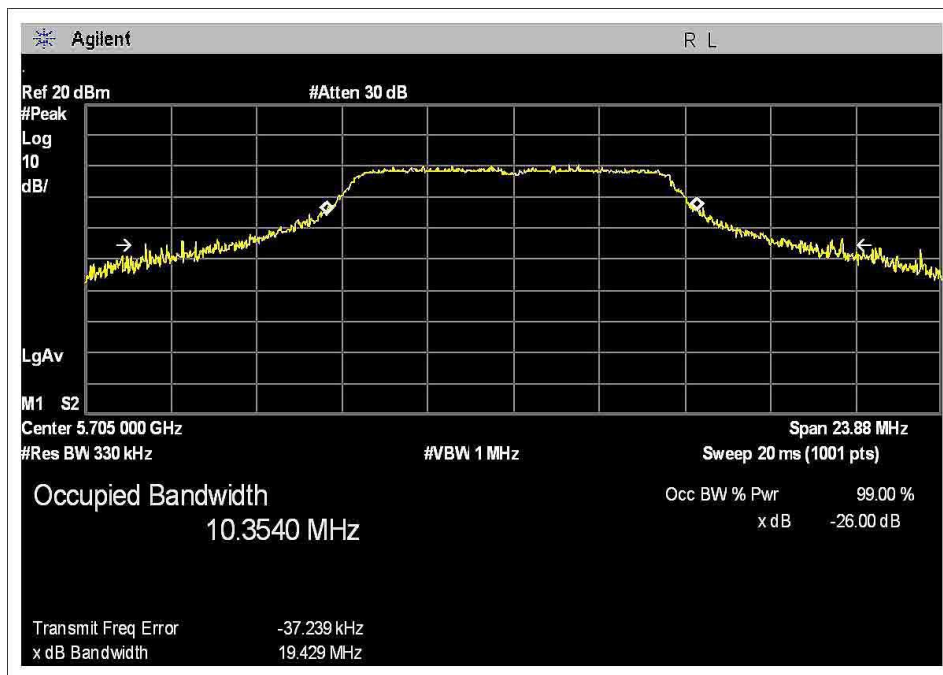
U5.47 C0 10MHz, HIGH CHANNEL, 802.11a



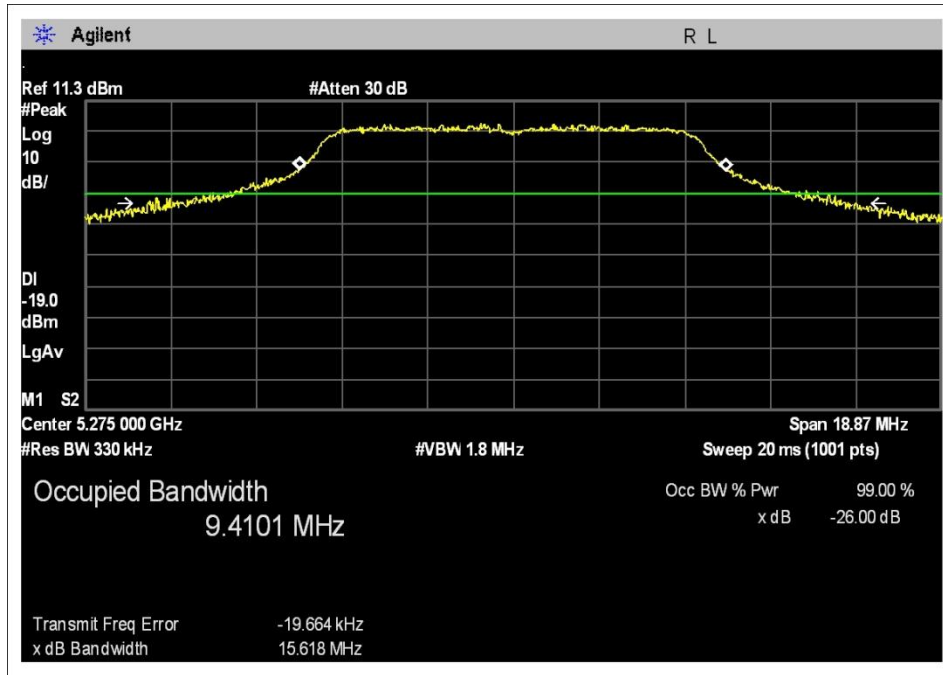
U5.47 C0 10MHz, LOW CHANNEL, 802.11n



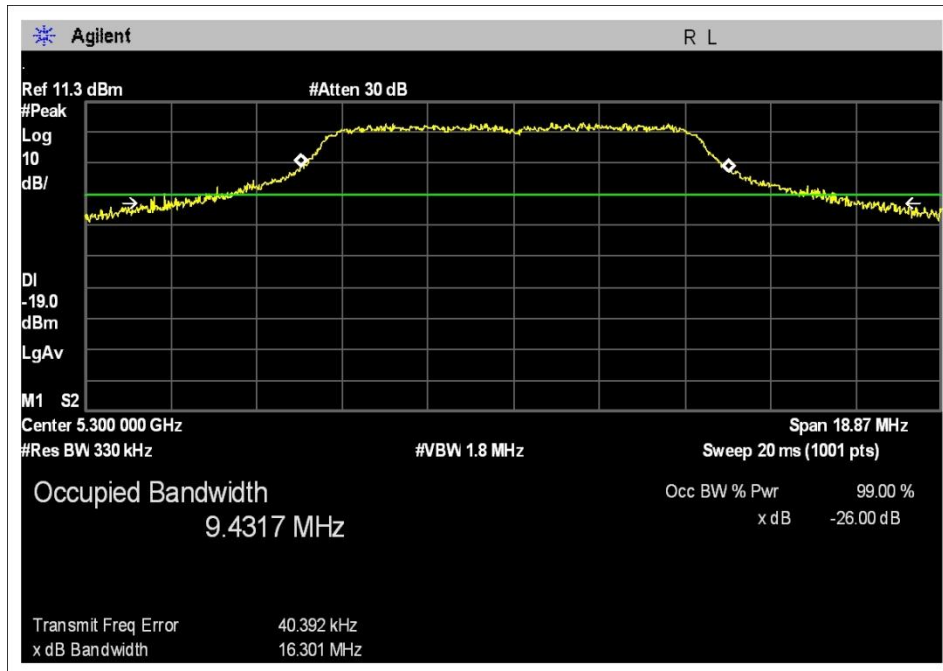
U5.47 C0 10MHz, MID CHANNEL, 802.11n



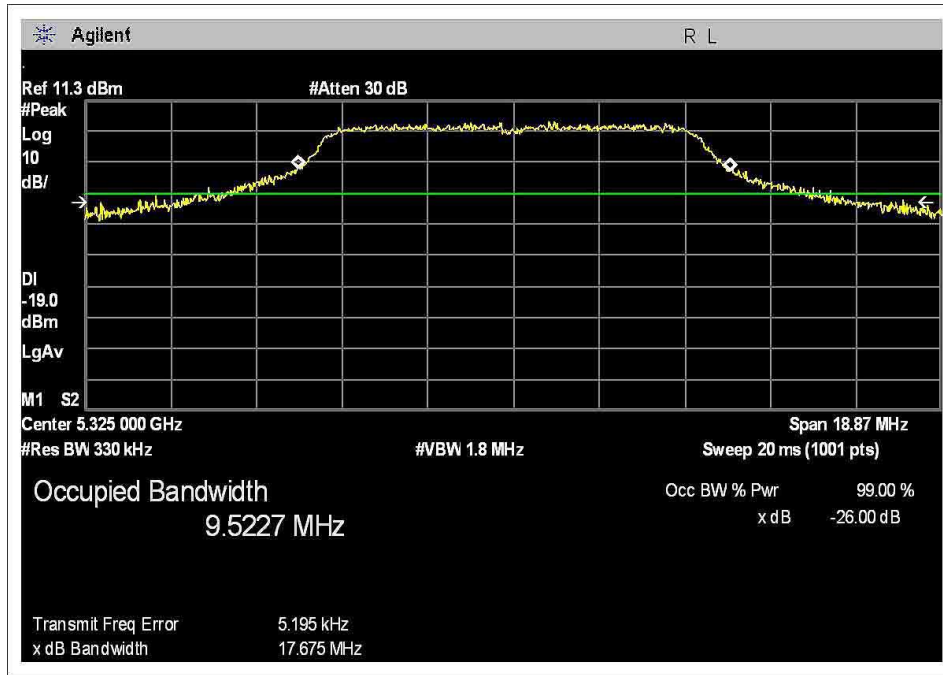
U5.47 C0 10MHz, HIGH CHANNEL, 802.11n



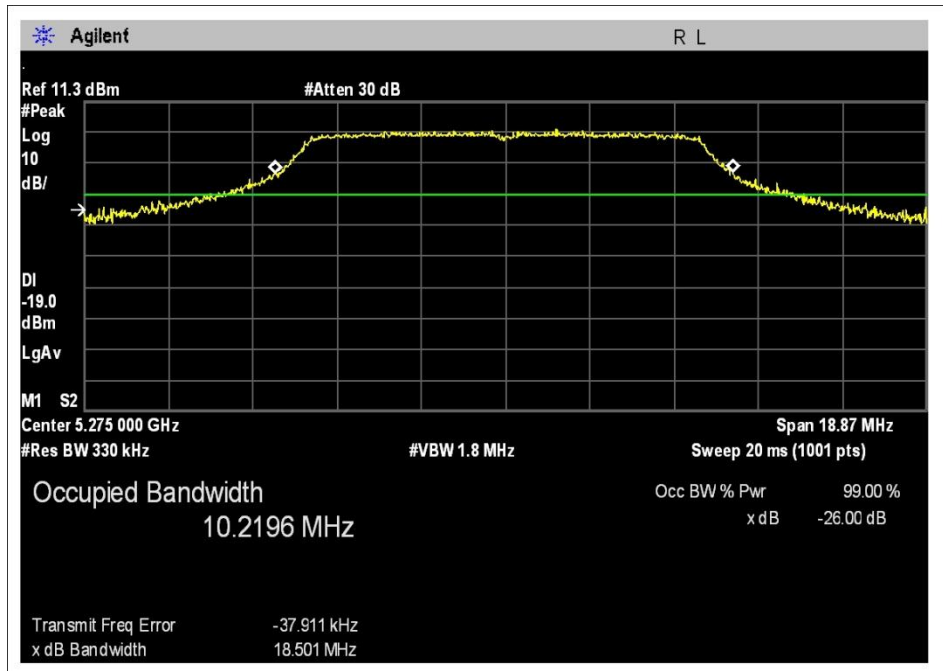
U5.25 C2 10MHz, LOW CHANNEL, 802.11a



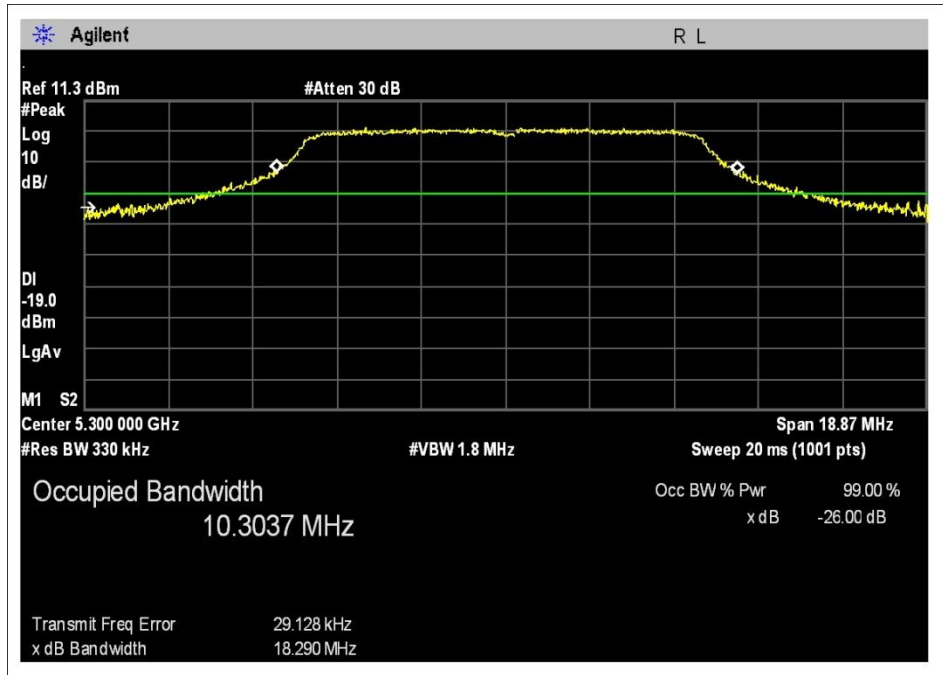
U5.25 C2 10MHz, MID CHANNEL, 802.11a



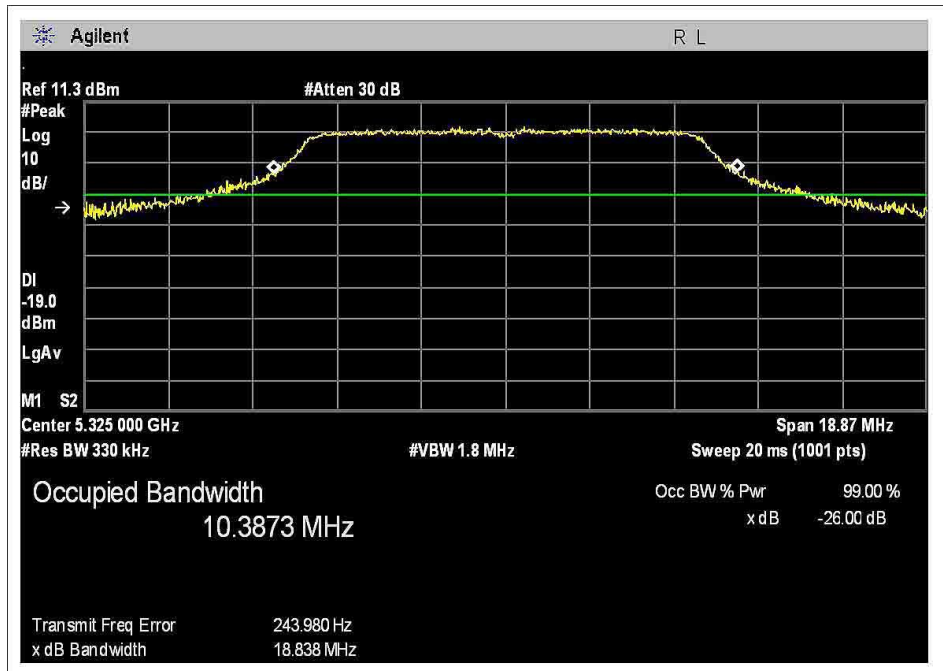
U5.25 C2 10MHz, HIGH CHANNEL, 802.11a



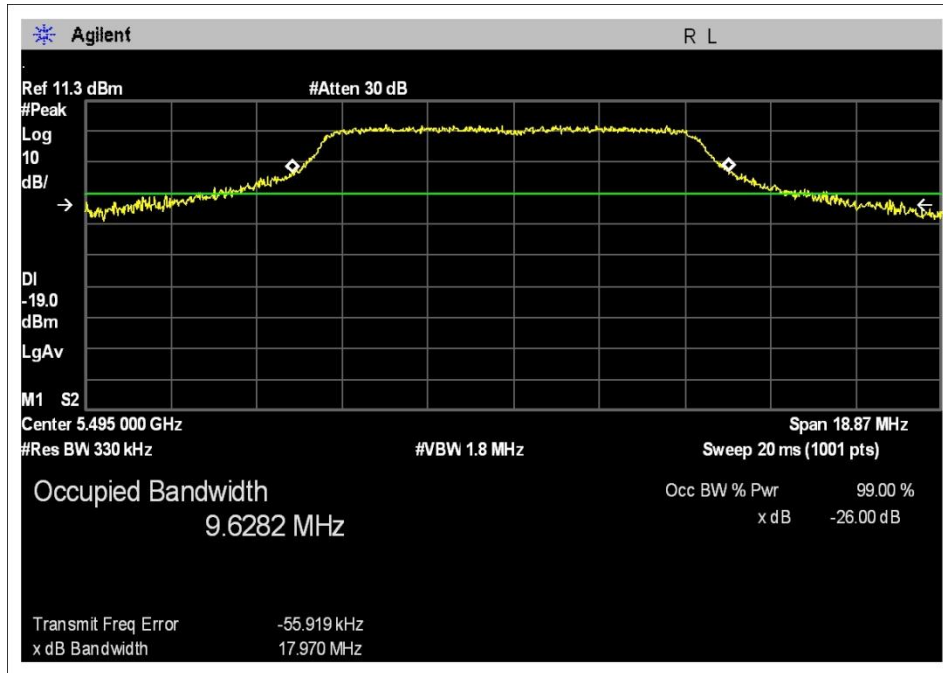
U5.25 C2 10MHz, LOW CHANNEL, 802.11n



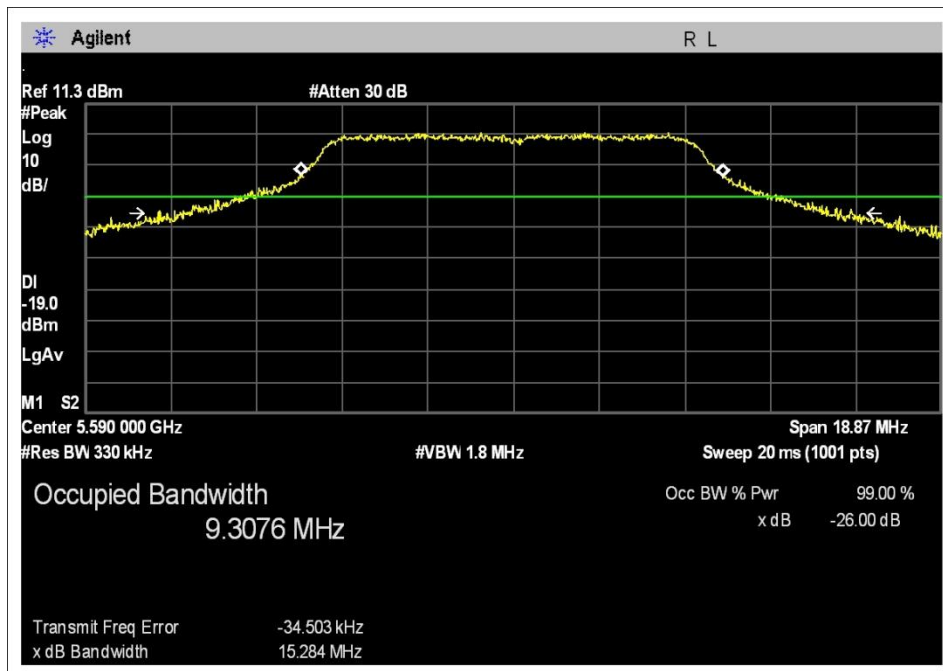
U5.25 C2 10MHz, MID CHANNEL, 802.11n



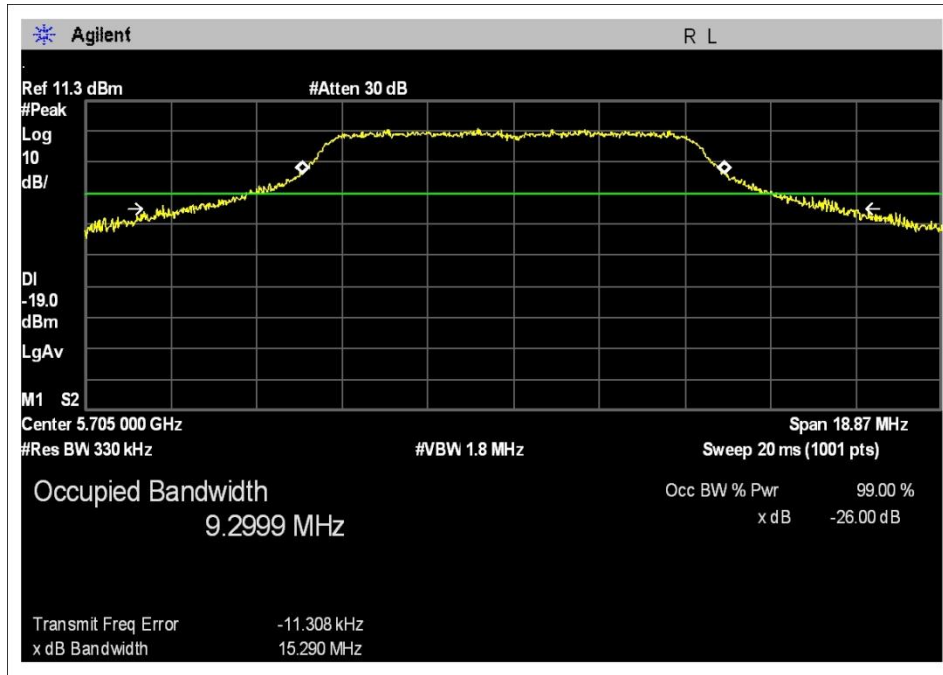
U5.25 C2 10MHz, HIGH CHANNEL, 802.11n



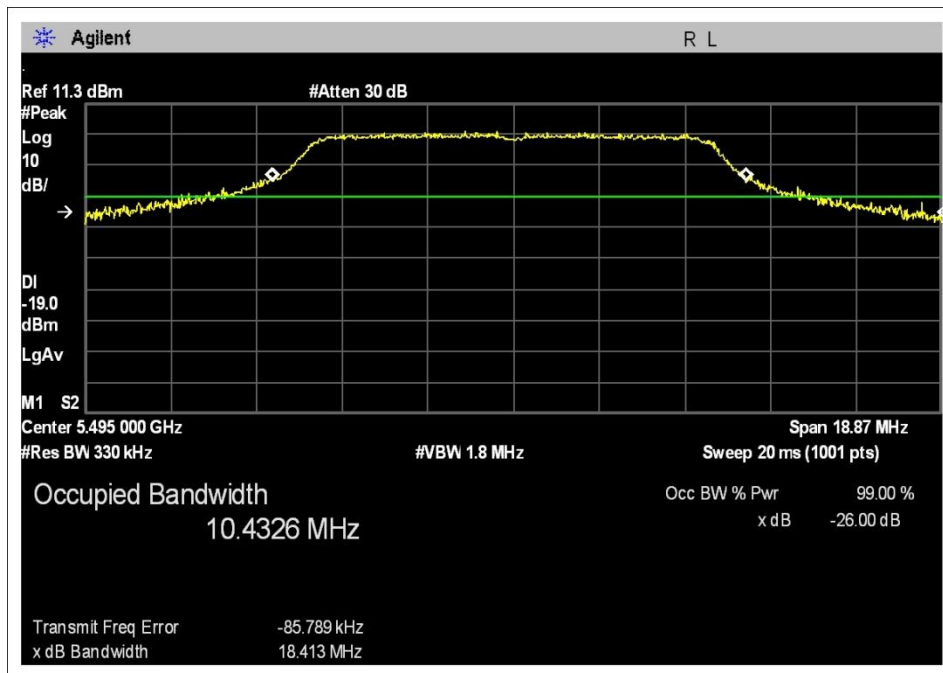
U5.47 C2 10MHz, LOW CHANNEL, 802.11a



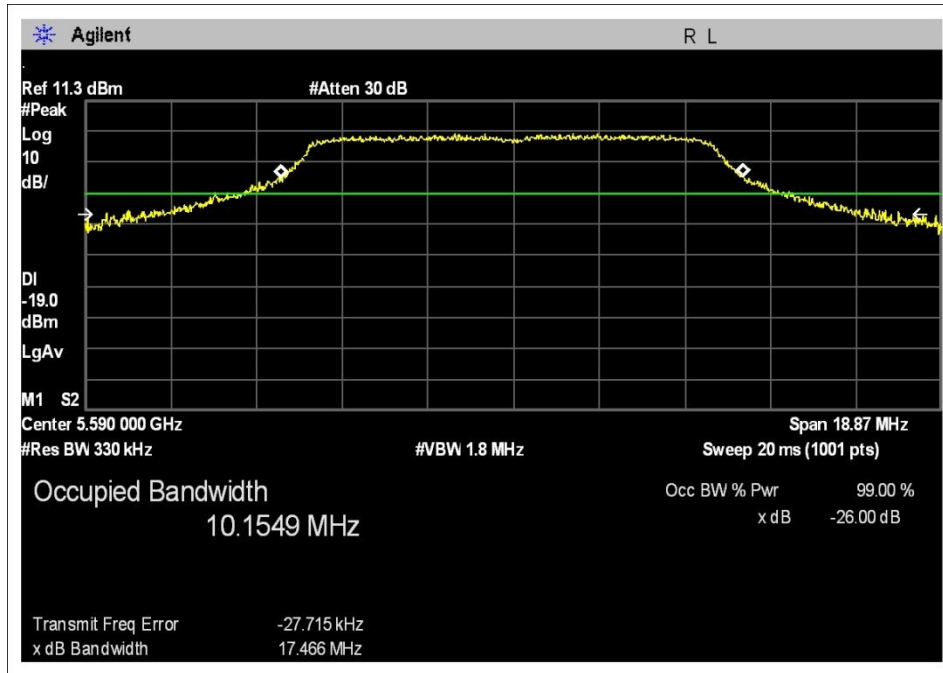
U5.47 C2 10MHz, MID CHANNEL, 802.11a



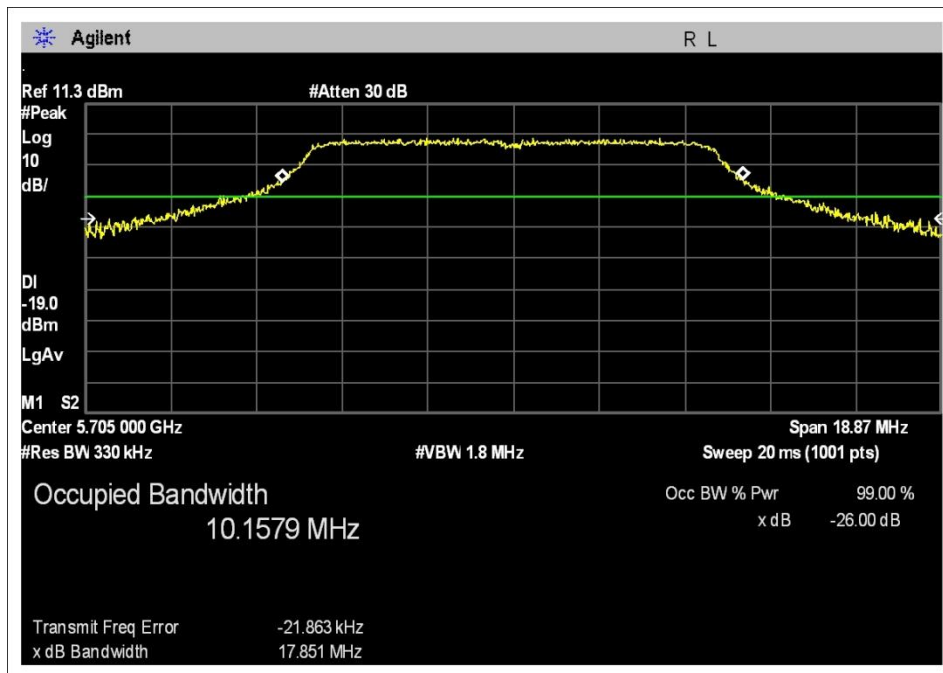
U5.47 C2 10MHz, HIGH CHANNEL, 802.11a



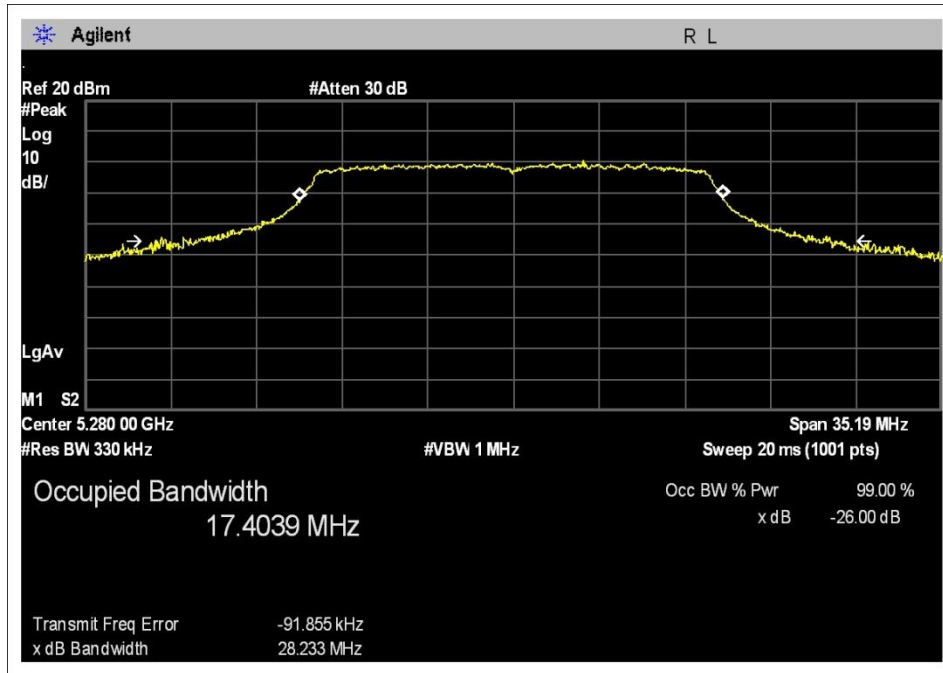
U5.47 C2 10MHz, LOW CHANNEL, 802.11n



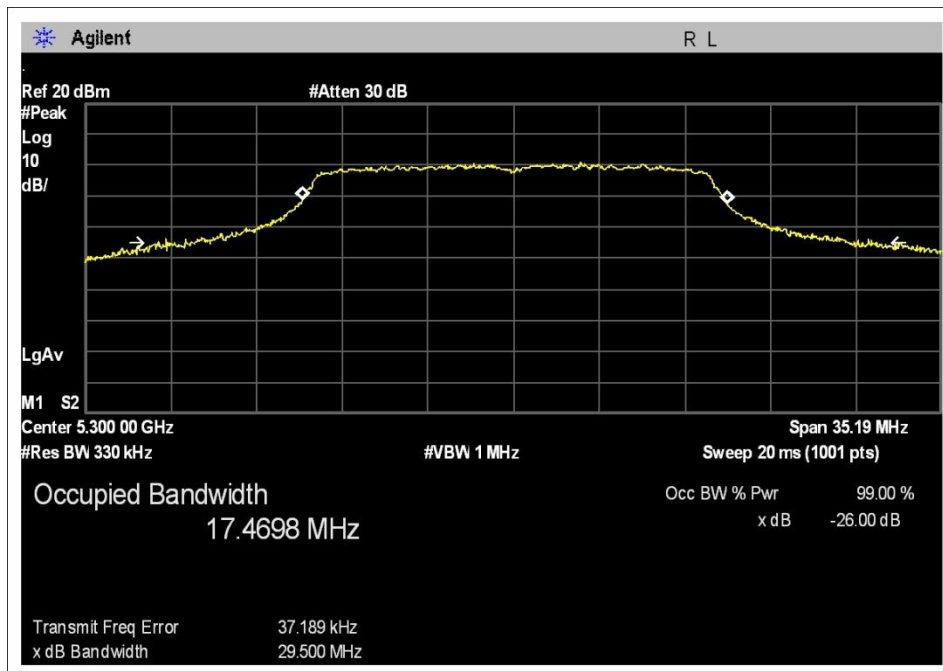
U5.47 C2 10MHz, MID CHANNEL, 802.11n



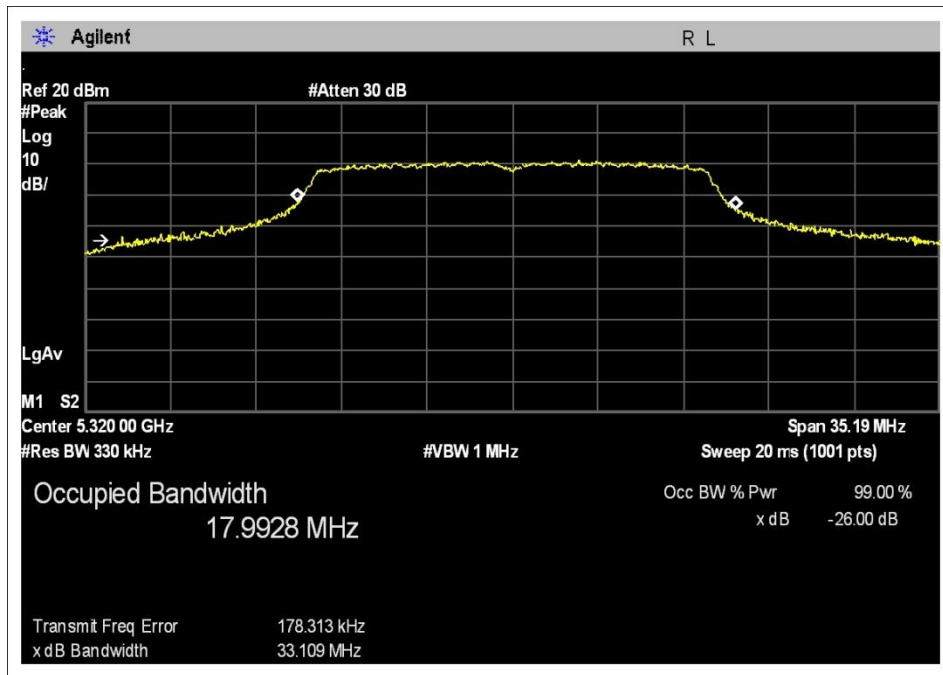
U5.47 C2 10MHz, HIGH CHANNEL, 802.11n



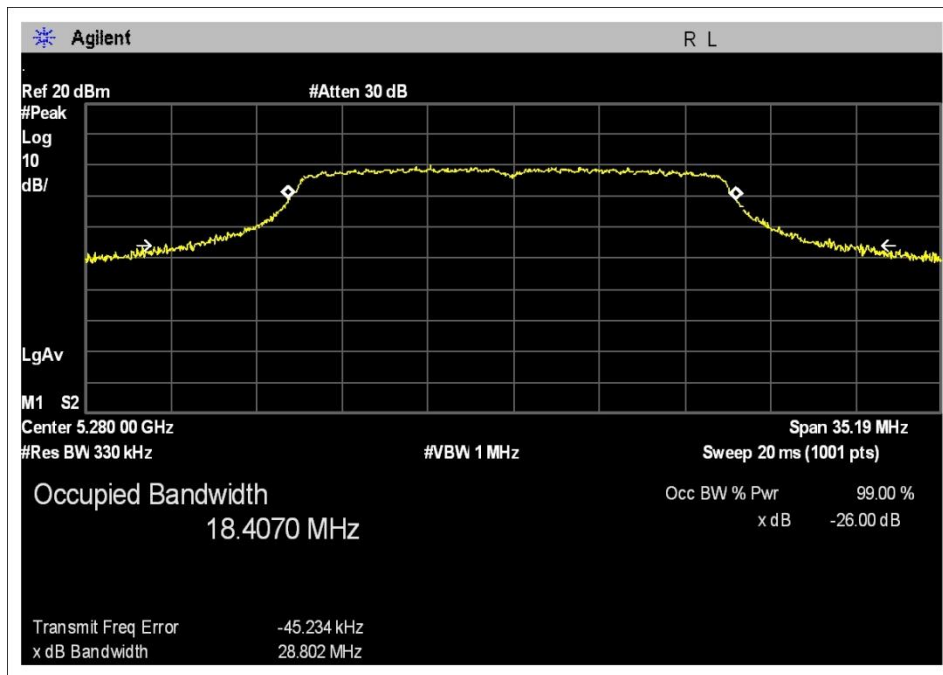
U5.25 C0 20MHz, LOW CHANNEL, 802.11a



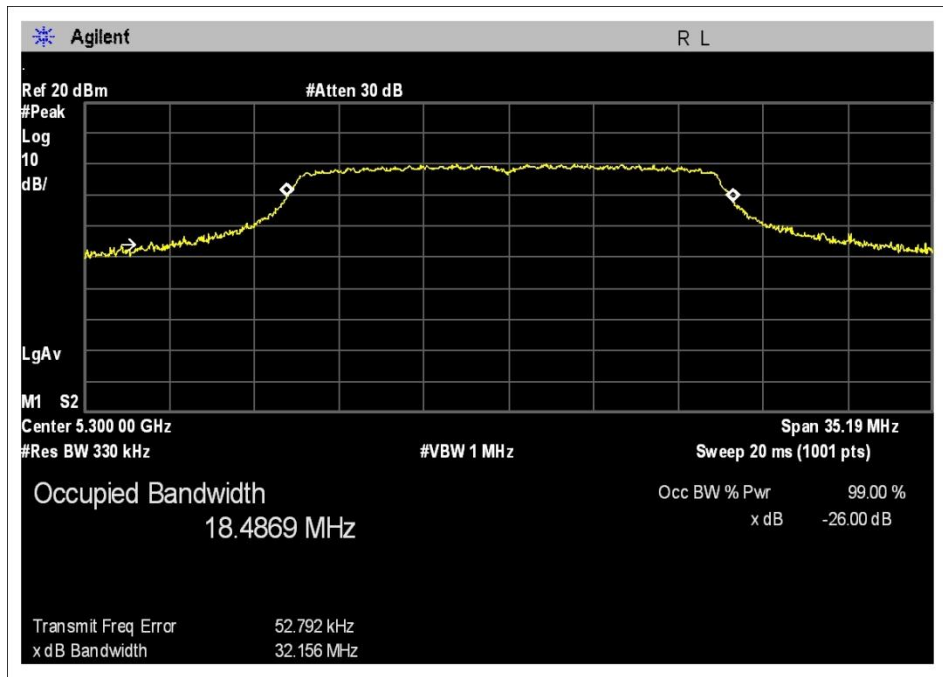
U5.25 C0 20MHz, MID CHANNEL, 802.11a



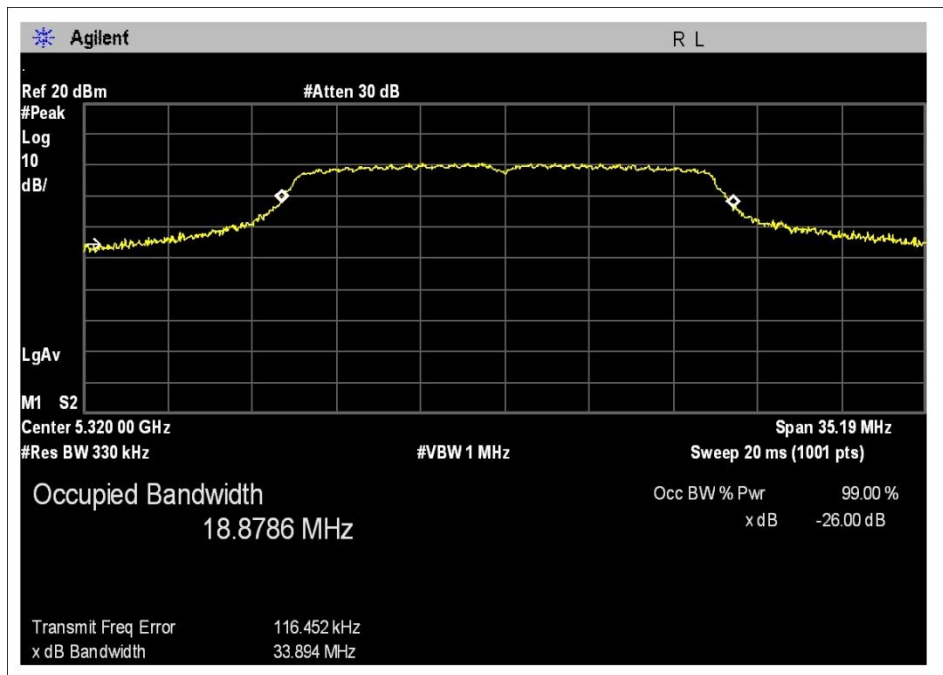
U5.25 C0 20MHz, HIGH CHANNEL, 802.11a



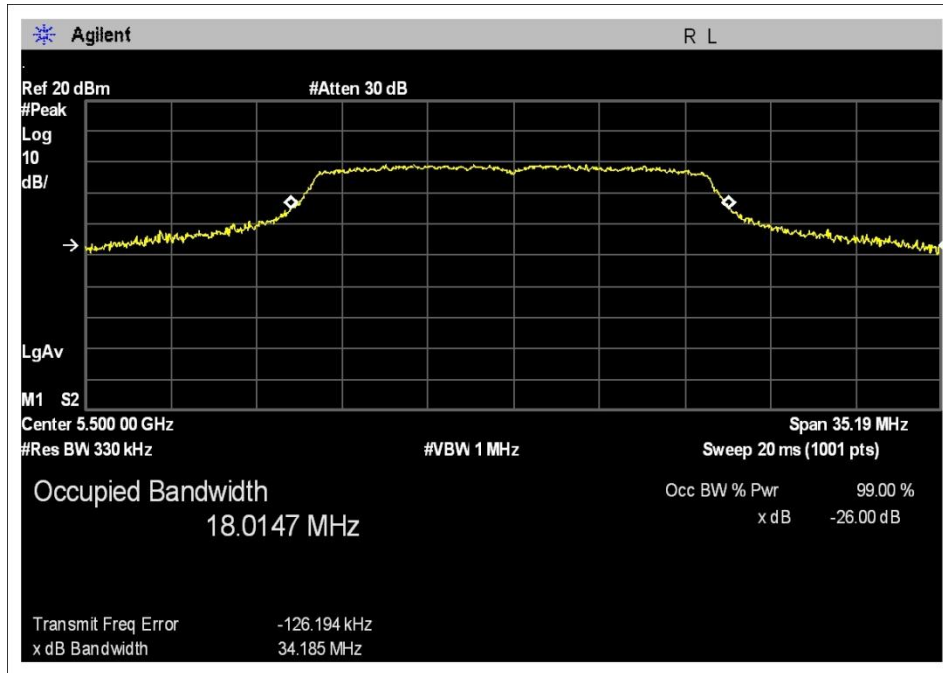
U5.25 C0 20MHz, LOW CHANNEL, 802.11n



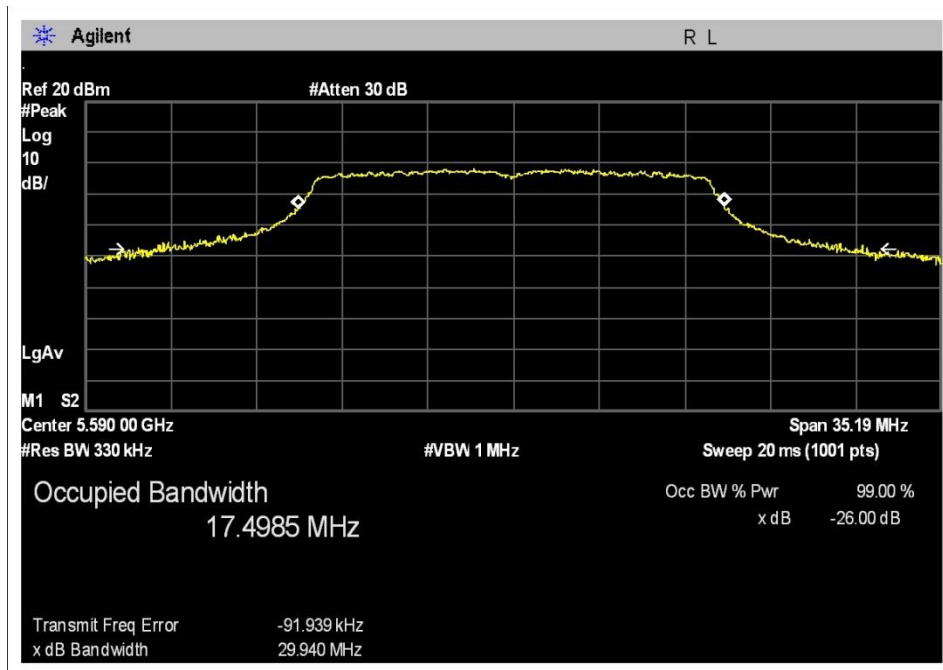
U5.25 C0 20MHz, MID CHANNEL, 802.11n



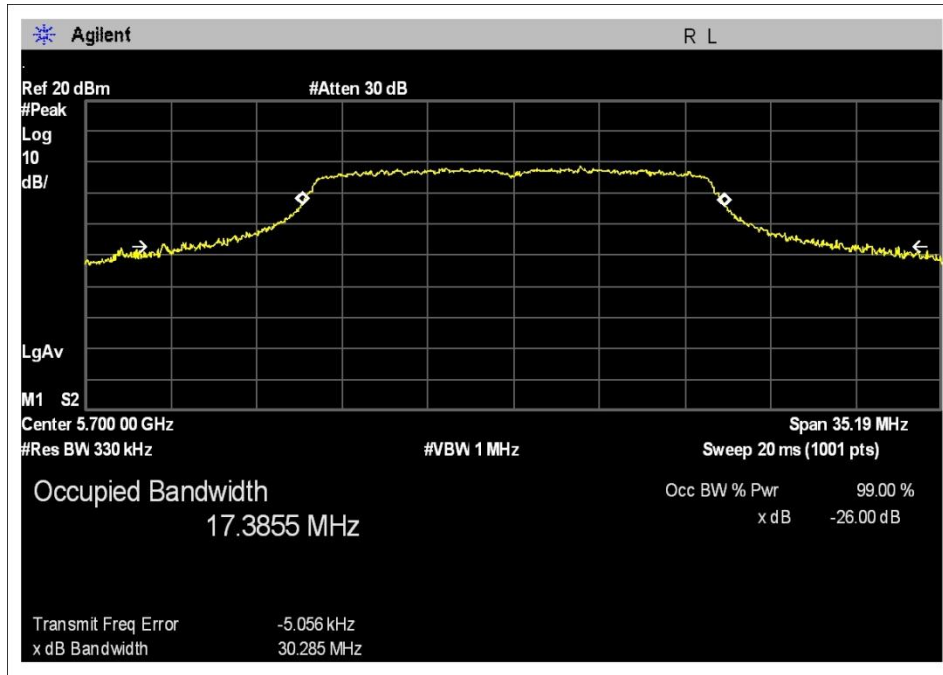
U5.25 C0 20MHz, HIGH CHANNEL, 802.11n



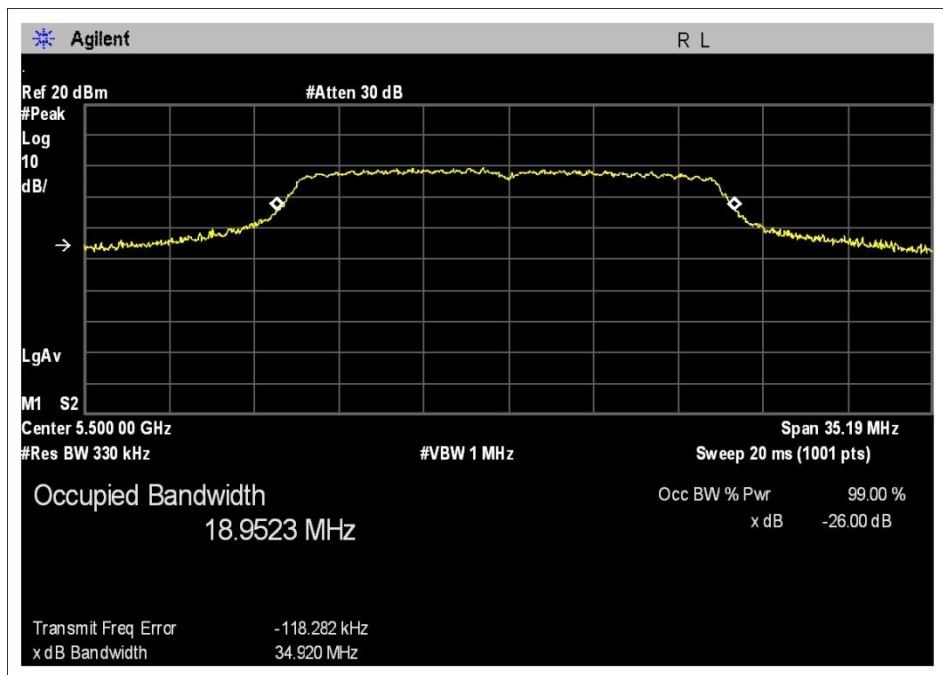
U5.47 C0 20MHz, LOW CHANNEL, 802.11a



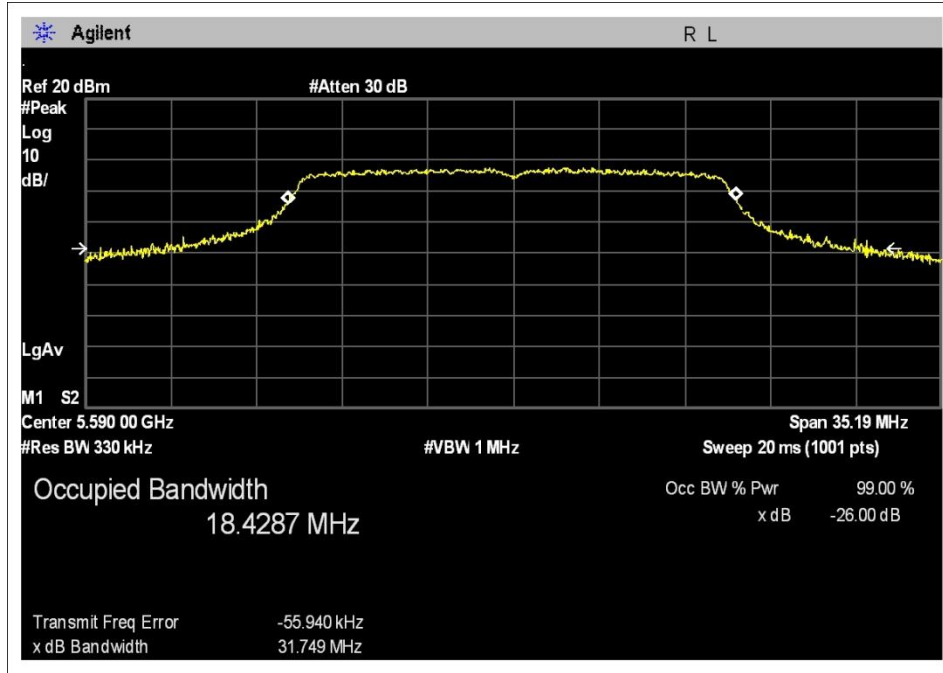
U5.47 C0 20MHz, MID CHANNEL, 802.11a



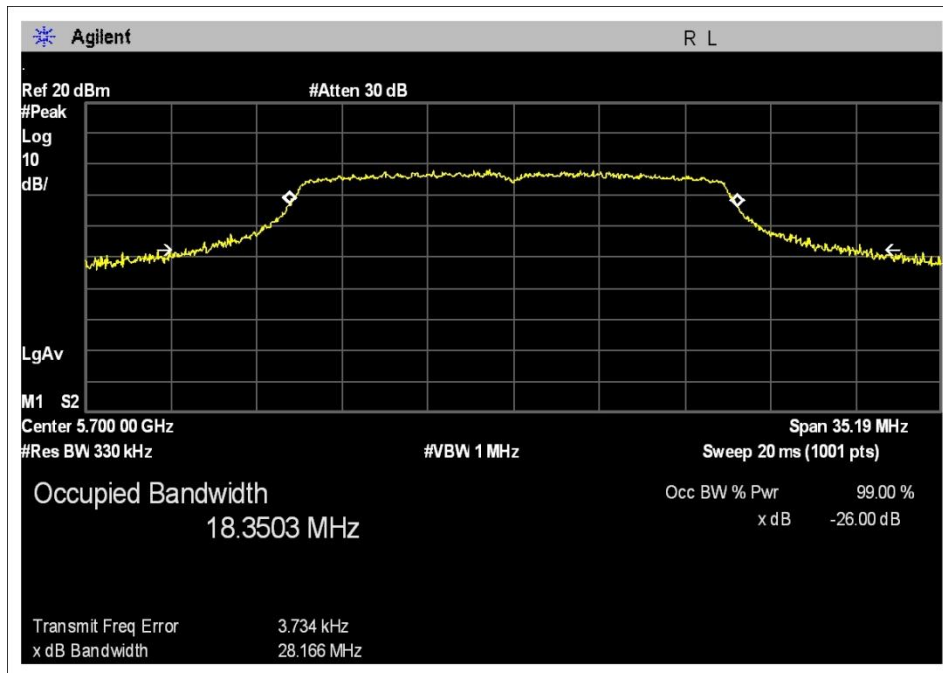
U5.47 C0 20MHz, HIGH CHANNEL, 802.11a



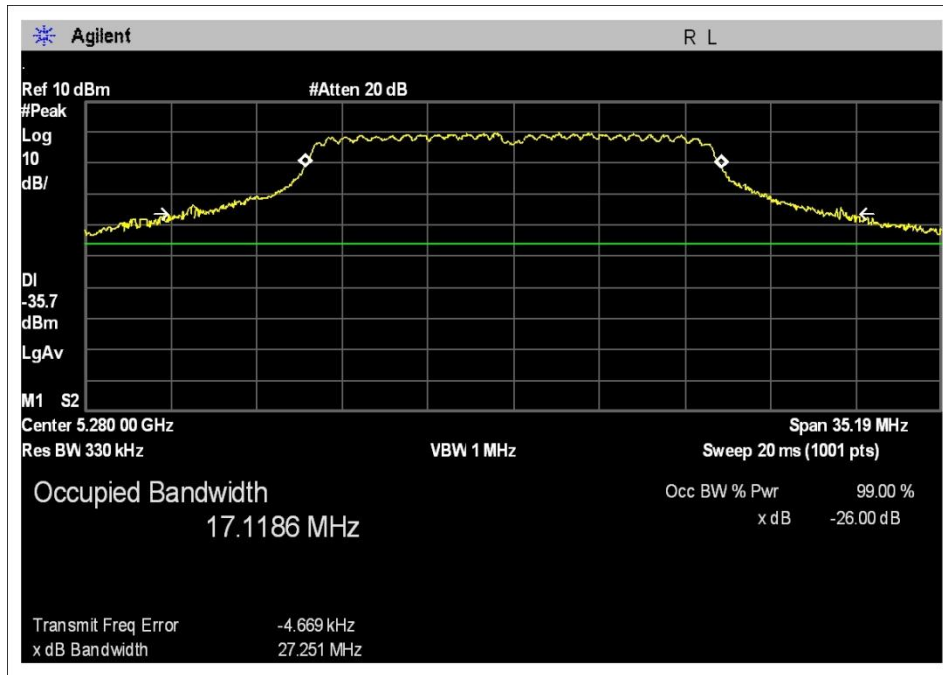
U5.47 C0 20MHz, LOW CHANNEL, 802.11n



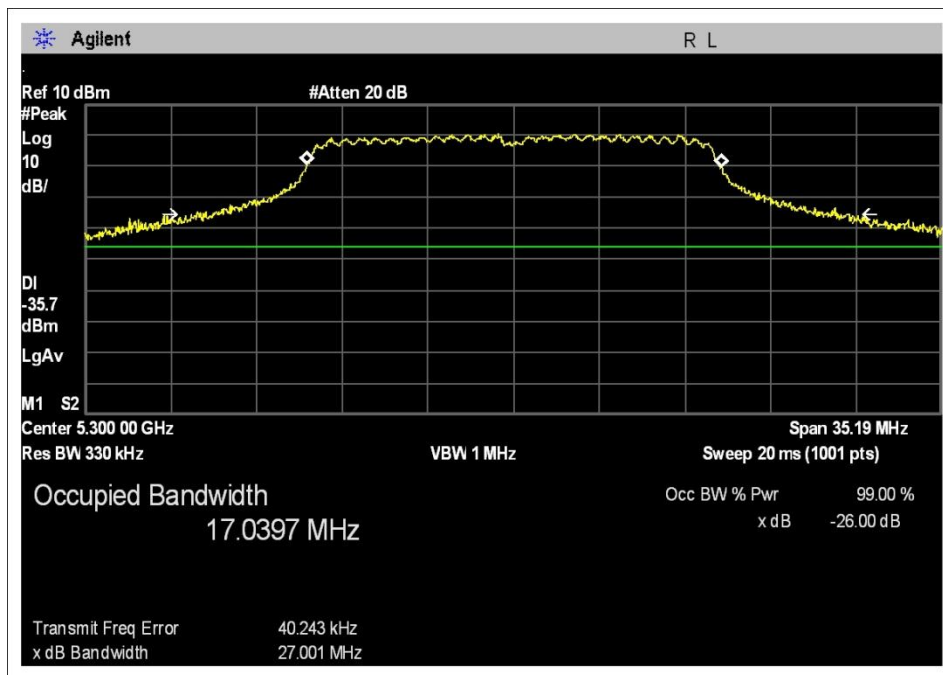
U5.47 C0 20MHz, MID CHANNEL, 802.11n



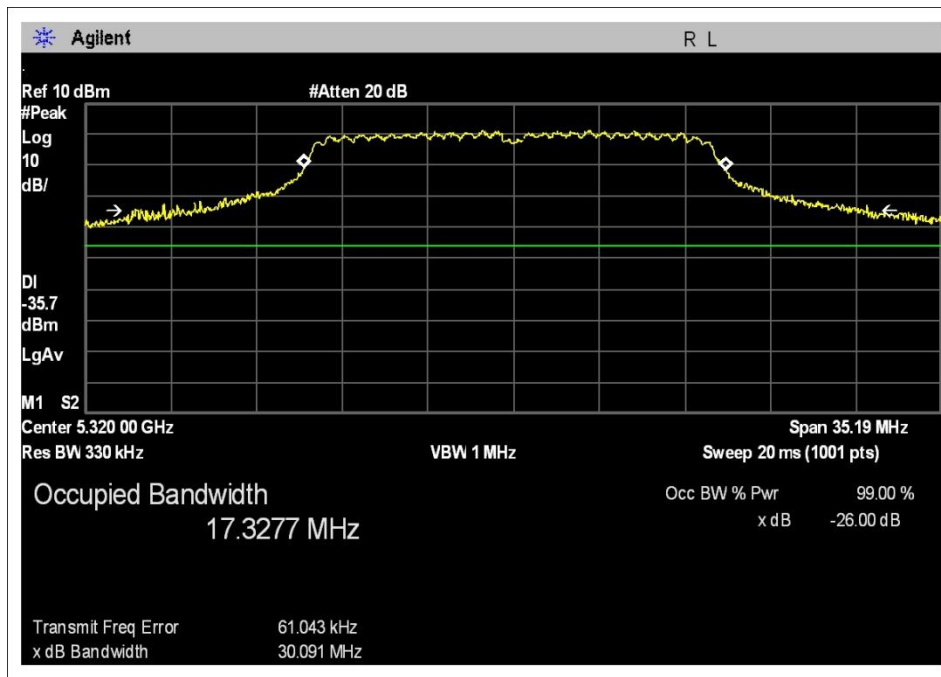
U5.47 C0 20MHz, HIGH CHANNEL, 802.11n



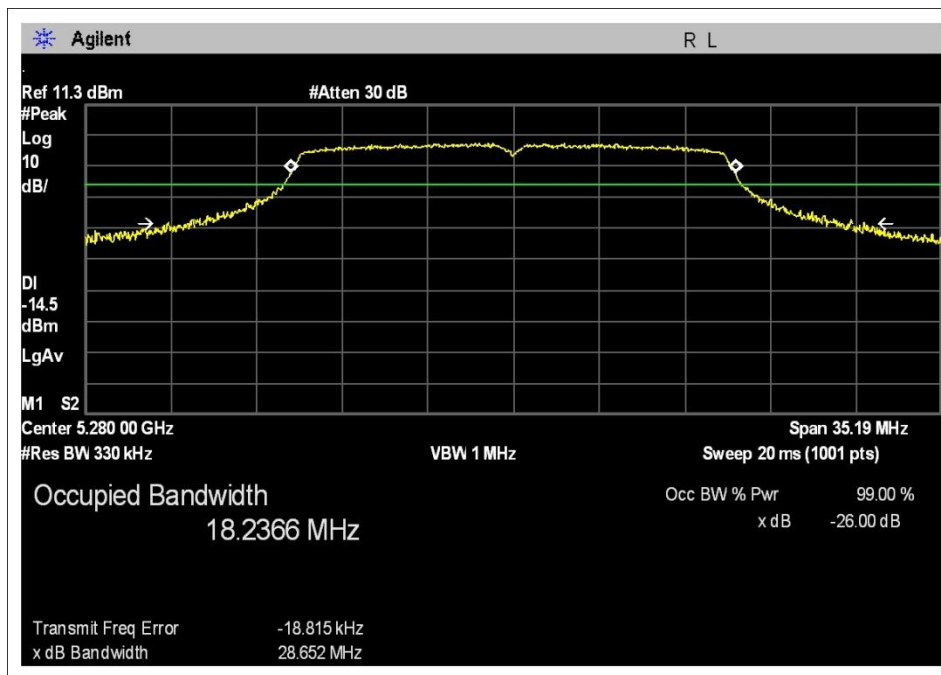
U5.25 C2 20MHz, LOW CHANNEL, 802.11a



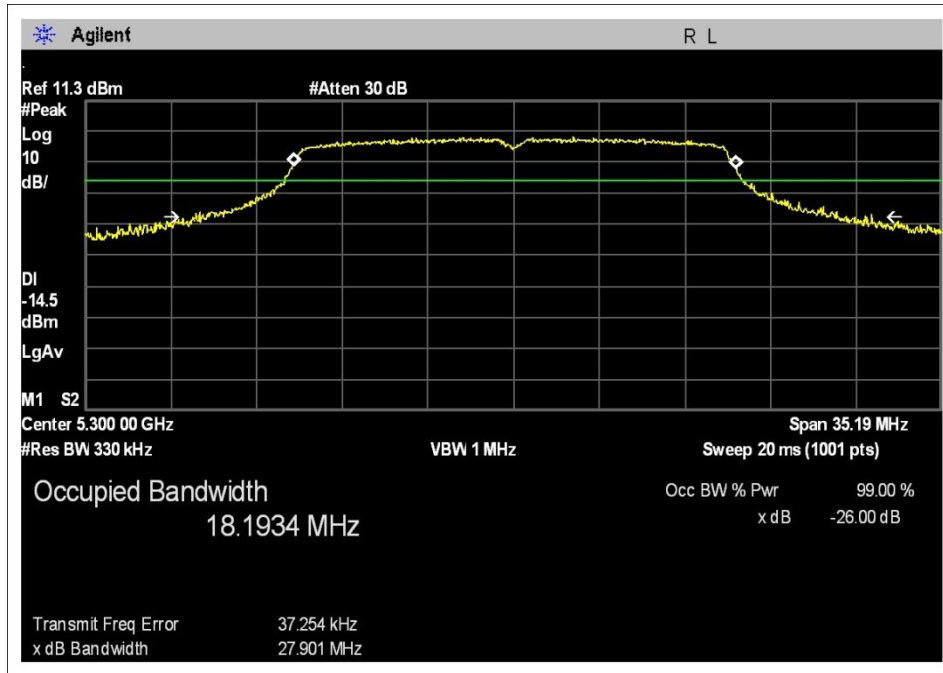
U5.25 C2 20MHz, MID CHANNEL, 802.11a



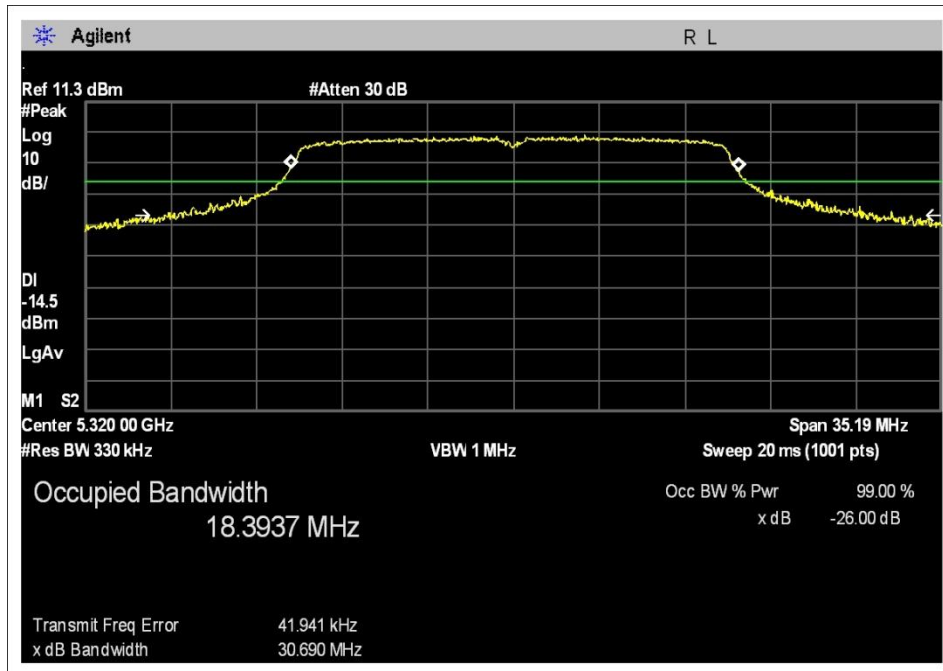
U5.25 C2 20MHz, HIGH CHANNEL, 802.11a



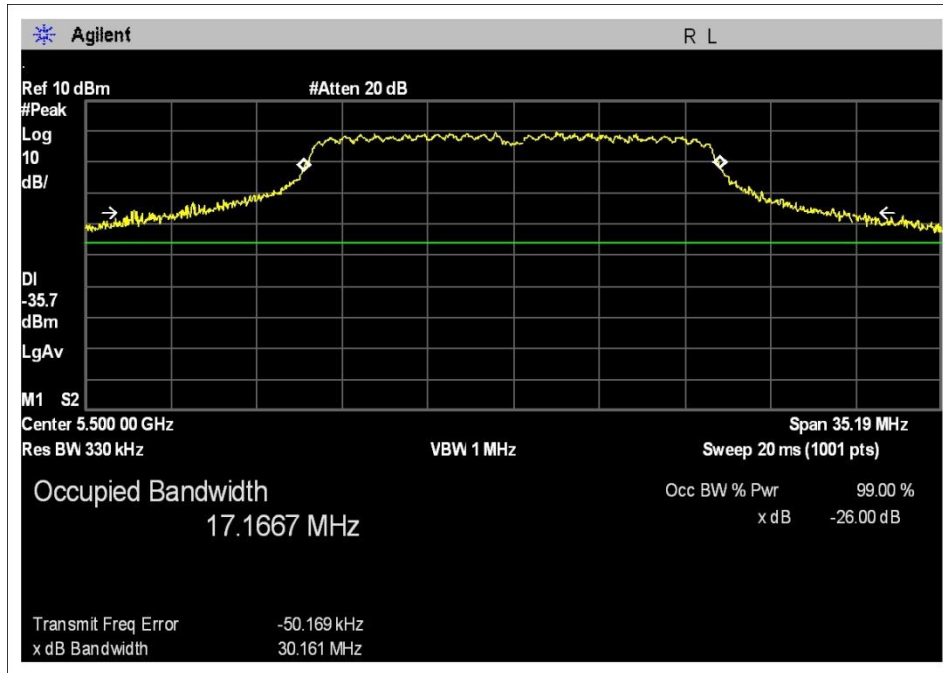
U5.25 C2 20MHz, LOW CHANNEL, 802.11n



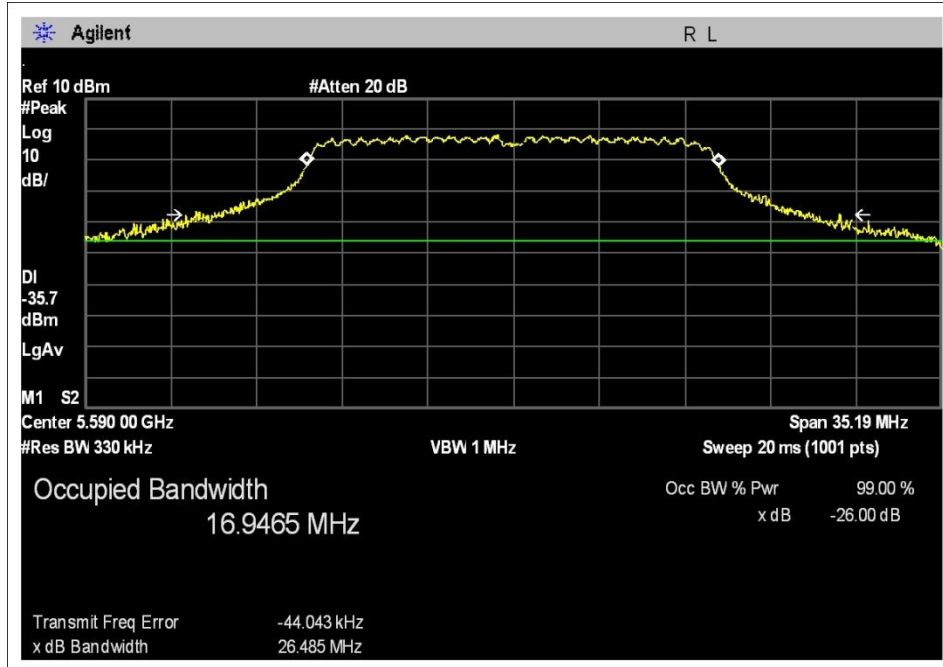
U5.25 C2 20MHz, MID CHANNEL, 802.11n



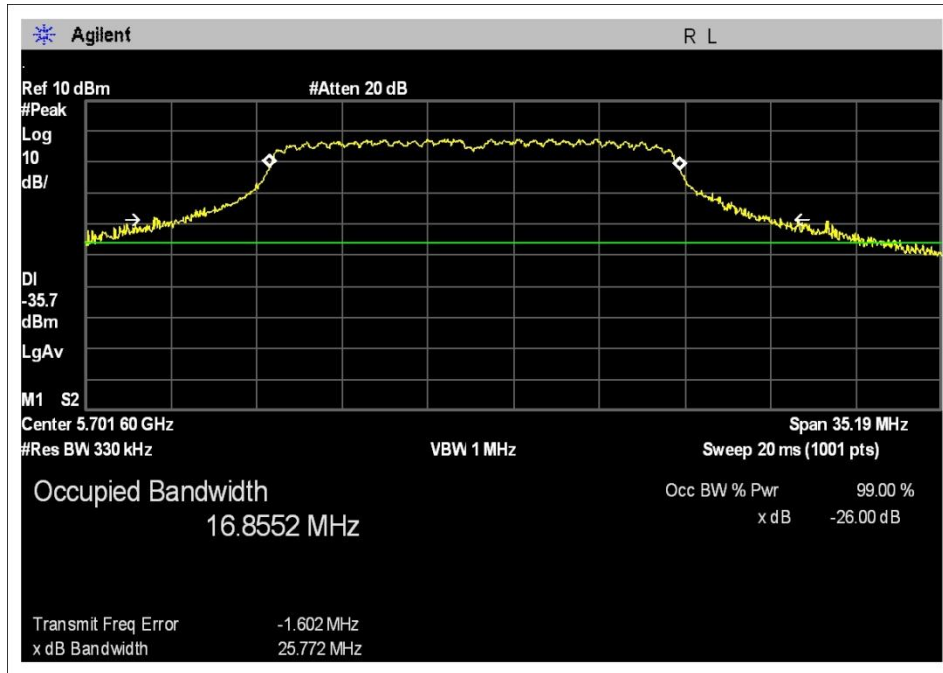
U5.25 C2 20MHz, HIGH CHANNEL, 802.11n



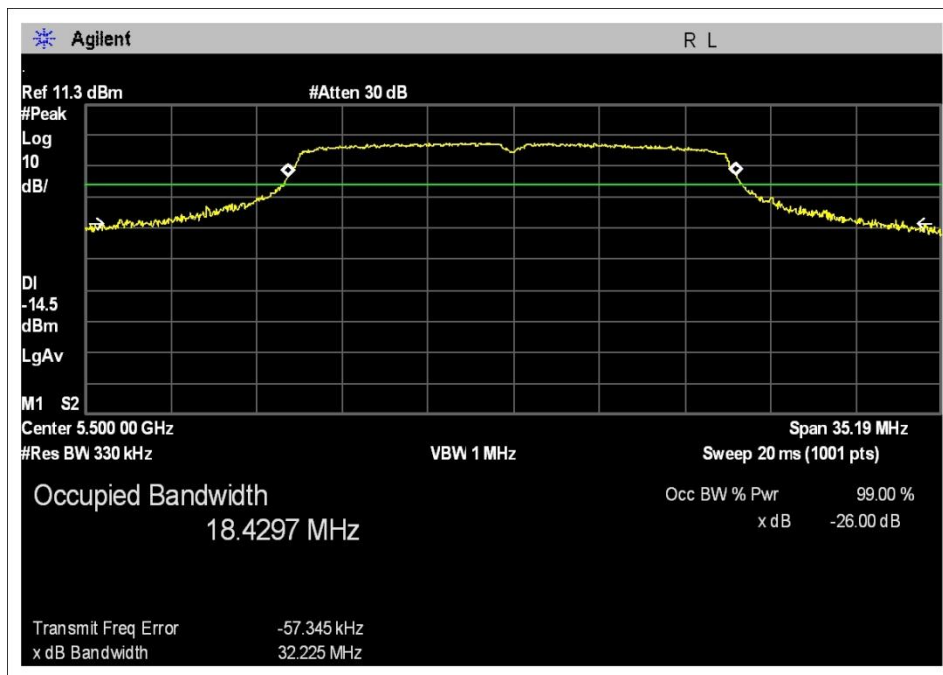
U5.47 C2 20MHz, LOW CHANNEL, 802.11a



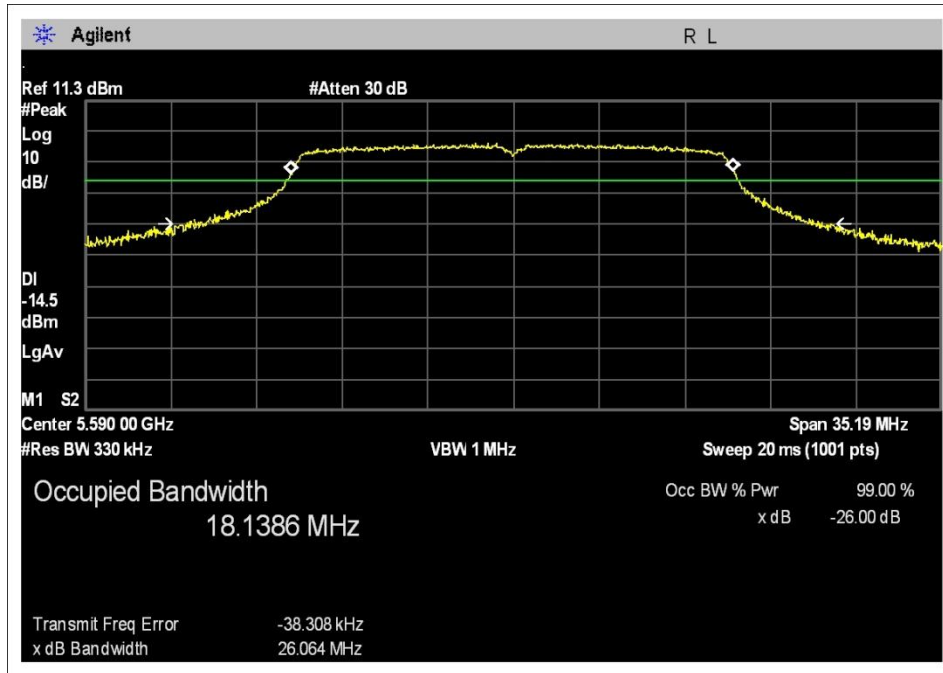
U5.47 C2 20MHz, MID CHANNEL, 802.11a



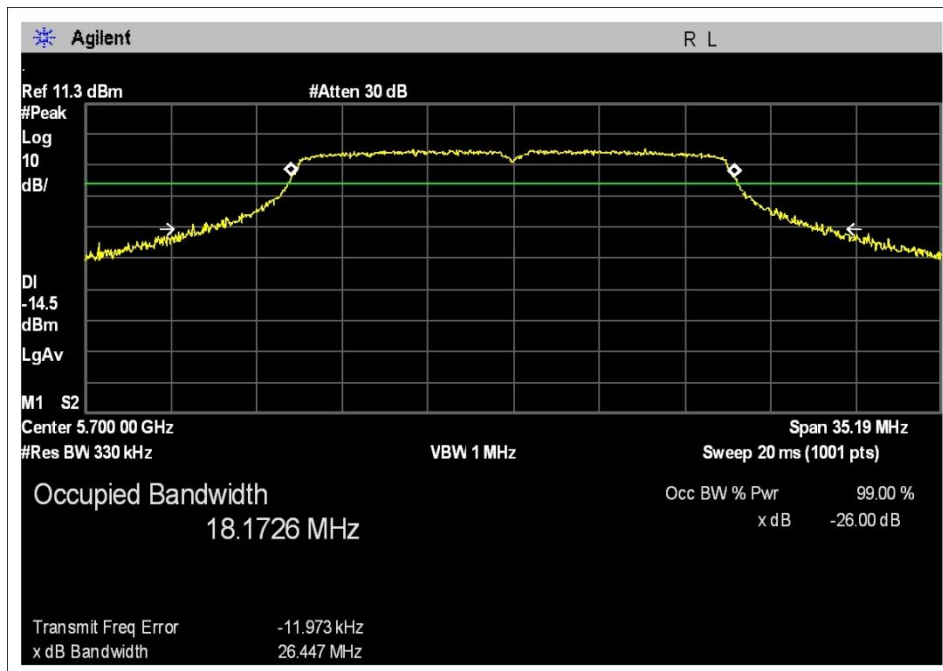
U5.47 C2 20MHz, HIGH CHANNEL, 802.11a



U5.47 C2 20MHz, LOW CHANNEL, 802.11n



U5.47 C2 20MHz, MID CHANNEL, 802.11n



U5.47 C2 20MHz, HIGH CHANNEL, 802.11n

Test Setup Photos

