

**15.407(a)(6) Peak Excursion**

**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 F) Peak excursion measurement. The units for Peak excursion are in dB.  
 The Peak Excursion Limit is 13dB.

Engineer Name: C. Nicklas

<b>Test Equipment</b>					
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**

<b>Peak Excursion Measurements: 10MHz, UNII 5.25-5.35GHz Band</b>				
Channel	802.11a		802.11n	
	Chain 0	Chain 2	Chain 0	Chain 2
LO	11.635	12.129	12.657	12.082
MID	12.064	12.320	12.506	12.652
HI	12.217	12.260	12.667	12.172

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

<b>Peak Excursion Measurements: 20MHz, UNII 5.25-5.35GHz Band</b>				
Channel	802.11a		802.11n	
	Chain 0	Chain 2	Chain 0	Chain 2
LO	11.178	12.171	11.306	12.081
MID	11.304	12.908	10.984	11.082
HI	10.358	11.989	10.985	10.949

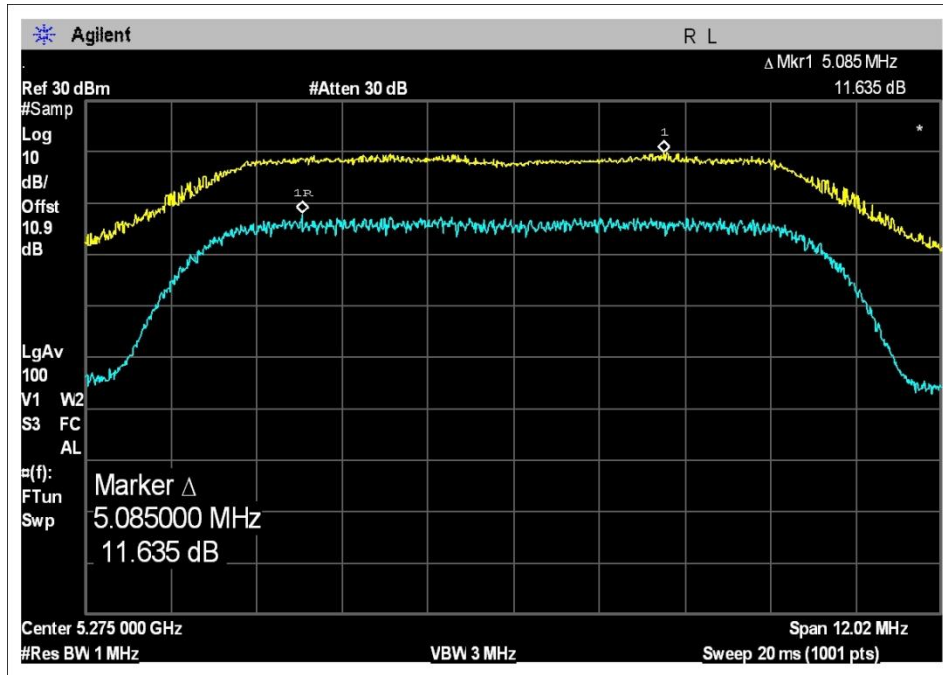
Worst Case 802.11a data rate is 9 Mbps, worst case 802.11n data rate is 6.5MCS HT20 1S

<b>Peak Excursion Measurements: 10MHz, UNII 5.47-5.725Gz Band</b>				
Channel	802.11a		802.11n	
	Chain 0	Chain 2	Chain 0	Chain 2
LO	11.487	12.934	12.017	12.585
MID	11.769	12.587	12.056	12.896
HI	12.015	11.655	12.310	12.177

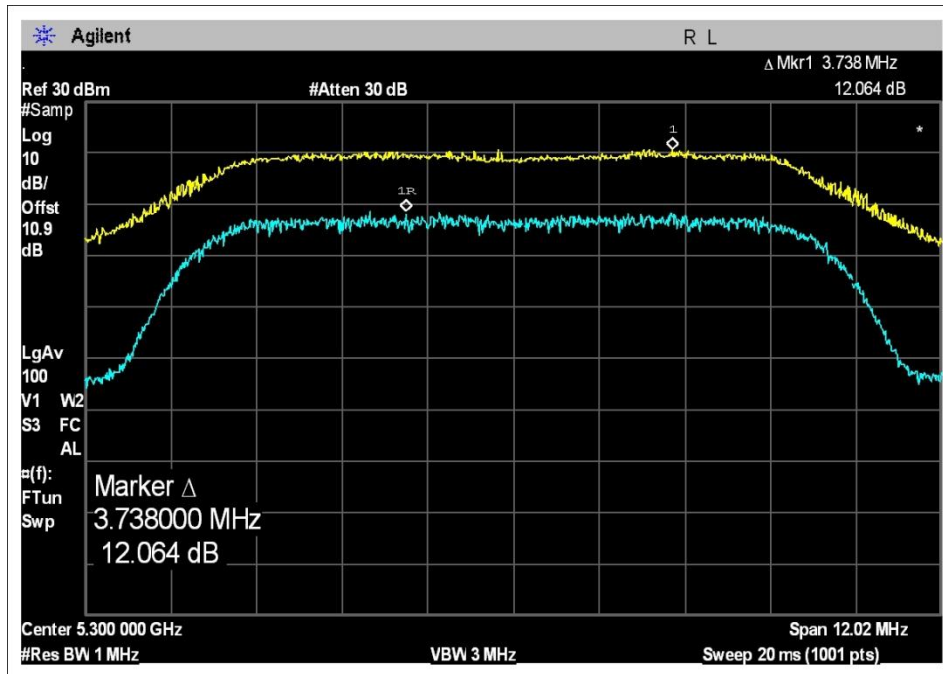
Worst Case 802.11a data rate is 24 Mbps, worst case 802.11n data rate is 13MCS HT20 2S

<b>Peak Excursion Measurements: 20MHz, UNII 5.47-5.725Gz Band</b>				
Channel	802.11a		802.11n	
	Chain 0	Chain 2	Chain 0	Chain 2
LO	11.894	10.589	11.163	11.217
MID	11.758	11.419	11.319	11.303
HI	12.602	11.635	12.315	10.794

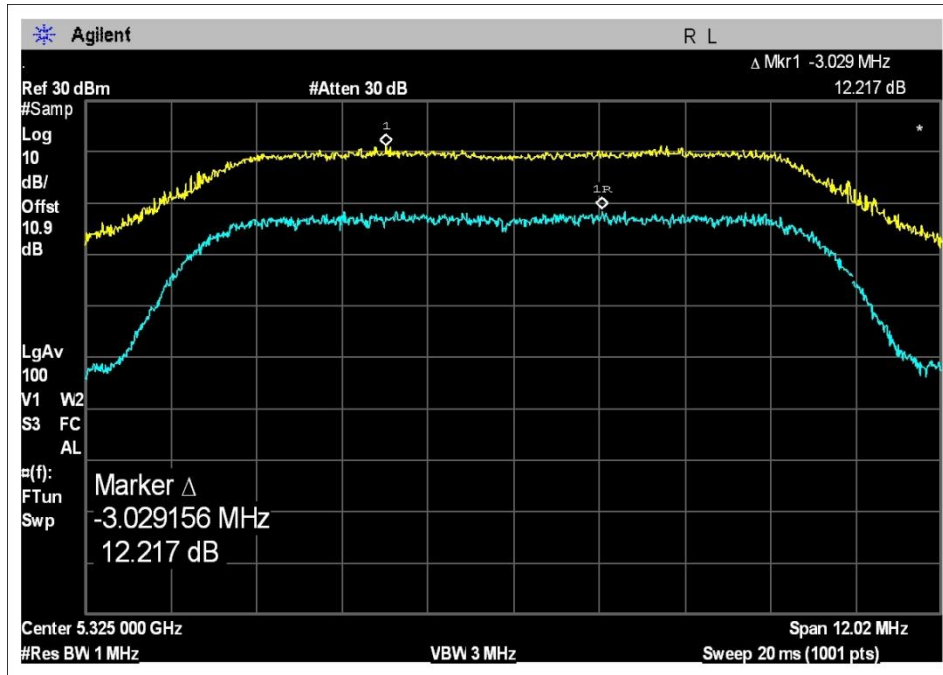
Worst Case 802.11a data rate is 24 Mbps, worst case 802.11n data rate is 6.5MCS HT20 1S



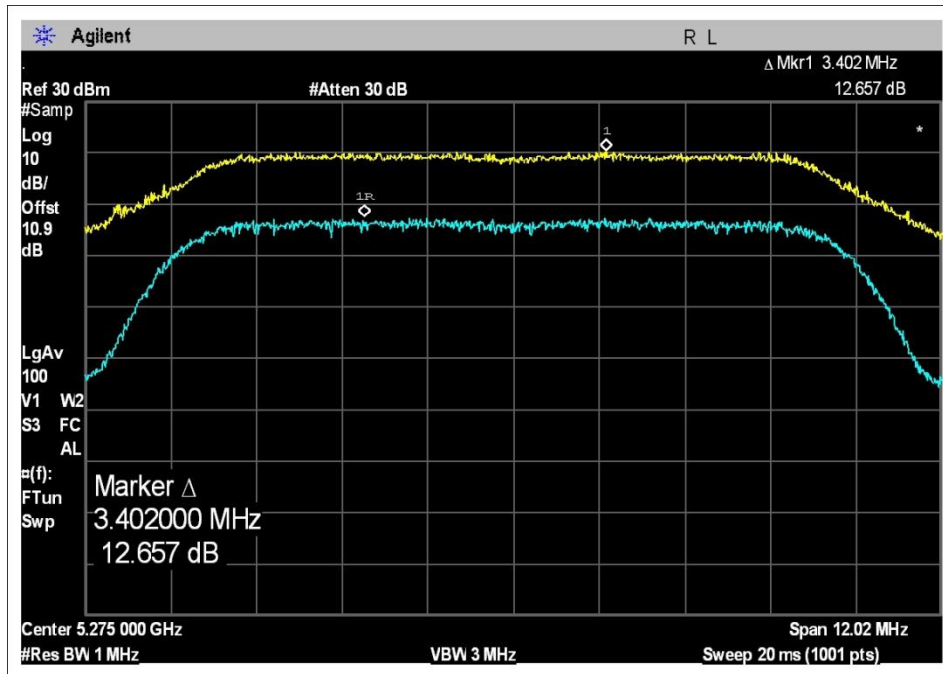
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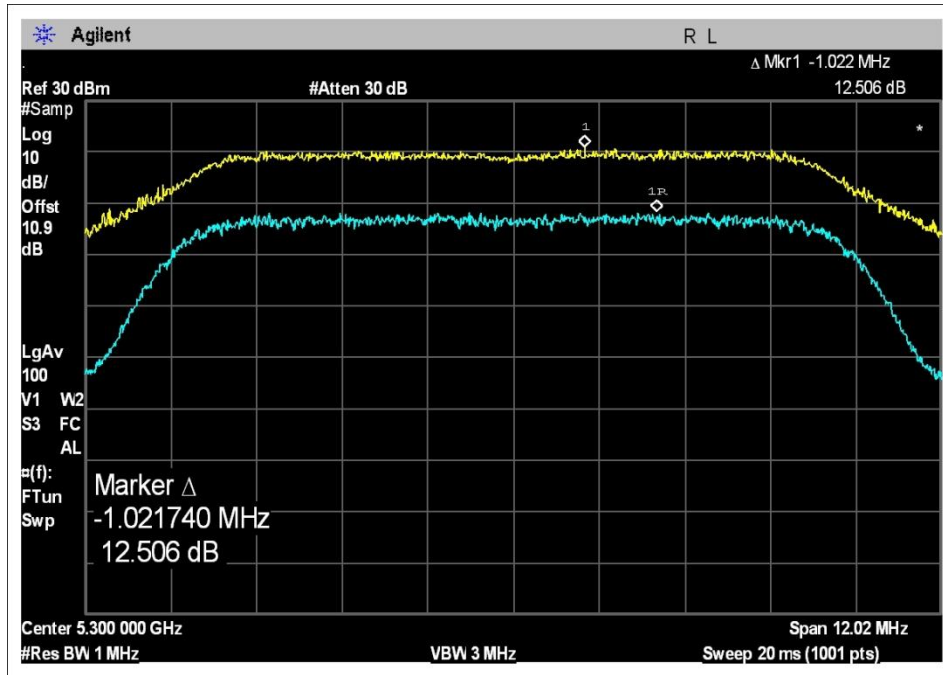
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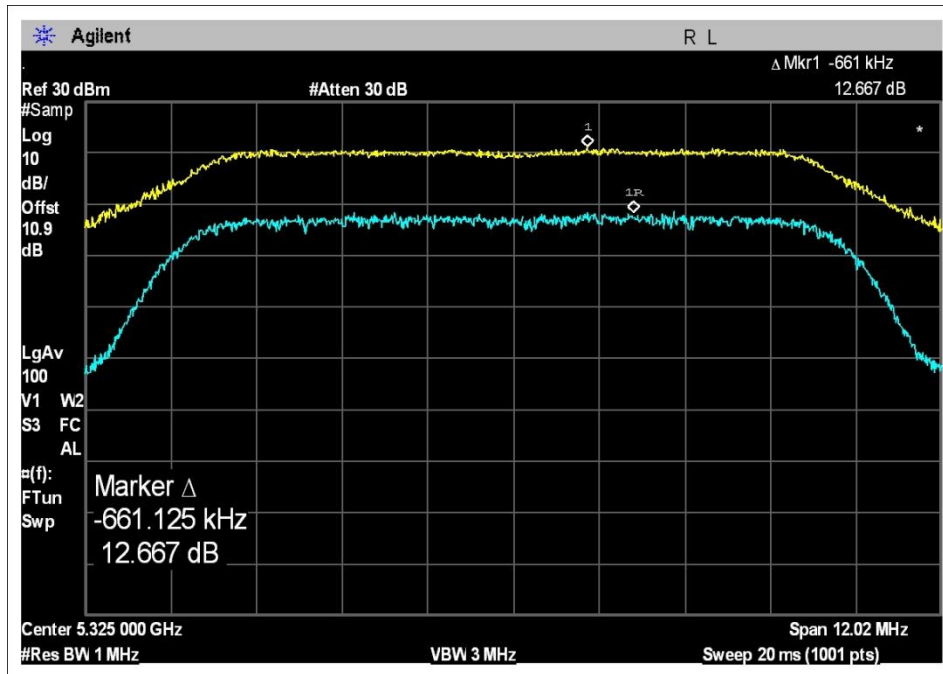
U5.25 C0 10MHz, HIGH CHANNEL, 802.11a



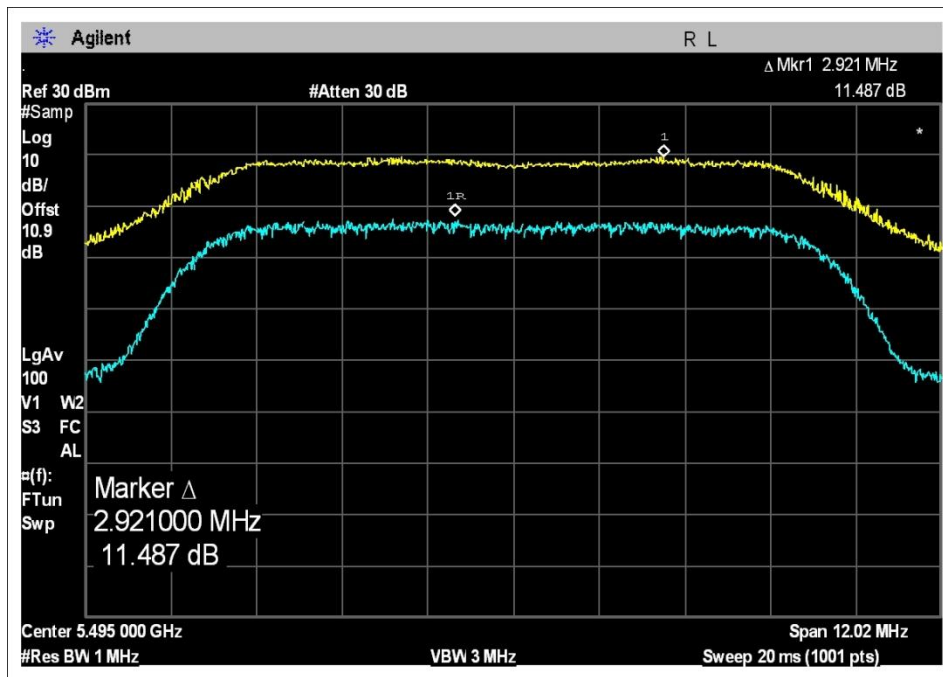
U5.25 C0 10MHz, LOW CHANNEL, 802.11n



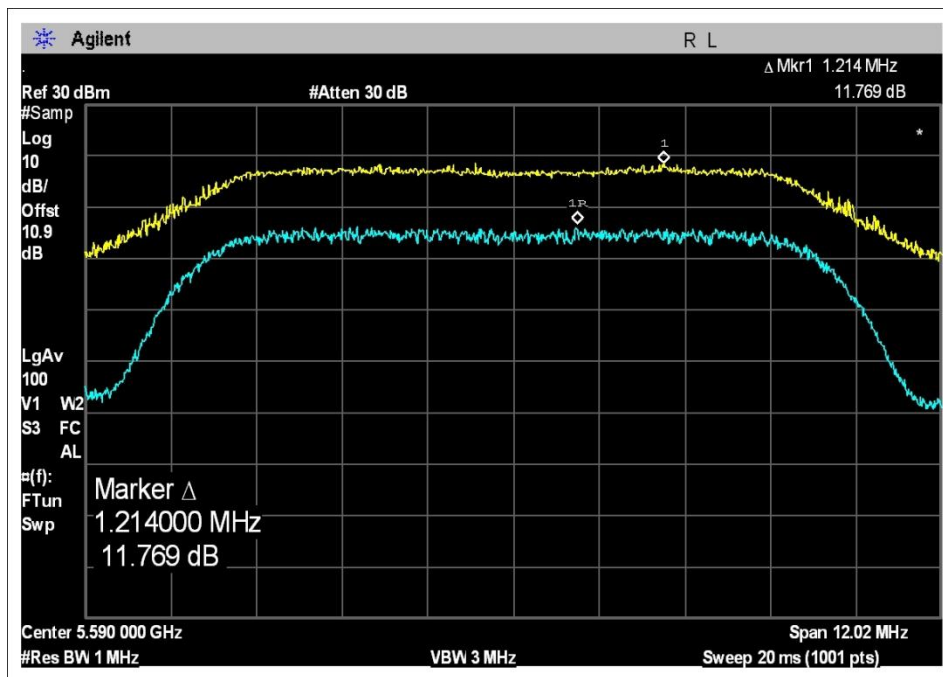
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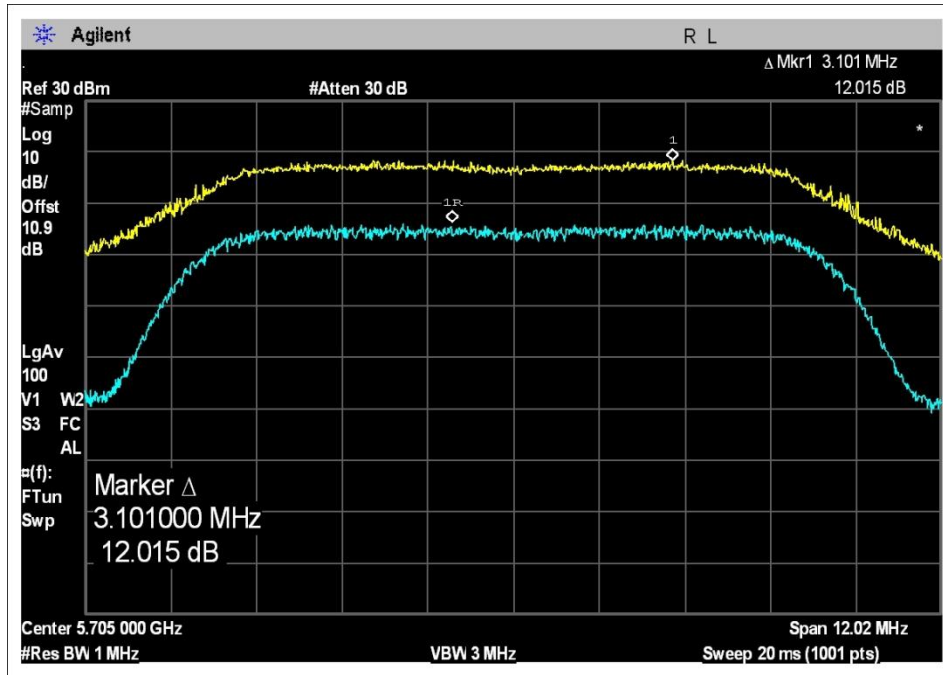
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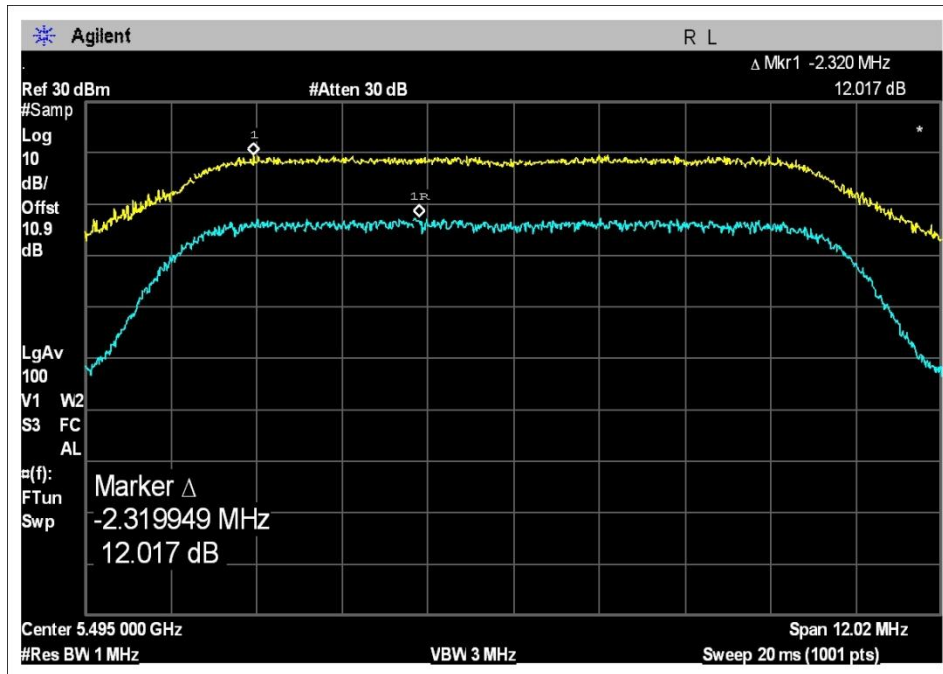
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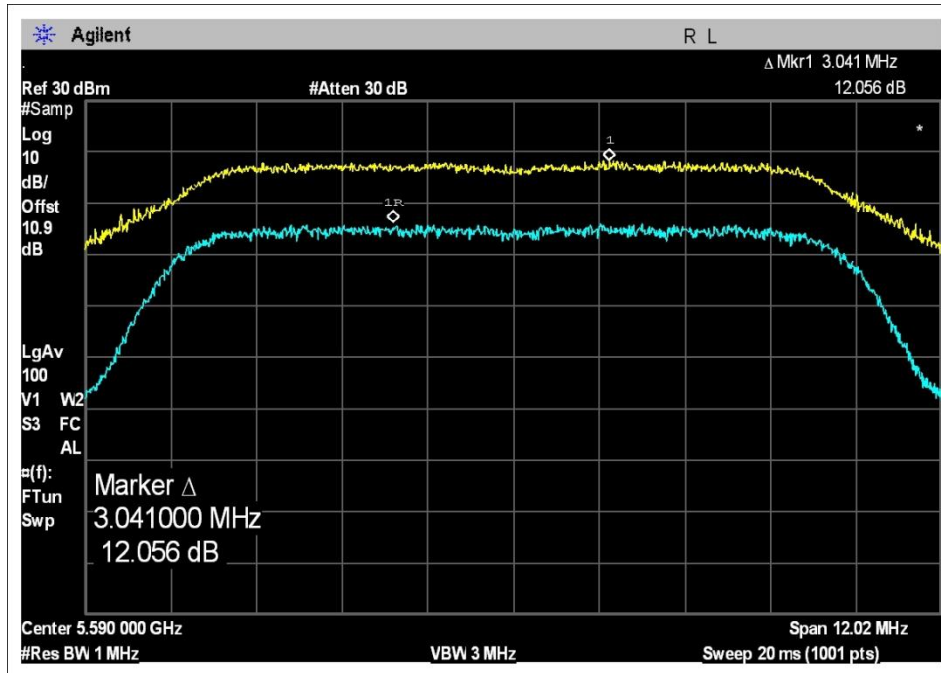
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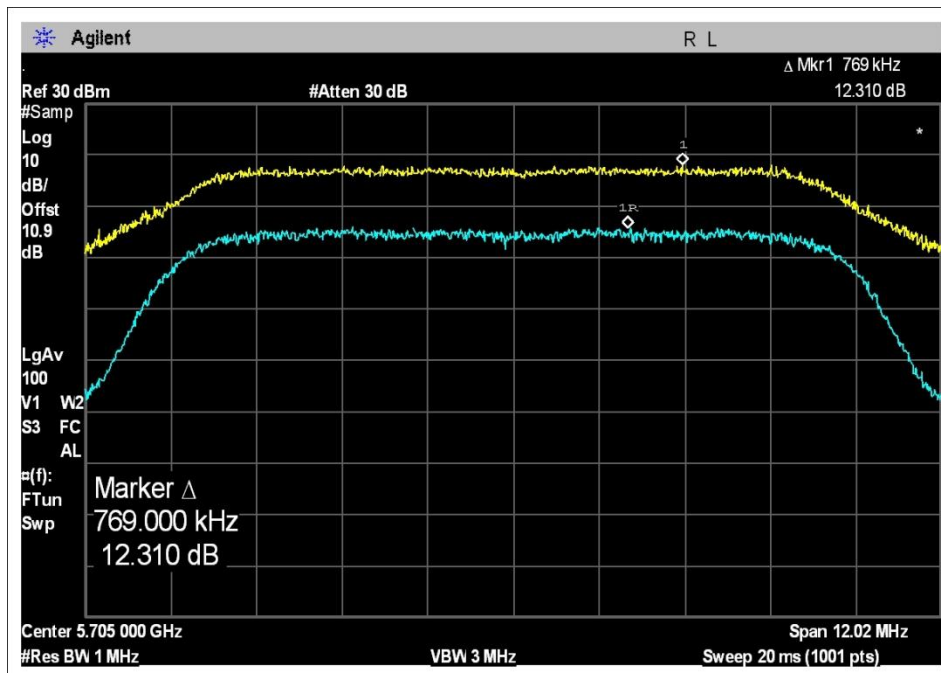
U5.47 C0 10MHz, HIGH CHANNEL, 802.11a



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

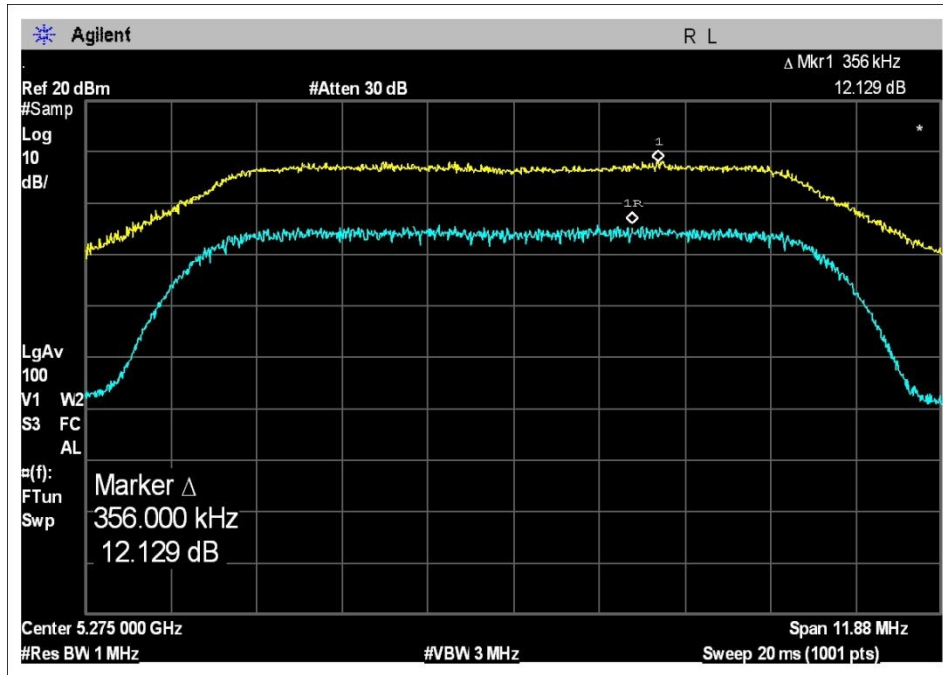


U5.47 C0 10MHz, MID CHANNEL, 802.11n

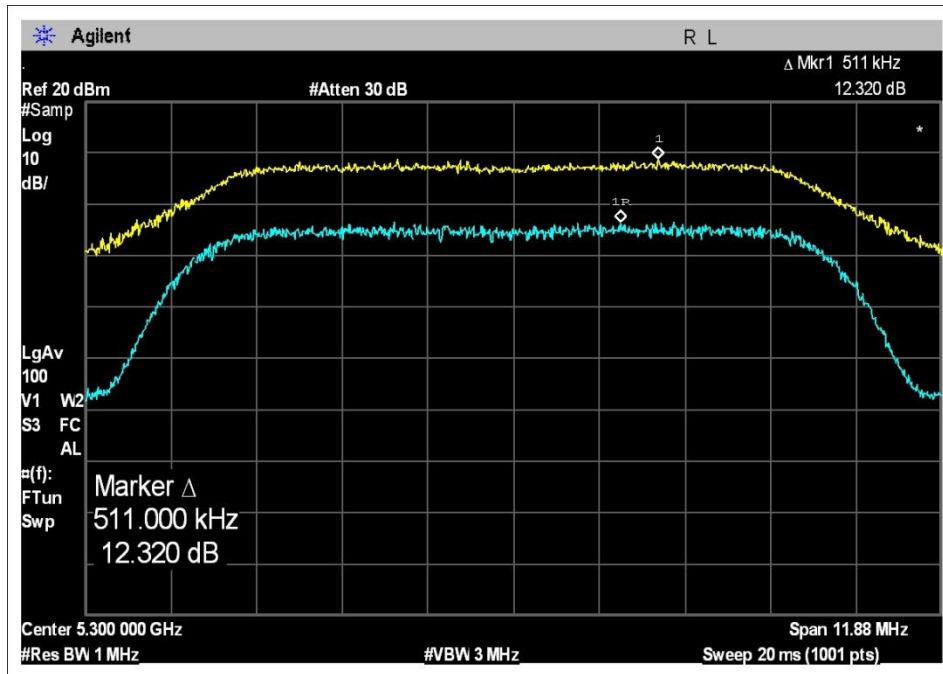


U5.47 C0 10MHz, HIGH CHANNEL, 802.11n

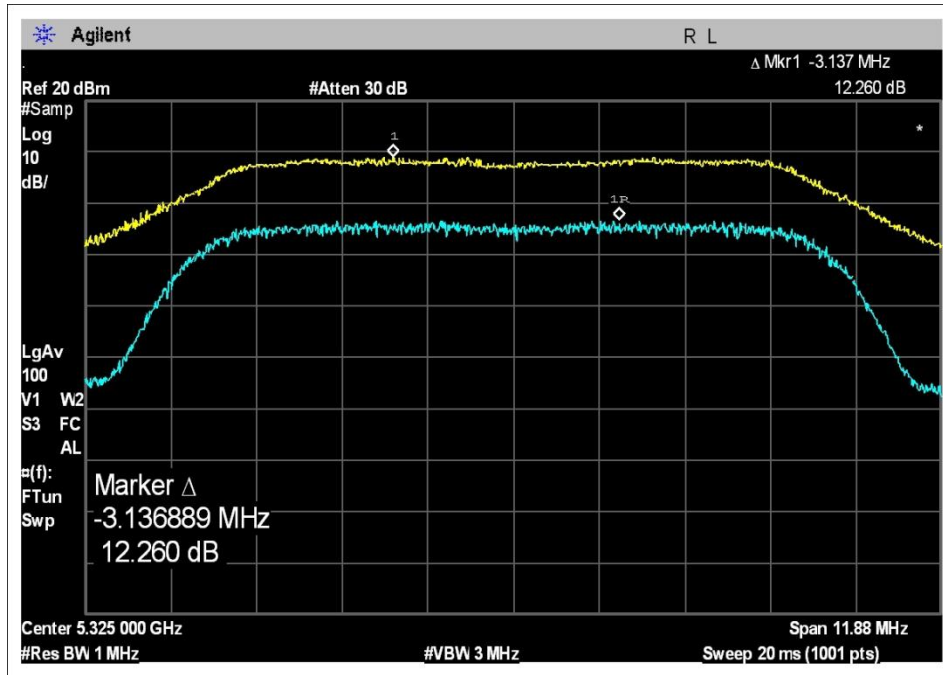




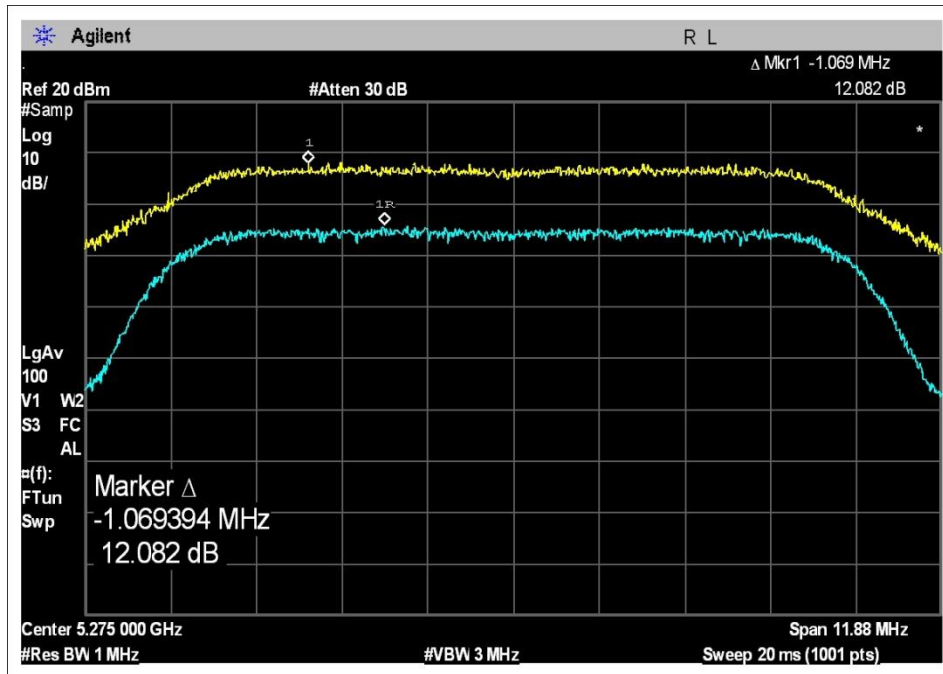
U5.25 C2 10MHz, LOW CHANNEL, 802.11a



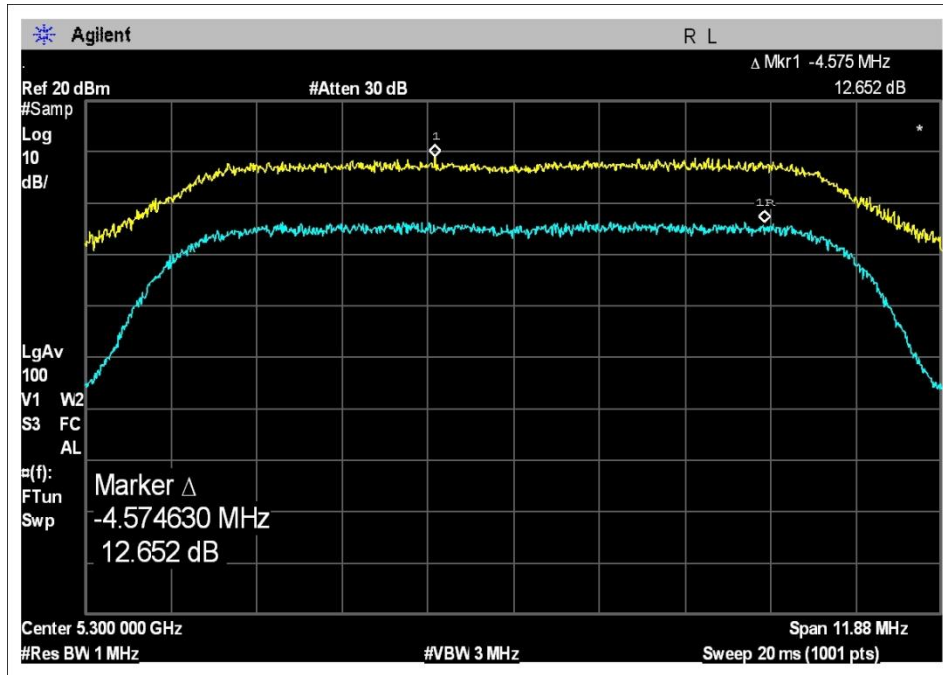
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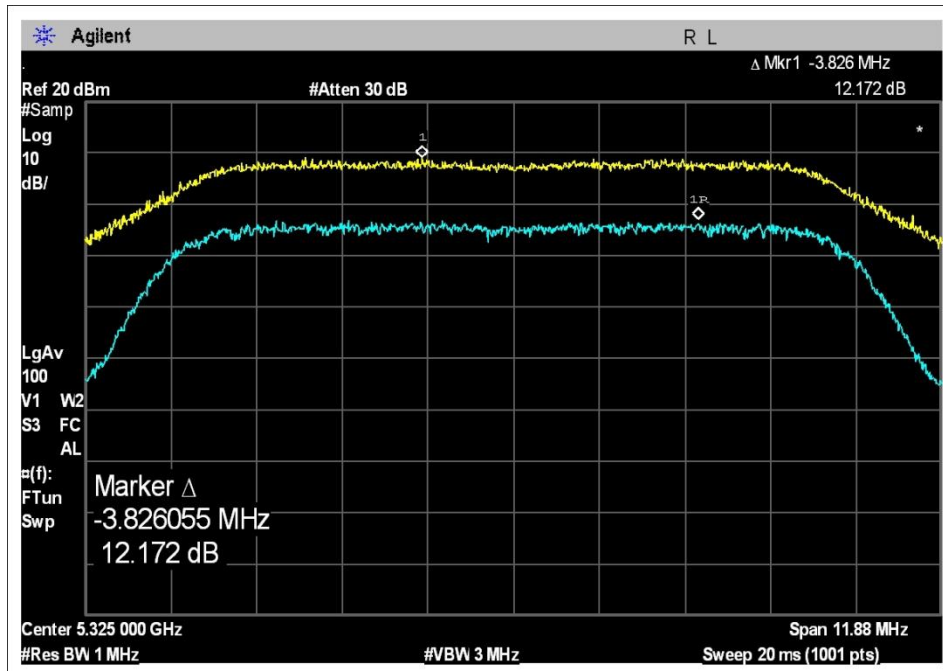
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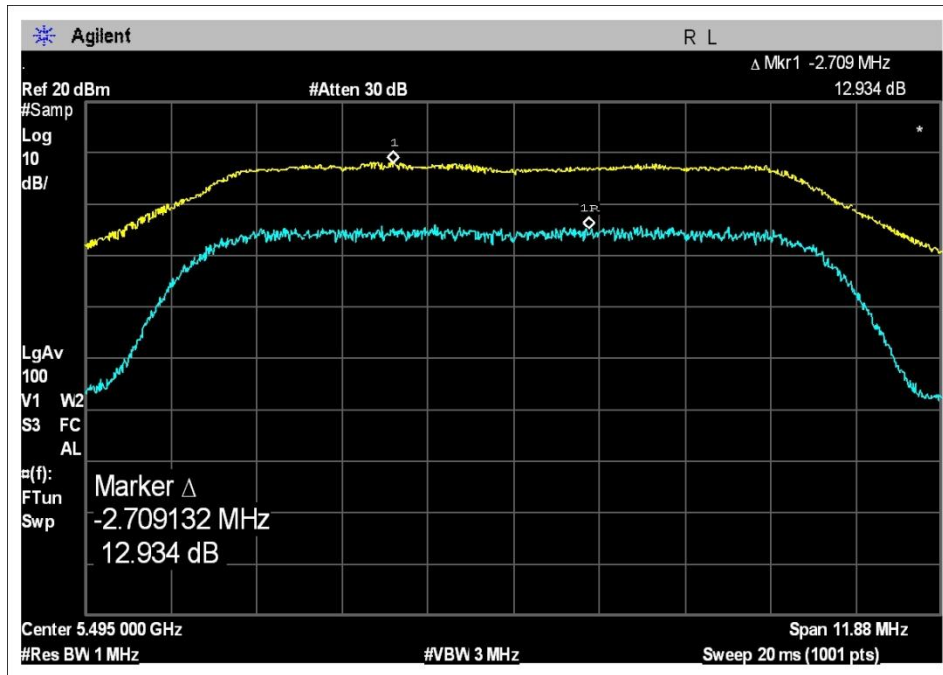
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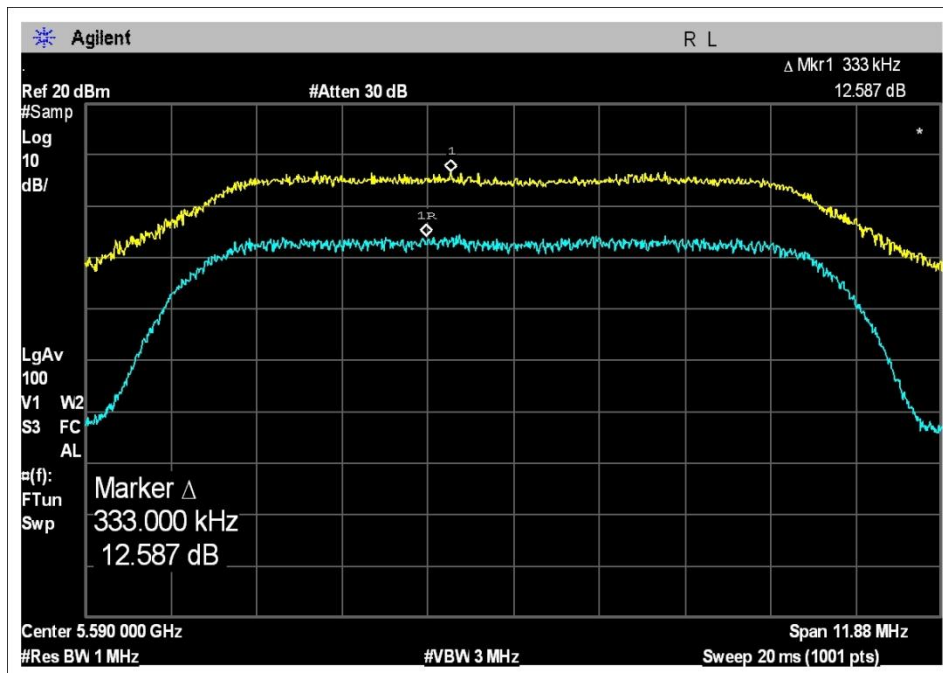
U5.25 C2 10MHz, MID CHANNEL, 802.11n



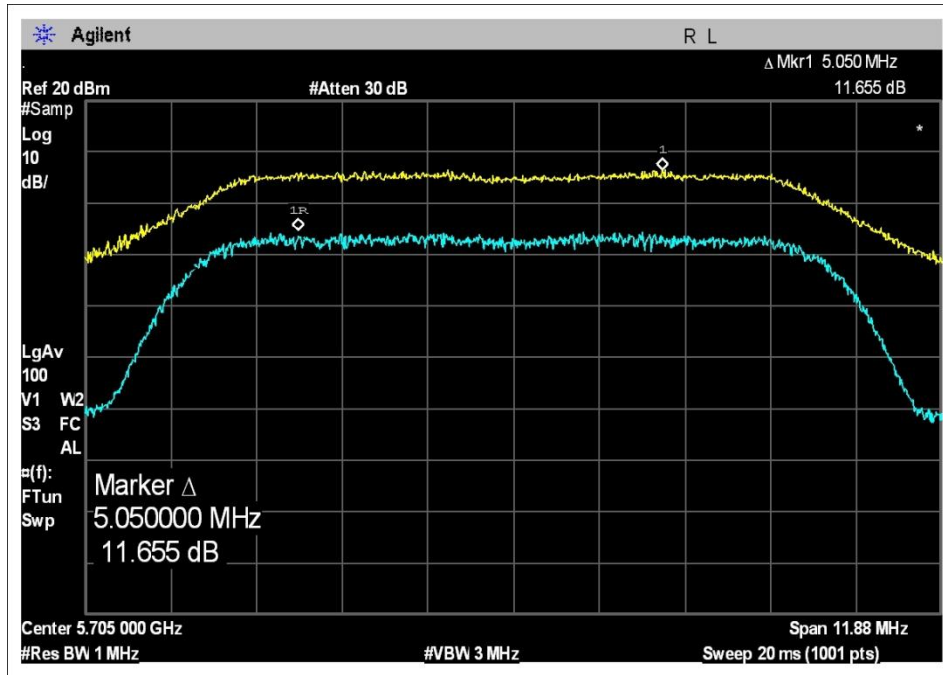
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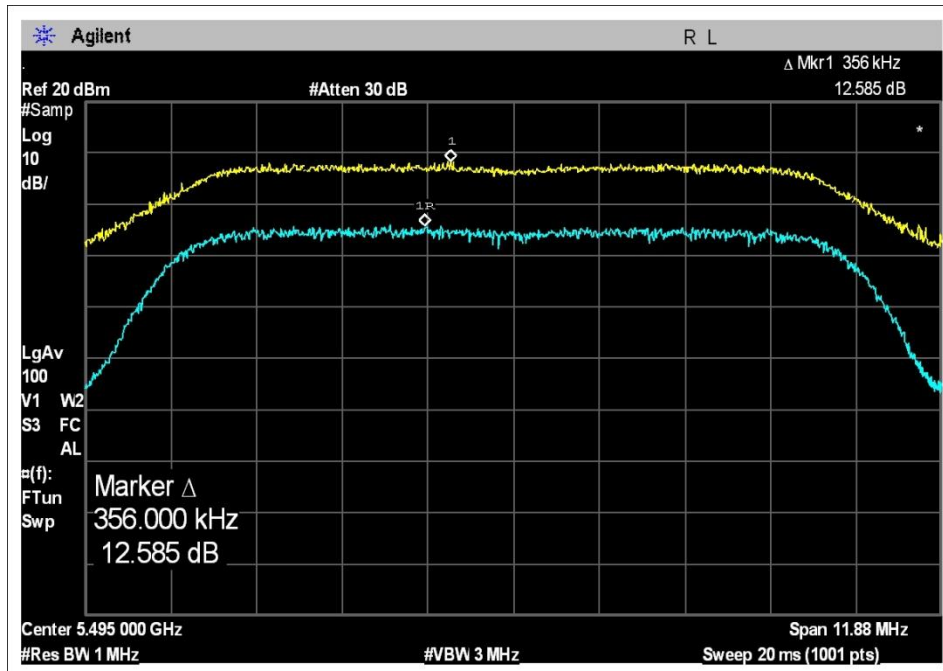
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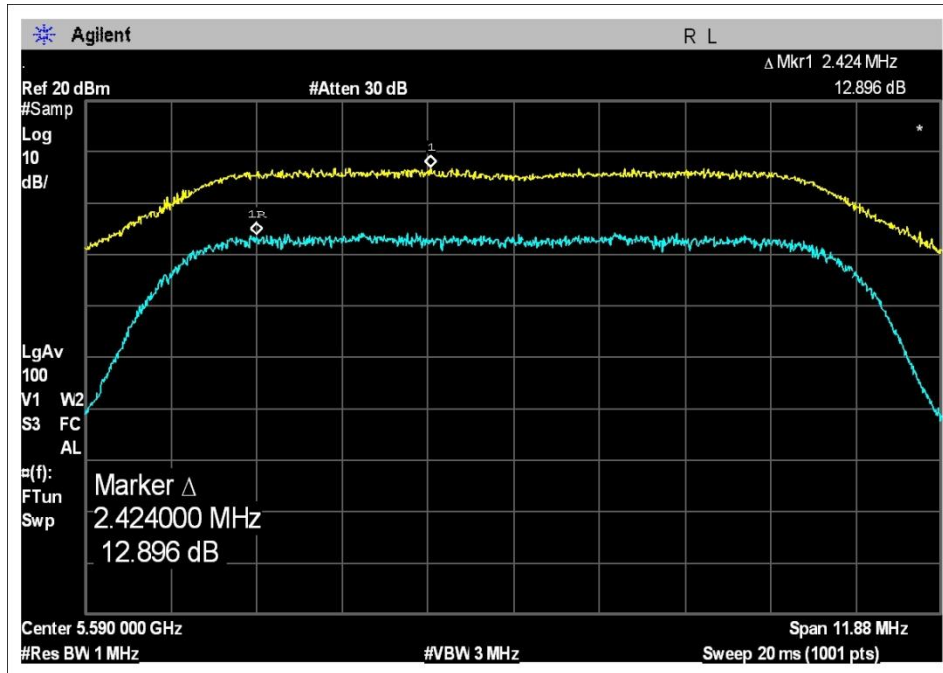
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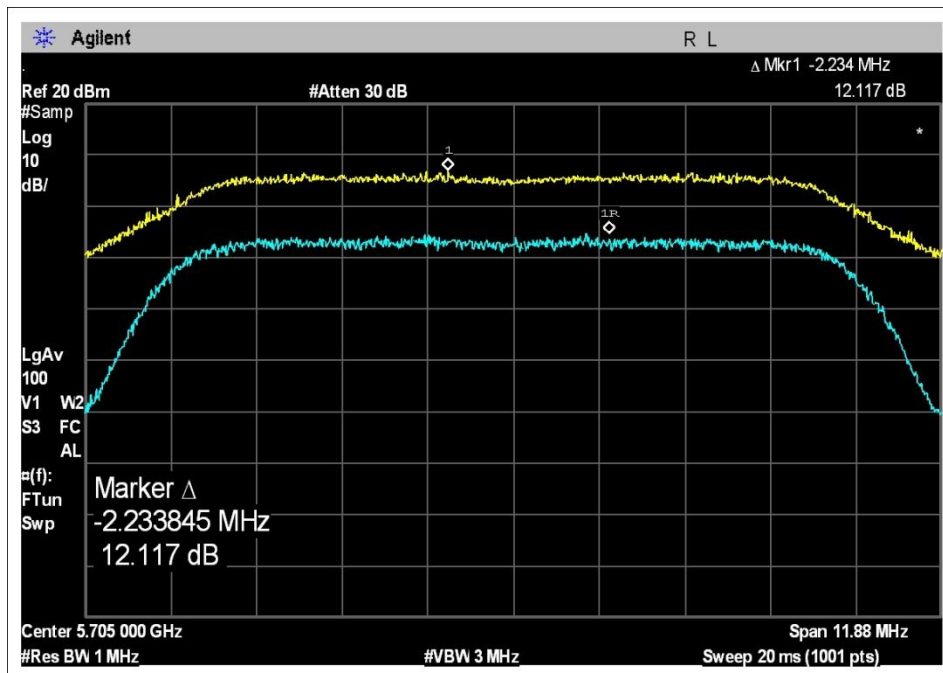
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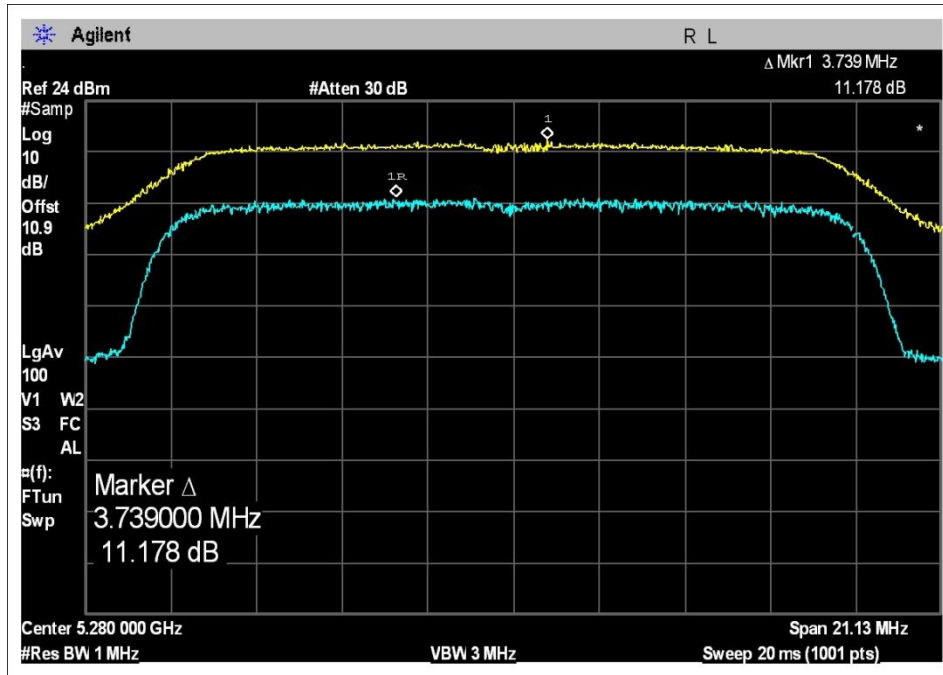
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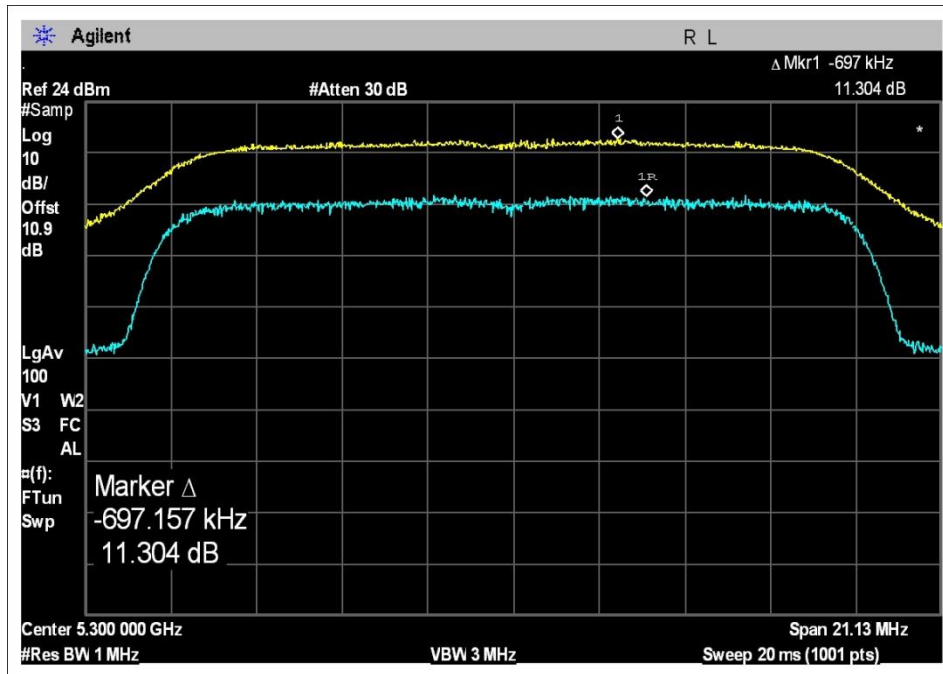
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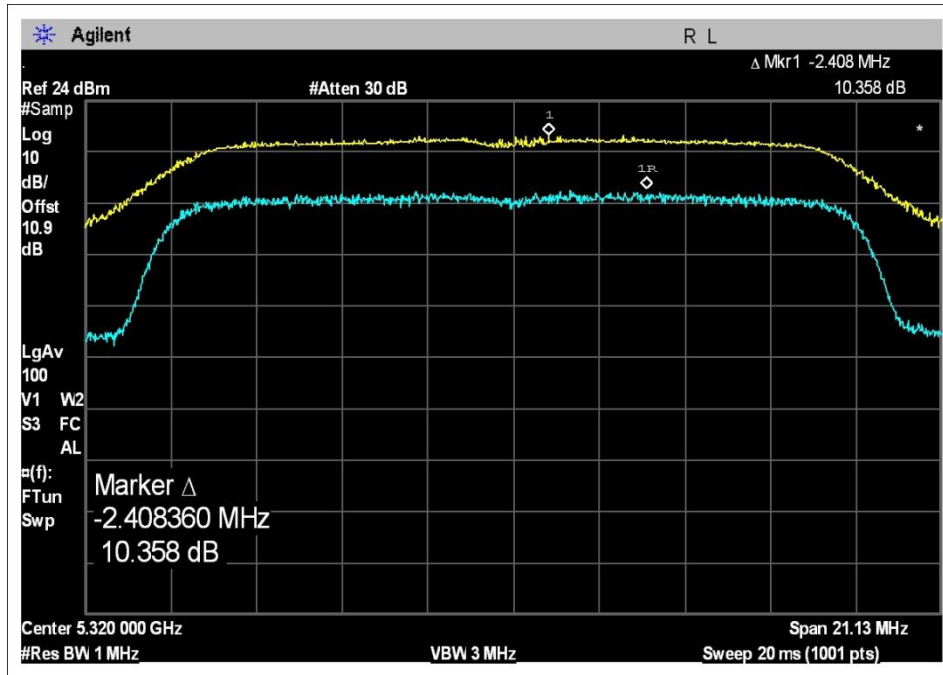
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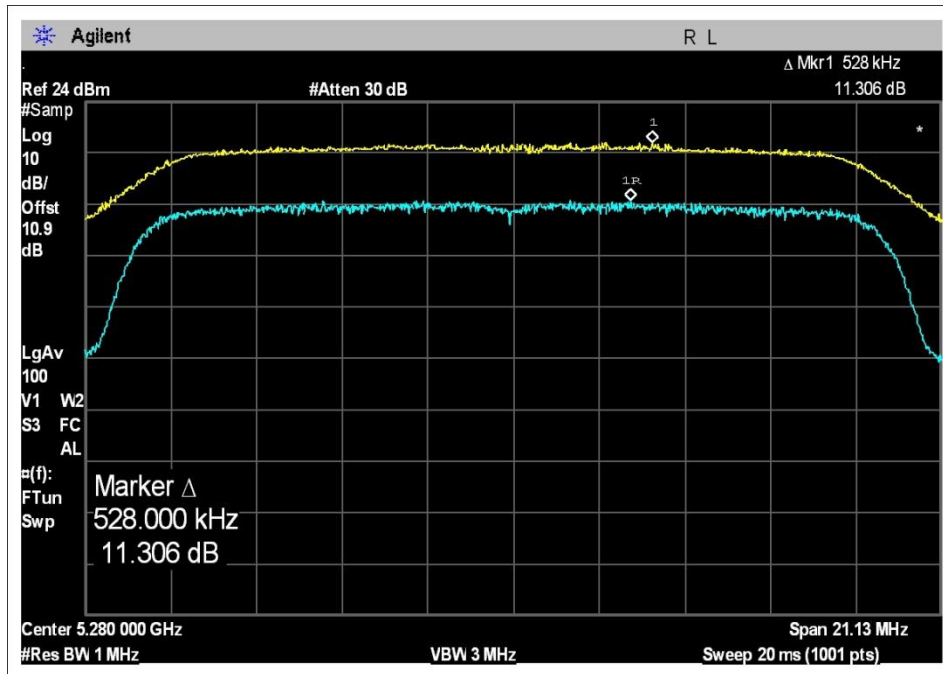
U5.25 C0 20MHz, LOW CHANNEL, 802.11a



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

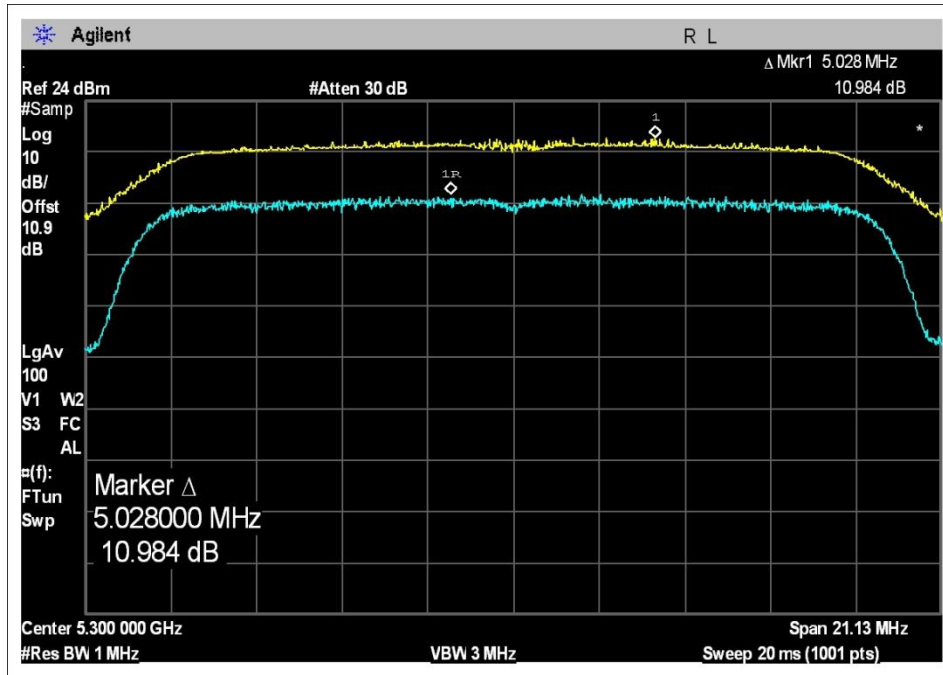


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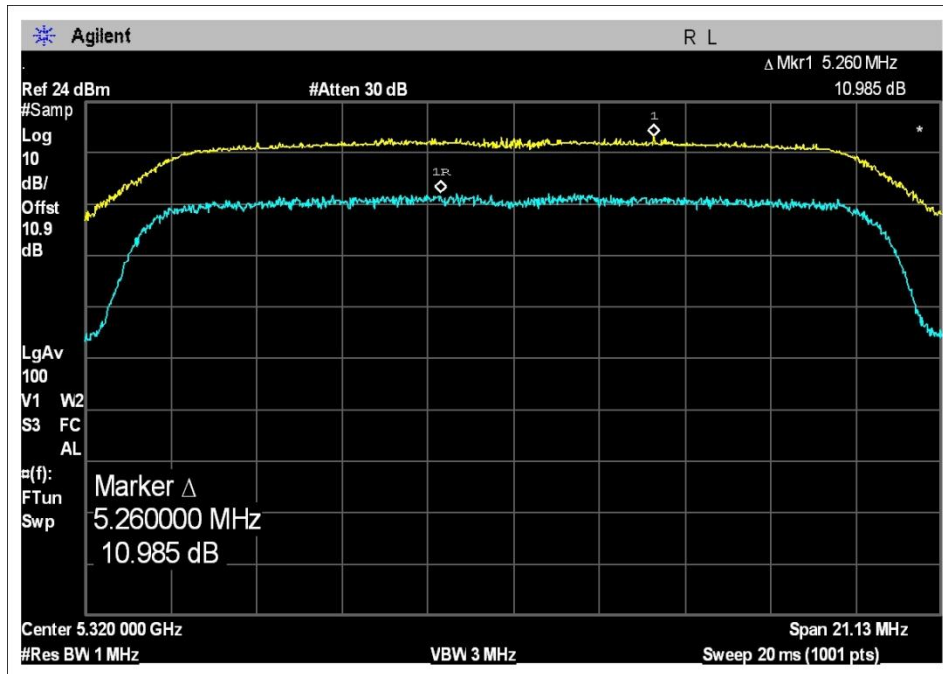


U5.25 C0 20MHz, LOW CHANNEL, 802.11n

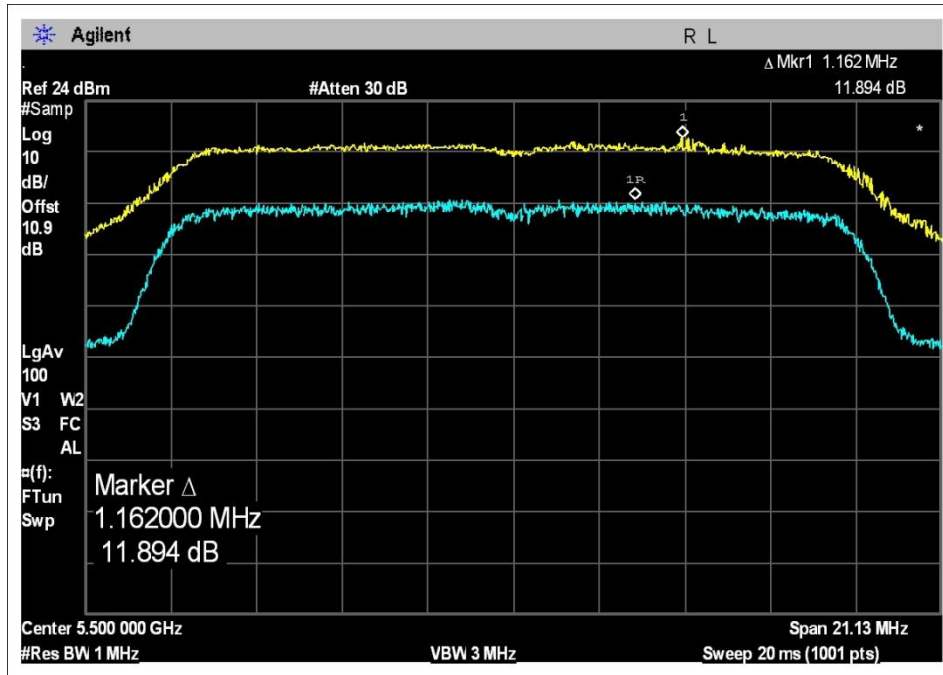




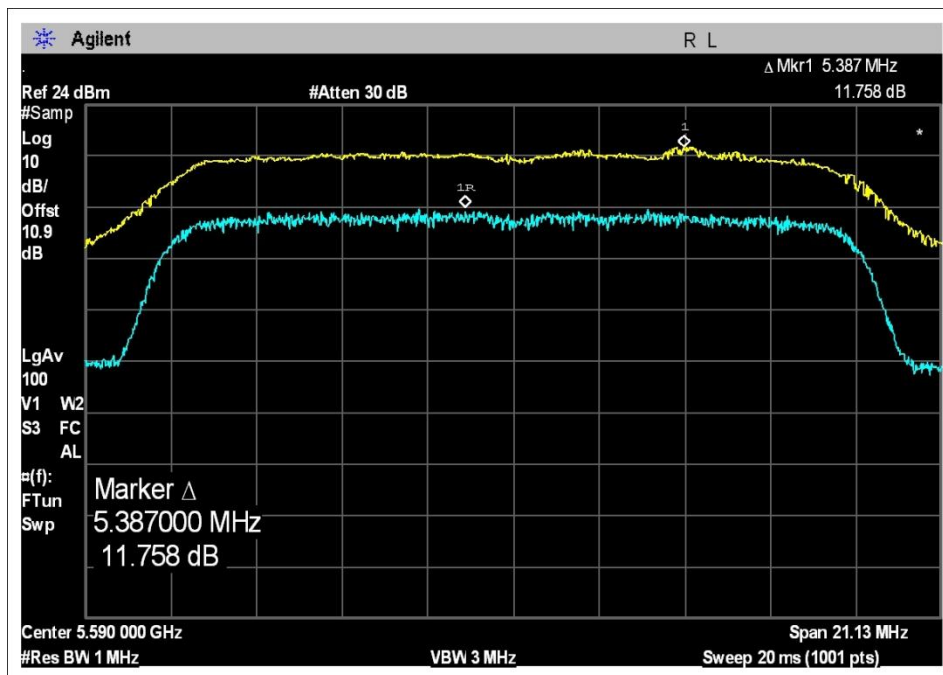
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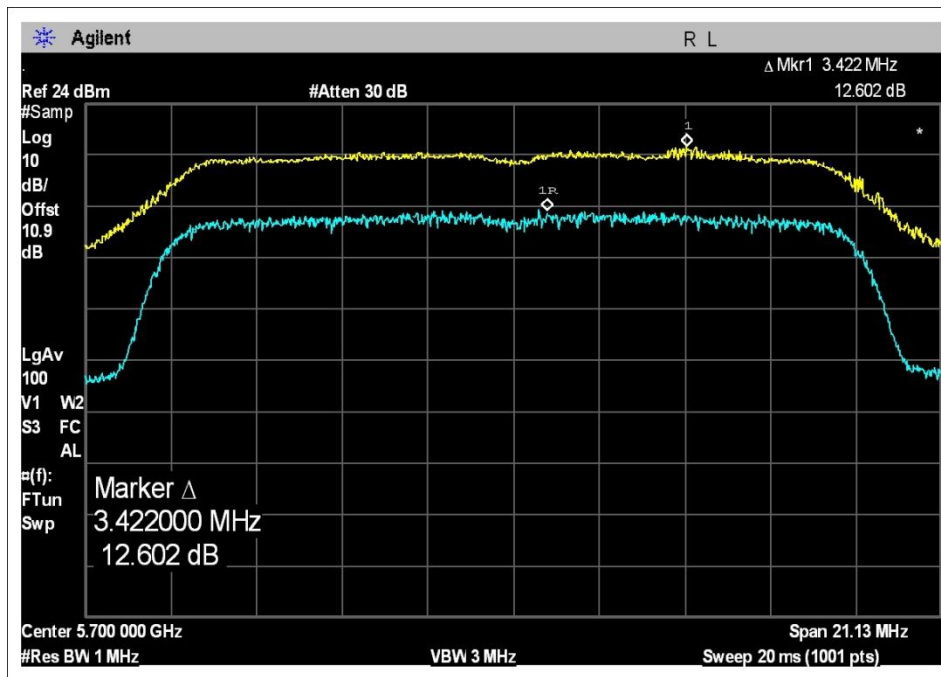
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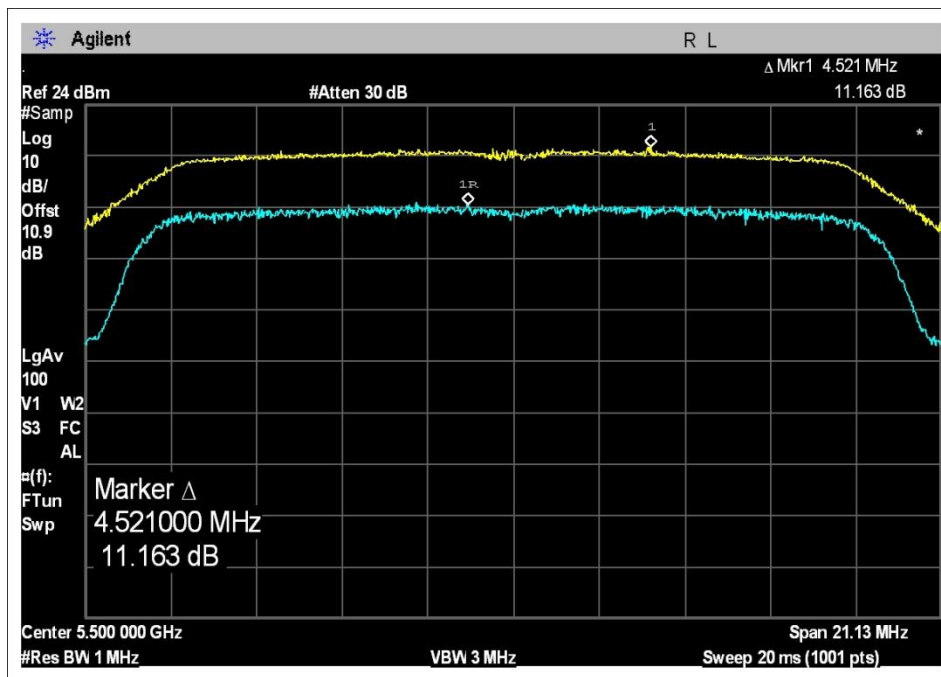
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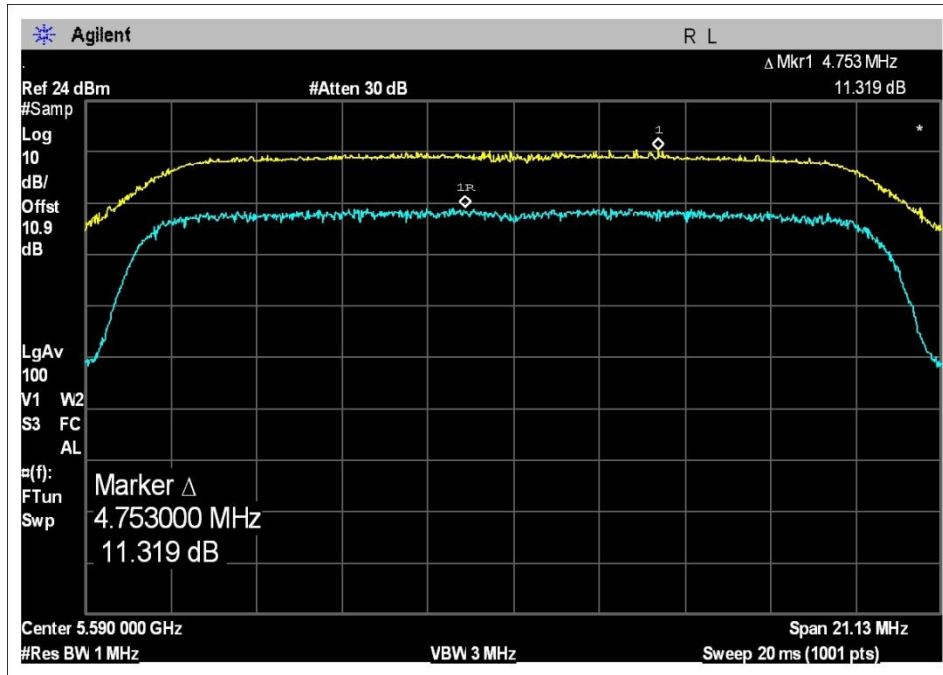
U5.47 C0 20MHz, MID CHANNEL, 802.11a



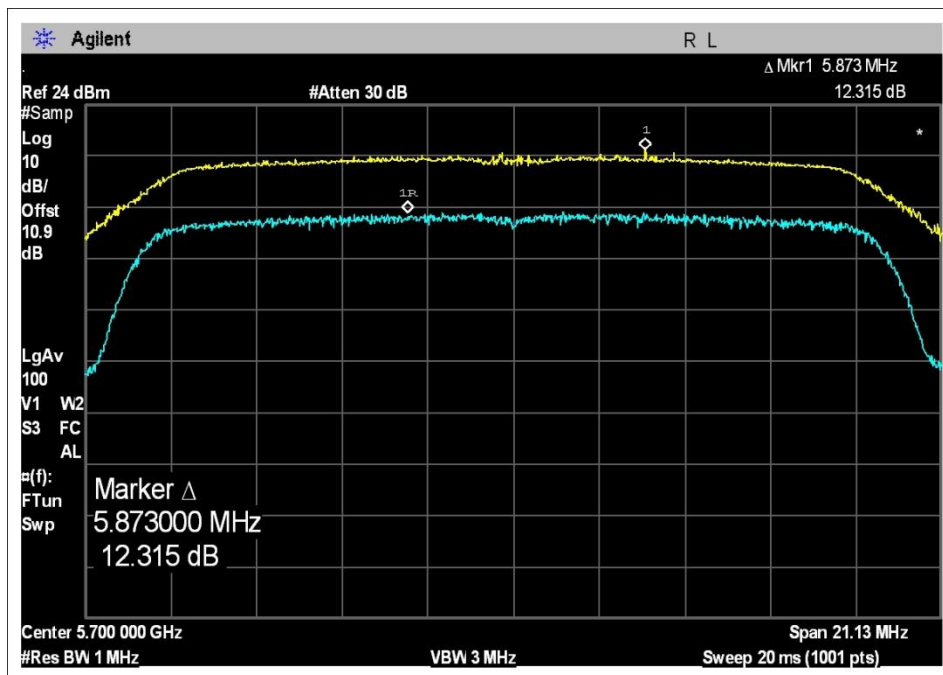
U5.47 C0 20MHz, HIGH CHANNEL, 802.11a



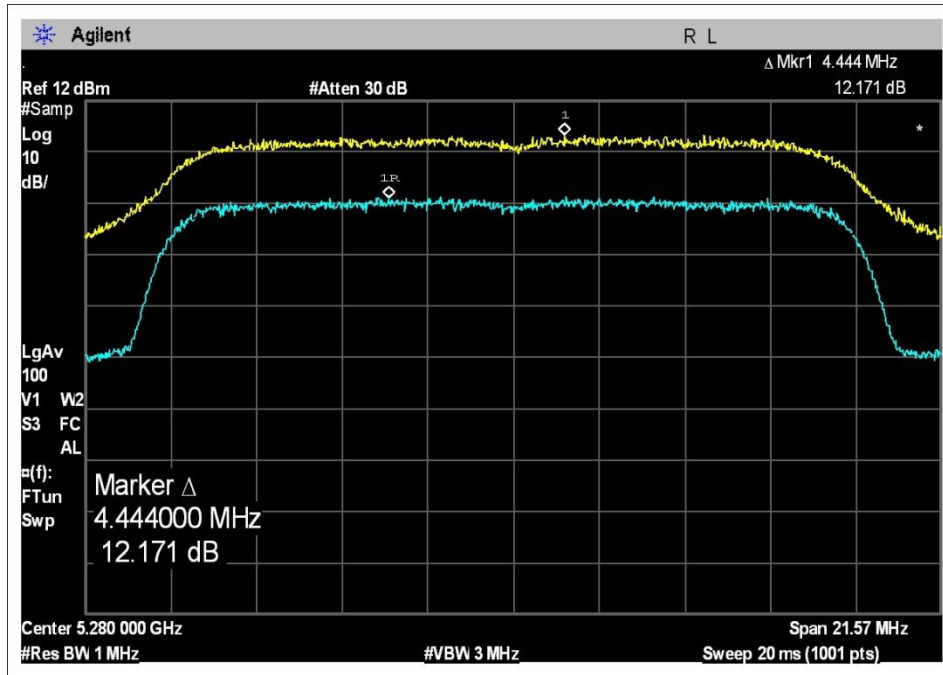
U5.47 C0 20MHz, LOW CHANNEL, 802.11n



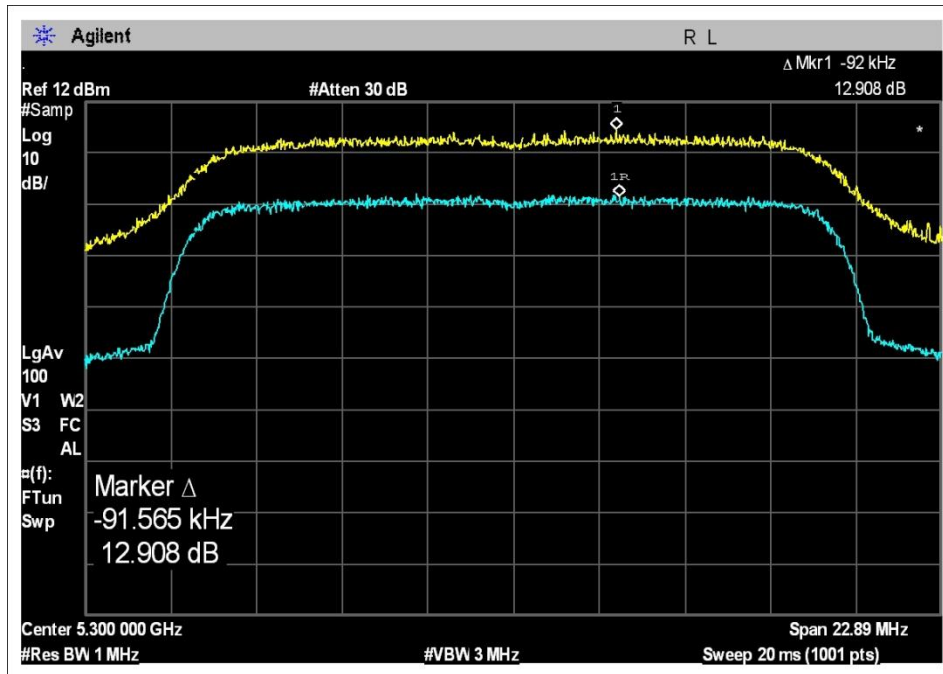
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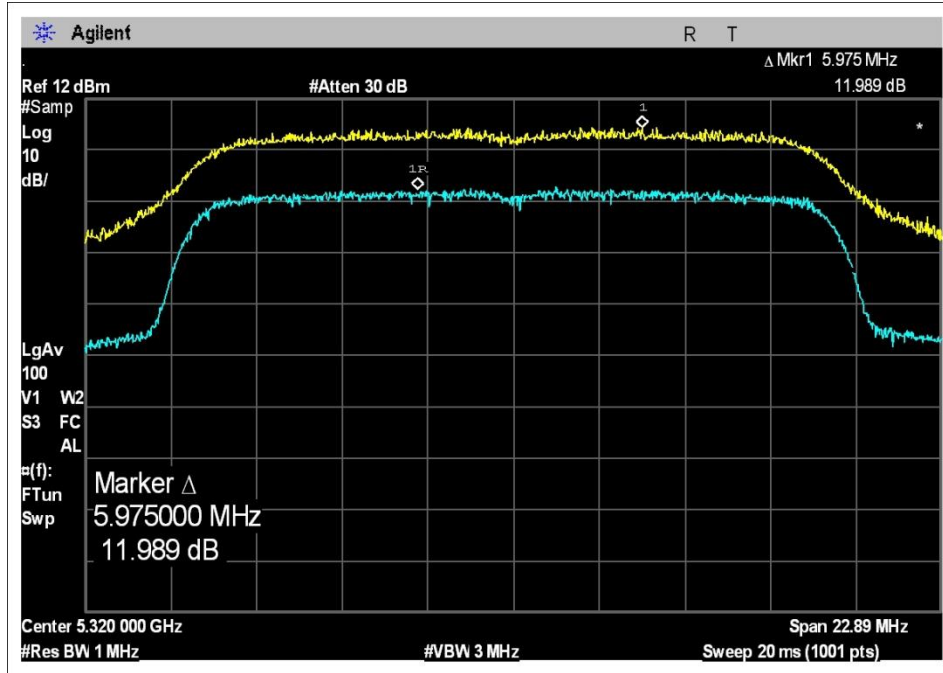
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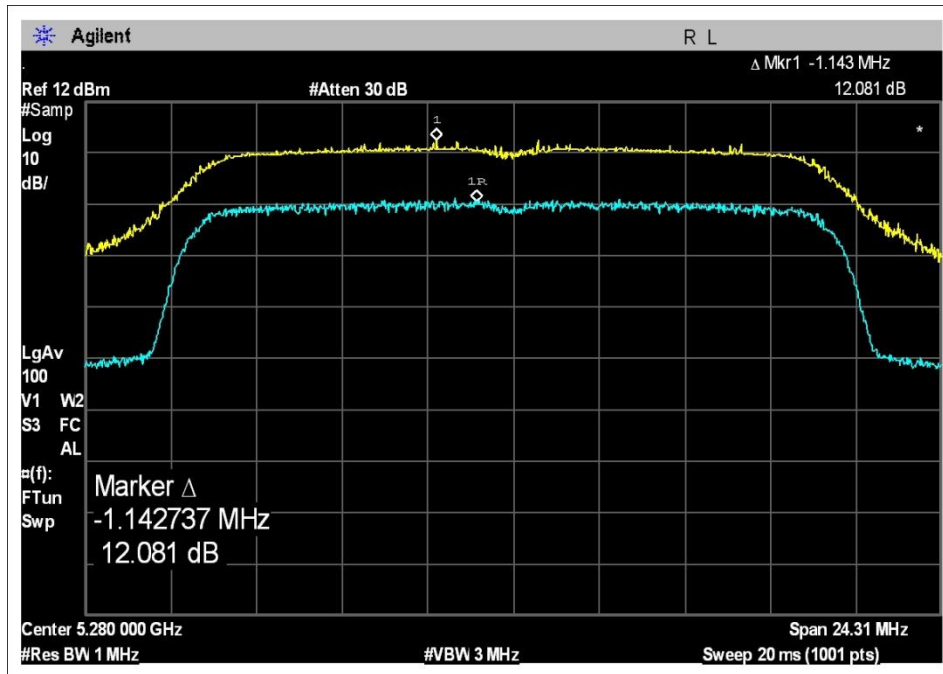
U5.25 C2 20MHz, LOW CHANNEL, 802.11a



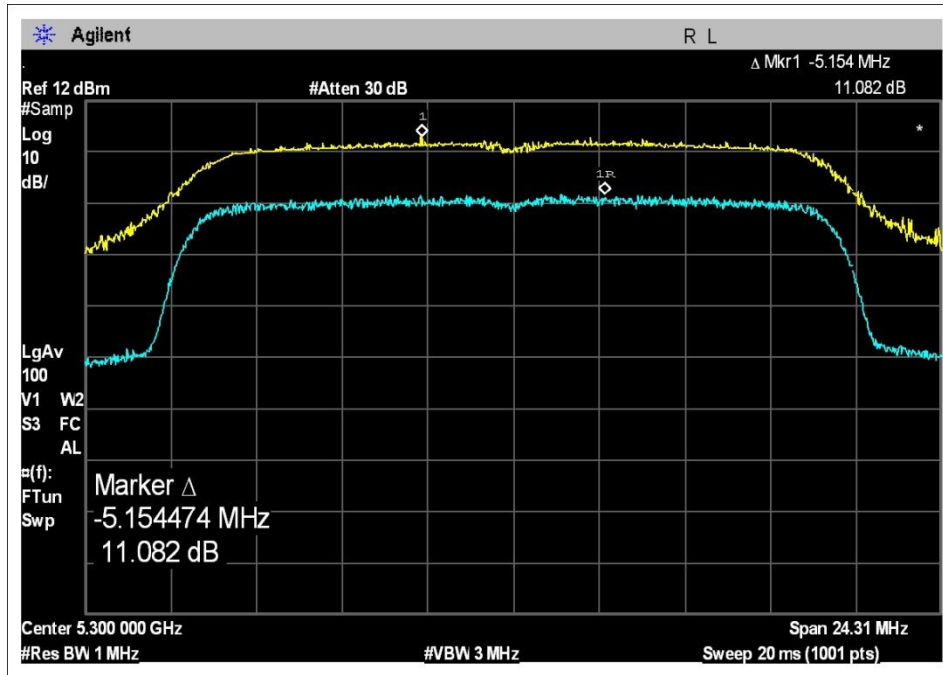
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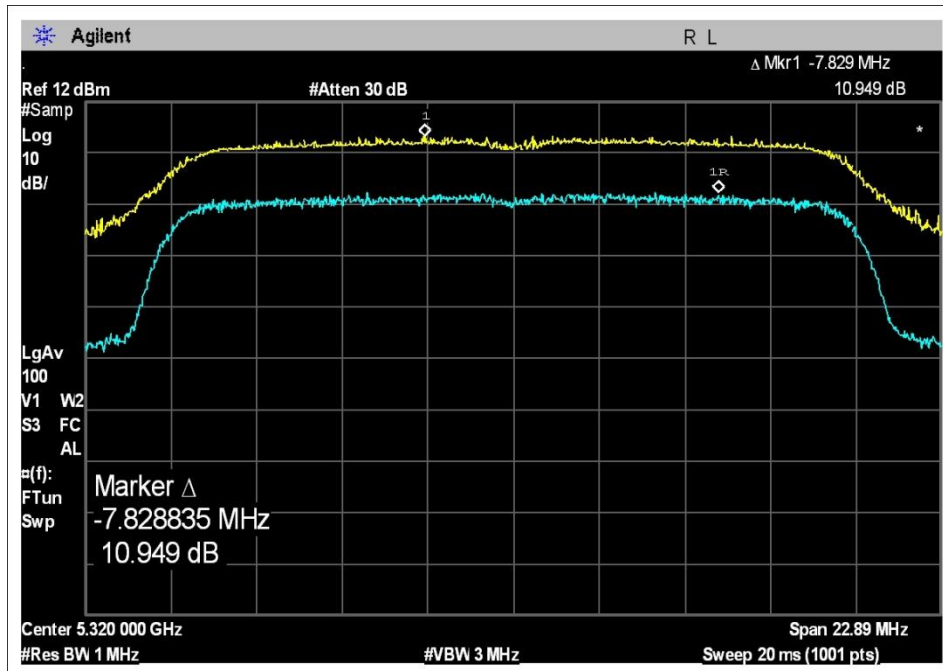
U5.25 C2 20MHz, HIGH CHANNEL, 802.11a



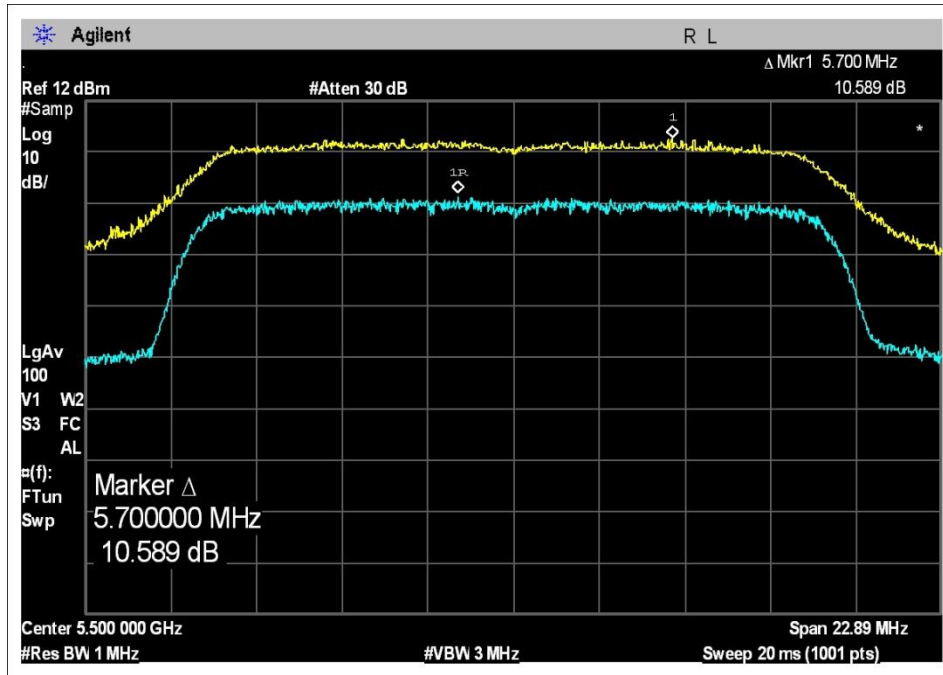
U5.25 C2 20MHz, LOW CHANNEL, 802.11n



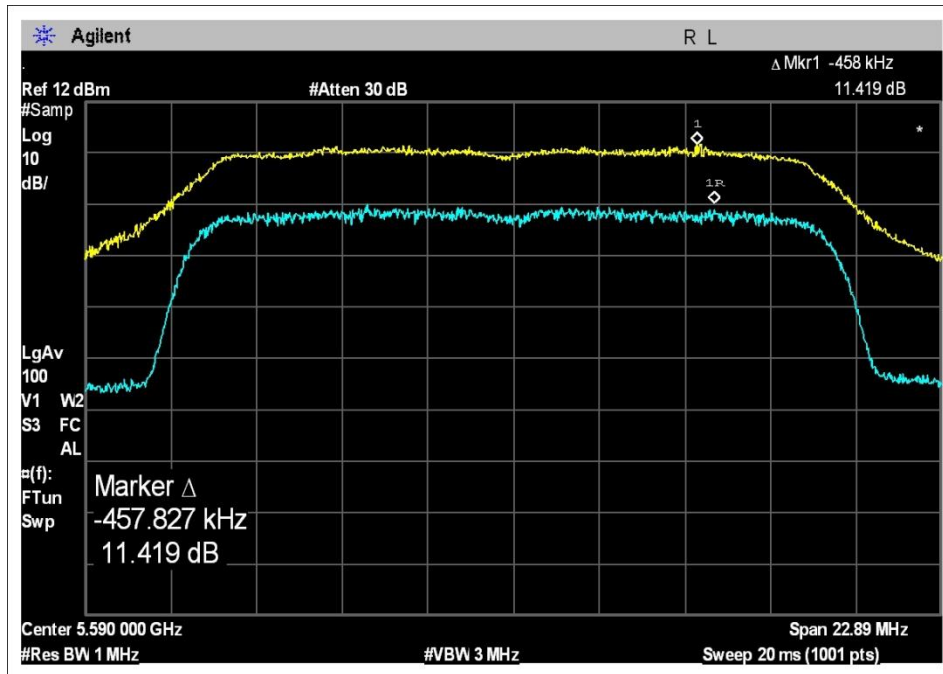
U5.25 C2 20MHz, MID CHANNEL, 802.11n



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

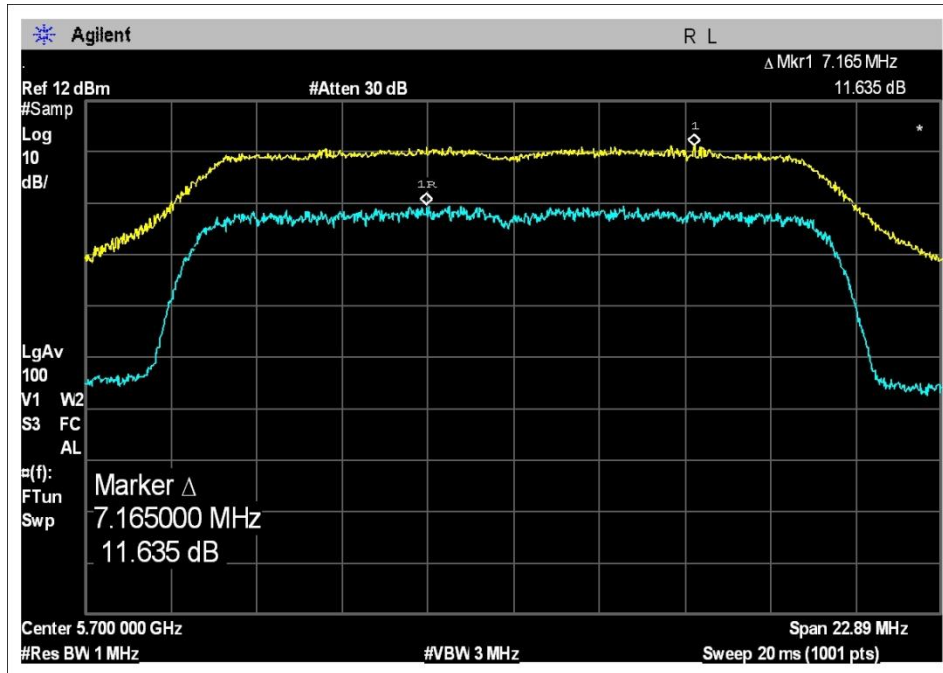


U5.47 C2 20MHz, LOW CHANNEL, 802.11a

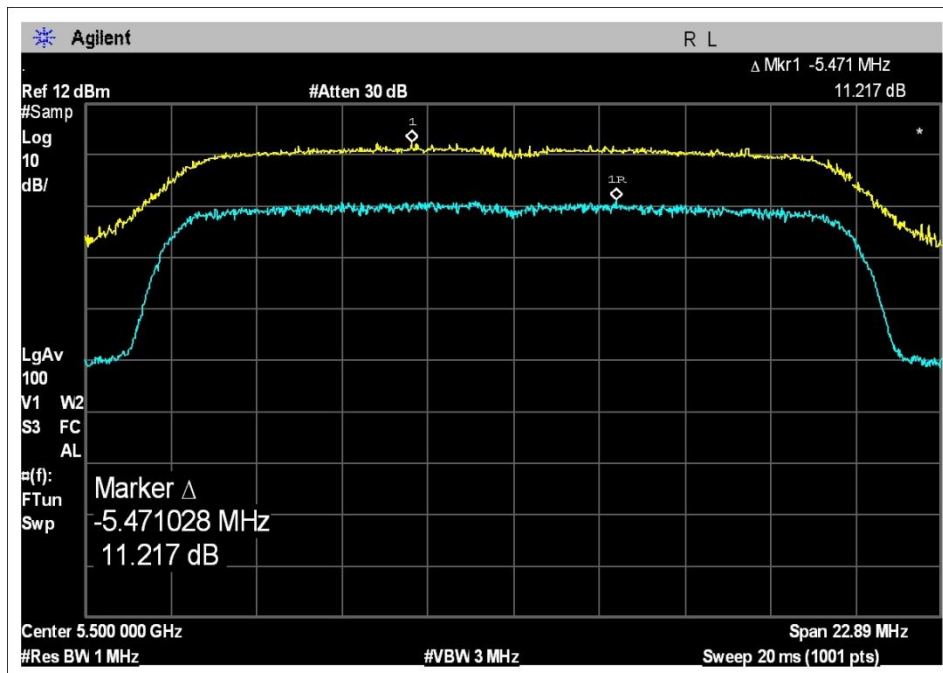


U5.47 C2 20MHz, MID CHANNEL, 802.11a

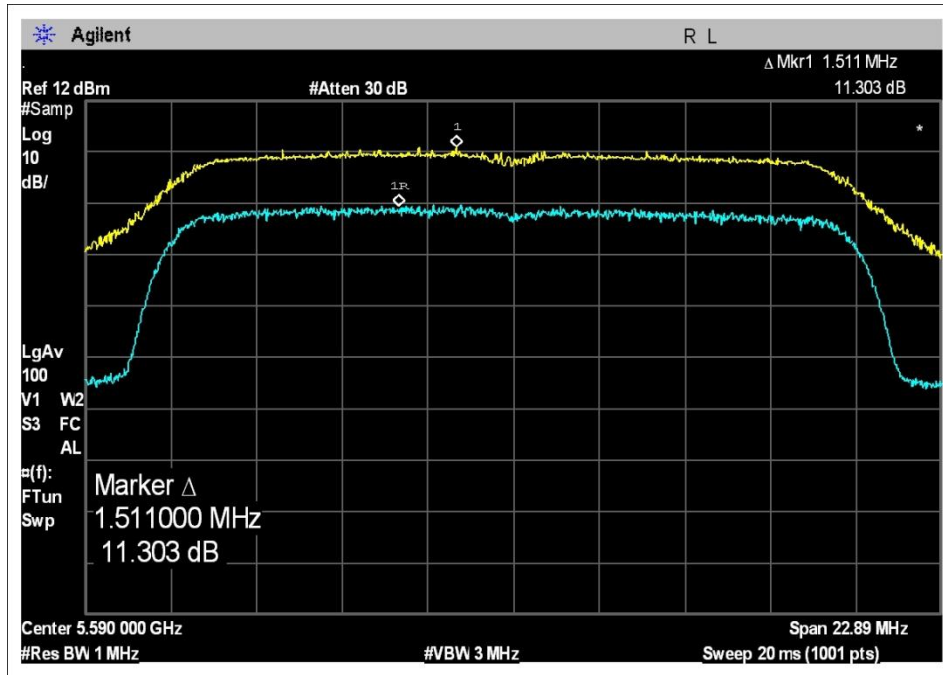




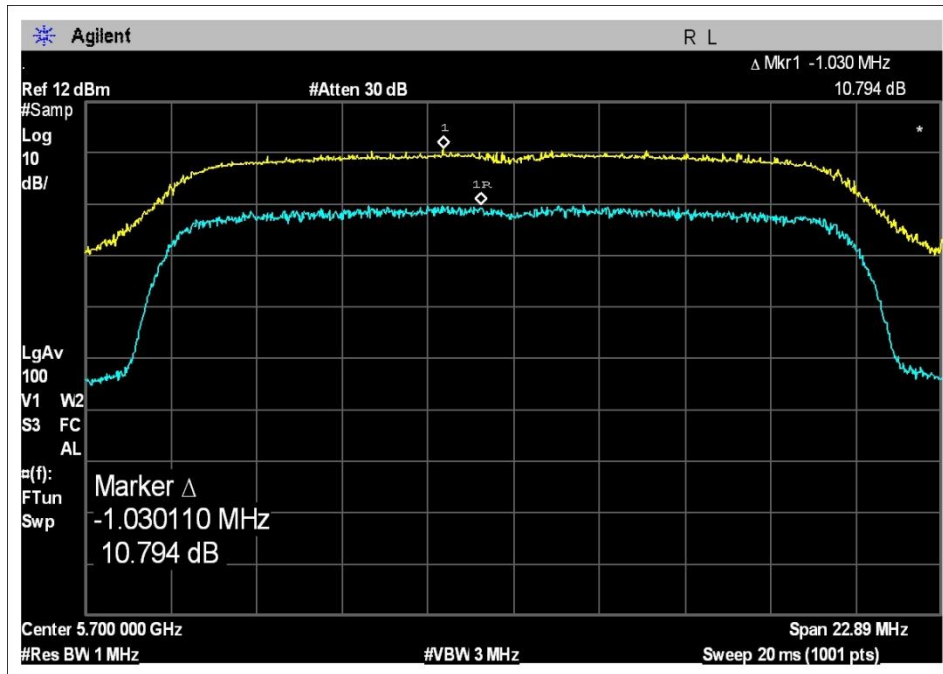
U5.47 C2 20MHz, HIGH CHANNEL, 802.11a



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**

