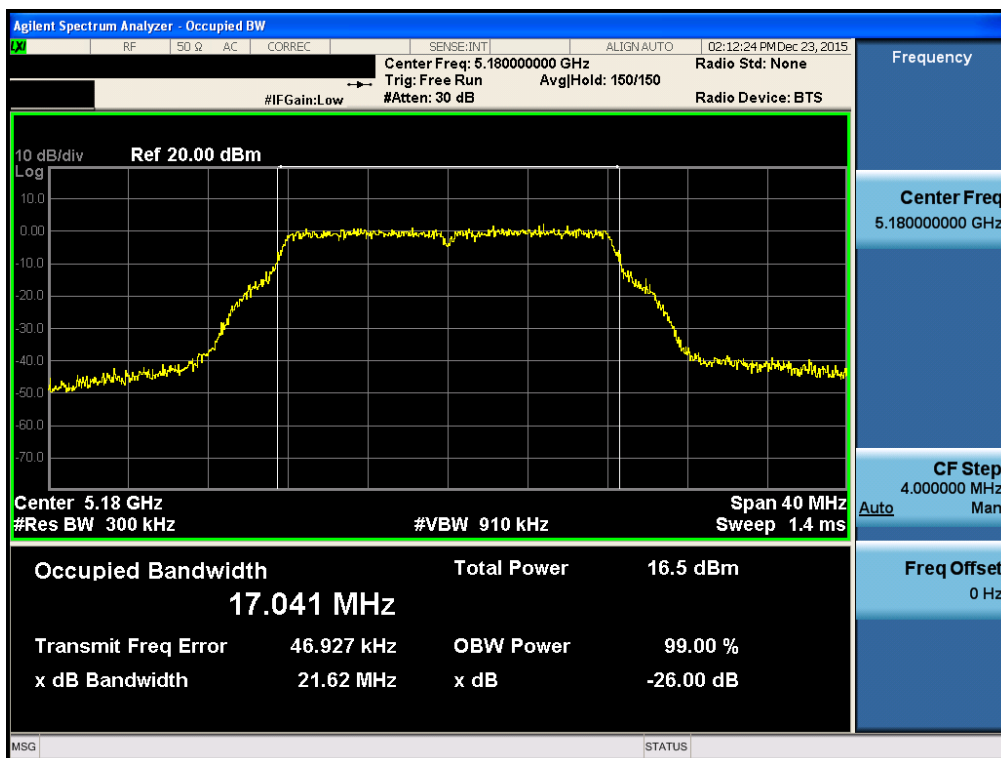


■ RESULT PLOTS

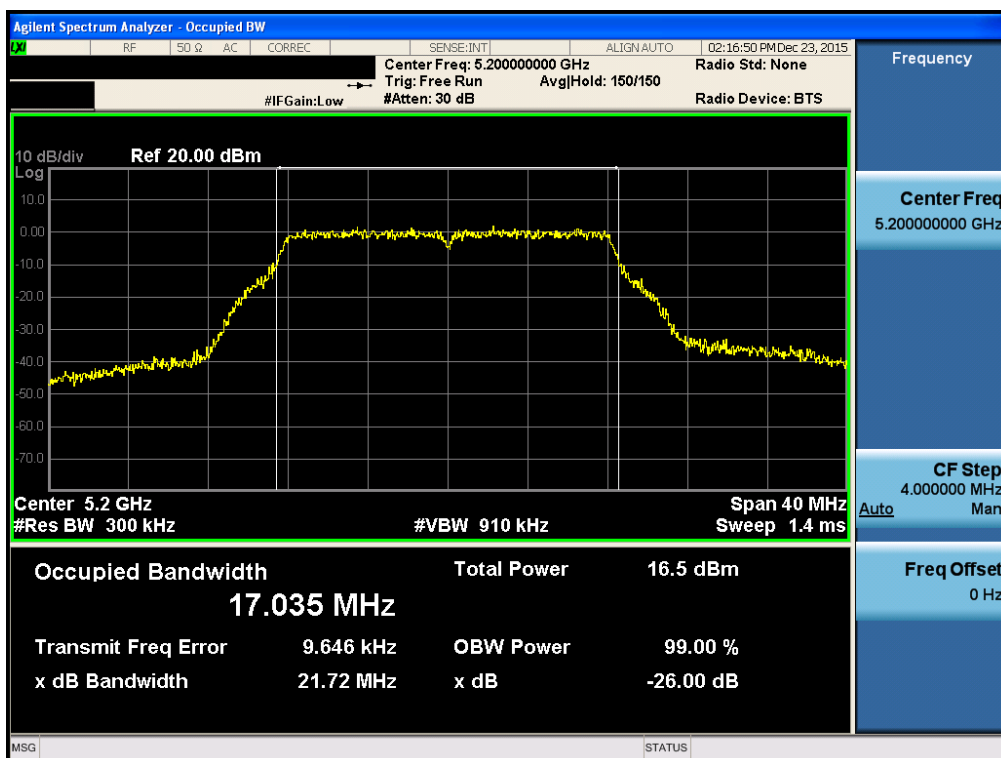
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.36



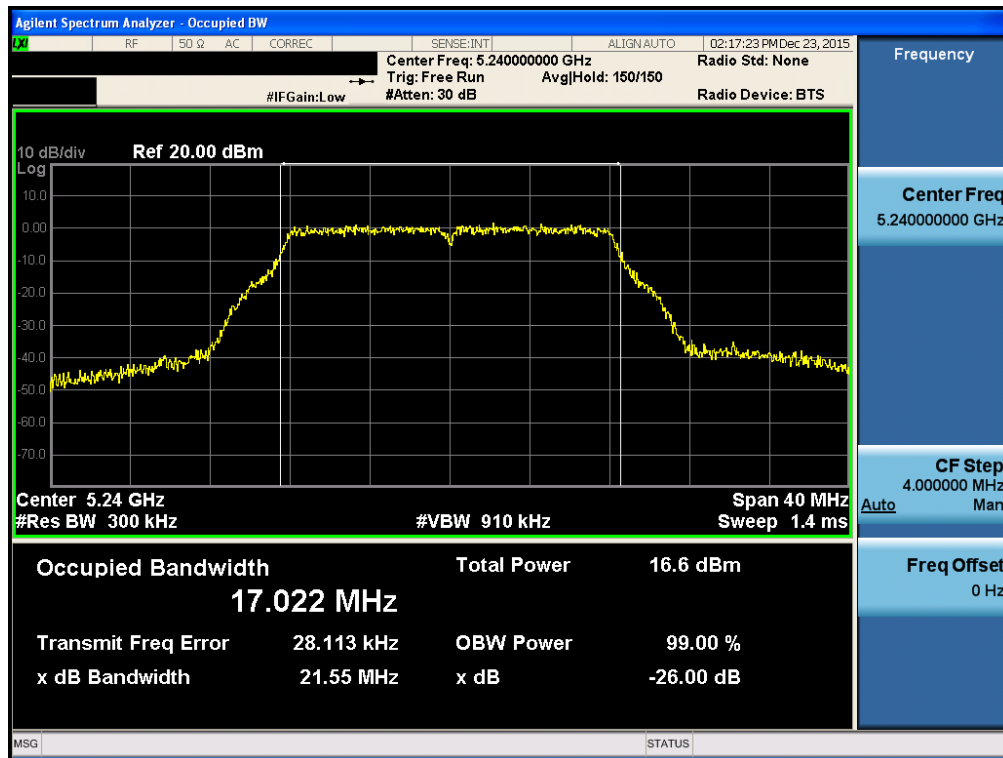
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.40



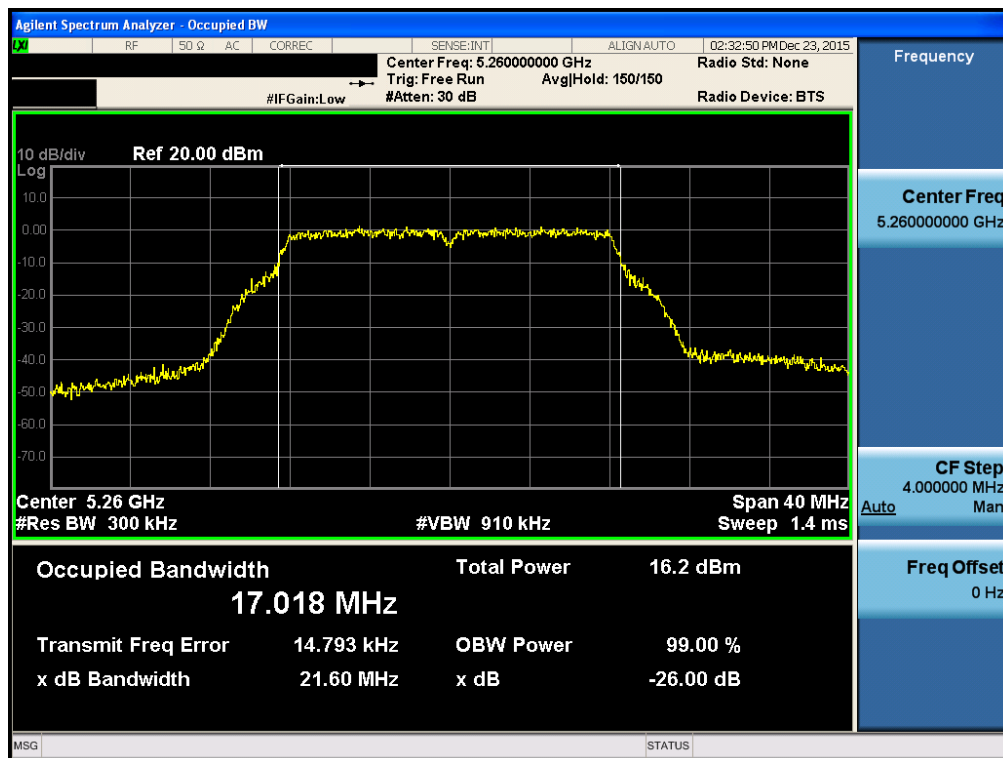
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.48



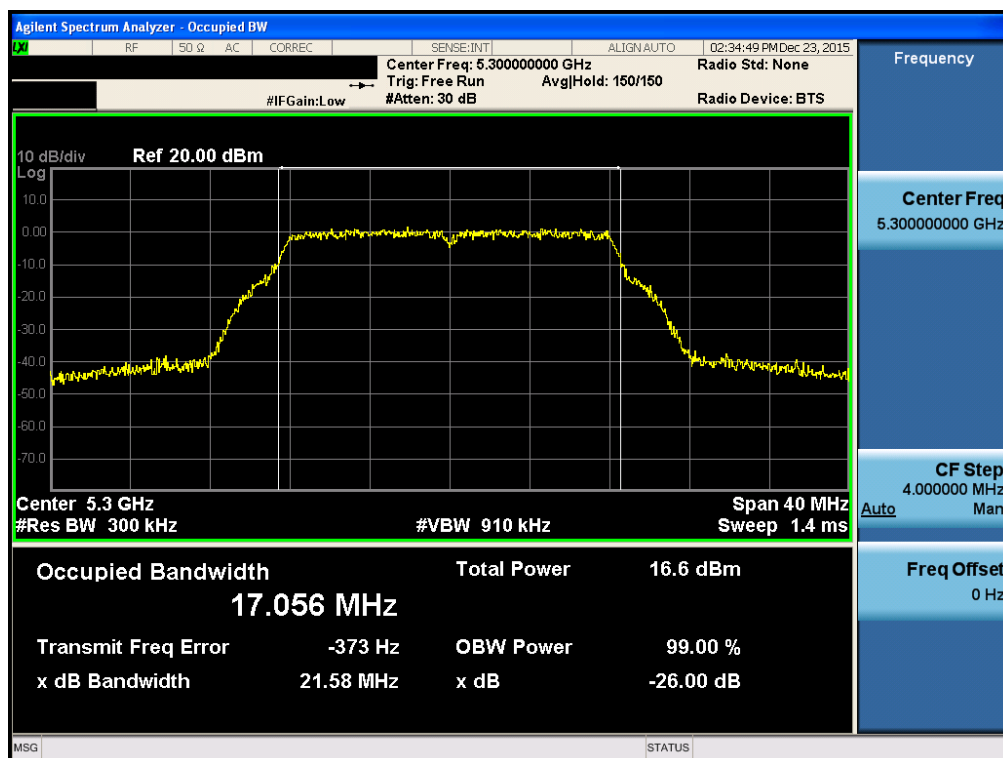
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.52



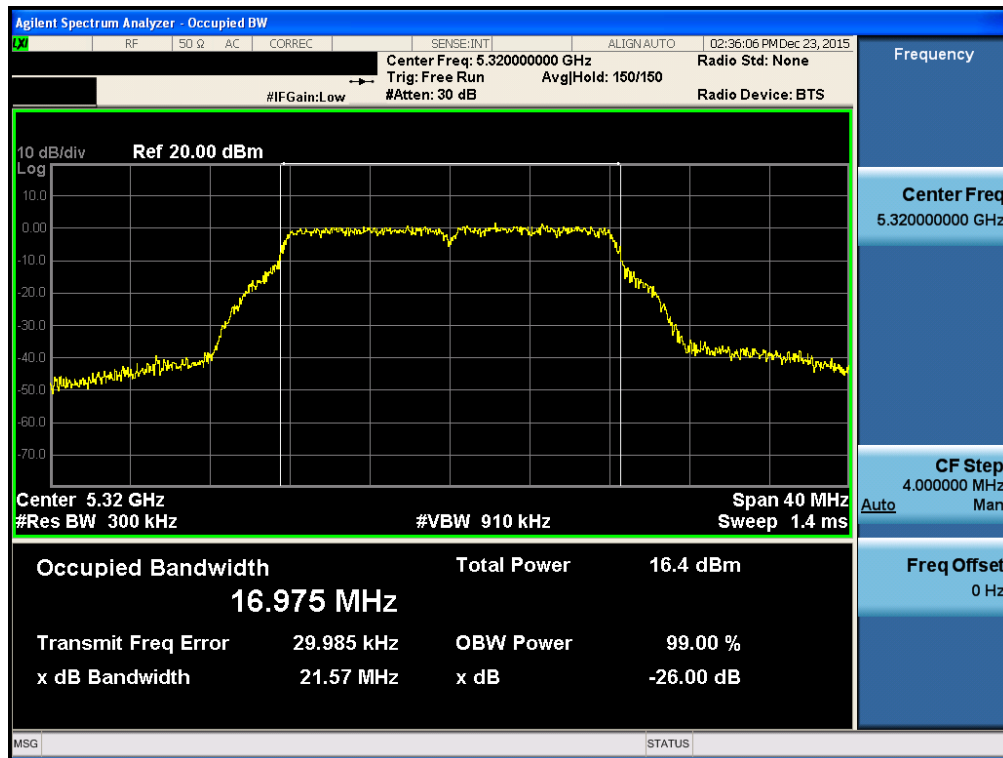
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.60



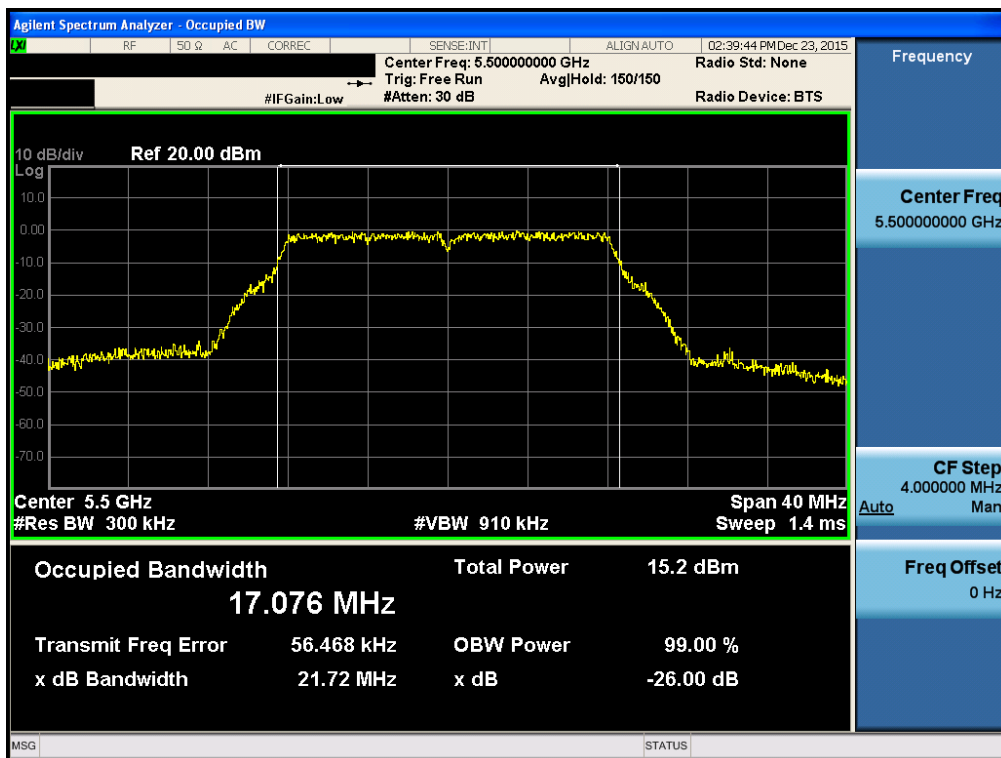
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.64



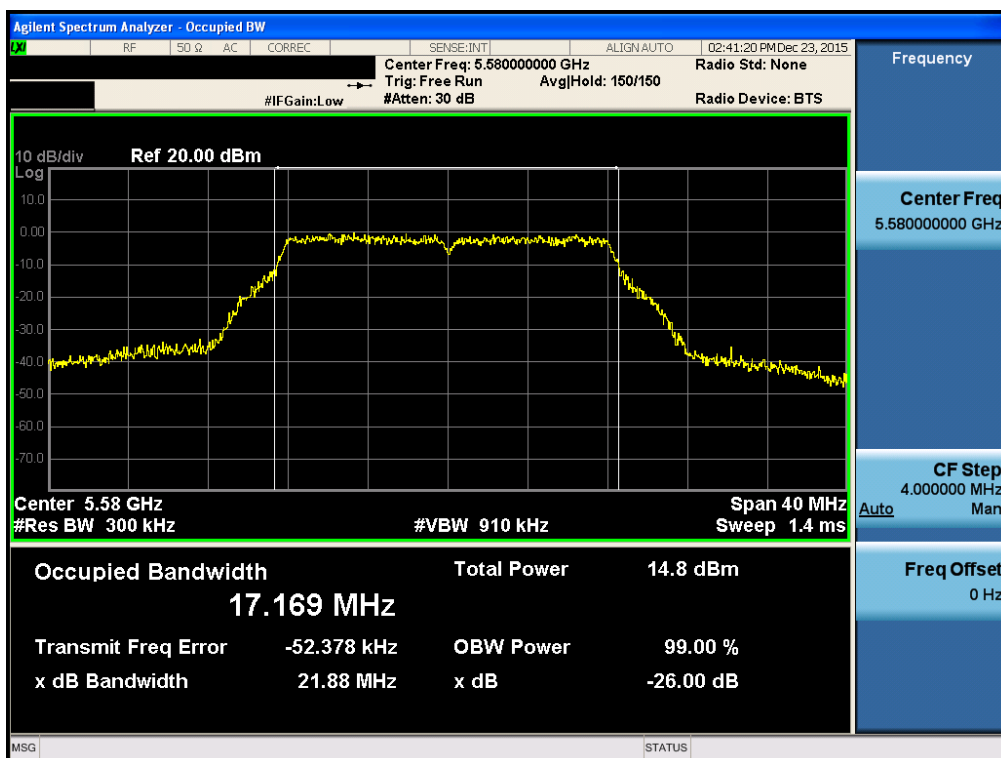
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.100



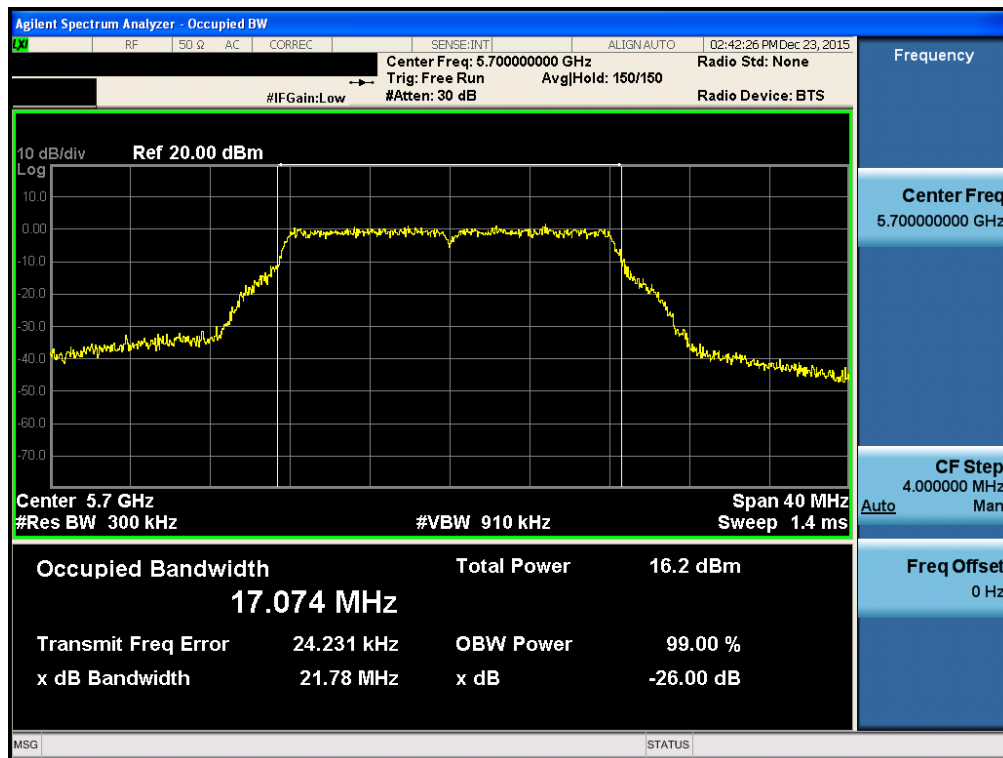
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.116



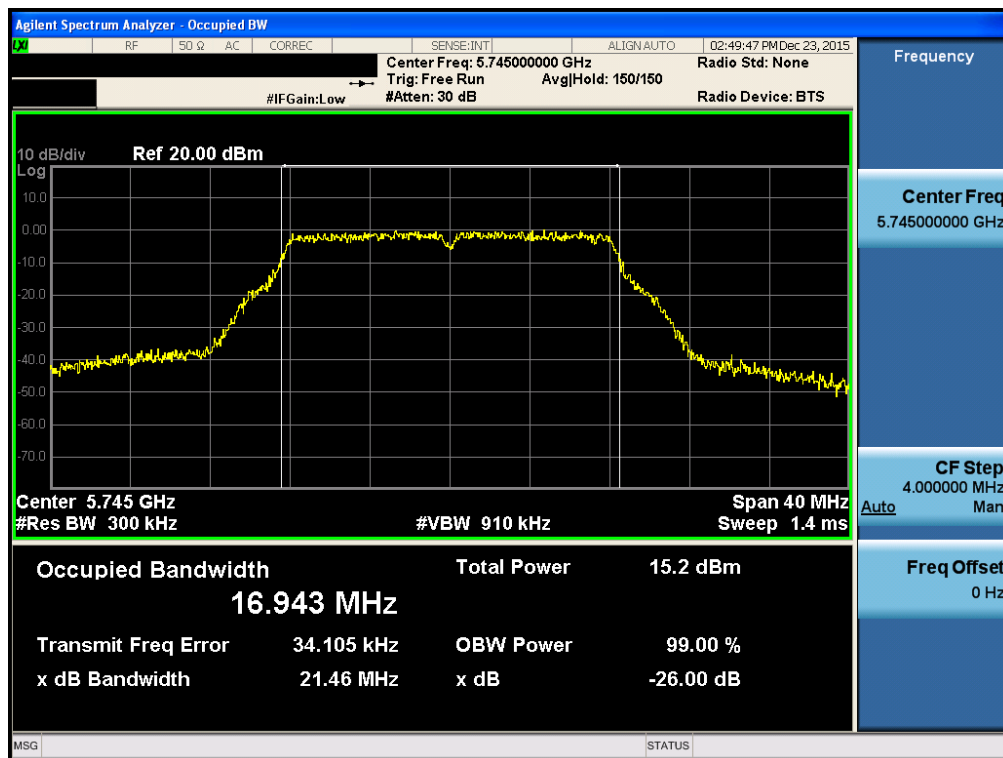
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.140



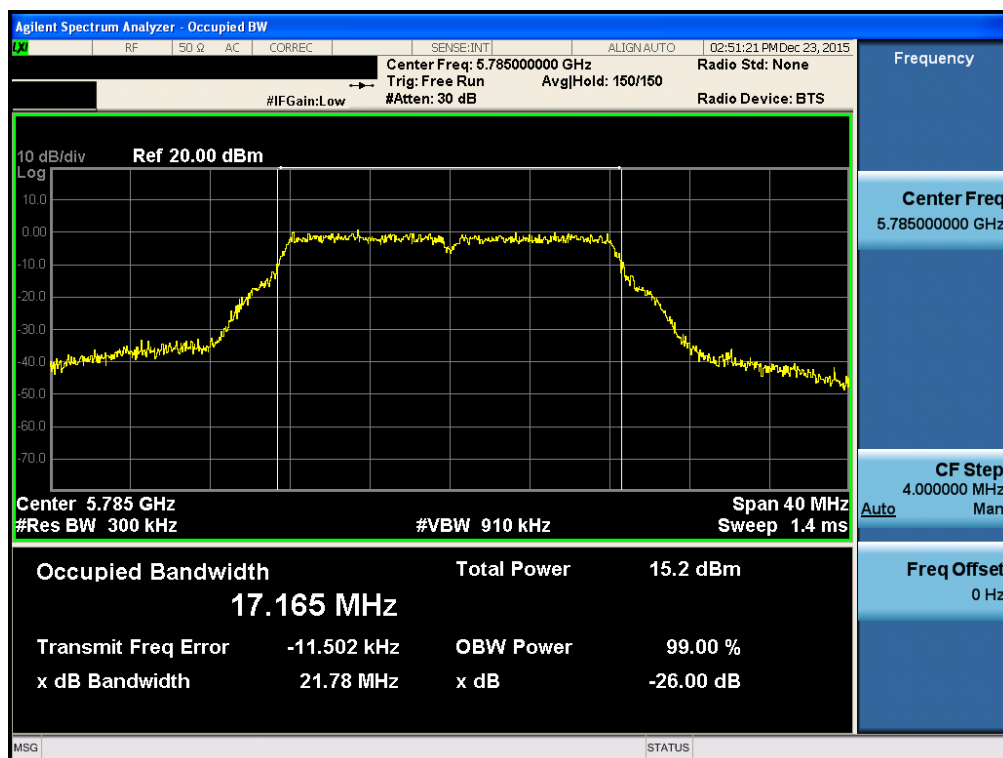
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.149



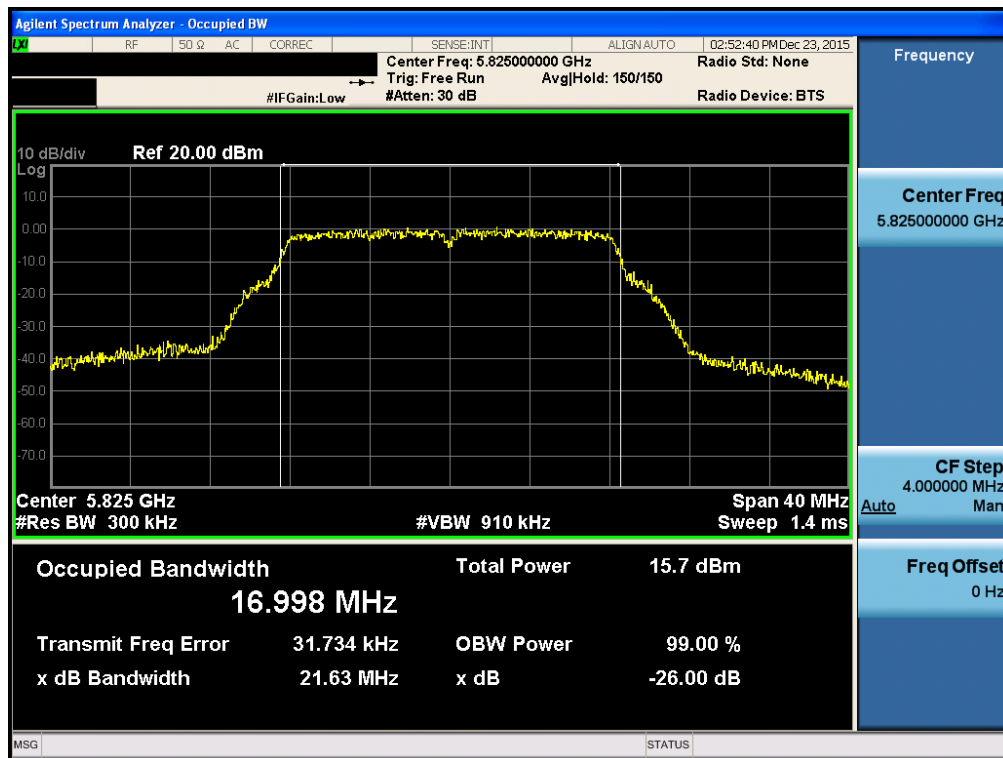
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.157



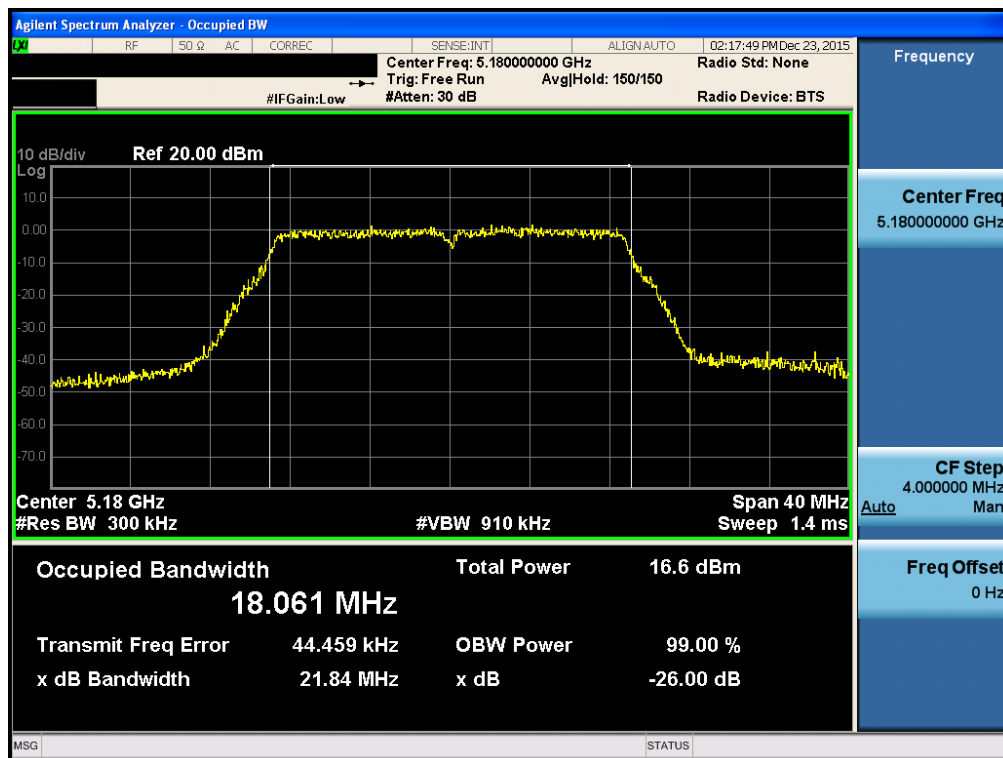
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.165



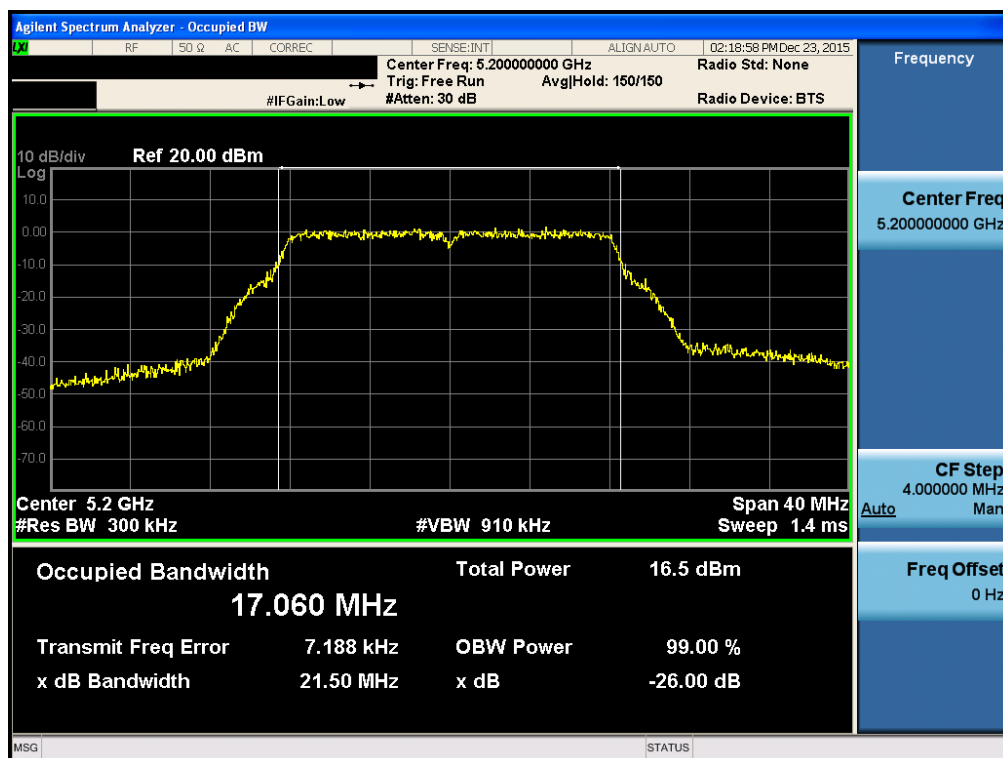
Occupied Bandwidth 99%

Test Mode: 802.11n(HT20) & Ch.36



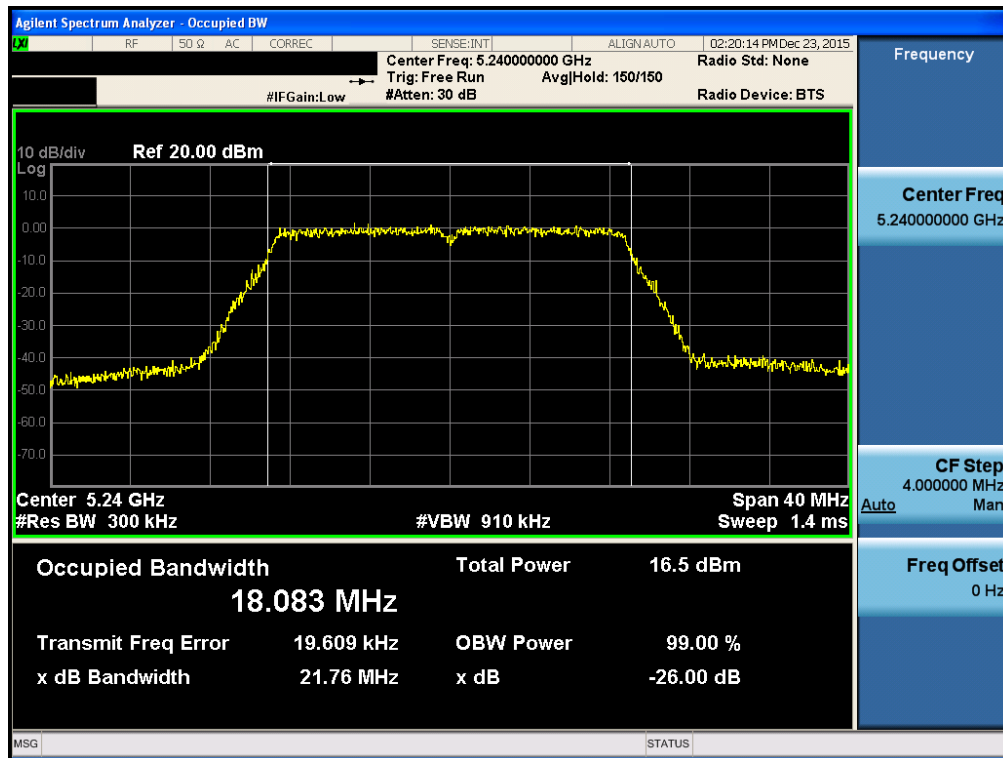
Occupied Bandwidth 99%

Test Mode: 802.11n(HT20) & Ch.40



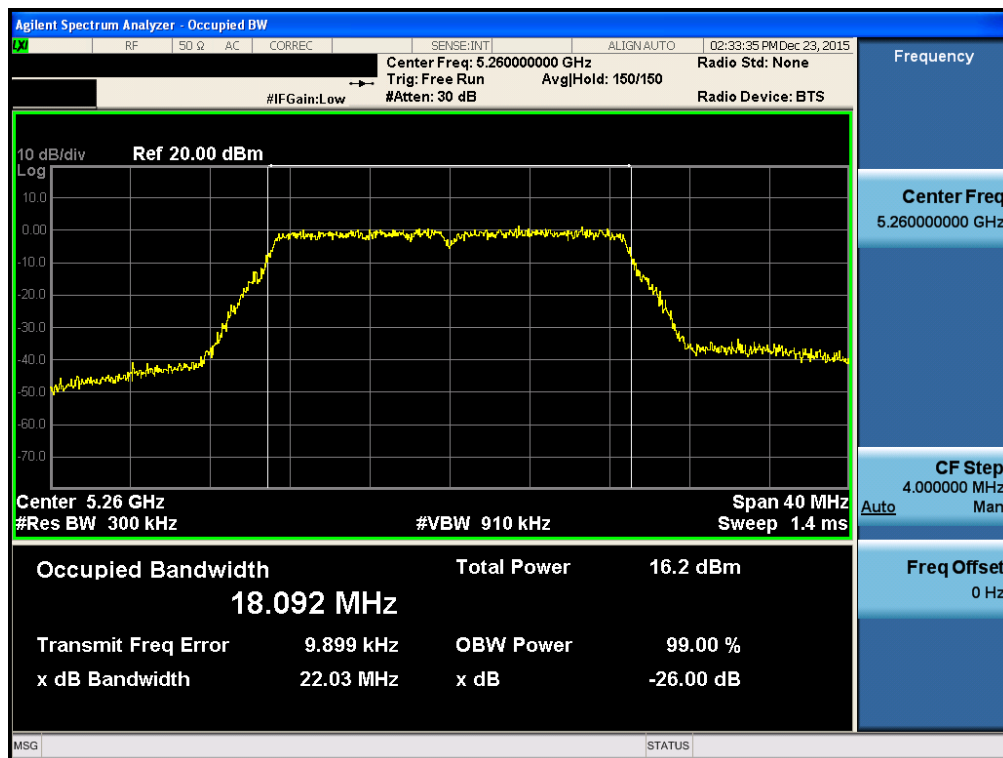
Occupied Bandwidth 99%

Test Mode: 802.11n(HT20) & Ch.48



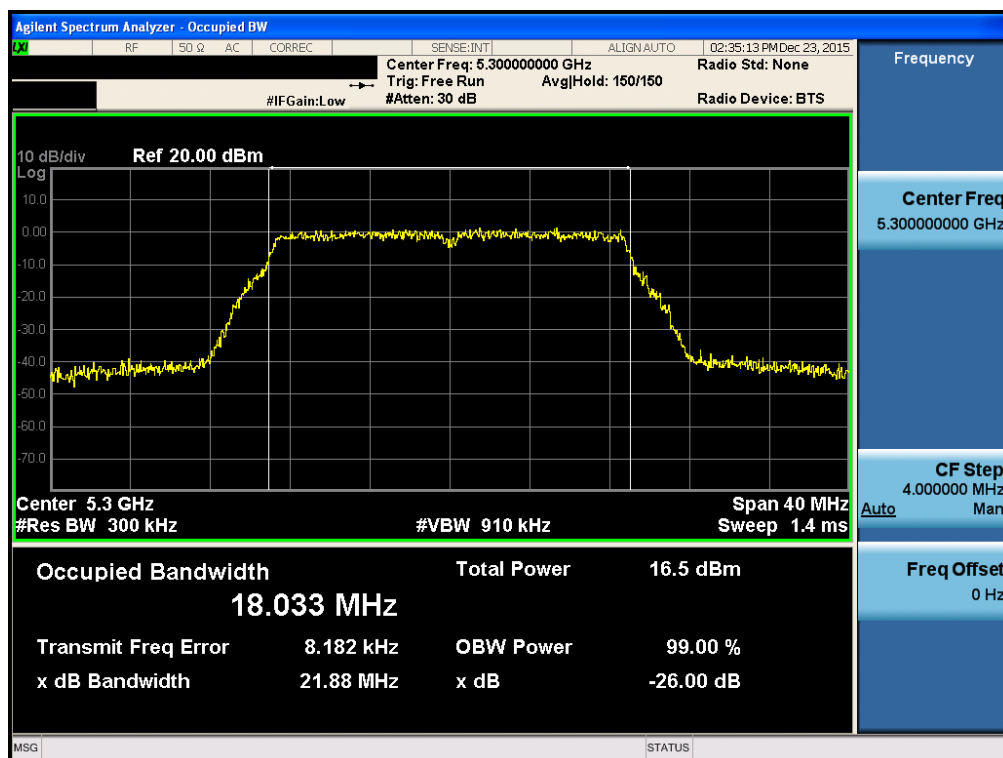
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.52



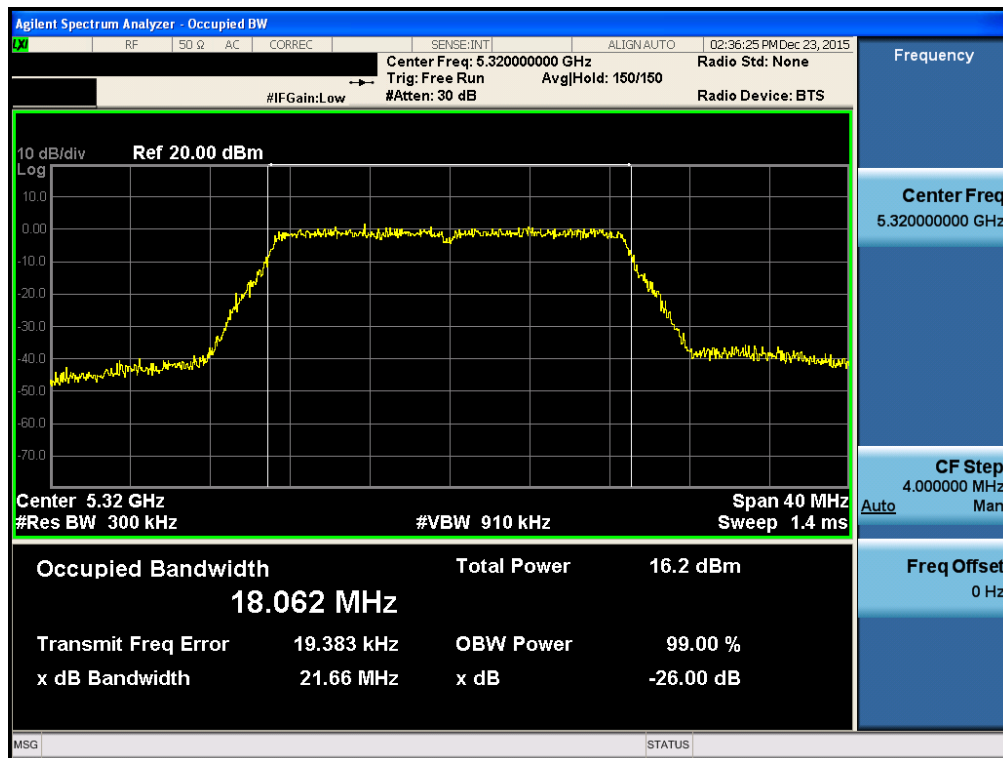
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.60



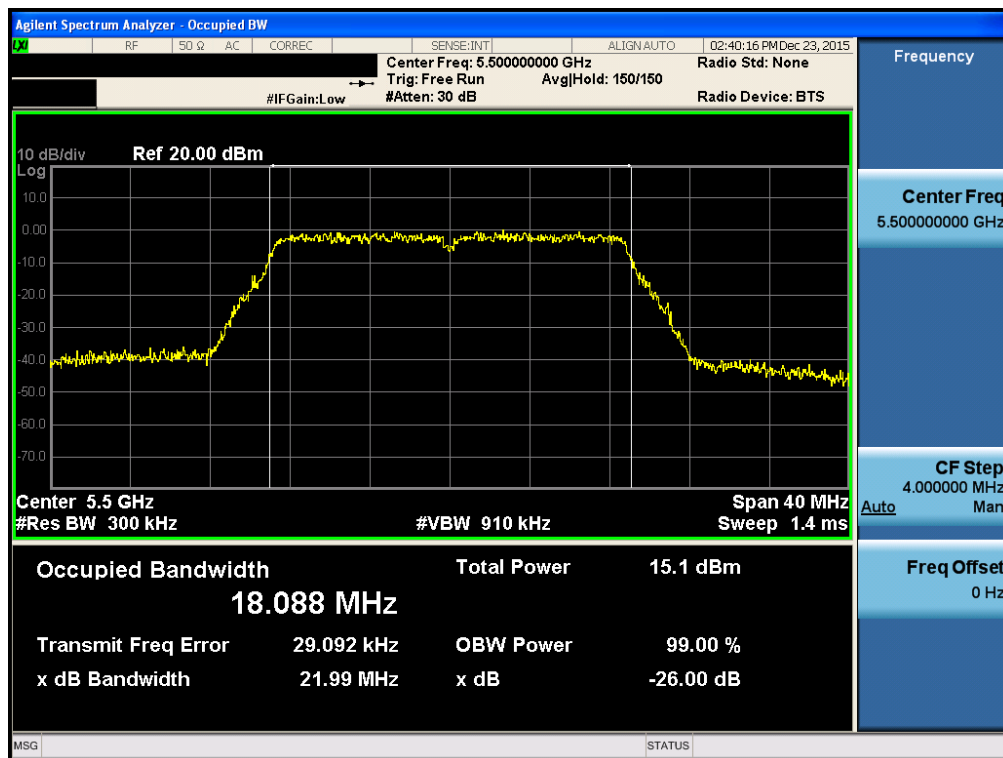
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.64



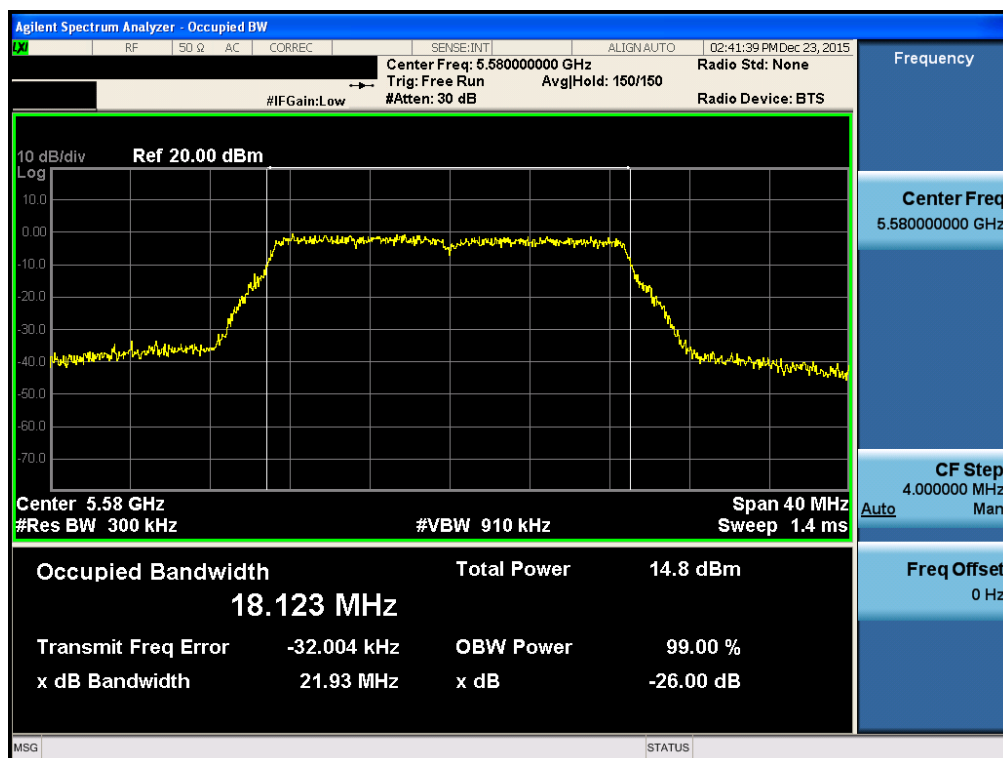
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.100



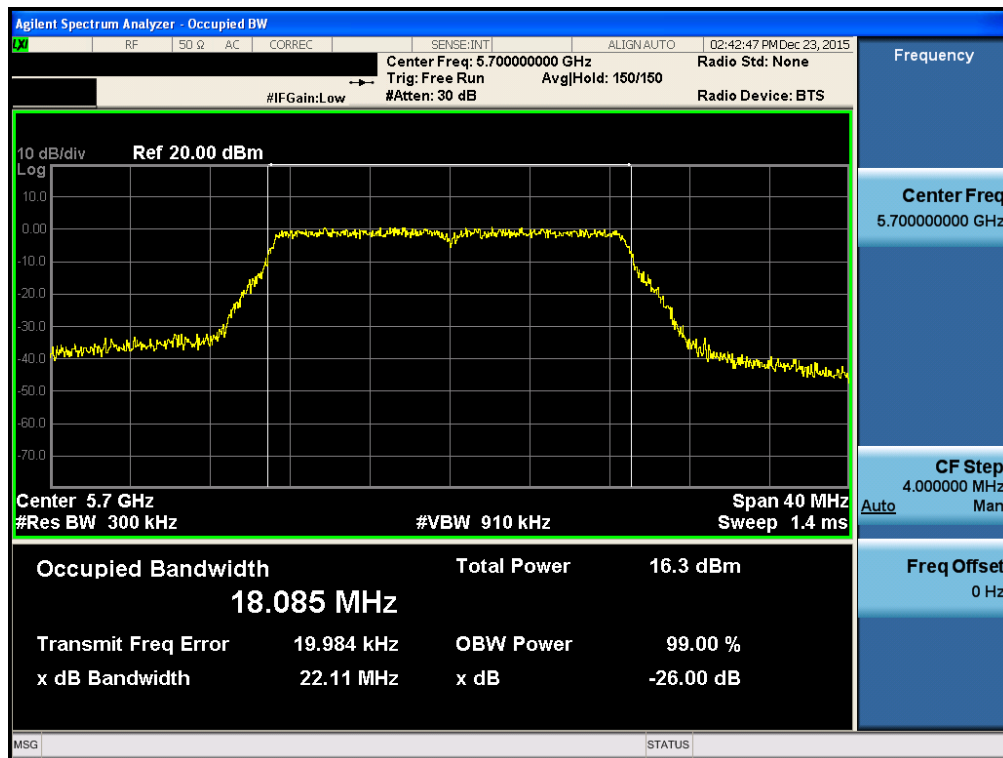
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.116



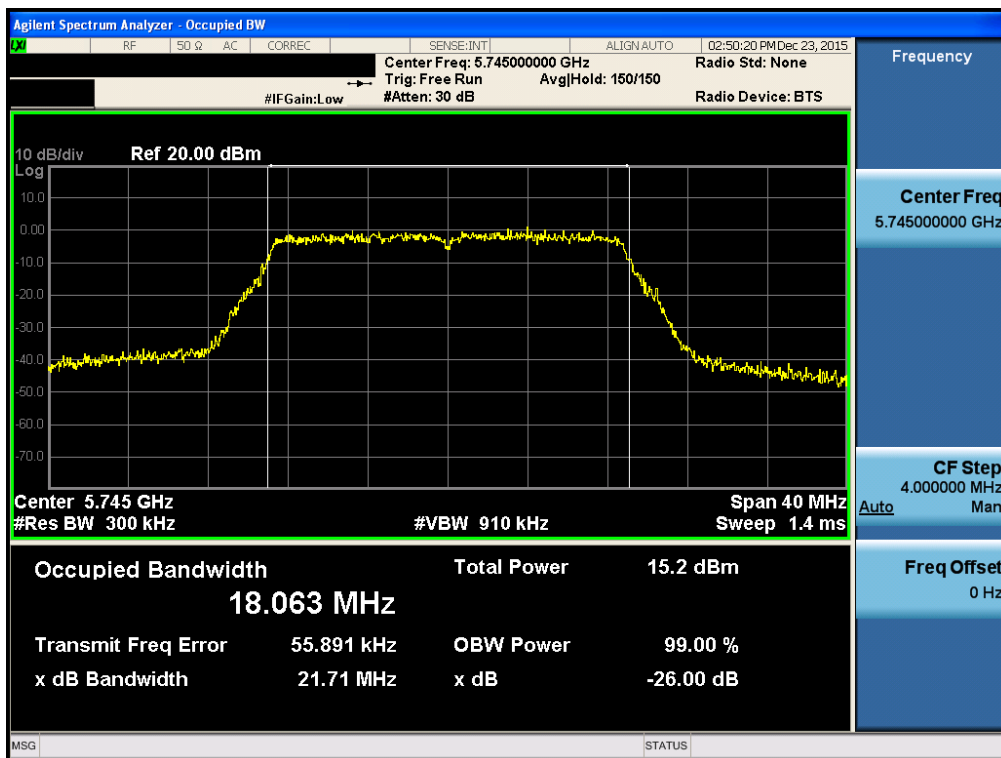
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.140



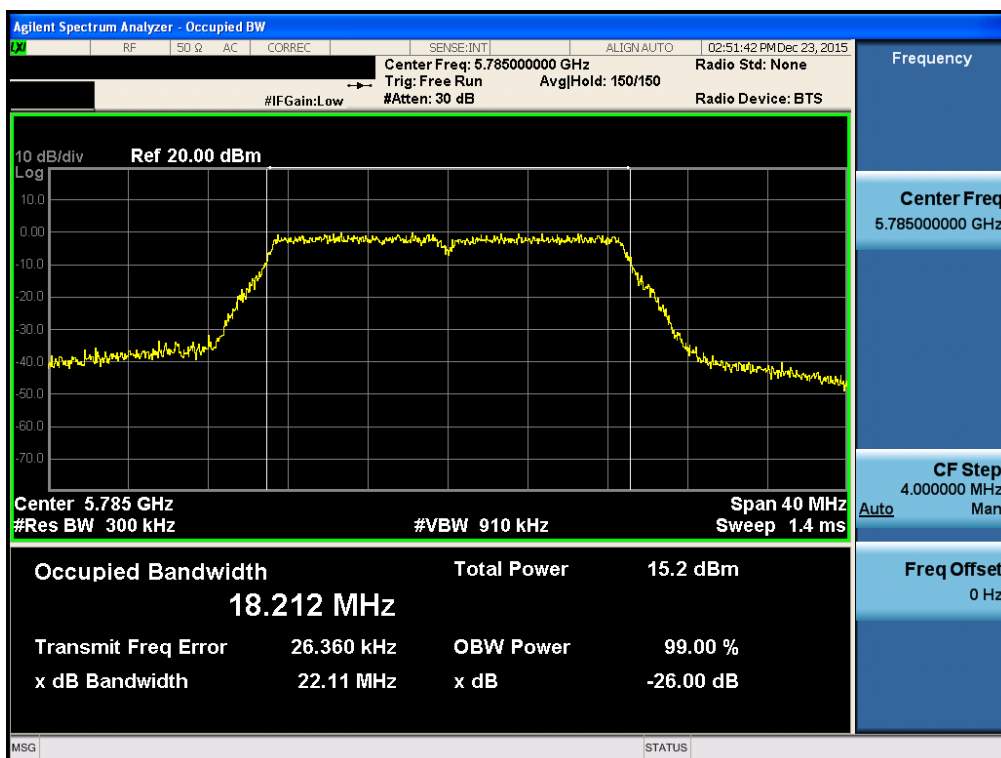
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.149



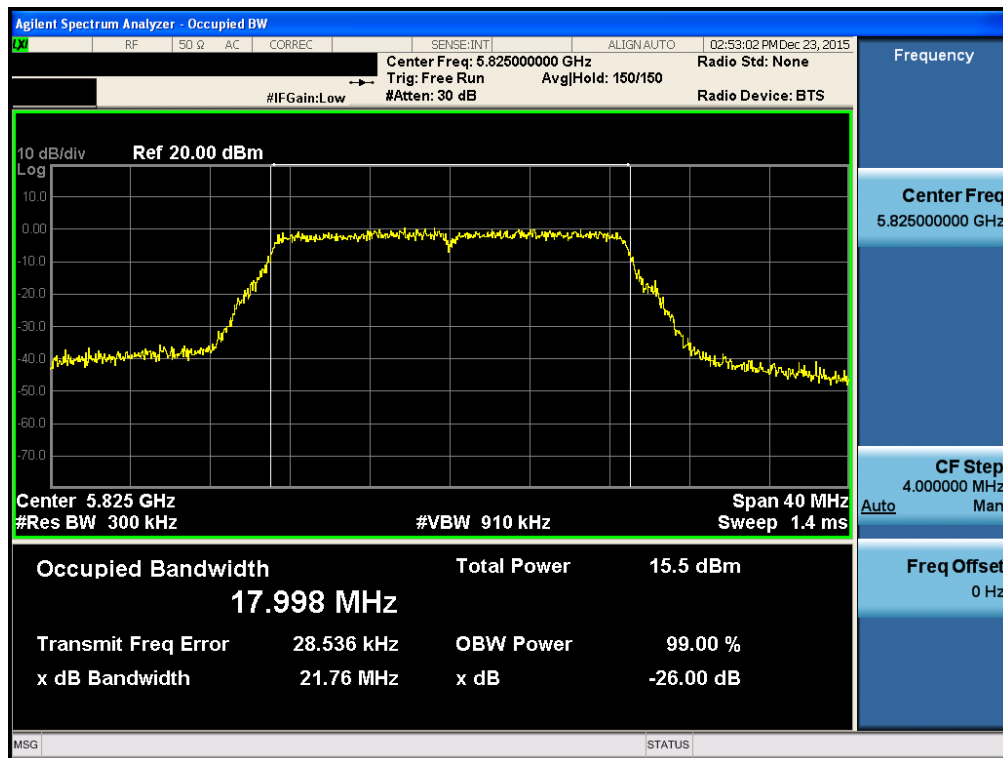
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.157



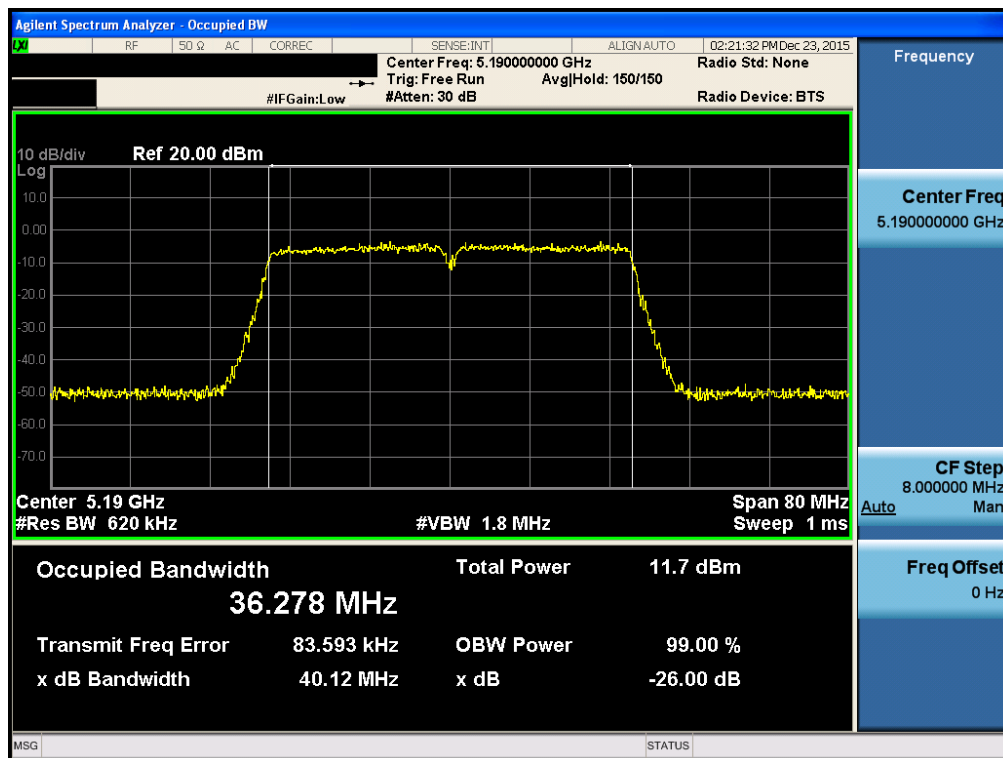
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.165



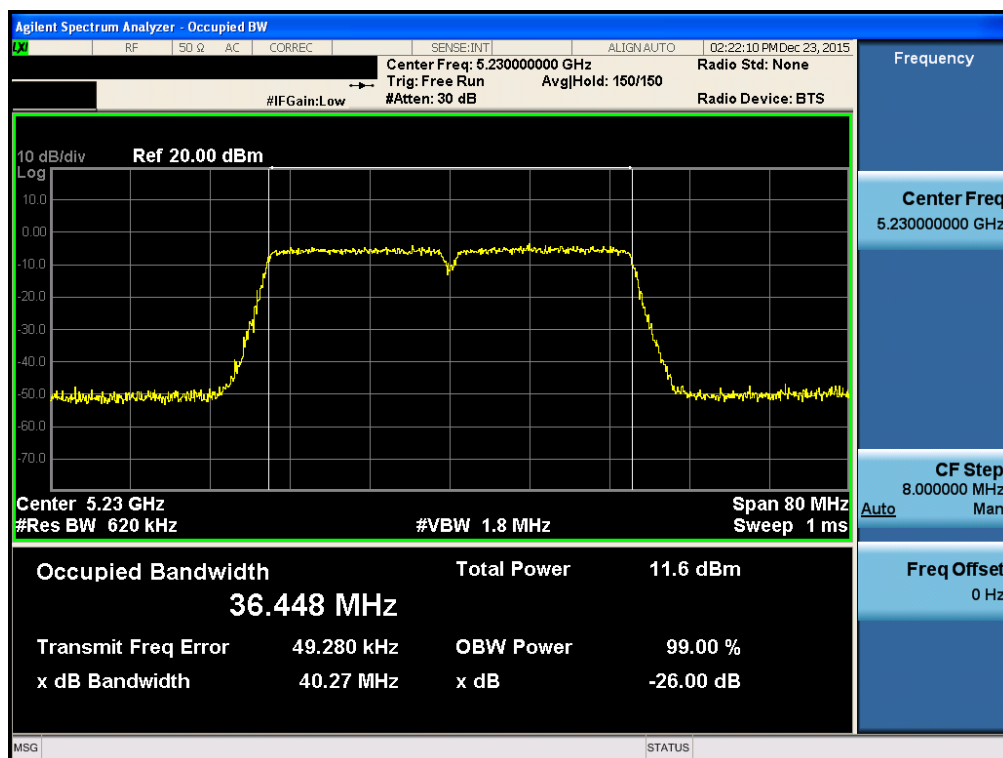
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.38



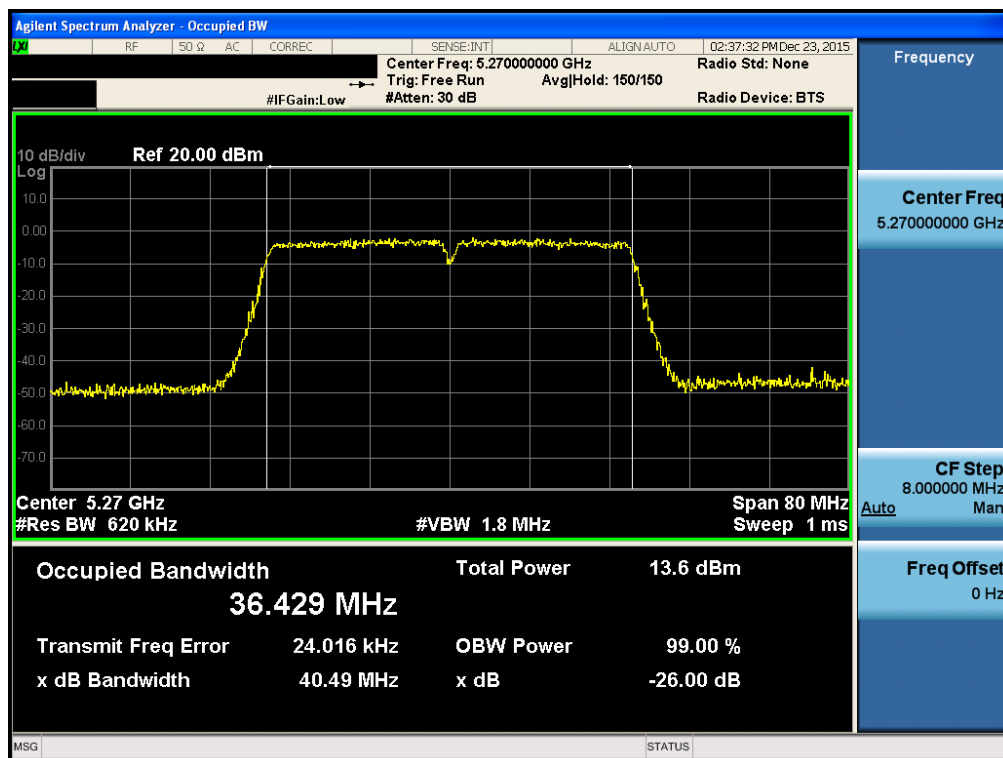
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.46



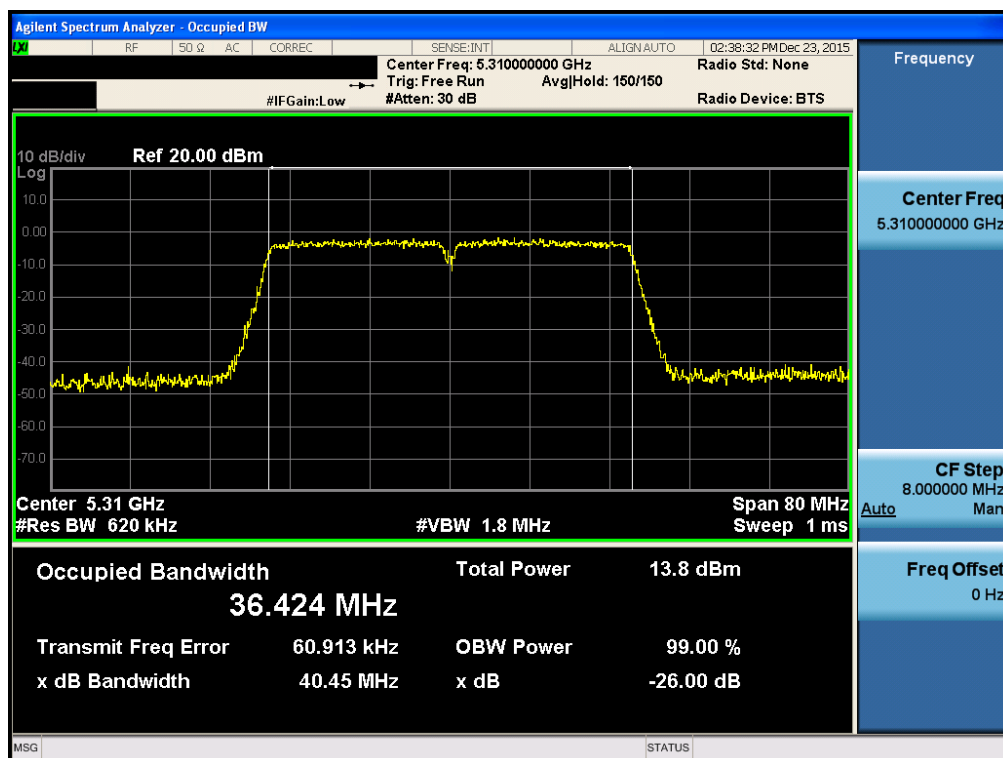
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.54



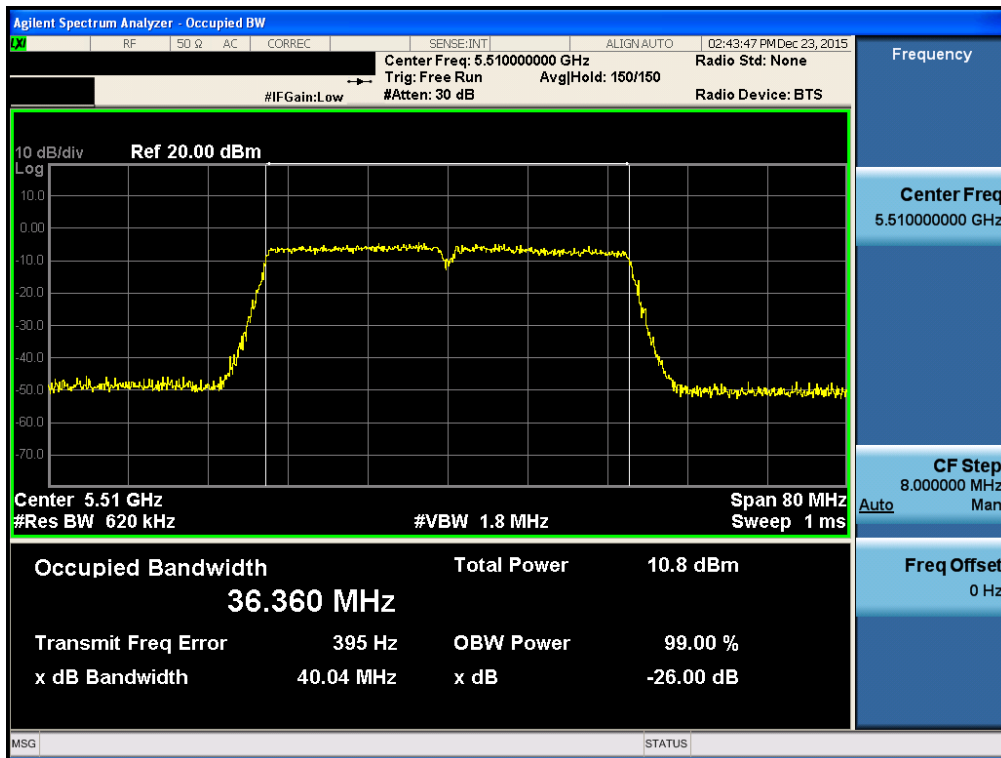
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.62



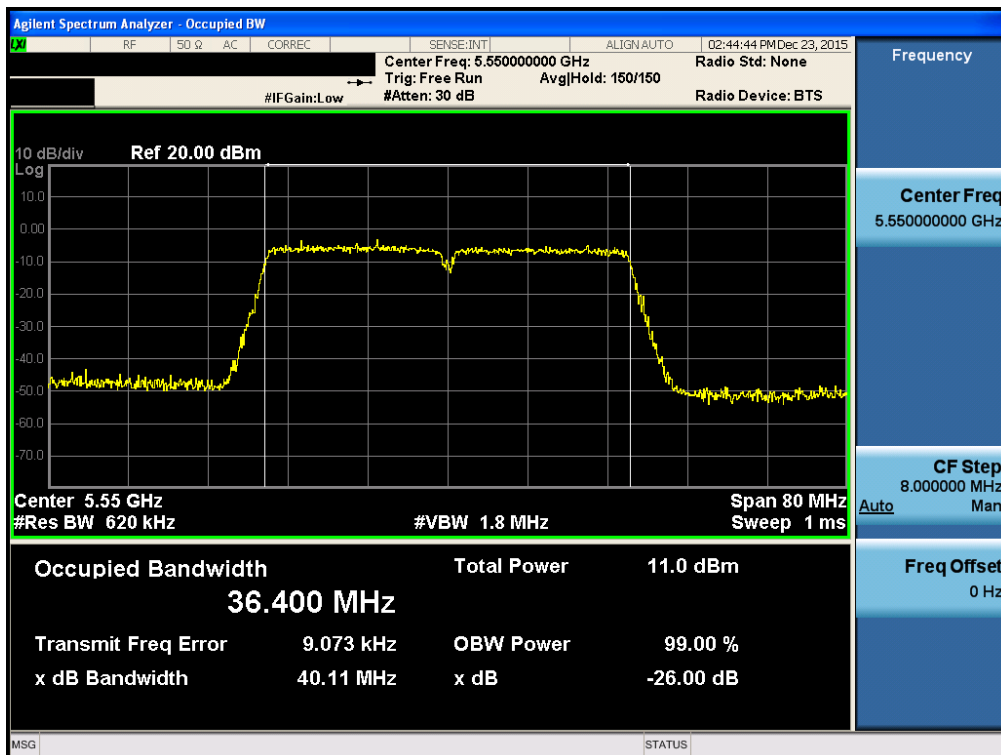
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.102



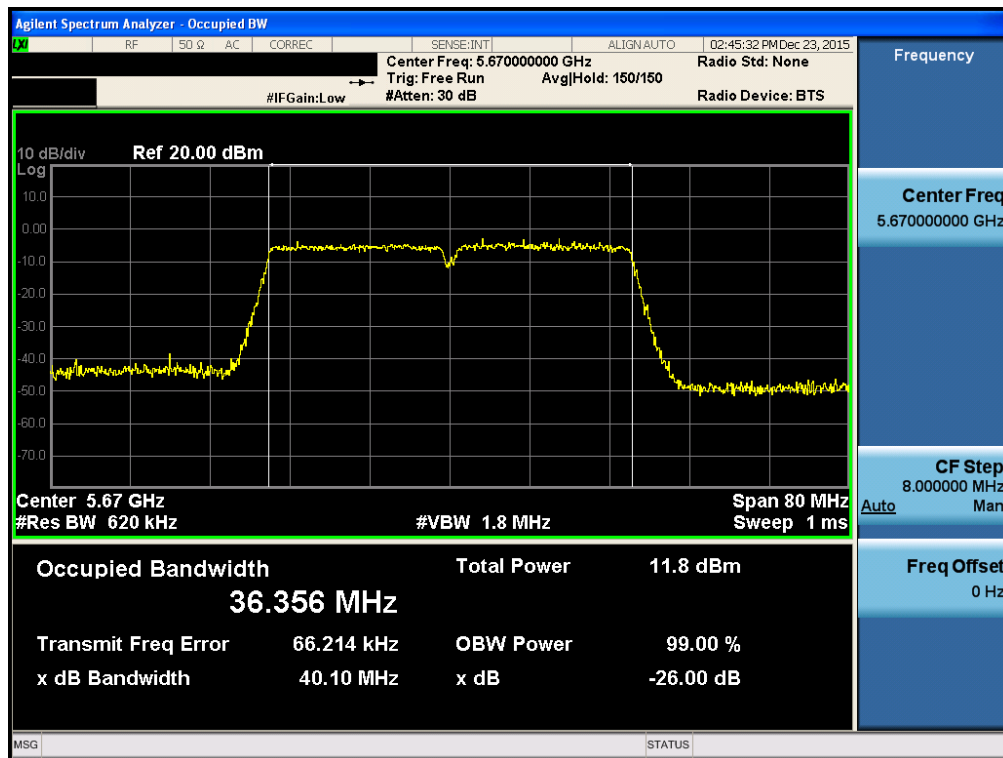
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.110



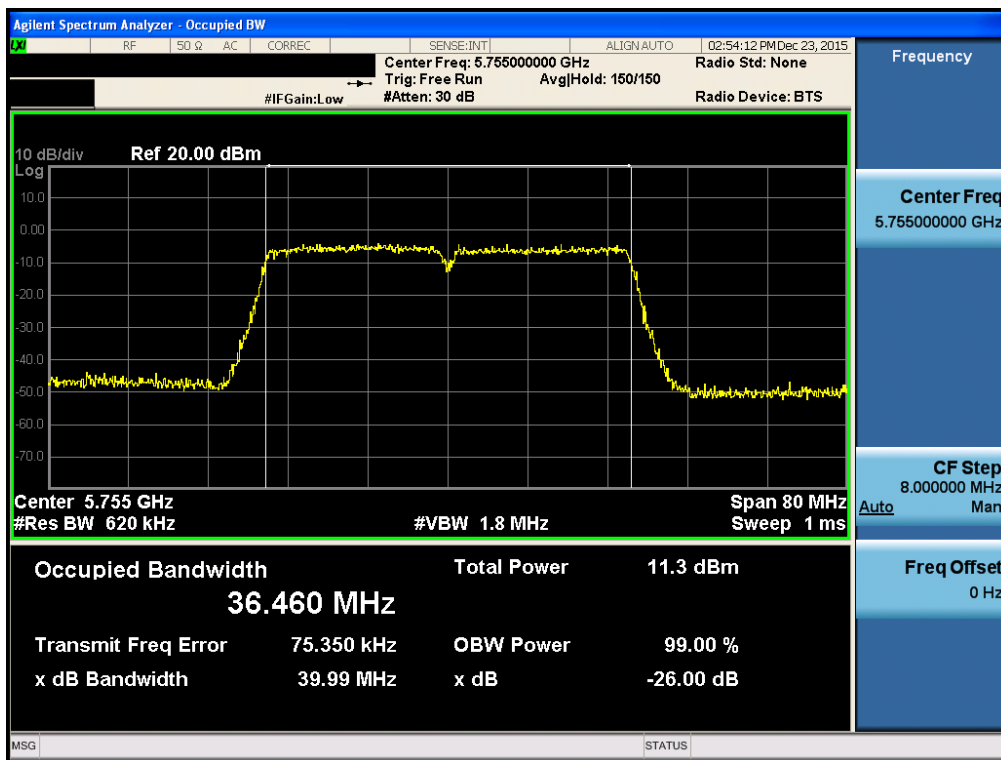
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.134



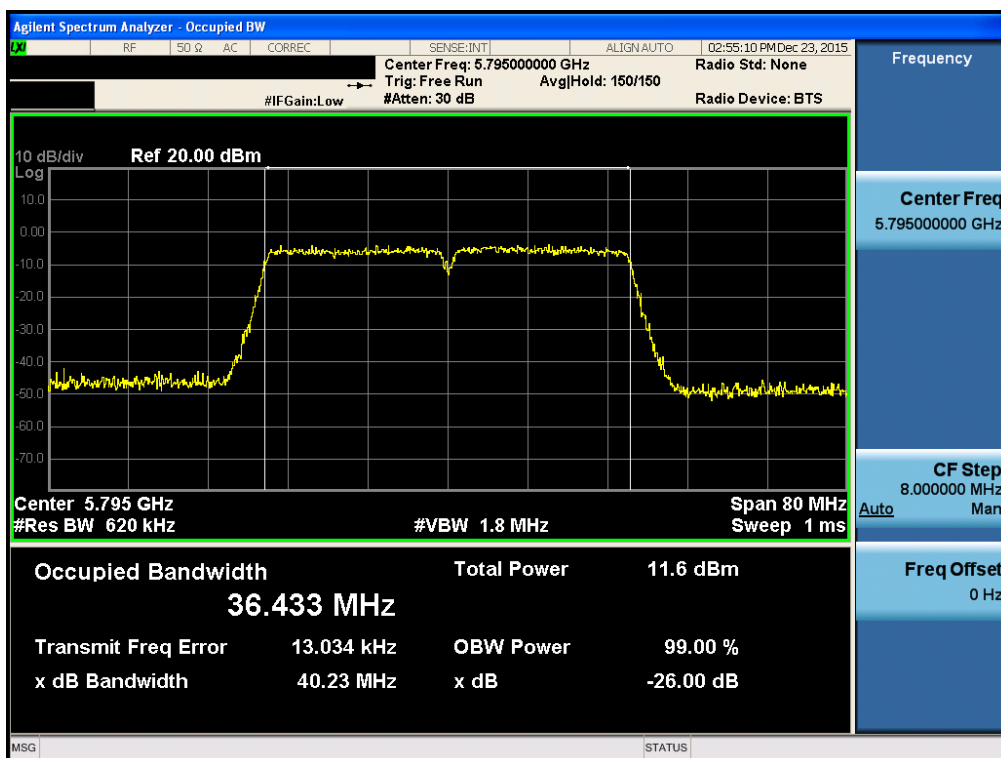
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.151



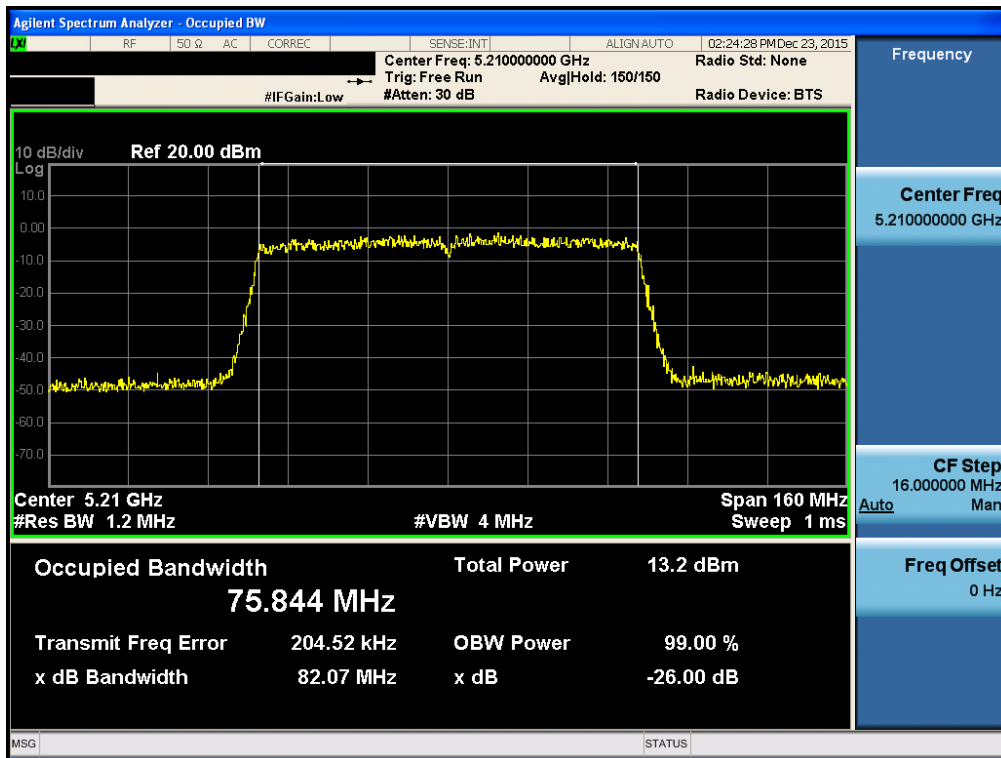
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.159



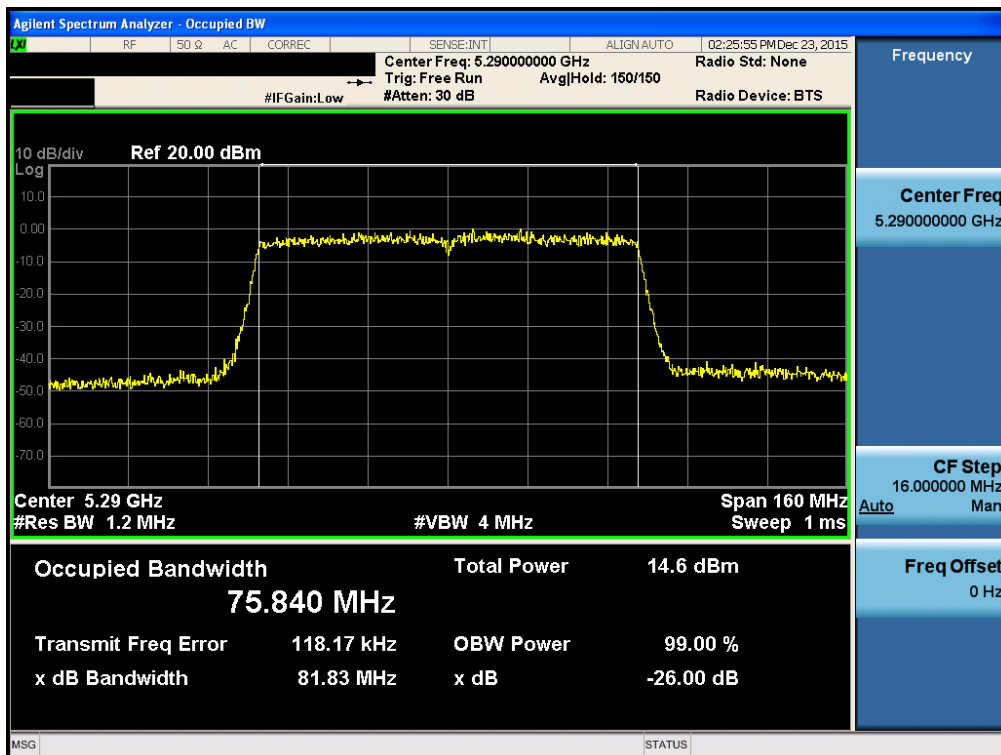
Occupied Bandwidth 99%

Test Mode: 802.11ac(VHT80) & Ch.42



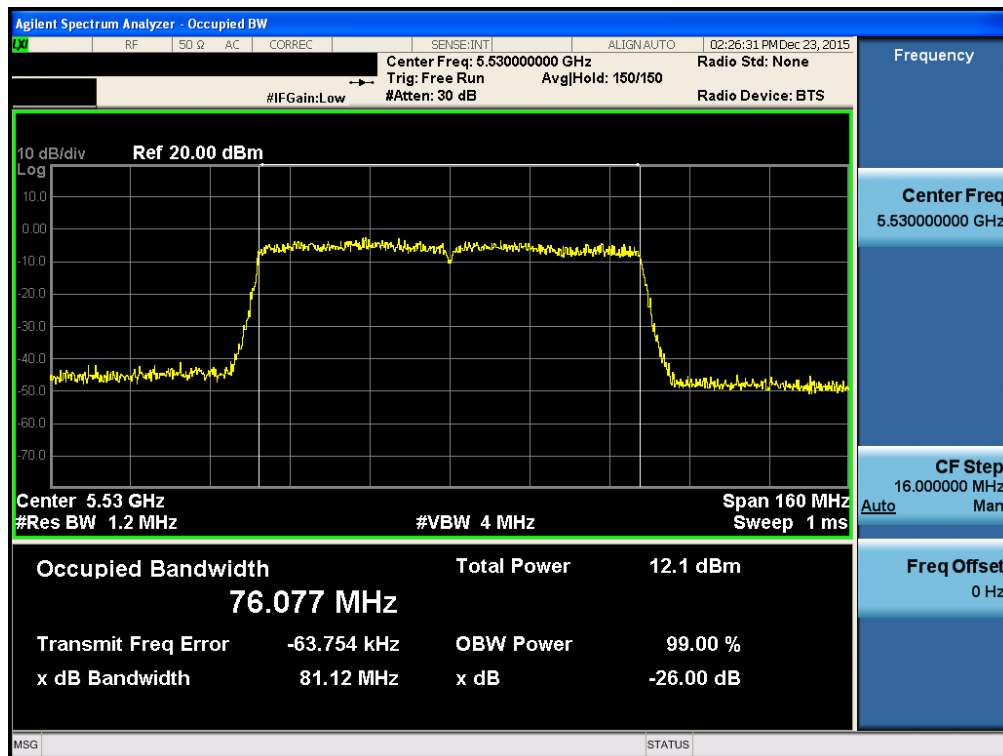
Occupied Bandwidth 99%

Test Mode: 802.11ac(VHT80) & Ch.58



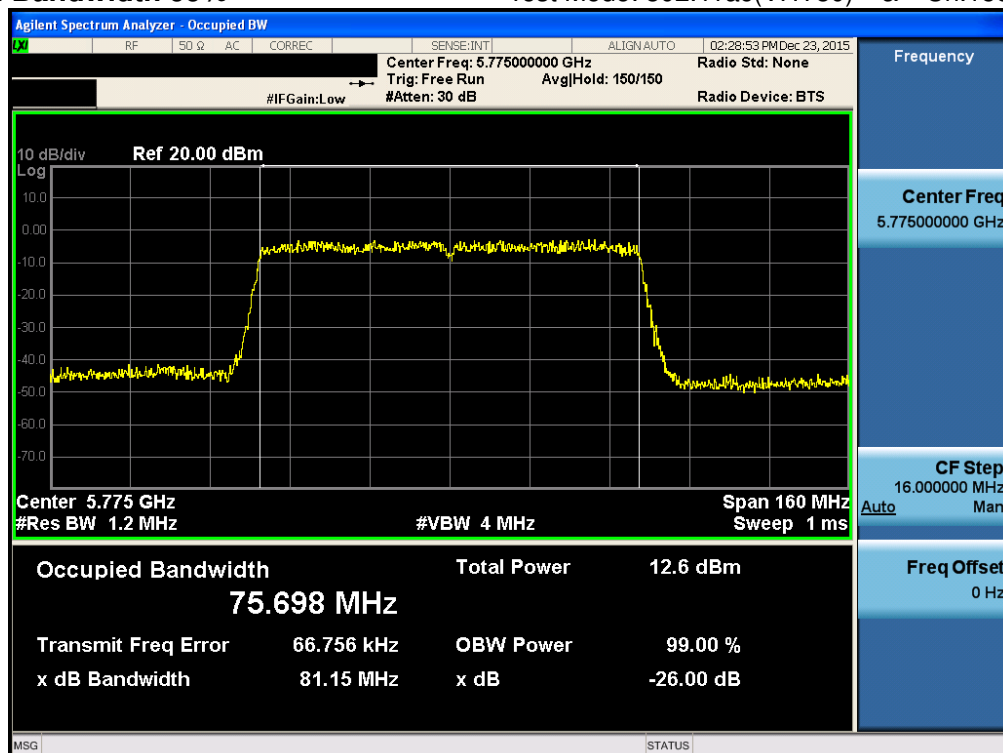
Occupied Bandwidth 99%

Test Mode: 802.11ac(VHT80) & Ch.106



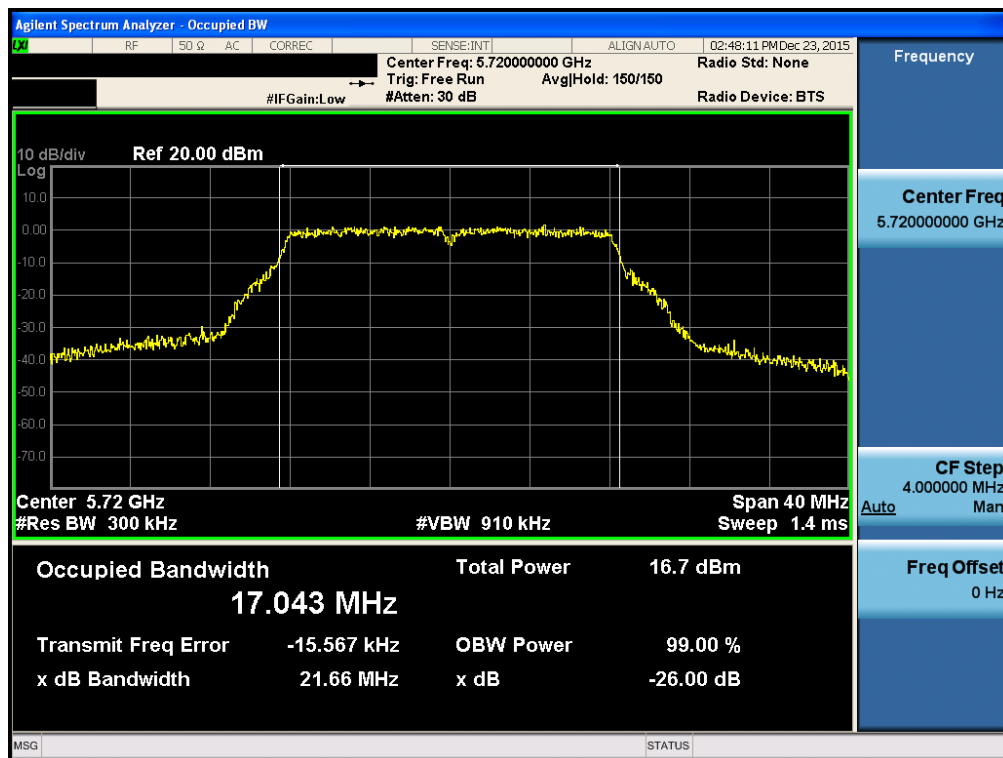
Occupied Bandwidth 99%

Test Mode: 802.11ac(VHT80) & Ch.155



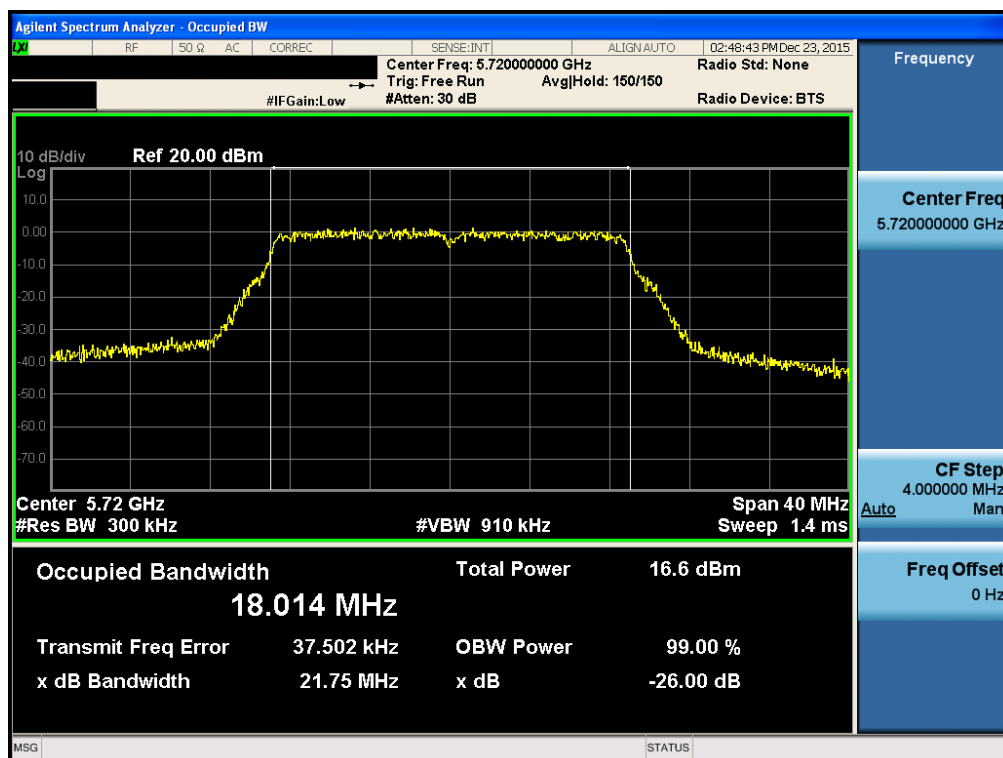
Occupied Bandwidth 99%

Test Mode: 802.11a & Ch.144



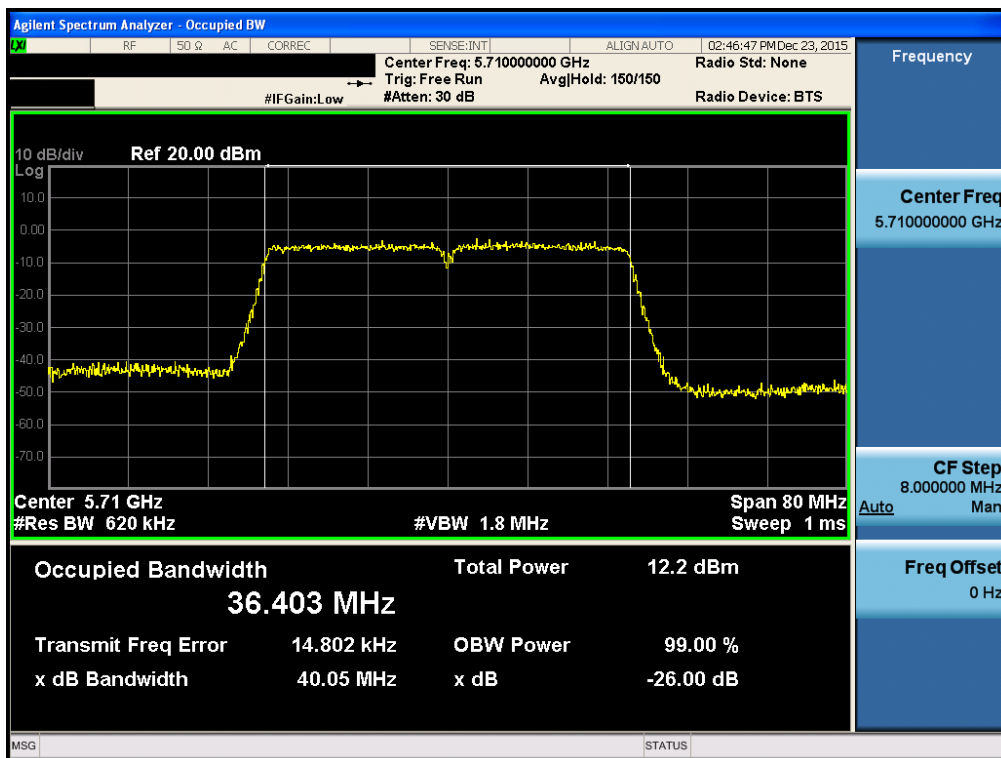
Occupied Bandwidth 99%

Test Mode: 802.11n HT20 & Ch.144



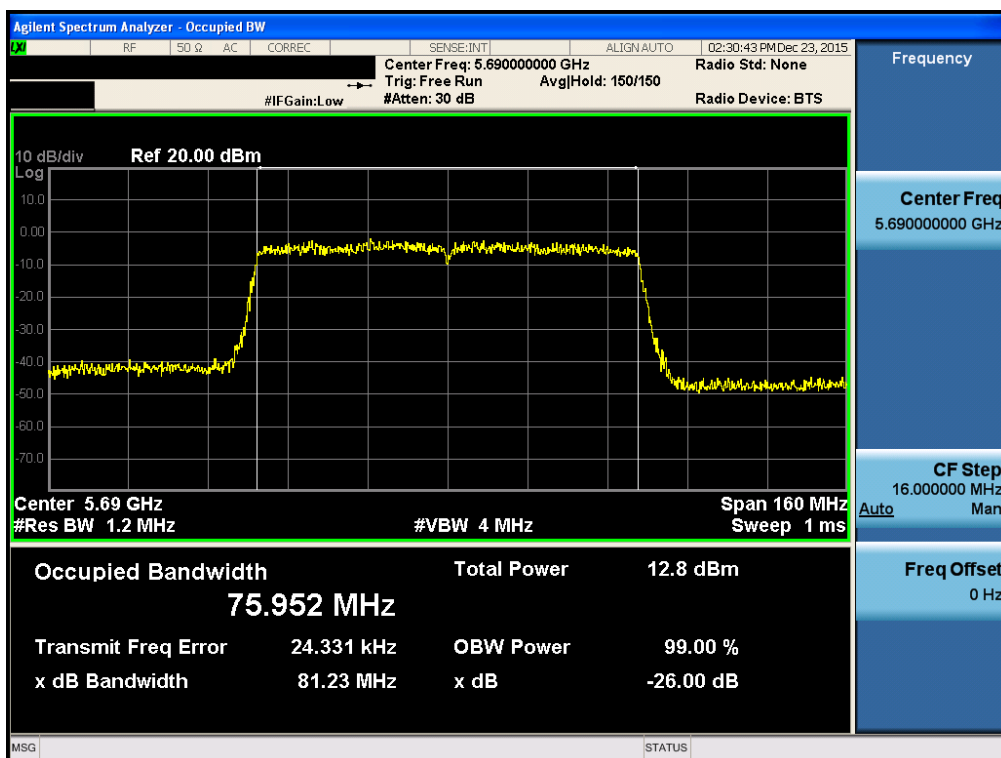
Occupied Bandwidth 99%

Test Mode: 802.11n HT40 & Ch.142



Occupied Bandwidth 99%

Test Mode: 802.11ac VHT80 & Ch.138



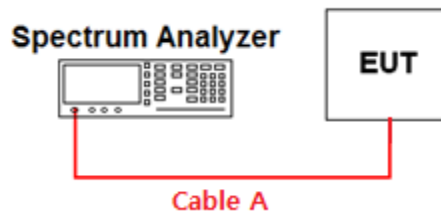
9. List of Test Equipment

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal.Date (yy/mm/dd)	S/N
MXA Signal Analyzer	Agilent Technologies	N9020A	15/10/19	16/10/19	MY48011075
MXA Signal Analyzer	Agilent Technologies	N9020A	15/09/14	16/09/14	MY50200834
PXA Signal Analyzer	Agilent Technologies	N9030A	15/10/19	16/10/19	MY53310140
DIGITAL MULTIMETER	Agilent Technologies	34401A	15/01/06	16/01/06	US36099541
			16/01/05	17/01/05	
Dynamic Measurement DC Source	Agilent Technologies	66332A	15/09/23	16/09/23	US37473305
Vector Signal Generator	Rohde Schwarz	SMBV100A	15/01/06	16/01/06	255571
			16/01/05	17/01/05	
Signal Generator	Rohde Schwarz	SMF100A	15/06/29	16/06/29	102341
10dB Attenuator	Aeroflex/Weinschel	86-10-11	15/09/09	16/09/09	446
Thermohygrometer	BODYCOM	BJ5478	15/05/08	16/05/08	120612-2
Temp & Humi Test Chamber	SJ Science	SJ-TH-S50	15/02/26	16/02/26	SJ-TH-S50-140205
LOOP Antenna	Schwarzbeck	FMZB1513	14/04/29	16/04/29	1513-128
TRILOG Broadband Test-Antenna	Schwarzbeck	VULB 9160	14/04/30	16/04/30	3358
Double-Ridged Guide Antenna	ETS	3115	15/02/09	17/02/09	9202-3820
Horn Antenna	A.H.Systems	SAS-574	15/04/30	17/04/30	154
Low Noise Pre Amplifier	tsj	MLA-010K01-B01-27	14/04/09	16/04/09	1844538
PreAmplifier	Agilent	8449B	15/02/26	16/02/26	3008A00370
PreAmplifier	A.H. SYSTEMS	PAM-1840VH	14/12/12	15/12/12	163
			15/12/03	16/12/03	
EMI TEST RECEIVER	Rohde Schwarz	ESR7	15/10/19	16/10/19	101109
Highpass Filter	Wainwright Instruments	WHNX6-6320-8000- 26500-40CC	15/09/23	16/09/23	1
Power Meter Power Sensor	Anritsu	ML2495A MA2490A	15/03/26	16/03/26	1306007 1249001

APPENDIX I

Conducted Test set up Diagram

▪ Conducted Measurement



APPENDIX II

Duty Cycle Information

■ Test Procedure

Duty Cycle [$X = \text{On Time} / (\text{On} + \text{Off time})$] is measured using Measurement Procedure of KDB789033 D02 V01

1. Set the center frequency of the spectrum analyzer to the center frequency of the transmission.
2. Set RBW $\geq$ EBW if possible; otherwise, set RBW to the largest available value.
3. Set VBW $\geq$ RBW. Set detector = peak.
4. Note : The zero-span measurement method shall not be used unless both **RBW and VBW are $> 50 / T$** , where T is defined in section II.B.1.a), and **the number of sweep points across duration T exceeds 100**. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

T : The minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

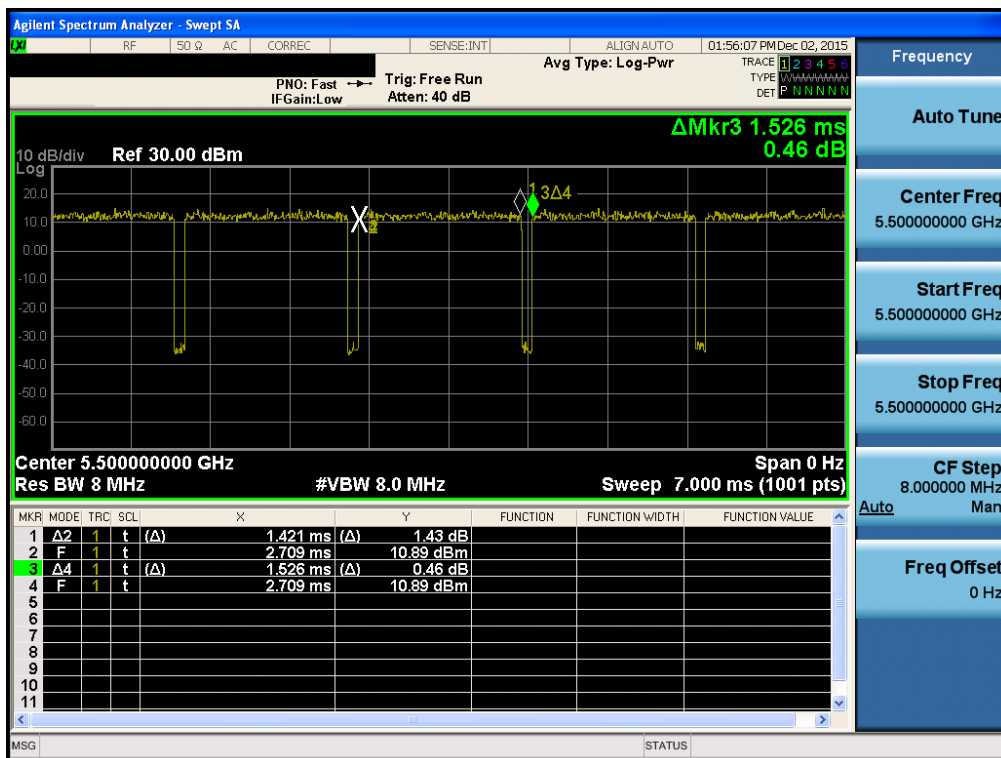
($T = \text{On time}$ of the above table since the EUT operates with above fixed Duty Cycle and it is the minimum On time)

TEST DATA

Mode	Channel	Tested Frequency [MHz]	Maximum Achievable Duty Cycle (x) = On / (On+Off)			Duty Cycle Correction Factor [dB]	50/ T [kHz]
			On Time [ms]	On+OffTime [ms]	x		
802.11a	100	5500	1.421	1.526	0.93	0.32	35.19
802.11n (HT20)	100	5500	1.337	1.442	0.92	0.37	37.40
802.11n (HT40)	102	5510	0.663	0.765	0.86	0.66	75.41
802.11ac (VHT80)	106	5530	0.332	0.434	0.76	1.20	150.60

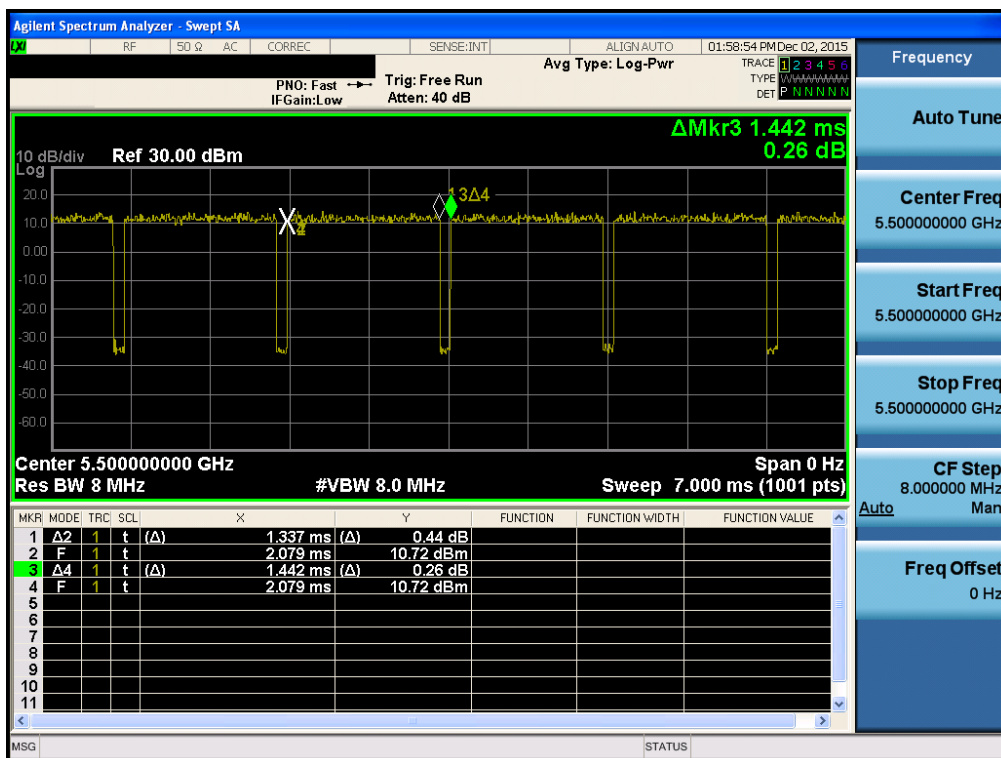
Duty Cycle

Test Mode: 802.11a & Ch.100

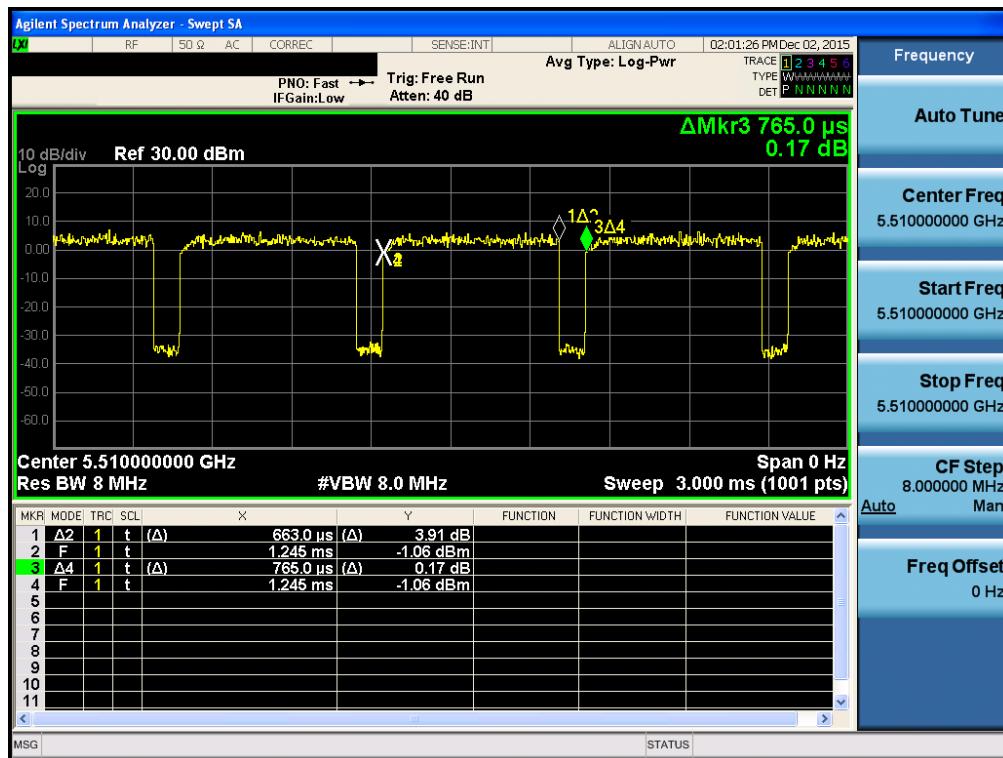


Duty Cycle

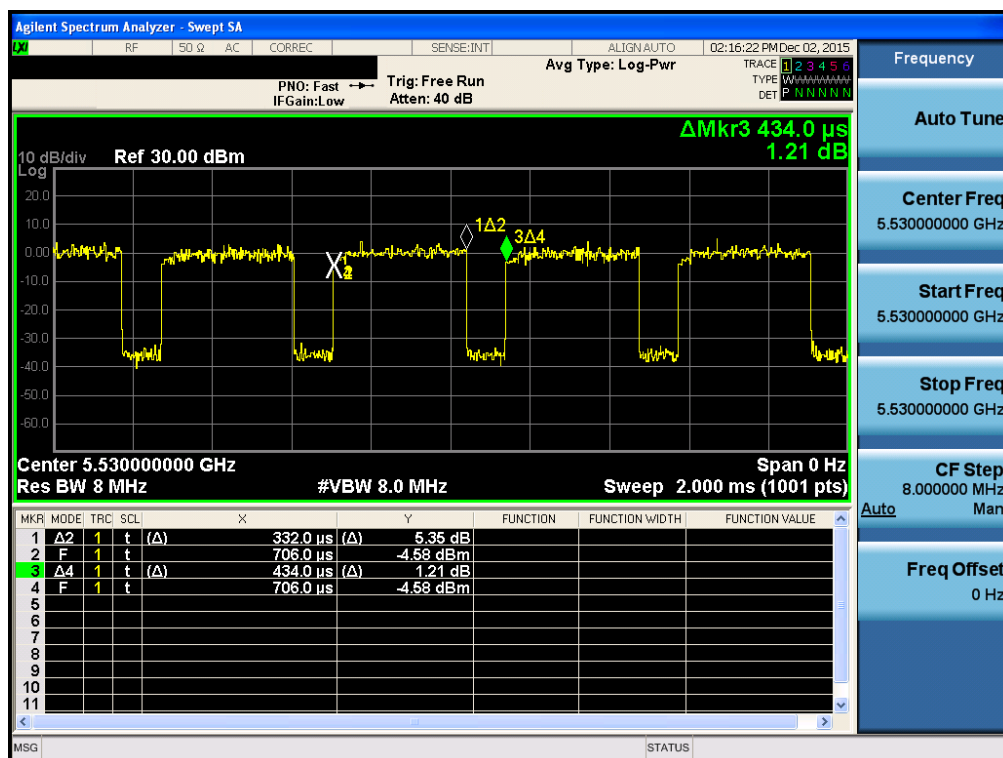
Test Mode: 802.11n(HT20) & Ch.100



Test Mode: 802.11n HT40 & Ch.102



Test Mode: 802.11ac VHT80 & Ch.106

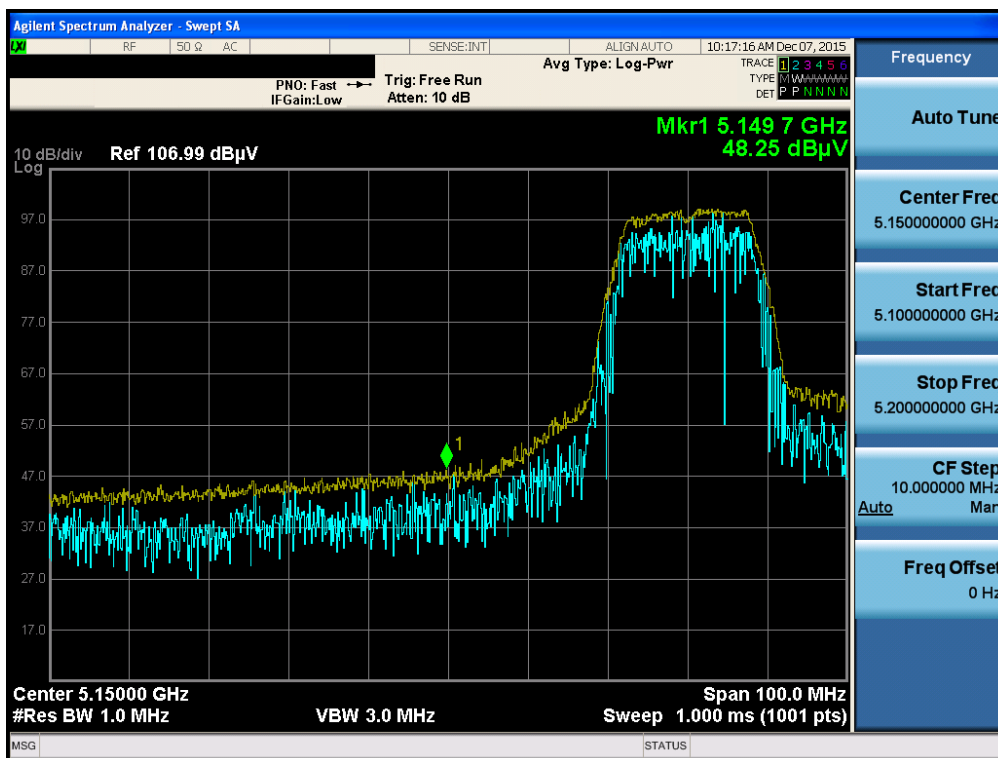


APPENDIX III

Unwanted Emissions (Radiated) Test Plot

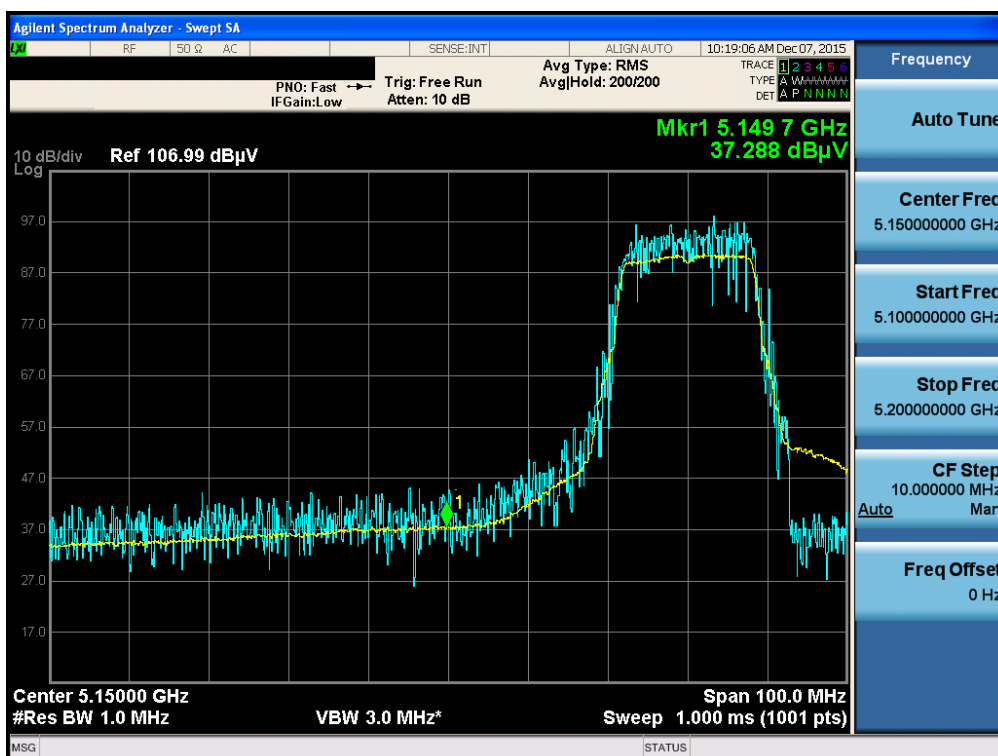
802.11a & U-NII 1 & Ch.36 & X axis & Hor

Detector Mode : PK



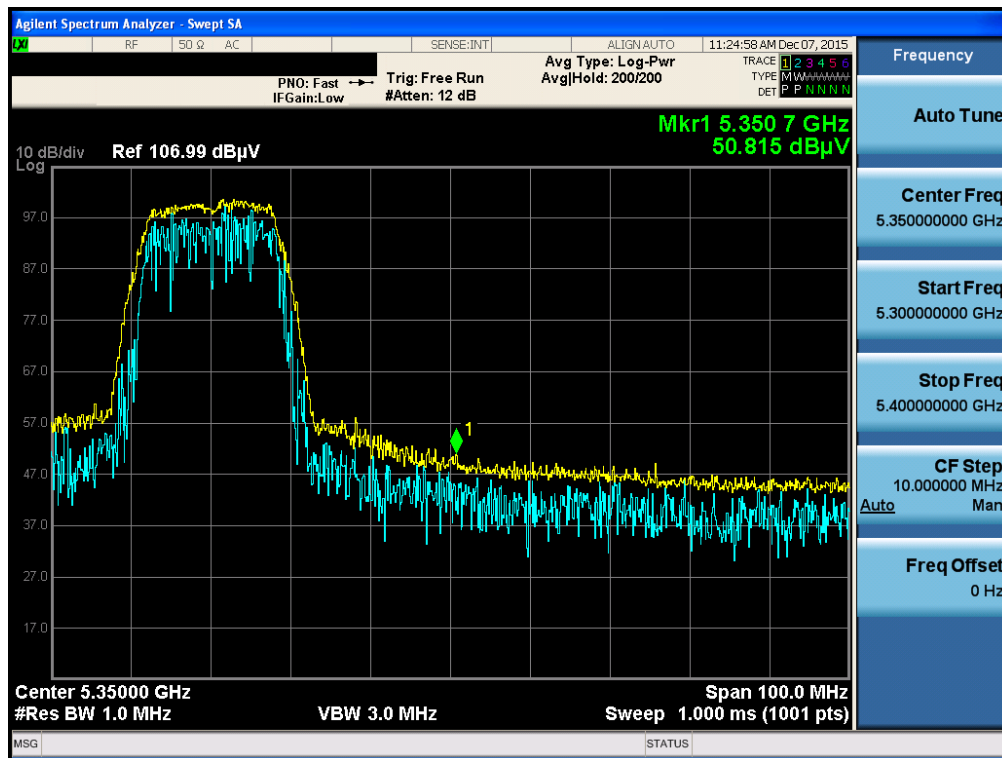
802.11a & U-NII 1 & Ch.36 & X axis & Hor

Detector Mode : AV



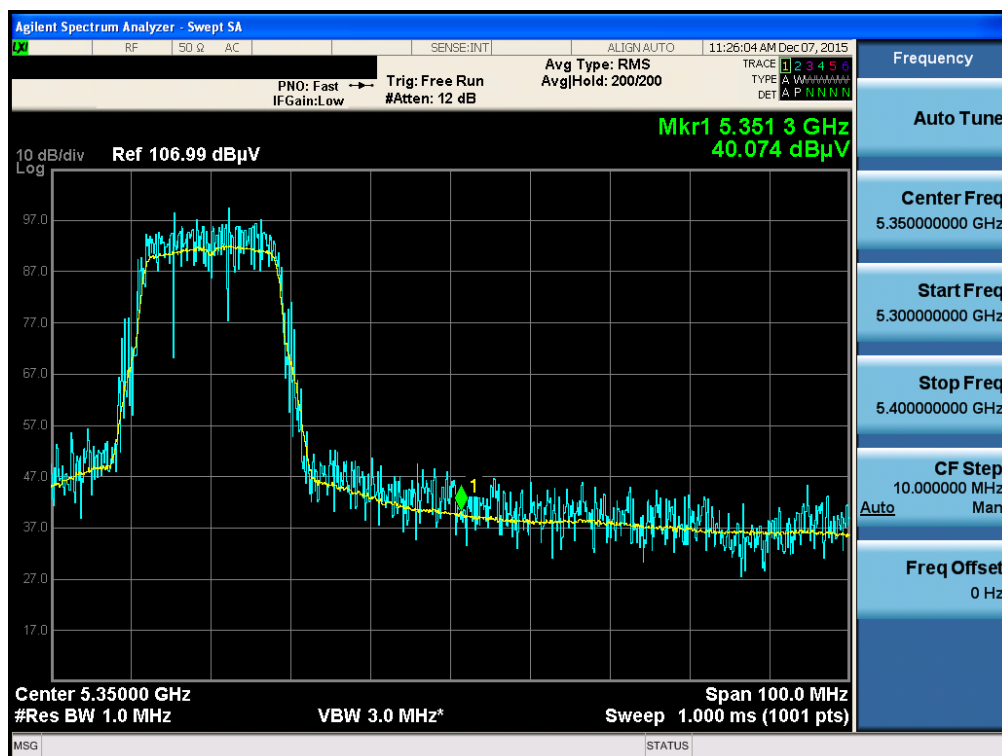
802.11a & U-NII 2A & Ch.64 & X axis & Hor

Detector Mode : PK



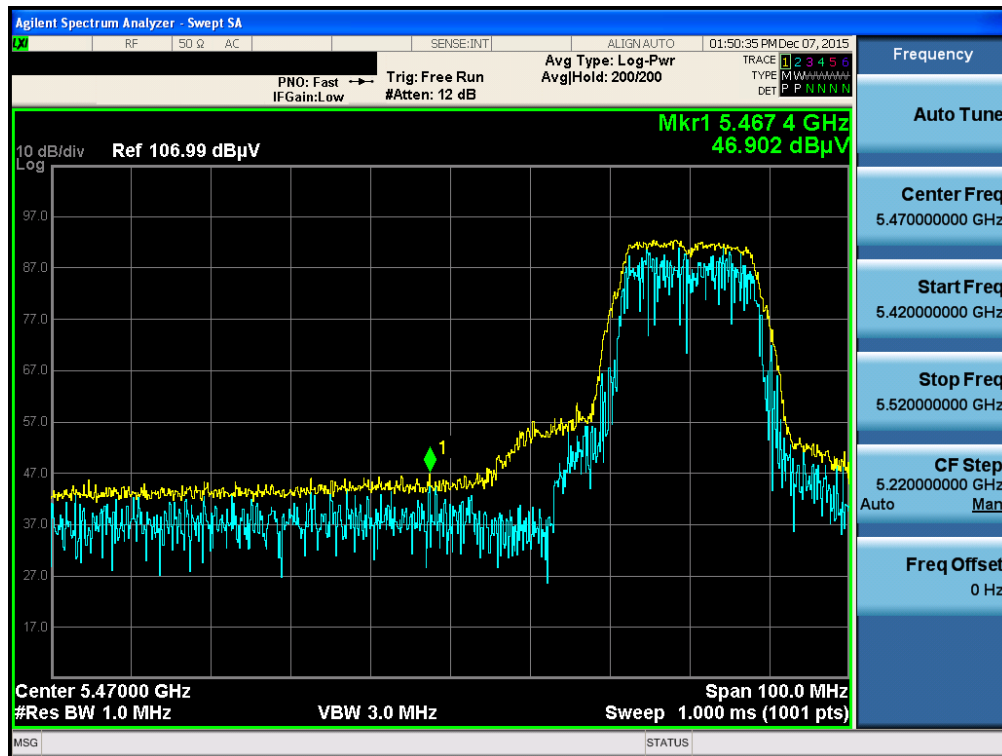
802.11a & U-NII 2A & Ch.64 & X axis & Hor

Detector Mode : AV



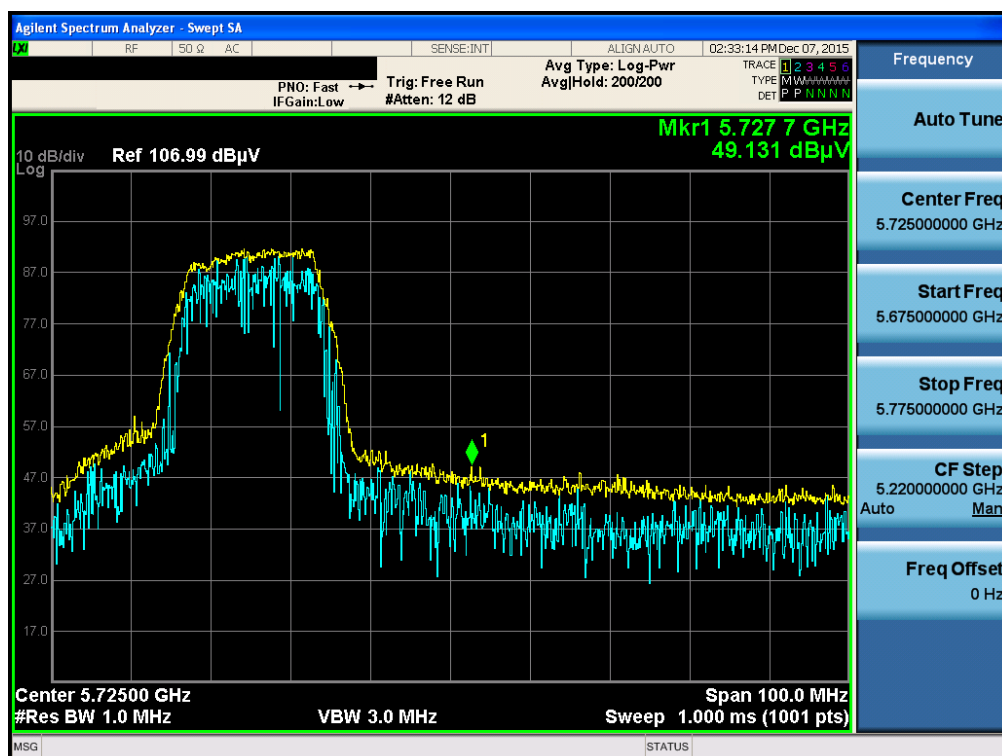
802.11a & U-NII 2C & Ch.100 & X axis & Hor

Detector Mode : PK



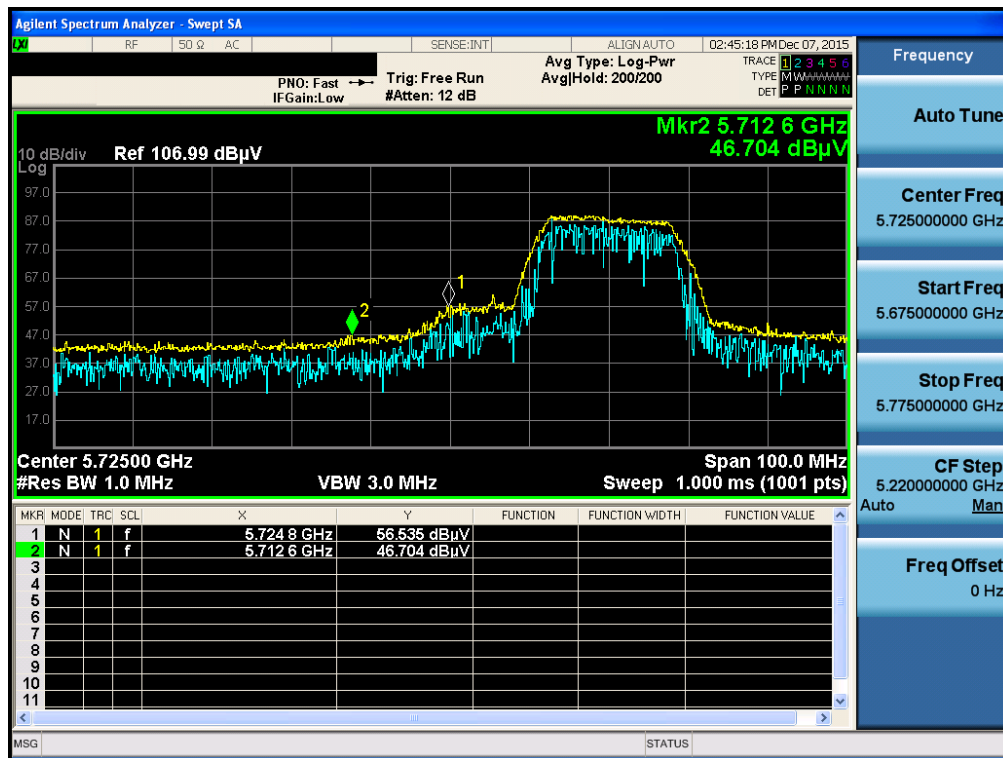
802.11a & U-NII 2C & Ch.140 & X axis & Hor

Detector Mode : PK



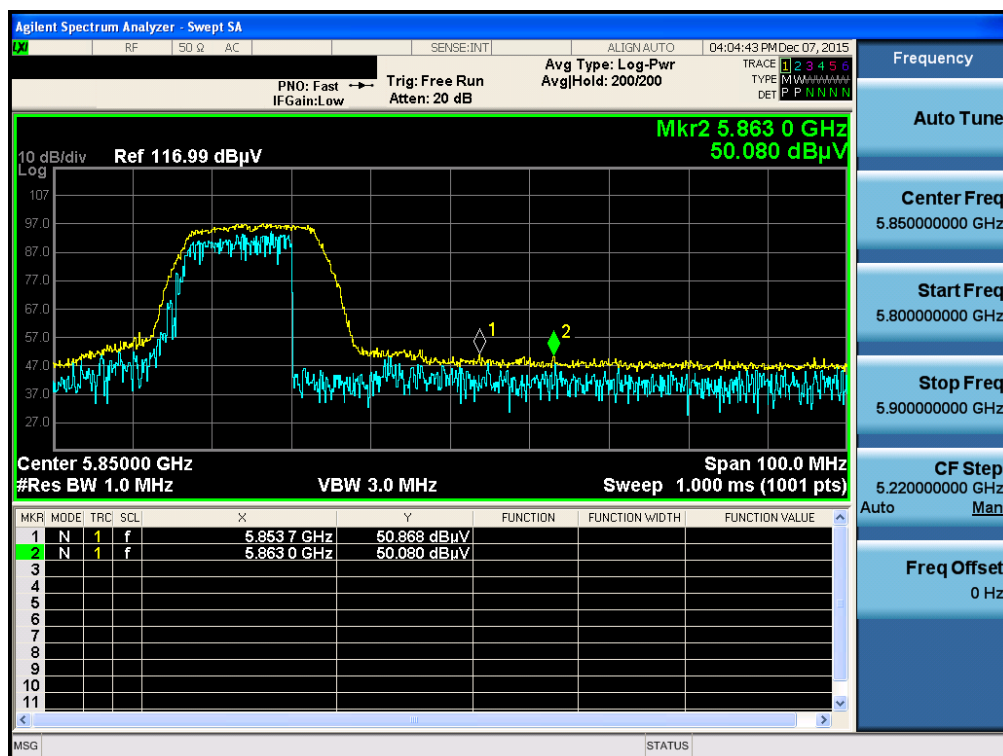
802.11a & U-NII 3 & Ch.149 & X axis & Hor

Detector Mode : PK

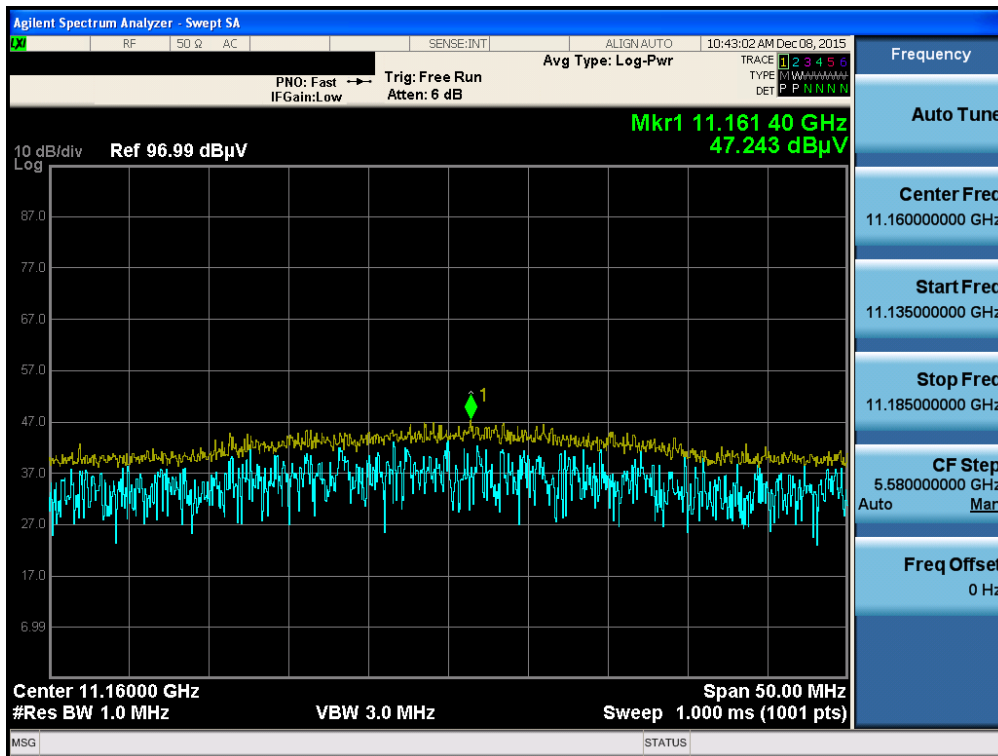


802.11a & U-NII 3 & Ch.165 & X axis & Hor

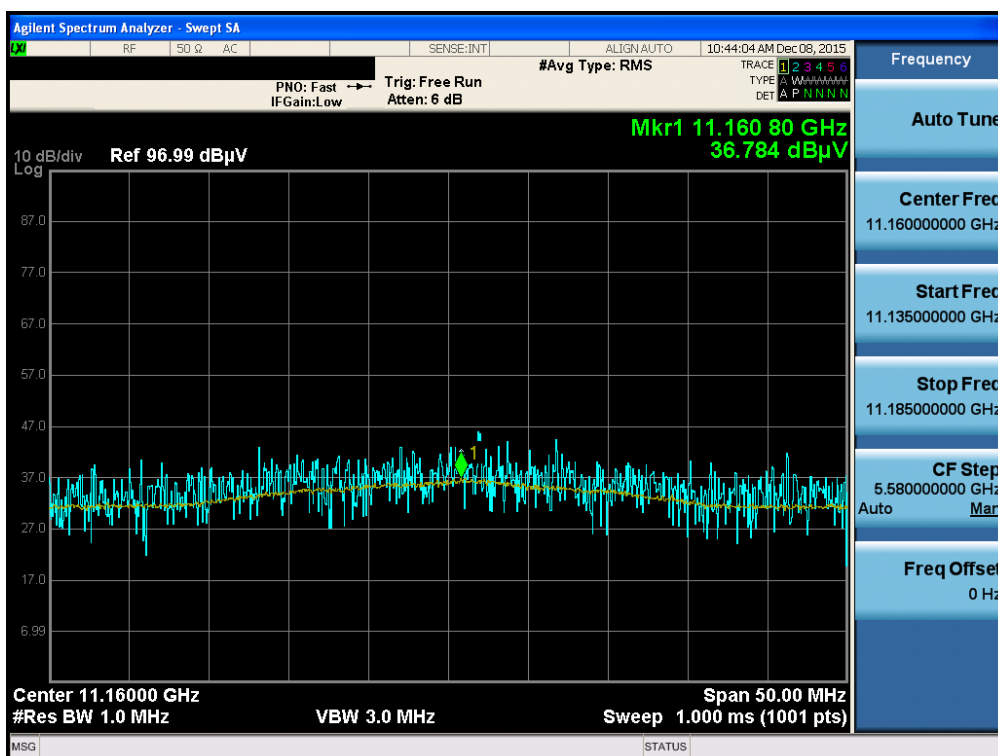
Detector Mode : PK



Detector Mode : PK

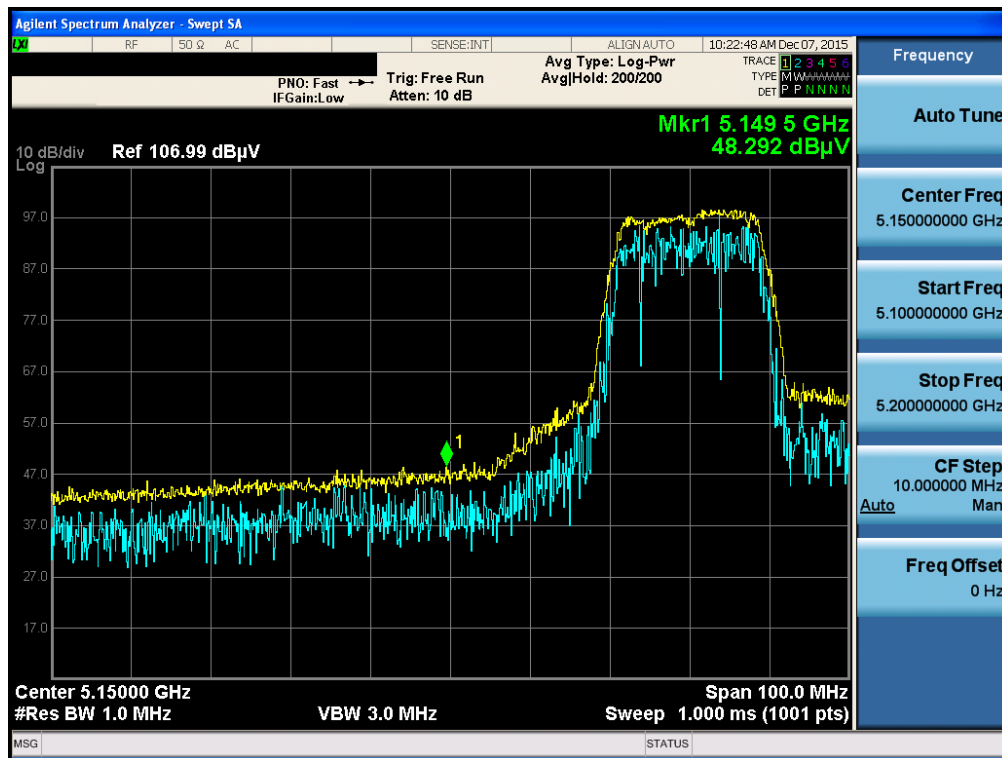


Detector Mode : AV



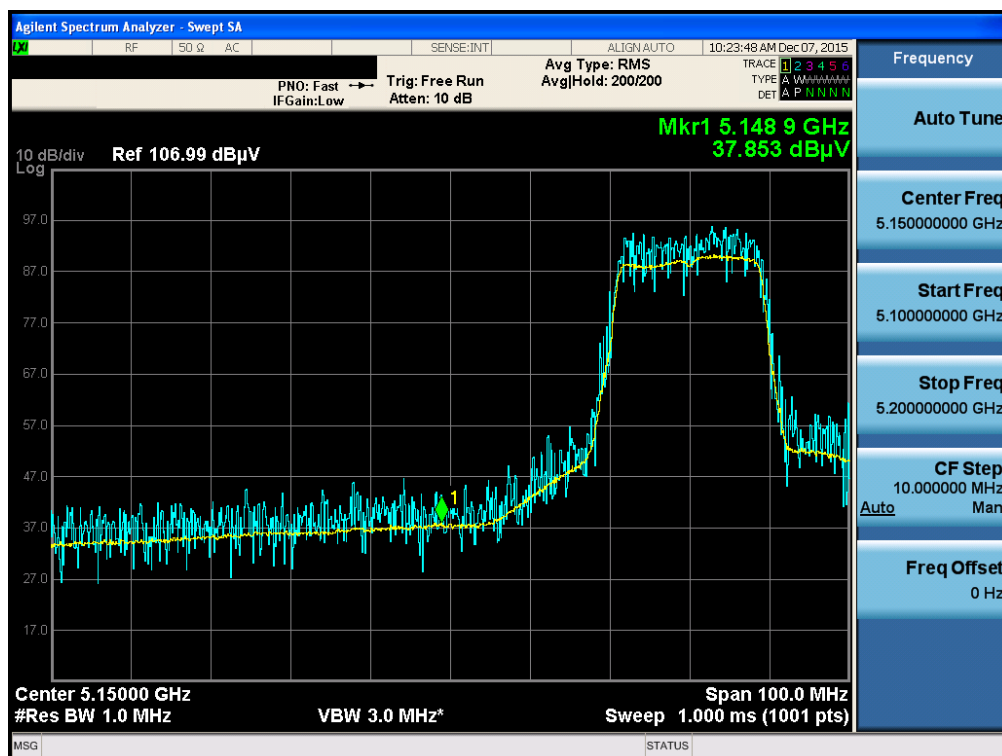
802.11n(HT20) & U-NII 1 & Ch.36 & X axis & Hor

Detector Mode : PK



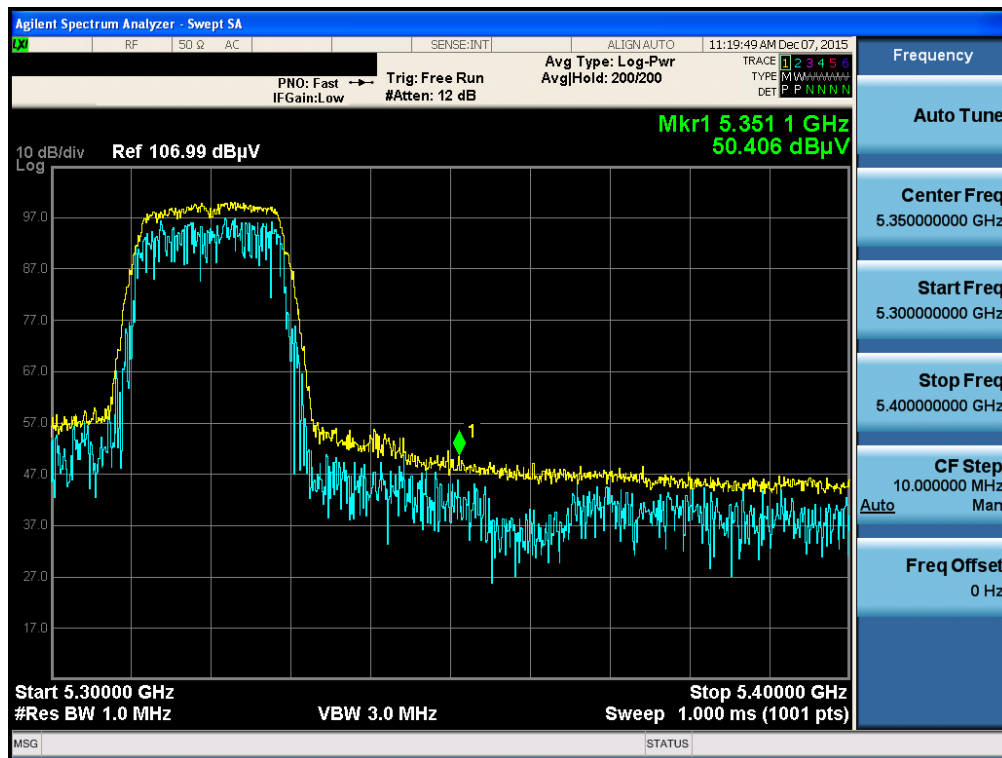
802.11n(HT20) & U-NII 1 & Ch.36 & X axis & Hor

Detector Mode : AV



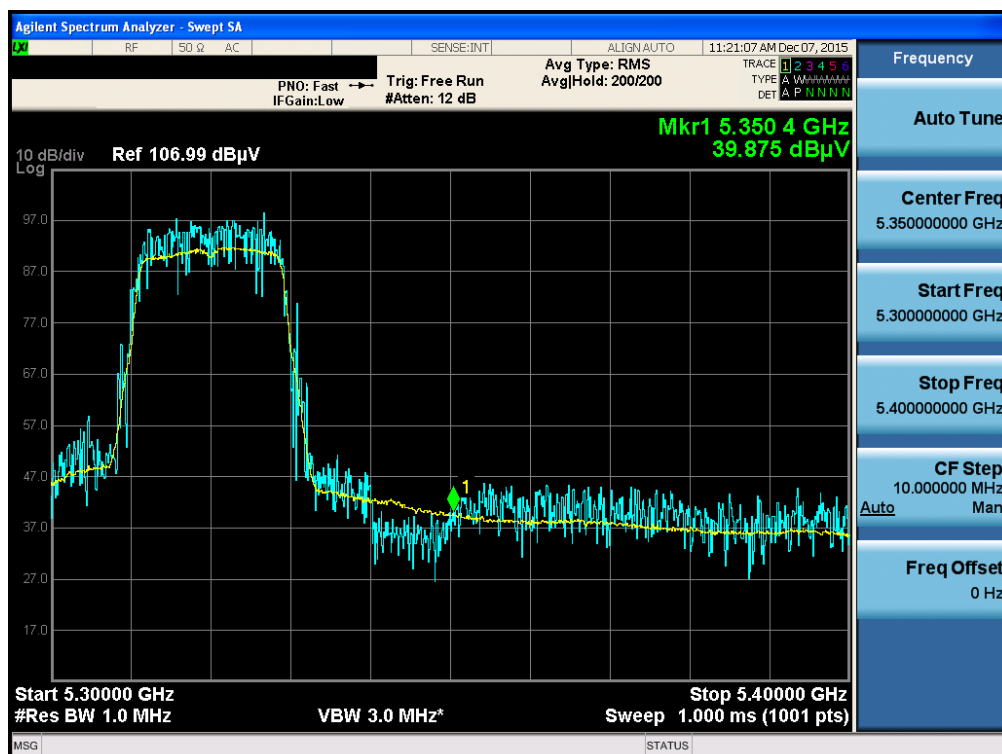
802.11n(HT20) & U-NII 2A & Ch.64 & X axis & Hor

Detector Mode : PK



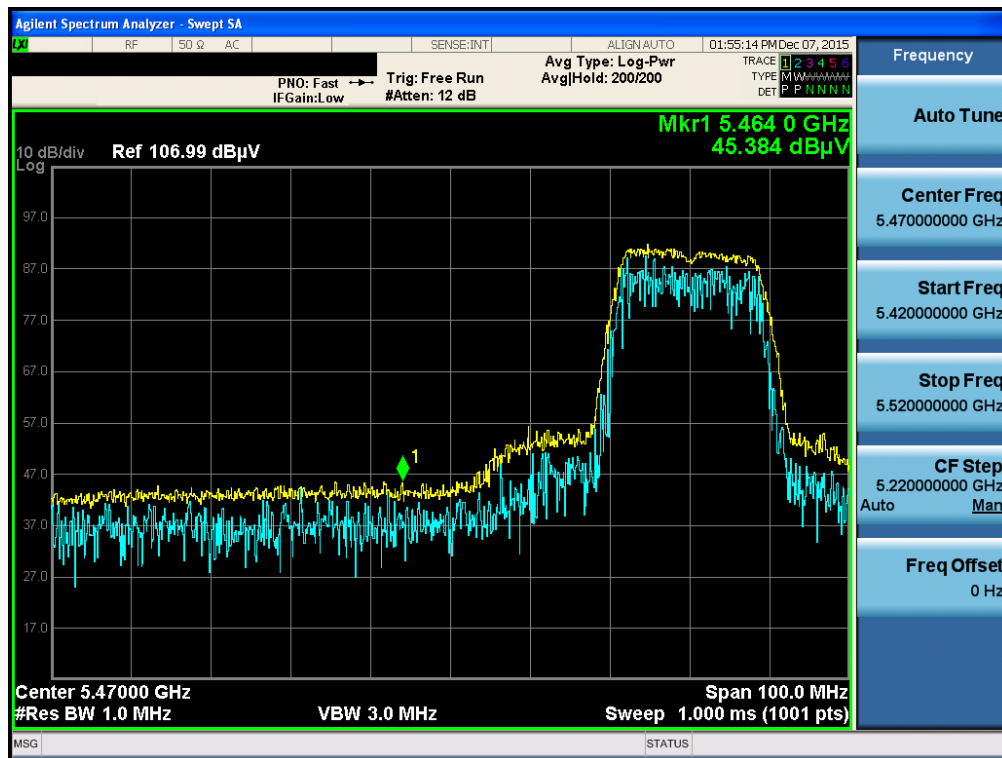
802.11n(HT20) & U-NII 2A & Ch.64 & X axis & Hor

Detector Mode : AV



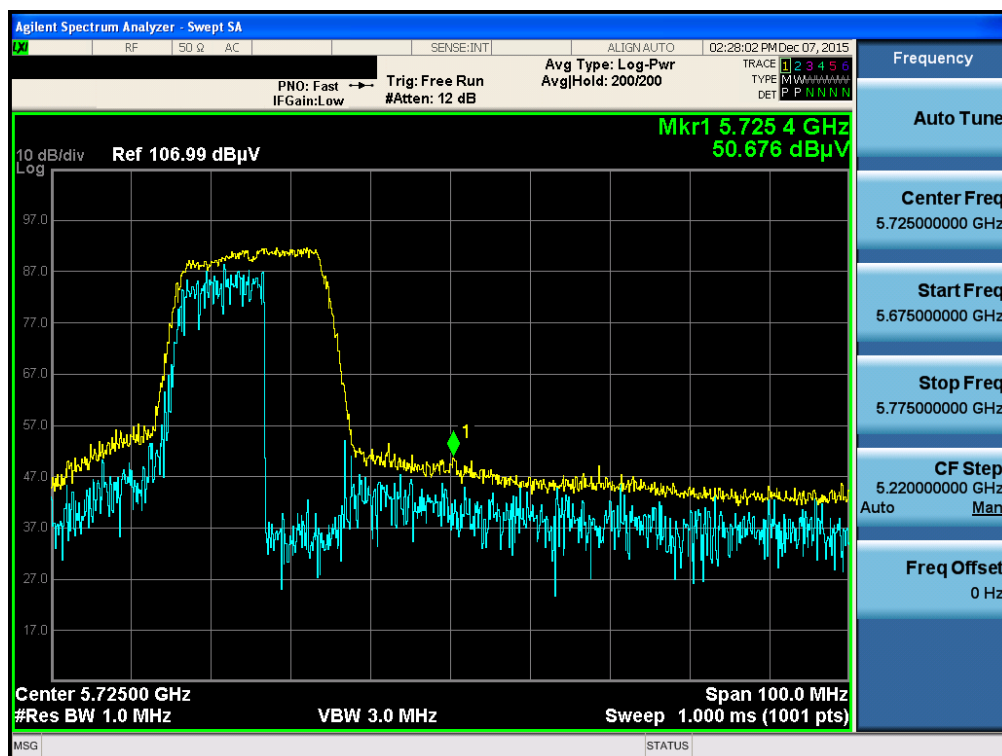
802.11n(HT20) & U-NII 2C & Ch.100 & X axis & Hor

Detector Mode : PK

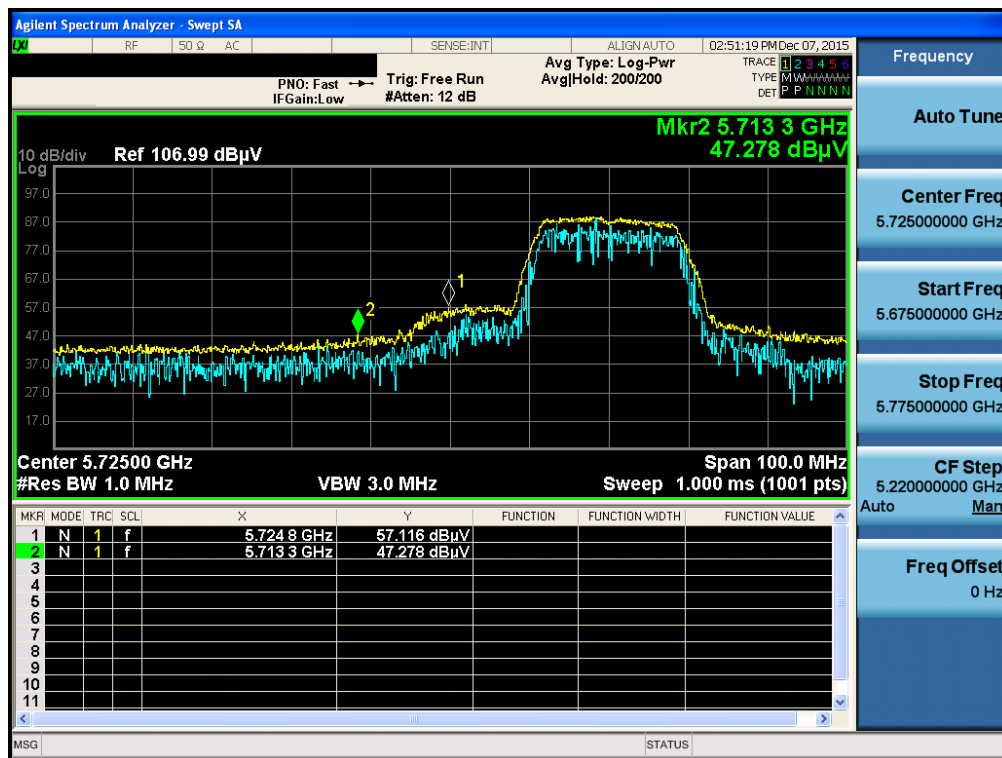


802.11n(HT20) & U-NII 2C & Ch.140 & X axis & Hor

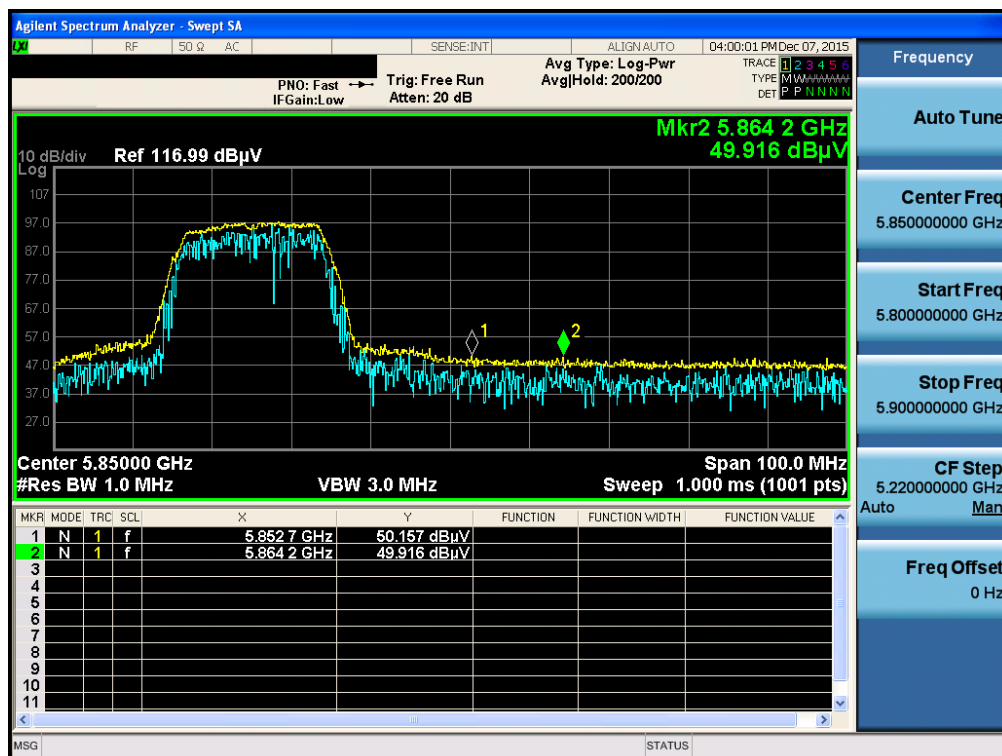
Detector Mode : PK



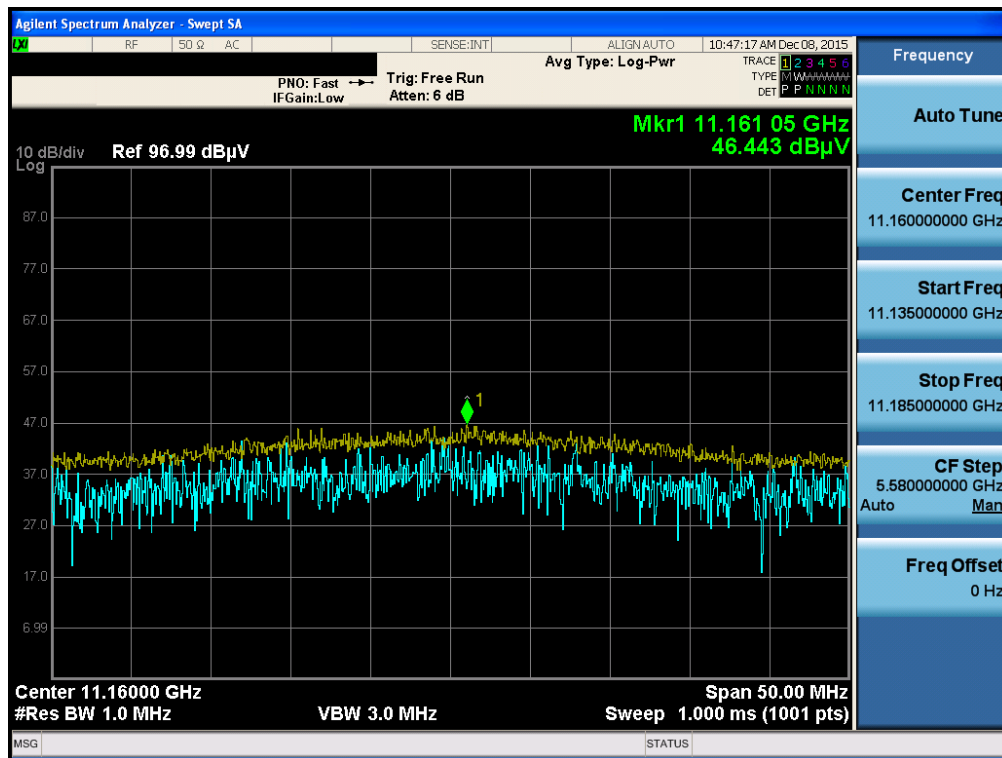
Detector Mode : PK



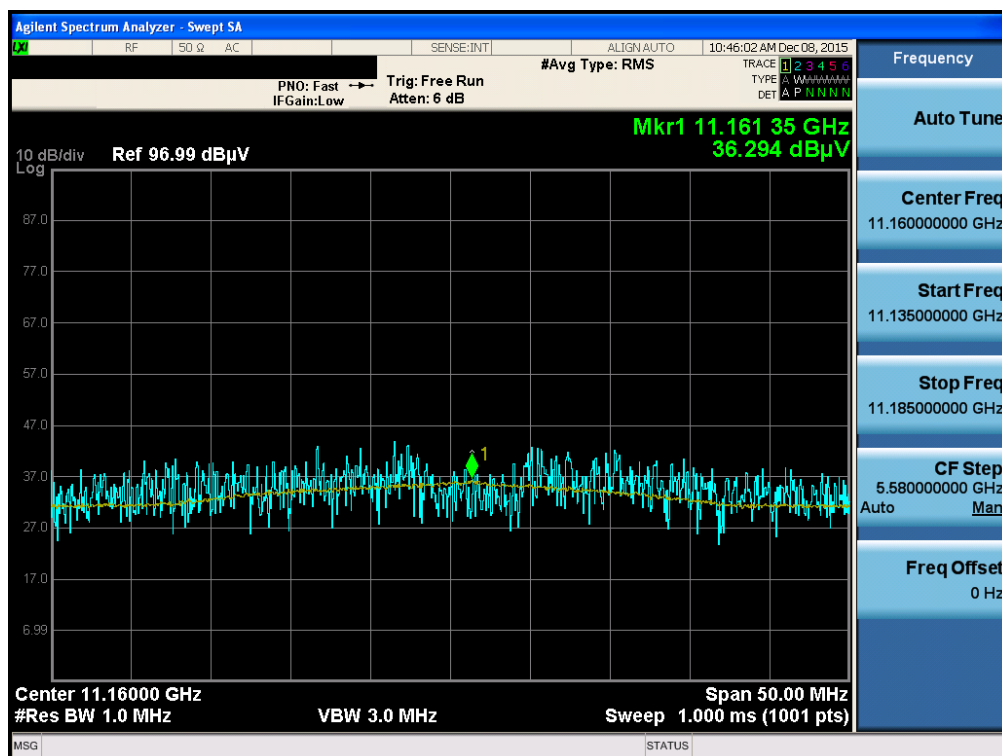
Detector Mode : PK



Detector Mode : PK

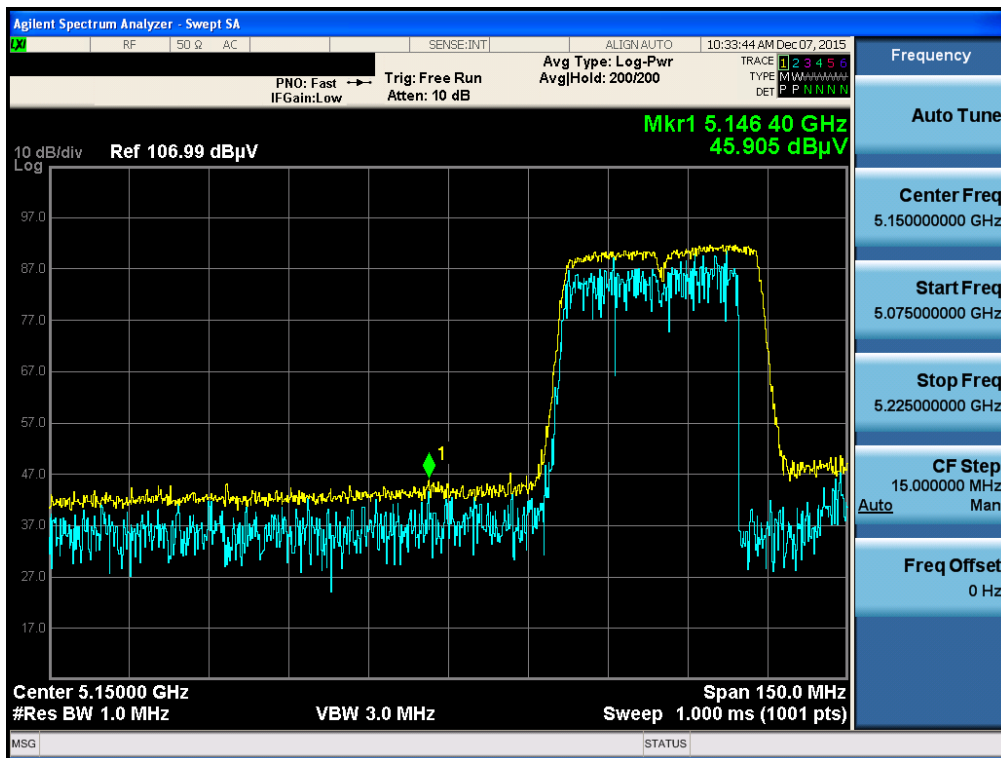


Detector Mode : AV



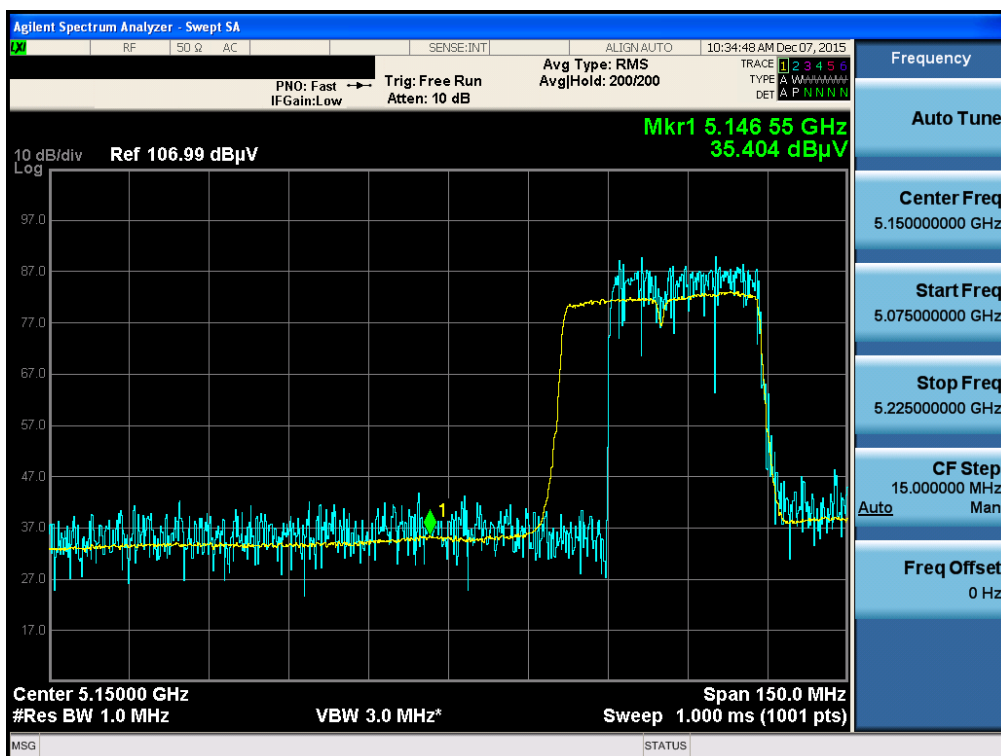
802.11n(HT40) & U-NII 1 & Ch.38 & X axis & Hor

Detector Mode : PK



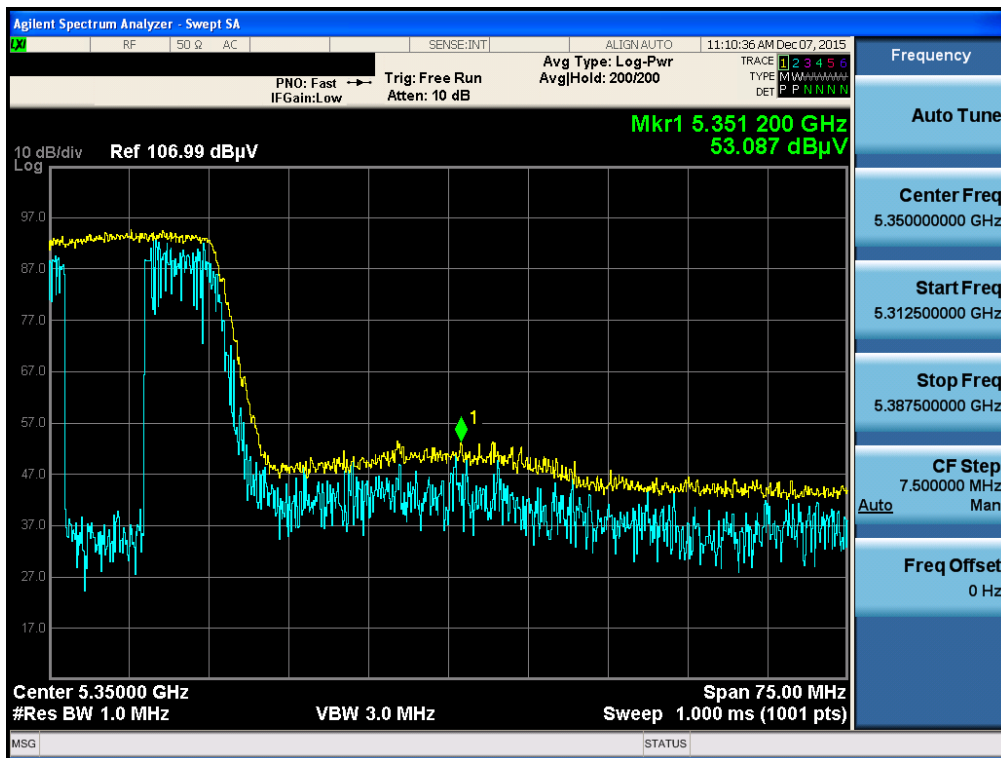
802.11n(HT40) & U-NII 1 & Ch.38 & X axis & Hor

Detector Mode : AV



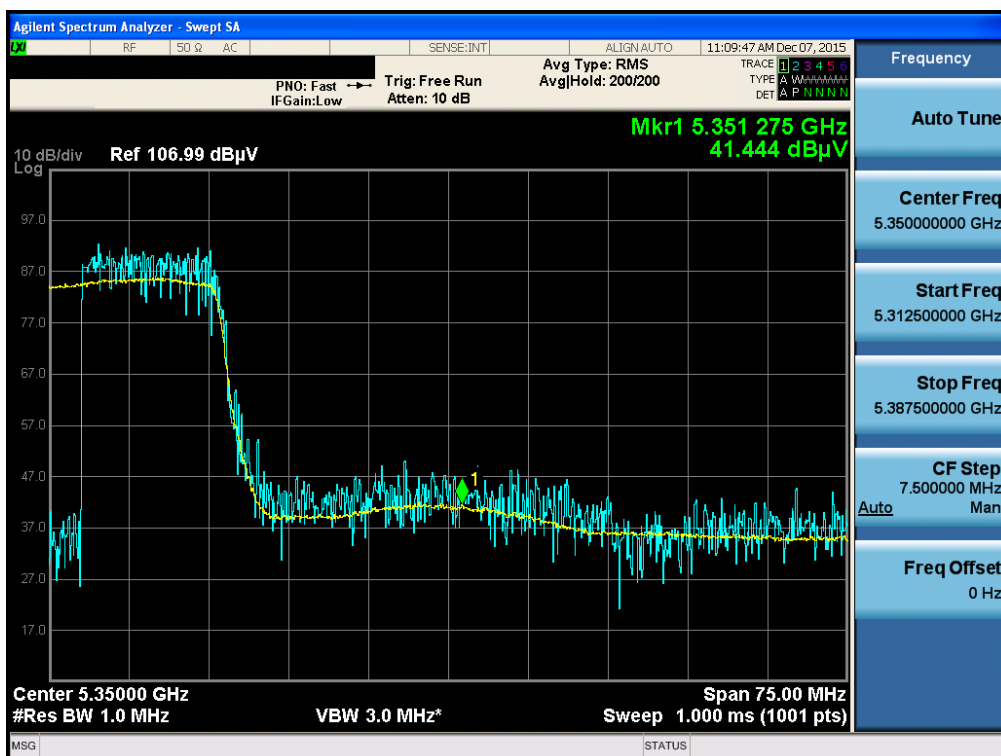
802.11n(HT40) & U-NII 2A & Ch.62 & X axis & Hor

Detector Mode : PK



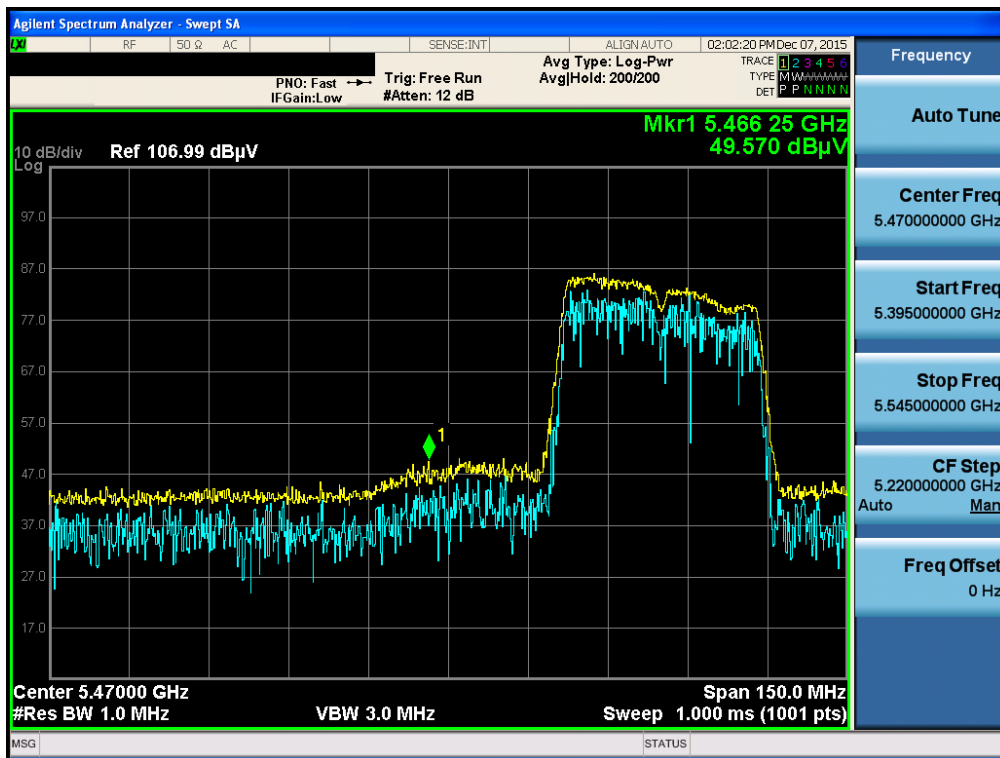
802.11n(HT40) & U-NII 2A & Ch.62 & X axis & Hor

Detector Mode : AV



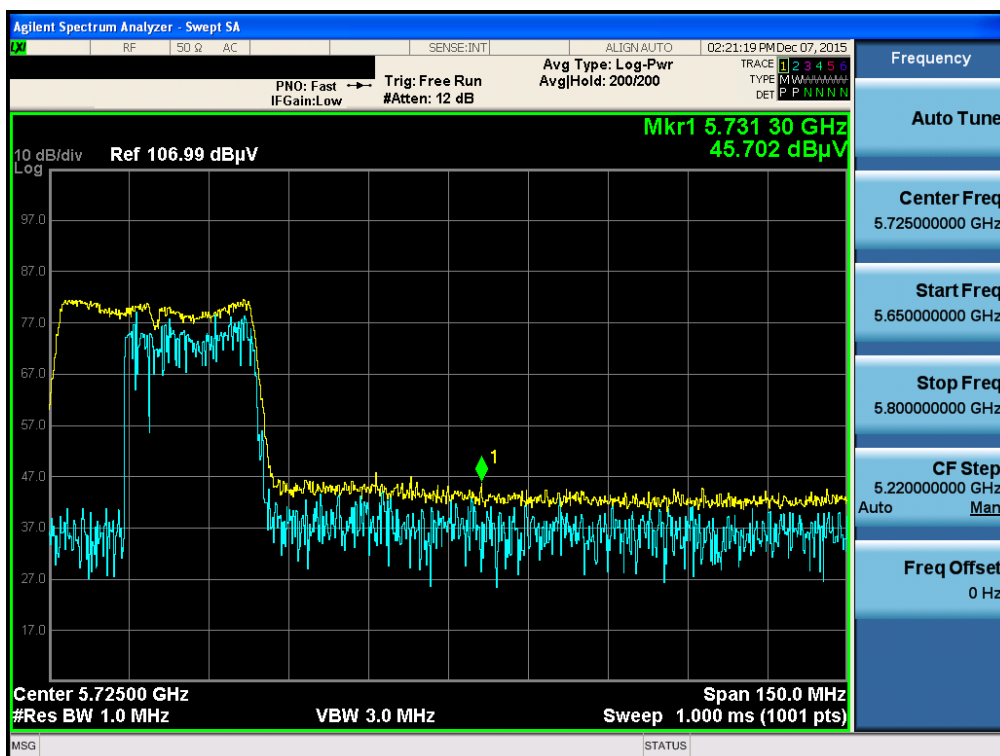
802.11n(HT40) & U-NII 2C & Ch.102 & X axis & Hor

Detector Mode : PK



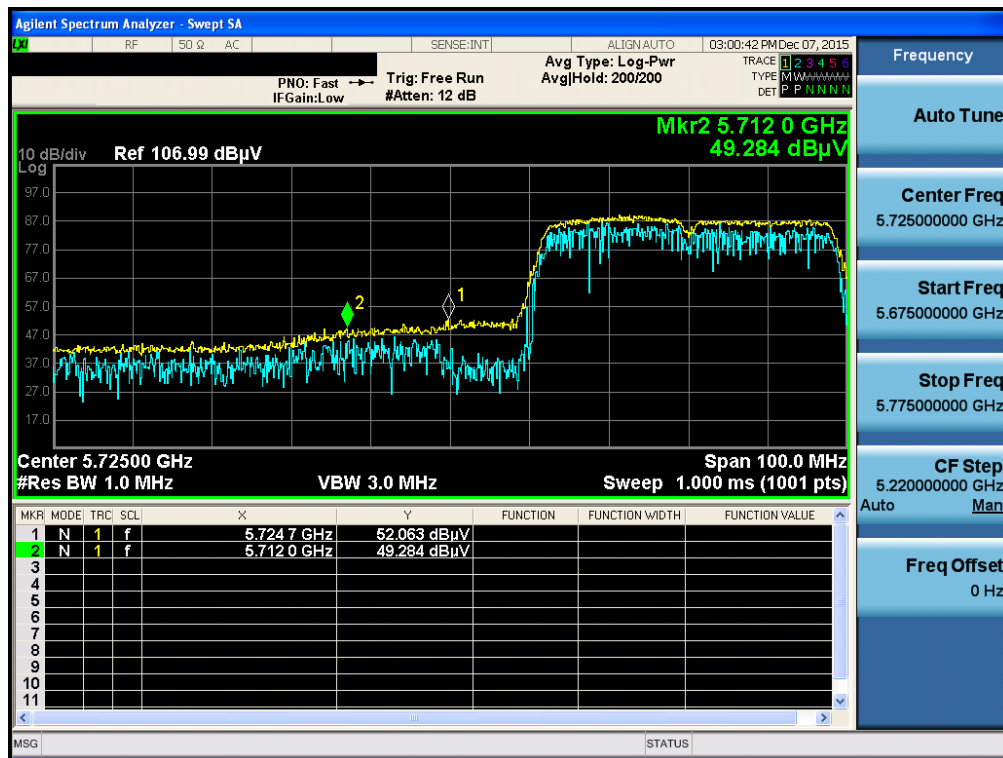
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Detector Mode : PK



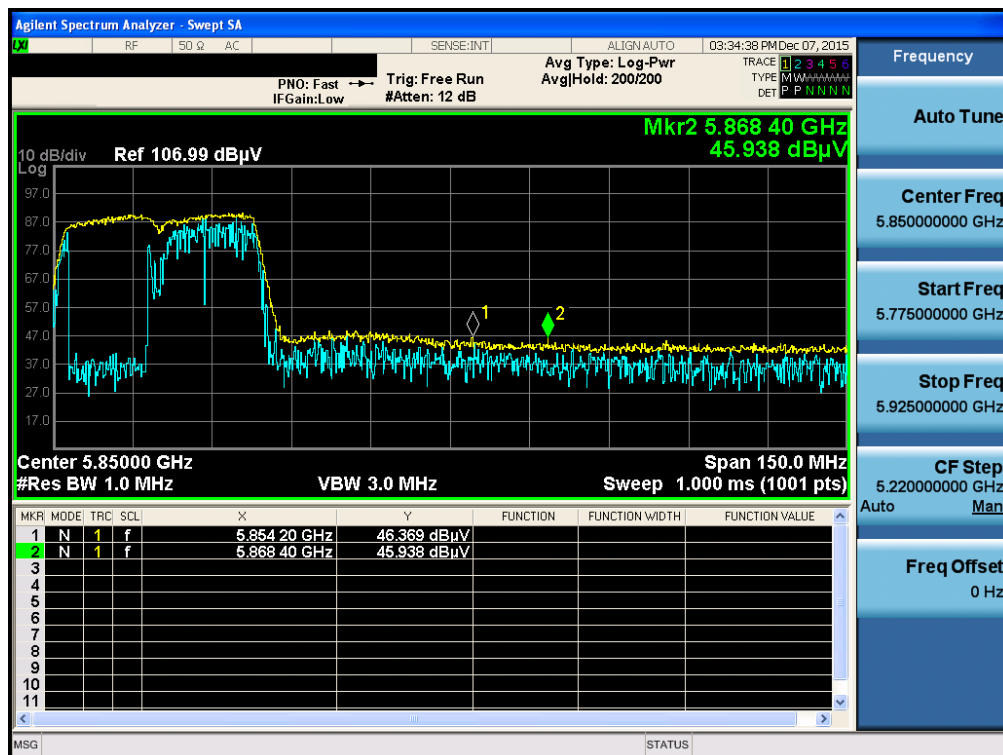
802.11n(HT40) & U-NII 3 & Ch.151 & X axis & Hor

Detector Mode : PK

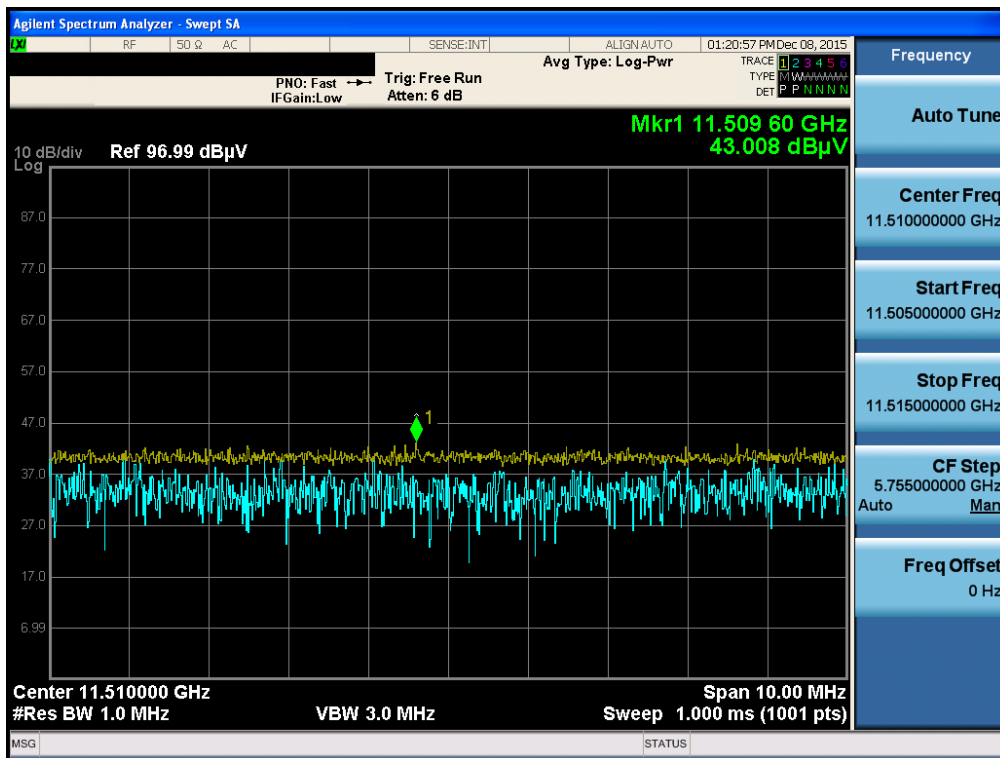


802.11n(HT40) & U-NII 3 & Ch.159 & X axis & Hor

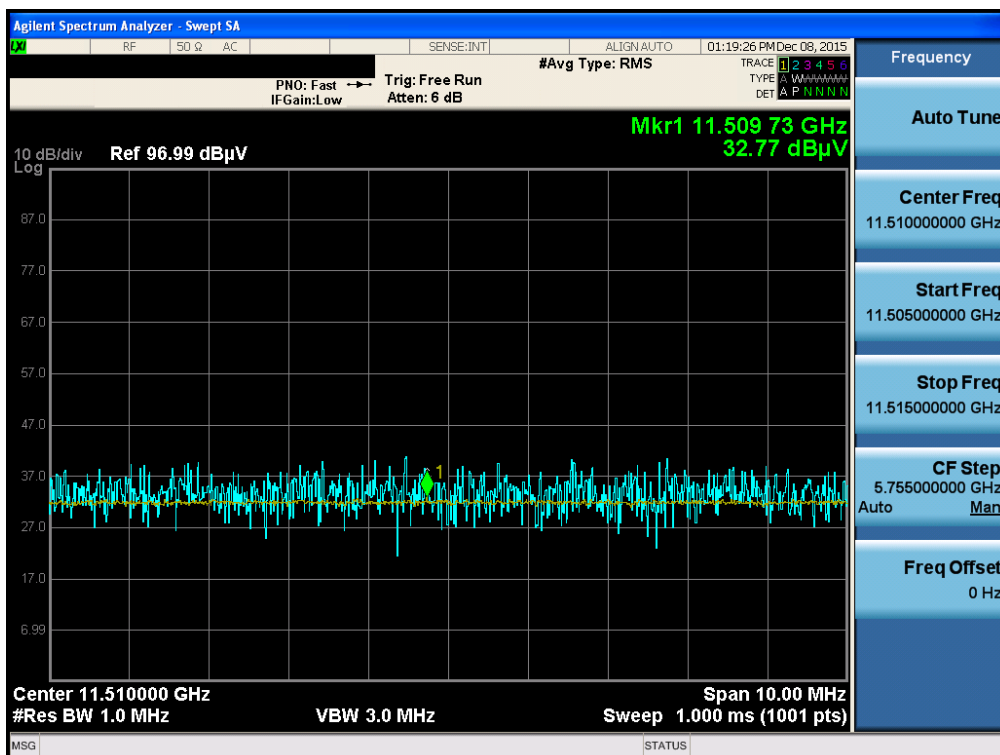
Detector Mode : PK



Detector Mode : PK

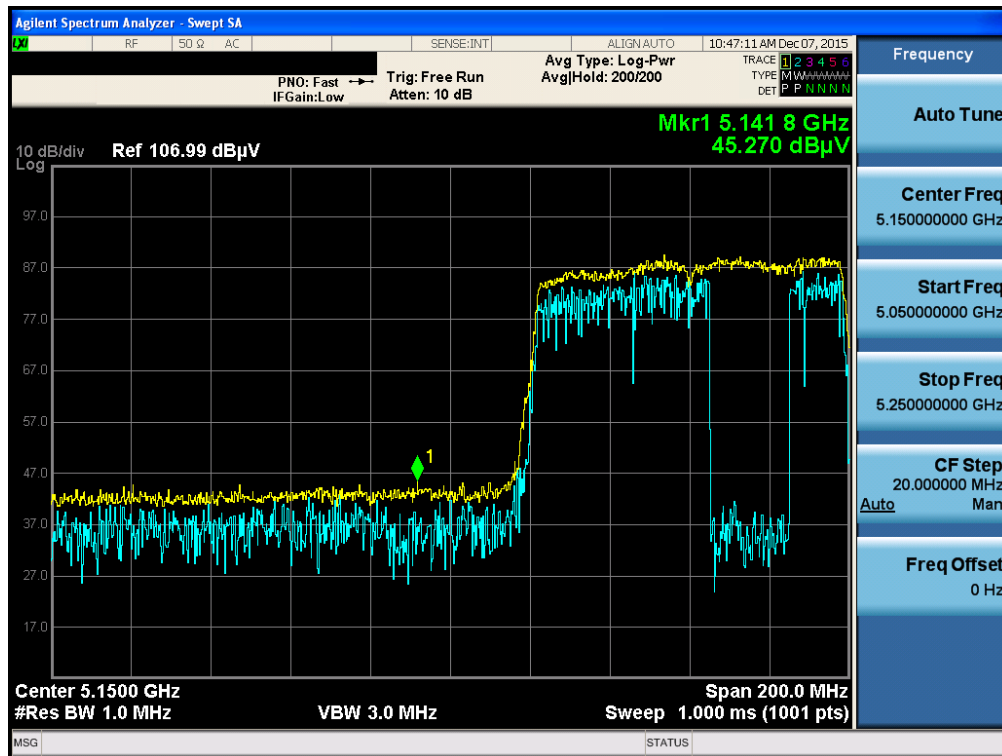


Detector Mode : AV



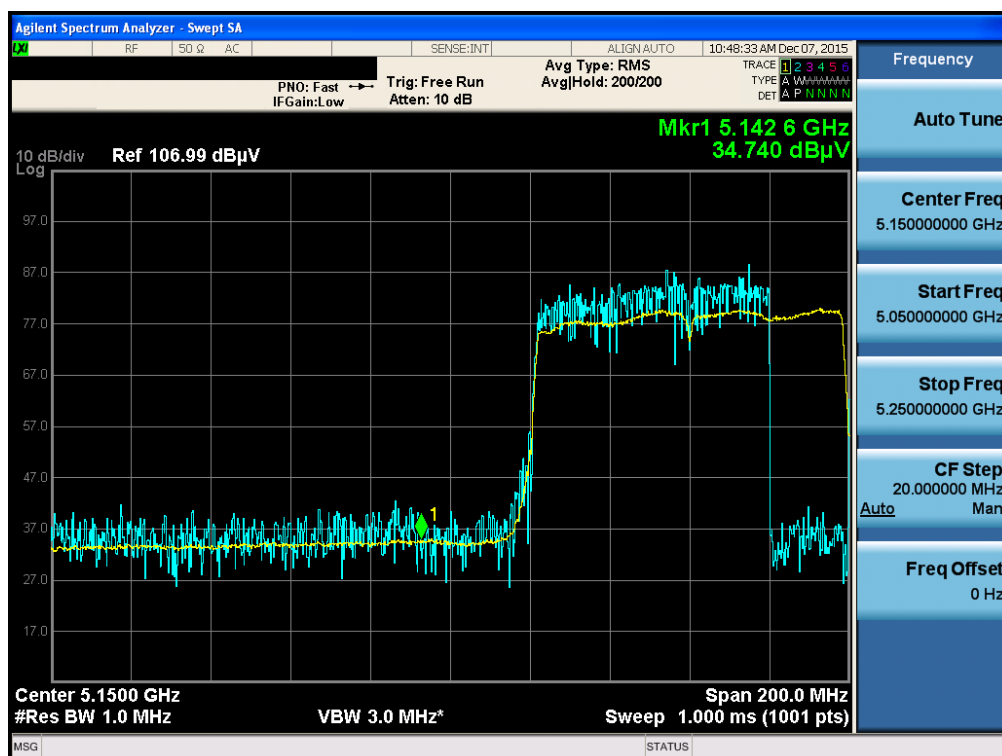
802.11ac(VHT80) & U-NII 1 & Ch.42 & X axis & Hor

Detector Mode : PK



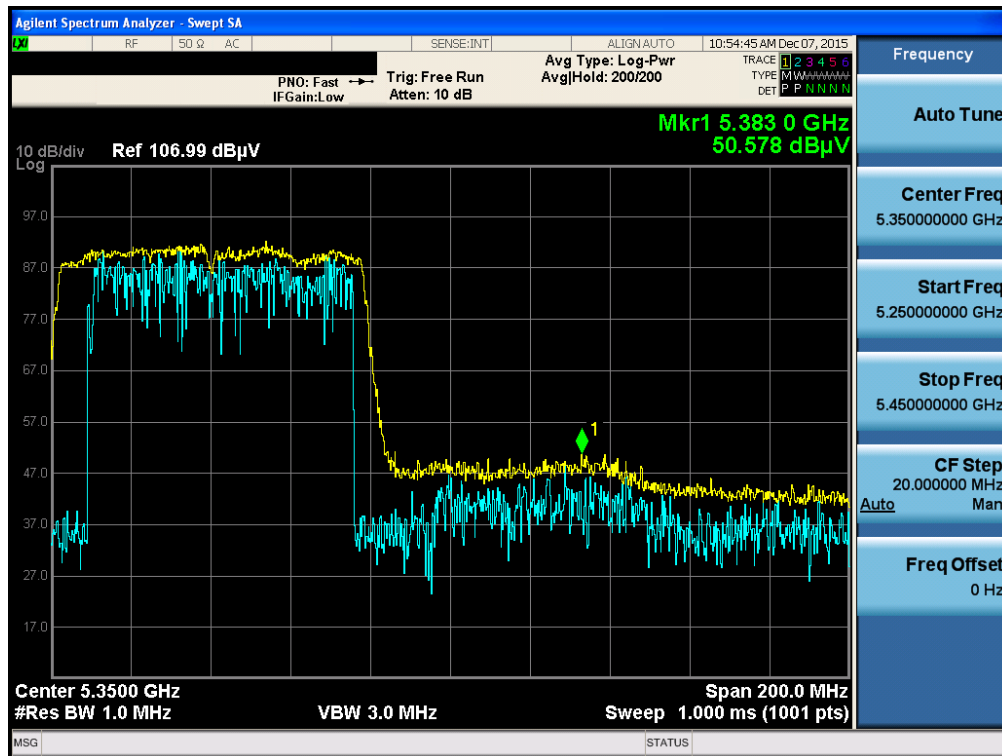
802.11ac(VHT80) & U-NII 1 & Ch.42 & X axis & Hor

Detector Mode : AV



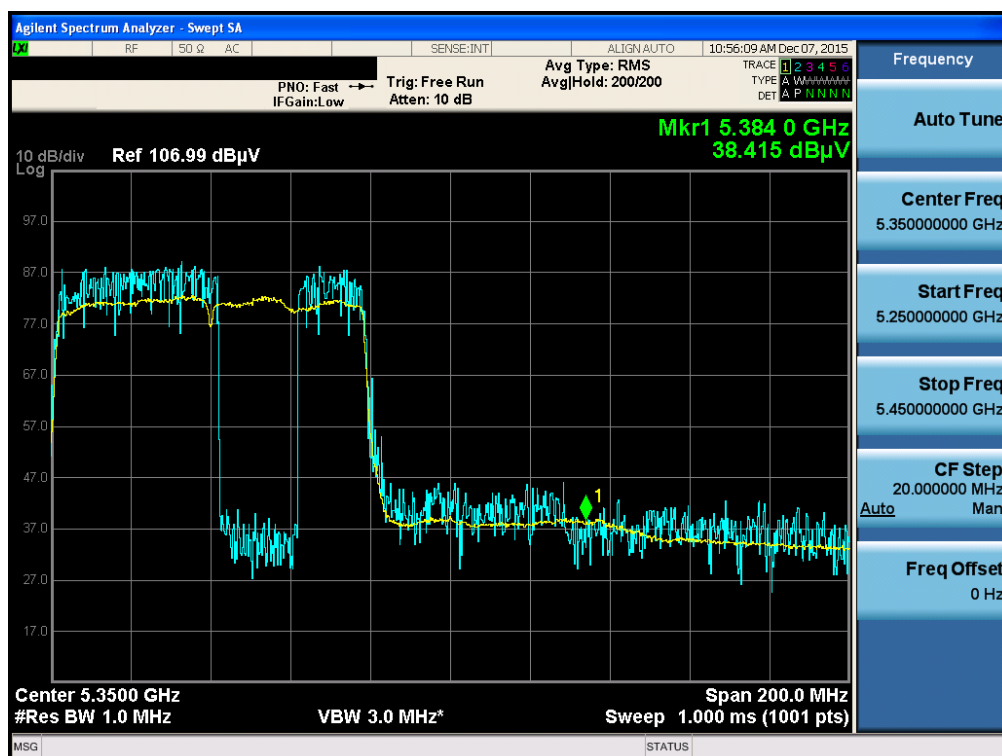
802.11ac(VHT80) & U-NII 2A & Ch.58 & X axis & Hor

Detector Mode : PK



802.11ac(VHT80) & U-NII 2A & Ch.58 & X axis & Hor

Detector Mode : AV



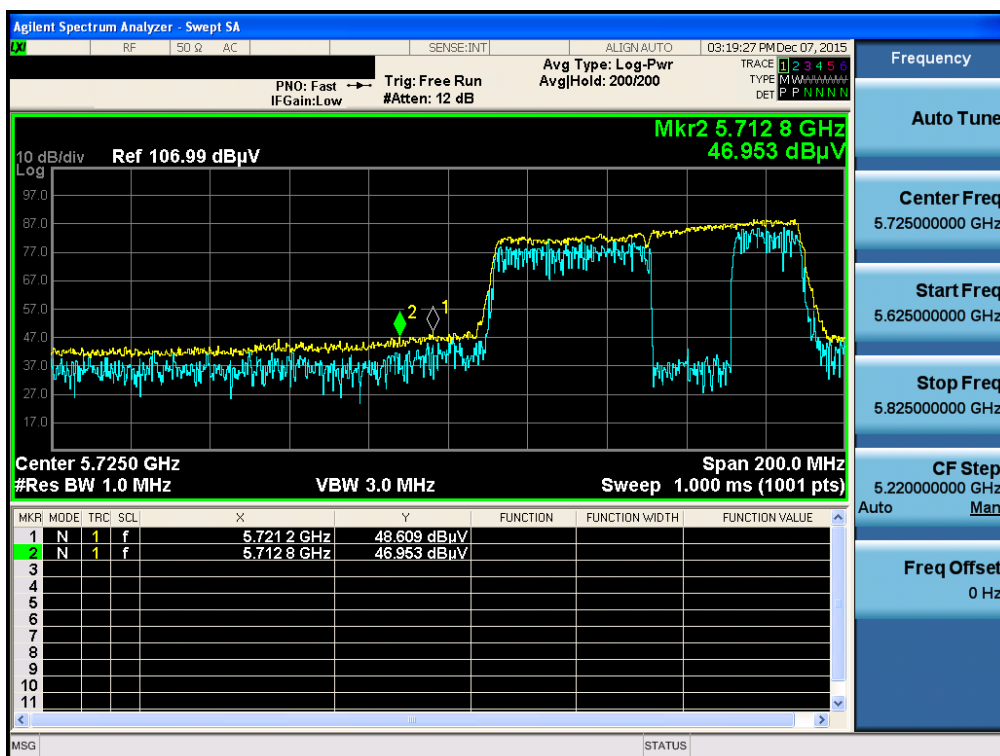
802.11ac(VHT80) & U-NII 2C & Ch.106 & X axis & Hor

Detector Mode : PK



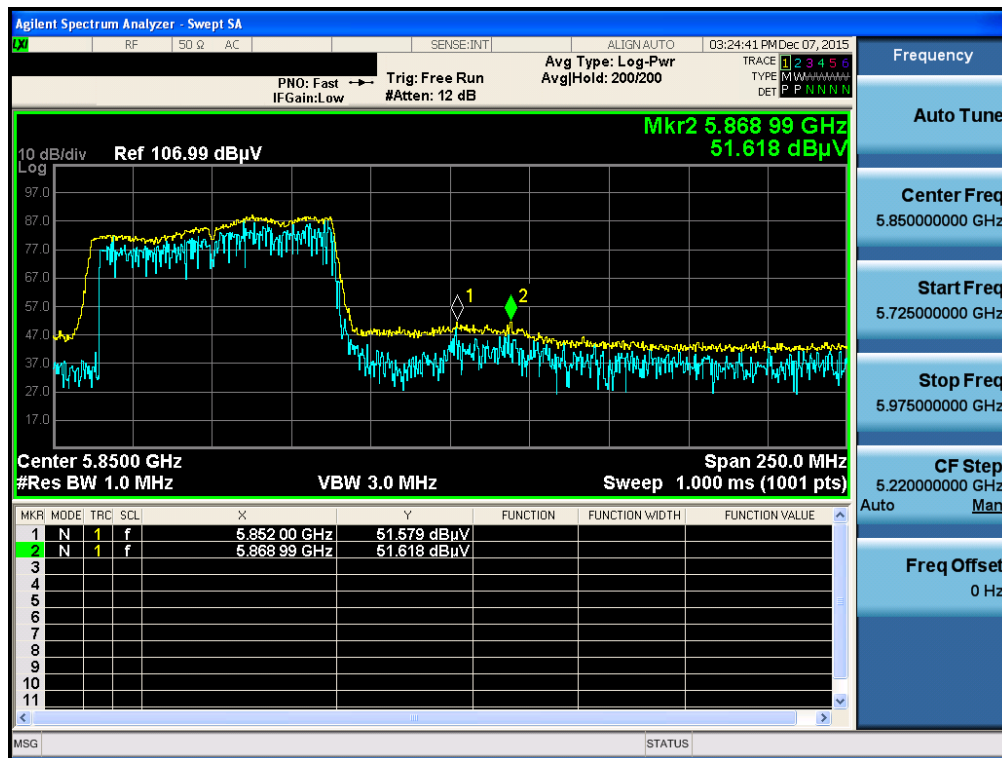
802.11ac(VHT80) & U-NII 3 & Ch.155 & X axis & Hor

Detector Mode : PK



802.11ac(VHT80) & U-NII 3 & Ch.155 & X axis & Hor

Detector Mode : PK



802.11ac(VHT80) & U-NII 3 & Ch.155 & X axis & Hor

Detector Mode : PK

