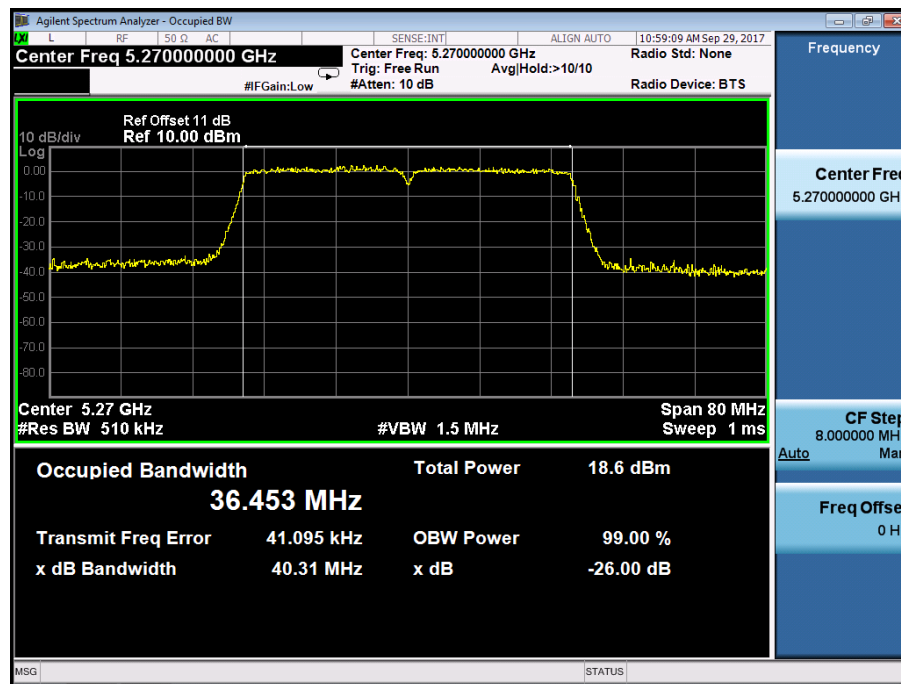
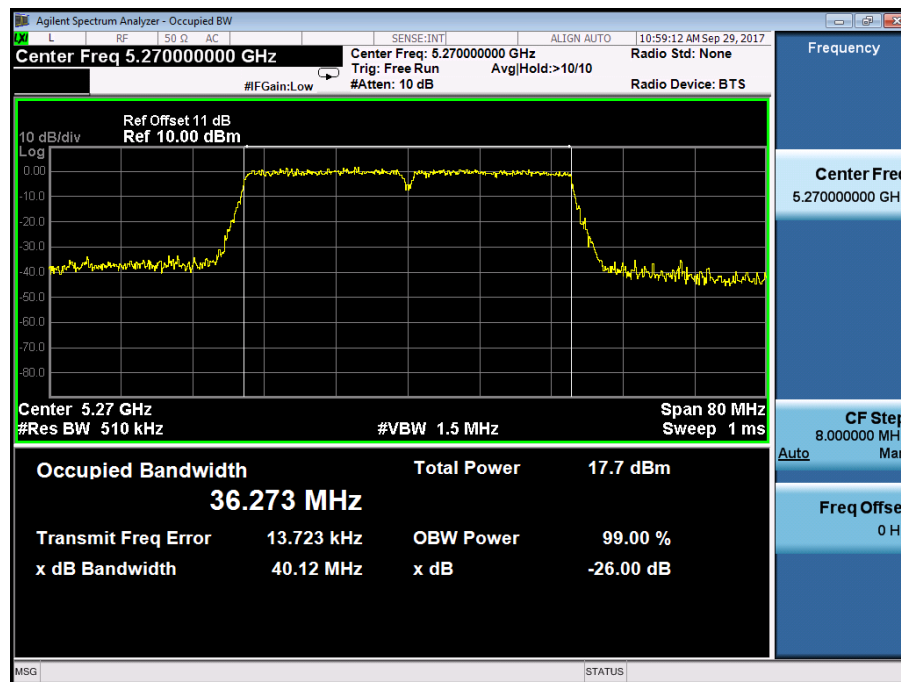


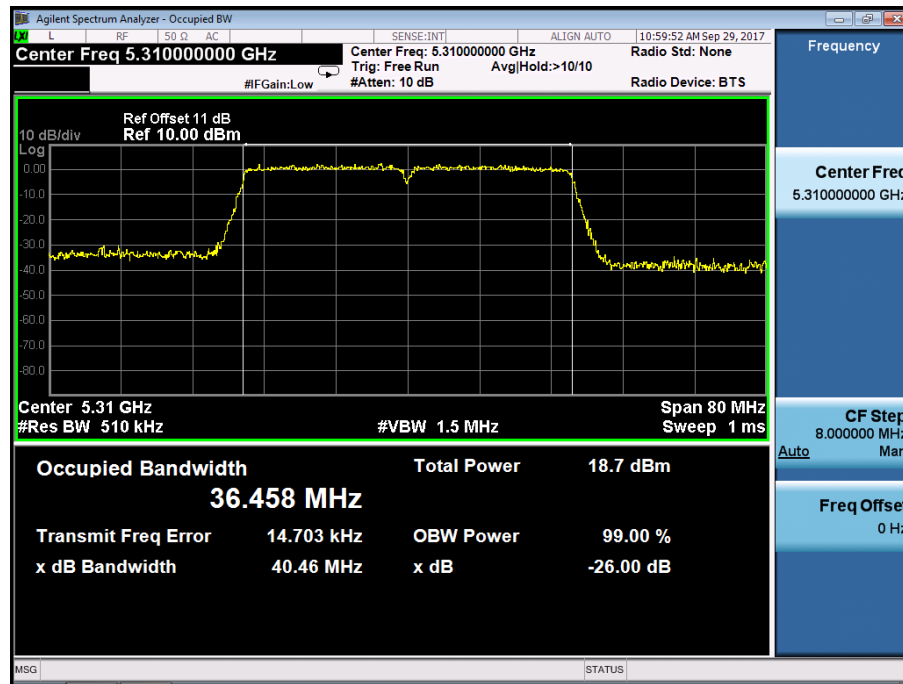
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-A
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5270
Ant0	



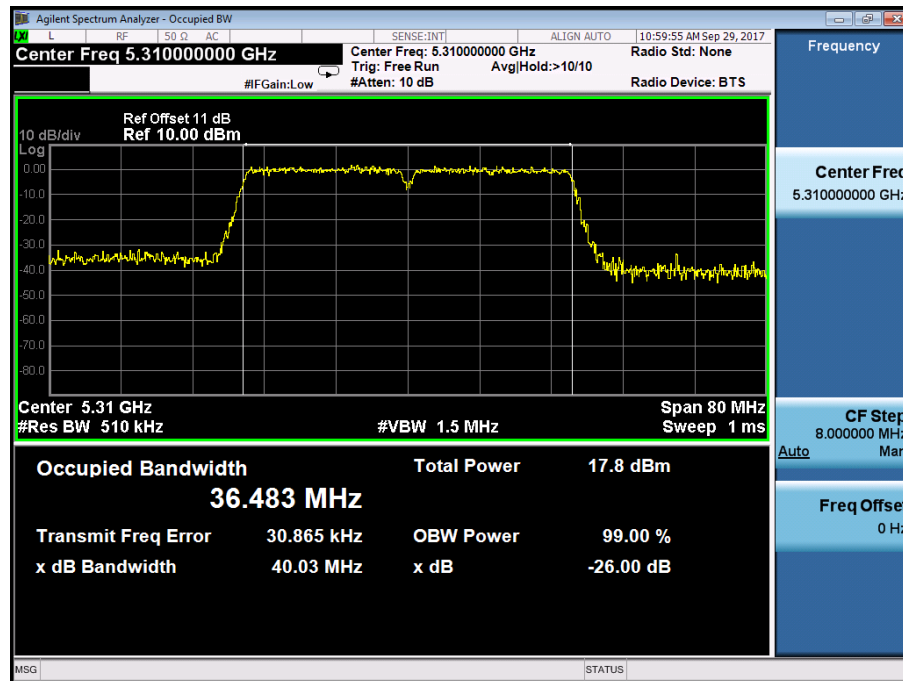
Ant1



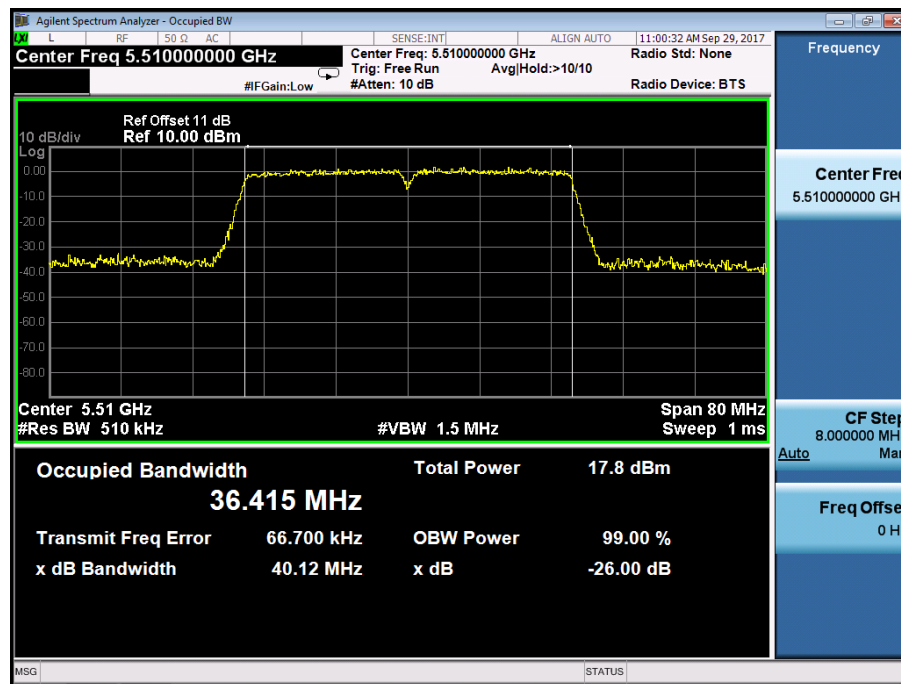
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-A
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5310
Ant0	



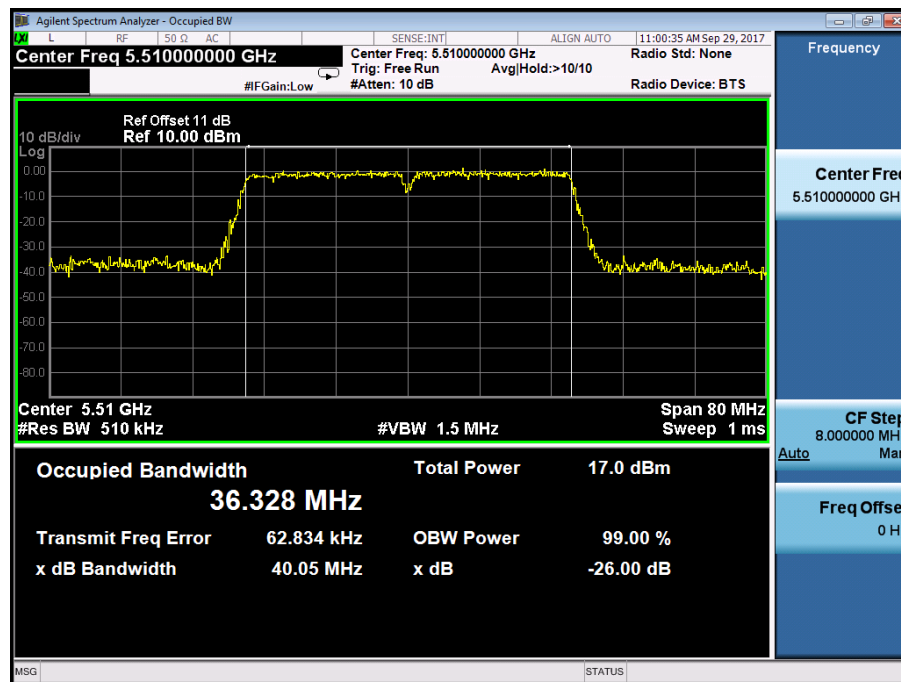
Ant1



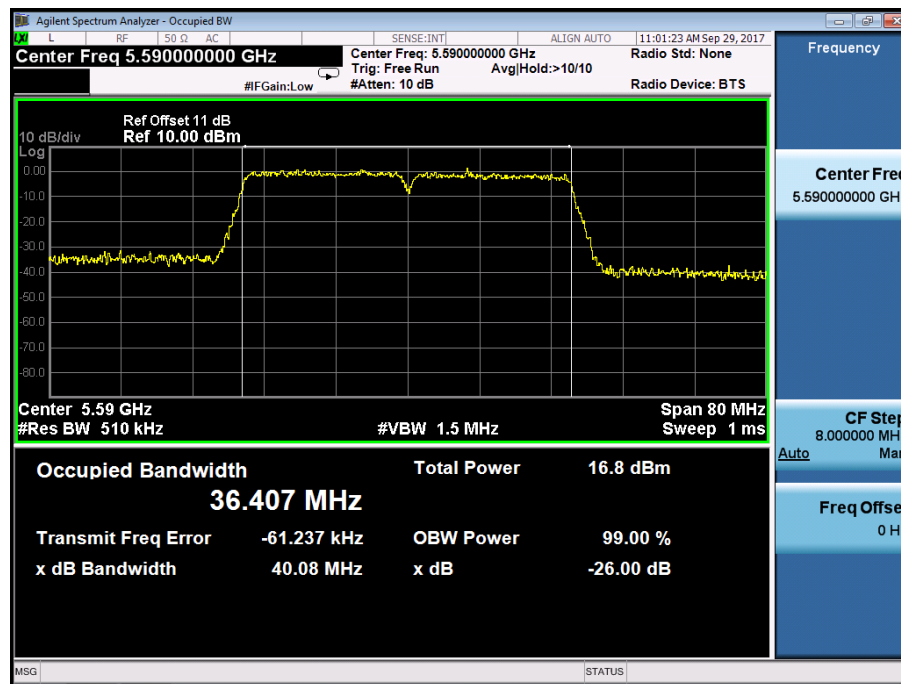
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5510
Ant0	



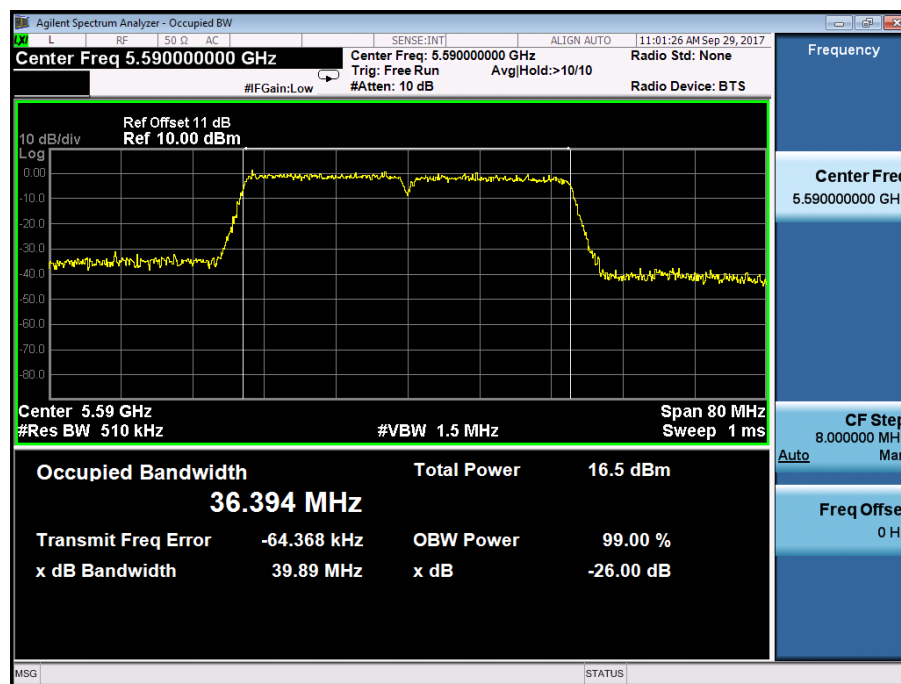
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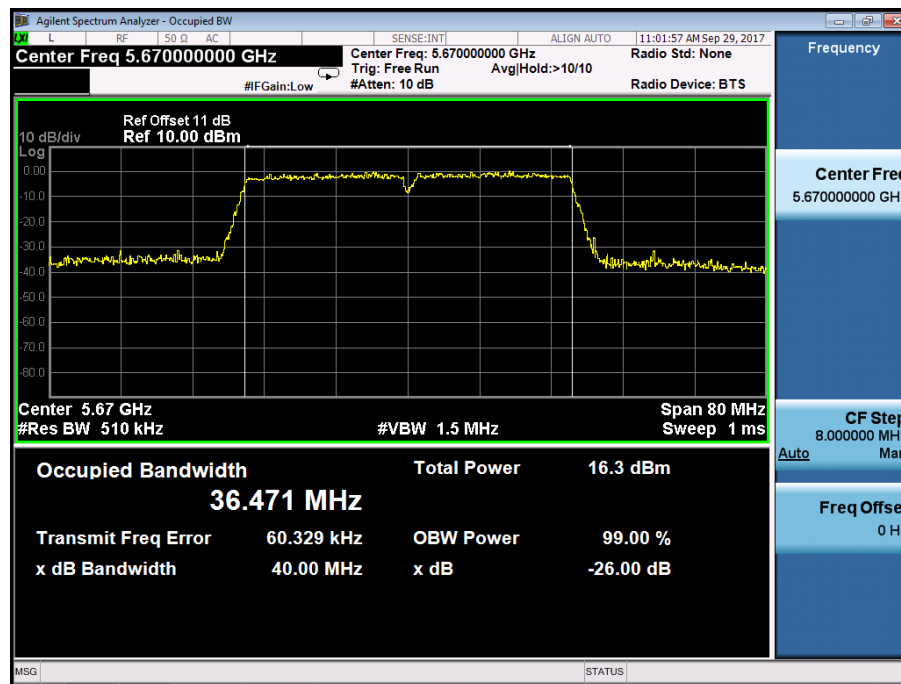
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5590
Ant0	



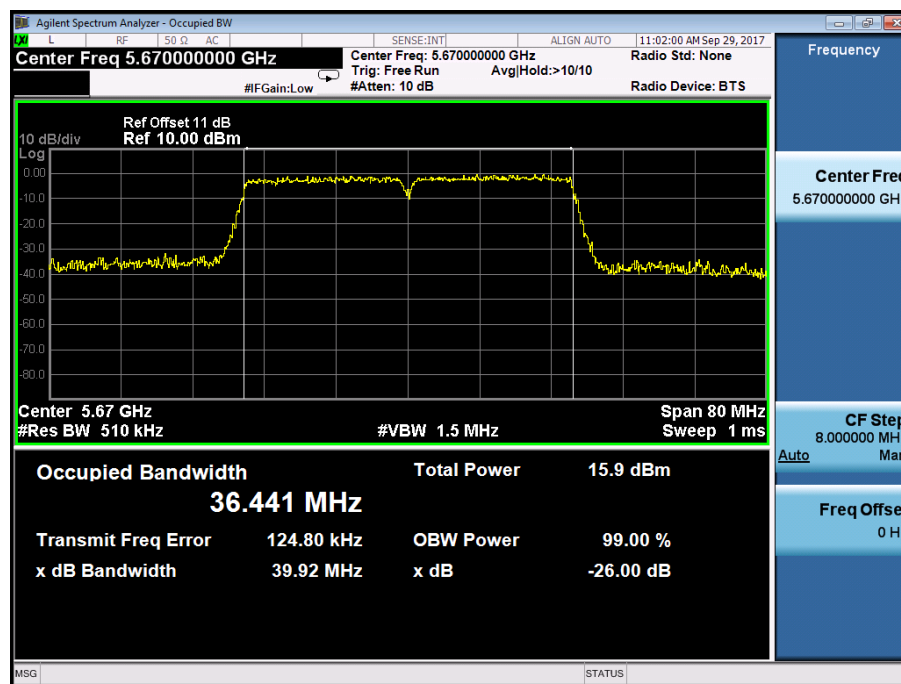
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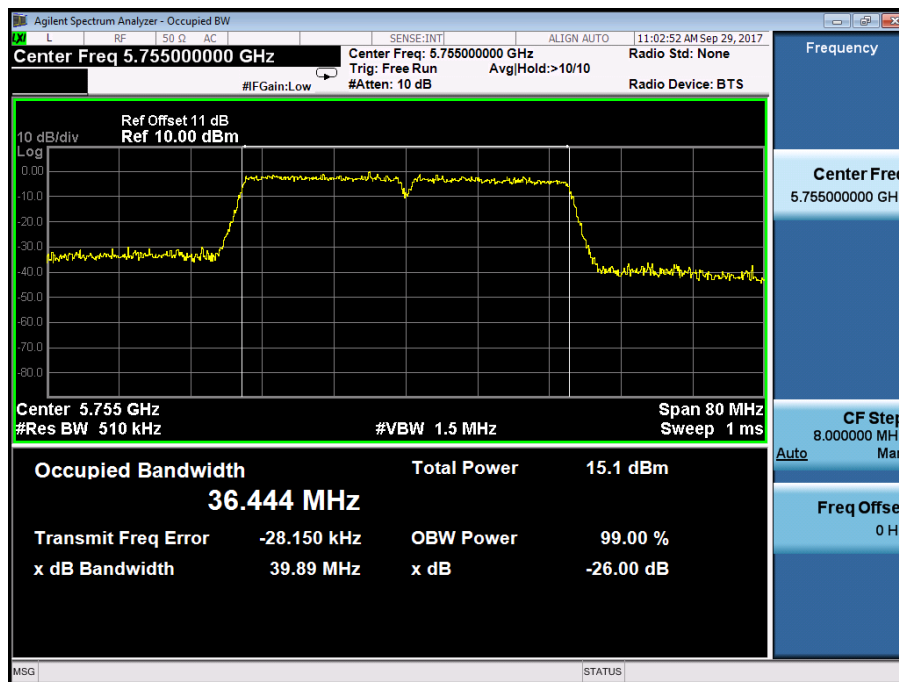
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5670
Ant0	



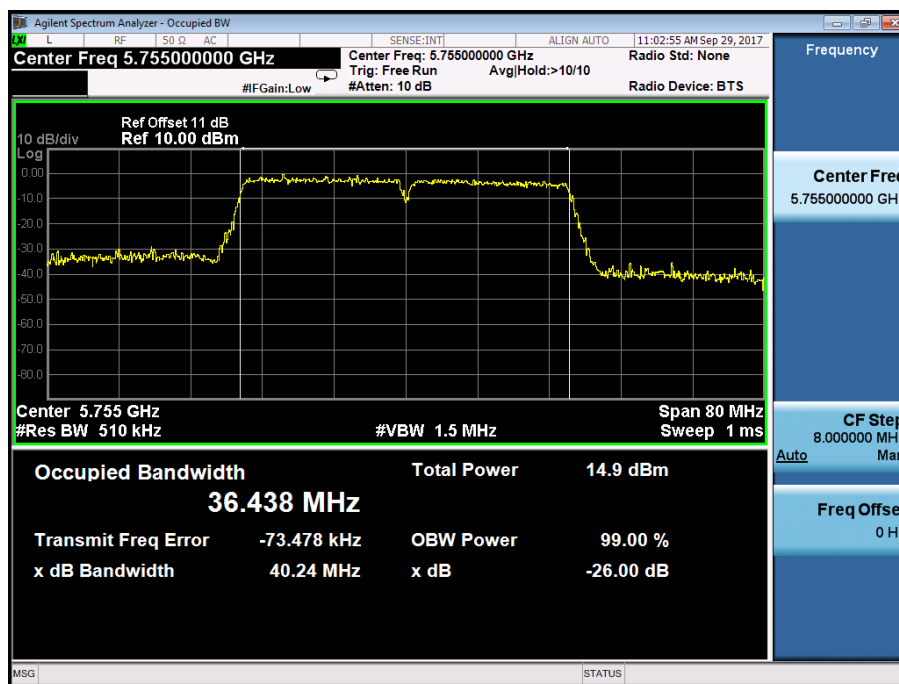
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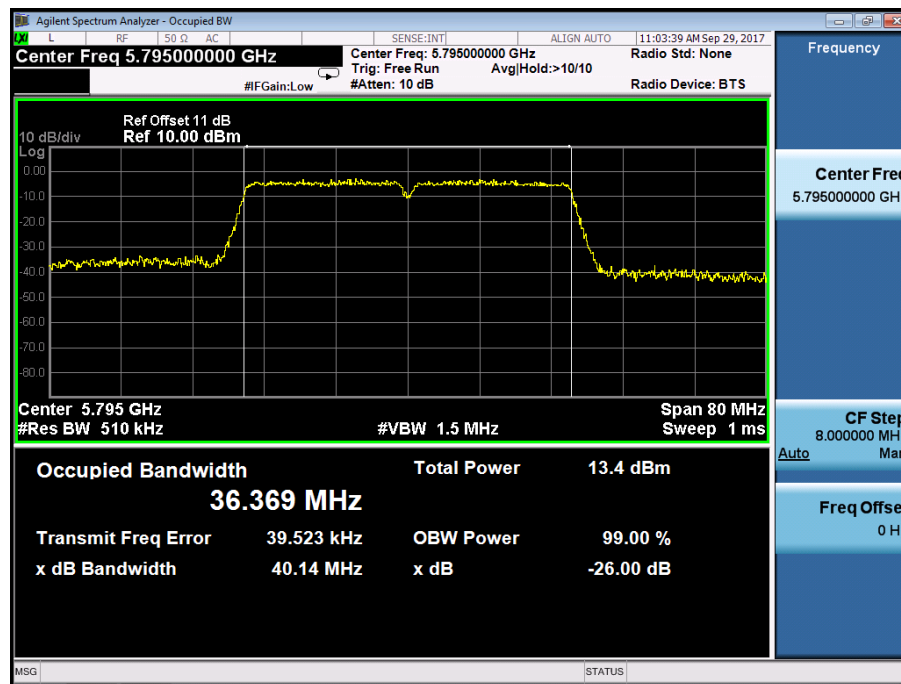
Emission Bandwidth&99% Occupied Bandwidth	UNII Band III
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5755
Ant0	



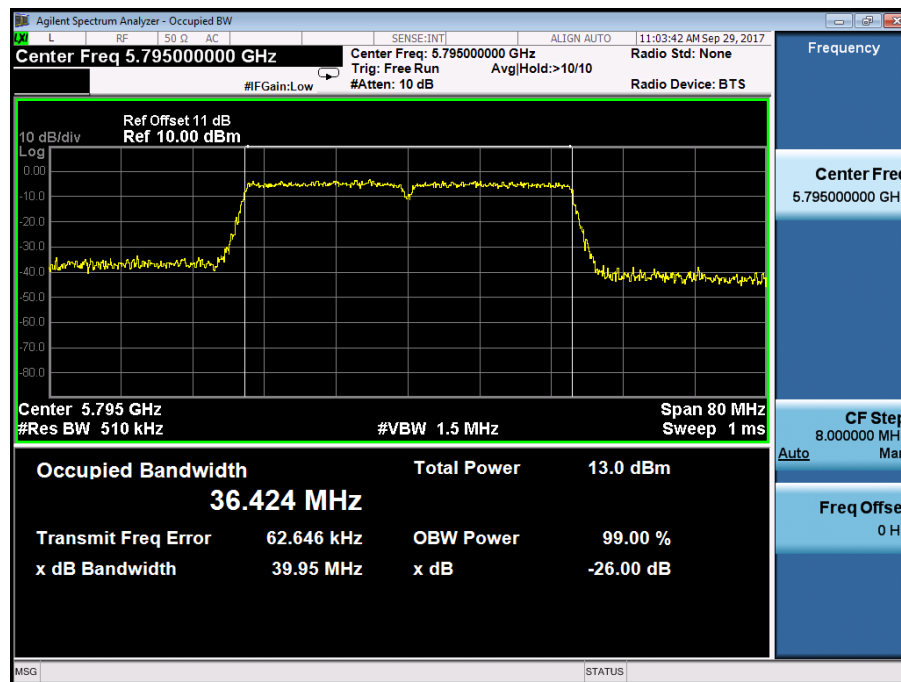
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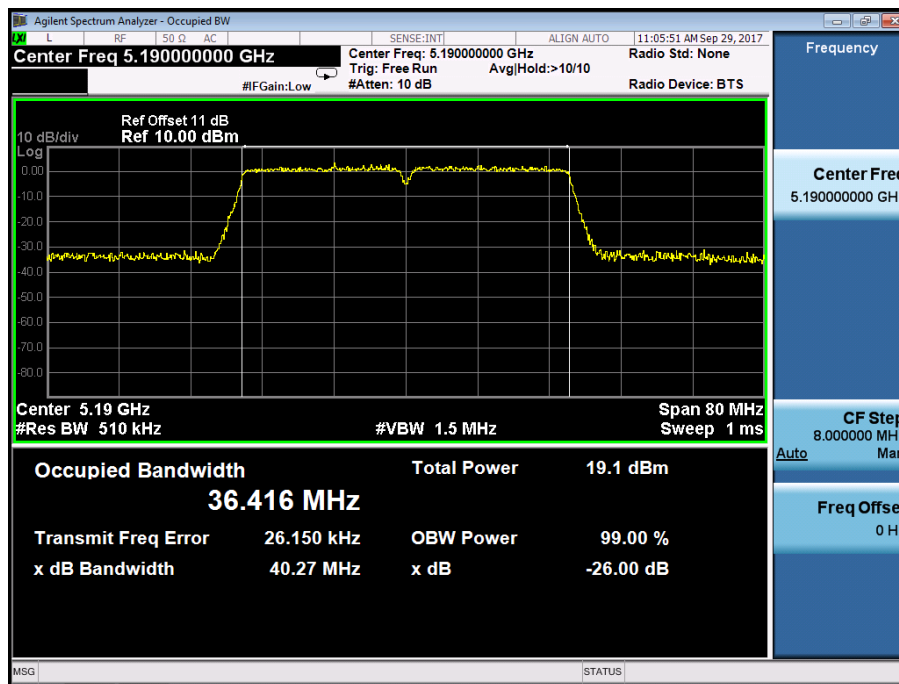
Emission Bandwidth&99% Occupied Bandwidth	UNII Band III
Test Model 802.11n(VHT40) mode	Frequency(MHz) 5795
Ant0	



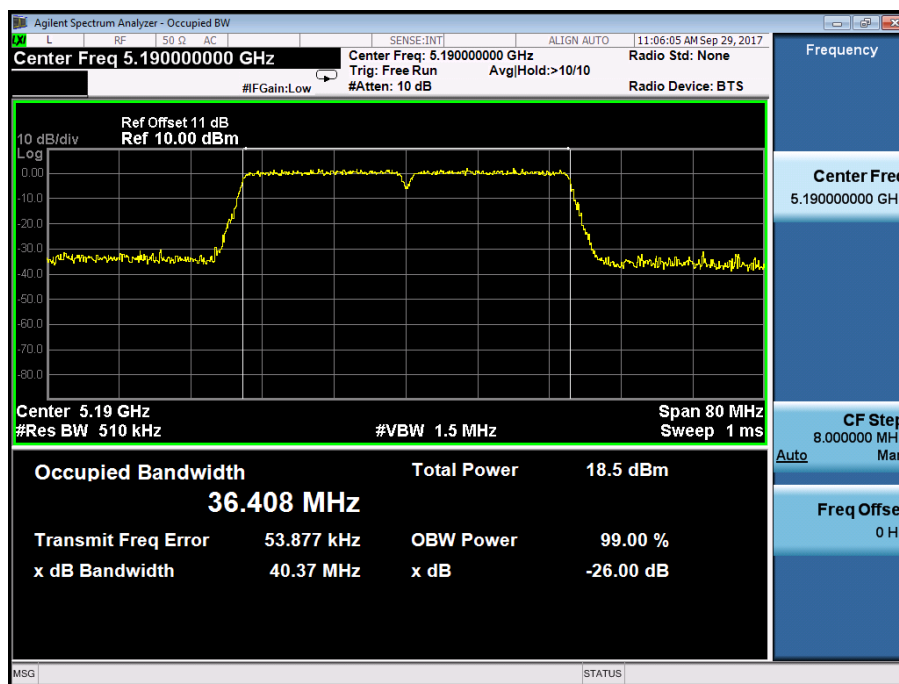
Ant1



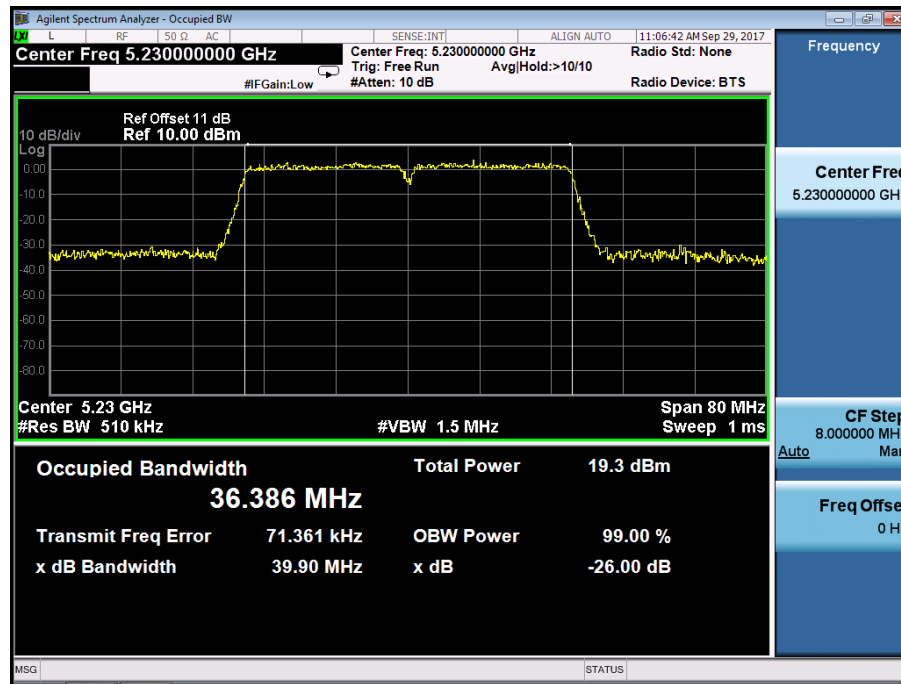
Emission Bandwidth&99% Occupied Bandwidth	UNII Band I
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5190
Ant0	



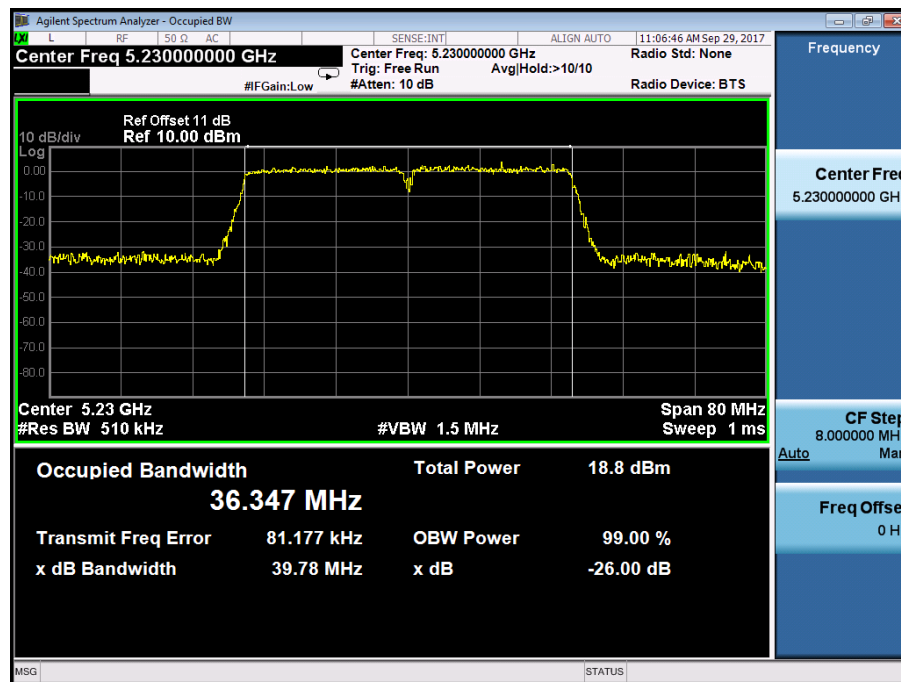
Ant1



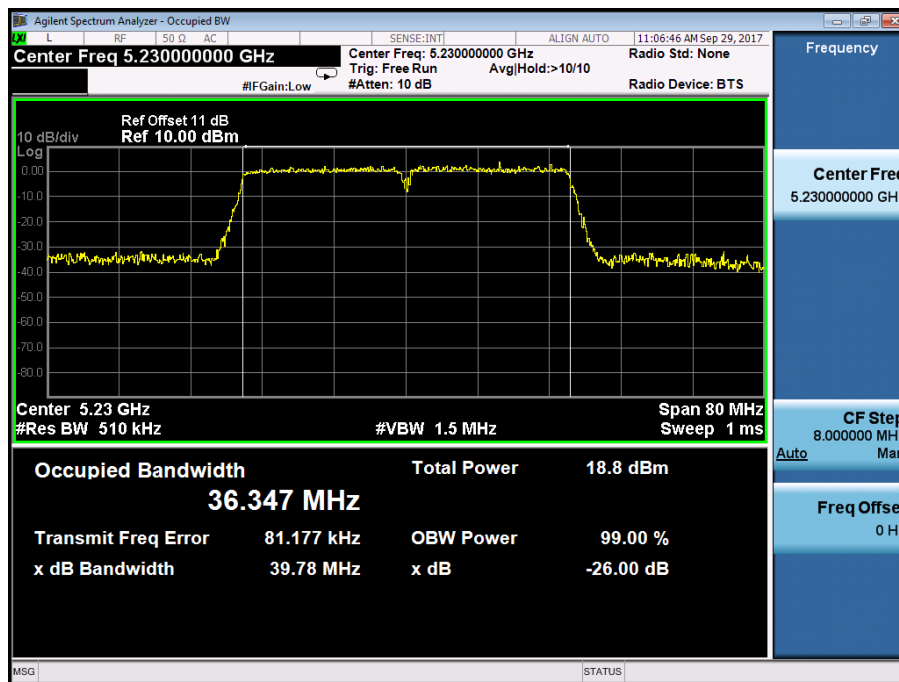
Emission Bandwidth&99% Occupied Bandwidth	UNII Band I
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5230
Ant0	



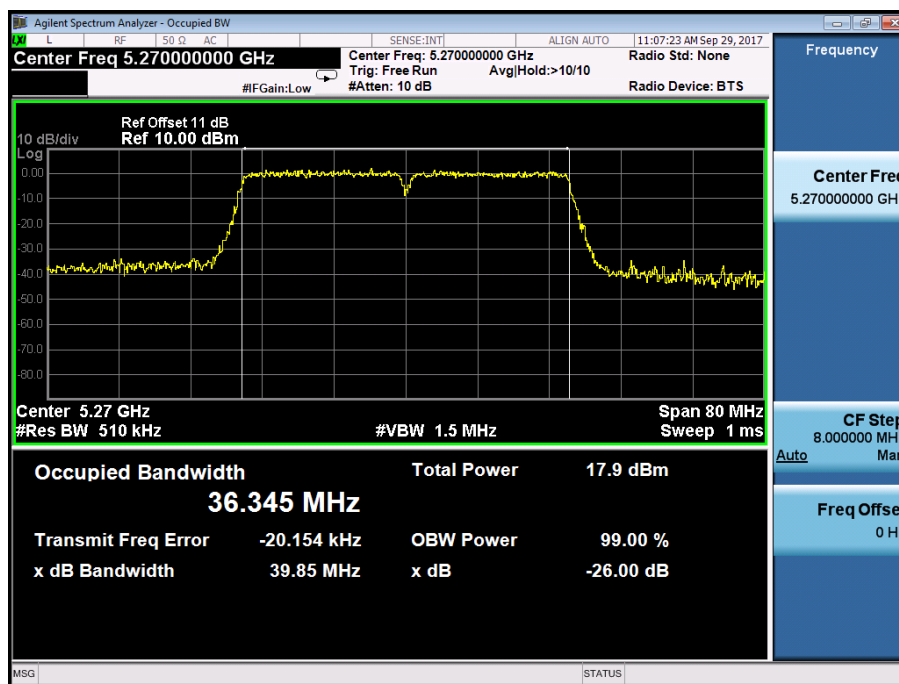
Ant1



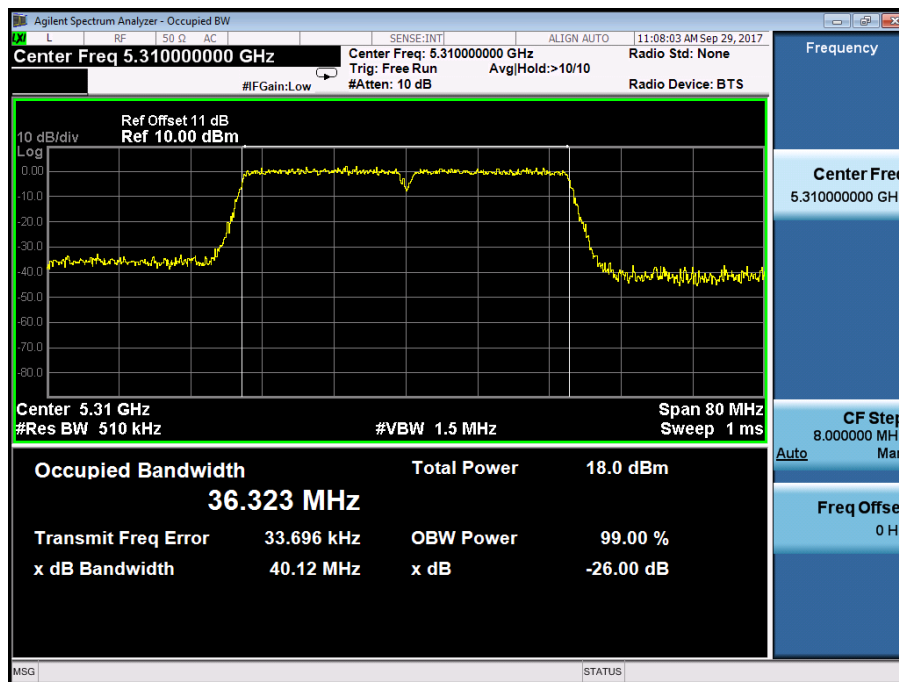
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-A
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5270
Ant0	



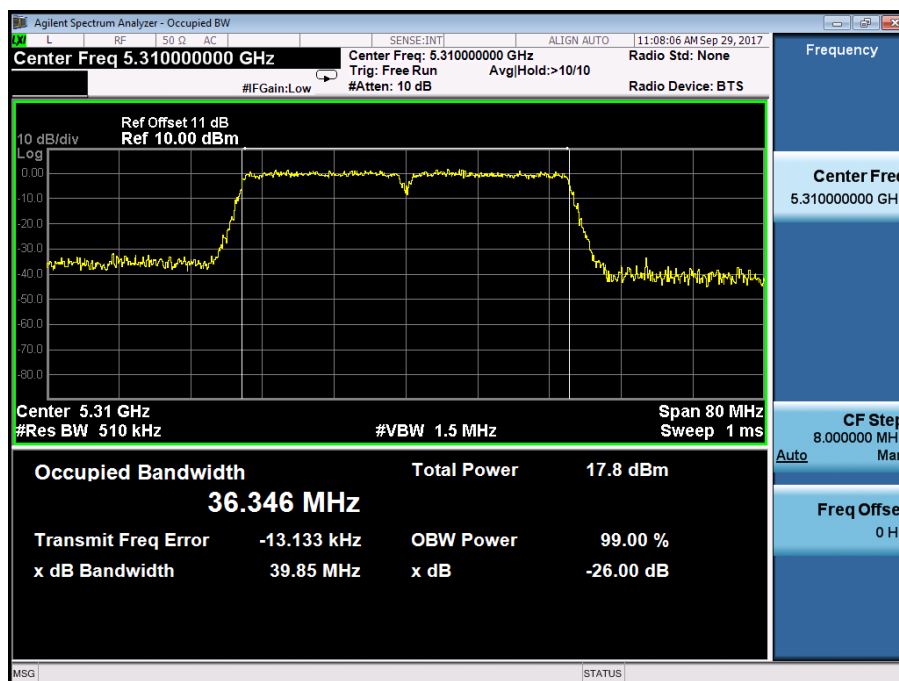
Ant1



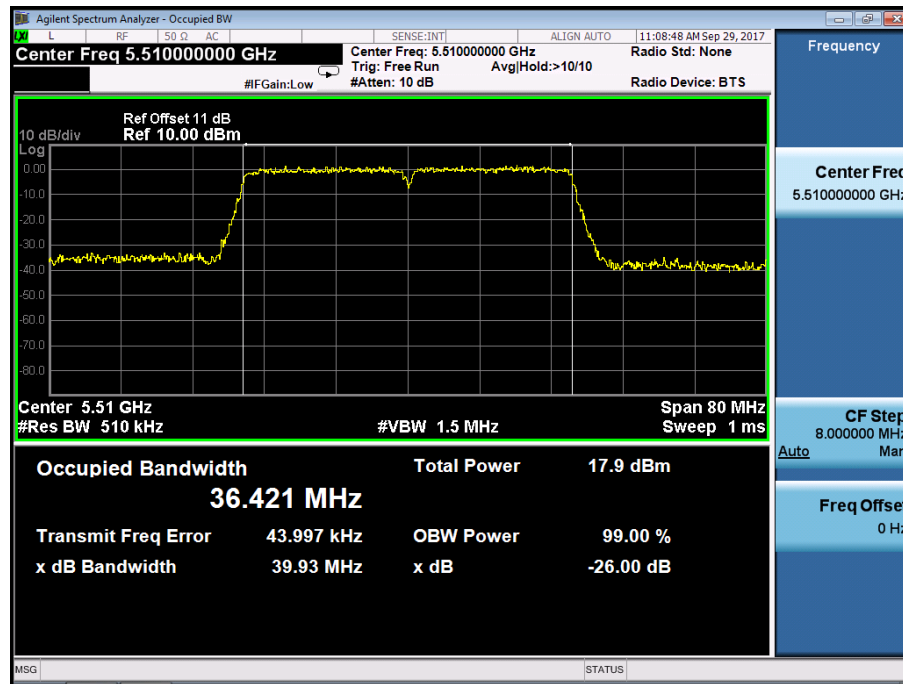
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-A
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5310
Ant0	



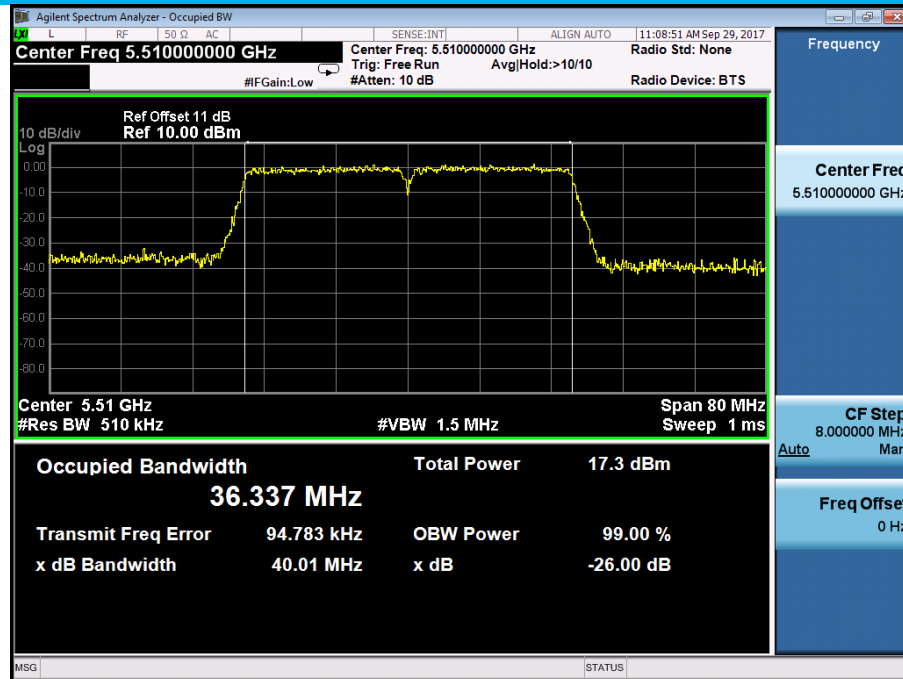
Ant1



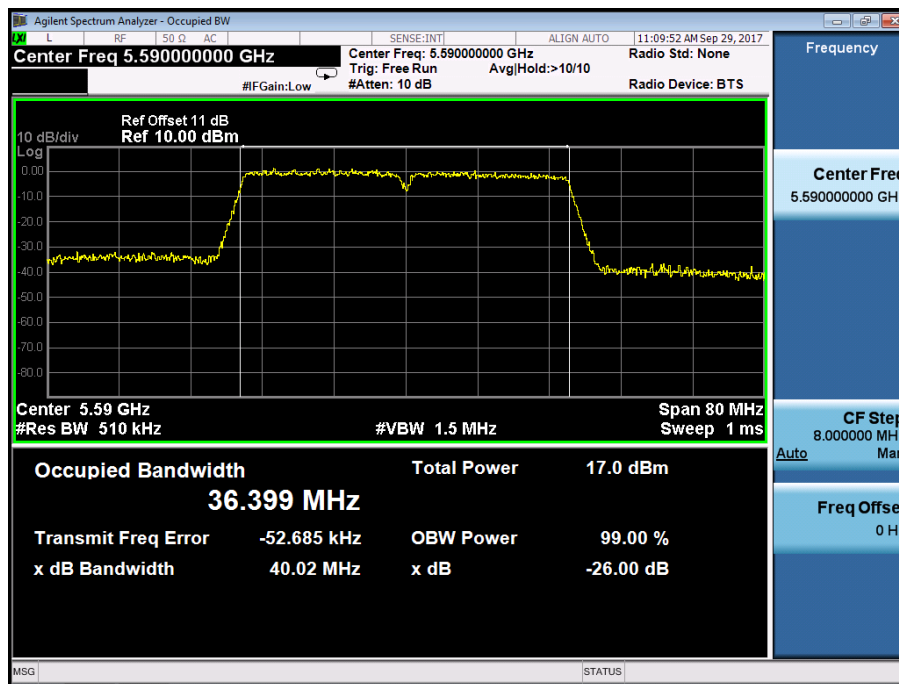
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5510
Ant0	



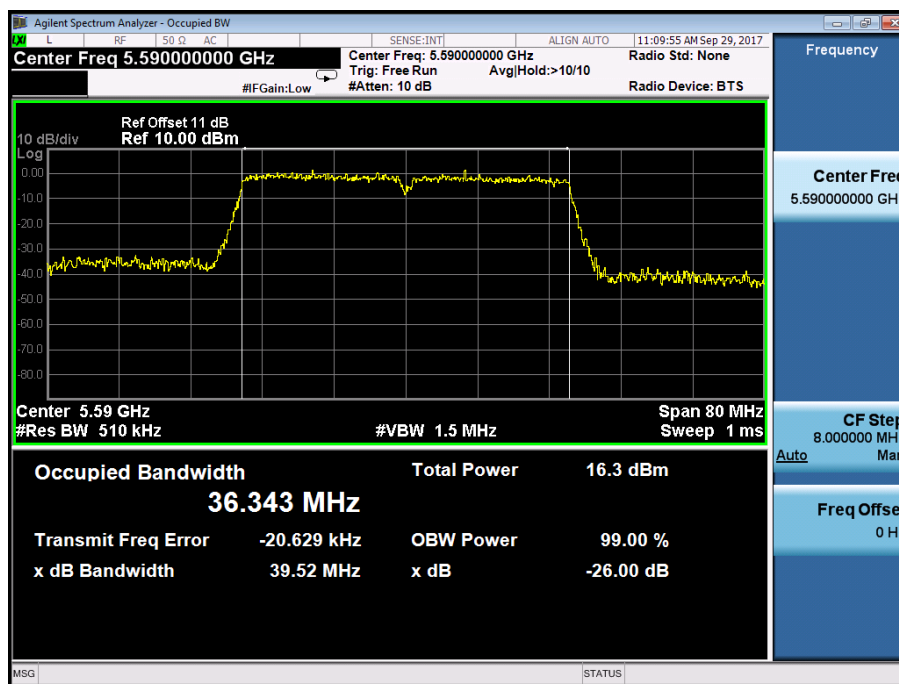
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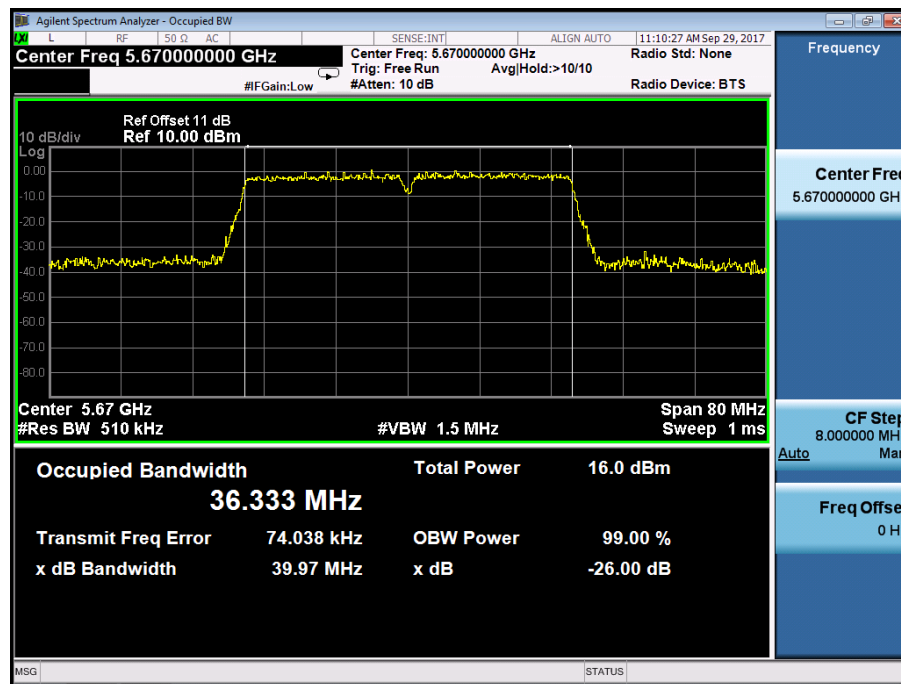
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5590
Ant0	



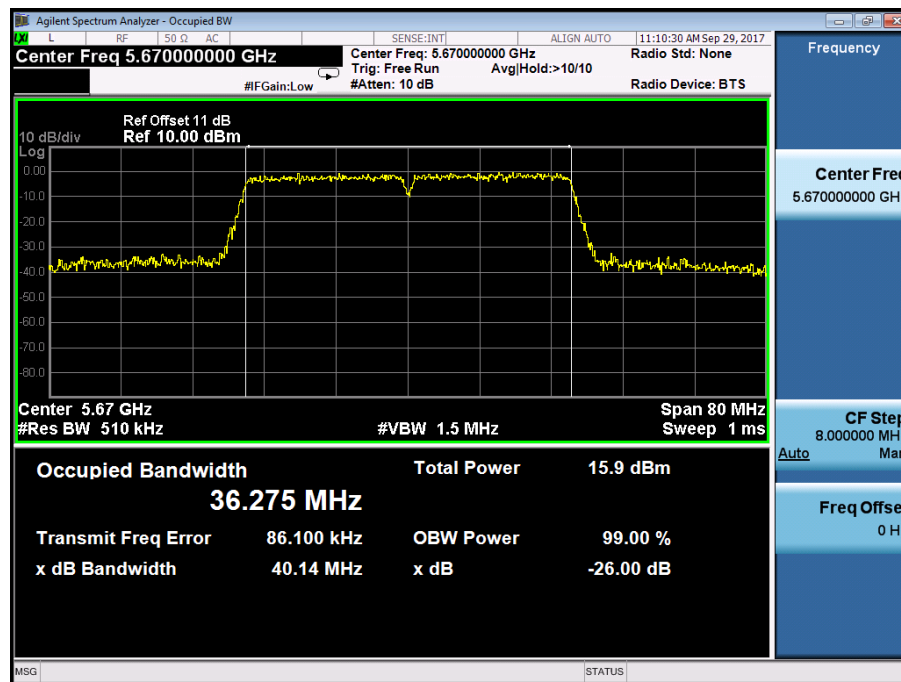
Ant1



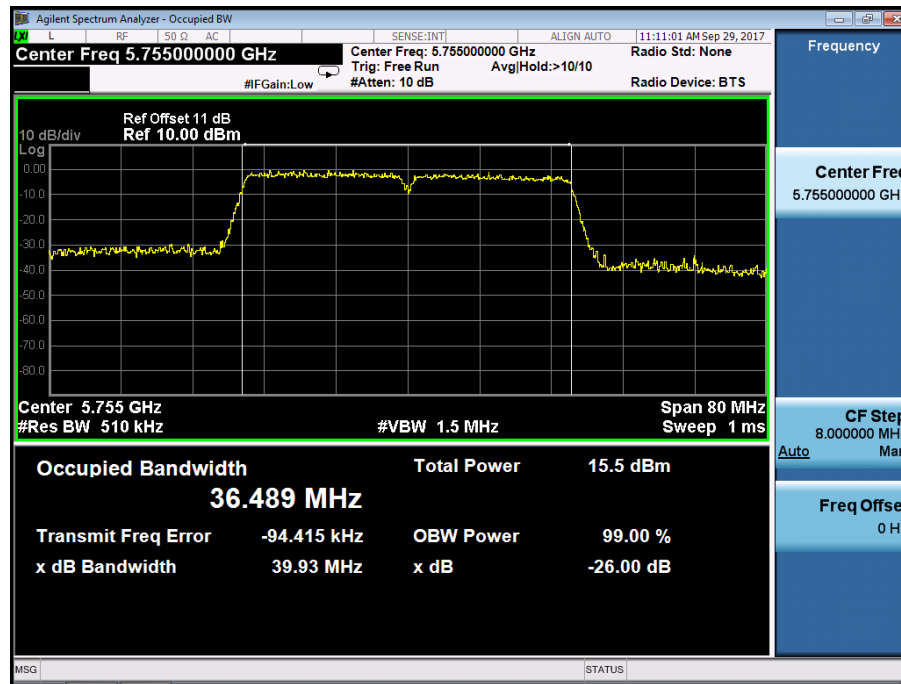
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5670
Ant0	



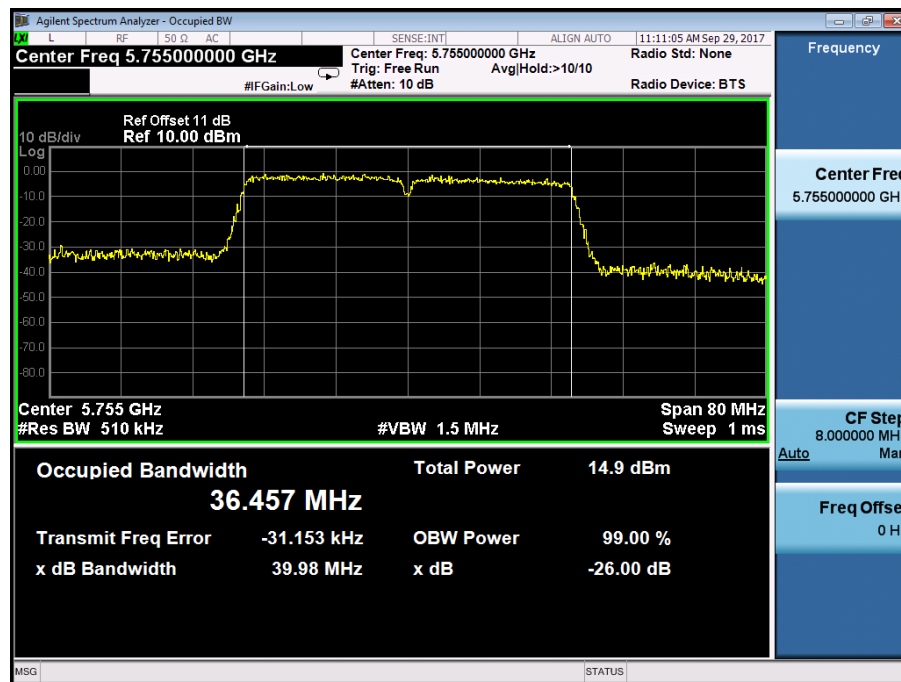
Ant1



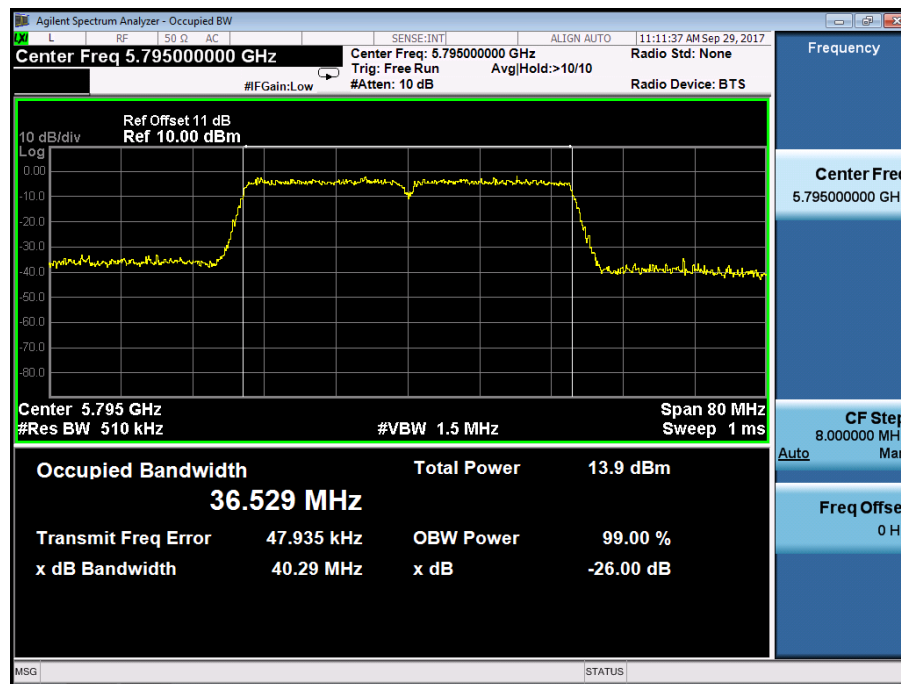
Emission Bandwidth&99% Occupied Bandwidth	UNII Band III
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5755
Ant0	



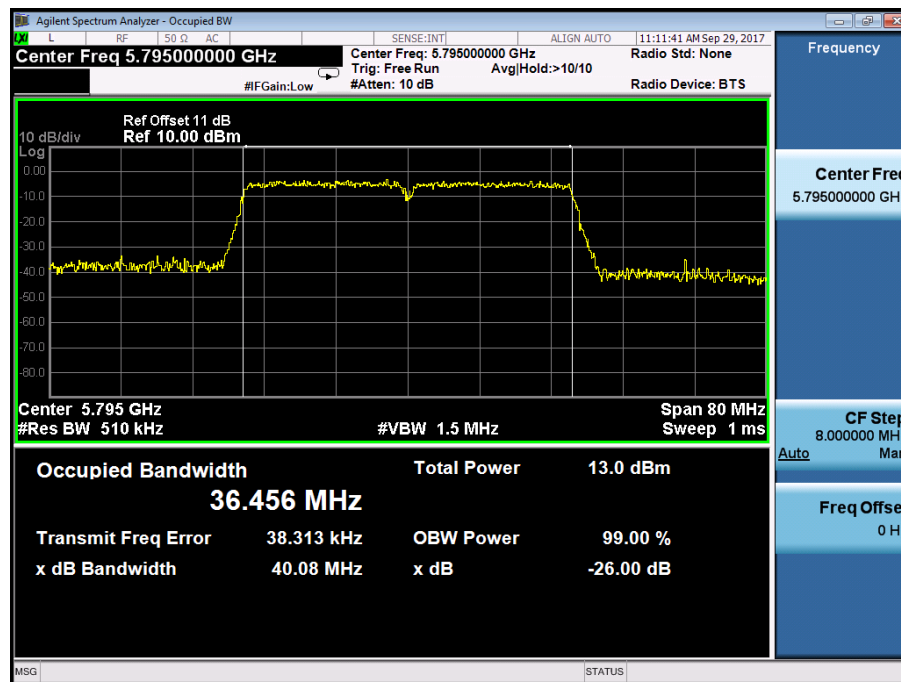
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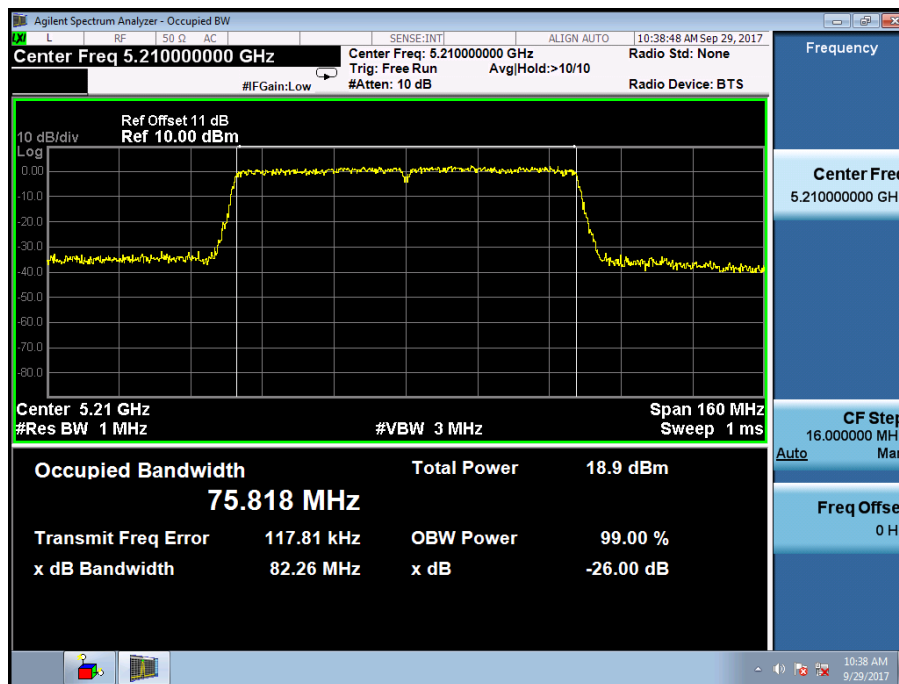
Emission Bandwidth&99% Occupied Bandwidth	UNII Band III
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5795
Ant0	



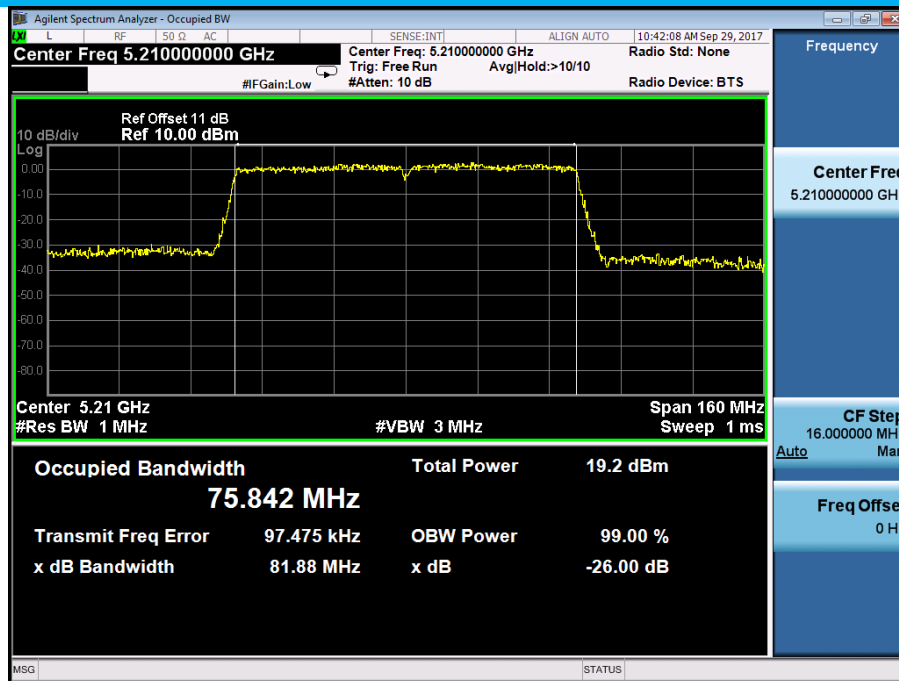
Ant1



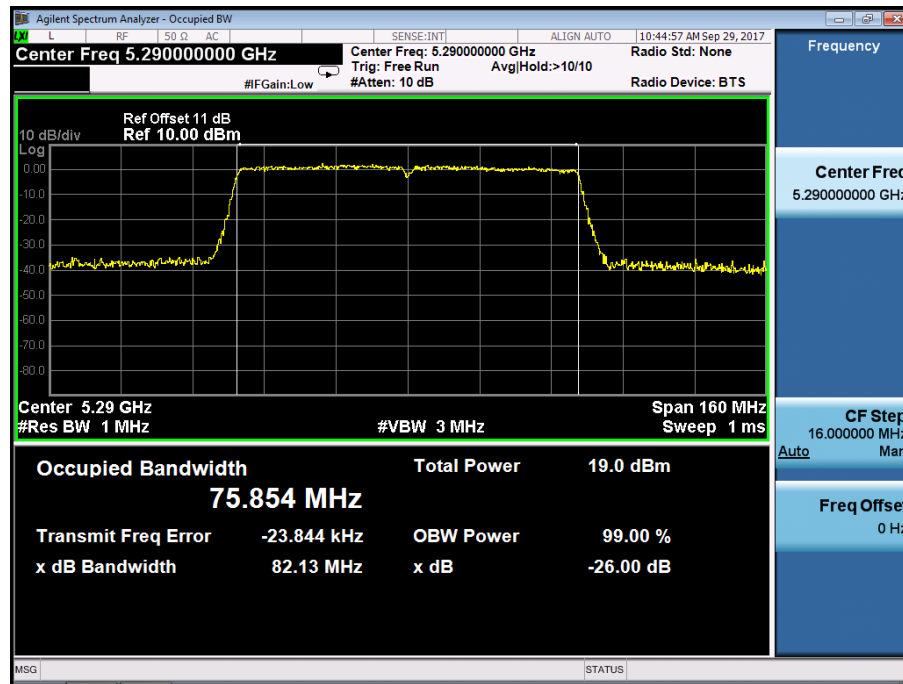
Emission Bandwidth&99% Occupied Bandwidth	UNII Band I
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5210
Ant0	



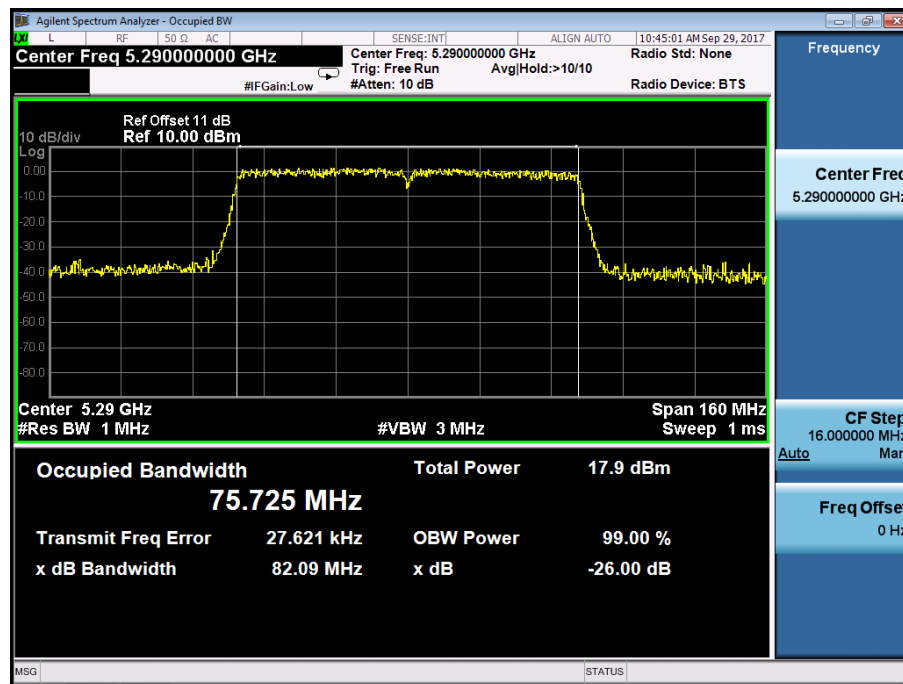
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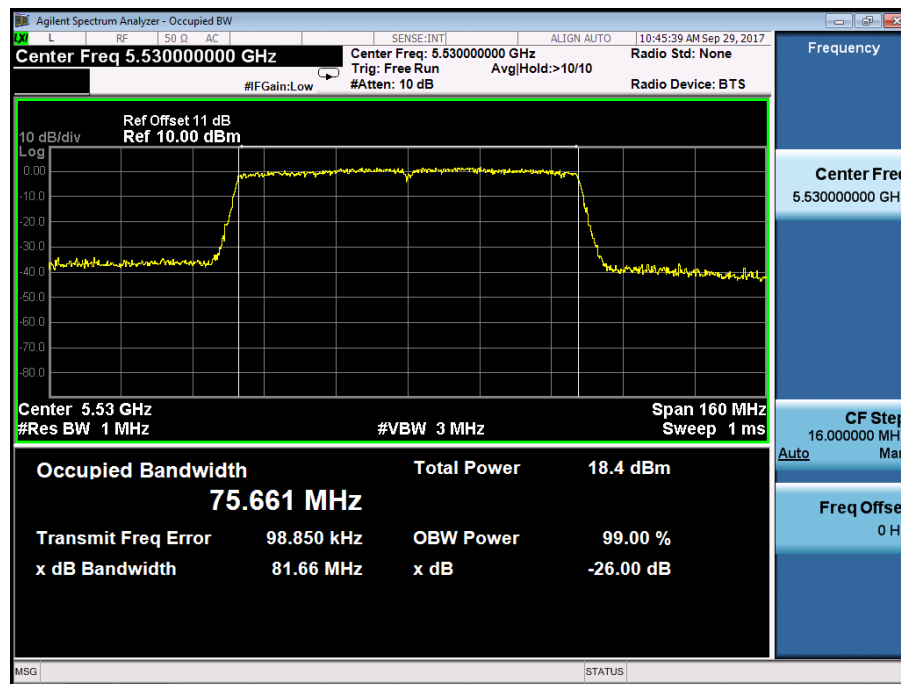
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-A
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5290
Ant0	



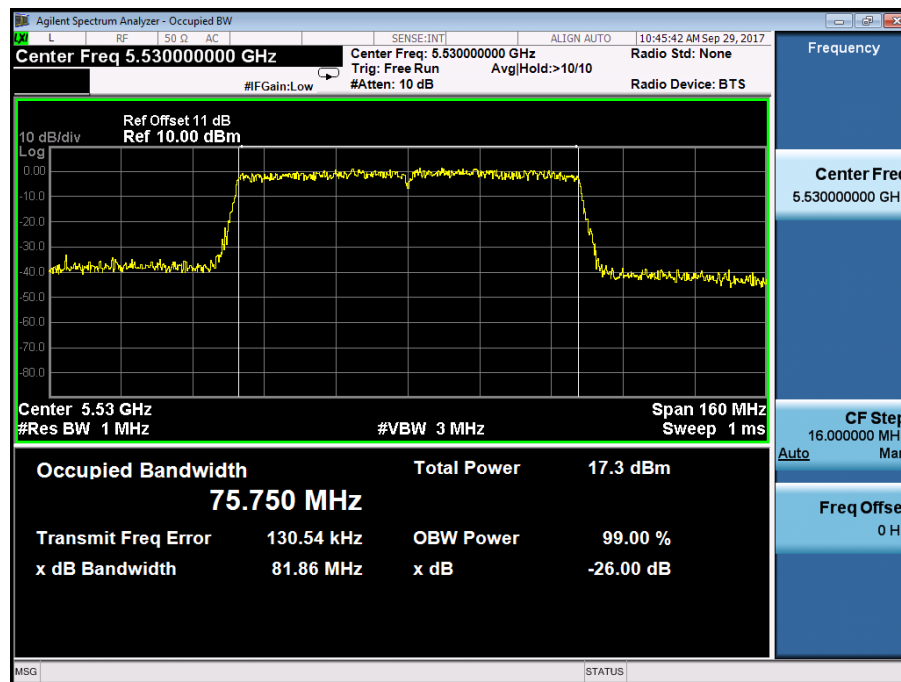
Ant1



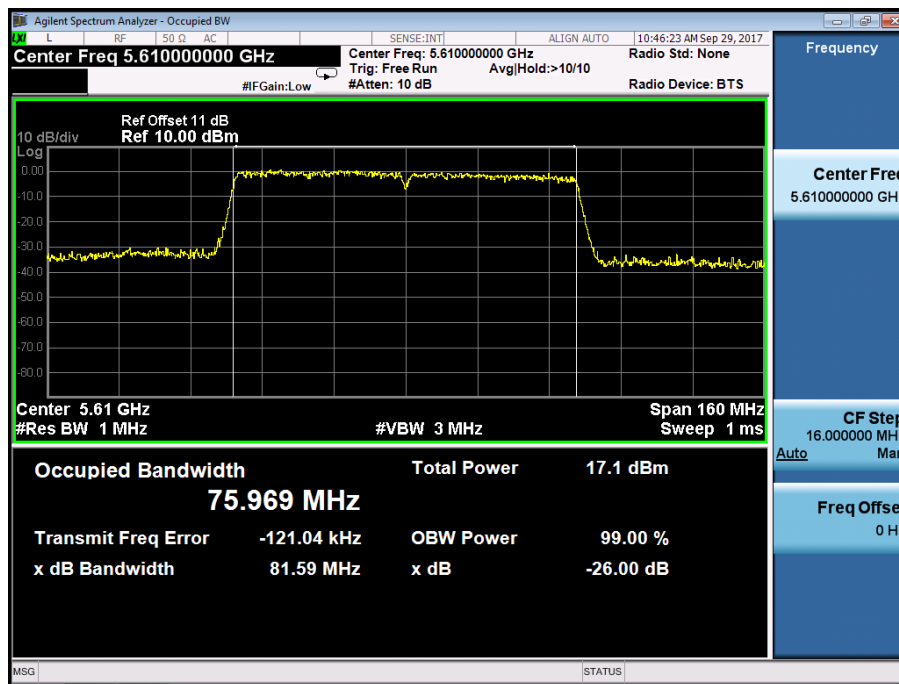
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5530
Ant0	



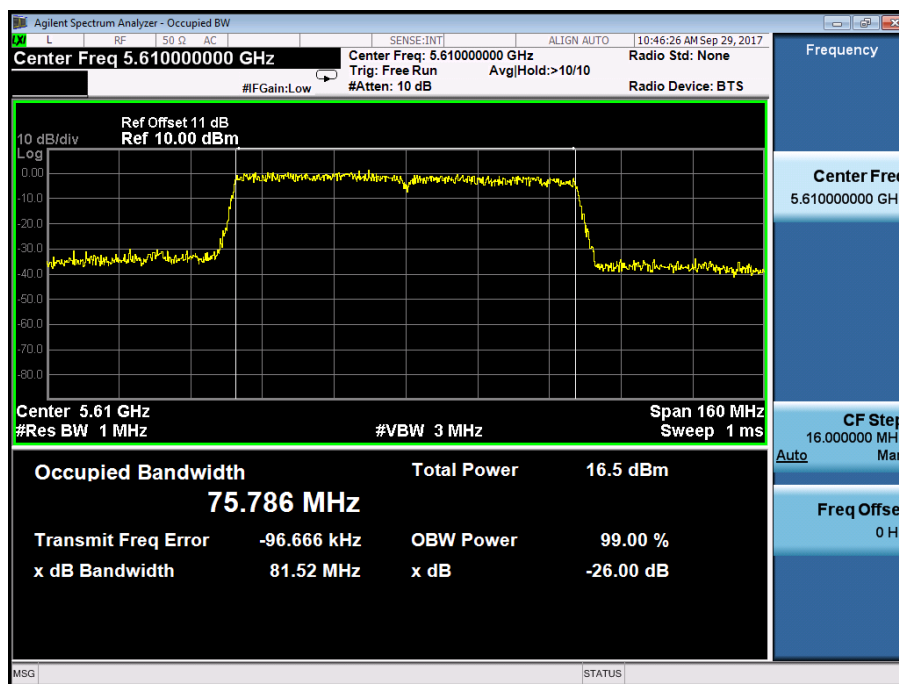
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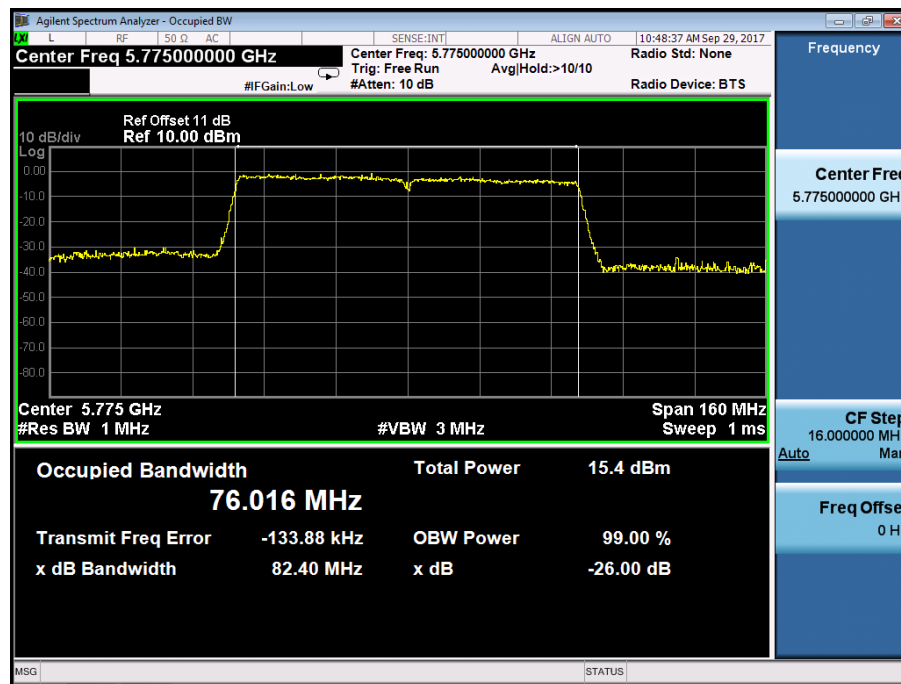
Emission Bandwidth&99% Occupied Bandwidth	UNII Band II-C
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5610
Ant0	



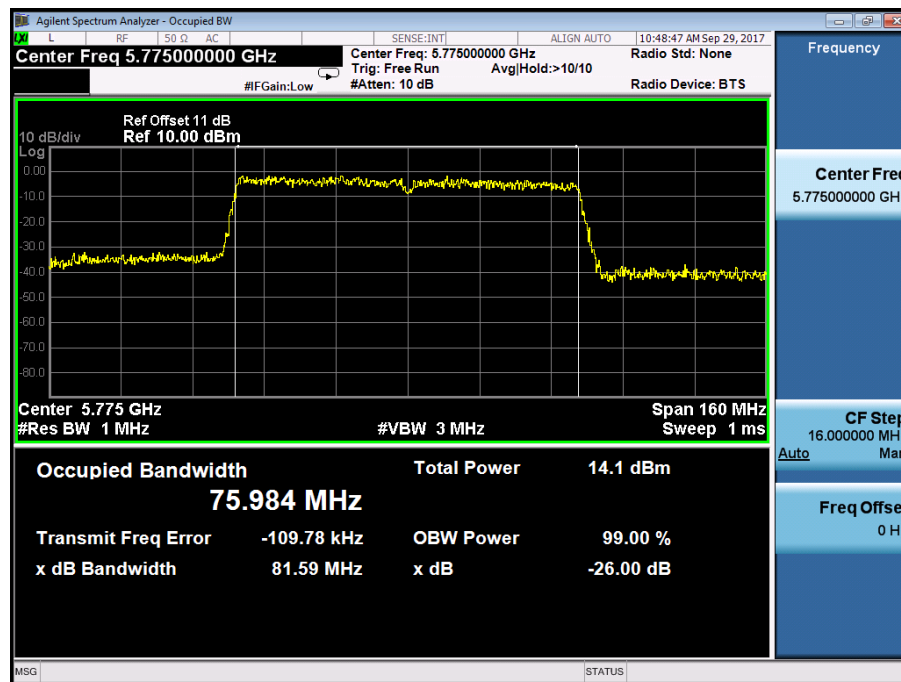
Ant1



Emission Bandwidth&99% Occupied Bandwidth	UNII Band III
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5775
Ant0	

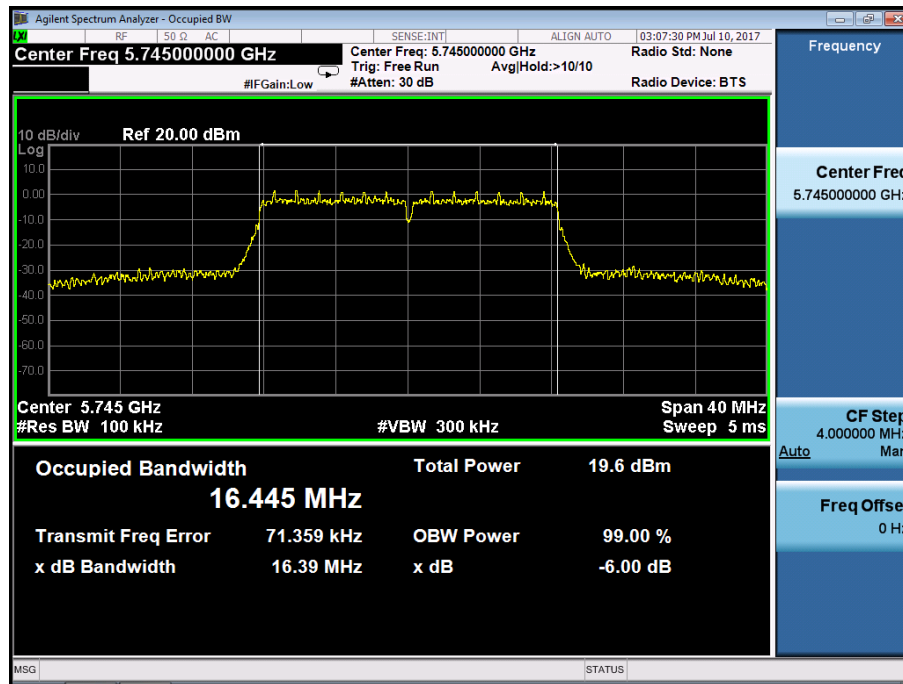


Ant1

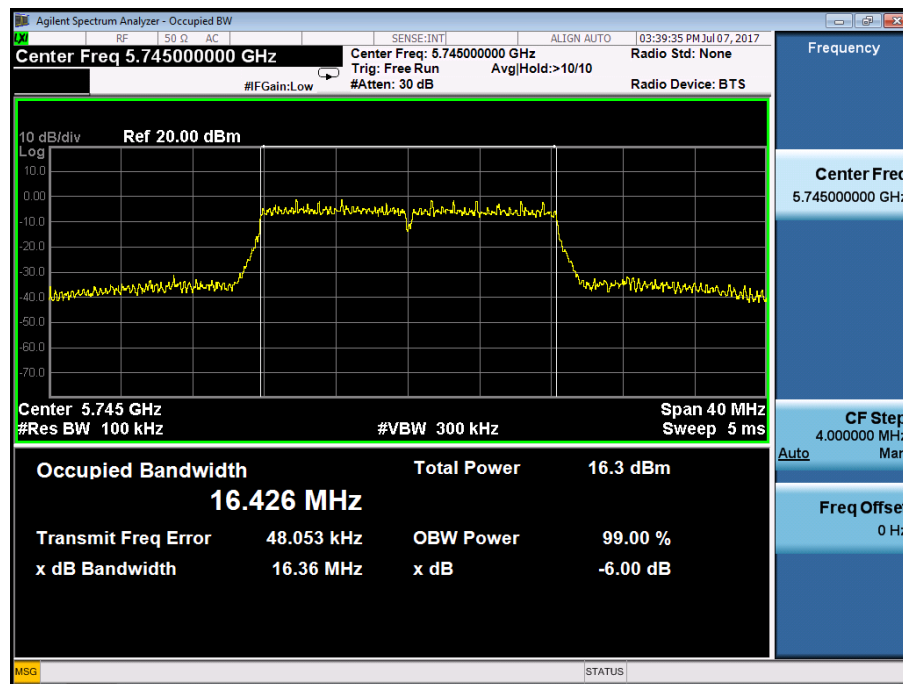


Minimum Emission Bandwidth
Test Model 802.11a mode
Ant0

UNII Band III
Frequency(MHz) 5745

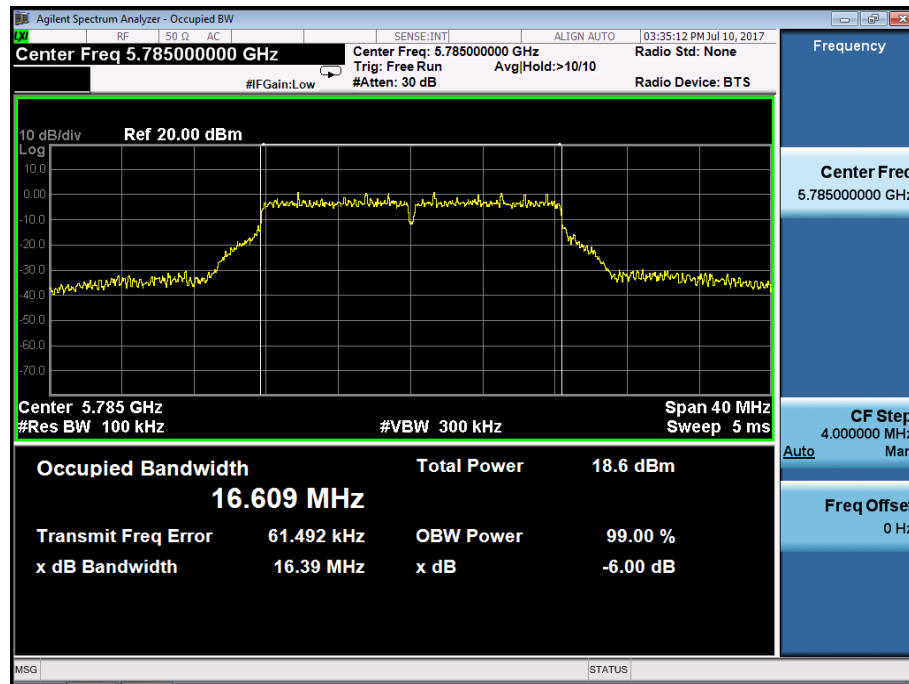


Ant1

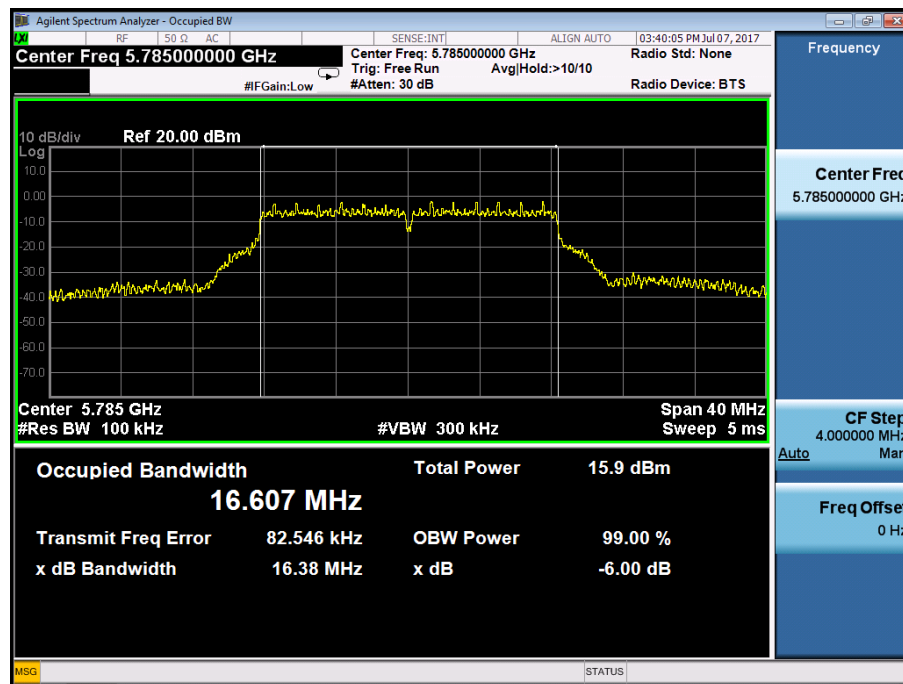


Minimum Emission Bandwidth
Test Model 802.11a mode
Ant0

UNII Band III
Frequency(MHz) 5785

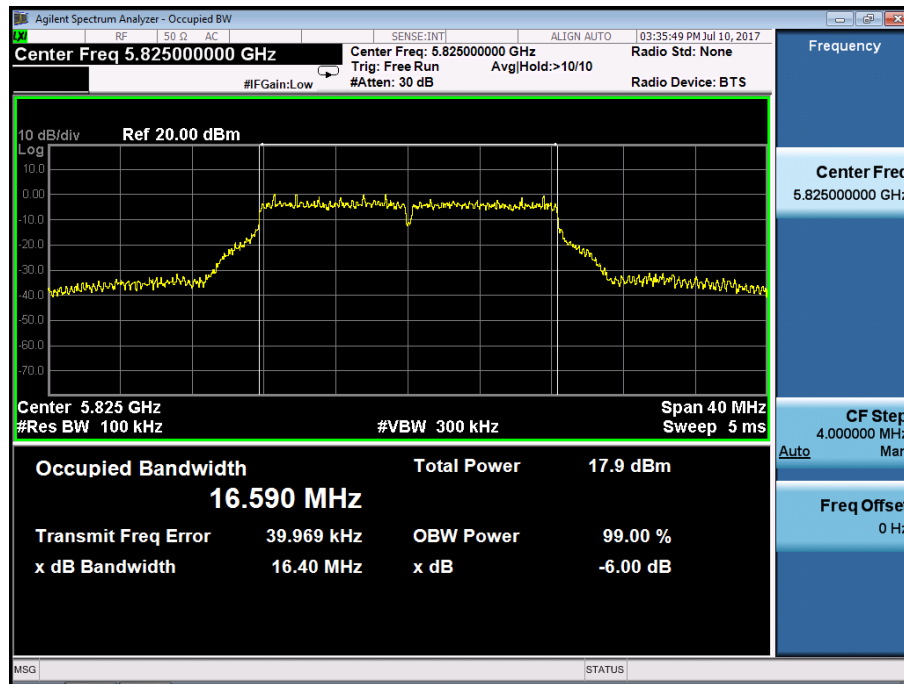


Ant1

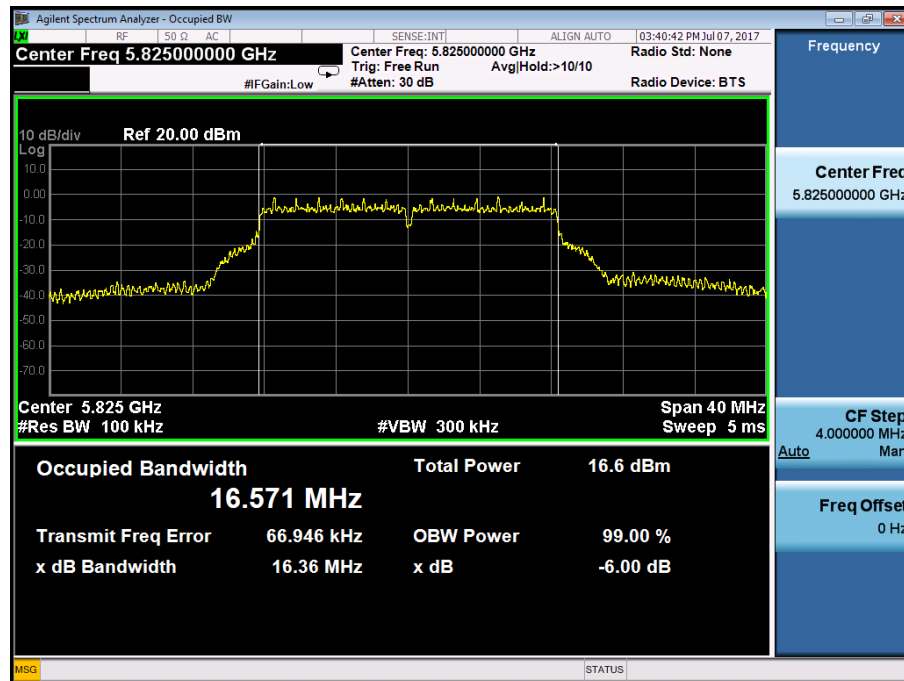


Minimum Emission Bandwidth
Test Model 802.11a mode
Ant0

UNII Band III
Frequency(MHz) 5825



Ant1



Minimum Emission Bandwidth

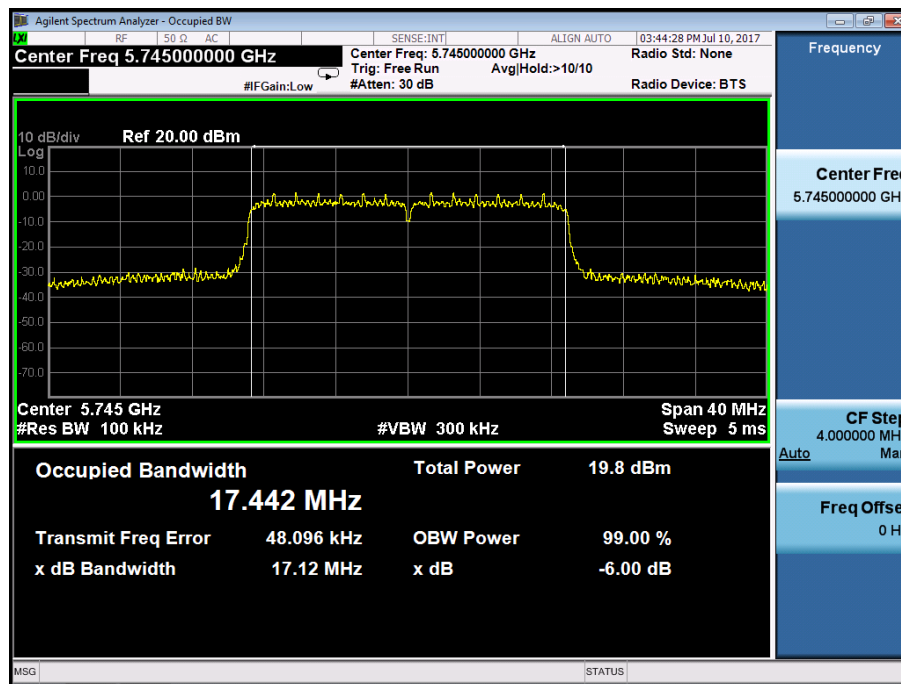
UNII Band III

Test Model 802.11n(VHT20) mode

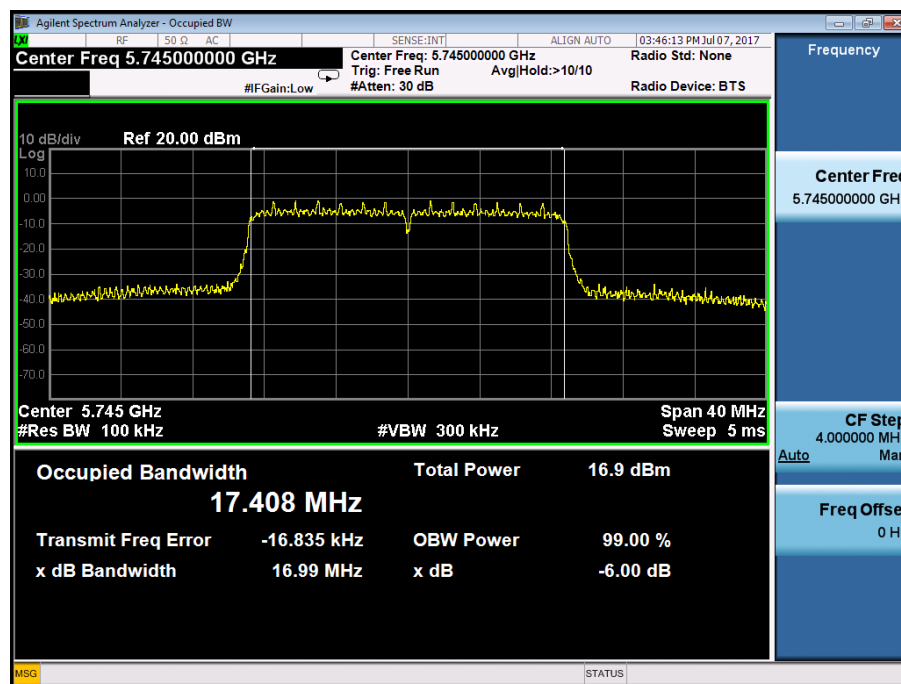
Frequency(MHz)

5745

Ant0



Ant1



Minimum Emission Bandwidth

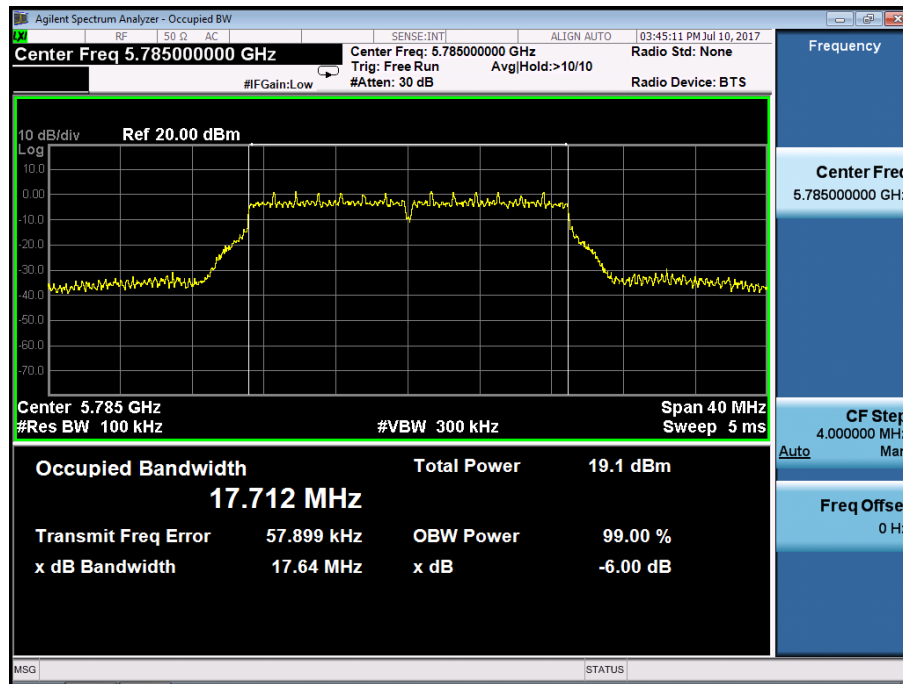
UNII Band III

Test Model 802.11n(VHT20) mode

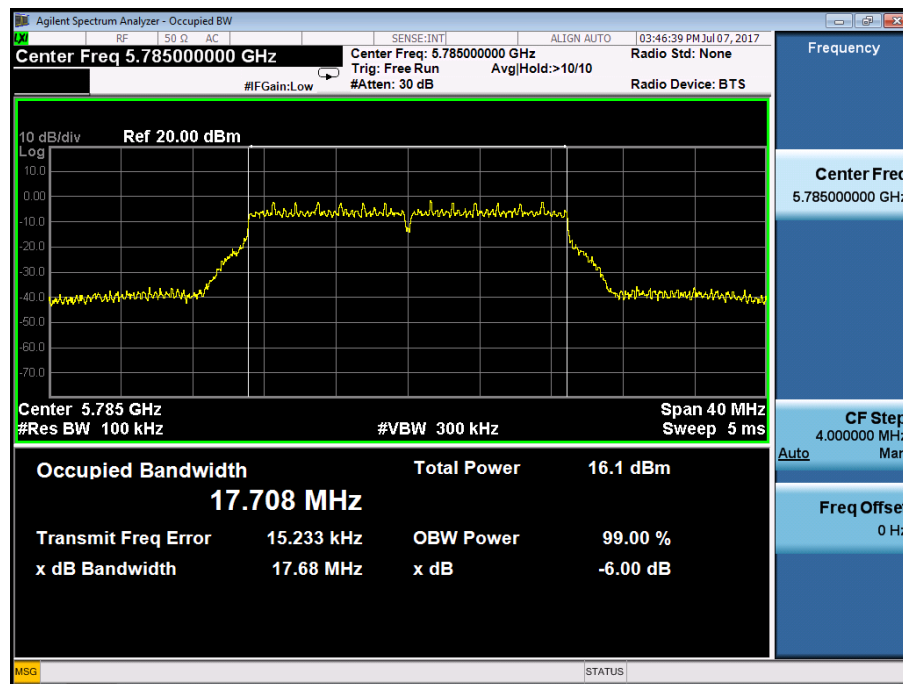
Frequency(MHz)

5785

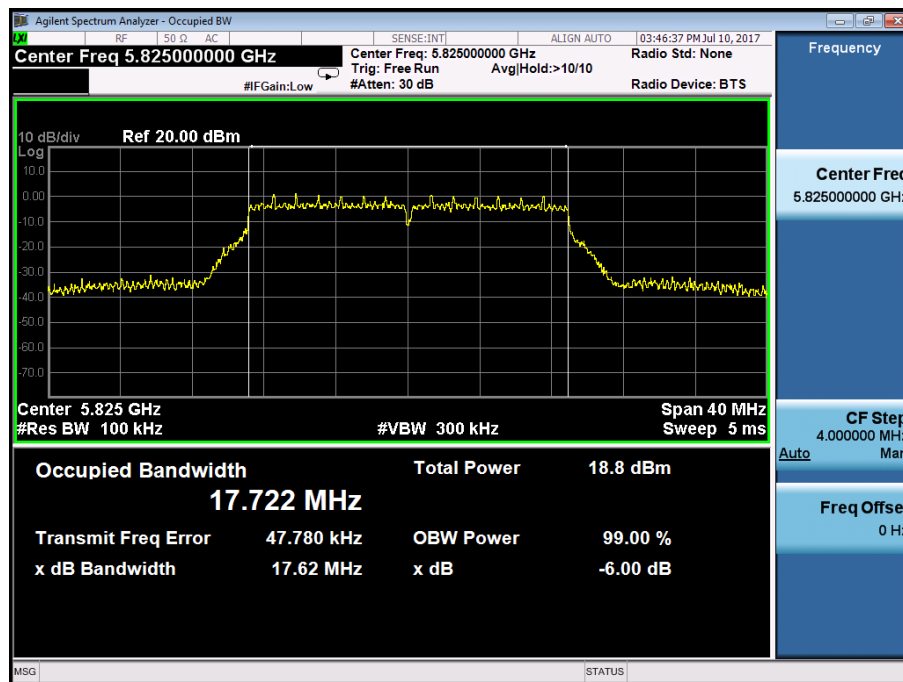
Ant0



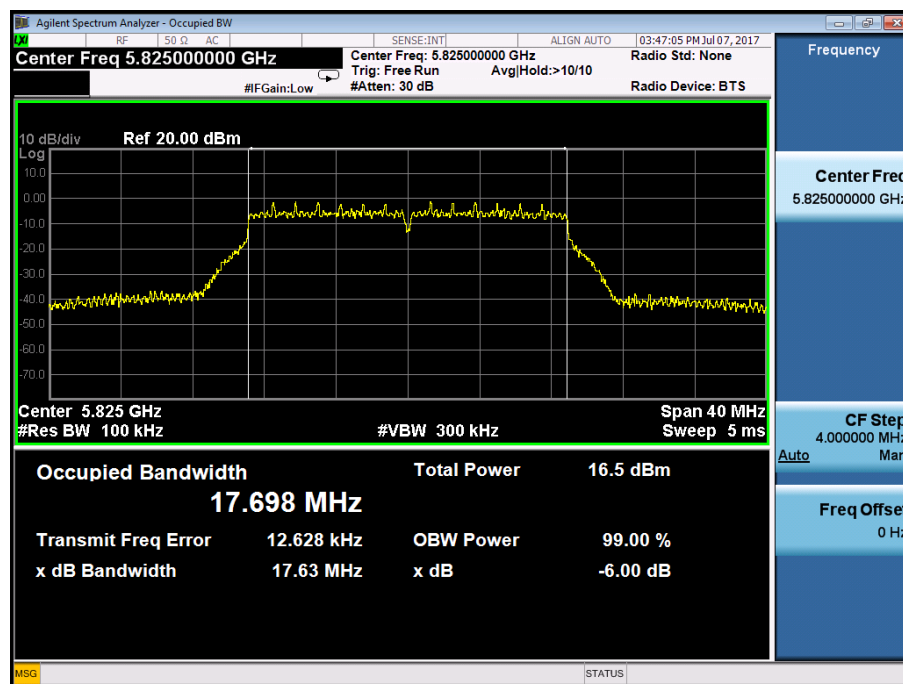
Ant1



Minimum Emission Bandwidth	UNII Band III
Test Model 802.11n(VHT20) mode	Frequency(MHz) 5825
Ant0	



Ant1



Minimum Emission Bandwidth

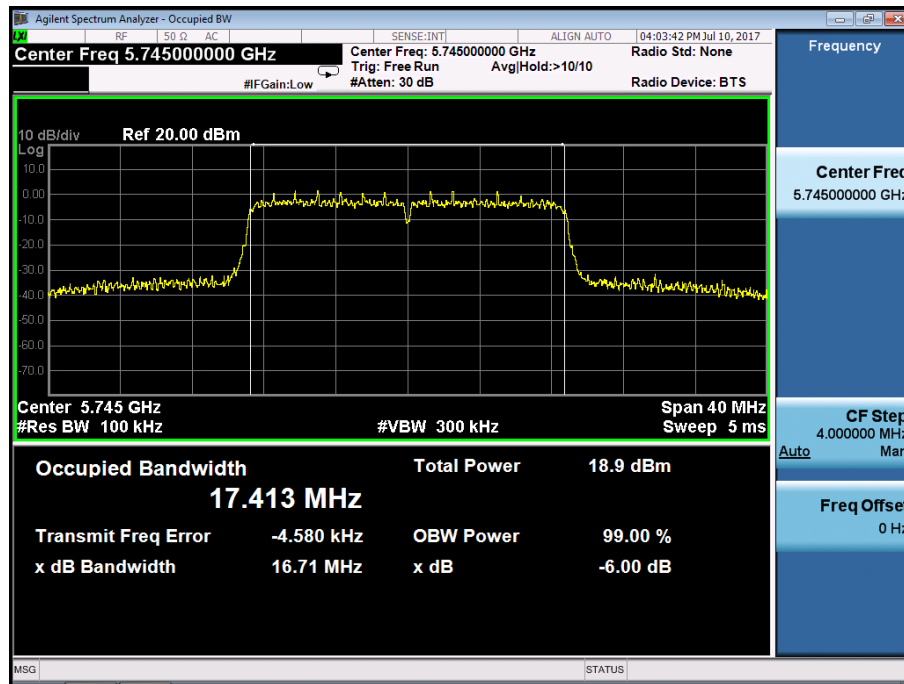
UNII Band III

Test Model 802.11ac(VHT20) mode

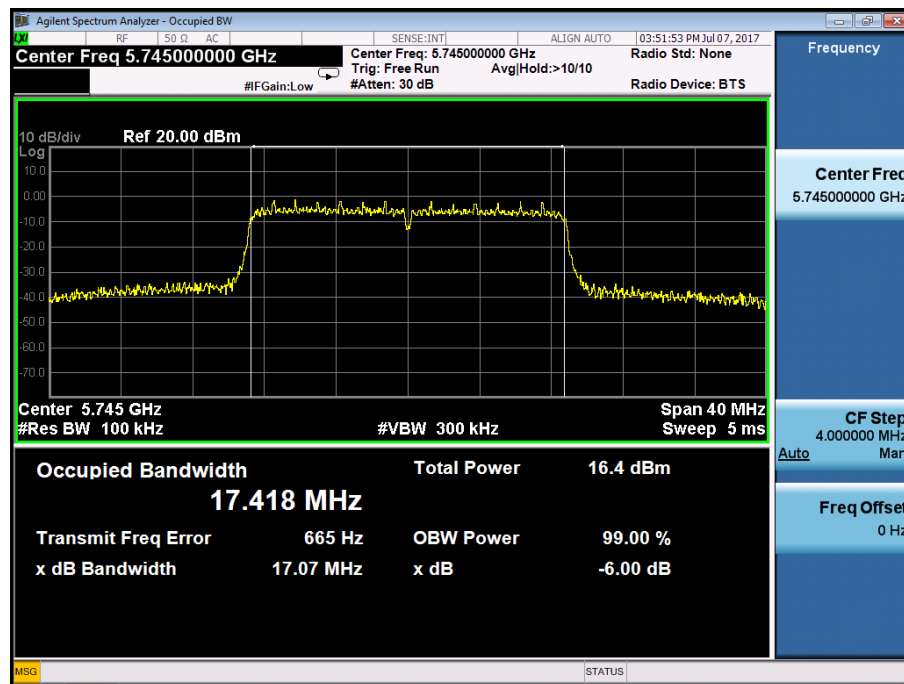
Frequency(MHz)

5745

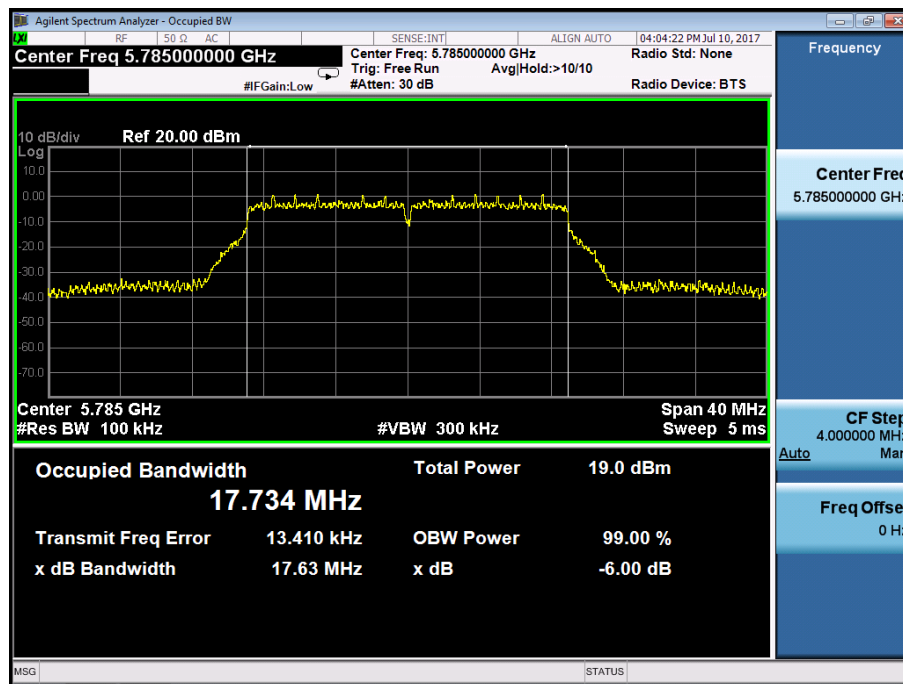
Ant0



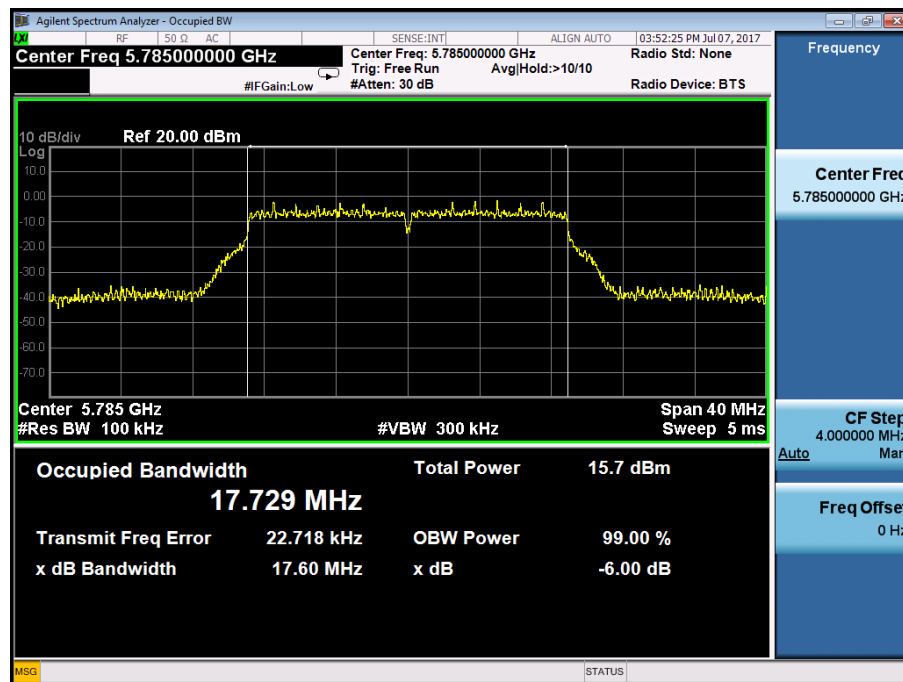
Ant1



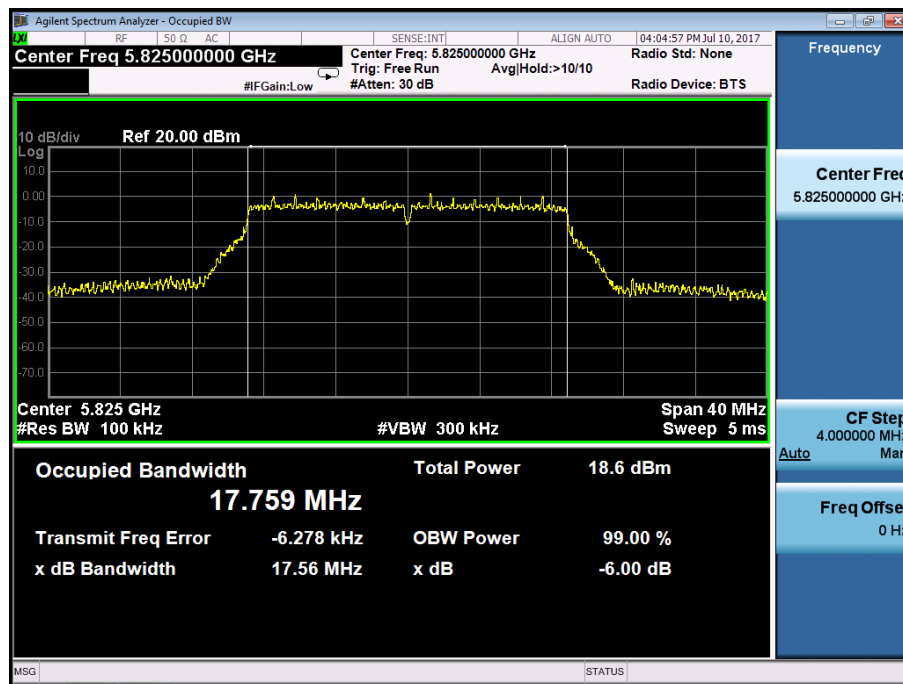
Minimum Emission Bandwidth	UNII Band III
Test Model 802.11ac(VHT20) mode	Frequency(MHz) 5785
Ant0	



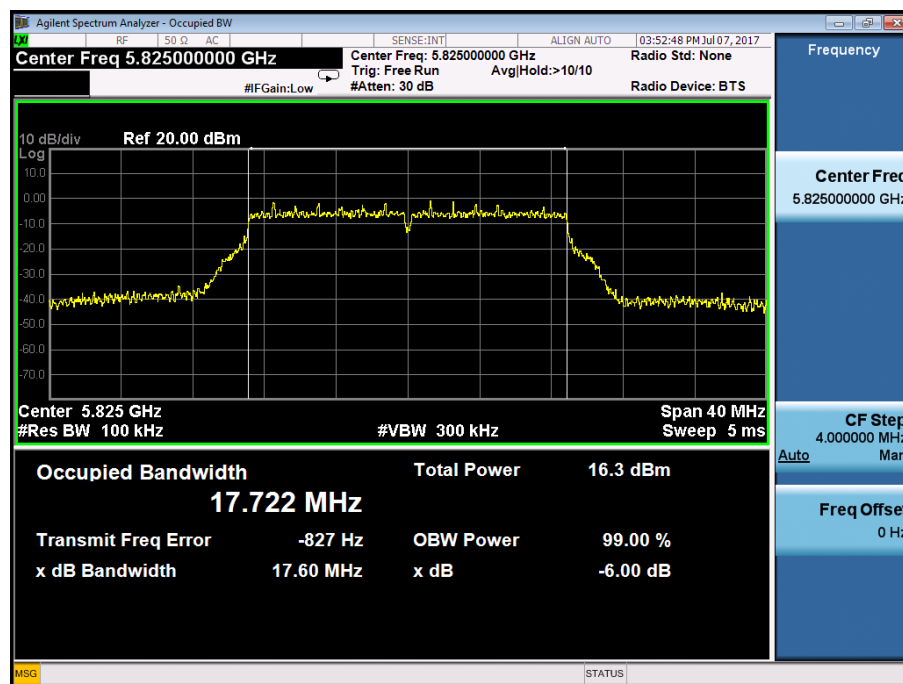
Ant1



Minimum Emission Bandwidth	UNII Band III
Test Model 802.11ac(VHT20) mode	Frequency(MHz) 5825
Ant0	



Ant1



Minimum Emission Bandwidth

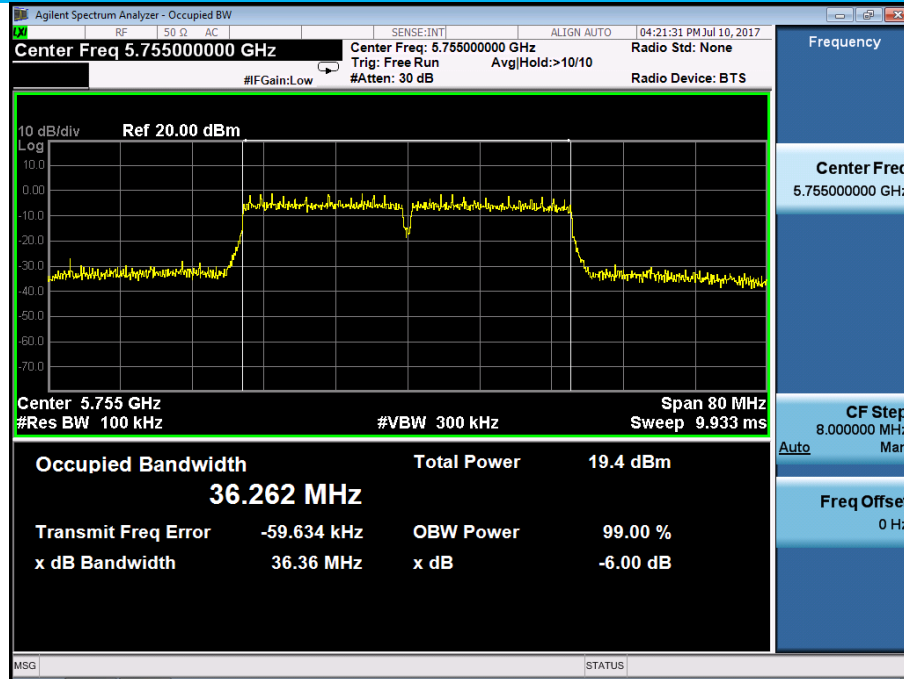
UNII Band III

Test Model 802.11n(VHT40) mode

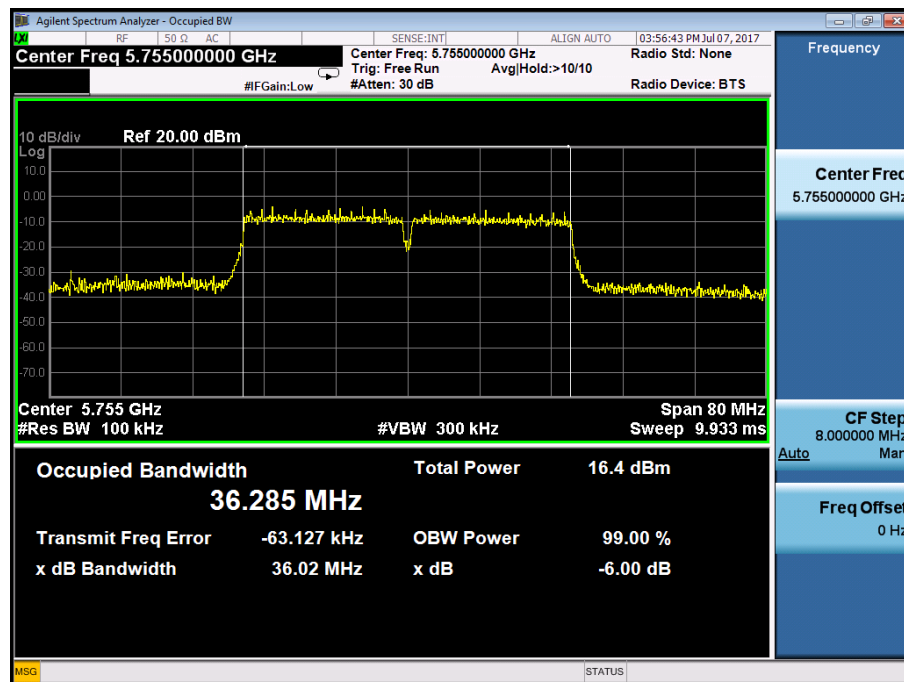
Frequency(MHz)

5755

Ant0



Ant1



Minimum Emission Bandwidth

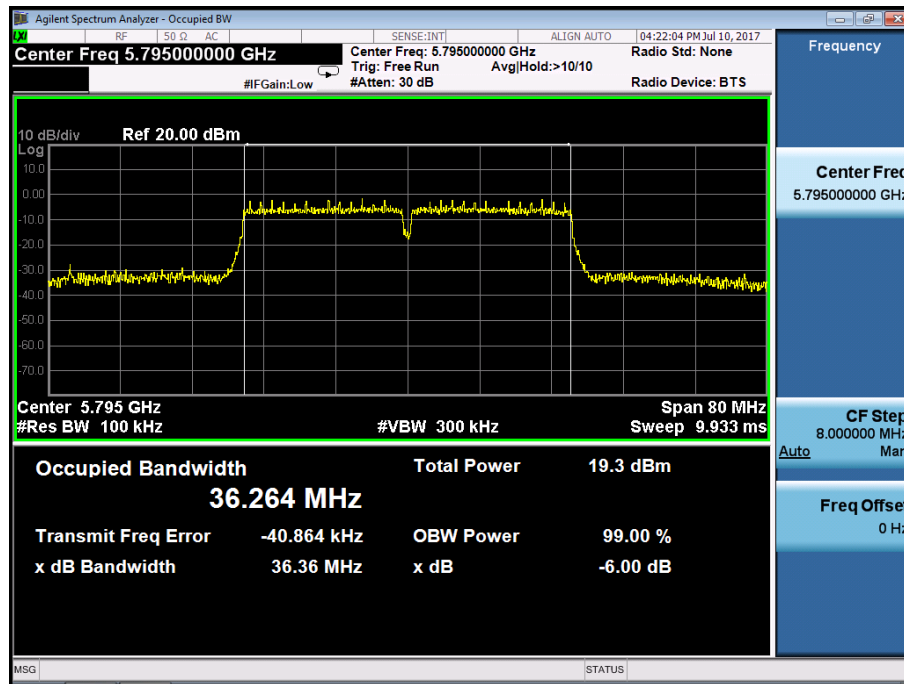
UNII Band III

Test Model 802.11n(VHT40) mode

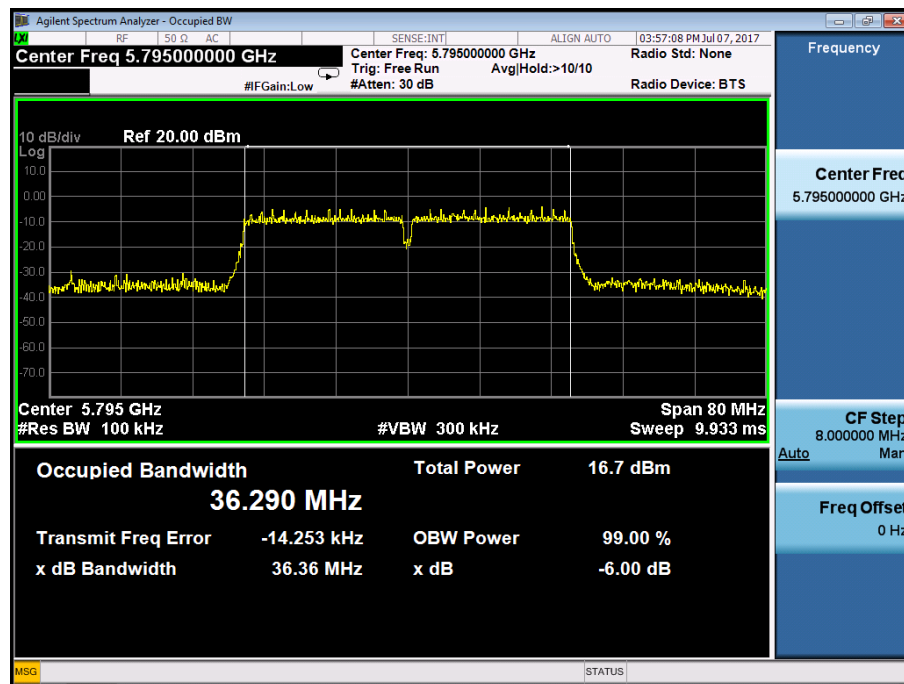
Frequency(MHz)

5795

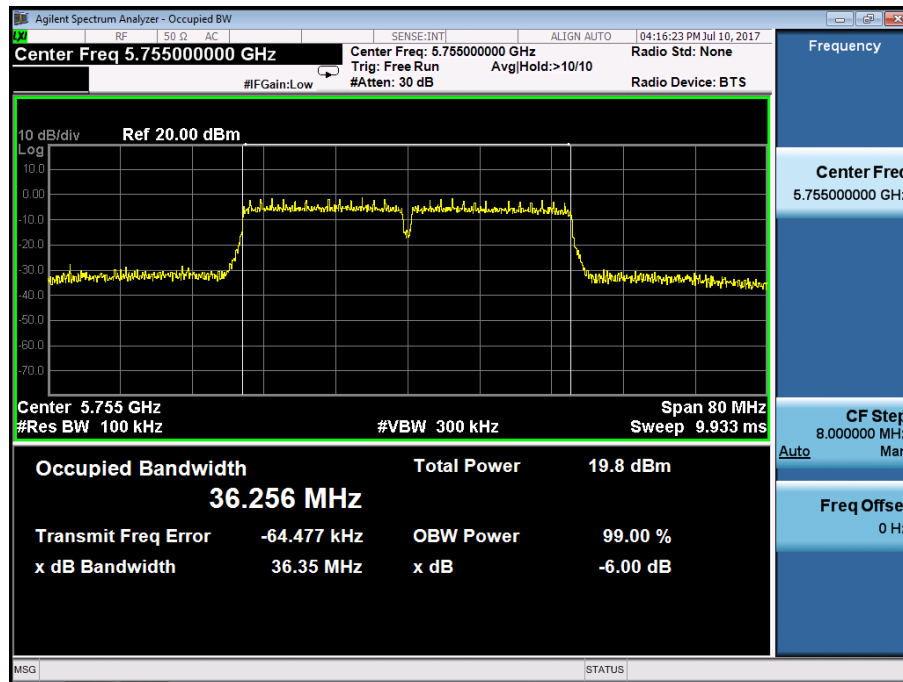
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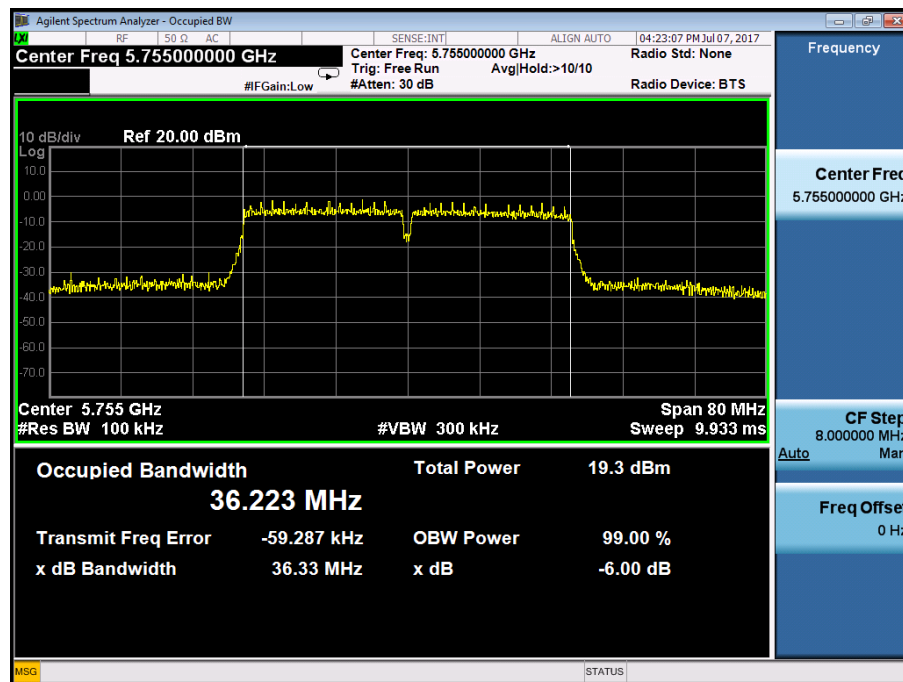
Ant1



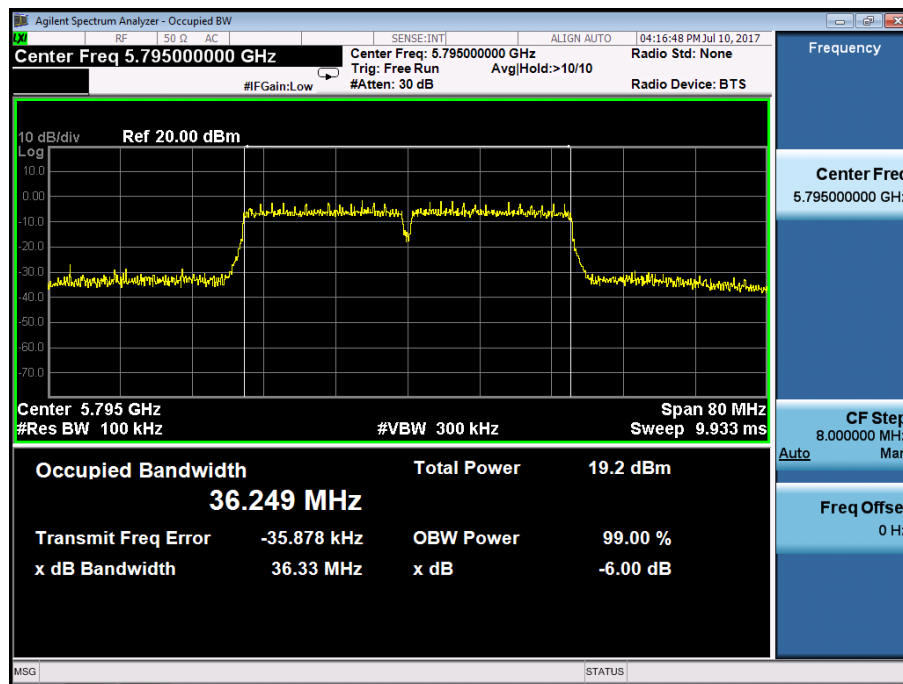
Minimum Emission Bandwidth	UNII Band III
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5755
Ant0	



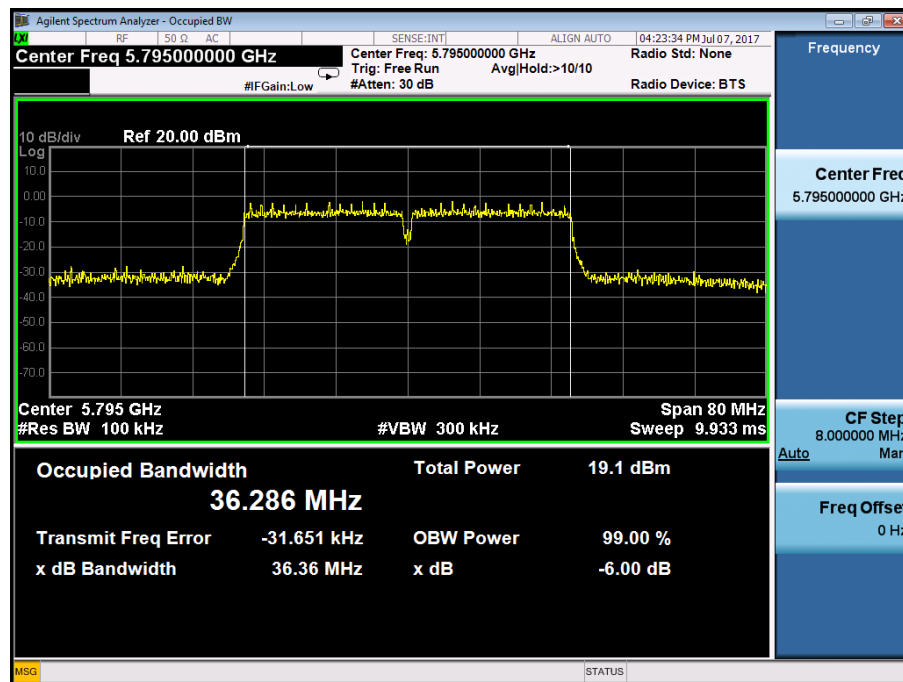
Ant1



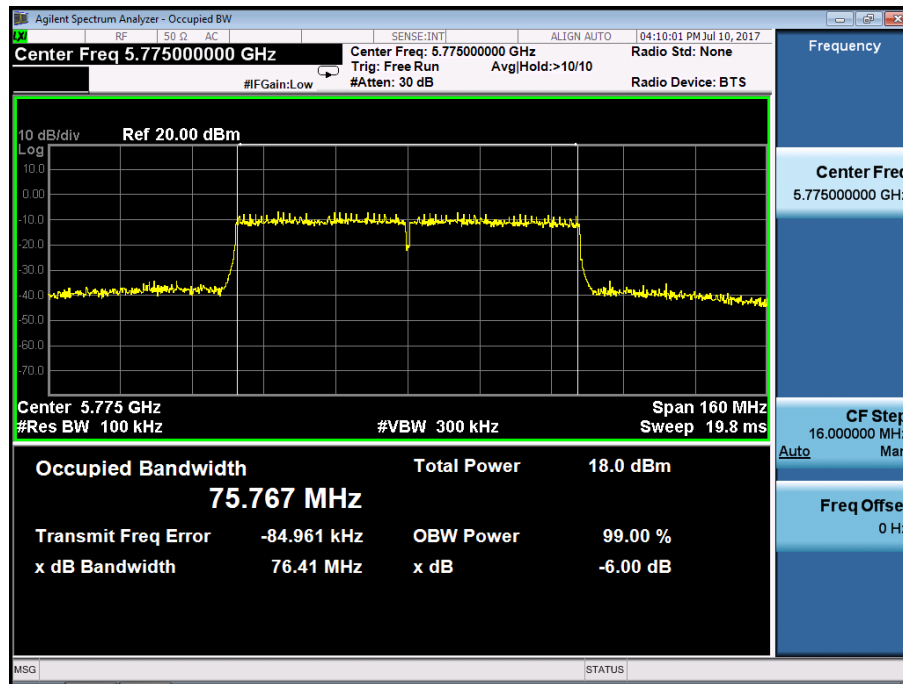
Minimum Emission Bandwidth	UNII Band III
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5795
Ant0	



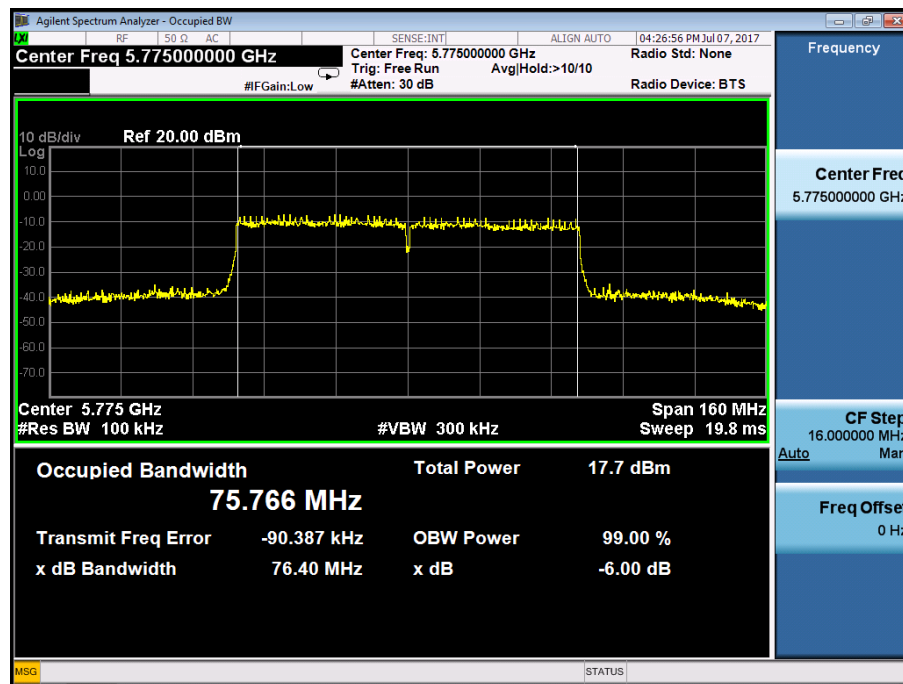
Ant1



Minimum Emission Bandwidth	UNII Band III
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5775
Ant0	



Ant1



8.2 MAXIMUM CONDUCTED OUTPUT POWER

8.2.1 Applicable Standard

According to FCC Part 15.407(a)(1) for UNII Band I
According to FCC Part 15.407(a)(2) for UNII Band II-A and UNII Band II-C
According to FCC Part 15.407(a)(3) for UNII Band III
According to 789033 D02 Section II(E)

8.2.2 Conformance Limit

■ For the band 5.15-5.25 GHz,

(a) (1) (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(a) (1) (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(a) (1) (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(a) (1) (iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the 5.25-5.35 GHz and 5.47-5.725 GHz bands

(a) (2) the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

■ For the band 5.725-5.85 GHz

(a) (3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.2.4 Test Procedure

The maximum average conducted output power can be measured using Method PM-G (Measurement using a gated RF average power meter):

Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

- a. The Transmitter output (antenna port) was connected to the power meter.
- b. Turn on the EUT and power meter and then record the power value.
- c. Repeat above procedures on all channels needed to be tested.

8.2.5 Test Results

Temperature : 28℃ Humidity : 65 % ☒ 802.11a mode Test Date : June 28, 2017 Test By: King Kong						
Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)		Limit (dBm)	Verdict
			Ant0	Ant1		
UNII Band I	CH36	5180	13.57	13.58	22.46	Pass
	CH40	5200	13.49	13.71	22.46	Pass
	CH48	5240	13.32	13.58	22.46	Pass
UNII Band II-A	CH52	5260	13.45	13.37	22.46	Pass
	CH56	5280	13.66	13.35	22.46	Pass
	CH64	5320	13.43	13.63	22.46	Pass
UNII Band II-C	CH100	5500	13.51	13.44	22.46	Pass
	CH120	5600	13.47	13.59	22.46	Pass
	CH140	5700	13.60	13.54	22.46	Pass
UNII Band III	CH149	5745	12.38	12.13	28.46	Pass
	CH157	5785	12.21	12.19	28.46	Pass
	CH165	5825	12.19	12.32	28.46	Pass
Note: N/A (Not Applicable)						

☒ 802.11n(HT20) mode

Temperature :	28℃	Test Date :	June 28, 2017
Humidity :	65 %	Test By:	King Kong

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
UNII Band I	CH36	5180	12.37	12.24	15.31	22.46	Pass
	CH40	5200	12.10	12.10	15.11	22.46	Pass
	CH48	5240	12.31	12.04	15.18	22.46	Pass
UNII Band II-A	CH52	5260	12.04	12.08	15.07	22.46	Pass
	CH56	5280	12.22	12.43	15.34	22.46	Pass
	CH64	5320	12.08	12.36	15.23	22.46	Pass
UNII Band II-C	CH100	5500	12.60	12.08	15.36	22.46	Pass
	CH120	5600	12.22	12.43	15.34	22.46	Pass
	CH140	5700	12.32	12.13	15.23	22.46	Pass
UNII Band III	CH149	5745	11.98	11.42	14.72	28.46	Pass
	CH157	5785	11.63	11.54	14.59	28.46	Pass
	CH165	5825	11.96	11.56	14.77	28.46	Pass

☒ 802.11ac(VHT20) mode

 Temperature : 28℃
 Humidity : 65 %

 Test Date : June 28, 2017
 Test By: King Kong

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
UNII Band I	CH36	5180	12.15	12.20	15.18	22.46	Pass
	CH40	5200	12.03	12.36	15.21	22.46	Pass
	CH48	5240	12.13	12.41	15.28	22.46	Pass
UNII Band II-A	CH52	5260	12.48	12.10	15.30	22.46	Pass
	CH56	5280	12.34	12.26	15.31	22.46	Pass
	CH64	5320	12.15	11.98	15.08	22.46	Pass
UNII Band II-C	CH100	5500	12.32	12.36	15.35	22.46	Pass
	CH120	5600	12.16	12.21	15.20	22.46	Pass
	CH140	5700	12.23	12.25	15.25	22.46	Pass
UNII Band III	CH149	5745	11.51	11.88	14.71	28.46	Pass
	CH157	5785	12.08	11.79	14.95	28.46	Pass
	CH165	5825	11.88	11.83	14.86	28.46	Pass

☒ 802.11n(HT40) mode

 Temperature : 28℃
 Humidity : 65 %

 Test Date : June 28, 2017
 Test By: King Kong

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
UNII Band I	CH38	5190	12.12	12.12	15.13	22.46	Pass
	CH46	5230	12.32	12.48	15.41	22.46	Pass
UNII Band II-A	CH54	5270	12.44	12.28	15.37	22.46	Pass
	CH62	5310	12.17	12.08	15.13	22.46	Pass
UNII Band II-C	CH102	5510	12.16	12.04	15.11	22.46	Pass
	CH118	5590	12.35	12.08	15.23	22.46	Pass
	CH134	5670	12.13	11.99	15.07	22.46	Pass
UNII Band III	CH151	5755	11.67	11.89	14.79	28.46	Pass
	CH159	5795	11.61	11.83	14.73	28.46	Pass

☒ 802.11ac(VHT40) mode

 Temperature : 28℃
 Humidity : 65 %

 Test Date : June 28, 2017
 Test By: King Kong

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)			Limit (MHz)	Verdict
			Ant0	Ant1	Ant0+Ant1		
UNII Band I	CH38	5190	12.21	12.10	15.17	22.46	Pass
	CH46	5230	12.26	12.01	15.15	22.46	Pass
UNII Band II-A	CH54	5270	12.42	11.88	15.17	22.46	Pass
	CH62	5310	11.96	12.08	15.03	22.46	Pass
UNII Band II-C	CH102	5510	12.21	11.84	15.04	22.46	Pass
	CH118	5590	12.20	12.00	15.12	22.46	Pass
	CH134	5670	11.95	12.34	15.16	22.46	Pass
UNII Band III	CH151	5755	11.75	11.44	14.60	28.46	Pass
	CH159	5795	11.72	11.70	14.72	28.46	Pass

☒ 802.11ac(VHT80) mode
 Temperature : 28°C Test Date : June 28, 2017
 Humidity : 65 % Test By: King Kong

Band	Channel Number	Channel Freq. (MHz)	Conducted Output Power(dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
UNII Band I	CH42	5210	12.01	11.87	14.95	22.46	Pass
UNII Band II-A	CH58	5290	11.75	12.12	14.95	22.46	Pass
UNII Band II-C	CH106	5530	11.76	12.00	14.89	22.46	Pass
	CH122	5610	12.23	11.71	14.99	22.46	Pass
UNII Band III	CH155	5775	11.46	11.92	14.71	28.46	Pass

Duty cycle=100%

