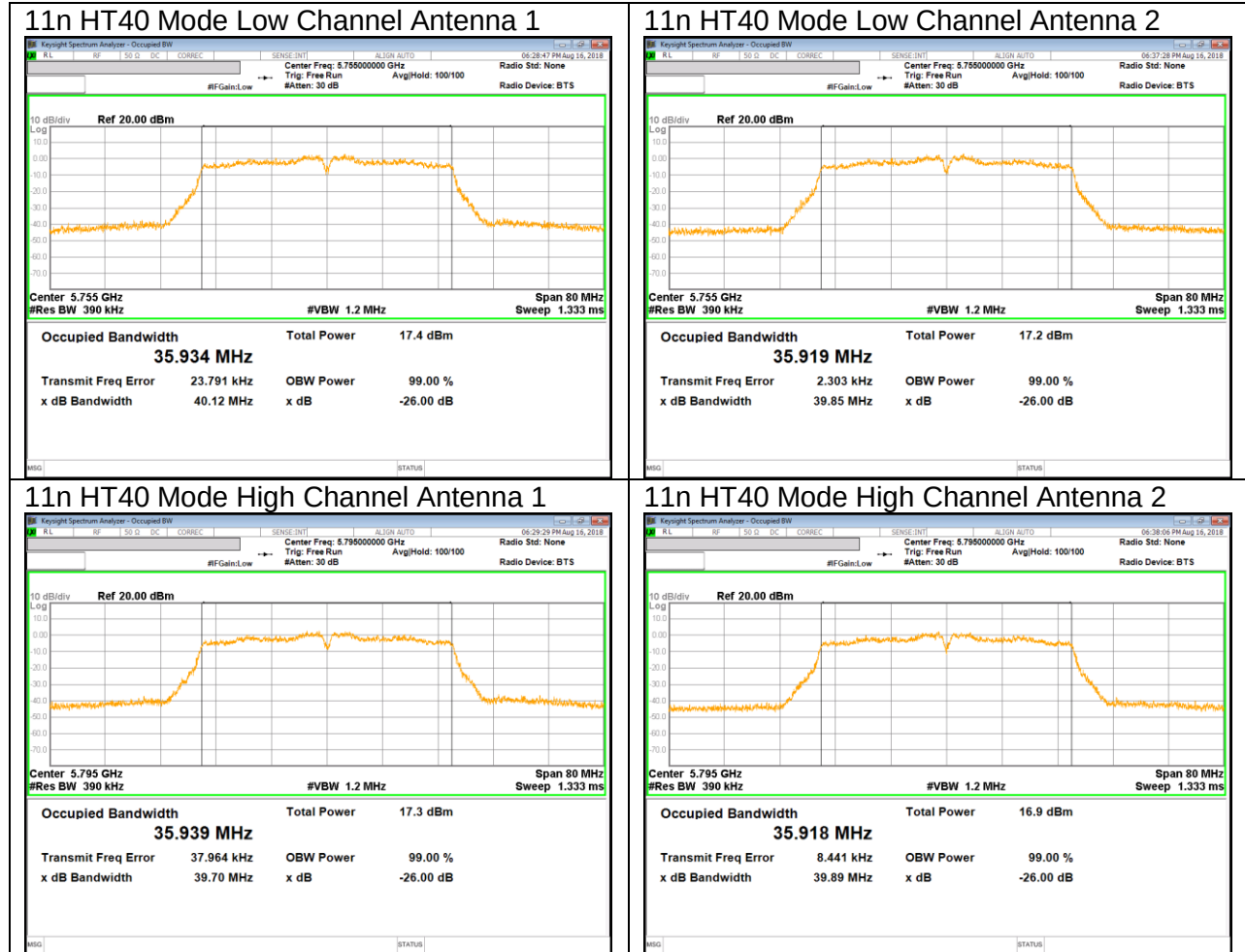
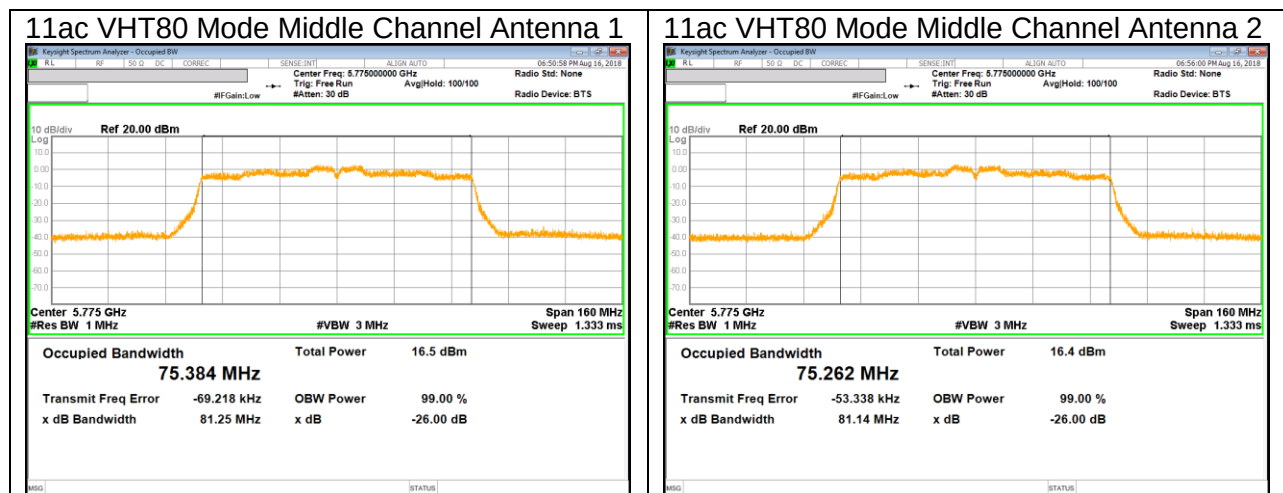


UNII 5.8 GHz IEEE 802.11n HT40 mode



UNII 5.8 GHz IEEE 802.11ac VHT80 mode



9.4. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Reference to 789033 D02 General UNII Test Procedures New Rules v01r04: The transmitter output is connected to a spectrum analyzer with the RBW set to approximately 1% to 5% of OBW, the VBW $\geq 3 \times$ RBW, single sweep.

NOTE

- Calculation for 99% Bandwidth of UNII-2C and UNII-3 Straddle Channel

ex) Fundamental frequency : 5720MHz

- 99% BW : 21.00MHz
- Turning Frequency : 5725MHz
- 99% Bandwidth of UNII-2C band Portion
 $= (5725 - (5720 + (21.00 / 2))) = 15.50 \text{ MHz}$
- 99% Bandwidth of UNII-3 band Portion
 $= (5720 + (21.00 / 2) - 5725) = 5.50 \text{ MHz}$

RESULTS

9.4.1.802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5180	16.370	16.372
Mid	5200	16.374	16.363
High	5240	16.358	16.377
Worst		16.377	

9.4.2.802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5180	17.595	17.587
Mid	5200	17.603	17.607
High	5240	17.615	17.604
Worst		17.615	

9.4.3.802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5190	36.005	35.999
High	5230	36.019	35.986
Worst		36.019	

9.4.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Middle	5210	75.189	75.244
Worst		75.244	

9.4.5.802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5260	16.348	16.343
Mid	5300	16.369	16.361
High	5320	16.378	16.357
Worst		16.378	

9.4.6.802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5260	17.615	17.607
Mid	5300	17.604	17.610
High	5320	17.609	17.603
Worst		17.615	

9.4.7.802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5270	36.021	36.002
High	5310	35.990	35.990
Worst		36.021	

9.4.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Middle	5290	75.243	75.373
Worst		75.373	

9.4.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5500	16.371	16.371
Mid	5580	16.368	16.367
High	5700	16.361	16.371
Straddle	5720	13.187	13.184
Worst		16.371	

9.4.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5500	17.592	17.598
Mid	5580	17.604	17.619
High	5700	17.606	17.609
Straddle	5720	13.807	13.810
Worst		17.619	

9.4.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5510	36.029	35.986
Mid	5550	36.022	36.031
High	5670	36.028	36.009
Straddle	5710	32.995	33.004
Worst		36.031	

9.4.12. 802.11ac VHT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Low	5530	75.288	75.199
High	5610	75.264	75.191
Straddle	5690	72.657	72.612
Worst		75.288	

9.4.13. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Straddle	5720	3.187	3.185
Low	5745	16.394	16.367
Mid	5785	16.384	16.389
High	5825	16.395	16.383
Worst		16.395	

9.4.14. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Straddle	5720	3.807	3.810
Low	5745	17.615	17.588
Mid	5785	17.605	17.607
High	5825	17.618	17.609
Worst		17.618	

9.4.15. 802.11n HT40 MODE IN THE 5.8 GHz BAND

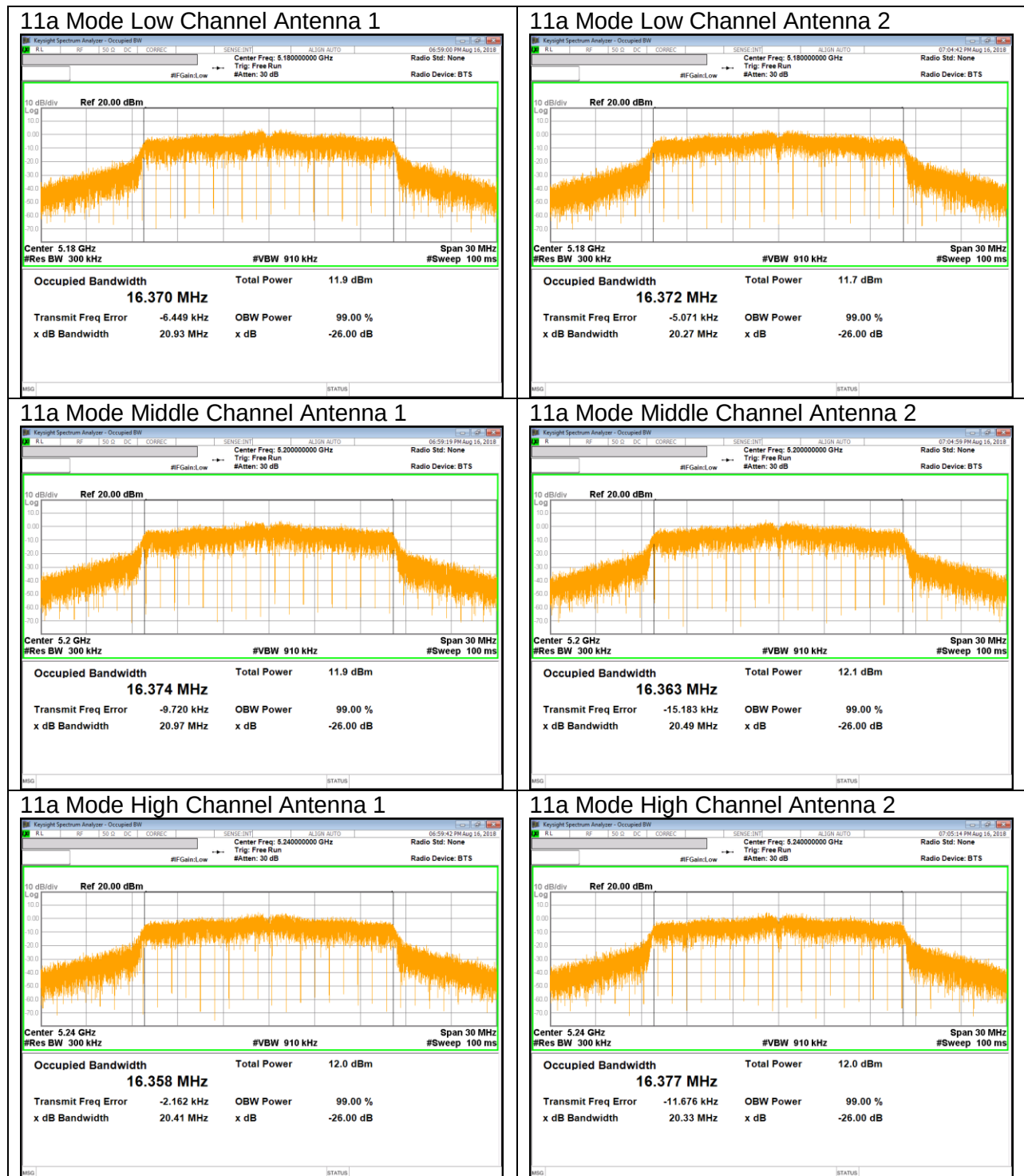
Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Straddle	5710	2.994	3.003
Low	5755	36.031	35.996
High	5795	36.008	36.033
Worst		36.033	

9.4.16. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

Channel	Frequency [MHz]	99% Bandwidth [MHz]	
		Antenna 1	Antenna 2
Straddle	5690	2.657	2.612
Middle	5775	75.252	75.379
Worst		75.379	

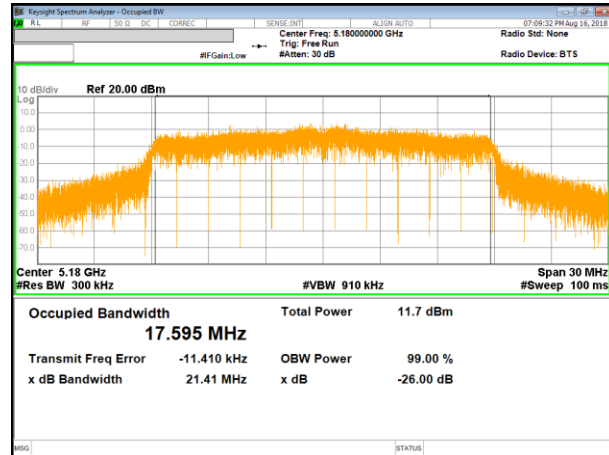
9.4.17. 99% BANDWIDTH PLOTS

UNII 5.2 GHz IEEE 802.11a mode

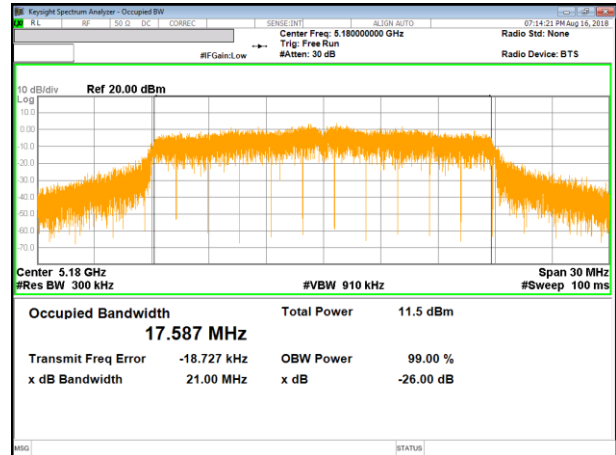


UNII 5.2 GHz IEEE 802.11n HT20 mode

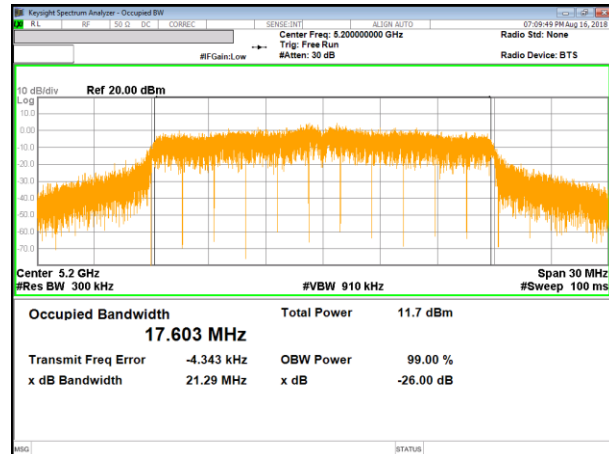
11n HT20 Mode Low Channel Antenna 1



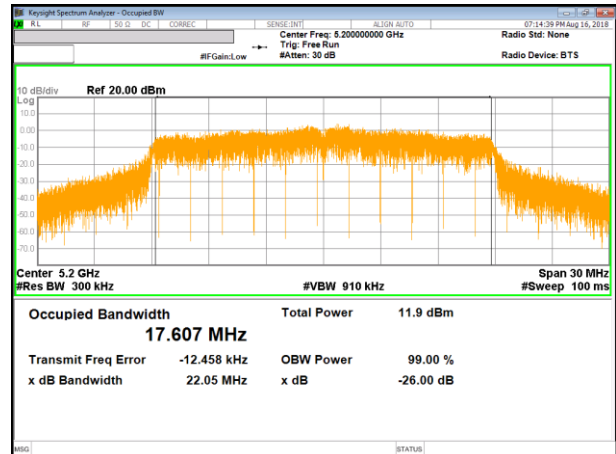
11n HT20 Mode Low Channel Antenna 2



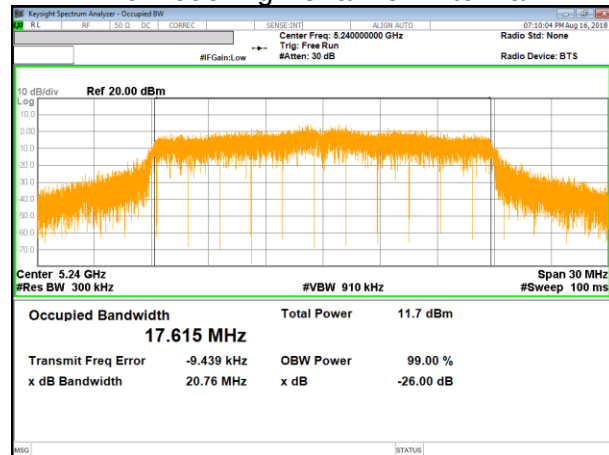
11n HT20 Mode Middle Channel Antenna 1



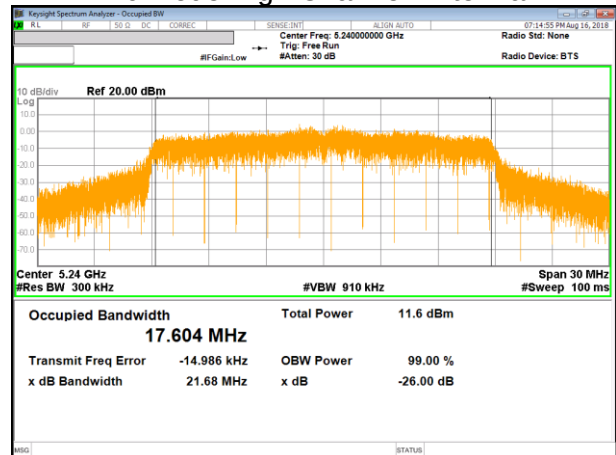
11n HT20 Mode Middle Channel Antenna 2



11n HT20 Mode High Channel Antenna 1

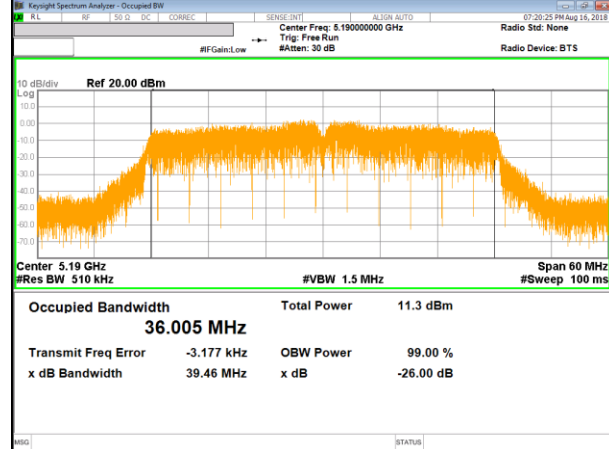


11n HT20 Mode High Channel Antenna 2

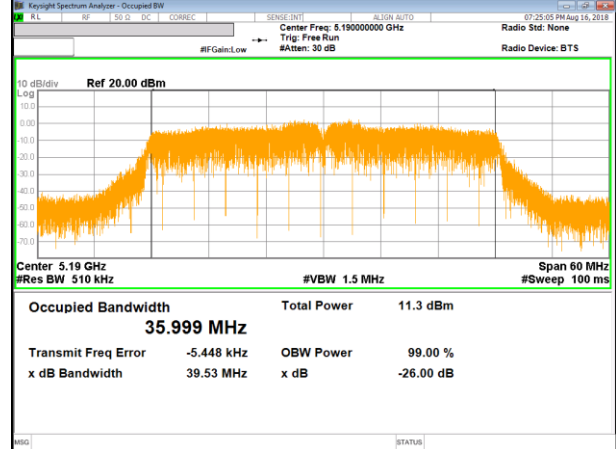


UNII 5.2 GHz IEEE 802.11n HT40 mode

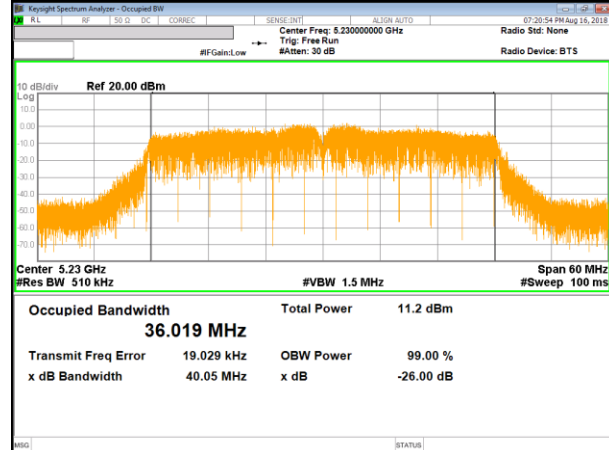
11n HT40 Mode Low Channel Antenna 1



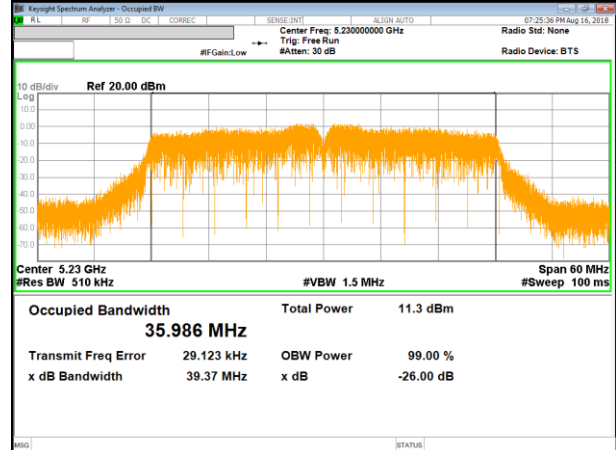
11n HT40 Mode Low Channel Antenna 2



11n HT40 Mode High Channel Antenna 1

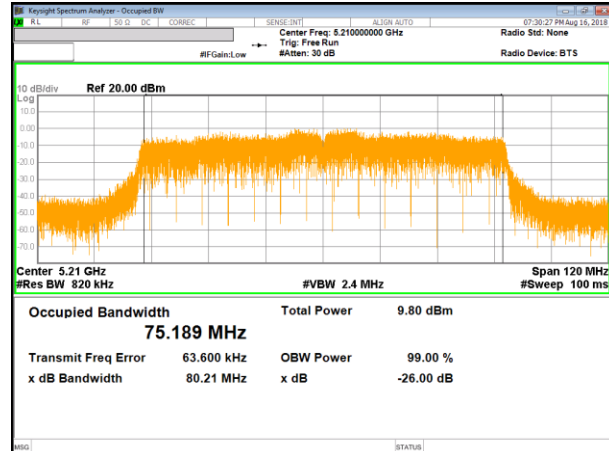


11n HT40 Mode High Channel Antenna 2

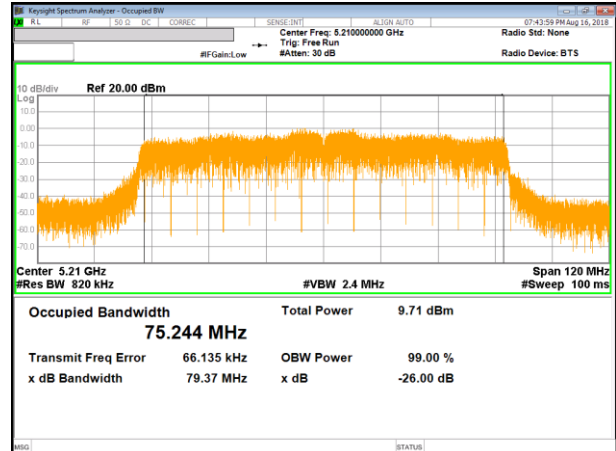


UNII 5.2 GHz IEEE 802.11ac VHT80 mode

11ac HT80 Mode Middle Channel Antenna 1

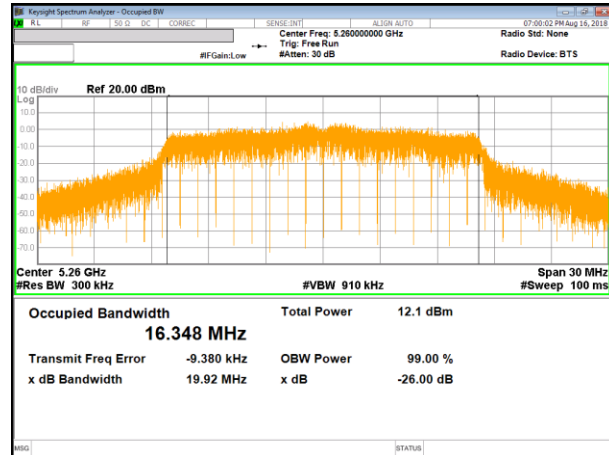


11ac HT80 Mode Middle Channel Antenna 2

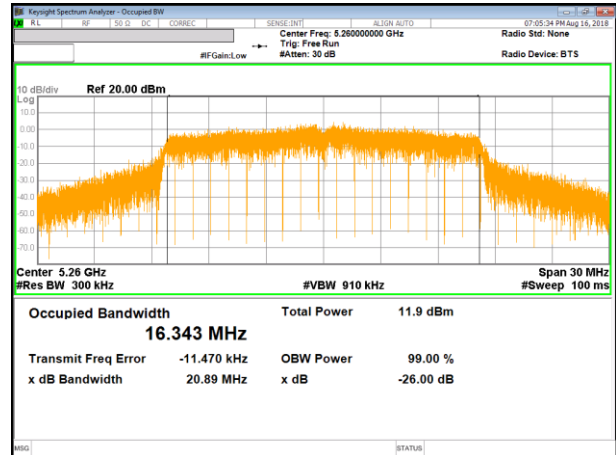


UNII 5.3 GHz IEEE 802.11a mode

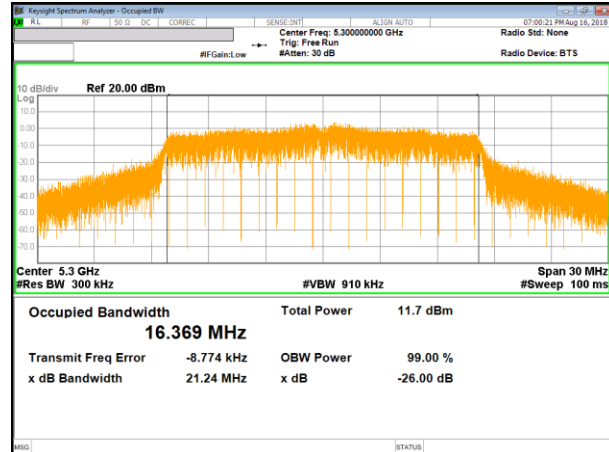
11a Mode Low Channel Antenna 1



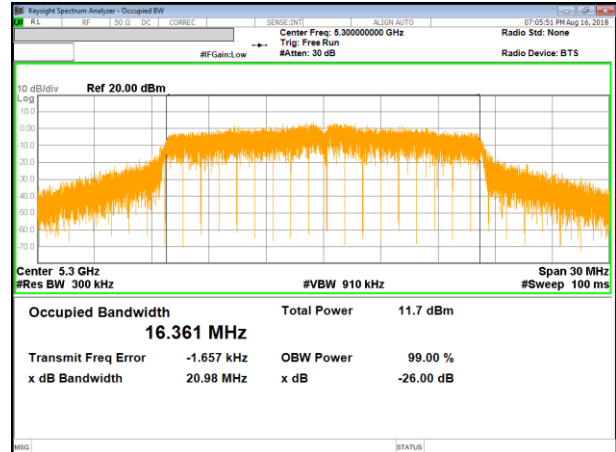
11a Mode Low Channel Antenna 2



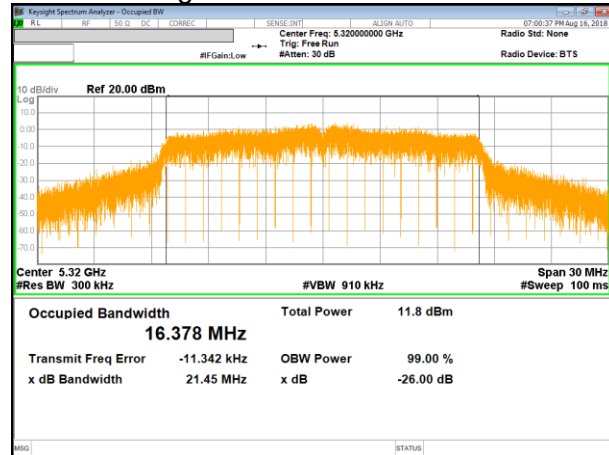
11a Mode Middle Channel Antenna 1



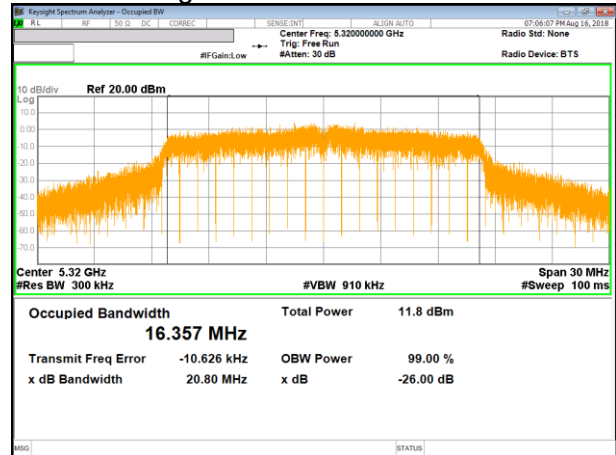
11a Mode Middle Channel Antenna 2



11a Mode High Channel Antenna 1

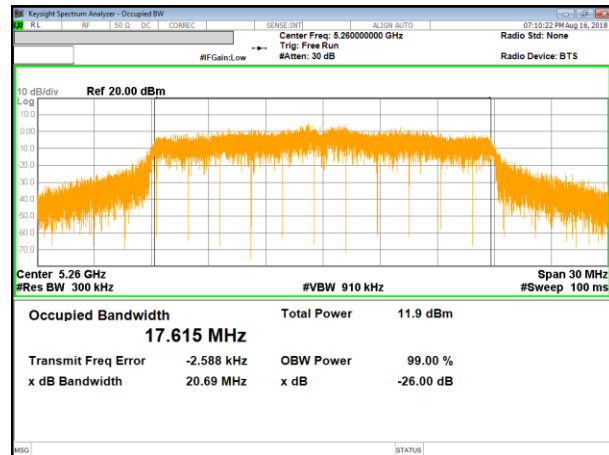


11a Mode High Channel Antenna 2

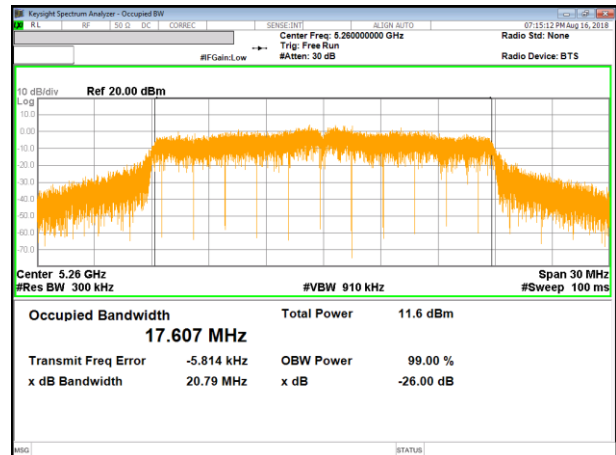


UNII 5.3 GHz IEEE 802.11n HT20 mode

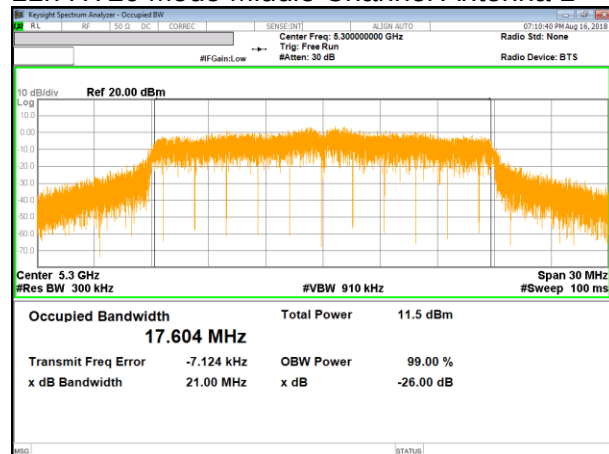
11n HT20 Mode Low Channel Antenna 1



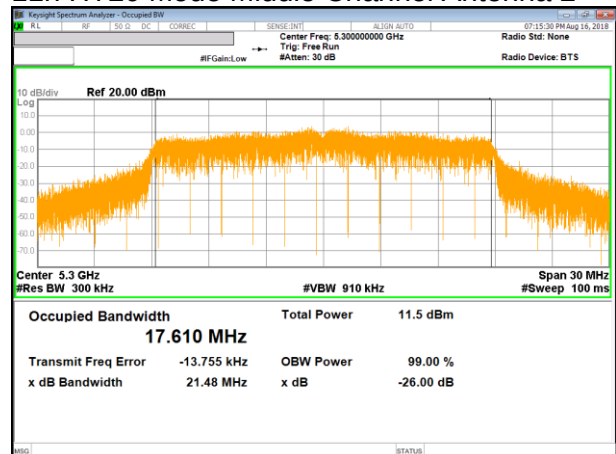
11n HT20 Mode Low Channel Antenna 2



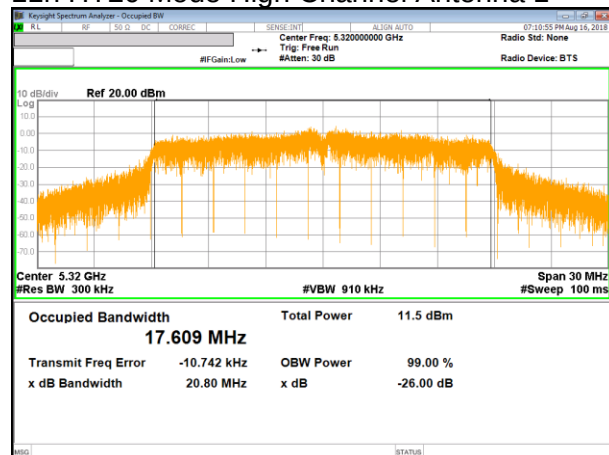
11n HT20 Mode Middle Channel Antenna 1



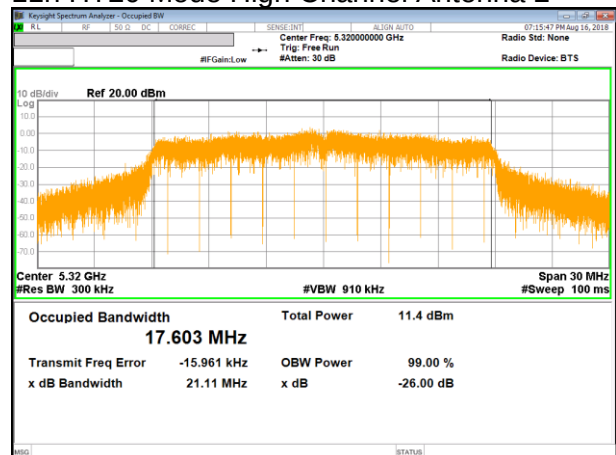
11n HT20 Mode Middle Channel Antenna 2



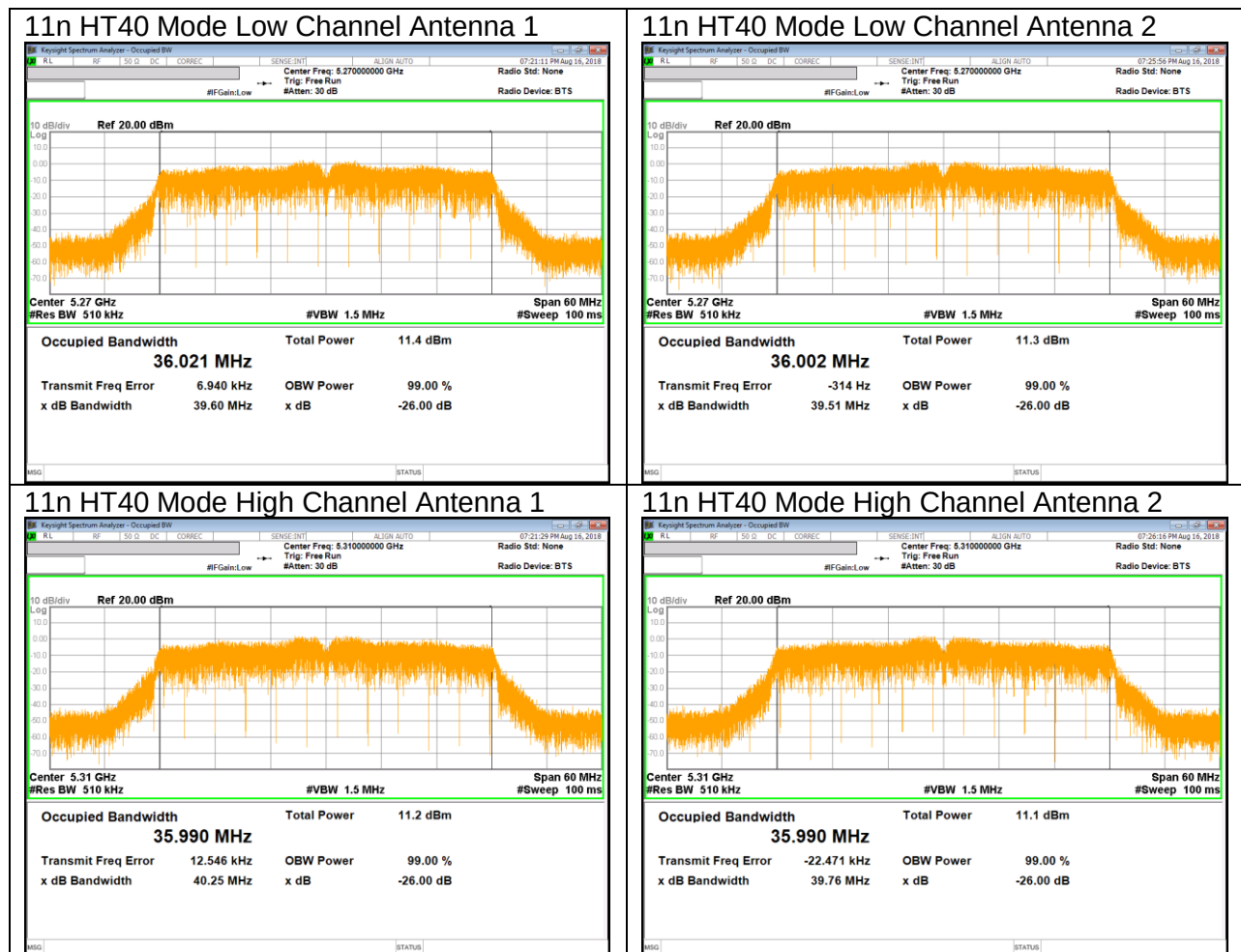
11n HT20 Mode High Channel Antenna 1



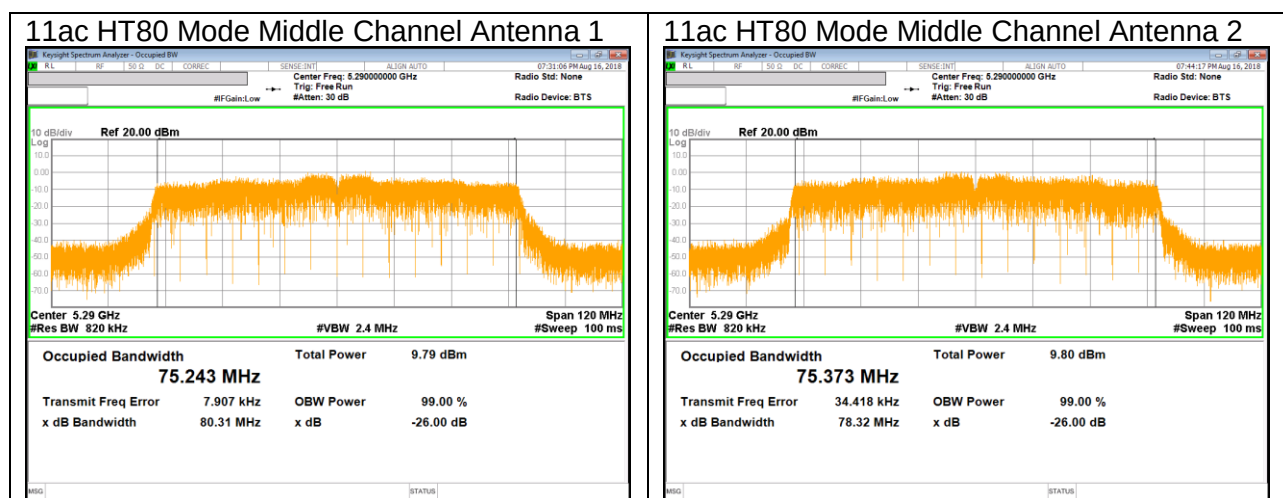
11n HT20 Mode High Channel Antenna 2



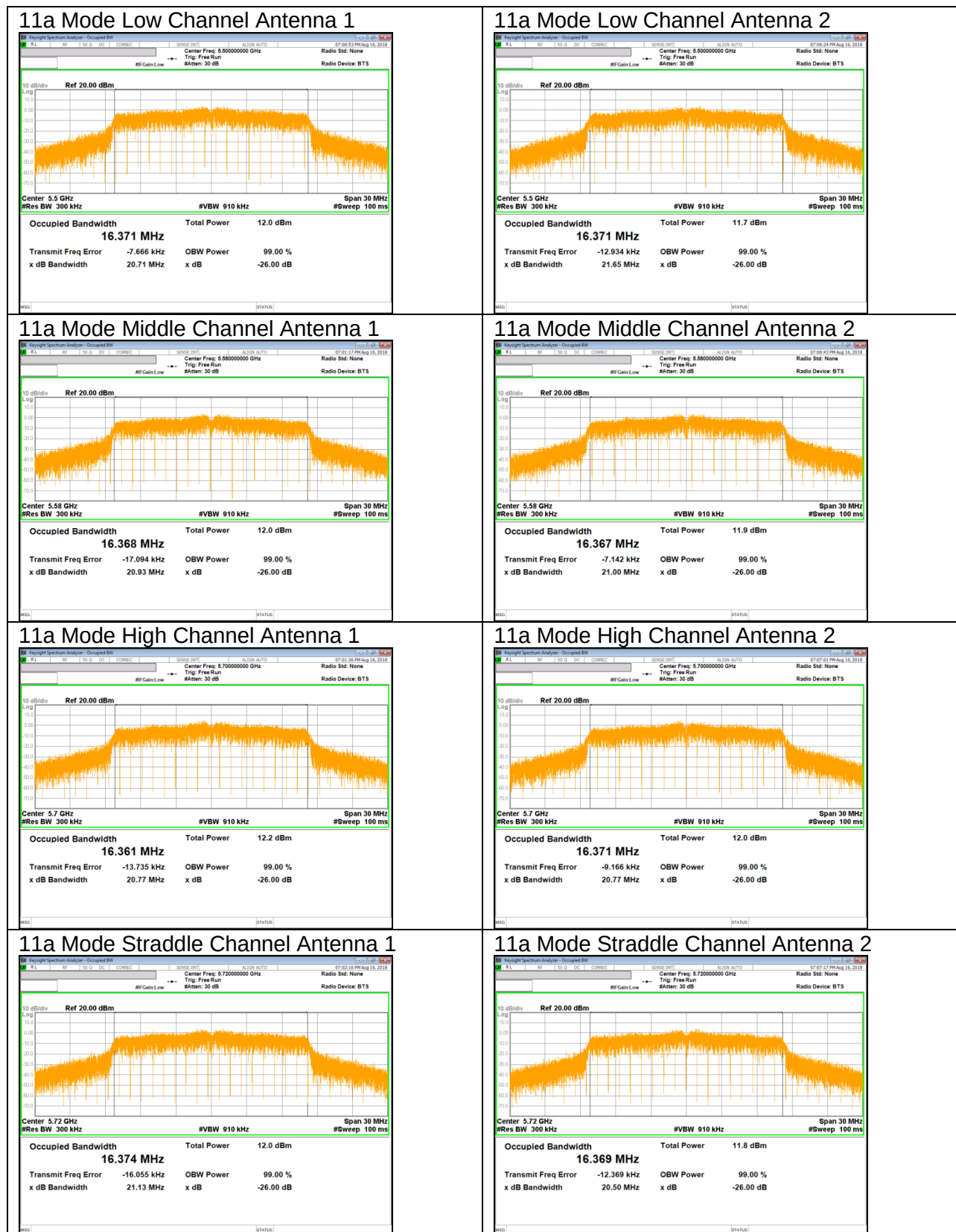
UNII 5.3 GHz IEEE 802.11n HT40 mode



UNII 5.3 GHz IEEE 802.11ac VHT80 mode

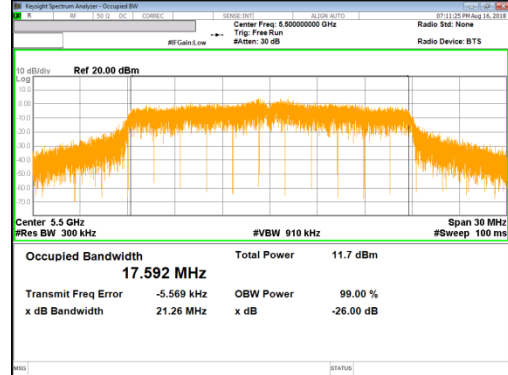


UNII 5.5 GHz IEEE 802.11a mode

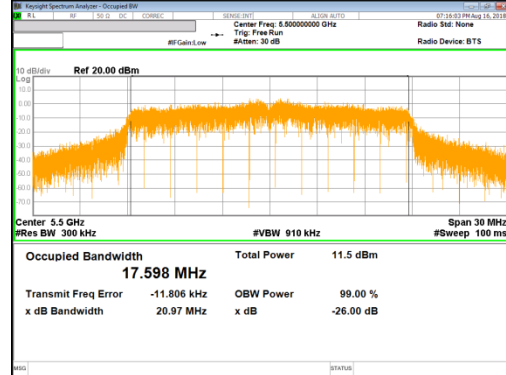


UNII 5.5 GHz IEEE 802.11n HT20 mode

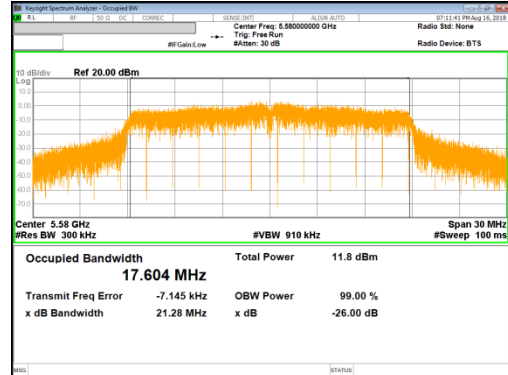
11n HT20 Mode Low Channel Antenna 1



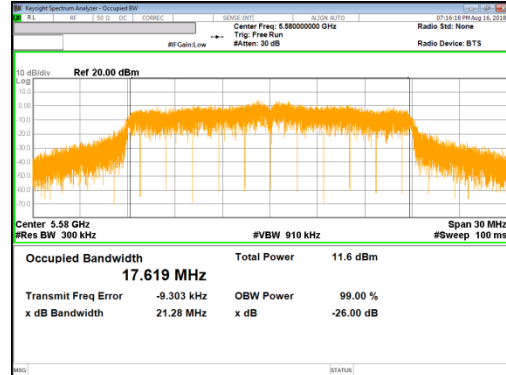
11n HT20 Mode Low Channel Antenna 2



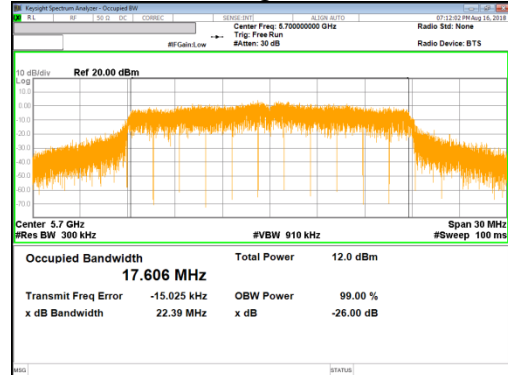
11n HT20 Mode Middle Channel Antenna 1



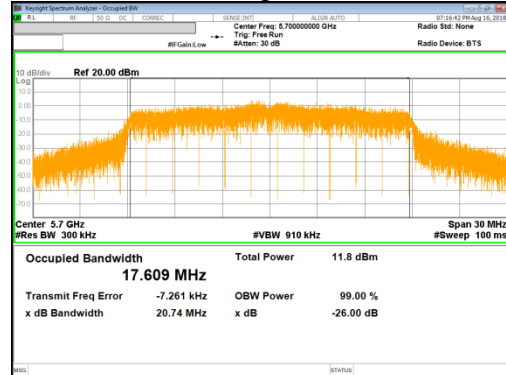
11n HT20 Mode Middle Channel Antenna 2



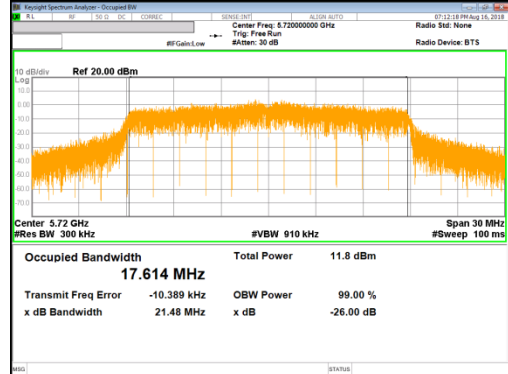
11n HT20 Mode High Channel Antenna 1



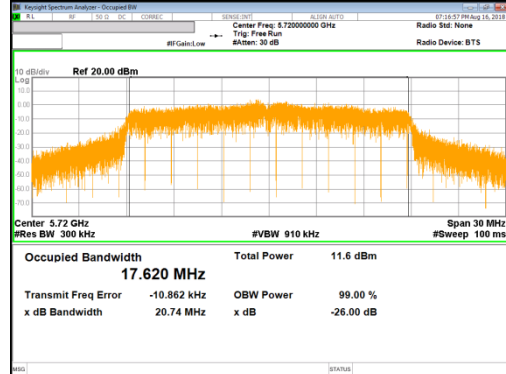
11n HT20 Mode High Channel Antenna 2



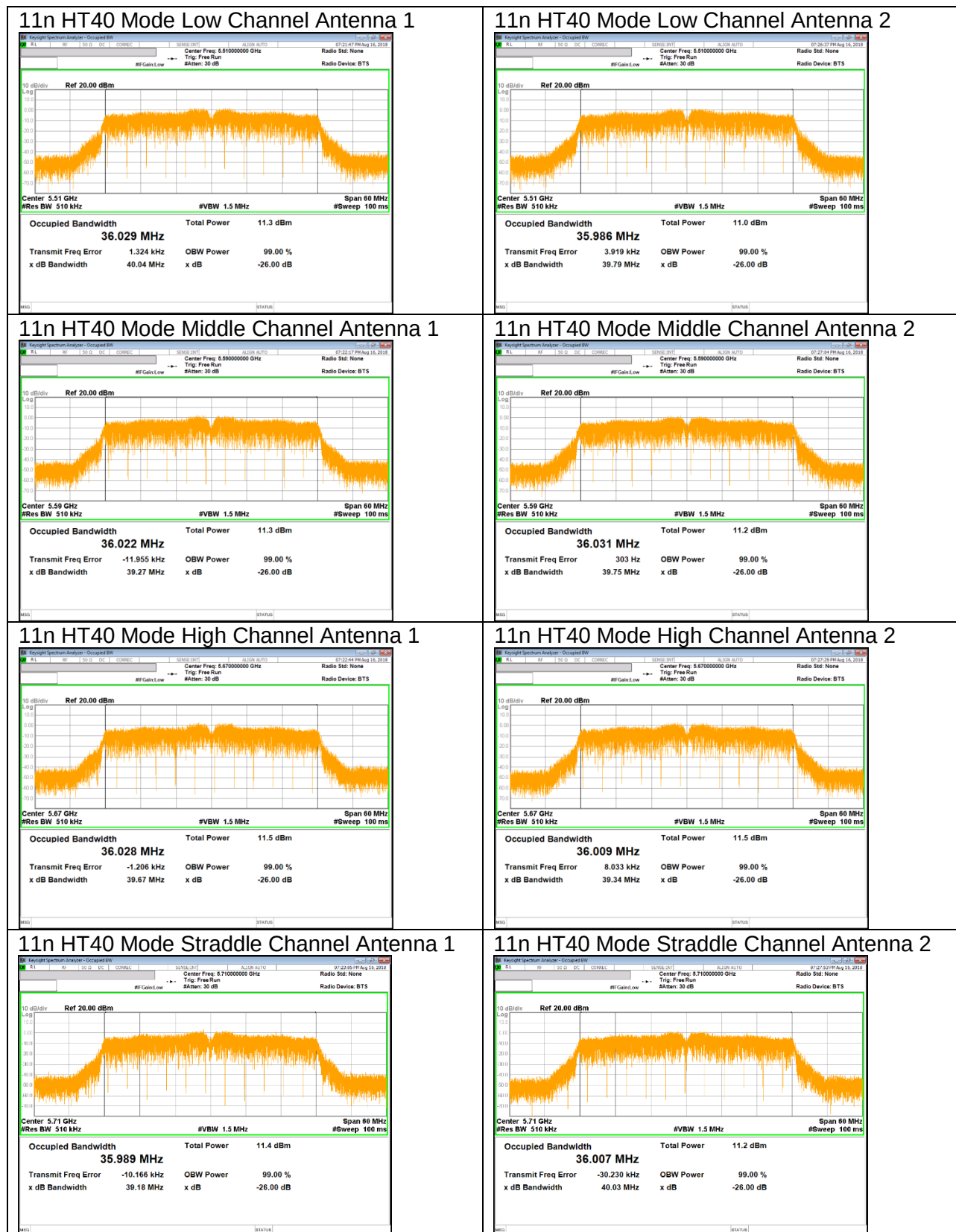
11n HT20 Mode Straddle Channel Antenna 1



11n HT20 Mode Straddle Channel Antenna 2

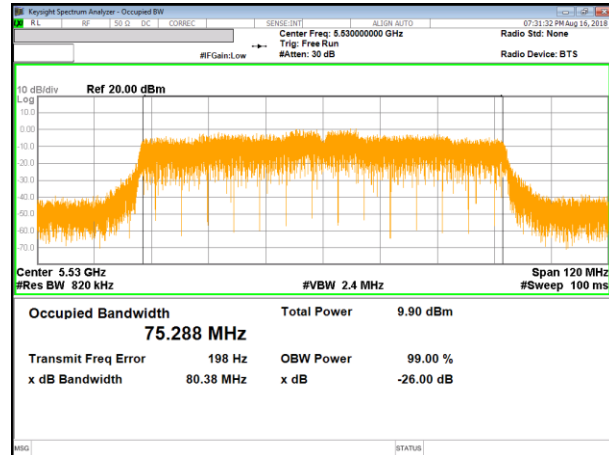


UNII 5.5 GHz IEEE 802.11n HT40 mode

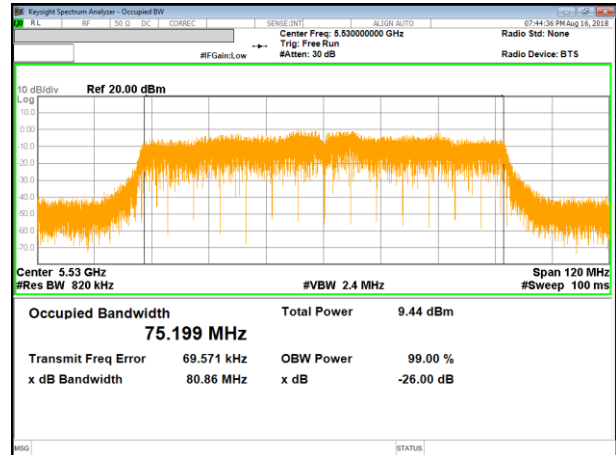


UNII 5.5 GHz IEEE 802.11ac VHT80 mode

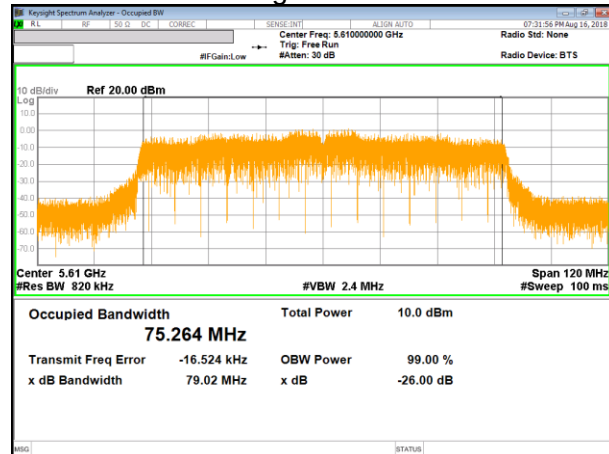
11ac HT80 Mode Low Channel Antenna 1



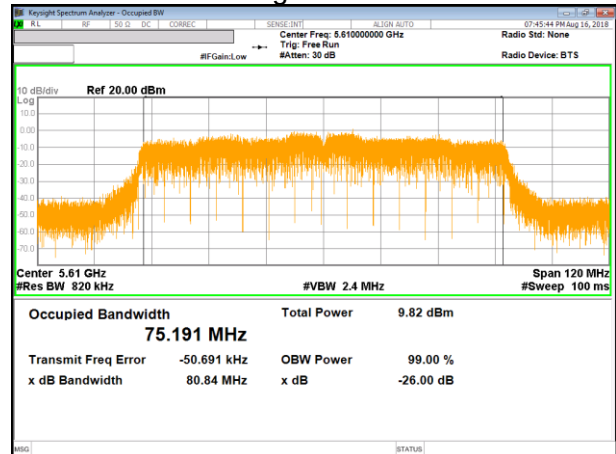
11ac HT80 Mode Low Channel Antenna 2



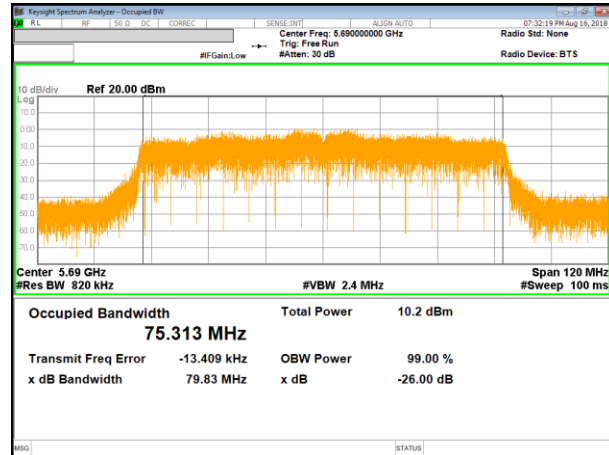
11ac HT80 Mode High Channel Antenna 1



11ac HT80 Mode High Channel Antenna 2



11ac HT80 Mode Straddle Channel Antenna 1



11ac HT80 Mode Straddle Channel Antenna 2

