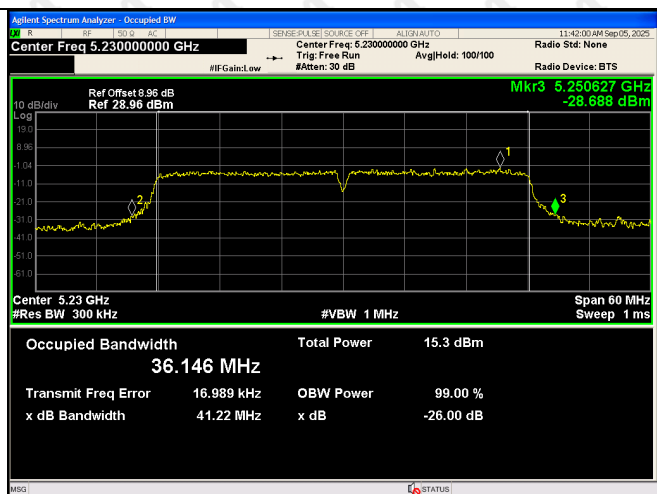
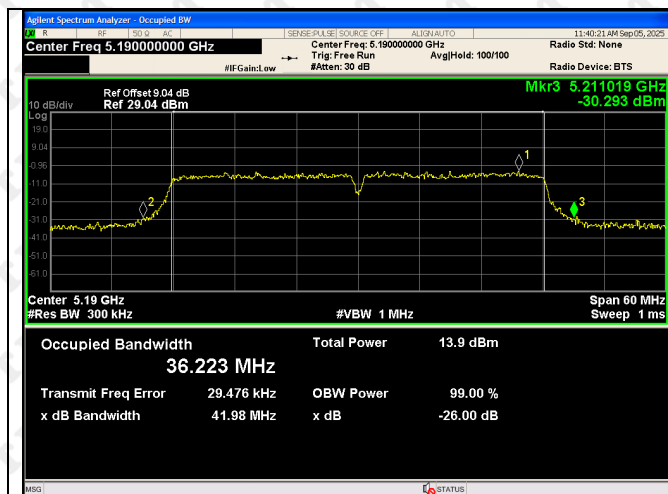
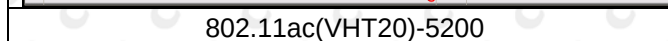
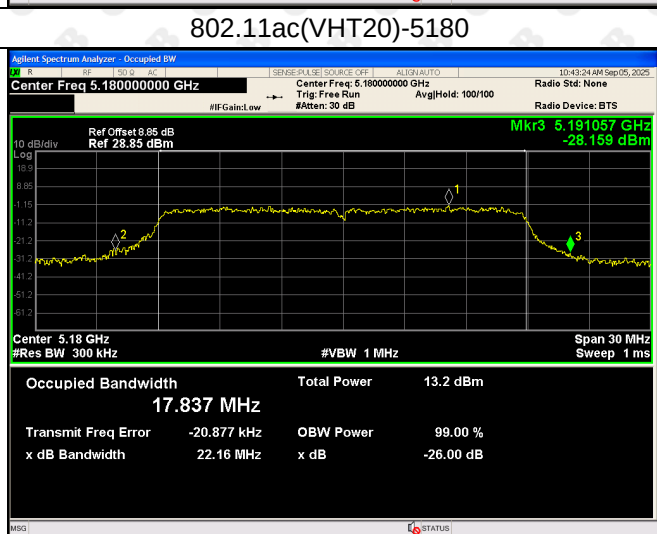
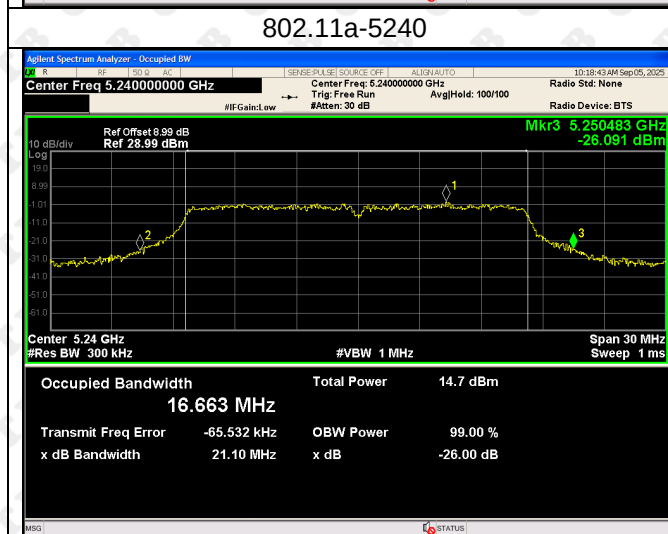
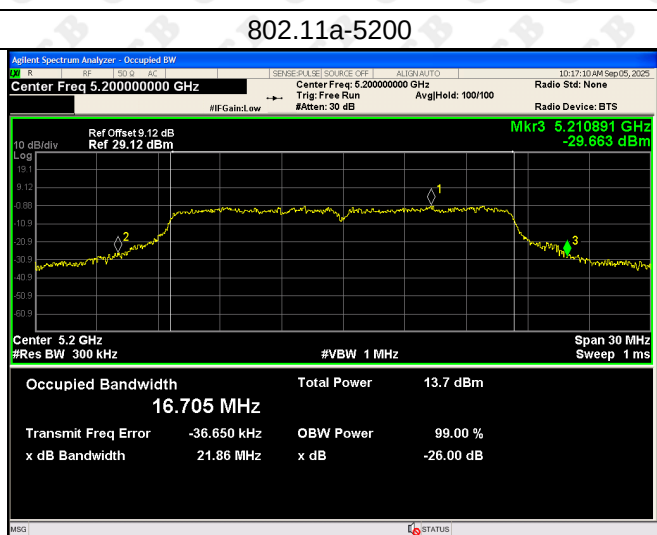
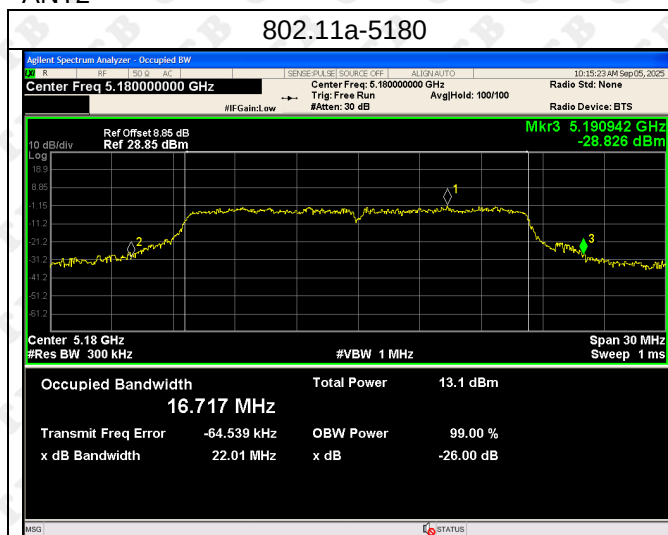
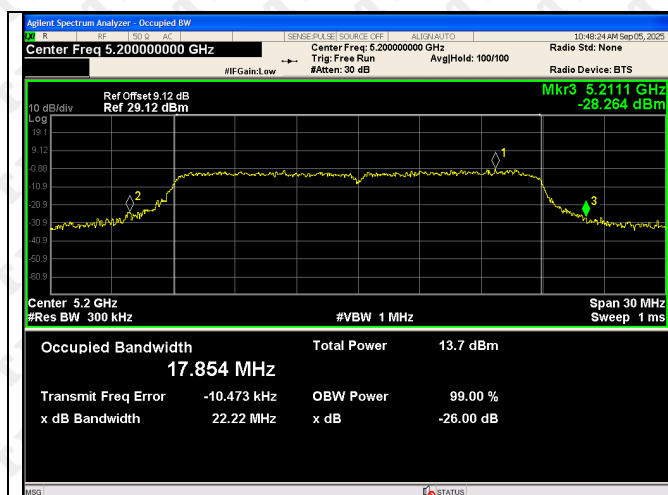


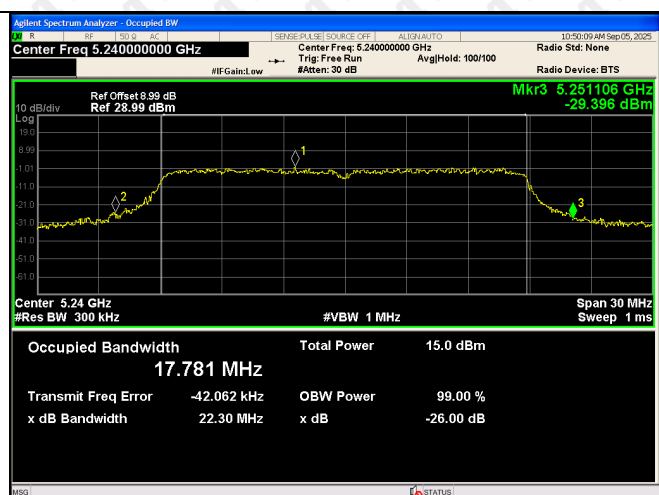


ANT2

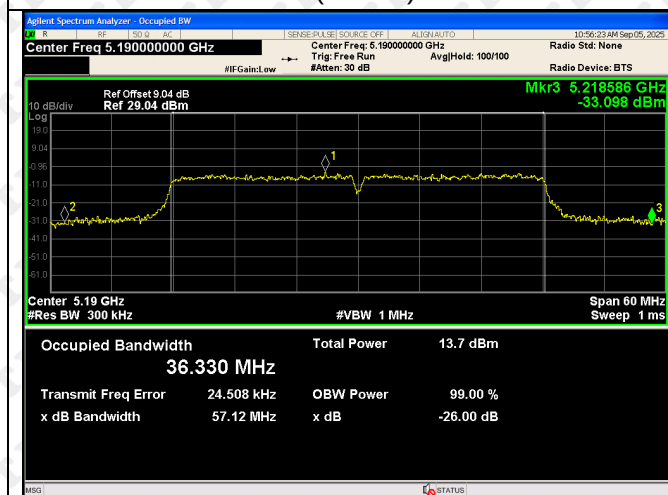




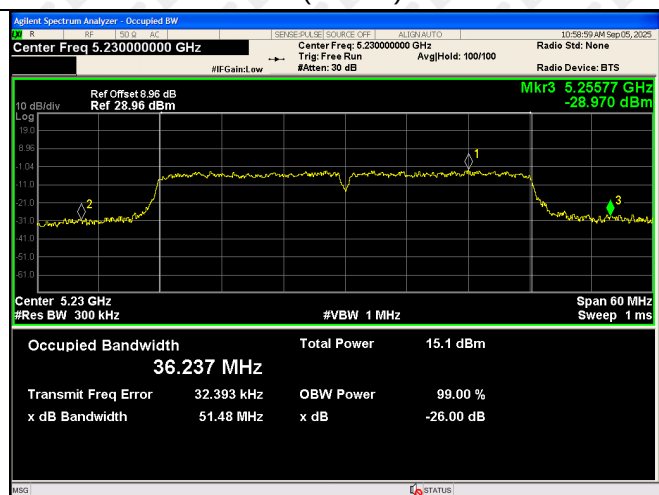
802.11ac(VHT40)-5190



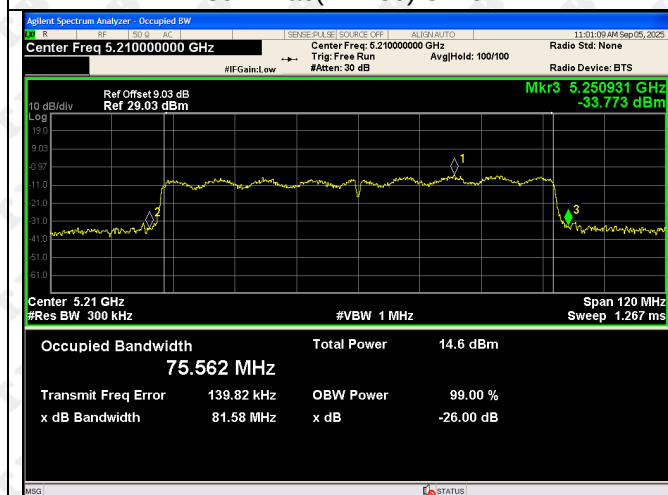
802.11ac(VHT40)-5230



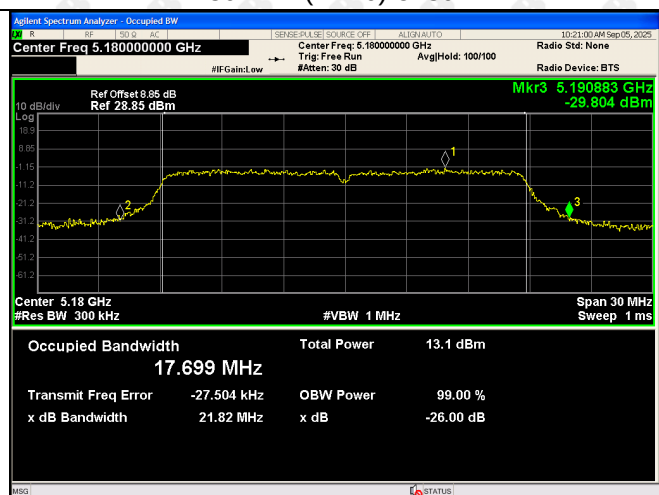
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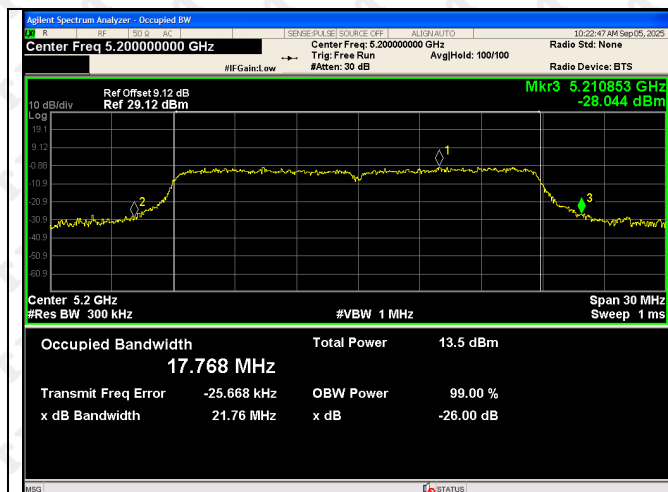
802.11n(HT20)-5180



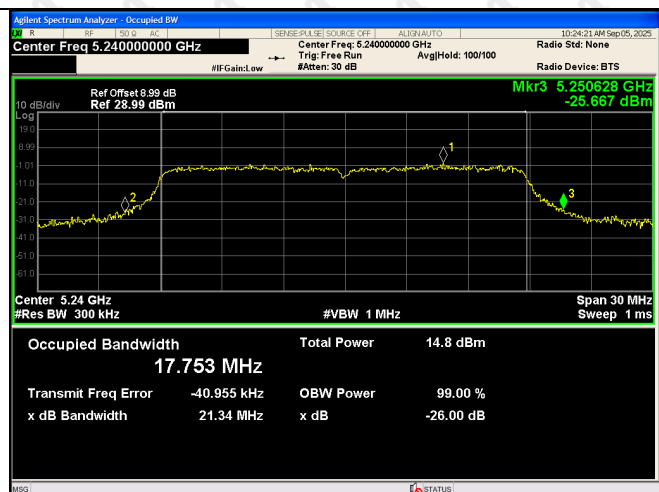
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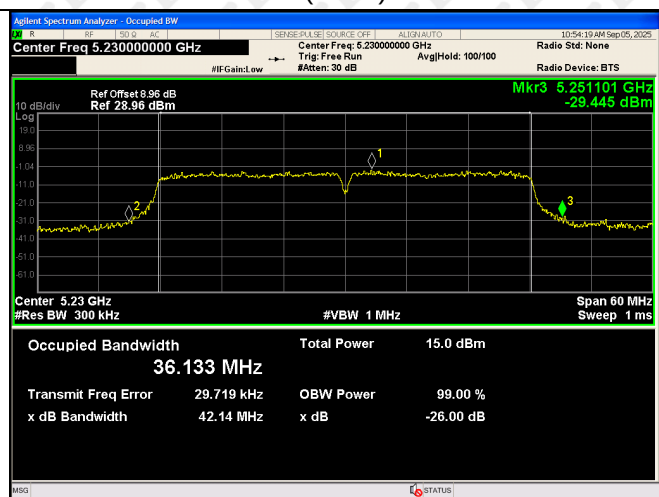
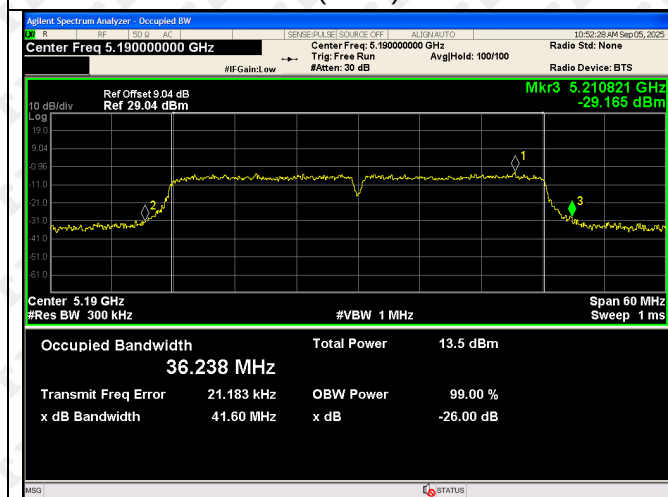
802.11n(HT20)-5240



802.11n(HT40)-5190

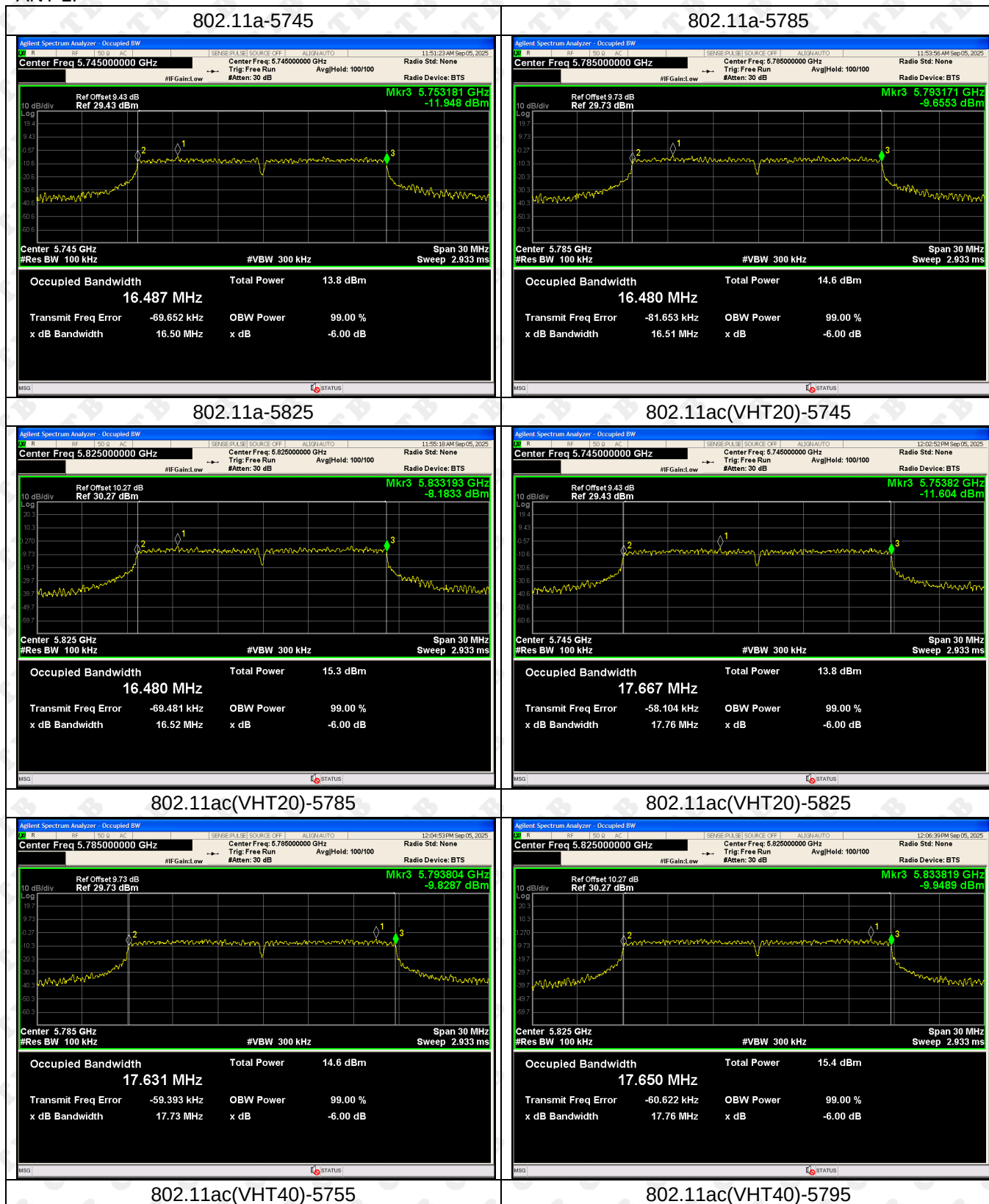


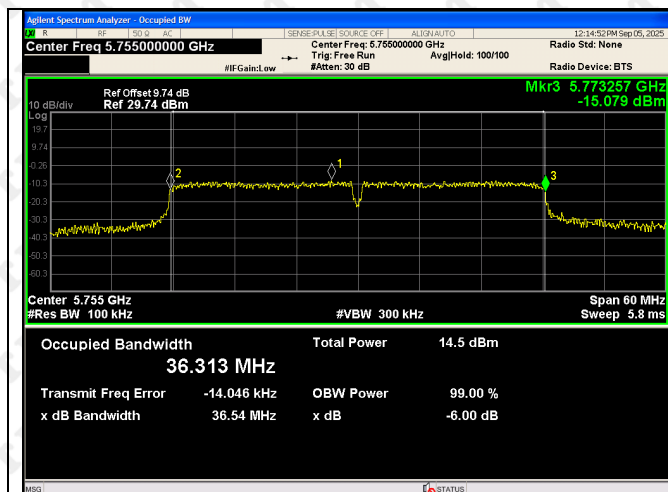
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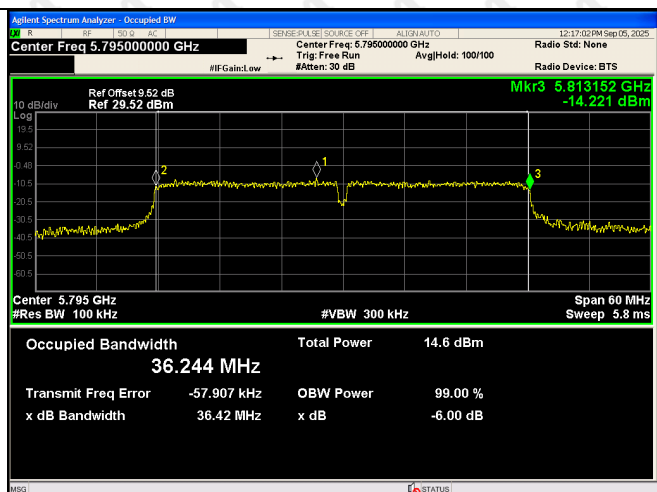
5745-5825MHz

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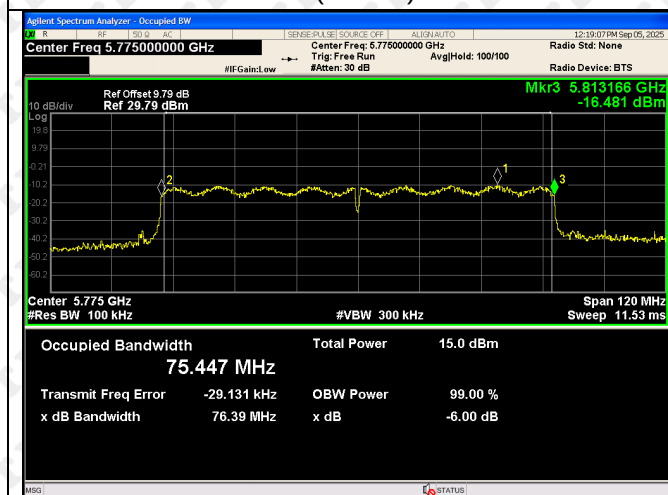




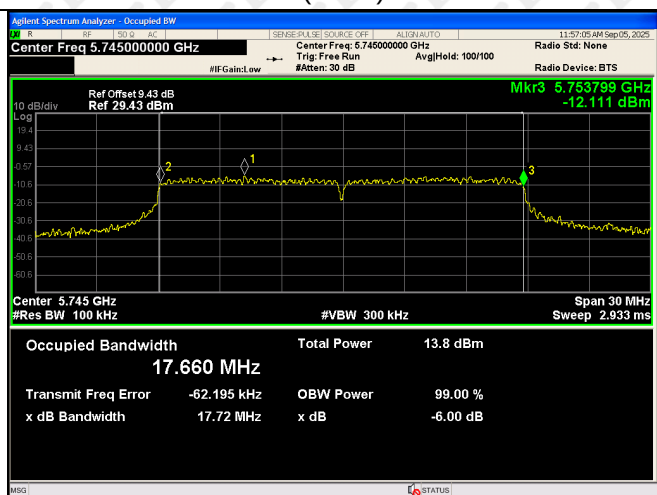
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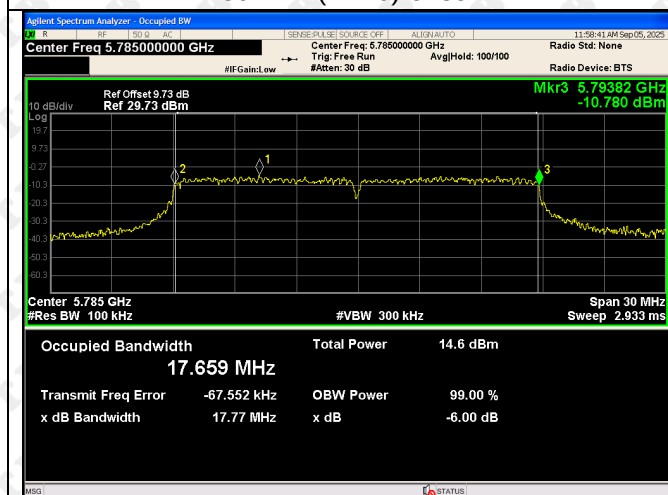
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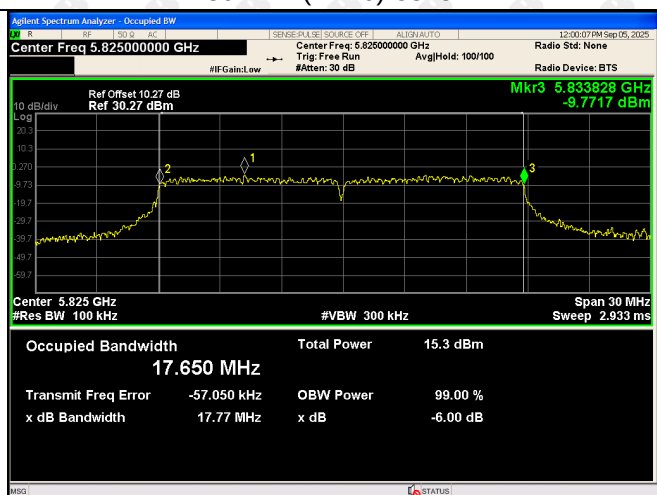
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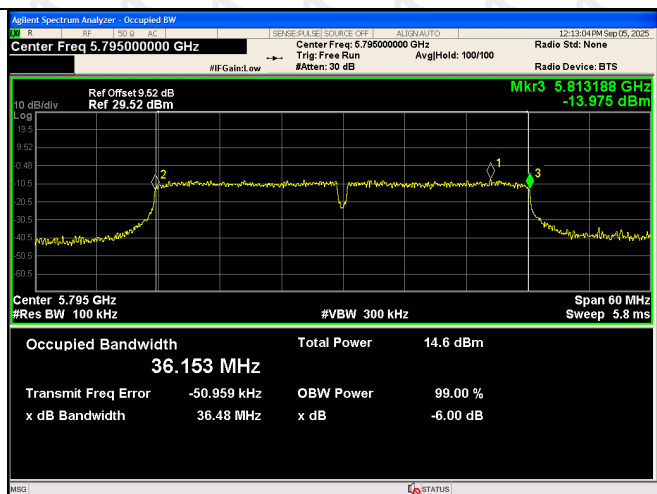
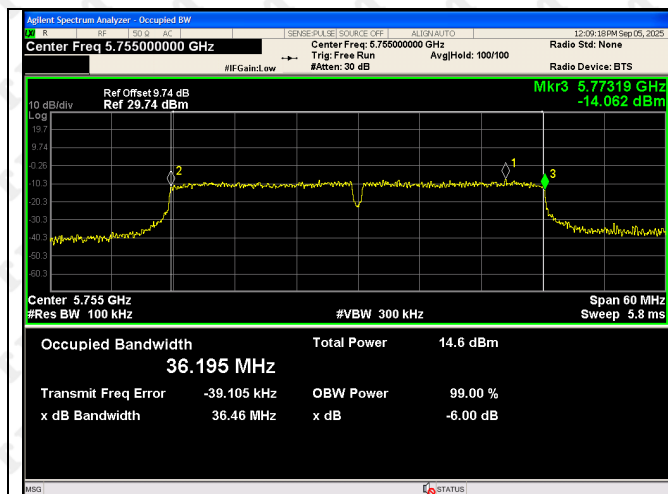
802.11n(HT20)-5825



5802.11n(HT40)-5755

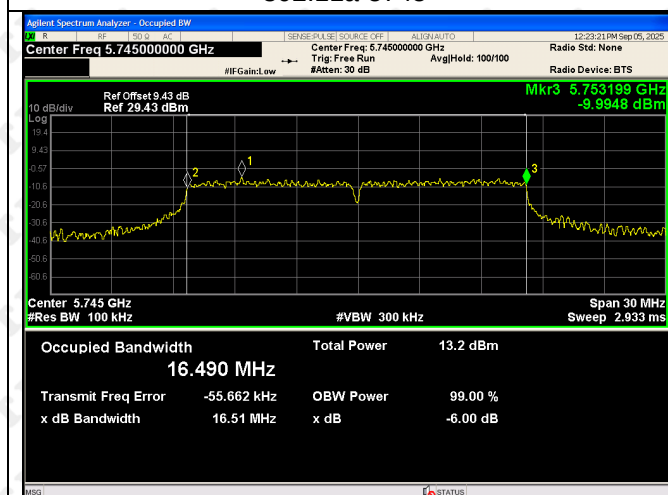


802.11n(HT40)-5795

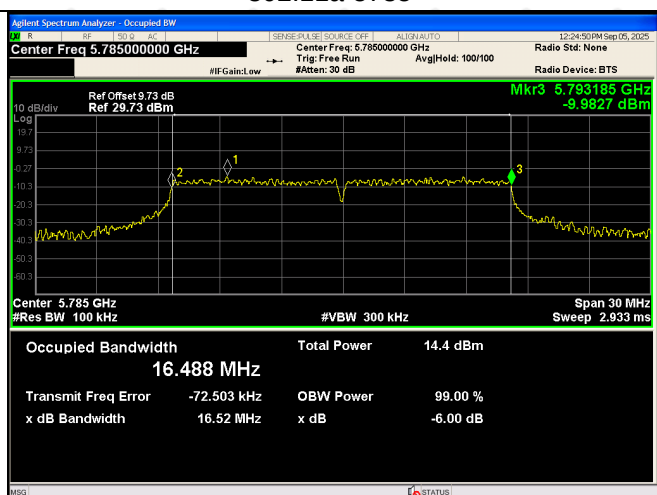


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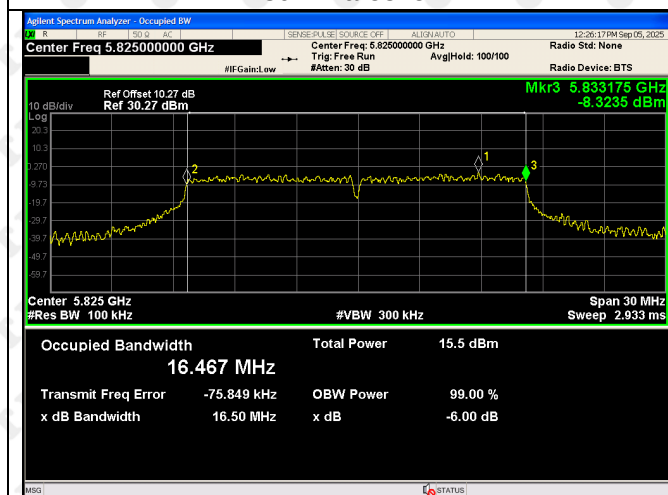
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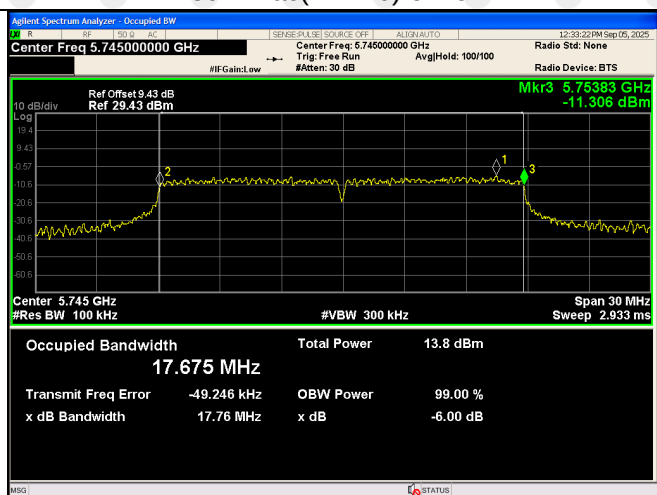
802.11a-5785



802.11a-5825

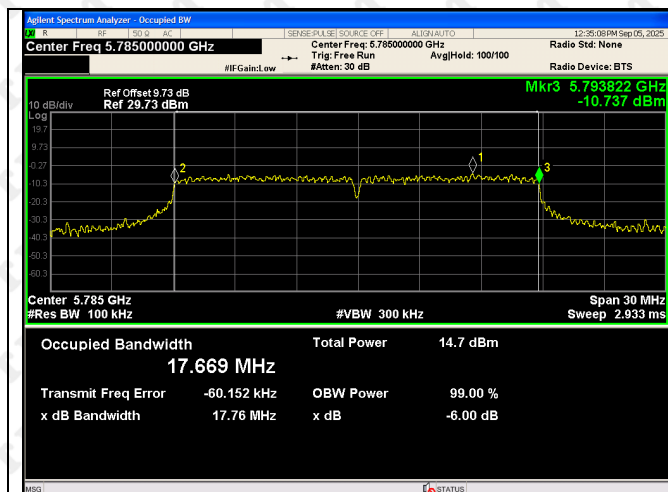


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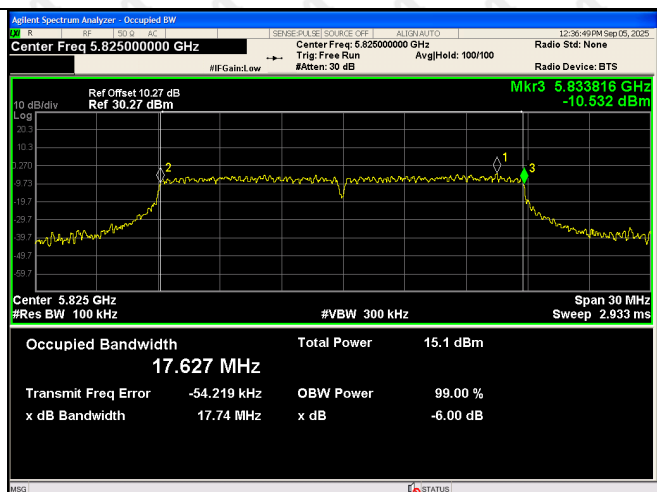


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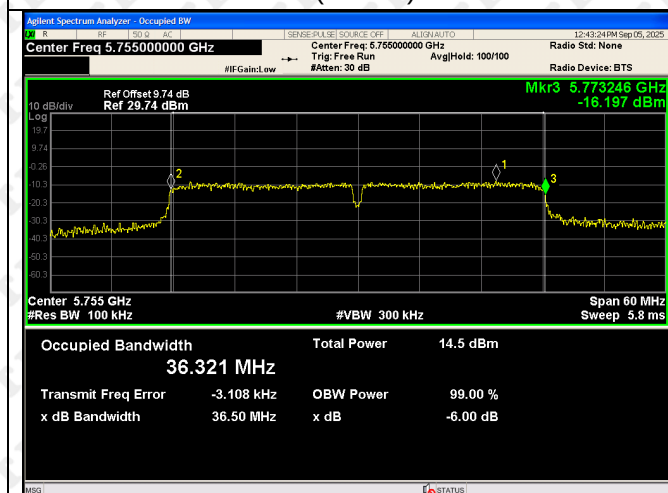
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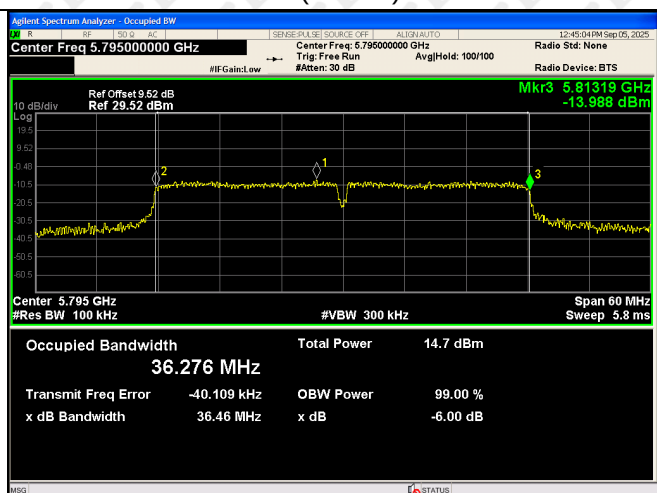
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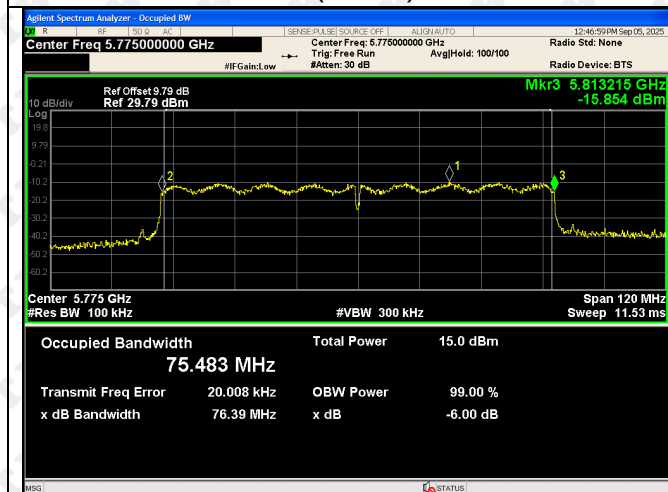
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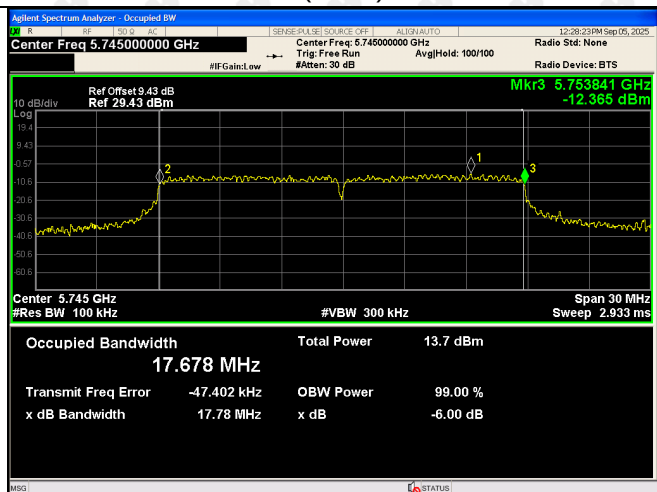
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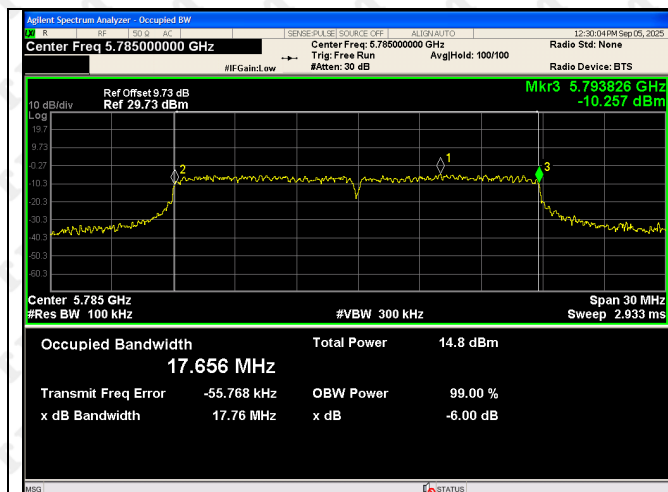
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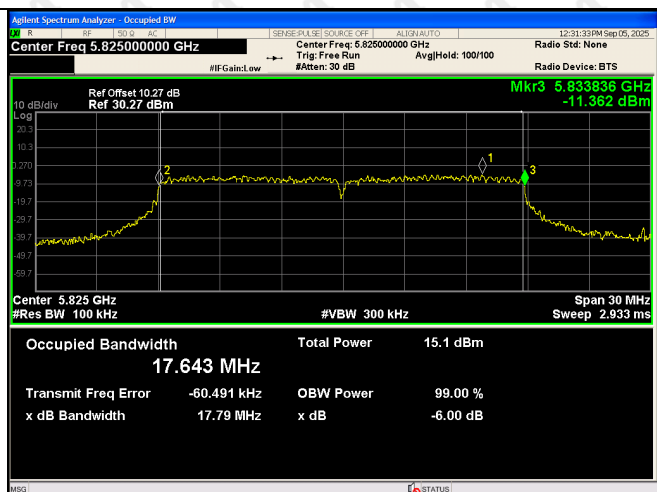
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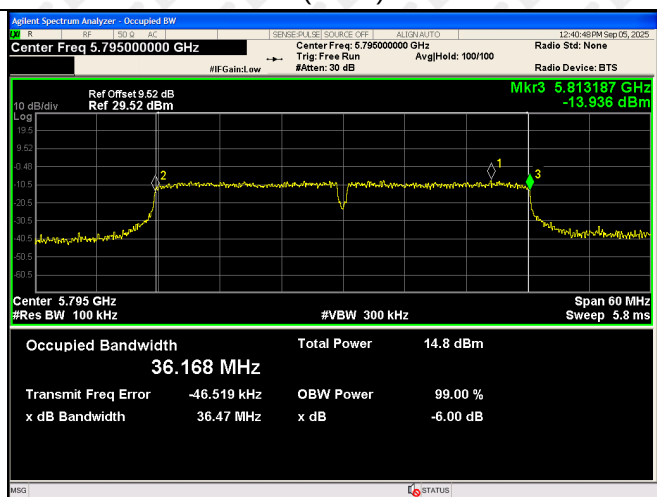
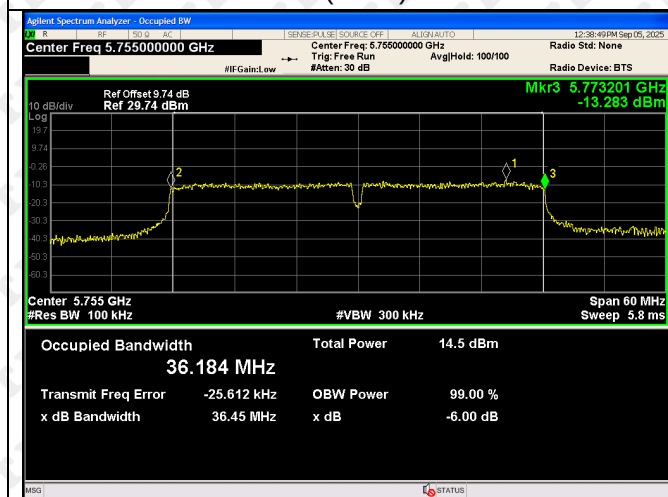
802.11n(HT20)-5825



5802.11n(HT40)-5755

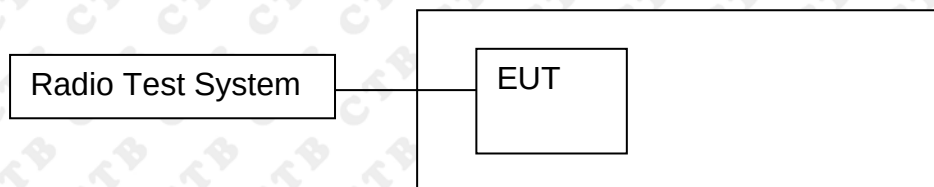


802.11n(HT40)-5795



11. POWER SPECTRAL DENSITY

11.1 Block Diagram Of Test Setup



11.2 Limit

(1) For the band 5.15-5.25 GHz.

(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. 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.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, 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.

(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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. 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.

11.3 Test procedure

According to KDB789033 D02v02r01 sectionE, the following is the measurement procedure.

For devices operating in the bands 5.15–5.25 GHz, 5.25–5.35 GHz, and 5.47–5.725 GHz, the preceding procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725–5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

a) Set $\text{RBW} \geq 1/T$, where T is defined in II.B.I.a).

b) Set $\text{VBW} \geq 3 \text{ RBW}$.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/\text{RBW})$ to the

measured result, whereas RBW (<500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/\text{RBW})$ to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.

e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the II.F.5.c) and II.F.5.d), since RBW=100 kHz is available on nearly all spectrum analyzers.

11.4 Test Result

ANT 1+ANT2

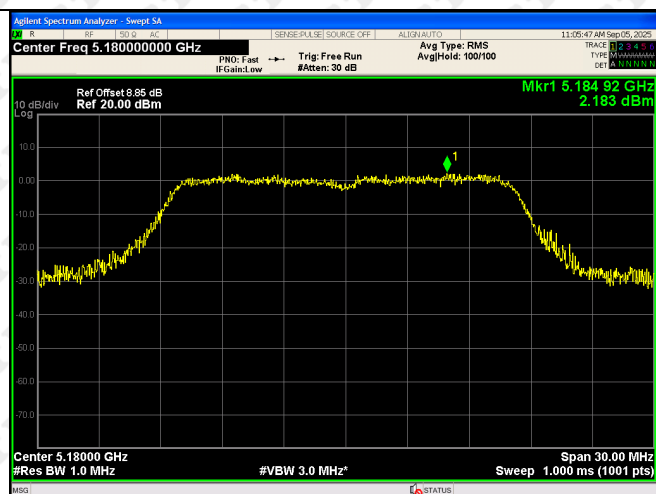
Test mode	Test Channel (MHz)	PSD [dBm/MHz] ANT 1	PSD [dBm/MHz] ANT 2	PSD [dBm/MHz] Total	Limit (dBm/MHz)	Result
802.11a	5180	2.183	1.783	/	11	Pass
	5200	3.194	2.451	/	11	Pass
	5240	4.394	3.656	/	11	Pass
802.11ac(VHT20)	5180	2.218	1.718	4.985	11	Pass
	5200	2.877	2.731	5.815	11	Pass
	5240	4.16	3.504	6.855	11	Pass
802.11ac(VHT40)	5190	-0.443	-0.962	2.316	11	Pass
	5230	0.483	0.53	3.517	11	Pass
802.11n(HT20)	5180	2.722	2.091	5.428	11	Pass
	5200	3.271	2.805	6.055	11	Pass
	5240	4.577	4.179	7.393	11	Pass
802.11n(HT40)	5190	-0.555	-0.722	2.373	11	Pass
	5230	0.93	1.18	4.067	11	Pass
802.11ac(VHT80)	5230	-7.421	-7.66	-4.529	11	Pass

Test mode	Test Channel (MHz)	PSD [dBm/MHz] ANT 1	PSD [dBm/MHz] ANT 2	PSD [dBm/MHz] Total	Limit (dBm)	Result
802.11a	5745	-0.352	-0.226	/	30	Pass
	5785	0.857	0.458	/	30	Pass
	5825	1.23	1.463	/	30	Pass
802.11ac(VHT20)	5745	-0.313	0.121	2.920	30	Pass
	5785	0.097	0.677	3.407	30	Pass
	5825	1.036	1.379	4.221	30	Pass
802.11ac(VHT40)	5755	-2.444	-2.542	0.518	30	Pass
	5795	-2.648	-2.272	0.554	30	Pass
802.11n(HT20)	5775	0.231	0.401	3.327	30	Pass
	5745	0.72	1.133	3.942	30	Pass
	5785	1.756	1.888	4.833	30	Pass
802.11n(HT40)	5825	-2.917	-2.206	0.463	30	Pass
	5755	-3.045	-2.658	0.163	30	Pass
802.11ac(VHT80)	5795	-5.143	-5.15	-2.136	30	Pass

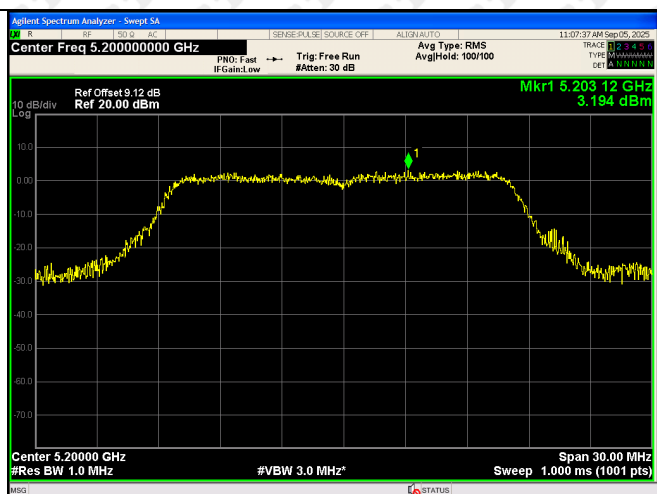
5180-5240MHz

ANT 1

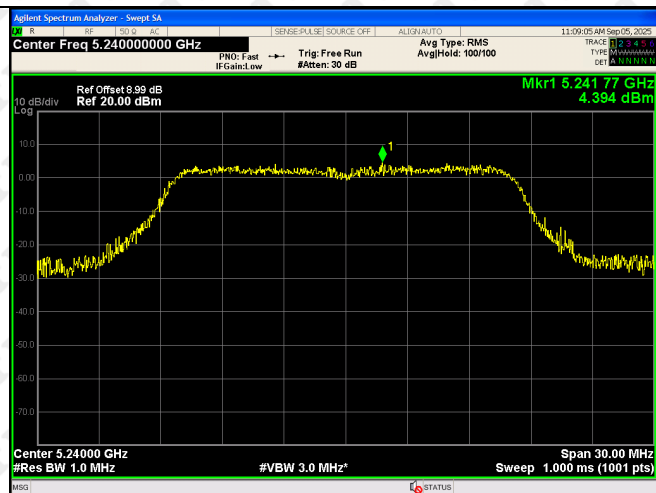
802.11a-5180



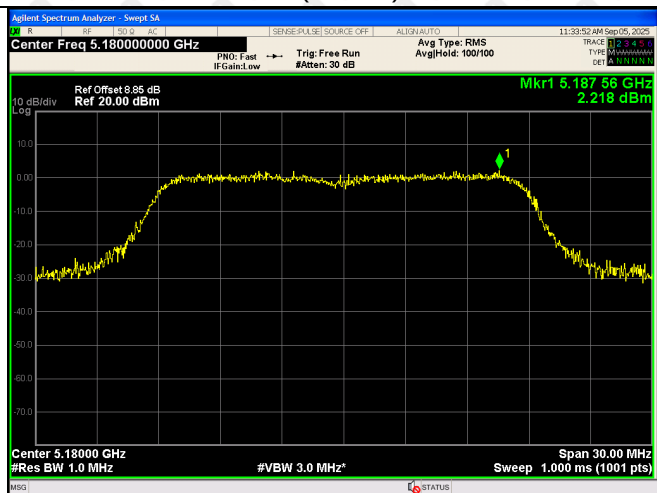
802.11a-5200



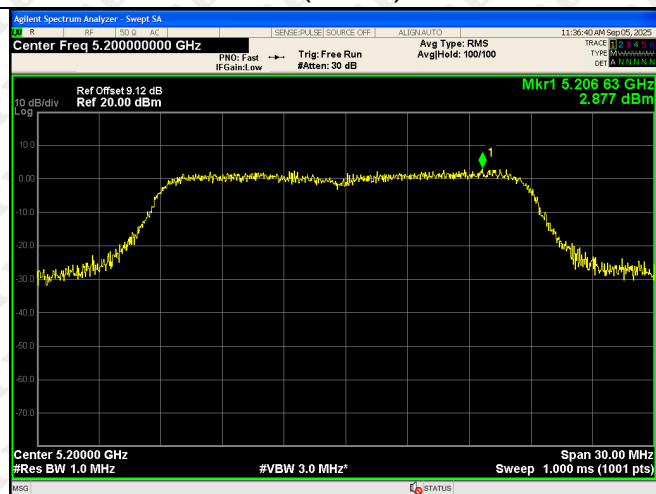
802.11a-5240



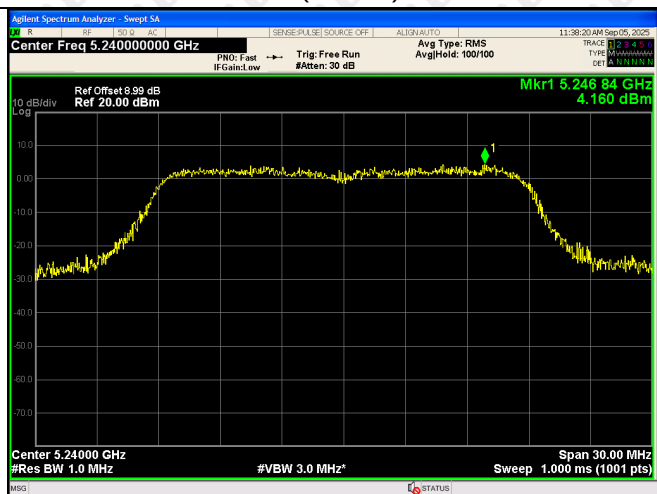
802.11ac(VHT20)-5180



802.11ac(VHT20)-5200

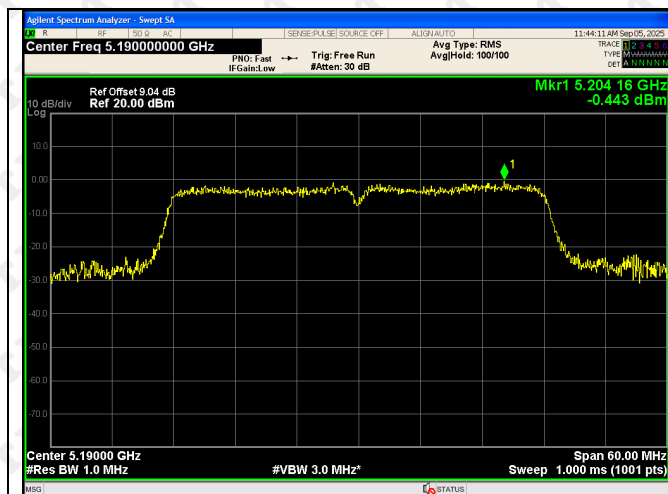


802.11ac(VHT20)-5240

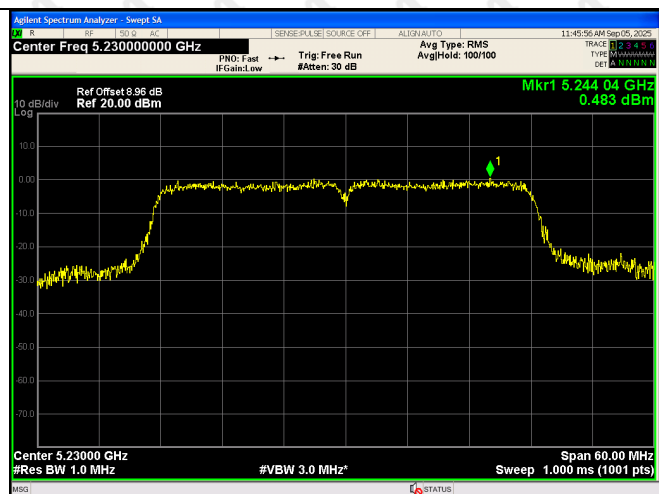


802.11ac(VHT40)-5190

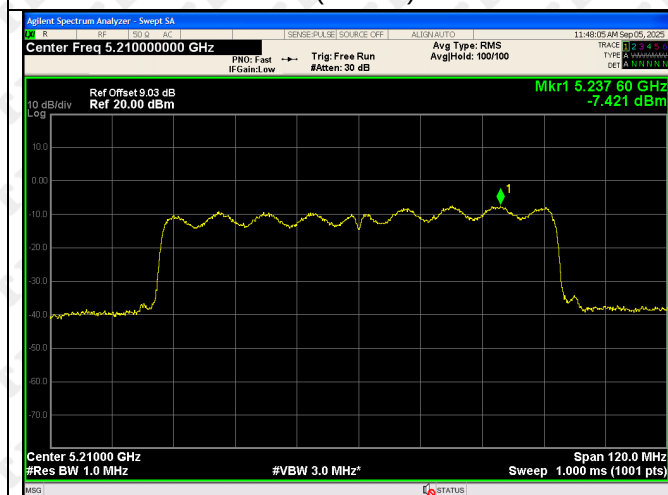
802.11ac(VHT40)-5230



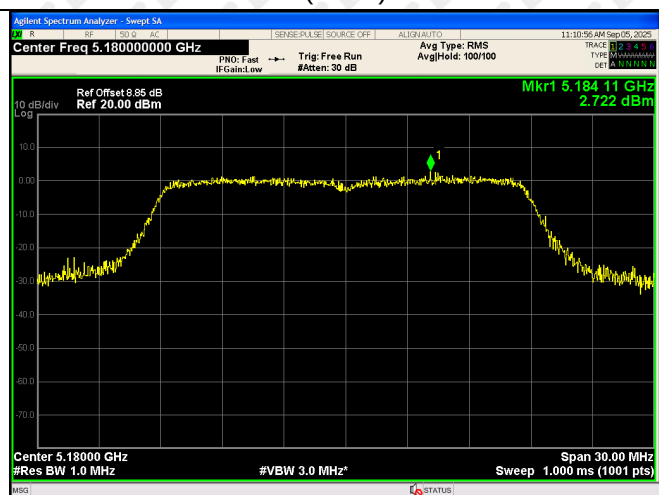
802.11ac(VHT80)-5210



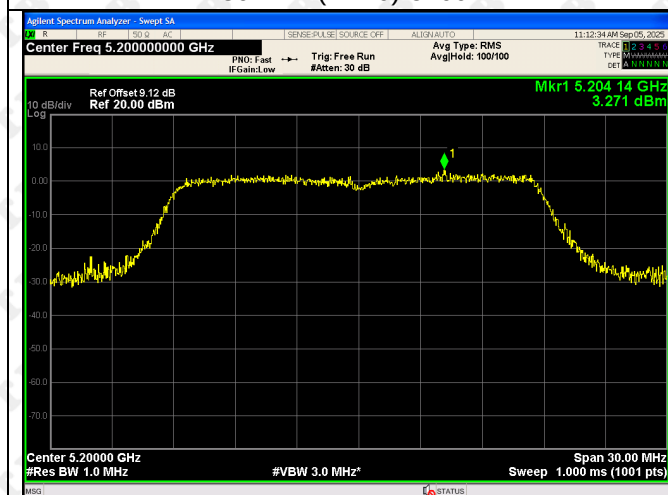
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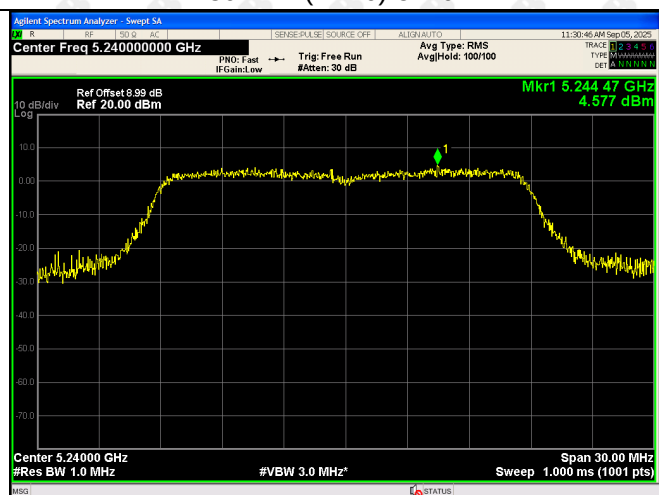
802.11n(HT20)-5200



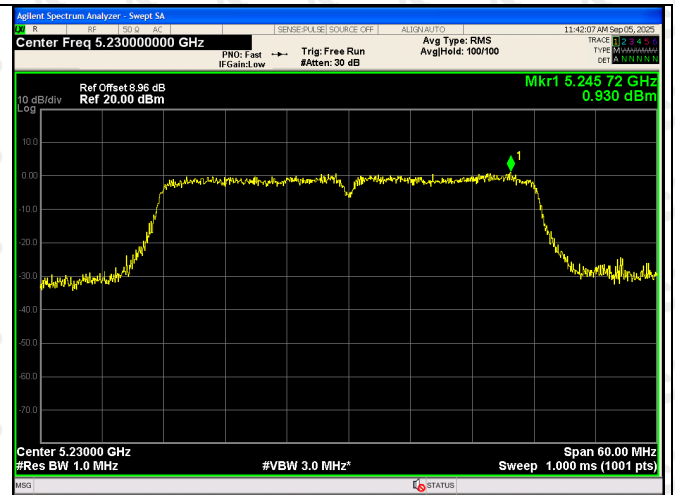
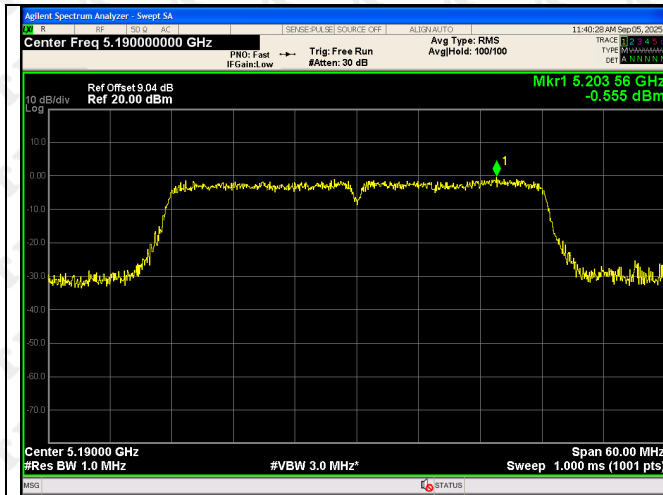
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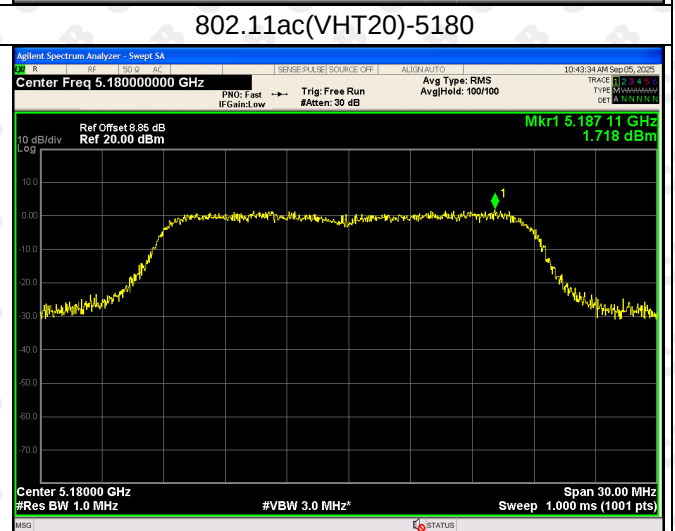
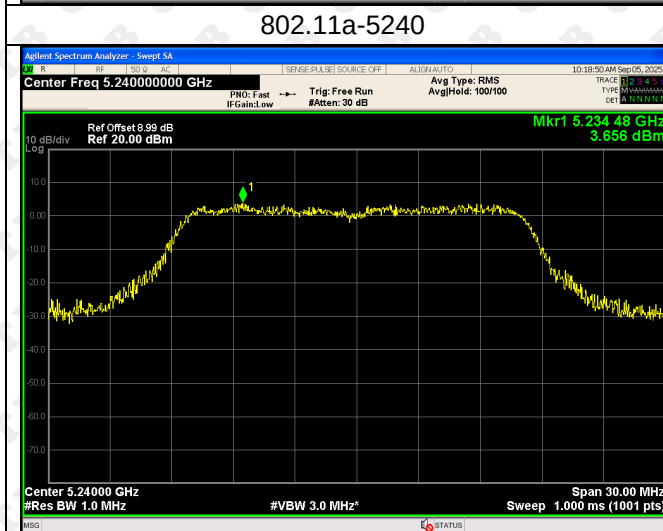
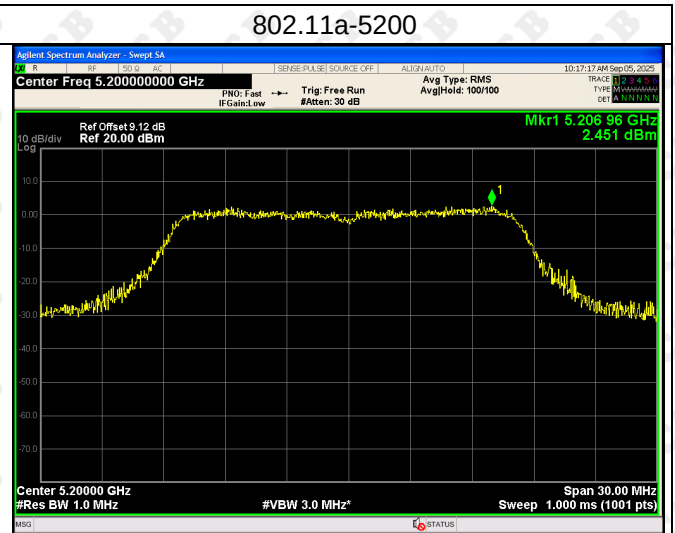
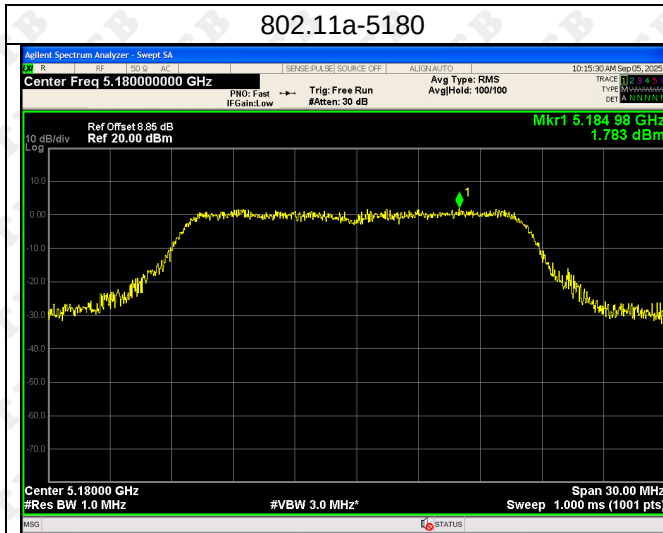
802.11n(HT40)-5190



802.11n(HT40)-5230

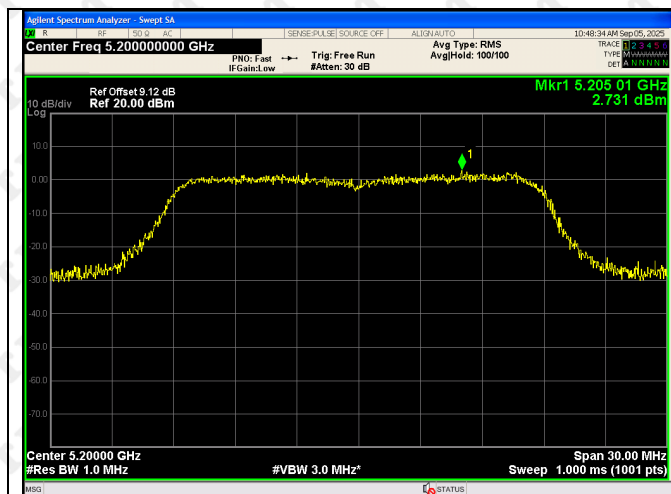


ANT2

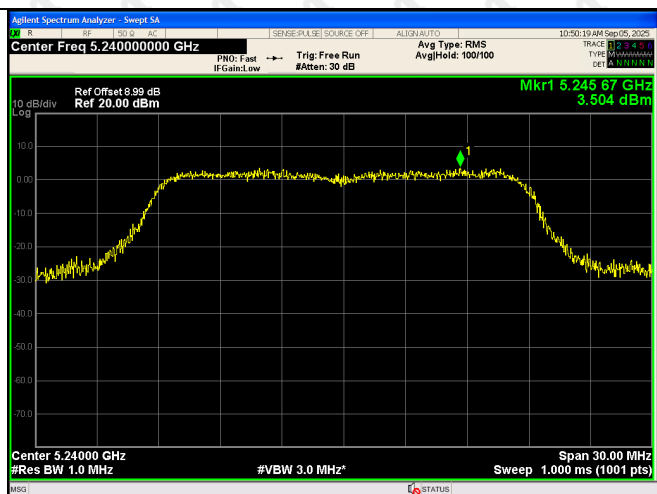


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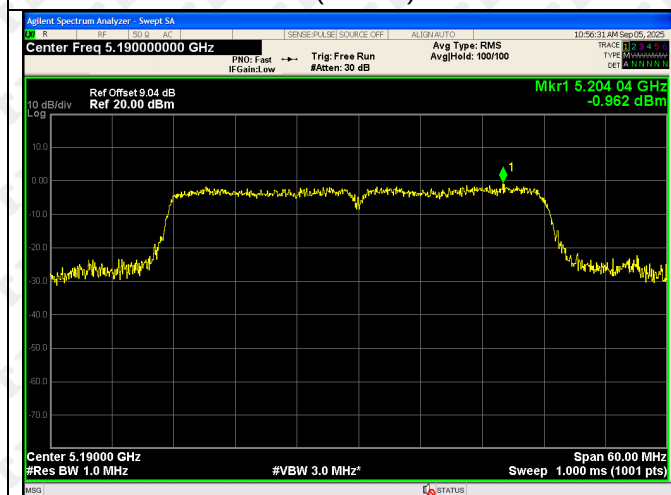
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802.11ac(VHT40)-5190



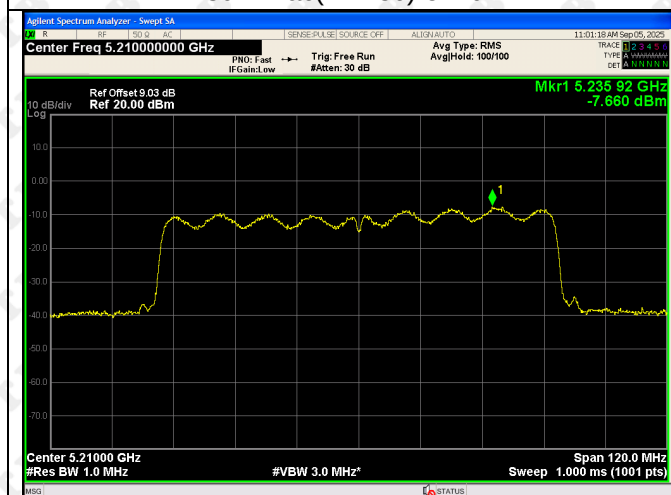
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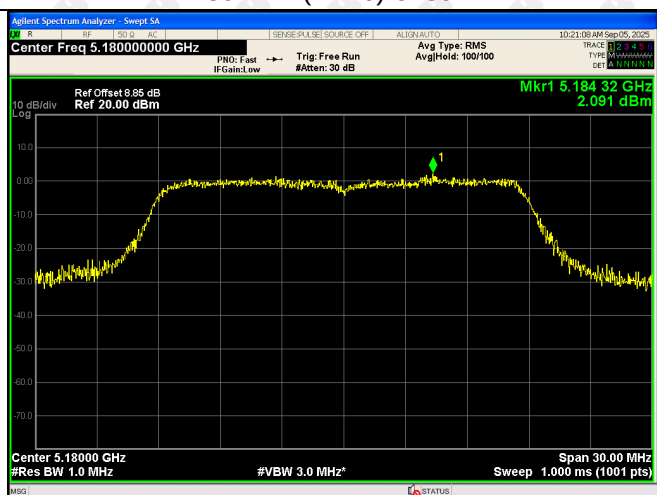
802.11ac(VHT80)-5210



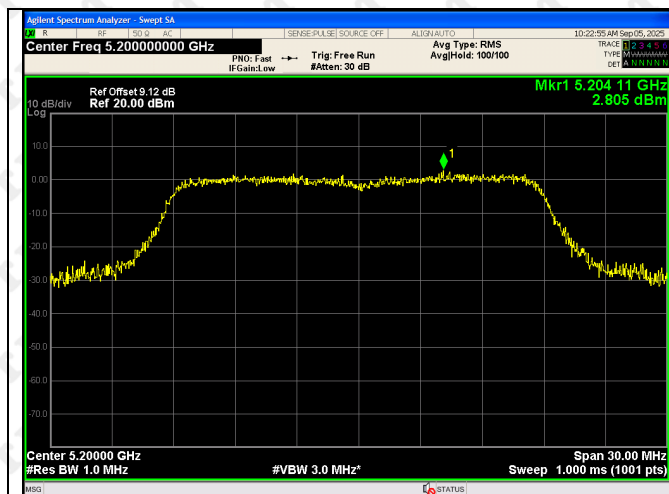
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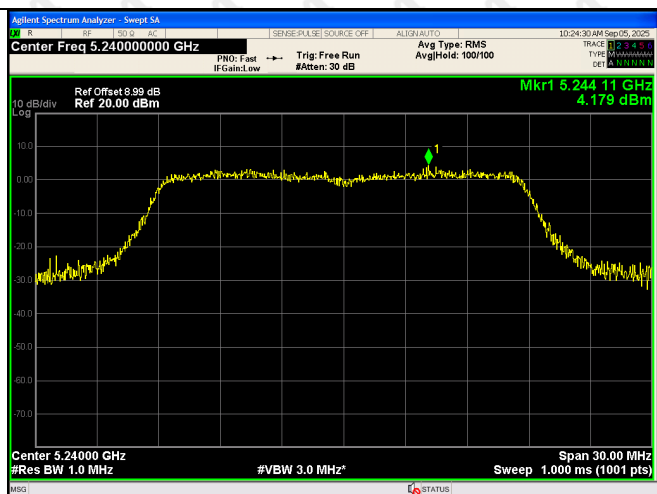
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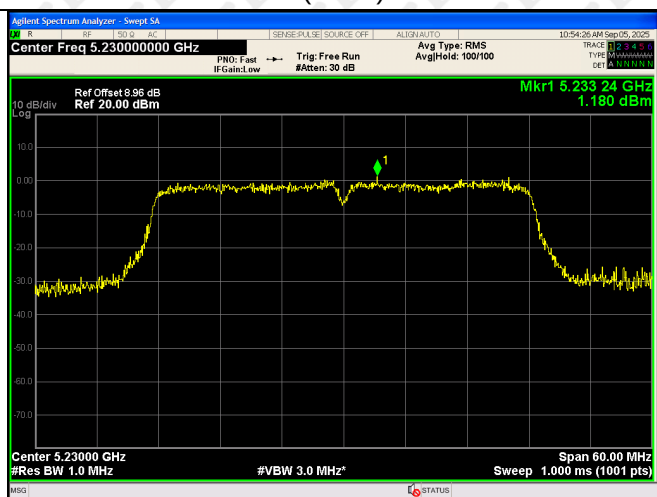
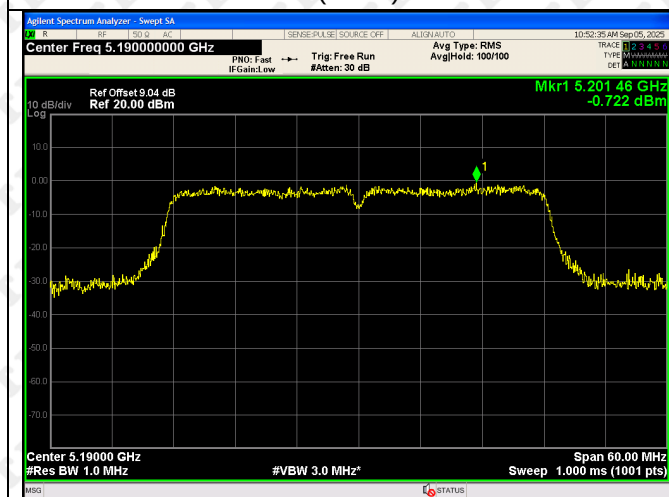
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802.11n(HT40)-5190

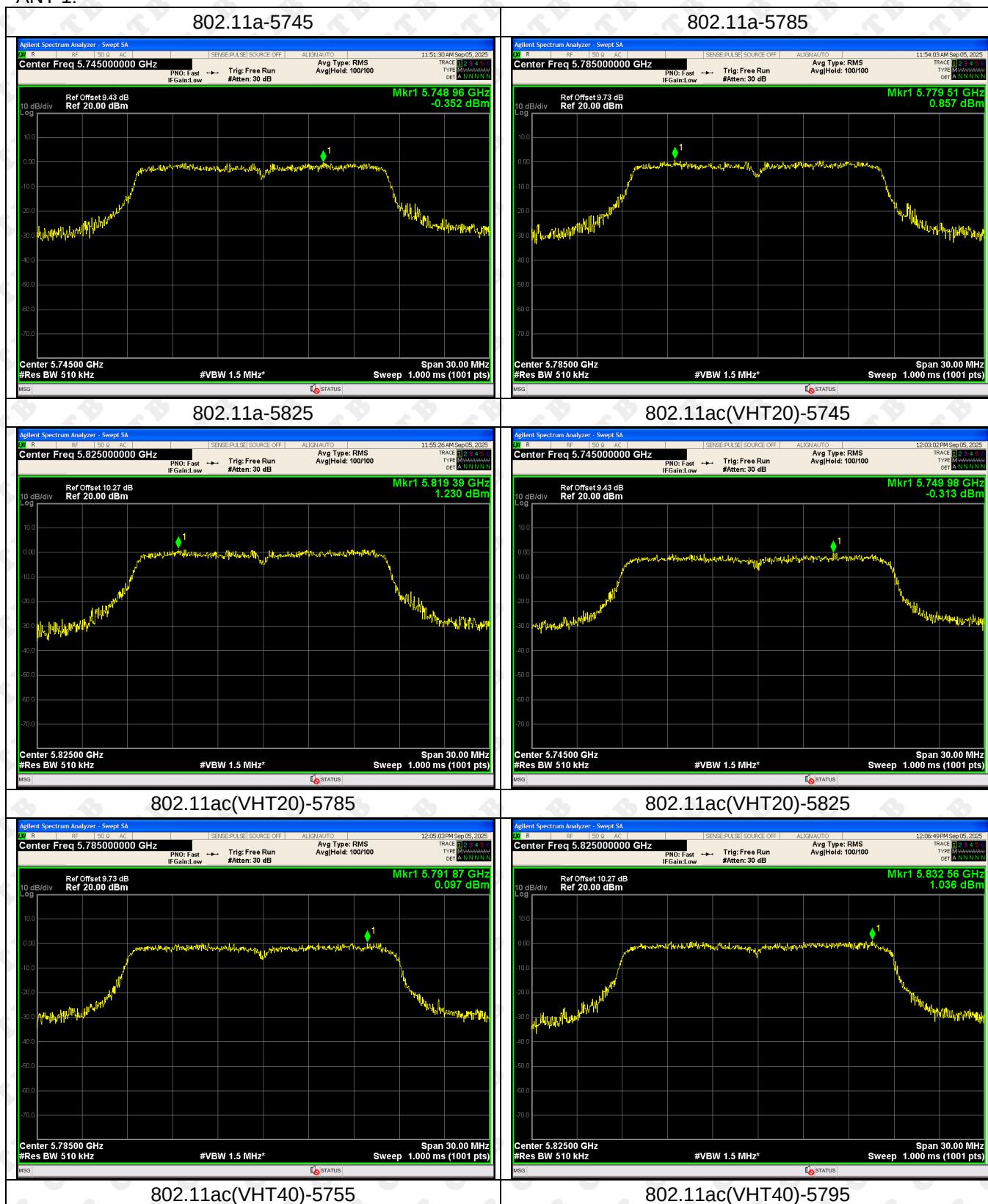


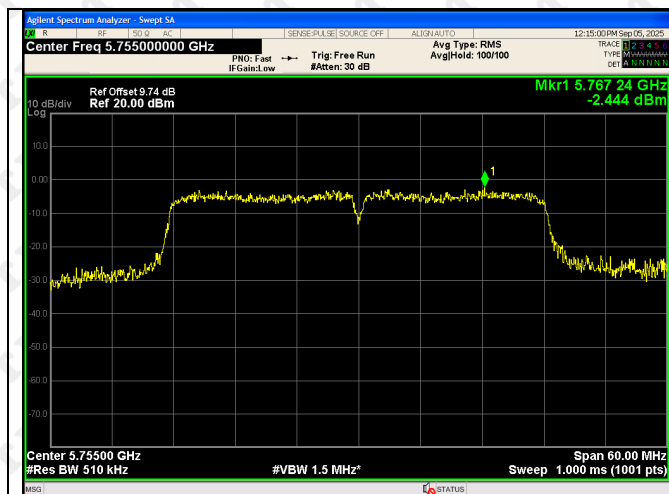
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5745-5825MHz

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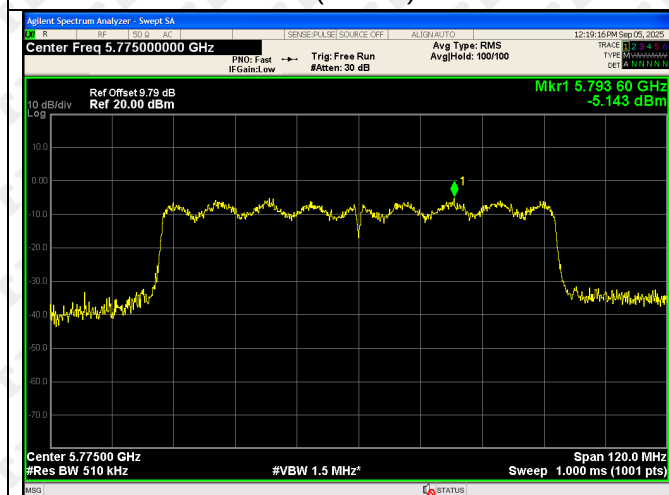




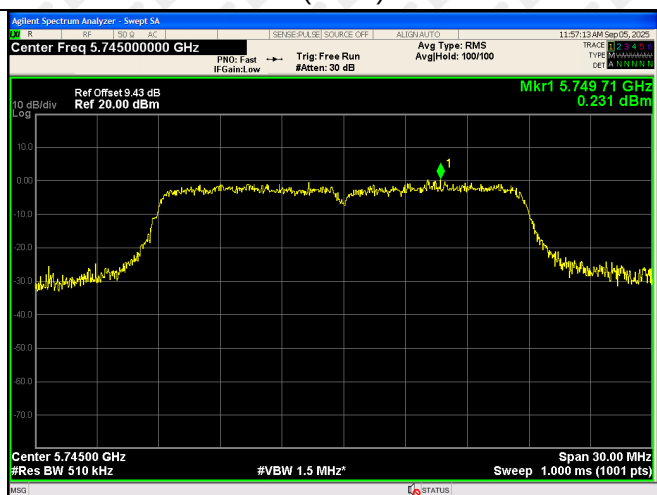
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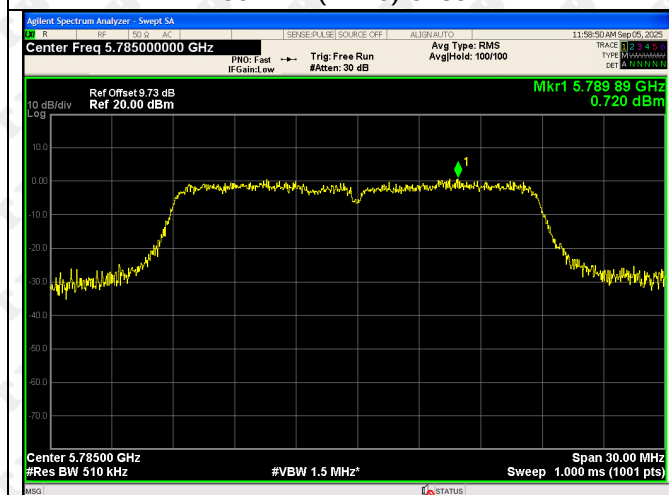
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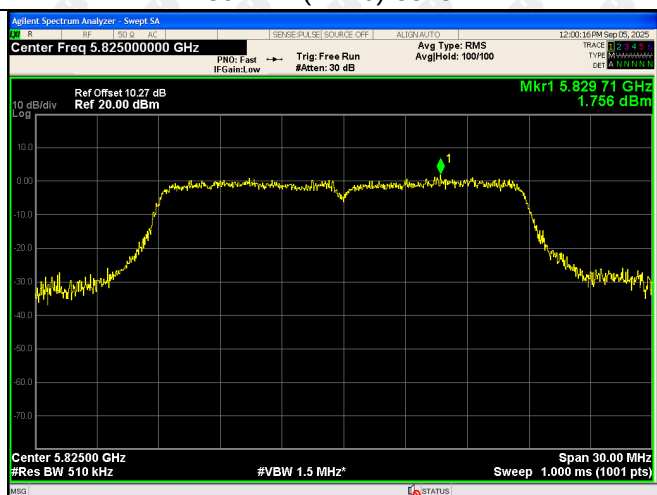
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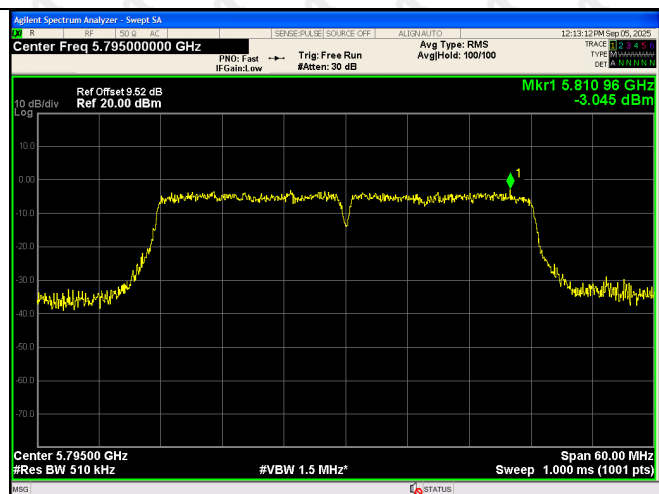
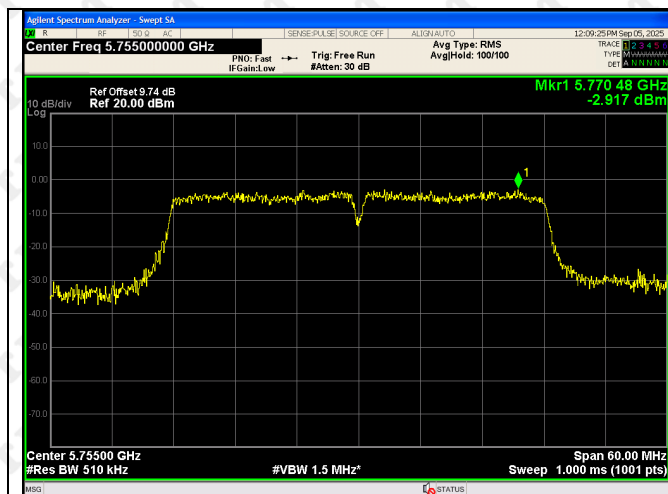
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5802.11n(HT40)-5755

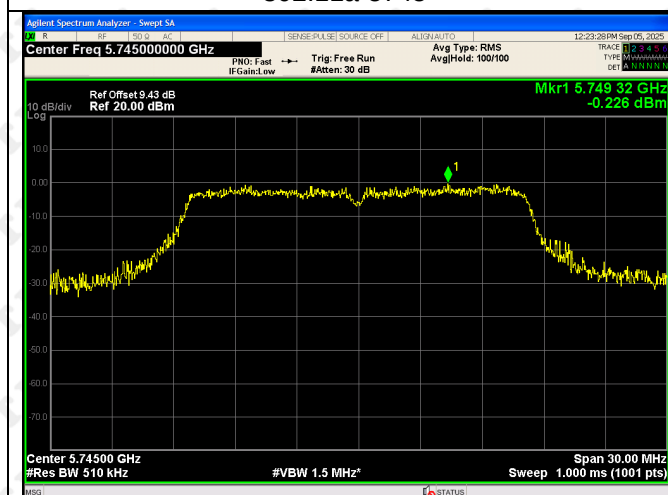


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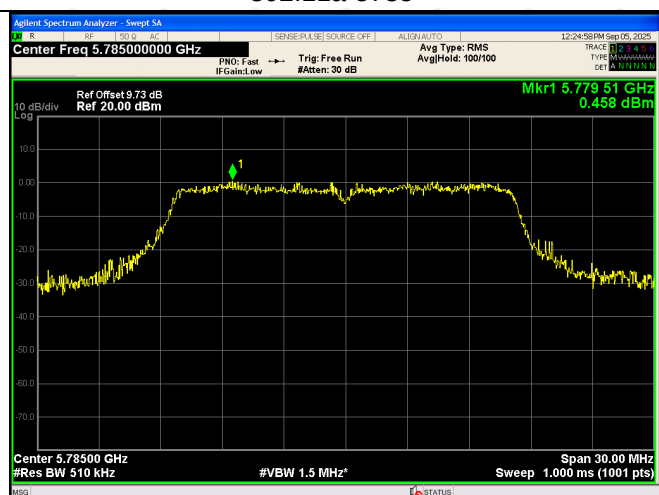


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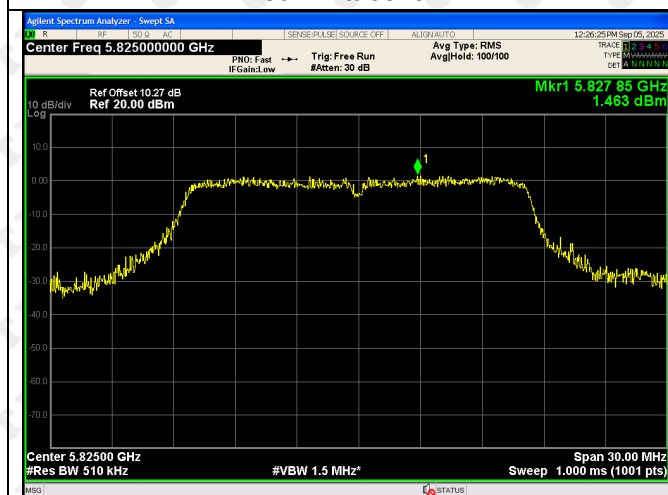
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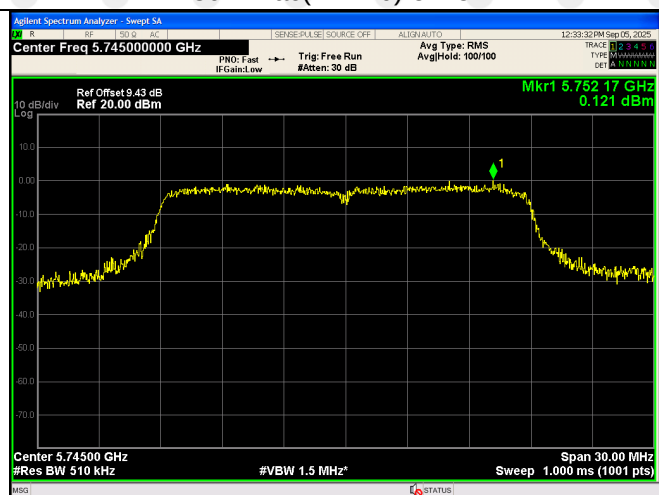
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802.11a-5825

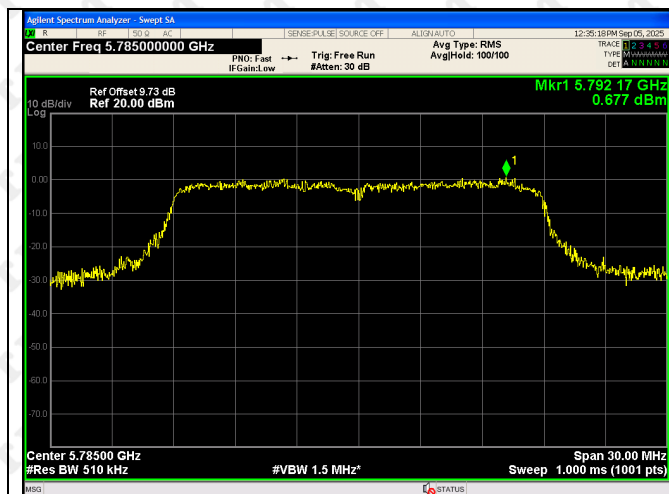


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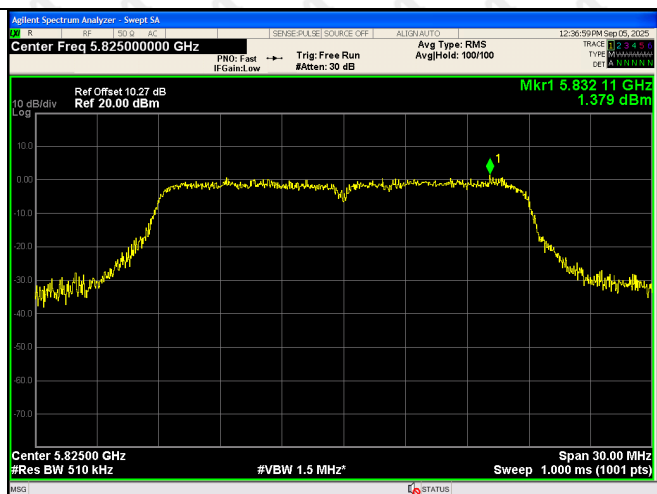


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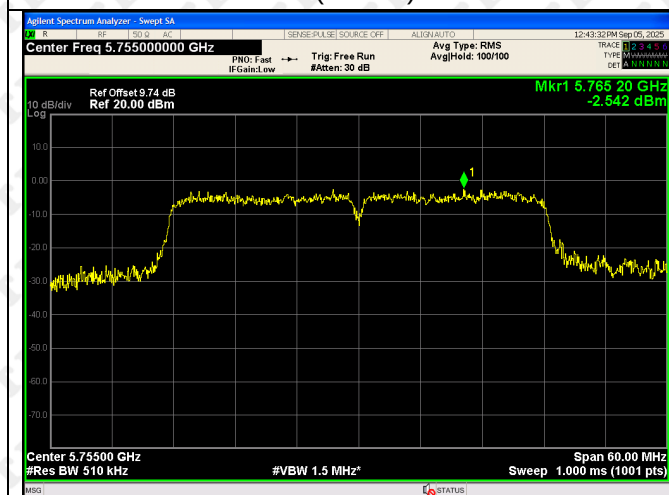
802.11ac(VHT20)-5825



802.11ac(VHT40)-5755



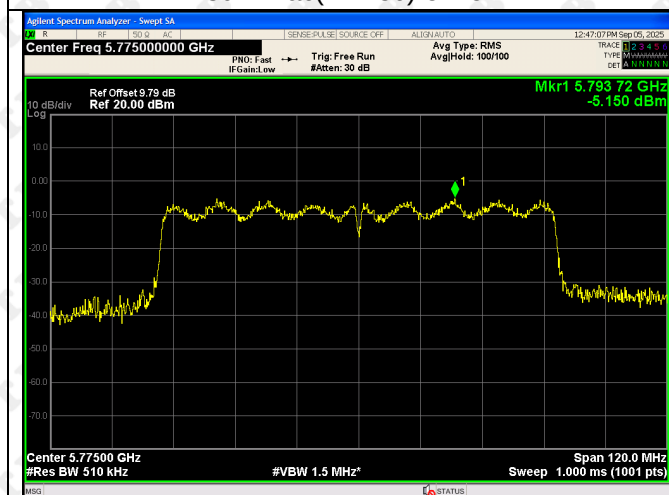
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802.11ac(VHT80)-5775



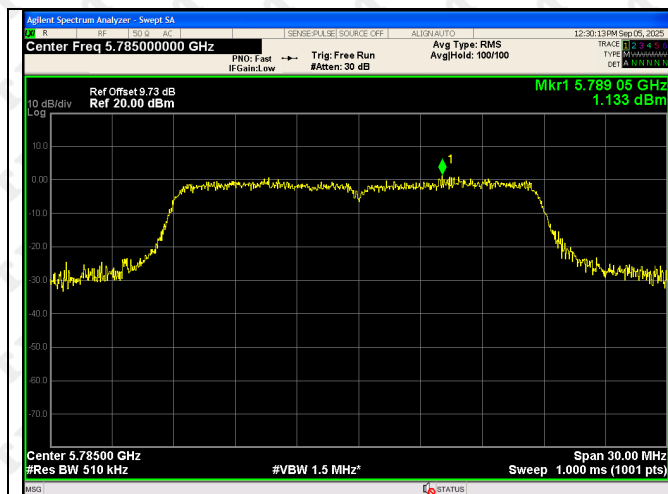
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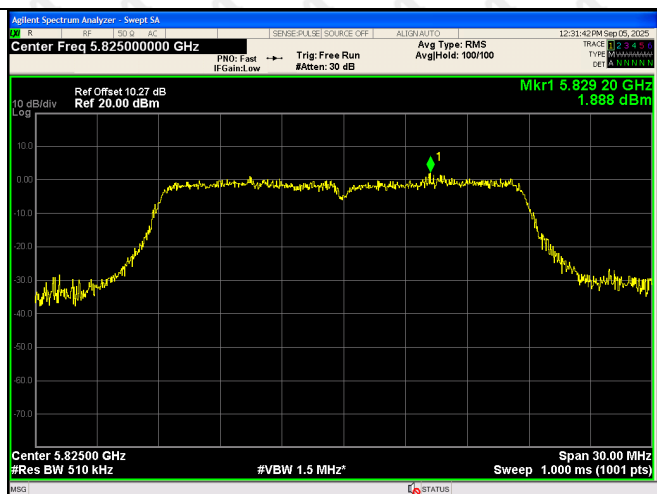
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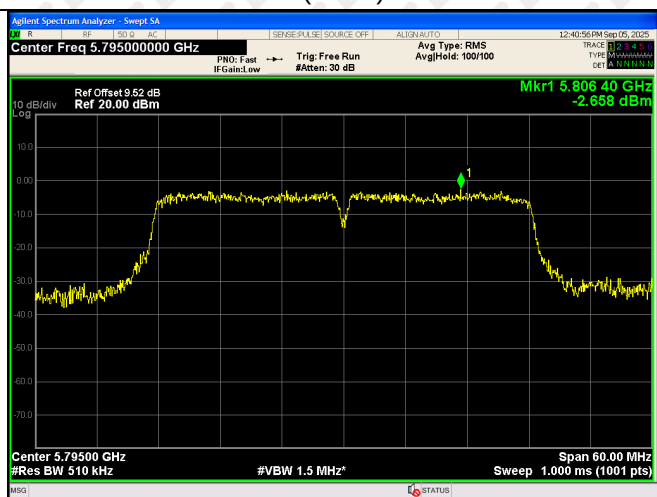
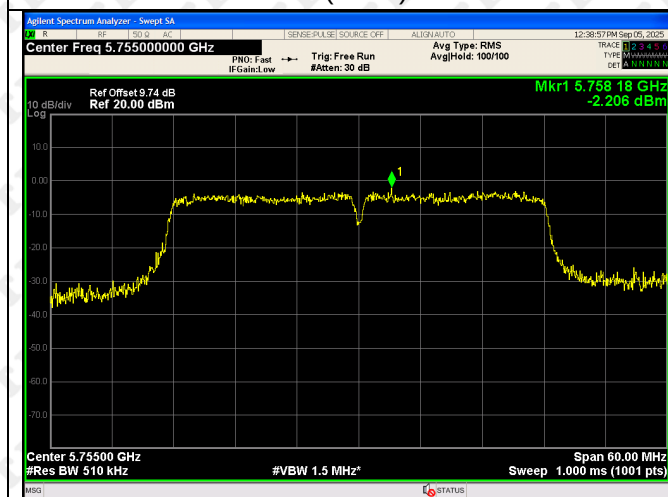
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5802.11n(HT40)-5755

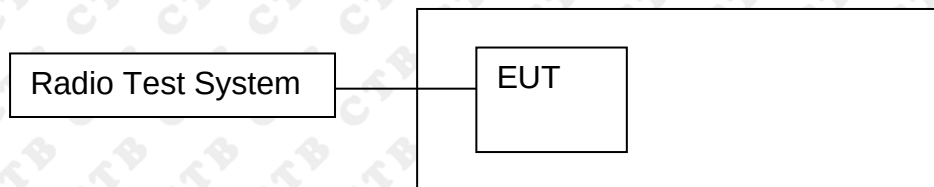


802.11n(HT40)-5795



12. FREQUENCY STABILITY

12.1 Block Diagram Of Test Setup



12.2 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

12.3 Test procedure

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
2. Set EUT as normal operation.
3. Turn the EUT on and couple its output to spectrum.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
6. Repeat step with the temperature chamber set to the lowest temperature.

12.4 Test Result

ANT1:

TX Frequency (5150-5250MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5180.0228	5180	0.0228	4.3985
		V max (V)	13.2	5180.0065	5180	0.0065	1.2617
		V min (V)	10.8	5180.0864	5180	0.0864	16.6772
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5180.0221	5180	0.0221	4.2655
		T (°C)	10	5180.0333	5180	0.0333	6.4249
		T (°C)	20	5180.0430	5180	0.0430	8.3035
		T (°C)	30	5180.0005	5180	0.0005	0.0977
		T (°C)	40	5180.0090	5180	0.0090	1.7343
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5200.0456	5200	0.0456	8.7718
		V max (V)	13.2	5200.0102	5200	0.0102	1.9684
		V min (V)	10.8	5200.0499	5200	0.0499	9.6046
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5200.0380	5200	0.0380	7.3138
		T (°C)	10	5200.0057	5200	0.0057	1.1003
		T (°C)	20	5200.0408	5200	0.0408	7.8523
		T (°C)	30	5200.0057	5200	0.0057	1.0981
		T (°C)	40	5200.0349	5200	0.0349	6.7100
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5240.0204	5240	0.0204	3.8935
		V max (V)	13.2	5240.0093	5240	0.0093	1.7773
		V min (V)	10.8	5240.0371	5240	0.0371	7.0855
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5240.0379	5240	0.0379	7.2278
		T (°C)	10	5240.0284	5240	0.0284	5.4231
		T (°C)	20	5240.0479	5240	0.0479	9.1485
		T (°C)	30	5240.0040	5240	0.0040	0.7544
		T (°C)	40	5240.0310	5240	0.0310	5.9205
Limits				±20ppm			
Result				Complies			

ANT2:

TX Frequency (5150-5250MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5180.0384	5180	0.0384	7.4194
		V max (V)	13.2	5180.0045	5180	0.0045	0.8704
		V min (V)	10.8	5180.0126	5180	0.0126	2.4240
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5180.0488	5180	0.0488	9.4214
		T (°C)	10	5180.0641	5180	0.0641	12.3674
		T (°C)	20	5180.0341	5180	0.0341	6.5846
		T (°C)	30	5180.0242	5180	0.0242	4.6768
		T (°C)	40	5180.0515	5180	0.0515	9.9405
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5200.0685	5200	0.0685	13.1642
		V max (V)	13.2	5200.0608	5200	0.0608	11.6892
		V min (V)	10.8	5200.0374	5200	0.0374	7.1975
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5200.0639	5200	0.0639	12.2825
		T (°C)	10	5200.0150	5200	0.0150	2.8782
		T (°C)	20	5200.0672	5200	0.0672	12.9276
		T (°C)	30	5200.0301	5200	0.0301	5.7925
		T (°C)	40	5200.0684	5200	0.0684	13.1582
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5240.0009	5240	0.0009	0.1787
		V max (V)	13.2	5240.0641	5240	0.0641	12.2285
		V min (V)	10.8	5240.0291	5240	0.0291	5.5615
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5240.0253	5240	0.0253	4.8206
		T (°C)	10	5240.0673	5240	0.0673	12.8361
		T (°C)	20	5240.0435	5240	0.0435	8.2929
		T (°C)	30	5240.0749	5240	0.0749	14.2893
		T (°C)	40	5240.0206	5240	0.0206	3.9270
Limits				±20ppm			
Result				Complies			

ANT1:

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5745.0834	5745	0.0834	14.5133
		V max (V)	13.2	5745.0555	5745	0.0555	9.6649
		V min (V)	10.8	5745.0834	5745	0.0834	14.5133
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5745.0736	5745	0.0736	12.8168
		T (°C)	10	5745.0696	5745	0.0696	12.1191
		T (°C)	20	5745.0721	5745	0.0721	12.5530
		T (°C)	30	5745.0507	5745	0.0507	8.8200
		T (°C)	40	5745.0241	5745	0.0241	4.1977
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5785.0874	5785	0.0874	15.1054
		V max (V)	13.2	5785.0332	5785	0.0332	5.7393
		V min (V)	10.8	5785.0749	5785	0.0749	12.9414
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5785.0904	5785	0.0904	15.6191
		T (°C)	10	5785.0335	5785	0.0335	5.7958
		T (°C)	20	5785.0753	5785	0.0753	13.0178
		T (°C)	30	5785.0330	5785	0.0330	5.7059
		T (°C)	40	5785.0364	5785	0.0364	6.3007
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5825.0469	5825	0.0469	8.0575
		V max (V)	13.2	5825.0187	5825	0.0187	3.2105
		V min (V)	10.8	5825.0887	5825	0.0887	15.2293
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5825.0266	5825	0.0266	4.5619
		T (°C)	10	5825.0798	5825	0.0798	13.7029
		T (°C)	20	5825.0006	5825	0.0006	0.0967
		T (°C)	30	5825.0145	5825	0.0145	2.4944
		T (°C)	40	5825.0183	5825	0.0183	3.1431
Limits				±20ppm			
Result				Complies			

ANT2:

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5745.0916	5745	0.0916	15.9491
		V max (V)	13.2	5745.0599	5745	0.0599	10.4178
		V min (V)	10.8	5745.0280	5745	0.0280	4.8822
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5745.0308	5745	0.0308	5.3675
		T (°C)	10	5745.0926	5745	0.0926	16.1176
		T (°C)	20	5745.0342	5745	0.0342	5.9474
		T (°C)	30	5745.0043	5745	0.0043	0.7511
		T (°C)	40	5745.0356	5745	0.0356	6.1886
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5785.0856	5785	0.0856	14.7959
		V max (V)	13.2	5785.0382	5785	0.0382	6.6080
		V min (V)	10.8	5785.0720	5785	0.0720	12.4409
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5785.0140	5785	0.0140	2.4188
		T (°C)	10	5785.0728	5785	0.0728	12.5826
		T (°C)	20	5785.0852	5785	0.0852	14.7338
		T (°C)	30	5785.0615	5785	0.0615	10.6275
		T (°C)	40	5785.0877	5785	0.0877	15.1588
		T (°C)	50	5785.0642	5785	0.0642	11.1015
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12	5825.0452	5825	0.0452	7.7532
		V max (V)	13.2	5825.0383	5825	0.0383	6.5787
		V min (V)	10.8	5825.0764	5825	0.0764	13.1189
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5825.0218	5825	0.0218	3.7344
		T (°C)	10	5825.0793	5825	0.0793	13.6150
		T (°C)	20	5825.0472	5825	0.0472	8.1065
		T (°C)	30	5825.0109	5825	0.0109	1.8785
		T (°C)	40	5825.0680	5825	0.0680	11.6696
Limits				±20ppm			
Result				Complies			

13. OPERATION IN THE ABSENCE OF INFORMATION TO THE TRANSMIT

13.1 Requirement

15.407(c) requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

13.2 Test Results

Operation in the absence of information to the transmit:

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

14. ANTENNA REQUIREMENT

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is FPC antenna and no consideration of replacement. The best case gain of the antenna is WiFi (5.2G):Ant1: -1.26dBi, Ant2: -0.12dBi, WiFi (5.8G):Ant1: 0.67dBi, Ant2: 0.93dBi

15. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz



Above 1GHz



Conducted Emission



***** END OF REPORT *****