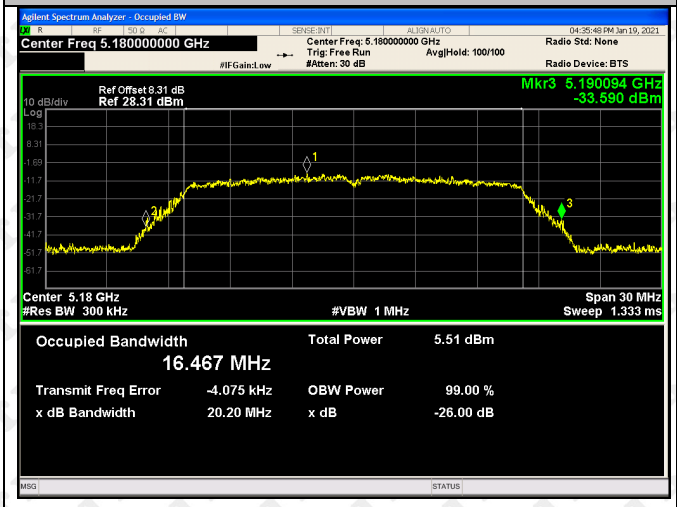
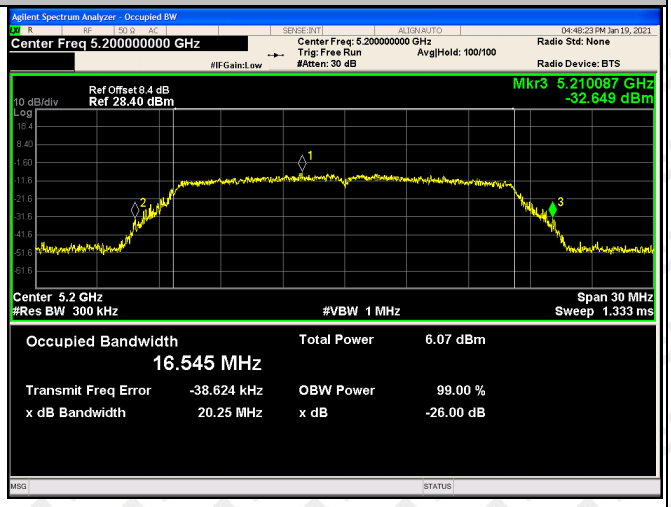
Test Graph

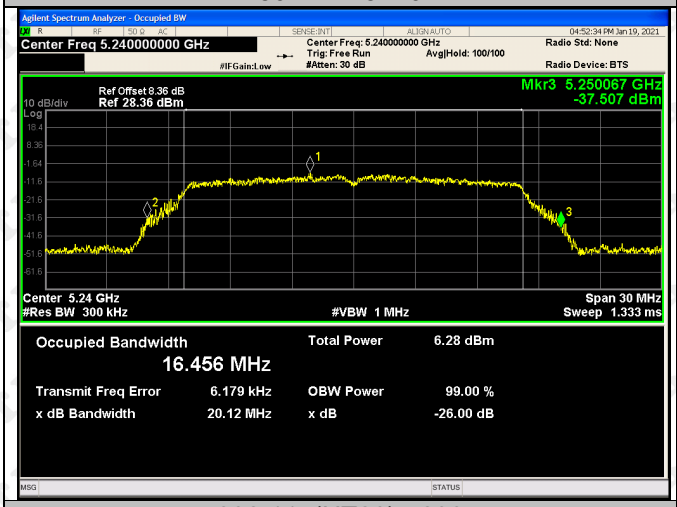
802.11a-5180



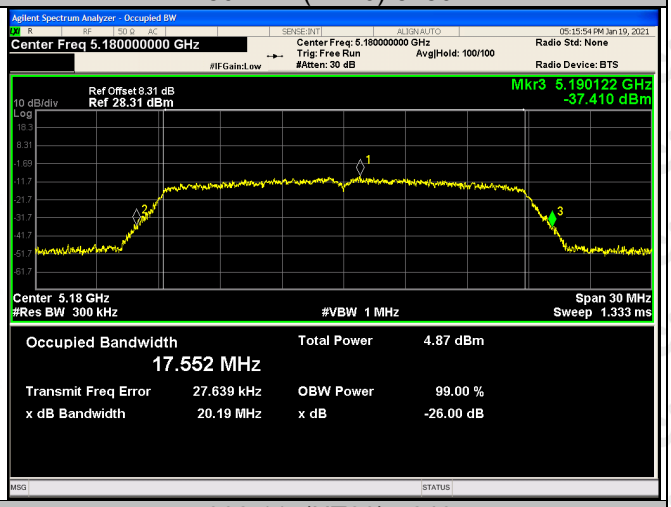
802.11a-5200



802.11a-5240



802.11n(HT20)-5180



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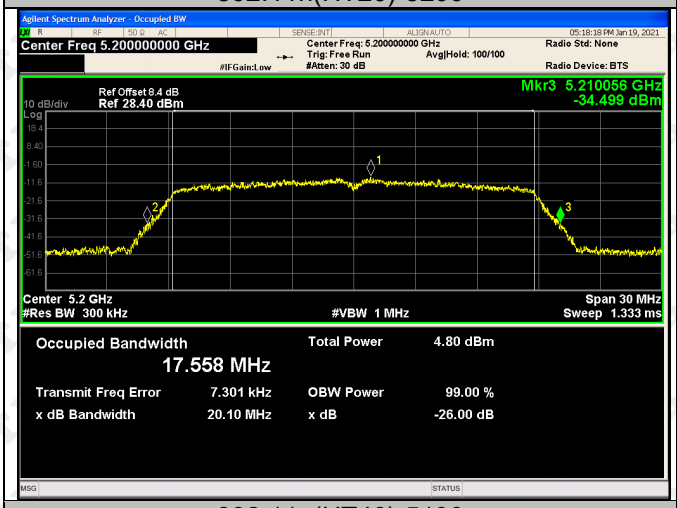

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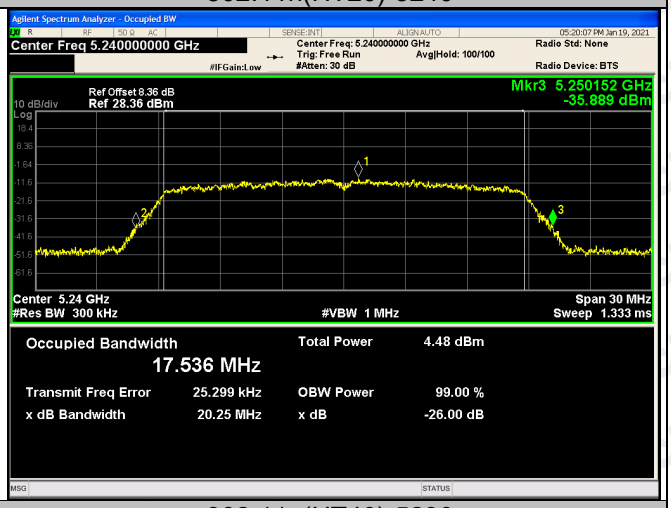
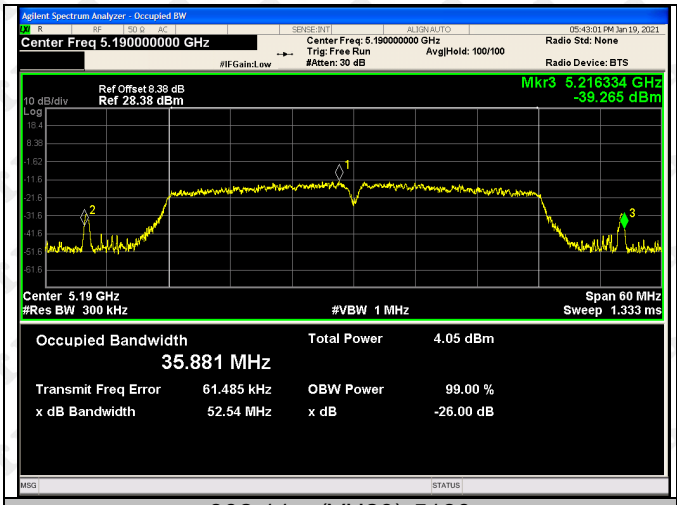
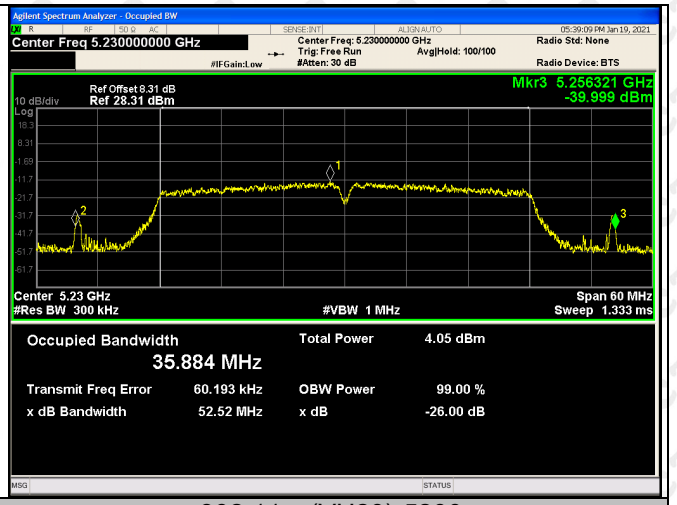


802.11n(HT40)-5190

802.11n(HT40)-5230



802.11ac(VH20)-5180



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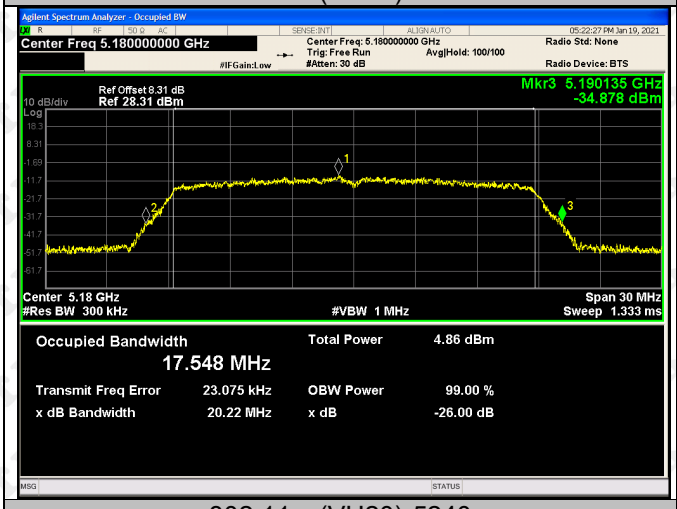

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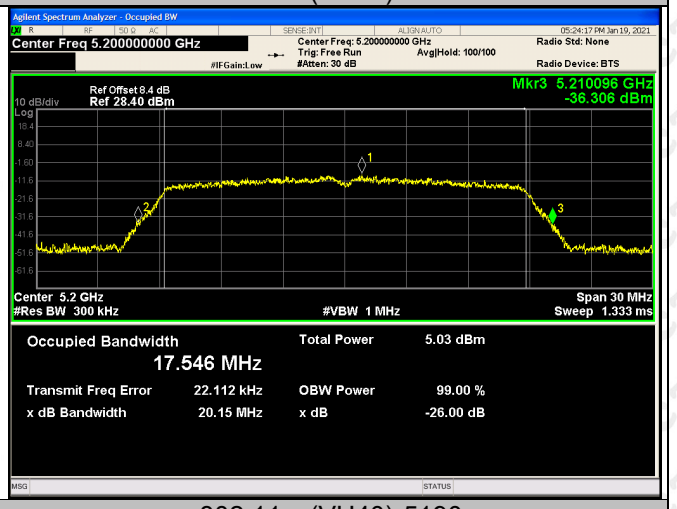
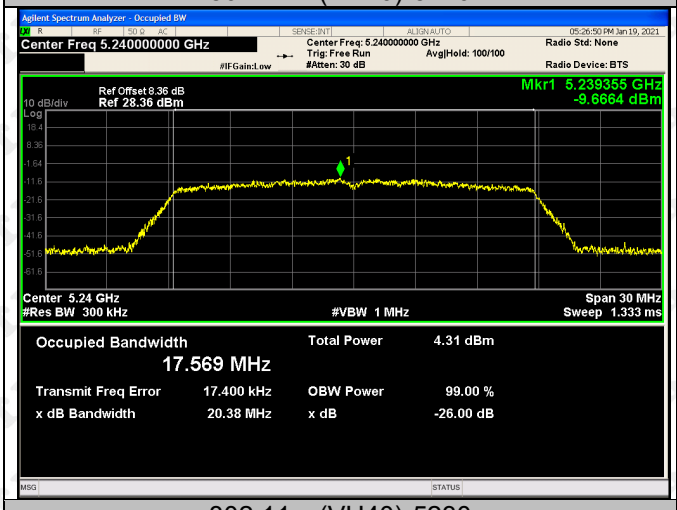


802.11ac(VH40)-5190



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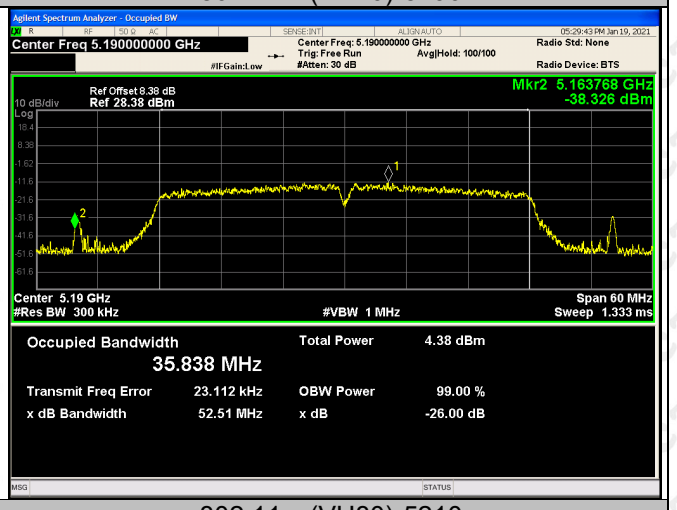
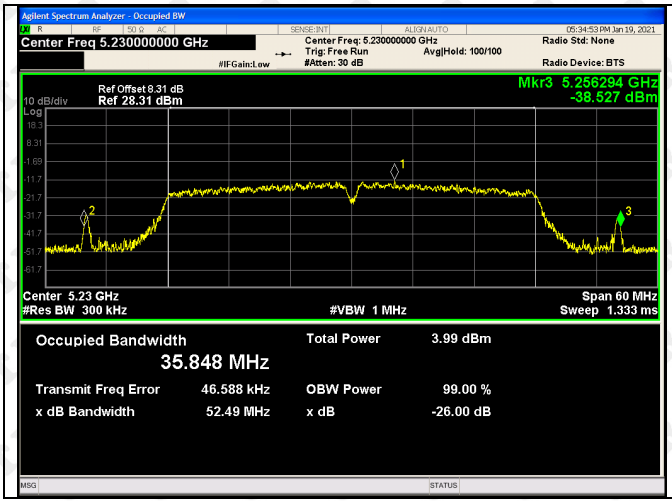
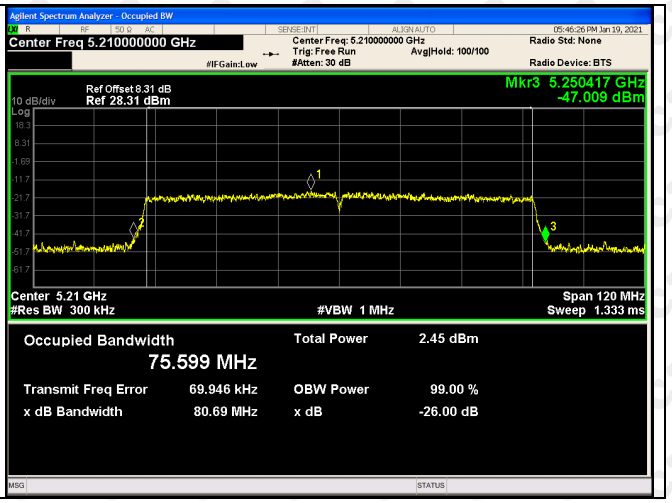


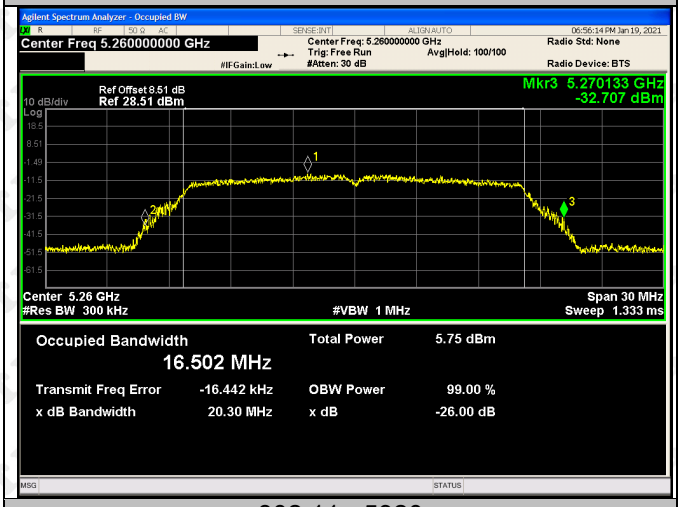
802.11ac(VH80)-5210



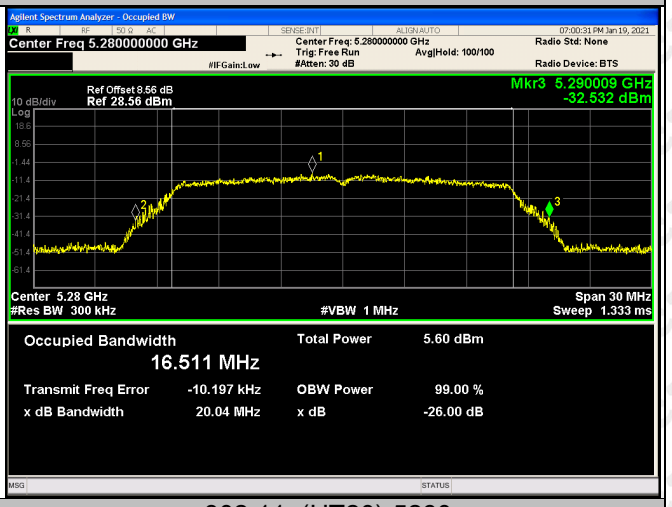


5250-5350MHz

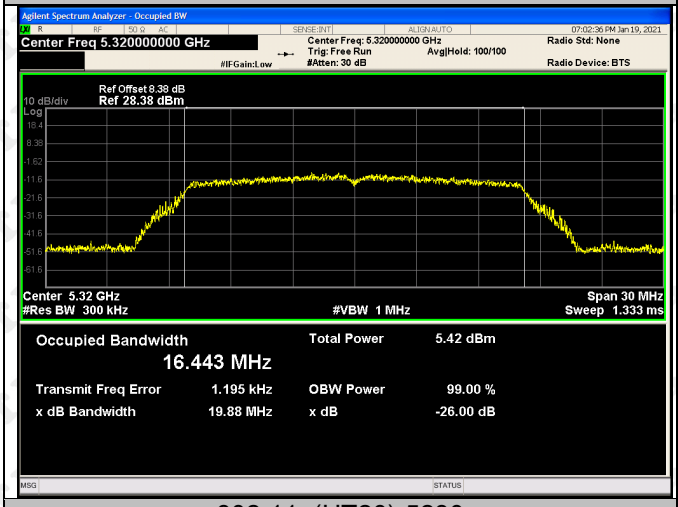
802.11a-5260



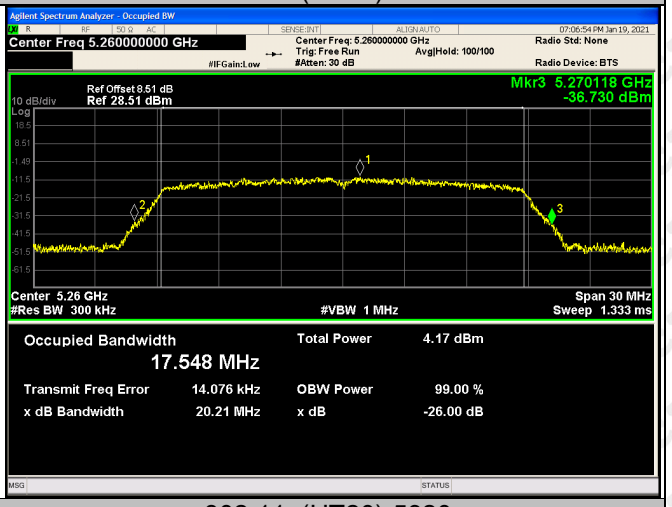
802.11a-5280



802.11a-5320

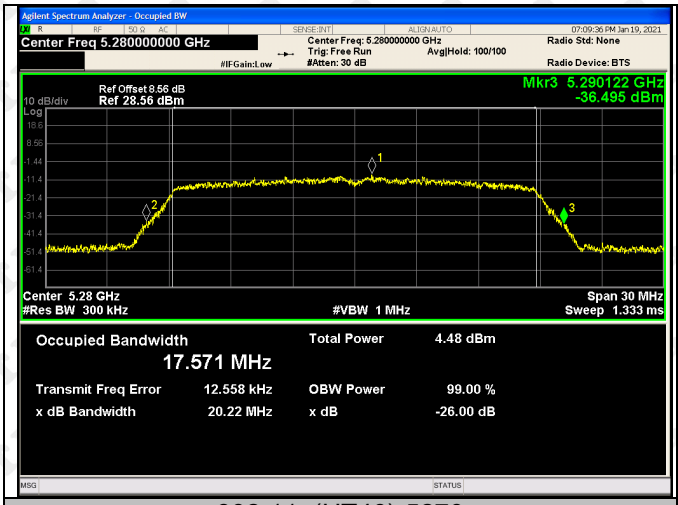


802.11n(HT20)-5260

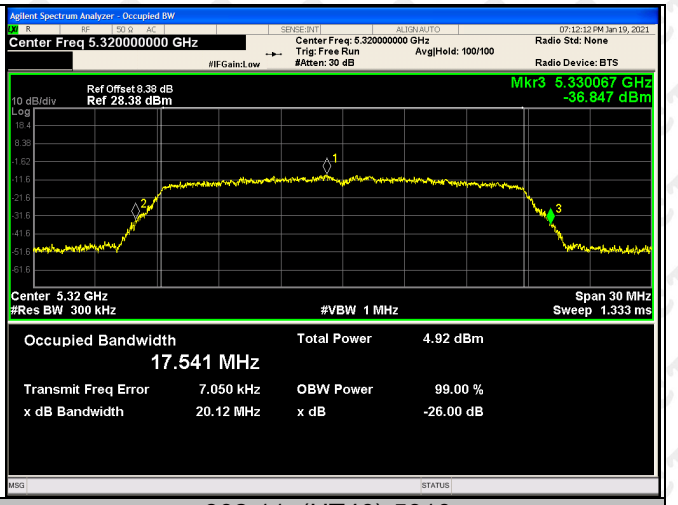


802.11n(HT20)-5280

802.11n(HT20)-5320



802.11n(HT40)-5270



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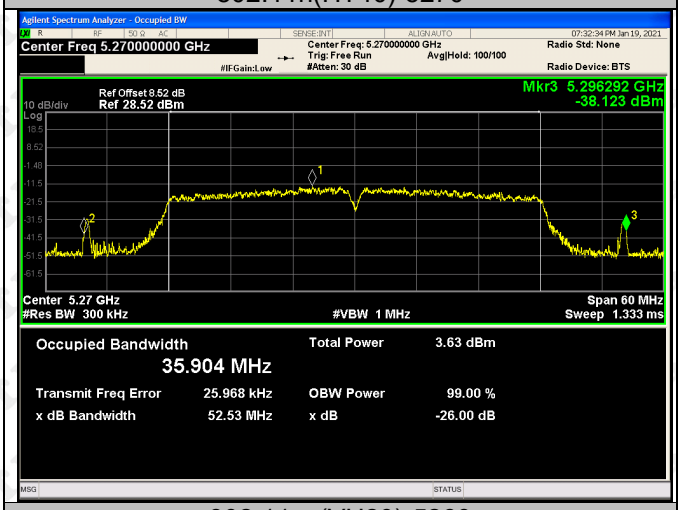
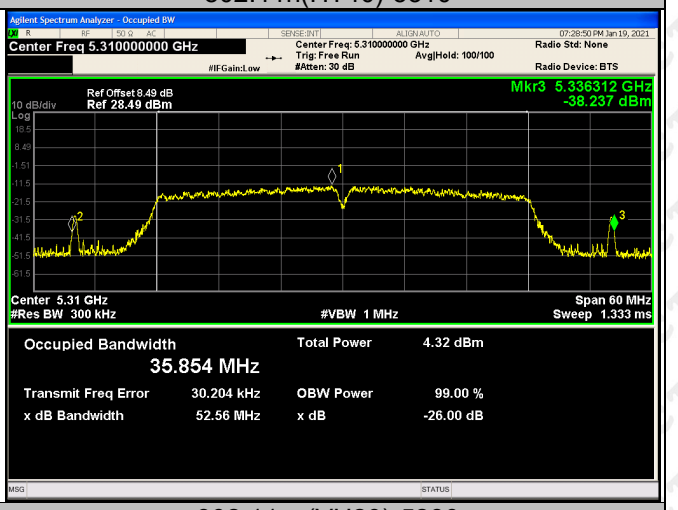


802.11ac(VH20)-5260



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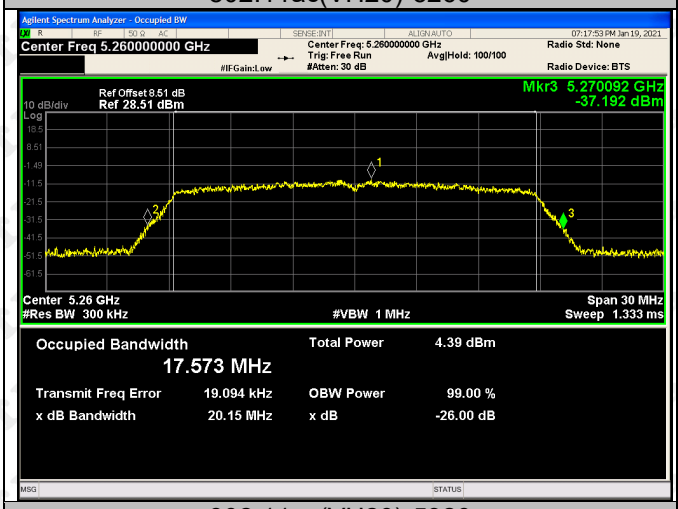

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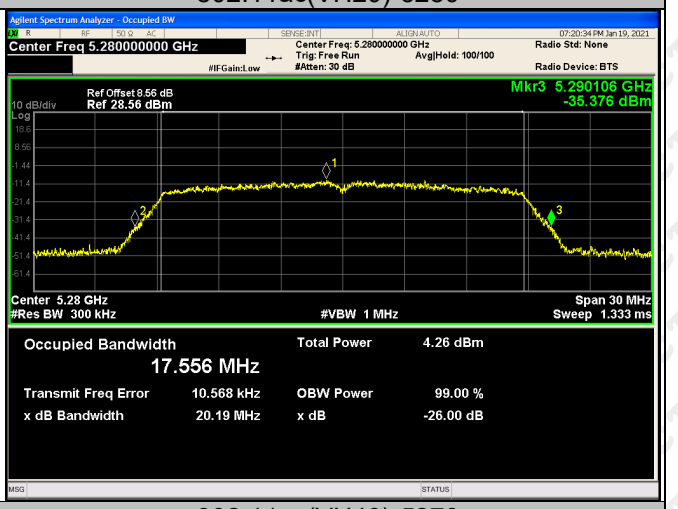
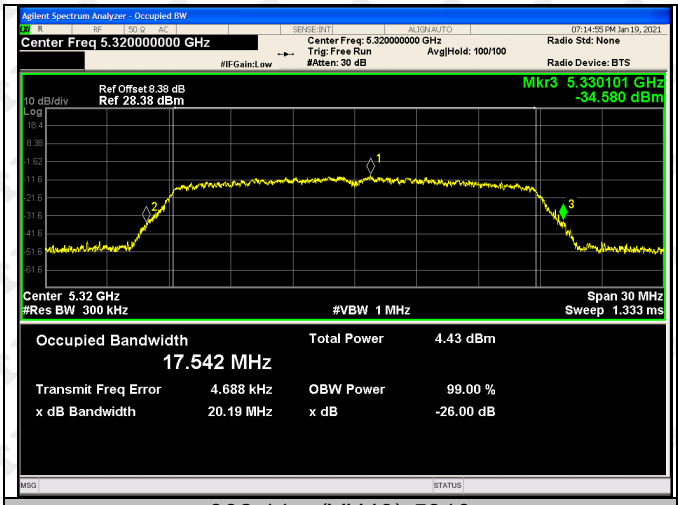
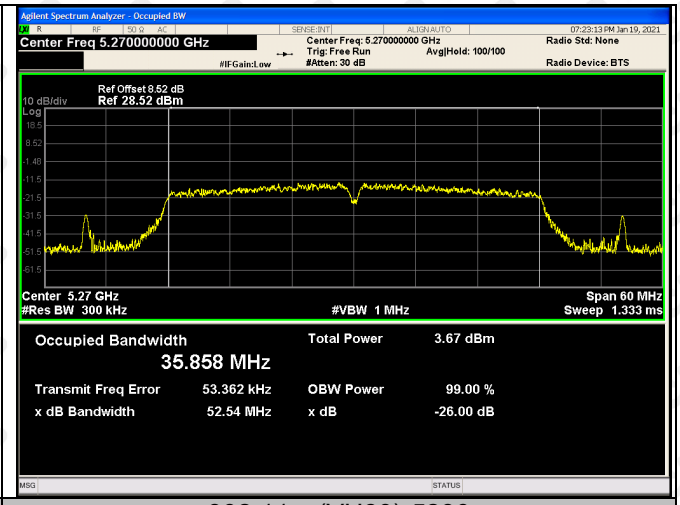


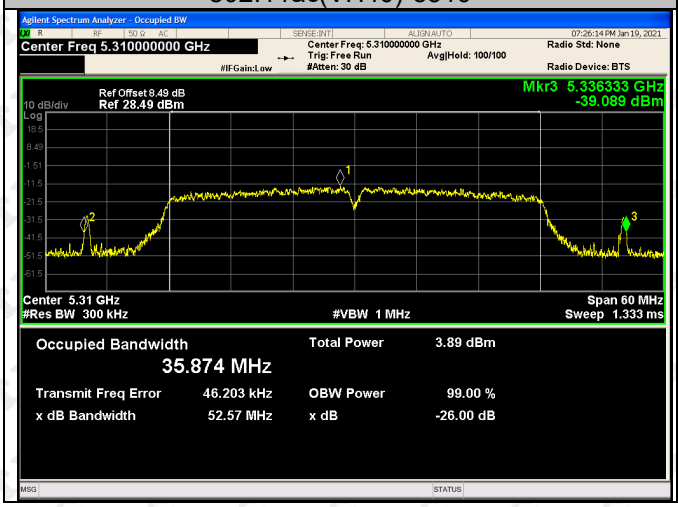
802.11ac(VH40)-5270

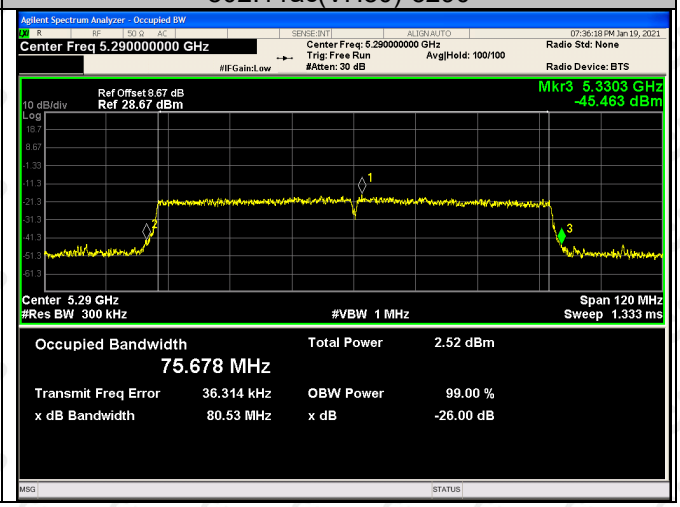


802.11ac(VH40)-5310



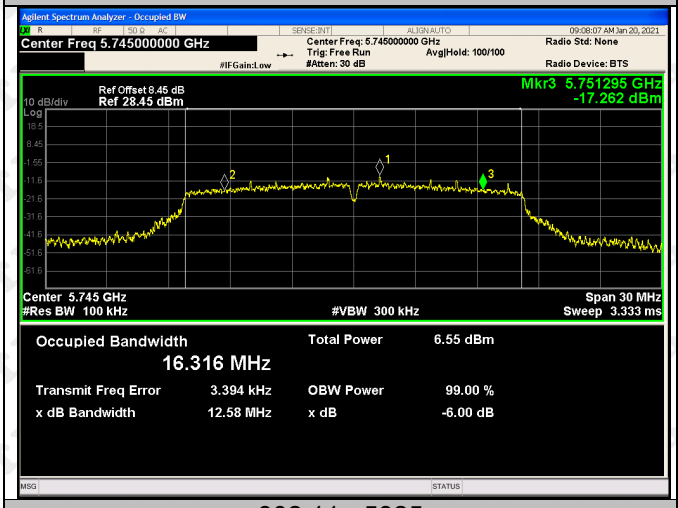
802.11ac(VH80)-5290



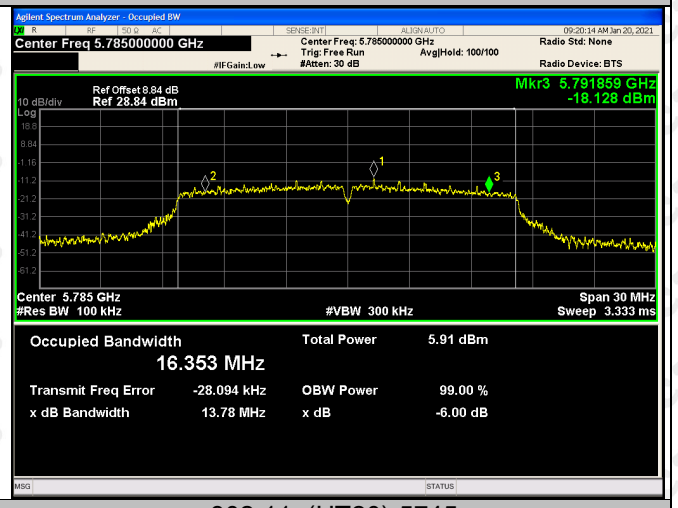


5725-5850MHz

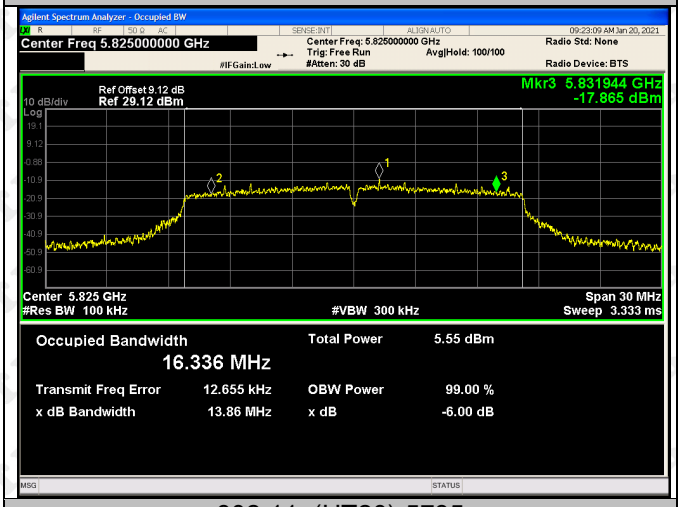
802.11a-5745



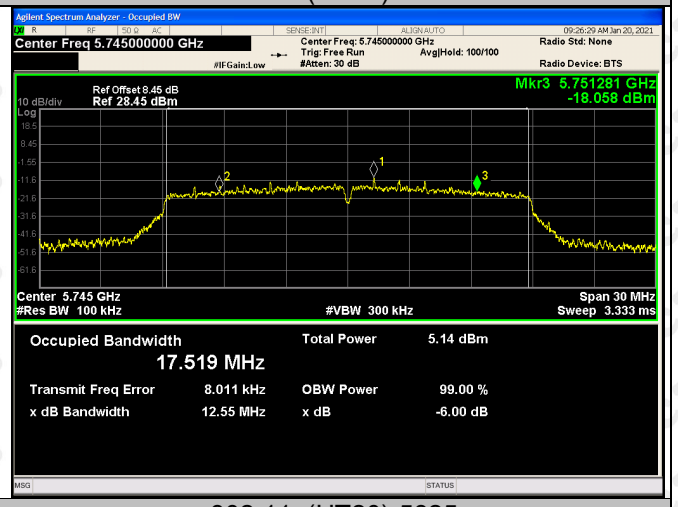
802.11a-5785



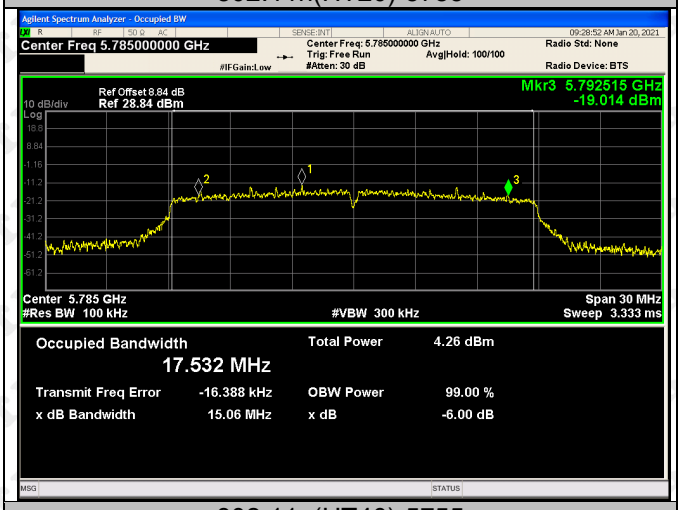
802.11a-5825



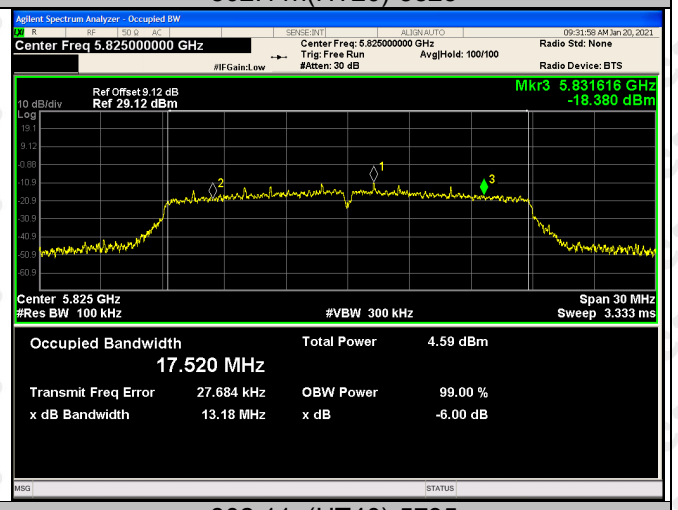
802.11n(HT20)-5745



802.11n(HT20)-5785

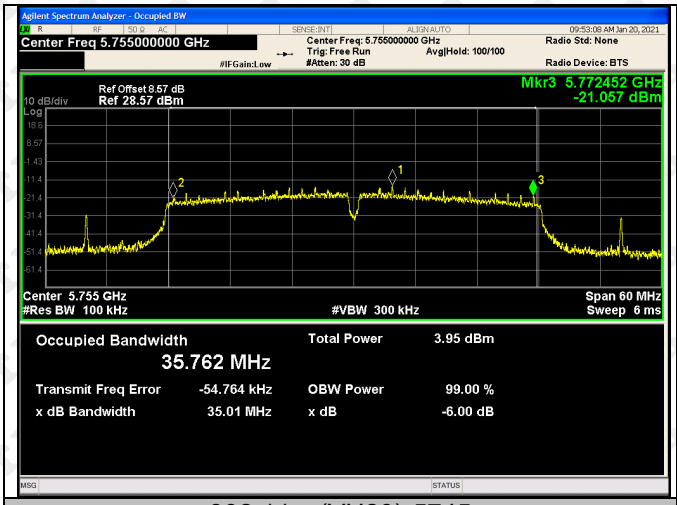


802.11n(HT20)-5825

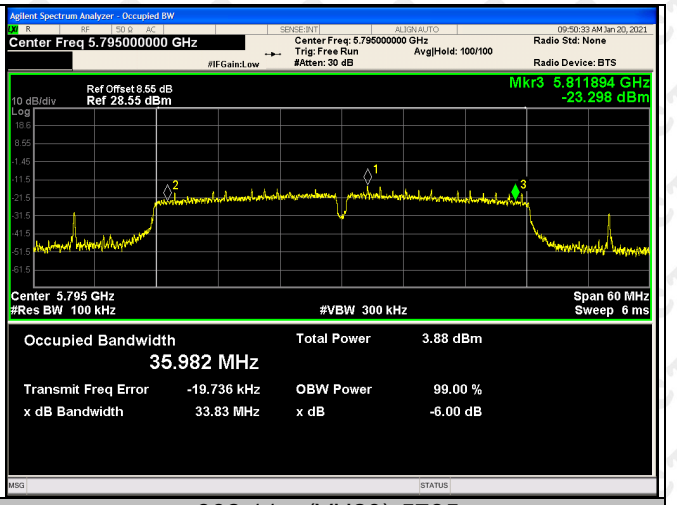


802.11n(HT40)-5755

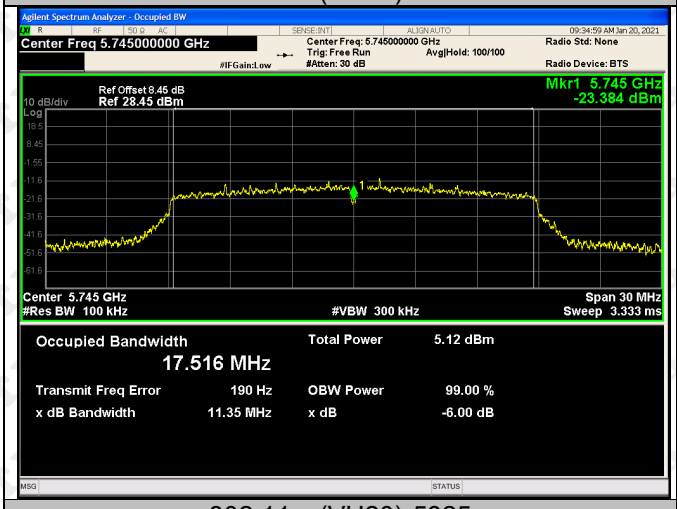
802.11n(HT40)-5795



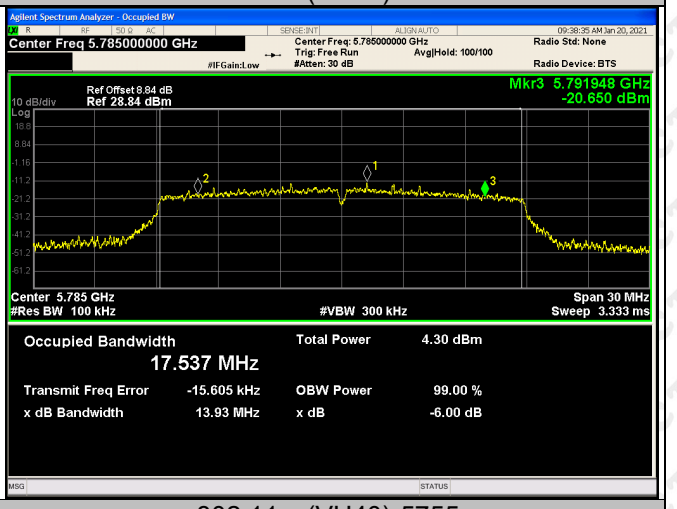
802.11ac(VH20)-5745



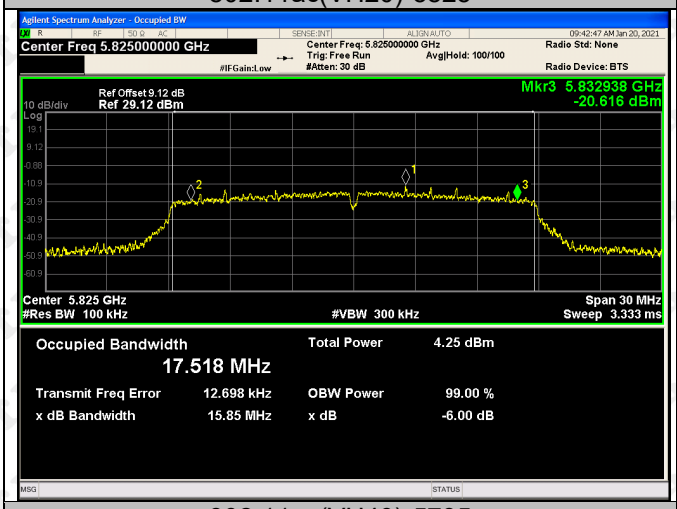
802.11ac(VH20)-5785



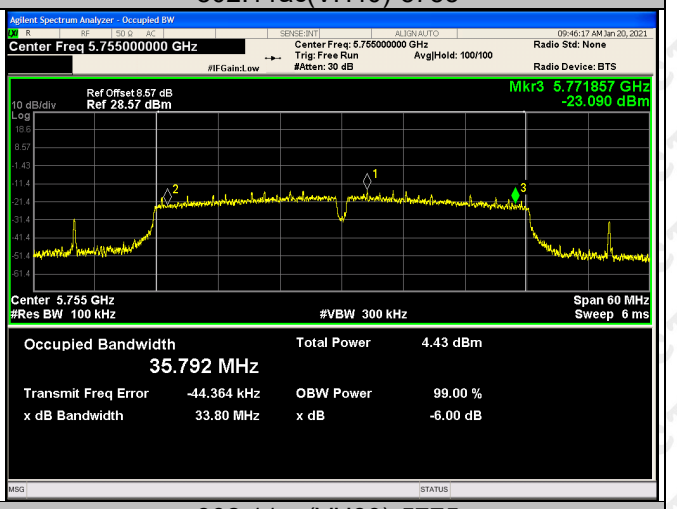
802.11ac(VH20)-5825



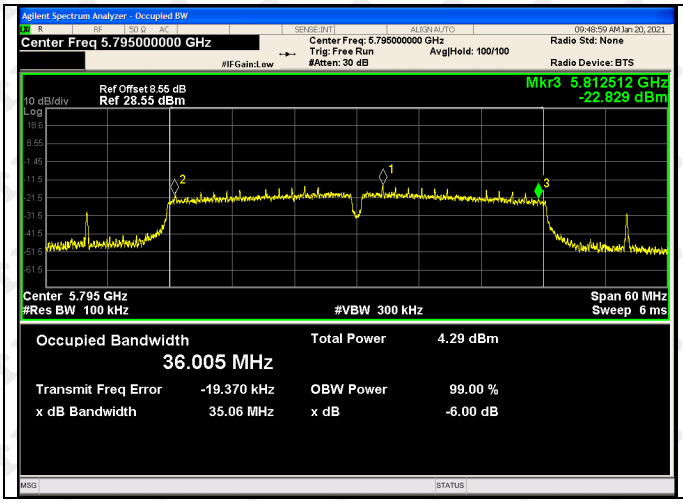
802.11ac(VH40)-5755

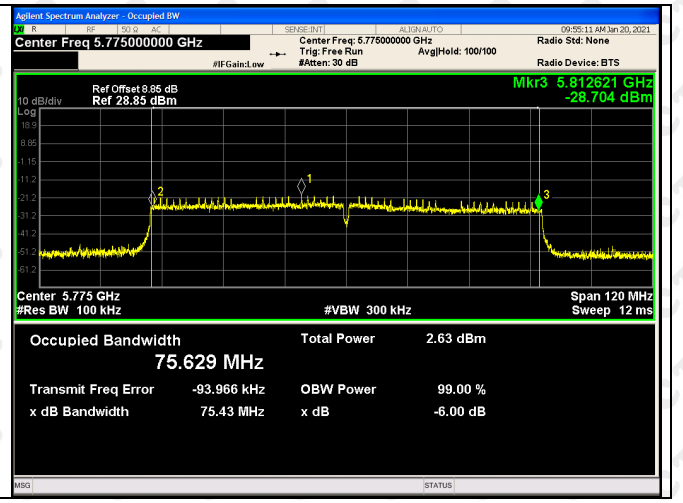


802.11ac(VH40)-5795



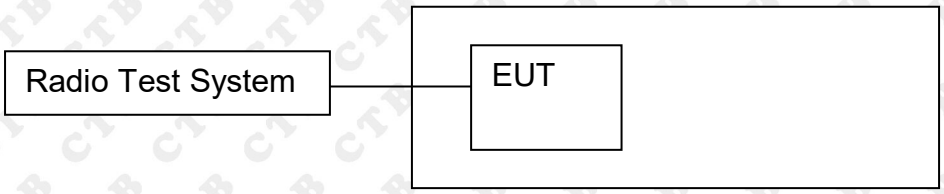
802.11ac(VH80)-5775


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.795000000 GHz
Center Freq: 5.795000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
Ref Offset 8.55 dB
10 dB/div
Ref 28.55 dBm
Mkr3 5.812512 GHz
-22.829 dBm
Center 5.795 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 60 MHz
Sweep 6 ms
Occupied Bandwidth
36.005 MHz
Total Power 4.29 dBm
Transmit Freq Error -19.370 kHz
OBW Power 99.00 %
x dB Bandwidth 35.06 MHz
x dB -6.00 dB


Agilent Spectrum Analyzer - Occupied BW
Center Freq 5.775000000 GHz
Center Freq: 5.775000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 30 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
Ref Offset 8.85 dB
10 dB/div
Ref 28.85 dBm
Mkr3 5.812621 GHz
-28.704 dBm
Center 5.775 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 120 MHz
Sweep 12 ms
Occupied Bandwidth
75.629 MHz
Total Power 2.63 dBm
Transmit Freq Error -93.966 kHz
OBW Power 99.00 %
x dB Bandwidth 75.43 MHz
x dB -6.00 dB

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 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 RBW ≥ 1/*T*, where *T* is defined in II.B.l.a).

b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10 log (500 kHz/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 (1MHz/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.

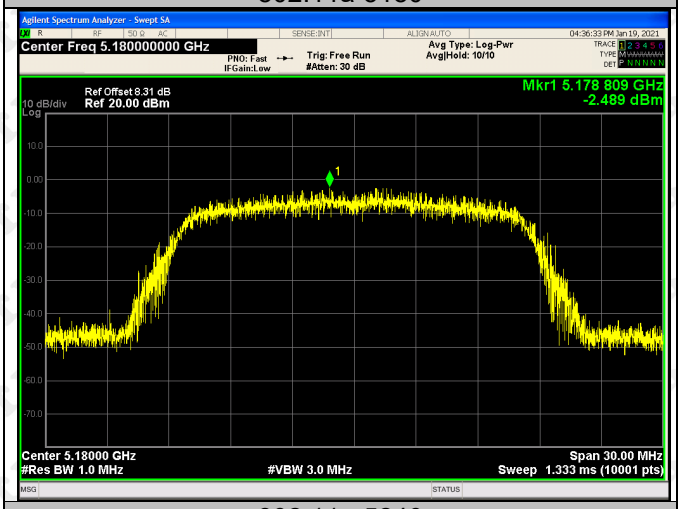
11.4 Test Result

Test mode1	Test Channel (MHz)	PSD [dBm/MHz]	Result
802.11a	5180	-2.489	Pass
	5200	-1.866	Pass
	5240	-1.797	Pass
802.11ac(VH20)	5180	-3.055	Pass
	5200	-3.298	Pass
	5240	-3.949	Pass
802.11ac(VH40)	5190	-6.747	Pass
	5230	-7.219	Pass
802.11ac(VH80)	5210	-13.342	Pass
802.11n(HT20)	5180	-3.333	Pass
	5200	-2.841	Pass
	5240	-3.766	Pass
802.11n(HT40)	5190	-7.716	Pass
	5230	-7.364	Pass

Test mode1	Test Channel (MHz)	PSD [dBm/MHz]	Result
802.11a	5260	-2.387	Pass
	5280	-2.567	Pass
	5320	-2.614	Pass
802.11ac(VH20)	5260	-3.246	Pass
	5280	-3.282	Pass
	5320	-3.842	Pass
802.11ac(VH40)	5270	-7.768	Pass
	5310	-7.392	Pass
802.11ac(VH80)	5290	-12.598	Pass
802.11n(HT20)	5260	-3.344	Pass
	5280	-3.362	Pass
	5320	-3.099	Pass
802.11n(HT40)	5270	-7.792	Pass
	5310	-6.672	Pass

Test mode1	Test Channel (MHz)	PSD [dBm/500kHz]	Result
802.11a	5745	-5.822	Pass
	5785	-5.694	Pass
	5825	-6.159	Pass
802.11ac(VH20)	5745	-6.623	Pass
	5785	-7.089	Pass
	5825	-8.035	Pass
802.11ac(VH40)	5755	-10.521	Pass
	5795	-11.313	Pass
802.11ac(VH80)	5775	-15.823	Pass
802.11n(HT20)	5745	-7.123	Pass
	5785	-7.775	Pass
	5825	-7.354	Pass
802.11n(HT40)	5755	-11.474	Pass
	5795	-11.325	Pass

802.11a-5180



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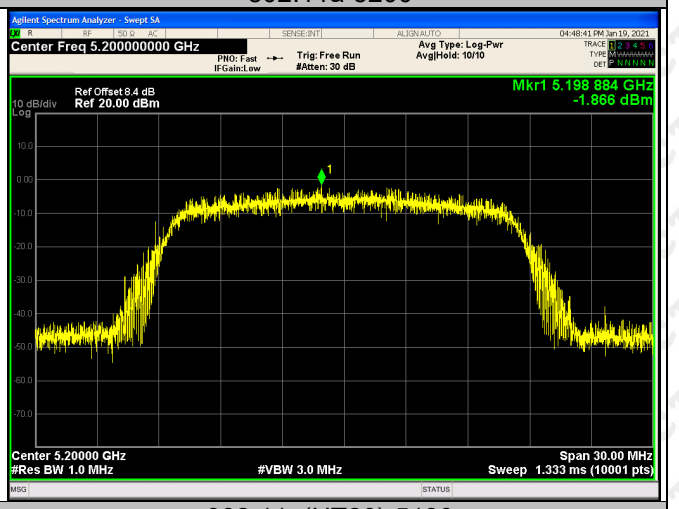
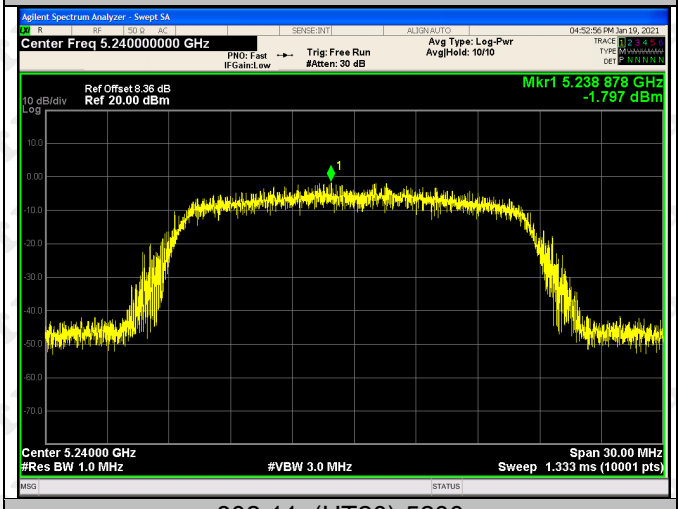


802.11a-5240



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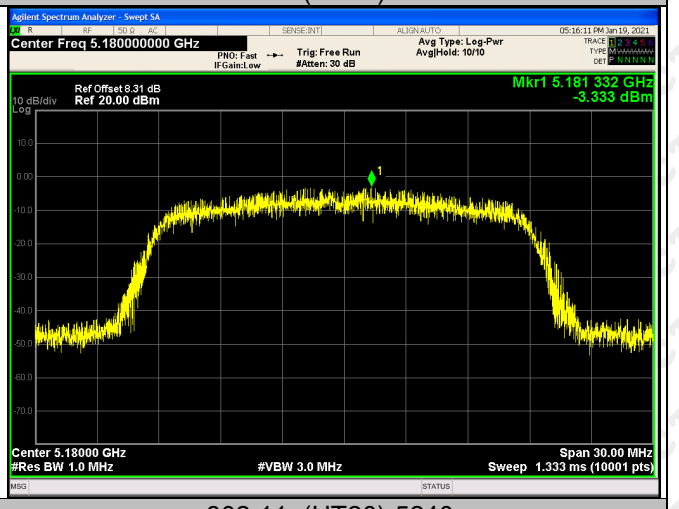

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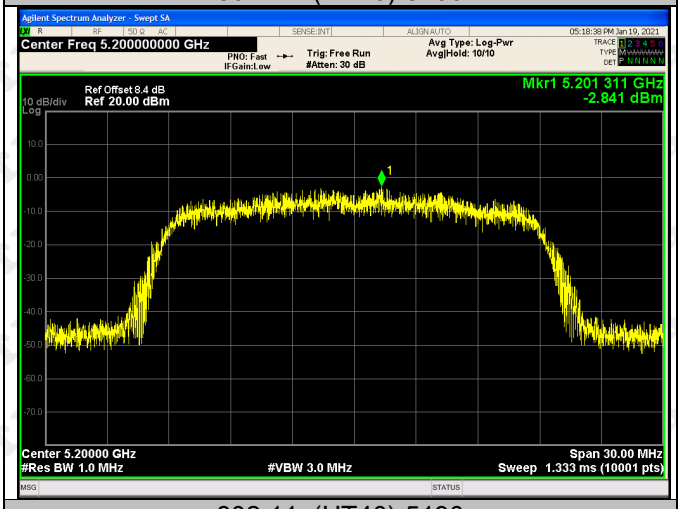

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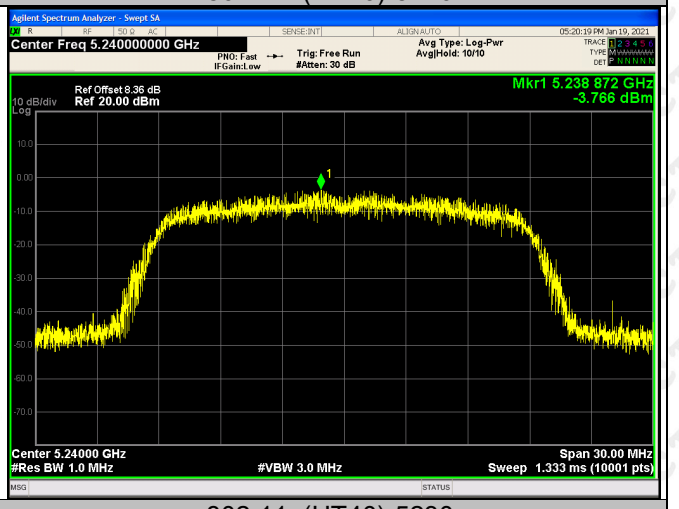

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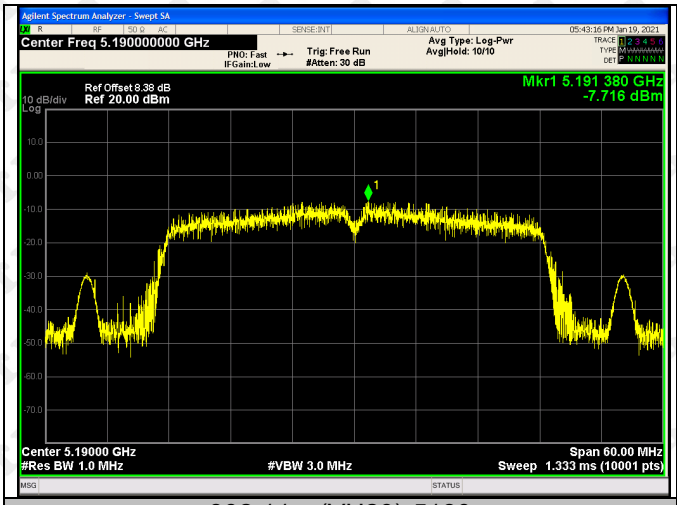
802.11n(HT40)-5230



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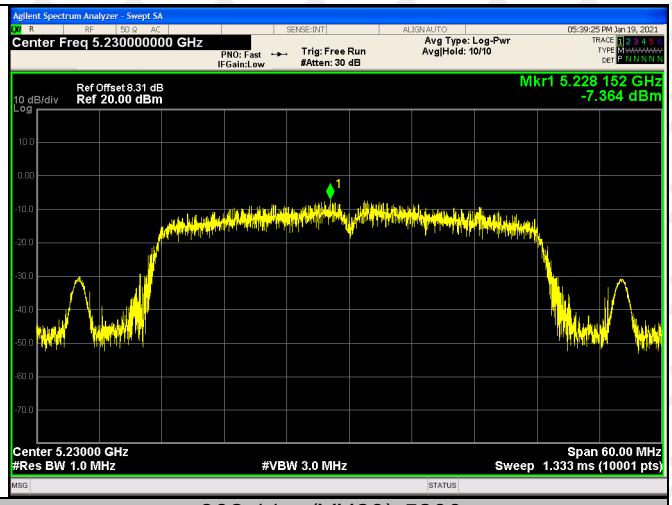

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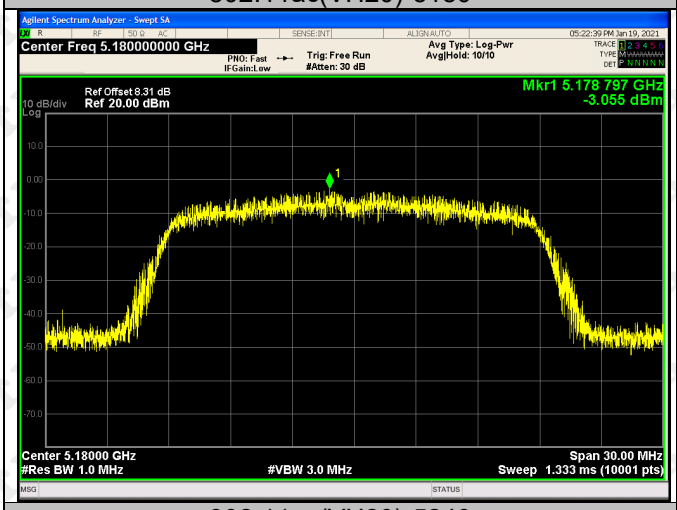

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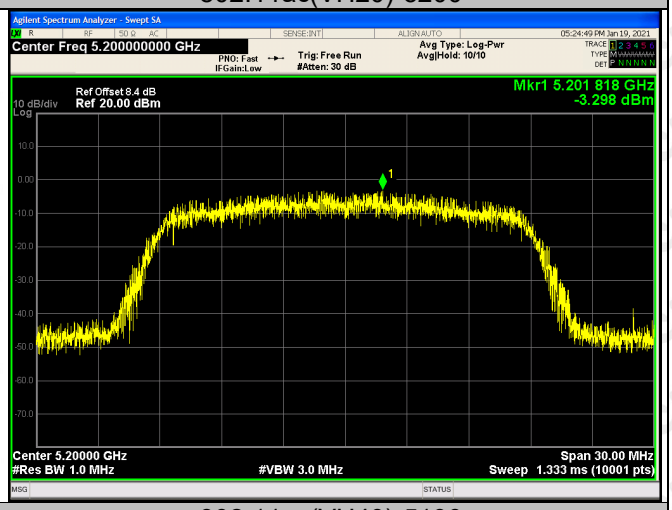

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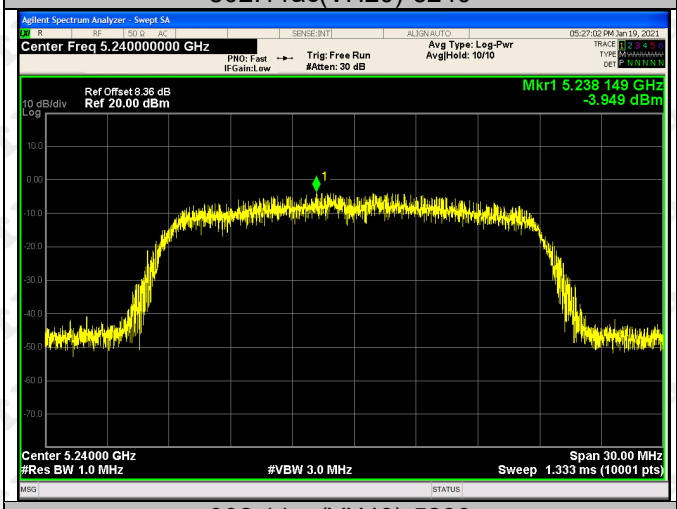

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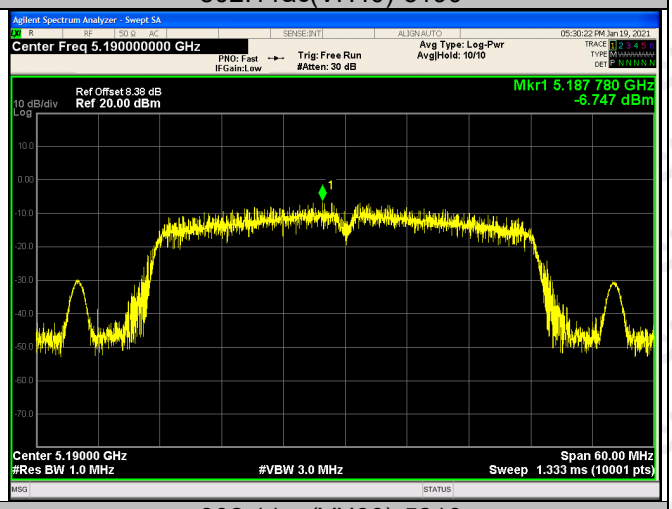

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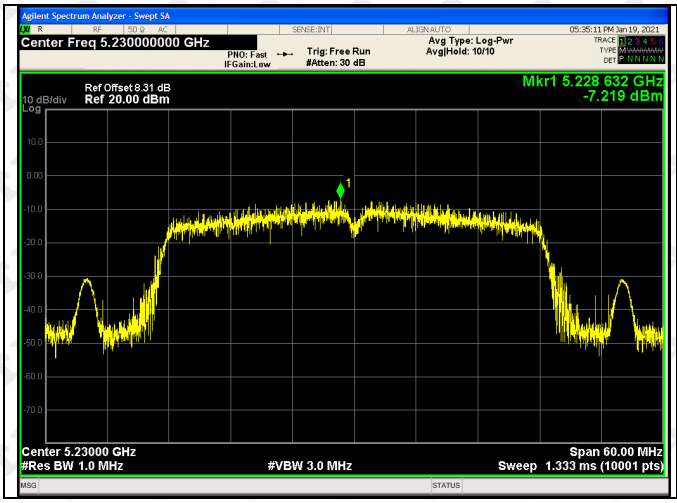
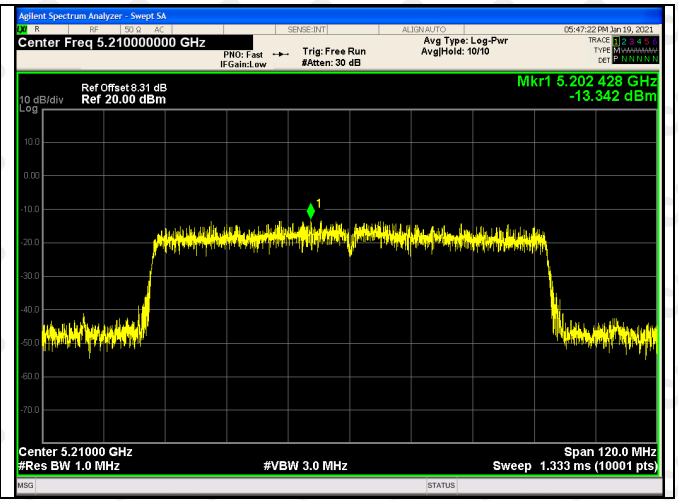
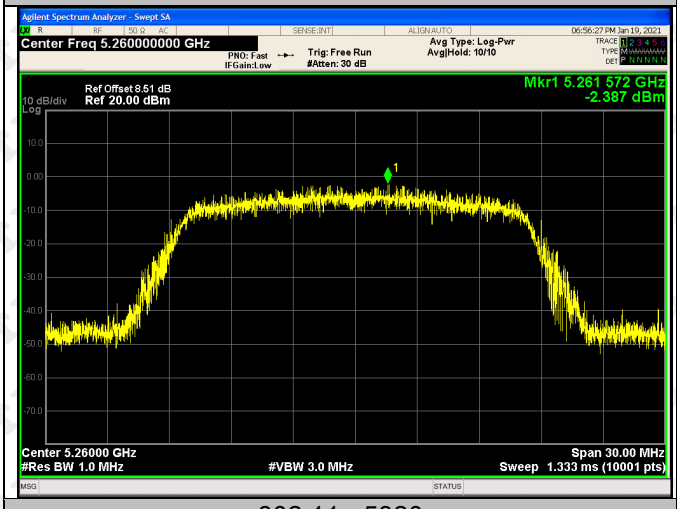


802.11a-5260



802.11a-5280



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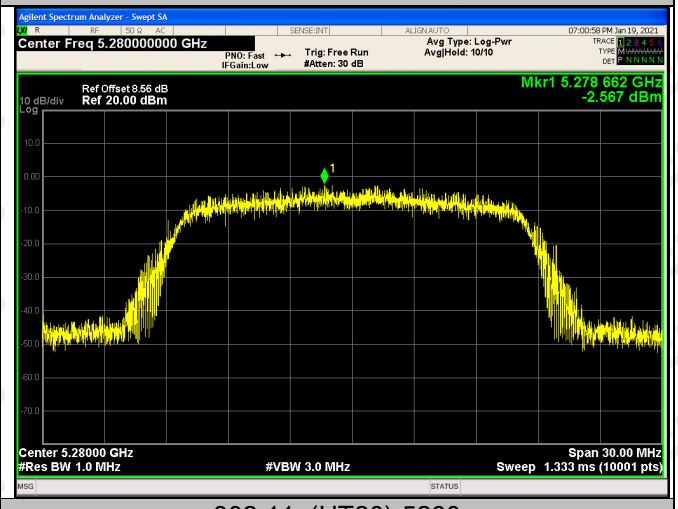

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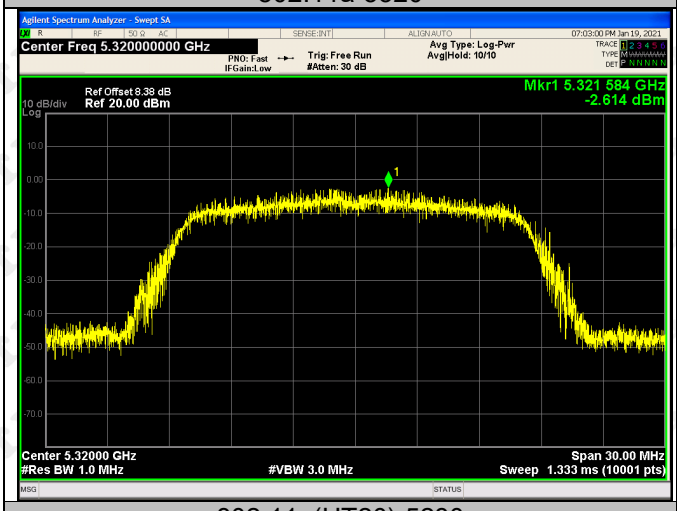

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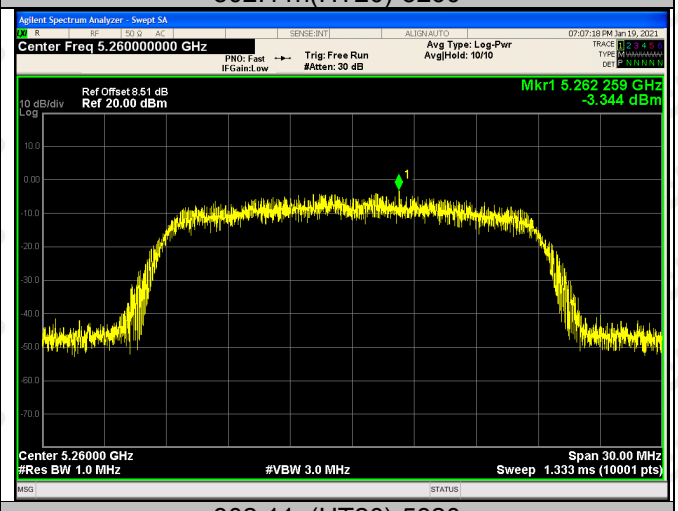

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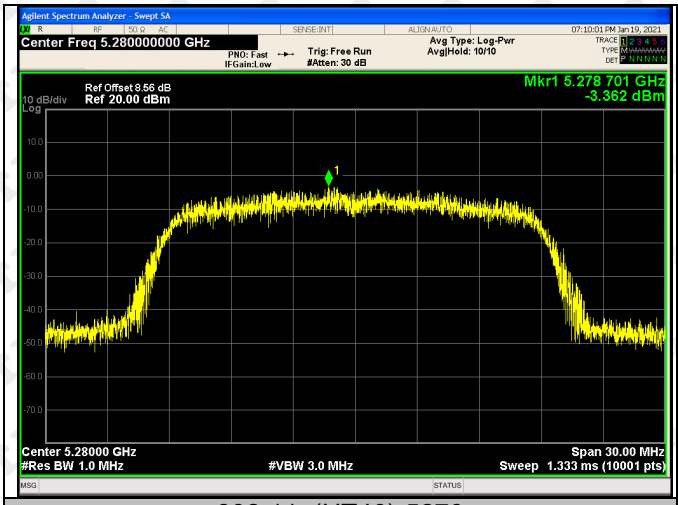

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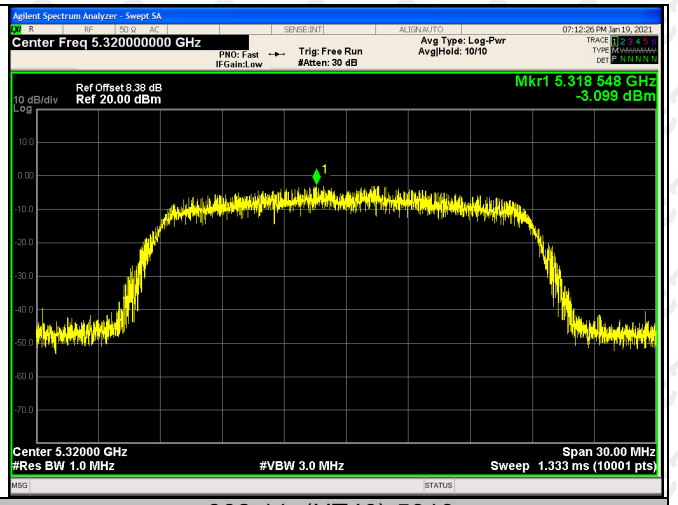

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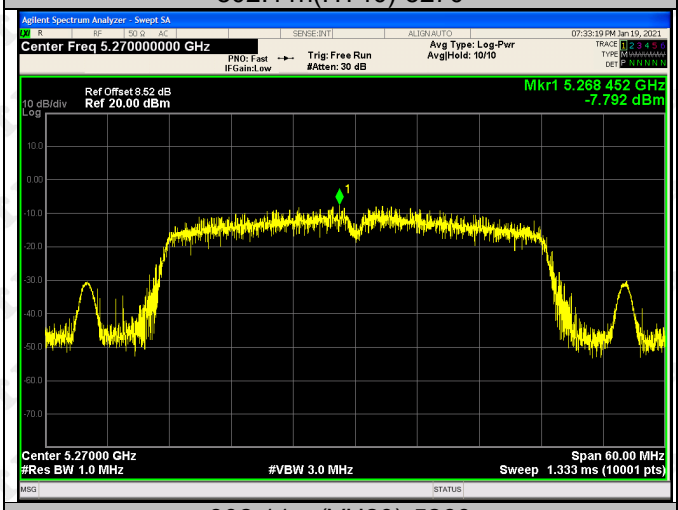

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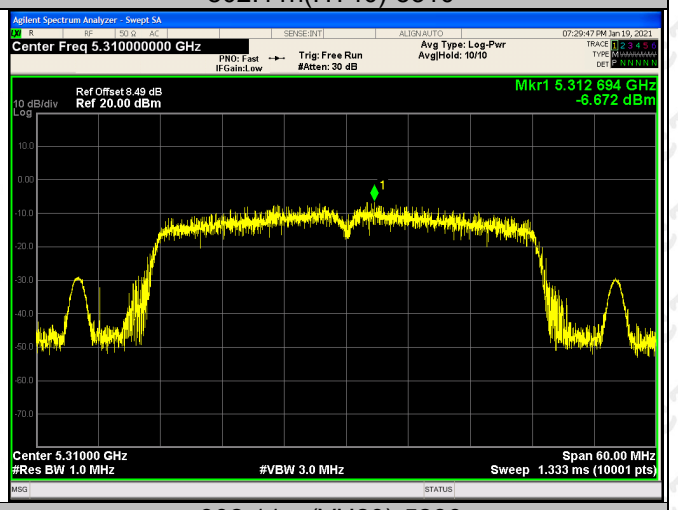

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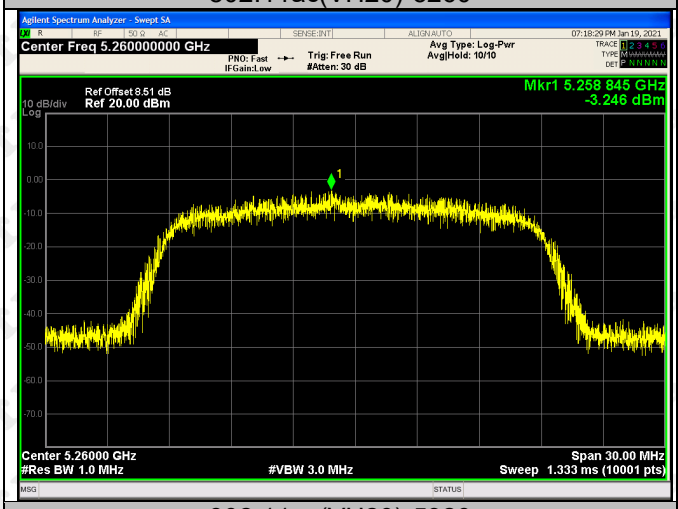

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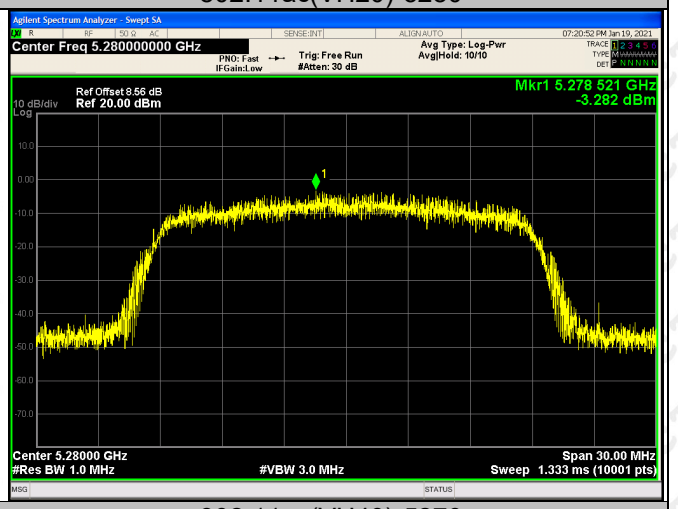

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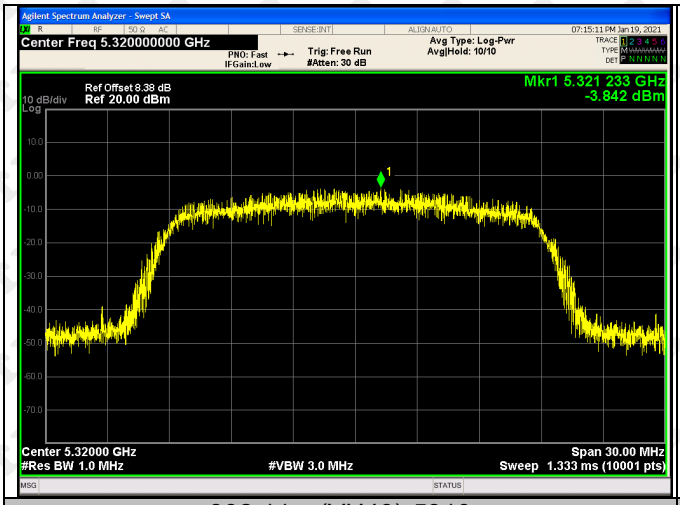

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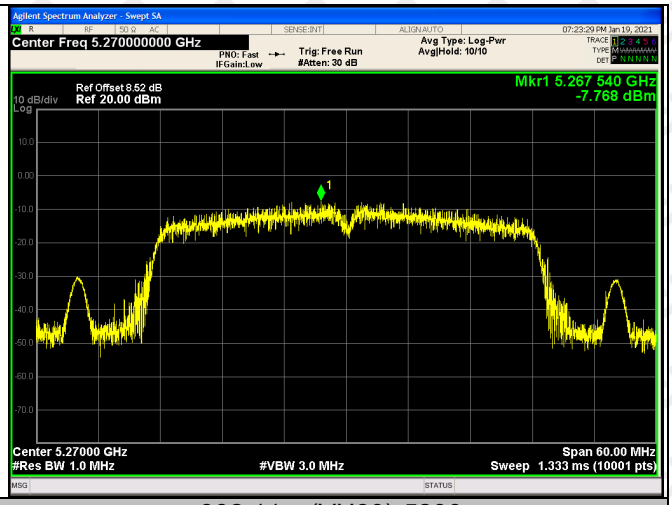

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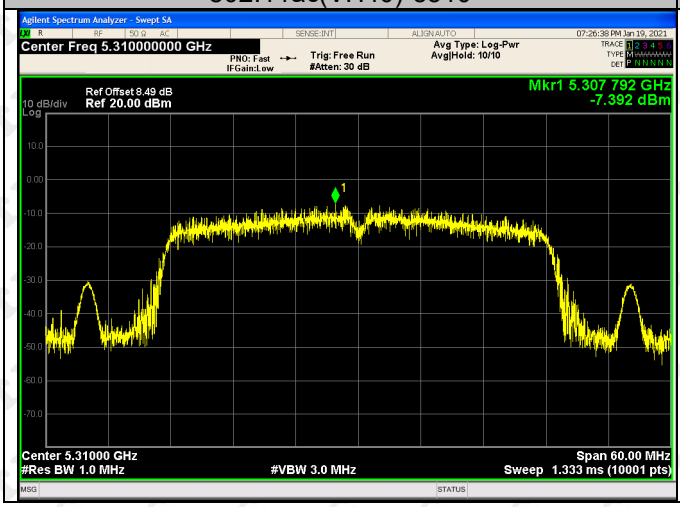
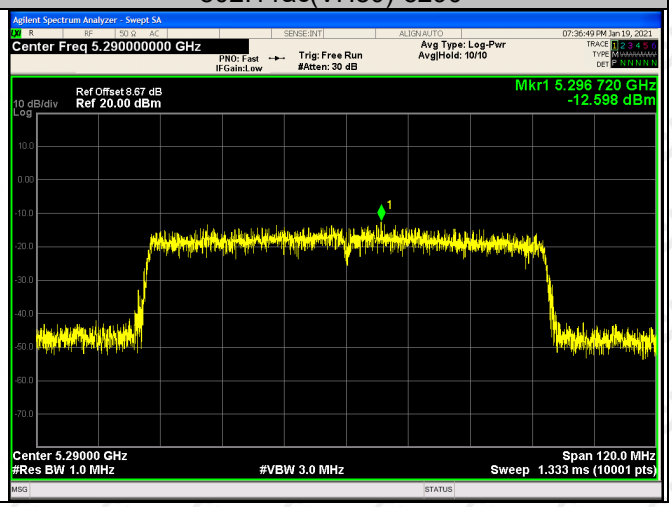
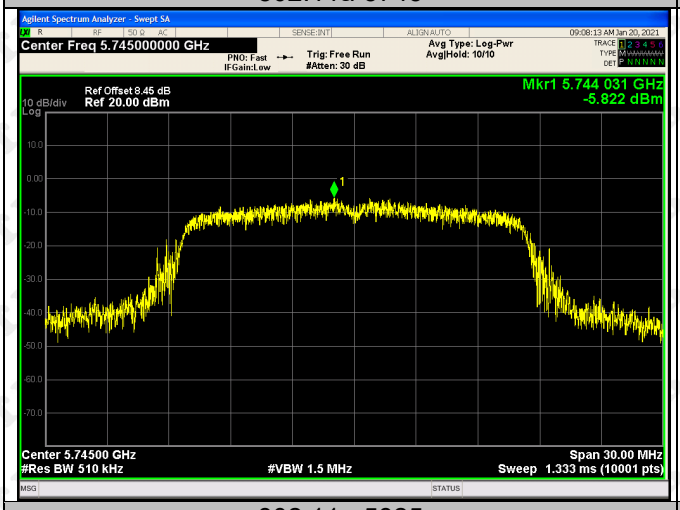
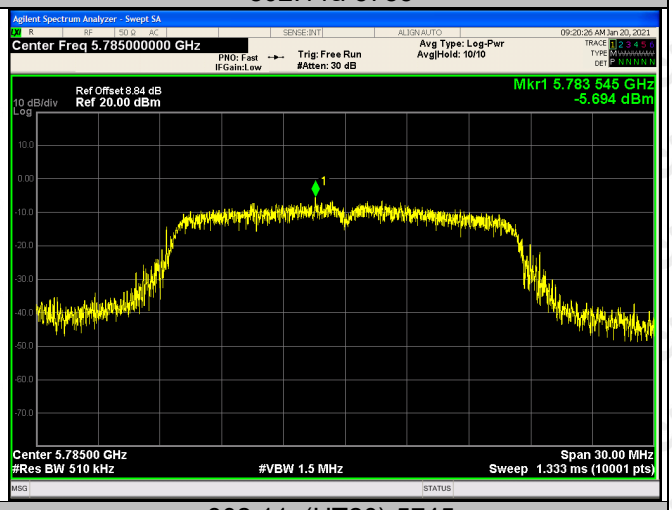




802.11a-5745

802.11a-5785





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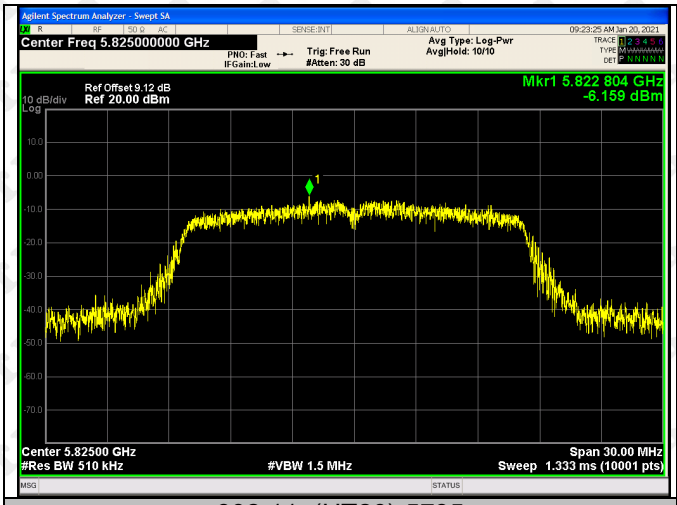
802.11n(HT20)-5745



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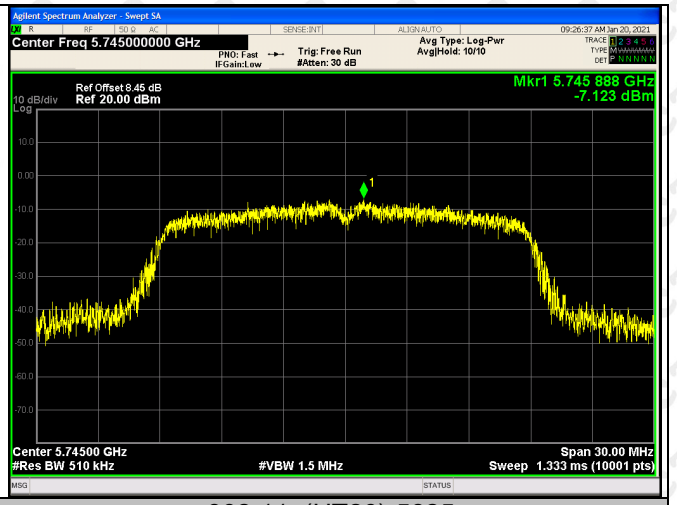

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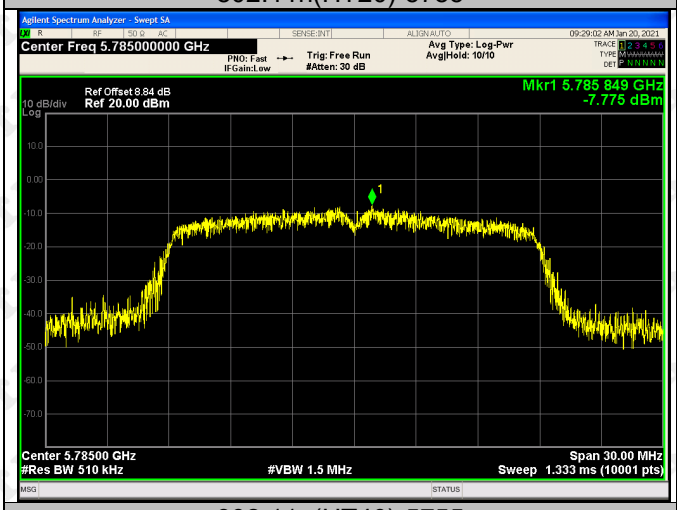

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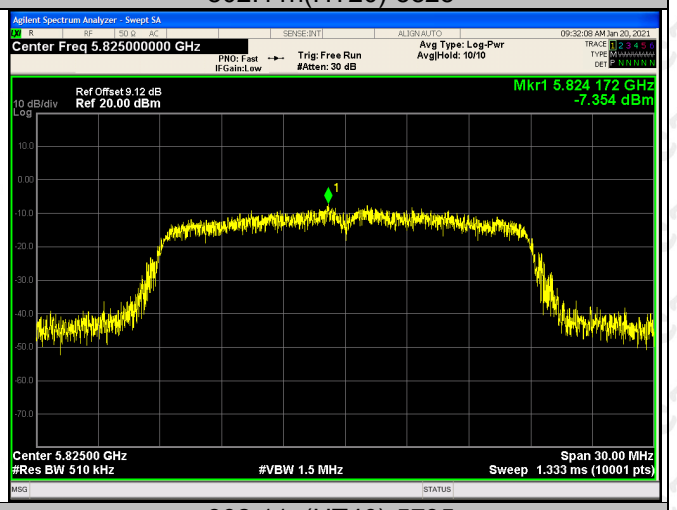

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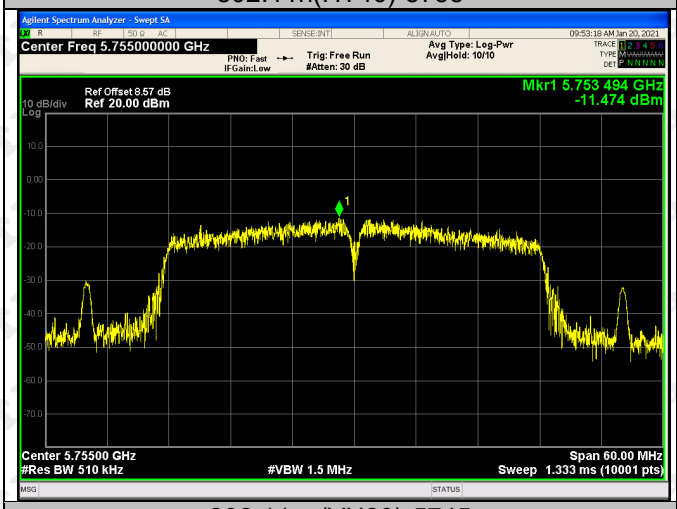

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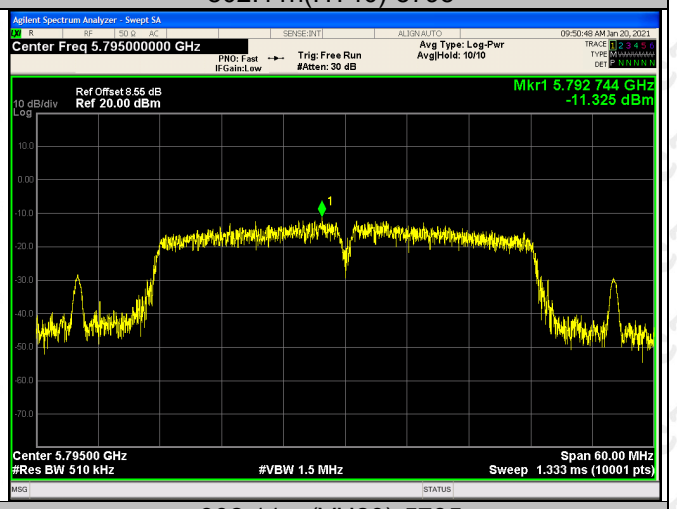

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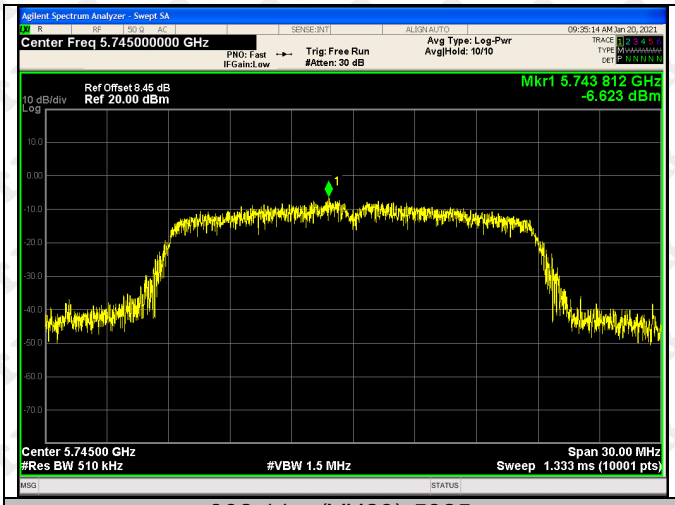

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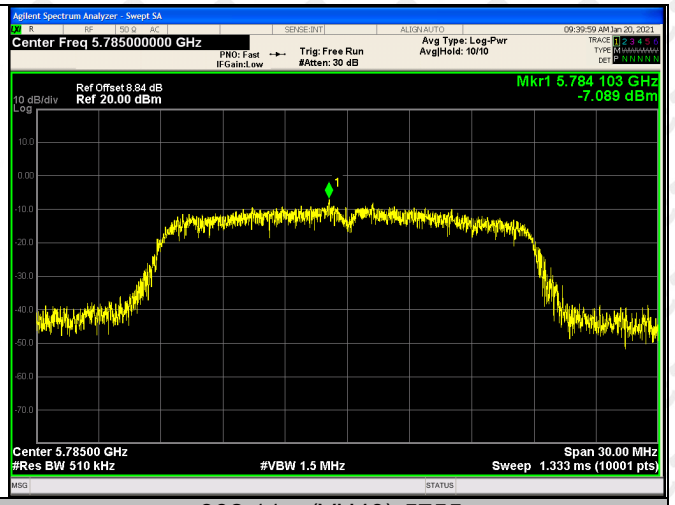

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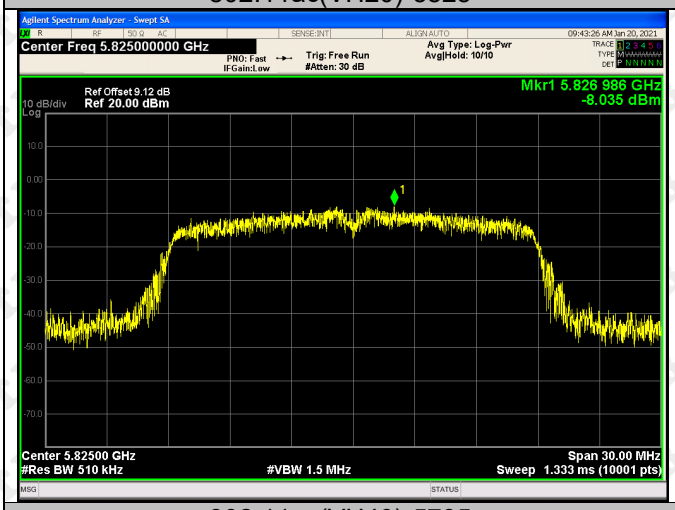

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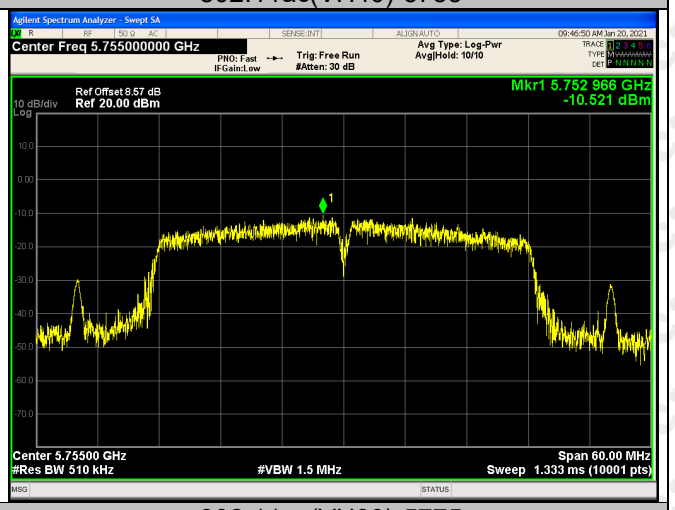

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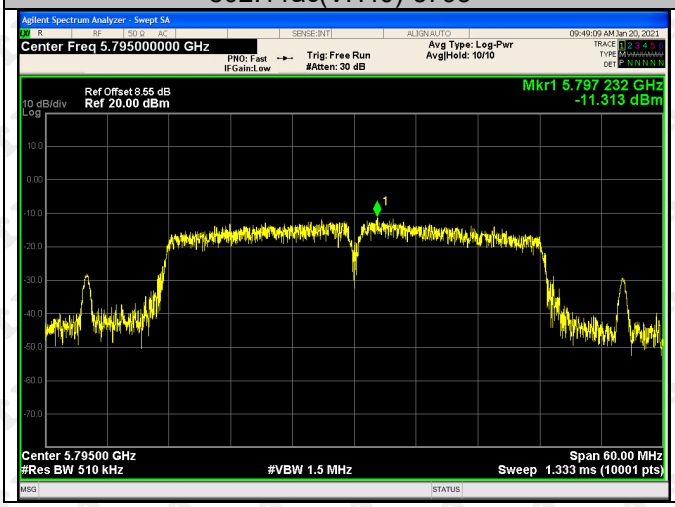
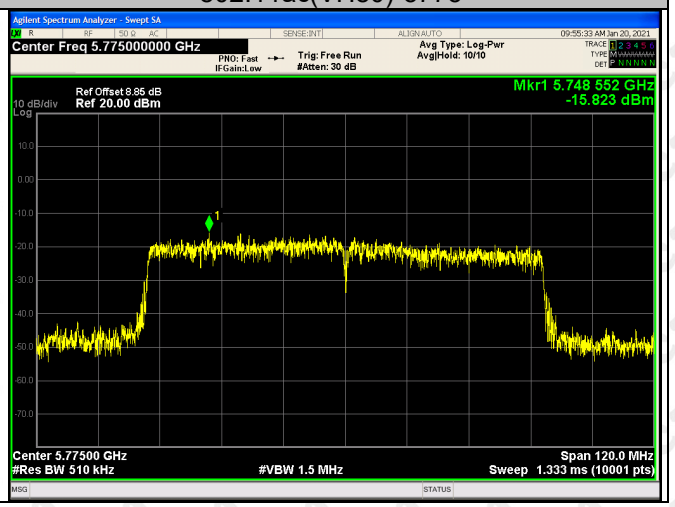
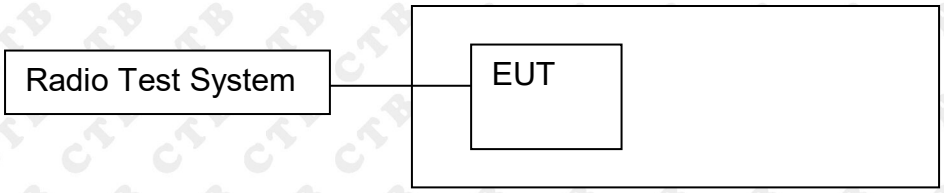




12. FREQUENCY STABILITY

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

TX Frequency (5180-5240MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5.00	5180.0556	5180	0.0556	10.7336
		V max (V)	5.75	5180.0323	5180	0.0323	6.2355
		V min (V)	4.25	5180.0246	5180	0.0246	4.7490
Limits				5150-5250 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5180.0054	5180	0.0054	1.0425
		T (°C)	-10	5180.0105	5180	0.0105	2.0270
		T (°C)	0	5180.0323	5180	0.0323	6.2355
		T (°C)	10	5180.0386	5180	0.0386	7.4517
		T (°C)	20	5180.0293	5180	0.0293	5.6564
		T (°C)	30	5180.0218	5180	0.0218	4.2085
		T (°C)	40	5180.0125	5180	0.0125	2.4131
		T (°C)	50	5180.0097	5180	0.0097	1.8726
		T (°C)	60	5180.0414	5180	0.0414	7.9923
		T (°C)	70	5180.0697	5180	0.0697	13.4556
Limits				5150-5250 MHz			
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)	5.00	5200.0254	5200	0.0254	4.8846
		V max (V)	5.75	5200.0428	5200	0.0428	8.2308
		V min (V)	4.25	5200.0694	5200	0.0694	13.3462
Limits				5150-5250MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5200.0633	5200	0.0633	12.1731
		T (°C)	-10	5200.0526	5200	0.0526	10.1154
		T (°C)	0	5200.0434	5200	0.0434	8.3462
		T (°C)	10	5200.0928	5200	0.0928	17.8462
		T (°C)	20	5200.0635	5200	0.0635	12.2115
		T (°C)	30	5200.0124	5200	0.0124	2.3846
		T (°C)	40	5200.0733	5200	0.0733	14.0962
		T (°C)	50	5200.0416	5200	0.0416	8.0000
		T (°C)	60	5200.0325	5200	0.0325	6.2500
		T (°C)	70	5200.0427	5200	0.0427	8.2115
Limits				5150-5250 MHz			
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)	5.00	5240.0136	5240	0.0136	2.5954
		V max (V)	5.75	5240.0414	5240	0.0414	7.9008
		V min (V)	4.25	5240.0097	5240	0.0097	1.8511
Limits				5150-5250 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5240.0094	5240	0.0094	1.7939
		T (°C)	-10	5240.0035	5240	0.0035	0.6679
		T (°C)	0	5240.0144	5240	0.0144	2.7481
		T (°C)	10	5240.0856	5240	0.0856	16.3359
		T (°C)	20	5240.0114	5240	0.0114	2.1756
		T (°C)	30	5240.0125	5240	0.0125	2.3855
		T (°C)	40	5240.0063	5240	0.0063	1.2023
		T (°C)	50	5240.0076	5240	0.0076	1.4504
		T (°C)	60	5240.0053	5240	0.0053	1.0115
		T (°C)	70	5240.0105	5240	0.0105	2.0038
Limits				5150-5250 MHz			
Result				Complies			

TX Frequency(5250-5350MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (° C)	20	V nom (V)	5.00	5260.00285	5260	0.00285	0.5424
		V max (V)	5.75	5260.00043	5260	0.00043	0.0809
		V min (V)	4.25	5260.00163	5260	0.00163	0.3101
Limits				5250-5350 MHz			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5260.00299	5260	0.00299	0.5688
		T (°C)	-10	5260.00079	5260	0.00079	0.1500
		T (°C)	0	5260.00938	5260	0.00938	1.7829
		T (°C)	10	5260.00152	5260	0.00152	0.2891
		T (°C)	20	5260.00856	5260	0.00856	1.6282
		T (°C)	30	5260.00755	5260	0.00755	1.4359
		T (°C)	40	5260.00175	5260	0.00175	0.3336
		T (°C)	50	5260.01171	5260	0.01171	2.2268
		T (°C)	60	5260.00826	5260	0.00826	1.5695
		T (°C)	70	5260.01081	5260	0.01081	2.0551
Limits				5250-5350 MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5.00	5280.00763	5280	0.00763	1.4450
		V max (V)	5.75	5280.00066	5280	0.00066	0.1242
		V min (V)	4.25	5280.01055	5280	0.01055	1.9977
Limits				5250-5350 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5280.00663	5280	0.00663	1.2559
		T (°C)	-10	5280.00743	5280	0.00743	1.4076
		T (°C)	0	5280.00552	5280	0.00552	1.0451
		T (°C)	10	5280.00548	5280	0.00548	1.0382
		T (°C)	20	5280.00153	5280	0.00153	0.2890
		T (°C)	30	5280.00567	5280	0.00567	1.0737
		T (°C)	40	5280.00105	5280	0.00105	0.1980
		T (°C)	50	5280.01050	5280	0.01050	1.9894
		T (°C)	60	5280.01058	5280	0.01058	2.0045
		T (°C)	70	5280.00404	5280	0.00404	0.7643
Limits				5250-5350 MHz			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5.00	5320.00204	5320	0.00204	0.3838
		V max (V)	5.75	5320.01218	5320	0.01218	2.2887
		V min (V)	4.25	5320.01203	5320	0.01203	2.2610
Limits				5250-5350 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5320.01329	5320	0.01329	2.4984
		T (°C)	-10	5320.00736	5320	0.00736	1.3842
		T (°C)	0	5320.01208	5320	0.01208	2.2716
		T (°C)	10	5320.00428	5320	0.00428	0.8048
		T (°C)	20	5320.01268	5320	0.01268	2.3827
		T (°C)	30	5320.00754	5320	0.00754	1.4169
		T (°C)	40	5320.00886	5320	0.00886	1.6656
		T (°C)	50	5320.00536	5320	0.00536	1.0079
		T (°C)	60	5320.01058	5320	0.01058	1.9883
		T (°C)	70	5320.00137	5320	0.00137	0.2576
Limits				5250-5350 MHz			
Result				Complies			

TX Frequency(5745-5825MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	5.00	5745.00674	5745	0.00674	1.1728
		V max (V)	5.75	5745.00624	5745	0.00624	1.0855
		V min (V)	4.25	5745.00861	5745	0.00861	1.4994
Limits				5725-5850 MHz			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5745.00906	5745	0.00906	1.5768
		T (°C)	-10	5745.01045	5745	0.01045	1.8183
		T (°C)	0	5745.01162	5745	0.01162	2.0224
		T (°C)	10	5745.01200	5745	0.01200	2.0888
		T (°C)	20	5745.01106	5745	0.01106	1.9247
		T (°C)	30	5745.00876	5745	0.00876	1.5250
		T (°C)	40	5745.00637	5745	0.00637	1.1082
		T (°C)	50	5745.00922	5745	0.00922	1.6050
		T (°C)	60	5745.00032	5745	0.00032	0.0561
		T (°C)	70	5745.00354	5745	0.00354	0.6163
Limits				5725-5850 MHz			
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)	5.00	5785.01228	5785	0.01228	2.1222
		V max (V)	5.75	5785.01045	5785	0.01045	1.8062
		V min (V)	4.25	5785.00821	5785	0.00821	1.4187
Limits				5725-5850 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5785.01103	5785	0.01103	1.9074
		T (°C)	-10	5785.00092	5785	0.00092	0.1596
		T (°C)	0	5785.00518	5785	0.00518	0.8960
		T (°C)	10	5785.01156	5785	0.01156	1.9974
		T (°C)	20	5785.00809	5785	0.00809	1.3980
		T (°C)	30	5785.01317	5785	0.01317	2.2759
		T (°C)	40	5785.00068	5785	0.00068	0.1167
		T (°C)	50	5785.00380	5785	0.00380	0.6562
		T (°C)	60	5785.01346	5785	0.01346	2.3274
		T (°C)	70	5785.00719	5785	0.00719	1.2430
Limits				5725-5850 MHz			
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)	5.00	5825.00385	5825	0.00385	0.6607
		V max (V)	5.75	5825.01238	5825	0.01238	2.1258
		V min (V)	4.25	5825.01027	5825	0.01027	1.7624
Limits				5725-5850 MHz			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	-20	5825.01348	5825	0.01348	2.3148
		T (°C)	-10	5825.00472	5825	0.00472	0.8108
		T (°C)	0	5825.01272	5825	0.01272	2.1828
		T (°C)	10	5825.01116	5825	0.01116	1.9166
		T (°C)	20	5825.00163	5825	0.00163	0.2791
		T (°C)	30	5825.00063	5825	0.00063	0.1078
		T (°C)	40	5825.00907	5825	0.00907	1.5563
		T (°C)	50	5825.00404	5825	0.00404	0.6939
		T (°C)	60	5825.00797	5825	0.00797	1.3683
		T (°C)	70	5825.00844	5825	0.00844	1.4483
Limits				5725-5850 MHz			
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 Internal Antenna and no consideration of replacement. The best case gain of the antenna is 1.0dBi.

15. EUT PHOTOGRAPHS

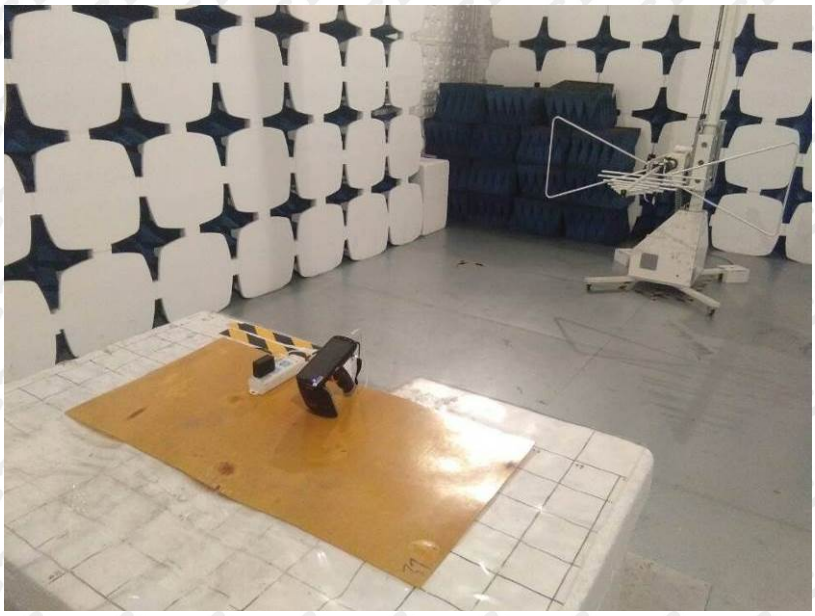
EUT Photo 1

EUT Photo 2

16. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz



Above 1GHz

Conducted Emission

※※※※※ END OF REPORT ※※※※※