10.4 Test Results

Test mode	Test Channel (MHz)	26dB Bandwidth (MHz)
802.11a	5180	20.976
	5200	21.147
	5240	21.008
802.11n(HT20)	5180	21.606
	5200	21.742
	5240	21.62
802.11n(HT40)	5190	38.257
	5230	38.228

Test mode	Test Channel (MHz)	6dB Bandwidth (MHz)
802.11a	5260	21.208
	5280	21.047
	5320	21.333
802.11n(HT20)	5260	21.697
	5280	21.56
	5320	21.782
802.11n(HT40)	5270	38.261
	5310	38.251

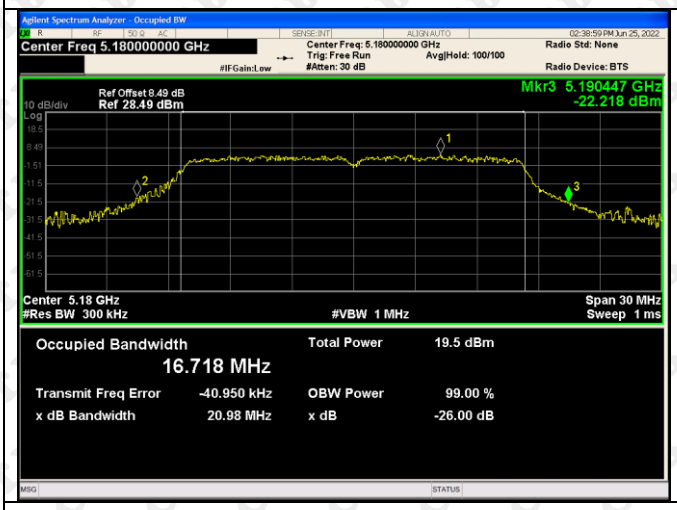
Test mode	Test Channel (MHz)	26dB Bandwidth (MHz)
802.11a	5500	21.234
	5580	20.857
	5700	20.948
802.11n(HT20)	5500	21.751
	5580	21.7
	5700	21.722
802.11n(HT40)	5510	38.324
	5670	38.283

Test mode	Test Channel (MHz)	6dB Bandwidth (MHz)
802.11a	5745	16.541
	5785	16.538
	5825	16.542
802.11n(HT20)	5745	17.674
	5785	17.656
	5825	17.676
802.11n(HT40)	5755	36.368
	5795	36.371

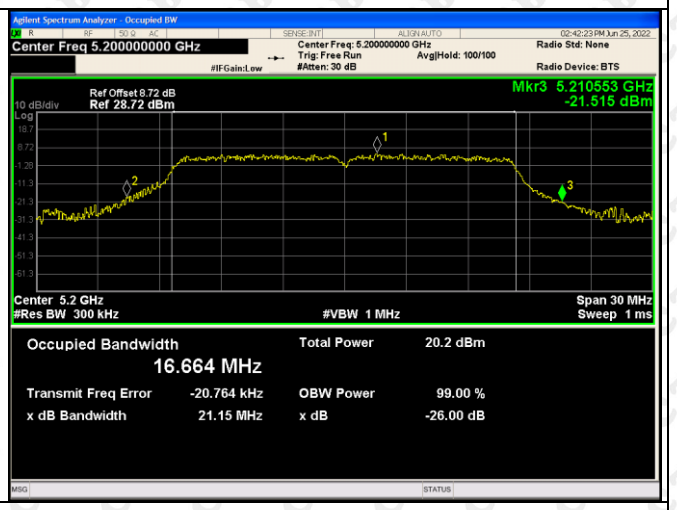
Test Graph

5180-5240MHz

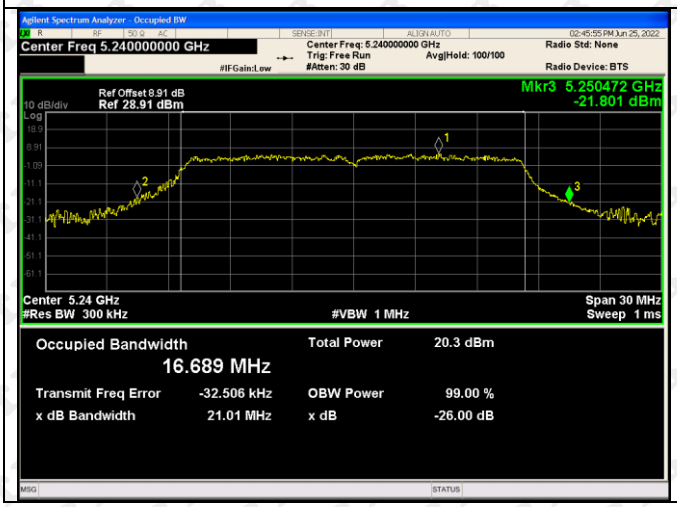
802.11a-5180



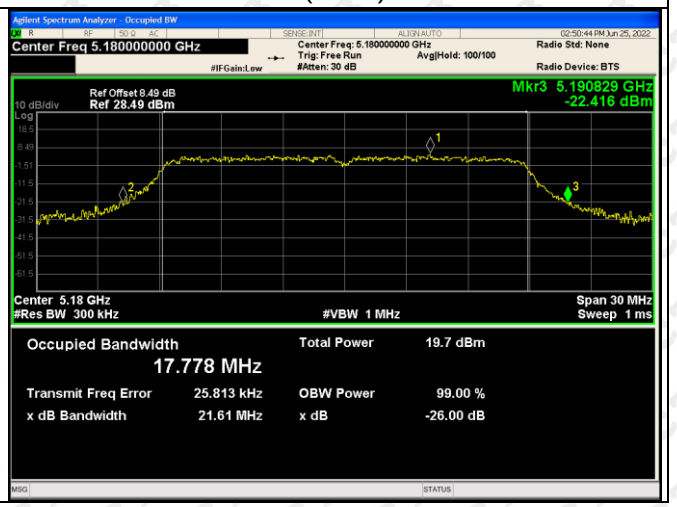
802.11a-5200



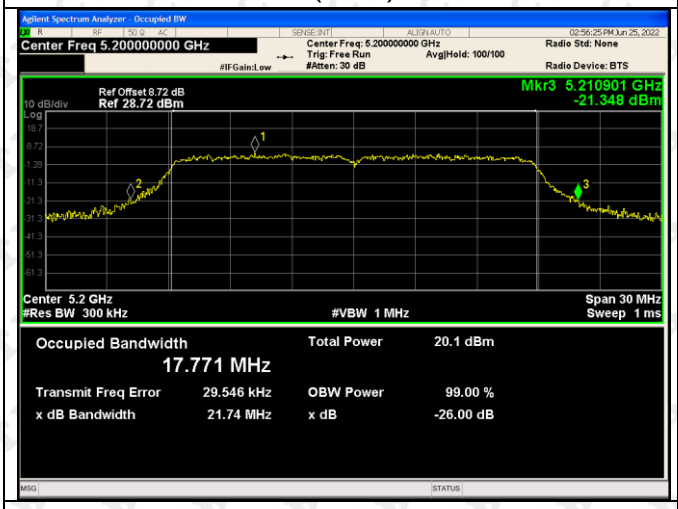
802.11a-5240



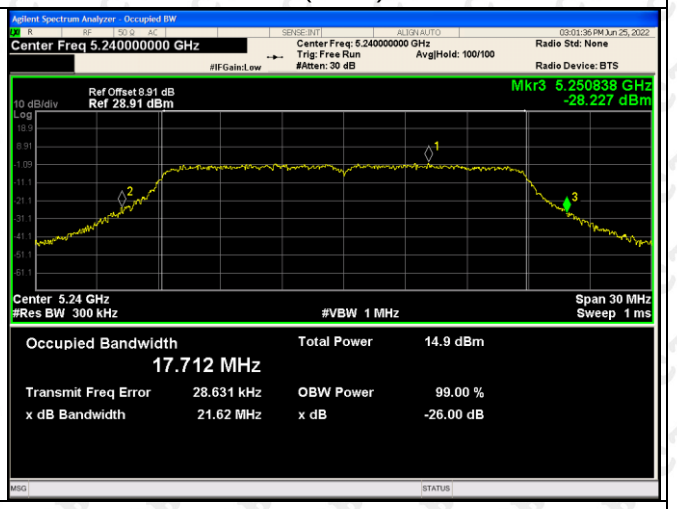
802.11n(HT20)-5180



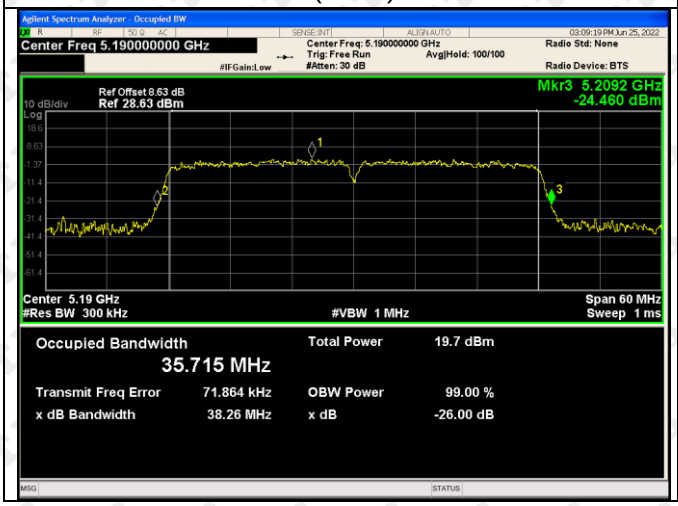
802.11n(HT20)-5200



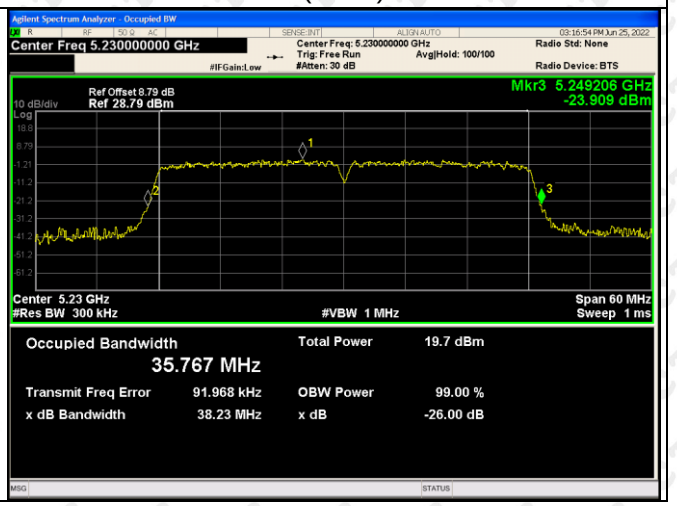
802.11n(HT20)-5240



802.11n(HT40)-5190

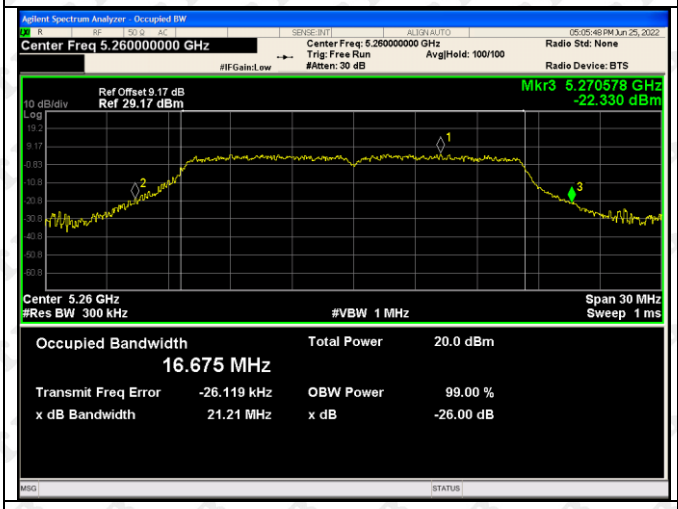


802.11n(HT40)-5230

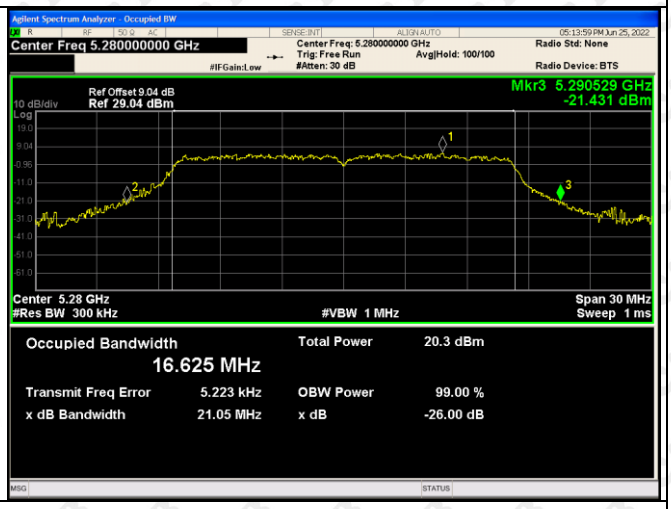


5260-5320MHz

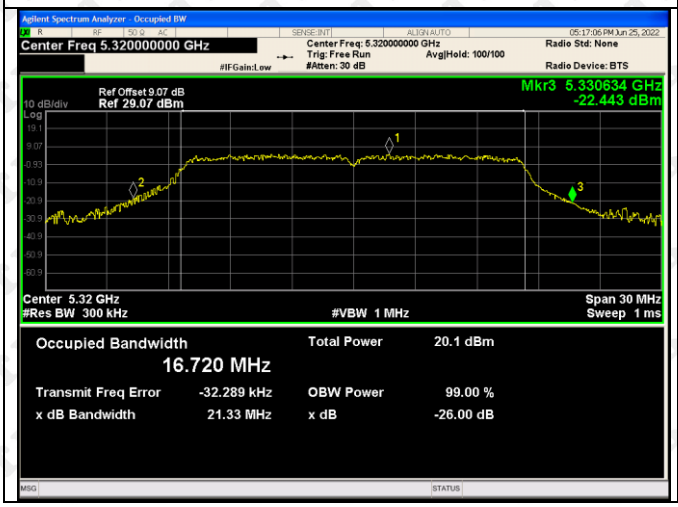
802.11a-5260



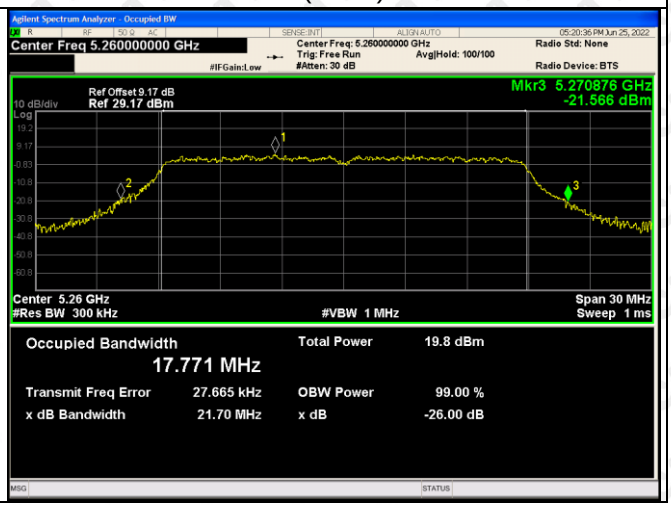
802.11a-5280



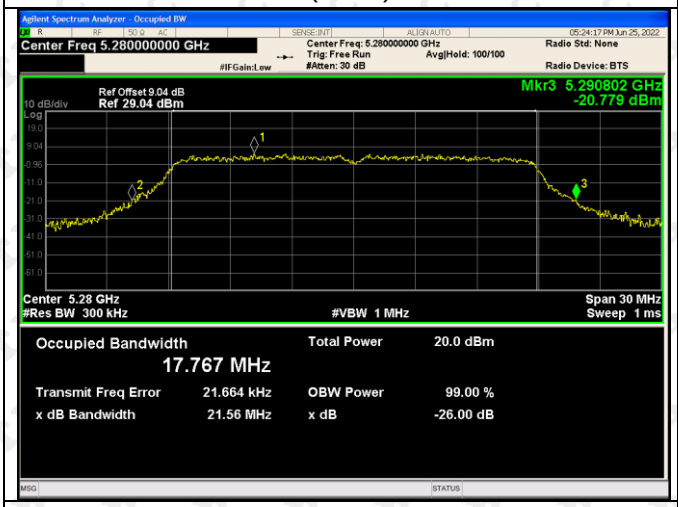
802.11a5320



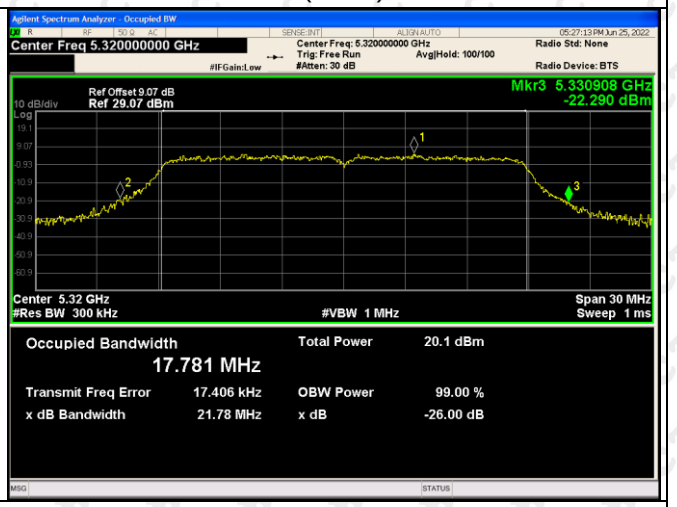
802.11n(HT20)-5260



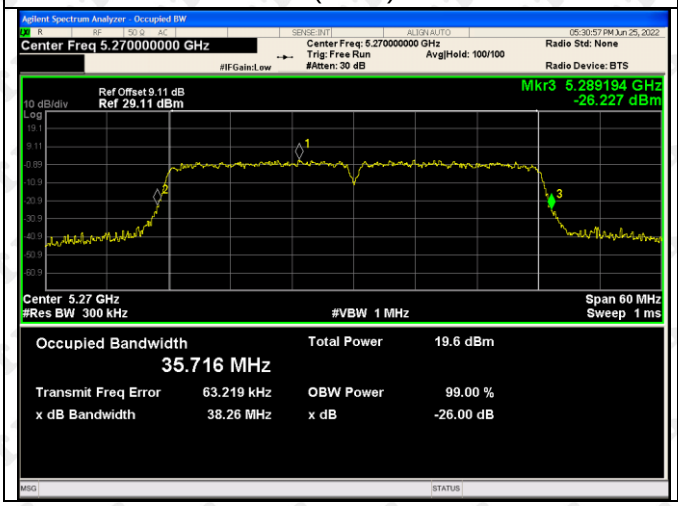
802.11n(HT20)- 5280



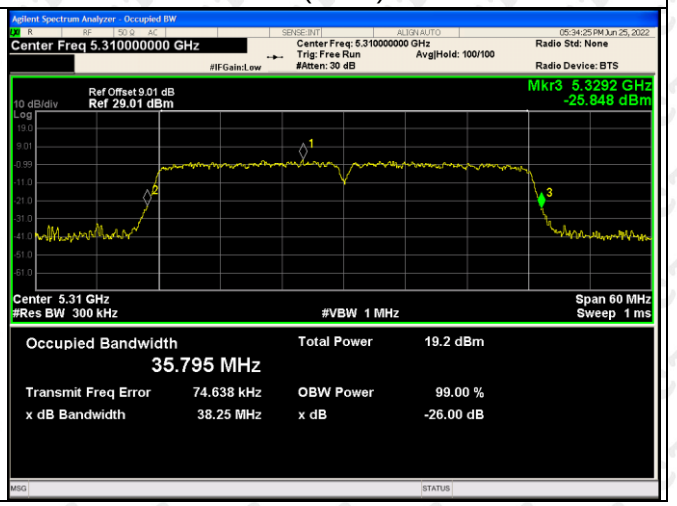
802.11n(HT20)-5320



802.11n(HT40)-5270

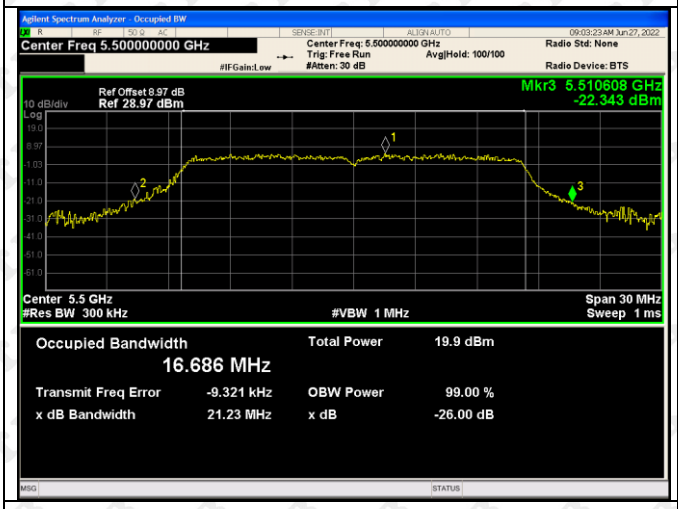


802.11n(HT40)-5310

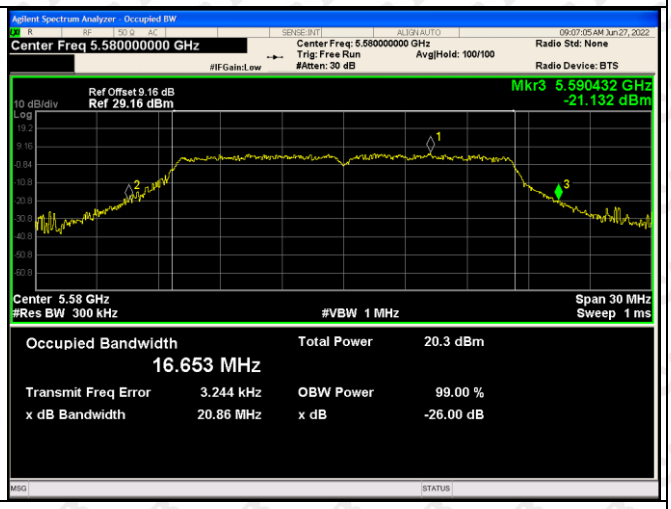


5500-5700MHz

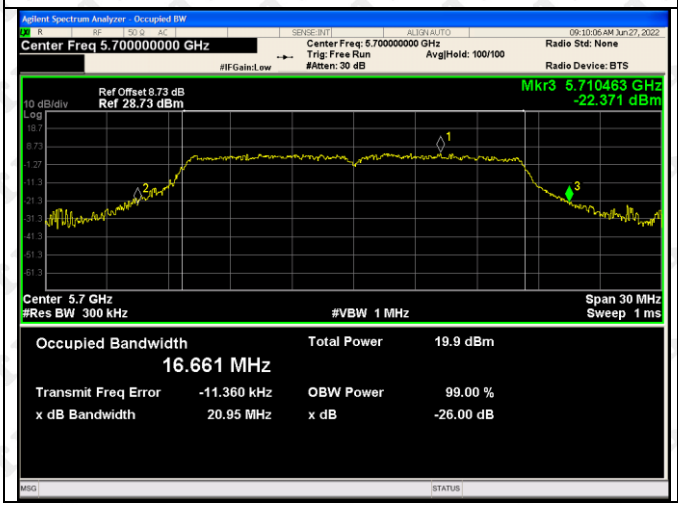
802.11a-5500



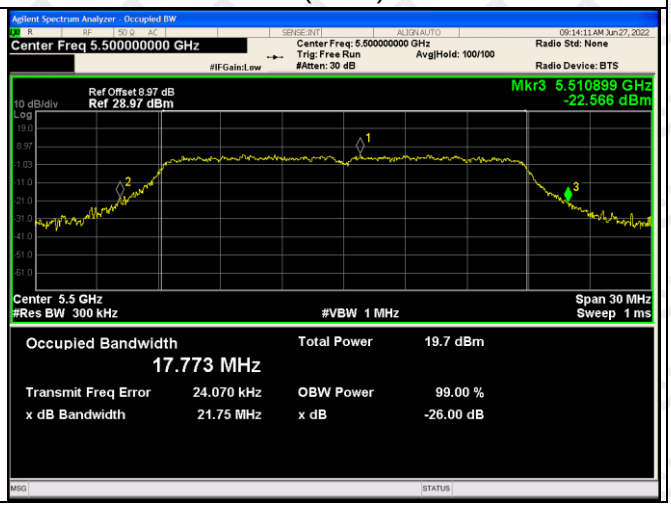
802.11a-5580



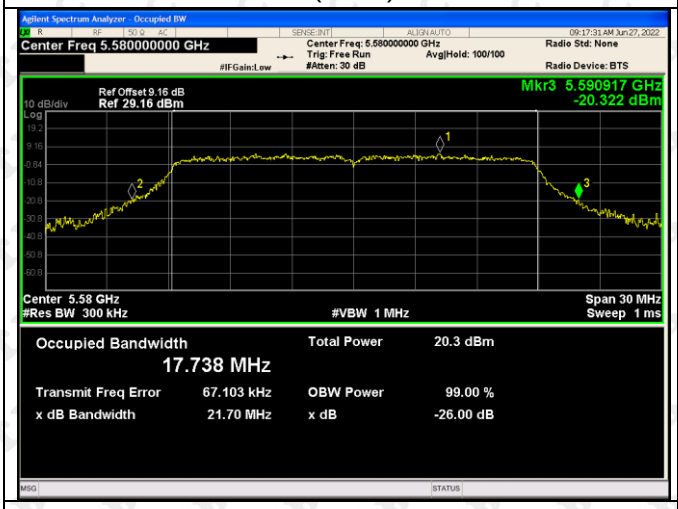
802.11a-5700



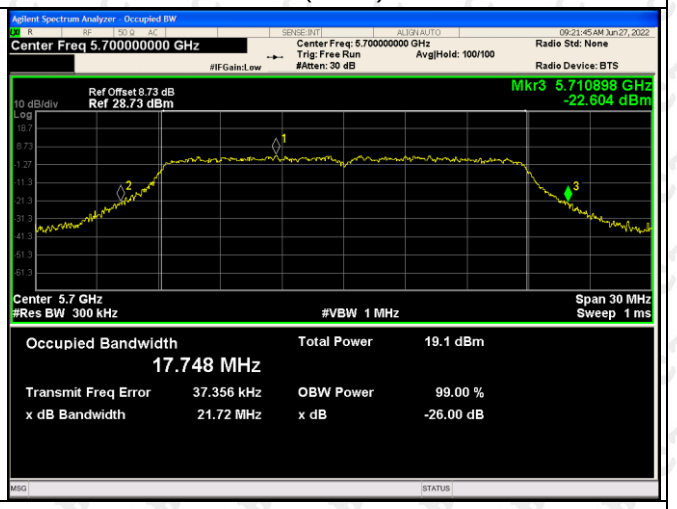
802.11n(HT20)-5500



802.11n(HT20)-5580



802.11n(HT20)-5700



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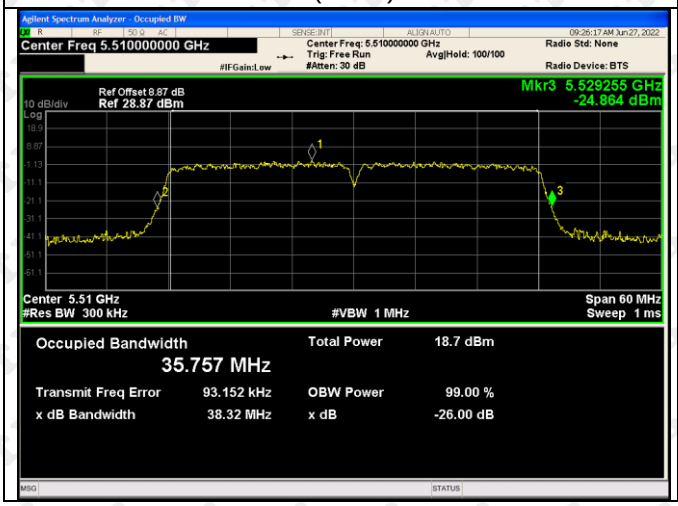
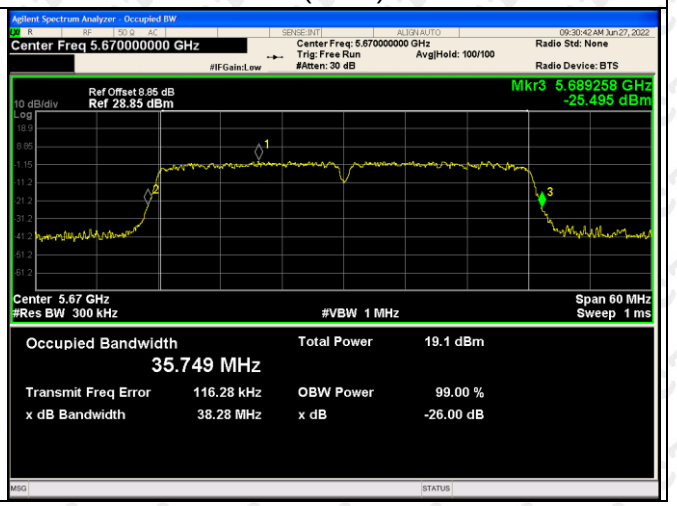
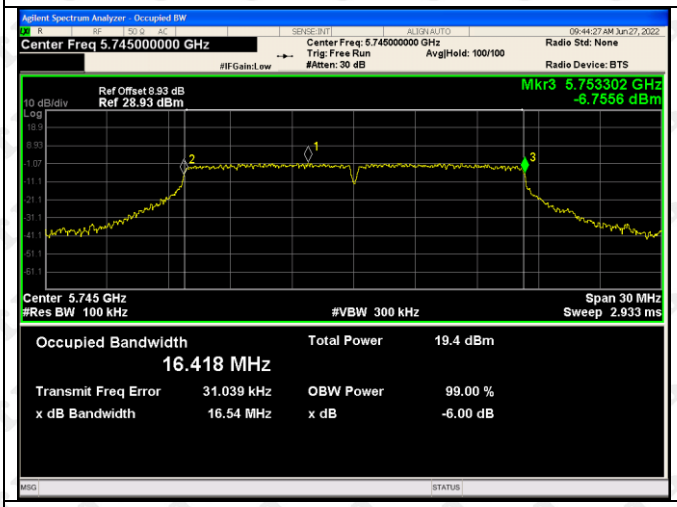


802.11n(HT40)-5670

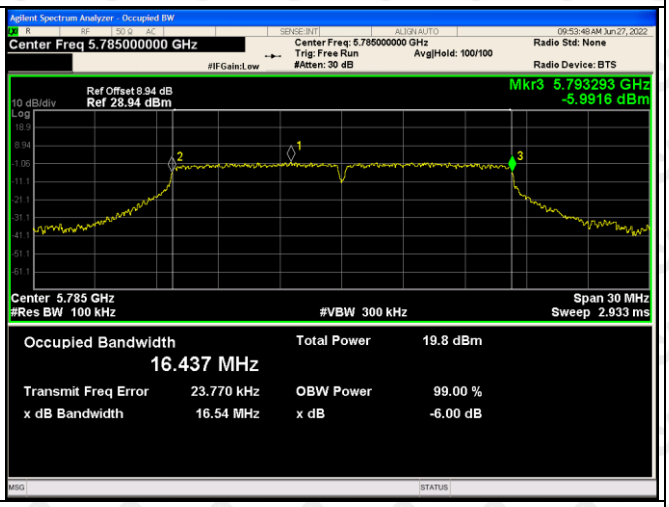


5745-5825MHz

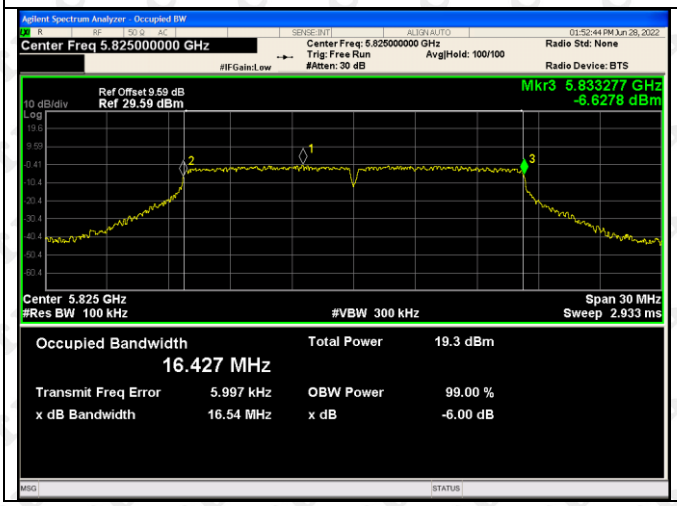
802.11a-5745



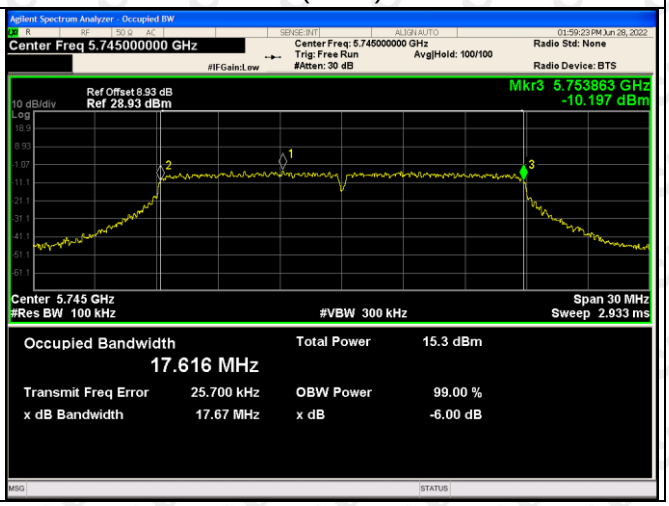
802.11a-5785



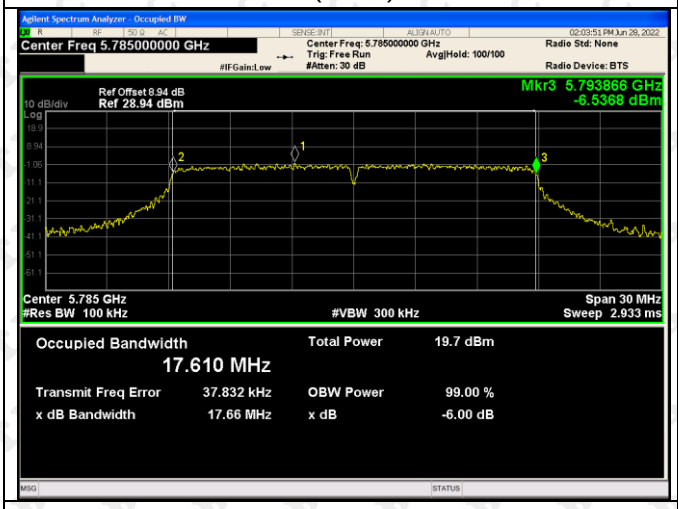
802.11a-5825



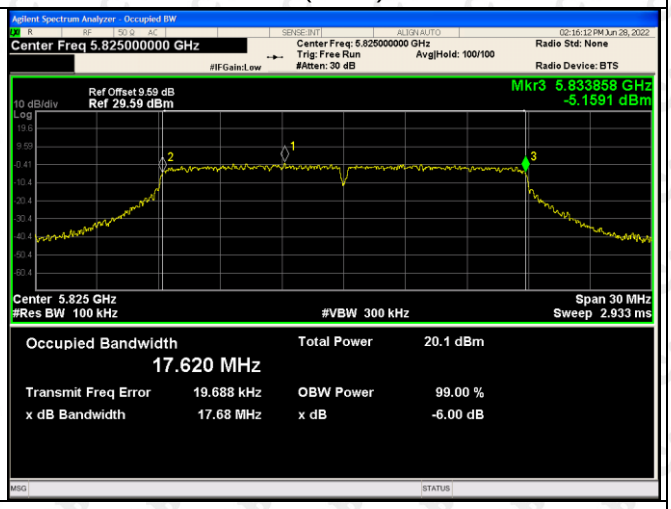
802.11n(HT20)-5745



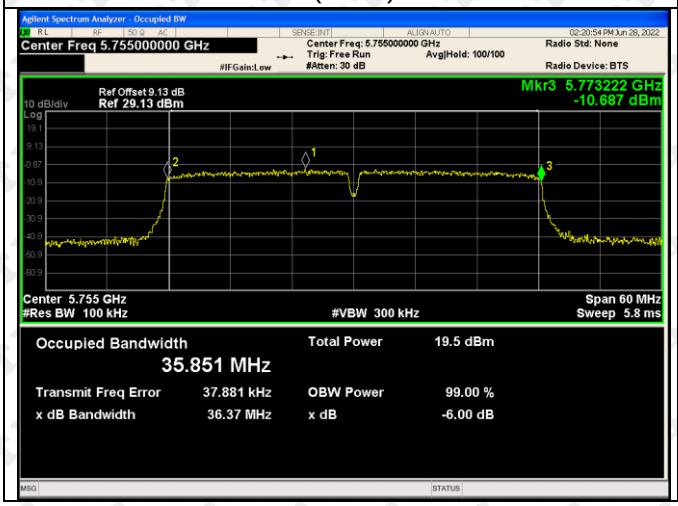
802.11n(HT20)-5785



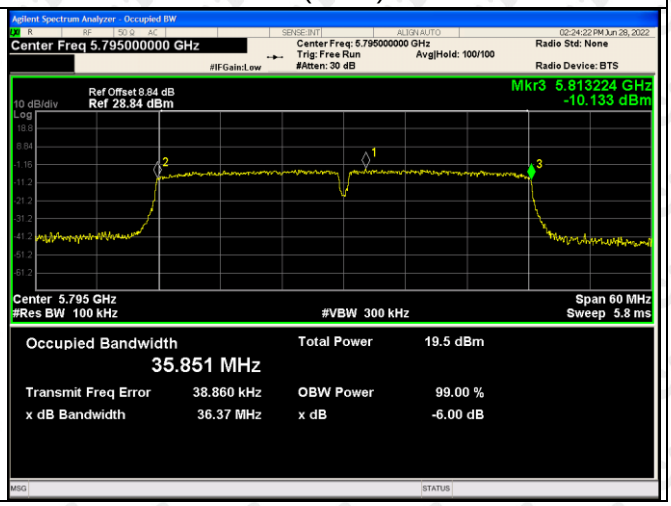
802.11n(HT20)-5825



802.11n(HT40)-5755

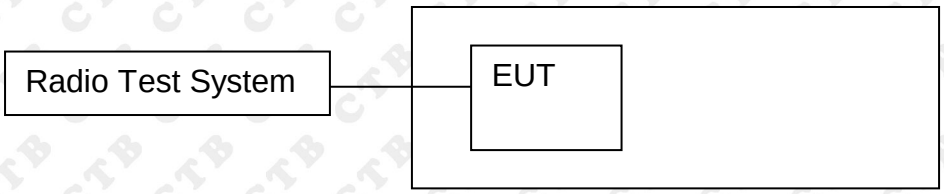


802.11n(HT40)-5795



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.I.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

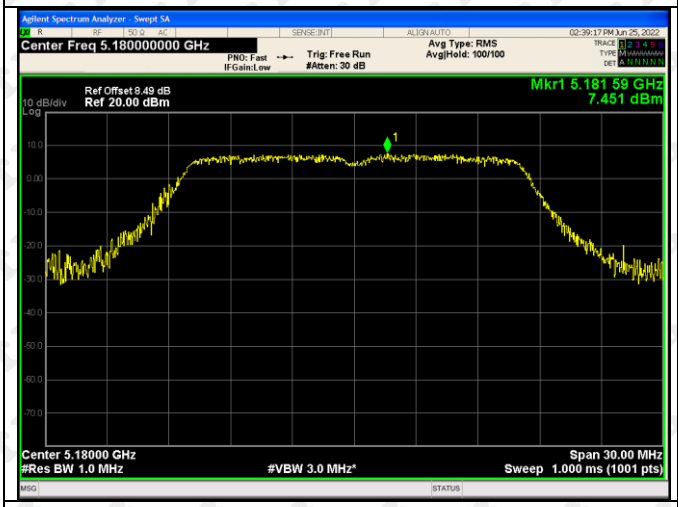
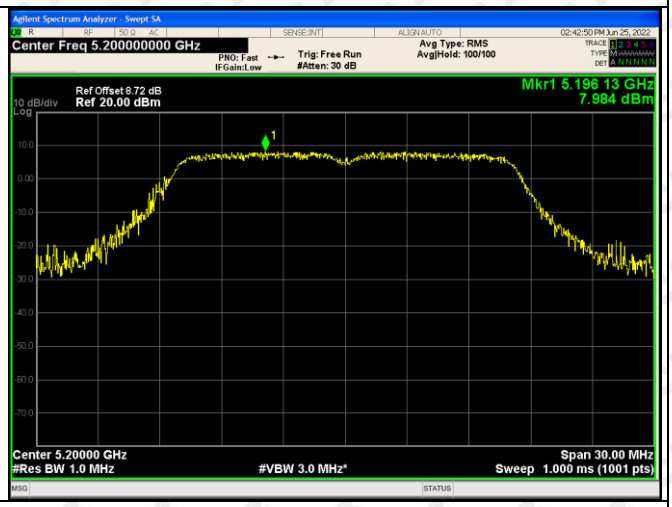
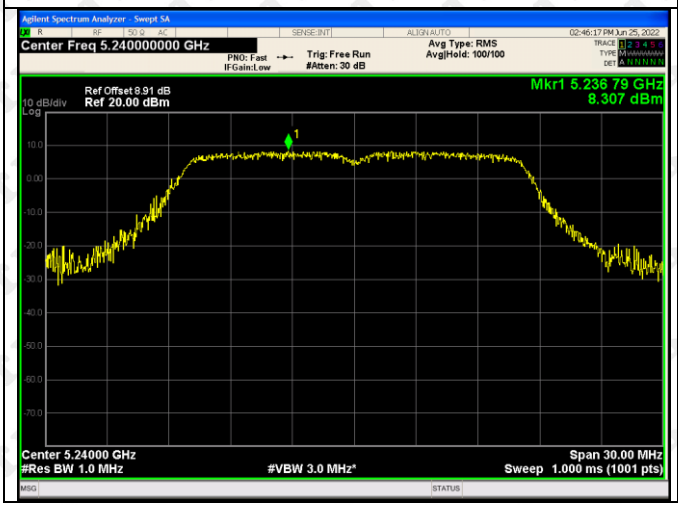
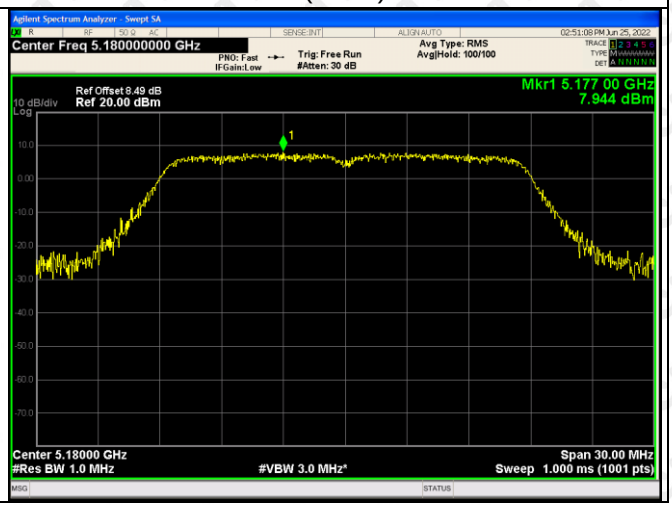
Test mode	Test Channel (MHz)	PSD [dBm/MHz]	Limit [dBm/MHz]	Result
802.11a	5180	7.451	11	Pass
	5200	7.984	11	Pass
	5240	8.307	11	Pass
802.11n(HT20)	5180	7.944	11	Pass
	5200	8.295	11	Pass
	5240	3.439	11	Pass
802.11n(HT40)	5190	4.935	11	Pass
	5230	4.959	11	Pass

Test mode	Test Channel (MHz)	PSD [dBm/MHz]	Limit [dBm/MHz]	Result
802.11a	5260	7.879	11	Pass
	5280	7.931	11	Pass
	5320	8.053	11	Pass
802.11n(HT20)	5260	7.874	11	Pass
	5280	8.599	11	Pass
	5320	8.212	11	Pass
802.11n(HT40)	5270	4.751	11	Pass
	5310	4.392	11	Pass

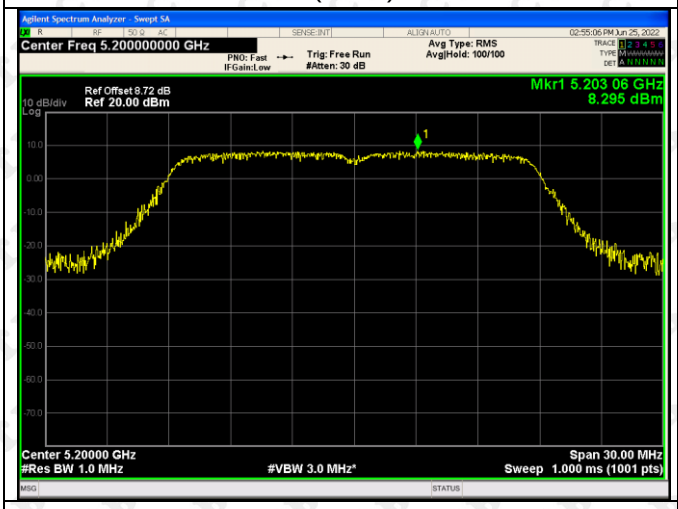
Test mode	Test Channel (MHz)	PSD [dBm/MHz]	Limit [dBm/MHz]	Result
802.11a	5500	8.107	11	Pass
	5580	8.368	11	Pass
	5700	7.938	11	Pass
802.11n(HT20)	5500	7.953	11	Pass
	5580	8.809	11	Pass
	5700	7.23	11	Pass
802.11n(HT40)	5510	4.318	11	Pass
	5670	5.163	11	Pass

Test mode	Test Channel (MHz)	PSD [dBm/MHz]	Limit [dBm/MHz]	Result
802.11a	5745	5.64	11	Pass
	5785	6.095	11	Pass
	5825	5.569	11	Pass
802.11n(HT20)	5745	1.236	11	Pass
	5785	5.854	11	Pass
	5825	6.181	11	Pass
802.11n(HT40)	5755	2.033	11	Pass
	5795	2.535	11	Pass

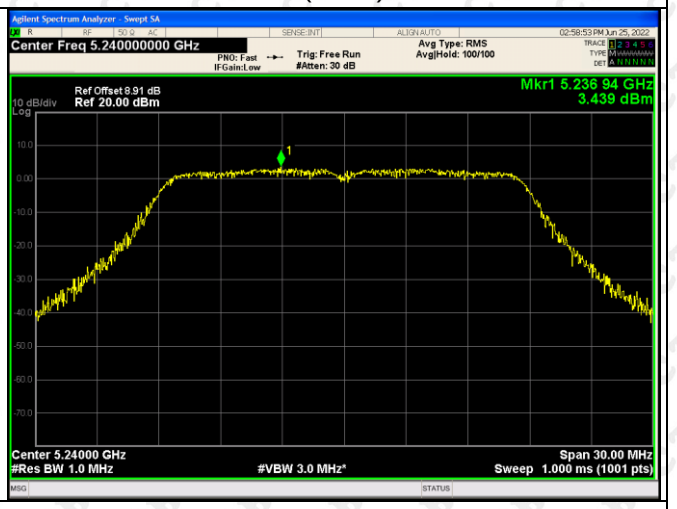
5180-5230MHz

802.11a-5180	802.11a-5200
	
802.11a-5240	**802.11n(HT20)-5180**
	

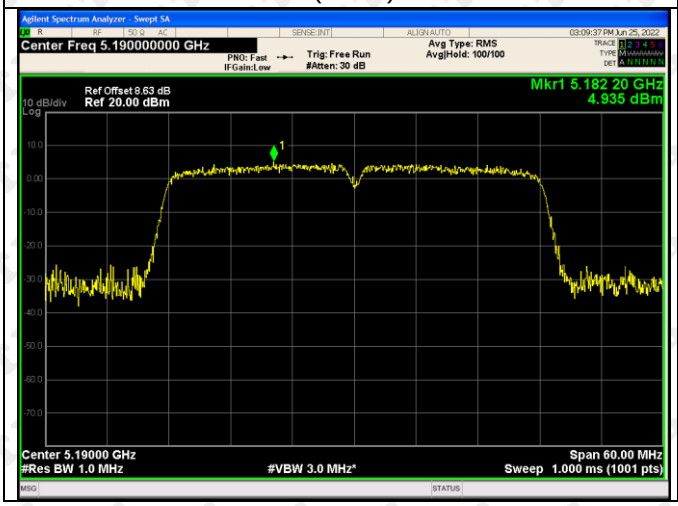
802.11n(HT20)-5200



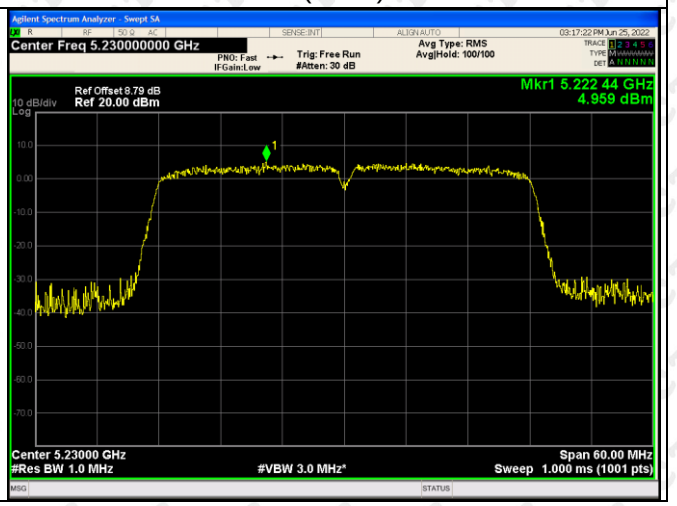
802.11n(HT20)-5240



802.11n(HT40)-5190

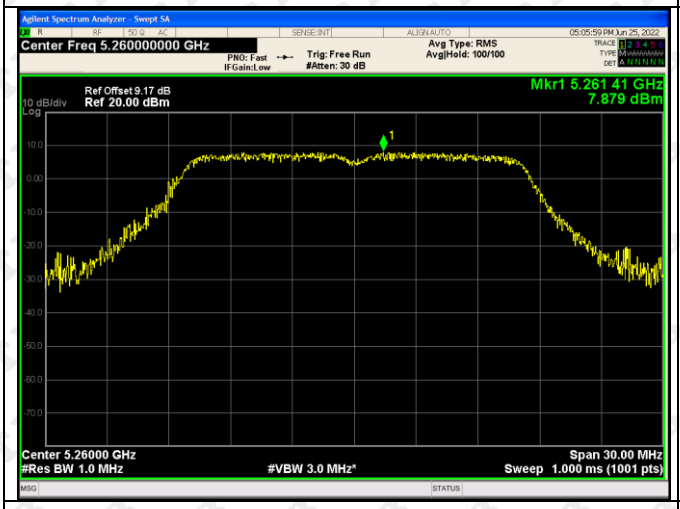


802.11n(HT40)-5230

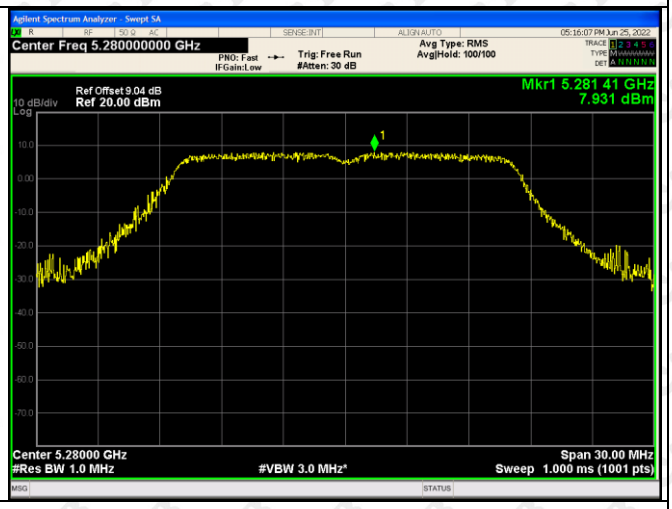


5260-5320MHz

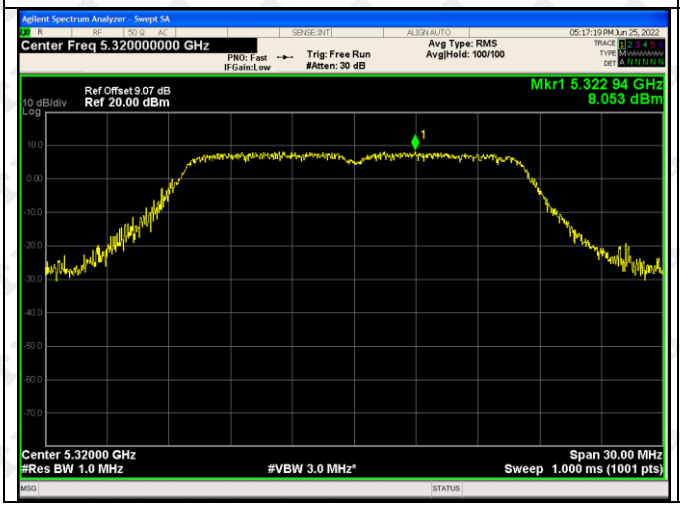
802.11a-5260



802.11a-5280



802.11a-5320



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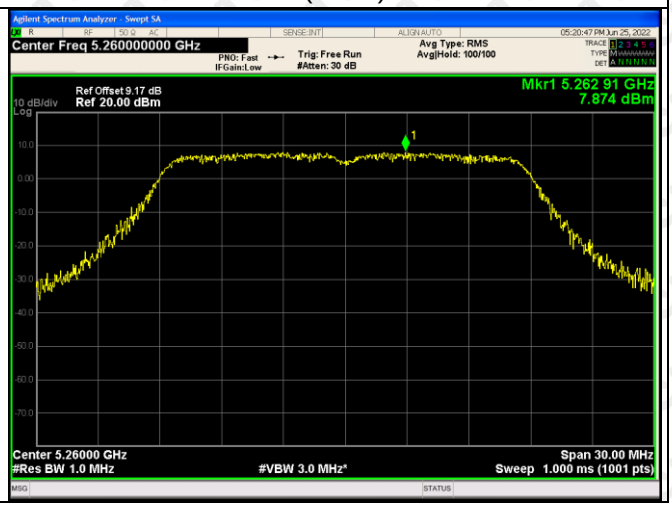

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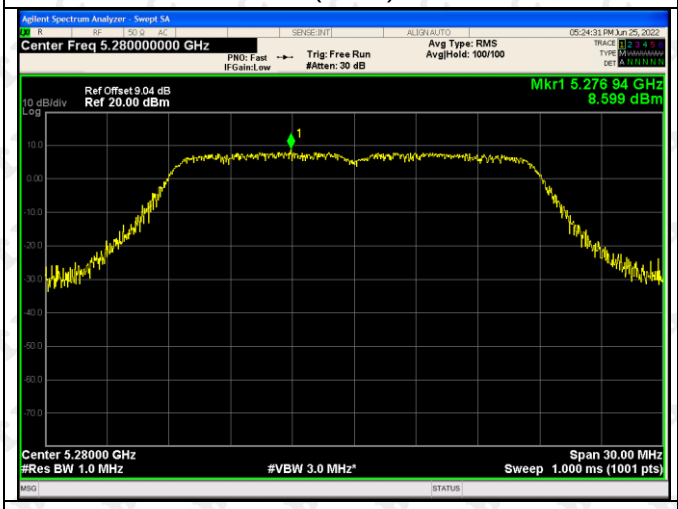

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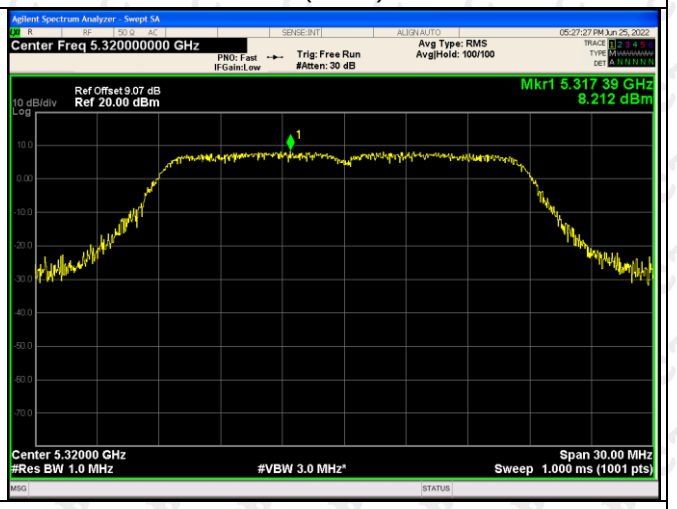

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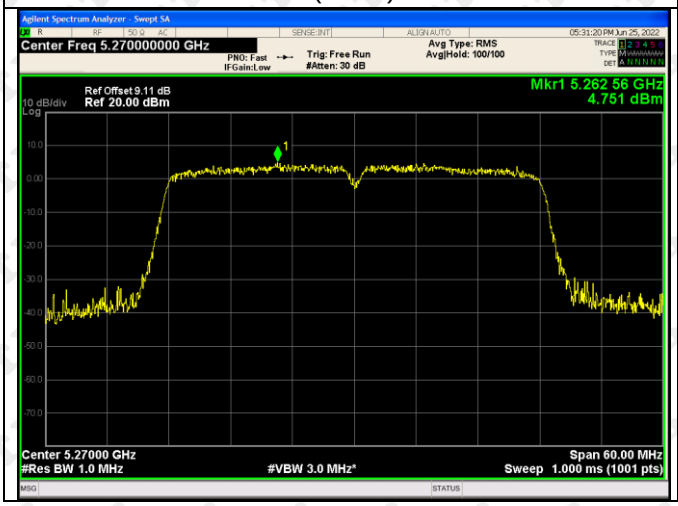

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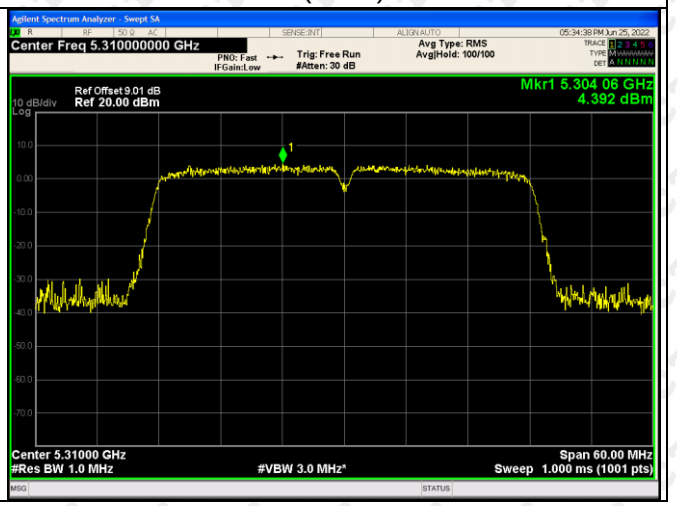
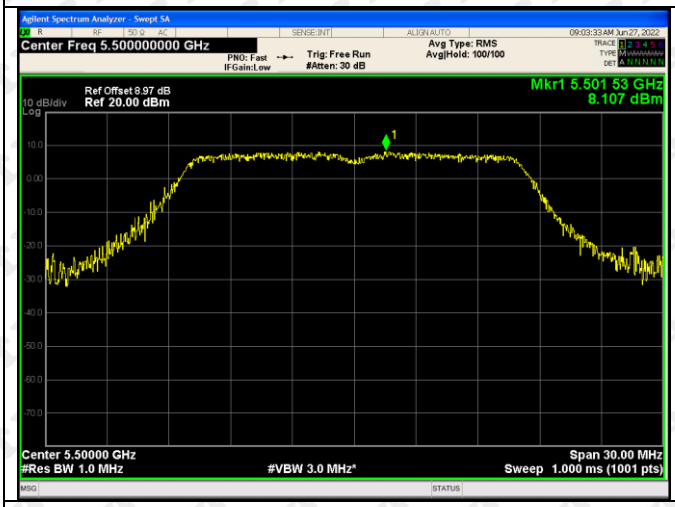


5500-5700MHz

802.11a-5500



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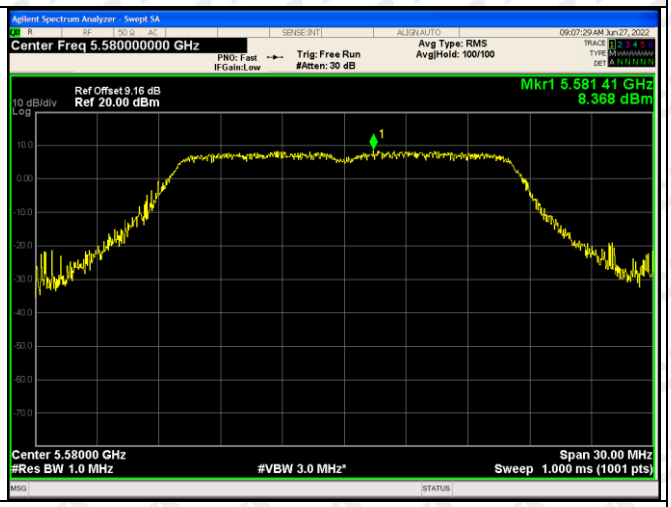

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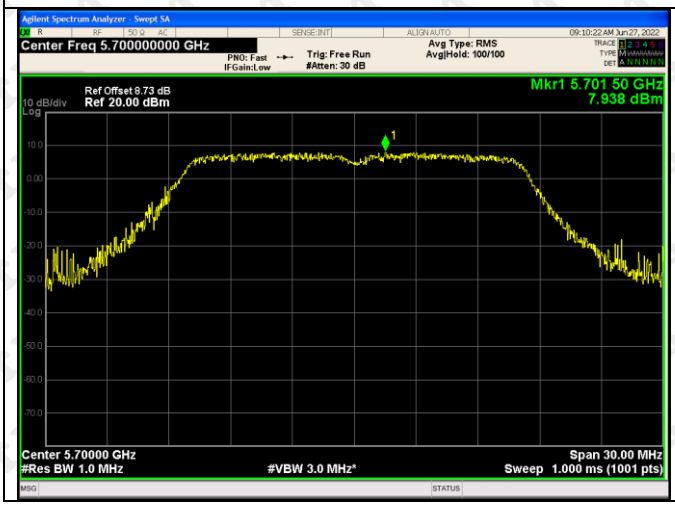

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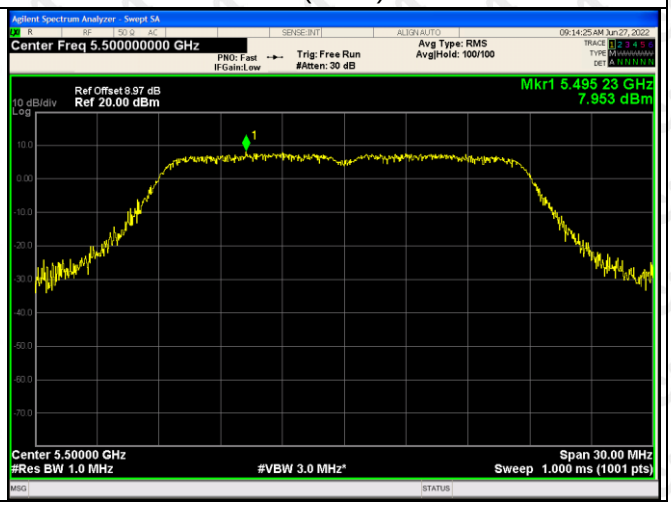

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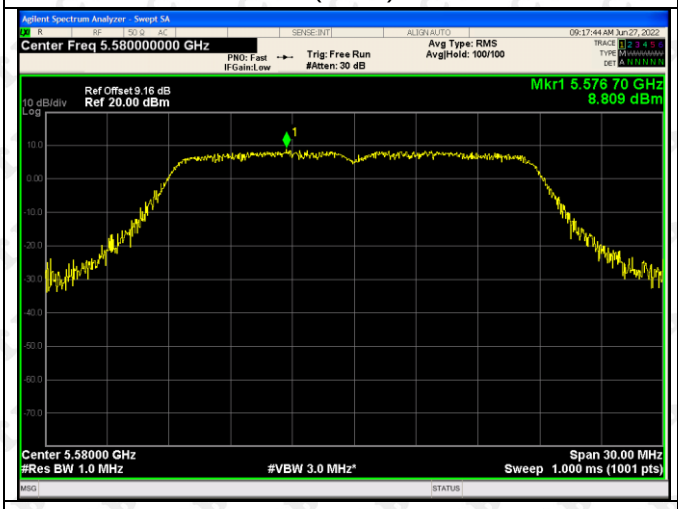

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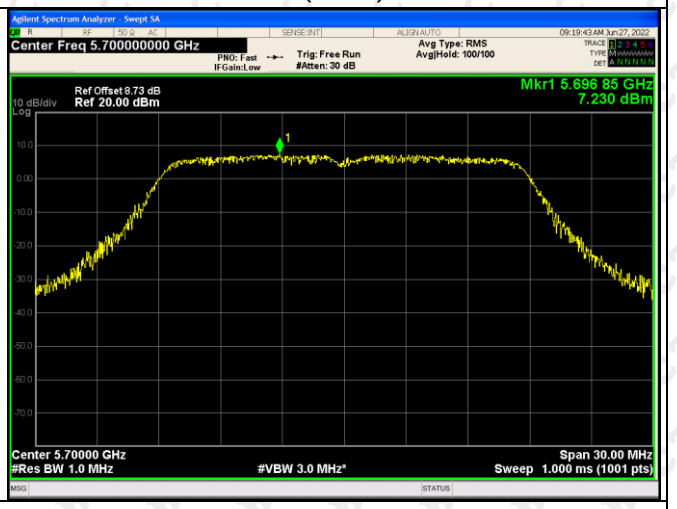

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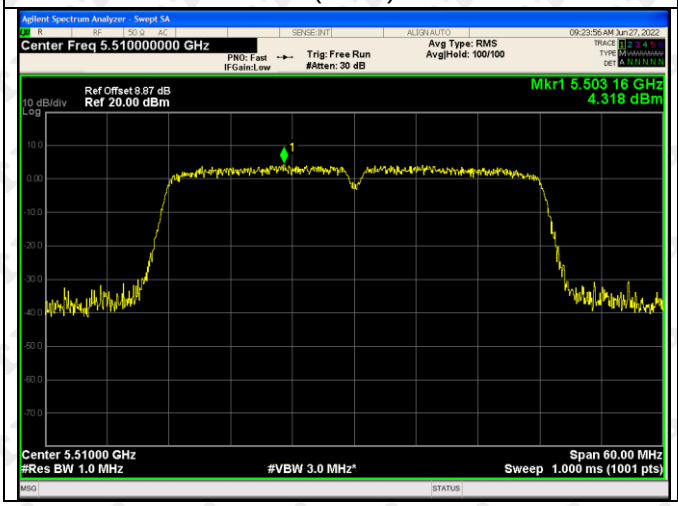

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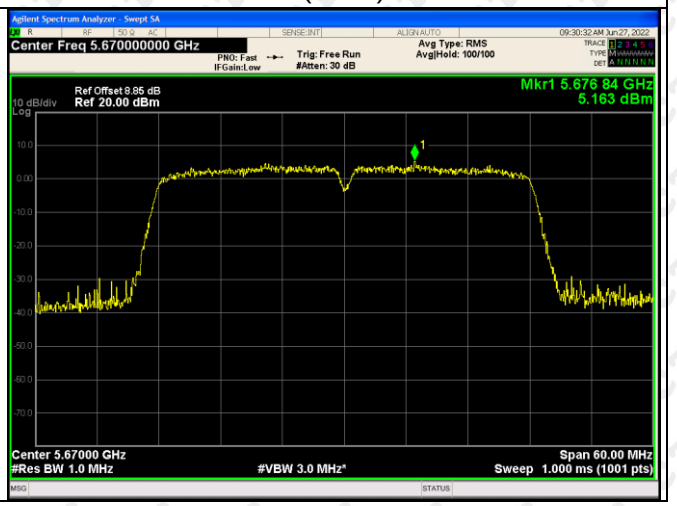
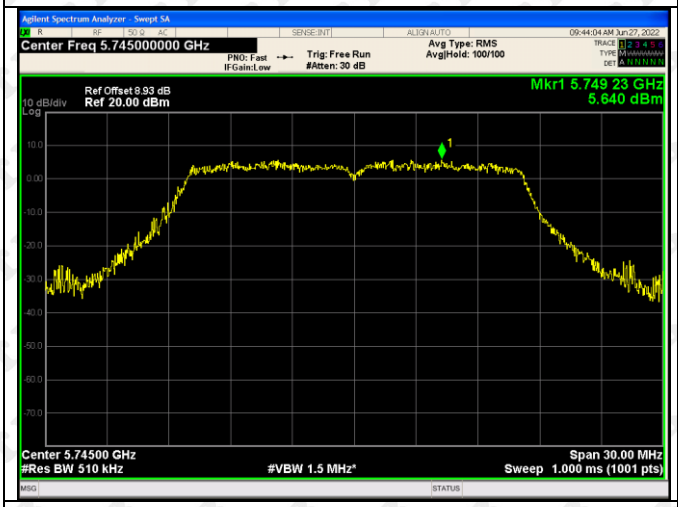
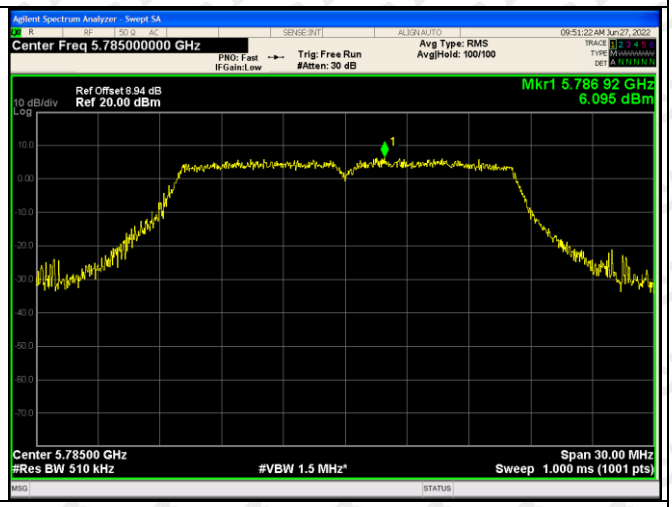
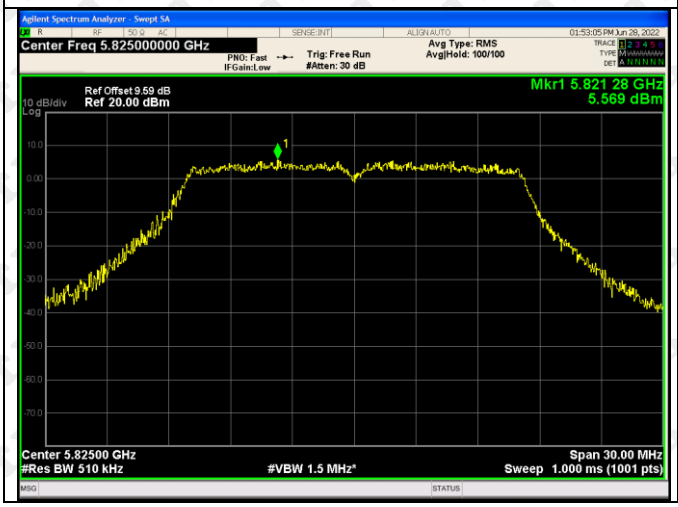
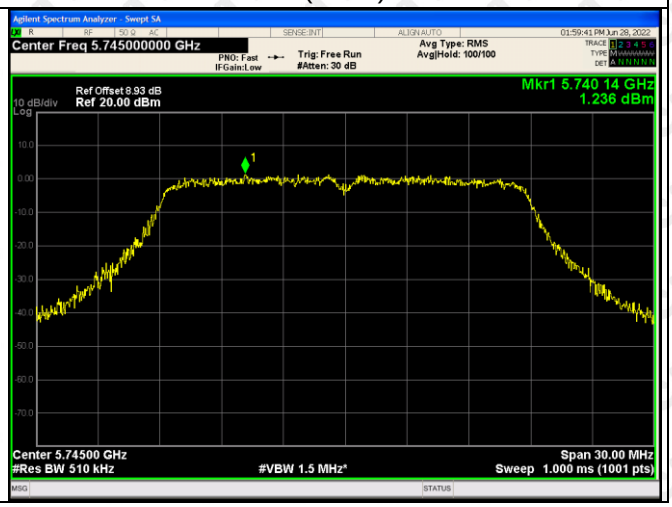


5745-5825MHz

802.11a-5745	802.11a-5785
	
802.11a-5825	**802.11n(HT20)-5745**
	

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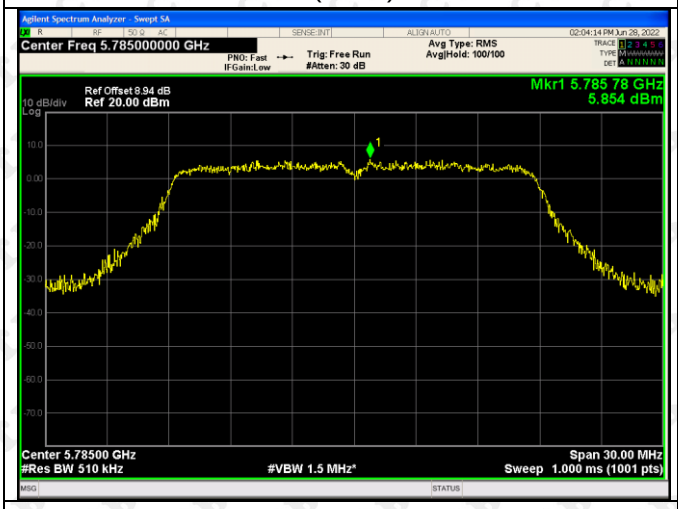

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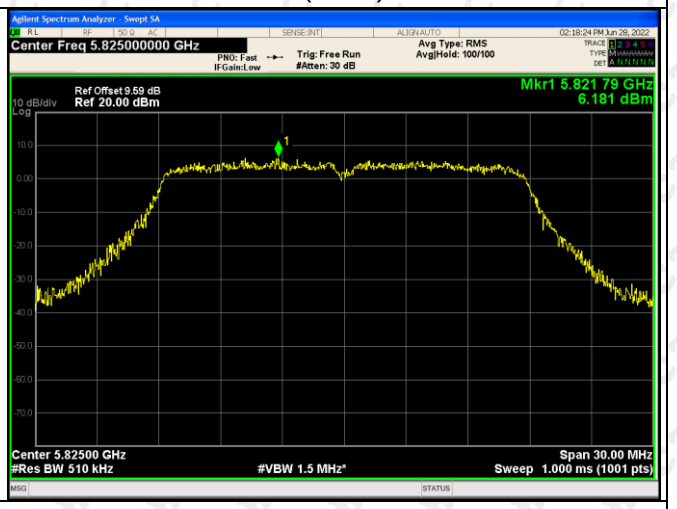

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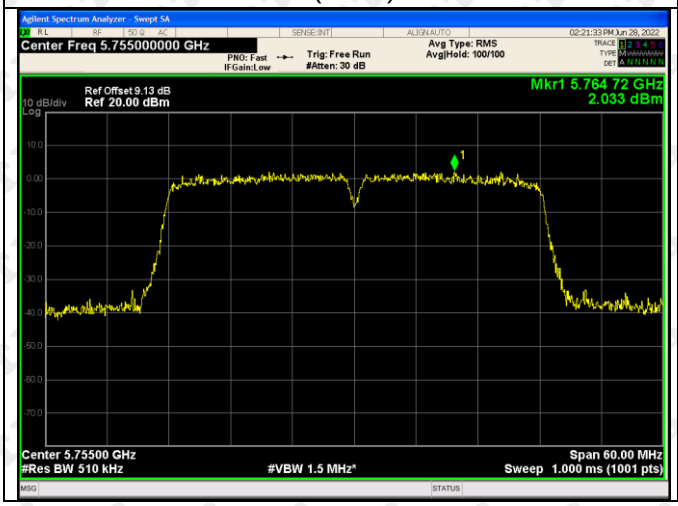

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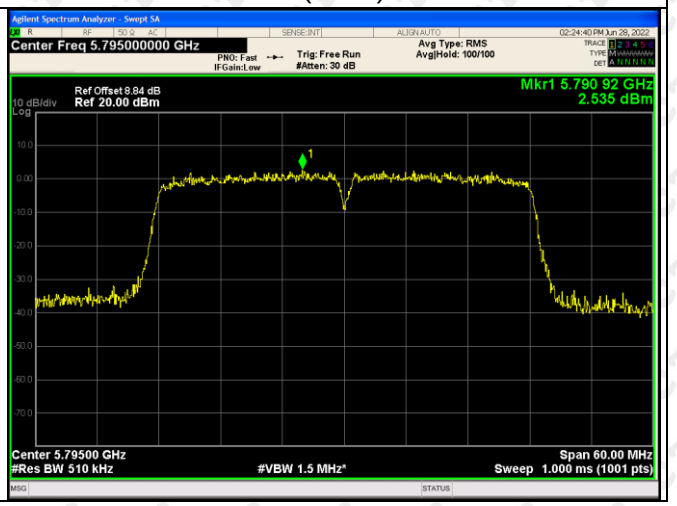
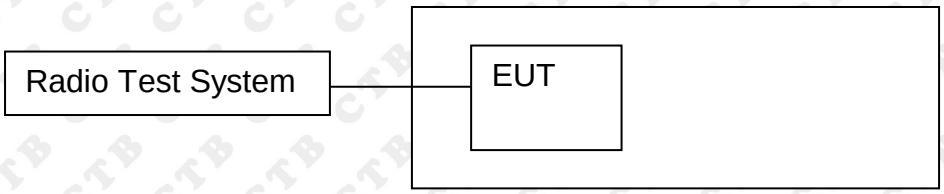


12. FREQUENCY STABILITY

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)	120	5180.0464	5180	0.0464	8.9575
		V max (V)	132	5180.0437	5180	0.0437	8.4363
		V min (V)	108	5180.0465	5180	0.0465	8.9768
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5180.0449	5180	0.0449	8.6680
		T (°C)	-10	5180.0454	5180	0.0454	8.7645
		T (°C)	0	5180.0431	5180	0.0431	8.3205
		T (°C)	10	5180.0475	5180	0.0475	9.1699
		T (°C)	20	5180.0492	5180	0.0492	9.4981
		T (°C)	30	5180.0484	5180	0.0484	9.3436
		T (°C)	40	5180.0444	5180	0.0444	8.5714
		T (°C)	50	5180.0476	5180	0.0476	9.1892
		T (°C)	60	5180.0490	5180	0.0490	9.4595
		T (°C)	70	5180.0414	5180	0.0414	7.9923
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)	120	5200.0436	5200	0.0436	8.3846
		V max (V)	132	5200.0422	5200	0.0422	8.1154
		V min (V)	108	5200.0469	5200	0.0469	9.0192
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5200.0432	5200	0.0432	8.3077
		T (°C)	-10	5200.0423	5200	0.0423	8.1346
		T (°C)	0	5200.0424	5200	0.0424	8.1538
		T (°C)	10	5200.0421	5200	0.0421	8.0962
		T (°C)	20	5200.0425	5200	0.0425	8.1731
		T (°C)	30	5200.0428	5200	0.0428	8.2308
		T (°C)	40	5200.0435	5200	0.0435	8.3654
		T (°C)	50	5200.0417	5200	0.0417	8.0192
		T (°C)	60	5200.0398	5200	0.0398	7.6538
		T (°C)	70	5200.0423	5200	0.0423	8.1346
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)	120	5240.0432	5240	0.0432	8.2443
		V max (V)	132	5240.0413	5240	0.0413	7.8817
		V min (V)	108	5240.0398	5240	0.0398	7.5954
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5240.0488	5240	0.0488	9.3130
		T (°C)	-10	5240.0434	5240	0.0434	8.2824
		T (°C)	0	5240.0432	5240	0.0432	8.2443
		T (°C)	10	5240.0458	5240	0.0458	8.7405
		T (°C)	20	5240.0429	5240	0.0429	8.1870
		T (°C)	30	5240.0426	5240	0.0426	8.1298
		T (°C)	40	5240.0483	5240	0.0483	9.2176
		T (°C)	50	5240.0496	5240	0.0496	9.4656
		T (°C)	60	5240.0483	5240	0.0483	9.2176
		T (°C)	70	5240.0413	5240	0.0413	7.8817
Limits				±20ppm			
Result				Complies			

TX Frequency (5260-5320MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5260.0464	5260	0.0464	8.8213
		V max (V)	132	5260.0437	5260	0.0437	8.3080
		V min (V)	108	5260.0465	5260	0.0465	8.8403
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5260.0449	5260	0.0449	8.5361
		T (°C)	-10	5260.0454	5260	0.0454	8.6312
		T (°C)	0	5260.0431	5260	0.0431	8.1939
		T (°C)	10	5260.0475	5260	0.0475	9.0304
		T (°C)	20	5260.0492	5260	0.0492	9.3536
		T (°C)	30	5260.0484	5260	0.0484	9.2015
		T (°C)	40	5260.0444	5260	0.0444	8.4411
		T (°C)	50	5260.0476	5260	0.0476	9.0494
		T (°C)	60	5260.0490	5260	0.0490	9.3156
		T (°C)	70	5260.0414	5260	0.0414	7.8707
Limits				±20ppm			
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)	120	5280.0436	5280	0.0436	8.2576
		V max (V)	132	5280.0422	5280	0.0422	7.9924
		V min (V)	108	5280.0469	5280	0.0469	8.8826
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5280.0432	5280	0.0432	8.1818
		T (°C)	-10	5280.0423	5280	0.0423	8.0114
		T (°C)	0	5280.0424	5280	0.0424	8.0303
		T (°C)	10	5280.0421	5280	0.0421	7.9735
		T (°C)	20	5280.0425	5280	0.0425	8.0492
		T (°C)	30	5280.0428	5280	0.0428	8.1061
		T (°C)	40	5280.0435	5280	0.0435	8.2386
		T (°C)	50	5280.0417	5280	0.0417	7.8977
		T (°C)	60	5280.0398	5280	0.0398	7.5379
		T (°C)	70	5280.0423	5280	0.0423	8.0114
Limits				±20ppm			
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)	120	5320.0432	5320	0.0432	8.1203
		V max (V)	132	5320.0413	5320	0.0413	7.7632
		V min (V)	108	5320.0398	5320	0.0398	7.4812
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5320.0488	5320	0.0488	9.1729
		T (°C)	-10	5320.0434	5320	0.0434	8.1579
		T (°C)	0	5320.0432	5320	0.0432	8.1203
		T (°C)	10	5320.0458	5320	0.0458	8.6090
		T (°C)	20	5320.0429	5320	0.0429	8.0639
		T (°C)	30	5320.0426	5320	0.0426	8.0075
		T (°C)	40	5320.0483	5320	0.0483	9.0789
		T (°C)	50	5320.0496	5320	0.0496	9.3233
		T (°C)	60	5320.0483	5320	0.0483	9.0789
		T (°C)	70	5320.0481	5320	0.0481	9.0414
Limits				±20ppm			
Result				Complies			

TX Frequency (5500-5700MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5500.0424	5500	0.0424	7.7091
		V max (V)	132	5500.0445	5500	0.0445	8.0909
		V min (V)	108	5500.0432	5500	0.0432	7.8545
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5500.0457	5500	0.0457	8.3091
		T (°C)	-10	5500.0403	5500	0.0403	7.3273
		T (°C)	0	5500.0424	5500	0.0424	7.7091
		T (°C)	10	5500.0478	5500	0.0478	8.6909
		T (°C)	20	5500.0483	5500	0.0483	8.7818
		T (°C)	30	5500.0420	5500	0.0420	7.6364
		T (°C)	40	5500.0415	5500	0.0415	7.5455
		T (°C)	50	5500.0496	5500	0.0496	9.0182
		T (°C)	60	5500.0409	5500	0.0409	7.4364
		T (°C)	70	5500.0498	5500	0.0498	9.0545
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5580.0458	5580	0.0458	8.2079
		V max (V)	132	5580.0425	5580	0.0425	7.6165
		V min (V)	108	5580.0484	5580	0.0484	8.6738
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5580.0488	5580	0.0488	8.7455
		T (°C)	-10	5580.0445	5580	0.0445	7.9749
		T (°C)	0	5580.0476	5580	0.0476	8.5305
		T (°C)	10	5580.0439	5580	0.0439	7.8674
		T (°C)	20	5580.0442	5580	0.0442	7.9211
		T (°C)	30	5580.0425	5580	0.0425	7.6165
		T (°C)	40	5580.0445	5580	0.0445	7.9749
		T (°C)	50	5580.0423	5580	0.0423	7.5806
		T (°C)	60	5580.0426	5580	0.0426	7.6344
		T (°C)	70	5580.0485	5580	0.0485	8.6918
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5700.0433	5700	0.0433	7.5965
		V max (V)	132	5700.0415	5700	0.0415	7.2807
		V min (V)	108	5700.0437	5700	0.0437	7.6667
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5700.0439	5700	0.0439	7.7018
		T (°C)	-10	5700.0434	5700	0.0434	7.6140
		T (°C)	0	5700.0455	5700	0.0455	7.9825
		T (°C)	10	5700.0484	5700	0.0484	8.4912
		T (°C)	20	5700.0425	5700	0.0425	7.4561
		T (°C)	30	5700.0419	5700	0.0419	7.3509
		T (°C)	40	5700.0454	5700	0.0454	7.9649
		T (°C)	50	5700.0486	5700	0.0486	8.5263
		T (°C)	60	5700.0445	5700	0.0445	7.8070
		T (°C)	70	5700.0403	5700	0.0403	7.0702
Limits				±20ppm			
Result				Complies			

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)	120	5745.0424	5745	0.0424	7.3803
		V max (V)	132	5745.0445	5745	0.0445	7.7459
		V min (V)	108	5745.0432	5745	0.0432	7.5196
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5745.0457	5745	0.0457	7.9547
		T (°C)	-10	5745.0403	5745	0.0403	7.0148
		T (°C)	0	5745.0424	5745	0.0424	7.3803
		T (°C)	10	5745.0478	5745	0.0478	8.3203
		T (°C)	20	5745.0483	5745	0.0483	8.4073
		T (°C)	30	5745.0420	5745	0.0420	7.3107
		T (°C)	40	5745.0415	5745	0.0415	7.2237
		T (°C)	50	5745.0496	5745	0.0496	8.6336
		T (°C)	60	5745.0409	5745	0.0409	7.1192
		T (°C)	70	5745.0498	5745	0.0498	8.6684
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)	120	5785.0458	5785	0.0458	7.9170
		V max (V)	132	5785.0425	5785	0.0425	7.3466
		V min (V)	108	5785.0484	5785	0.0484	8.3665
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5785.0488	5785	0.0488	8.4356
		T (°C)	-10	5785.0445	5785	0.0445	7.6923
		T (°C)	0	5785.0476	5785	0.0476	8.2282
		T (°C)	10	5785.0439	5785	0.0439	7.5886
		T (°C)	20	5785.0442	5785	0.0442	7.6404
		T (°C)	30	5785.0425	5785	0.0425	7.3466
		T (°C)	40	5785.0445	5785	0.0445	7.6923
		T (°C)	50	5785.0423	5785	0.0423	7.3120
		T (°C)	60	5785.0426	5785	0.0426	7.3639
		T (°C)	70	5785.0485	5785	0.0485	8.3838
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)	120	5825.0433	5825	0.0433	7.4335
		V max (V)	132	5825.0415	5825	0.0415	7.1245
		V min (V)	108	5825.0437	5825	0.0437	7.5021
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5825.0439	5825	0.0439	7.5365
		T (°C)	-10	5825.0434	5825	0.0434	7.4506
		T (°C)	0	5825.0455	5825	0.0455	7.8112
		T (°C)	10	5825.0484	5825	0.0484	8.3090
		T (°C)	20	5825.0425	5825	0.0425	7.2961
		T (°C)	30	5825.0419	5825	0.0419	7.1931
		T (°C)	40	5825.0454	5825	0.0454	7.7940
		T (°C)	50	5825.0486	5825	0.0486	8.3433
		T (°C)	60	5825.0445	5825	0.0445	7.6395
		T (°C)	70	5825.0403	5825	0.0403	6.9185
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 WLAN message transmitting from remote device and verify whether it shall reconnect. (manufacturer declare)

14. ANTENNA REQUIREMENT

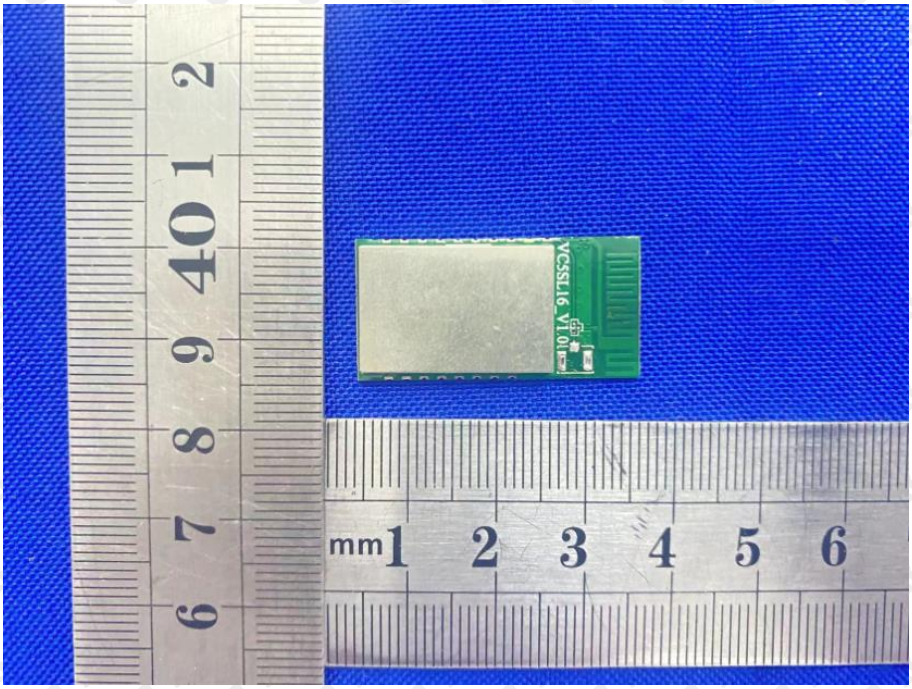
15.203 requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer 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.

EUT Antenna:

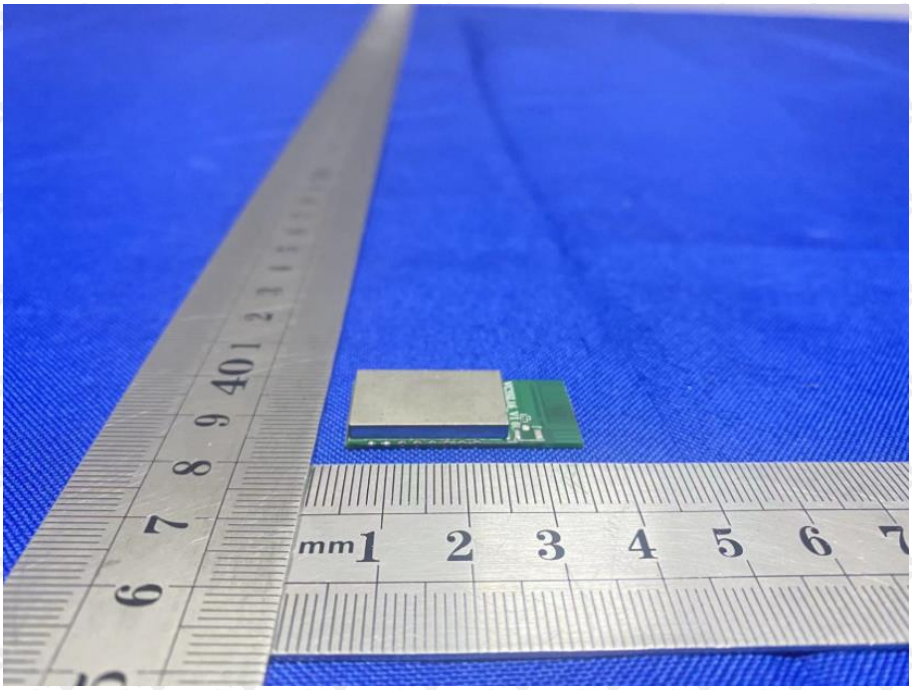
The antenna is PCB Antenna and no consideration of replacement. The best case gain of the antenna is 1.0dBi.

15. EUT PHOTOGRAPHS

EUT Photo 1



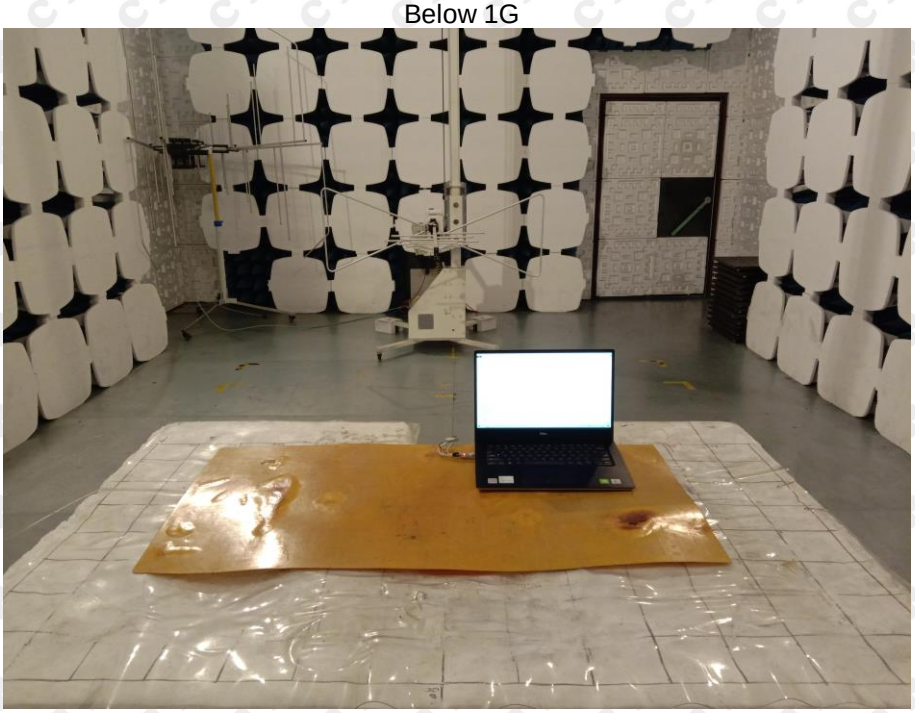
EUT Photo 2



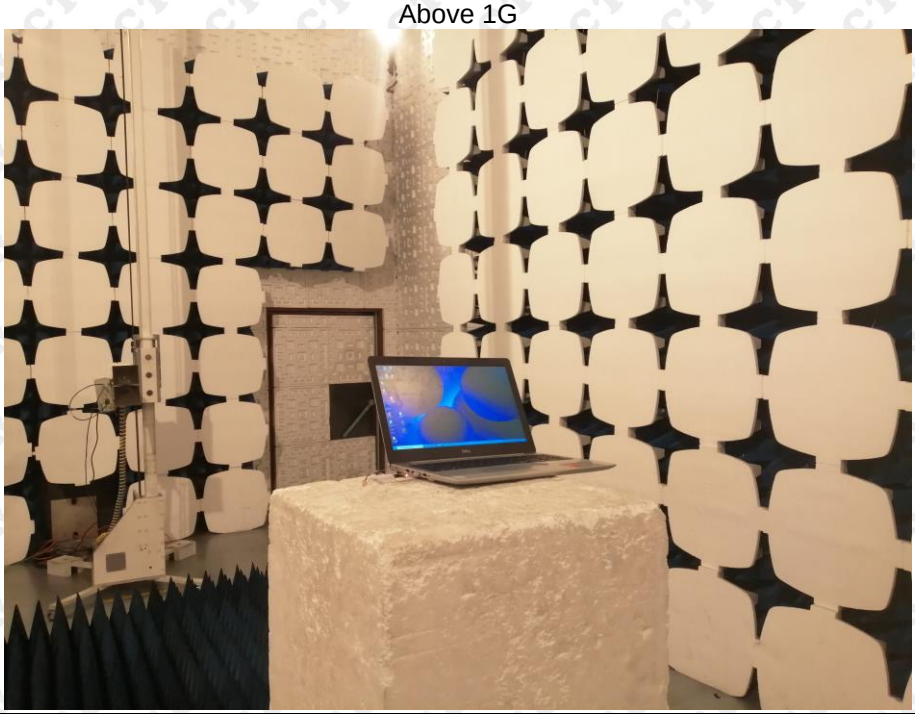
16. EUT TEST SETUP PHOTOGRAPHS

Radiated Emission

Below 1G



Above 1G



Conducted Emission

※※※※※ **END OF REPORT** ※※※※※