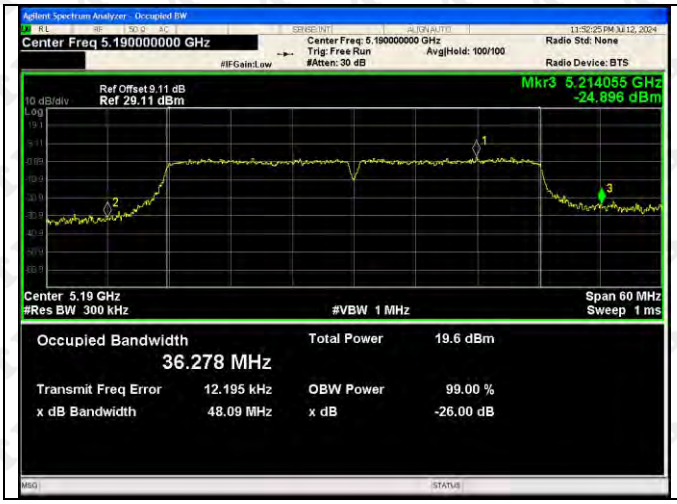
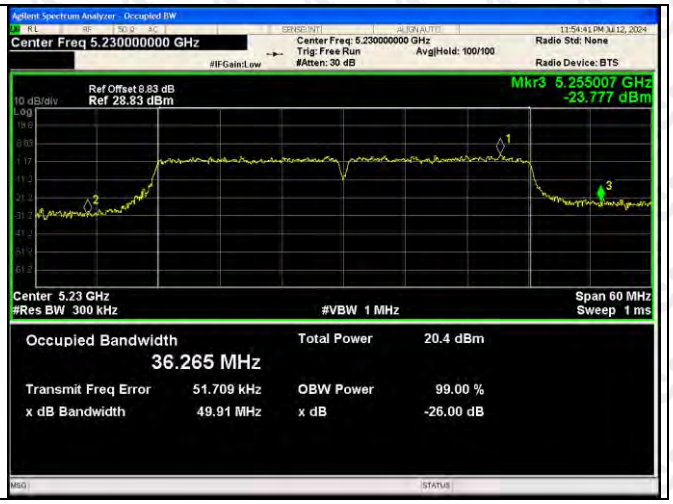




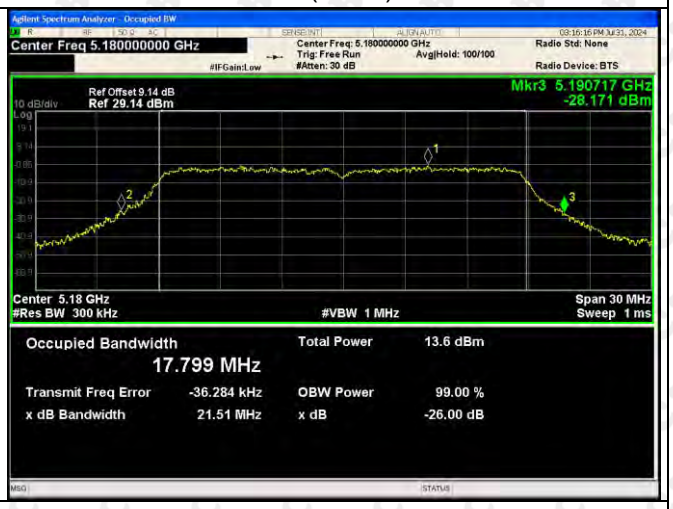
ANT2

802.11a-5180

802.11a-5200

802.11a-5240

802.11ac(VH20)-5180



802.11ac(VH20)-5200

802.11ac(VH20)-5240

802.11ac(VH40)-5190

802.11ac(VH40)-5230

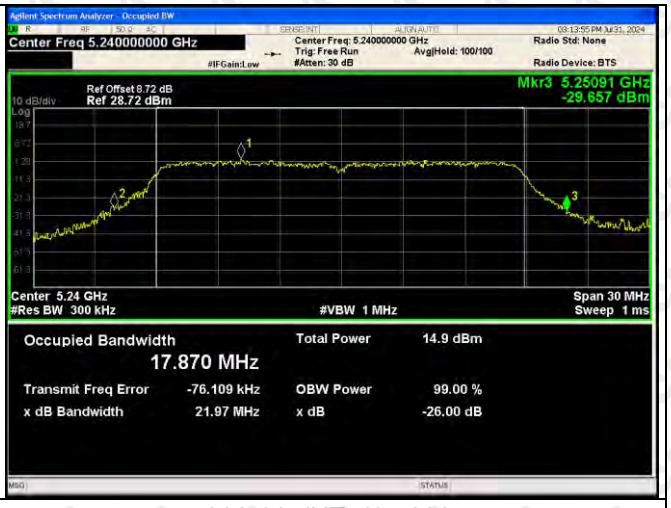
802.11ac(VH80)-5210

802.11n(HT20)-5180

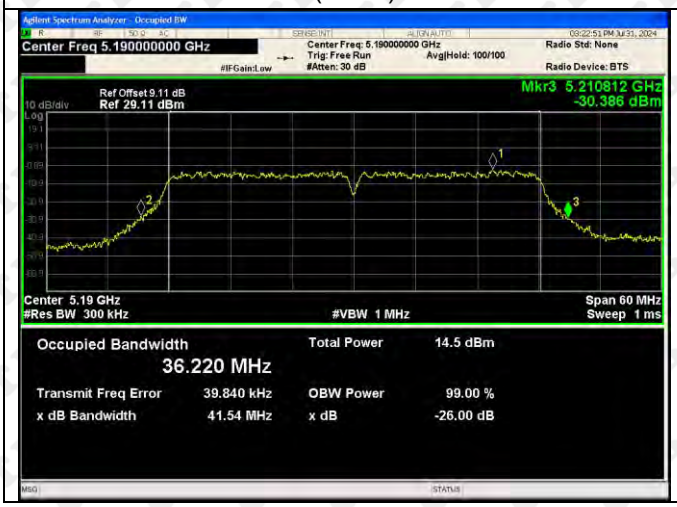
802.11n(HT20)-5200

802.11n(HT20)-5240

802.11n(HT40)-5190

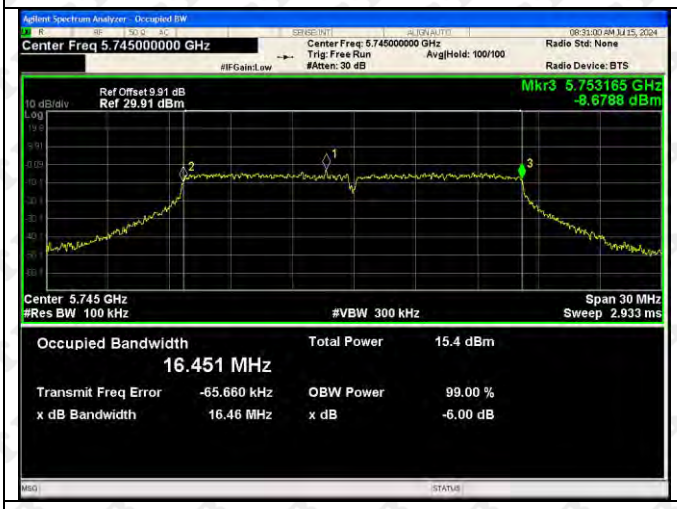


802.11n(HT40)-5230



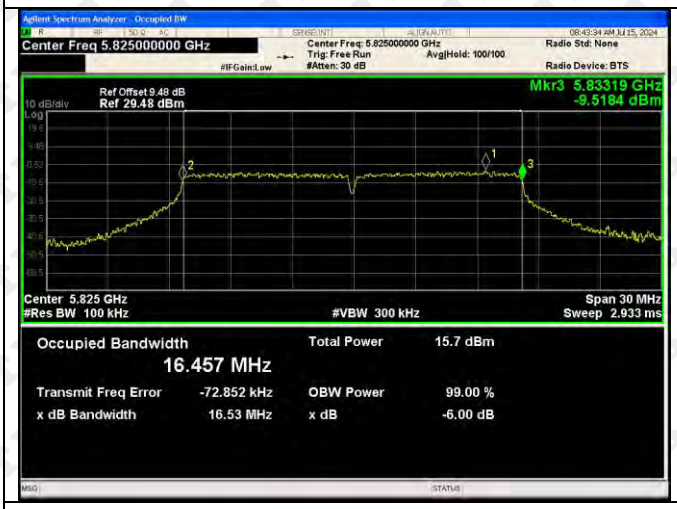
5745-5825MHz
ANT 1:

802.11a-5745



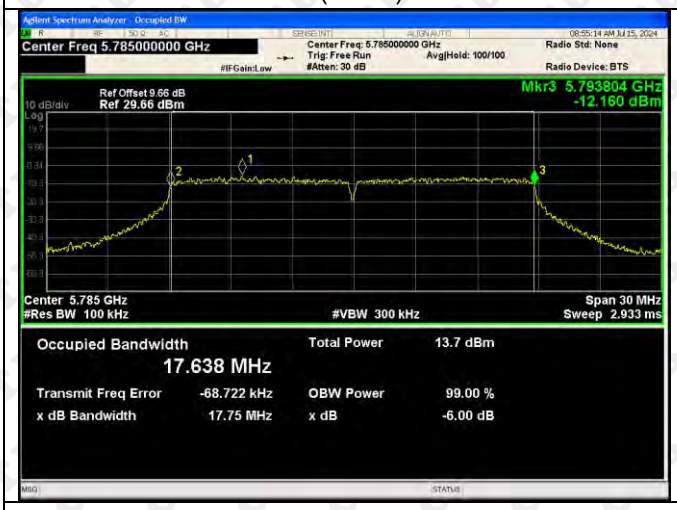
802.11a-5785

802.11a-5825



802.11ac(VH20)-5745

802.11ac(VH20)-5785

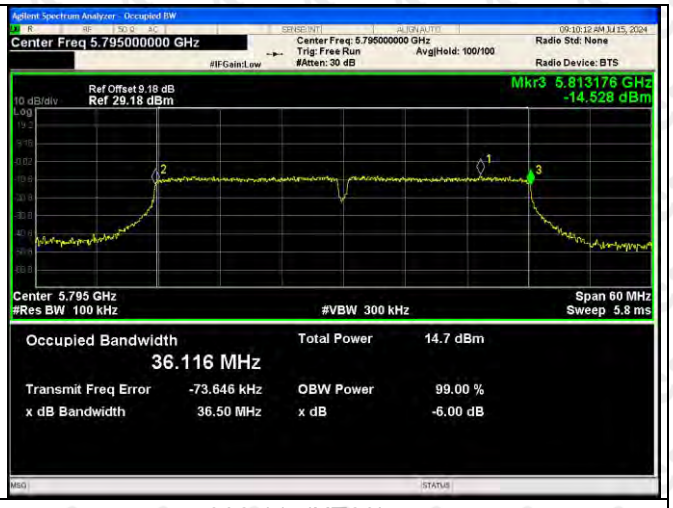


802.11ac(VH20)-5825

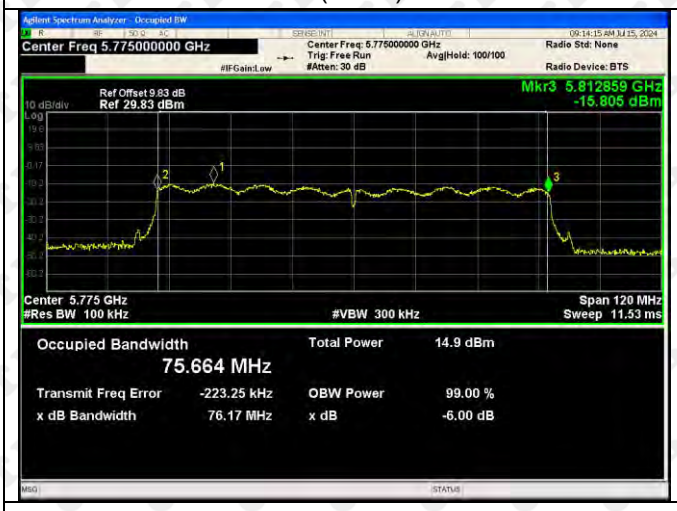
802.11ac(VH40)-5755

802.11ac(VH40)-5795

802.11ac(VH80)-5775



802.11n(HT20)-5745

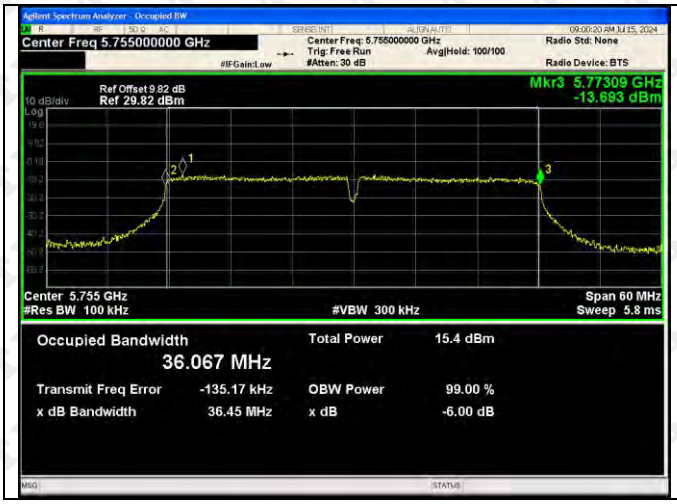


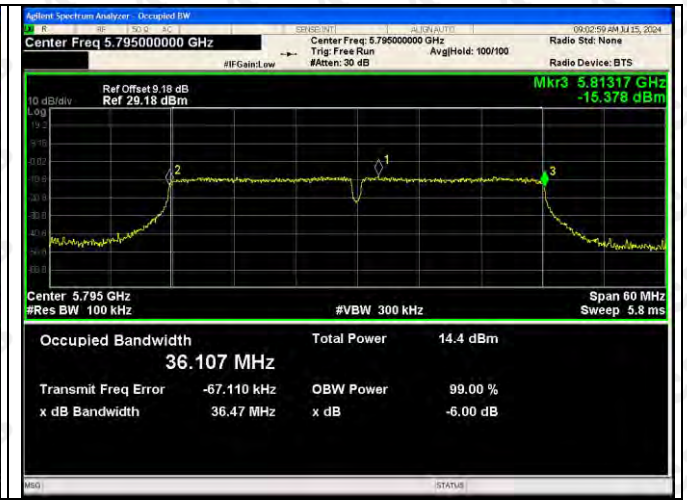
802.11n(HT20)-5785

802.11n(HT20)-5825

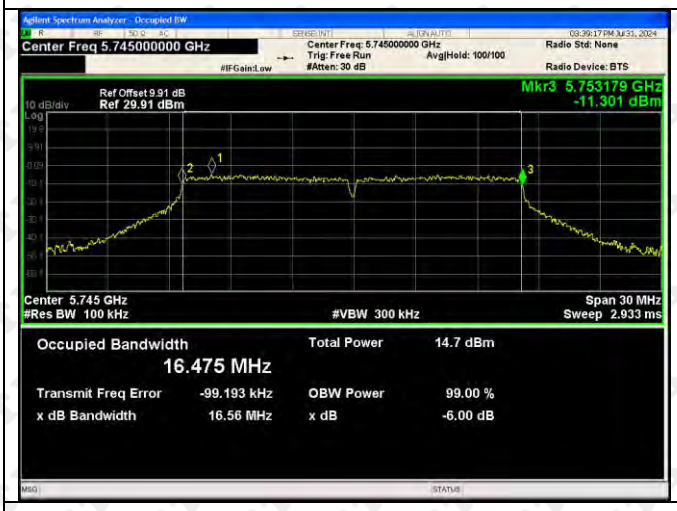
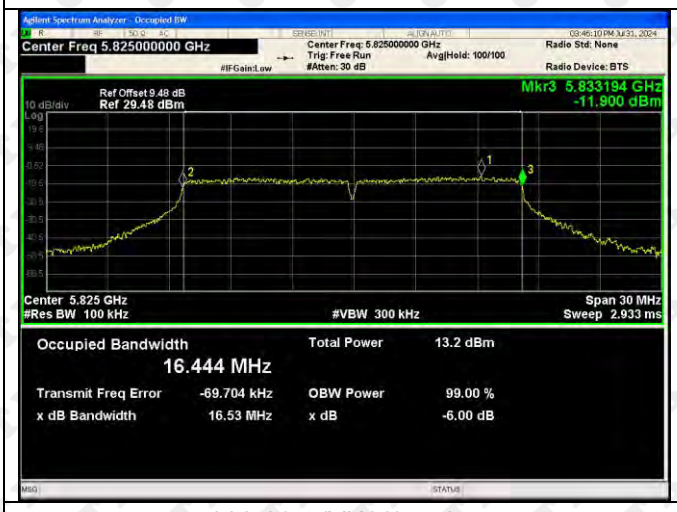
5802.11n(HT40)-5755

802.11n(HT40)-5795





ANT2:

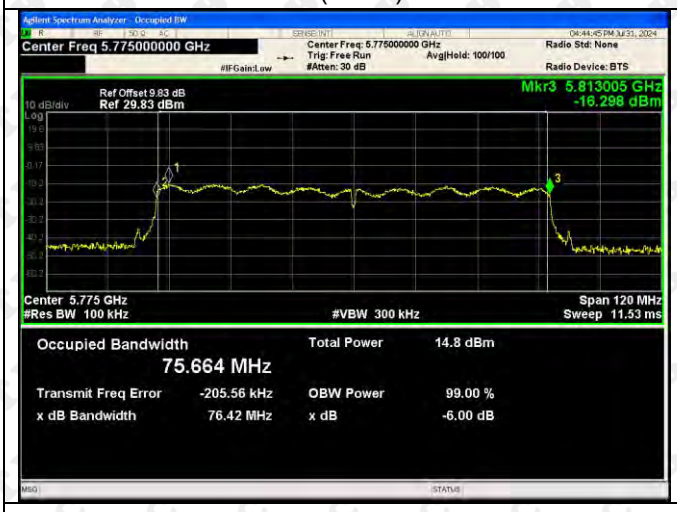
802.11a-5745	802.11a-5785
	
802.11a-5825	802.11ac(VH20)-5745
	
802.11ac(VH20)-5785	802.11ac(VH20)-5825

802.11ac(VH40)-5755

802.11ac(VH40)-5795

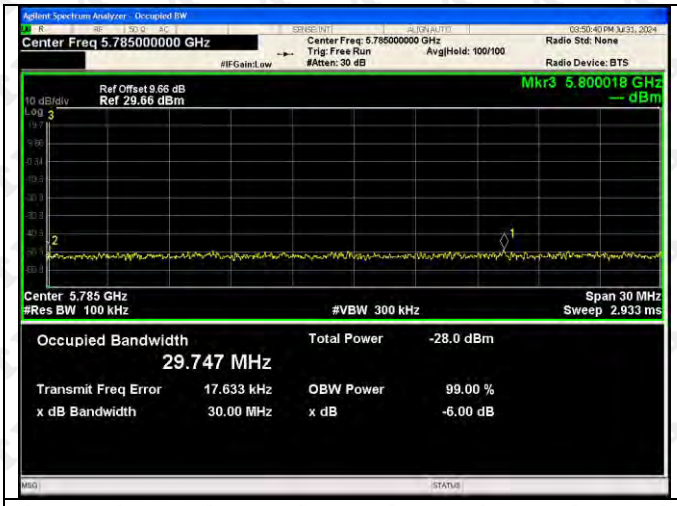
802.11ac(VH80)-5775

802.11n(HT20)-5745



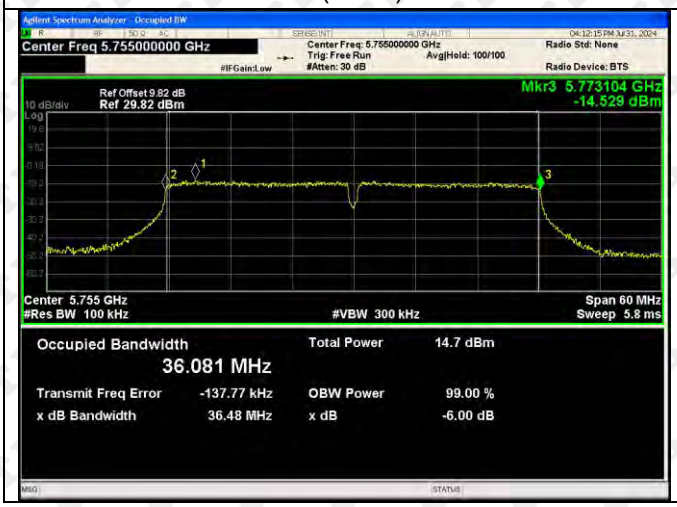
802.11n(HT20)-5785

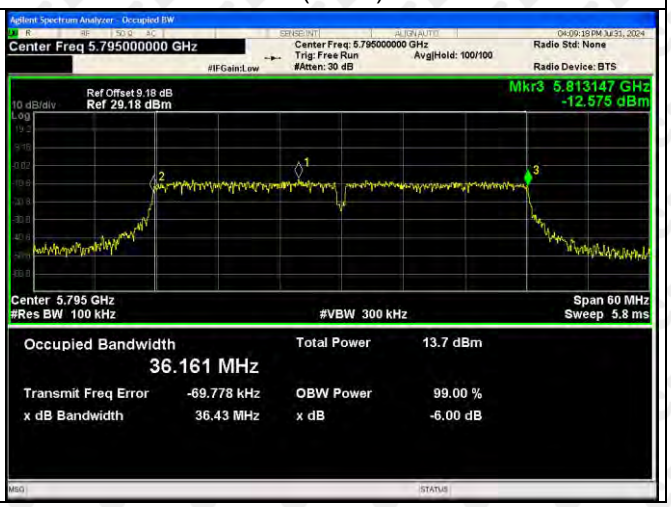
802.11n(HT20)-5825



5802.11n(HT40)-5755

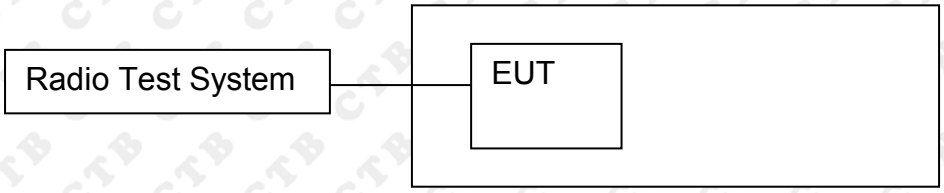
802.11n(HT40)-5795





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 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

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	2.642	-2.549	/	11	Pass
	5200	2.805	-2.769	/	11	Pass
	5240	3.606	-1.908	/	11	Pass
802.11ac(VH20)	5180	2.082	-3.365	3.172	11	Pass
	5200	2.318	-2.464	3.565	11	Pass
	5240	3.093	-1.653	4.349	11	Pass
802.11ac(VH40)	5190	-1.237	-5.679	0.097	11	Pass
	5230	0.431	-4.876	1.553	11	Pass
802.11n(VH20)	5180	2.117	-2.922	3.301	11	Pass
	5200	2.337	-2.817	3.494	11	Pass
	5240	3.053	-2.151	4.198	11	Pass
802.11n(VH40)	5190	-0.933	-5.461	0.378	11	Pass
	5230	0.165	-4.972	1.326	11	Pass
802.11ac(VH80)	5230	-1.286	-6.786	-0.208	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	-5.961	-4.859	/	30	Pass
	5785	-8.277	-6.236	/	30	Pass
	5825	-3.673	-6.098	/	30	Pass
802.11ac(VH20)	5745	-4.251	-4.901	-1.554	30	Pass
	5785	-6.161	-6.877	-3.494	30	Pass
	5825	-5.505	-6.638	-3.024	30	Pass
802.11ac(VH40)	5755	-8.071	-8.162	-5.106	30	Pass
	5795	-8.308	-10.156	-6.124	30	Pass
802.11n(VH20)	5775	-4.663	-4.994	-1.815	30	Pass
	5745	-6.174	-7.193	-3.643	30	Pass
	5785	-4.062	-6.626	-2.147	30	Pass
802.11n(VH40)	5825	-7.594	-8.196	-4.874	30	Pass
	5755	-8.781	-9.46	-6.097	30	Pass
802.11ac(VH80)	5795	-10.276	-10.005	-7.128	30	Pass

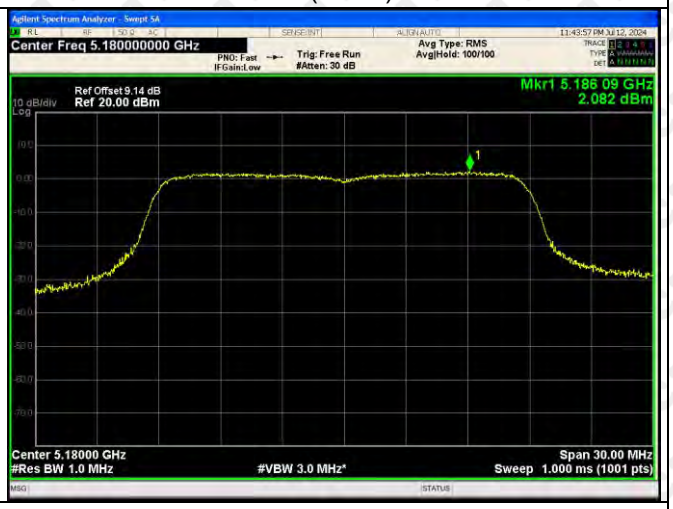
5180-5240MHz
ANT 1

802.11a-5180

802.11a-5200

802.11a-5240

802.11ac(VH20)-5180



802.11ac(VH20)-5200

802.11ac(VH20)-5240

802.11ac(VH40)-5190

802.11ac(VH40)-5230

802.11ac(VH80)-5210

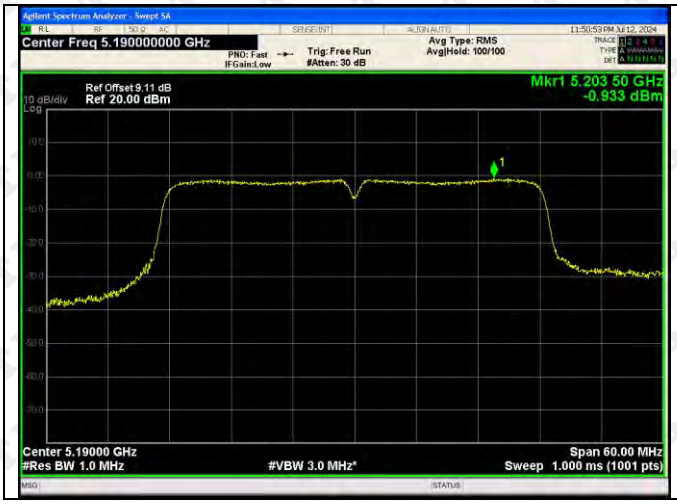
802.11n(HT20)-5180

802.11n(HT20)-5200

802.11n(HT20)-5240

802.11n(HT40)-5190

802.11n(HT40)-5230



ANT2

802.11a-5180	802.11a-5200
802.11a-5240	802.11ac(VH20)-5180
802.11ac(VH20)-5200	802.11ac(VH20)-5240

802.11ac(VH40)-5190

802.11ac(VH40)-5230

802.11ac(VH80)-5210

802.11n(HT20)-5180

802.11n(HT20)-5200

802.11n(HT20)-5240

802.11n(HT40)-5190

802.11n(HT40)-5230

5745-5825MHz
ANT 1:

802.11a-5745

802.11a-5785

802.11a-5825

802.11ac(VH20)-5745

802.11ac(VH20)-5785

802.11ac(VH20)-5825

802.11ac(VH40)-5755

802.11ac(VH40)-5795

802.11ac(VH80)-5775

802.11n(HT20)-5745

802.11n(HT20)-5785

802.11n(HT20)-5825

5802.11n(HT40)-5755

802.11n(HT40)-5795

ANT2:

802.11a-5745	802.11a-5785
802.11a-5825	802.11ac(VH20)-5745
802.11ac(VH20)-5785	802.11ac(VH20)-5825

802.11ac(VH40)-5755

802.11ac(VH40)-5795

802.11ac(VH80)-5775

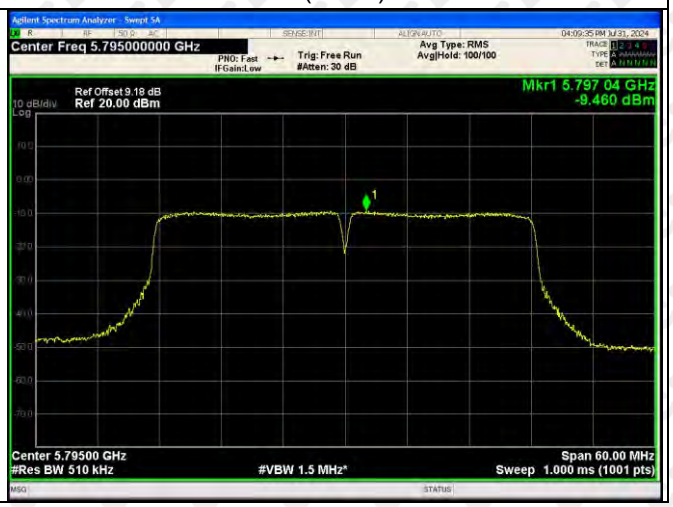
802.11n(HT20)-5745

802.11n(HT20)-5785

802.11n(HT20)-5825

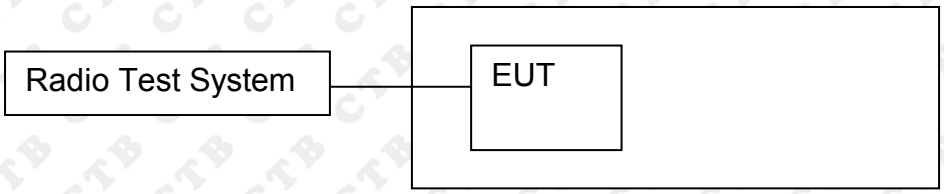
5802.11n(HT40)-5755

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)	5	5180.0360	5180	0.0360	6.9585
		V max (V)	5.5	5180.0991	5180	0.0991	19.1381
		V min (V)	4.5	5180.1086	5180	0.1086	20.9632
Limits				±20ppm			
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)	0	5180.0308	5180	0.0308	5.9430
		T (°C)	10	5180.0061	5180	0.0061	1.1766
		T (°C)	20	5180.0479	5180	0.0479	9.2495
		T (°C)	30	5180.0124	5180	0.0124	2.3870
		T (°C)	40	5180.0281	5180	0.0281	5.4335
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)	5	5200.0111	5200	0.0111	2.1306
		V max (V)	5.5	5200.0165	5200	0.0165	3.1754
		V min (V)	4.5	5200.0459	5200	0.0459	8.8300
Limits				±20ppm			
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)	0	5200.0142	5200	0.0142	2.7280
		T (°C)	10	5200.0117	5200	0.0117	2.2495
		T (°C)	20	5200.0005	5200	0.0005	0.1046
		T (°C)	30	5200.0171	5200	0.0171	3.2971
		T (°C)	40	5200.0409	5200	0.0409	7.8743
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)	5	5240.0432	5240	0.0432	8.2357
		V max (V)	5.5	5240.0403	5240	0.0403	7.6902
		V min (V)	4.5	5240.0273	5240	0.0273	5.2138
Limits				±20ppm			
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)	0	5240.0329	5240	0.0329	6.2738
		T (°C)	10	5240.0474	5240	0.0474	9.0407
		T (°C)	20	5240.0078	5240	0.0078	1.4872
		T (°C)	30	5240.0293	5240	0.0293	5.5982
		T (°C)	40	5240.0190	5240	0.0190	3.6266
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)	5	5180.0112	5180	0.0112	2.1573
		V max (V)	5.5	5180.0928	5180	0.0928	17.9210
		V min (V)	4.5	5180.0852	5180	0.0852	16.4415
Limits				±20ppm			
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)	0	5180.0498	5180	0.0498	9.6207
		T (°C)	10	5180.0592	5180	0.0592	11.4305
		T (°C)	20	5180.0870	5180	0.0870	16.7922
		T (°C)	30	5180.0505	5180	0.0505	9.7444
		T (°C)	40	5180.0358	5180	0.0358	6.9177
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)	5	5200.0142	5200	0.0142	2.7393
		V max (V)	5.5	5200.0432	5200	0.0432	8.3004
		V min (V)	4.5	5200.0121	5200	0.0121	2.3209
Limits				±20ppm			
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)	0	5200.0352	5200	0.0352	6.7640
		T (°C)	10	5200.0254	5200	0.0254	4.8786
		T (°C)	20	5200.0765	5200	0.0765	14.7082
		T (°C)	30	5200.0520	5200	0.0520	9.9920
		T (°C)	40	5200.0894	5200	0.0894	17.1995
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)	5	5240.0380	5240	0.0380	7.2612
		V max (V)	5.5	5240.0146	5240	0.0146	2.7783
		V min (V)	4.5	5240.0755	5240	0.0755	14.4029
Limits				±20ppm			
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)	0	5240.0815	5240	0.0815	15.5469
		T (°C)	10	5240.0531	5240	0.0531	10.1259
		T (°C)	20	5240.0151	5240	0.0151	2.8867
		T (°C)	30	5240.0197	5240	0.0197	3.7672
		T (°C)	40	5240.0710	5240	0.0710	13.5474
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)	5	5745.0091	5745	0.0091	1.5780
		V max (V)	5.5	5745.0480	5745	0.0480	8.3530
		V min (V)	4.5	5745.0091	5745	0.0091	1.5780
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	0	5745.0526	5745	0.0526	9.1564
		T (°C)	10	5745.0277	5745	0.0277	4.8204
		T (°C)	20	5745.0472	5745	0.0472	8.2076
		T (°C)	30	5745.0444	5745	0.0444	7.7356
		T (°C)	40	5745.0219	5745	0.0219	3.8057
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)	5	5785.0759	5785	0.0759	13.1262
		V max (V)	5.5	5785.0333	5785	0.0333	5.7628
		V min (V)	4.5	5785.0469	5785	0.0469	8.1015
Limits				±20ppm			
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)	0	5785.0759	5785	0.0759	13.1144
		T (°C)	10	5785.0481	5785	0.0481	8.3188
		T (°C)	20	5785.0625	5785	0.0625	10.8017
		T (°C)	30	5785.0580	5785	0.0580	10.0278
		T (°C)	40	5785.0107	5785	0.0107	1.8541
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)	5	5825.0145	5825	0.0145	2.4941
		V max (V)	5.5	5825.0727	5825	0.0727	12.4855
		V min (V)	4.5	5825.0541	5825	0.0541	9.2799
Limits				±20ppm			
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)	0	5825.0137	5825	0.0137	2.3463
		T (°C)	10	5825.0859	5825	0.0859	14.7493
		T (°C)	20	5825.0869	5825	0.0869	14.9159
		T (°C)	30	5825.0471	5825	0.0471	8.0852
		T (°C)	40	5825.0429	5825	0.0429	7.3574
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)	5	5745.0371	5745	0.0371	6.4606
		V max (V)	5.5	5745.0238	5745	0.0238	4.1459
		V min (V)	4.5	5745.0843	5745	0.0843	14.6693
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	5	T (°C)	0	5745.0553	5745	0.0553	9.6193
		T (°C)	10	5745.0762	5745	0.0762	13.2602
		T (°C)	20	5745.0509	5745	0.0509	8.8673
		T (°C)	30	5745.0811	5745	0.0811	14.1084
		T (°C)	40	5745.0277	5745	0.0277	4.8258
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)	5	5785.0350	5785	0.0350	6.0511
		V max (V)	5.5	5785.0027	5785	0.0027	0.4676
		V min (V)	4.5	5785.0088	5785	0.0088	1.5250
Limits				±20ppm			
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)	0	5785.0391	5785	0.0391	6.7602
		T (°C)	10	5785.0448	5785	0.0448	7.7409
		T (°C)	20	5785.0493	5785	0.0493	8.5244
		T (°C)	30	5785.0367	5785	0.0367	6.3380
		T (°C)	40	5785.0733	5785	0.0733	12.6641
		T (°C)	50	5785.0572	5785	0.0572	9.8802
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)	5	5825.0185	5825	0.0185	3.1739
		V max (V)	5.5	5825.0694	5825	0.0694	11.9204
		V min (V)	4.5	5825.0605	5825	0.0605	10.3795
Limits				±20ppm			
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)	0	5825.0605	5825	0.0605	10.3852
		T (°C)	10	5825.0525	5825	0.0525	9.0201
		T (°C)	20	5825.0172	5825	0.0172	2.9516
		T (°C)	30	5825.0194	5825	0.0194	3.3341
		T (°C)	40	5825.0071	5825	0.0071	1.2227
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.

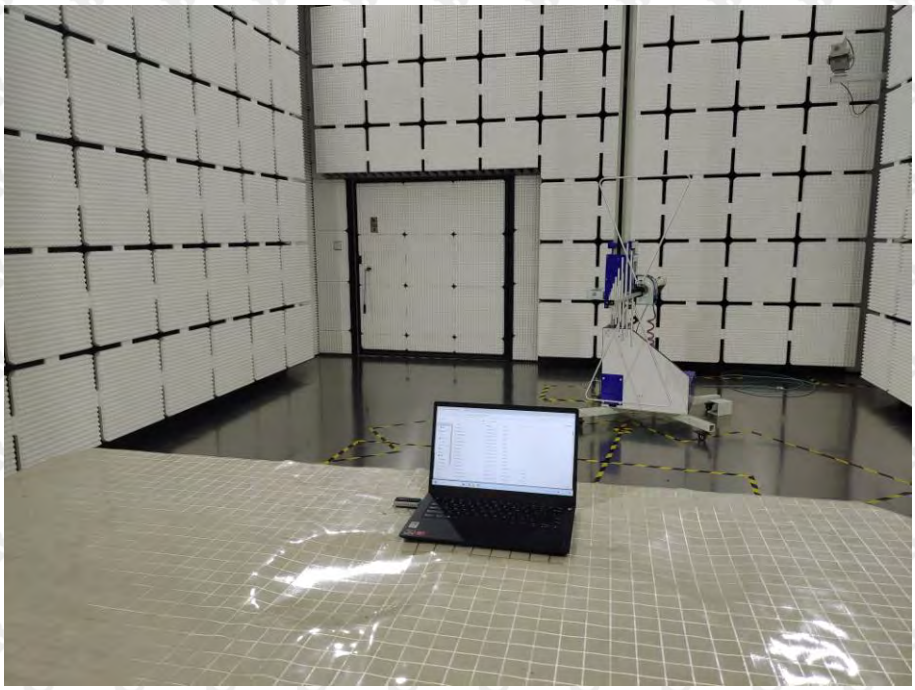
EUT Antenna:

The antenna is PCB antenna and no consideration of replacement. The best case gain of the antenna is WiFi (5.2G):ANT1: -3.94dBi, ANT2: -0.94dBi, WiFi (5.8G):Ant1: -0.51dBi, Ant2: -1.39dBi

15. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz



Above 1GHz

Conducted Emission

※※※※※ **END OF REPORT** ※※※※※