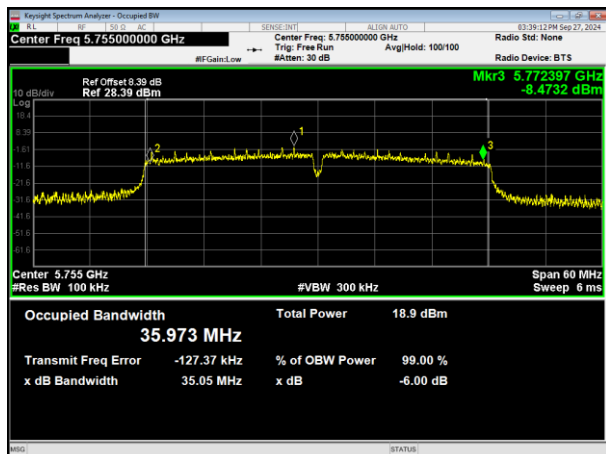
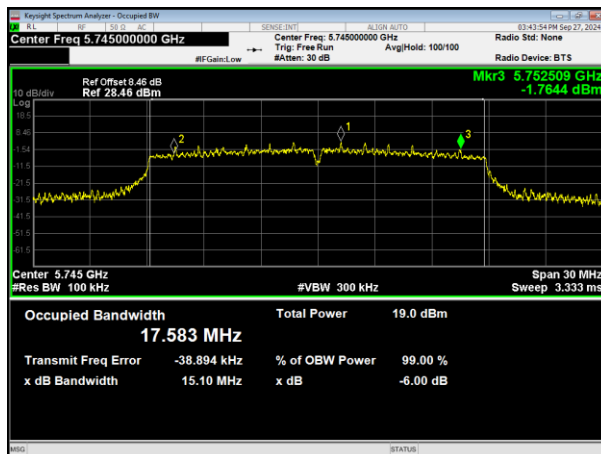




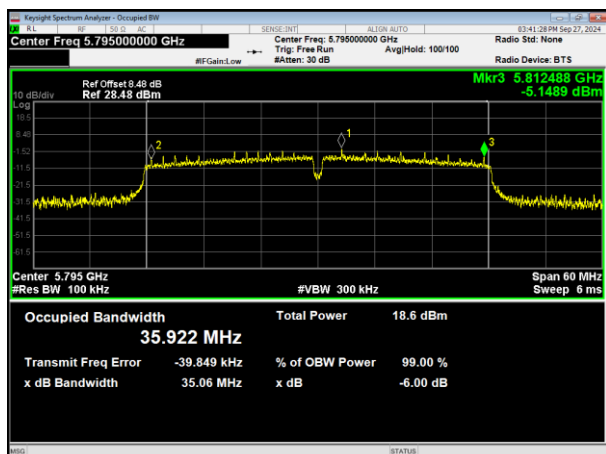
802.11n HT40



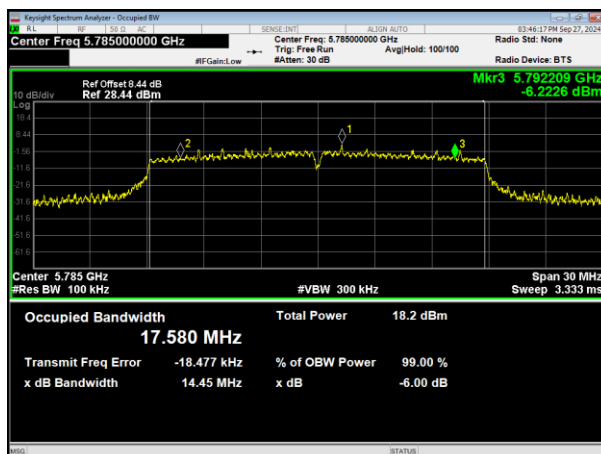
802.11ac HT20



5755MHz



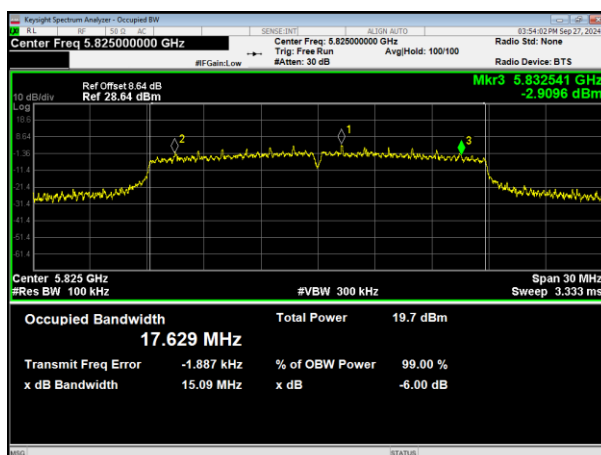
5745MHz



5795MHz



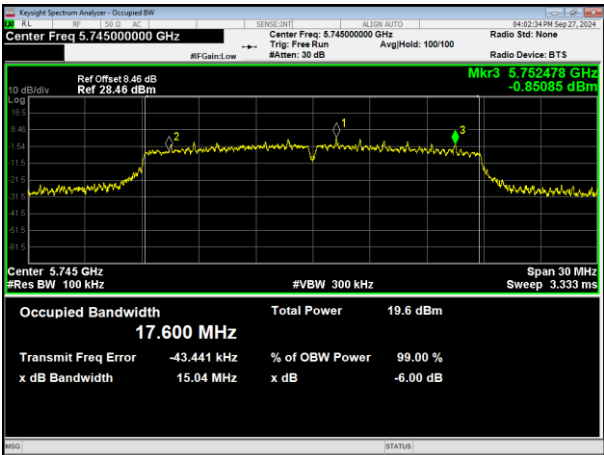
5785MHz



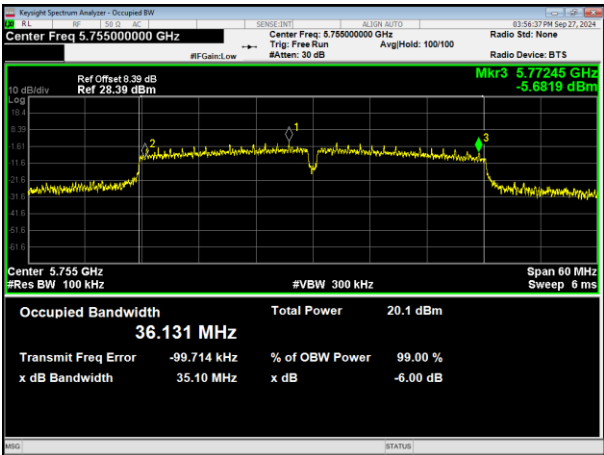
5825MHz



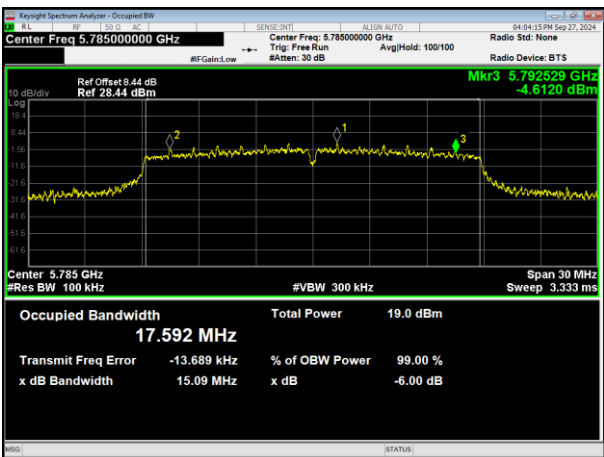
802.11ax HT20



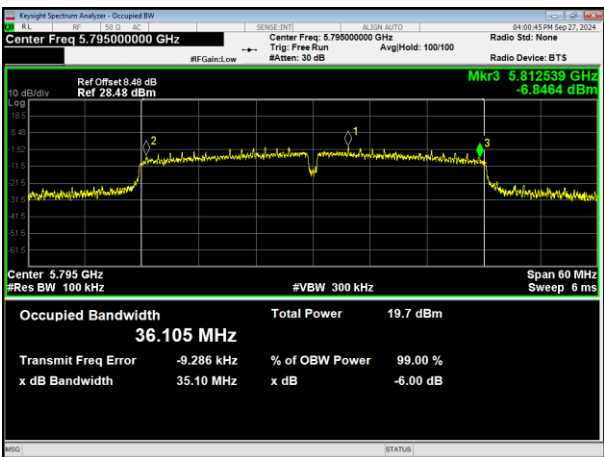
802.11ac HT40



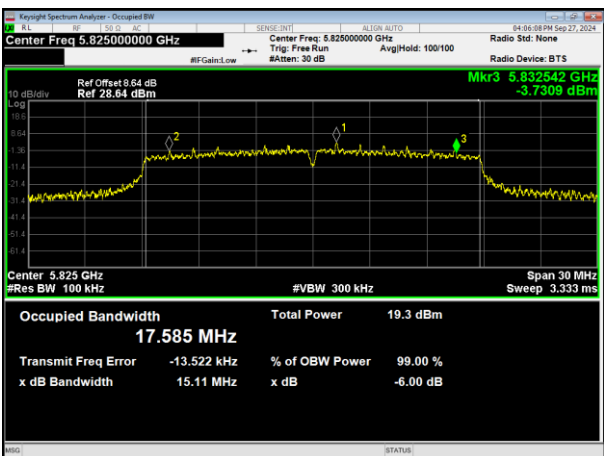
5745MHz



5755MHz



5785MHz

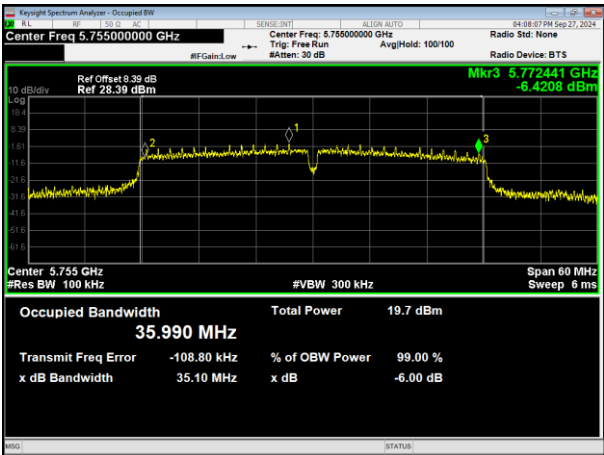


5795MHz

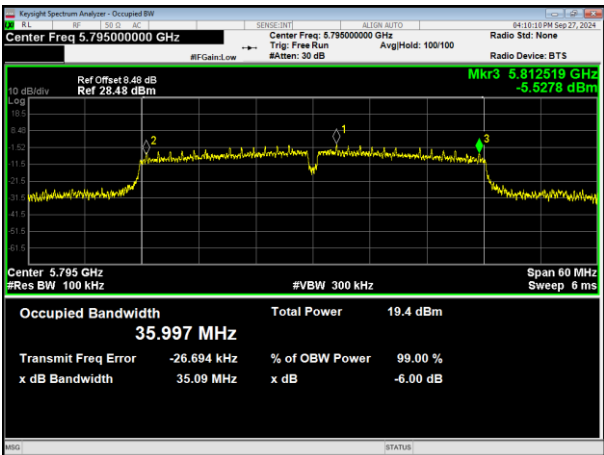
5825MHz



802.11ax HT40



5755MHz



5795MHz



7. DUTY CYCLE TEST SIGNAL

7.1 APPLIED PROCEDURES / LIMIT

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

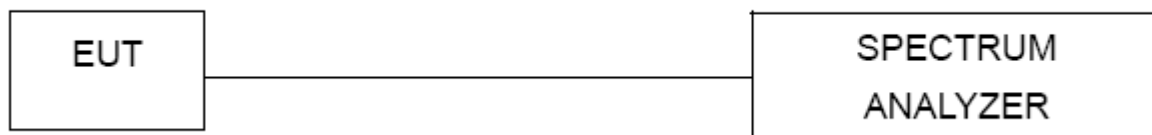
7.1.1 TEST PROCEDURE

1. Set RBW = 1 MHz.
2. Set the video bandwidth (VBW) $\geq$ RBW.
3. Detector = Peak.
4. Sweep = auto couple.
5. Allow the trace to stabilize.
6. Span=0

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

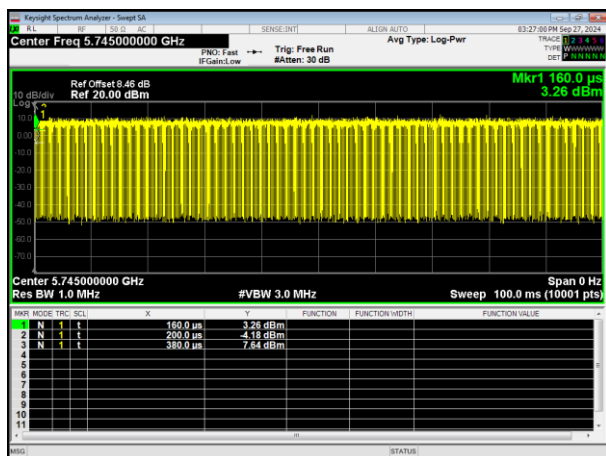
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

**7.1.5 TEST RESULTS**

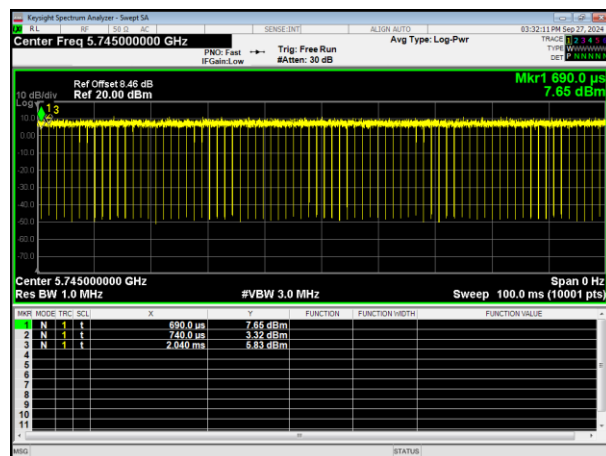
Operation Mode		Duty Cycle(%)	Duty Fator (dB) 10 * log (1/ Duty cycle)
Band 4	802.11a	81.82	0.87
	802.11n(HT20)	96.3	0.16
	802.11n(HT40)	92.75	0.33
	802.11ac(HT20)	93.06	0.31
	802.11ac(HT40)	89.74	0.47
	802.11ax(HT20)	92.16	0.35
	802.11ax(HT40)	82.76	0.82



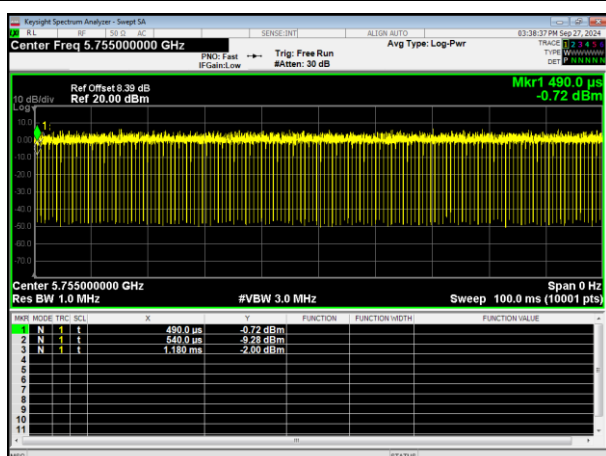
802.11a



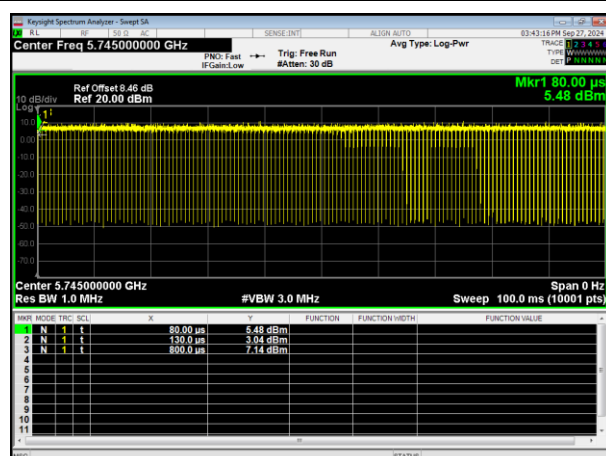
802.11n HT20



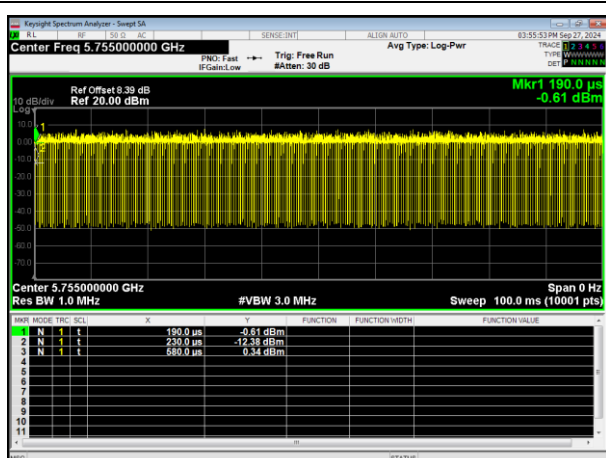
802.11n HT40



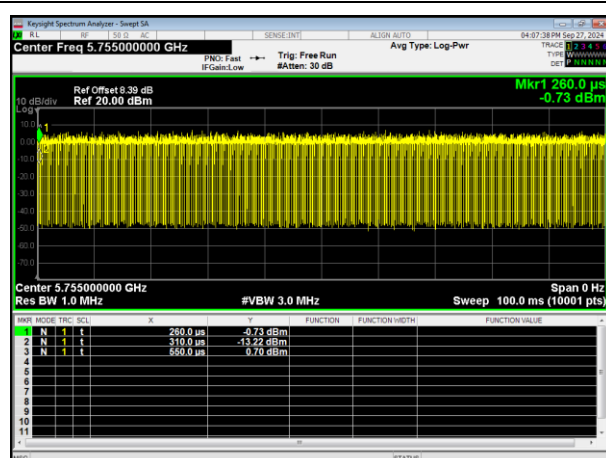
802.11ac HT20



802.11ac HT40

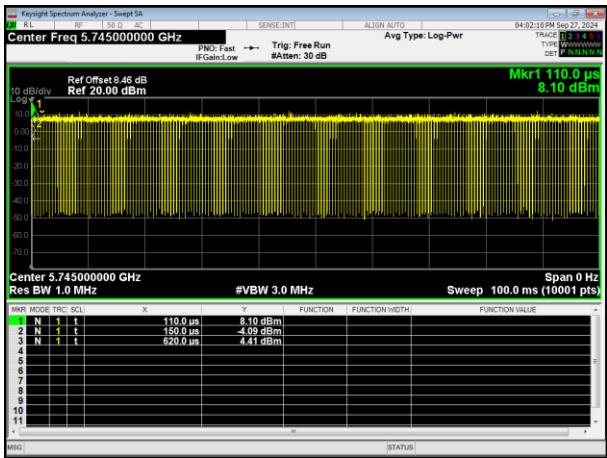


802.11ax HT40





802.11ax HT20





8. FREQUENCY STABILITY

8.1 APPLIED PROCEDURES / 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.

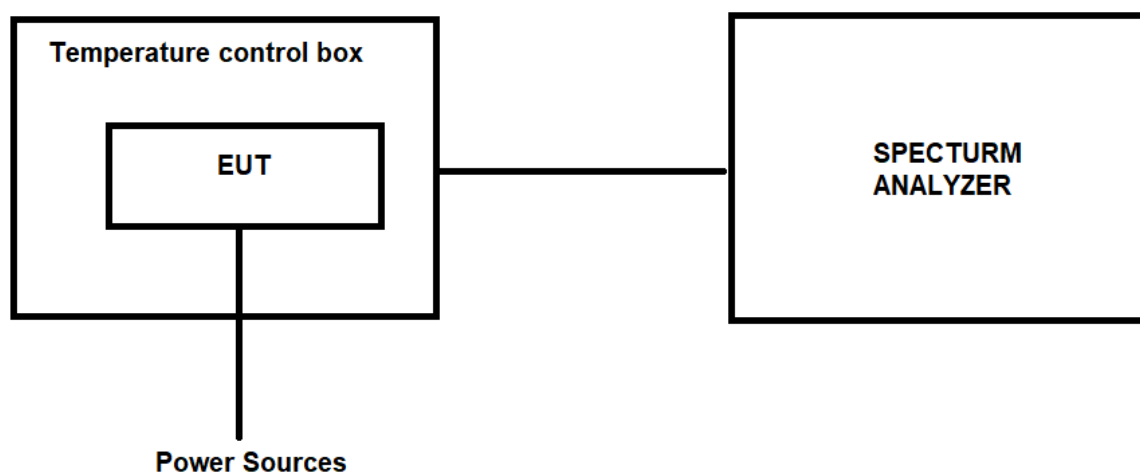
8.1.1 TEST PROCEDURE

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.

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.



8.1.5 TEST RESULTS

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)			Δ Frequency (MHz)		
			802.11a	802.11n HT20	802.11ac HT20	802.11a	802.11n HT20	802.11ac HT20
132V	-20℃	5745	5745.0336	5745.0341	5745.0352	5.8486	5.9356	6.1271
		5785	5785.0354	5785.0363	5785.0316	6.1193	6.2748	5.4624
		5825	5825.0385	5825.0352	5825.0364	6.6094	6.0429	6.2489
108V		5745	5745.0212	5745.0214	5745.0252	3.6902	3.7250	4.3864
		5785	5785.0356	5785.0336	5785.0336	6.1538	5.8081	5.8081
		5825	5825.0414	5825.0452	5825.0452	7.1073	7.7597	7.7597
120V	25℃	5745	5745.0363	5745.0314	5745.0314	6.3185	5.4656	5.4656
		5785	5785.0425	5785.0463	5785.0433	7.3466	8.0035	7.4849
		5825	5825.0263	5825.0252	5825.0252	4.5150	4.3262	4.3262
132V	50℃	5745	5745.0614	5745.0641	5745.0614	10.6876	11.1575	10.6876
		5785	5785.0463	5785.0463	5785.0436	8.0035	8.0035	7.5367
		5825	5825.0646	5825.0614	5825.0652	11.0901	10.5408	11.1931
108V	50℃	5745	5745.0417	5745.0425	5745.0414	7.2585	7.3977	7.2063
		5785	5785.0252	5785.0233	5785.0233	4.3561	4.0277	4.0277
		5825	5825.0763	5825.0733	5825.0764	13.0987	12.5837	13.1159

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)		Δ Frequency (MHz)	
			802.11n HT40	802.11ac HT40	802.11n HT40	802.11ac HT40
132V	-20℃	5755	5755.0552	5755.0552	9.5917	9.5917
		5795	5795.0634	5795.0614	10.9405	10.5953
108V		5755	5755.0225	5755.0663	3.9096	11.5204
		5795	5795.0463	5795.0452	7.9896	7.7998
120V	25℃	5755	5755.0214	5755.0223	3.7185	3.8749
		5795	5795.0536	5795.0552	9.2494	9.5255
132V	50℃	5755	5755.0452	5755.0436	7.8540	7.5760
		5795	5795.0336	5795.0314	5.7981	5.4185
108V	50℃	5755	5755.0314	5755.0336	5.4561	5.8384
		5795	5795.0436	5795.0447	7.5237	7.7135



Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)	Δ Frequency (MHz)
			802.11ax HT20	802.11ax HT20
132V	-20℃	5745	5745.0325	5.6571
		5785	5785.0341	5.8946
		5825	5825.0322	5.5279
108V		5745	5745.0263	4.5779
		5785	5785.0341	5.8946
		5825	5825.0452	7.7597
120V	25℃	5745	5745.0339	5.9008
		5785	5785.0441	7.6232
		5825	5825.0285	4.8927
132V	50℃	5745	5745.0663	11.5405
		5785	5785.0414	7.1564
		5825	5825.0625	10.7296
108V	50℃	5745	5745.0436	7.5892
		5785	5785.0241	4.1659
		5825	5825.0774	13.2876

Test Voltage	Test Temp.	Measured Frequency (MHz)	Spectrum Frequency (MHz)	Δ Frequency(MHz)
			802.11ax HT40	802.11ax HT40
132V	-20℃	5755	5755.0536	9.3136
		5795	5795.0652	11.2511
108V		5755	5755.0233	4.0487
		5795	5795.0452	7.7998
120V	25℃	5755	5755.0236	4.1008
		5795	5795.0514	8.8697
132V	50℃	5755	5755.0425	7.3849
		5795	5795.0339	5.8499
108V	50℃	5755	5755.0352	6.1164
		5795	5795.0414	7.1441



9. TRANSMISSION IN THE ABSENCE OF DATA

9.1 STANDARD REQUIREMENT

According to §15.407(c)

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 signaling 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.

9.2 TEST RESULT

No non-compliance noted:
Refer to the theory of operation.

10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: 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.

10.2 EUT ANTENNA

The EUT antenna is Internal Antenna, It comply with the standard requirement.

11. TEST SEUUP PHOTO

Reference to the appendix I for details.

12. EUT PHOTO

Reference to the appendix II for details.

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