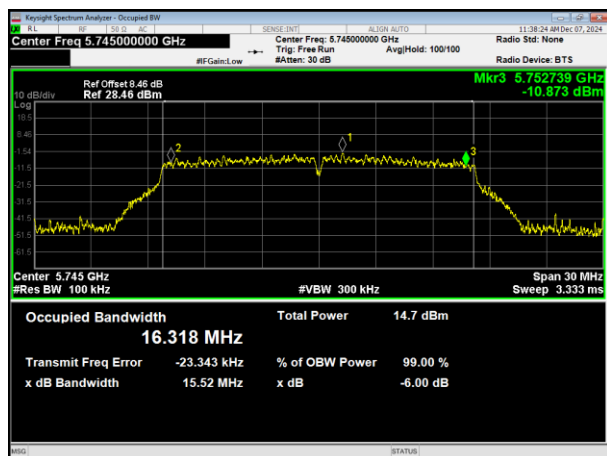
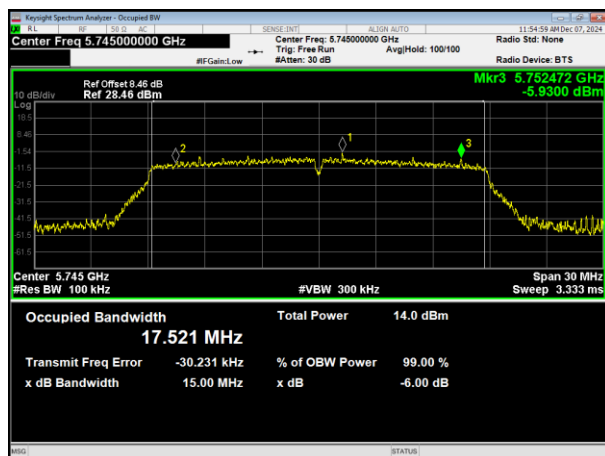




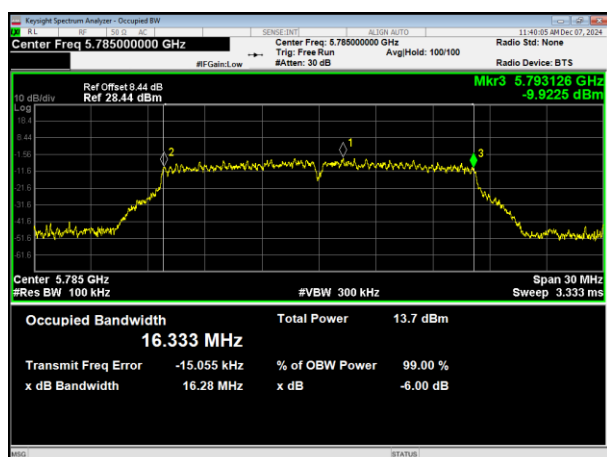
802.11a



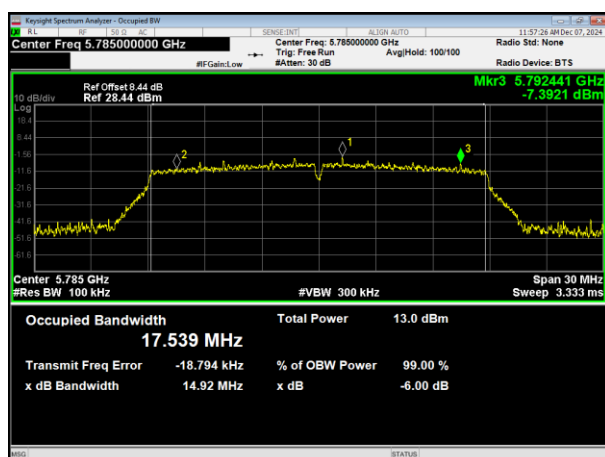
802.11ac HT20



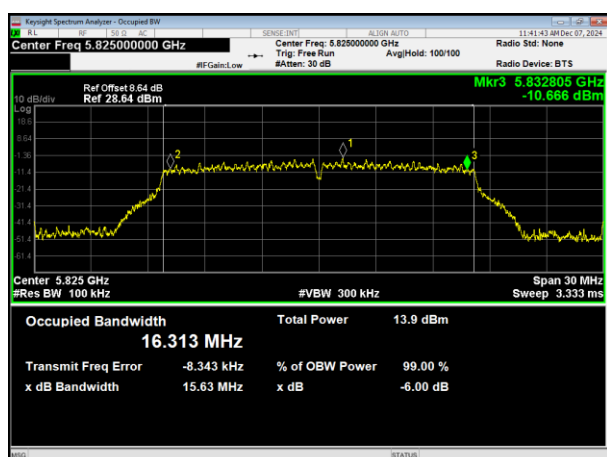
5745MHz



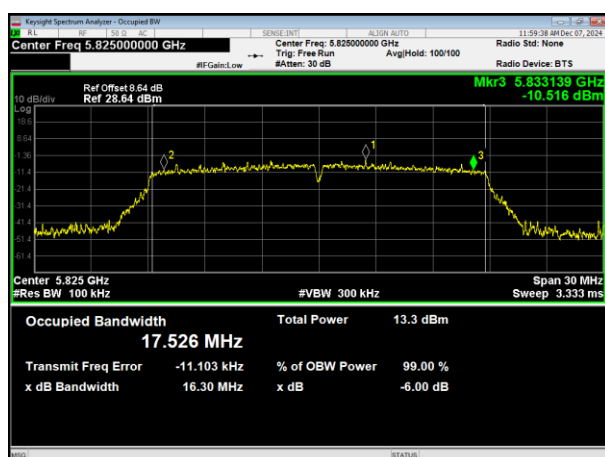
5745MHz



5785MHz



5785MHz

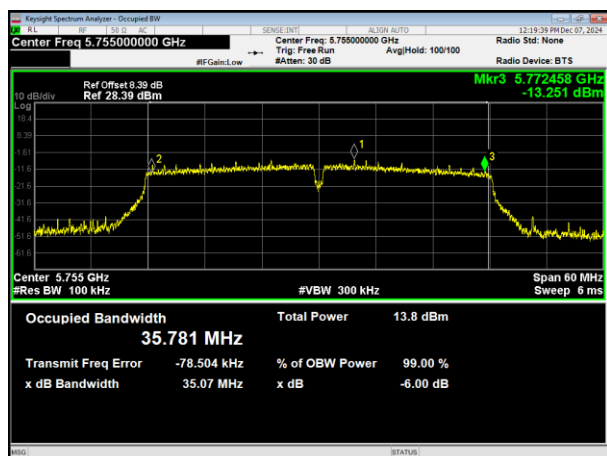


5825MHz

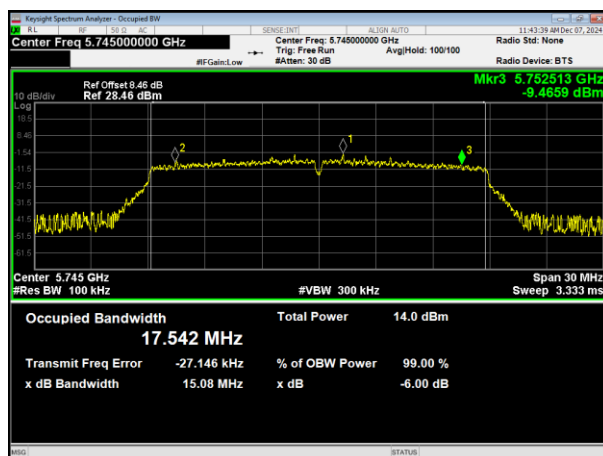
5825MHz



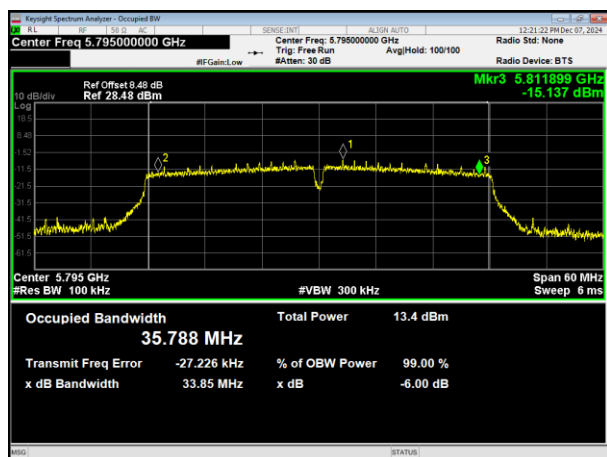
802.11ac HT40



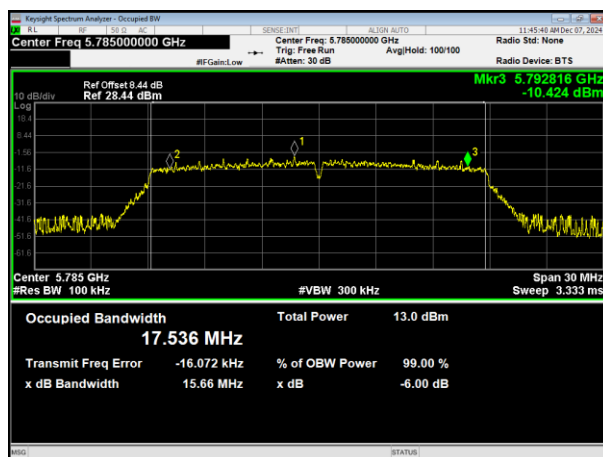
802.11n HT20



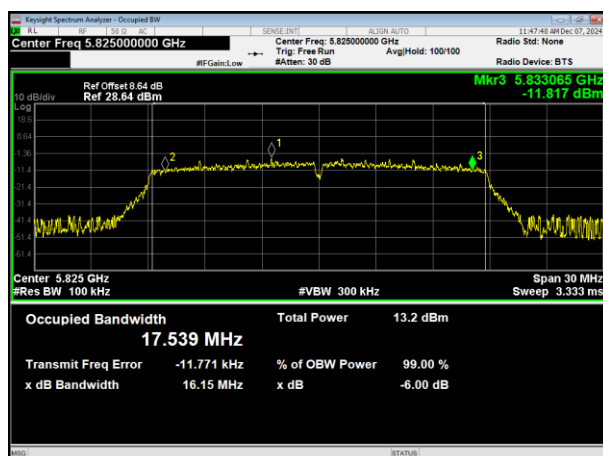
5755MHz



5745MHz



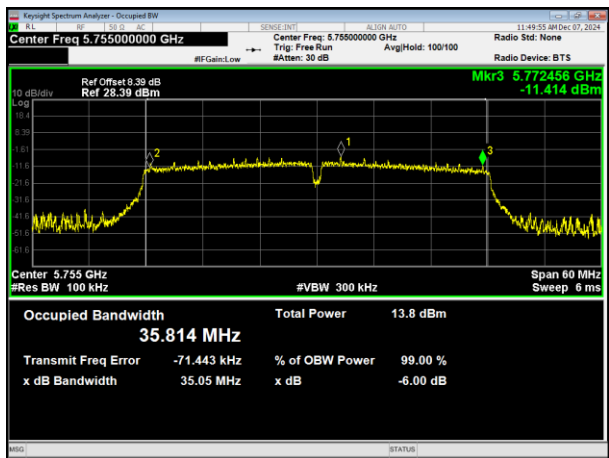
5795MHz



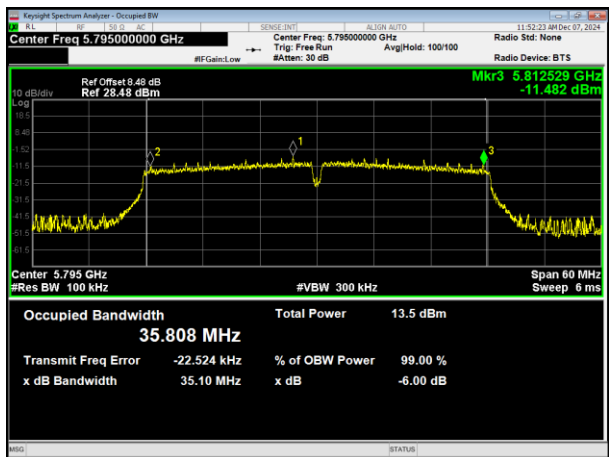
5825MHz



802.11n 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.

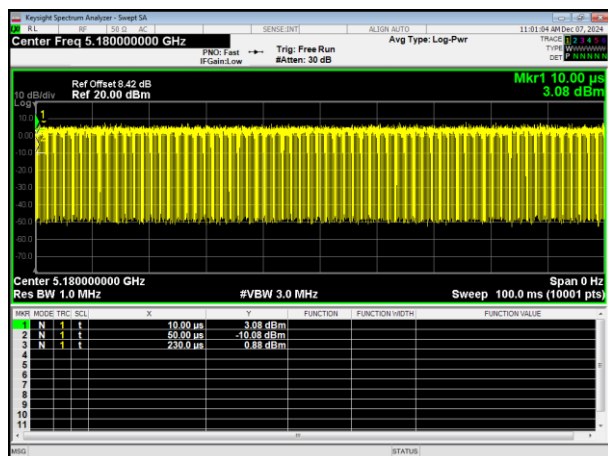
**7.1.5 TEST RESULTS**

		Test Channel	Duty Cycle(%)	Duty Fator (dB) 10 * log (1/ Duty cycle)
Band 1	802.11a	Low	81.82	0.87
		Middle	81.82	0.87
		High	81.82	0.87
	802.11ac HT20	Low	97.06	0.13
		Middle	97.04	0.13
		High	96.32	0.16
	802.11ac HT40	Low	94.29	0.26
		High	94.2	0.26
	802.11n HT20	Low	97.01	0.13
		Middle	97.01	0.13
		High	96.3	0.16
	802.11n HT40	Low	94.2	0.26
		High	92.86	0.32

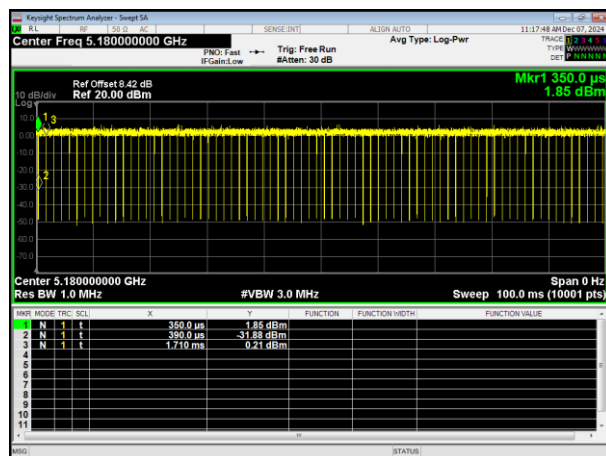
		Test Channel	Duty Cycle(%)	Duty Fator (dB) 10 * log (1/ Duty cycle)
Band 4	802.11a	Low	81.82	0.87
		Middle	81.82	0.87
		High	81.82	0.87
	802.11ac HT20	Low	97.04	0.13
		Middle	97.04	0.13
		High	96.32	0.16
	802.11ac HT40	Low	94.29	0.26
		High	94.2	0.26
	802.11n HT20	Low	97.04	0.13
		Middle	97.01	0.13
		High	97.04	0.13
	802.11n HT40	Low	94.2	0.26
		High	94.2	0.26



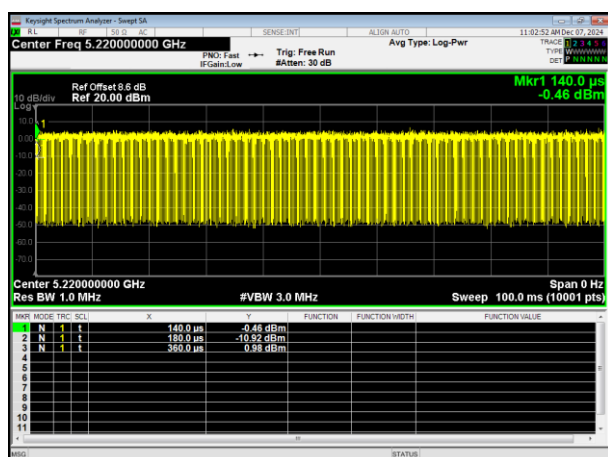
802.11a



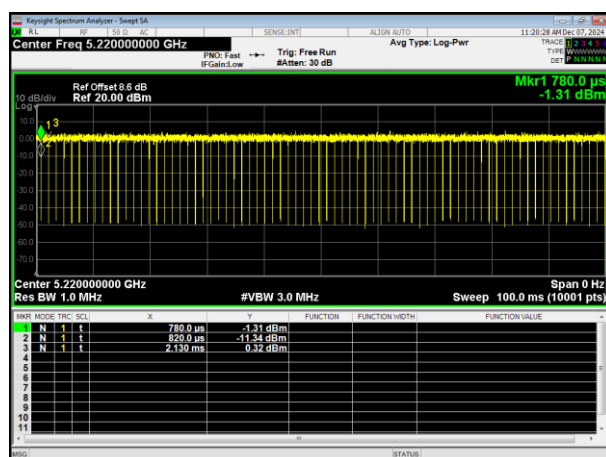
802.11ac HT20



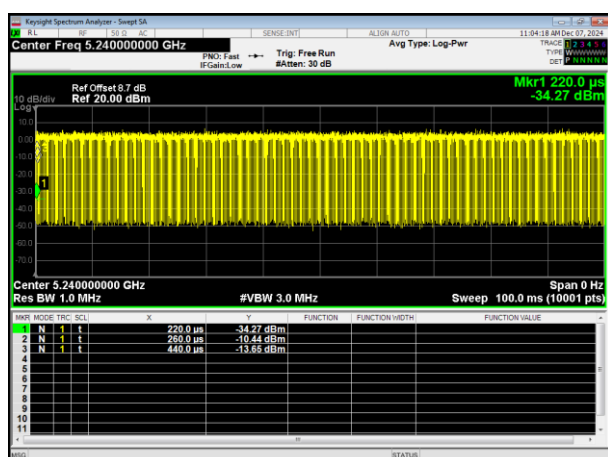
5180MHz



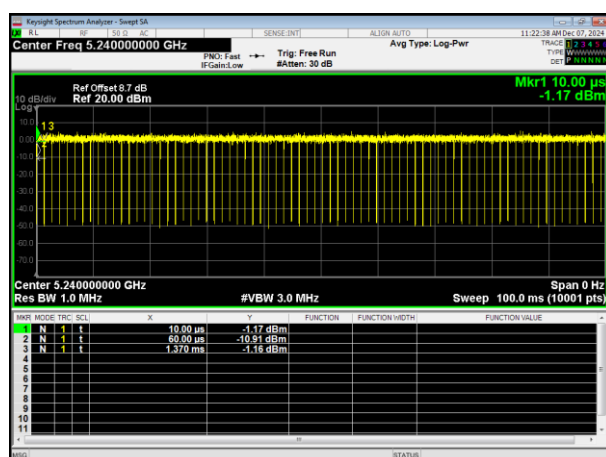
5180MHz



5200MHz



5200MHz



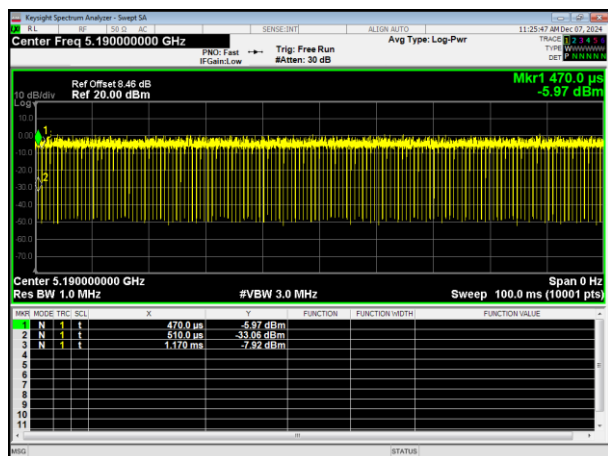
5240MHz



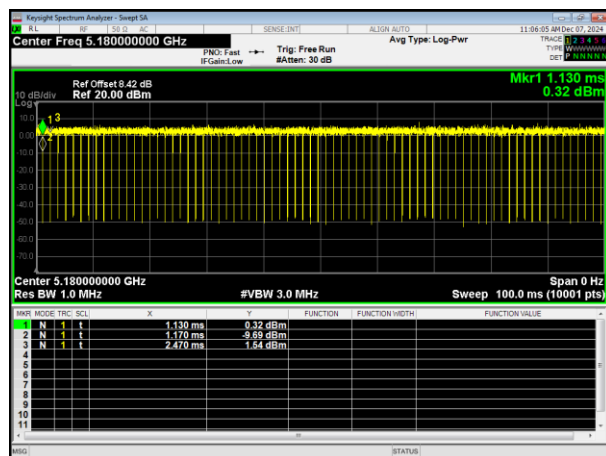
5240MHz



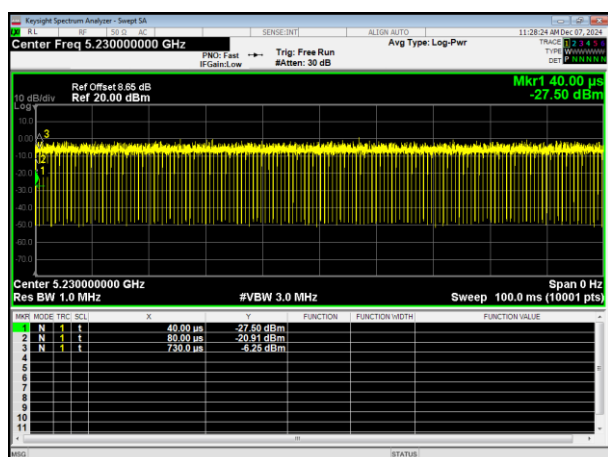
802.11ac HT40



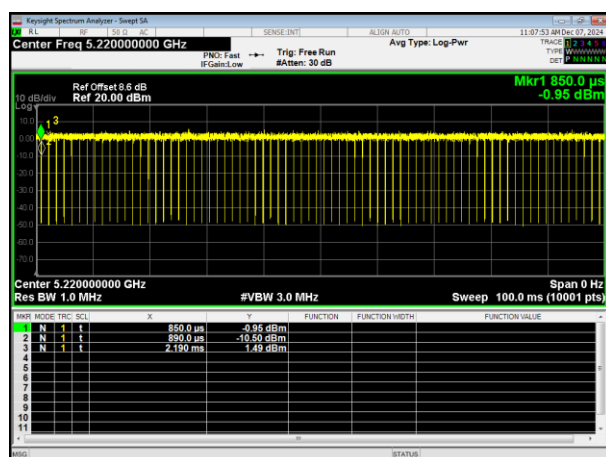
802.11n HT20



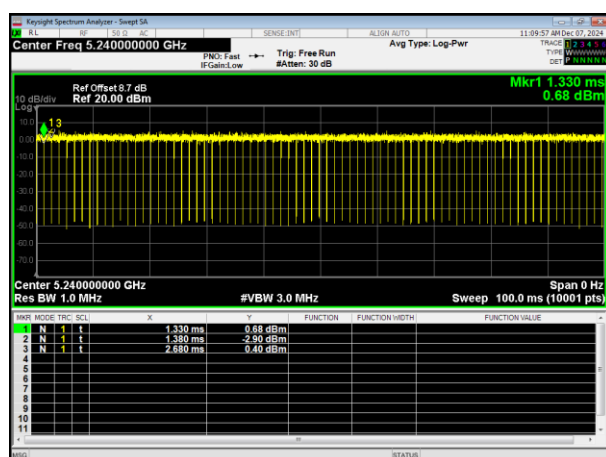
5190MHz



5180MHz



5230MHz

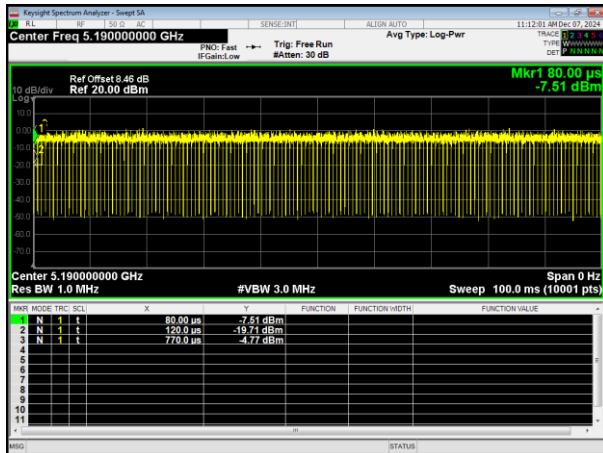


5200MHz

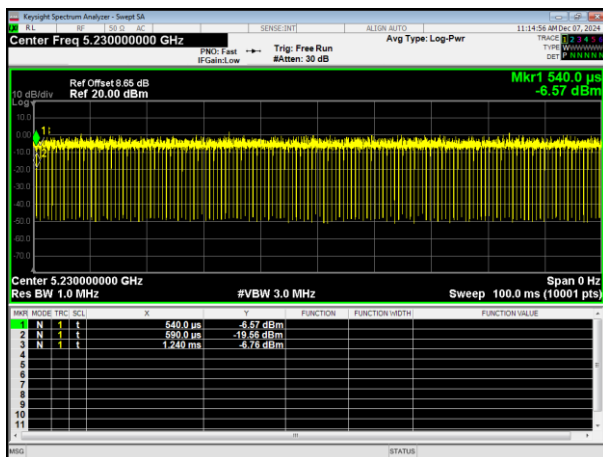
5240MHz



802.11n HT40



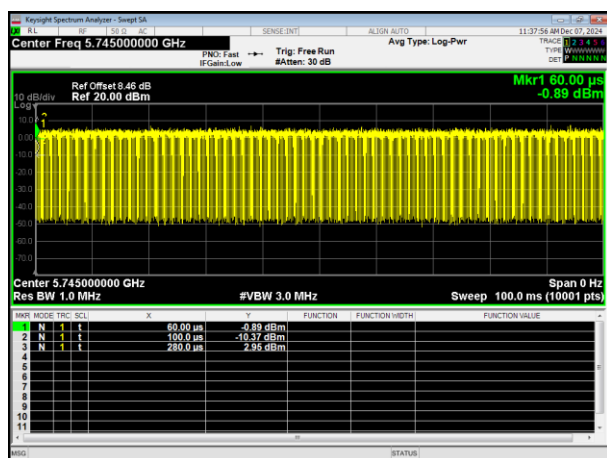
5190MHz



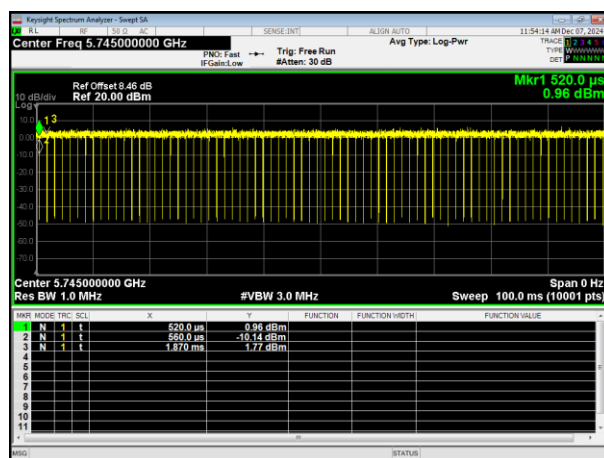
5230MHz



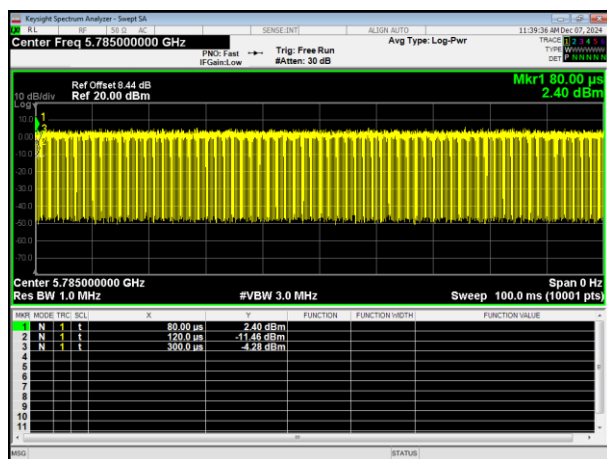
802.11a



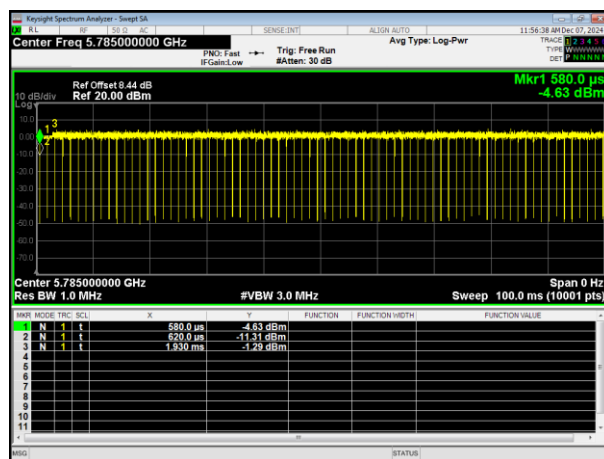
802.11ac HT20



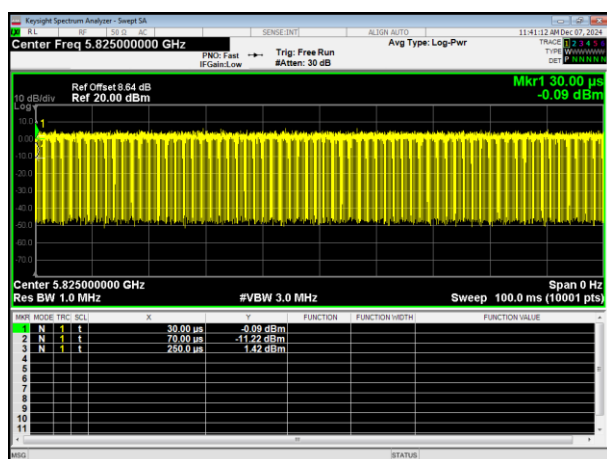
5745MHz



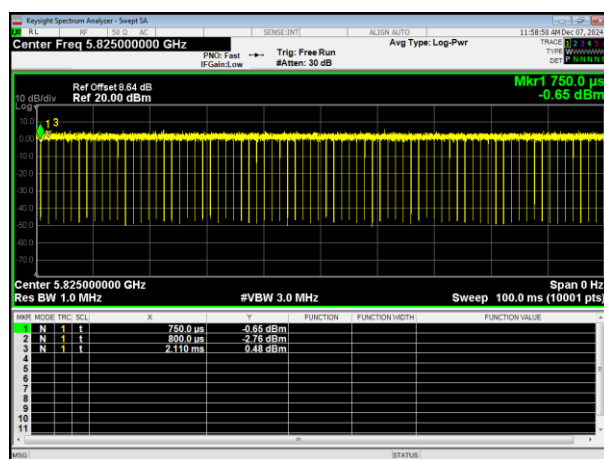
5745MHz



5785MHz



5785MHz

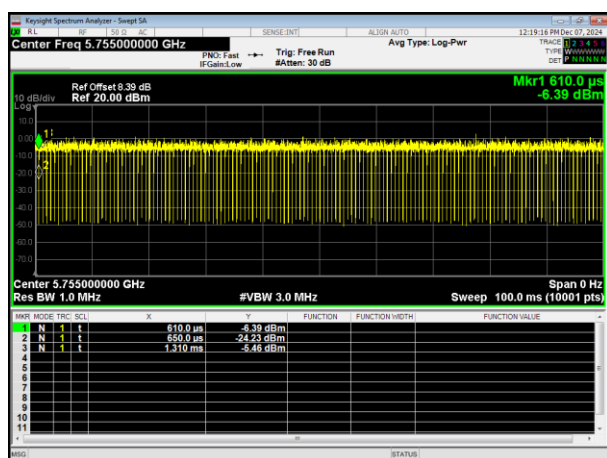


5825MHz

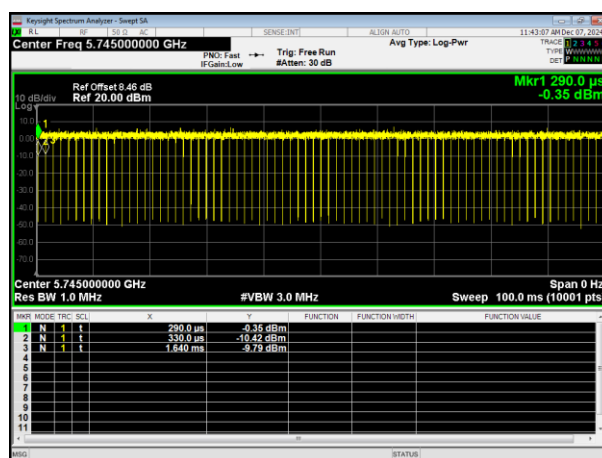
5825MHz



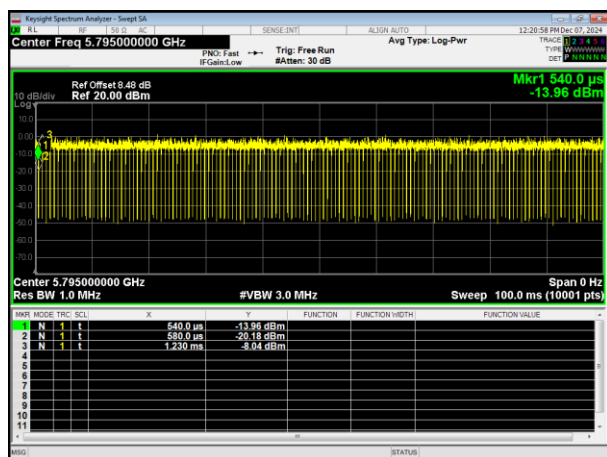
802.11ac HT40



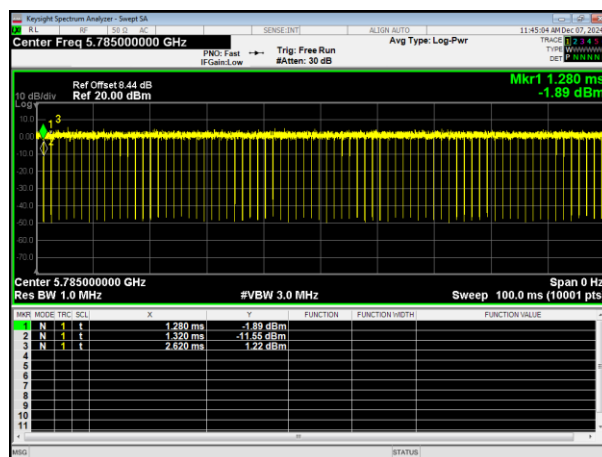
802.11n HT20



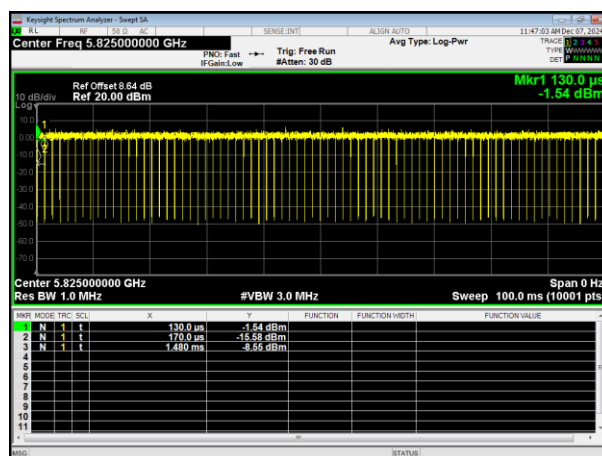
5755MHz



5745MHz



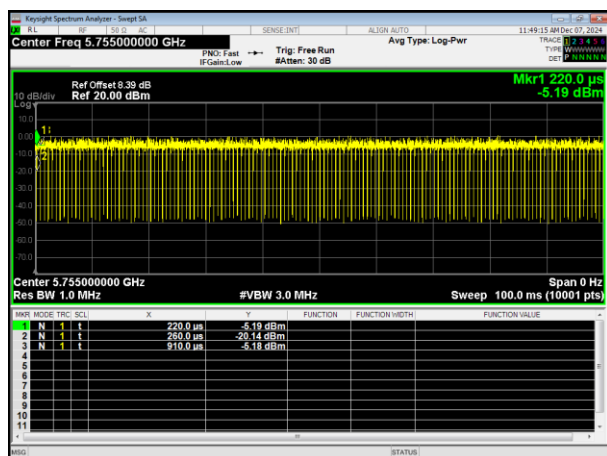
5795MHz



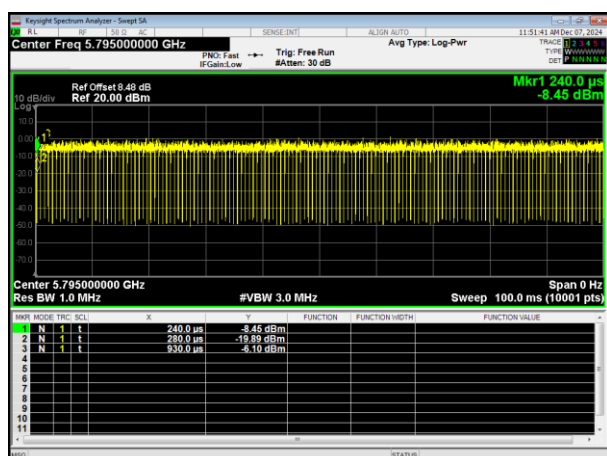
5825MHz



802.11n HT40



5755MHz



5795MHz



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.

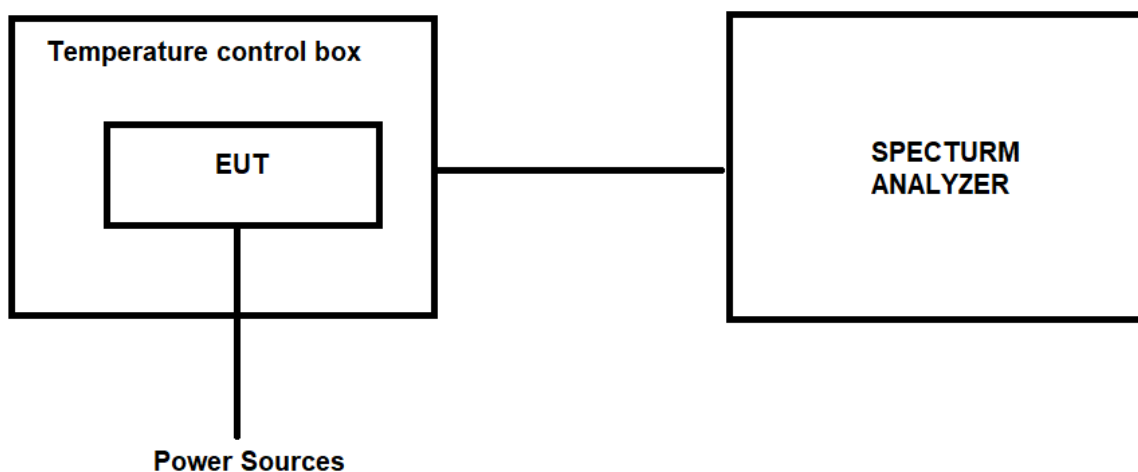
8.1.1 TEST PROCEDURE

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	Spectrum Frequency (MHz)			Δ Frequency (MHz)		
		(MHz)	802.11a	802.11n HT20	802.11ac HT20	802.11a	802.11n HT20	802.11ac HT20
132V	-20℃	5180	5180.0396	5180.0460	5180.0378	7.6448	8.8803	7.2973
		5220	5220.0430	5220.0388	5220.0400	8.2375	7.4330	7.6628
		5240	5240.0311	5240.0286	5240.0278	5.9351	5.4580	5.3053
		5745	5745.0467	5745.0467	5745.0398	8.1288	8.1288	6.9278
		5785	5785.0392	5785.0385	5785.0427	6.7761	6.6551	7.3812
		5825	5825.0404	5825.0424	5825.0437	6.9356	7.2790	7.5021
108V		5180	5180.0275	5180.0308	5180.0318	5.3089	5.9459	6.1390
		5220	5220.0433	5220.0427	5220.0416	8.2950	8.1801	7.9693
		5240	5240.0297	5240.0309	5240.0291	5.6679	5.8969	5.5534
		5745	5745.0360	5745.0296	5745.0334	6.2663	5.1523	5.8138
		5785	5785.0422	5785.0434	5785.0426	7.2947	7.5022	7.3639
		5825	5825.0554	5825.0513	5825.0484	9.5107	8.8069	8.3090
120V	25℃	5180	5180.0653	5180.0577	5180.0627	12.6062	11.1390	12.1042
		5220	5220.0300	5220.0303	5220.0308	5.7471	5.8046	5.9004
		5240	5240.0442	5240.0378	5240.0431	8.4351	7.2137	8.2252
		5745	5745.0392	5745.0393	5745.0396	6.8233	6.8407	6.8930
		5785	5785.0493	5785.0507	5785.0537	8.5220	8.7640	9.2826
		5825	5825.0361	5825.0295	5825.0296	6.1974	5.0644	5.0815
132V	50℃	5180	5180.0385	5180.0378	5180.0431	7.4324	7.2973	8.3205
		5220	5220.0267	5220.0308	5220.0336	5.1149	5.9004	6.4368
		5240	5240.0453	5240.0416	5240.0417	8.6450	7.9389	7.9580
		5745	5745.0692	5745.0729	5745.0712	12.0453	12.6893	12.3934
		5785	5785.0502	5785.0497	5785.0514	8.6776	8.5912	8.8850
		5825	5825.0674	5825.0697	5825.0739	11.5708	11.9657	12.6867
108V	50℃	5180	5180.0381	5180.0386	5180.0408	7.3552	7.4517	7.8764
		5220	5220.0326	5220.0331	5220.0317	6.2452	6.3410	6.0728
		5240	5240.0385	5240.0417	5240.0388	7.3473	7.9580	7.4046
		5745	5745.0492	5745.0495	5745.0533	8.5640	8.6162	9.2776
		5785	5785.0370	5785.0328	5785.0319	6.3959	5.6698	5.5143
		5825	5825.0833	5825.0808	5825.0835	14.3004	13.8712	14.3348



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℃	5190	5190.0278	5190.0341	5.3565	6.5703
		5230	5230.0427	5230.0409	8.1644	7.8203
		5755	5755.0574	5755.0588	9.9739	10.2172
		5795	5795.0689	5795.0686	11.8896	11.8378
108V		5190	5190.0268	5190.0326	5.1638	6.2813
		5230	5230.0420	5230.0379	8.0306	7.2467
		5755	5755.0304	5755.0740	5.2824	12.8584
		5795	5795.0533	5795.0549	9.1976	9.4737
120V	25℃	5190	5190.0278	5190.0268	5.3565	5.1638
		5230	5230.0746	5230.0713	14.2639	13.6329
		5755	5755.0277	5755.0341	4.8132	5.9253
		5795	5795.0660	5795.0597	11.3891	10.3020
132V	50℃	5190	5190.0685	5190.0704	13.1985	13.5645
		5230	5230.0572	5230.0579	10.9369	11.0707
		5755	5755.0562	5755.0485	9.7654	8.4275
		5795	5795.0385	5795.0453	6.6437	7.8171
108V	50℃	5190	5190.0644	5190.0578	12.4085	11.1368
		5230	5230.0447	5230.0435	8.5468	8.3174
		5755	5755.0440	5755.0444	7.6455	7.7150
		5795	5795.0522	5795.0513	9.0078	8.8525



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 *******