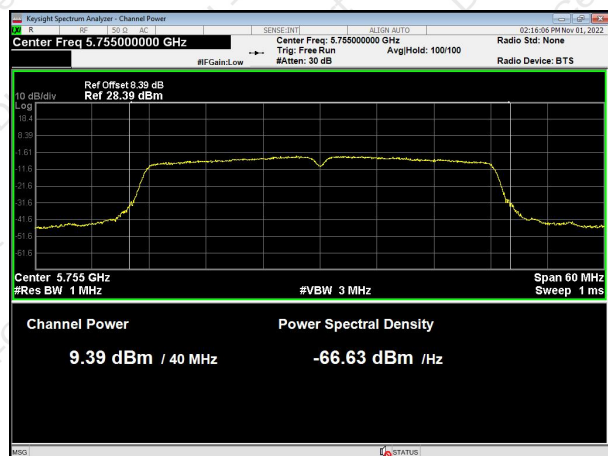
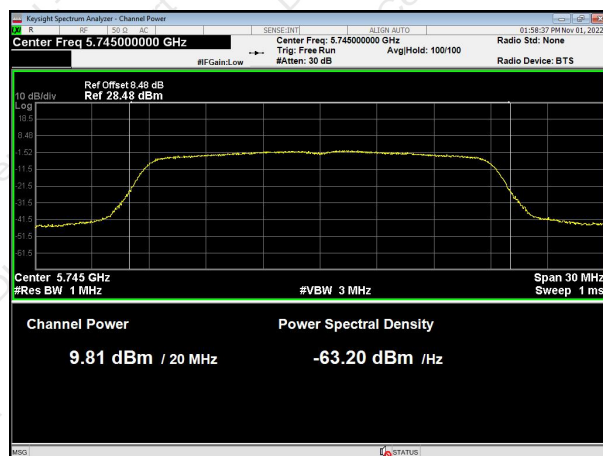




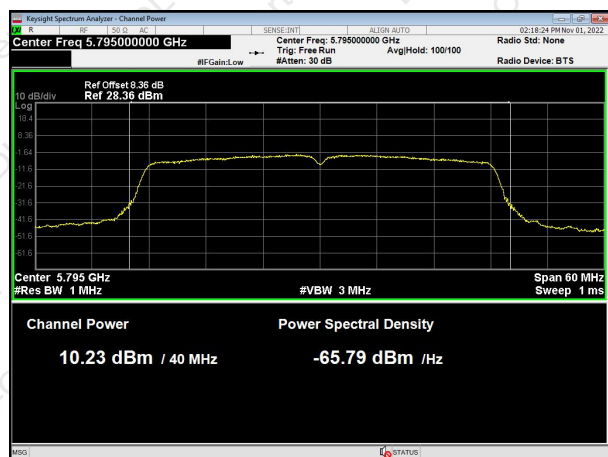
802.11ac HT40



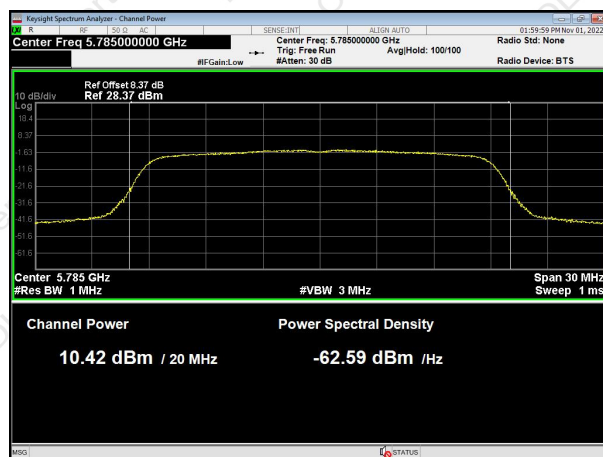
802.11n HT20



5755MHz

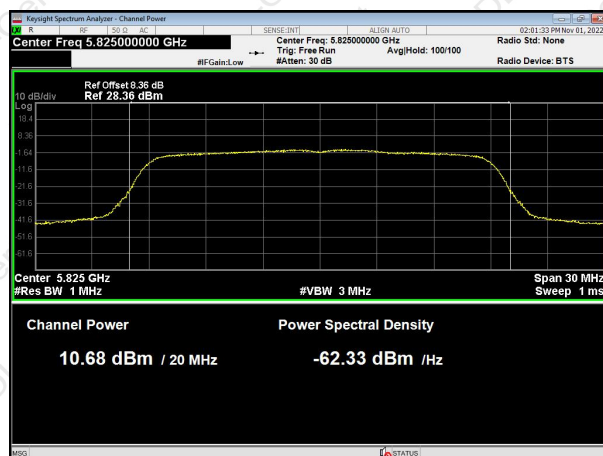


5745MHz



5795MHz

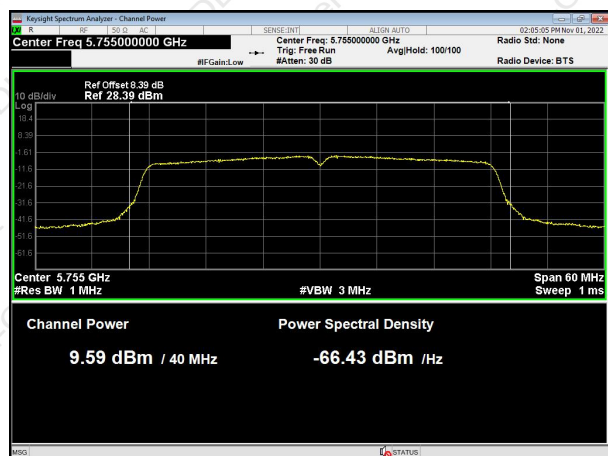
5785MHz



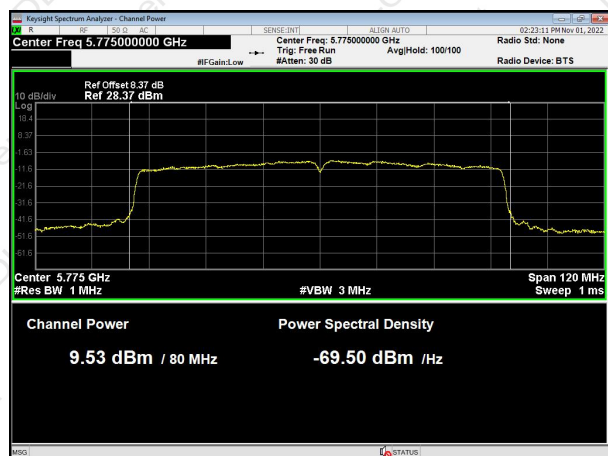
5825MHz



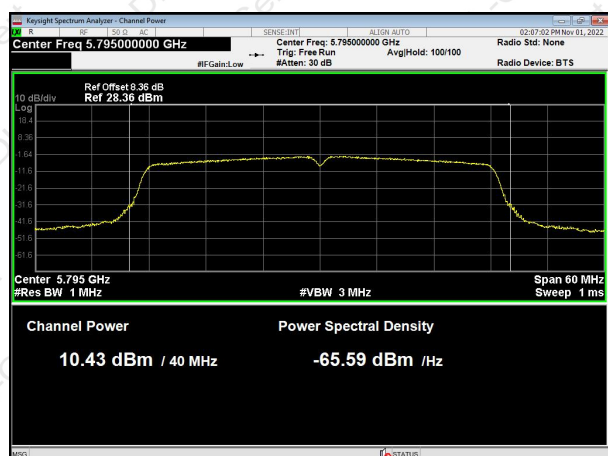
802.11n HT40



802.11ac HT80



5755MHz



5775MHz

5795MHz

**POWER SPECTRAL DENSITY TEST****APPLIED PROCEDURES / LIMIT**

In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

In addition, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW $\geq$ 1MHz for band 1 RBW $\geq$ 510KHz for band 4
VB	VBW $\geq$ 3RBW
Detector	RMS (i.e., power averaging).
Trace	Max Hold
Sweep Time	Auto

TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. The testing follows FCC KDB 789033 D02.
3. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to Spectrum.
4. For U-NII1, U-NII-2A, U-NII-2C Band:
Set RBW=1MHz, VBW=3MHz, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
For U-NII-3 Band:
Set RBW=510 kHz, VBW=3*RBW, where span is enough to capture the entire bandwidth, Sweep time = Auto (601 pts), detector = sample, traces 100 sweeps of video averaging. (SA-2 with the omission of procedure x, the integration with 26dB EBW bandwidth)
5. Use the cursor on spectrum to peak search the highest level of trace
6. Record the max. reading and add 10 log(1/duty cycle).
we test all antennas, the antenna 1 was worst mode and the data recording in the report.
7. Duty factor Reference is made to the test results in Section 7.1.5.

DEVIATION FROM STANDARD

No deviation.

TEST SETUP**EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

**TEST RESULTS****Antenna 1:**

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/MHz)	Limit (dBm)	Result
Band1	802.11a	Low	-0.763	0.11	-0.653	11.00	PASS
		Moddle	-1.340	0.11	-1.230	11.00	PASS
		High	-1.994	0.11	-1.884	11.00	PASS
	802.11ac HT20	Low	-0.777	0.36	-0.417	11.00	PASS
		Moddle	-1.988	0.36	-1.628	11.00	PASS
		High	-2.462	0.36	-2.102	11.00	PASS
	802.11ac HT40	Low	-4.408	0.63	-3.778	11.00	PASS
		High	-5.342	0.63	-4.712	11.00	PASS
	802.11n HT20	Low	-0.973	0.20	-0.773	11.00	PASS
		Moddle	-1.598	0.20	-1.398	11.00	PASS
		High	-2.134	0.20	-1.934	11.00	PASS
	802.11n HT40	Low	-4.241	0.55	-3.691	11.00	PASS
		High	-5.153	0.55	-4.603	11.00	PASS
	802.11ac HT80	/	-8.126	0.39	-7.736	11.00	PASS

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/500kHz)	Limit (dBm)	Result
Band4	802.11a	Low	-4.743	0.11	-4.633	30.00	PASS
		Moddle	-5.441	0.11	-5.331	30.00	PASS
		High	-4.965	0.11	-4.855	30.00	PASS
	802.11ac HT20	Low	-4.617	0.38	-4.237	30.00	PASS
		Moddle	-5.633	0.38	-5.253	30.00	PASS
		High	-5.625	0.38	-5.245	30.00	PASS
	802.11ac HT40	Low	-8.607	0.53	-8.077	30.00	PASS
		High	-9.303	0.53	-8.773	30.00	PASS
	802.11n HT20	Low	-4.481	0.21	-4.271	30.00	PASS
		Moddle	-5.505	0.21	-5.295	30.00	PASS
		High	-5.314	0.21	-5.104	30.00	PASS
	802.11n HT40	Low	-8.592	0.40	-8.192	30.00	PASS
		High	-8.788	0.40	-8.388	30.00	PASS
	802.11ac HT80	/	-11.815	0.41	-11.405	30.00	PASS



Antenna 2:

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/MHz)	Limit (dBm)	Result
Band1	802.11a	Low	-1.281	0.11	-1.171	11.00	PASS
		Moddle	-0.572	0.11	-0.462	11.00	PASS
		High	-0.342	0.11	-0.232	11.00	PASS
	802.11ac HT20	Low	-1.198	0.29	-0.908	11.00	PASS
		Moddle	-0.955	0.29	-0.665	11.00	PASS
		High	-0.696	0.29	-0.406	11.00	PASS
	802.11ac HT40	Low	-4.465	0.52	-3.945	11.00	PASS
		High	-4.373	0.52	-3.853	11.00	PASS
	802.11n HT20	Low	-1.153	0.21	-0.943	11.00	PASS
		Moddle	-0.798	0.21	-0.588	11.00	PASS
		High	-0.585	0.21	-0.375	11.00	PASS
	802.11n HT40	Low	-4.312	0.21	-4.102	11.00	PASS
		High	-3.59	0.21	-3.38	11.00	PASS
	802.11ac HT80	/	-8.146	0.87	-7.276	11.00	PASS

	Mode	Test Channel	Reading Level (dBm)	Duty factor (dB)	PSD (dBm/500kHz)	Limit (dBm)	Result
Band4	802.11a	Low	-1.969	0.11	-1.859	30.00	PASS
		Moddle	-2.254	0.11	-2.144	30.00	PASS
		High	-1.691	0.11	-1.581	30.00	PASS
	802.11ac HT20	Low	-2.899	0.29	-2.609	30.00	PASS
		Moddle	-2.202	0.29	-1.912	30.00	PASS
		High	-2.082	0.29	-1.792	30.00	PASS
	802.11ac HT40	Low	-6.464	0.52	-5.944	30.00	PASS
		High	-5.230	0.52	-4.71	30.00	PASS
	802.11n HT20	Low	-2.986	0.21	-2.776	30.00	PASS
		Moddle	-2.151	0.21	-1.941	30.00	PASS
		High	-1.87	0.21	-1.66	30.00	PASS
	802.11n HT40	Low	-6.155	0.39	-5.765	30.00	PASS
		High	-5.316	0.39	-4.926	30.00	PASS
	802.11ac HT80	/	-8.751	0.87	-7.881	30.00	PASS



For Band1 MIMO

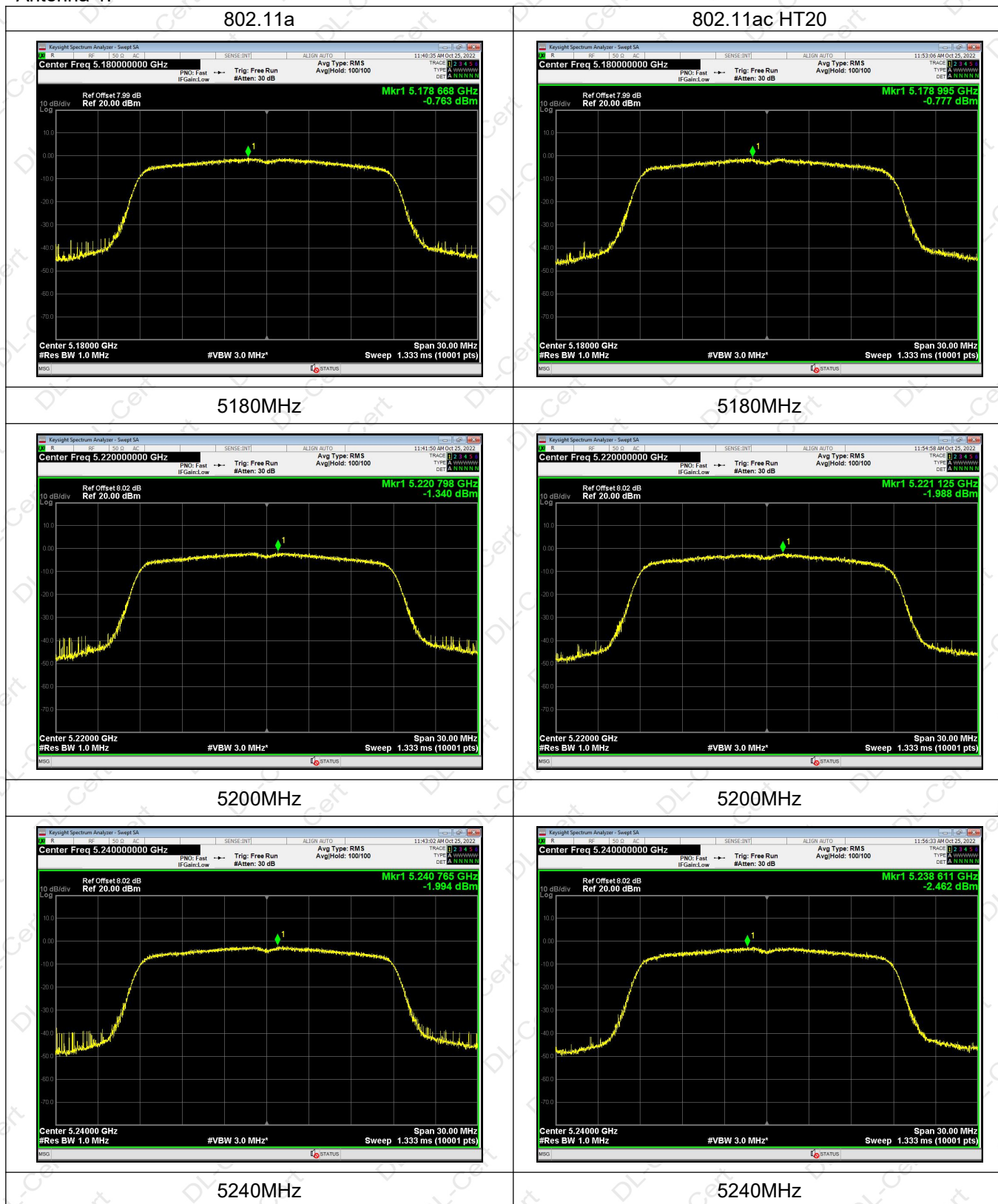
Mode	Test Channel	Antenna	PSD (dBm/ 500kHz)	Limit (dBm)	Result
802.11ac HT20	Low	Antenna1+ Antenna2	2.35	10.99	PASS
	Middle		1.89	10.99	PASS
	High		1.84	10.99	PASS
802.11ac HT40	Low		-0.85	10.99	PASS
	High		-1.25	10.99	PASS
802.11n HT20	Low		2.15	10.99	PASS
	Middle		2.04	10.99	PASS
	High		1.93	10.99	PASS
802.11n HT40	Low		-0.88	10.99	PASS
	High		-0.94	10.99	PASS
802.11ac HT80	/		-4.49	10.99	PASS

For Band4 MIMO

Mode	Test Channel	Antenna	PSD (dBm/ 500kHz)	Limit (dBm/ 500kHz)	Result
802.11ac HT20	Low	Antenna1+ Antenna2	-0.34	29.99	PASS
	Middle		-0.26	29.99	PASS
	High		-0.17	29.99	PASS
802.11ac HT40	Low		-3.87	29.99	PASS
	High		-3.27	29.99	PASS
802.11n HT20	Low		-0.45	29.99	PASS
	Middle		-0.29	29.99	PASS
	High		-0.04	29.99	PASS
802.11n HT40	Low		-3.80	29.99	PASS
	High		-3.31	29.99	PASS
802.11ac HT80	/		-6.28	29.99	PASS



Antenna 1:

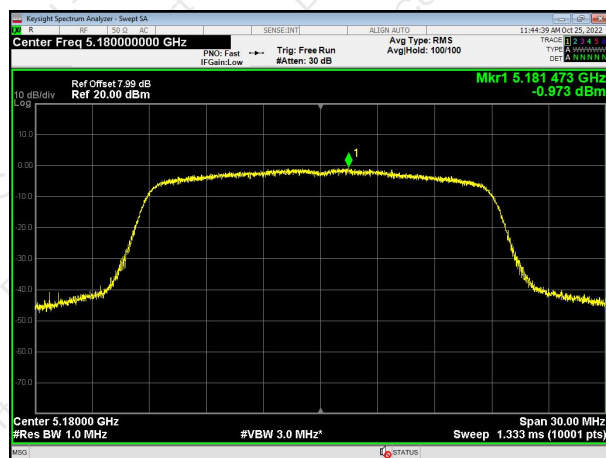




802.11ac HT40



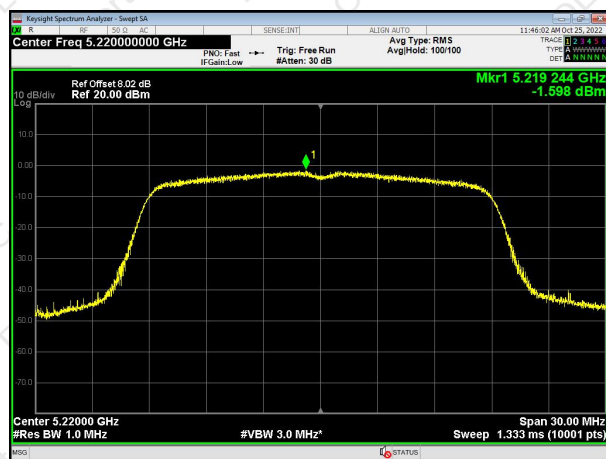
802.11n HT20



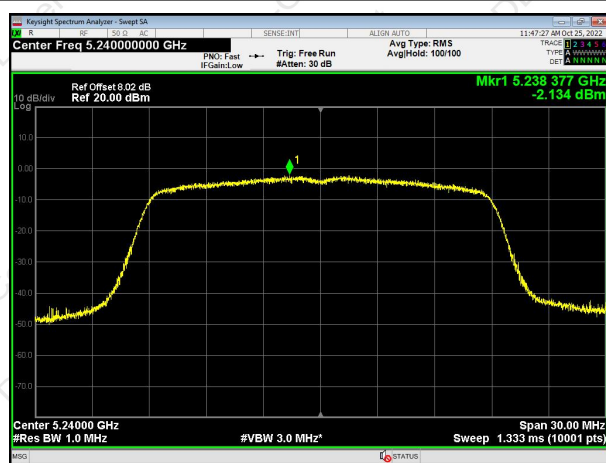
5190MHz



5180MHz



5230MHz



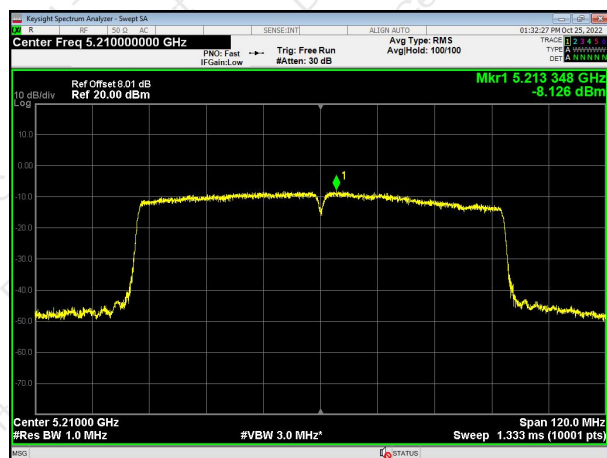
5240MHz



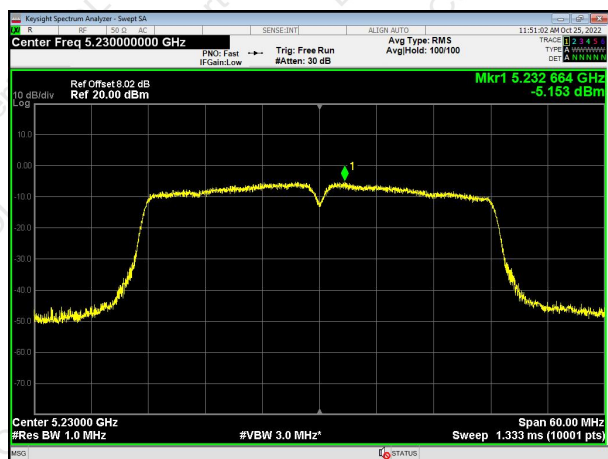
802.11n HT40



802.11ac HT80



5190MHz



5210MHz

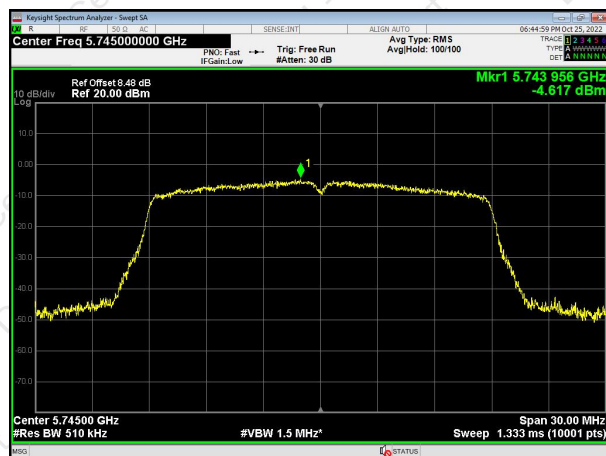
5230MHz



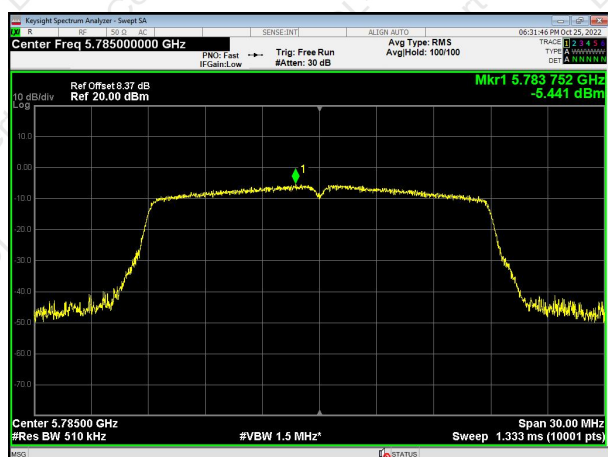
802.11a



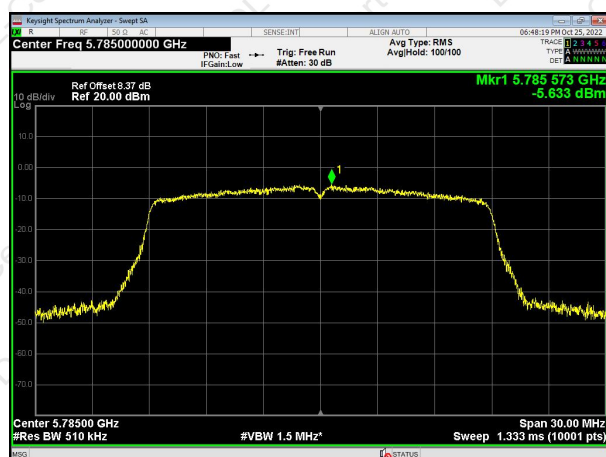
802.11ac HT20



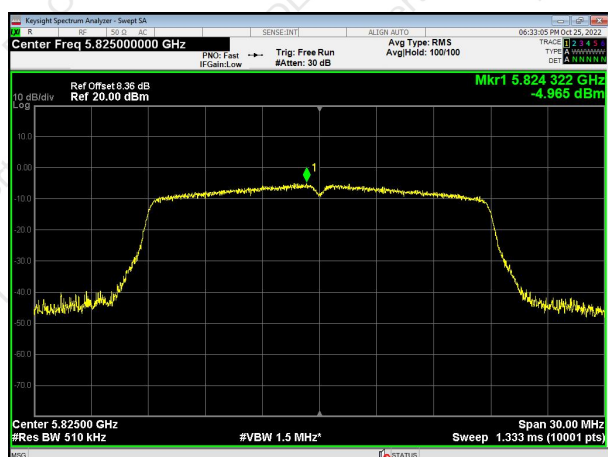
5745MHz



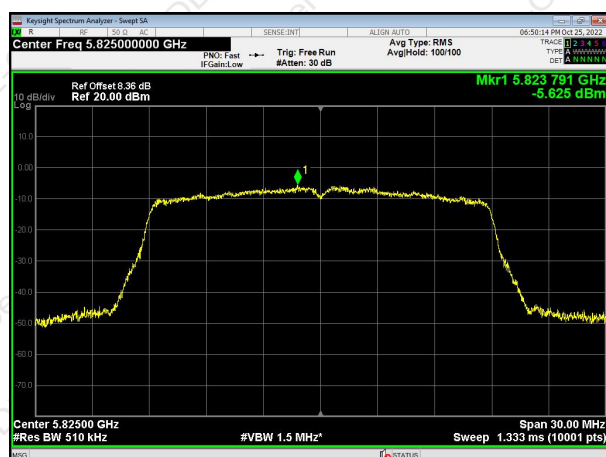
5745MHz



5785MHz



5785MHz

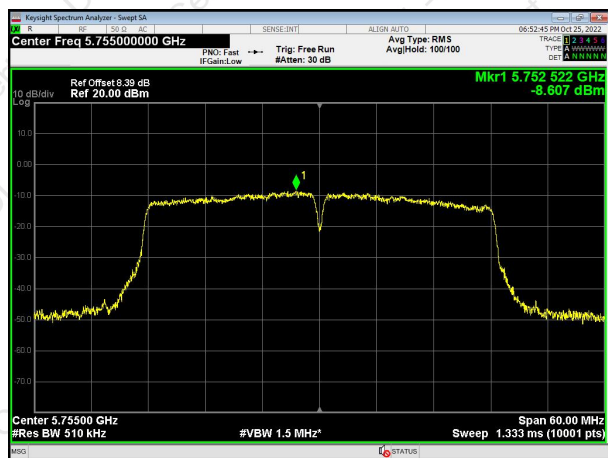


5825MHz

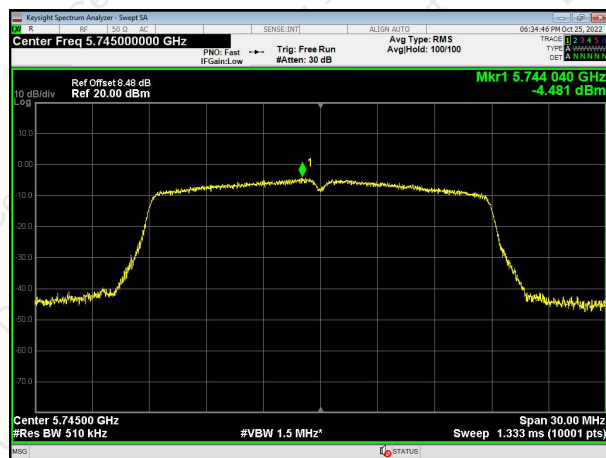
5825MHz



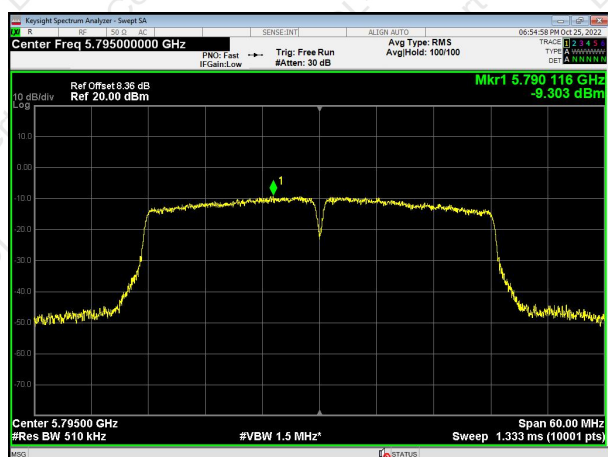
802.11ac HT40



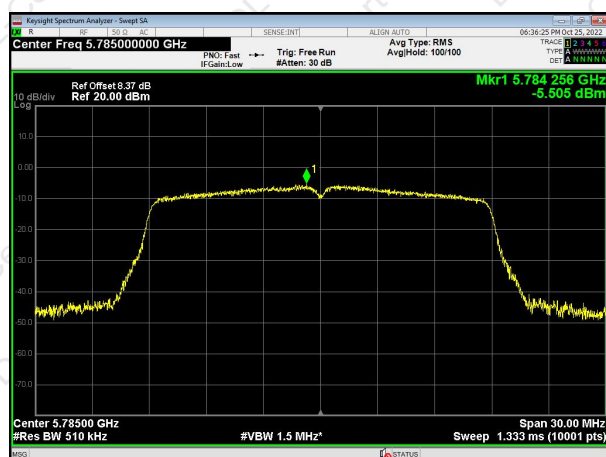
802.11n HT20



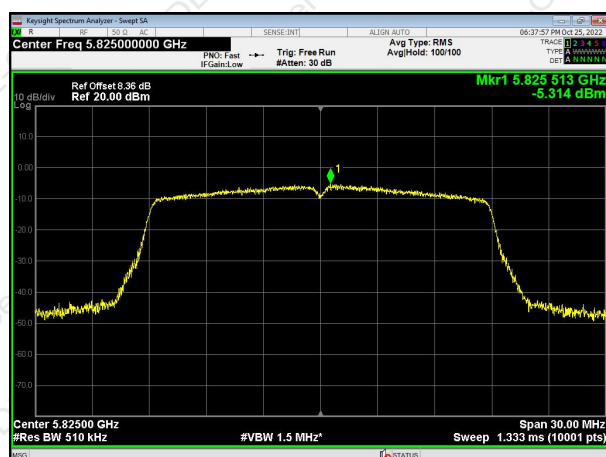
5755MHz



5745MHz



5795MHz

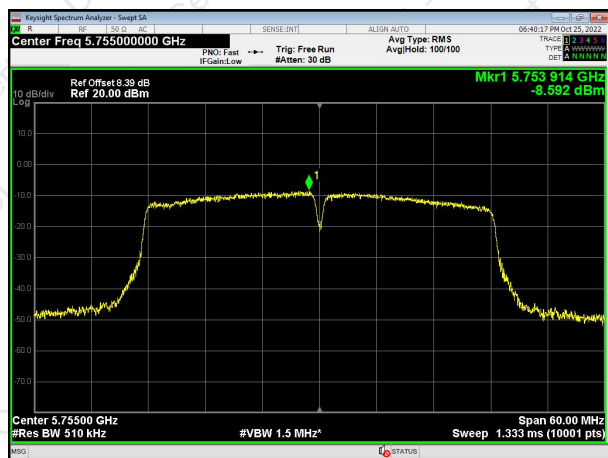


5785MHz

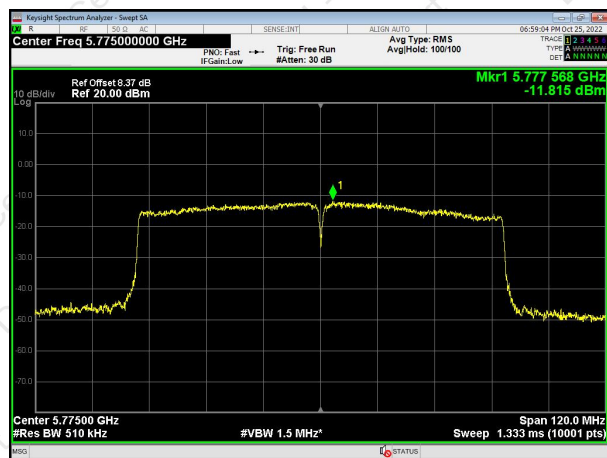
5825MHz



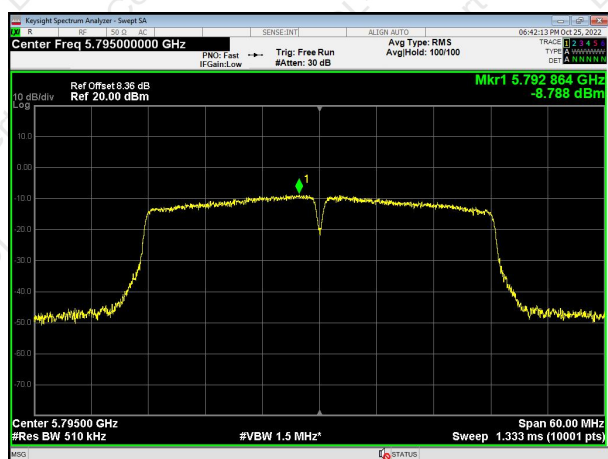
802.11n HT40



802.11ac HT80



5755MHz



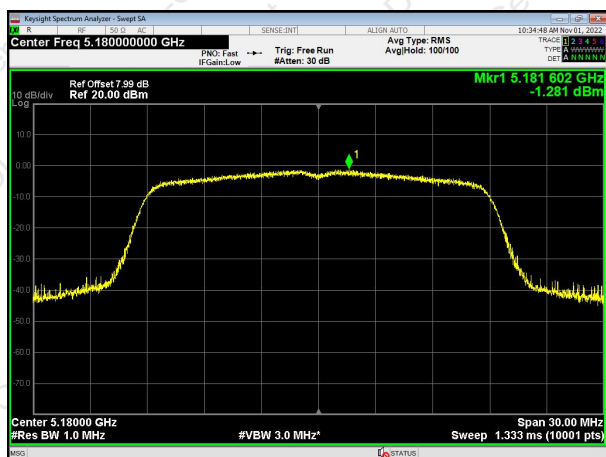
5775MHz

5795MHz



Antenna 2:

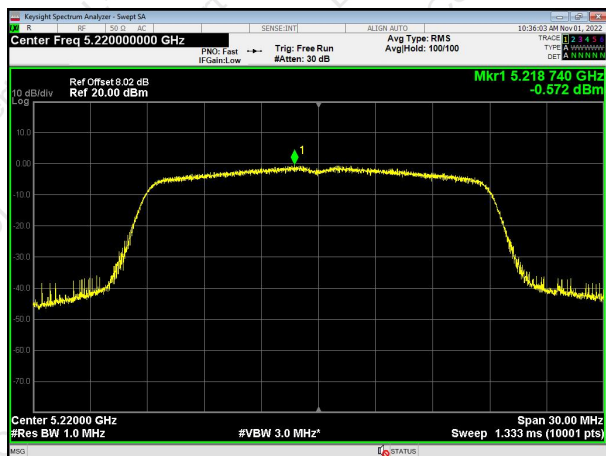
802.11a



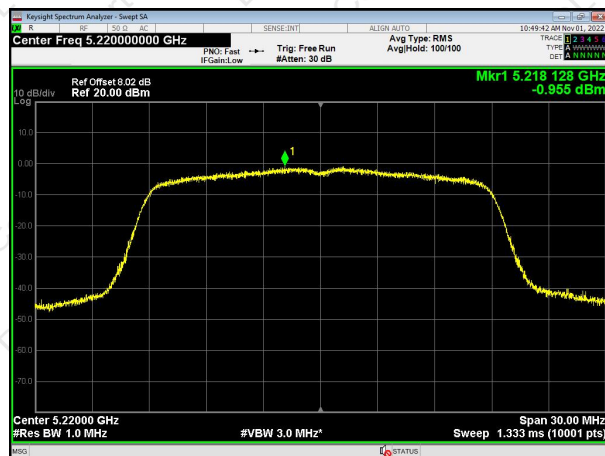
802.11ac HT20



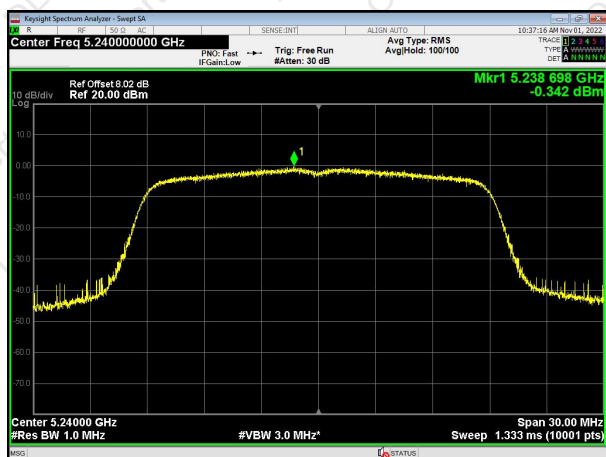
5180MHz



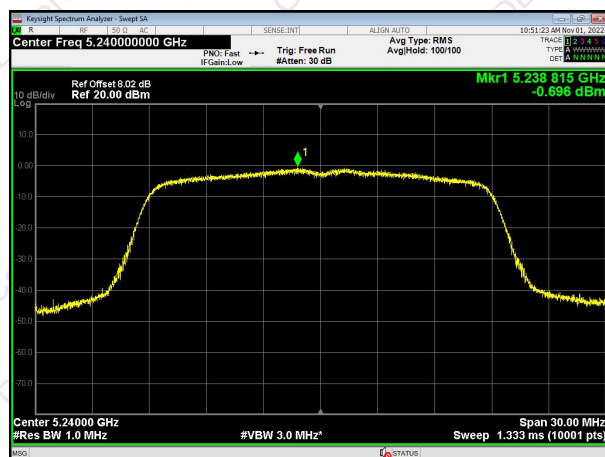
5180MHz



5200MHz



5200MHz

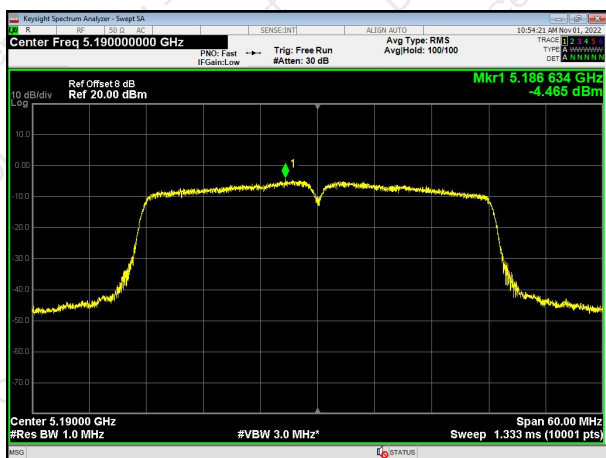


5240MHz

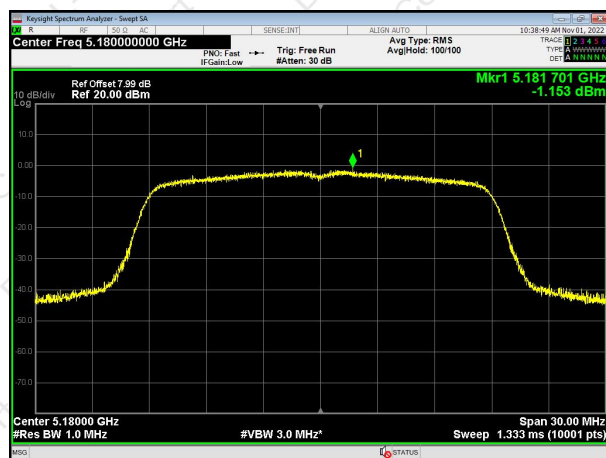
5240MHz



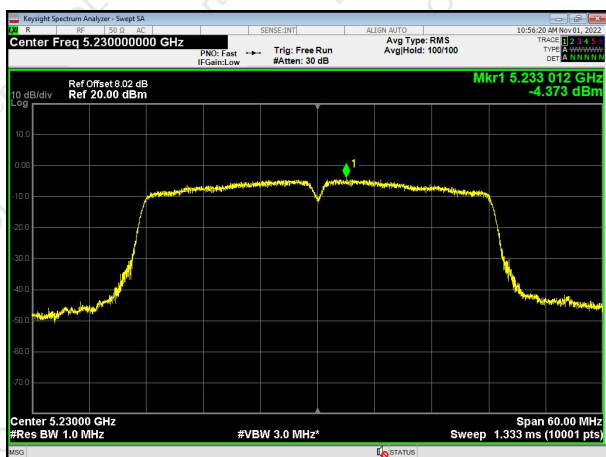
802.11ac HT40



802.11n HT20



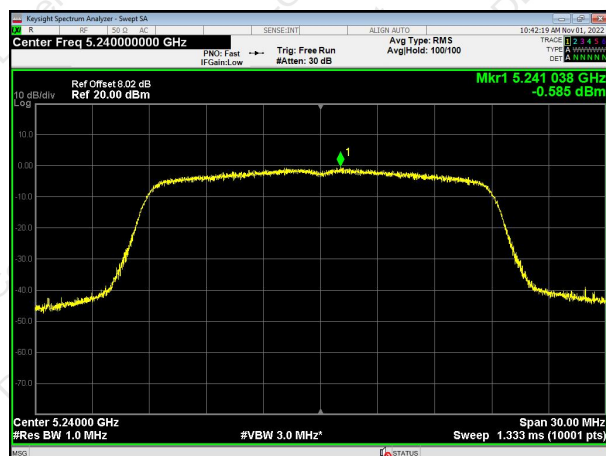
5190MHz



5180MHz



5230MHz



5200MHz

5240MHz