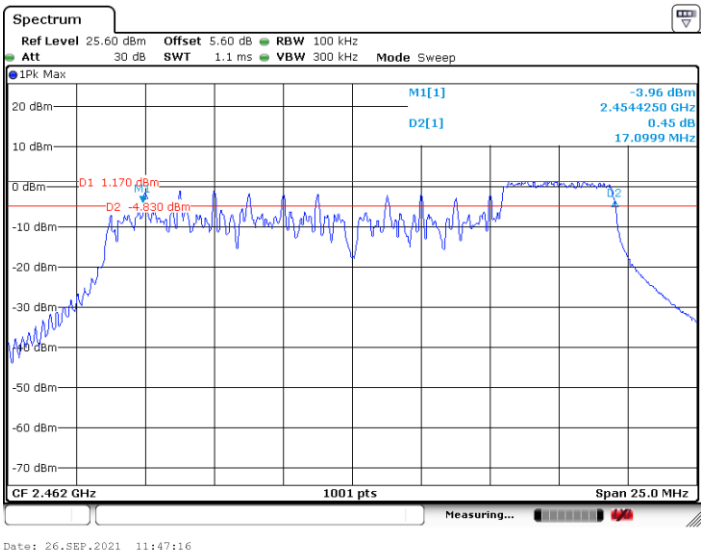
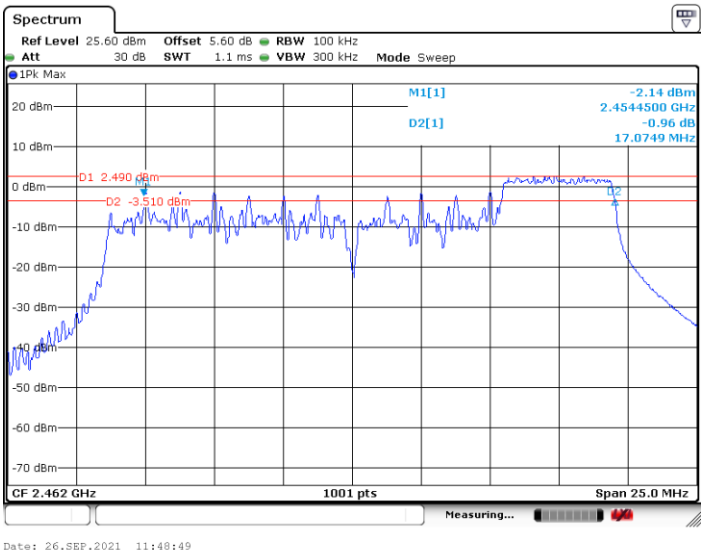
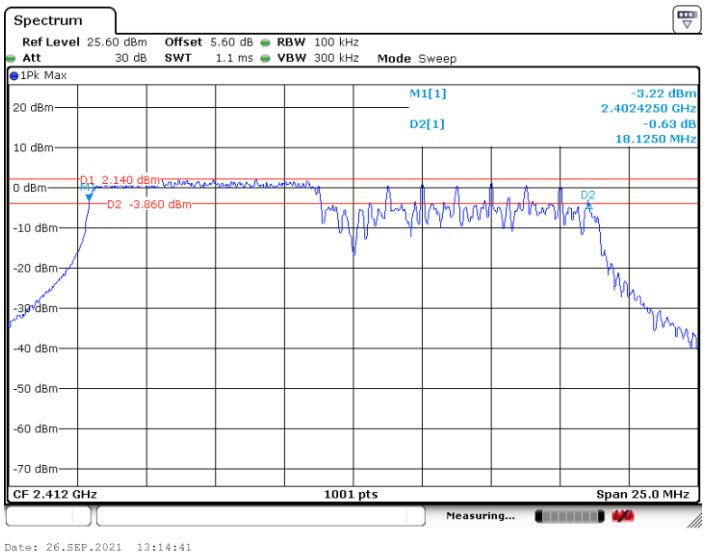
11AX20MIMO_Ant1_2462_52Tone


11AX20MIMO_Ant2_2462_52Tone


11AX20MIMO_Ant1_2412_106Tone


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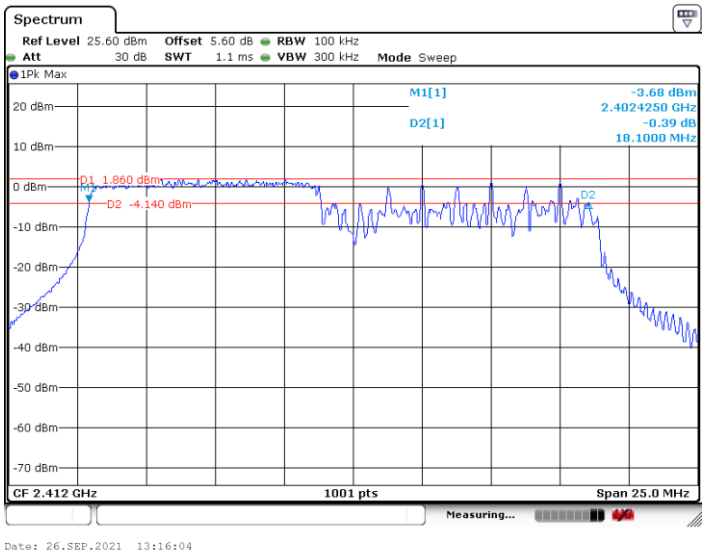

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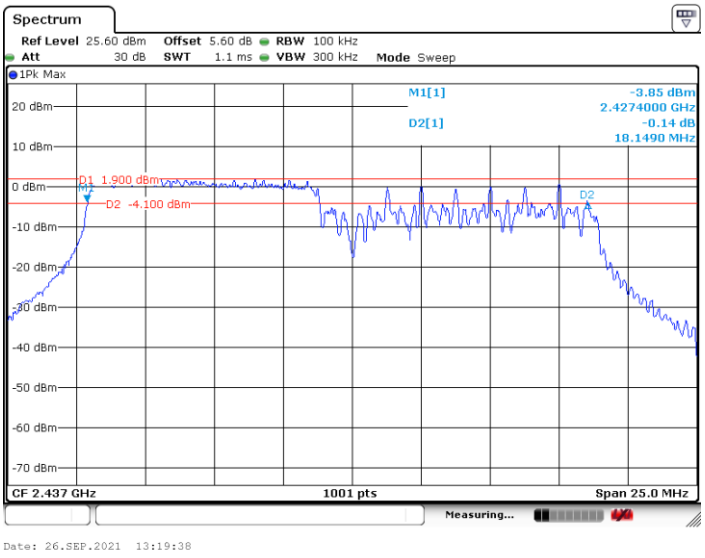

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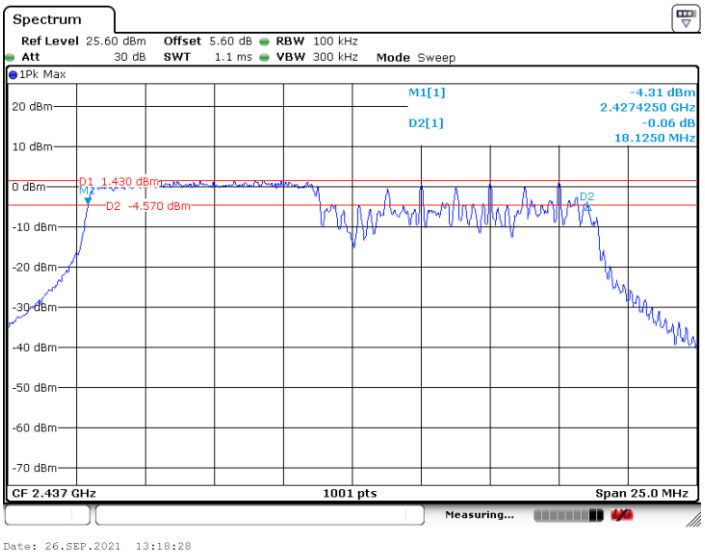

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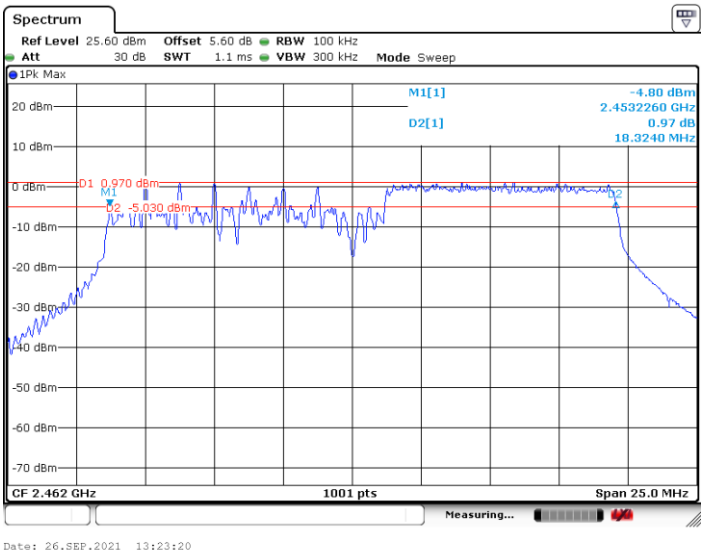

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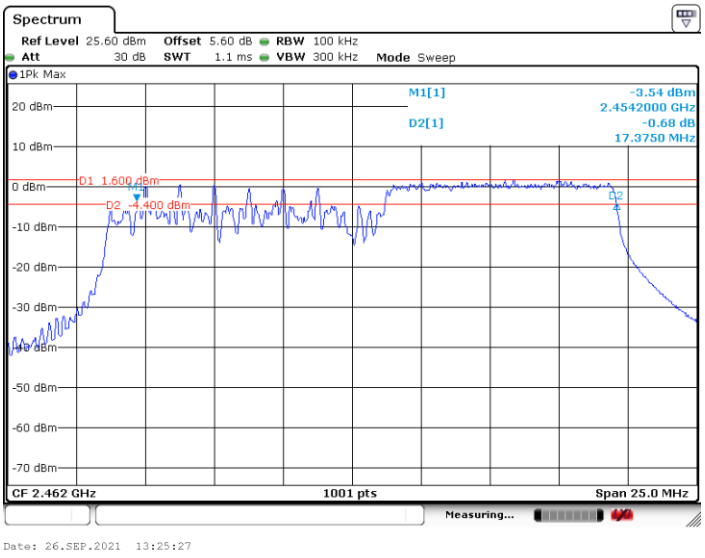
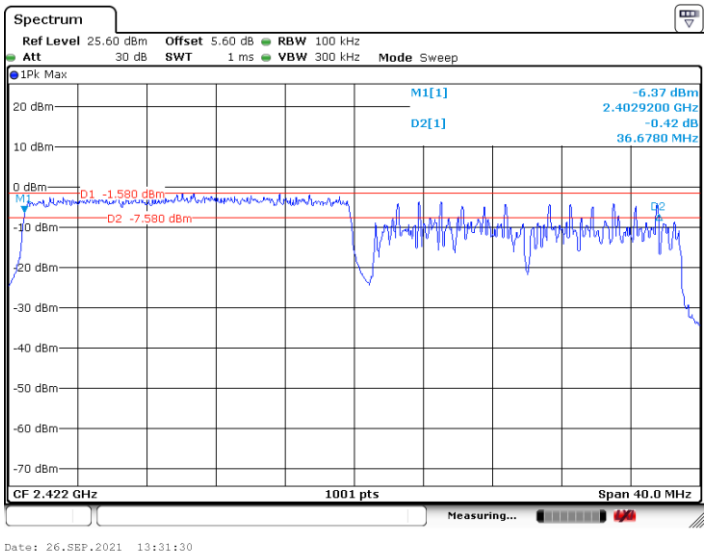


11AX40MIMO_Ant1_2422_242Tone


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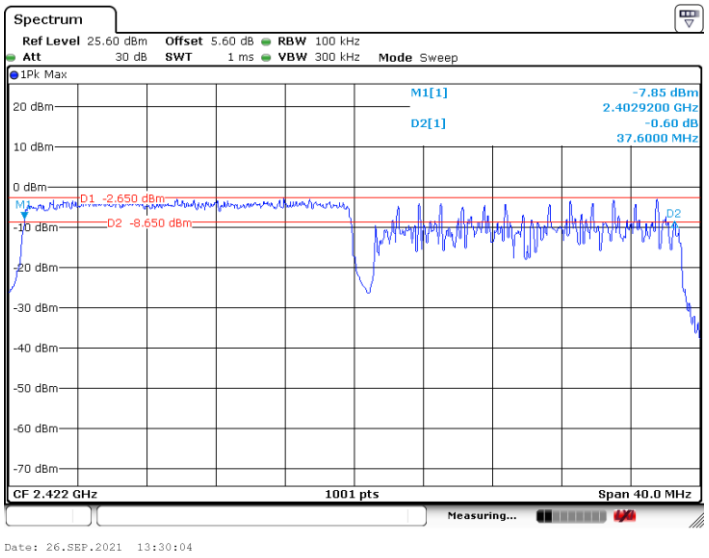
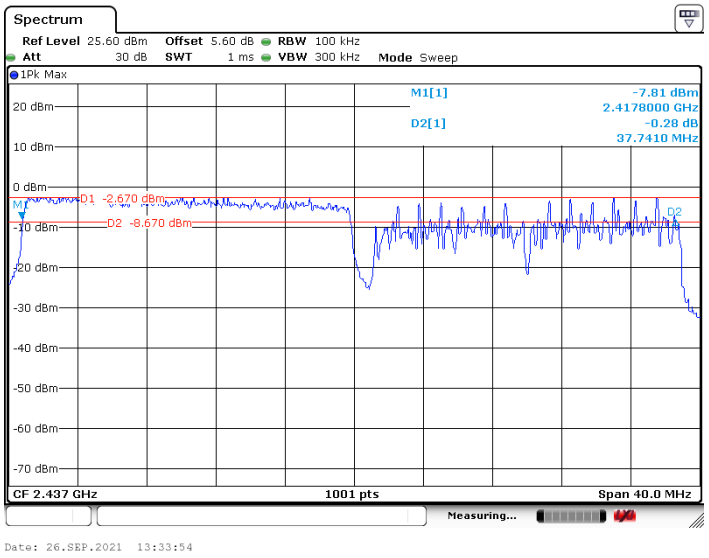


11AX40MIMO_Ant1_2437_242Tone


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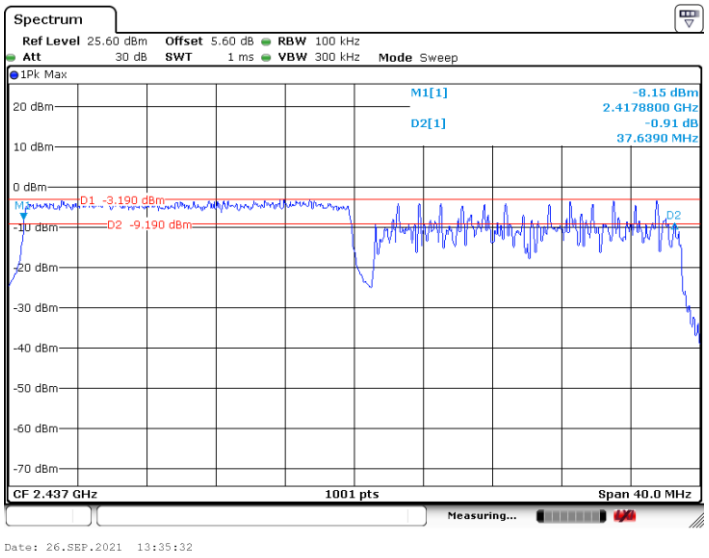
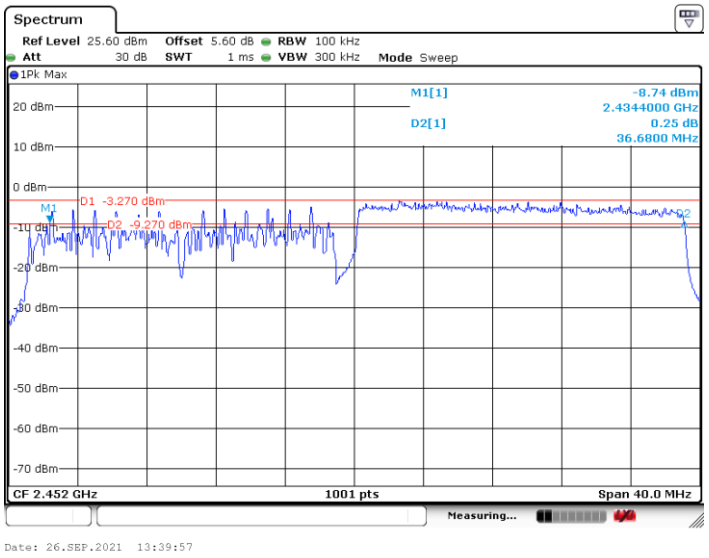
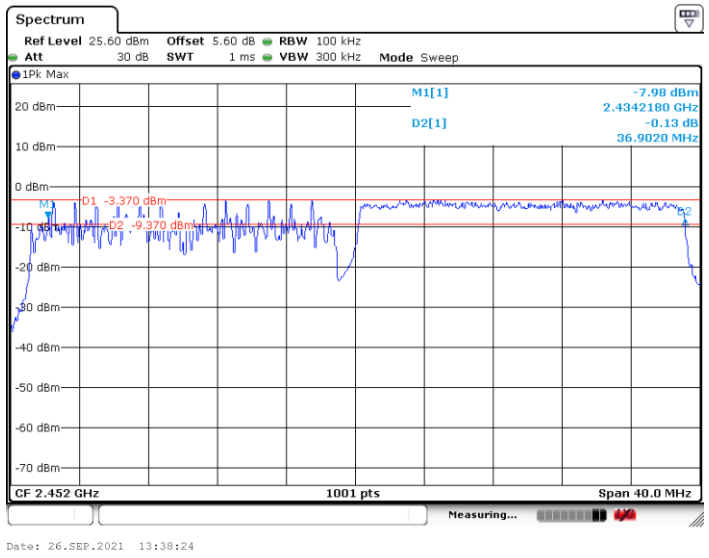


11AX40MIMO_Ant1_2452_242Tone


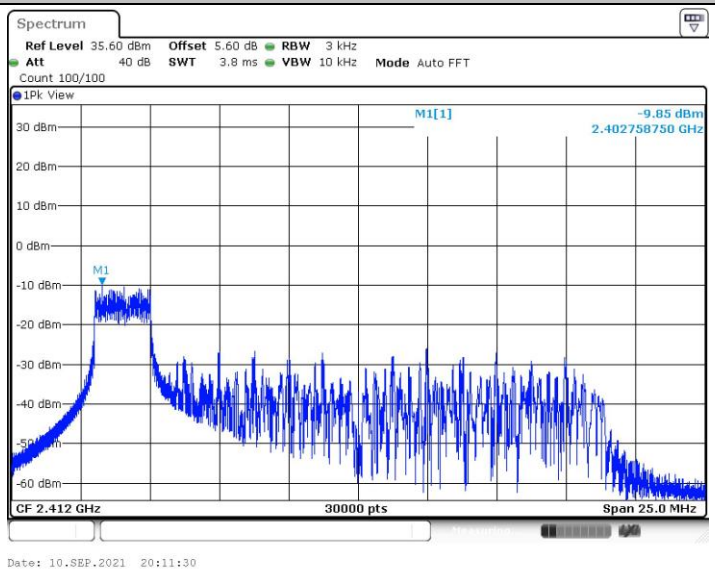
11AX40MIMO_Ant2_2452_242Tone


Appendix A: Maximum power spectral density

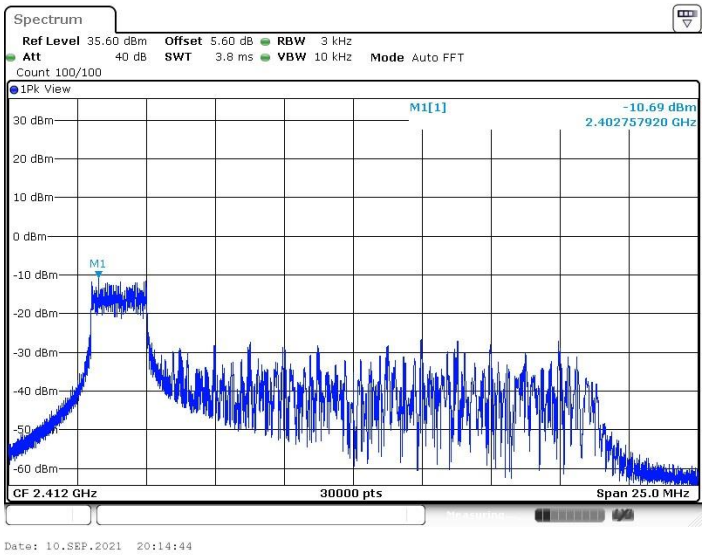
TestMode	Antenna	Frequency [MHz]	RuSize	RuIndex	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11AX20MIMO	Ant1	2412	26Tone	RU1	-9.85	≤8	PASS
	Ant2	2412	26Tone	RU1	-10.69	≤8	PASS
	total	2412	26Tone	RU1	-7.25	≤8	PASS
	Ant1	2437	26Tone	RU5	-10.12	≤8	PASS
	Ant2	2437	26Tone	RU5	-9.99	≤8	PASS
	total	2437	26Tone	RU5	-7.04	≤8	PASS
	Ant1	2462	26Tone	RU9	-9.28	≤8	PASS
	Ant2	2462	26Tone	RU9	-9.17	≤8	PASS
	total	2462	26Tone	RU9	-6.21	≤8	PASS
	Ant1	2412	52Tone	RU1	-9.96	≤8	PASS
	Ant2	2412	52Tone	RU1	-9.43	≤8	PASS
	total	2412	52Tone	RU1	-6.68	≤8	PASS
	Ant1	2437	52Tone	RU5	-9.92	≤8	PASS
	Ant2	2437	52Tone	RU5	-9.70	≤8	PASS
	total	2437	52Tone	RU1	-6.80	≤8	PASS
	Ant1	2462	52Tone	RU9	-10.12	≤8	PASS
	Ant2	2462	52Tone	RU9	-10.51	≤8	PASS
	total	2462	52Tone	RU1	-7.30	≤8	PASS
	Ant1	2412	106Tone	RU1	-10.08	≤8	PASS
	Ant2	2412	106Tone	RU1	-9.50	≤8	PASS
	total	2412	106Tone	RU1	-6.77	≤8	PASS
	Ant1	2437	106Tone	RU5	-9.32	≤8	PASS
	Ant2	2437	106Tone	RU5	-9.75	≤8	PASS
	total	2437	106Tone	RU5	-6.52	≤8	PASS
	Ant1	2462	106Tone	RU9	-10.41	≤8	PASS
	Ant2	2462	106Tone	RU9	-10.53	≤8	PASS
	total	2462	106Tone	RU9	-7.46	≤8	PASS
11AX40MIMO	Ant1	2422	242Tone	RU1	-13.8	≤8	PASS
	Ant2	2422	242Tone	RU1	-14.53	≤8	PASS
	total	2422	242Tone	RU1	-11.15	≤8	PASS
	Ant1	2437	242Tone	RU9	-13.5	≤8	PASS
	Ant2	2437	242Tone	RU9	-13.82	≤8	PASS
	total	2437	242Tone	RU9	-10.65	≤8	PASS
	Ant1	2452	242Tone	RU18	-13.86	≤8	PASS
	Ant2	2452	242Tone	RU18	-13.78	≤8	PASS

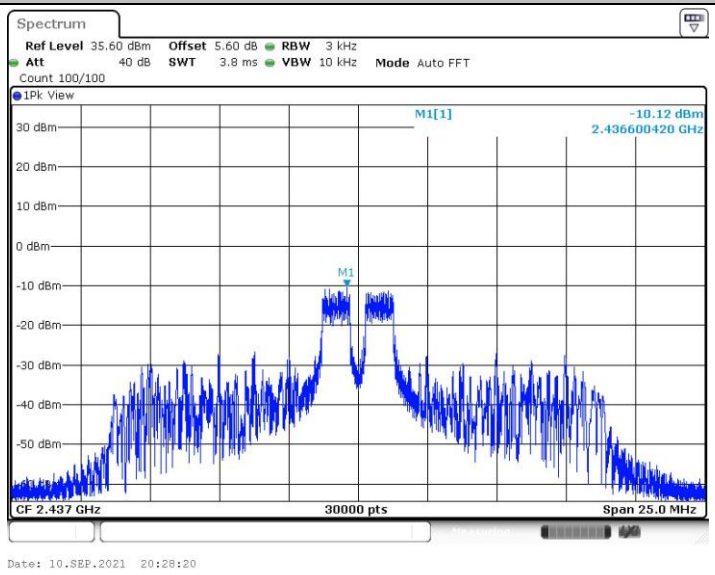
	total	2452	242Tone	RU18	-10.81	≤8	PASS

11AX20MIMO_Ant1_2412_26Tone



11AX20MIMO_Ant2_2412_26Tone



11AX20MIMO_Ant1_2437_26Tone


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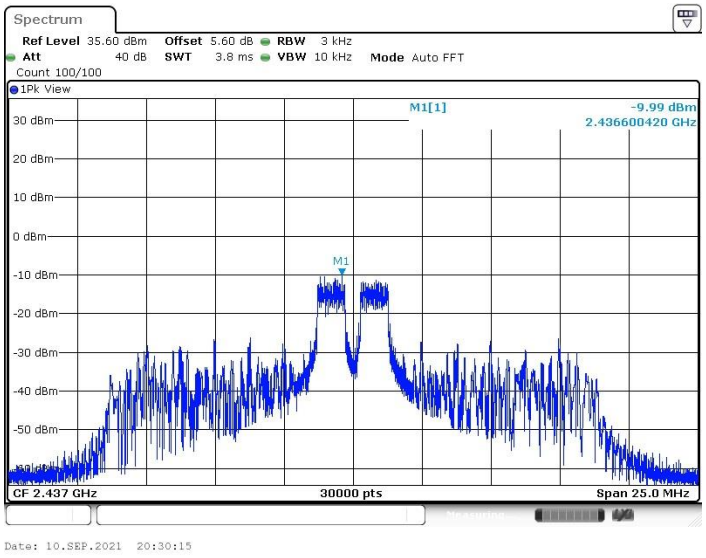
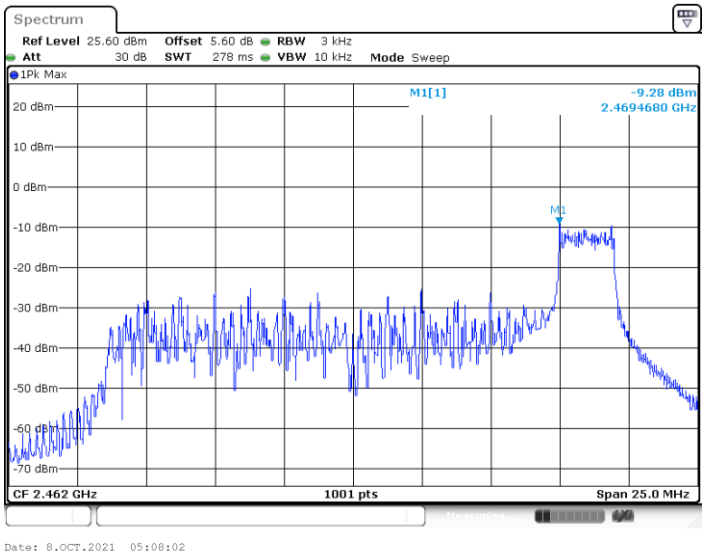


11AX20MIMO_Ant1_2462_26Tone


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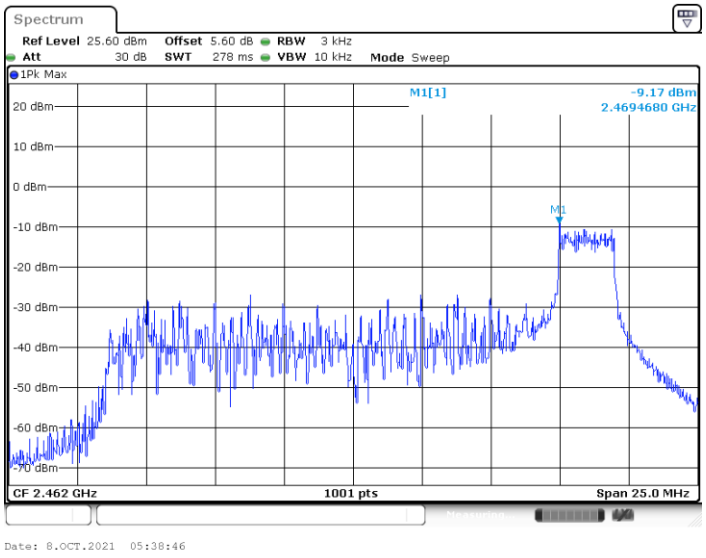

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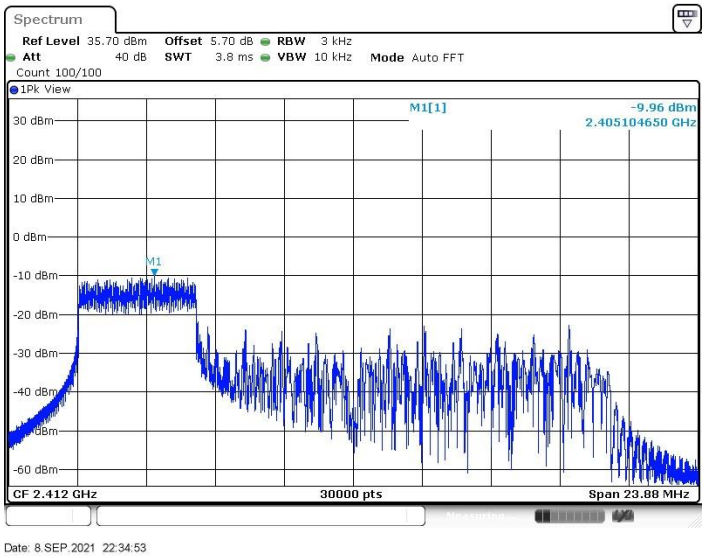
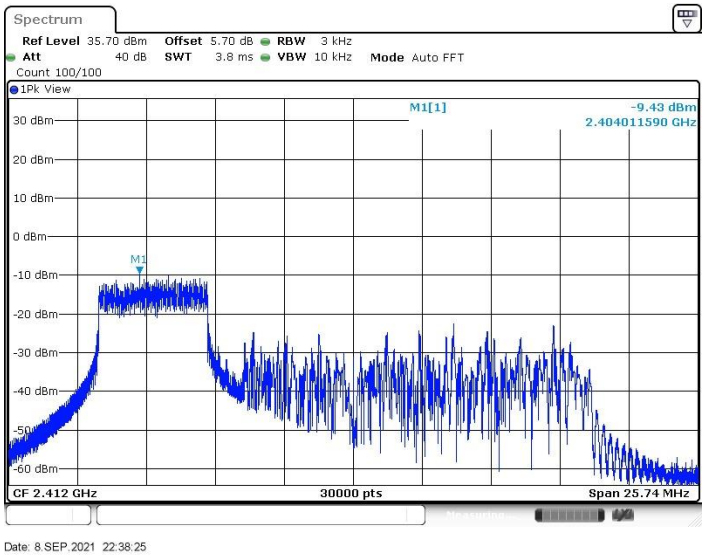


11AX20MIMO_Ant2_2412_52Tone


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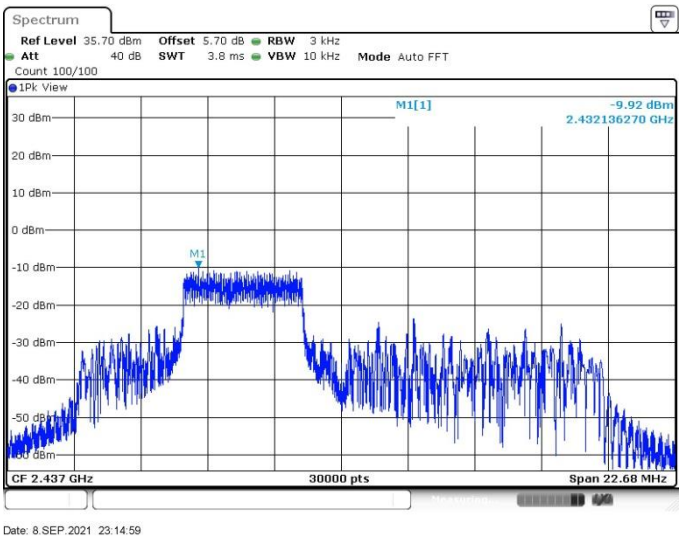

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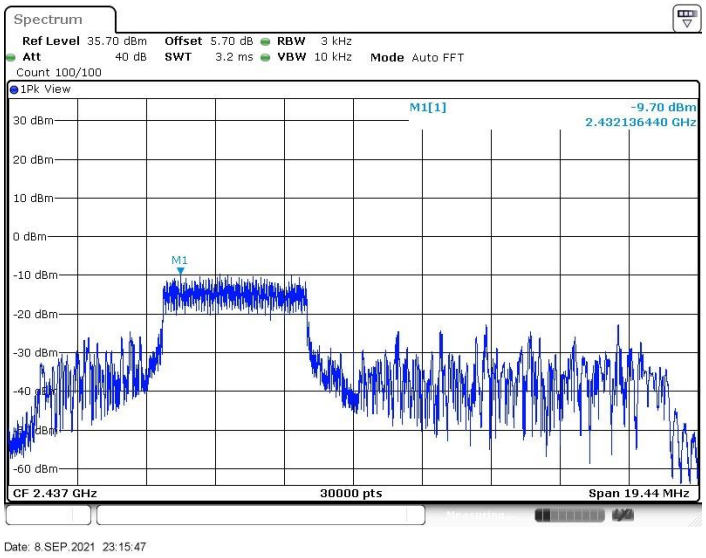

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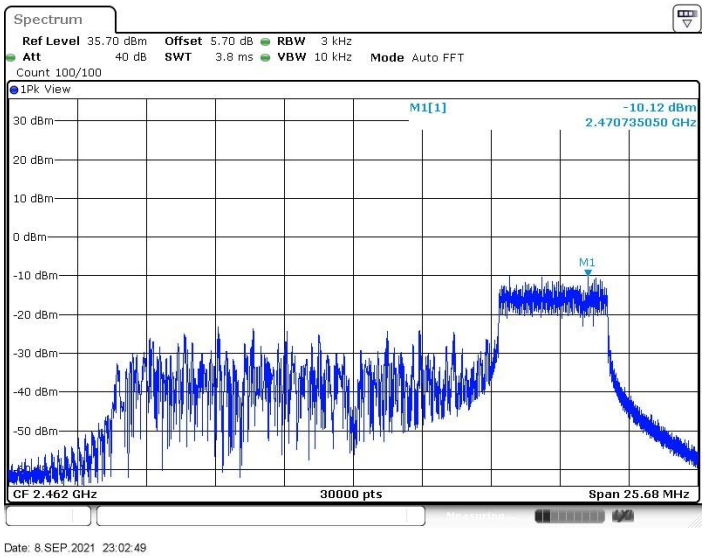

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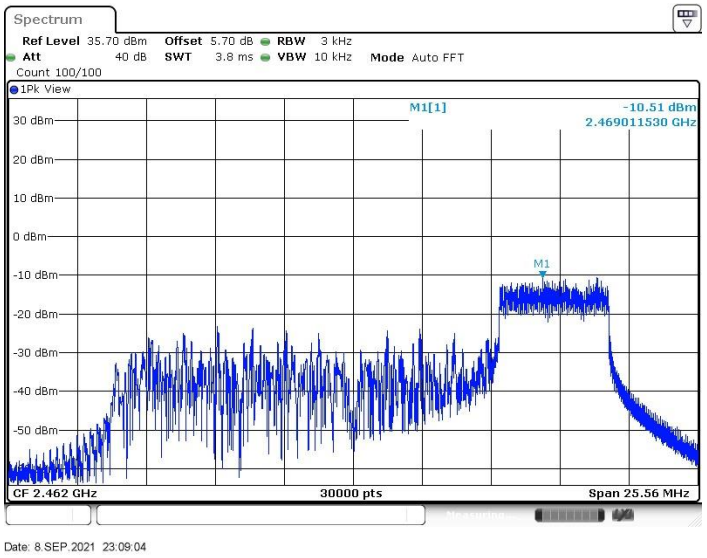
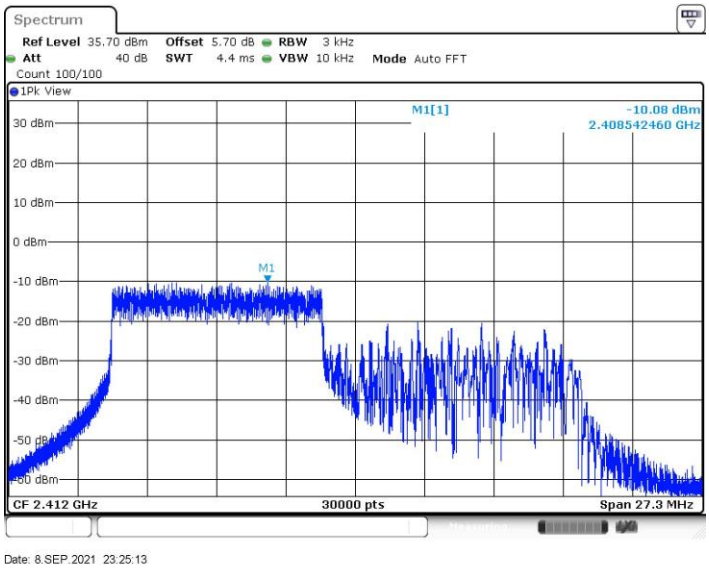
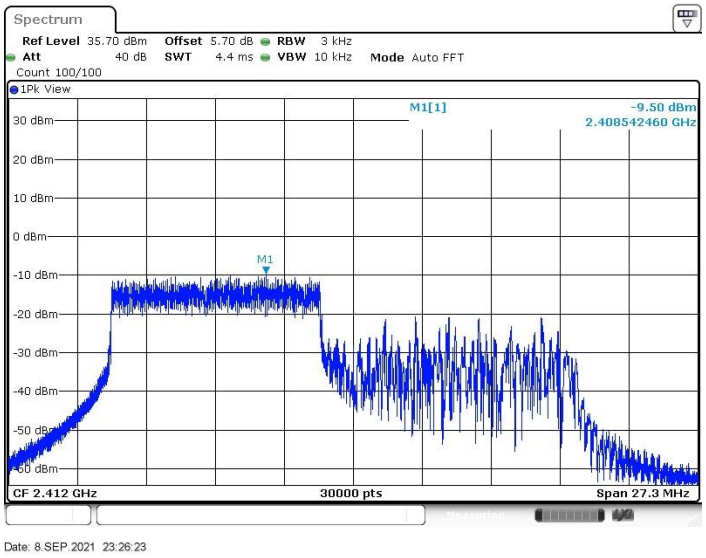


11AX20MIMO_Ant1_2412_106Tone


11AX20MIMO_Ant2_2412_106Tone


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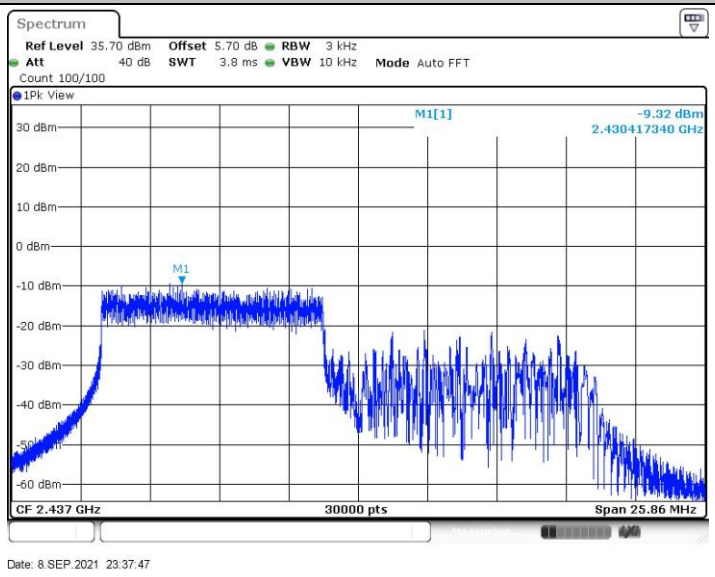

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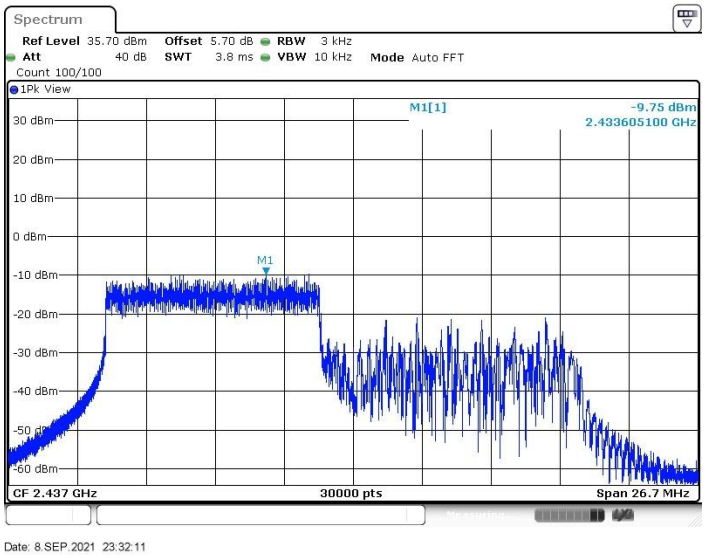

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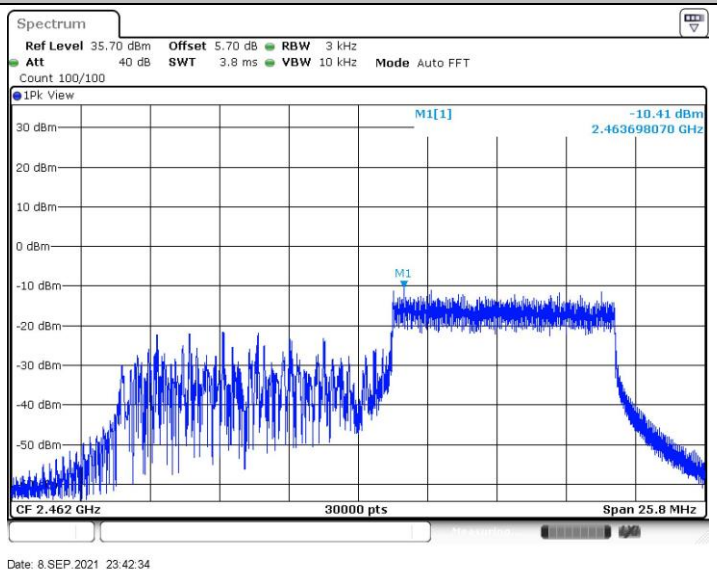

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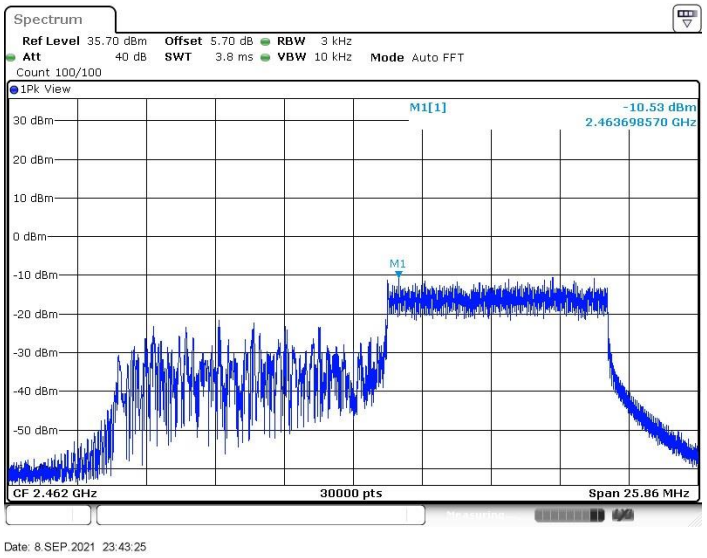
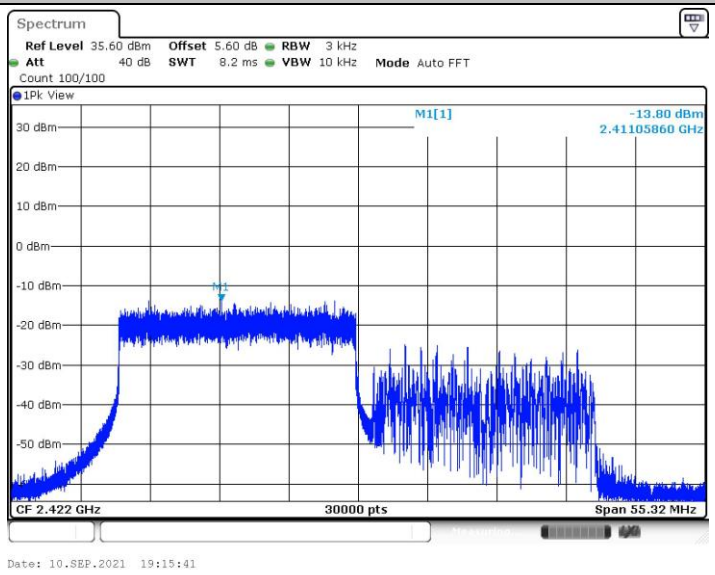


11AX40MIMO_Ant1_2422_242Tone


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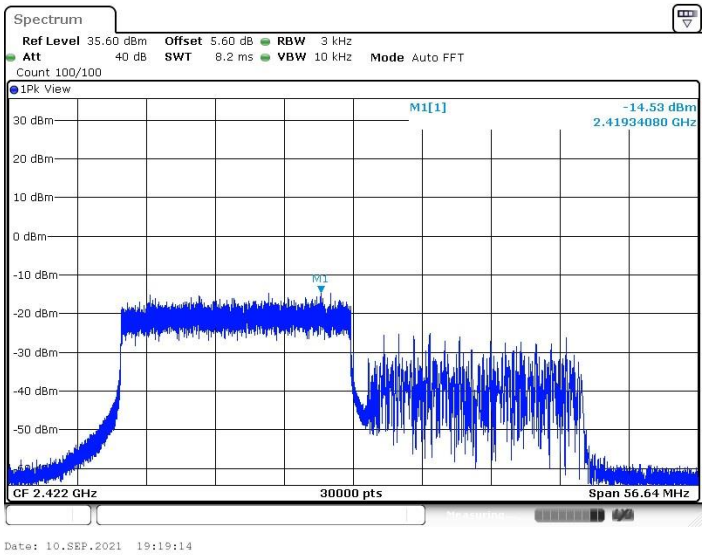

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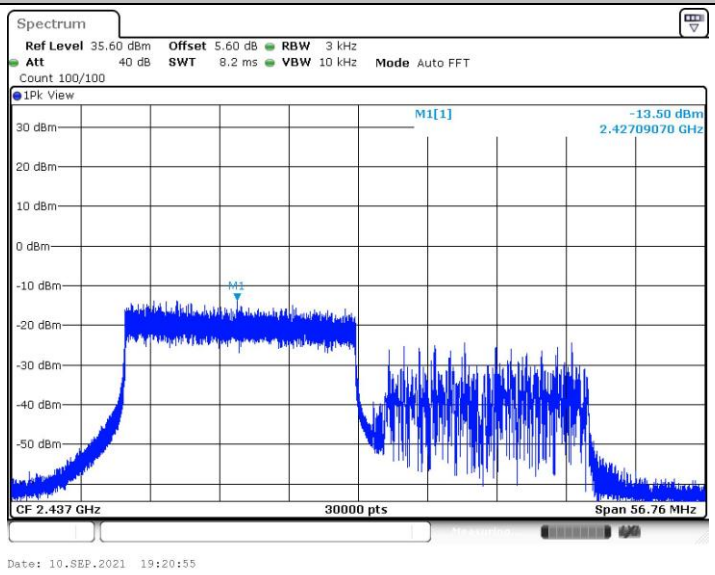

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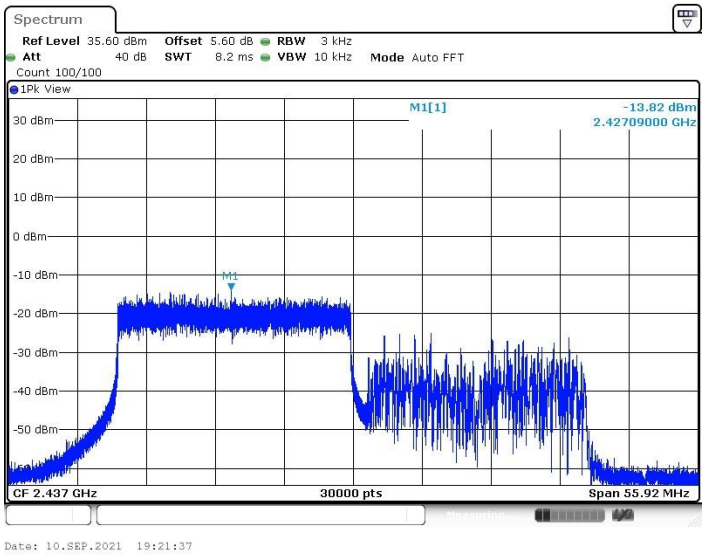
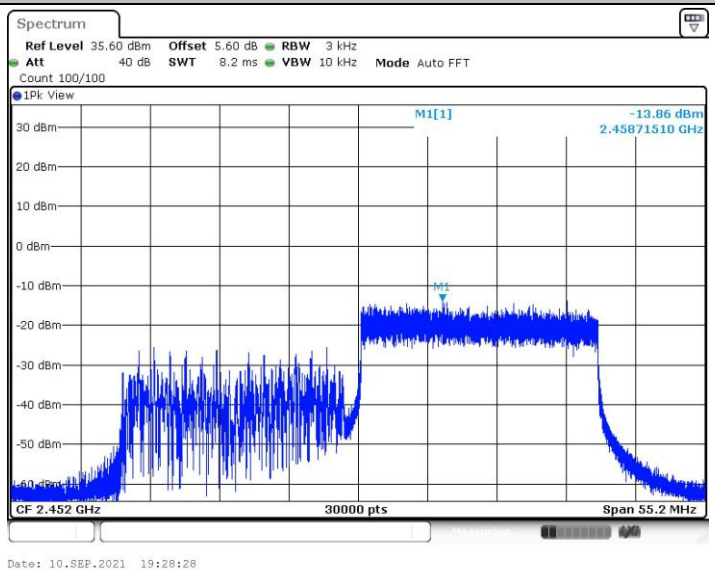
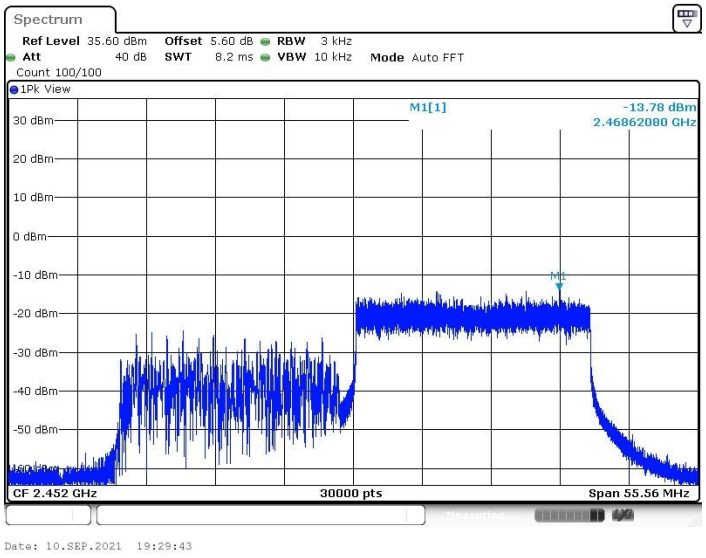


11AX40MIMO_Ant1_2452_242Tone


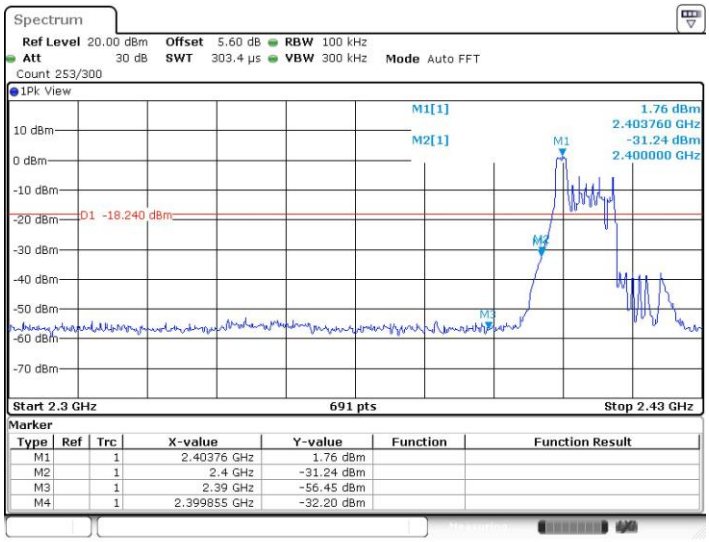
11AX40MIMO_Ant2_2452_242Tone


Appendix A: Band edge measurements

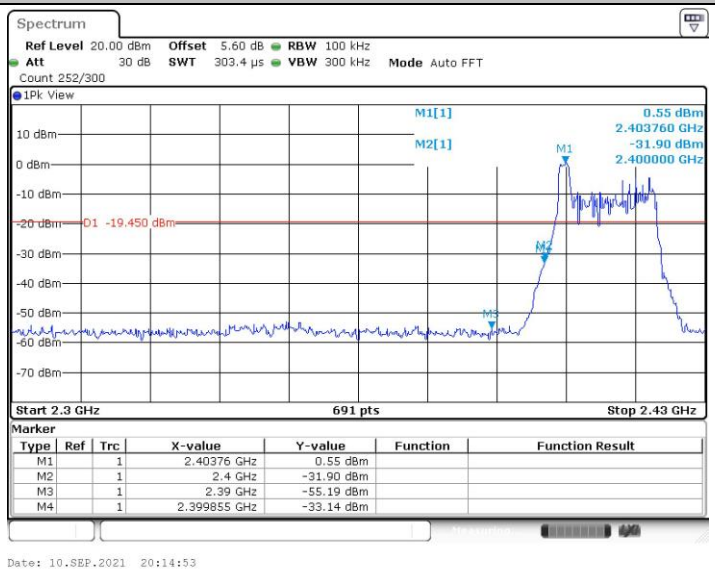
TestMode	Antenna	ChName	Frequency [MHz]	RuSize	RuIndex	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11AX20MIMO	Ant1	Low	2412	26Tone	RU1	1.76	-32.2	≤-18.24	PASS
	Ant2	Low	2412	26Tone	RU1	0.55	-33.14	≤-19.45	PASS
	Ant1	High	2462	26Tone	RU9	2.33	-49.31	≤-19	PASS
	Ant2	High	2462	26Tone	RU9	2.88	-48.22	≤-18.73	PASS
	Ant1	Low	2412	52Tone	RU1	1.88	-29.69	≤-18.12	PASS
	Ant2	Low	2412	52Tone	RU1	1.72	-33.94	≤-18.28	PASS
	Ant1	High	2462	52Tone	RU9	0.76	-52.57	≤-19.24	PASS
	Ant2	High	2462	52Tone	RU9	1.79	-52.18	≤-18.21	PASS
	Ant1	Low	2412	106Tone	RU1	2.71	-31.79	≤-17.29	PASS
	Ant2	Low	2412	106Tone	RU1	2.43	-31.34	≤-17.57	PASS
	Ant1	High	2462	106Tone	RU9	1.24	-52.33	≤-18.76	PASS
	Ant2	High	2462	106Tone	RU9	1.48	-53	≤-18.52	PASS
11AX40MIMO	Ant1	Low	2422	242Tone	RU1	-1.67	-34.57	≤-21.67	PASS
	Ant2	Low	2422	242Tone	RU1	-2.46	-36.03	≤-22.46	PASS
	Ant1	High	2452	242Tone	RU18	-2.05	-53.86	≤-22.05	PASS
	Ant2	High	2452	242Tone	RU18	-3.12	-52.96	≤-23.12	PASS

1.1.1 Trigger-Based

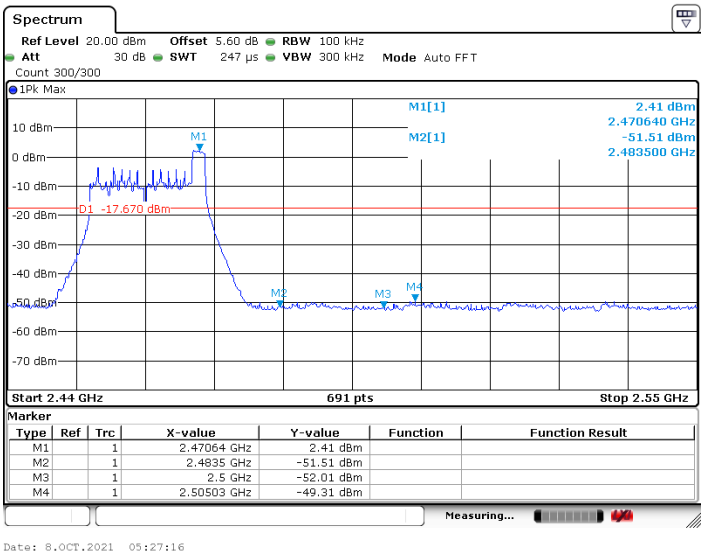
11AX20MIMO_Ant1_Low_2412_26Tone



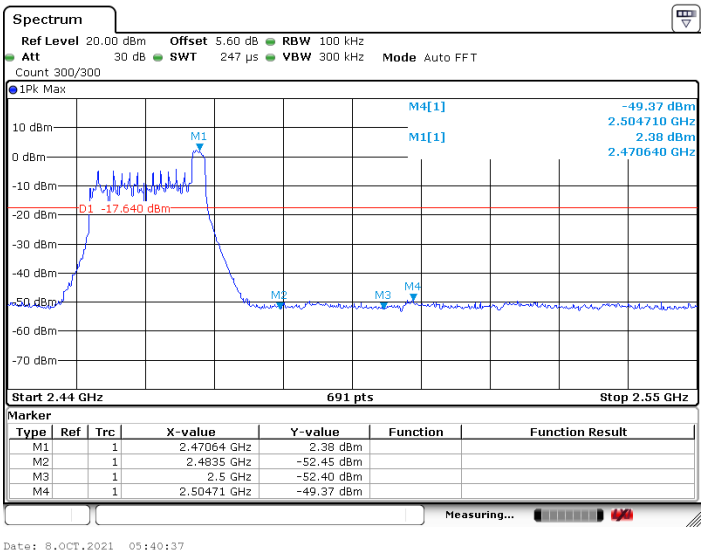
11AX20MIMO_Ant2_Low_2412_26Tone



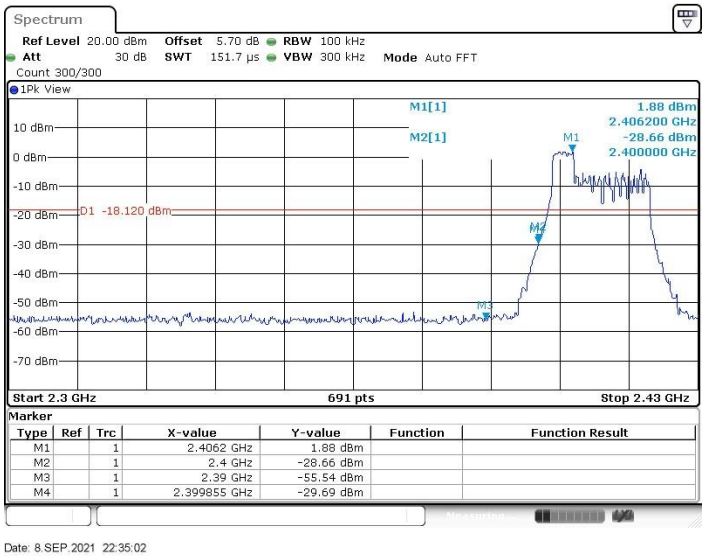
11AX20MIMO_Ant1_High_2462_26Tone



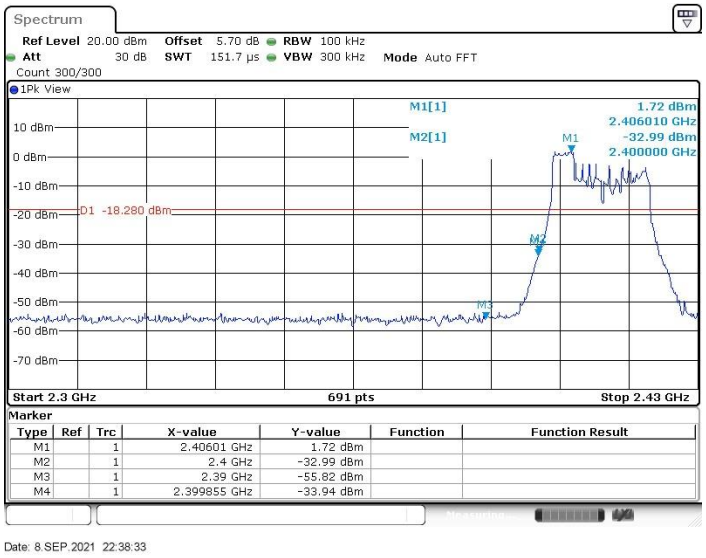
11AX20MIMO_Ant2_High_2462_26Tone



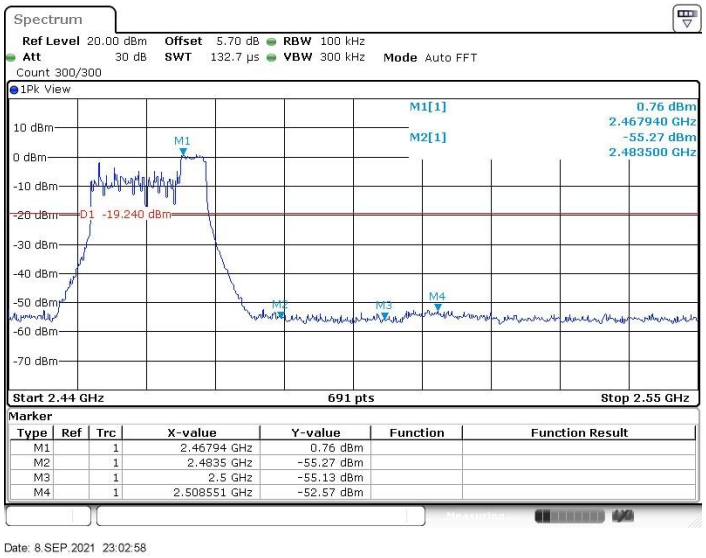
11AX20MIMO_Ant1_Low_2412_52Tone



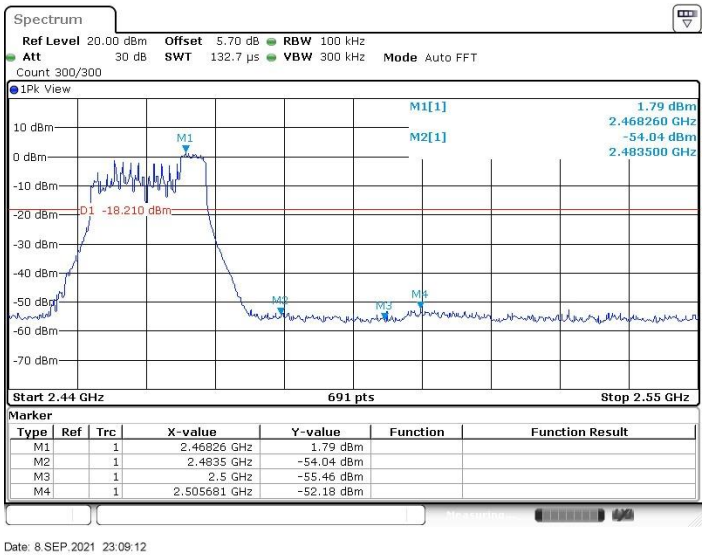
11AX20MIMO_Ant2_Low_2412_52Tone



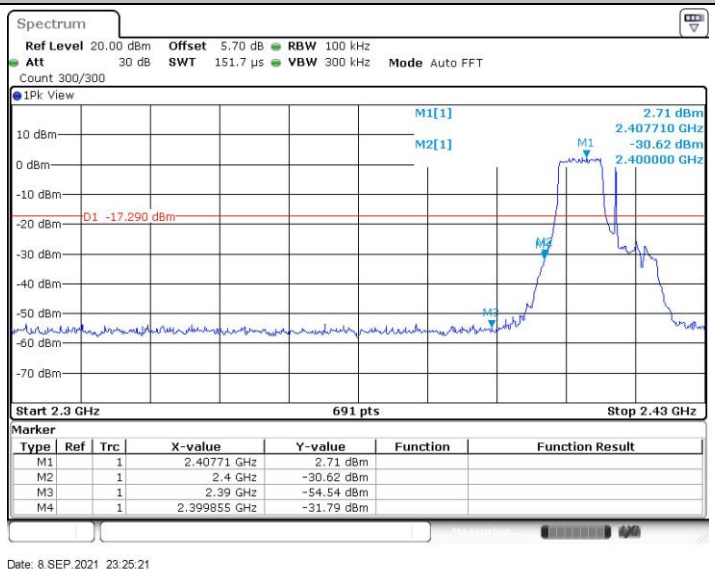
11AX20MIMO_Ant1_High_2462_52Tone



11AX20MIMO_Ant2_High_2462_52Tone



11AX20MIMO_Ant1_Low_2412_106Tone



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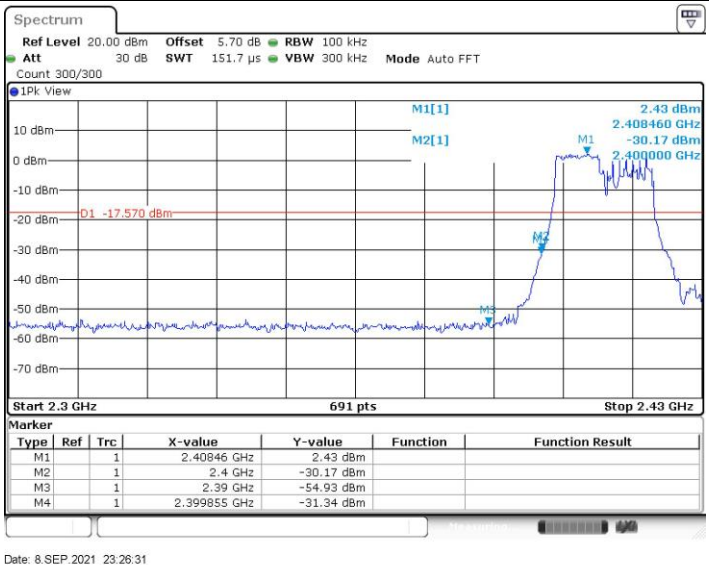

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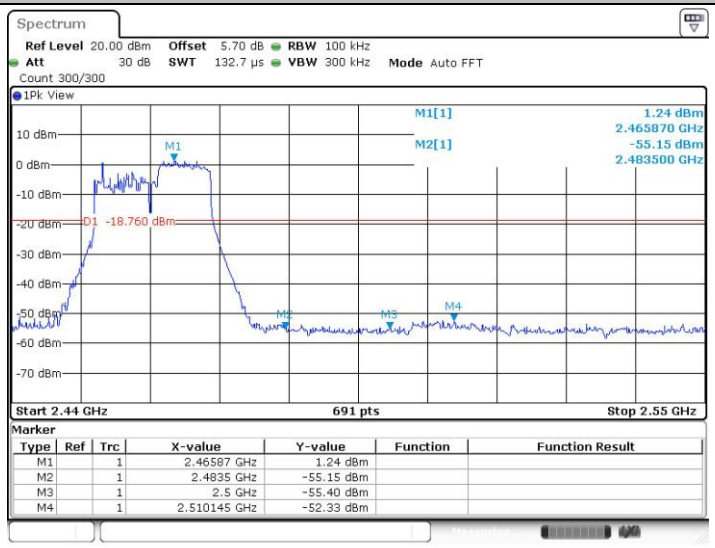

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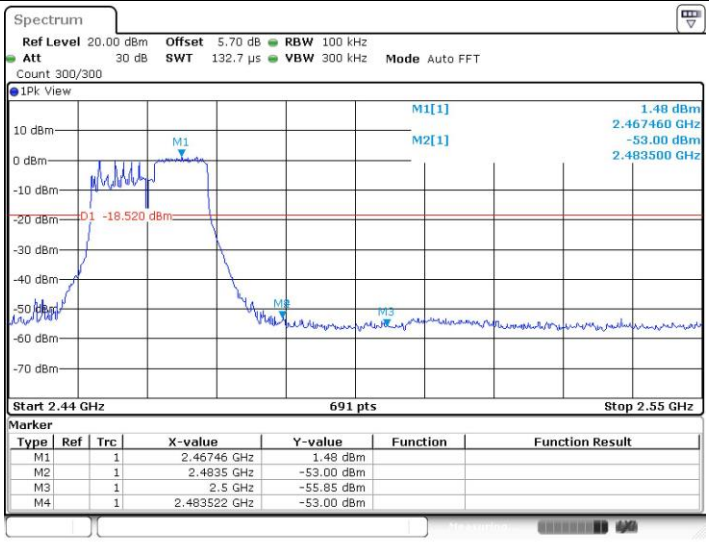

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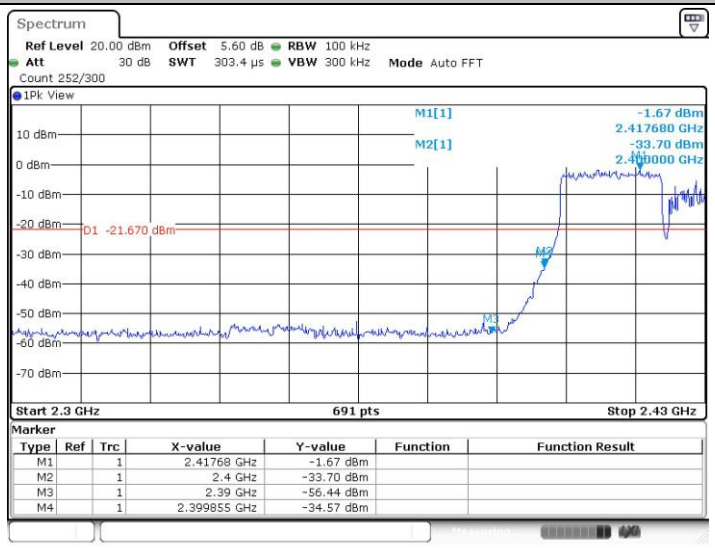
11AX40MIMO_Ant1_Low_2422_242Tone



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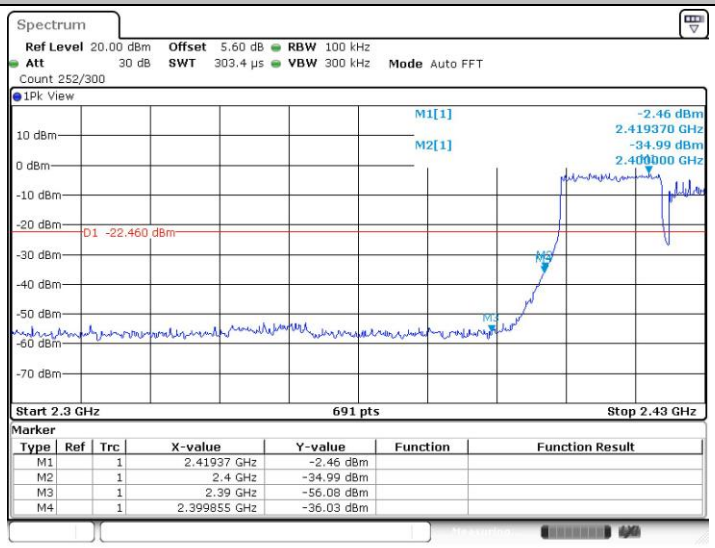

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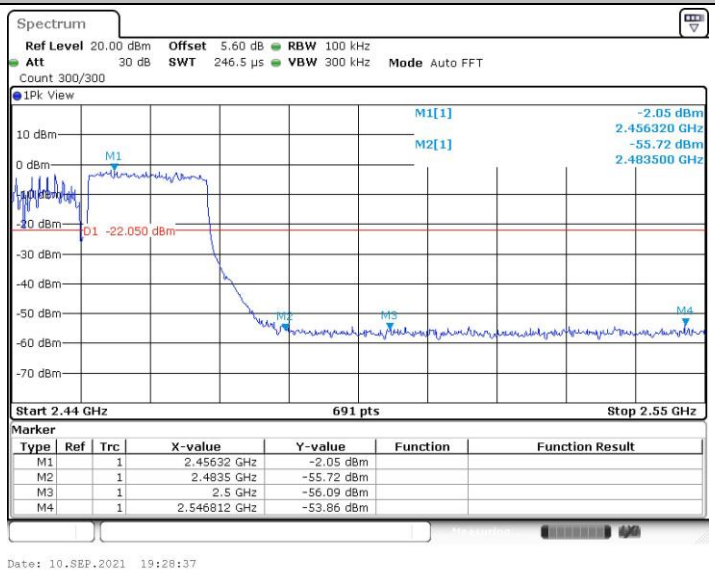

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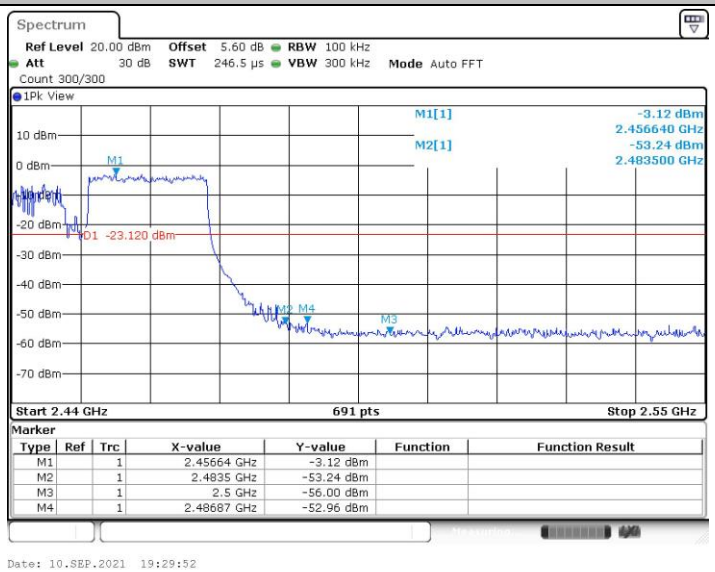
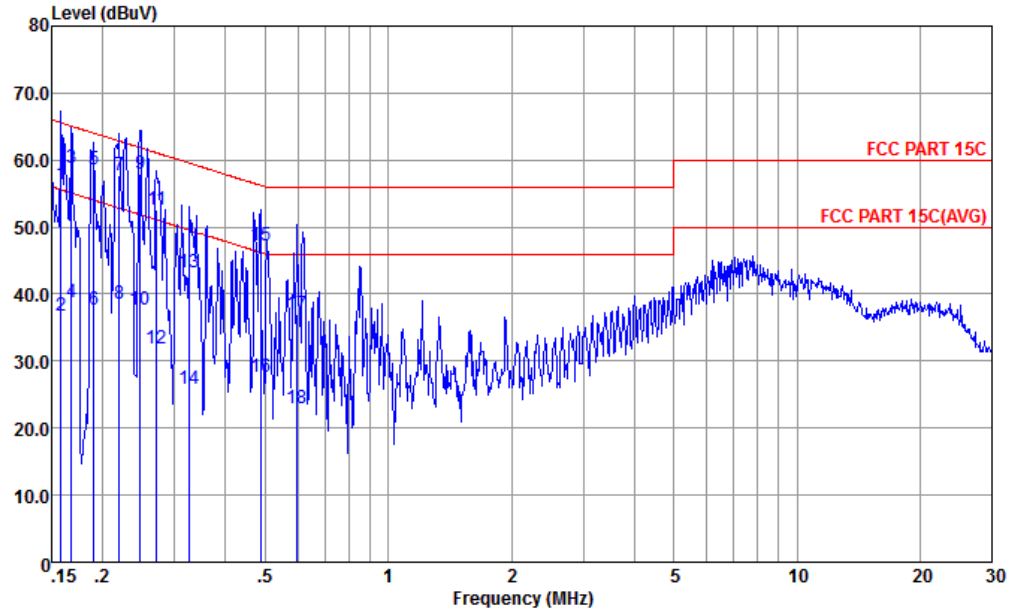


Appendix B. AC Conducted Emission Test Results

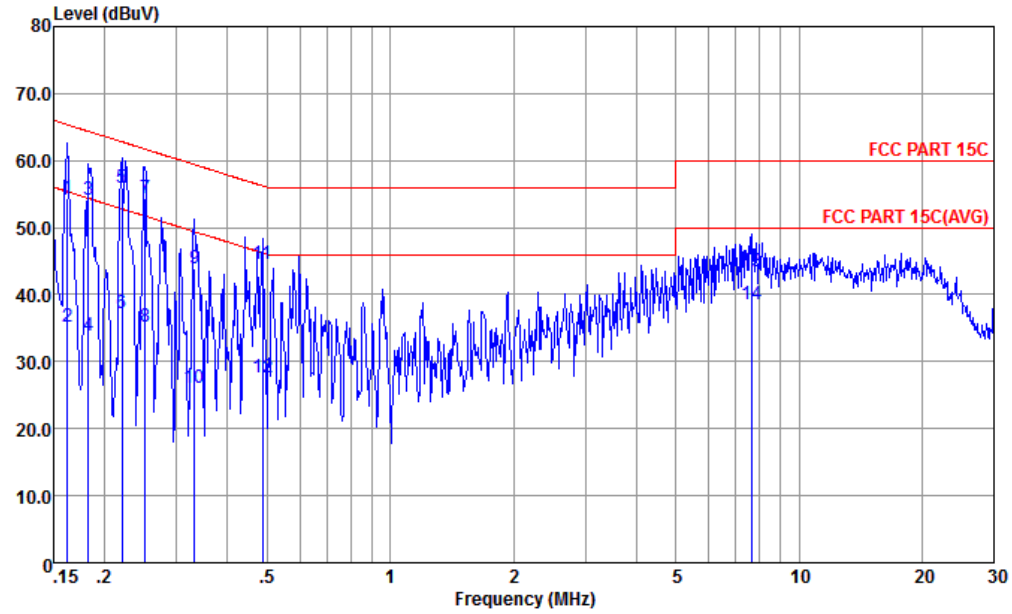
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15C LISN-L-060105-CN02 LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.158	56.43	-9.13	65.56	45.90	0.07	10.46	QP
2		0.158	36.85	-18.71	55.56	26.32	0.07	10.46	Average
3		0.168	58.81	-6.27	65.08	48.30	0.08	10.43	QP
4		0.168	38.71	-16.37	55.08	28.20	0.08	10.43	Average
5		0.190	58.57	-5.45	64.02	48.11	0.08	10.38	QP
6		0.190	37.57	-16.45	54.02	27.11	0.08	10.38	Average
7		0.220	57.64	-5.19	62.83	47.20	0.09	10.35	QP
8		0.220	38.54	-14.29	52.83	28.10	0.09	10.35	Average
9	*	0.247	58.03	-3.83	61.86	47.59	0.10	10.34	QP
10		0.247	37.73	-14.13	51.86	27.29	0.10	10.34	Average
11		0.272	52.62	-8.45	61.07	42.20	0.10	10.32	QP
12		0.272	31.92	-19.15	51.07	21.50	0.10	10.32	Average
13		0.327	43.21	-16.32	59.53	32.81	0.11	10.29	QP
14		0.327	25.91	-23.62	49.53	15.51	0.11	10.29	Average
15		0.486	47.17	-9.06	56.23	36.80	0.13	10.24	QP
16		0.486	27.57	-18.66	46.23	17.20	0.13	10.24	Average
17		0.598	36.98	-19.02	56.00	26.60	0.14	10.24	QP
18		0.598	22.88	-23.12	46.00	12.50	0.14	10.24	Average

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15C LISN-N-060105-CN02 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.162	54.40	-10.94	65.34	43.80	0.15	10.45	QP
2		0.162	35.10	-20.24	55.34	24.50	0.15	10.45	Average
3		0.182	54.16	-10.21	64.37	43.60	0.16	10.40	QP
4		0.182	33.86	-20.51	54.37	23.30	0.16	10.40	Average
5	*	0.221	56.02	-6.77	62.79	45.50	0.17	10.35	QP
6		0.221	37.12	-15.67	52.79	26.60	0.17	10.35	Average
7		0.251	54.32	-7.41	61.73	43.81	0.18	10.33	QP
8		0.251	35.32	-16.41	51.73	24.81	0.18	10.33	Average
9		0.332	43.99	-15.41	59.40	33.50	0.20	10.29	QP
10		0.332	25.99	-23.41	49.40	15.50	0.20	10.29	Average
11		0.486	44.67	-11.56	56.23	34.20	0.23	10.24	QP
12		0.486	27.67	-18.56	46.23	17.20	0.23	10.24	Average
13		7.646	43.55	-16.45	60.00	32.21	1.03	10.31	QP
14		7.646	38.45	-11.55	50.00	27.11	1.03	10.31	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

Appendix C. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2331.97	53.26	-20.74	74	50.01	30.43	7.6	34.78	377	130	P	H
		2389.04	41.94	-12.06	54	38.43	30.5	7.72	34.71	377	130	A	H
	*	2412	101.25	-	-	97.61	30.57	7.75	34.68	377	130	P	H
	*	2412	97.81	-	-	94.17	30.57	7.75	34.68	377	130	A	H
		2383.19	53.02	-20.98	74	49.58	30.48	7.69	34.73	211	320	P	V
		2388.39	41.8	-12.2	54	38.29	30.5	7.72	34.71	211	320	A	V
	*	2412	103.97	-	-	100.33	30.57	7.75	34.68	211	320	P	V
	*	2414	100.41	-	-	96.77	30.57	7.75	34.68	211	320	A	V
802.11b CH 11 2462MHz		2499.64	53.02	-20.98	74	48.8	30.93	7.89	34.6	354	136	P	H
		2487.04	42.17	-11.83	54	38.08	30.86	7.86	34.63	354	136	A	H
	*	2462	98.78	-	-	94.81	30.79	7.83	34.65	354	136	P	H
	*	2464	95.41	-	-	91.42	30.79	7.83	34.63	354	136	A	H
		2489.02	53.46	-20.54	74	49.24	30.93	7.89	34.6	234	322	P	V
		2486.26	42.46	-11.54	54	38.37	30.86	7.86	34.63	234	322	A	V
	*	2462	102.44	-	-	98.47	30.79	7.83	34.65	234	322	P	V
	*	2464	99.12	-	-	95.13	30.79	7.83	34.63	234	322	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	43.83	-30.17	74	58.05	34.61	11.21	60.04	300	0	P	H
		4824	43.54	-30.46	74	57.76	34.61	11.21	60.04	300	360	P	V
802.11b CH 06 2437MHz		4872	42.23	-31.77	74	56.29	34.69	11.28	60.03	300	0	P	H
		7308	44.47	-29.53	74	54.58	36.68	13.72	60.51	300	0	P	H
		4872	41.55	-32.45	74	55.61	34.69	11.28	60.03	300	360	P	V
		7308	43.74	-30.26	74	53.85	36.68	13.72	60.51	300	360	P	V
802.11b CH 11 2462MHz		4926	44.95	-29.05	74	58.85	34.77	11.35	60.02	300	0	P	H
		7386	44.33	-29.67	74	54.42	36.64	13.8	60.53	300	0	P	H
		4926	43.57	-30.43	74	57.47	34.77	11.35	60.02	300	360	P	V
		7386	43.99	-30.01	74	54.08	36.64	13.8	60.53	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.17	60.27	-13.73	74	56.76	30.5	7.72	34.71	377	61	P	H
		2389.82	45.87	-8.13	54	42.36	30.5	7.72	34.71	377	61	A	H
	*	2408	103.05	-	-	99.44	30.57	7.75	34.71	377	61	P	H
	*	2408	94.73	-	-	91.12	30.57	7.75	34.71	377	61	A	H
		2389.95	60.81	-13.19	74	57.3	30.5	7.72	34.71	291	360	P	V
		2389.95	47.97	-6.03	54	44.46	30.5	7.72	34.71	291	360	A	V
	*	2410	104.76	-	-	101.15	30.57	7.75	34.71	291	360	P	V
	*	2410	96.98	-	-	93.37	30.57	7.75	34.71	291	360	A	V
802.11g CH 11 2462MHz		2483.92	58.69	-15.31	74	54.6	30.86	7.86	34.63	356	59	P	H
		2483.5	46.03	-7.97	54	41.94	30.86	7.86	34.63	356	59	A	H
	*	2458	102.32	-	-	98.35	30.79	7.83	34.65	356	59	P	H
	*	2458	93.62	-	-	89.65	30.79	7.83	34.65	356	59	A	H
		2483.74	60.12	-13.88	74	56.03	30.86	7.86	34.63	100	133	P	V
		2483.5	46.99	-7.01	54	42.9	30.86	7.86	34.63	100	133	A	V
	*	2460	103.11	-	-	99.14	30.79	7.83	34.65	100	133	P	V
	*	2458	94.98	-	-	91.01	30.79	7.83	34.65	100	133	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	42.34	-31.66	74	56.56	34.61	11.21	60.04	300	0	P	H
		4824	43.23	-30.77	74	57.45	34.61	11.21	60.04	300	360	P	V
802.11g CH 06 2437MHz		4872	41.87	-32.13	74	55.93	34.69	11.28	60.03	300	0	P	H
		7308	44.77	-29.23	74	54.88	36.68	13.72	60.51	300	0	P	H
		4872	40.9	-33.1	74	54.96	34.69	11.28	60.03	300	360	P	V
		7308	44.54	-29.46	74	54.65	36.68	13.72	60.51	300	360	P	V
802.11g CH 11 2462MHz		4926	43.04	-30.96	74	56.94	34.77	11.35	60.02	300	0	P	H
		7386	45.03	-28.97	74	55.12	36.64	13.8	60.53	300	0	P	H
		4926	45.69	-28.31	74	59.59	34.77	11.35	60.02	300	360	P	V
		7386	44.5	-29.5	74	54.59	36.64	13.8	60.53	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2388.13	54.6	-19.4	74	51.09	30.5	7.72	34.71	329	45	P	H
		2389.95	42.95	-11.05	54	39.44	30.5	7.72	34.71	329	45	A	H
802.11ax	*	2414	103.68	-	-	100.04	30.57	7.75	34.68	329	45	P	H
HE20 Full	*	2414	93.61	-	-	89.97	30.57	7.75	34.68	329	45	A	H
CH 01		2388	62.69	-11.31	74	59.18	30.5	7.72	34.71	292	0	P	V
2412MHz		2389.95	48.66	-5.34	54	45.15	30.5	7.72	34.71	292	0	A	V
	*	2416	105.93	-	-	102.29	30.57	7.75	34.68	292	0	P	V
	*	2406	95.58	-	-	91.97	30.57	7.75	34.71	292	0	A	V
		2483.62	58.17	-15.83	74	54.08	30.86	7.86	34.63	355	59	P	H
		2483.5	45.72	-8.28	54	41.63	30.86	7.86	34.63	355	59	A	H
8802.11ax	*	2464	103.17	-	-	99.18	30.79	7.83	34.63	355	59	P	H
HE20 Full	*	2464	93.63	-	-	89.64	30.79	7.83	34.63	355	59	A	H
CH 11		2483.74	59.42	-14.58	74	55.33	30.86	7.86	34.63	100	107	P	V
2462MHz		2483.5	46.62	-7.38	54	42.53	30.86	7.86	34.63	100	107	A	V
	*	2466	103.7	-	-	99.71	30.79	7.83	34.63	100	107	P	V
	*	2464	94.03	-	-	90.04	30.79	7.83	34.63	100	107	A	V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 01 2412MHz		4824	42.48	-31.52	74	56.7	34.61	11.21	60.04	300	0	P	H
		4824	42.35	-31.65	74	56.57	34.61	11.21	60.04	300	360	P	V
802.11ax HE20 Full CH 06 2437MHz		4872	40.67	-33.33	74	54.73	34.69	11.28	60.03	300	0	P	H
		7308	44.2	-29.8	74	54.31	36.68	13.72	60.51	300	0	P	H
		4872	40.5	-33.5	74	54.56	34.69	11.28	60.03	300	360	P	V
		7308	44.42	-29.58	74	54.53	36.68	13.72	60.51	300	360	P	V
802.11ax HE20 Full CH 11 2462MHz		4926	42.62	-31.38	74	56.52	34.77	11.35	60.02	300	0	P	H
		7386	45.06	-28.94	74	55.15	36.64	13.8	60.53	300	0	P	H
		4926	43.53	-30.47	74	57.43	34.77	11.35	60.02	300	360	P	V
		7386	44.97	-29.03	74	55.06	36.64	13.8	60.53	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial RU (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 26/0 CH 01 2412MHz		2344.45	53.43	-20.57	74	49.71	30.45	7.63	34.36	266	53	P	H
		2389.95	41.91	-12.09	54	38.03	30.5	7.72	34.34	266	53	A	H
		2404	103.97	-	-	99.99	30.57	7.75	34.34	266	53	P	H
		2404	95.07	-	-	91.09	30.57	7.75	34.34	266	53	A	H
		2318.06	53.05	-20.95	74	49.39	30.43	7.6	34.37	100	71	P	V
		2389.95	41.86	-12.14	54	37.98	30.5	7.72	34.34	100	71	A	V
		2404	104.89	-	-	100.91	30.57	7.75	34.34	100	71	P	V
		2404	96.25	-	-	92.27	30.57	7.75	34.34	100	71	A	V
802.11ax HE20 Partial 26/8 CH 11 2462MHz		2485.48	54.28	-19.72	74	49.82	30.86	7.86	34.26	356	127	P	H
		2491.24	42.58	-11.42	54	37.99	30.93	7.89	34.23	356	127	A	H
		2472	99.77	-	-	95.31	30.86	7.86	34.26	356	127	P	H
		2470	90.03	-	-	85.67	30.79	7.83	34.26	356	127	A	H
		2483.86	56.55	-17.45	74	52.09	30.86	7.86	34.26	234	330	P	V
		2490.4	42.5	-11.5	54	37.91	30.93	7.89	34.23	234	330	A	V
		2470	103.11	-	-	98.75	30.79	7.83	34.26	234	330	P	V
		2470	94.34	-	-	89.98	30.79	7.83	34.26	234	330	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial RU (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/37 CH 01 2412MHz		2322.61	53.67	-20.33	74	50.01	30.43	7.6	34.37	267	51	P	H
		2389.82	42.37	-11.63	54	38.49	30.5	7.72	34.34	267	51	A	H
		2404	105.72	-	-	101.74	30.57	7.75	34.34	267	51	P	H
		2404	96.33	-	-	92.35	30.57	7.75	34.34	267	51	A	H
		2379.68	53.88	-20.12	74	50.06	30.48	7.69	34.35	100	68	P	V
		2389.95	42.25	-11.75	54	38.37	30.5	7.72	34.34	100	68	A	V
		2404	106.78	-	-	102.8	30.57	7.75	34.34	100	68	P	V
		2404	96.76	-	-	92.78	30.57	7.75	34.34	100	68	A	V
802.11ax HE20 Partial 52/40 CH 11 2462MHz		2499.88	54.11	-19.89	74	49.52	30.93	7.89	34.23	104	44	P	H
		2488.18	42.76	-11.24	54	38.2	30.93	7.89	34.26	104	44	A	H
		2468	98.12	-	-	93.76	30.79	7.83	34.26	104	44	P	H
		2468	89.25	-	-	84.89	30.79	7.83	34.26	104	44	A	H
		2489.86	53.38	-20.62	74	48.79	30.93	7.89	34.23	235	329	P	V
		2488.6	42.69	-11.31	54	38.13	30.93	7.89	34.26	235	329	A	V
		2470	105.34	-	-	100.98	30.79	7.83	34.26	235	329	P	V
		2470	95.24	-	-	90.88	30.79	7.83	34.26	235	329	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial RU (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 01 2412MHz		2370.58	53.31	-20.69	74	49.49	30.48	7.69	34.35	379	57	P	H
		2389.3	41.88	-12.12	54	38	30.5	7.72	34.34	379	57	A	H
		2404	103.66	-	-	99.68	30.57	7.75	34.34	379	57	P	H
		2404	95.19	-	-	91.21	30.57	7.75	34.34	379	57	A	H
		2334.83	53.2	-20.8	74	49.48	30.45	7.63	34.36	100	70	P	V
		2389.82	41.88	-12.12	54	38	30.5	7.72	34.34	100	70	A	V
		2404	105.4	-	-	101.42	30.57	7.75	34.34	100	70	P	V
		2404	96.59	-	-	92.61	30.57	7.75	34.34	100	70	A	V
802.11ax HE20 Partial 106/54 CH 11 2462MHz		2485.42	54.18	-19.82	74	49.72	30.86	7.86	34.26	100	65	P	H
		2492.68	42.59	-11.41	54	38	30.93	7.89	34.23	100	65	A	H
		2466	102.45	-	-	98.09	30.79	7.83	34.26	100	65	P	H
		2466	92.5	-	-	88.14	30.79	7.83	34.26	100	65	A	H
		2493.16	54.13	-19.87	74	49.54	30.93	7.89	34.23	232	330	P	V
		2489.92	42.63	-11.37	54	38.04	30.93	7.89	34.23	232	330	A	V
		2470	103.46	-	-	99.1	30.79	7.83	34.26	232	330	P	V
		2470	94.01	-	-	89.65	30.79	7.83	34.26	232	330	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		2389.43	53.91	-20.09	74	50.4	30.5	7.72	34.71	369	47	P	H
		2388	42.81	-11.19	54	39.3	30.5	7.72	34.71	369	47	A	H
		2490.76	52.94	-21.06	74	48.72	30.93	7.89	34.6	369	47	P	H
		2489.86	42.01	-11.99	54	37.79	30.93	7.89	34.6	369	47	A	H
802.11ax	*	2434	101.34	-	-	97.6	30.64	7.78	34.68	369	47	P	H
HE40 Full	*	2424	89.83	-	-	86.09	30.64	7.78	34.68	369	47	A	H
CH 03		2389.3	58.75	-15.25	74	55.24	30.5	7.72	34.71	326	0	P	V
2422MHz		2389.95	47.07	-6.93	54	43.56	30.5	7.72	34.71	326	0	A	V
		2486.92	53.09	-20.91	74	49	30.86	7.86	34.63	326	0	P	V
		2486.26	42.02	-11.98	54	37.93	30.86	7.86	34.63	326	0	A	V
	*	2428	99.91	-	-	96.17	30.64	7.78	34.68	326	0	P	V
	*	2428	90.76	-	-	87.02	30.64	7.78	34.68	326	0	A	V
		2389.69	54.77	-19.23	74	51.26	30.5	7.72	34.71	368	46	P	H
		2389.95	43.55	-10.45	54	40.04	30.5	7.72	34.71	368	46	A	H
		2491.42	53.46	-20.54	74	49.24	30.93	7.89	34.6	368	46	P	H
		2485.18	42.45	-11.55	54	38.36	30.86	7.86	34.63	368	46	A	H
802.11ax	*	2428	98.76	-	-	95.02	30.64	7.78	34.68	368	46	P	H
HE40 Full	*	2430	90.05	-	-	86.31	30.64	7.78	34.68	368	46	A	H
CH 06		2389.82	58.1	-15.9	74	54.59	30.5	7.72	34.71	293	23	P	V
2437MHz		2389.95	44.21	-9.79	54	40.7	30.5	7.72	34.71	293	23	A	V
		2484.04	54.2	-19.8	74	50.11	30.86	7.86	34.63	293	23	P	V
		2483.5	43.5	-10.5	54	39.41	30.86	7.86	34.63	293	23	A	V
	*	2432	100.31	-	-	96.57	30.64	7.78	34.68	293	23	P	V
	*	2432	91.13	-	-	87.39	30.64	7.78	34.68	293	23	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 09 2452MHz		2375.26	56.4	-17.6	74	48.22	32.15	7.69	31.66	355	63	P	H
		2389.95	45.07	-8.93	54	36.8	32.2	7.72	31.65	355	63	A	H
		2483.62	57.65	-16.35	74	53.56	30.86	7.86	34.63	355	63	P	H
		2483.98	45.86	-8.14	54	41.77	30.86	7.86	34.63	355	63	A	H
		2454	99.78	-	-	95.81	30.79	7.83	34.65	355	63	P	H
		2454	89.51	-	-	85.54	30.79	7.83	34.65	355	63	A	H
		2353.03	56	-18	74	47.9	32.11	7.66	31.67	229	1	P	V
		2388.91	45.08	-8.92	54	36.81	32.2	7.72	31.65	229	1	A	V
		2486.44	58.52	-15.48	74	54.43	30.86	7.86	34.63	229	1	P	V
		2485.9	46.1	-7.9	54	42.01	30.86	7.86	34.63	229	1	A	V
		2446	100.06	-	-	96.2	30.71	7.8	34.65	229	1	P	V
		2448	90.42	-	-	86.56	30.71	7.8	34.65	229	1	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		4842	40.79	-33.21	74	54.96	34.63	11.23	60.03	300	0	P	H
HE40 Full		7266	44.41	-29.59	74	54.55	36.69	13.68	60.51	300	0	P	H
CH 03		4842	40.83	-33.17	74	55	34.63	11.23	60.03	300	360	P	V
2422MHz		7266	44.61	-29.39	74	54.75	36.69	13.68	60.51	300	360	P	V
802.11ax		4872	40.27	-33.73	74	54.33	34.69	11.28	60.03	300	0	P	H
HE40 Full		7308	44.25	-29.75	74	54.36	36.68	13.72	60.51	300	0	P	H
CH 06		4872	40.34	-33.66	74	54.4	34.69	11.28	60.03	300	360	P	V
2437MHz		7308	44.45	-29.55	74	54.56	36.68	13.72	60.51	300	360	P	V
802.11ax		4902	40.86	-33.14	74	54.82	34.74	11.32	60.02	300	0	P	H
HE40 Full		7356	44.95	-29.05	74	55.04	36.66	13.77	60.52	300	0	P	H
CH 09		4902	41.88	-32.12	74	55.84	34.74	11.32	60.02	300	360	P	V
2452MHz		7356	44.32	-29.68	74	54.41	36.66	13.77	60.52	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE40 Partial RU (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Partial 242/61 CH 03 2422MHz		2338.73	53.67	-20.33	74	49.95	30.45	7.63	34.36	266	53	P	H
		2388.91	41.87	-12.13	54	37.99	30.5	7.72	34.34	266	53	A	H
		2489.14	53.72	-20.28	74	49.13	30.93	7.89	34.23	266	53	P	H
		2491	42.58	-11.42	54	37.99	30.93	7.89	34.23	266	53	A	H
		2414	100.19	-	-	96.18	30.57	7.75	34.31	266	53	P	H
		2404	90.82	-	-	86.84	30.57	7.75	34.34	266	53	A	H
		2347.7	53.4	-20.6	74	49.68	30.45	7.63	34.36	100	69	P	V
		2389.95	41.92	-12.08	54	38.04	30.5	7.72	34.34	100	69	A	V
		2495.74	53.53	-20.47	74	48.94	30.93	7.89	34.23	100	69	P	V
		2492.44	42.61	-11.39	54	38.02	30.93	7.89	34.23	100	69	A	V
		2406	101.26	-	-	97.28	30.57	7.75	34.34	100	69	P	V
		2404	91.57	-	-	87.59	30.57	7.75	34.34	100	69	A	V
802.11ax HE40 Partial 242/62 CH 09 2452MHz		2369.67	53.21	-20.79	74	49.39	30.48	7.69	34.35	249	136	P	H
		2389.95	41.76	-12.24	54	37.88	30.5	7.72	34.34	249	136	A	H
		2489.8	54.08	-19.92	74	49.49	30.93	7.89	34.23	249	136	P	H
		2483.56	42.53	-11.47	54	38.07	30.86	7.86	34.26	249	136	A	H
		2464	97.4	-	-	93.04	30.79	7.83	34.26	249	136	P	H
		2464	87.9	-	-	83.54	30.79	7.83	34.26	249	136	A	H
		2318.84	53.19	-20.81	74	49.53	30.43	7.6	34.37	234	328	P	V
		2388.91	41.75	-12.25	54	37.87	30.5	7.72	34.34	234	328	A	V
		2492.62	53.43	-20.57	74	48.84	30.93	7.89	34.23	234	328	P	V
		2486.92	42.54	-11.46	54	38.08	30.86	7.86	34.26	234	328	A	V
		2470	99.79	-	-	95.43	30.79	7.83	34.26	234	328	P	V
		2470	90.37	-	-	86.01	30.79	7.83	34.26	234	328	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz WIFI 802.11ax HE20 (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11ax HE20 LF		42.61	26.74	-13.26	40	40.27	18.34	0.99	32.86	100	0	P	H
		65.89	20.69	-19.31	40	39.27	13.28	1.22	33.08	-	-	P	H
		95.96	20.18	-23.32	43.5	34.18	17.26	1.48	32.74	-	-	P	H
		140.58	18.79	-24.71	43.5	32.19	17.62	1.8	32.82	-	-	P	H
		211.39	20.36	-23.14	43.5	34.23	17.02	2.21	33.1	-	-	P	H
		832.19	28.97	-17.03	46	30.04	27.09	4.4	32.56	-	-	P	H
		43.58	28.72	-11.28	40	42.78	17.82	1	32.88	100	360	P	V
		70.74	23.04	-16.96	40	41.48	13.27	1.27	32.98	-	-	P	V
		183.26	19.86	-23.64	43.5	34.1	16.7	2.06	33	-	-	P	V
		324.88	20.61	-25.39	46	29.97	20.8	2.74	32.9	-	-	P	V
		567.38	27.45	-18.55	46	30.62	25.76	3.64	32.57	-	-	P	V
		691.54	26.99	-19.01	46	30.02	25.73	4.02	32.78	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

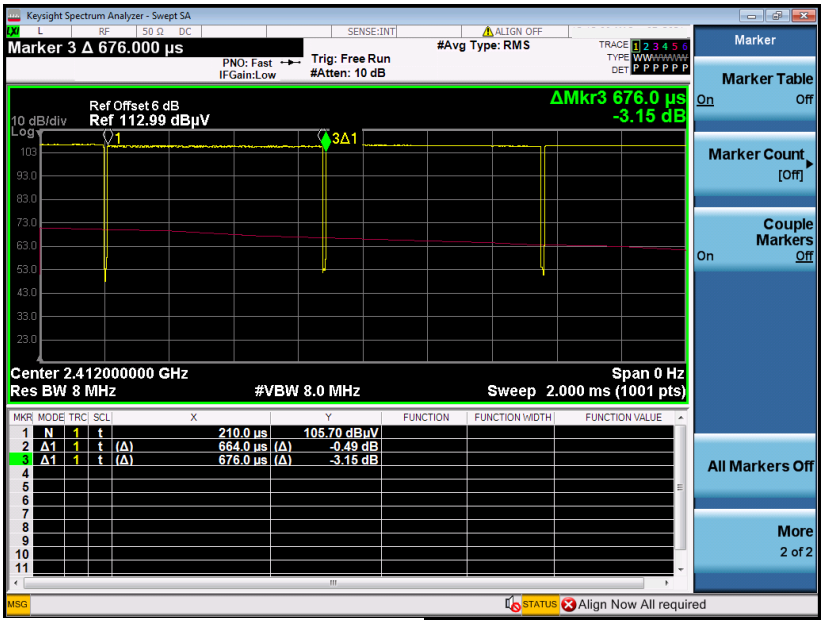
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

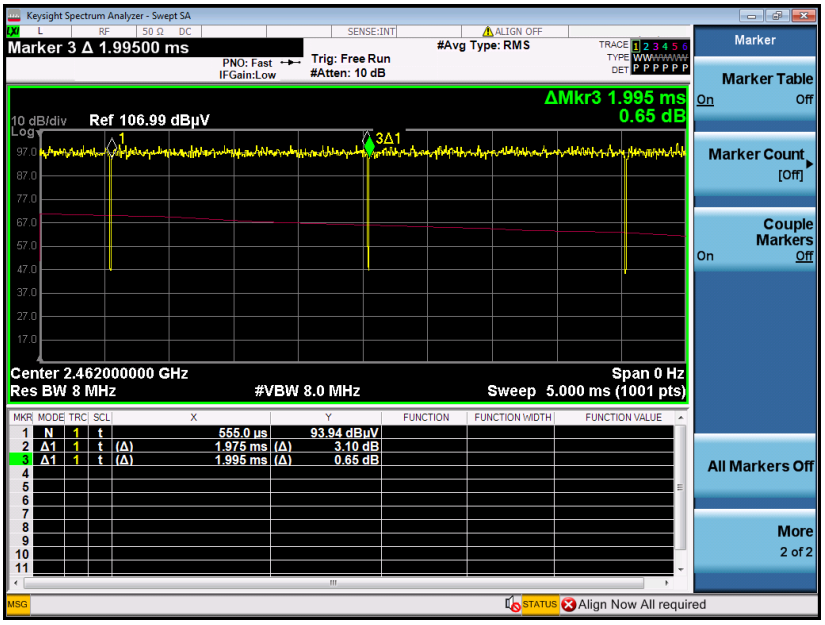
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	98.22	-	-	10Hz
802.11g	99.00	-	-	10Hz
802.11ax HE20	100	-	-	10Hz
802.11ax HE40	100	-	-	10Hz

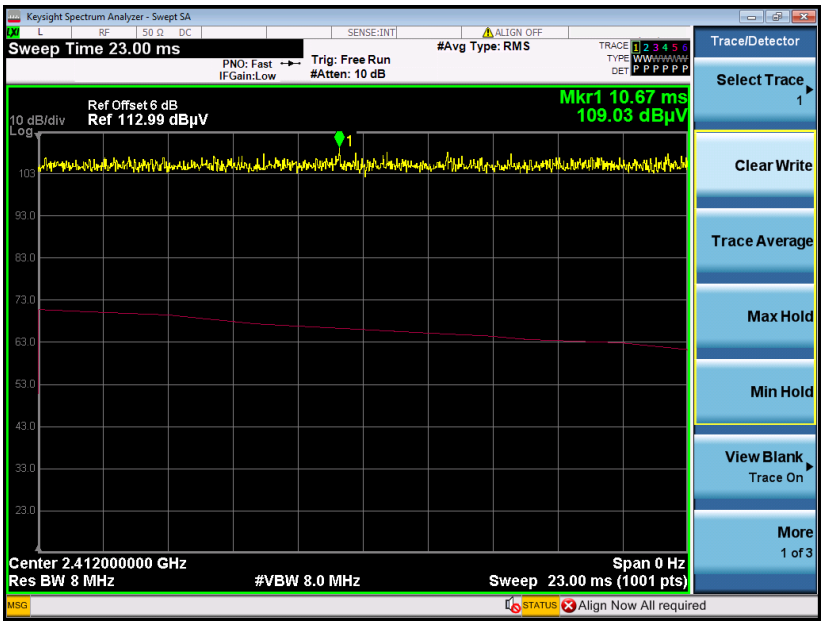
802.11b



802.11g



802.11ax HE20



802.11ax HE40