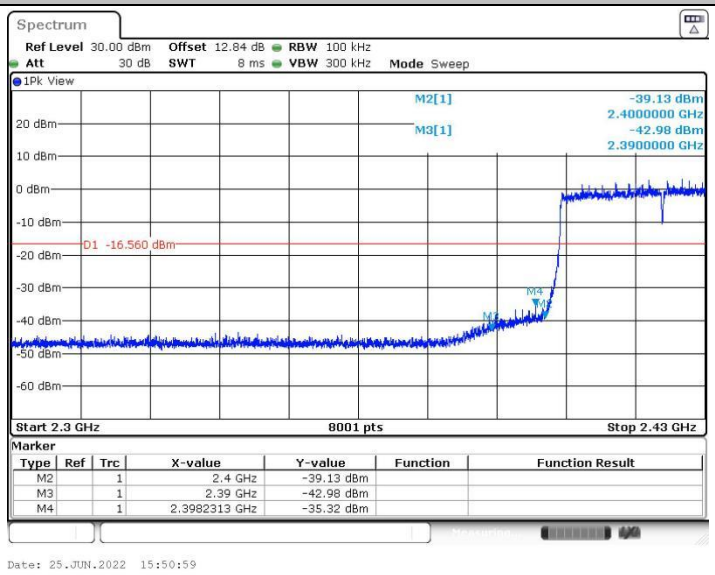
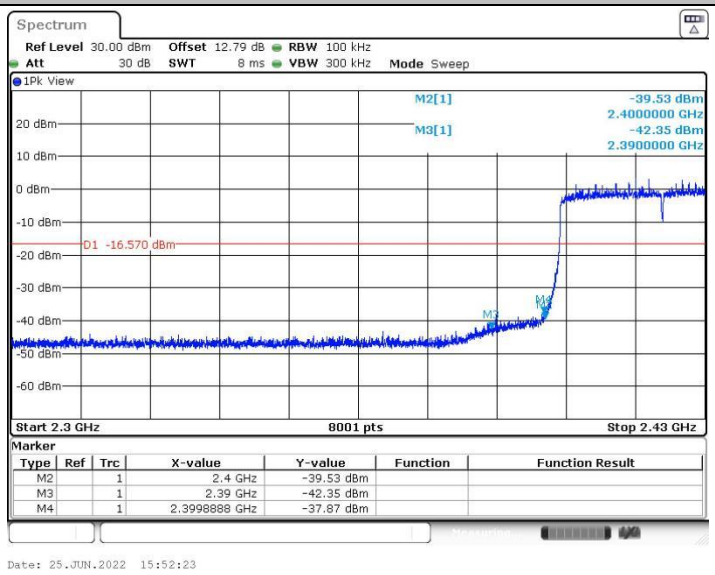
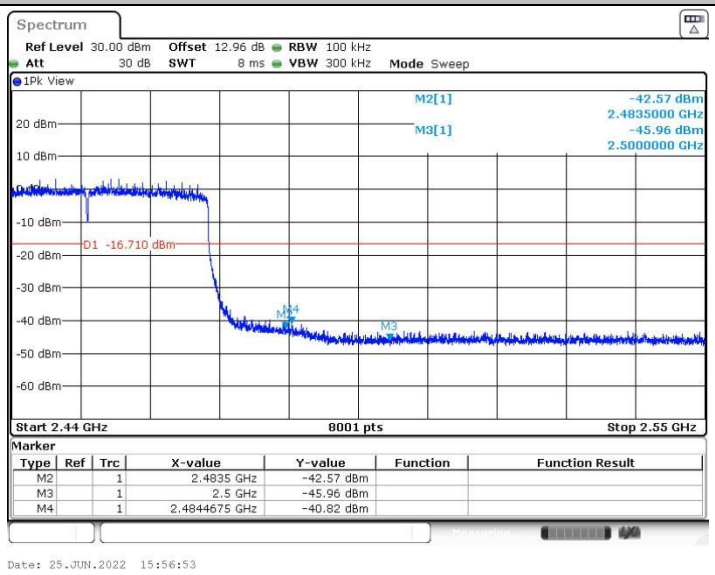
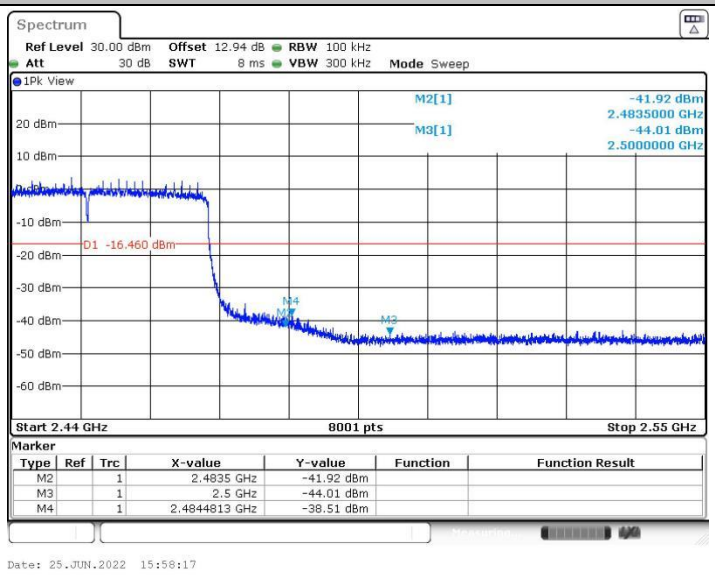
11AX40MIMO_Ant1_Low_2422


11AX40MIMO_Ant2_Low_2422


11AX40MIMO_Ant1_High_2452


11AX40MIMO_Ant2_High_2452


Conducted Spurious Emission

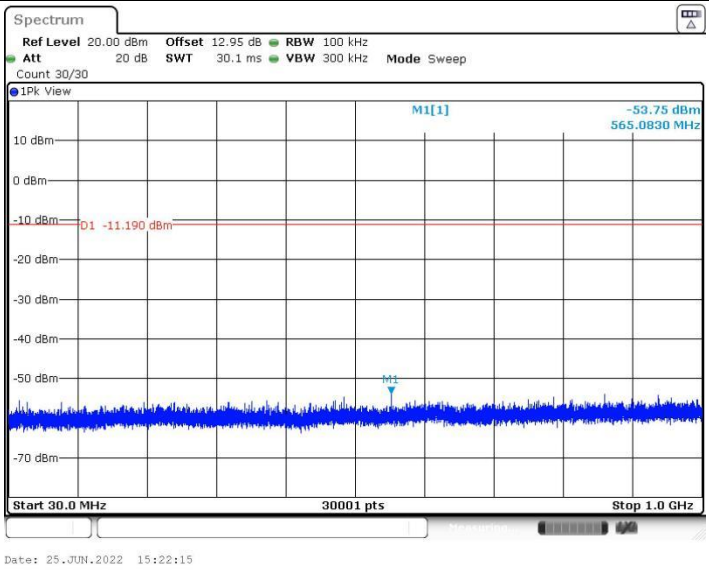
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B-CDD	Ant1	2412	30~1000	8.81	-53.75	≤-11.19	PASS
			1000~26500	8.81	-45.43	≤-11.19	PASS
	Ant2	2412	30~1000	8.87	-54.52	≤-11.13	PASS
			1000~26500	8.87	-45.32	≤-11.13	PASS
	Ant1	2437	30~1000	8.64	-54.25	≤-11.36	PASS
			1000~26500	8.64	-45.91	≤-11.36	PASS
	Ant2	2437	30~1000	9.13	-54.9	≤-10.87	PASS
			1000~26500	9.13	-45.66	≤-10.87	PASS
	Ant1	2462	30~1000	8.68	-53.95	≤-11.32	PASS
			1000~26500	8.68	-45.87	≤-11.32	PASS
	Ant2	2462	30~1000	9.01	-54.55	≤-10.99	PASS
			1000~26500	9.01	-45.73	≤-10.99	PASS
11G-CDD	Ant1	2412	30~1000	7.16	-53.68	≤-12.84	PASS
			1000~26500	7.16	-45.61	≤-12.84	PASS
	Ant2	2412	30~1000	6.80	-54.78	≤-13.2	PASS
			1000~26500	6.80	-45.28	≤-13.2	PASS
	Ant1	2437	30~1000	6.95	-54.55	≤-13.05	PASS
			1000~26500	6.95	-44.74	≤-13.05	PASS
	Ant2	2437	30~1000	6.56	-53.76	≤-13.44	PASS
			1000~26500	6.56	-45.47	≤-13.44	PASS
	Ant1	2462	30~1000	6.72	-54.95	≤-13.28	PASS
			1000~26500	6.72	-44.94	≤-13.28	PASS
	Ant2	2462	30~1000	6.73	-54.15	≤-13.27	PASS
			1000~26500	6.73	-45.43	≤-13.27	PASS
11AX20MIMO	Ant1	2412	30~1000	7.17	-54.3	≤-12.83	PASS
			1000~26500	7.17	-44.53	≤-12.83	PASS
	Ant2	2412	30~1000	6.45	-54.4	≤-13.55	PASS
			1000~26500	6.45	-45.52	≤-13.55	PASS
	Ant1	2437	30~1000	5.76	-54.06	≤-14.24	PASS
			1000~26500	5.76	-45.6	≤-14.24	PASS
	Ant2	2437	30~1000	6.78	-53.43	≤-13.22	PASS
			1000~26500	6.78	-45.34	≤-13.22	PASS
	Ant1	2462	30~1000	5.76	-54.49	≤-14.24	PASS
			1000~26500	5.76	-45.56	≤-14.24	PASS
	Ant2	2462	30~1000	6.52	-53.87	≤-13.48	PASS

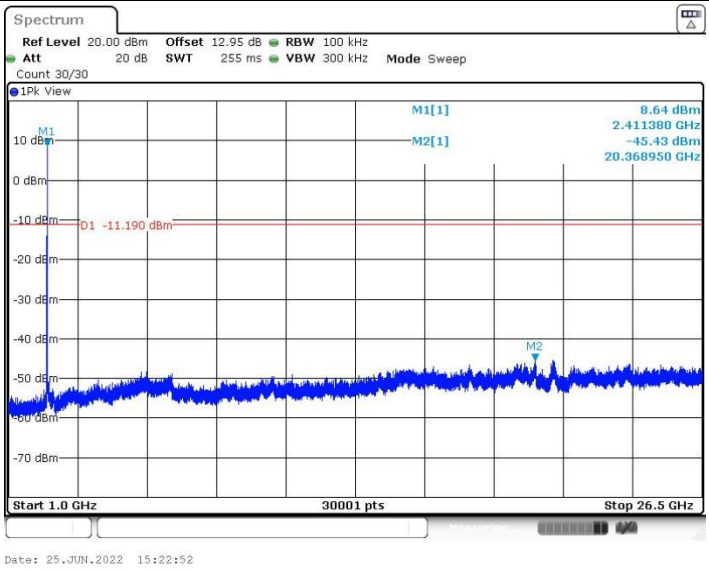
			1000~26500	6.52	-45.19	≤-13.48	PASS
11AX40MIMO	Ant1	2422	30~1000	3.44	-54.48	≤-16.56	PASS
			1000~26500	3.44	-45.03	≤-16.56	PASS
	Ant2	2422	30~1000	3.43	-55.09	≤-16.57	PASS
			1000~26500	3.43	-45.02	≤-16.57	PASS
	Ant1	2437	30~1000	3.42	-54.96	≤-16.58	PASS
			1000~26500	3.42	-46.06	≤-16.58	PASS
	Ant2	2437	30~1000	3.49	-54.23	≤-16.51	PASS
			1000~26500	3.49	-45.4	≤-16.51	PASS
	Ant1	2452	30~1000	3.29	-54.26	≤-16.71	PASS
			1000~26500	3.29	-45.31	≤-16.71	PASS
	Ant2	2452	30~1000	3.54	-53.98	≤-16.46	PASS
			1000~26500	3.54	-45.2	≤-16.46	PASS

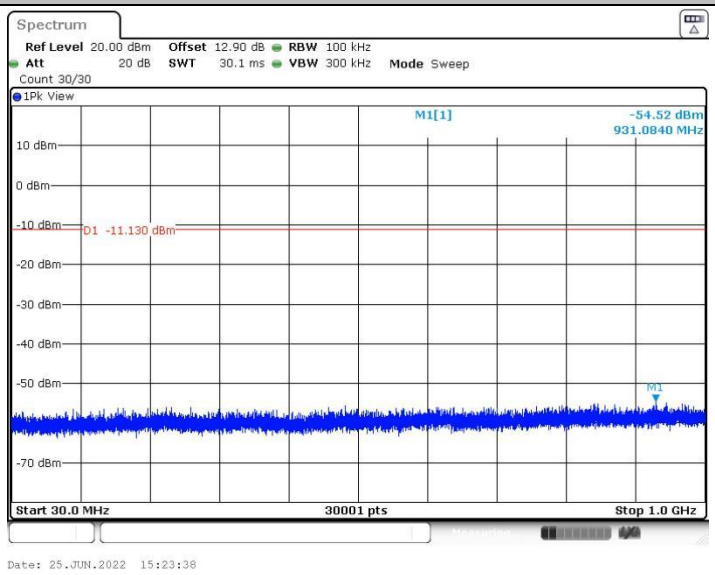
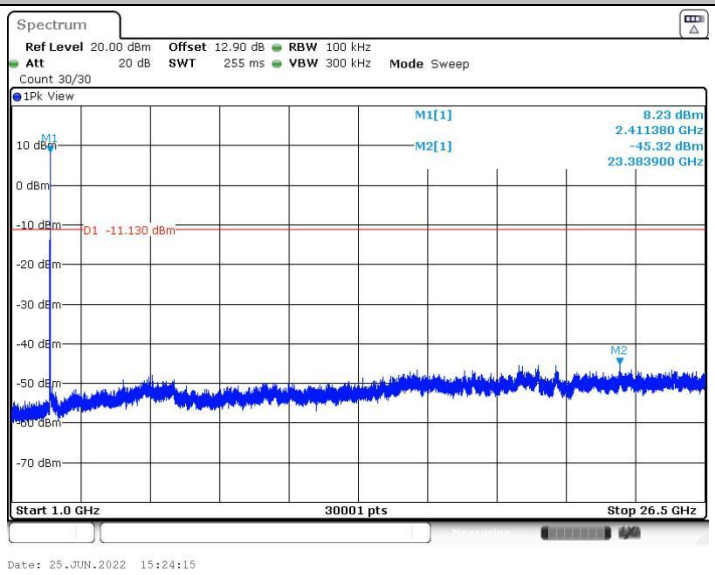
Test Graphs

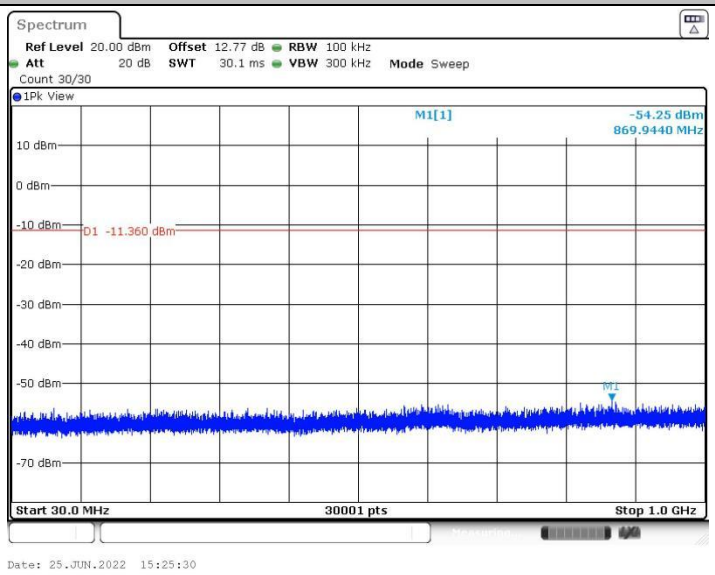
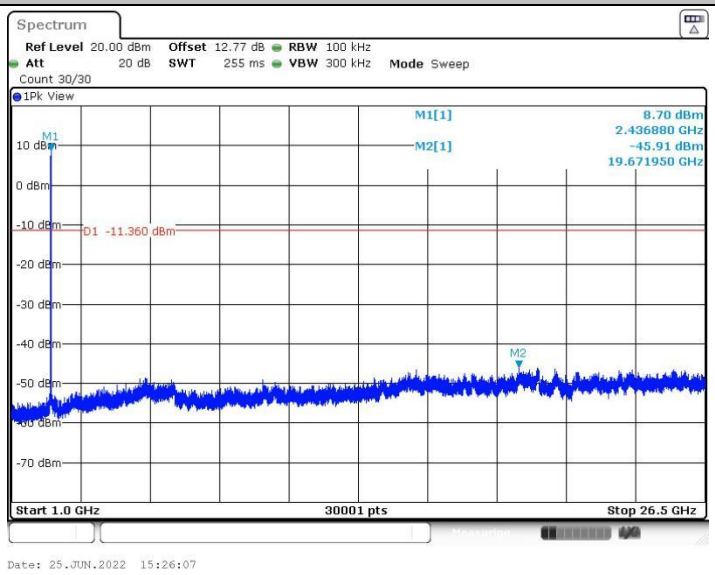
11B-CDD_Ant1_2412_30~1000

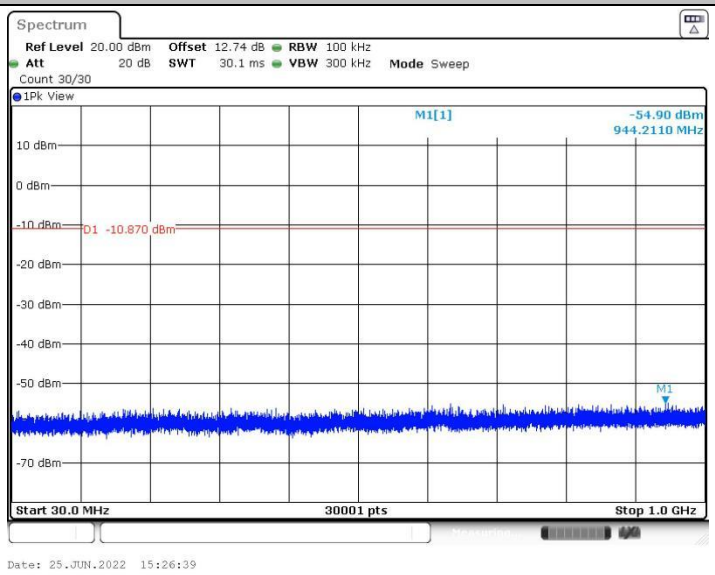


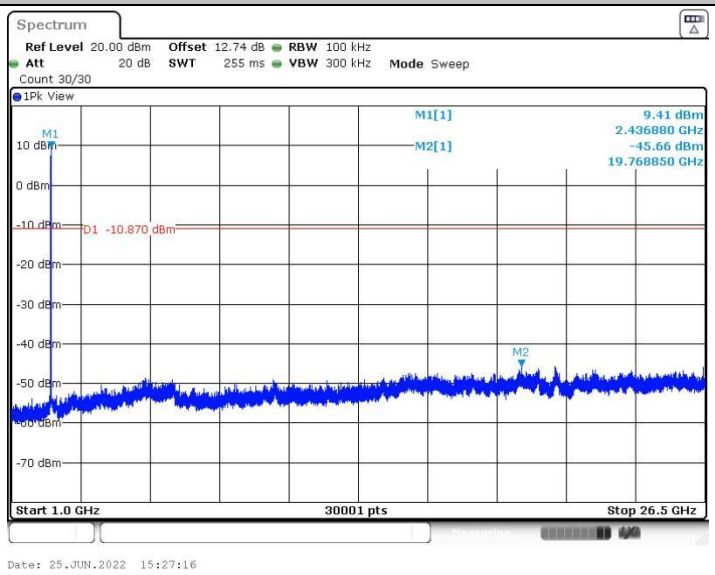
11B-CDD_Ant1_2412_1000~26500

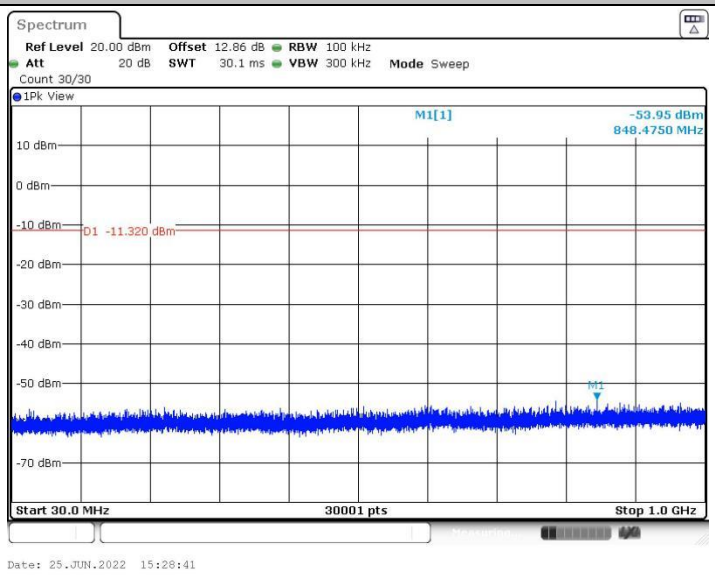
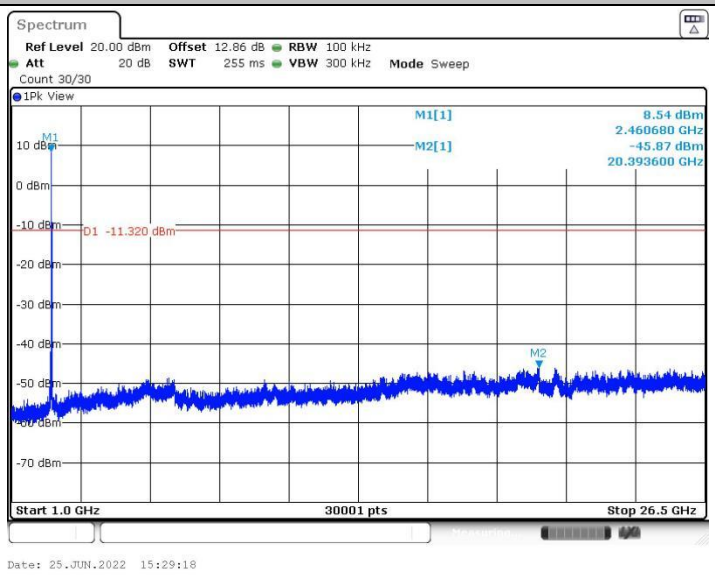


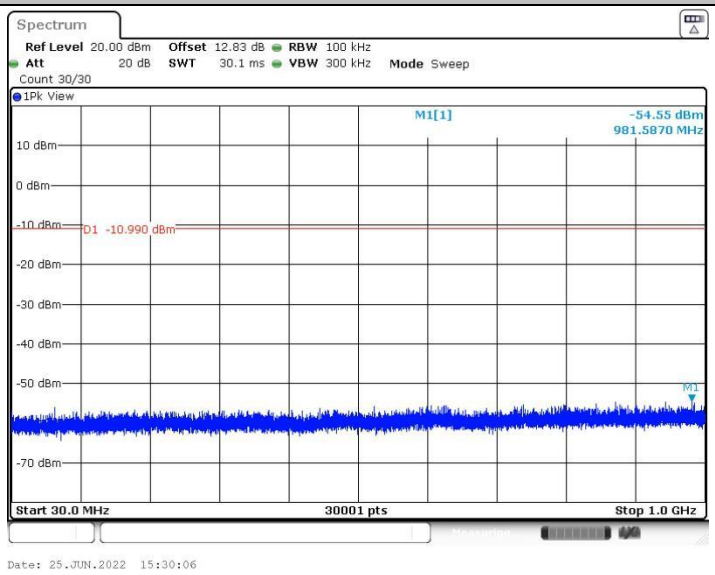
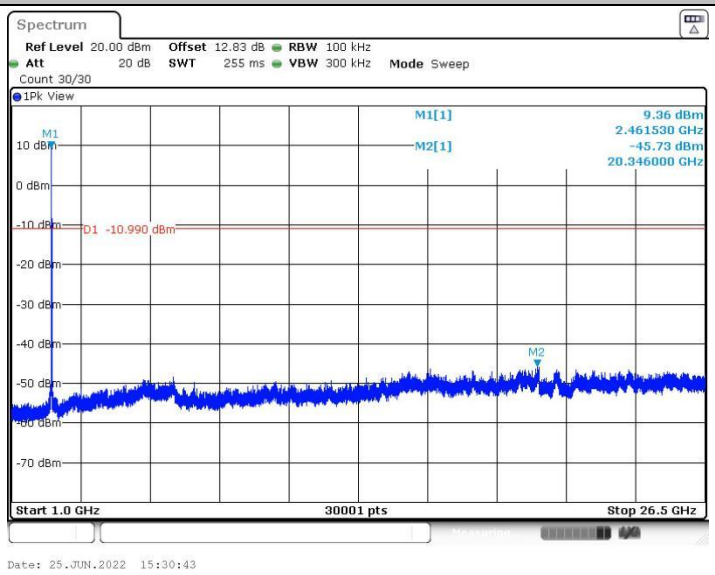
11B-CDD_Ant2_2412_30~1000

11B-CDD_Ant2_2412_1000~26500


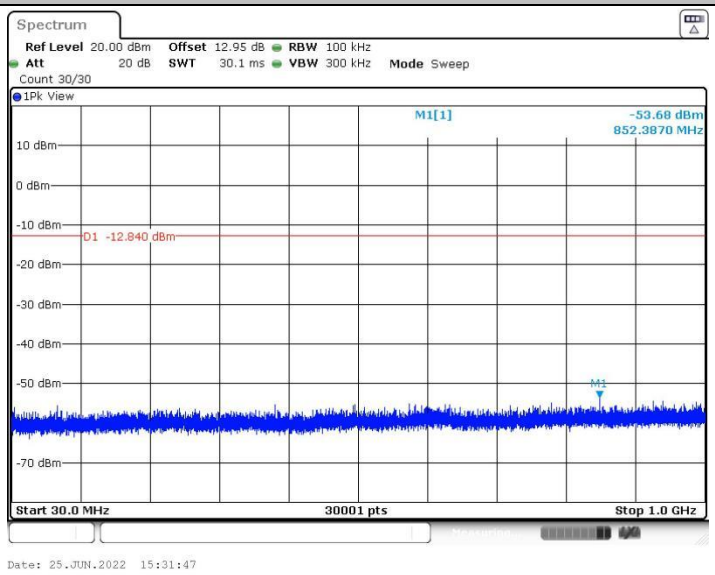
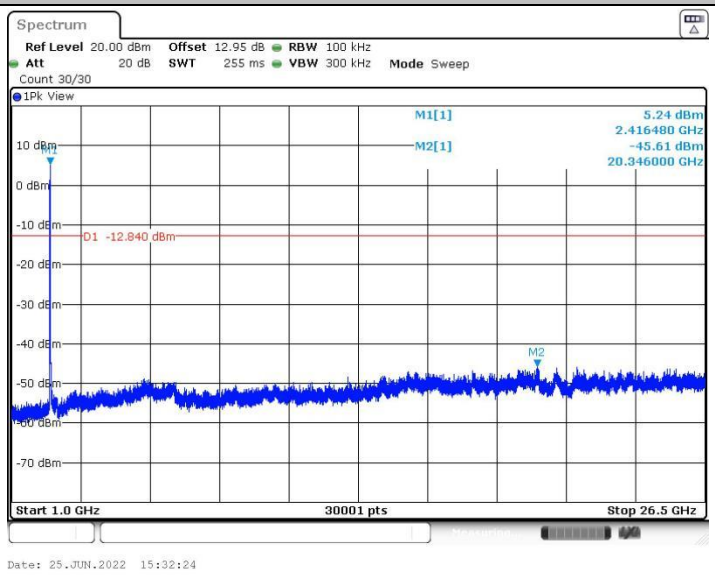
11B-CDD_Ant1_2437_30~1000

11B-CDD_Ant1_2437_1000~26500


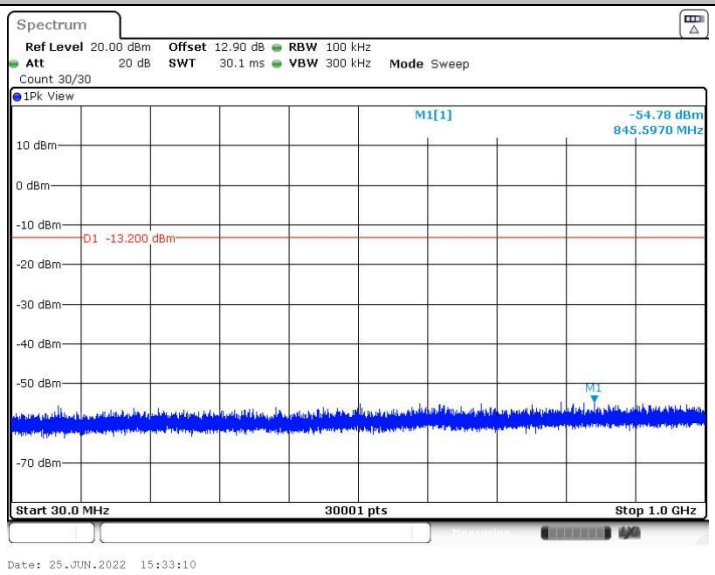
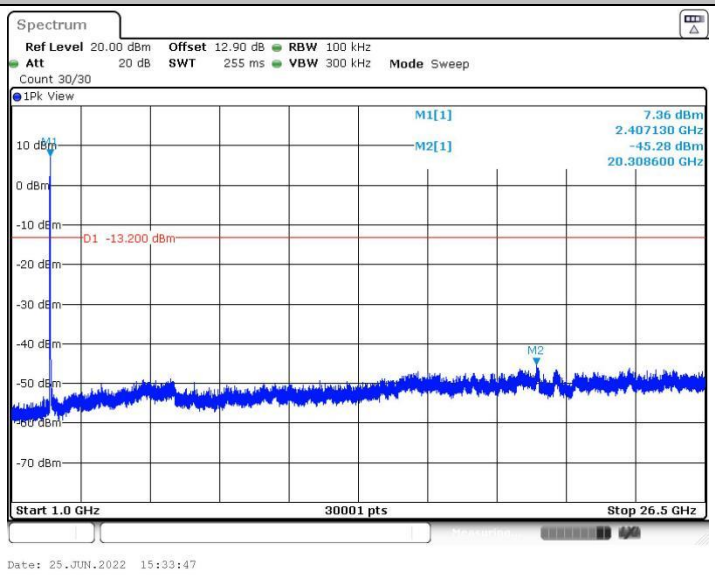
11B-CDD_Ant2_2437_30~1000


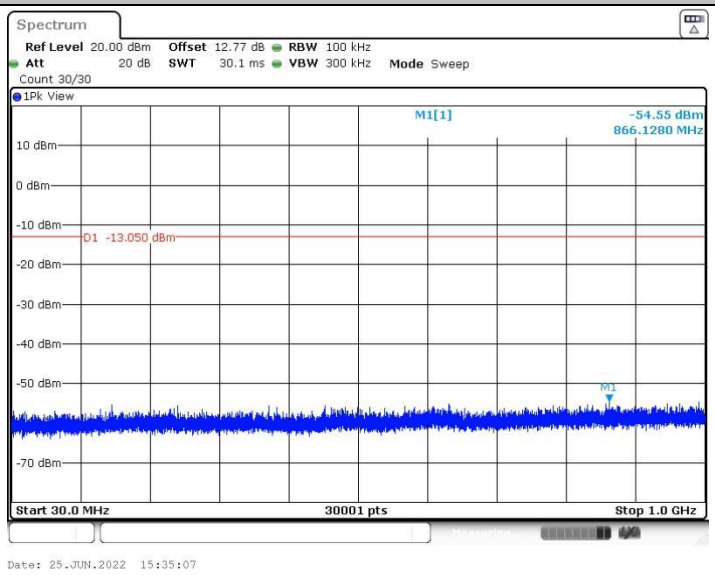
11B-CDD_Ant2_2437_1000~26500


11B-CDD_Ant1_2462_30~1000

11B-CDD_Ant1_2462_1000~26500


11B-CDD_Ant2_2462_30~1000

11B-CDD_Ant2_2462_1000~26500


11G-CDD_Ant1_2412_30~1000

11G-CDD_Ant1_2412_1000~26500


11G-CDD_Ant2_2412_30~1000

11G-CDD_Ant2_2412_1000~26500


11G-CDD_Ant1_2437_30~1000

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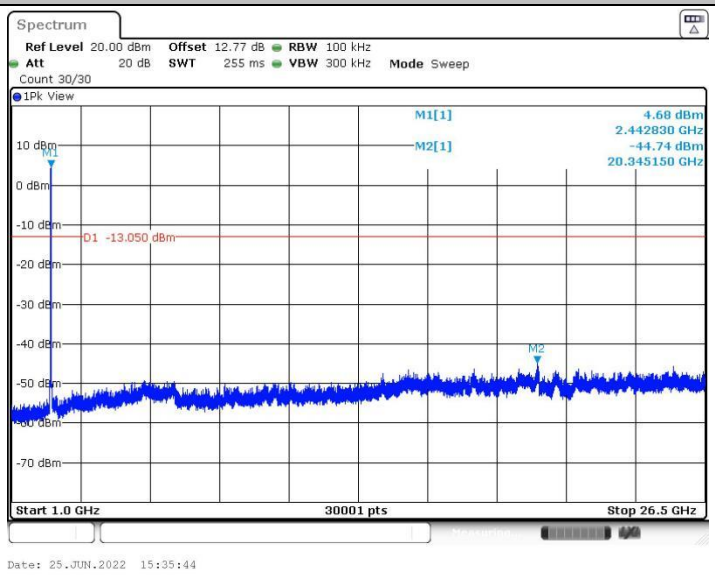
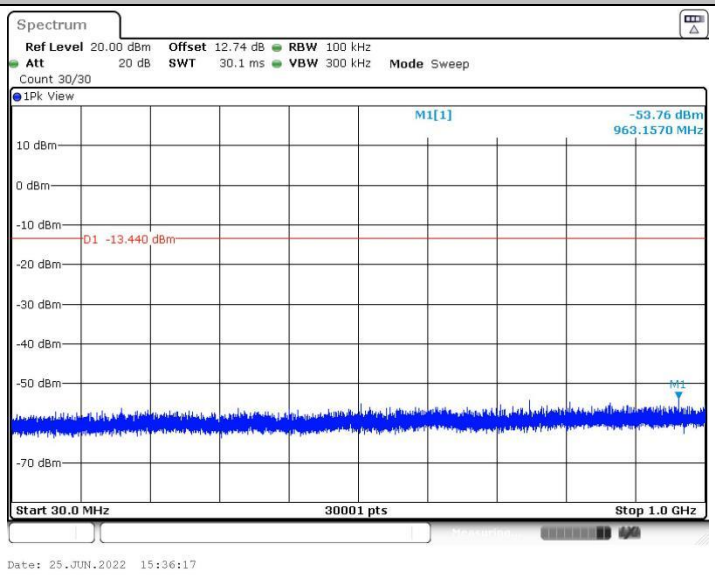
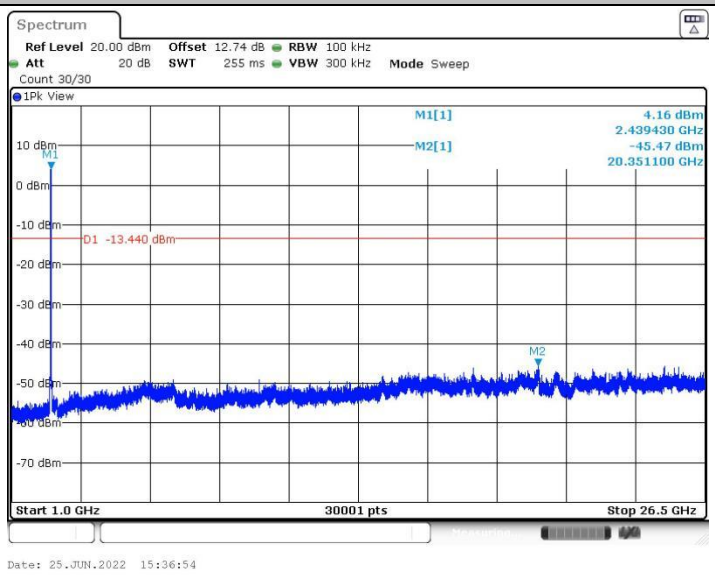
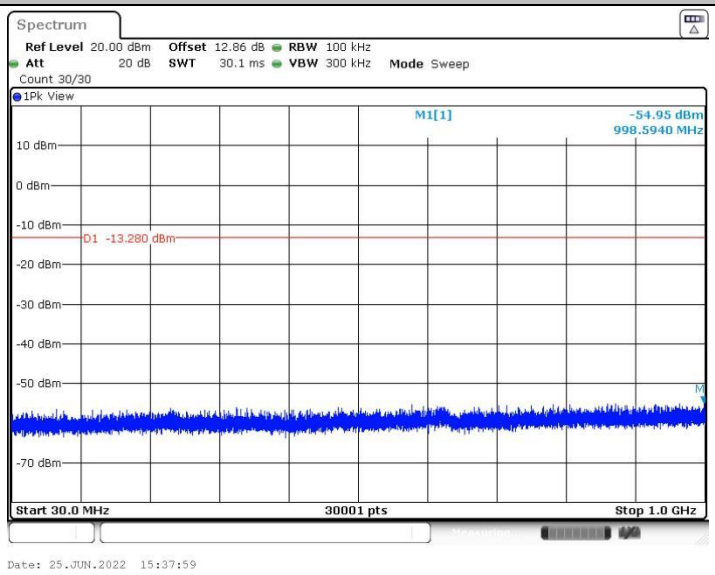
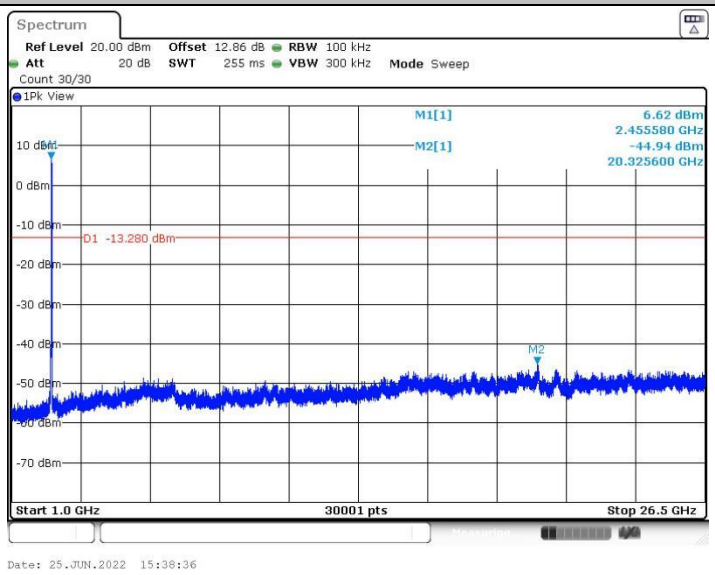
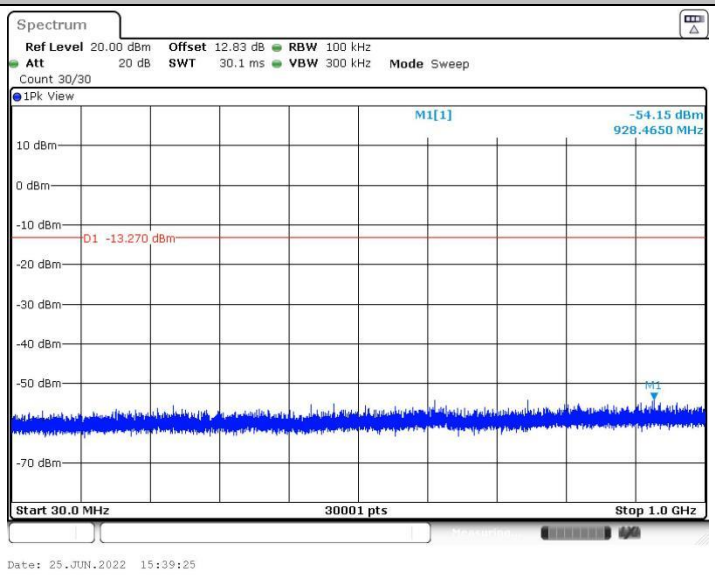
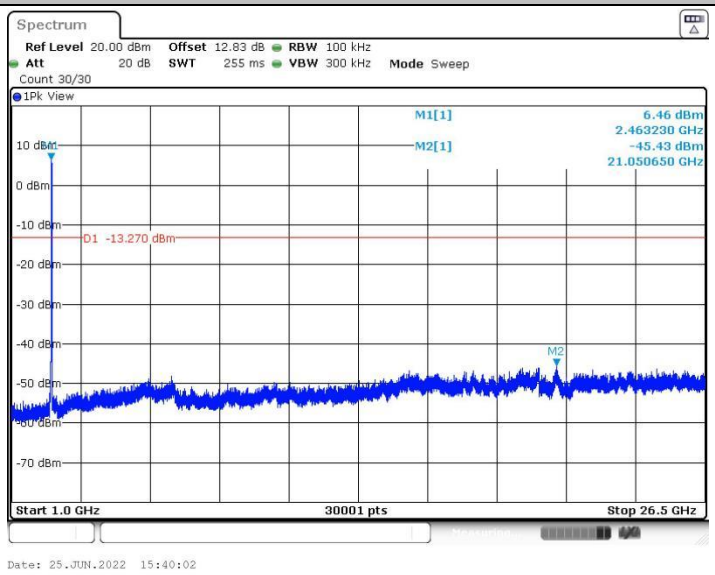
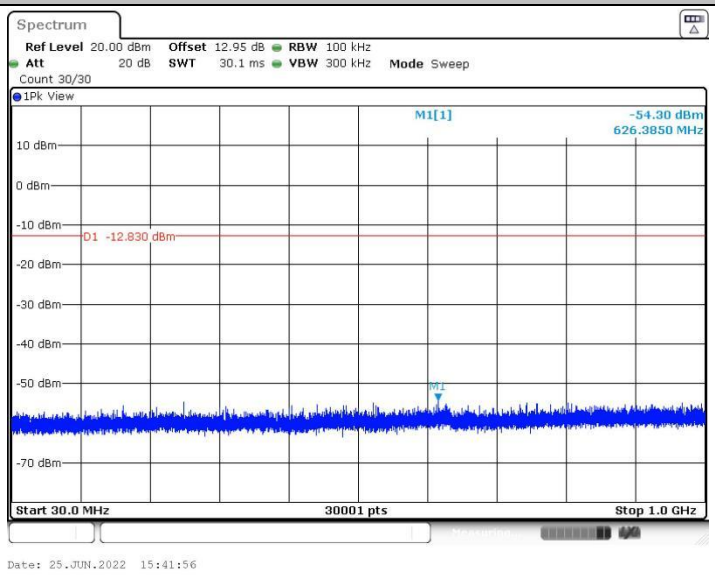
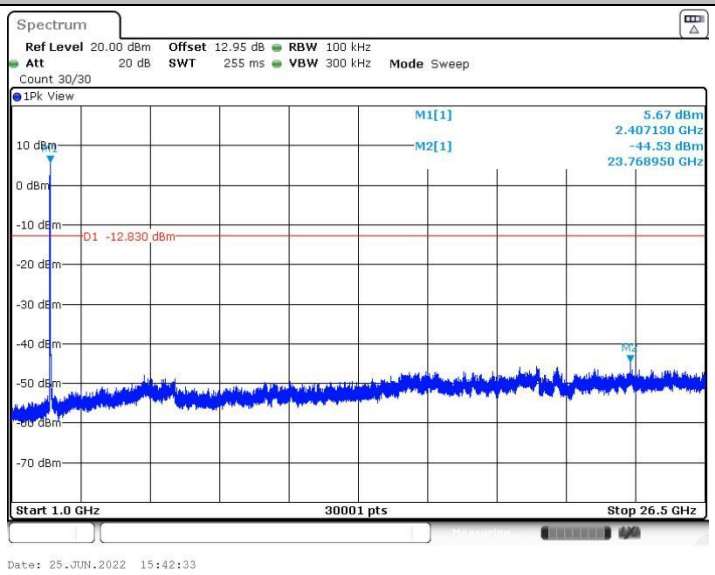
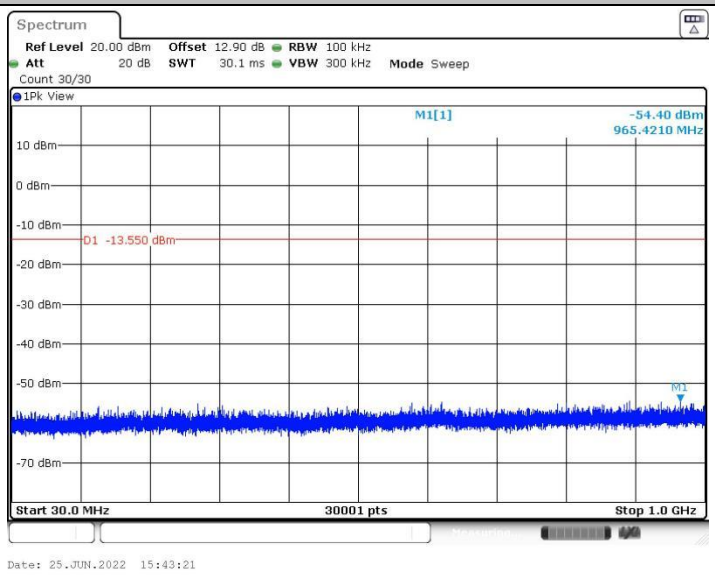


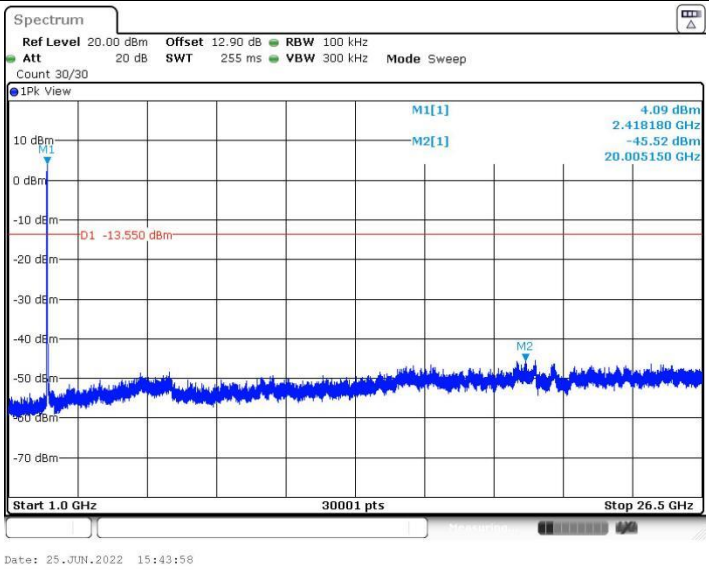
11G-CDD_Ant2_2437_30~1000

11G-CDD_Ant2_2437_1000~26500


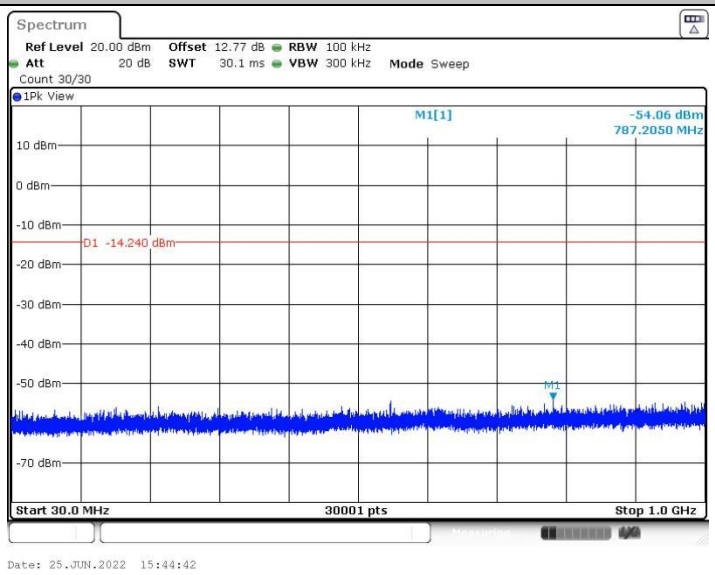
11G-CDD_Ant1_2462_30~1000

11G-CDD_Ant1_2462_1000~26500


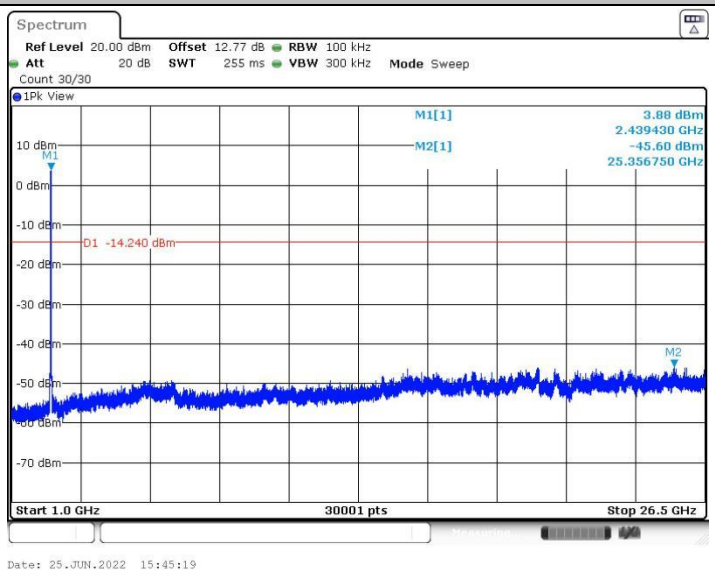
11G-CDD_Ant2_2462_30~1000

11G-CDD_Ant2_2462_1000~26500


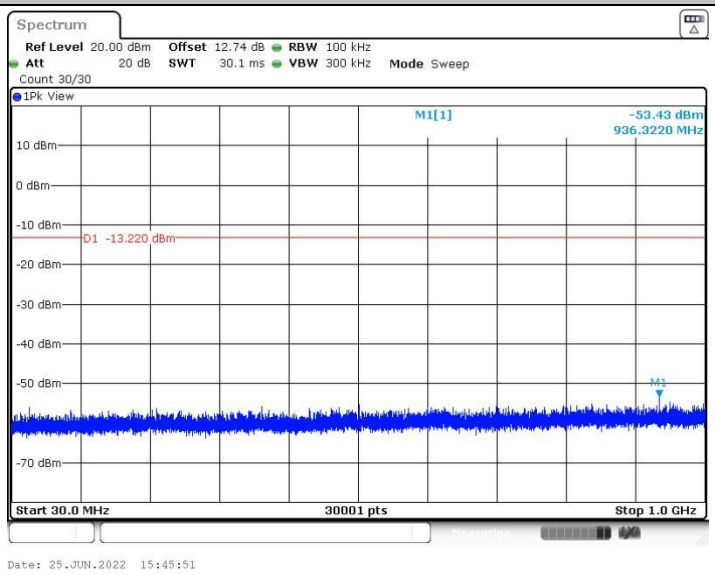
11AX20MIMO_Ant1_2412_30~1000

11AX20MIMO_Ant1_2412_1000~26500


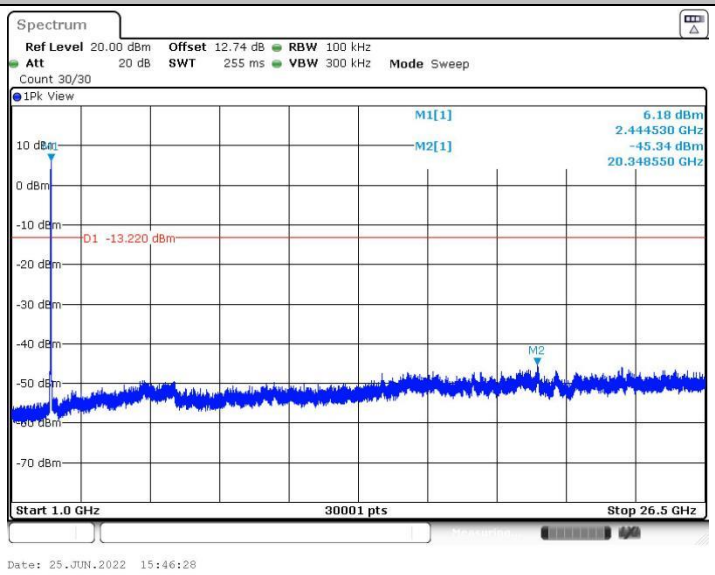
11AX20MIMO_Ant2_2412_30~1000


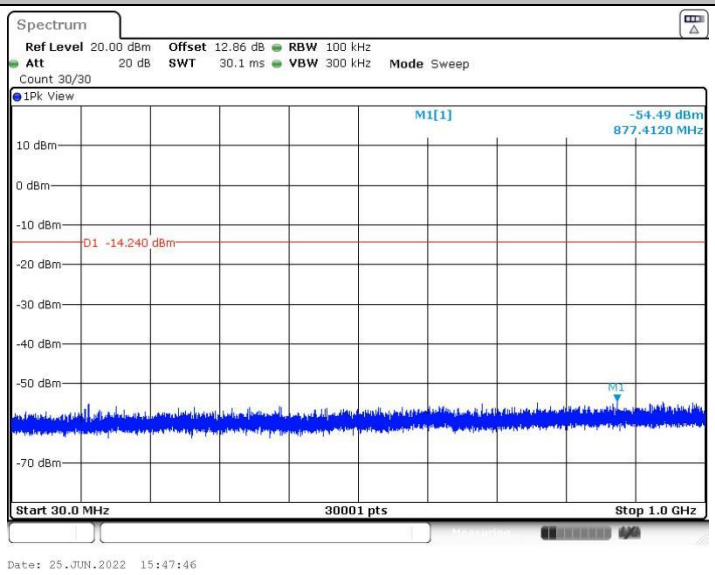
11AX20MIMO_Ant2_2412_1000~26500


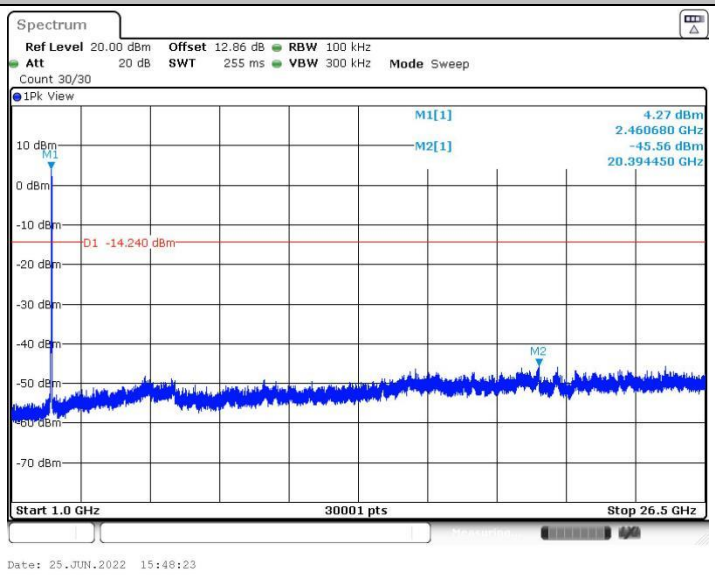
11AX20MIMO_Ant1_2437_30~1000


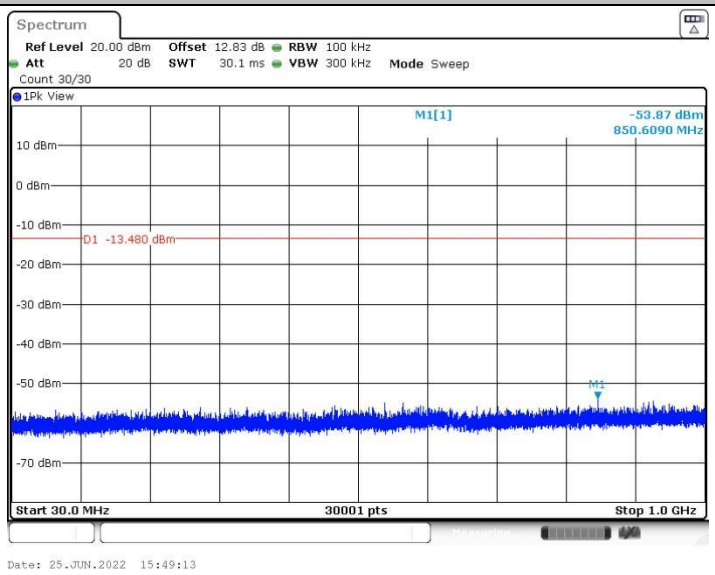
11AX20MIMO_Ant1_2437_1000~26500


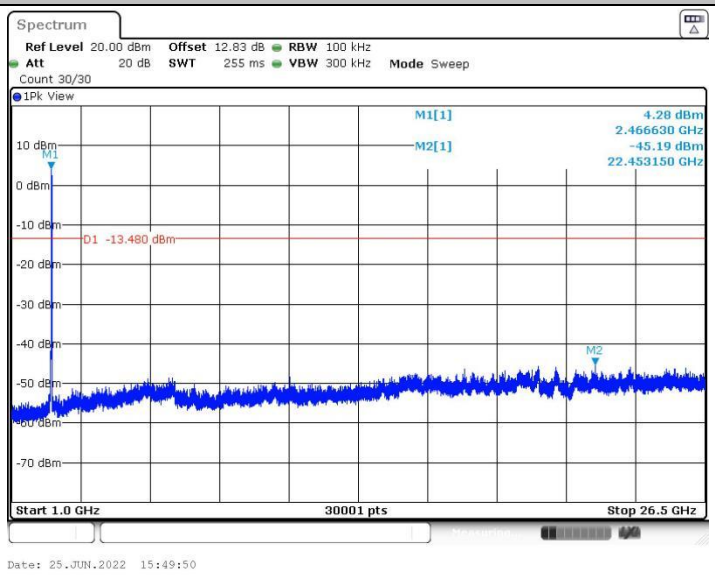
11AX20MIMO_Ant2_2437_30~1000


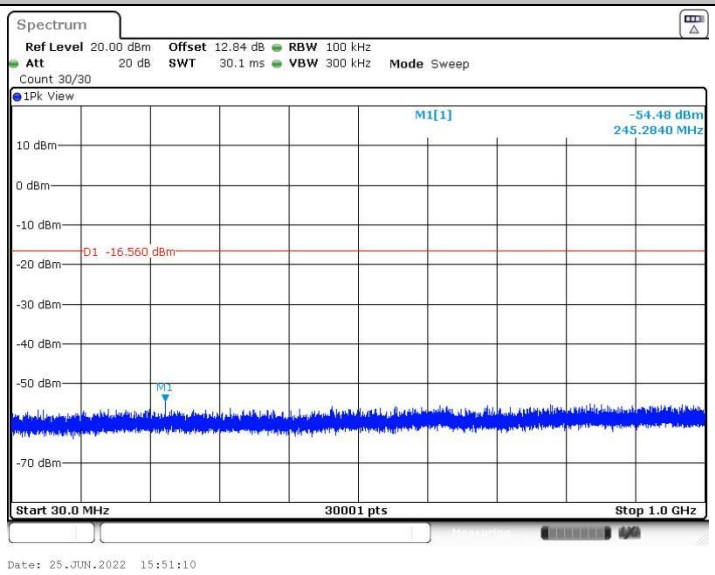
11AX20MIMO_Ant2_2437_1000~26500


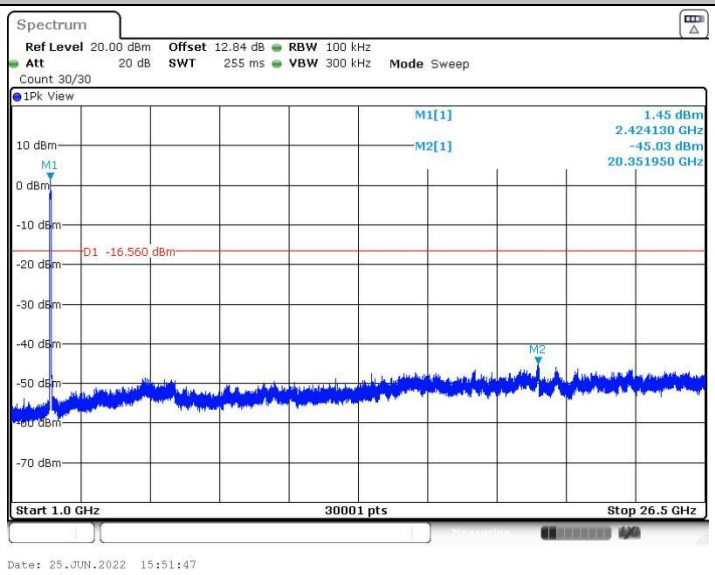
11AX20MIMO_Ant1_2462_30~1000


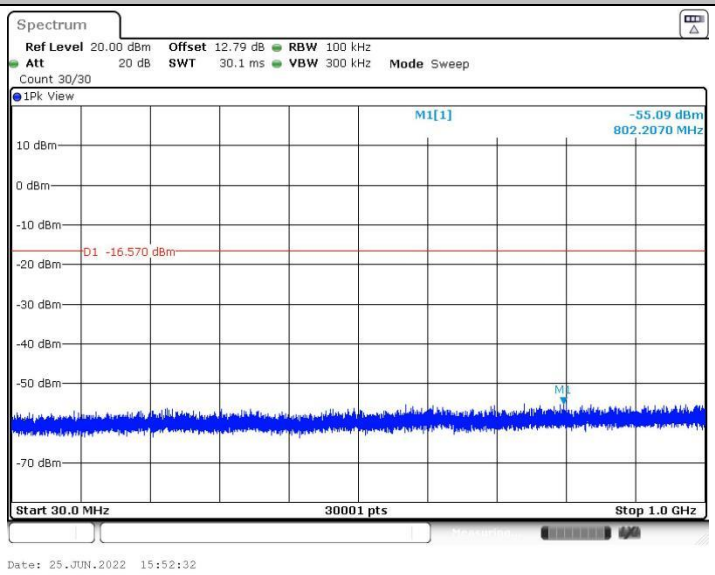
11AX20MIMO_Ant1_2462_1000~26500


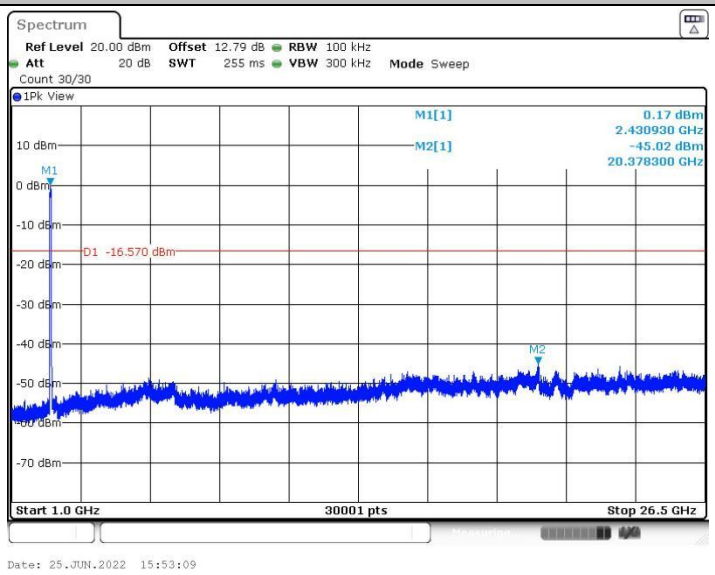
11AX20MIMO_Ant2_2462_30~1000


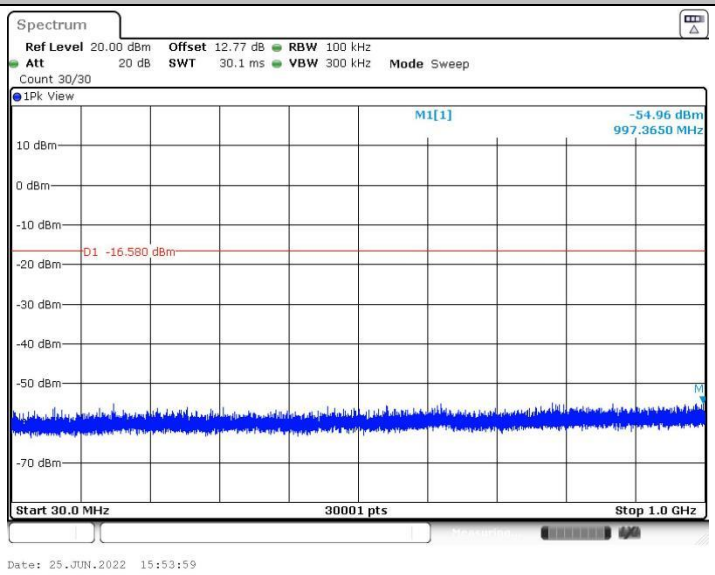
11AX20MIMO_Ant2_2462_1000~26500


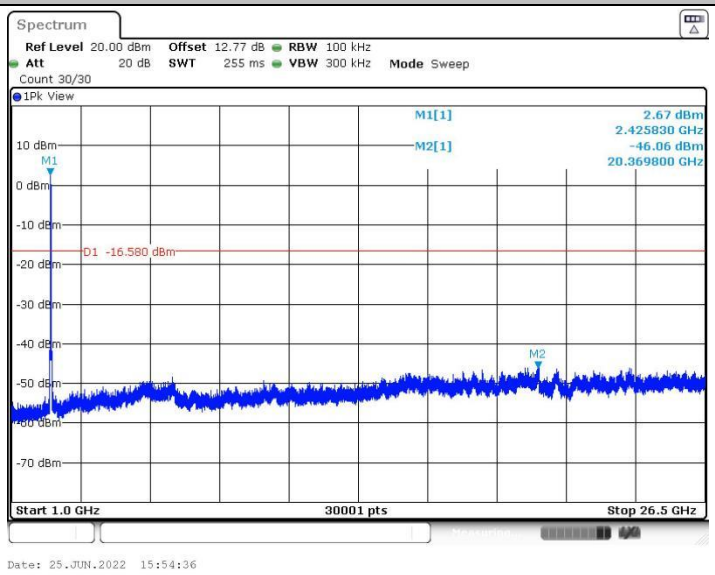
11AX40MIMO_Ant1_2422_30~1000


11AX40MIMO_Ant1_2422_1000~26500


11AX40MIMO_Ant2_2422_30~1000


11AX40MIMO_Ant2_2422_1000~26500


11AX40MIMO_Ant1_2437_30~1000


11AX40MIMO_Ant1_2437_1000~26500


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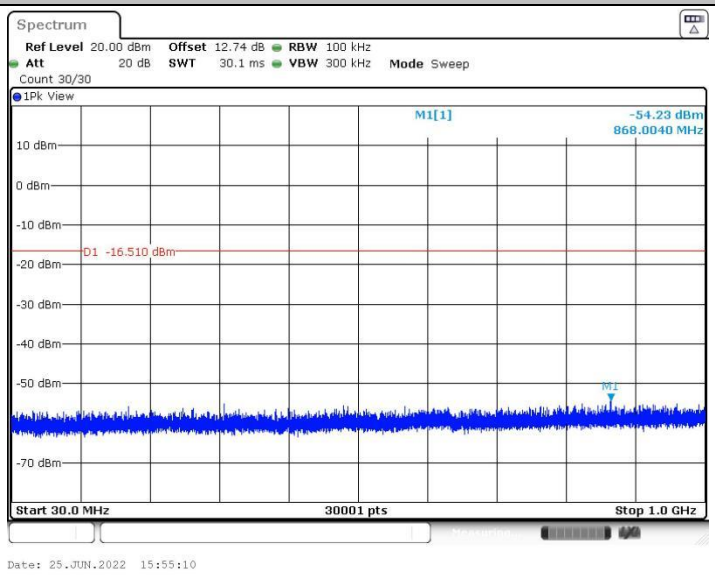

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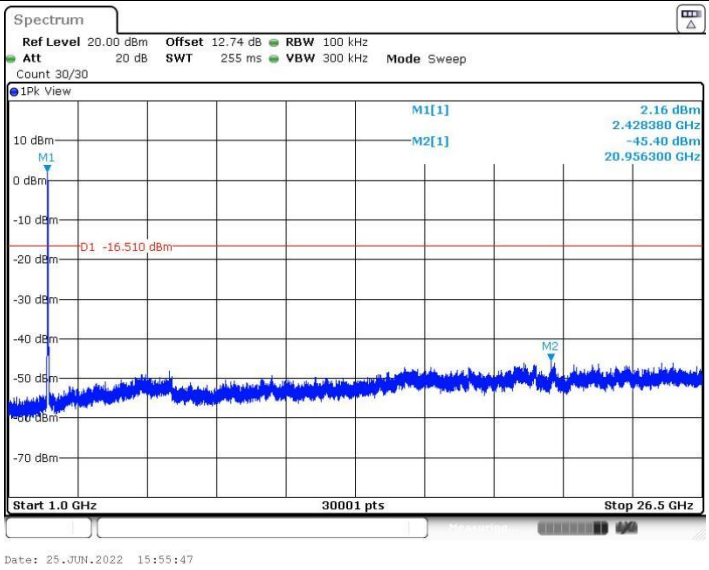

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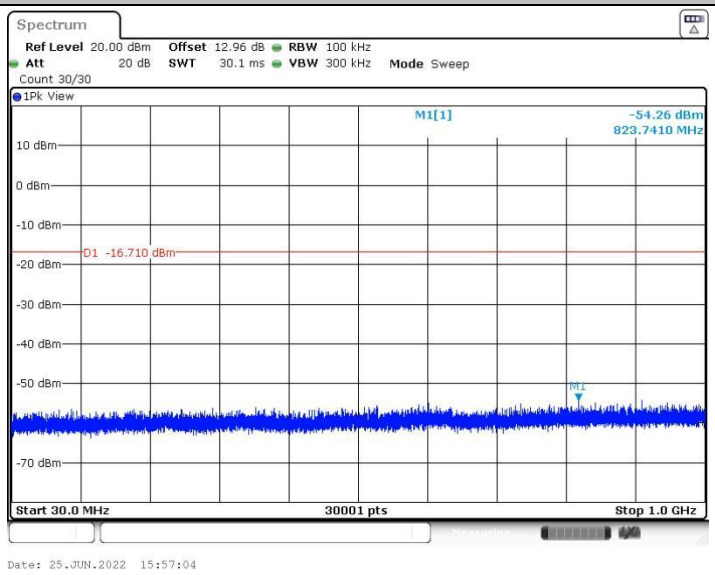

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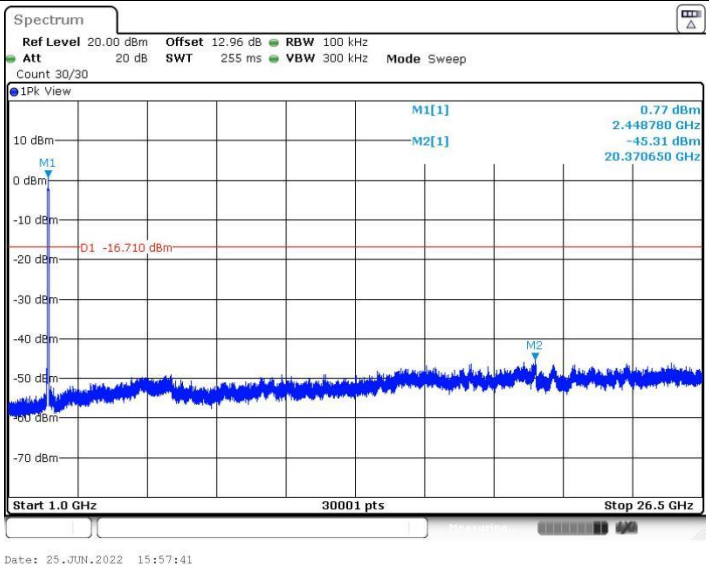

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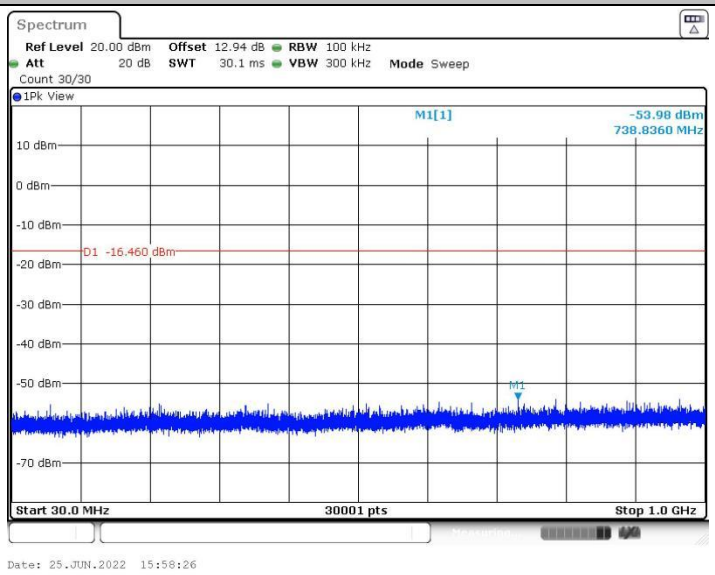

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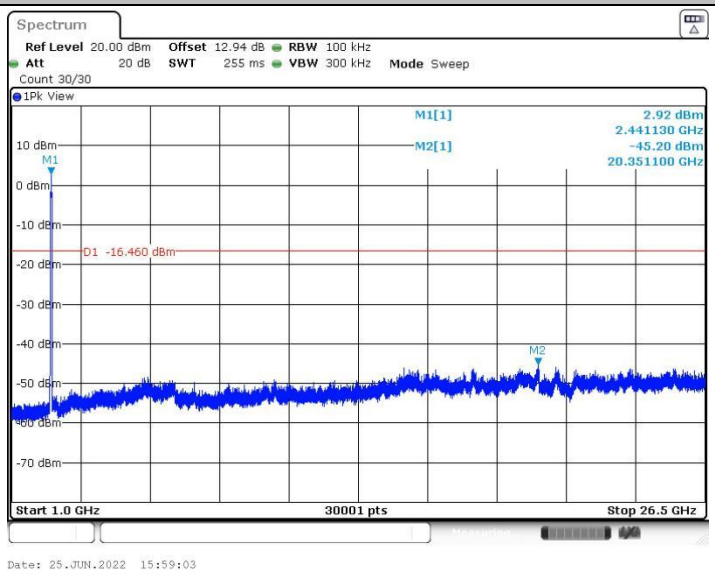


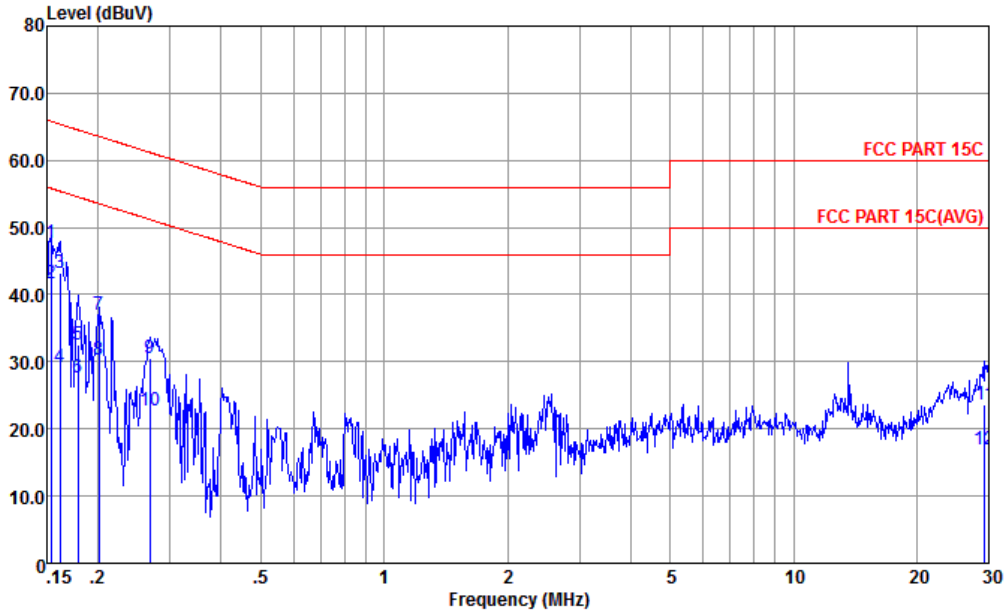
Maximum Output Power

Peak Power

2.4GHz Band																
Mod.	Data Rate	Data	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit(dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit(dBm)		Pass /Fail
						Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	full	2	1	2412	21.58	22.01	24.81	30.00		0.00		24.81		36.00		Pass
11b	1Mbps	full	2	6	2437	22.03	21.96	25.01	30.00		0.00		25.01		36.00		Pass
11b	1Mbps	full	2	11	2462	21.86	22.13	25.01	30.00		0.00		25.01		36.00		Pass
11g	6Mbps	full	2	1	2412	24.03	23.34	26.71	30.00		0.00		26.71		36.00		Pass
11g	6Mbps	full	2	6	2437	25.74	26.17	28.97	30.00		0.00		28.97		36.00		Pass
11g	6Mbps	full	2	11	2462	25.08	25.62	28.37	30.00		0.00		28.37		36.00		Pass
HT20	MCS0	full	2	1	2412	24.79	24.92	27.87	30.00		0.00		27.87		36.00		Pass
HT20	MCS0	full	2	6	2437	25.53	25.92	28.74	30.00		0.00		28.74		36.00		Pass
HT20	MCS0	full	2	11	2462	24.82	25.43	28.15	30.00		0.00		28.15		36.00		Pass
HT40	MCS0	full	2	3	2422	24.22	24.13	27.19	30.00		0.00		27.19		36.00		Pass
HT40	MCS0	full	2	6	2437	25.18	25.51	28.36	30.00		0.00		28.36		36.00		Pass
HT40	MCS0	full	2	9	2452	23.45	23.35	26.41	30.00		0.00		26.41		36.00		Pass
HE20	MCS0	full	2	1	2412	25.36	25.04	28.21	30.00		0.00		28.21		36.00		Pass
HE20	MCS0	26RU	2	1	2412	18.96	18.78	21.88	30.00		0.00		21.88		36.00		Pass
HE20	MCS0	52RU	2	1	2412	21.85	21.69	24.78	30.00		0.00		24.78		36.00		Pass
HE20	MCS0	106RU	2	1	2412	22.94	22.76	25.86	30.00		0.00		25.86		36.00		Pass
HE20	MCS0	full	2	6	2437	25.72	26.18	28.97	30.00		0.00		28.97		36.00		Pass
HE20	MCS0	26RU	2	6	2437	21.01	21.33	24.18	30.00		0.00		24.18		36.00		Pass
HE20	MCS0	52RU	2	6	2437	23.61	23.74	26.69	30.00		0.00		26.69		36.00		Pass
HE20	MCS0	106RU	2	6	2437	24.95	24.82	27.90	30.00		0.00		27.90		36.00		Pass
HE20	MCS0	full	2	11	2462	25.13	25.61	28.39	30.00		0.00		28.39		36.00		Pass
HE20	MCS0	26RU	2	11	2462	18.86	19.36	22.13	30.00		0.00		22.13		36.00		Pass
HE20	MCS0	52RU	2	11	2462	21.82	21.83	24.84	30.00		0.00		24.84		36.00		Pass
HE20	MCS0	106RU	2	11	2462	22.88	22.87	25.89	30.00		0.00		25.89		36.00		Pass
HE40	MCS0	full	2	3	2422	24.35	24.23	27.30	30.00		0.00		27.30		36.00		Pass
HE40	MCS0	full	2	6	2437	25.48	25.62	28.56	30.00		0.00		28.56		36.00		Pass
HE40	MCS0	full	2	9	2452	23.69	23.44	26.58	30.00		0.00		26.58		36.00		Pass

Appendix B. AC Conducted Emission Test Results

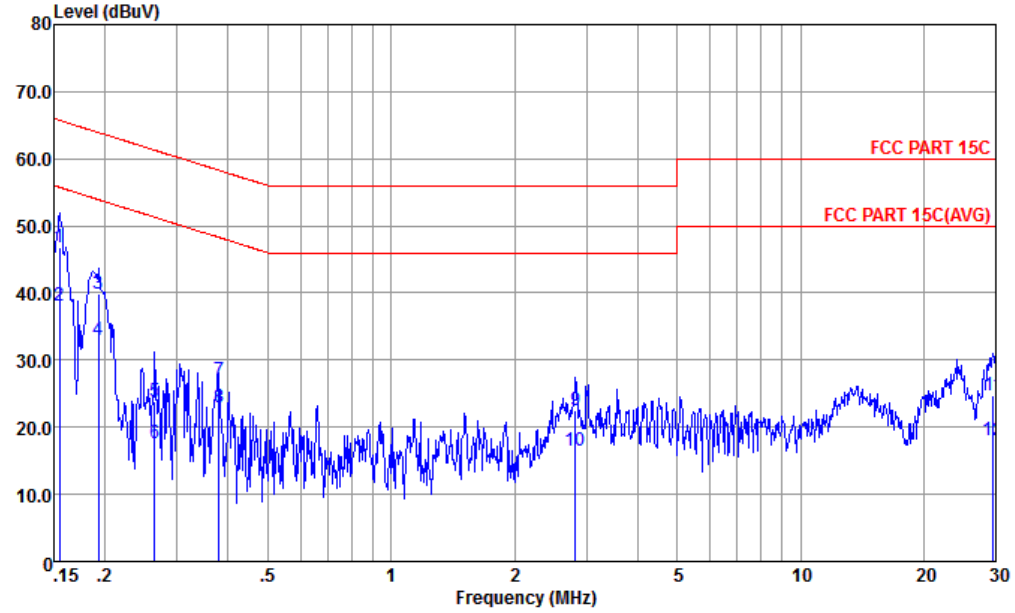
Test Engineer :	Amos Zhao	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



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

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.153	47.69	-18.13	65.82	37.20	0.02	10.47	QP
2	*	0.153	41.69	-14.13	55.82	31.20	0.02	10.47	Average
3		0.162	43.27	-22.11	65.38	32.79	0.03	10.45	QP
4		0.162	29.27	-26.11	55.38	18.79	0.03	10.45	Average
5		0.179	32.64	-31.91	64.55	22.20	0.03	10.41	QP
6		0.179	27.64	-26.91	54.55	17.20	0.03	10.41	Average
7		0.201	36.90	-26.68	63.58	26.50	0.04	10.36	QP
8		0.201	30.20	-23.38	53.58	19.80	0.04	10.36	Average
9		0.267	30.59	-30.61	61.20	20.21	0.06	10.32	QP
10		0.267	22.69	-28.51	51.20	12.31	0.06	10.32	Average
11		29.371	23.60	-36.40	60.00	12.20	0.78	10.62	QP
12		29.371	17.00	-33.00	50.00	5.60	0.78	10.62	Average

Test Engineer :	Amos Zhao	**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-060105-N NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.155	46.77	-18.97	65.74	36.19	0.11	10.47	QP
2	*	0.155	38.17	-17.57	55.74	27.59	0.11	10.47	Average
3		0.192	39.98	-23.95	63.93	29.50	0.10	10.38	QP
4		0.192	33.08	-20.85	53.93	22.60	0.10	10.38	Average
5		0.264	23.92	-37.37	61.29	13.50	0.10	10.32	QP
6		0.264	17.62	-33.67	51.29	7.20	0.10	10.32	Average
7		0.379	26.88	-31.42	58.30	16.51	0.10	10.27	QP
8		0.379	22.98	-25.32	48.30	12.61	0.10	10.27	Average
9		2.824	22.59	-33.41	56.00	12.20	0.15	10.24	QP
10		2.824	16.59	-29.41	46.00	6.20	0.15	10.24	Average
11		29.527	24.74	-35.26	60.00	13.30	0.82	10.62	QP
12		29.527	17.94	-32.06	50.00	6.50	0.82	10.62	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.
16+18		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2386.96	53.77	-20.23	74	50.65	32.88	7.1	36.86	100	77	P	H
		2386.96	43.71	-10.29	54	40.59	32.88	7.1	36.86	100	77	A	H
	*	2412	111.26	-	-	108.08	32.9	7.13	36.85	100	77	P	H
	*	2412	107.39	-	-	104.21	32.9	7.13	36.85	100	77	A	H
		2388	51.82	-22.18	74	48.7	32.88	7.1	36.86	392	77	P	V
		2387.22	42.53	-11.47	54	39.41	32.88	7.1	36.86	392	77	A	V
	*	2412	109.79	-	-	106.61	32.9	7.13	36.85	392	77	P	V
	*	2414	106.81	-	-	103.63	32.9	7.13	36.85	392	77	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.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
16+18		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		4830	41.21	-32.79	74	62.14	34.2	10.25	65.38	300	0	P	H
		4830	40.1	-33.9	74	61.03	34.2	10.25	65.38	100	0	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. 16+18	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		2389.56	60.87	-13.13	74	57.75	32.88	7.1	36.86	130	87	P	H
		2389.95	50.35	-3.65	54	47.23	32.88	7.1	36.86	130	87	A	H
	*	2416	111.94	-	-	108.73	32.9	7.16	36.85	130	87	P	H
	*	2414	101.57	-	-	98.39	32.9	7.13	36.85	130	87	A	H
		2389.56	59.9	-14.1	74	56.78	32.88	7.1	36.86	390	66	P	V
		2389.95	48.78	-5.22	54	45.66	32.88	7.1	36.86	390	66	A	V
	*	2418	111.56	-	-	108.35	32.9	7.16	36.85	390	66	P	V
	*	2414	101.89	-	-	98.71	32.9	7.13	36.85	390	66	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. 16+18	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		4830	40.16	-33.84	74	61.09	34.2	10.25	65.38	300	0	P	H
		4830	40.92	-33.08	74	61.85	34.2	10.25	65.38	100	0	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 106 (Band Edge @ 3m)

WIFI Ant. 16+18	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		2386.44	50.61	-23.39	74	47.49	32.88	7.1	36.86	100	18	P	H
		2389.95	38.79	-15.21	54	35.67	32.88	7.1	36.86	100	18	A	H
	*	2410	109.24	-	-	106.06	32.9	7.13	36.85	100	18	P	H
	*	2408	101.47	-	-	98.29	32.9	7.13	36.85	100	18	A	H
		2389.95	50.52	-23.48	74	47.4	32.88	7.1	36.86	392	66	P	V
		2389.95	38.58	-15.42	54	35.46	32.88	7.1	36.86	392	66	A	V
	*	2410	109.6	-	-	106.42	32.9	7.13	36.85	392	66	P	V
	*	2410	100.82	-	-	97.64	32.9	7.13	36.85	392	66	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. 16+18	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)
		2389.82	61.69	-12.31	74	58.57	32.88	7.1	36.86	114	91	P	H
		2389.95	50.46	-3.54	54	47.34	32.88	7.1	36.86	114	91	A	H
	*	2432	109.17	-	-	105.94	32.92	7.16	36.85	114	91	P	H
	*	2428	99.06	-	-	95.83	32.92	7.16	36.85	114	91	A	H
802.11ax		2483.92	52.74	-21.26	74	49.33	32.98	7.25	36.82	114	91	P	H
HE40 Full		2483.5	42.34	-11.66	54	38.93	32.98	7.25	36.82	114	91	A	H
CH 03		2388.39	57.71	-16.29	74	54.59	32.88	7.1	36.86	339	62	P	V
2422MHz		2389.95	46.91	-7.09	54	43.79	32.88	7.1	36.86	339	62	A	V
	*	2426	106.99	-	-	103.76	32.92	7.16	36.85	339	62	P	V
	*	2430	96.77	-	-	93.54	32.92	7.16	36.85	339	62	A	V
		2485.36	51.53	-22.47	74	48.12	32.98	7.25	36.82	339	62	P	V
		2483.62	41.31	-12.69	54	37.9	32.98	7.25	36.82	339	62	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 (Harmonic @ 3m)

WIFI Ant. 16+18	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		4845	40.69	-33.31	74	61.62	34.21	10.25	65.39	300	0	P	H
HE40 Full		7266	41.89	-32.11	74	59.12	35.86	12.72	65.81	300	0	P	H
CH 03		4845	40.47	-33.53	74	61.4	34.21	10.25	65.39	100	0	P	V
2422MHz		7266	42.46	-31.54	74	59.69	35.86	12.72	65.81	100	0	P	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 HE40 (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.	
16+18		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11ax HE40 LF		30	20.36	-19.64	40	26.85	25.5	0.71	32.7	-	-	P	H
		175.5	22.57	-20.93	43.5	36.62	16.89	2.01	32.95	-	-	P	H
		350.1	20.88	-25.12	46	29.53	21.4	2.85	32.9	-	-	P	H
		478.14	23.46	-22.54	46	28.78	24.1	3.34	32.76	-	-	P	H
		619.76	25.09	-20.91	46	28.21	25.66	3.8	32.58	-	-	P	H
		787.57	28.38	-17.62	46	29.84	26.8	4.29	32.55	-	-	P	H
		48.43	26.49	-13.51	40	42.64	15.77	1.05	32.97	-	-	P	V
		64.92	28.36	-11.64	40	46.95	13.3	1.21	33.1	-	-	P	V
		137.67	23.57	-19.93	43.5	36.96	17.65	1.79	32.83	-	-	P	V
		174.53	24.88	-18.62	43.5	38.91	16.91	2.01	32.95	-	-	P	V
		561.56	25.6	-20.4	46	28.75	25.81	3.62	32.58	-	-	P	V
		753.62	28.48	-17.52	46	30.43	26.53	4.2	32.68	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Co-location

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE40 Full Tx&LTE_B48_BW_20M Link(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.
		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full CH 03 2422MHz		2388.91	61.39	-12.61	74	58.27	32.88	7.1	36.86	302	332	P	H
		2389.95	50.59	-3.41	54	47.47	32.88	7.1	36.86	302	332	A	H
		2484.16	50.11	-23.89	74	46.7	32.98	7.25	36.82	302	332	P	H
		2483.5	39.76	-14.24	54	36.35	32.98	7.25	36.82	302	332	A	H
	*	2420	108.45	-	-	105.22	32.92	7.16	36.85	302	332	P	H
	*	2420	97.3	-	-	94.07	32.92	7.16	36.85	302	332	A	H
		2389.82	60.55	-13.45	74	57.43	32.88	7.1	36.86	278	1	P	V
		2389.95	50.43	-3.57	54	47.31	32.88	7.1	36.86	278	1	A	V
		2483.62	50.08	-23.92	74	46.67	32.98	7.25	36.82	278	1	P	V
		2483.5	39.93	-14.07	54	36.52	32.98	7.25	36.82	278	1	A	V
	*	2426	107.96	-	-	104.73	32.92	7.16	36.85	278	1	P	V
	*	2424	96.45	-	-	93.22	32.92	7.16	36.85	278	1	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 Tx &LTE_B48_BW_20M Link (Harmonic @ 3m)

WIFI Ant.	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		4965	40.65	-33.35	74	61.43	34.28	10.41	65.47	300	0	P	H
HE40 Full		7260	41.96	-32.04	74	59.15	35.85	12.72	65.76	300	0	P	H
CH 03		4965	41.08	-32.92	74	61.86	34.28	10.41	65.47	100	0	P	V
2422MHz		7266	41.62	-32.38	74	58.85	35.86	12.72	65.81	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average 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		(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)

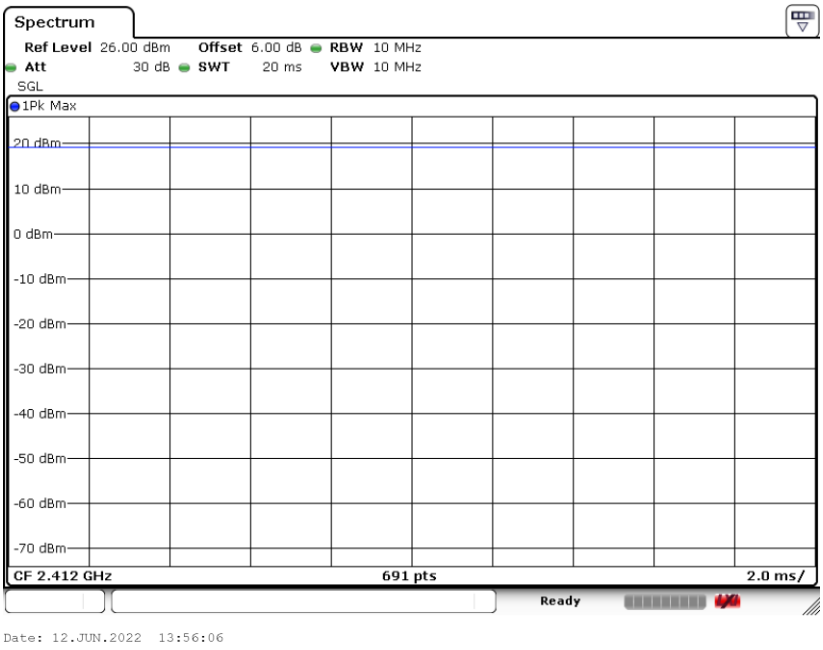
= -10.46(dB)

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

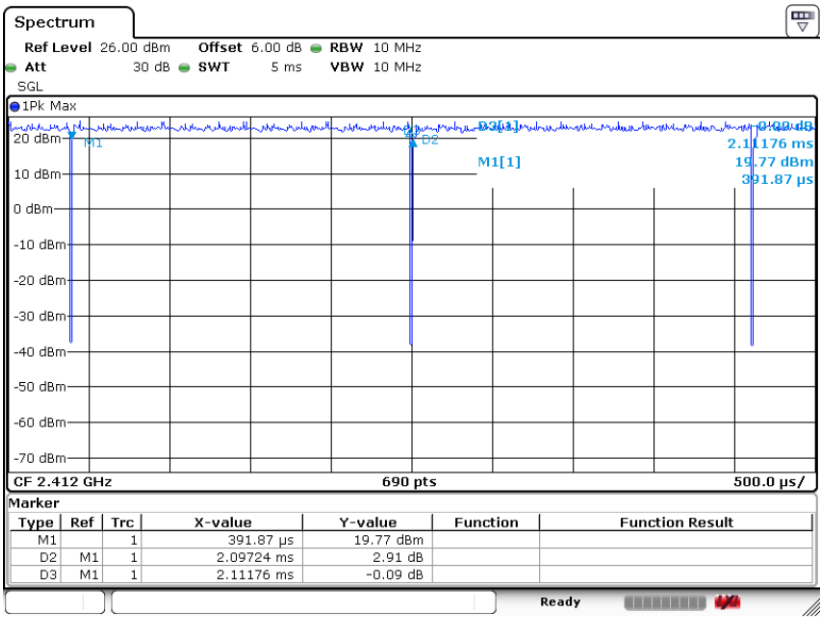
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	100	-	-	10Hz
802.11g	99.31	-	-	10Hz
802.11ax HE20	100	-	-	10Hz
802.11ax HE40	100	-	-	10Hz
802.11axHE20-2412-26ru	100	-	-	10Hz
802.11axHE20-2412-52ru	100	-	-	10Hz
802.11axHE20-2412-106ru	100	-	-	10Hz

802.11b



802.11g



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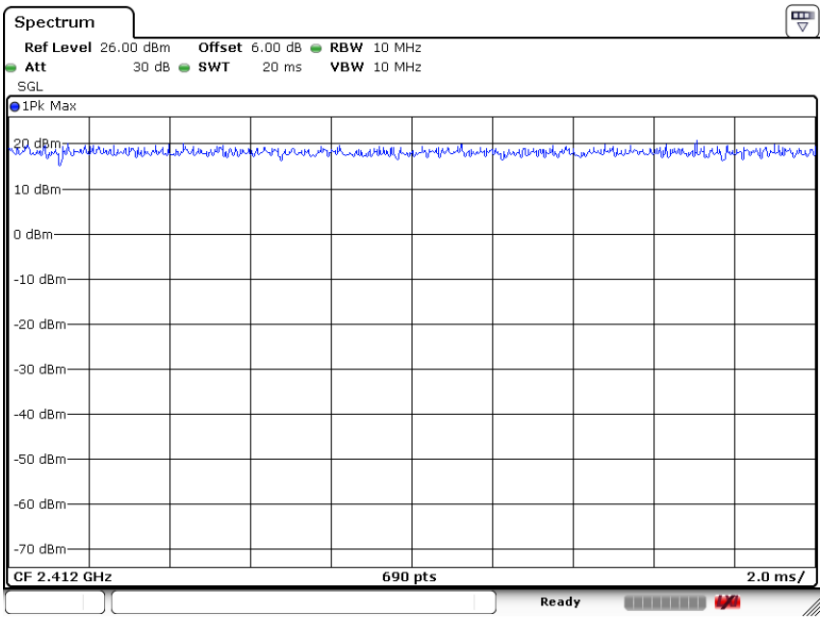
802.11ax HE20



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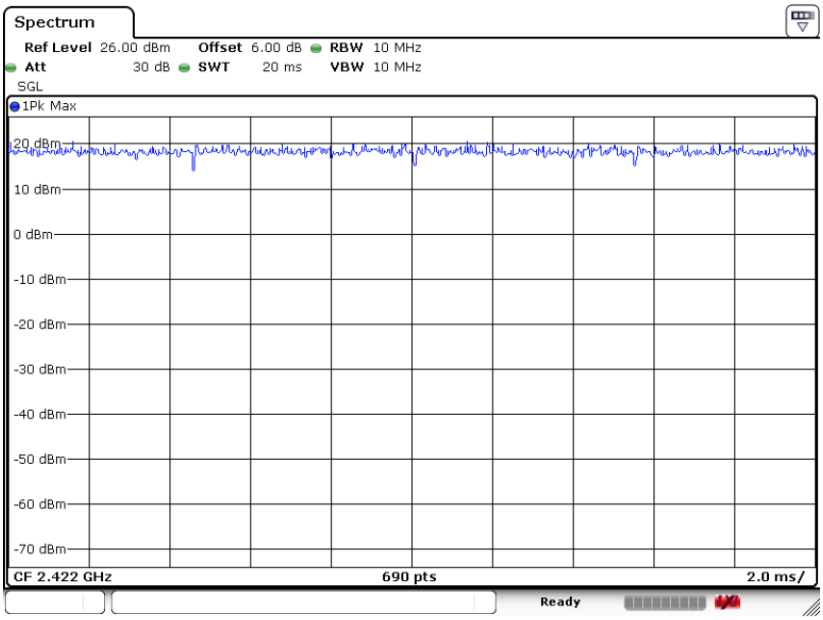
802.11ax HE40



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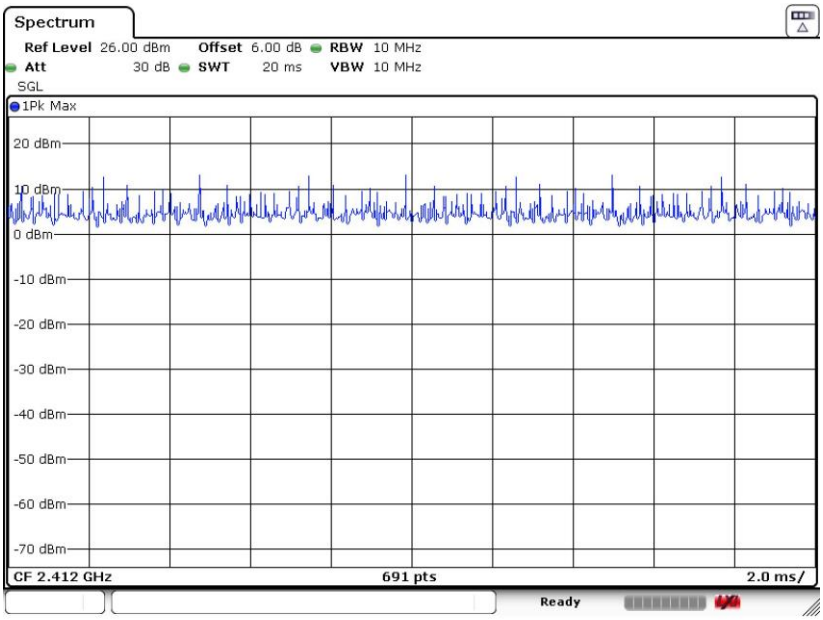

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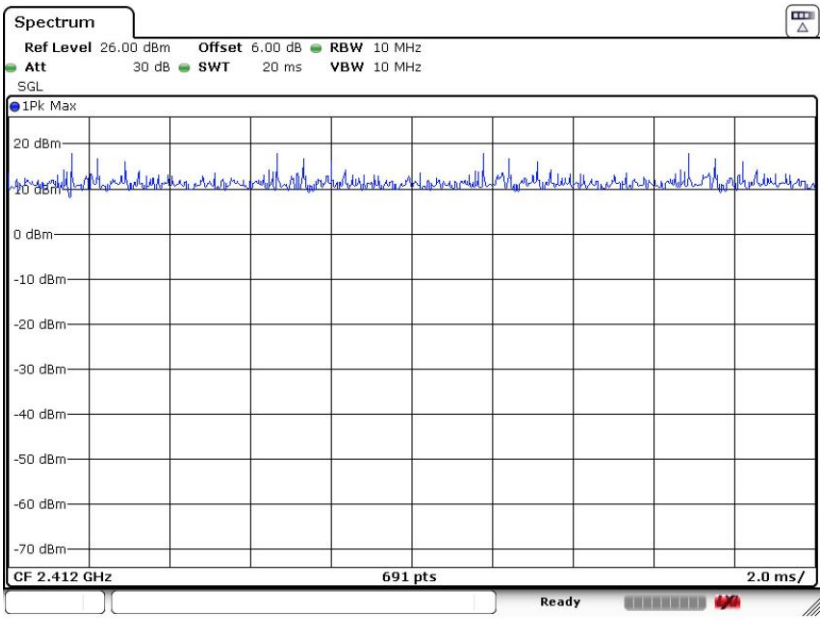

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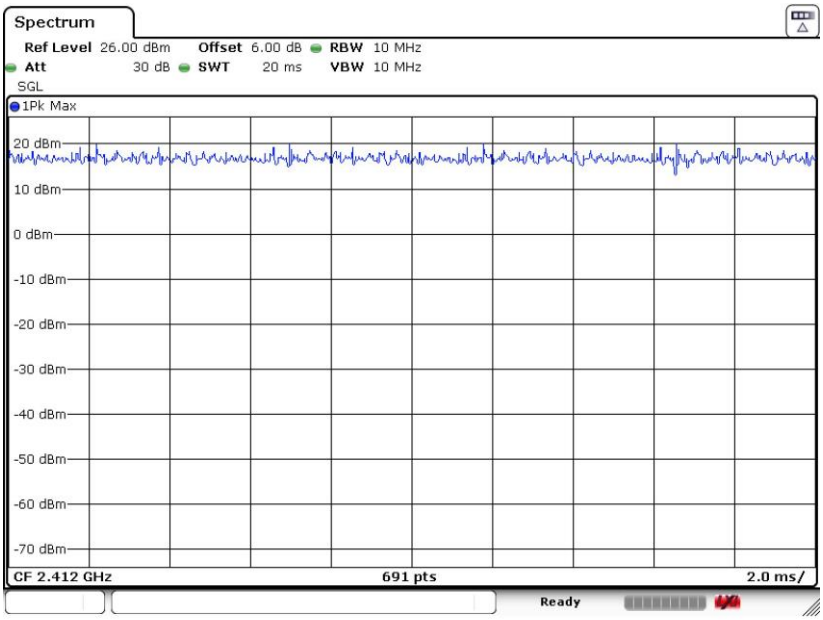

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