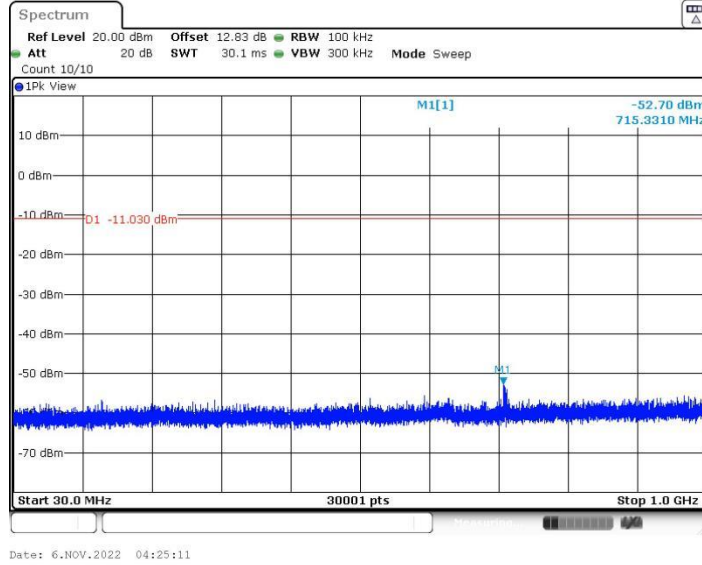
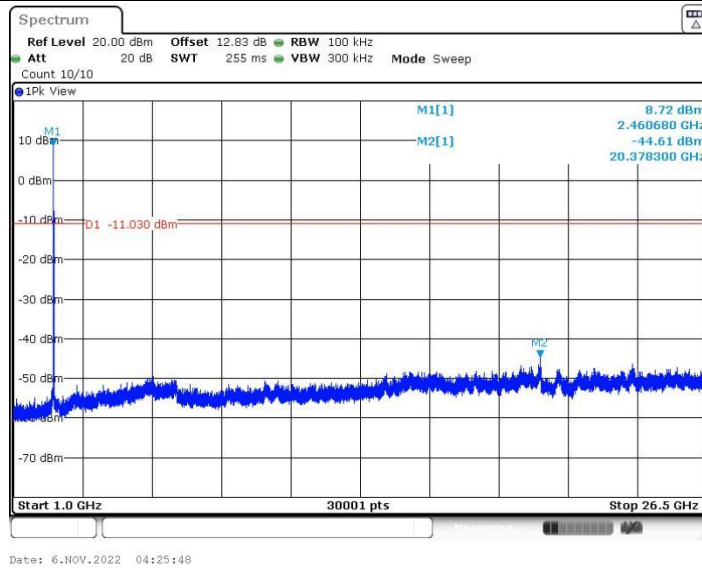




11B-CDD_Ant.7_2462_30~1000

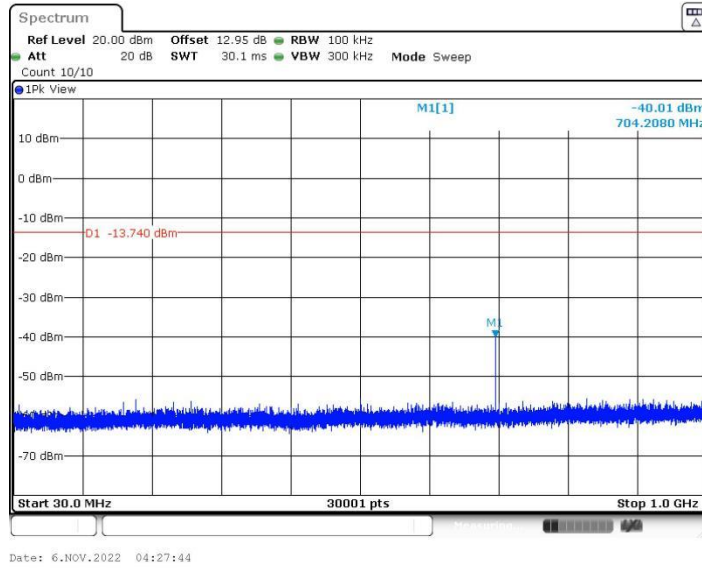


11B-CDD_Ant.7_2462_1000~26500

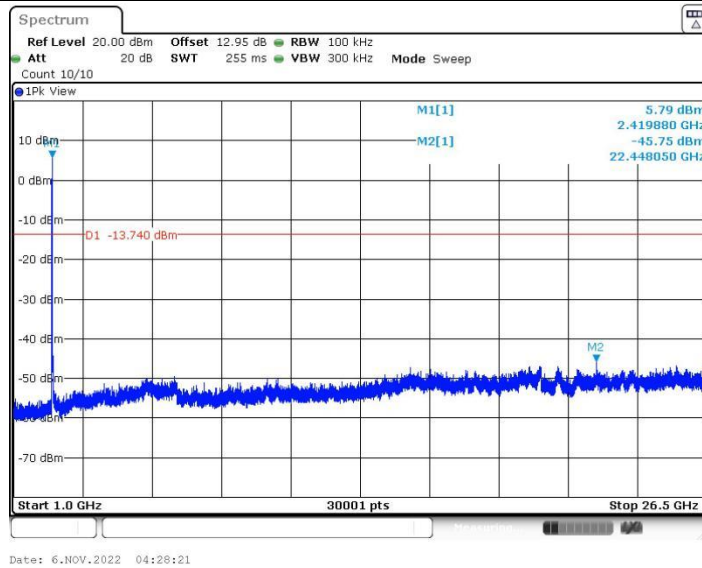




11G-CDD_Ant.16_2412_30~1000

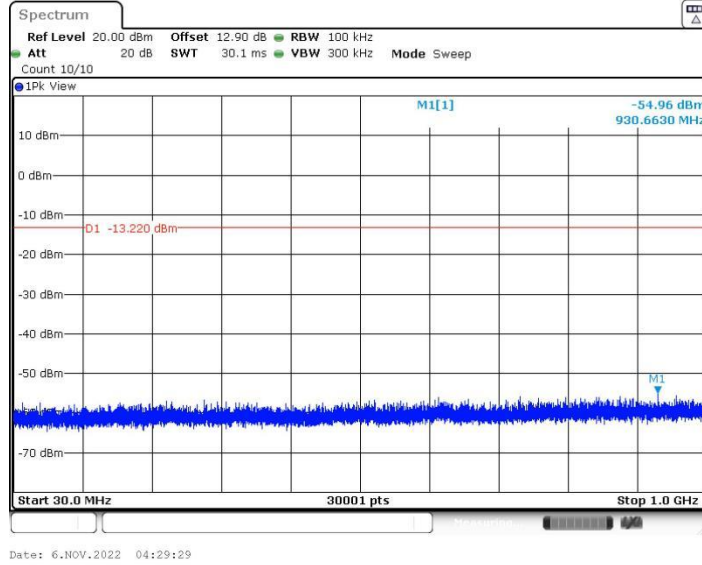


11G-CDD_Ant.16_2412_1000~26500

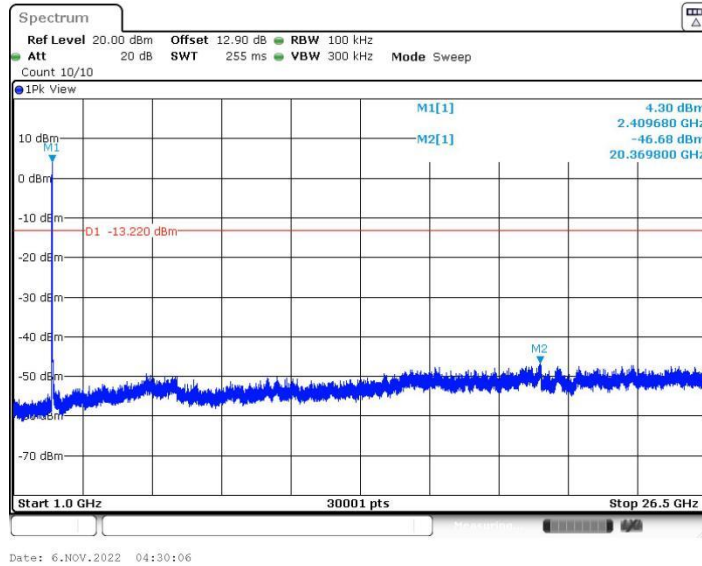




11G-CDD_Ant.7_2412_30~1000

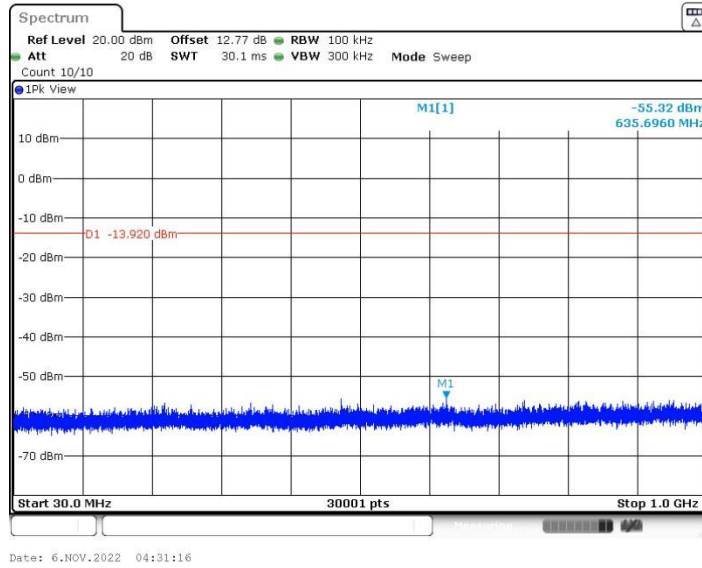


11G-CDD_Ant.7_2412_1000~26500

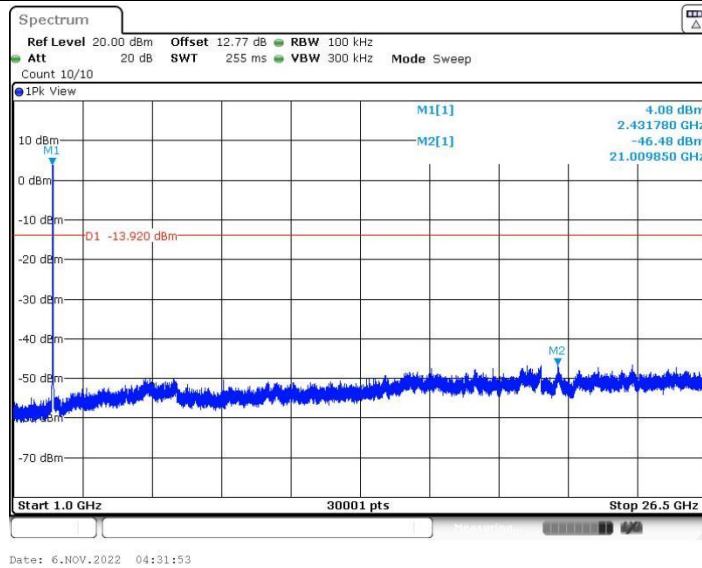




11G-CDD_Ant.16_2437_30~1000

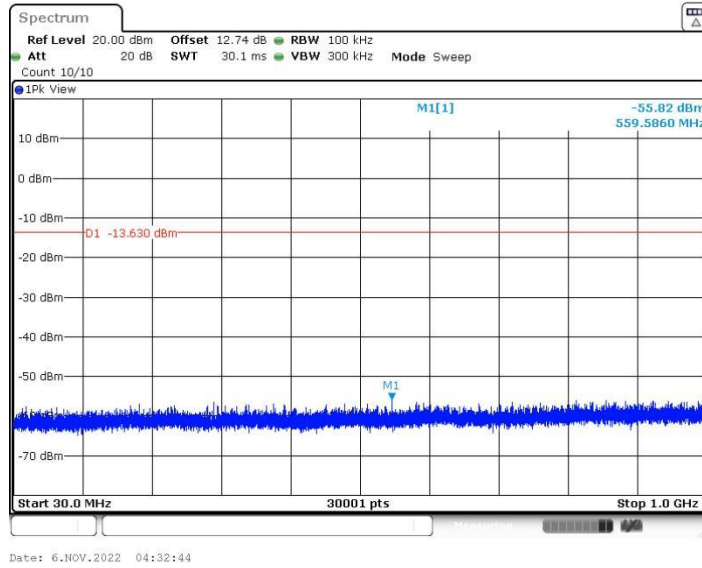


11G-CDD_Ant.16_2437_1000~26500

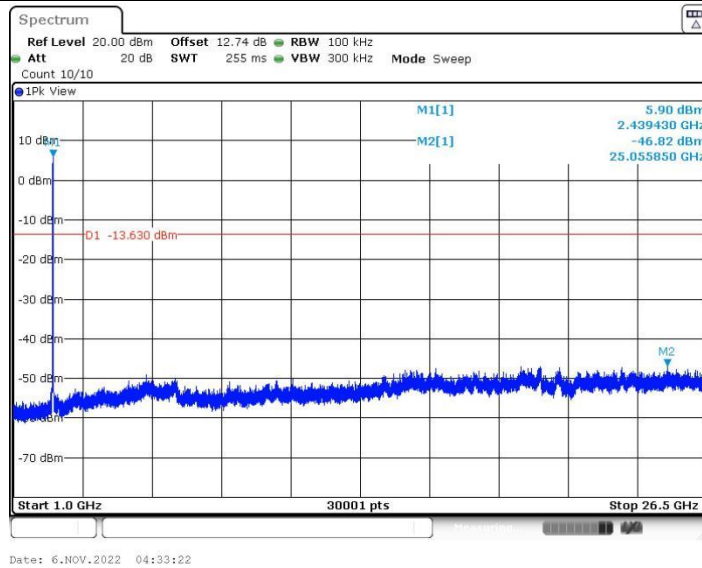




11G-CDD_Ant.7_2437_30~1000

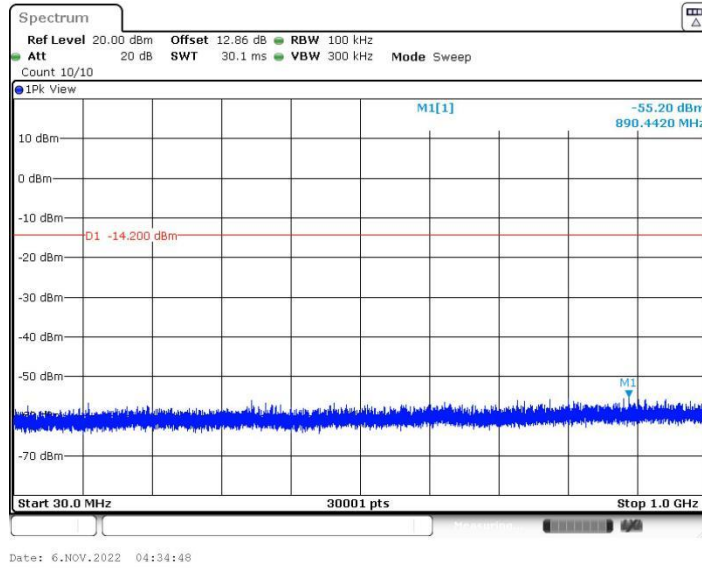


11G-CDD_Ant.7_2437_1000~26500

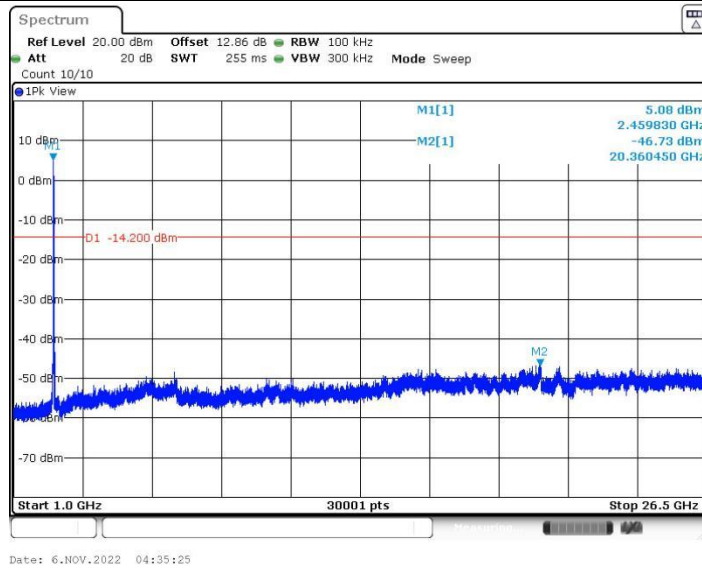




11G-CDD_Ant.16_2462_30~1000

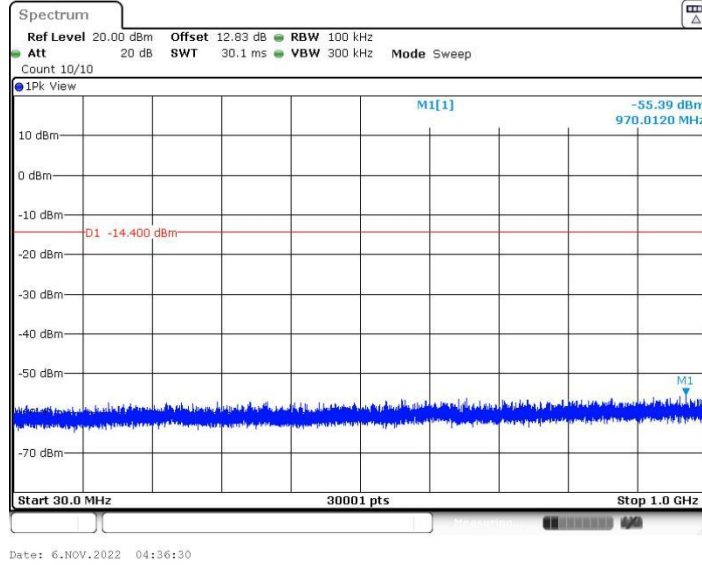


11G-CDD_Ant.16_2462_1000~26500

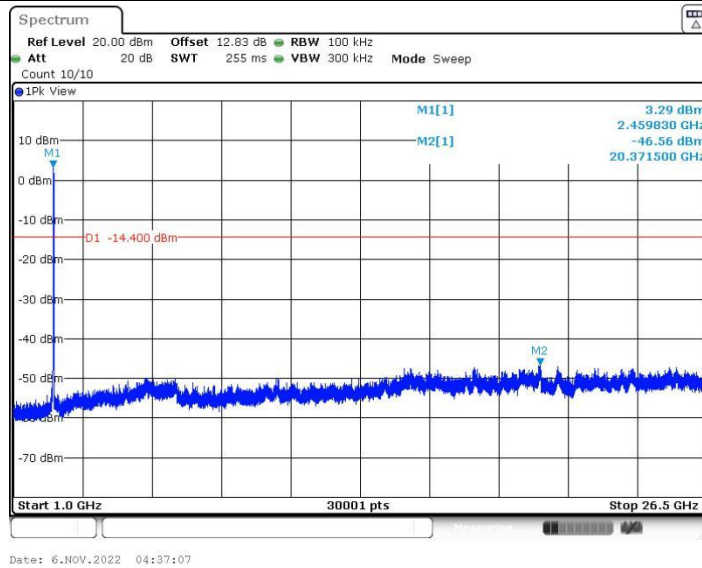




11G-CDD_Ant.7_2462_30~1000

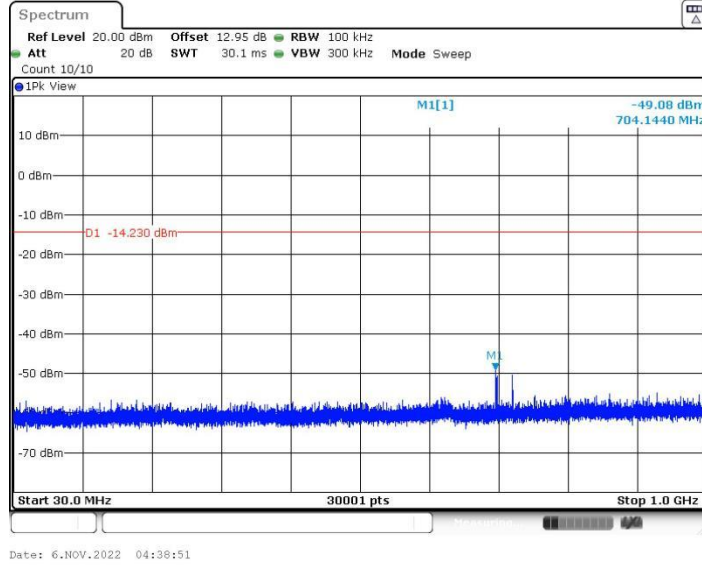


11G-CDD_Ant.7_2462_1000~26500

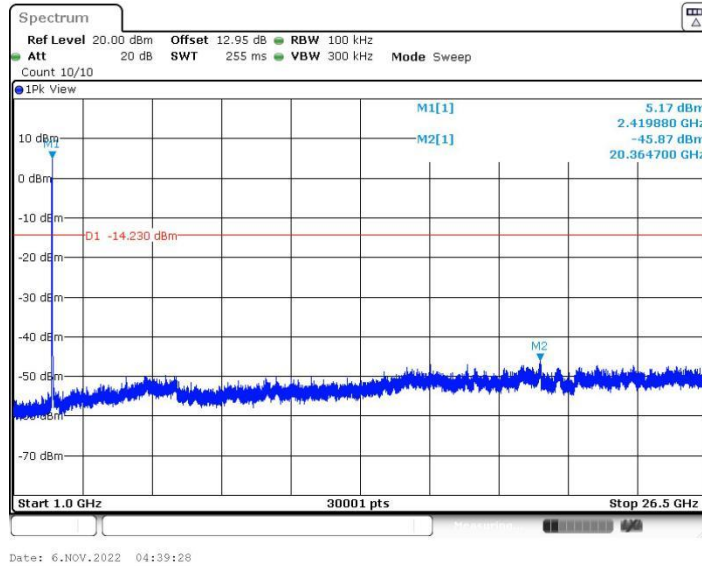




11AX20MIMO_Ant.16_2412_30~1000

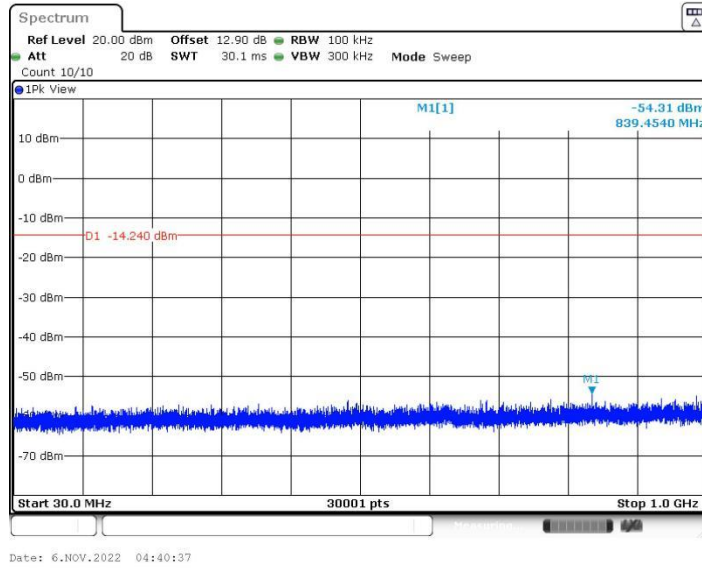


11AX20MIMO_Ant.16_2412_1000~26500

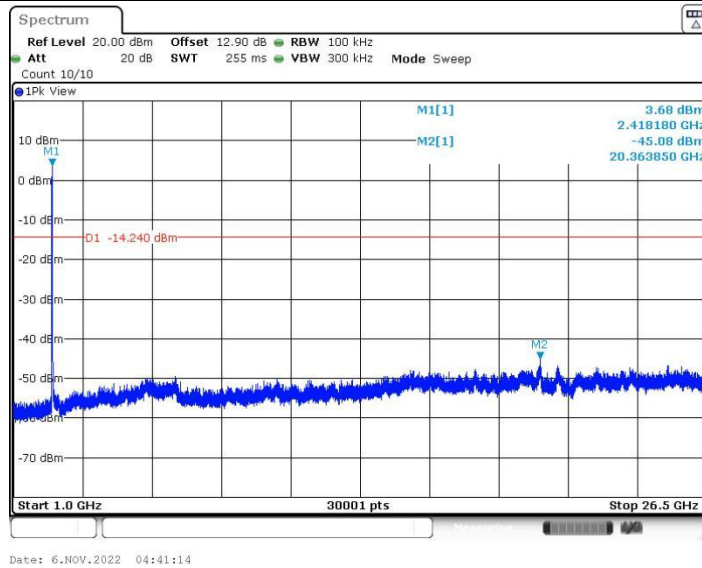




11AX20MIMO_Ant.7_2412_30~1000

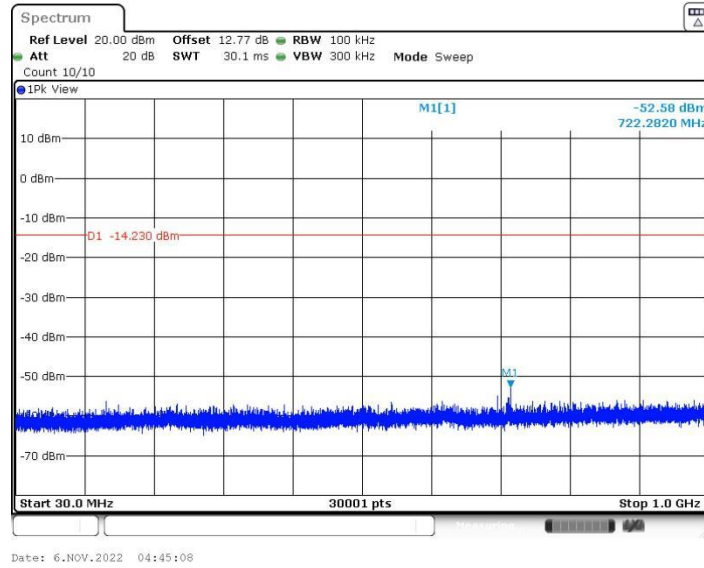


11AX20MIMO_Ant.7_2412_1000~26500

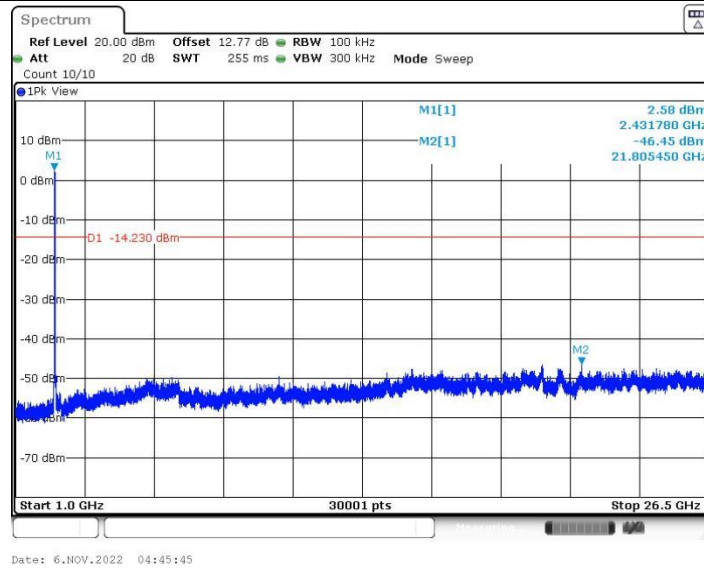




11AX20MIMO_Ant.16_2437_30~1000

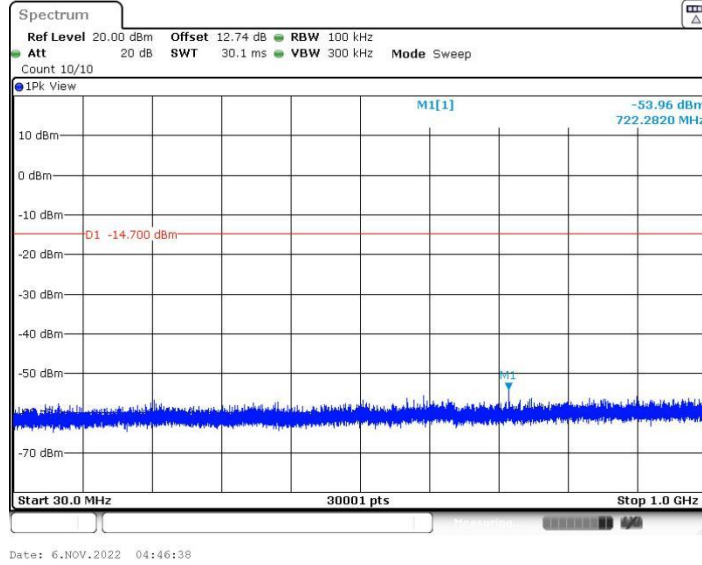


11AX20MIMO_Ant.16_2437_1000~26500

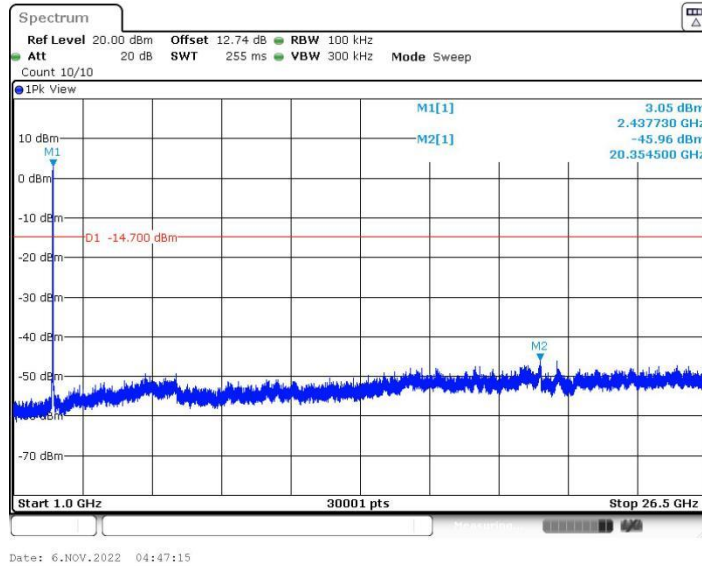




11AX20MIMO_Ant.7_2437_30~1000

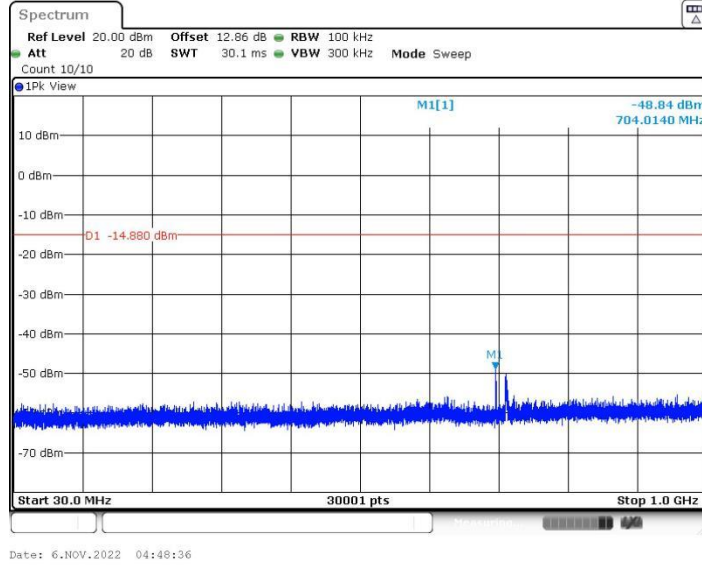


11AX20MIMO_Ant.7_2437_1000~26500

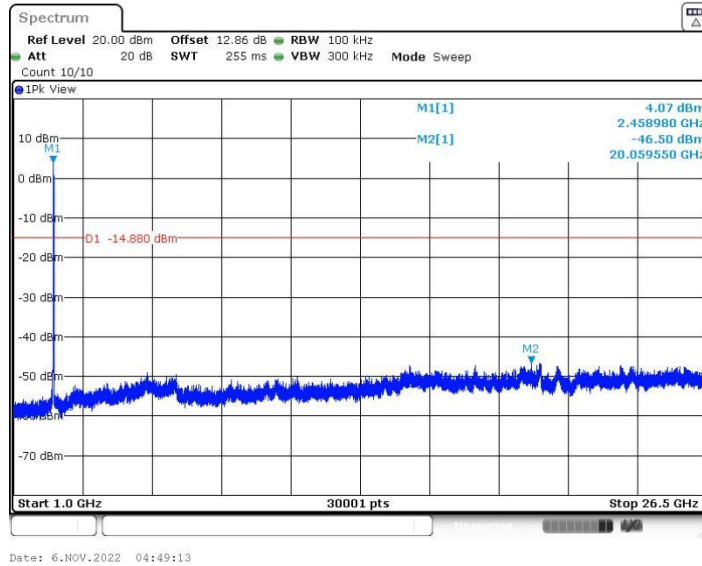




11AX20MIMO_Ant.16_2462_30~1000

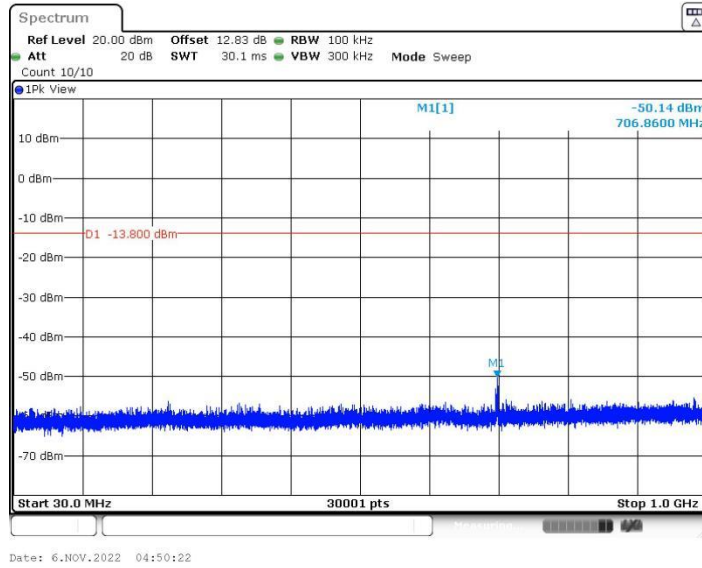


11AX20MIMO_Ant.16_2462_1000~26500

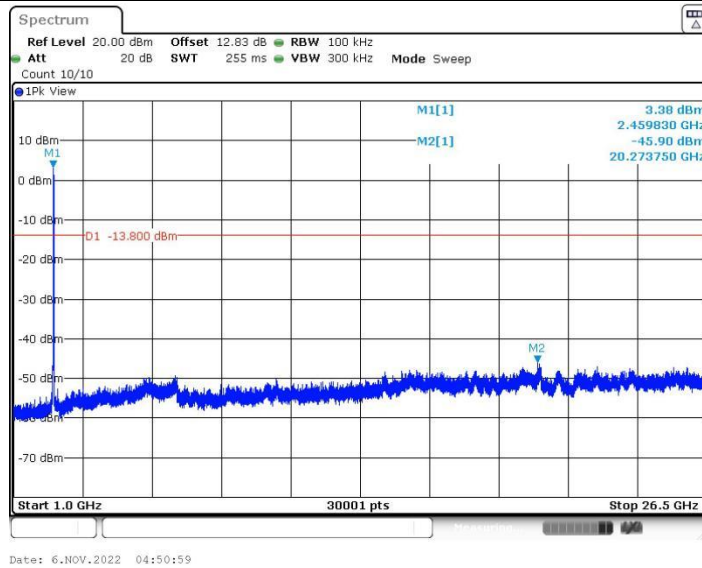




11AX20MIMO_Ant.7_2462_30~1000

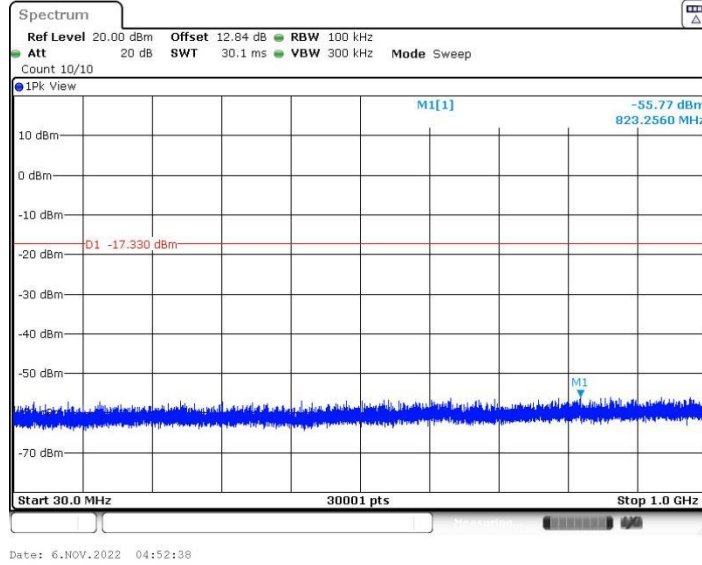


11AX20MIMO_Ant.7_2462_1000~26500

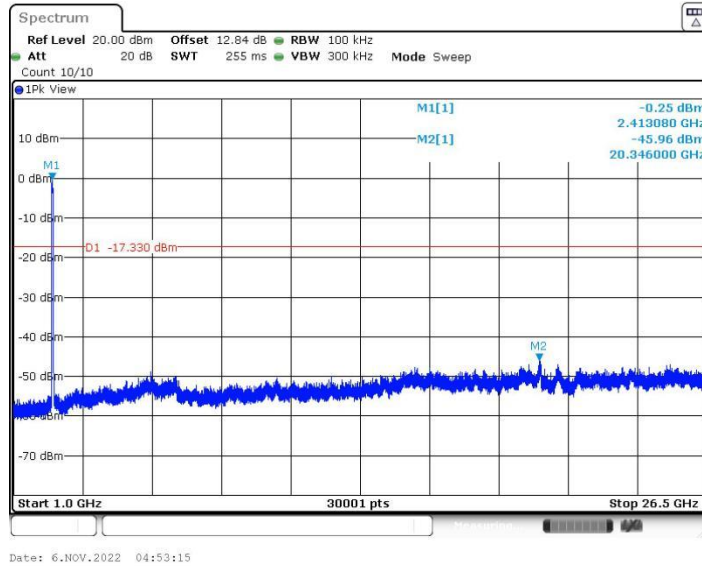




11AX40MIMO_Ant.16_2422_30~1000

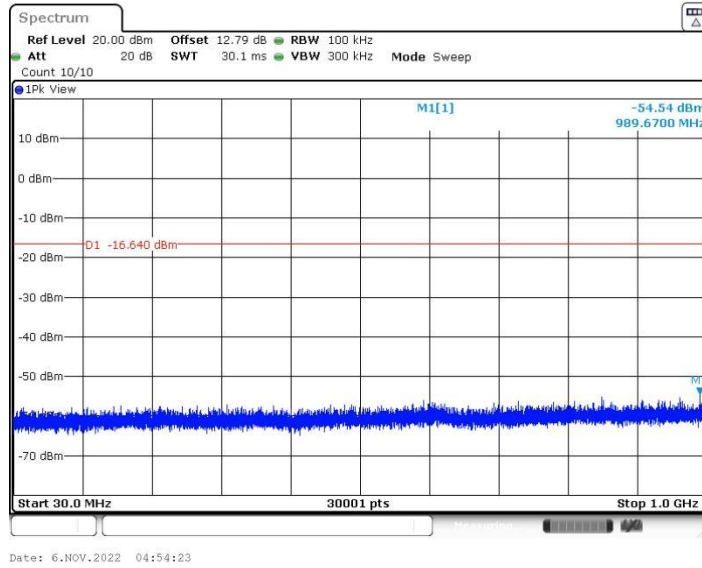


11AX40MIMO_Ant.16_2422_1000~26500

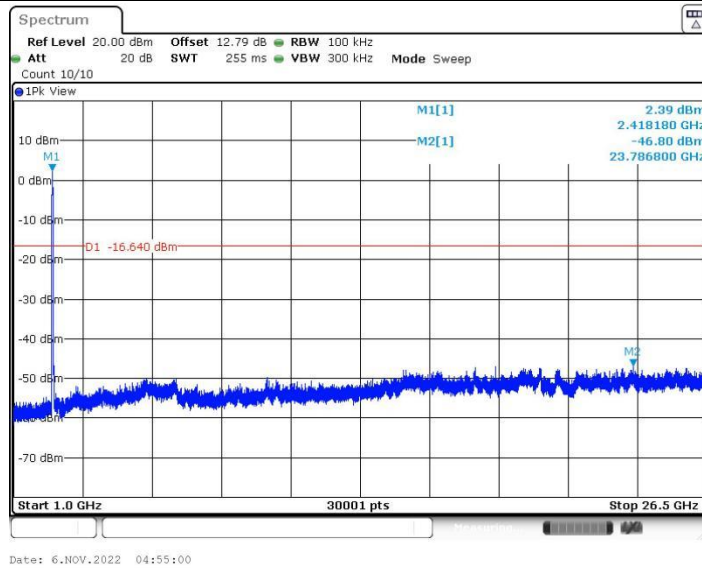




11AX40MIMO_Ant.7_2422_30~1000

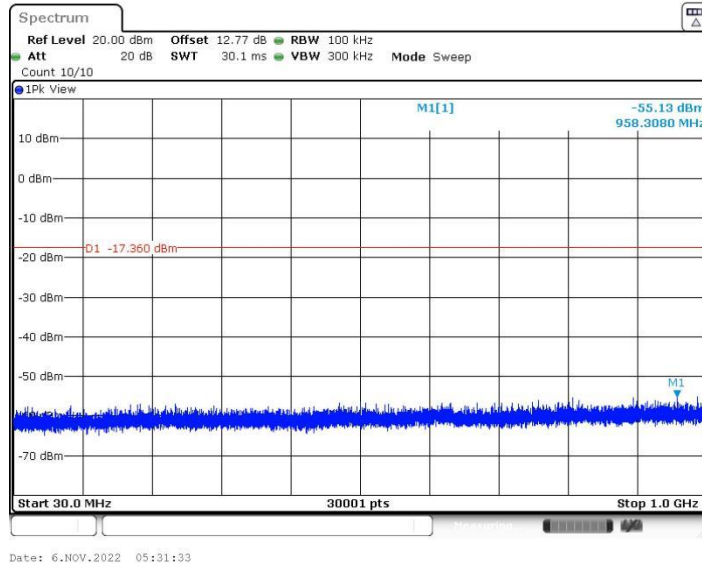


11AX40MIMO_Ant.7_2422_1000~26500

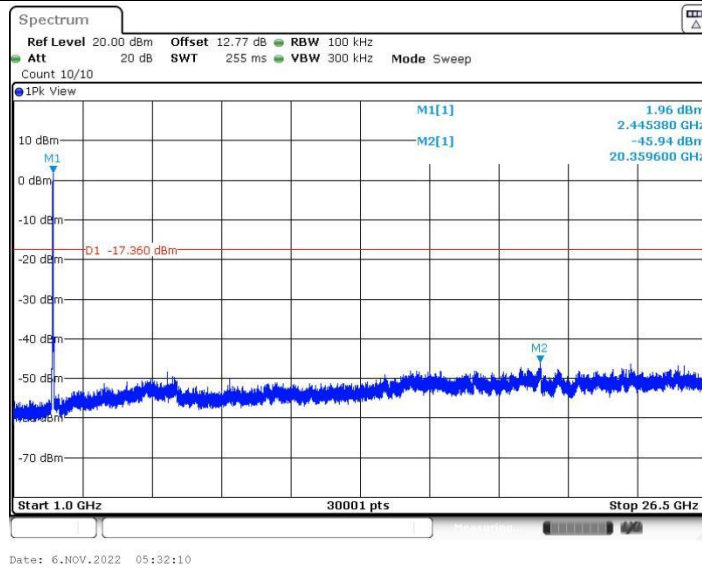




11AX40MIMO_Ant.16_2437_30~1000

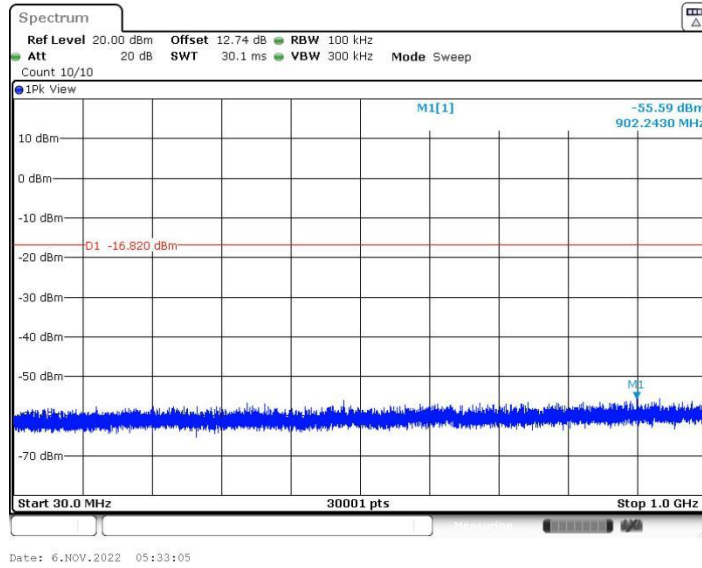


11AX40MIMO_Ant.16_2437_1000~26500

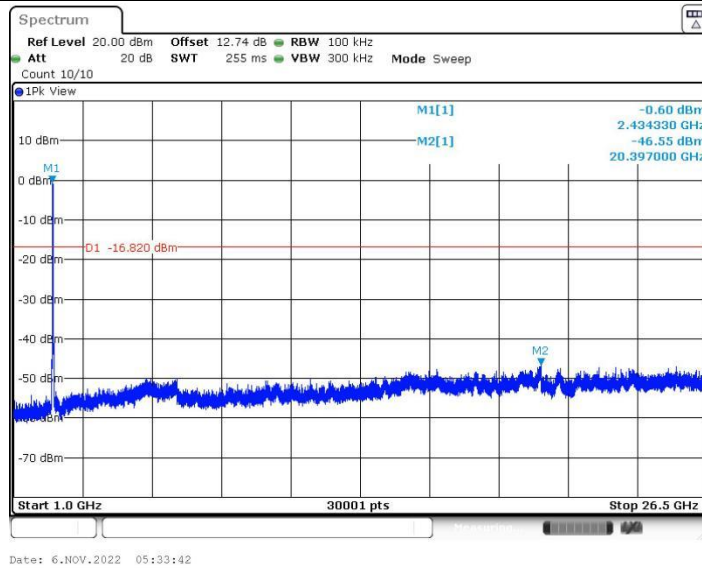




11AX40MIMO_Ant.7_2437_30~1000

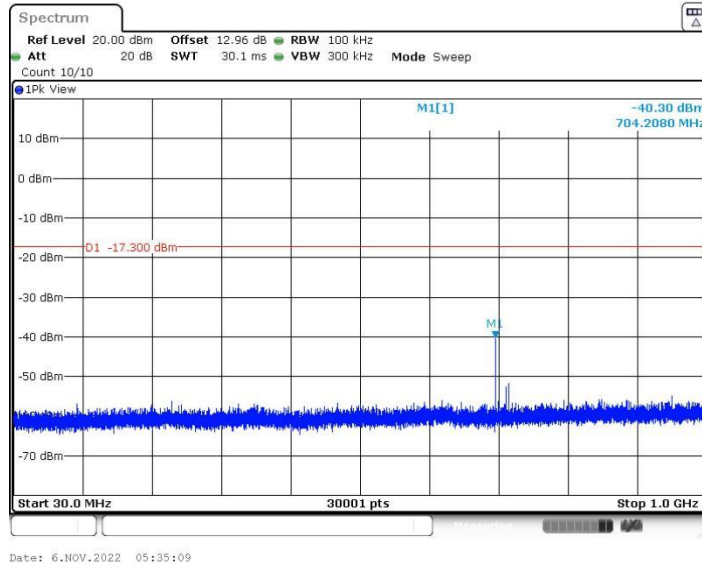


11AX40MIMO_Ant.7_2437_1000~26500

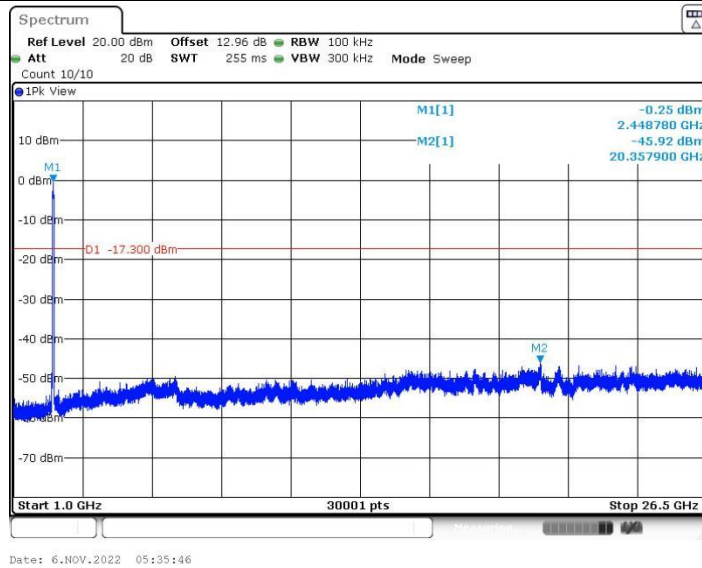




11AX40MIMO_Ant.16_2452_30~1000

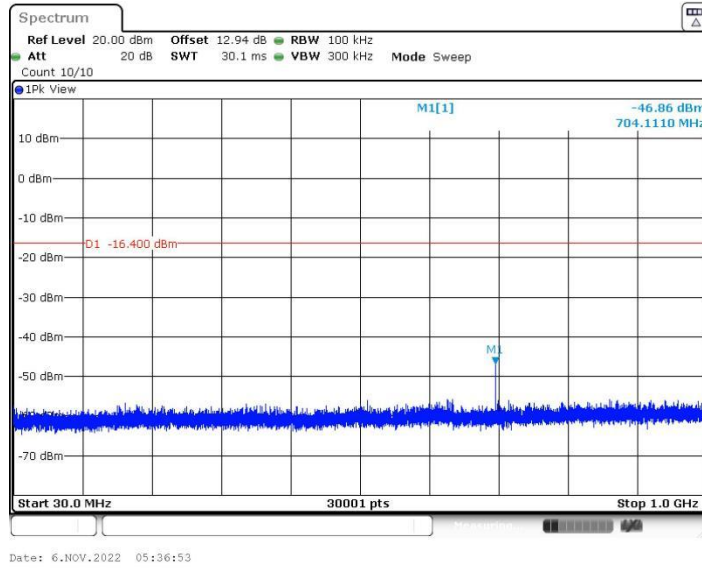


11AX40MIMO_Ant.16_2452_1000~26500

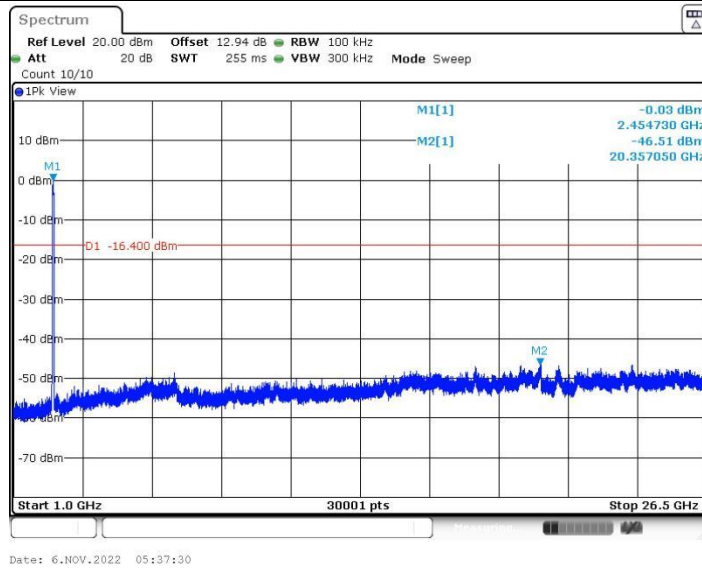




11AX40MIMO_Ant.7_2452_30~1000



11AX40MIMO_Ant.7_2452_1000~26500





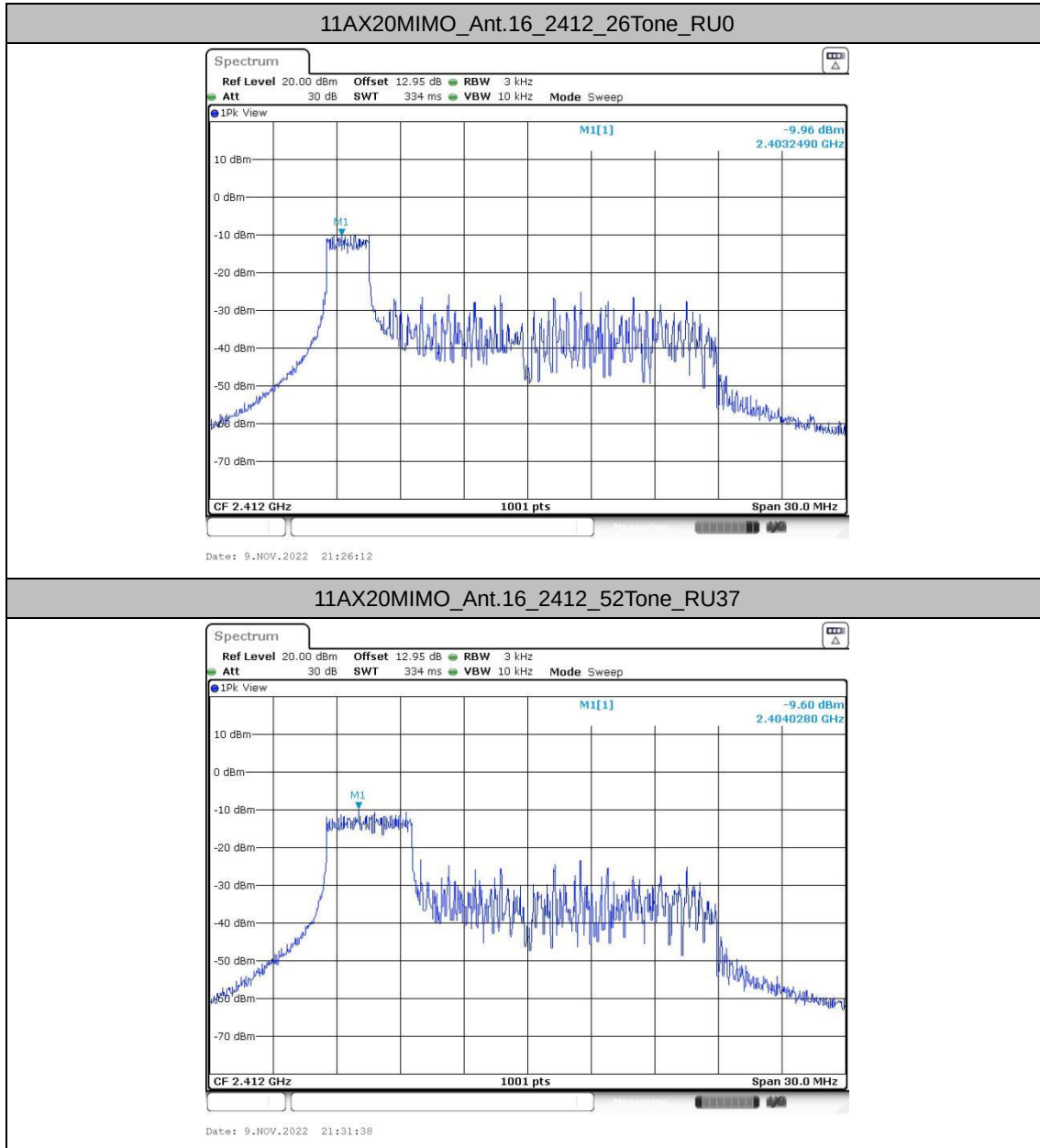
Maximum power spectral density for 802.11ax partial RU

Test Result

TestMode	Antenna	Freq(MHz)	RuSize	RuIndex	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11AX20	Ant.16	2412	26Tone	RU0	-9.96	≤8.00	PASS
			52Tone	RU37	-9.6	≤8.00	PASS
			106Tone	RU53	-9.28	≤8.00	PASS
	Ant.7	2412	26Tone	RU0	-8.71	≤8.00	PASS
			52Tone	RU37	-8.67	≤8.00	PASS
			106Tone	RU53	-8.77	≤8.00	PASS
	total	2412	26Tone	RU0	-6.28	≤8.00	PASS
			52Tone	RU37	-6.10	≤8.00	PASS
			106Tone	RU53	-6.01	≤8.00	PASS
	Ant.16	2437	26Tone	RU0	-9.04	≤8.00	PASS
			52Tone	RU37	-9.19	≤8.00	PASS
			106Tone	RU53	-8.73	≤8.00	PASS
	Ant.7	2437	26Tone	RU0	-8.87	≤8.00	PASS
			52Tone	RU37	-8.82	≤8.00	PASS
			106Tone	RU53	-9.2	≤8.00	PASS
	total	2437	26Tone	RU0	-5.94	≤8.00	PASS
			52Tone	RU37	-5.99	≤8.00	PASS
			106Tone	RU53	-5.95	≤8.00	PASS
	Ant.16	2462	26Tone	RU8	-10.1	≤8.00	PASS
			52Tone	RU40	-10.01	≤8.00	PASS
			106Tone	RU54	-9.99	≤8.00	PASS
	Ant.7	2462	26Tone	RU8	-10.36	≤8.00	PASS
			52Tone	RU40	-9.74	≤8.00	PASS
			106Tone	RU54	-10.09	≤8.00	PASS
	total	2462	26Tone	RU8	-7.22	≤8.00	PASS
			52Tone	RU40	-6.86	≤8.00	PASS
			106Tone	RU54	-7.03	≤8.00	PASS

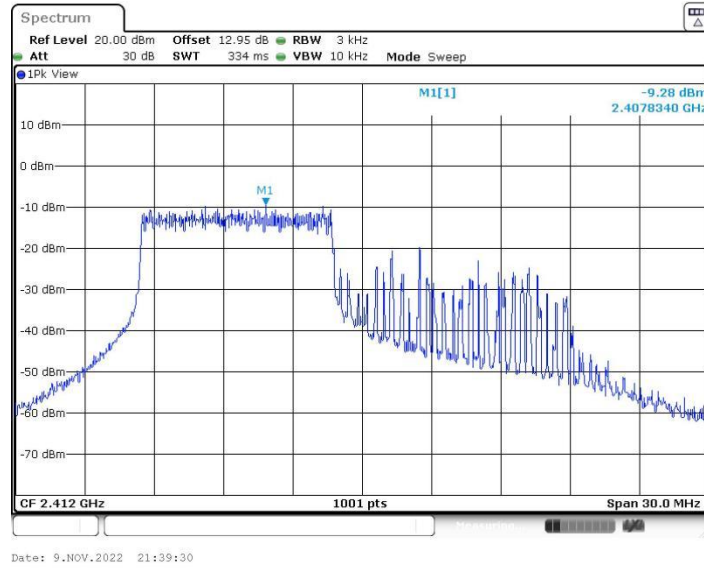


Test Graphs

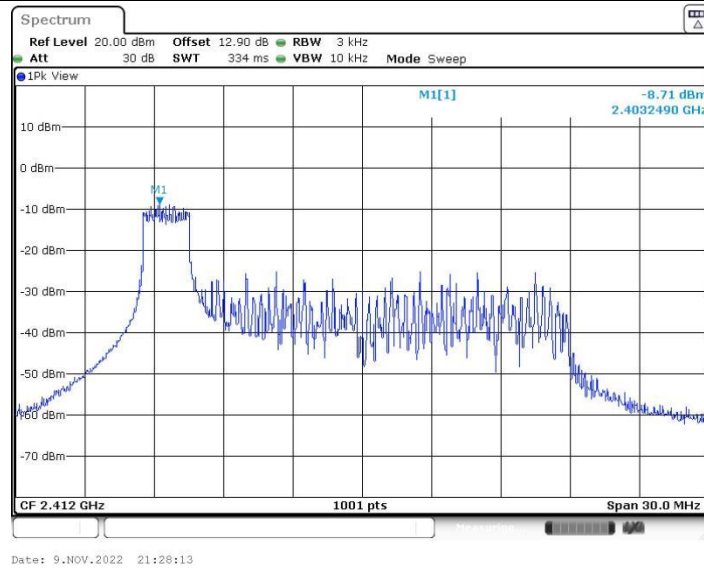




11AX20MIMO_Ant.16_2412_106Tone_RU53

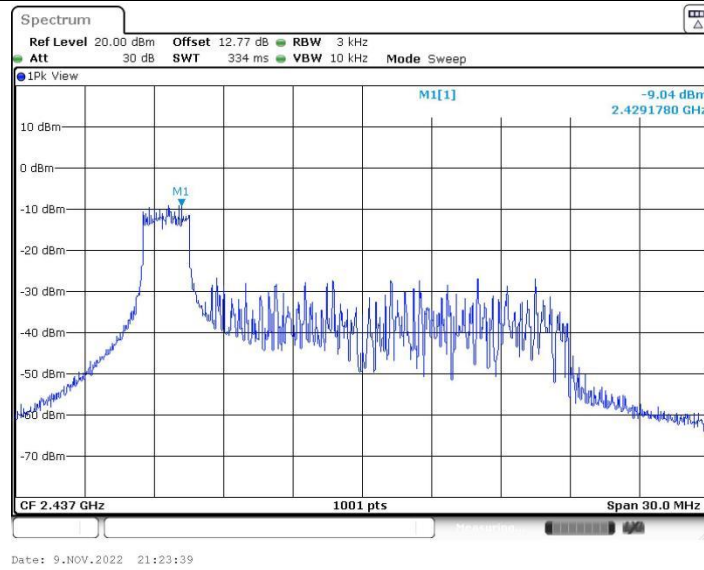


11AX20MIMO_Ant.7_2412_26Tone_RU0

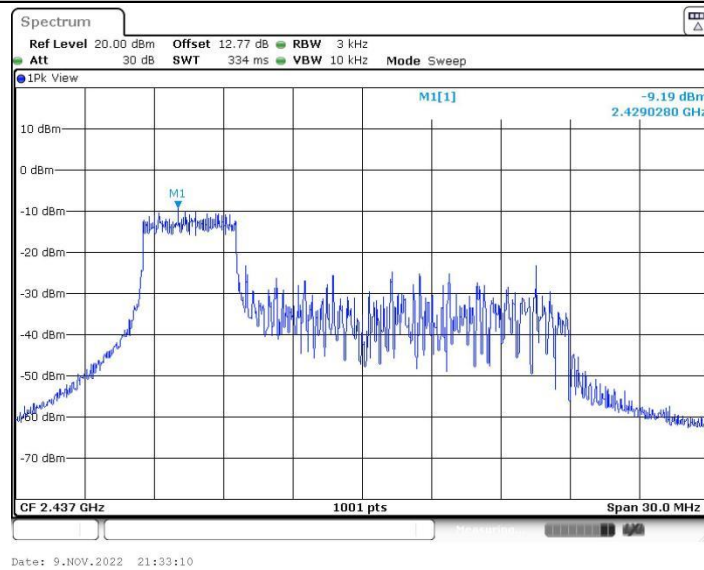




11AX20MIMO_Ant.16_2437_26Tone_RU0

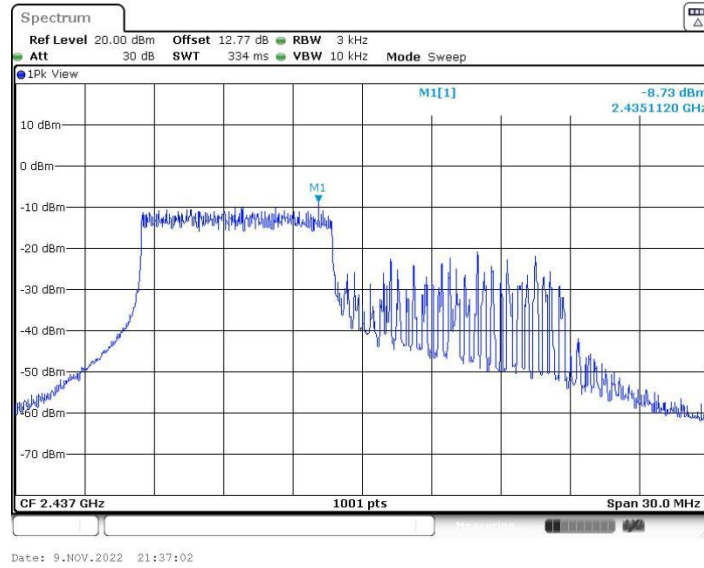


11AX20MIMO_Ant.16_2437_52Tone_RU37

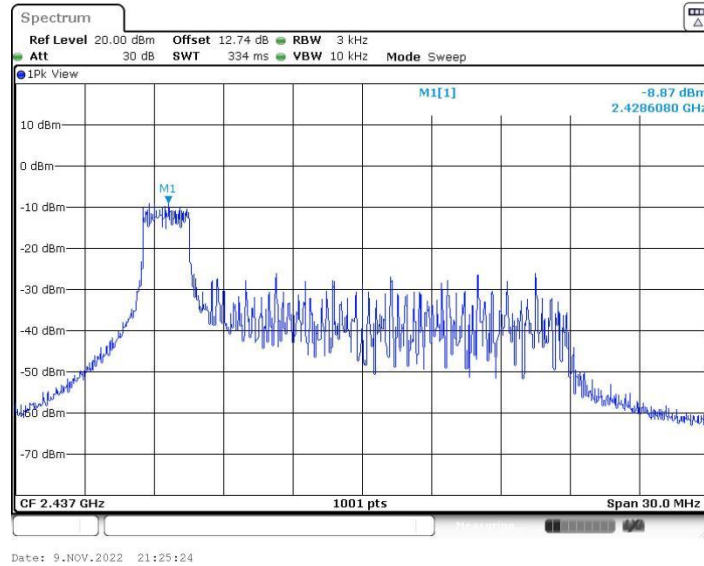




11AX20MIMO_Ant.16_2437_106Tone_RU53

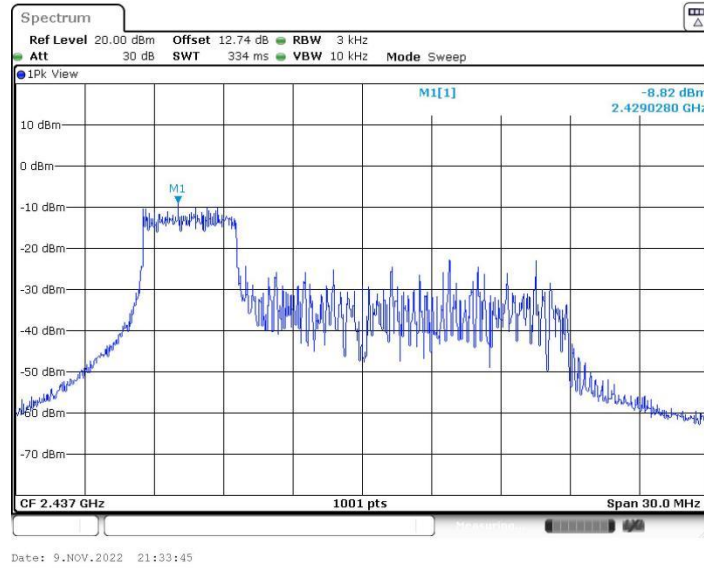


11AX20MIMO_Ant.7_2437_26Tone_RU0

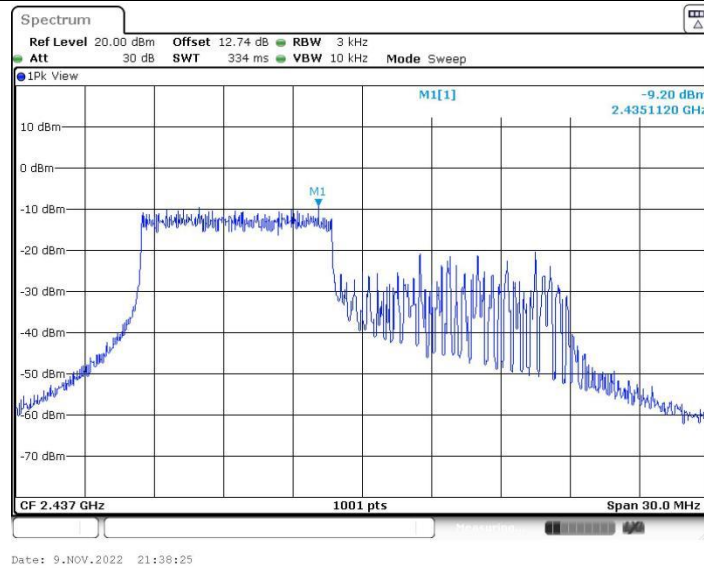




11AX20MIMO_Ant.7_2437_52Tone_RU37

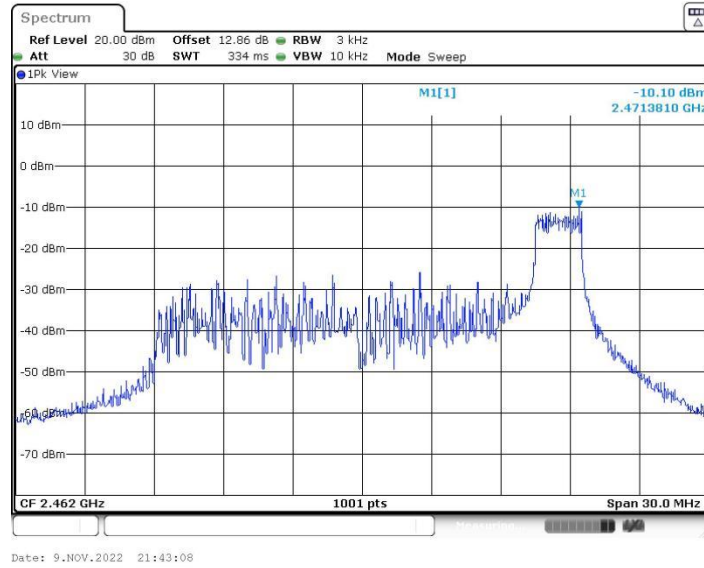


11AX20MIMO_Ant.7_2437_106Tone_RU53

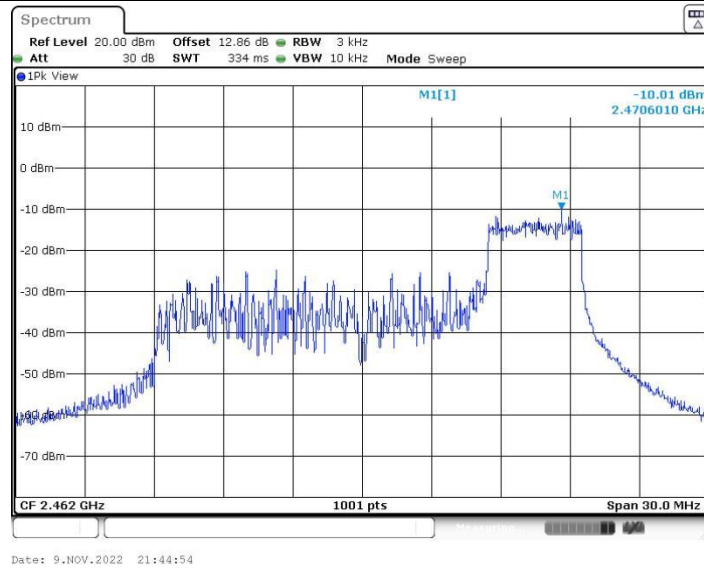




11AX20MIMO_Ant.16_2462_26Tone_RU8

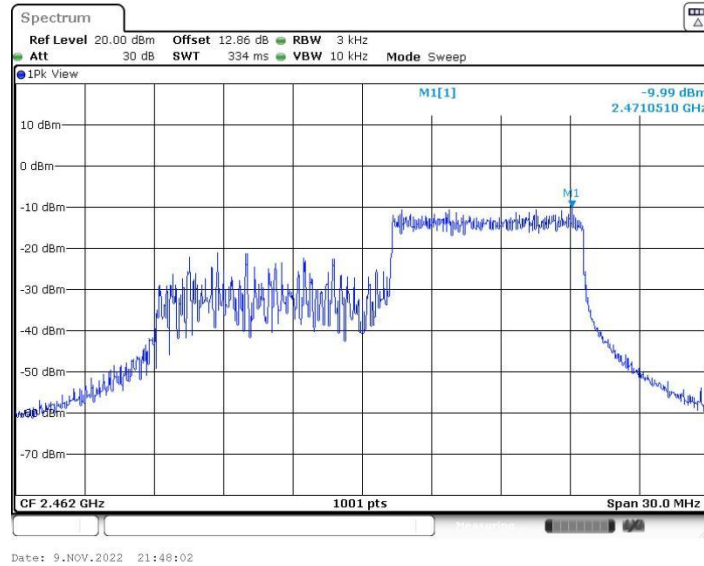


11AX20MIMO_Ant.16_2462_52Tone_RU40

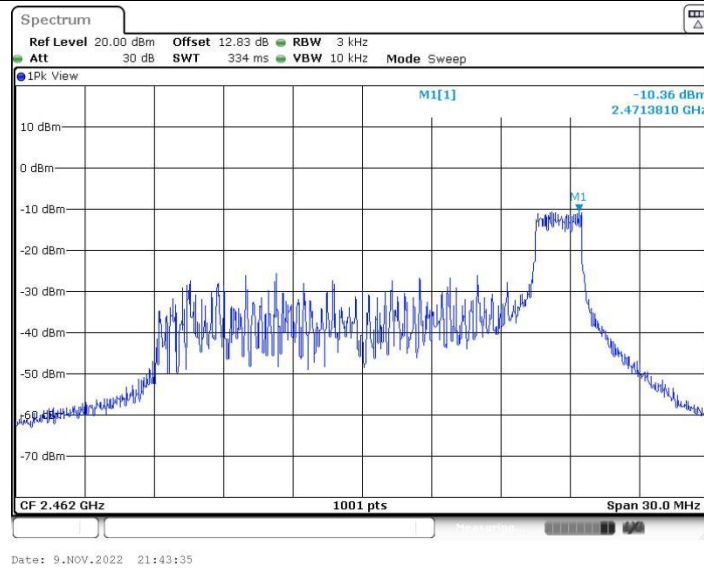




11AX20MIMO_Ant.16_2462_106Tone_RU54

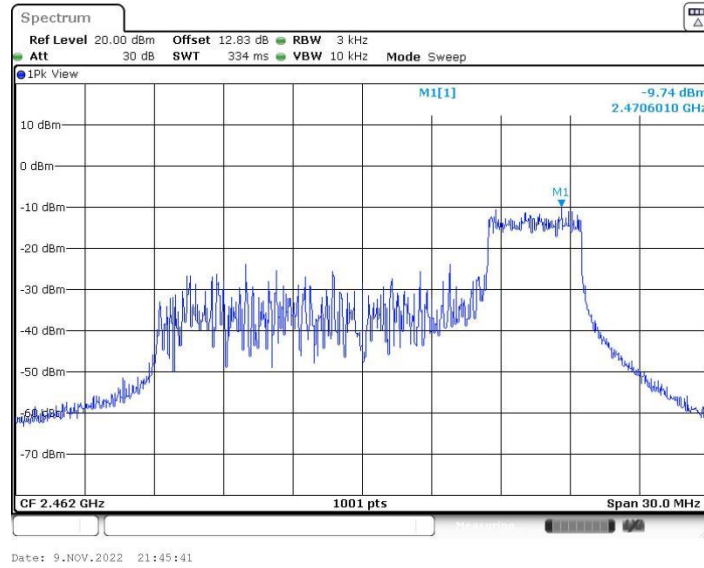


11AX20MIMO_Ant.7_2462_26Tone_RU8

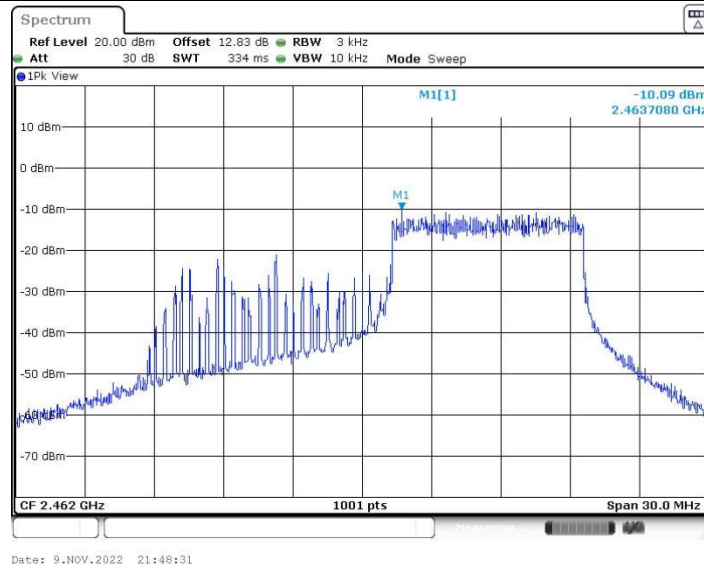




11AX20MIMO_Ant.7_2462_52Tone_RU40



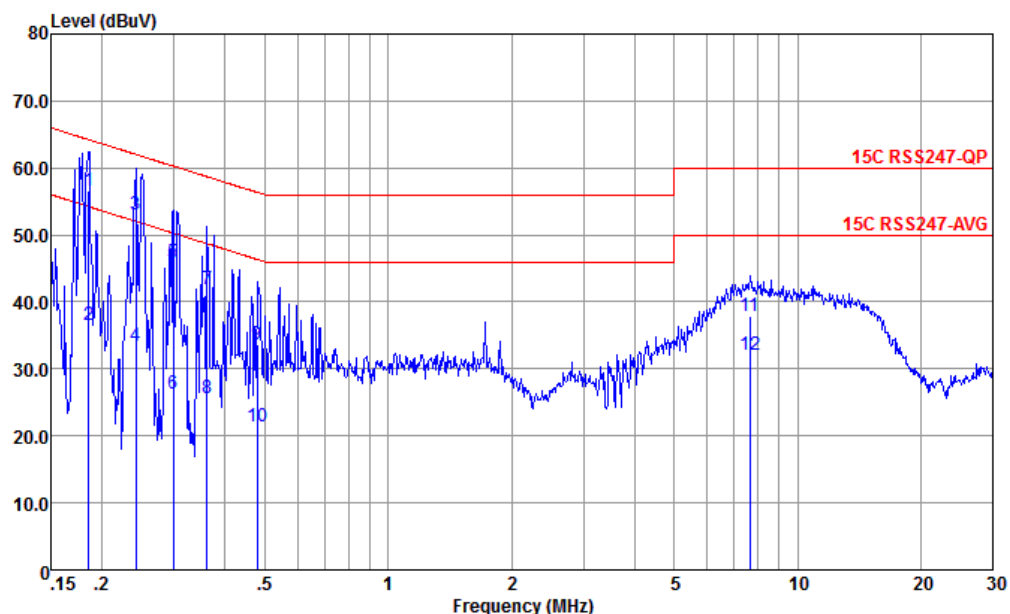
11AX20MIMO_Ant.7_2462_106Tone_RU54





Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		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.		

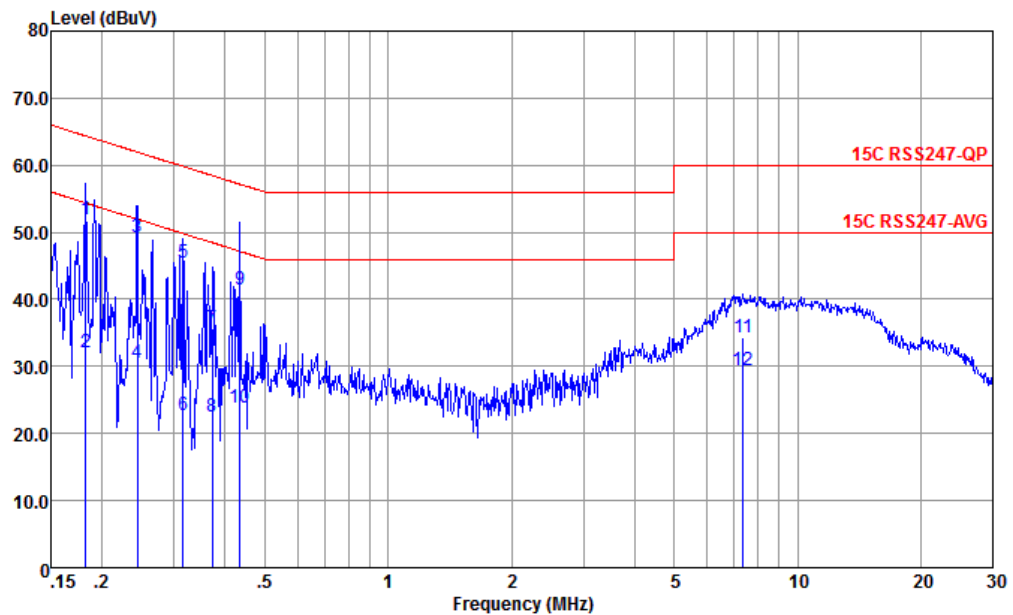


Site : CO01-KS
Condition : 15C RSS247-QP LISN-060105-LINE LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 *	0.185	56.66	-7.58	64.24	46.21	0.03	10.42	QP
2	0.185	36.66	-17.58	54.24	26.21	0.03	10.42	Average
3	0.242	52.93	-9.11	62.04	42.50	0.04	10.39	QP
4	0.242	33.33	-18.71	52.04	22.90	0.04	10.39	Average
5	0.299	45.91	-14.37	60.28	35.50	0.06	10.35	QP
6	0.299	26.21	-24.07	50.28	15.80	0.06	10.35	Average
7	0.361	41.84	-16.85	58.69	31.49	0.03	10.32	QP
8	0.361	25.54	-23.15	48.69	15.19	0.03	10.32	Average
9	0.479	33.70	-22.66	56.36	23.49	-0.02	10.23	QP
10	0.479	21.40	-24.96	46.36	11.19	-0.02	10.23	Average
11	7.646	37.80	-22.20	60.00	27.60	-0.15	10.35	QP
12	7.646	32.00	-18.00	50.00	21.80	-0.15	10.35	Average



Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		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 : 15C RSS247-QP LISN-060105-NEUTRAL NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1 *	0.182	51.97	-12.40	64.37	41.51	0.04	10.42	QP
2	0.182	32.07	-22.30	54.37	21.61	0.04	10.42	Average
3	0.244	49.19	-12.76	61.95	38.80	0.00	10.39	QP
4	0.244	30.59	-21.36	51.95	20.20	0.00	10.39	Average
5	0.315	45.49	-14.35	59.84	35.20	-0.05	10.34	QP
6	0.315	22.79	-27.05	49.84	12.50	-0.05	10.34	Average
7	0.371	35.75	-22.72	58.47	25.50	-0.06	10.31	QP
8	0.371	22.45	-26.02	48.47	12.20	-0.06	10.31	Average
9	0.435	41.39	-15.76	57.15	31.19	-0.07	10.27	QP
10	0.435	23.79	-23.36	47.15	13.59	-0.07	10.27	Average
11	7.368	34.38	-25.62	60.00	24.20	-0.13	10.31	QP
12	7.368	29.48	-20.52	50.00	19.30	-0.13	10.31	Average

Note:

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



Appendix C. Radiated Spurious Emission

Only the worst mode for each operation mode are shown in the report.

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 7+16		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 11 2462MHz		2486.5	55.01	-18.99	74	48.49	32.43	6.73	32.64	149	200	P	H
		2486.44	44.76	-9.24	54	38.24	32.43	6.73	32.64	149	200	A	H
	*	2462	110.05	-	-	103.69	32.37	6.7	32.71	149	200	P	H
	*	2464	107.56	-	-	101.2	32.37	6.7	32.71	149	200	A	H
		2499.34	54.73	-19.27	74	48.05	32.5	6.75	32.57	275	145	P	V
		2486.32	43.36	-10.64	54	36.84	32.43	6.73	32.64	275	145	A	V
	*	2462	101	-	-	94.64	32.37	6.7	32.71	275	145	P	V
	*	2464	98.7	-	-	92.34	32.37	6.7	32.71	275	145	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 7+16		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 11 2462MHz		4920	40.47	-33.53	74	58.53	34.1	9.58	61.74	300	0	P	H
		7380	42.17	-31.83	74	56.82	35.7	11.71	62.06	300	0	P	H
		4920	40.11	-33.89	74	58.17	34.1	9.58	61.74	100	0	P	V
		7380	42.25	-31.75	74	56.9	35.7	11.71	62.06	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 802.11g (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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 11 2462MHz	*	2460	110.94	-	-	104.58	32.37	6.7	32.71	100	139	P	H
	*	2460	102.36	-	-	96	32.37	6.7	32.71	100	139	A	H
		2484.4	62.98	-11.02	74	56.46	32.43	6.73	32.64	100	139	P	H
		2483.5	50.68	-3.32	54	44.16	32.43	6.73	32.64	100	139	A	H
	*	2460	107.8	-	-	101.44	32.37	6.7	32.71	298	47	P	V
	*	2460	100.18	-	-	93.82	32.37	6.7	32.71	298	47	A	V
		2484.58	59.71	-14.29	74	53.19	32.43	6.73	32.64	298	47	P	V
		2483.5	47.27	-6.73	54	40.75	32.43	6.73	32.64	298	47	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. CDD 7+16	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 11 2462MHz		4920	40.54	-33.46	74	58.6	34.1	9.58	61.74	300	0	P	H
		7380	46.99	-27.01	74	61.64	35.7	11.71	62.06	300	0	P	H
		4920	40.69	-33.31	74	58.75	34.1	9.58	61.74	100	0	P	V
		7380	52.42	-21.58	74	67.07	35.7	11.71	62.06	100	173	P	V
		7380	41.71	-12.29	54	56.36	35.7	11.71	62.06	100	173	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 (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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)
8802.11ax HE20 Full CH 11 2462MHz	*	2458	111.24	-	-	104.88	32.37	6.7	32.71	100	140	P	H
	*	2458	101.31	-	-	94.95	32.37	6.7	32.71	100	140	A	H
		2486.8	63.86	-10.14	74	57.34	32.43	6.73	32.64	100	140	P	H
		2483.68	50.87	-3.13	54	44.35	32.43	6.73	32.64	100	140	A	H
	*	2458	110.29	-	-	103.93	32.37	6.7	32.71	337	52	P	V
	*	2458	99.91	-	-	93.55	32.37	6.7	32.71	337	52	A	V
		2485	59.43	-14.57	74	52.91	32.43	6.73	32.64	337	52	P	V
		2485	46.84	-7.16	54	40.32	32.43	6.73	32.64	337	52	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. CDD 7+16	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 11 2462MHz		4920	39.77	-34.23	74	57.83	34.1	9.58	61.74	300	0	P	H
		7380	46	-28	74	60.65	35.7	11.71	62.06	300	0	P	H
		4920	39.84	-34.16	74	57.9	34.1	9.58	61.74	100	0	P	V
		7380	47.5	-26.5	74	62.15	35.7	11.71	62.06	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 26 (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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 26/8 CH 11 2462MHz		2470	107.84	-	-	101.41	32.37	6.7	32.64	287	28	P	H
		2470	99.65	-	-	93.22	32.37	6.7	32.64	287	28	A	H
		2484.88	54.47	-19.53	74	47.95	32.43	6.73	32.64	287	28	P	H
		2487.88	43.61	-10.39	54	37	32.5	6.75	32.64	287	28	A	H
		2470	106.83	-	-	100.4	32.37	6.7	32.64	366	268	P	V
		2470	98.29	-	-	91.86	32.37	6.7	32.64	366	268	A	V
		2490.1	54.86	-19.14	74	48.25	32.5	6.75	32.64	366	268	P	V
		2497.84	43.58	-10.42	54	36.9	32.5	6.75	32.57	366	268	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 52 (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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 52/40 CH 11 2462MHz		2488.9	54.6	-19.4	74	47.99	32.5	6.75	32.64	136	296	P	H
		2485.6	43.62	-10.38	54	37.1	32.43	6.73	32.64	136	296	A	H
		2468	107.84	-	-	101.41	32.37	6.7	32.64	136	296	P	H
		2468	97.98	-	-	91.55	32.37	6.7	32.64	136	296	A	H
		2499.7	54.64	-19.36	74	47.96	32.5	6.75	32.57	362	240	P	V
		2498.68	43.58	-10.42	54	36.9	32.5	6.75	32.57	362	240	A	V
		2468	106.56	-	-	100.13	32.37	6.7	32.64	362	240	P	V
		2468	97.6	-	-	91.17	32.37	6.7	32.64	362	240	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 106 (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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 106/54 CH 11 2462MHz		2497.12	55.46	-18.54	74	48.78	32.5	6.75	32.57	118	284	P	H
		2485.24	43.64	-10.36	54	37.12	32.43	6.73	32.64	118	284	A	H
		2468	108.29	-	-	101.86	32.37	6.7	32.64	118	284	P	H
		2468	99.08	-	-	92.65	32.37	6.7	32.64	118	284	A	H
		2493.94	54.33	-19.67	74	47.65	32.5	6.75	32.57	364	238	P	V
		2486.68	43.54	-10.46	54	37.02	32.43	6.73	32.64	364	238	A	V
		2470	108.16	-	-	101.73	32.37	6.7	32.64	364	238	P	V
		2468	98.57	-	-	92.14	32.37	6.7	32.64	364	238	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 7+16				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full CH 09 2452MHz		2386.18	54.05	-19.95	74	48.02	32.3	6.61	32.88	110	140	P	H
		2389.95	43.24	-10.76	54	37.17	32.3	6.61	32.84	110	140	A	H
	*	2448	107.39	-	-	101.12	32.3	6.68	32.71	110	140	P	H
	*	2448	97.58	-	-	91.31	32.3	6.68	32.71	110	140	A	H
		2484.7	63.03	-10.97	74	56.51	32.43	6.73	32.64	110	140	P	H
		2485.78	50.65	-3.35	54	44.13	32.43	6.73	32.64	110	140	A	H
		2348.22	54.05	-19.95	74	48.34	32.1	6.53	32.92	336	54	P	V
		2389.82	42.73	-11.27	54	36.66	32.3	6.61	32.84	336	54	A	V
	*	2448	107.52	-	-	101.25	32.3	6.68	32.71	336	54	P	V
	*	2448	96.78	-	-	90.51	32.3	6.68	32.71	336	54	A	V
		2485.72	61.66	-12.34	74	55.14	32.43	6.73	32.64	336	54	P	V
		2485.84	48.8	-5.2	54	42.28	32.43	6.73	32.64	336	54	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 7+16		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full CH 09 2452MHz		4905	41	-33	74	59.09	34.1	9.56	61.75	300	0	P	H
		7350	43.63	-30.37	74	58.28	35.7	11.71	62.06	300	0	P	H
		4905	39.84	-34.16	74	57.93	34.1	9.56	61.75	100	0	P	V
		7350	47.73	-26.27	74	62.38	35.7	11.71	62.06	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 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.	
CDD 7+16		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11ax HE20 LF		47.46	22.12	-17.88	40	37.77	15.7	0.85	32.2	-	-	P	H
		91.11	20.42	-23.08	43.5	35.55	15.65	1.5	32.28	-	-	P	H
		178.41	22.77	-20.73	43.5	36.76	15.95	2.16	32.1	-	-	P	H
		300.63	24.01	-21.99	46	34.09	19.21	2.81	32.1	-	-	P	H
		339.43	21.5	-24.5	46	30.54	20.15	2.99	32.18	-	-	P	H
		731.31	27.17	-18.83	46	29.56	25.47	4.4	32.26	-	-	P	H
		42.61	35.64	-4.36	40	48.67	18.34	0.77	32.14	-	-	P	V
		90.14	26.42	-17.08	43.5	41.24	16	1.48	32.3	-	-	P	V
		216.24	23.9	-22.1	46	36.34	17.31	2.38	32.13	-	-	P	V
		263.77	24.54	-21.46	46	34.47	19.62	2.62	32.17	-	-	P	V
		722.58	27.88	-18.12	46	29.69	26.06	4.37	32.24	-	-	P	V
		831.22	35.71	-10.29	46	36.28	27.09	4.7	32.36	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<Simultaneous transmission>

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full & GSM850 Link (Band Edge @ 3m)

WIFI Ant. CDD 7+16	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 11 2462MHz	*	2462	110.26	-	-	103.9	32.37	6.7	32.71	100	266	P	H
	*	2464	100.24	-	-	93.88	32.37	6.7	32.71	100	266	A	H
		2483.98	64.68	-9.32	74	58.16	32.43	6.73	32.64	100	266	P	H
		2483.5	50.97	-3.03	54	44.45	32.43	6.73	32.64	100	266	A	H
	*	2458	109.65	-	-	103.29	32.37	6.7	32.71	374	73	P	V
	*	2458	99.45	-	-	93.09	32.37	6.7	32.71	374	73	A	V
		2486.74	60.89	-13.11	74	54.37	32.43	6.73	32.64	374	73	P	V
		2485.78	46.77	-7.23	54	40.25	32.43	6.73	32.64	374	73	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 & GSM850 Link (Harmonic @ 3m)

WIFI Ant. CDD 7+16	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 11 2462MHz		4920	39.73	-34.27	74	57.18	34.1	9.58	61.13	300	0	P	H
		7380	44.18	-29.82	74	57.63	35.7	11.71	60.86	300	0	P	H
		4920	40.01	-33.99	74	57.46	34.1	9.58	61.13	100	0	P	V
		7380	43.31	-30.69	74	56.76	35.7	11.71	60.86	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	Peak or Average
H/V	Horizontal or Vertical



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.	
CDD 7+16		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		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)

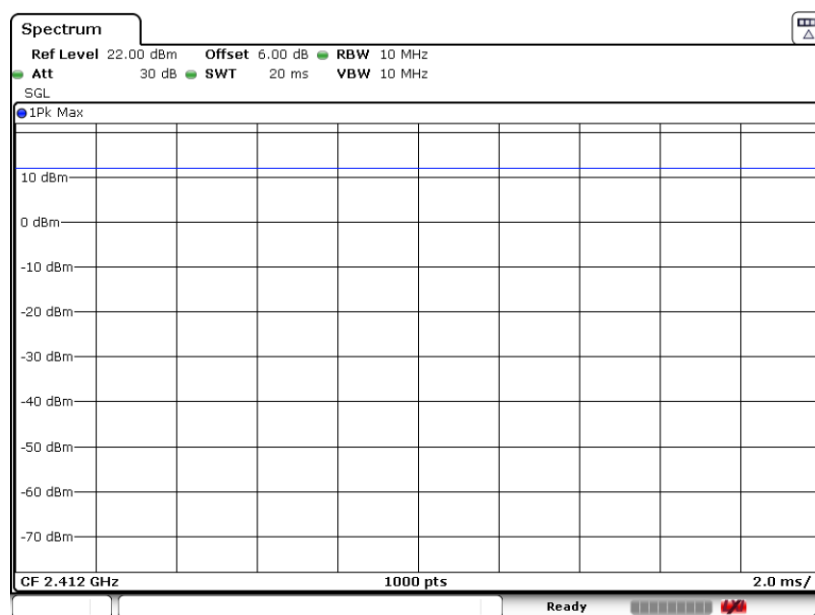
= -10.46(dB)

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

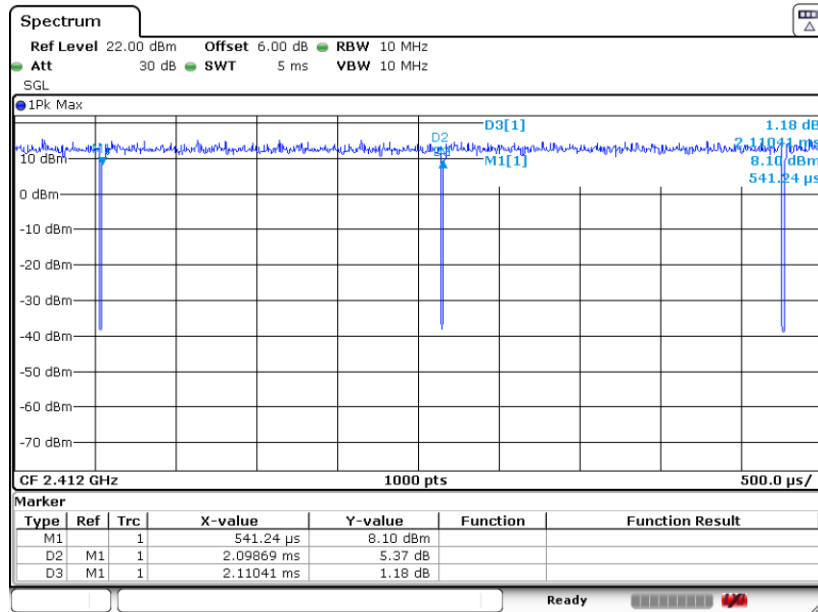
Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
16+7	802.11b	100	-	-	10Hz
16+7	802.11g	99.44	-	-	10Hz
16+7	802.11ax HE20	100	-	-	10Hz
16+7	802.11ax HE40	100	-	-	10Hz

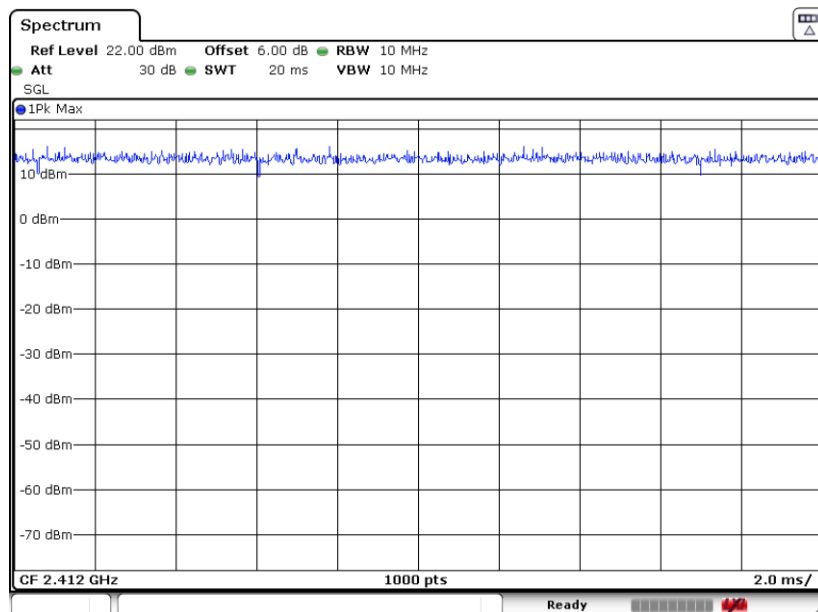
802.11b



802.11g



802.11ax HE20





802.11ax HE40

