



Appendix A

RF Test Data for BT(BLE) (Conducted Measurement)

Product Name: Mology Magic Camera

Trade Mark: mology

Test Model: MA01

Environmental Conditions

Temperature:	25.2℃
Relative Humidity:	51.2%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



Contents

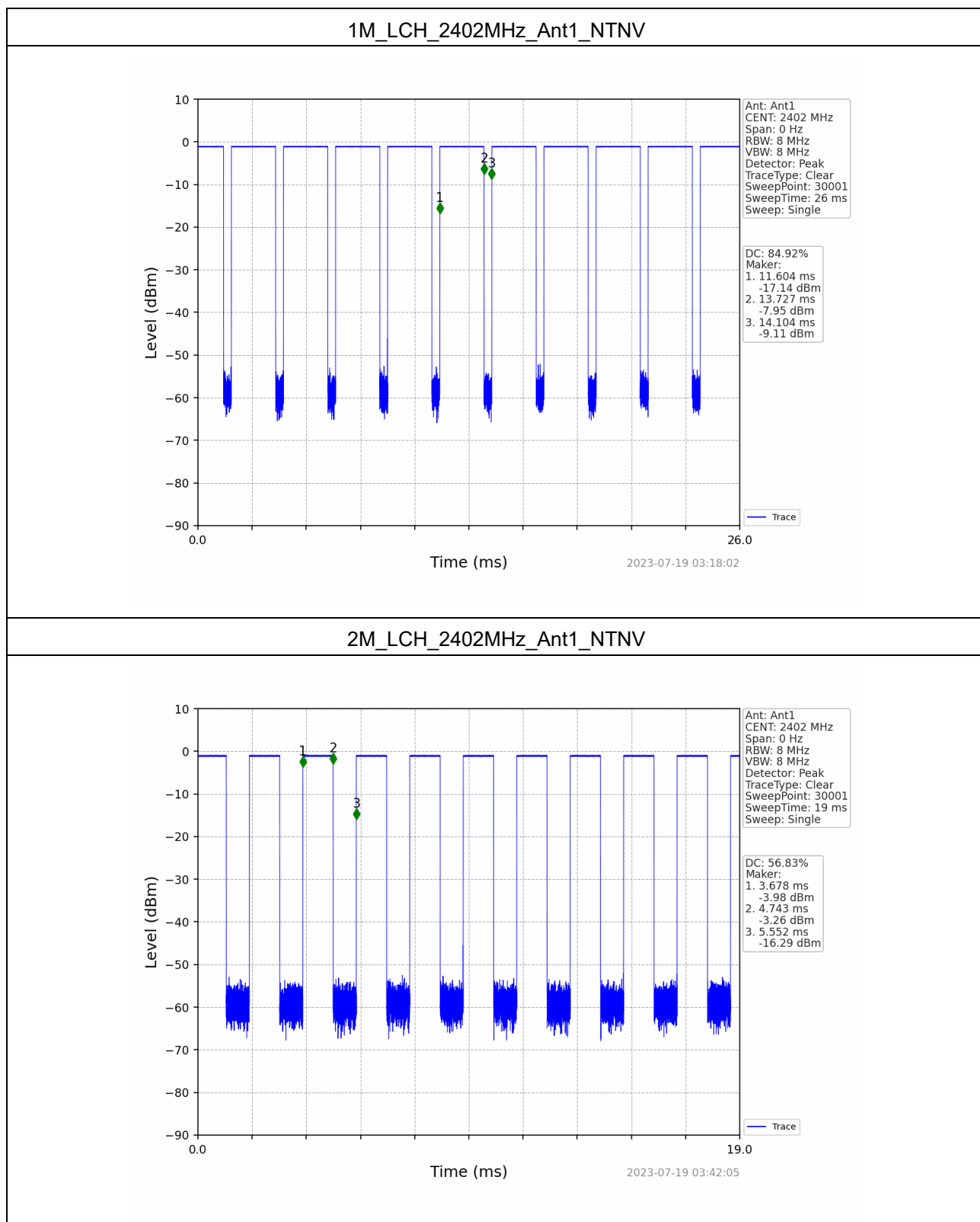
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1 Duty Cycle

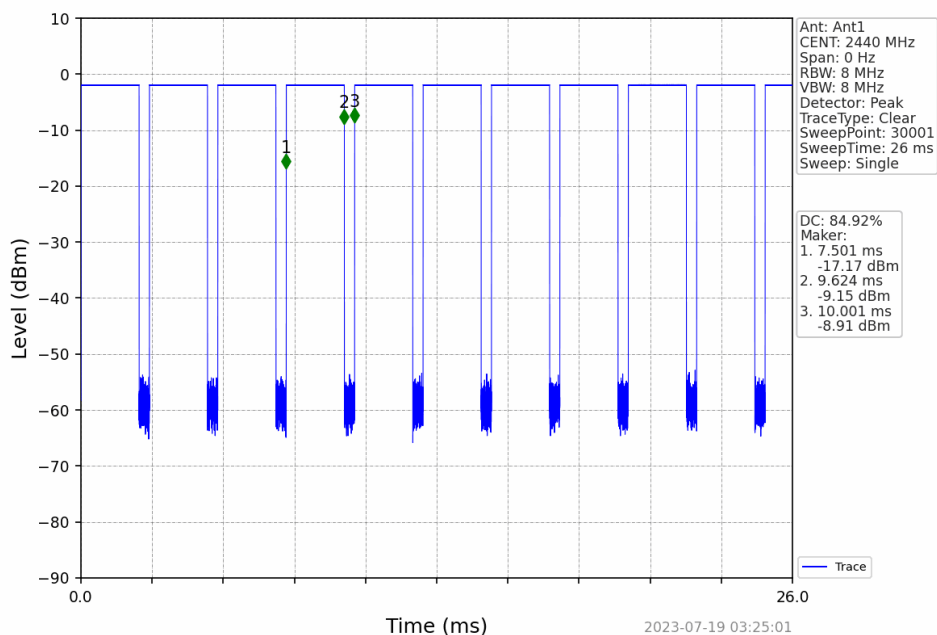
1.1 Test Result

Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	2.123	2.500	84.92	0.71	0.03
2M	SISO	2402	1.065	1.874	56.83	2.45	0.03
1M	SISO	2440	2.123	2.500	84.92	0.71	0.03
2M	SISO	2440	1.066	1.875	56.85	2.45	0.02
2M	SISO	2480	1.065	1.875	56.80	2.46	0.03
1M	SISO	2480	2.123	2.500	84.92	0.71	0.01

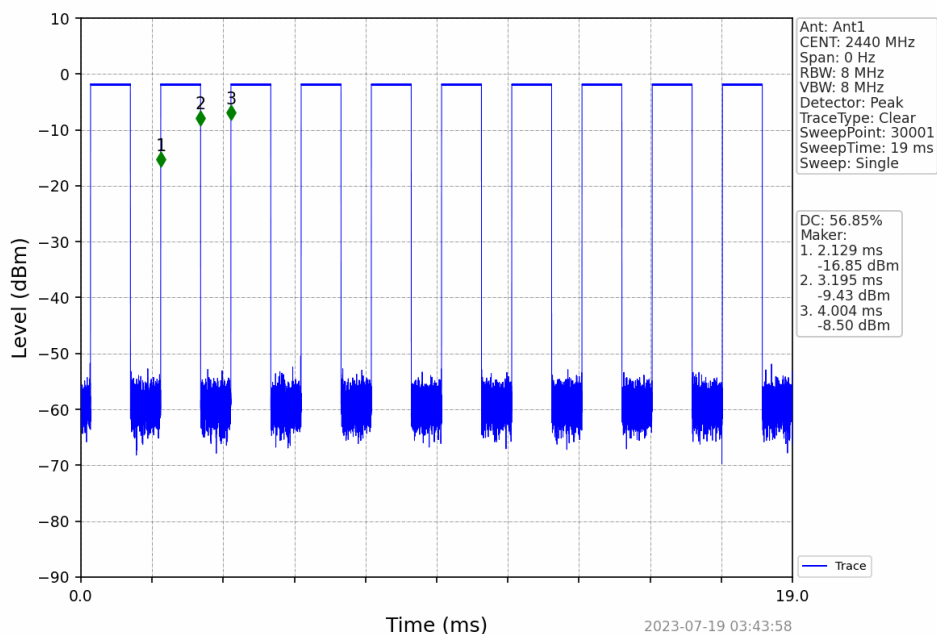
1.2 Test Graphs



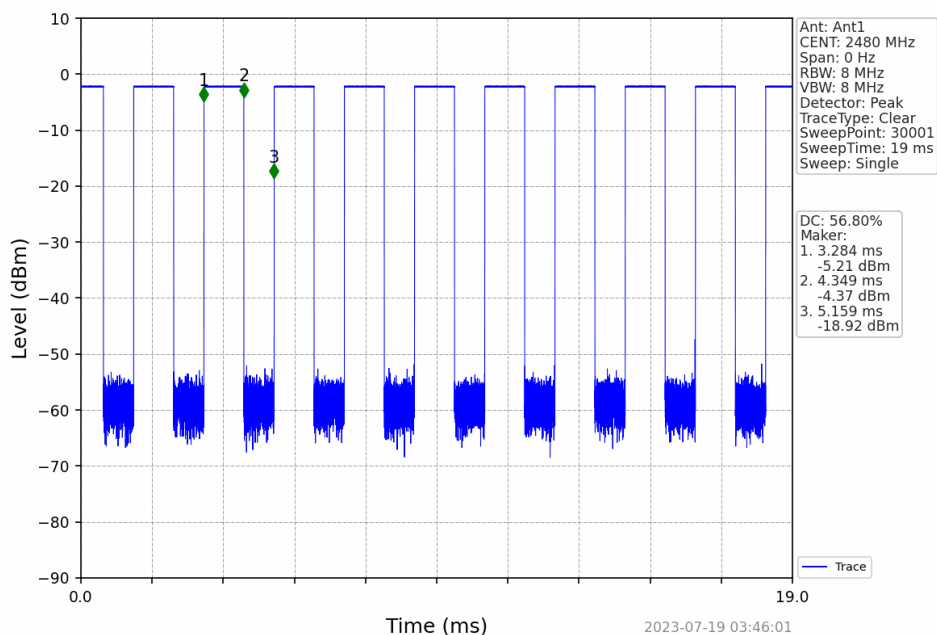
1M_MCH_2440MHz_Ant1_NTNV



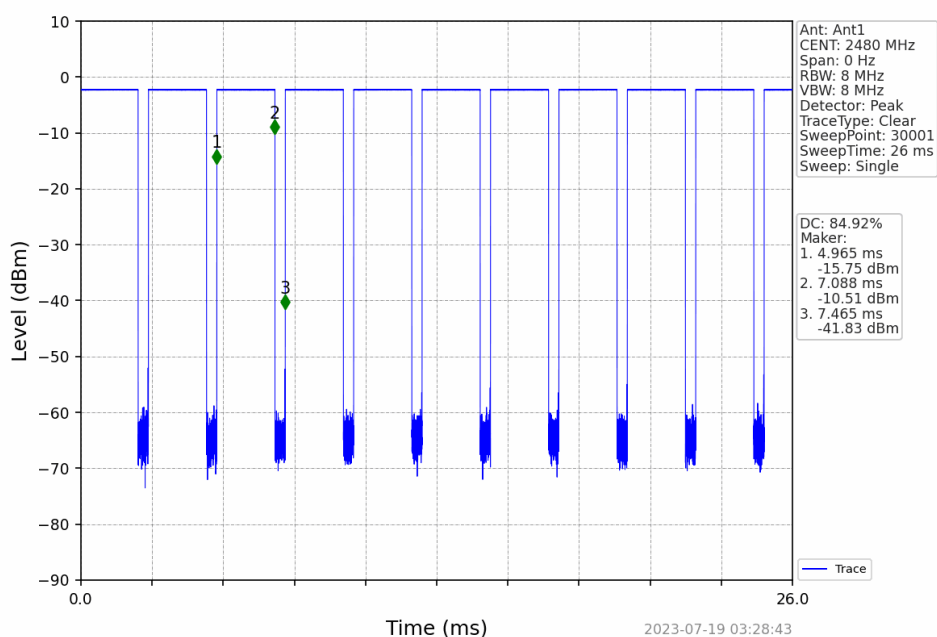
2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



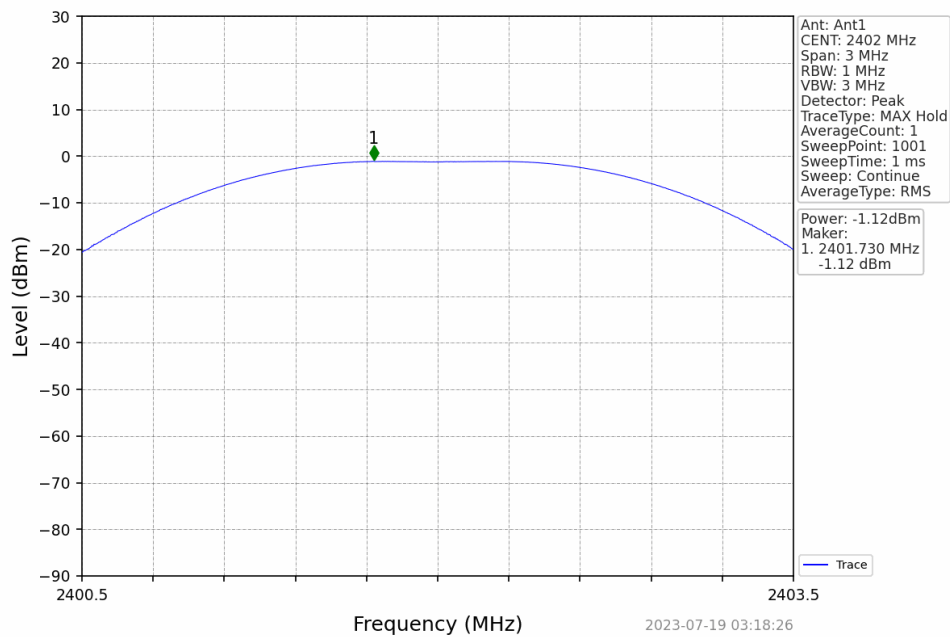
2 Maximum Conducted Peak Output Power

2.1 Test Result

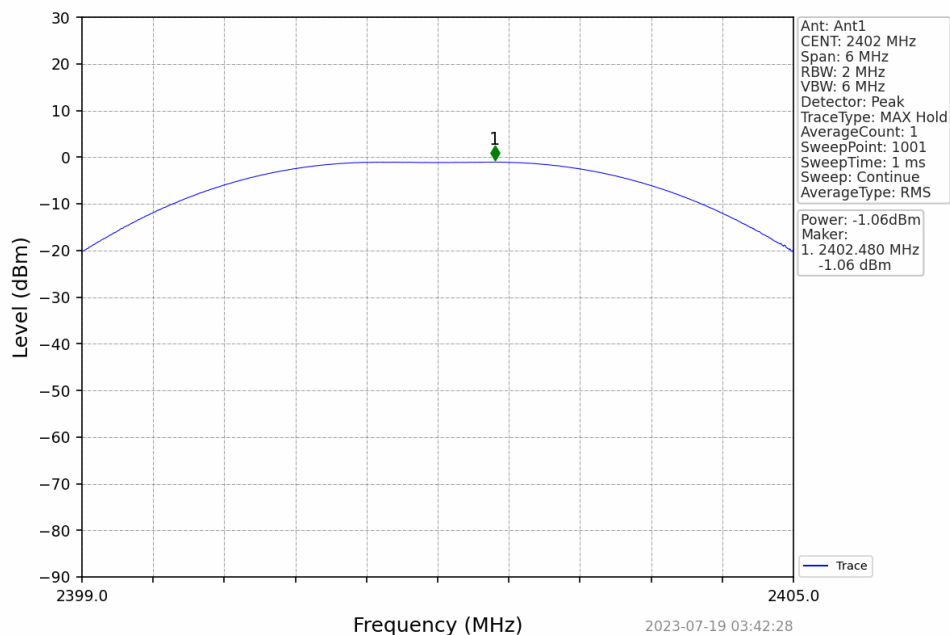
Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	-1.12	≤ 30	Pass
2M	SISO	2402	-1.06	≤ 30	Pass
1M	SISO	2440	-1.95	≤ 30	Pass
2M	SISO	2440	-1.91	≤ 30	Pass
1M	SISO	2480	-2.25	≤ 30	Pass
2M	SISO	2480	-2.23	≤ 30	Pass

2.2 Test Graphs

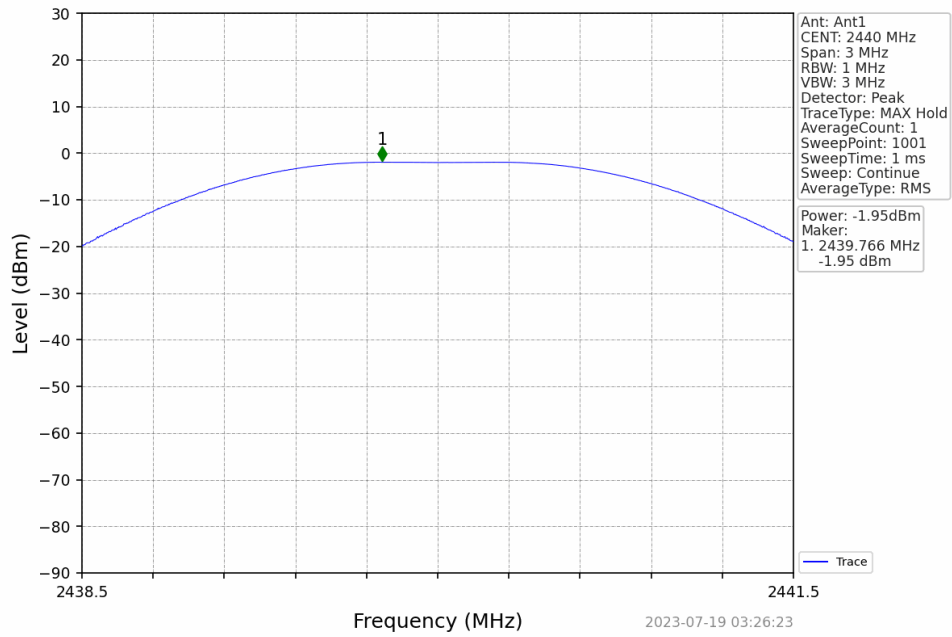
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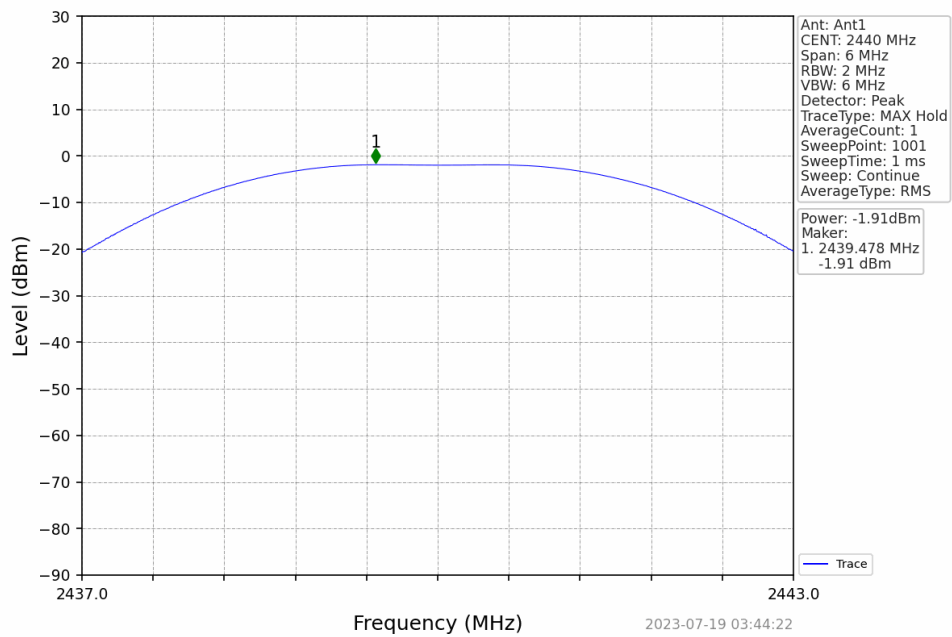
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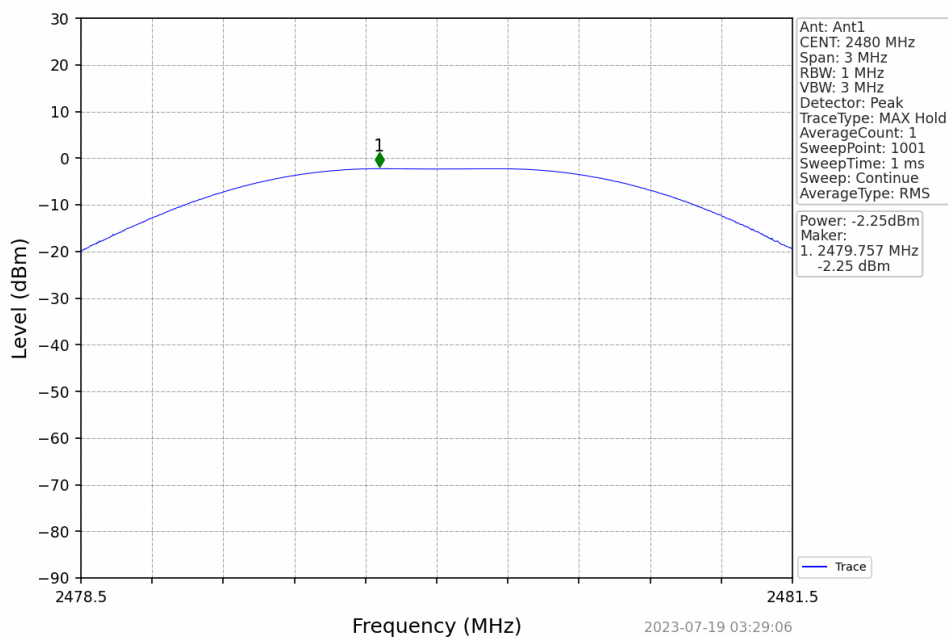
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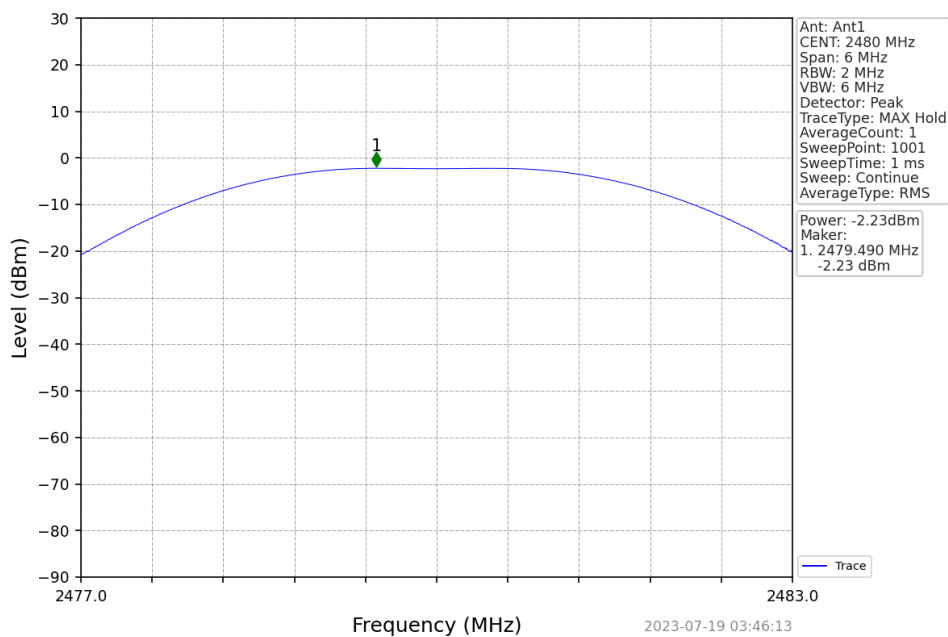
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1M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV

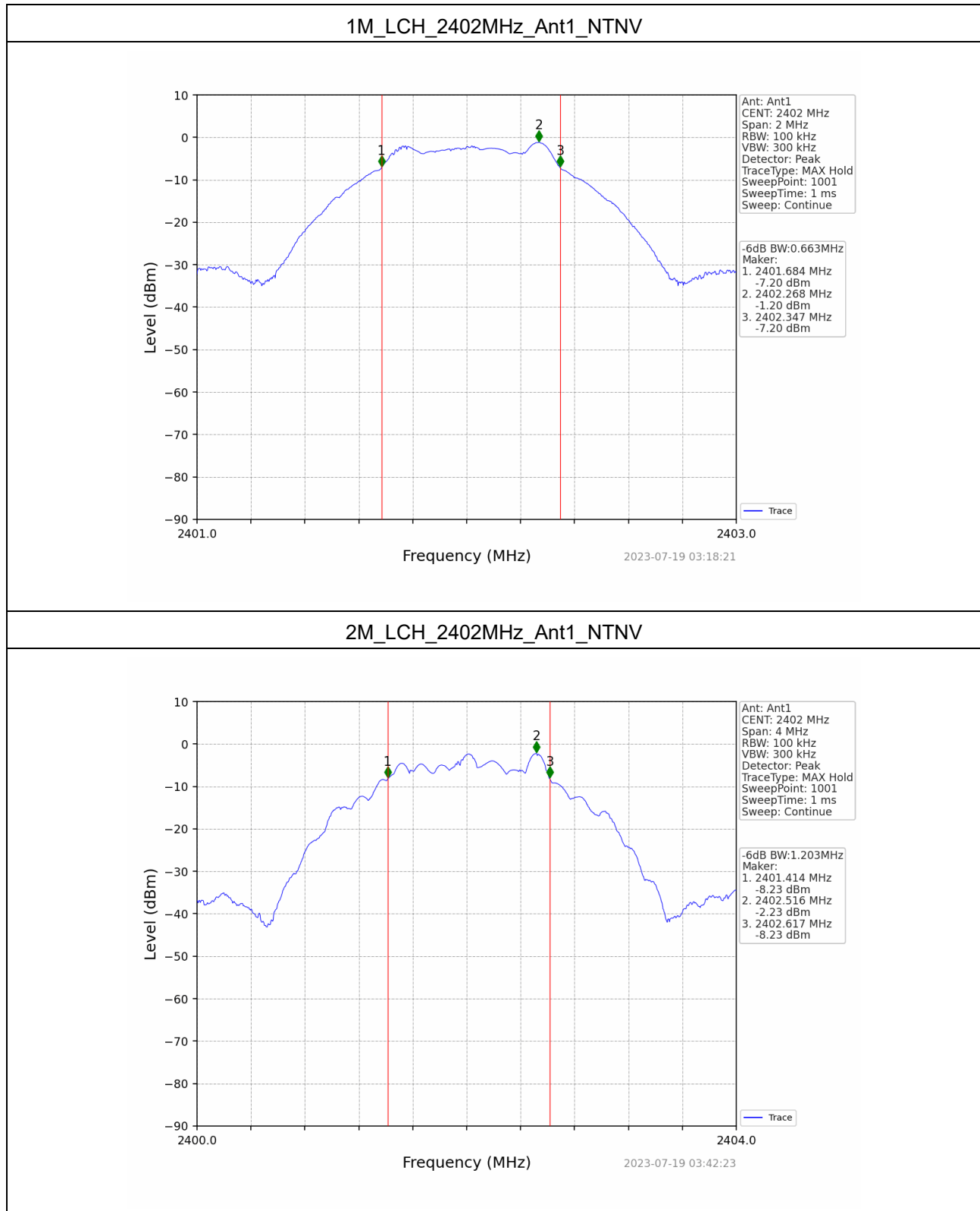


3 6dB BW

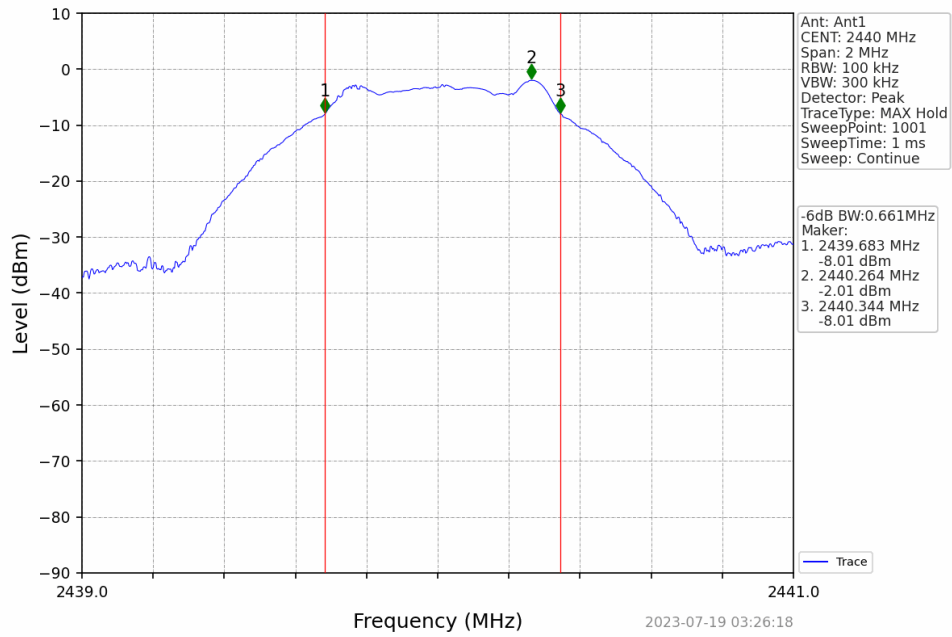
3.1 Test Result

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.663	≥ 0.5	Pass
2M	SISO	2402	1	1.203	≥ 0.5	Pass
1M	SISO	2440	1	0.661	≥ 0.5	Pass
2M	SISO	2440	1	1.248	≥ 0.5	Pass
1M	SISO	2480	1	0.665	≥ 0.5	Pass
2M	SISO	2480	1	1.252	≥ 0.5	Pass

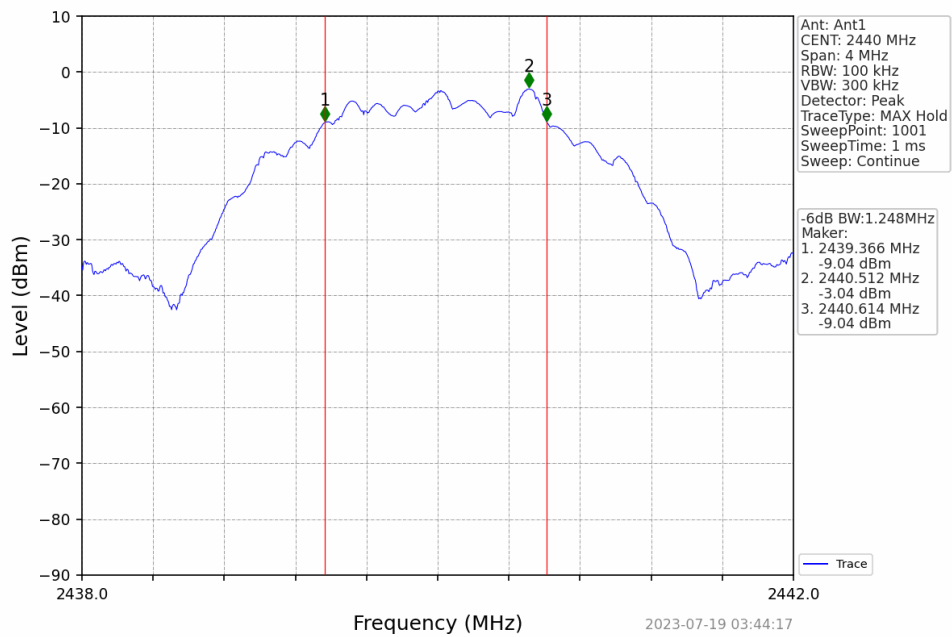
3.2 Test Graphs



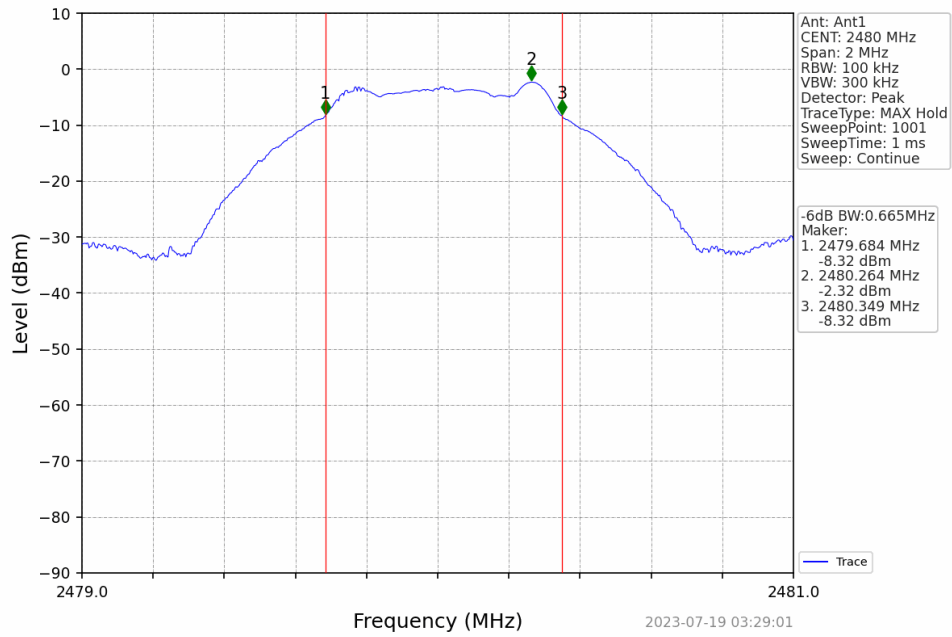
1M_MCH_2440MHz_Ant1_NTNV



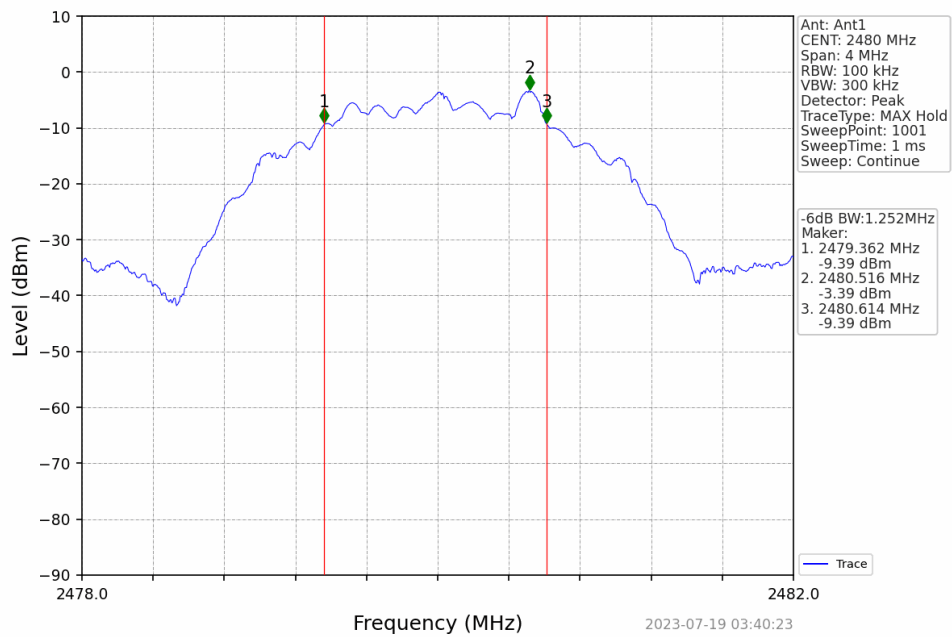
2M_MCH_2440MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV

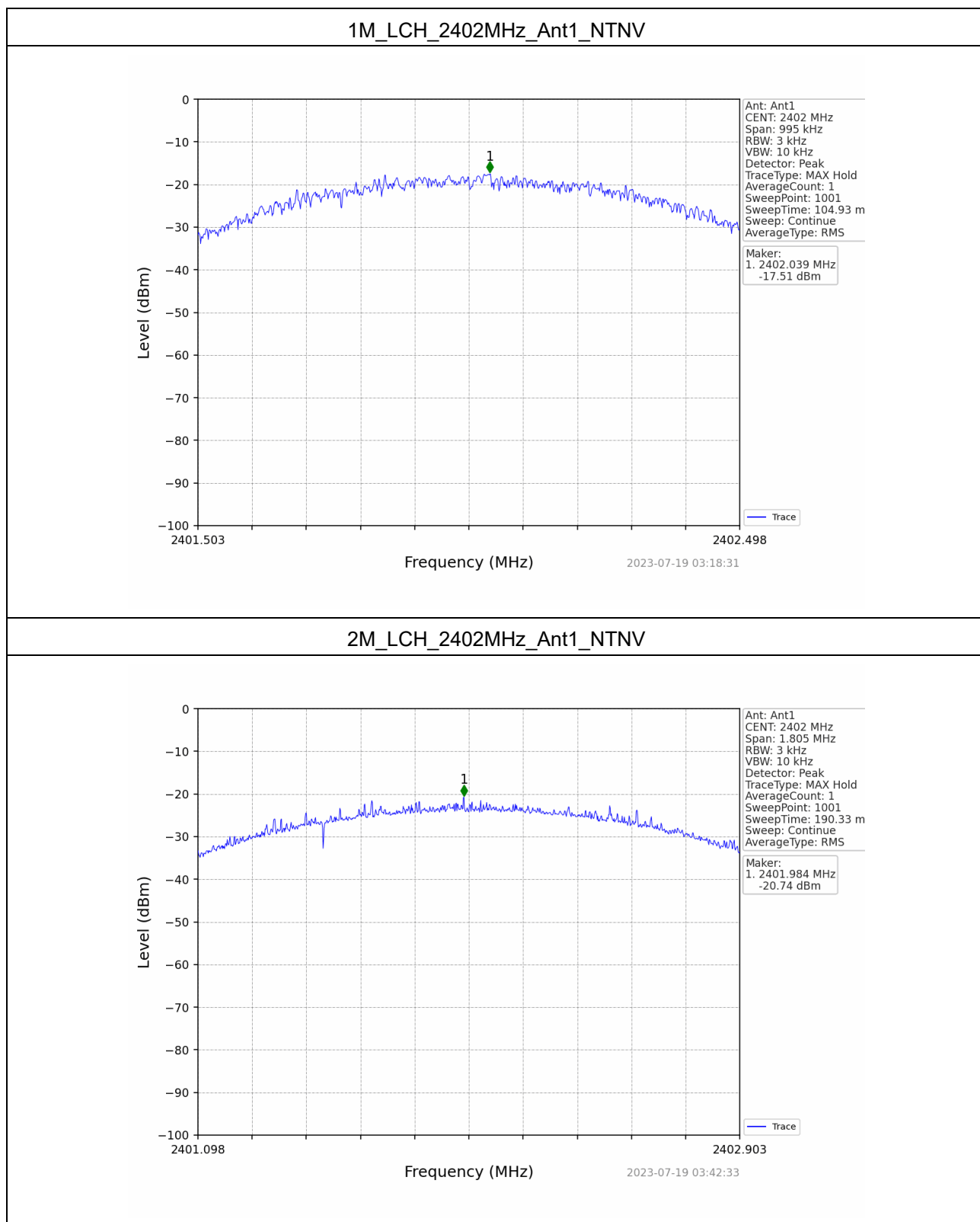


4 Maximum Power Spectral Density

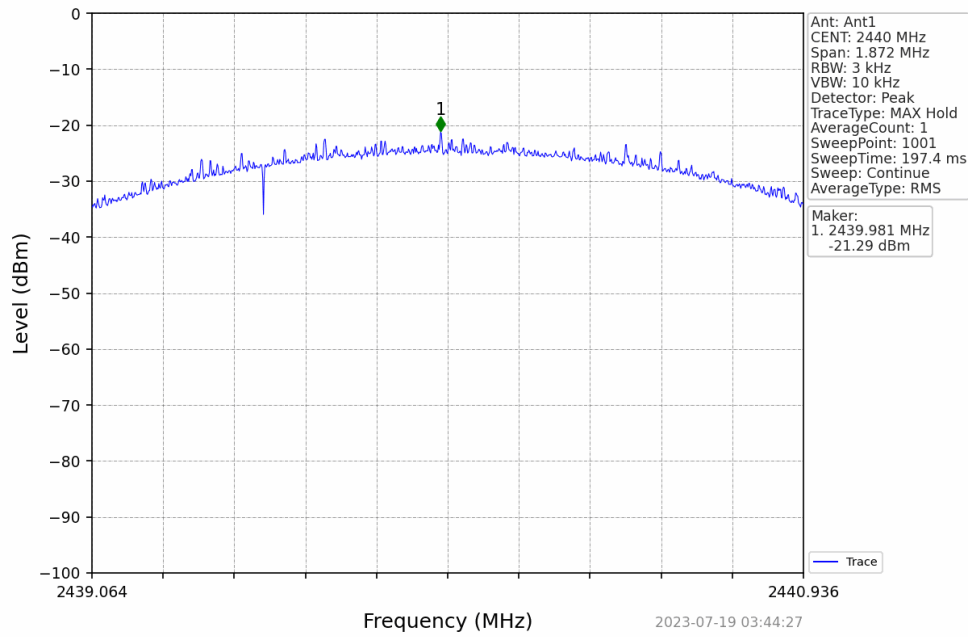
4.1 Test Result

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-17.51	≤ 8	Pass
2M	SISO	2402	-20.74	≤ 8	Pass
		2440	-21.29	≤ 8	Pass
1M	SISO	2440	-17.83	≤ 8	Pass
		2480	-18.40	≤ 8	Pass
2M	SISO	2480	-21.76	≤ 8	Pass

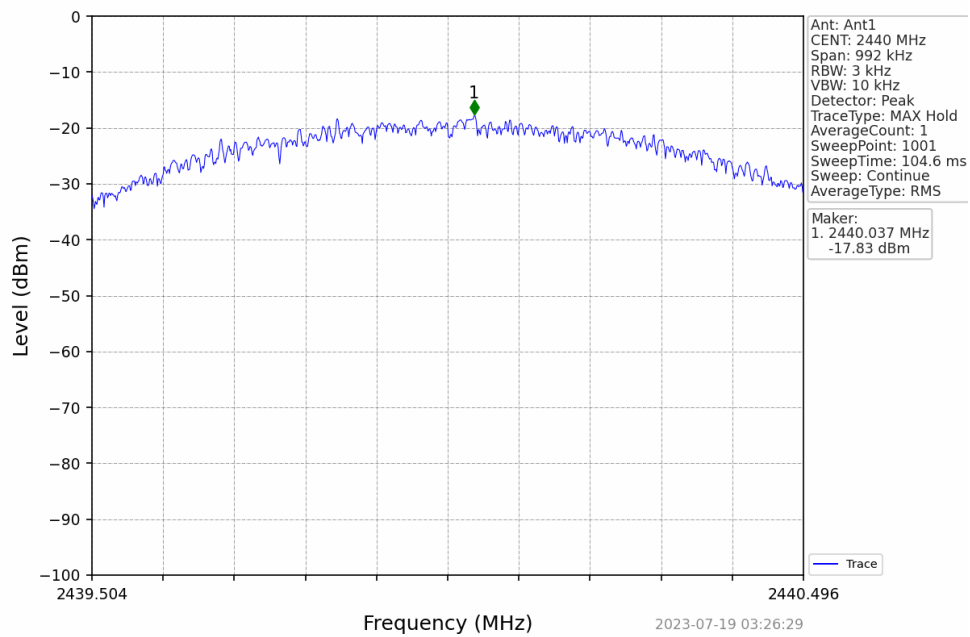
4.2 Test Graphs



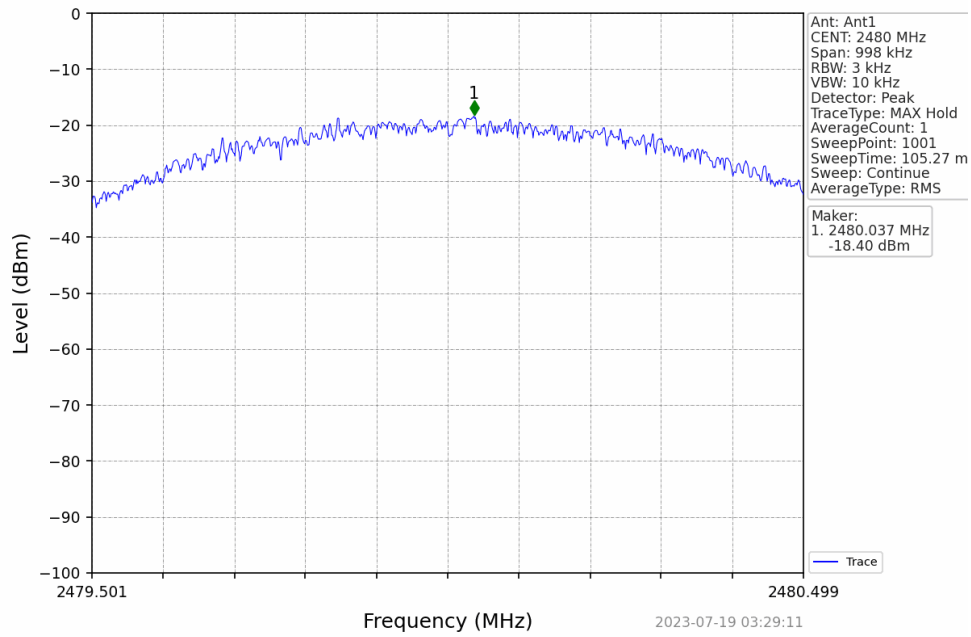
2M_MCH_2440MHz_Ant1_NTNV



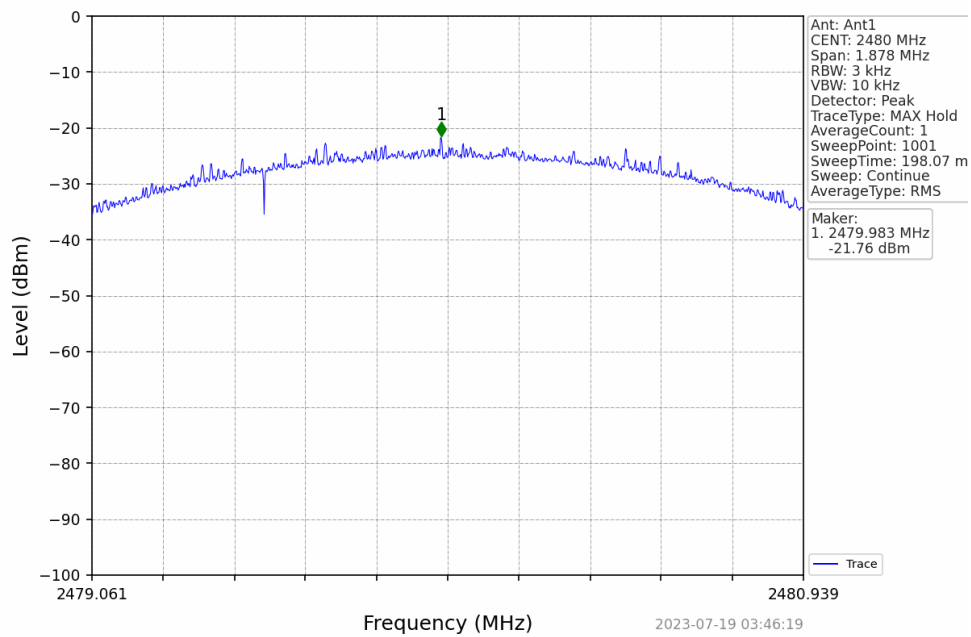
1M_MCH_2440MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



5 Conducted Spurious Emissions and Band Edges Test

5.1 Test Result

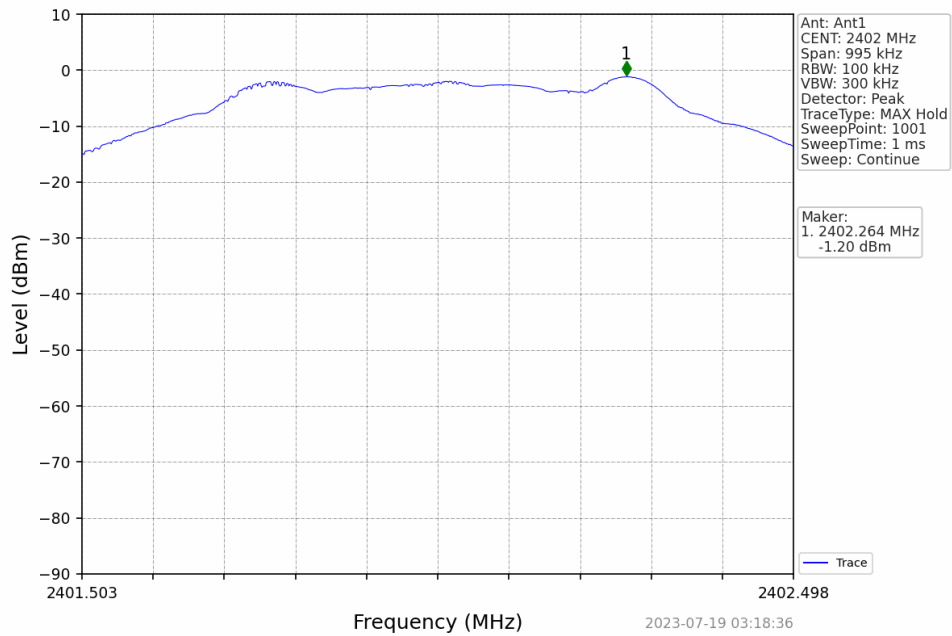
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	-1.20
2M	SISO	2402	1	-2.28
		2440	1	-3.08
1M	SISO	2440	1	-2.01
2M	SISO	2480	1	-3.42
1M	SISO	2480	1	-2.34
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.				

CSE

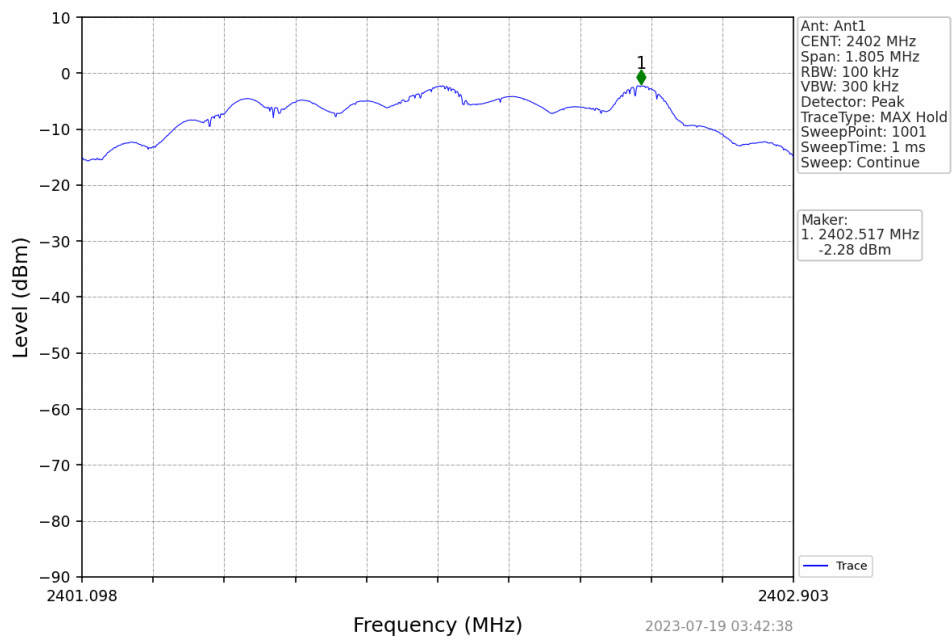
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	-1.20	-21.20	Pass
2M	SISO	2402	1	-2.28	-22.28	Pass
		2440	1	-2.28	-22.28	Pass
1M	SISO	2440	1	-1.20	-21.20	Pass
		2480	1	-1.20	-21.20	Pass
2M	SISO	2480	1	-2.28	-22.28	Pass
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.						

5.2 Test Graphs

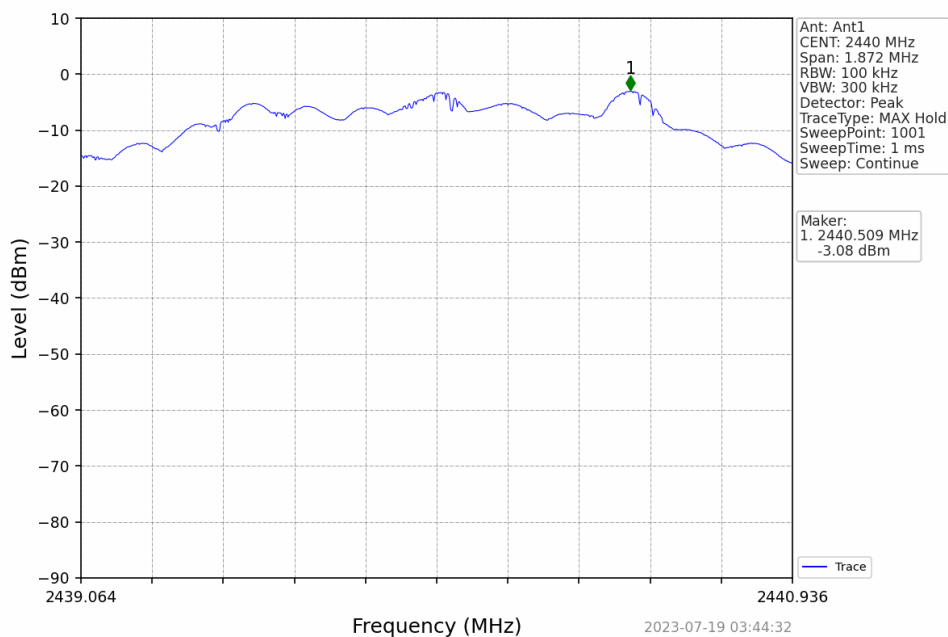
6 1M_LCH_2402MHz_Ant1_NTNV



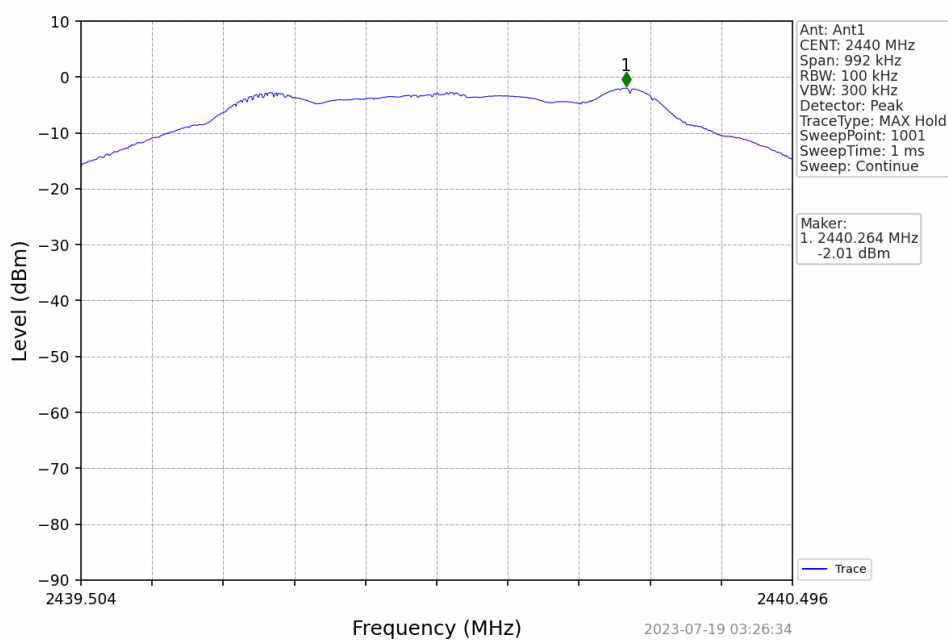
2M_LCH_2402MHz_Ant1_NTNV



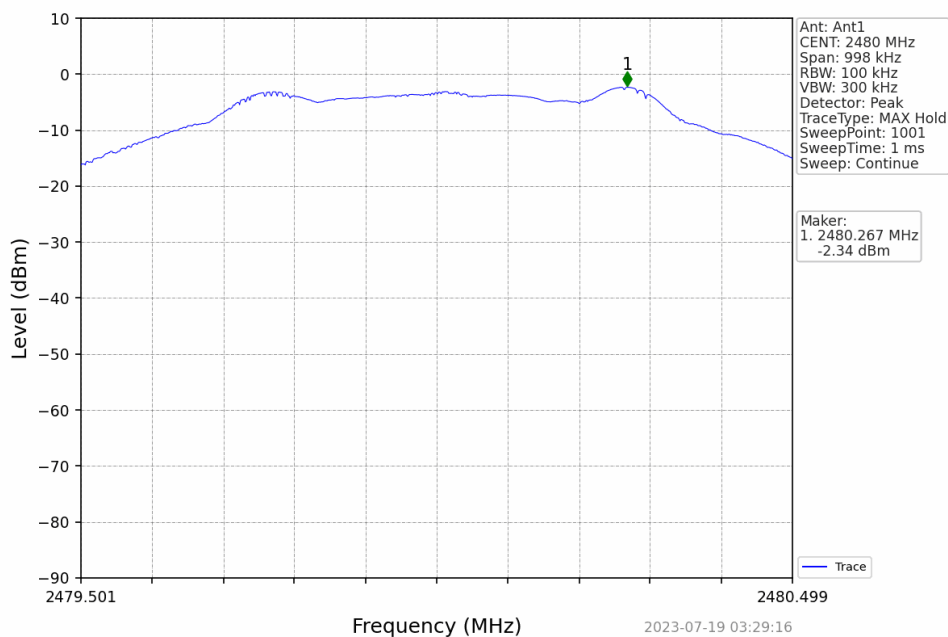
2M_MCH_2440MHz_Ant1_NTNV



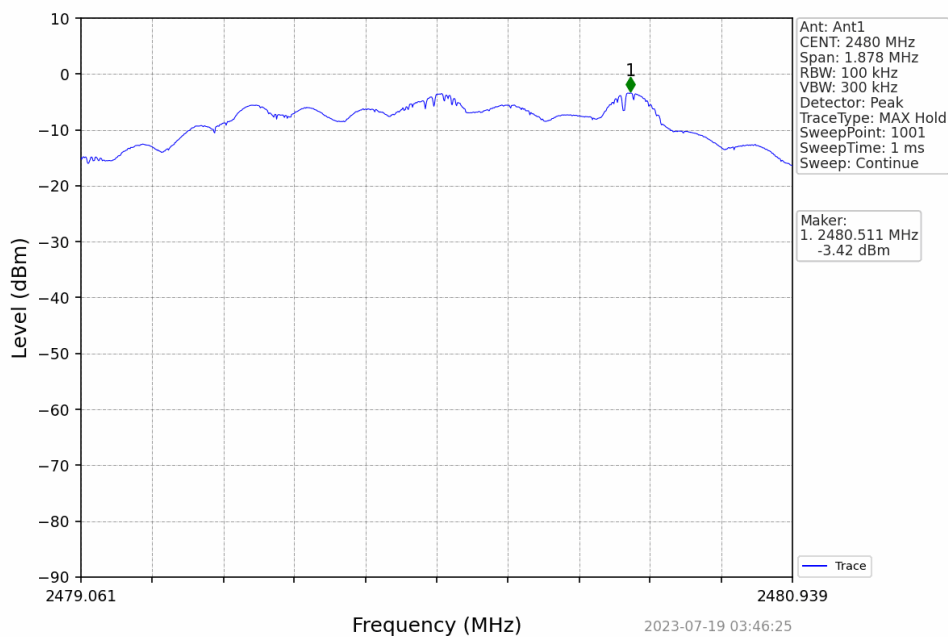
1M_MCH_2440MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV

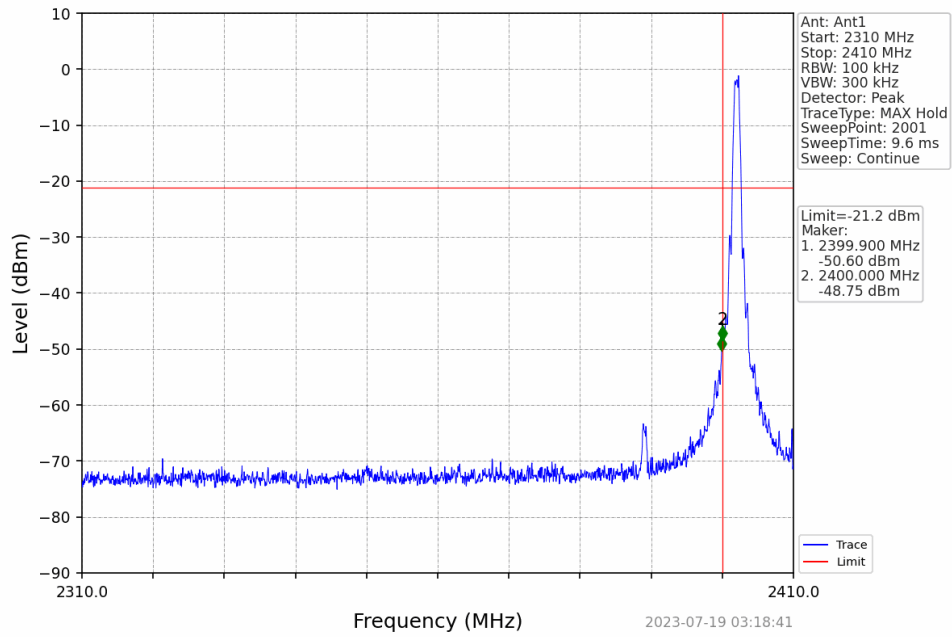


2M_HCH_2480MHz_Ant1_NTNV

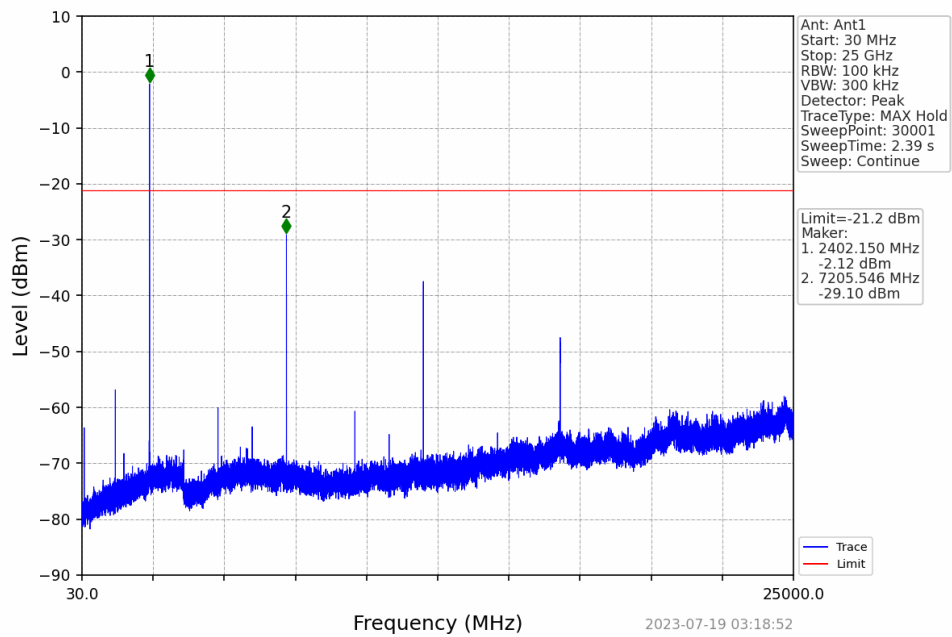


CSE

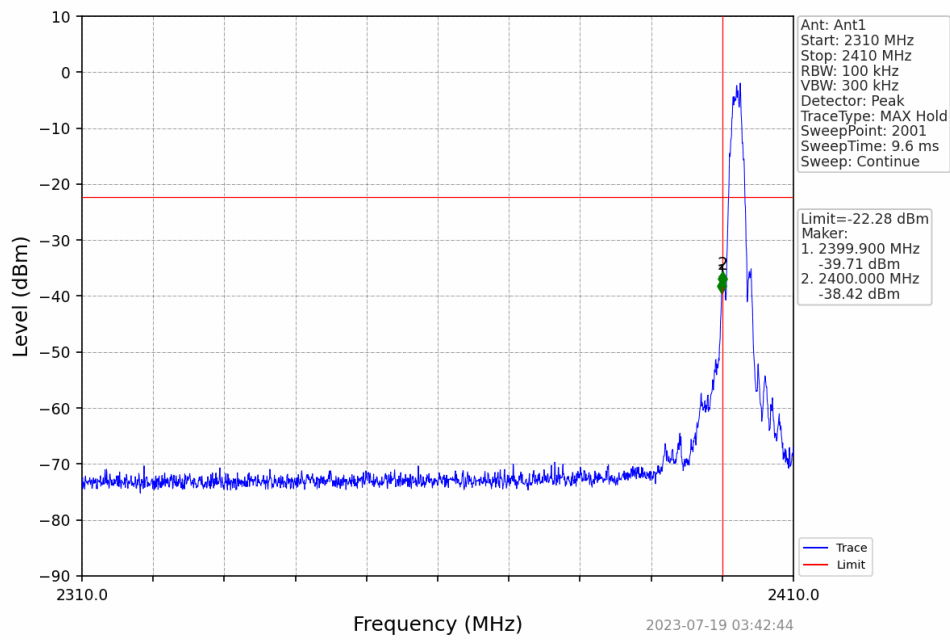
1M_LCH_2402MHz_Ant1_NTNV



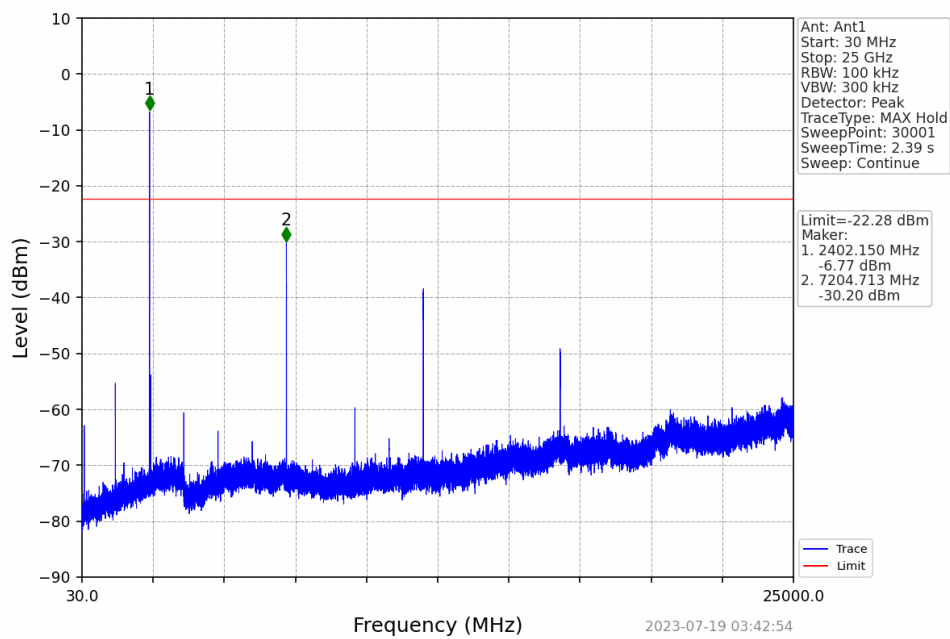
1M_LCH_2402MHz_Ant1_NTNV



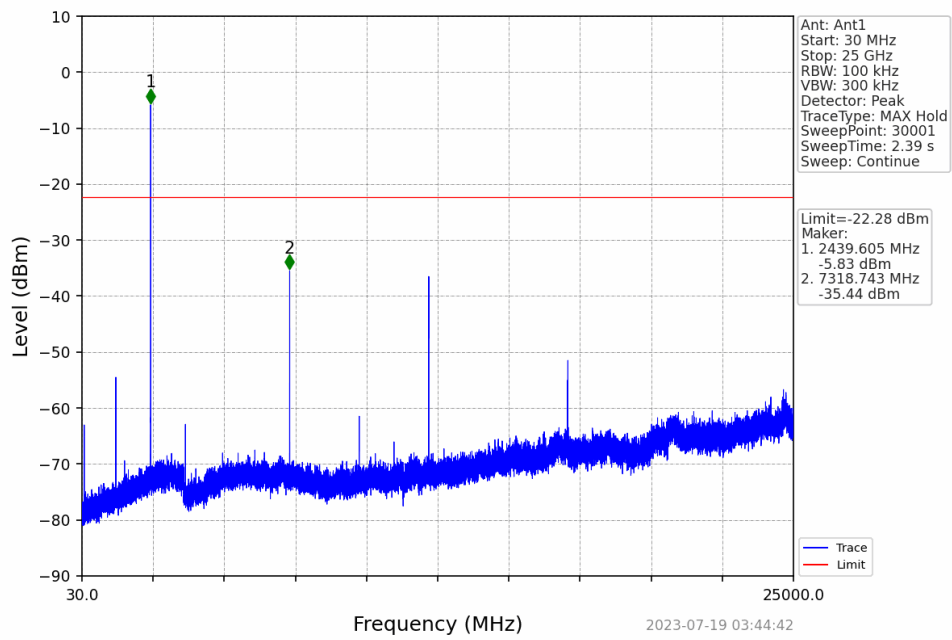
2M_LCH_2402MHz_Ant1_NTNV



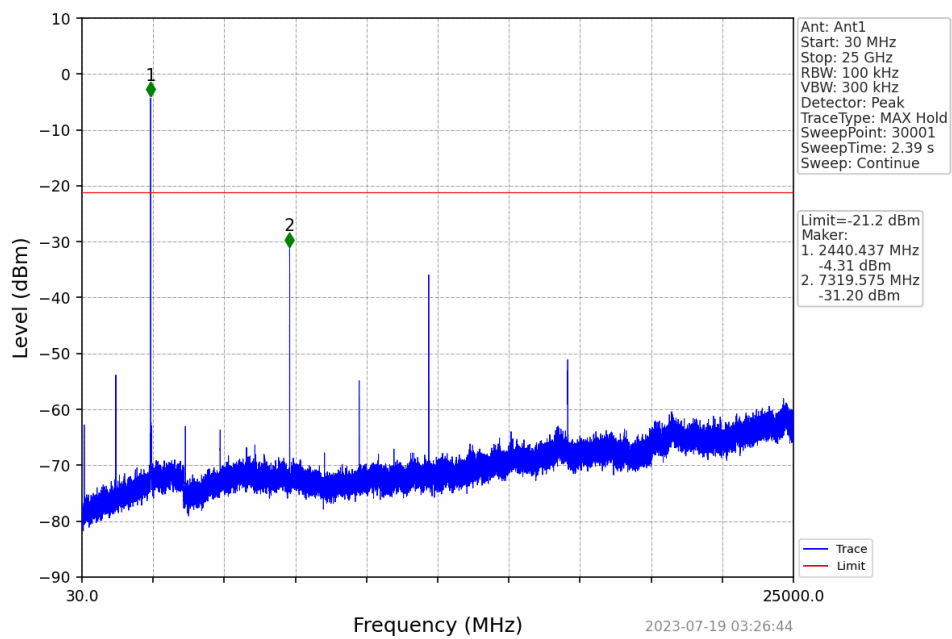
2M_LCH_2402MHz_Ant1_NTNV



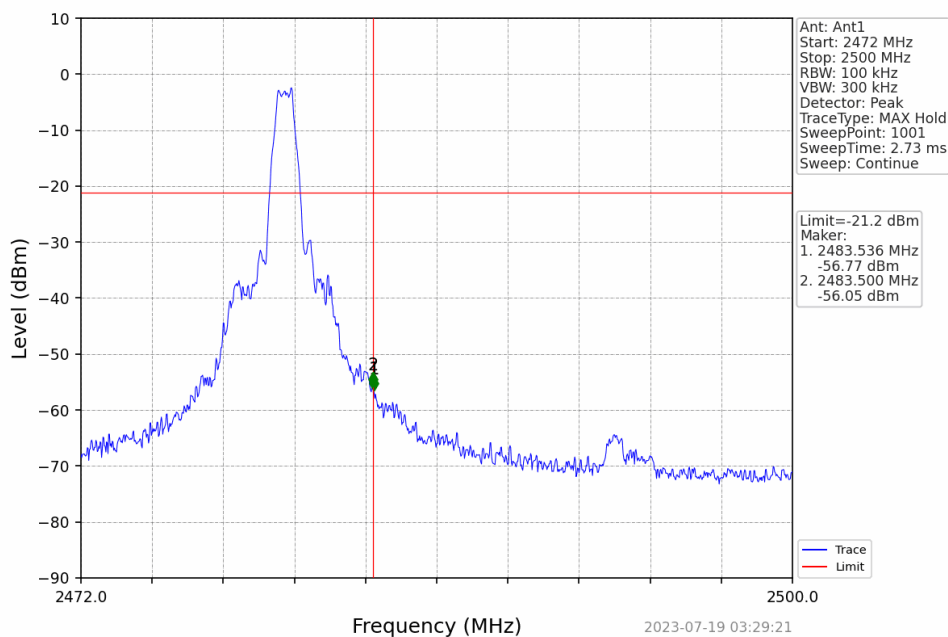
2M_MCH_2440MHz_Ant1_NTNV



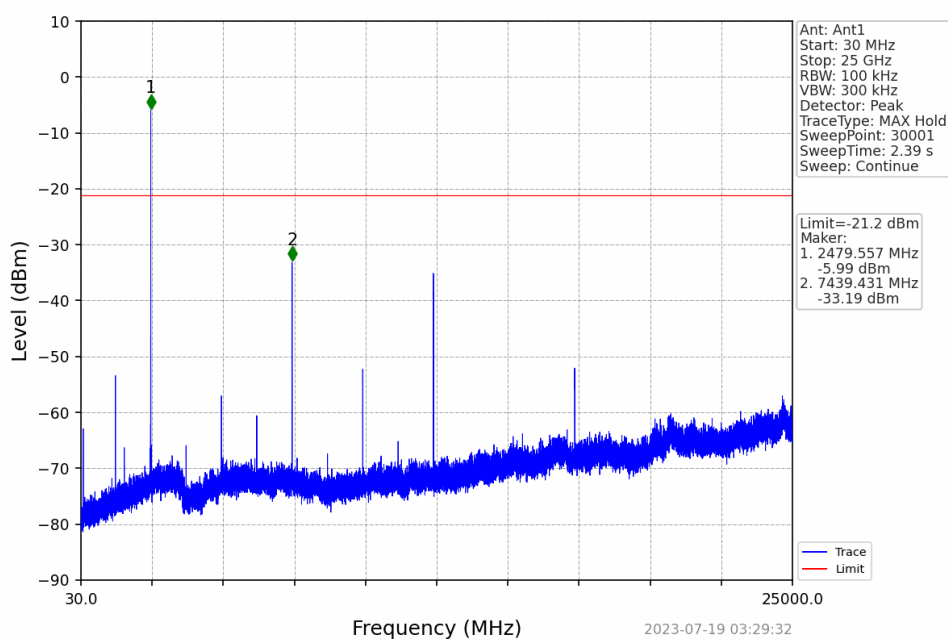
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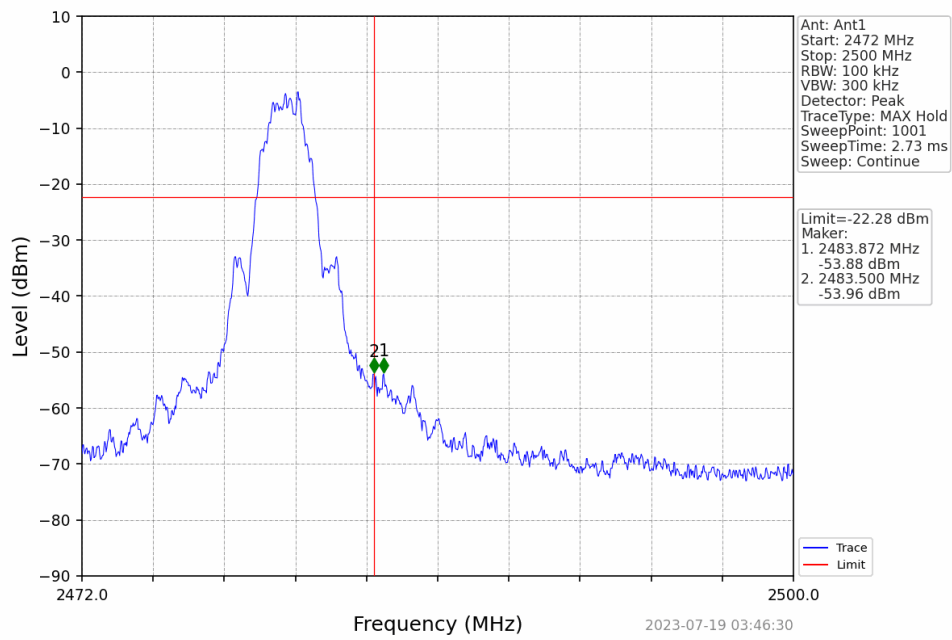
1M_HCH_2480MHz_Ant1_NTNV



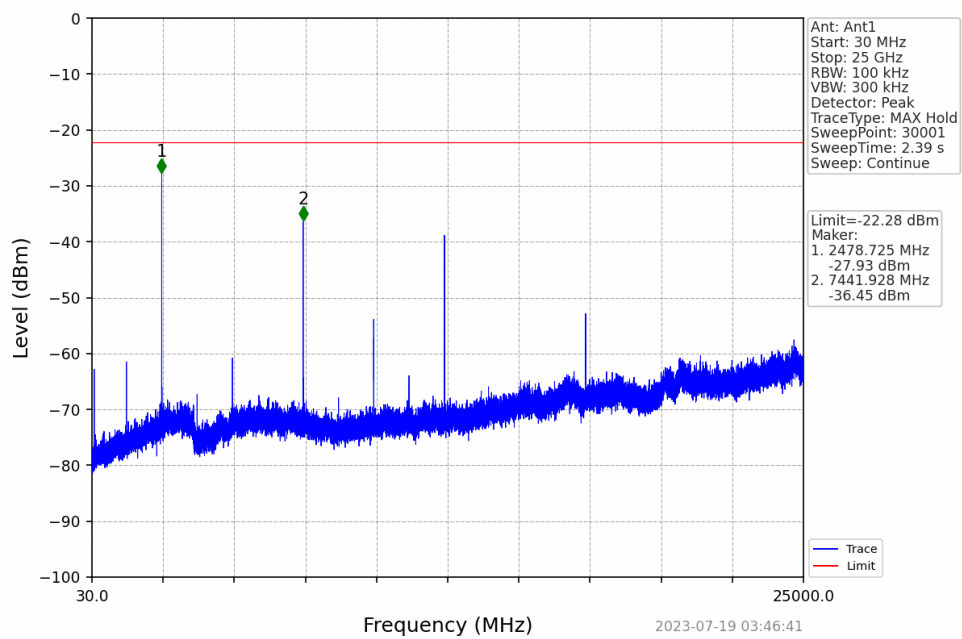
1M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



6 Restrict-band Band-edge Measurements

6.1 Test Result

Test Mode: GFSK										
Pol.	Frequen cy (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/ m)	Margin (dB)	Detect or Type	Result
Low Channel: 2402MHz										
H	2390.00	48.24	29.15	3.41	34.01	46.79	74.00	-27.21	PK	PASS
H	2400.00	65.80	29.16	3.43	34.01	64.38	74.00	-9.62	PK	PASS
V	2390.00	49.30	29.15	3.41	34.01	47.85	74.00	-26.15	PK	PASS
V	2400.00	68.41	29.16	3.43	34.01	66.99	74.00	-7.01	PK	PASS
H	2390.00	37.58	29.15	3.41	34.01	36.13	54.00	-17.87	AV	PASS
H	2400.00	49.13	29.16	3.43	34.01	47.71	54.00	-6.29	AV	PASS
V	2390.00	37.91	29.15	3.41	34.01	36.46	54.00	-17.54	AV	PASS
V	2400.00	46.29	29.16	3.43	34.01	44.87	54.00	-9.13	AV	PASS
High Channel: 2480MHz										
H	2483.50	50.98	29.28	3.53	34.03	49.76	74.00	-24.24	PK	PASS
H	2500.00	49.13	29.30	3.56	34.03	47.96	74.00	-26.04	PK	PASS
V	2483.50	52.72	29.28	3.53	34.03	51.50	74.00	-22.50	PK	PASS
V	2500.00	50.64	29.30	3.56	34.03	49.47	74.00	-24.53	PK	PASS
H	2483.50	40.47	29.28	3.53	34.03	39.25	54.00	-14.75	AV	PASS
H	2500.00	37.70	29.30	3.56	34.03	36.53	54.00	-17.47	AV	PASS
V	2483.50	42.13	29.28	3.53	34.03	40.91	54.00	-13.09	AV	PASS
V	2500.00	38.07	29.30	3.56	34.03	36.90	54.00	-17.10	AV	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										

-----End-----