



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Portable Power Station

Test Model: AF-P110-E

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





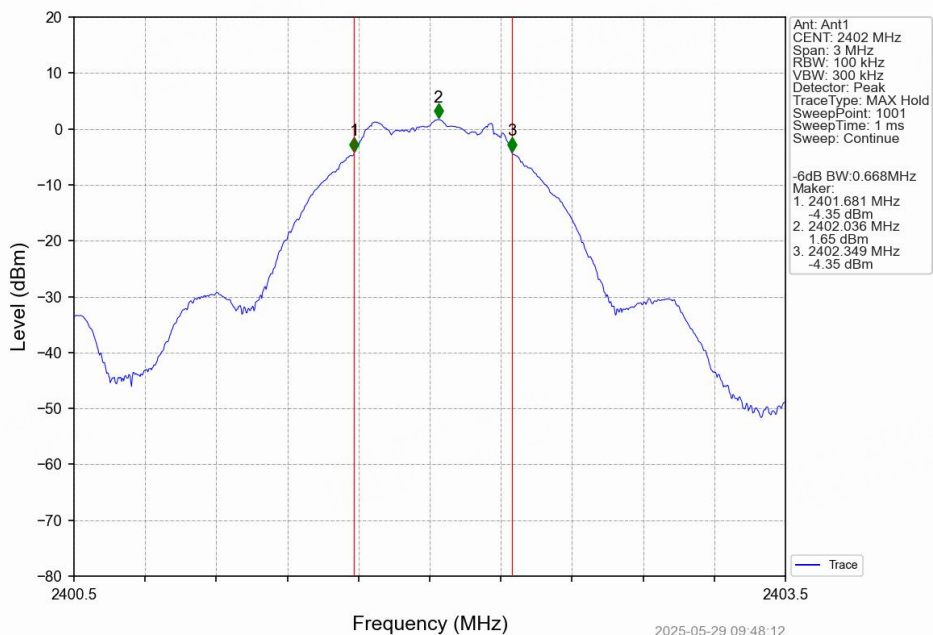
A.1 -6dB Bandwidth

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.668	≥ 0.5	Pass
		2440	1	0.667	≥ 0.5	Pass
		2480	1	0.664	≥ 0.5	Pass
2M	SISO	2402	1	1.161	≥ 0.5	Pass
		2440	1	1.161	≥ 0.5	Pass
		2480	1	1.170	≥ 0.5	Pass

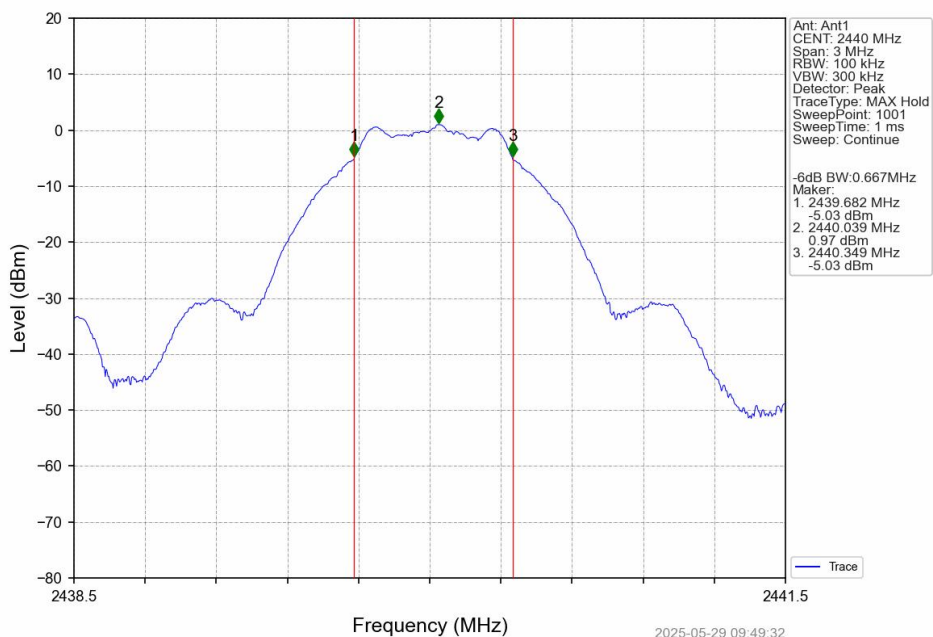




1M_LCH_2402MHz_Ant1_NTNV

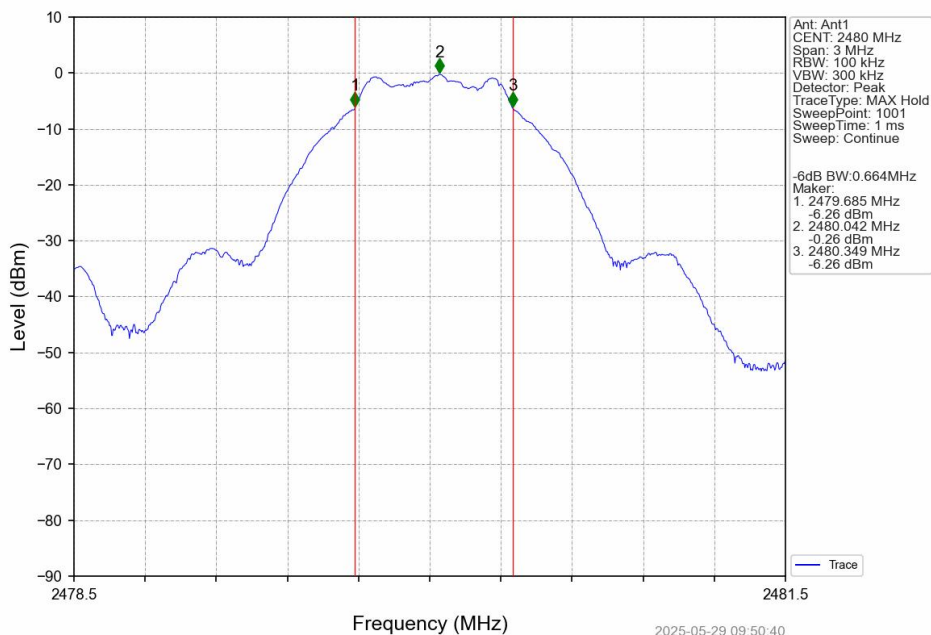


1M_MCH_2440MHz_Ant1_NTNV

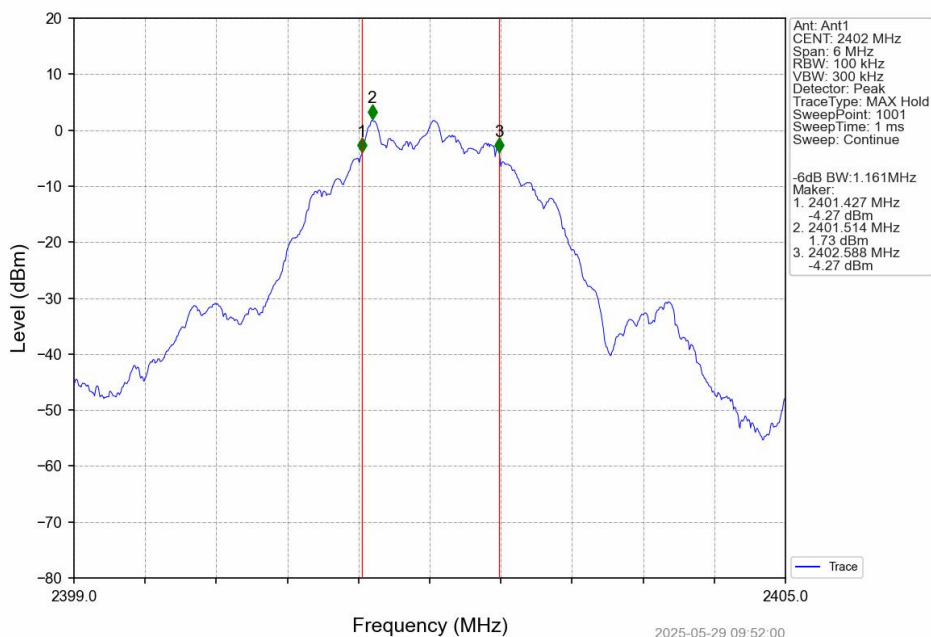




1M_HCH_2480MHz_Ant1_NTNV

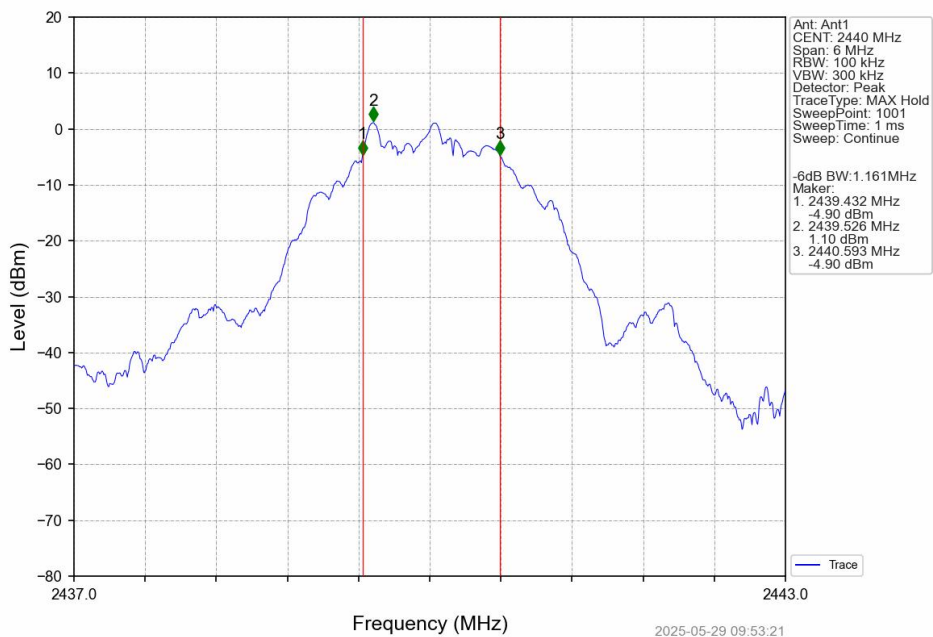


2M_LCH_2402MHz_Ant1_NTNV

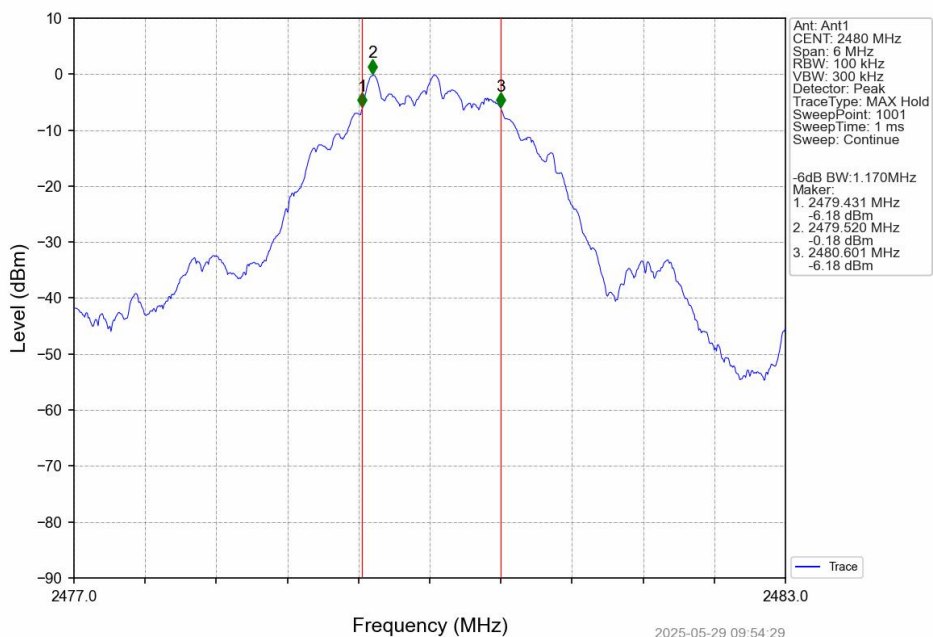




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



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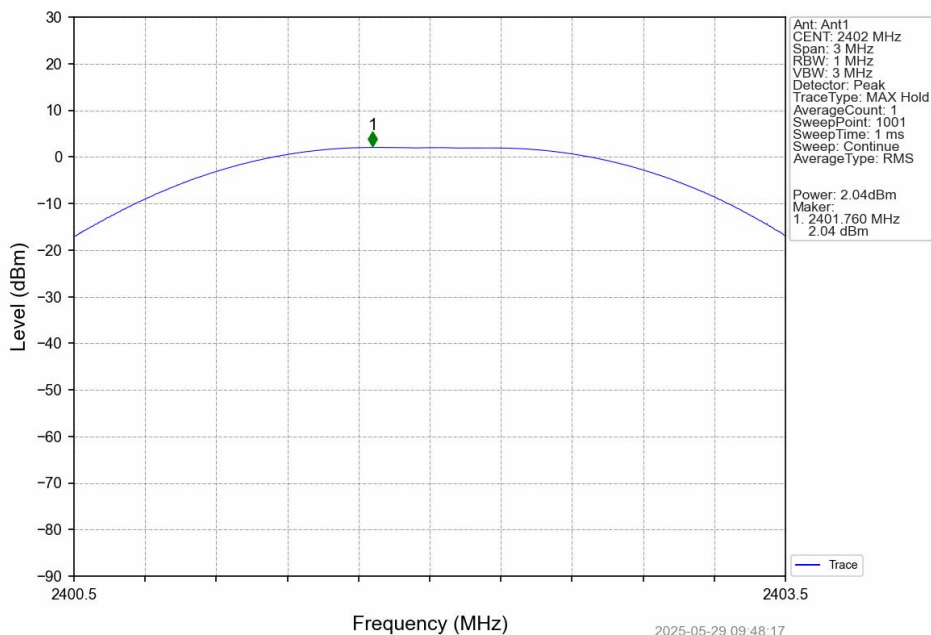
A.2 Maximum Peak Conducted Output Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	2.04	<=30	Pass
		2440	1.35	<=30	Pass
		2480	0.11	<=30	Pass
2M	SISO	2402	2.23	<=30	Pass
		2440	1.55	<=30	Pass
		2480	0.29	<=30	Pass

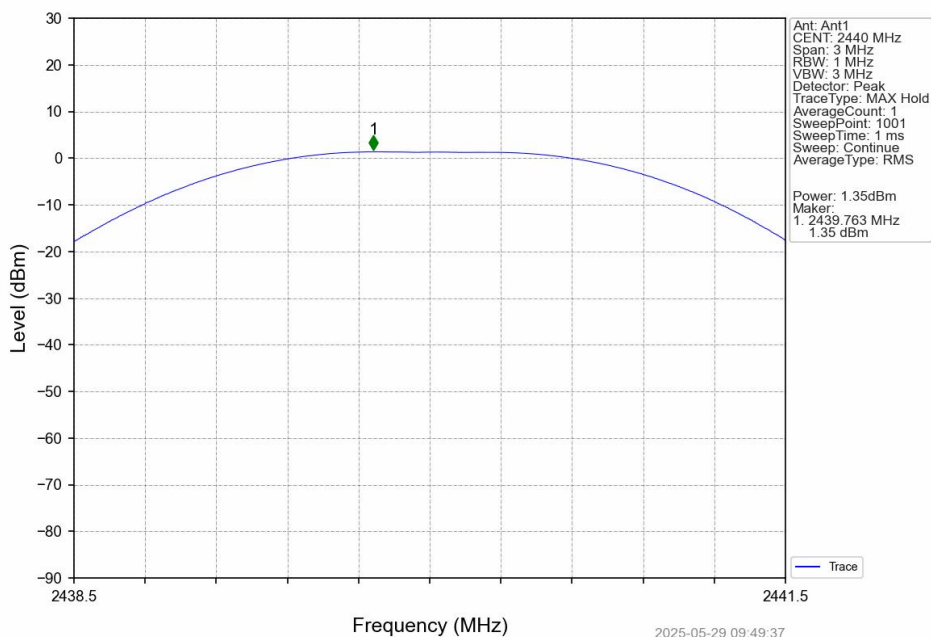




1M_LCH_2402MHz_Ant1_NTNV

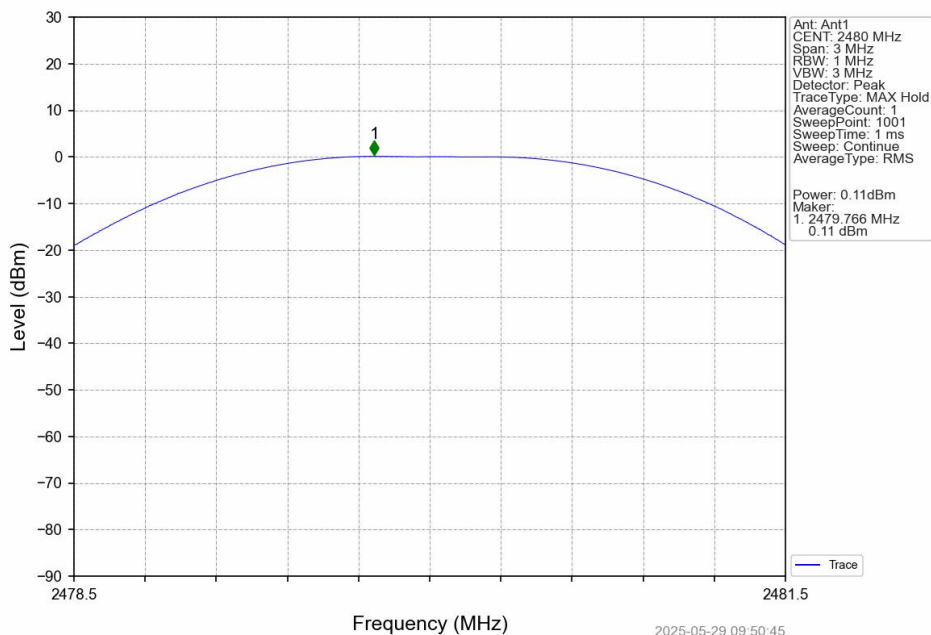


1M_MCH_2440MHz_Ant1_NTNV

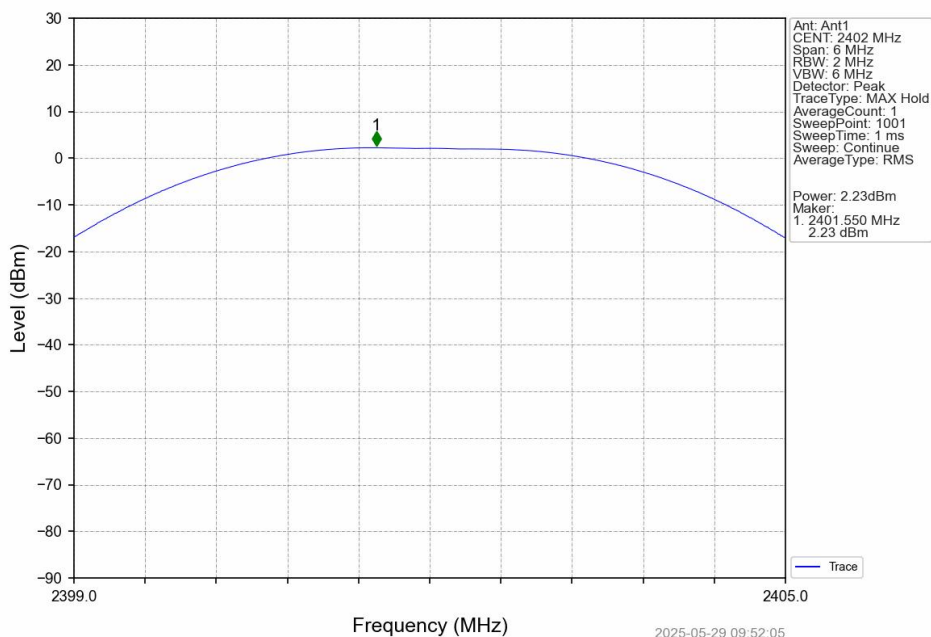




1M_HCH_2480MHz_Ant1_NTNV

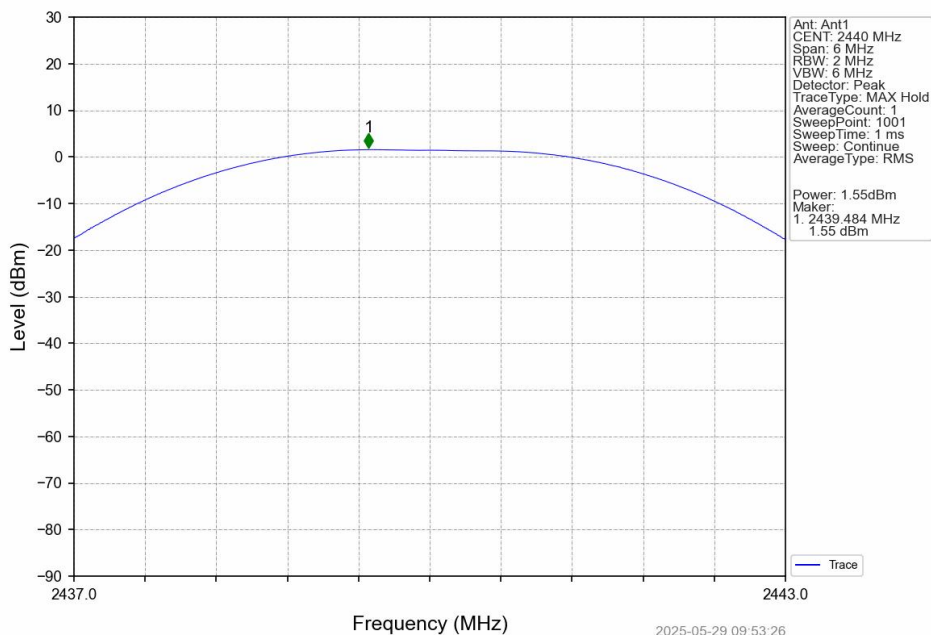


2M_LCH_2402MHz_Ant1_NTNV

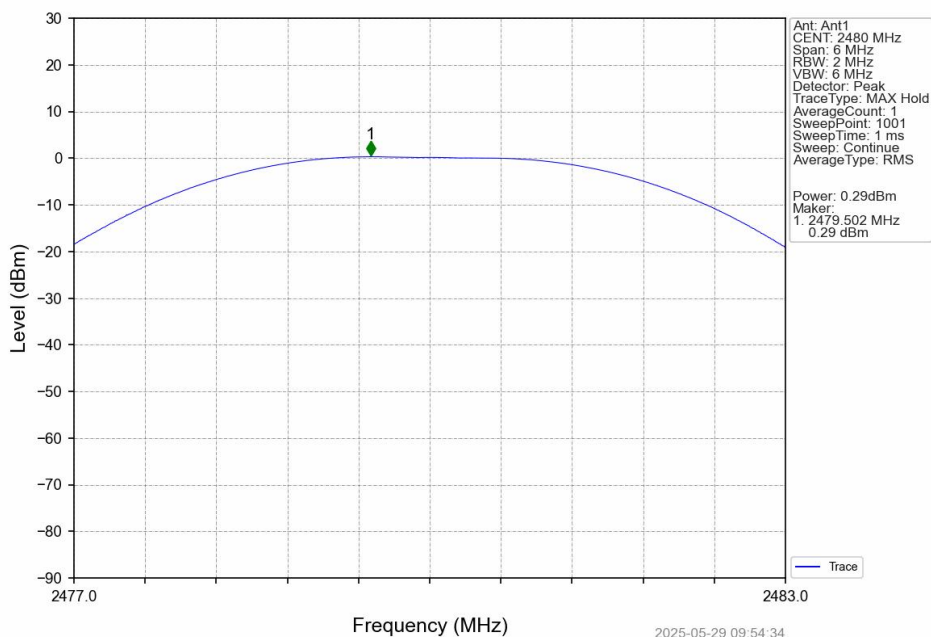




2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV





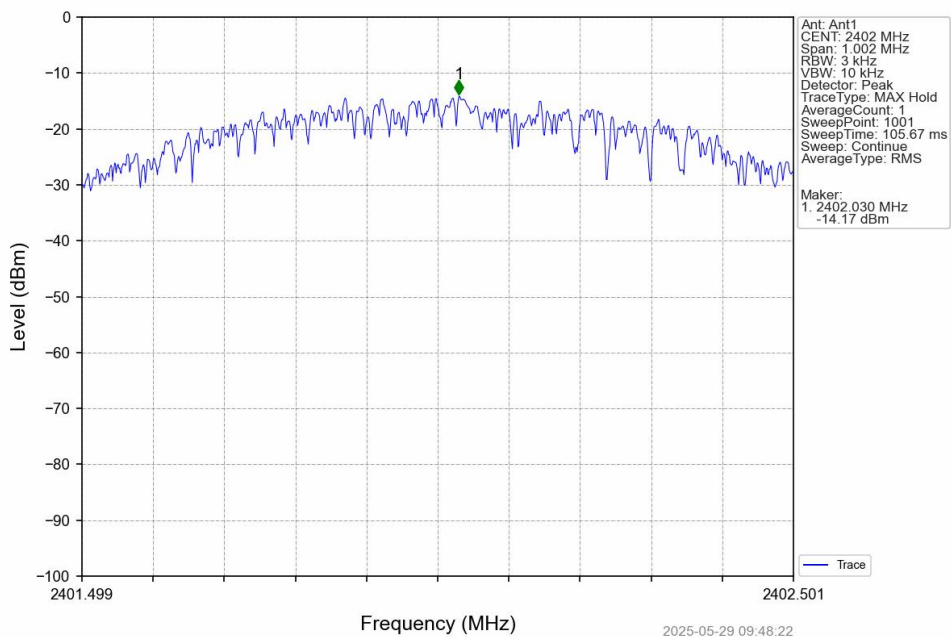
A.3 Maximum Power Spectral Density Level

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-14.17	<=8	Pass
		2440	-14.87	<=8	Pass
		2480	-16.06	<=8	Pass
2M	SISO	2402	-16.21	<=8	Pass
		2440	-16.94	<=8	Pass
		2480	-18.17	<=8	Pass

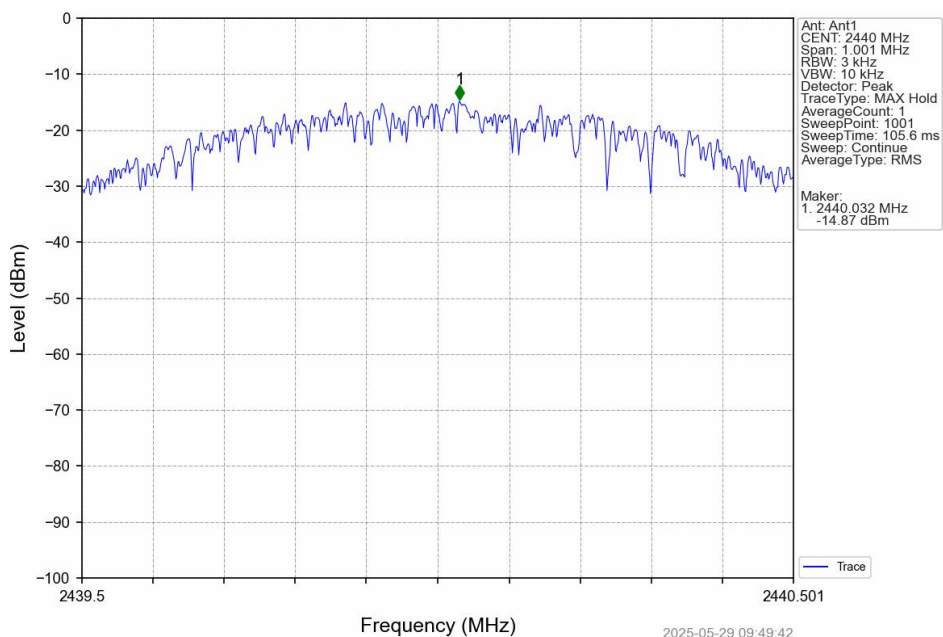




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



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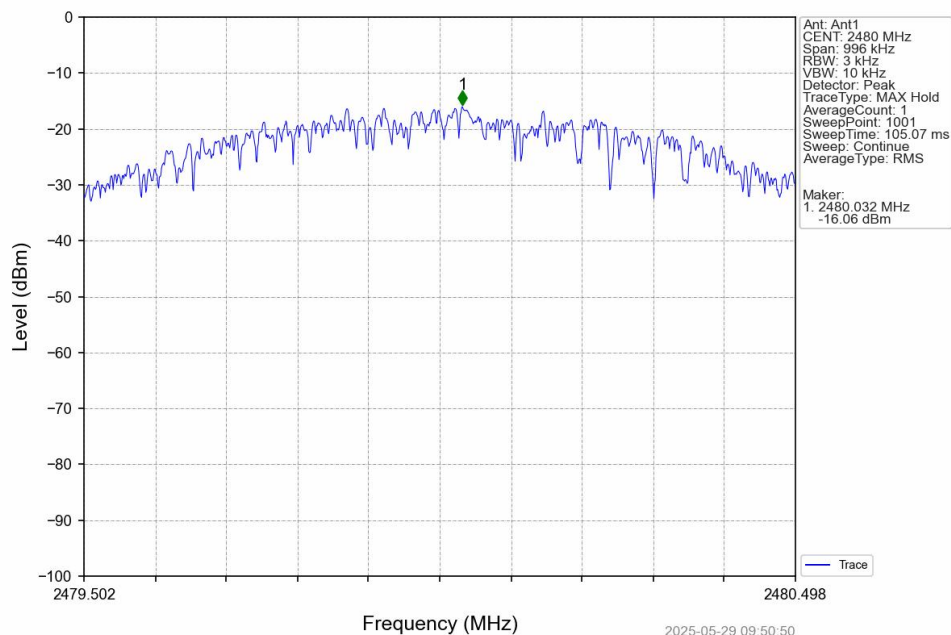
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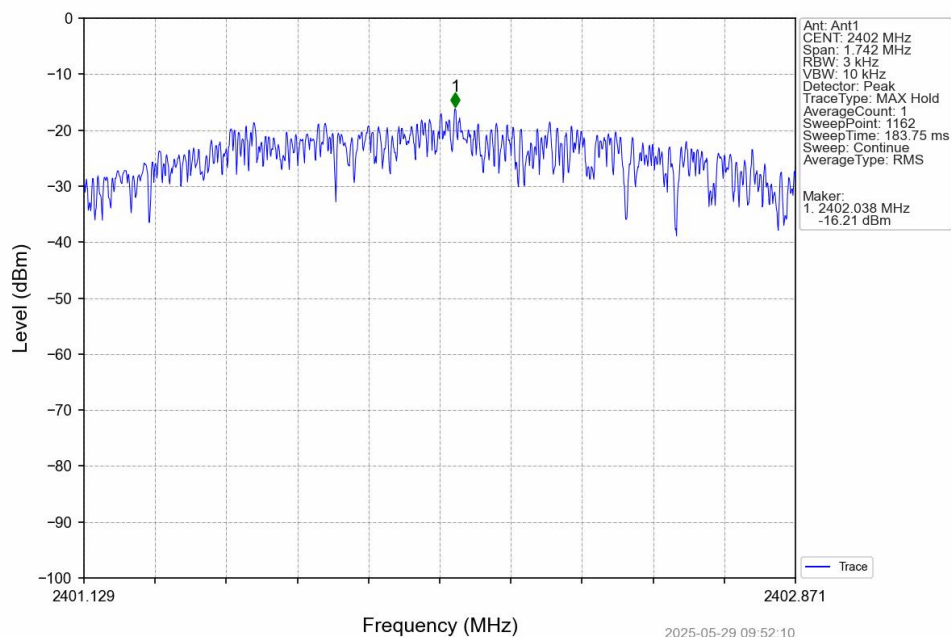
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1M_HCH_2480MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV



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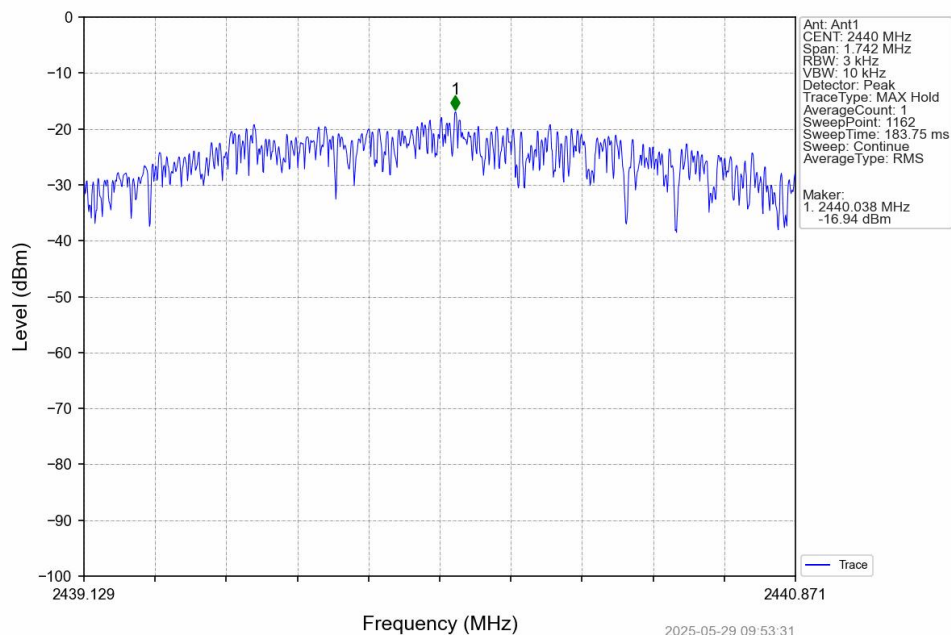
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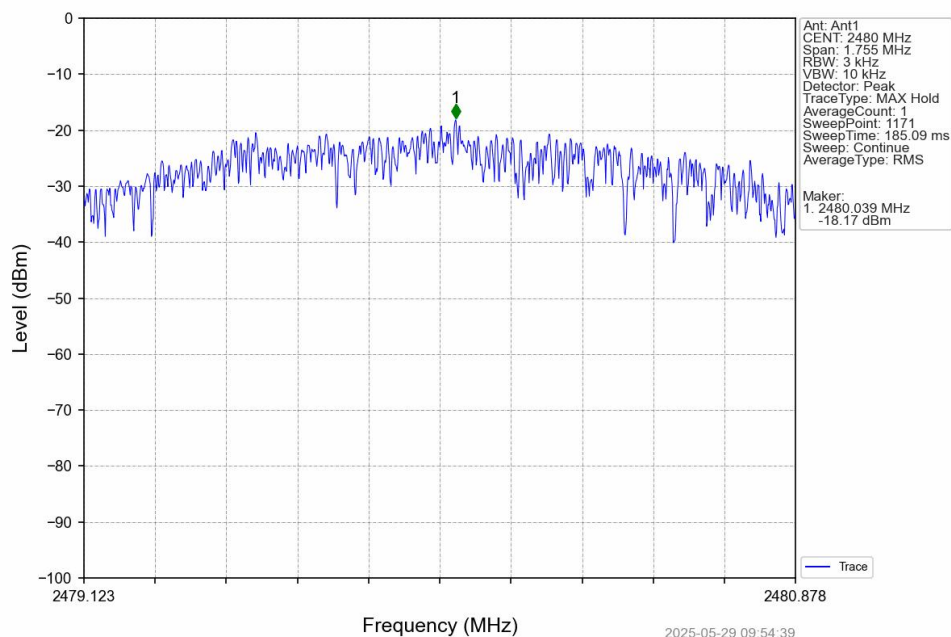
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2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



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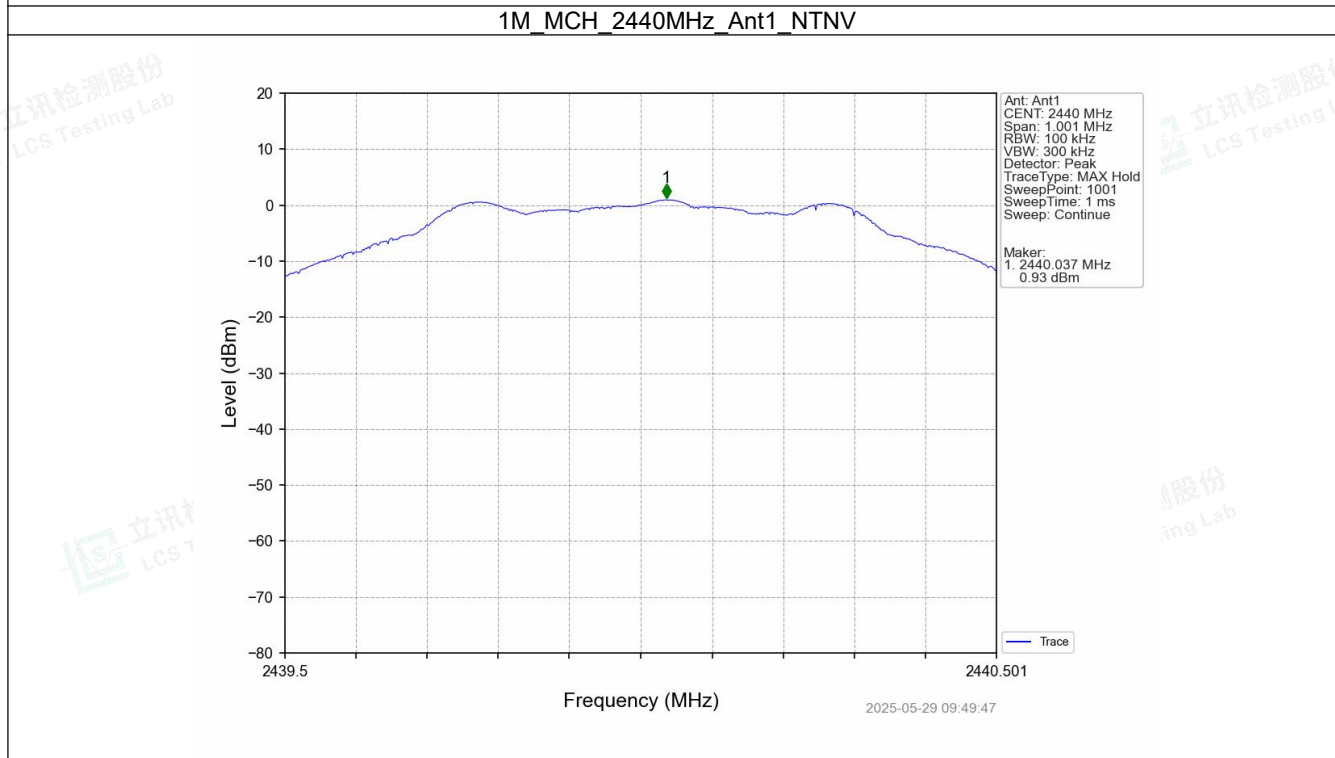
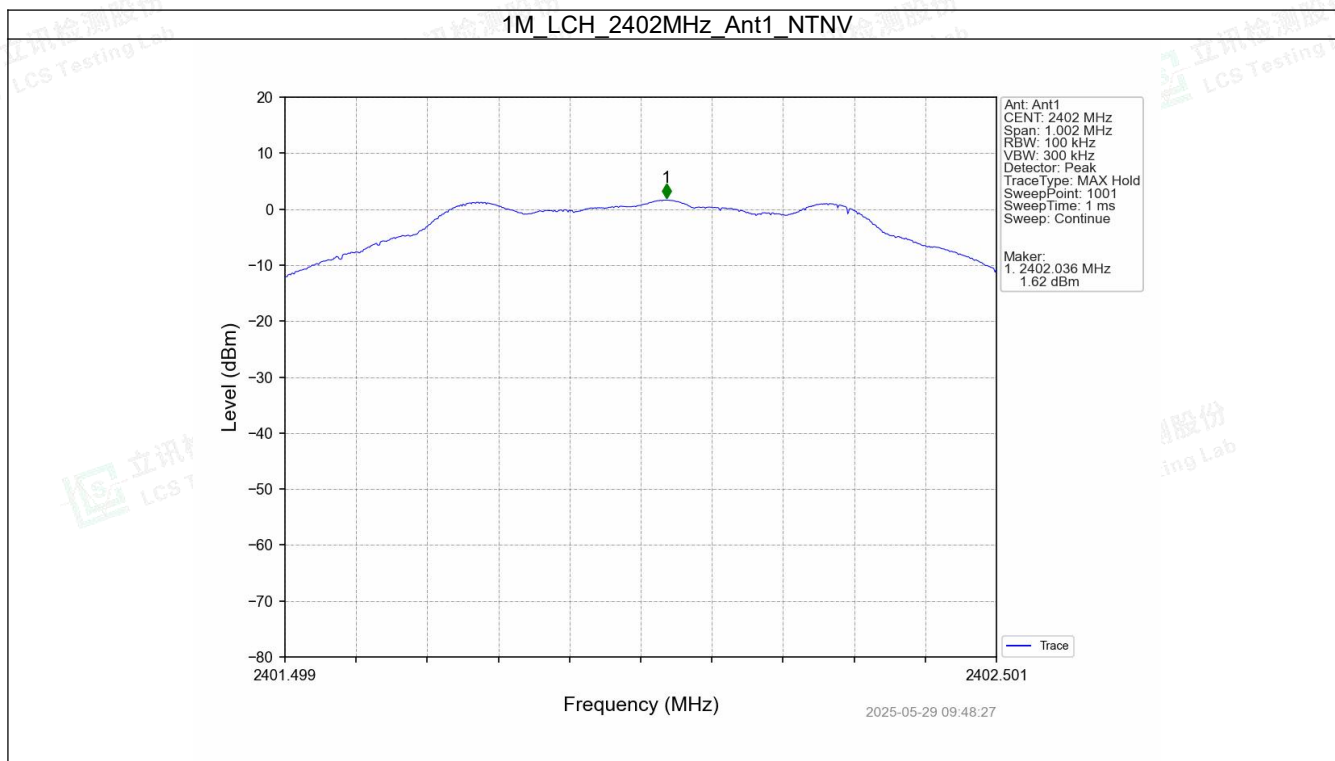


A.4 Band Edge

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	1.62	-18.38	Pass
		2440	1	0.93	-19.07	Pass
		2480	1	-0.26	-20.26	Pass
2M	SISO	2402	1	1.72	-18.28	Pass
		2440	1	1.06	-18.94	Pass
		2480	1	-0.21	-20.21	Pass

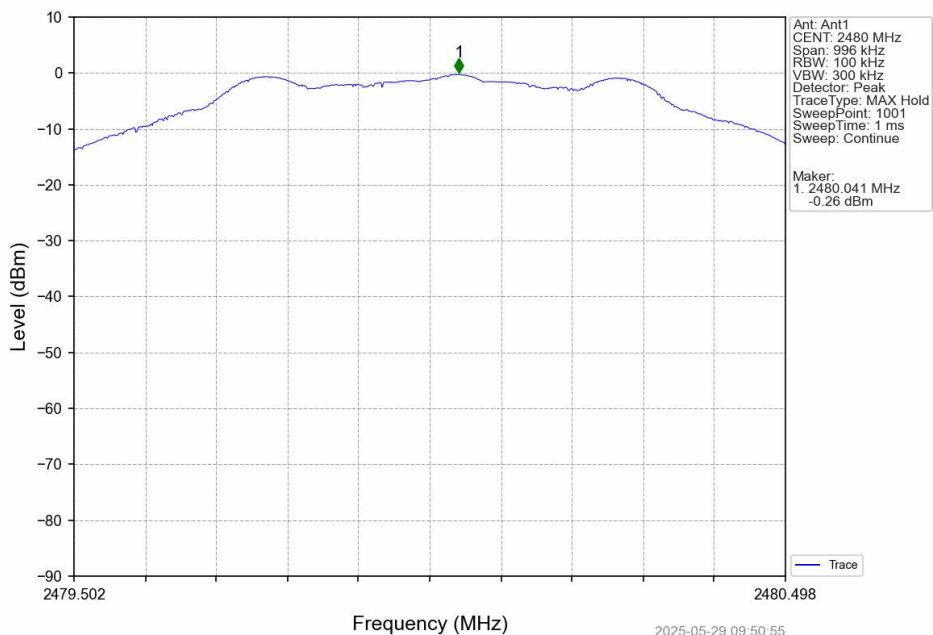
Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.



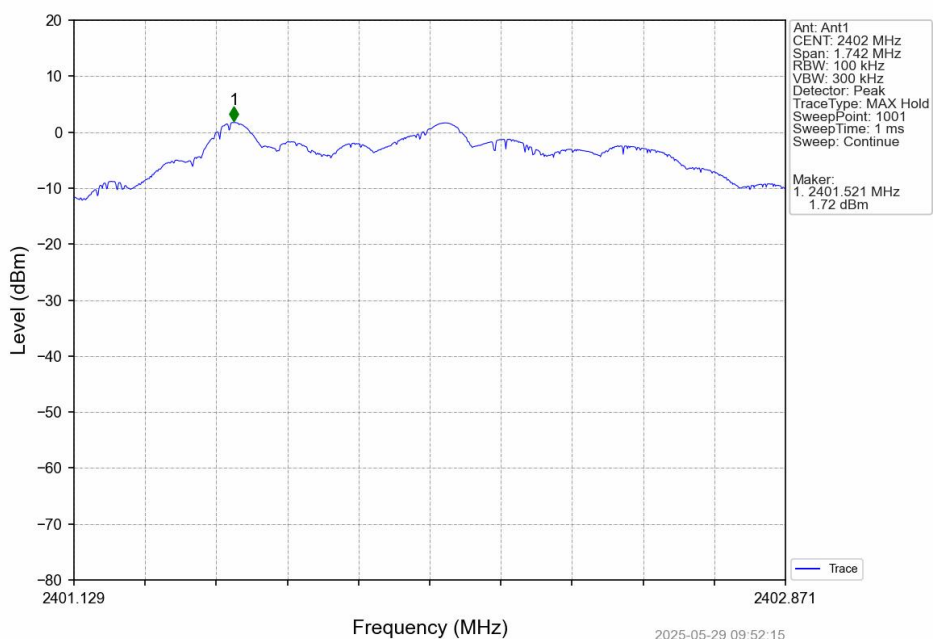




1M_HCH_2480MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV



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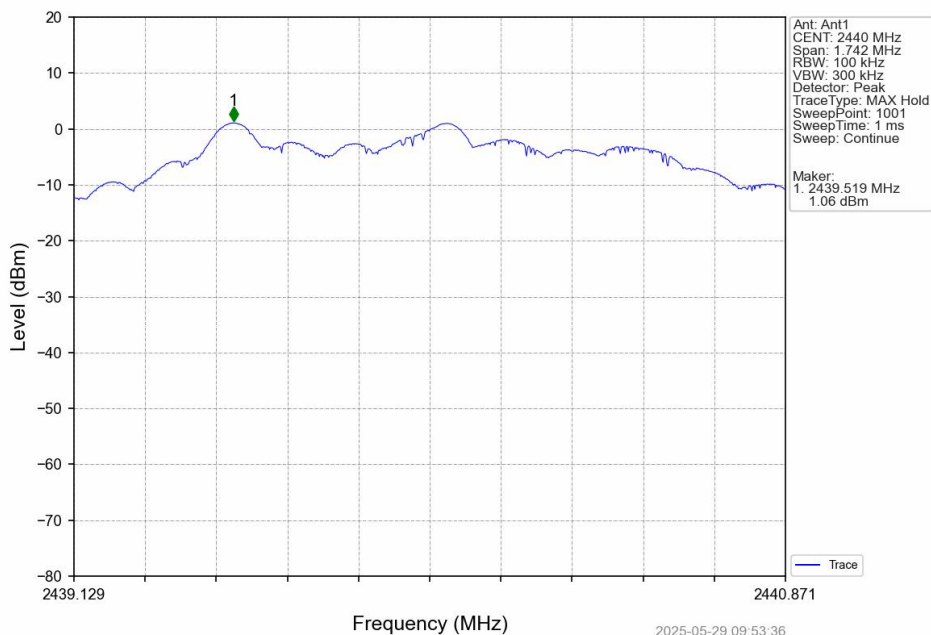
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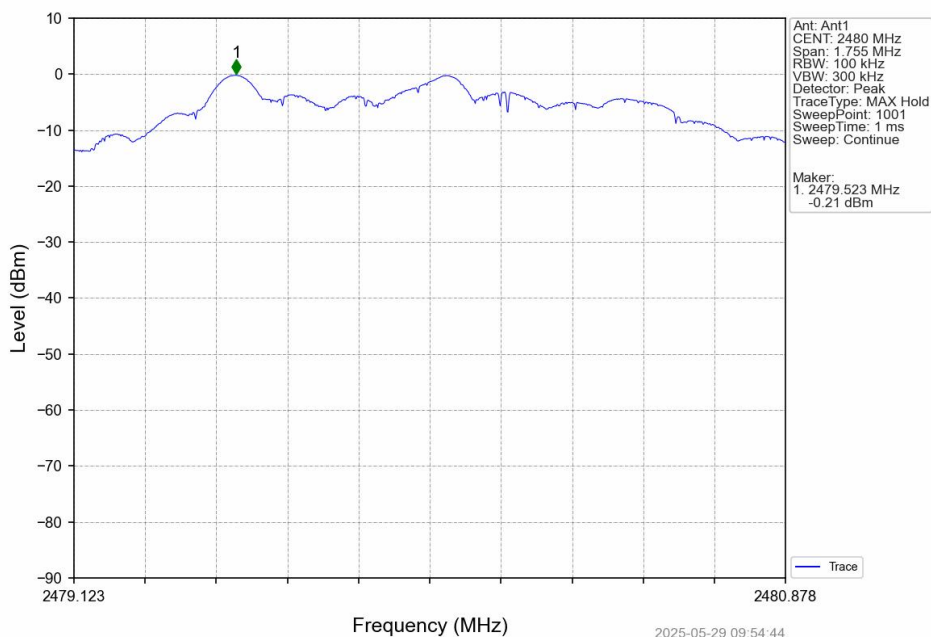
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2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



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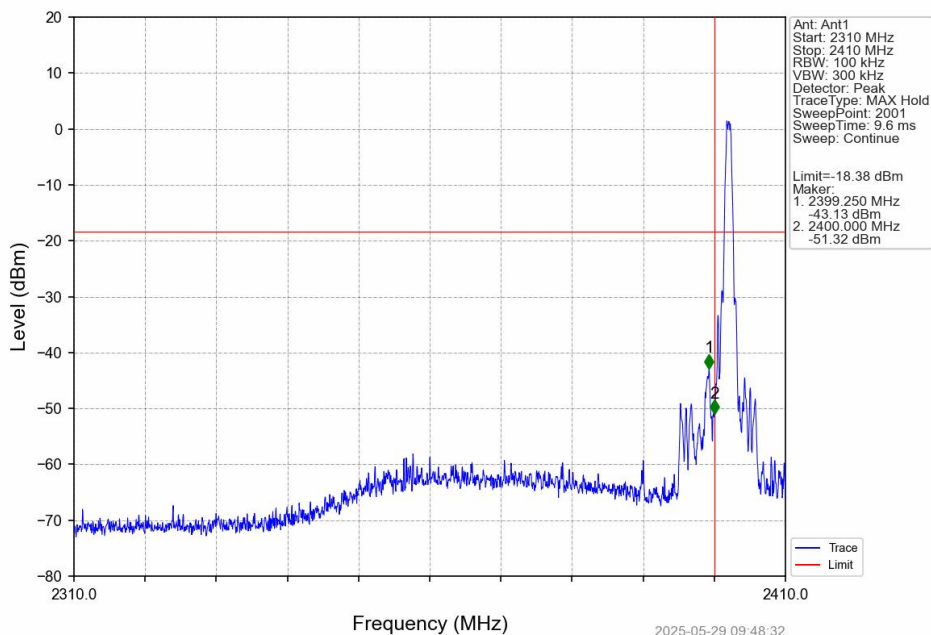
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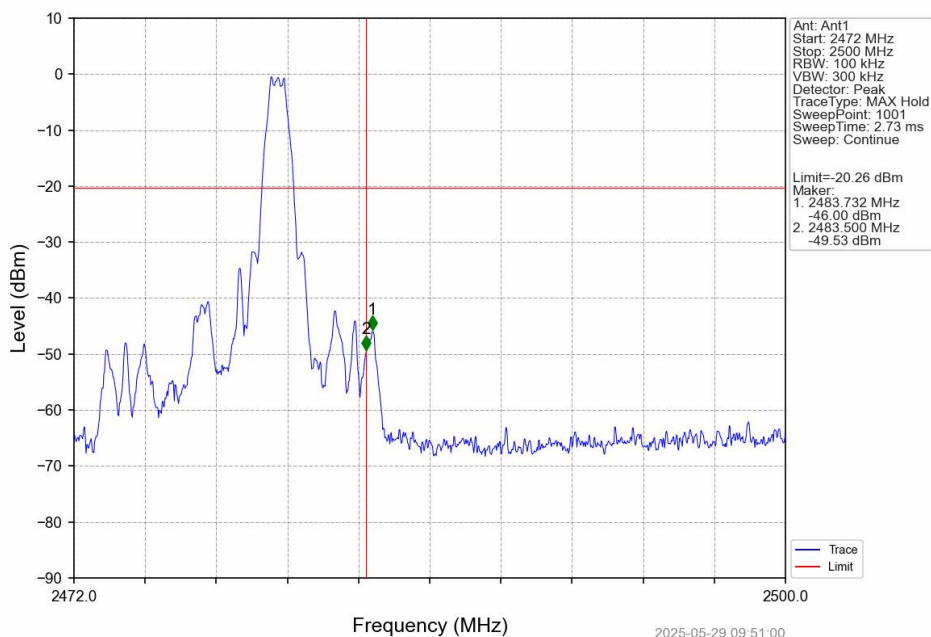
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1M_LCH_2402MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV

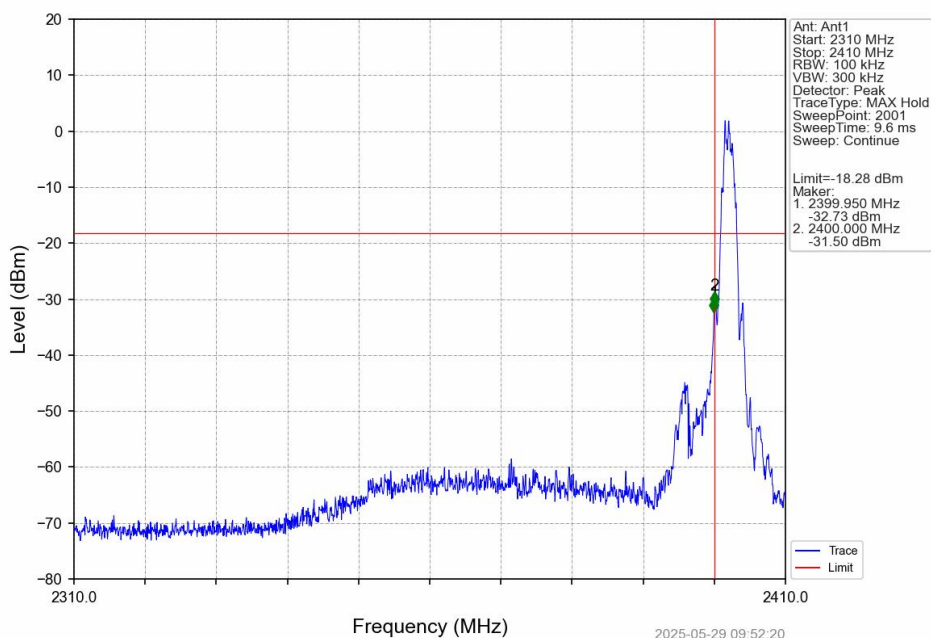


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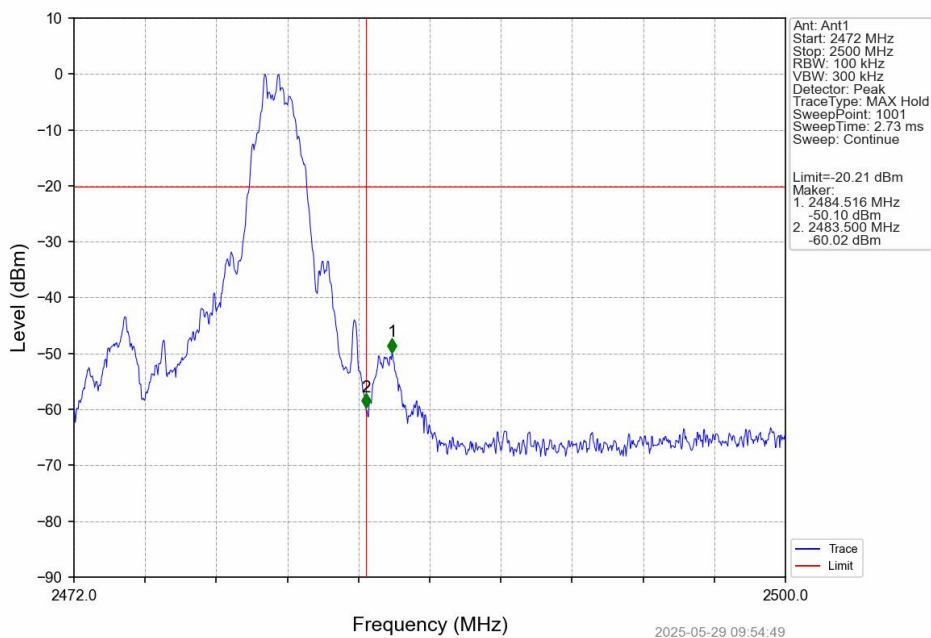
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2M_HCH_2480MHz_Ant1_NTNV



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A.5 Conducted RF Spurious Emission

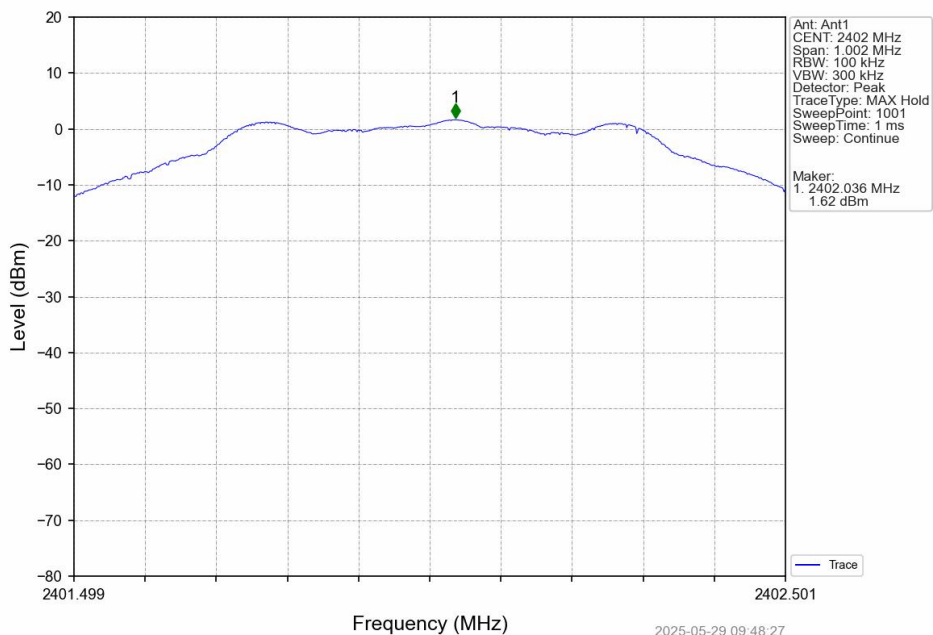
Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	1.62
		2440	1	0.93
		2480	1	-0.26
2M	SISO	2402	1	1.72
		2440	1	1.06
		2480	1	-0.21

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.

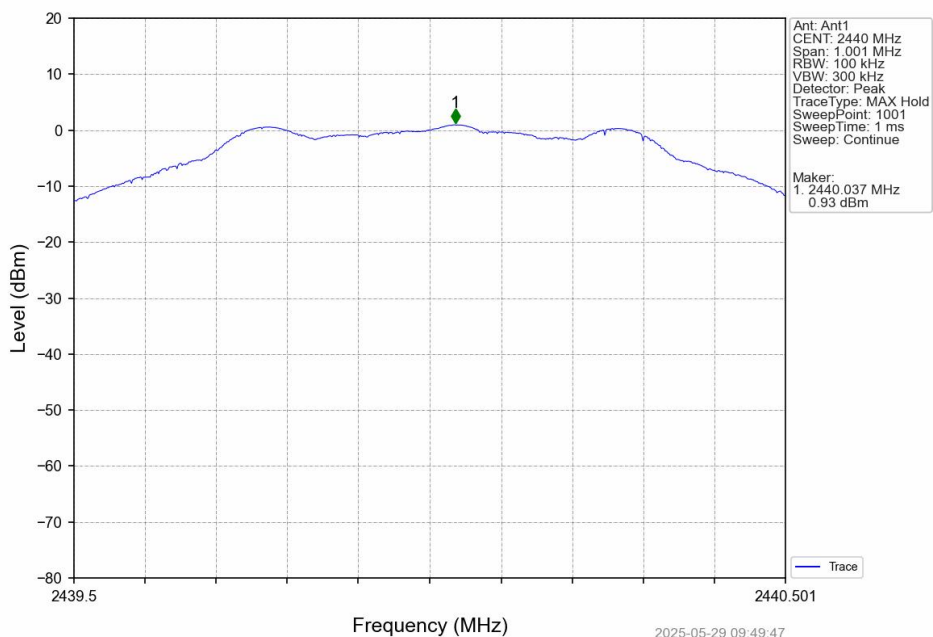




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



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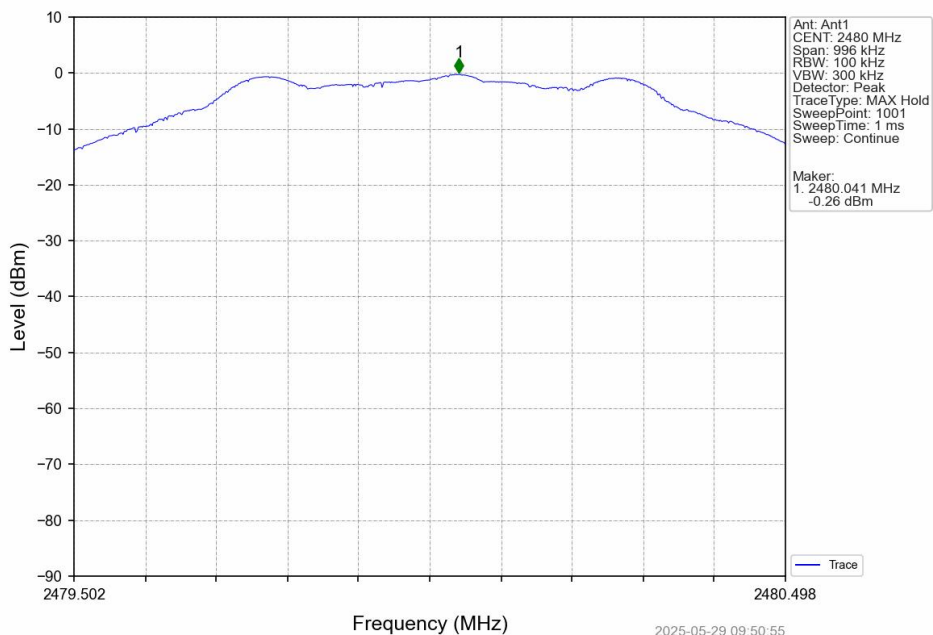
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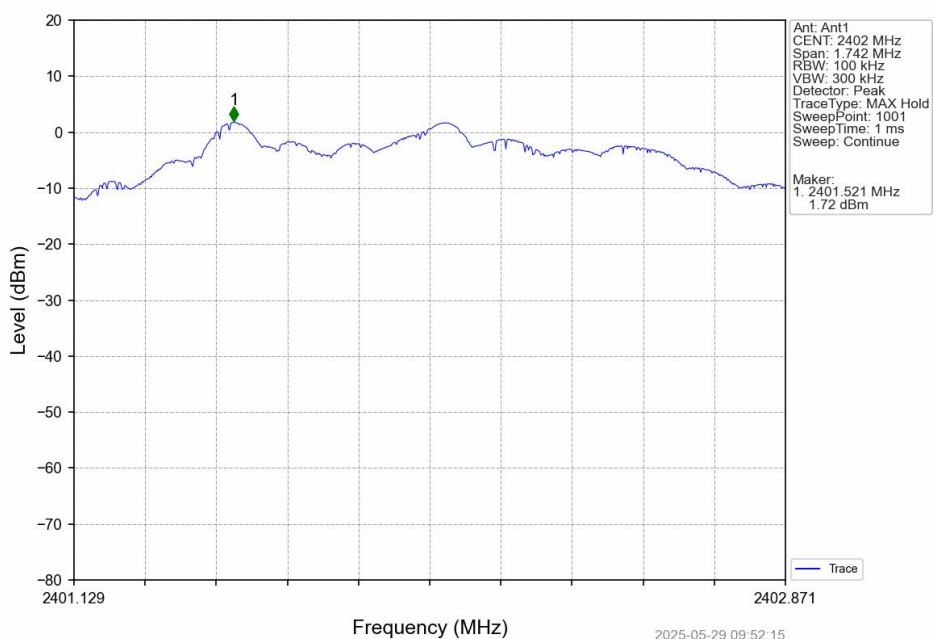
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1M_HCH_2480MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV



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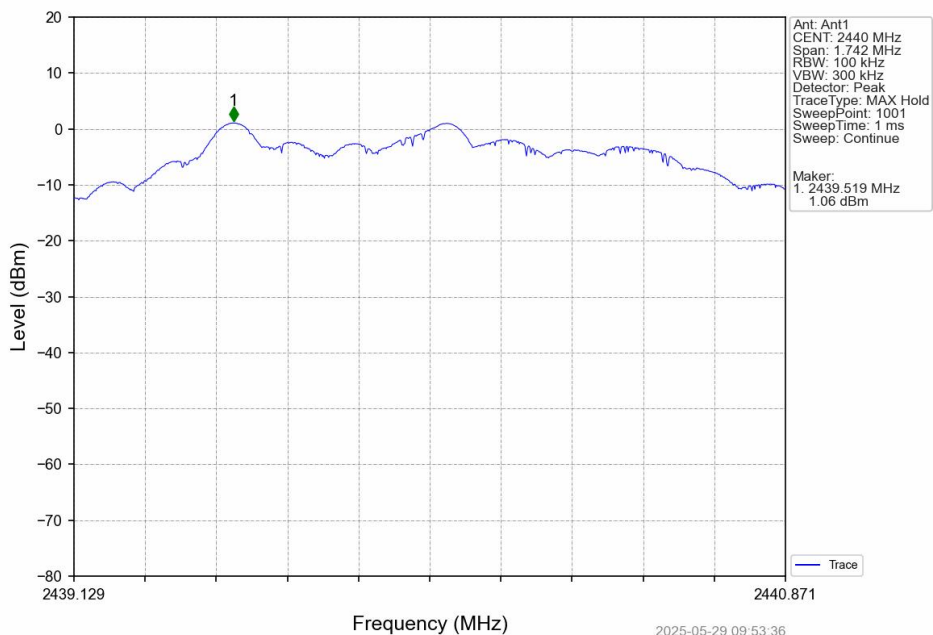
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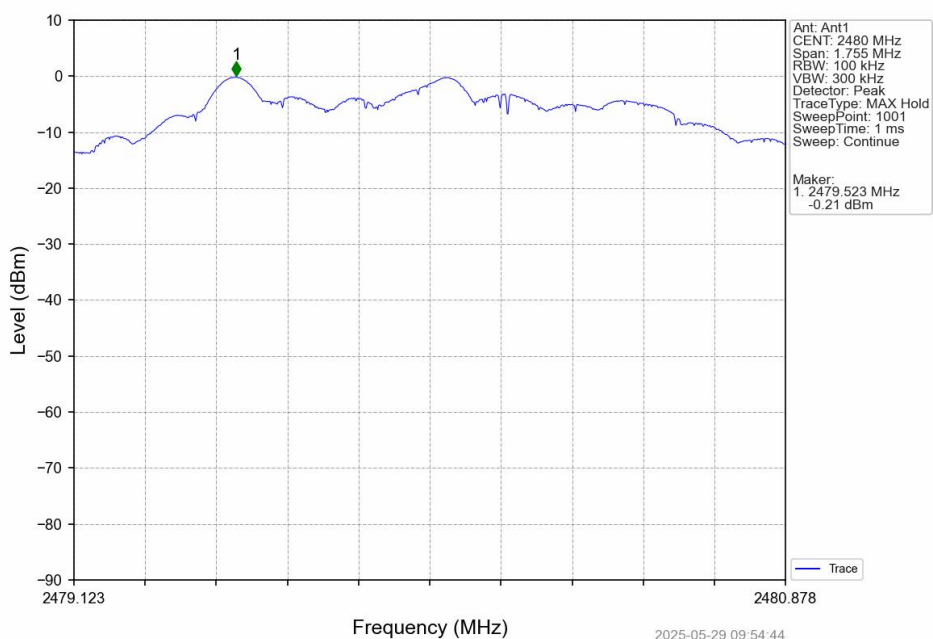
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2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



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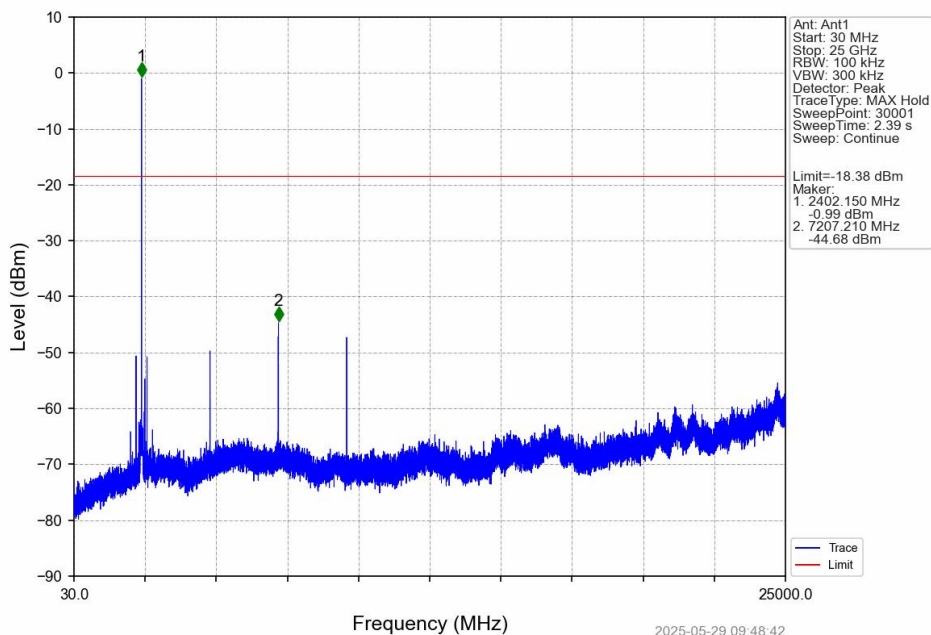
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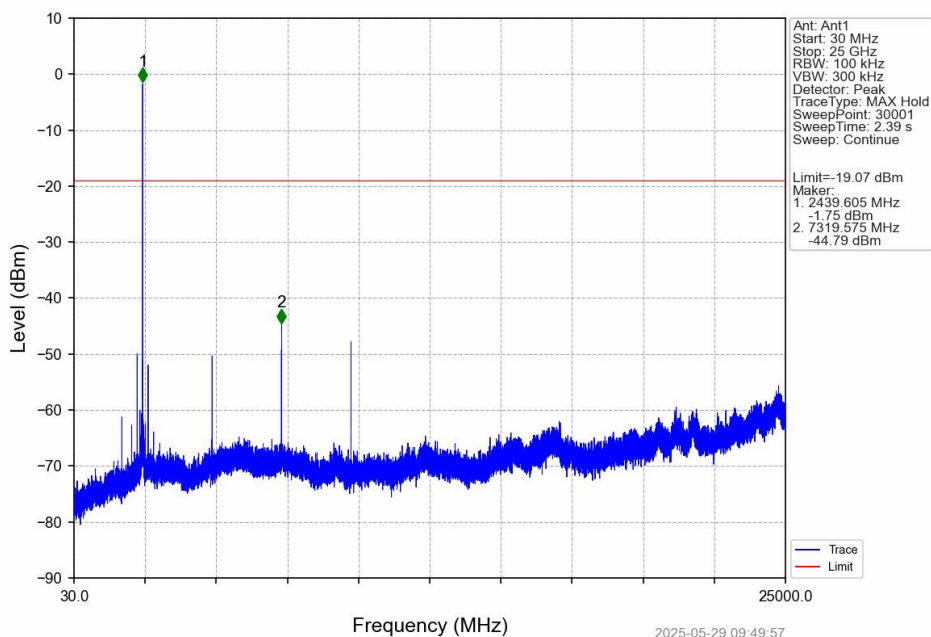
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1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV

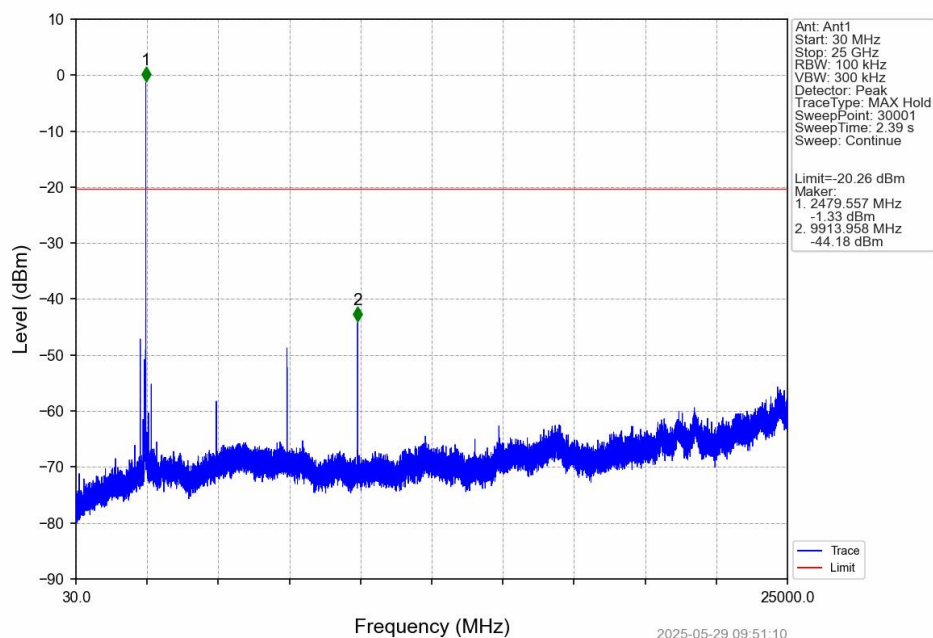


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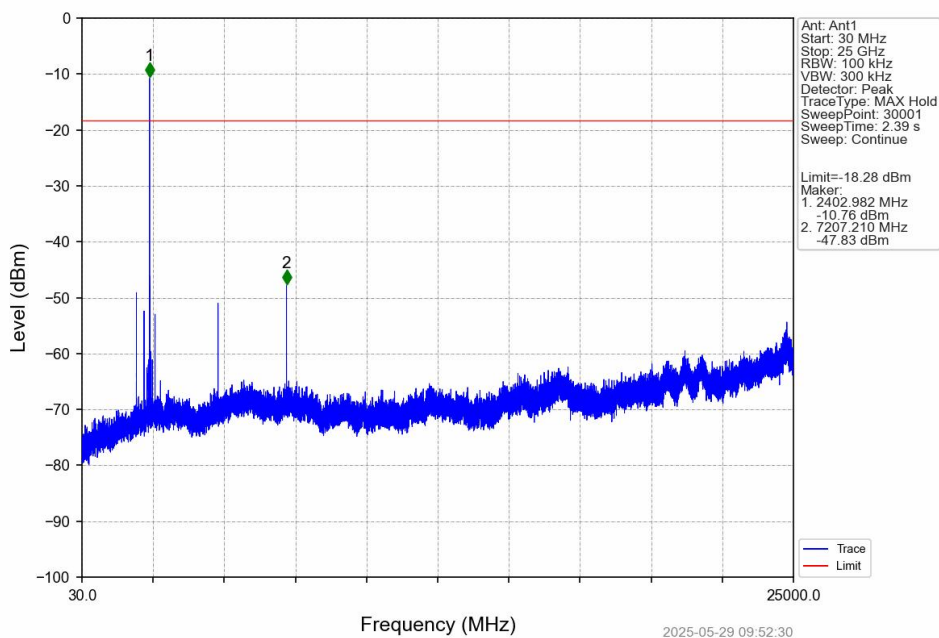
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2M_LCH_2402MHz_Ant1_NTNV



2M_MCH_2440MHz_Ant1_NTNV

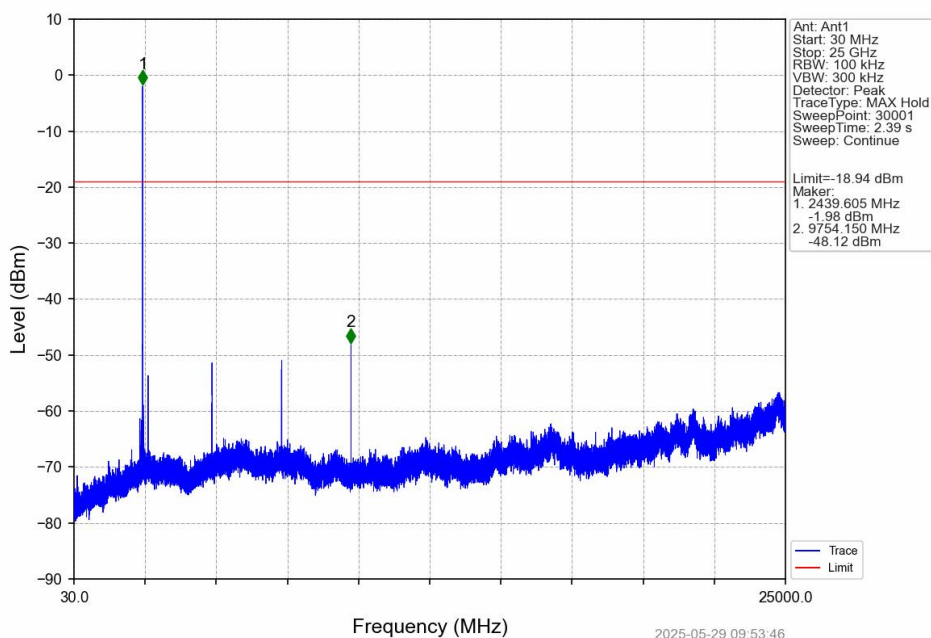


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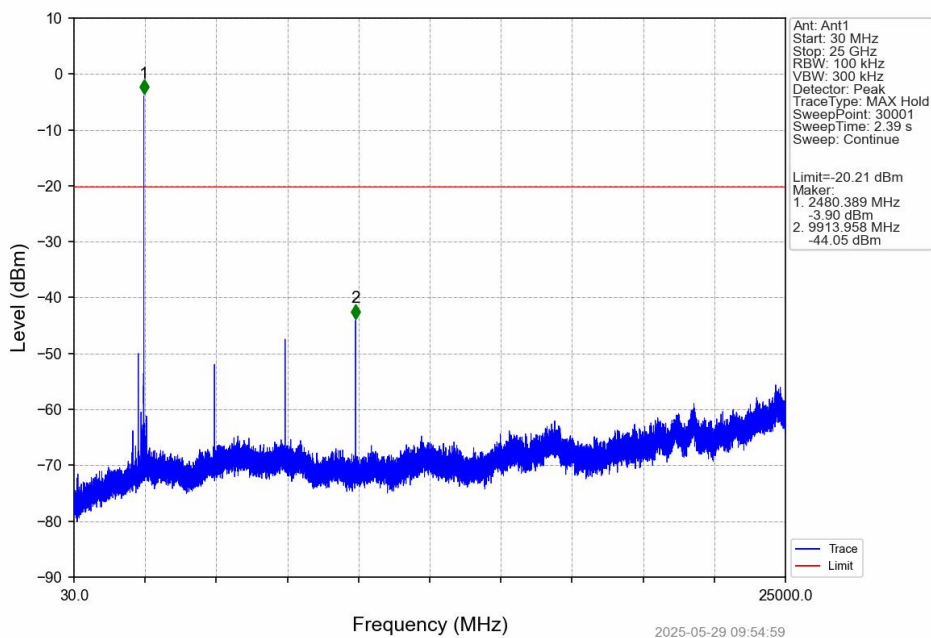
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2M_HCH_2480MHz_Ant1_NTNV



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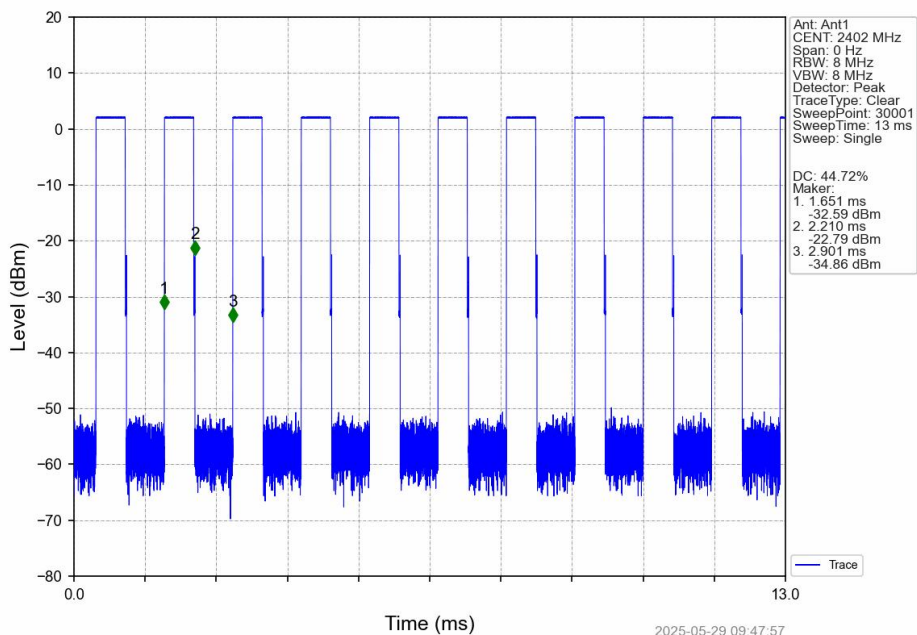
A.6 Duty Cycle

Ant1							
Mode	TX Type	Frequency (MHz)	T_on (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	Max. DC Variation (%)
1M	SISO	2402	0.559	1.250	44.72	3.49	0.02
		2440	0.558	1.250	44.64	3.50	0.03
		2480	0.558	1.250	44.64	3.50	0.03
2M	SISO	2402	0.306	1.250	24.48	6.11	0.01
		2440	0.306	1.250	24.48	6.11	0.03
		2480	0.306	1.250	24.48	6.11	0.01

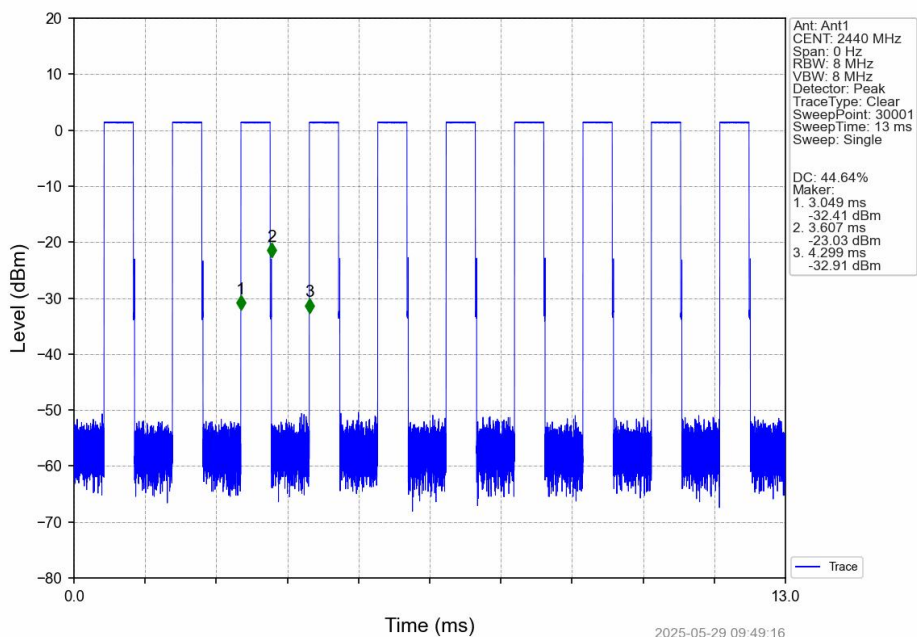




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



Shenzhen LCS Compliance Testing Laboratory Ltd.

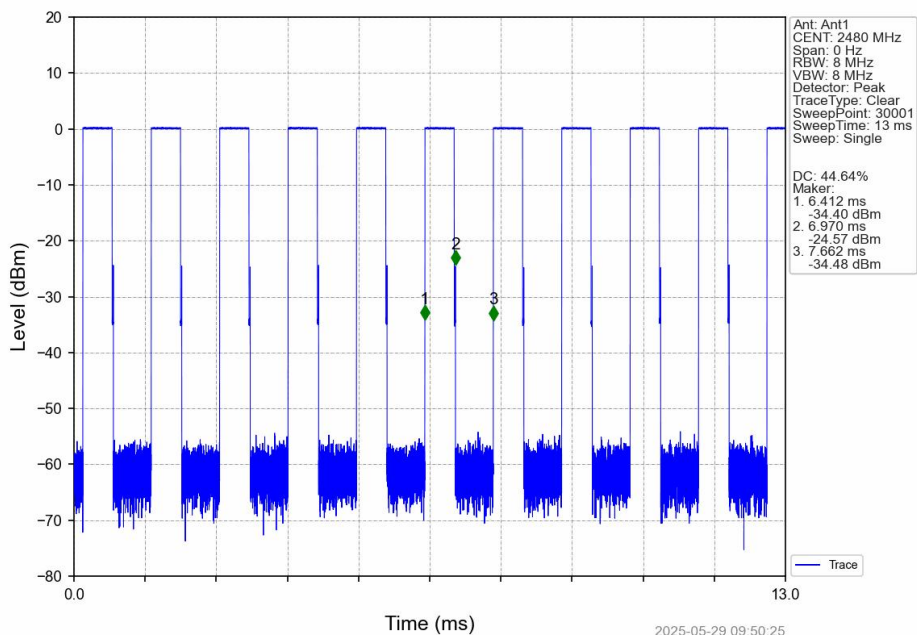
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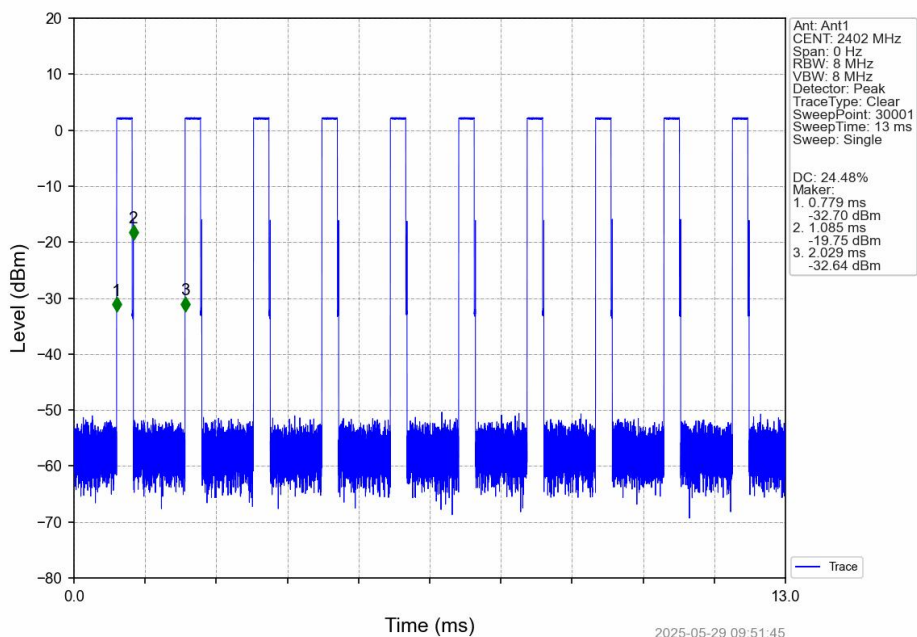
Scan code to check authenticity



1M_HCH_2480MHz_Ant1_NTNV



2M_LCH_2402MHz_Ant1_NTNV



Shenzhen LCS Compliance Testing Laboratory Ltd.

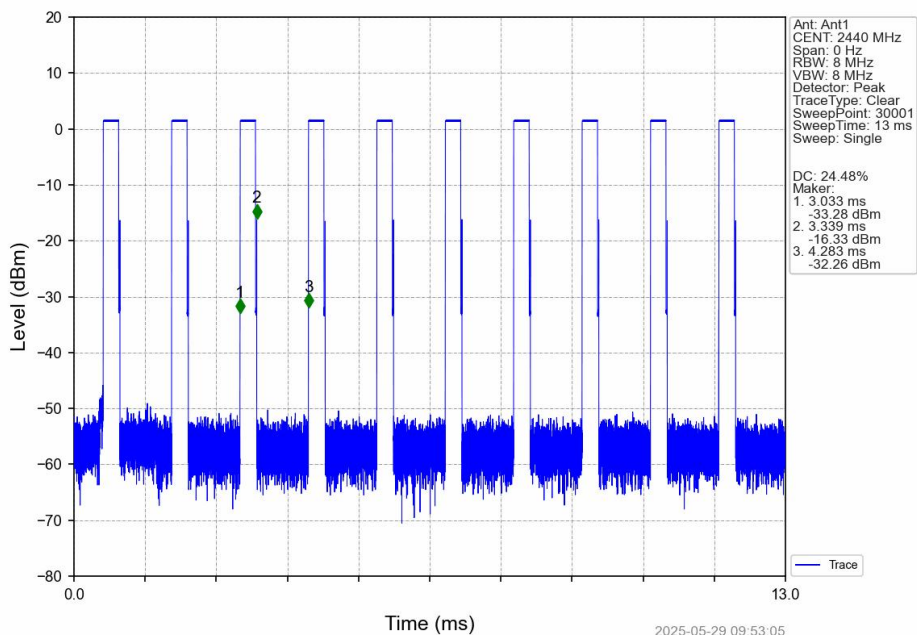
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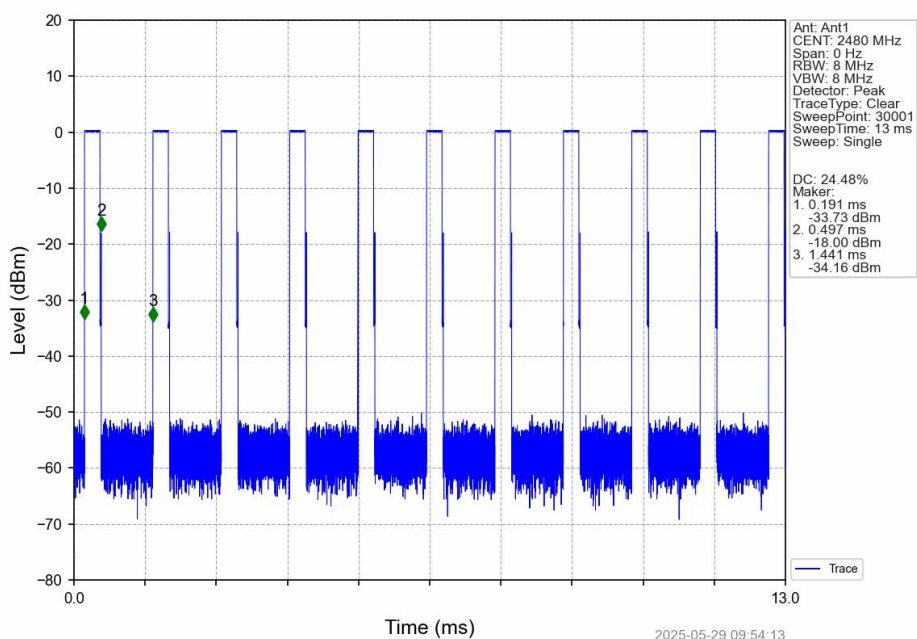
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2M_MCH_2440MHz_Ant1_NTNV



2M_HCH_2480MHz_Ant1_NTNV



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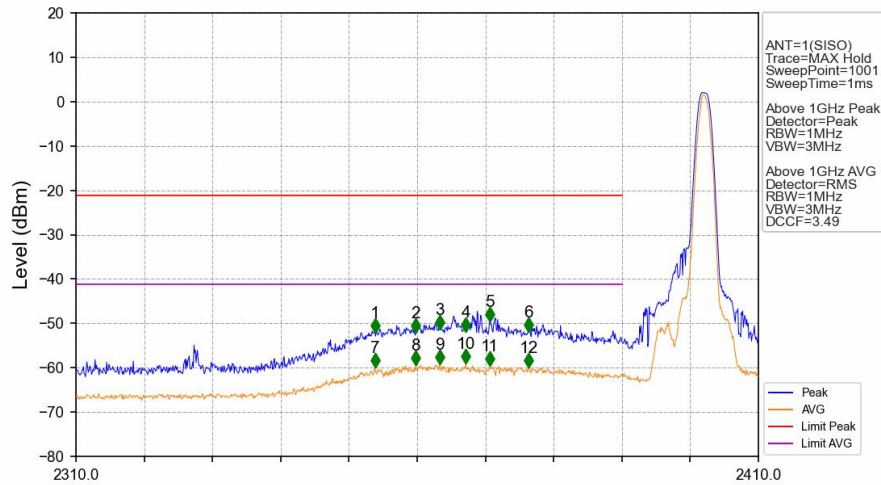
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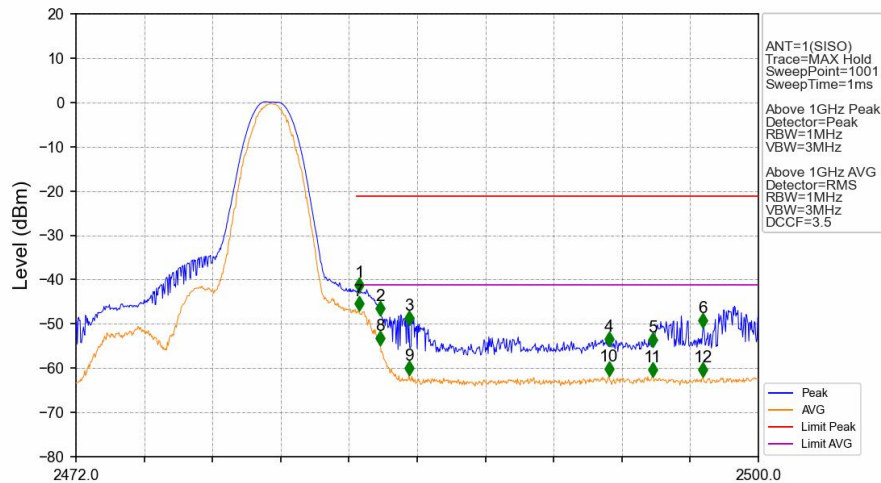
A.7 Restrict Band

1M_LCH_2402MHz_Ant1_NTNV



Frequency (MHz)											
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
1	2353.800	-52.07	-21.20	30.87	Pass	Peak	7	2353.800	-59.95	-41.20	18.75
2	2359.800	-52.06	-21.20	30.86	Pass	Peak	8	2359.800	-59.35	-41.20	18.15
3	2363.300	-51.41	-21.20	30.21	Pass	Peak	9	2363.300	-59.14	-41.20	17.94
4	2367.100	-51.89	-21.20	30.69	Pass	Peak	10	2367.100	-59.03	-41.20	17.83
5	2370.600	-49.50	-21.20	28.30	Pass	Peak	11	2370.600	-59.60	-41.20	18.40
6	2376.300	-51.85	-21.20	30.65	Pass	Peak	12	2376.300	-59.91	-41.20	18.71

1M_HCH_2480MHz_Ant1_NTNV



Frequency (MHz)											
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)
1	2483.620	-42.77	-21.20	21.57	Pass	Peak	7	2483.620	-46.97	-41.20	5.77
2	2484.488	-48.04	-21.20	26.84	Pass	Peak	8	2484.488	-54.75	-41.20	13.55
3	2485.664	-50.20	-21.20	29.00	Pass	Peak	9	2485.664	-61.55	-41.20	20.35
4	2493.868	-55.04	-21.20	33.84	Pass	Peak	10	2493.868	-61.66	-41.20	20.46
5	2495.660	-55.11	-21.20	33.91	Pass	Peak	11	2495.660	-61.84	-41.20	20.64
6	2497.732	-50.73	-21.20	29.53	Pass	Peak	12	2497.732	-61.95	-41.20	20.75

2M_LCH_2402MHz_Ant1_NTNV

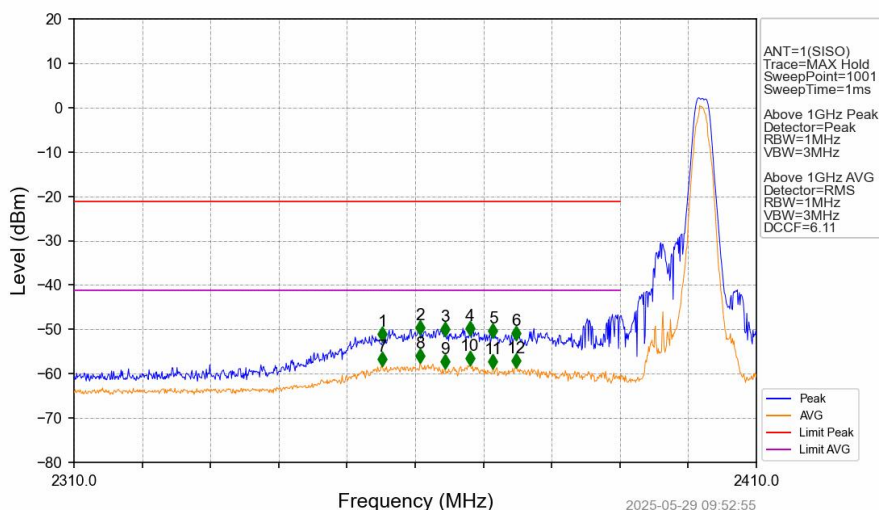


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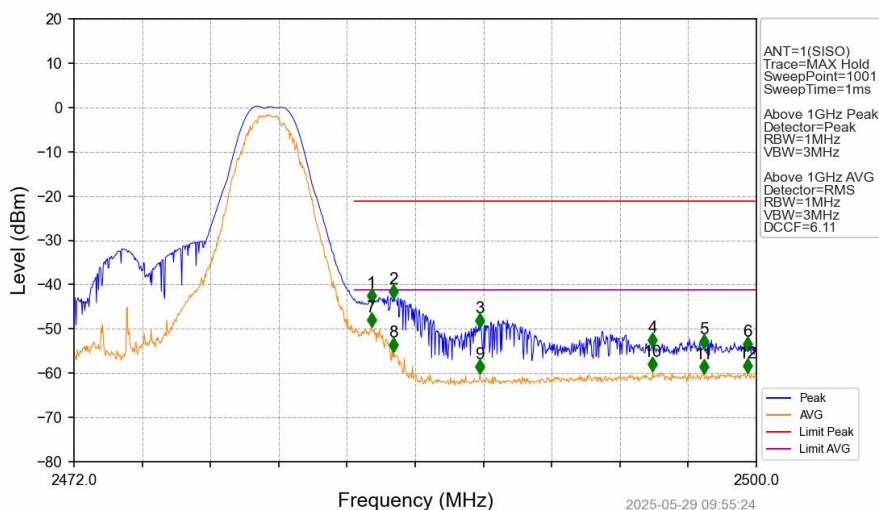
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No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2355.200	-52.57	-21.20	31.37	Pass	Peak	7	2355.200	-58.24	-41.20	17.04	Pass	AVG
2	2360.700	-51.20	-21.20	30.00	Pass	Peak	8	2360.700	-57.61	-41.20	16.41	Pass	AVG
3	2364.400	-51.62	-21.20	30.42	Pass	Peak	9	2364.400	-58.77	-41.20	17.57	Pass	AVG
4	2368.000	-51.41	-21.20	30.21	Pass	Peak	10	2368.000	-58.04	-41.20	16.84	Pass	AVG
5	2371.400	-51.83	-21.20	30.63	Pass	Peak	11	2371.400	-58.84	-41.20	17.64	Pass	AVG
6	2374.800	-52.43	-21.20	31.23	Pass	Peak	12	2374.800	-58.56	-41.20	17.36	Pass	AVG

2M_HCH_2480MHz_Ant1_NTNV



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2484.208	-44.13	-21.20	22.93	Pass	Peak	7	2484.208	-49.54	-41.20	8.34	Pass	AVG
2	2485.104	-43.12	-21.20	21.92	Pass	Peak	8	2485.104	-55.23	-41.20	14.03	Pass	AVG
3	2488.660	-49.72	-21.20	28.52	Pass	Peak	9	2488.660	-60.10	-41.20	18.90	Pass	AVG
4	2495.744	-54.16	-21.20	32.96	Pass	Peak	10	2495.744	-59.58	-41.20	18.38	Pass	AVG
5	2497.844	-54.52	-21.20	33.32	Pass	Peak	11	2497.844	-60.12	-41.20	18.92	Pass	AVG
6	2499.636	-55.03	-21.20	33.83	Pass	Peak	12	2499.636	-59.89	-41.20	18.69	Pass	AVG



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