



Appendix B

RF Test Data for BT LE(Conducted Measurement)

Product Name: Portable Karaoke Speaker

Test Model: B78

Environmental Conditions

Temperature:	24.3°C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Can Kun
Supervised by:	Nick Peng



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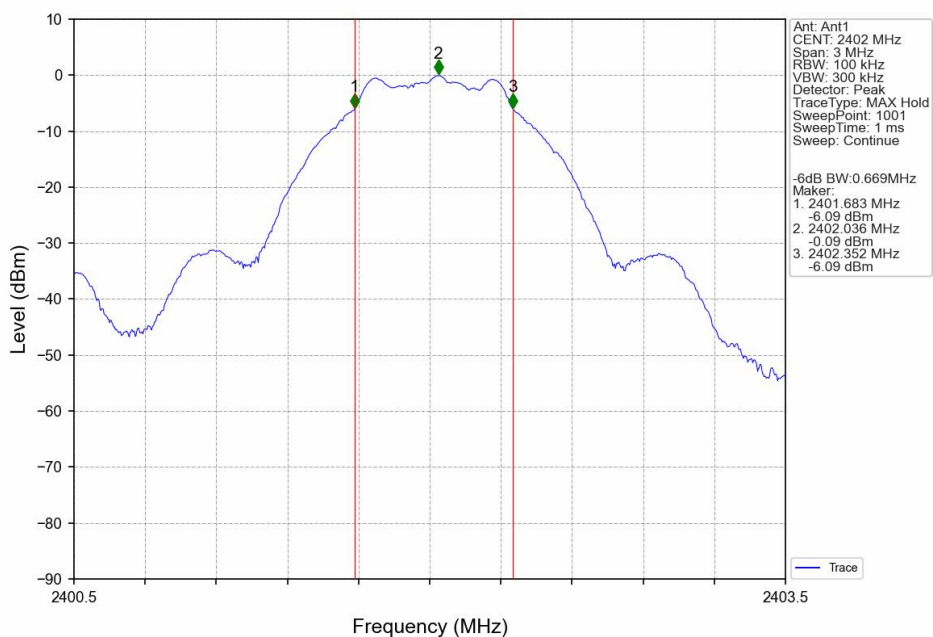
**B.1 -6dB Bandwidth**

Mode	TX Type	Frequency (MHz)	ANT	6dB Bandwidth (MHz)		Verdict
				Result	Limit	
1M	SISO	2402	1	0.669	≥ 0.5	Pass
		2440	1	0.669	≥ 0.5	Pass
		2480	1	0.669	≥ 0.5	Pass

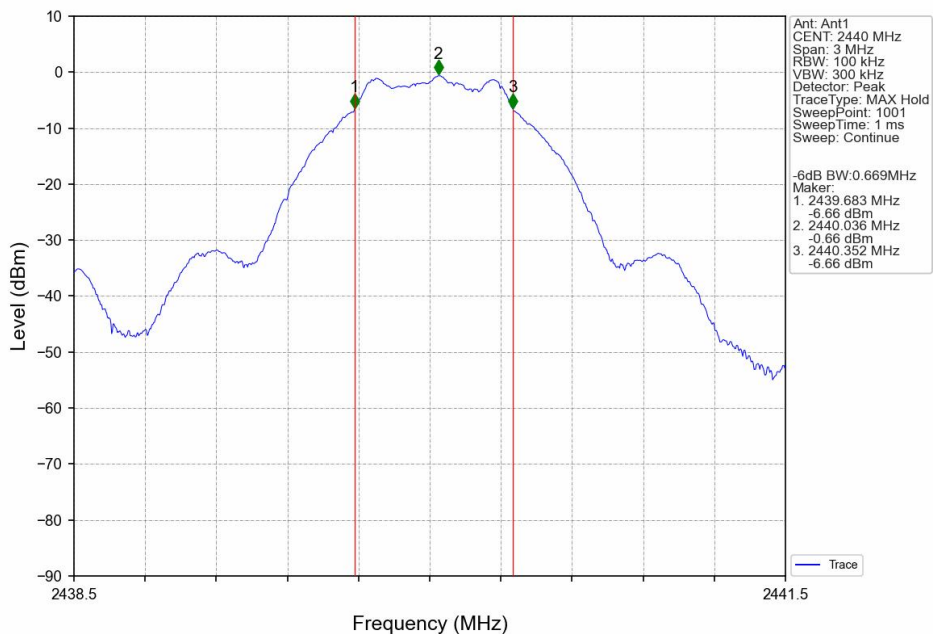




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV

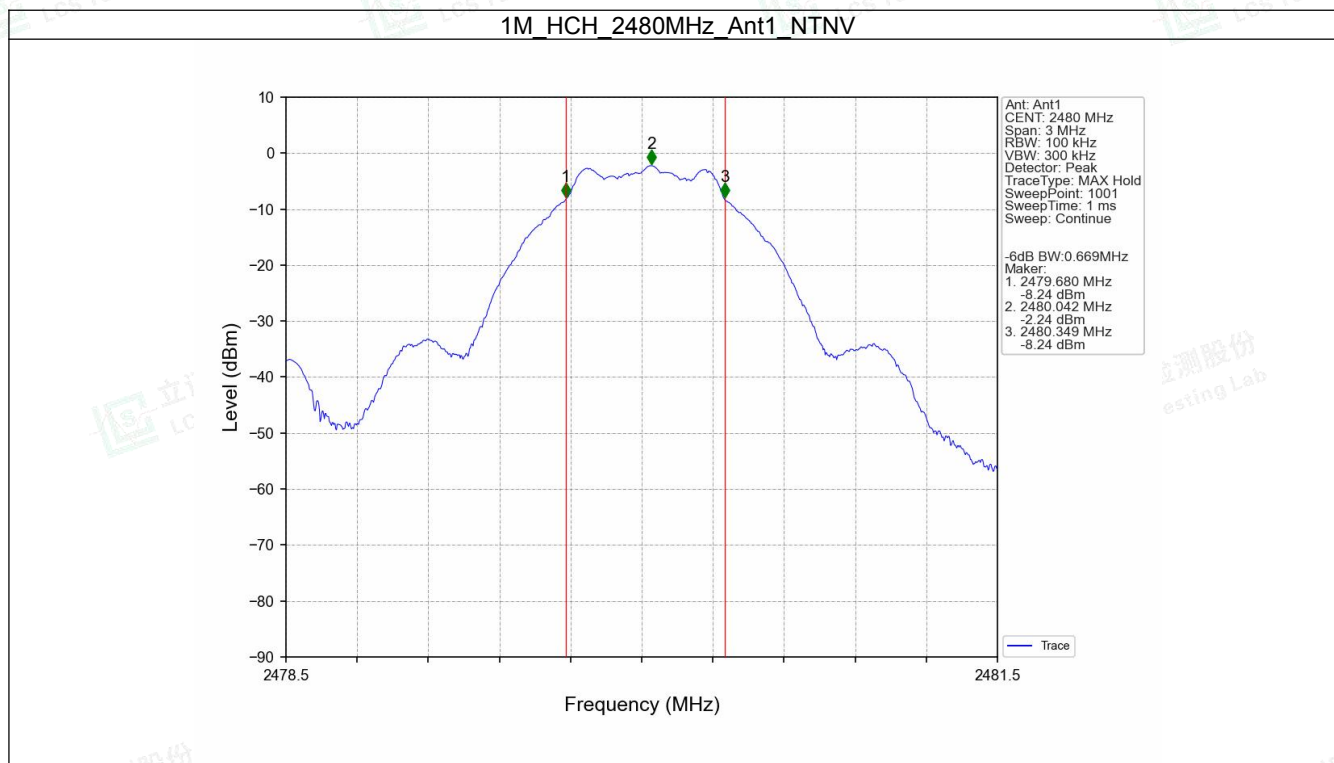


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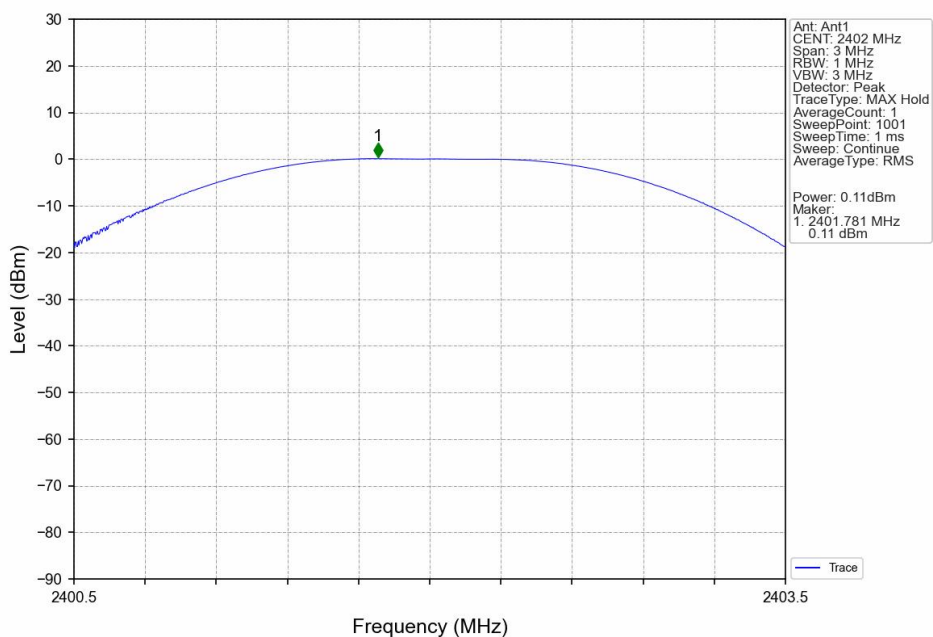
B.2 Maximum Peak Conducted Output Power

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Verdict
			ANT1	Limit	
1M	SISO	2402	0.11	<=30	Pass
		2440	-0.47	<=30	Pass
		2480	-2.04	<=30	Pass

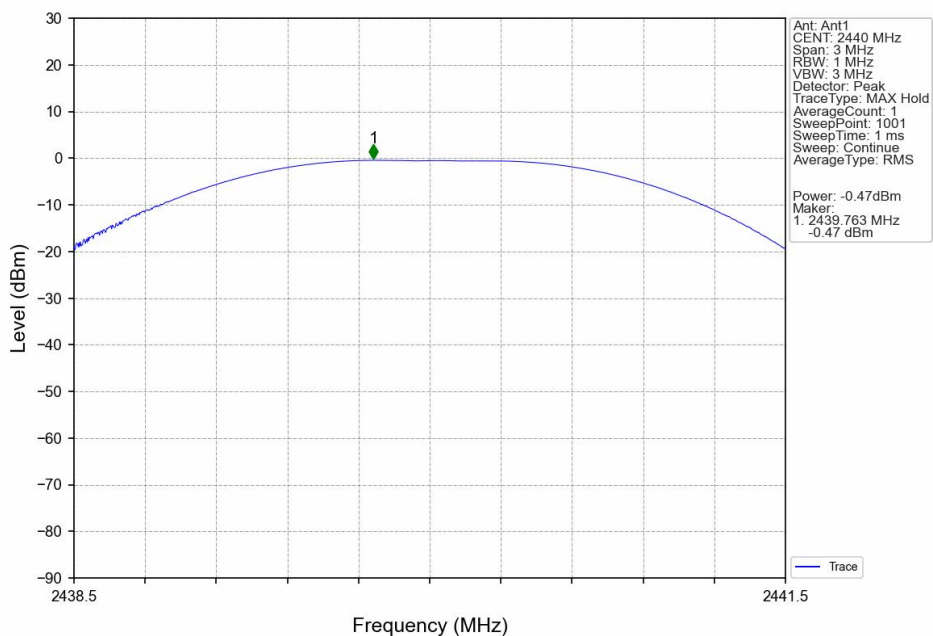




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



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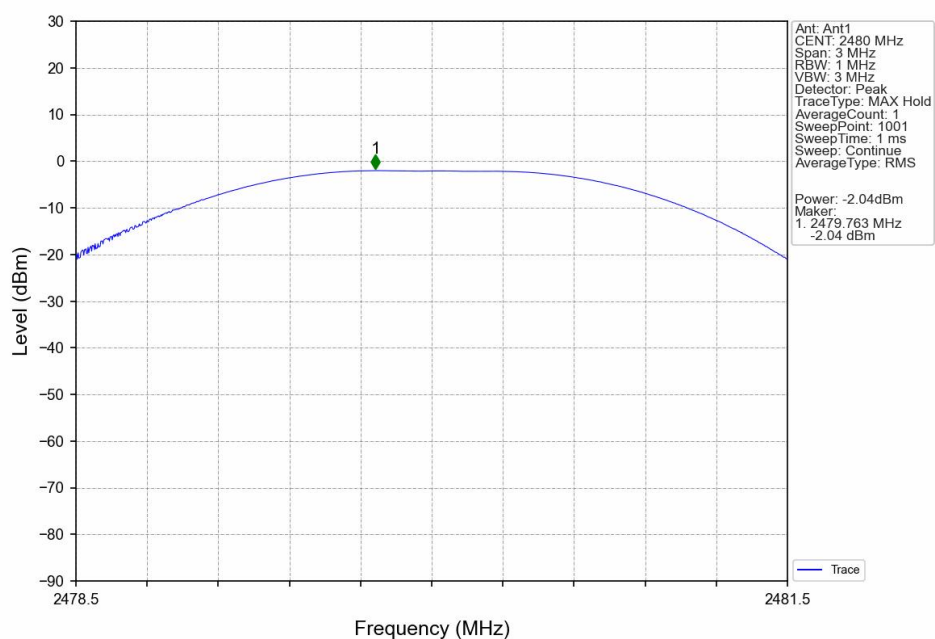
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1M_HCH_2480MHz_Ant1_NTNV





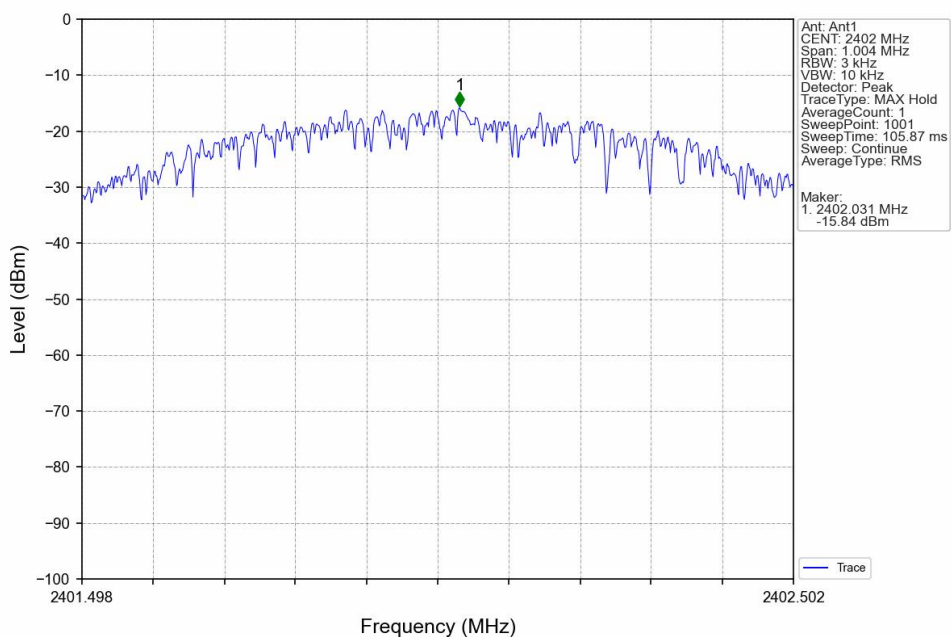
B.3 Maximum Power Spectral Density

Mode	TX Type	Frequency (MHz)	Maximum PSD (dBm/3kHz)		Verdict
			ANT1	Limit	
1M	SISO	2402	-15.84	<=8	Pass
		2440	-16.49	<=8	Pass
		2480	-18.12	<=8	Pass

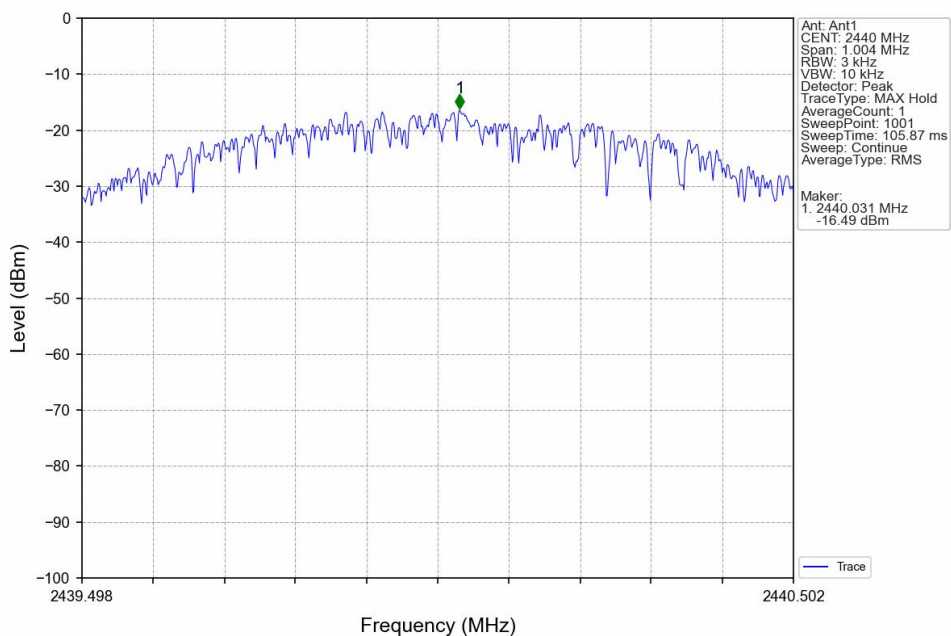




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV

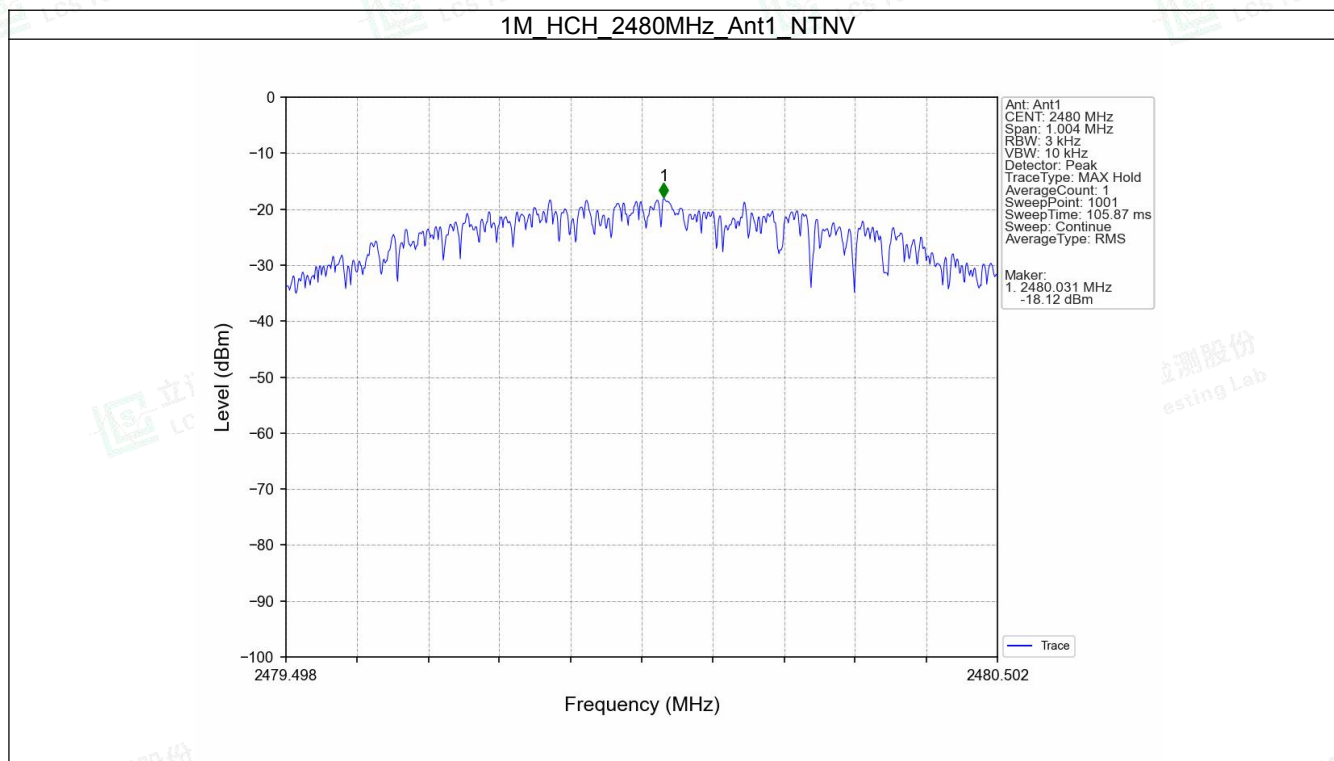


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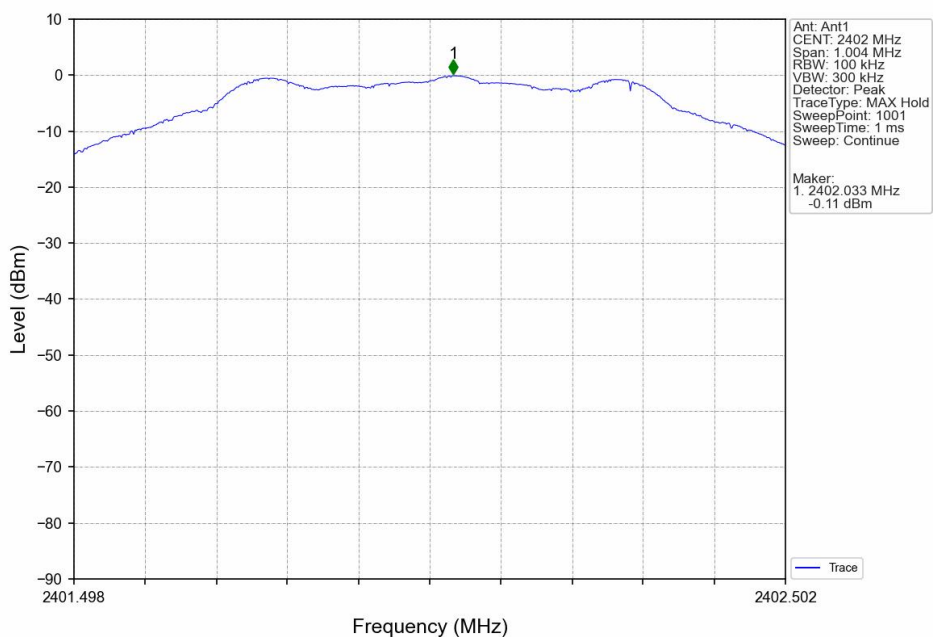
B.4 Band Edge

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
1M	SISO	2402	1	-0.11	-20.11	Pass
		2440	1	-0.11	-20.11	Pass
		2480	1	-0.11	-20.11	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.						

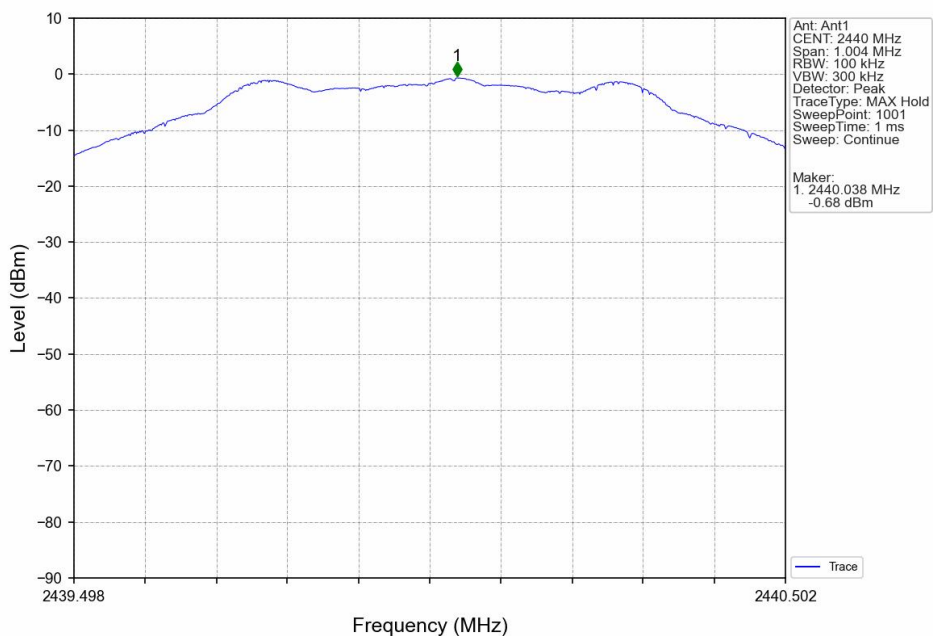




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV

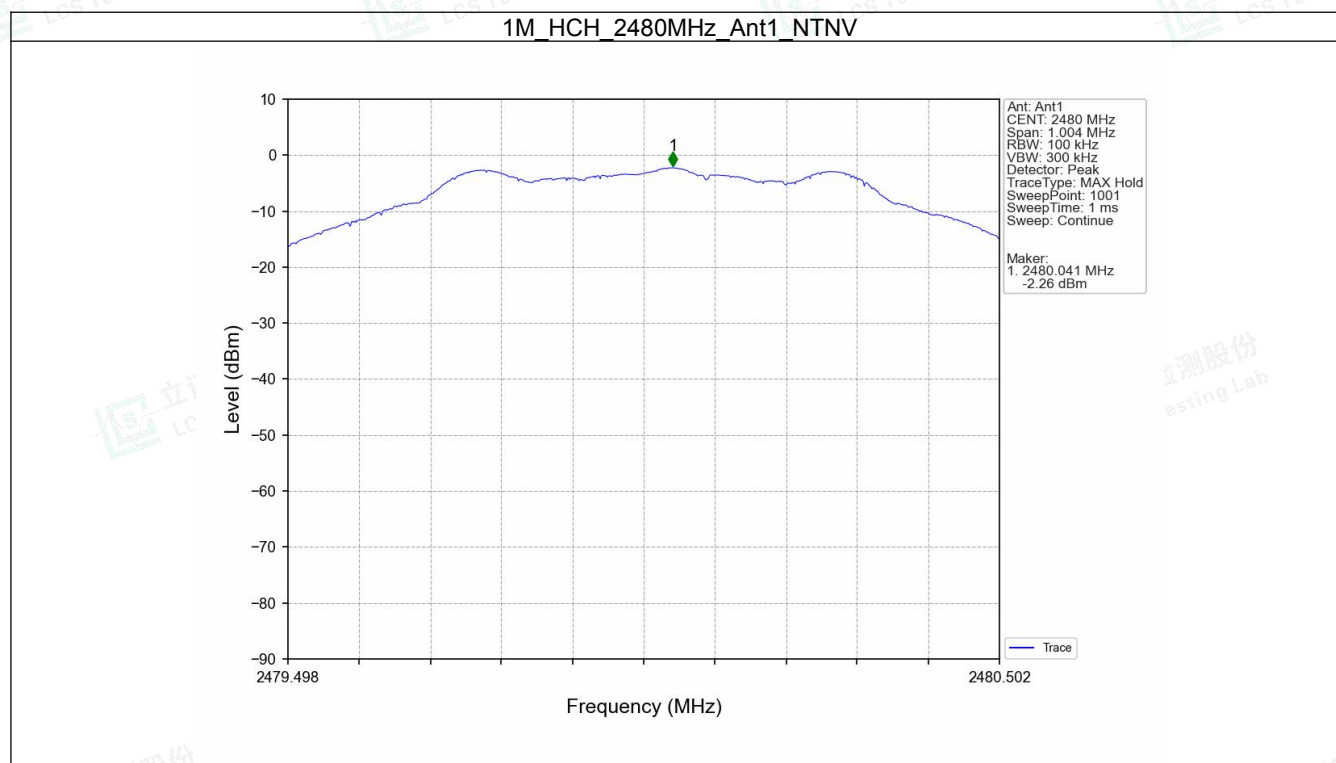


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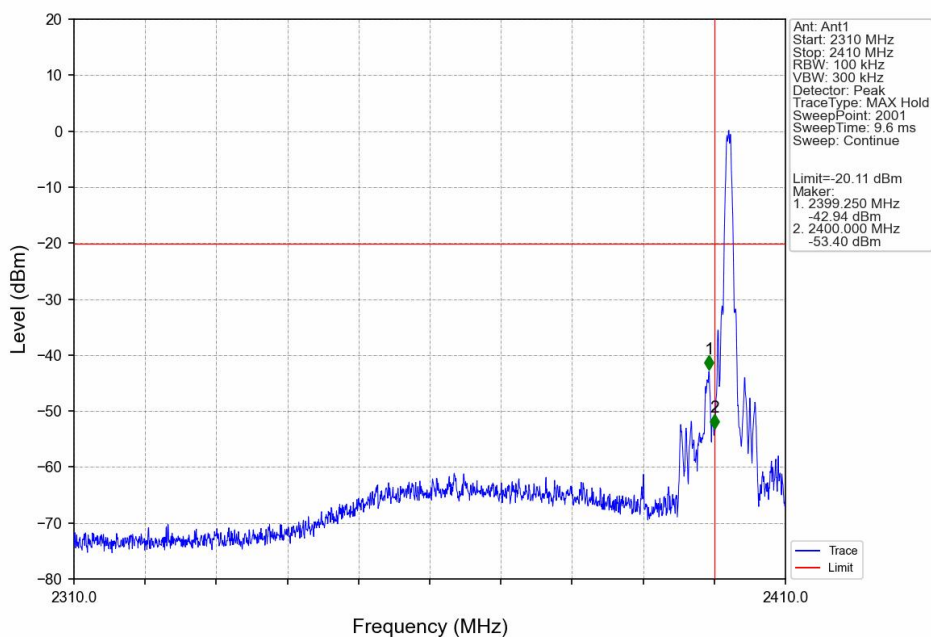
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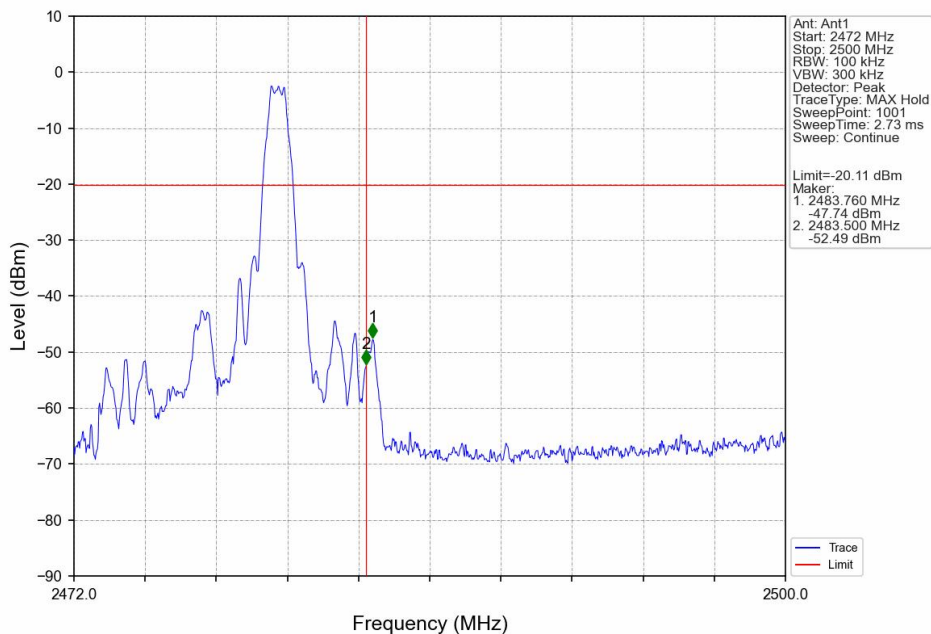
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1M_LCH_2402MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



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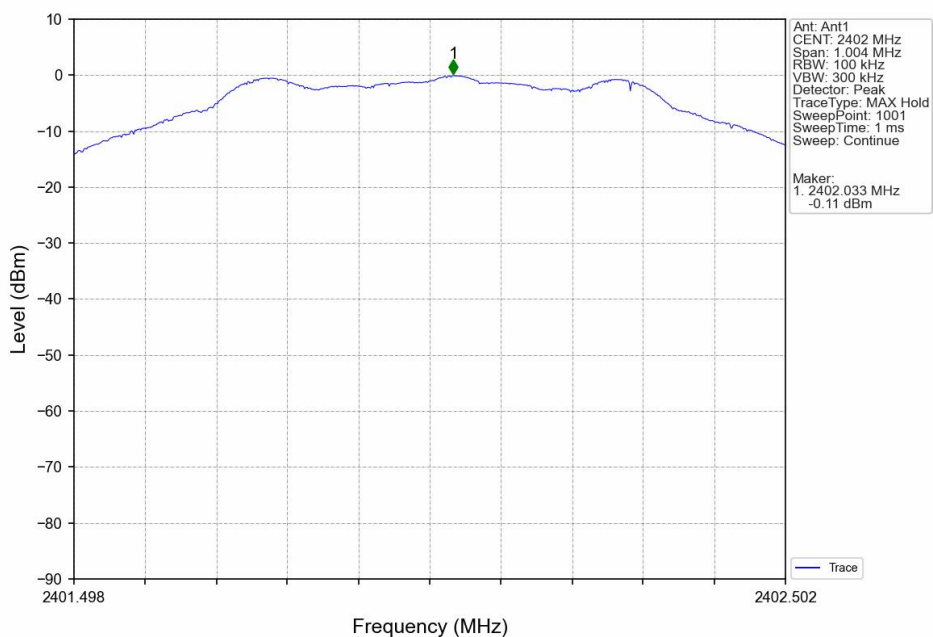
B.5 Conducted RF Spurious Emission

Mode	TX Type	Frequency (MHz)	ANT	Level of Reference (dBm)
1M	SISO	2402	1	-0.11
		2440	1	-0.68
		2480	1	-2.26
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.				

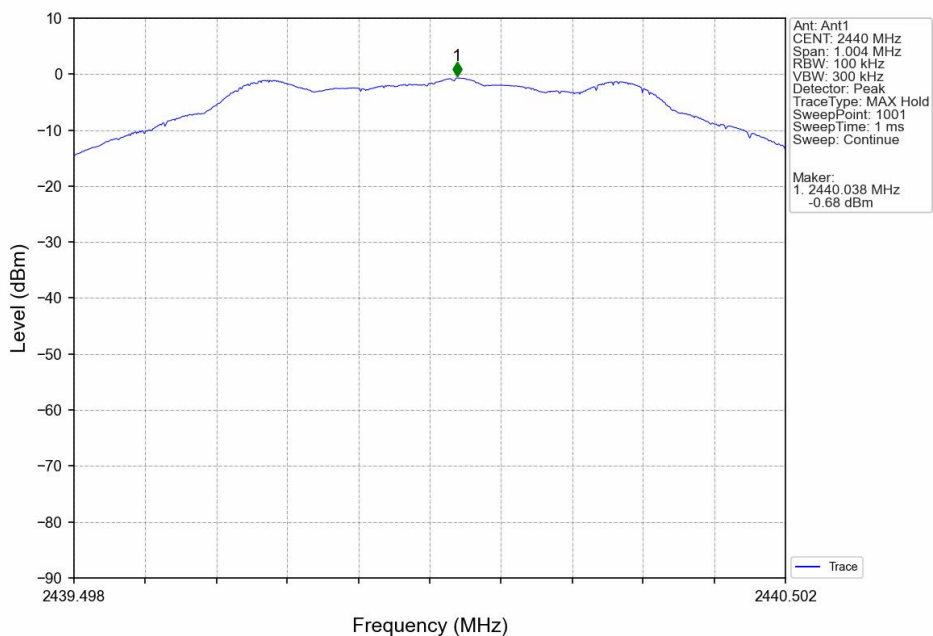




1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV



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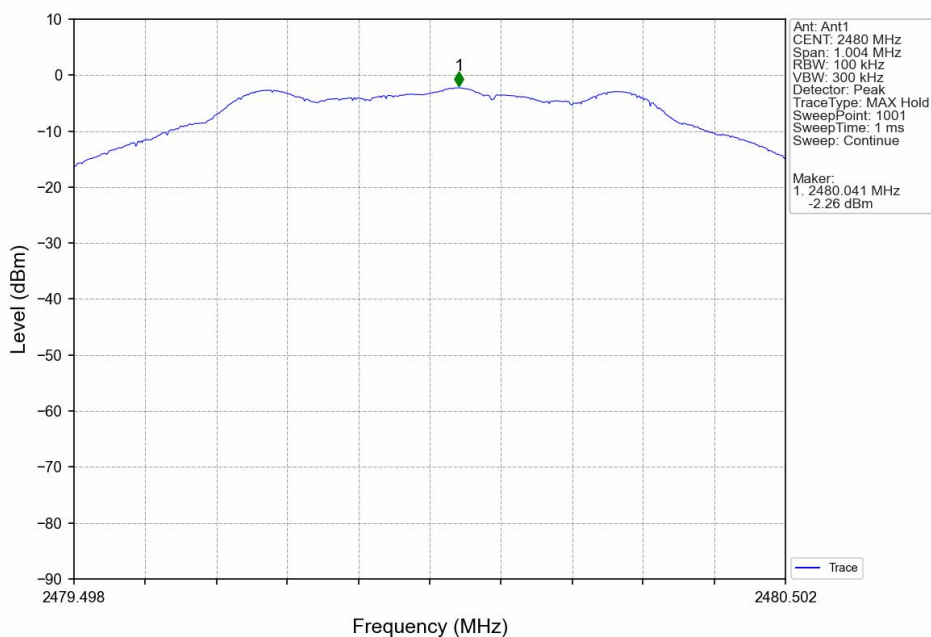
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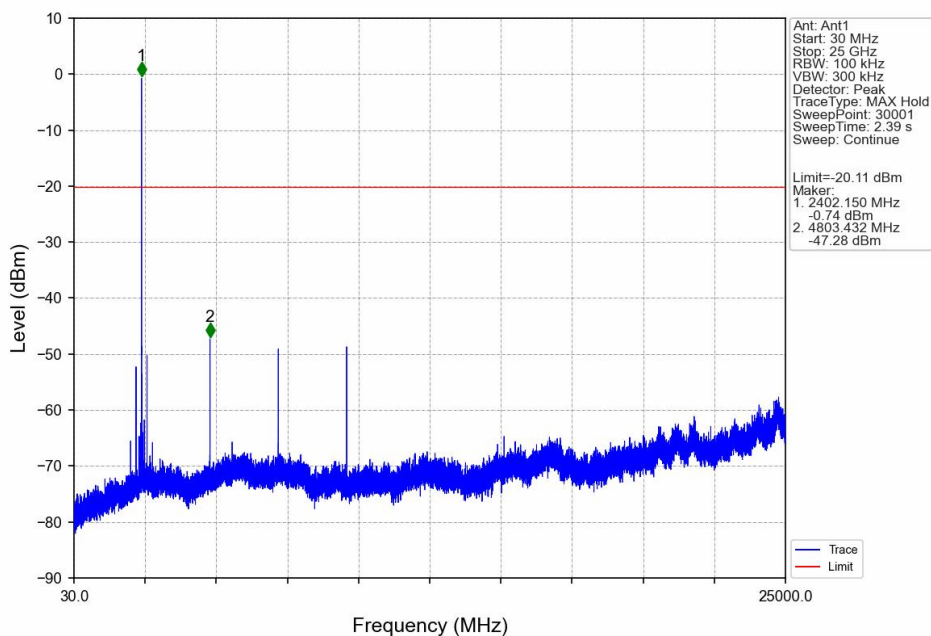
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1M_HCH_2480MHz_Ant1_NTNV



1M_LCH_2402MHz_Ant1_NTNV



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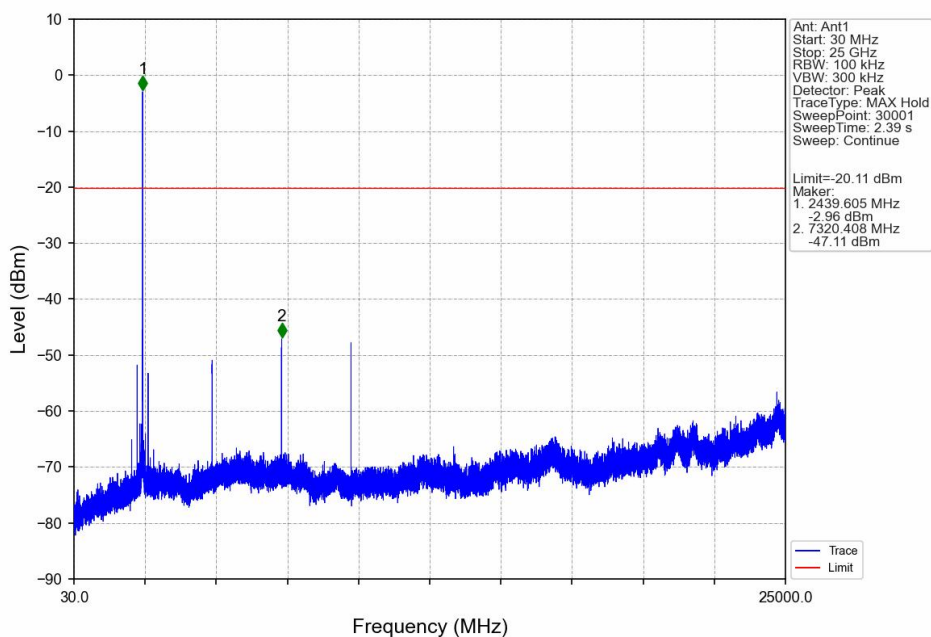
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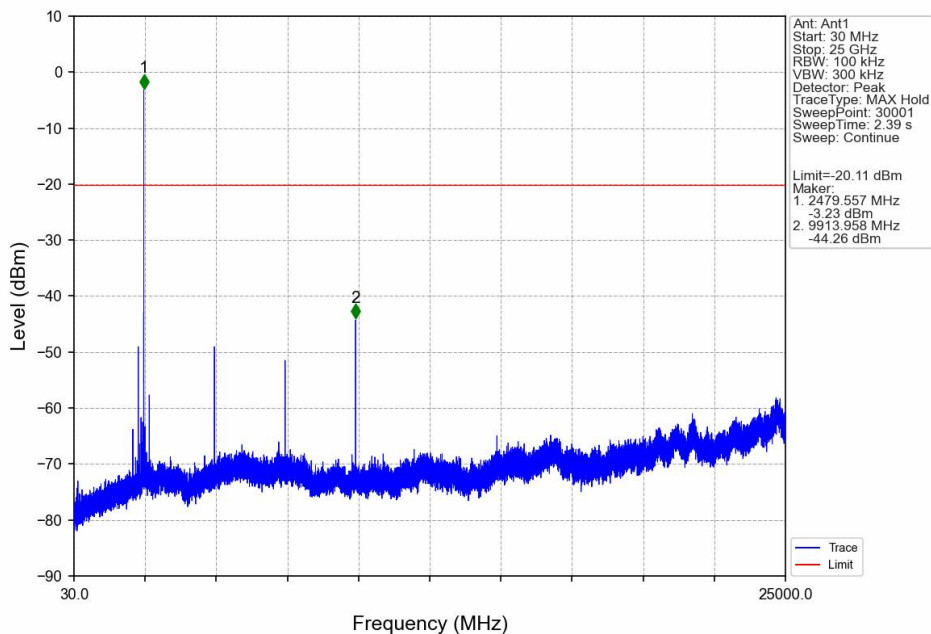
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1M_MCH_2440MHz_Ant1_NTNV



1M_HCH_2480MHz_Ant1_NTNV



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B.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	0.558	1.250	44.64	3.50	0.03
		2440	0.559	1.250	44.72	3.49	0.02
		2480	0.558	1.250	44.64	3.50	0.03



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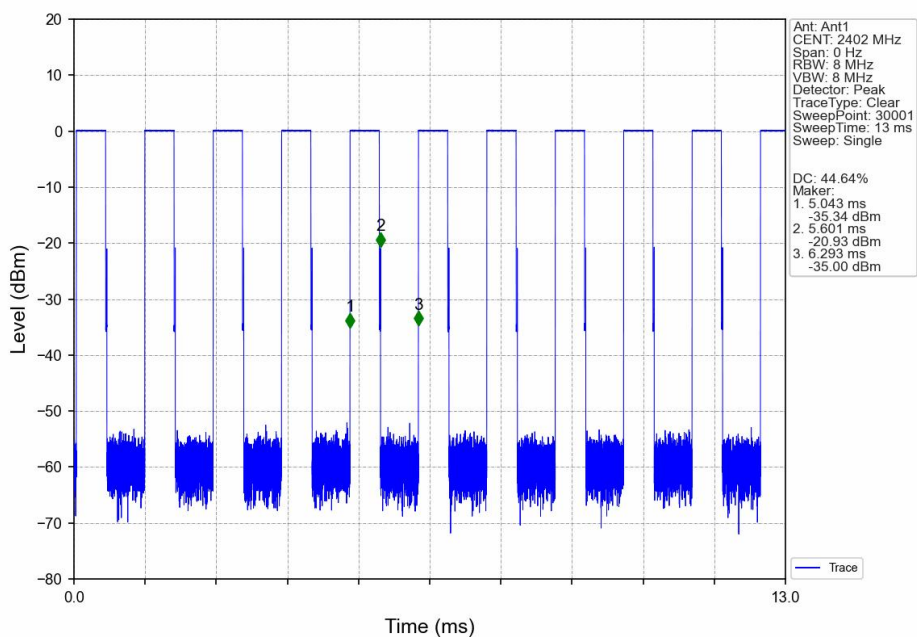
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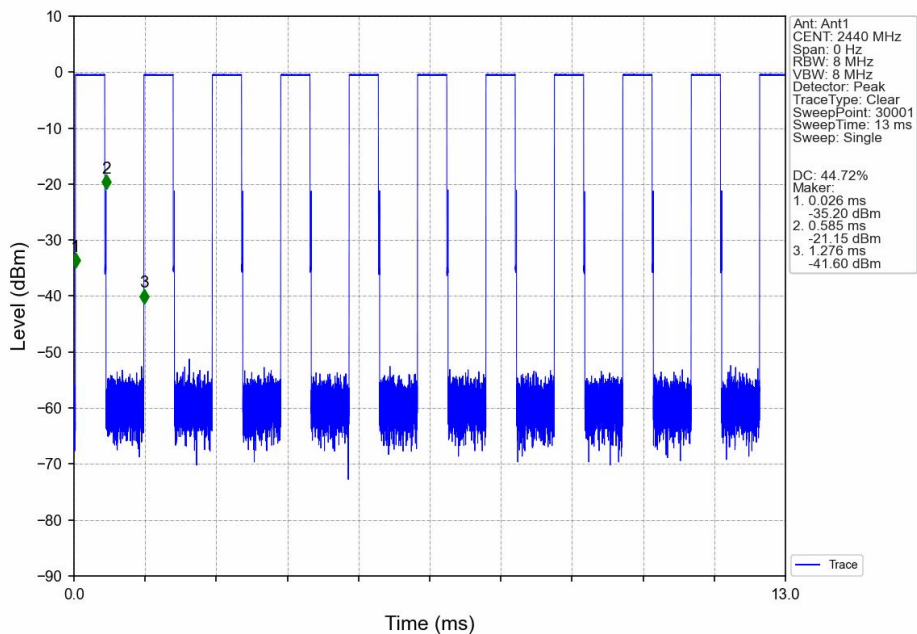
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1M_LCH_2402MHz_Ant1_NTNV



1M_MCH_2440MHz_Ant1_NTNV

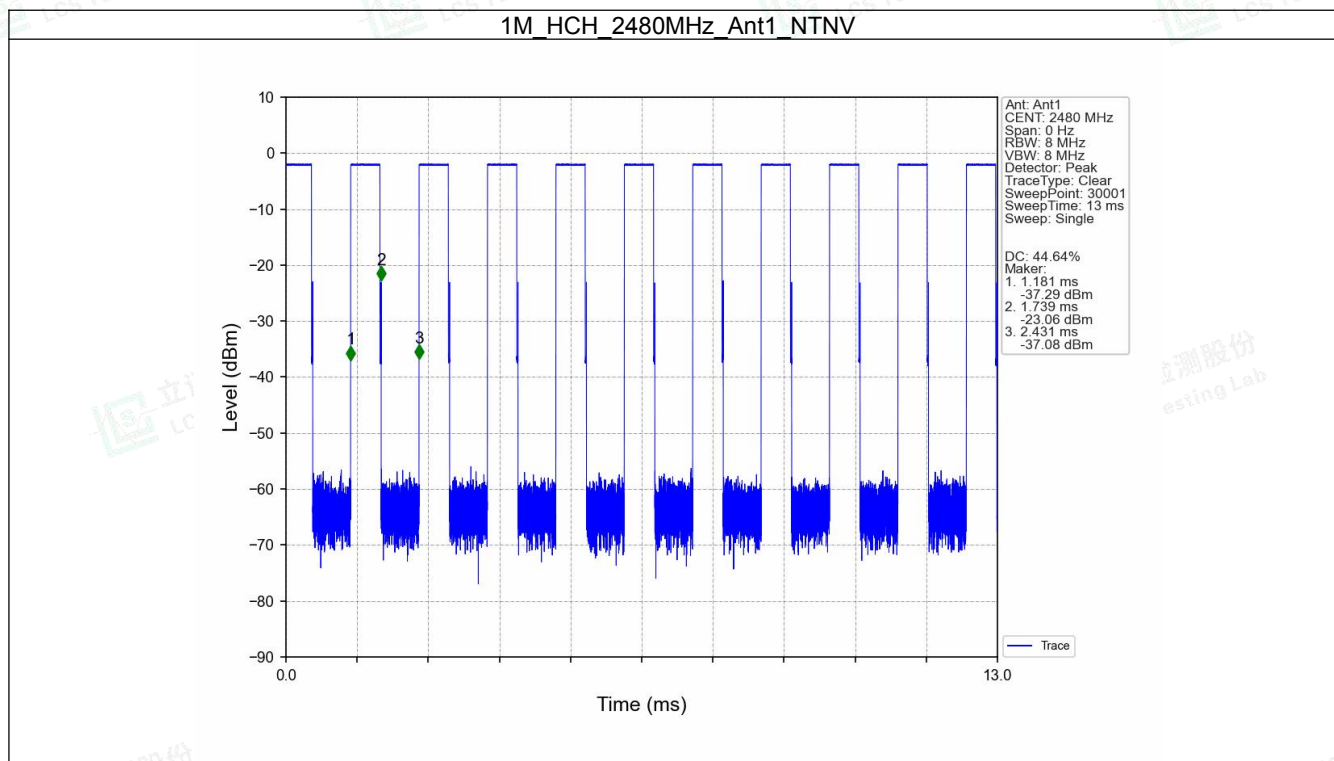


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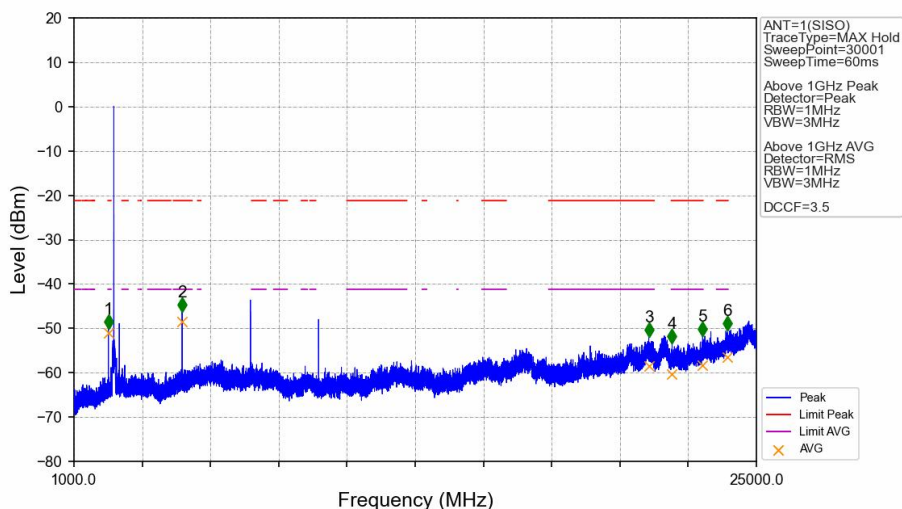
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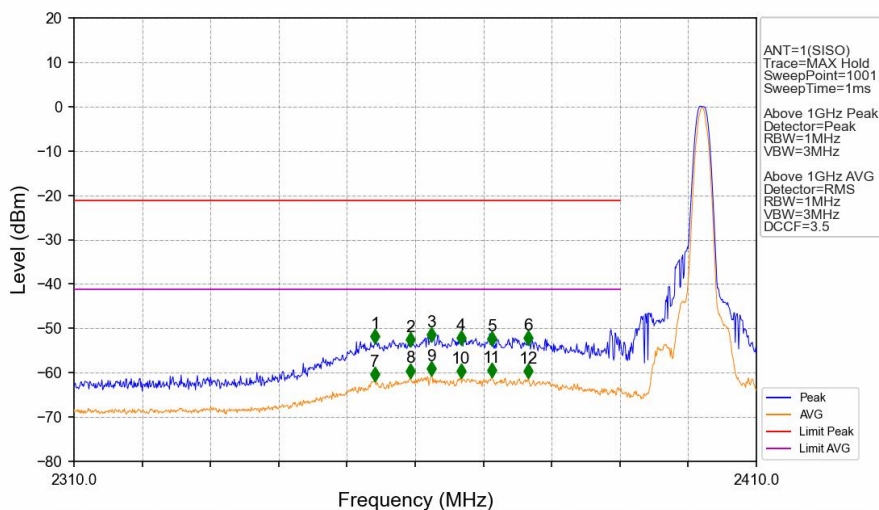
B.7 Restrict Band

1M_LCH_2402MHz_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	2210.4	-50.09	-21.20	28.89	Pass	Peak	7	2210.4	-51.03	-41.20	9.83	Pass	AVG
2	4803.2	-46.17	-21.20	24.97	Pass	Peak	8	4803.2	-48.51	-41.20	7.31	Pass	AVG
3	21214.4	-51.88	-21.20	30.68	Pass	Peak	9	21214.4	-58.47	-41.20	17.27	Pass	AVG
4	22035.2	-53.33	-21.20	32.13	Pass	Peak	10	22035.2	-60.36	-41.20	19.16	Pass	AVG
5	23109.6	-51.68	-21.20	30.48	Pass	Peak	11	23109.6	-58.35	-41.20	17.15	Pass	AVG
6	23992	-50.38	-21.20	29.18	Pass	Peak	12	23992	-56.43	-41.20	15.23	Pass	AVG

1M_LCH_2402MHz_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	2354.100	-53.33	-21.20	32.13	Pass	Peak	7	2354.100	-61.90	-41.20	20.70	Pass	AVG
2	2359.300	-54.00	-21.20	32.80	Pass	Peak	8	2359.300	-61.09	-41.20	19.89	Pass	AVG
3	2362.400	-52.99	-21.20	31.79	Pass	Peak	9	2362.400	-60.68	-41.20	19.48	Pass	AVG
4	2366.700	-53.68	-21.20	32.48	Pass	Peak	10	2366.700	-61.17	-41.20	19.97	Pass	AVG
5	2371.200	-53.85	-21.20	32.65	Pass	Peak	11	2371.200	-60.96	-41.20	19.76	Pass	AVG
6	2376.600	-53.70	-21.20	32.50	Pass	Peak	12	2376.600	-61.18	-41.20	19.98	Pass	AVG

1M_HCH_2480MHz_Ant1_NTNV

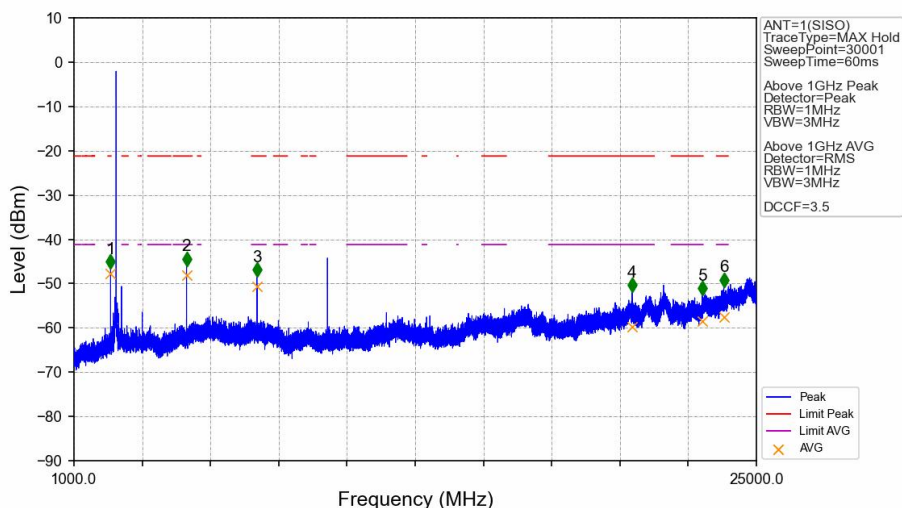


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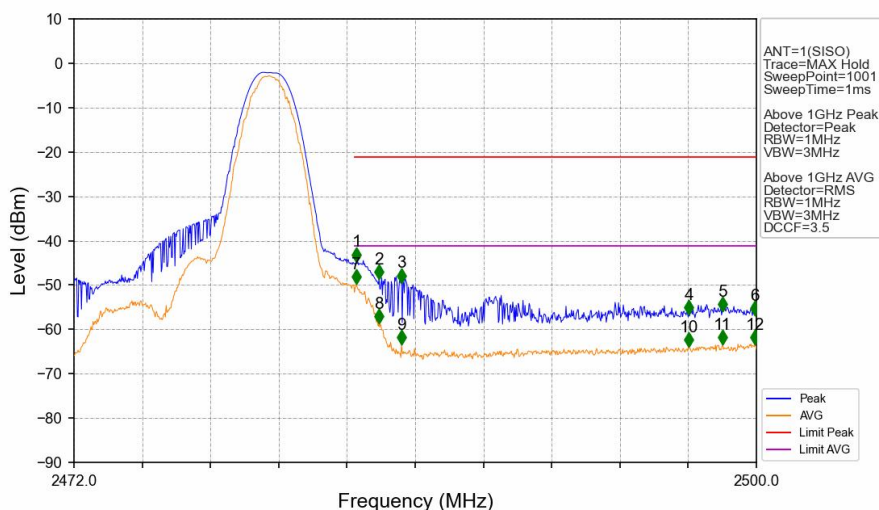
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No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2288	-46.55	-21.20	25.35	Pass	Peak	7	2288	-47.83	-41.20	6.63	Pass	AVG
2	4959.2	-45.96	-21.20	24.76	Pass	Peak	8	4959.2	-48.16	-41.20	6.96	Pass	AVG
3	7434.4	-48.40	-21.20	27.20	Pass	Peak	9	7434.4	-50.70	-41.20	9.50	Pass	AVG
4	20629.6	-51.90	-21.20	30.70	Pass	Peak	10	20629.6	-59.69	-41.20	18.49	Pass	AVG
5	23100	-52.65	-21.20	31.45	Pass	Peak	11	23100	-58.47	-41.20	17.27	Pass	AVG
6	23854.4	-50.70	-21.20	29.50	Pass	Peak	12	23854.4	-57.61	-41.20	16.41	Pass	AVG

1M_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	2483.592	-44.68	-21.20	23.48	Pass	Peak	7	2483.592	-49.66	-41.20	8.46	Pass	AVG
2	2484.516	-48.59	-21.20	27.39	Pass	Peak	8	2484.516	-58.58	-41.20	17.38	Pass	AVG
3	2485.440	-49.41	-21.20	28.21	Pass	Peak	9	2485.440	-63.42	-41.20	22.22	Pass	AVG
4	2497.228	-56.56	-21.20	35.36	Pass	Peak	10	2497.228	-63.88	-41.20	22.68	Pass	AVG
5	2498.600	-55.83	-21.20	34.63	Pass	Peak	11	2498.600	-63.43	-41.20	22.23	Pass	AVG
6	2499.944	-56.79	-21.20	35.59	Pass	Peak	12	2499.944	-63.28	-41.20	22.08	Pass	AVG



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