Appendix RF test data for BT

1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.821	/	Pass
		2441	DH5	1	0.826	/	Pass
		2480	DH5	1	0.809	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.237	/	Pass
		2441	2DH5	1	1.233	/	Pass
		2480	2DH5	1	1.235	/	Pass
8DPSK	SISO	2402	3DH5	1	1.231	/	Pass
		2441	3DH5	1	1.229	/	Pass
		2480	3DH5	1	1.228	/	Pass

1.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.884	/	Pass
		2441	DH5	1	0.884	/	Pass
		2480	DH5	1	0.883	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.352	/	Pass
		2441	2DH5	1	1.358	/	Pass
		2480	2DH5	1	1.359	/	Pass
8DPSK	SISO	2402	3DH5	1	1.344	/	Pass
		2441	3DH5	1	1.345	/	Pass
		2480	3DH5	1	1.344	/	Pass

1.2 Test Graph

1.2.1 OBW

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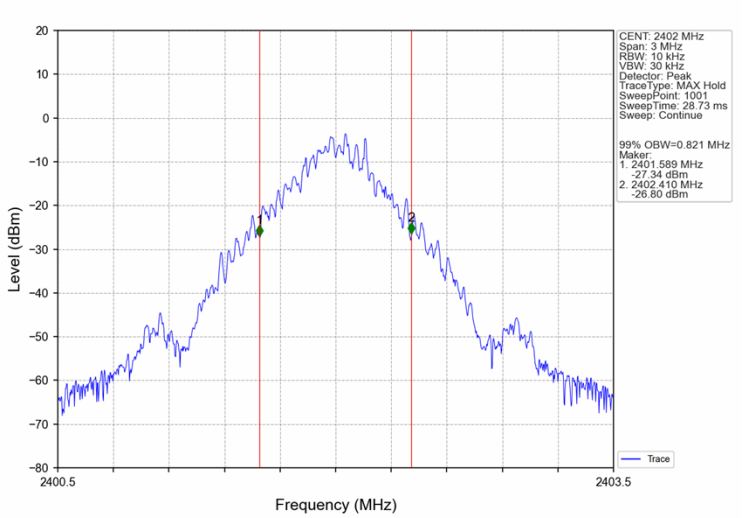
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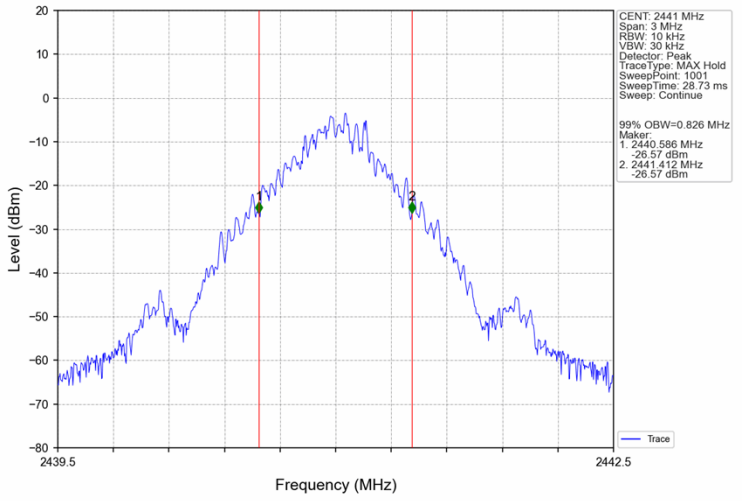

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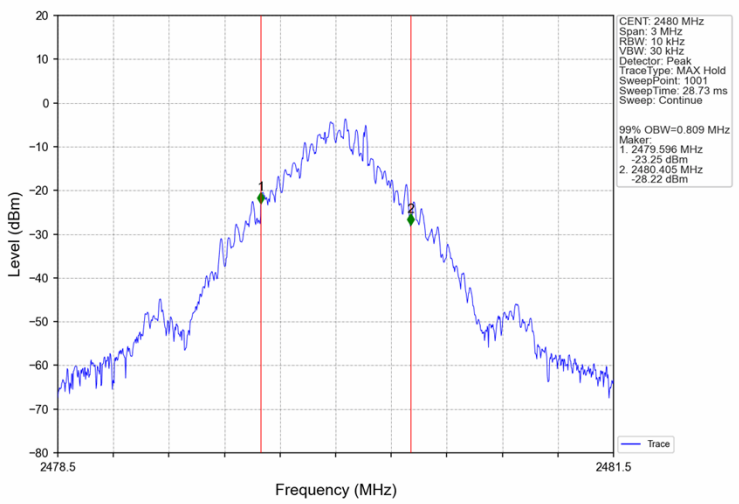
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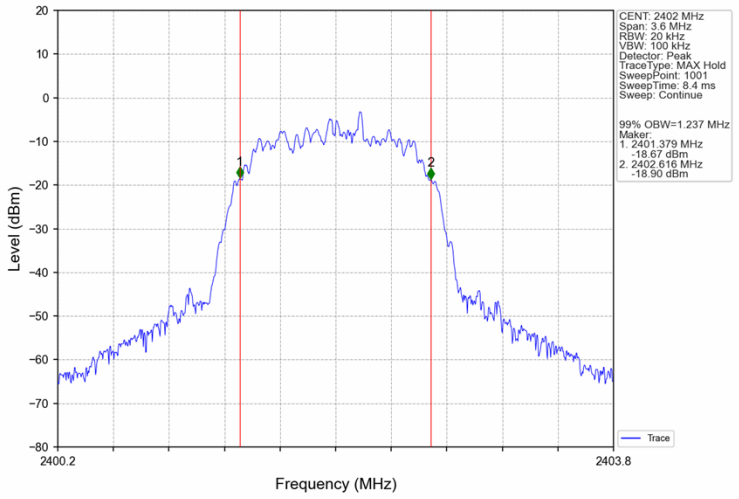

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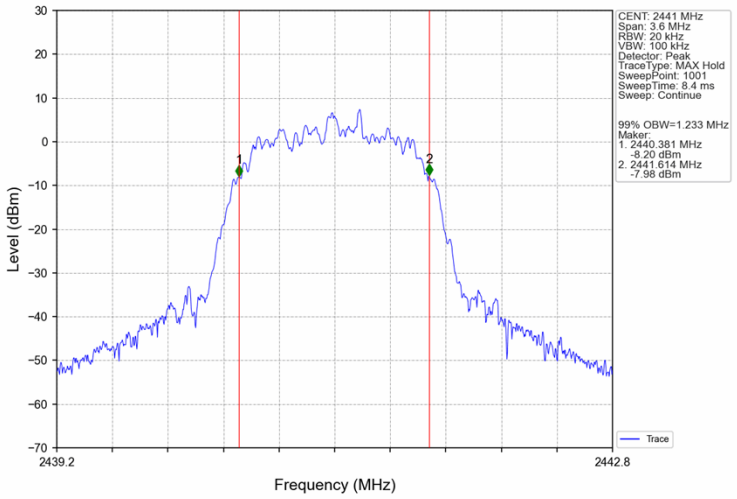
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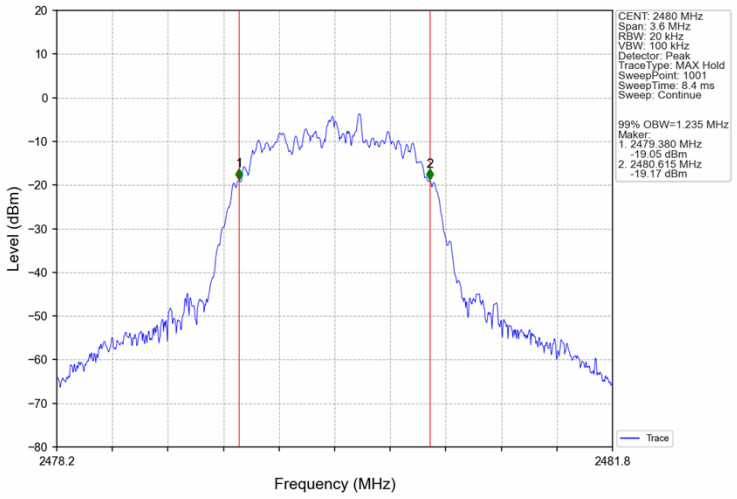

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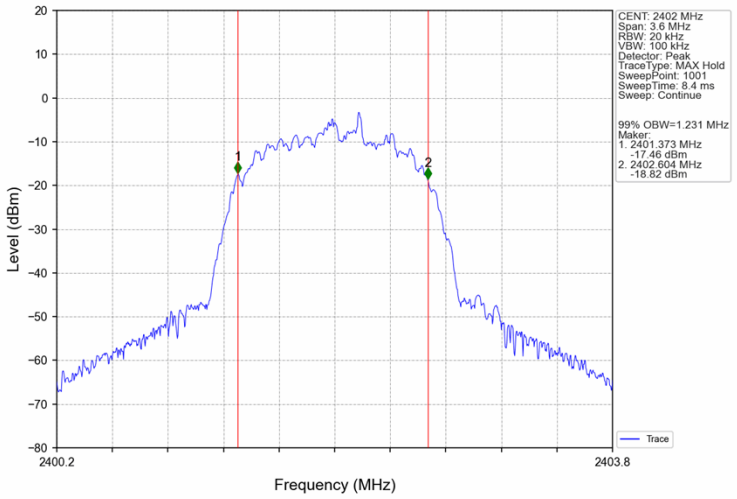
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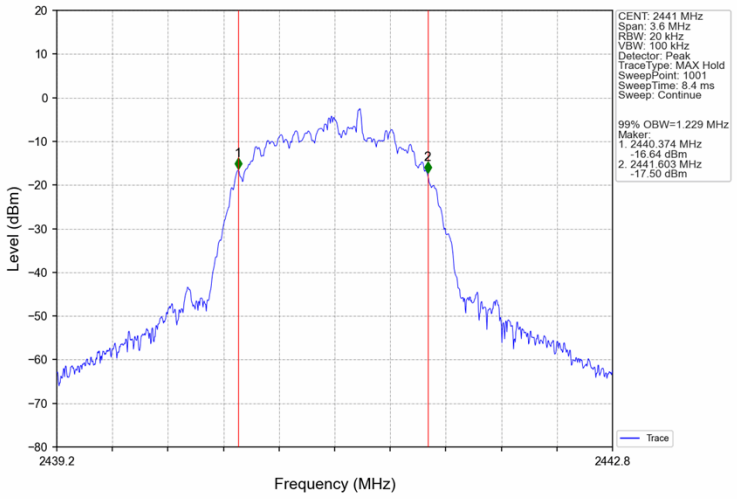

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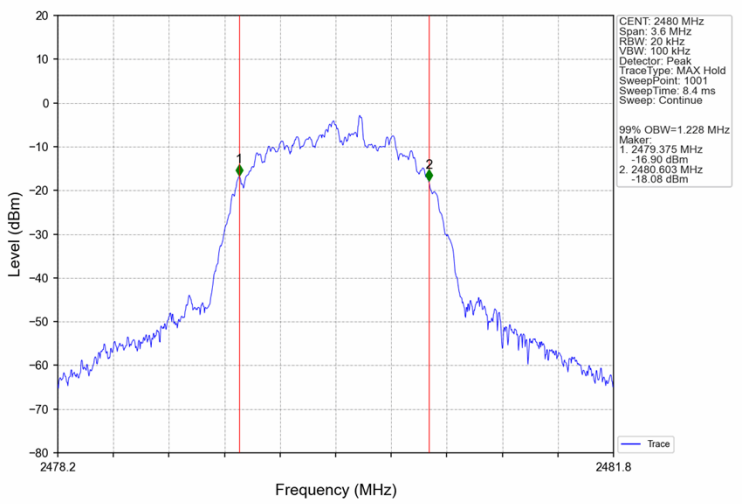

1.2.2 20dB BW

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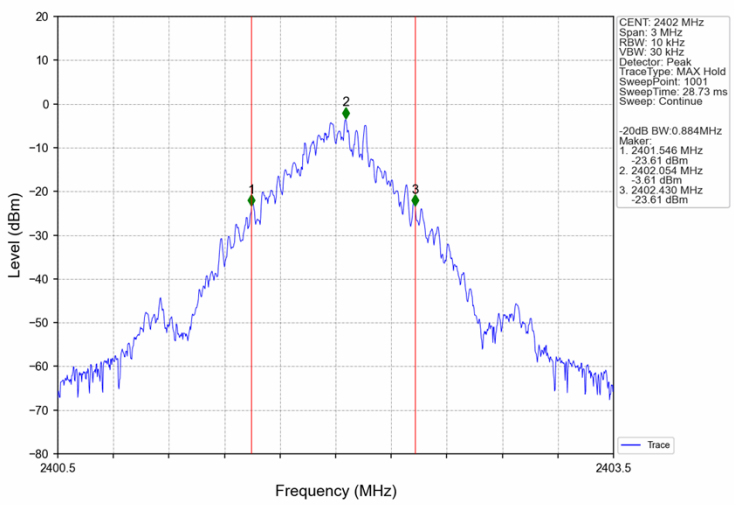
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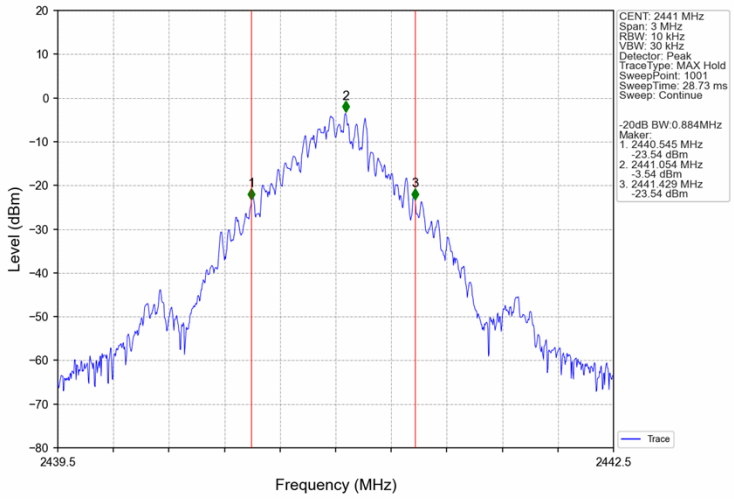

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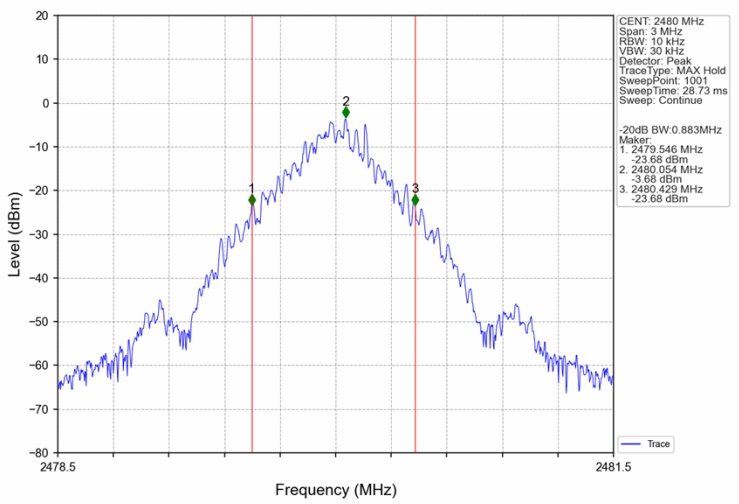

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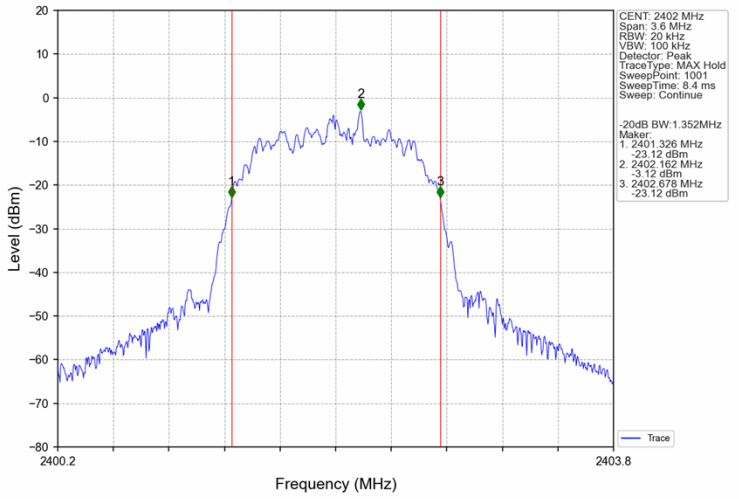

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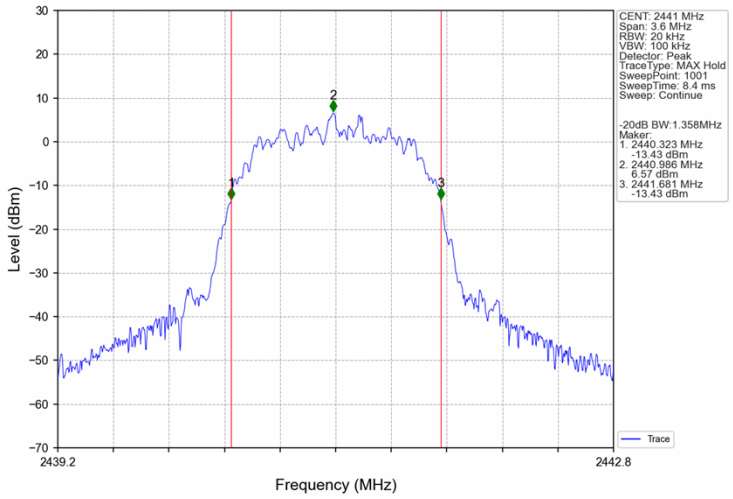
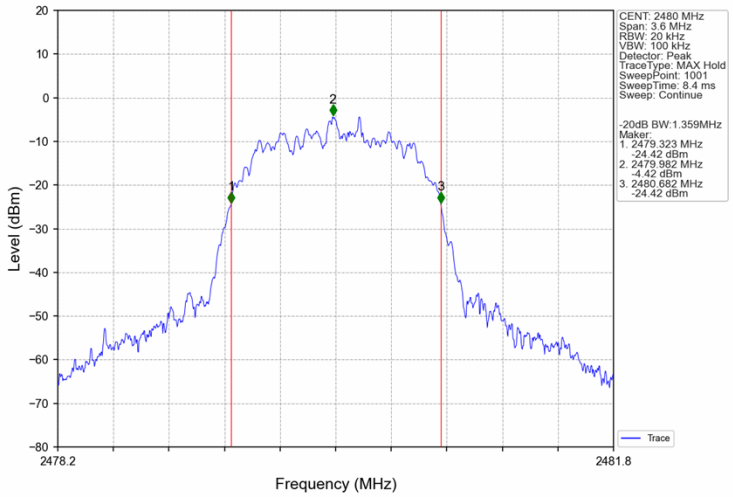


Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV



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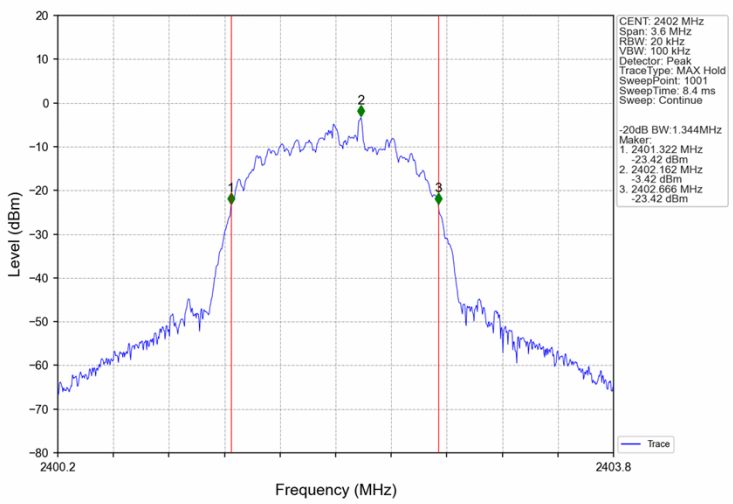
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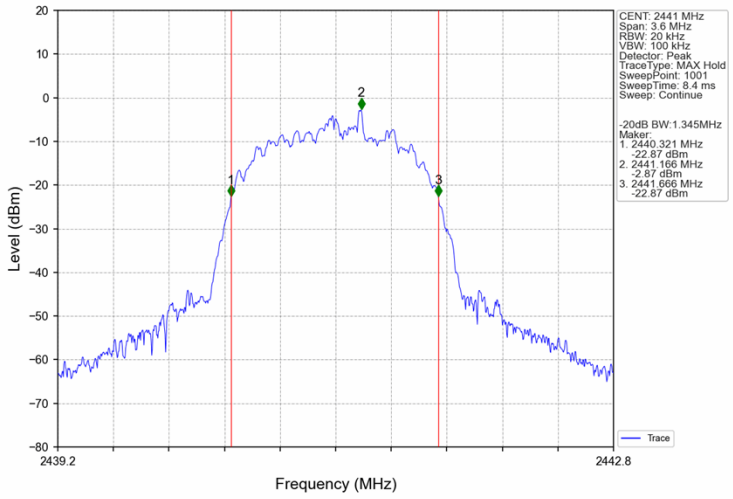

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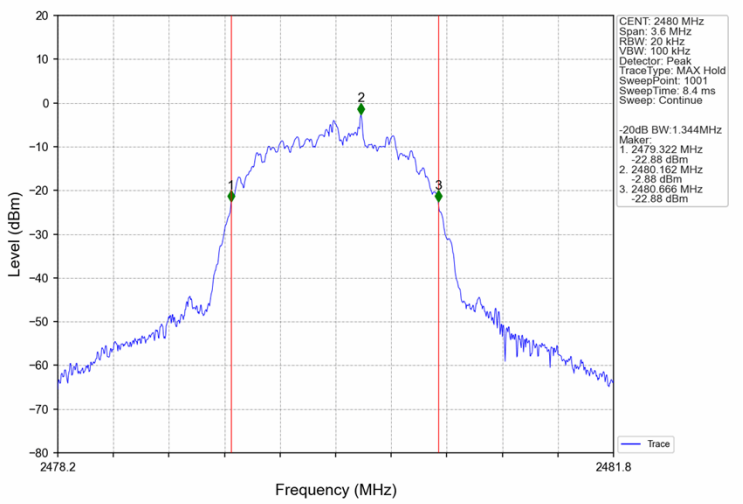

2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Power

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	1.94	<=30	Pass
		2441	DH5	2.05	<=30	Pass
		2480	DH5	1.83	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	3.04	<=20.97	Pass
		2441	2DH5	2.67	<=20.97	Pass
		2480	2DH5	2.68	<=20.97	Pass
8DPSK	SISO	2402	3DH5	2.83	<=20.97	Pass
		2441	3DH5	3.74	<=20.97	Pass
		2480	3DH5	3.52	<=20.97	Pass
Note1: Antenna Gain: Ant1: -0.58dBi;						

2.2 Test Graph

2.2.1 Power

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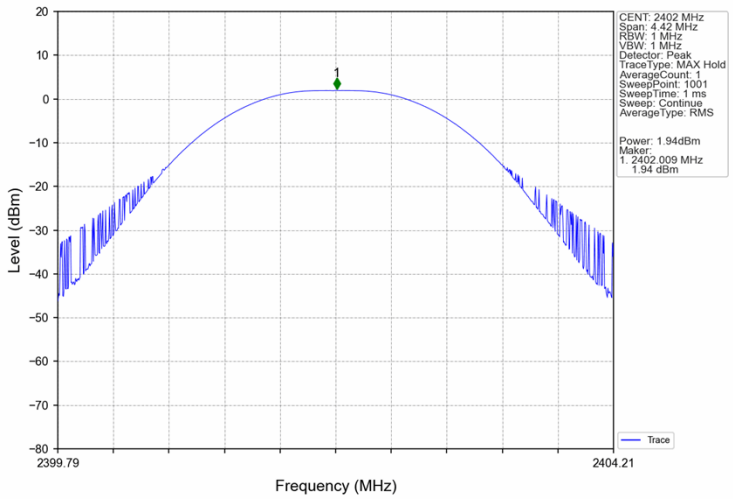
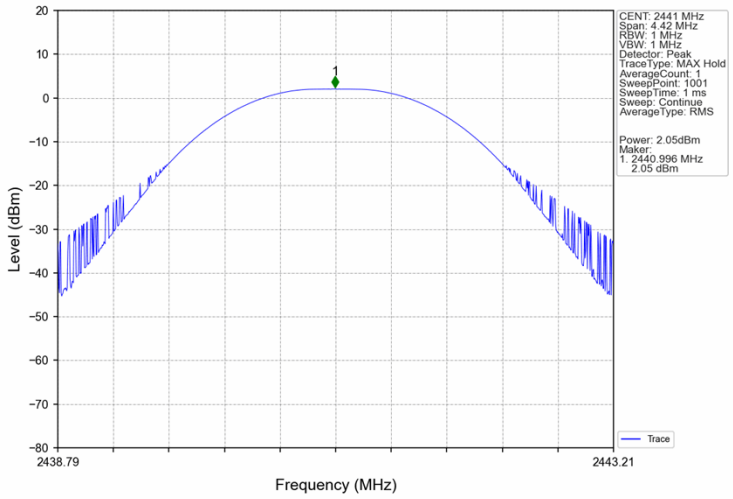

GFSK_DH5_MCH_2441MHz_Ant1_NTNV


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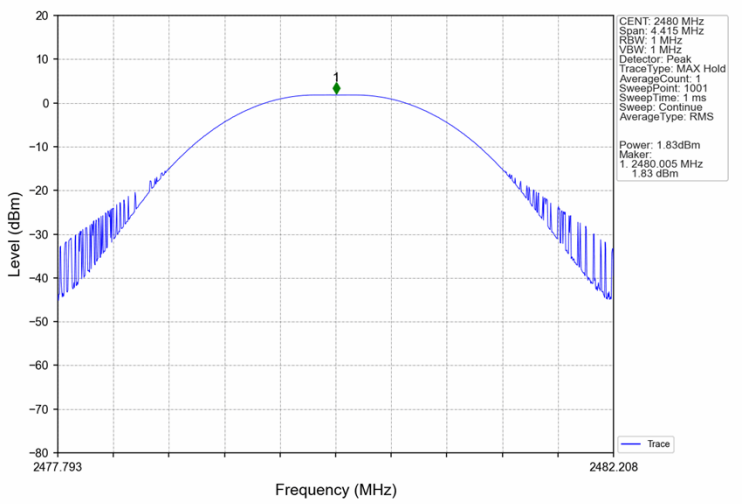
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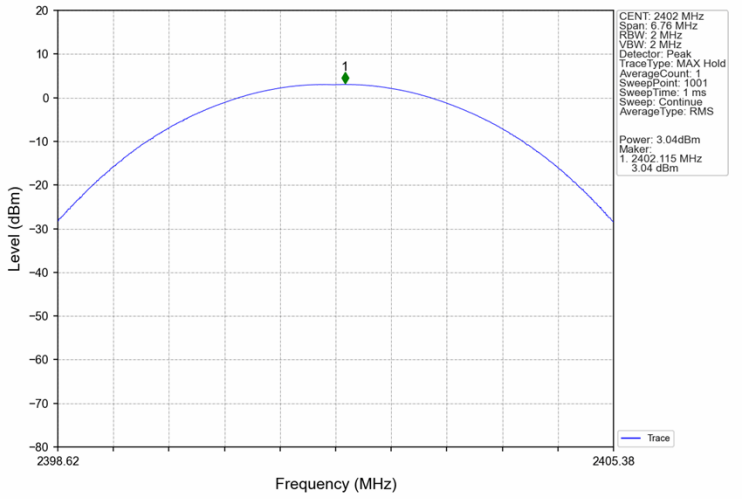

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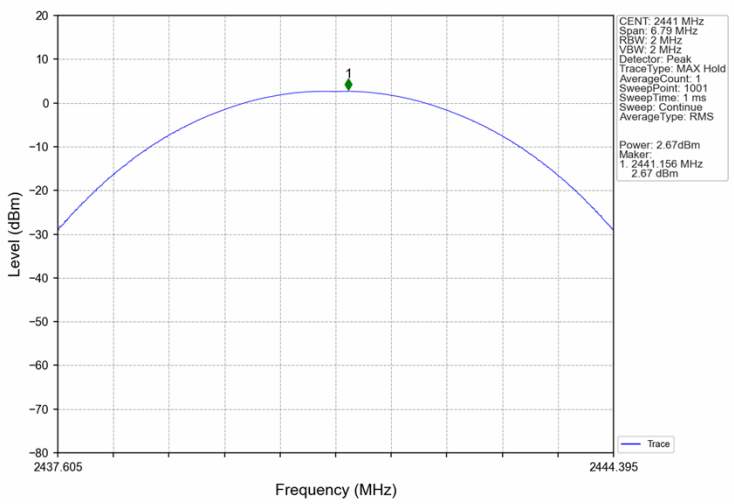
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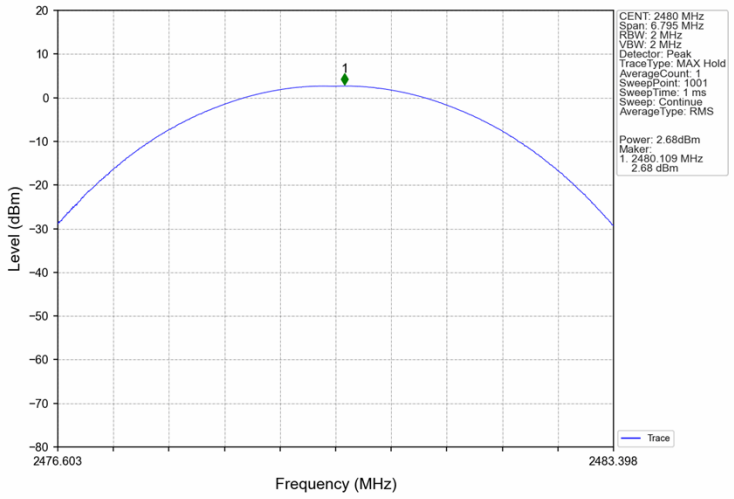
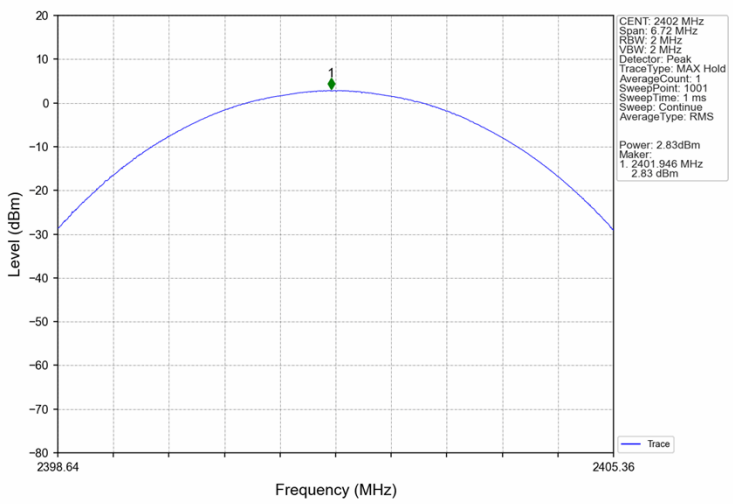


8DPSK_3DH5_LCH_2402MHz_Ant1_NTNV

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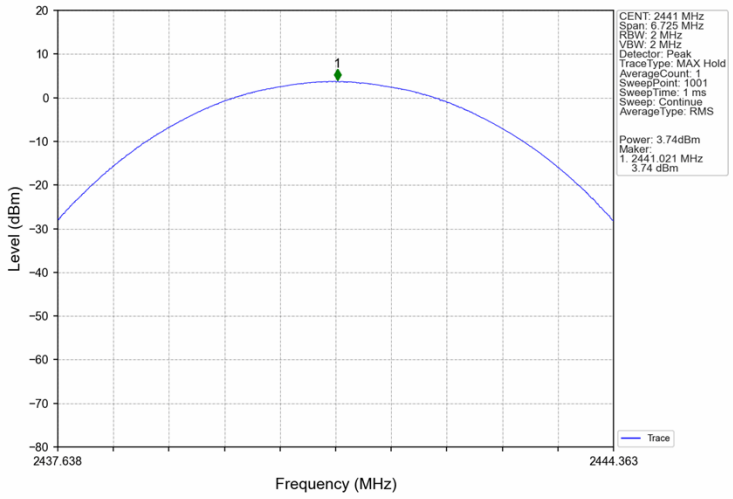

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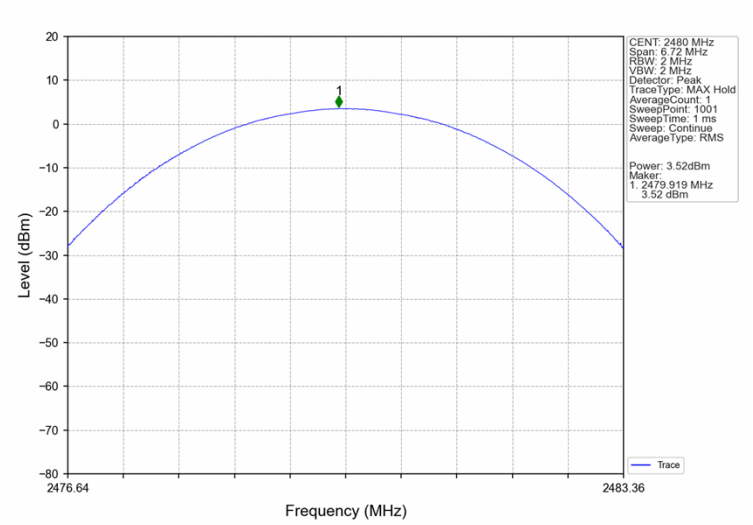

3. Carrier Frequency Separation

3.1 Test Result

3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	0.992	0.884	>=0.884	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	1.032	1.359	>=0.906	Pass
8DPSK	SISO	HOPP	3DH5	1.025	1.345	>=0.897	Pass

3.2 Test Graph

3.2.1 Ant1

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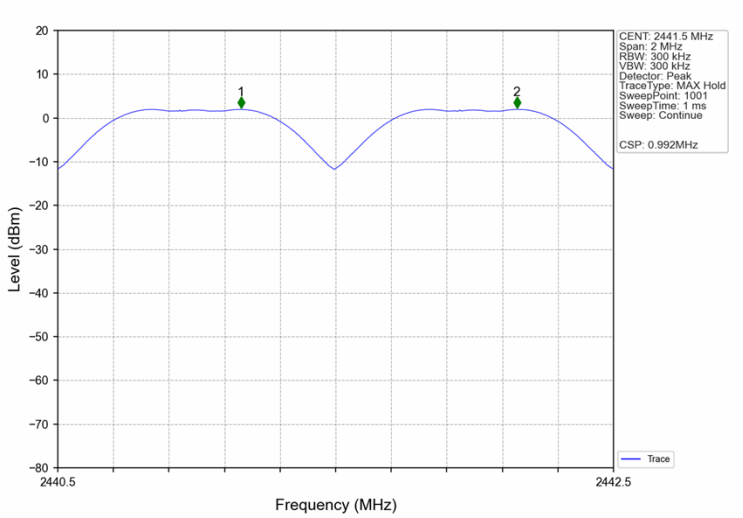
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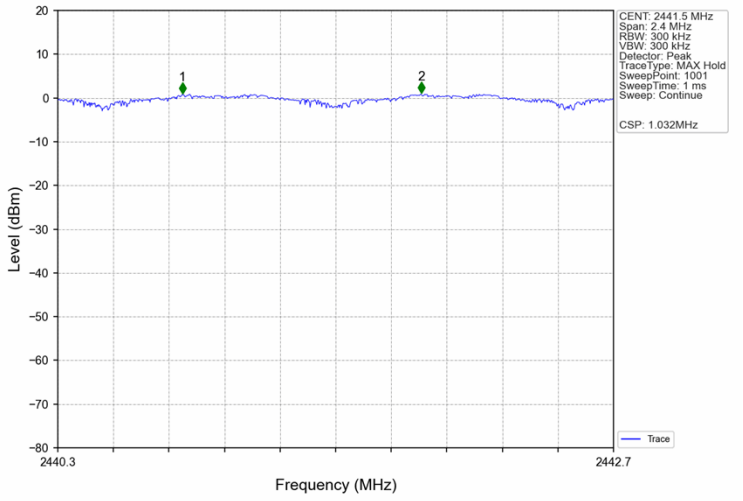
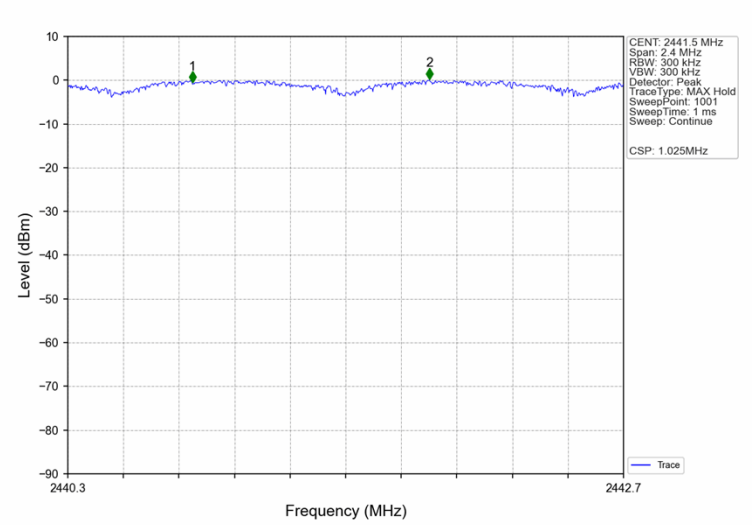


8DPSK_3DH5_HOPP_Ant1_NTNV


4. Number of Hopping Frequencies

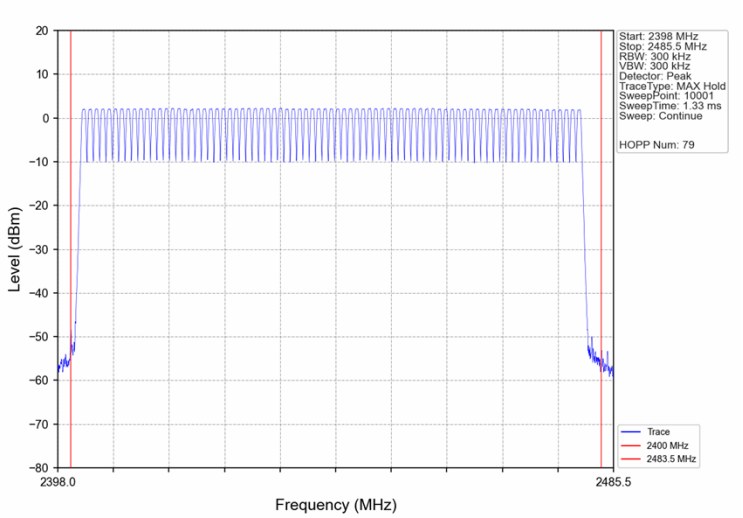
4.1 Test Result

4.1.1 HoppNum

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass
8DPSK	SISO	HOPP	3DH5	79	>=15	Pass

4.2 Test Graph

4.2.1 HoppNum

GFSK_DH5_HOPP_Ant1_NTNV

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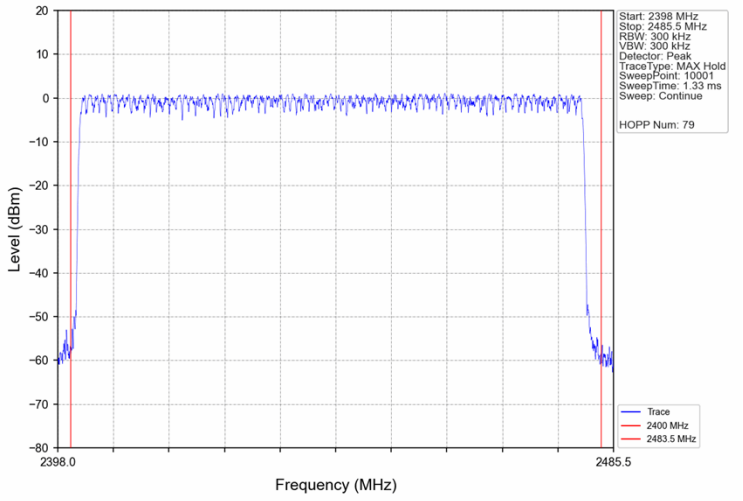
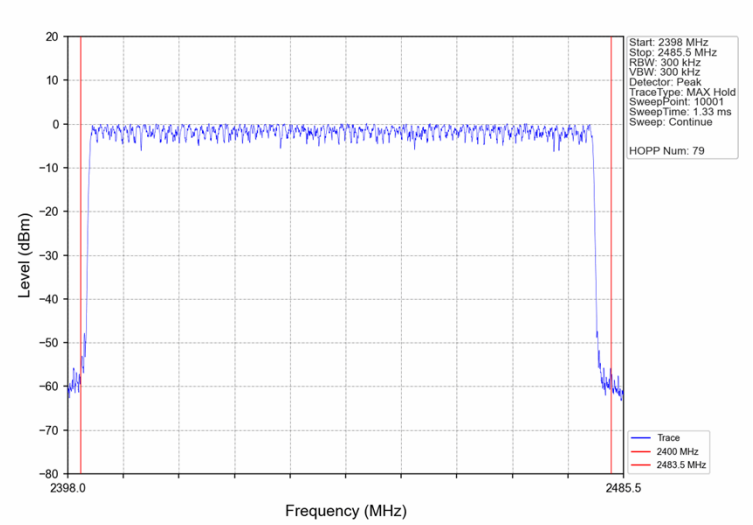


8DPSK_3DH5_HOPP_Ant1_NTNV


5. Time of Occupancy (Dwell Time)

5.1 Test Result

5.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.382	31.600	319	121.858	<=400	Pass
			DH3	1.638	31.600	163	266.994	<=400	Pass
			DH5	2.892	31.600	99	286.308	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.382	31.600	320	122.240	<=400	Pass
			2DH3	1.644	31.600	159	261.396	<=400	Pass
			2DH5	2.884	31.600	108	311.472	<=400	Pass
8DPSK	SISO	HOPP	3DH1	0.384	31.600	320	122.880	<=400	Pass
			3DH3	1.634	31.600	175	285.950	<=400	Pass
			3DH5	2.884	31.600	96	276.864	<=400	Pass

5.2 Test Graph

5.2.1 Ant1

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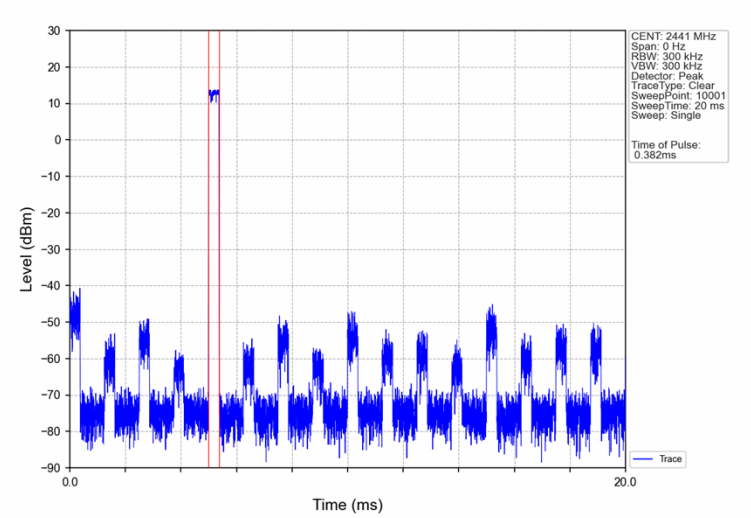
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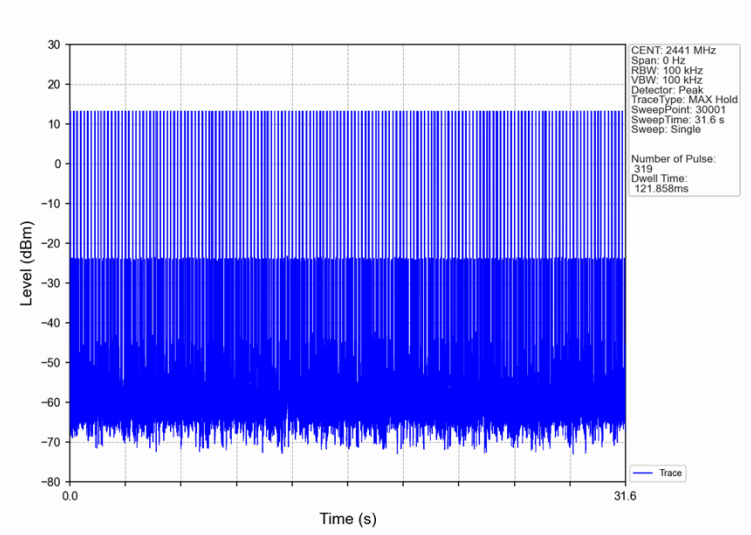

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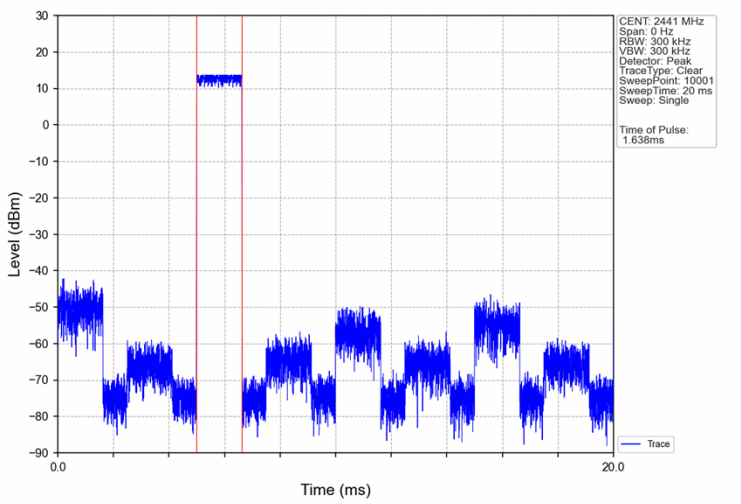
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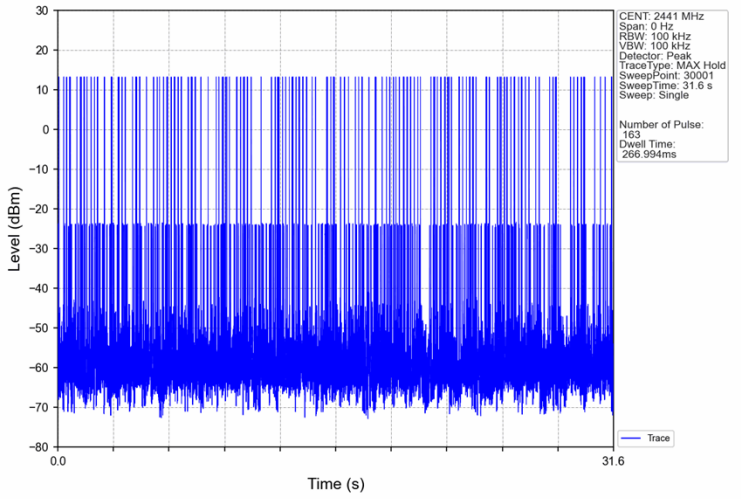

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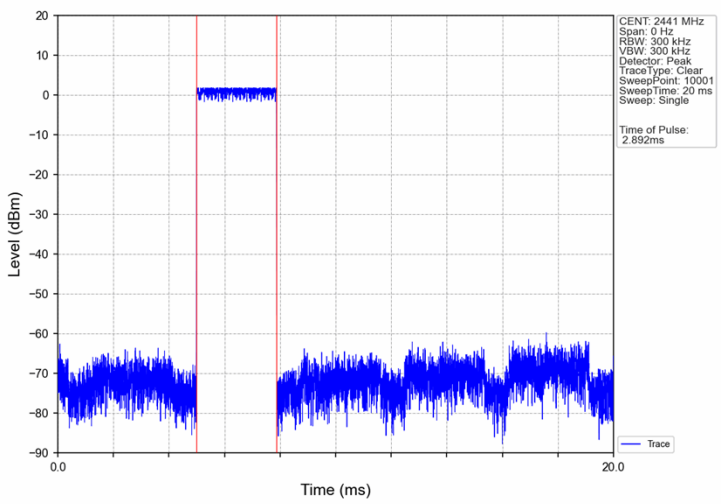
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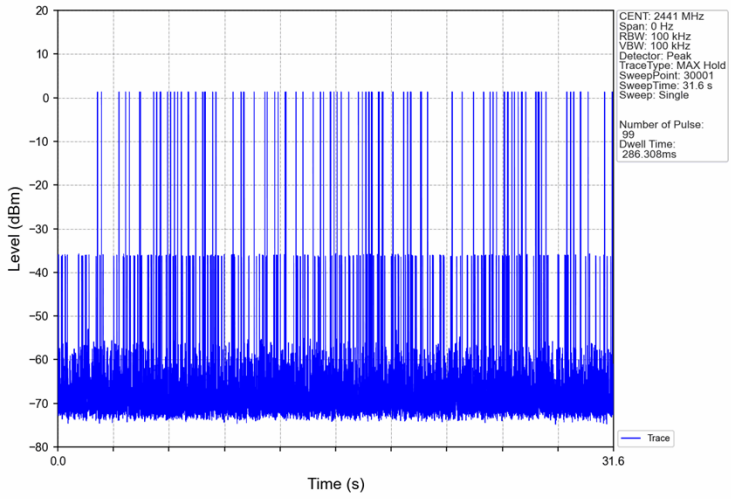

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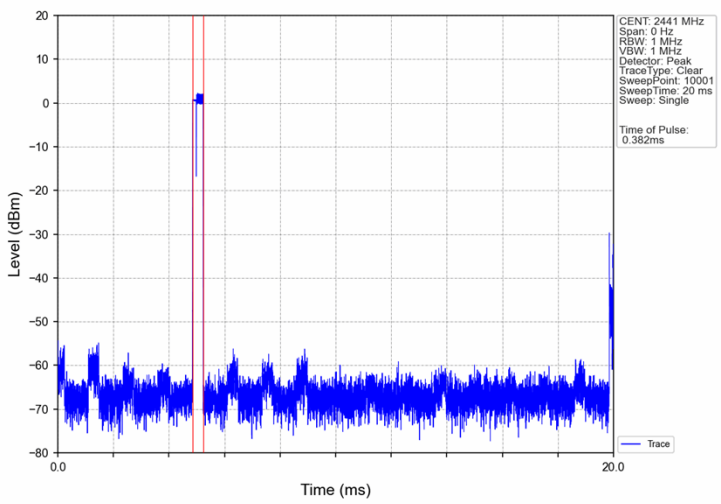
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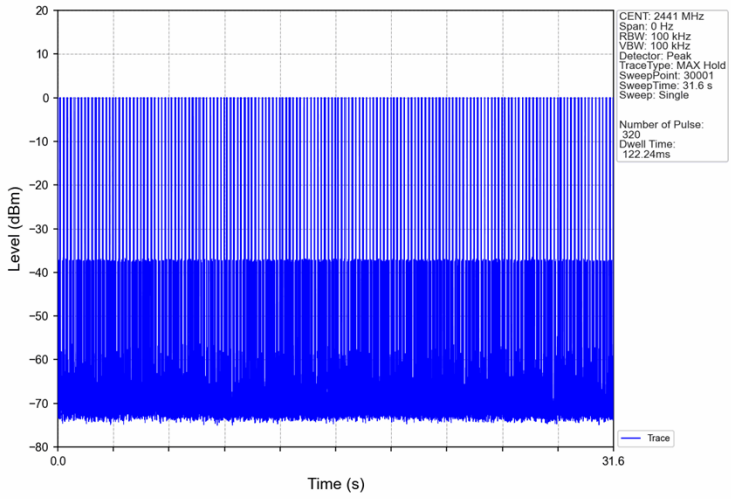

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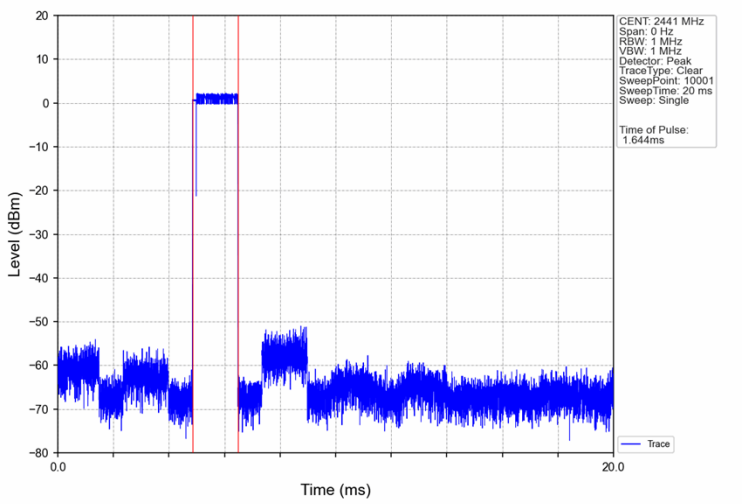
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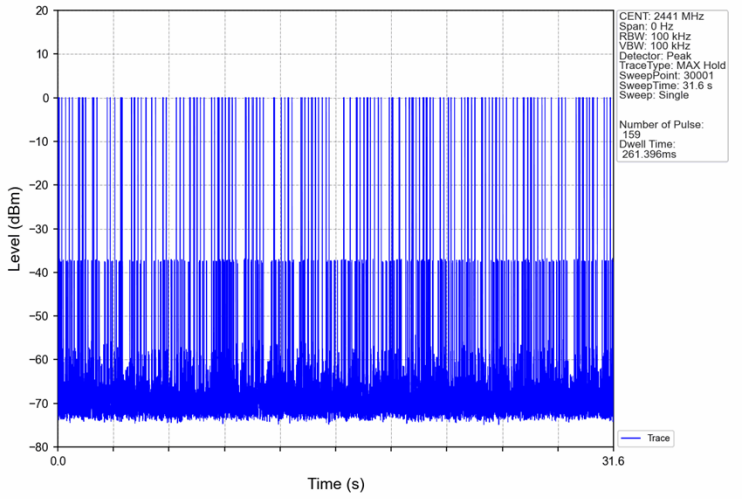

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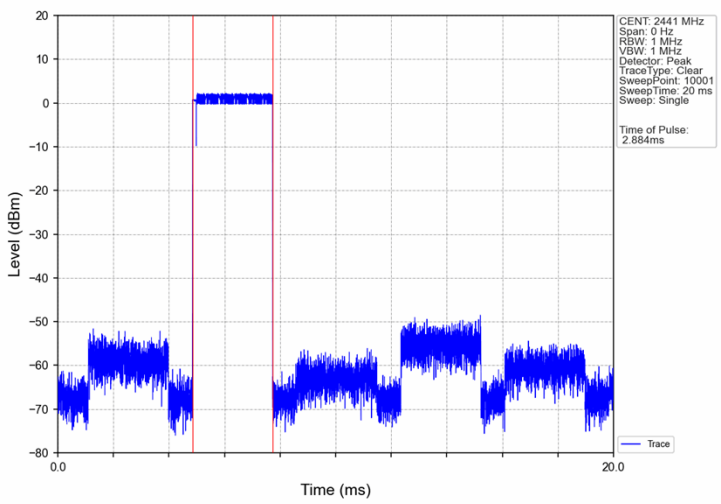
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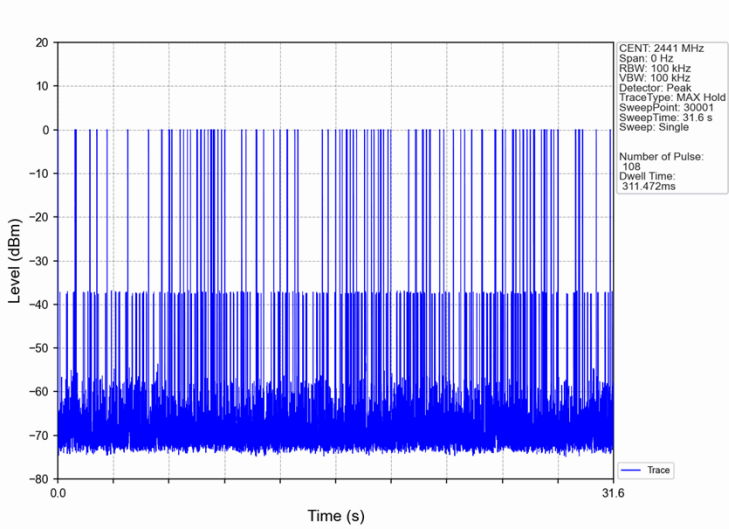

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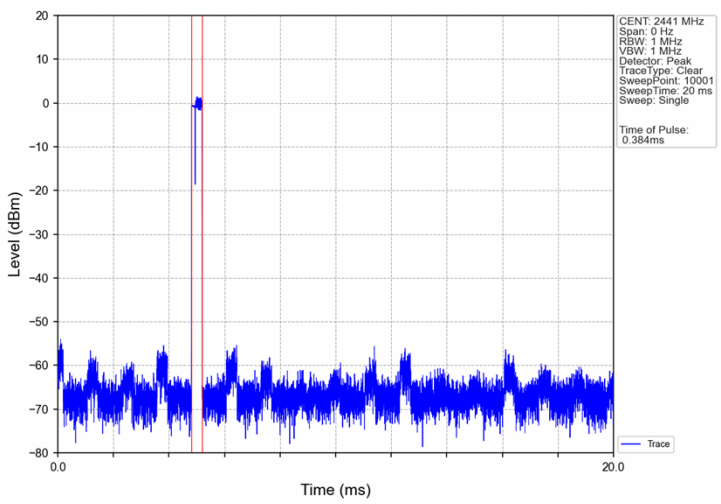
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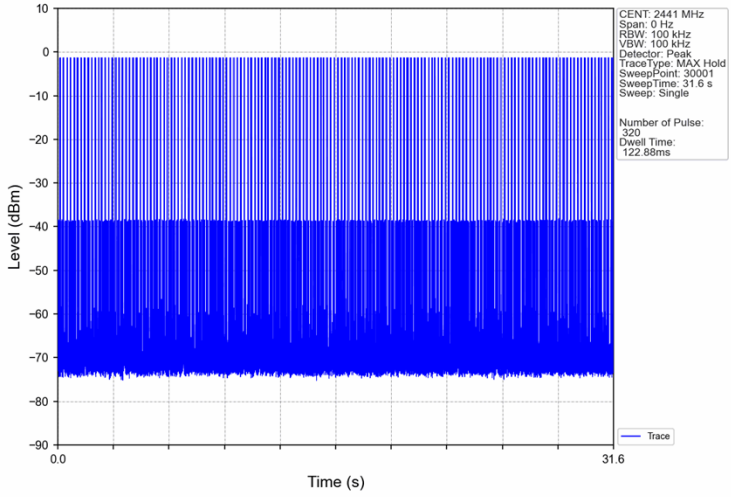

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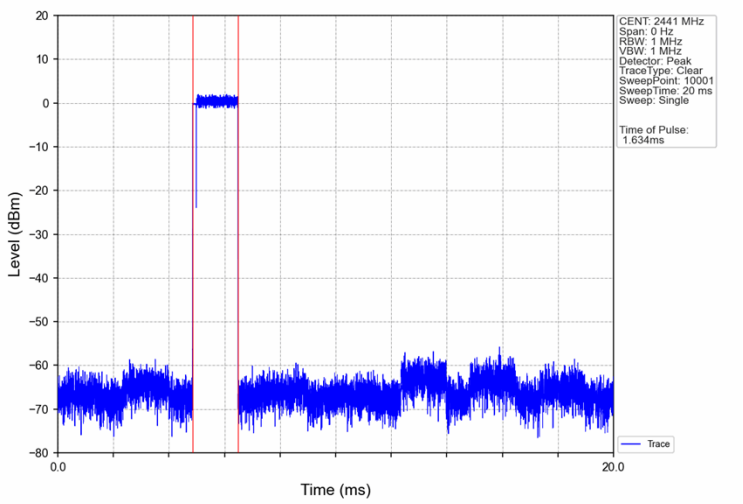
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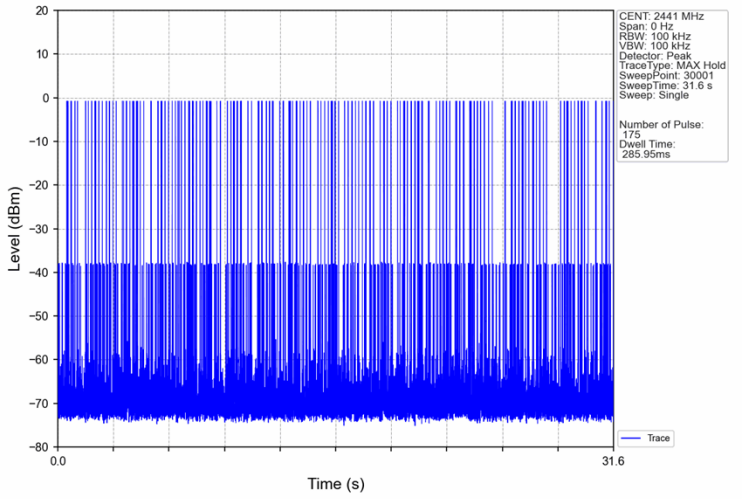

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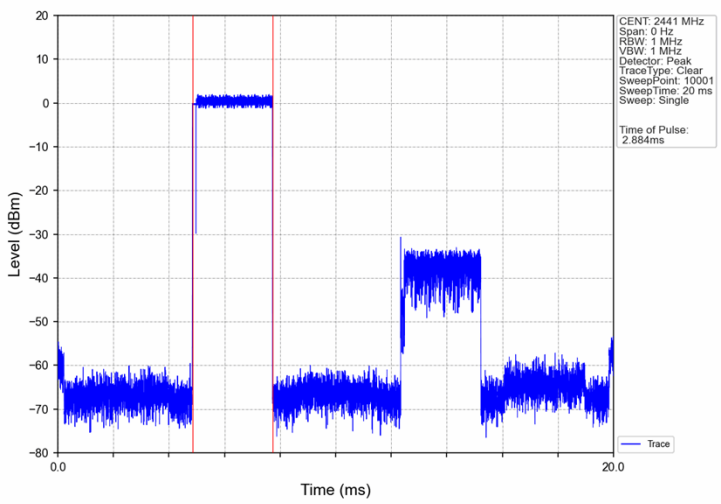
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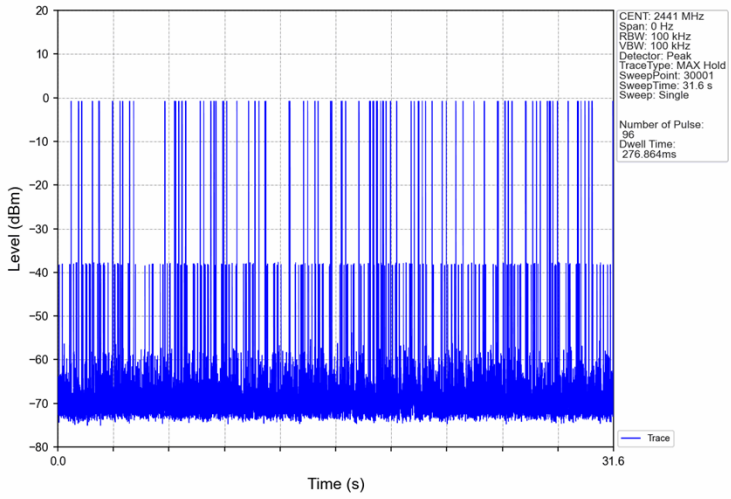

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Test Result

6.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	1.84
		2441	DH5	1	1.89
		2480	DH5	1	1.69
		HOPP	DH5	1	2.00
					2.00
Pi/4DQPSK	SISO	2402	2DH5	1	0.88
		2441	2DH5	1	11.46
		2480	2DH5	1	0.54
		HOPP	2DH5	1	0.73
					0.73
8DPSK	SISO	2402	3DH5	1	0.25
		2441	3DH5	1	1.13
		2480	3DH5	1	0.73
		HOPP	3DH5	1	-0.13
					-0.13

6.1.2 CSE

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	1.84	-18.16	Pass
		2441	DH5	1	1.89	-18.11	Pass
		2480	DH5	1	1.69	-18.31	Pass
		HOPP	DH5	1	2.00	-18.00	Pass
					2.00	-18.00	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	0.88	-19.12	Pass
		2441	2DH5	1	11.46	-8.54	Pass
		2480	2DH5	1	0.54	-19.46	Pass
		HOPP	2DH5	1	0.73	-19.27	Pass
					0.73	-19.27	Pass
8DPSK	SISO	2402	3DH5	1	0.25	-19.75	Pass
		2441	3DH5	1	1.13	-18.87	Pass
		2480	3DH5	1	0.73	-19.27	Pass
		HOPP	3DH5	1	-0.13	-20.13	Pass
					-0.13	-20.13	Pass

6.2 Test Graph

6.2.1 Ref

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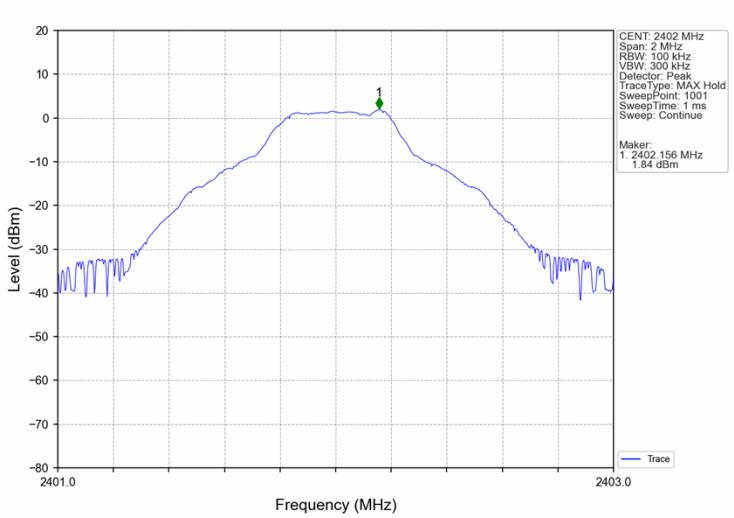
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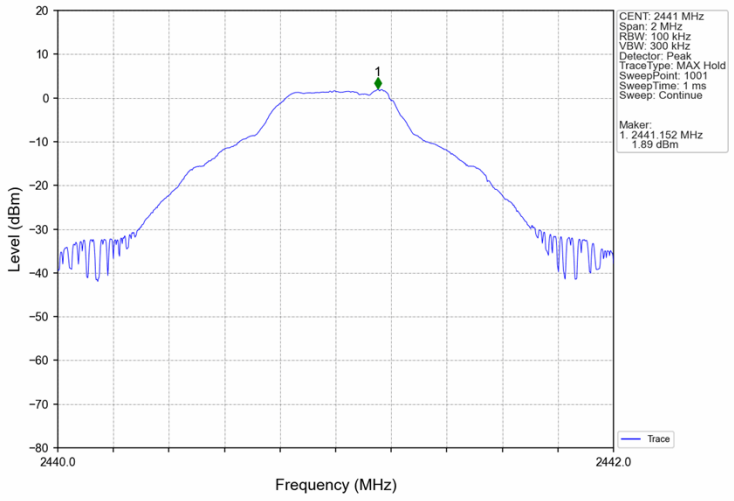
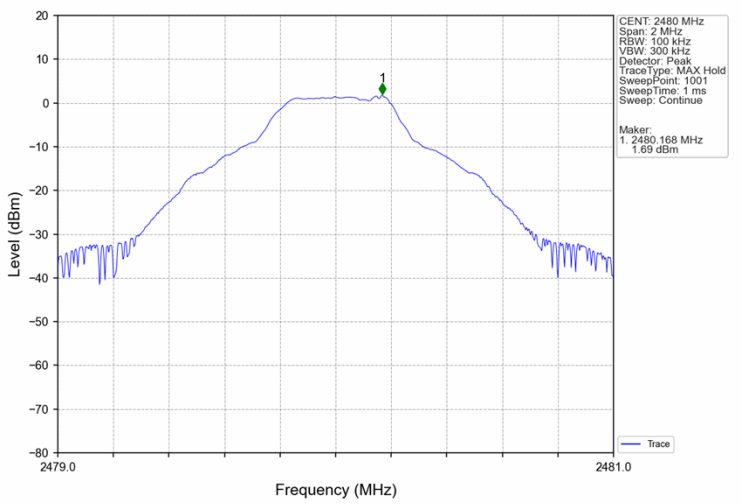
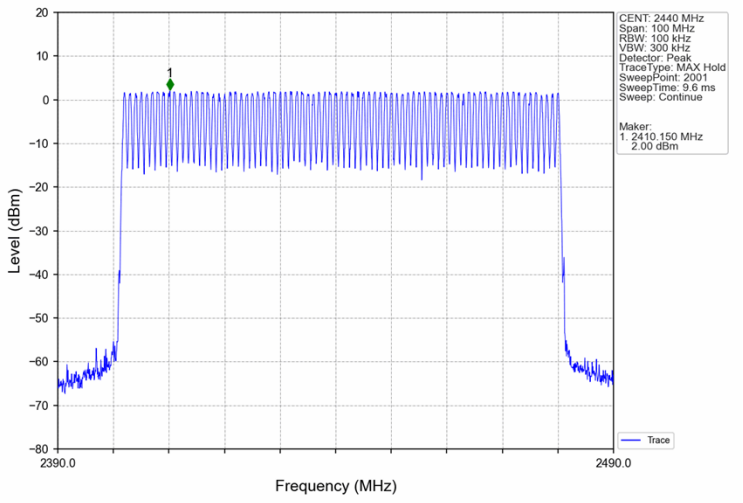


GFSK_DH5_HCH_2480MHz_Ant1_NTNV



GFSK_DH5_HOPP_Ant1_NTNV