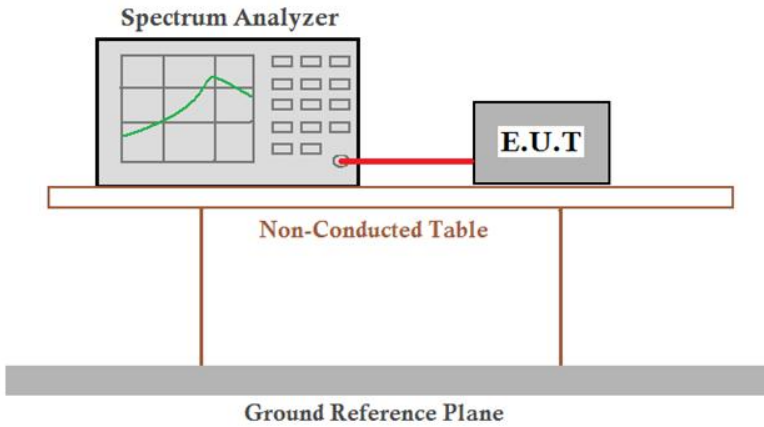


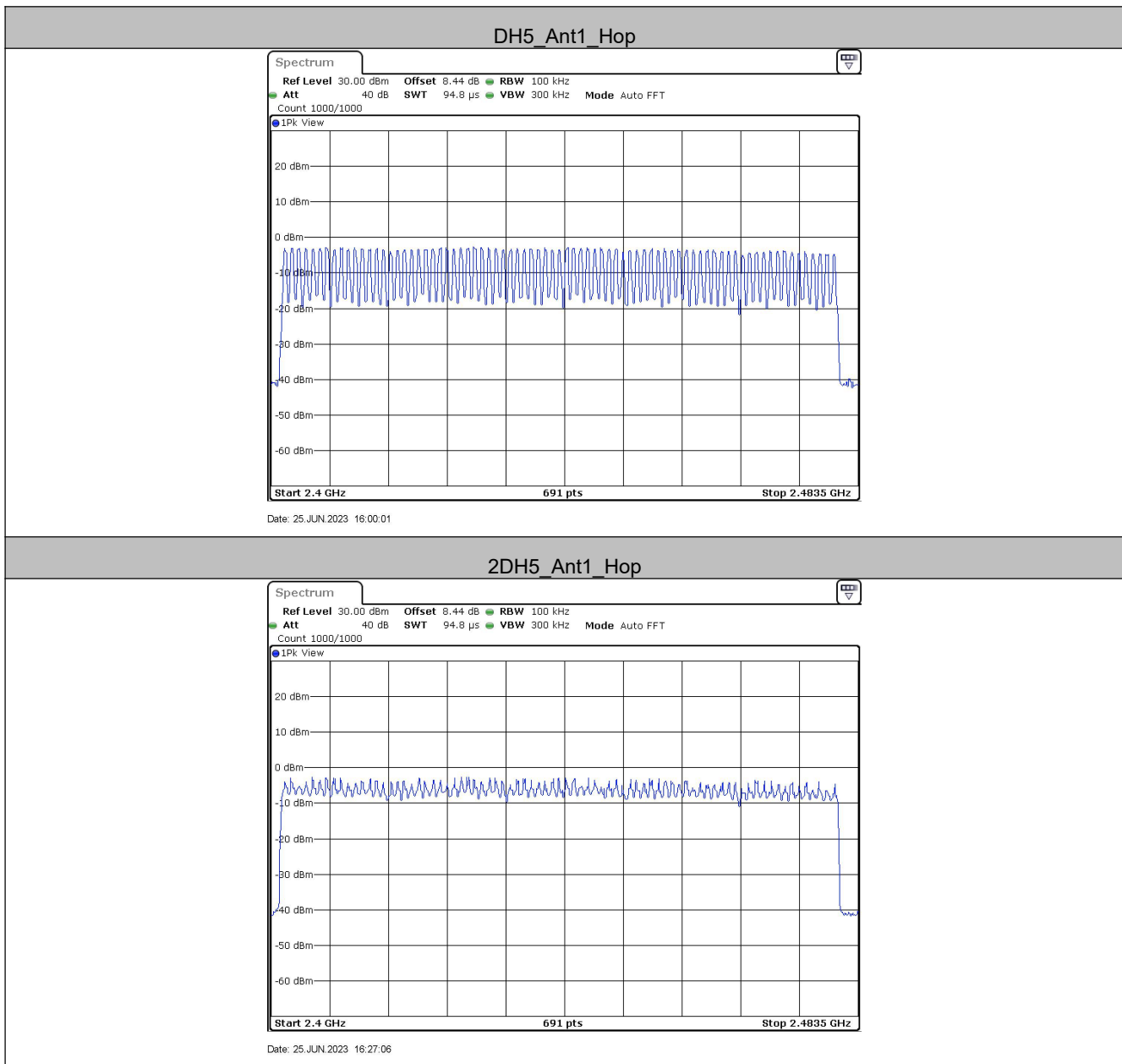
5.6 Hopping Channel Number

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: $Offset = \text{Cable loss} + \text{attenuation factor}$.
Limit:	At least 15 channels
Exploratory Test Mode:	hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Only the worst case is recorded in the report.
Test Results:	Pass

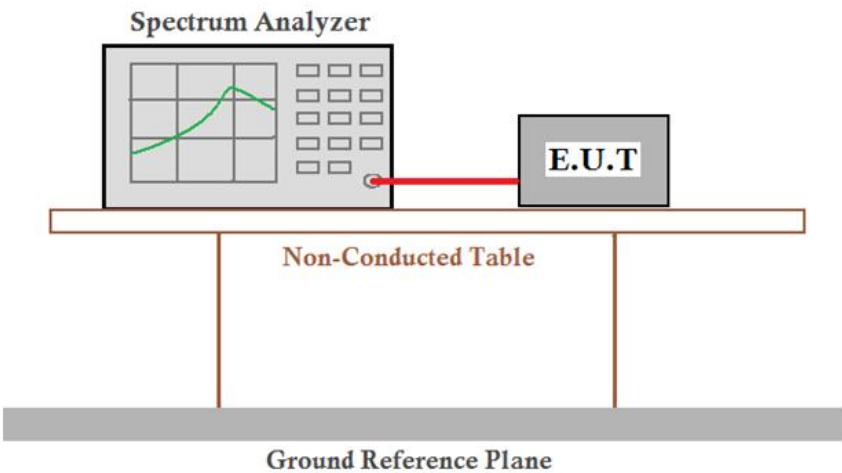
Measurement Data

Mode	Hopping channel numbers	Limit
GFSK	79	≥ 15
$\pi/4$ DQPSK	79	≥ 15

Test plot as follows:



5.7 Dwell Time

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 <i>Remark: Offset=Cable loss+ attenuation factor.</i>
Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type.
Limit:	0.4 Second
Test Results:	Pass

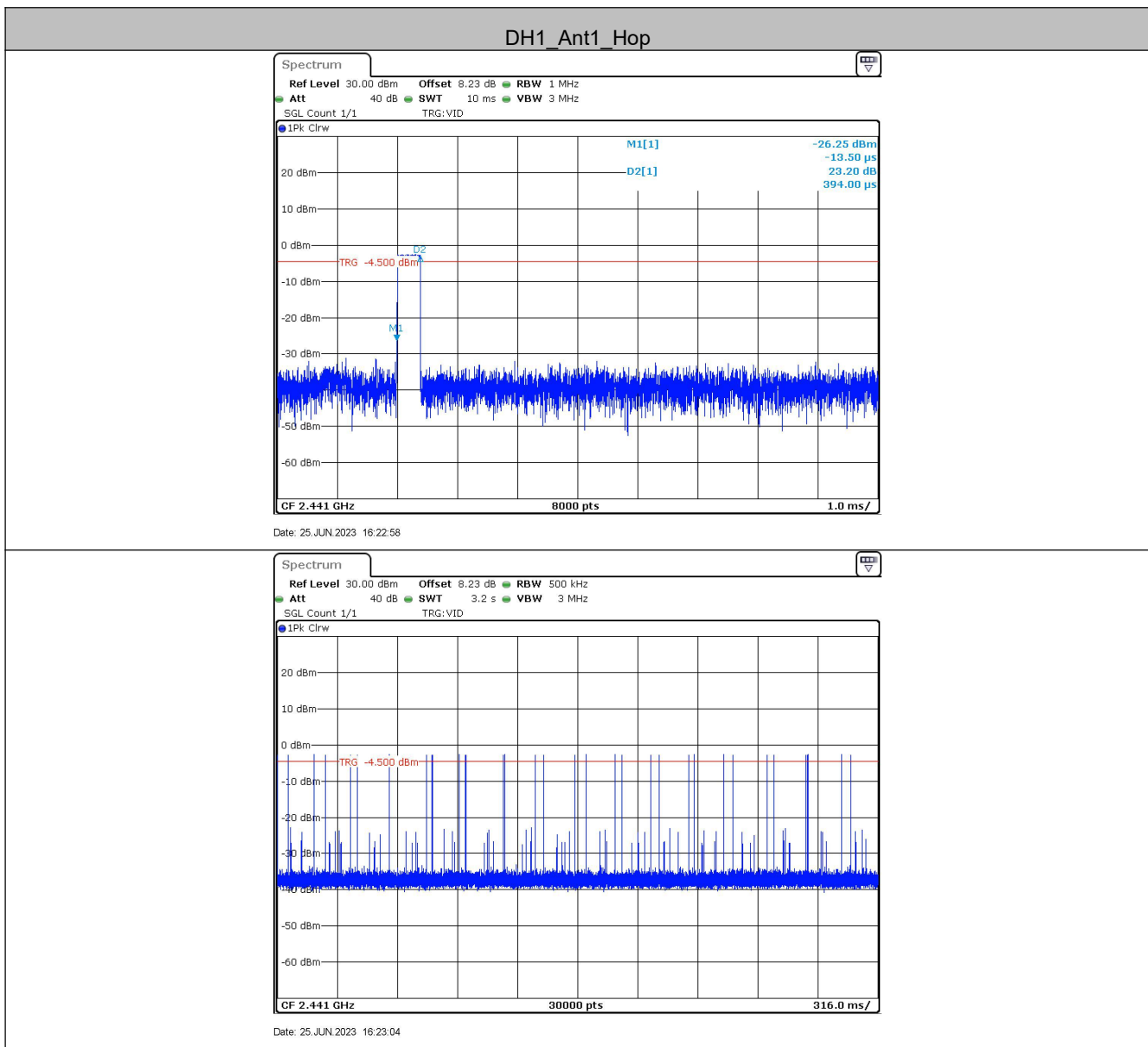
Measurement Data

TestMode	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Hop	0.394	320	0.126	≤0.4	PASS
DH3	Hop	1.641	200	0.328	≤0.4	PASS
DH5	Hop	2.882	90	0.259	≤0.4	PASS
2DH1	Hop	0.403	320	0.129	≤0.4	PASS
2DH3	Hop	1.648	140	0.231	≤0.4	PASS
2DH5	Hop	2.888	90	0.26	≤0.4	PASS

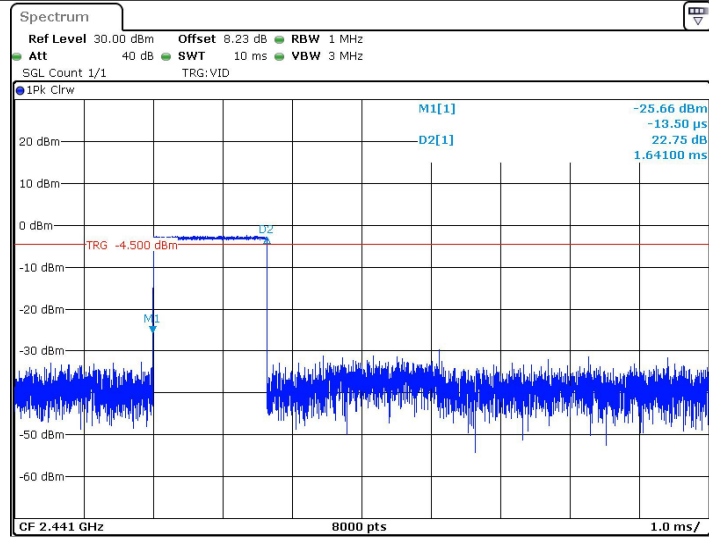
Remark:

The test period: $T = 0.4 \text{ Second/Channel} \times 79 \text{ Channel} = 31.6 \text{ s}$

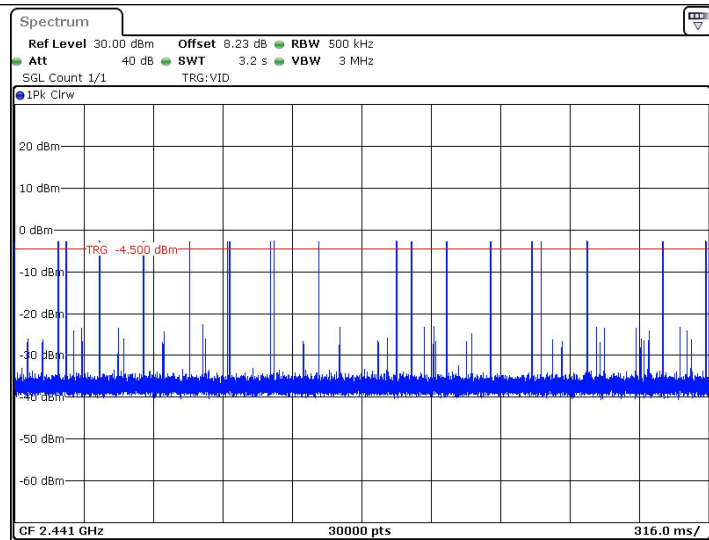
Test plot as follows:



DH3_Ant1_Hop

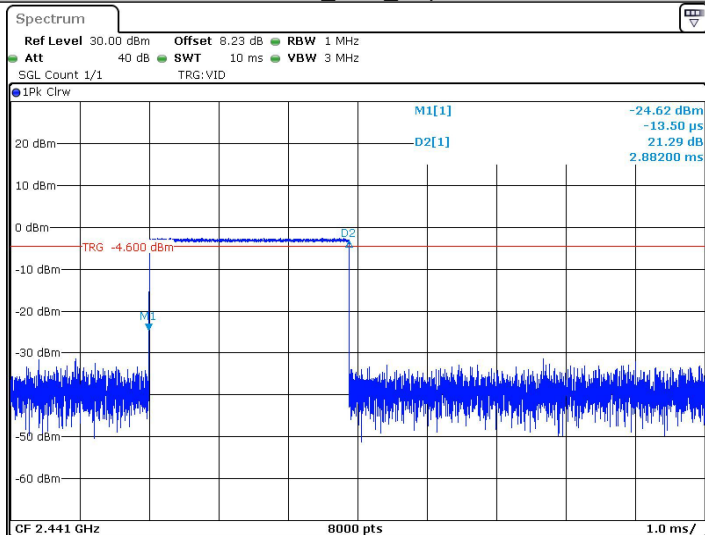


Date: 25 JUN 2023 16:23:26

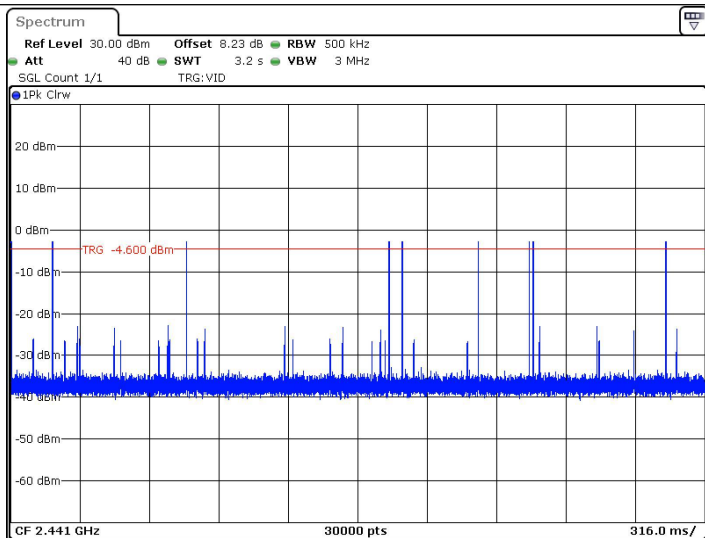


Date: 25 JUN 2023 16:23:32

DH5_Ant1_Hop

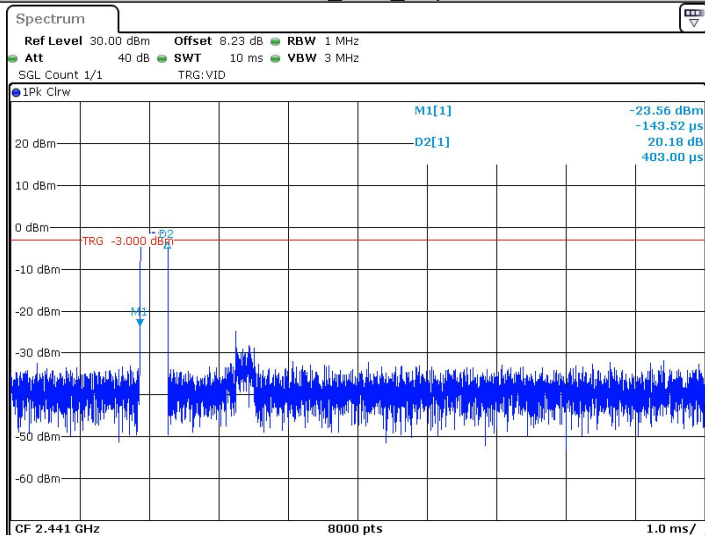


Date: 25 JUN 2023 16:00:16

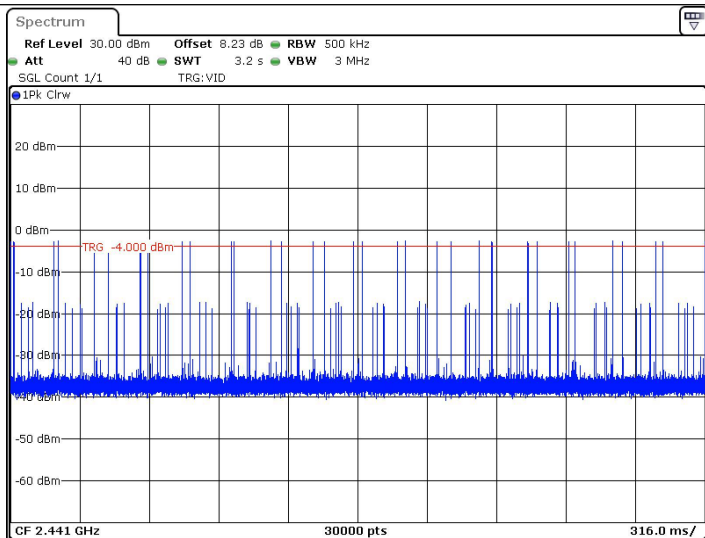


Date: 25 JUN 2023 16:00:22

2DH1_Ant1_Hop

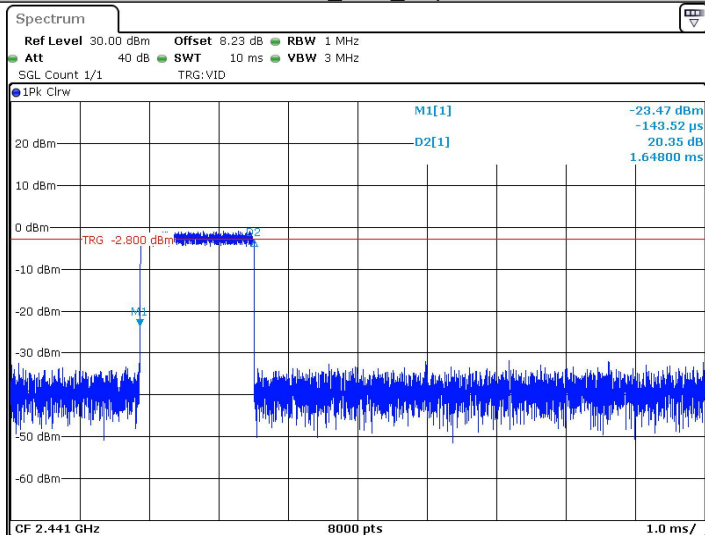


Date: 25 JUN 2023 16:28:19

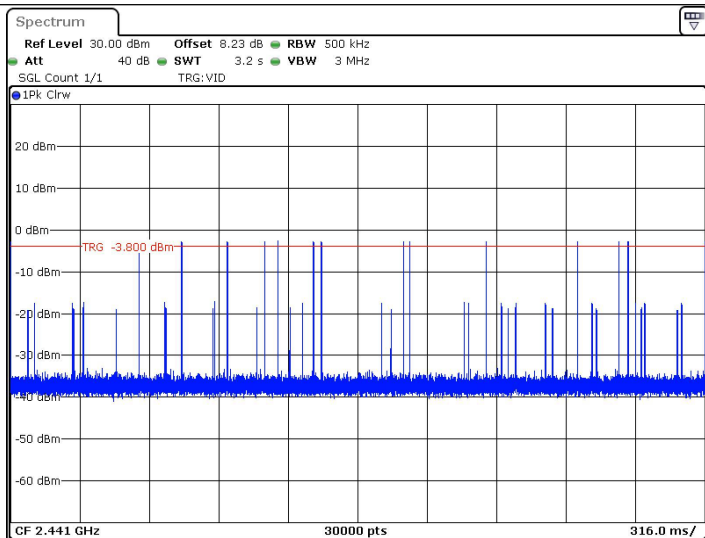


Date: 25 JUN 2023 16:28:31

2DH3_Ant1_Hop

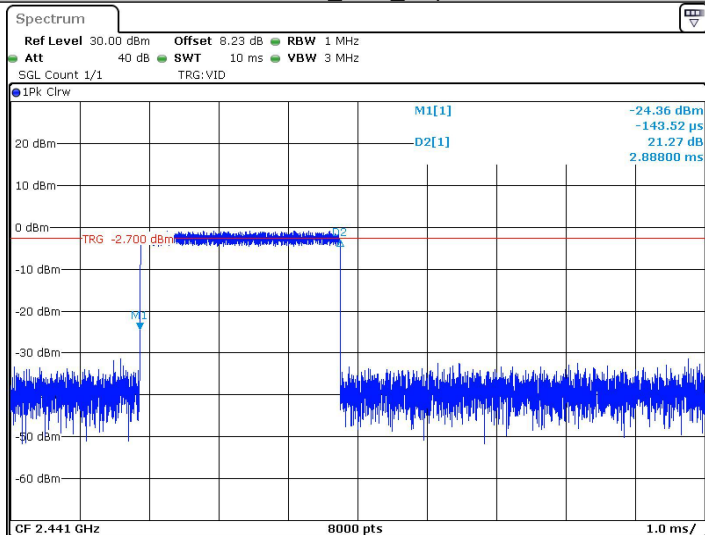


Date: 25 JUN 2023 16:29:07

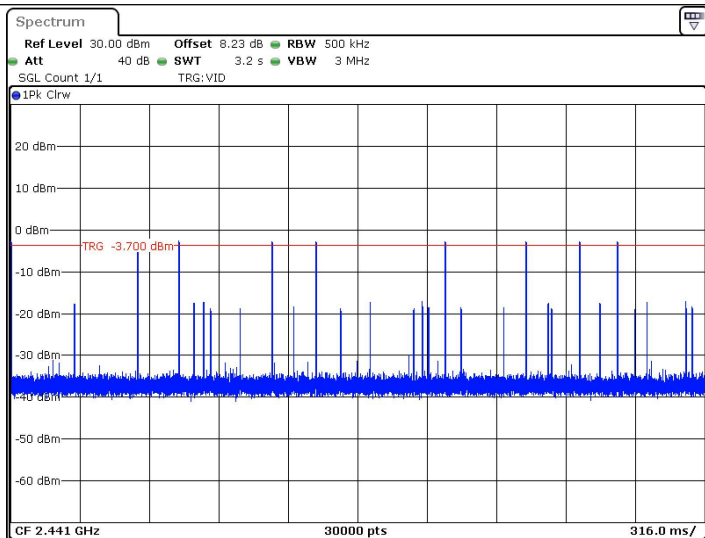


Date: 25 JUN 2023 16:29:19

2DH5_Ant1_Hop

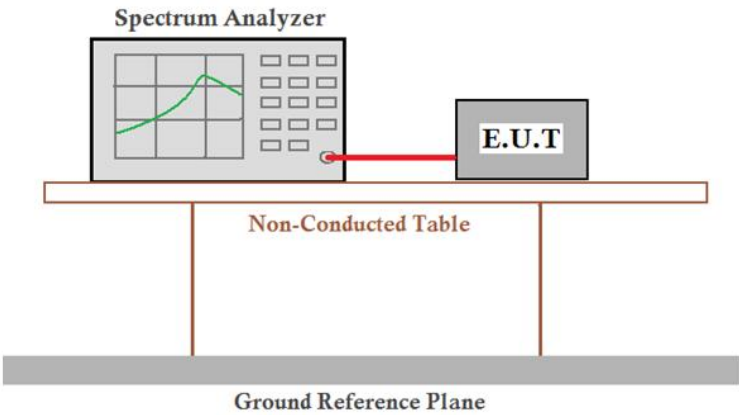


Date: 25 JUN 2023 16:27:22



Date: 25 JUN 2023 16:27:34

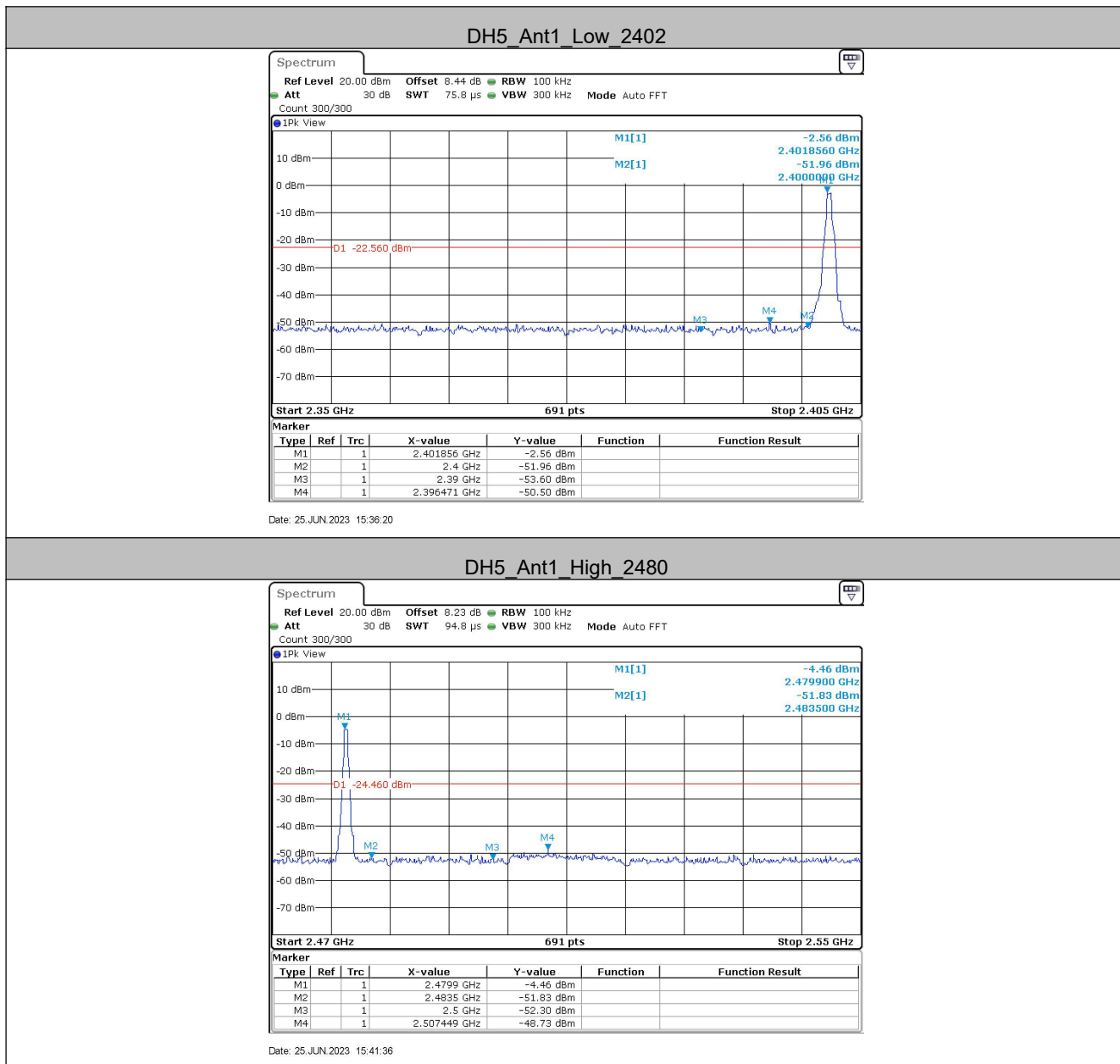
5.8 Band-edge for RF Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	 <i>Remark: Offset=cable loss+ attenuation factor.</i>
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Hopping and Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Only the worst case is recorded in the report.
Test Results:	Pass

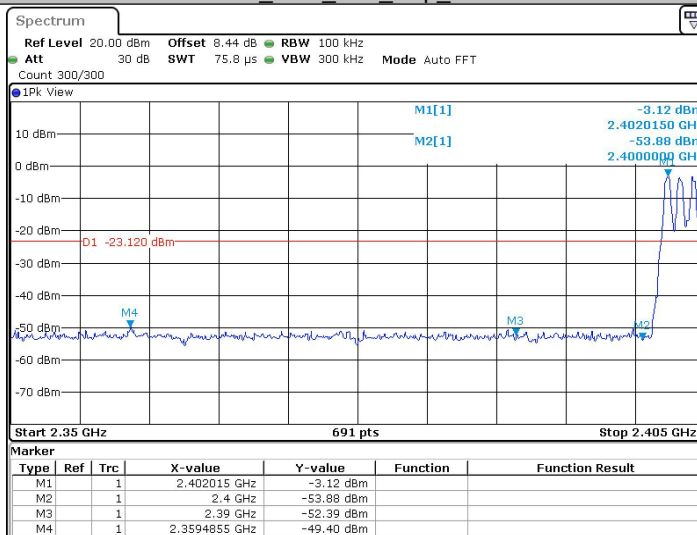
Measurement Data

TestMode	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Low	2402	-2.56	-50.5	≤ -22.56	PASS
	High	2480	-4.46	-48.73	≤ -24.46	PASS
	Low	Hop_2402	-3.12	-49.4	≤ -23.12	PASS
	High	Hop_2480	-4.41	-47.71	≤ -24.41	PASS
2DH5	Low	2402	-2.56	-49.75	≤ -22.56	PASS
	High	2480	-4.47	-49.74	≤ -24.47	PASS
	Low	Hop_2402	-3.55	-50.53	≤ -23.55	PASS
	High	Hop_2480	-4.19	-49.39	≤ -24.19	PASS

Test plot as follows:

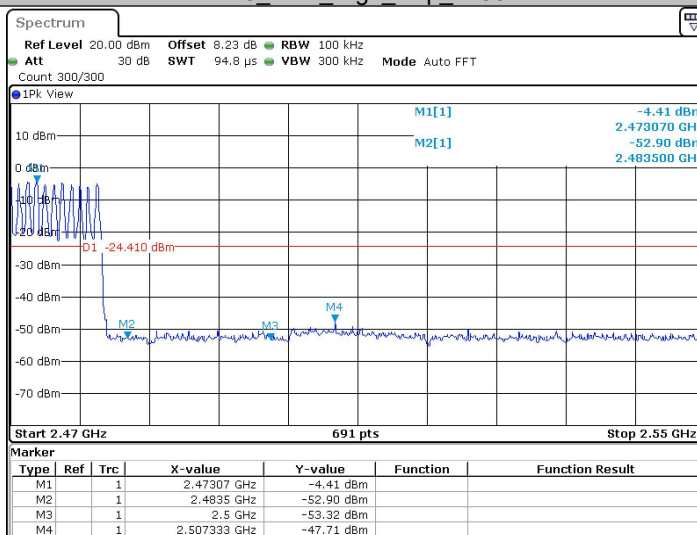


DH5_Ant1_Low_Hop_2402



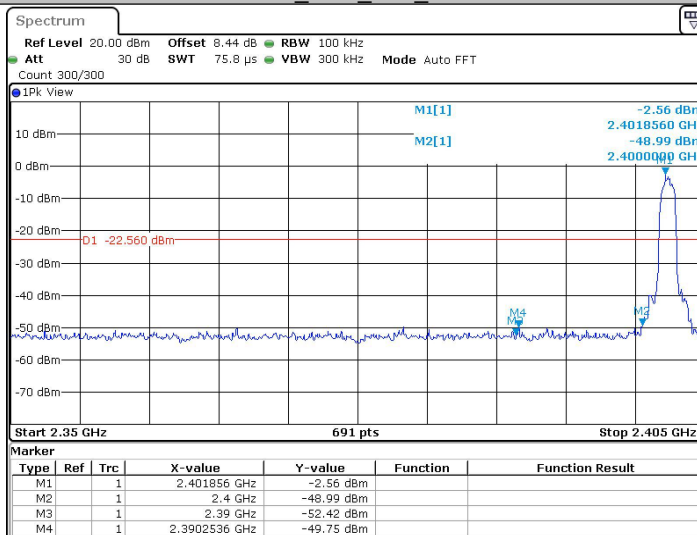
Date: 26 JUN 2023 17:58:35

DH5_Ant1_High_Hop_2480



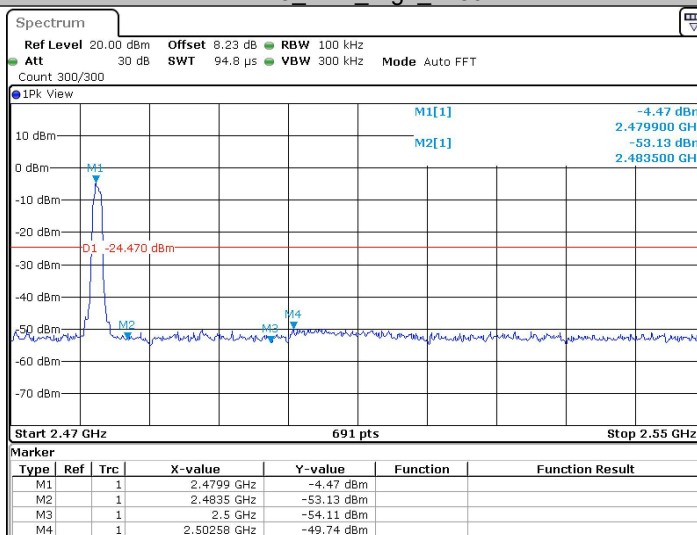
Date: 25 JUN 2023 16:23:51

2DH5_Ant1_Low_2402



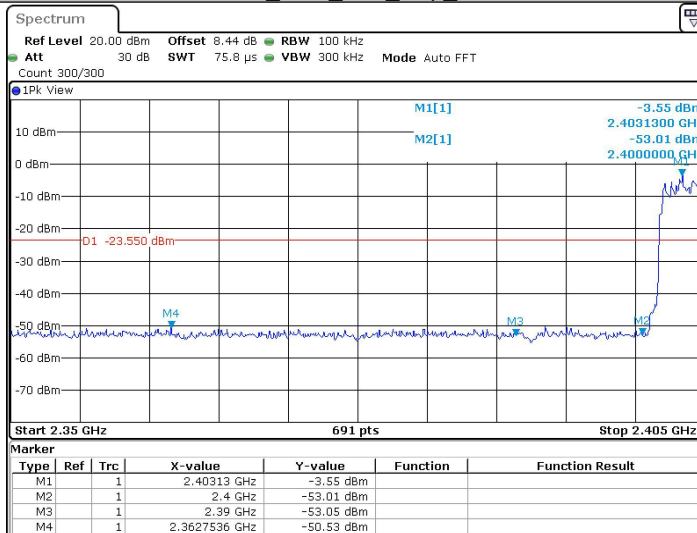
Date: 25 JUN 2023 15:44:26

2DH5_Ant1_High_2480



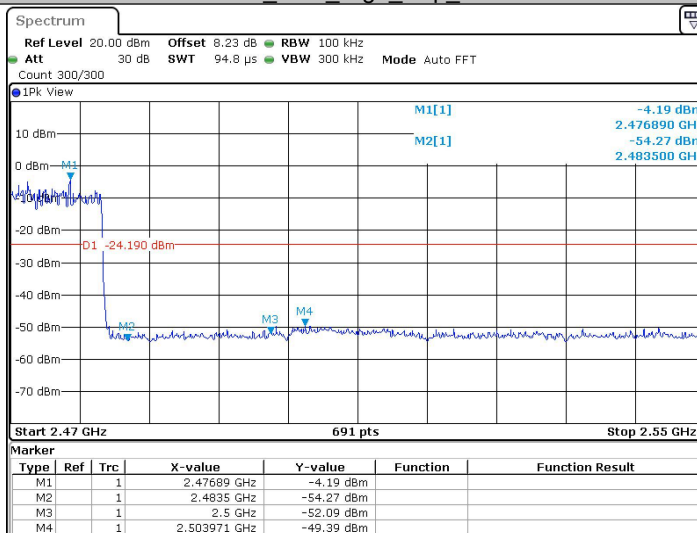
Date: 25 JUN 2023 15:52:54

2DH5_Ant1_Low_Hop_2402



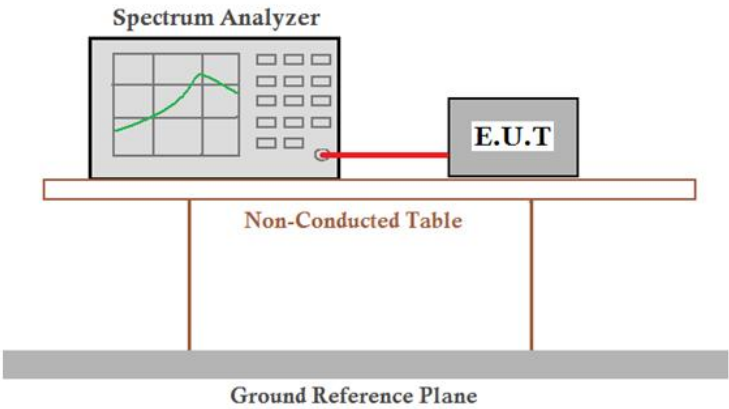
Date: 25 JUN 2023 16:25:00

2DH5_Ant1_High_Hop_2480

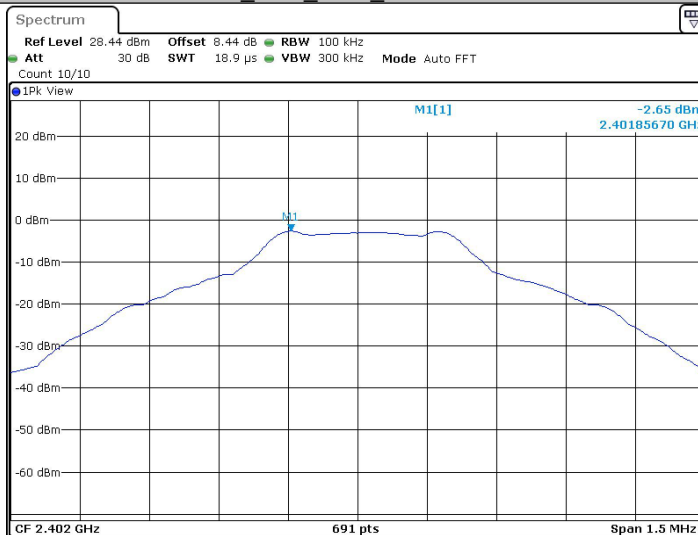


Date: 25 JUN 2023 16:29:42

5.9 Spurious RF Conducted Emissions

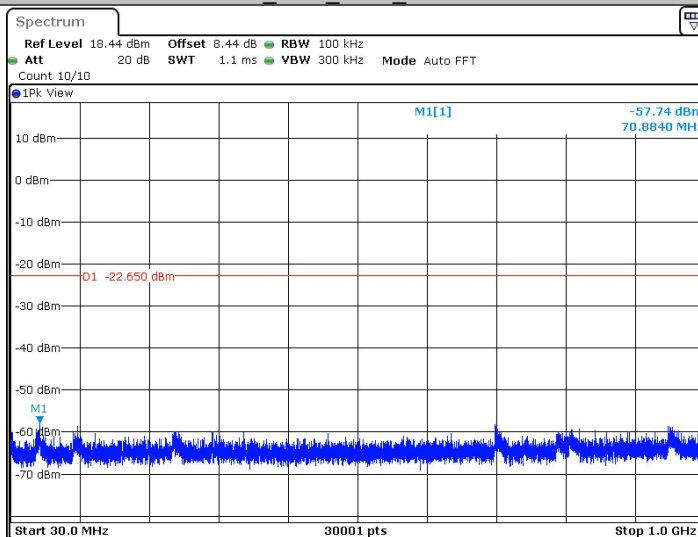
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	 <i>Remark: Offset=cable loss+ attenuation factor.</i>
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type is the worst case of GFSK modulation type, 2-DH5 of data type is the worst case of $\pi/4$ DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type.
Test Results:	Pass

DH5_Ant1_2402_0~Reference



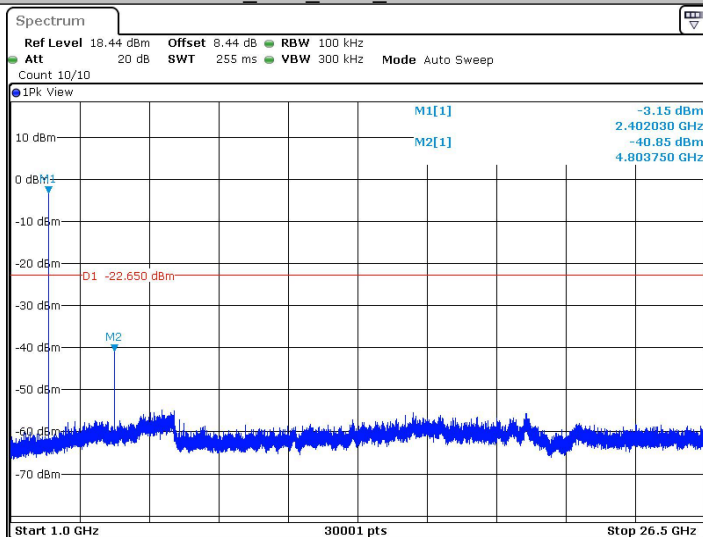
Date: 25 JUN 2023 15:37:25

DH5_Ant1_2402_30~1000



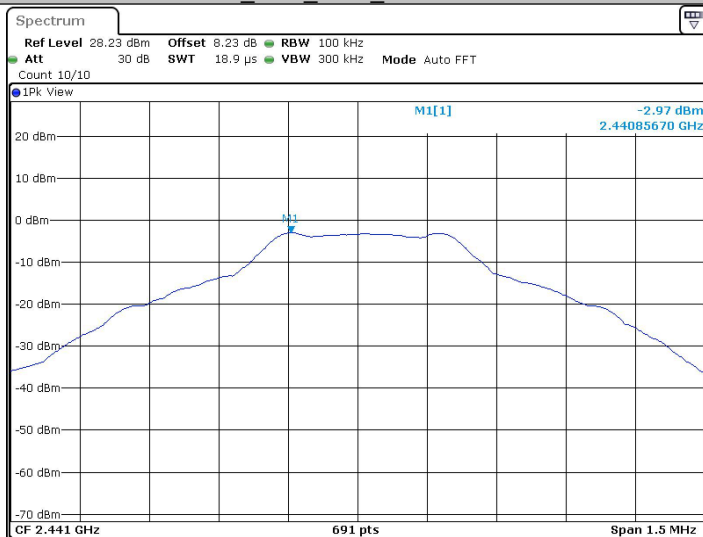
Date: 25 JUN 2023 15:37:32

DH5_Ant1_2402_1000~26500



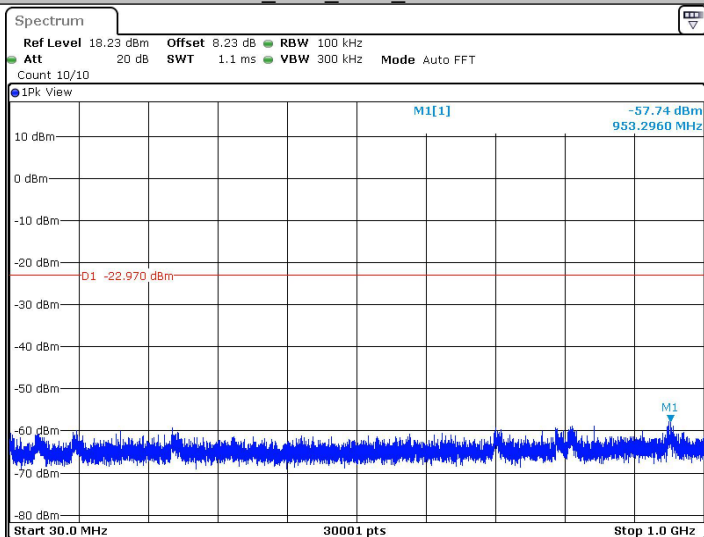
Date: 25 JUN 2023 15:37:54

DH5_Ant1_2441_0~Reference



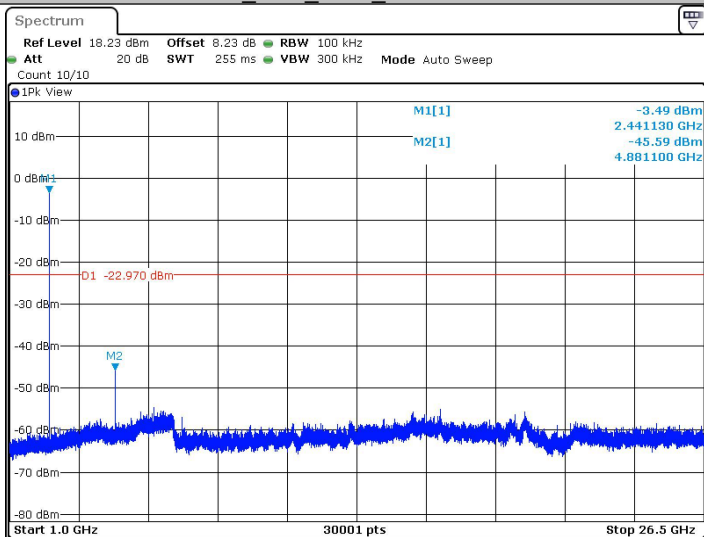
Date: 25 JUN 2023 15:39:05

DH5_Ant1_2441_30~1000



Date: 25 JUN 2023 15:39:12

DH5_Ant1_2441_1000~26500



Date: 25 JUN 2023 15:39:34