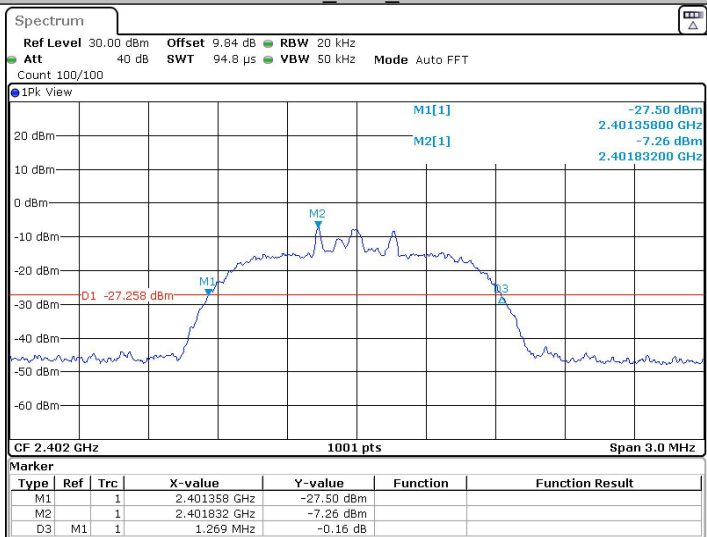
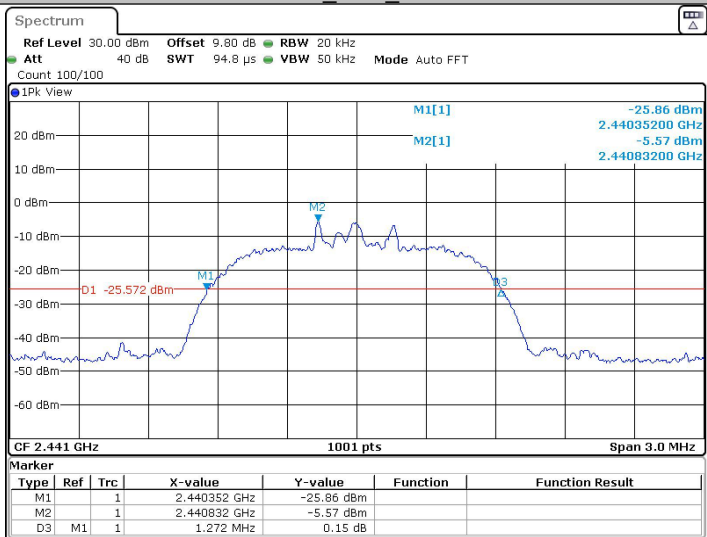


3DH5_Ant1_2402



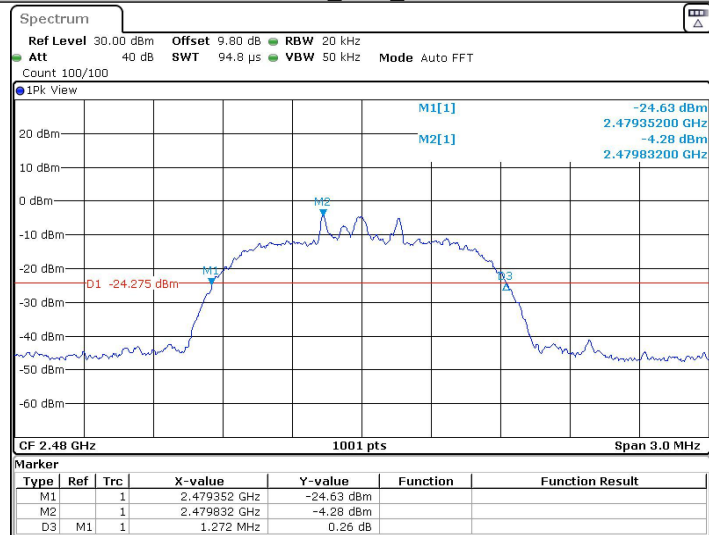
Date: 9 FEB. 2022 07:54:38

3DH5_Ant1_2441



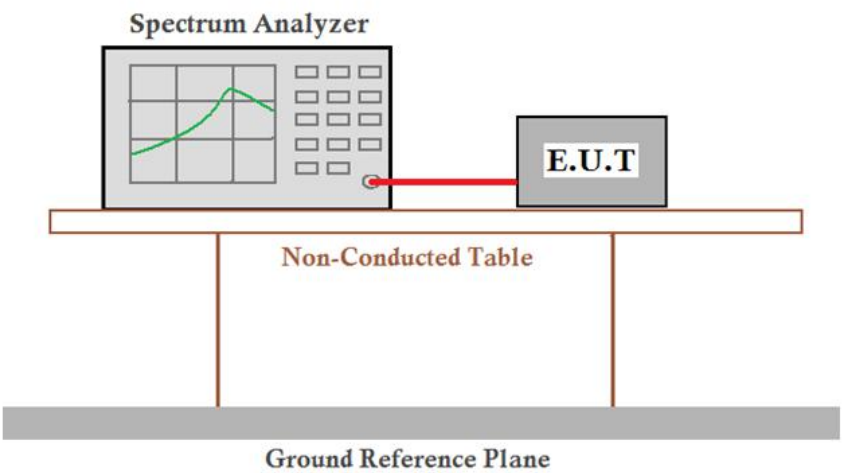
Date: 9 FEB. 2022 07:57:27

3DH5_Ant1_2480



Date: 9 FEB. 2022 07:59:24

5.5 Carrier Frequencies Separation

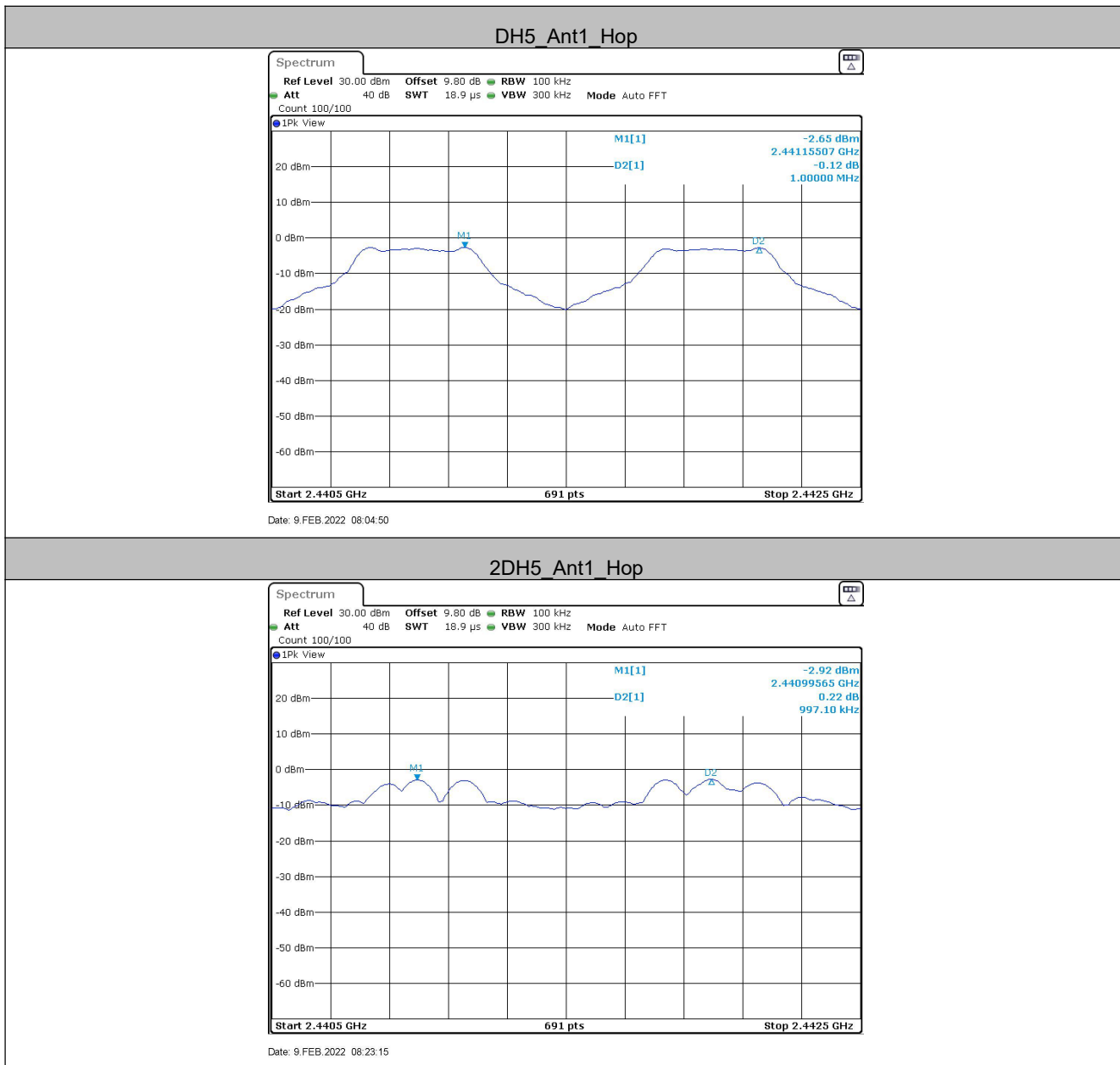
Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Limit:	2/3 of the 20dB bandwidth
	Remark: the transmission power is less than 0.125W.
Exploratory Test Mode:	Hopping transmitting with all kind of modulation 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. Only the worst case is recorded in the report.
Test Results:	Pass

Test Result

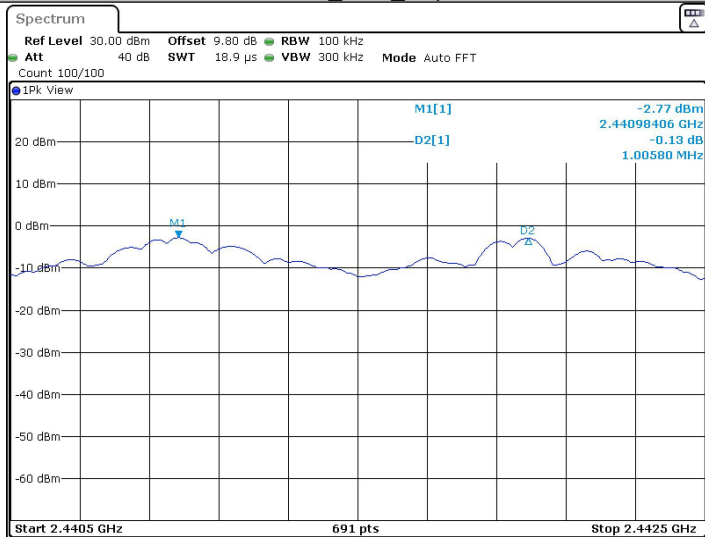
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	≥0.646	PASS
2DH5	Ant1	Hop	0.997	≥0.852	PASS
3DH5	Ant1	Hop	1.006	≥0.848	PASS

Mode	20dB bandwidth (MHz) (worse case)	Limit (MHz) (Carrier Frequencies Separation)
GFSK	0.969	0.646
$\pi/4$ DQPSK	1.278	0.852
8DPSK	1.272	0.848

Test Graphs

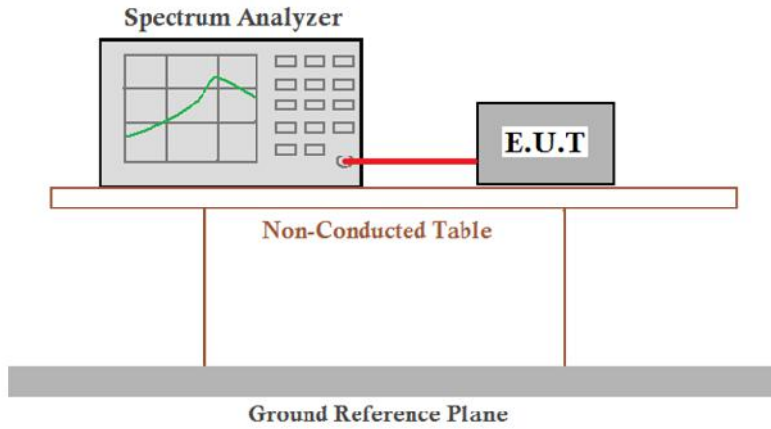


3DH5_Ant1_Hop



Date: 9 FEB. 2022 08:30:28

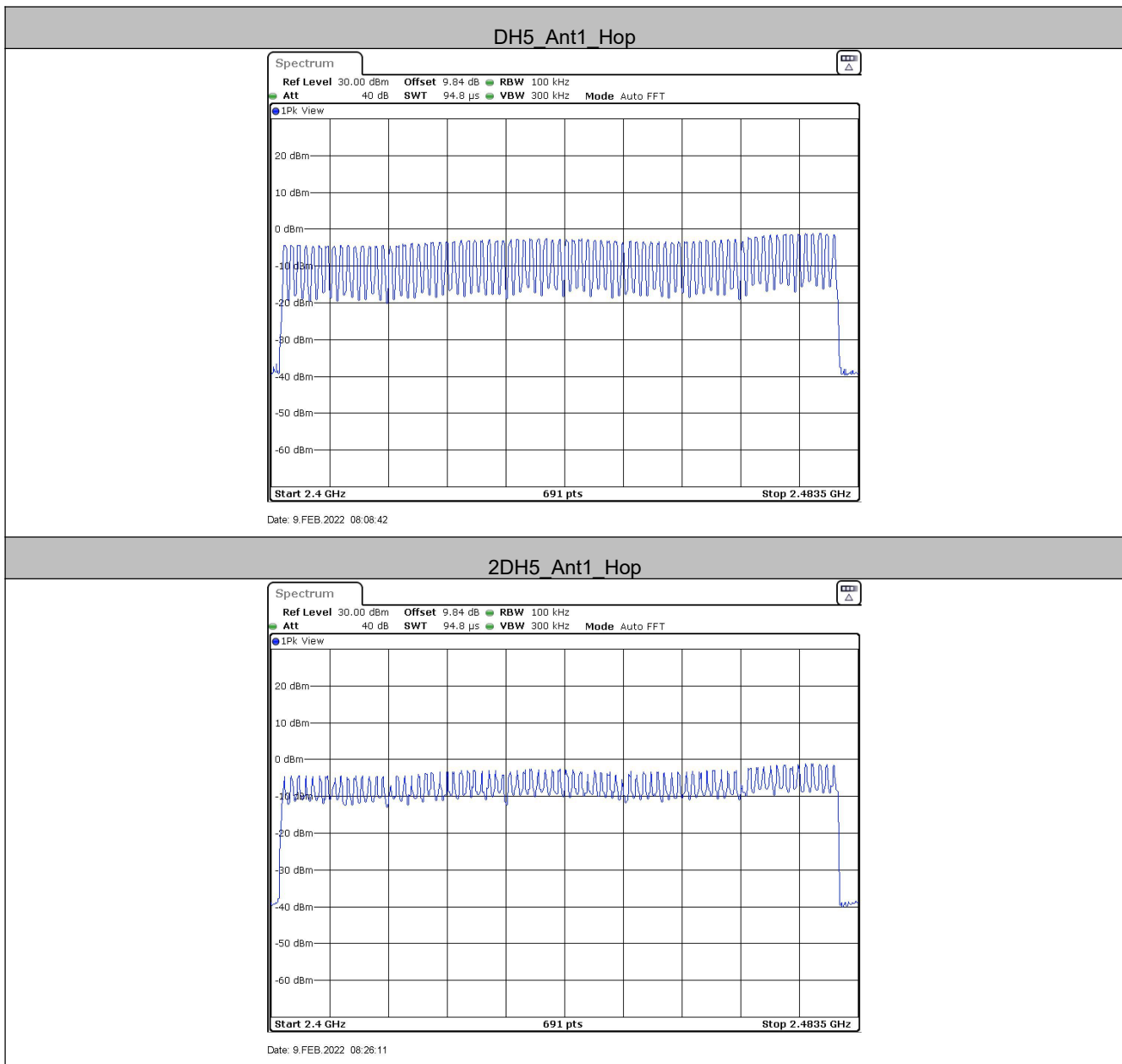
5.6 Hopping Channel Number

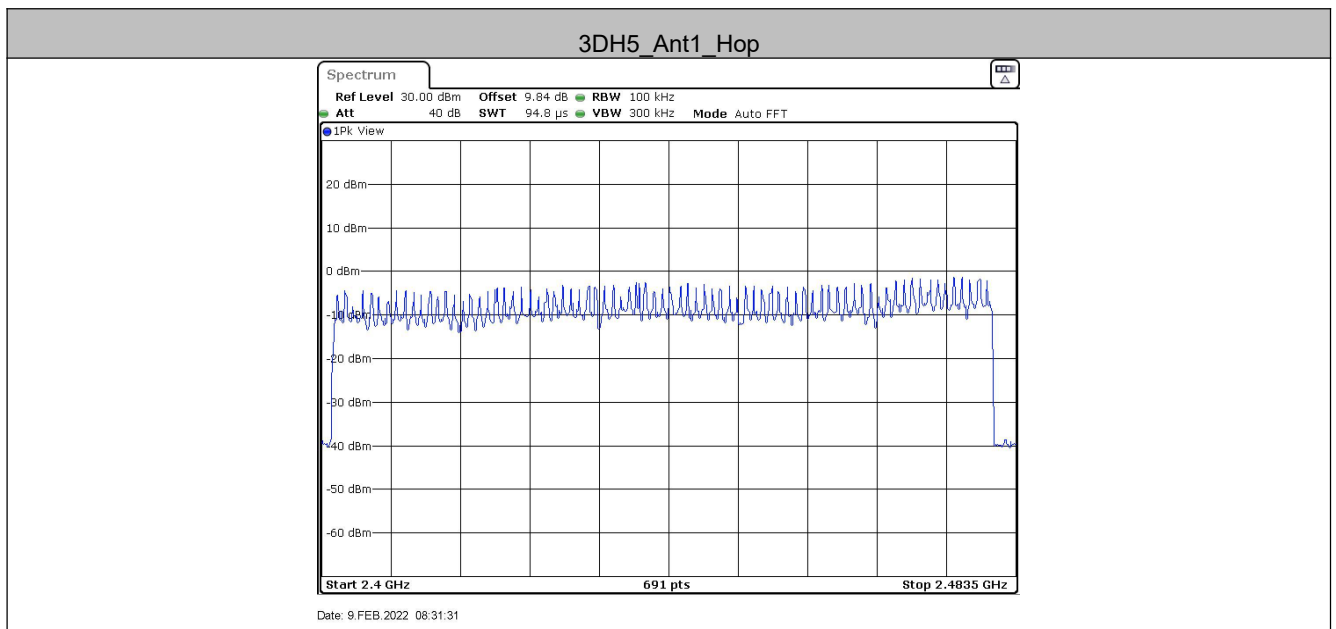
Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Limit:	At least 15 channels
Exploratory Test Mode:	hopping transmitting with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan,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

Test Result

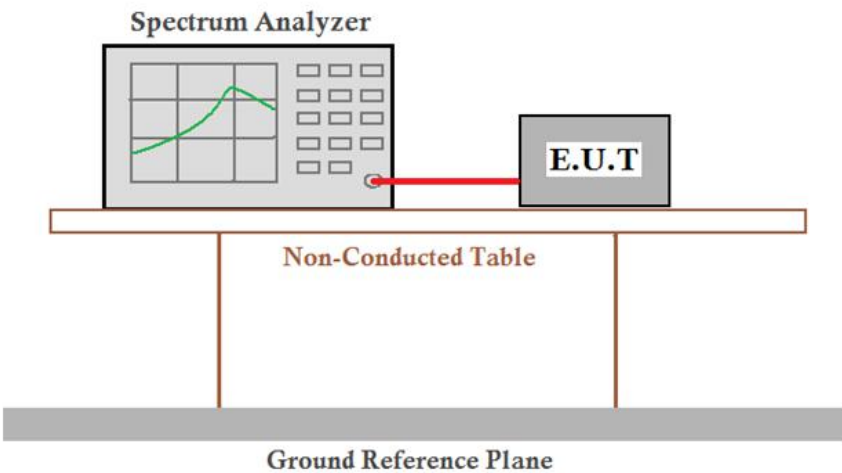
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS

Test Graphs





5.7 Dwell Time

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

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.42	320	0.133	≤0.4	PASS
DH3	Ant1	Hop	1.58	120	0.189	≤0.4	PASS
DH5	Ant1	Hop	2.61	120	0.313	≤0.4	PASS
2DH1	Ant1	Hop	0.42	330	0.14	≤0.4	PASS
2DH3	Ant1	Hop	1.62	180	0.291	≤0.4	PASS
2DH5	Ant1	Hop	2.61	90	0.235	≤0.4	PASS
3DH1	Ant1	Hop	0.43	320	0.138	≤0.4	PASS
3DH3	Ant1	Hop	1.41	190	0.268	≤0.4	PASS
3DH5	Ant1	Hop	2.61	120	0.313	≤0.4	PASS

Remark:

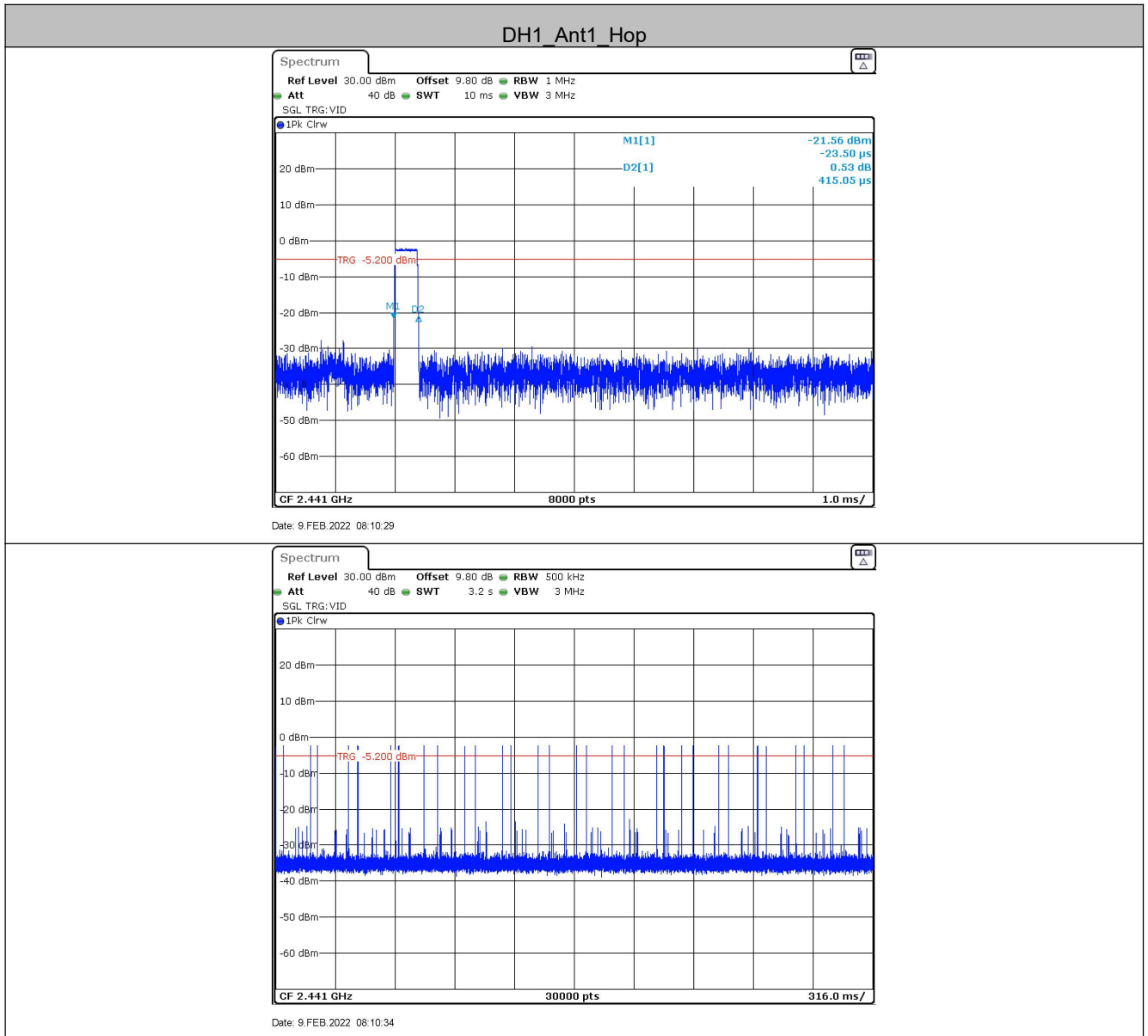
The test period: $T = 0.4 \text{ Second/Channel} \times 79 \text{ Channel} = 31.6 \text{ s}$

DH1/2DH1/3DH1 Dwell time = Burst Width(ms)*[1600/ (2*79)]*31.6

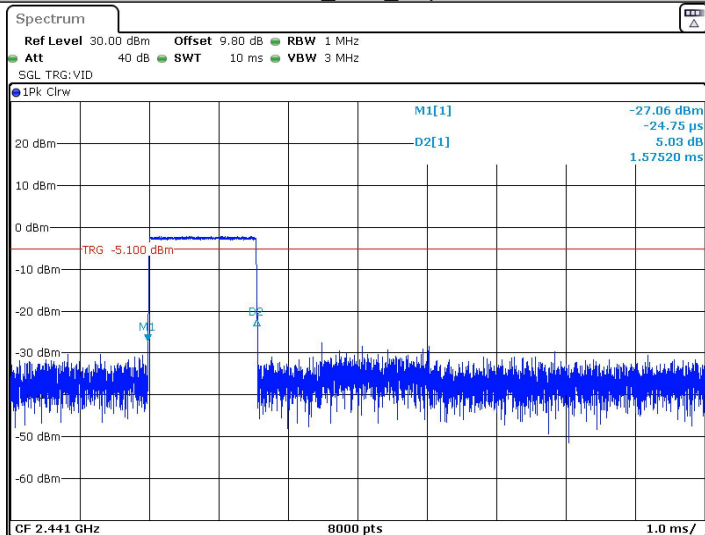
DH3/2DH3/3DH3 Dwell time = Burst Width (ms)*[1600/ (4*79)]*31.6

DH5/2DH5/3DH5 Dwell time = Burst Width (ms)*[1600/ (6*79)]*31.6

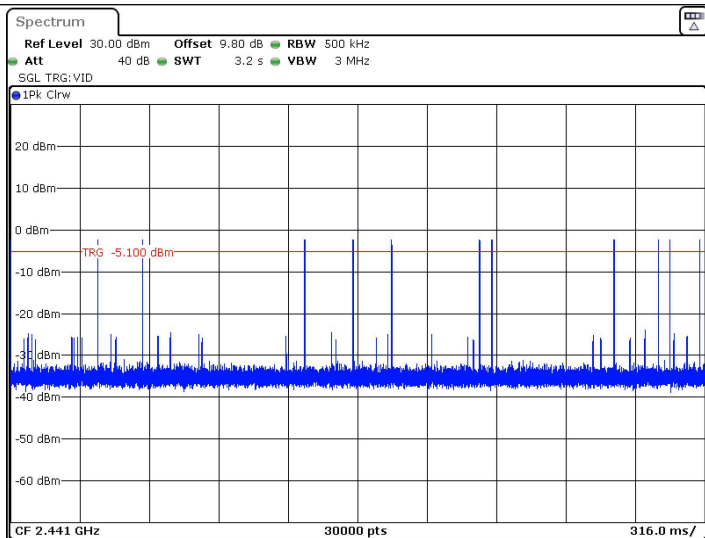
5.7.1 Test Graphs



DH3_Ant1_Hop

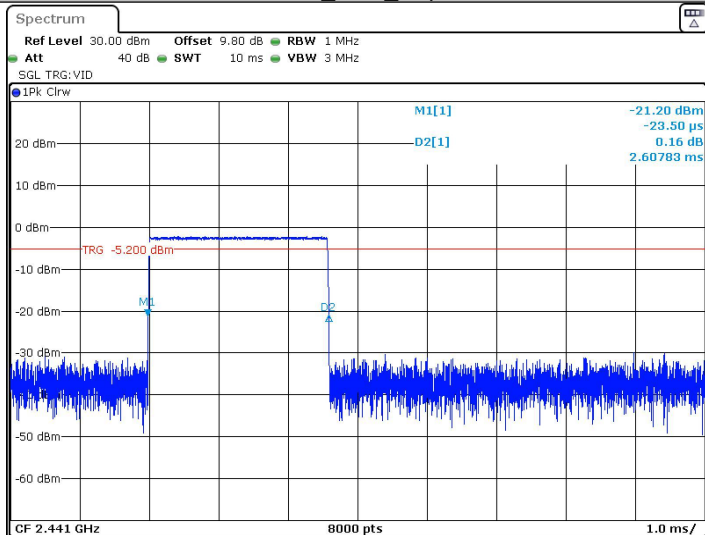


Date: 9.FEB.2022 08:12:42

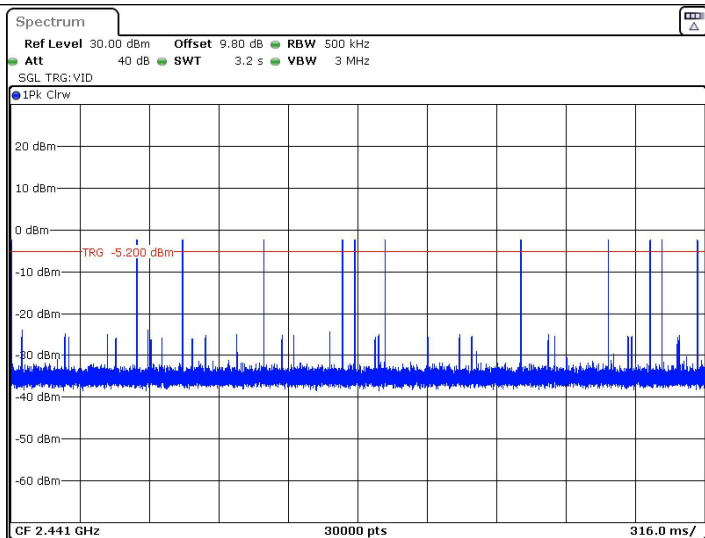


Date: 9.FEB.2022 08:12:48

DH5_Ant1_Hop

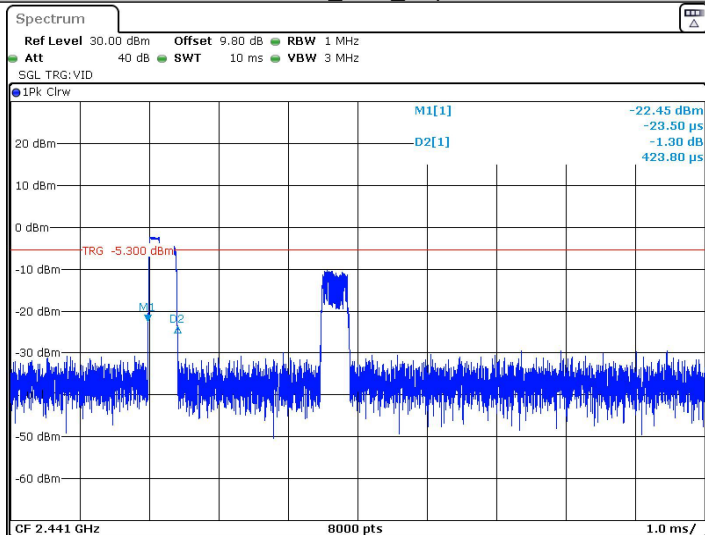


Date: 9 FEB. 2022 08:08:55

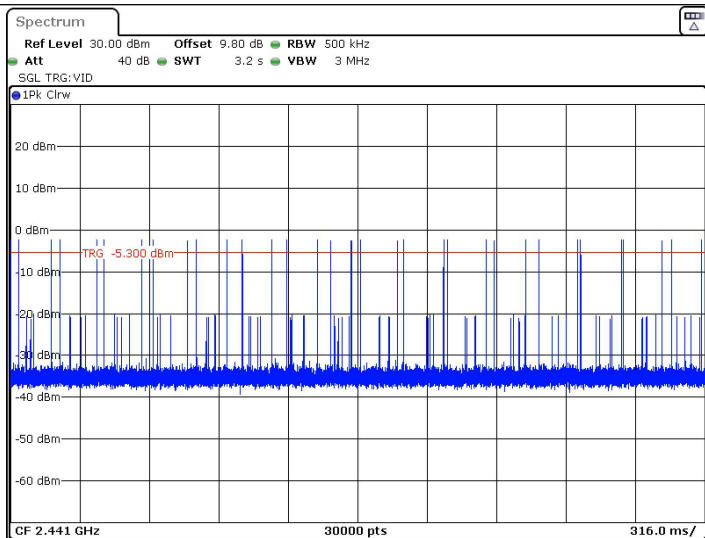


Date: 9 FEB. 2022 08:09:00

2DH1_Ant1_Hop

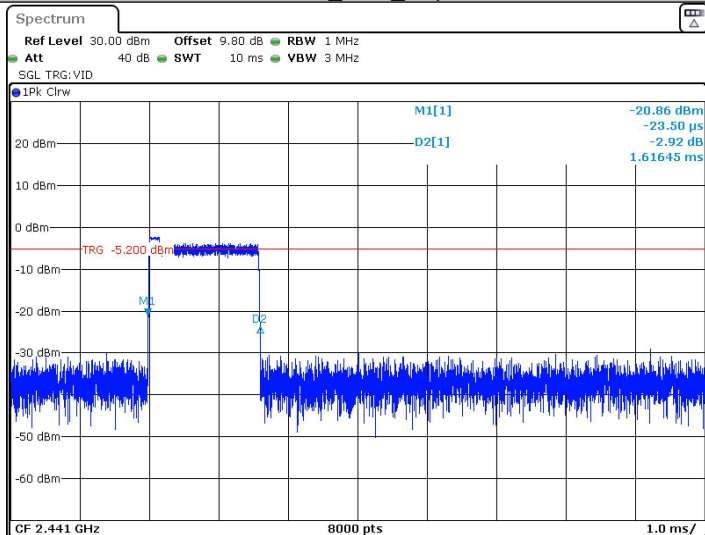


Date: 9.FEB.2022 08:26:55

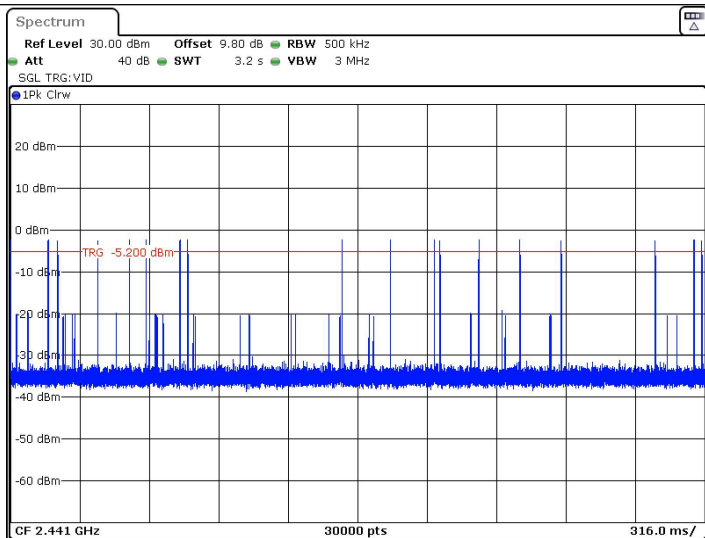


Date: 9.FEB.2022 08:27:01

2DH3_Ant1_Hop

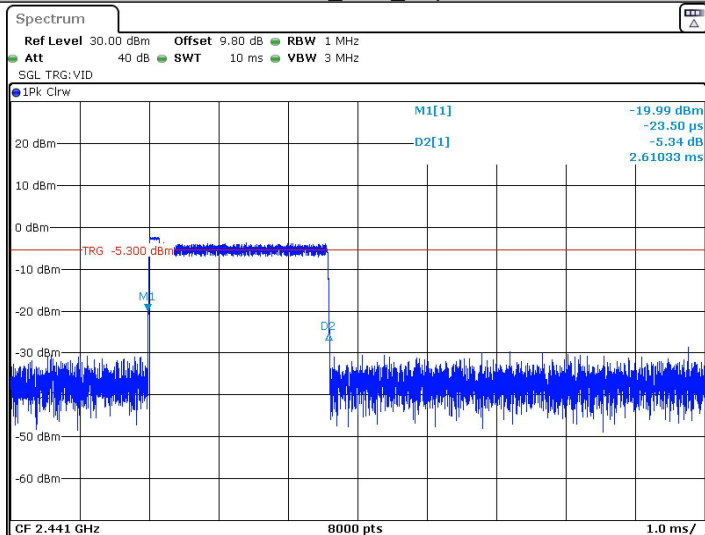


Date: 9 FEB. 2022 08:27:30

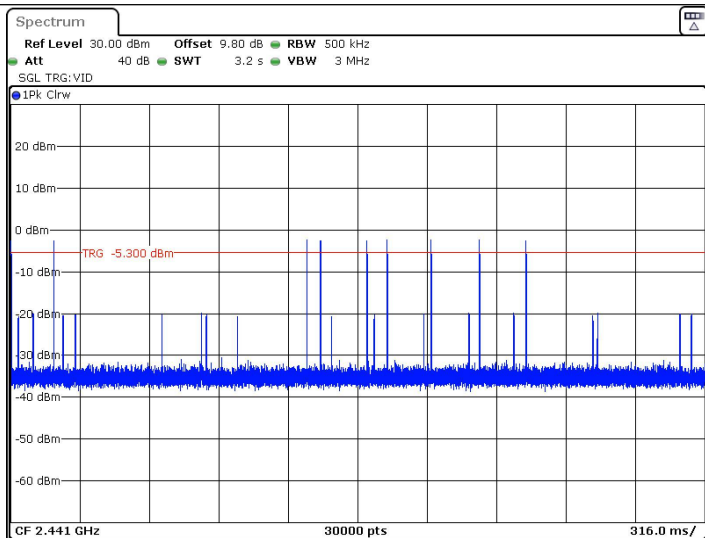


Date: 9 FEB. 2022 08:27:36

2DH5_Ant1_Hop

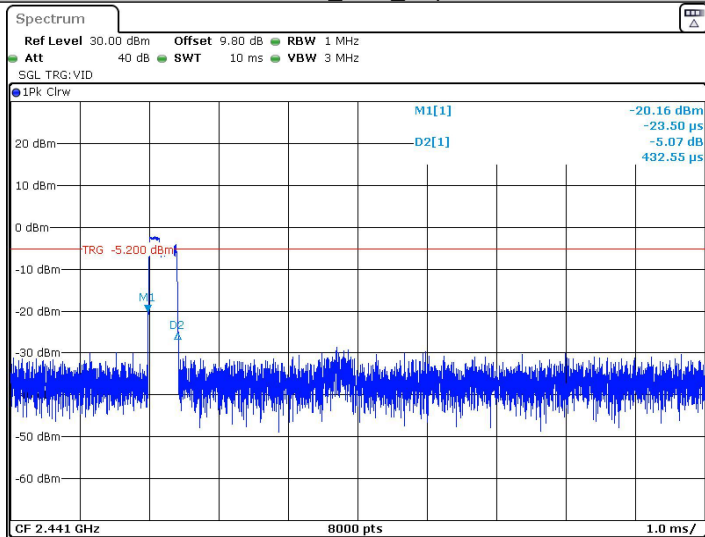


Date: 9 FEB. 2022 08:26:23

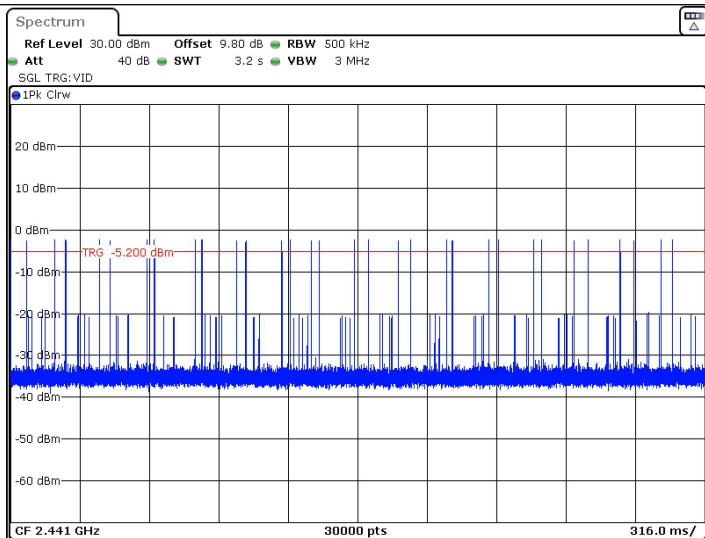


Date: 9 FEB. 2022 08:26:29

3DH1_Ant1_Hop

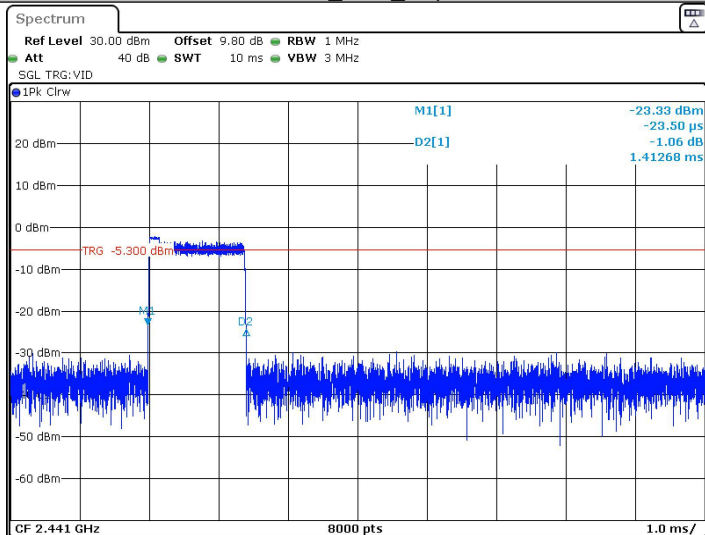


Date: 9.FEB.2022 08:32:46

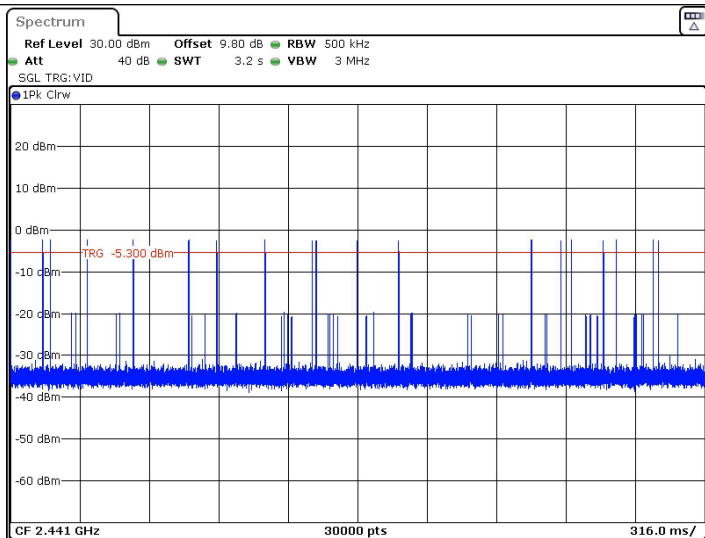


Date: 9.FEB.2022 08:32:52

3DH3_Ant1_Hop



Date: 9 FEB. 2022 08:33:52



Date: 9 FEB. 2022 08:33:57