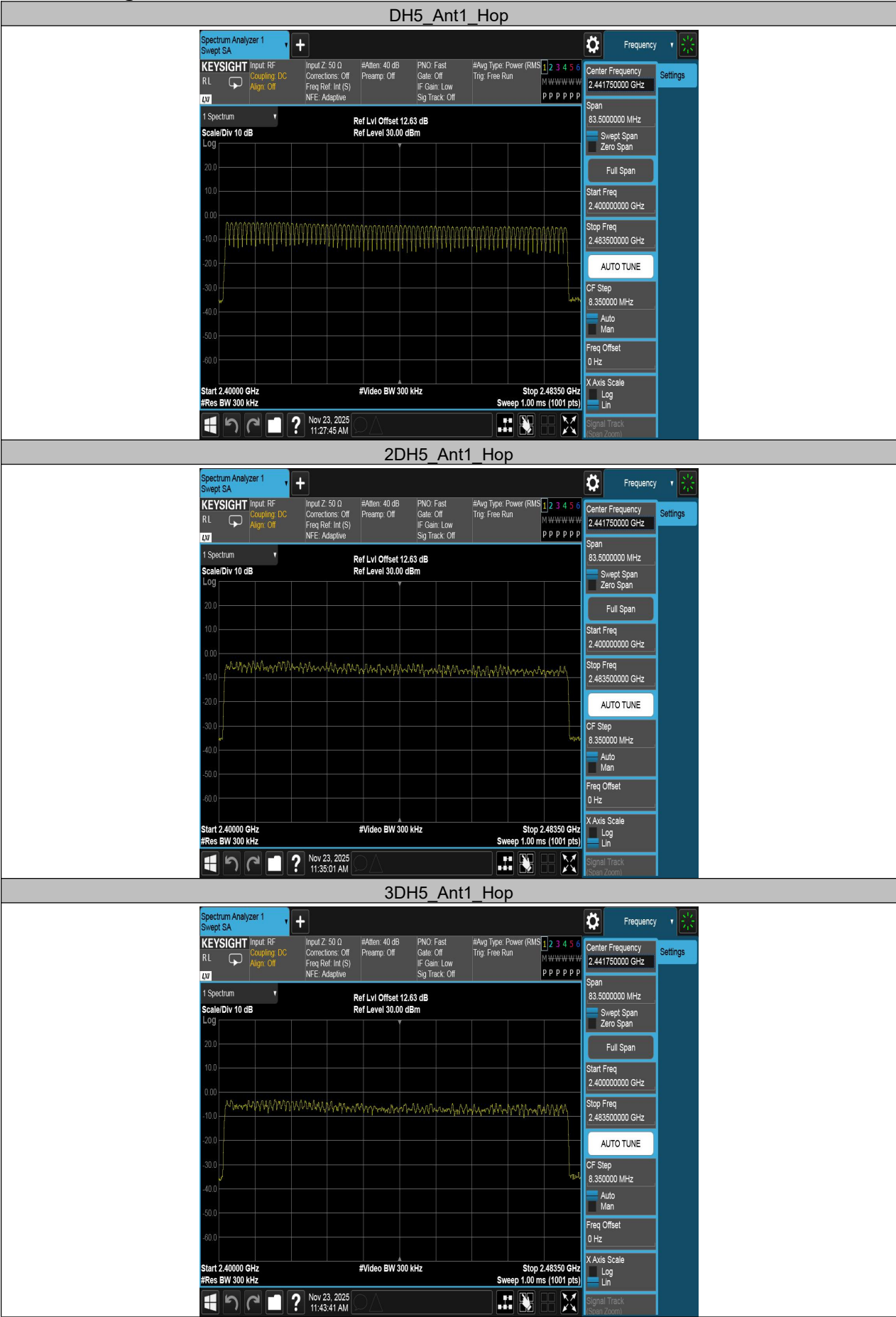


12.5. Original test data



13. Time of Occupancy (Dwell Time)

13.1. Block diagram of test setup

Same as section 8.1

13.2. Limits

CFR 47 FCC Part15 (15.247), Subpart C		
Section	Test Item	Limit
CFR 47 15.247 (a) (1) III	Time of Occupancy (Dwell Time)	The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds, multiplied by the number of hopping channels employed.

13.3. Test Procedure

Connect the UUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Average
RBW	1 MHz
VBW	≥ RBW
Span	zero span
Trace	Clear Write
Sweep time	As necessary to capture the entire dwell time per hopping channel

Connect the UUT to the spectrum Analyzer and use the following settings:

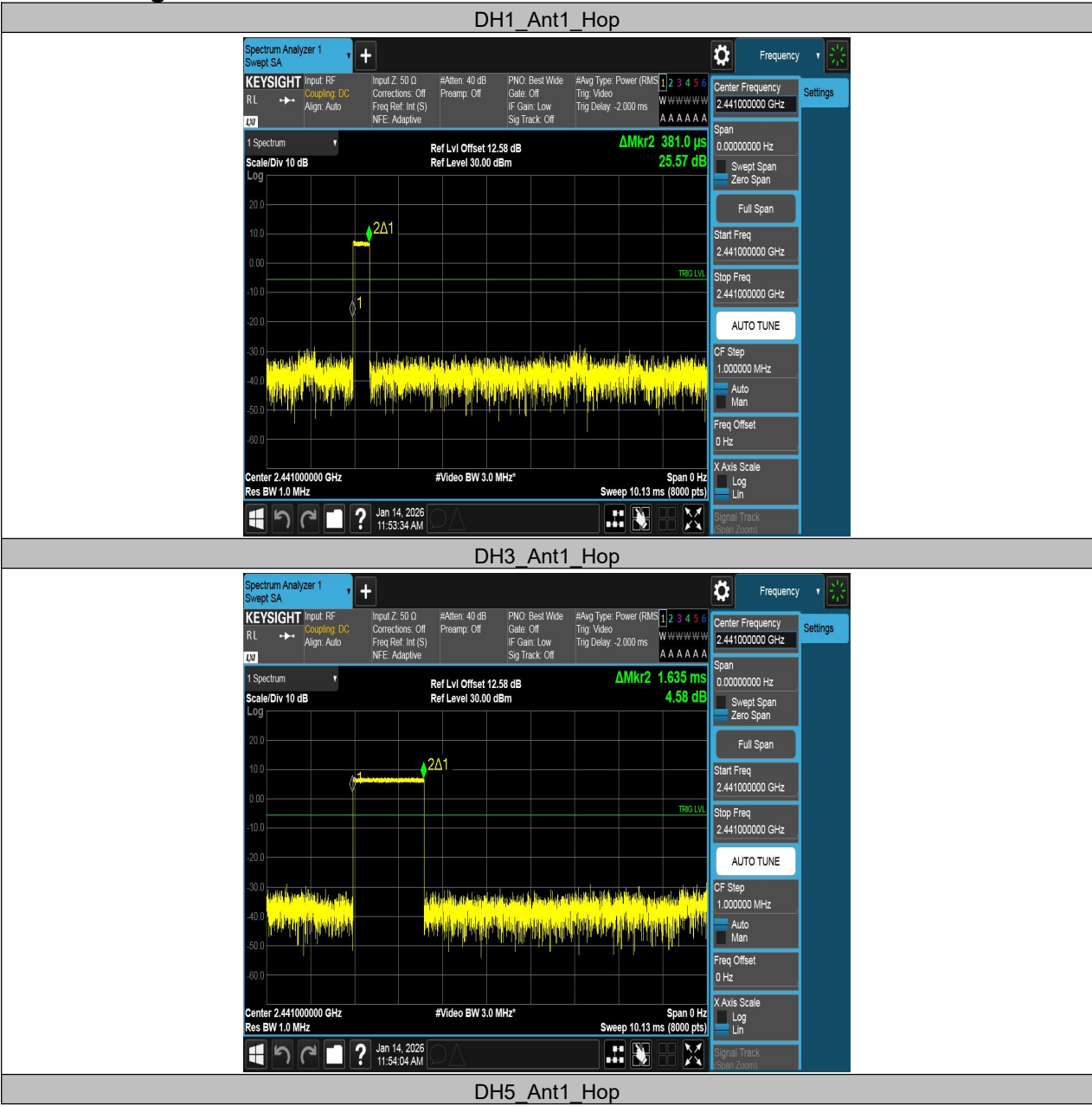
- The transmitter output (antenna port) was connected to the spectrum analyzer
 - Set RBW of spectrum analyzer to 1 MHz and VBW to 3 MHz.
 - Use a video trigger with the trigger level set to enable triggering only on full pulses.
 - Sweep Time is more than once pulse time.
 - Set the center frequency on any frequency would be measure and set the frequency span to zero span.
 - Measure the maximum time duration of one single pulse.
 - Set the EUT for DH5, DH3 and DH1 packet transmitting.
 - Measure the maximum time duration of one single pulse.
- A Period Time = (channel number)*0.4
 For FHSS Mode (79 Channel):
 DH1 Time Slot: Reading * (1600/2)*31.6/(channel number)
 DH3 Time Slot: Reading * (1600/4)*31.6/(channel number)
 DH5 Time Slot: Reading * (1600/6)*31.6/(channel number)

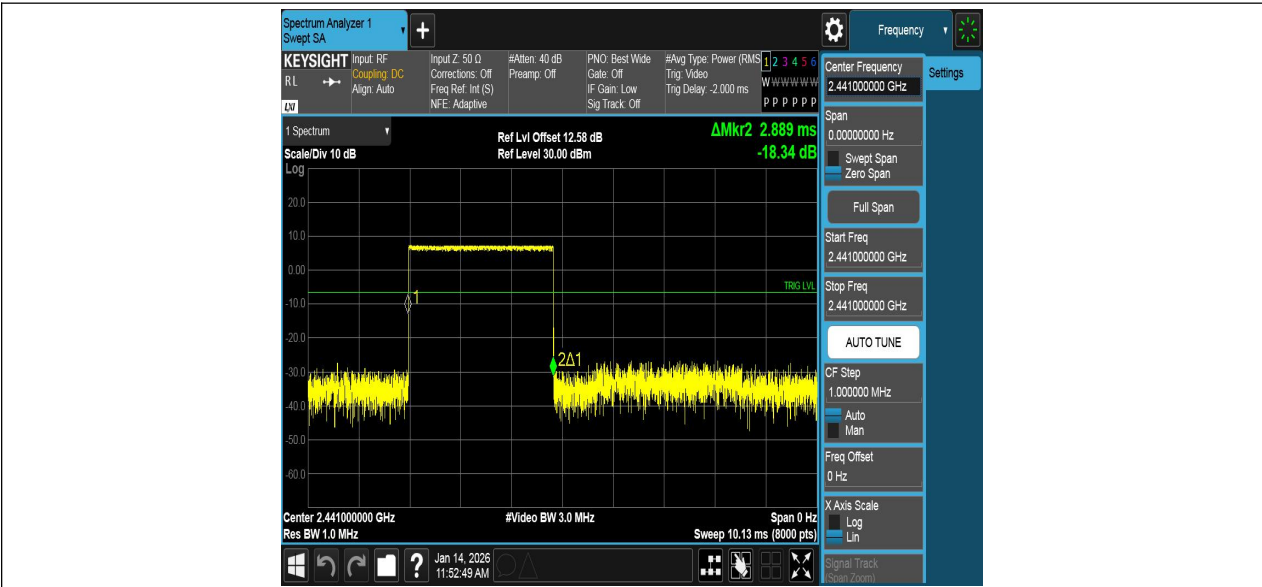
13.4. Results

Test Mode	Ant.	Freq. (MHz)	Burst Width (ms)	Total Hops (Num)	Result (s)	Limit (s)	Verdict
DH1	Ant1	Hop	0.381	320	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.635	160	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.889	106.67	0.308	≤0.4	PASS
2DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
2DH3	Ant1	Hop	1.643	160	0.263	≤0.4	PASS
2DH5	Ant1	Hop	2.891	106.67	0.308	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.642	160	0.263	≤0.4	PASS

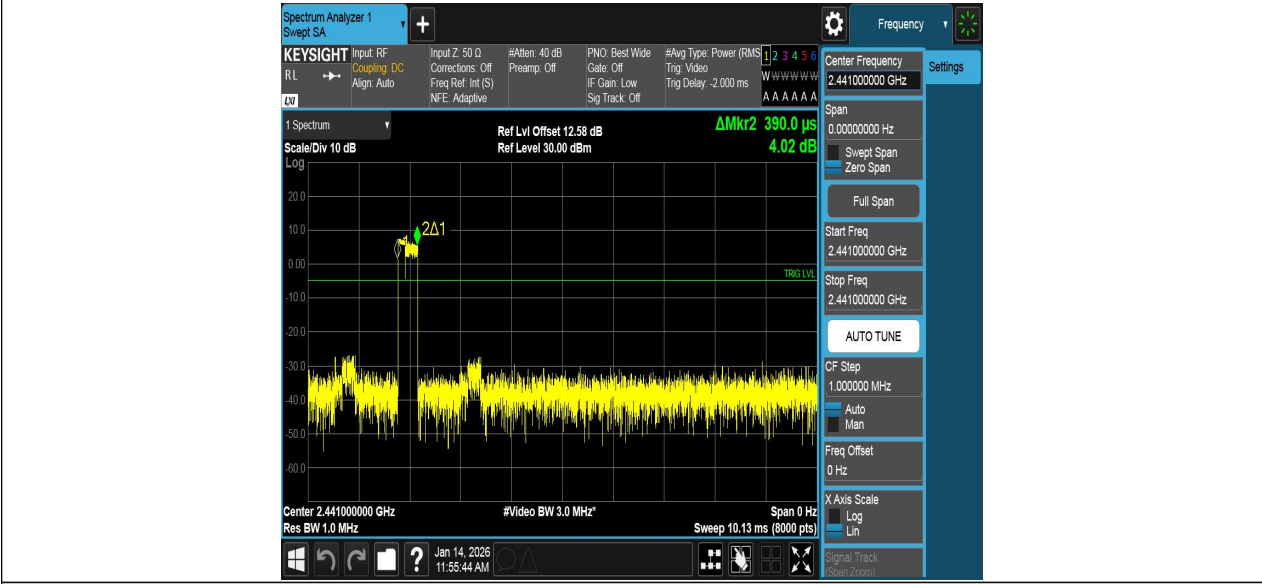
3DH5	Ant1	Hop	2.893	106.67	0.309	≤0.4	PASS
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13.5. Original test data

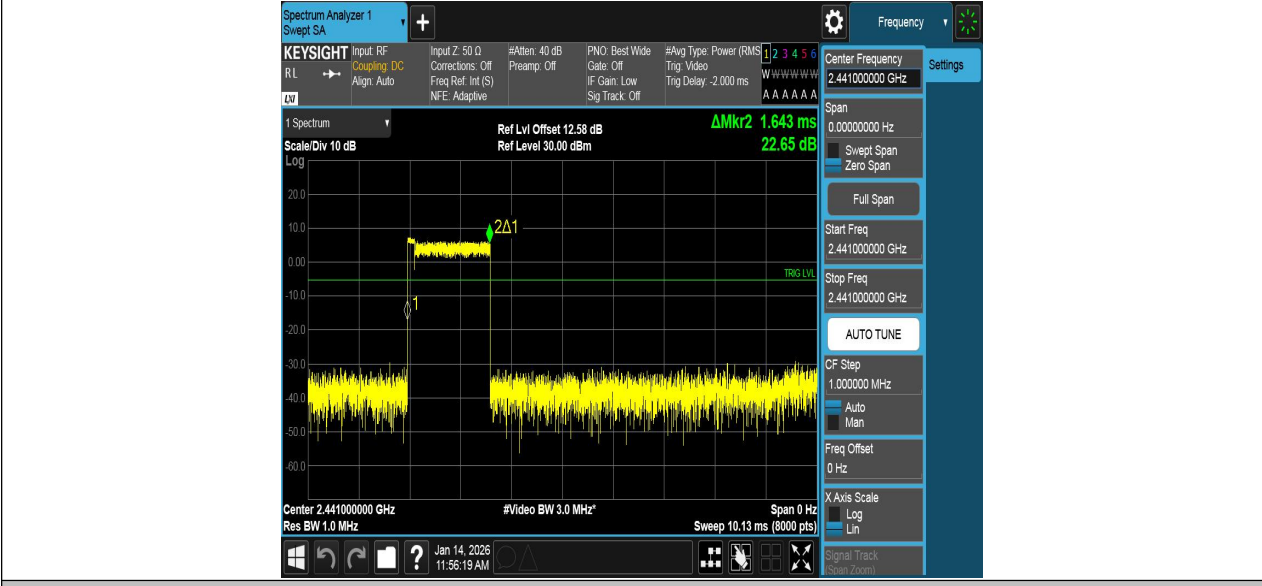




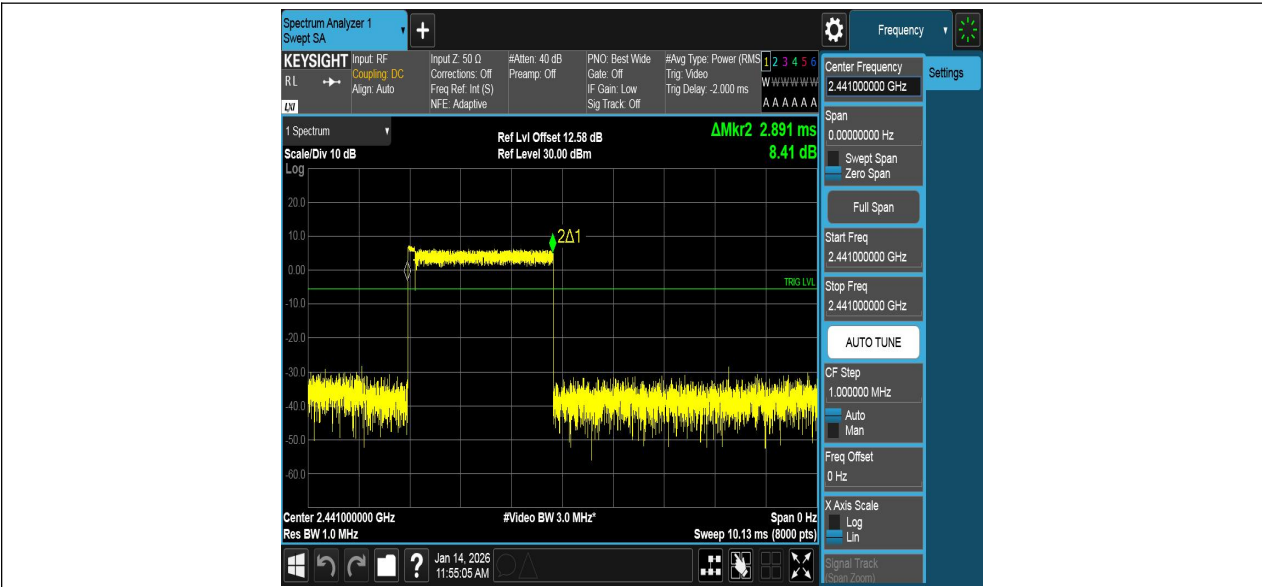
2DH1_Ant1_Hop



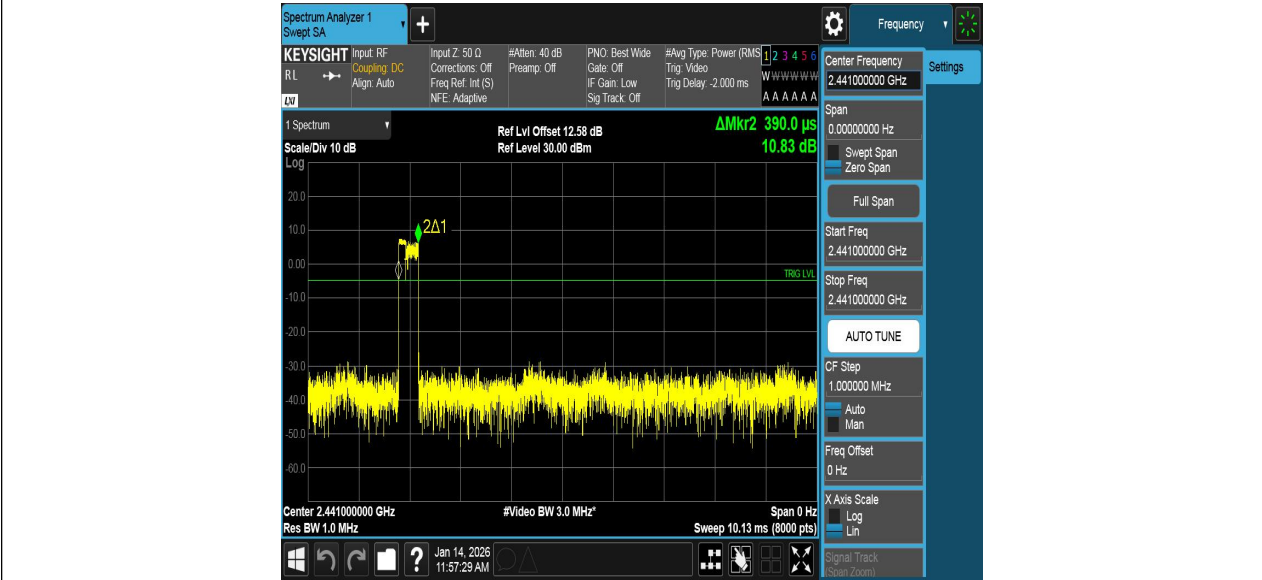
2DH3_Ant1_Hop



2DH5_Ant1_Hop



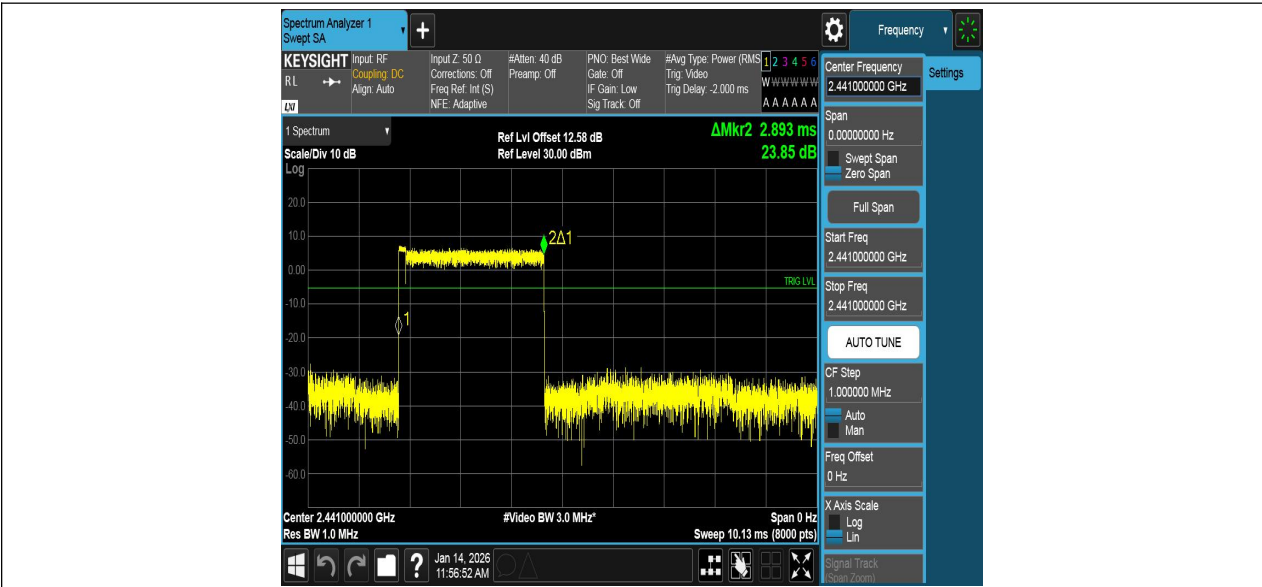
3DH1_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop



14. Conducted Spurious Emission

14.1. Block diagram of test setup

Same as section 8.1

14.2. Limits

CFR 47 FCC Part15 (15.247), Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Spurious Emission	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

14.3. Test Procedure

Please refer to the ANSI C63.10 section 6.10.

For Band edge use the following settings:

Detector	Peak
RBW	100 kHz
VBW	300 kHz
Span	wide enough to fully capture the emission being measured
Trace	Max hold
Sweep time	Auto couple.

For Spurious Emission use the following settings:

Detector	Peak
RBW	100 kHz
VBW	300 kHz
Span	wide enough to fully capture the emission being measured
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

14.4. Results

Band edge:

Test Mode	Ant.	Ch Name	Freq. (MHz)	Ref Level (dBm)	Result (dBm)	Limit (dBm)	Verdict
DH5	Ant1	Low	2402	-3.85	-47.86	≤-23.85	PASS
		High	2480	-5.39	-47.09	≤-25.39	PASS
		Low	Hop_2402	-3.55	-47.65	≤-23.55	PASS
		High	Hop_2480	-5.09	-47.33	≤-25.09	PASS
2DH5	Ant1	Low	2402	-3.99	-46.27	≤-23.99	PASS
		High	2480	-5.65	-48.29	≤-25.65	PASS
		Low	Hop_2402	-7.38	-47.61	≤-27.38	PASS
		High	Hop_2480	-6.25	-47.33	≤-26.25	PASS
3DH5	Ant1	Low	2402	-3.69	-47.67	≤-23.69	PASS
		High	2480	-5.60	-48.32	≤-25.6	PASS
		Low	Hop_2402	-6.11	-48.05	≤-26.11	PASS
		High	Hop_2480	-6.34	-47.81	≤-26.34	PASS

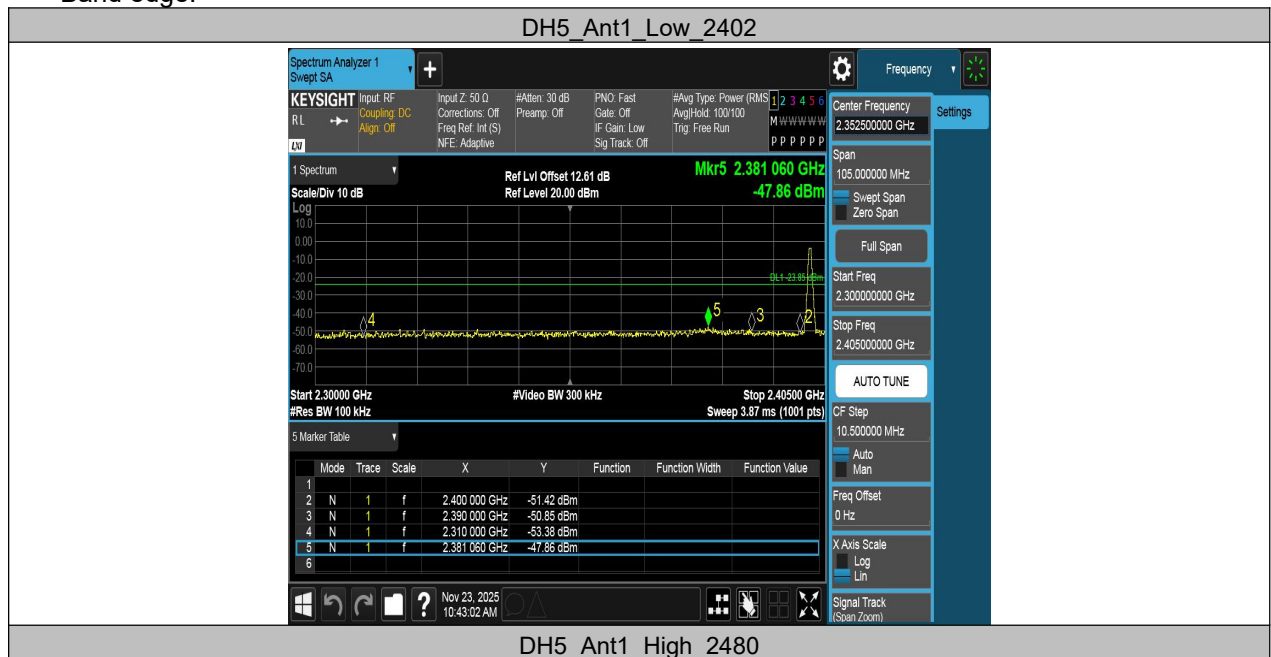
Spurious Emission:

Test Mode	Ant.	Freq. (MHz)	Freq. Range (MHz)	Ref Level (dBm)	Result (dBm)	Limit (dBm)	Verdict
DH5	Ant1	2402	30~1000	-3.85	-61.55	≤-23.85	PASS
			1000~26500	-3.85	-37.56	≤-23.85	PASS
		2441	30~1000	-4.93	-62.08	≤-24.93	PASS
			1000~26500	-4.93	-40.42	≤-24.93	PASS
		2480	30~1000	-5.39	-62.6	≤-25.39	PASS
			1000~26500	-5.39	-40.8	≤-25.39	PASS
2DH5	Ant1	2402	30~1000	-3.99	-62.8	≤-23.99	PASS
			1000~26500	-3.99	-41.68	≤-23.99	PASS
		2441	30~1000	-5.06	-62.24	≤-25.06	PASS
			1000~26500	-5.06	-39.77	≤-25.06	PASS
		2480	30~1000	-5.65	-62.45	≤-25.65	PASS
			1000~26500	-5.65	-39.77	≤-25.65	PASS
3DH5	Ant1	2402	30~1000	-3.69	-62.64	≤-23.69	PASS
			1000~26500	-3.69	-39.96	≤-23.69	PASS
		2441	30~1000	-5.19	-62.53	≤-25.19	PASS
			1000~26500	-5.19	-41.52	≤-25.19	PASS
		2480	30~1000	-5.60	-62.83	≤-25.6	PASS
			1000~26500	-5.60	-41.7	≤-25.6	PASS

Note: Offset=cable loss

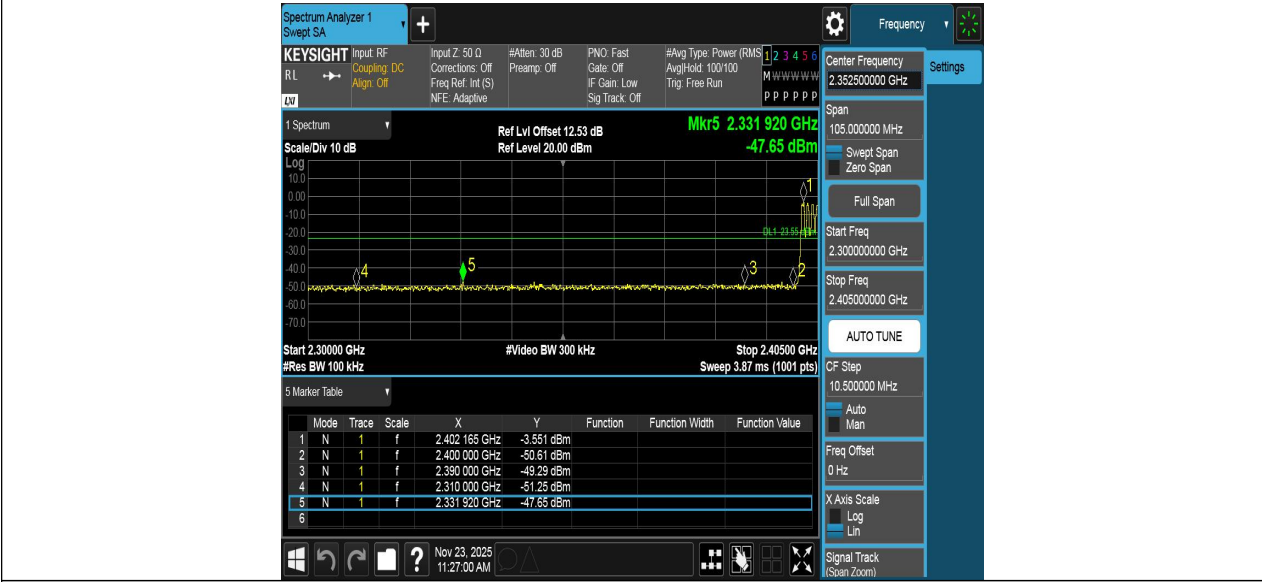
14.5. Original test data

Band edge:

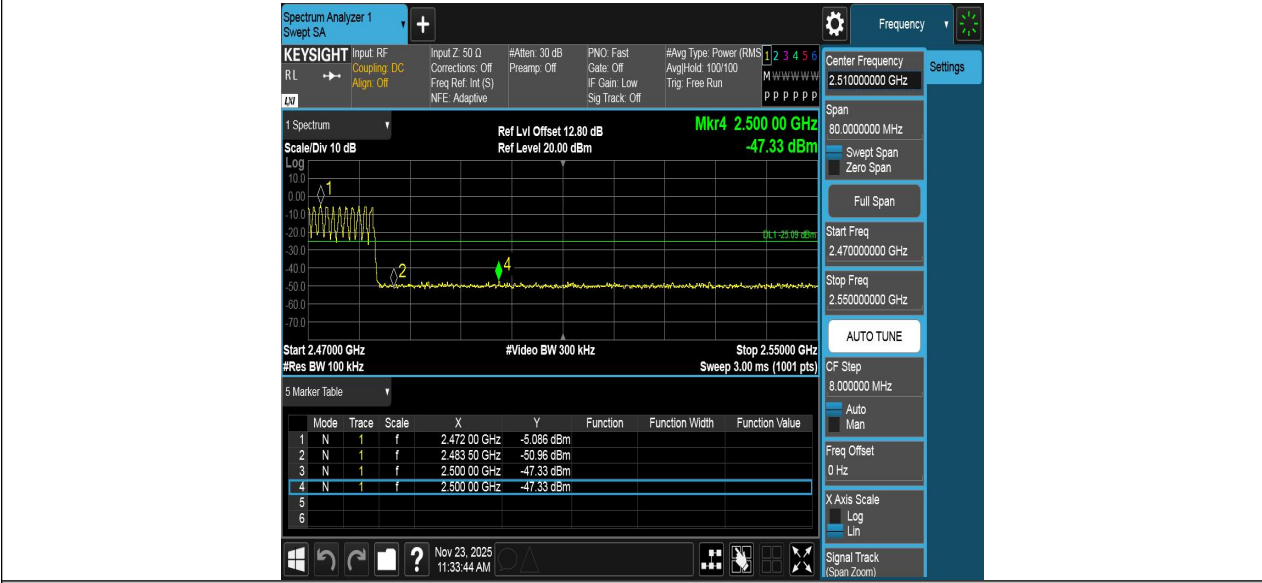




DH5 Ant1 Low Hop 2402



DH5 Ant1 High Hop 2480



2DH5 Ant1 Low 2402

