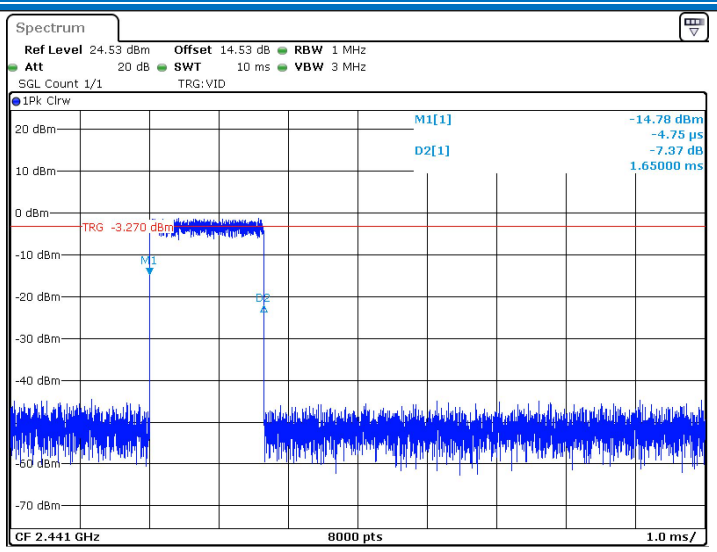
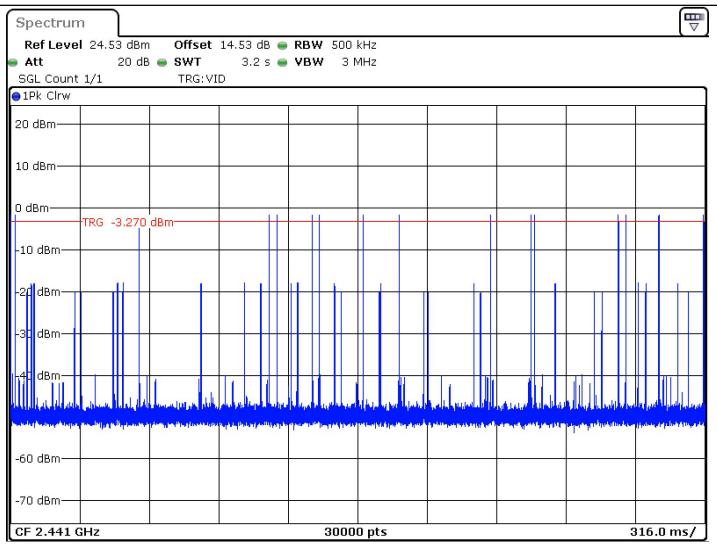
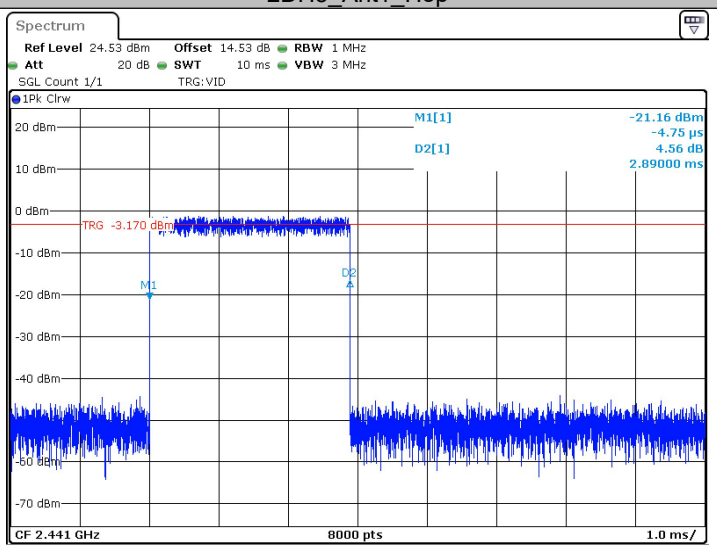


Date: 12.MAR.2025 10:51:25

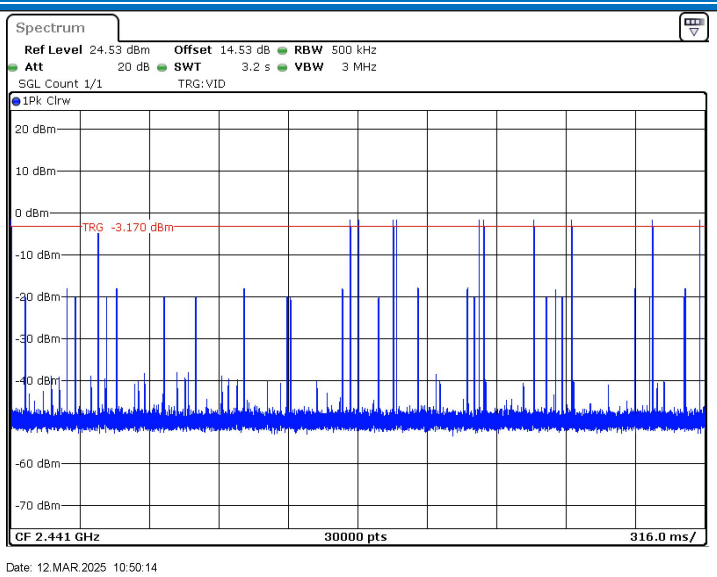


Date: 12.MAR.2025 10:51:30

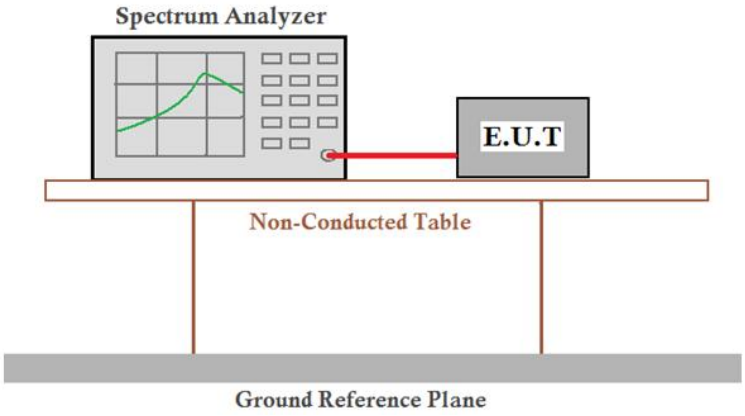
2DH5_Ant1_Hop



Date: 12.MAR.2025 10:50:08


Spectrum
Ref Level 24.53 dBm Offset 14.53 dB RBW 500 kHz
Att 20 dB SWT 3.2 s VBW 3 MHz
SGL Count 1/1 TRG:VID
1Pk Clrw
20 dBm
10 dBm
0 dBm
TRG -3.170 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-60 dBm
-70 dBm
CF 2.441 GHz
30000 pts
316.0 ms/
Date: 12.MAR.2025 10:50:14

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:	 *Remark: Offset=cable loss+ attenuation factor.*
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

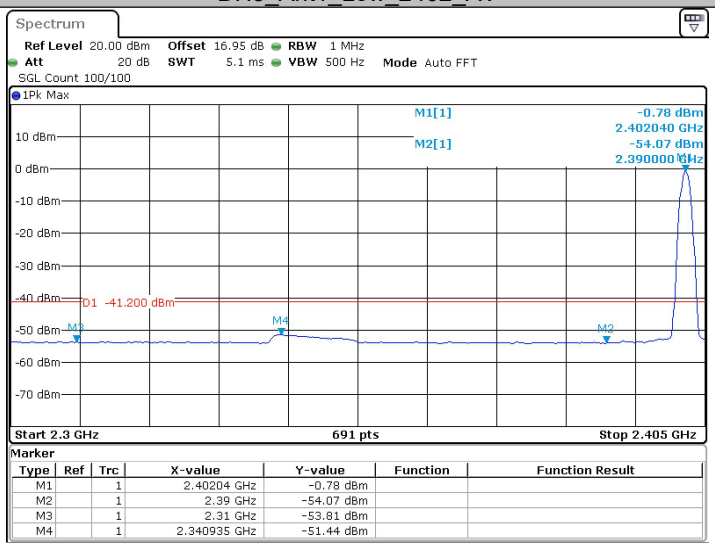
Measurement Data

ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
Low	2402	AV	2310.000	-53.81	≤-41.20	41.39	≤54	PASS
		AV	2340.935	-51.44	≤-41.20	43.76	≤54	PASS
		AV	2390.000	-54.07	≤-41.20	41.13	≤54	PASS
		Peak	2310.000	-44.66	≤-21.20	50.54	≤74	PASS
		Peak	2346.870	-40.38	≤-21.20	54.82	≤74	PASS
		Peak	2390.000	-44.39	≤-21.20	50.81	≤74	PASS
High	2480	AV	2483.500	-53.03	≤-41.20	42.17	≤54	PASS
		AV	2483.681	-52.87	≤-41.20	42.33	≤54	PASS
		AV	2500.000	-54.12	≤-41.20	41.08	≤54	PASS
		Peak	2483.500	-46.39	≤-21.20	48.81	≤74	PASS
		Peak	2484.493	-43.03	≤-21.20	52.17	≤74	PASS
		Peak	2500.000	-44.7	≤-21.20	50.50	≤74	PASS
Low	Hop_2402	Peak	2310.000	-44.45	≤-21.20	50.75	≤74	PASS
		Peak	2346.261	-41.26	≤-21.20	53.94	≤74	PASS
		Peak	2390.000	-44.8	≤-21.20	50.40	≤74	PASS
High	Hop_2480	Peak	2483.500	-47.24	≤-21.20	47.96	≤74	PASS
		Peak	2485.420	-42.41	≤-21.20	52.79	≤74	PASS
		Peak	2500.000	-45.37	≤-21.20	49.83	≤74	PASS
Low	2402	AV	2310.000	-53.85	≤-41.20	41.35	≤54	PASS
		AV	2341.239	-51.48	≤-41.20	43.72	≤54	PASS
		AV	2390.000	-54.07	≤-41.20	41.13	≤54	PASS
		Peak	2310.000	-44.83	≤-21.20	50.37	≤74	PASS
		Peak	2368.478	-41.05	≤-21.20	54.15	≤74	PASS
		Peak	2390.000	-43.06	≤-21.20	52.14	≤74	PASS
High	2480	AV	2483.500	-53.27	≤-41.20	41.93	≤54	PASS
		AV	2483.797	-53.15	≤-41.20	42.05	≤54	PASS
		AV	2500.000	-54.15	≤-41.20	41.05	≤54	PASS
		Peak	2483.500	-46.92	≤-21.20	48.28	≤74	PASS
		Peak	2486.464	-42.31	≤-21.20	52.89	≤74	PASS
		Peak	2500.000	-43.91	≤-21.20	51.29	≤74	PASS
Low	Hop_2402	Peak	2310.000	-45.85	≤-21.20	49.35	≤74	PASS
		Peak	2342.000	-39.76	≤-21.20	55.44	≤74	PASS
		Peak	2390.000	-45.29	≤-21.20	49.91	≤74	PASS
High	Hop_2480	Peak	2483.500	-46.13	≤-21.20	49.07	≤74	PASS
		Peak	2497.478	-43.31	≤-21.20	51.89	≤74	PASS

		Peak	2500.000	-44.76	≤-21.20	50.44	≤74	PASS

Test plot as follows:

DH5_Ant1_Low_2402_AV

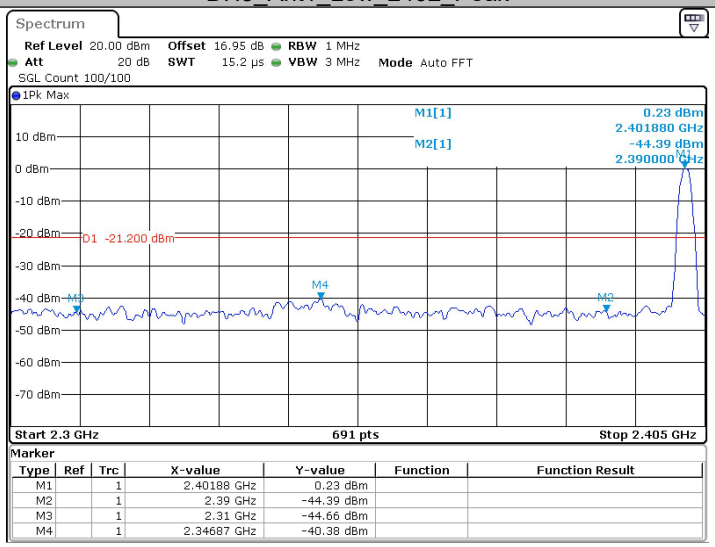


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40204 GHz	-0.78 dBm		
M2		1	2.39 GHz	-54.07 dBm		
M3		1	2.31 GHz	-53.81 dBm		
M4		1	2.340935 GHz	-51.44 dBm		

Date: 12.MAR.2025 10:19:00

DH5_Ant1_Low_2402_Peak

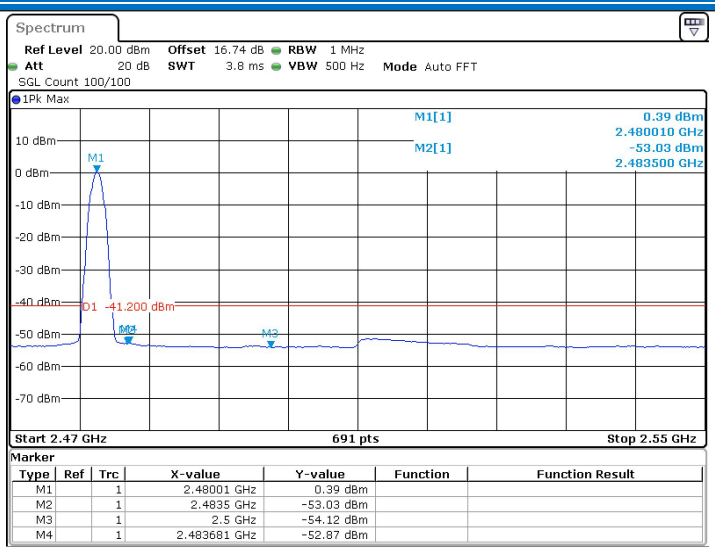


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40188 GHz	0.23 dBm		
M2		1	2.39 GHz	-44.39 dBm		
M3		1	2.31 GHz	-44.66 dBm		
M4		1	2.34687 GHz	-40.38 dBm		

Date: 12.MAR.2025 10:18:52

DH5_Ant1_High_2480_AV

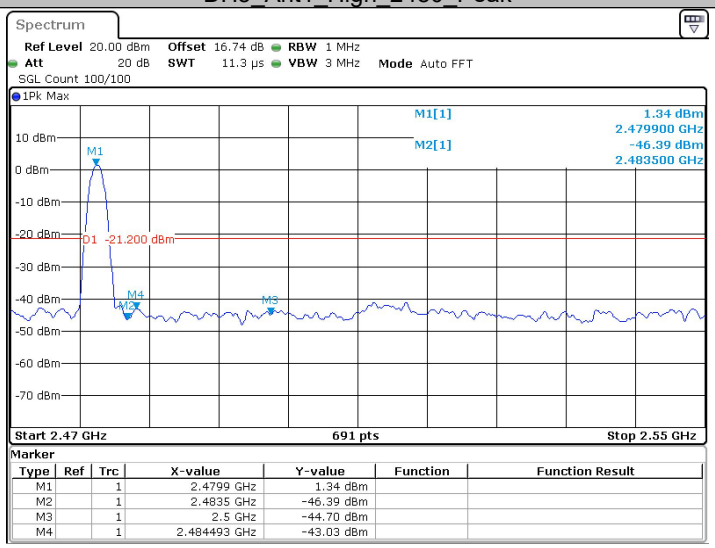


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.48001 GHz	0.39 dBm		
M2		1	2.4835 GHz	-53.03 dBm		
M3		1	2.5 GHz	-54.12 dBm		
M4		1	2.483681 GHz	-52.87 dBm		

Date: 12.MAR.2025 10:21:43

DH5_Ant1_High_2480_Peak



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4799 GHz	1.34 dBm		
M2		1	2.4835 GHz	-46.39 dBm		
M3		1	2.5 GHz	-44.70 dBm		
M4		1	2.484493 GHz	-43.03 dBm		

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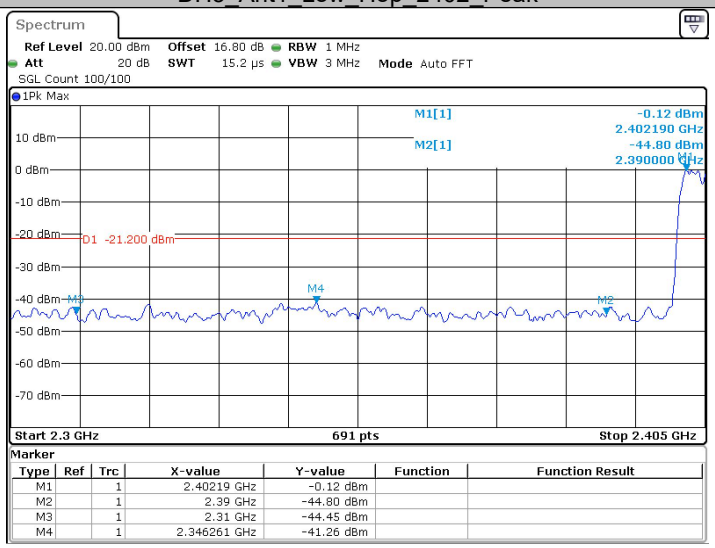
DH5_Ant1_Low_Hop_2402_Peak

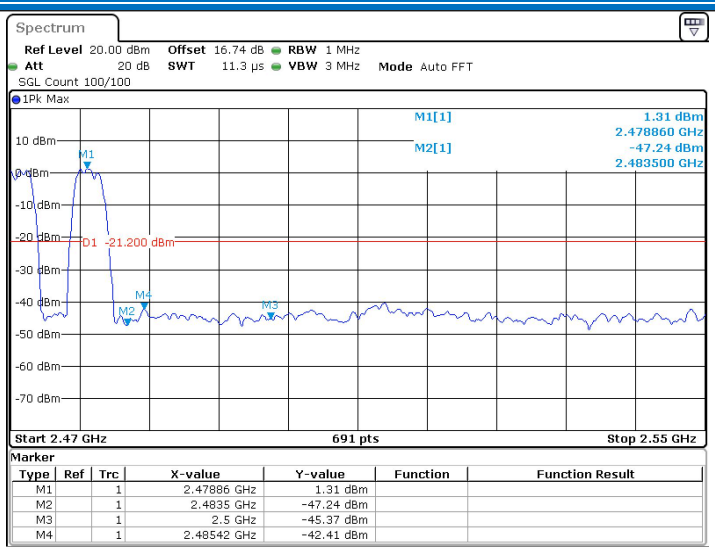


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40219 GHz	-0.12 dBm		
M2		1	2.39 GHz	-44.80 dBm		
M3		1	2.31 GHz	-44.45 dBm		
M4		1	2.346261 GHz	-41.26 dBm		

Date: 12.MAR.2025 10:31:21

DH5_Ant1_High_Hop_2480_Peak

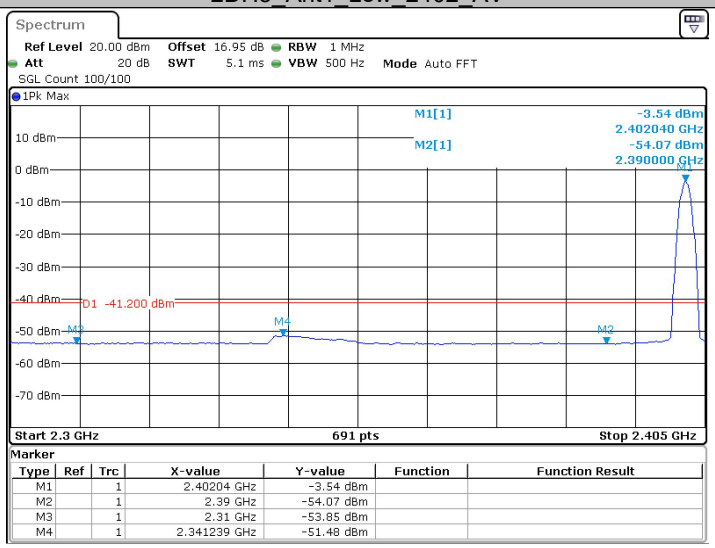


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47886 GHz	1.31 dBm		
M2		1	2.4835 GHz	-47.24 dBm		
M3		1	2.5 GHz	-45.37 dBm		
M4		1	2.48542 GHz	-42.41 dBm		

Date: 12.MAR.2025 10:38:33

2DH5_Ant1_Low_2402_AV

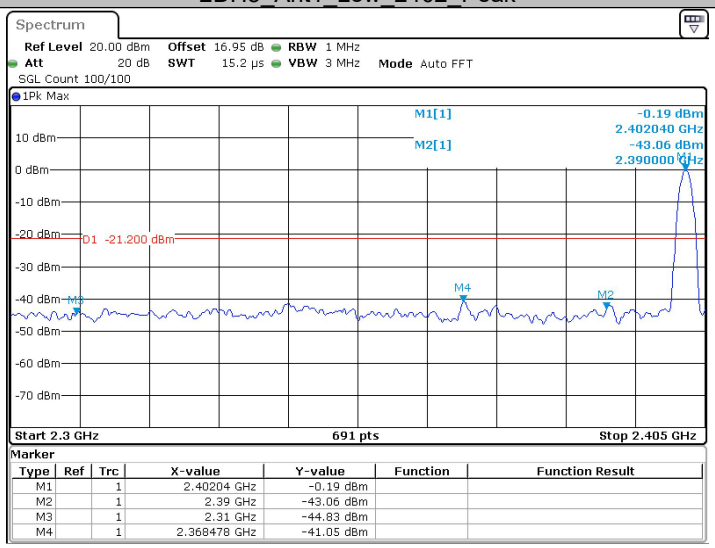


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40204 GHz	-3.54 dBm		
M2		1	2.39 GHz	-54.07 dBm		
M3		1	2.31 GHz	-53.85 dBm		
M4		1	2.341239 GHz	-51.48 dBm		

Date: 12.MAR.2025 10:24:57

2DH5_Ant1_Low_2402_Peak

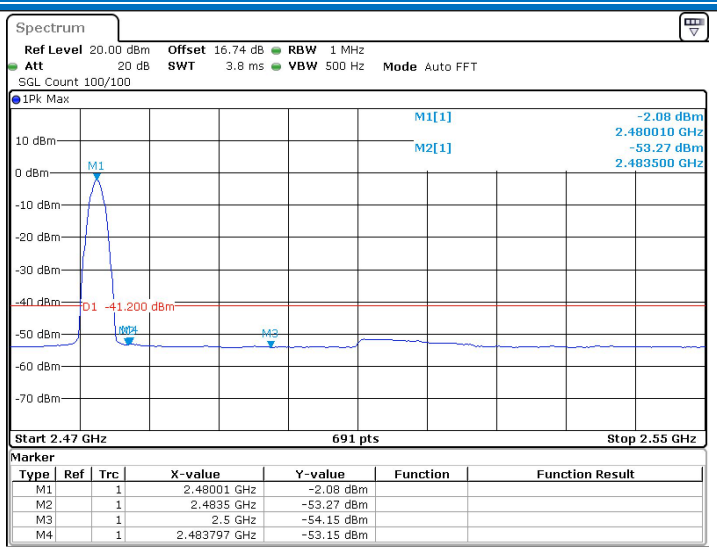


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40204 GHz	-0.19 dBm		
M2		1	2.39 GHz	-43.06 dBm		
M3		1	2.31 GHz	-44.83 dBm		
M4		1	2.368478 GHz	-41.05 dBm		

Date: 12.MAR.2025 10:24:50

2DH5_Ant1_High_2480_AV

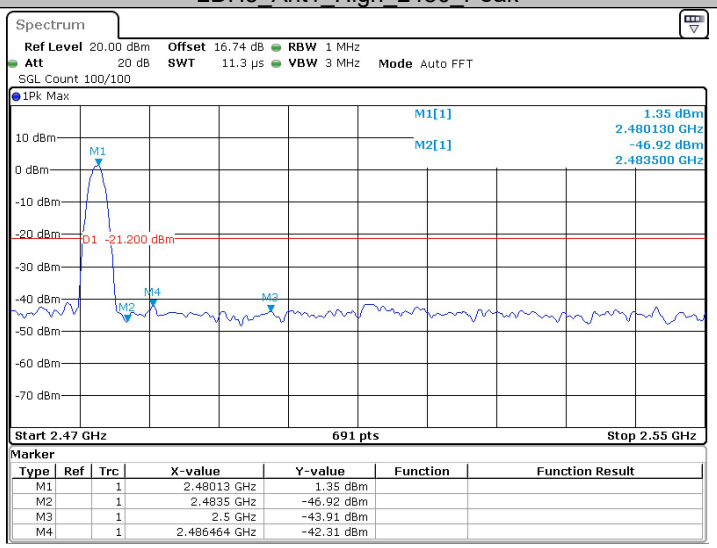


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.48001 GHz	-2.08 dBm		
M2		1	2.4835 GHz	-53.27 dBm		
M3		1	2.5 GHz	-54.15 dBm		
M4		1	2.483797 GHz	-53.15 dBm		

Date: 12.MAR.2025 10:29:59

2DH5_Ant1_High_2480_Peak

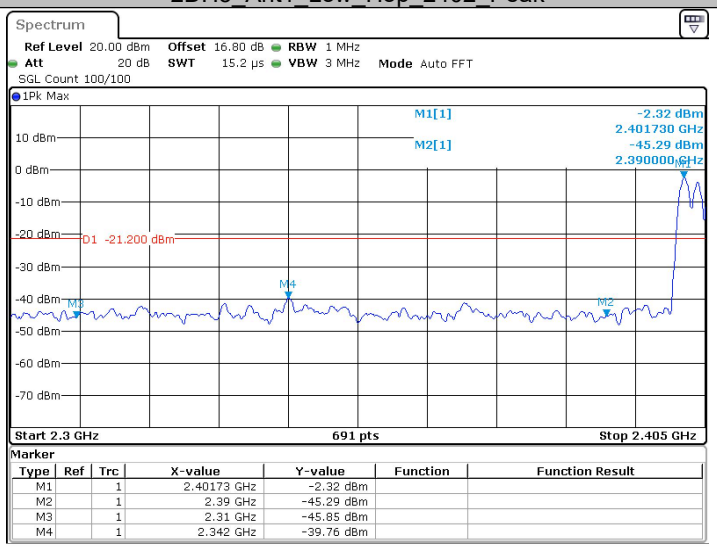


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.48013 GHz	1.35 dBm		
M2		1	2.4835 GHz	-46.92 dBm		
M3		1	2.5 GHz	-43.91 dBm		
M4		1	2.486464 GHz	-42.31 dBm		

Date: 12.MAR.2025 10:29:53

2DH5_Ant1_Low_Hop_2402_Peak

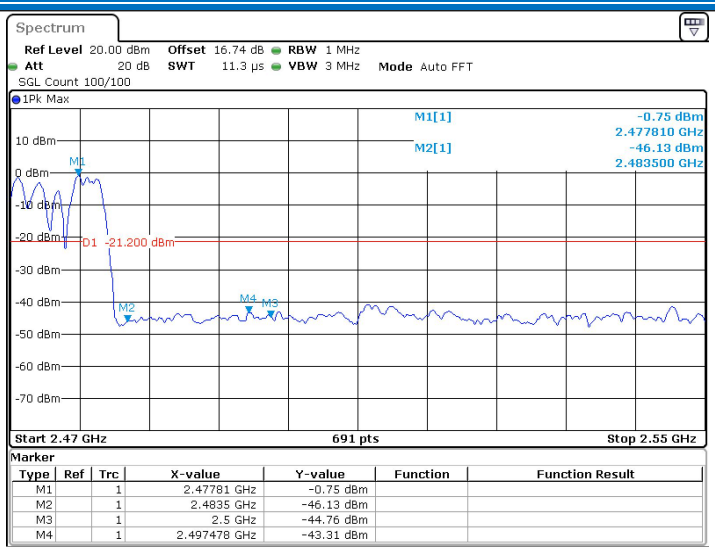


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40173 GHz	-2.32 dBm		
M2		1	2.39 GHz	-45.29 dBm		
M3		1	2.31 GHz	-45.85 dBm		
M4		1	2.342 GHz	-39.76 dBm		

Date: 12.MAR.2025 10:39:13

2DH5_Ant1_High_Hop_2480_Peak

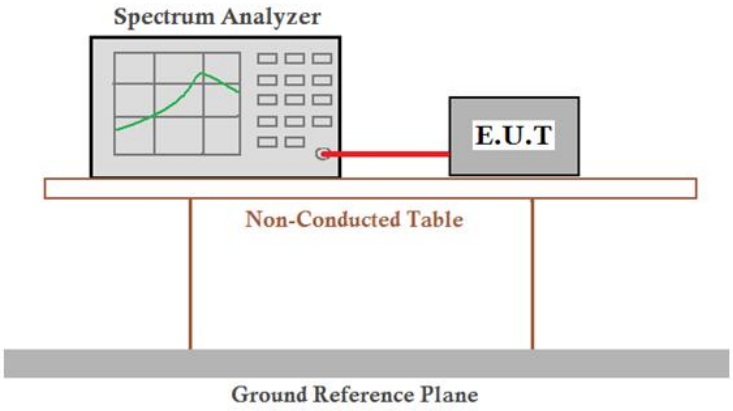


Marker

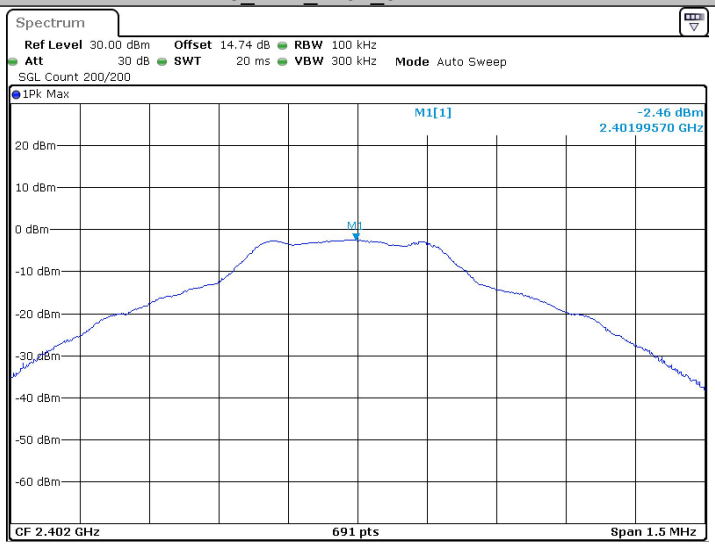
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47781 GHz	-0.75 dBm		
M2		1	2.4835 GHz	-46.13 dBm		
M3		1	2.5 GHz	-44.76 dBm		
M4		1	2.497478 GHz	-43.31 dBm		

Date: 12.MAR.2025 10:52:21

5.9 Spurious RF Conducted Emissions

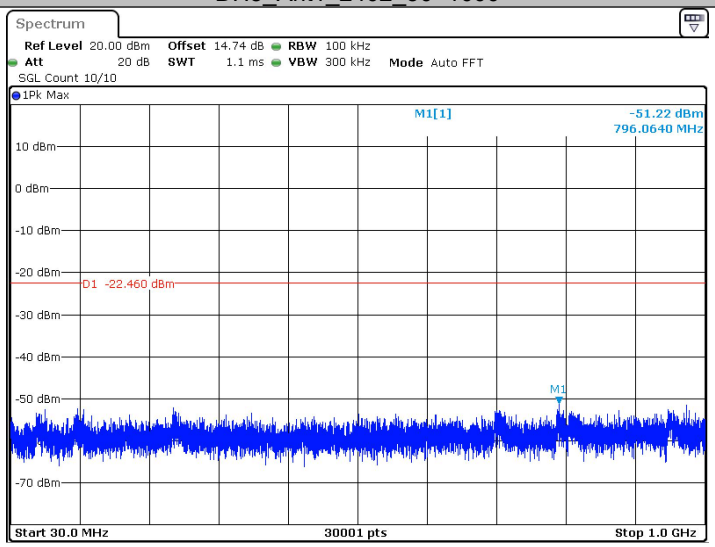
Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	 *Remark: Offset=cable loss+ attenuation factor.*
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is 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 π/4DQPSK modulation type, 3-DH5 of data type is the worst case of 8DPSK modulation type.
Test Results:	Pass

DH5_Ant1_2402_0~Reference



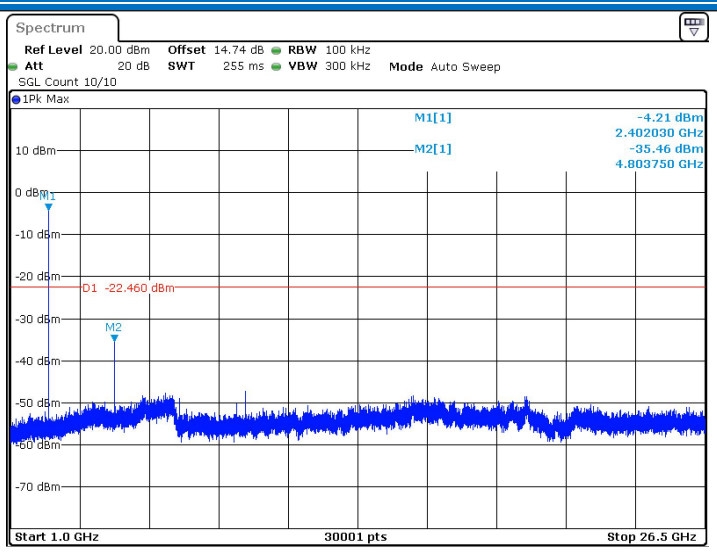
Date: 12.MAR.2025 10:19:09

DH5_Ant1_2402_30~1000



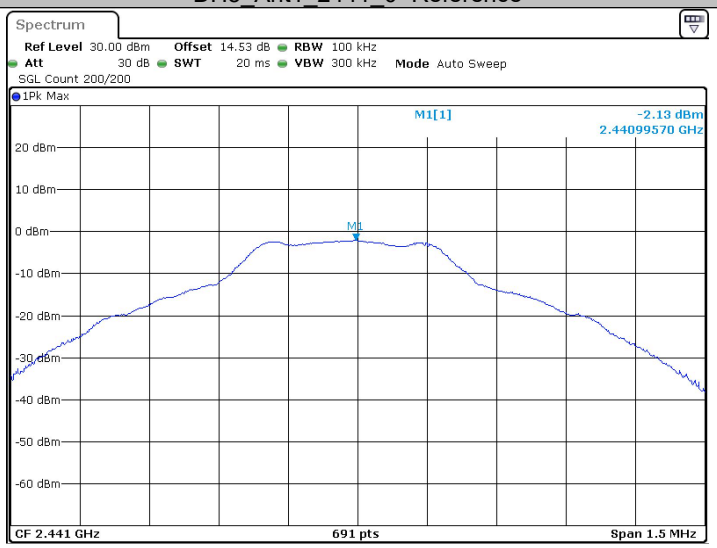
Date: 12.MAR.2025 10:19:14

DH5_Ant1_2402_1000~26500



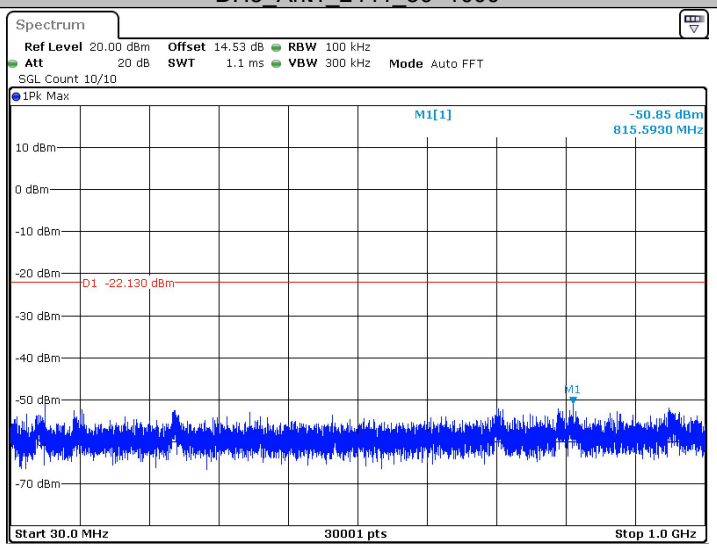
Date: 12.MAR.2025 10:19:24

DH5_Ant1_2441_0~Reference



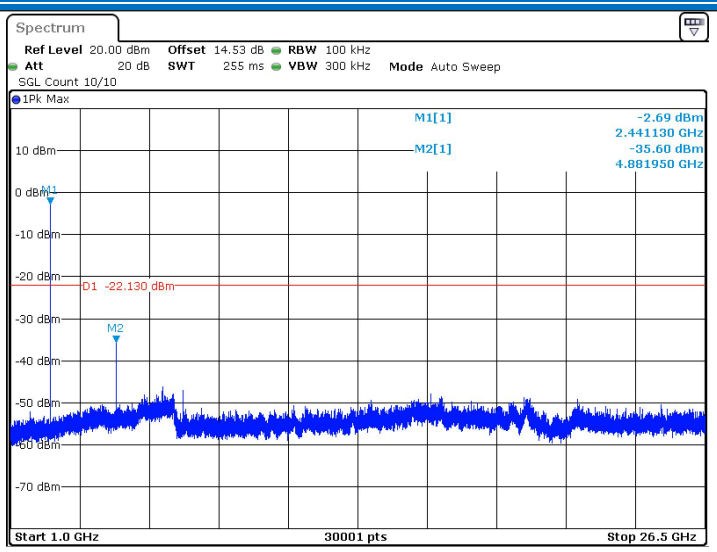
Date: 12.MAR.2025 10:20:54

DH5_Ant1_2441_30~1000



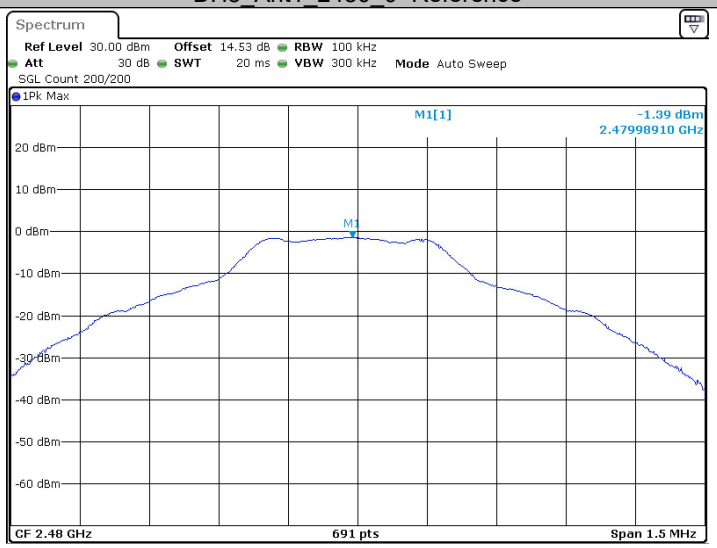
Date: 12.MAR.2025 10:20:58

DH5_Ant1_2441_1000~26500



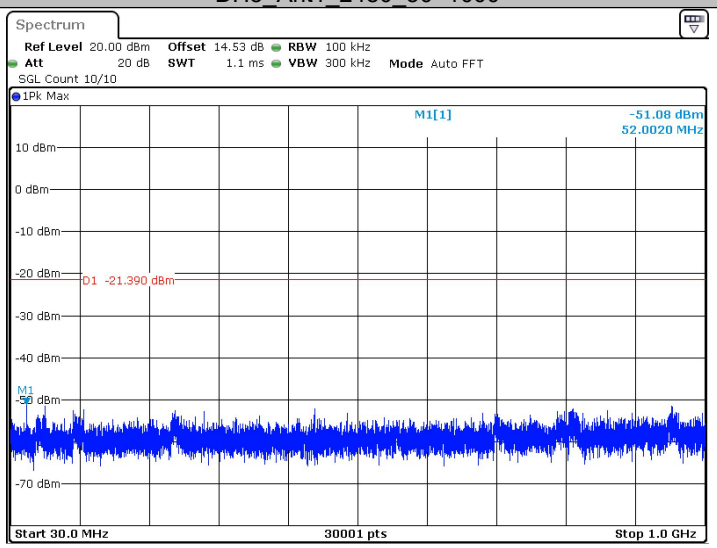
Date: 12.MAR.2025 10:21:09

DH5_Ant1_2480_0~Reference



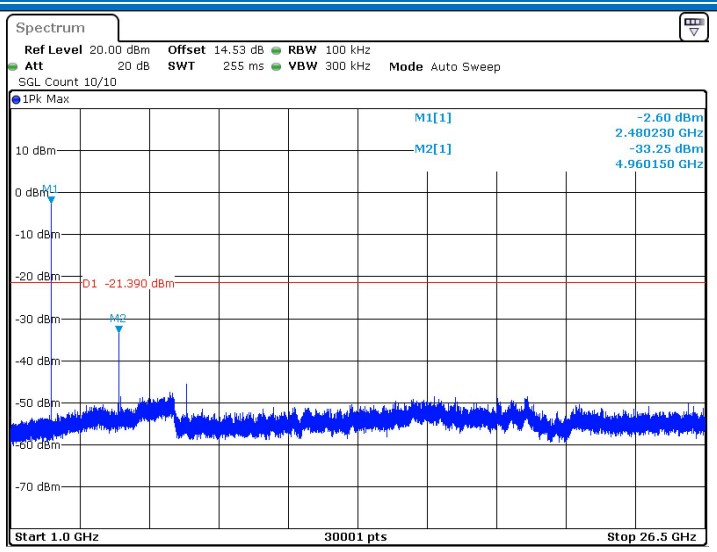
Date: 12.MAR.2025 10:21:52

DH5_Ant1_2480_30~1000

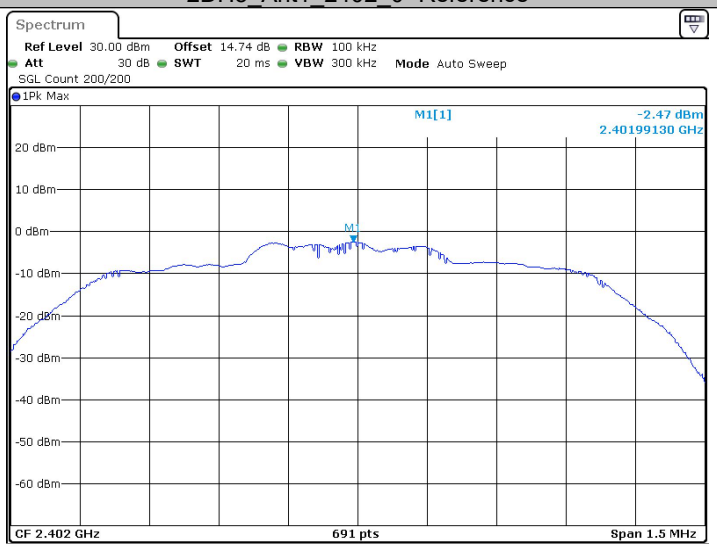


Date: 12.MAR.2025 10:21:56

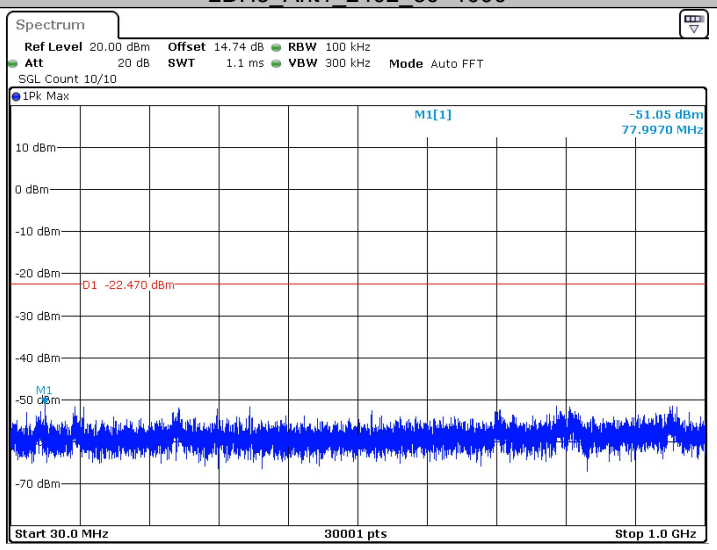
DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500