Case No. : GTS20250225018-2-06	
Ambient Condition: 22 ℃, 53 %RH	
According Standard: ■Part15C	
Test Date: 2025.4.21	**Test Engineer:** Evan ouyang

Appendix A.1: 20dB Emission Bandwidth

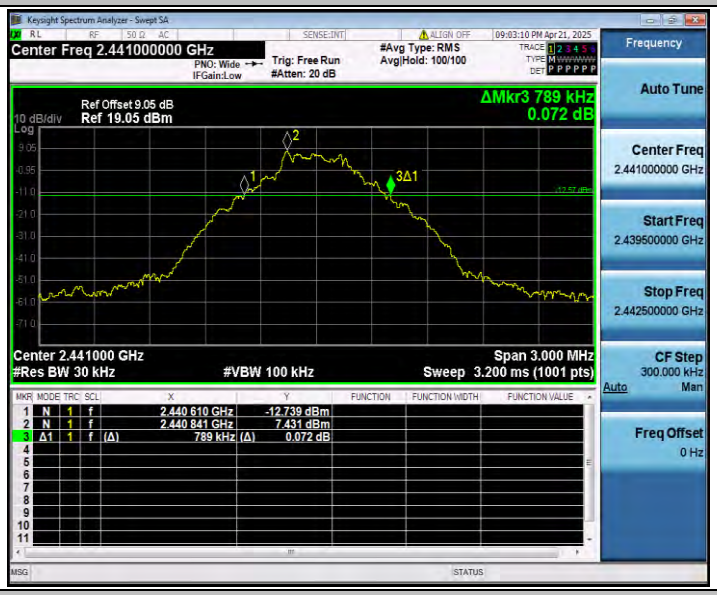
Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.795	2401.607	2402.402	---	---
		2441	0.789	2440.610	2441.399	---	---
		2480	0.831	2479.571	2480.402	---	---
2DH1	Ant1	2402	1.221	2401.382	2402.603	---	---
		2441	1.251	2440.379	2441.630	---	---
		2480	1.260	2479.367	2480.627	---	---
3DH1	Ant1	2402	1.254	2401.370	2402.624	---	---
		2441	1.254	2440.373	2441.627	---	---
		2480	1.251	2479.376	2480.627	---	---

Test Graphs

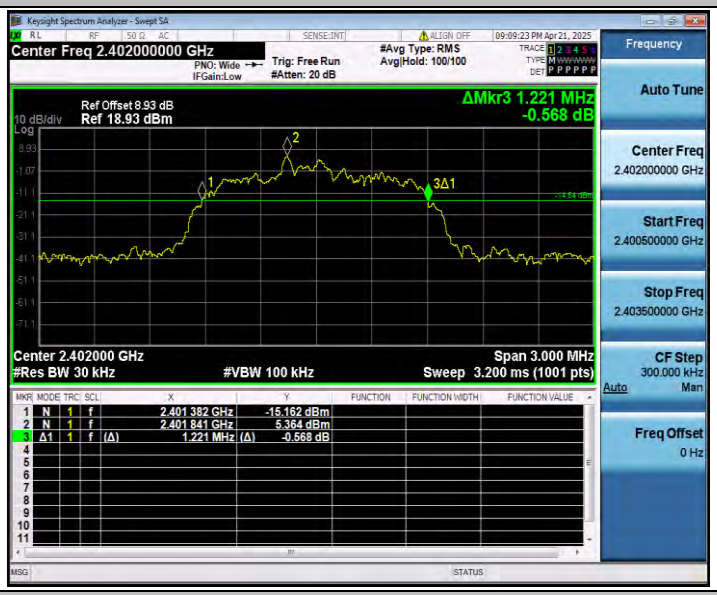
DH1_Ant1_2402

DH1_Ant1_2441

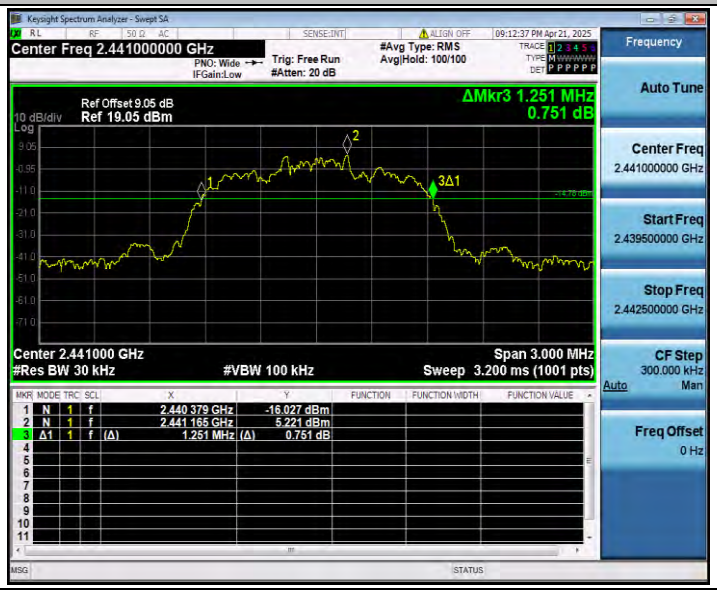


DH1_Ant1_2480

2DH1_Ant1_2402

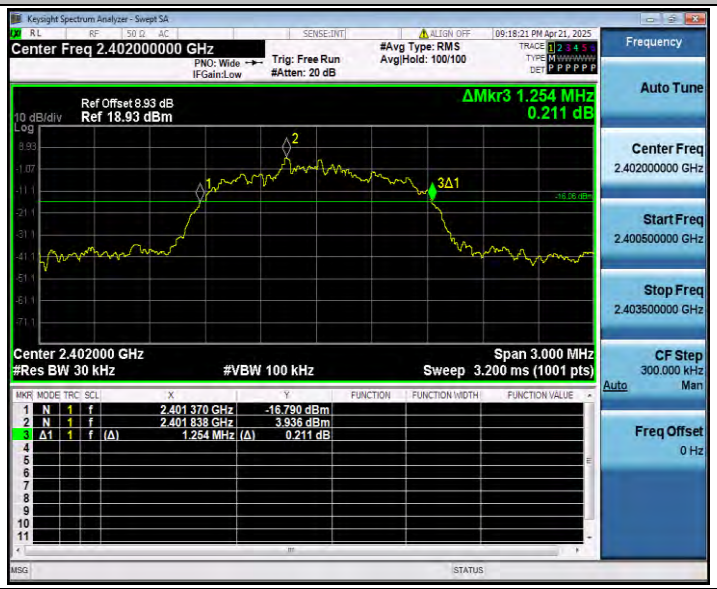


2DH1_Ant1_2441



2DH1_Ant1_2480

3DH1_Ant1_2402



3DH1_Ant1_2441

3DH1_Ant1_2480

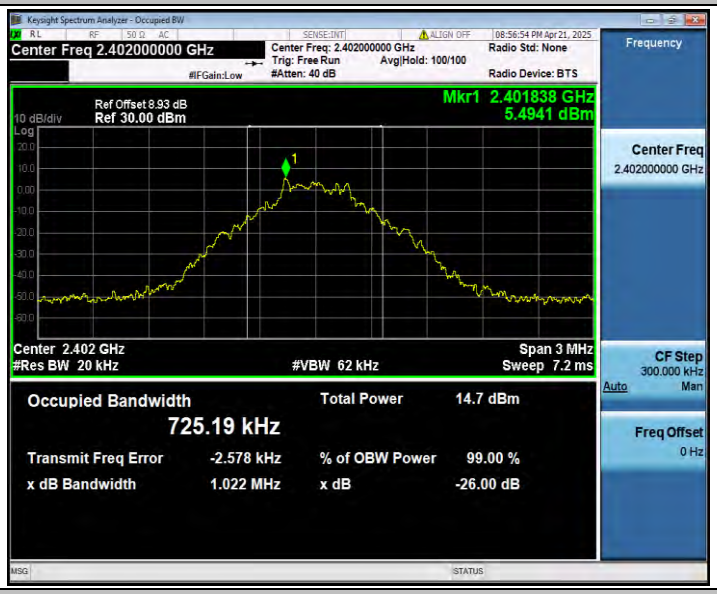
Appendix A.2: Occupied Channel Bandwidth

Test Result

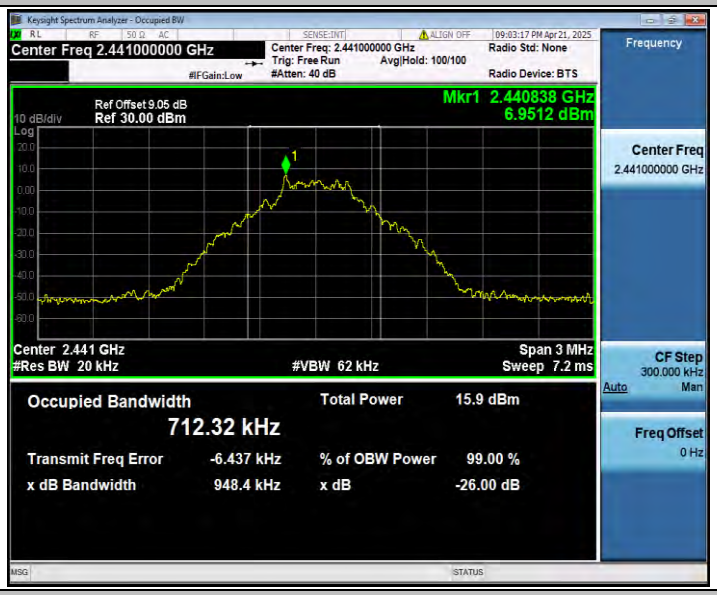
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH1	Ant1	2402	0.72519	2401.6348	2402.3600	---	---
		2441	0.71232	2440.6374	2441.3497	---	---
		2480	0.72156	2479.6347	2480.3563	---	---
2DH1	Ant1	2402	1.1522	2401.4231	2402.5753	---	---
		2441	1.1384	2440.4300	2441.5684	---	---
		2480	1.1381	2479.4328	2480.5709	---	---
3DH1	Ant1	2402	1.1412	2401.4377	2402.5789	---	---
		2441	1.1276	2440.4410	2441.5686	---	---
		2480	1.1402	2479.4405	2480.5807	---	---

Test Graphs

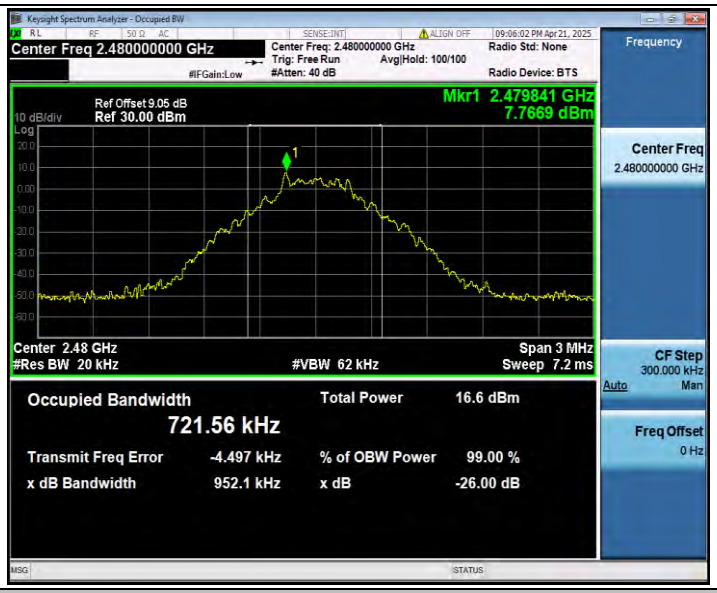
DH1_Ant1_2402



DH1_Ant1_2441



DH1_Ant1_2480



2DH1_Ant1_2402

2DH1_Ant1_2441

2DH1_Ant1_2480

3DH1_Ant1_2402

3DH1_Ant1_2441

3DH1_Ant1_2480

Appendix A.3: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH1	Ant1	2402	9.08	≤20.97	PASS
		2441	9.87	≤20.97	PASS
		2480	10.70	≤20.97	PASS
2DH1	Ant1	2402	8.13	≤20.97	PASS
		2441	9.11	≤20.97	PASS
		2480	9.98	≤20.97	PASS
3DH1	Ant1	2402	8.04	≤20.97	PASS
		2441	9.03	≤20.97	PASS
		2480	9.95	≤20.97	PASS

Appendix A.4: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH1	Ant1	Hop_2402	0.998	≥0.831	PASS
		Hop_2441	1.158	≥0.831	PASS
		Hop_2480	0.832	≥0.831	PASS
2DH1	Ant1	Hop_2402	1.006	≥0.840	PASS
		Hop_2441	0.99	≥0.840	PASS
		Hop_2480	0.992	≥0.840	PASS
3DH1	Ant1	Hop_2402	1.01	≥0.836	PASS
		Hop_2441	1.222	≥0.836	PASS
		Hop_2480	0.844	≥0.836	PASS

Test Graphs

DH1_Ant1_Hop_2402

DH1_Ant1_Hop_2441

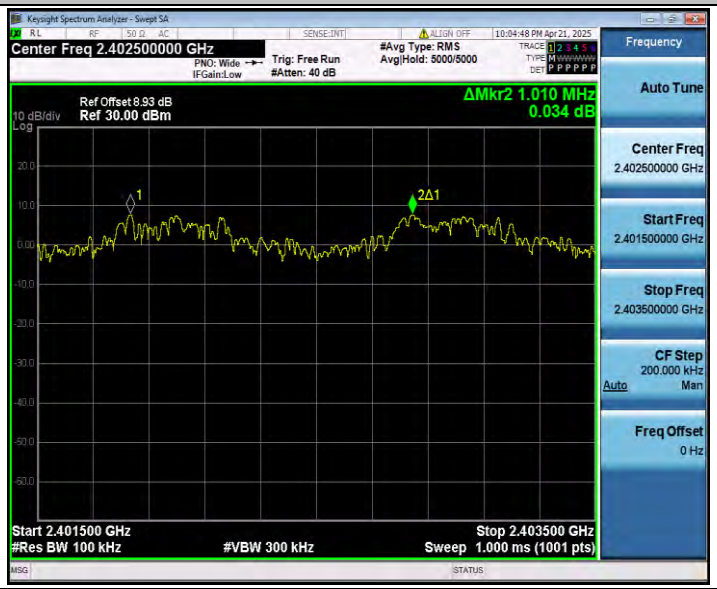
DH1_Ant1_Hop_2480

2DH1_Ant1_Hop_2402

2DH1_Ant1_Hop_2441

2DH1_Ant1_Hop_2480

3DH1_Ant1_Hop_2402



3DH1_Ant1_Hop_2441

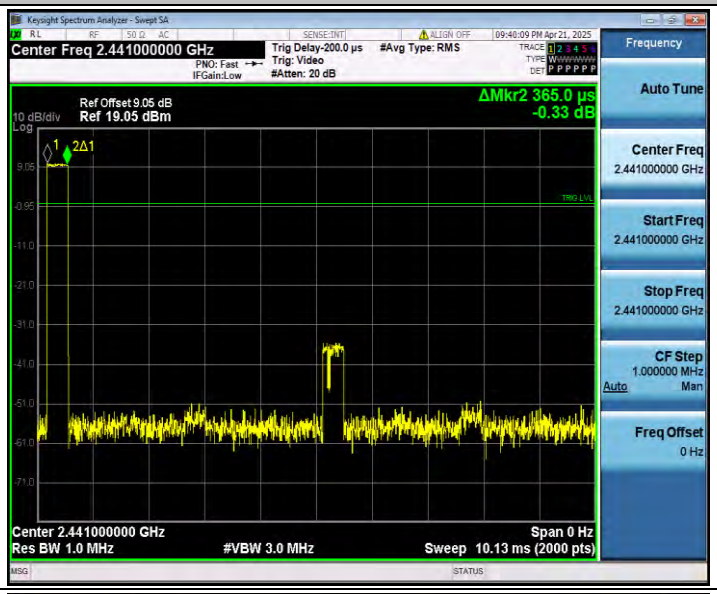
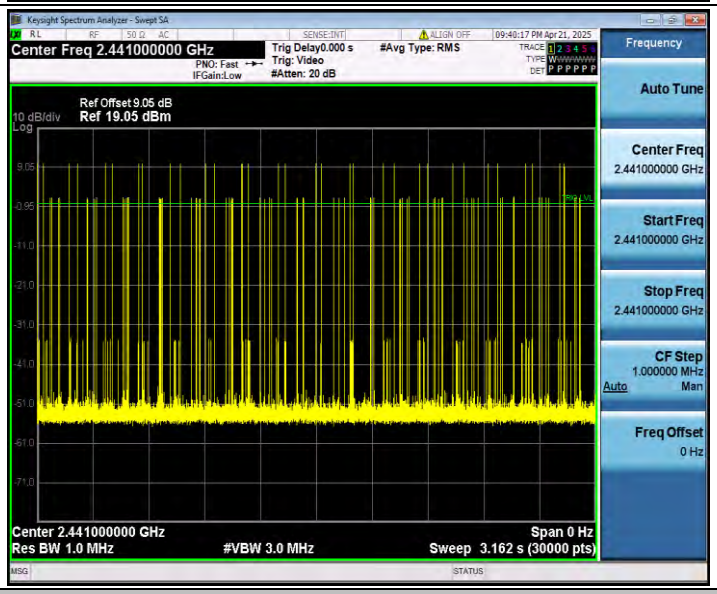
3DH1_Ant1_Hop_2480

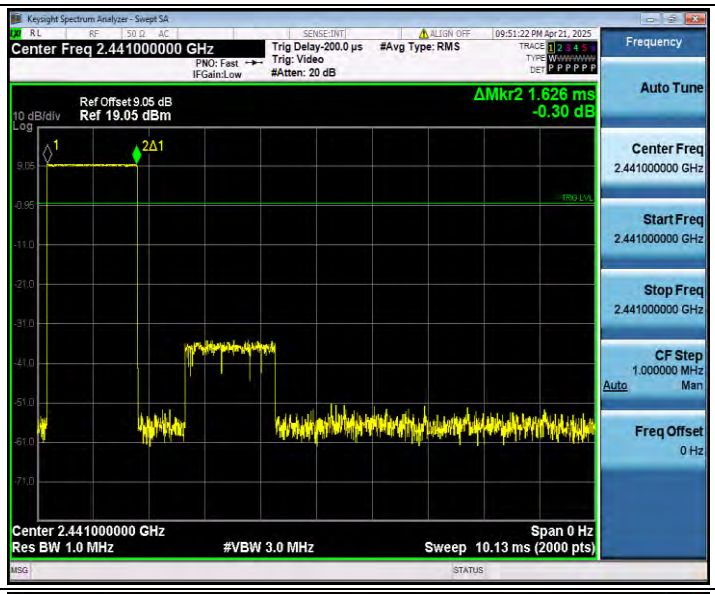
Appendix A.5: Time of occupancy

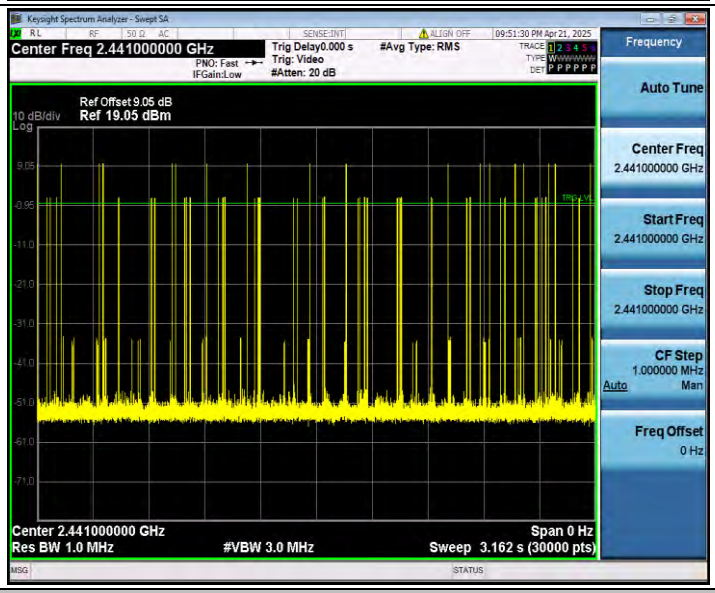
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.365	320	0.117	≤0.4	PASS
DH3	Ant1	Hop	1.626	180	0.293	≤0.4	PASS
DH5	Ant1	Hop	2.873	120	0.345	≤0.4	PASS
2DH1	Ant1	Hop	0.375	330	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.626	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS
3DH1	Ant1	Hop	0.380	330	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.626	180	0.293	≤0.4	PASS
3DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS

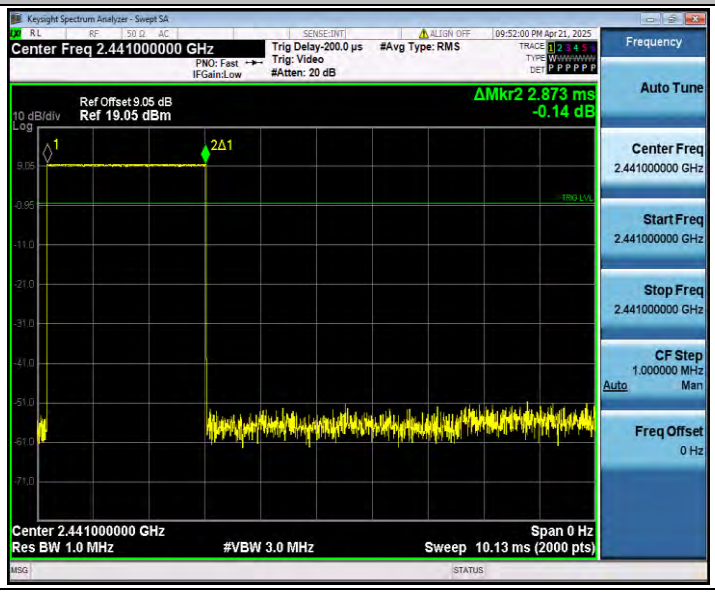
Test Graphs

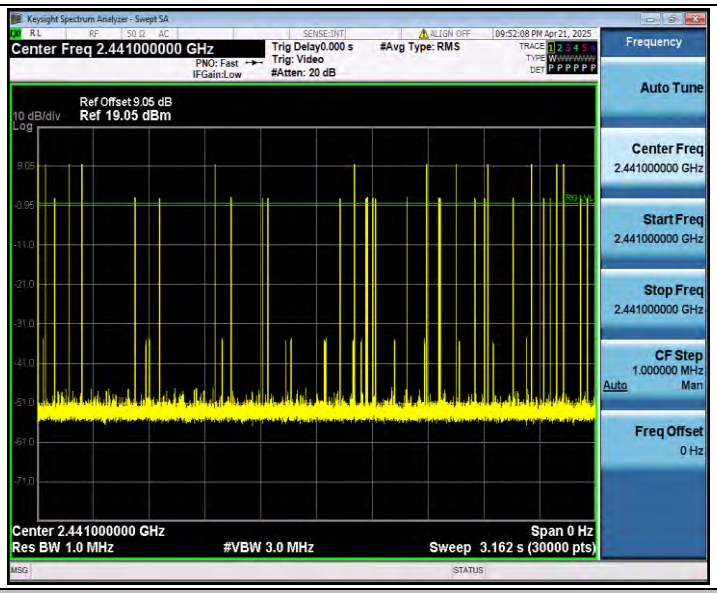
DH1_Ant1_Hop


DH3_Ant1_Hop


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
Trig Delay-200.0 µs
#Avg Type: RMS
Trig: Video
#Atten: 20 dB
PNO: Fast
IFGain:Low
09:51:22 PM Apr 21, 2025
Ref Offset 9.05 dB
10 dB/div
Ref 19.05 dBm
ΔMkr2 1.626 ms
-0.30 dB
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.13 ms (2000 pts)
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

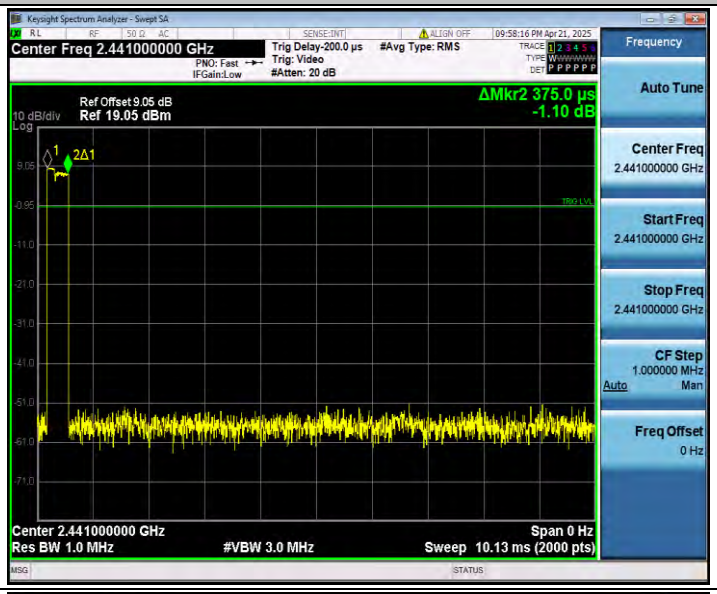

Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
Trig Delay0.000 s
#Avg Type: RMS
Trig: Video
#Atten: 20 dB
PNO: Fast
IFGain:Low
09:51:30 PM Apr 21, 2025
Ref Offset 9.05 dB
10 dB/div
Ref 19.05 dBm
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 3.162 s (30000 pts)
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

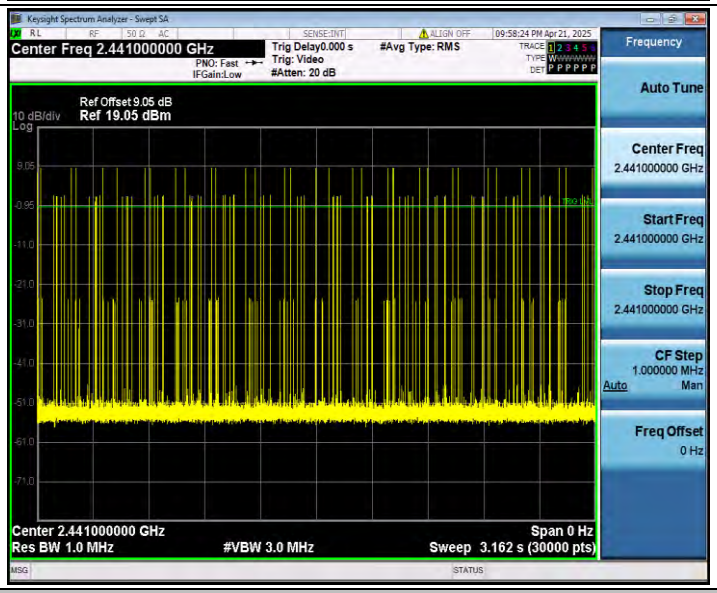
DH5_Ant1_Hop


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
Trig Delay-200.0 µs
#Avg Type: RMS
Trig: Video
#Atten: 20 dB
PNO: Fast
IFGain:Low
09:52:00 PM Apr 21, 2025
Ref Offset 9.05 dB
10 dB/div
Ref 19.05 dBm
ΔMkr2 2.873 ms
-0.14 dB
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.13 ms (2000 pts)
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

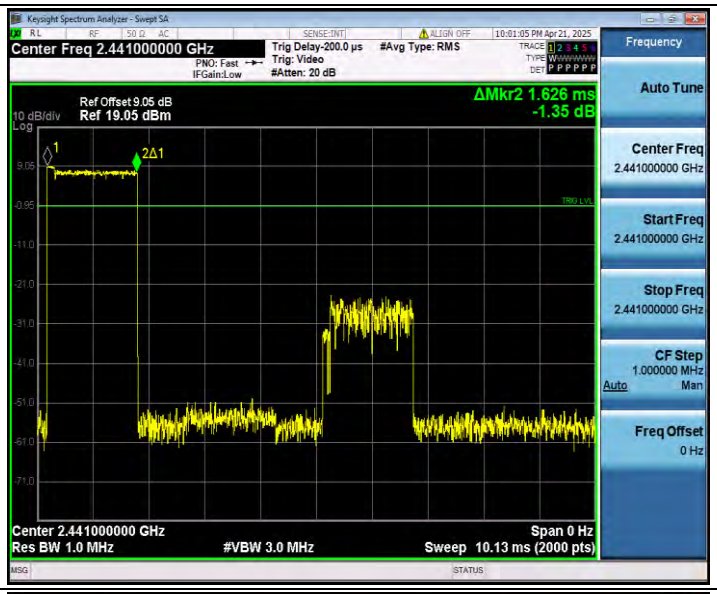


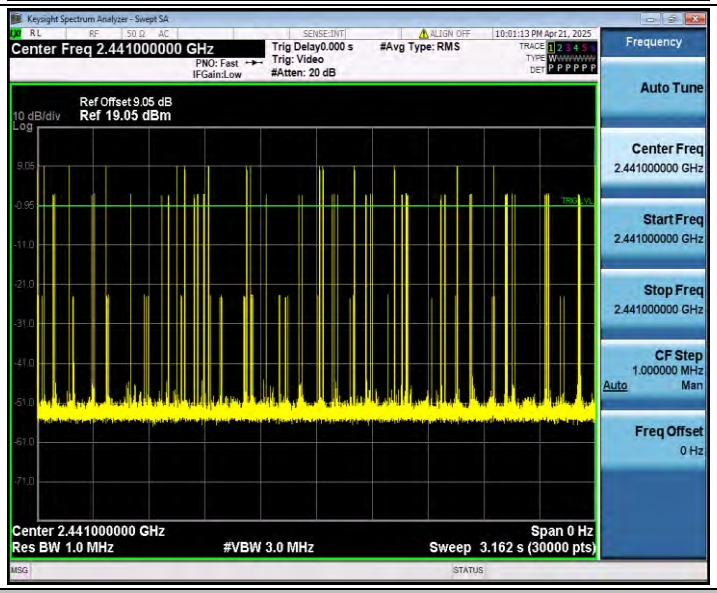
2DH1_Ant1_Hop



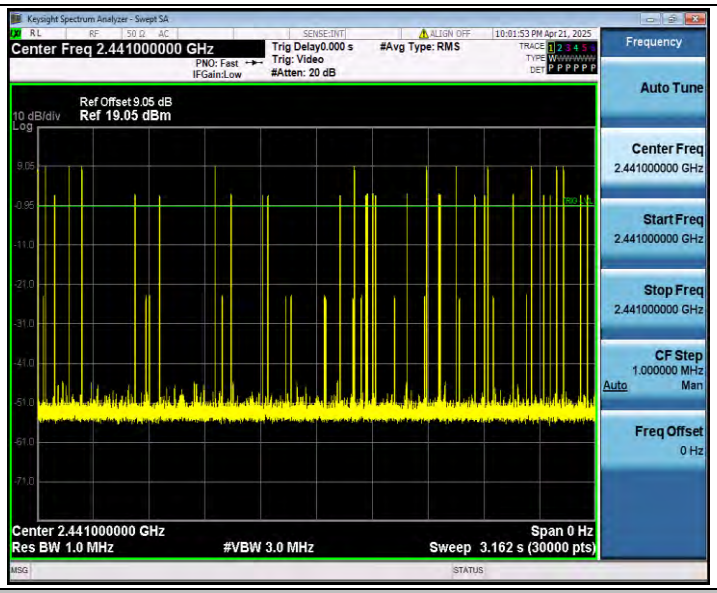


2DH3_Ant1_Hop

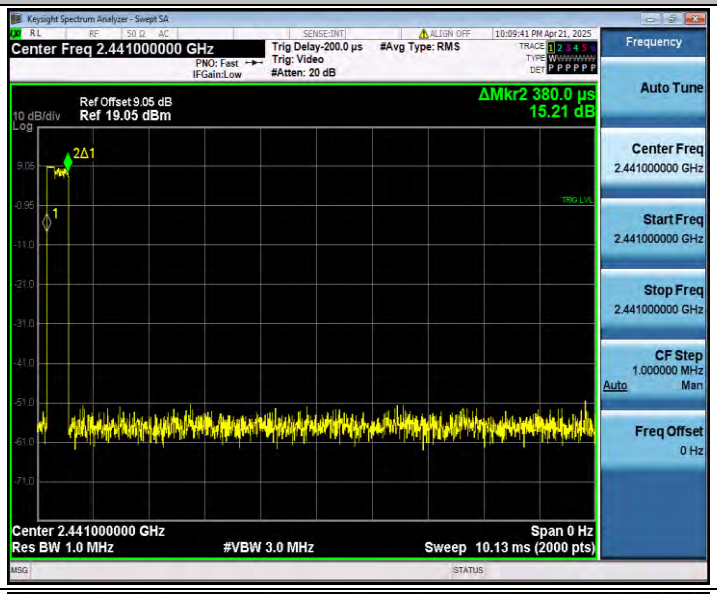


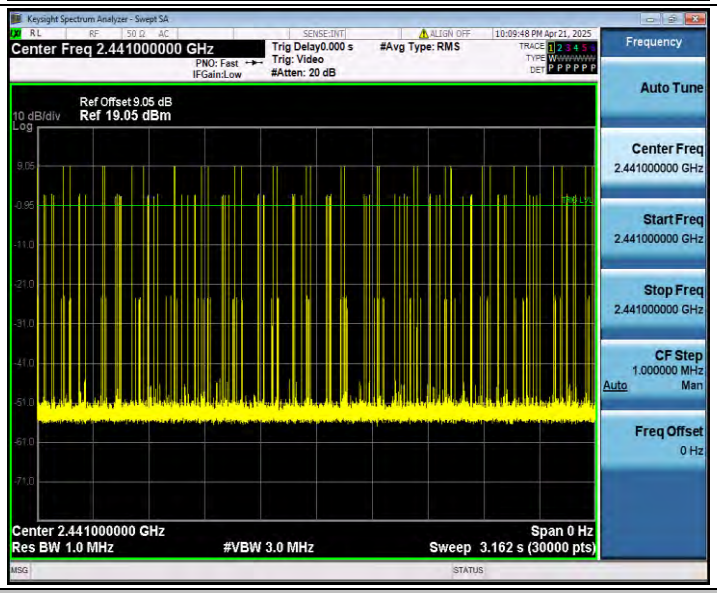


2DH5_Ant1_Hop

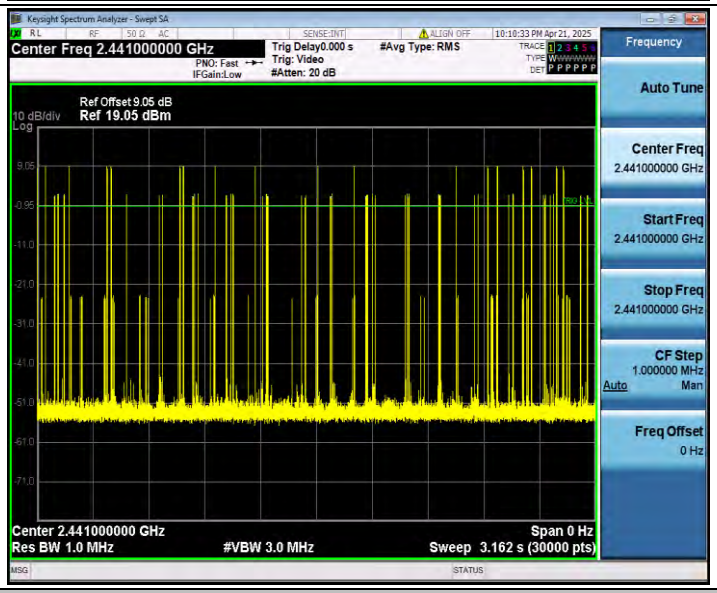


3DH1_Ant1_Hop

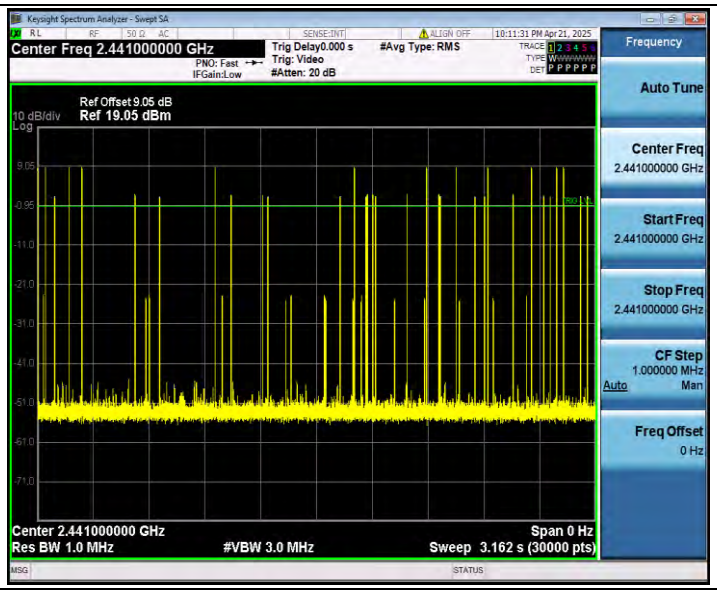




3DH3_Ant1_Hop



3DH5_Ant1_Hop

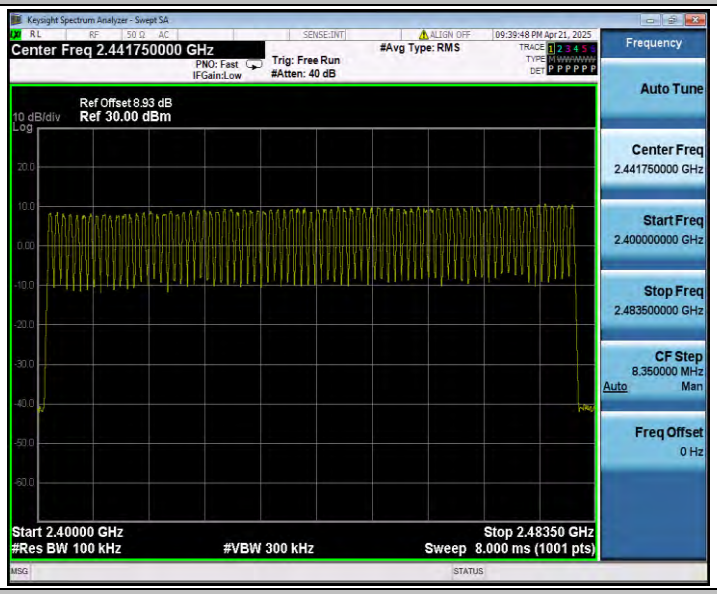
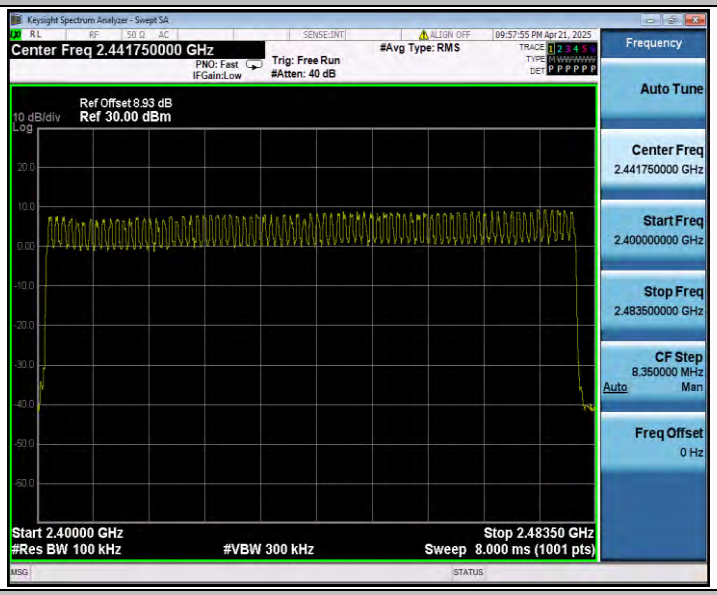

Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay0.000 s
Trig: Video
#Atten: 20 dB
#Avg Type: RMS
10:11:31 PM Apr 21, 2025
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 9.05 dB
10 dB/div
Ref 19.05 dBm
Log
Center 2.441000000 GHz
Span 0 Hz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 3.162 s (30000 pts)

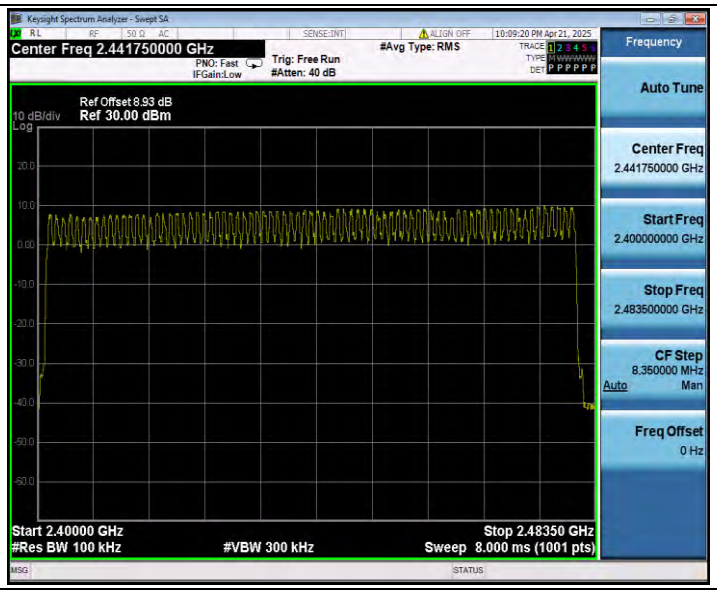
Appendix A.6: Number of hopping channels

Test Result

TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH1	Ant1	Hop	79	≥15	PASS
2DH1	Ant1	Hop	79	≥15	PASS
3DH1	Ant1	Hop	79	≥15	PASS

Test Graphs

DH1_Ant1_Hop

2DH1_Ant1_Hop

3DH1_Ant1_Hop


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
10:09:20 PM Apr 21, 2025
Ref Offset 8.93 dB
10 dB/div
Ref 30.00 dBm
Log
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto
Man
Freq Offset
0 Hz

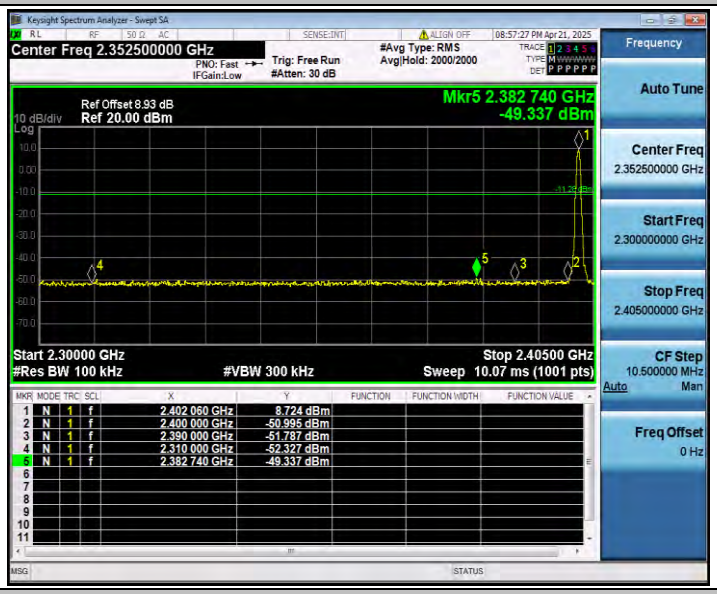
Appendix A.7: Band edge measurements

Test Result

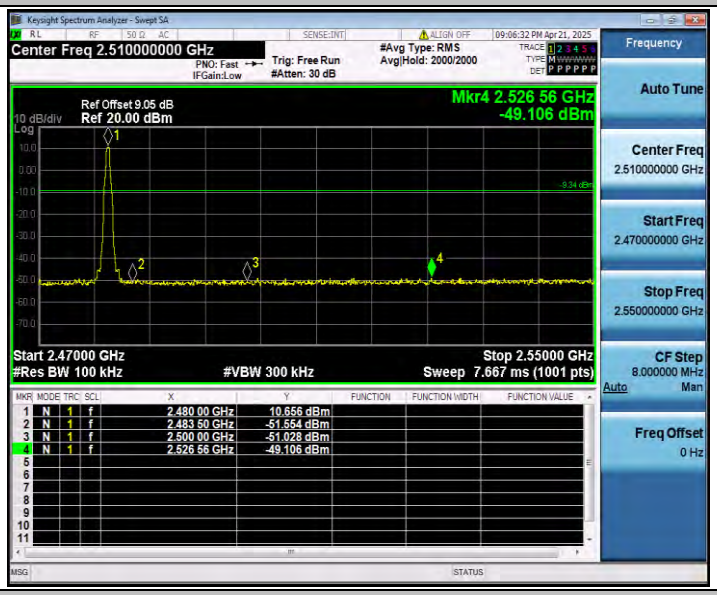
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	Low	2402	8.72	-49.34	≤-11.28	PASS
		High	2480	10.66	-49.11	≤-9.34	PASS
		Low	Hop_2402	8.25	-49.33	≤-11.75	PASS
		High	Hop_2480	10.06	-48.38	≤-9.94	PASS
2DH1	Ant1	Low	2402	7.93	-49.13	≤-12.07	PASS
		High	2480	9.91	-48.84	≤-10.09	PASS
		Low	Hop_2402	7.95	-49.54	≤-12.05	PASS
		High	Hop_2480	9.83	-48.38	≤-10.17	PASS
3DH1	Ant1	Low	2402	7.89	-46.68	≤-12.11	PASS
		High	2480	9.81	-48.73	≤-10.19	PASS
		Low	Hop_2402	7.77	-49.28	≤-12.23	PASS
		High	Hop_2480	9.64	-49.02	≤-10.36	PASS

Test Graphs

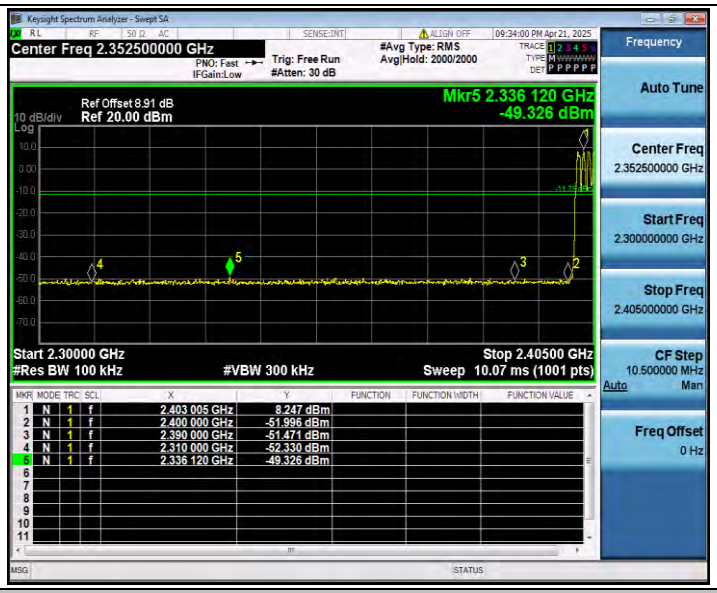
DH1_Ant1_Low_2402



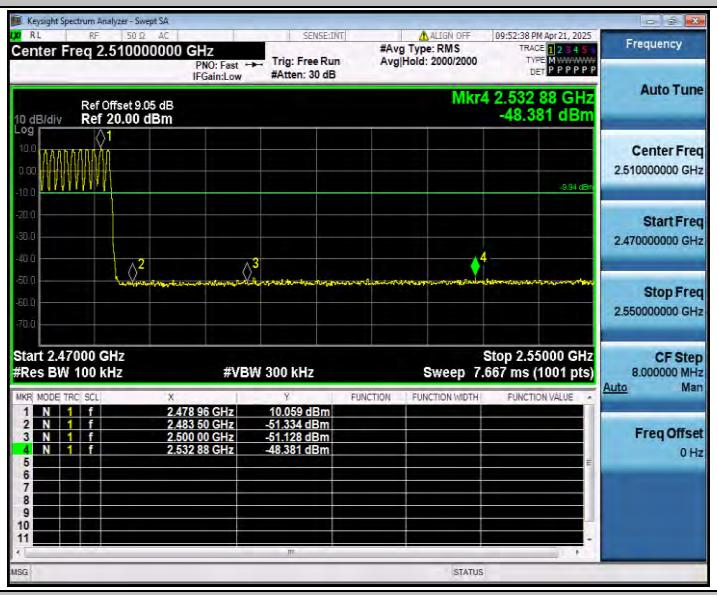
DH1_Ant1_High_2480



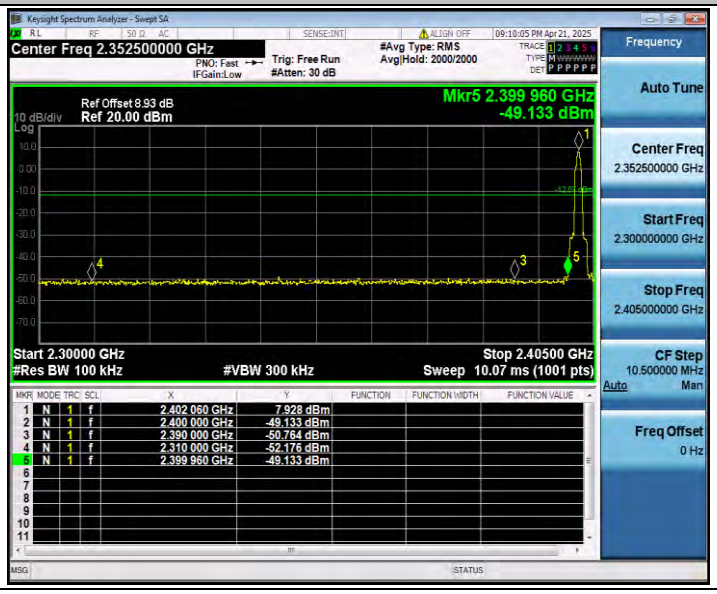
DH1_Ant1_Low_Hop_2402



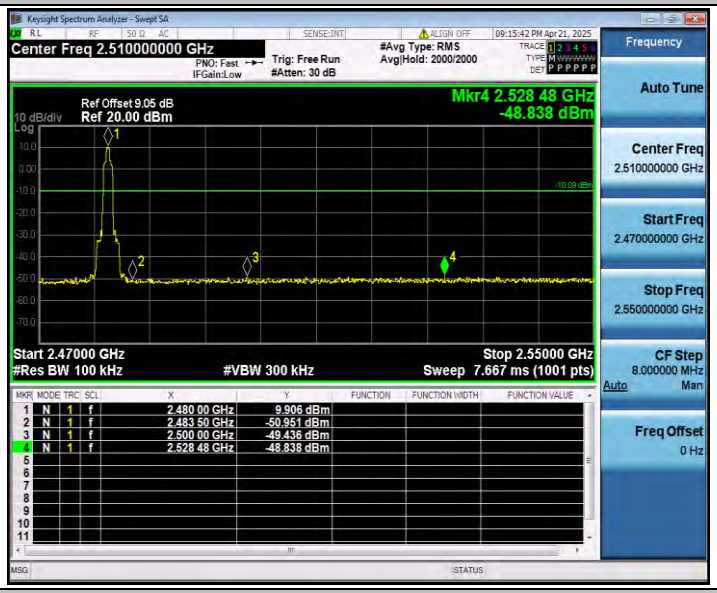
DH1_Ant1_High_Hop_2480



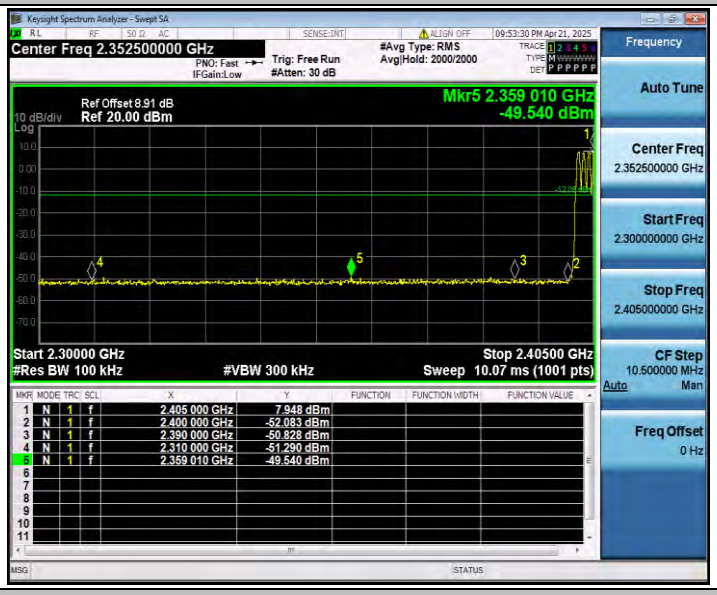
2DH1_Ant1_Low_2402



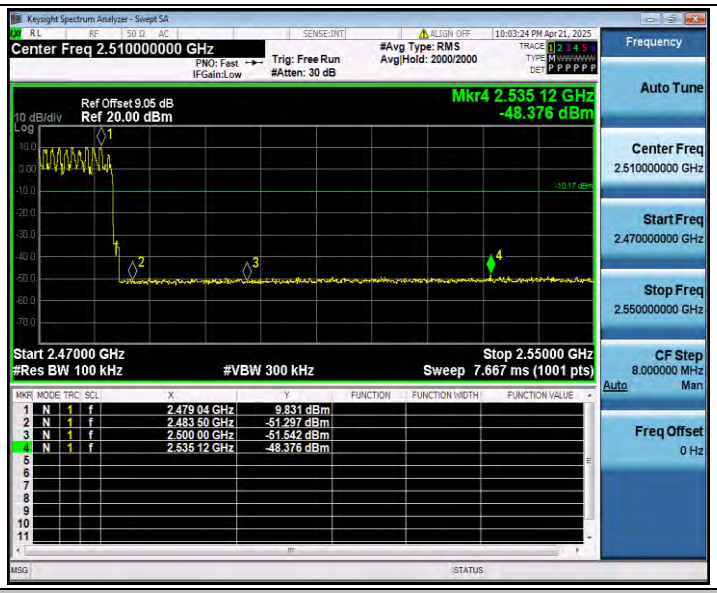
2DH1_Ant1_High_2480



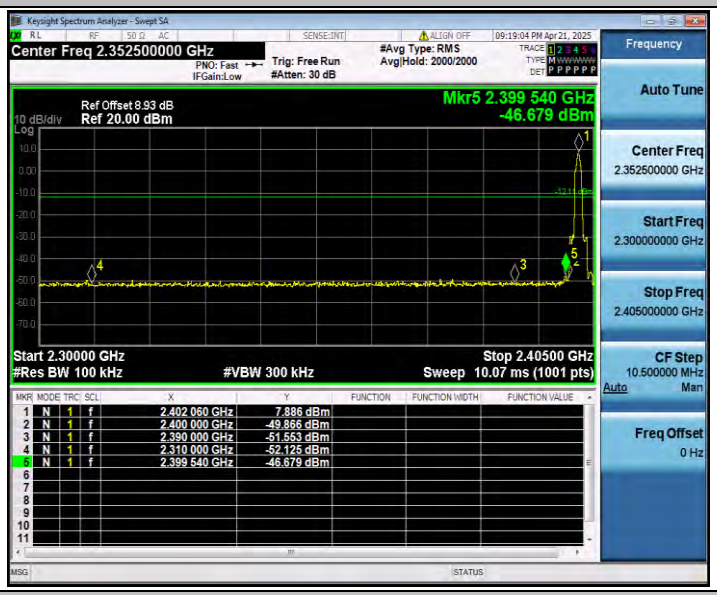
2DH1_Ant1_Low_Hop_2402



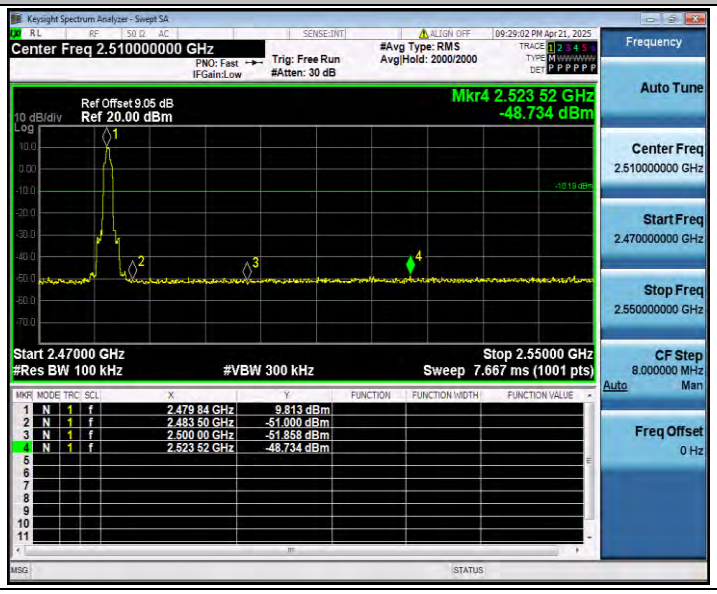
2DH1_Ant1_High_Hop_2480

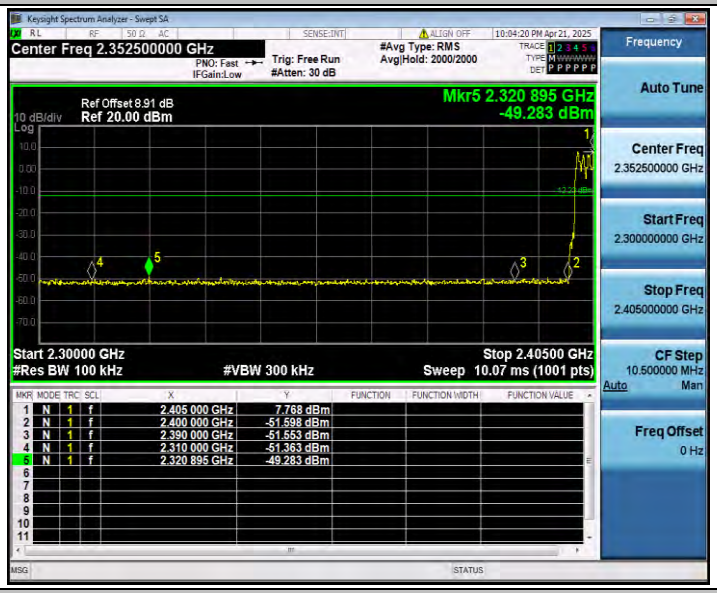


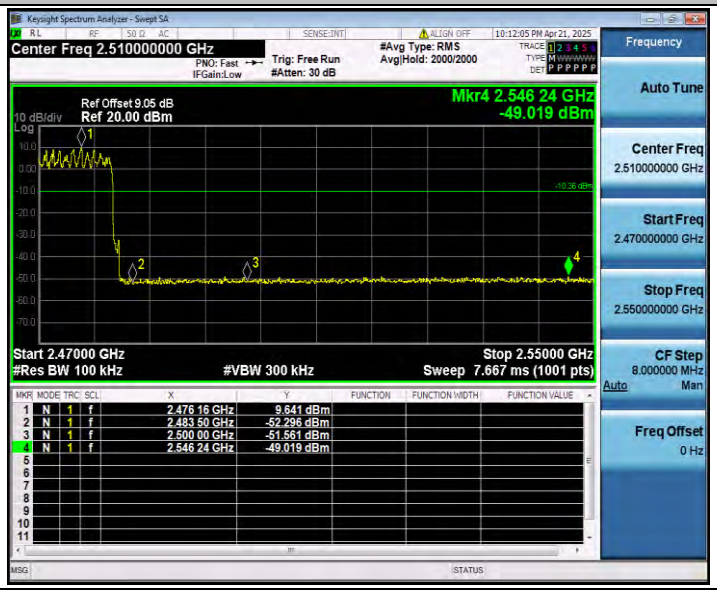
3DH1_Ant1_Low_2402



3DH1_Ant1_High_2480



3DH1_Ant1_Low_Hop_2402


3DH1_Ant1_High_Hop_2480


Appendix A.8: Conducted Spurious Emission

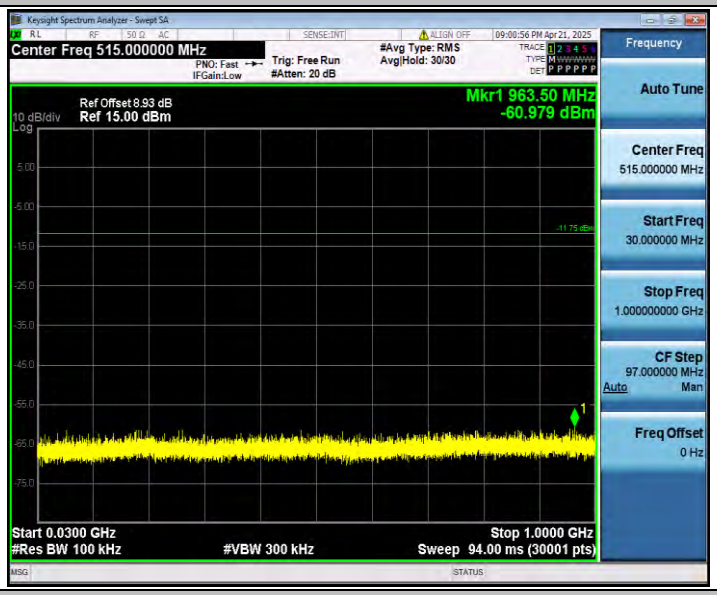
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH1	Ant1	2402	Reference	8.25	8.25	---	PASS
			30~1000	8.25	-60.98	≤-11.75	PASS
			1000~26500	8.25	-47.41	≤-11.75	PASS
		2441	Reference	9.35	9.35	---	PASS
			30~1000	9.35	-60.09	≤-10.65	PASS
			1000~26500	9.35	-47.87	≤-10.65	PASS
		2480	Reference	10.13	10.13	---	PASS
			30~1000	10.13	-61.22	≤-9.87	PASS
			1000~26500	10.13	-47.61	≤-9.87	PASS
2DH1	Ant1	2402	Reference	6.99	6.99	---	PASS
			30~1000	6.99	-60.93	≤-13.01	PASS
			1000~26500	6.99	-47.88	≤-13.01	PASS
		2441	Reference	8.68	8.68	---	PASS
			30~1000	8.68	-60.94	≤-11.32	PASS
			1000~26500	8.68	-46.67	≤-11.32	PASS
		2480	Reference	9.38	9.38	---	PASS
			30~1000	9.38	-59.74	≤-10.62	PASS
			1000~26500	9.38	-47.28	≤-10.62	PASS
3DH1	Ant1	2402	Reference	7.27	7.27	---	PASS
			30~1000	7.27	-60.84	≤-12.73	PASS
			1000~26500	7.27	-48.19	≤-12.73	PASS
		2441	Reference	8.47	8.47	---	PASS
			30~1000	8.47	-60.67	≤-11.53	PASS
			1000~26500	8.47	-47.9	≤-11.53	PASS
		2480	Reference	9.42	9.42	---	PASS
			30~1000	9.42	-60.73	≤-10.58	PASS
			1000~26500	9.42	-47.53	≤-10.58	PASS

Test Graphs

DH1_Ant1_2402_0~Reference

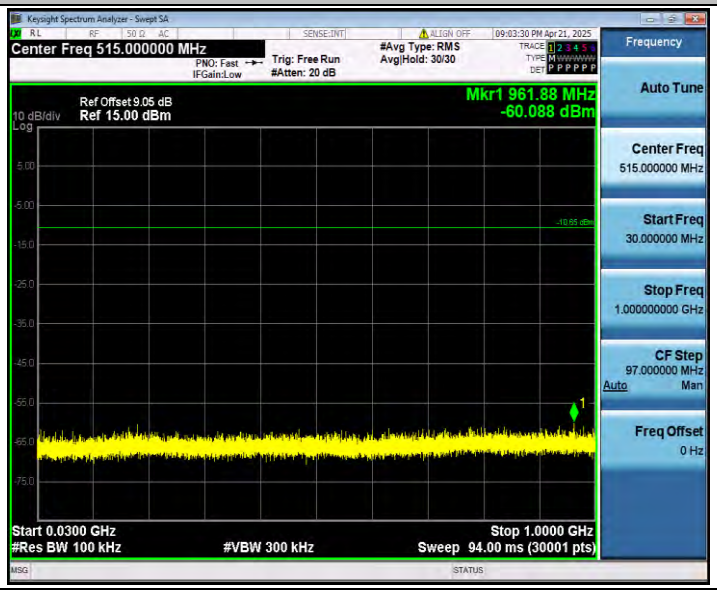
DH1_Ant1_2402_30~1000



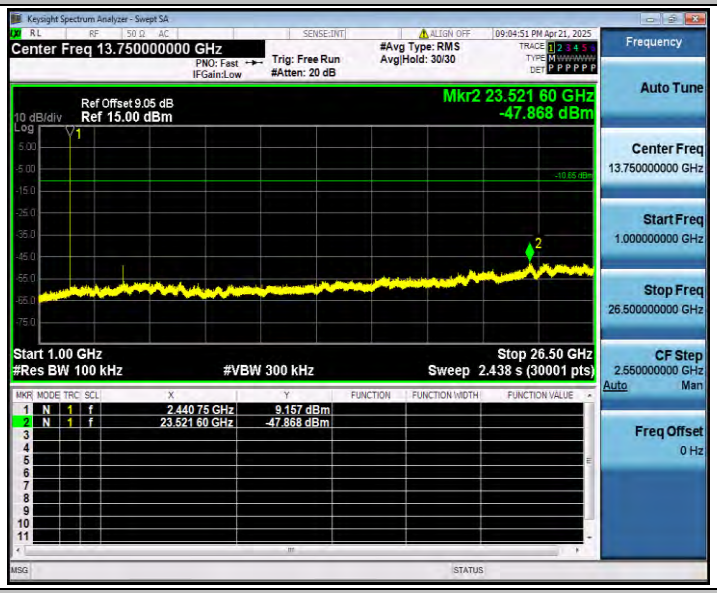
DH1_Ant1_2402_1000~26500

DH1_Ant1_2441_0~Reference

DH1_Ant1_2441_30~1000

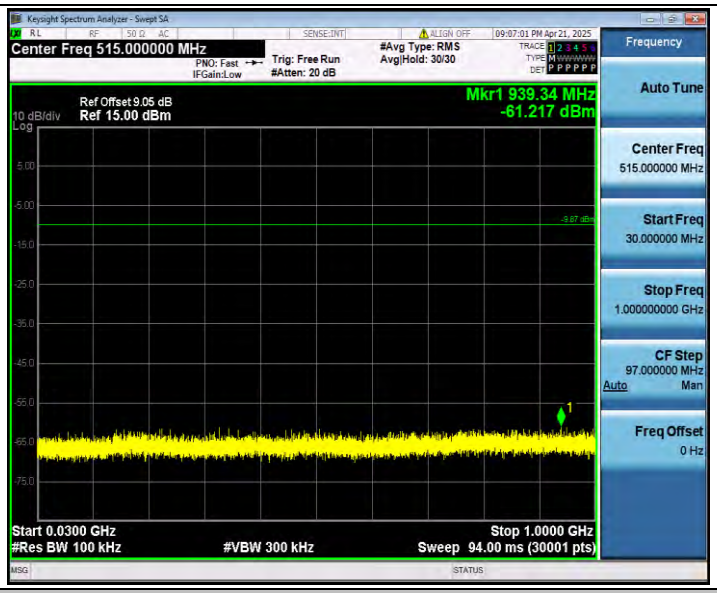


DH1_Ant1_2441_1000~26500

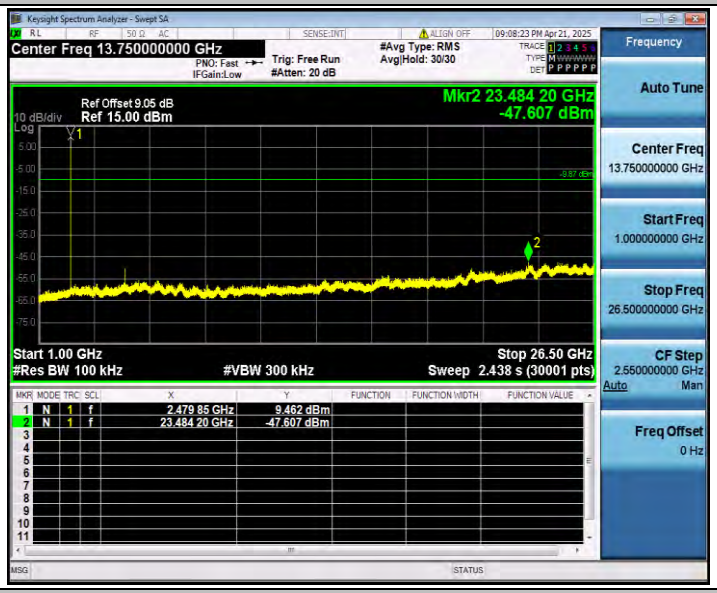


DH1_Ant1_2480_0~Reference

DH1_Ant1_2480_30~1000

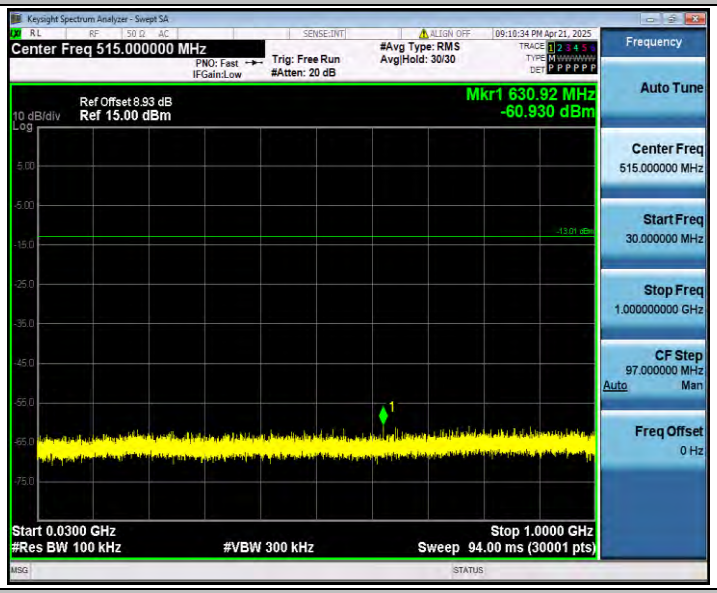


DH1_Ant1_2480_1000~26500



2DH1_Ant1_2402_0~Reference

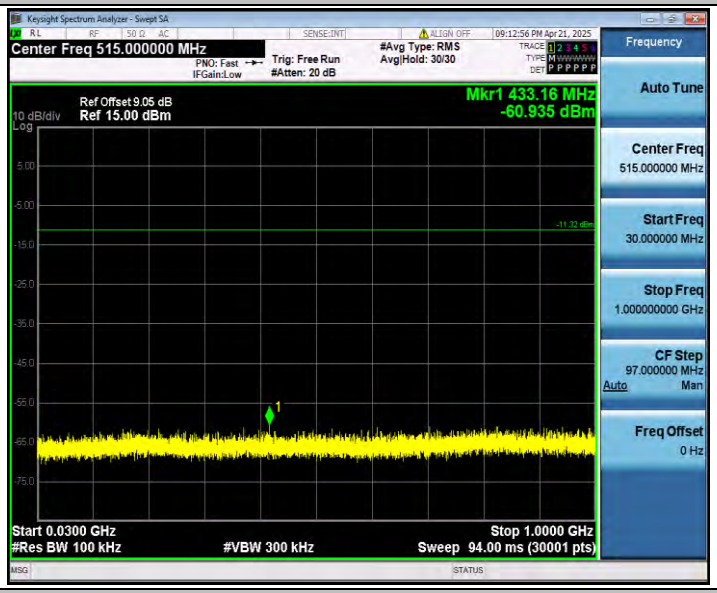
2DH1_Ant1_2402_30~1000



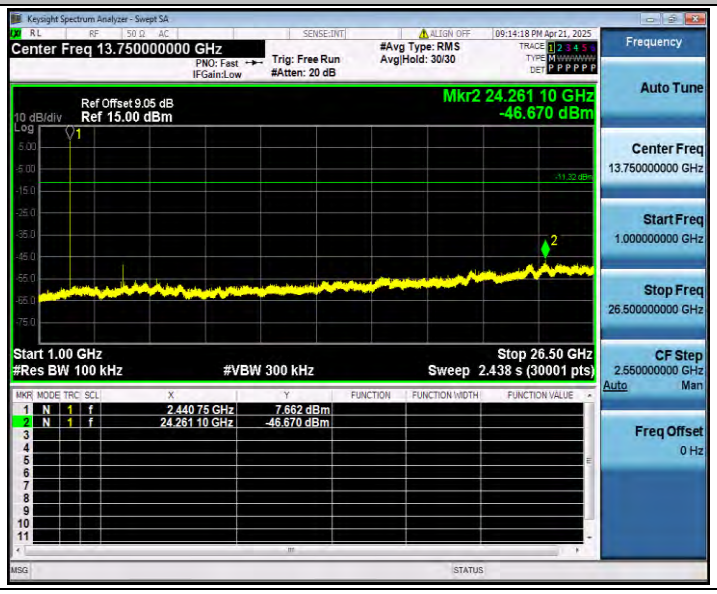
2DH1_Ant1_2402_1000~26500

2DH1_Ant1_2441_0~Reference

2DH1_Ant1_2441_30~1000

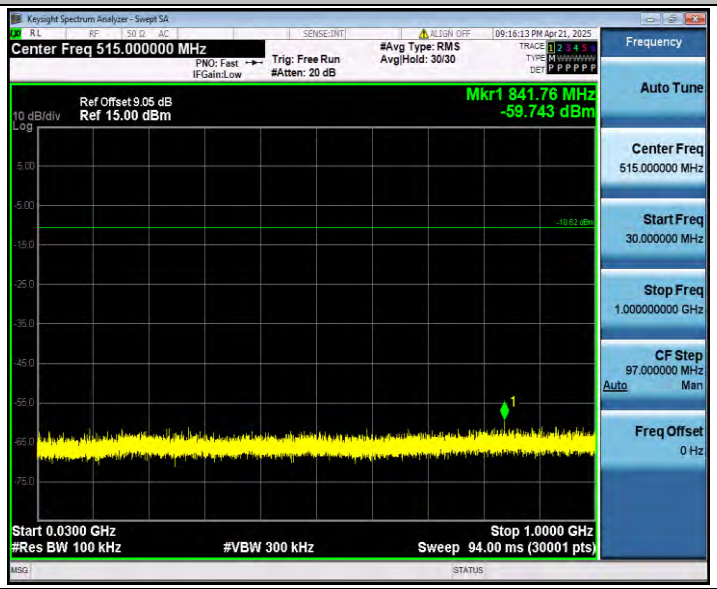


2DH1_Ant1_2441_1000~26500

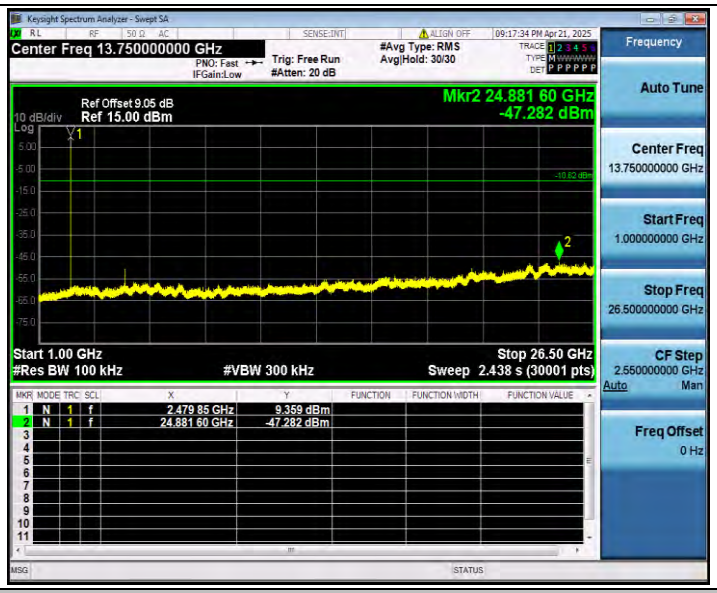


2DH1_Ant1_2480_0~Reference

2DH1_Ant1_2480_30~1000

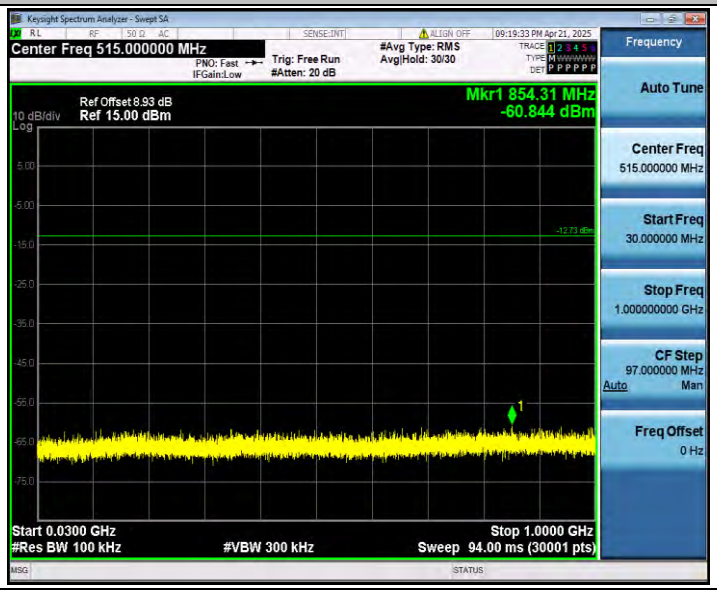


2DH1_Ant1_2480_1000~26500

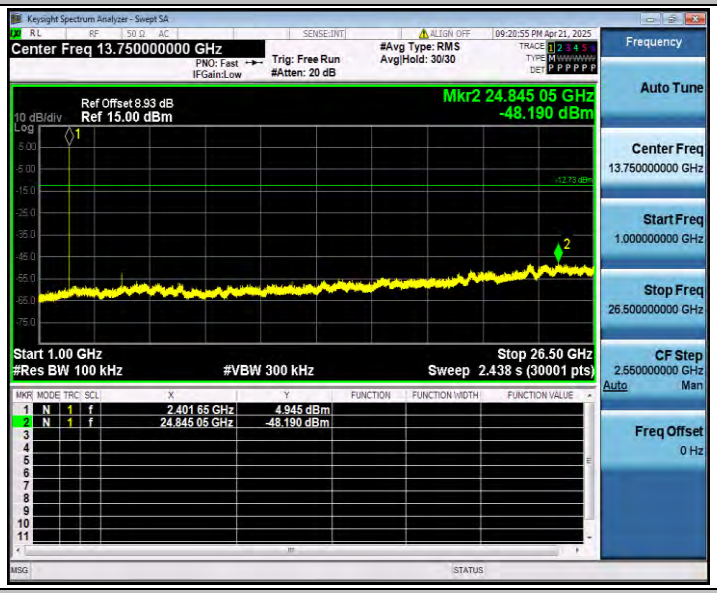


3DH1_Ant1_2402_0~Reference

3DH1_Ant1_2402_30~1000



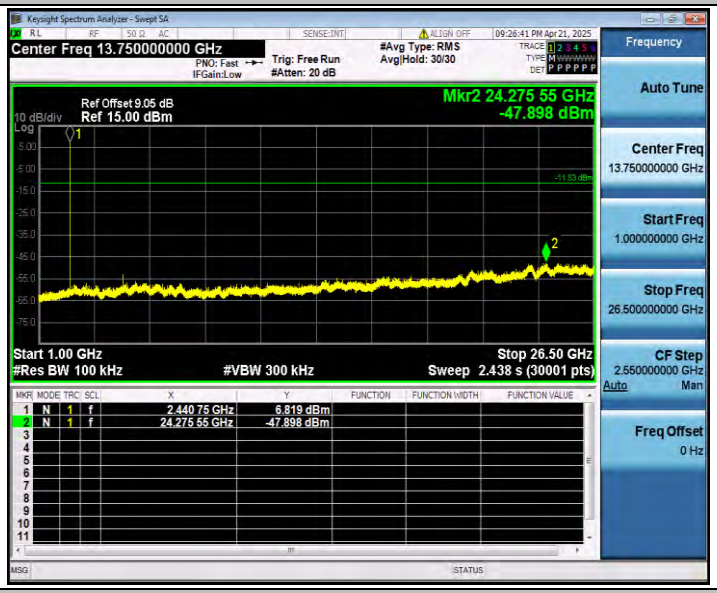
3DH1_Ant1_2402_1000~26500



3DH1_Ant1_2441_0~Reference

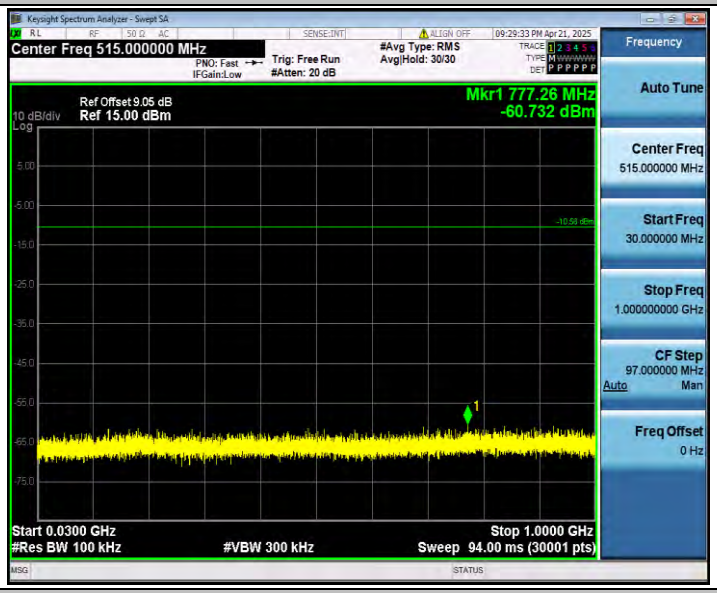
3DH1_Ant1_2441_30~1000

3DH1_Ant1_2441_1000~26500

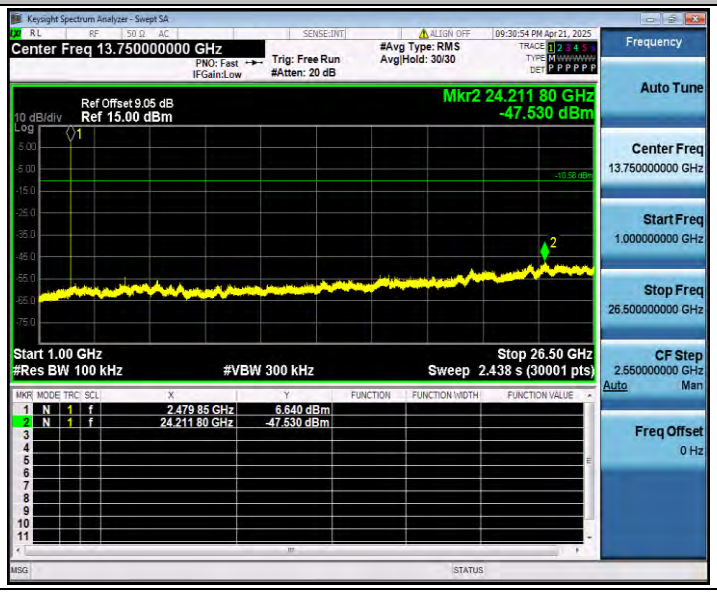


3DH1_Ant1_2480_0~Reference

3DH1_Ant1_2480_30~1000



3DH1_Ant1_2480_1000~26500



Appendix A.9: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH1	Ant1	Low	2402	AV	2310.000	-49.18	≤-41.20	46.02	≤54	PASS
				AV	2382.950	-48.85	≤-41.20	46.35	≤54	PASS
				AV	2390.000	-49.06	≤-41.20	46.14	≤54	PASS
				Peak	2310.000	-42.61	≤-21.20	52.59	≤74	PASS
				Peak	2336.540	-39.2	≤-21.20	56.00	≤74	PASS
				Peak	2390.000	-42.45	≤-21.20	52.75	≤74	PASS
		High	2480	AV	2483.500	-47.41	≤-41.20	47.79	≤54	PASS
				AV	2483.520	-47.41	≤-41.20	47.79	≤54	PASS
				AV	2500.000	-48.76	≤-41.20	46.44	≤54	PASS
				Peak	2483.500	-41.59	≤-21.20	53.61	≤74	PASS
				Peak	2485.600	-38.89	≤-21.20	56.31	≤74	PASS
				Peak	2500.000	-40.69	≤-21.20	54.51	≤74	PASS
2DH1	Ant1	Low	2402	AV	2310.000	-49.39	≤-41.20	45.81	≤54	PASS
				AV	2387.780	-48.9	≤-41.20	46.30	≤54	PASS
				AV	2390.000	-49.13	≤-41.20	46.07	≤54	PASS
				Peak	2310.000	-41.46	≤-21.20	53.74	≤74	PASS
				Peak	2361.320	-38.7	≤-21.20	56.50	≤74	PASS
				Peak	2390.000	-40.15	≤-21.20	55.05	≤74	PASS
		High	2480	AV	2483.500	-47.22	≤-41.20	47.98	≤54	PASS
				AV	2483.520	-47.22	≤-41.20	47.98	≤54	PASS
				AV	2500.000	-48.72	≤-41.20	46.48	≤54	PASS
				Peak	2483.500	-40.99	≤-21.20	54.21	≤74	PASS
				Peak	2486.560	-39.02	≤-21.20	56.18	≤74	PASS
				Peak	2500.000	-41.61	≤-21.20	53.59	≤74	PASS
3DH1	Ant1	Low	2402	AV	2310.000	-49.49	≤-41.20	45.71	≤54	PASS
				AV	2384.420	-48.79	≤-41.20	46.41	≤54	PASS
				AV	2390.000	-49	≤-41.20	46.20	≤54	PASS
				Peak	2310.000	-41.26	≤-21.20	53.94	≤74	PASS
				Peak	2378.750	-38.04	≤-21.20	57.16	≤74	PASS
				Peak	2390.000	-39.87	≤-21.20	55.33	≤74	PASS
		High	2480	AV	2483.500	-47.21	≤-41.20	47.99	≤54	PASS
				AV	2483.520	-47.21	≤-41.20	47.99	≤54	PASS
				AV	2500.000	-48.63	≤-41.20	46.57	≤54	PASS
				Peak	2483.500	-40.85	≤-21.20	54.35	≤74	PASS
				Peak	2487.760	-38.68	≤-21.20	56.52	≤74	PASS

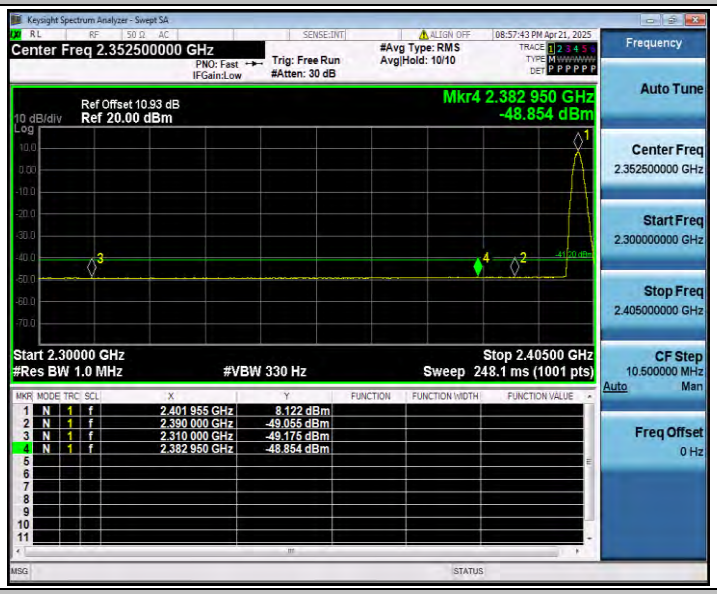
				Peak	2500.000	-40.68	≤-21.20	54.52	≤74	PASS

Note：

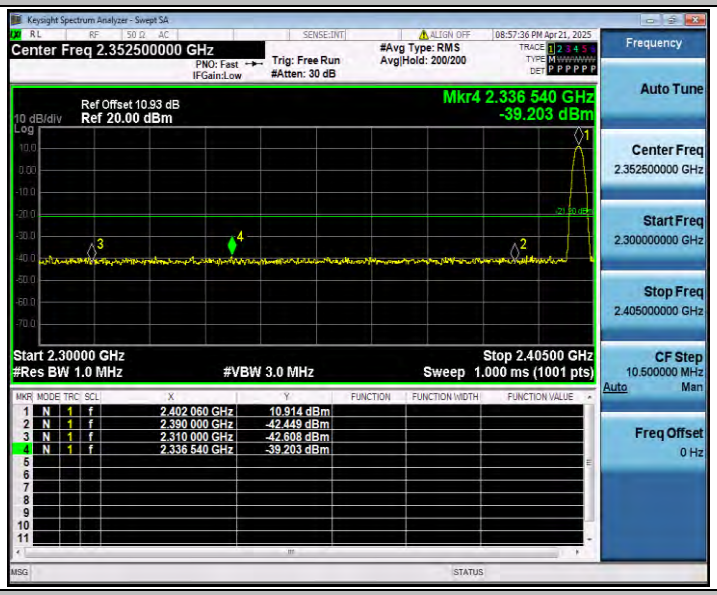
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

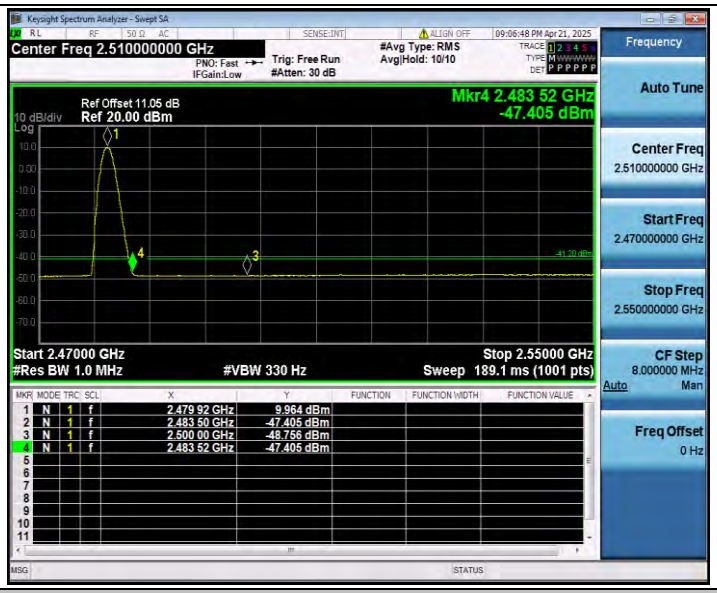
DH1_Ant1_Low_2402_AV



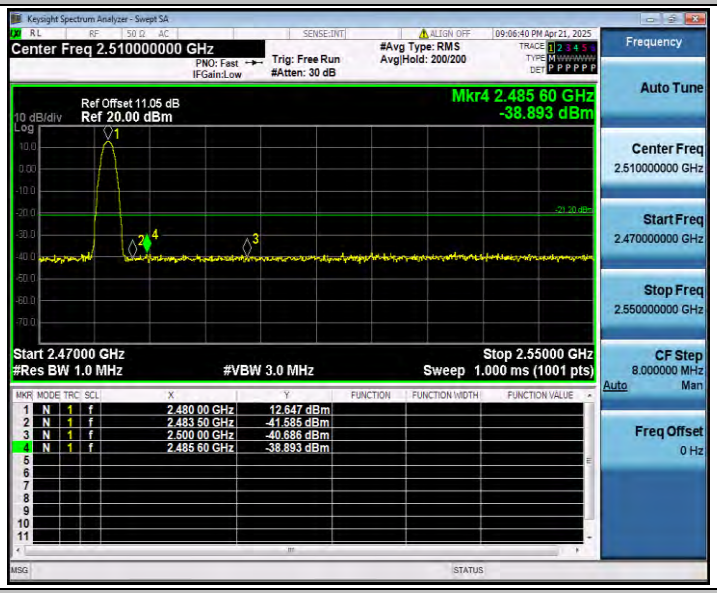
DH1_Ant1_Low_2402_Peak



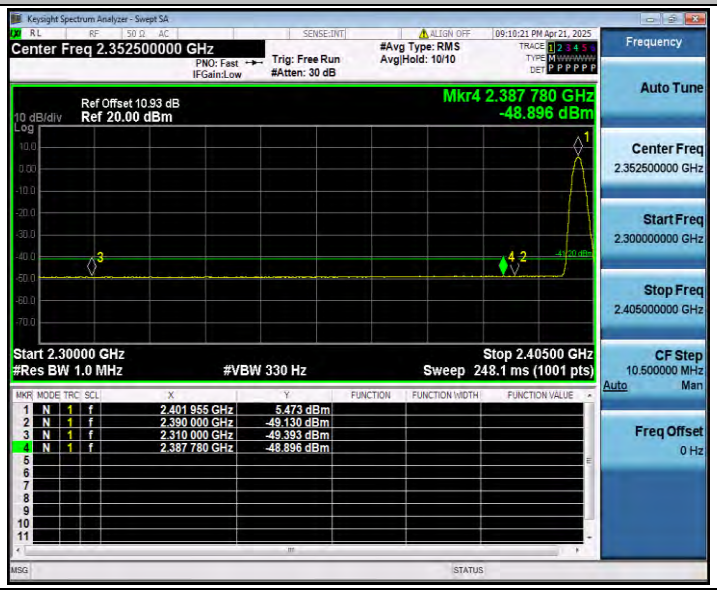
DH1_Ant1_High_2480_AV



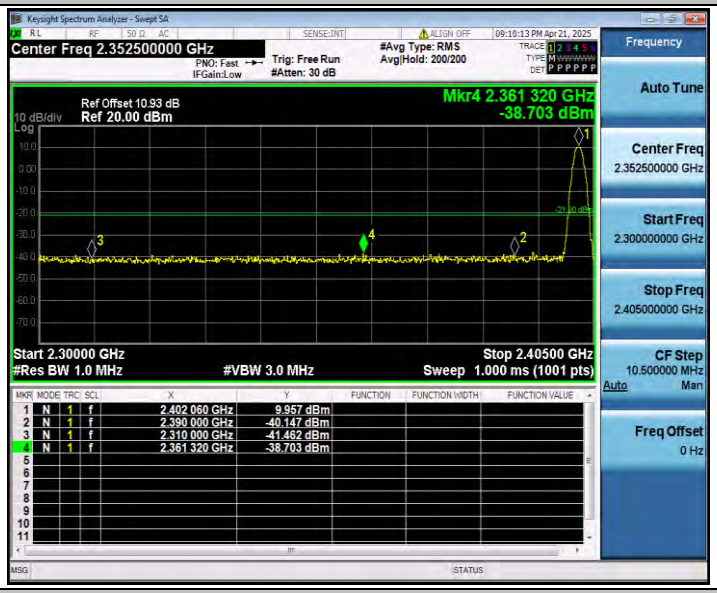
DH1_Ant1_High_2480_Peak



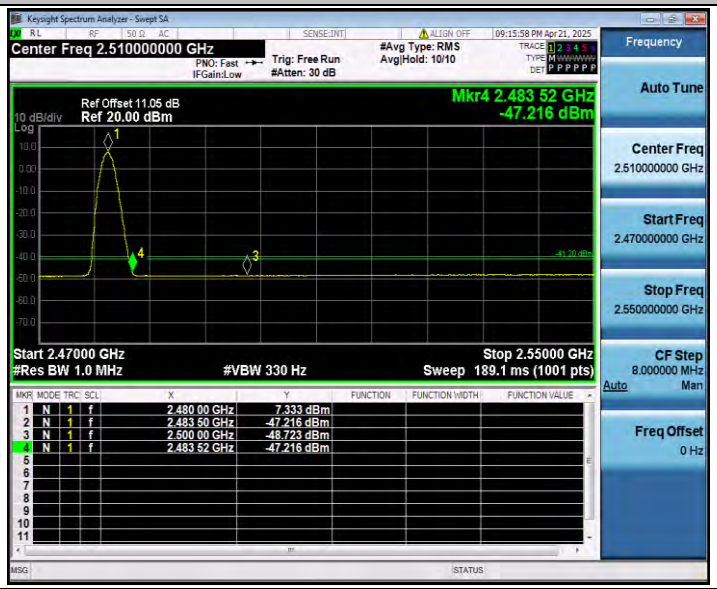
2DH1_Ant1_Low_2402_AV



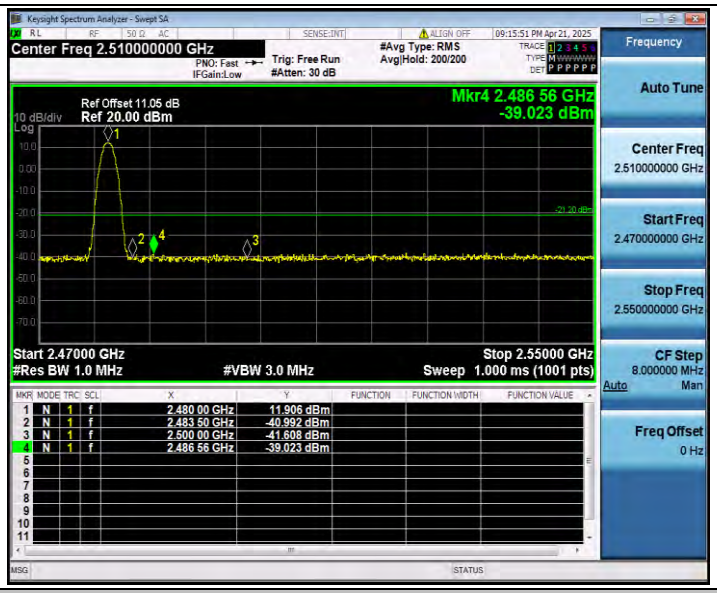
2DH1_Ant1_Low_2402_Peak



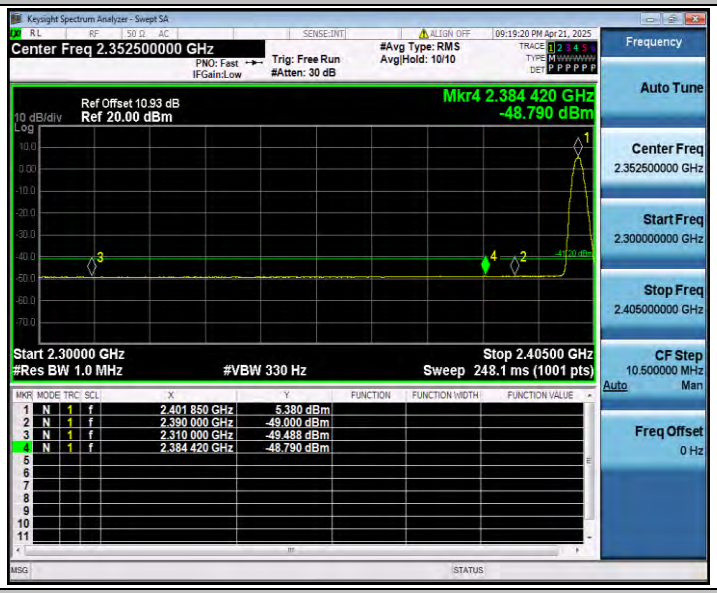
2DH1_Ant1_High_2480_AV



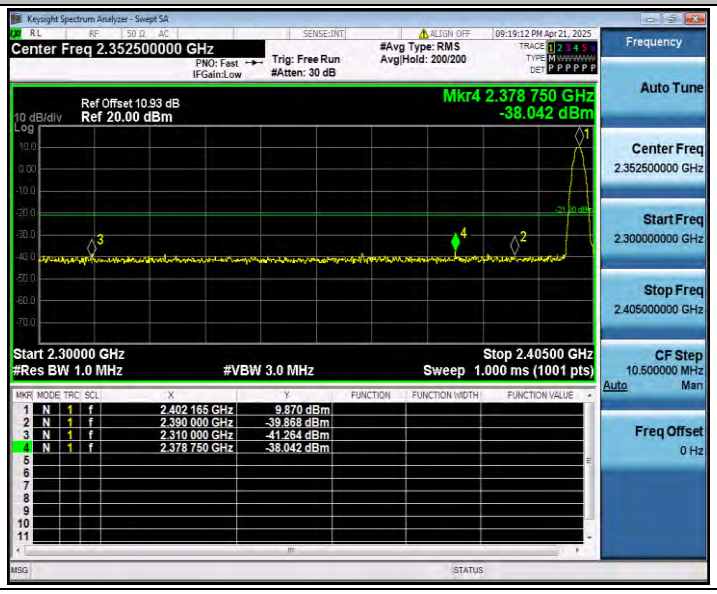
2DH1_Ant1_High_2480_Peak

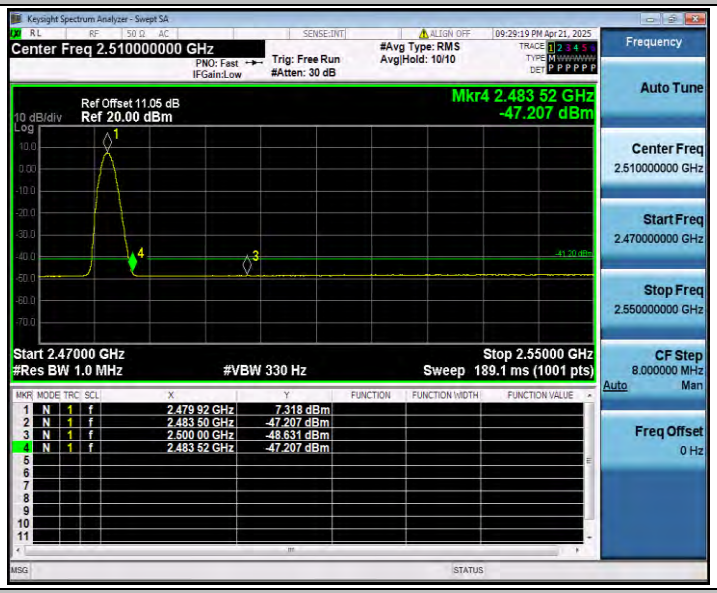
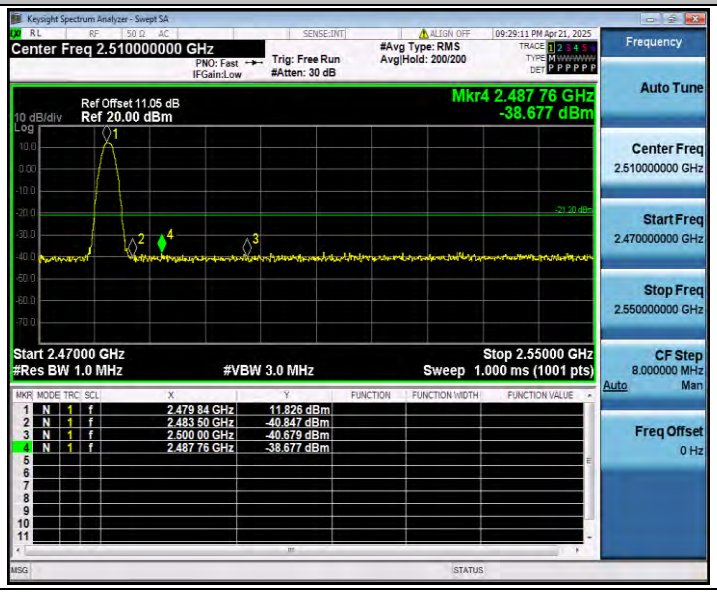


3DH1_Ant1_Low_2402_AV



3DH1_Ant1_Low_2402_Peak



3DH1_Ant1_High_2480_AV


3DH1_Ant1_High_2480_Peak