Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Tablet device

Test Model: Sundial

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Ling Zhu

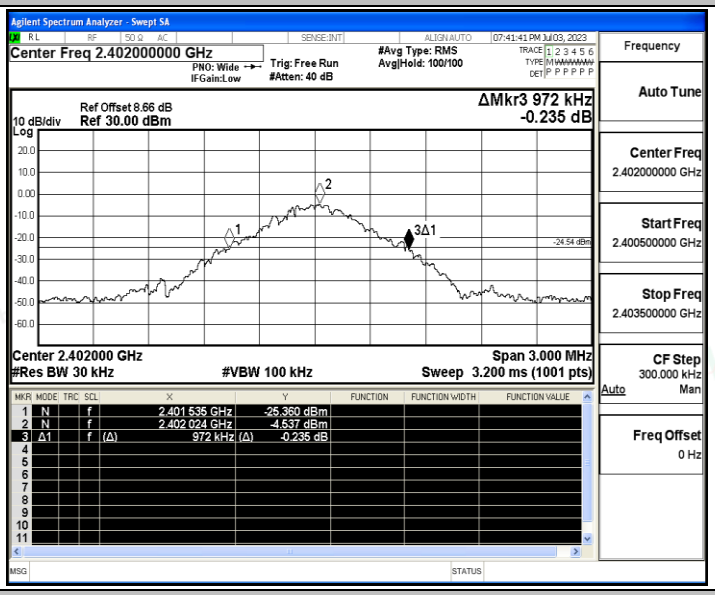
A.1 20dB Emission Bandwidth

Test Result

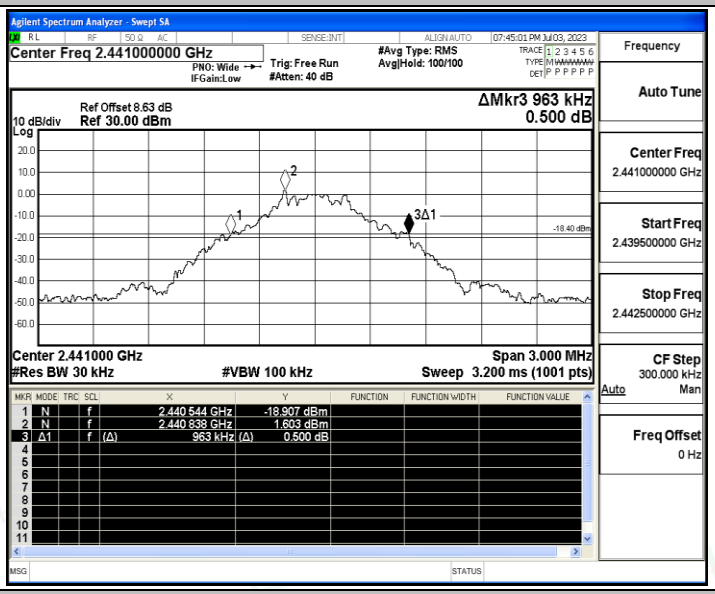
TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.972	2401.535	2402.507	---	---
		2441	0.963	2440.544	2441.507	---	---
		2480	0.960	2479.544	2480.504	---	---
2DH5	Ant1	2402	1.290	2401.364	2402.654	---	---
		2441	1.353	2440.322	2441.675	---	---
		2480	1.338	2479.328	2480.666	---	---
3DH5	Ant1	2402	1.299	2401.349	2402.648	---	---
		2441	1.305	2440.349	2441.654	---	---
		2480	1.305	2479.346	2480.651	---	---

Test Graphs

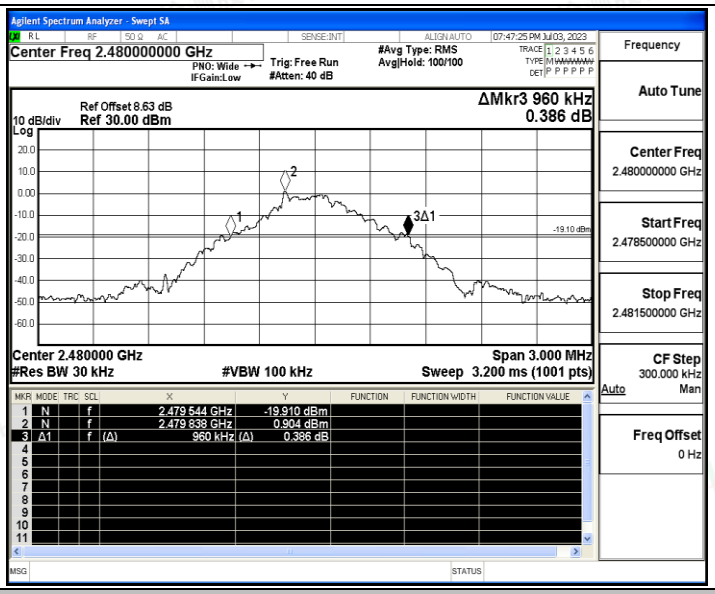
DH5_Ant1_2402



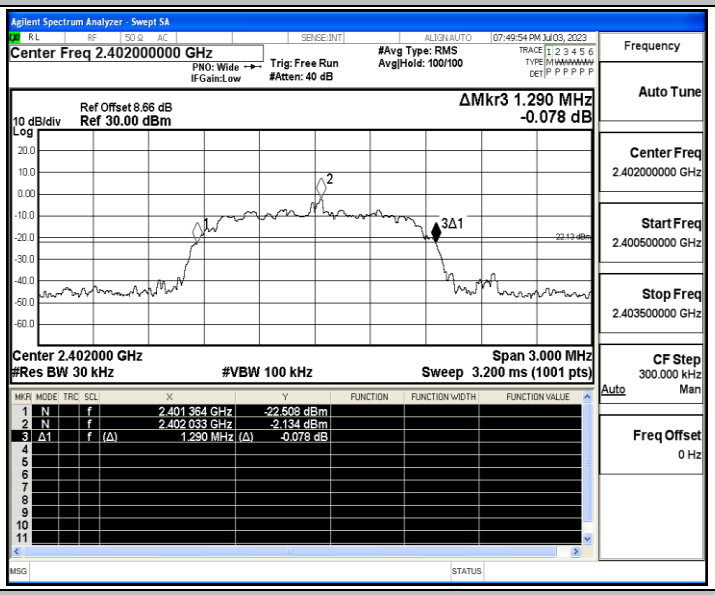
DH5_Ant1_2441



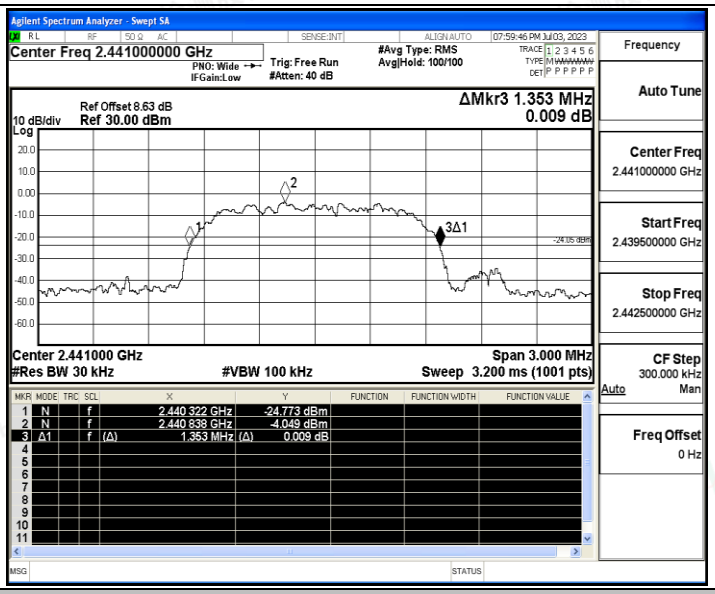
DH5_Ant1_2480



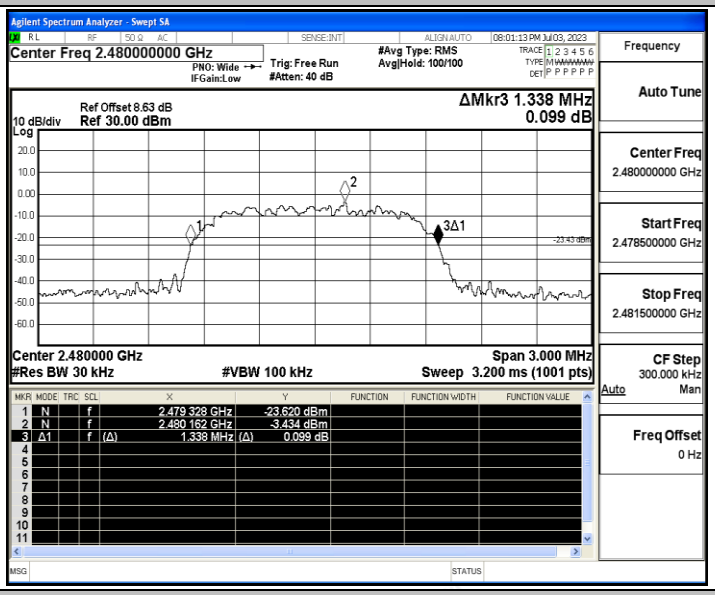
2DH5_Ant1_2402



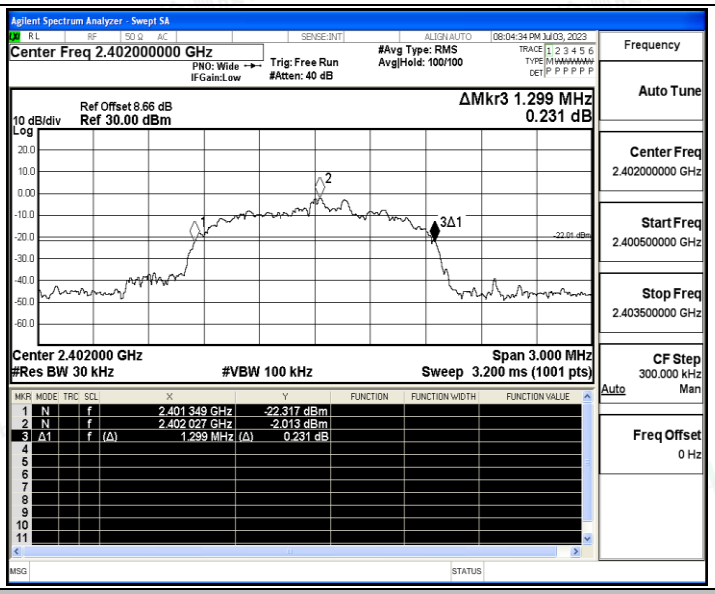
2DH5_Ant1_2441



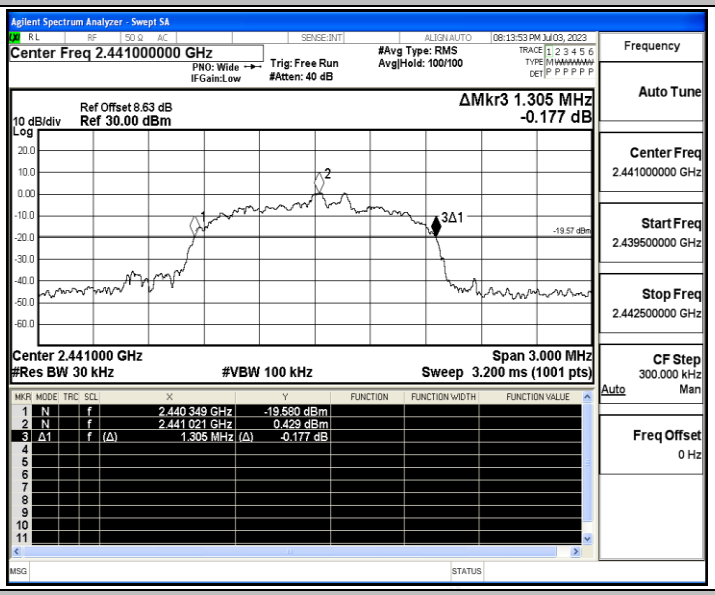
2DH5_Ant1_2480



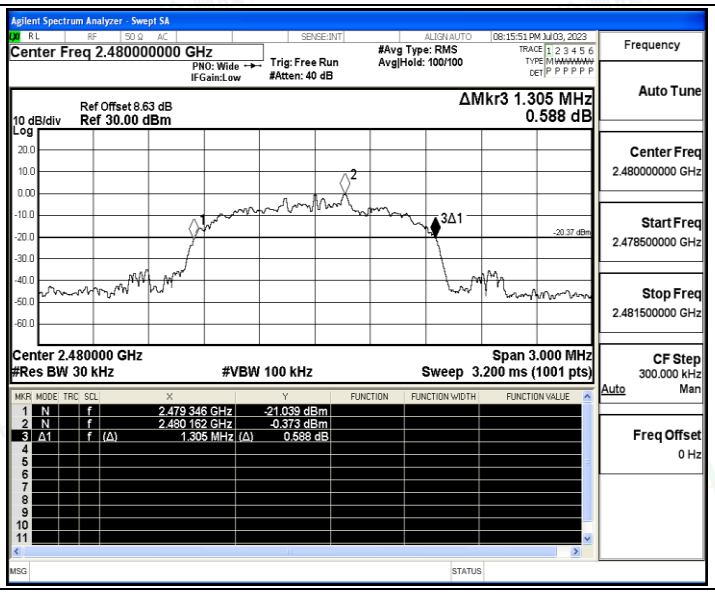
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
08:15:51 PM Jul 03, 2023
Frequency
Auto Tune
Ref Offset 8.63 dB
10 dB/div
Ref 30.00 dBm
ΔMkr3 1.305 MHz
0.588 dB
-20.37 dBm
Center Freq
2.480000000 GHz
Start Freq
2.478500000 GHz
Stop Freq
2.481500000 GHz
Center 2.480000 GHz
#Res BW 30 kHz
#VBW 100 kHz
Span 3.000 MHz
Sweep 3.200 ms (1001 pts)
CF Step
300.000 kHz
Auto
Man
Freq Offset
0 Hz
1 N f 2.479 346 GHz -21.039 dBm
2 N f 2.480 162 GHz -0.373 dBm
3 Δ1 f (Δ) 1.305 MHz (Δ) 0.588 dB
MSG
STATUS

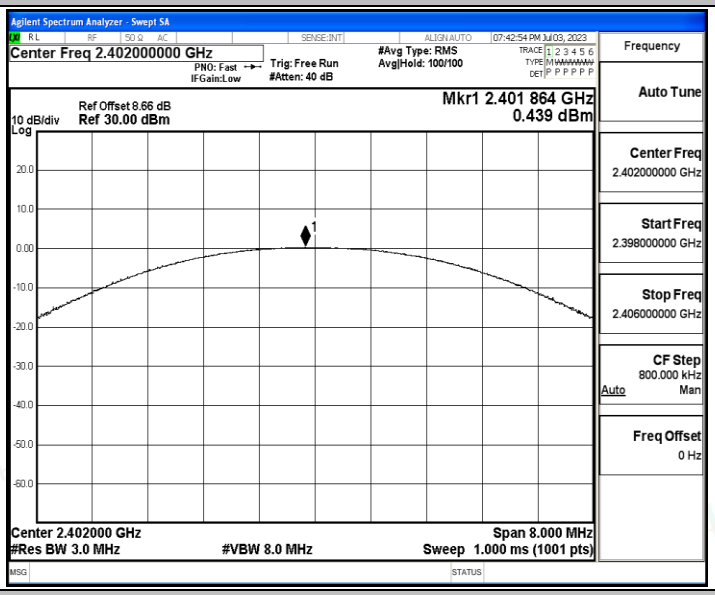
A.2 Maximum conducted output power

Test Result Peak

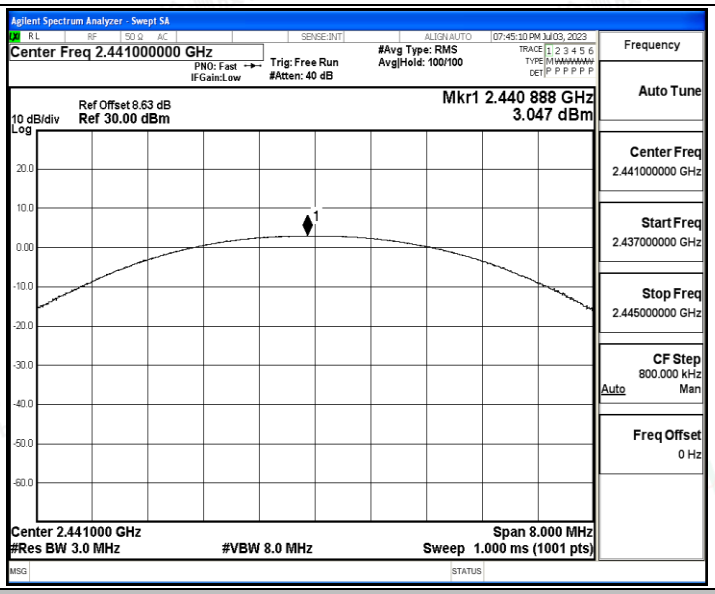
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.44	≤21	PASS
		2441	3.05	≤21	PASS
		2480	2.34	≤21	PASS
2DH5	Ant1	2402	2.09	≤21	PASS
		2441	4.78	≤21	PASS
		2480	3.92	≤21	PASS
3DH5	Ant1	2402	2.43	≤21	PASS
		2441	4.99	≤21	PASS
		2480	3.99	≤21	PASS

Test Graphs

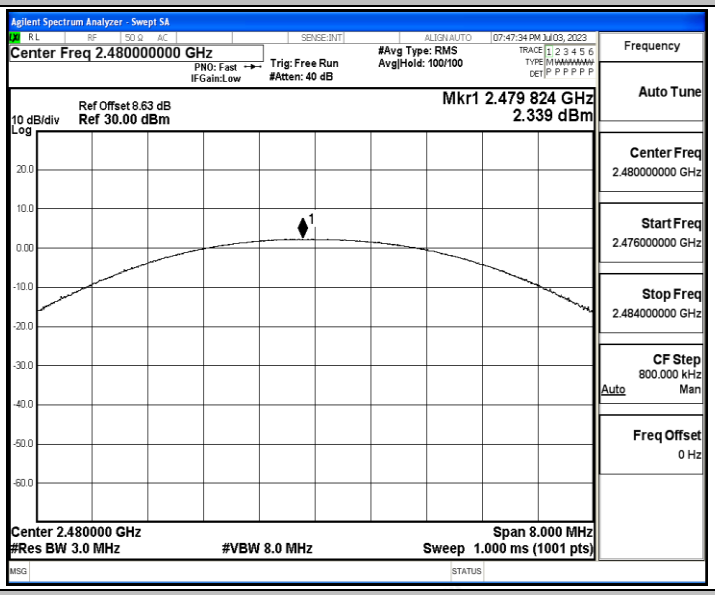
DH5_Ant1_2402



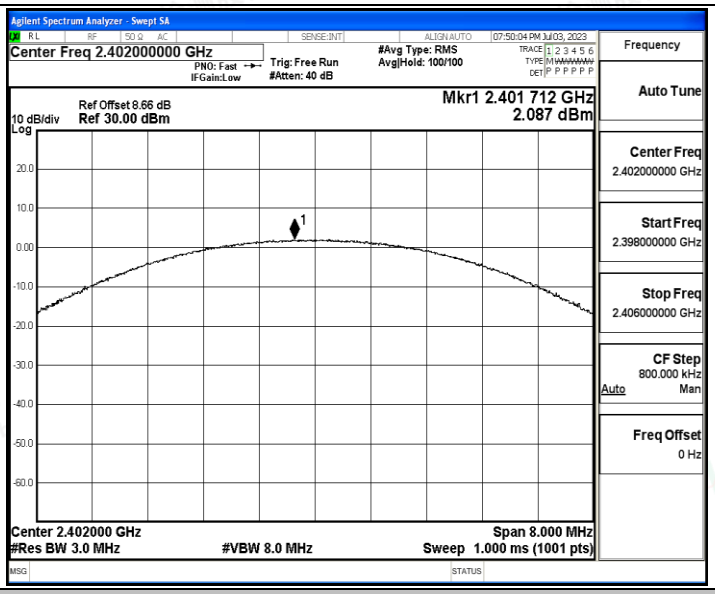
DH5_Ant1_2441



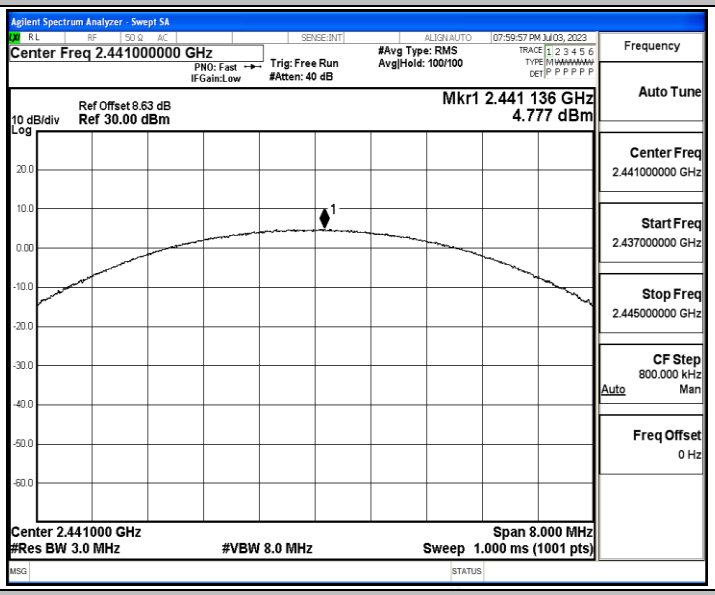
DH5_Ant1_2480



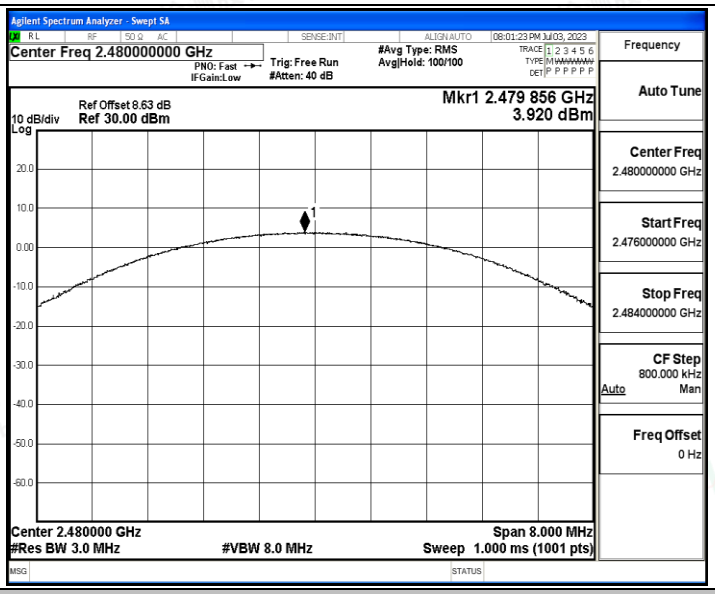
2DH5_Ant1_2402



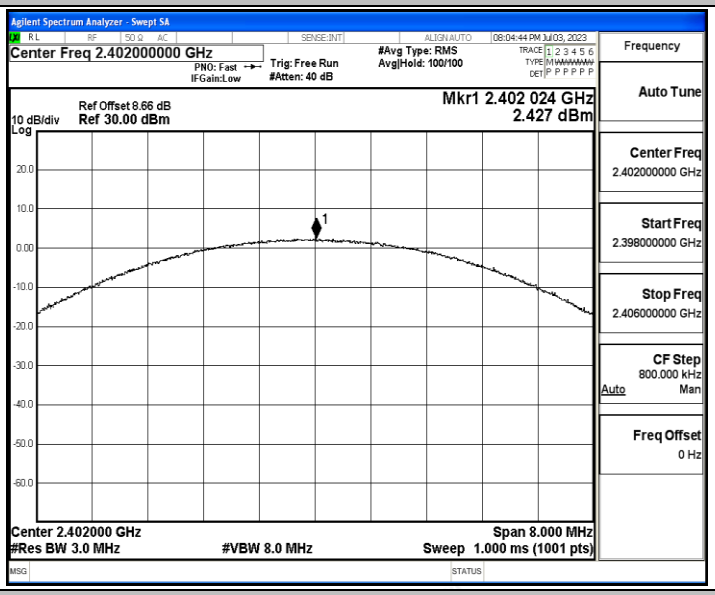
2DH5_Ant1_2441



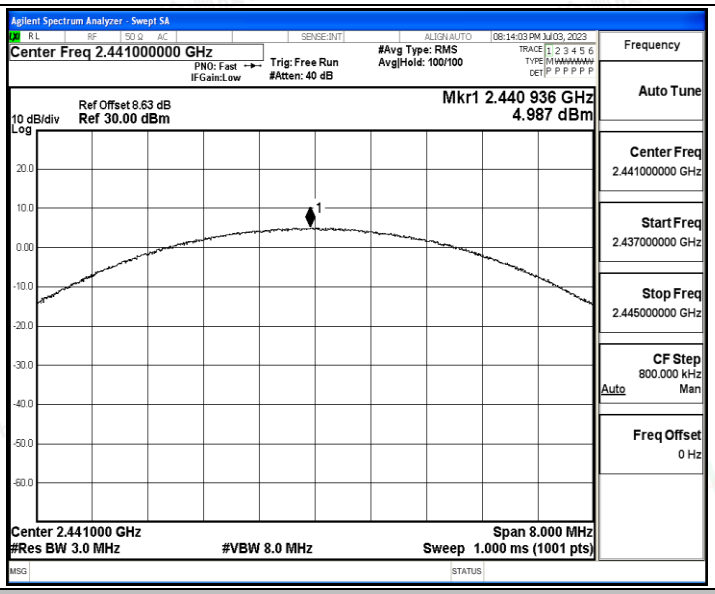
2DH5_Ant1_2480



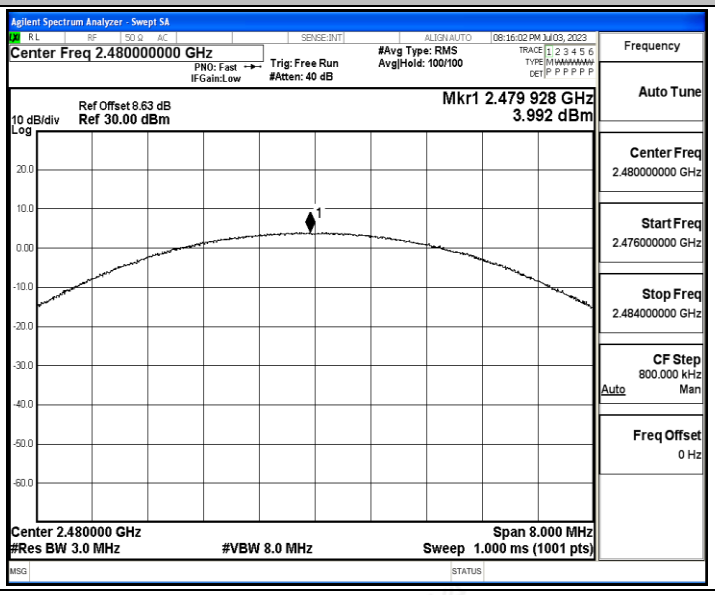
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



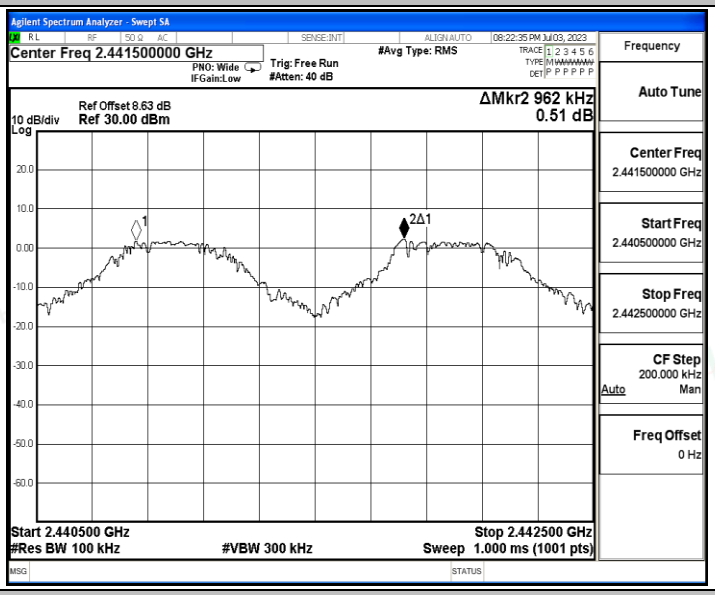
A.3 Carrier frequency separation

Test Result

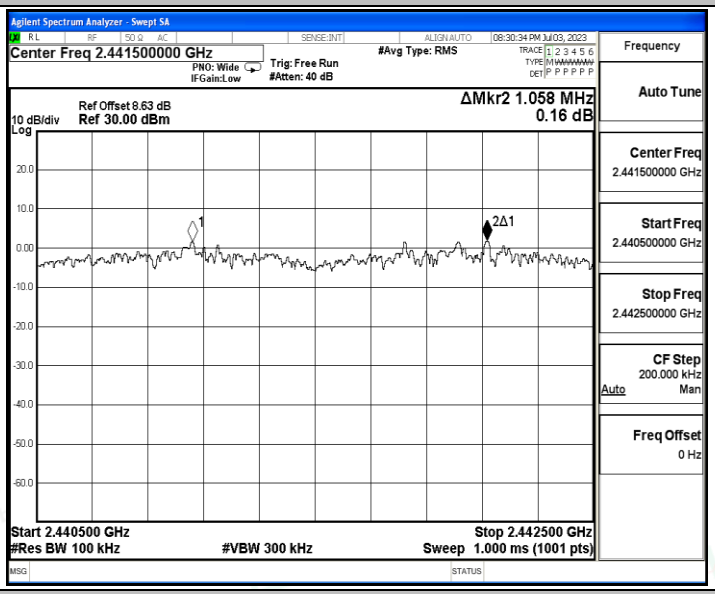
TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.962	≥0.648	PASS
2DH5	Ant1	Hop	1.058	≥0.902	PASS
3DH5	Ant1	Hop	0.994	≥0.870	PASS

Test Graphs

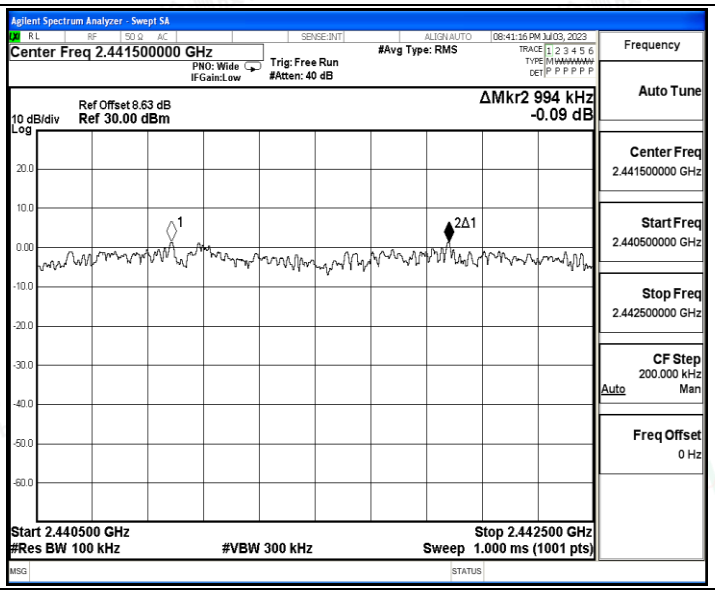
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441500000 GHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
08:41:16 PM Jul 03, 2023
Frequency
Auto Tune
Ref Offset 8.63 dB
10 dB/div
Ref 30.00 dBm
ΔMkr2 994 kHz
-0.09 dB
Center Freq
2.441500000 GHz
Start Freq
2.440500000 GHz
Stop Freq
2.442500000 GHz
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz
Start 2.440500 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.442500 GHz
Sweep 1.000 ms (1001 pts)

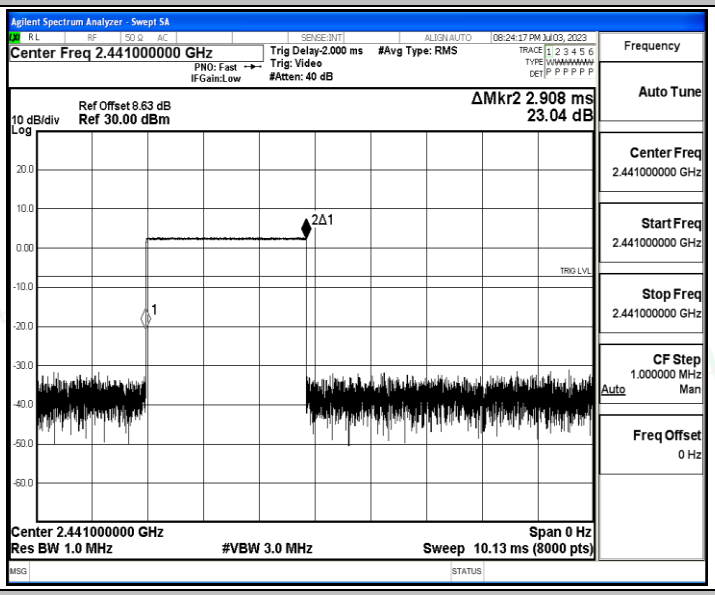
A.4 Time of occupancy

Test Result

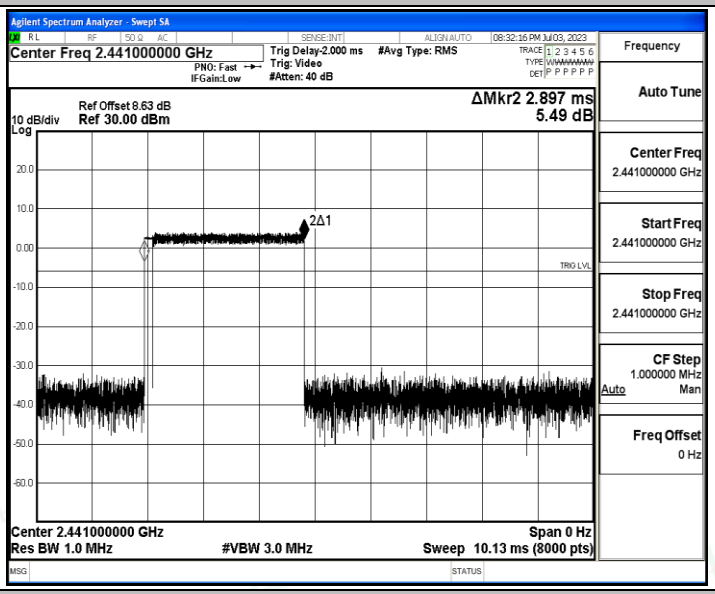
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.908	106.67	0.31	≤0.4	PASS
2DH5	Ant1	Hop	2.897	106.67	0.309	≤0.4	PASS
3DH5	Ant1	Hop	2.896	106.67	0.309	≤0.4	PASS

Test Graphs

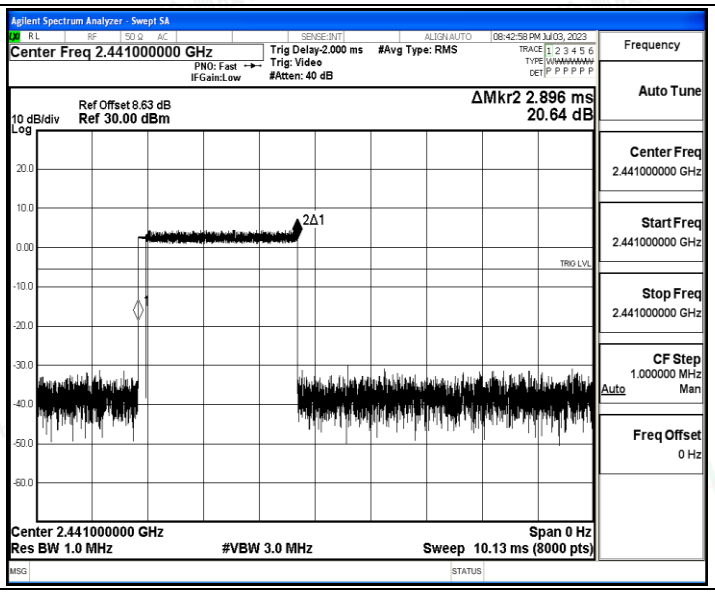
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay-2.000 ms
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
08:42:58 PM Jul 03, 2023
Frequency
Auto Tune
Ref Offset 8.63 dB
10 dB/div
Ref 30.00 dBm
ΔMkr2 2.896 ms
20.64 dB
2Δ1
1
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
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.13 ms (8000 pts)

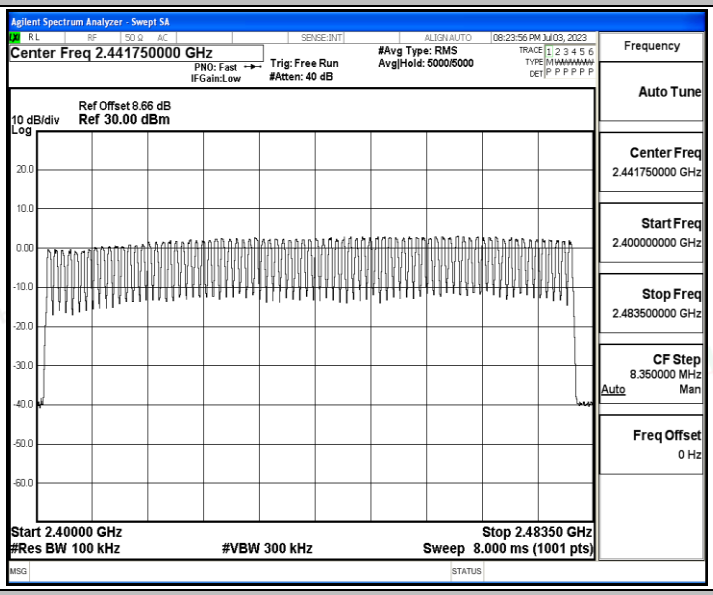
A.5 Number of hopping channels

Test Result

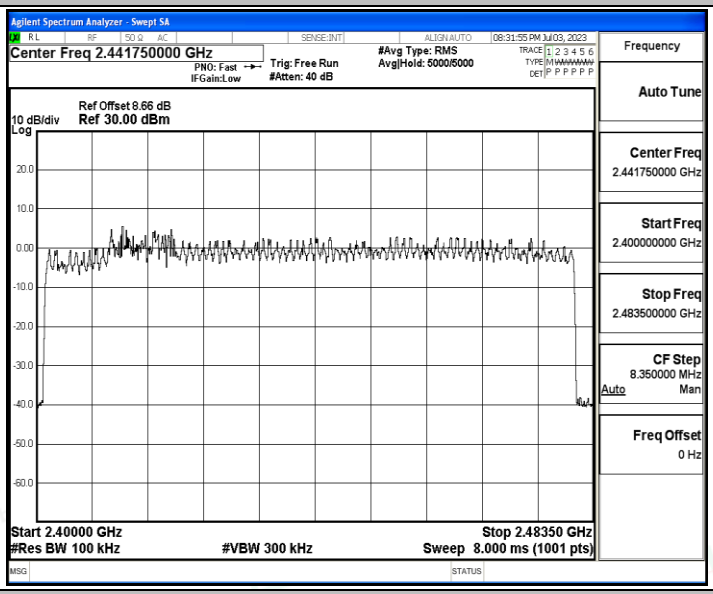
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

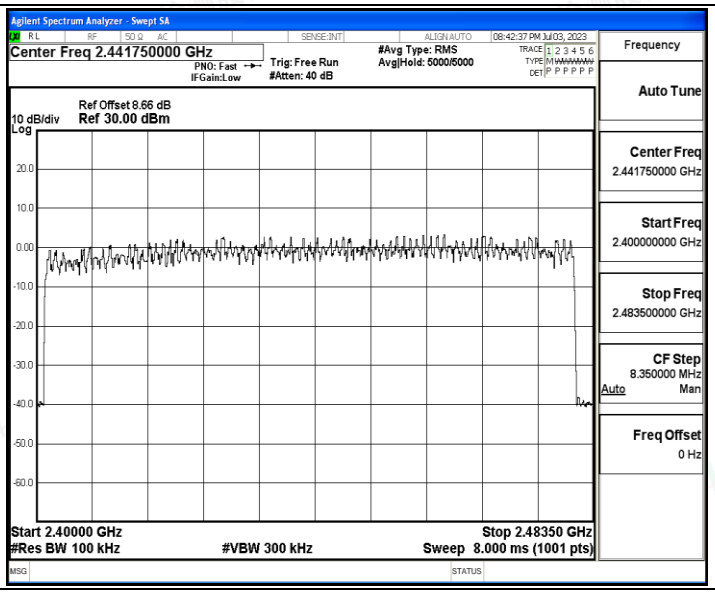
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 5000/5000
08:42:37 PM Jul 03, 2023
Ref Offset 8.66 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

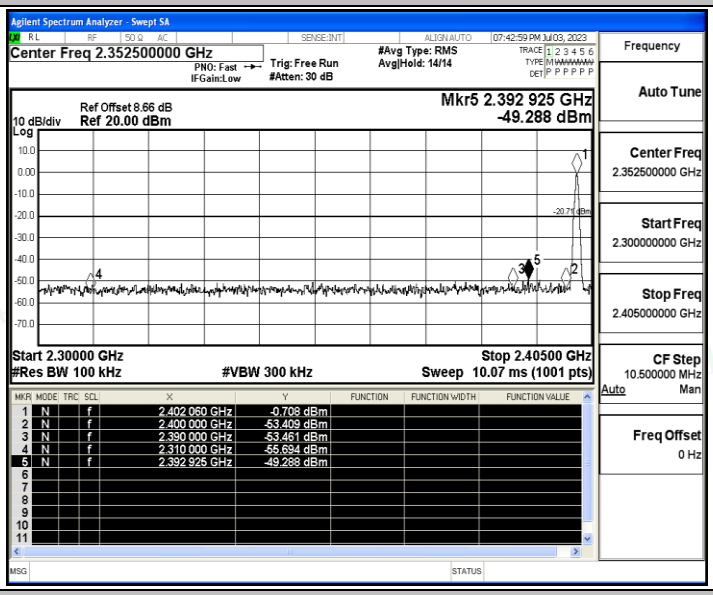
A.6 Band edge measurements

Test Result

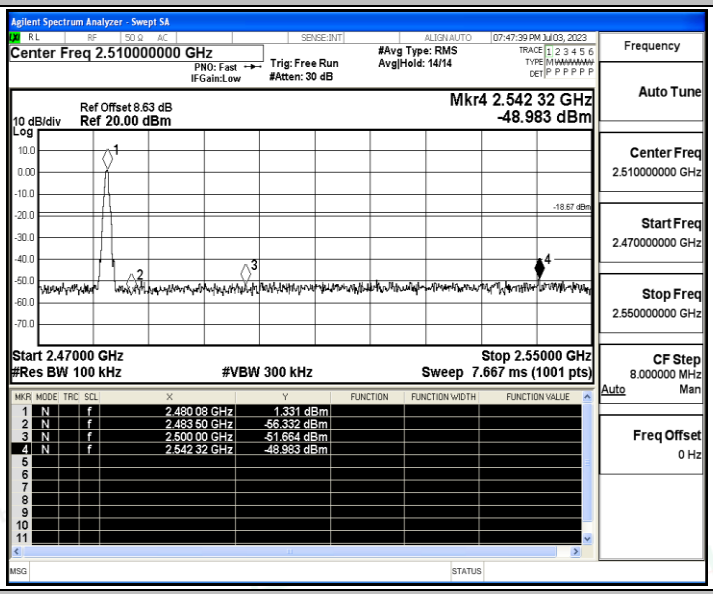
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.71	-49.29	≤-20.71	PASS
		High	2480	1.33	-48.98	≤-18.67	PASS
		Low	Hop_2402	-1.18	-49.25	≤-21.18	PASS
		High	Hop_2480	2.17	-47.99	≤-17.83	PASS
2DH5	Ant1	Low	2402	-3.14	-48.51	≤-23.14	PASS
		High	2480	-1.73	-49.19	≤-21.73	PASS
		Low	Hop_2402	-1.00	-49.38	≤-21	PASS
		High	Hop_2480	0.66	-48.08	≤-19.35	PASS
3DH5	Ant1	Low	2402	-1.92	-49.47	≤-21.92	PASS
		High	2480	-0.01	-49.21	≤-20.01	PASS
		Low	Hop_2402	-0.58	-49.41	≤-20.58	PASS
		High	Hop_2480	0.41	-48.01	≤-19.59	PASS

Test Graphs

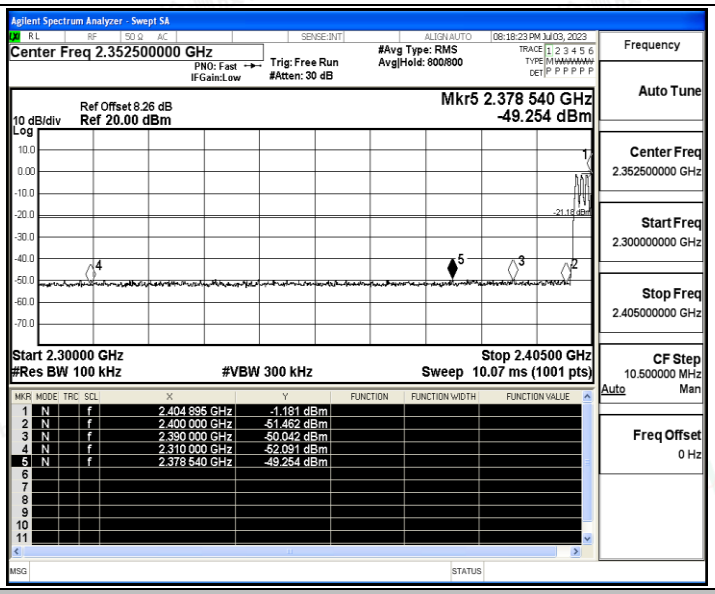
DH5_Ant1_Low_2402



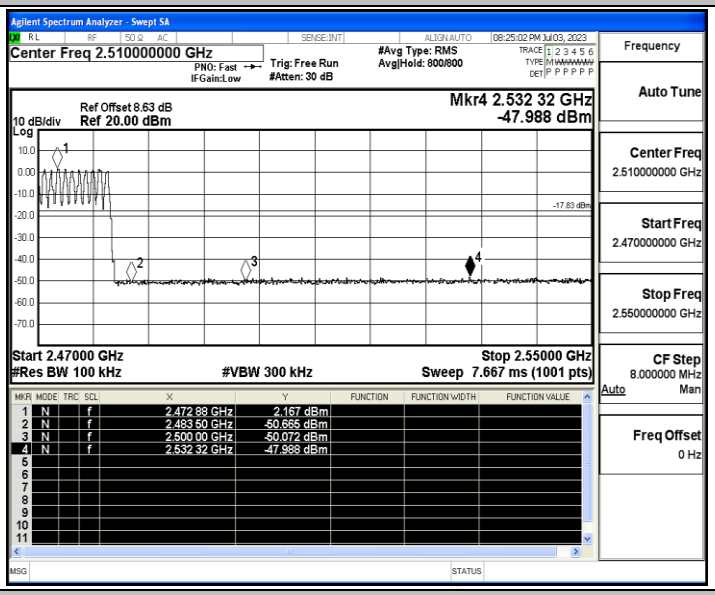
DH5_Ant1_High_2480



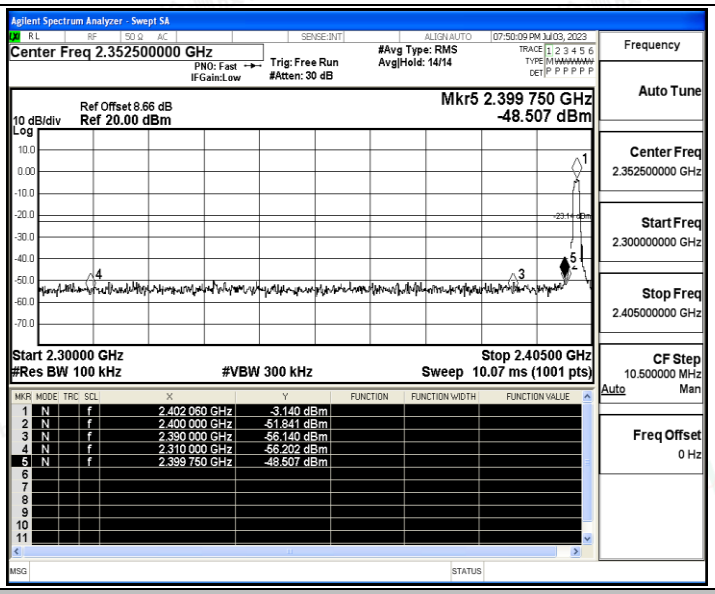
DH5_Ant1_Low_Hop_2402



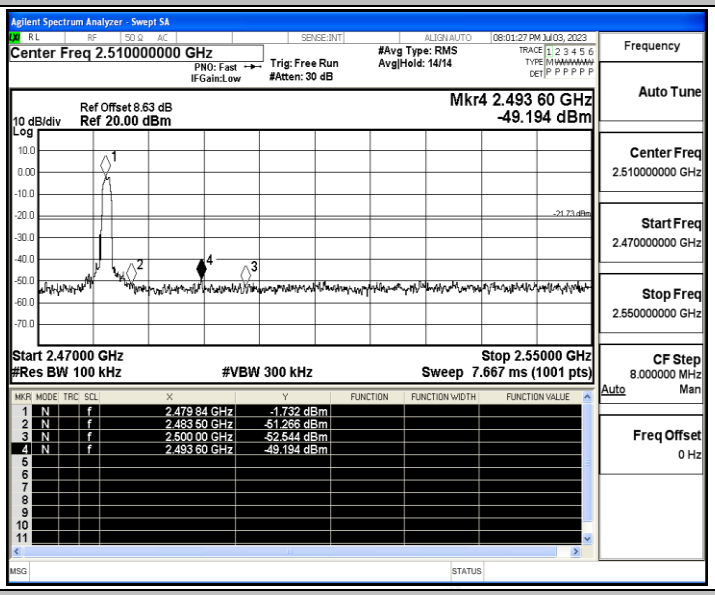
DH5_Ant1_High_Hop_2480



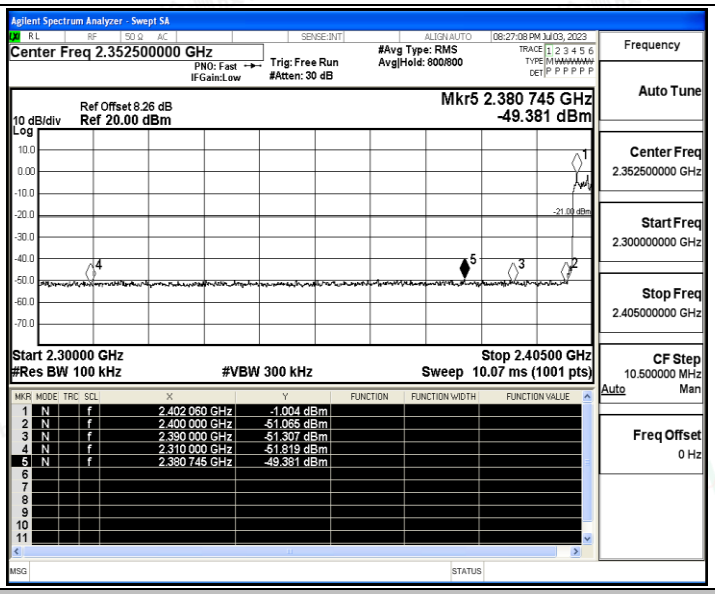
2DH5_Ant1_Low_2402



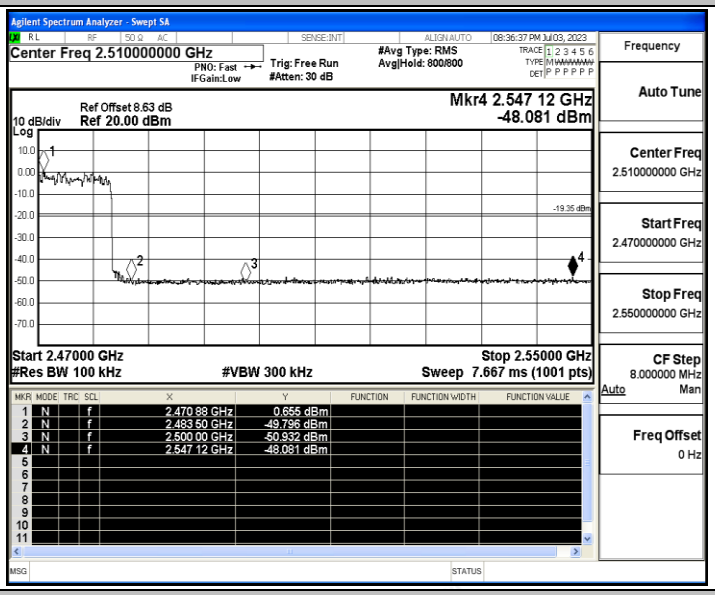
2DH5_Ant1_High_2480



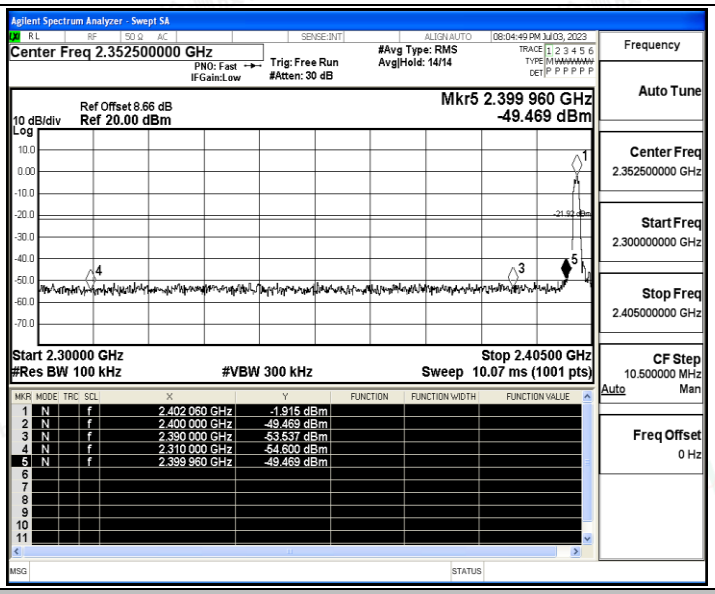
2DH5_Ant1_Low_Hop_2402



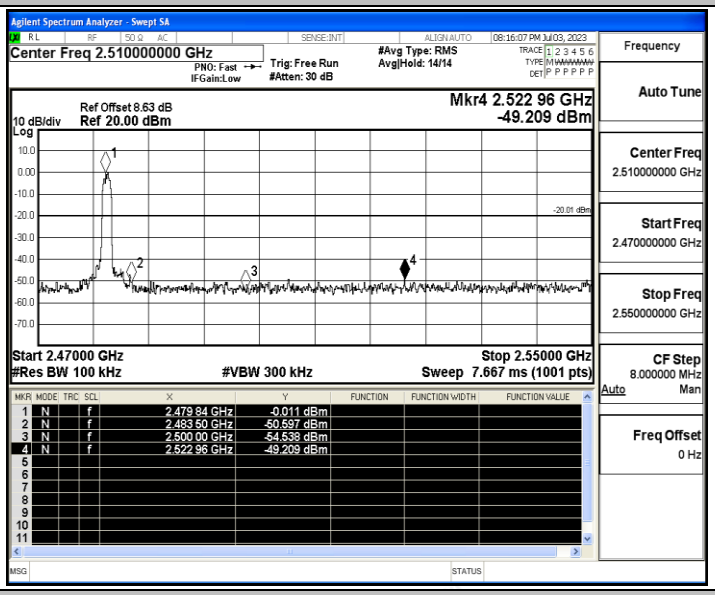
2DH5_Ant1_High_Hop_2480



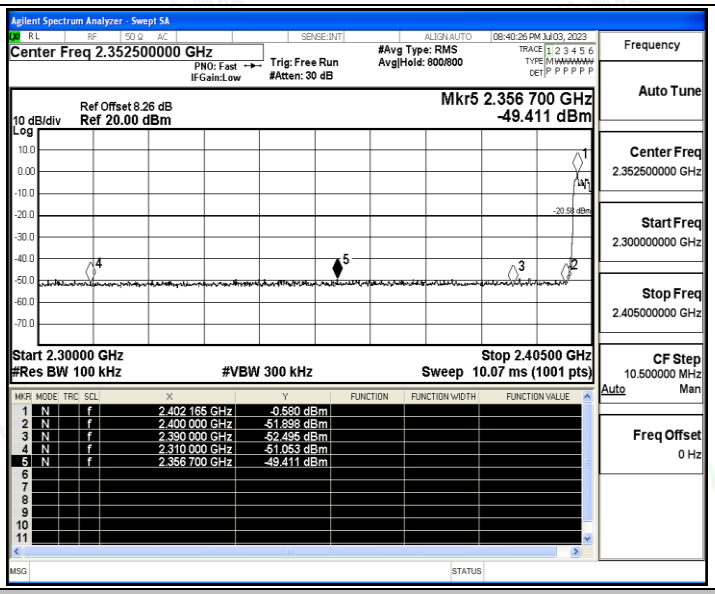
3DH5_Ant1_Low_2402



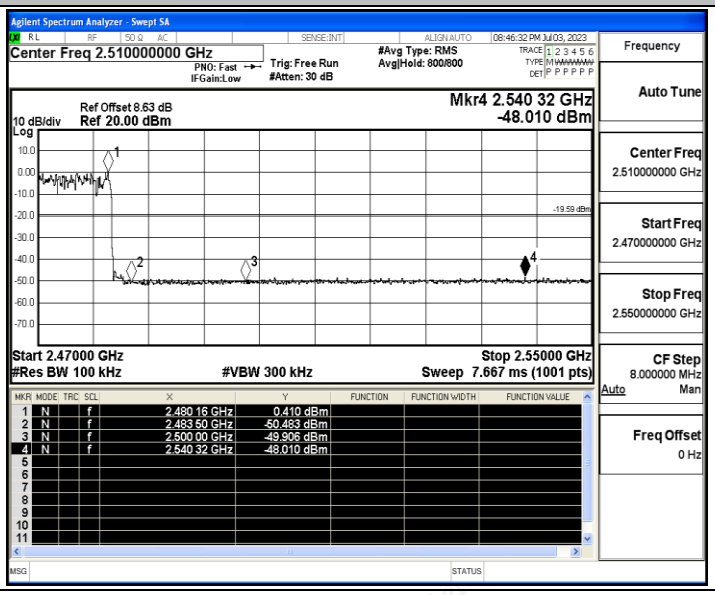
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



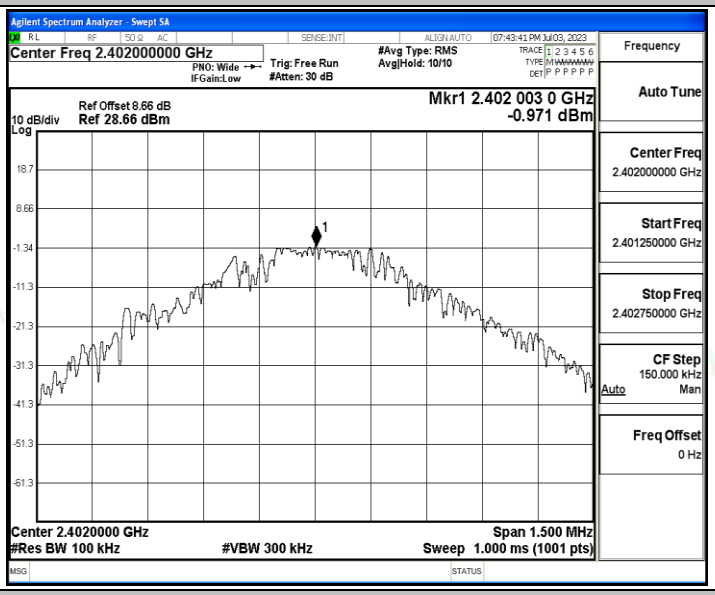
A.7 Conducted Spurious Emission

Test Result

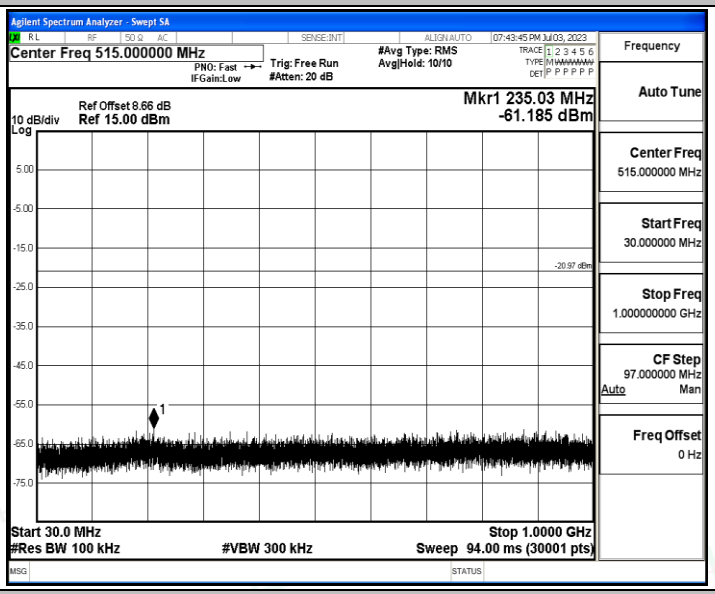
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.97	-0.97	---	PASS
			30~1000	-0.97	-61.19	≤-20.97	PASS
			1000~26500	-0.97	-46.83	≤-20.97	PASS
		2441	Reference	1.86	1.86	---	PASS
			30~1000	1.86	-60.74	≤-18.14	PASS
			1000~26500	1.86	-46.54	≤-18.14	PASS
		2480	Reference	1.07	1.07	---	PASS
			30~1000	1.07	-60.62	≤-18.93	PASS
			1000~26500	1.07	-46.83	≤-18.93	PASS
2DH5	Ant1	2402	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-60.88	≤-21.44	PASS
			1000~26500	-1.44	-46.93	≤-21.44	PASS
		2441	Reference	1.80	1.80	---	PASS
			30~1000	1.80	-61.24	≤-18.2	PASS
			1000~26500	1.80	-47.11	≤-18.2	PASS
		2480	Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-60.88	≤-22.06	PASS
			1000~26500	-2.06	-46.41	≤-22.06	PASS
3DH5	Ant1	2402	Reference	-2.95	-2.95	---	PASS
			30~1000	-2.95	-61.11	≤-22.95	PASS
			1000~26500	-2.95	-46.72	≤-22.95	PASS
		2441	Reference	-0.65	-0.65	---	PASS
			30~1000	-0.65	-61.37	≤-20.65	PASS
			1000~26500	-0.65	-46.39	≤-20.65	PASS
		2480	Reference	-1.09	-1.09	---	PASS
			30~1000	-1.09	-60.85	≤-21.09	PASS
			1000~26500	-1.09	-46.14	≤-21.09	PASS

Test Graphs

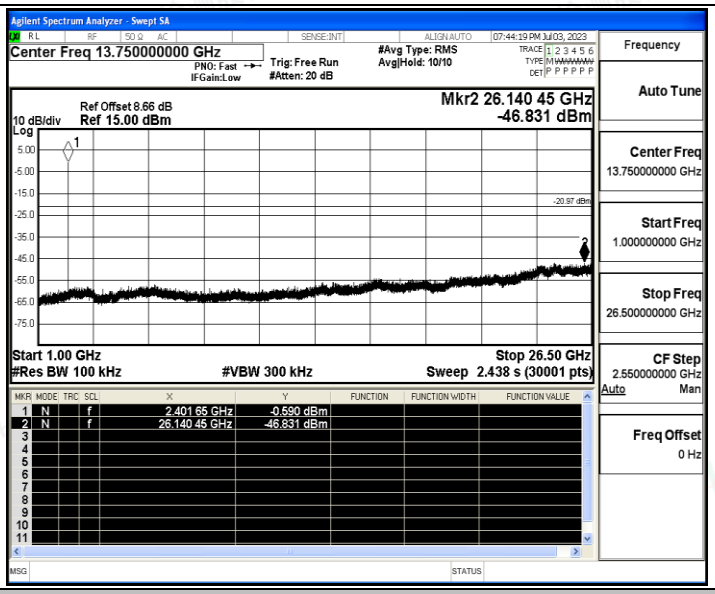
DH5_Ant1_2402_0~Reference



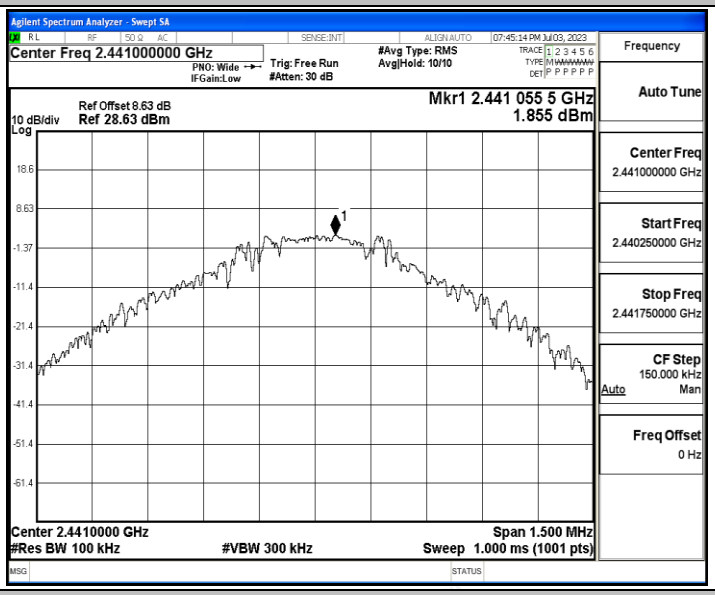
DH5_Ant1_2402_30~1000



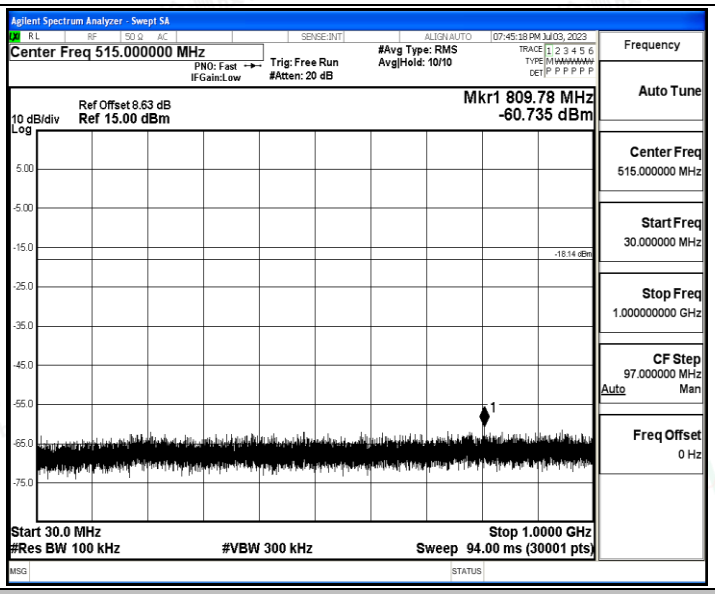
DH5_Ant1_2402_1000~26500



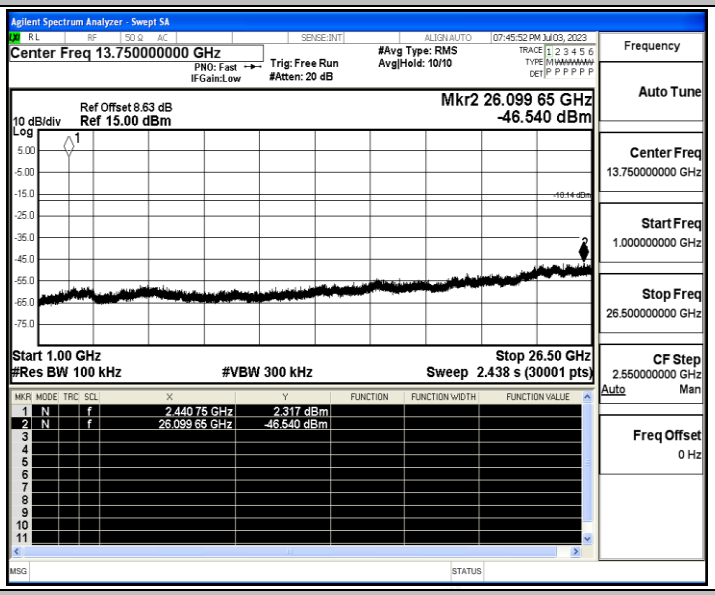
DH5_Ant1_2441_0~Reference



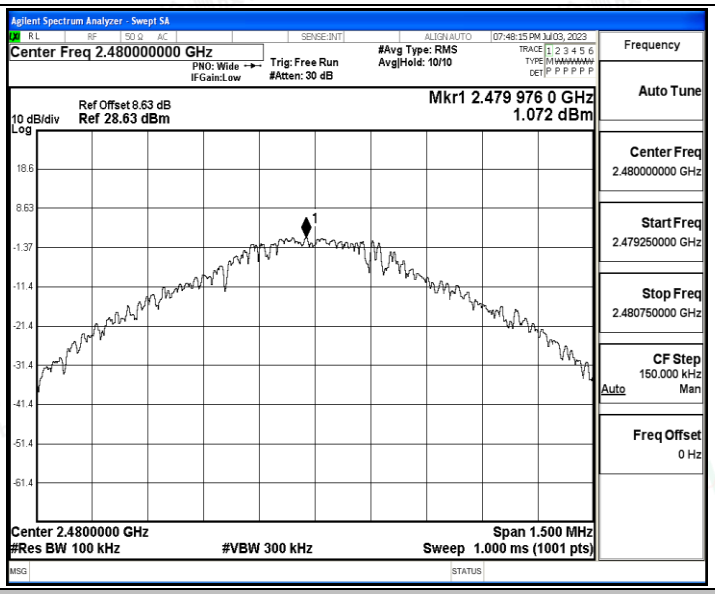
DH5_Ant1_2441_30~1000



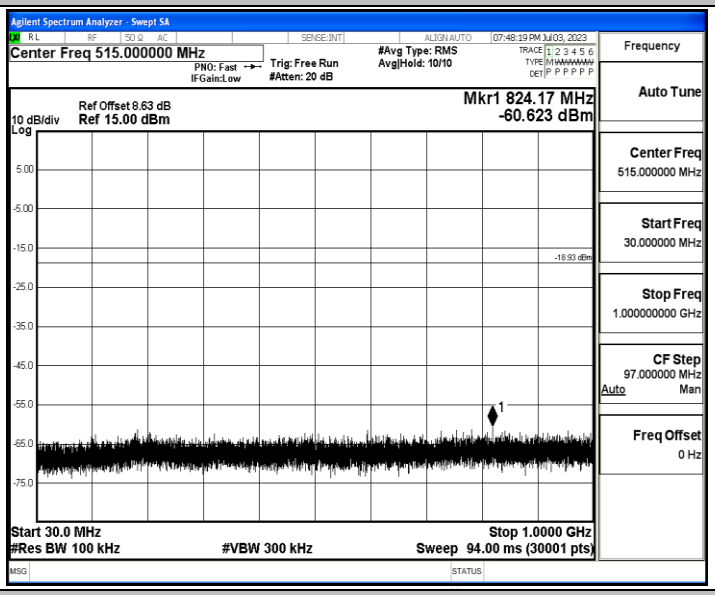
DH5_Ant1_2441_1000~26500



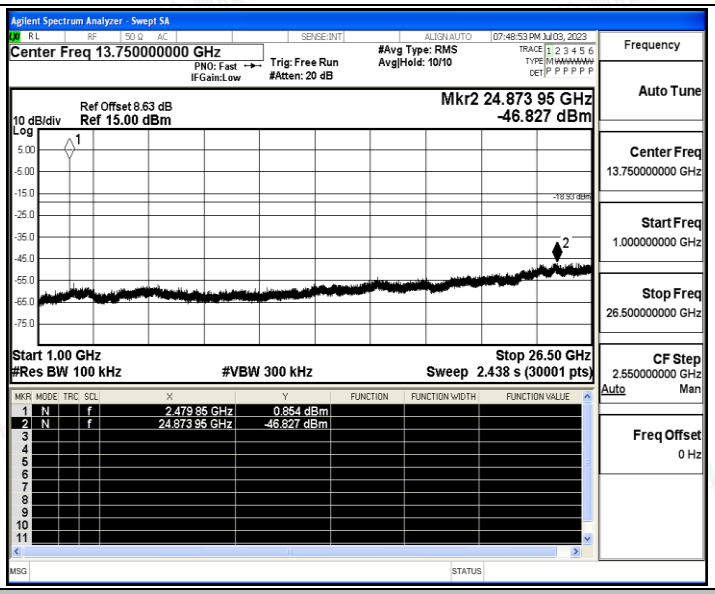
DH5_Ant1_2480_0~Reference



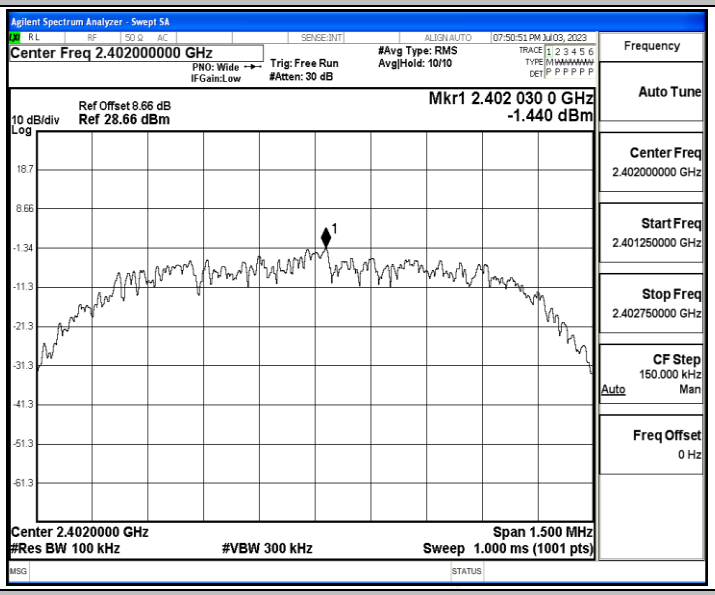
DH5_Ant1_2480_30~1000



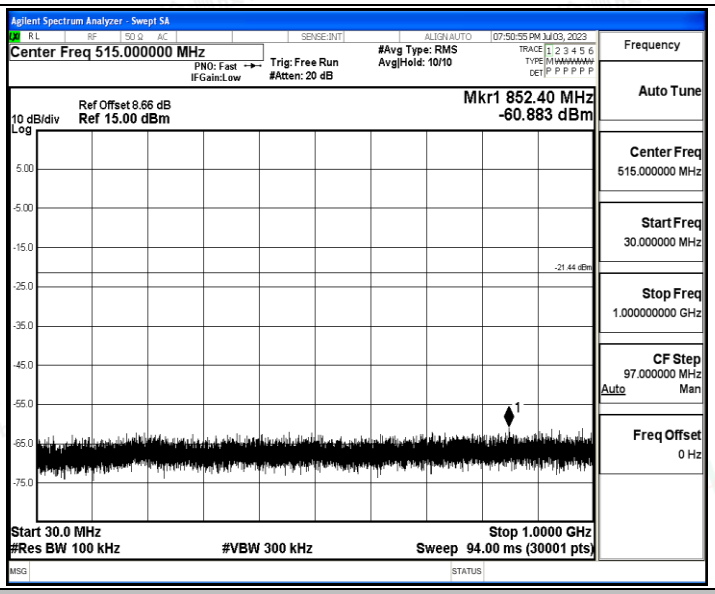
DH5_Ant1_2480_1000~26500



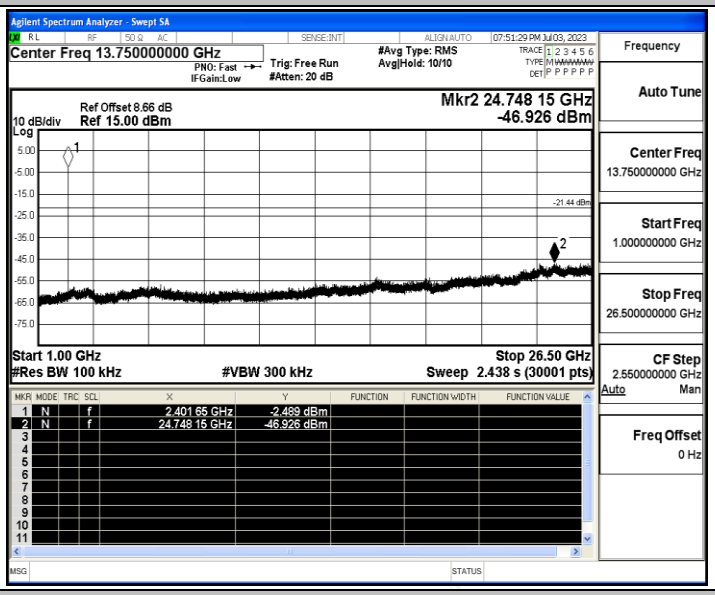
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



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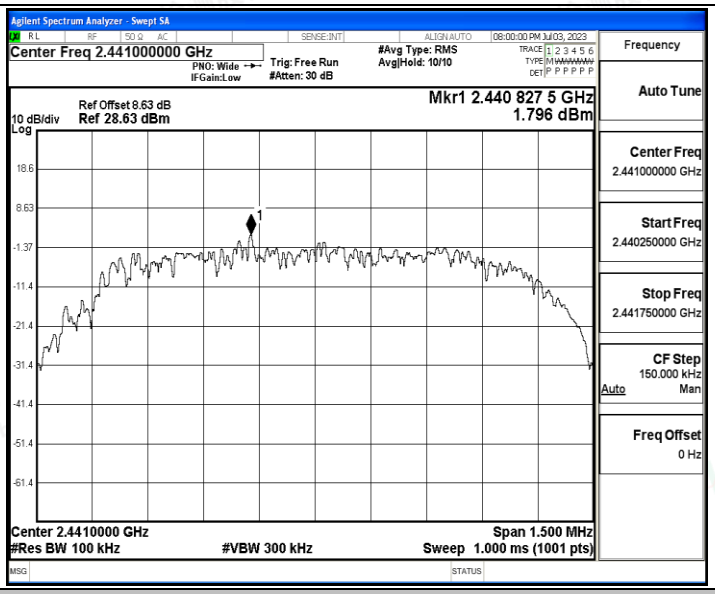

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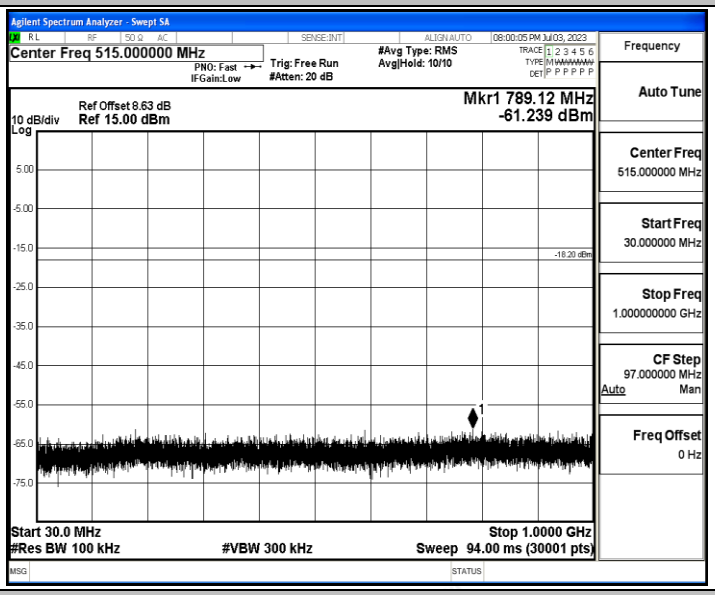

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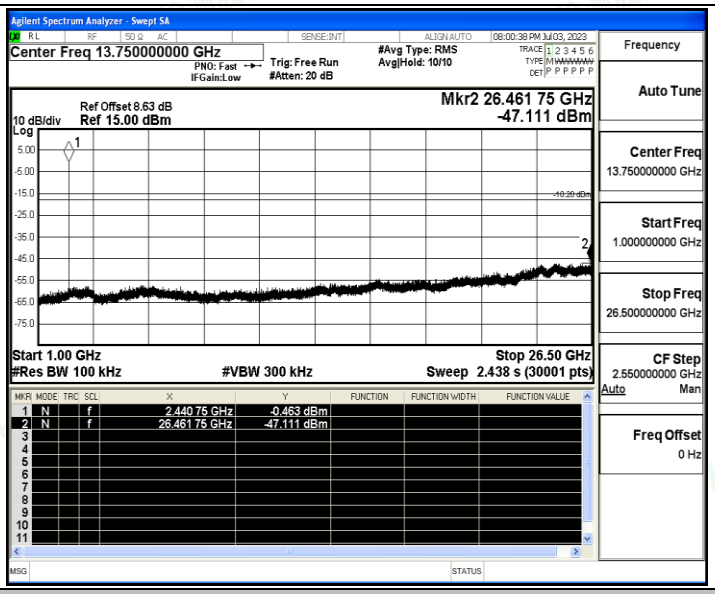

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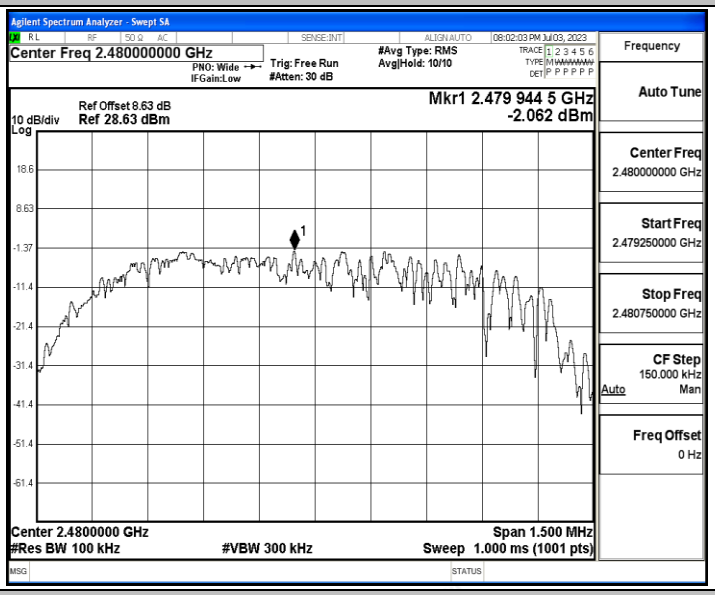
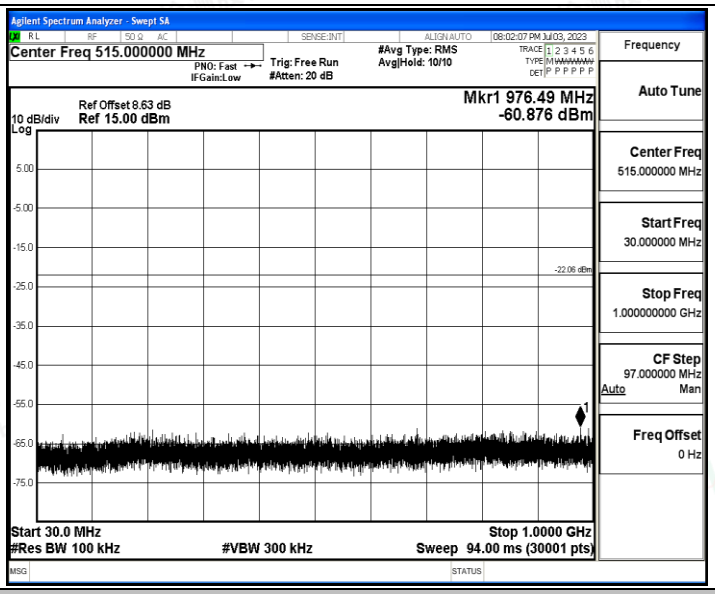
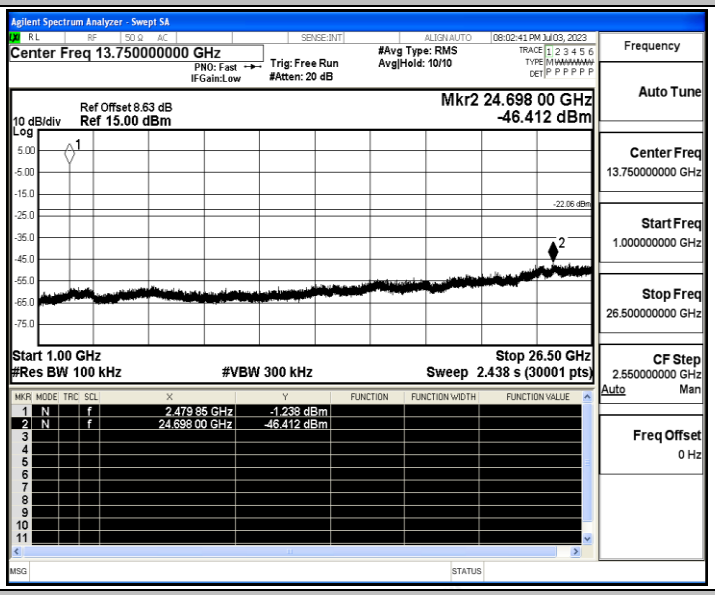


2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



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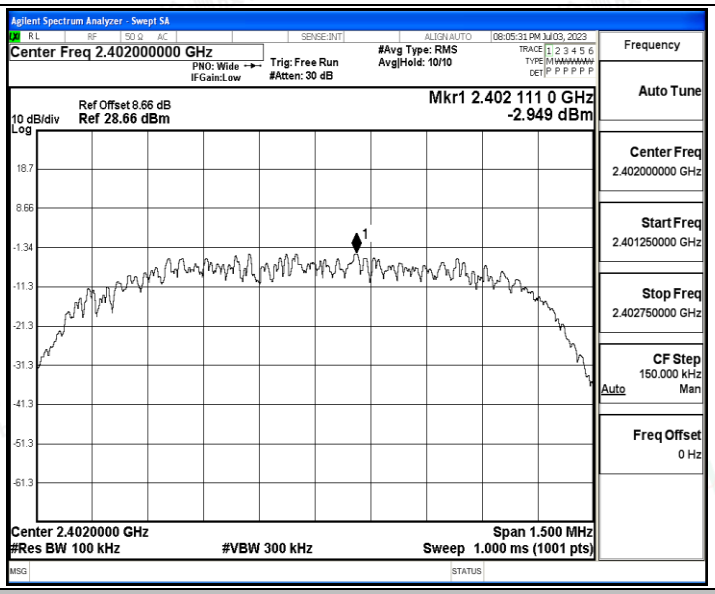

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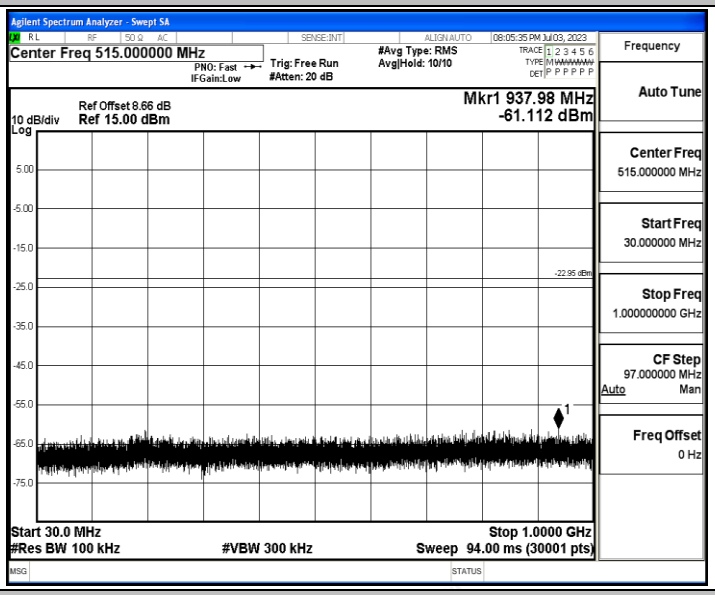

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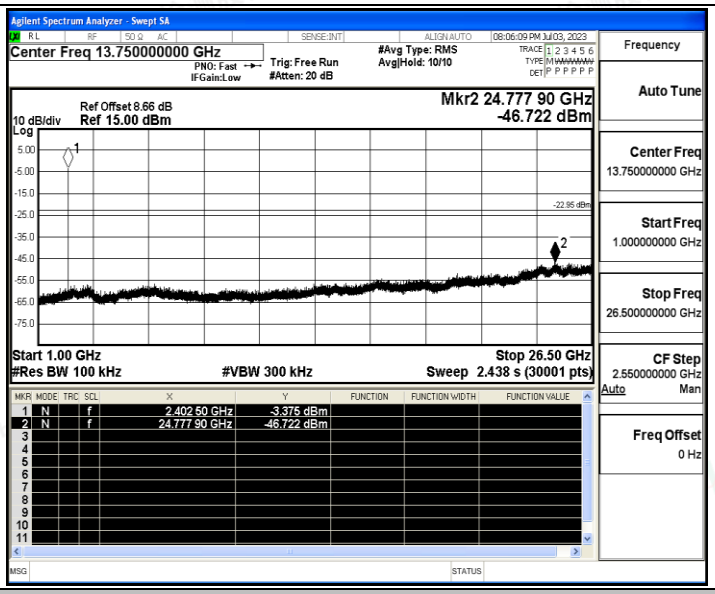

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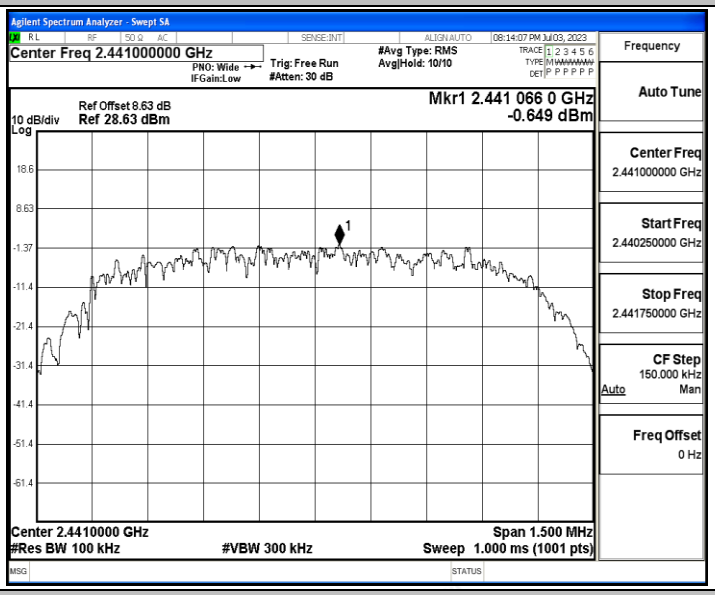

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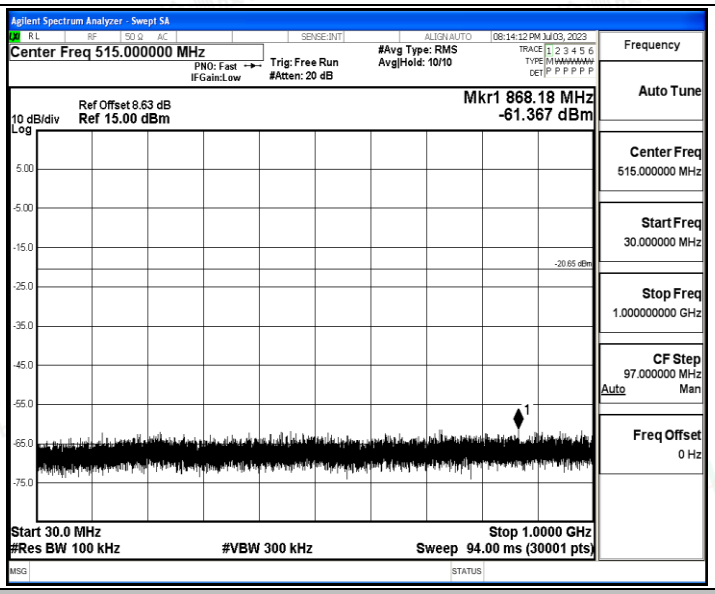

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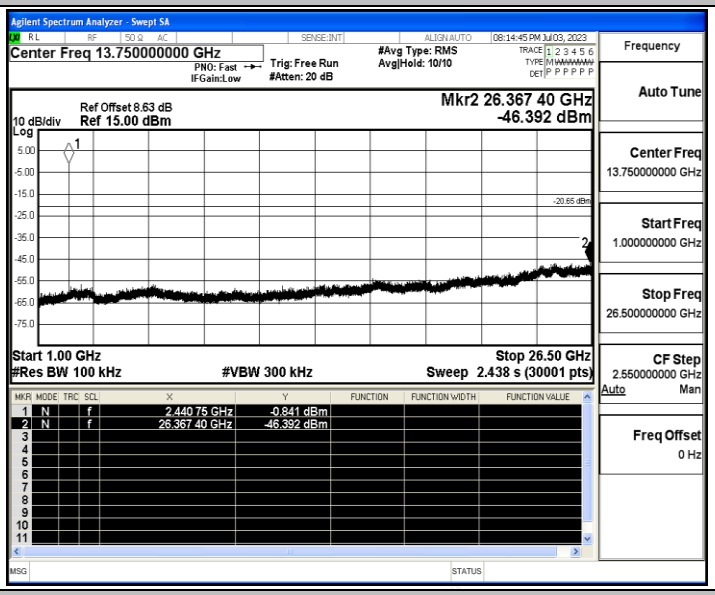

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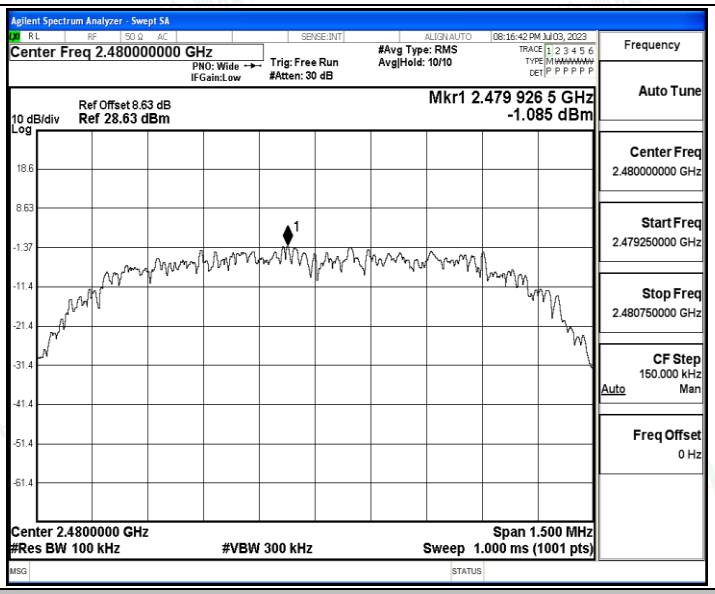

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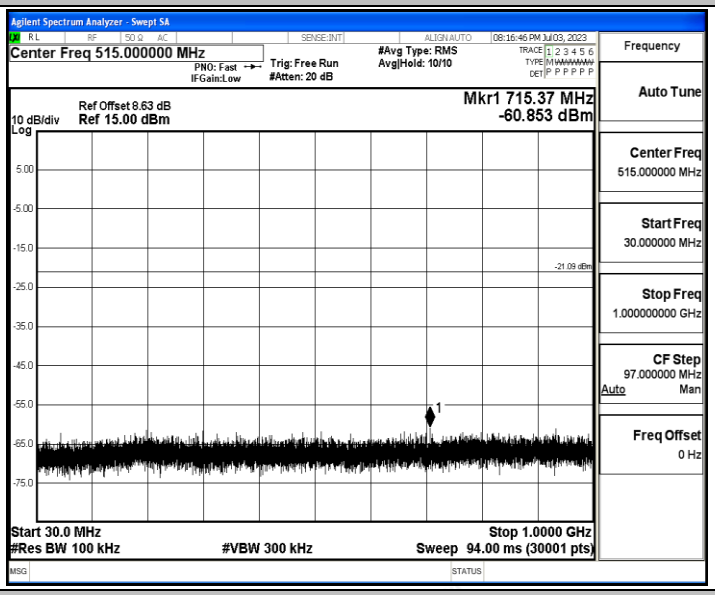

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