

FCC Appendix RF Test Data

FCC ID : **2A8W5S6MAX**

Company: : **BAODE INTERNATIONAL LIMITED**

EUT : **Smart Media Player**

Model Number : **SuperBOX S6MAX**

Reviewed By : **Eric Wang**

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.547	2402.492	---	---
		2441	0.942	2440.544	2441.486	---	---
		2480	0.942	2479.544	2480.486	---	---
2DH5	Ant1	2402	1.311	2401.352	2402.663	---	---
		2441	1.314	2440.346	2441.660	---	---
		2480	1.329	2479.343	2480.672	---	---
3DH5	Ant1	2402	1.314	2401.346	2402.660	---	---
		2441	1.314	2440.352	2441.666	---	---
		2480	1.278	2479.376	2480.654	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

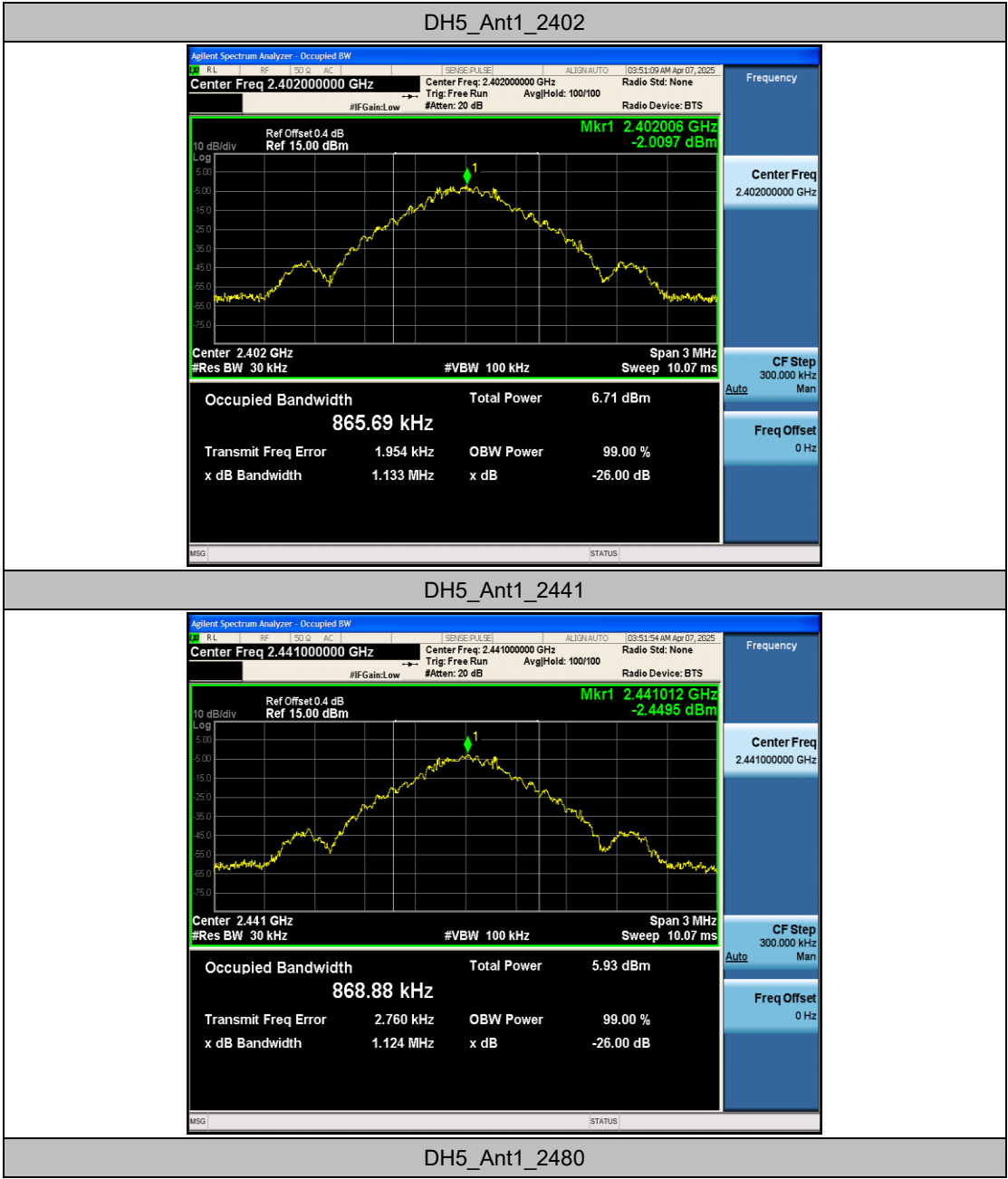


Appendix B: Occupied Channel Bandwidth

Test Result

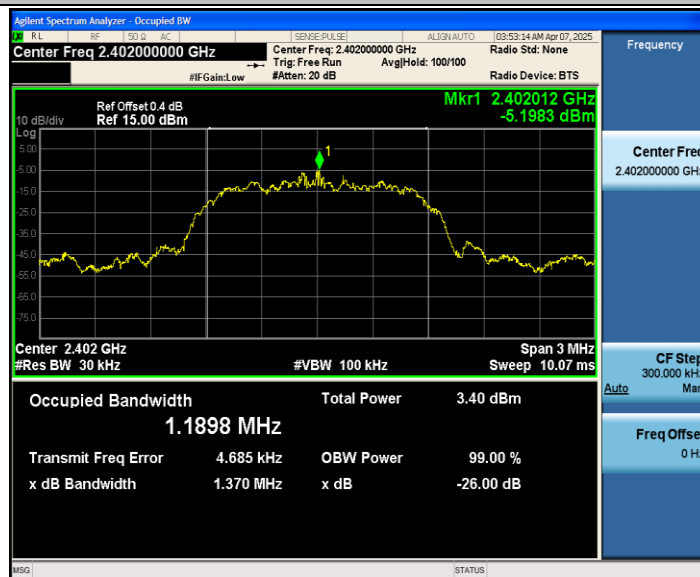
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86569	2401.5691	2402.4348	---	---
		2441	0.86888	2440.5683	2441.4372	---	---
		2480	0.87331	2479.5668	2480.4401	---	---
2DH5	Ant1	2402	1.1898	2401.4098	2402.5996	---	---
		2441	1.1880	2440.4123	2441.6003	---	---
		2480	1.1901	2479.4113	2480.6014	---	---
3DH5	Ant1	2402	1.1909	2401.4100	2402.6009	---	---
		2441	1.1859	2440.4113	2441.5972	---	---
		2480	1.1823	2479.4149	2480.5972	---	---

Test Graphs

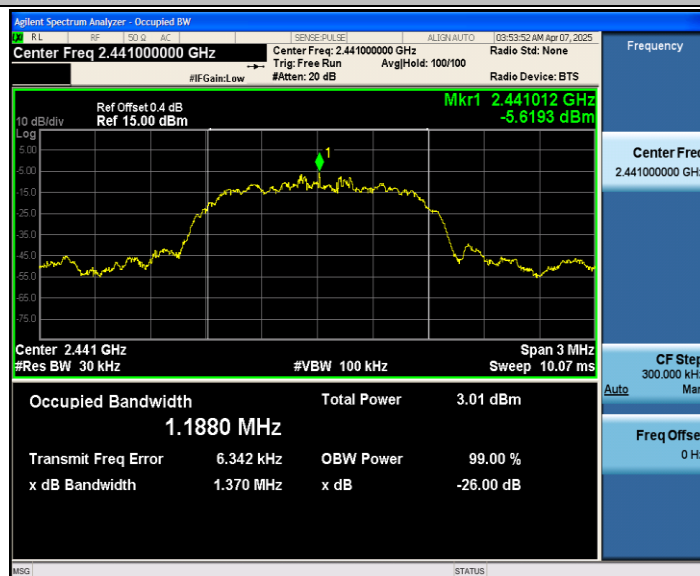




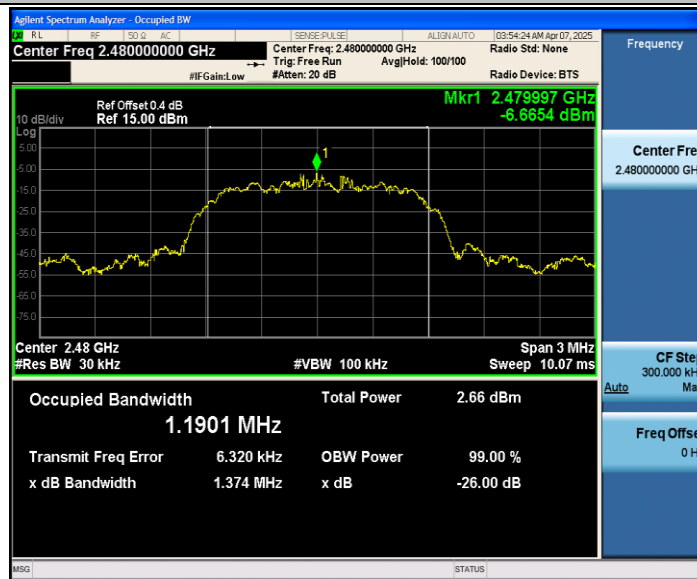
2DH5_Ant1_2402



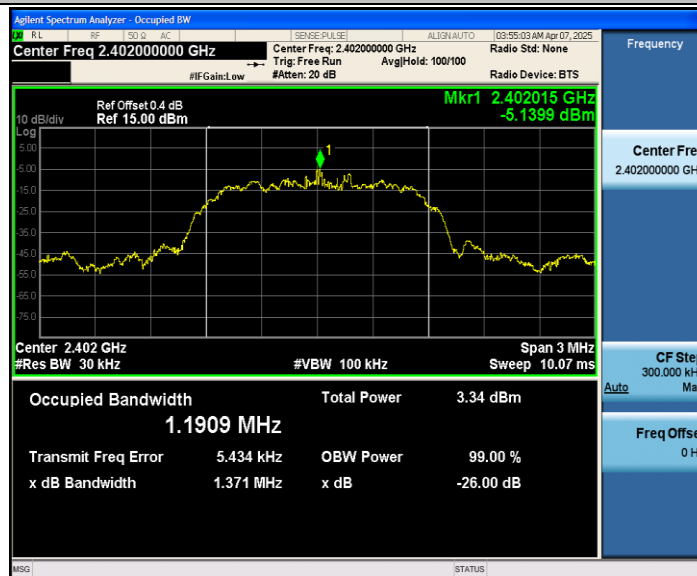
2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.60	≤20.97	PASS
		2441	0.03	≤20.97	PASS
		2480	-0.13	≤20.97	PASS
2DH5	Ant1	2402	-0.16	≤20.97	PASS
		2441	-0.73	≤20.97	PASS
		2480	-0.89	≤20.97	PASS
3DH5	Ant1	2402	-0.15	≤20.97	PASS
		2441	-0.73	≤20.97	PASS
		2480	-0.88	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.14	≥ 0.945	PASS
2DH5	Ant1	Hop	1.128	≥ 0.886	PASS
3DH5	Ant1	Hop	1.016	≥ 0.876	PASS

DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.442000000 GHz

Ref Offset 0.4 dB
Ref 10.40 dBm

ΔMkr2 1.140 MHz
-0.034 dB

Start 2.440000 GHz
#Res BW 300 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Stop 2.444000 GHz

Frequency

Auto Tune

Center Freq 2.442000000 GHz

Start Freq 2.440000000 GHz

Stop Freq 2.444000000 GHz

CF Step 400.000 kHz
Auto Man

Freq Offset 0 Hz

2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.442000000 GHz

Ref Offset 0.4 dB
Ref 10.40 dBm

ΔMkr2 1.128 MHz
-0.149 dB

Start 2.440000 GHz
#Res BW 300 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

Stop 2.444000 GHz

Frequency

Auto Tune

Center Freq 2.442000000 GHz

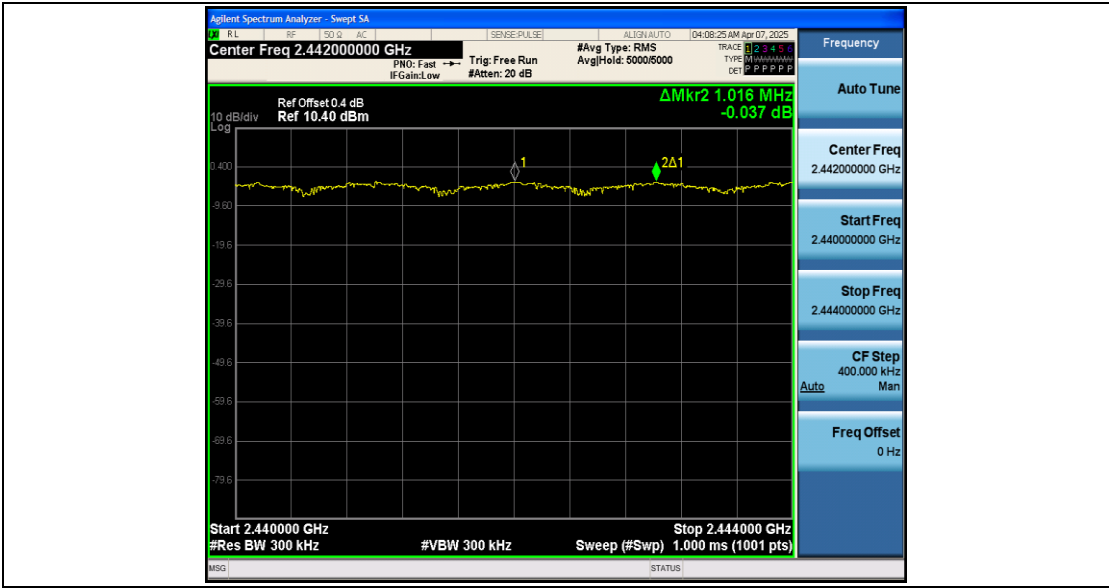
Start Freq 2.440000000 GHz

Stop Freq 2.444000000 GHz

CF Step 400.000 kHz
Auto Man

Freq Offset 0 Hz

3DH5_Ant1_Hop

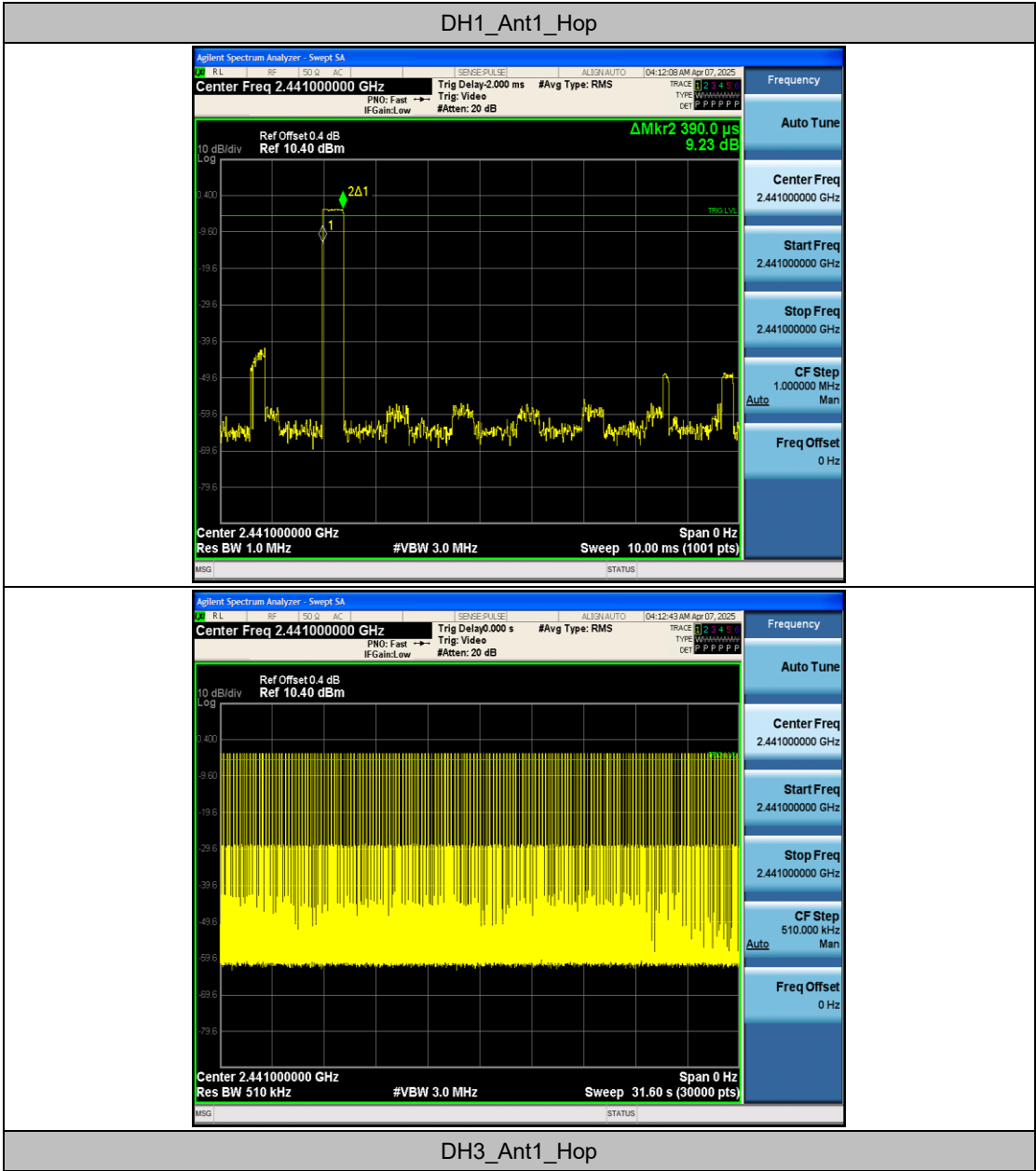


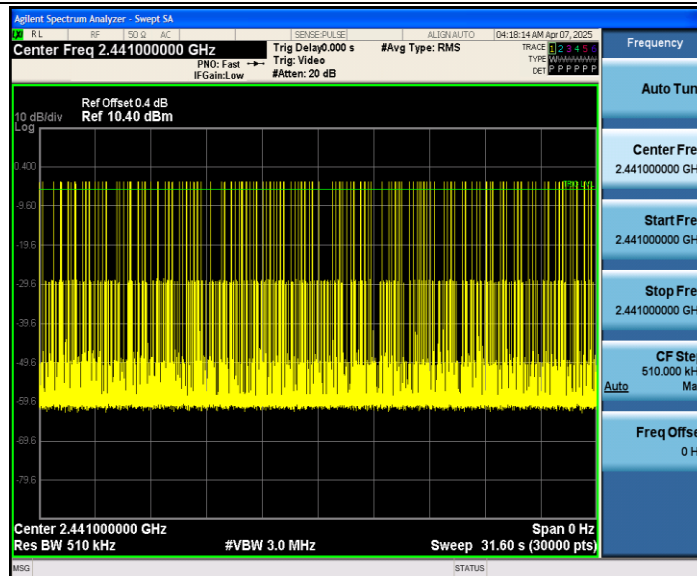
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.650	159	0.262	≤0.4	PASS
DH5	Ant1	Hop	2.890	117	0.338	≤0.4	PASS
2DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.640	151	0.248	≤0.4	PASS
2DH5	Ant1	Hop	2.890	109	0.315	≤0.4	PASS
3DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	163	0.267	≤0.4	PASS
3DH5	Ant1	Hop	2.900	118	0.342	≤0.4	PASS

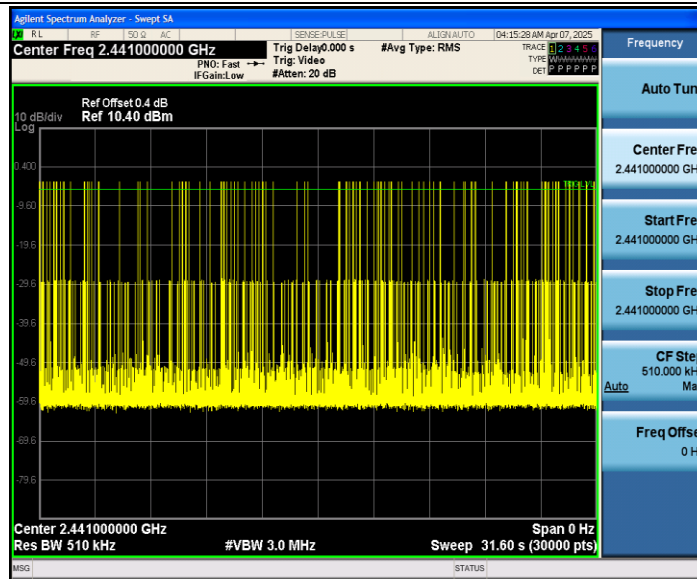
Test Graphs



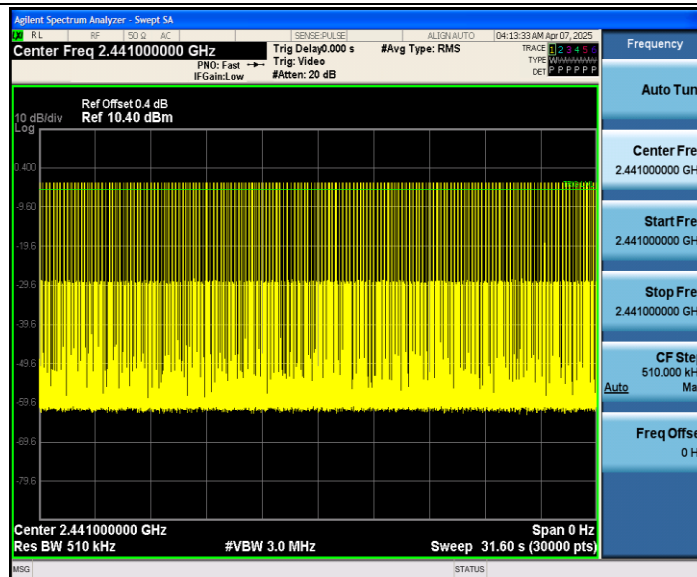
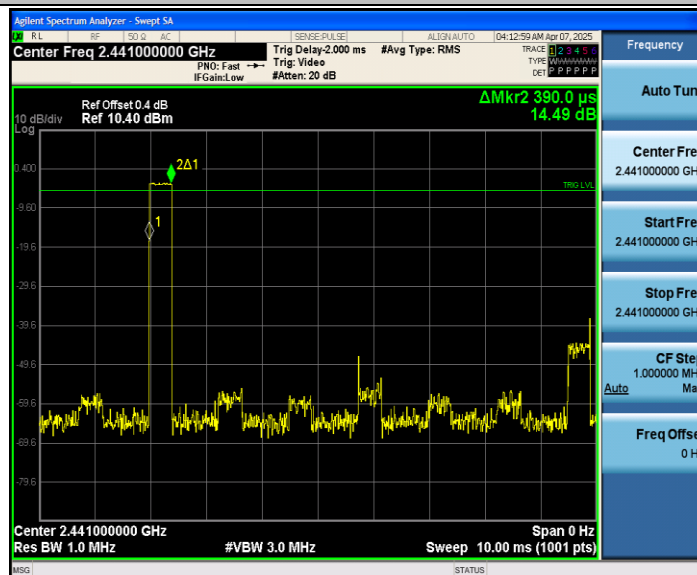


DH5_Ant1_Hop

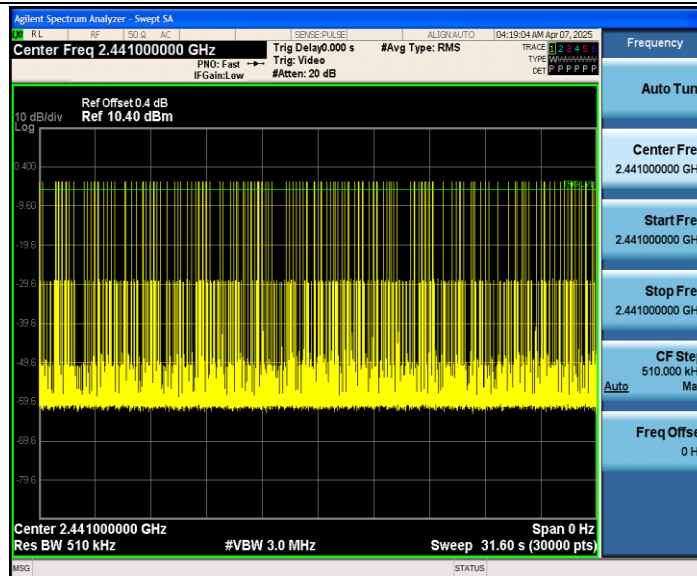




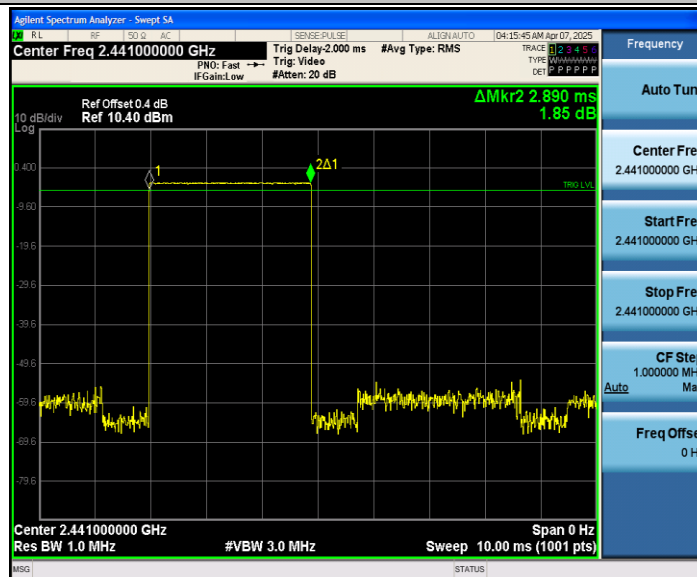
2DH1_Ant1_Hop

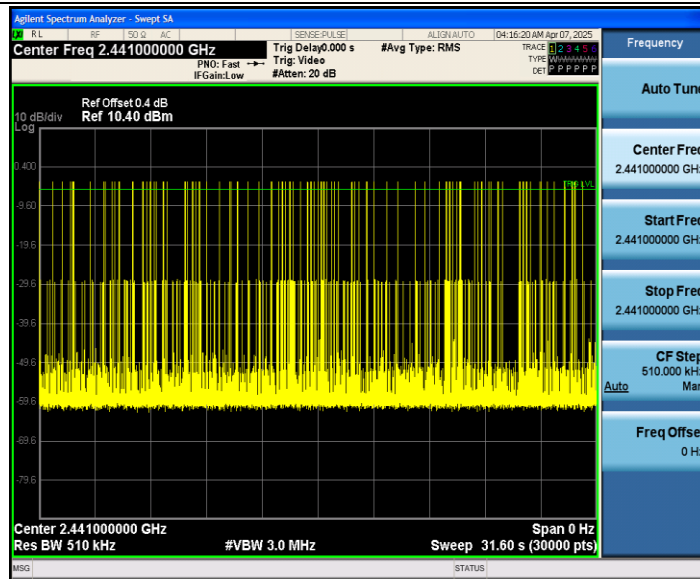


2DH3_Ant1_Hop

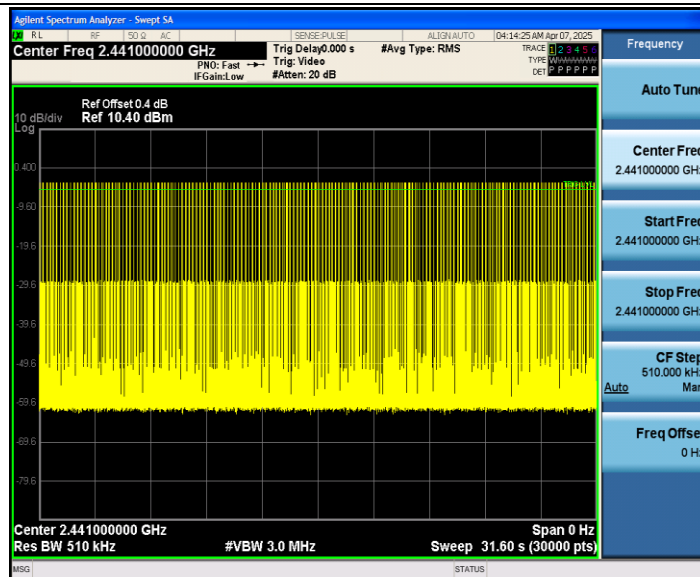
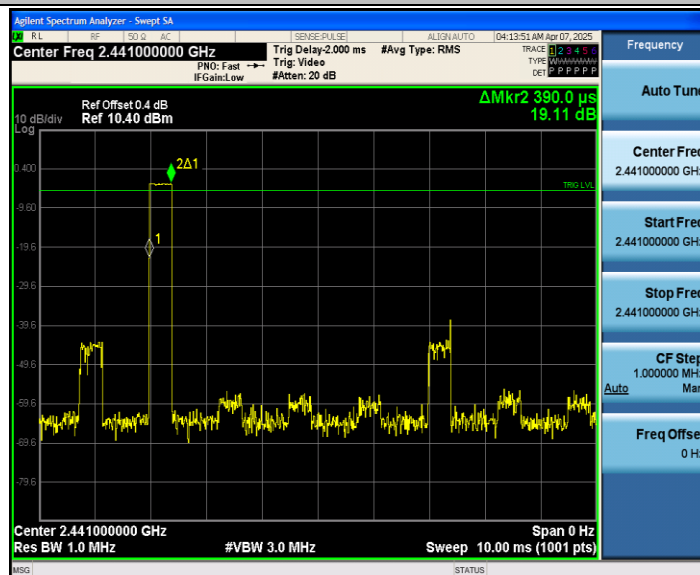


2DH5_Ant1_Hop

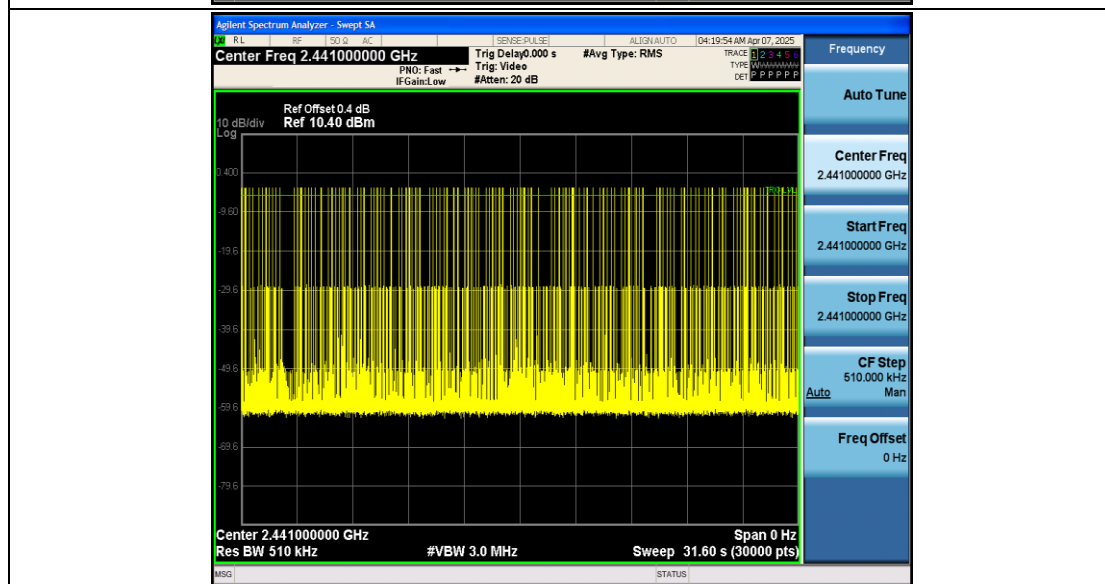




3DH1_Ant1_Hop

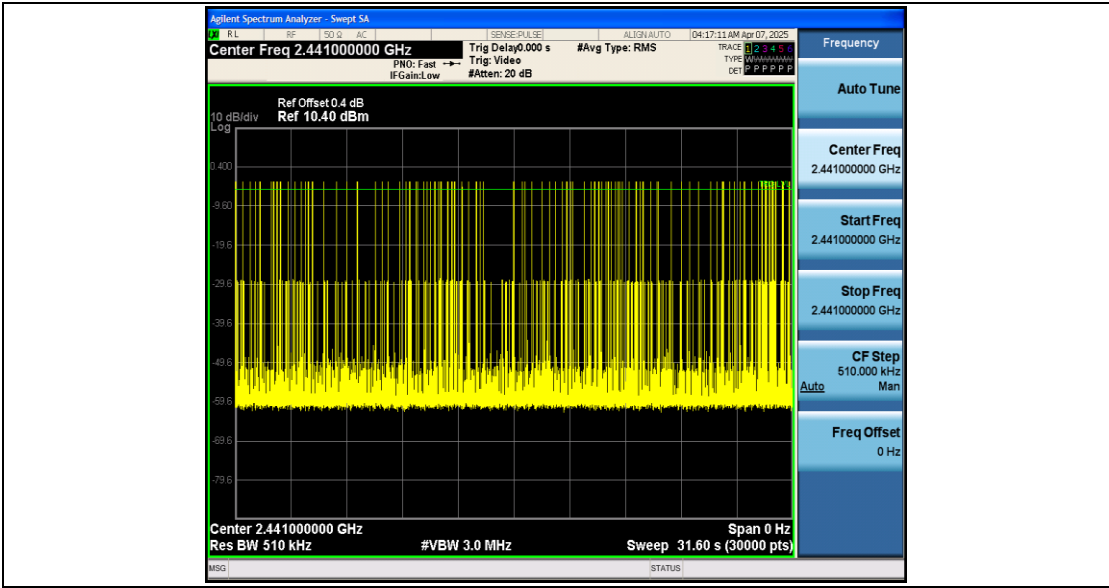


3DH3_Ant1_Hop



3DH5_Ant1_Hop





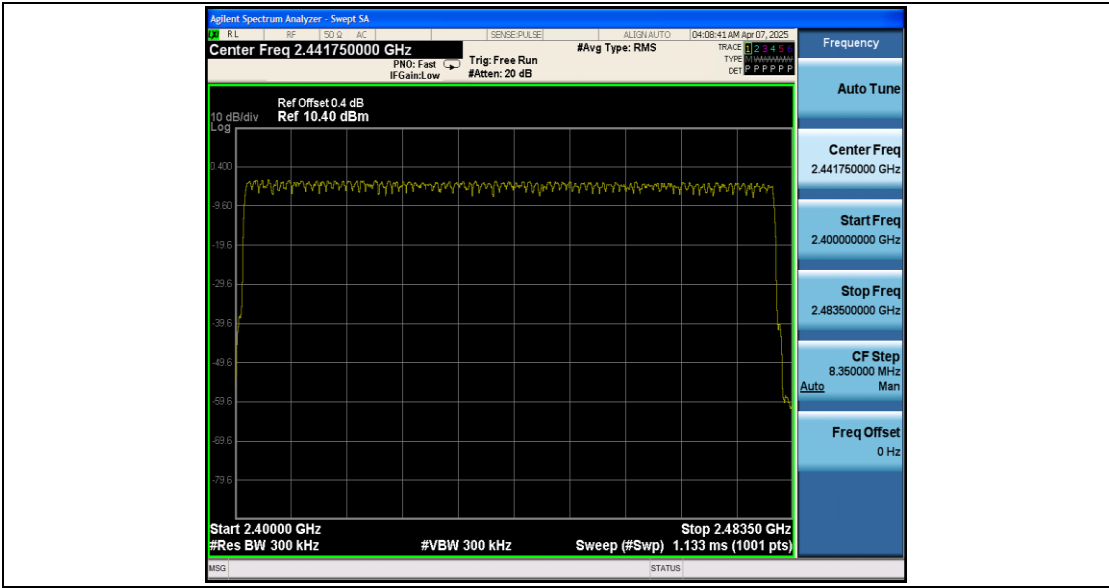
Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Freq(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





Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.05	-59.5	≤-20.05	PASS
		High	2480	-0.81	-58.03	≤-20.81	PASS
		Low	Hop_2402	-3.78	-59.65	≤-23.78	PASS
		High	Hop_2480	-3.97	-63.45	≤-23.97	PASS
2DH5	Ant1	Low	2402	-3.78	-59.34	≤-23.78	PASS
		High	2480	-4.02	-63.66	≤-24.02	PASS
		Low	Hop_2402	-5.09	-63.35	≤-25.09	PASS
		High	Hop_2480	-4.37	-63.98	≤-24.37	PASS
3DH5	Ant1	Low	2402	-3.68	-58.5	≤-23.68	PASS
		High	2480	-3.87	-63.11	≤-23.87	PASS
		Low	Hop_2402	-3.29	-62.74	≤-23.29	PASS
		High	Hop_2480	-4.32	-62.68	≤-24.32	PASS

DH5_Ant1_Low_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.352500000 GHz

Ref Offset 0.4 dB
Ref 10.40 dBm

Mkr5 2.399 960 GHz
-59.496 dBm

Start 2.300000 GHz
#Res BW 100 kHz

Stop 2.405000 GHz
#VBW 300 kHz

Sweep (#Swp) 10.07 ms (1001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.402 050 GHz	-0.045 dBm			
2	N	1	f	2.400 000 GHz	-59.496 dBm			
3	N	1	f	2.390 000 GHz	-65.271 dBm			
4	N	1	f	2.310 000 GHz	-70.376 dBm			
5	N	1	f	2.399 960 GHz	-59.496 dBm			

DH5_Ant1_High_2480

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.510000000 GHz

Ref Offset 0.4 dB
Ref 10.40 dBm

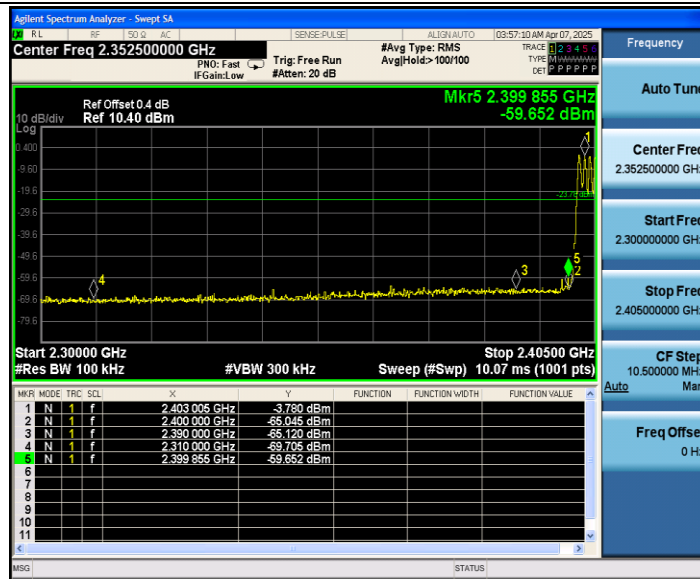
Mkr4 2.484 64 GHz
-58.034 dBm

Start 2.470000 GHz
#Res BW 100 kHz

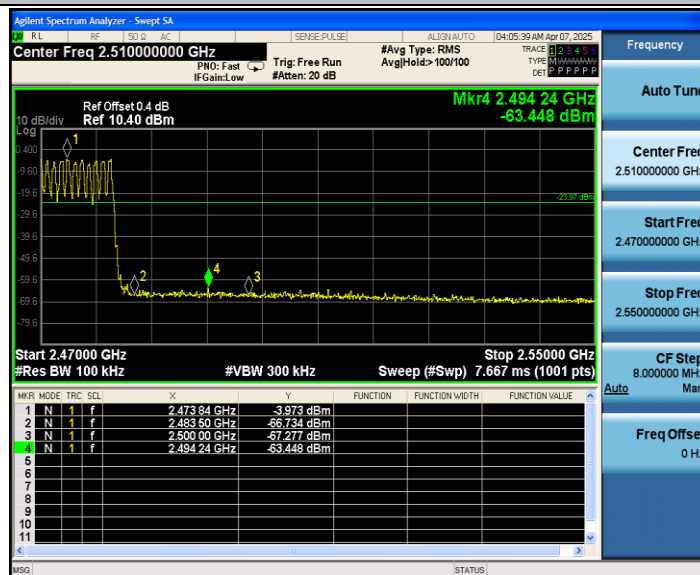
Stop 2.550000 GHz
#VBW 300 kHz

Sweep (#Swp) 7.667 ms (1001 pts)

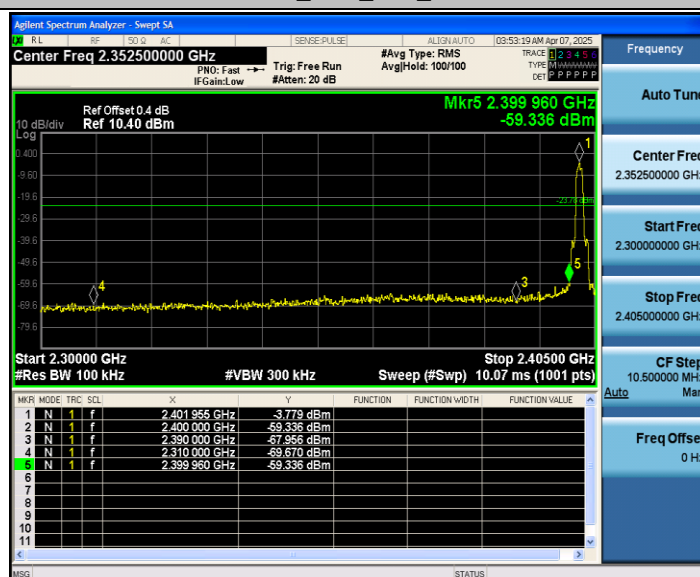
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.480 08 GHz	-0.810 dBm			
2	N	1	f	2.483 50 GHz	-61.946 dBm			
3	N	1	f	2.500 00 GHz	-66.045 dBm			
4	N	1	f	2.484 64 GHz	-58.034 dBm			



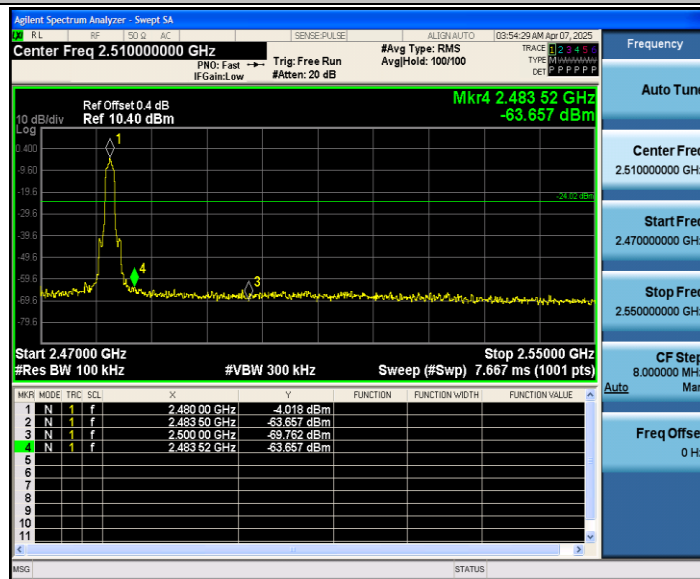
DH5_Ant1_High_Hop_2480



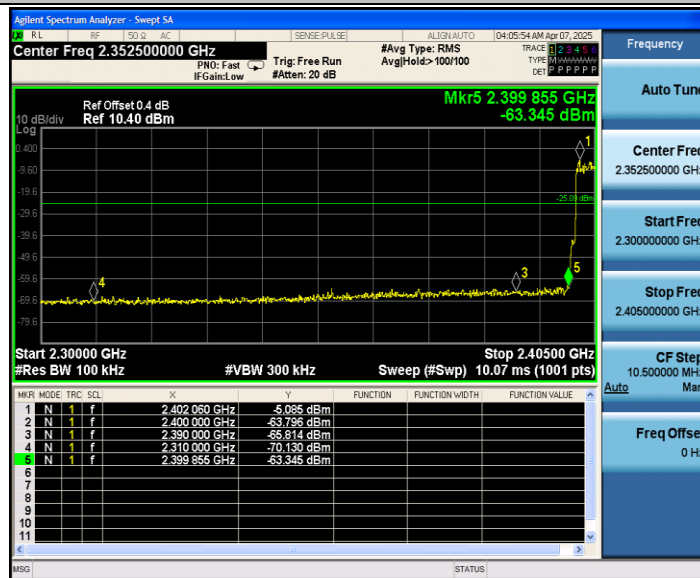
2DH5_Ant1_Low_2402



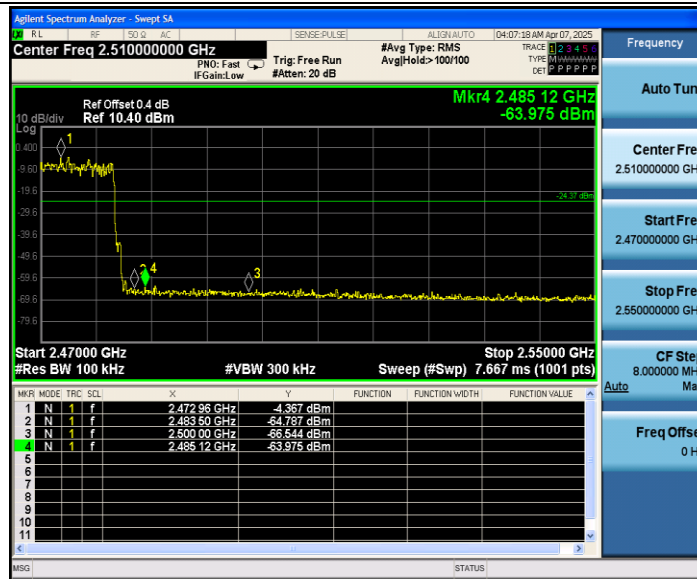
2DH5_Ant1_High_2480



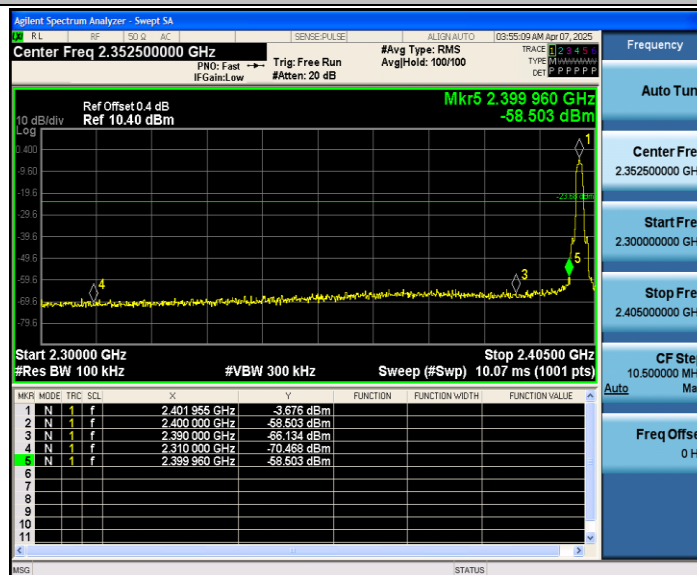
2DH5_Ant1_Low_Hop_2402



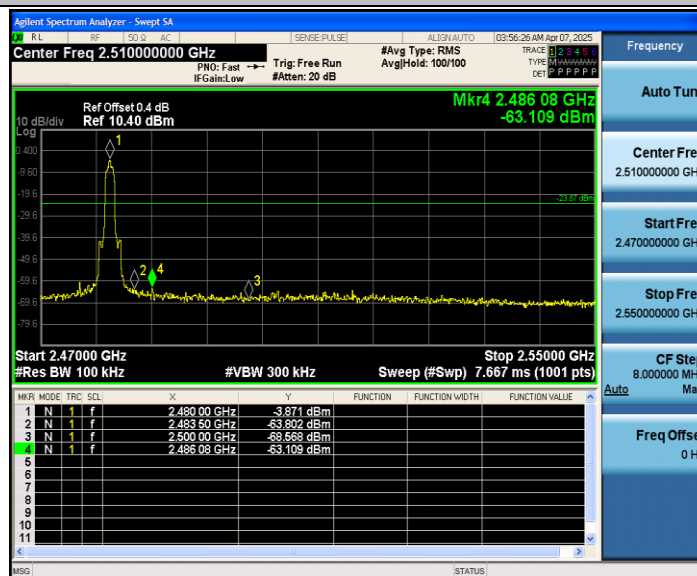
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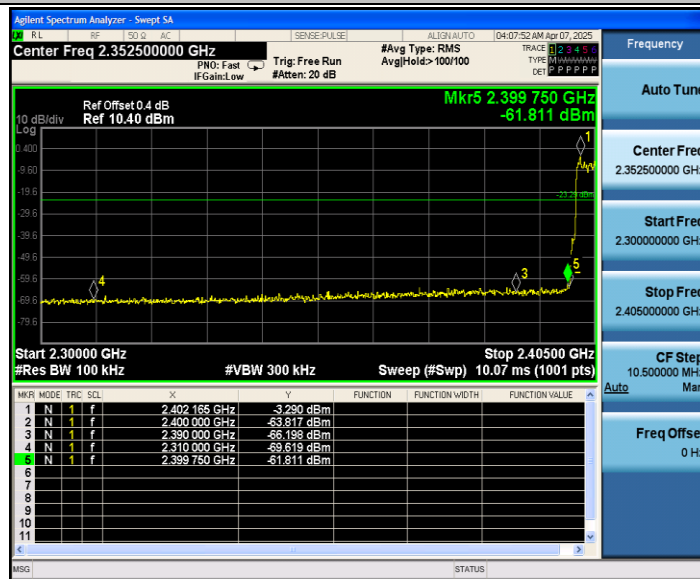
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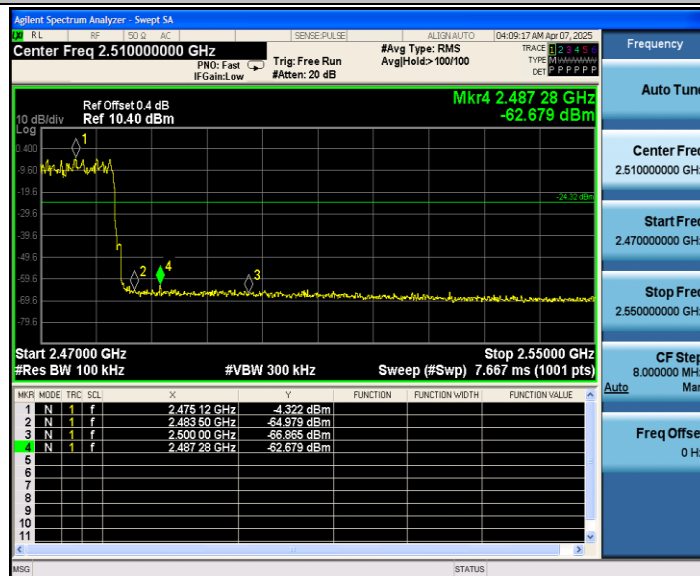
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

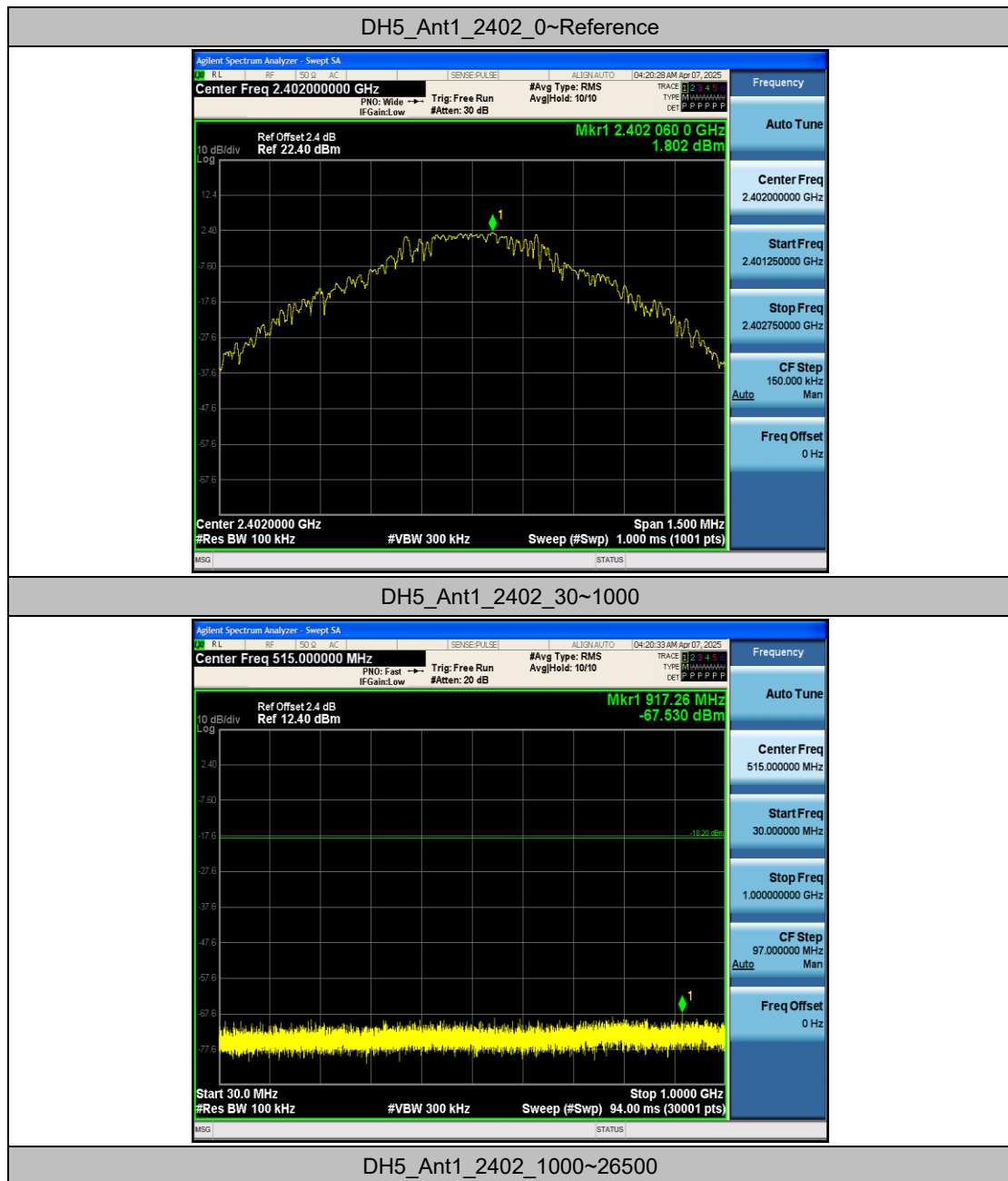


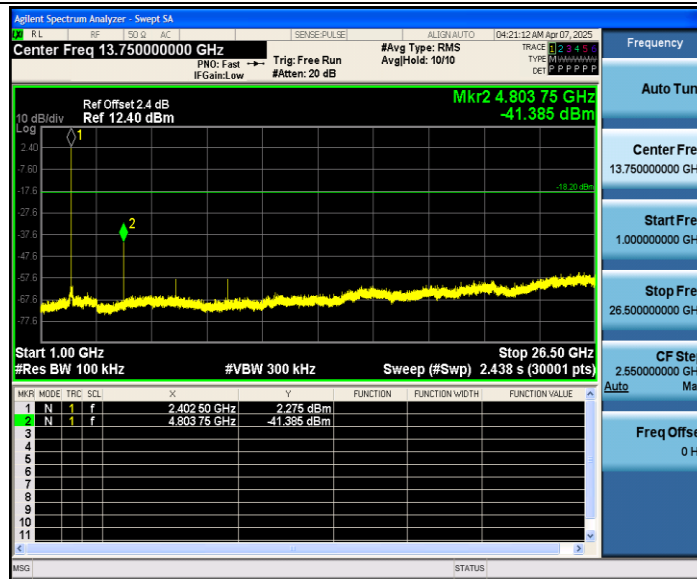
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.80	1.80	---	PASS
			30~1000	1.80	-67.53	≤-18.2	PASS
			1000~26500	1.80	-41.39	≤-18.2	PASS
		2441	Reference	1.74	1.74	---	PASS
			30~1000	1.74	-68.18	≤-18.26	PASS
			1000~26500	1.74	-40.14	≤-18.26	PASS
		2480	Reference	0.70	0.70	---	PASS
			30~1000	0.70	-67.34	≤-19.3	PASS
			1000~26500	0.70	-42.82	≤-19.3	PASS
2DH5	Ant1	2402	Reference	-1.28	-1.28	---	PASS
			30~1000	-1.28	-67.75	≤-21.28	PASS
			1000~26500	-1.28	-46.29	≤-21.28	PASS
		2441	Reference	-4.56	-4.56	---	PASS
			30~1000	-4.56	-68.34	≤-24.56	PASS
			1000~26500	-4.56	-47.33	≤-24.56	PASS
		2480	Reference	-4.12	-4.12	---	PASS
			30~1000	-4.12	-68.17	≤-24.12	PASS
			1000~26500	-4.12	-48.18	≤-24.12	PASS
3DH5	Ant1	2402	Reference	-3.80	-3.80	---	PASS
			30~1000	-3.80	-68.15	≤-23.8	PASS
			1000~26500	-3.80	-45.64	≤-23.8	PASS
		2441	Reference	-4.40	-4.40	---	PASS
			30~1000	-4.40	-67.73	≤-24.4	PASS
			1000~26500	-4.40	-47.1	≤-24.4	PASS
		2480	Reference	-2.06	-2.06	---	PASS
			30~1000	-2.06	-68.16	≤-22.06	PASS
			1000~26500	-2.06	-48.6	≤-22.06	PASS

Test Graphs

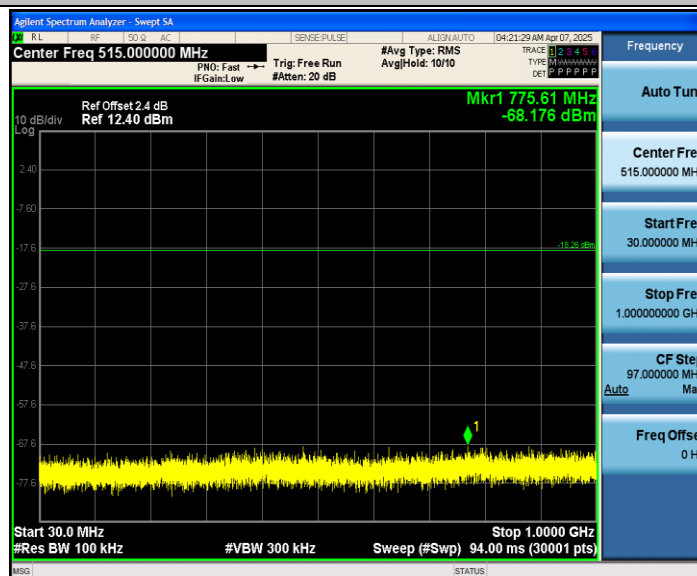




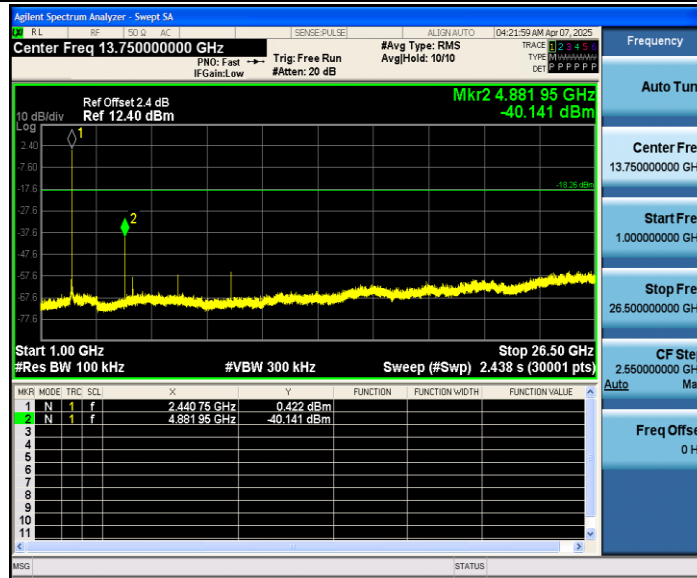
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



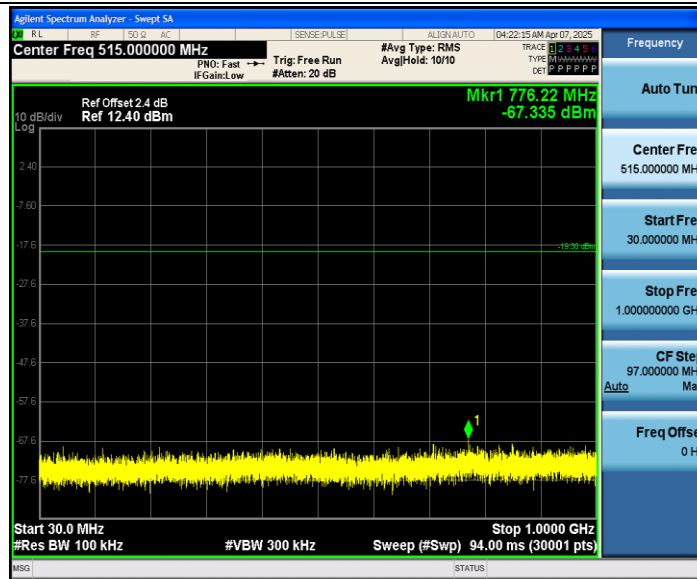
DH5_Ant1_2441_1000~26500



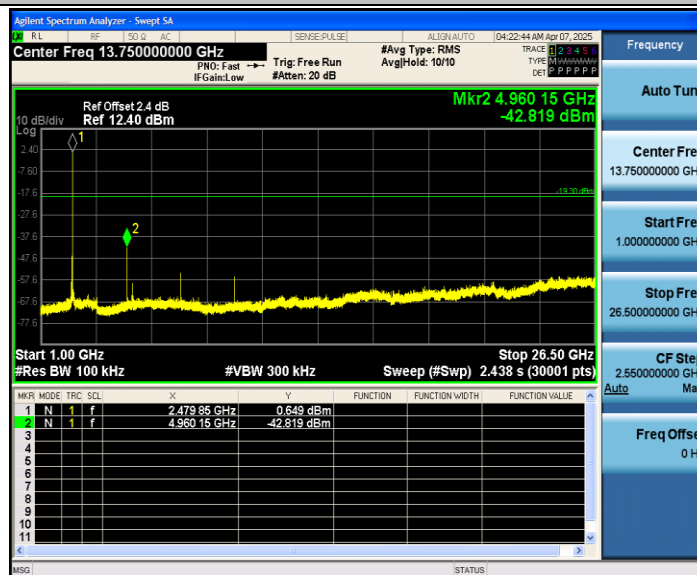
DH5_Ant1_2480_0~Reference



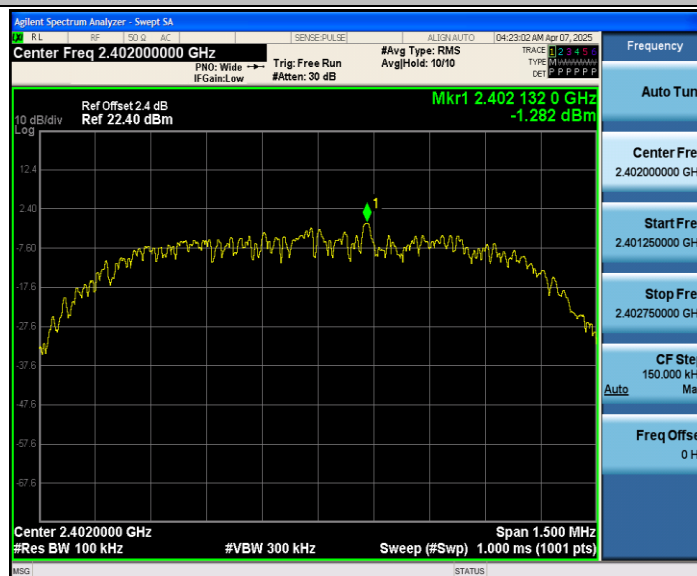
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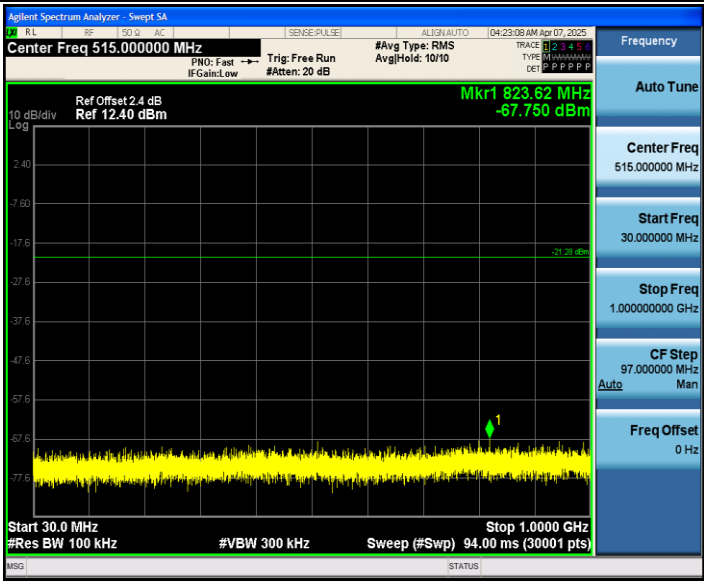
DH5_Ant1_2480_1000~26500



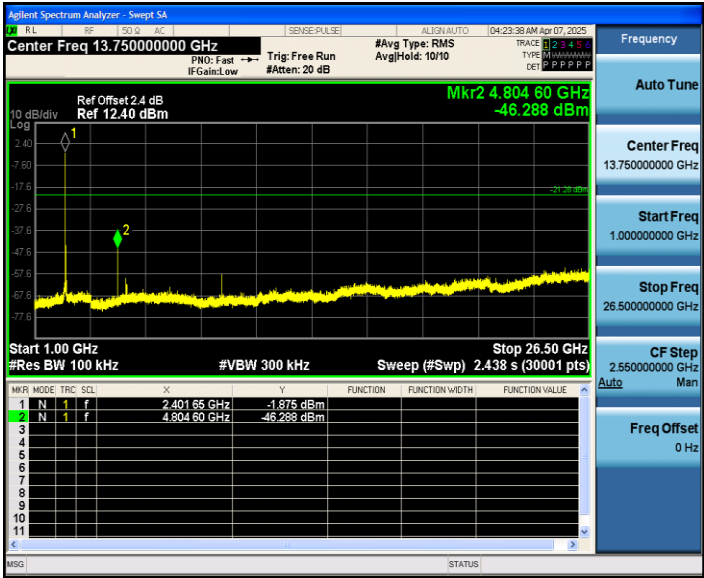
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference