

Appendix A

RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Wireless Mono Headset

Trade Mark: N/A

Test Model: EP-BH100

FCC ID: 2A2QG-EP-BH100

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

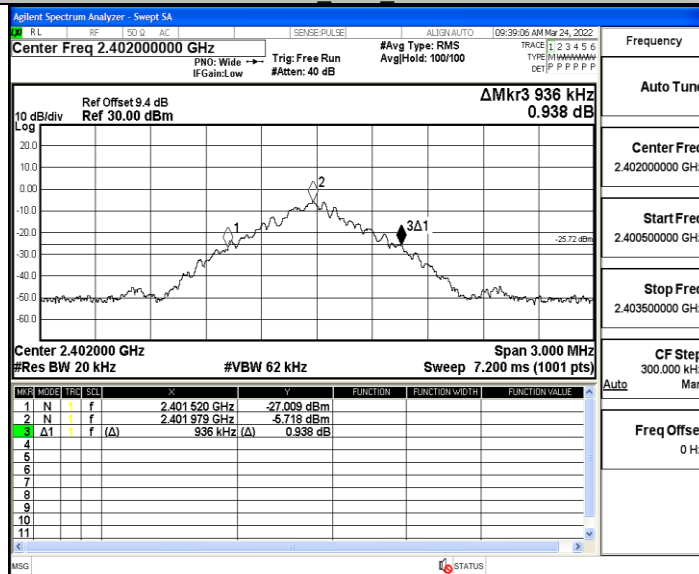
Appendix A: 20dB Emission Bandwidth

Test Result

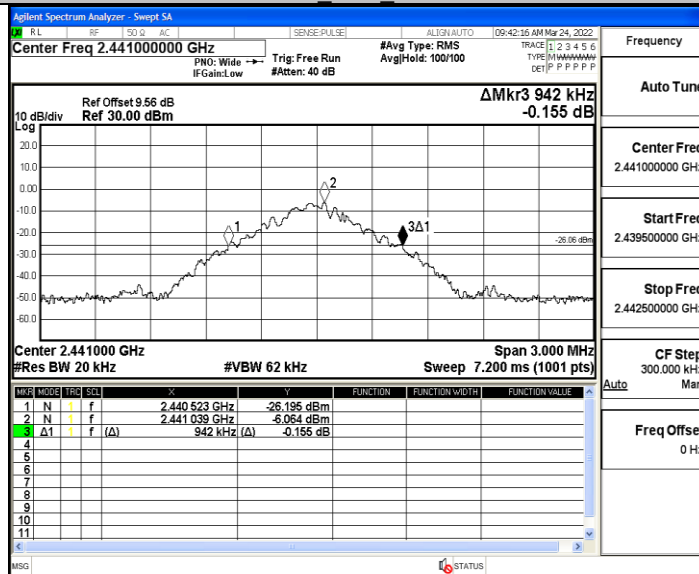
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.520	2402.456	---	---
		2441	0.942	2440.523	2441.465	---	---
		2480	0.942	2479.523	2480.465	---	---
2DH5	Ant1	2402	1.329	2401.316	2402.645	---	---
		2441	1.335	2440.316	2441.651	---	---
		2480	1.314	2479.325	2480.639	---	---
3DH5	Ant1	2402	1.308	2401.328	2402.636	---	---
		2441	1.347	2440.307	2441.654	---	---
		2480	1.299	2479.334	2480.633	---	---

Test Graphs

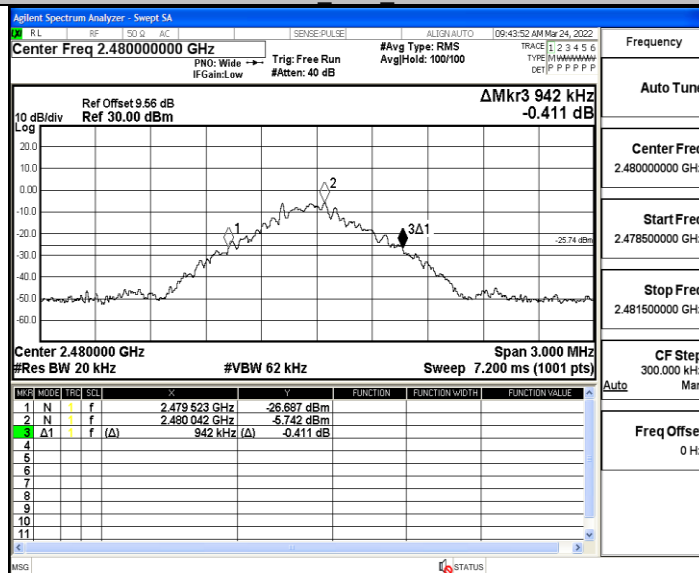
DH5_Ant1_2402



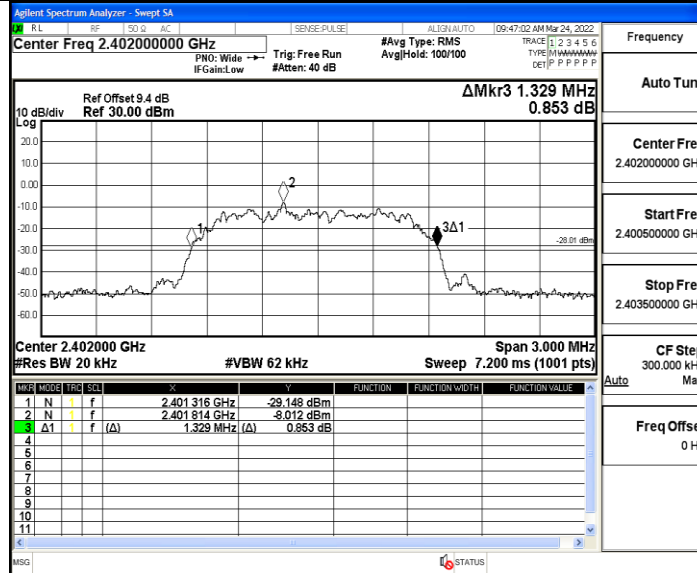
DH5_Ant1_2441



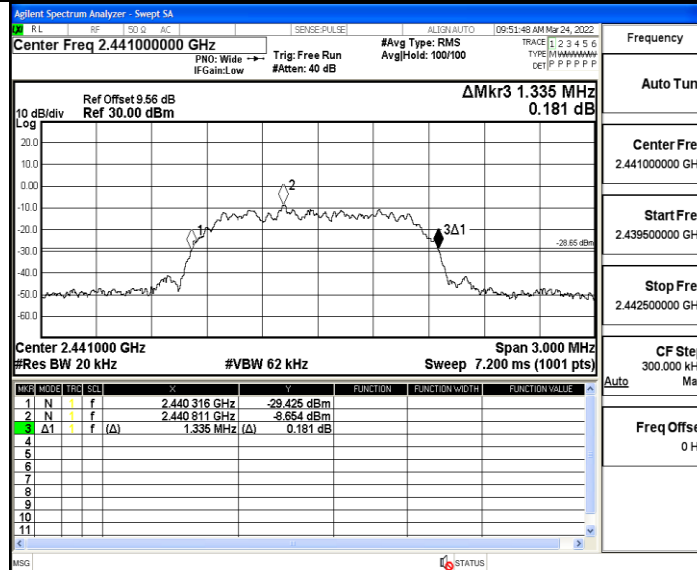
DH5_Ant1_2480



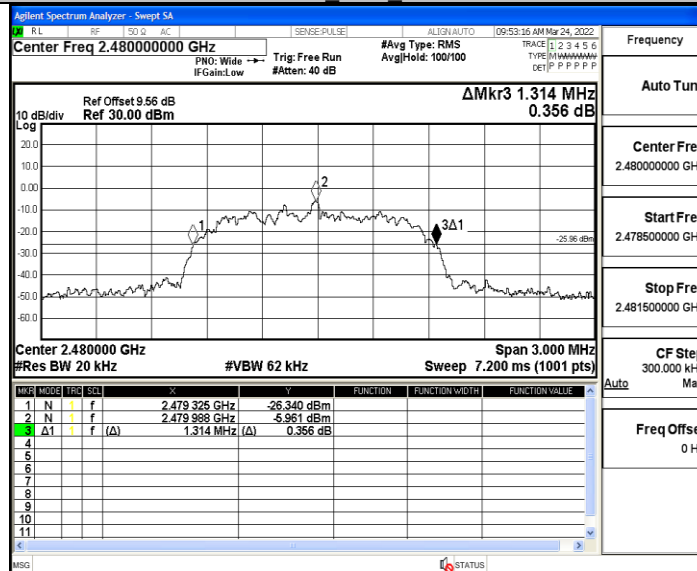
2DH5_Ant1_2402



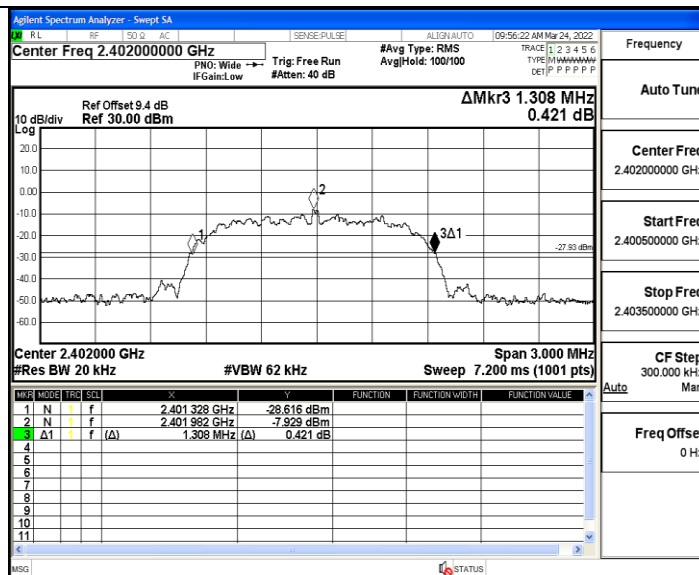
2DH5_Ant1_2441



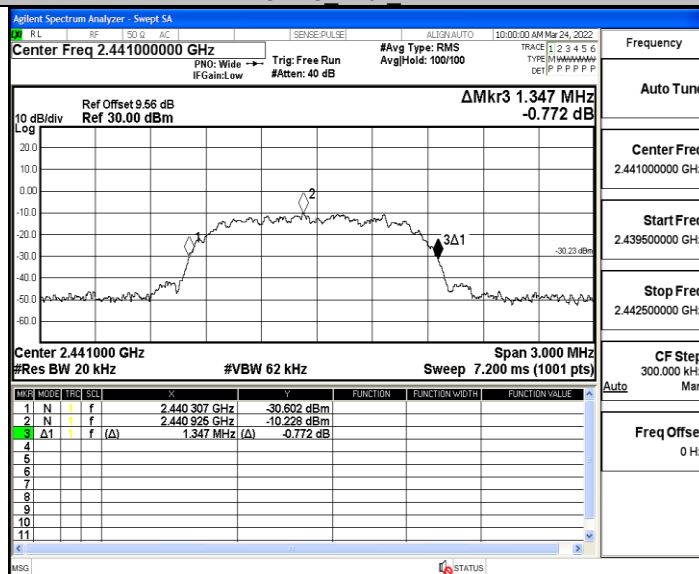
2DH5_Ant1_2480



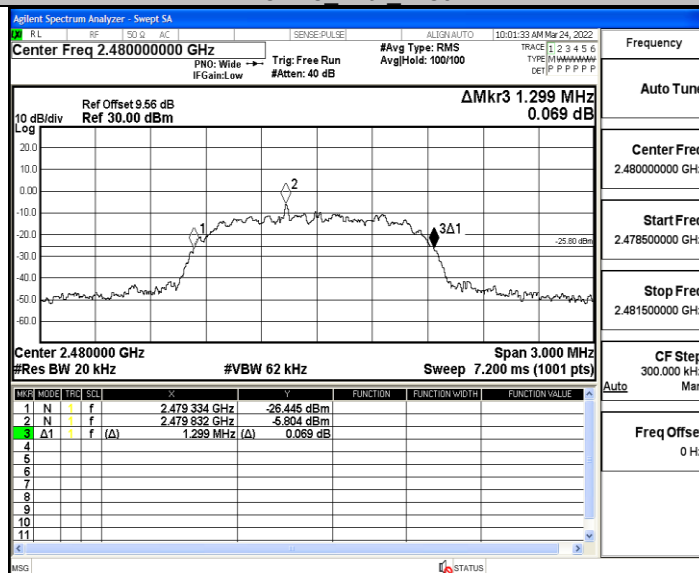
3DH5_Ant1_2402



3DH5 Ant1_2441



3DH5 Ant1_2480



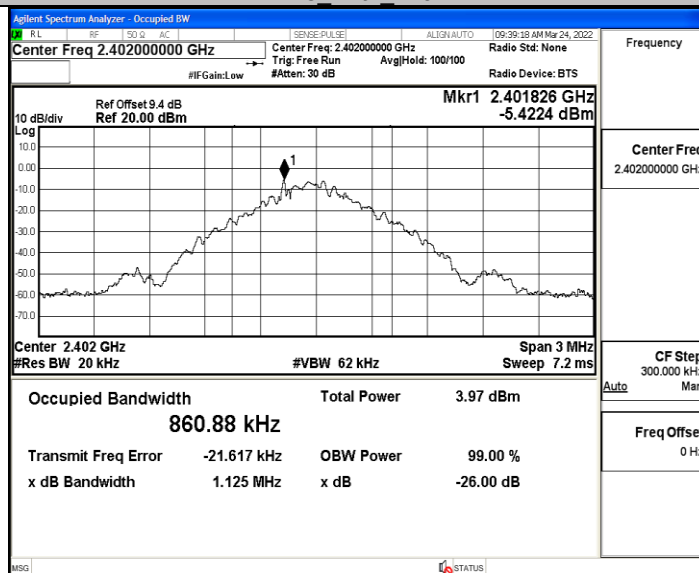
Appendix B: Occupied Channel Bandwidth

Test Result

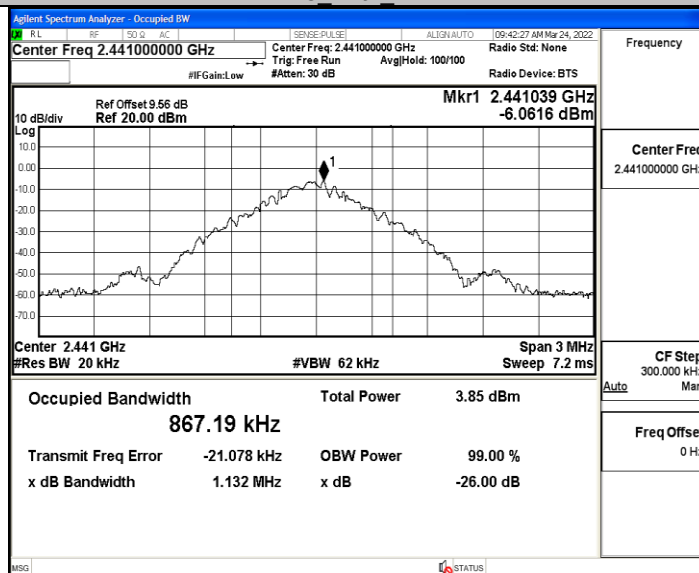
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86088	2401.548	2402.409	---	---
		2441	0.86719	2440.545	2441.413	---	---
		2480	0.85747	2479.553	2480.410	---	---
2DH5	Ant1	2402	1.1955	2401.383	2402.578	---	---
		2441	1.1864	2440.387	2441.574	---	---
		2480	1.1905	2479.388	2480.579	---	---
3DH5	Ant1	2402	1.1882	2401.381	2402.570	---	---
		2441	1.1886	2440.382	2441.570	---	---
		2480	1.1942	2479.381	2480.575	---	---

Test Graphs

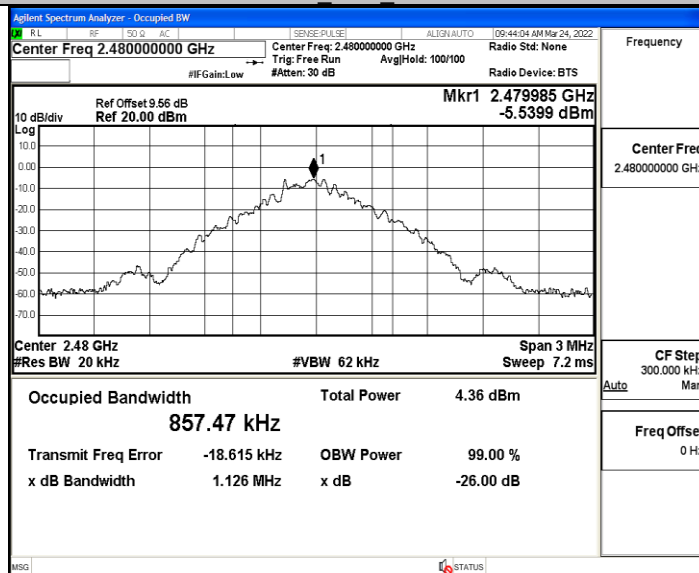
DH5_Ant1_2402



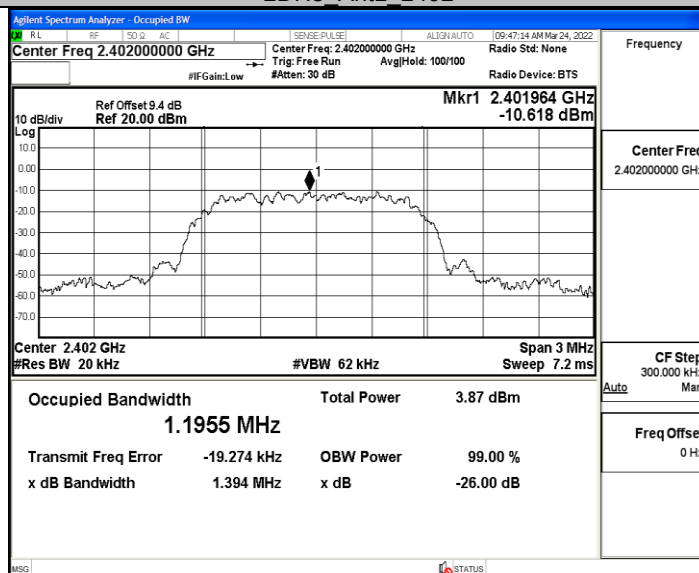
DH5_Ant1_2441



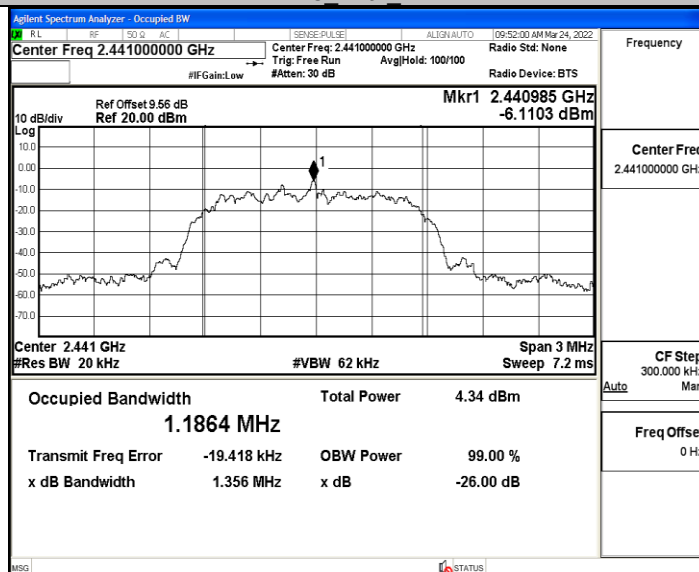
DH5_Ant1_2480



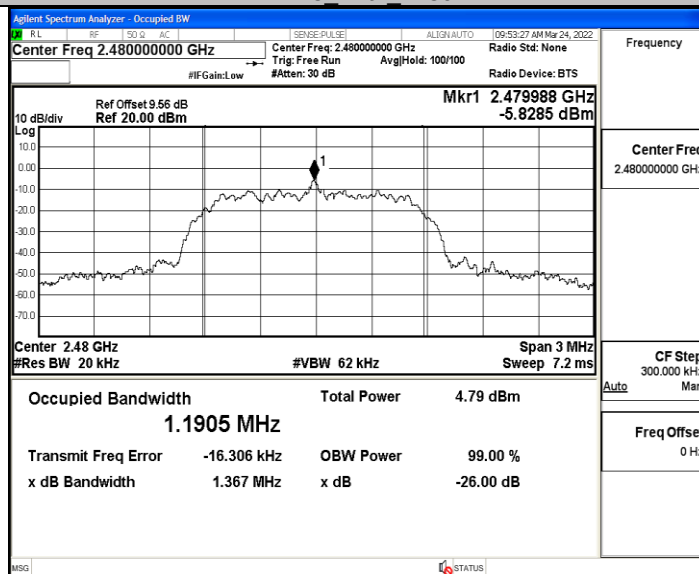
2DH5_Ant1_2402



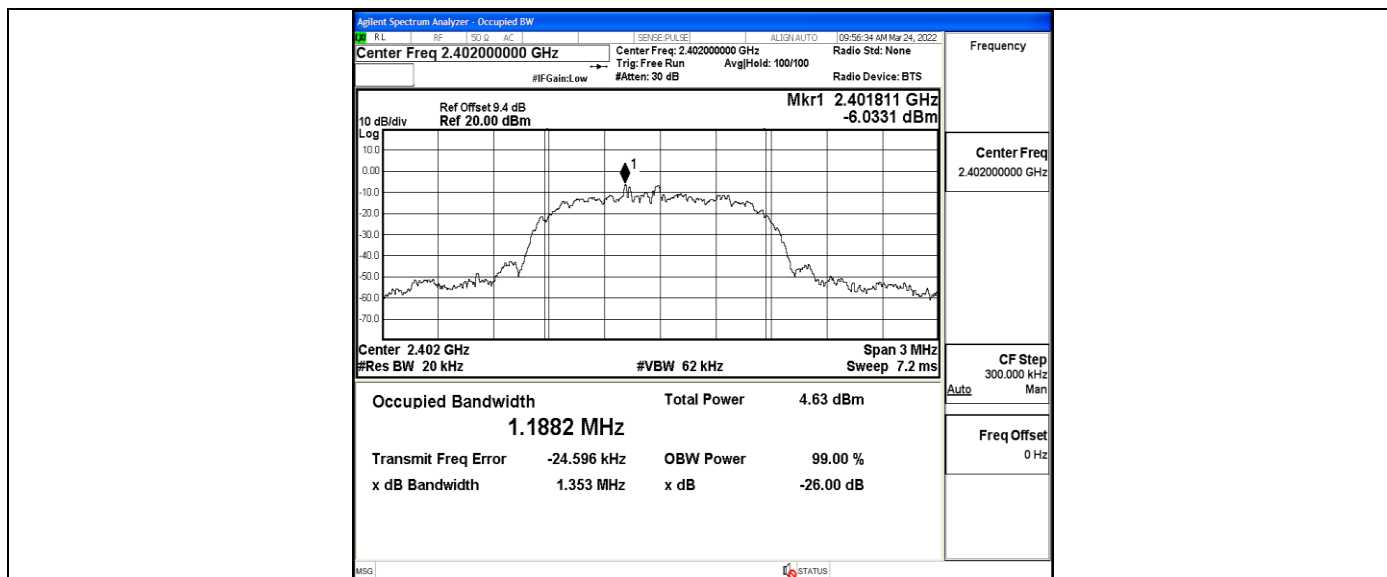
2DH5_Ant1_2441



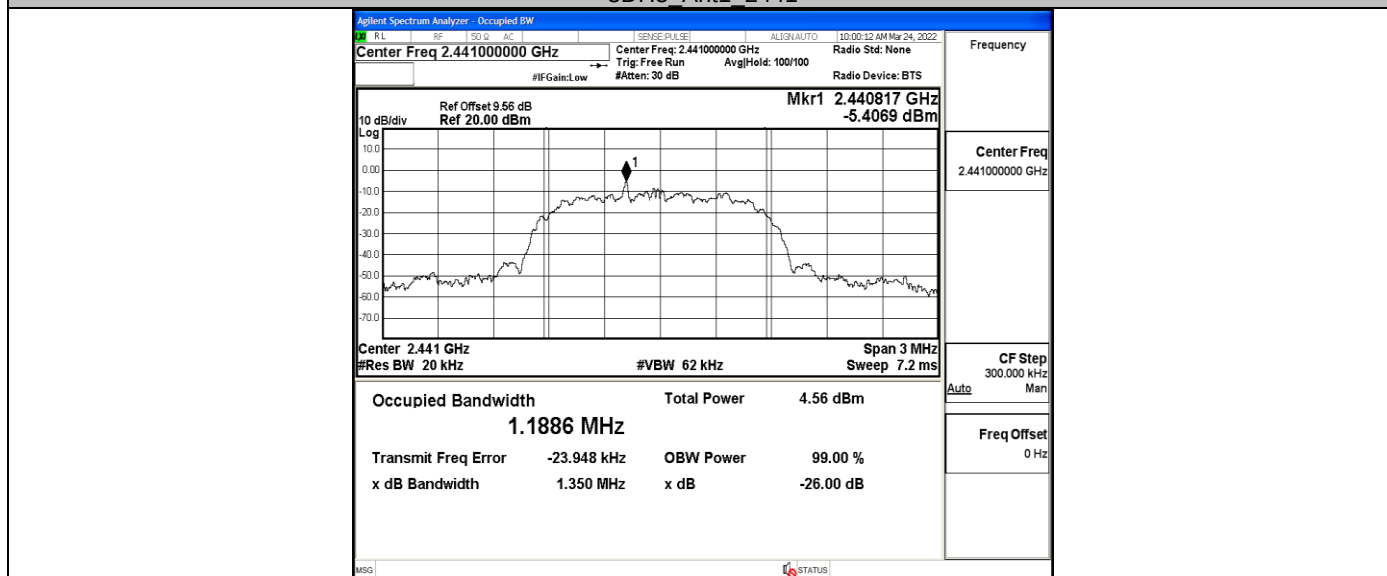
2DH5_Ant1_2480



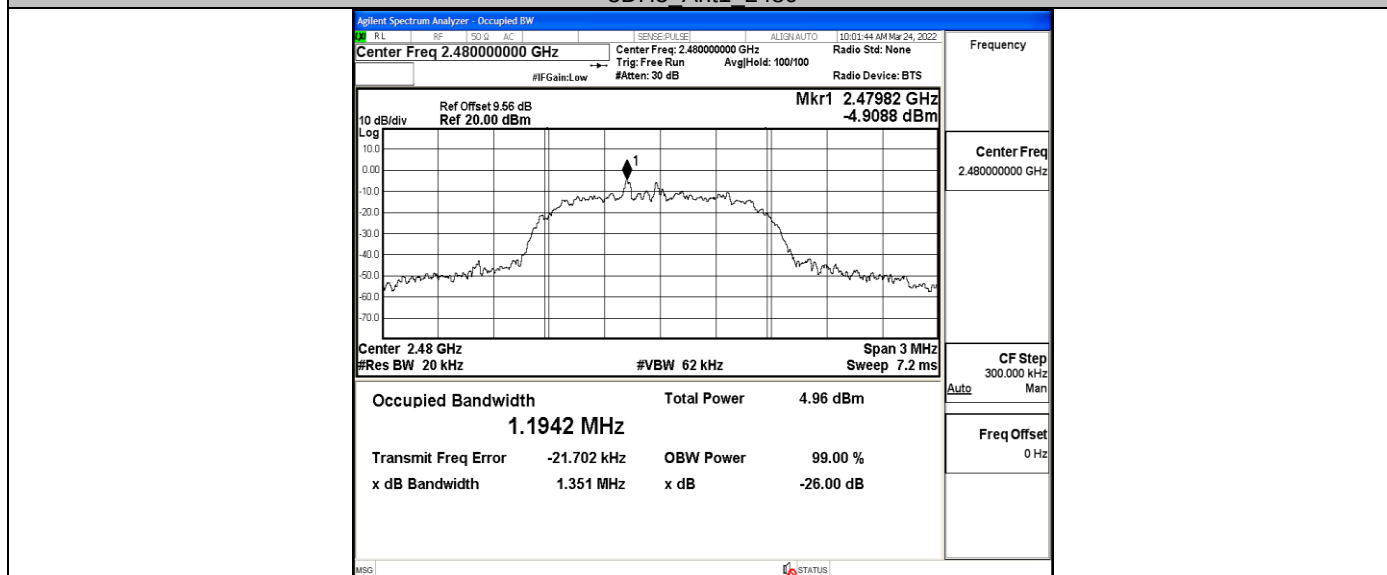
3DH5_Ant1_2402



3DH5 Ant1 2441



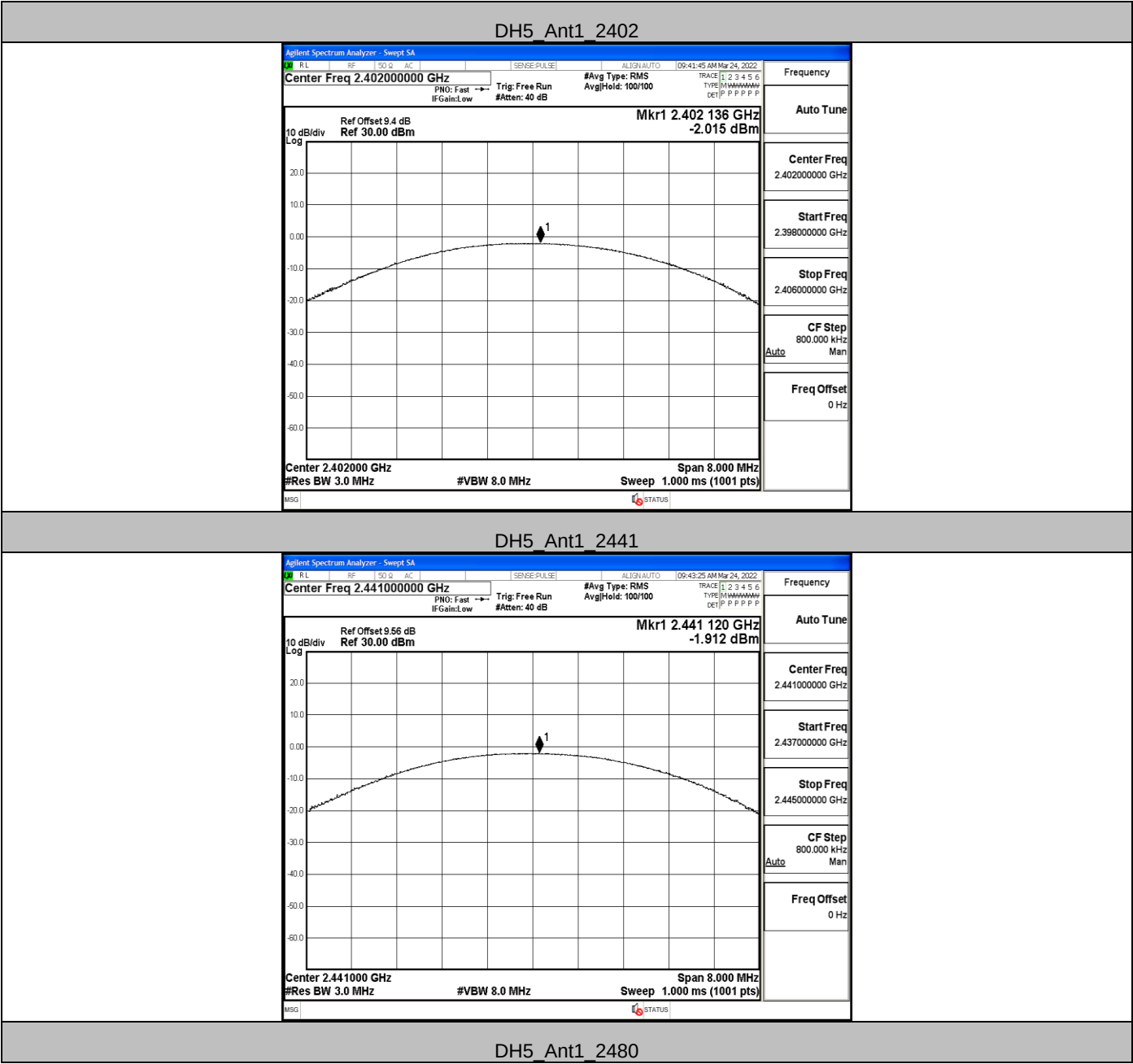
3DH5 Ant1 2480

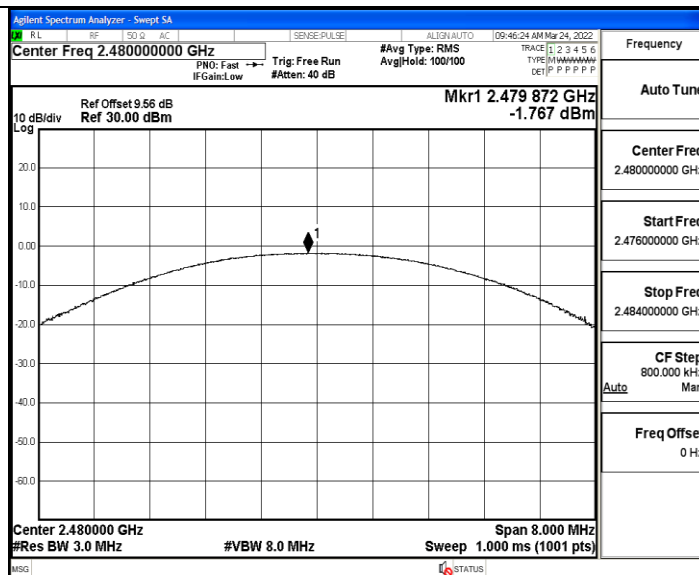


Appendix C: Maximum conducted output power Test Result

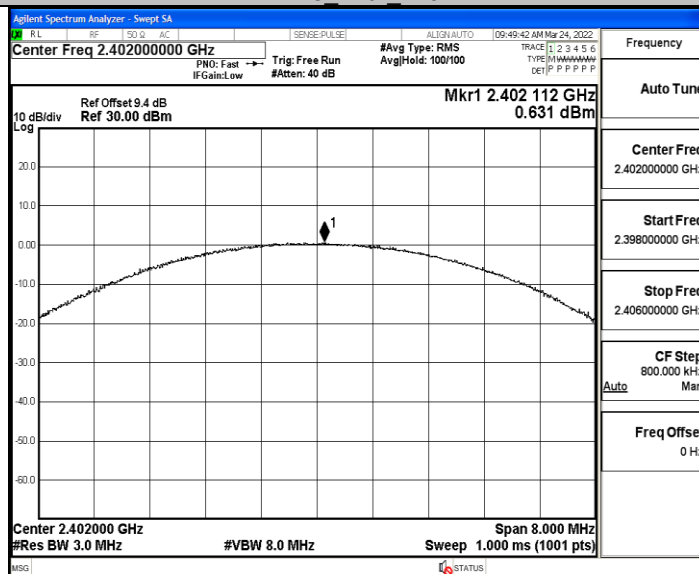
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-2.02	≤20.97	PASS
		2441	-1.91	≤20.97	PASS
		2480	-1.77	≤20.97	PASS
2DH5	Ant1	2402	0.63	≤20.97	PASS
		2441	0.8	≤20.97	PASS
		2480	1.04	≤20.97	PASS
3DH5	Ant1	2402	1.34	≤20.97	PASS
		2441	1.38	≤20.97	PASS
		2480	1.93	≤20.97	PASS

Test Graphs

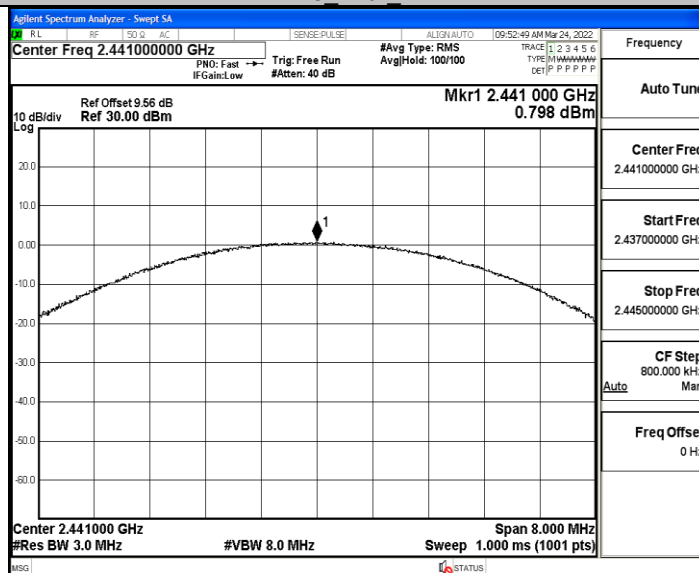




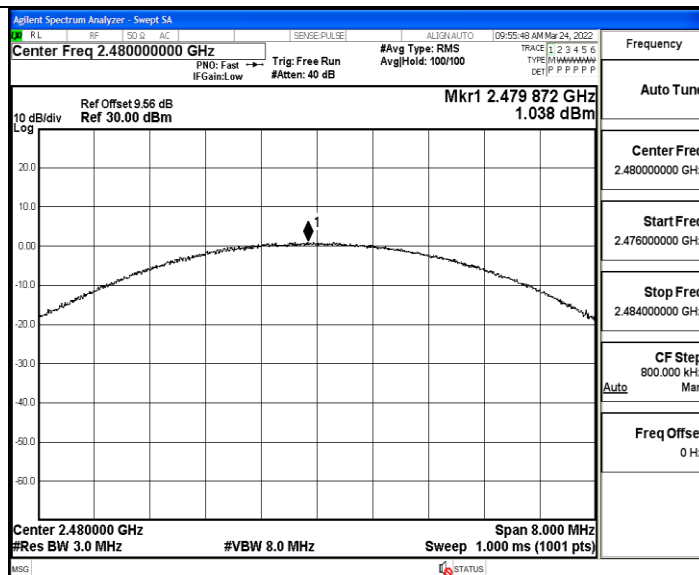
2DH5_Ant1_2402



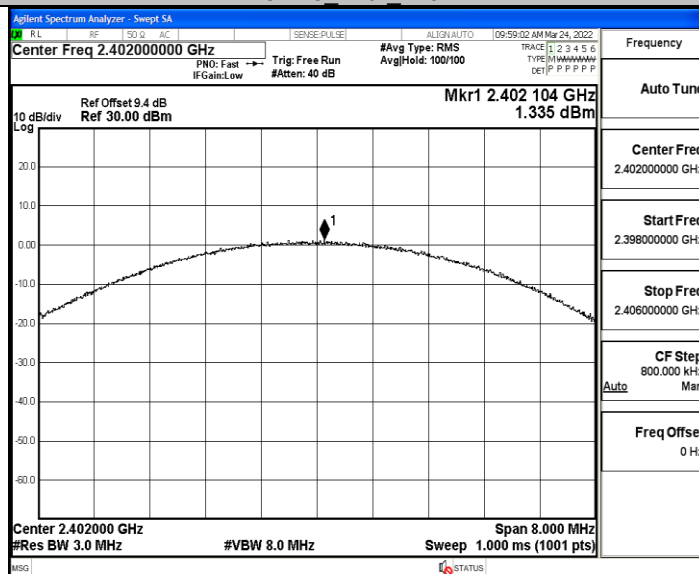
2DH5_Ant1_2441



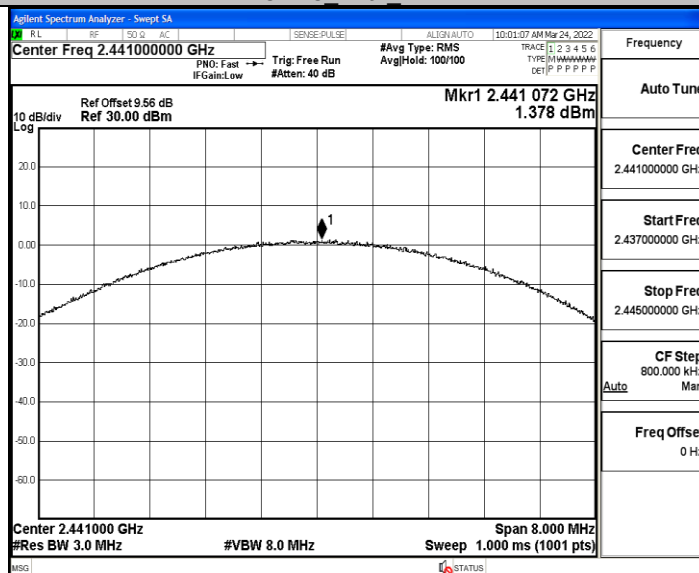
2DH5_Ant1_2480



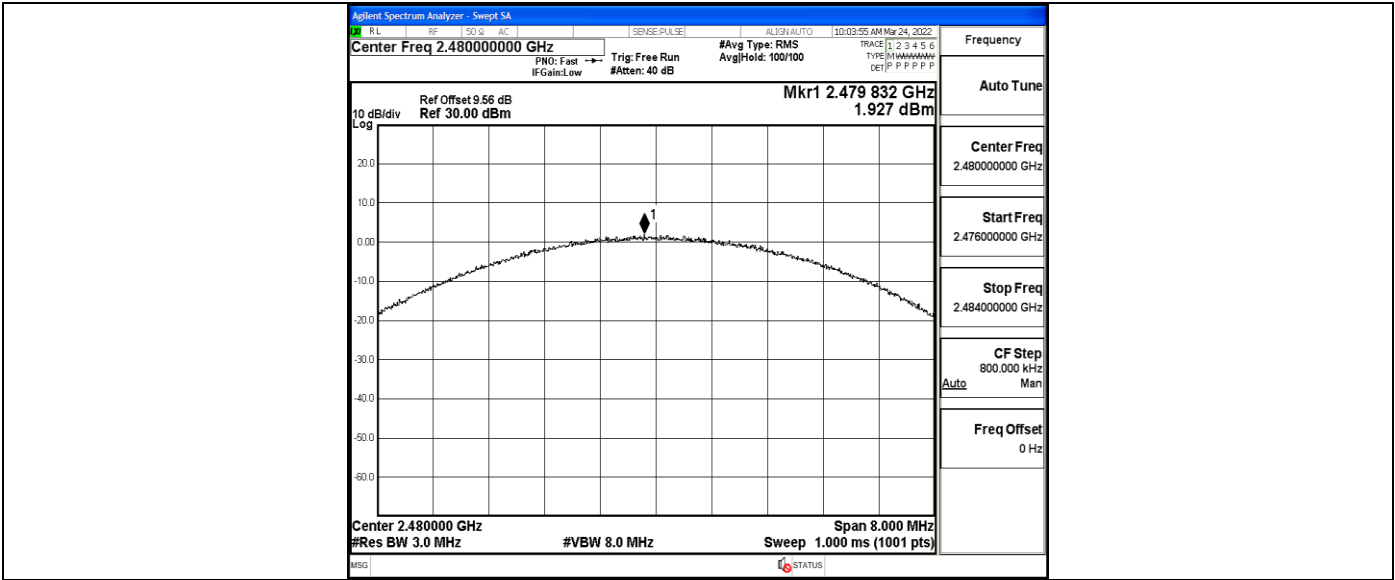
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

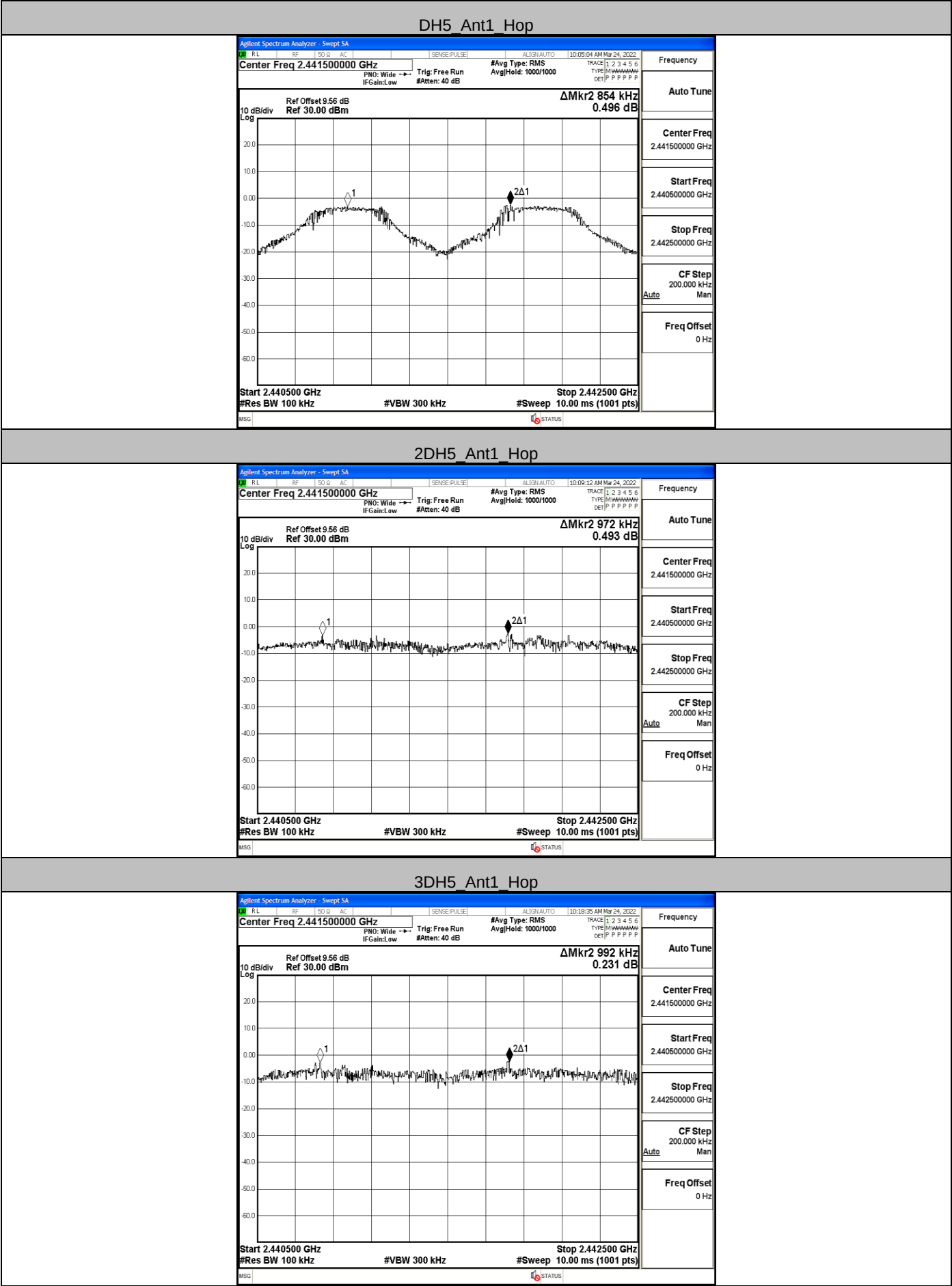


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.854	≥ 0.628	PASS
2DH5	Ant1	Hop	0.972	≥ 0.890	PASS
3DH5	Ant1	Hop	0.992	≥ 0.898	PASS

Test Graphs



Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	110	0.318	≤0.4	PASS
2DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS
3DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS

DH5 Ant1 Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 9.56 dB

Ref 10.00 dBm

ΔMkr2 2.892 ms

-2.94 dB

10 dB/div

Log

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

-80.0

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 10.13 ms (8000 pts)

MSG

STATUS

Frequency
Auto Tune
Center Freq 2.441000000 GHz
Start Freq 2.441000000 GHz
Stop Freq 2.441000000 GHz
CF Step 1.000000 MHz
Freq Offset 0 Hz

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 9.56 dB

Ref 10.00 dBm

ΔMkr2 2.892 ms

-2.94 dB

10 dB/div

Log

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

-80.0

Center 2.441000000 GHz

Res BW 1.0 MHz

#VBW 3.0 MHz

Sweep 10.13 ms (8000 pts)

MSG

STATUS

Frequency
Auto Tune
Center Freq 2.441000000 GHz
Start Freq 2.441000000 GHz
Stop Freq 2.441000000 GHz
CF Step 1.000000 MHz
Freq Offset 0 Hz

2DH5 Ant1 Hop

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 9.56 dB

Ref 10.00 dBm

ΔMkr2 2.879 ms

12.36 dB

10 dB/div

Log

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

-80.0

Center 2.441000000 GHz

Res BW 1.0 MHz

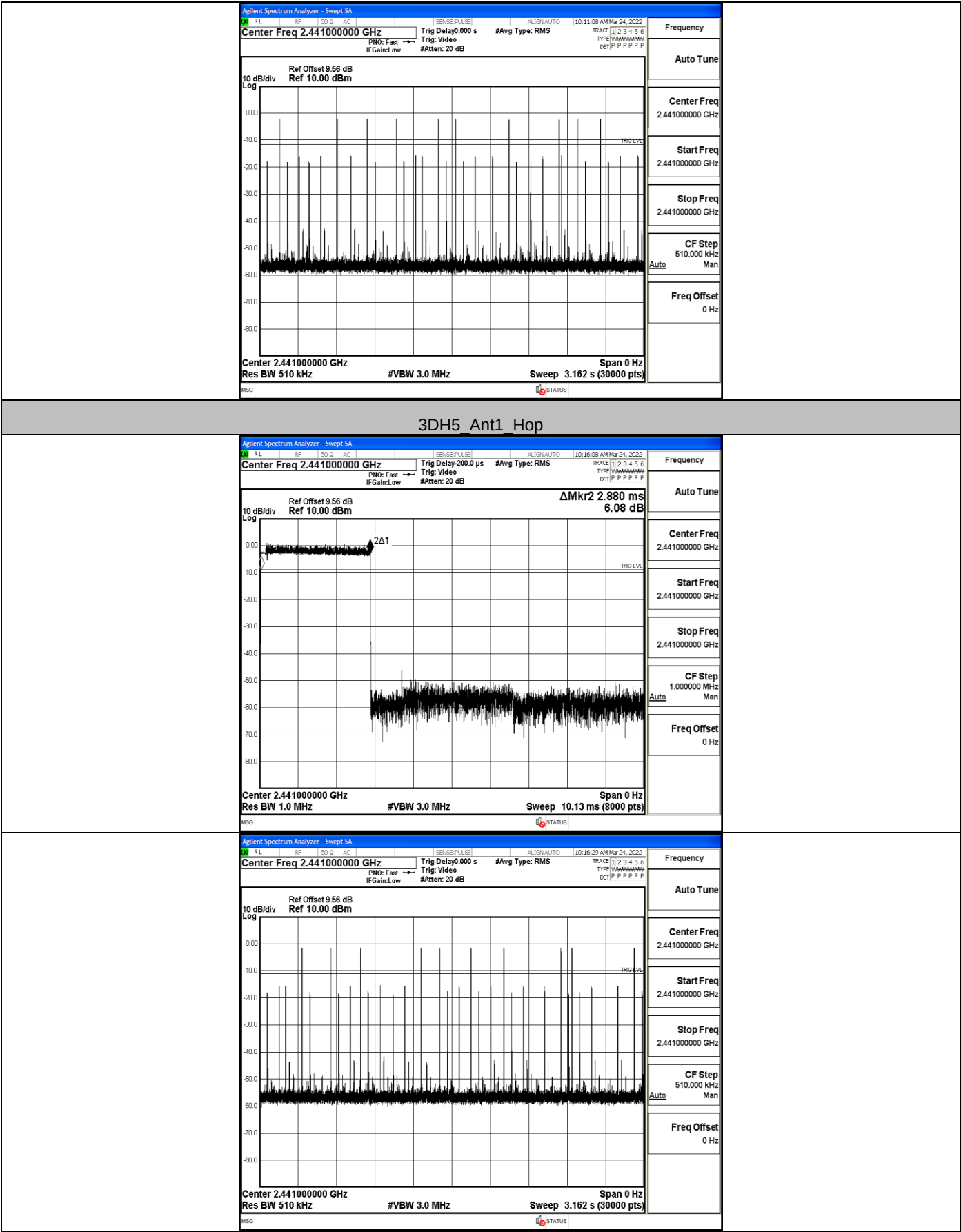
#VBW 3.0 MHz

Sweep 10.13 ms (8000 pts)

MSG

STATUS

Frequency
Auto Tune
Center Freq 2.441000000 GHz
Start Freq 2.441000000 GHz
Stop Freq 2.441000000 GHz
CF Step 1.000000 MHz
Freq Offset 0 Hz



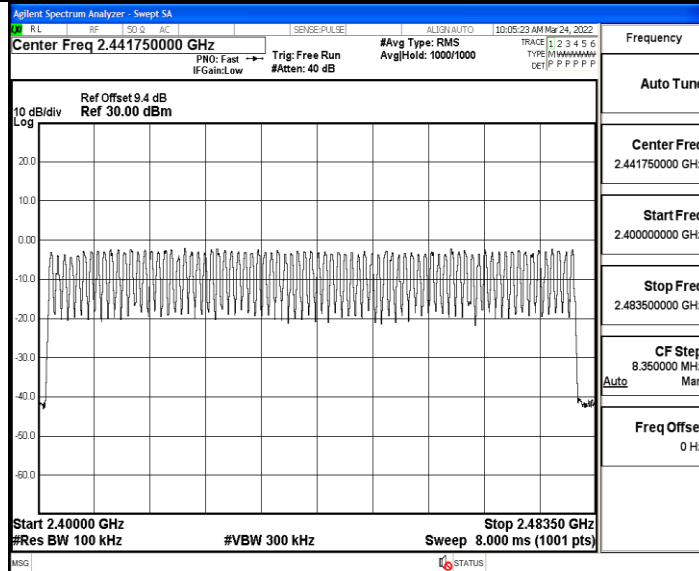
Appendix F: Number of hopping channels

Test Result

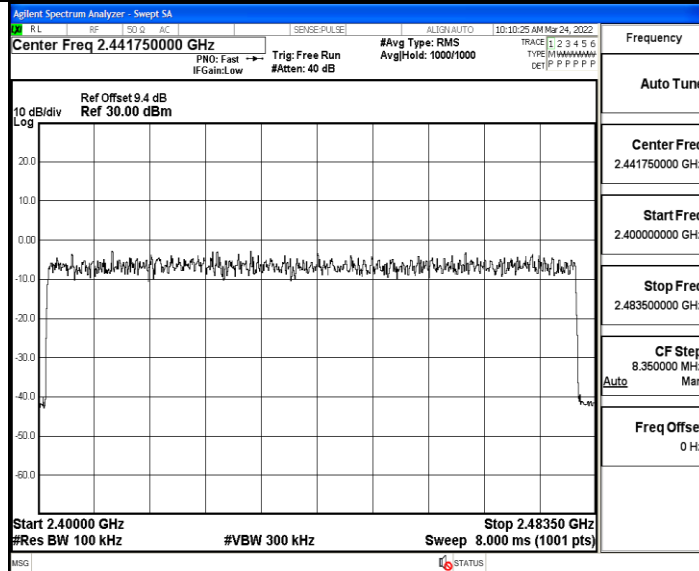
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

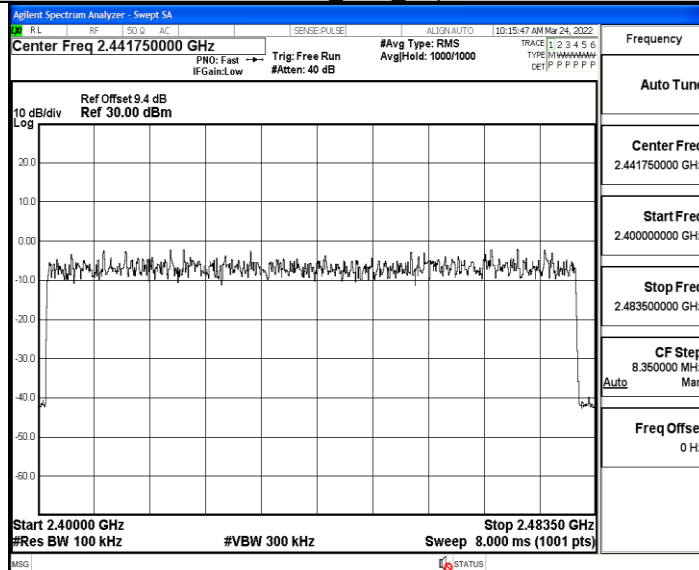
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



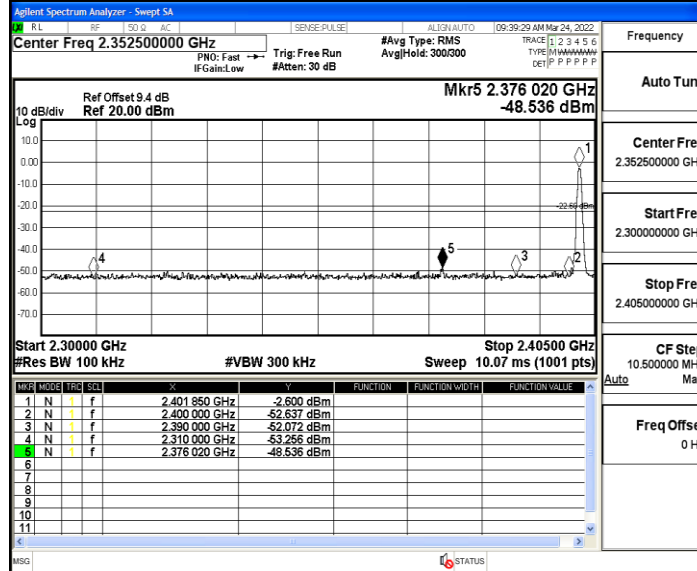
Appendix G: Band edge measurements

Test Result

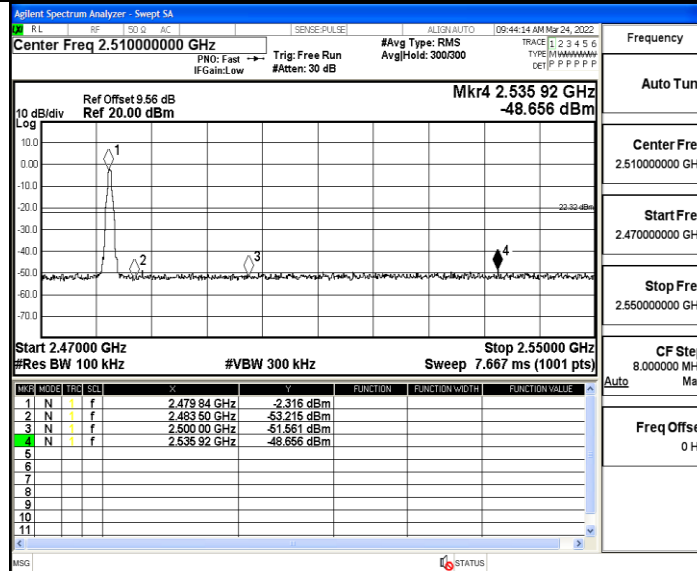
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.60	-48.54	≤ -22.6	PASS
		High	2480	-2.32	-48.66	≤ -22.32	PASS
		Low	Hop_2402	-2.90	-48.71	≤ -22.9	PASS
		High	Hop_2480	-2.54	-49.19	≤ -22.54	PASS
2DH5	Ant1	Low	2402	-3.44	-49.9	≤ -23.44	PASS
		High	2480	-2.74	-48.87	≤ -22.74	PASS
		Low	Hop_2402	-4.83	-49.4	≤ -24.83	PASS
		High	Hop_2480	-4.56	-48.94	≤ -24.56	PASS
3DH5	Ant1	Low	2402	-2.68	-49.19	≤ -22.68	PASS
		High	2480	-2.29	-48.74	≤ -22.29	PASS
		Low	Hop_2402	-5.62	-49.5	≤ -25.62	PASS
		High	Hop_2480	-3.61	-48.57	≤ -23.61	PASS

Test Graphs

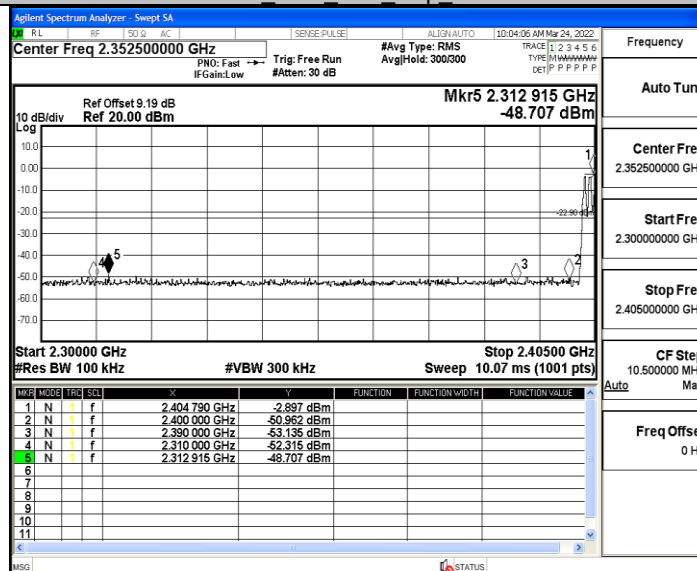
DH5_Ant1_Low_2402



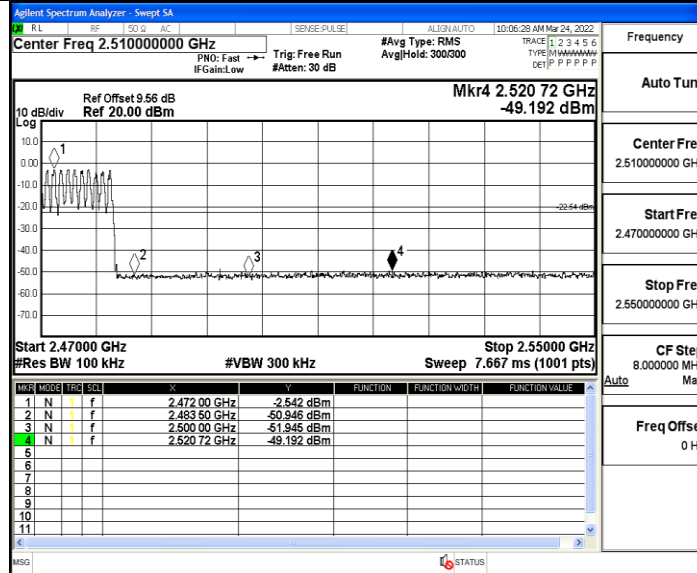
DH5_Ant1_High_2480



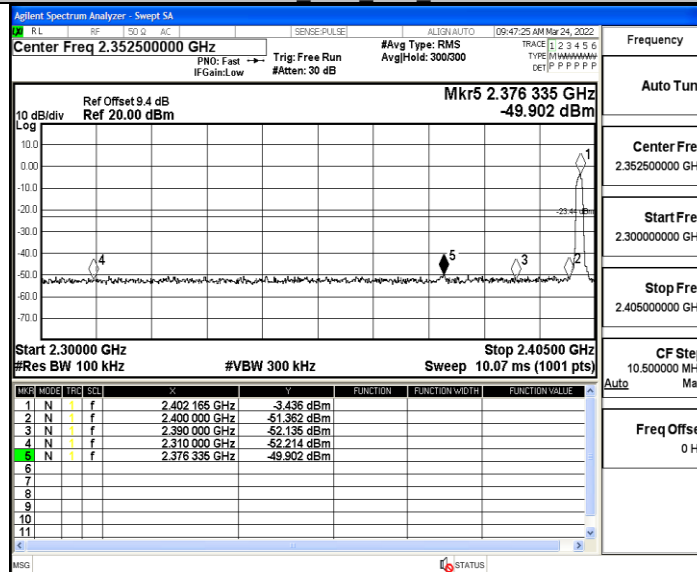
DH5_Ant1_Low_Hop_2402



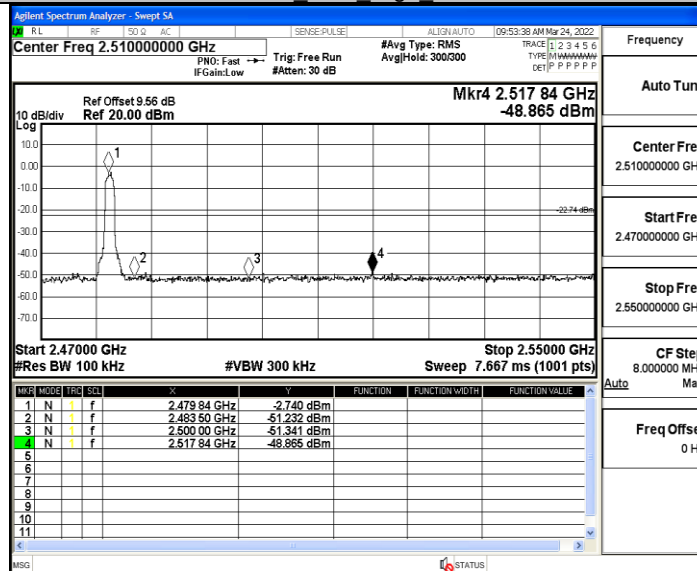
DH5_Ant1_High_Hop_2480



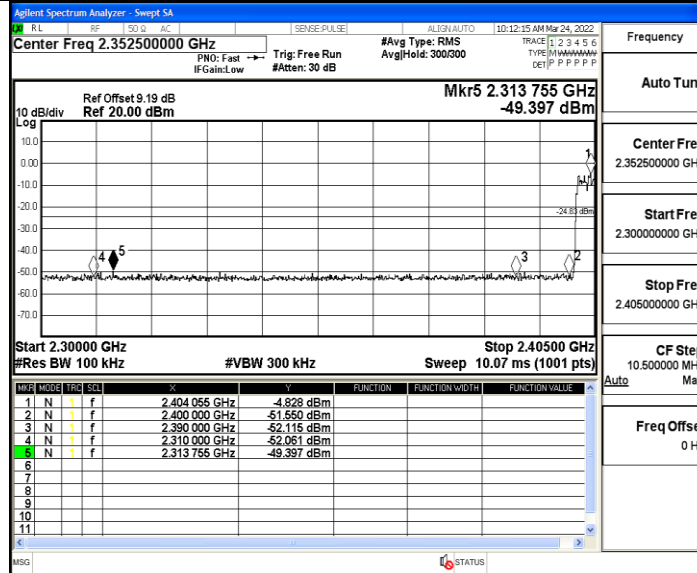
2DH5_Ant1_Low_2402



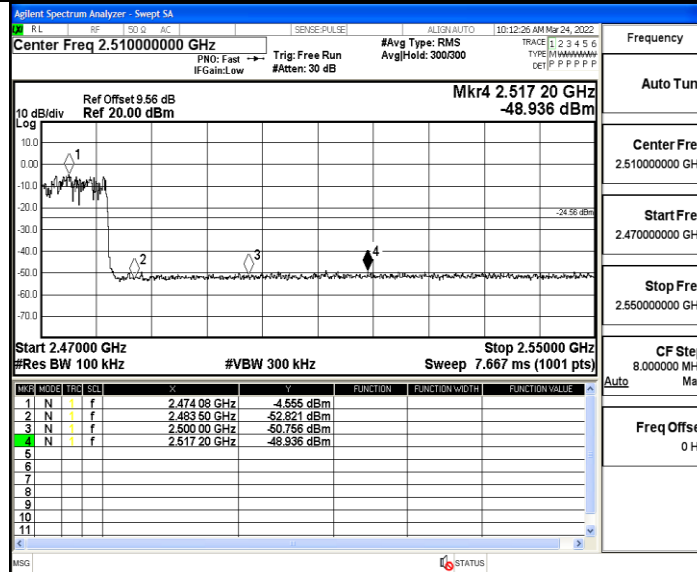
2DH5_Ant1_High_2480



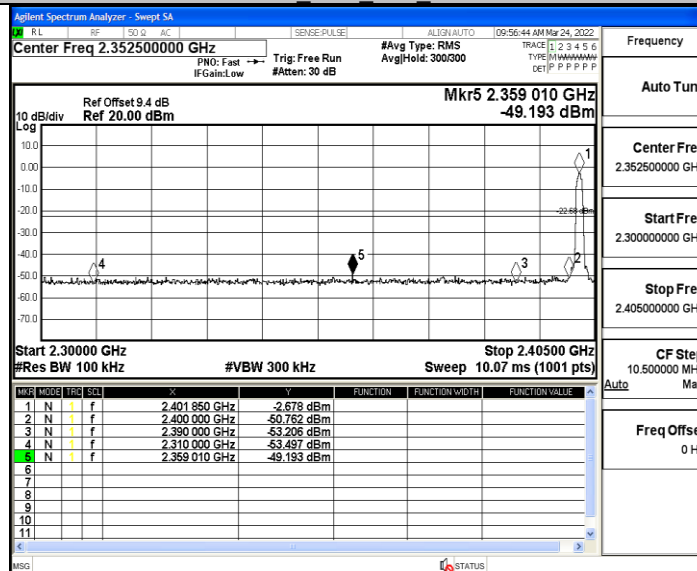
2DH5_Ant1_Low_Hop_2402



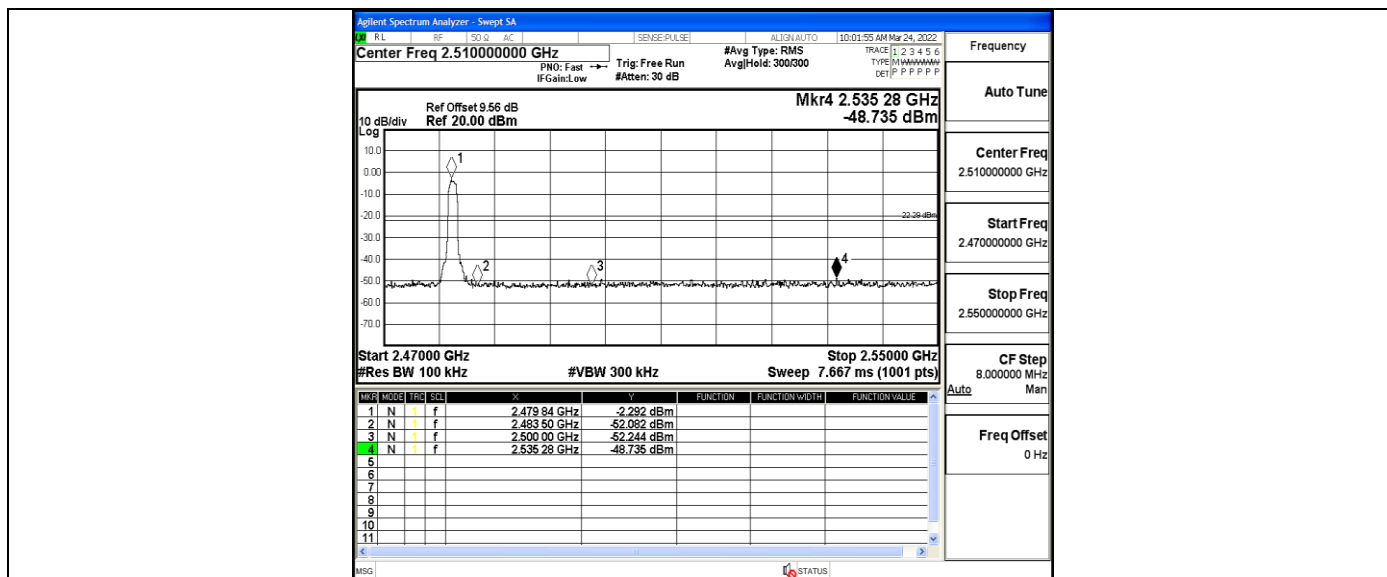
2DH5 Ant1 High Hop 2480



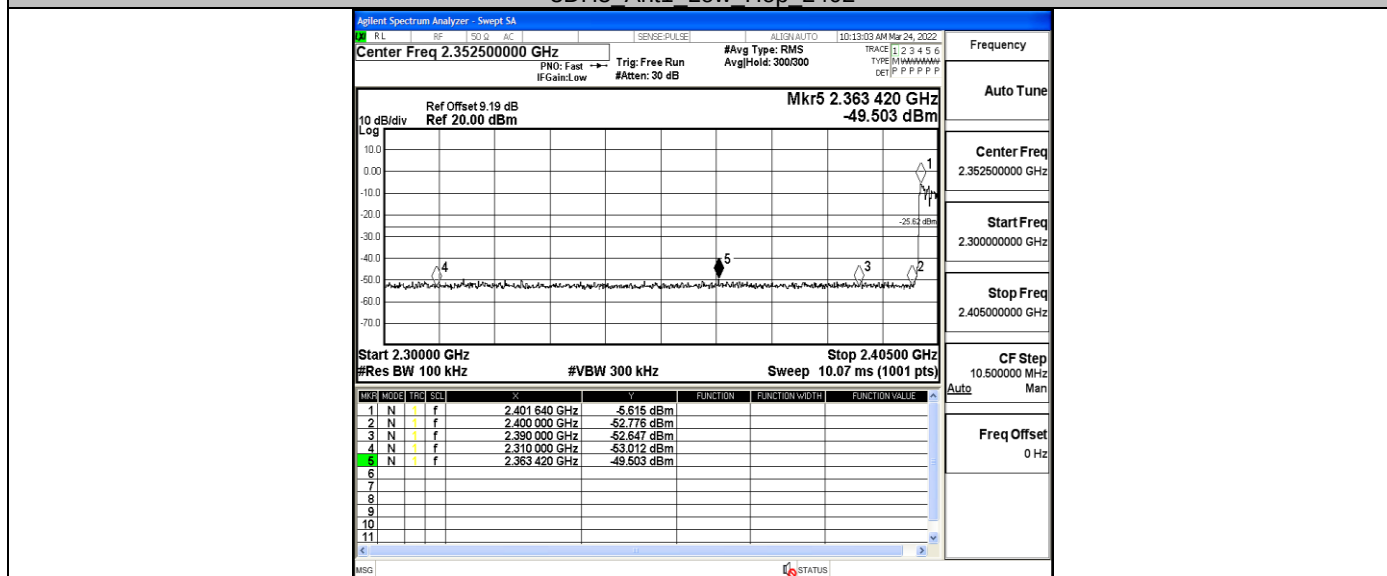
3DH5 Ant1 Low 2402



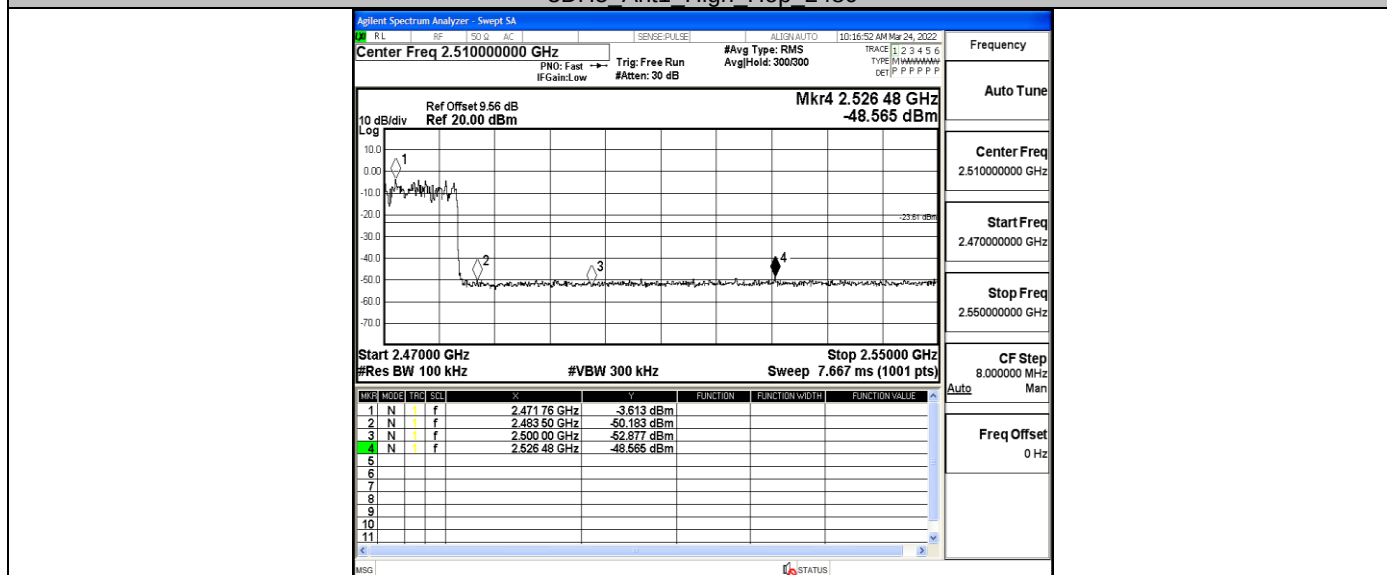
3DH5 Ant1 High 2480



3DH5 Ant1 Low Hop 2402



3DH5 Ant1 High Hop 2480



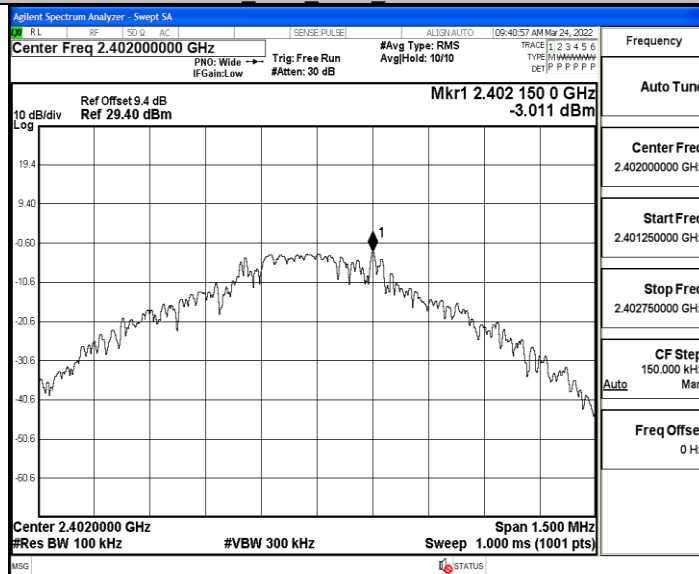
Appendix H: Conducted Spurious Emission

Test Result

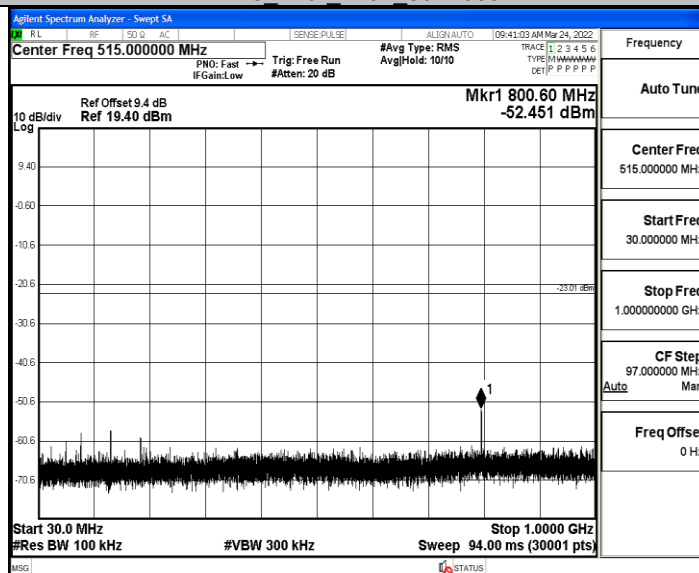
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-3.01	-3.01	---	PASS
			30~1000	-3.01	-52.45	≤ -23.01	PASS
			1000~26500	-3.01	-45.45	≤ -23.01	PASS
		2441	Reference	-3.46	-3.46	---	PASS
			30~1000	-3.46	-52	≤ -23.46	PASS
			1000~26500	-3.46	-43.38	≤ -23.46	PASS
		2480	Reference	-2.97	-2.97	---	PASS
			30~1000	-2.97	-51.01	≤ -22.97	PASS
			1000~26500	-2.97	-42.63	≤ -22.97	PASS
2DH5	Ant1	2402	Reference	-5.17	-5.17	---	PASS
			30~1000	-5.17	-54.61	≤ -25.17	PASS
			1000~26500	-5.17	-44.43	≤ -25.17	PASS
		2441	Reference	-5.56	-5.56	---	PASS
			30~1000	-5.56	-52.39	≤ -25.56	PASS
			1000~26500	-5.56	-45.71	≤ -25.56	PASS
		2480	Reference	-3.22	-3.22	---	PASS
			30~1000	-3.22	-51	≤ -23.22	PASS
			1000~26500	-3.22	-44.82	≤ -23.22	PASS
3DH5	Ant1	2402	Reference	-5.34	-5.34	---	PASS
			30~1000	-5.34	-54.83	≤ -25.34	PASS
			1000~26500	-5.34	-45.88	≤ -25.34	PASS
		2441	Reference	-4.11	-4.11	---	PASS
			30~1000	-4.11	-52.28	≤ -24.11	PASS
			1000~26500	-4.11	-43.64	≤ -24.11	PASS
		2480	Reference	-2.53	-2.53	---	PASS
			30~1000	-2.53	-52.49	≤ -22.53	PASS
			1000~26500	-2.53	-43.36	≤ -22.53	PASS

Test Graphs

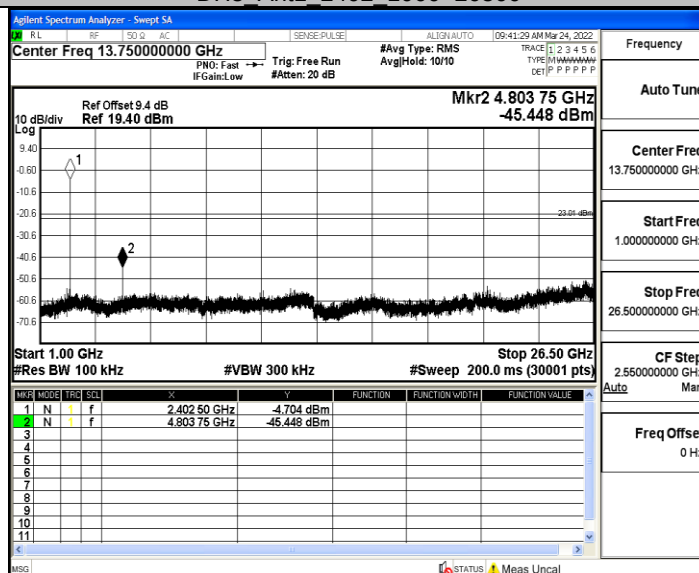
DH5_Ant1_2402_0-Reference



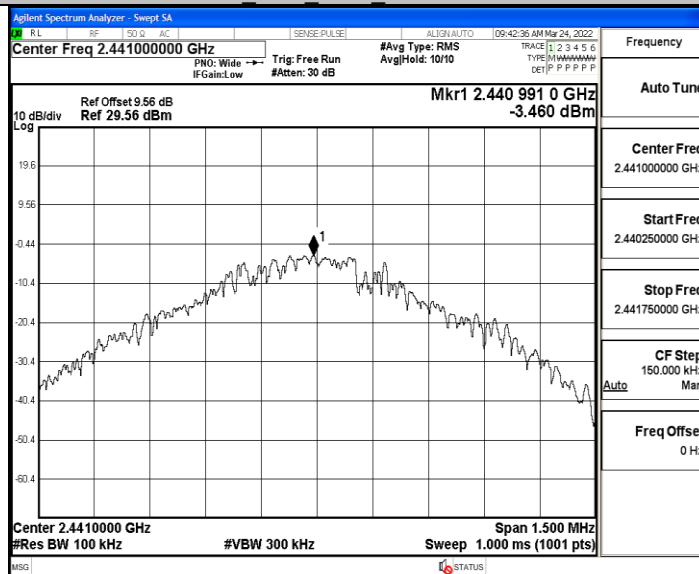
DH5_Ant1_2402_30~1000



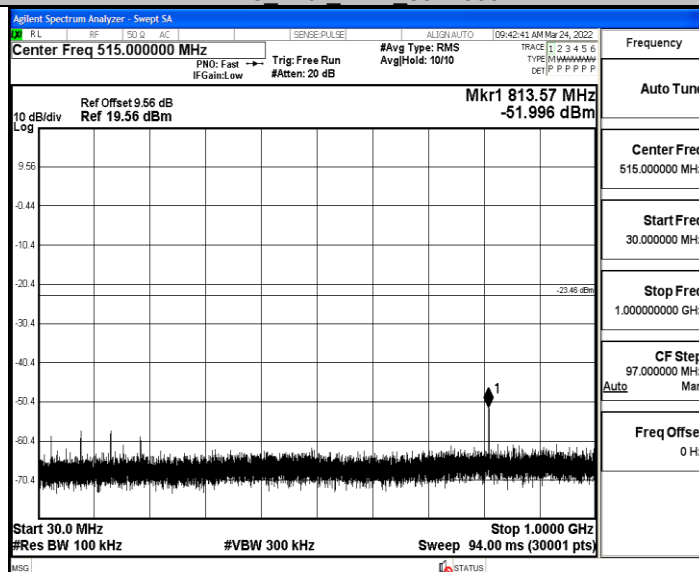
DH5_Ant1_2402_1000~26500



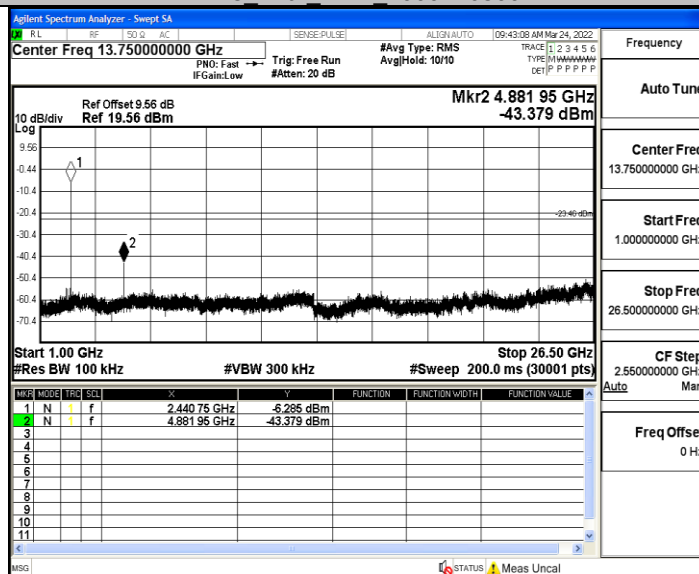
DH5_Ant1_2441_0~Reference



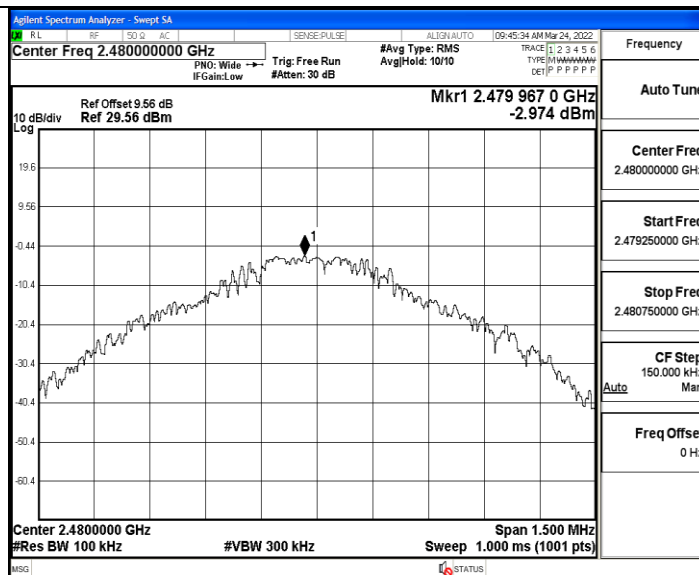
DH5_Ant1_2441_30~1000



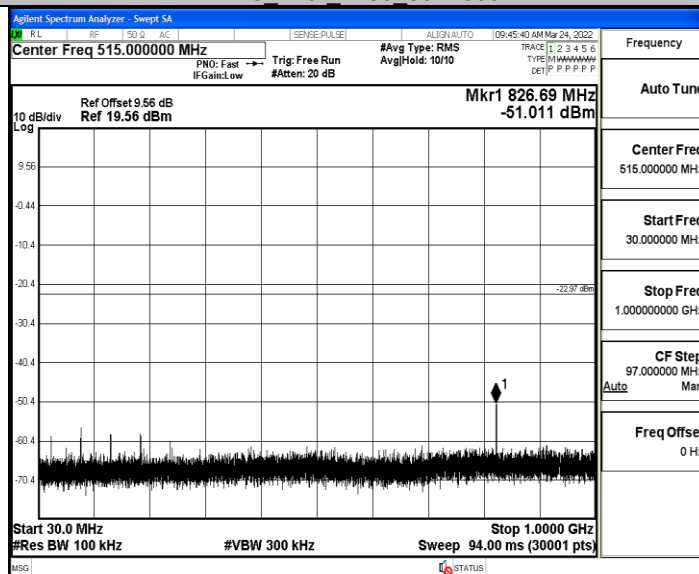
DH5_Ant1_2441_1000~26500



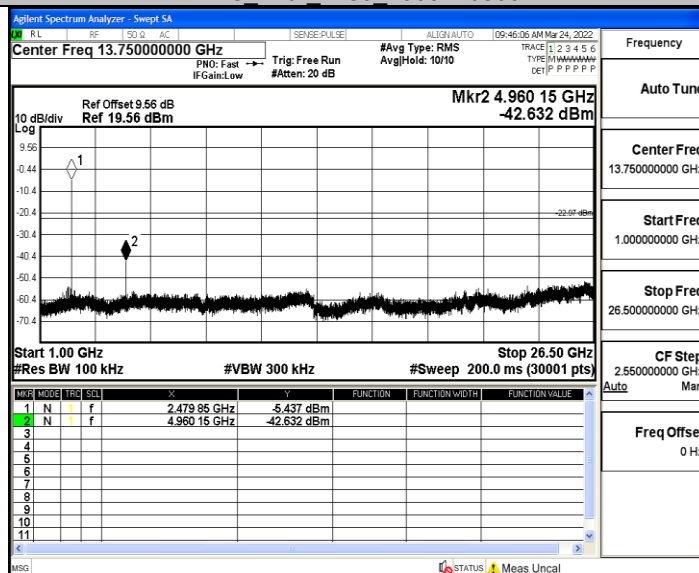
DH5_Ant1_2480_0~Reference



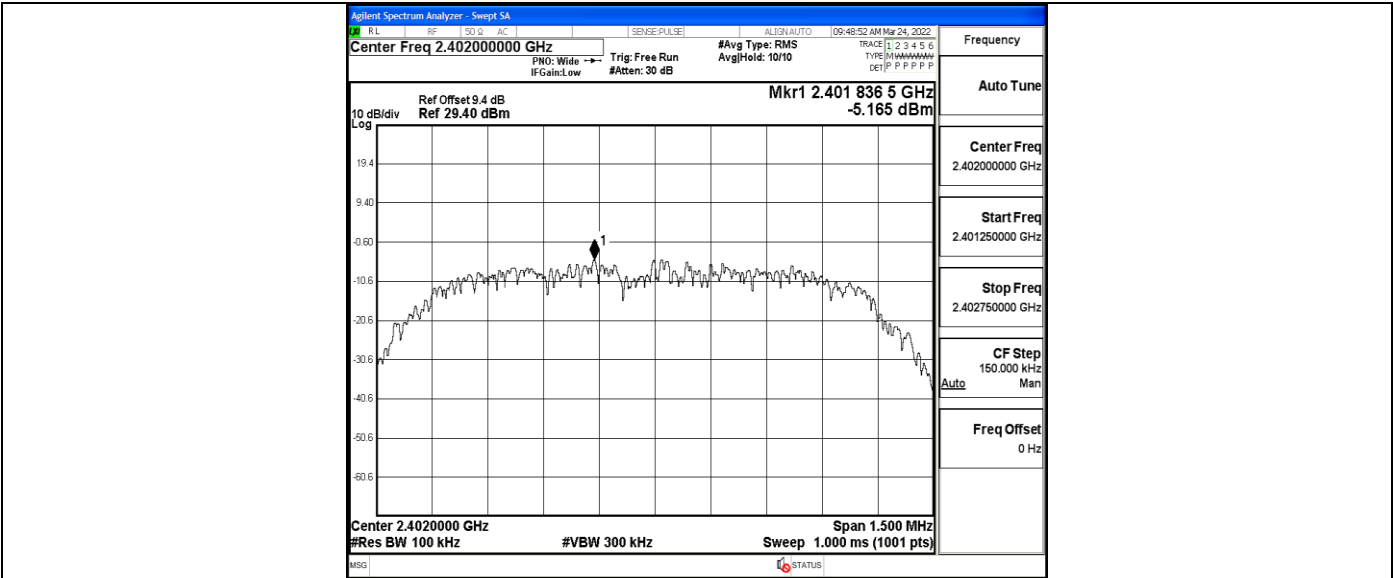
DH5 Ant1 2480 30~1000



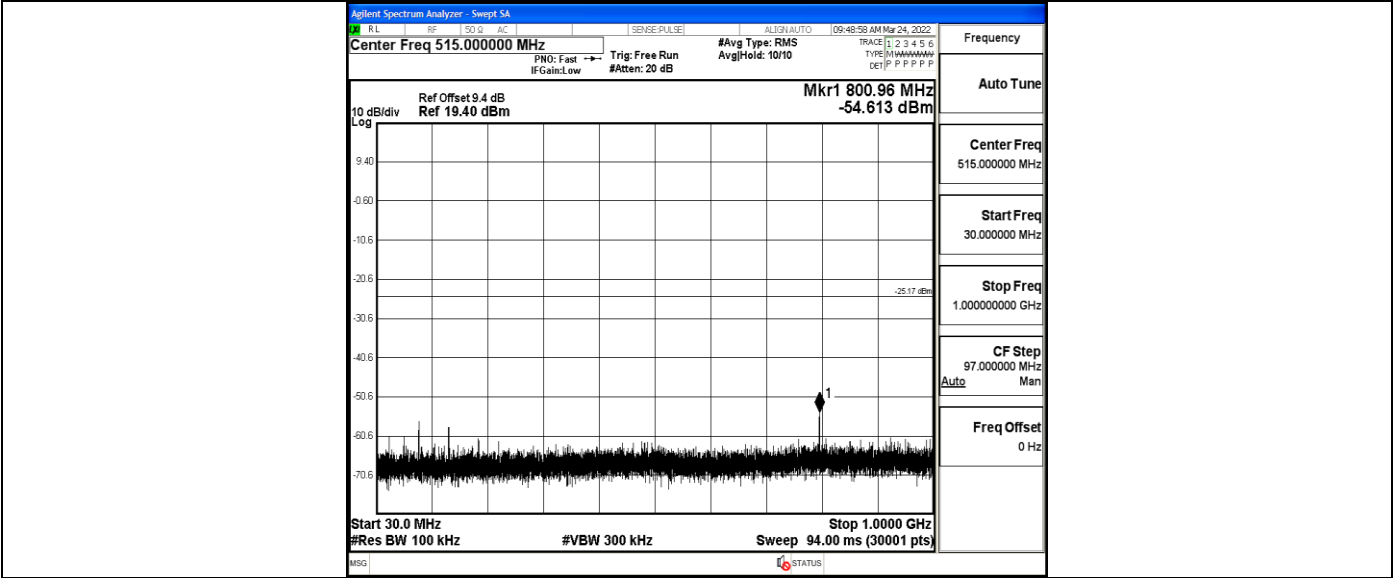
DH5 Ant1 2480 1000~26500



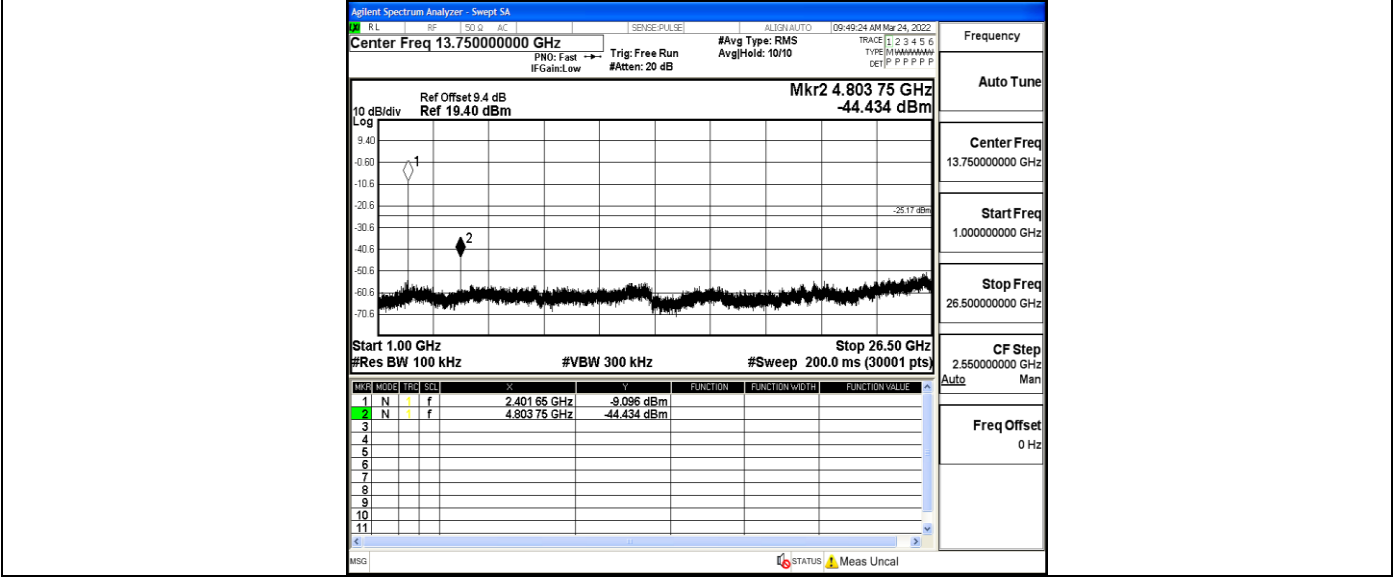
2DH5 Ant1 2402 0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference