

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

Product Name: Bone Conduction Earphone

Trade Mark: N/A

Test Model: Dai3mimi Di2

FCC ID: 2A744-DAI3MIMIDI2

Environmental Conditions

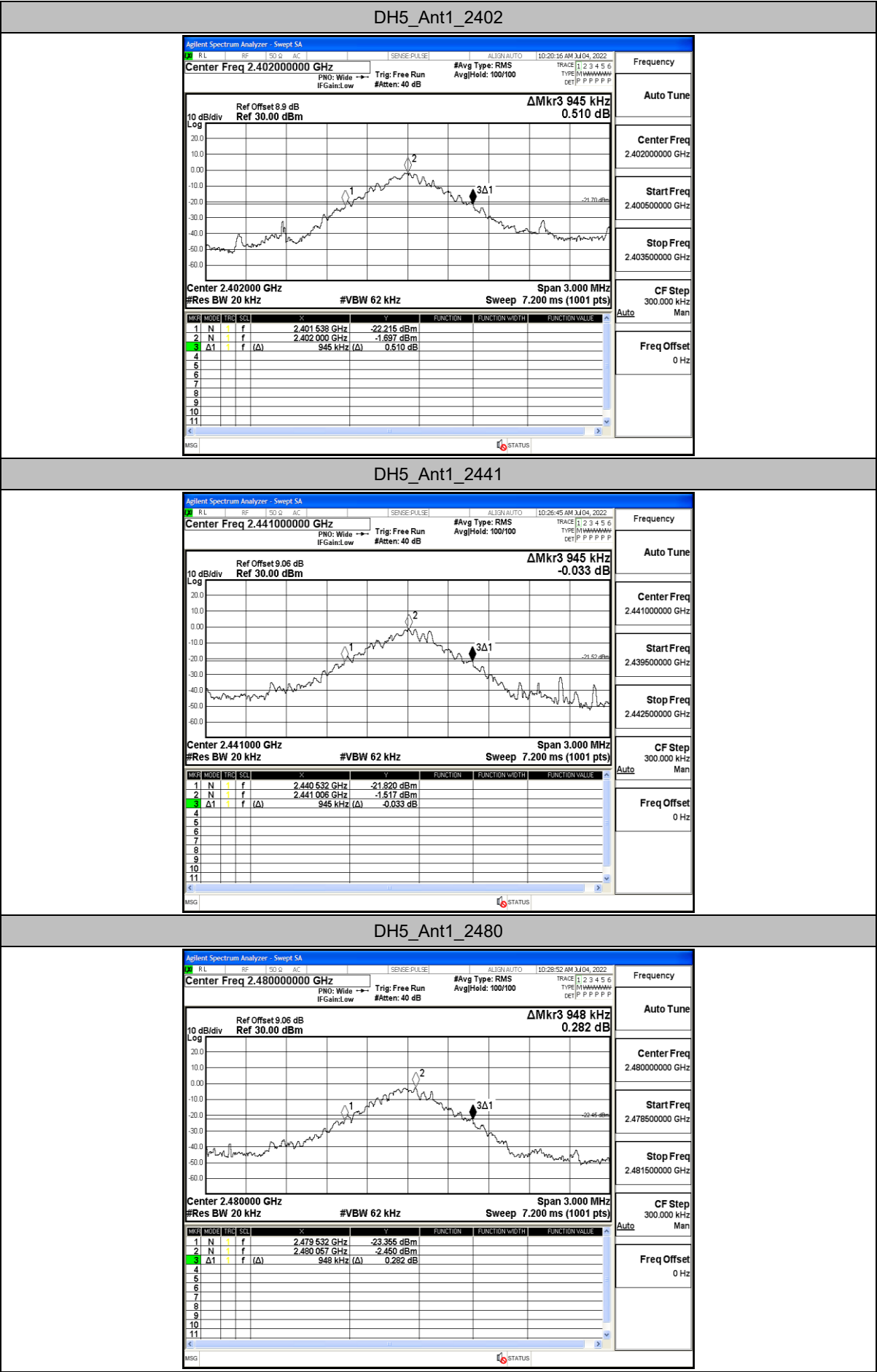
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth

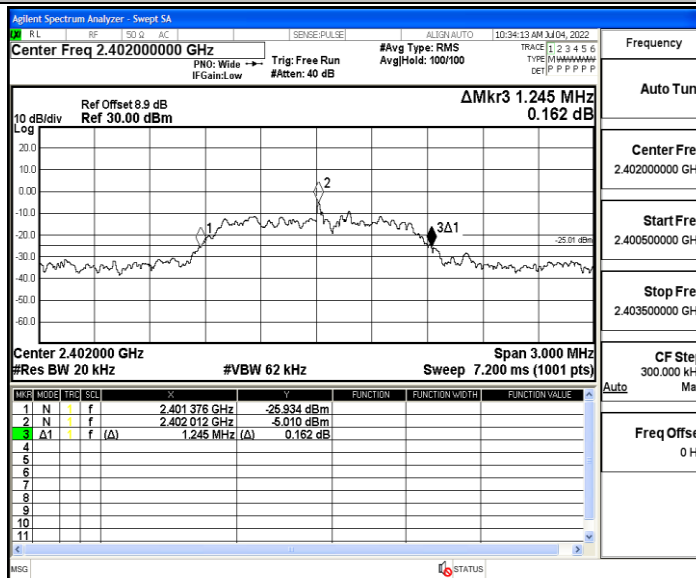
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.538	2402.483	---	---
		2441	0.945	2440.532	2441.477	---	---
		2480	0.948	2479.532	2480.480	---	---
2DH5	Ant1	2402	1.245	2401.376	2402.621	---	---
		2441	1.275	2440.364	2441.639	---	---
		2480	1.209	2479.385	2480.594	---	---
3DH5	Ant1	2402	1.212	2401.403	2402.615	---	---
		2441	1.272	2440.355	2441.627	---	---
		2480	1.221	2479.385	2480.606	---	---

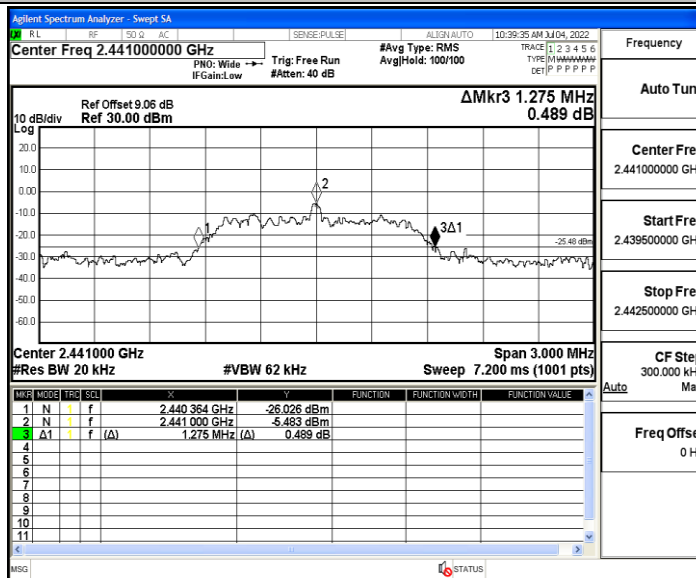
Test Graphs



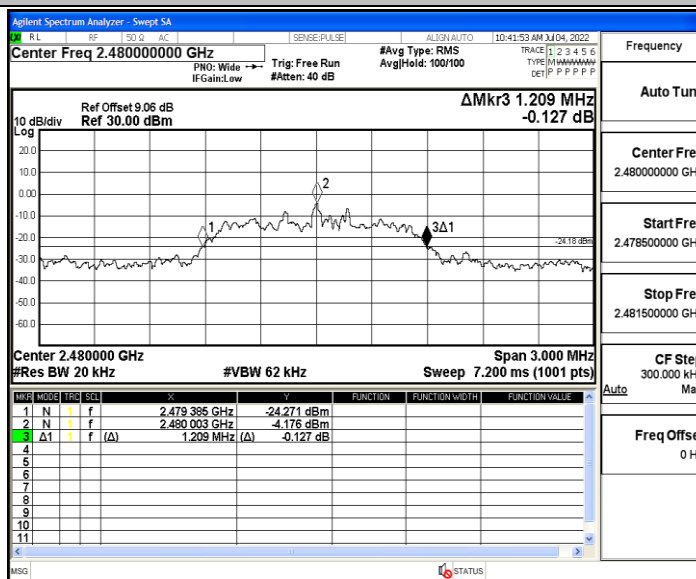
2DH5_Ant1_2402



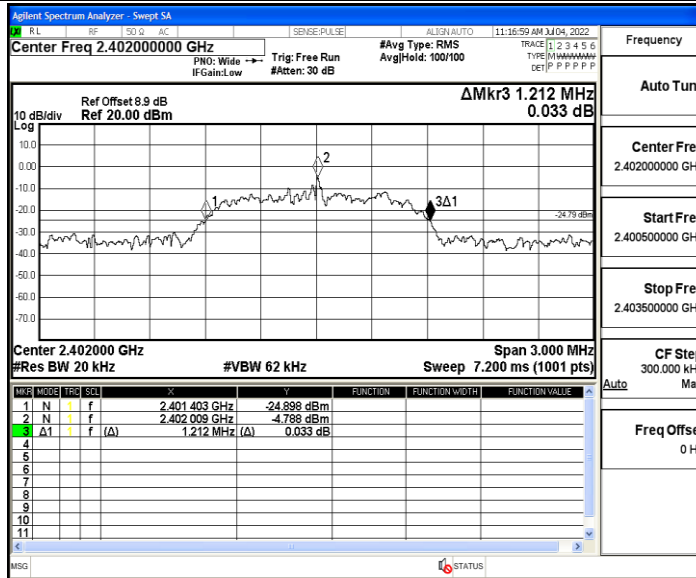
2DH5_Ant1_2441



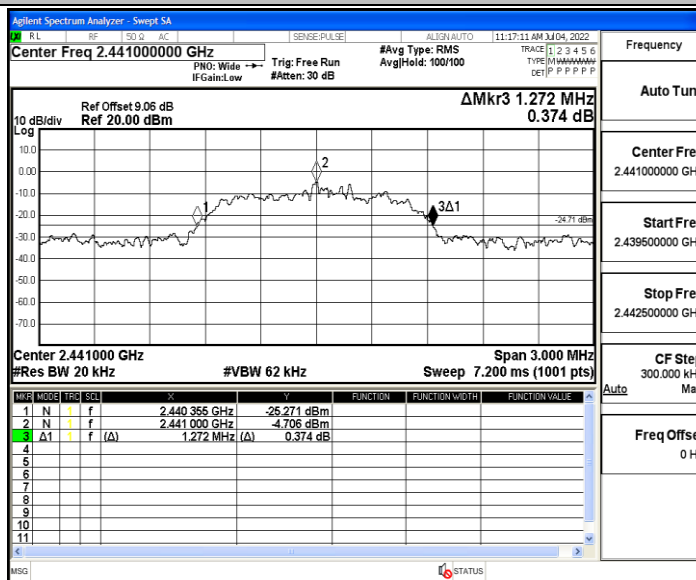
2DH5_Ant1_2480



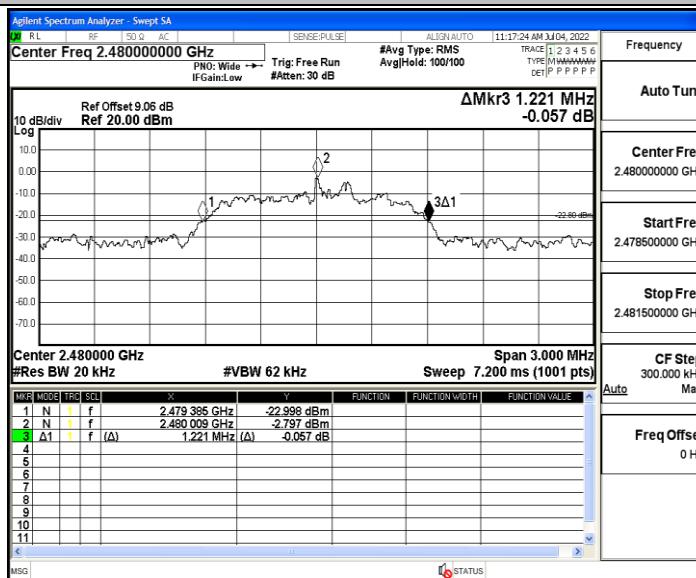
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



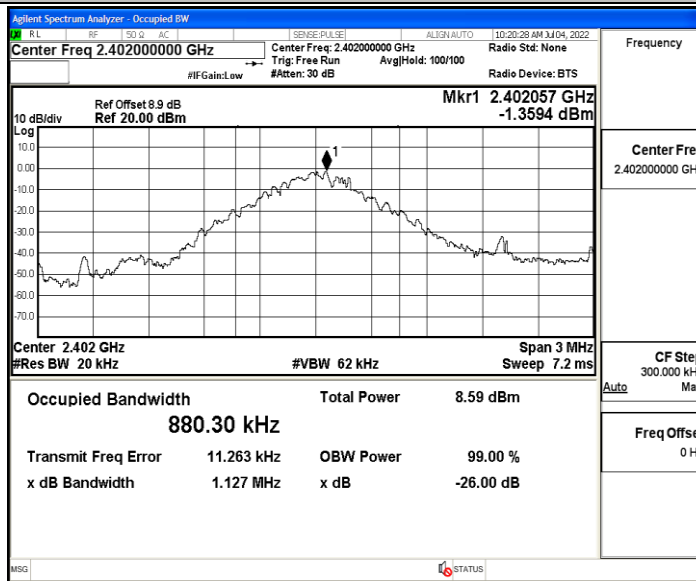
Appendix B: Occupied Channel Bandwidth

Test Result

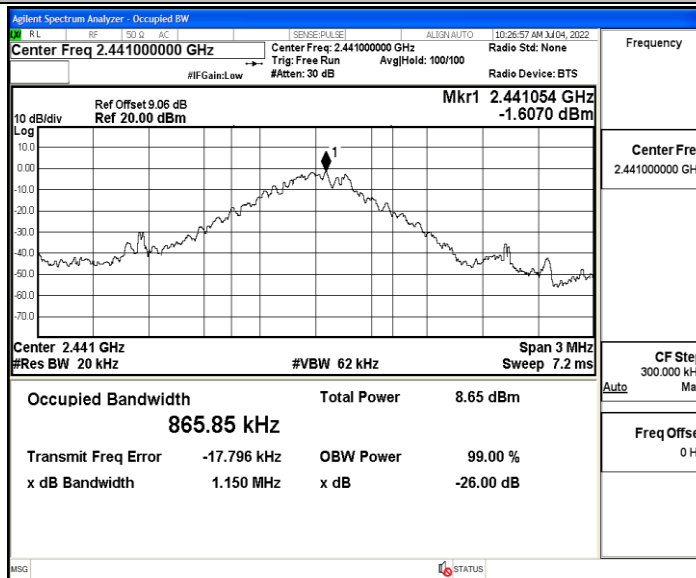
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88030	2401.571	2402.451	---	---
		2441	0.86585	2440.549	2441.415	---	---
		2480	0.85948	2479.554	2480.413	---	---
2DH5	Ant1	2402	1.5996	2401.206	2402.806	---	---
		2441	1.9467	2440.015	2441.962	---	---
		2480	1.9689	2478.961	2480.930	---	---
3DH5	Ant1	2402	1.6168	2401.176	2402.793	---	---
		2441	1.5395	2440.213	2441.753	---	---
		2480	1.6822	2479.132	2480.815	---	---

Test Graphs

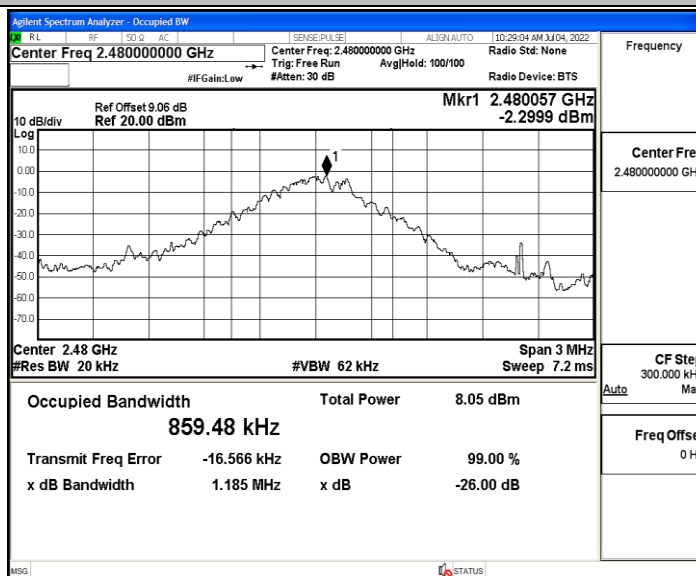
DH5_Ant1_2402



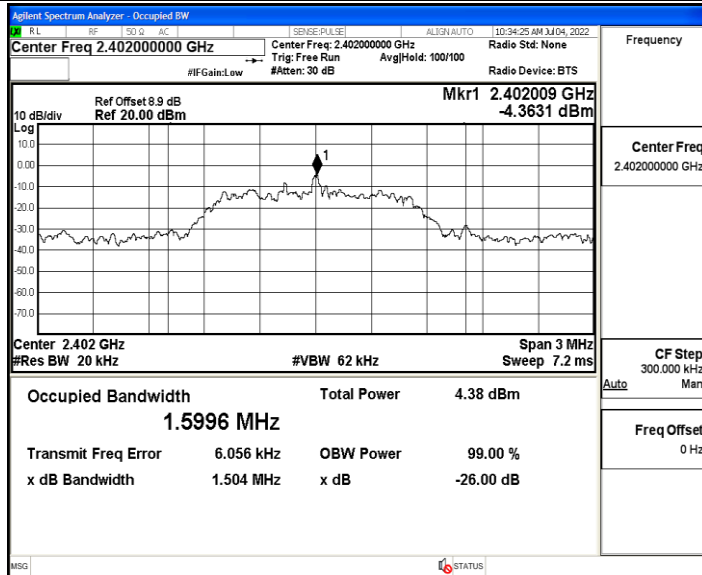
DH5_Ant1_2441



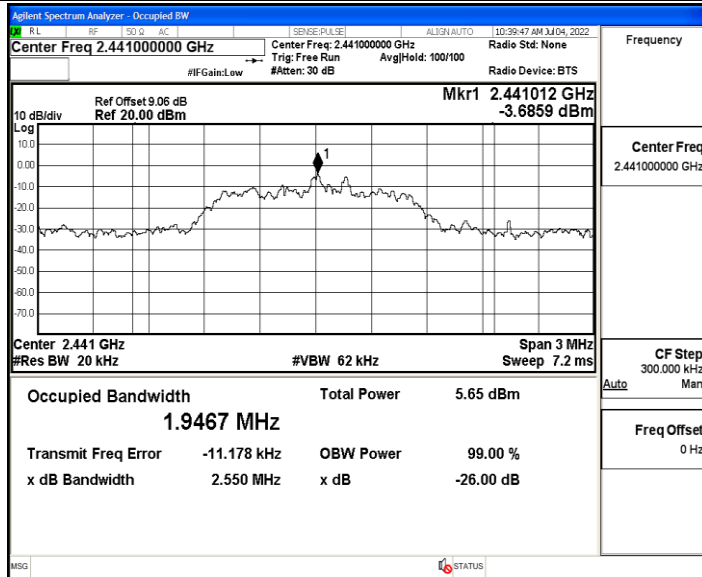
DH5_Ant1_2480



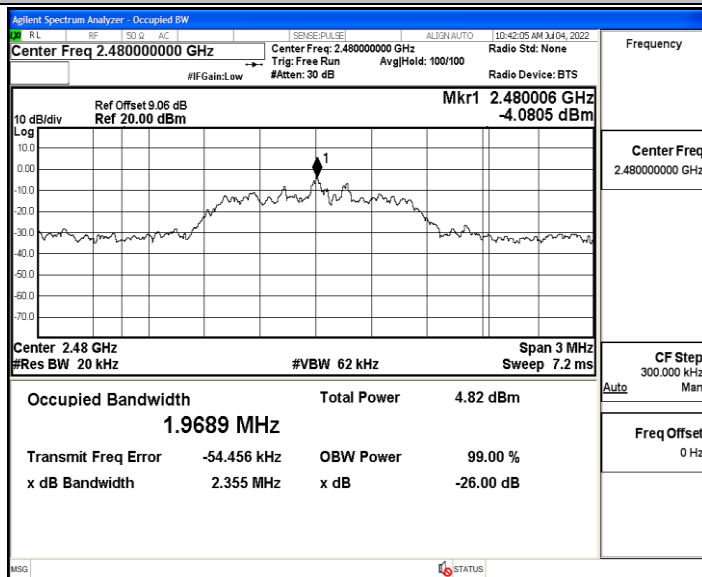
2DH5_Ant1_2402



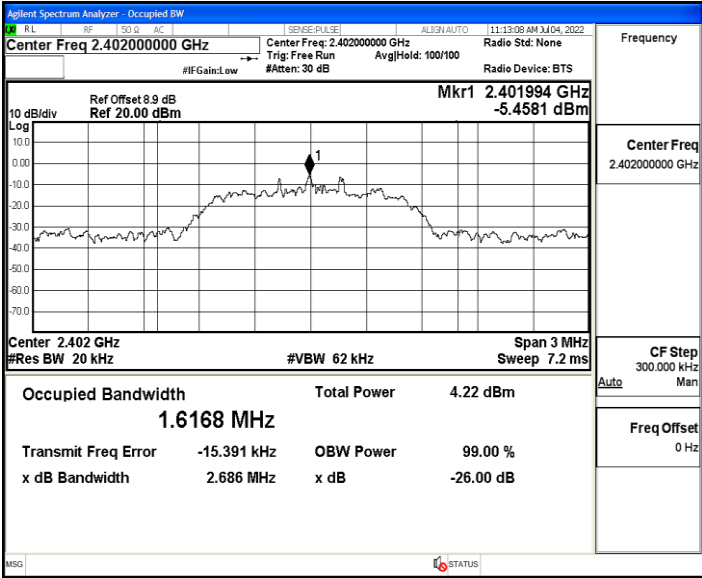
2DH5_Ant1_2441



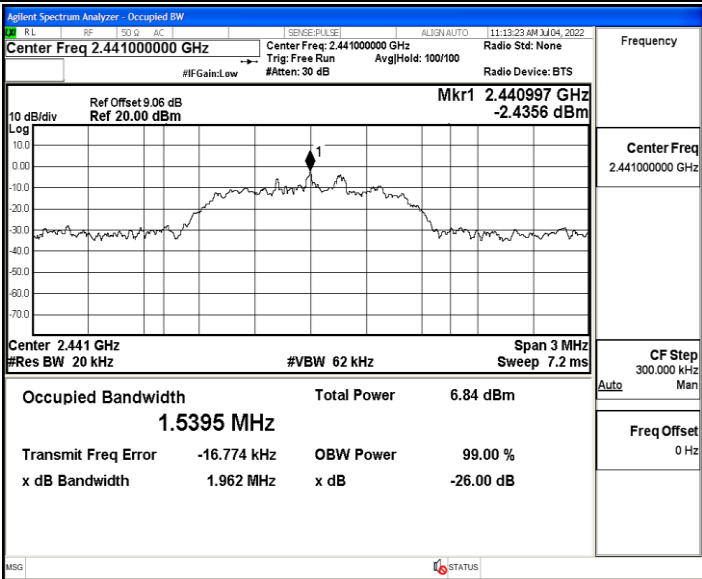
2DH5_Ant1_2480



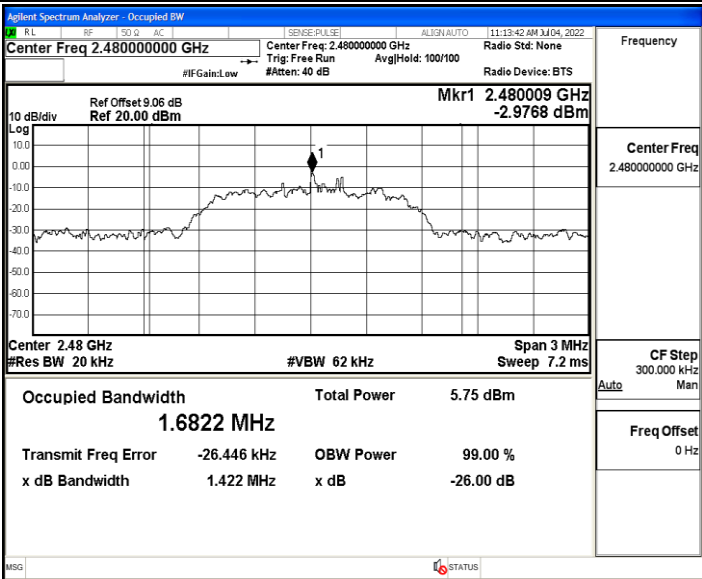
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

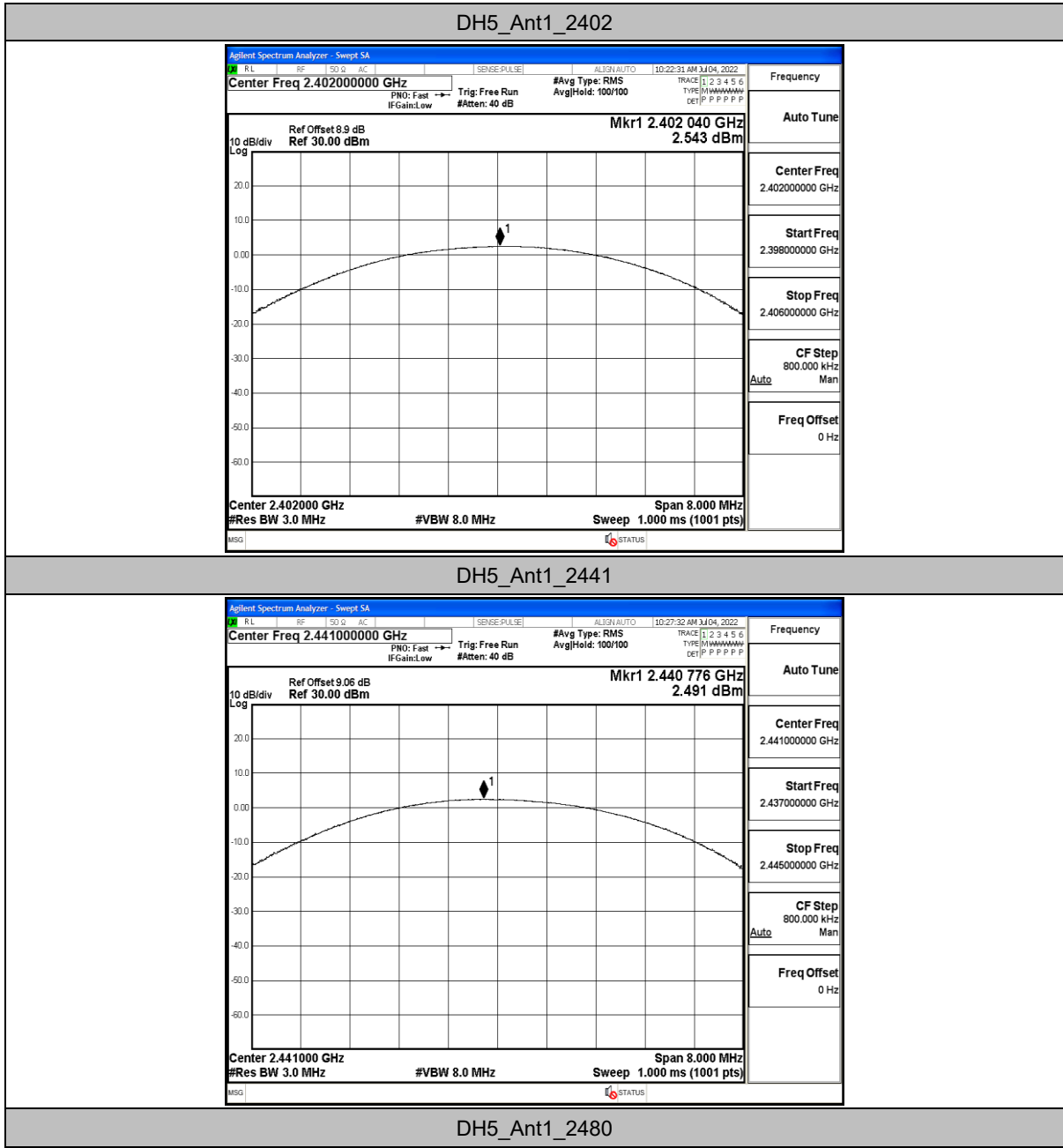


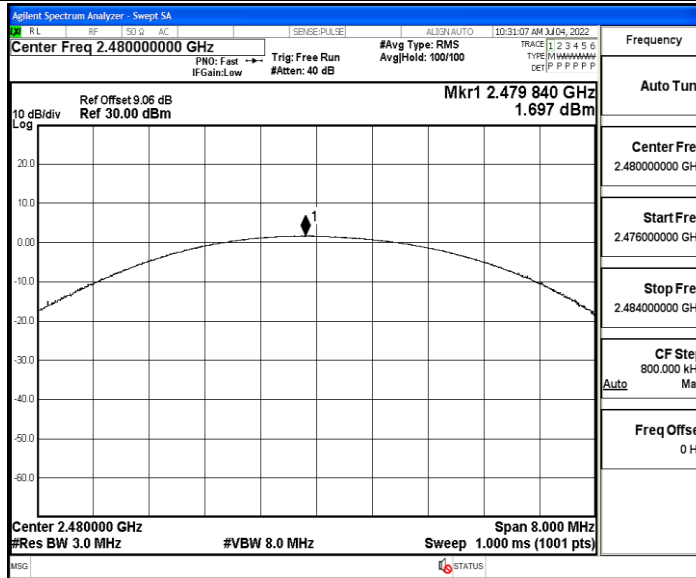
Appendix C: Maximum Peak conducted output power

Test Result

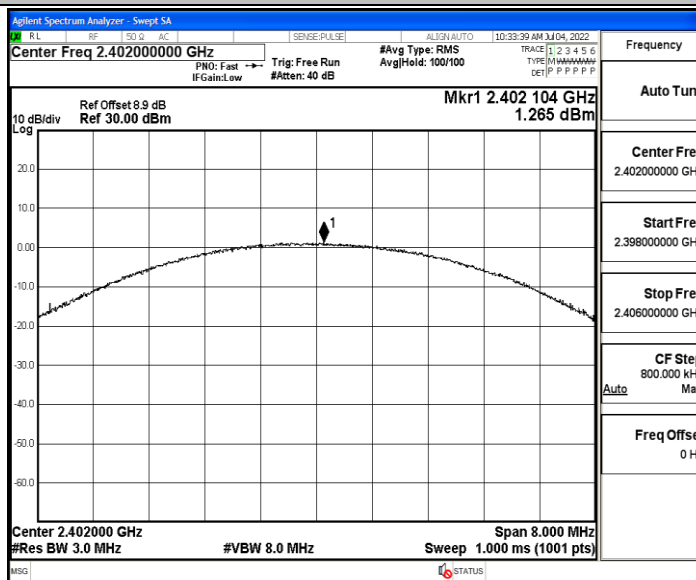
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.54	≤30	PASS
		2441	2.49	≤30	PASS
		2480	1.7	≤30	PASS
2DH5	Ant1	2402	1.27	≤20.97	PASS
		2441	2.49	≤20.97	PASS
		2480	1.72	≤20.97	PASS
3DH5	Ant1	2402	0.91	≤20.97	PASS
		2441	0.87	≤20.97	PASS
		2480	2.68	≤20.97	PASS

Test Graphs

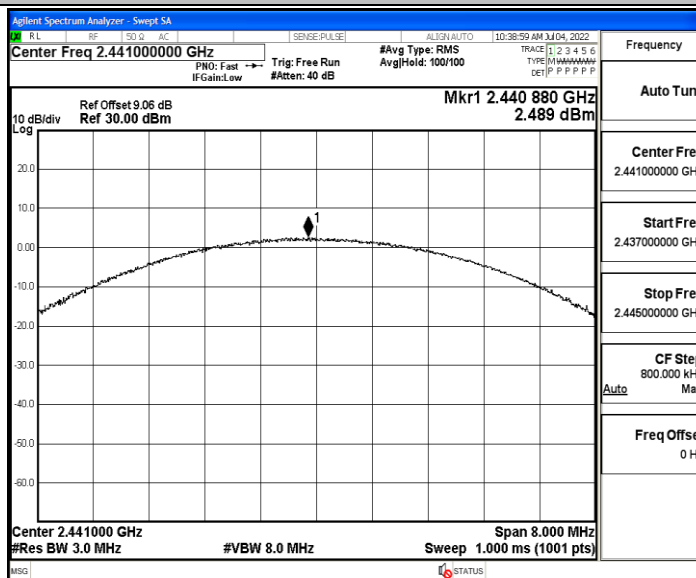




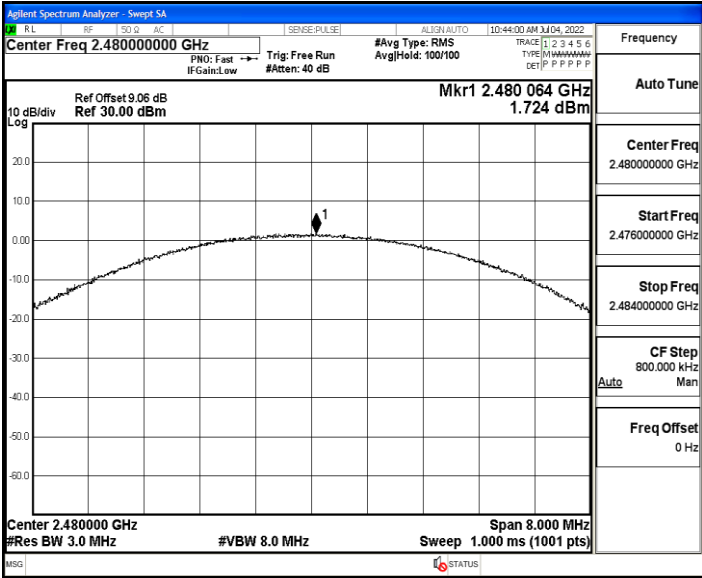
2DH5_Ant1_2402



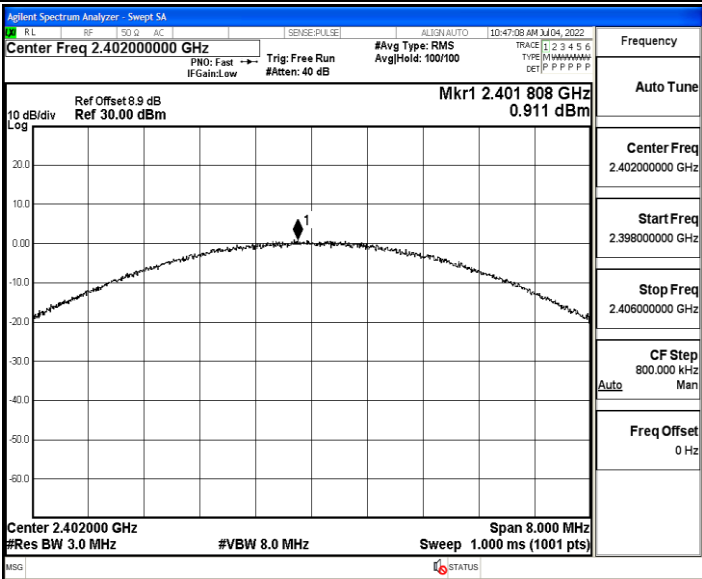
2DH5_Ant1_2441



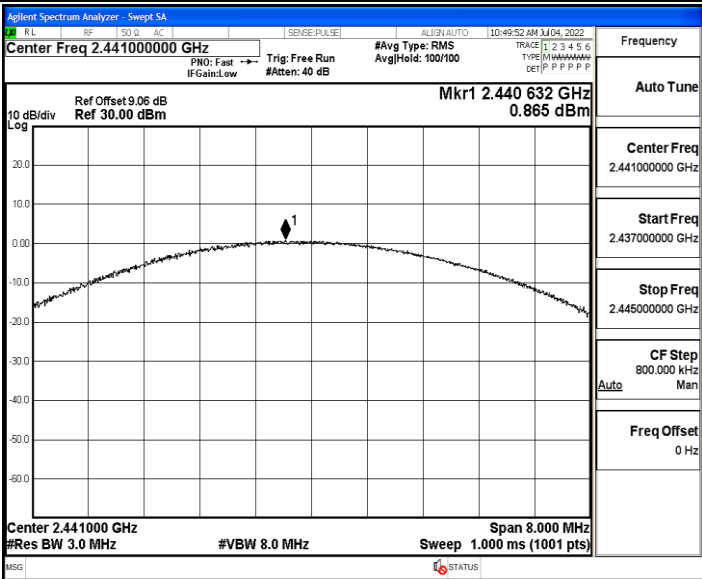
2DH5_Ant1_2480



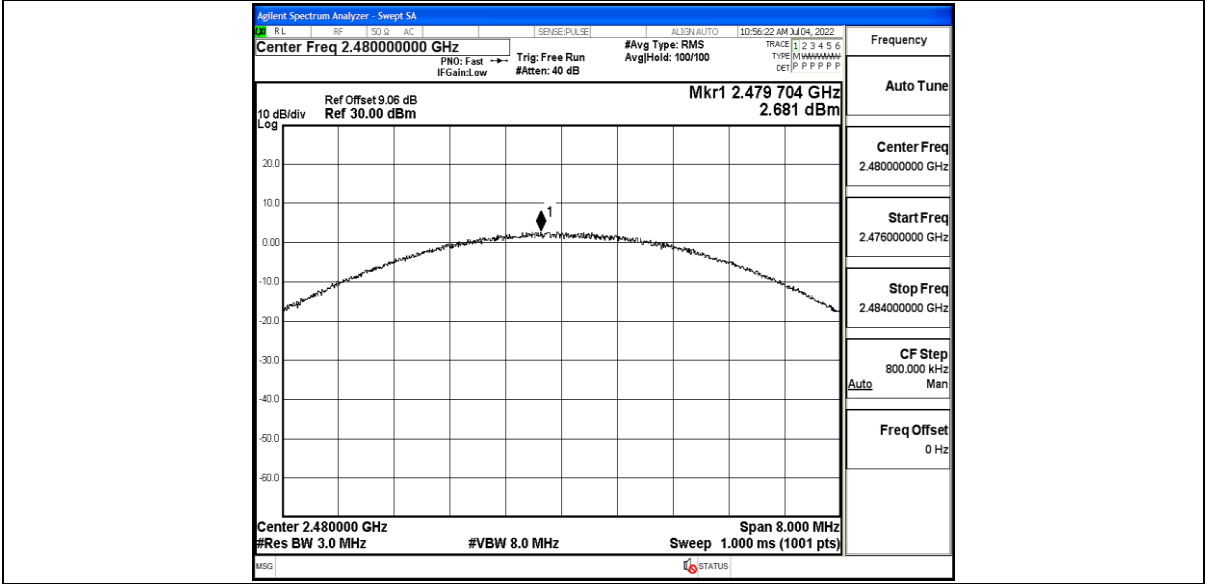
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

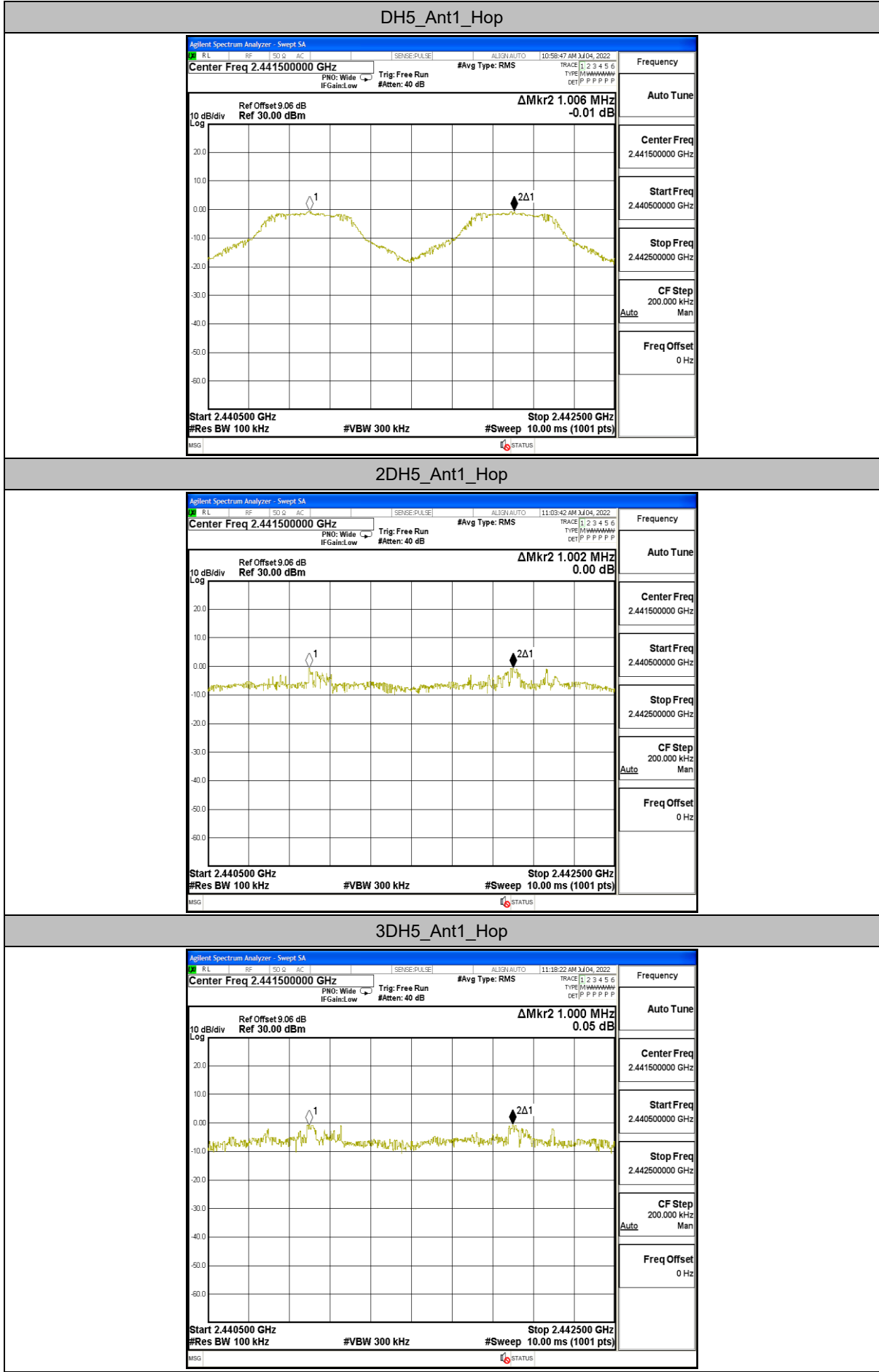


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.006	≥0.948	PASS
2DH5	Ant1	Hop	1.002	≥0.850	PASS
3DH5	Ant1	Hop	1	≥0.848	PASS

Test Graphs

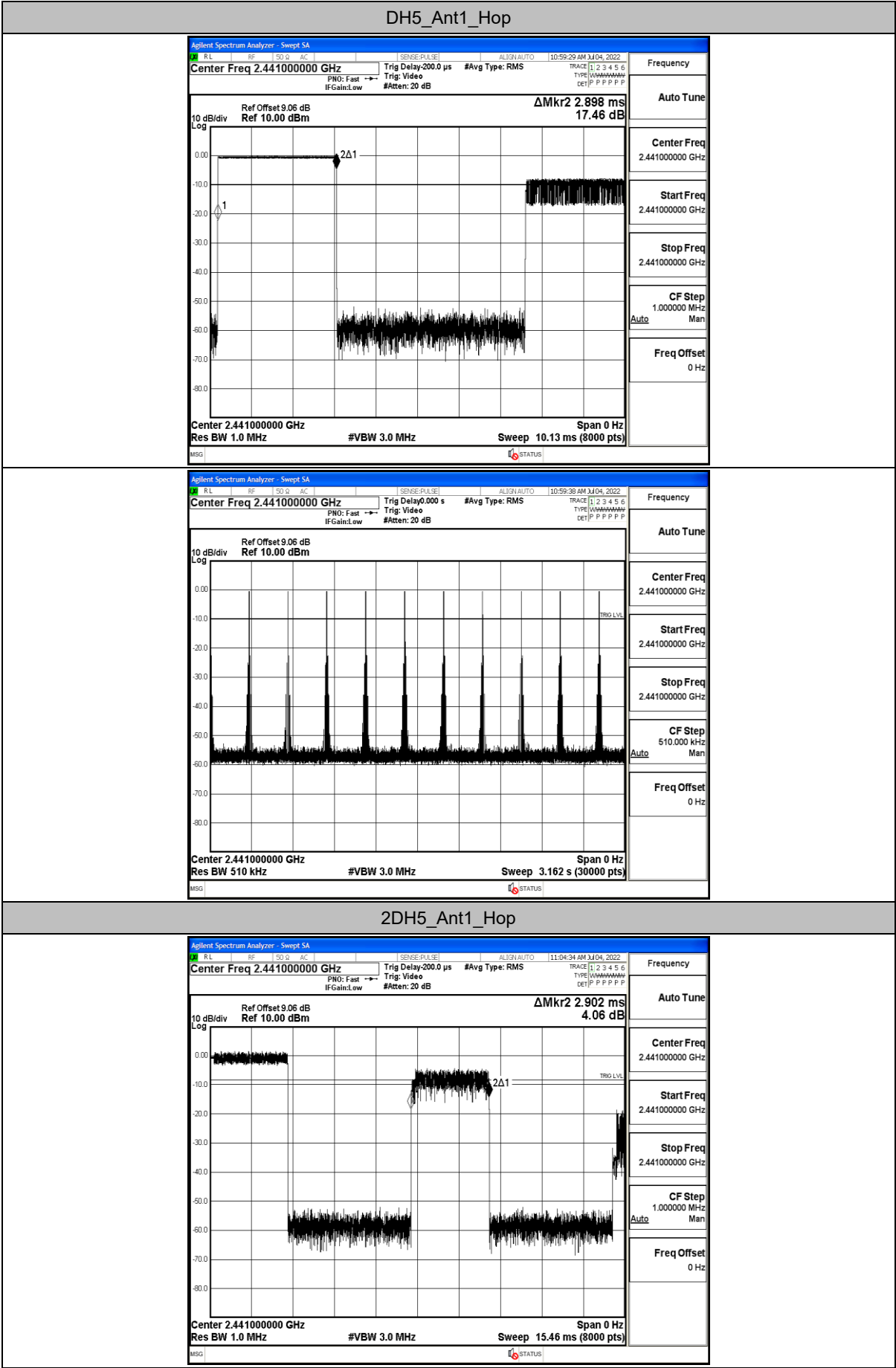


Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.90	110	0.319	≤0.4	PASS
2DH5	Ant1	Hop	2.90	110	0.319	≤0.4	PASS
3DH5	Ant1	Hop	2.90	100	0.29	≤0.4	PASS

Test Graphs



2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Swept SA

RLRF50QACSENSE:PULSEALIGN:AUTO11:04:34 AM 3/04/2022

Center Freq 2.441000000 GHzTrig Delay:200.0 μ s#Avg Type: RMS

PNO: FastIF Gain:Low#Atten: 20 dB

Frequency

Auto Tune

Center Freq2.441000000 GHz

Start Freq2.441000000 GHz

Stop Freq2.441000000 GHz

CF Step1.000000 MHzAutoMan

Freq Offset0 Hz

Ref Offset 9.06 dBRef 10.00 dBm

Δ Mkr2 2.902 ms4.06 dB

10 dB/divLog

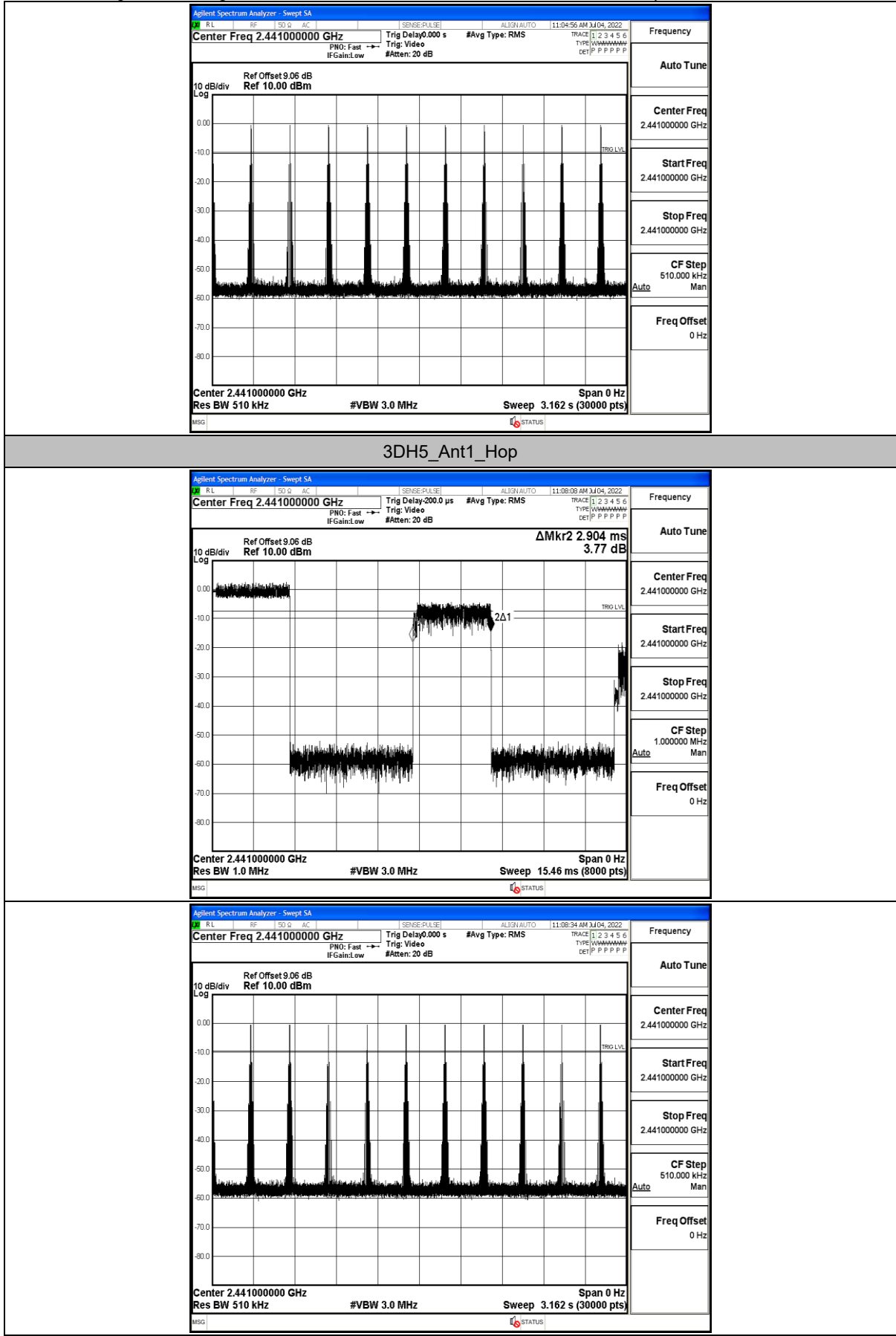
0.00-10.0-20.0-30.0-40.0-50.0-60.0-70.0-80.0

2.441000000 GHz#VBW 3.0 MHzSweep 15.46 ms (8000 pts)

MSGSTATUS

2A1

TRIG LVL

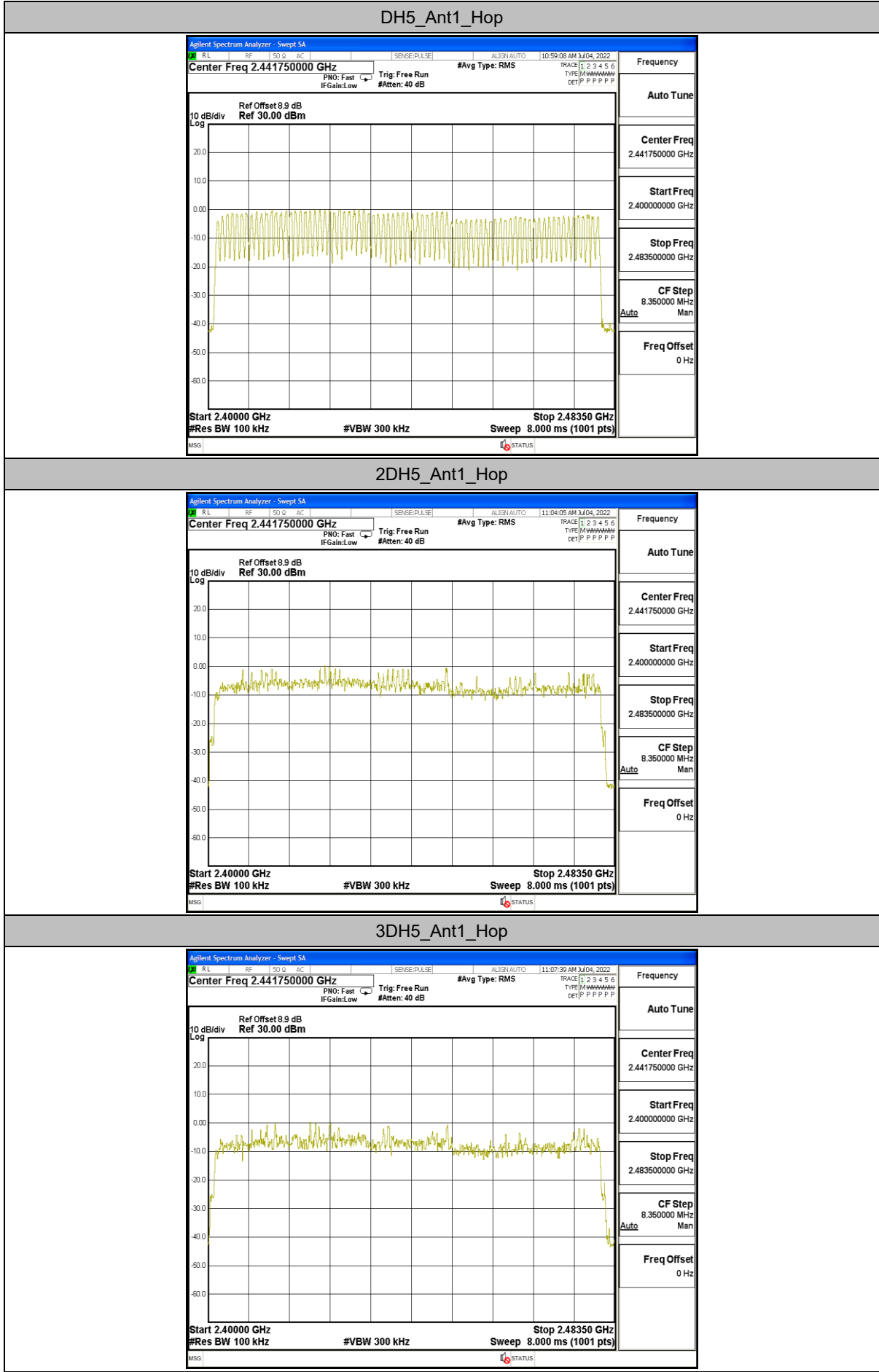


Appendix F: Number of hopping channels

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



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

2DH5_Ant1_Hop

Agilent Spectrum Analyzer - Sweep SA

RL

RF

50 Ω

AC

SENSE: PULSE

ALIGN: AUTO

11:04:05 AM 3/04/2022

Center Freq 2.441750000 GHz

PNO: Fast

IF Gain: Low

Trig: Free Run

#Avg Type: RMS

TRACE [1: 2 3 4 5 6]

TYPE [HAWAIIAN]

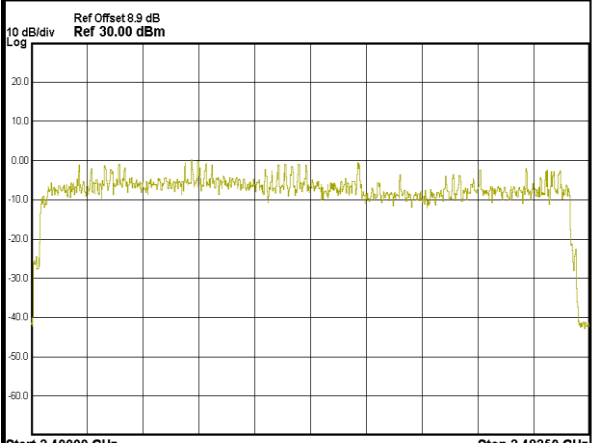
DET [P P P P P P]

Ref Offset 8.9 dB

Ref 30.00 dBm

10 dB/div

Log



Start 2.40000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 2.48350 GHz

Sweep 8.000 ms (1001 pts)

MSG

STATUS

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

3DH5_Ant1_Hop

Agilent Spectrum Analyzer - Sweep SA

RL

RF

50 Ω

AC

SENSE: PULSE

ALIGN: AUTO

11:07:39 AM 3/04/2022

Center Freq 2.441750000 GHz

PNO: Fast

IF Gain: Low

Trig: Free Run

#Avg Type: RMS

TRACE [1: 2 3 4 5 6]

TYPE [HAWAIIAN]

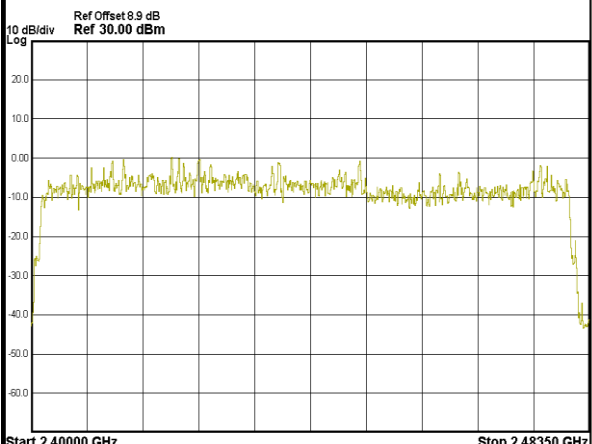
DET [P P P P P P]

Ref Offset 8.9 dB

Ref 30.00 dBm

10 dB/div

Log



Start 2.40000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Stop 2.48350 GHz

Sweep 8.000 ms (1001 pts)

MSG

STATUS

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

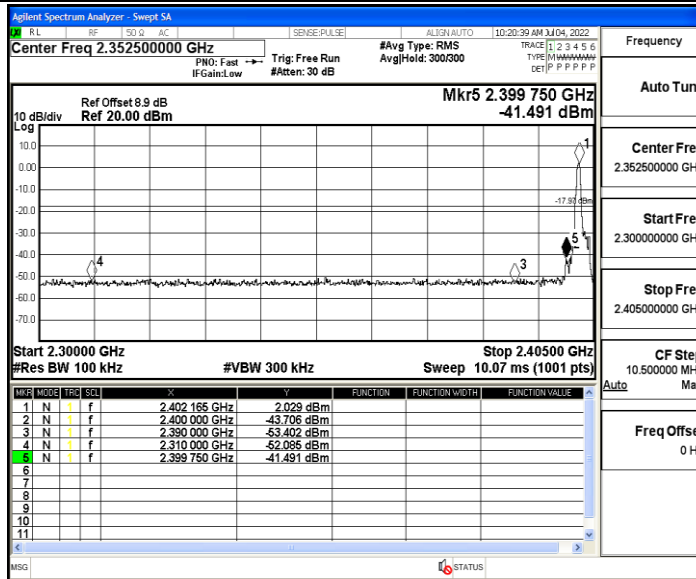
Appendix G: Band edge measurements

Test Result

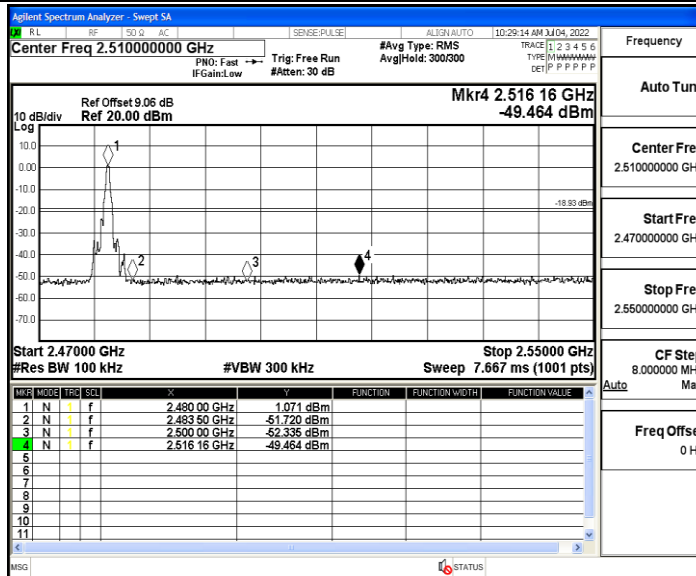
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.03	-41.49	≤-17.97	PASS
		High	2480	1.07	-49.46	≤-18.93	PASS
		Low	Hop_2402	-2.08	-49.75	≤-22.08	PASS
		High	Hop_2480	-2.07	-48.88	≤-22.07	PASS
2DH5	Ant1	Low	2402	-1.65	-38.81	≤-21.65	PASS
		High	2480	-1.42	-49.28	≤-21.42	PASS
		Low	Hop_2402	-3.98	-50.6	≤-23.98	PASS
		High	Hop_2480	-1.67	-49.16	≤-21.67	PASS
3DH5	Ant1	Low	2402	-3.62	-39.74	≤-23.62	PASS
		High	2480	-1.56	-49.3	≤-21.56	PASS
		Low	Hop_2402	-1.47	-50.2	≤-21.47	PASS
		High	Hop_2480	-1.56	-49.02	≤-21.56	PASS

Test Graphs

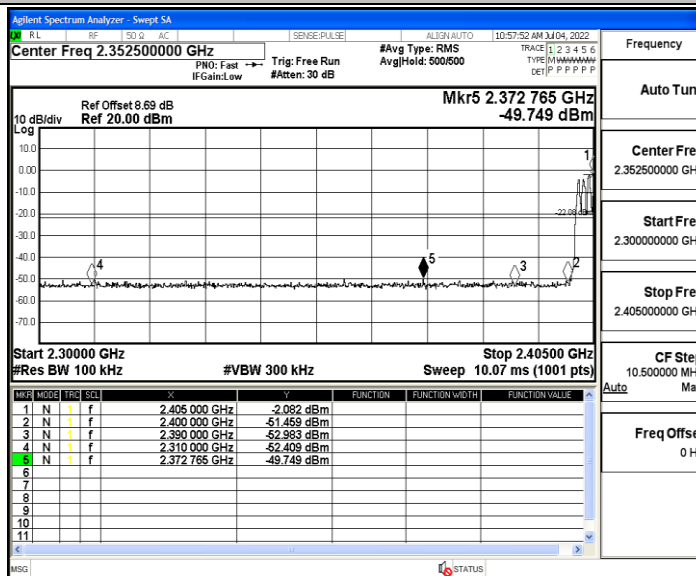
DH5_Ant1_Low_2402



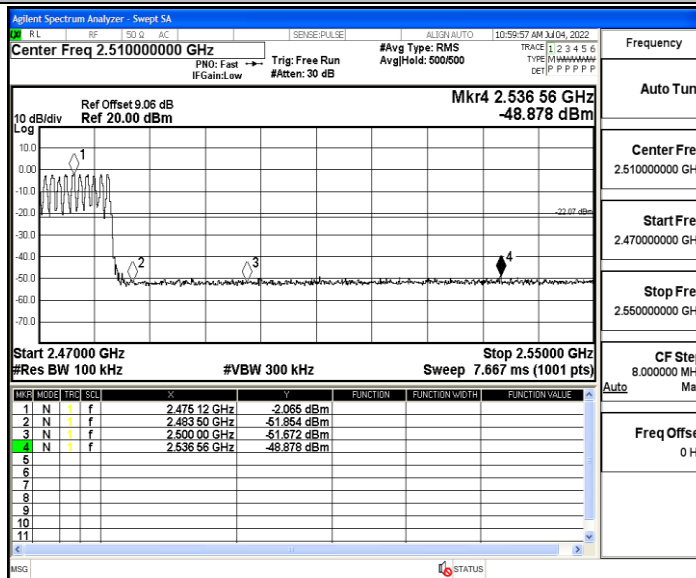
DH5_Ant1_High_2480



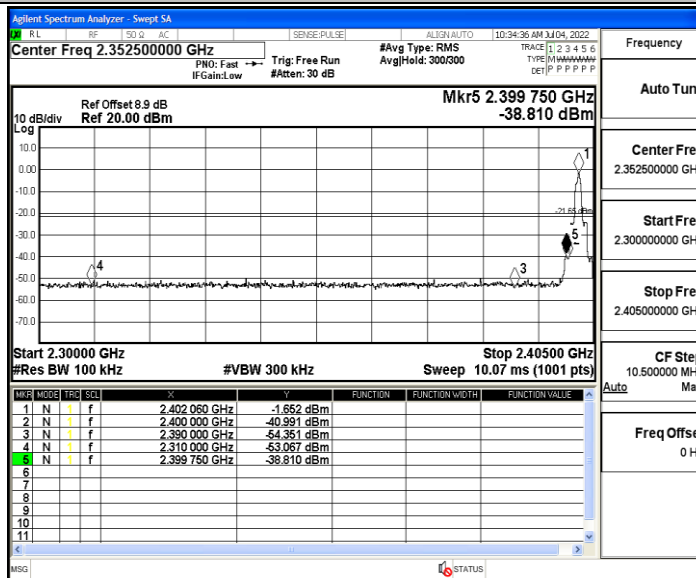
DH5_Ant1_Low_Hop_2402



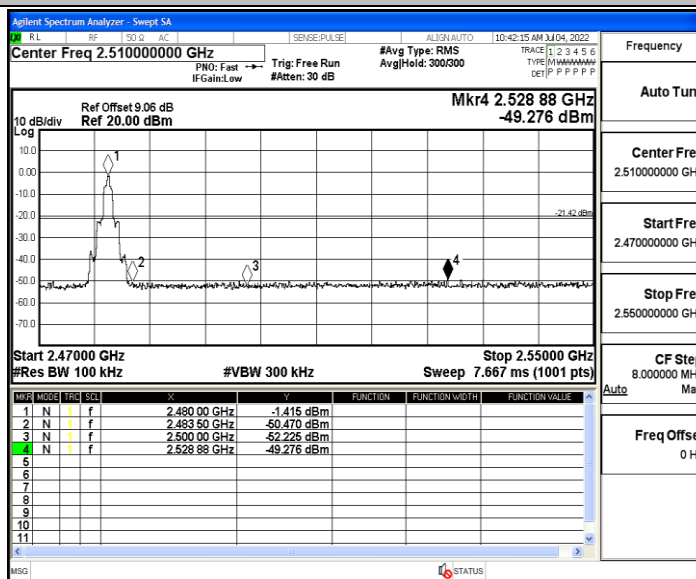
DH5_Ant1_High_Hop_2480



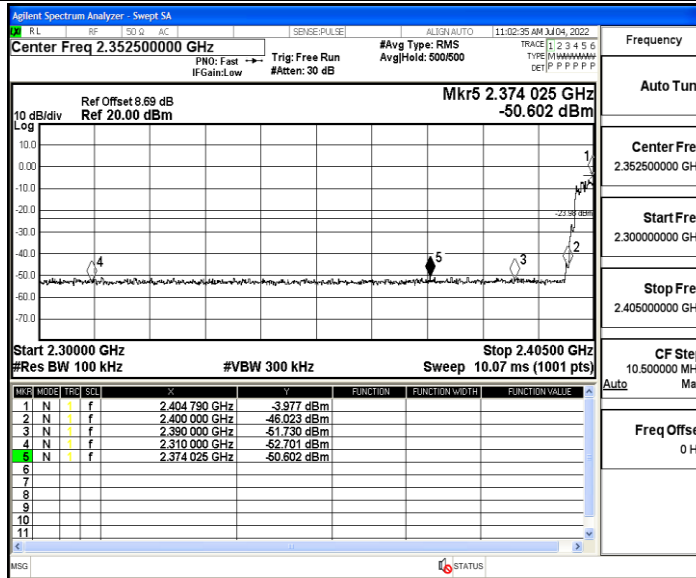
2DH5_Ant1_Low_2402



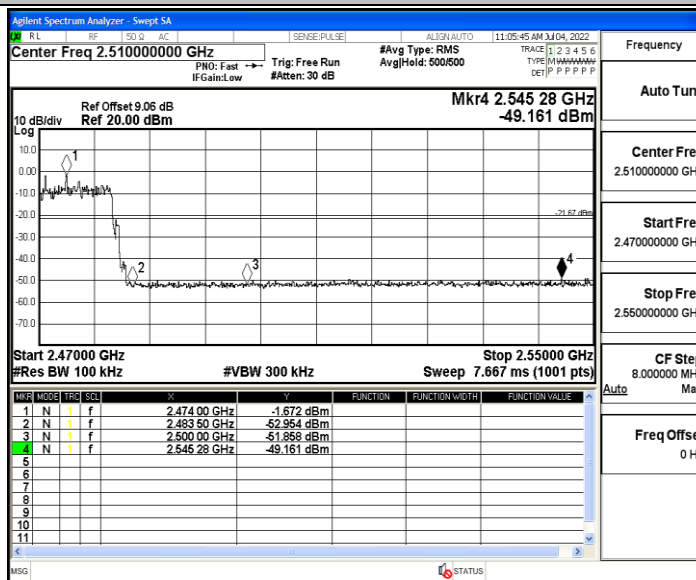
2DH5_Ant1_High_2480



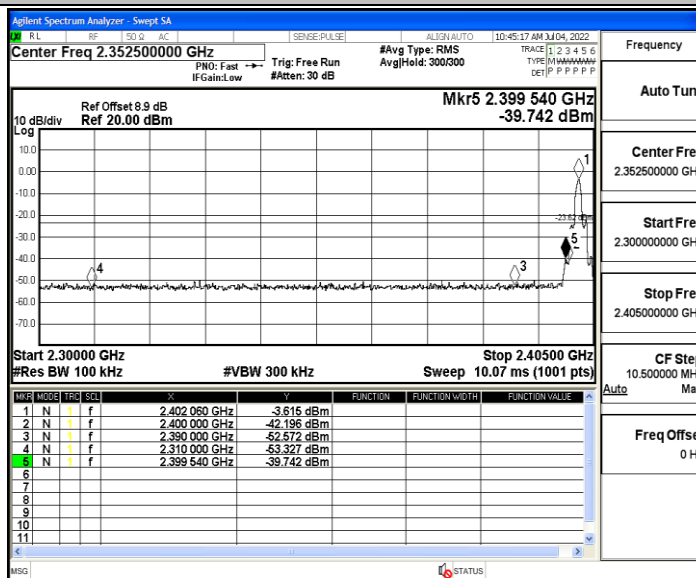
2DH5_Ant1_Low_Hop_2402



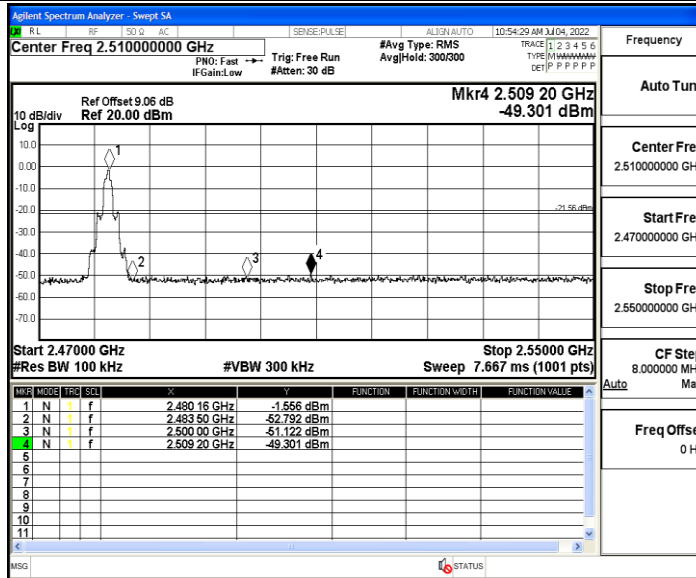
2DH5_Ant1_High_Hop_2480



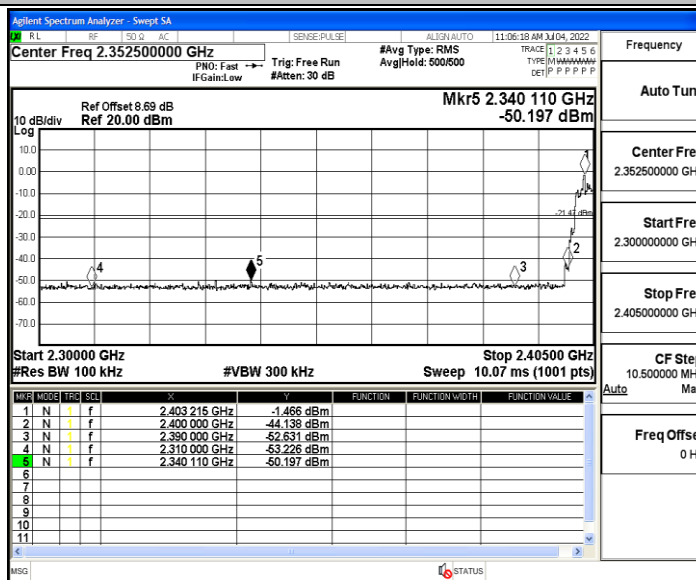
3DH5_Ant1_Low_2402



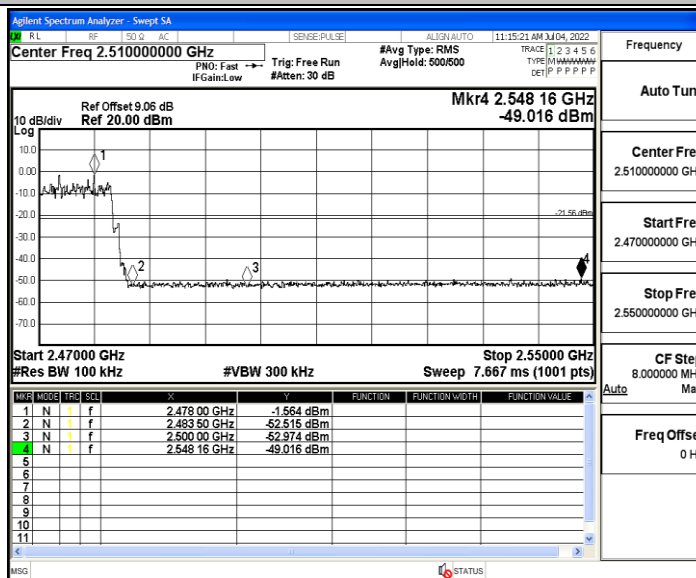
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

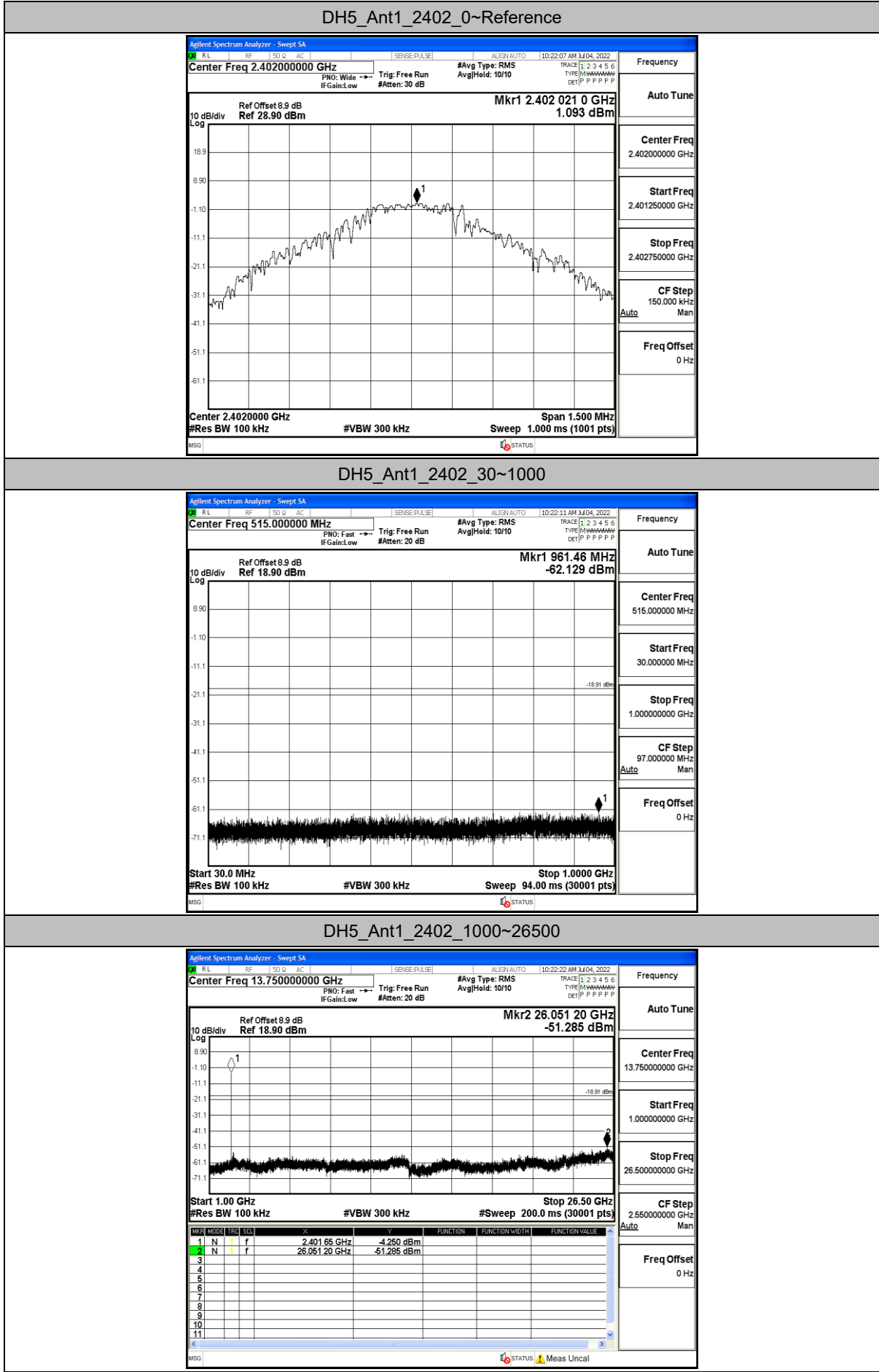


Appendix H: Conducted Spurious Emission

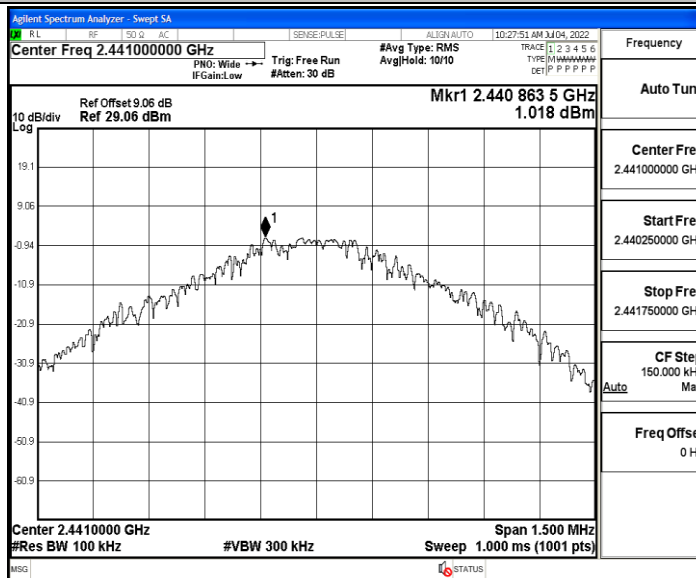
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.09	1.09	---	PASS
			30~1000	1.09	-62.13	≤-18.91	PASS
			1000~26500	1.09	-51.29	≤-18.91	PASS
		2441	Reference	1.02	1.02	---	PASS
			30~1000	1.02	-61.1	≤-18.98	PASS
			1000~26500	1.02	-51.04	≤-18.98	PASS
		2480	Reference	0.85	0.85	---	PASS
			30~1000	0.85	-61.33	≤-19.15	PASS
			1000~26500	0.85	-50.81	≤-19.15	PASS
2DH5	Ant1	2402	Reference	-3.80	-3.80	---	PASS
			30~1000	-3.80	-61.38	≤-23.8	PASS
			1000~26500	-3.80	-51.81	≤-23.8	PASS
		2441	Reference	-2.24	-2.24	---	PASS
			30~1000	-2.24	-60.84	≤-22.24	PASS
			1000~26500	-2.24	-51.46	≤-22.24	PASS
		2480	Reference	-6.21	-6.21	---	PASS
			30~1000	-6.21	-61.19	≤-26.21	PASS
			1000~26500	-6.21	-51.97	≤-26.21	PASS
3DH5	Ant1	2402	Reference	-5.79	-5.79	---	PASS
			30~1000	-5.79	-61.6	≤-25.79	PASS
			1000~26500	-5.79	-50.04	≤-25.79	PASS
		2441	Reference	-3.69	-3.69	---	PASS
			30~1000	-3.69	-61.19	≤-23.69	PASS
			1000~26500	-3.69	-51.98	≤-23.69	PASS
		2480	Reference	-1.58	-1.58	---	PASS
			30~1000	-1.58	-61.45	≤-21.58	PASS
			1000~26500	-1.58	-50.38	≤-21.58	PASS

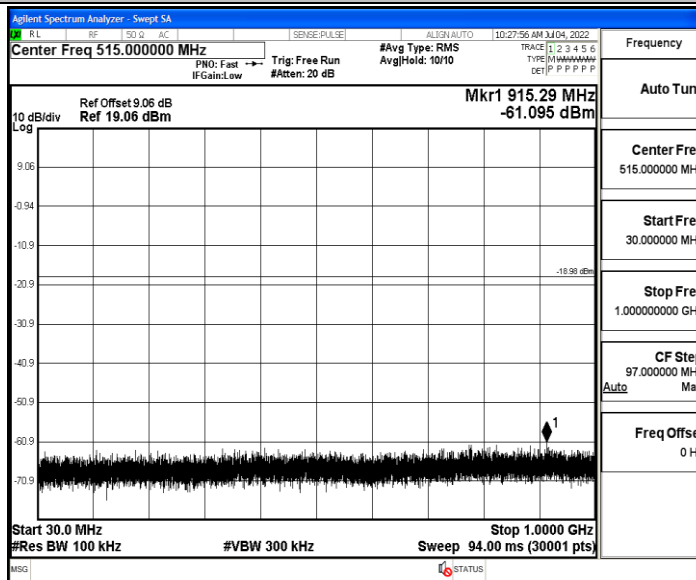
Test Graphs



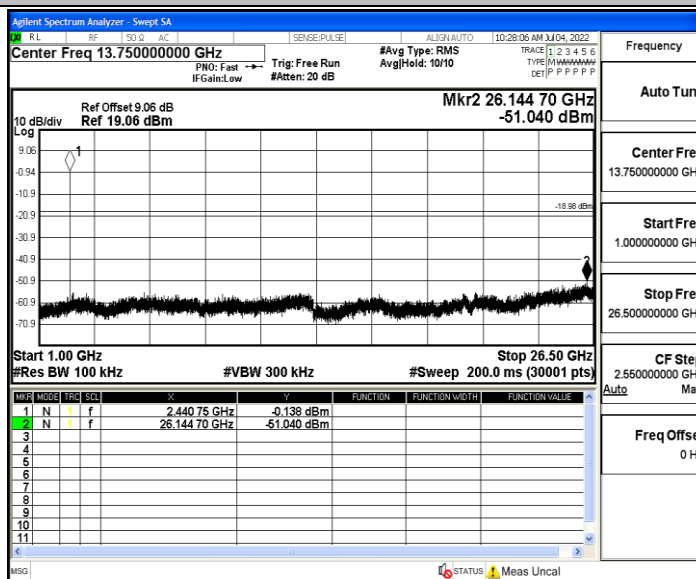
DH5_Ant1_2441_0~Reference



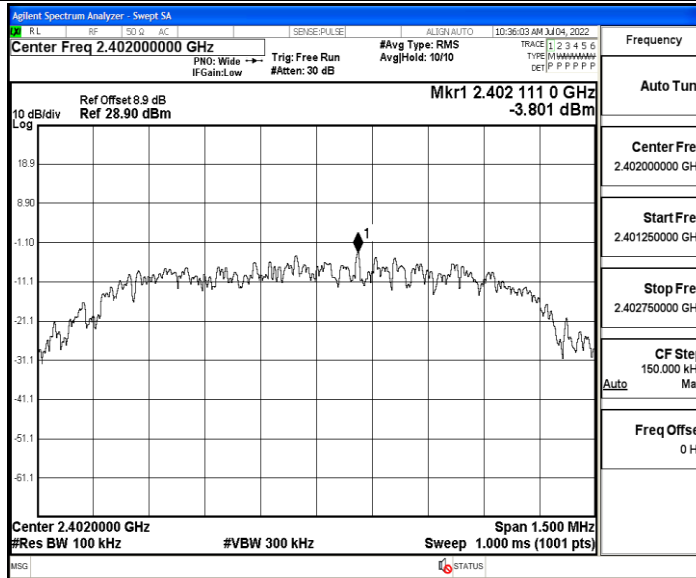
DH5_Ant1_2441_30~1000



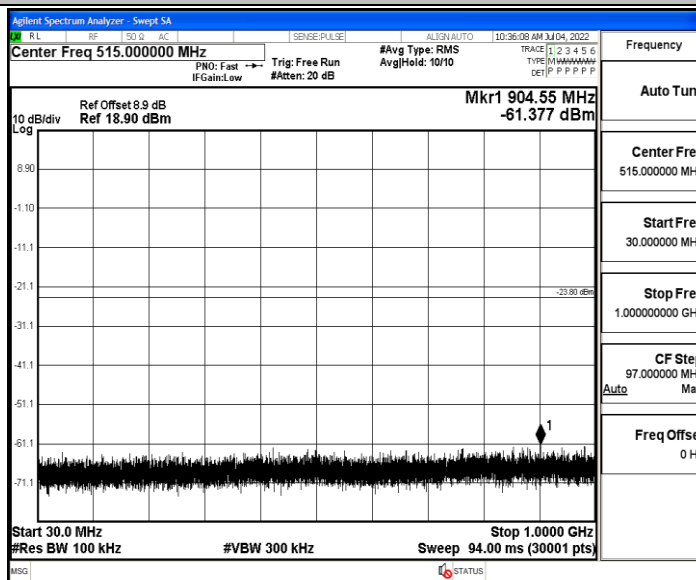
DH5_Ant1_2441_1000~26500



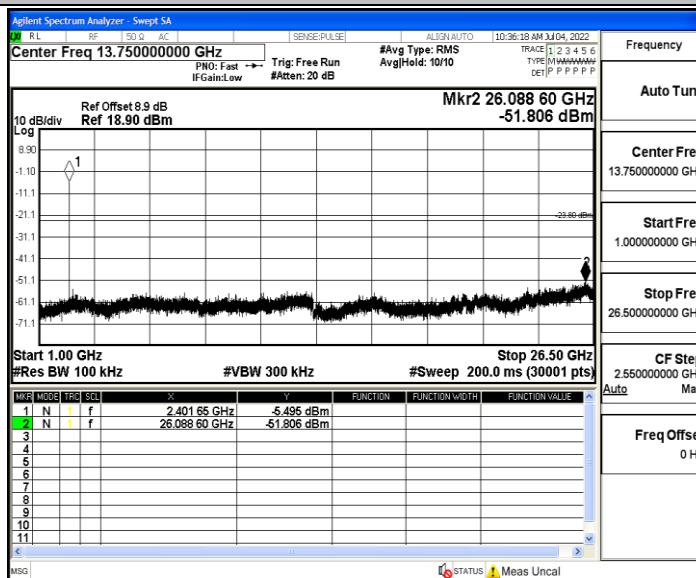
DH5_Ant1_2480_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference