

FCC Appendix RF Test Data

FCC ID : 2BF3Z-E03

Company : Shenzhen Taiyang Technology Co., Ltd

EUT : Smart Glasses

Model Number : E03

Report No. : CTA25060900702

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	0.957	2401.544	2402.501	---	---
		2441	0.945	2440.550	2441.495	---	---
		2480	0.933	2479.559	2480.492	---	---
2DH5	Ant1	2402	1.278	2401.382	2402.660	---	---
		2441	1.338	2440.340	2441.678	---	---
		2480	1.311	2479.355	2480.666	---	---
3DH5	Ant1	2402	1.311	2401.358	2402.669	---	---
		2441	1.311	2440.358	2441.669	---	---
		2480	1.266	2479.367	2480.633	---	---

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Atten: 20 dB

#Avg Type: RMS
Avg/Hold: 100/100

Frequency

Auto Tune

Center Freq
2.40200000 GHz

Start Freq
2.40050000 GHz

Stop Freq
2.40350000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

10 dB/div
Log

Ref Offset 0.3 dB
Ref 10.30 dBm

ΔMkr3 957 kHz
0.009 dB

Center 2.402000 GHz
#Res BW 30 kHz
#VBW 100 kHz
Sweep (#Swp) 3.200 ms (1001 pts)

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401544 GHz	-22.993 dBm			
2	N	1	f	2.402003 GHz	-3.165 dBm			
3	Δ	1	f (Δ)	957 kHz (Δ)	0.009 dB			

MSO

STATUS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

Trig: Free Run
#Atten: 20 dB

#Avg Type: RMS
Avg/Hold: 100/100

Frequency

Auto Tune

Center Freq
2.441000000 GHz

Start Freq
2.439500000 GHz

Stop Freq
2.442500000 GHz

CF Step
300.000 kHz
Man

Freq Offset
0 Hz

10 dB/div
Log

Ref Offset 0.3 dB
Ref 10.30 dBm

ΔMkr3 945 kHz
-0.351 dB

Center 2.441000 GHz
#Res BW 30 kHz
#VBW 100 kHz
Sweep (#Swp) 3.200 ms (1001 pts)

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440550 GHz	-22.101 dBm			
2	N	1	f	2.440926 GHz	-3.112 dBm			
3	Δ	1	f (Δ)	945 kHz (Δ)	-0.351 dB			

MSO

STATUS



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

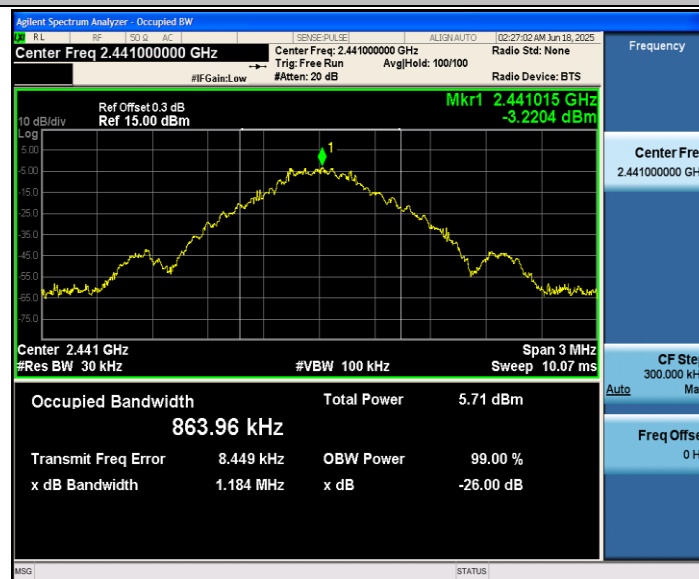
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86550	2401.5747	2402.4402	---	---
		2441	0.86396	2440.5765	2441.4404	---	---
		2480	0.87082	2479.5719	2480.4427	---	---
2DH5	Ant1	2402	1.1881	2401.4154	2402.6035	---	---
		2441	1.1860	2440.4178	2441.6038	---	---
		2480	1.1862	2479.4169	2480.6031	---	---
3DH5	Ant1	2402	1.1892	2401.4153	2402.6045	---	---
		2441	1.1904	2440.4149	2441.6053	---	---
		2480	1.1881	2479.4164	2480.6045	---	---

Test Graphs

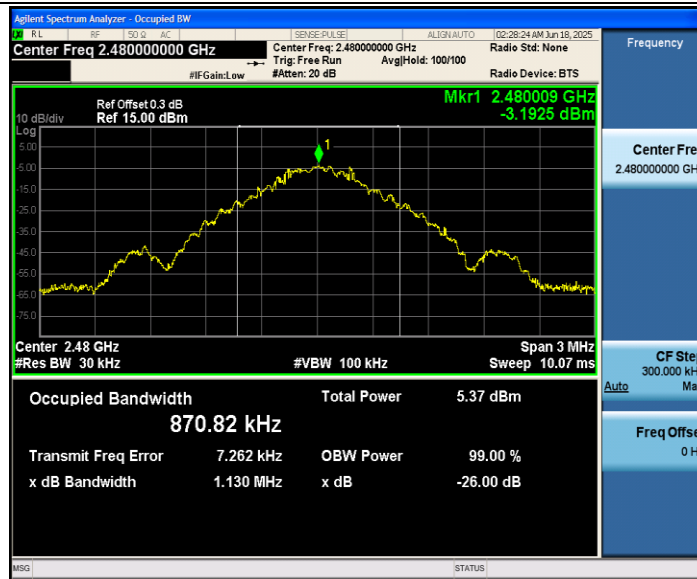
DH5_Ant1_2402



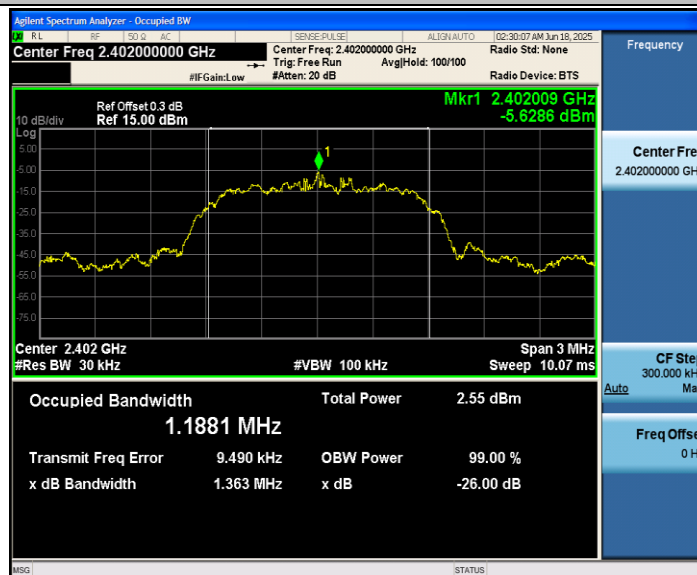
DH5_Ant1_2441



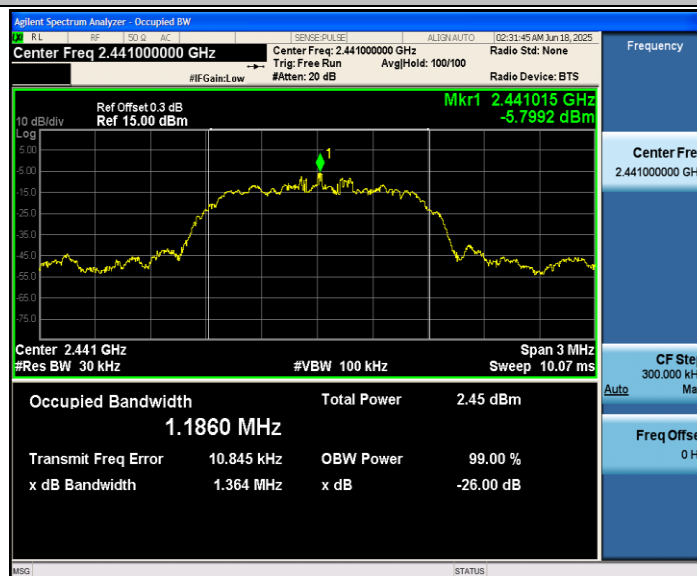
DH5_Ant1_2480



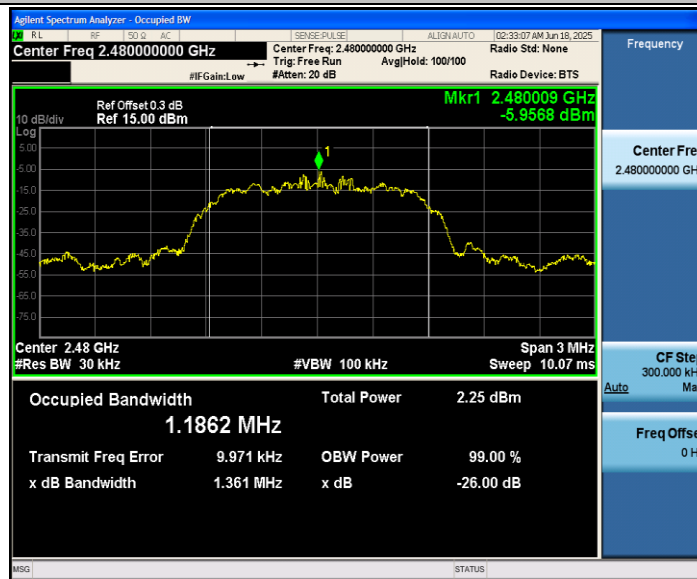
2DH5_Ant1_2402



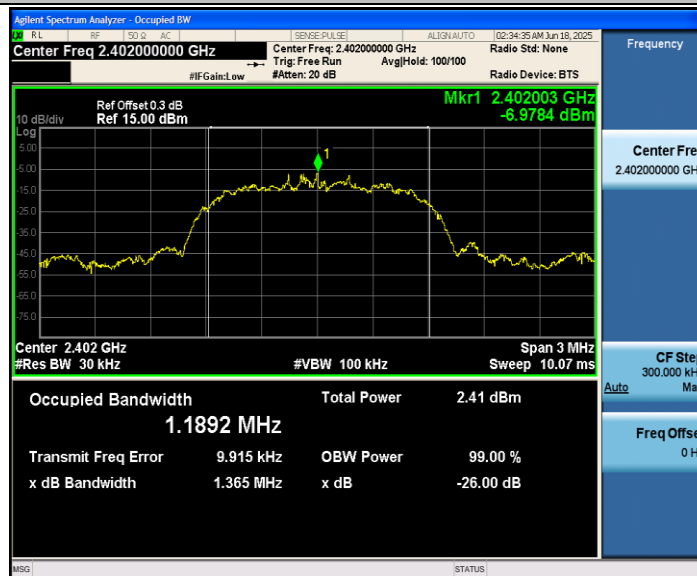
2DH5_Ant1_2441



2DH5_Ant1_2480



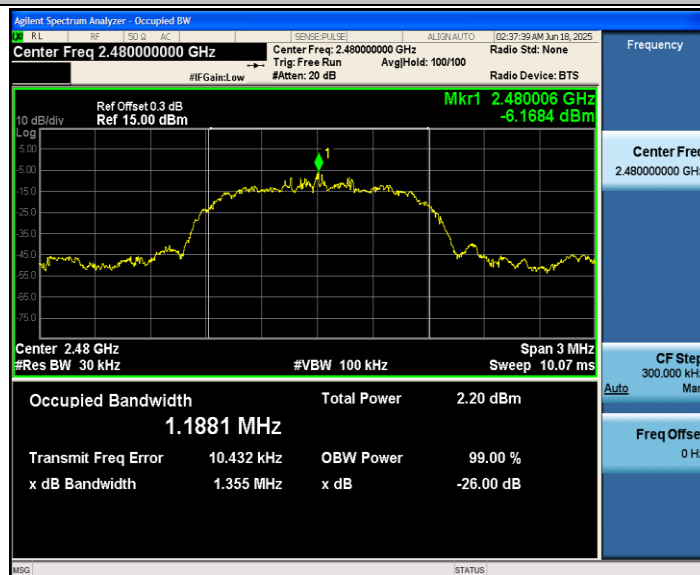
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-0.15	≤20.97	PASS
		2441	-0.41	≤20.97	PASS
		2480	-0.49	≤20.97	PASS
2DH5	Ant1	2402	-1.03	≤20.97	PASS
		2441	-1.19	≤20.97	PASS
		2480	-1.31	≤20.97	PASS
3DH5	Ant1	2402	-0.61	≤20.97	PASS
		2441	-0.81	≤20.97	PASS
		2480	-0.87	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.012	≥ 0.957	PASS
2DH5	Ant1	Hop	1.188	≥ 0.892	PASS
3DH5	Ant1	Hop	1.3	≥ 0.874	PASS

Figure 10 shows the spectrum of the DH5_Ant1_Hop signal. The spectrum is displayed on a log scale, with the frequency range from 2.440000 GHz to 2.444000 GHz. The signal is centered at 2.442000000 GHz. The spectrum shows a peak at 2.442000000 GHz with a magnitude of -0.02 dB. The spectrum also shows a peak at 2.442000000 GHz with a magnitude of 1.012 MHz. The spectrum is labeled "DH5_Ant1_Hop" and "Spectrum Analyzer - Sweep SA".

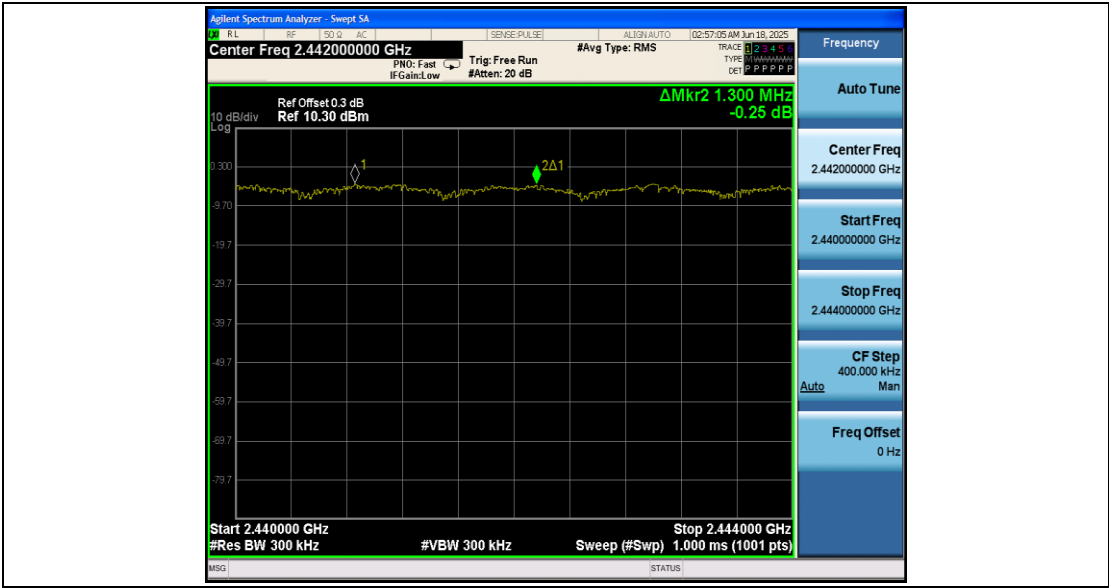
Parameter	Value
Center Freq	2.442000000 GHz
Start Freq	2.440000000 GHz
Stop Freq	2.444000000 GHz
CF Step	400.000 kHz
Freq Offset	0 Hz

Figure 11 shows the spectrum of the 2DH5_Ant1_Hop signal. The spectrum is displayed on a log scale, with the frequency range from 2.440000 GHz to 2.444000 GHz. The signal is centered at 2.442000000 GHz. The spectrum shows a peak at 2.442000000 GHz with a magnitude of 0.32 dB. The spectrum also shows a peak at 2.442000000 GHz with a magnitude of 1.188 MHz. The spectrum is labeled "2DH5_Ant1_Hop" and "Spectrum Analyzer - Sweep SA".

Parameter	Value
Center Freq	2.442000000 GHz
Start Freq	2.440000000 GHz
Stop Freq	2.444000000 GHz
CF Step	400.000 kHz
Freq Offset	0 Hz

Figure 12 shows the spectrum of the 3DH5_Ant1_Hop signal. The spectrum is displayed on a log scale, with the frequency range from 2.440000 GHz to 2.444000 GHz. The signal is centered at 2.442000000 GHz. The spectrum shows a peak at 2.442000000 GHz with a magnitude of 0.32 dB. The spectrum also shows a peak at 2.442000000 GHz with a magnitude of 1.188 MHz. The spectrum is labeled "3DH5_Ant1_Hop" and "Spectrum Analyzer - Sweep SA".

Parameter	Value
Center Freq	2.442000000 GHz
Start Freq	2.440000000 GHz
Stop Freq	2.444000000 GHz
CF Step	400.000 kHz
Freq Offset	0 Hz

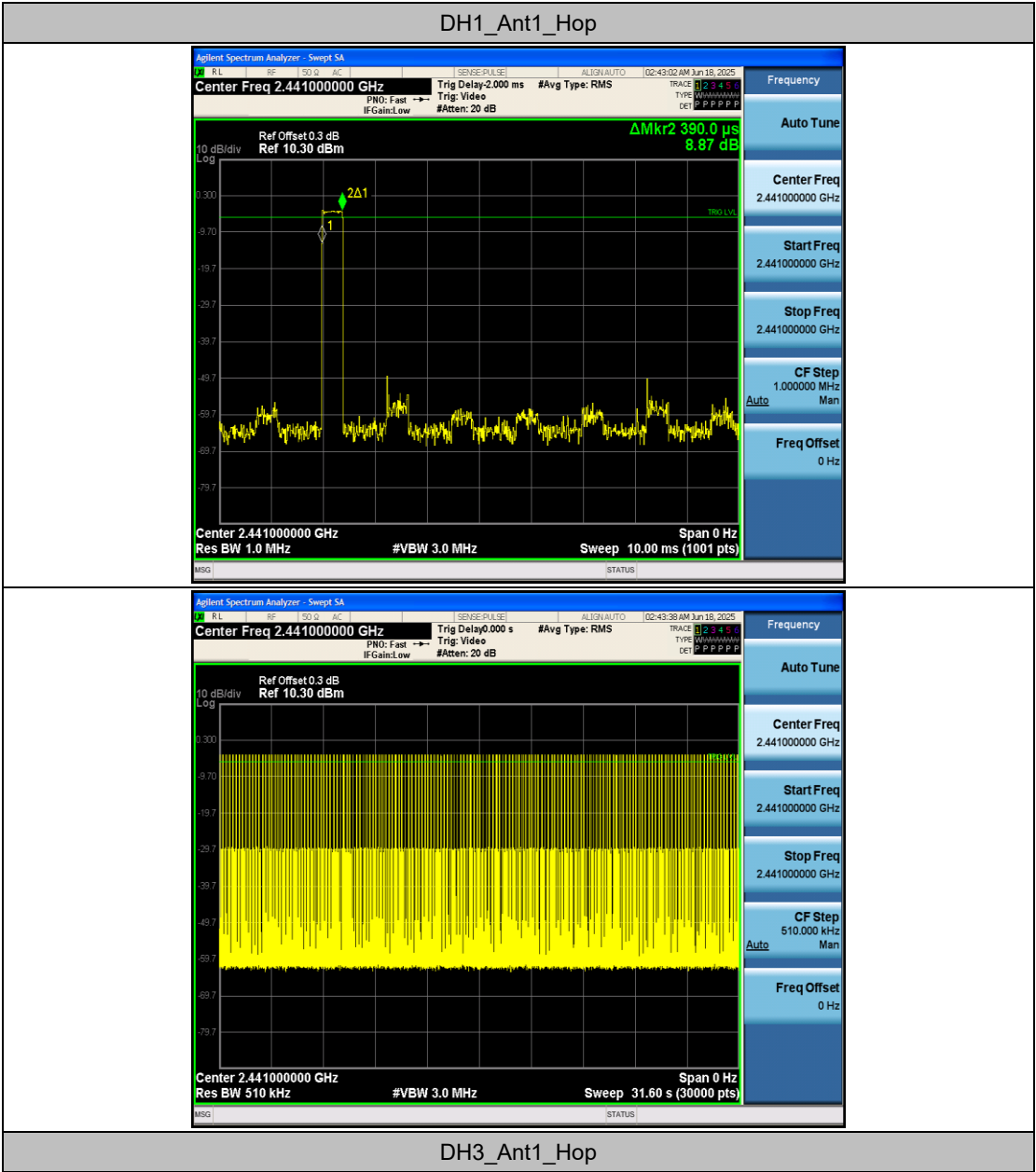


Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.640	165	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.900	107	0.31	≤0.4	PASS
2DH1	Ant1	Hop	0.380	318	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.640	154	0.253	≤0.4	PASS
2DH5	Ant1	Hop	2.890	118	0.341	≤0.4	PASS
3DH1	Ant1	Hop	0.390	320	0.125	≤0.4	PASS
3DH3	Ant1	Hop	1.650	172	0.284	≤0.4	PASS
3DH5	Ant1	Hop	2.900	106	0.307	≤0.4	PASS

Test Graphs



Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 0.3 dB
Ref 10.30 dBm

10 dB/div
Log

3.300
-8.70
-18.7
-28.7
-38.7
-48.7
-58.7
-68.7
-78.7

Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Sweep 31.60 s (30000 pts)

MSG STATUS

SENSE: PULSE

Trig Delay 0.000 s
Trig: Video
#Atten: 20 dB

#Avg Type: RMS

02:43:38 AM Jun 18, 2025

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P P P P P P P

Auto Tune

Center Freq
2.441000000 GHz

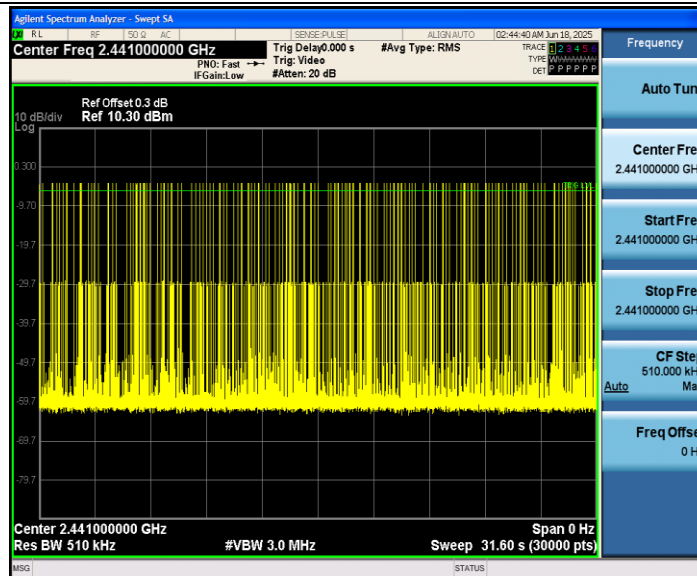
Start Freq
2.441000000 GHz

Stop Freq
2.441000000 GHz

CF Step
510.000 kHz
Auto Man

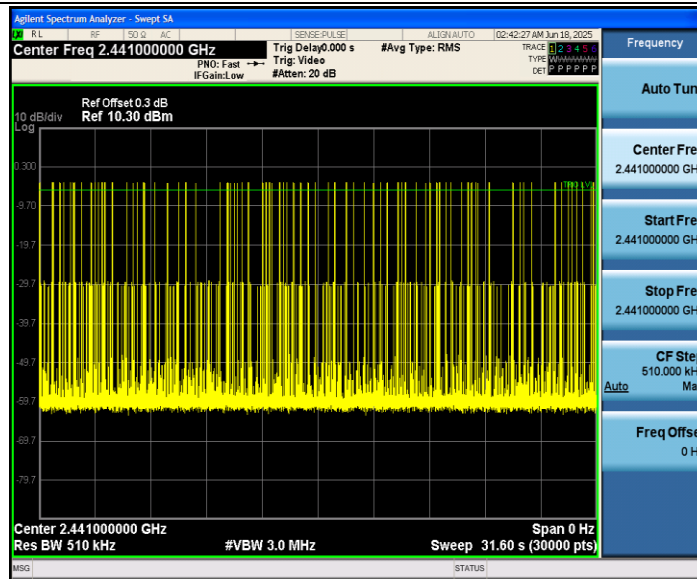
Freq Offset
0 Hz

DH3_Ant1_Hop

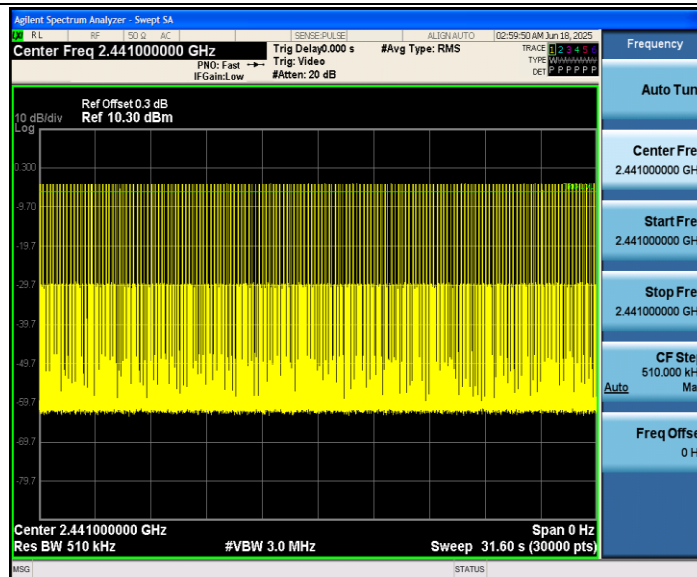
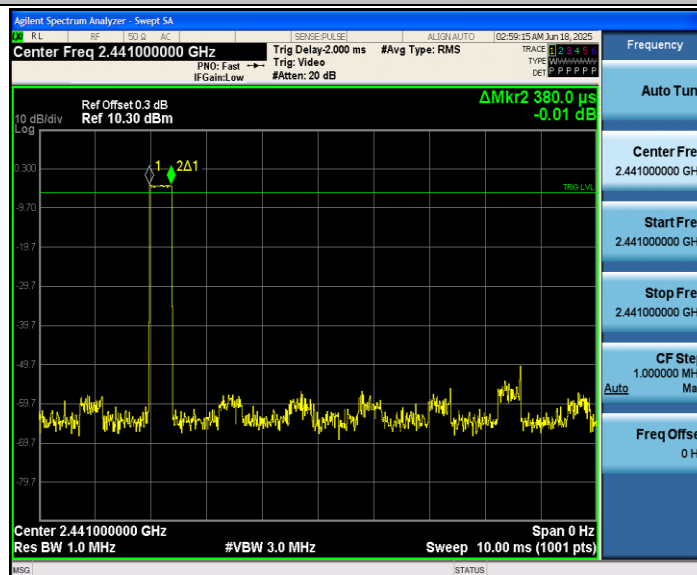


DH5_Ant1_Hop

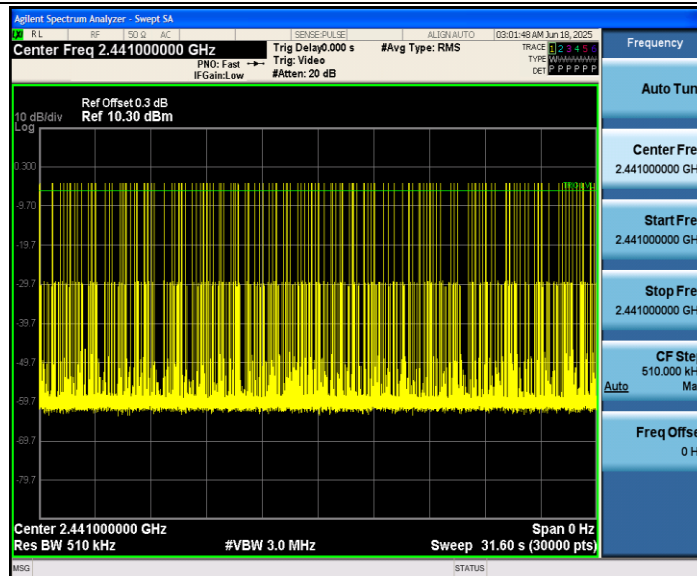




2DH1_Ant1_Hop

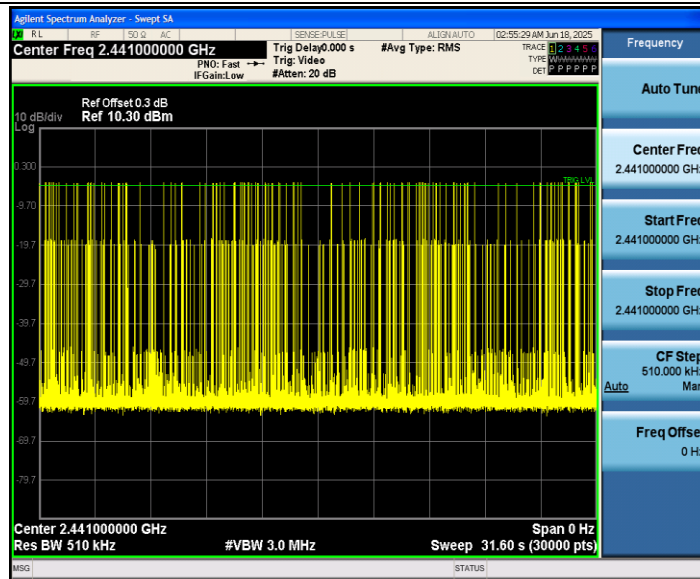


2DH3_Ant1_Hop

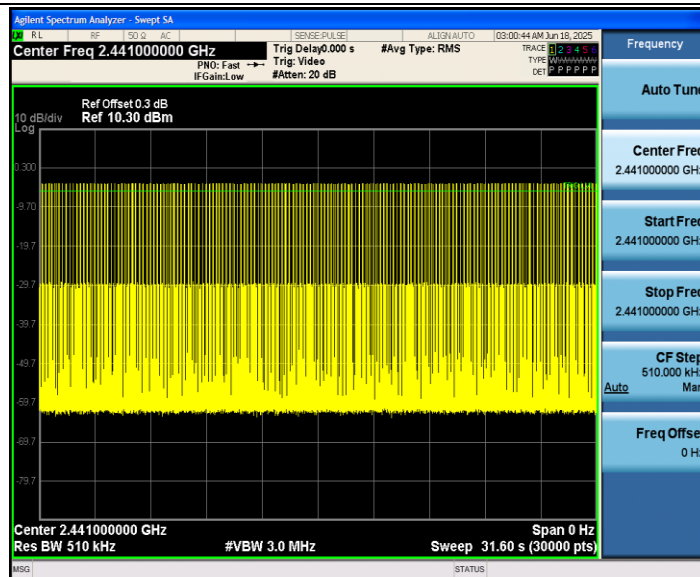
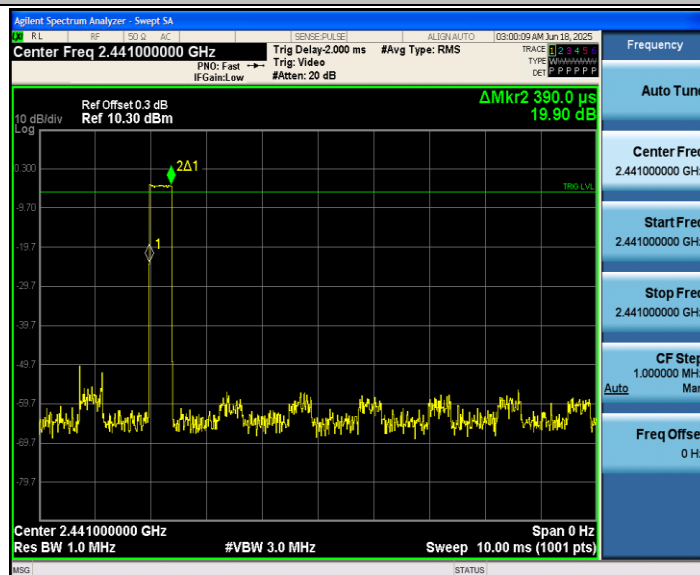


2DH5_Ant1_Hop

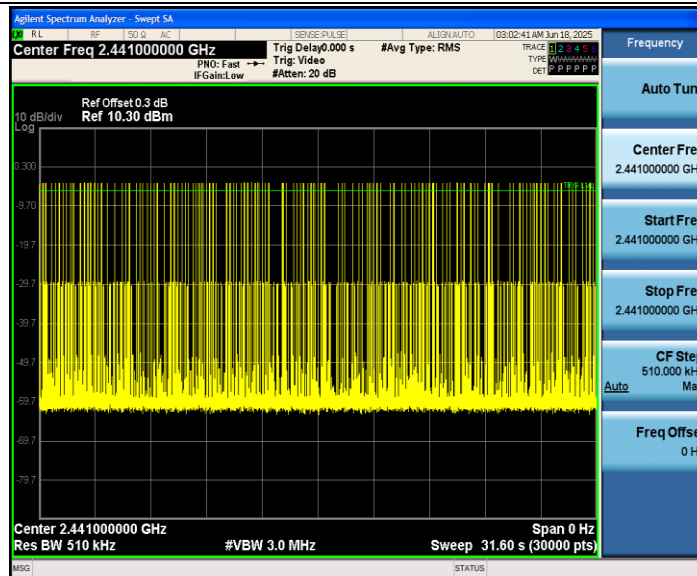
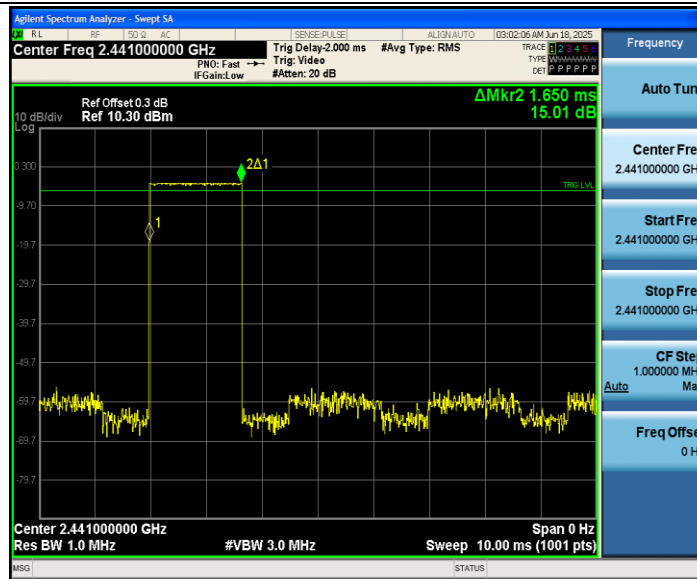




3DH1_Ant1_Hop

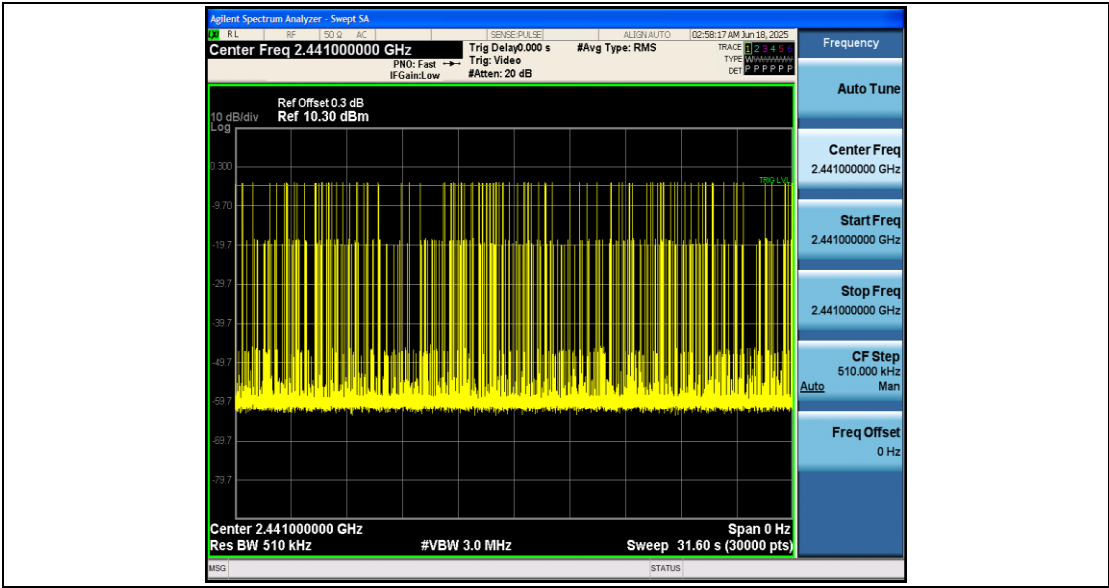


3DH3_Ant1_Hop



3DH5_Ant1_Hop





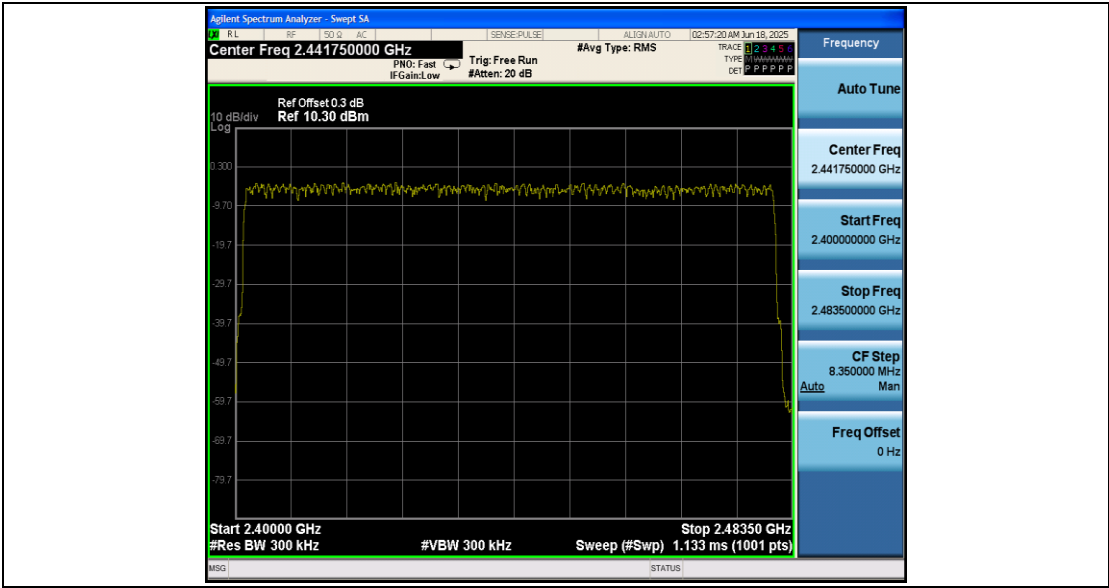
Appendix F: Number of hopping channels

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



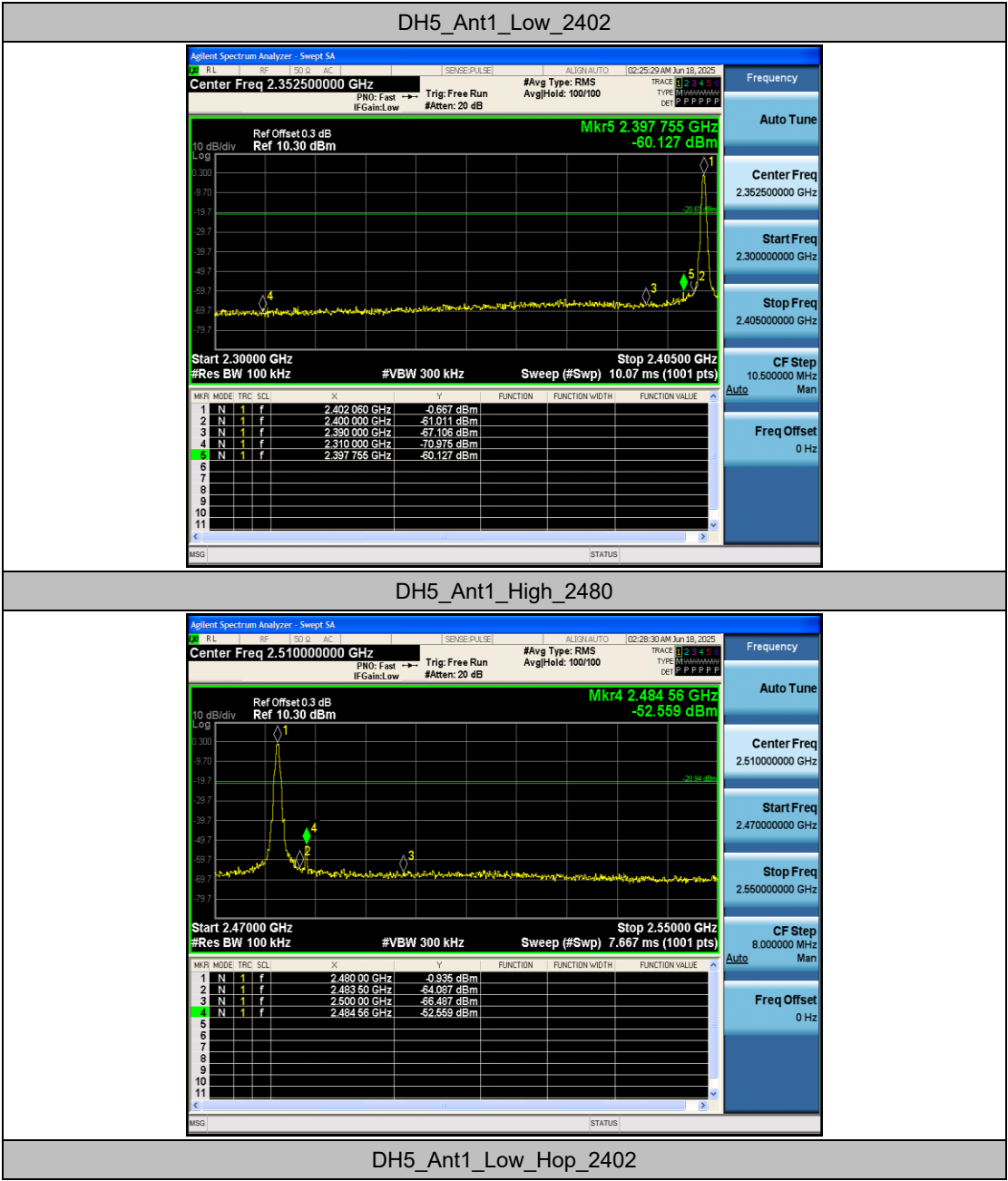


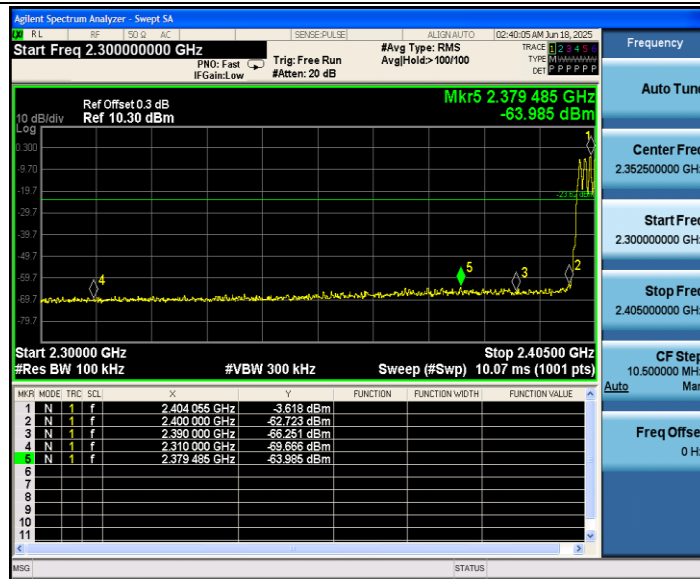
Appendix G: Band edge measurements

Test Result

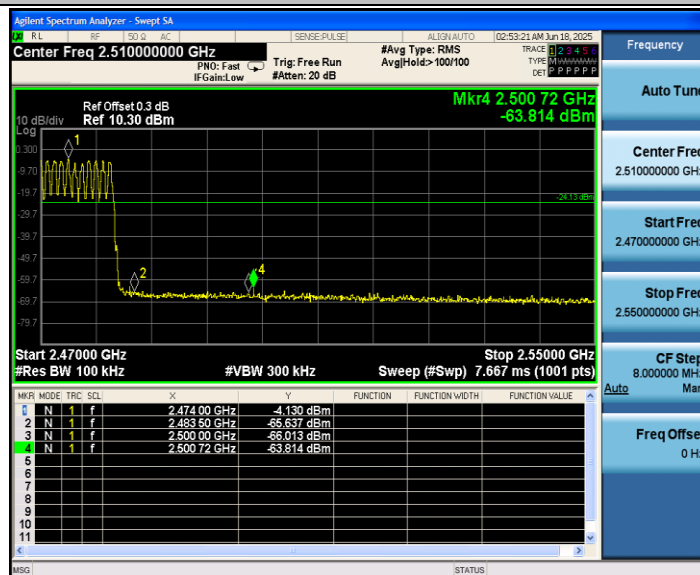
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.67	-60.13	≤-20.67	PASS
		High	2480	-0.94	-52.56	≤-20.94	PASS
		Low	Hop_2402	-3.62	-63.99	≤-23.62	PASS
		High	Hop_2480	-4.13	-63.81	≤-24.13	PASS
2DH5	Ant1	Low	2402	-5.36	-60.51	≤-25.36	PASS
		High	2480	-3.85	-62.08	≤-23.85	PASS
		Low	Hop_2402	-6.48	-63.91	≤-26.48	PASS
		High	Hop_2480	-4.25	-63.88	≤-24.25	PASS
3DH5	Ant1	Low	2402	-4.20	-59.74	≤-24.2	PASS
		High	2480	-4.55	-63.82	≤-24.55	PASS
		Low	Hop_2402	-6.47	-62.27	≤-26.47	PASS
		High	Hop_2480	-4.05	-64.1	≤-24.05	PASS

Test Graphs

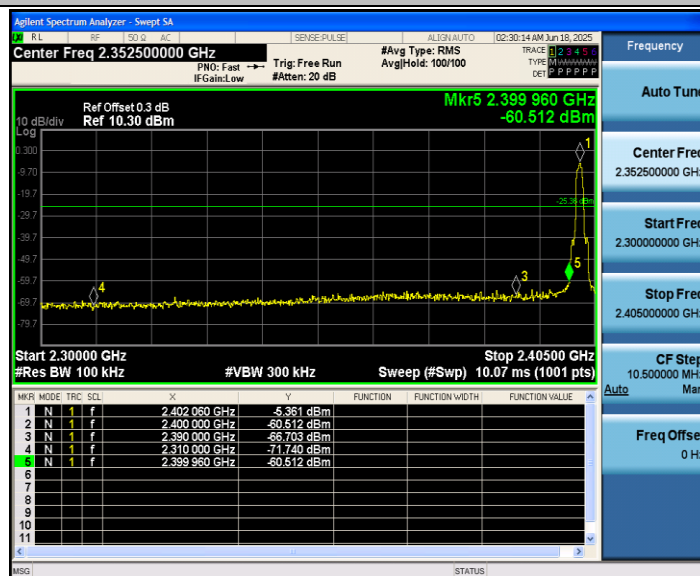




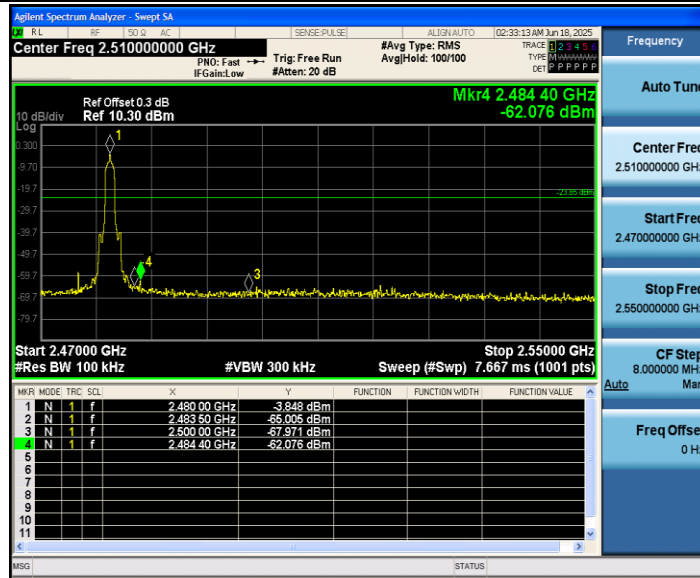
DH5_Ant1_High_Hop_2480



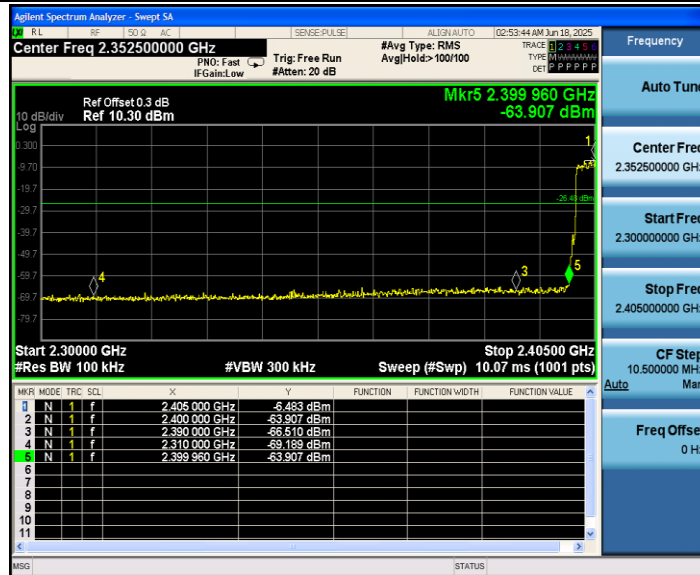
2DH5_Ant1_Low_2402



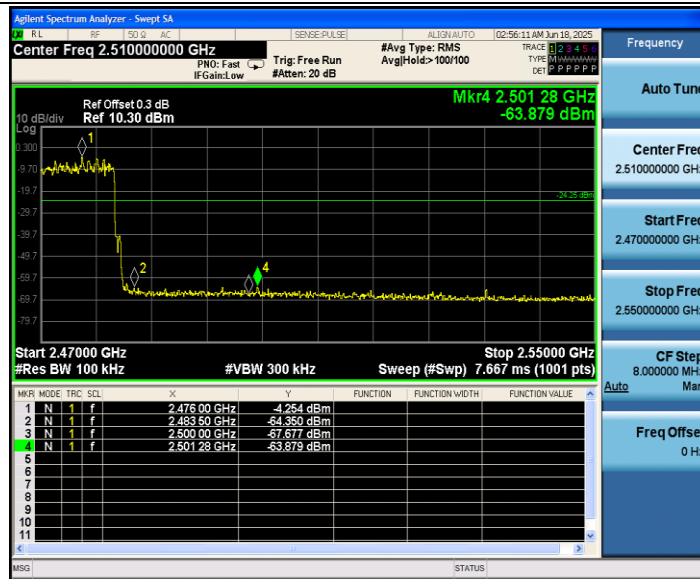
2DH5_Ant1_High_2480



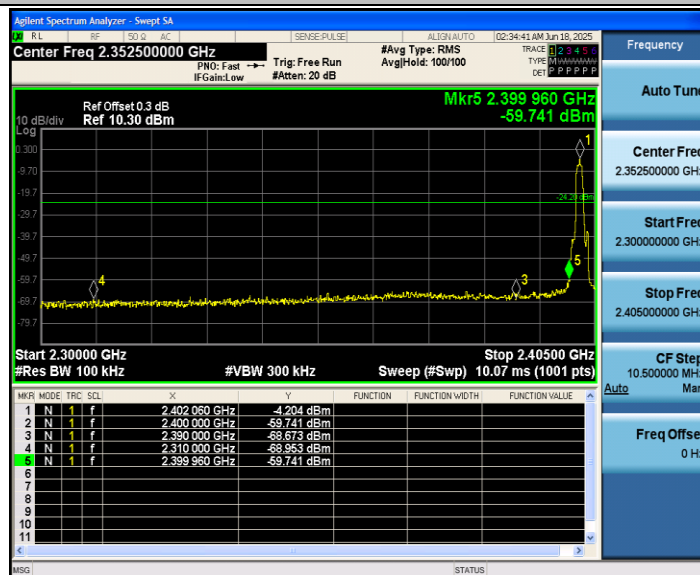
2DH5_Ant1_Low_Hop_2402



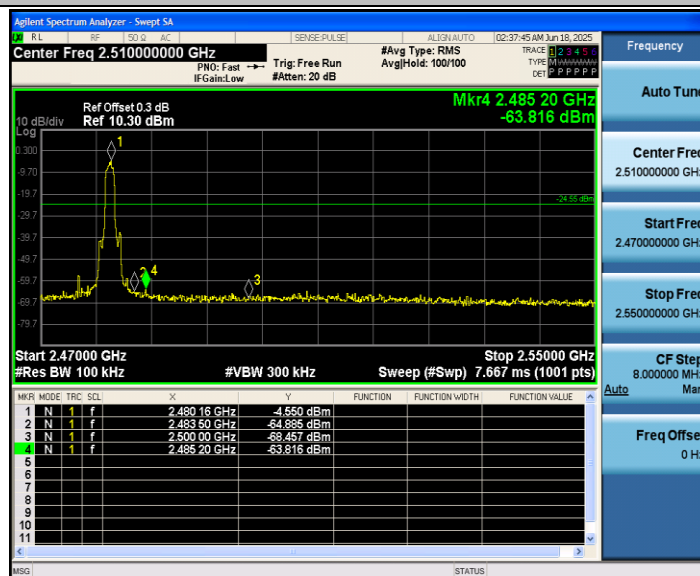
2DH5_Ant1_High_Hop_2480



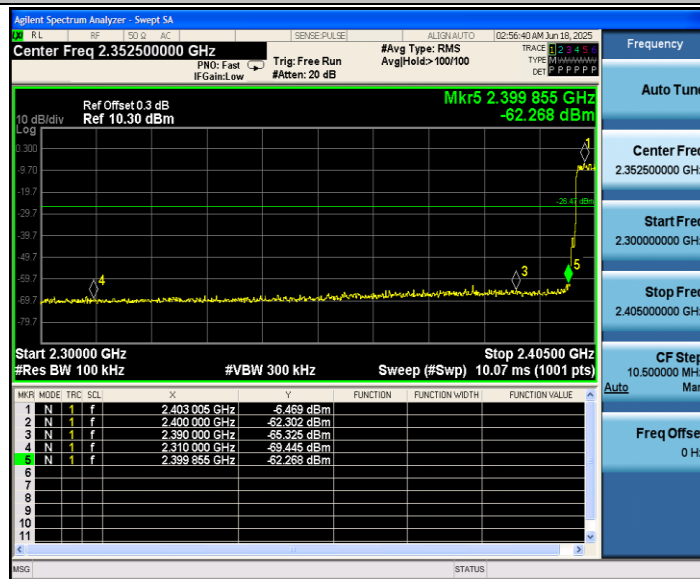
3DH5_Ant1_Low_2402



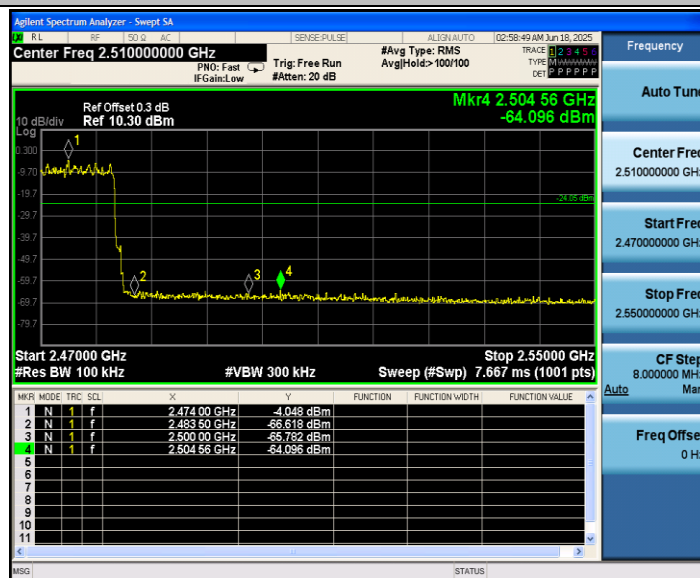
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

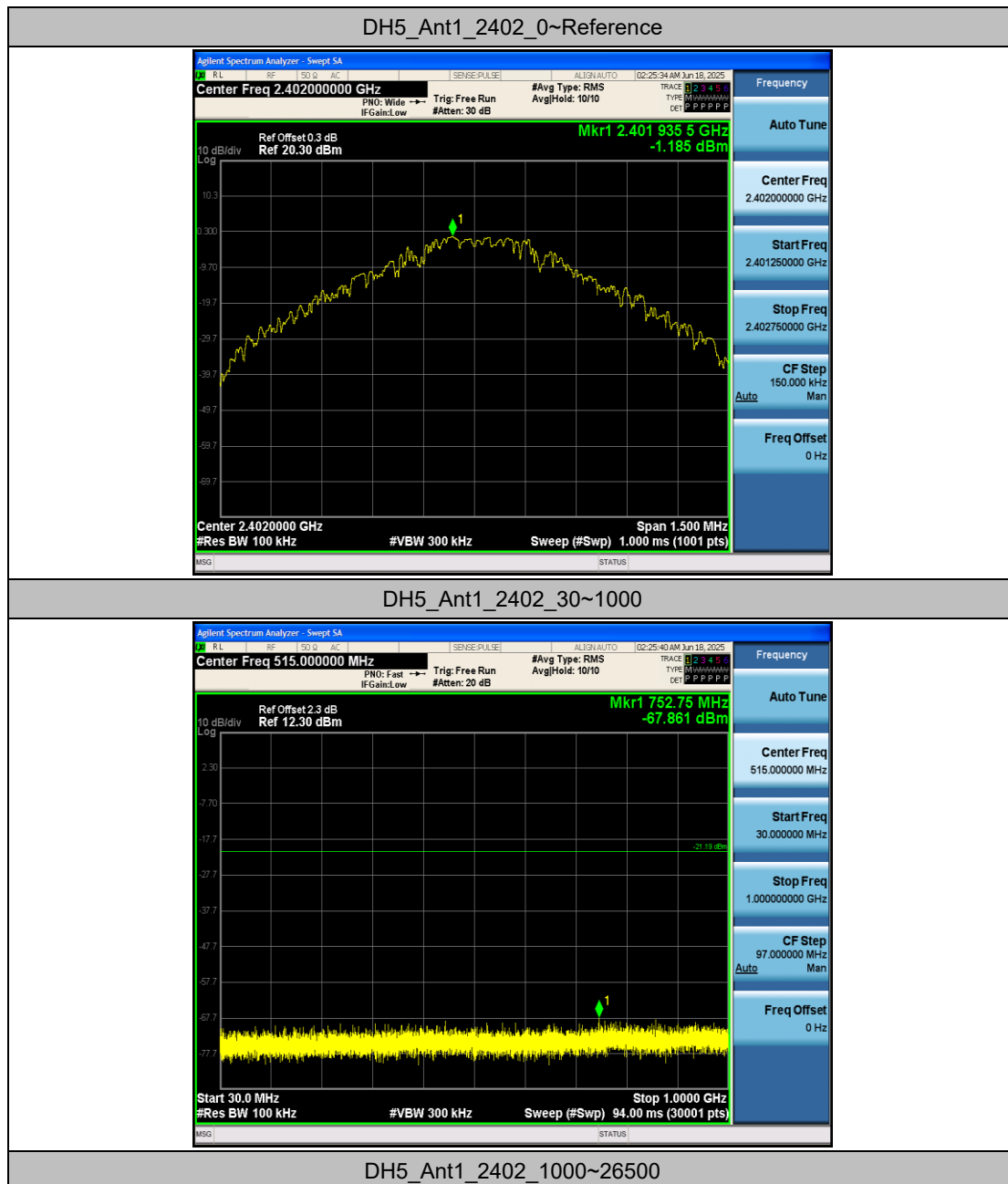


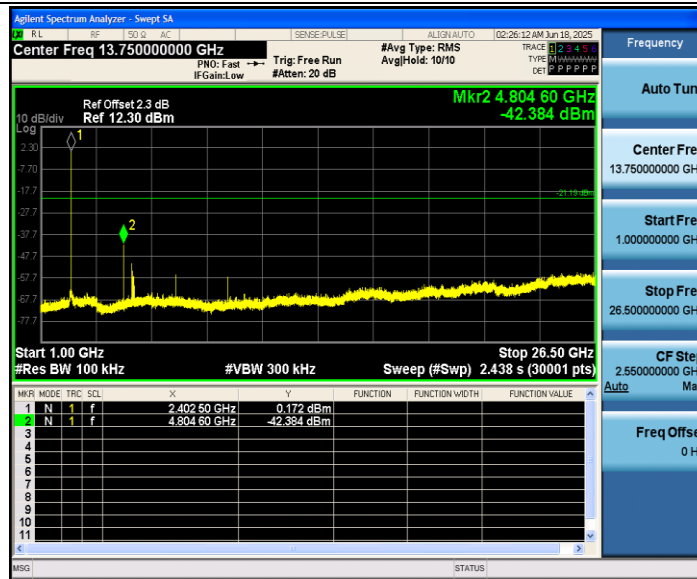
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-67.86	≤-21.19	PASS
			1000~26500	-1.19	-42.38	≤-21.19	PASS
		2441	Reference	-1.33	-1.33	---	PASS
			30~1000	-1.33	-68.18	≤-21.33	PASS
			1000~26500	-1.33	-44.51	≤-21.33	PASS
		2480	Reference	-1.66	-1.66	---	PASS
			30~1000	-1.66	-68.19	≤-21.66	PASS
			1000~26500	-1.66	-45.12	≤-21.66	PASS
2DH5	Ant1	2402	Reference	-5.71	-5.71	---	PASS
			30~1000	-5.71	-66.7	≤-25.71	PASS
			1000~26500	-5.71	-50.38	≤-25.71	PASS
		2441	Reference	-5.98	-5.98	---	PASS
			30~1000	-5.98	-68.13	≤-25.98	PASS
			1000~26500	-5.98	-47.88	≤-25.98	PASS
		2480	Reference	-7.61	-7.61	---	PASS
			30~1000	-7.61	-67.96	≤-27.61	PASS
			1000~26500	-7.61	-49.21	≤-27.61	PASS
3DH5	Ant1	2402	Reference	-5.28	-5.28	---	PASS
			30~1000	-5.28	-67.61	≤-25.28	PASS
			1000~26500	-5.28	-50.92	≤-25.28	PASS
		2441	Reference	-4.11	-4.11	---	PASS
			30~1000	-4.11	-67.93	≤-24.11	PASS
			1000~26500	-4.11	-50.9	≤-24.11	PASS
		2480	Reference	-4.16	-4.16	---	PASS
			30~1000	-4.16	-67.94	≤-24.16	PASS
			1000~26500	-4.16	-48.81	≤-24.16	PASS

Test Graphs

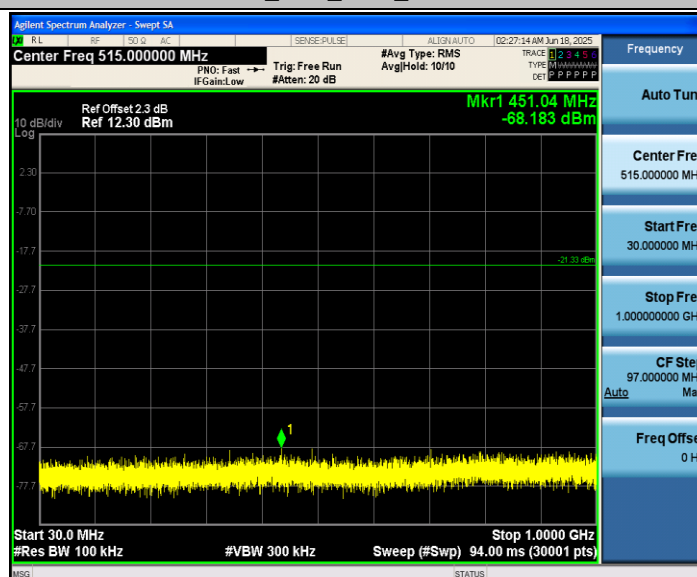




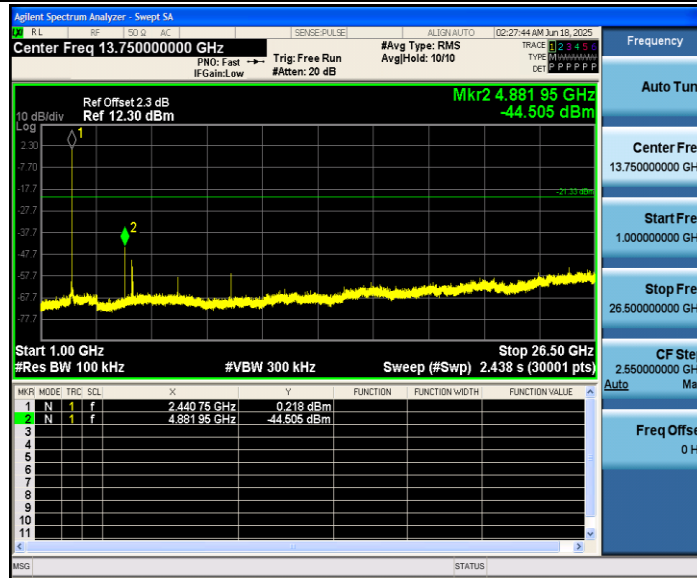
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



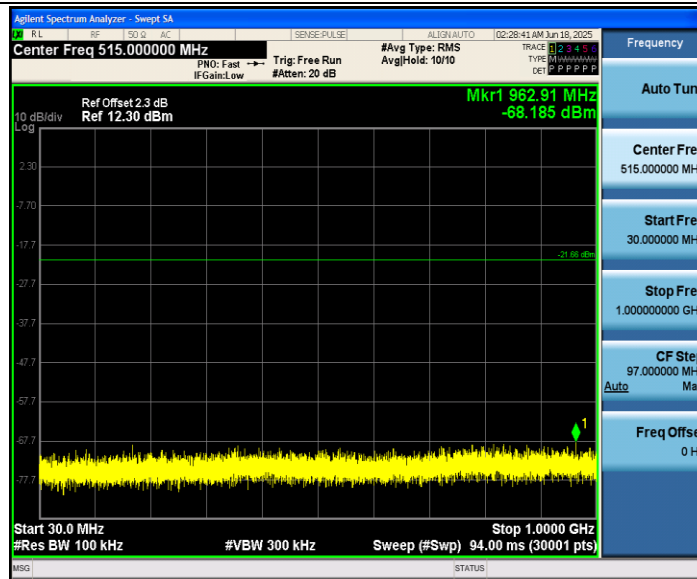
DH5_Ant1_2441_1000~26500



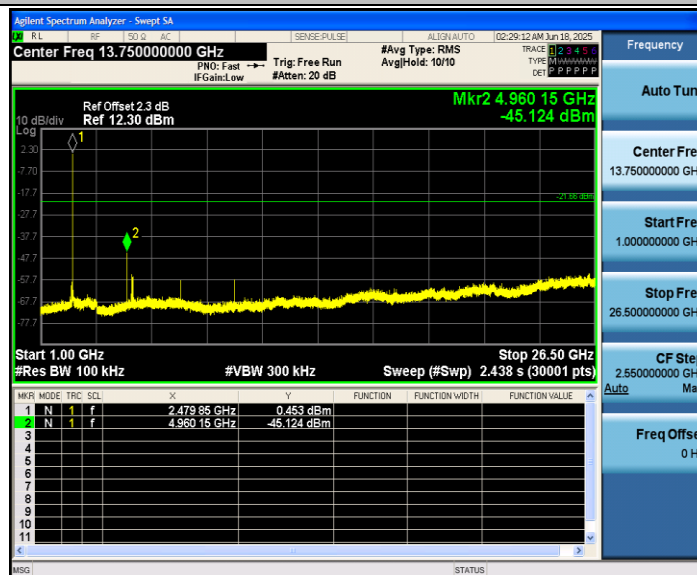
DH5_Ant1_2480_0~Reference



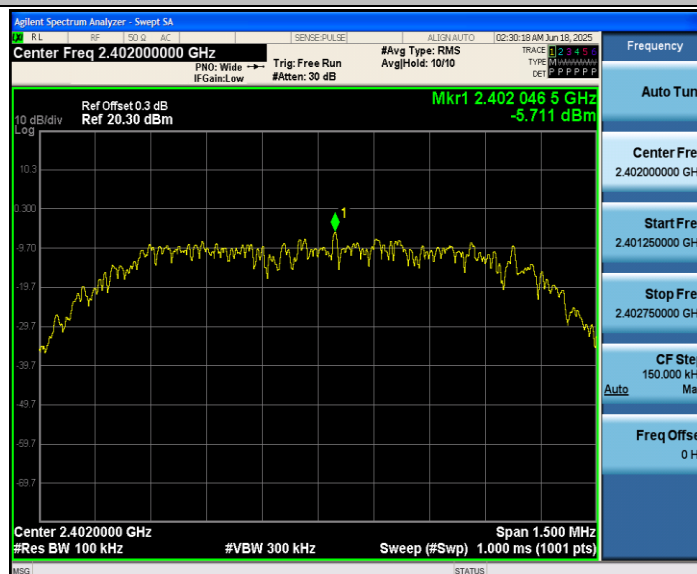
DH5_Ant1_2480_30~1000



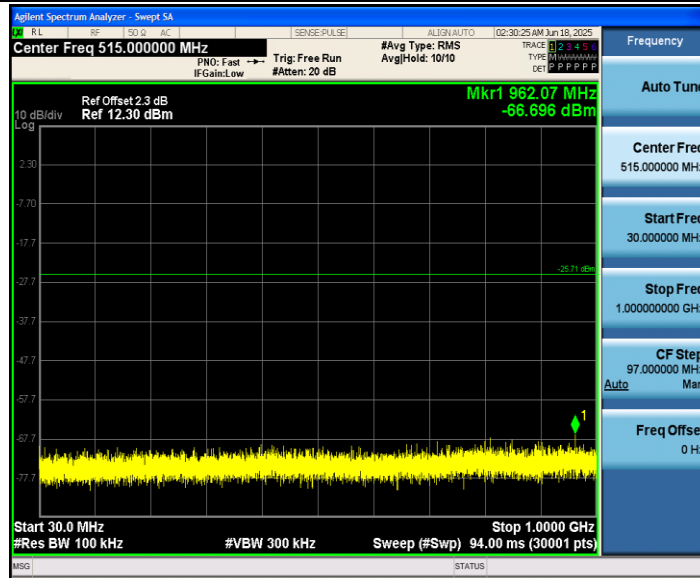
DH5_Ant1_2480_1000~26500



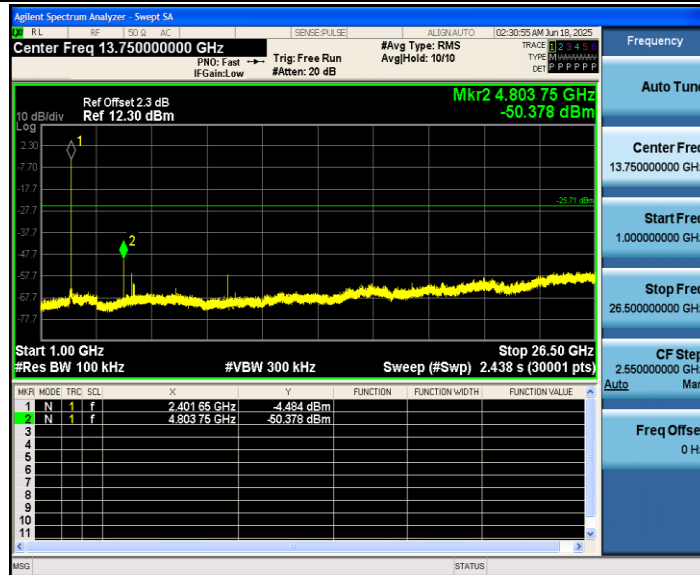
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference