

FCC Appendix RF Test Data

FCC ID : 2BKMA-SV01

Company : Shenzhen G-Tide Technology Co.,Ltd.

EUT : Bluetooth speaker

Model Number : SV01

Report No. : CTA25071604501

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	0.954	2401.547	2402.501	---	---
		2441	0.945	2440.547	2441.492	---	---
		2480	0.954	2479.547	2480.501	---	---
2DH5	Ant1	2402	1.329	2401.343	2402.672	---	---
		2441	1.281	2440.379	2441.660	---	---
		2480	1.284	2479.379	2480.663	---	---

DH5_Ant1_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 1 dB
Ref 11.00 dBm

Trig: Free Run
#Atten: 20 dB

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

Span 3.000 MHz

#Res BW 30 kHz

#VBW 100 kHz

Sweep (#Swp) 3.200 ms (1001 pts)

ΔMkr3 954 kHz
0.024 dB

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401547 GHz	-21.853 dBm			
2	N	1	f	2.402003 GHz	-1.918 dBm			
3	Δ	1	f (Δ)	954 kHz (Δ)	0.024 dB			

DH5_Ant1_2441

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.441000000 GHz

Ref Offset 1 dB
Ref 11.00 dBm

Trig: Free Run
#Atten: 20 dB

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

Span 3.000 MHz

#Res BW 30 kHz

#VBW 100 kHz

Sweep (#Swp) 3.200 ms (1001 pts)

ΔMkr3 945 kHz
-0.292 dB

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440547 GHz	-21.808 dBm			
2	N	1	f	2.440928 GHz	-2.459 dBm			
3	Δ	1	f (Δ)	945 kHz (Δ)	-0.292 dB			



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

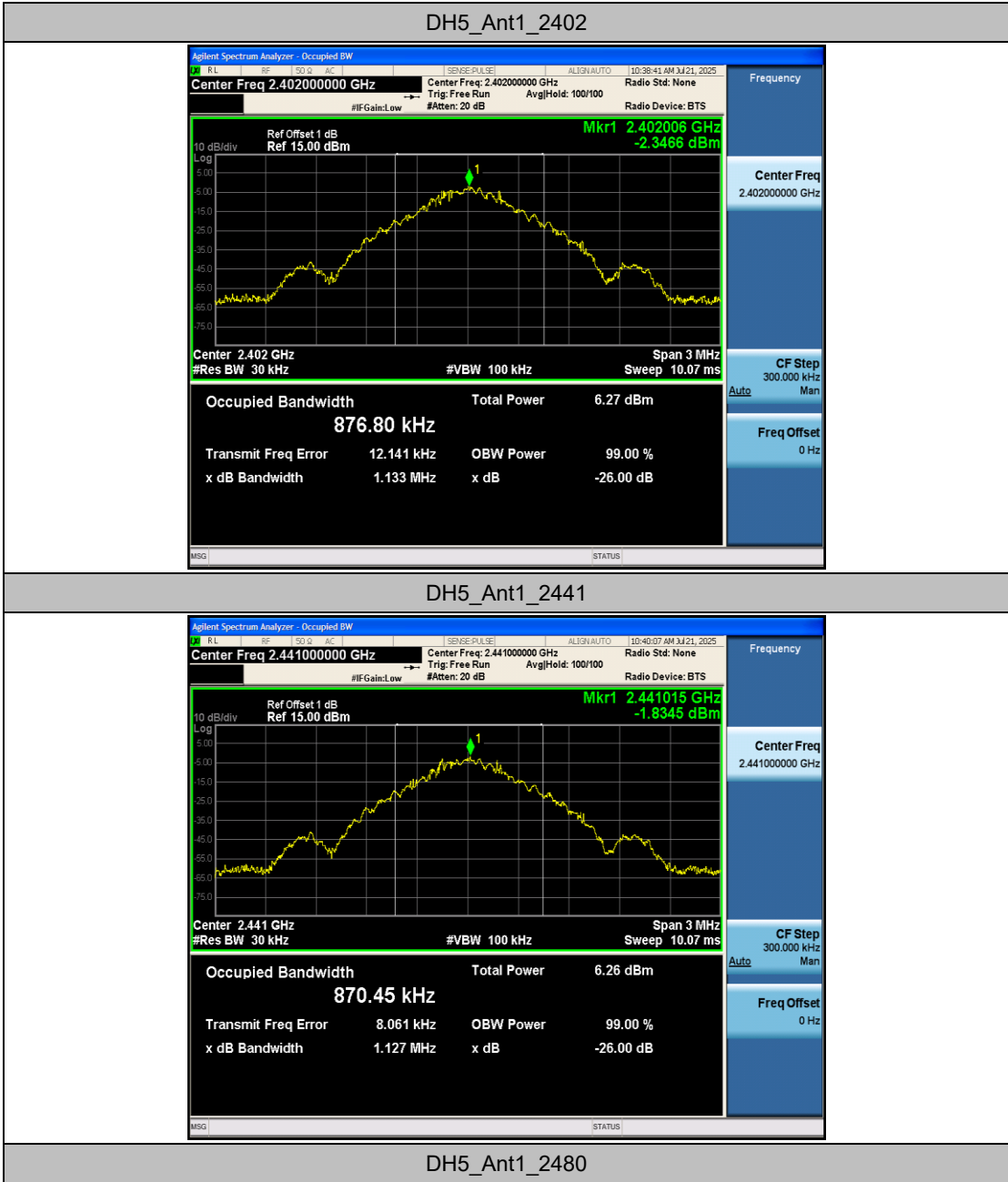


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87680	2401.5737	2402.4505	---	---
		2441	0.87045	2440.5728	2441.4433	---	---
		2480	0.86928	2479.5739	2480.4432	---	---
2DH5	Ant1	2402	1.1855	2401.4162	2402.6017	---	---
		2441	1.1916	2440.4148	2441.6064	---	---
		2480	1.1913	2479.4157	2480.6070	---	---

Test Graphs

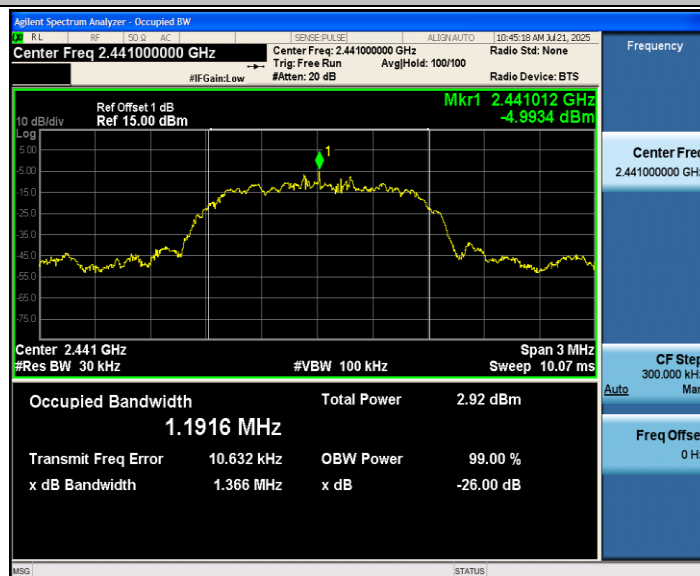




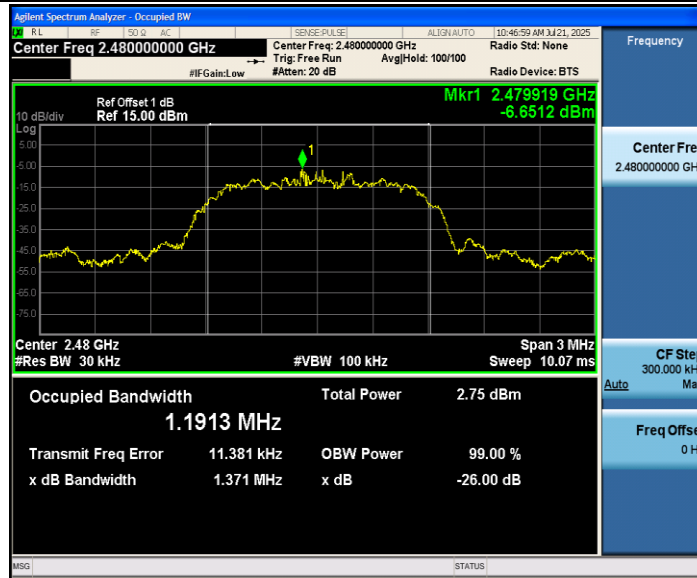
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_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	0.47	≤20.97	PASS
		2441	0.33	≤20.97	PASS
		2480	0.32	≤20.97	PASS
2DH5	Ant1	2402	-0.34	≤20.97	PASS
		2441	-0.52	≤20.97	PASS
		2480	-0.53	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.028	≥ 0.954	PASS
2DH5	Ant1	Hop	0.98	≥ 0.886	PASS

Test Graphs

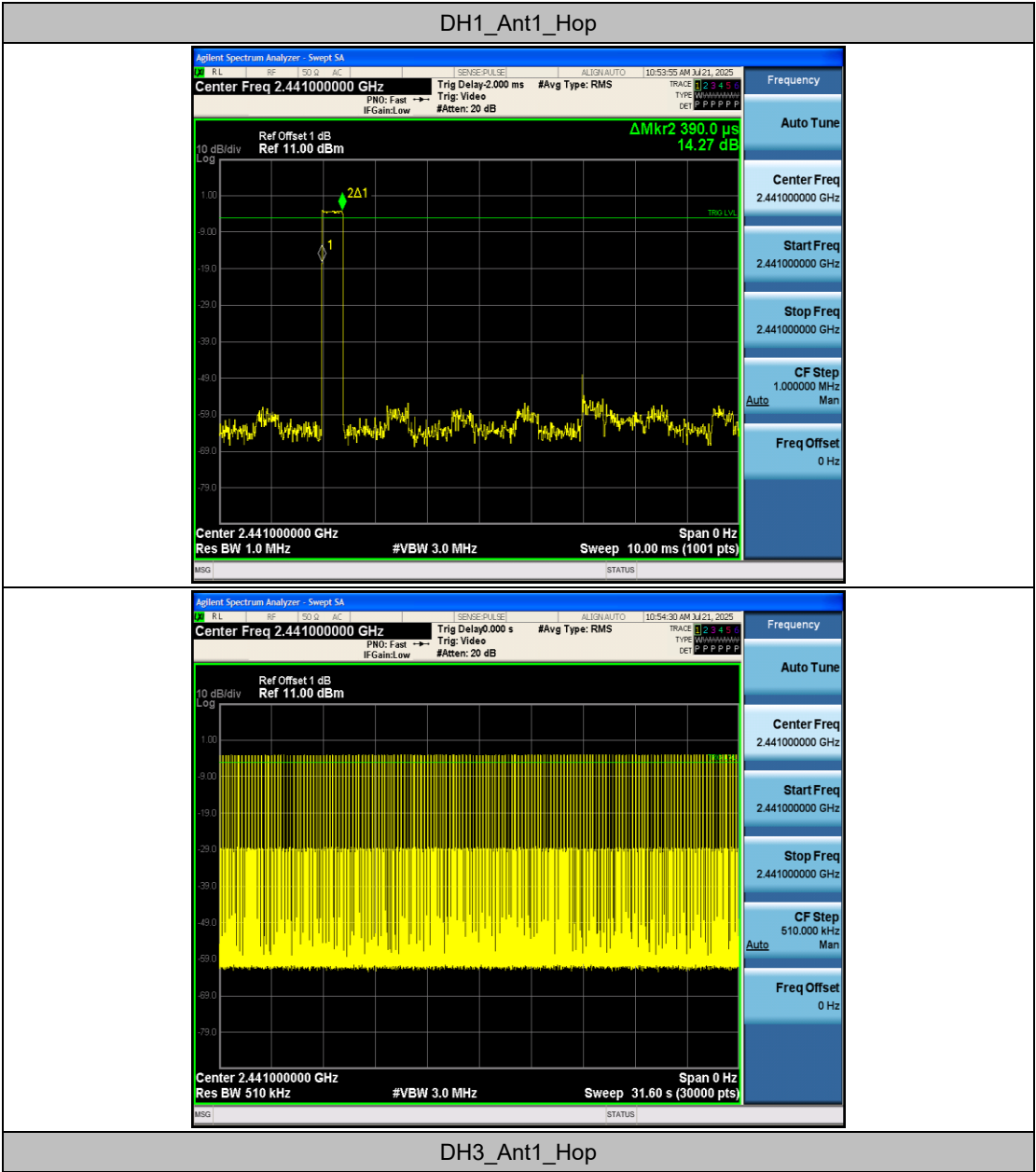


Appendix E: Time of occupancy

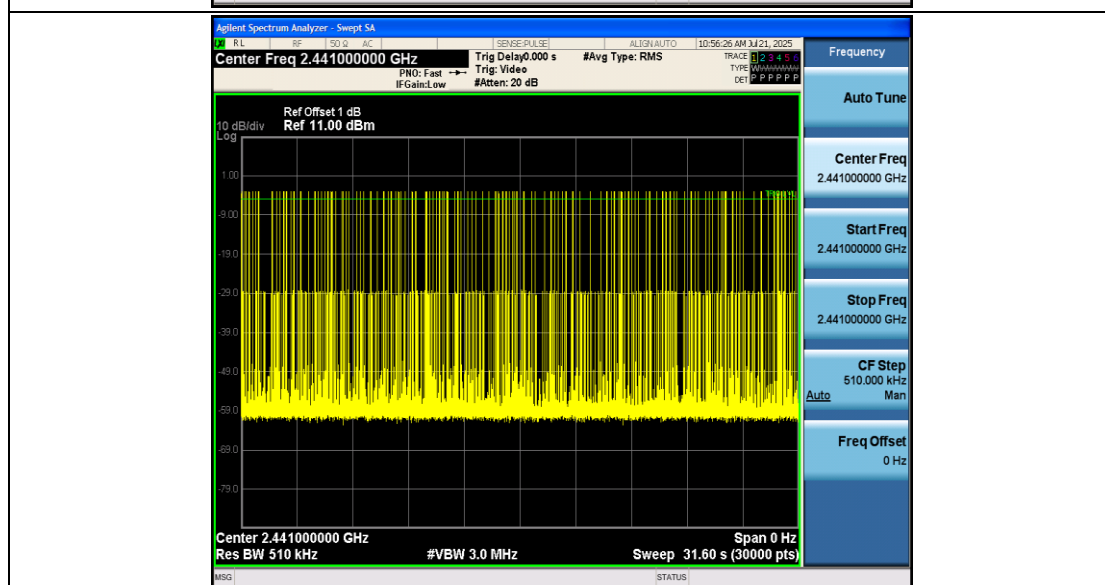
Test Result

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	162	0.266	≤0.4	PASS
DH5	Ant1	Hop	2.890	118	0.341	≤0.4	PASS
2DH1	Ant1	Hop	0.390	319	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.640	172	0.282	≤0.4	PASS
2DH5	Ant1	Hop	2.900	118	0.342	≤0.4	PASS

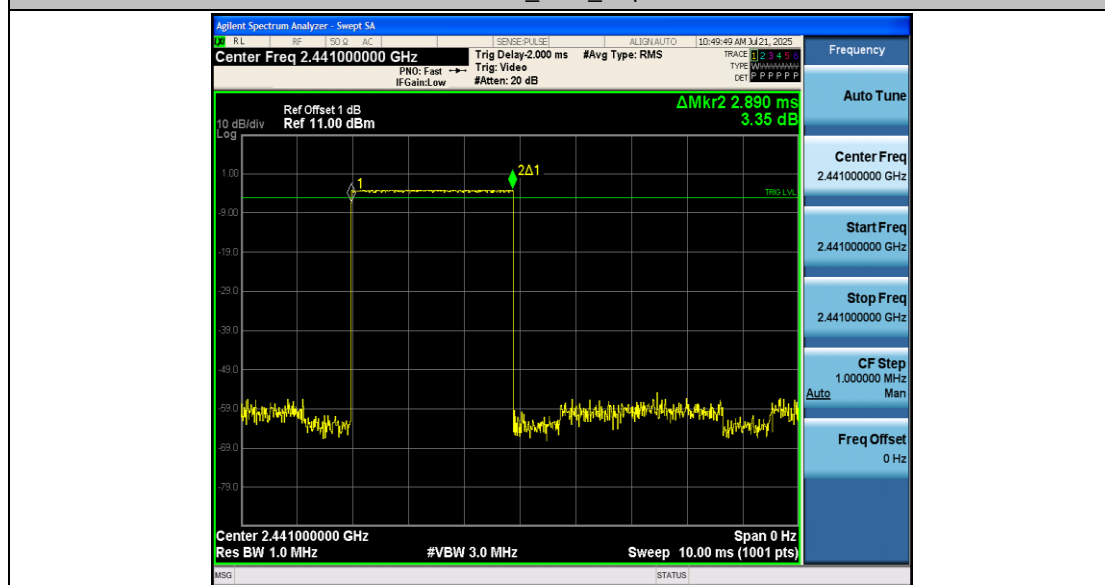
Test Graphs

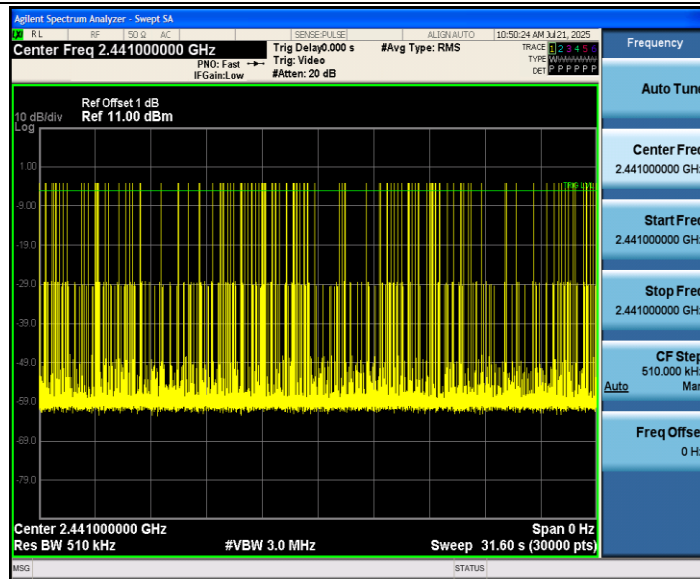


DH3_Ant1_Hop

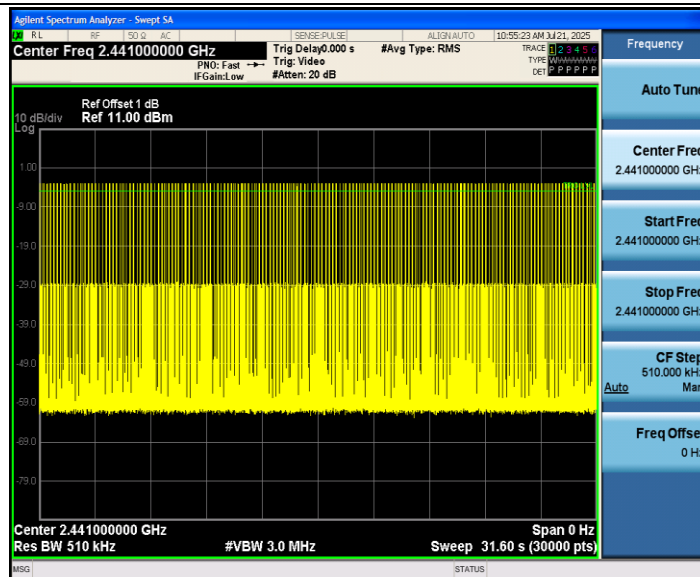
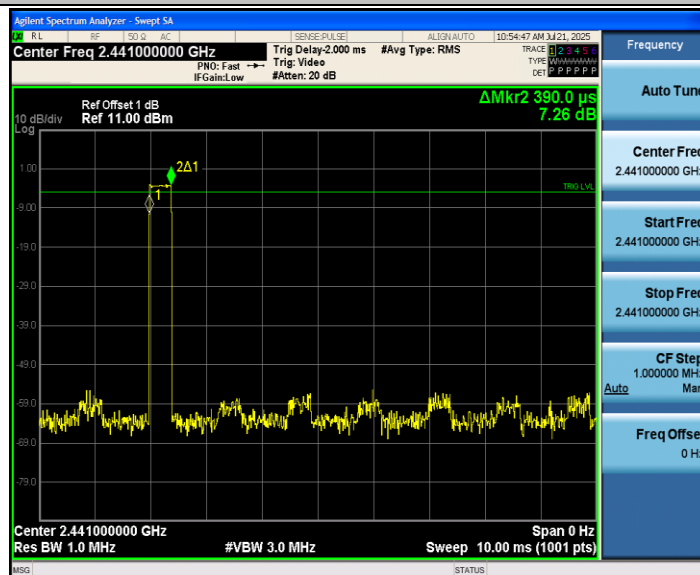


DH5_Ant1_Hop

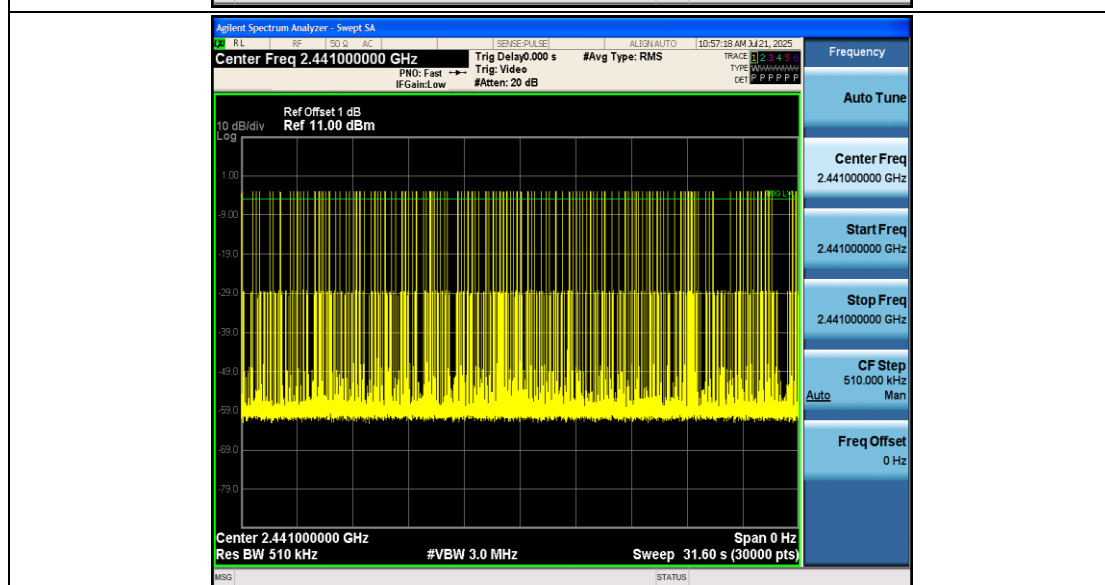




2DH1_Ant1_Hop

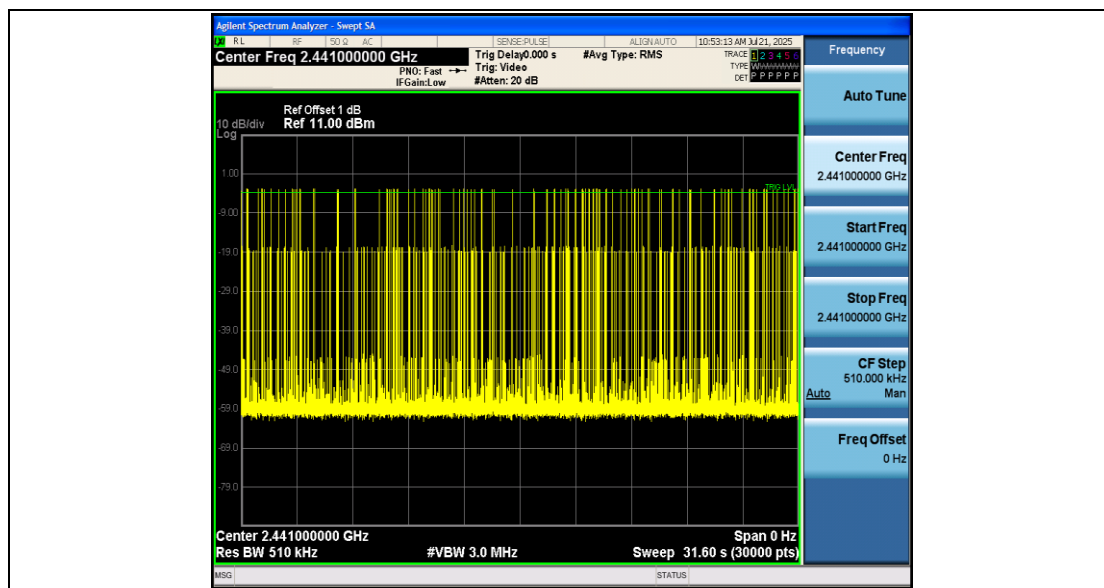


2DH3_Ant1_Hop



2DH5_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

Test Graphs

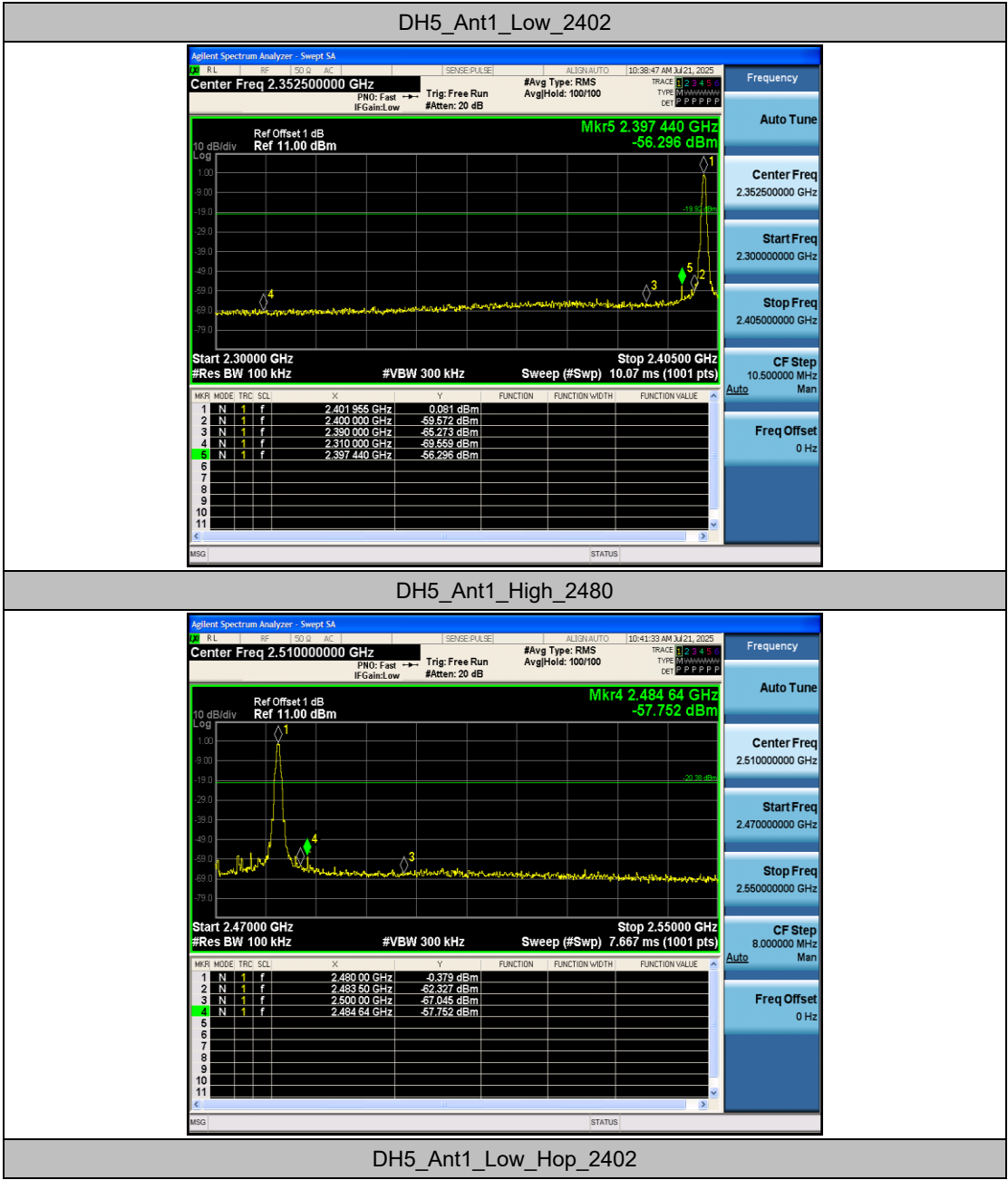


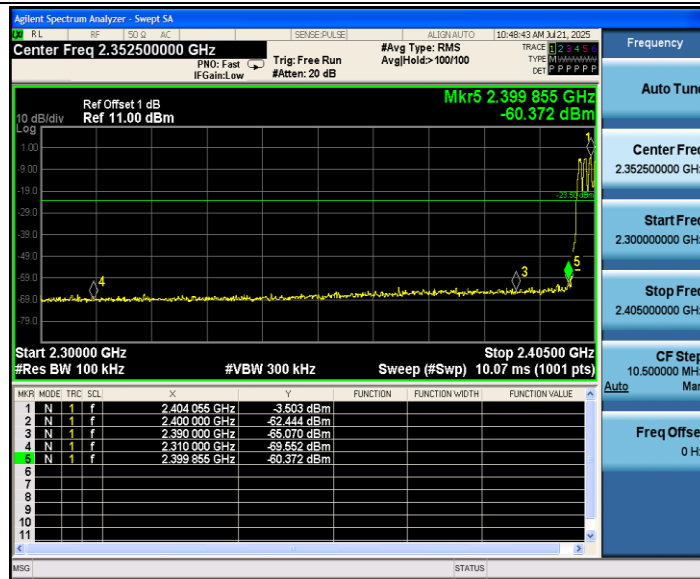
Appendix G: Band edge measurements

Test Result

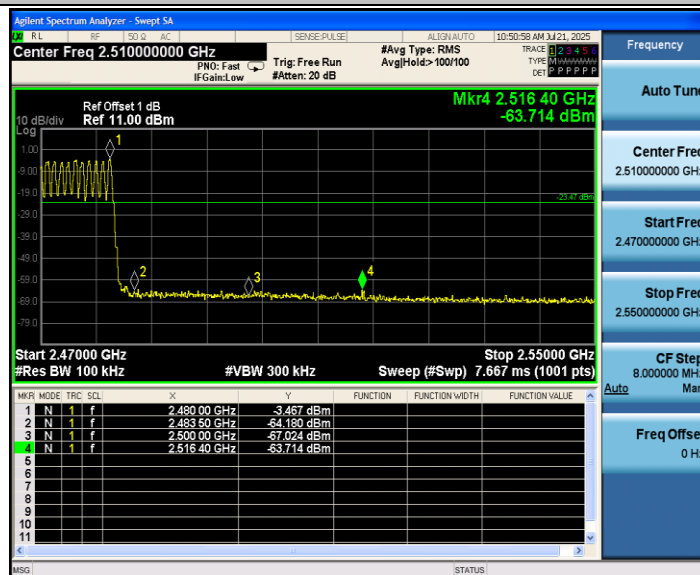
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.08	-56.3	≤ -19.92	PASS
		High	2480	-0.38	-57.75	≤ -20.38	PASS
		Low	Hop_2402	-3.50	-60.37	≤ -23.5	PASS
		High	Hop_2480	-3.47	-63.71	≤ -23.47	PASS
2DH5	Ant1	Low	2402	-3.74	-55.19	≤ -23.74	PASS
		High	2480	-3.10	-61.98	≤ -23.1	PASS
		Low	Hop_2402	-5.91	-61.19	≤ -25.91	PASS
		High	Hop_2480	-3.17	-63.04	≤ -23.17	PASS

Test Graphs

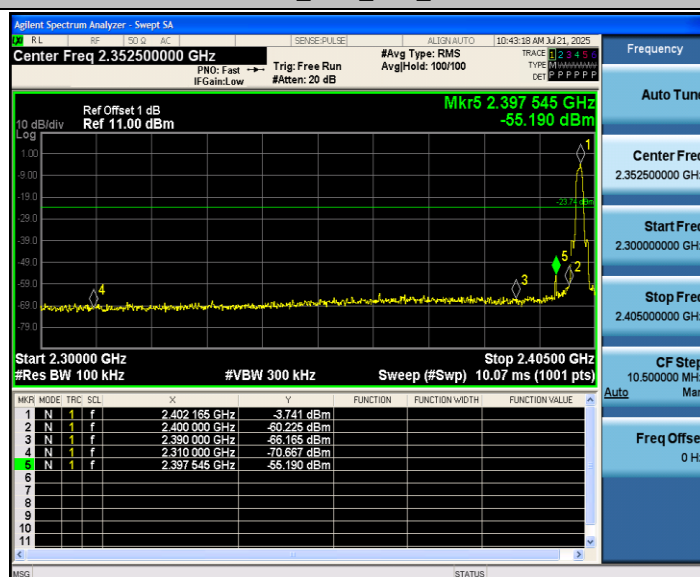




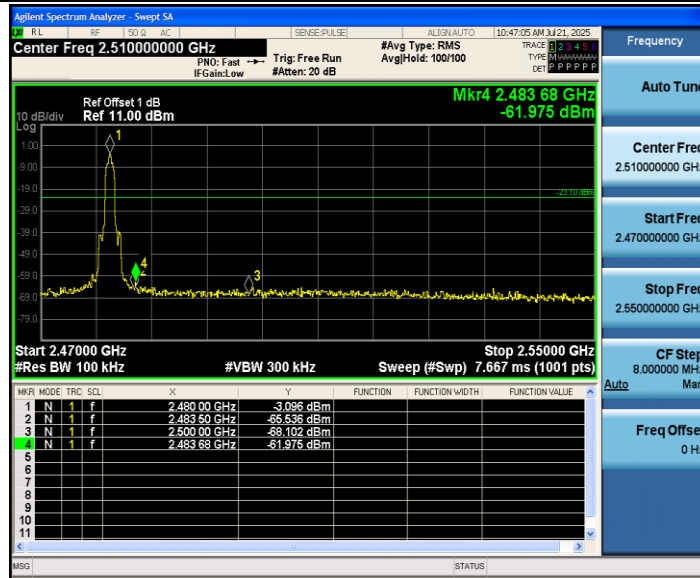
DH5_Ant1_High_Hop_2480



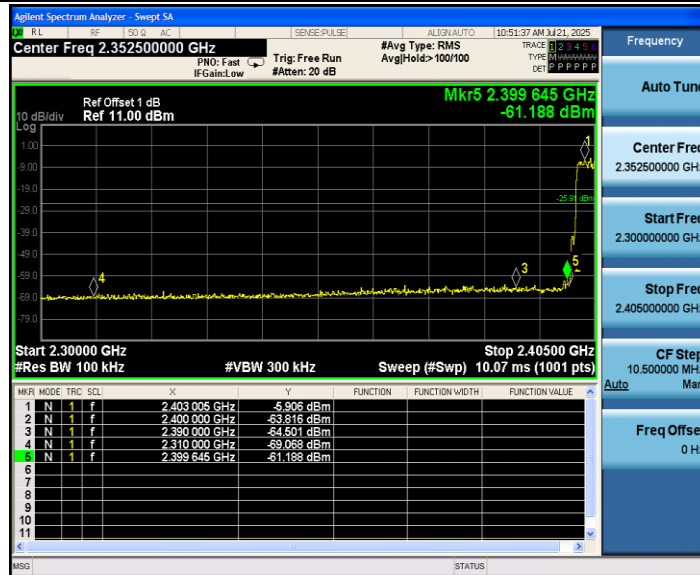
2DH5_Ant1_Low_2402



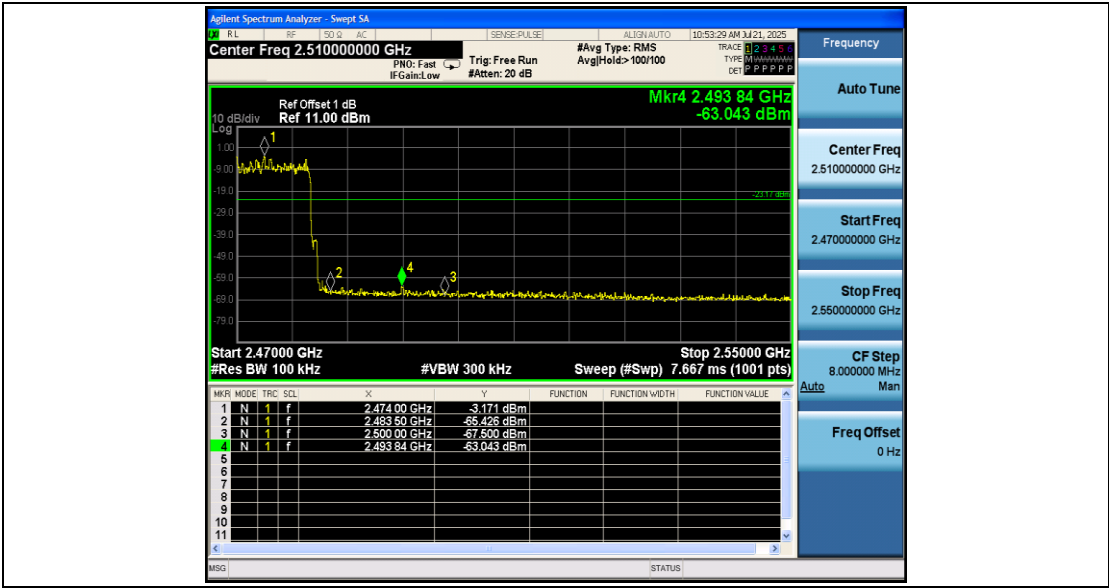
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

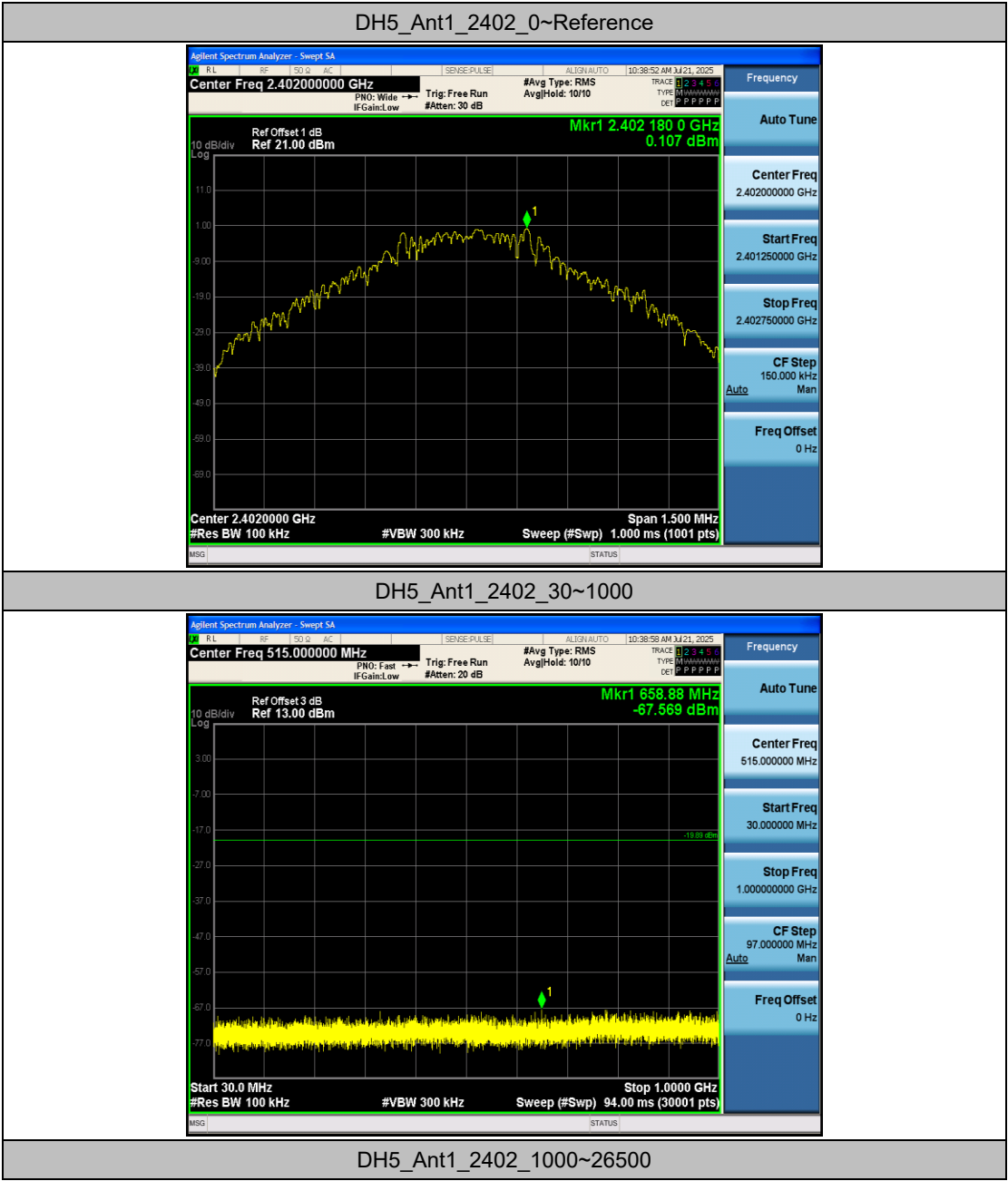


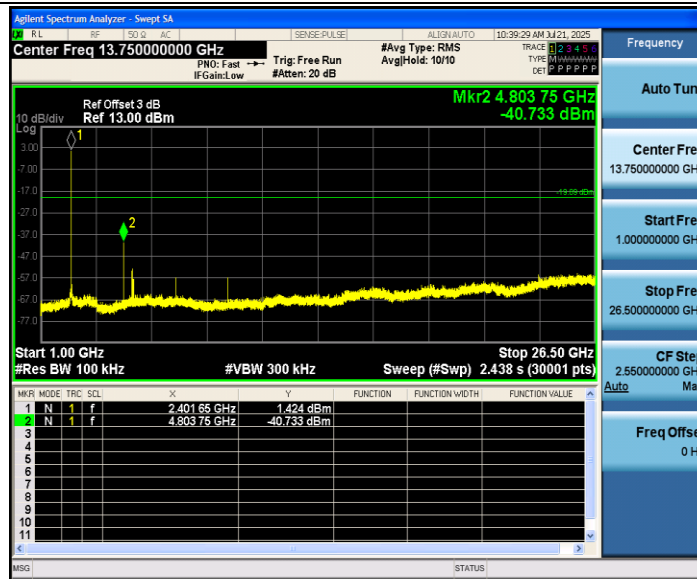
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.11	0.11	---	PASS
			30~1000	0.11	-67.57	≤-19.89	PASS
			1000~26500	0.11	-40.73	≤-19.89	PASS
		2441	Reference	-0.78	-0.78	---	PASS
			30~1000	-0.78	-67.4	≤-20.78	PASS
			1000~26500	-0.78	-41.75	≤-20.78	PASS
		2480	Reference	0.14	0.14	---	PASS
			30~1000	0.14	-66.73	≤-19.86	PASS
			1000~26500	0.14	-43.42	≤-19.86	PASS
2DH5	Ant1	2402	Reference	-5.20	-5.20	---	PASS
			30~1000	-5.20	-67.3	≤-25.2	PASS
			1000~26500	-5.20	-49.76	≤-25.2	PASS
		2441	Reference	-6.13	-6.13	---	PASS
			30~1000	-6.13	-66.86	≤-26.13	PASS
			1000~26500	-6.13	-46.38	≤-26.13	PASS
		2480	Reference	-6.57	-6.57	---	PASS
			30~1000	-6.57	-66.84	≤-26.57	PASS
			1000~26500	-6.57	-48.63	≤-26.57	PASS

Test Graphs

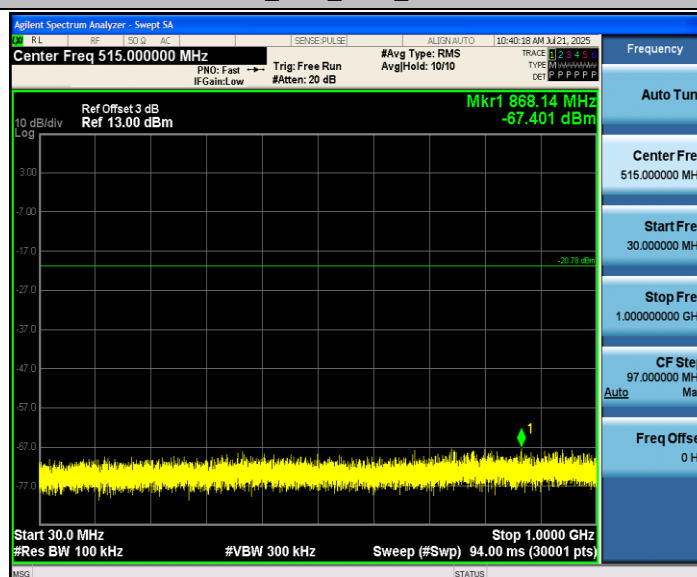




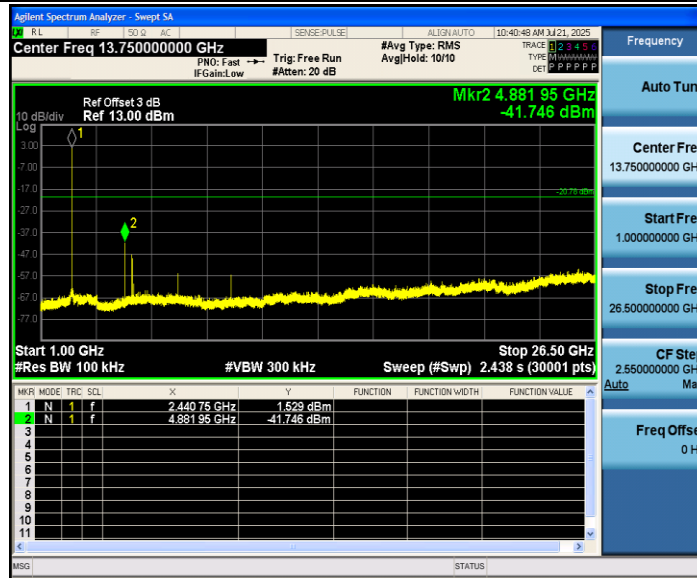
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



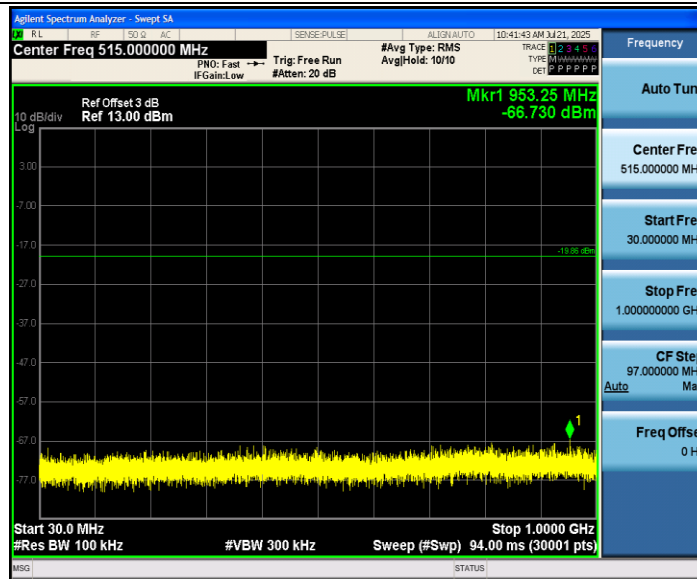
DH5_Ant1_2441_1000~26500



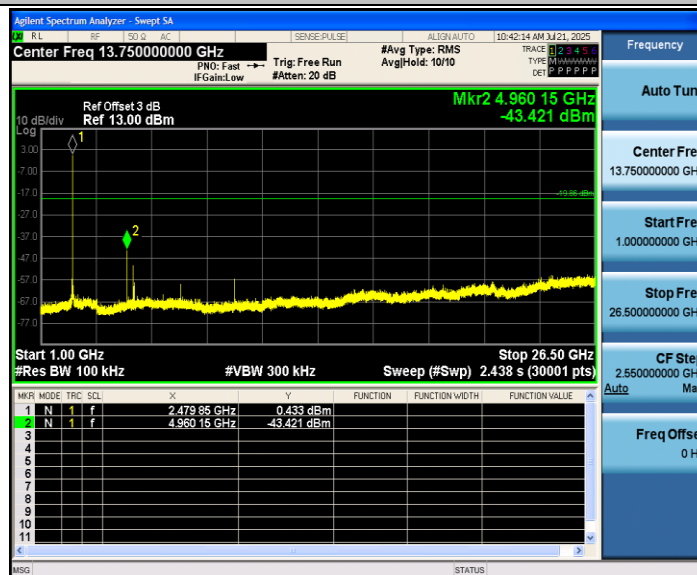
DH5_Ant1_2480_0~Reference



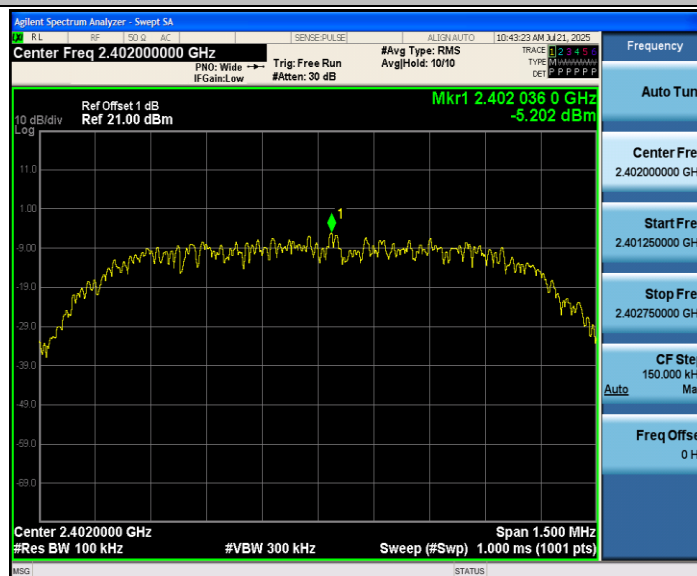
DH5_Ant1_2480_30~1000



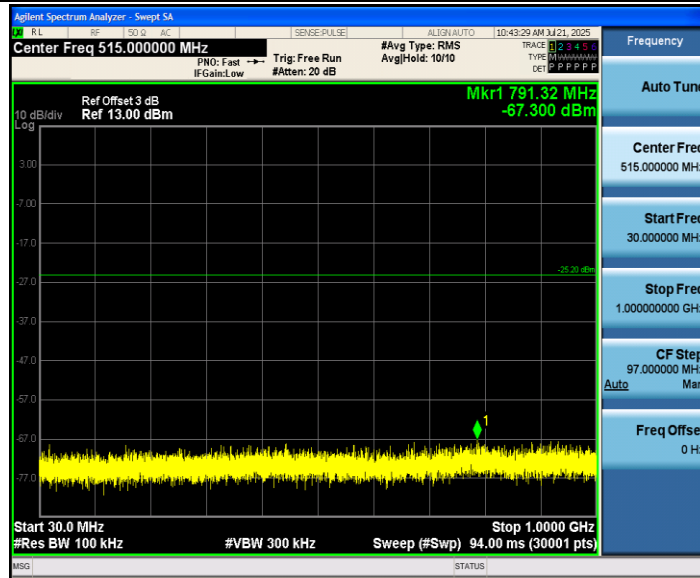
DH5_Ant1_2480_1000~26500



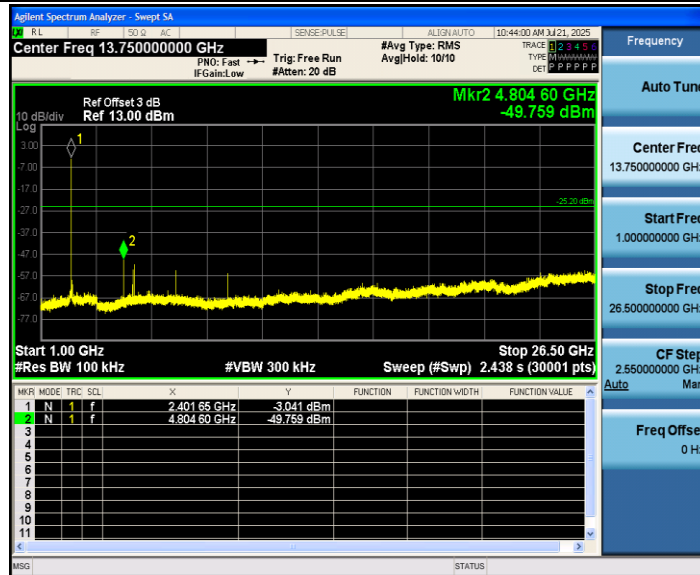
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



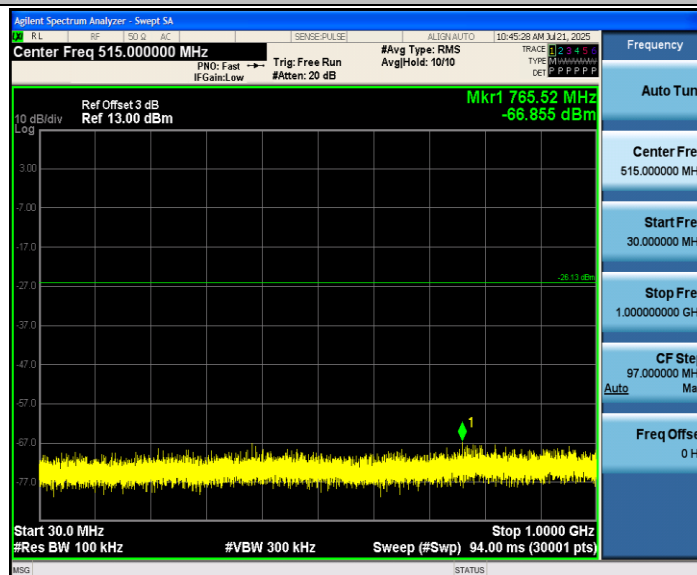
2DH5_Ant1_2402_1000~26500



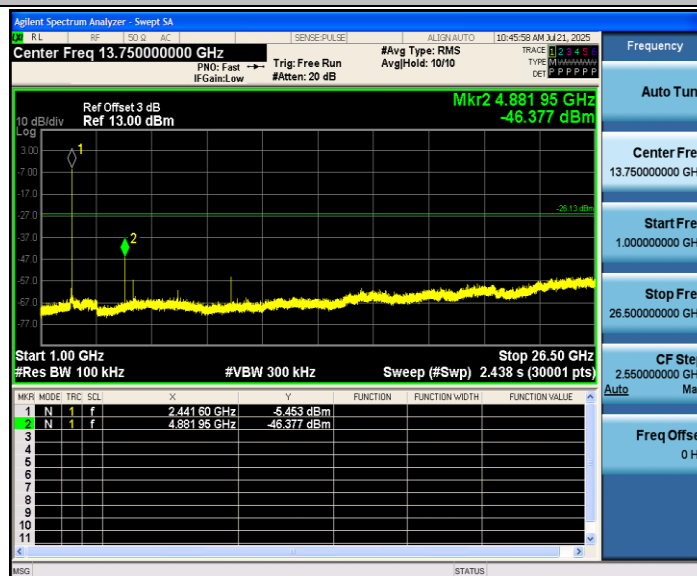
2DH5_Ant1_2441_0~Reference



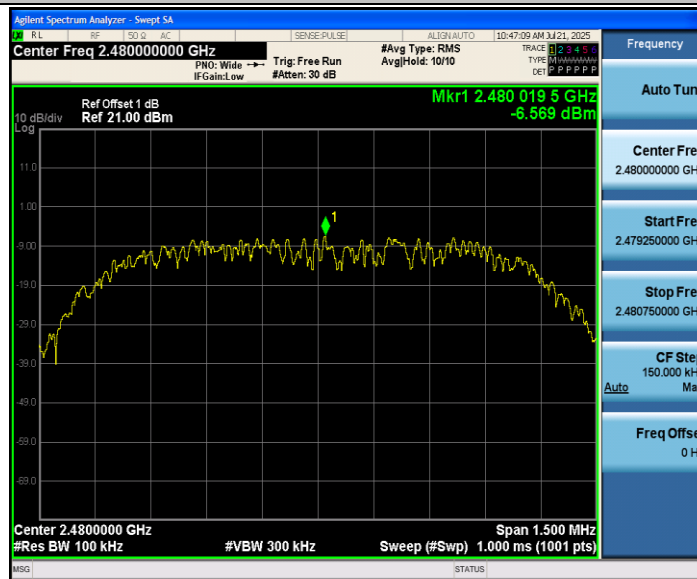
2DH5_Ant1_2441_30~1000



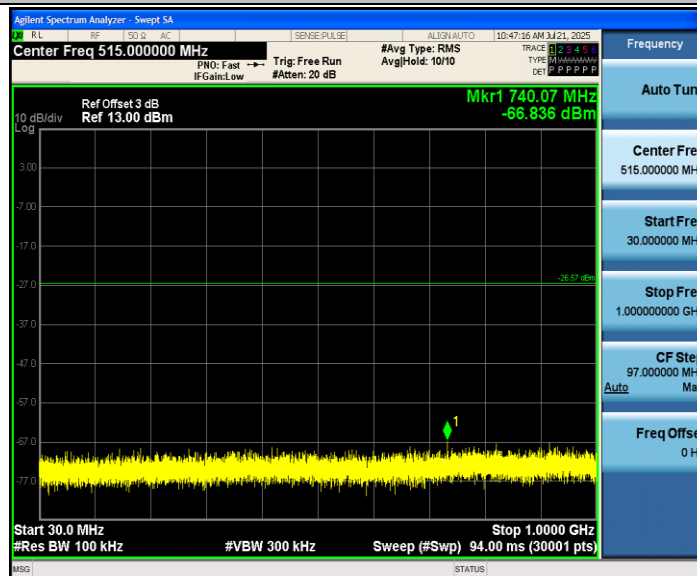
2DH5_Ant1_2441_1000~26500



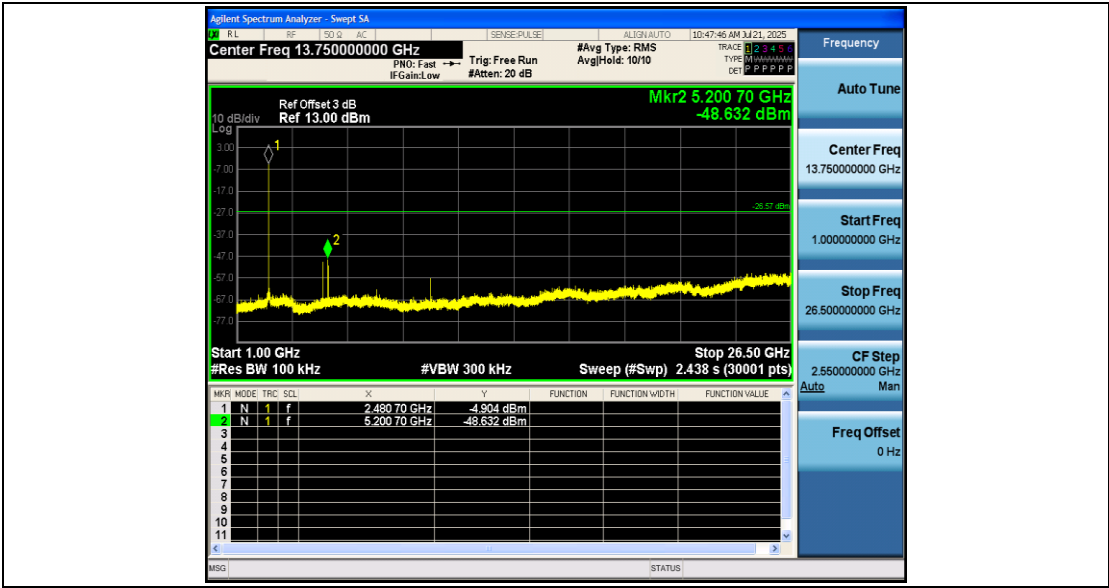
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

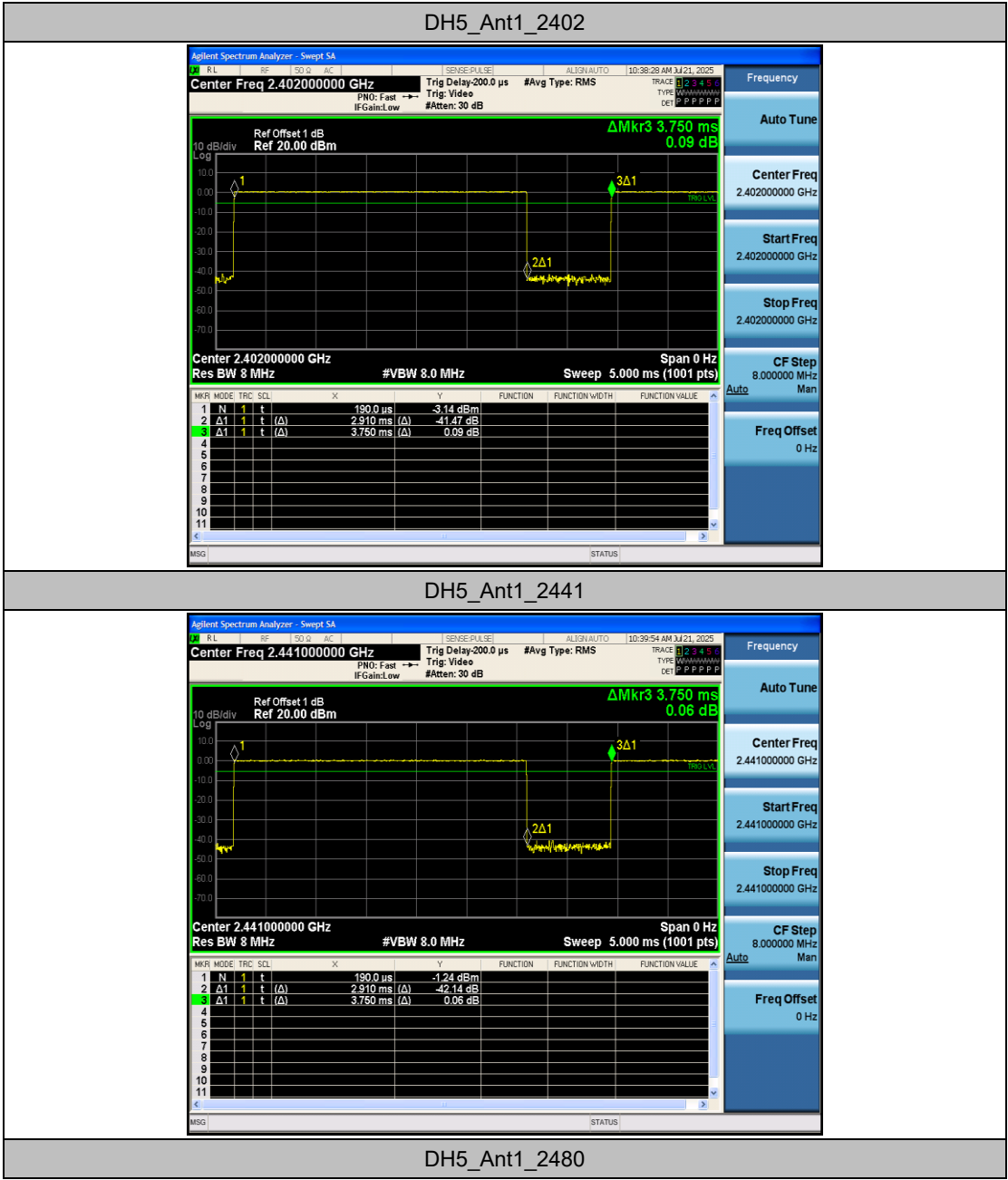


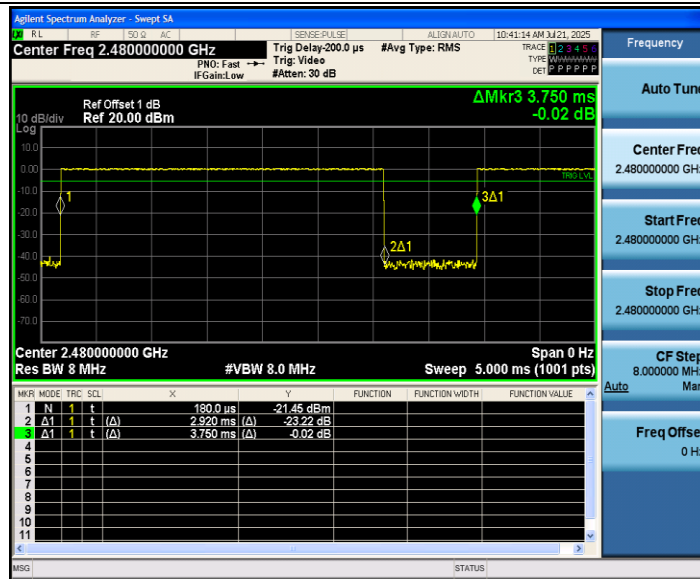
Appendix I: Duty Cycle

Test Result

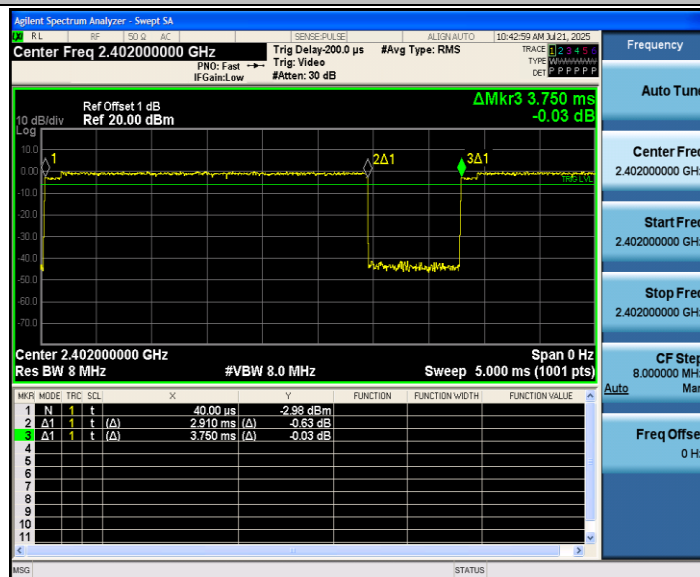
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.91	3.75	77.60	1.10	---	---

Test Graphs

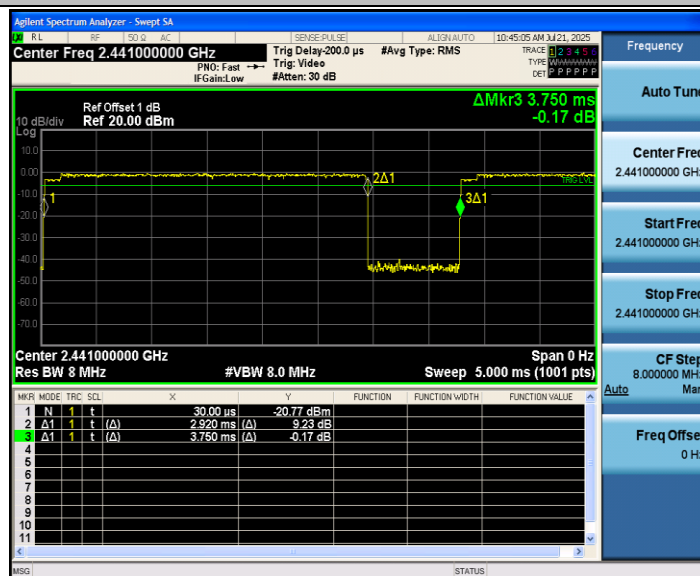




2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

