

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: VOYAGER CD PLAYER

Test Model: CR3517A-DU

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

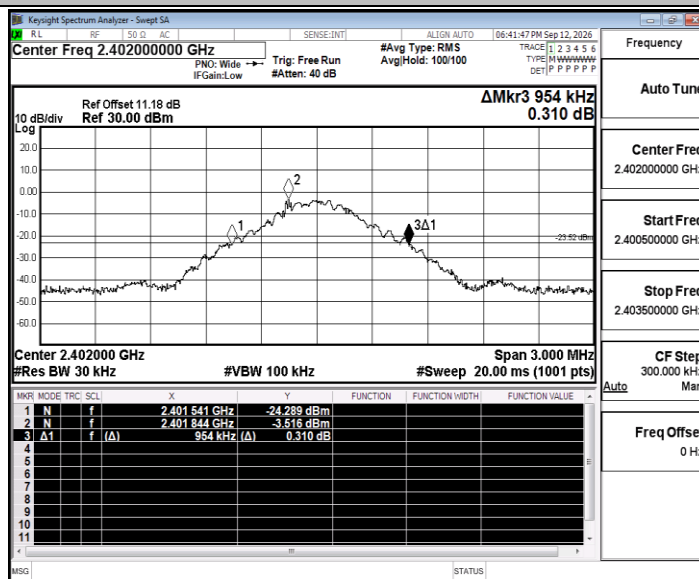
A.1 20dB Emission Bandwidth

Test Result

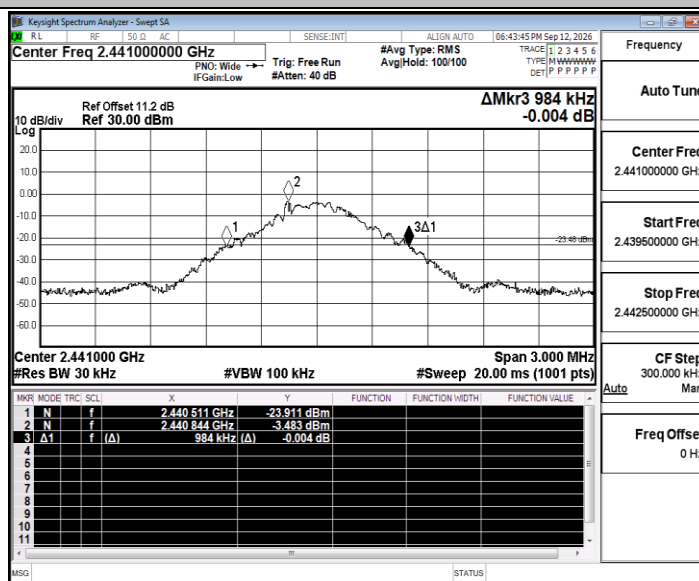
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.954	2401.541	2402.495	---	---
		2441	0.984	2440.511	2441.495	---	---
		2480	1.020	2479.493	2480.513	---	---
2DH5	Ant1	2402	1.317	2401.349	2402.666	---	---
		2441	1.317	2440.346	2441.663	---	---
		2480	1.320	2479.346	2480.666	---	---
3DH5	Ant1	2402	1.299	2401.361	2402.660	---	---
		2441	1.293	2440.361	2441.654	---	---
		2480	1.296	2479.358	2480.654	---	---

Test Graphs

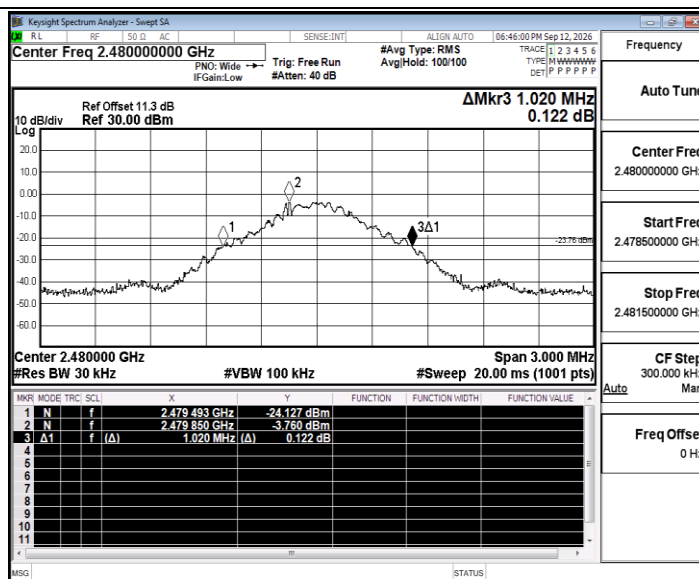
DH5_Ant1_2402



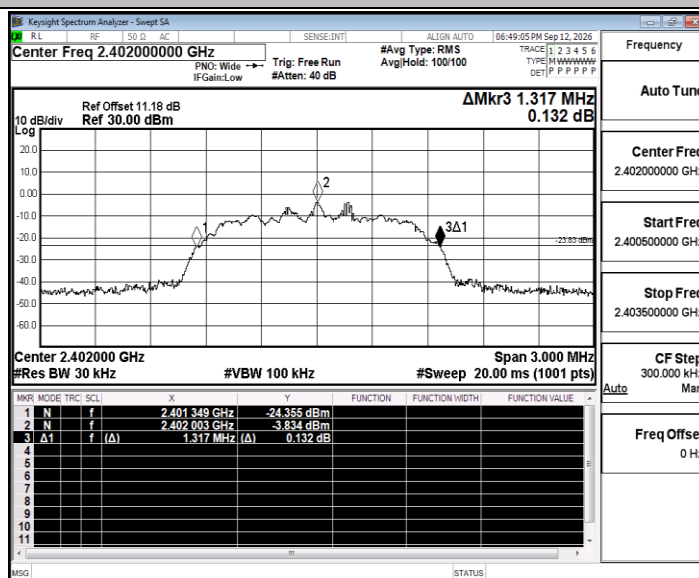
DH5_Ant1_2441



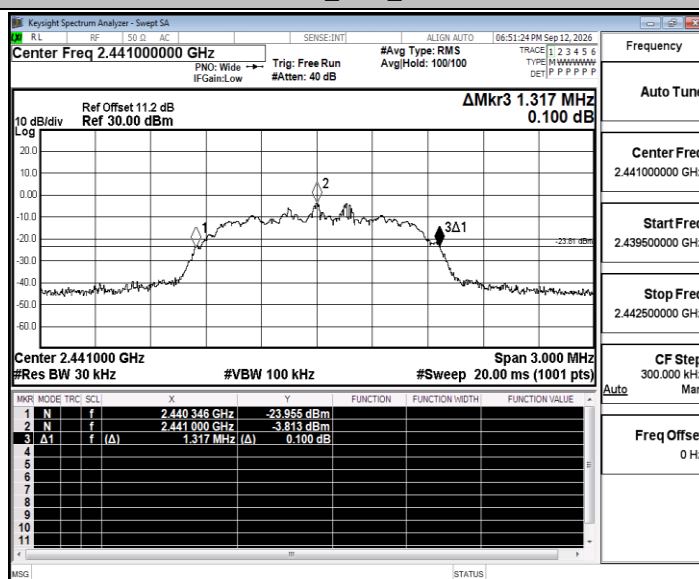
DH5_Ant1_2480



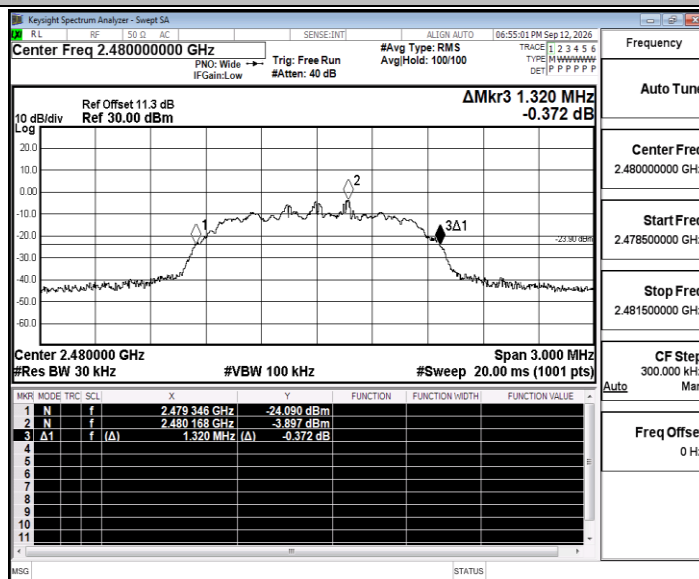
2DH5_Ant1_2402



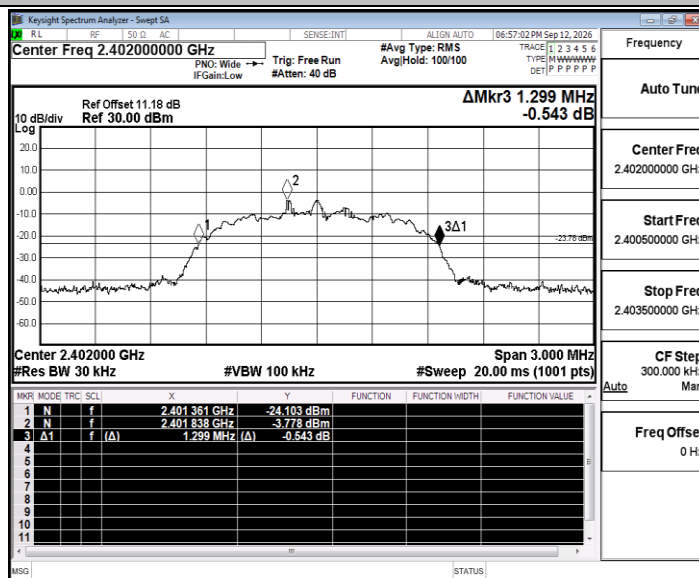
2DH5_Ant1_2441



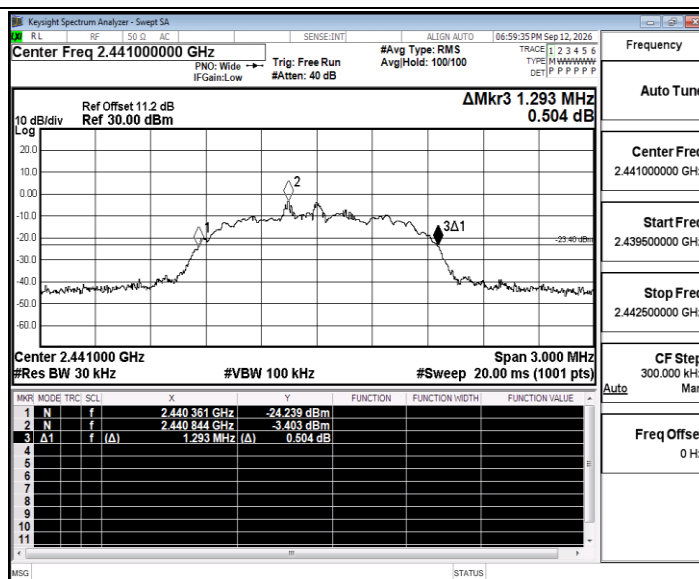
2DH5_Ant1_2480



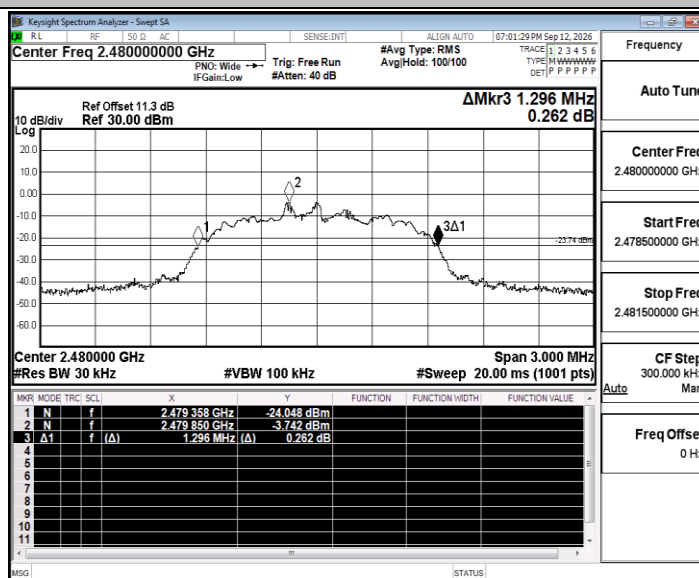
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



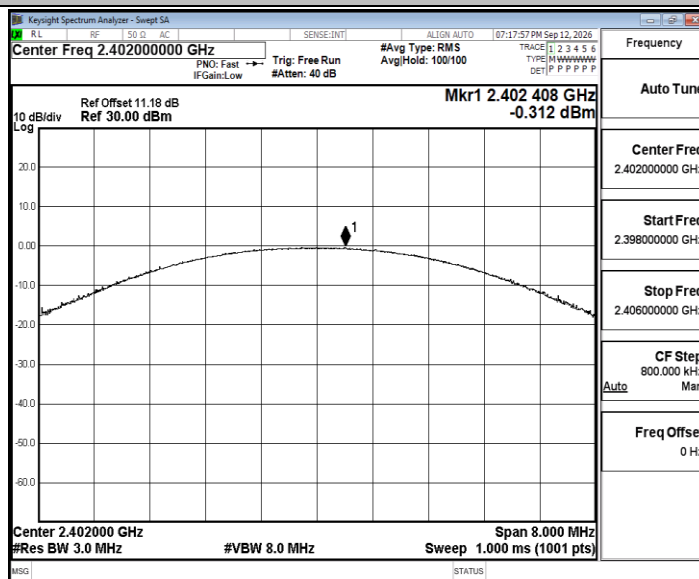
A.2 Maximum Peak conducted output power

Test Result Peak

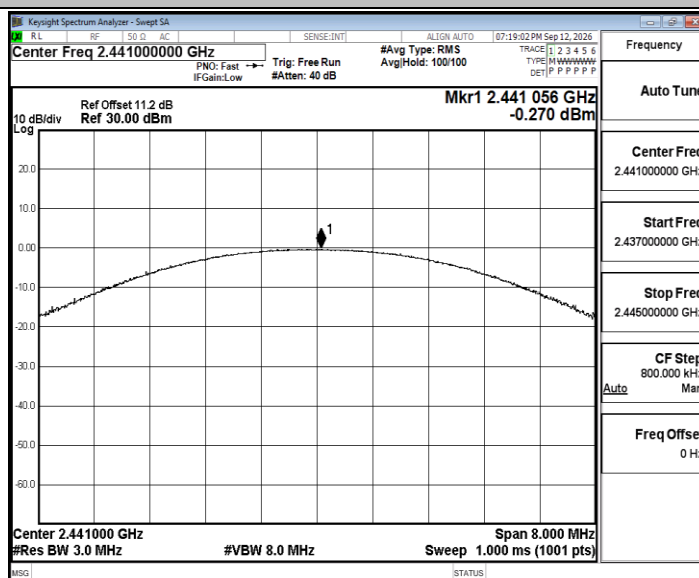
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-0.31	≤30	PASS
		2441	-0.27	≤30	PASS
		2480	-0.23	≤30	PASS
2DH5	Ant1	2402	0.26	≤20.97	PASS
		2441	0.38	≤20.97	PASS
		2480	0.25	≤20.97	PASS
3DH5	Ant1	2402	0.60	≤30	PASS
		2441	0.57	≤30	PASS
		2480	0.76	≤30	PASS

Test Graphs

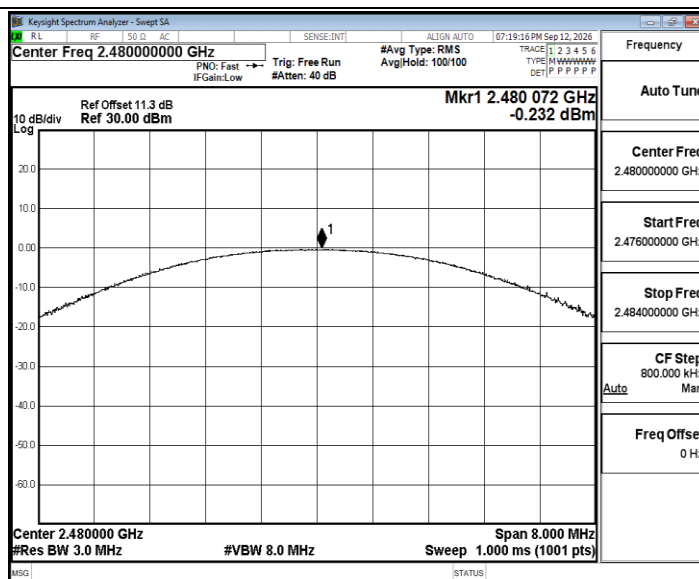
DH5_Ant1_2402



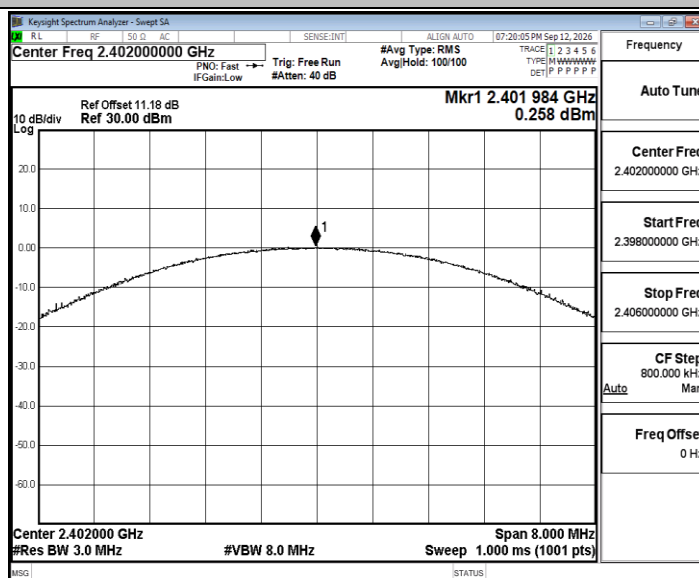
DH5_Ant1_2441



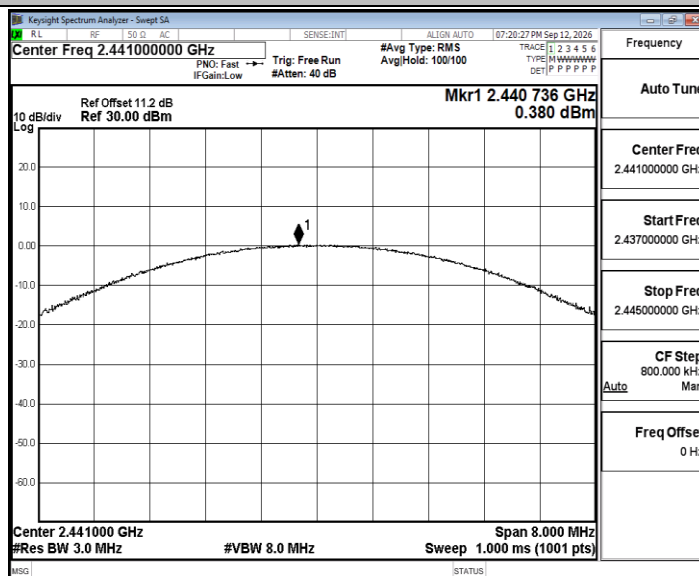
DH5_Ant1_2480



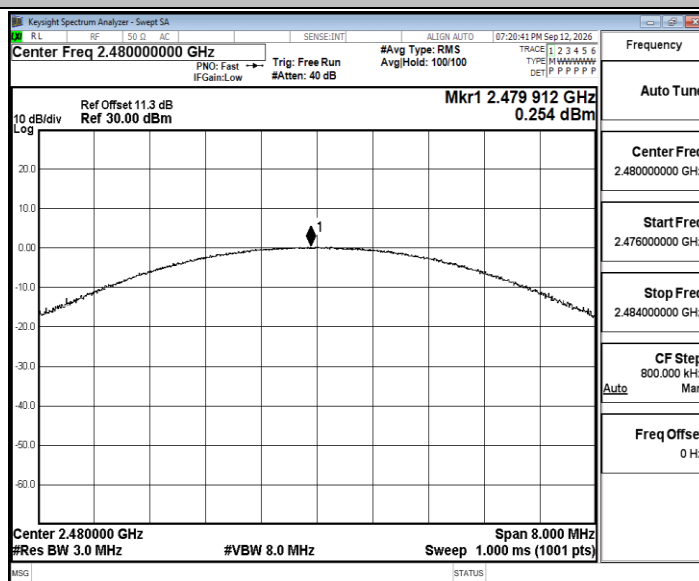
2DH5_Ant1_2402



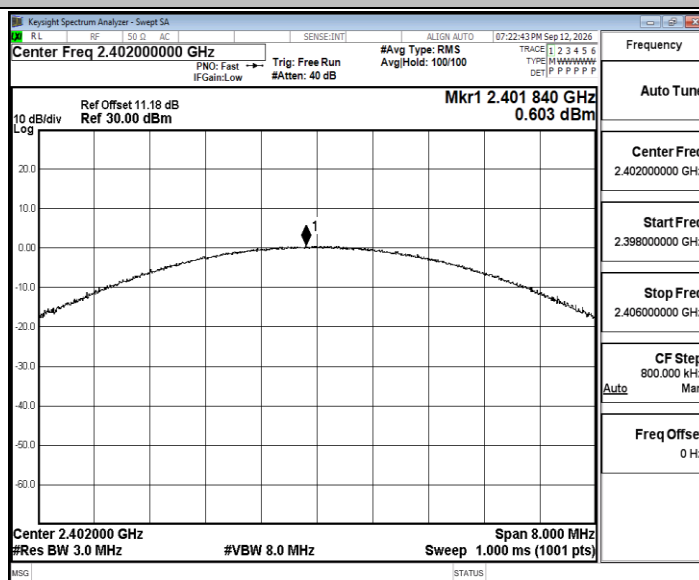
2DH5_Ant1_2441



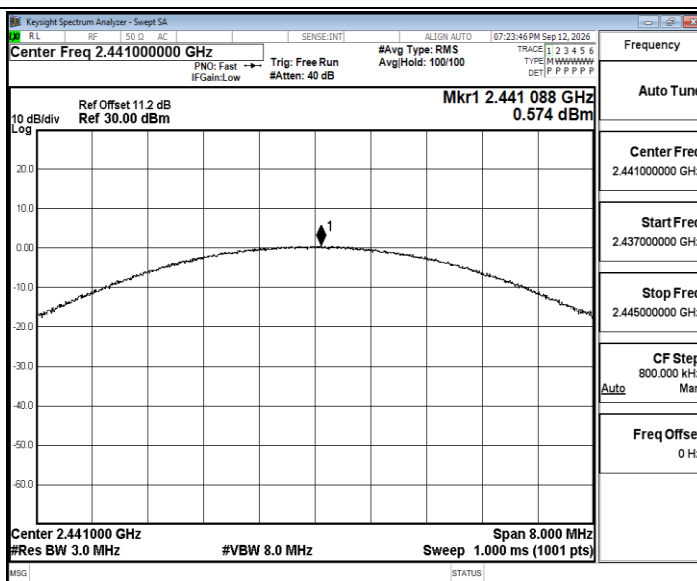
2DH5_Ant1_2480



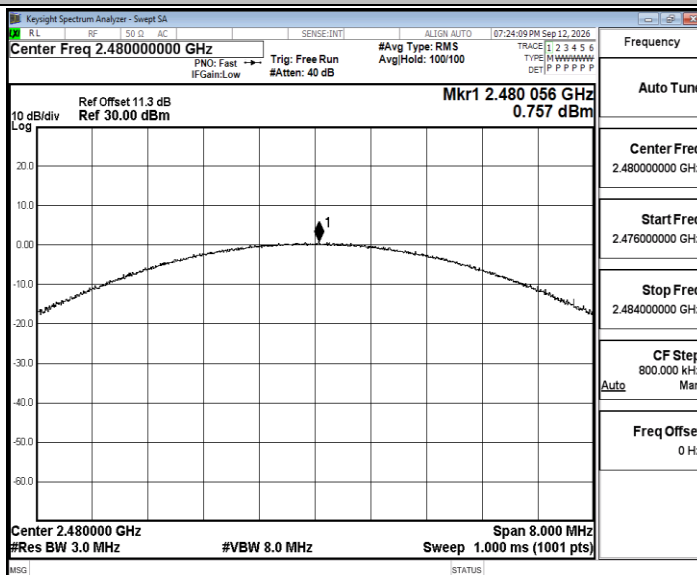
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

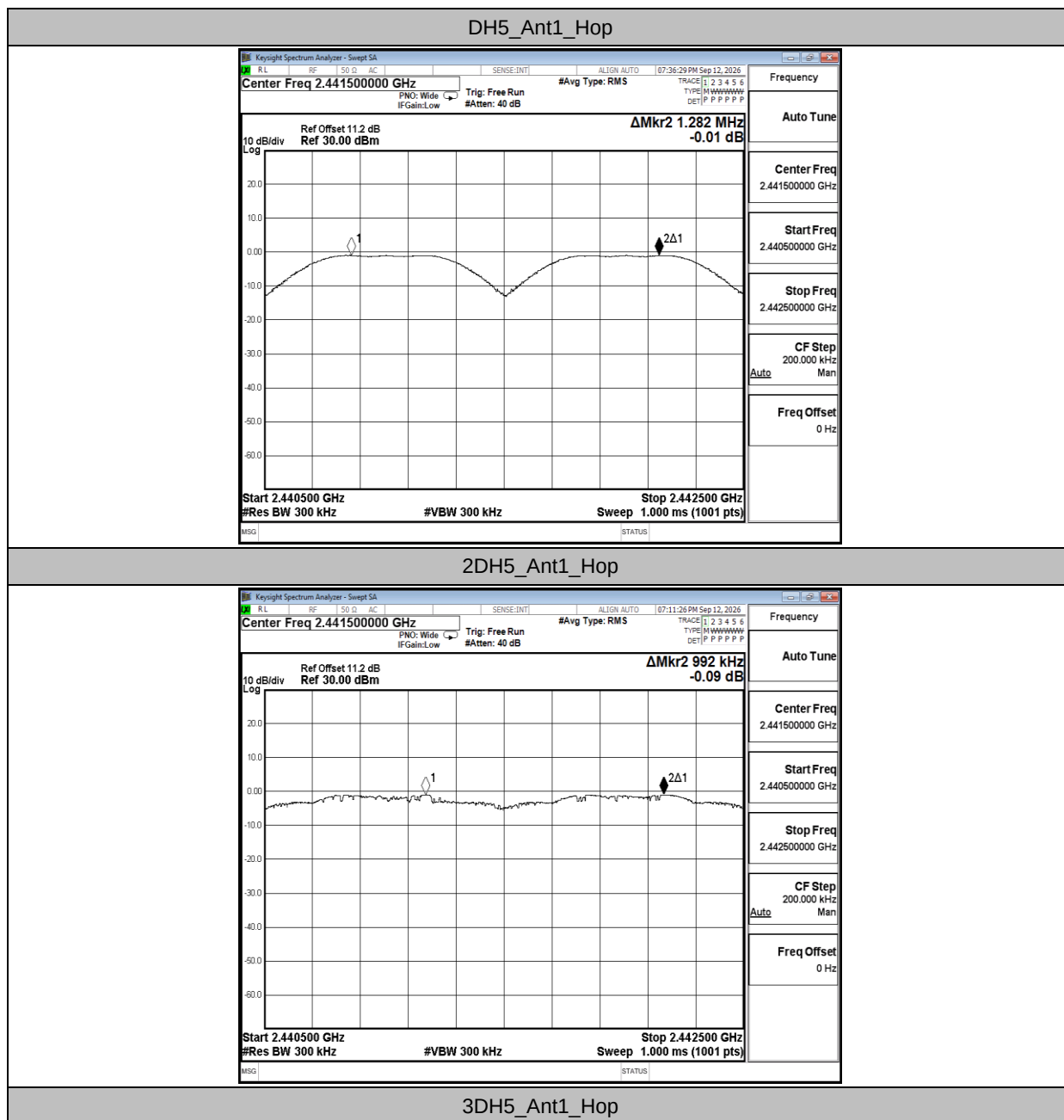


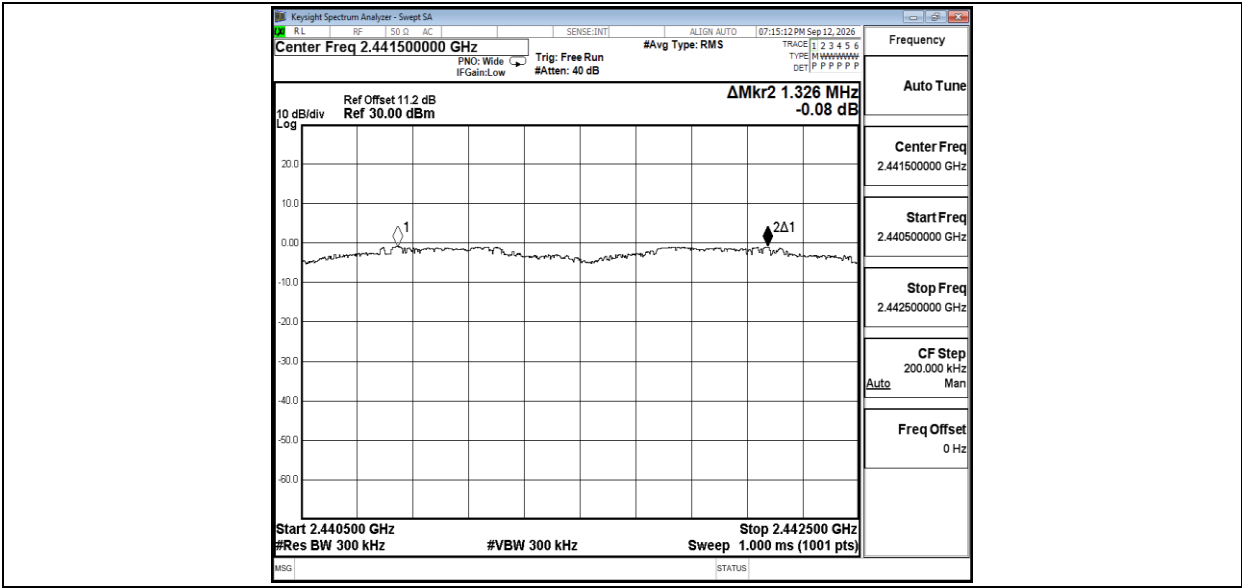
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.282	≥ 0.680	PASS
2DH5	Ant1	Hop	0.992	≥ 0.880	PASS
3DH5	Ant1	Hop	1.326	≥ 0.866	PASS

Test Graphs



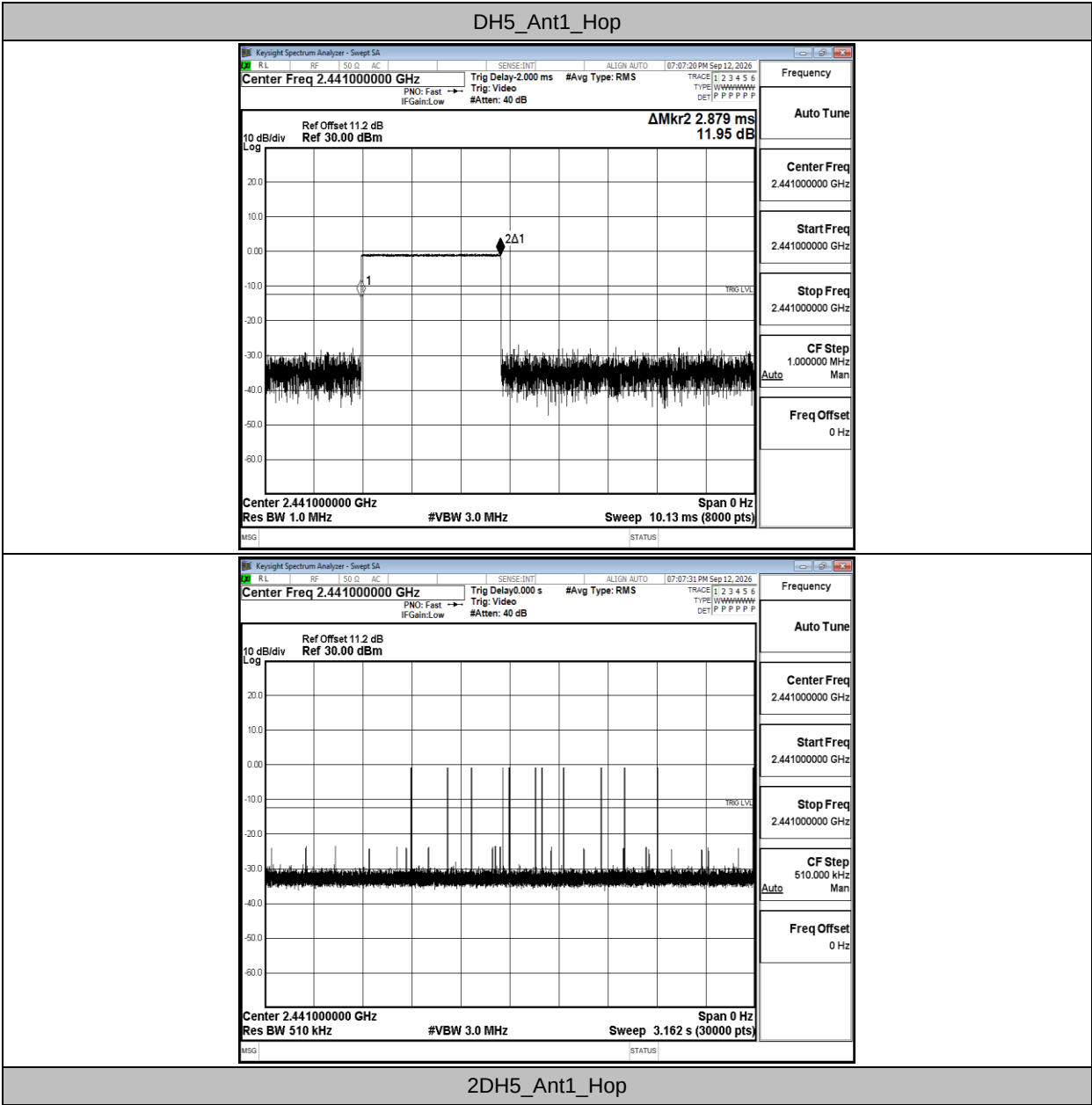


A.4 Time of occupancy

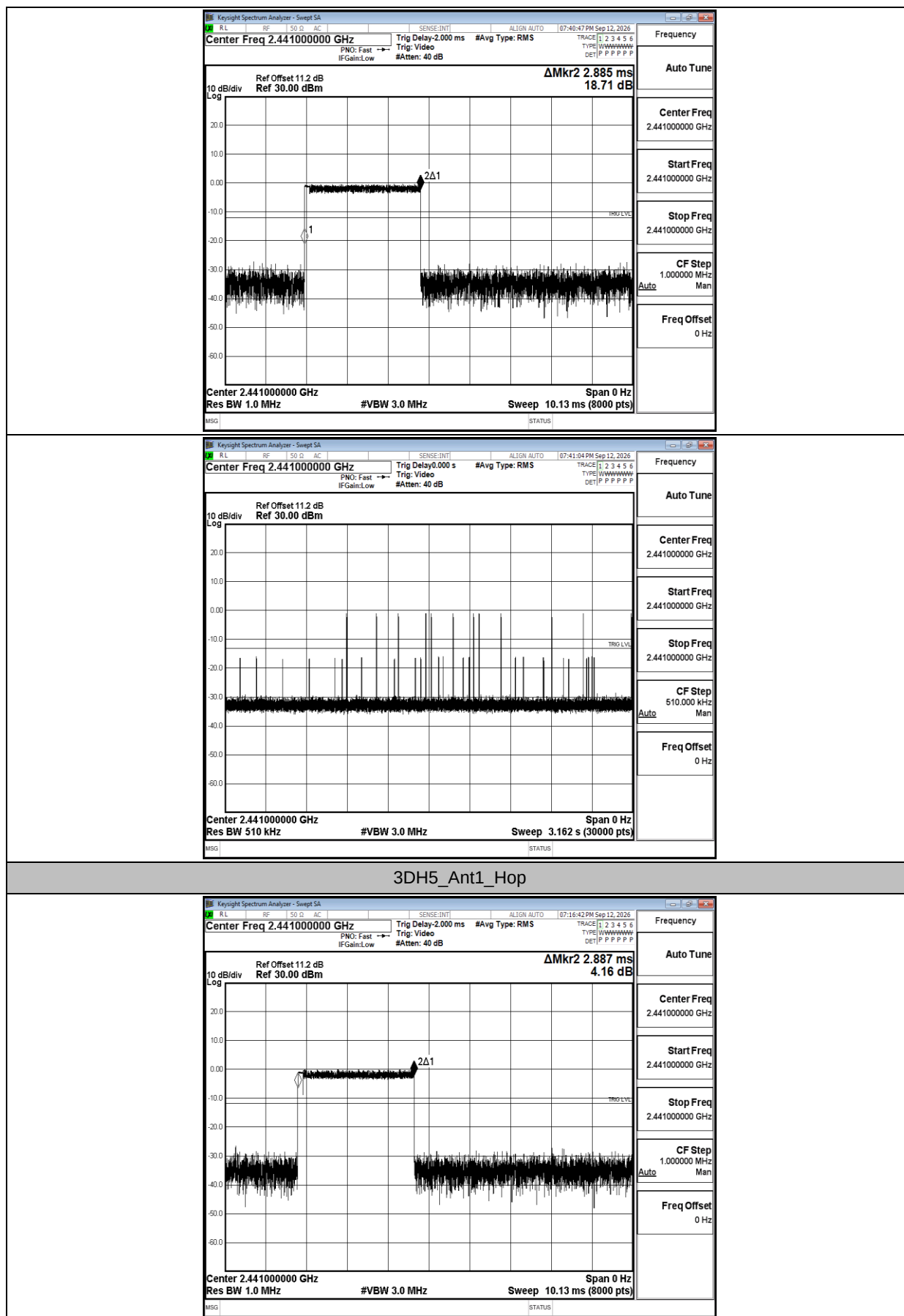
Test Result

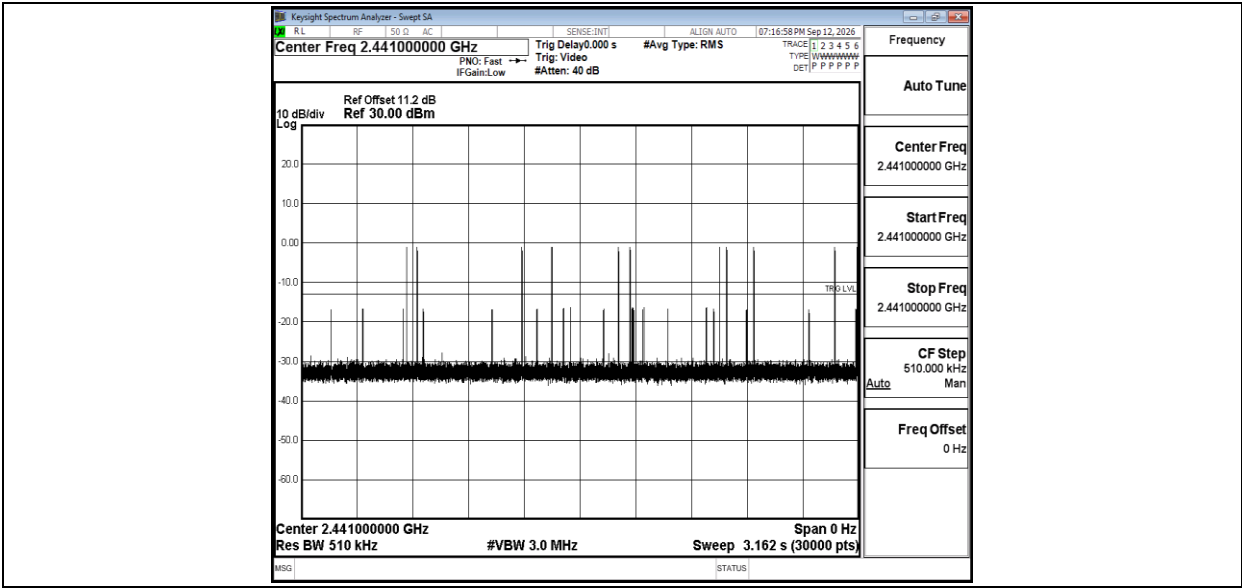
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	130	0.374	≤0.4	PASS
2DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS
3DH5	Ant1	Hop	2.887	120	0.346	≤0.4	PASS

Test Graphs



2DH5_Ant1_Hop





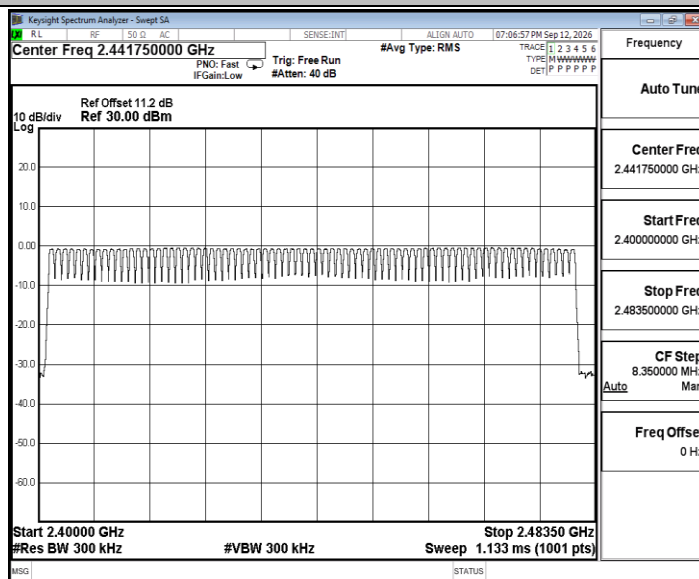
A.5 Number of hopping channels

Test Result

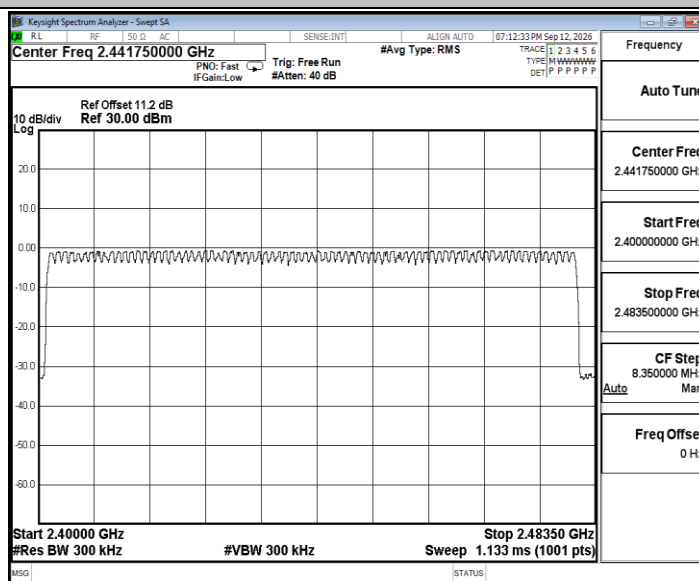
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

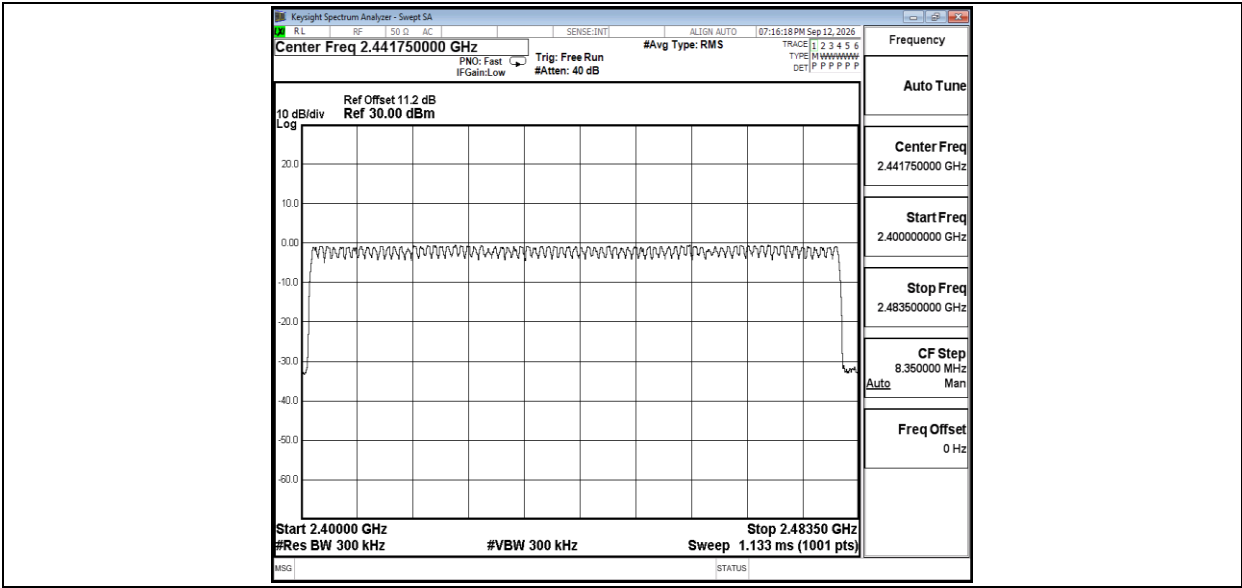
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



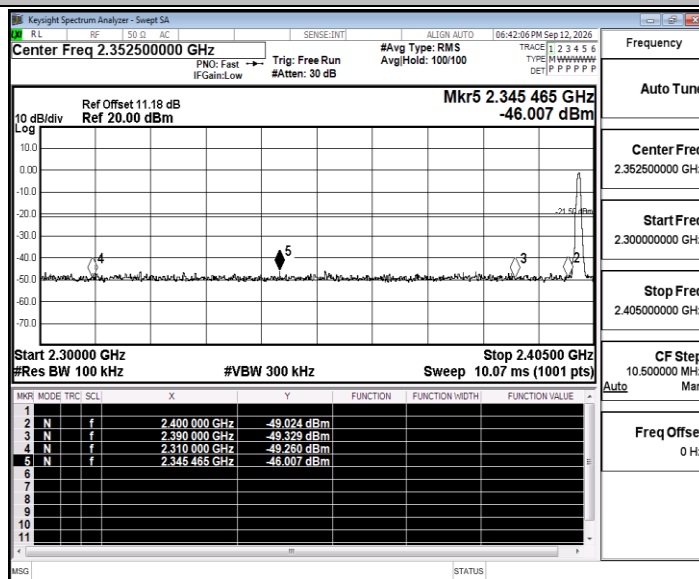
A.6 Band edge measurements

Test Result

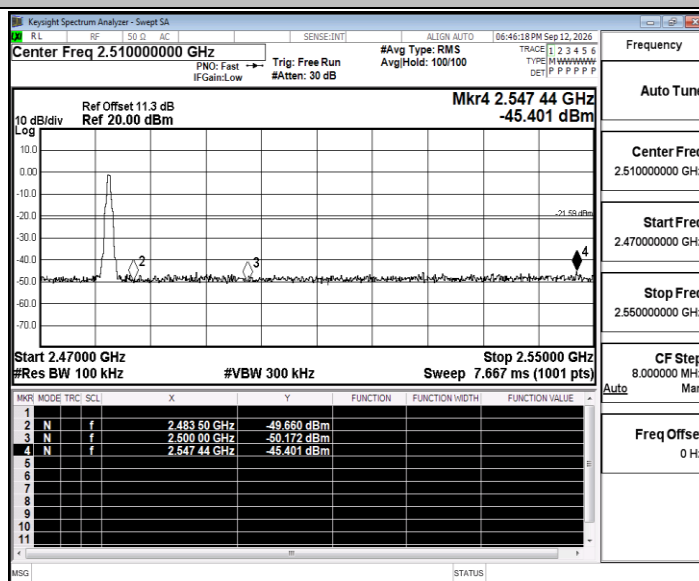
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.50	-46.01	≤ -21.5	PASS
		High	2480	-1.59	-45.4	≤ -21.59	PASS
		Low	Hop_2402	-2.09	-45.57	≤ -22.09	PASS
		High	Hop_2480	-1.50	-45.07	≤ -21.5	PASS
2DH5	Ant1	Low	2402	-1.18	-46.81	≤ -21.18	PASS
		High	2480	-1.32	-45.66	≤ -21.32	PASS
		Low	Hop_2402	-5.71	-45.7	≤ -25.71	PASS
		High	Hop_2480	-0.83	-44.68	≤ -20.83	PASS
3DH5	Ant1	Low	2402	-1.18	-45.95	≤ -21.18	PASS
		High	2480	-1.14	-45.75	≤ -21.14	PASS
		Low	Hop_2402	-4.57	-46.15	≤ -24.57	PASS
		High	Hop_2480	-4.31	-45.98	≤ -24.31	PASS

Test Graphs

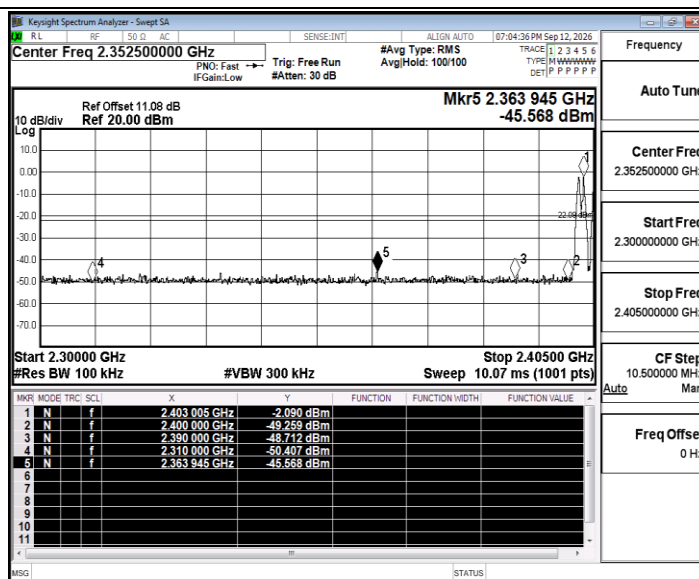
DH5_Ant1_Low_2402



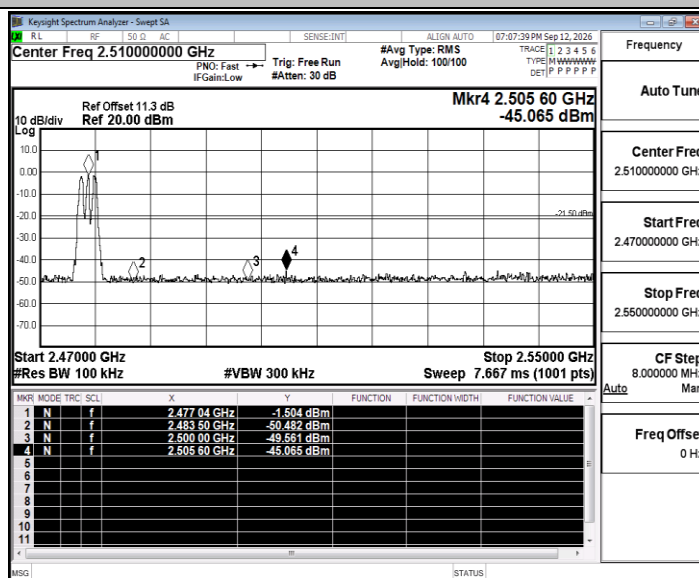
DH5_Ant1_High_2480



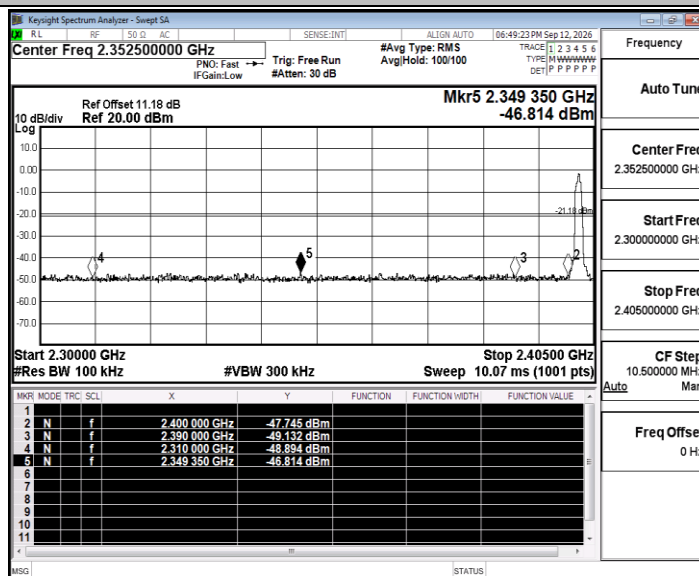
DH5_Ant1_Low_Hop_2402



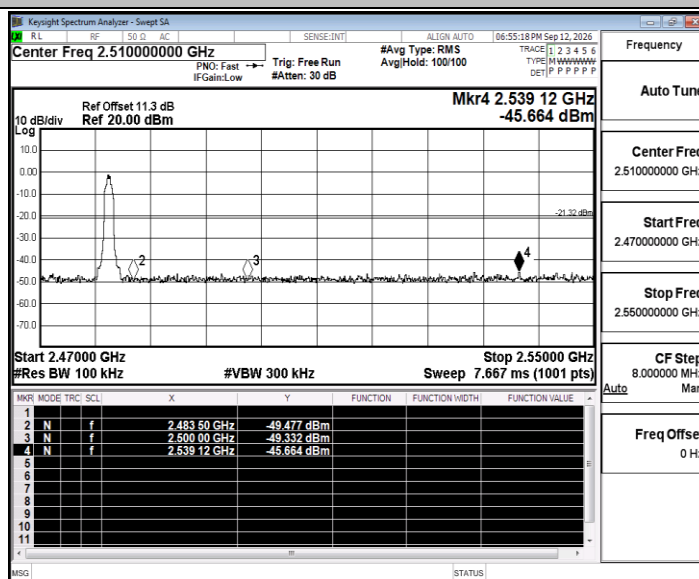
DH5_Ant1_High_Hop_2480



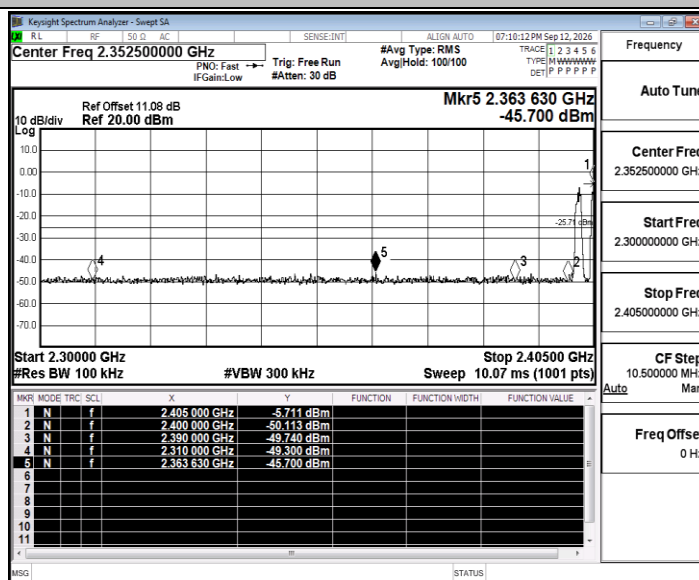
2DH5_Ant1_Low_2402



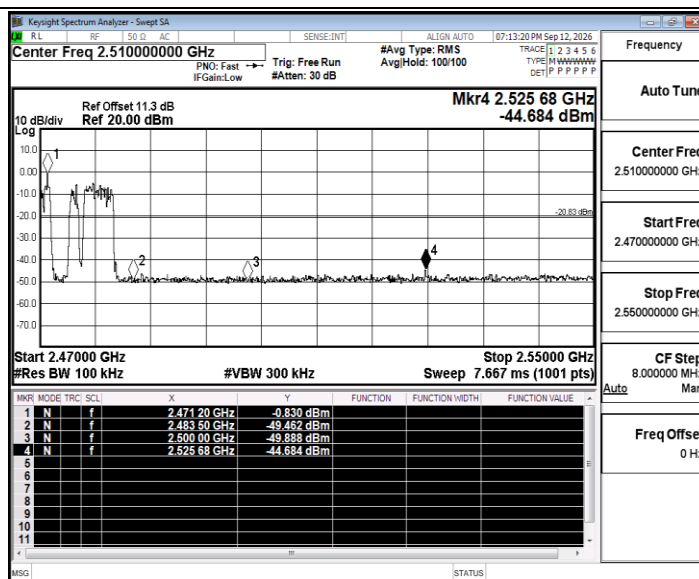
2DH5_Ant1_High_2480



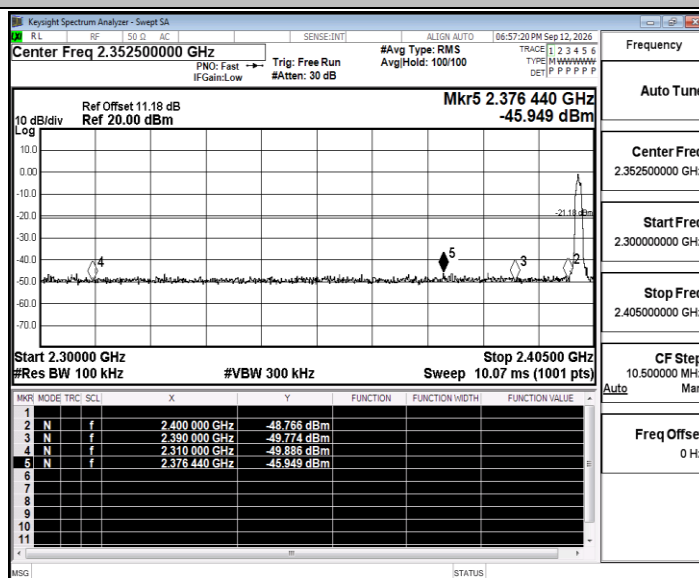
2DH5_Ant1_Low_Hop_2402



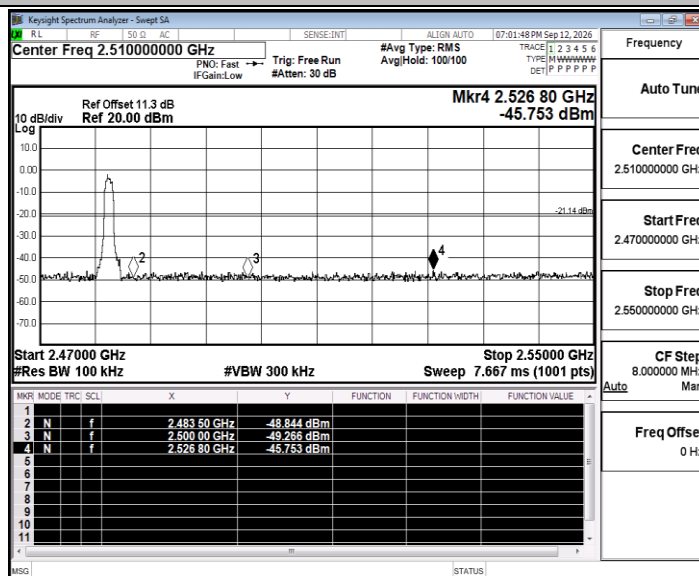
2DH5_Ant1_High_Hop_2480



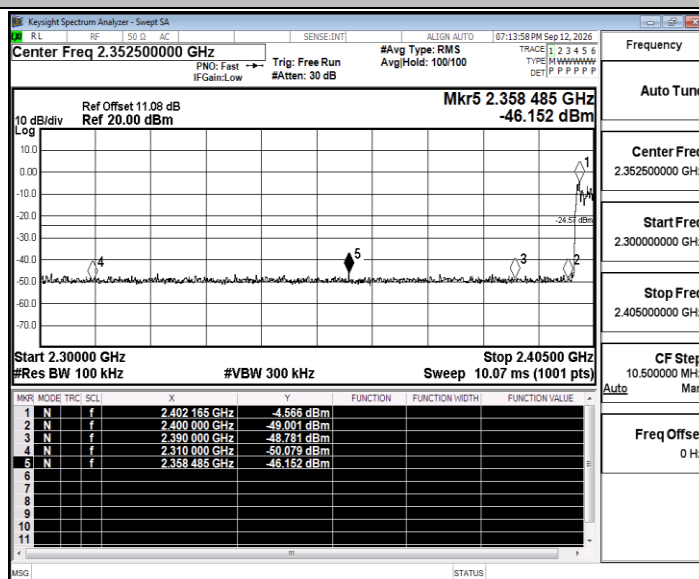
3DH5_Ant1_Low_2402



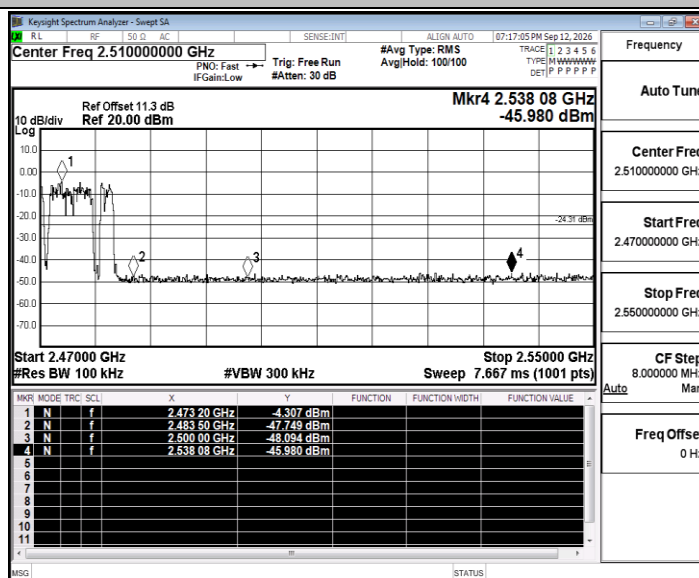
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



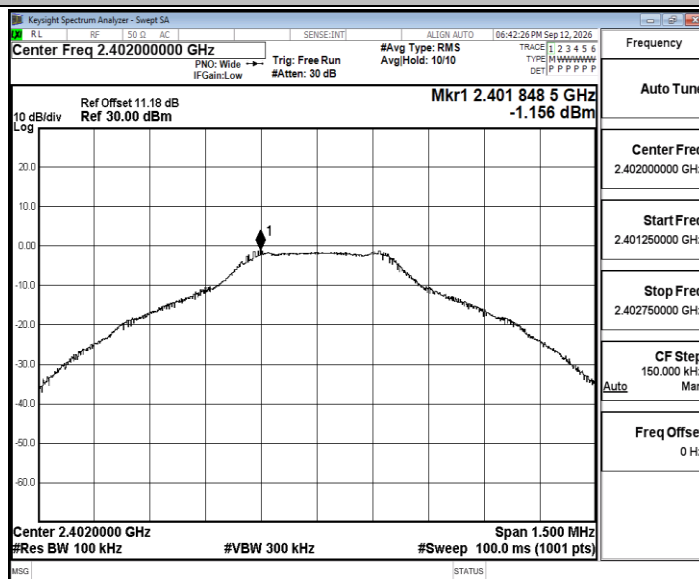
A.7 Conducted Spurious Emission

Test Result

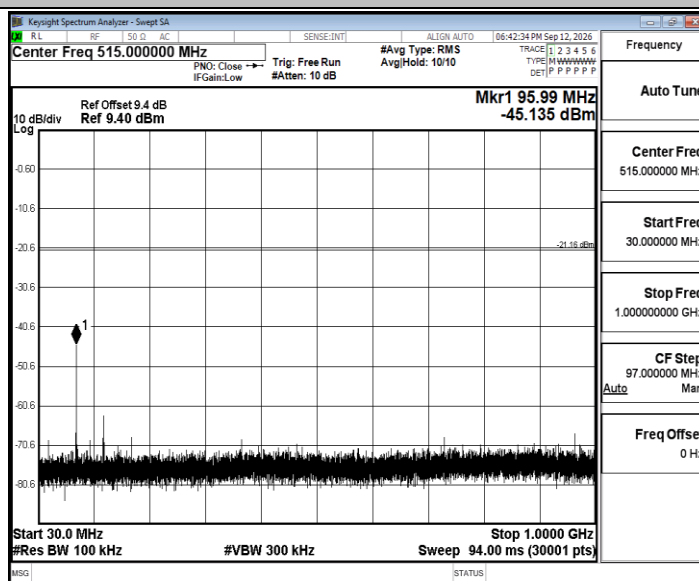
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.16	-1.16	---	PASS
			30~1000	-1.16	-45.14	≤-21.16	PASS
			1000~26500	-1.16	-39.04	≤-21.16	PASS
		2441	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-58.82	≤-21.14	PASS
			1000~26500	-1.14	-36.44	≤-21.14	PASS
		2480	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-61.37	≤-21.14	PASS
			1000~26500	-1.14	-37.45	≤-21.14	PASS
2DH5	Ant1	2402	Reference	-1.16	-1.16	---	PASS
			30~1000	-1.16	-52.83	≤-21.16	PASS
			1000~26500	-1.16	-40.32	≤-21.16	PASS
		2441	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-44.94	≤-21.13	PASS
			1000~26500	-1.13	-41.5	≤-21.13	PASS
		2480	Reference	-1.21	-1.21	---	PASS
			30~1000	-1.21	-61.62	≤-21.21	PASS
			1000~26500	-1.21	-41.3	≤-21.21	PASS
3DH5	Ant1	2402	Reference	-1.16	-1.16	---	PASS
			30~1000	-1.16	-60.77	≤-21.16	PASS
			1000~26500	-1.16	-40.7	≤-21.16	PASS
		2441	Reference	-1.15	-1.15	---	PASS
			30~1000	-1.15	-60.53	≤-21.15	PASS
			1000~26500	-1.15	-41.17	≤-21.15	PASS
		2480	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-58.9	≤-21.13	PASS
			1000~26500	-1.13	-40.91	≤-21.13	PASS

Test Graphs

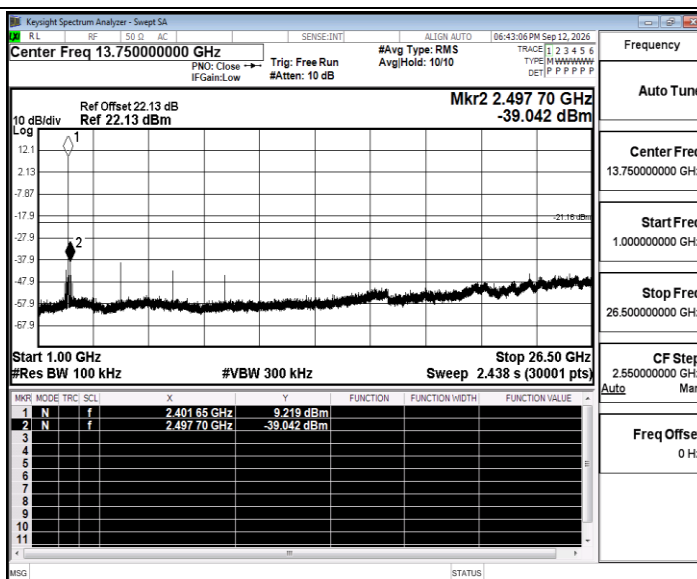
DH5_Ant1_2402_0~Reference



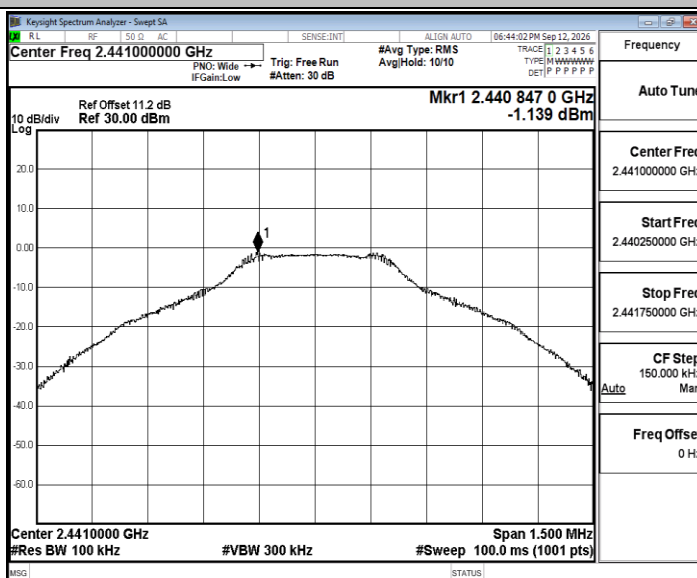
DH5_Ant1_2402_30~1000



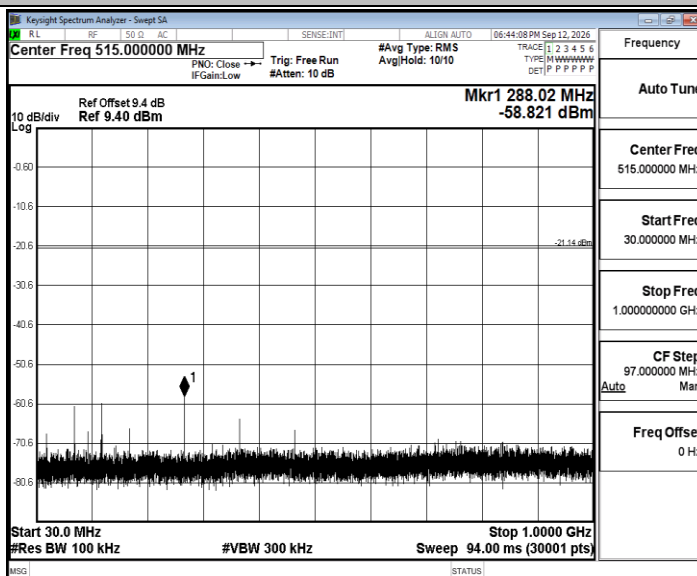
DH5_Ant1_2402_1000~26500

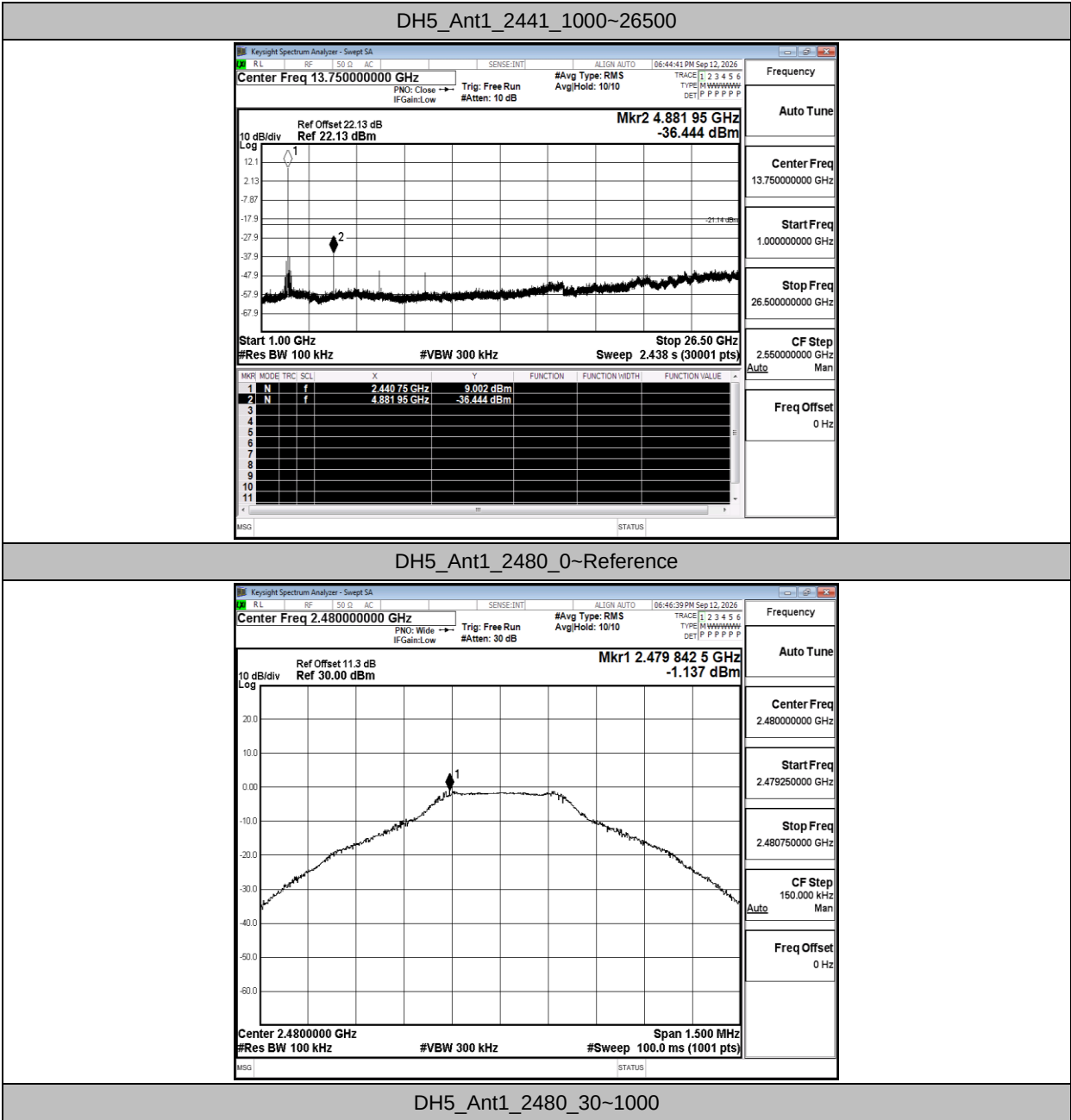


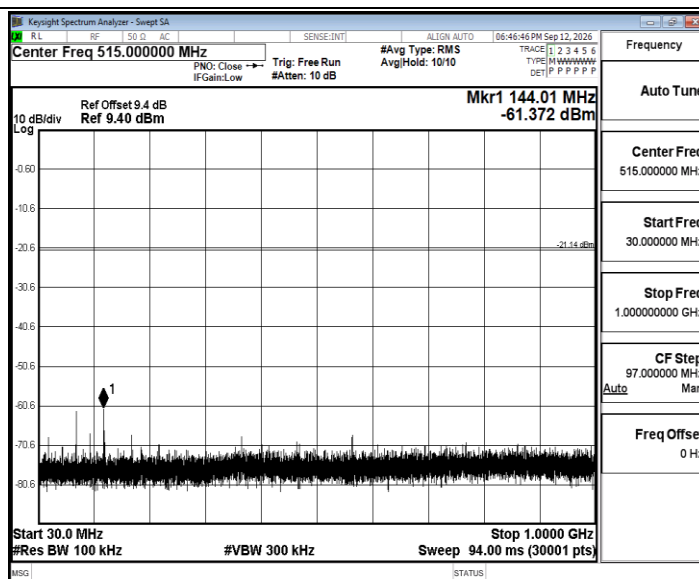
DH5_Ant1_2441_0~Reference



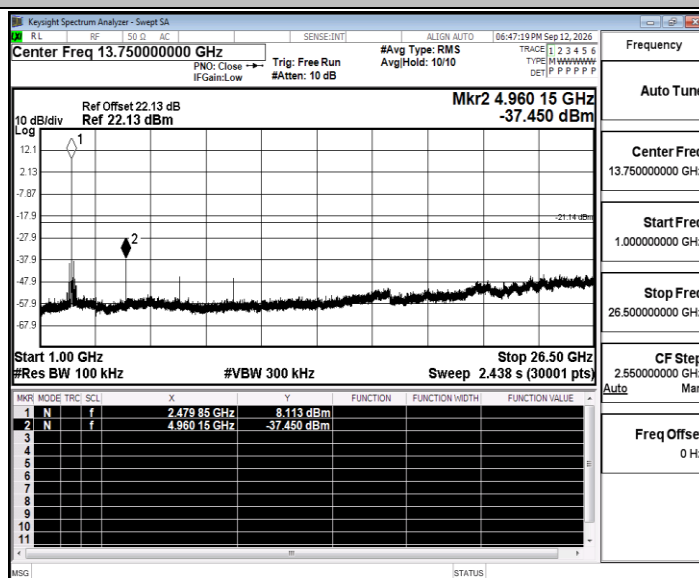
DH5_Ant1_2441_30~1000



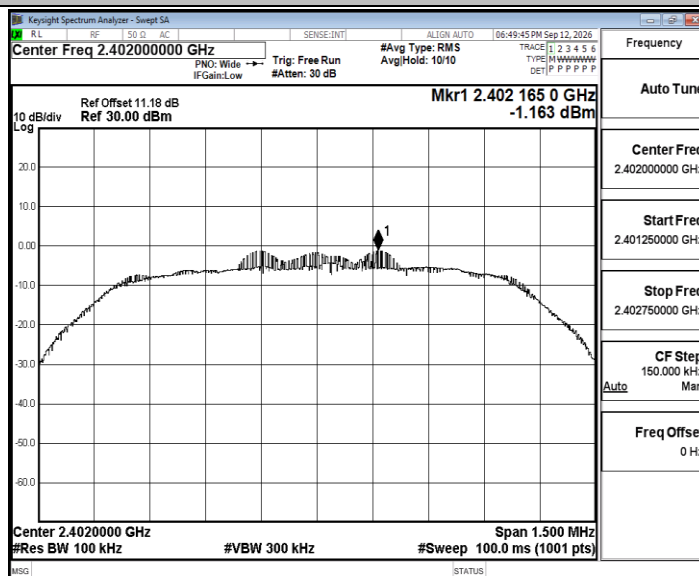




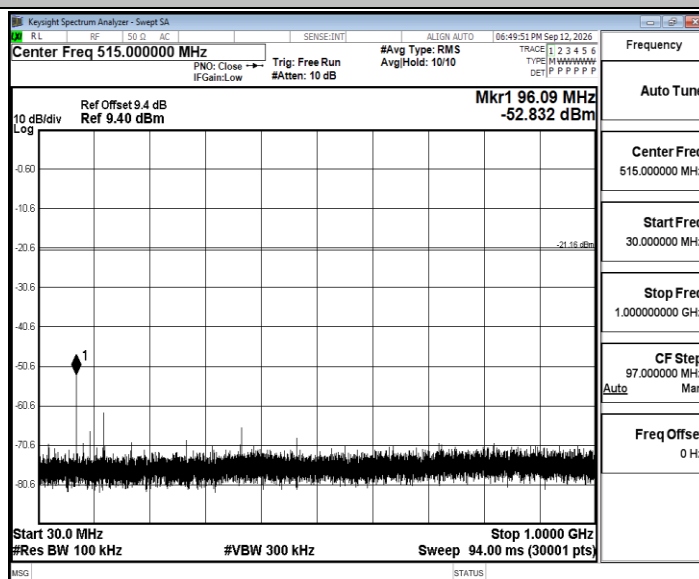
DH5_Ant1_2480_1000~26500



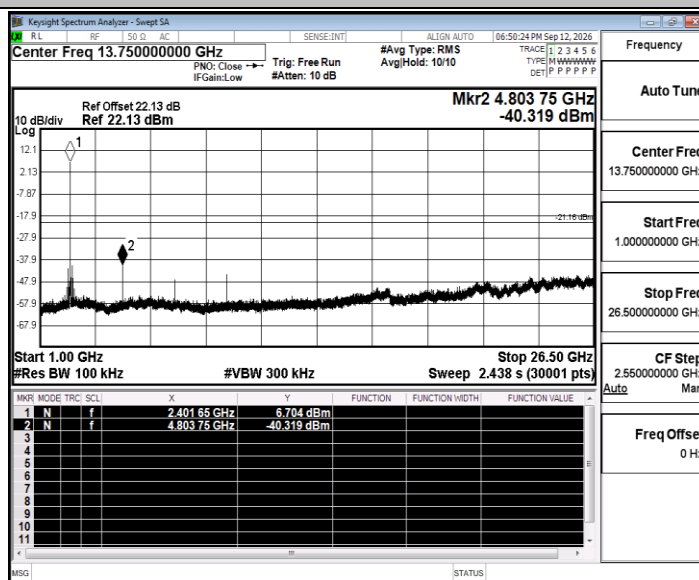
2DH5_Ant1_2402_0~Reference



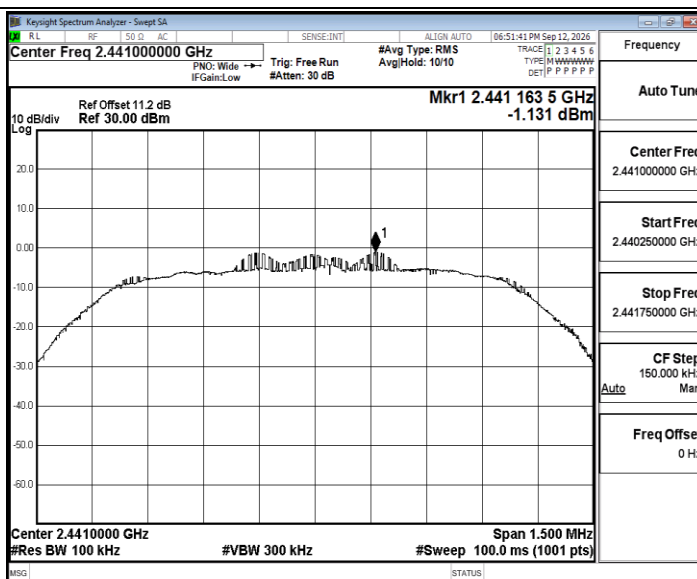
2DH5_Ant1_2402_30~1000



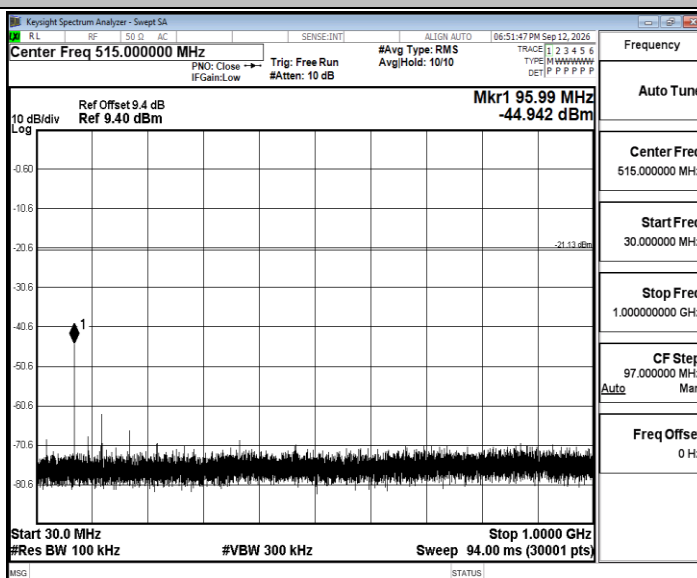
2DH5_Ant1_2402_1000~26500



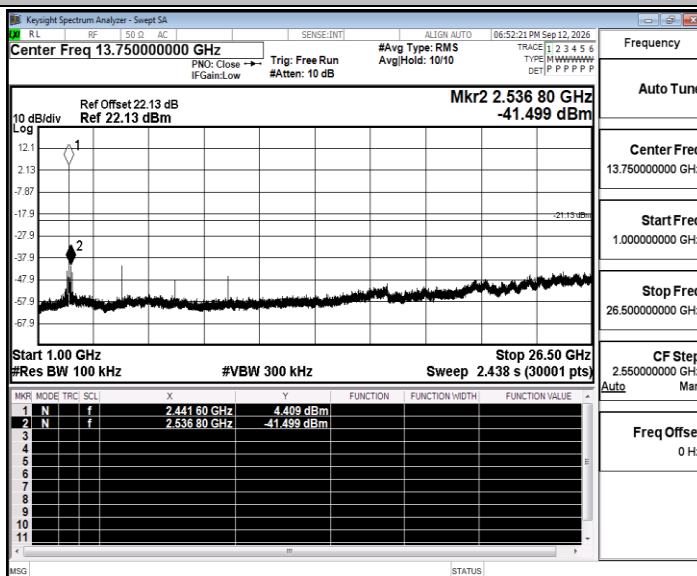
2DH5_Ant1_2441_0~Reference



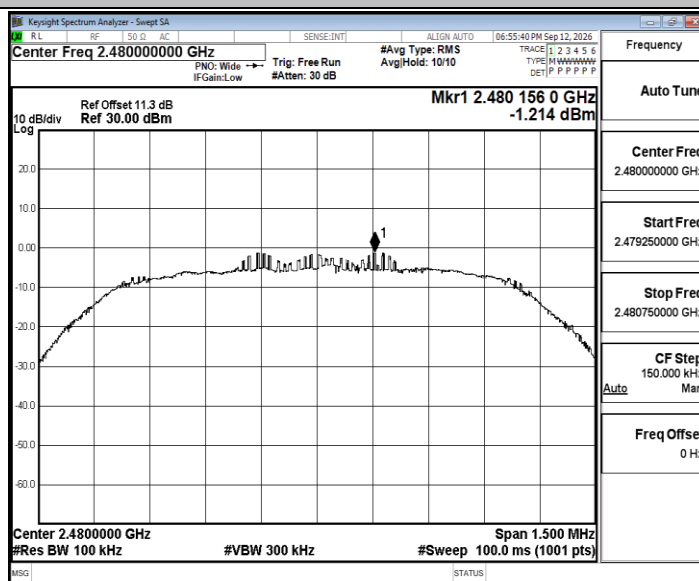
2DH5_Ant1_2441_30~1000



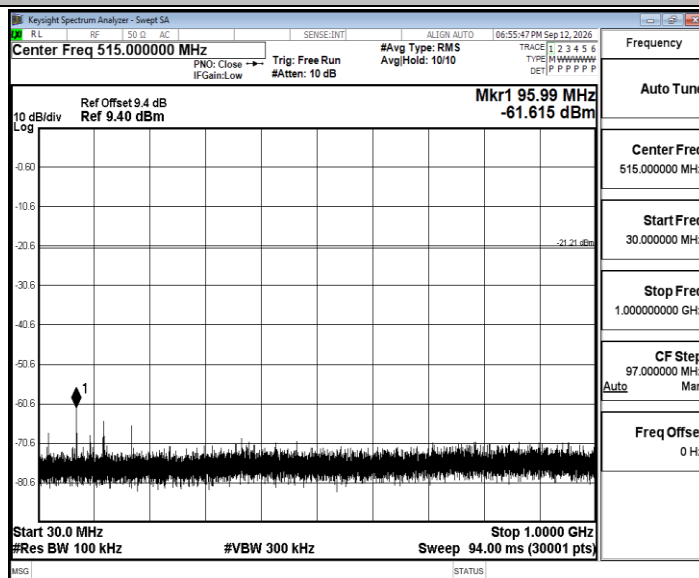
2DH5_Ant1_2441_1000~26500



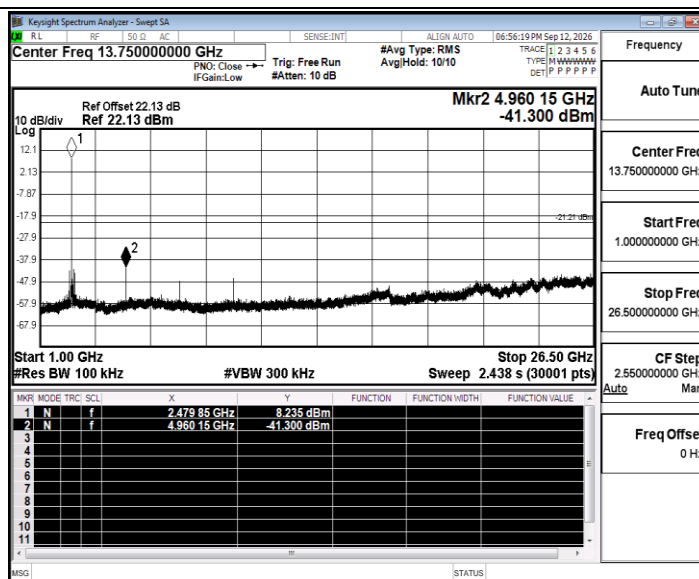
2DH5_Ant1_2480_0~Reference



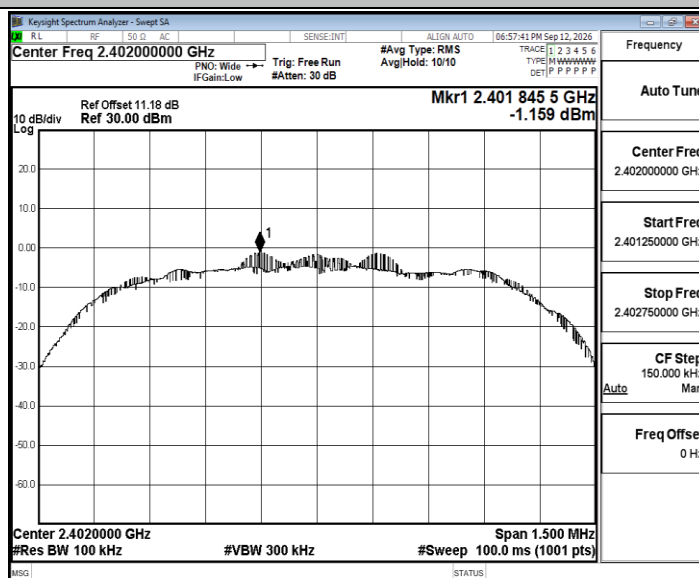
2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000

