

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth speaker

Test Model: OS-1988

Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

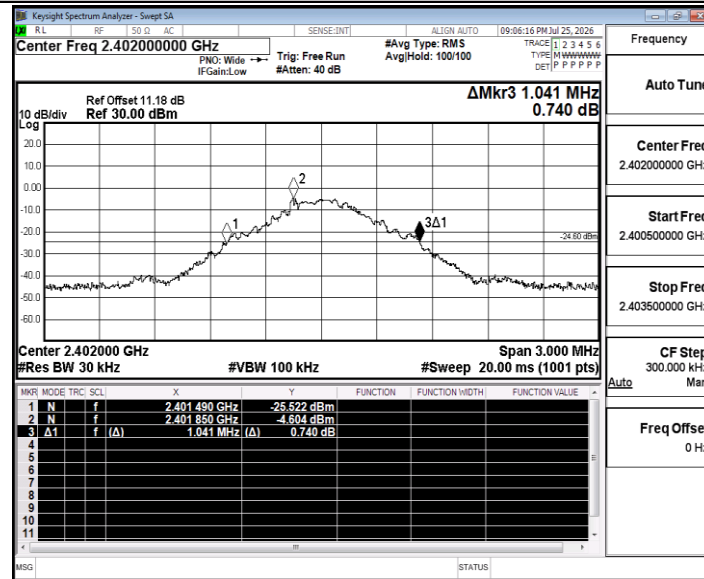
A.1 20dB Emission Bandwidth

Test Result

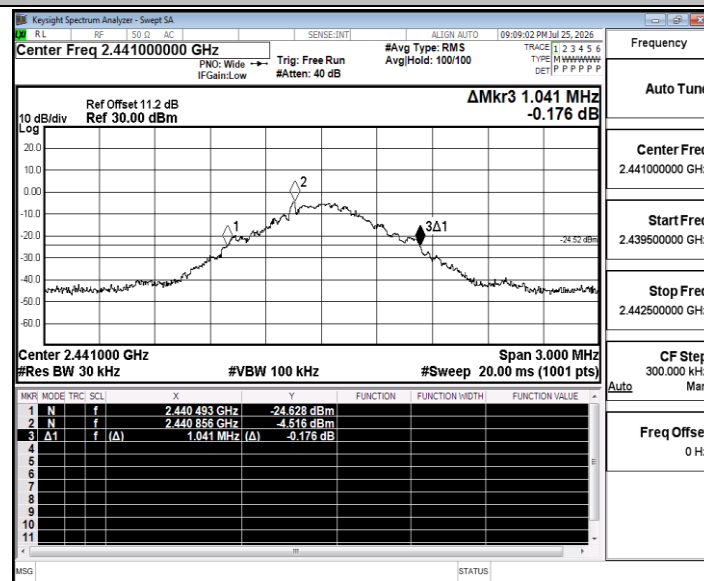
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.041	2401.490	2402.531	---	---
		2441	1.041	2440.493	2441.534	---	---
		2480	1.068	2479.466	2480.534	---	---
2DH5	Ant1	2402	1.326	2401.358	2402.684	---	---
		2441	1.338	2440.346	2441.684	---	---
		2480	1.341	2479.352	2480.693	---	---
3DH5	Ant1	2402	1.293	2401.370	2402.663	---	---
		2441	1.296	2440.367	2441.663	---	---
		2480	1.281	2479.370	2480.651	---	---

Test Graphs

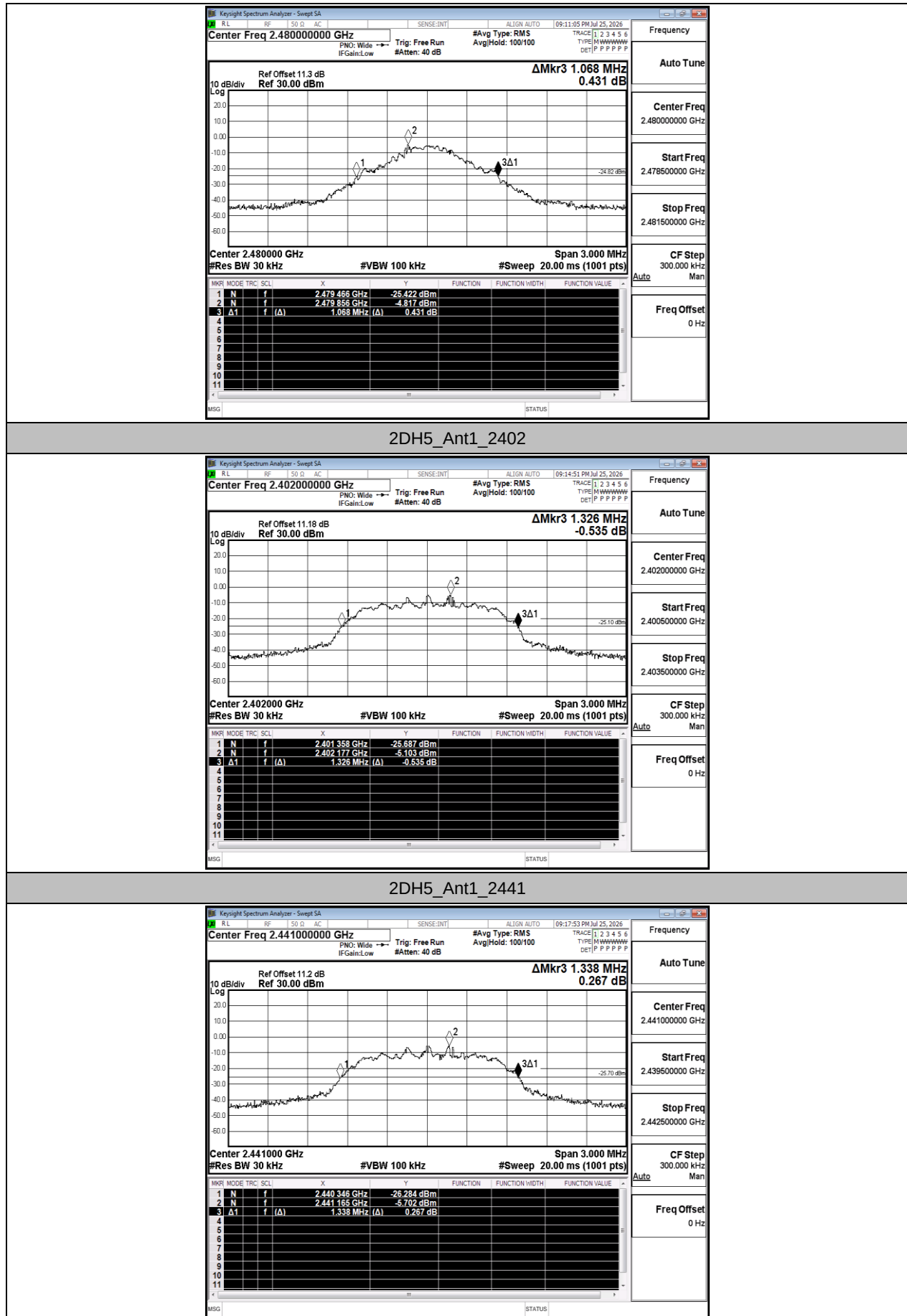
DH5_Ant1_2402



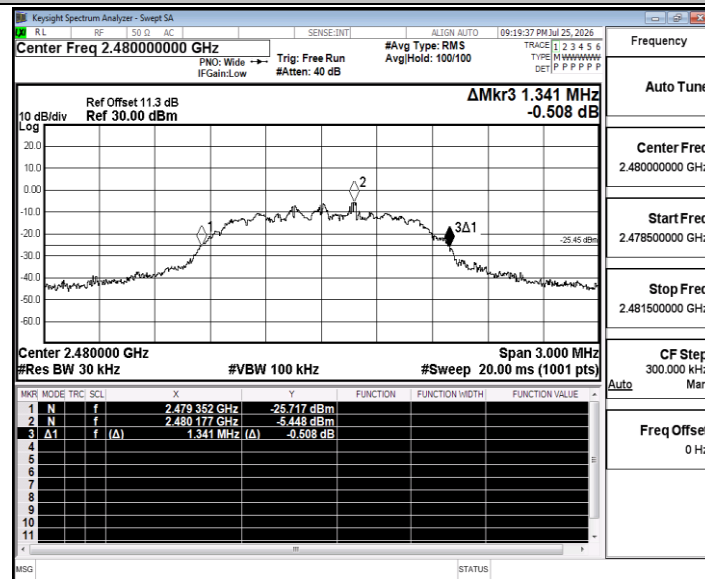
DH5_Ant1_2441



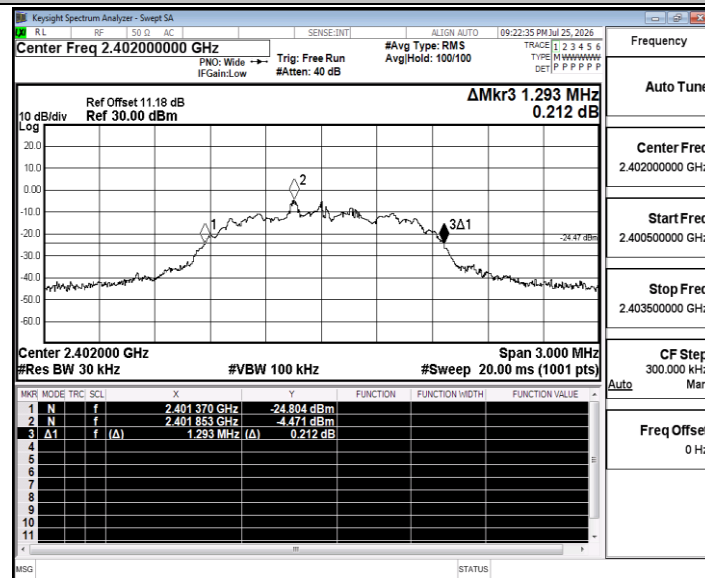
DH5_Ant1_2480



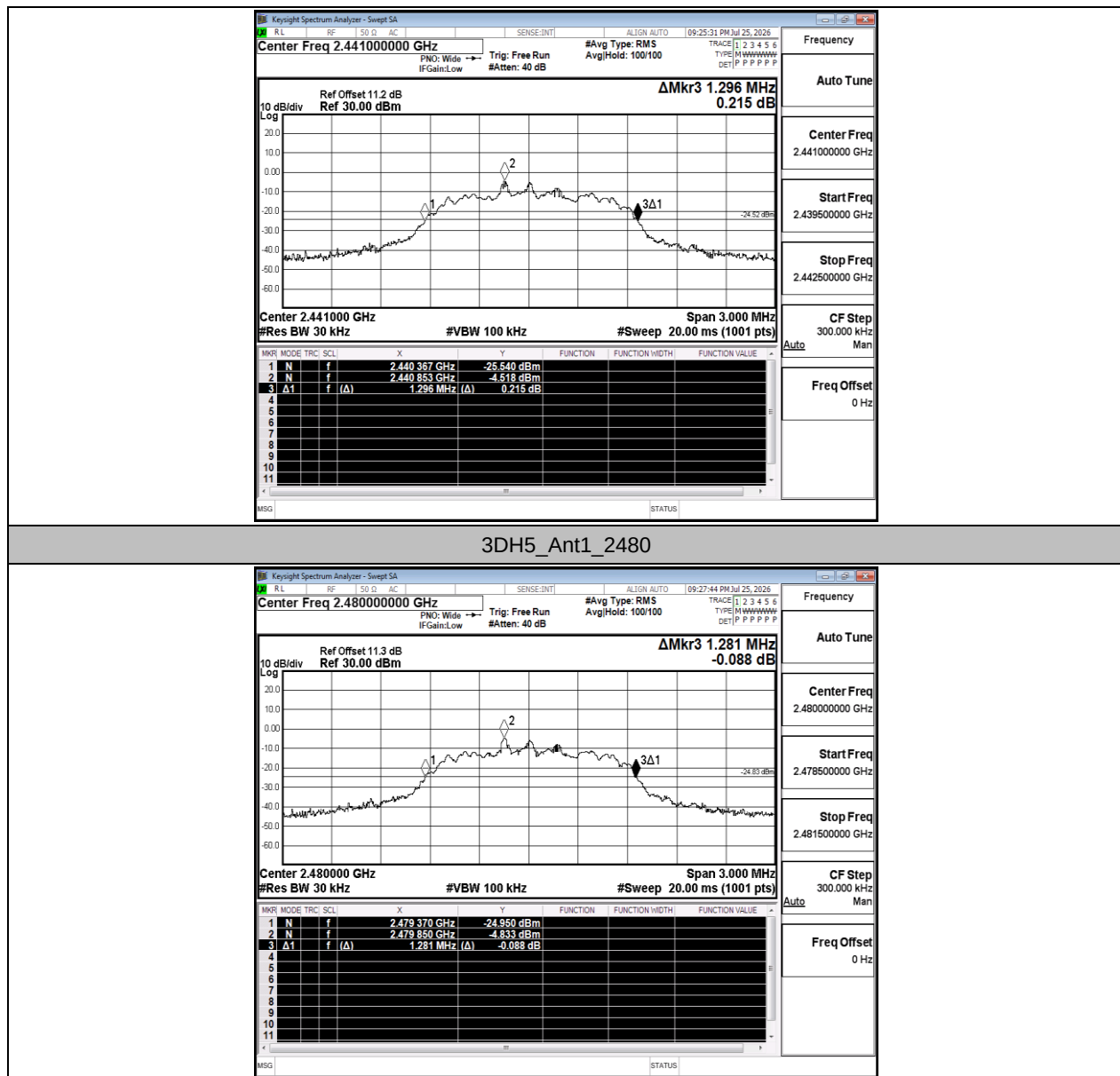
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

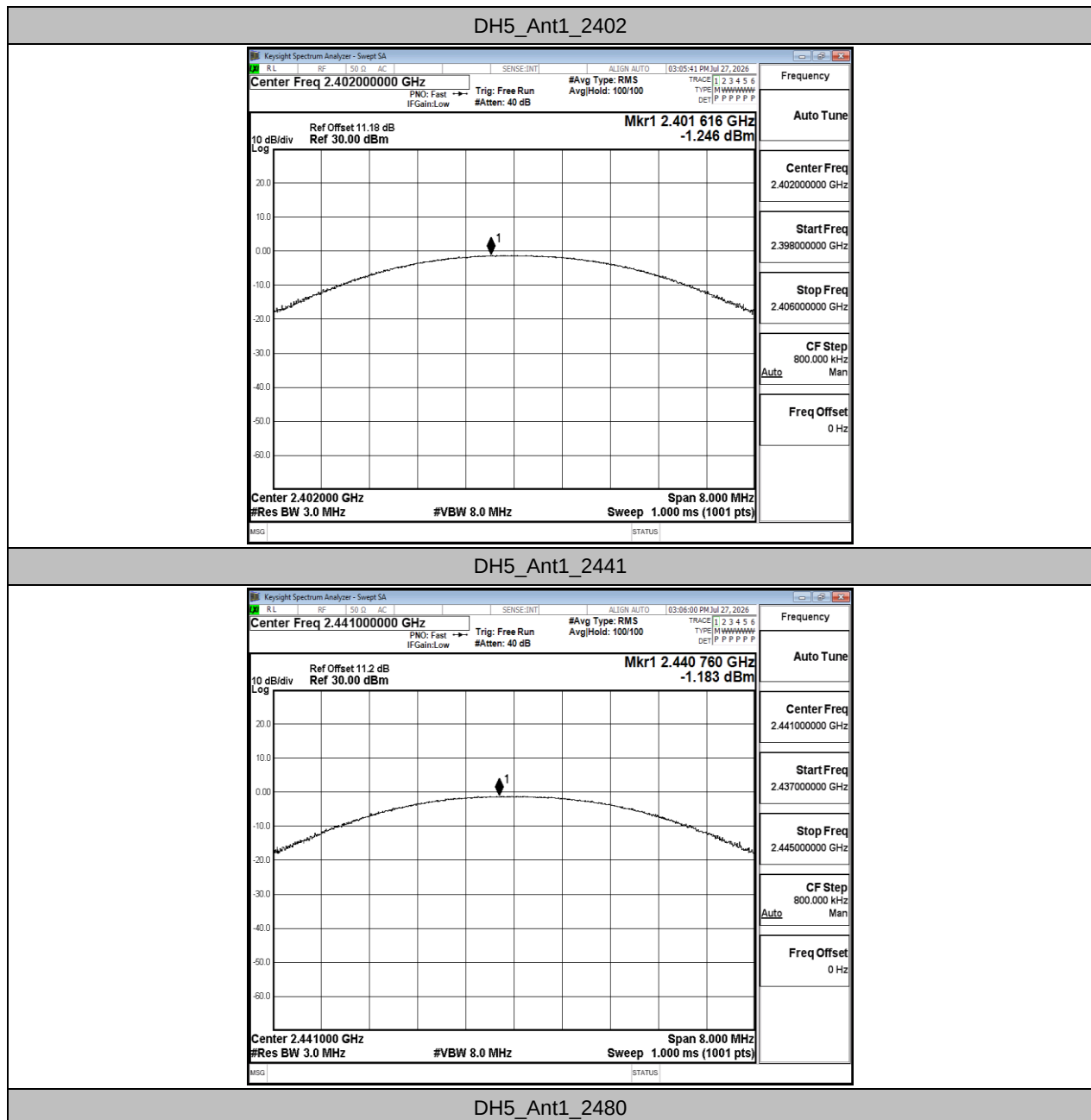


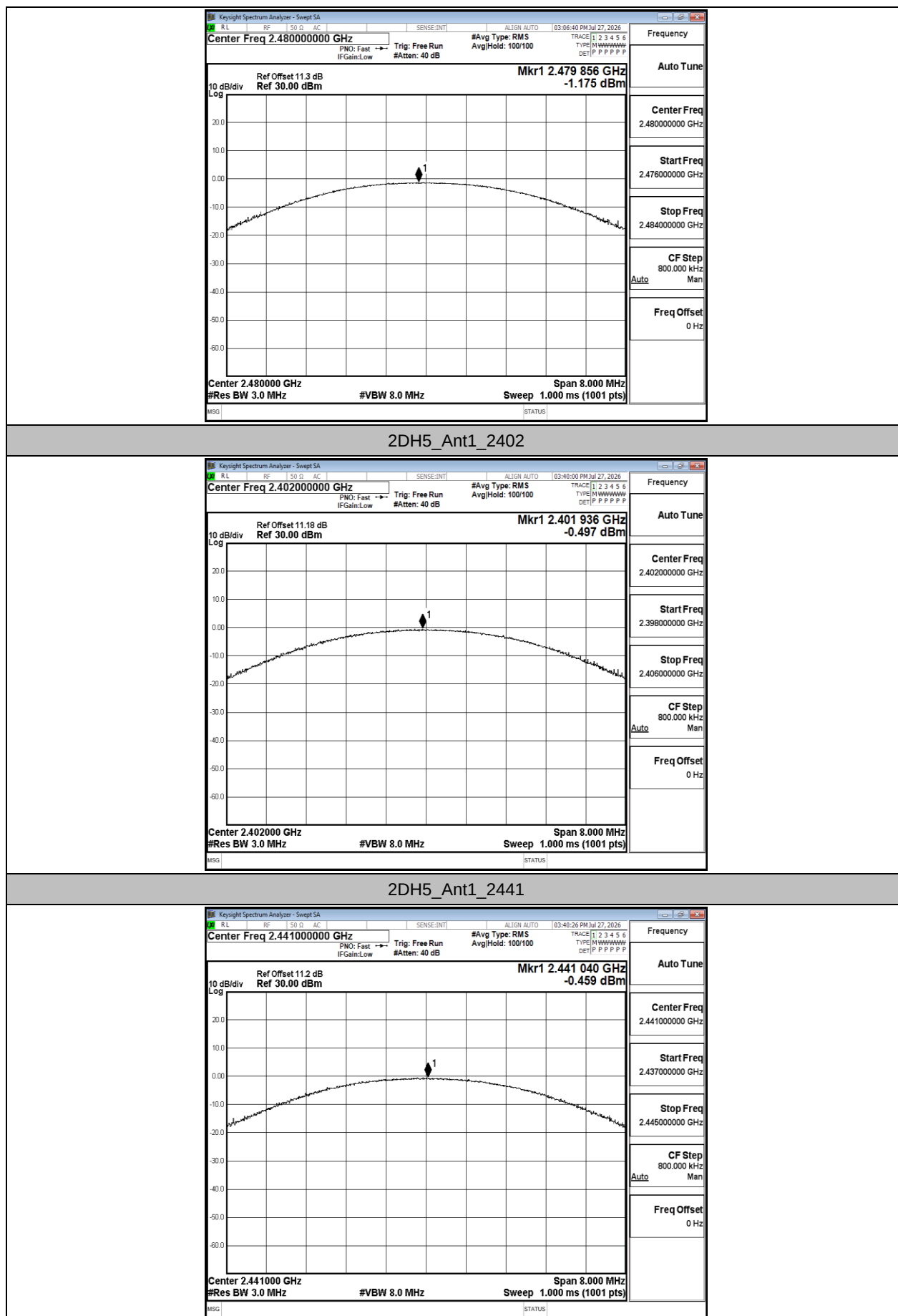
A.2 Maximum Peak conducted output power

Test Result Peak

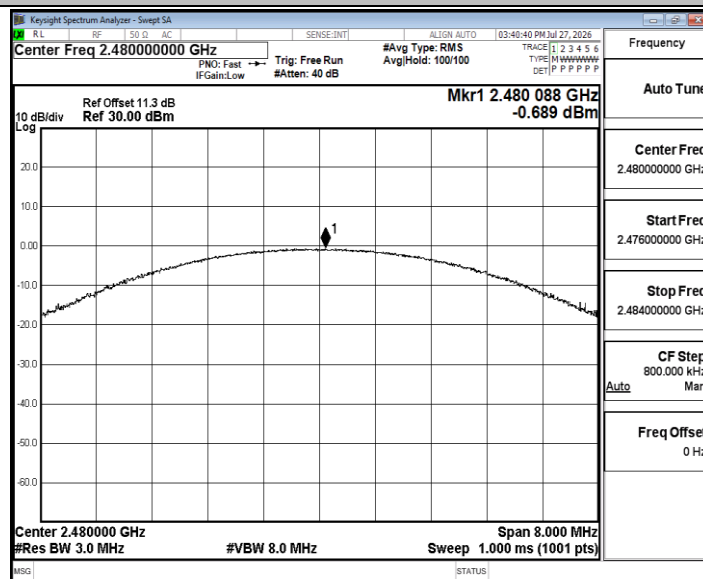
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-1.25	≤ 20.97	PASS
		2441	-1.18	≤ 20.97	PASS
		2480	-1.18	≤ 20.97	PASS
2DH5	Ant1	2402	-0.50	≤ 20.97	PASS
		2441	-0.46	≤ 20.97	PASS
		2480	-0.69	≤ 20.97	PASS
3DH5	Ant1	2402	-0.24	≤ 20.97	PASS
		2441	-0.21	≤ 20.97	PASS
		2480	-0.28	≤ 20.97	PASS

Test Graphs

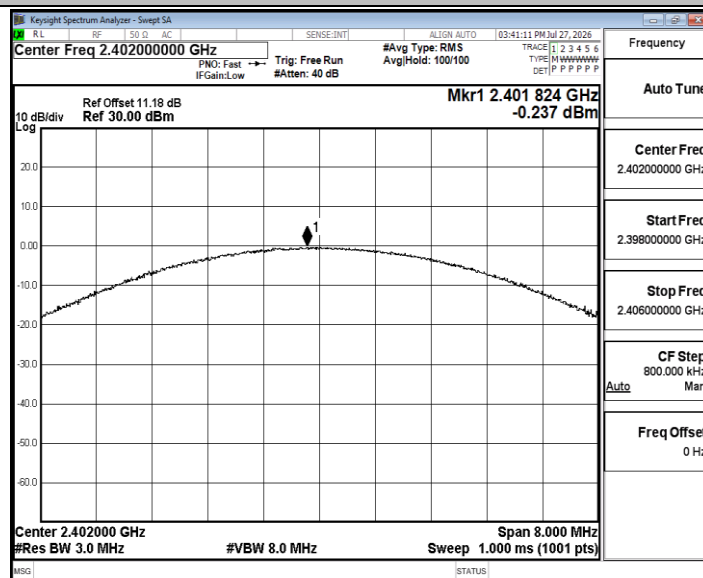




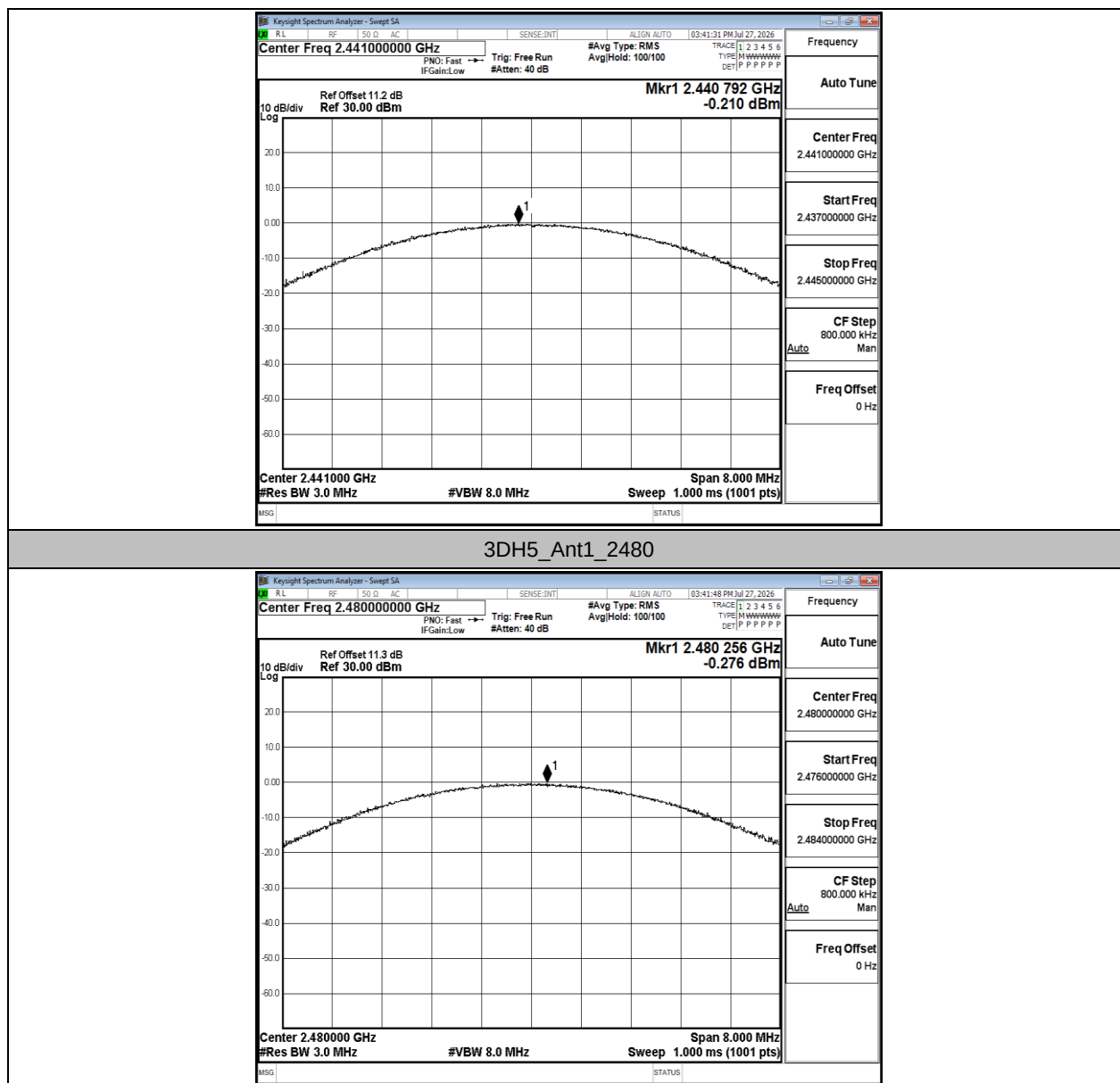
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

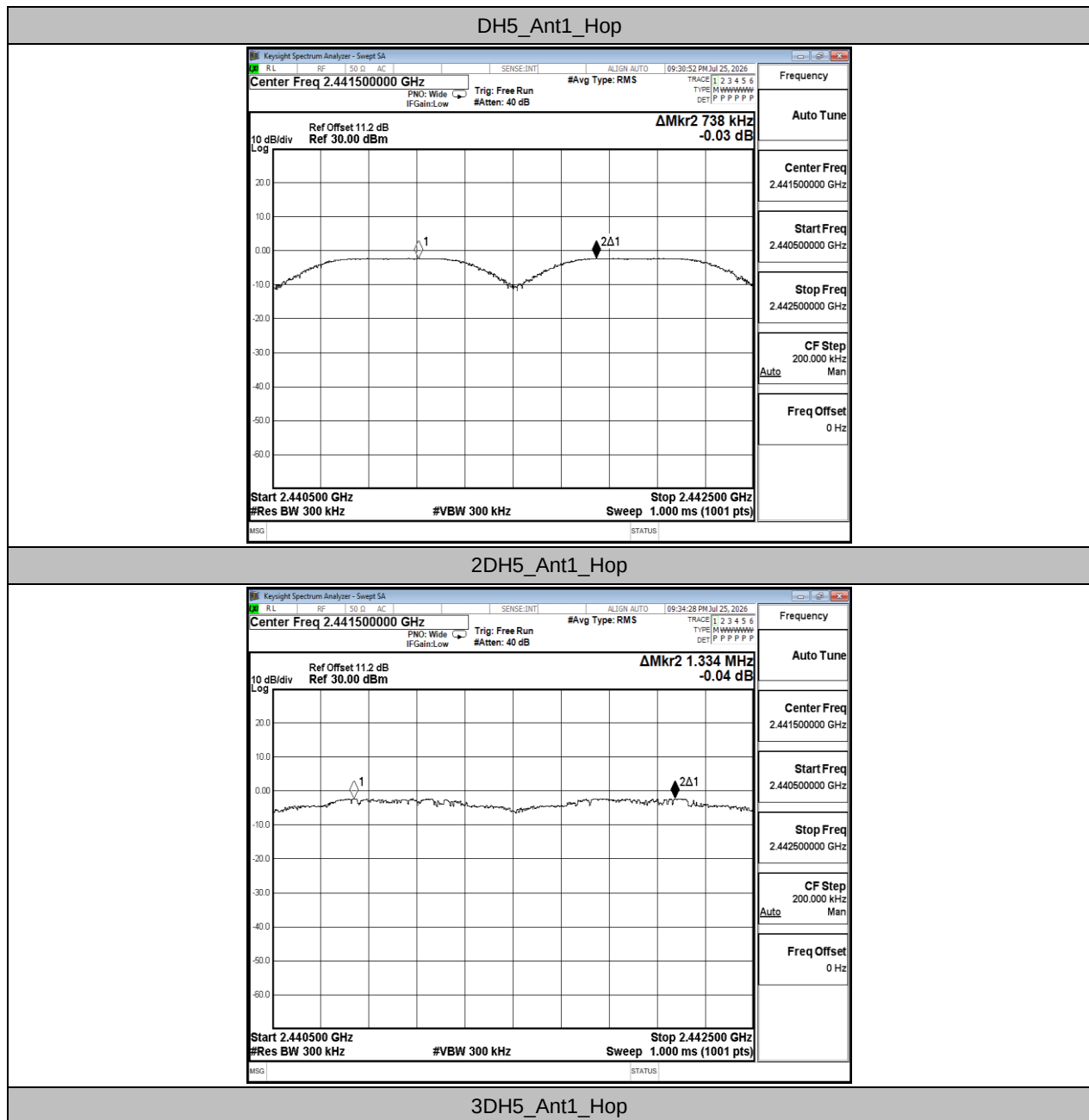


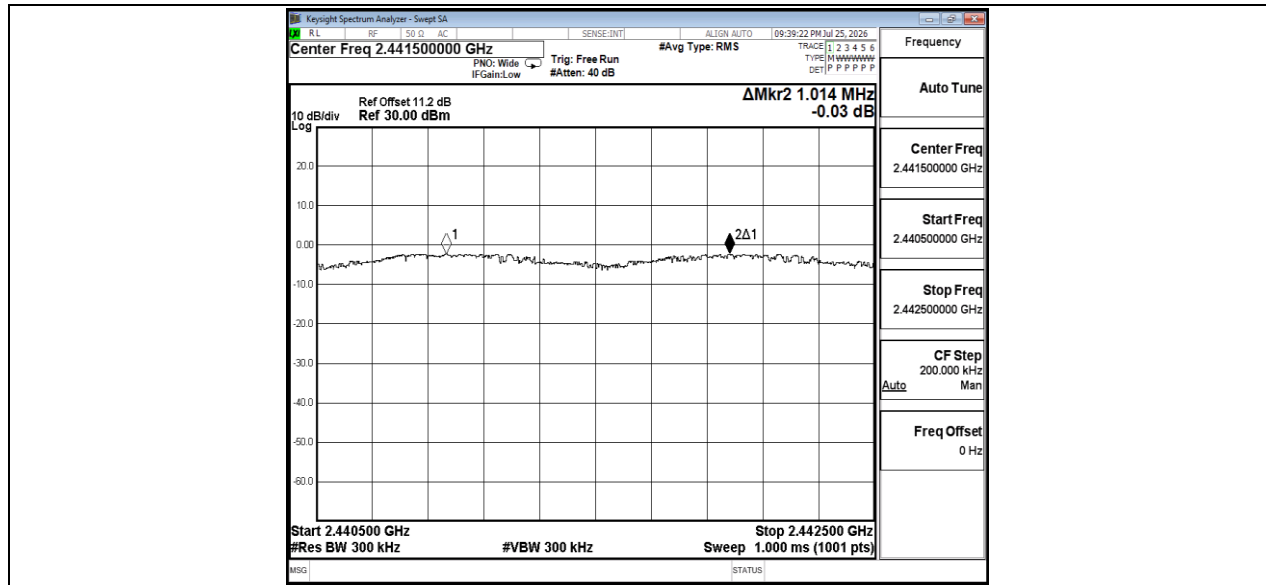
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.738	≥ 0.712	PASS
2DH5	Ant1	Hop	1.334	≥ 0.894	PASS
3DH5	Ant1	Hop	1.014	≥ 0.864	PASS

Test Graphs



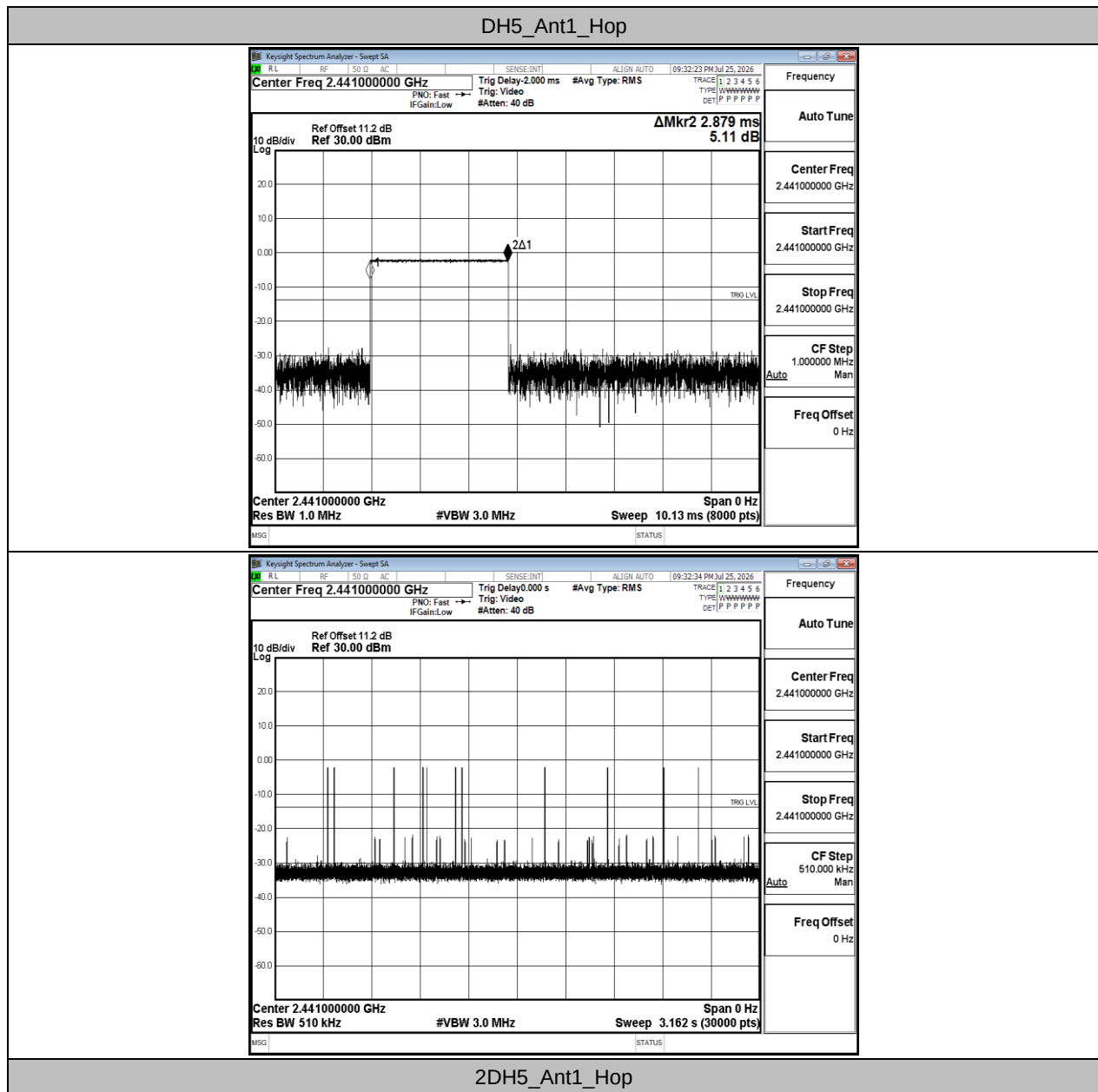


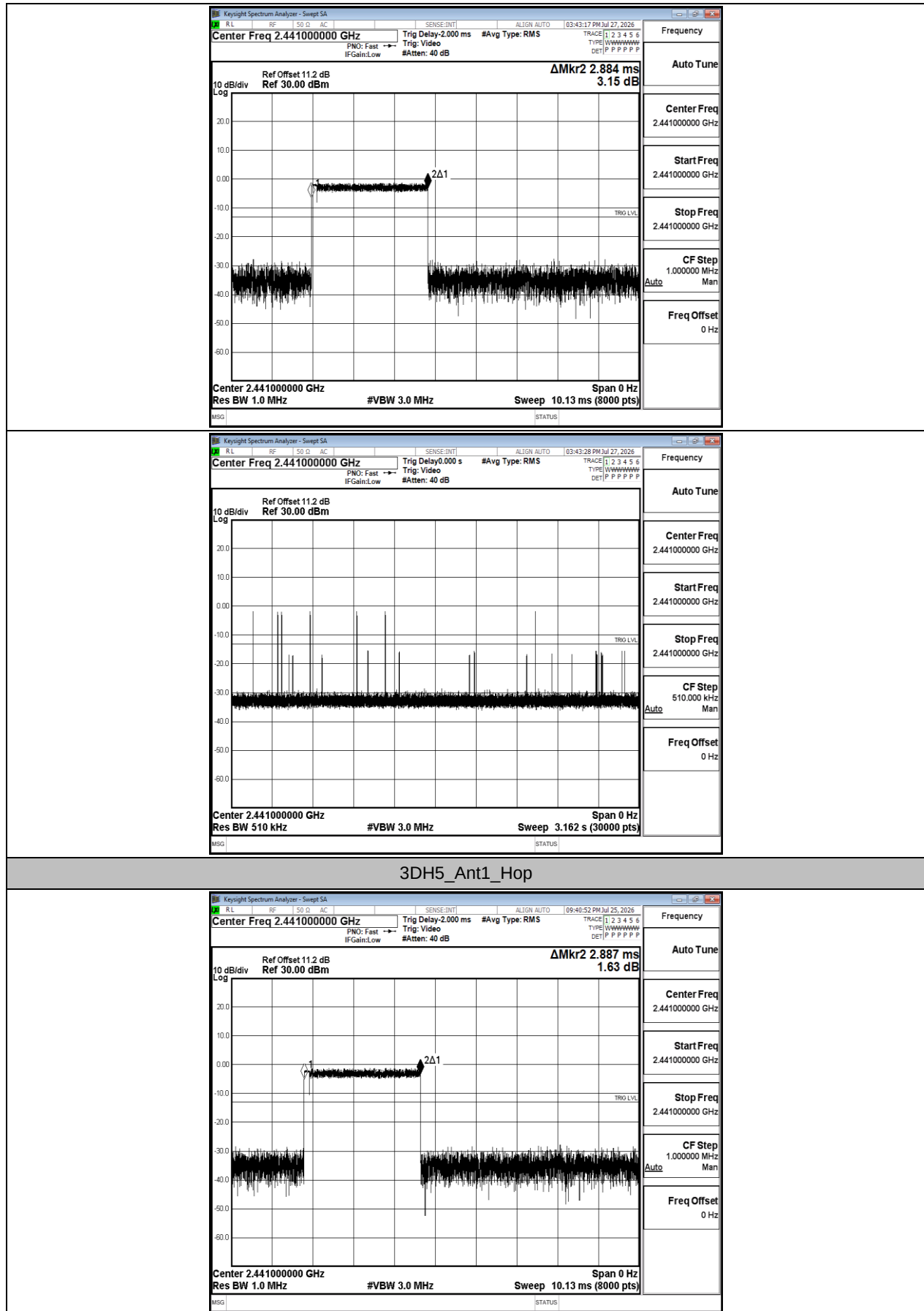
A4 Time of occupancy

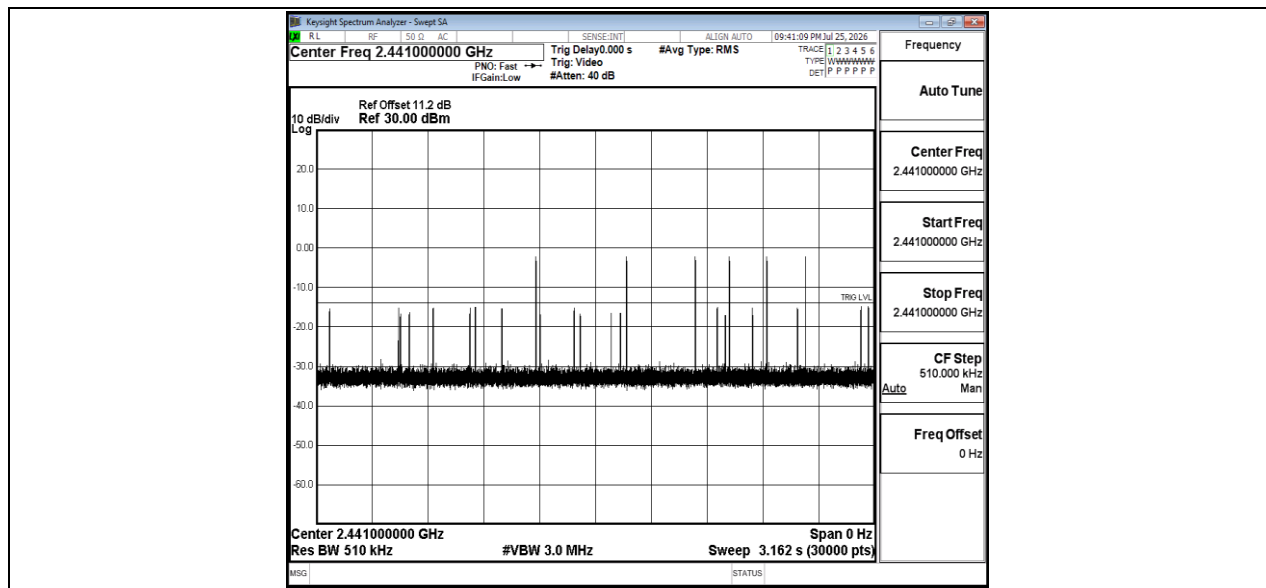
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	120	0.345	≤0.4	PASS
2DH5	Ant1	Hop	2.884	80	0.231	≤0.4	PASS
3DH5	Ant1	Hop	2.887	70	0.202	≤0.4	PASS

Test Graphs





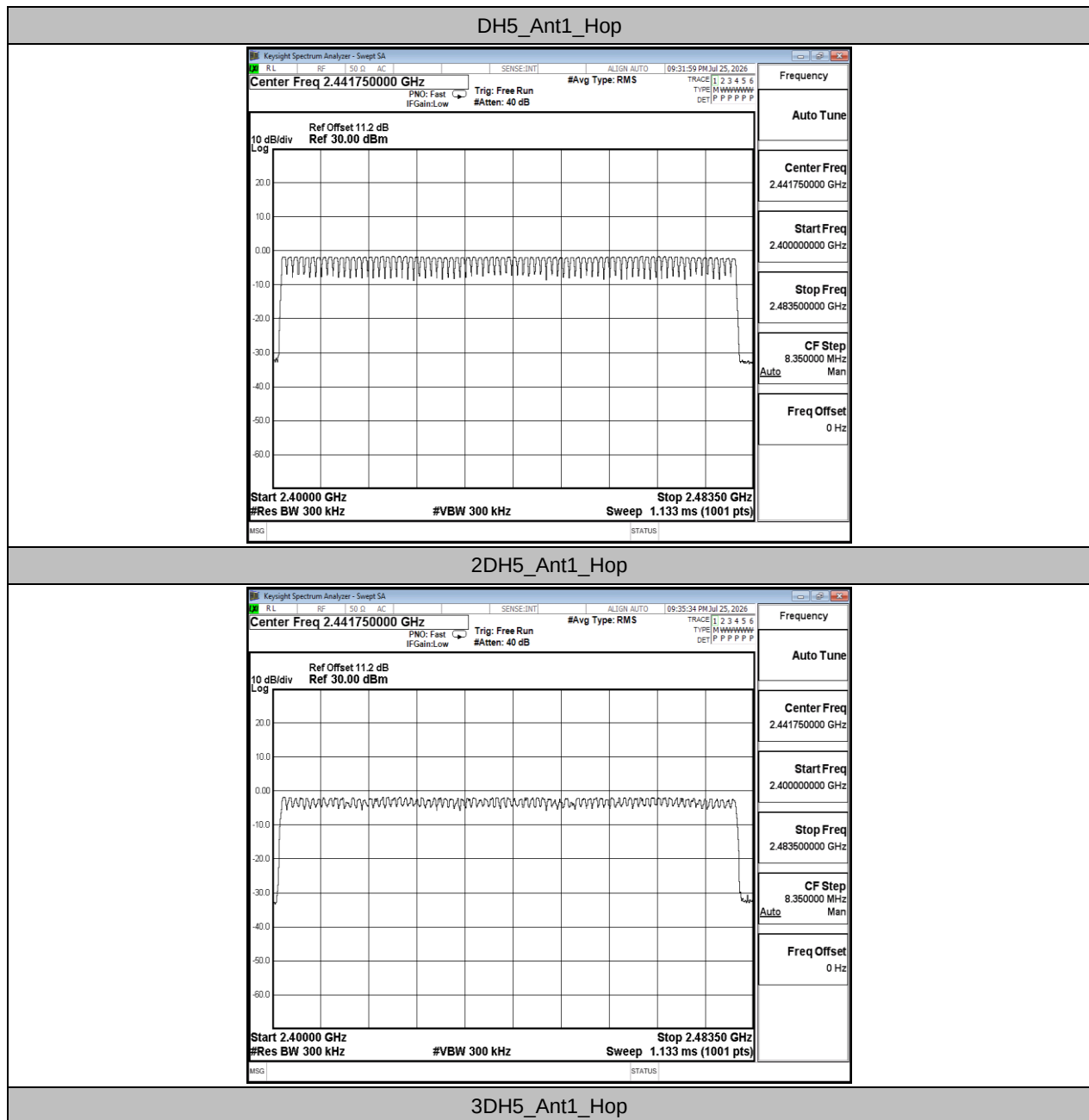


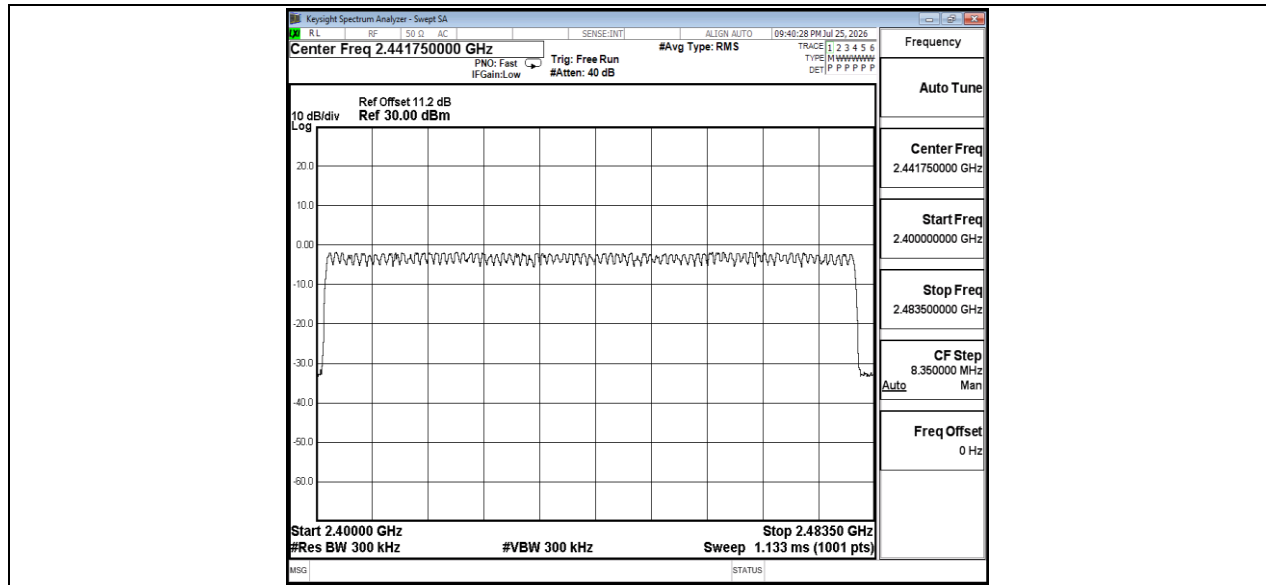
A.5 Number of hopping channels

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



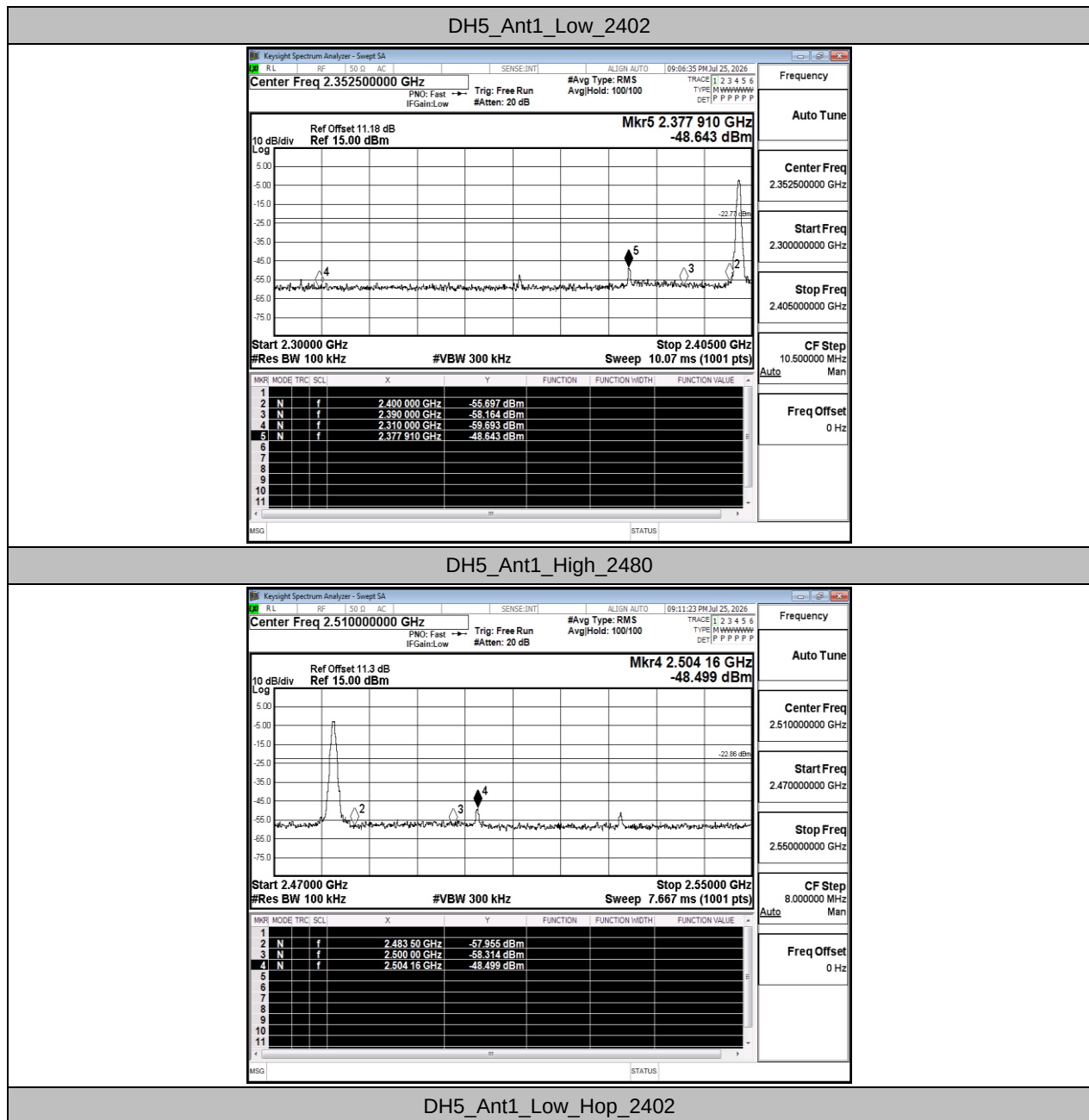


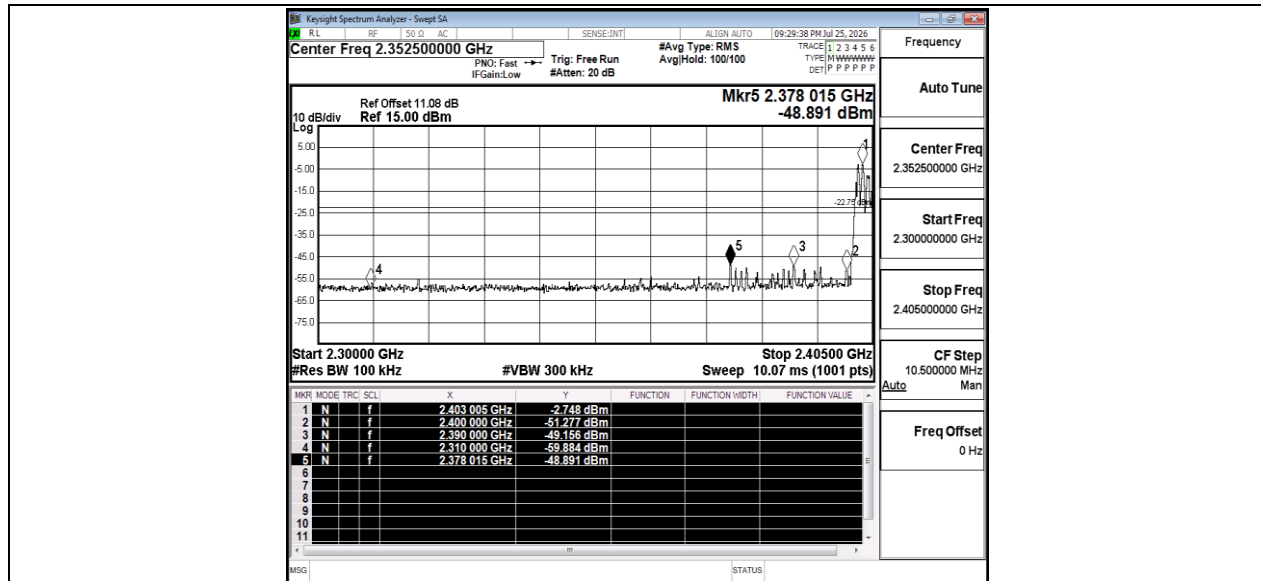
A.6 Band edge measurements

Test Result

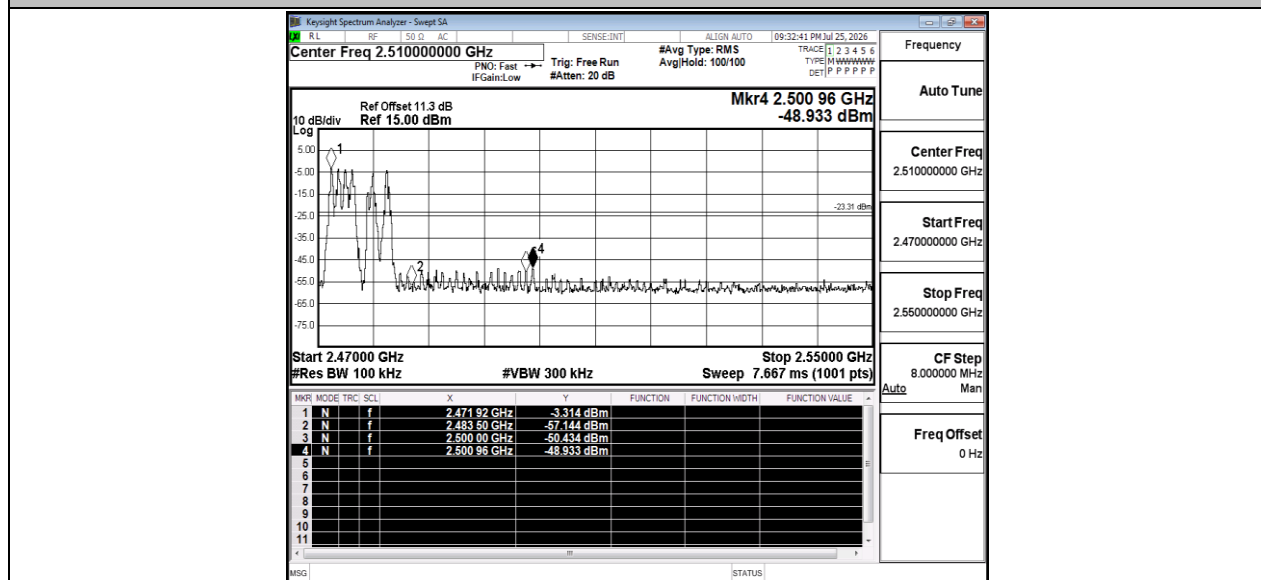
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.77	-48.64	≤ -22.77	PASS
		High	2480	-2.86	-48.5	≤ -22.86	PASS
		Low	Hop_2402	-2.75	-48.89	≤ -22.75	PASS
		High	Hop_2480	-3.31	-48.93	≤ -23.31	PASS
2DH5	Ant1	Low	2402	-2.34	-50.72	≤ -22.34	PASS
		High	2480	-2.80	-50.58	≤ -22.8	PASS
		Low	Hop_2402	-8.82	-50.93	≤ -28.82	PASS
		High	Hop_2480	-6.17	-50.88	≤ -26.17	PASS
3DH5	Ant1	Low	2402	-2.34	-49.8	≤ -22.34	PASS
		High	2480	-2.80	-49.98	≤ -22.8	PASS
		Low	Hop_2402	-7.60	-50.96	≤ -27.6	PASS
		High	Hop_2480	-6.64	-50.07	≤ -26.64	PASS

Test Graphs

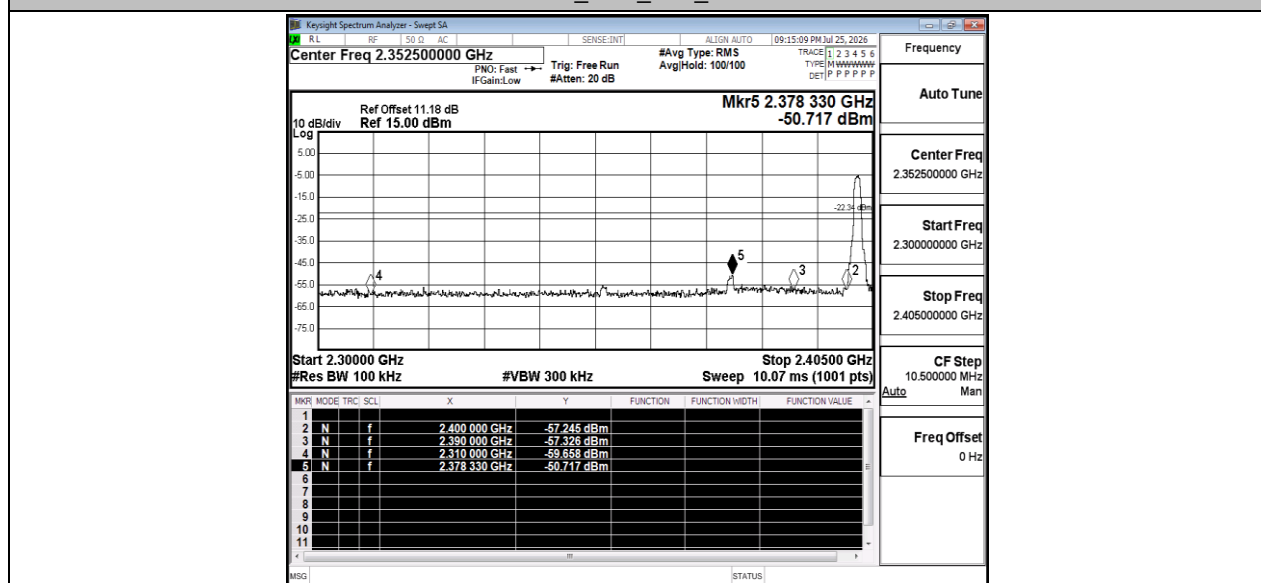




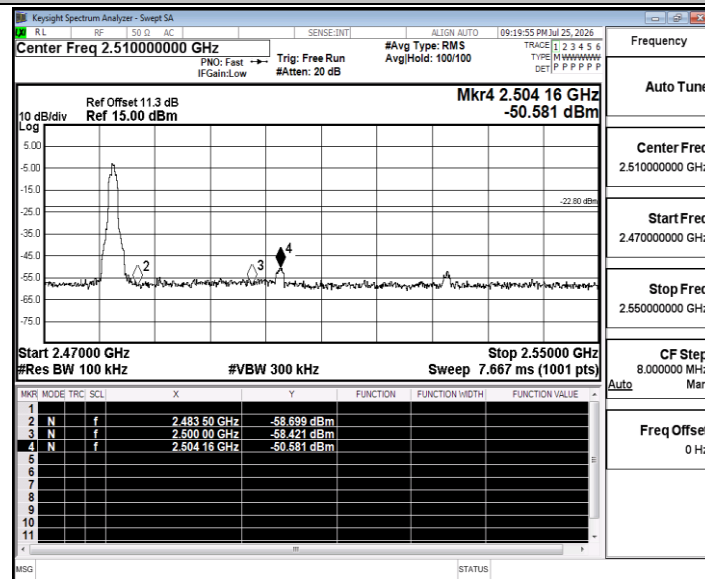
DH5_Ant1_High_Hop_2480



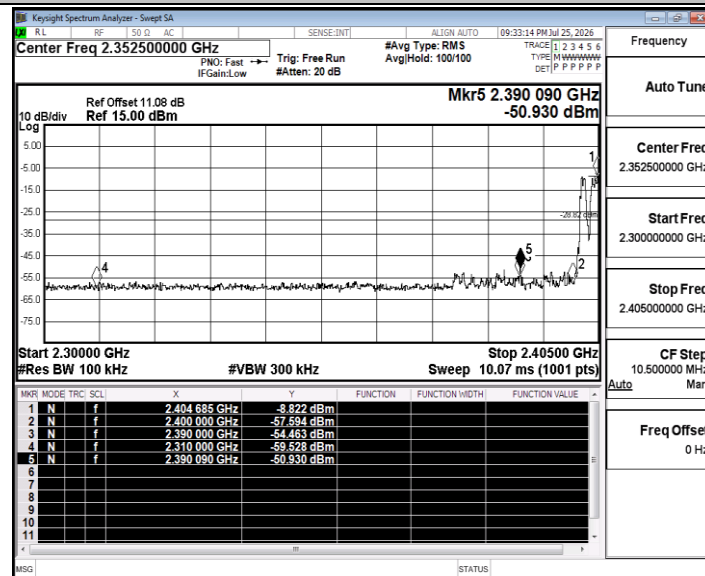
2DH5_Ant1_Low_2402



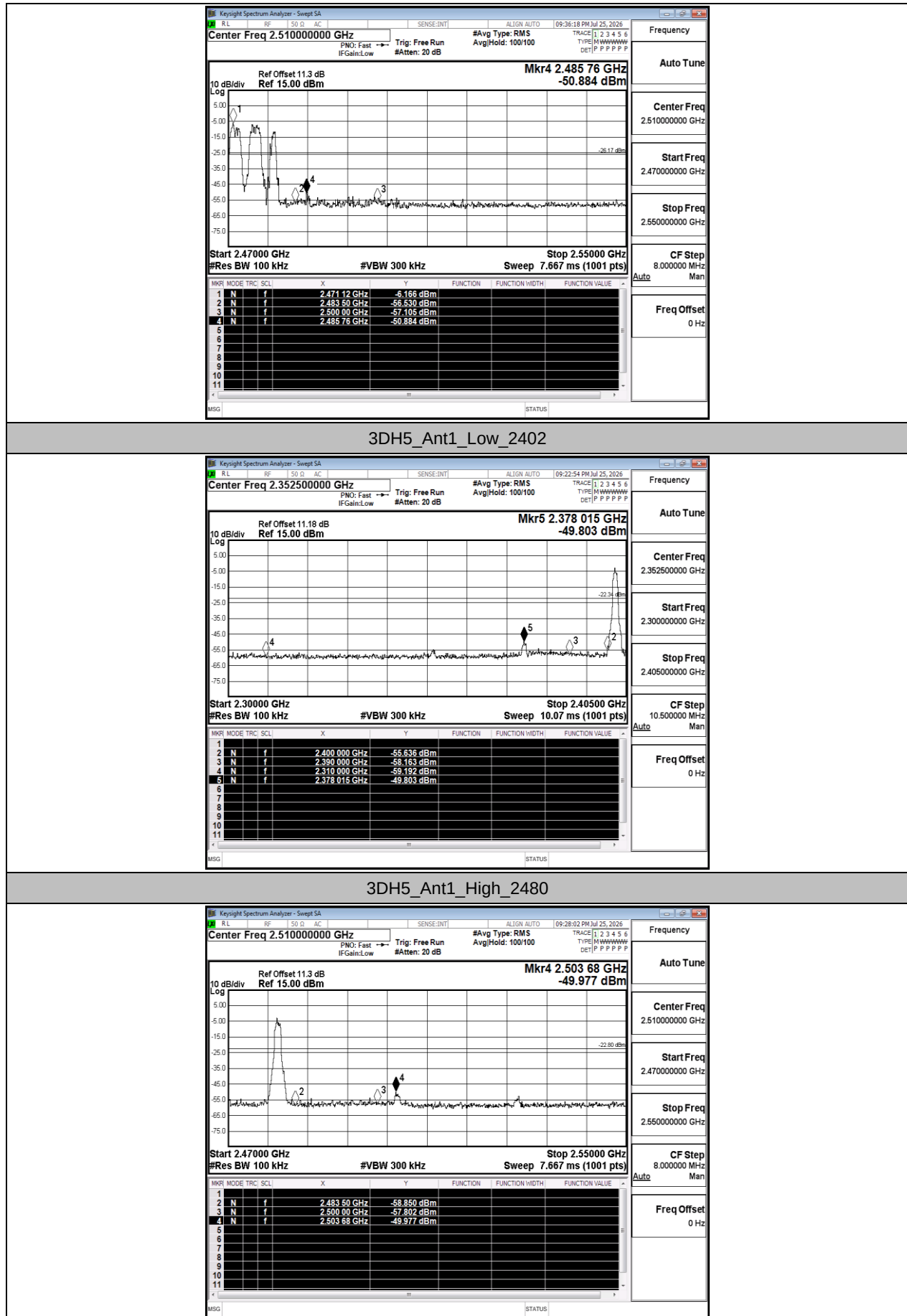
2DH5_Ant1_High_2480



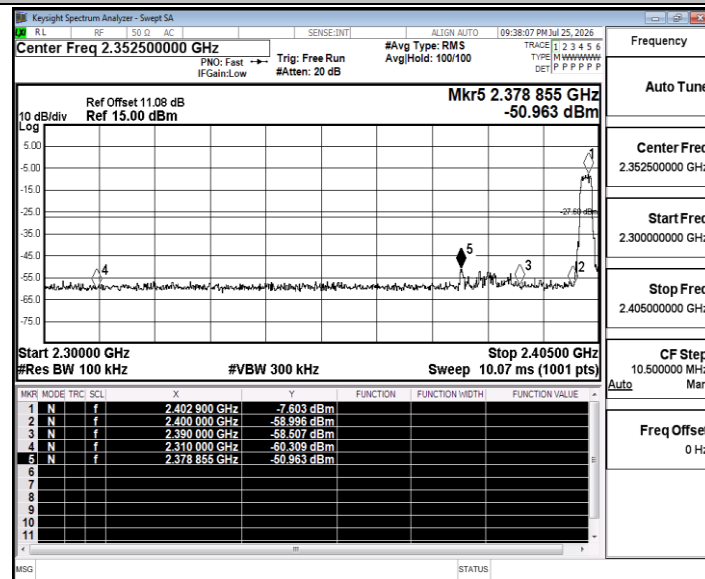
2DH5_Ant1_Low_Hop_2402



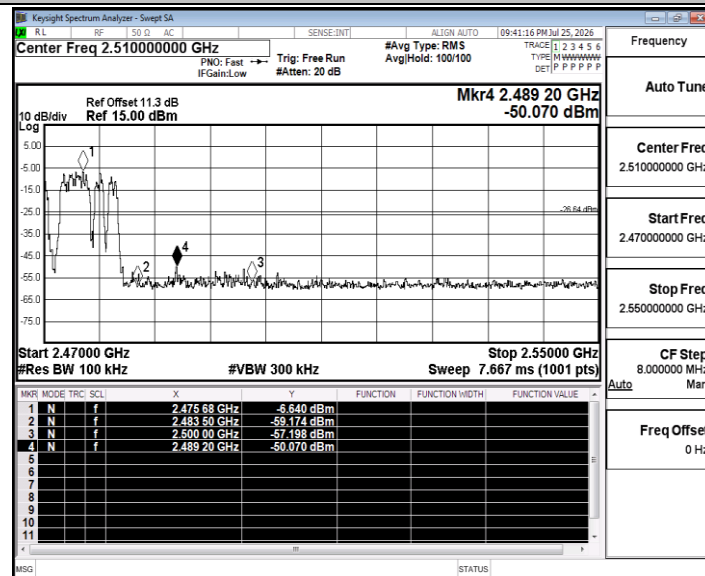
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

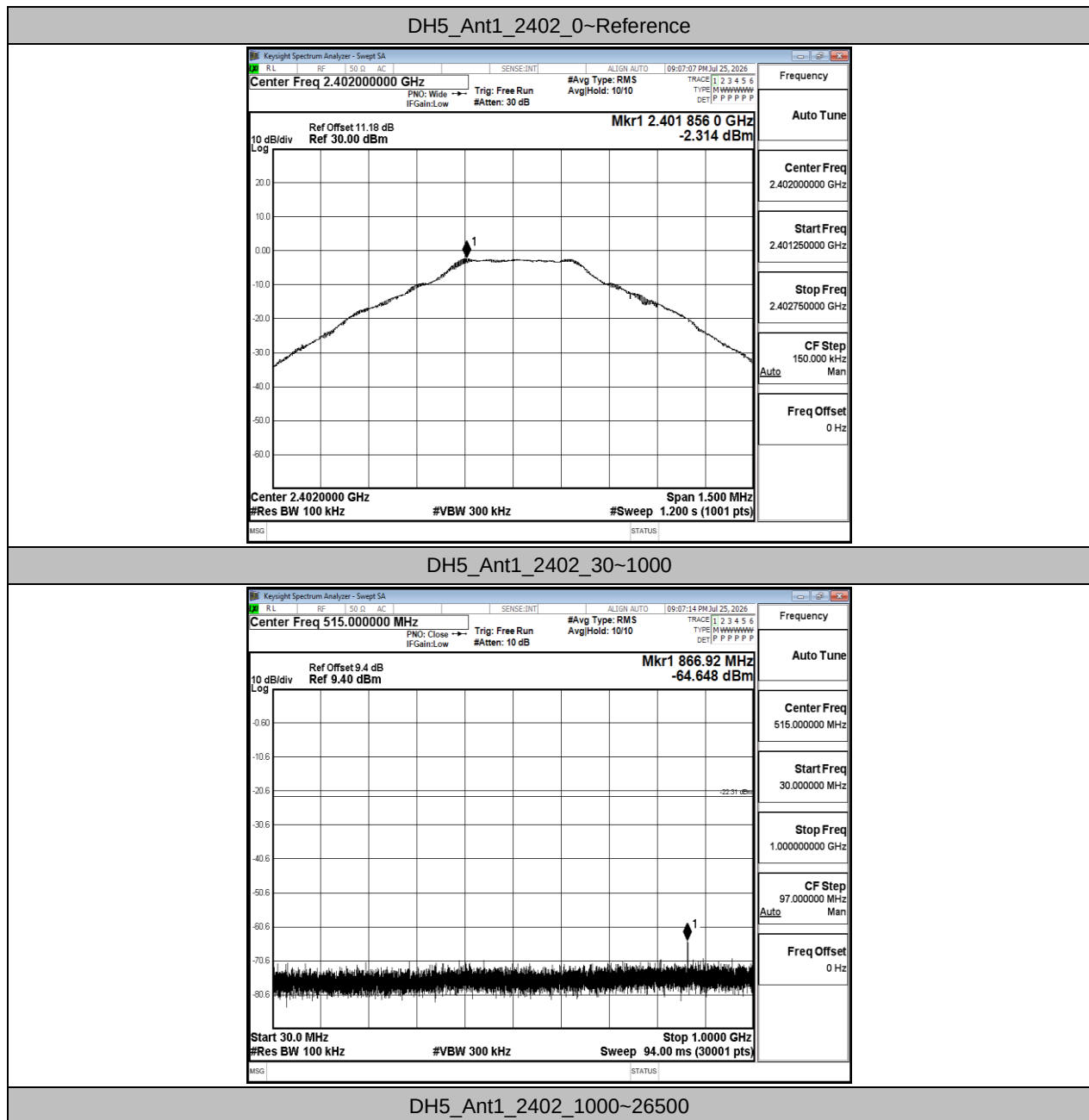


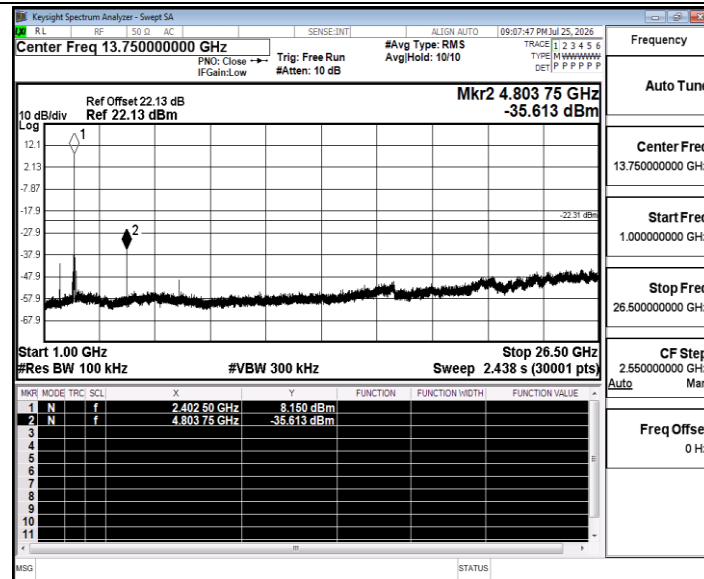
A.7 Conducted Spurious Emission

Test Result

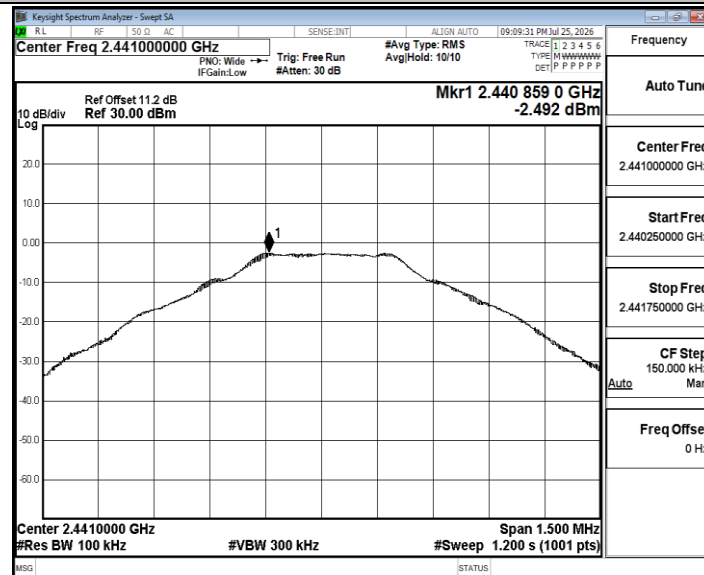
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-2.31	-2.31	---	PASS
			30~1000	-2.31	-64.65	≤-22.31	PASS
			1000~26500	-2.31	-35.61	≤-22.31	PASS
		2441	Reference	-2.49	-2.49	---	PASS
			30~1000	-2.49	-63.69	≤-22.49	PASS
			1000~26500	-2.49	-37.19	≤-22.49	PASS
		2480	Reference	-2.73	-2.73	---	PASS
			30~1000	-2.73	-64.58	≤-22.73	PASS
			1000~26500	-2.73	-35.14	≤-22.73	PASS
2DH5	Ant1	2402	Reference	-2.34	-2.34	---	PASS
			30~1000	-2.34	-64.39	≤-22.34	PASS
			1000~26500	-2.34	-38.98	≤-22.34	PASS
		2441	Reference	-2.49	-2.49	---	PASS
			30~1000	-2.49	-64.22	≤-22.49	PASS
			1000~26500	-2.49	-37.75	≤-22.49	PASS
		2480	Reference	-2.70	-2.70	---	PASS
			30~1000	-2.70	-61.3	≤-22.7	PASS
			1000~26500	-2.70	-36.7	≤-22.7	PASS
3DH5	Ant1	2402	Reference	-2.31	-2.31	---	PASS
			30~1000	-2.31	-64.43	≤-22.31	PASS
			1000~26500	-2.31	-39.01	≤-22.31	PASS
		2441	Reference	-2.46	-2.46	---	PASS
			30~1000	-2.46	-62.91	≤-22.46	PASS
			1000~26500	-2.46	-37.52	≤-22.46	PASS
		2480	Reference	-2.68	-2.68	---	PASS
			30~1000	-2.68	-61.29	≤-22.68	PASS
			1000~26500	-2.68	-35.47	≤-22.68	PASS

Test Graphs

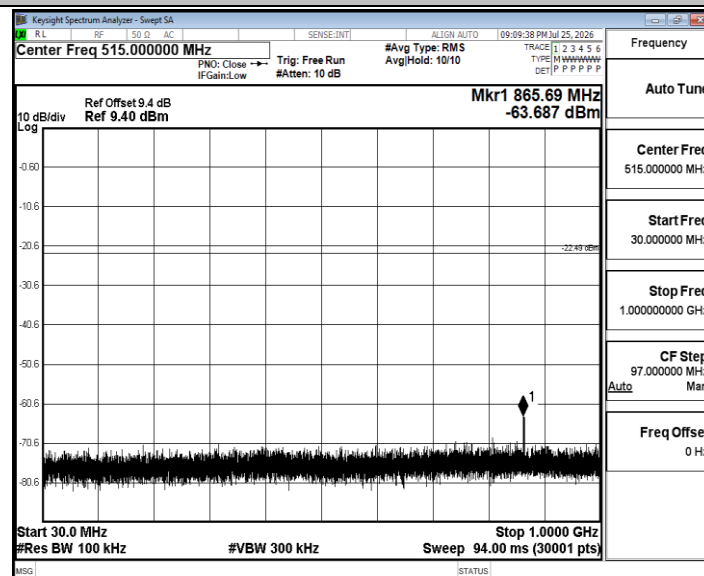




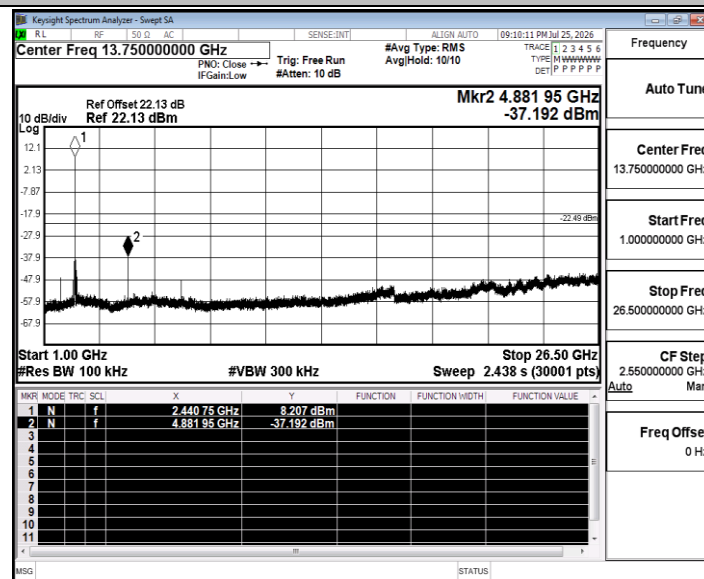
DH5_Ant1_2441_0~Reference



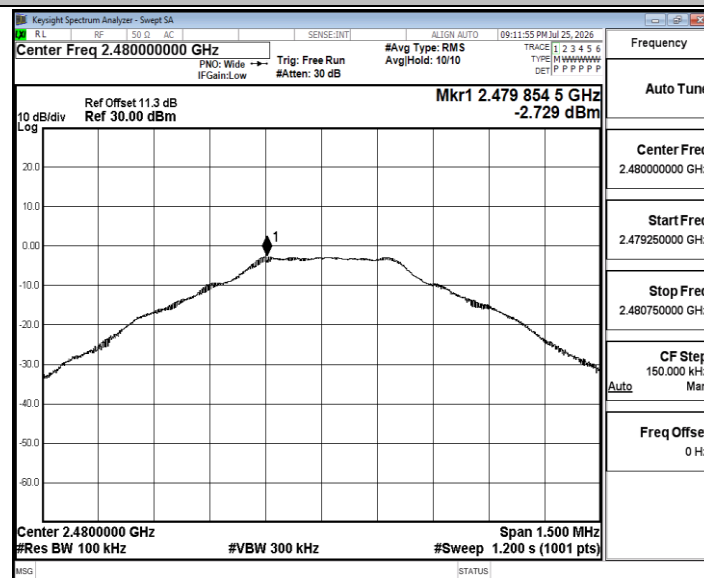
DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500

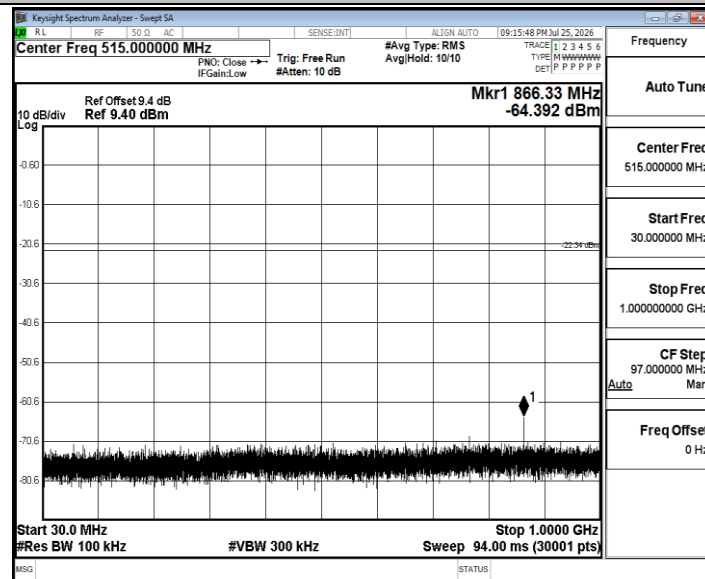


DH5_Ant1_2480_0~Reference

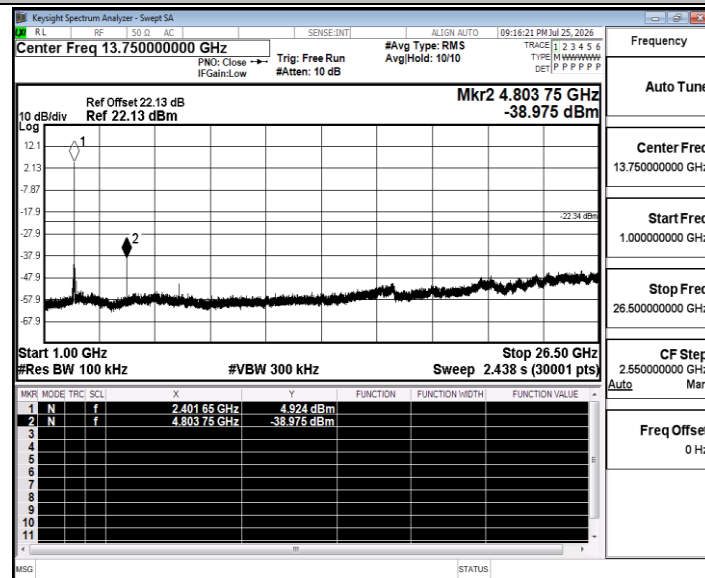


DH5_Ant1_2480_30~1000

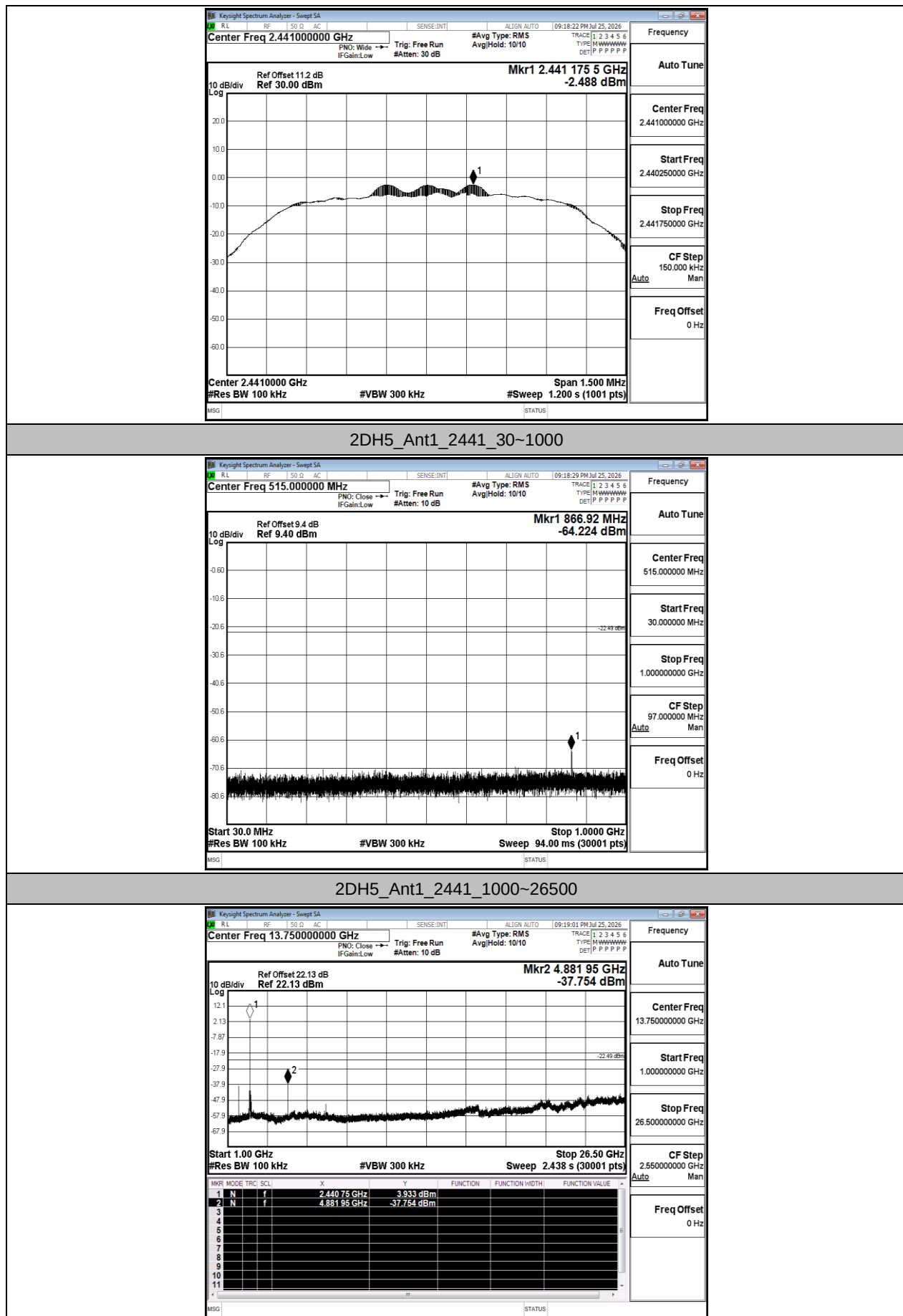
2DH5_Ant1_2402_30~1000



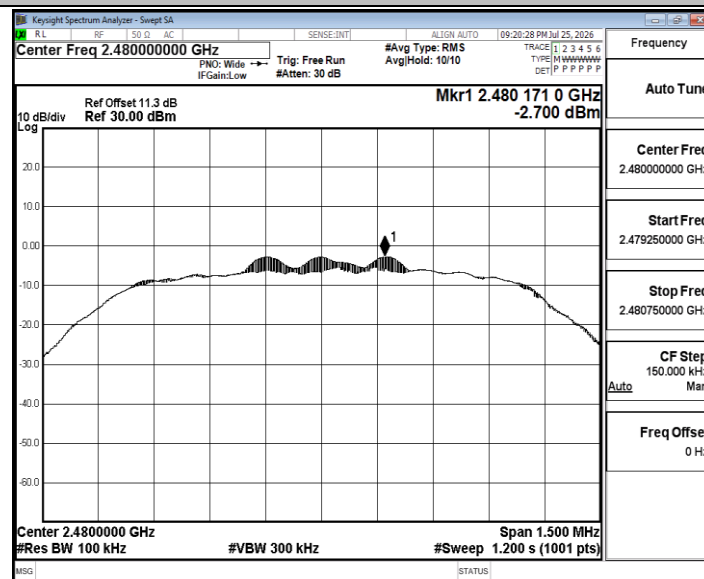
2DH5_Ant1_2402_1000~26500



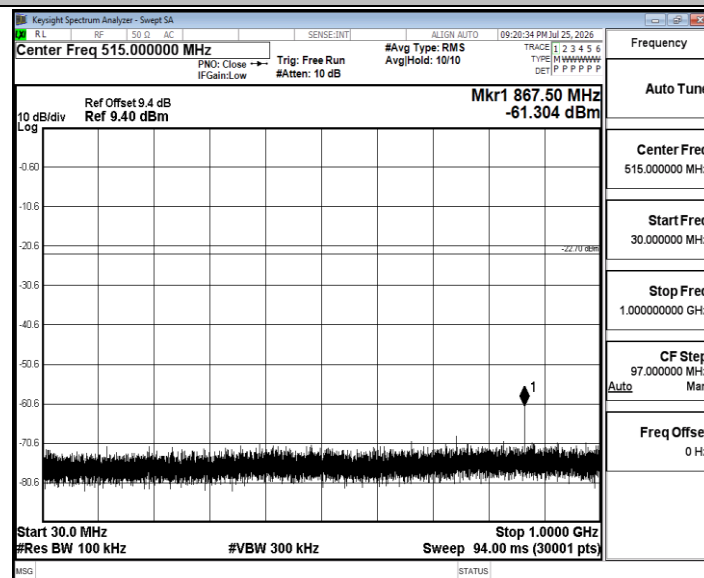
2DH5_Ant1_2441_0~Reference



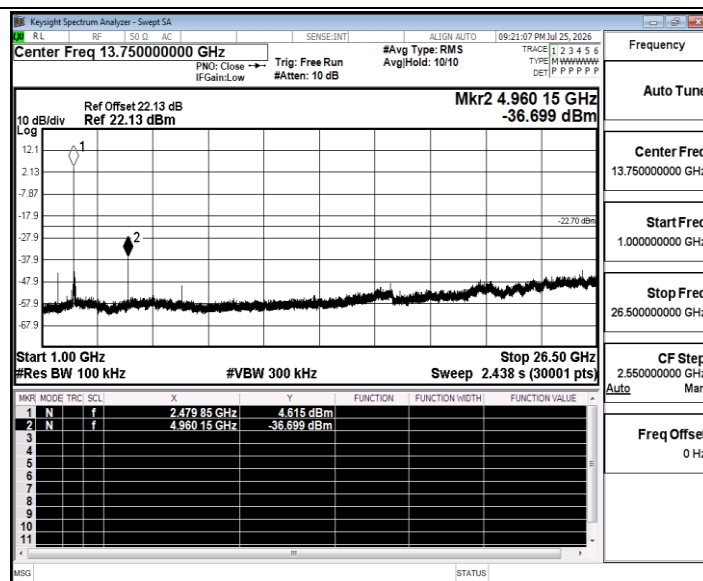
2DH5_Ant1_2480_0~Reference



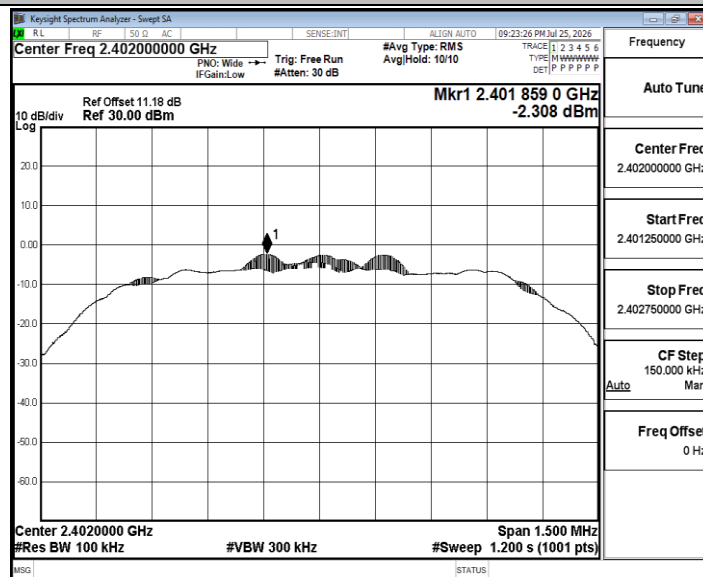
2DH5_Ant1_2480_30~1000



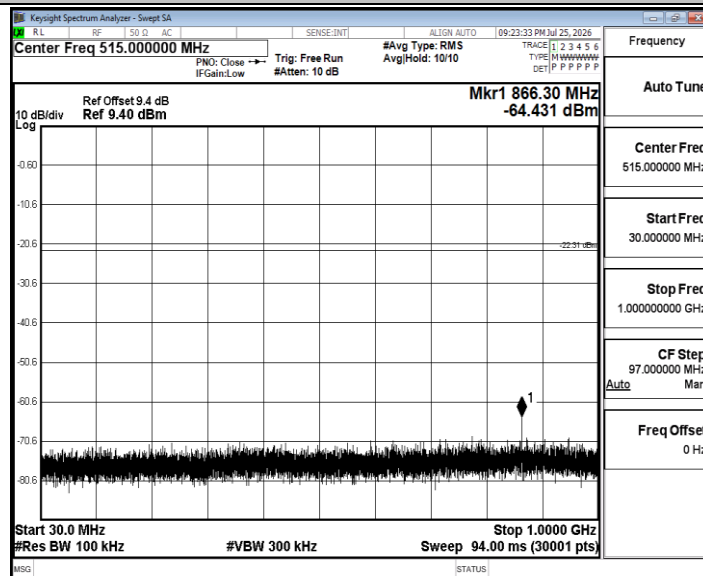
2DH5_Ant1_2480_1000~26500



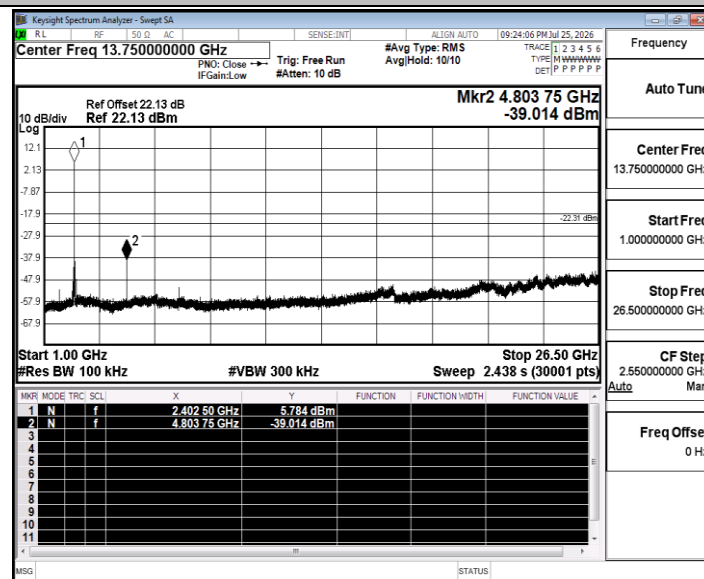
3DH5 Ant1 2402 0~Reference



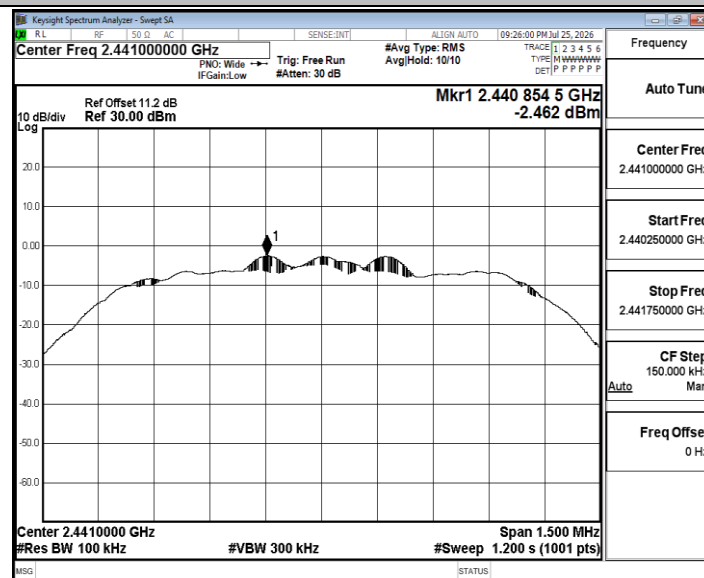
3DH5 Ant1 2402 30~1000



3DH5_Ant1_2402_1000~26500



3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000