

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: SATELLITE BULLET SPEAKER

Test Model: TS-OA1SS-BLK

Environmental Conditions

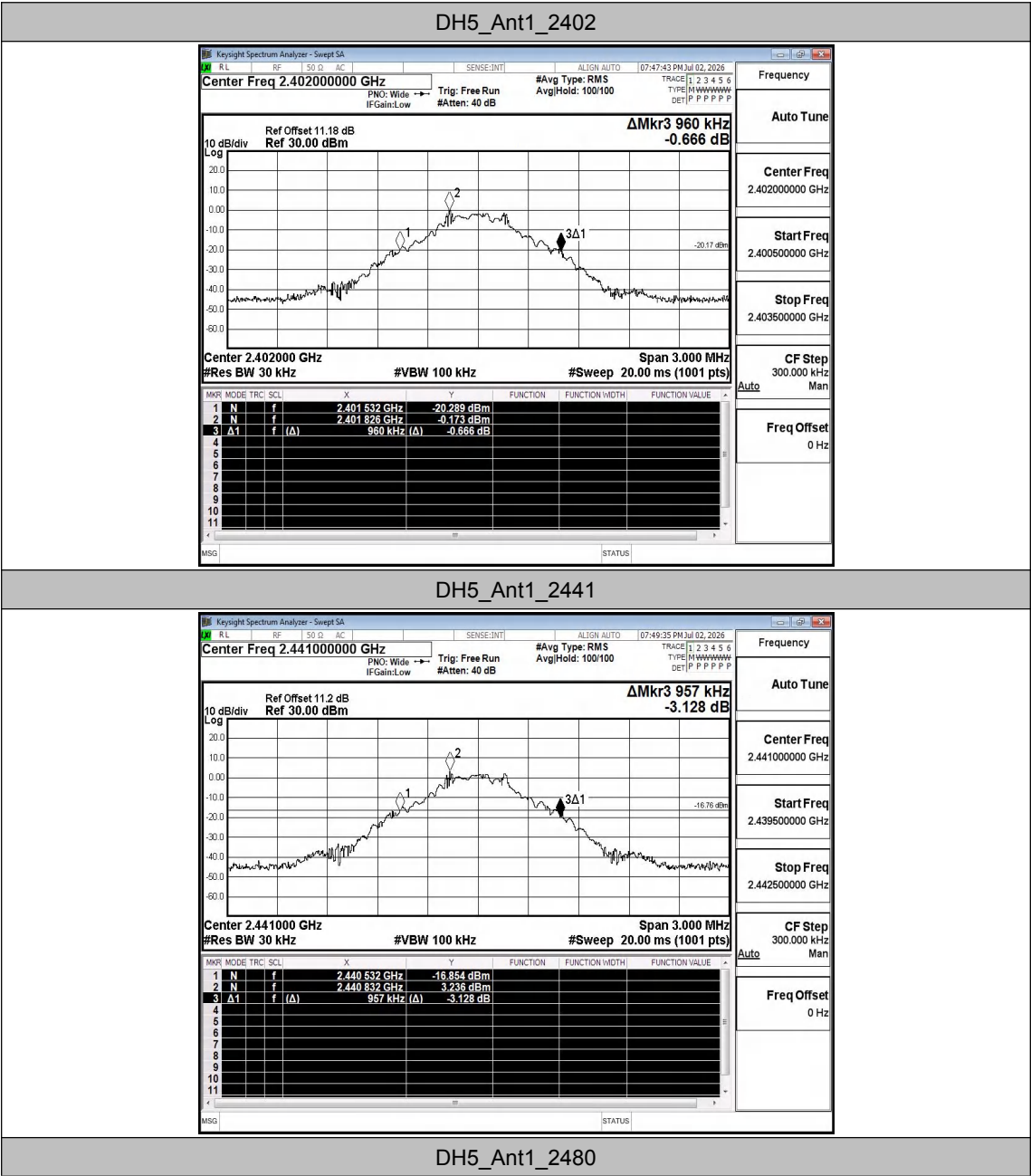
Temperature:	24.2°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

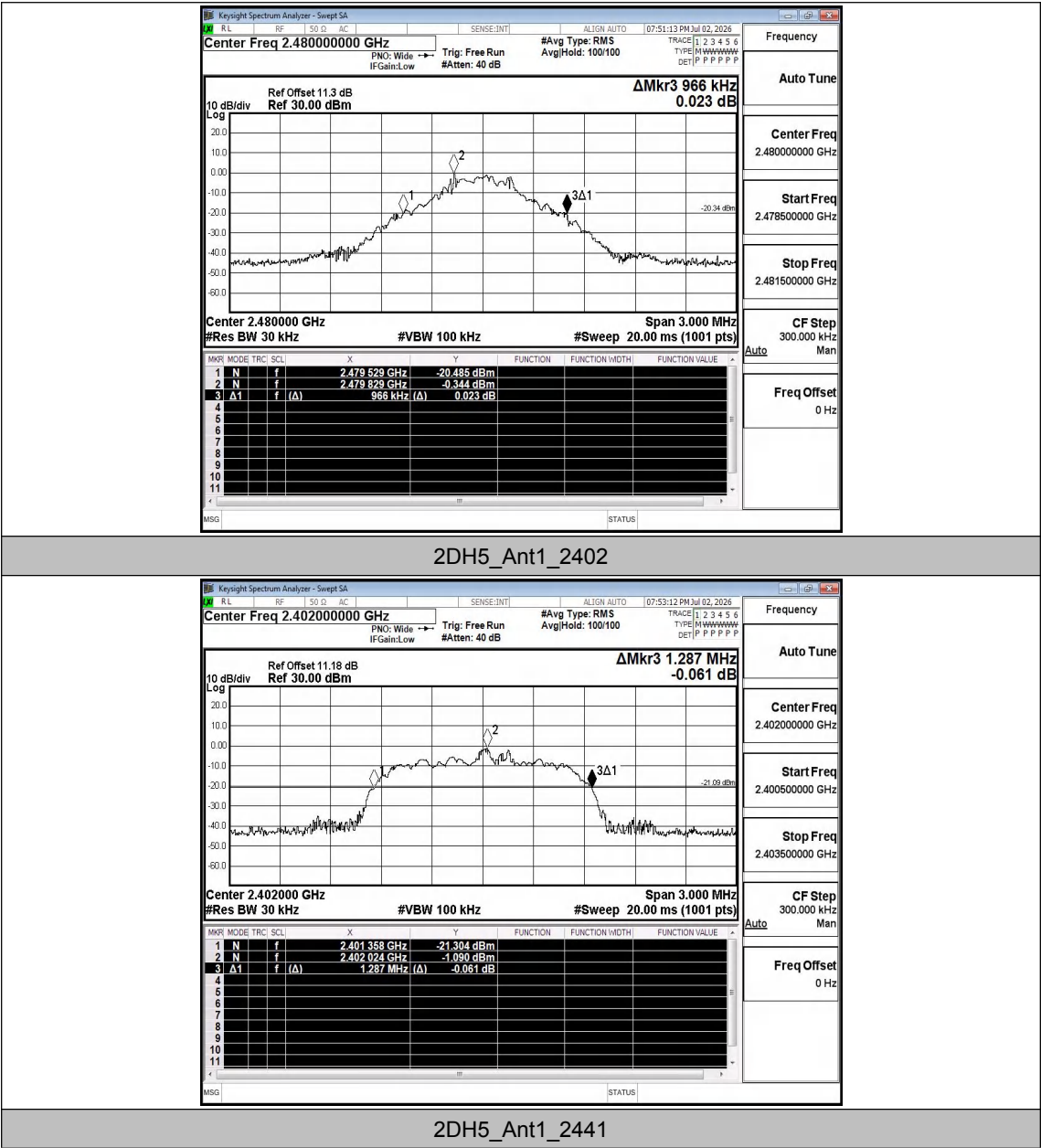
A.1 20dB Emission Bandwidth

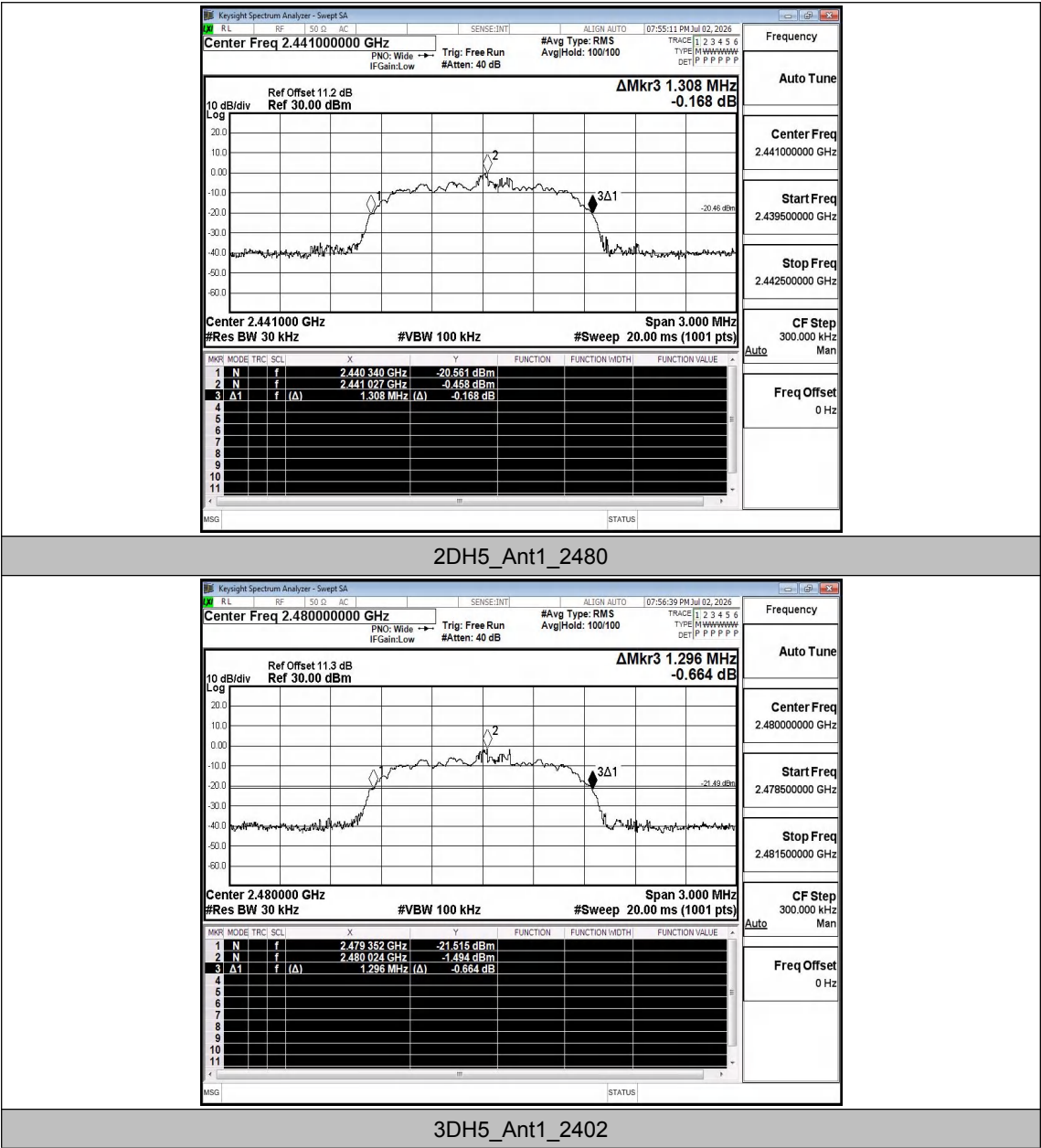
Test Result

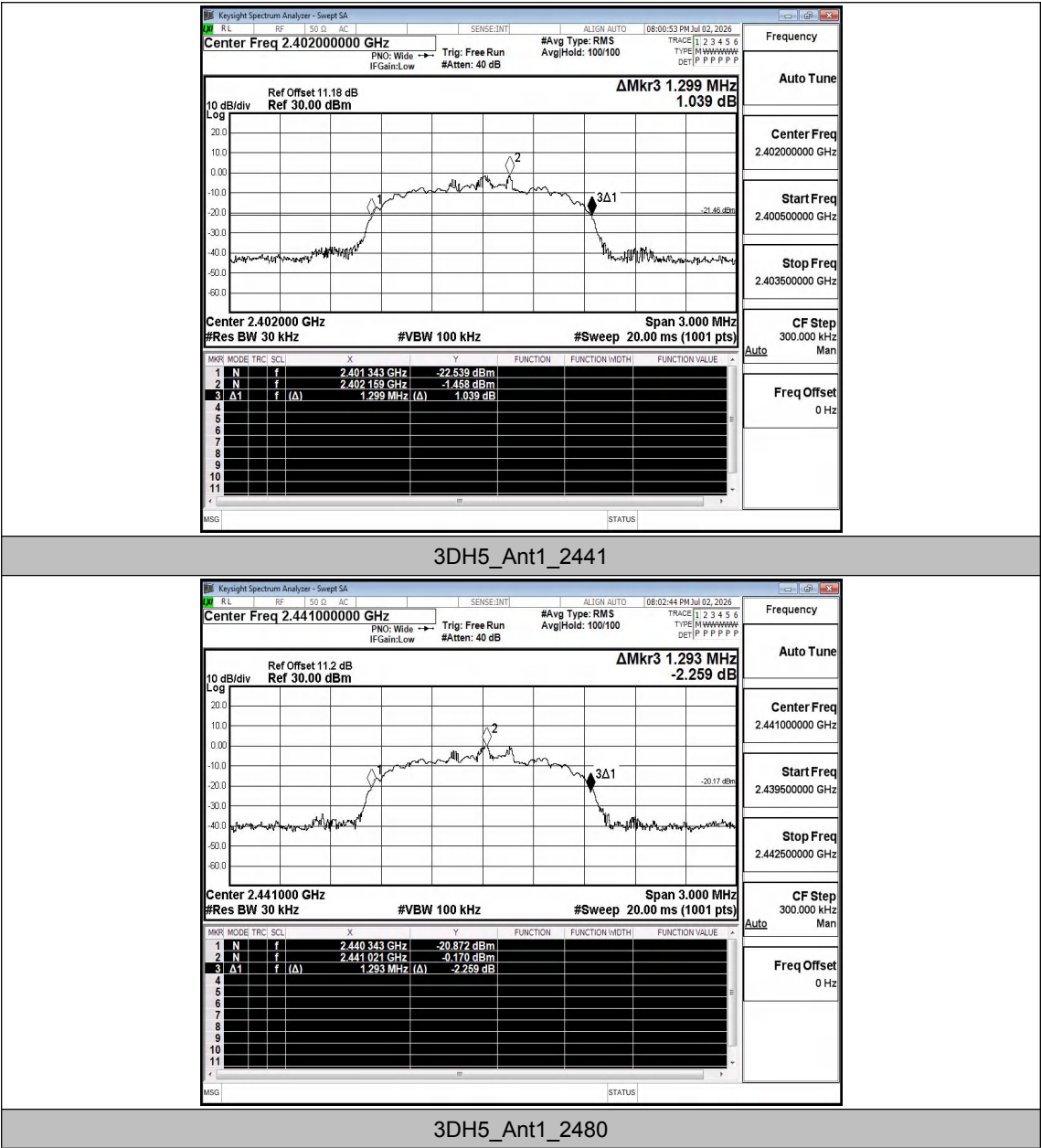
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.960	2401.532	2402.492	---	---
		2441	0.957	2440.532	2441.489	---	---
		2480	0.966	2479.529	2480.495	---	---
2DH5	Ant1	2402	1.287	2401.358	2402.645	---	---
		2441	1.308	2440.340	2441.648	---	---
		2480	1.296	2479.352	2480.648	---	---
3DH5	Ant1	2402	1.299	2401.343	2402.642	---	---
		2441	1.293	2440.343	2441.636	---	---
		2480	1.299	2479.343	2480.642	---	---

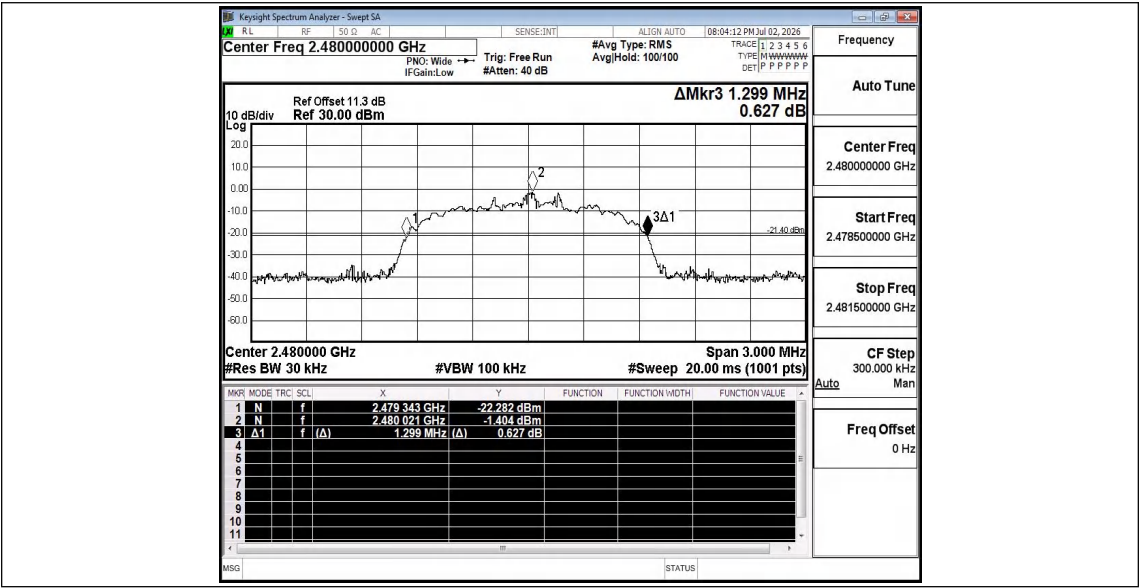
Test Graphs









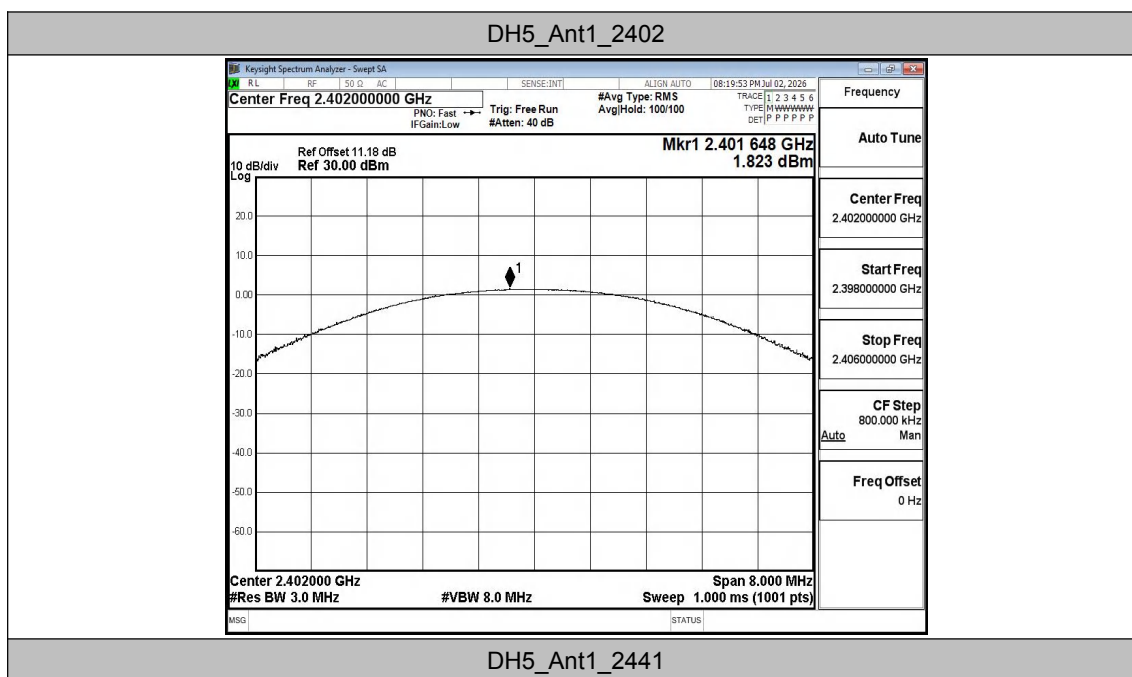


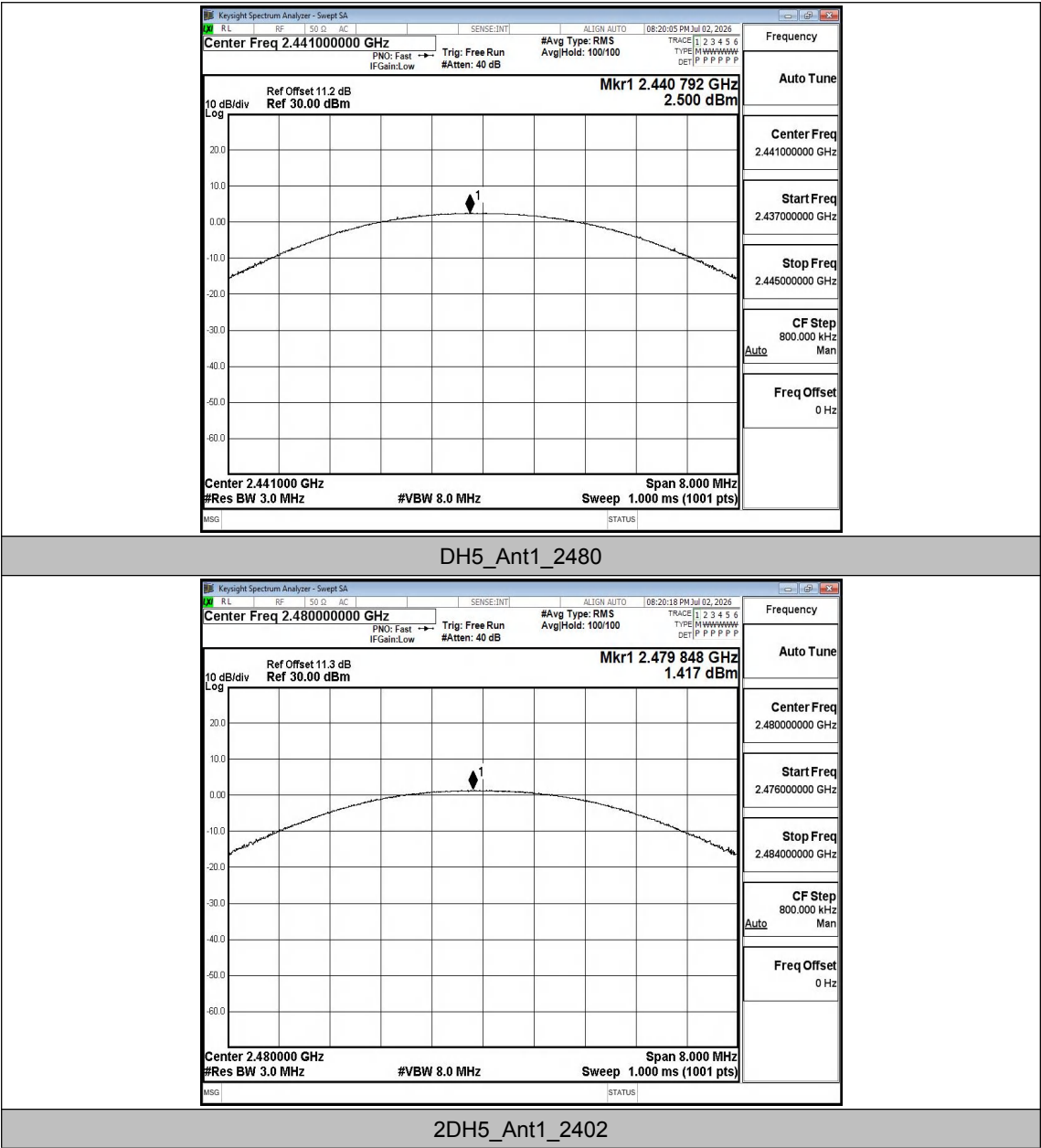
A.2 Maximum conducted output power

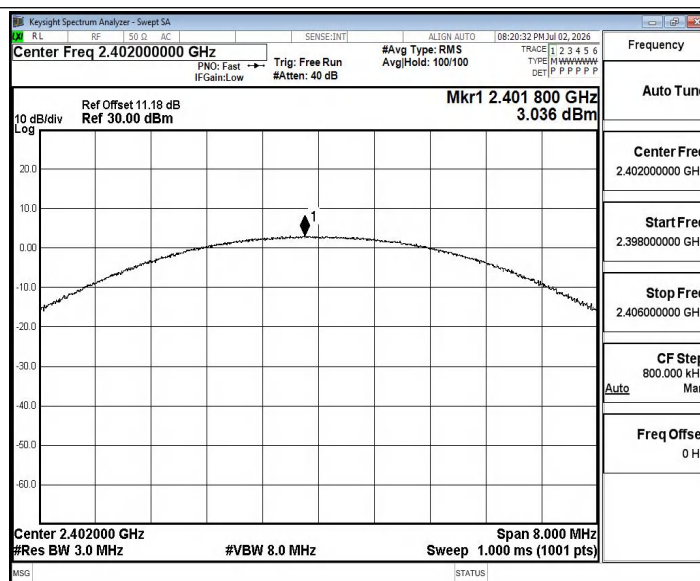
Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.82	≤30	PASS
		2441	2.50	≤30	PASS
		2480	1.42	≤30	PASS
2DH5	Ant1	2402	3.04	≤30	PASS
		2441	3.85	≤30	PASS
		2480	2.46	≤30	PASS
3DH5	Ant1	2402	3.18	≤30	PASS
		2441	3.96	≤30	PASS
		2480	2.70	≤30	PASS

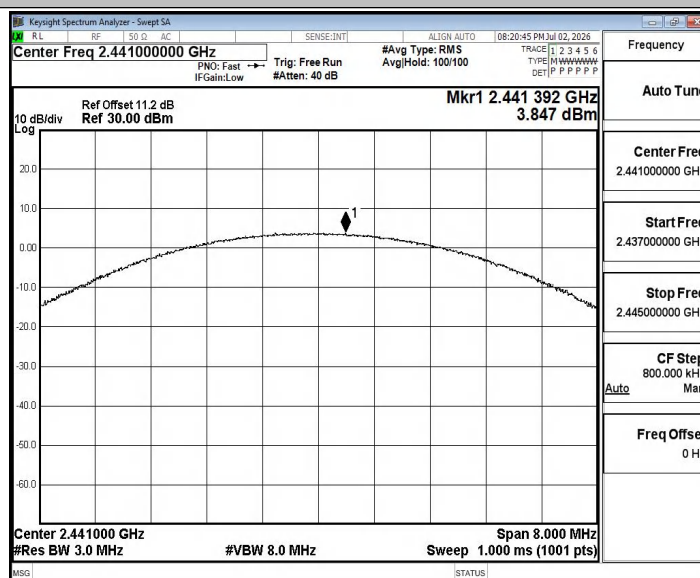
Test Graphs



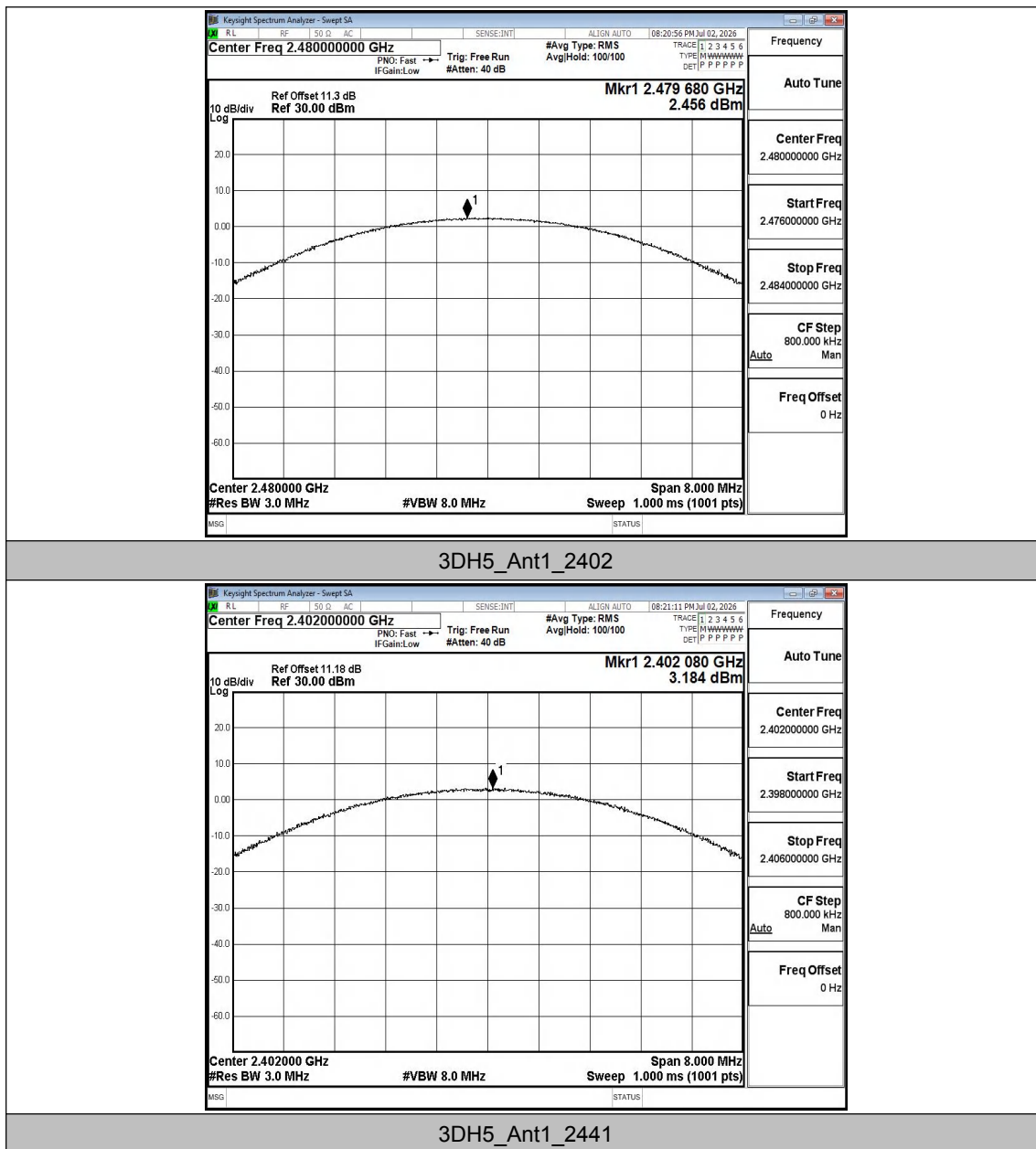


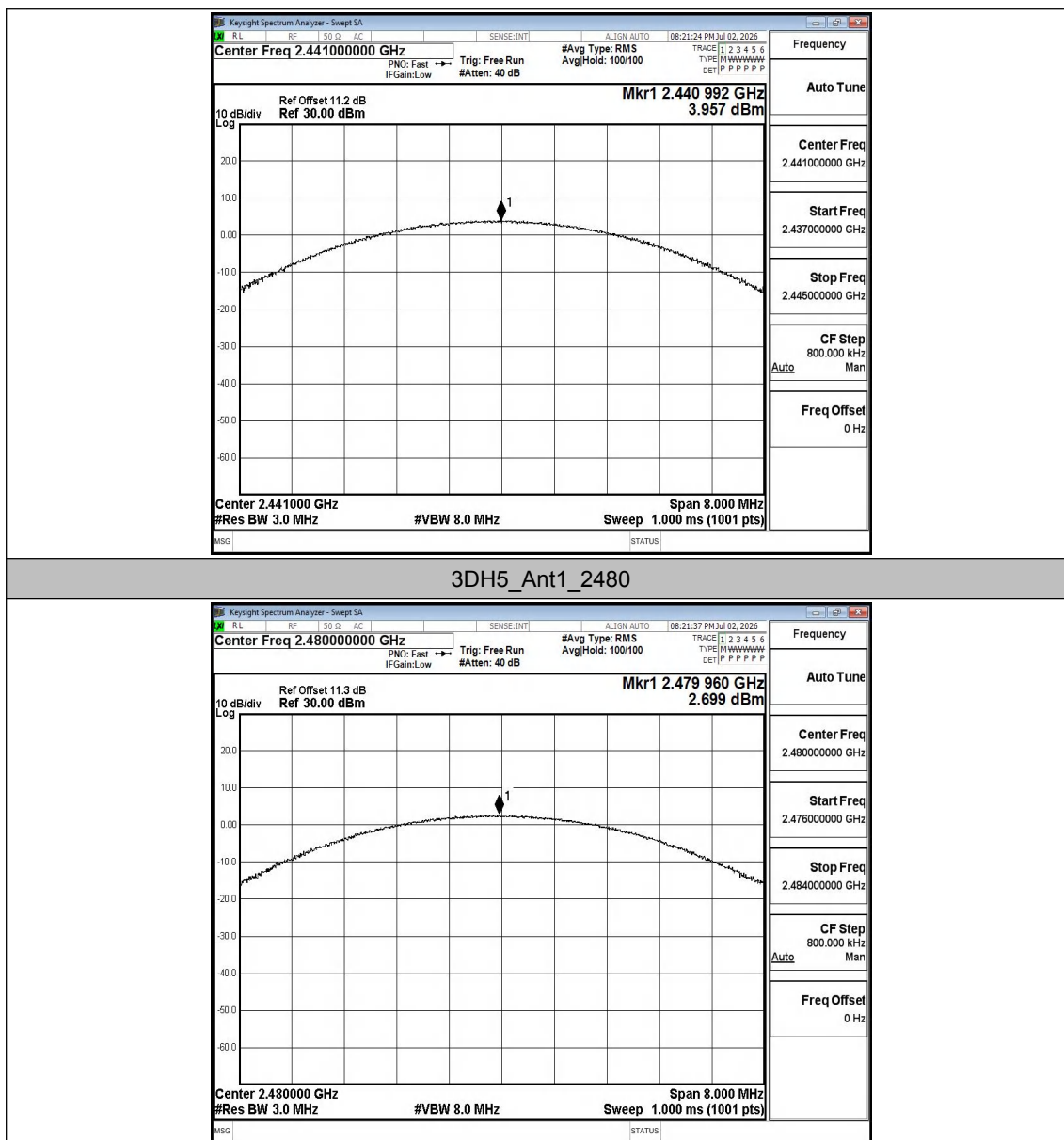


2DHS_Ant1_2441



2DHS_Ant1_2480



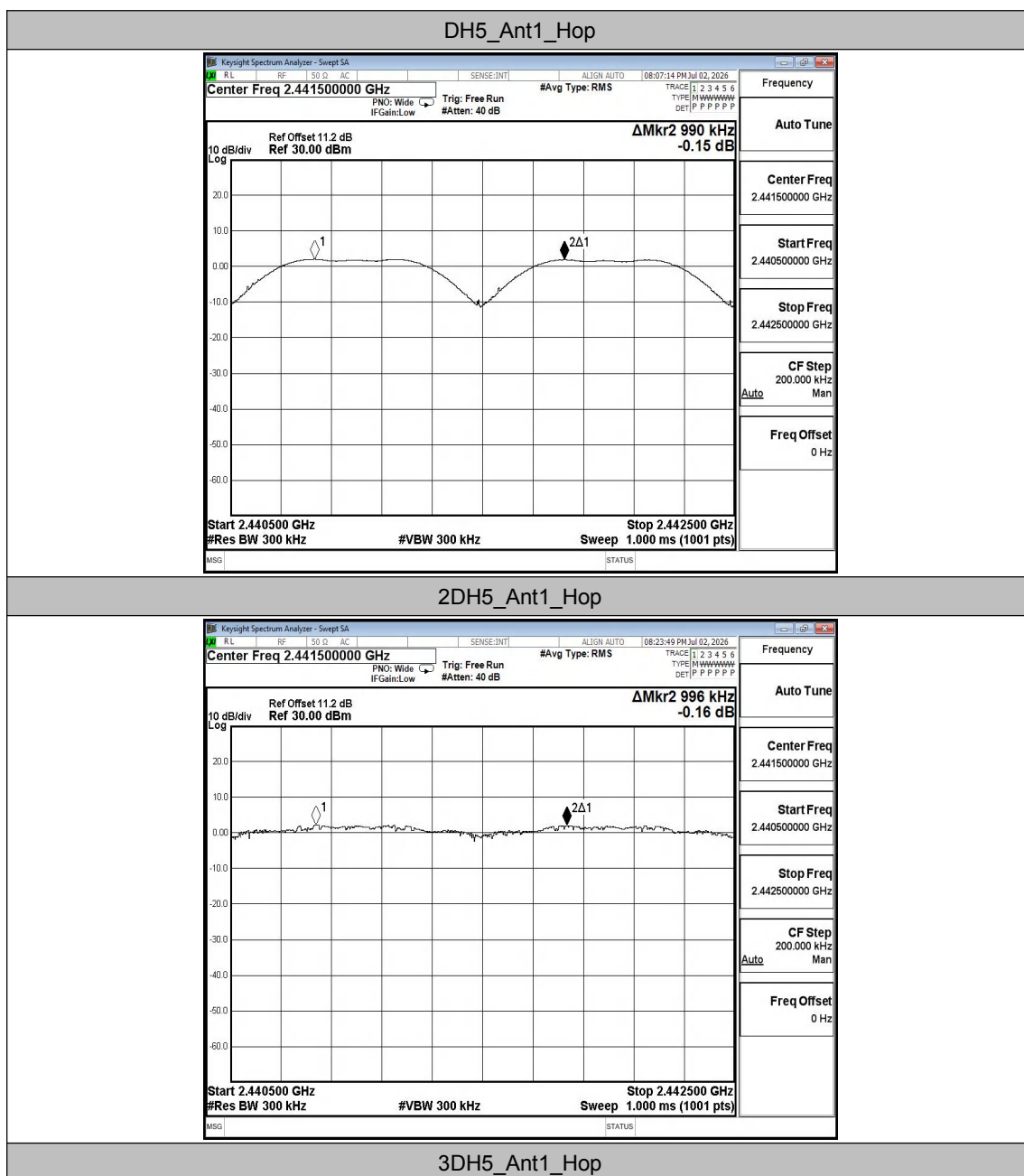


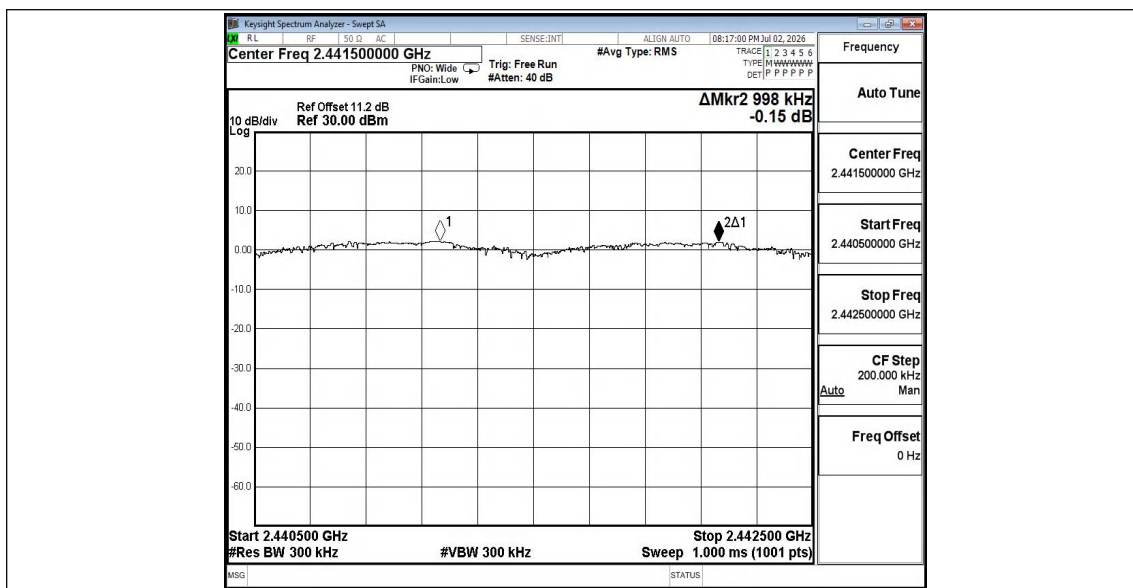
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.99	≥ 0.966	PASS
2DH5	Ant1	Hop	0.996	≥ 0.872	PASS
3DH5	Ant1	Hop	0.998	≥ 0.866	PASS

Test Graphs



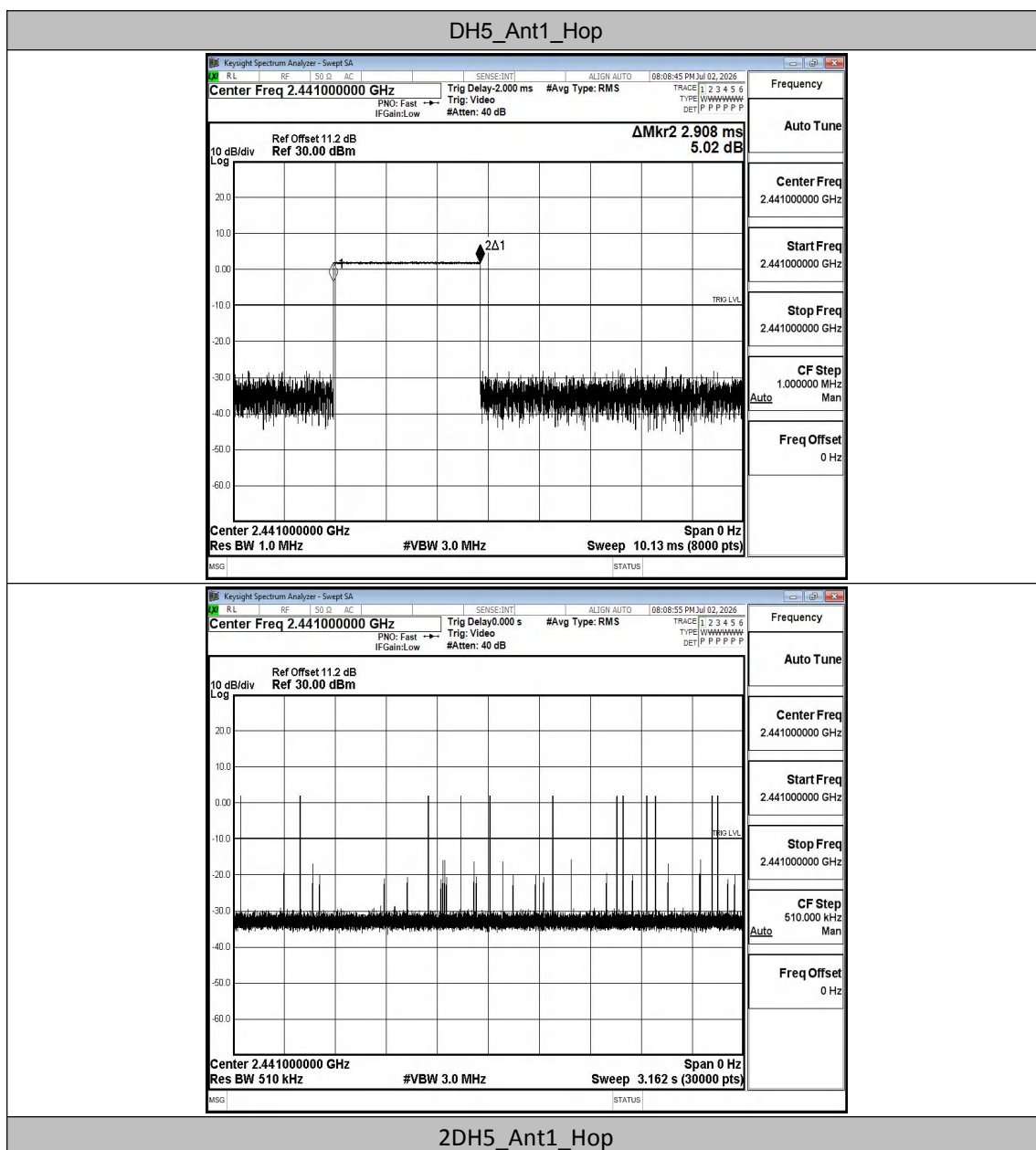


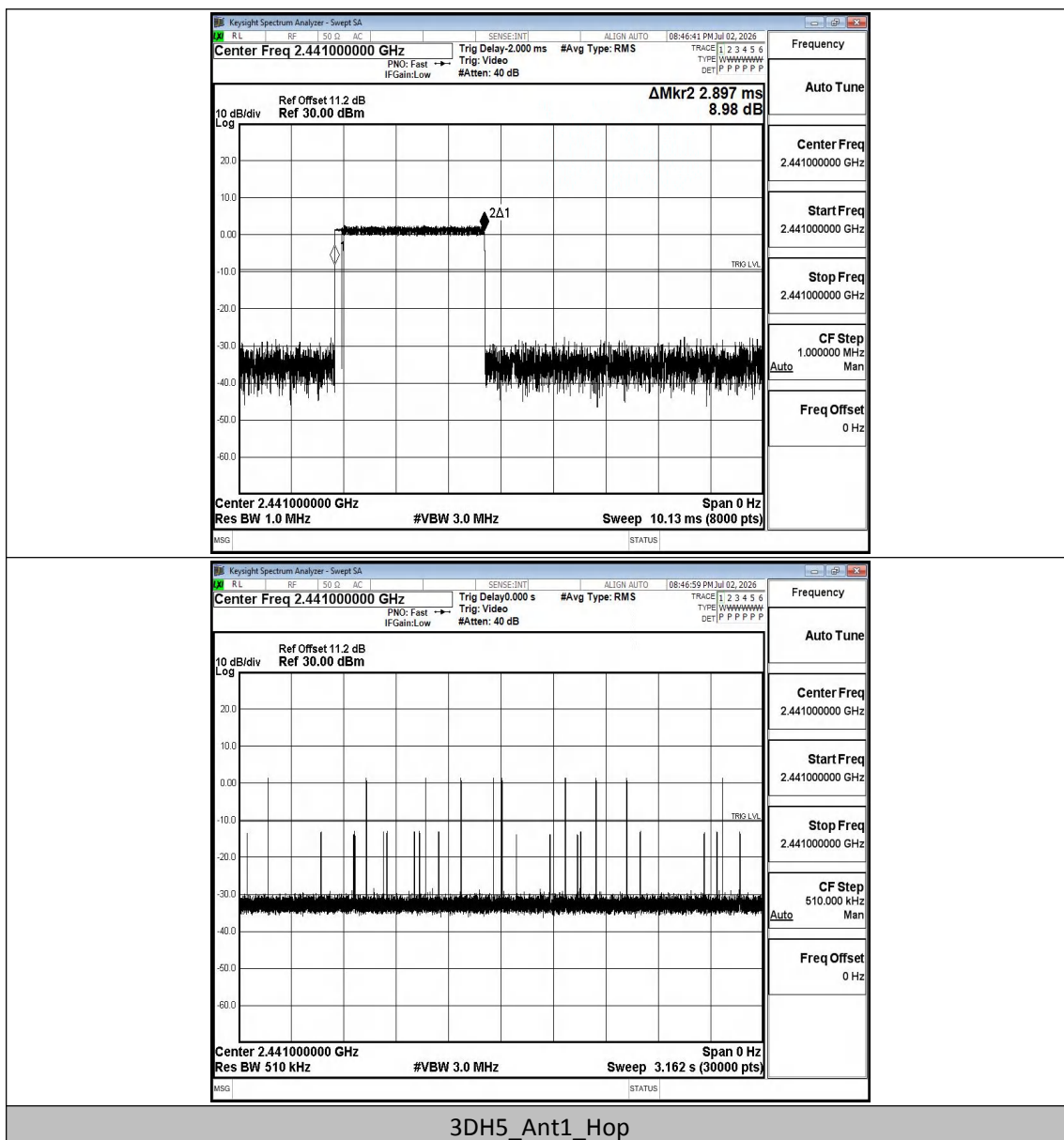
A.4 Time of occupancy

Test Result

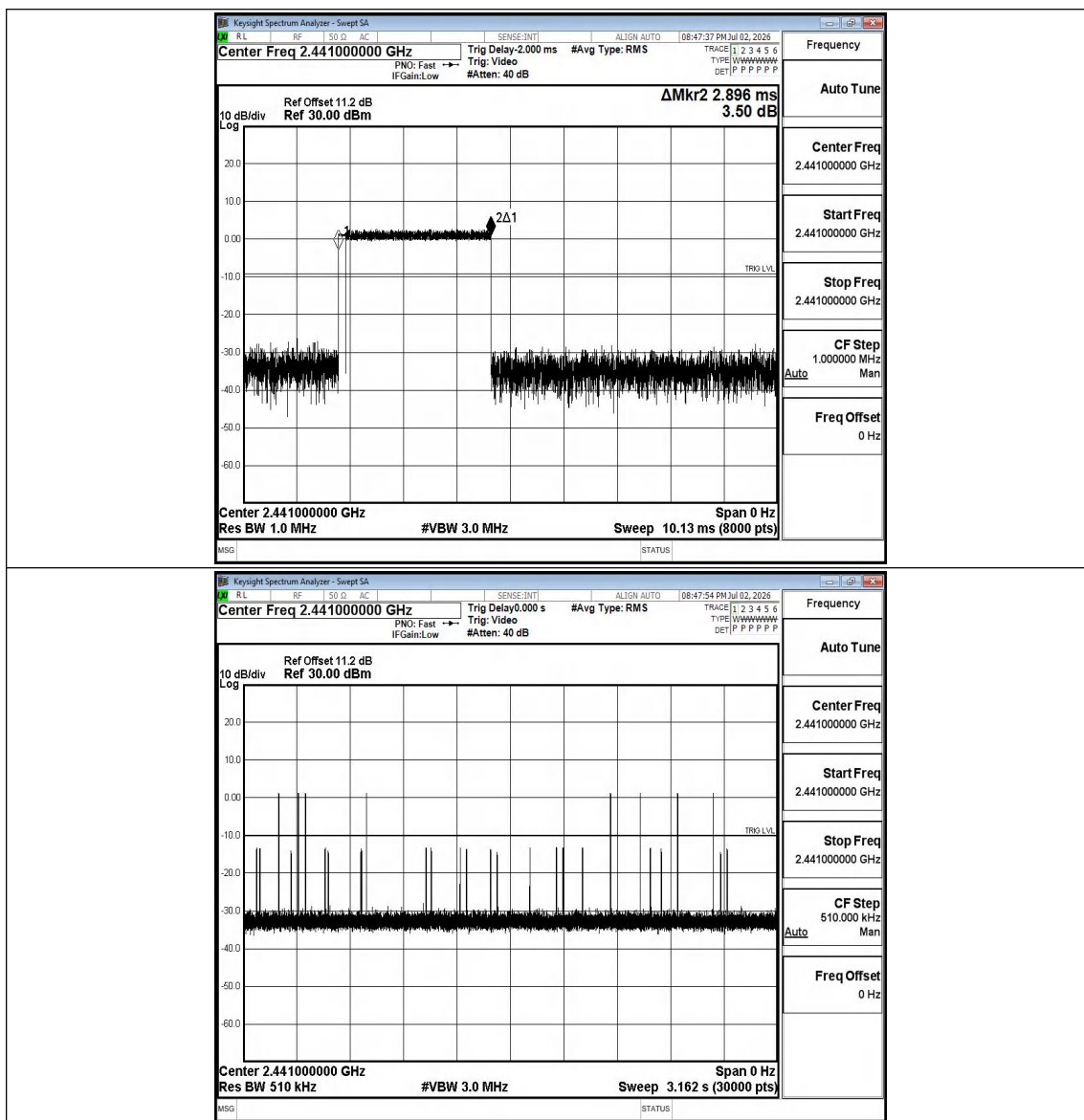
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.908	130	0.378	≤0.4	PASS
2DH5	Ant1	Hop	2.897	110	0.319	≤0.4	PASS
3DH5	Ant1	Hop	2.896	90	0.261	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop

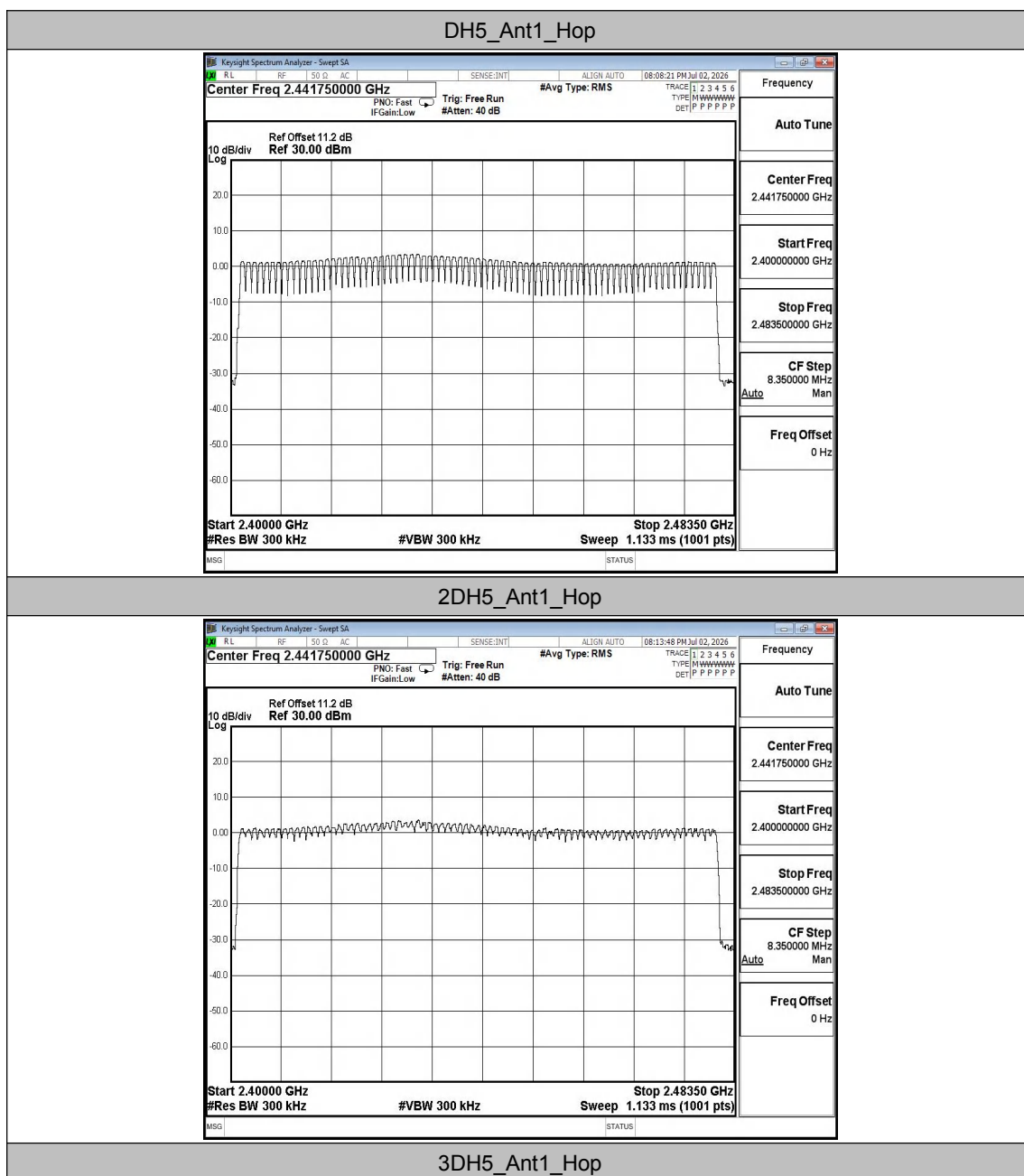


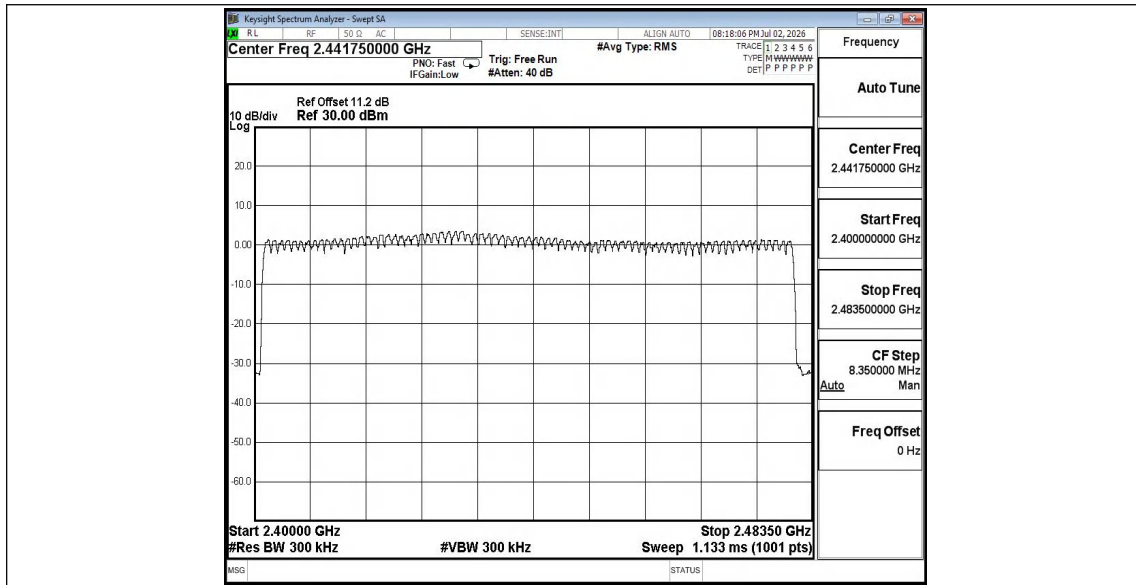
A.5 Number of hopping channels

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



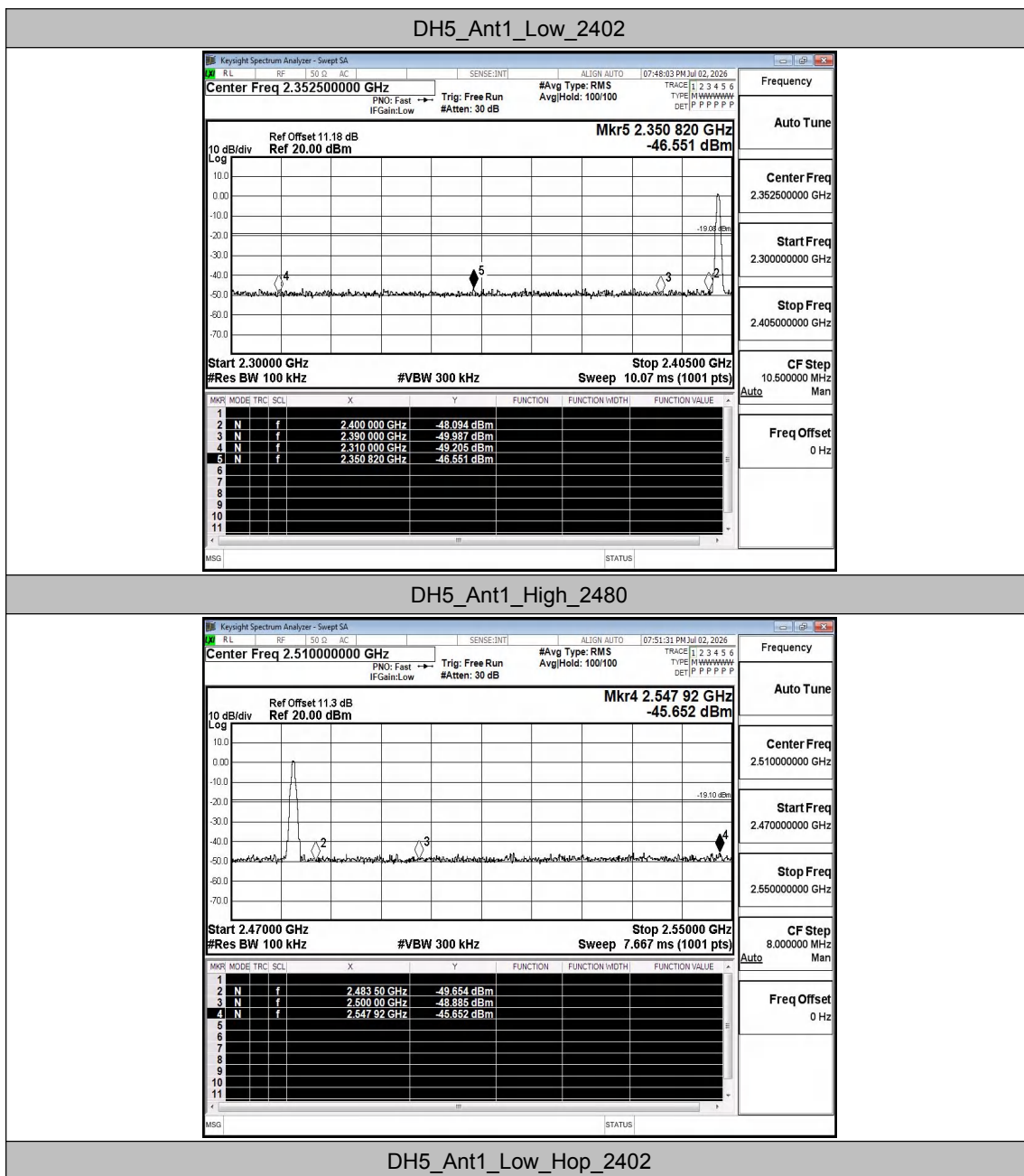


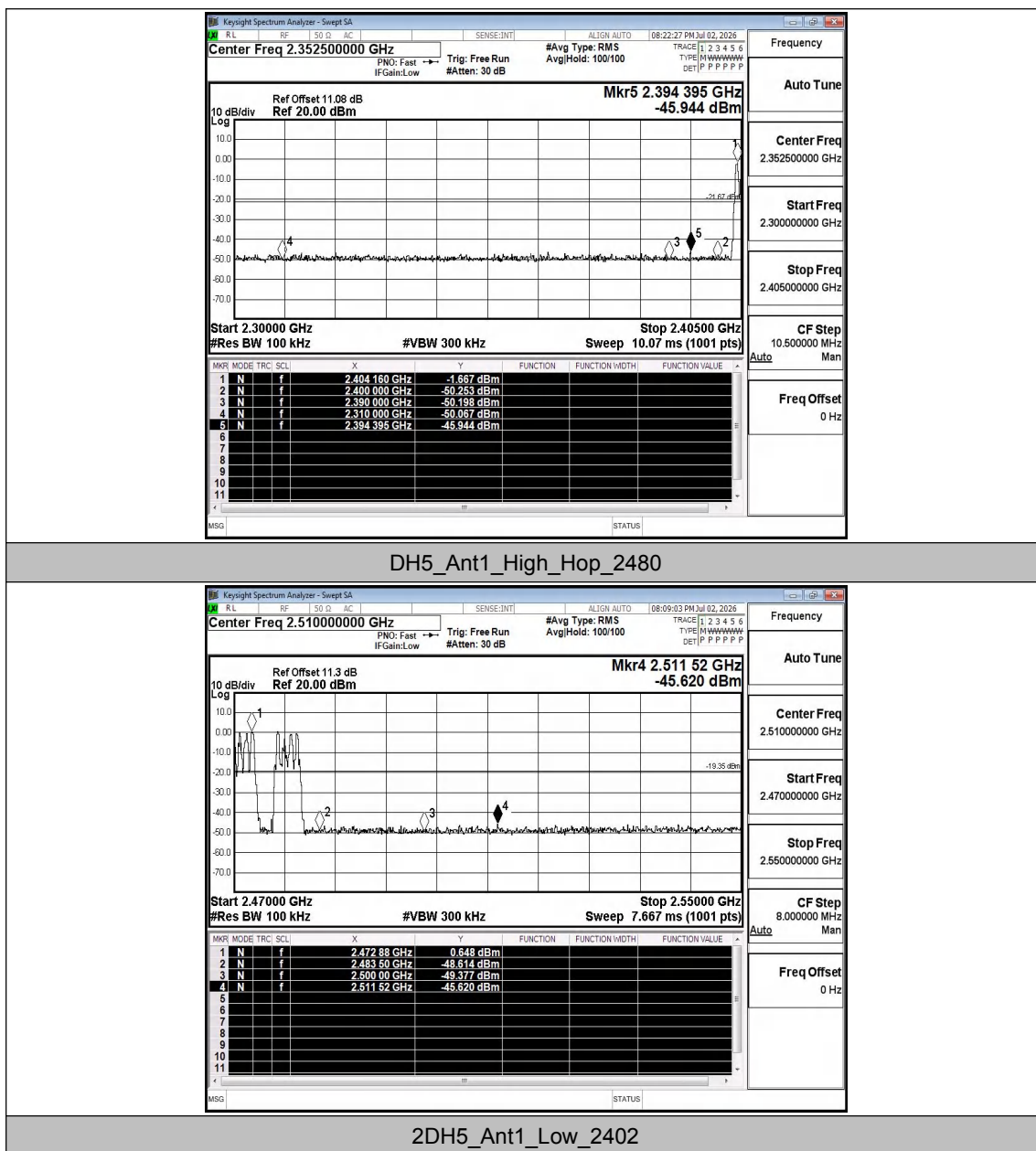
A.6 Band edge measurements

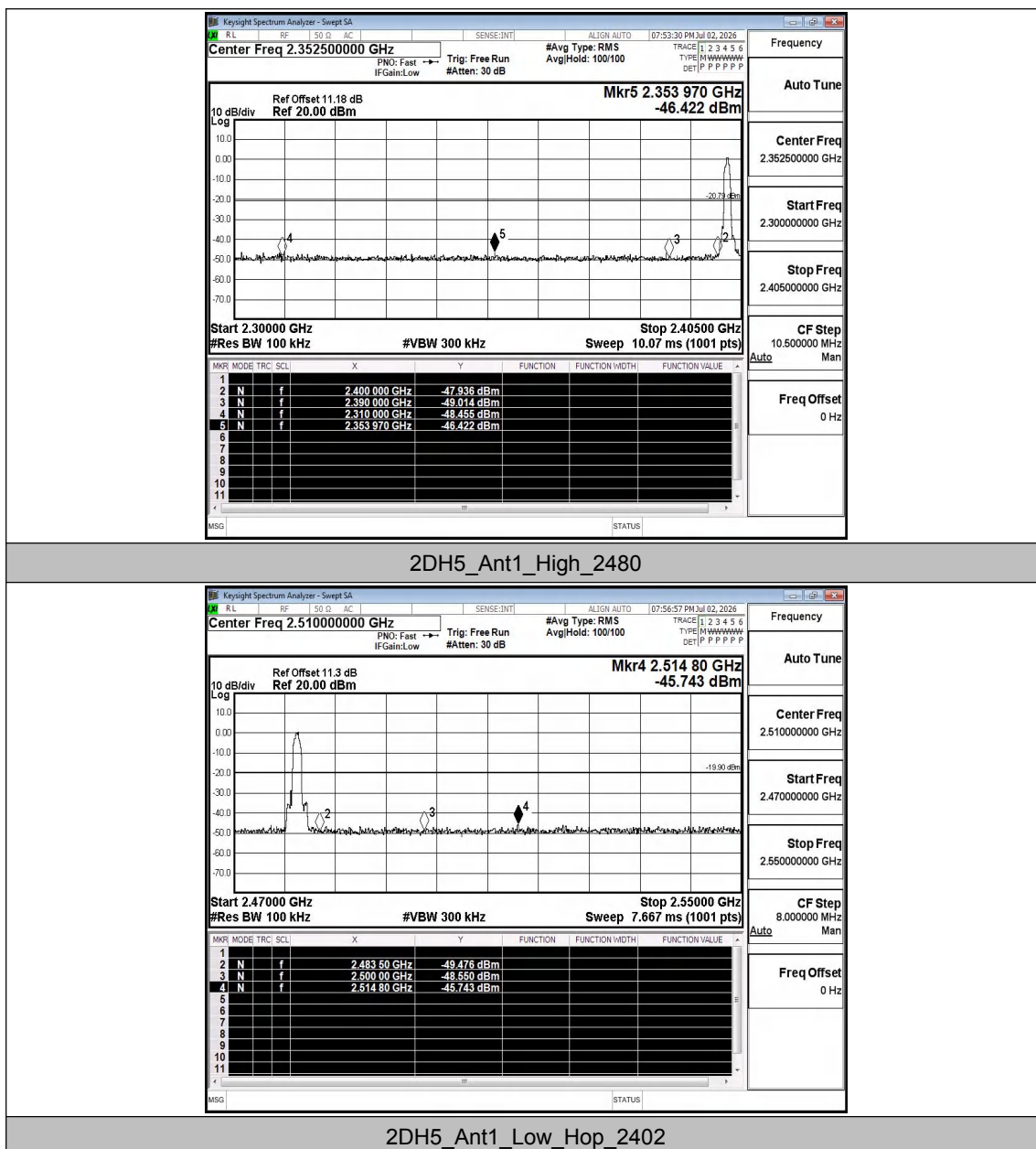
Test Result

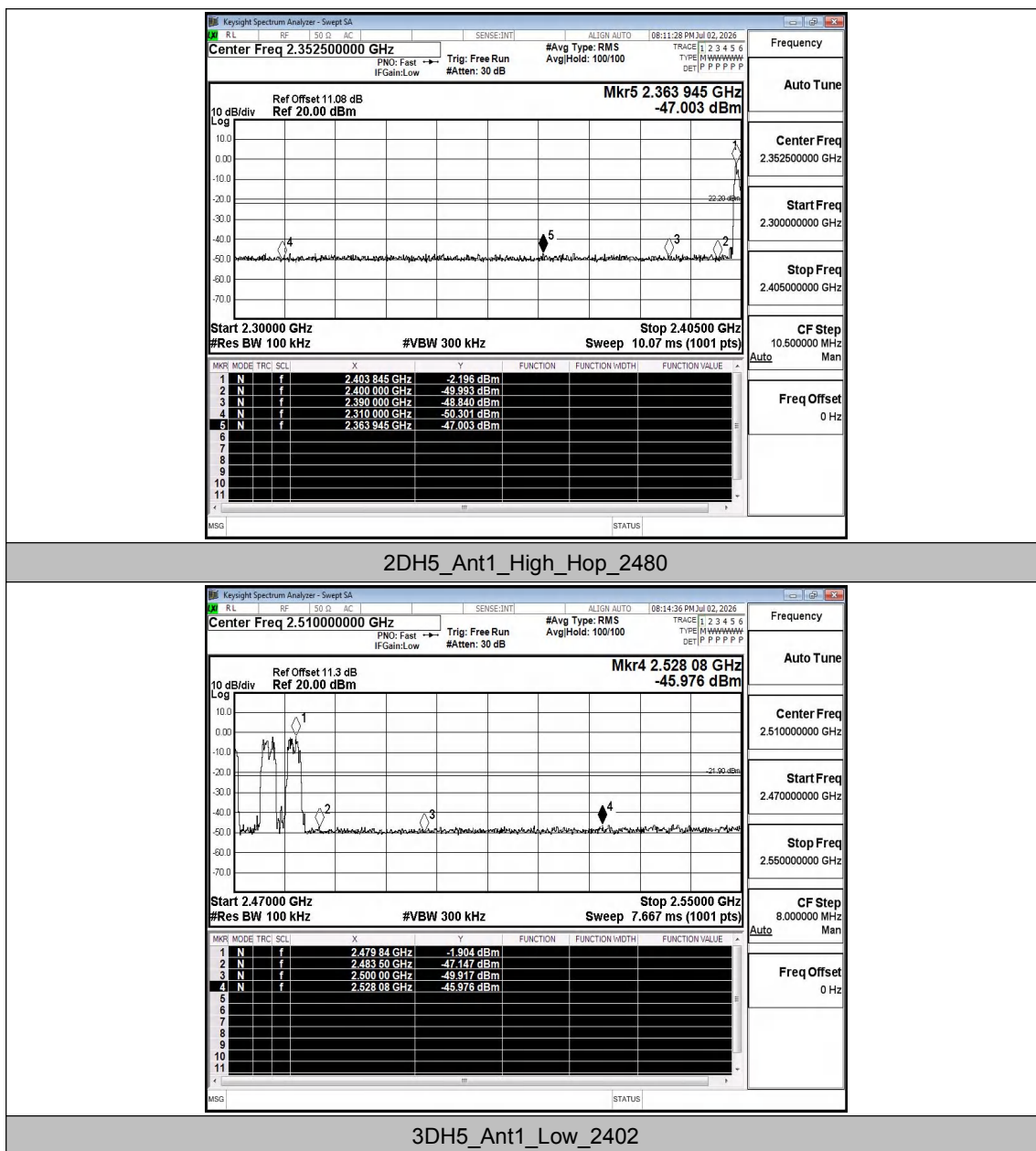
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.92	-46.55	≤ -19.08	PASS
		High	2480	0.90	-45.65	≤ -19.1	PASS
		Low	Hop_2402	-1.67	-45.94	≤ -21.67	PASS
		High	Hop_2480	0.65	-45.62	≤ -19.35	PASS
2DH5	Ant1	Low	2402	-0.79	-46.42	≤ -20.79	PASS
		High	2480	0.10	-45.74	≤ -19.9	PASS
		Low	Hop_2402	-2.20	-47	≤ -22.2	PASS
		High	Hop_2480	-1.90	-45.98	≤ -21.9	PASS
3DH5	Ant1	Low	2402	0.83	-46.07	≤ -19.17	PASS
		High	2480	0.73	-46.05	≤ -19.27	PASS
		Low	Hop_2402	-2.53	-45.97	≤ -22.53	PASS
		High	Hop_2480	-3.60	-46.08	≤ -23.6	PASS

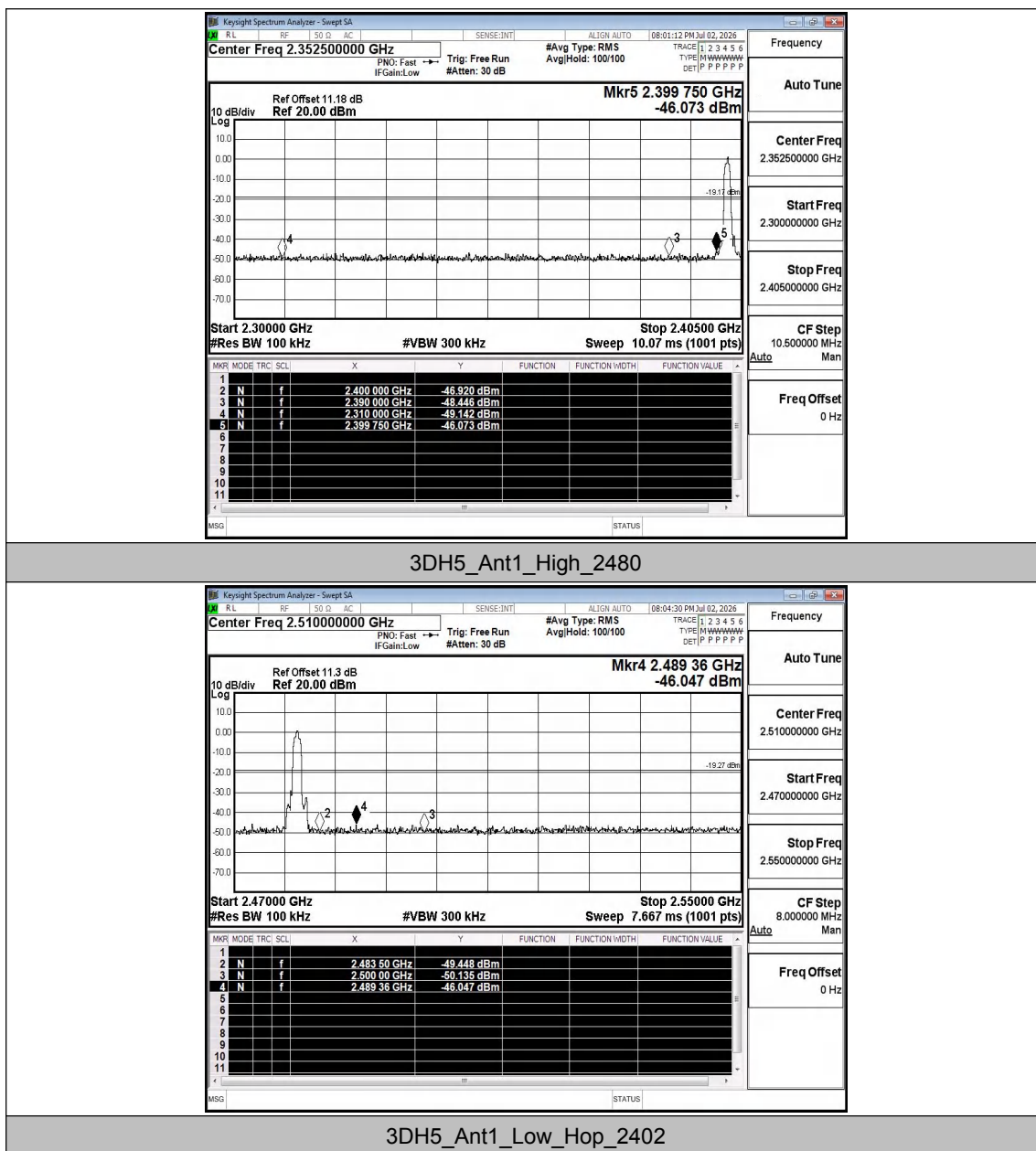
Test Graphs

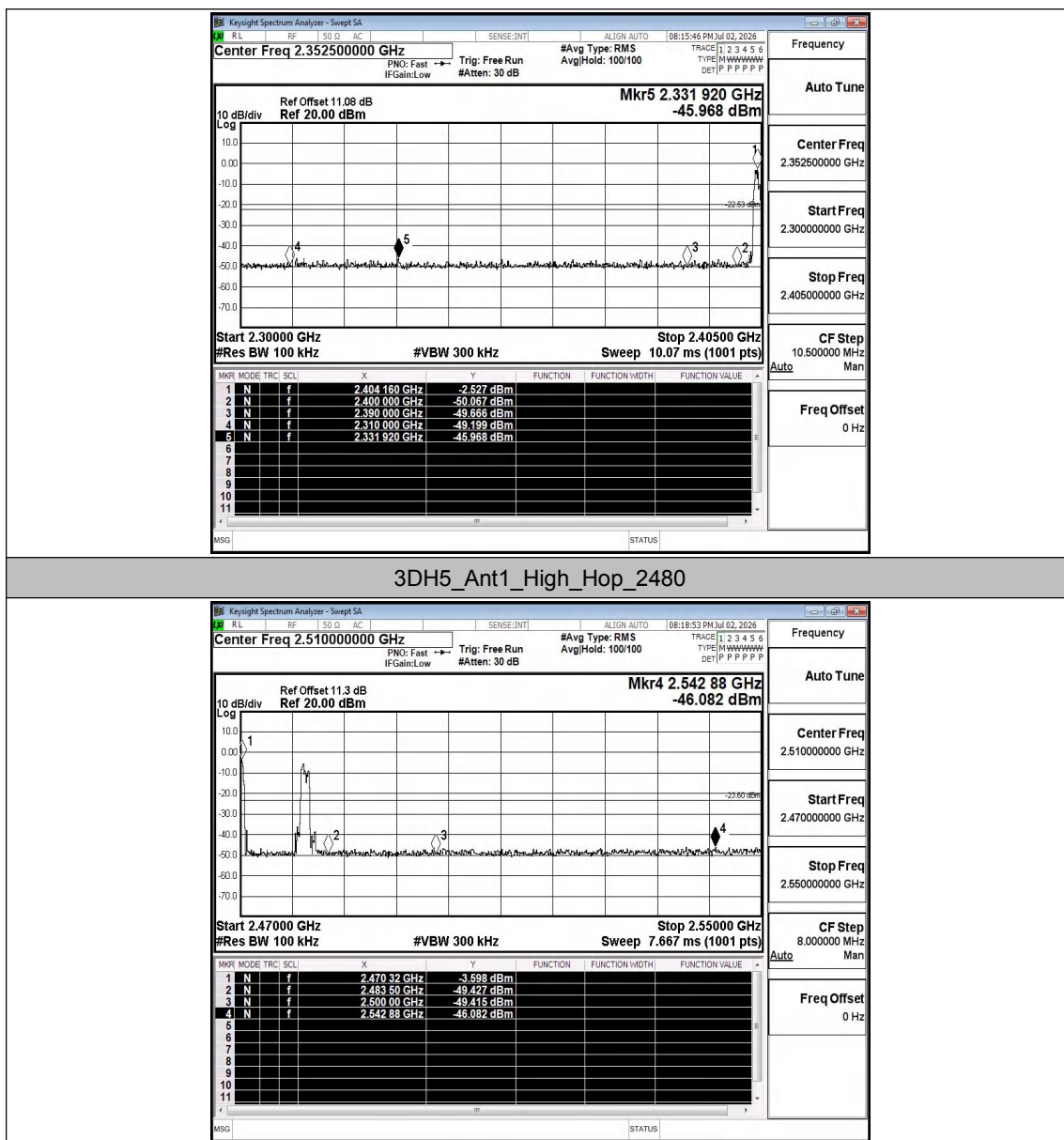










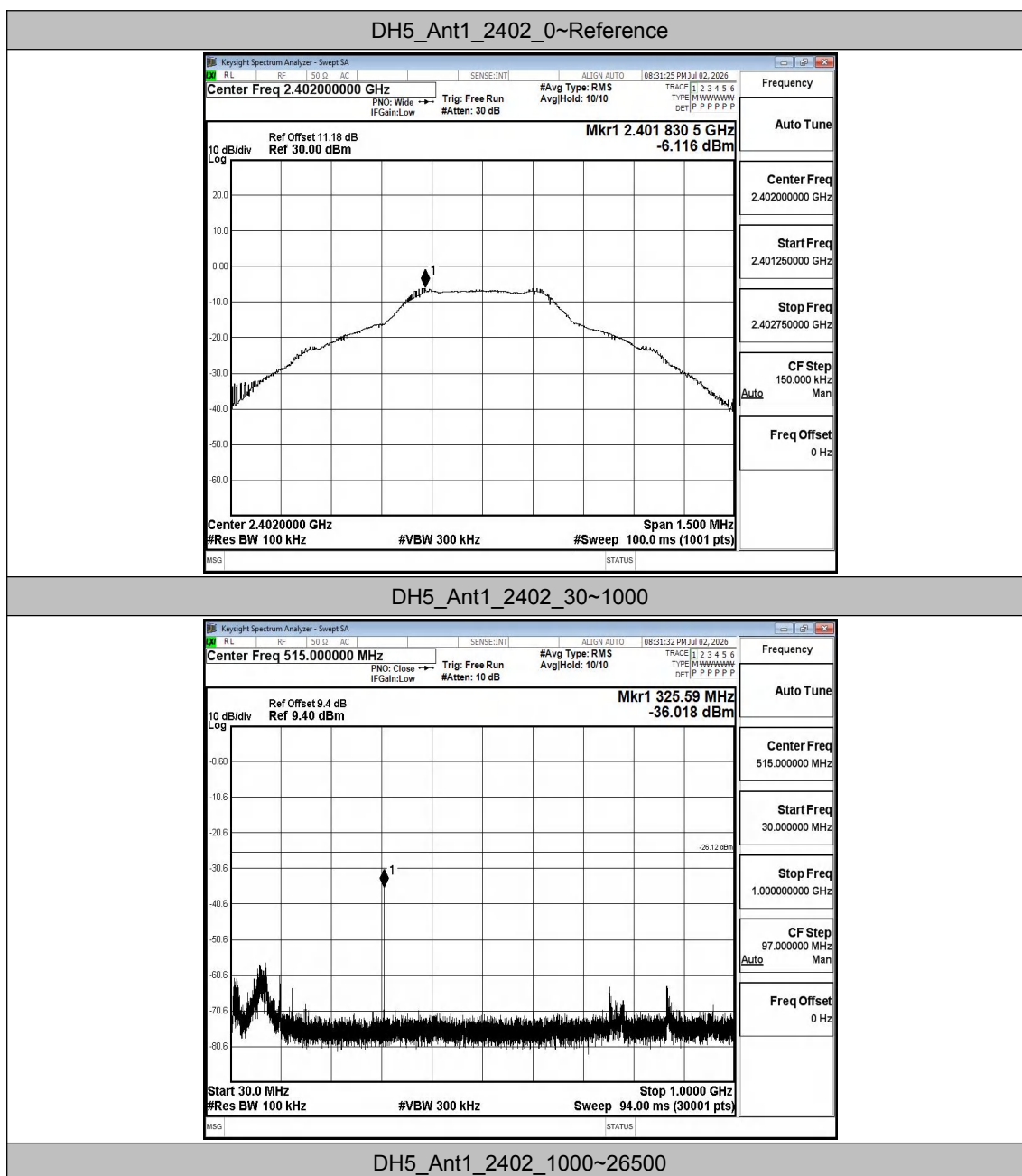


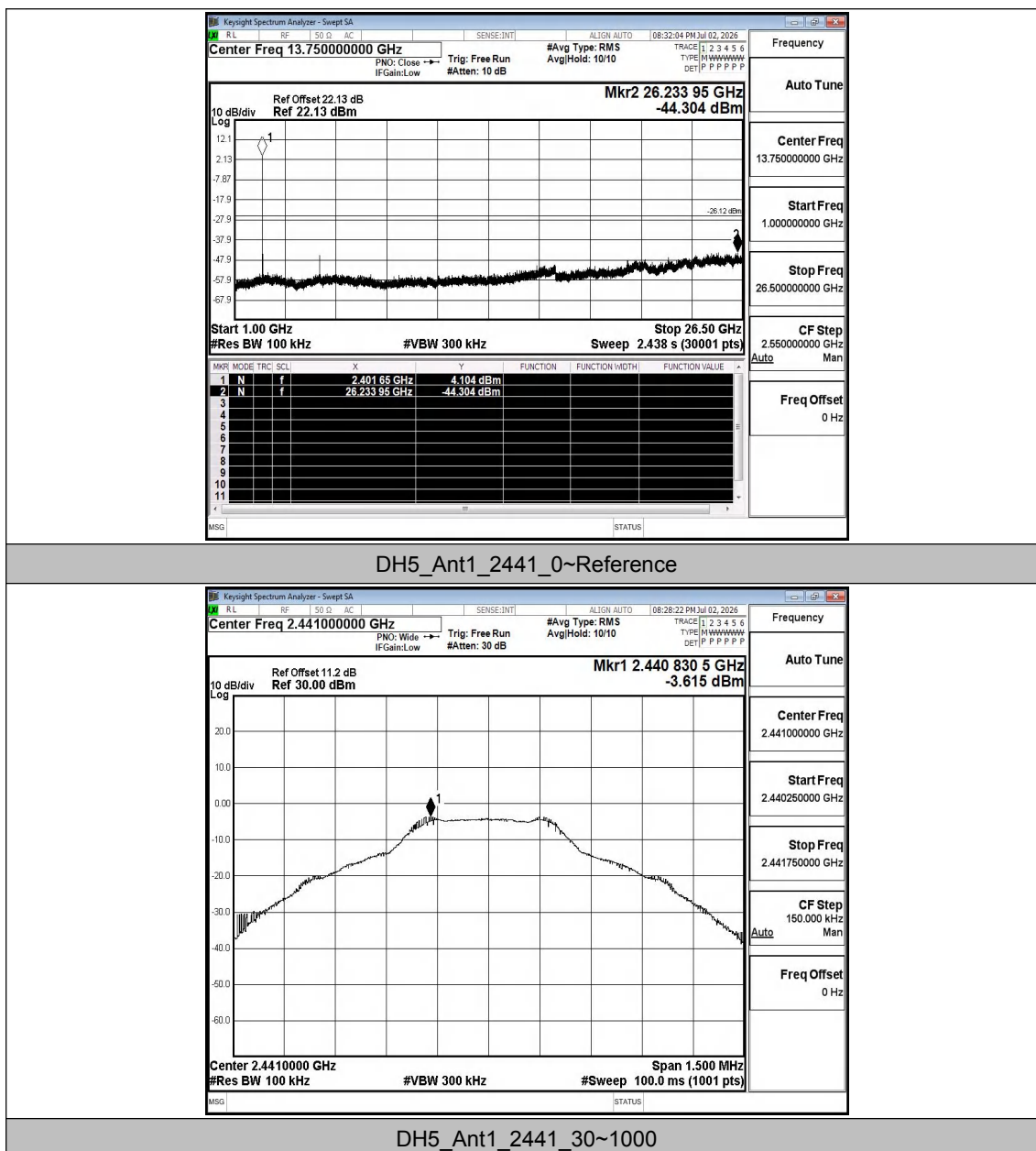
A.7 Conducted Spurious Emission

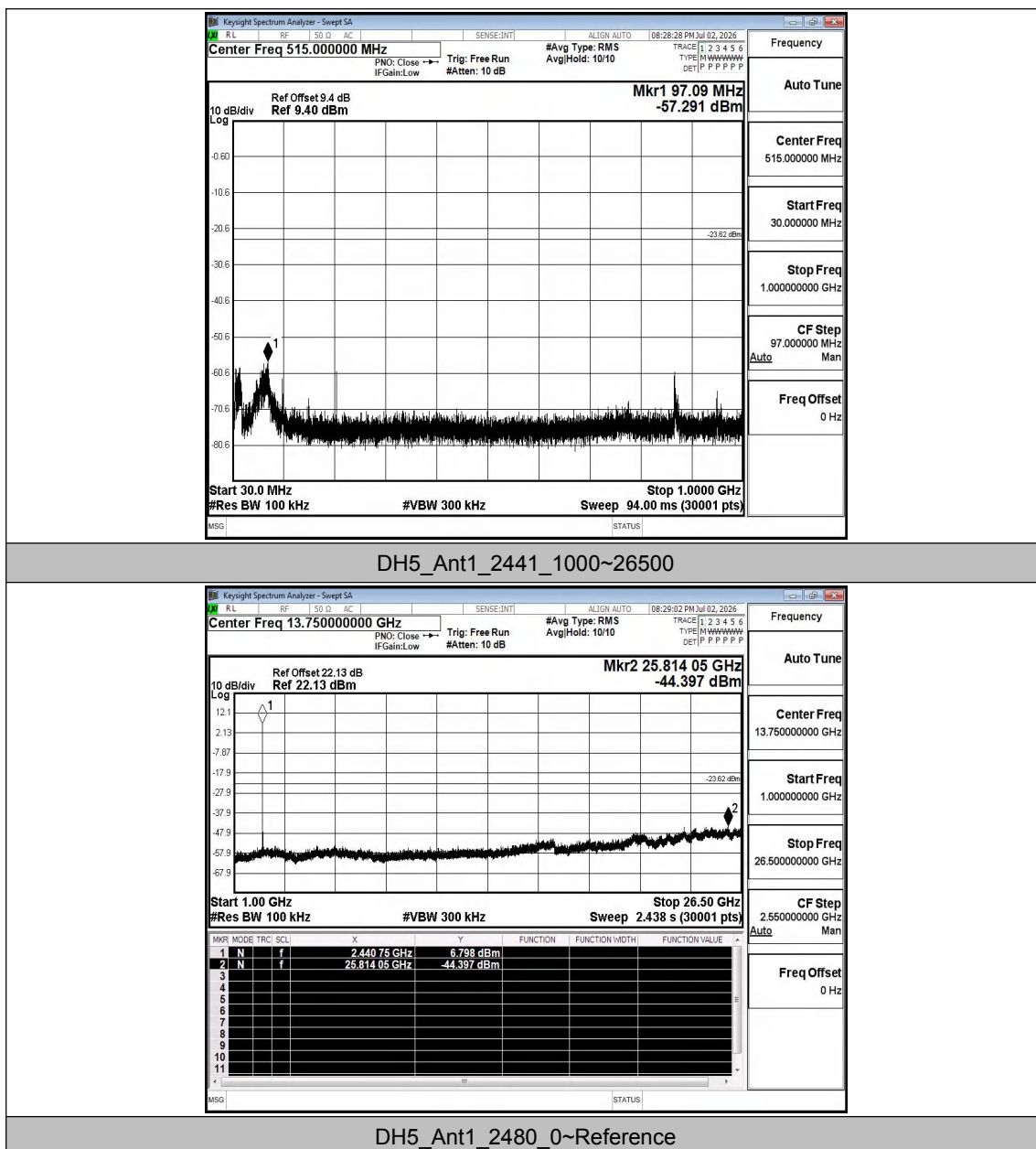
Test Result

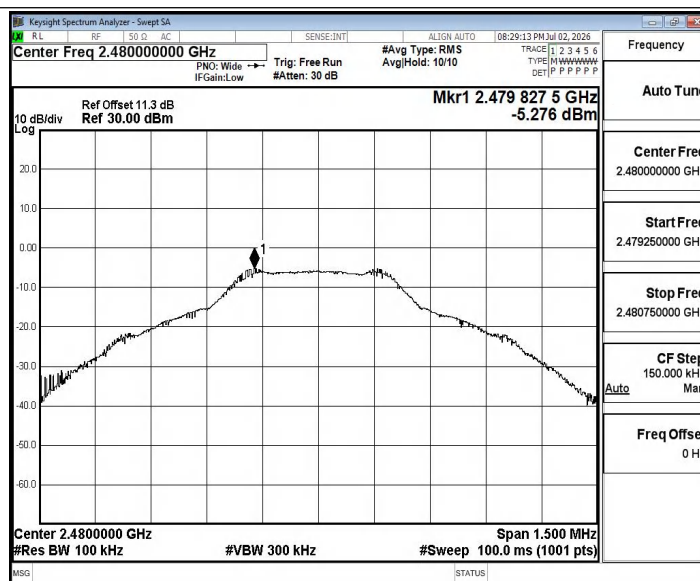
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-6.12	-6.12	---	PASS
			30~1000	-6.12	-36.02	≤-26.12	PASS
			1000~26500	-6.12	-44.3	≤-26.12	PASS
		2441	Reference	-3.62	-3.62	---	PASS
			30~1000	-3.62	-57.29	≤-23.62	PASS
			1000~26500	-3.62	-44.4	≤-23.62	PASS
		2480	Reference	-5.28	-5.28	---	PASS
			30~1000	-5.28	-40.76	≤-25.28	PASS
			1000~26500	-5.28	-44.06	≤-25.28	PASS
2DH5	Ant1	2402	Reference	-6.15	-6.15	---	PASS
			30~1000	-6.15	-34.66	≤-26.15	PASS
			1000~26500	-6.15	-44.26	≤-26.15	PASS
		2441	Reference	1.85	1.85	---	PASS
			30~1000	1.85	-58.19	≤-18.15	PASS
			1000~26500	1.85	-44.3	≤-18.15	PASS
		2480	Reference	0.70	0.70	---	PASS
			30~1000	0.70	-55.77	≤-19.3	PASS
			1000~26500	0.70	-44.18	≤-19.3	PASS
3DH5	Ant1	2402	Reference	0.98	0.98	---	PASS
			30~1000	0.98	-57.12	≤-19.02	PASS
			1000~26500	0.98	-44.89	≤-19.02	PASS
		2441	Reference	1.94	1.94	---	PASS
			30~1000	1.94	-57.17	≤-18.06	PASS
			1000~26500	1.94	-44.8	≤-18.06	PASS
		2480	Reference	0.83	0.83	---	PASS
			30~1000	0.83	-54.3	≤-19.17	PASS
			1000~26500	0.83	-44.86	≤-19.17	PASS

Test Graphs

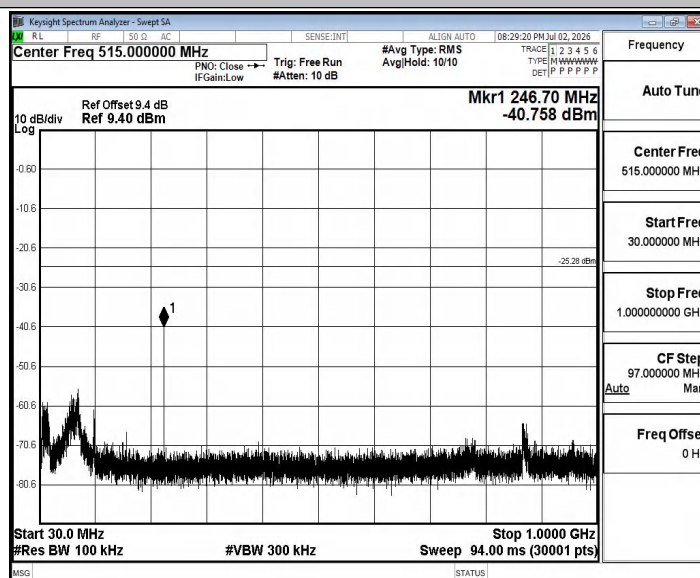








DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

