

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: BONE CONDUCTION W SCREEN

Test Model: TWSBONFT52-BLK

Environmental Conditions

Temperature:	24.1°C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Yan Chen
Supervised by:	Fengliu Tang

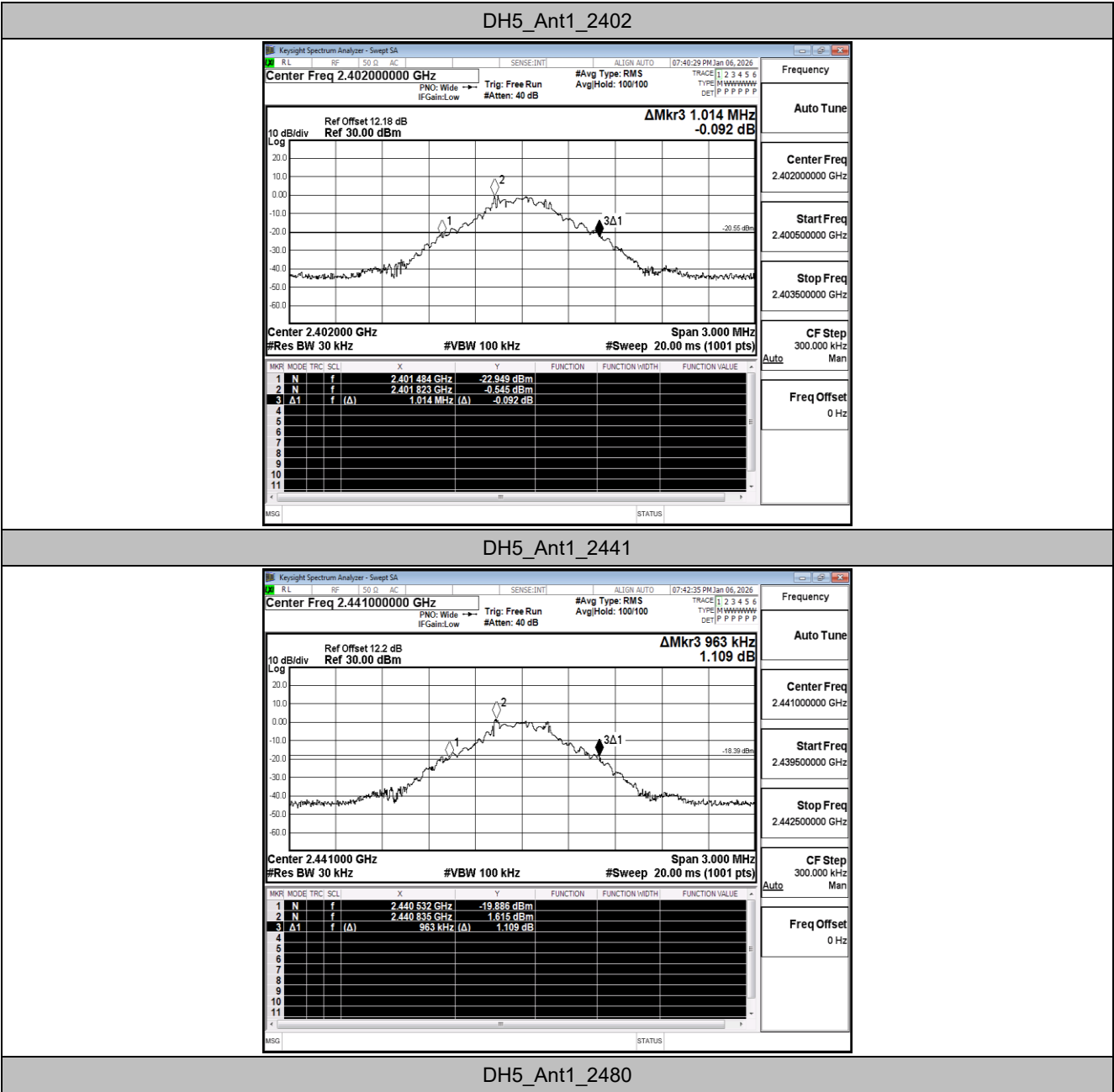
A.1 20dB Emission Bandwidth

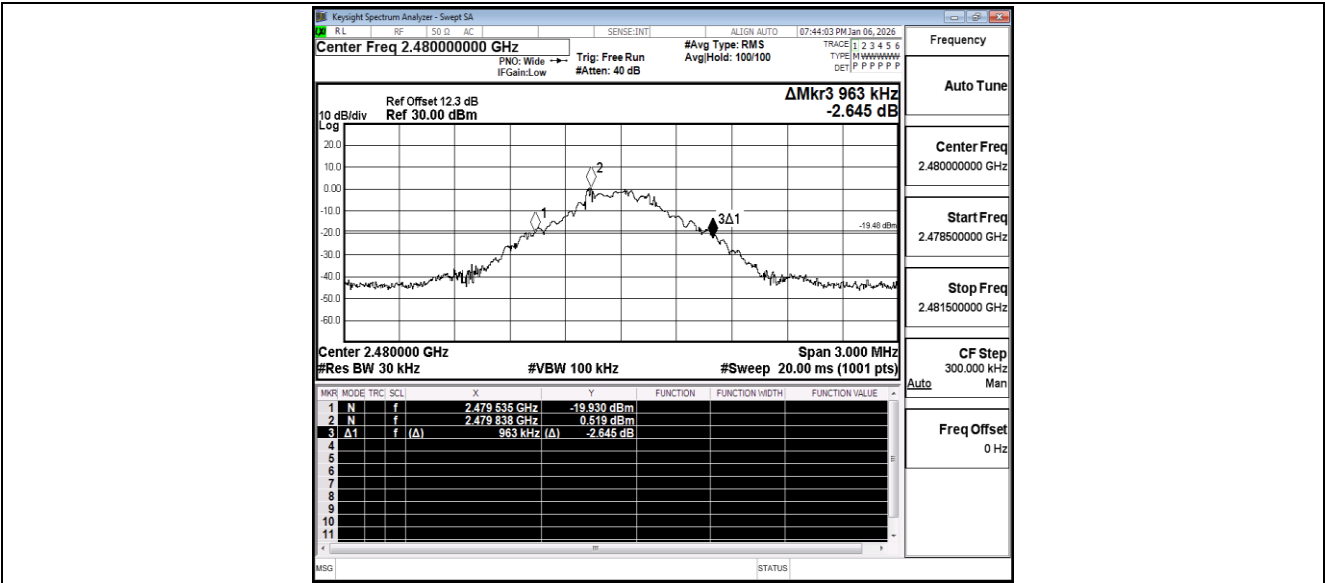
Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.014	2401.484	2402.498	---	---
		2441	0.963	2440.532	2441.495	---	---
		2480	0.963	2479.535	2480.498	---	---
2DH5	Ant1	2402	1.287	2401.364	2402.651	---	---
		2441	1.287	2440.361	2441.648	---	---
		2480	1.299	2479.352	2480.651	---	---
3DH5	Ant1	2402	1.296	2401.349	2402.645	---	---
		2441	1.305	2440.346	2441.651	---	---
		2480	1.299	2479.349	2480.648	---	---

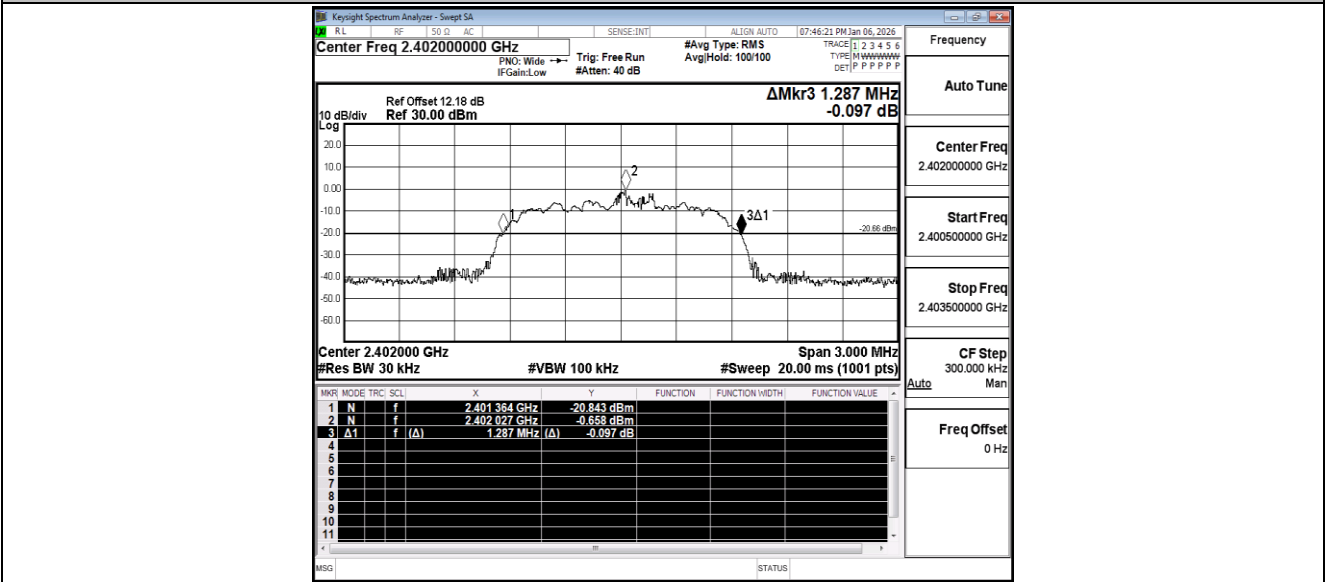
Note :offset=System attenuation +cabal loss

Test Graphs

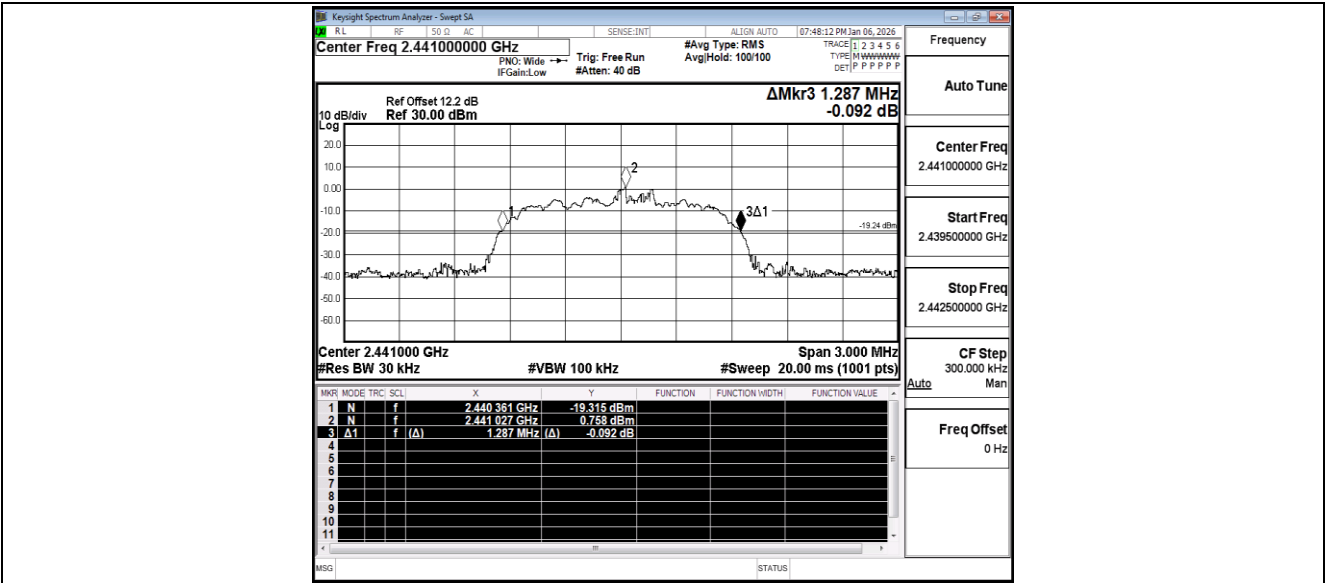




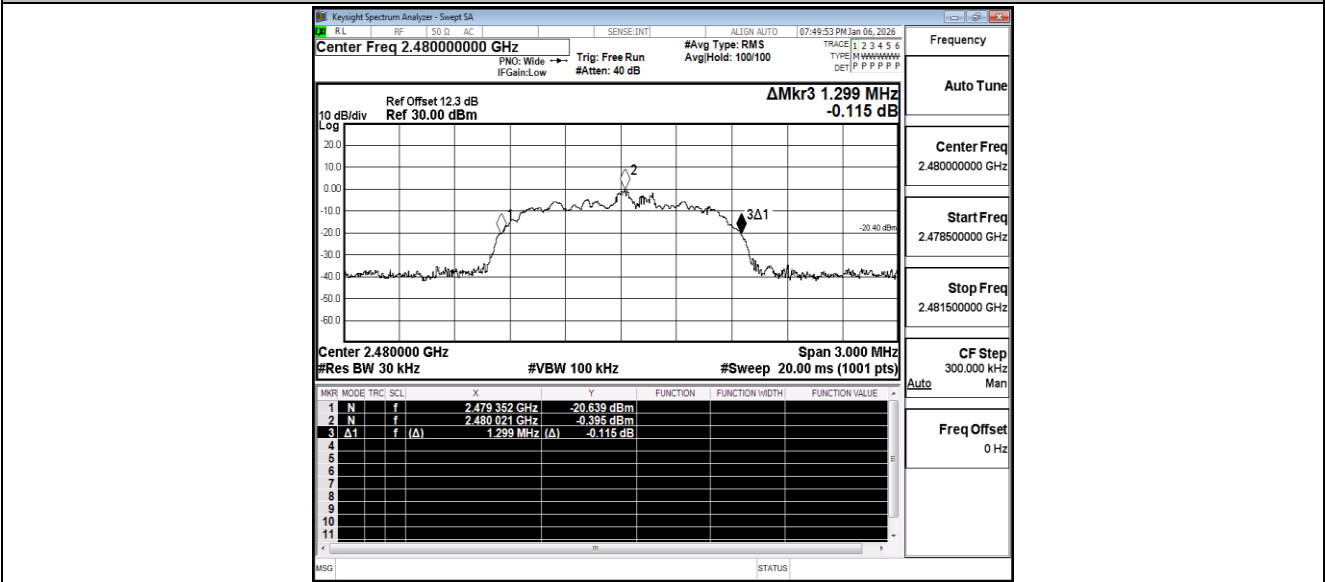
2DH5_Ant1_2402



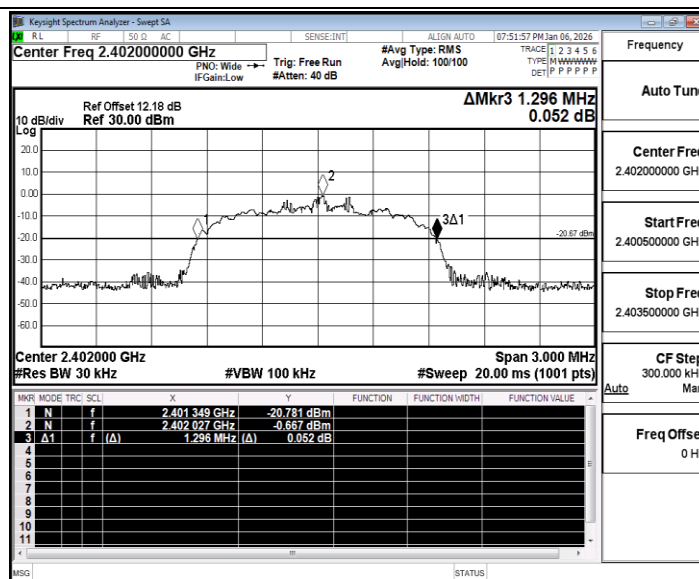
2DH5_Ant1_2441



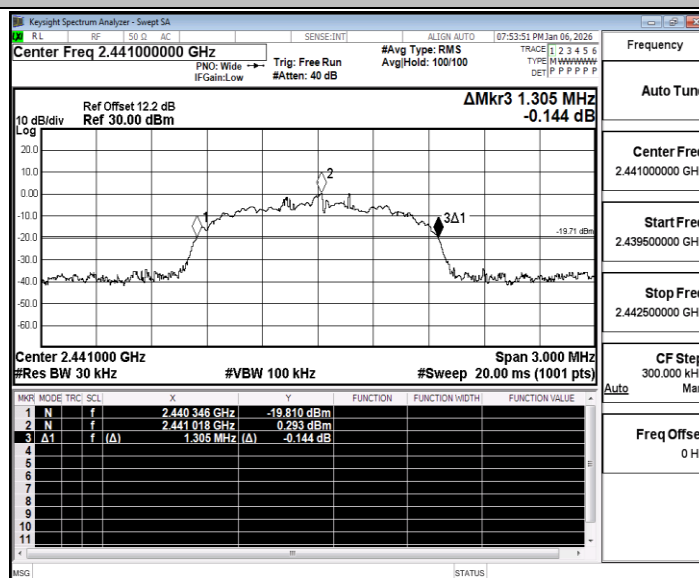
2DH5_Ant1_2480



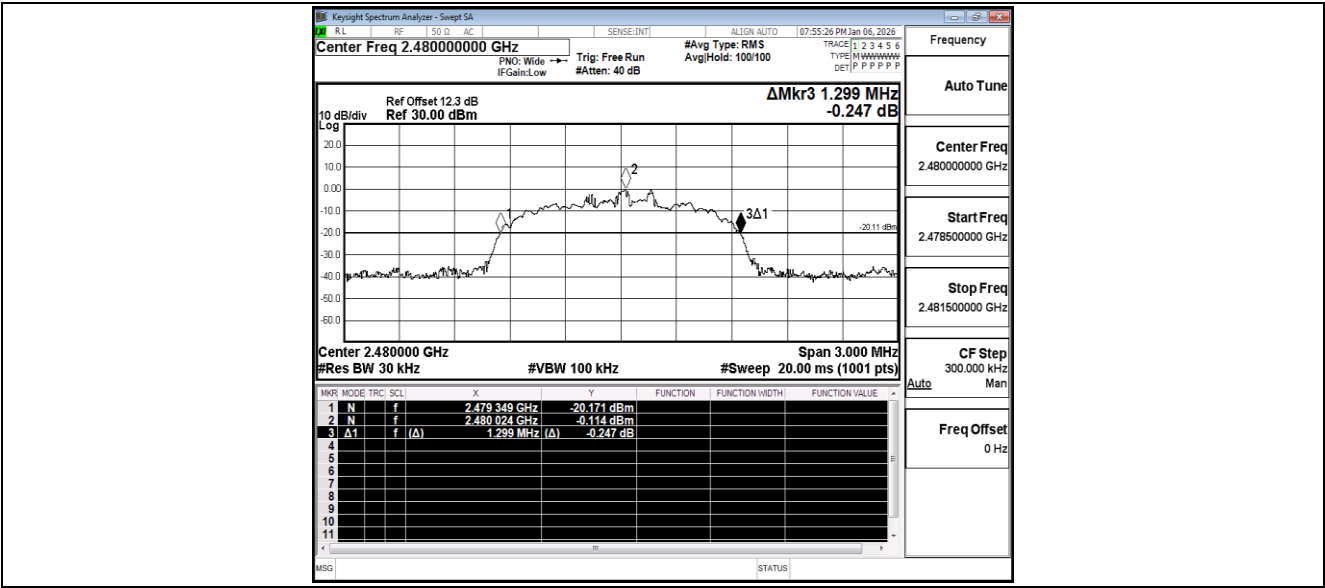
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



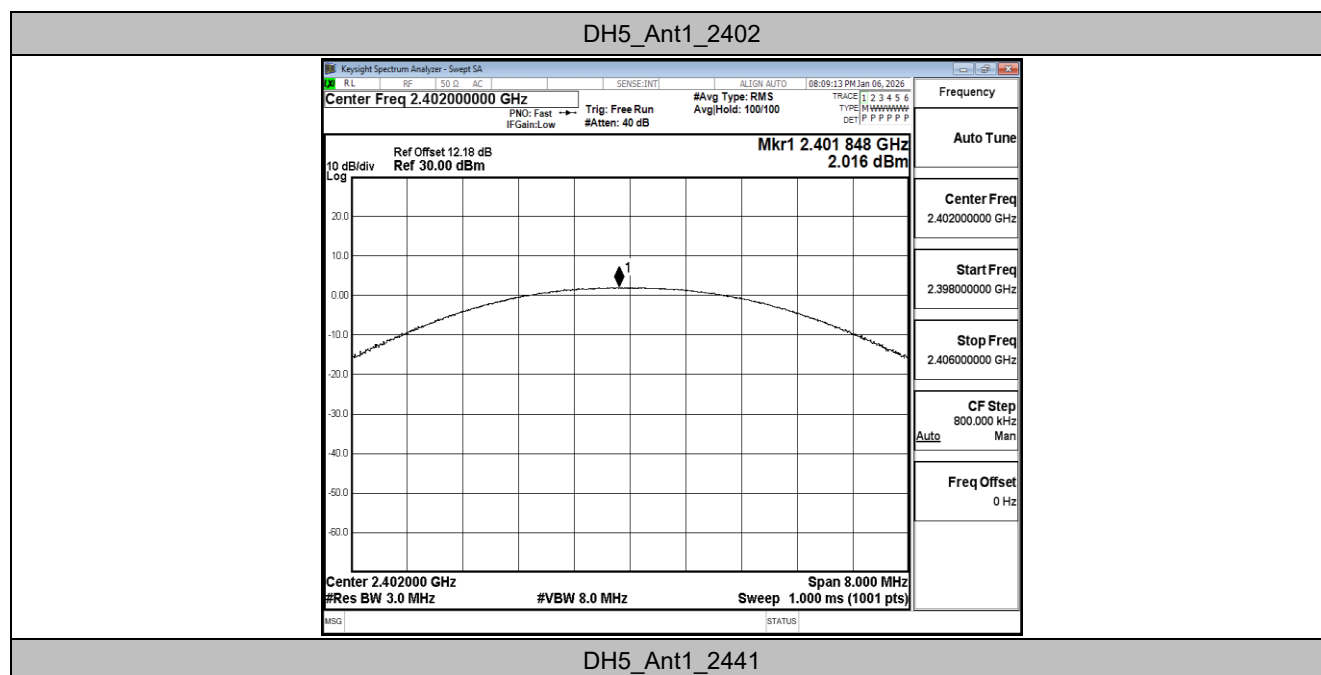
A.2 Maximum Peak conducted output power

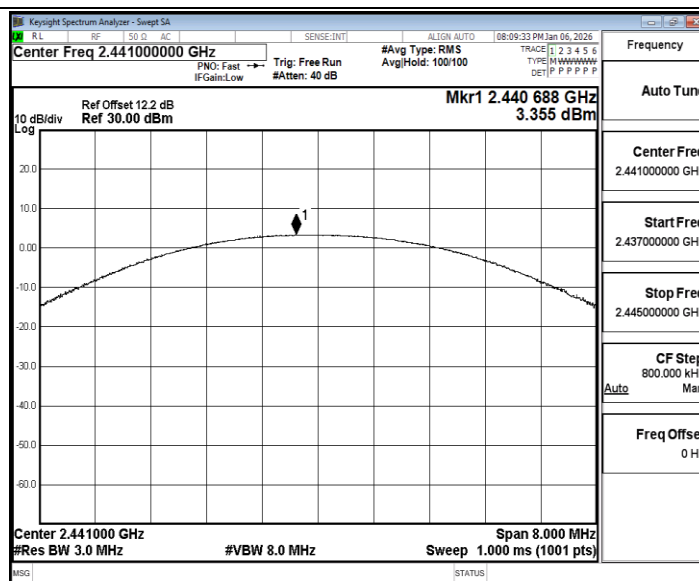
Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.02	≤20.97	PASS
		2441	3.36	≤20.97	PASS
		2480	2.56	≤20.97	PASS
2DH5	Ant1	2402	3.55	≤20.97	PASS
		2441	4.59	≤20.97	PASS
		2480	3.64	≤20.97	PASS
3DH5	Ant1	2402	3.76	≤20.97	PASS
		2441	4.68	≤20.97	PASS
		2480	3.81	≤20.97	PASS

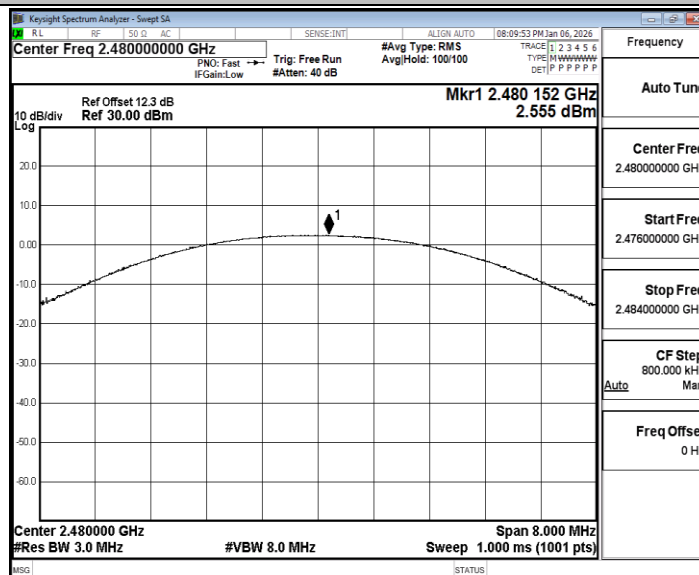
Note :offset=System attenuation +cabal loss

Test Graphs

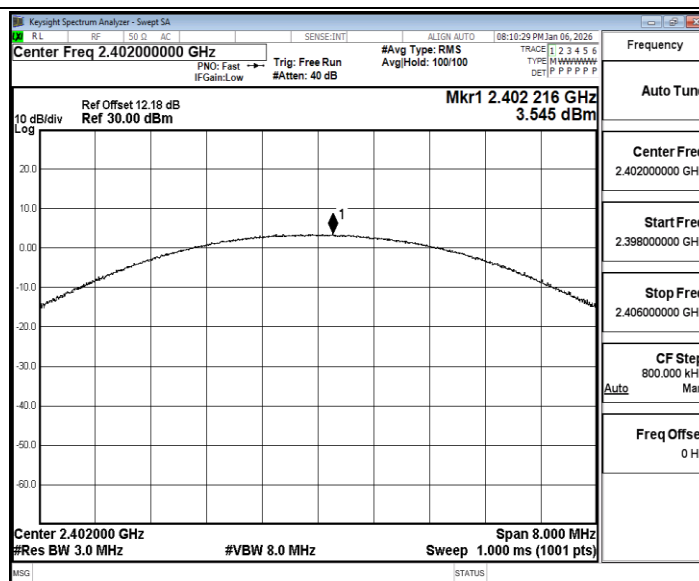




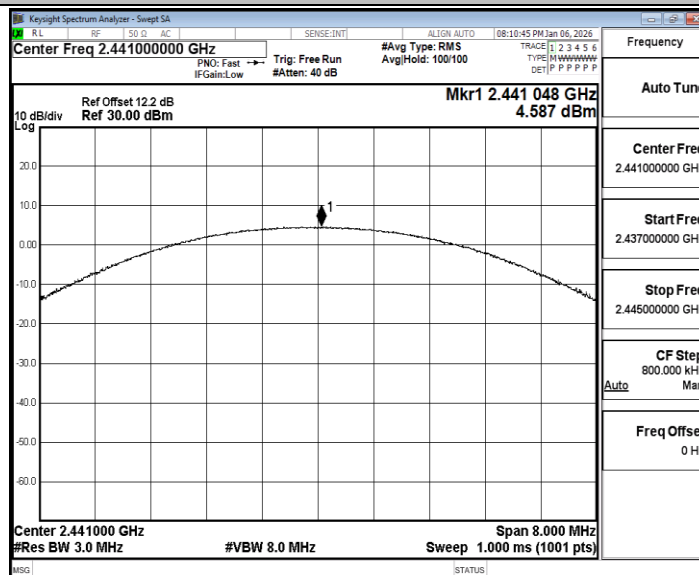
DH5_Ant1_2480



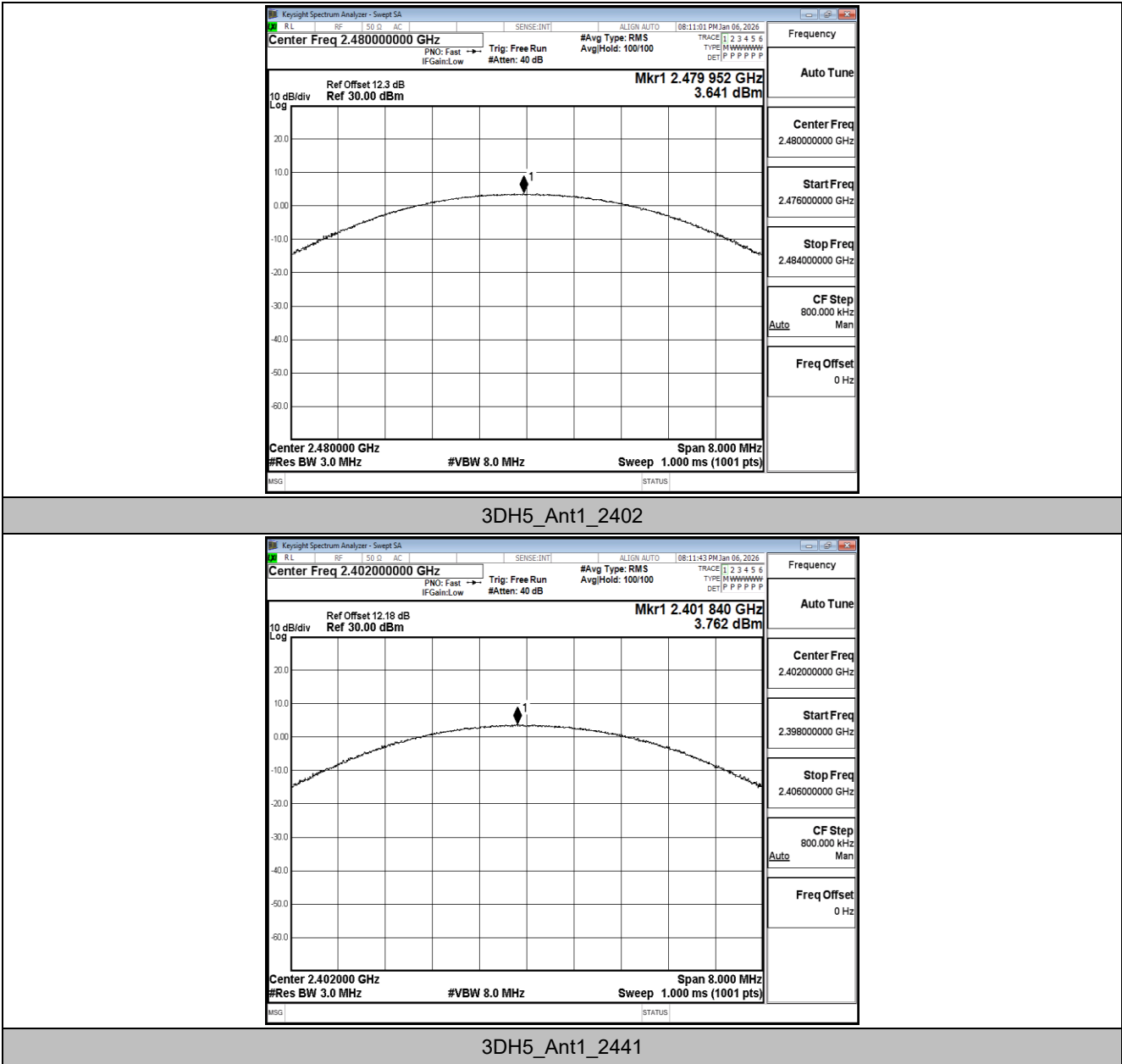
2DH5_Ant1_2402

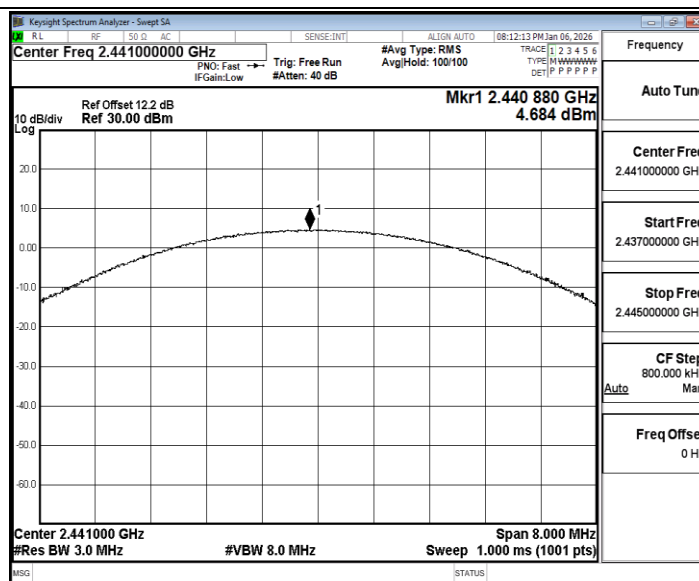


2DH5_Ant1_2441

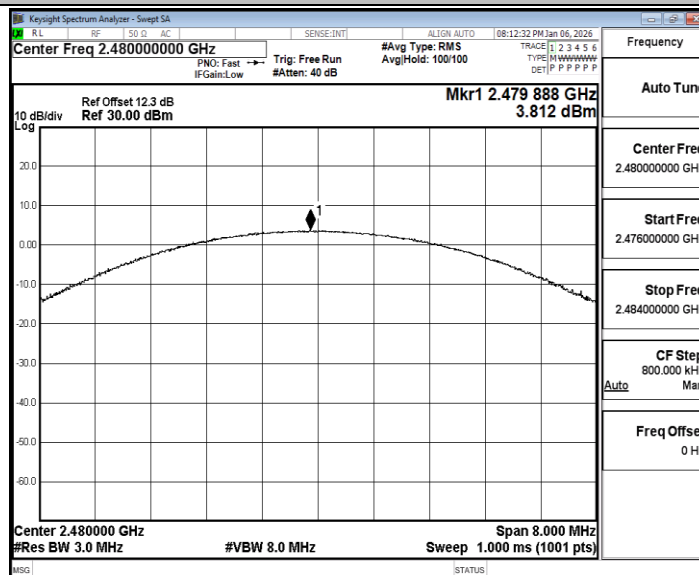


2DH5_Ant1_2480





3DH5_Ant1_2480



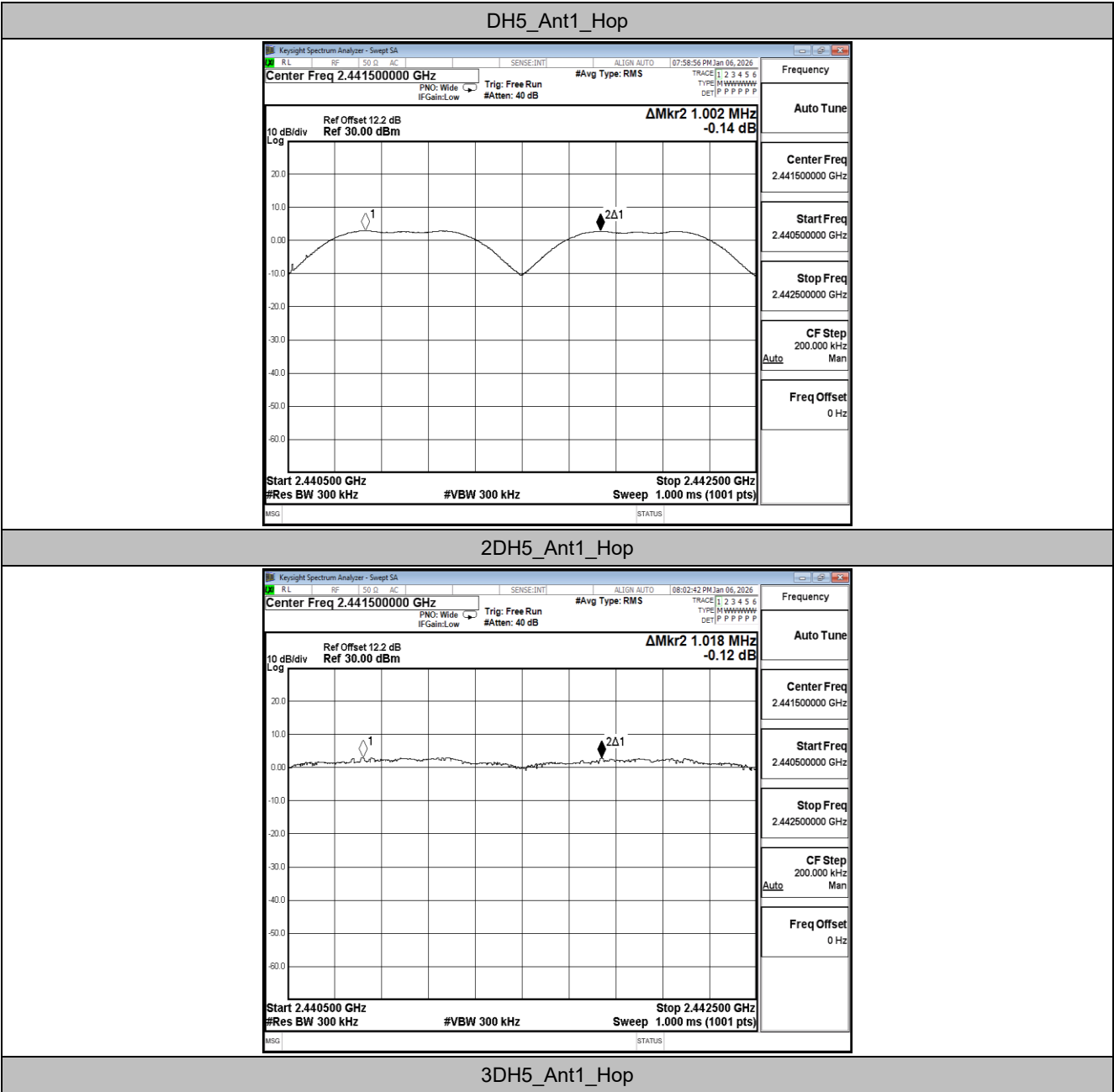
A.3 Carrier frequency separation

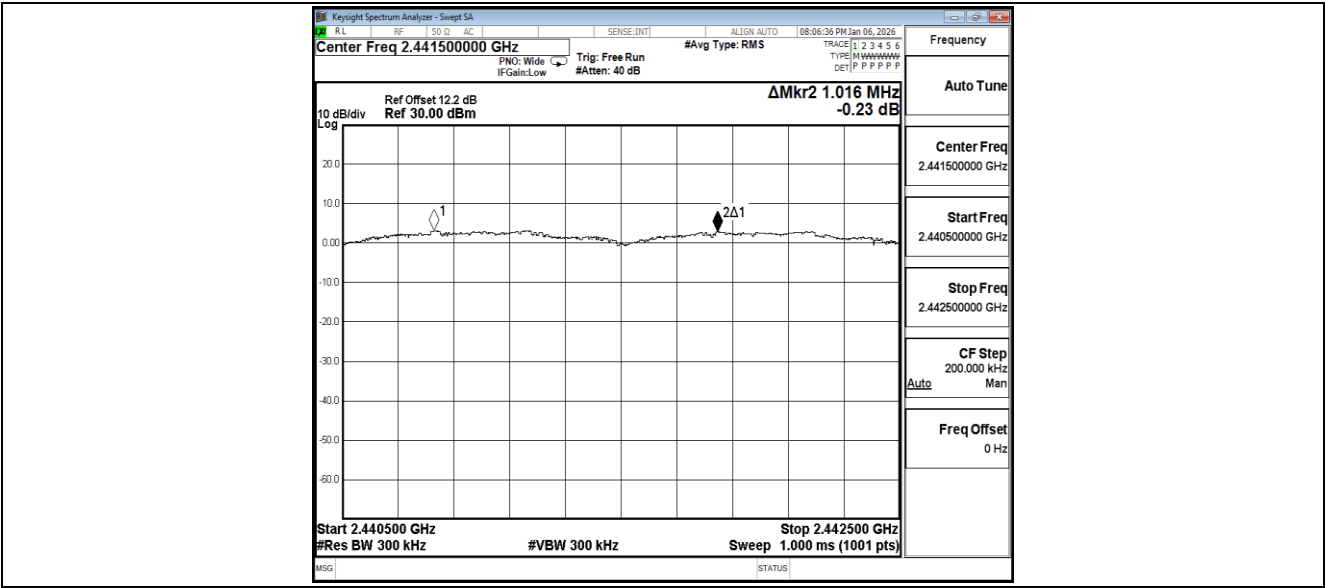
Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.002	≥ 0.676	PASS
2DH5	Ant1	Hop	1.018	≥ 0.866	PASS
3DH5	Ant1	Hop	1.016	≥ 0.870	PASS

Note :offset=System attenuation +cabal loss

Test Graphs





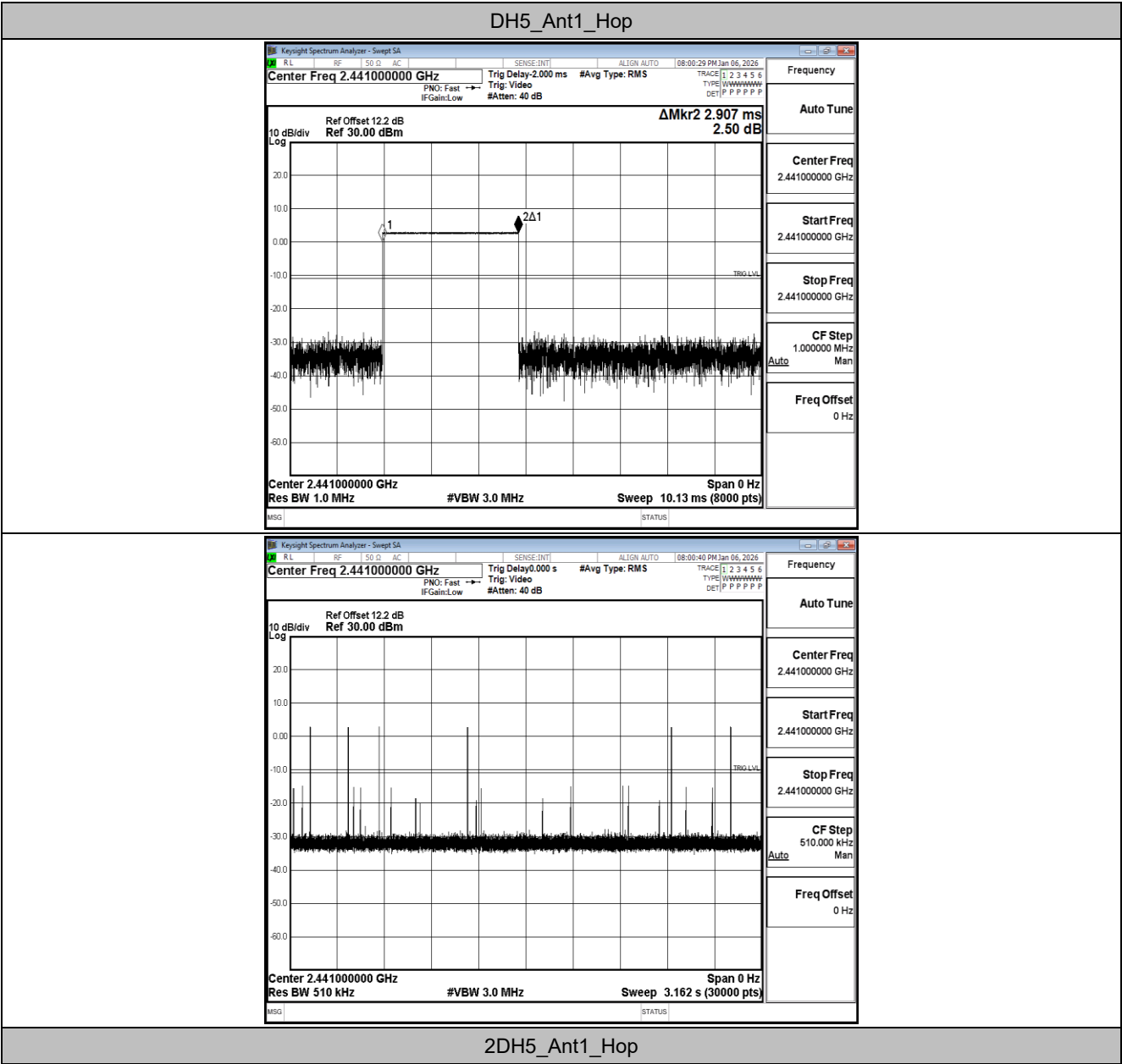
A.4 Time of occupancy

Test Result

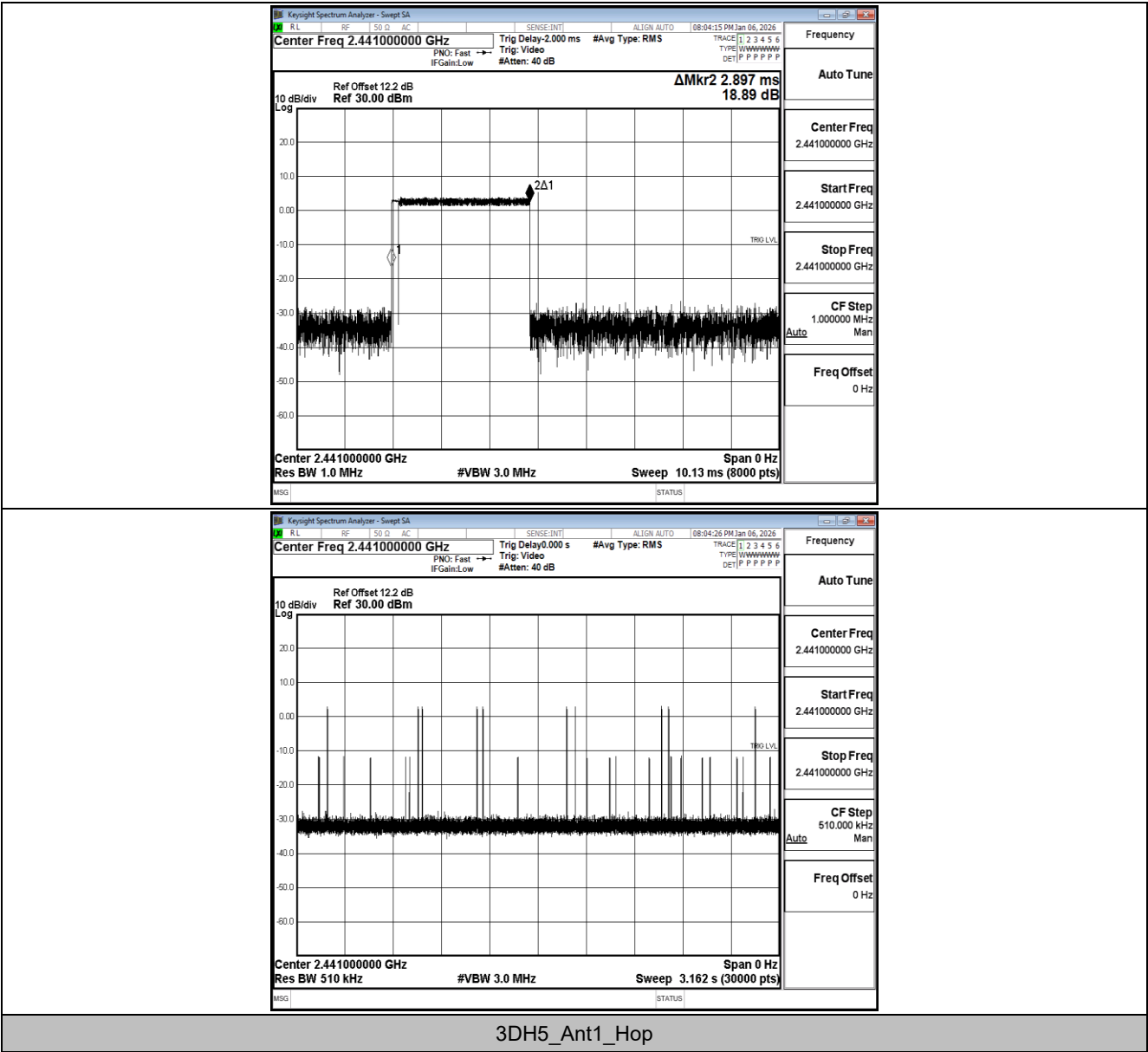
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.907	70	0.203	≤0.4	PASS
2DH5	Ant1	Hop	2.897	110	0.319	≤0.4	PASS
3DH5	Ant1	Hop	2.896	100	0.29	≤0.4	PASS

Note :offset=System attenuation +cabal loss

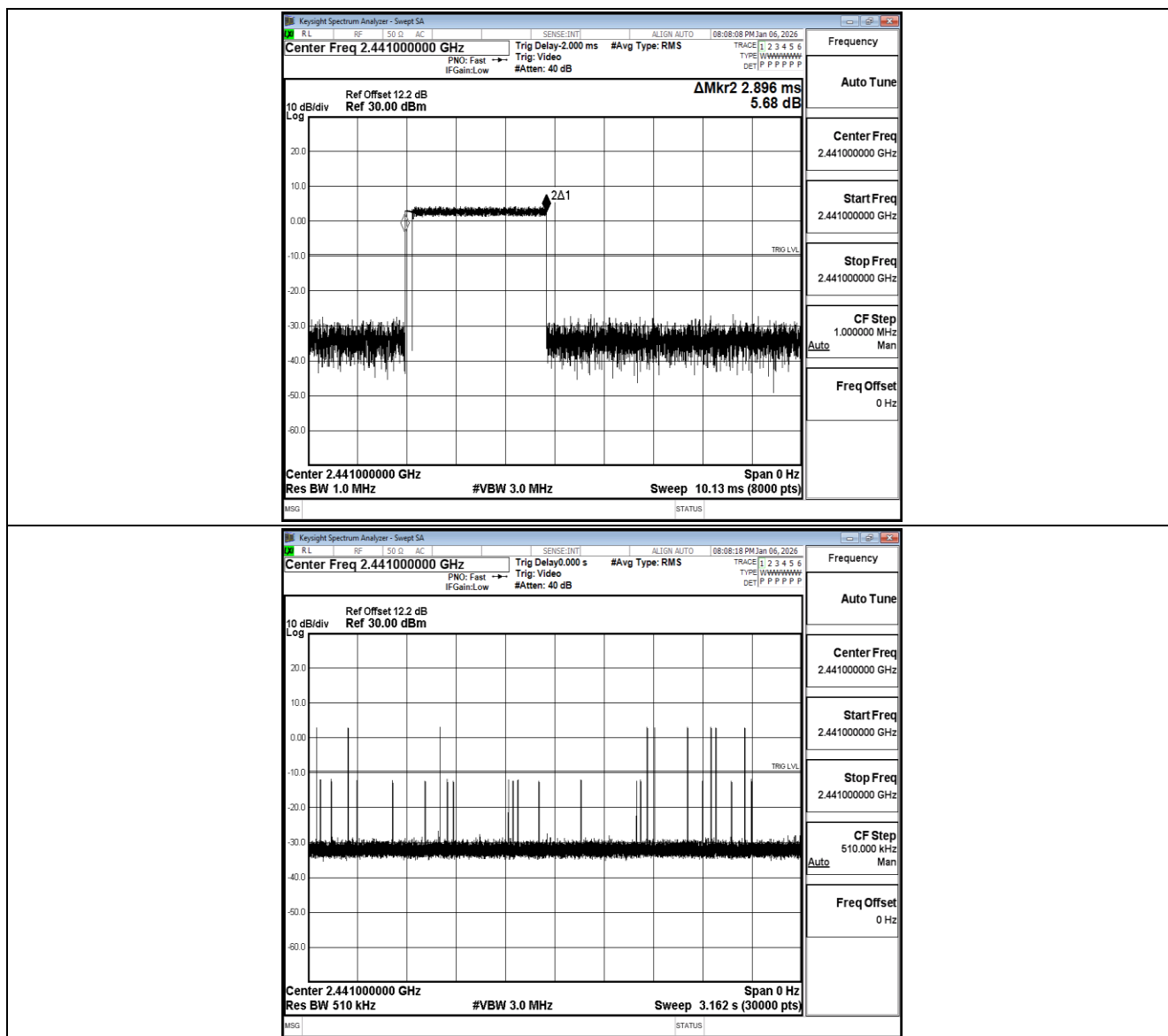
Test Graphs



2DH5_Ant1_Hop



3DH5_Ant1_Hop



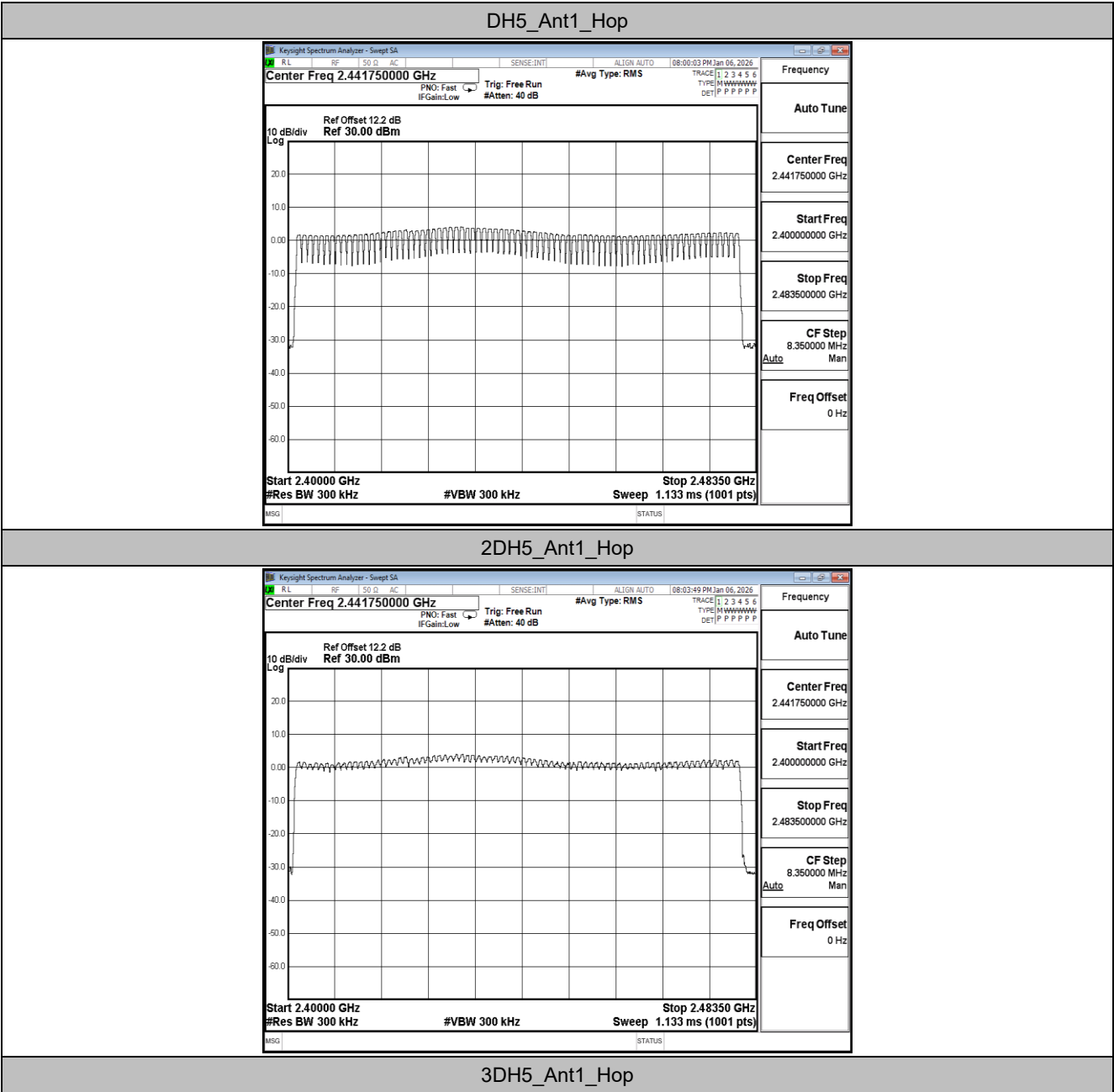
A.5 Number of hopping channels

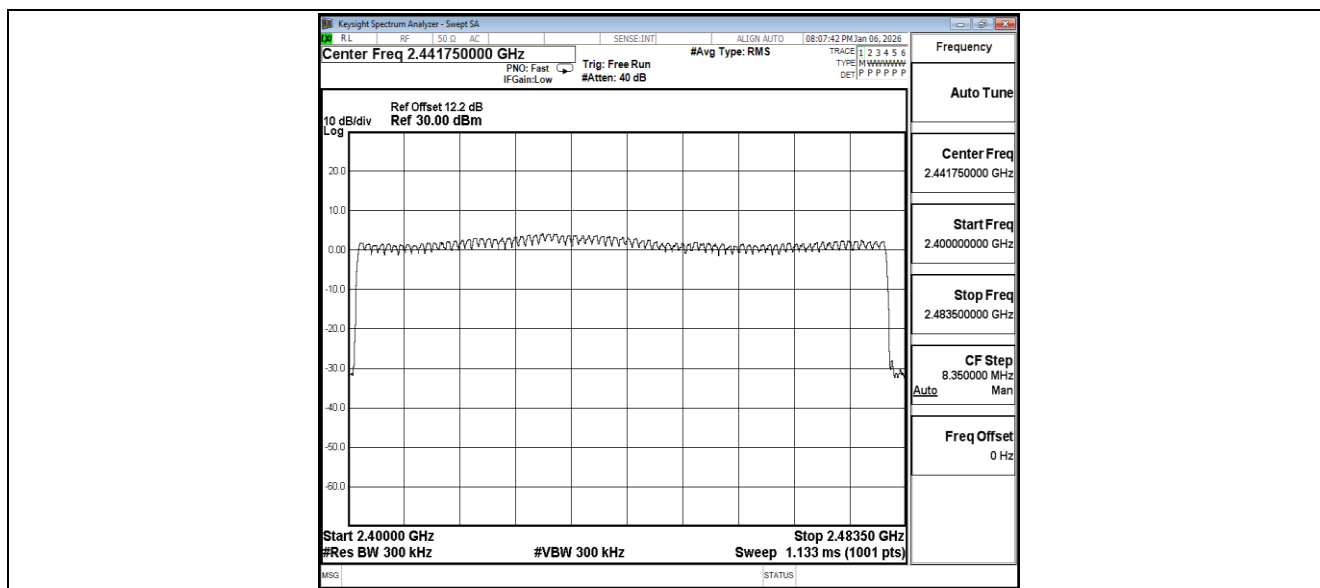
Test Result

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

Note :offset=System attenuation +cabal loss

Test Graphs





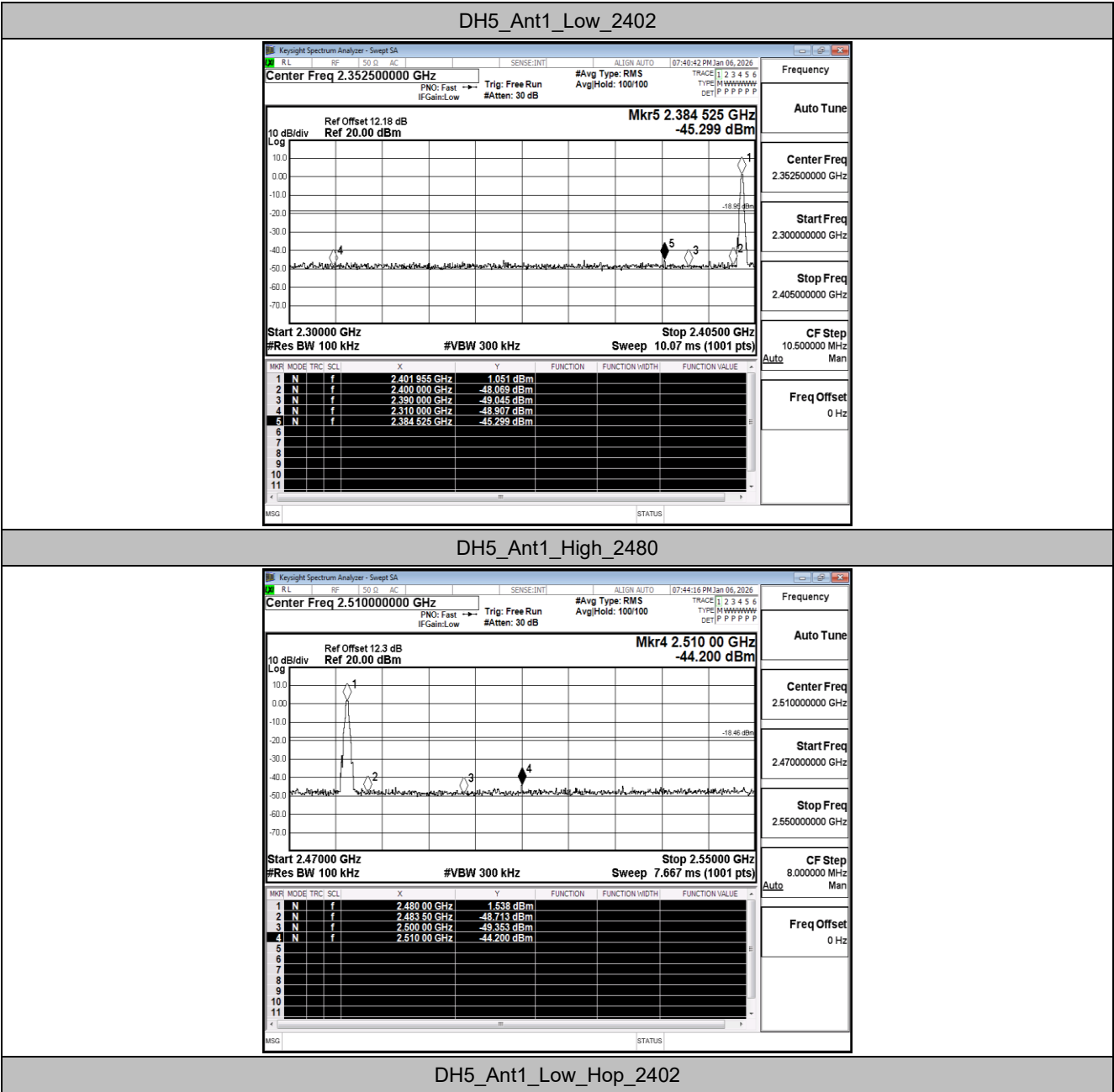
A.6 Band edge measurements

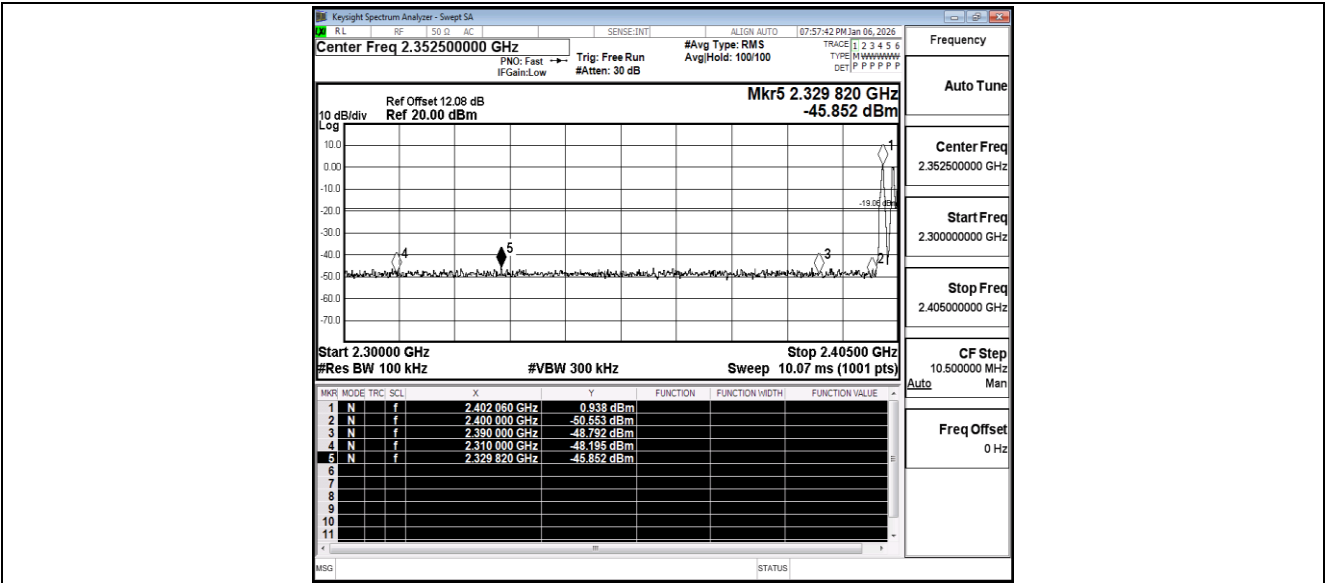
Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.05	-45.3	≤ -18.95	PASS
		High	2480	1.54	-44.2	≤ -18.46	PASS
		Low	Hop_2402	0.94	-45.85	≤ -19.06	PASS
		High	Hop_2480	1.05	-44.93	≤ -18.95	PASS
2DH5	Ant1	Low	2402	0.90	-44.77	≤ -19.1	PASS
		High	2480	1.76	-44.63	≤ -18.24	PASS
		Low	Hop_2402	-2.76	-45.5	≤ -22.76	PASS
		High	Hop_2480	-1.15	-44.51	≤ -21.15	PASS
3DH5	Ant1	Low	2402	1.41	-45.67	≤ -18.59	PASS
		High	2480	1.84	-44.96	≤ -18.16	PASS
		Low	Hop_2402	-1.93	-45.34	≤ -21.93	PASS
		High	Hop_2480	-2.25	-45.1	≤ -22.25	PASS

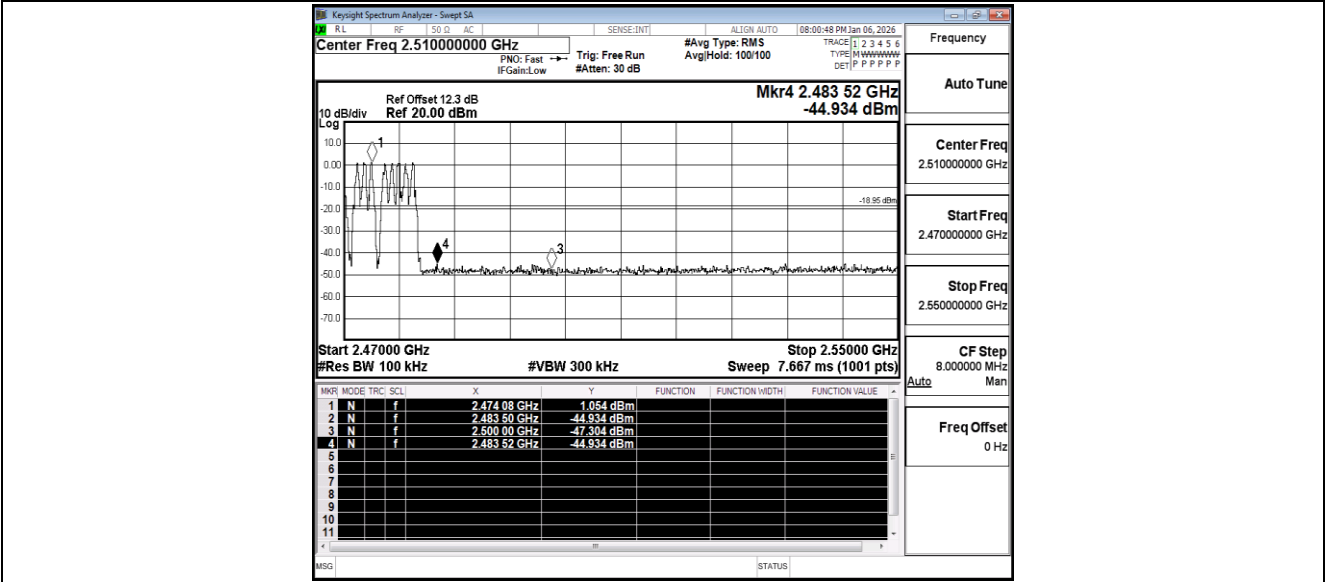
Note :offset=System attenuation +cabal loss

Test Graphs

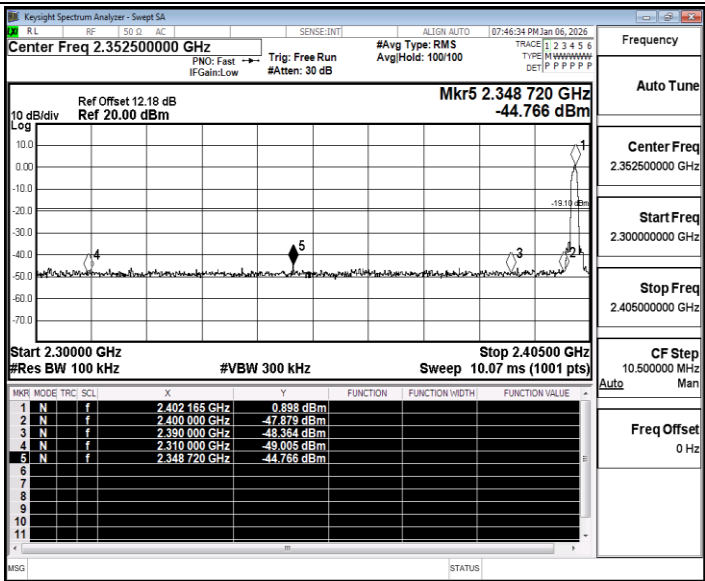




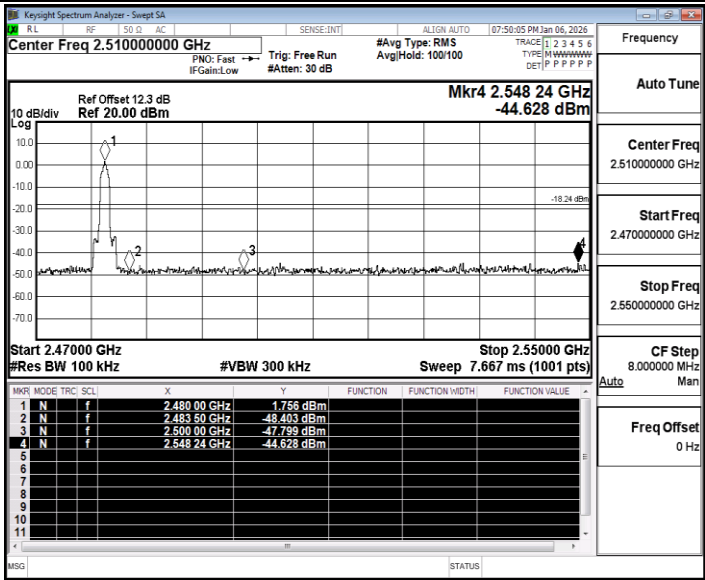
DH5_Ant1_High_Hop_2480



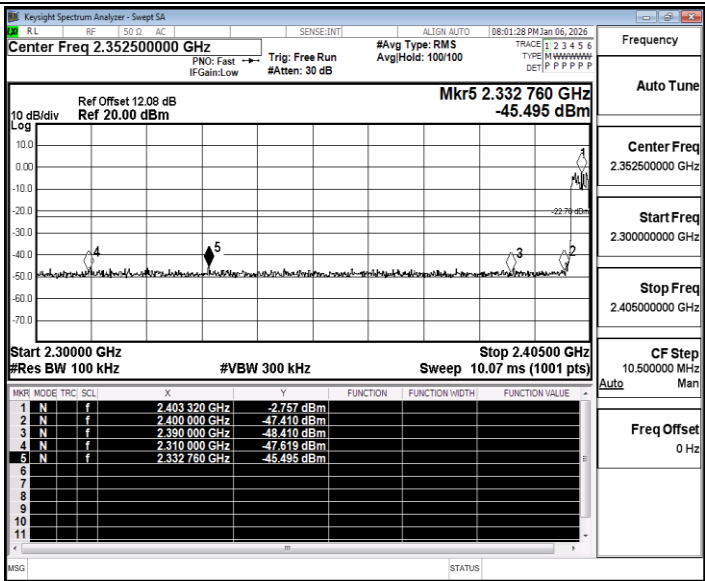
2DH5_Ant1_Low_2402



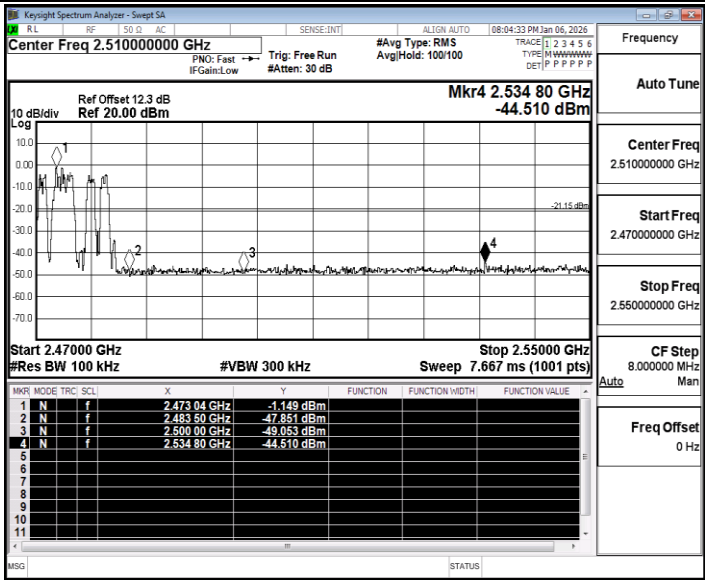
2DH5_Ant1_High_2480



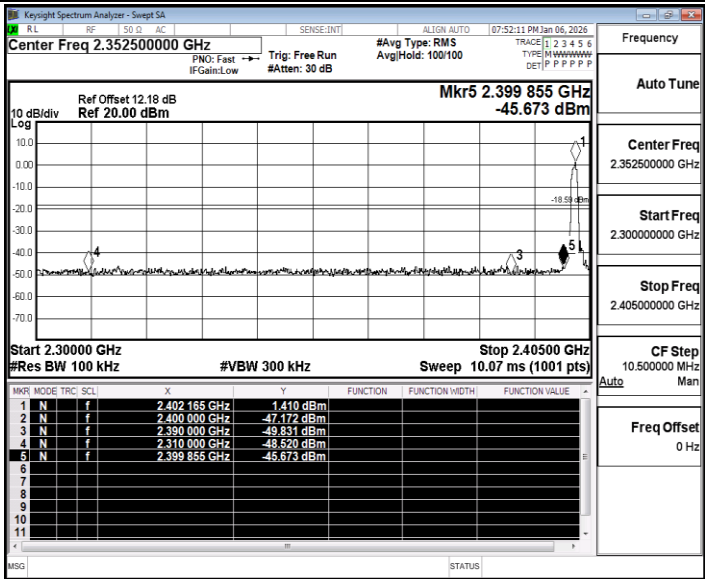
2DH5_Ant1_Low_Hop_2402



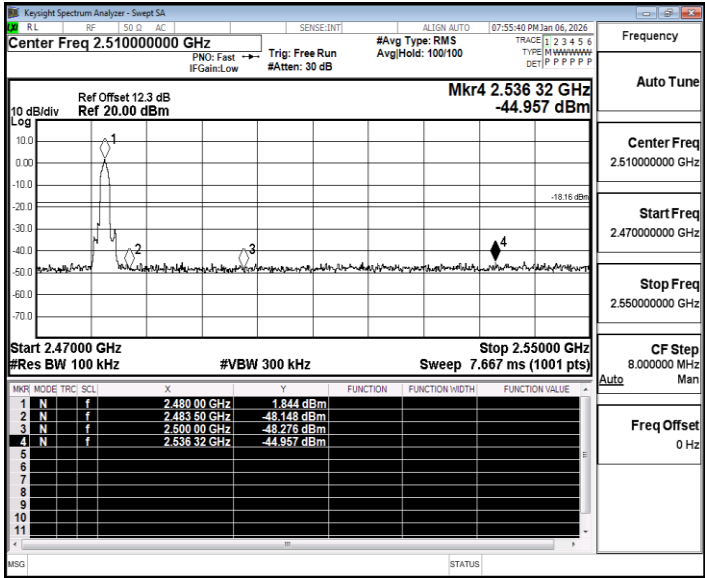
2DH5_Ant1_High_Hop_2480



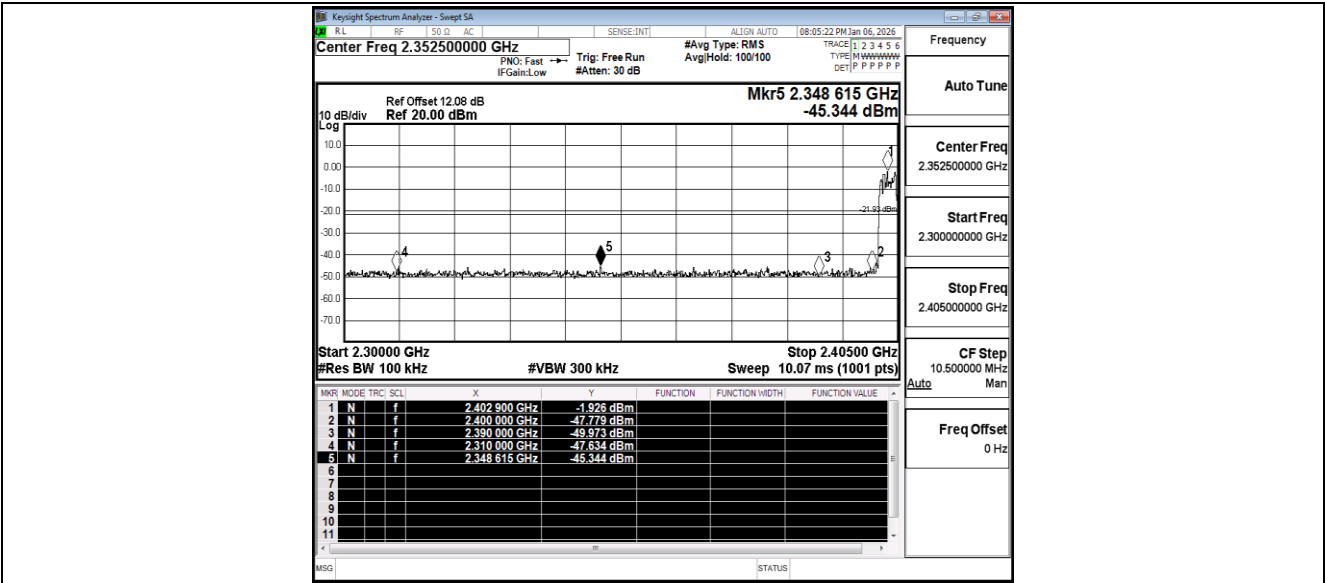
3DH5_Ant1_Low_2402



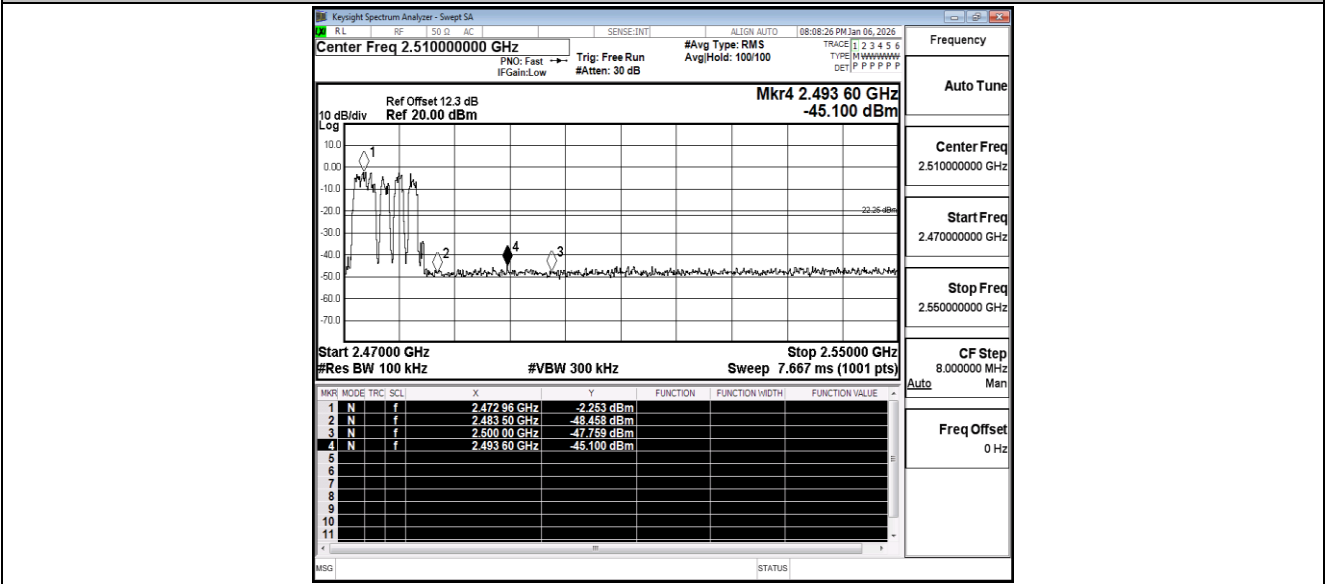
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



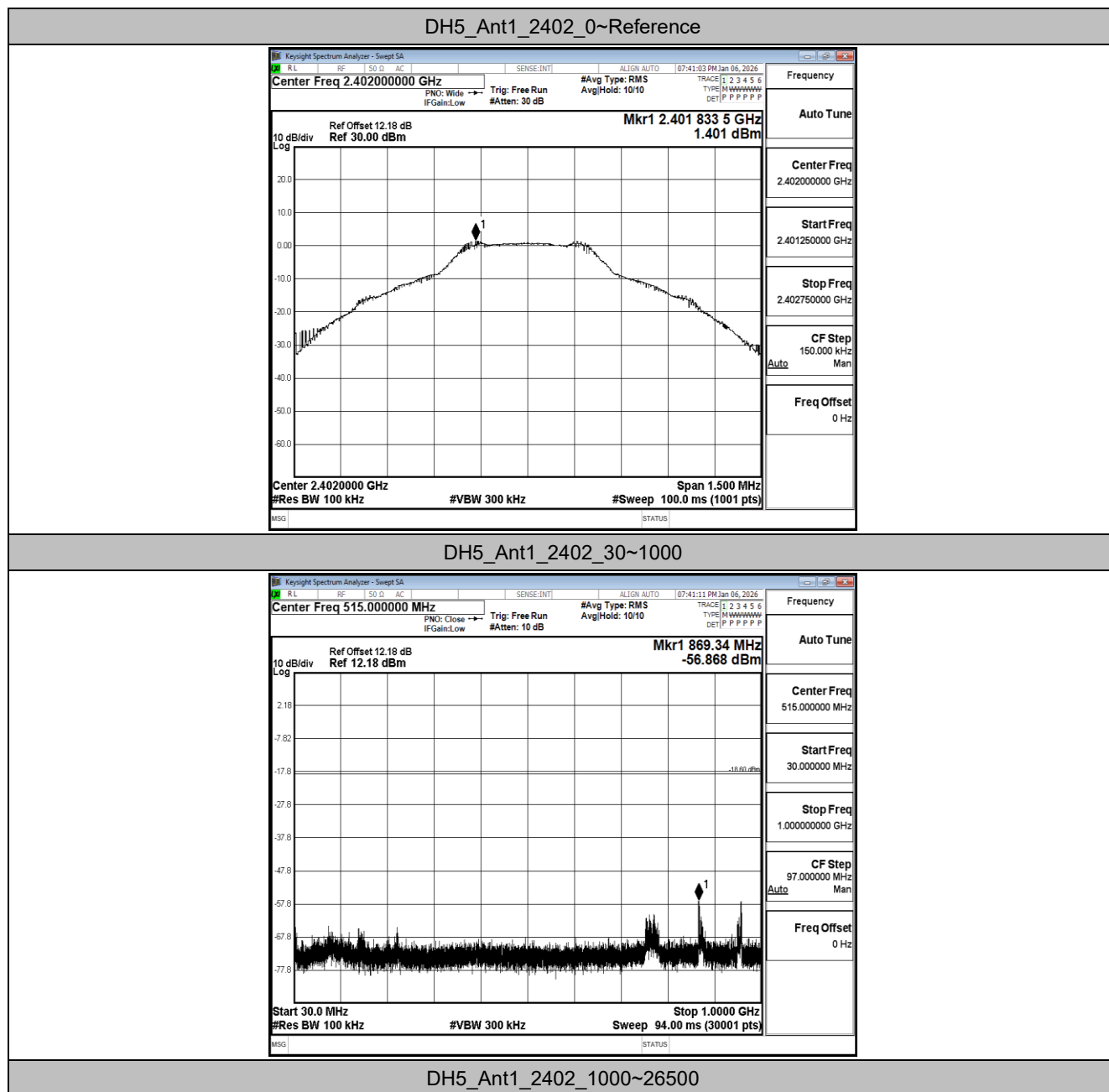
A.7 Conducted Spurious Emission

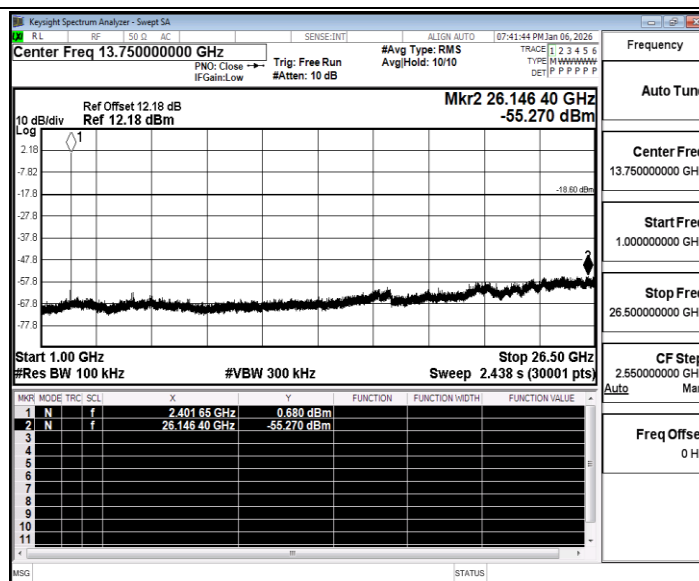
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.40	1.40	---	PASS
			30~1000	1.40	-56.87	≤-18.6	PASS
			1000~26500	1.40	-55.27	≤-18.6	PASS
		2441	Reference	2.79	2.79	---	PASS
			30~1000	2.79	-56.75	≤-17.21	PASS
			1000~26500	2.79	-55.17	≤-17.21	PASS
		2480	Reference	1.89	1.89	---	PASS
			30~1000	1.89	-57.59	≤-18.11	PASS
			1000~26500	1.89	-53.88	≤-18.11	PASS
2DH5	Ant1	2402	Reference	1.28	1.28	---	PASS
			30~1000	1.28	-57.72	≤-18.72	PASS
			1000~26500	1.28	-51.72	≤-18.72	PASS
		2441	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-57.48	≤-17.37	PASS
			1000~26500	2.63	-54.5	≤-17.37	PASS
		2480	Reference	1.73	1.73	---	PASS
			30~1000	1.73	-56.66	≤-18.27	PASS
			1000~26500	1.73	-54.6	≤-18.27	PASS
3DH5	Ant1	2402	Reference	1.48	1.48	---	PASS
			30~1000	1.48	-57.08	≤-18.52	PASS
			1000~26500	1.48	-55.09	≤-18.52	PASS
		2441	Reference	2.84	2.84	---	PASS
			30~1000	2.84	-55.17	≤-17.16	PASS
			1000~26500	2.84	-54.79	≤-17.16	PASS
		2480	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-56.14	≤-18.03	PASS
			1000~26500	1.97	-54.24	≤-18.03	PASS

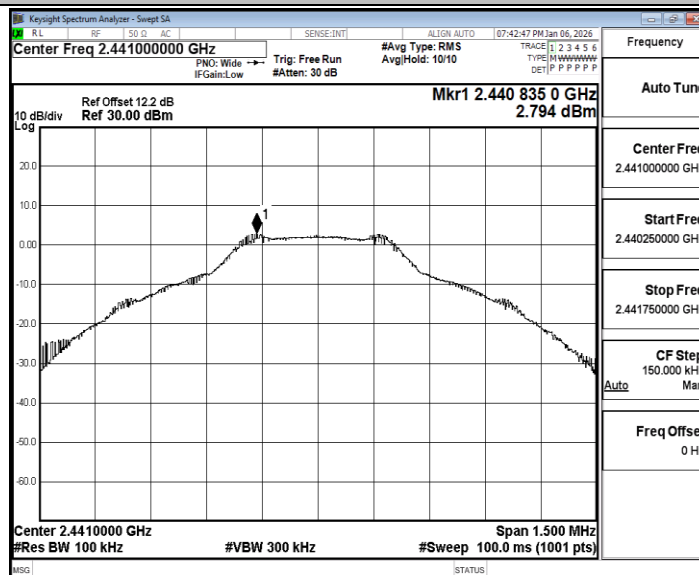
Note :offset=System attenuation +cabal loss

Test Graphs

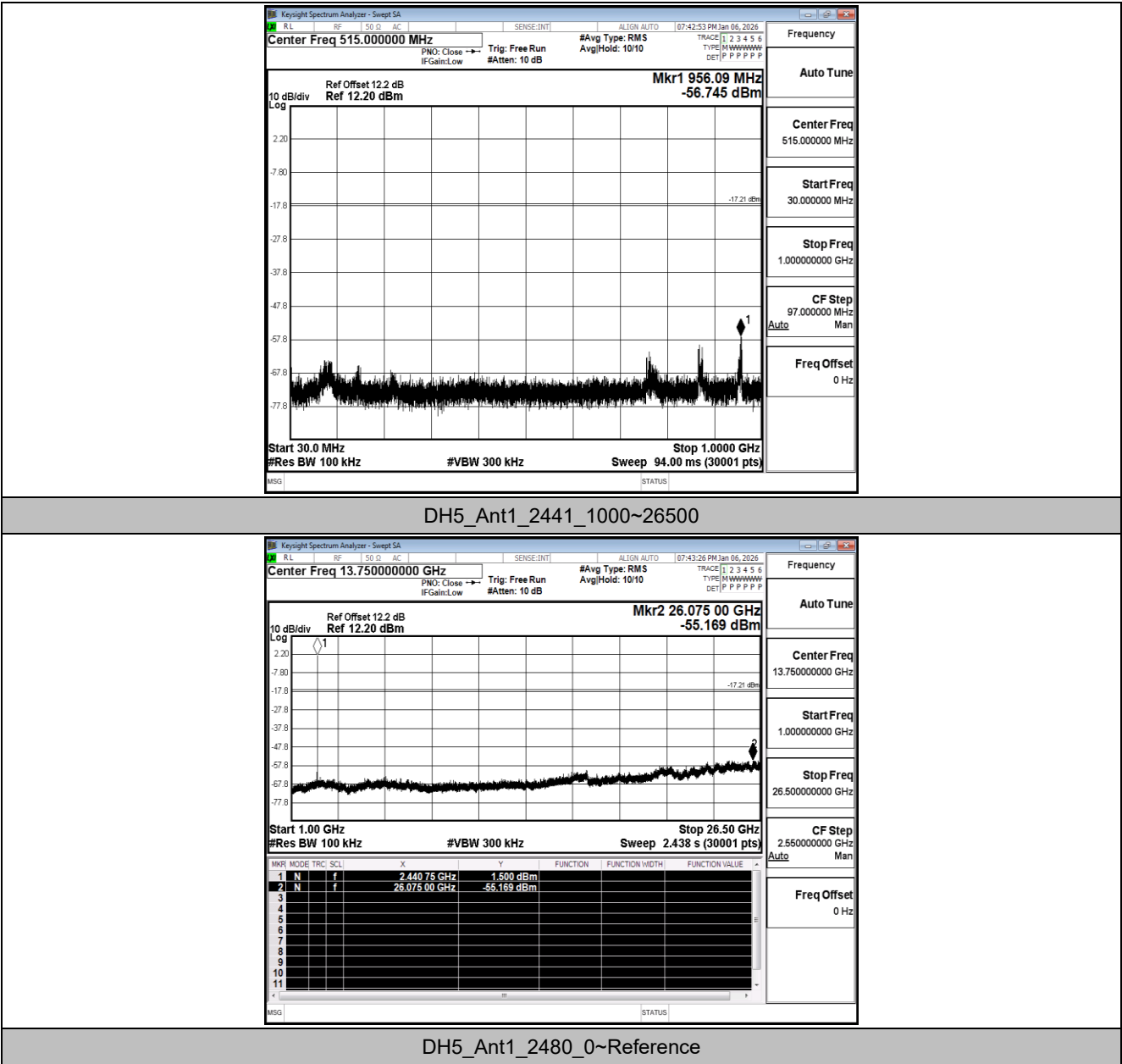


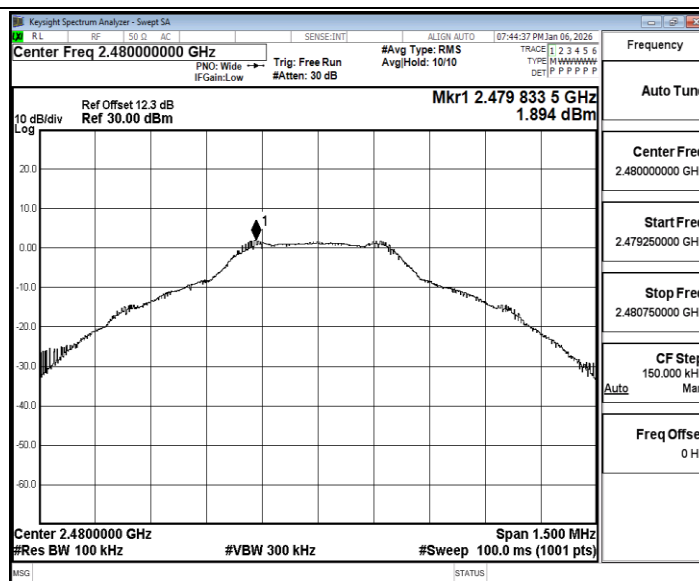


DH5_Ant1_2441_0~Reference

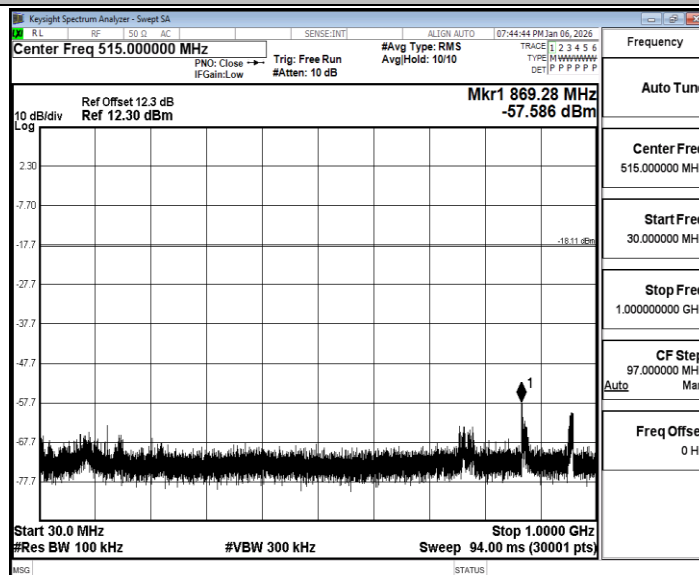


DH5_Ant1_2441_30~1000

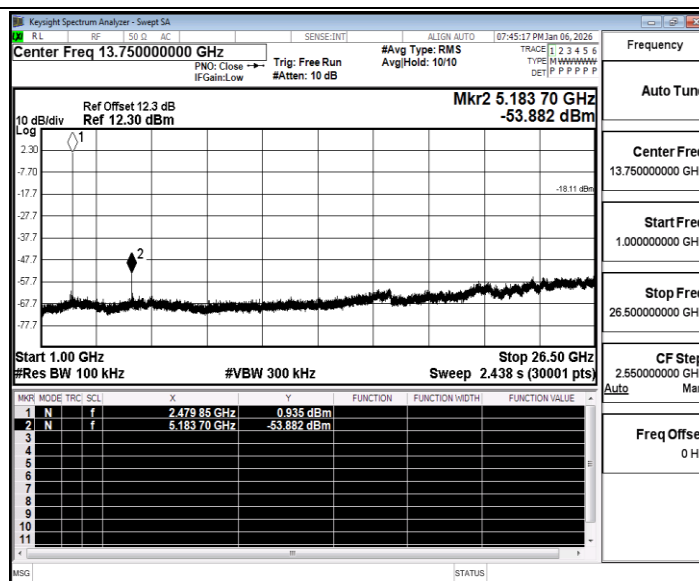




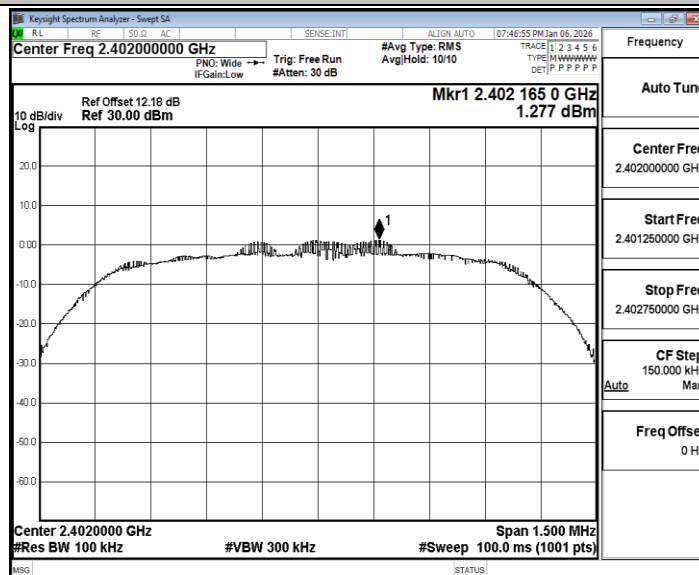
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500



2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000