

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: PEARL WIRELESS SPEAKER

Test Model: ISB-2548AS

Environmental Conditions

Temperature:	24.2°C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Yan Chen
Supervised by:	Fengliu Tang

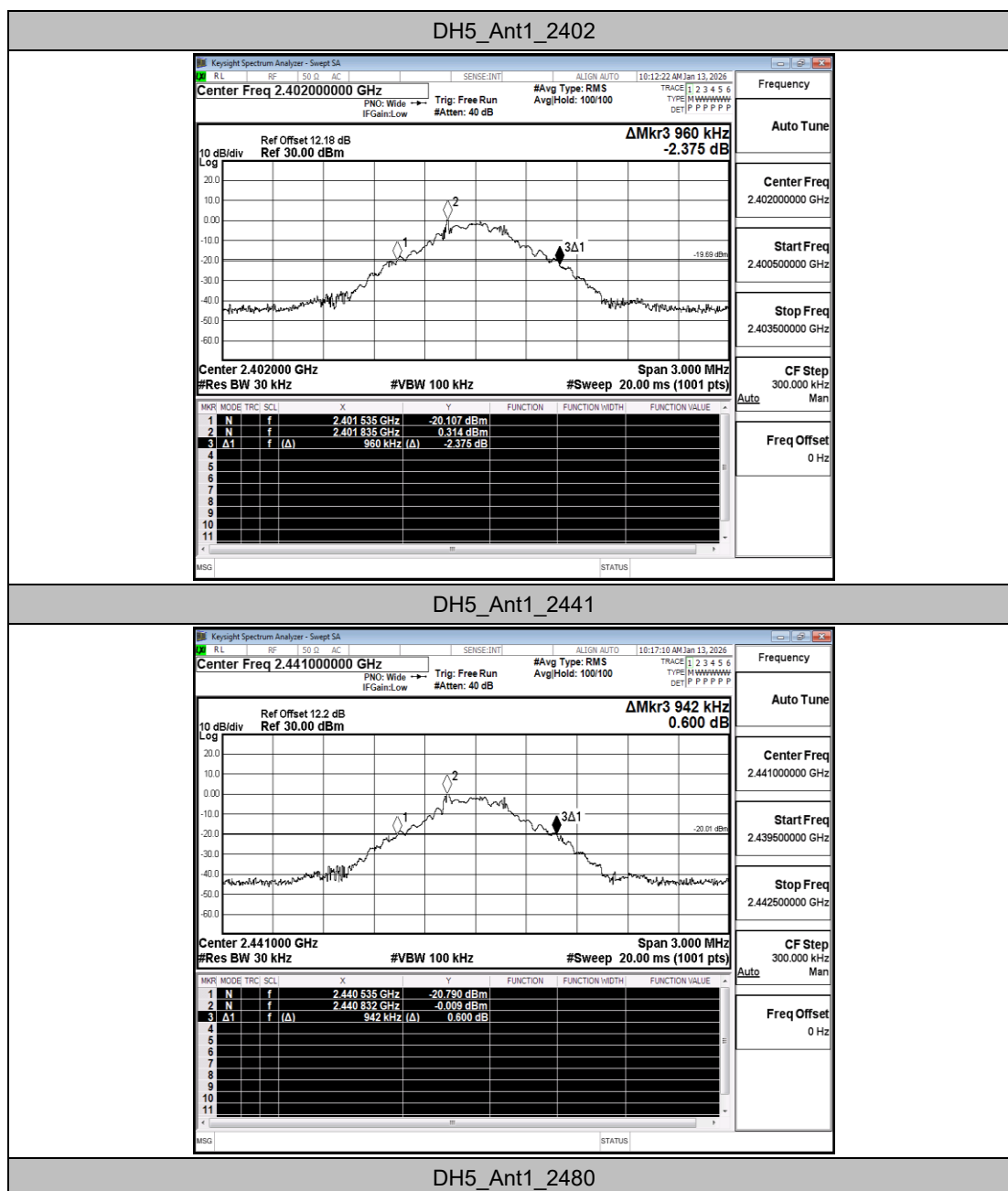
A.1 20dB Emission Bandwidth

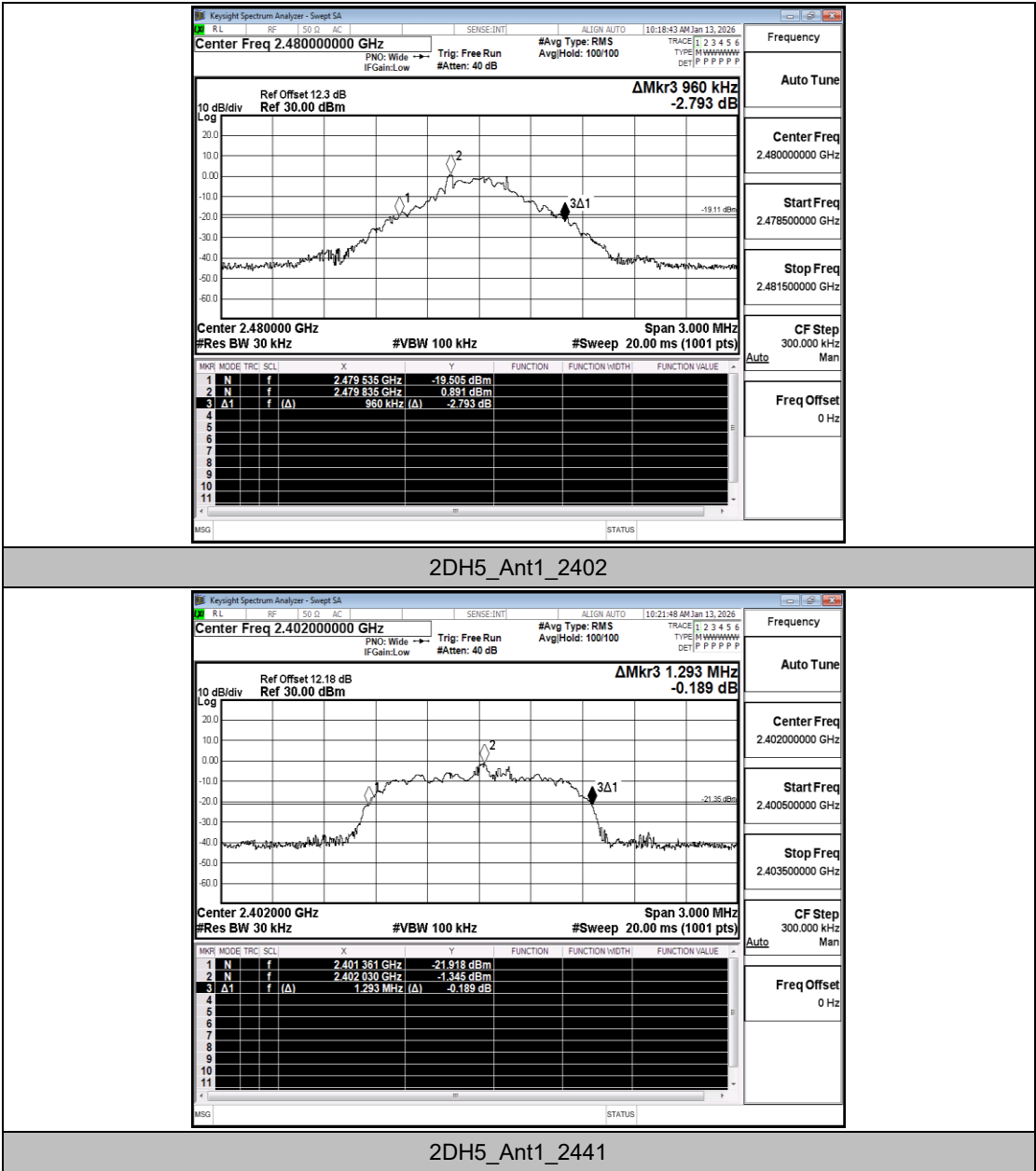
Test Result

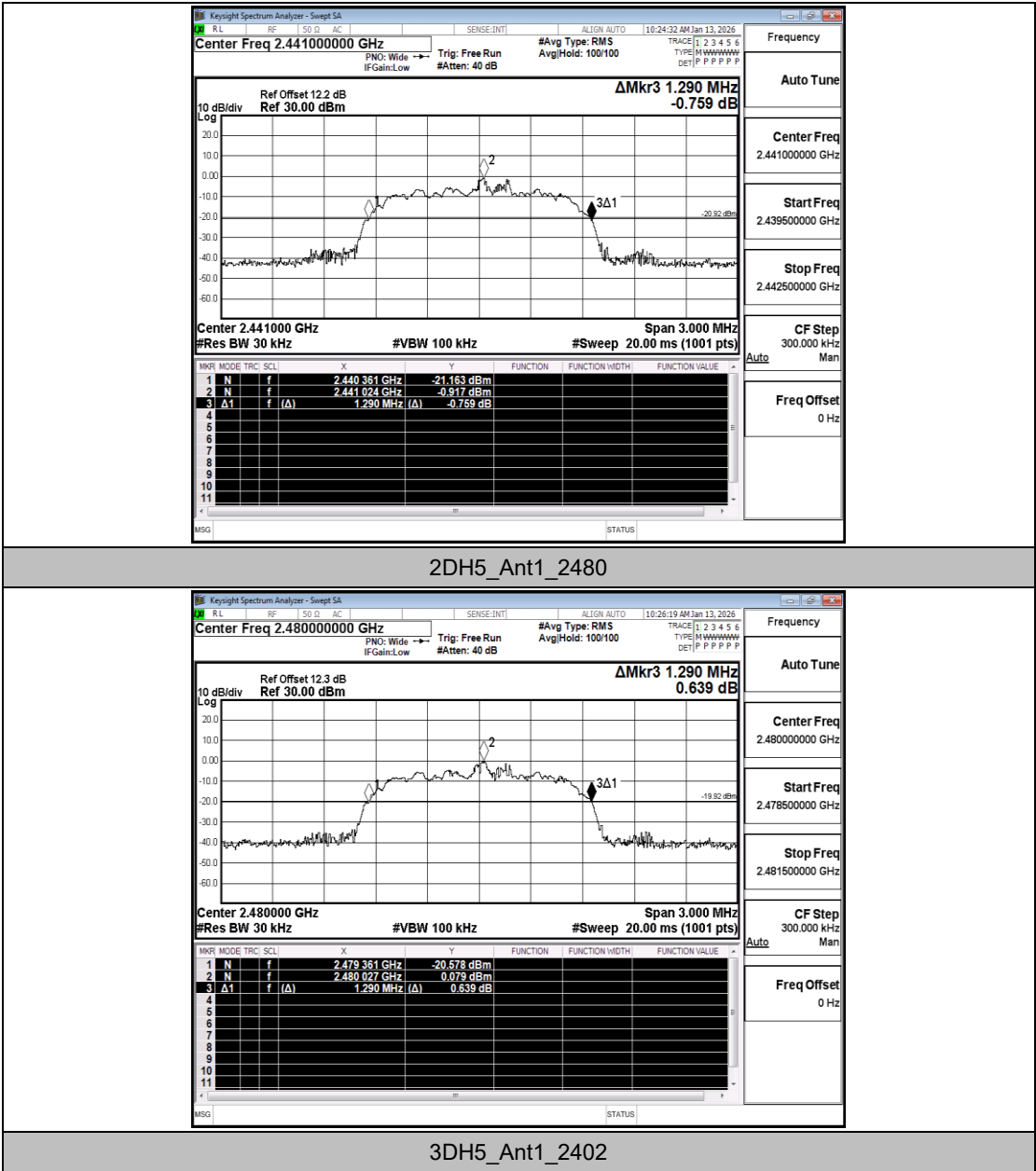
TestMode	Antenna	Freq (MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.960	2401.535	2402.495	---	---
		2441	0.942	2440.535	2441.477	---	---
		2480	0.960	2479.535	2480.495	---	---
2DH5	Ant1	2402	1.293	2401.361	2402.654	---	---
		2441	1.290	2440.361	2441.651	---	---
		2480	1.290	2479.361	2480.651	---	---
3DH5	Ant1	2402	1.302	2401.349	2402.651	---	---
		2441	1.293	2440.355	2441.648	---	---
		2480	1.296	2479.352	2480.648	---	---

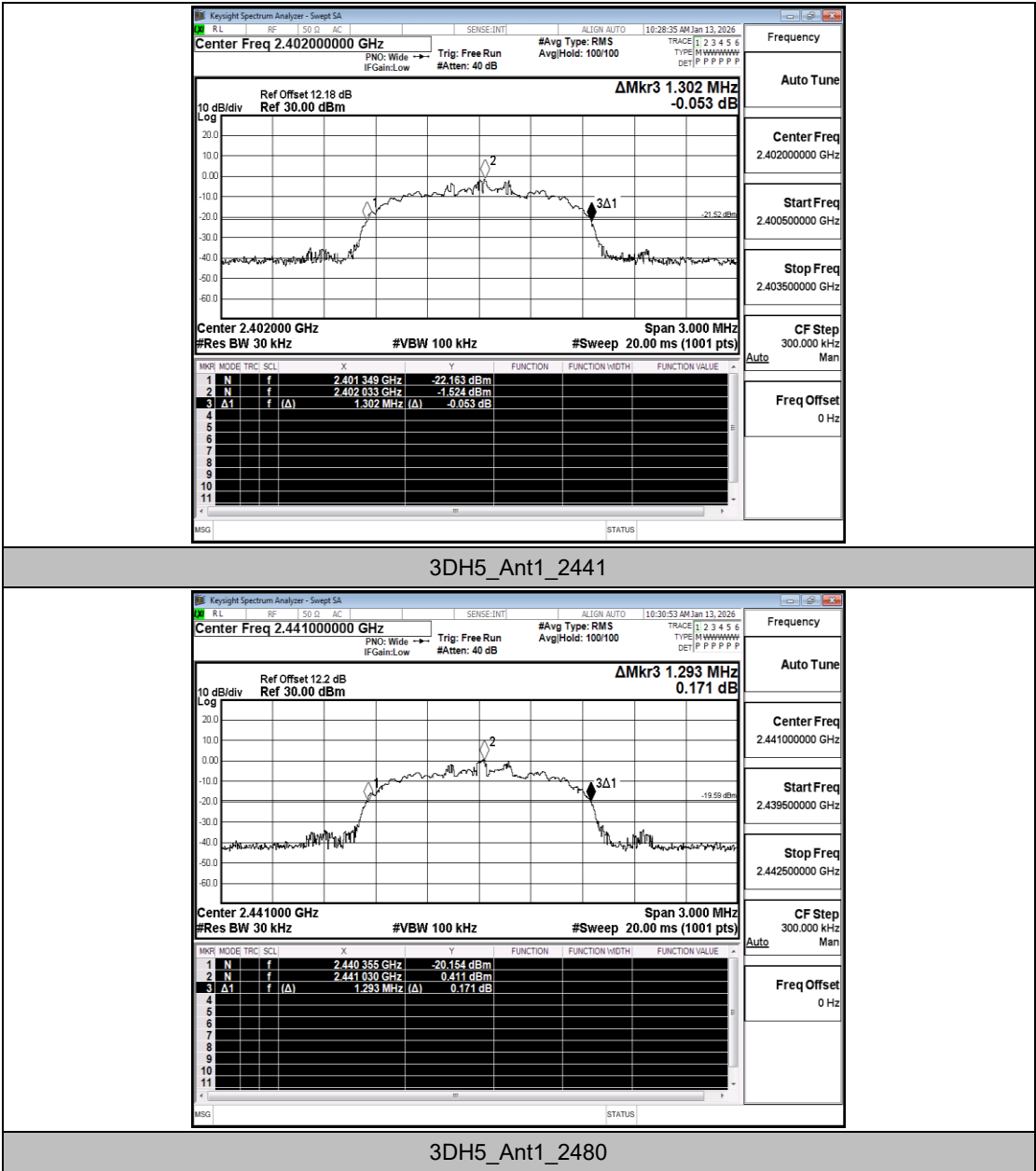
Note: offset=System attenuation +cabal loss

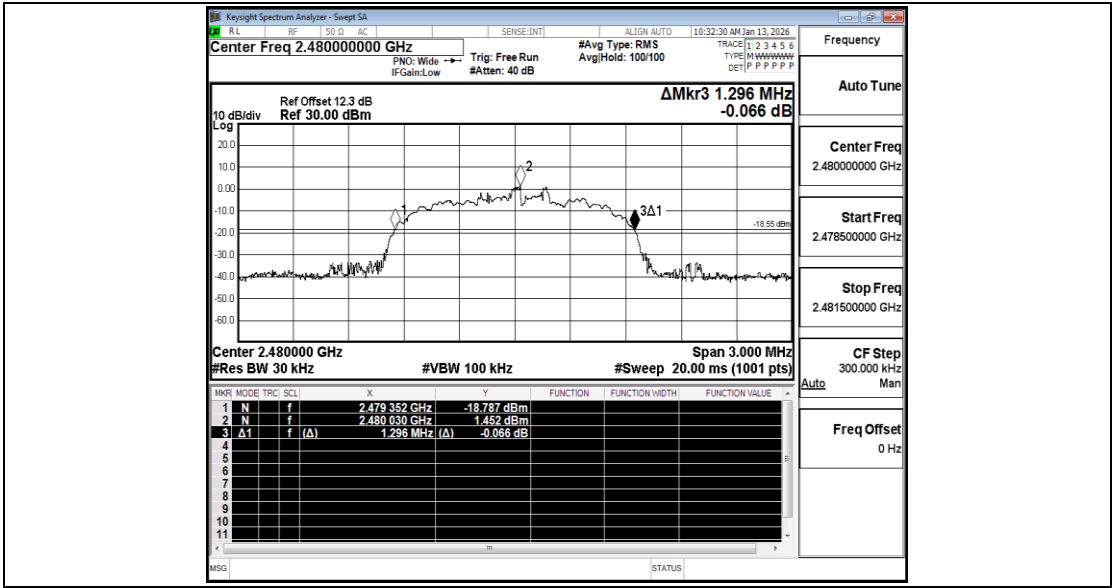
Test Graphs









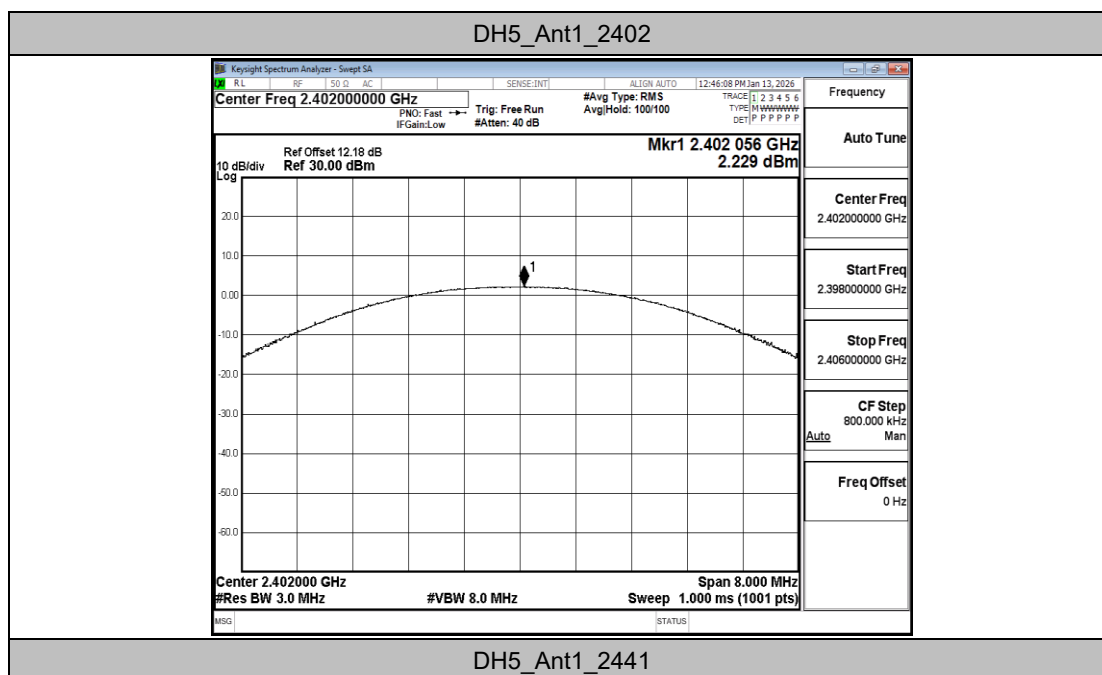


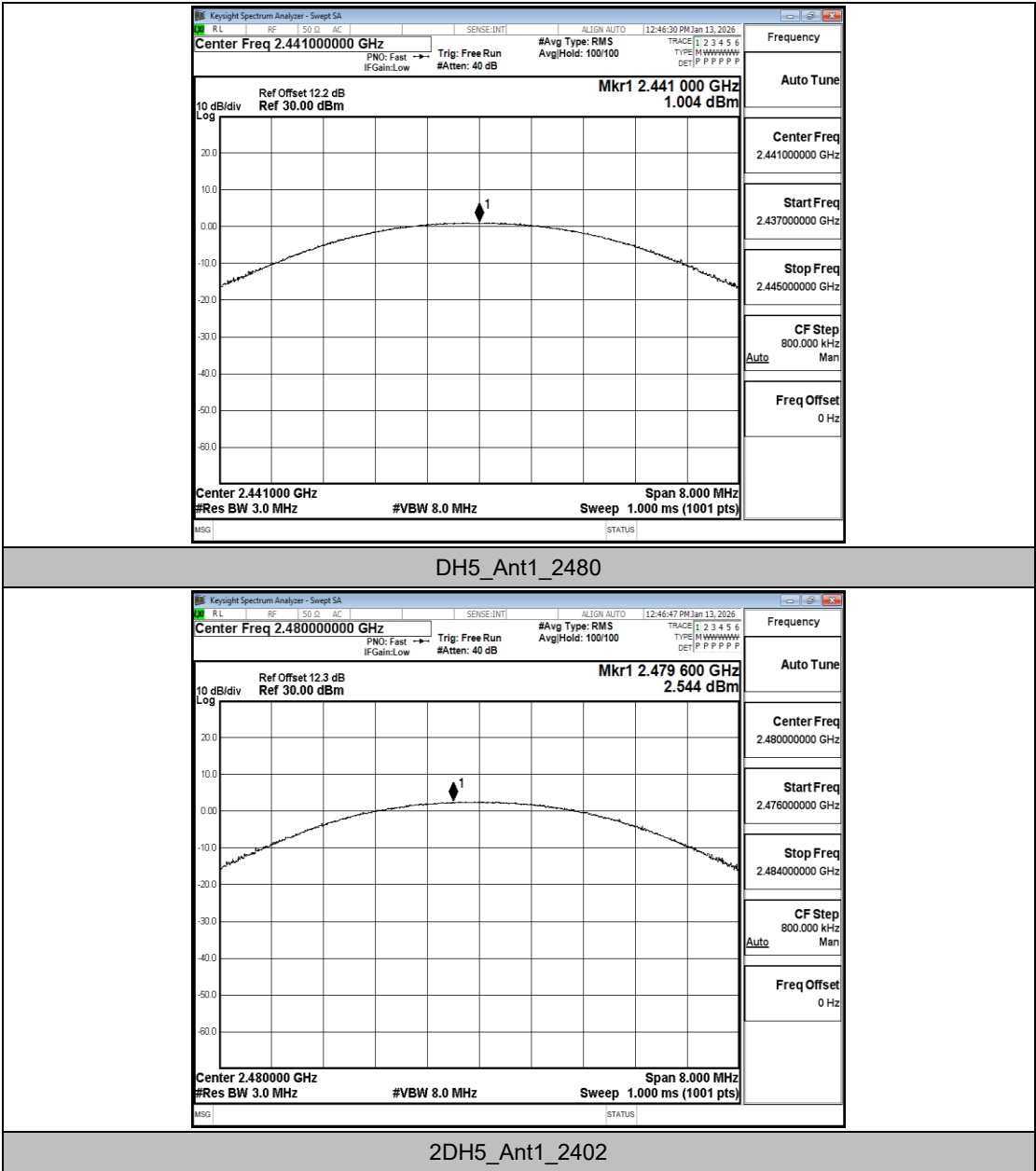
A.2 Maximum Peak conducted output power

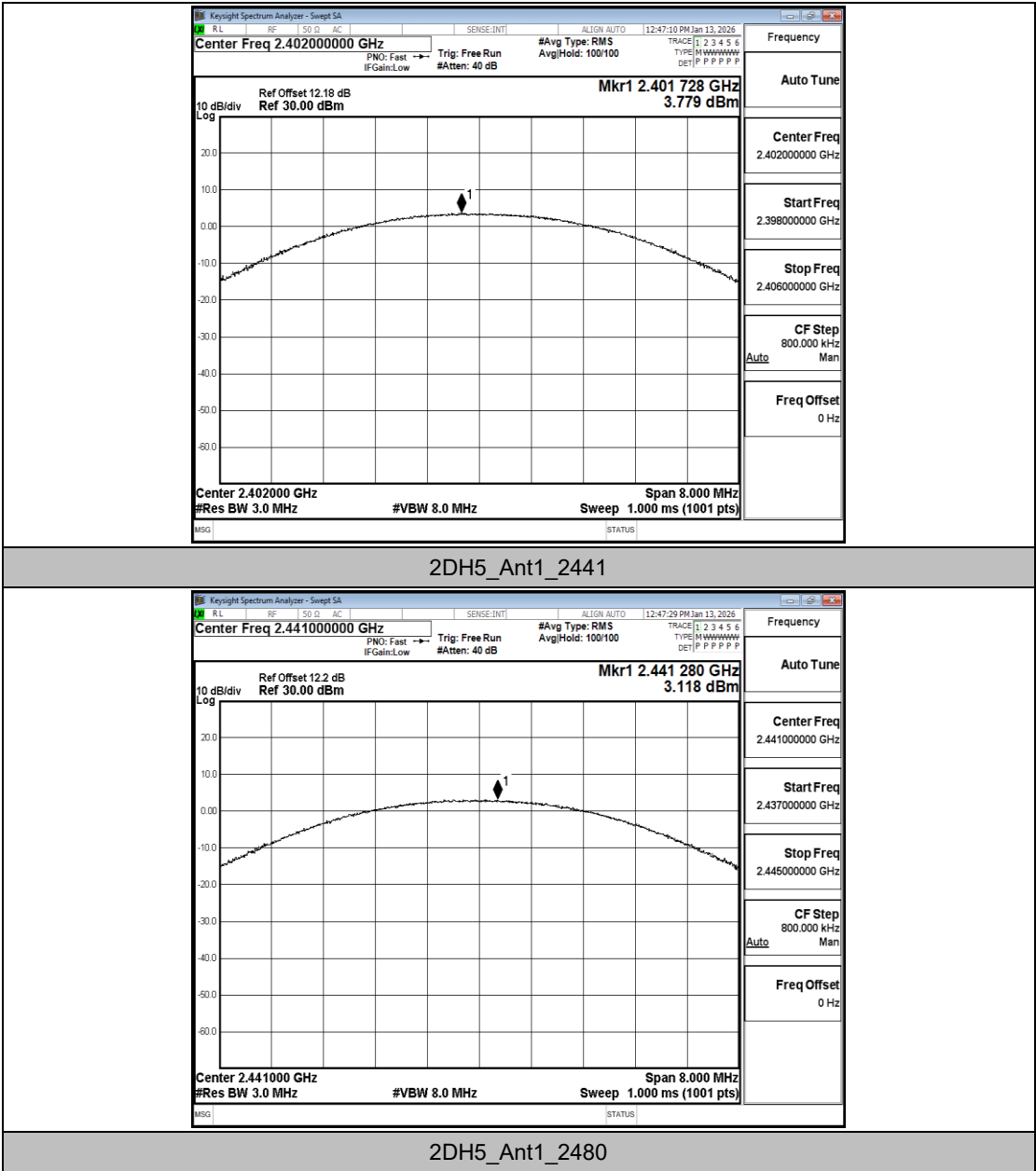
Test Result Peak

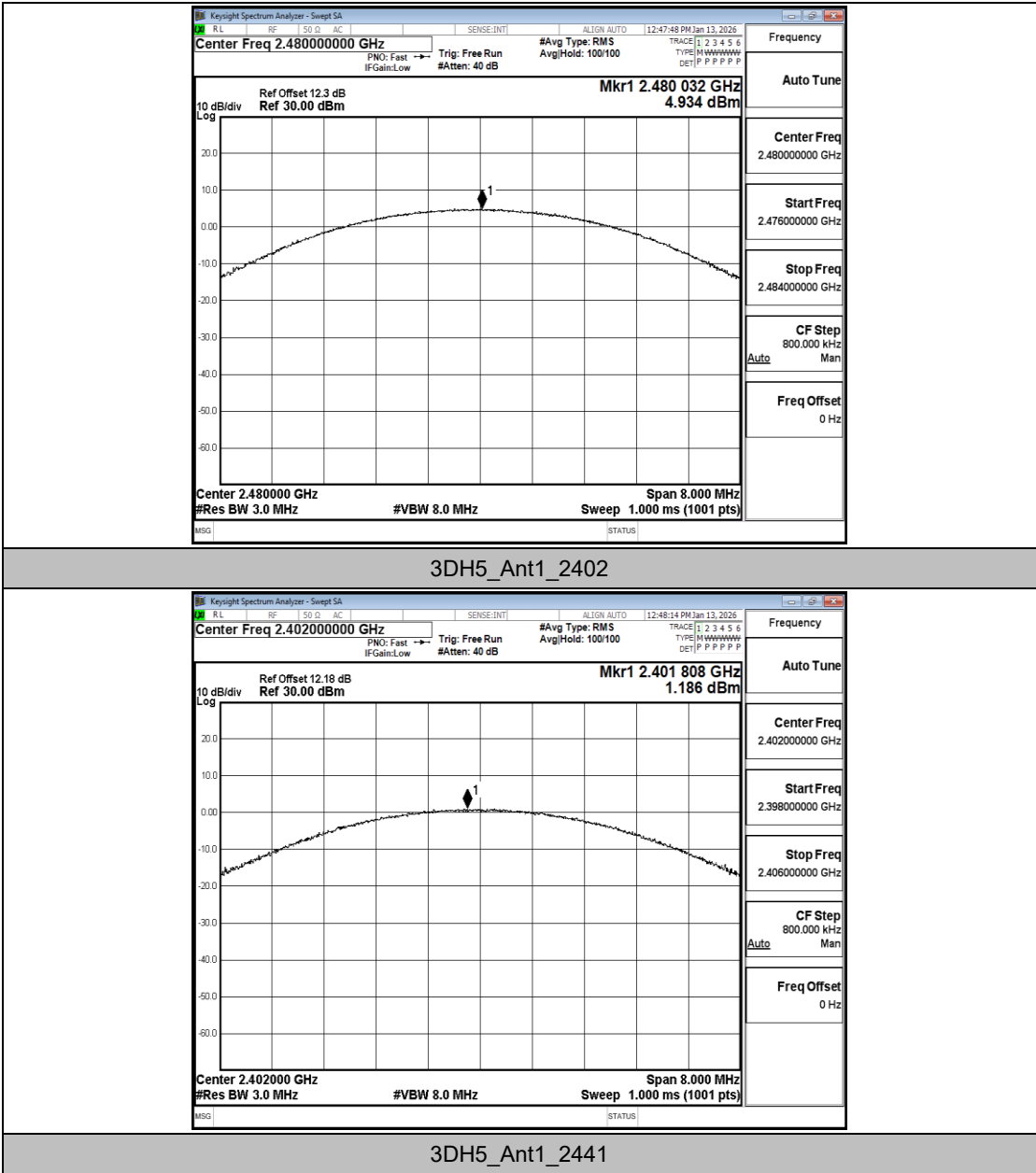
Test Mode	Antenna	Freq (MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.23	≤30	PASS
		2441	1.00	≤30	PASS
		2480	2.54	≤30	PASS
2DH5	Ant1	2402	3.78	≤20.97	PASS
		2441	3.12	≤20.97	PASS
		2480	4.93	≤20.97	PASS
3DH5	Ant1	2402	1.19	≤20.97	PASS
		2441	3.41	≤20.97	PASS
		2480	4.99	≤20.97	PASS

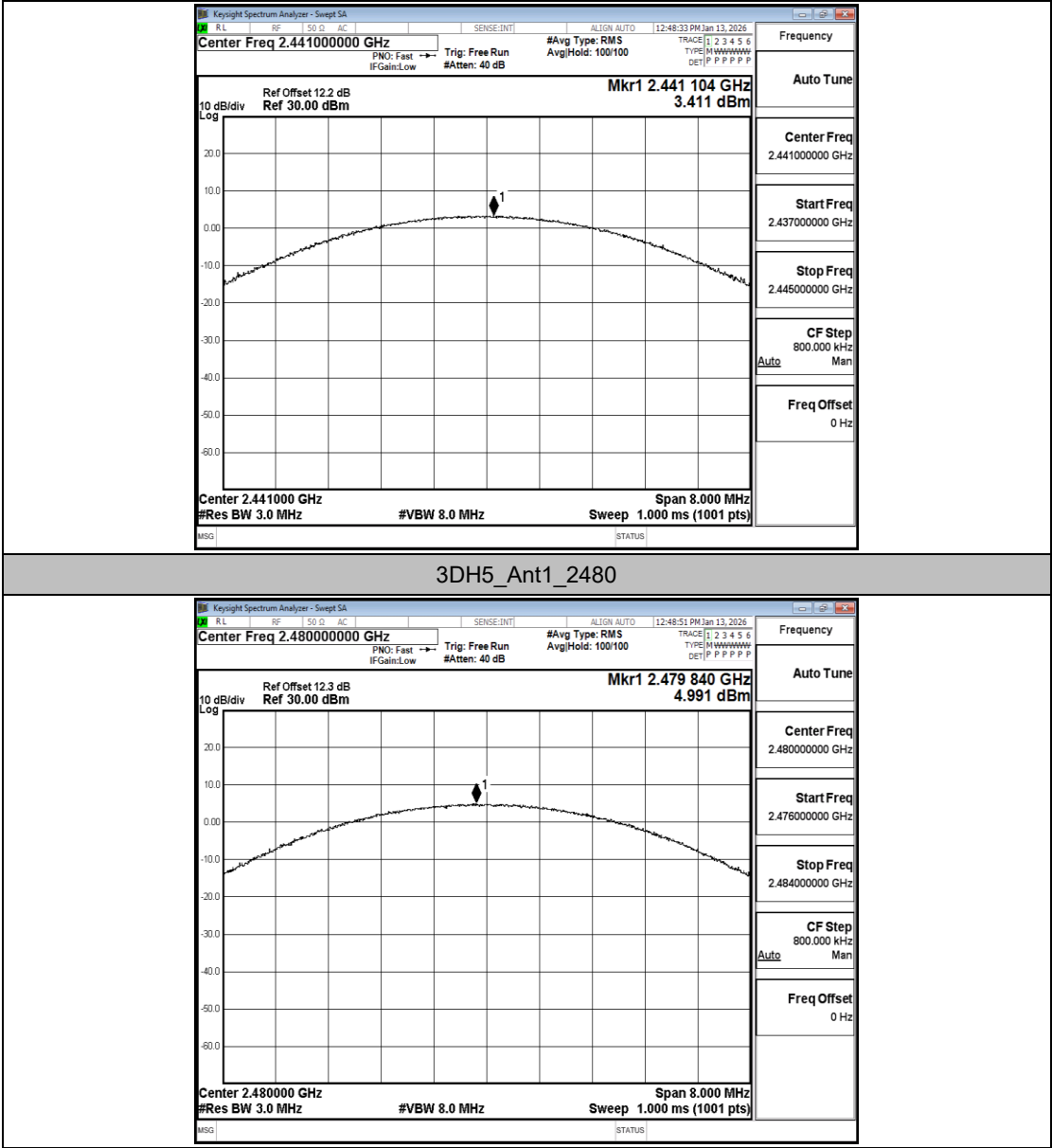
Test Graphs











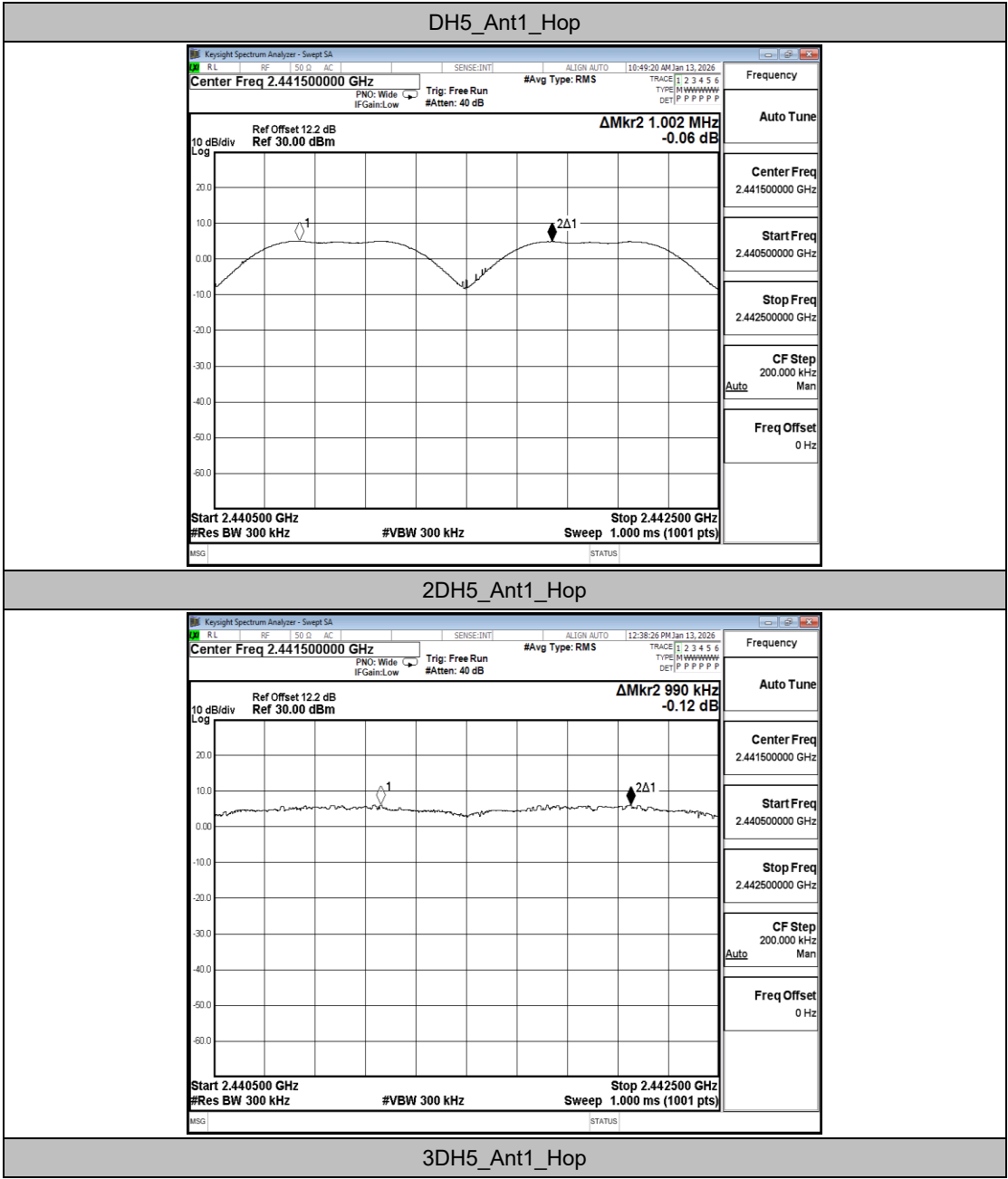
A.3 Carrier frequency separation

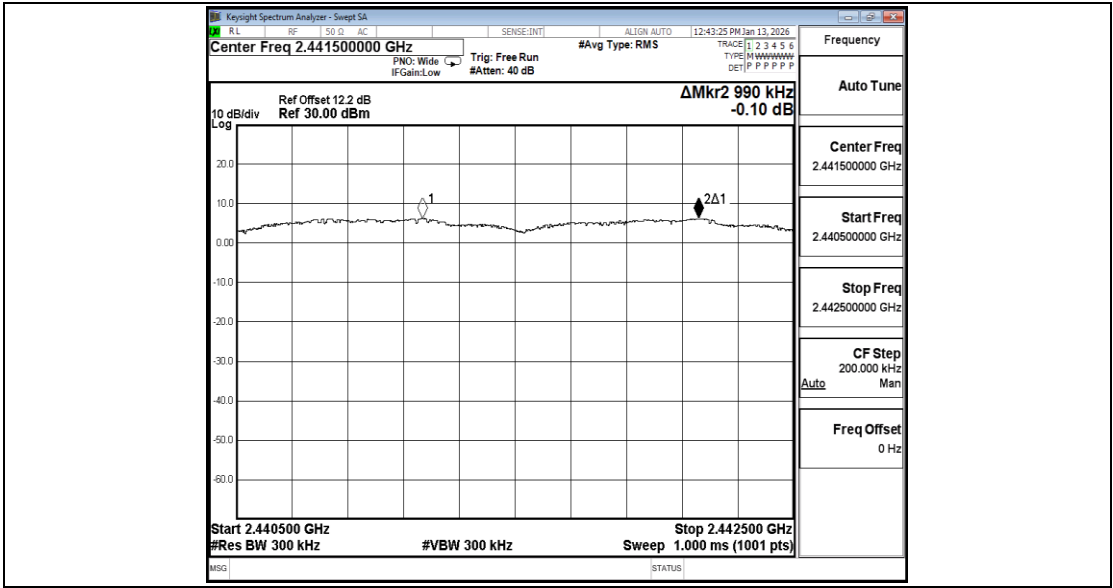
Test Result

TestMode	Antenna	Freq (MHz)	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	1.002	≥0.640	PASS
2DH5	Ant1	Hop	0.99	≥0.862	PASS
3DH5	Ant1	Hop	0.99	≥0.868	PASS

Note: offset=System attenuation +caval loss

Test Graphs





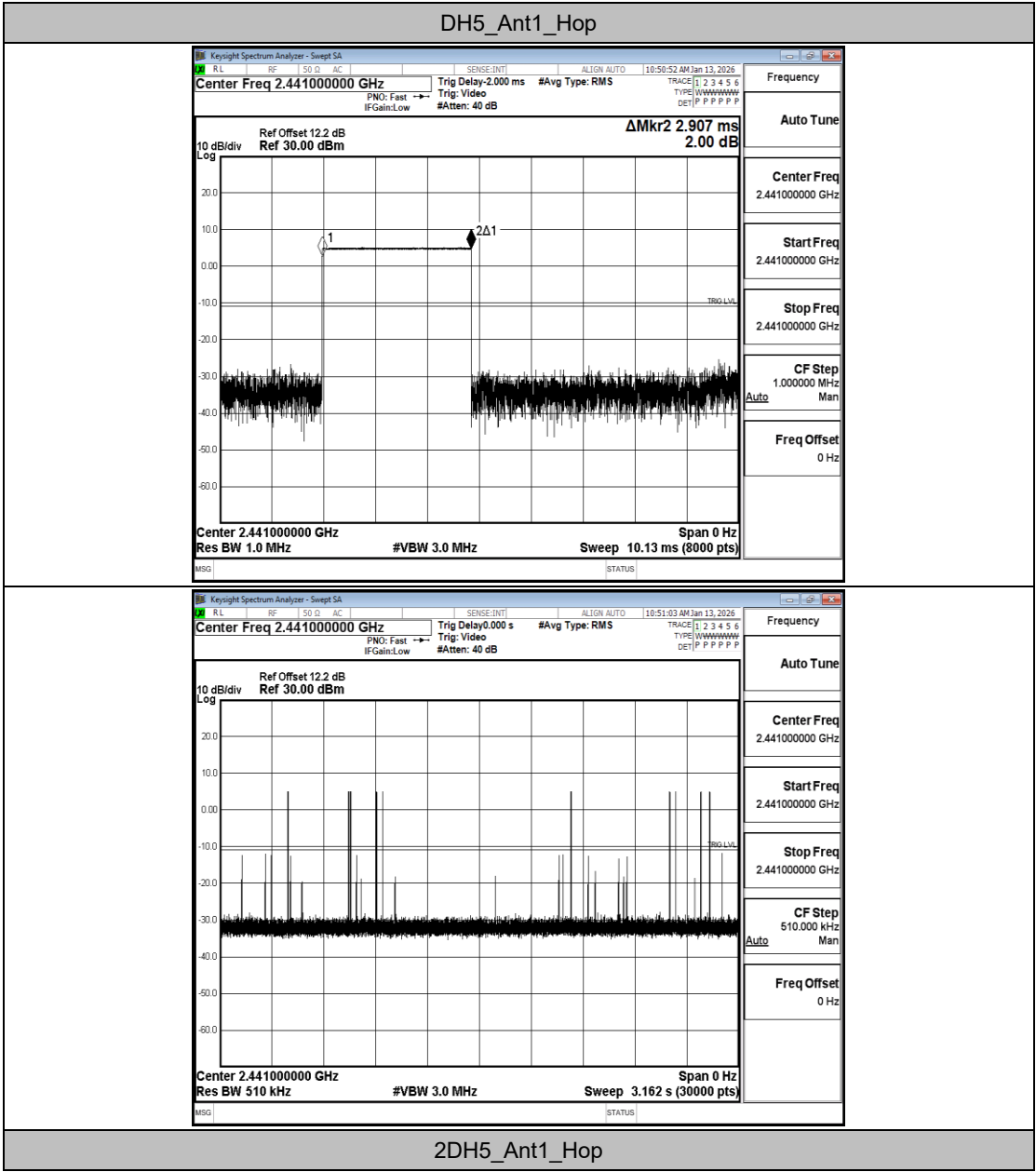
A.4 Time of occupancy

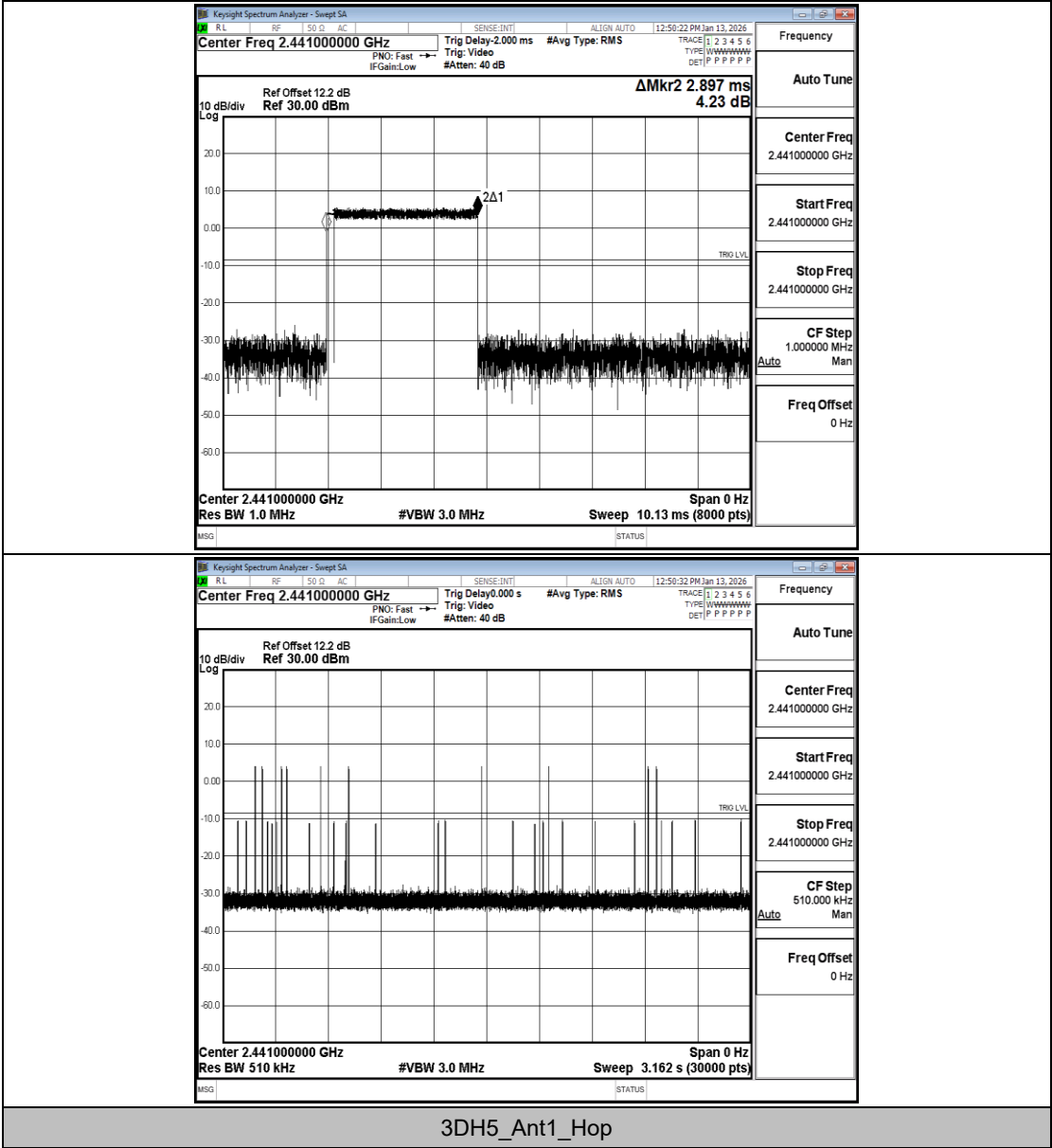
Test Result

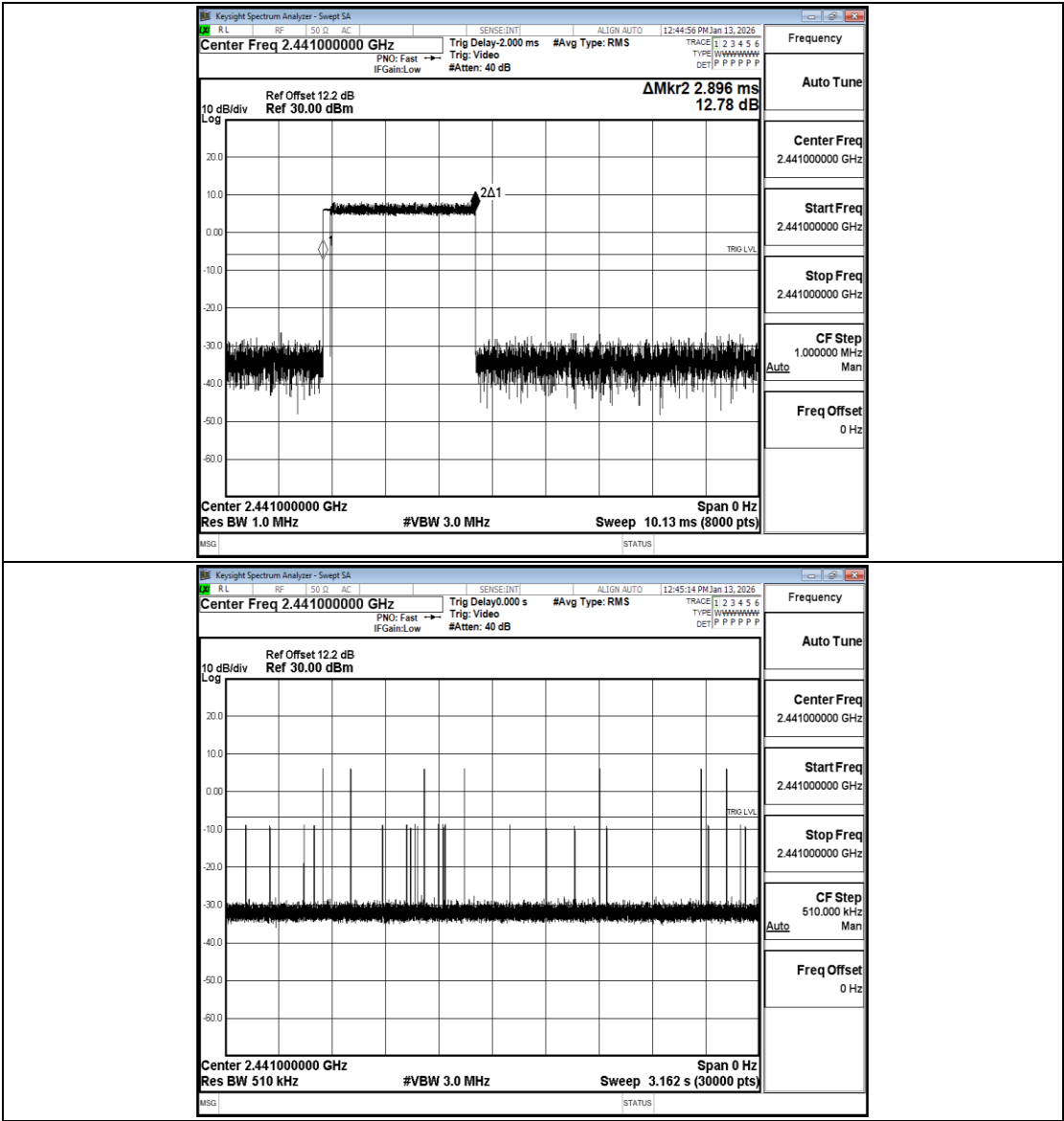
TestMode	Antenna	Freq (MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.907	110	0.32	≤0.4	PASS
2DH5	Ant1	Hop	2.897	110	0.319	≤0.4	PASS
3DH5	Ant1	Hop	2.896	80	0.232	≤0.4	PASS

Note: offset=System attenuation +cabal loss

Test Graphs







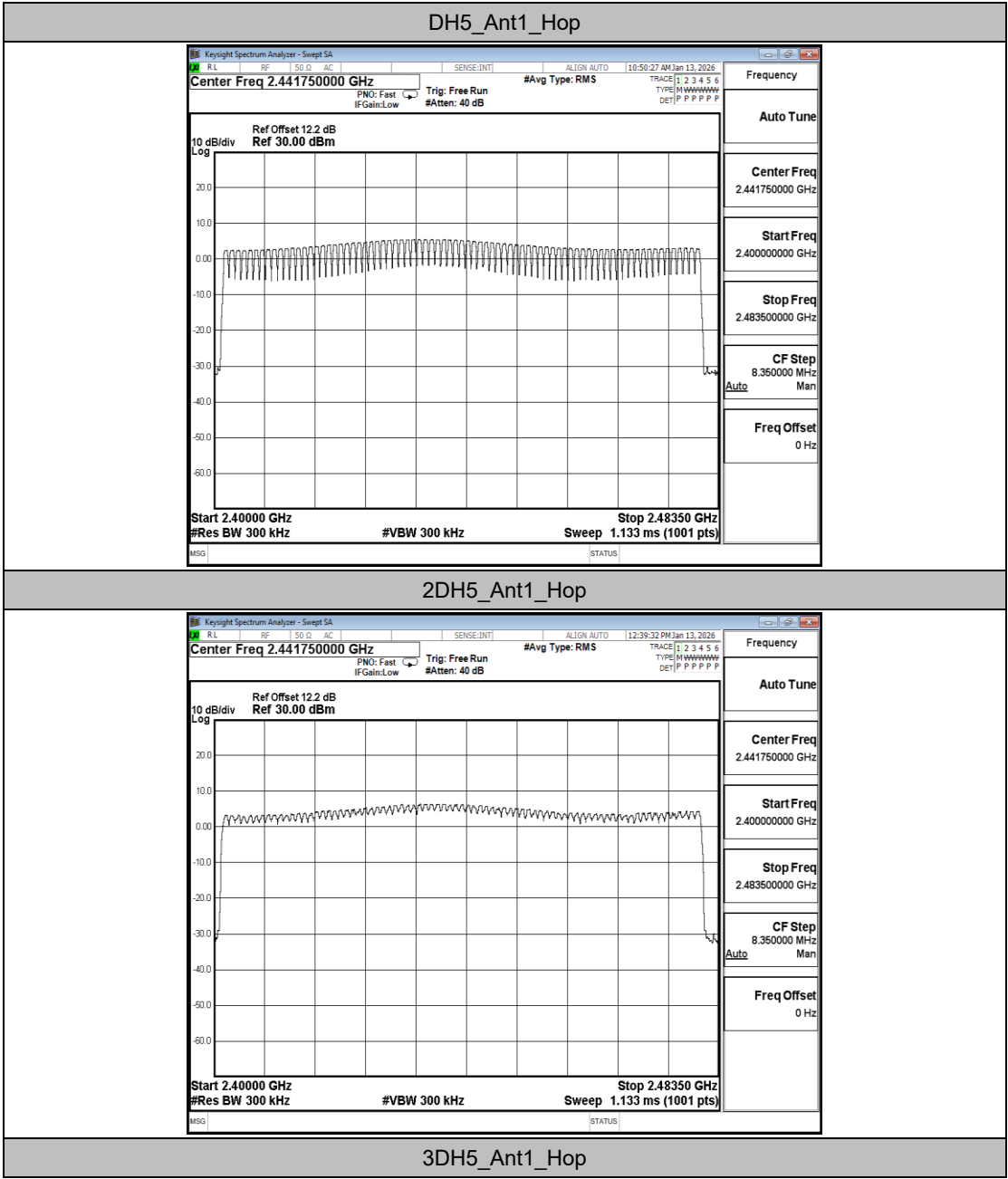
A.5 Number of hopping channels

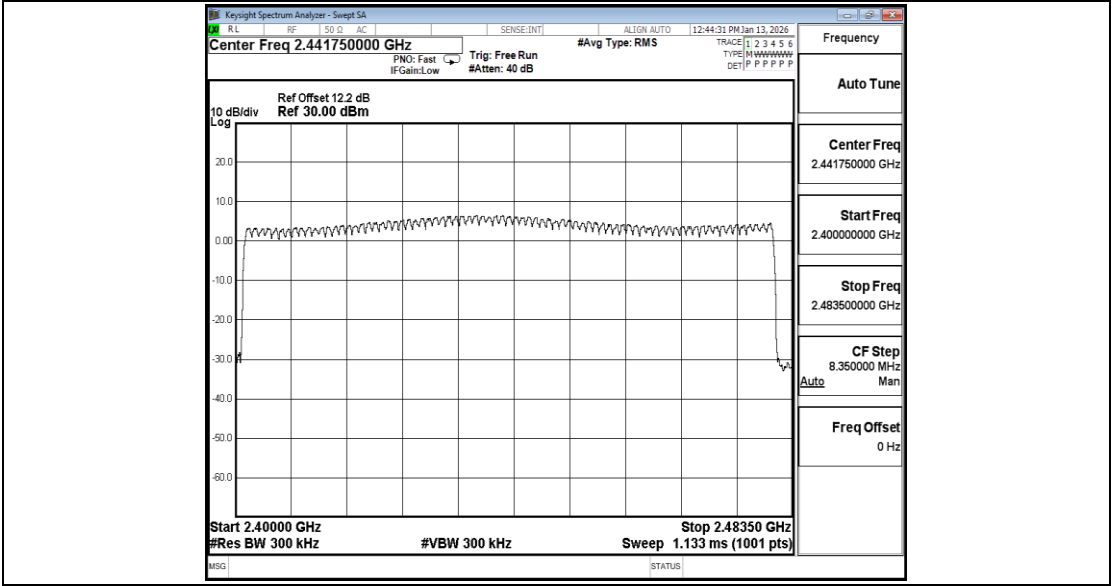
Test Result

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

Note: offset=System attenuation +cabal loss

Test Graphs





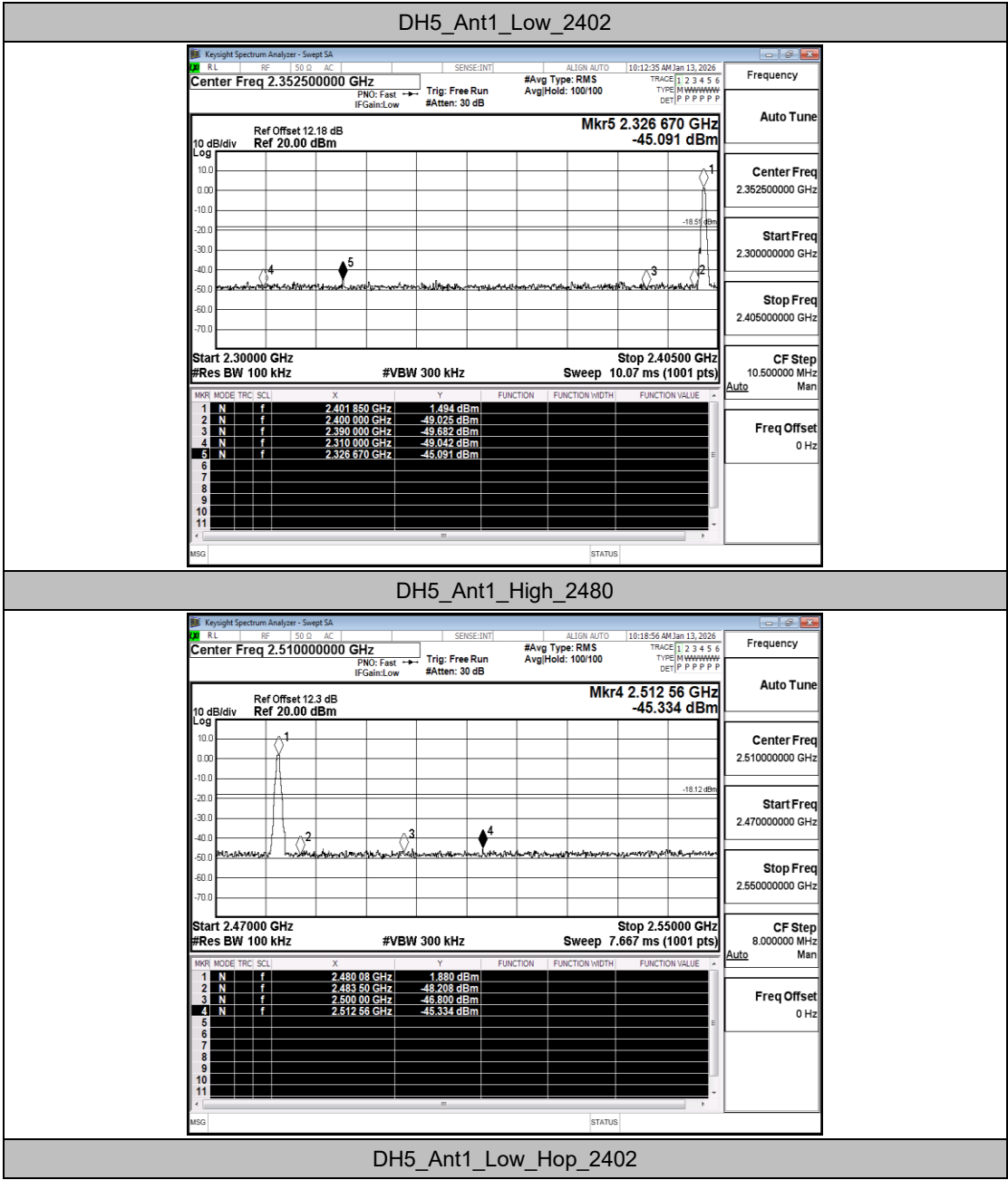
A.6 Band edge measurements

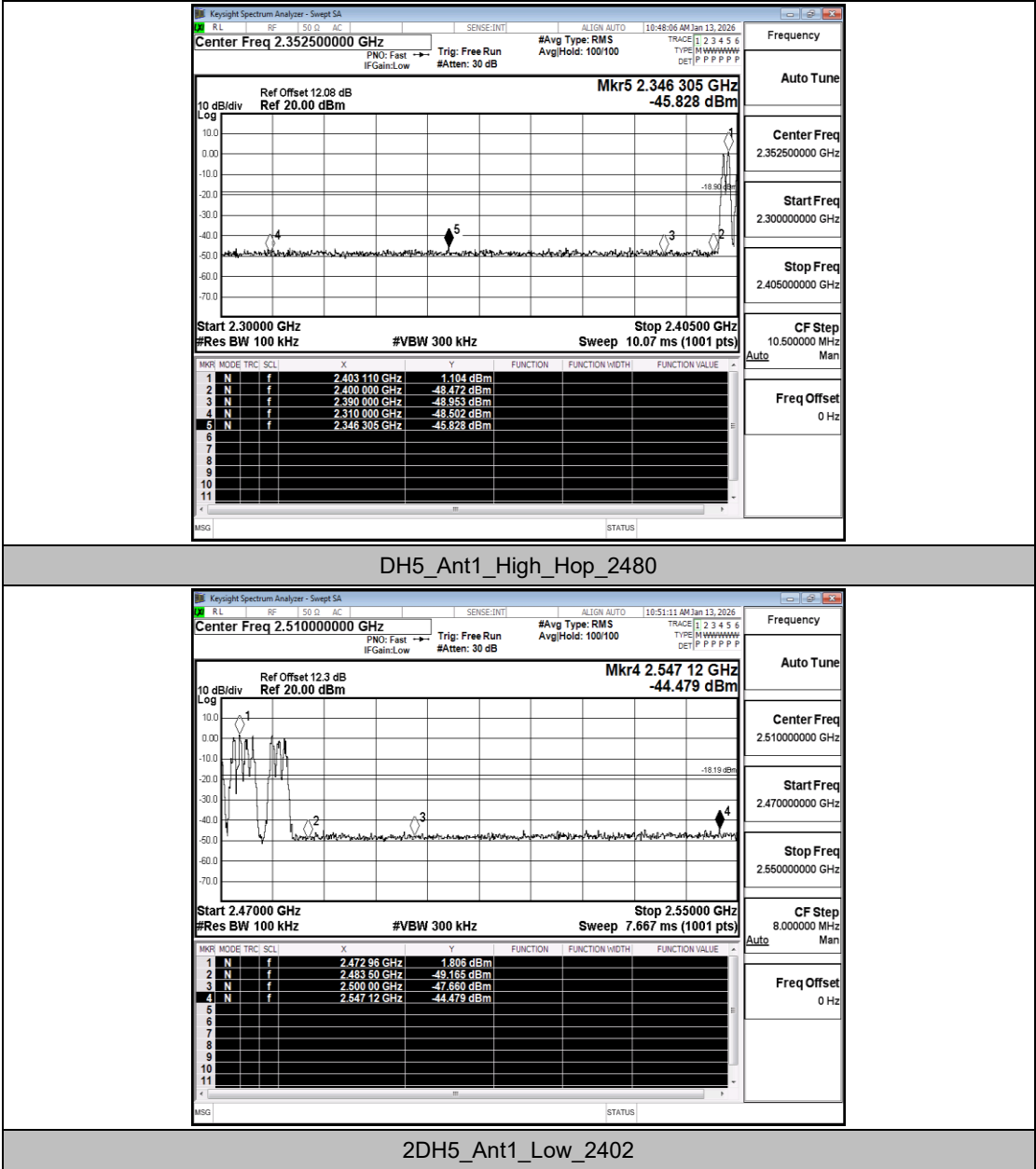
Test Result

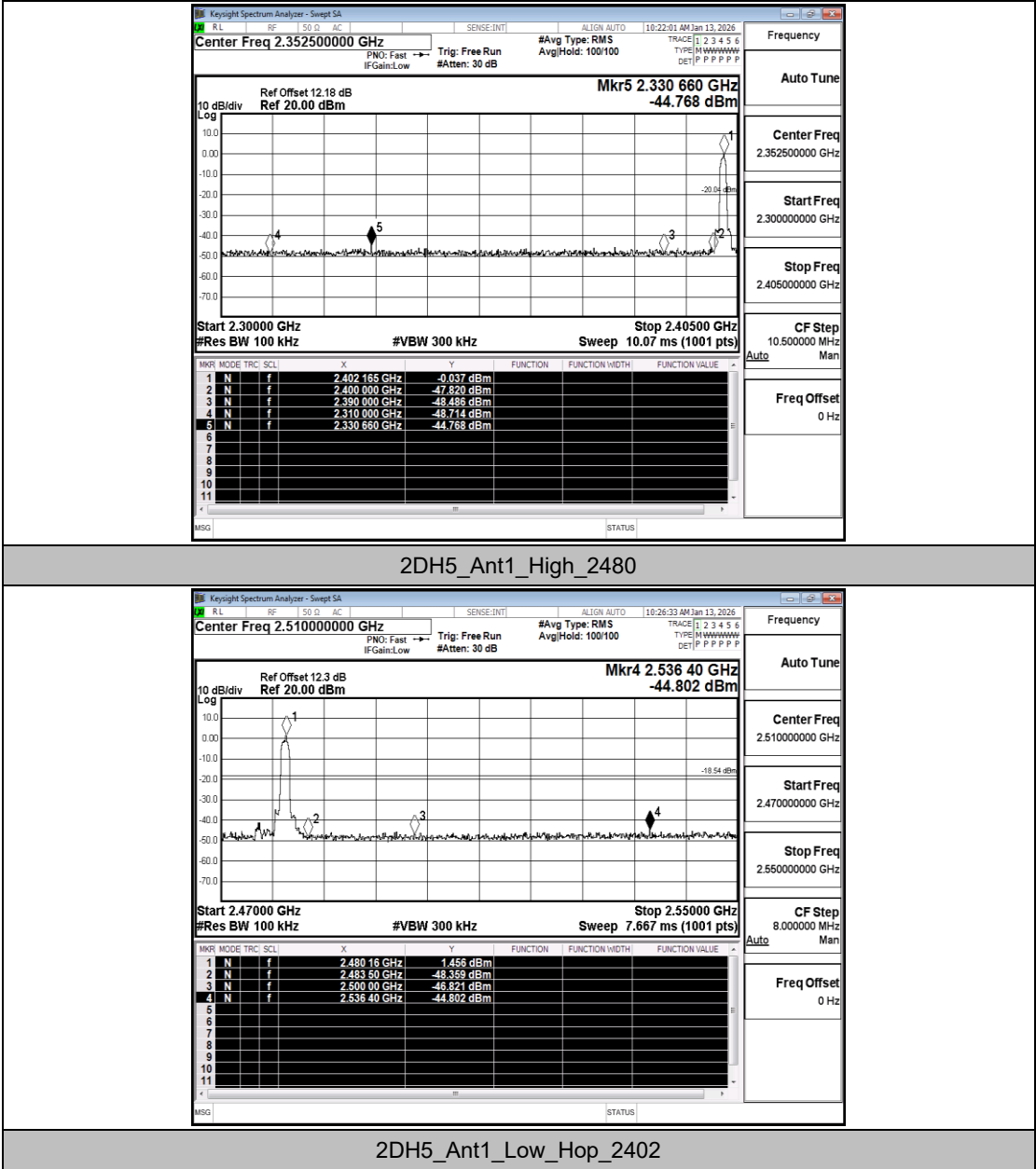
TestMode	Antenna	ChName	Freq (MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.49	-45.09	≤-18.51	PASS
		High	2480	1.88	-45.33	≤-18.12	PASS
		Low	Hop_2402	1.10	-45.83	≤-18.9	PASS
		High	Hop_2480	1.81	-44.48	≤-18.19	PASS
2DH5	Ant1	Low	2402	-0.04	-44.77	≤-20.04	PASS
		High	2480	1.46	-44.8	≤-18.54	PASS
		Low	Hop_2402	-3.09	-45.47	≤-23.09	PASS
		High	Hop_2480	0.81	-45.08	≤-19.19	PASS
3DH5	Ant1	Low	2402	1.00	-44.96	≤-19	PASS
		High	2480	1.07	-45.16	≤-18.93	PASS
		Low	Hop_2402	-1.92	-45.79	≤-21.92	PASS
		High	Hop_2480	0.93	-44.86	≤-19.07	PASS

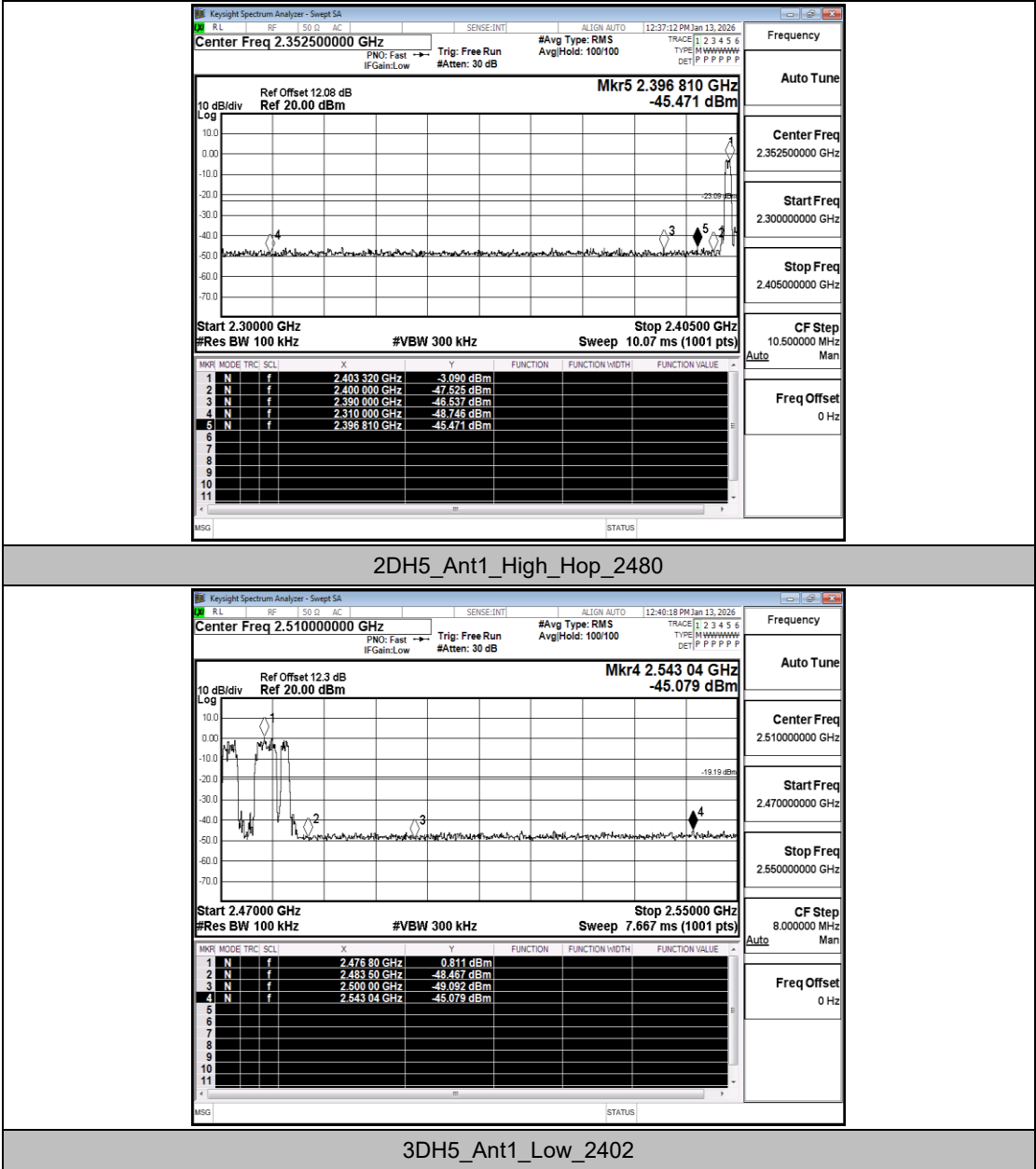
Note: offset=System attenuation +cabel loss

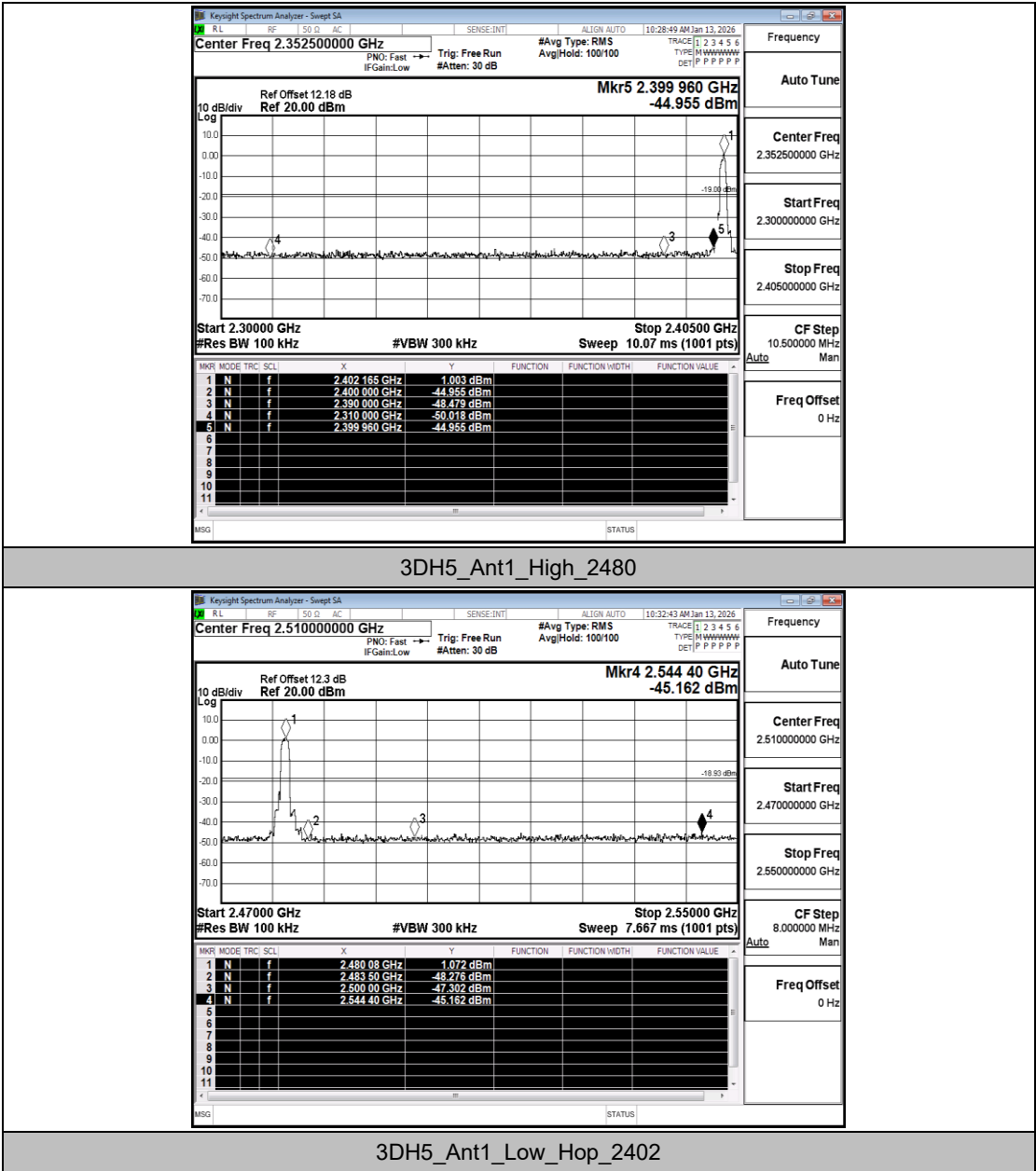
Test Graphs

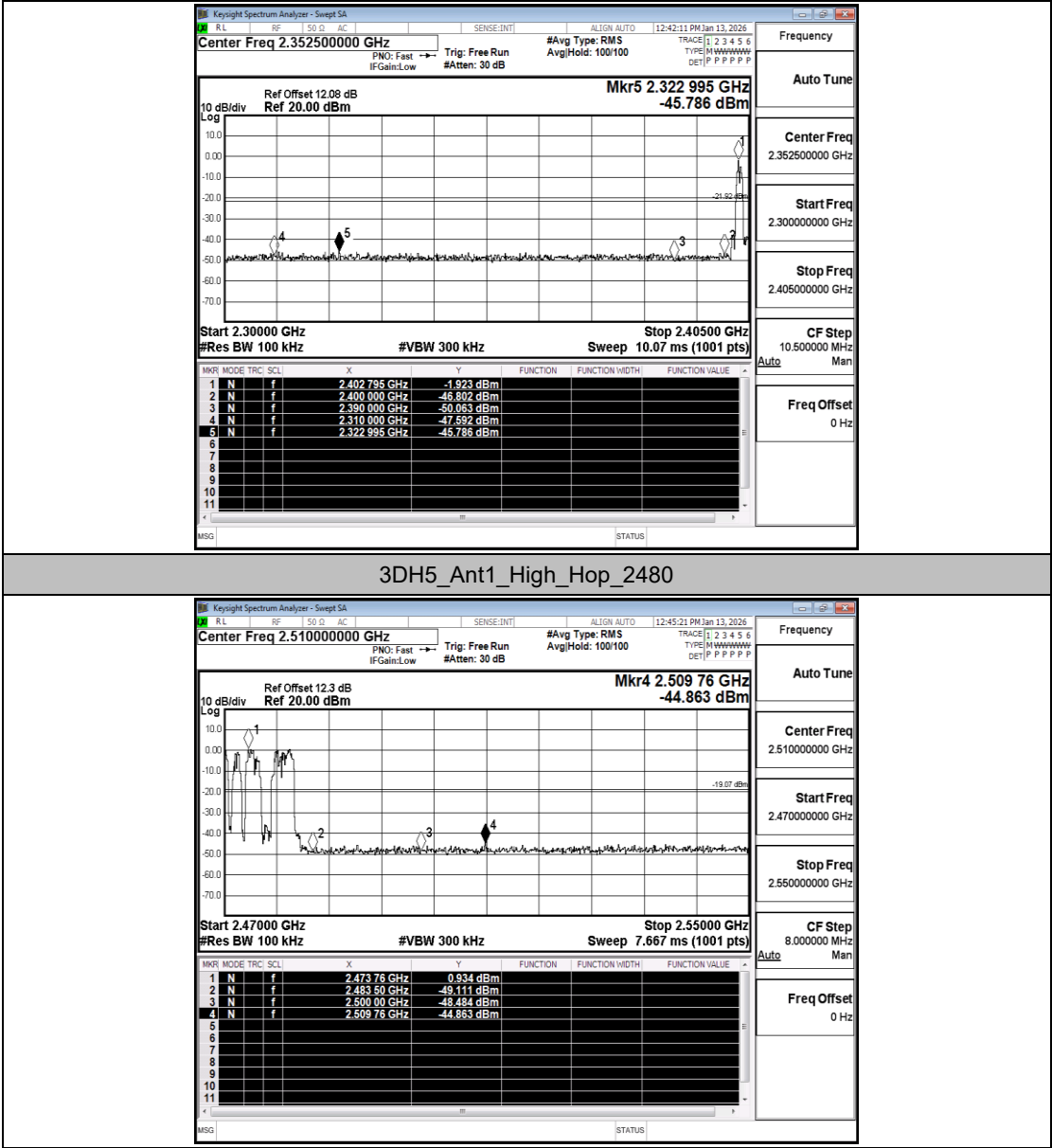












A.7 Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq (MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.55	1.55	---	PASS
			30~1000	1.55	-44.26	≤-18.45	PASS
			1000~26500	1.55	-52.45	≤-18.45	PASS
		2441	Reference	1.09	1.09	---	PASS
			30~1000	1.09	-42.06	≤-18.91	PASS
			1000~26500	1.09	-53.49	≤-18.91	PASS
		2480	Reference	2.11	2.11	---	PASS
			30~1000	2.11	-47.82	≤-17.89	PASS
			1000~26500	2.11	-50.08	≤-17.89	PASS
2DH5	Ant1	2402	Reference	0.84	0.84	---	PASS
			30~1000	0.84	-47.62	≤-19.16	PASS
			1000~26500	0.84	-55.1	≤-19.16	PASS
		2441	Reference	1.02	1.02	---	PASS
			30~1000	1.02	-45.99	≤-18.98	PASS
			1000~26500	1.02	-53.51	≤-18.98	PASS
		2480	Reference	2.02	2.02	---	PASS
			30~1000	2.02	-49.67	≤-17.98	PASS
			1000~26500	2.02	-55.11	≤-17.98	PASS
3DH5	Ant1	2402	Reference	0.99	0.99	---	PASS
			30~1000	0.99	-50.42	≤-19.01	PASS
			1000~26500	0.99	-54.64	≤-19.01	PASS
		2441	Reference	2.64	2.64	---	PASS
			30~1000	2.64	-46.89	≤-17.36	PASS
			1000~26500	2.64	-41.95	≤-17.36	PASS
		2480	Reference	3.68	3.68	---	PASS
			30~1000	3.68	-42.96	≤-16.32	PASS
			1000~26500	3.68	-54.2	≤-16.32	PASS

Note: Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the CORREC' of the Spectrum Analyzer during the test.

Test Graphs

