

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: True Wireless Earphones

Test Model: M91

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhao Xing Hai
Supervised by:	Fengliu Tang

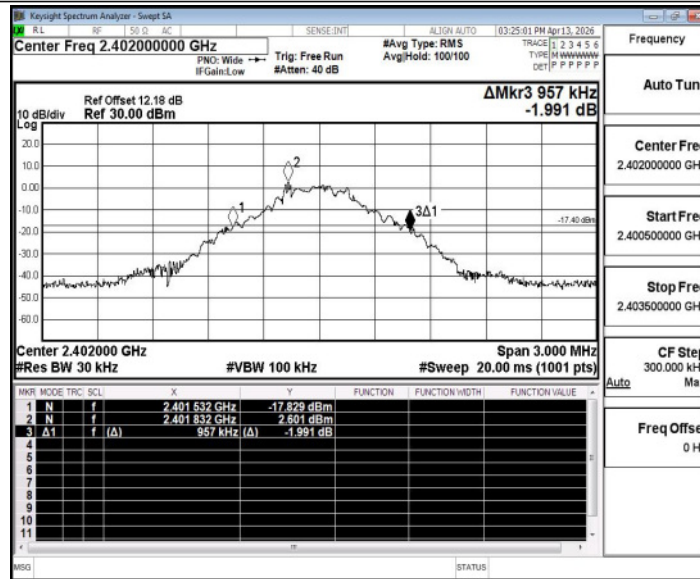
A.1 20dB Emission Bandwidth

Test Result

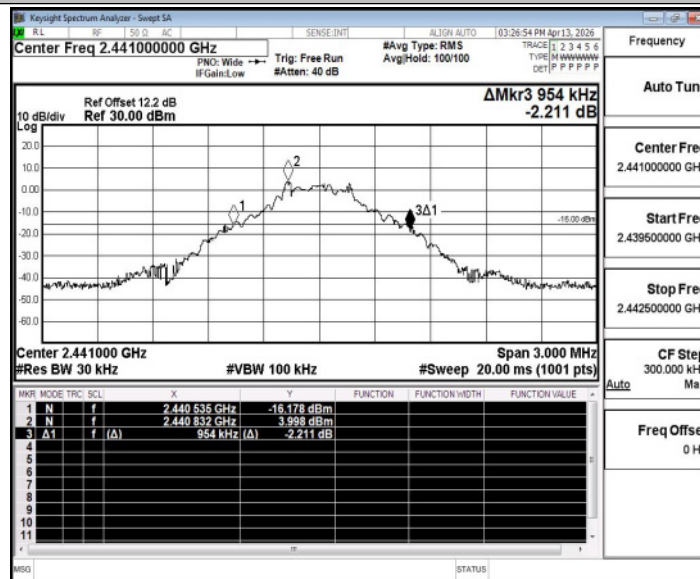
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.957	2401.532	2402.489	---	---
		2441	0.954	2440.535	2441.489	---	---
		2480	0.948	2479.535	2480.483	---	---
2DH5	Ant1	2402	1.293	2401.358	2402.651	---	---
		2441	1.293	2440.355	2441.648	---	---
		2480	1.293	2479.355	2480.648	---	---
3DH5	Ant1	2402	1.299	2401.346	2402.645	---	---
		2441	1.296	2440.346	2441.642	---	---
		2480	1.302	2479.343	2480.645	---	---

Test Graphs

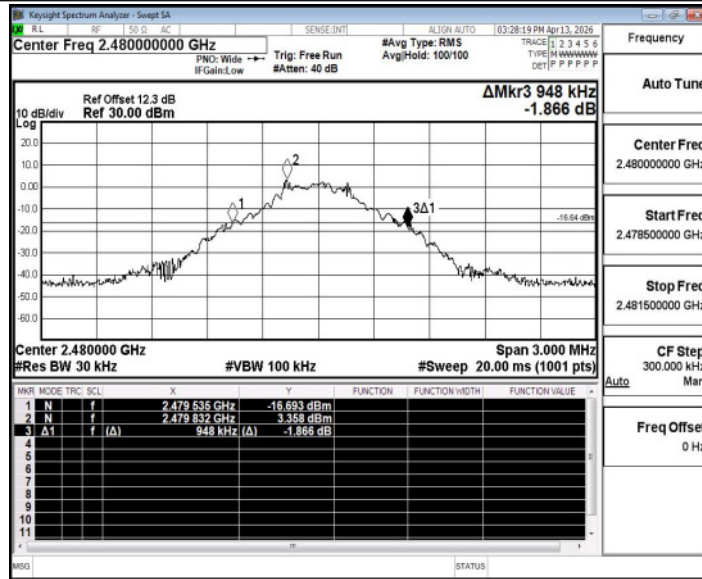
DH5_Ant1_2402



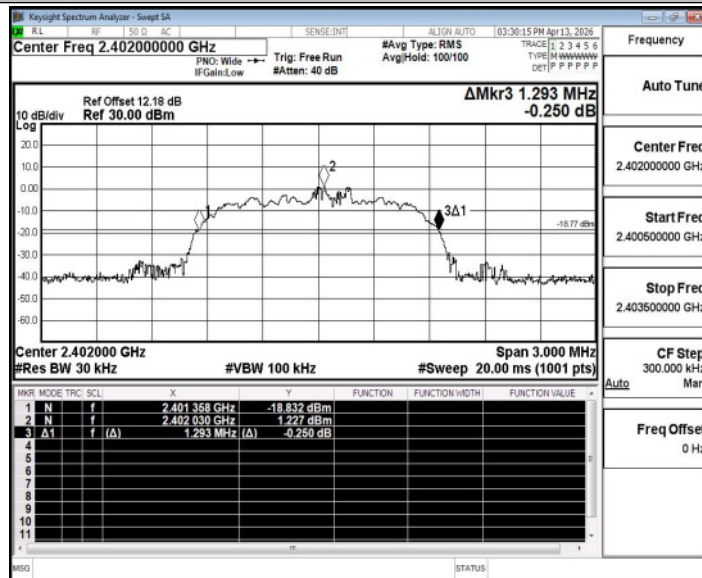
DH5_Ant1_2441



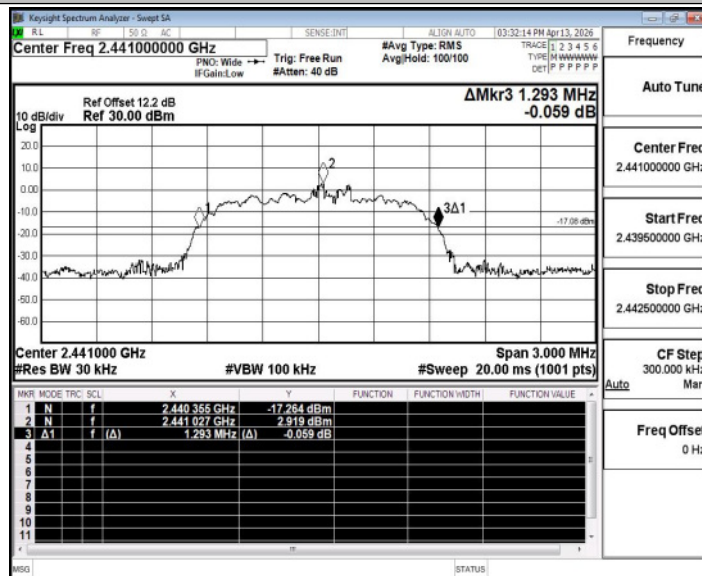
DH5_Ant1_2480



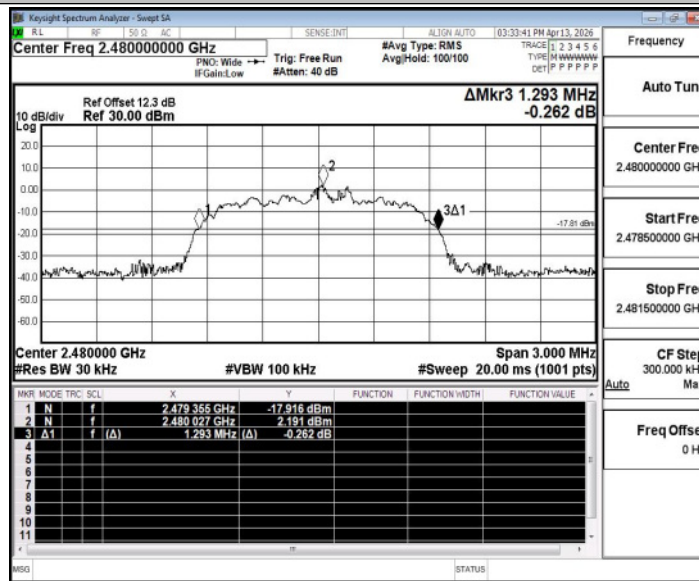
2DH5_Ant1_2402



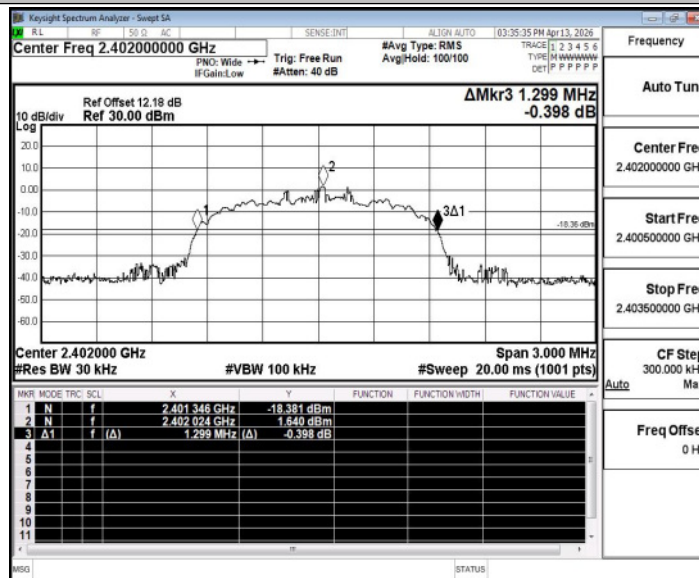
2DH5_Ant1_2441



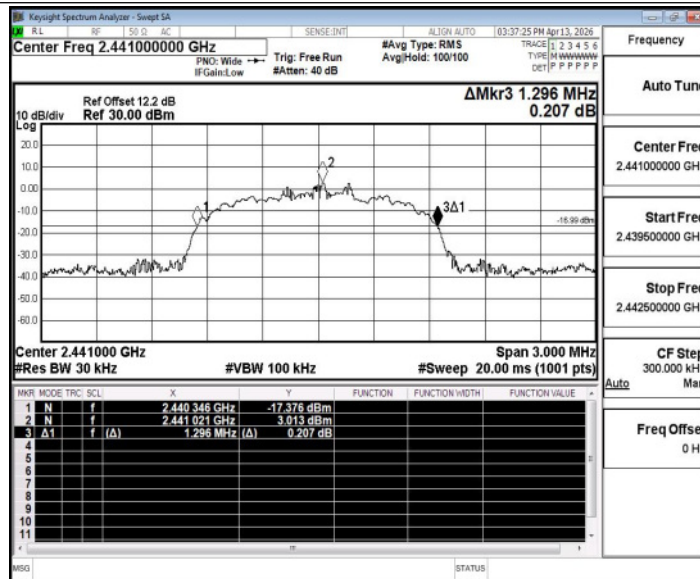
2DH5_Ant1_2480



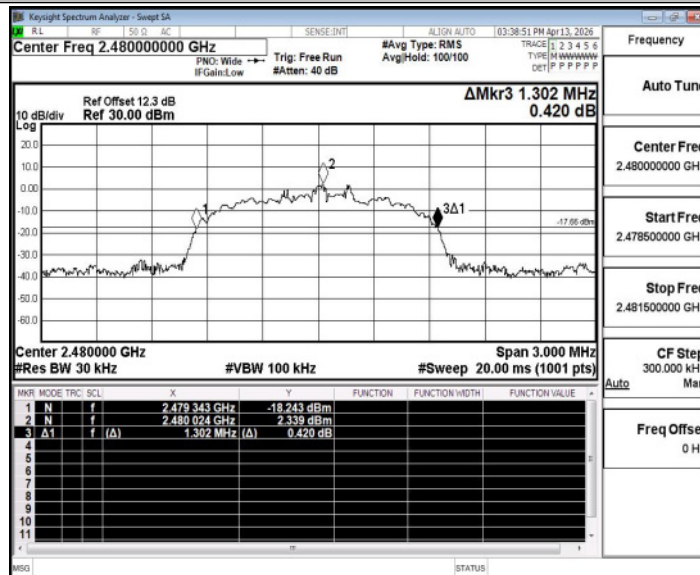
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



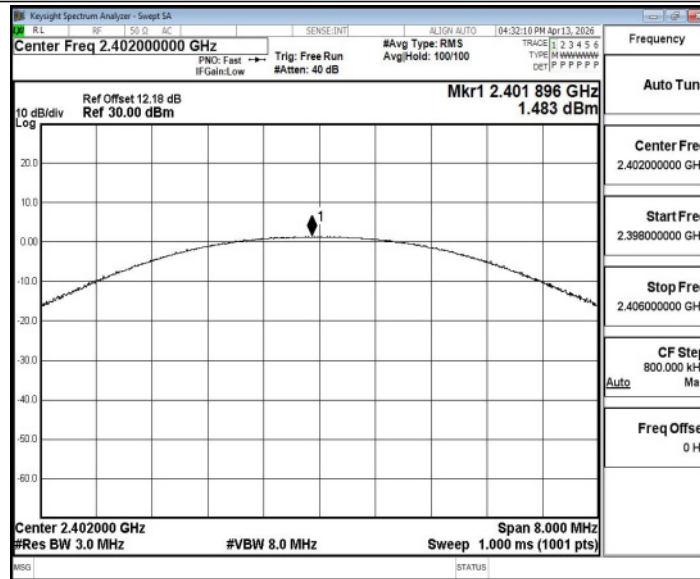
A.2 Maximum Peak conducted output power

Test Result Peak

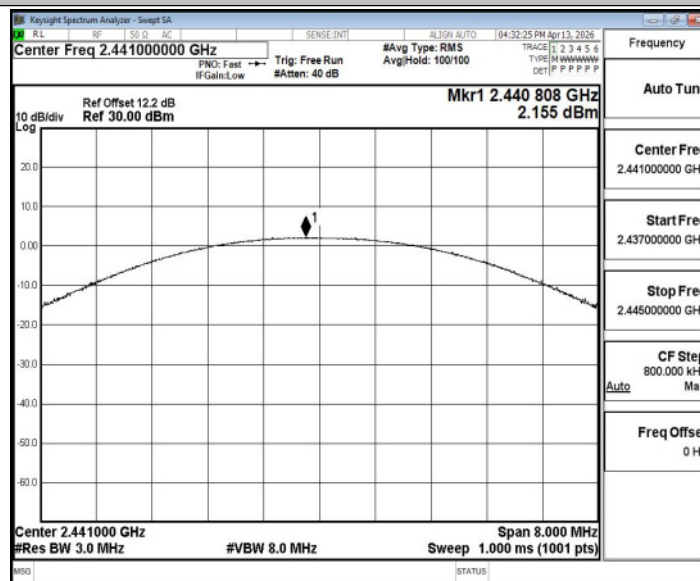
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	1.48	≤30	PASS
		2441	2.16	≤30	PASS
		2480	1.13	≤30	PASS
2DH5	Ant1	2402	2.67	≤30	PASS
		2441	3.28	≤30	PASS
		2480	2.01	≤30	PASS
3DH5	Ant1	2402	3.07	≤30	PASS
		2441	3.58	≤30	PASS
		2480	2.12	≤30	PASS

Test Graphs

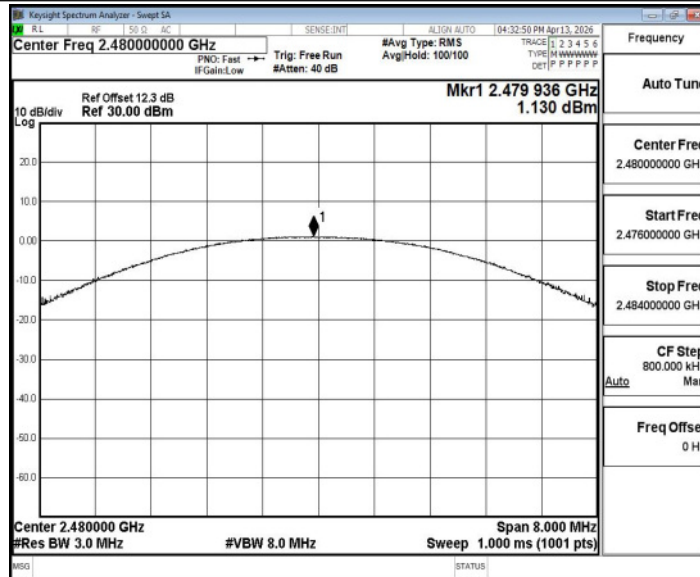
DH5_Ant1_2402



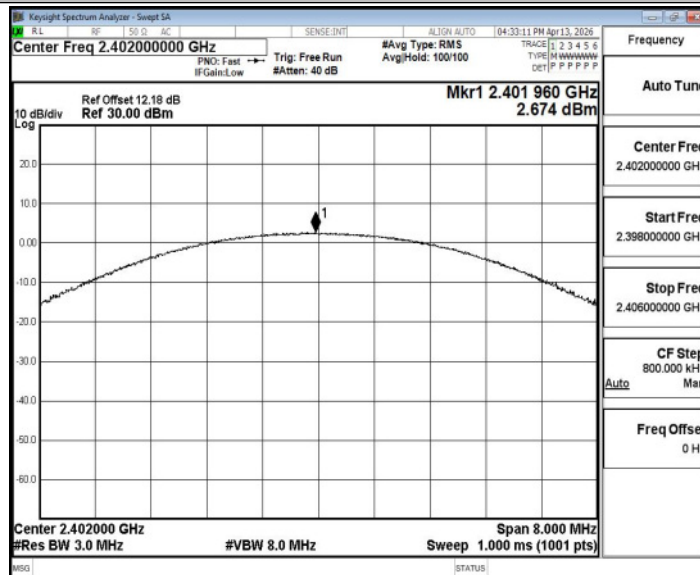
DH5_Ant1_2441



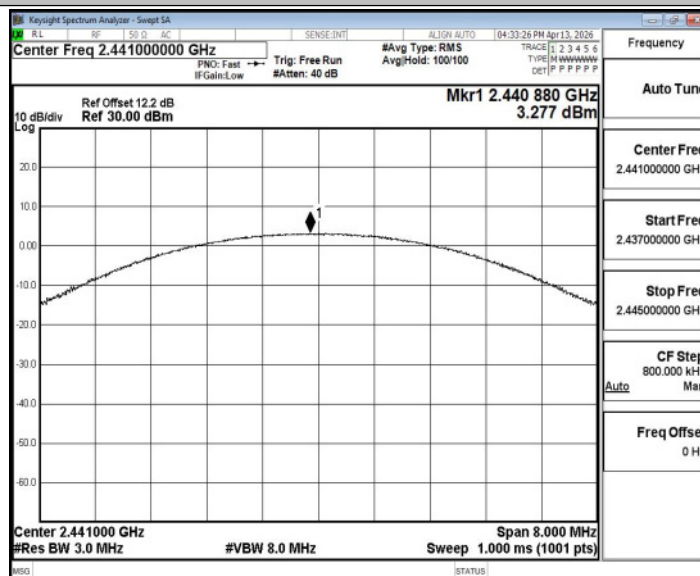
DH5_Ant1_2480



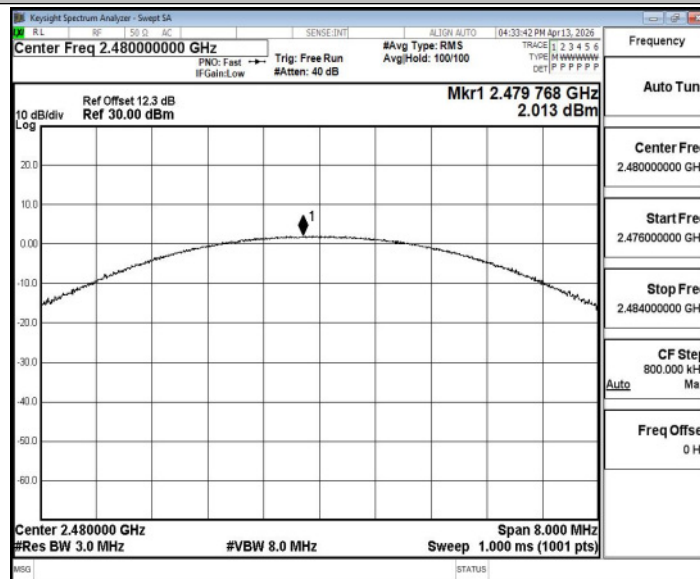
2DH5_Ant1_2402



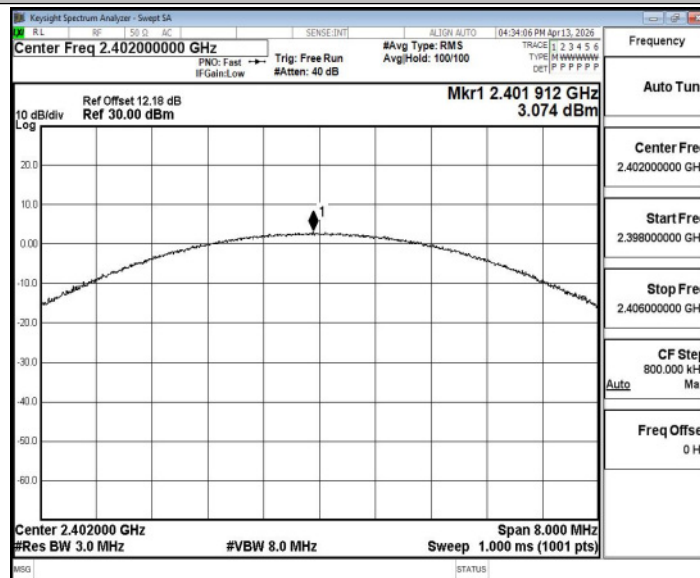
2DH5_Ant1_2441



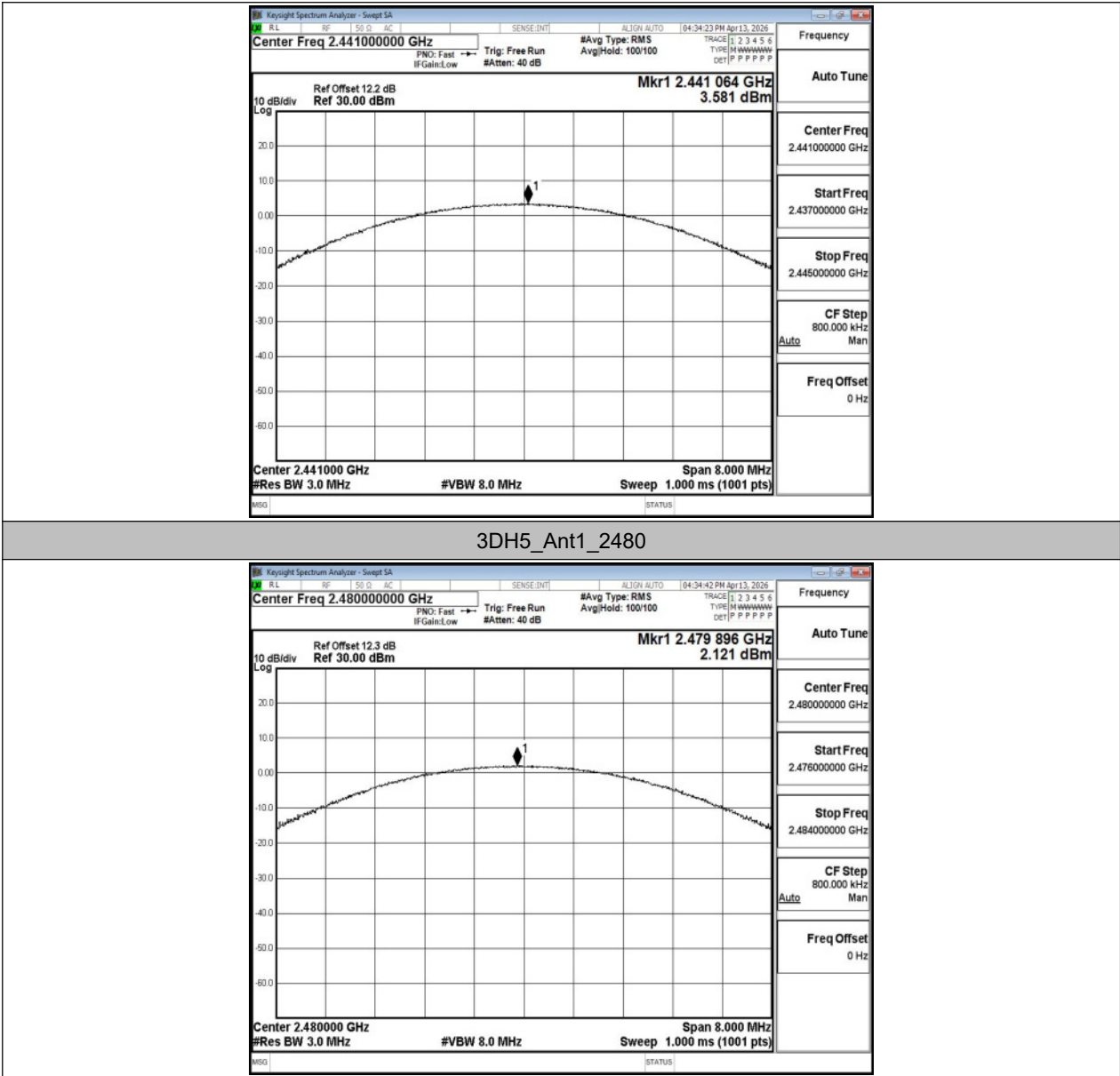
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

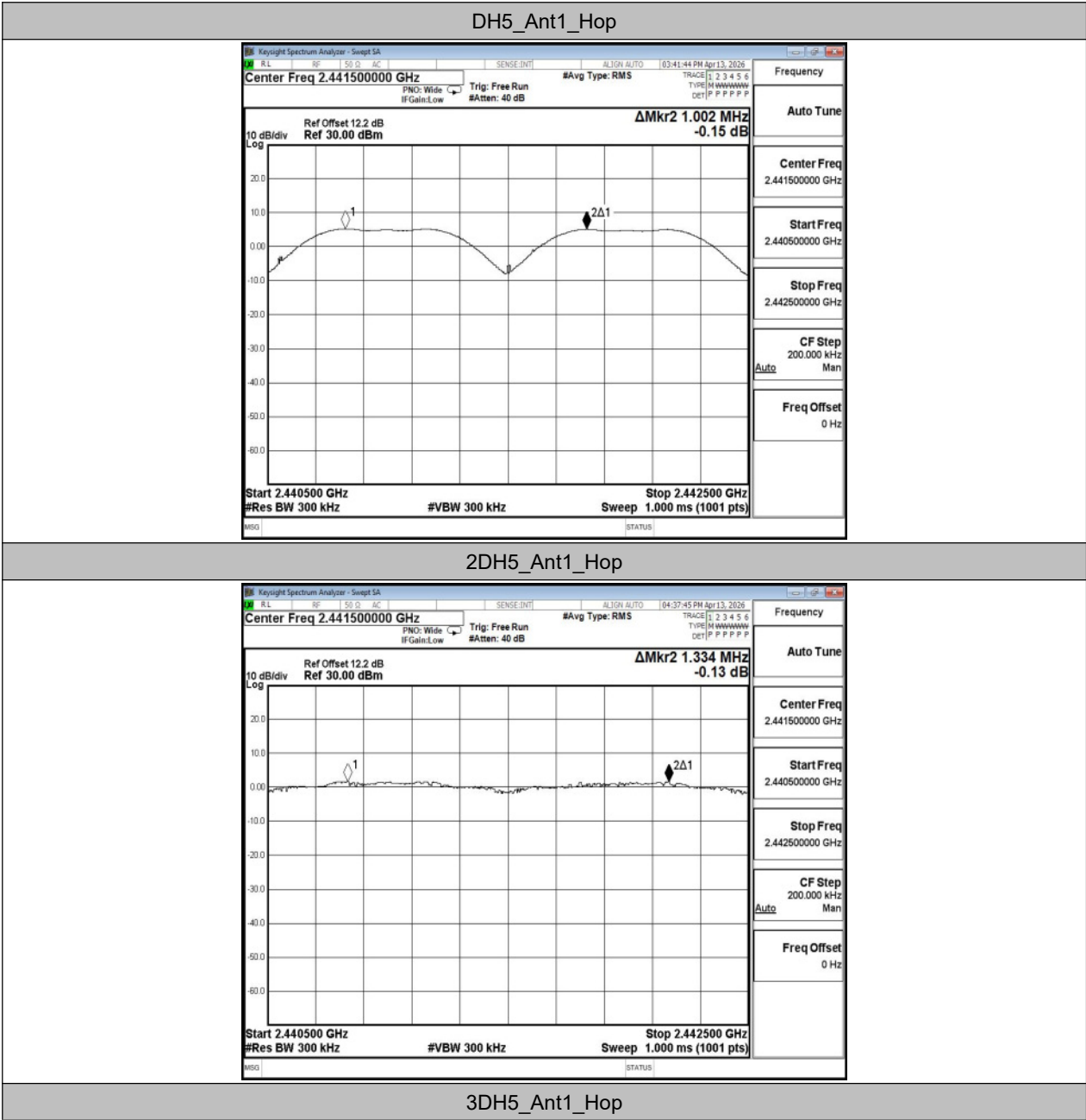


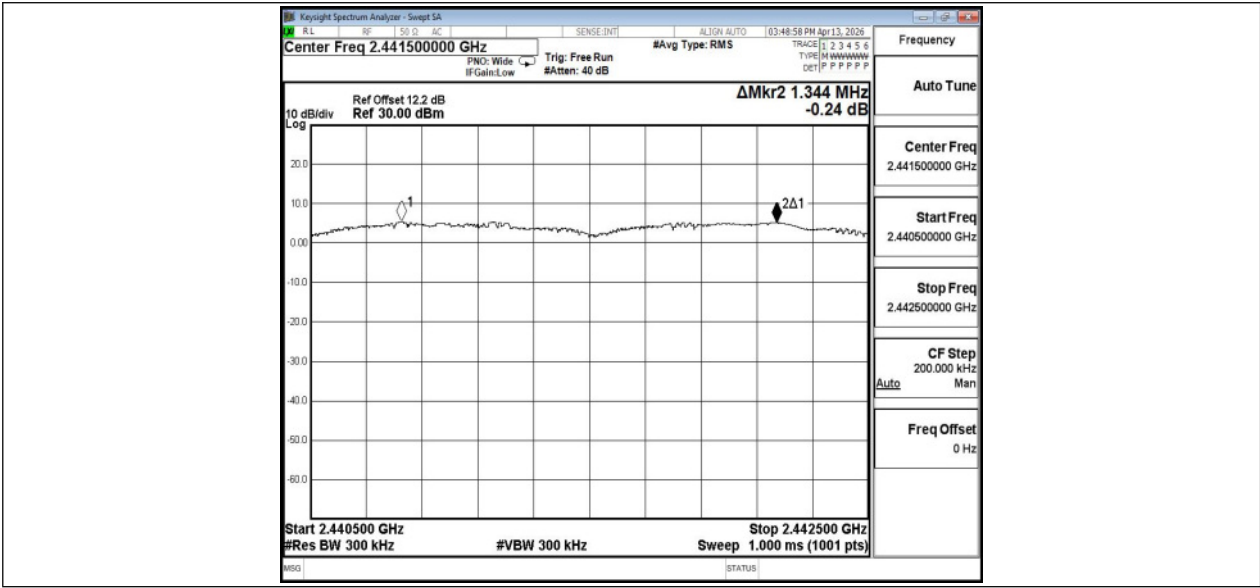
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.002	≥ 0.638	PASS
2DH5	Ant1	Hop	1.334	≥ 0.862	PASS
3DH5	Ant1	Hop	1.344	≥ 0.868	PASS

Test Graphs



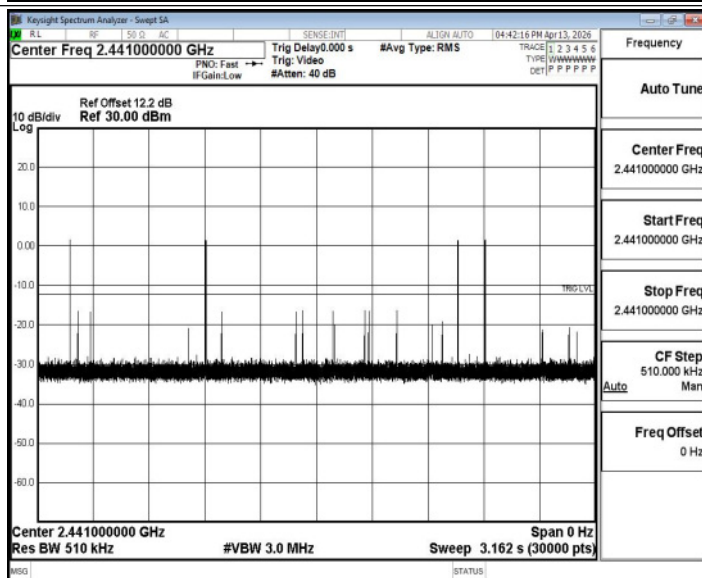
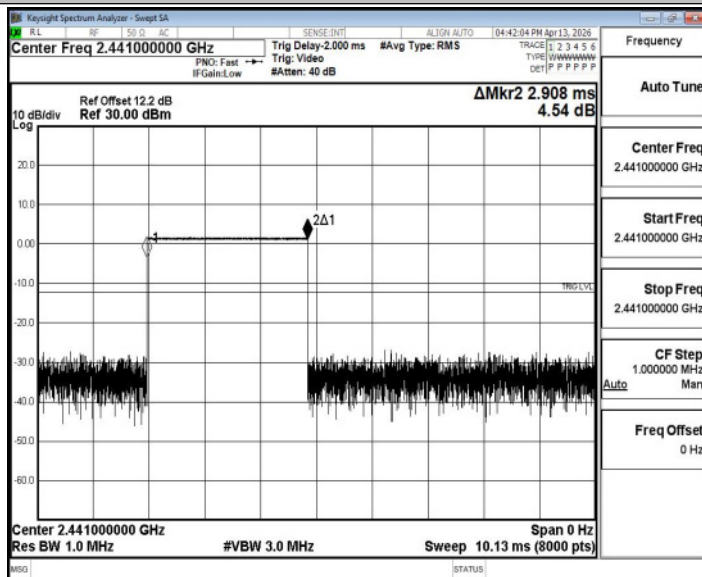


A.4 Time of occupancy

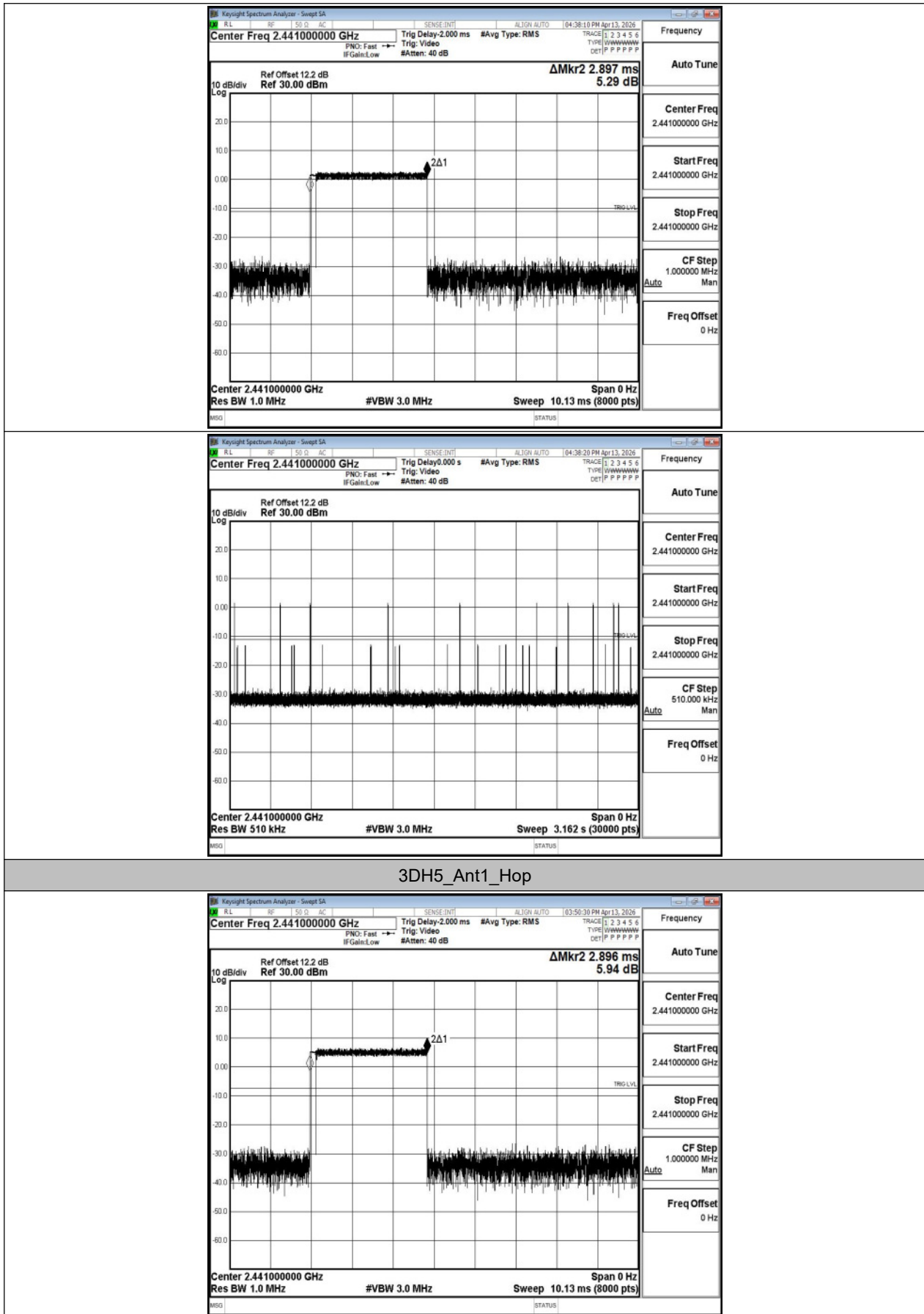
Test Result

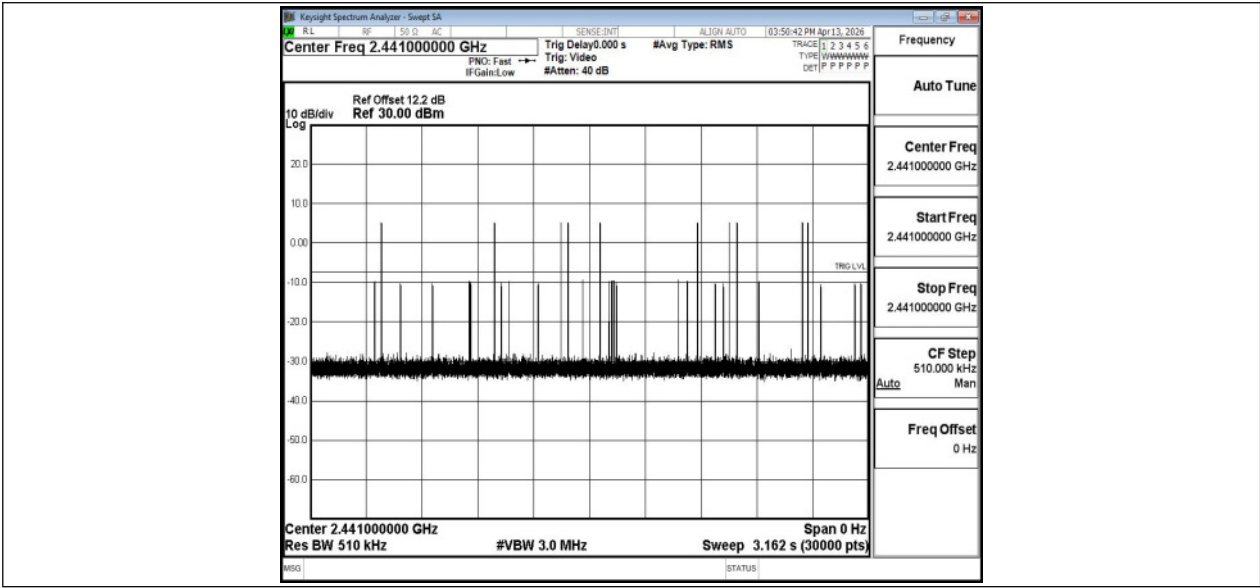
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.908	50	0.145	≤0.4	PASS
2DH5	Ant1	Hop	2.897	110	0.319	≤0.4	PASS
3DH5	Ant1	Hop	2.896	110	0.319	≤0.4	PASS

DH5 Ant1 Hop



2DH5 Ant1 Hop





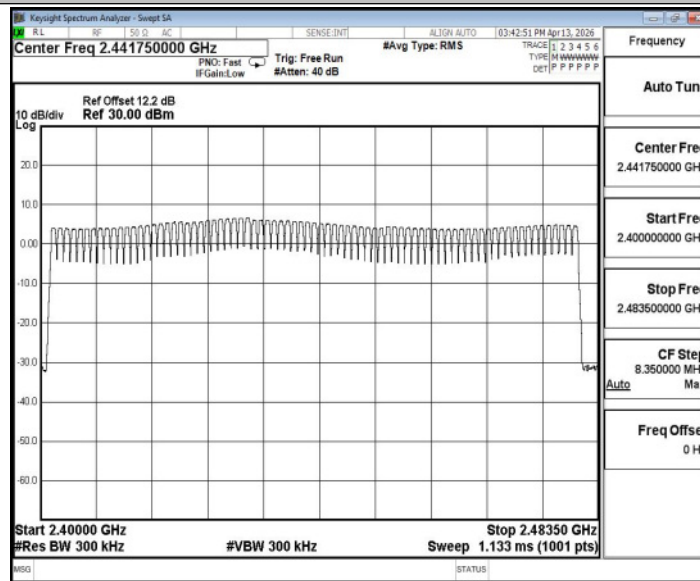
A.5 Number of hopping channels

Test Result

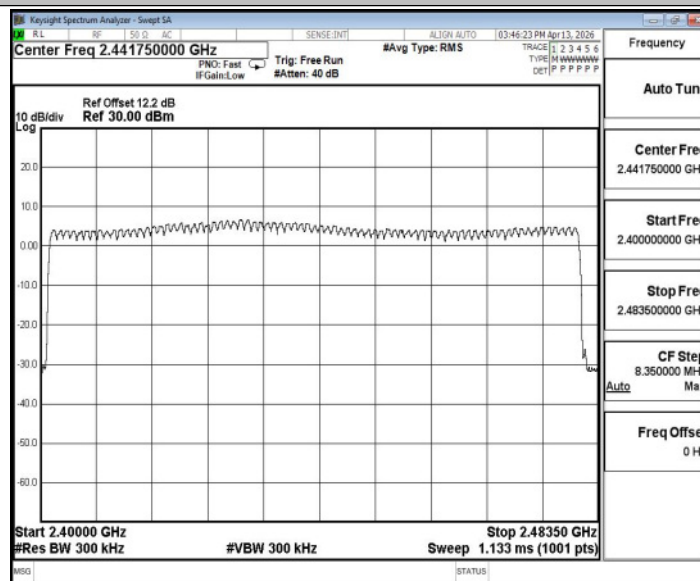
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

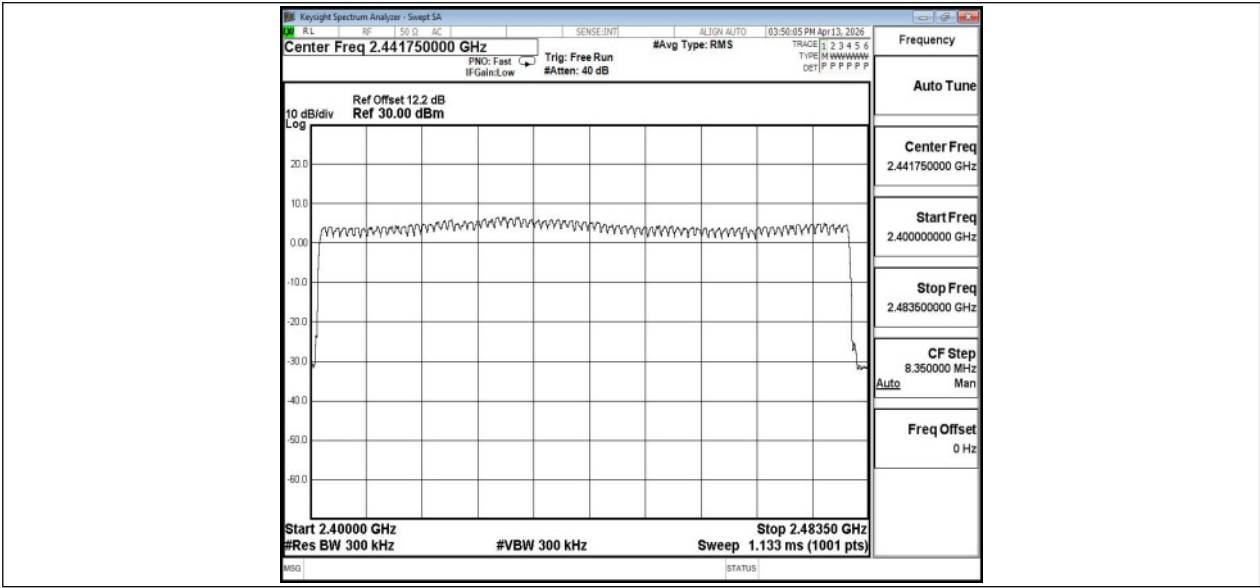
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



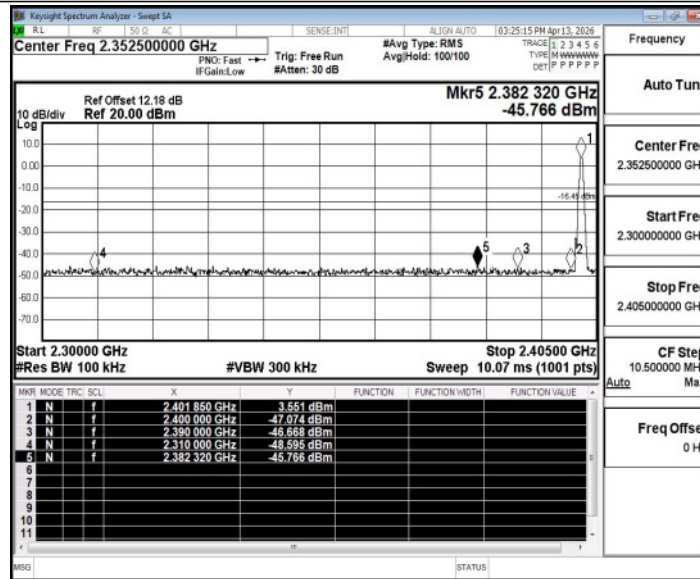
A.6 Band edge measurements

Test Result

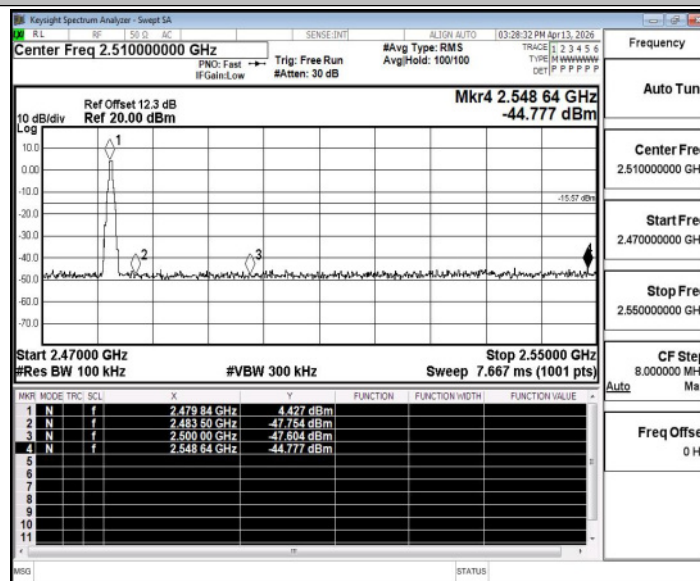
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.55	-45.77	≤ -16.45	PASS
		High	2480	4.43	-44.78	≤ -15.57	PASS
		Low	Hop_2402	3.09	-45.27	≤ -16.91	PASS
		High	Hop_2480	4.40	-44.94	≤ -15.6	PASS
2DH5	Ant1	Low	2402	3.41	-43.77	≤ -16.59	PASS
		High	2480	3.57	-44.93	≤ -16.43	PASS
		Low	Hop_2402	-1.30	-44.93	≤ -21.3	PASS
		High	Hop_2480	1.15	-44.94	≤ -18.85	PASS
3DH5	Ant1	Low	2402	3.34	-43.87	≤ -16.66	PASS
		High	2480	3.01	-44.51	≤ -16.99	PASS
		Low	Hop_2402	-0.40	-45.8	≤ -20.4	PASS
		High	Hop_2480	3.56	-43.48	≤ -16.44	PASS

Test Graphs

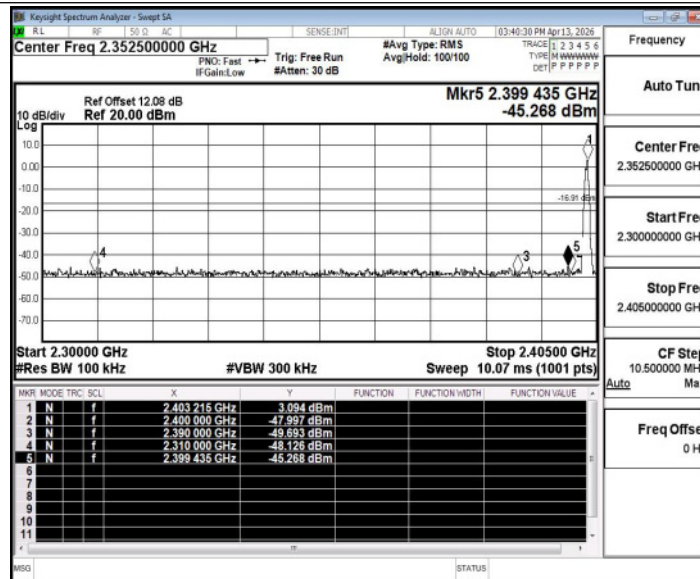
DH5_Ant1_Low_2402



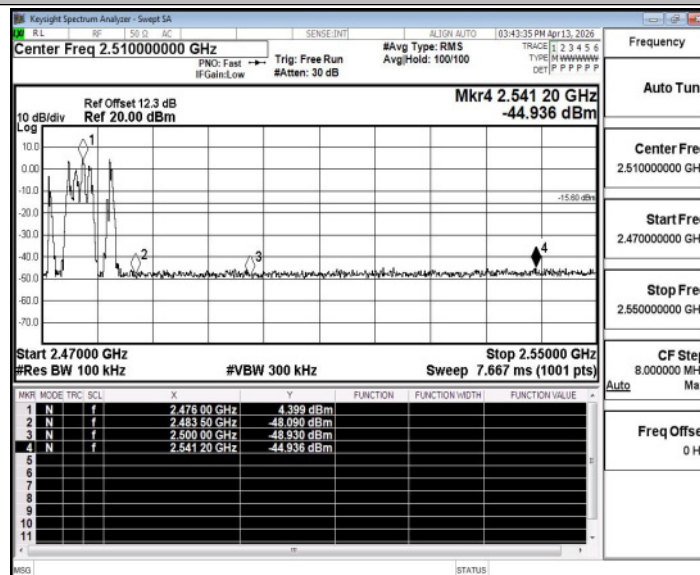
DH5_Ant1_High_2480



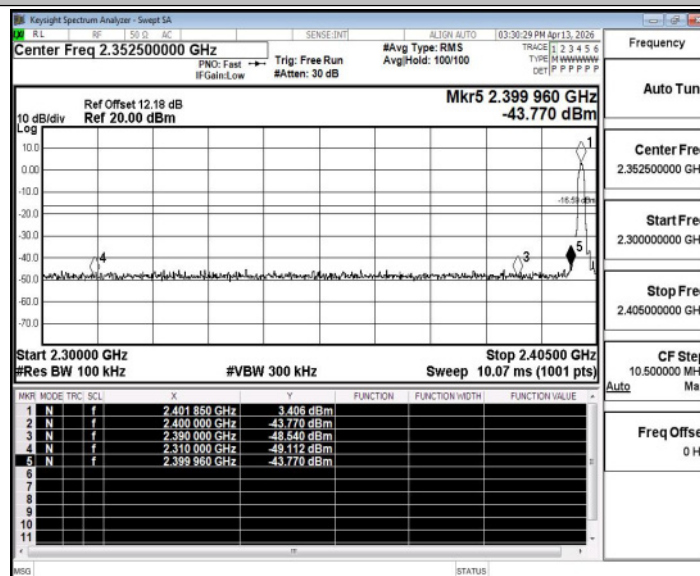
DH5_Ant1_Low_Hop_2402



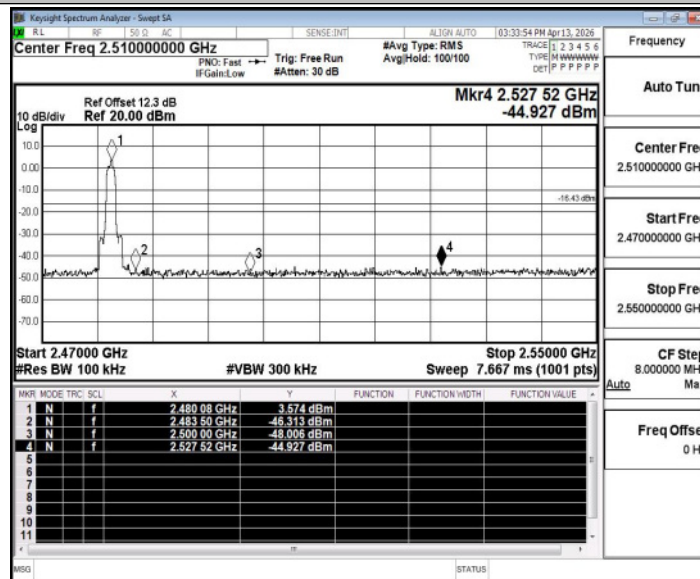
DH5_Ant1_High_Hop_2480



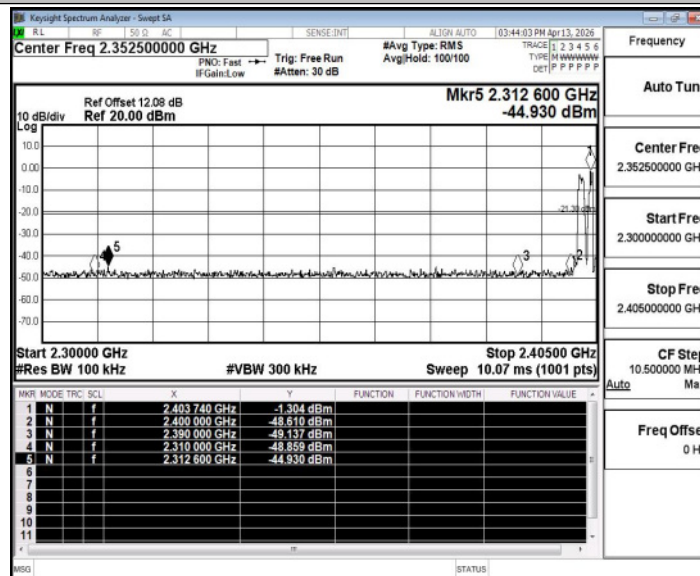
2DH5_Ant1_Low_2402



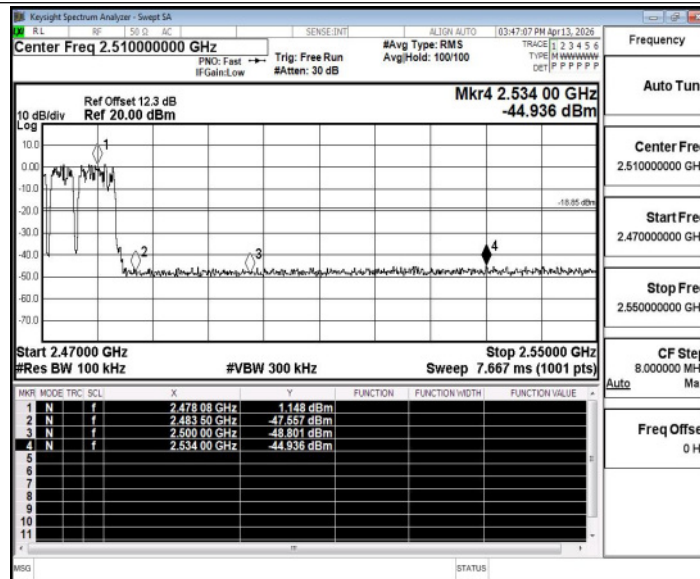
2DH5_Ant1_High_2480



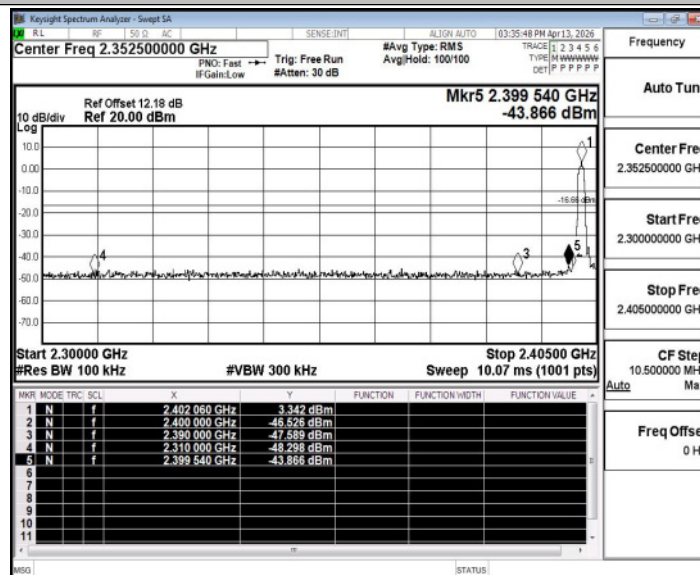
2DH5_Ant1_Low_Hop_2402



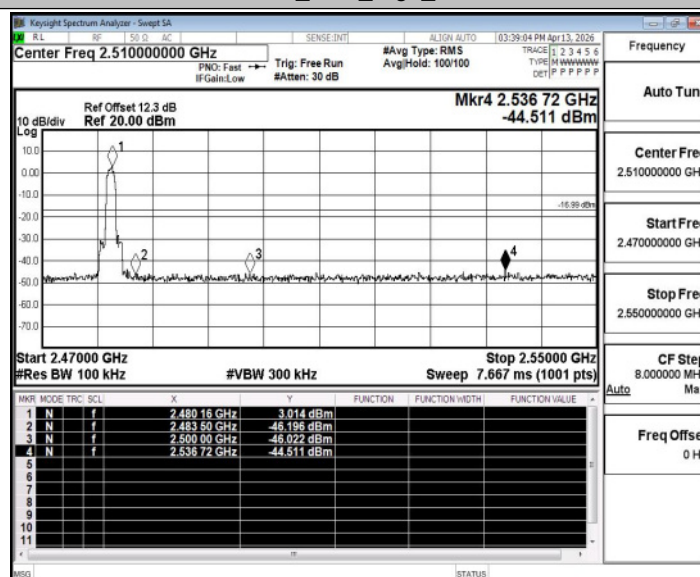
2DH5_Ant1_High_Hop_2480



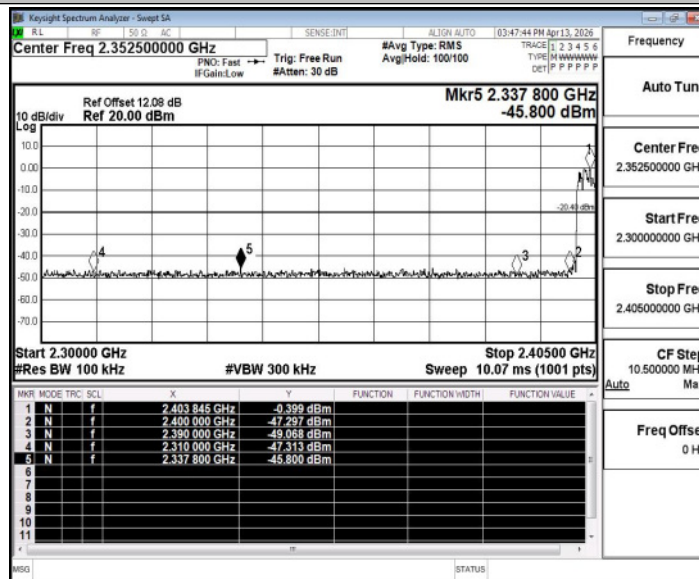
3DH5_Ant1_Low_2402



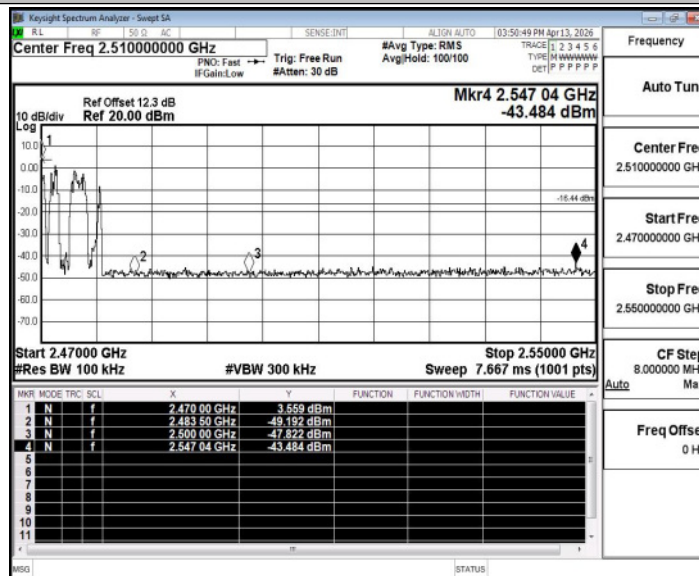
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



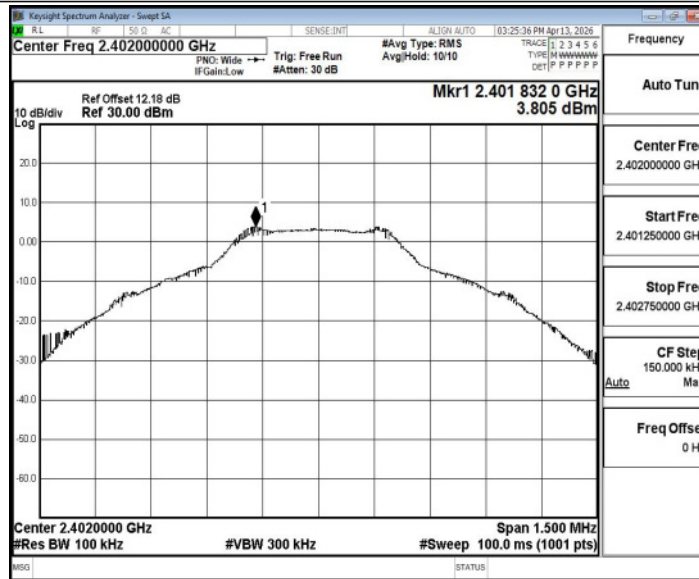
A.7 Conducted Spurious Emission

Test Result

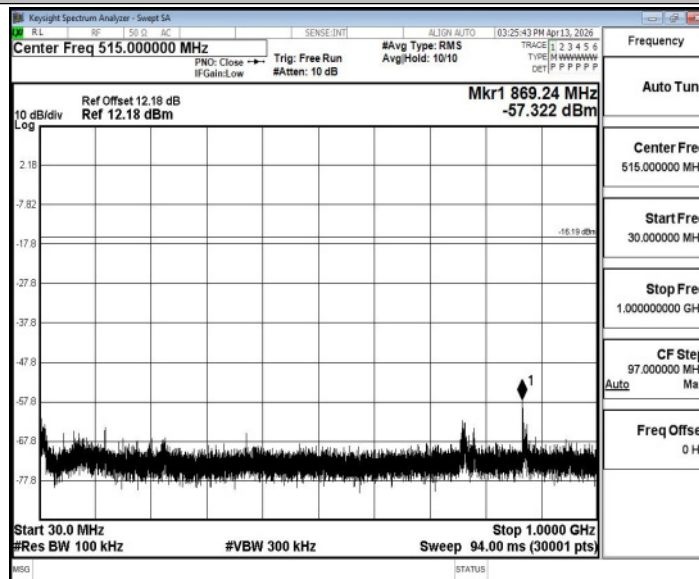
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	3.81	3.81	---	PASS
			30~1000	3.81	-57.32	≤-16.19	PASS
			1000~26500	3.81	-54.8	≤-16.19	PASS
		2441	Reference	5.15	5.15	---	PASS
			30~1000	5.15	-56.97	≤-14.85	PASS
			1000~26500	5.15	-54.7	≤-14.85	PASS
		2480	Reference	4.52	4.52	---	PASS
			30~1000	4.52	-57.87	≤-15.48	PASS
			1000~26500	4.52	-54.41	≤-15.48	PASS
2DH5	Ant1	2402	Reference	3.70	3.70	---	PASS
			30~1000	3.70	-56.14	≤-16.3	PASS
			1000~26500	3.70	-54.54	≤-16.3	PASS
		2441	Reference	4.98	4.98	---	PASS
			30~1000	4.98	-57.95	≤-15.02	PASS
			1000~26500	4.98	-54.4	≤-15.02	PASS
		2480	Reference	4.24	4.24	---	PASS
			30~1000	4.24	-55.93	≤-15.76	PASS
			1000~26500	4.24	-55.04	≤-15.76	PASS
3DH5	Ant1	2402	Reference	3.80	3.80	---	PASS
			30~1000	3.80	-58.92	≤-16.2	PASS
			1000~26500	3.80	-54.5	≤-16.2	PASS
		2441	Reference	5.10	5.10	---	PASS
			30~1000	5.10	-58.58	≤-14.9	PASS
			1000~26500	5.10	-54.33	≤-14.9	PASS
		2480	Reference	4.47	4.47	---	PASS
			30~1000	4.47	-58.83	≤-15.53	PASS
			1000~26500	4.47	-54.48	≤-15.53	PASS

Test Graphs

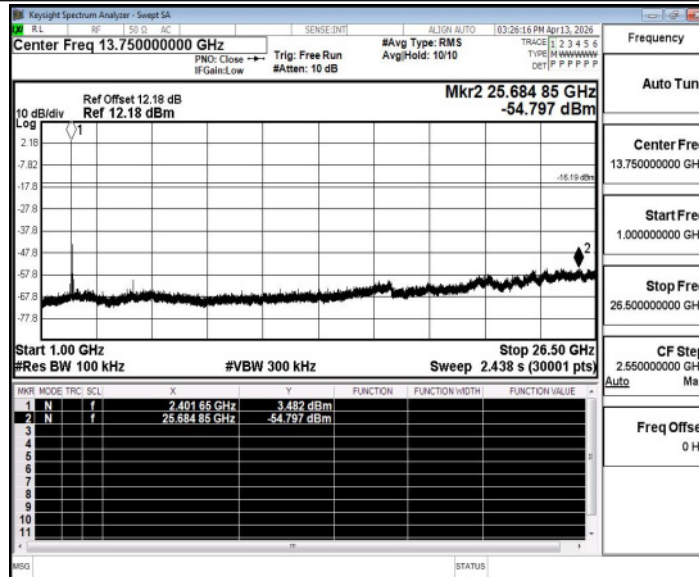
DH5_Ant1_2402_0~Reference



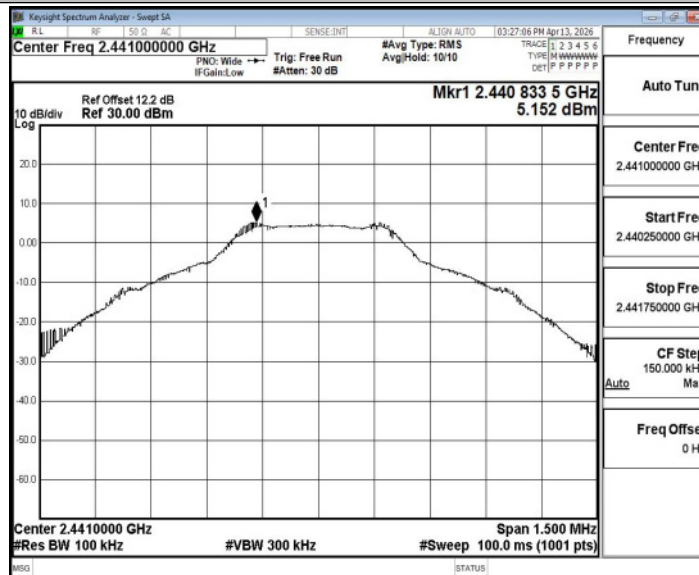
DH5_Ant1_2402_30~1000



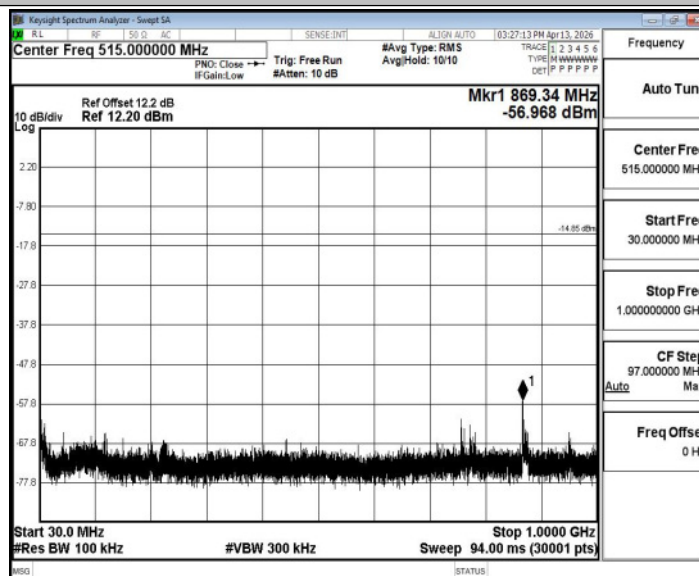
DH5_Ant1_2402_1000~26500



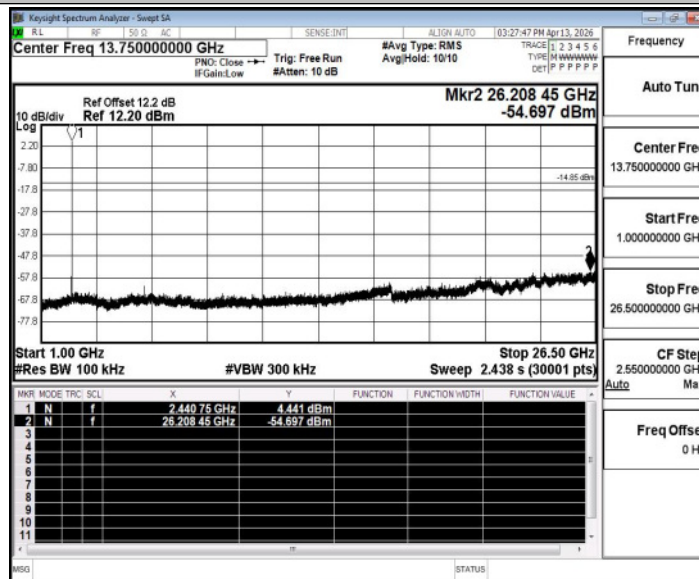
DH5_Ant1_2441_0~Reference



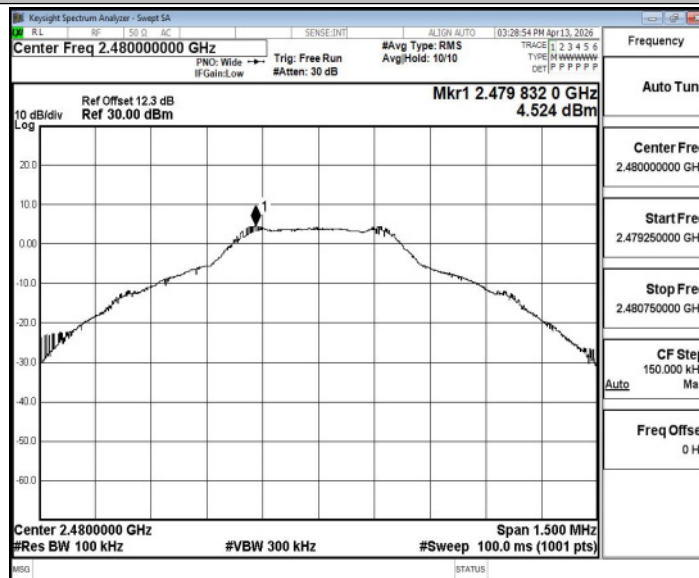
DH5_Ant1_2441_30~1000



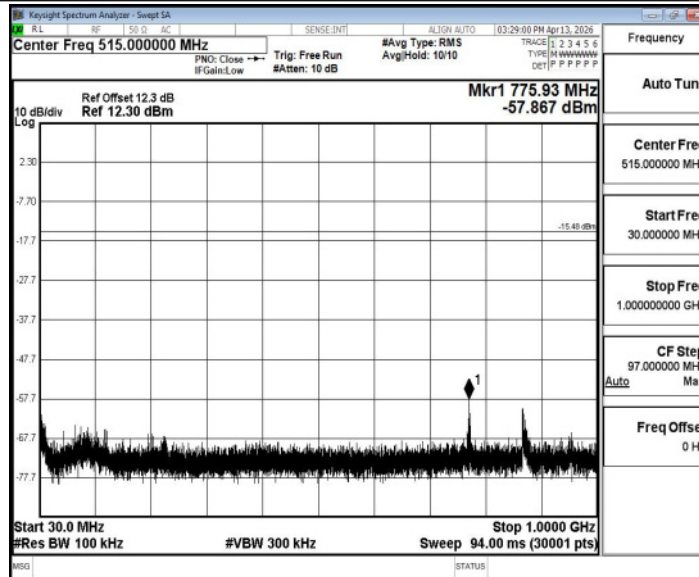
DH5_Ant1_2441_1000~26500



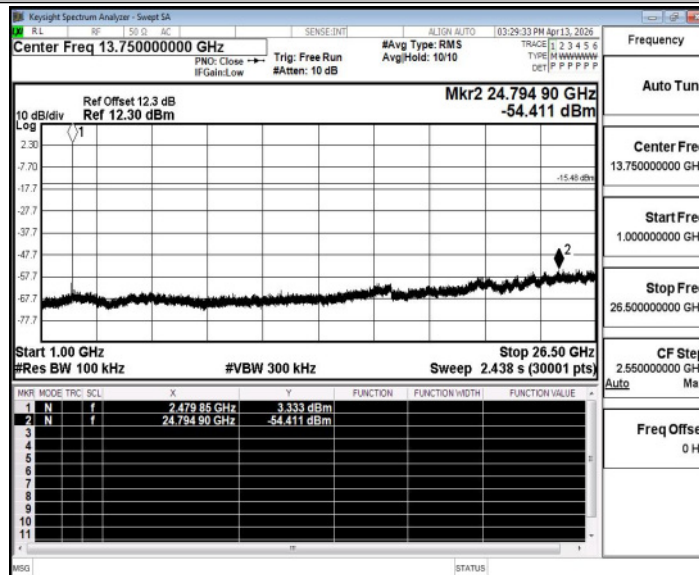
DH5_Ant1_2480_0~Reference



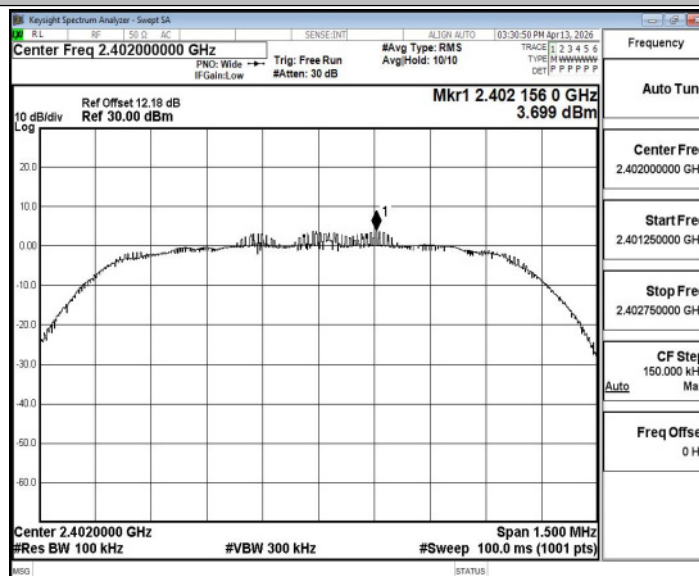
DH5_Ant1_2480_30~1000

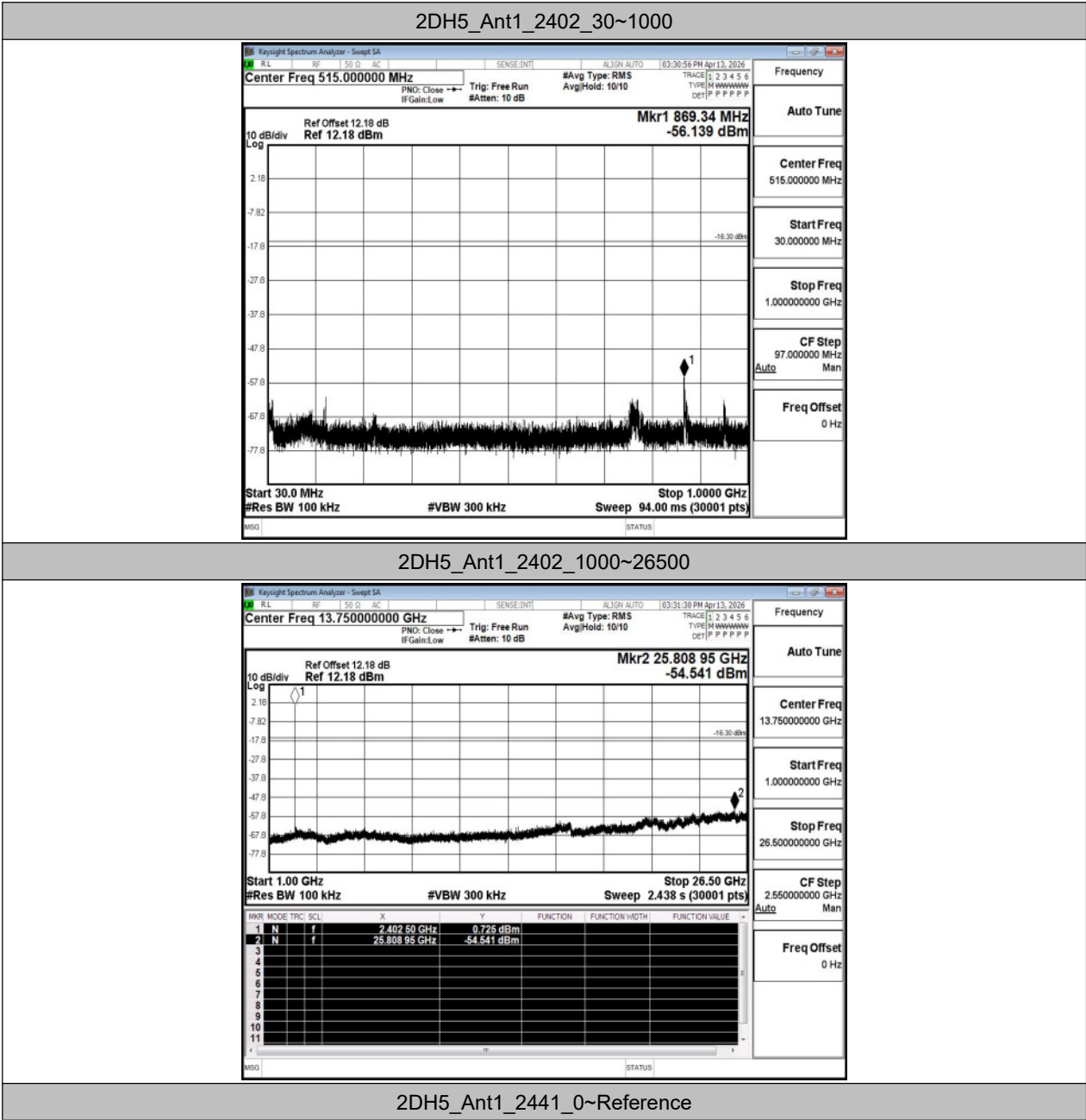


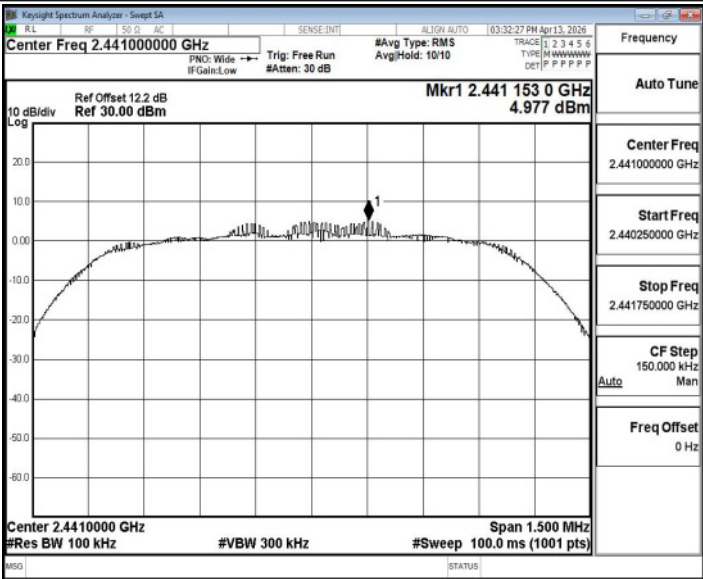
DH5_Ant1_2480_1000~26500



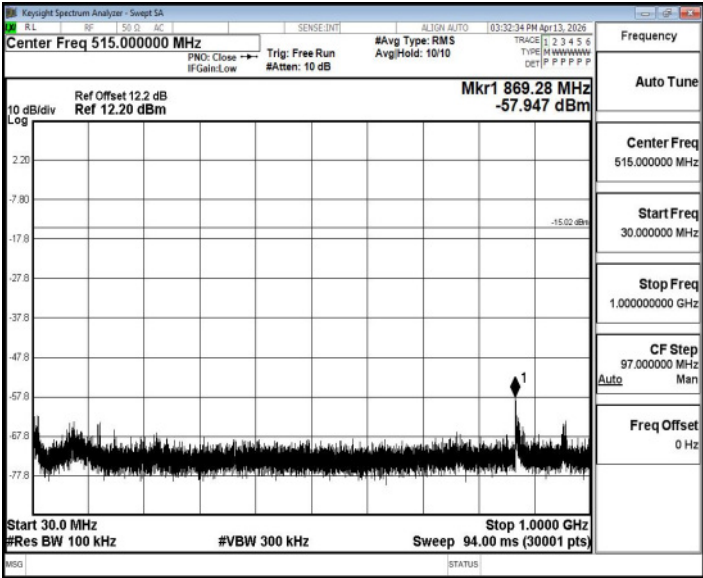
2DH5_Ant1_2402_0~Reference



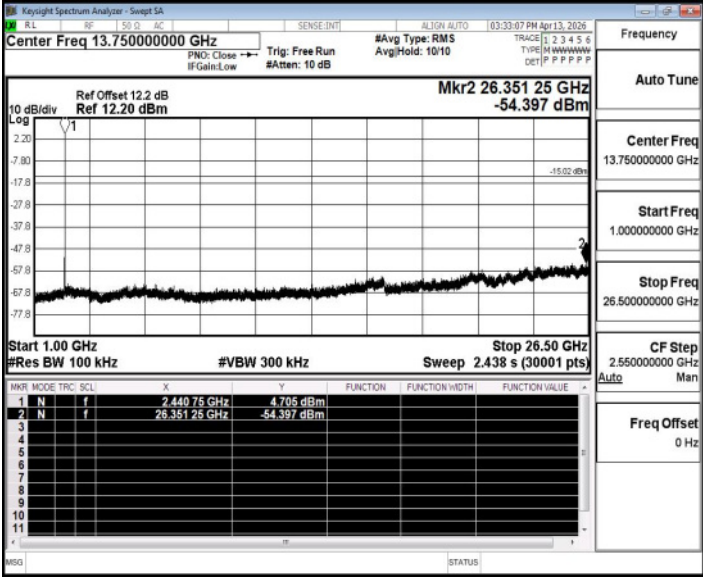




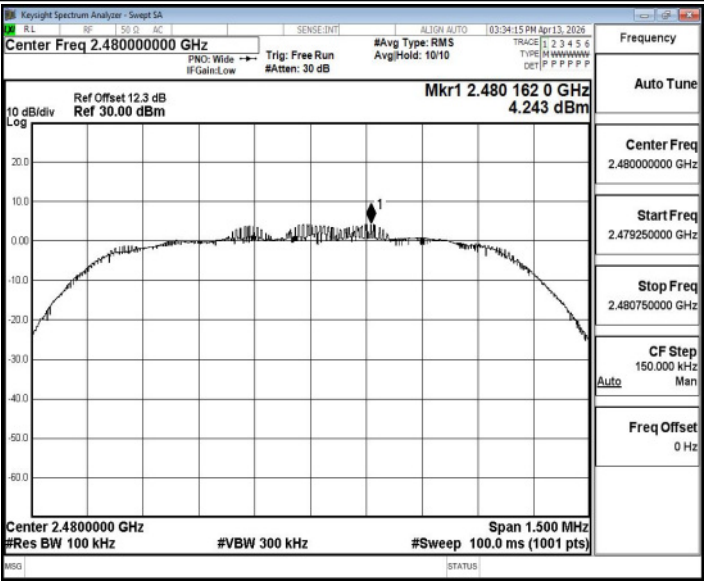
2DH5_Ant1_2441_30~1000



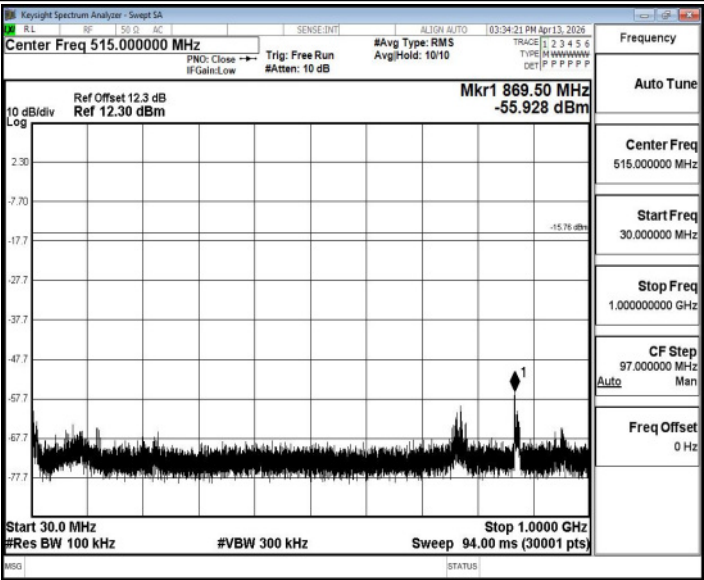
2DH5_Ant1_2441_1000~26500



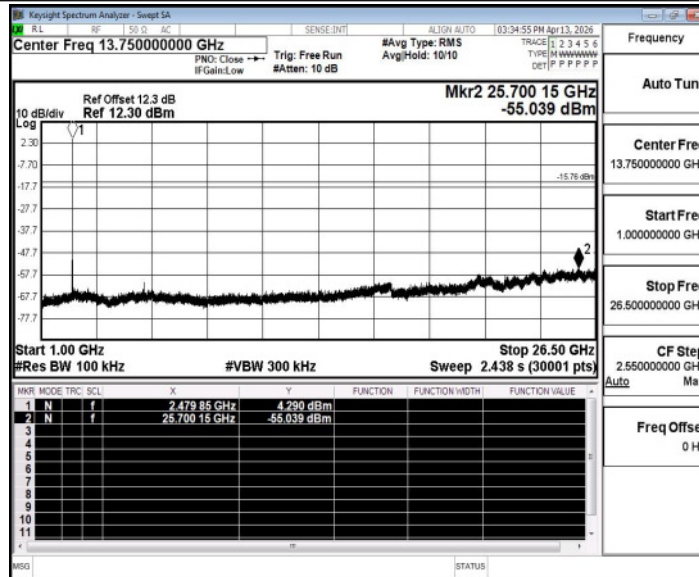
2DH5_Ant1_2480_0~Reference



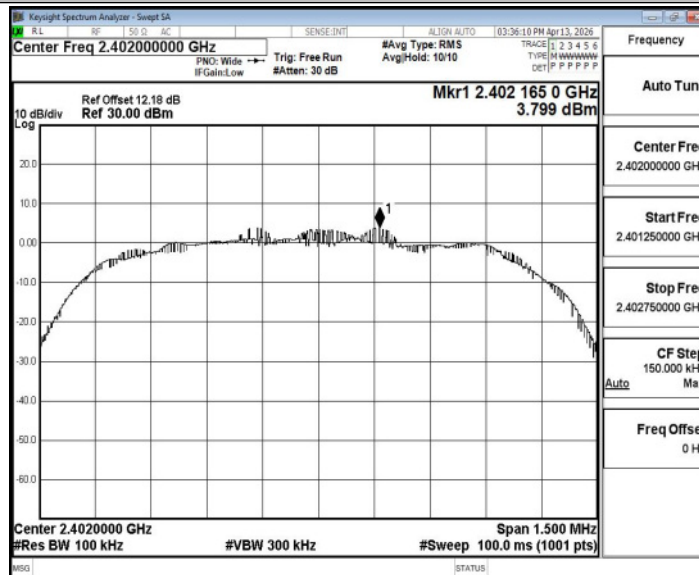
2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000

