

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: LED Shelf System

Test Model: CR7505A-BK

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

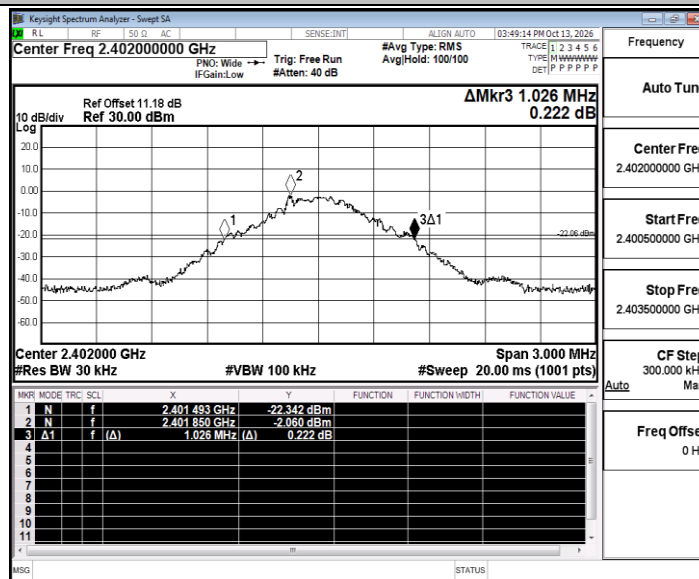
A.1 20dB Emission Bandwidth

Test Result

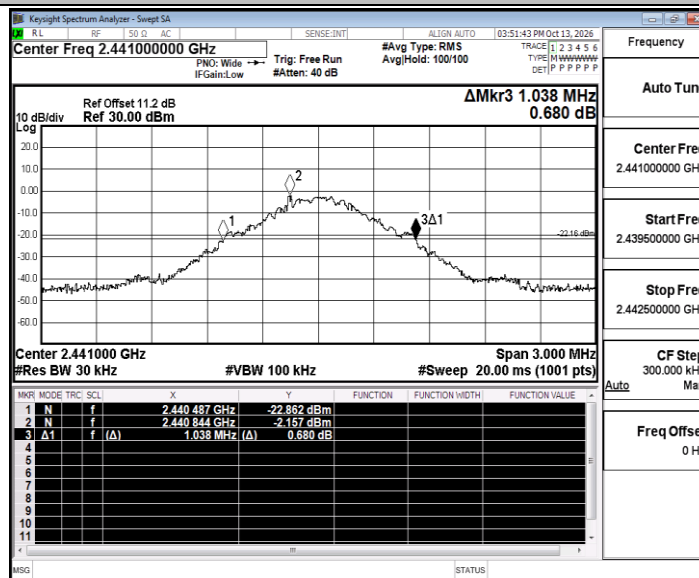
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.026	2401.493	2402.519	---	---
		2441	1.038	2440.487	2441.525	---	---
		2480	1.044	2479.487	2480.531	---	---
2DH5	Ant1	2402	1.335	2401.346	2402.681	---	---
		2441	1.329	2440.343	2441.672	---	---
		2480	1.338	2479.346	2480.684	---	---
3DH5	Ant1	2402	1.305	2401.361	2402.666	---	---
		2441	1.296	2440.361	2441.657	---	---
		2480	1.296	2479.358	2480.654	---	---

Test Graphs

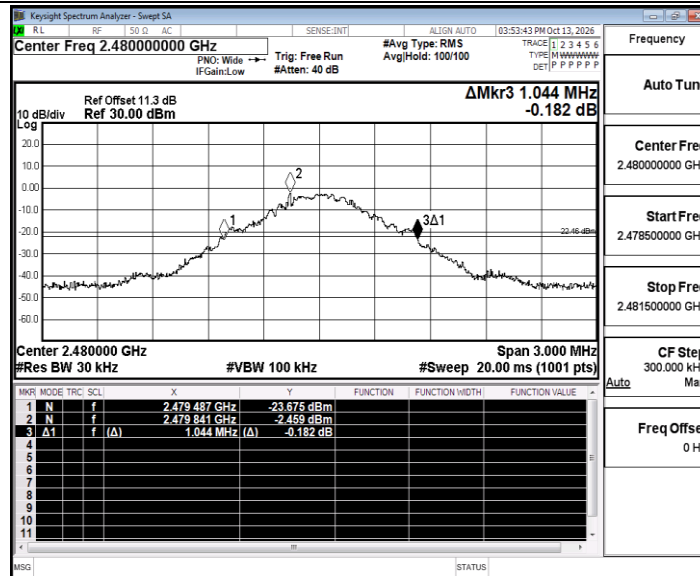
DH5_Ant1_2402



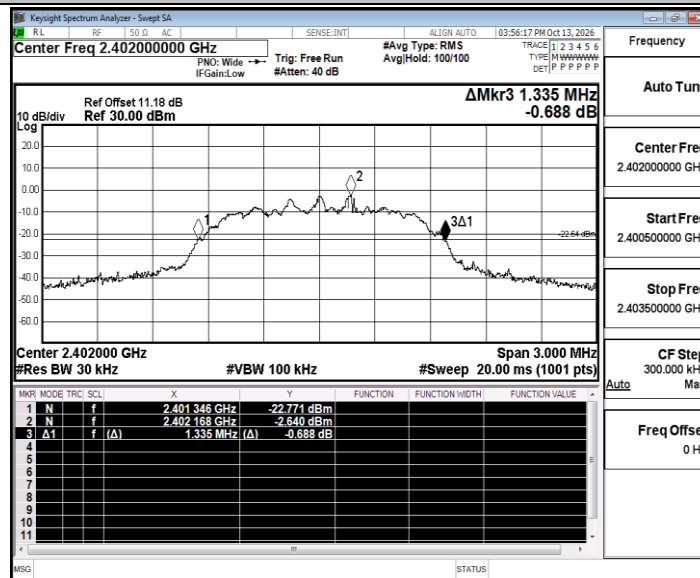
DH5_Ant1_2441



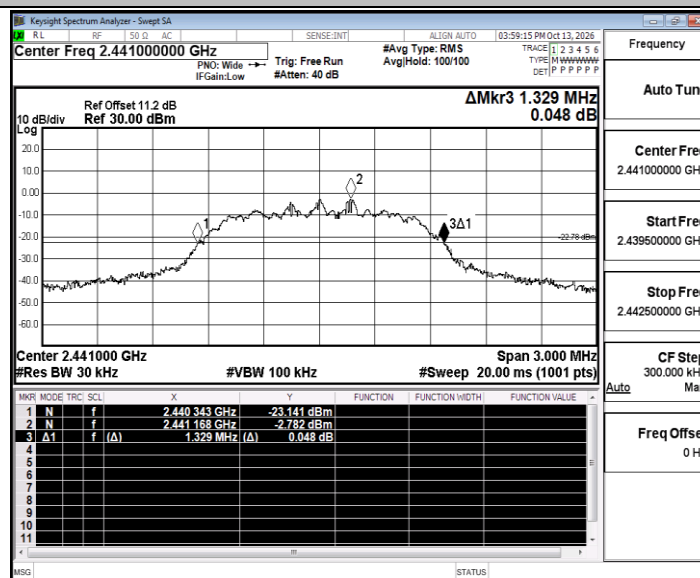
DH5_Ant1_2480



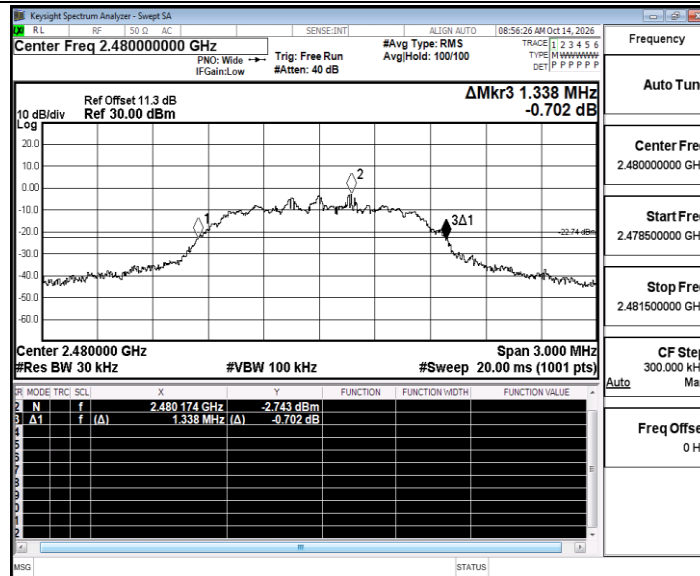
2DH5_Ant1_2402



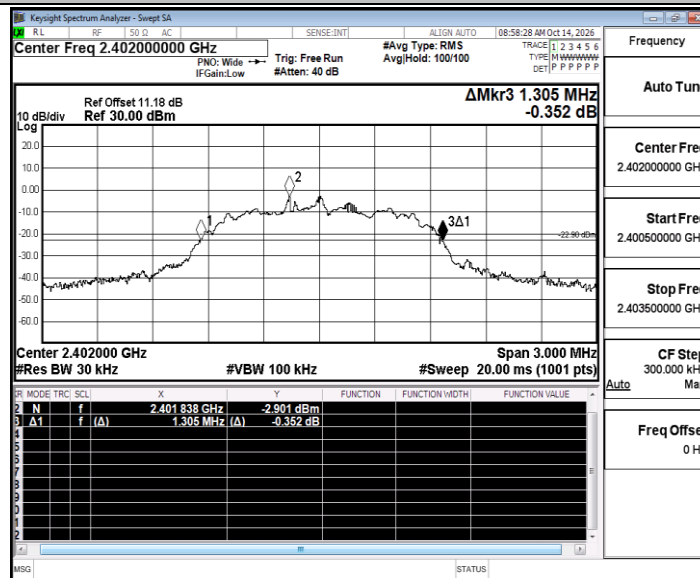
2DH5_Ant1_2441



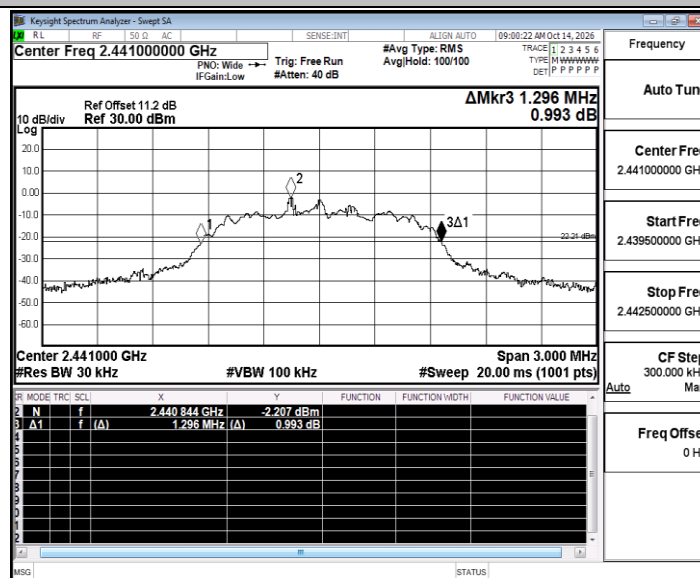
2DH5_Ant1_2480



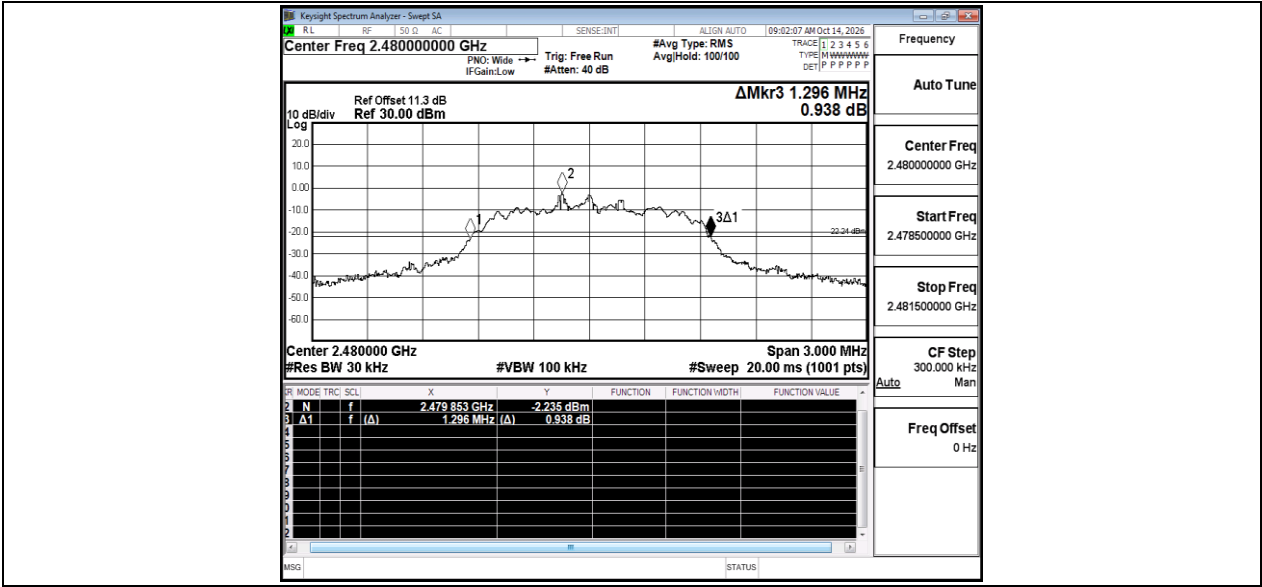
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



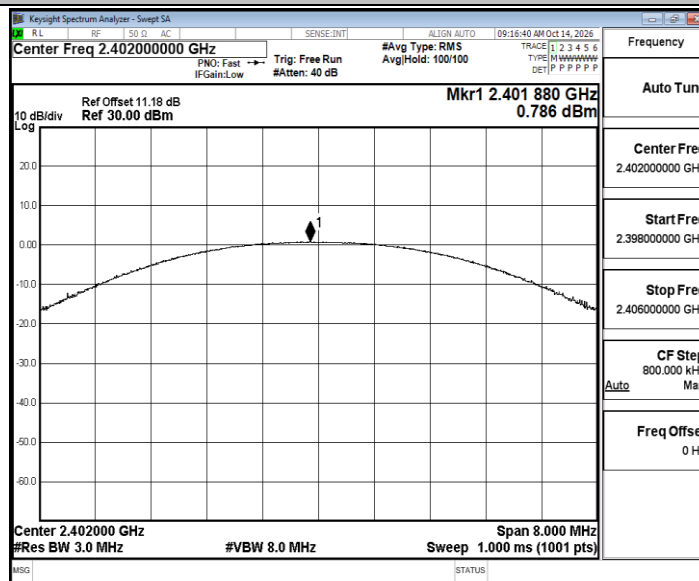
A.2 Maximum Peak conducted output power

Test Result Peak

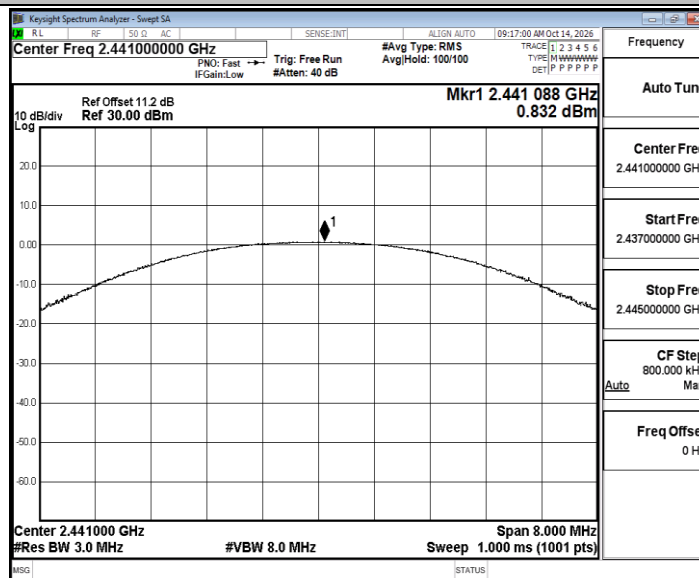
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.79	≤20.97	PASS
		2441	0.83	≤20.97	PASS
		2480	0.73	≤20.97	PASS
2DH5	Ant1	2402	1.39	≤20.97	PASS
		2441	1.43	≤20.97	PASS
		2480	1.35	≤20.97	PASS
3DH5	Ant1	2402	1.87	≤20.97	PASS
		2441	1.79	≤20.97	PASS
		2480	1.74	≤20.97	PASS

Test Graphs

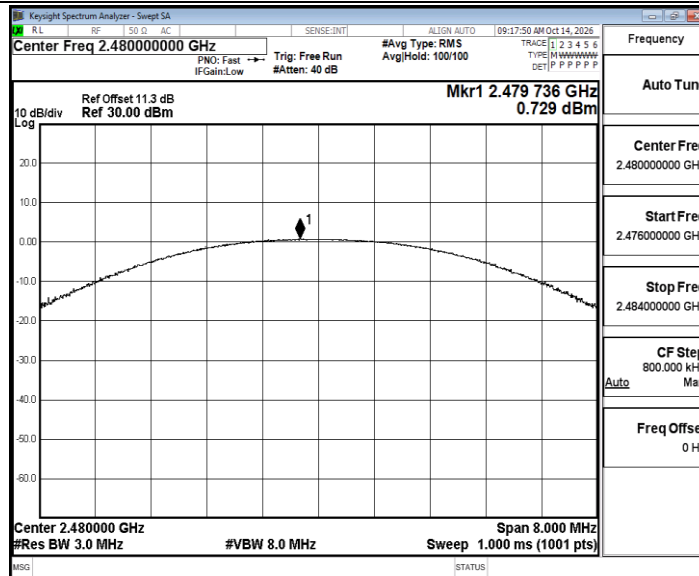
DH5_Ant1_2402



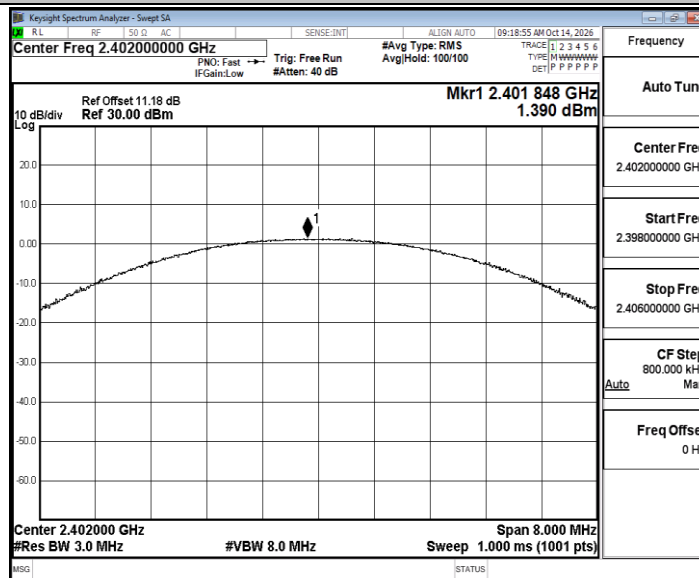
DH5_Ant1_2441



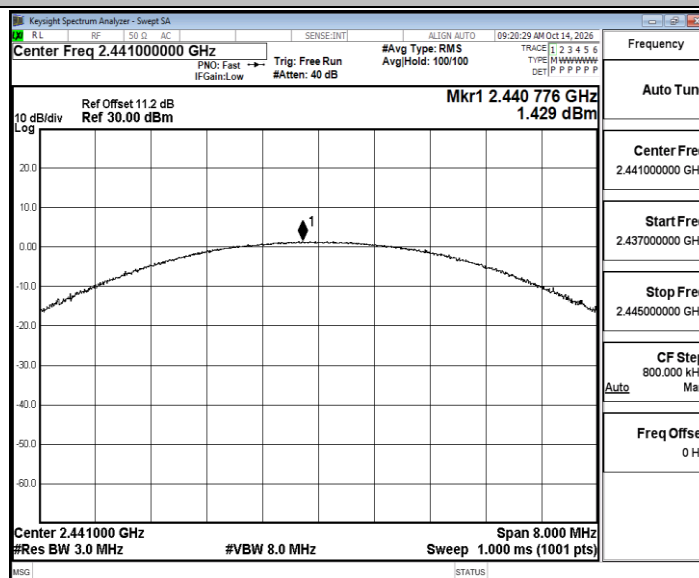
DH5_Ant1_2480



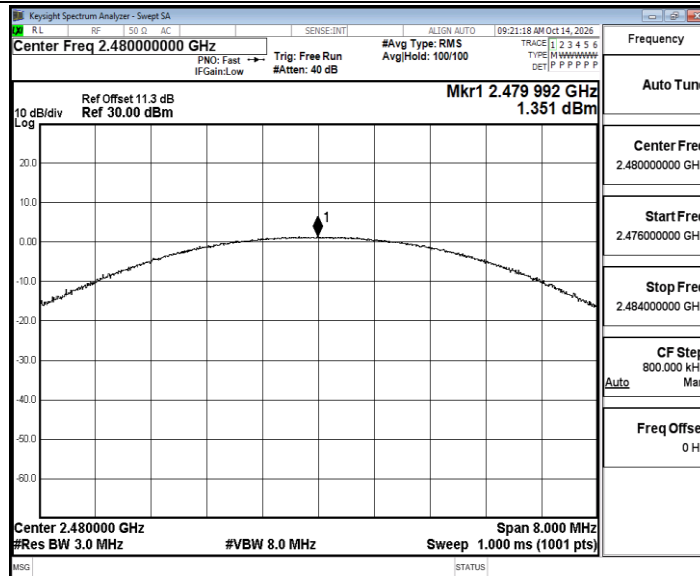
2DH5_Ant1_2402



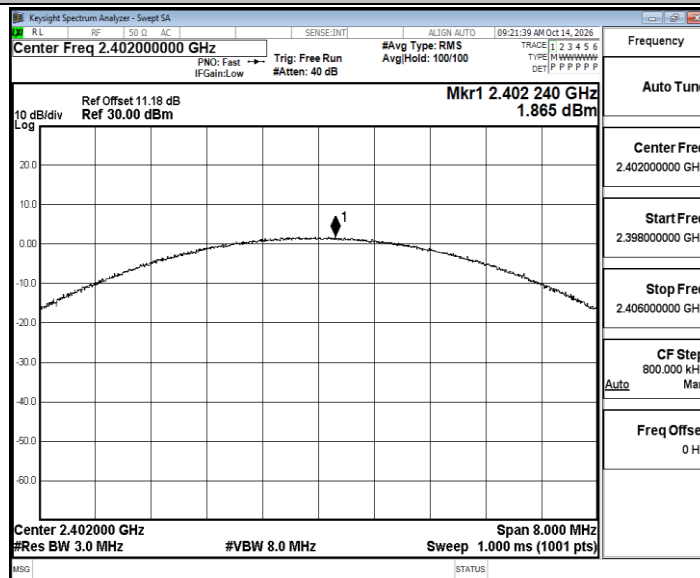
2DH5_Ant1_2441



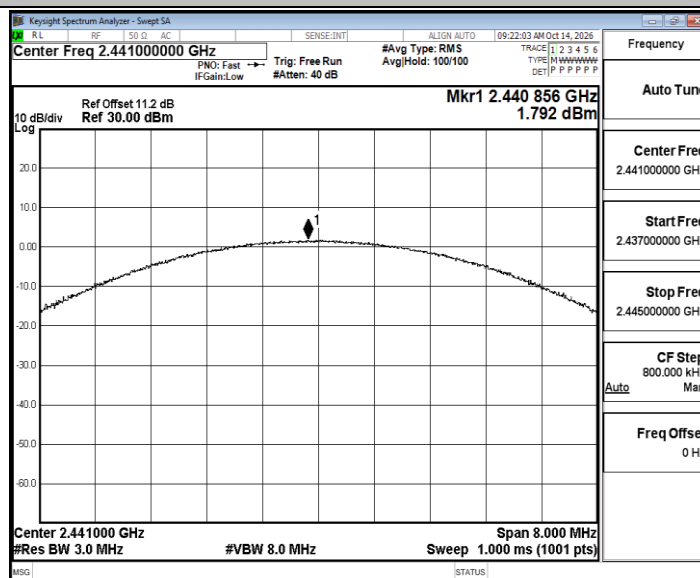
2DH5_Ant1_2480



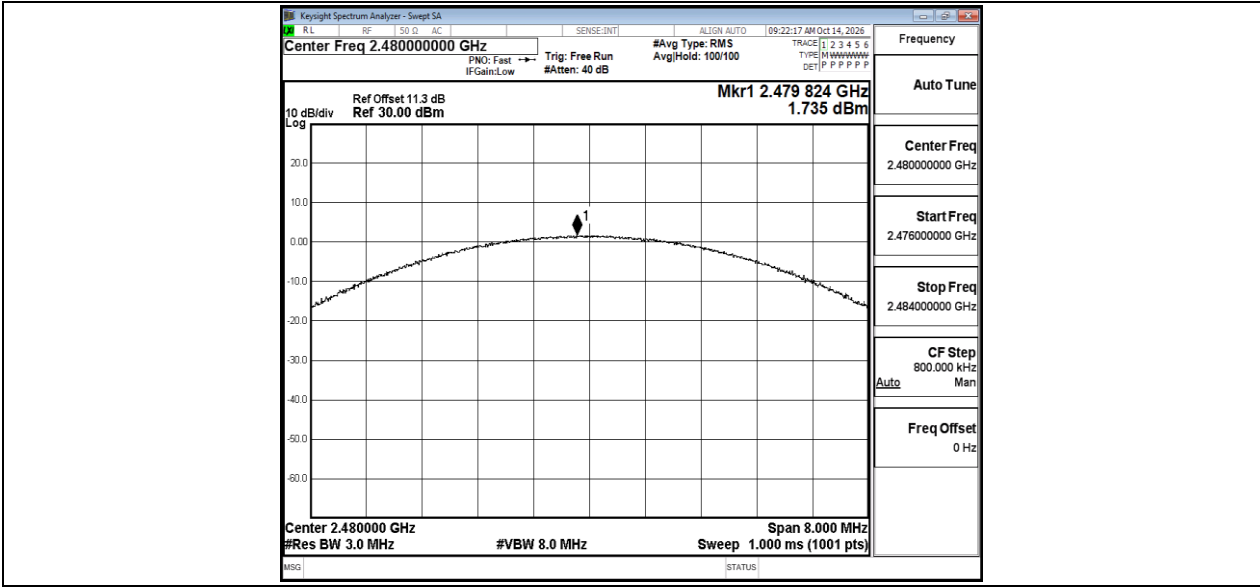
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

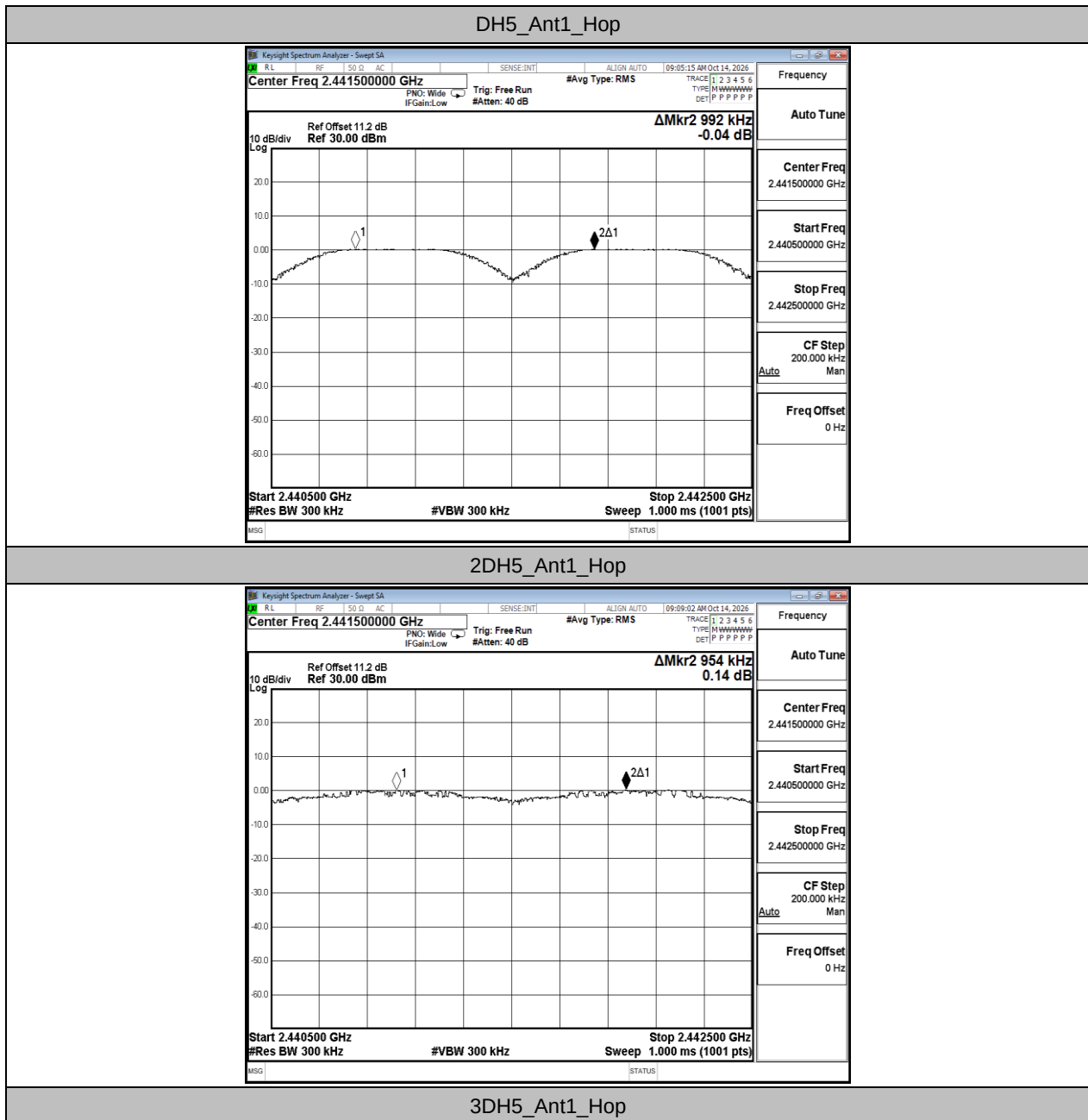


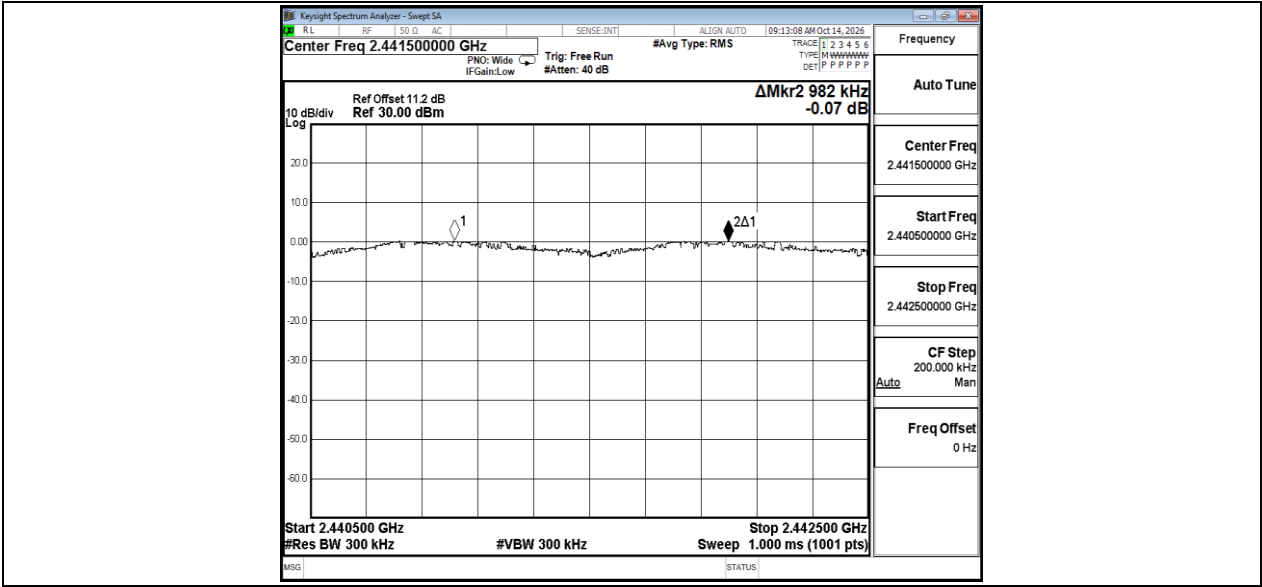
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.992	≥0.696	PASS
2DH5	Ant1	Hop	0.954	≥0.892	PASS
3DH5	Ant1	Hop	0.982	≥0.870	PASS

Test Graphs





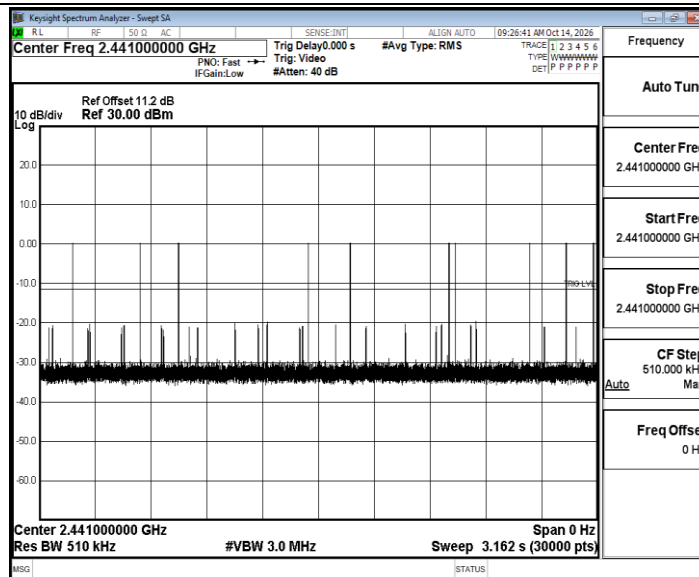
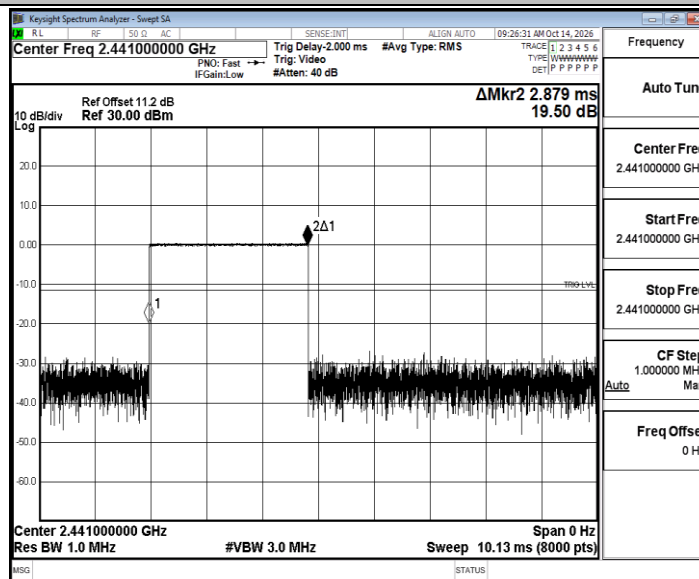
A.4 Time of occupancy

Test Result

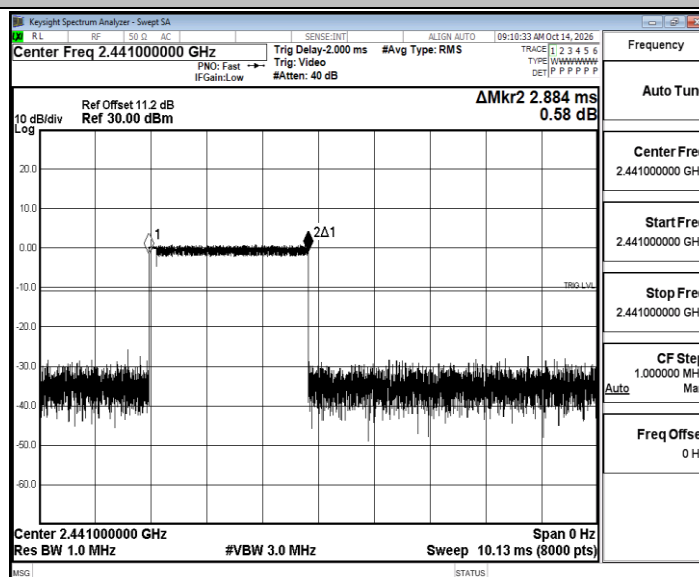
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	110	0.317	≤0.4	PASS
2DH5	Ant1	Hop	2.884	70	0.202	≤0.4	PASS
3DH5	Ant1	Hop	2.887	110	0.318	≤0.4	PASS

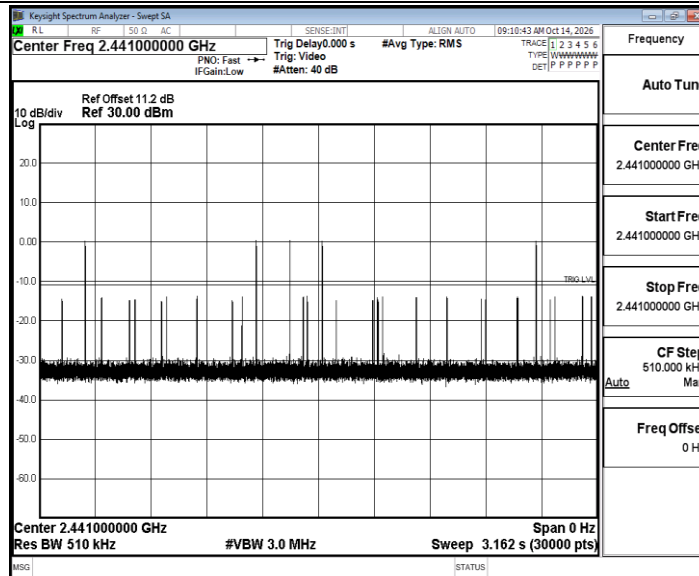
Test Graphs

DH5_Ant1_Hop

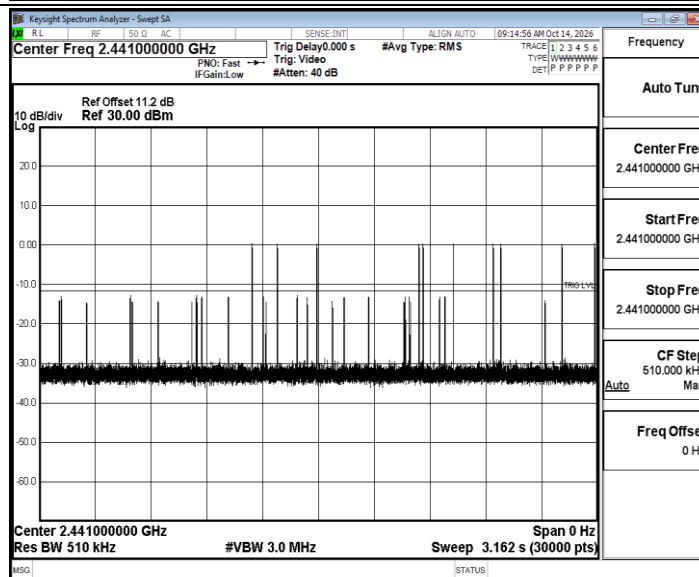
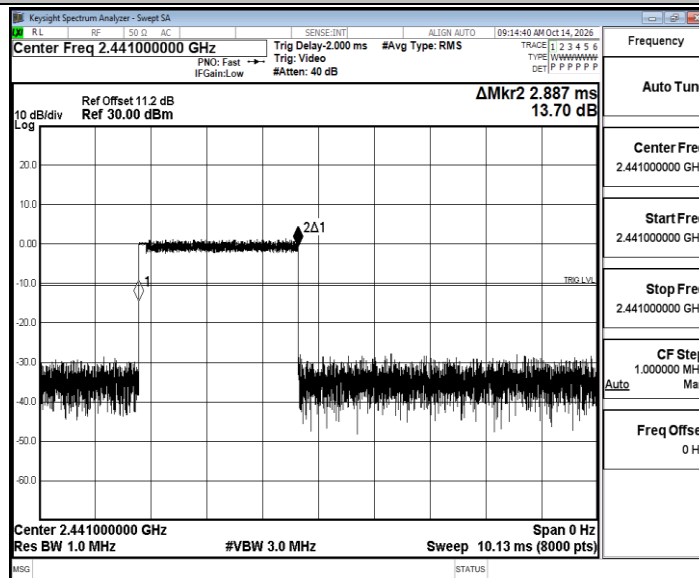


2DH5_Ant1_Hop





3DH5_Ant1_Hop



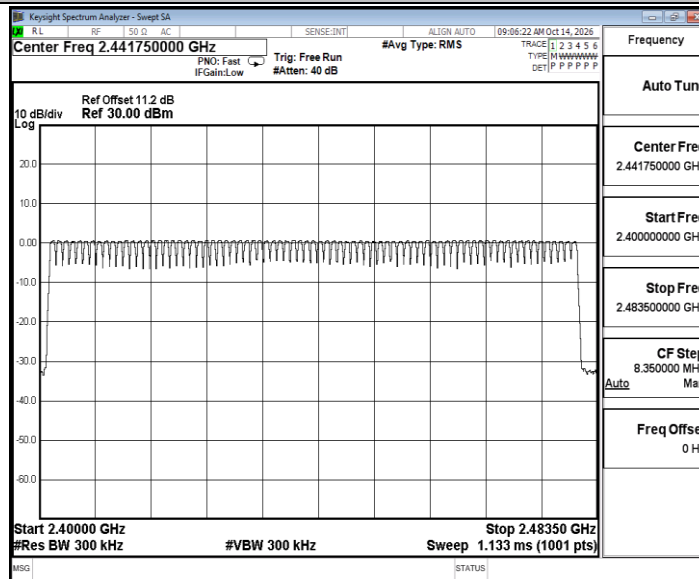
A.5 Number of hopping channels

Test Result

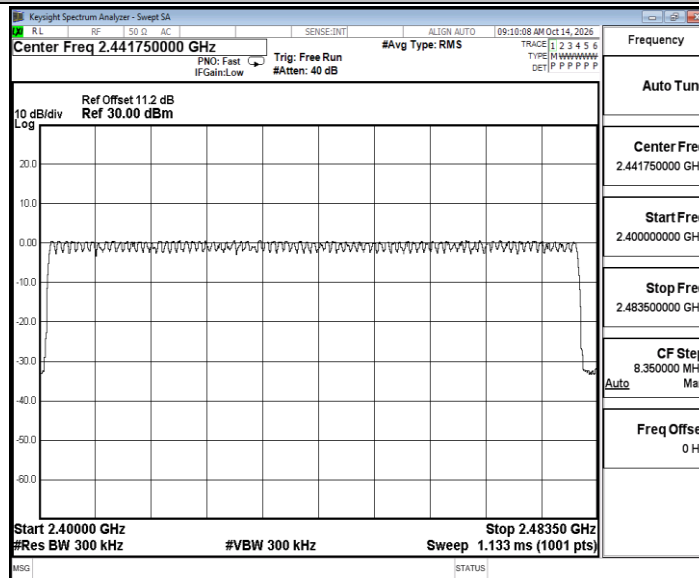
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

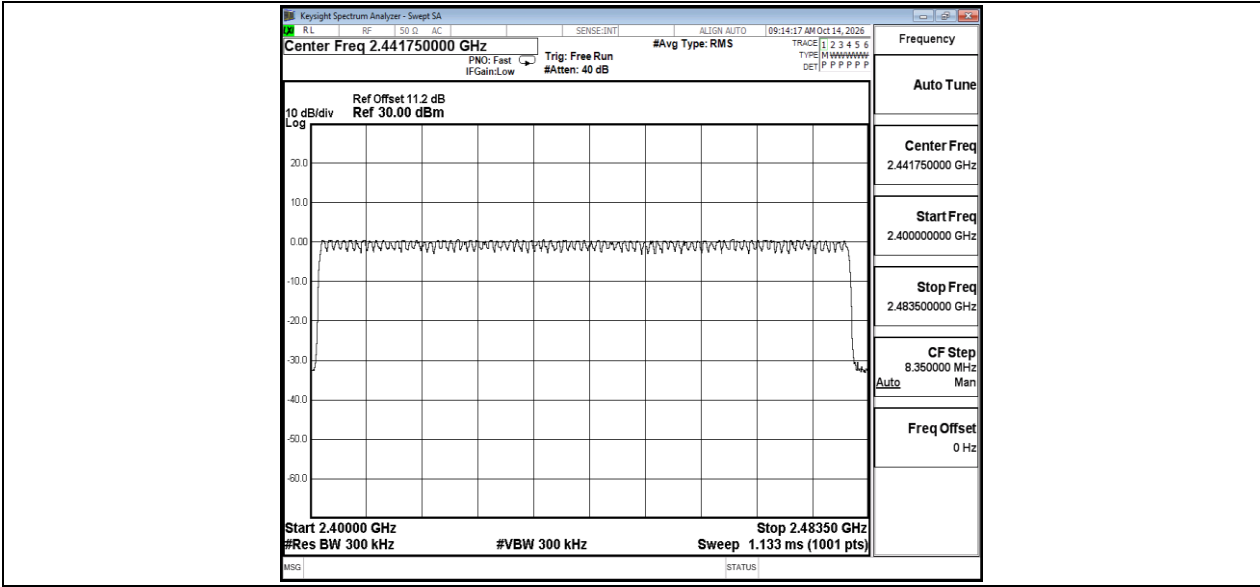
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



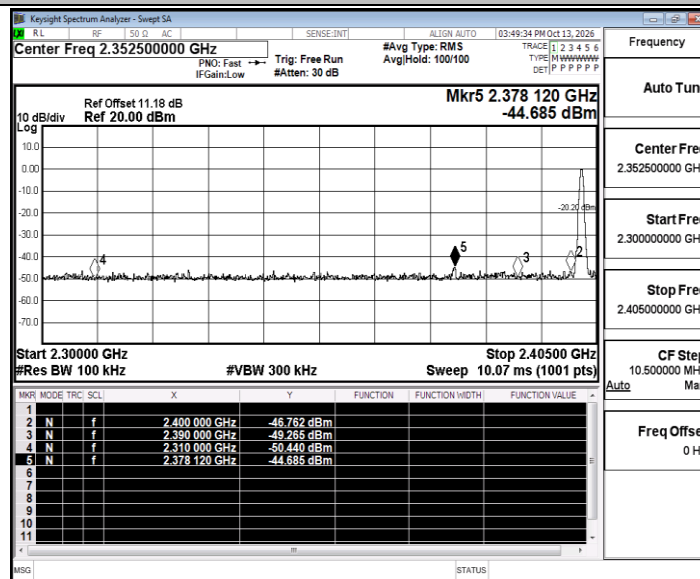
A.6 Band edge measurements

Test Result

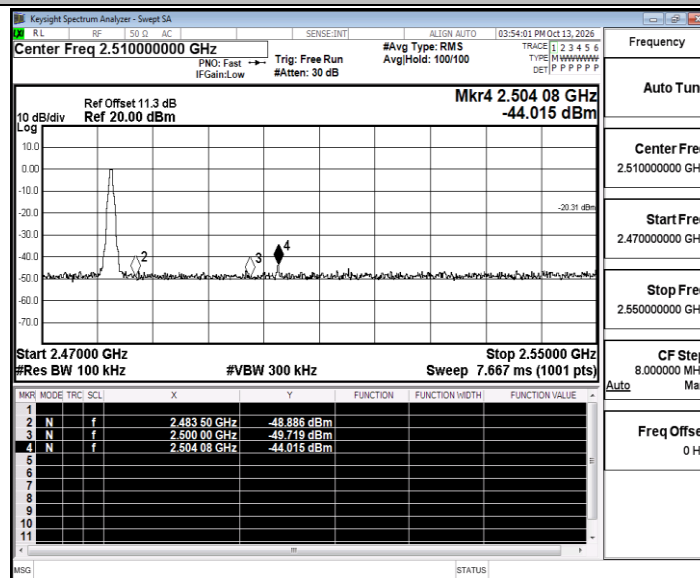
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.20	-44.69	≤ -20.2	PASS
		High	2480	-0.31	-44.02	≤ -20.31	PASS
		Low	Hop_2402	-0.09	-45.26	≤ -20.09	PASS
		High	Hop_2480	-0.21	-45.14	≤ -20.21	PASS
2DH5	Ant1	Low	2402	-0.05	-46.45	≤ -20.05	PASS
		High	2480	-0.11	-44.82	≤ -20.11	PASS
		Low	Hop_2402	-3.81	-45.77	≤ -23.81	PASS
		High	Hop_2480	-3.50	-46.03	≤ -23.5	PASS
3DH5	Ant1	Low	2402	-1.21	-45.57	≤ -21.21	PASS
		High	2480	-0.19	-44.18	≤ -20.19	PASS
		Low	Hop_2402	-3.47	-46.41	≤ -23.47	PASS
		High	Hop_2480	-3.81	-44.88	≤ -23.81	PASS

Test Graphs

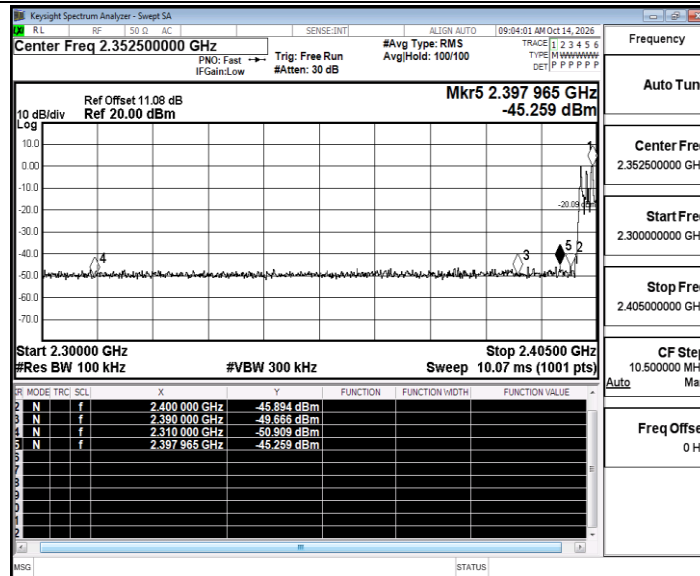
DH5_Ant1_Low_2402



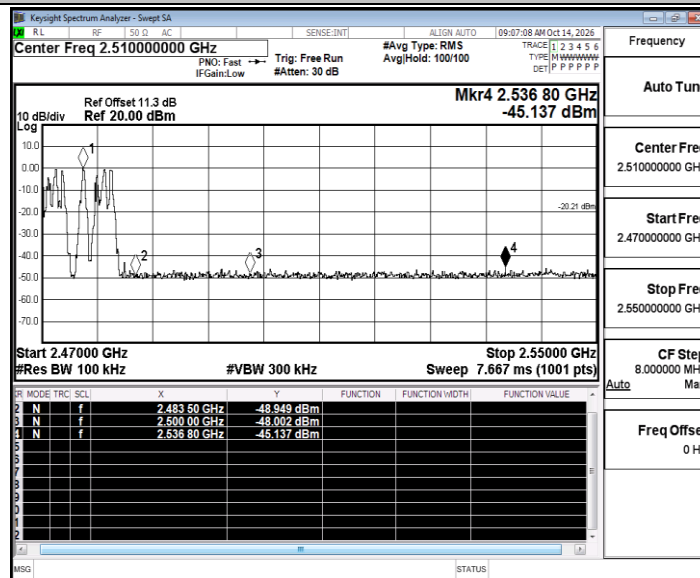
DH5_Ant1_High_2480



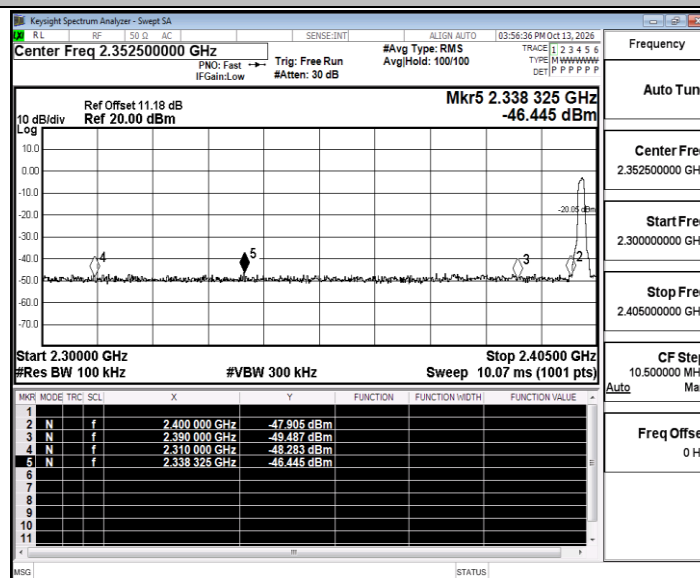
DH5_Ant1_Low_Hop_2402



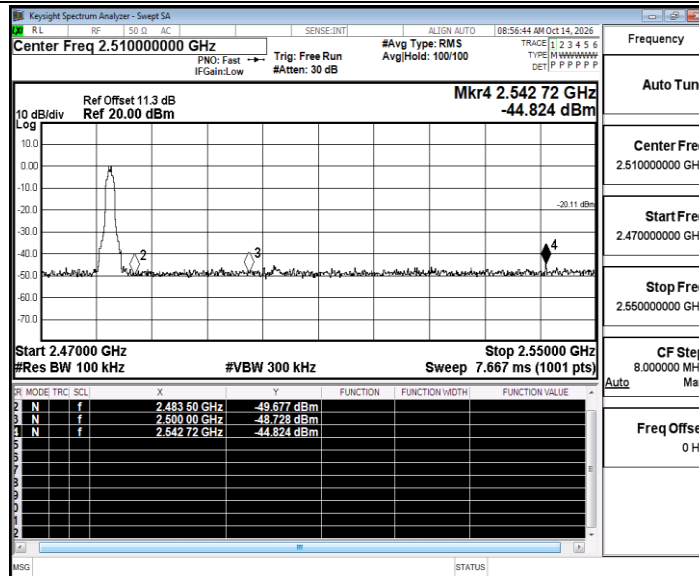
DH5_Ant1_High_Hop_2480



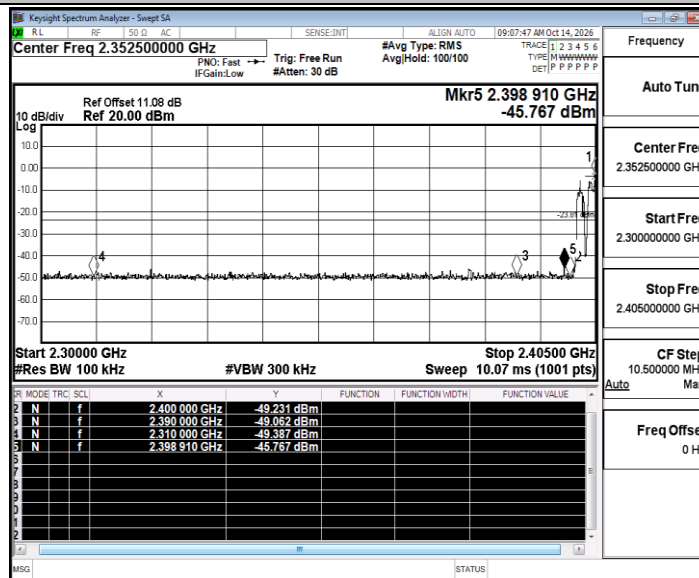
2DH5_Ant1_Low_2402



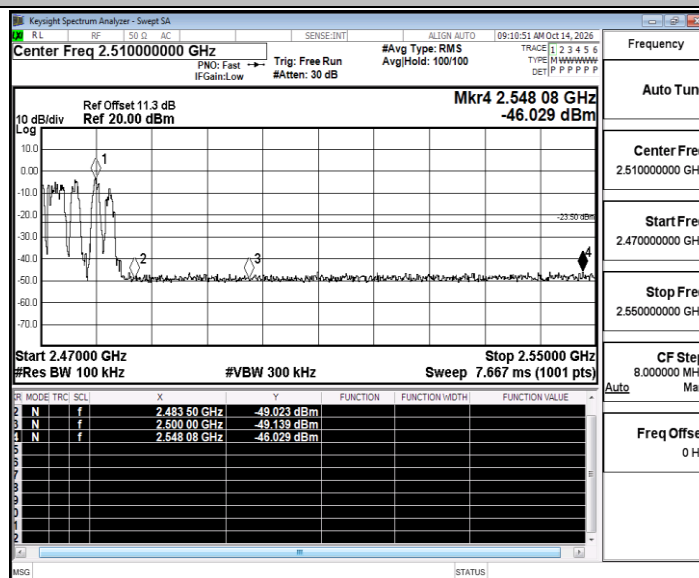
2DH5_Ant1_High_2480



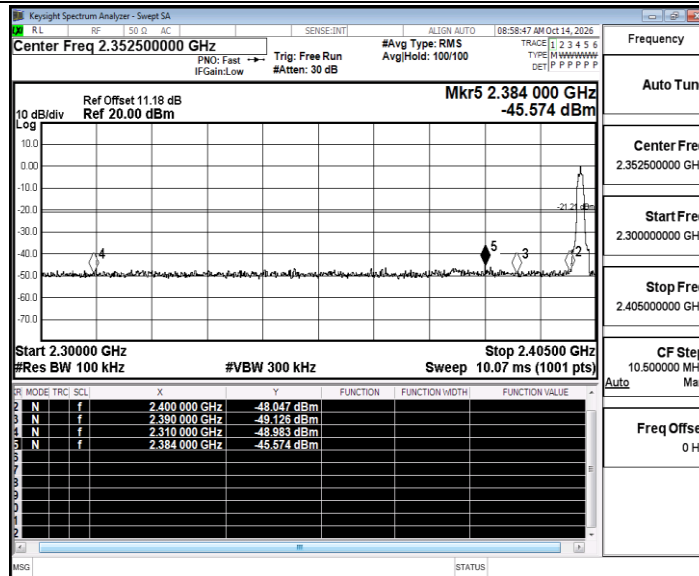
2DH5_Ant1_Low_Hop_2402



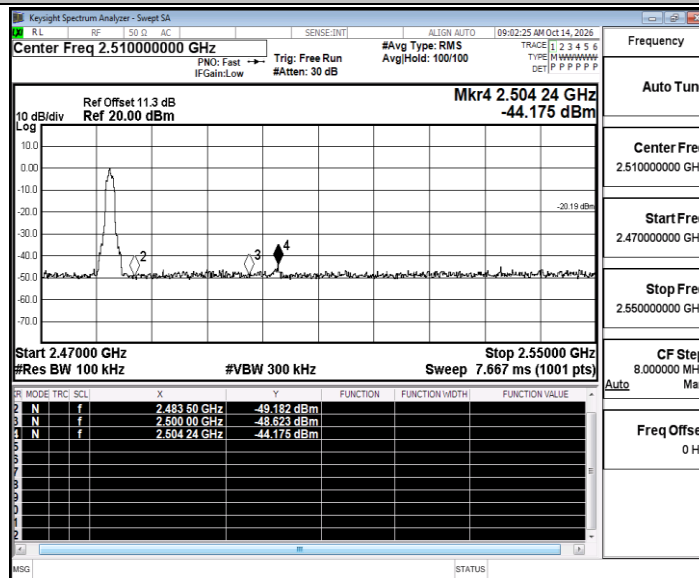
2DH5_Ant1_High_Hop_2480



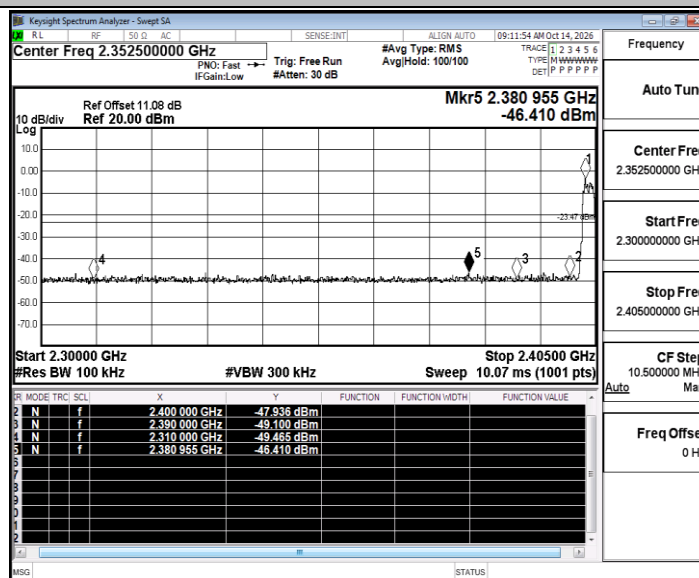
3DH5_Ant1_Low_2402



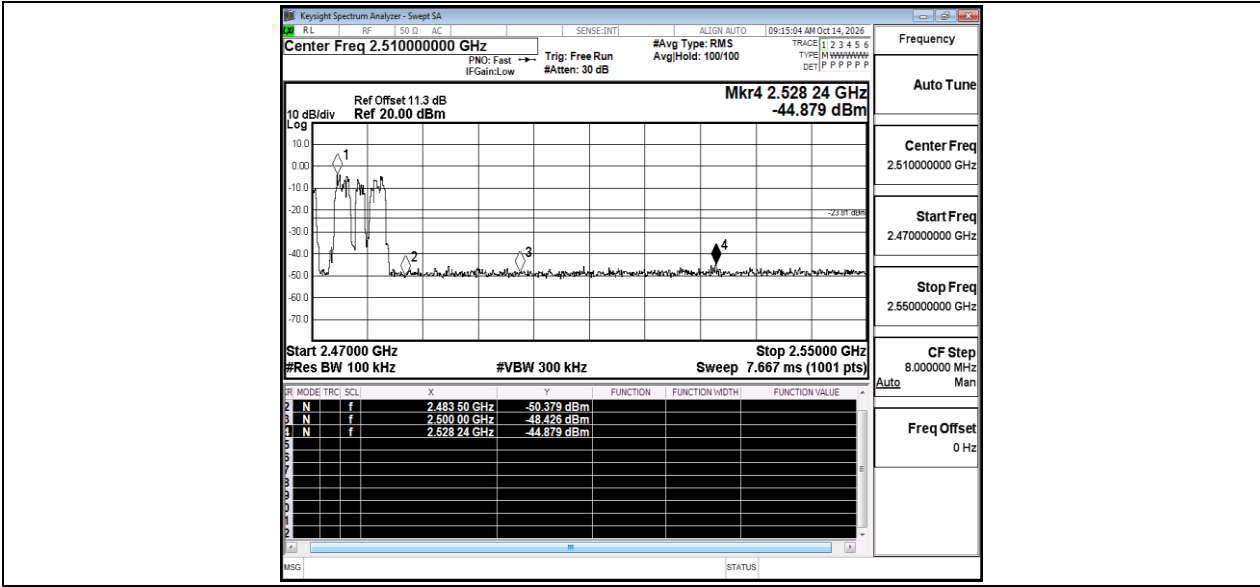
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



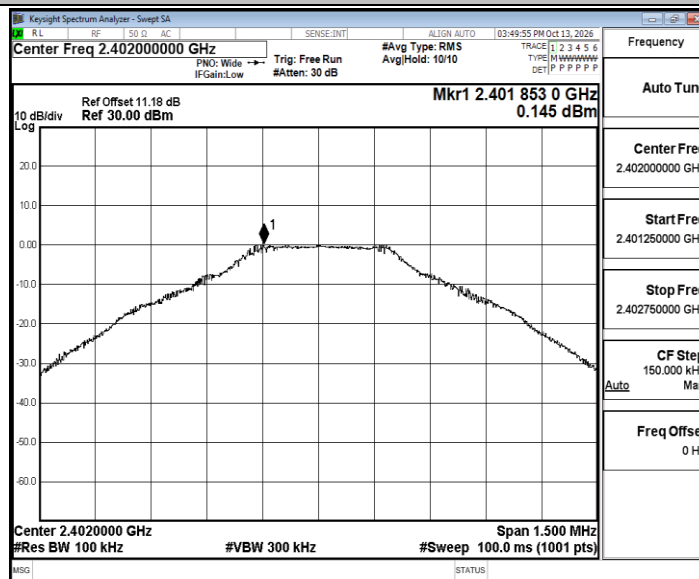
A.7 Conducted Spurious Emission

Test Result

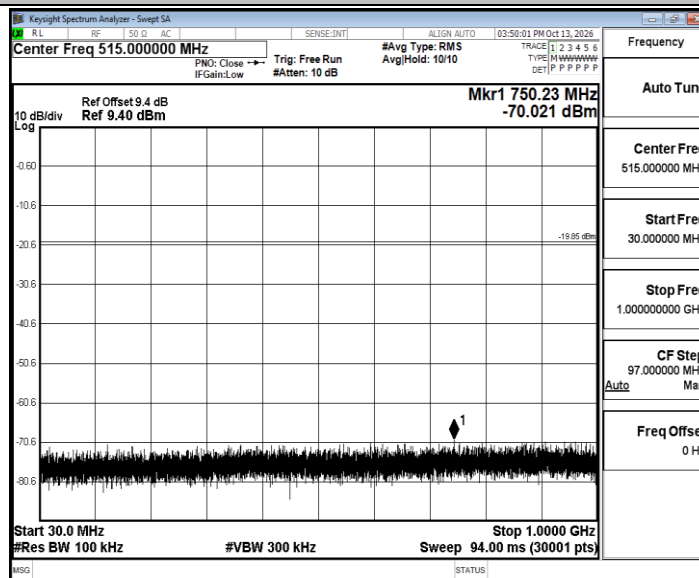
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.15	0.15	---	PASS
			30~1000	0.15	-70.02	≤-19.85	PASS
			1000~26500	0.15	-31.21	≤-19.85	PASS
		2441	Reference	0.02	0.02	---	PASS
			30~1000	0.02	-70.31	≤-19.98	PASS
			1000~26500	0.02	-31.11	≤-19.98	PASS
		2480	Reference	-0.06	-0.06	---	PASS
			30~1000	-0.06	-68.76	≤-20.06	PASS
			1000~26500	-0.06	-31.75	≤-20.06	PASS
2DH5	Ant1	2402	Reference	0.14	0.14	---	PASS
			30~1000	0.14	-70	≤-19.86	PASS
			1000~26500	0.14	-35.3	≤-19.86	PASS
		2441	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-69.38	≤-20.01	PASS
			1000~26500	-0.01	-34.41	≤-20.01	PASS
		2480	Reference	-0.05	-0.05	---	PASS
			30~1000	-0.05	-70.18	≤-20.05	PASS
			1000~26500	-0.05	-33	≤-20.05	PASS
3DH5	Ant1	2402	Reference	0.13	0.13	---	PASS
			30~1000	0.13	-69.79	≤-19.87	PASS
			1000~26500	0.13	-36.24	≤-19.87	PASS
		2441	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-69.37	≤-20.01	PASS
			1000~26500	-0.01	-32.62	≤-20.01	PASS
		2480	Reference	-0.08	-0.08	---	PASS
			30~1000	-0.08	-70.36	≤-20.08	PASS
			1000~26500	-0.08	-34.62	≤-20.08	PASS

Test Graphs

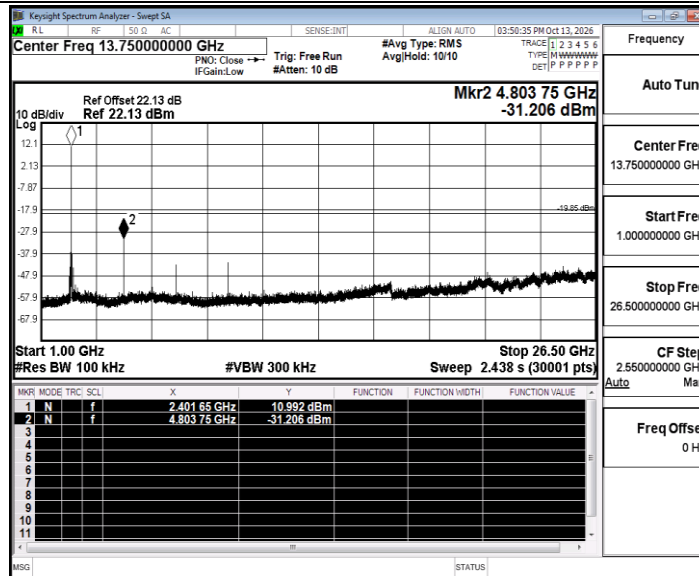
DH5_Ant1_2402_0~Reference



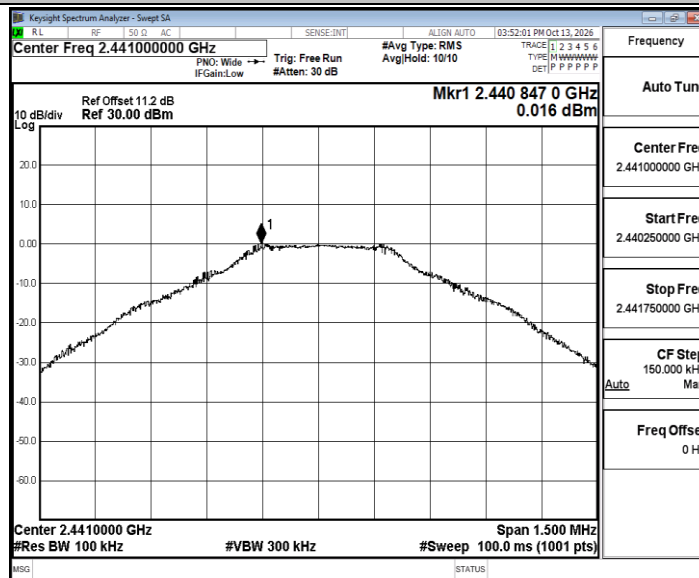
DH5_Ant1_2402_30~1000



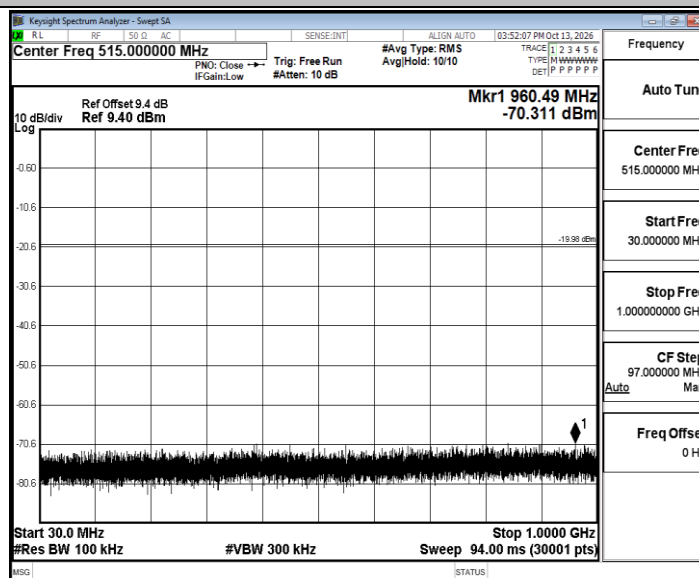
DH5_Ant1_2402_1000~26500



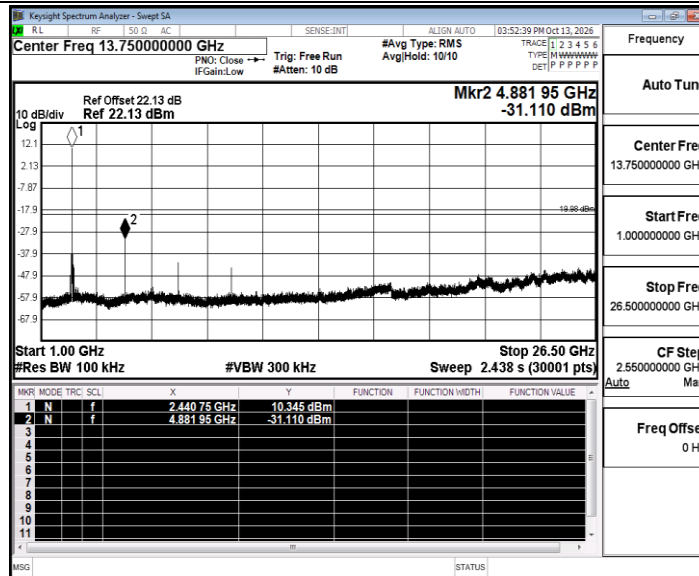
DH5_Ant1_2441_0~Reference



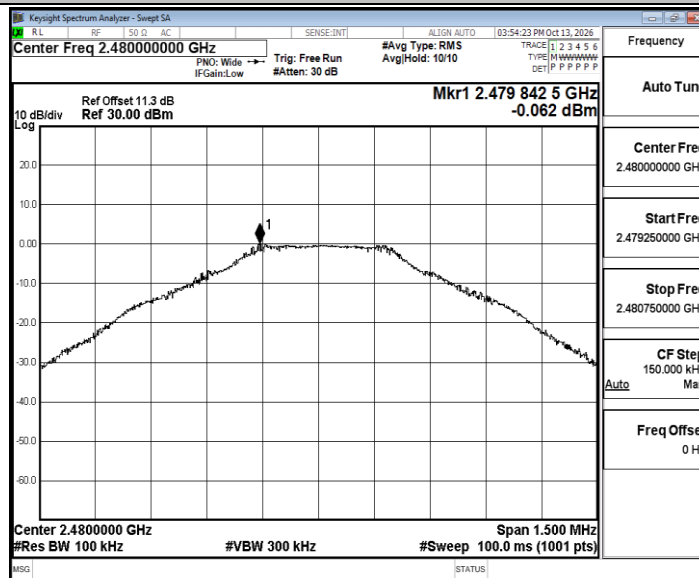
DH5_Ant1_2441_30~1000



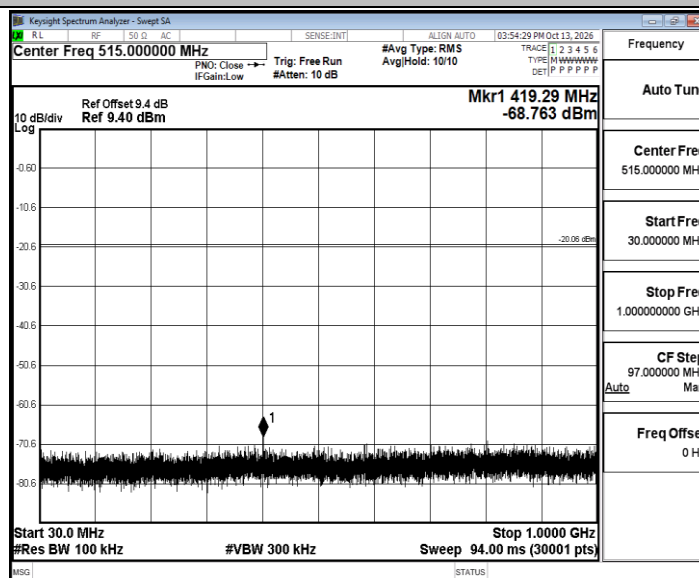
DH5_Ant1_2441_1000~26500



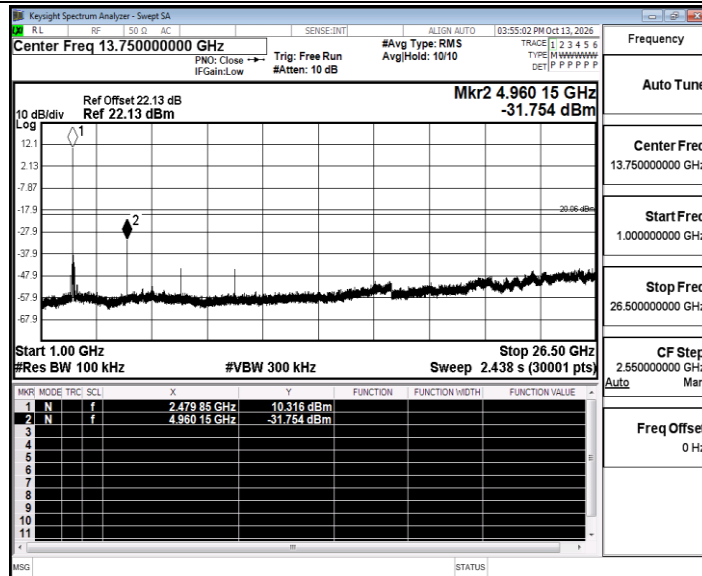
DH5_Ant1_2480_0~Reference



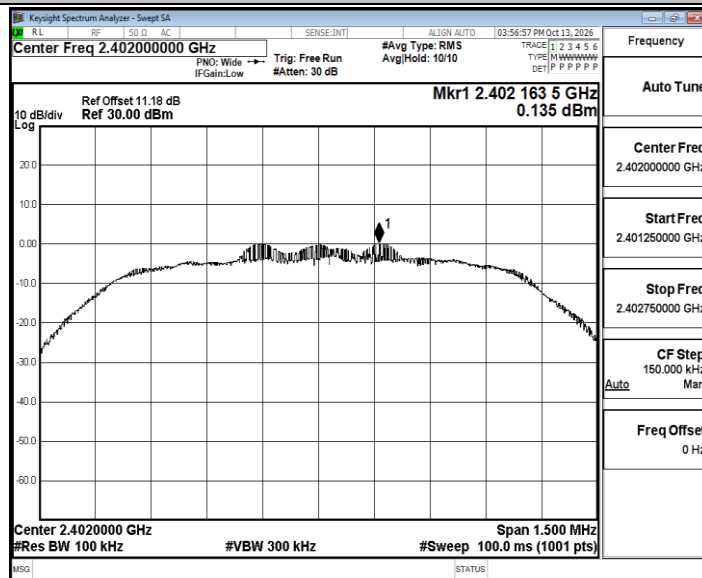
DH5_Ant1_2480_30~1000



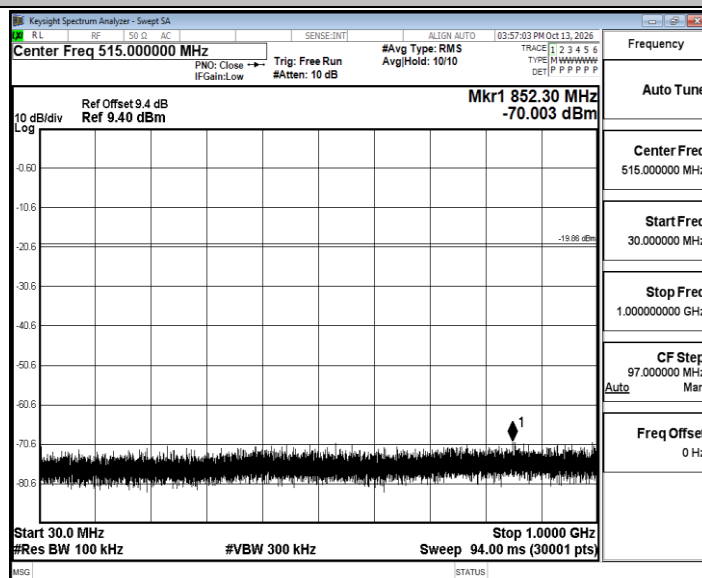
DH5_Ant1_2480_1000~26500



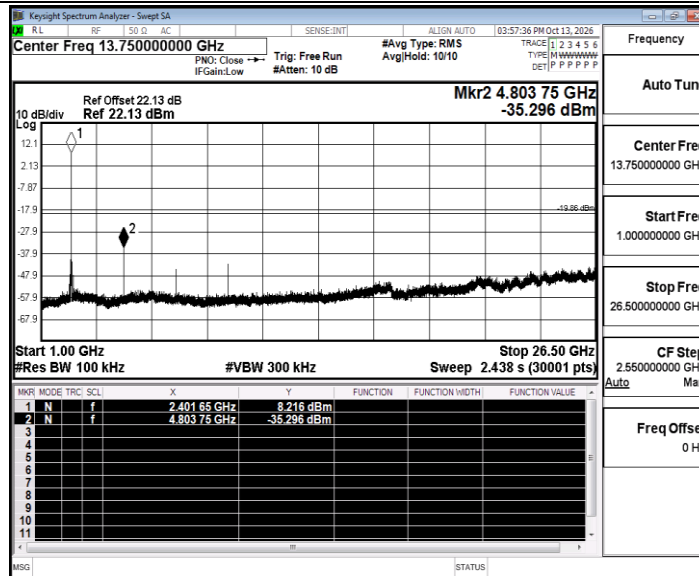
2DH5_Ant1_2402_0~Reference



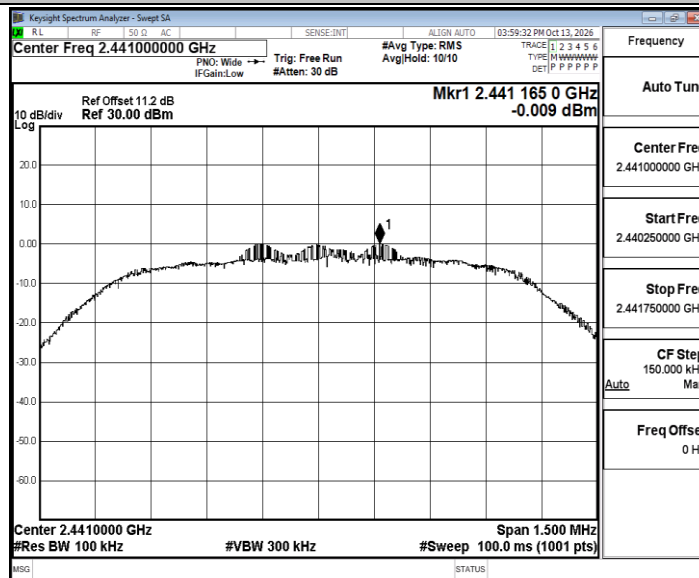
2DH5_Ant1_2402_30~1000



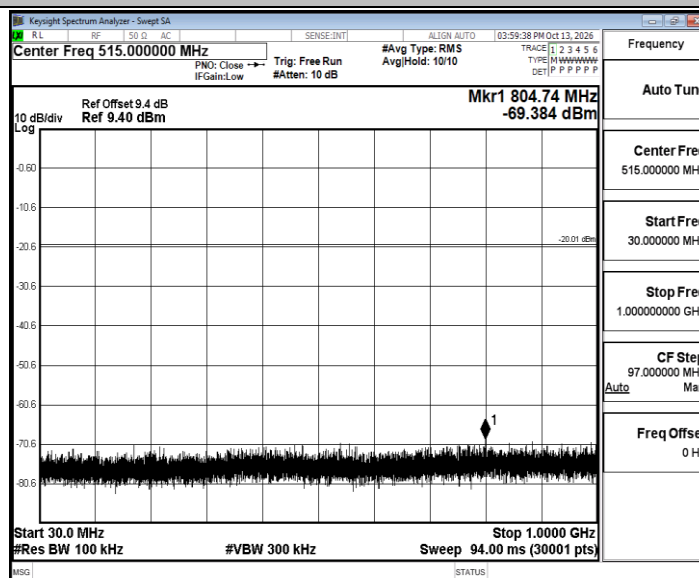
2DH5_Ant1_2402_1000~26500



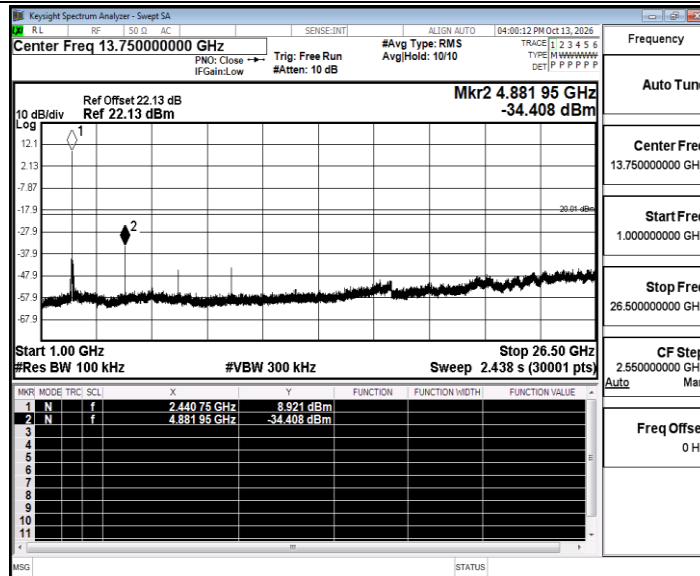
2DH5_Ant1_2441_0~Reference



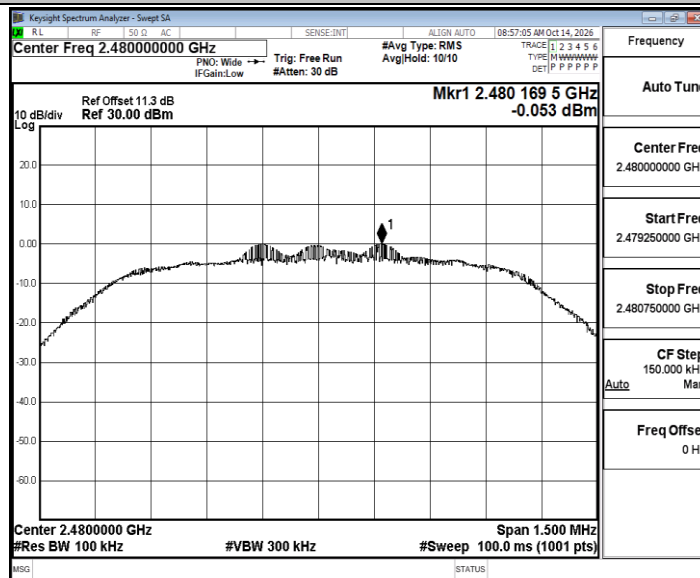
2DH5_Ant1_2441_30~1000



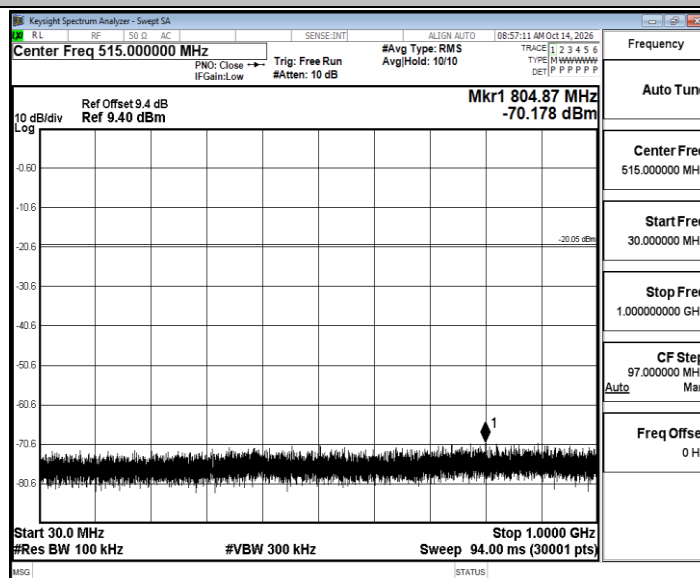
2DH5_Ant1_2441_1000~26500



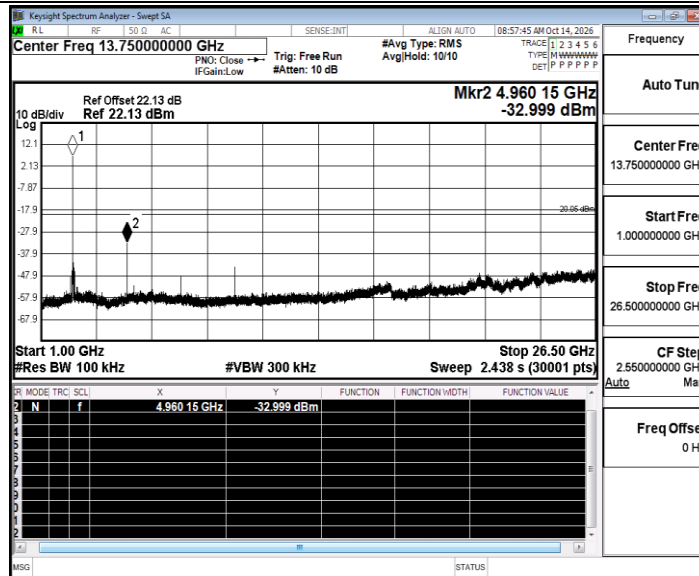
2DH5_Ant1_2480_0~Reference



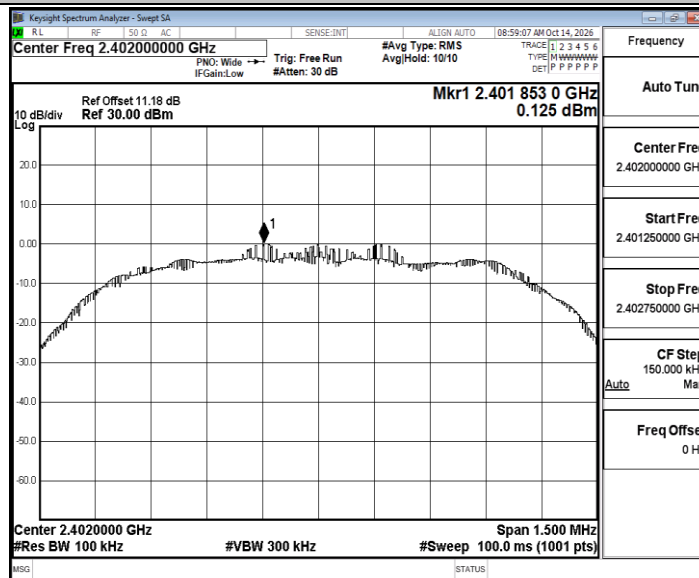
2DH5_Ant1_2480_30~1000



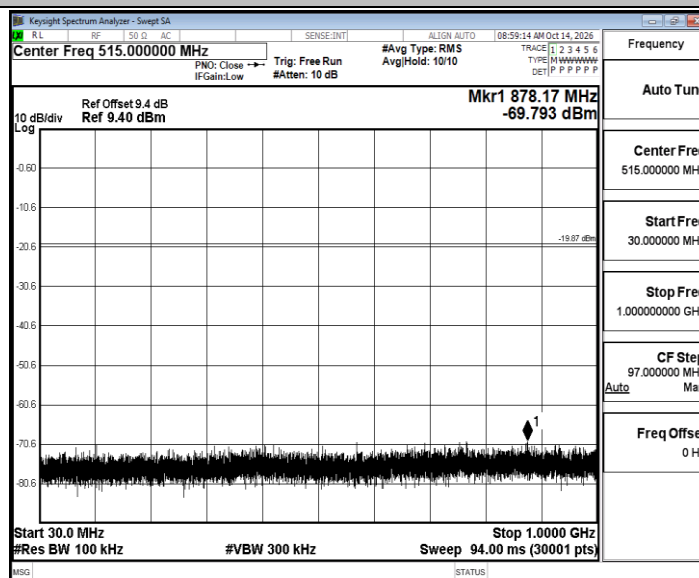
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



3DH5_Ant1_2402_1000~26500