

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Smart Terminal

Test Model: MX15

Environmental Conditions

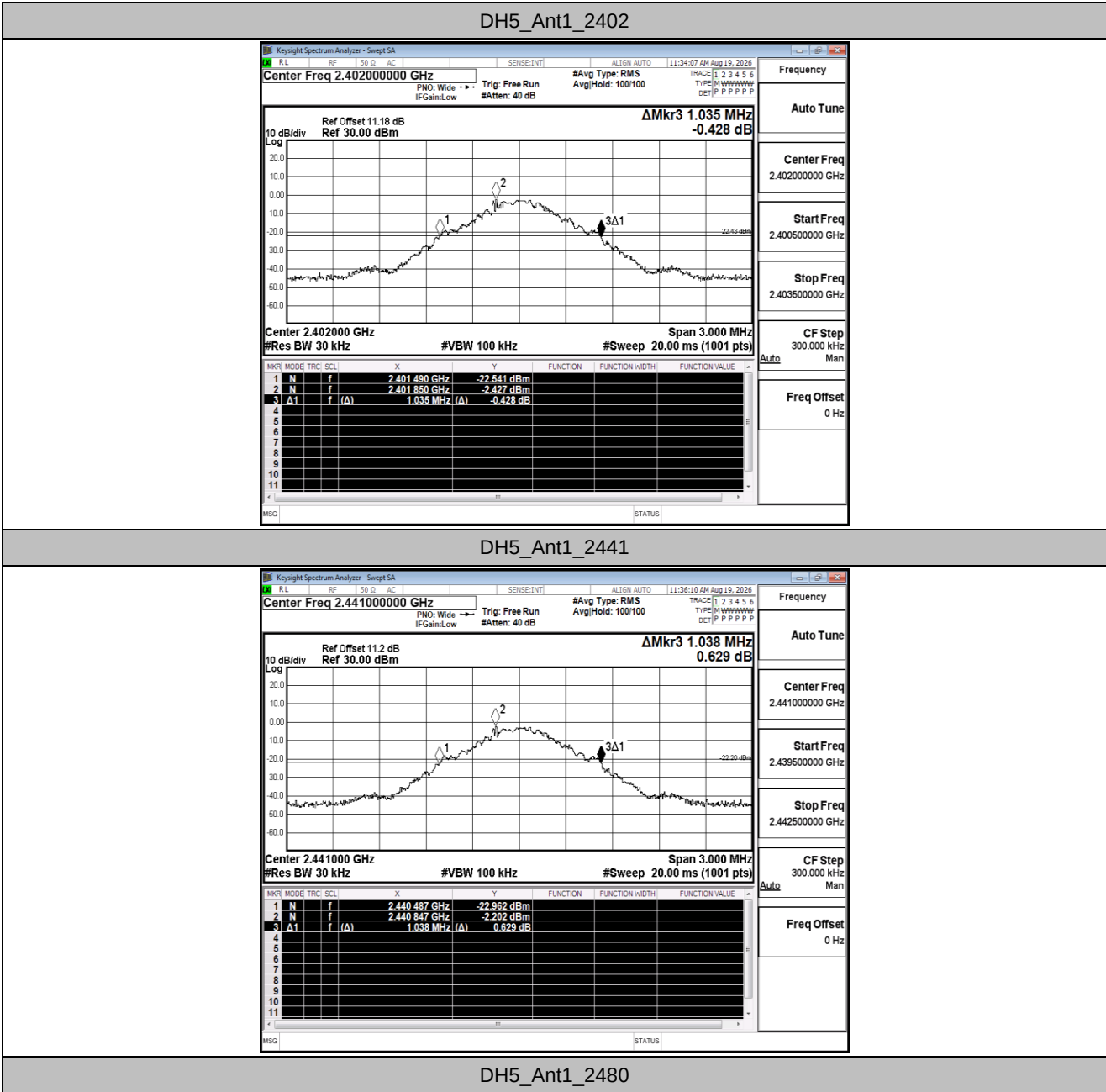
Temperature:	24.8°C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

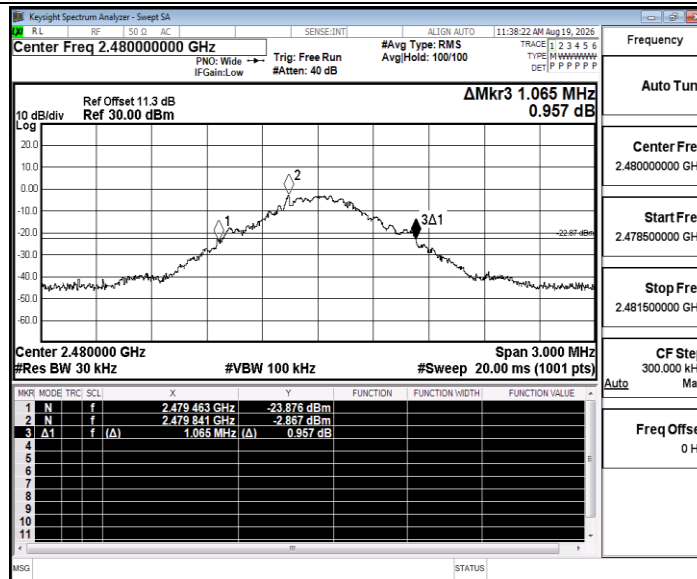
A.1 20dB Emission Bandwidth

Test Result

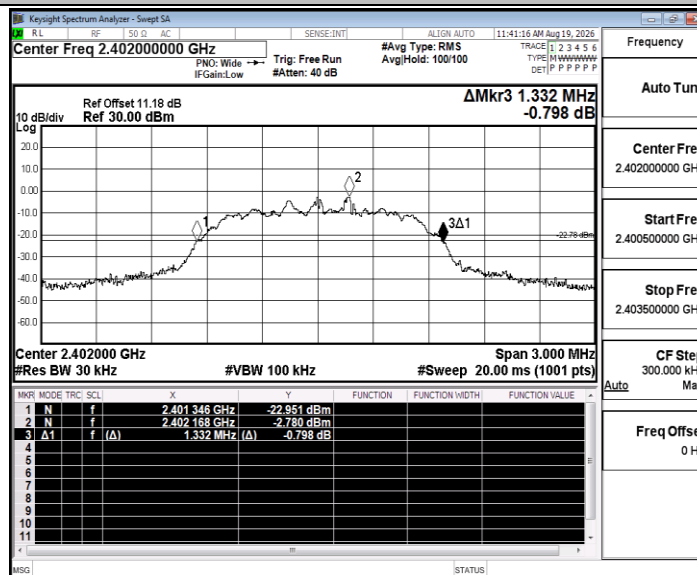
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.035	2401.490	2402.525	---	---
		2441	1.038	2440.487	2441.525	---	---
		2480	1.065	2479.463	2480.528	---	---
2DH5	Ant1	2402	1.332	2401.346	2402.678	---	---
		2441	1.335	2440.346	2441.681	---	---
		2480	1.341	2479.346	2480.687	---	---
3DH5	Ant1	2402	1.296	2401.361	2402.657	---	---
		2441	1.293	2440.361	2441.654	---	---
		2480	1.293	2479.358	2480.651	---	---

Test Graphs

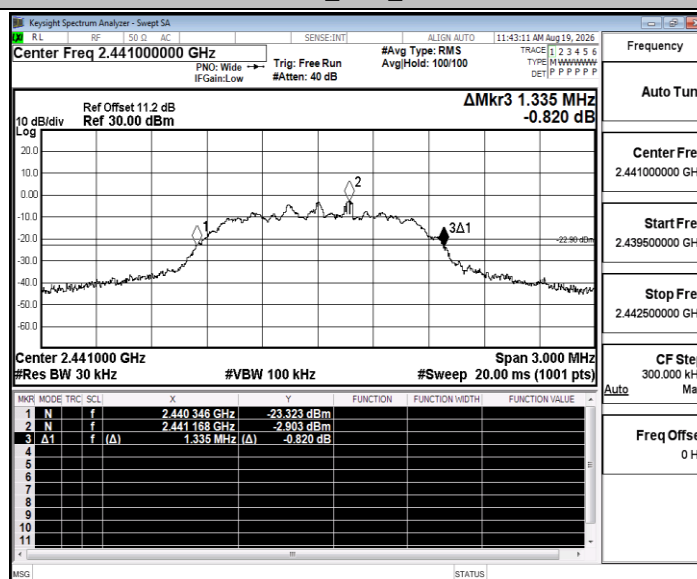


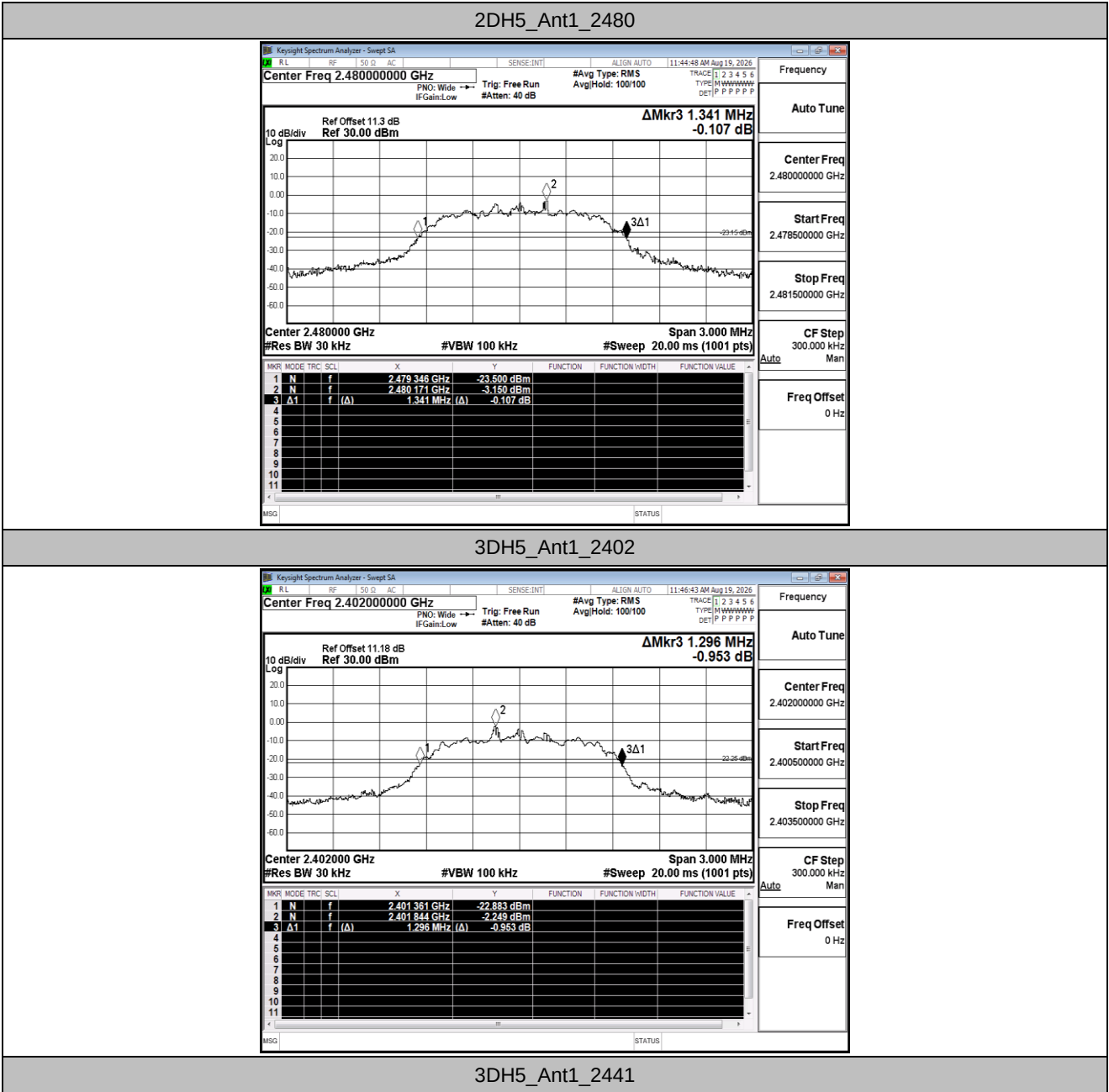


2DH5_Ant1_2402



2DH5_Ant1_2441





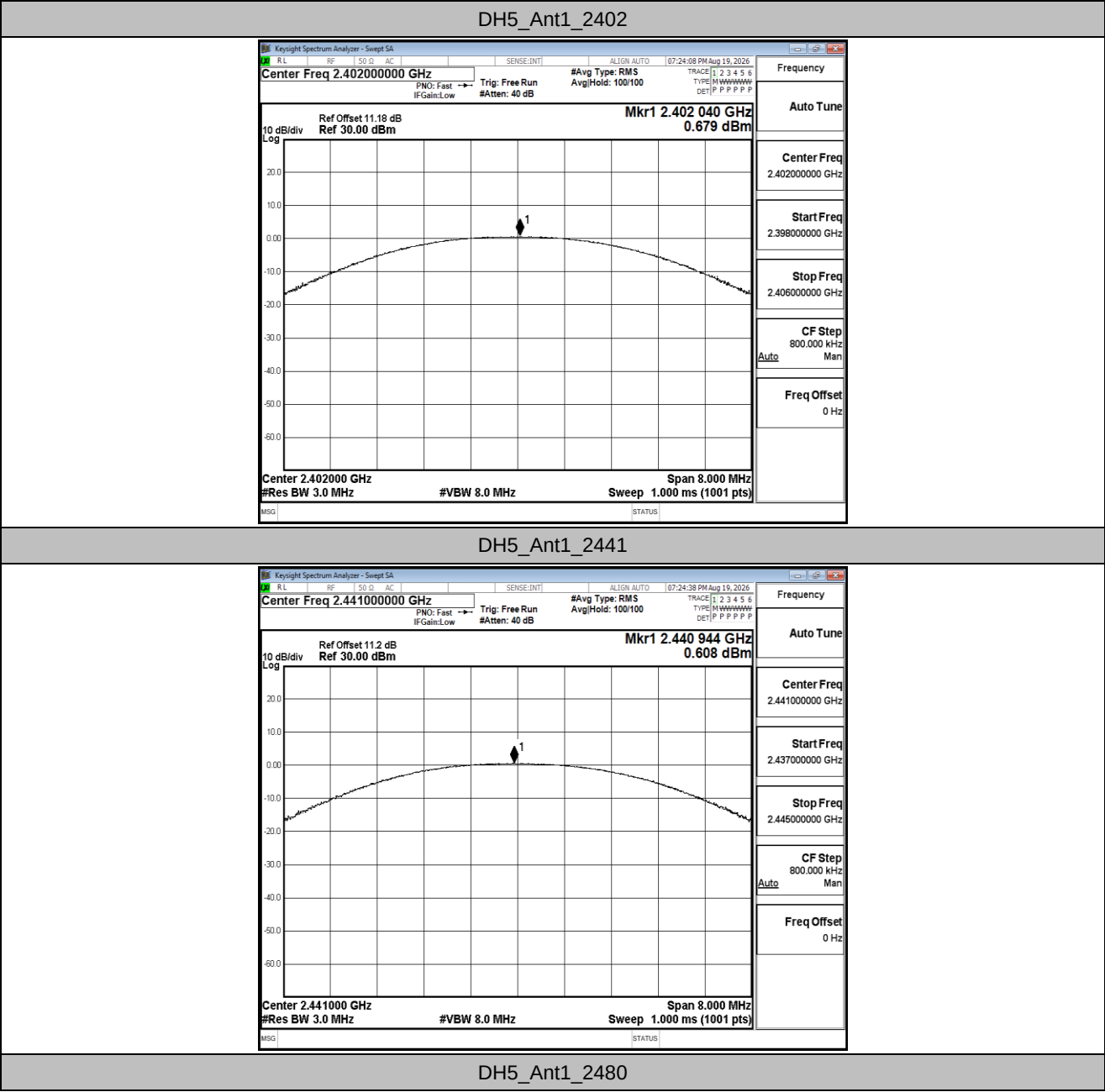


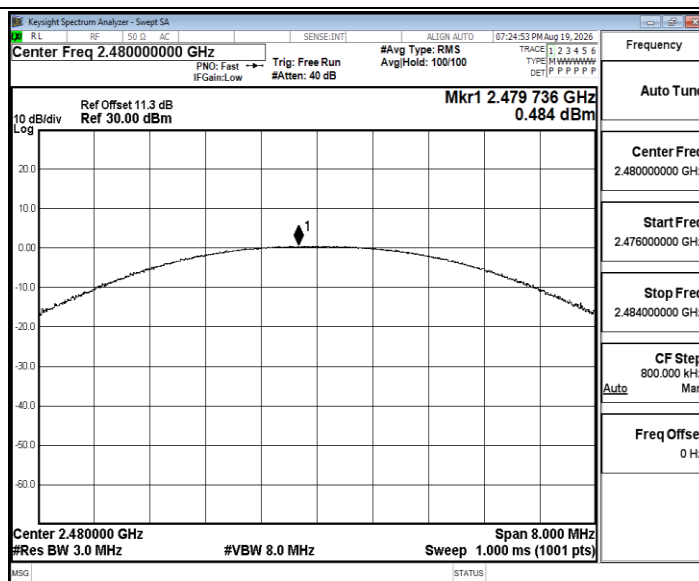
A.2 Maximum Peak conducted output power

Test Result Peak

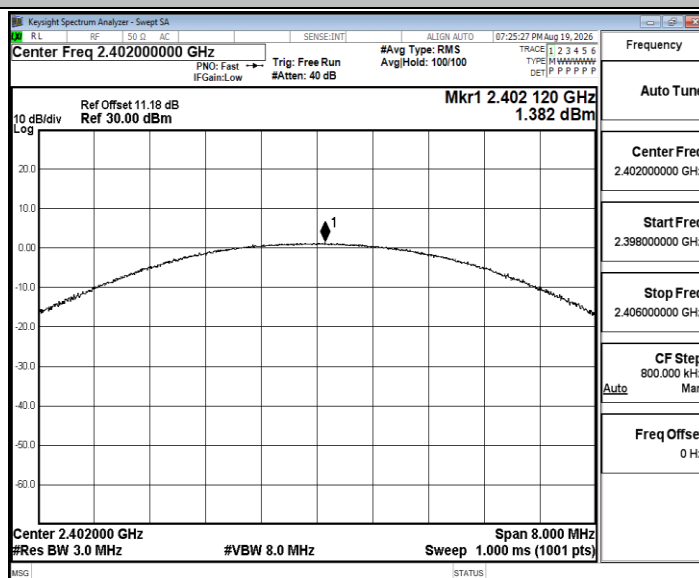
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.68	≤20.97	PASS
		2441	0.61	≤20.97	PASS
		2480	0.48	≤20.97	PASS
2DH5	Ant1	2402	1.38	≤20.97	PASS
		2441	1.22	≤20.97	PASS
		2480	1.14	≤20.97	PASS
3DH5	Ant1	2402	1.58	≤20.97	PASS
		2441	1.69	≤20.97	PASS
		2480	1.49	≤20.97	PASS

Test Graphs

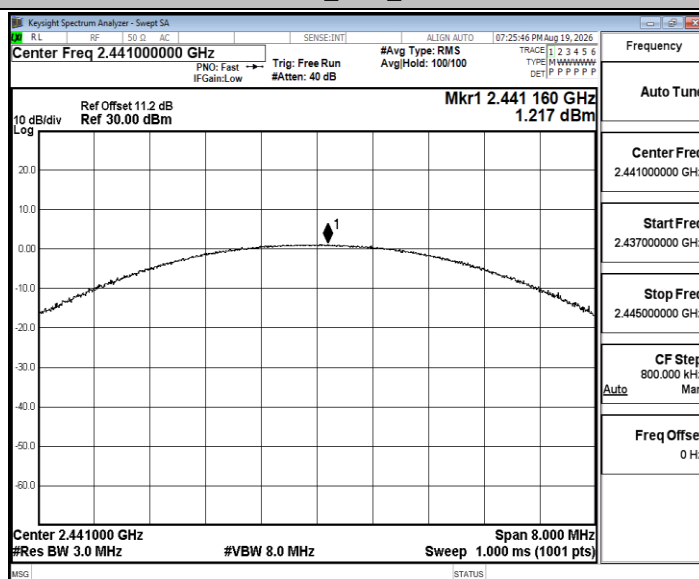




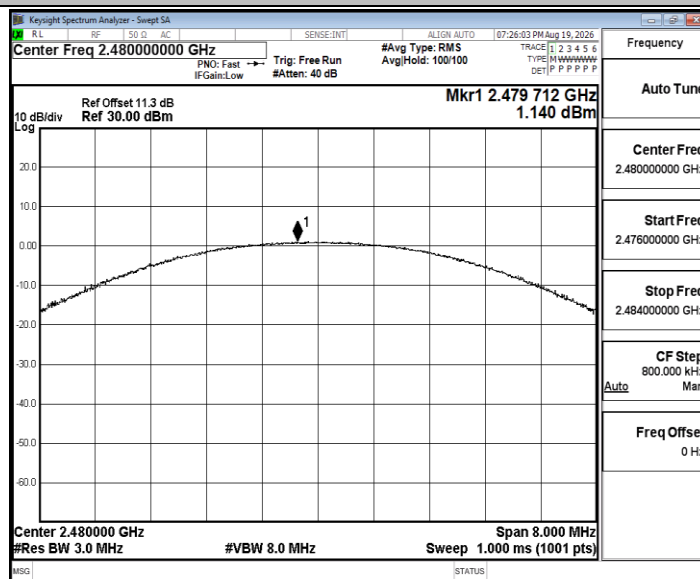
2DH5_Ant1_2402



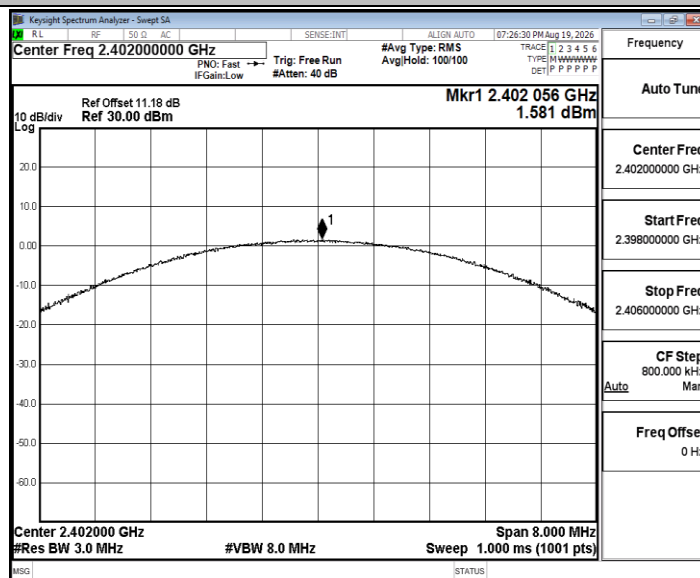
2DH5_Ant1_2441



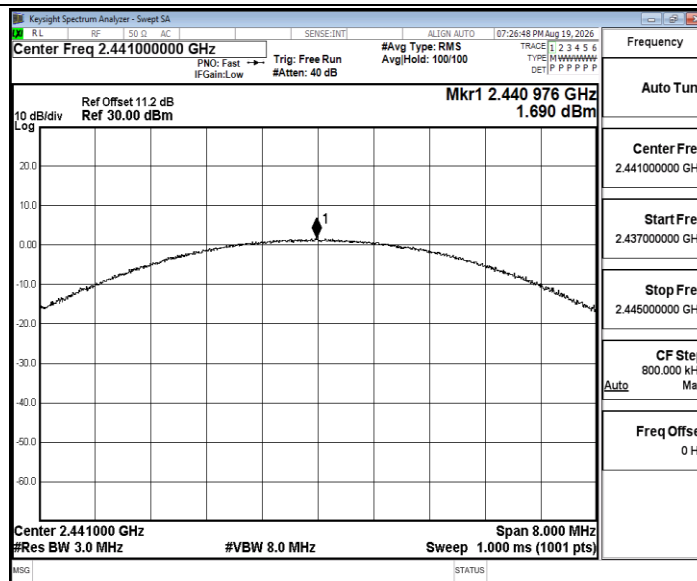
2DH5_Ant1_2480



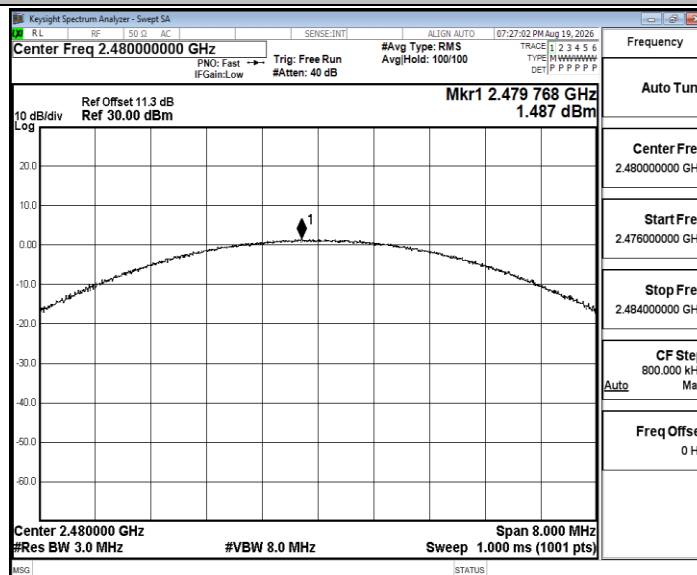
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



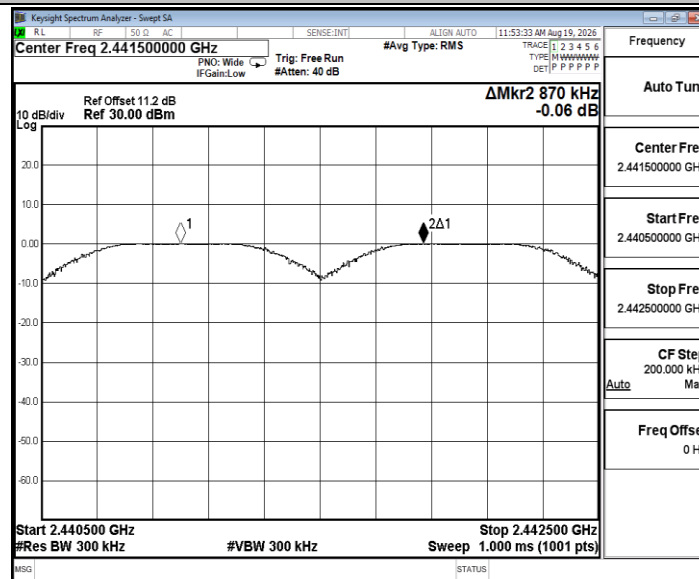
A.3 Carrier frequency separation

Test Result

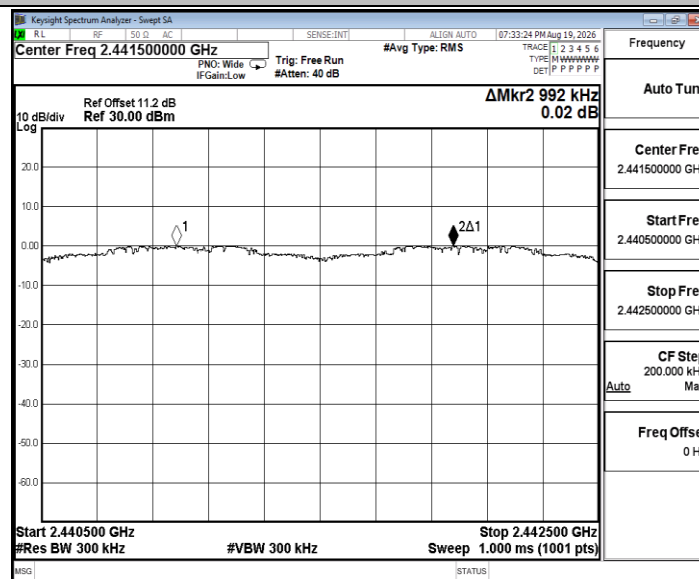
TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.87	≥0.710	PASS
2DH5	Ant1	Hop	0.992	≥0.894	PASS
3DH5	Ant1	Hop	1.024	≥0.864	PASS

Test Graphs

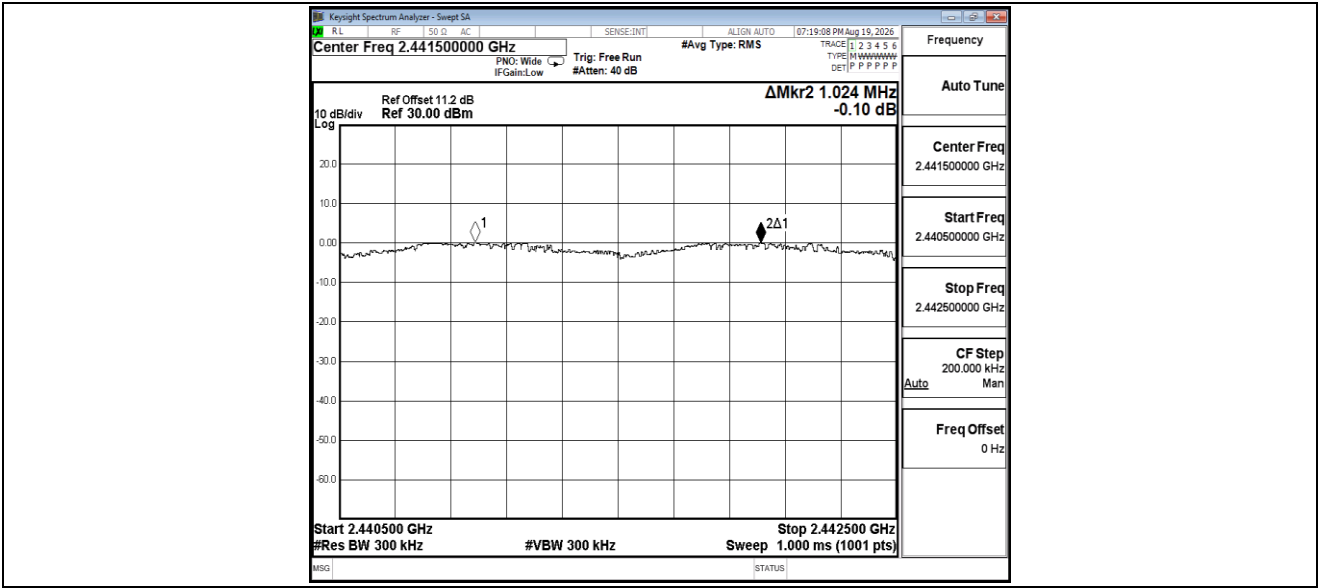
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

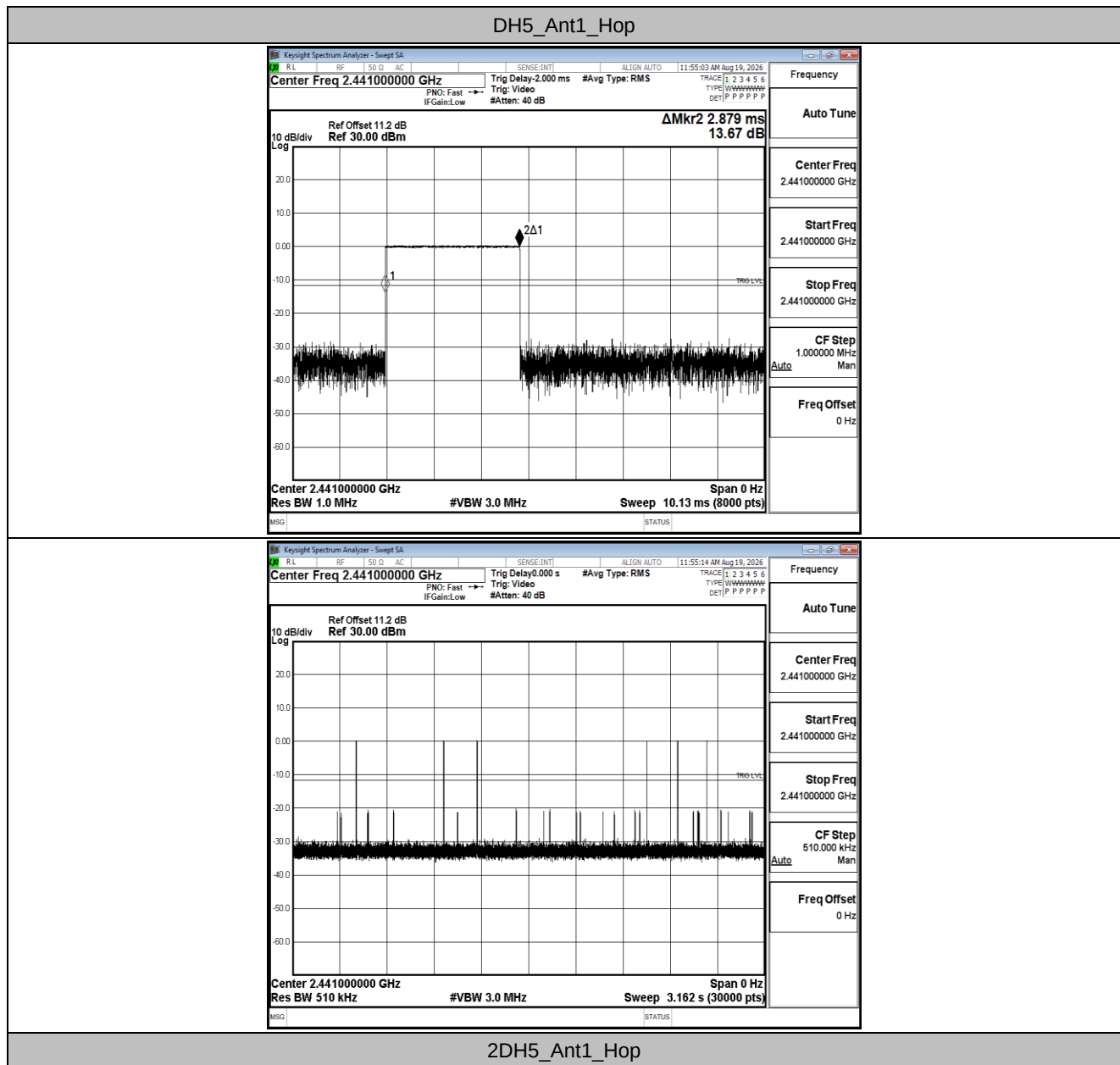


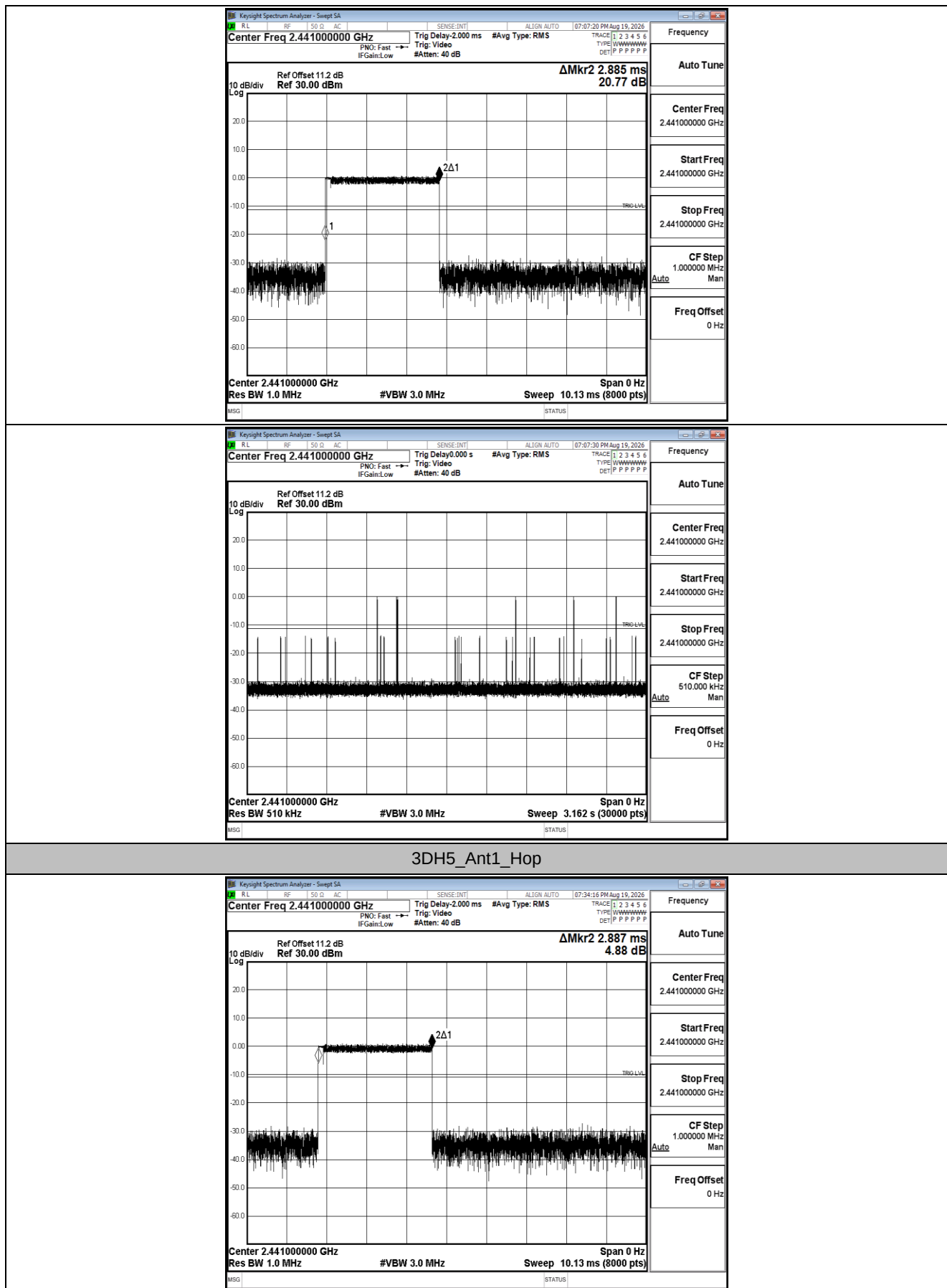
A.4 Time of occupancy

Test Result

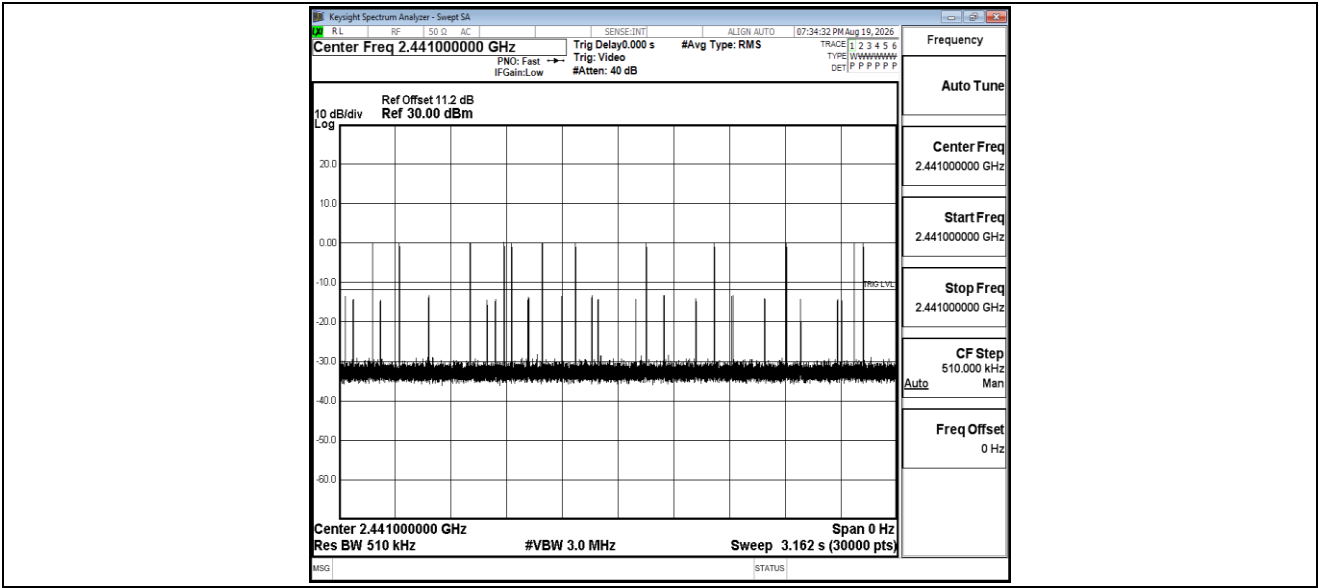
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	70	0.202	≤0.4	PASS
2DH5	Ant1	Hop	2.885	70	0.202	≤0.4	PASS
3DH5	Ant1	Hop	2.887	130	0.375	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop



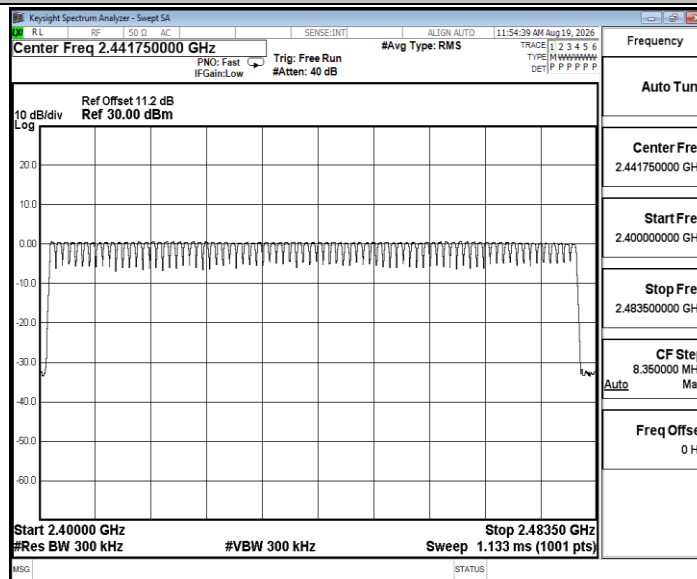
A.5 Number of hopping channels

Test Result

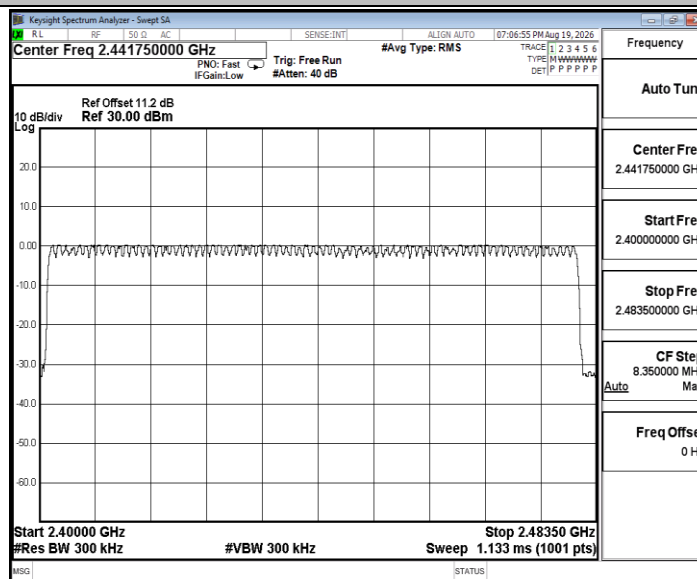
TestMode	Antenna	Freq(MHz)	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

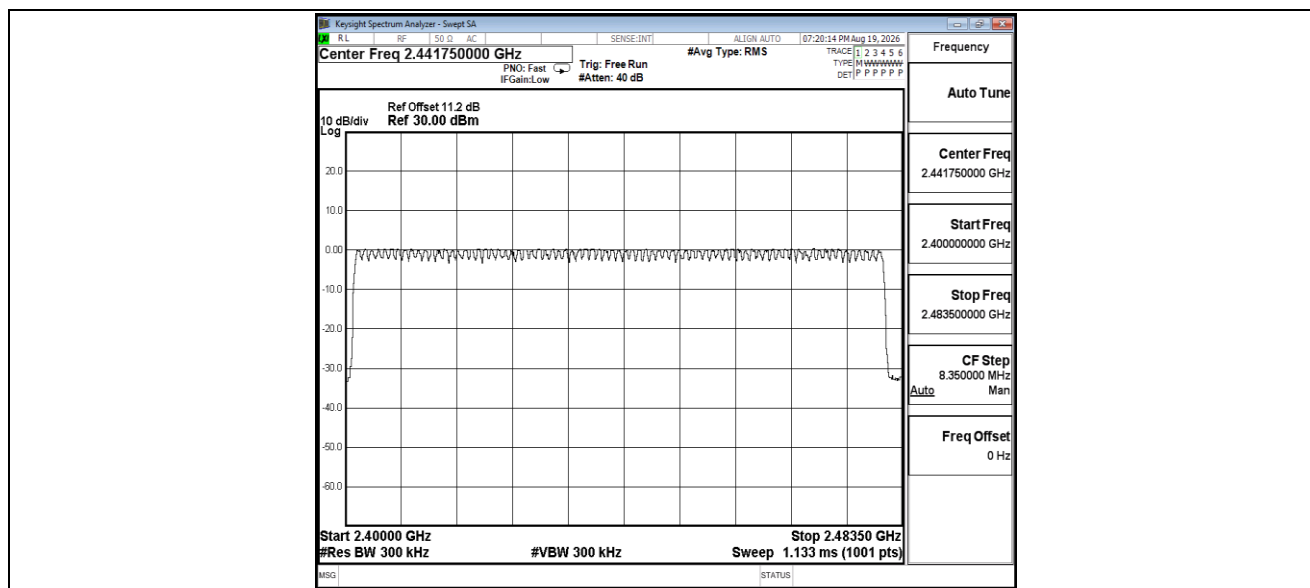
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



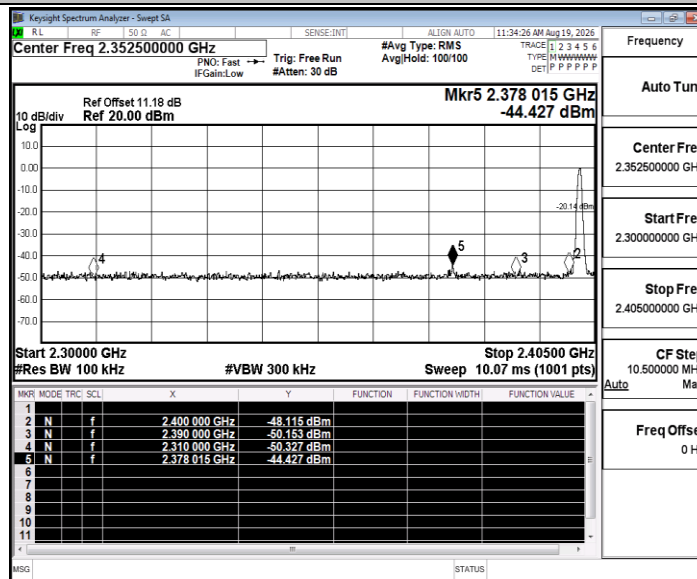
A.6 Band edge measurements

Test Result

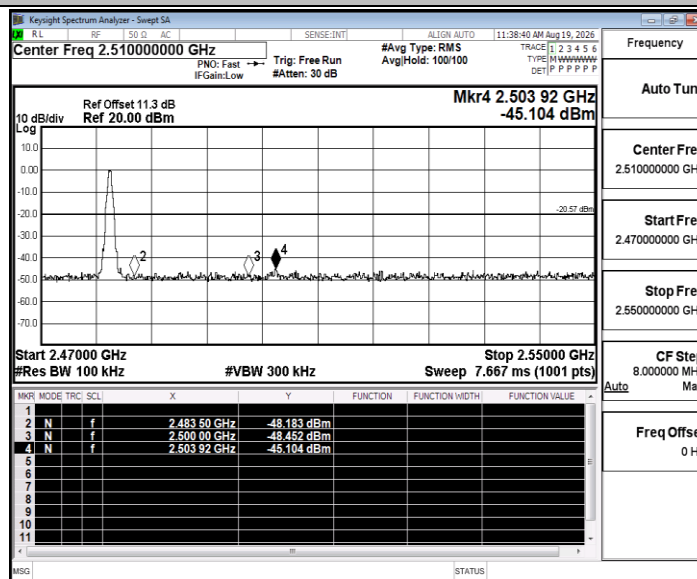
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.14	-44.43	≤ -20.14	PASS
		High	2480	-0.57	-45.1	≤ -20.57	PASS
		Low	Hop_2402	-1.48	-45.91	≤ -21.48	PASS
		High	Hop_2480	-0.46	-45.59	≤ -20.46	PASS
2DH5	Ant1	Low	2402	-0.25	-46.13	≤ -20.25	PASS
		High	2480	-1.60	-45.15	≤ -21.6	PASS
		Low	Hop_2402	-2.01	-45.92	≤ -22.01	PASS
		High	Hop_2480	-3.56	-46.14	≤ -23.56	PASS
3DH5	Ant1	Low	2402	-3.30	-46.46	≤ -23.3	PASS
		High	2480	-0.55	-44.84	≤ -20.55	PASS
		Low	Hop_2402	-3.72	-45.34	≤ -23.72	PASS
		High	Hop_2480	-3.59	-45.95	≤ -23.59	PASS

Test Graphs

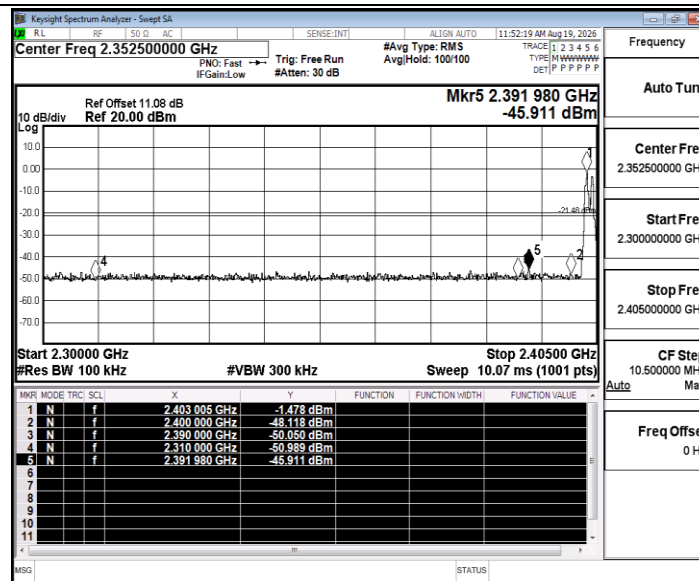
DH5_Ant1_Low_2402



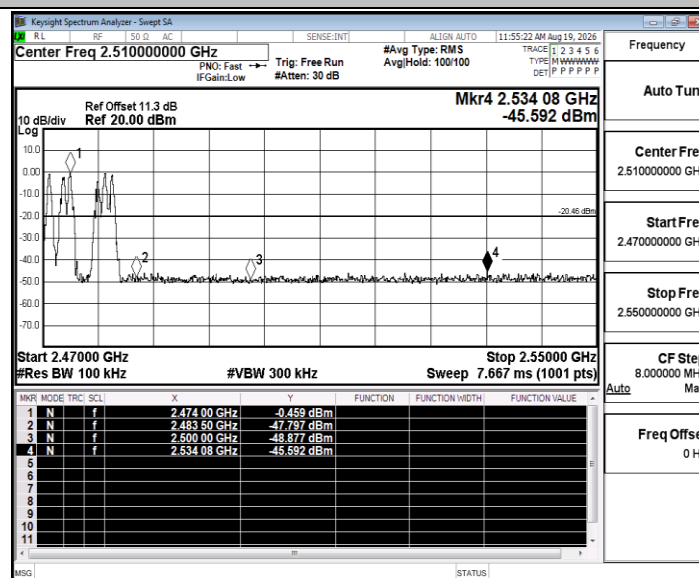
DH5_Ant1_High_2480



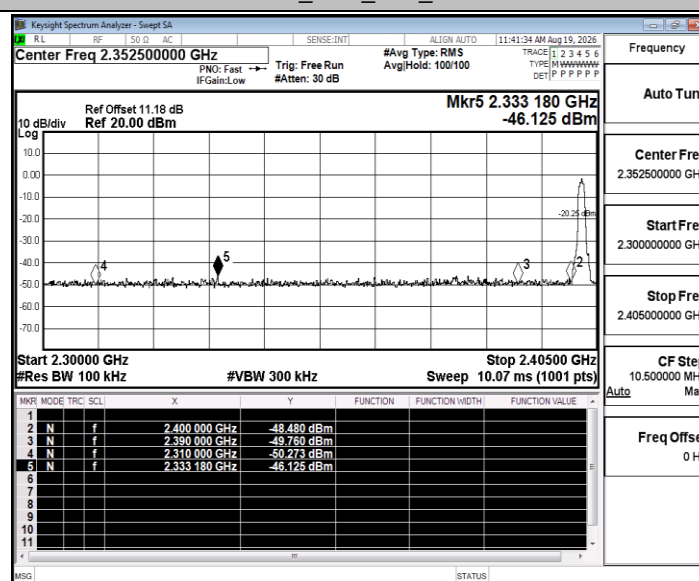
DH5_Ant1_Low_Hop_2402



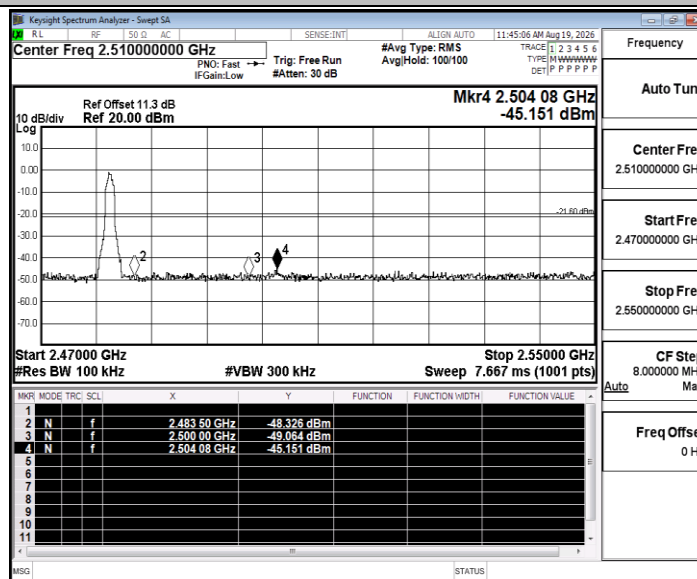
DH5_Ant1_High_Hop_2480



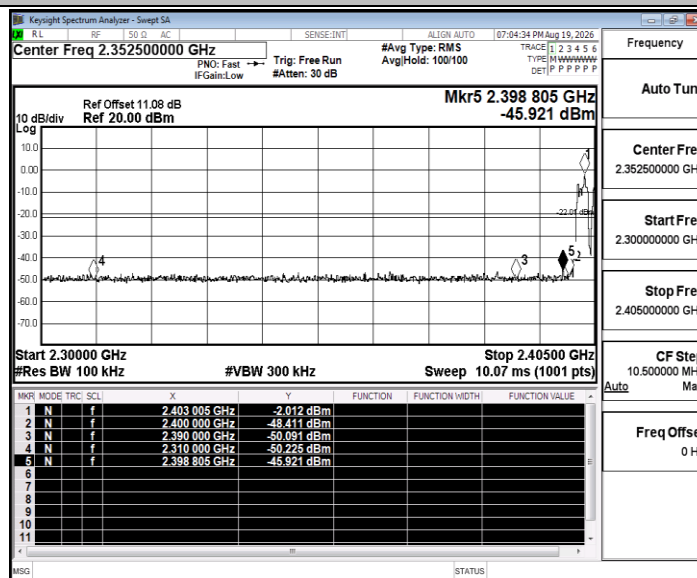
2DH5_Ant1_Low_2402



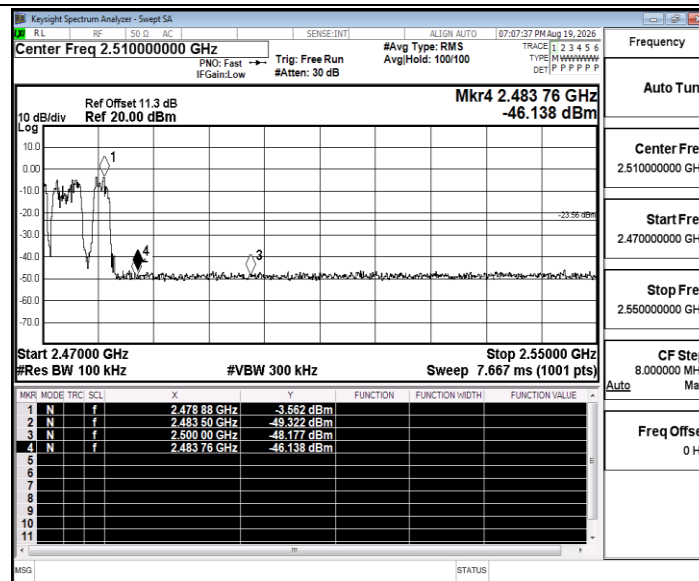
2DH5_Ant1_High_2480



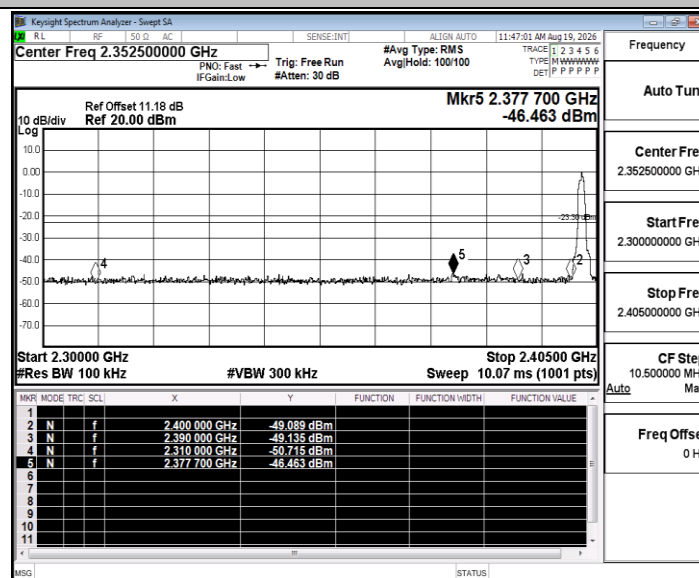
2DH5_Ant1_Low_Hop_2402



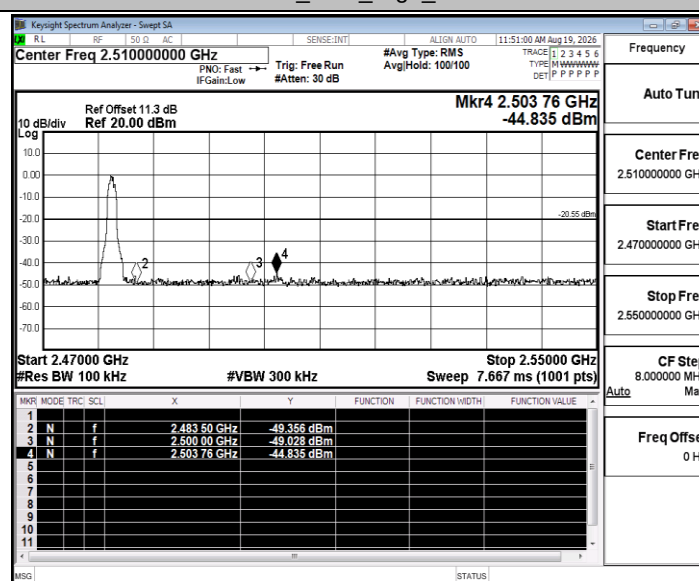
2DH5_Ant1_High_Hop_2480



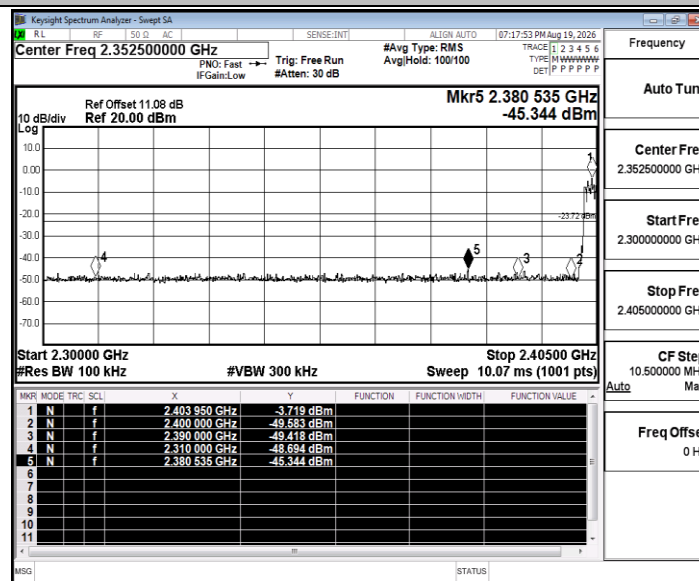
3DH5_Ant1_Low_2402



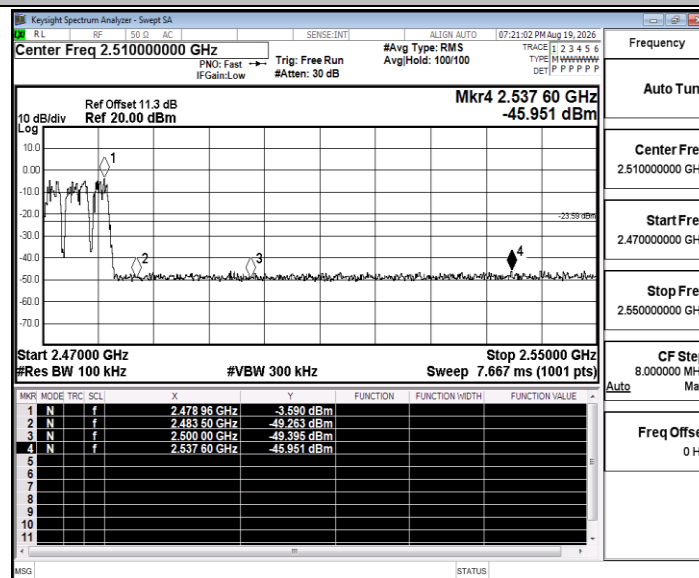
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

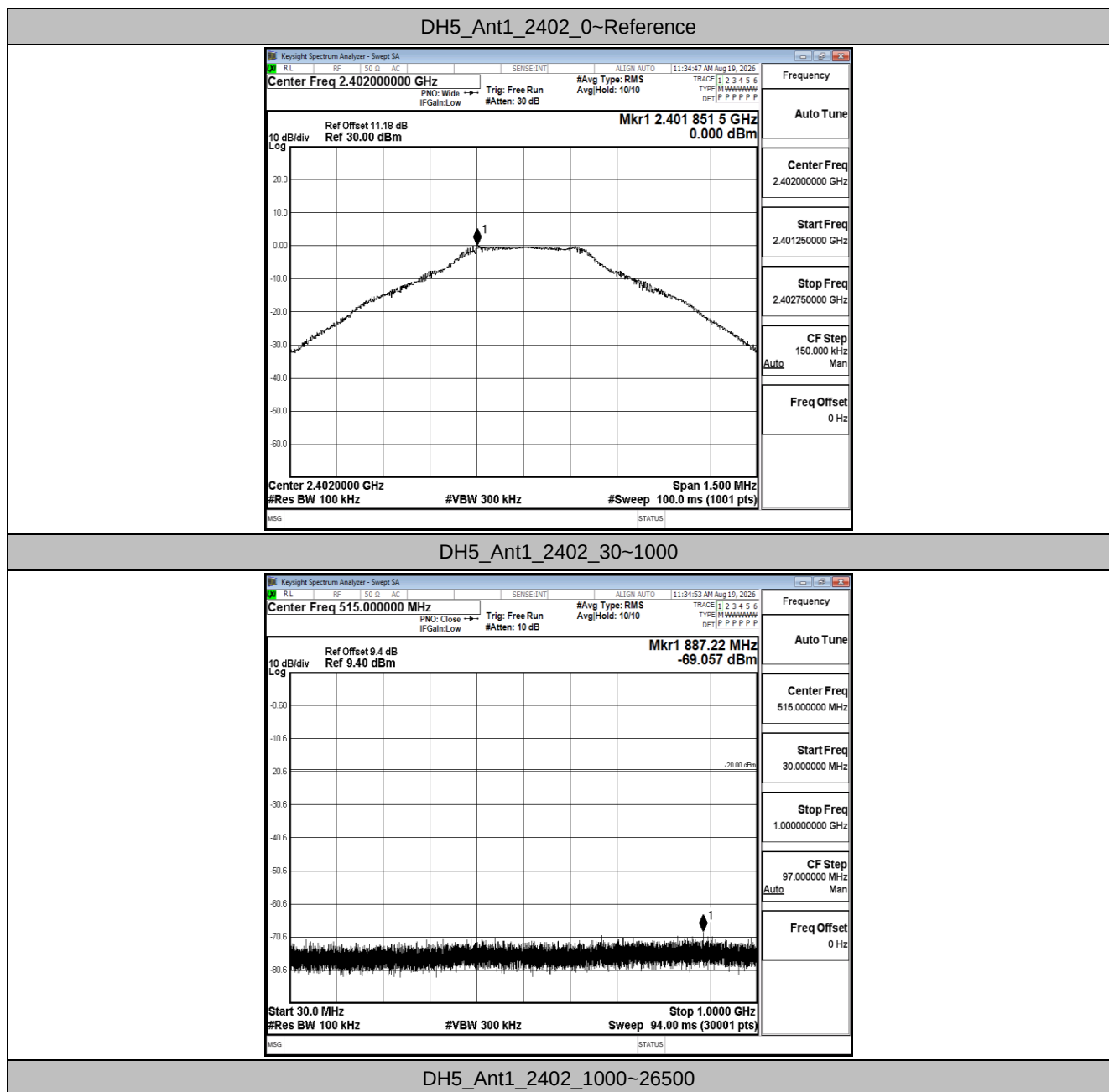


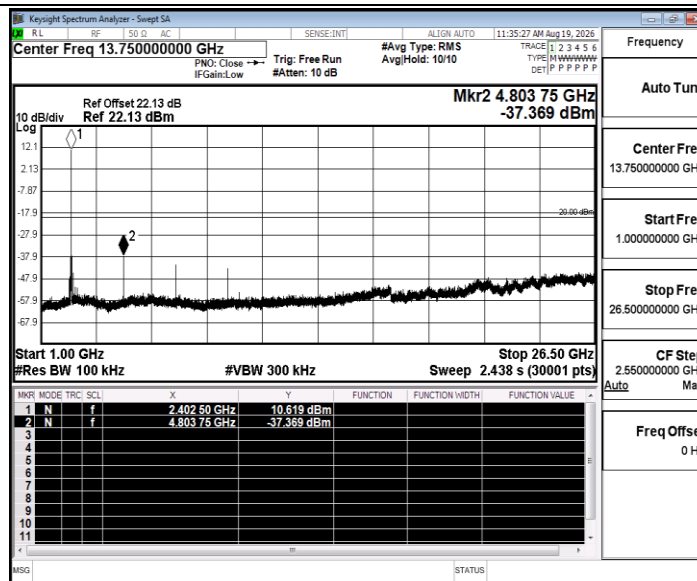
A.7 Conducted Spurious Emission

Test Result

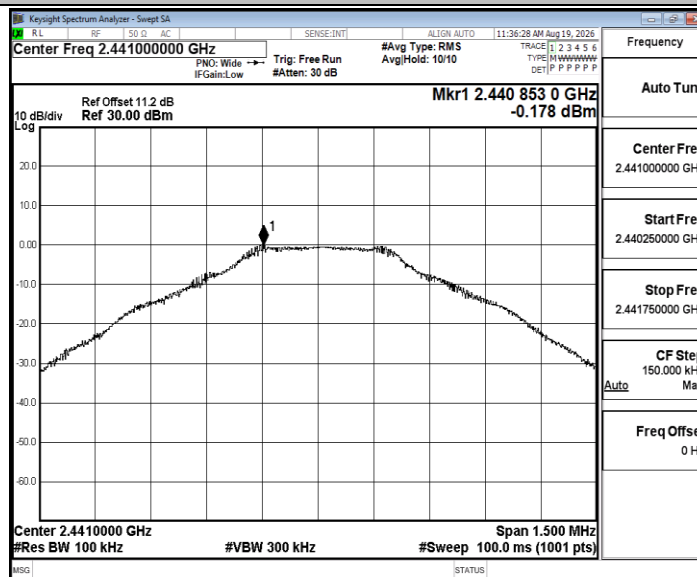
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.00	0.00	---	PASS
			30~1000	0.00	-69.06	≤-20	PASS
			1000~26500	0.00	-37.37	≤-20	PASS
		2441	Reference	-0.18	-0.18	---	PASS
			30~1000	-0.18	-70.09	≤-20.18	PASS
			1000~26500	-0.18	-34.96	≤-20.18	PASS
		2480	Reference	-0.37	-0.37	---	PASS
			30~1000	-0.37	-69.9	≤-20.37	PASS
			1000~26500	-0.37	-34.02	≤-20.37	PASS
2DH5	Ant1	2402	Reference	-0.02	-0.02	---	PASS
			30~1000	-0.02	-69.26	≤-20.02	PASS
			1000~26500	-0.02	-38.36	≤-20.02	PASS
		2441	Reference	-0.16	-0.16	---	PASS
			30~1000	-0.16	-69.96	≤-20.16	PASS
			1000~26500	-0.16	-36.52	≤-20.16	PASS
		2480	Reference	-0.38	-0.38	---	PASS
			30~1000	-0.38	-70.1	≤-20.38	PASS
			1000~26500	-0.38	-38.24	≤-20.38	PASS
3DH5	Ant1	2402	Reference	-0.05	-0.05	---	PASS
			30~1000	-0.05	-69.53	≤-20.05	PASS
			1000~26500	-0.05	-38.35	≤-20.05	PASS
		2441	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-69.32	≤-20.17	PASS
			1000~26500	-0.17	-36.59	≤-20.17	PASS
		2480	Reference	-0.37	-0.37	---	PASS
			30~1000	-0.37	-69.31	≤-20.37	PASS
			1000~26500	-0.37	-35.7	≤-20.37	PASS

Test Graphs

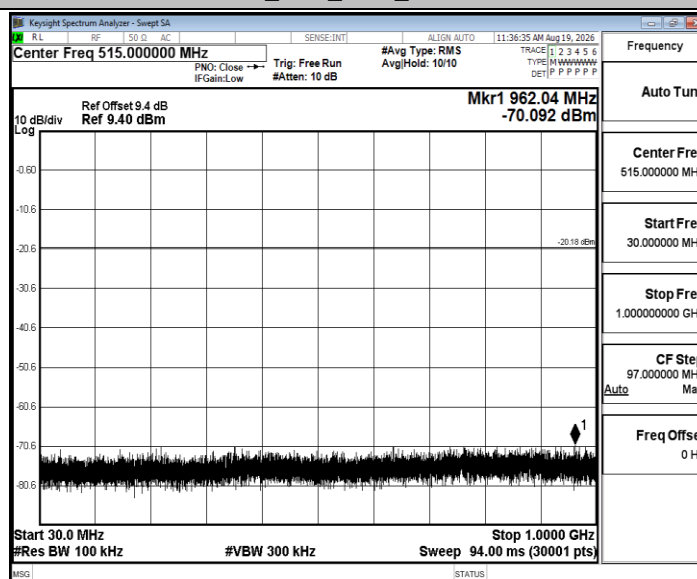




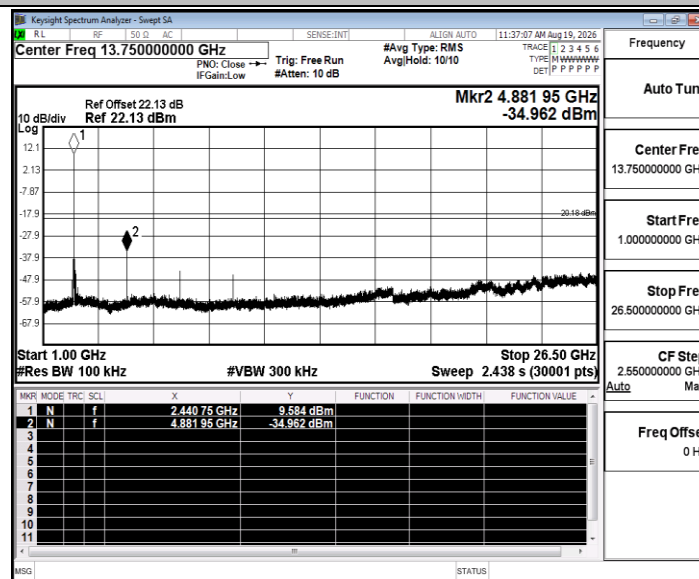
DH5_Ant1_2441_0~Reference



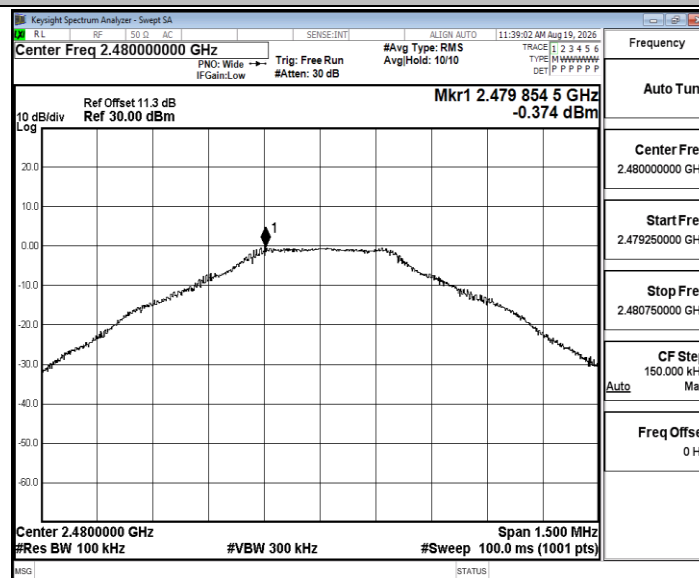
DH5_Ant1_2441_30~1000



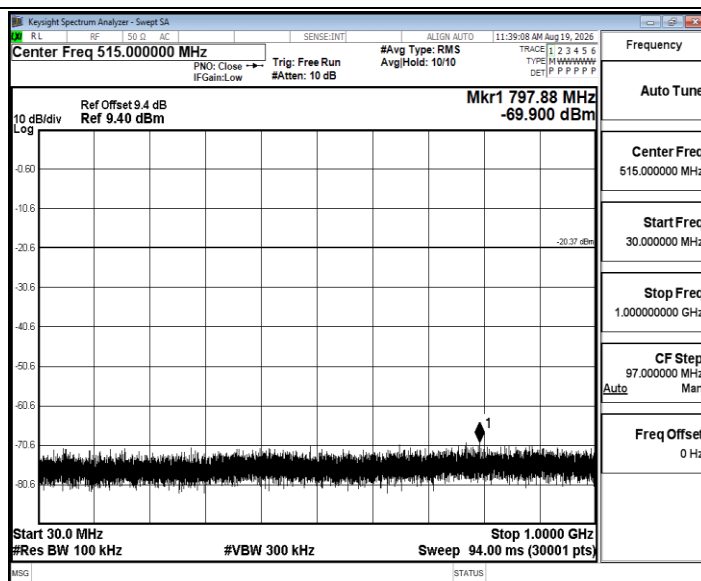
DH5_Ant1_2441_1000~26500



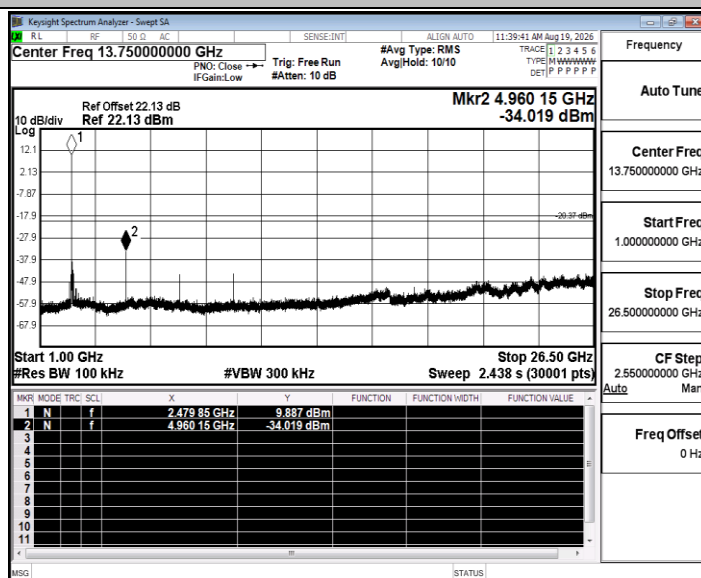
DH5_Ant1_2480_0~Reference



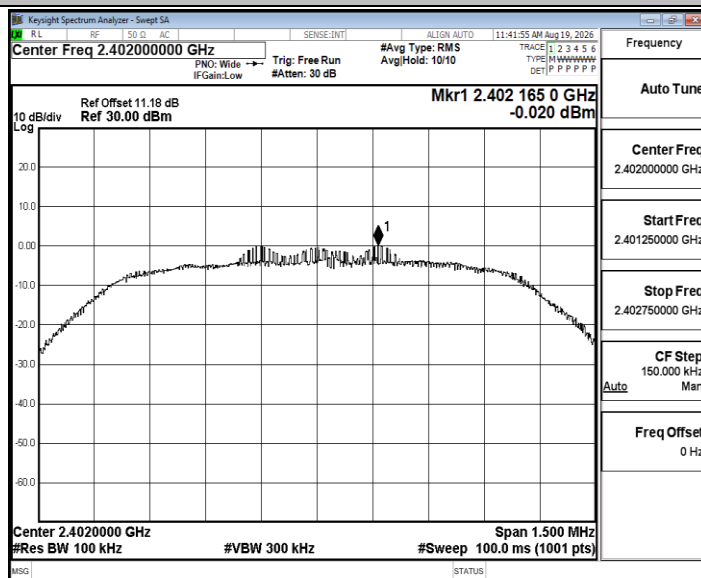
DH5_Ant1_2480_30~1000



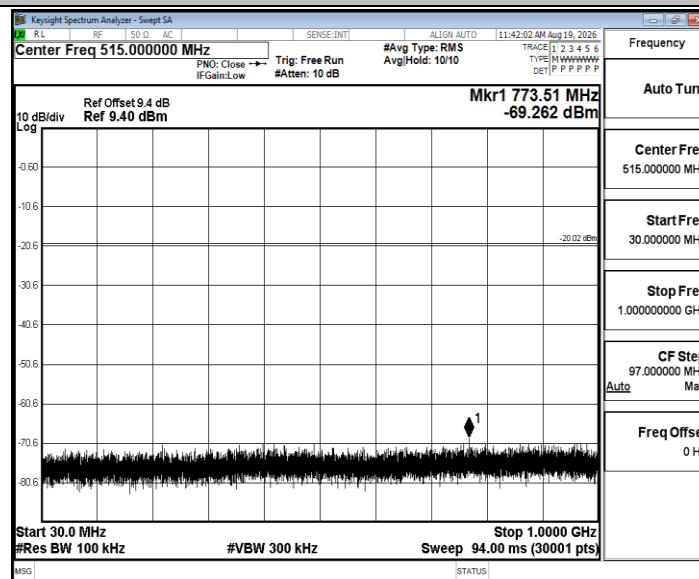
DH5_Ant1_2480_1000~26500



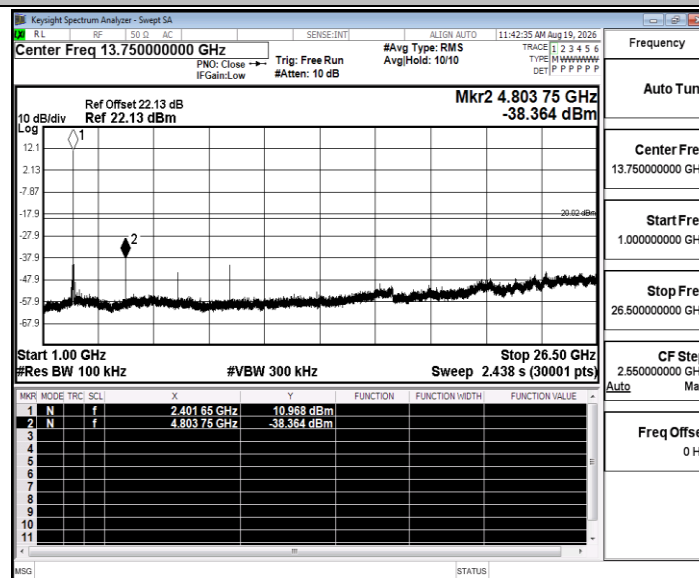
2DH5_Ant1_2402_0~Reference



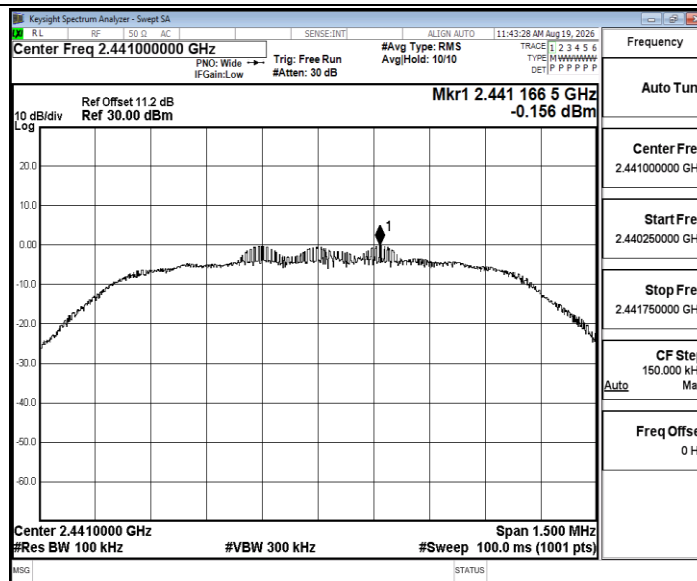
2DH5_Ant1_2402_30~1000



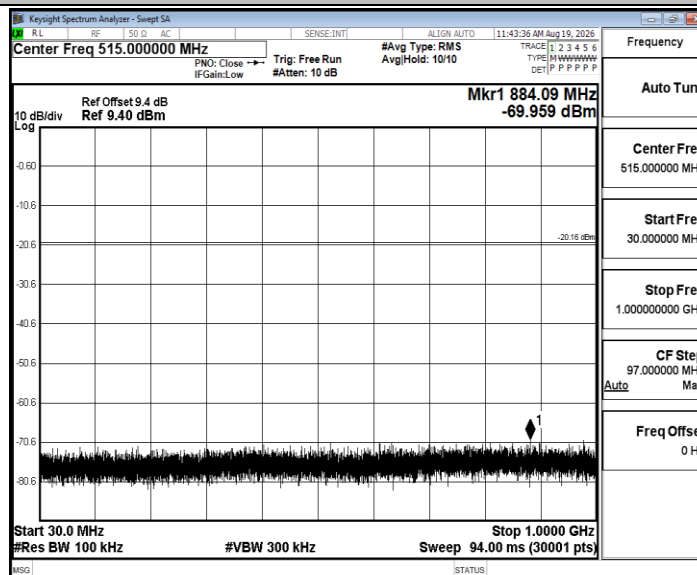
2DH5_Ant1_2402_1000~26500



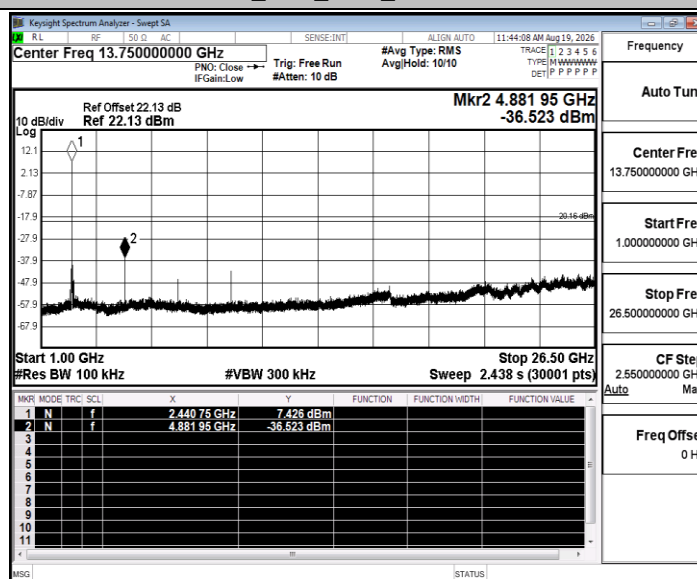
2DH5_Ant1_2441_0~Reference



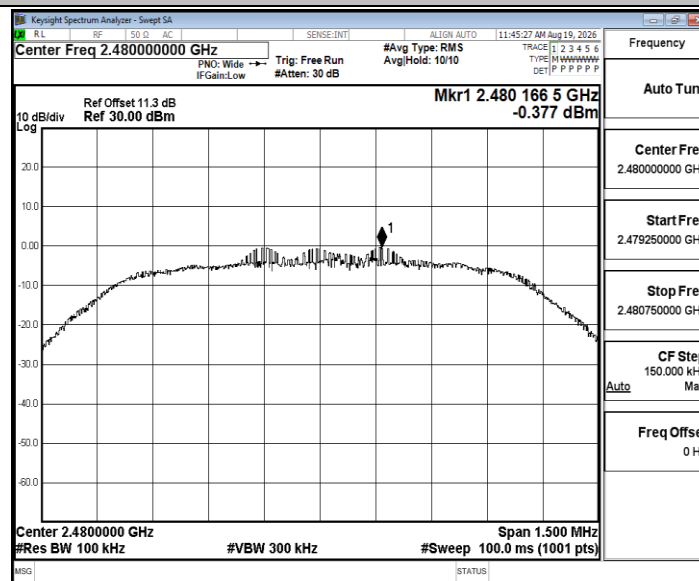
2DH5_Ant1_2441_30~1000



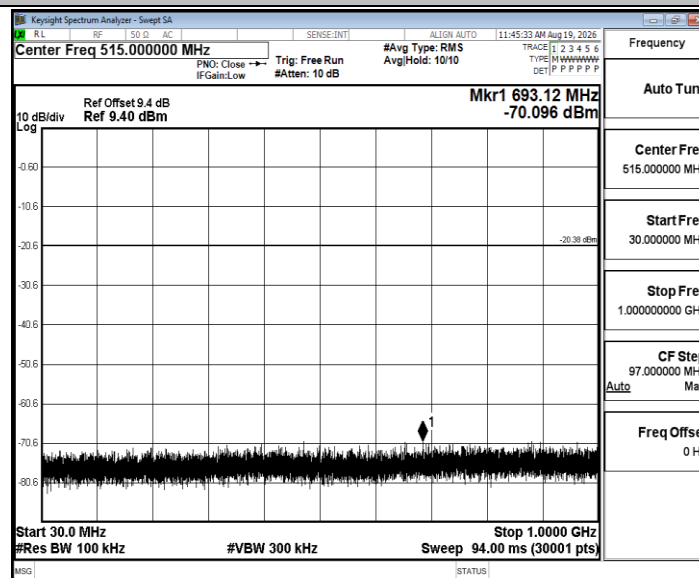
2DH5_Ant1_2441_1000~26500



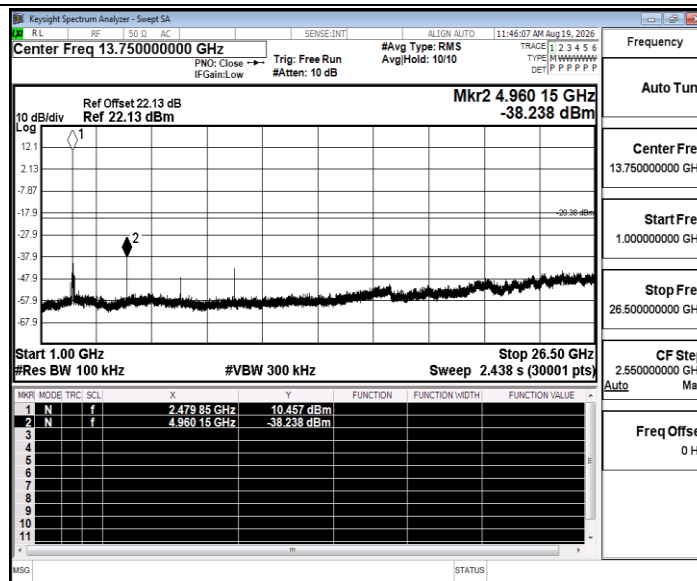
2DH5_Ant1_2480_0~Reference



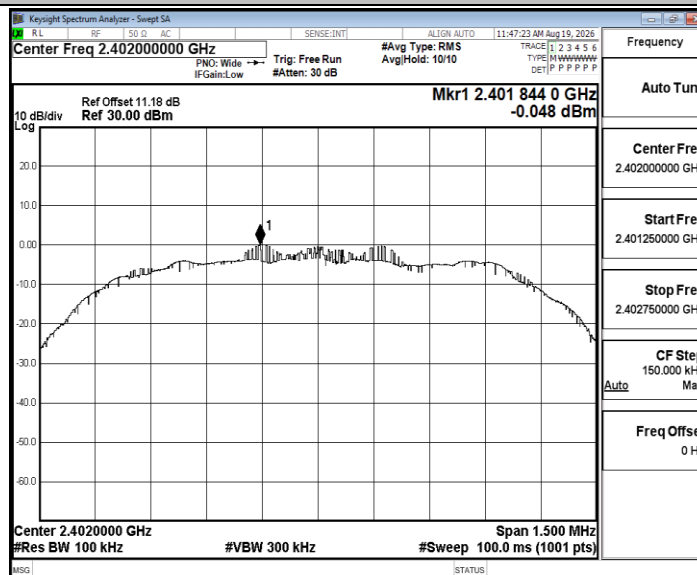
2DH5_Ant1_2480_30~1000



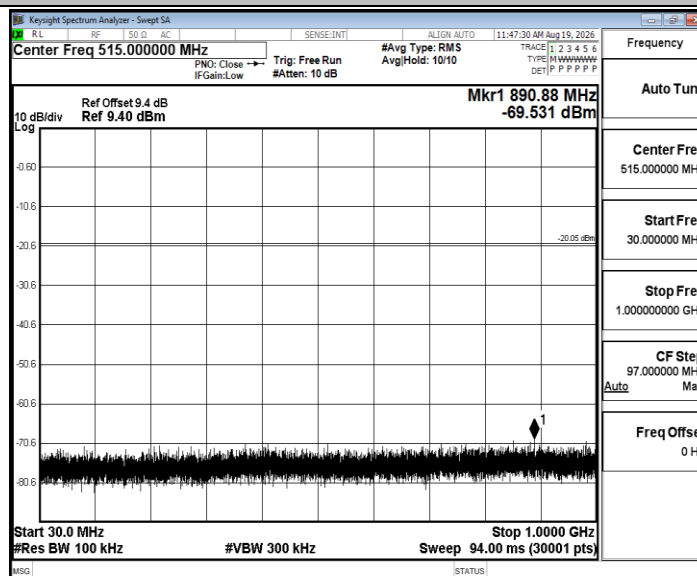
2DH5_Ant1_2480_1000~26500



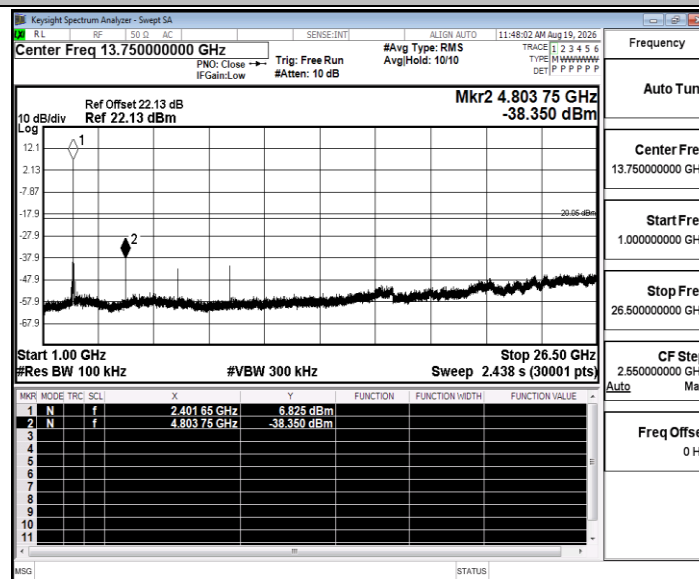
3DH5_Ant1_2402_0~Reference



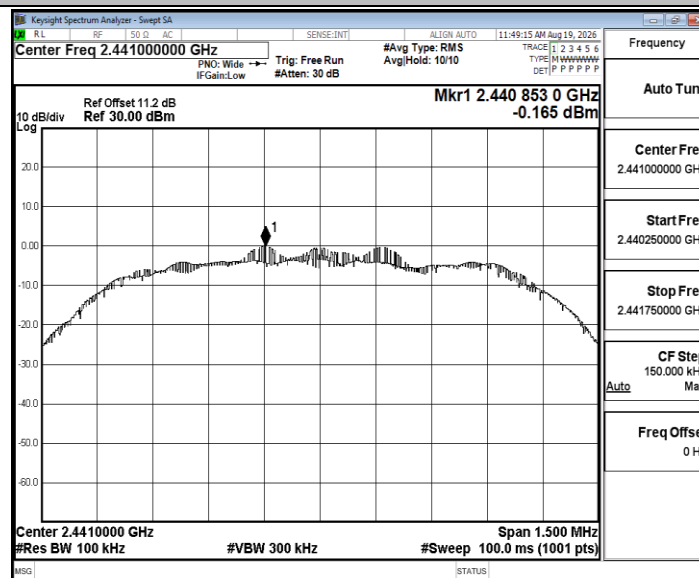
3DH5_Ant1_2402_30~1000



3DH5_Ant1_2402_1000~26500



3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000