

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Open Ear Clip-On Earbuds

Test Model: S1010

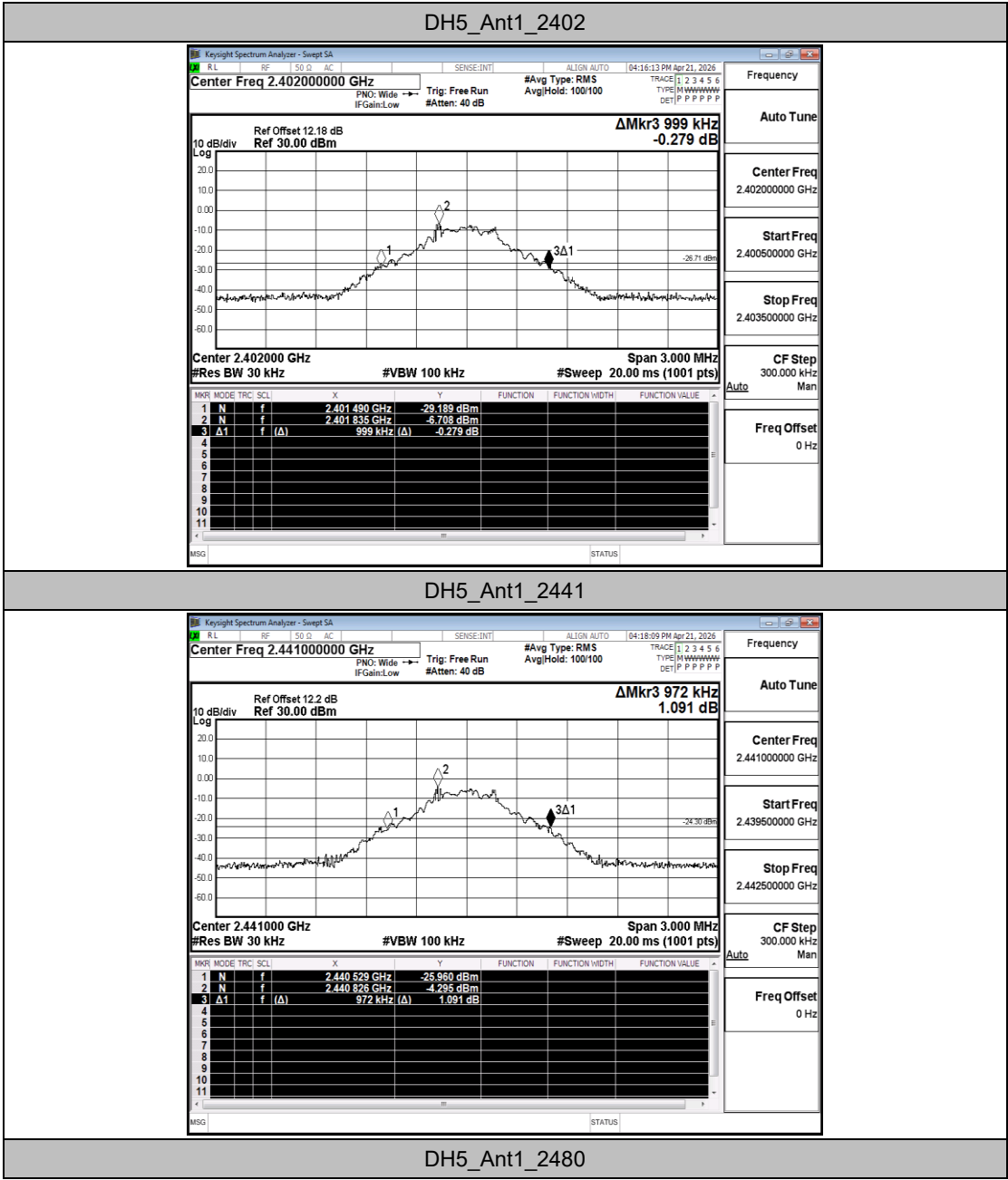
Environmental Conditions	
Temperature:	25.1°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

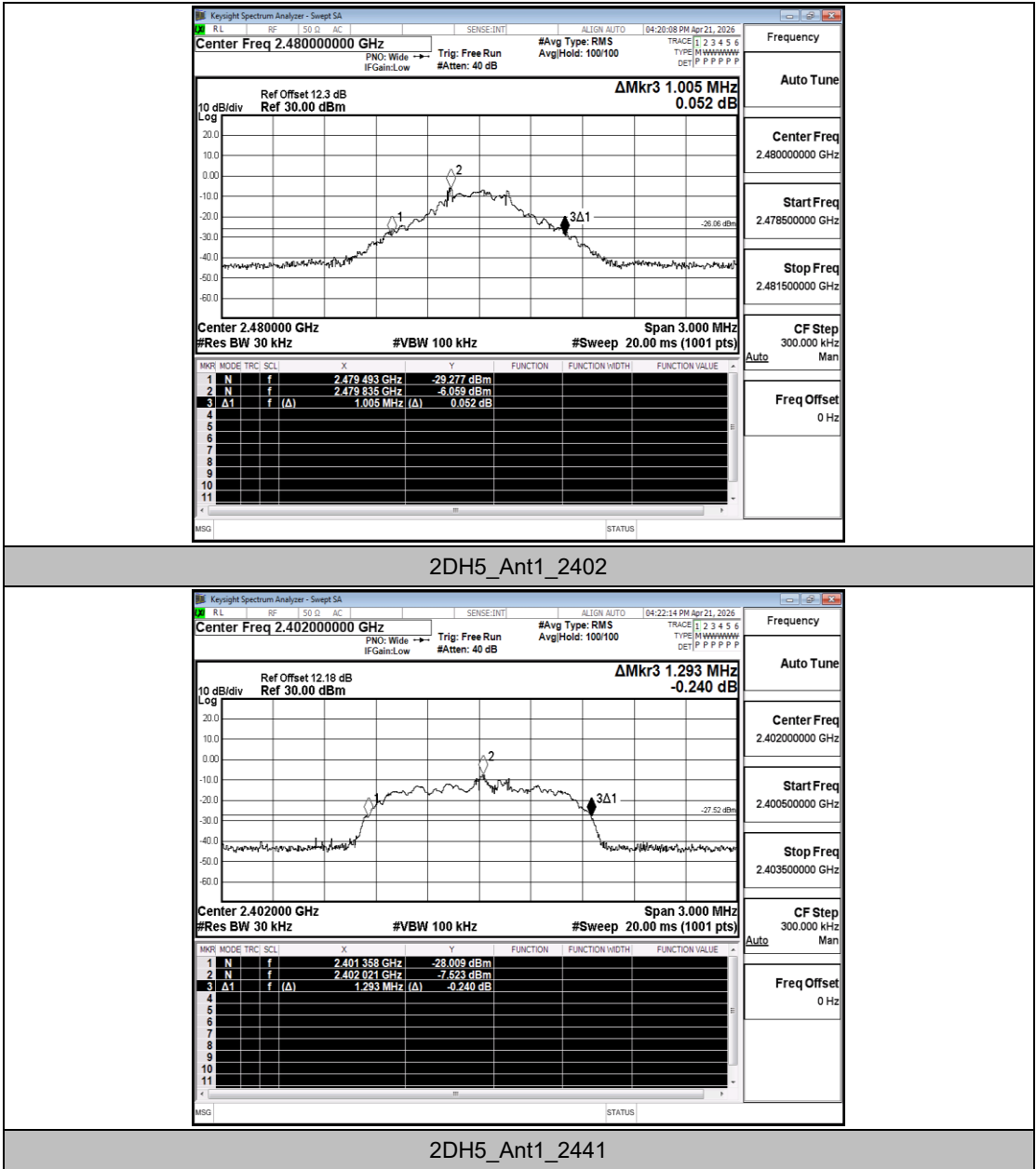
C.1 20dB Emission Bandwidth

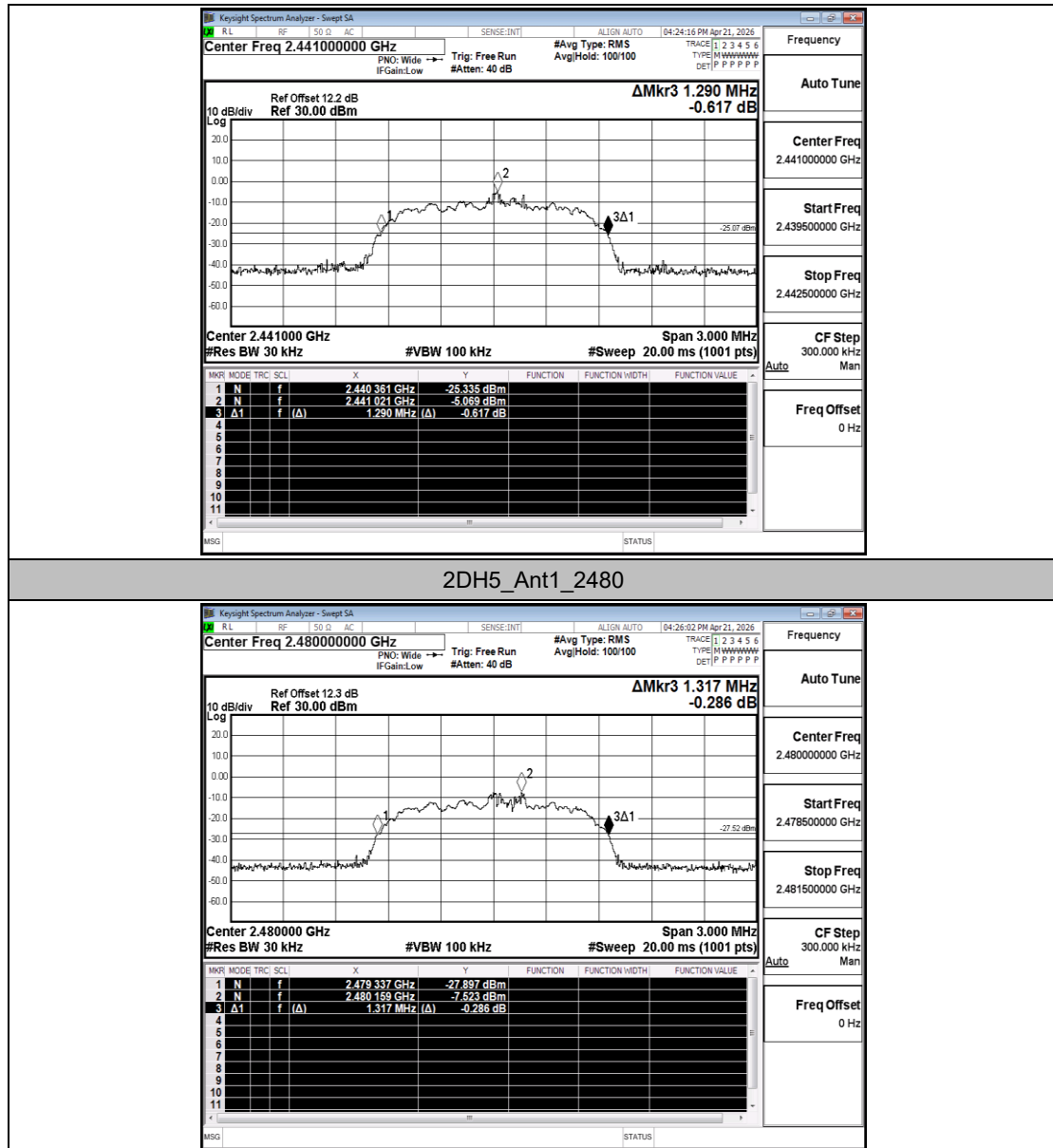
Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.999	2401.490	2402.489	---	---
		2441	0.972	2440.529	2441.501	---	---
		2480	1.005	2479.493	2480.498	---	---
2DH5	Ant1	2402	1.293	2401.358	2402.651	---	---
		2441	1.290	2440.361	2441.651	---	---
		2480	1.317	2479.337	2480.654	---	---

Test Graphs





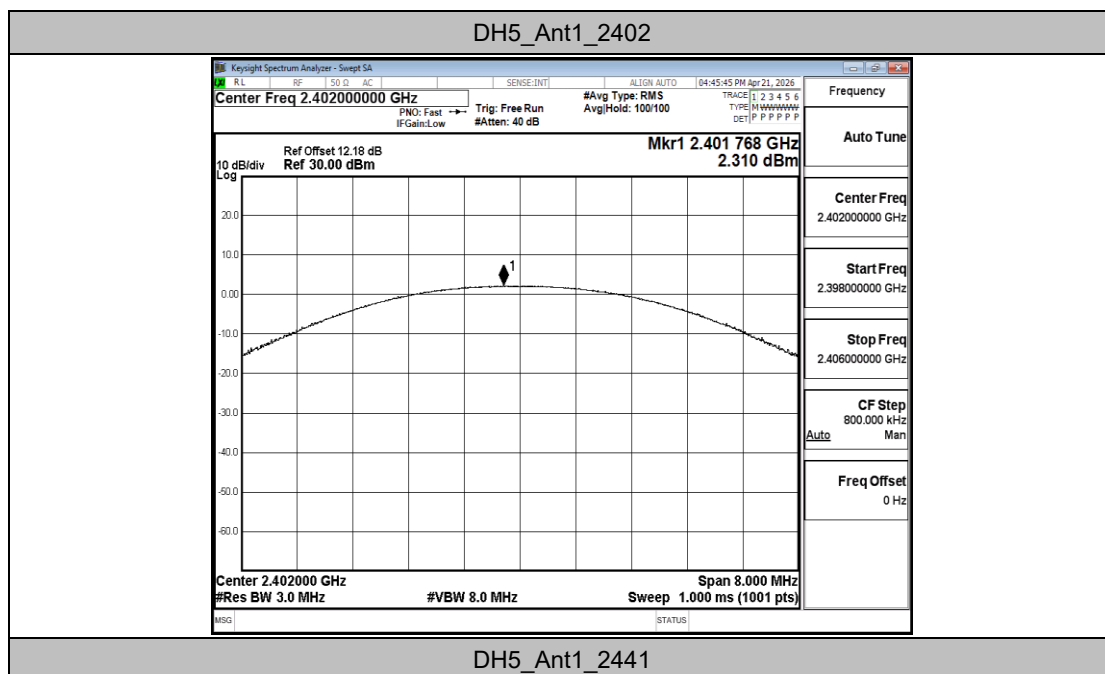


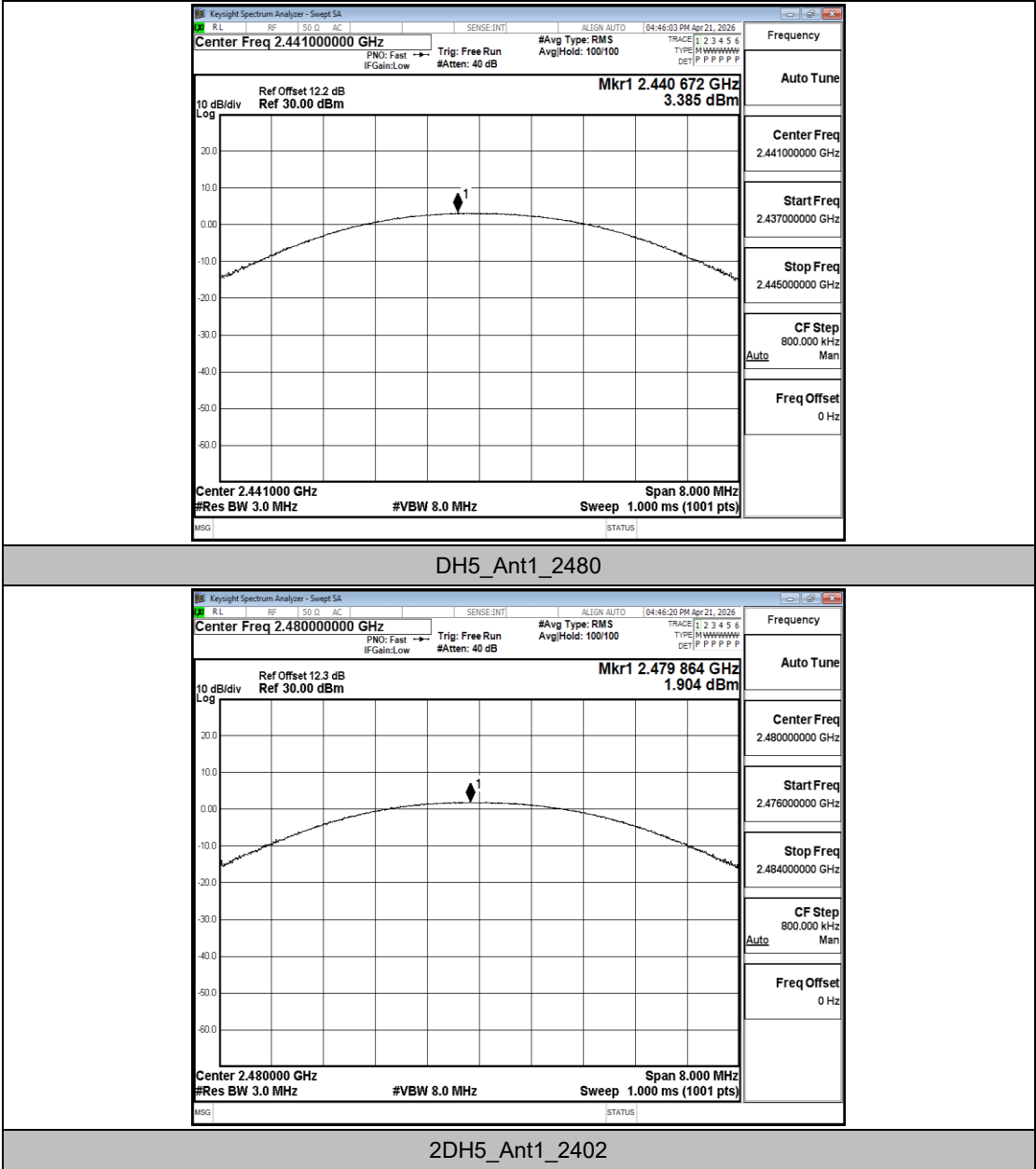
C.2 Maximum Peak conducted output power

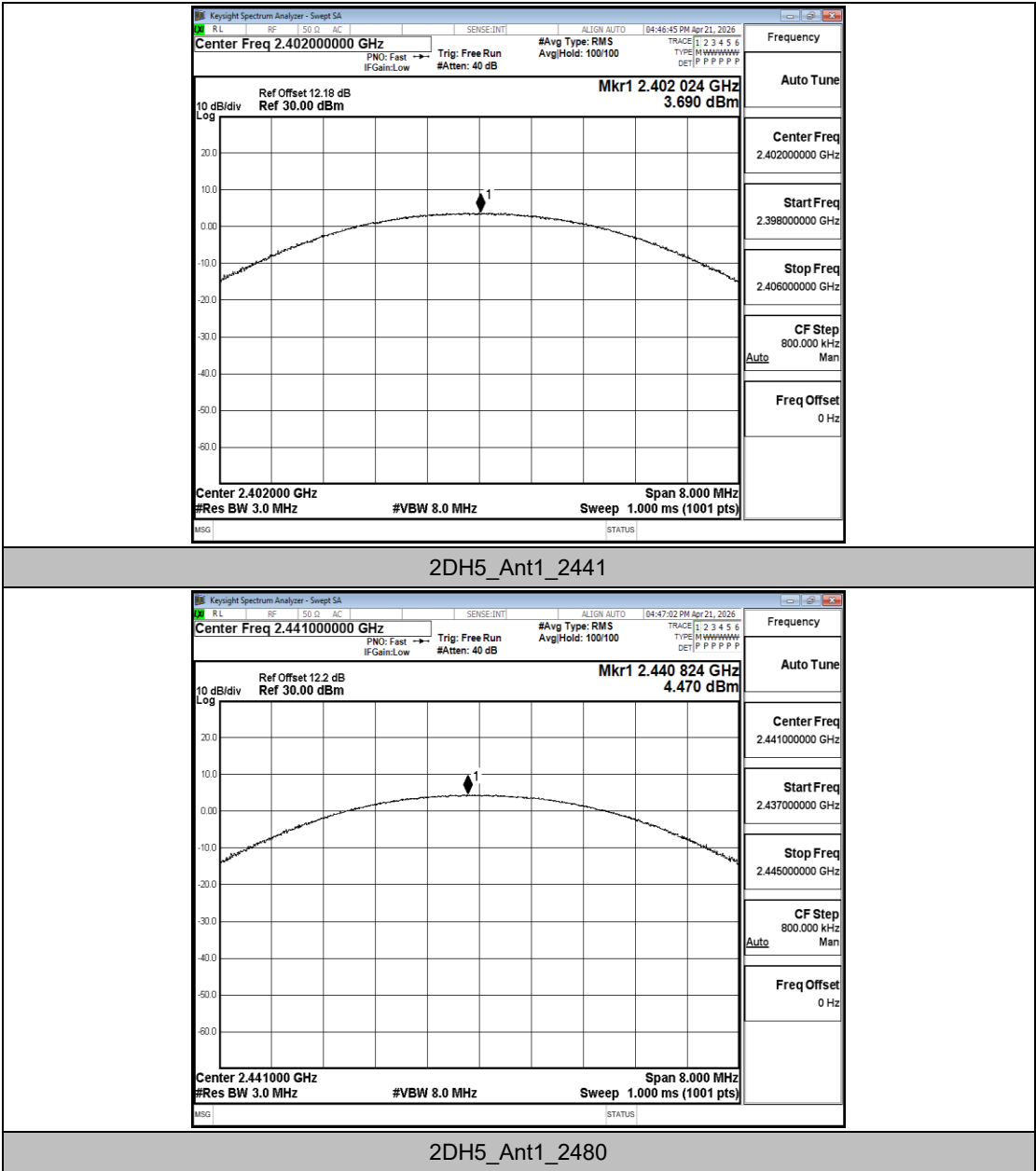
Test Result Peak

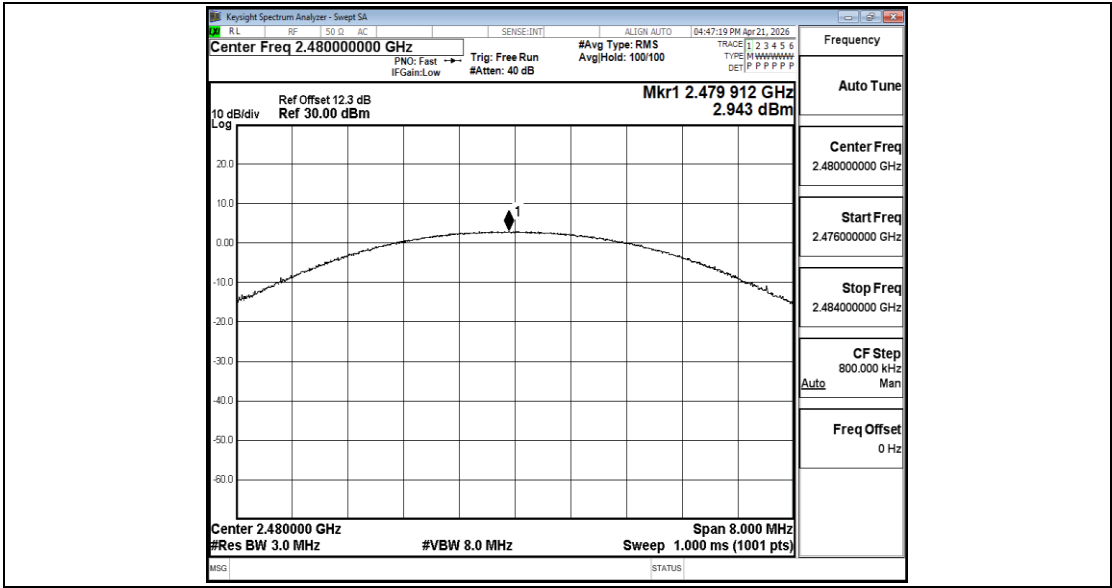
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.31	≤30	PASS
		2441	3.39	≤30	PASS
		2480	1.90	≤30	PASS
2DH5	Ant1	2402	3.69	≤30	PASS
		2441	4.47	≤30	PASS
		2480	2.94	≤30	PASS

Test Graphs







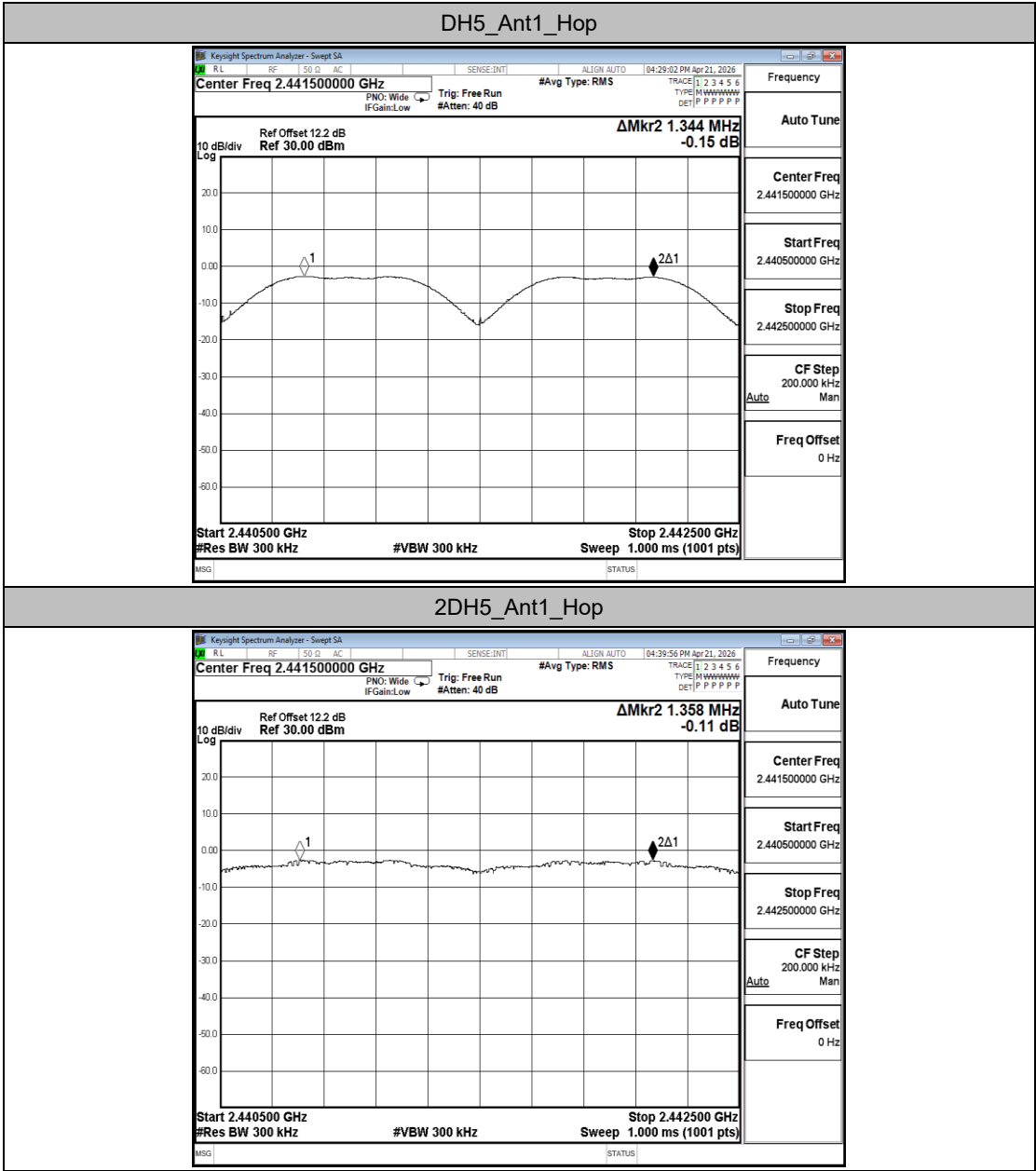


C.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.344	≥1.005	PASS
2DH5	Ant1	Hop	1.358	≥1.317	PASS

Test Graphs

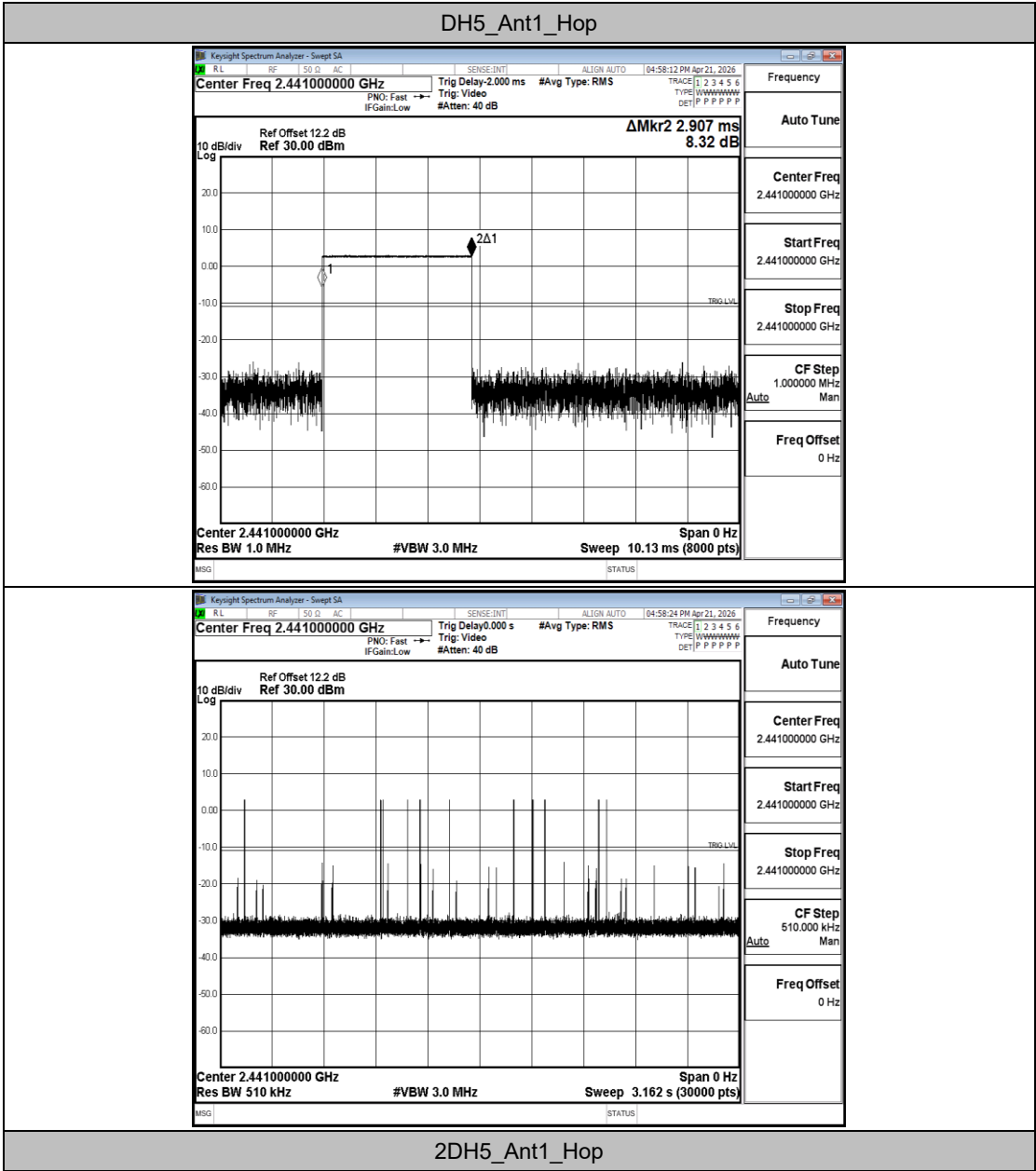


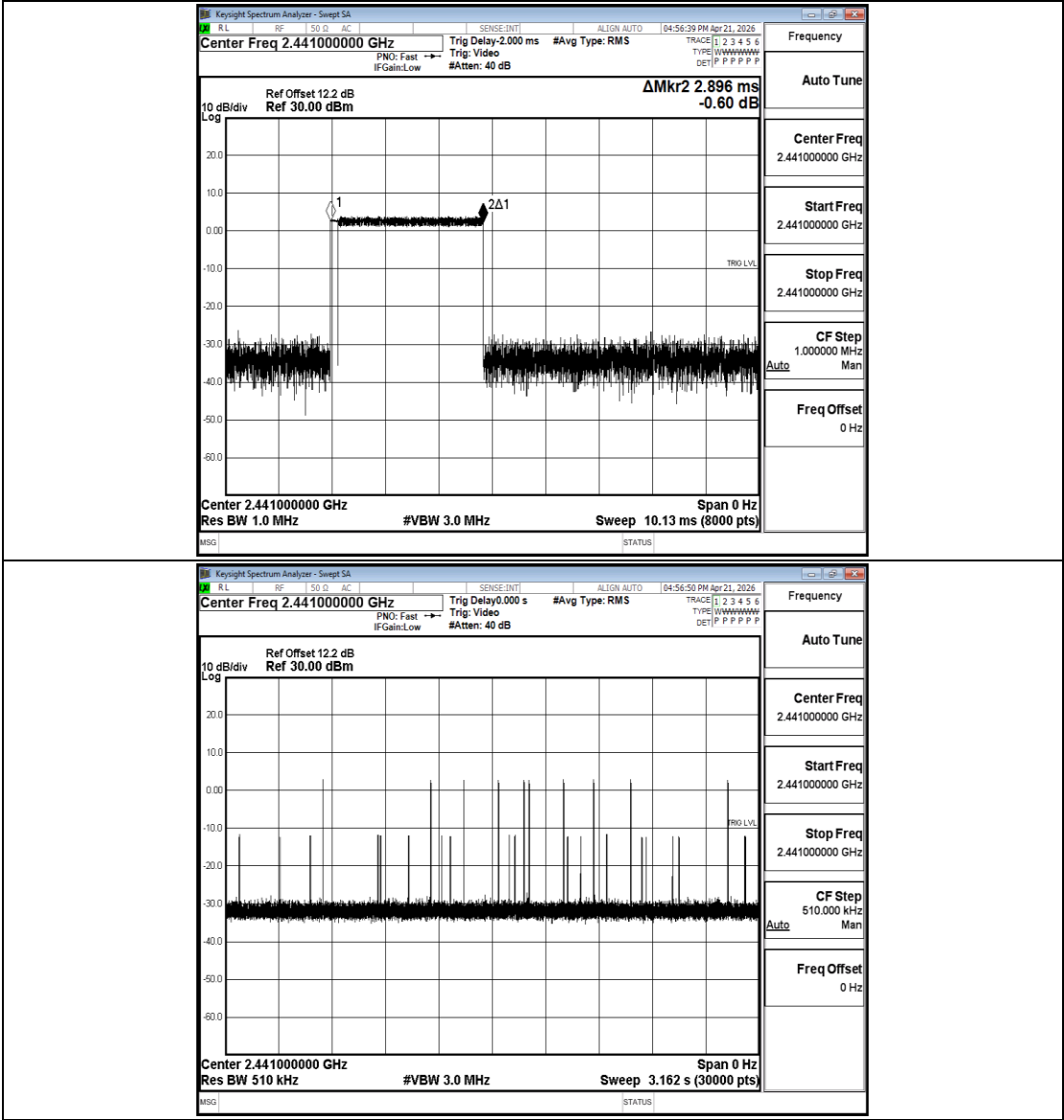
C.4 Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.907	120	0.349	≤0.4	PASS
2DH5	Ant1	Hop	2.896	110	0.319	≤0.4	PASS

Test Graphs



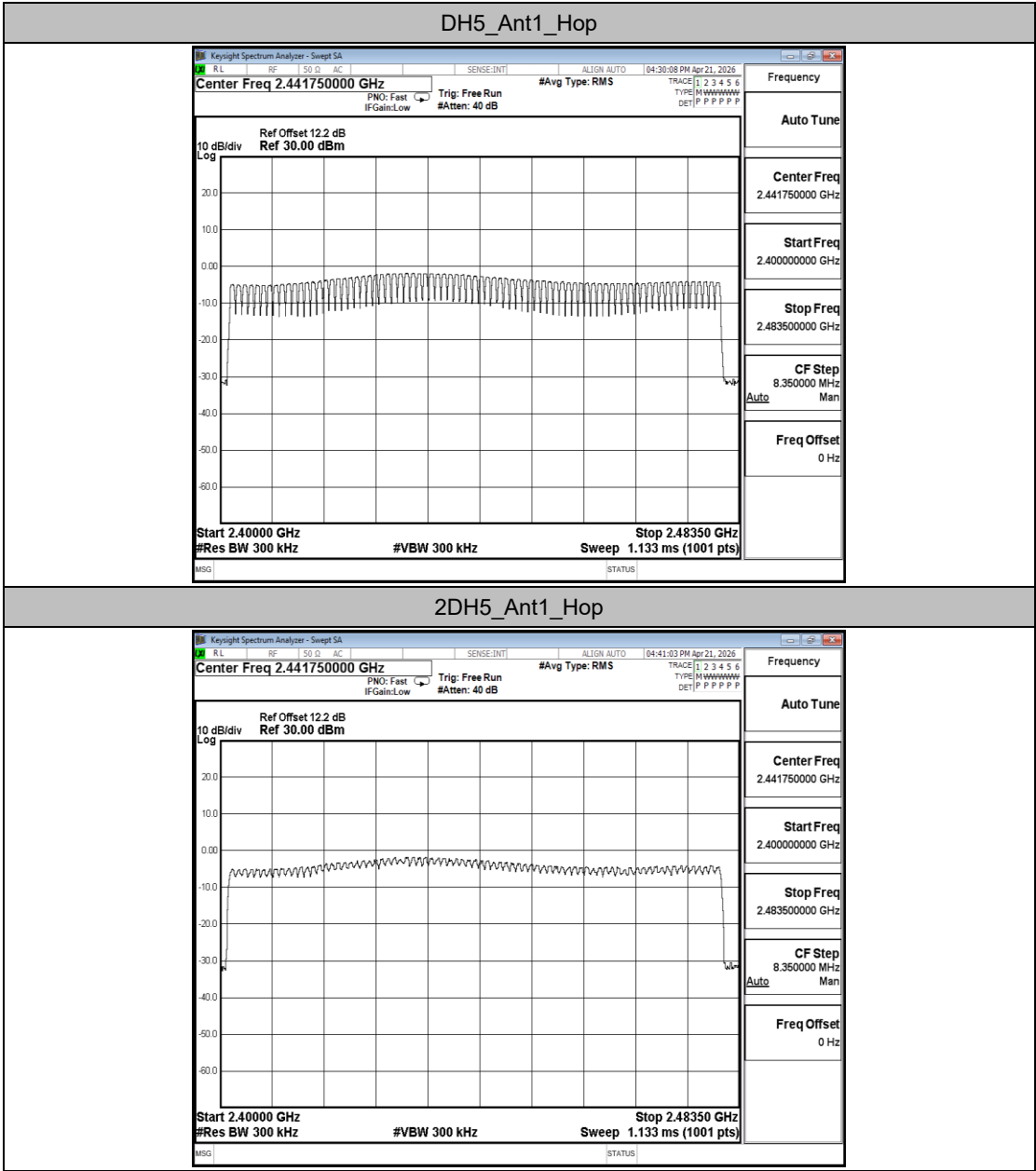


C.5 Number of hopping channels

Test Result

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

Test Graphs

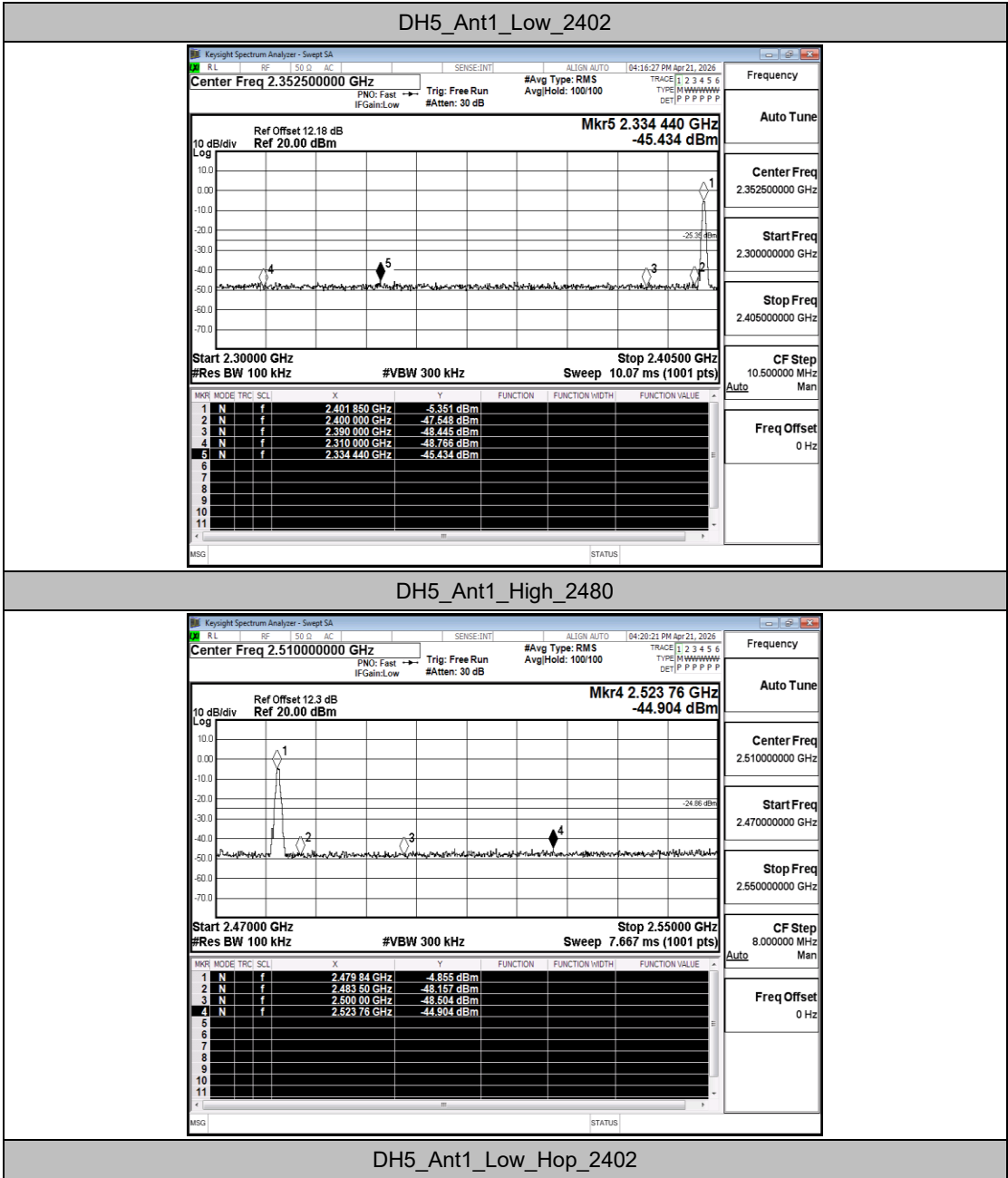


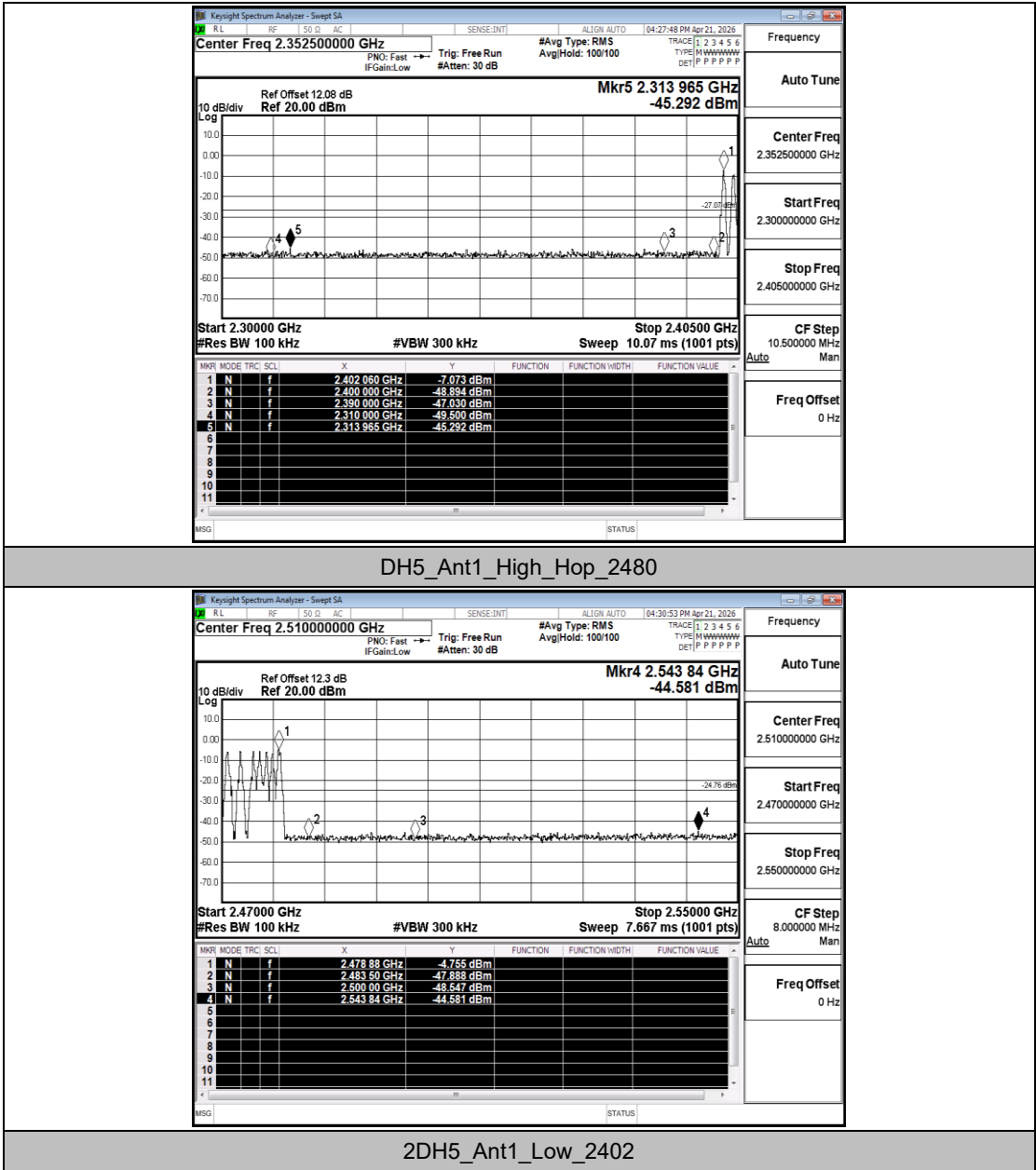
C.6 Band edge measurements

Test Result

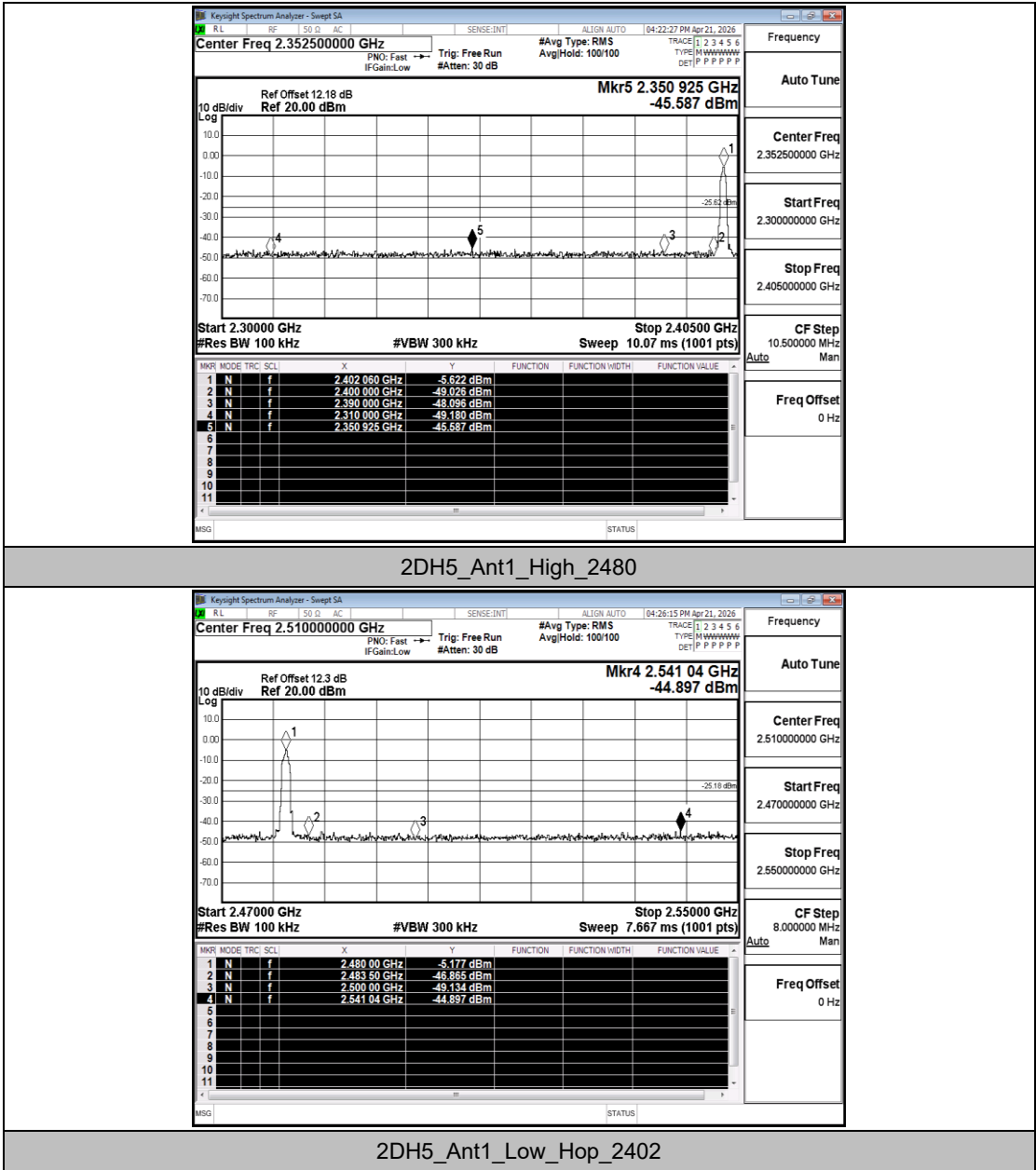
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-5.35	-45.43	≤-25.35	PASS
		High	2480	-4.86	-44.9	≤-24.86	PASS
		Low	Hop_2402	-7.07	-45.29	≤-27.07	PASS
		High	Hop_2480	-4.76	-44.58	≤-24.76	PASS
2DH5	Ant1	Low	2402	-5.62	-45.59	≤-25.62	PASS
		High	2480	-5.18	-44.9	≤-25.18	PASS
		Low	Hop_2402	-8.76	-45.57	≤-28.76	PASS
		High	Hop_2480	-7.36	-44.36	≤-27.36	PASS

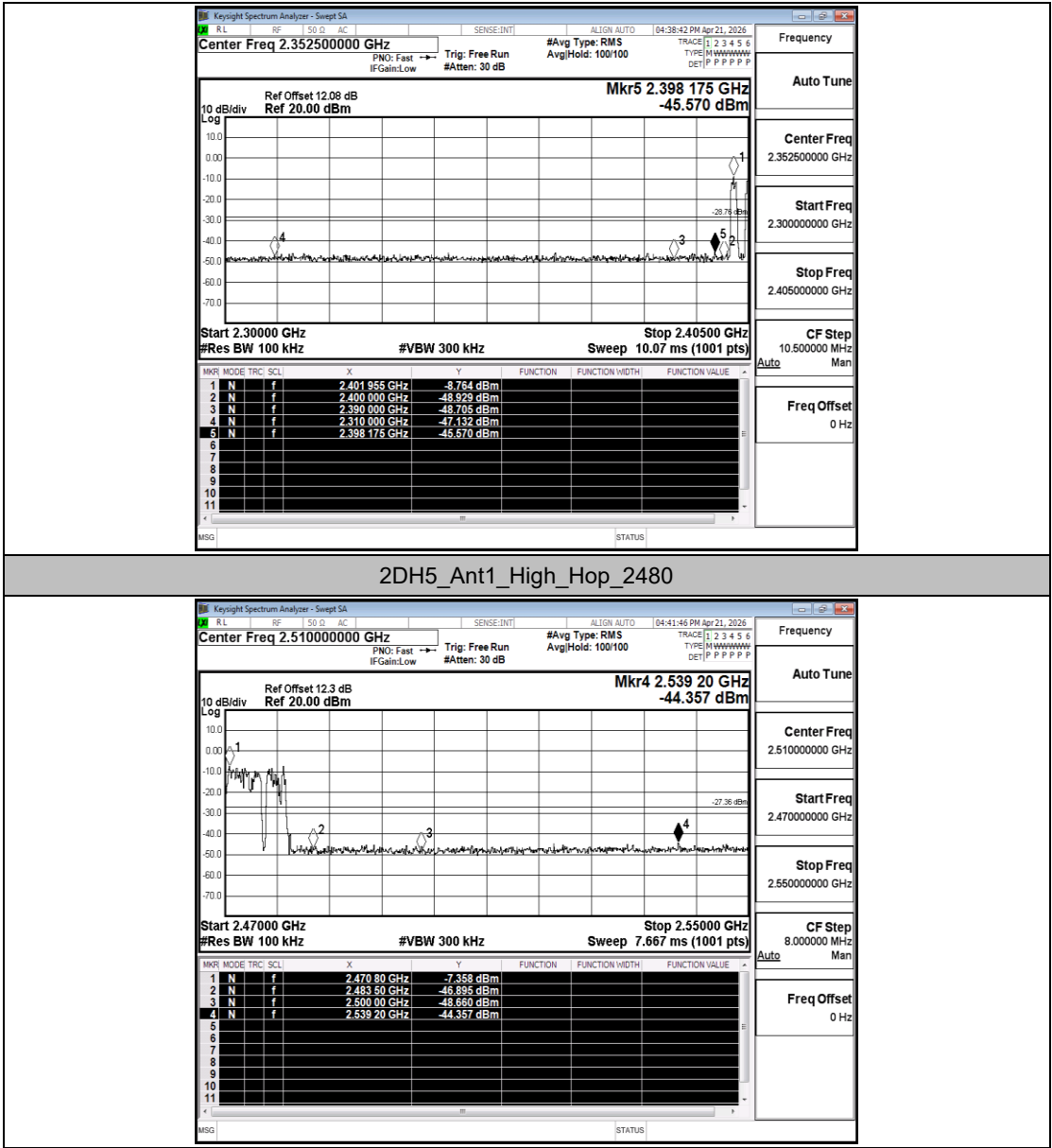
Test Graphs





2DH5_Ant1_Low_2402



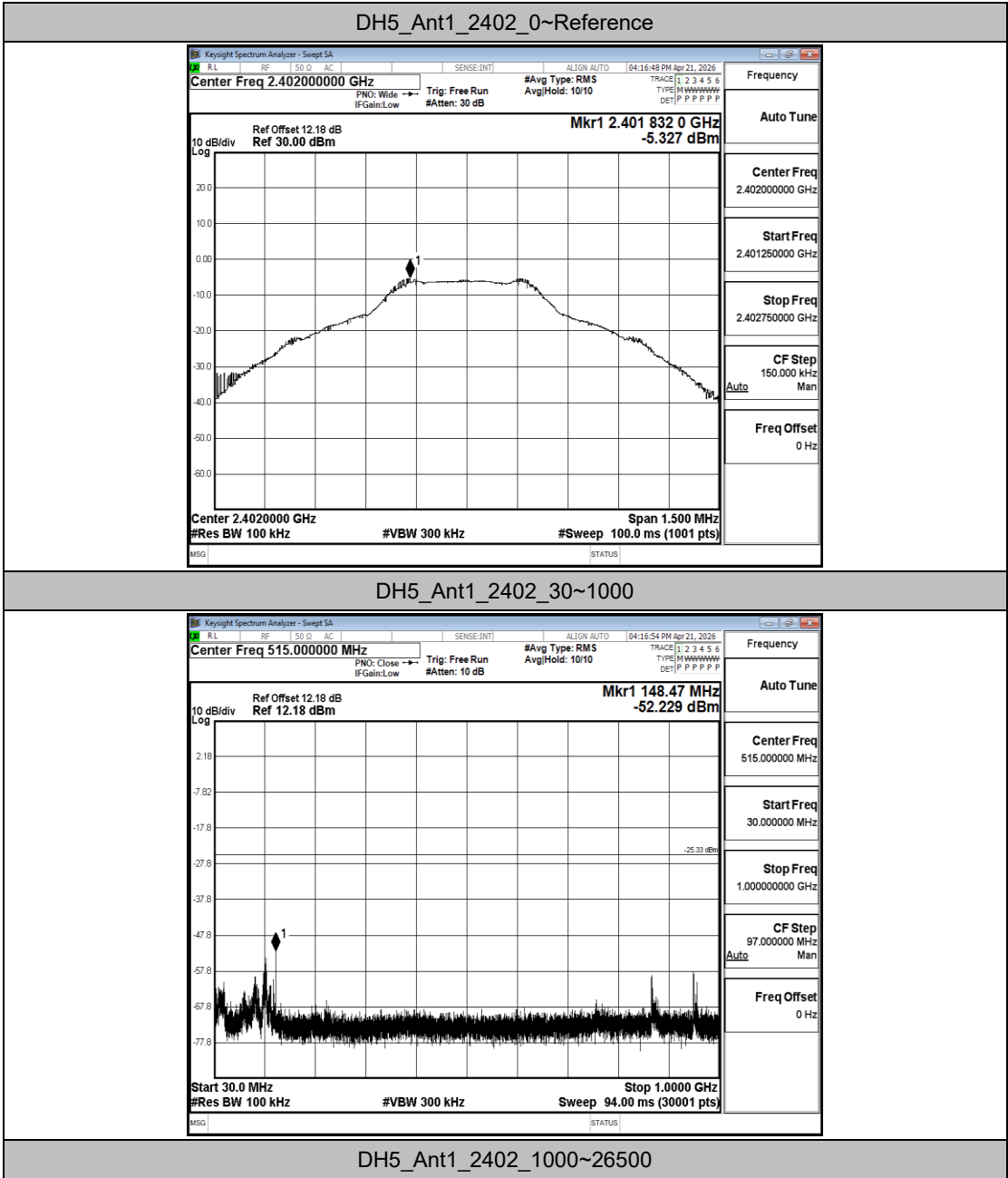


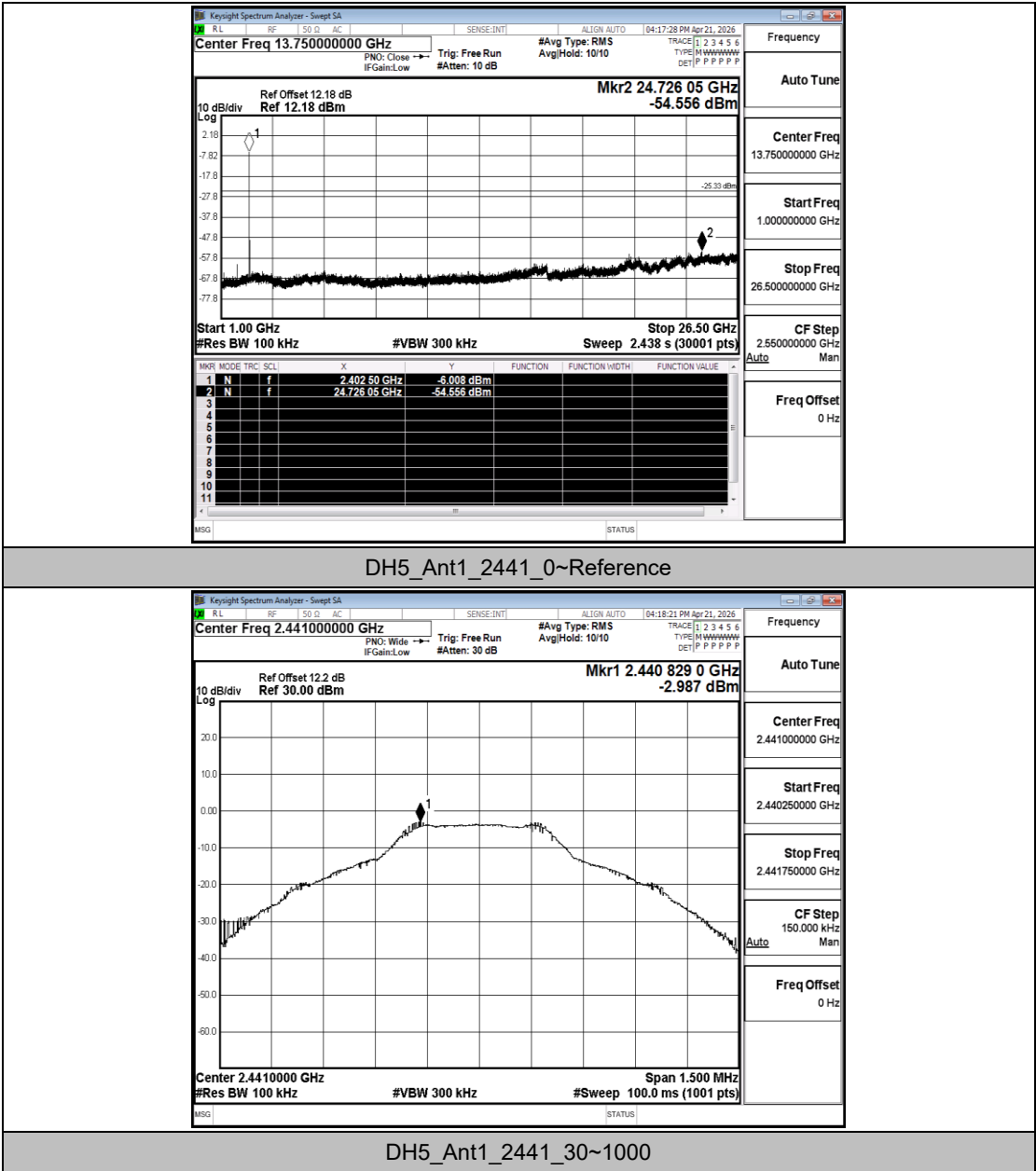
C.7 Conducted Spurious Emission

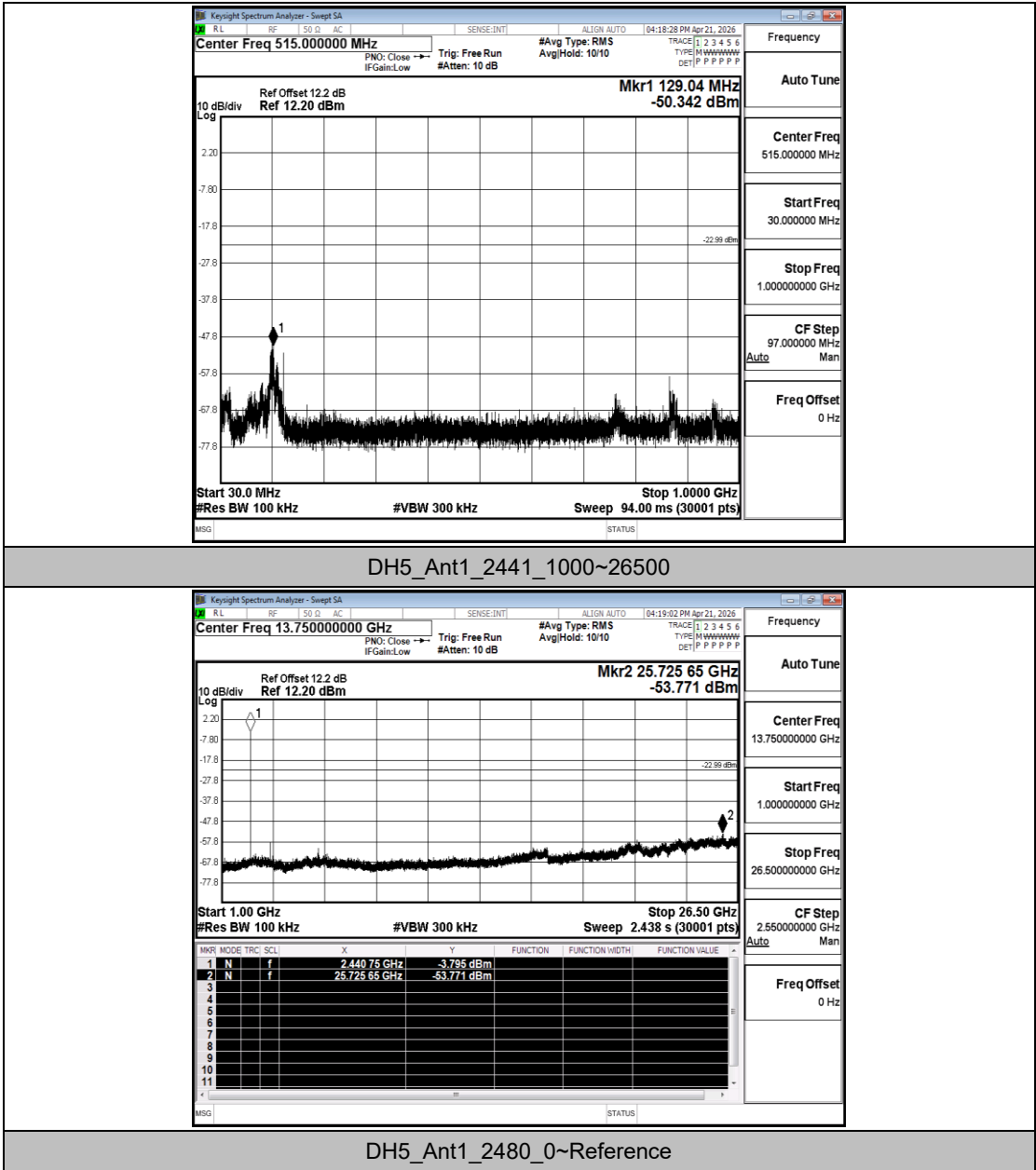
Test Result

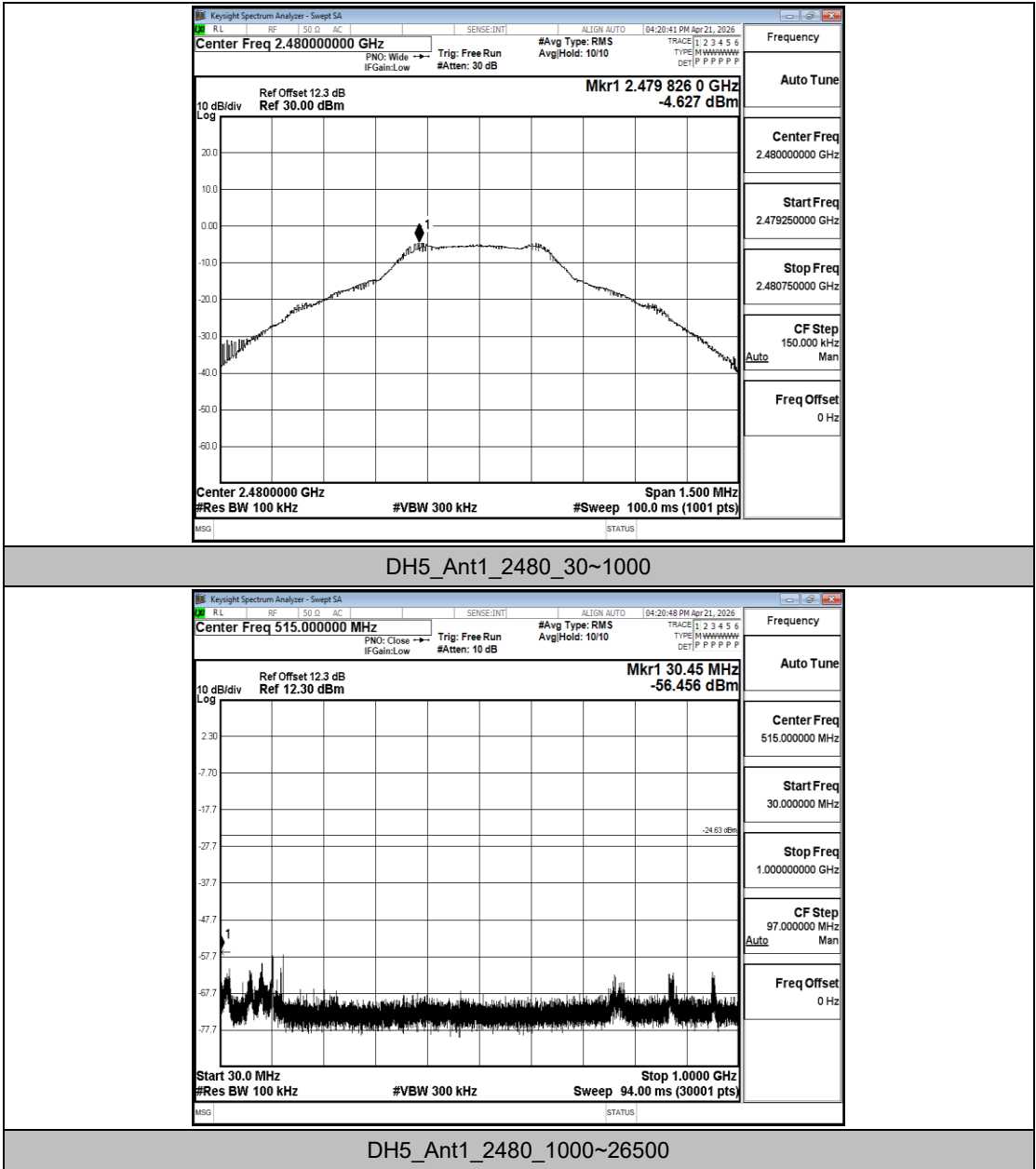
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-5.33	-5.33	---	PASS
			30~1000	-5.33	-52.23	≤-25.33	PASS
			1000~26500	-5.33	-54.56	≤-25.33	PASS
		2441	Reference	-2.99	-2.99	---	PASS
			30~1000	-2.99	-50.34	≤-22.99	PASS
			1000~26500	-2.99	-53.77	≤-22.99	PASS
		2480	Reference	-4.63	-4.63	---	PASS
			30~1000	-4.63	-56.46	≤-24.63	PASS
			1000~26500	-4.63	-54.77	≤-24.63	PASS
2DH5	Ant1	2402	Reference	-5.39	-5.39	---	PASS
			30~1000	-5.39	-56.07	≤-25.39	PASS
			1000~26500	-5.39	-54.61	≤-25.39	PASS
		2441	Reference	-3.05	-3.05	---	PASS
			30~1000	-3.05	-52.75	≤-23.05	PASS
			1000~26500	-3.05	-54.19	≤-23.05	PASS
		2480	Reference	-4.77	-4.77	---	PASS
			30~1000	-4.77	-52.21	≤-24.77	PASS
			1000~26500	-4.77	-54.34	≤-24.77	PASS

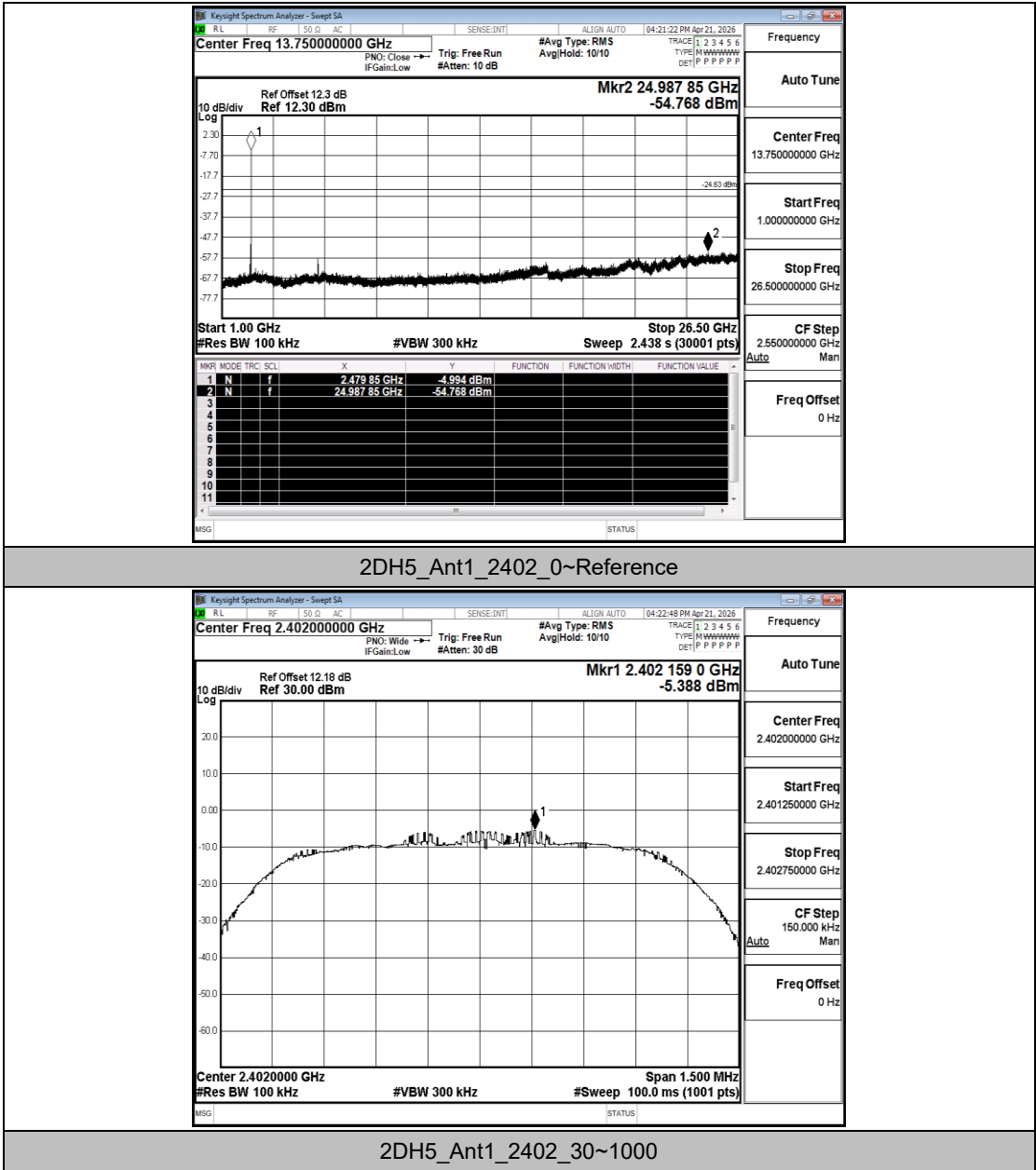
Test Graphs

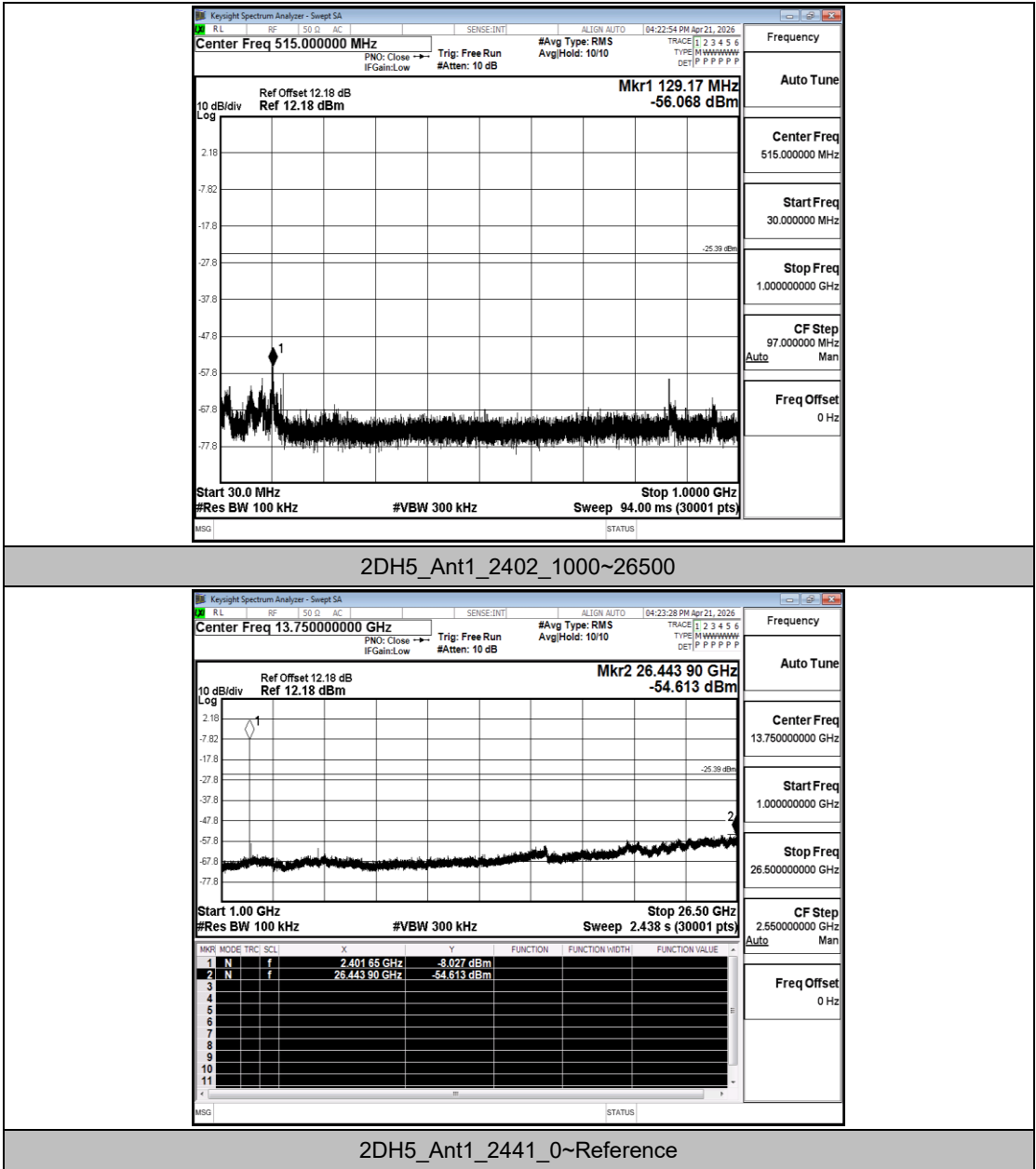


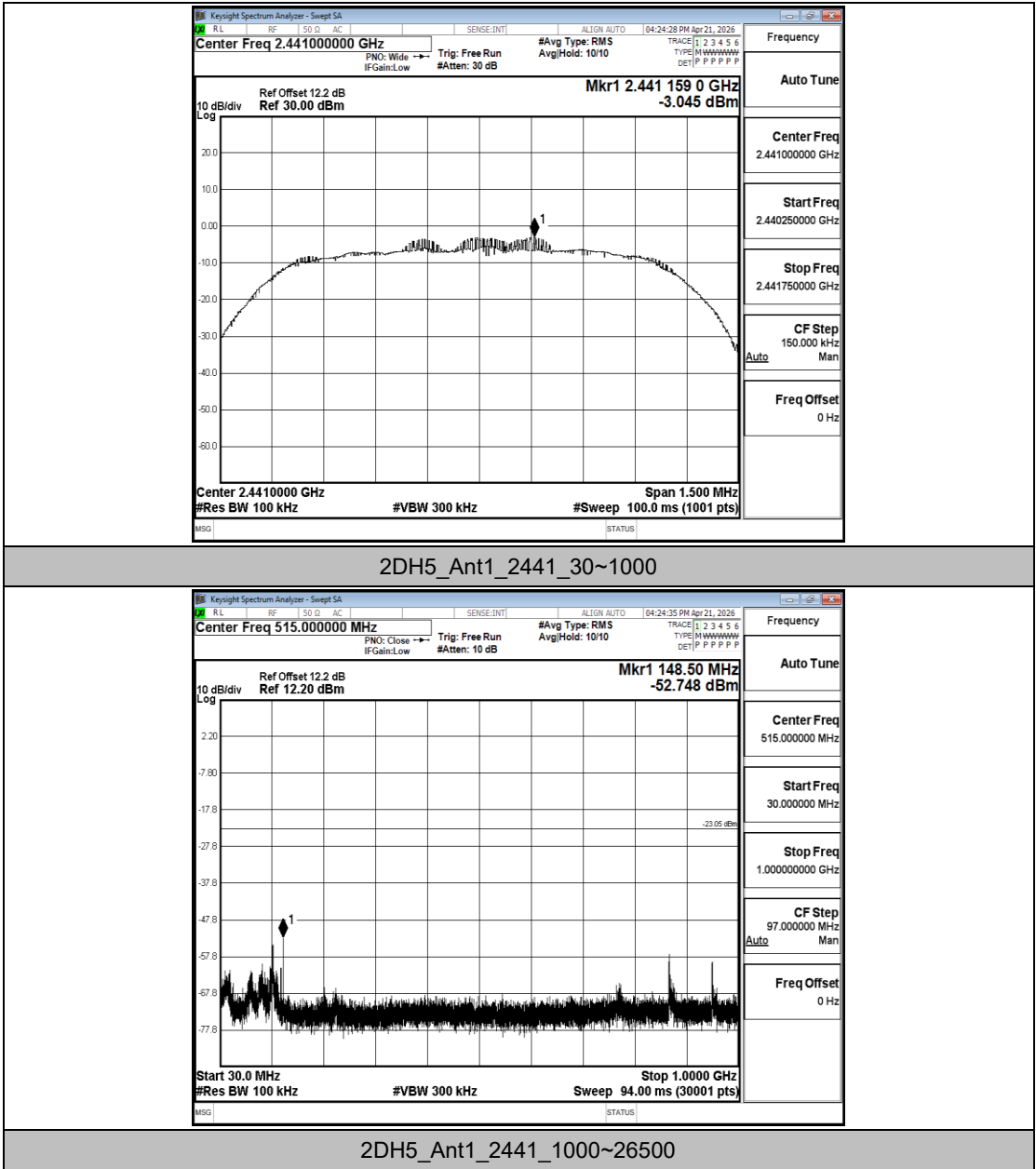


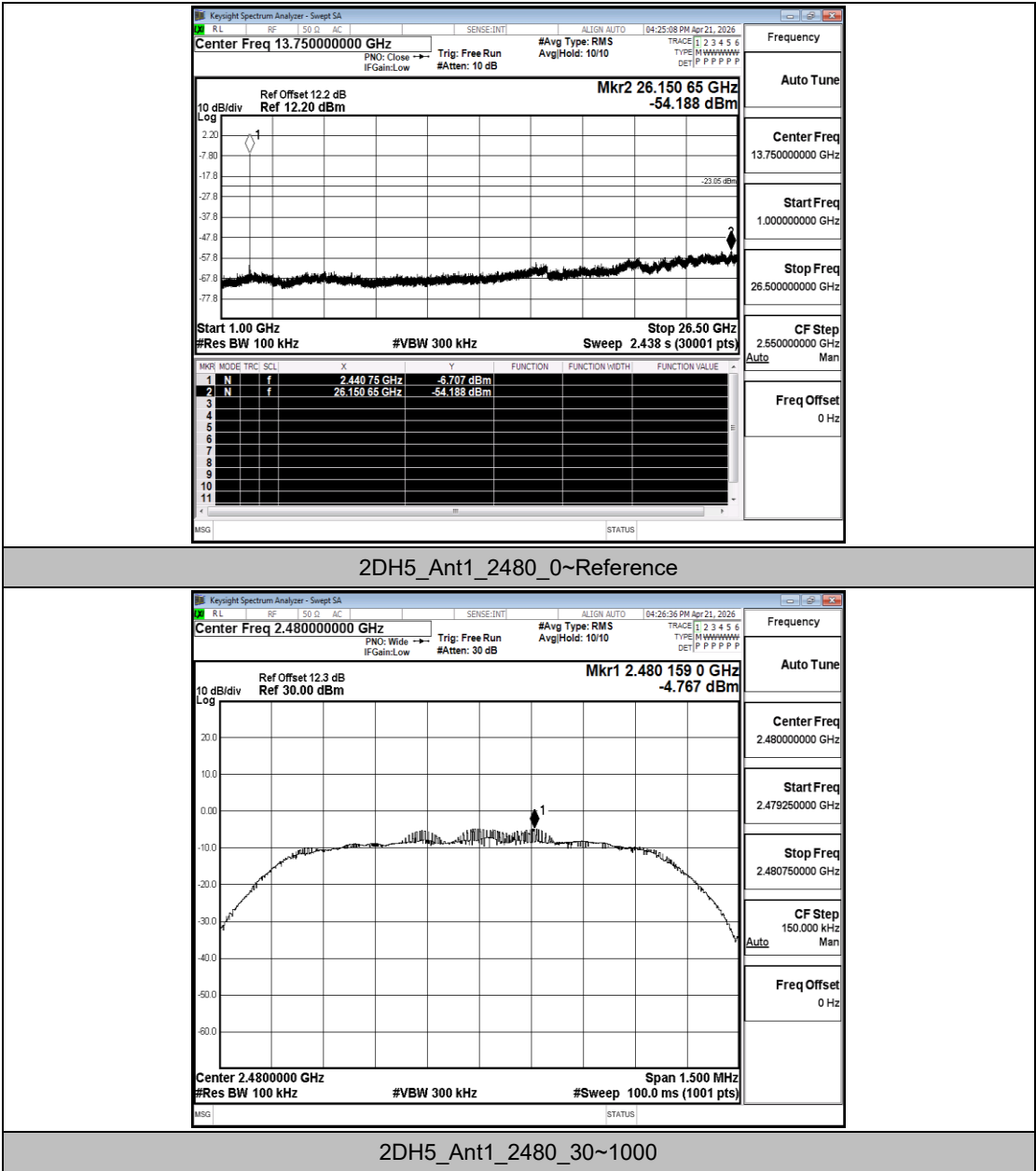


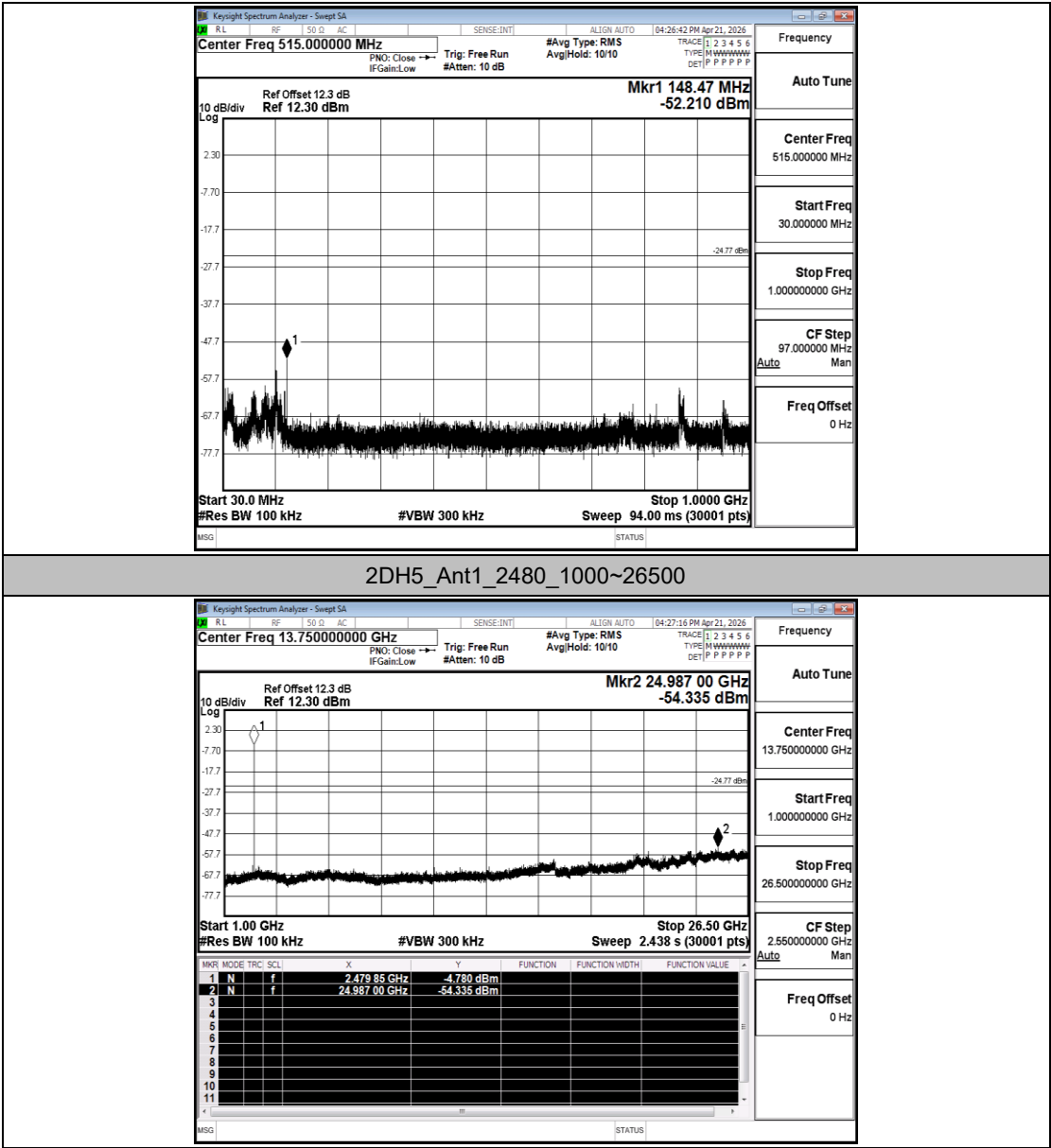










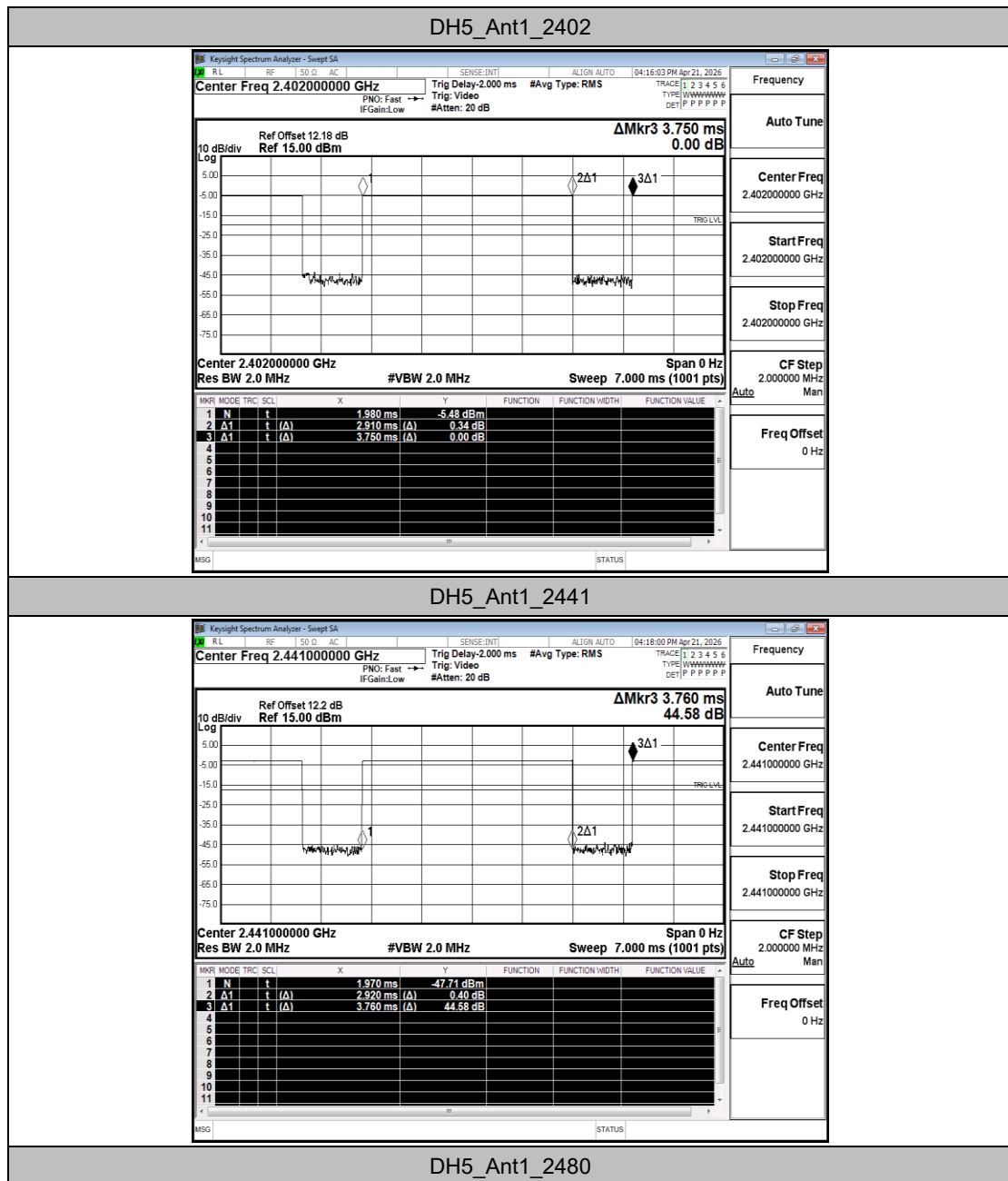


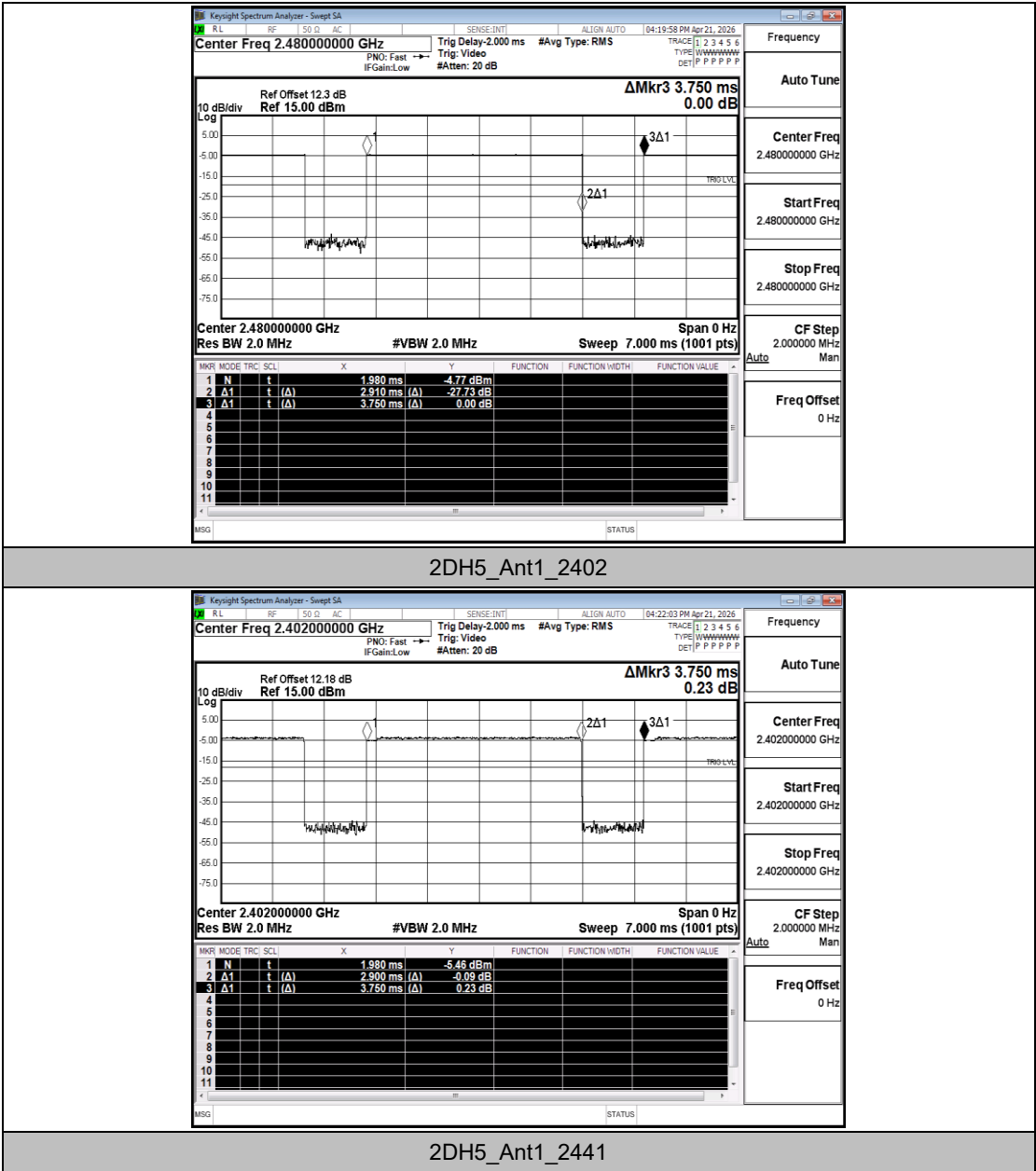
C.8 Duty Cycle

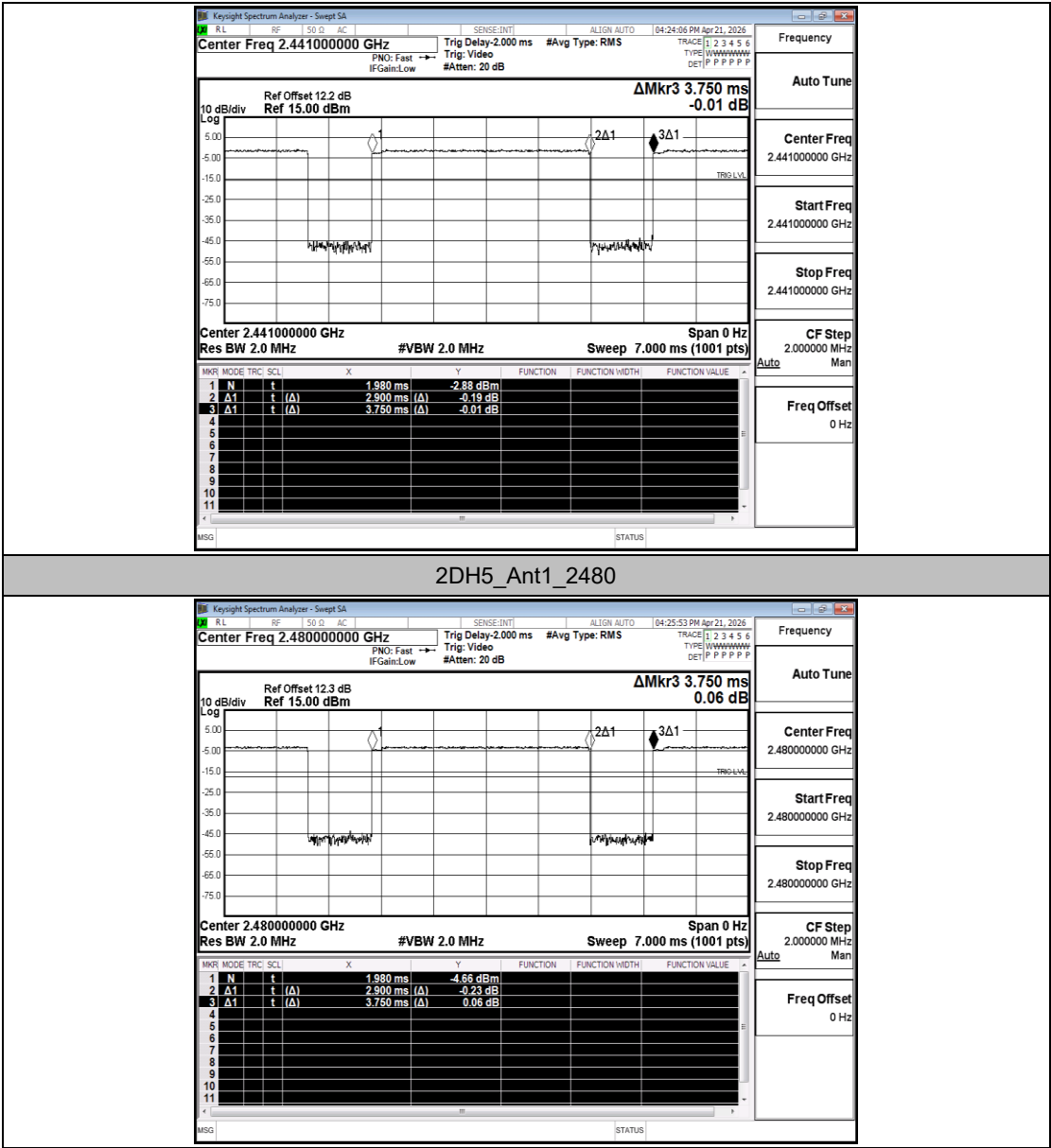
Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.76	77.66	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.90	3.75	77.33	1.12	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.90	3.75	77.33	1.12	---	---

Test Graphs







C.9 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-61.05	≤-44.30	2.00	1.10	37.25	≤54	PASS
				AV	2369.090	-59.89	≤-44.30	2.00	1.10	38.41	≤54	PASS
				AV	2390.000	-60.66	≤-44.30	2.00	1.10	37.64	≤54	PASS
				Peak	2310.000	-52.78	≤-23.20	2.00	0.00	44.42	≤74	PASS
				Peak	2388.305	-49.81	≤-23.20	2.00	0.00	47.39	≤74	PASS
				Peak	2390.000	-52.08	≤-23.20	2.00	0.00	45.12	≤74	PASS
		High	2480	AV	2483.500	-60.12	≤-44.30	2.00	1.10	38.18	≤54	PASS
				AV	2483.840	-59.55	≤-44.30	2.00	1.10	38.75	≤54	PASS
				AV	2500.000	-60.56	≤-44.30	2.00	1.10	37.74	≤54	PASS
				Peak	2483.500	-50.55	≤-23.20	2.00	0.00	46.65	≤74	PASS
				Peak	2490.800	-50.18	≤-23.20	2.00	0.00	47.02	≤74	PASS
				Peak	2500.000	-53.49	≤-23.20	2.00	0.00	43.71	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-51.35	≤-23.20	2.00	0.00	45.85	≤74	PASS
				Peak	2322.050	-50.18	≤-23.20	2.00	0.00	47.02	≤74	PASS
				Peak	2390.000	-51.96	≤-23.20	2.00	0.00	45.24	≤74	PASS
		High	Hop_2480	Peak	2483.500	-53.14	≤-23.20	2.00	0.00	44.06	≤74	PASS
				Peak	2485.440	-49.6	≤-23.20	2.00	0.00	47.60	≤74	PASS
				Peak	2500.000	-52.4	≤-	2.00	0.00	44.80	≤74	PASS

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							23.20					
2DH5	Ant1	Low	2402	AV	2310.000	-60.9	≤- 44.32	2.00	1.12	37.42	≤54	PASS
				AV	2328.140	-60.14	≤- 44.32	2.00	1.12	38.18	≤54	PASS
				AV	2390.000	-60.61	≤- 44.32	2.00	1.12	37.71	≤54	PASS
				Peak	2310.000	-53.23	≤- 23.20	2.00	0.00	43.97	≤74	PASS
				Peak	2364.050	-49.83	≤- 23.20	2.00	0.00	47.37	≤74	PASS
				Peak	2390.000	-52.58	≤- 23.20	2.00	0.00	44.62	≤74	PASS
		High	2480	AV	2483.500	-59.35	≤- 44.32	2.00	1.12	38.97	≤54	PASS
				AV	2483.520	-59.35	≤- 44.32	2.00	1.12	38.97	≤54	PASS
				AV	2500.000	-61.02	≤- 44.32	2.00	1.12	37.30	≤54	PASS
				Peak	2483.500	-51.34	≤- 23.20	2.00	0.00	45.86	≤74	PASS
				Peak	2492.880	-48.55	≤- 23.20	2.00	0.00	48.65	≤74	PASS
				Peak	2500.000	-51.26	≤- 23.20	2.00	0.00	45.94	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-52.61	≤- 23.20	2.00	0.00	44.59	≤74	PASS
				Peak	2332.550	-49.65	≤- 23.20	2.00	0.00	47.55	≤74	PASS
				Peak	2390.000	-52.14	≤- 23.20	2.00	0.00	45.06	≤74	PASS
		High	Hop_2480	Peak	2483.500	-52.37	≤- 23.20	2.00	0.00	44.83	≤74	PASS
				Peak	2497.280	-49.47	≤- 23.20	2.00	0.00	47.73	≤74	PASS
				Peak	2500.000	-53.12	≤- 23.20	2.00	0.00	44.08	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

