

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Laptop

Test Model: H729AE

Environmental Conditions

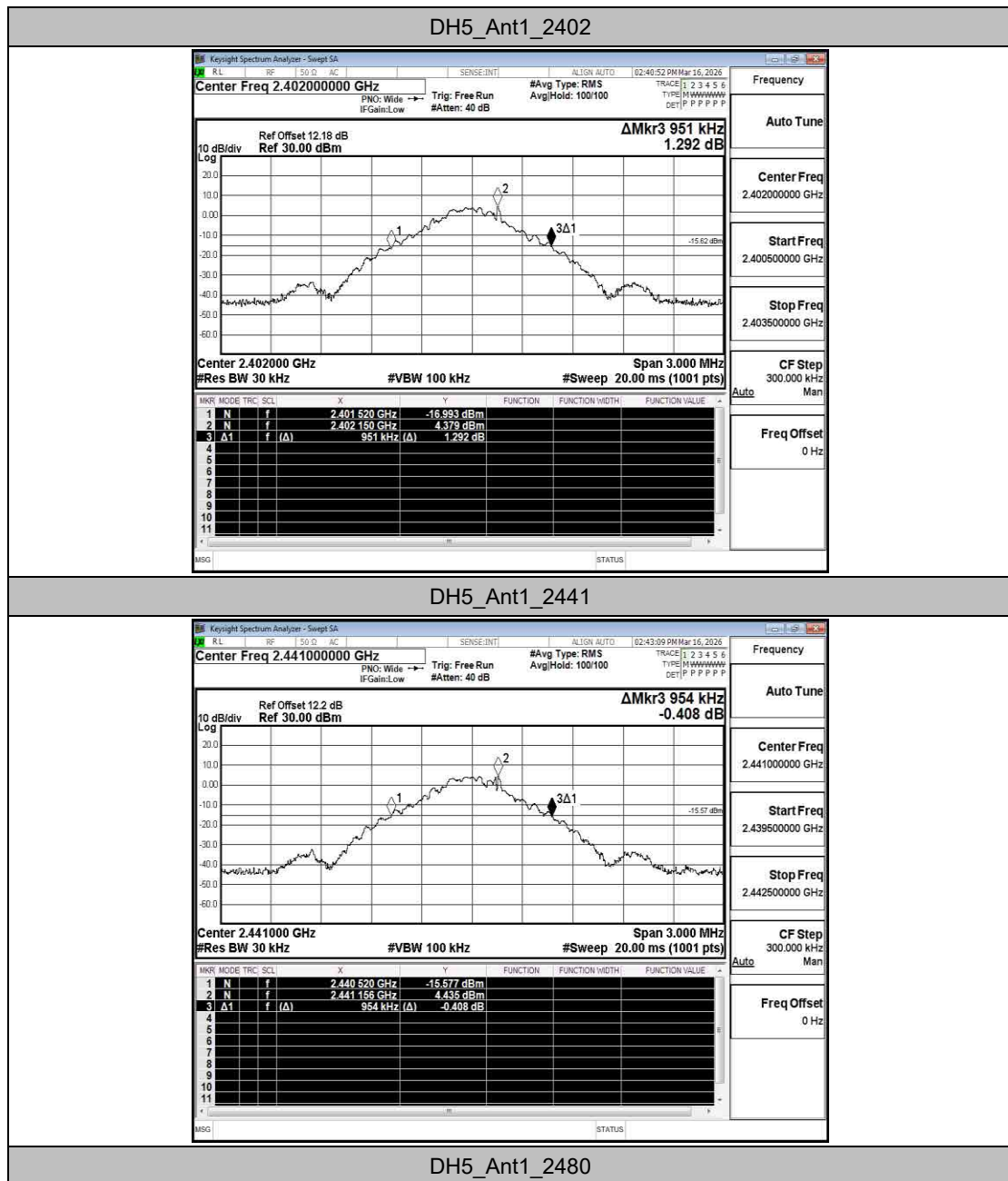
Temperature:	23.5°C
Relative Humidity:	53.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

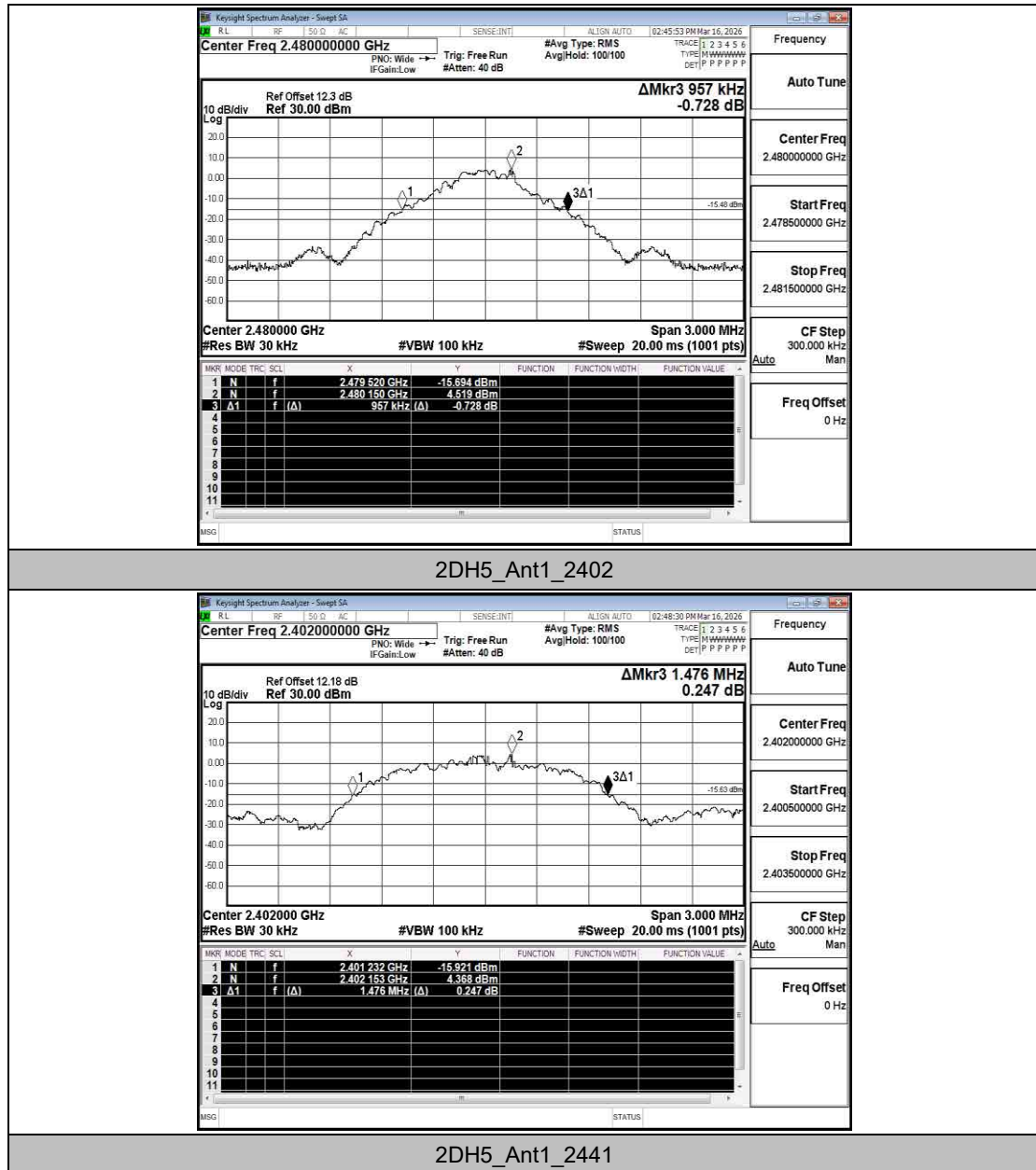
A.1 20dB Emission Bandwidth

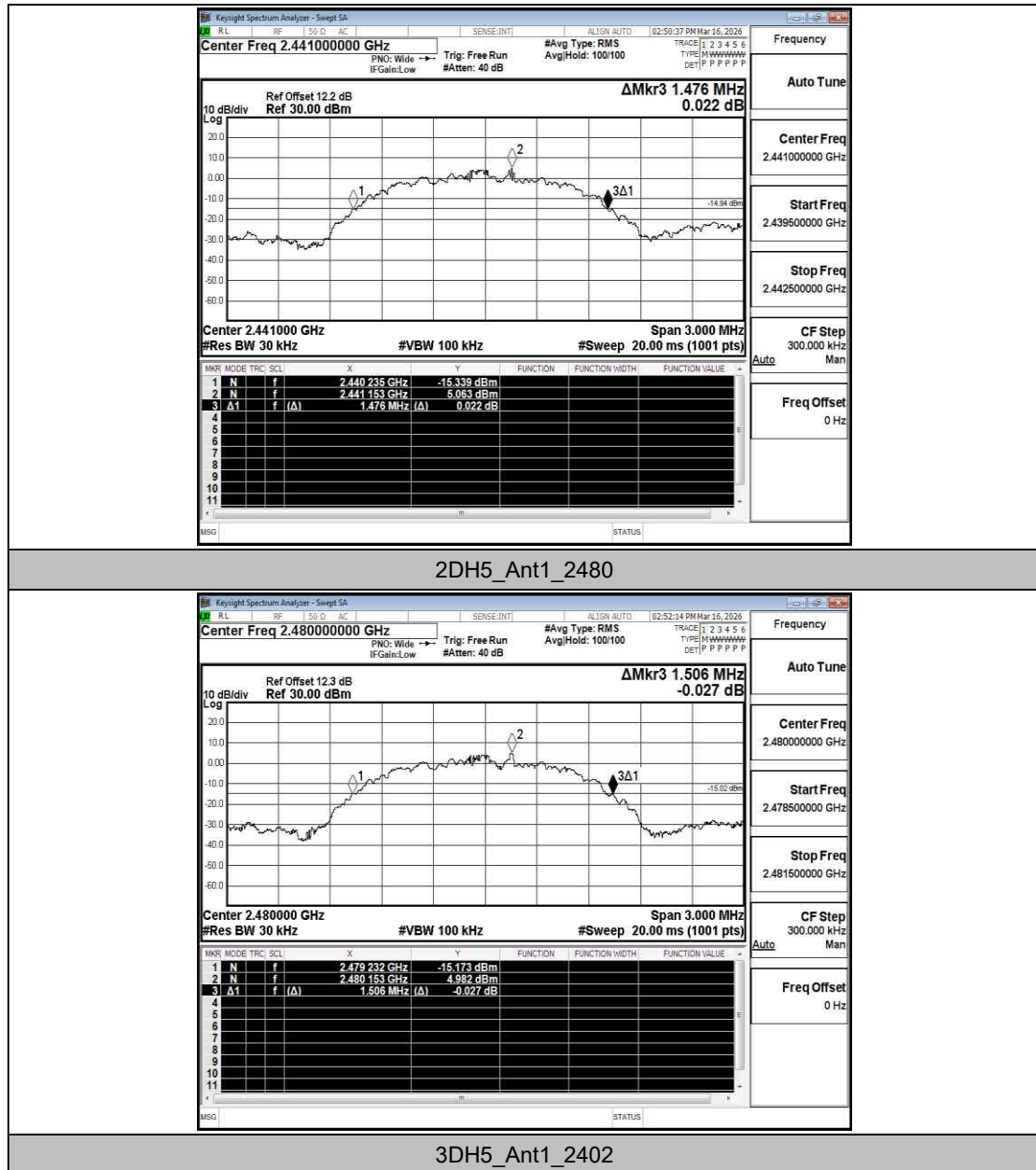
Test Result

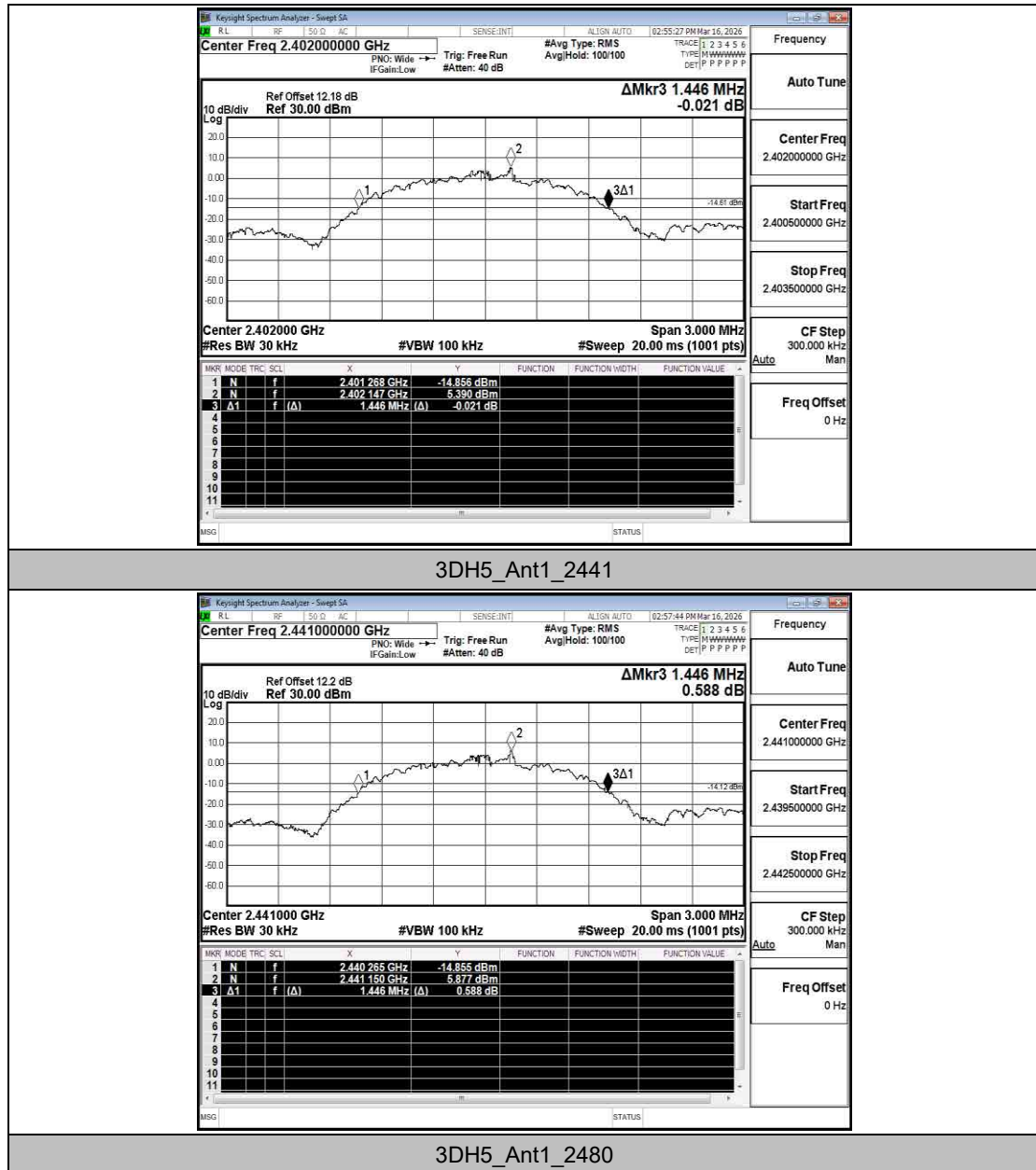
TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.520	2402.471	---	---
		2441	0.954	2440.520	2441.474	---	---
		2480	0.957	2479.520	2480.477	---	---
2DH5	Ant1	2402	1.476	2401.232	2402.708	---	---
		2441	1.476	2440.235	2441.711	---	---
		2480	1.506	2479.232	2480.738	---	---
3DH5	Ant1	2402	1.446	2401.268	2402.714	---	---
		2441	1.446	2440.265	2441.711	---	---
		2480	1.467	2479.265	2480.732	---	---

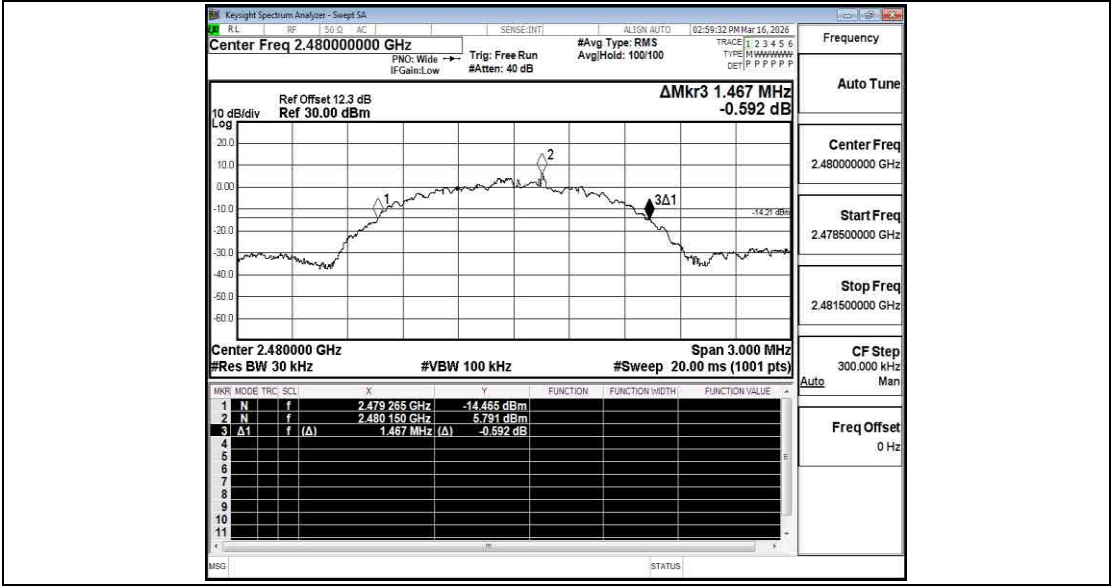
Test Graphs









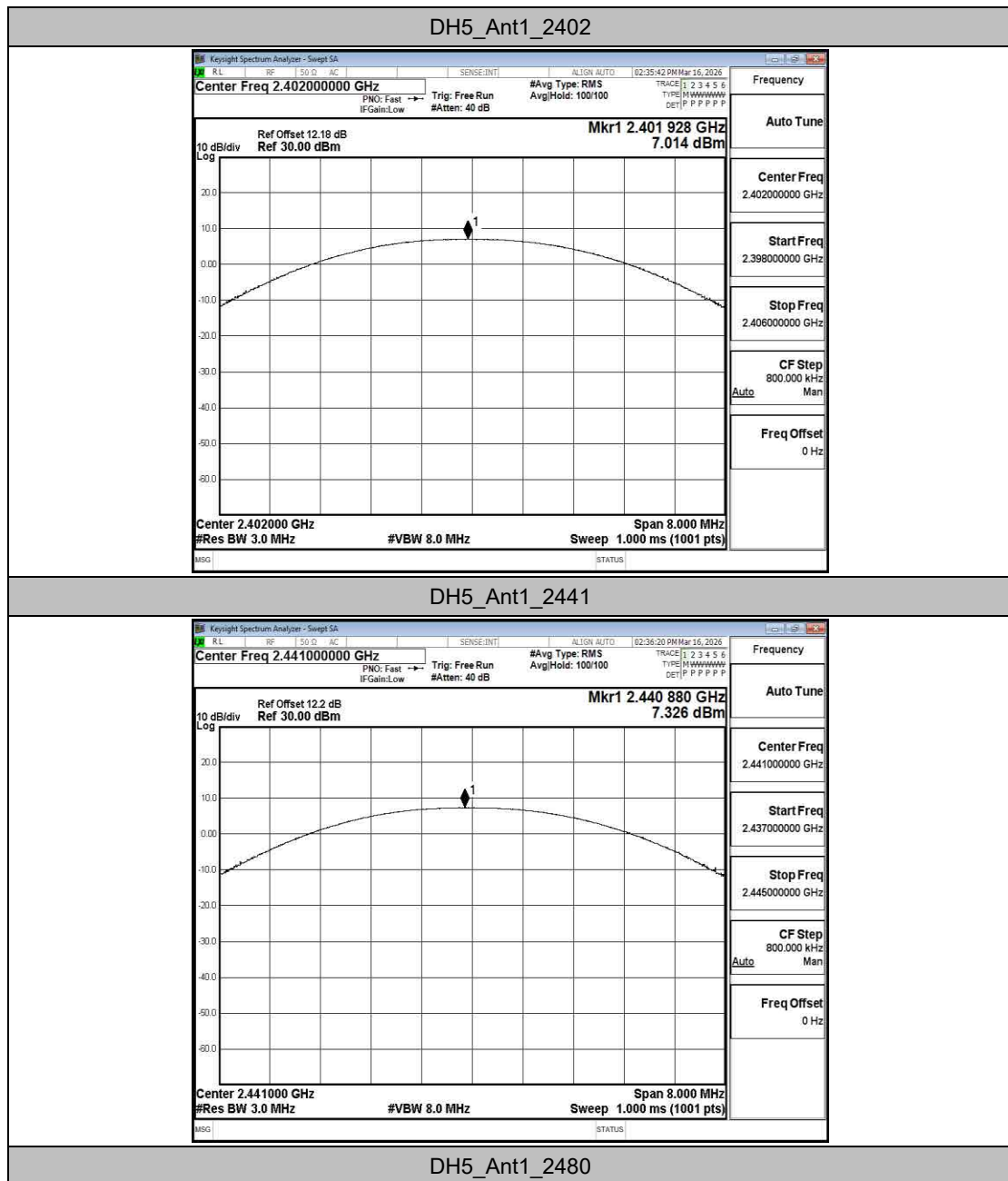


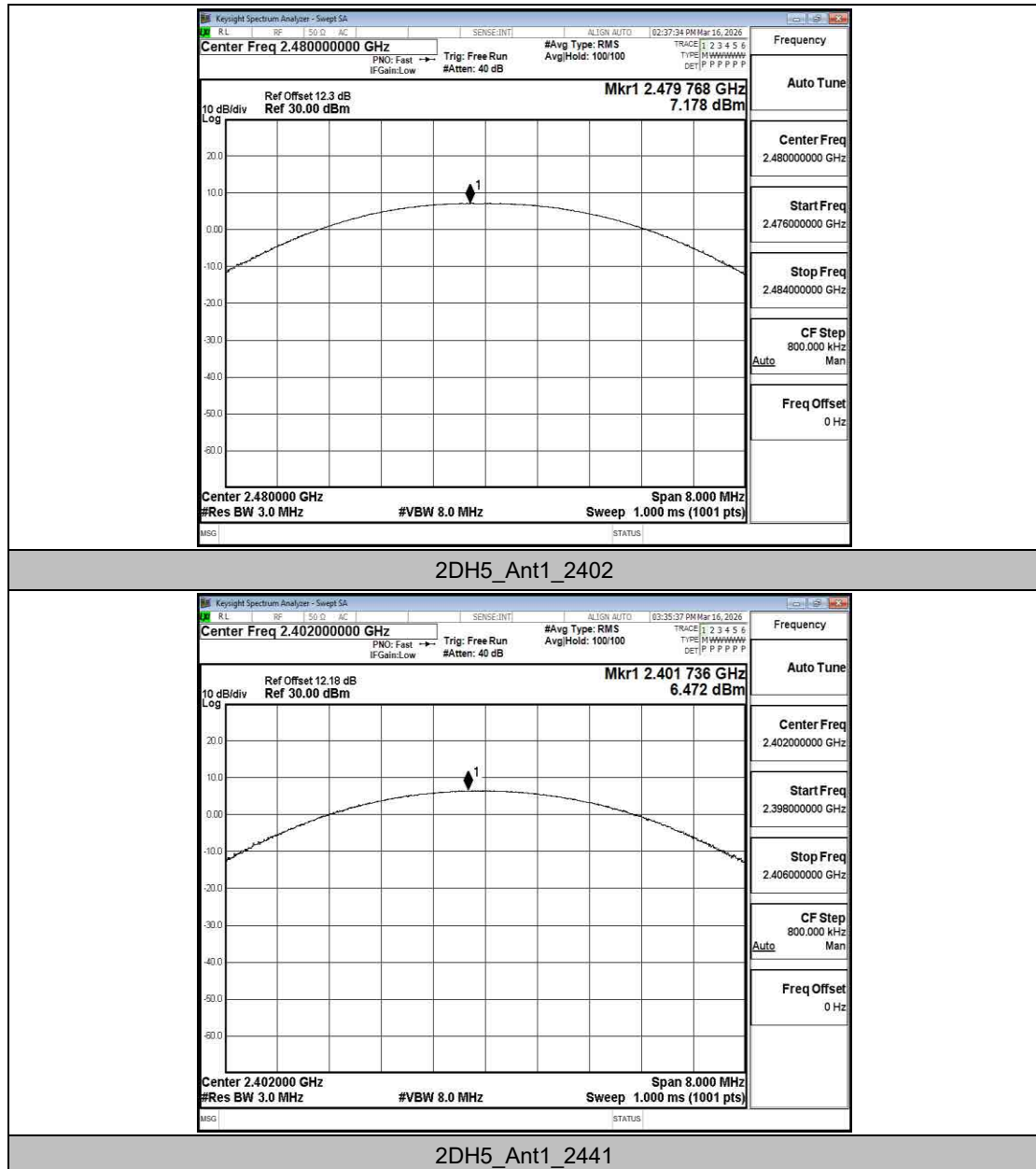
A.2 Maximum conducted output power

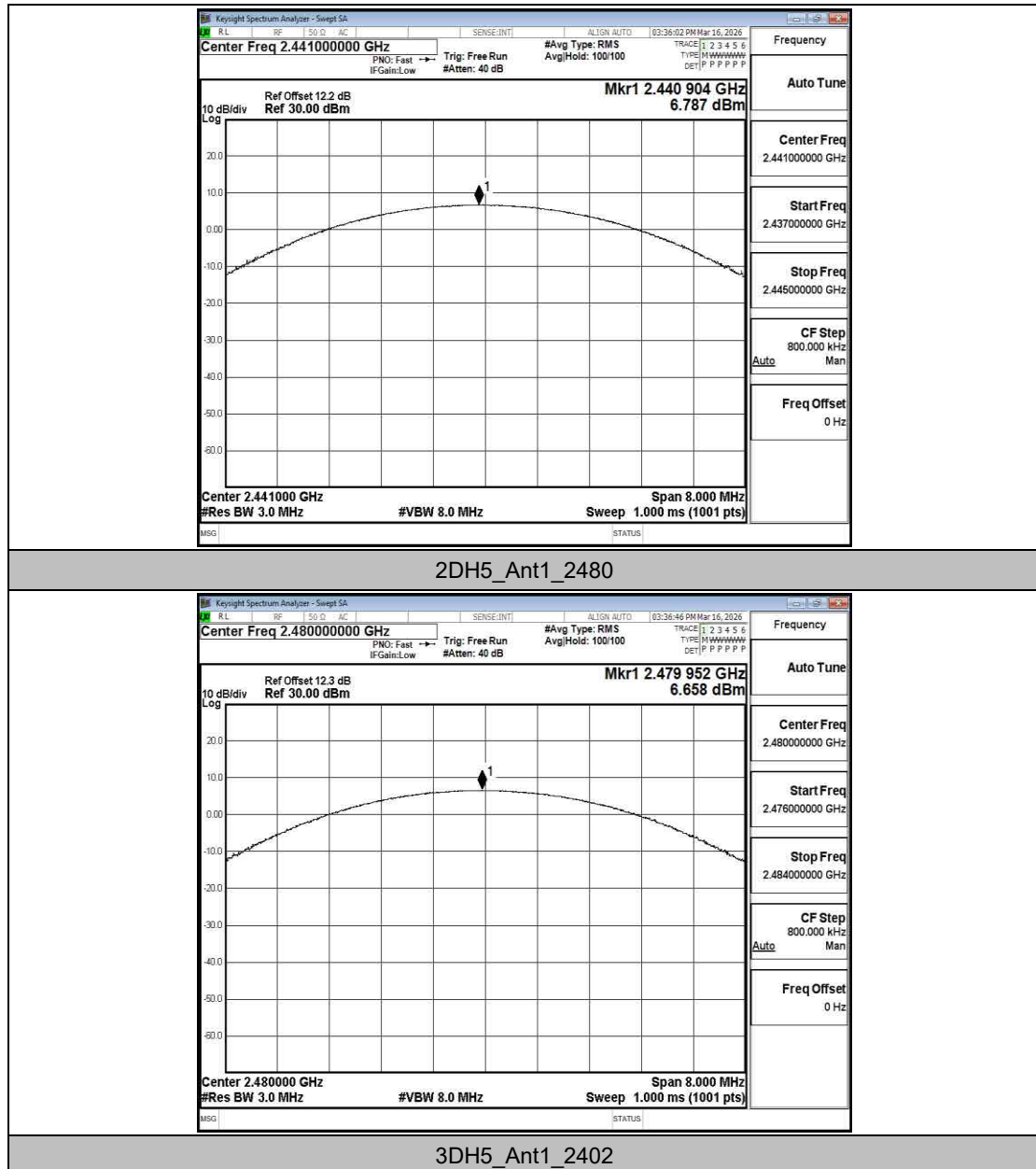
Test Result Peak

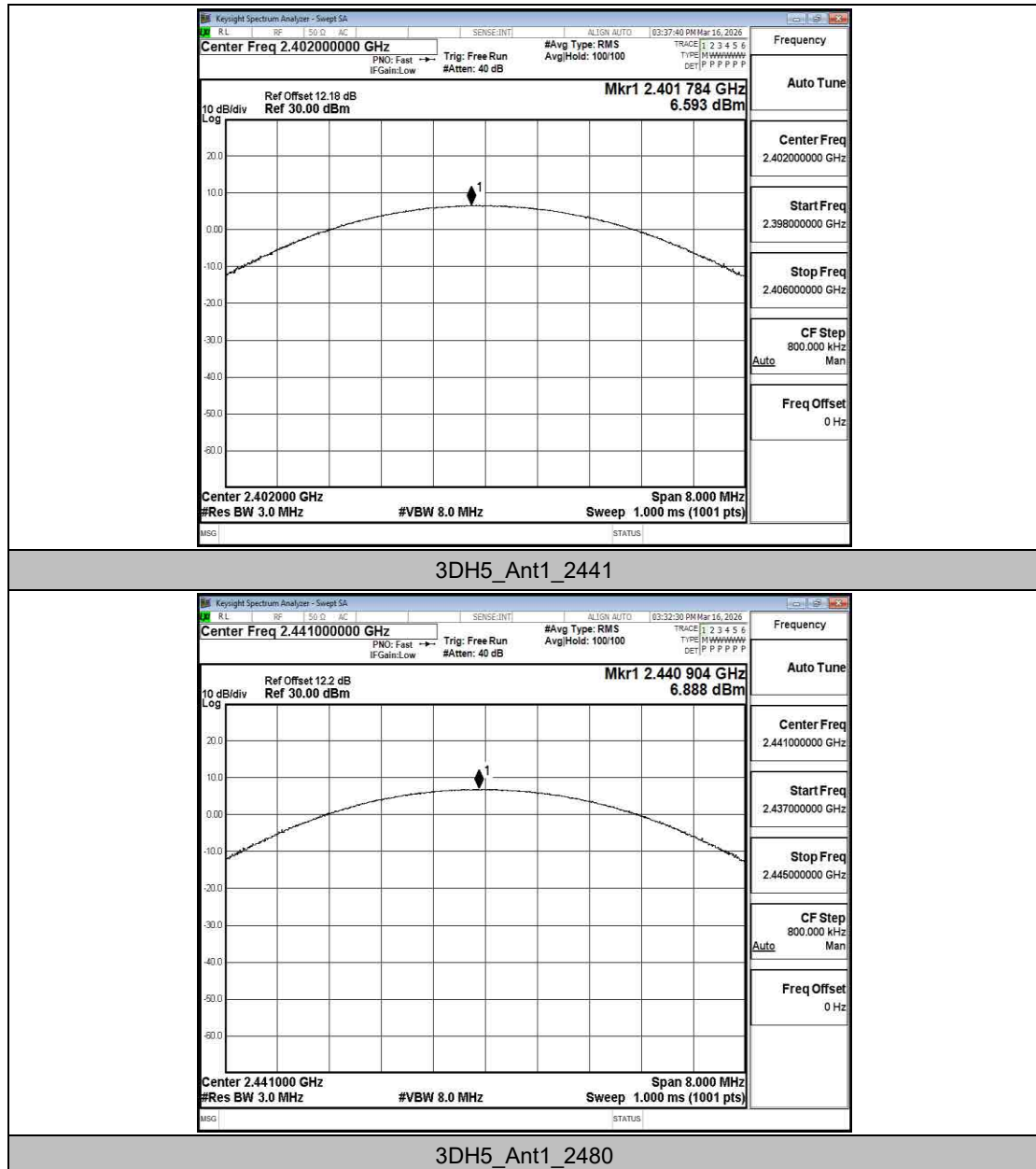
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	7.01	≤30	PASS
		2441	7.33	≤30	PASS
		2480	7.18	≤30	PASS
2DH5	Ant1	2402	6.47	≤30	PASS
		2441	6.79	≤30	PASS
		2480	6.66	≤30	PASS
3DH5	Ant1	2402	6.59	≤30	PASS
		2441	6.89	≤30	PASS
		2480	6.76	≤30	PASS

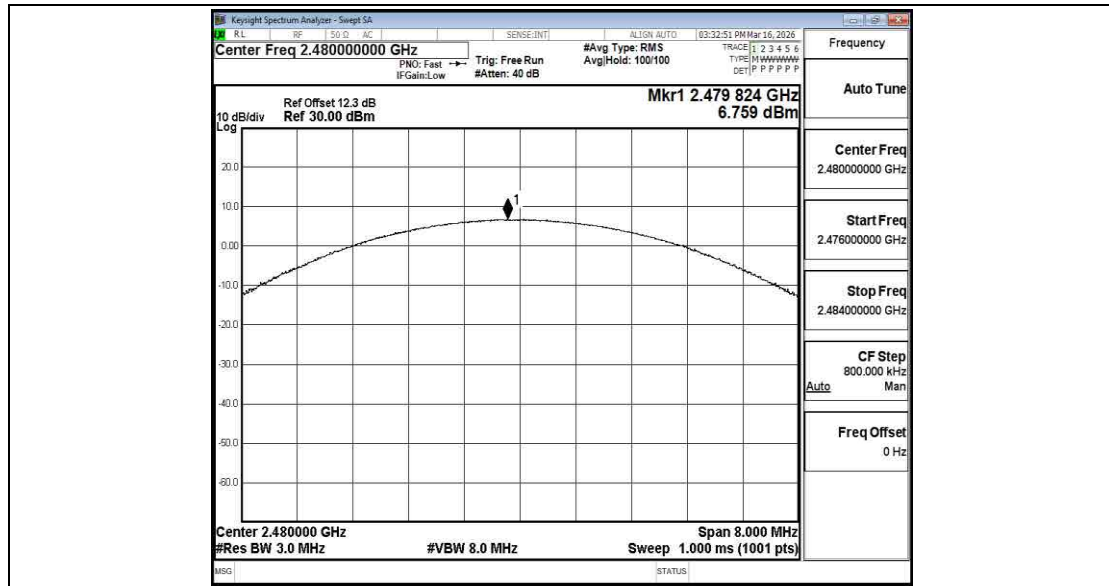
Test Graphs









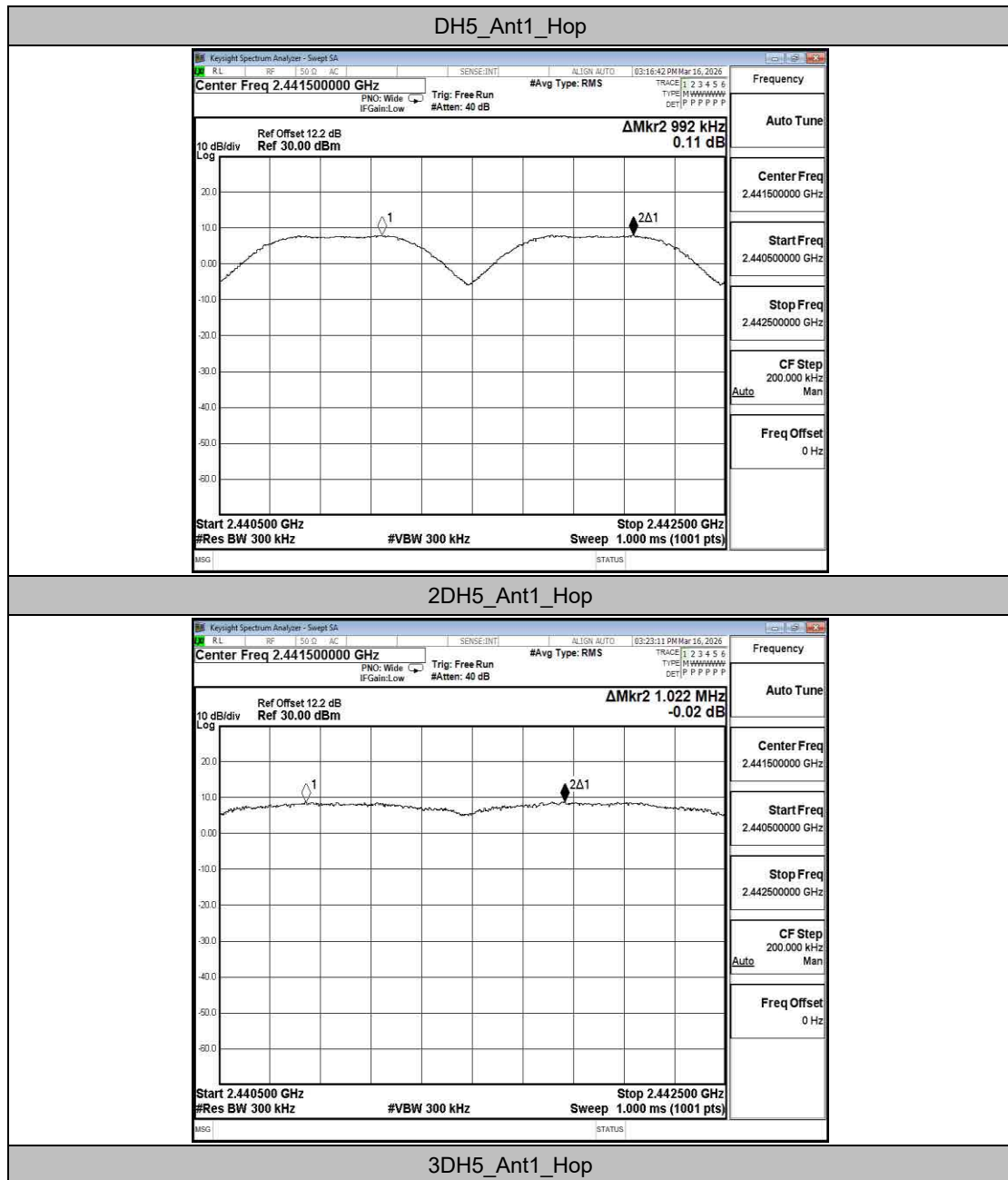


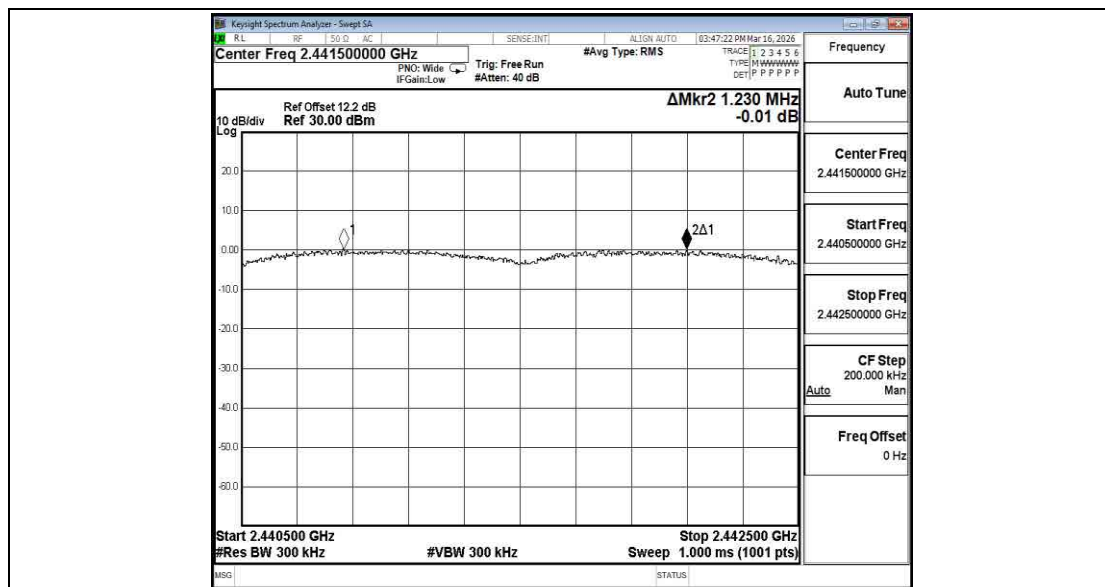
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.992	≥0.957	PASS
2DH5	Ant1	Hop	1.022	≥1.004	PASS
3DH5	Ant1	Hop	1.23	≥0.978	PASS

Test Graphs



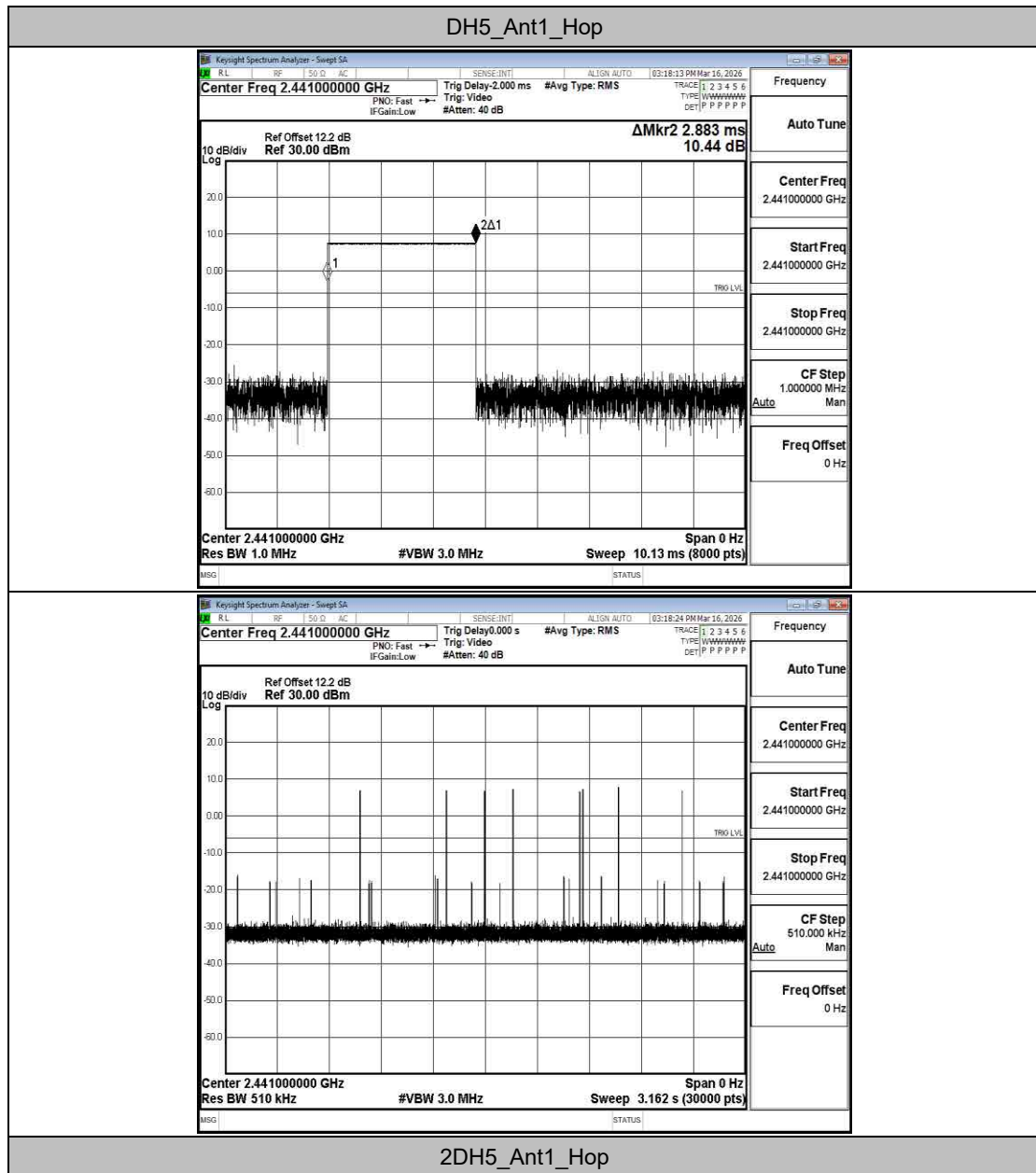


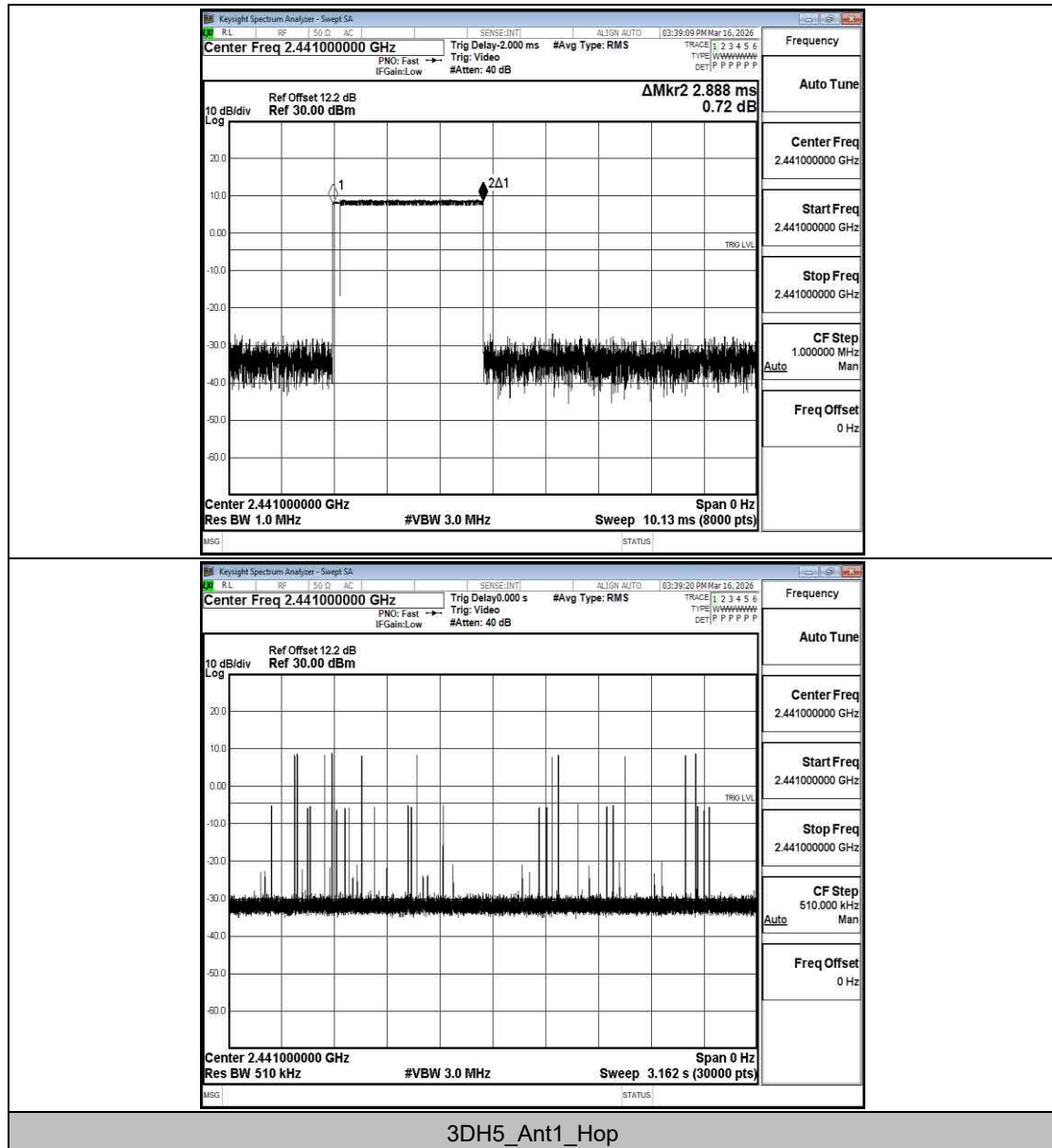
A.4 Time of occupancy

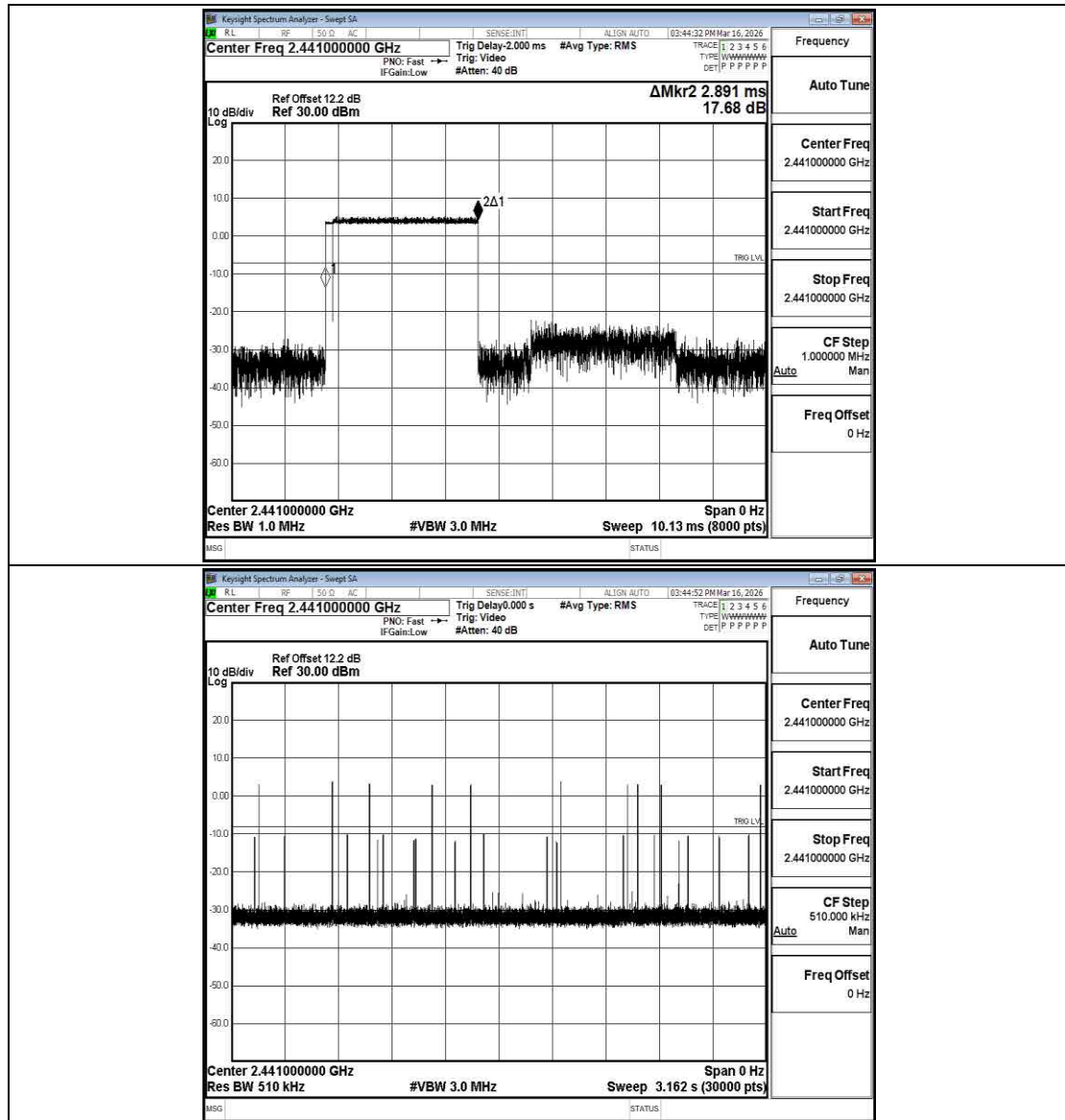
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.883	90	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.888	120	0.347	≤0.4	PASS
3DH5	Ant1	Hop	2.891	110	0.318	≤0.4	PASS

Test Graphs





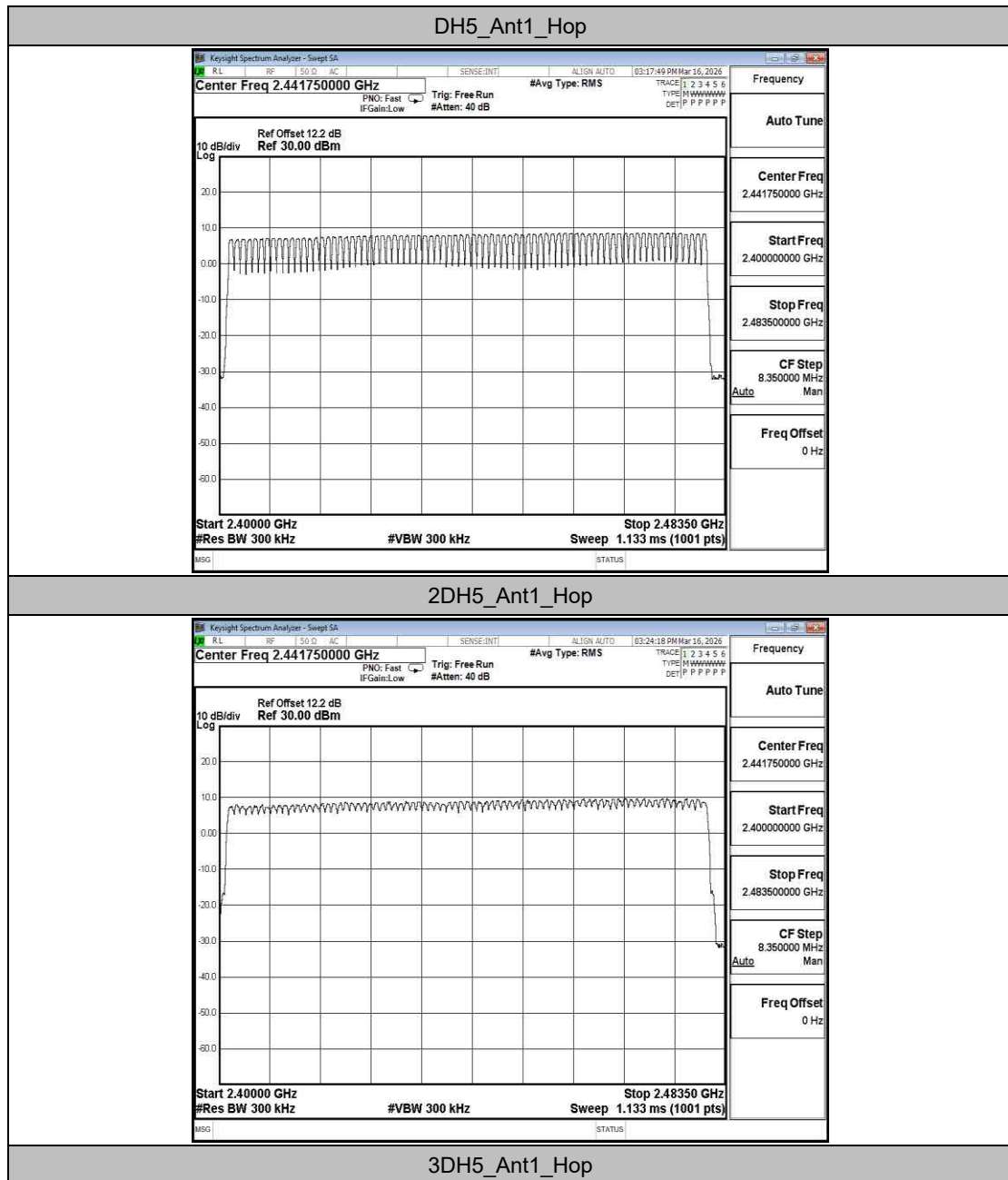


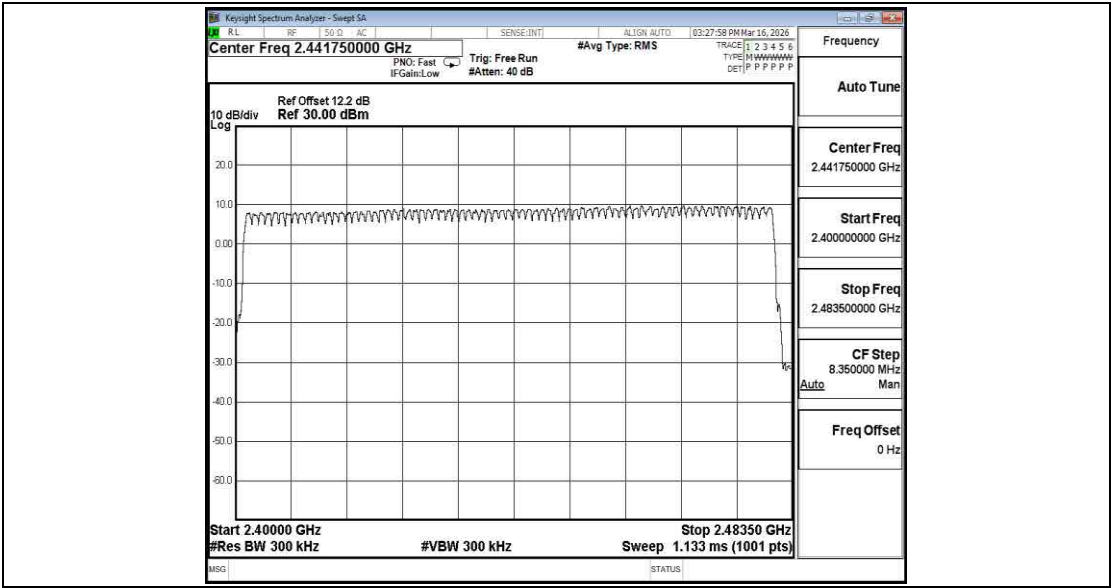
A.5 Number of hopping channels

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

Test Graphs



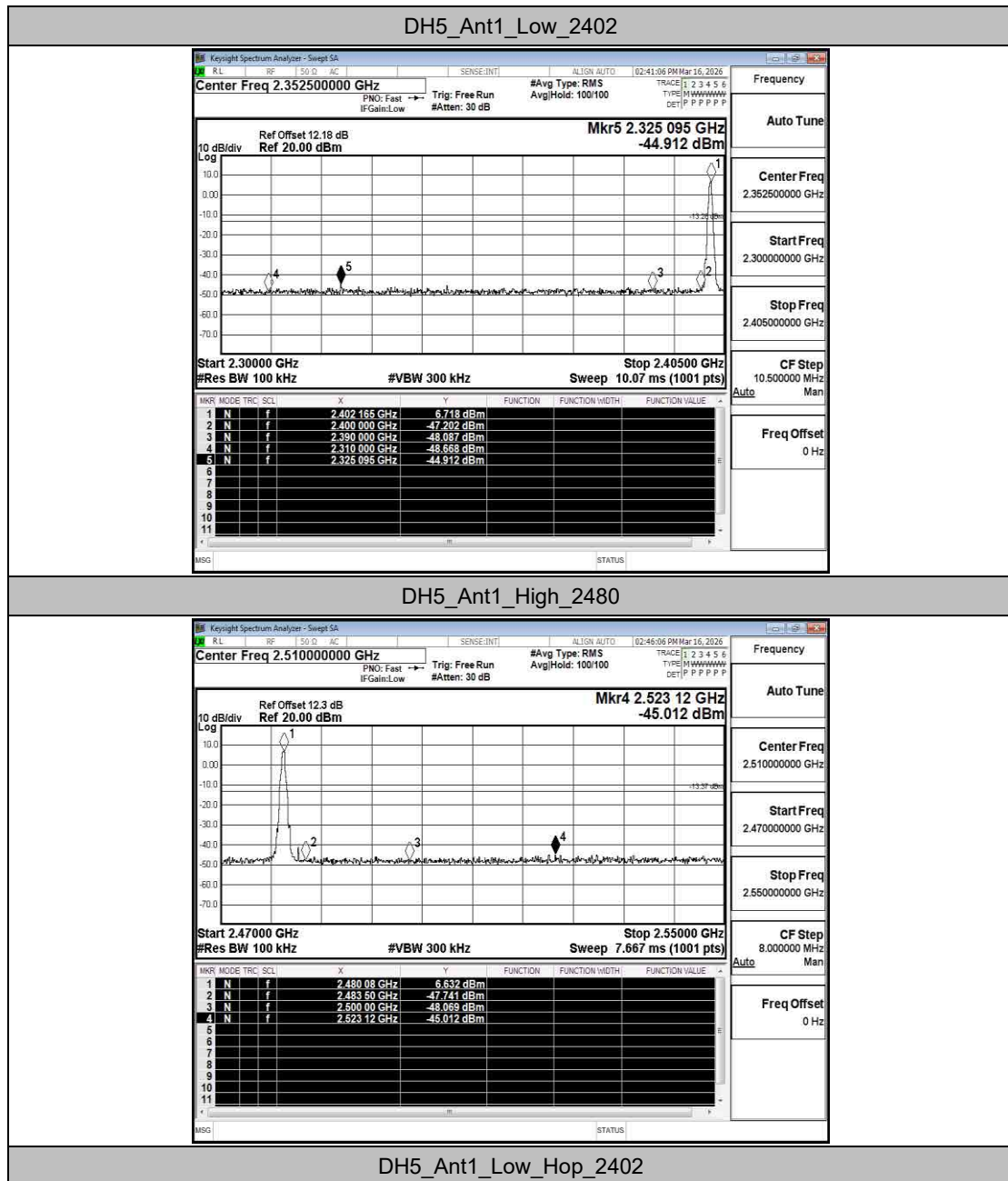


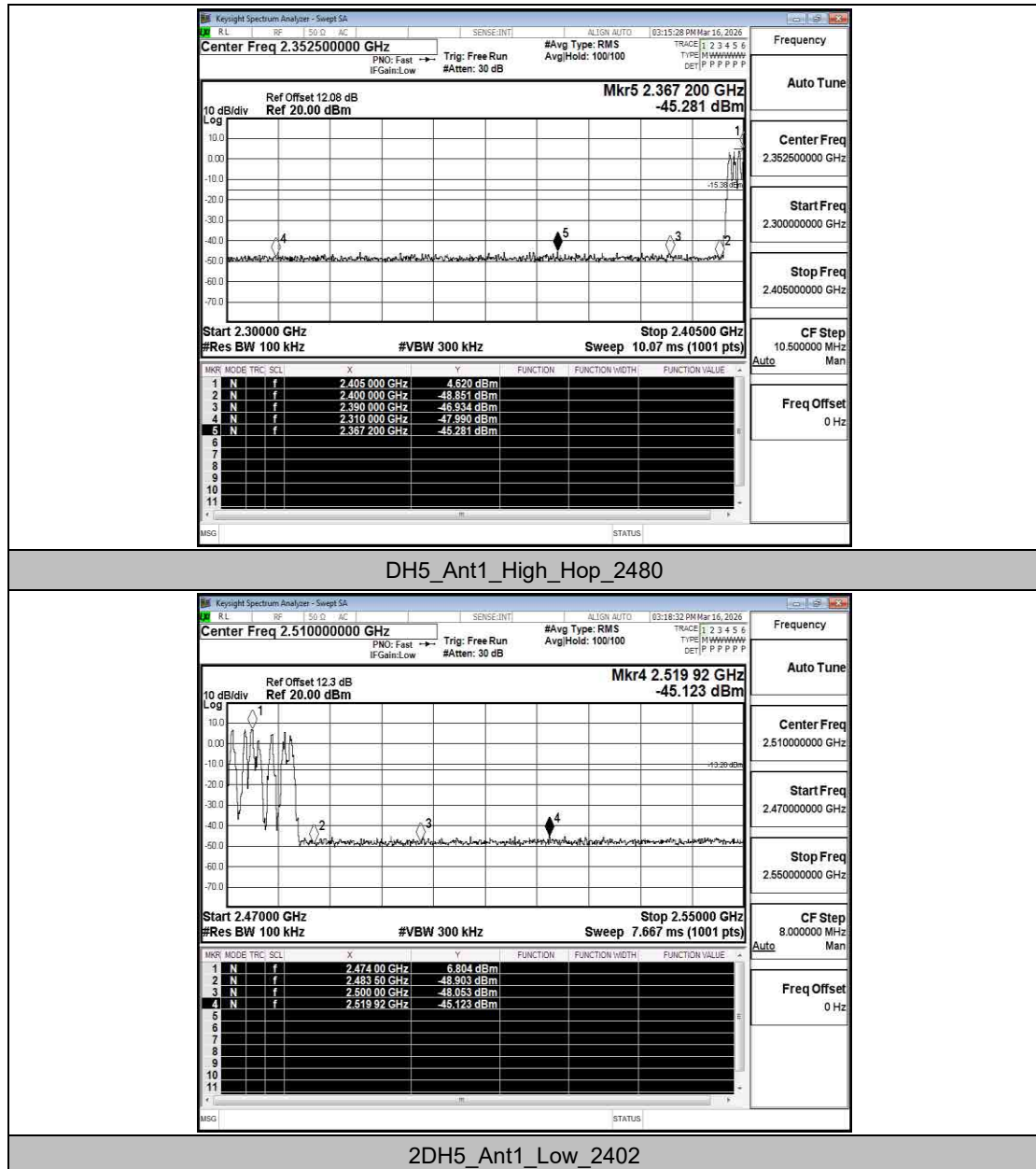
A.6 Band edge measurements

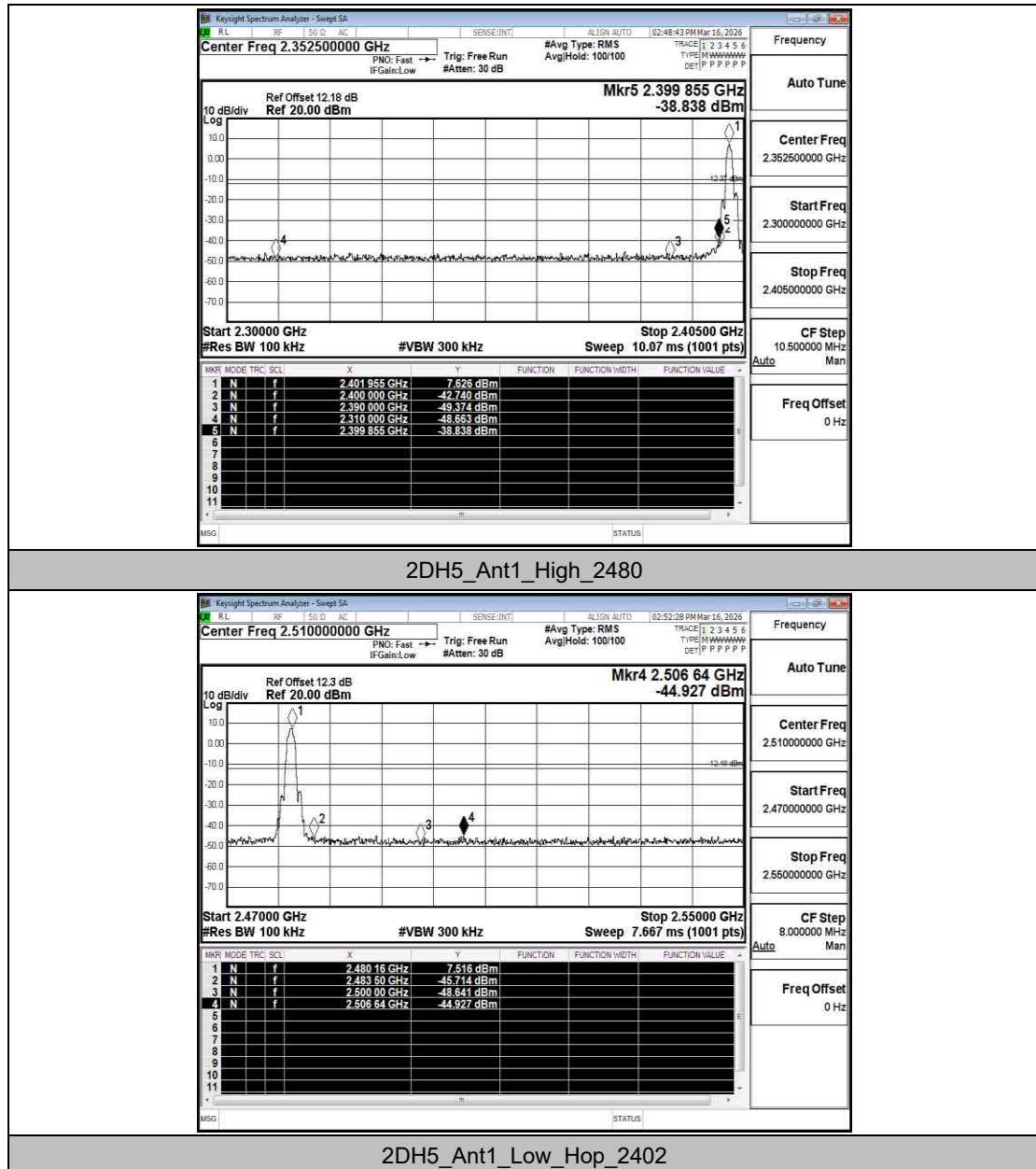
Test Result

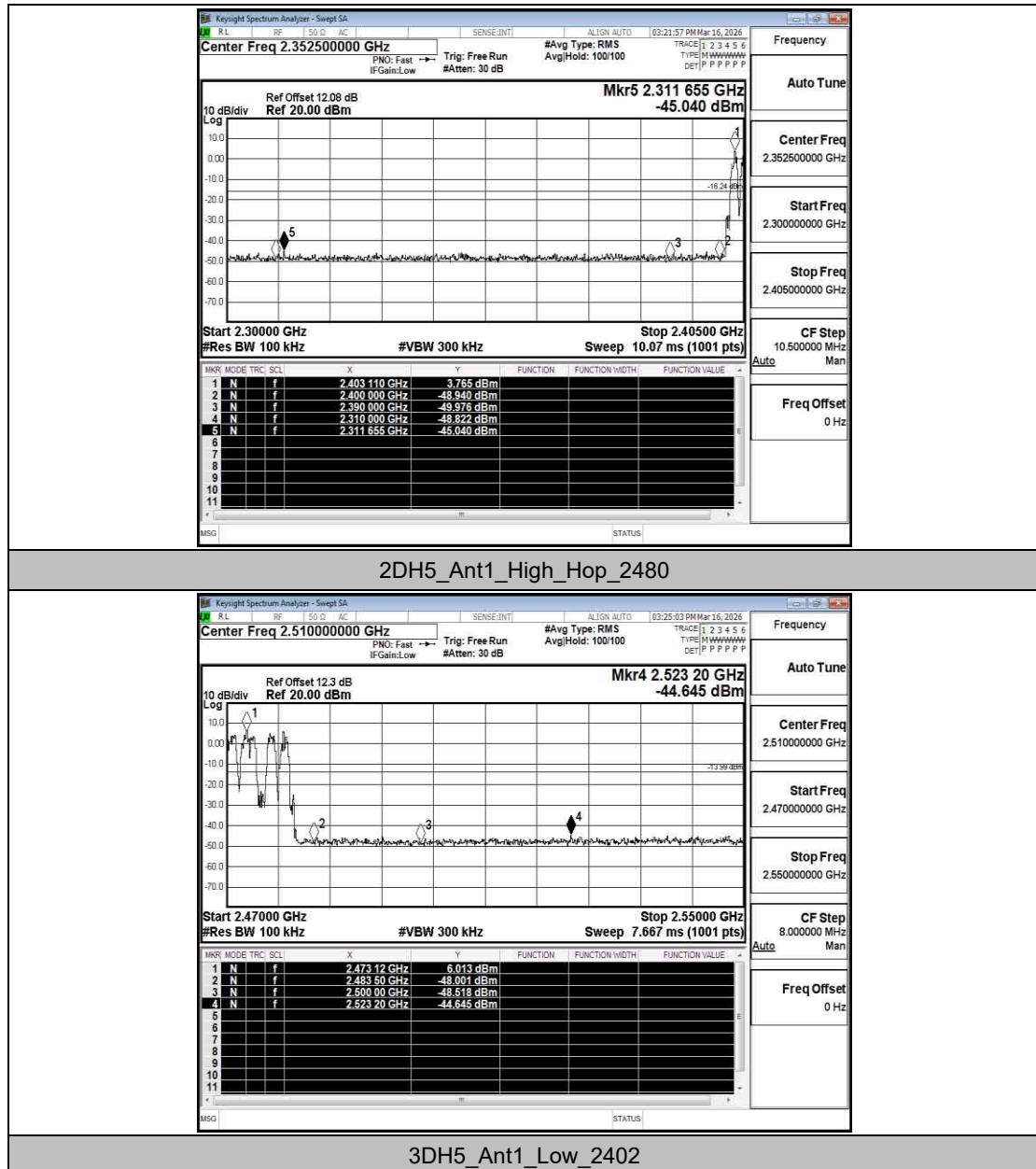
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.72	-44.91	≤-13.28	PASS
		High	2480	6.63	-45.01	≤-13.37	PASS
		Low	Hop_2402	4.62	-45.28	≤-15.38	PASS
		High	Hop_2480	6.80	-45.12	≤-13.2	PASS
2DH5	Ant1	Low	2402	7.63	-38.84	≤-12.37	PASS
		High	2480	7.52	-44.93	≤-12.48	PASS
		Low	Hop_2402	3.77	-45.04	≤-16.24	PASS
		High	Hop_2480	6.01	-44.65	≤-13.99	PASS
3DH5	Ant1	Low	2402	7.60	-42.05	≤-12.4	PASS
		High	2480	7.50	-42.01	≤-12.5	PASS
		Low	Hop_2402	4.84	-45.36	≤-15.16	PASS
		High	Hop_2480	6.14	-44.52	≤-13.86	PASS

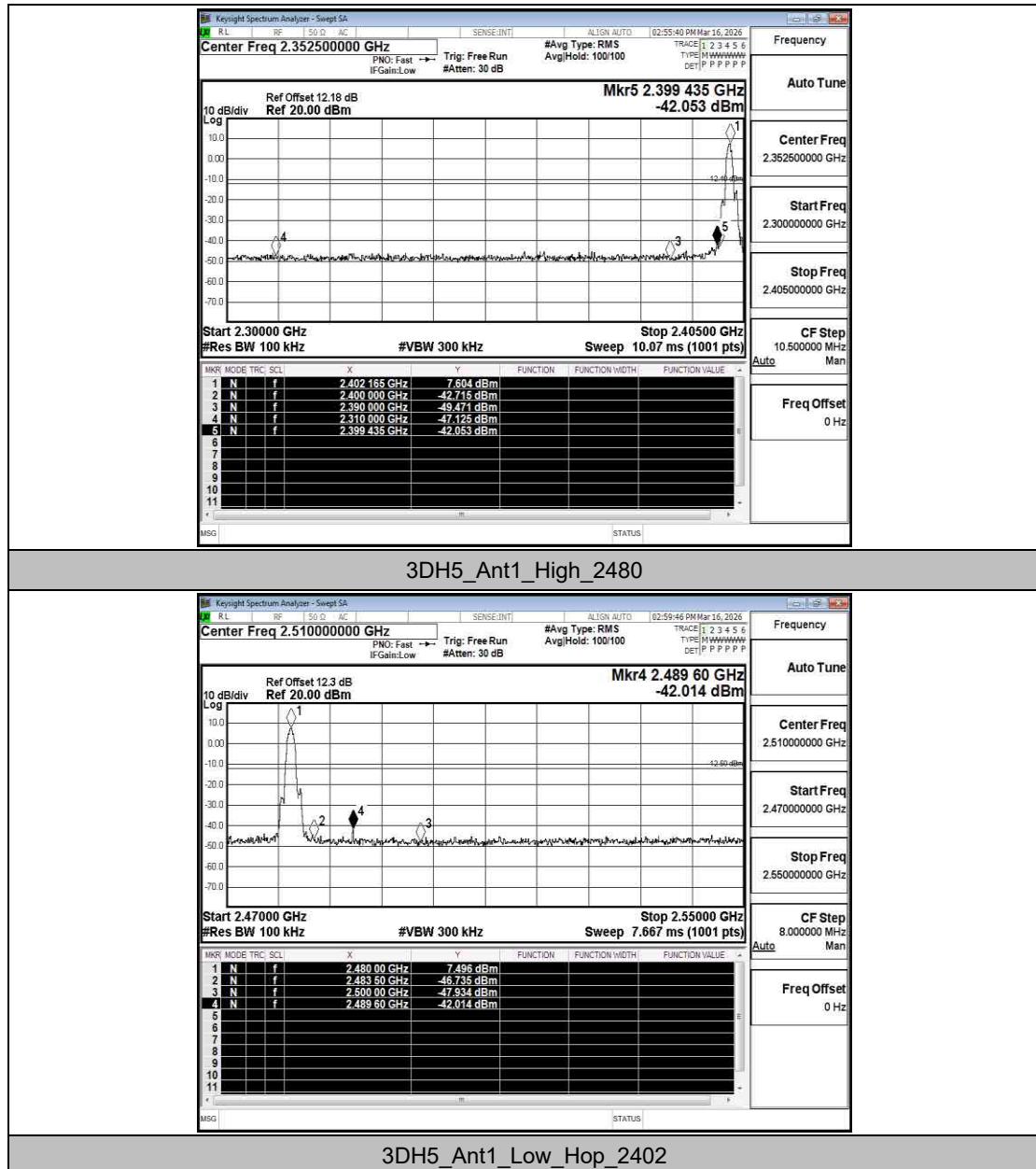
Test Graphs

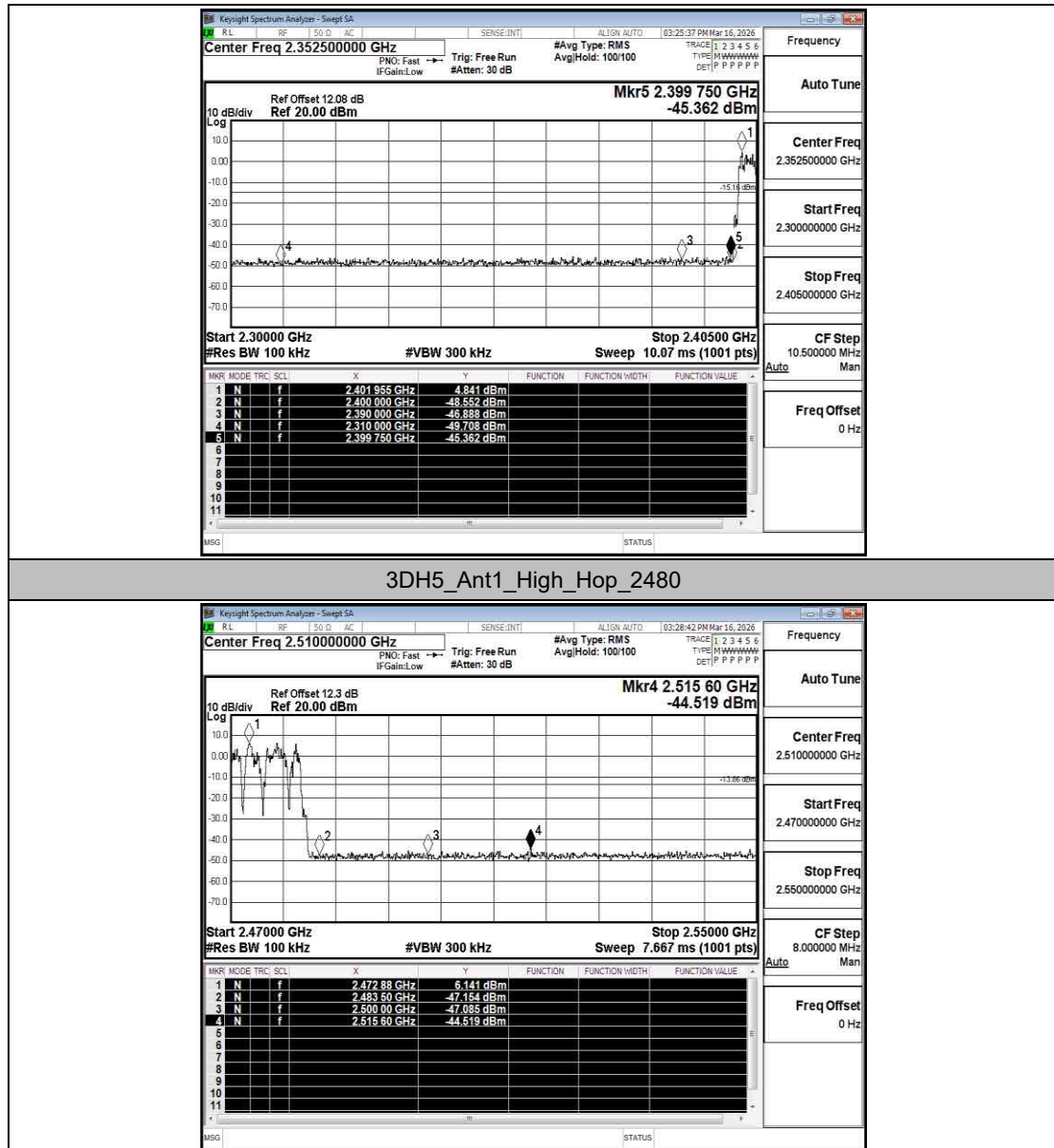










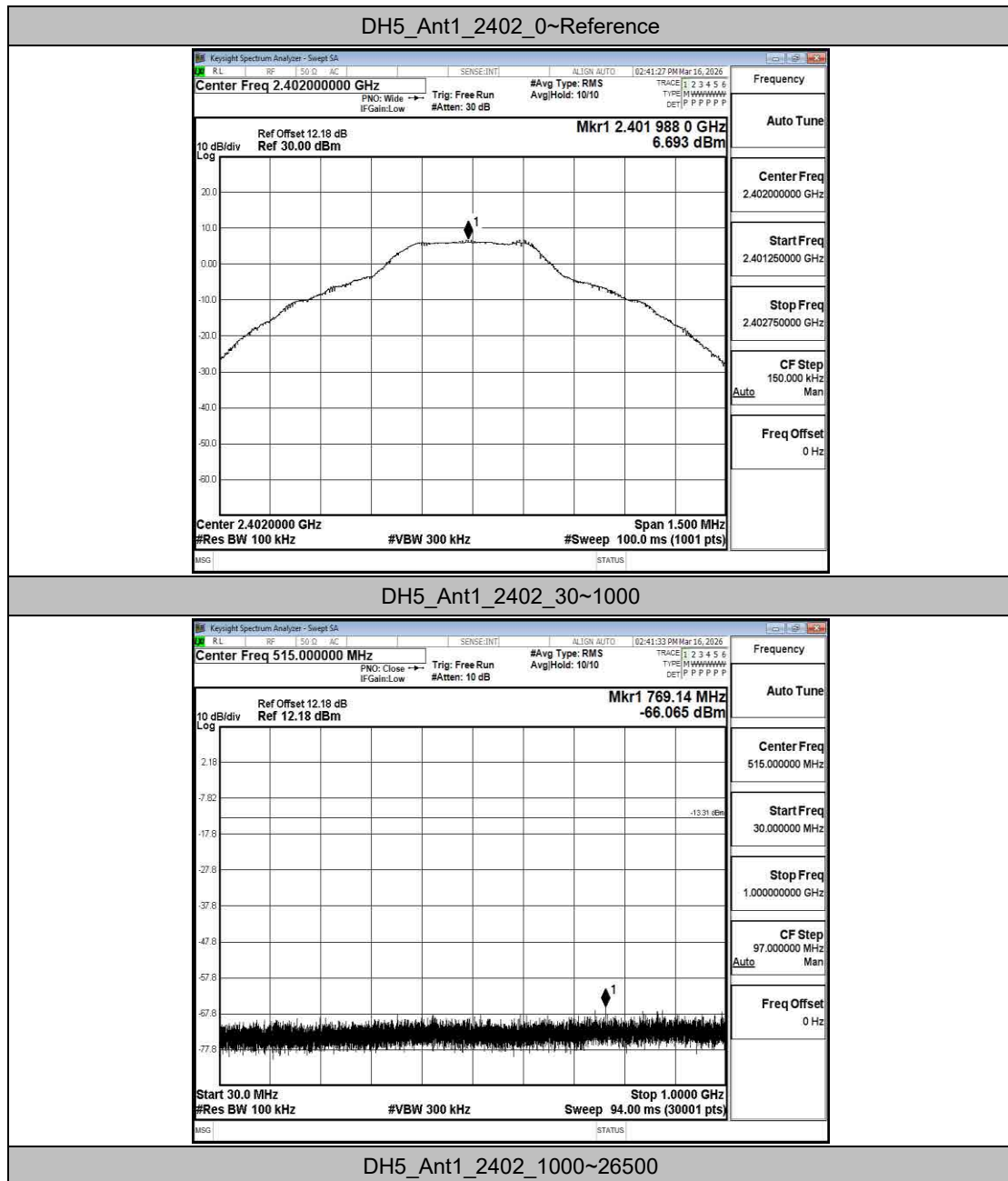


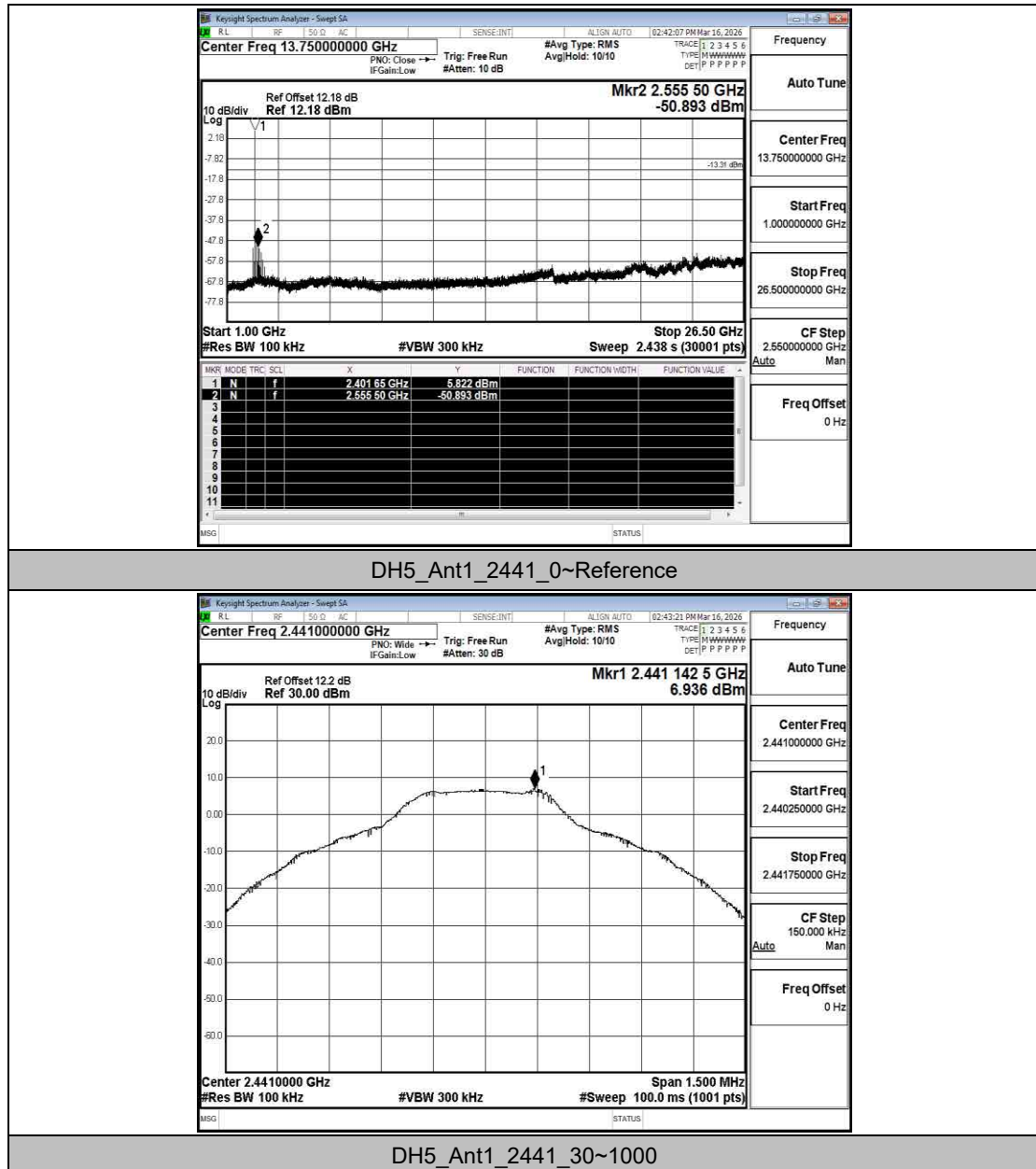
A.7 Conducted Spurious Emission

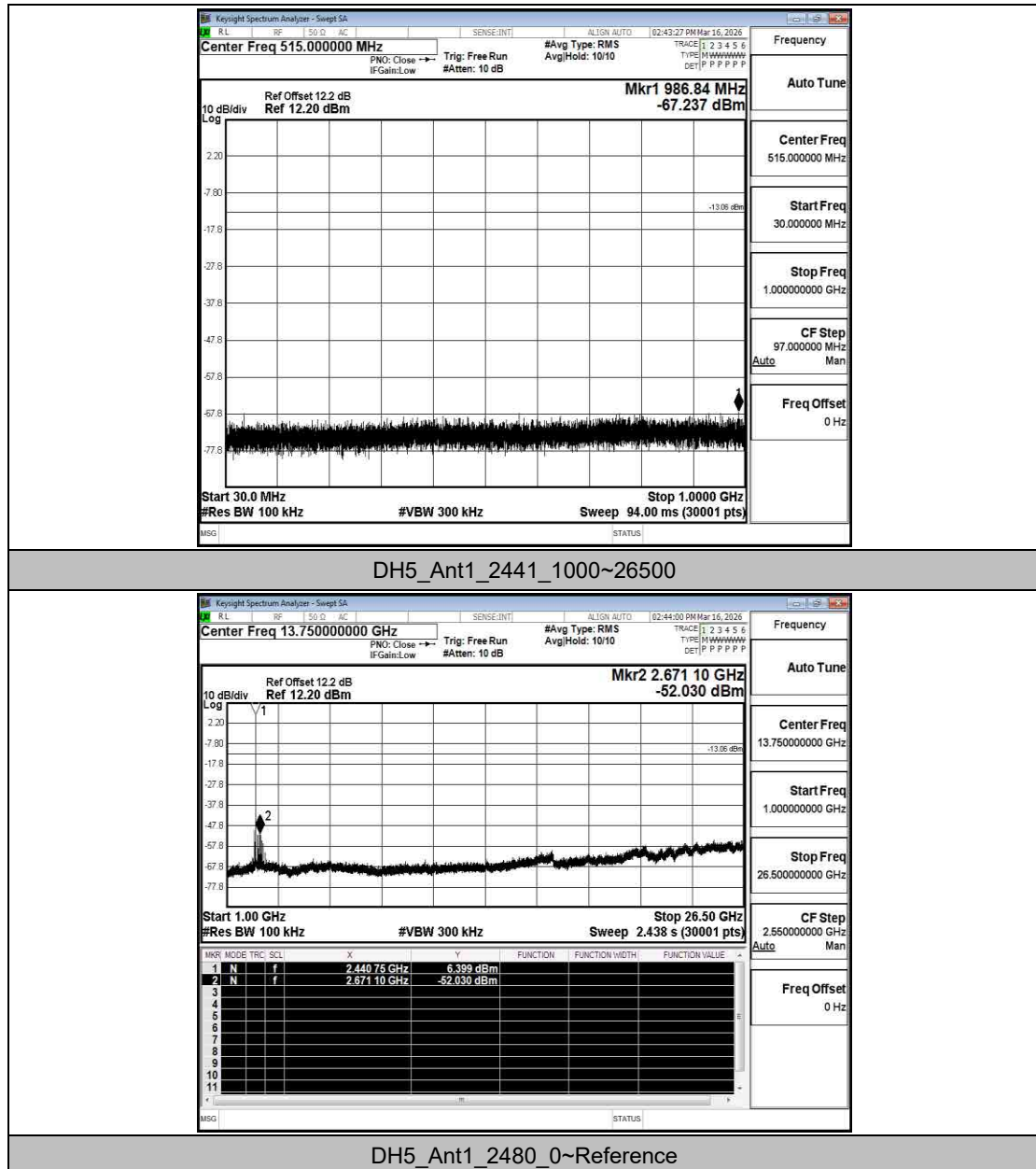
Test Result

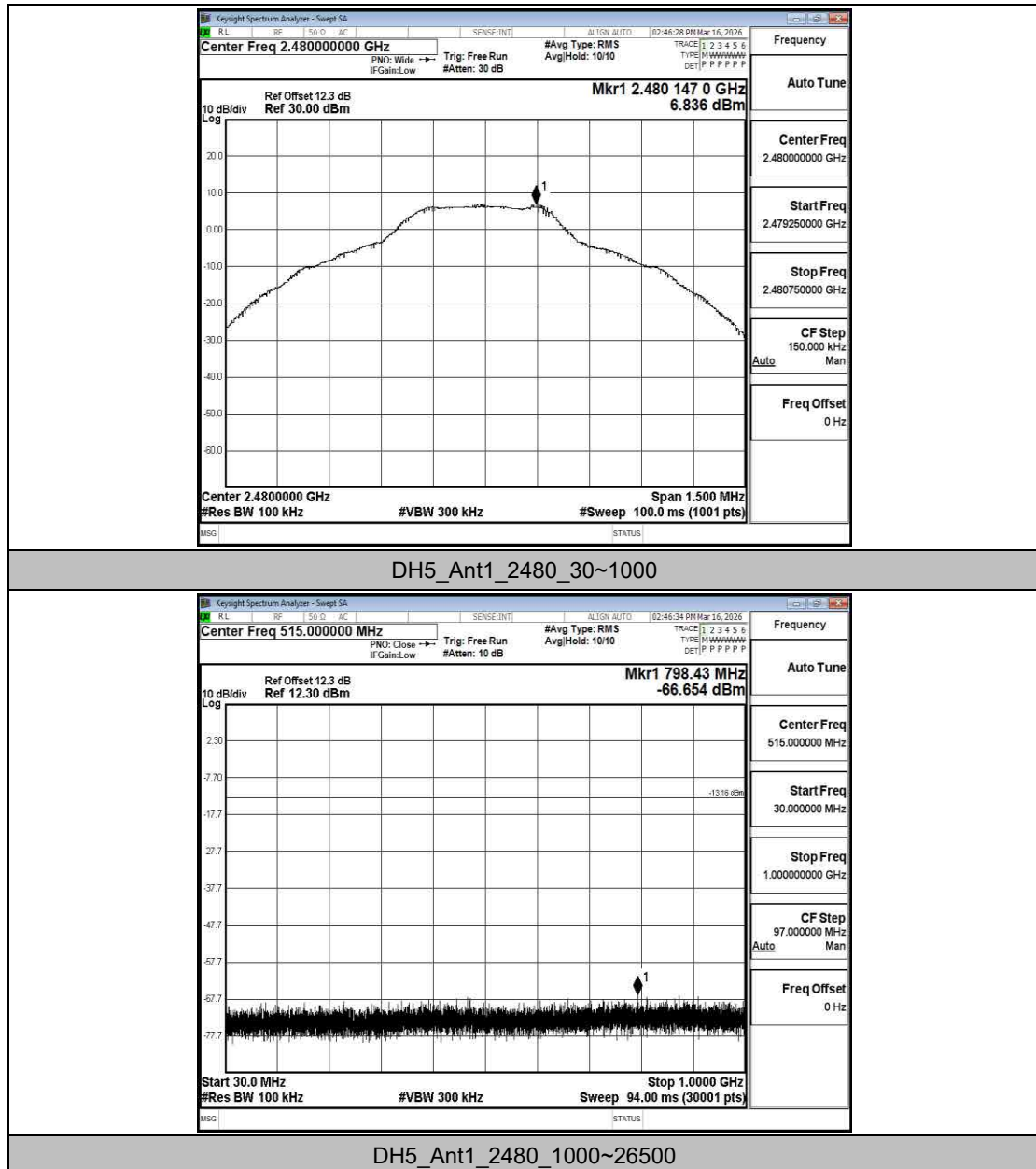
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	6.69	6.69	---	PASS
			30~1000	6.69	-66.07	≤-13.31	PASS
			1000~26500	6.69	-50.89	≤-13.31	PASS
		2441	Reference	6.94	6.94	---	PASS
			30~1000	6.94	-67.24	≤-13.06	PASS
			1000~26500	6.94	-52.03	≤-13.06	PASS
		2480	Reference	6.84	6.84	---	PASS
			30~1000	6.84	-66.65	≤-13.16	PASS
			1000~26500	6.84	-50.88	≤-13.16	PASS
2DH5	Ant1	2402	Reference	7.67	7.67	---	PASS
			30~1000	7.67	-66.96	≤-12.33	PASS
			1000~26500	7.67	-53.46	≤-12.33	PASS
		2441	Reference	8.04	8.04	---	PASS
			30~1000	8.04	-66.05	≤-11.96	PASS
			1000~26500	8.04	-52.61	≤-11.96	PASS
		2480	Reference	8.06	8.06	---	PASS
			30~1000	8.06	-66.89	≤-11.94	PASS
			1000~26500	8.06	-52.85	≤-11.94	PASS
3DH5	Ant1	2402	Reference	7.70	7.70	---	PASS
			30~1000	7.70	-67.14	≤-12.3	PASS
			1000~26500	7.70	-52.1	≤-12.3	PASS
		2441	Reference	8.08	8.08	---	PASS
			30~1000	8.08	-66.66	≤-11.92	PASS
			1000~26500	8.08	-52.28	≤-11.92	PASS
		2480	Reference	8.07	8.07	---	PASS
			30~1000	8.07	-66.55	≤-11.93	PASS
			1000~26500	8.07	-52.25	≤-11.93	PASS

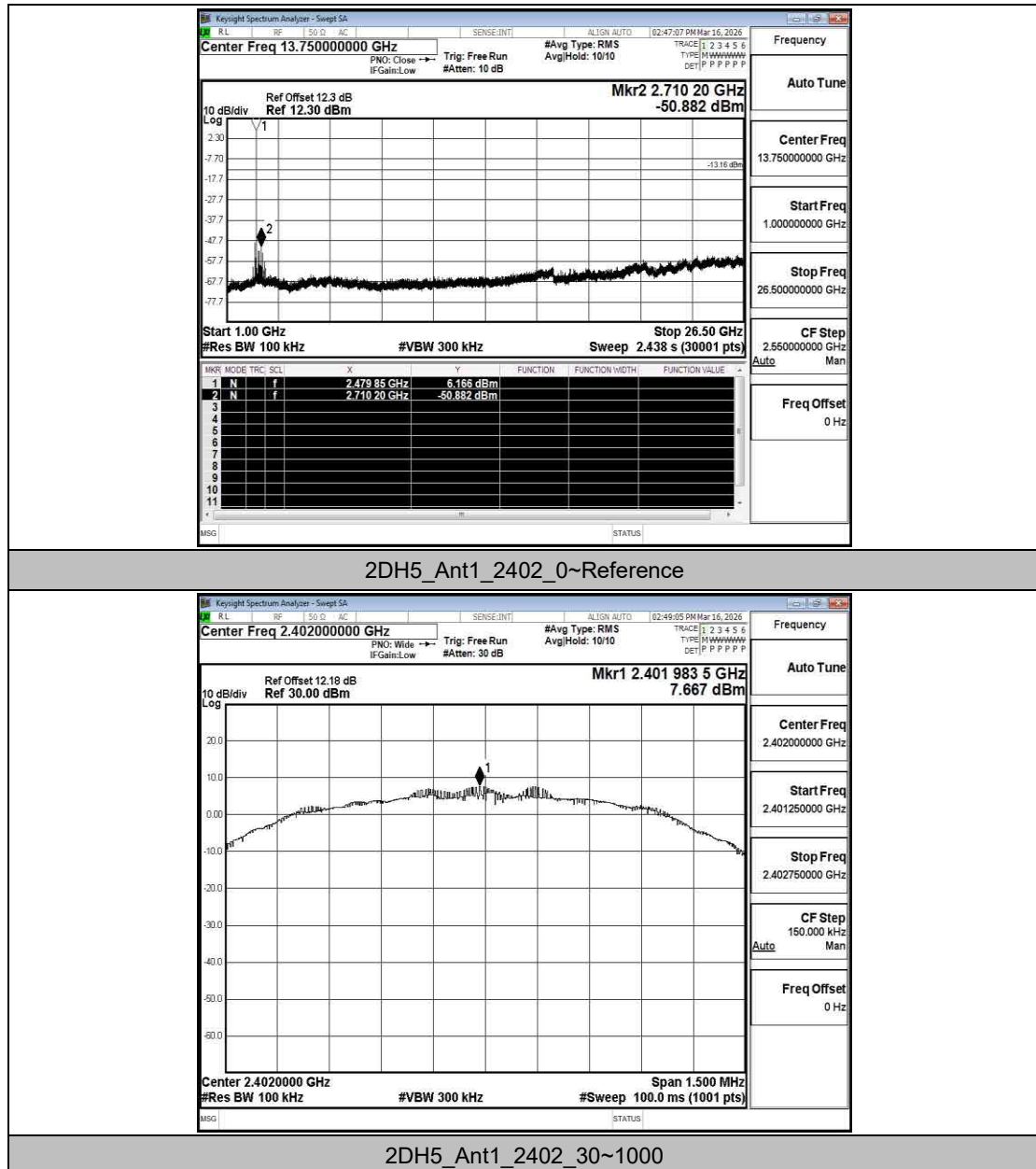
Test Graphs

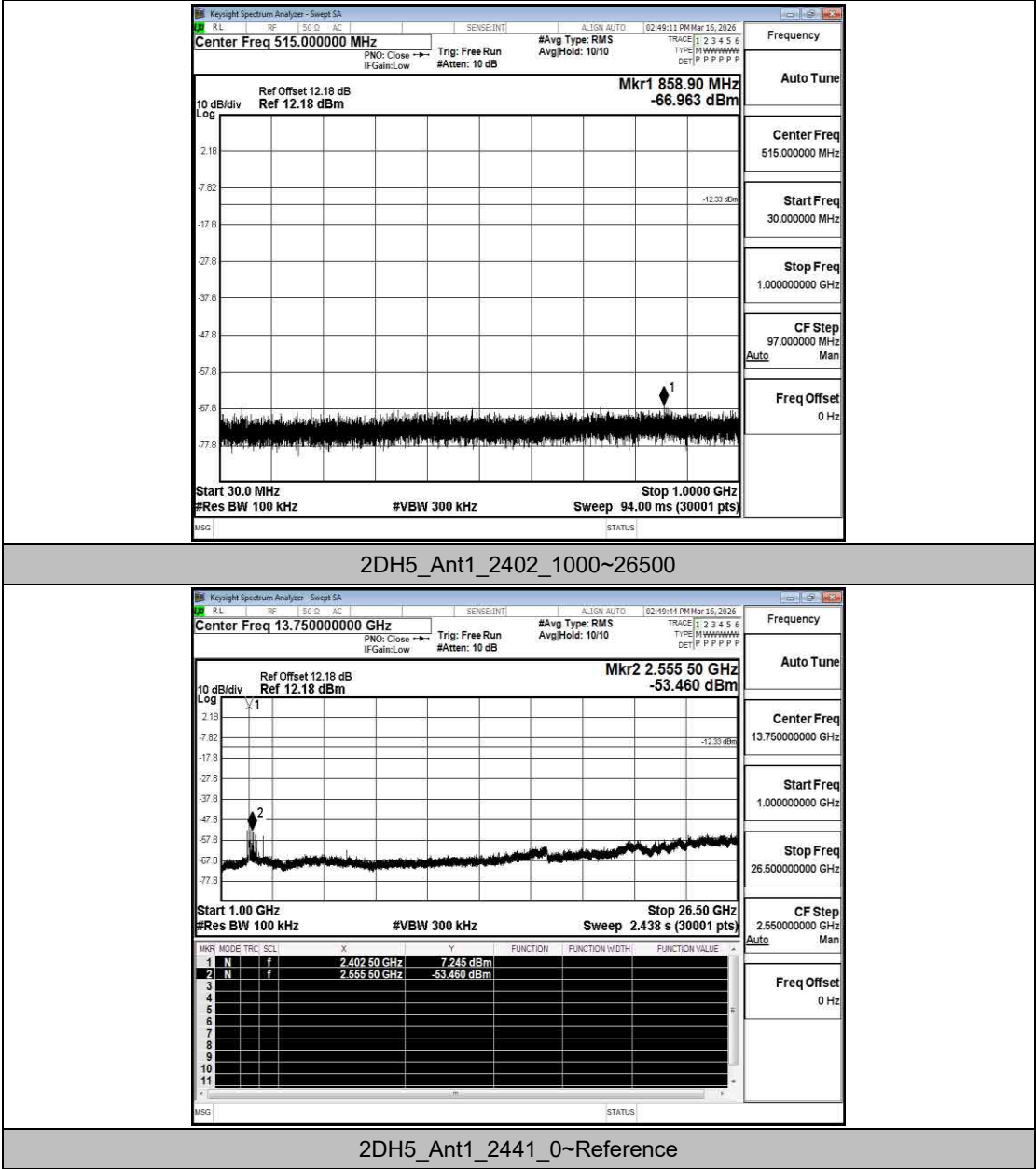


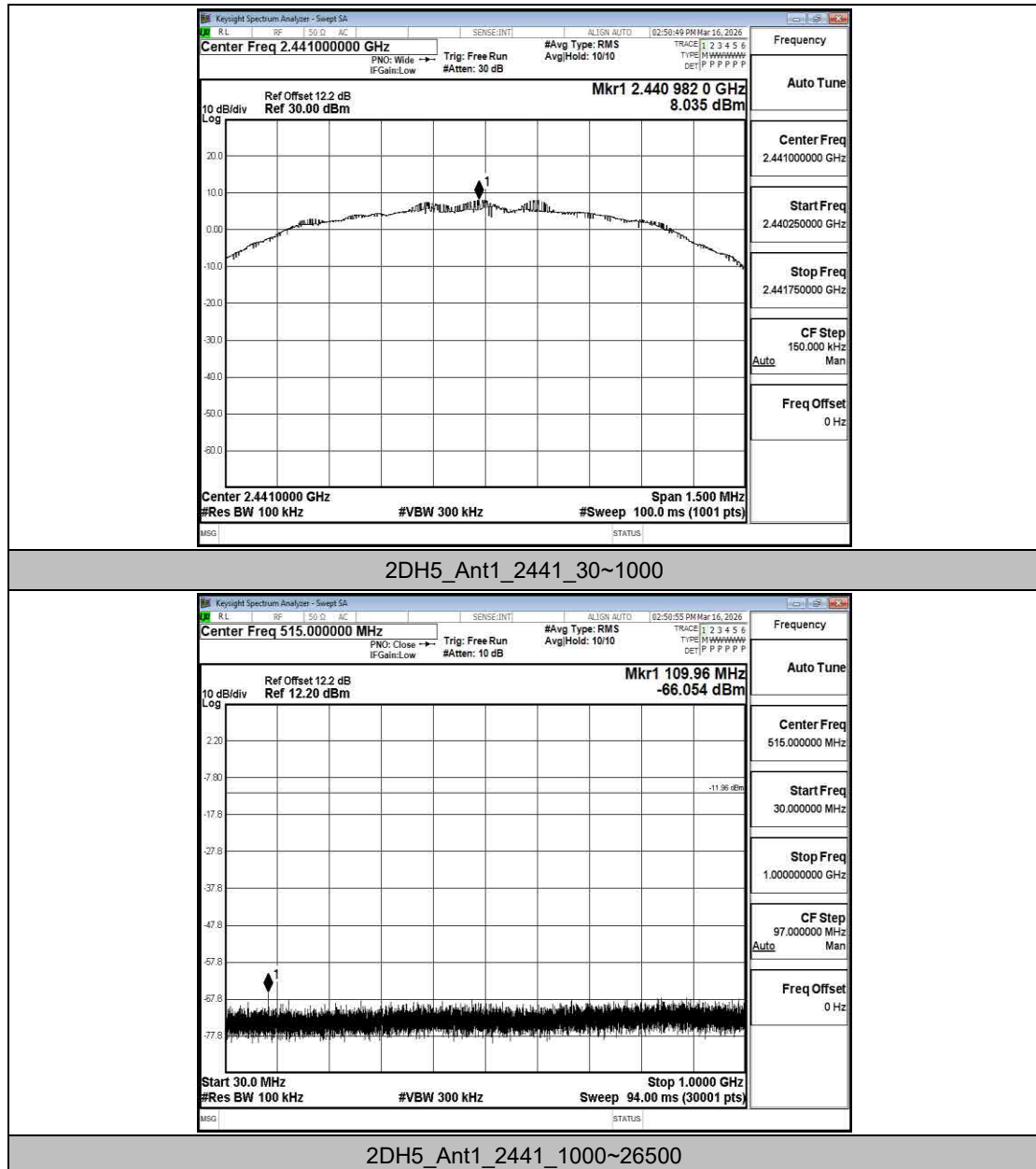


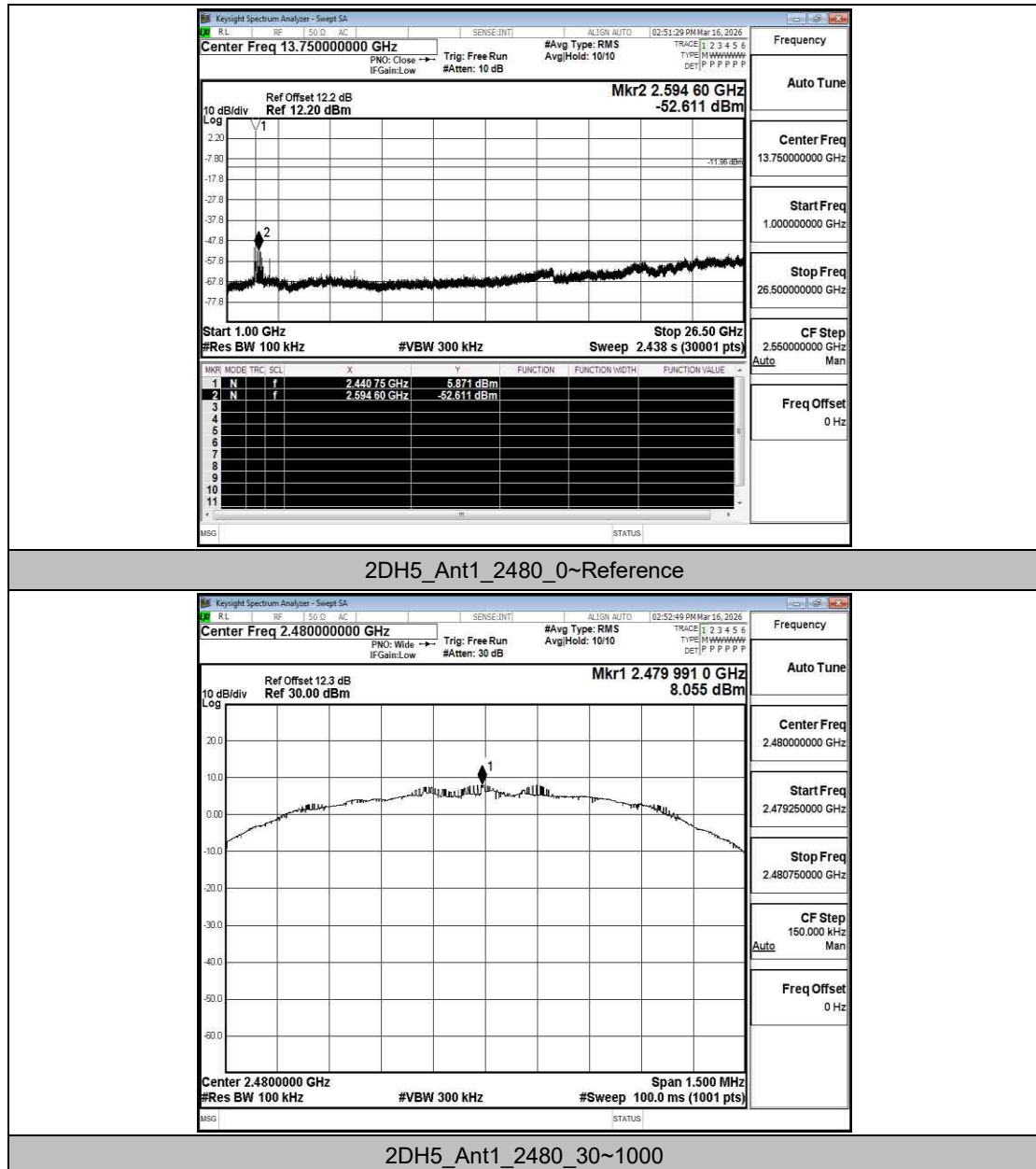


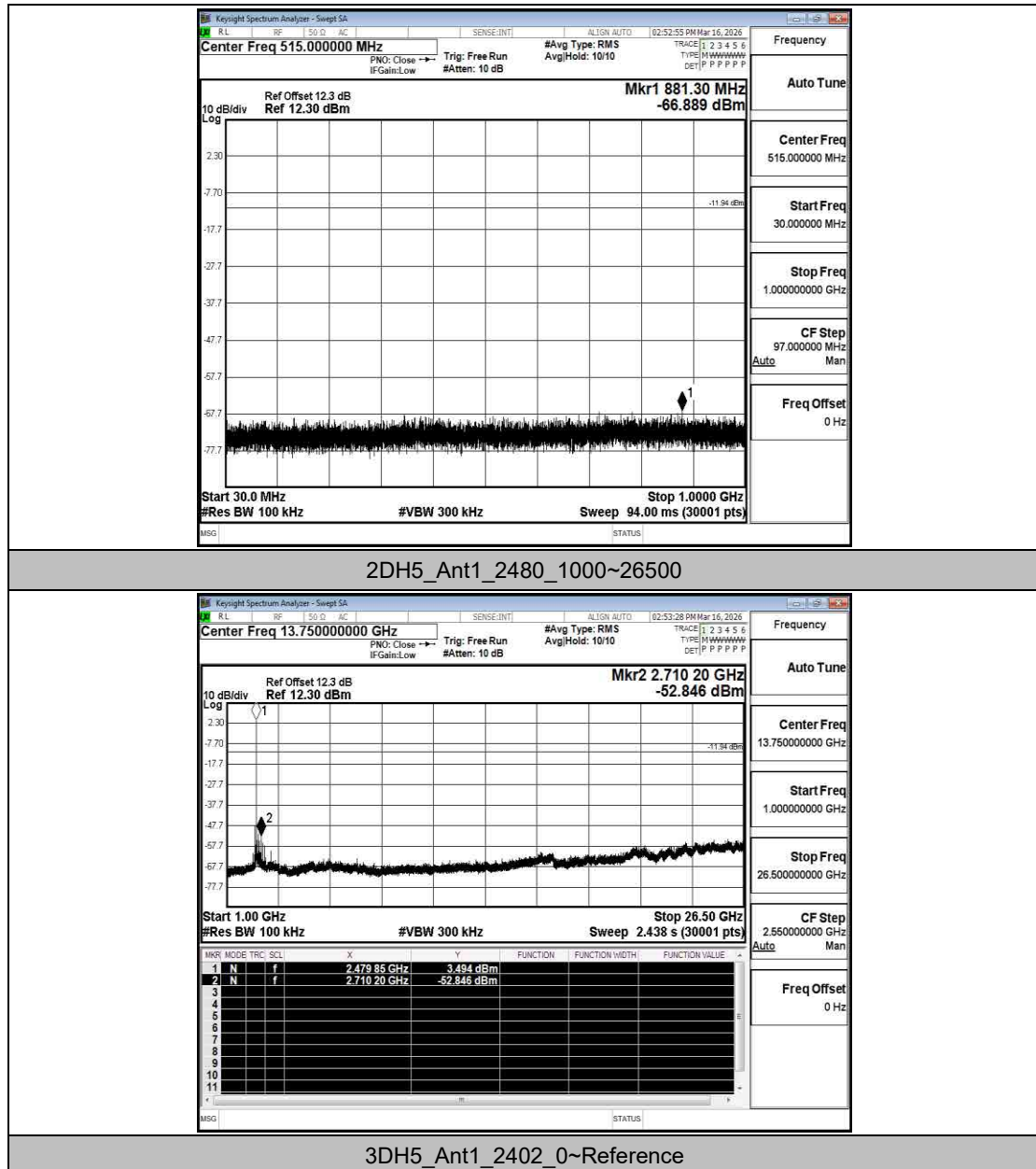


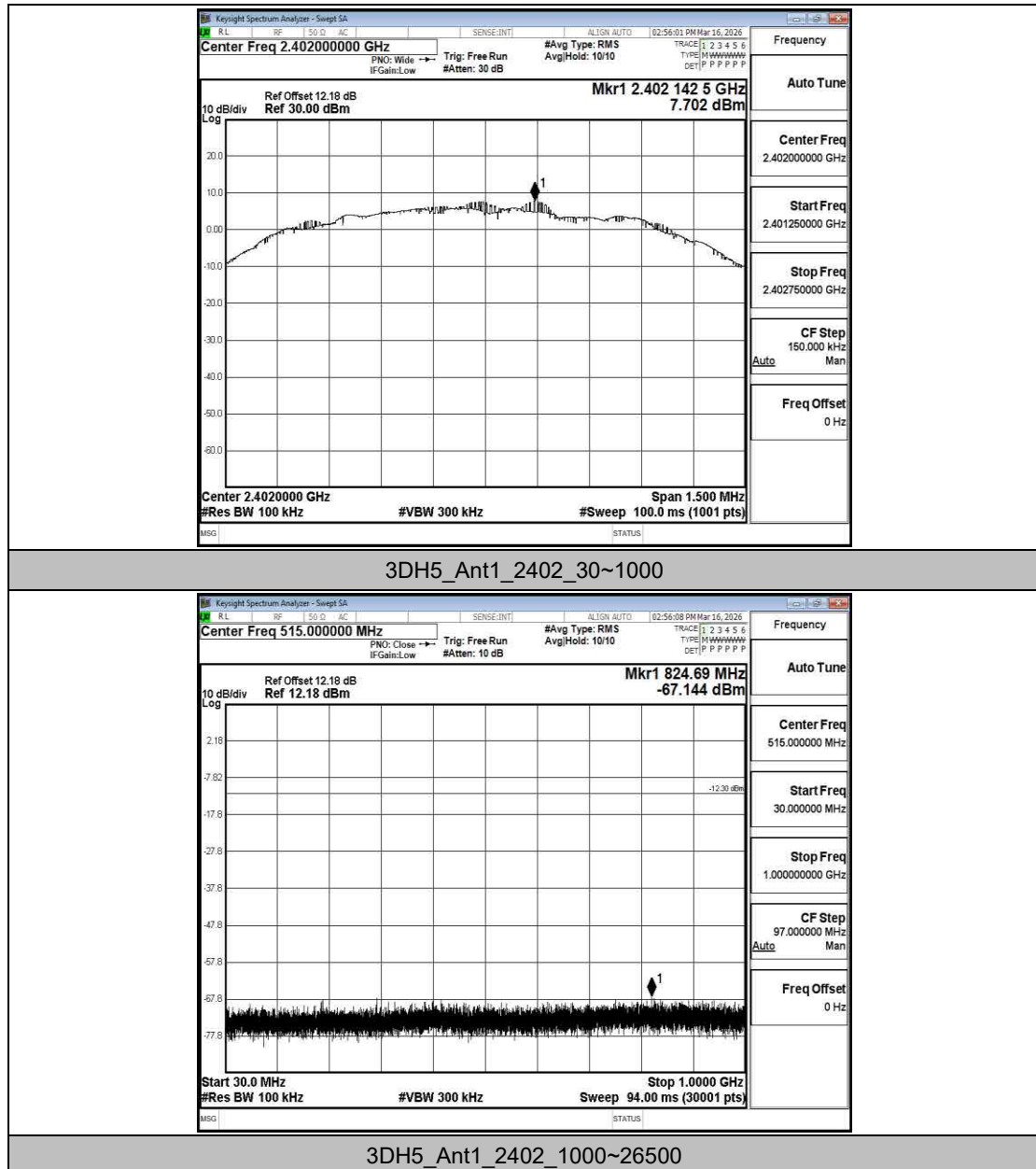


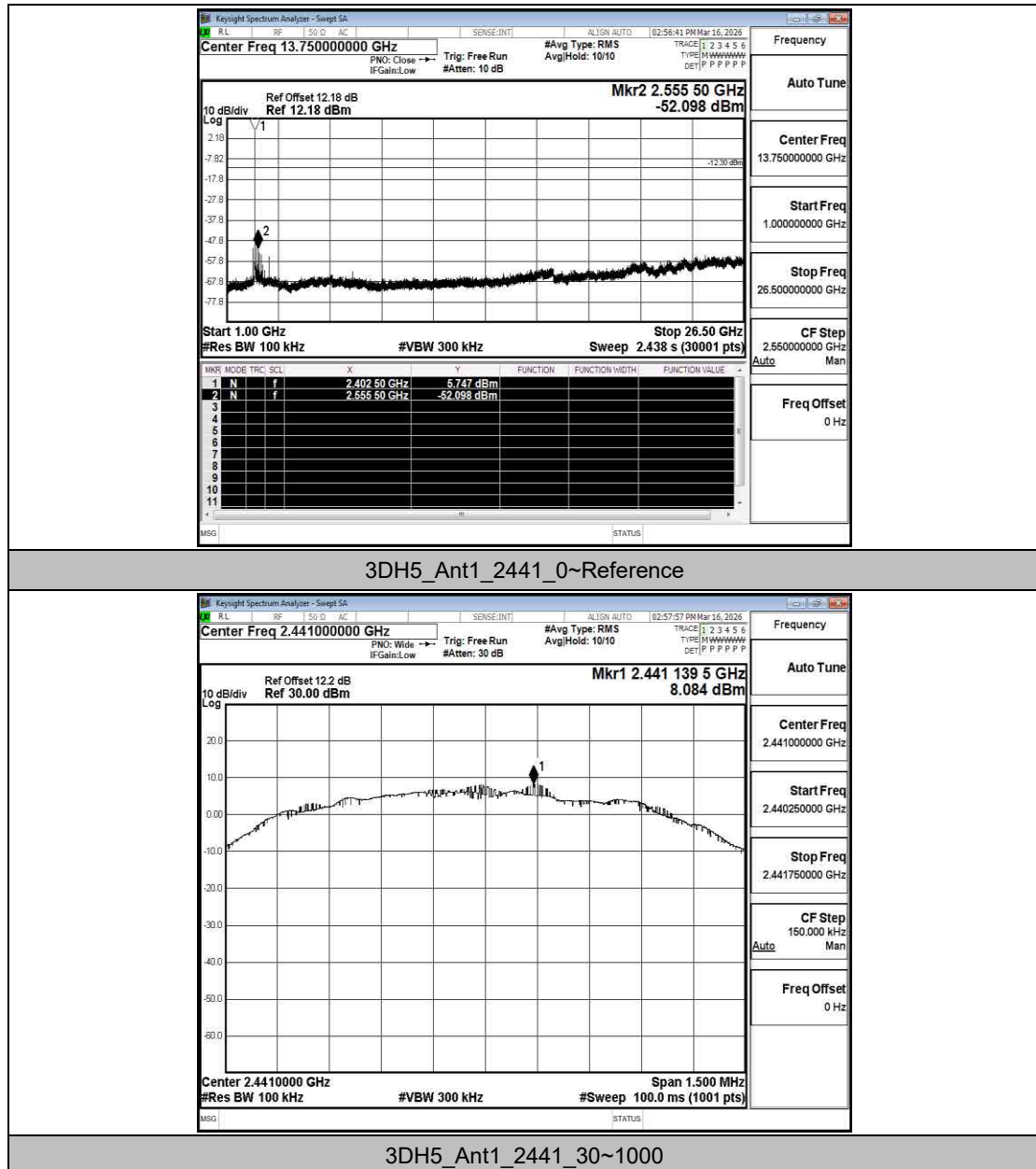


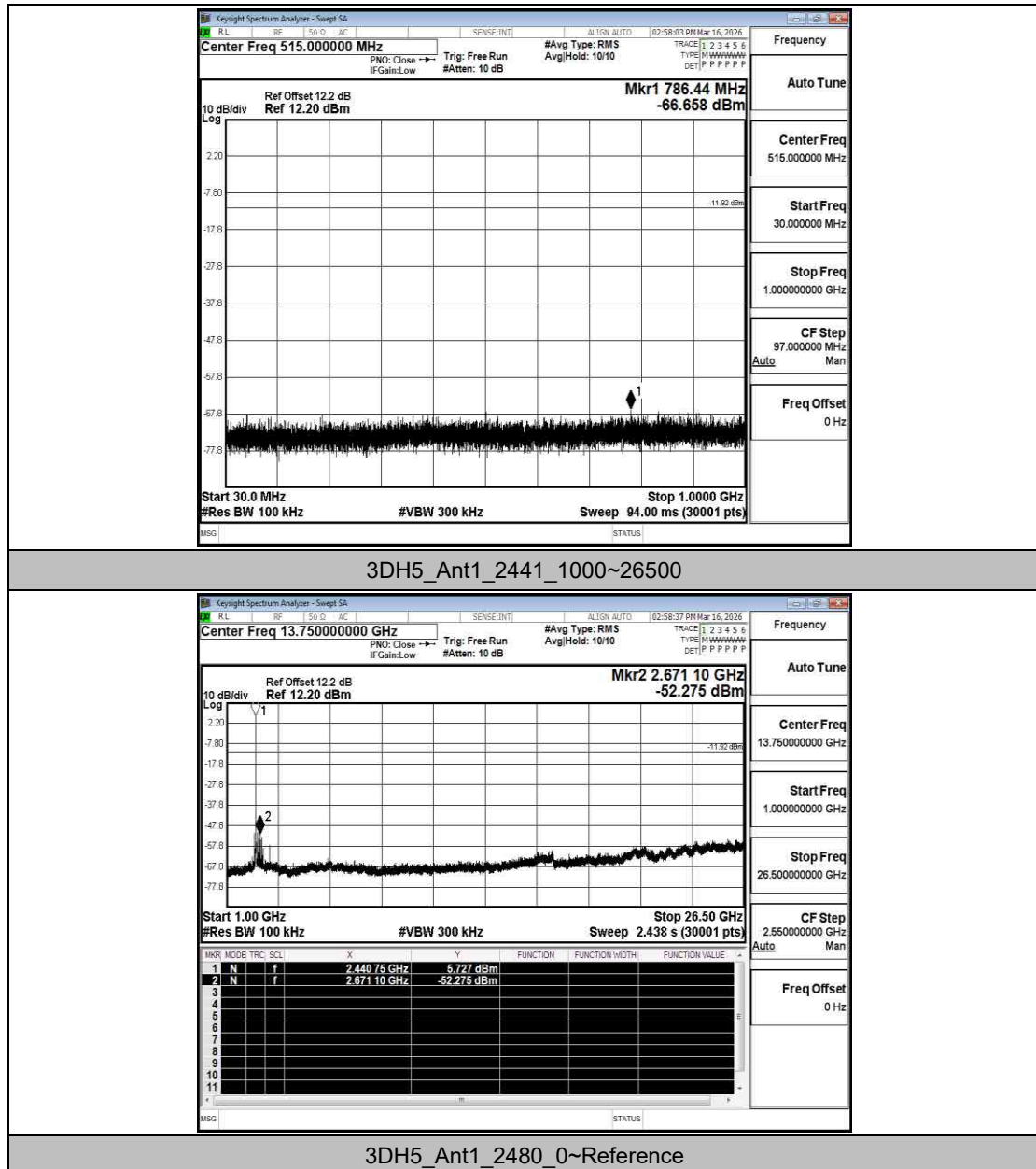


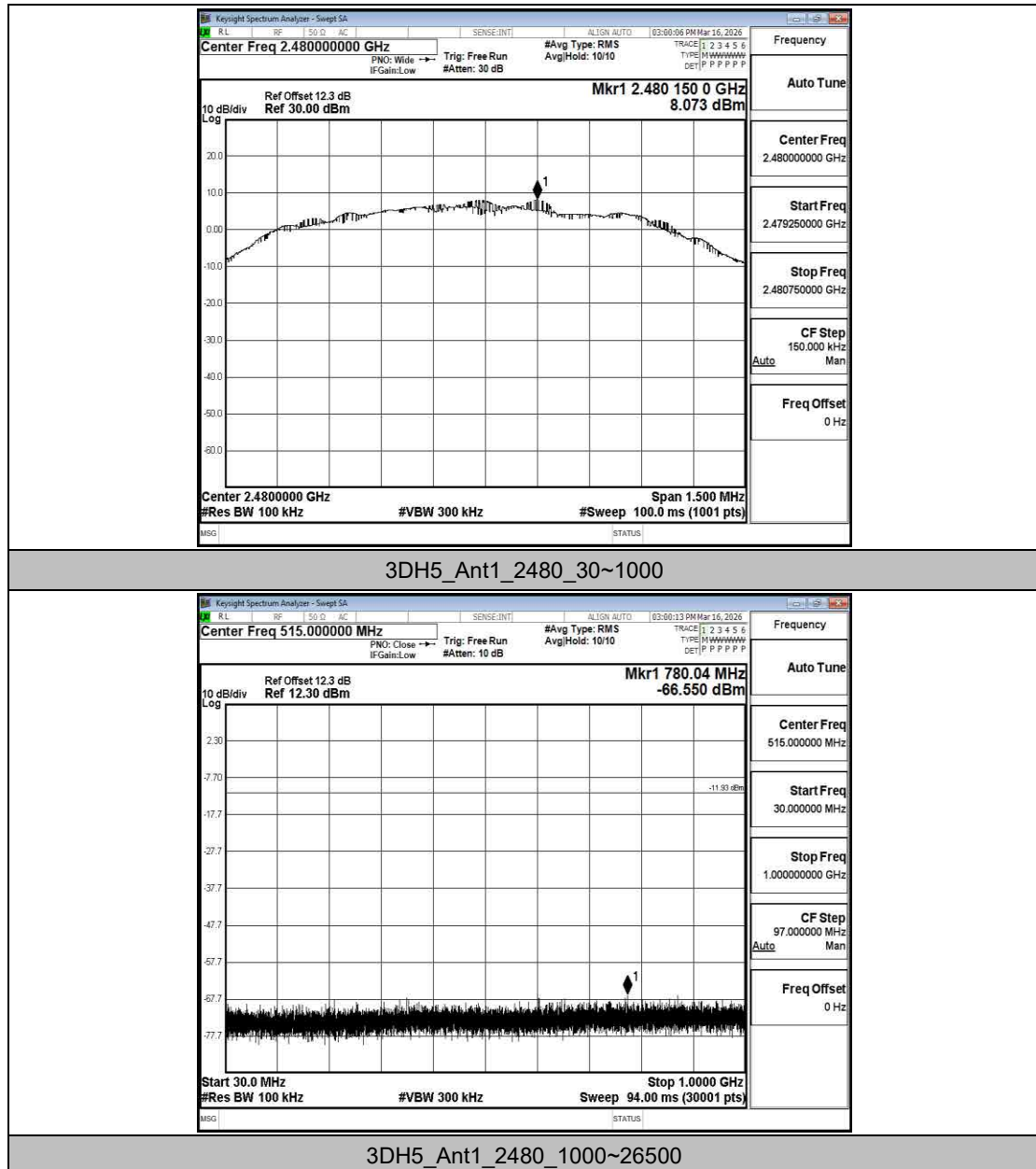


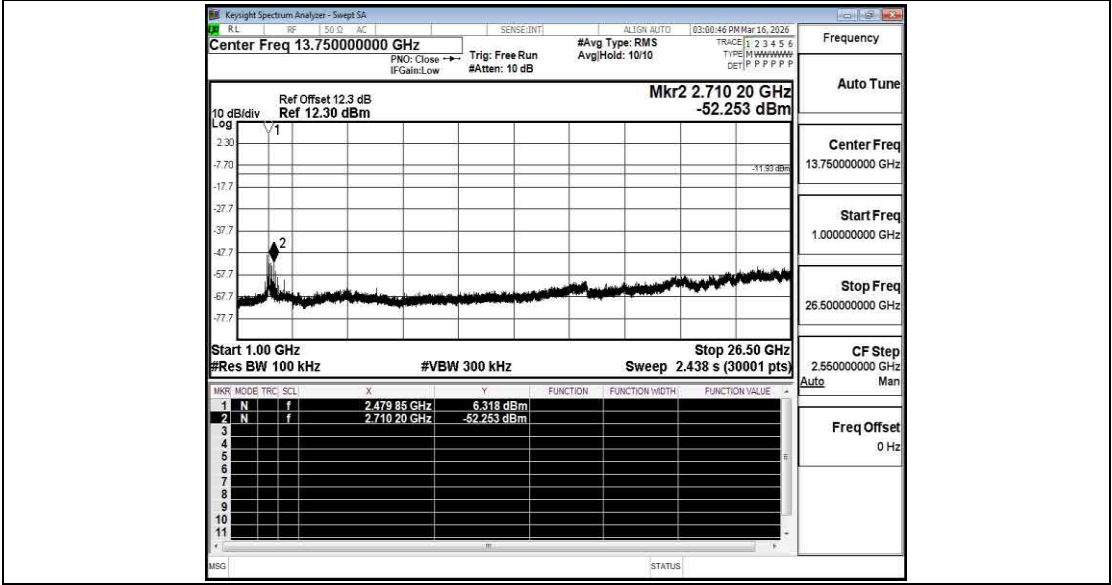










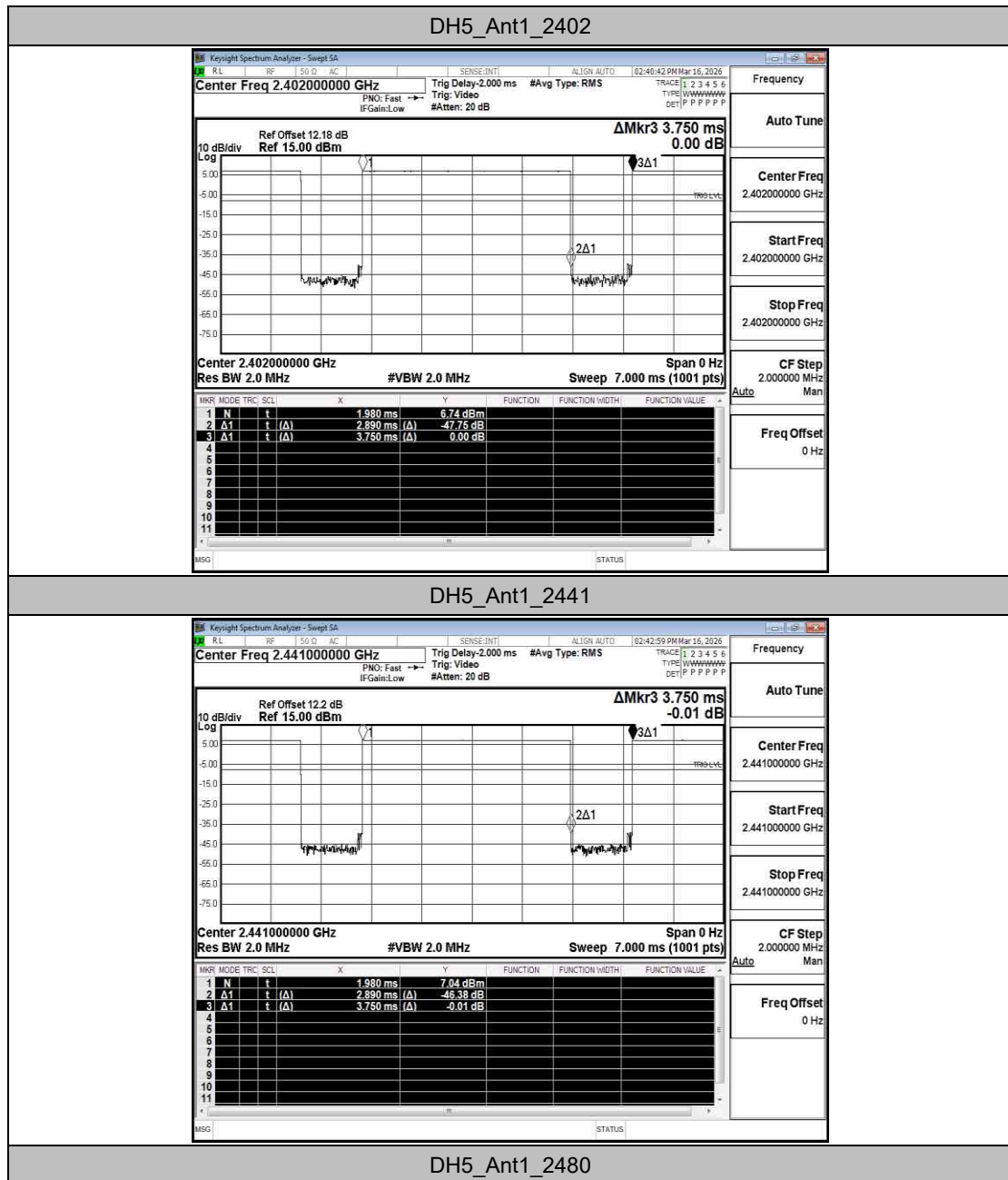


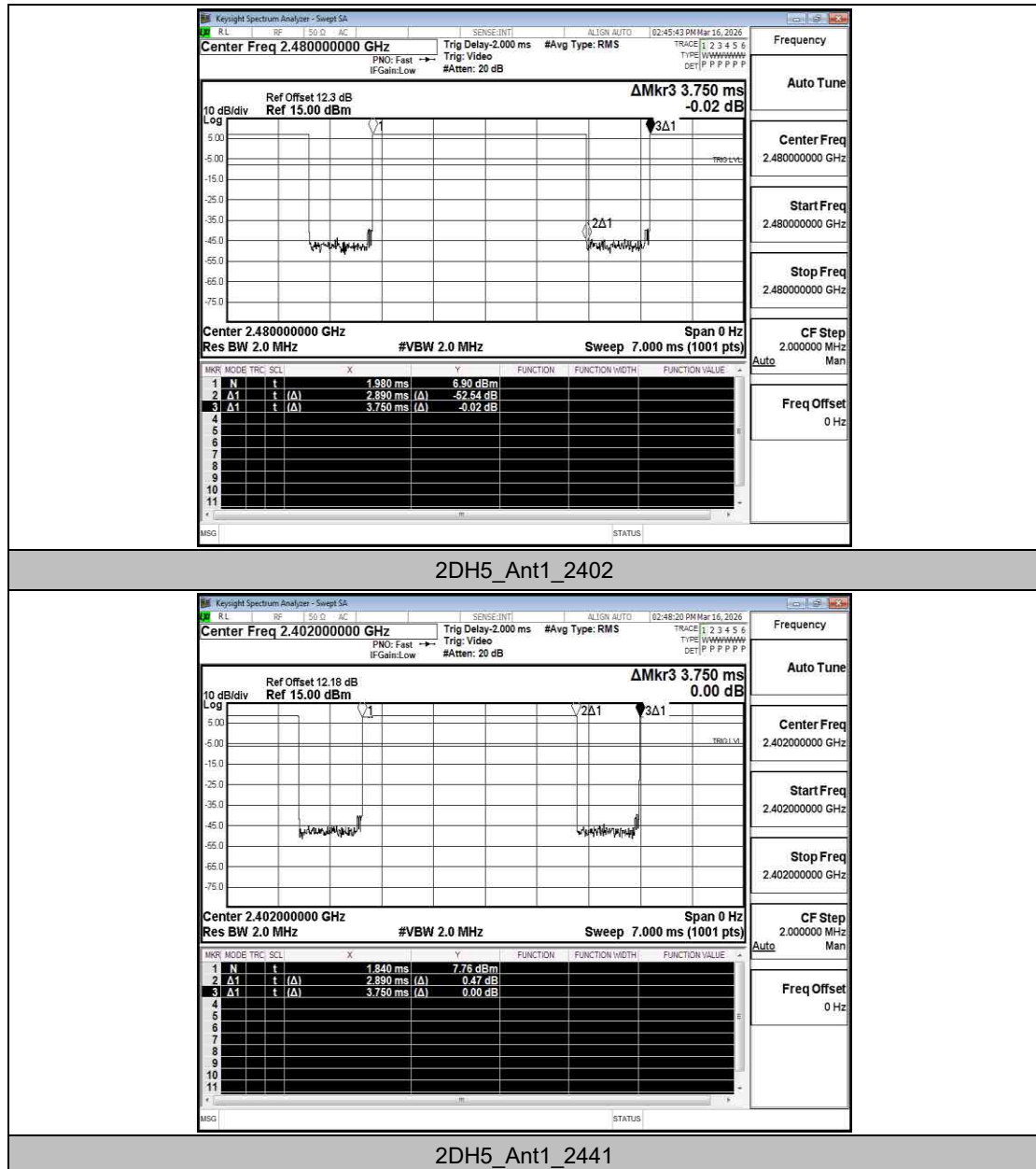
A.8 Duty Cycle

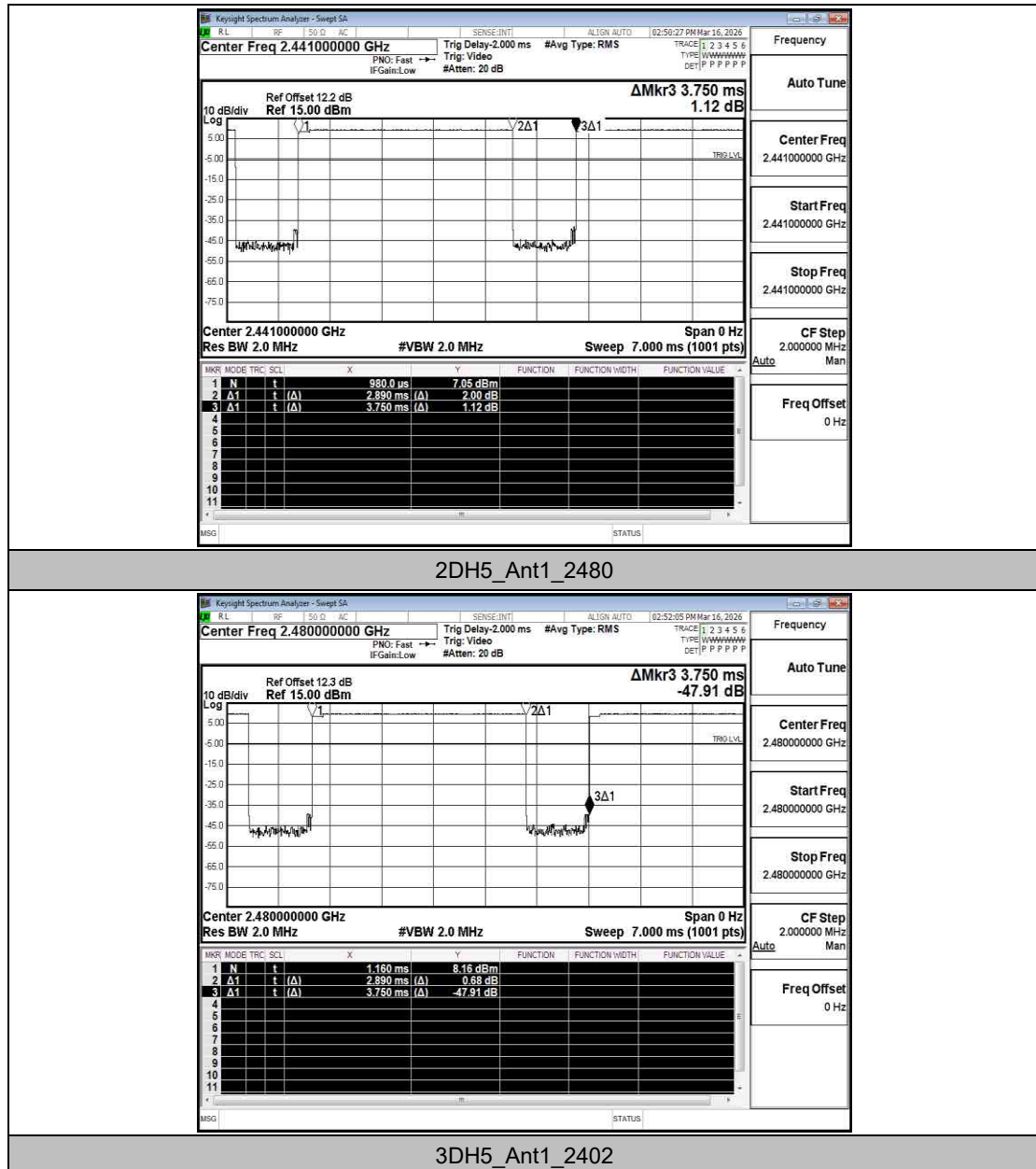
Test Result

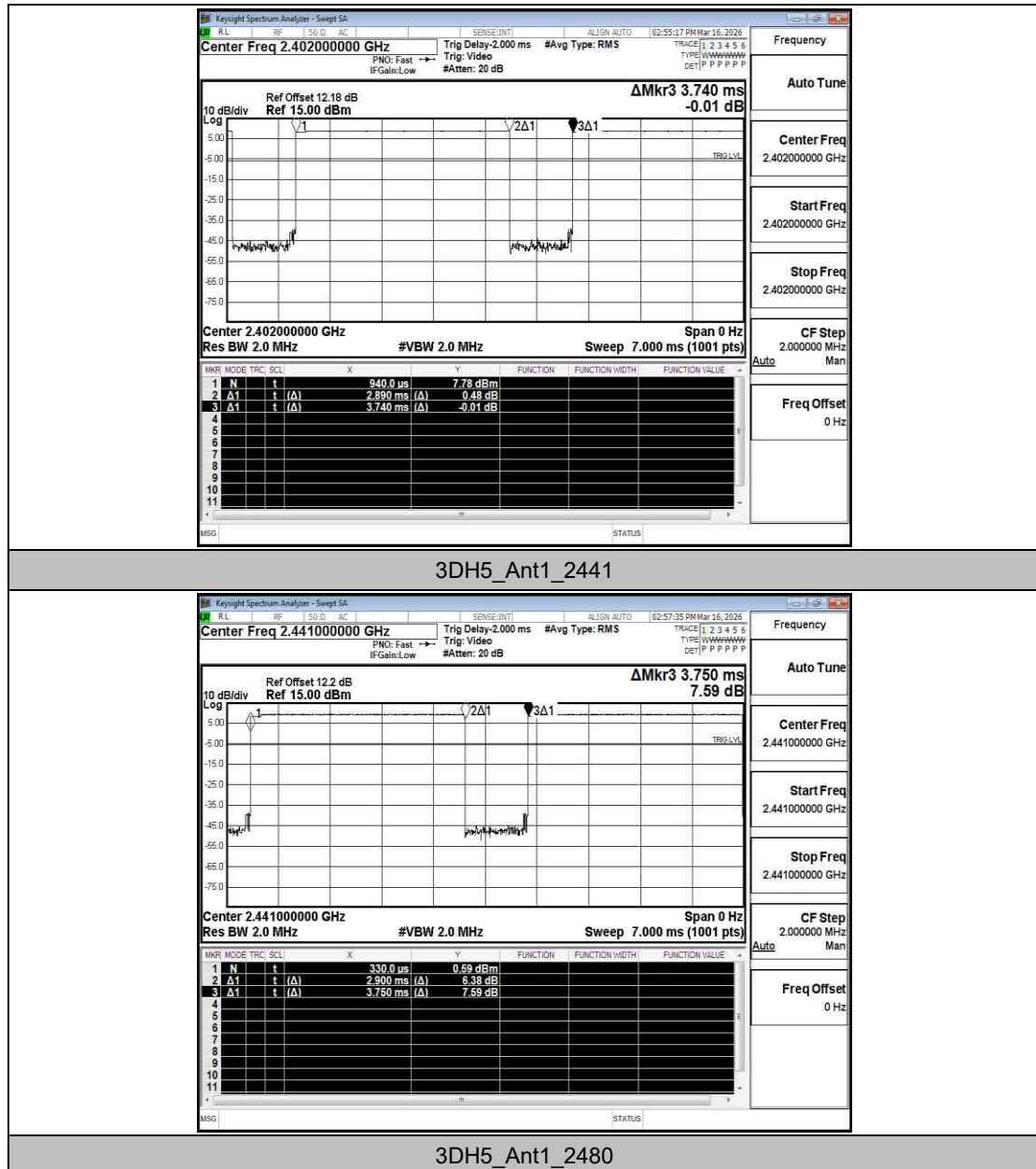
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.89	3.75	77.07	1.13	---	---
		2441	2.89	3.75	77.07	1.13	---	---
		2480	2.89	3.75	77.07	1.13	---	---
2DH5	Ant1	2402	2.89	3.75	77.07	1.13	---	---
		2441	2.89	3.75	77.07	1.13	---	---
		2480	2.89	3.75	77.07	1.13	---	---
3DH5	Ant1	2402	2.89	3.74	77.27	1.12	---	---
		2441	2.90	3.75	77.33	1.12	---	---
		2480	2.89	3.75	77.07	1.13	---	---

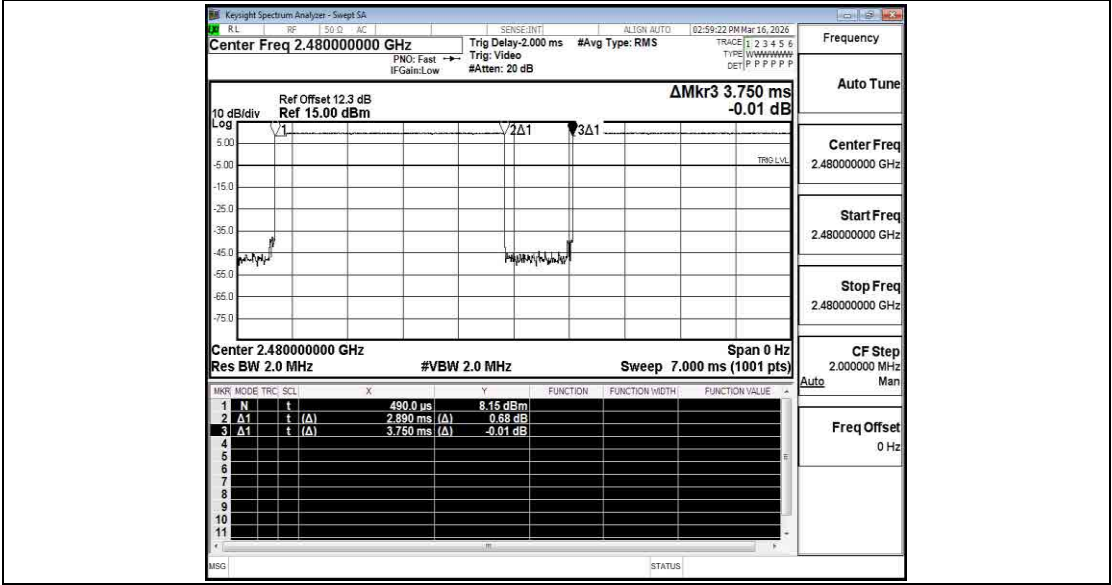
Test Graphs











A.9 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-61.07	2.97	1.13	38.23	≤54	PASS
				AV	2325.200	-51.99	2.97	1.13	47.31	≤54	PASS
				AV	2390.000	-60.65	2.97	1.13	38.65	≤54	PASS
				Peak	2310.000	-51.21	2.97	0.00	46.96	≤74	PASS
				Peak	2325.200	-45.96	2.97	0.00	52.21	≤74	PASS
				Peak	2390.000	-53.08	2.97	0.00	45.09	≤74	PASS
		High	2480	AV	2483.500	-56.65	2.97	1.13	42.65	≤54	PASS
				AV	2483.680	-56.39	2.97	1.13	42.91	≤54	PASS
				AV	2500.000	-60.43	2.97	1.13	38.87	≤54	PASS
				Peak	2483.500	-47.63	2.97	0.00	50.54	≤74	PASS
				Peak	2489.360	-42.15	2.97	0.00	56.02	≤74	PASS
				Peak	2500.000	-52.39	2.97	0.00	45.78	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-52.97	2.97	0.00	45.20	≤74	PASS
				Peak	2373.395	-46.14	2.97	0.00	52.03	≤74	PASS
				Peak	2390.000	-48.37	2.97	0.00	49.80	≤74	PASS
		High	Hop_2480	Peak	2483.500	-48.41	2.97	0.00	49.76	≤74	PASS
				Peak	2483.920	-47.34	2.97	0.00	50.83	≤74	PASS
				Peak	2500.000	-52.89	2.97	0.00	45.28	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-61.14	2.97	1.13	38.16	≤54	PASS
				AV	2325.410	-52.51	2.97	1.13	46.79	≤54	PASS
				AV	2390.000	-57.48	2.97	1.13	41.82	≤54	PASS
				Peak	2310.000	-51.59	2.97	0.00	46.58	≤74	PASS
				Peak	2325.095	-45.68	2.97	0.00	52.49	≤74	PASS
				Peak	2390.000	-49.29	2.97	0.00	48.88	≤74	PASS
		High	2480	AV	2483.500	-51.38	2.97	1.13	47.92	≤54	PASS
				AV	2483.600	-51.26	2.97	1.13	48.04	≤54	PASS
				AV	2500.000	-56.3	2.97	1.13	43.00	≤54	PASS
				Peak	2483.500	-41.95	2.97	0.00	56.22	≤74	PASS
				Peak	2483.520	-41.95	2.97	0.00	56.22	≤74	PASS
				Peak	2500.000	-47.67	2.97	0.00	50.50	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-52.76	2.97	0.00	45.41	≤74	PASS
				Peak	2360.690	-45.23	2.97	0.00	52.94	≤74	PASS
				Peak	2390.000	-48.35	2.97	0.00	49.82	≤74	PASS
		High	Hop_2480	Peak	2483.500	-42.76	2.97	0.00	55.41	≤74	PASS

				Peak	2500.000	-51.63	2.97	0.00	46.54	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-60.78	2.97	1.12	38.51	≤54	PASS
				AV	2325.095	-52.2	2.97	1.12	47.09	≤54	PASS
				AV	2390.000	-56.96	2.97	1.12	42.33	≤54	PASS
				Peak	2310.000	-52.28	2.97	0.00	45.89	≤74	PASS
				Peak	2385.470	-43.15	2.97	0.00	55.02	≤74	PASS
				Peak	2390.000	-45.53	2.97	0.00	52.64	≤74	PASS
		High	2480	AV	2483.500	-50.03	2.97	1.13	49.27	≤54	PASS
				AV	2483.680	-49.48	2.97	1.13	49.82	≤54	PASS
				AV	2500.000	-57.33	2.97	1.13	41.97	≤54	PASS
				Peak	2483.500	-41.02	2.97	0.00	57.15	≤74	PASS
				Peak	2483.680	-37.96	2.97	0.00	60.21	≤74	PASS
				Peak	2500.000	-49.38	2.97	0.00	48.79	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-52.43	2.97	0.00	45.74	≤74	PASS
				Peak	2385.365	-45.08	2.97	0.00	53.09	≤74	PASS
				Peak	2390.000	-47	2.97	0.00	51.17	≤74	PASS
		High	Hop_2480	Peak	2483.500	-44.39	2.97	0.00	53.78	≤74	PASS
				Peak	2483.680	-41.95	2.97	0.00	56.22	≤74	PASS
				Peak	2500.000	-50.7	2.97	0.00	47.47	≤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

