

Appendix A: Test Results of Bluetooth BR & EDR

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Appendix A.1: Test Results of 20dB Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.535	2402.480	---	PASS
		2441	0.948	2440.532	2441.480	---	PASS
		2480	0.948	2479.535	2480.483	---	PASS
3DH5	Ant1	2402	1.275	2401.355	2402.630	---	PASS
		2441	1.272	2440.352	2441.624	---	PASS
		2480	1.266	2479.352	2480.618	---	PASS

Test Graphs



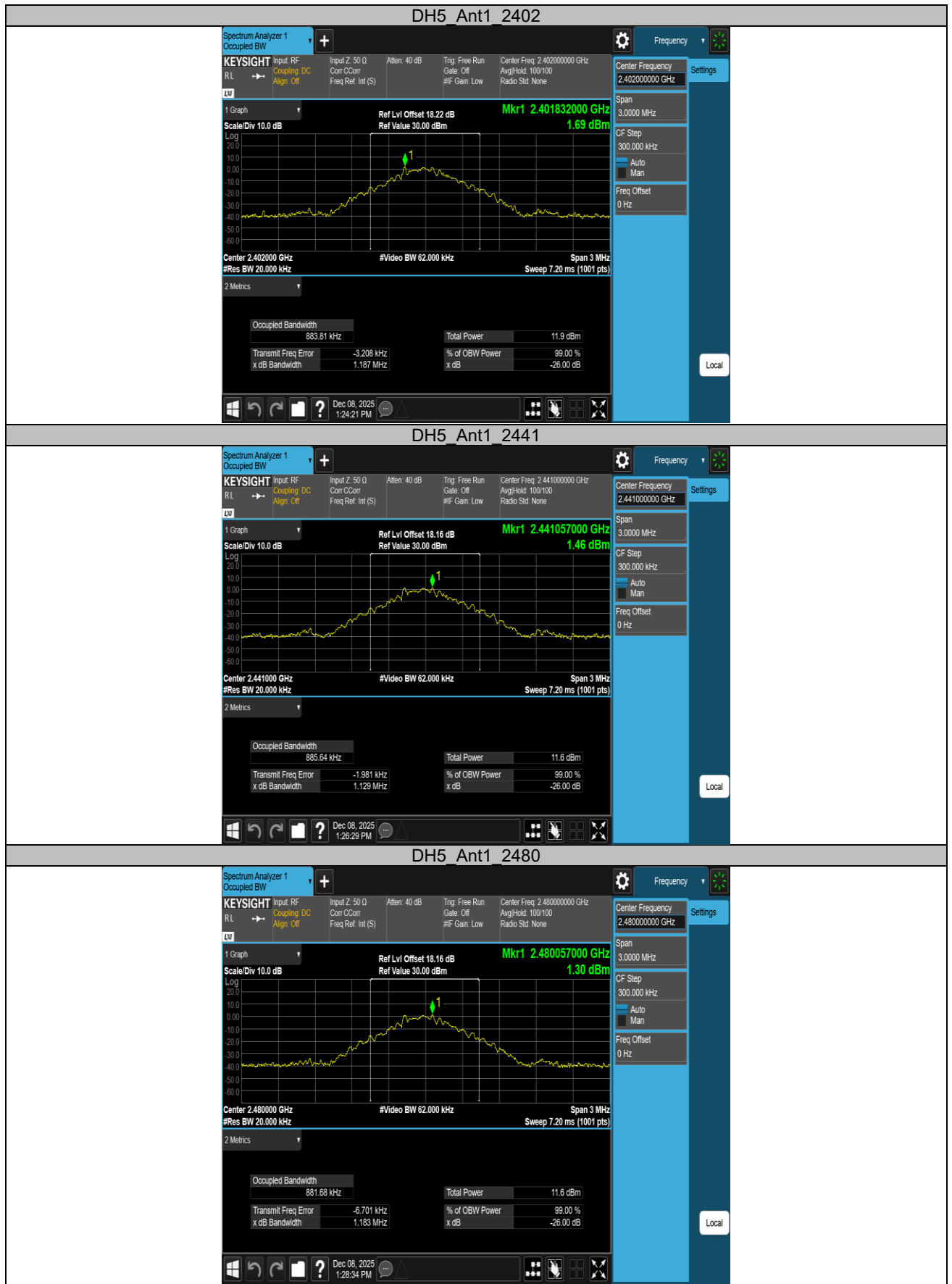


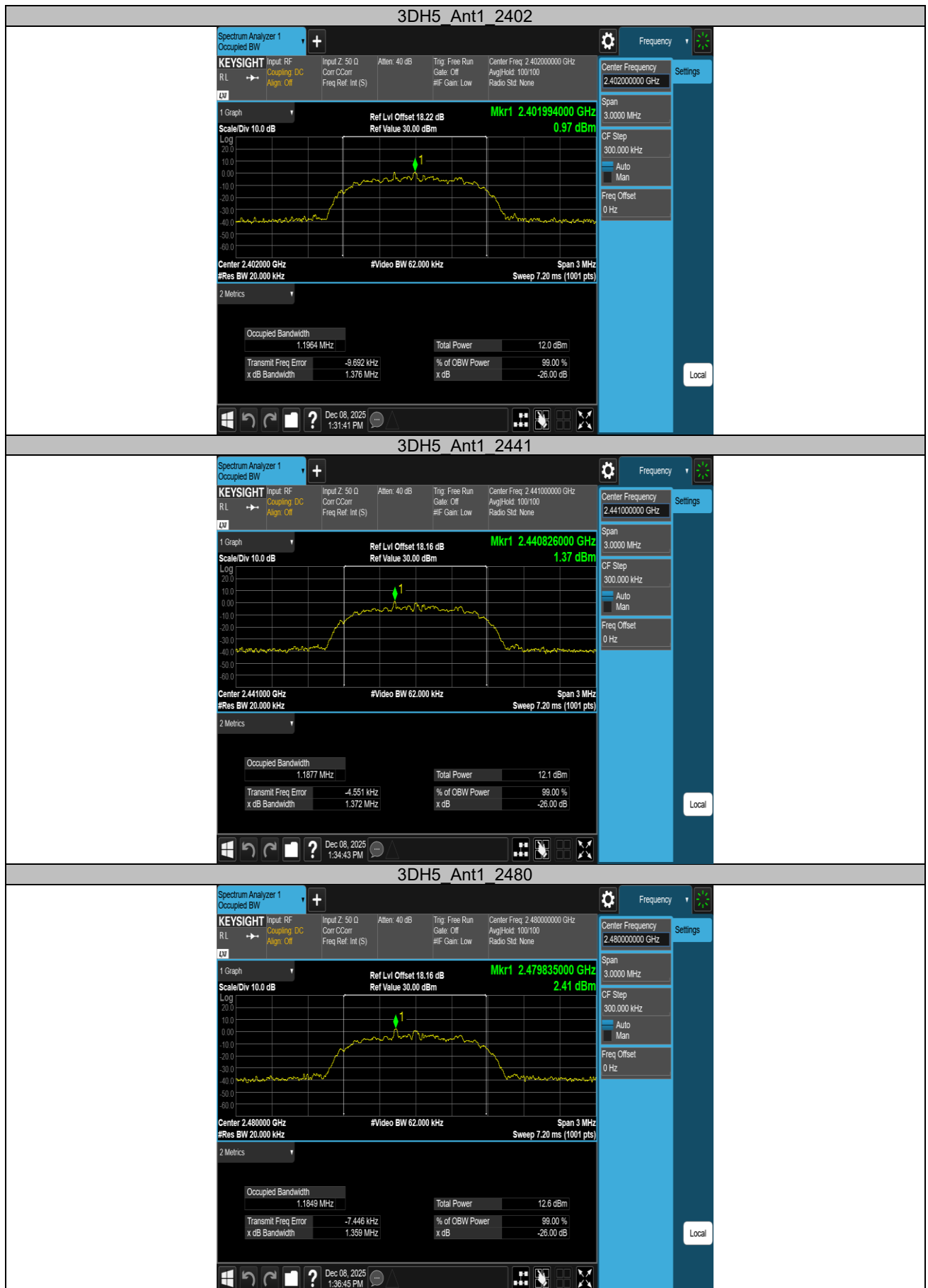
Appendix A.2: Test Results of 99% Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88381	2401.5549	2402.4387	---	PASS
		2441	0.88564	2440.5552	2441.4408	---	PASS
		2480	0.88168	2479.5525	2480.4341	---	PASS
3DH5	Ant1	2402	1.1964	2401.3921	2402.5885	---	PASS
		2441	1.1877	2440.4016	2441.5893	---	PASS
		2480	1.1849	2479.4001	2480.5850	---	PASS

Test Graphs





Appendix A.3: Test Results of Carrier Frequency Separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.962	≥0.948	PASS
3DH5	Ant1	Hop	1.042	≥0.850	PASS

Test Graphs

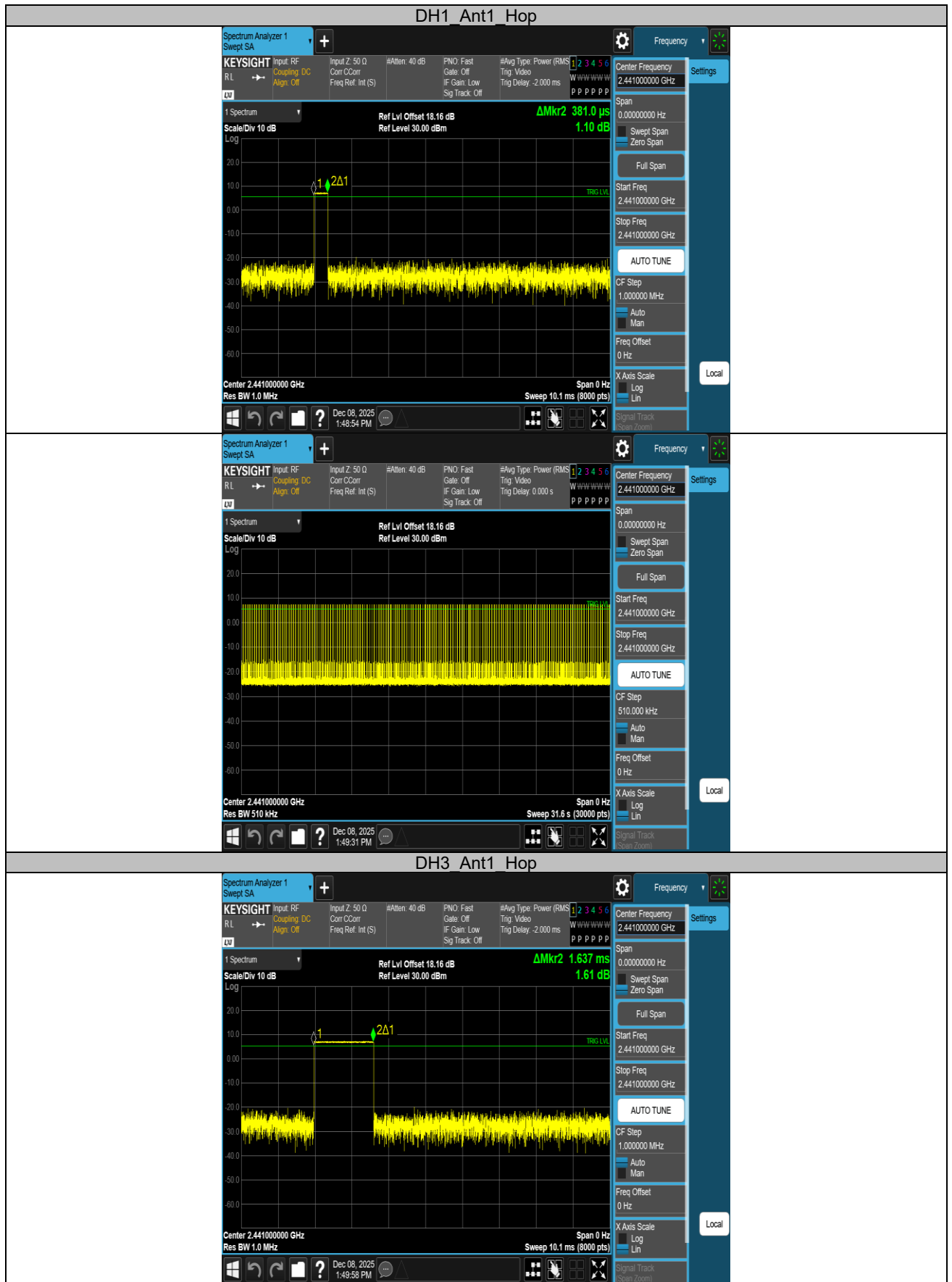


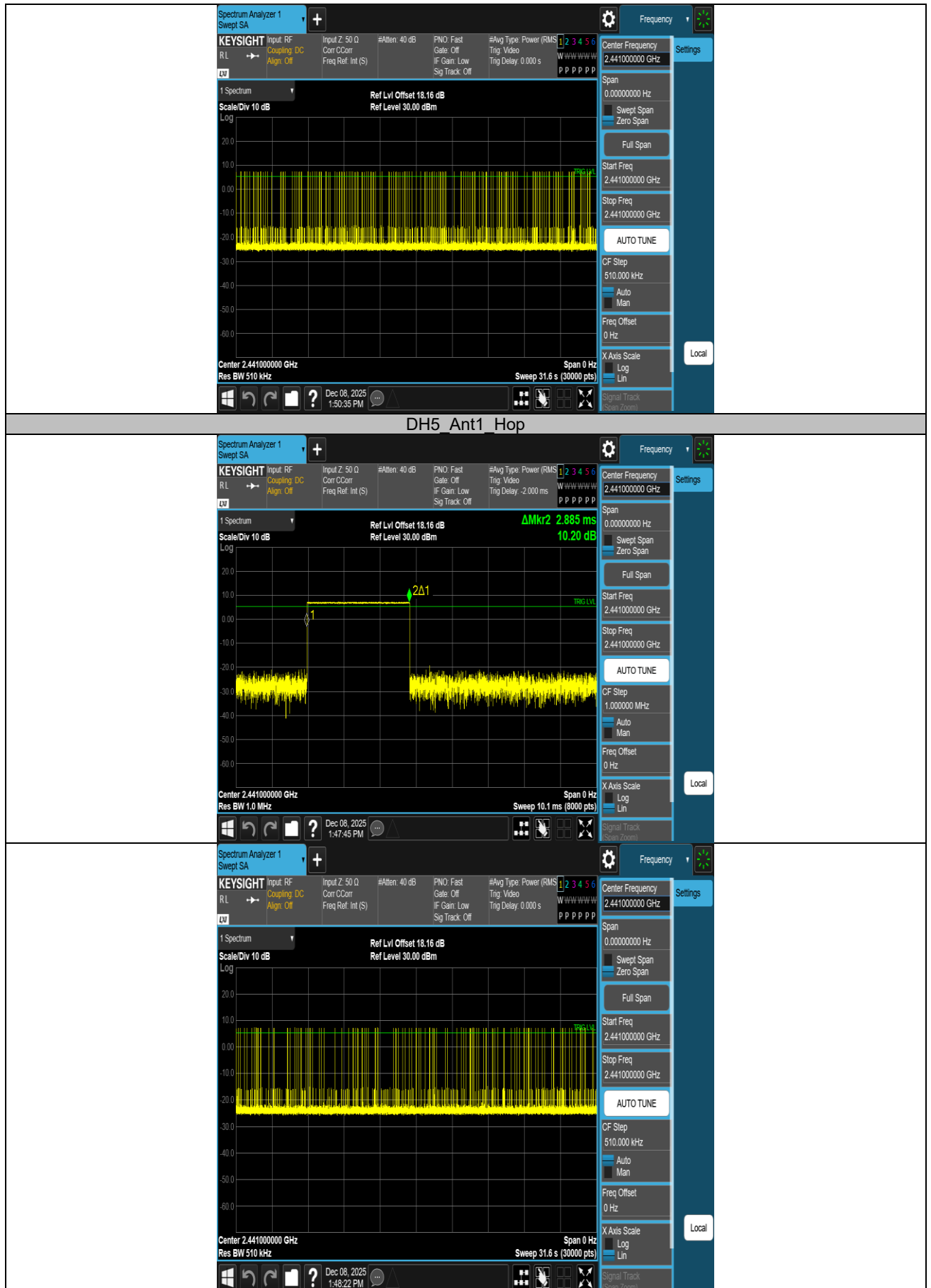
Appendix A.4: Test Results of Time of Occupancy

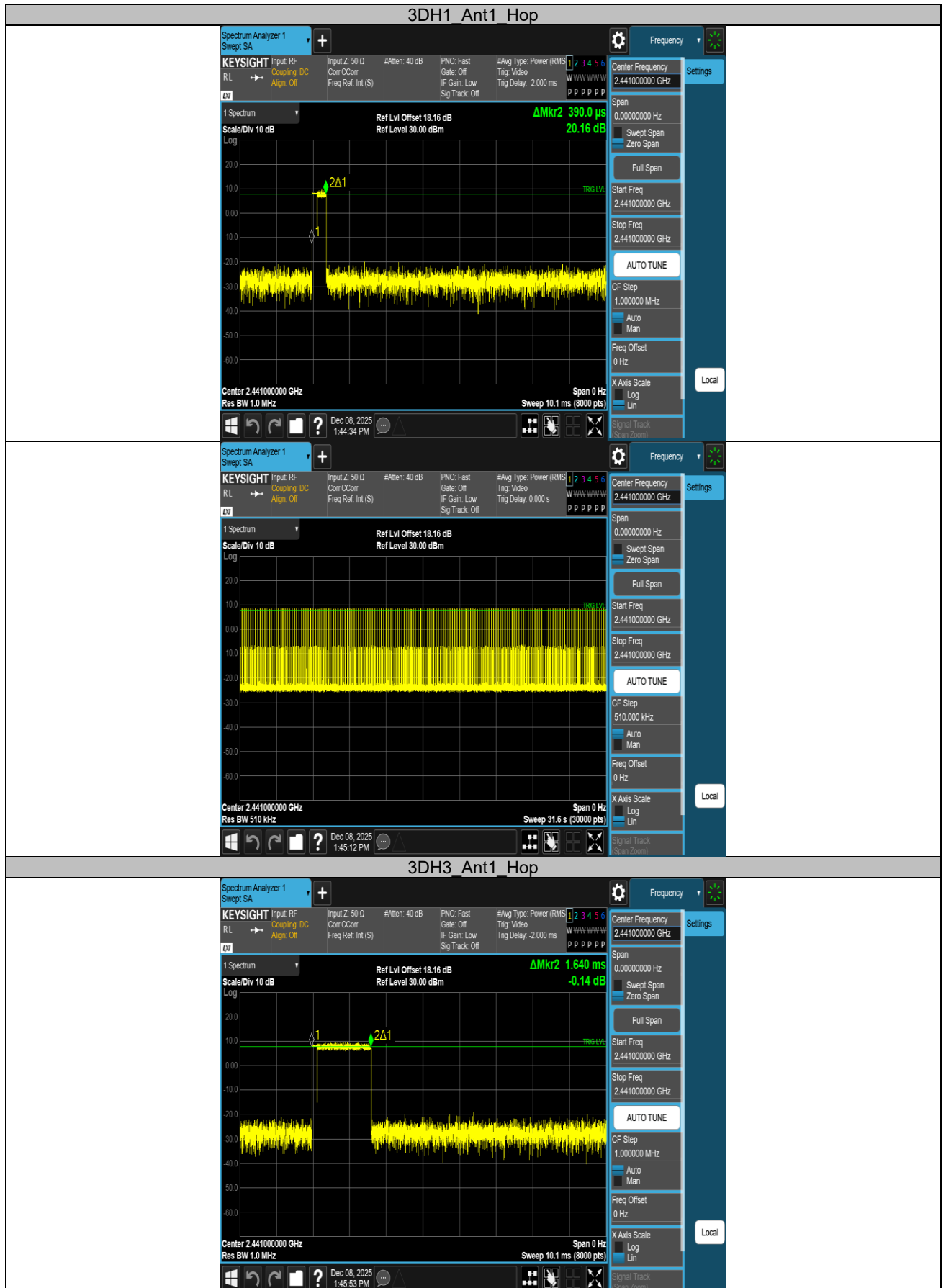
Test Result

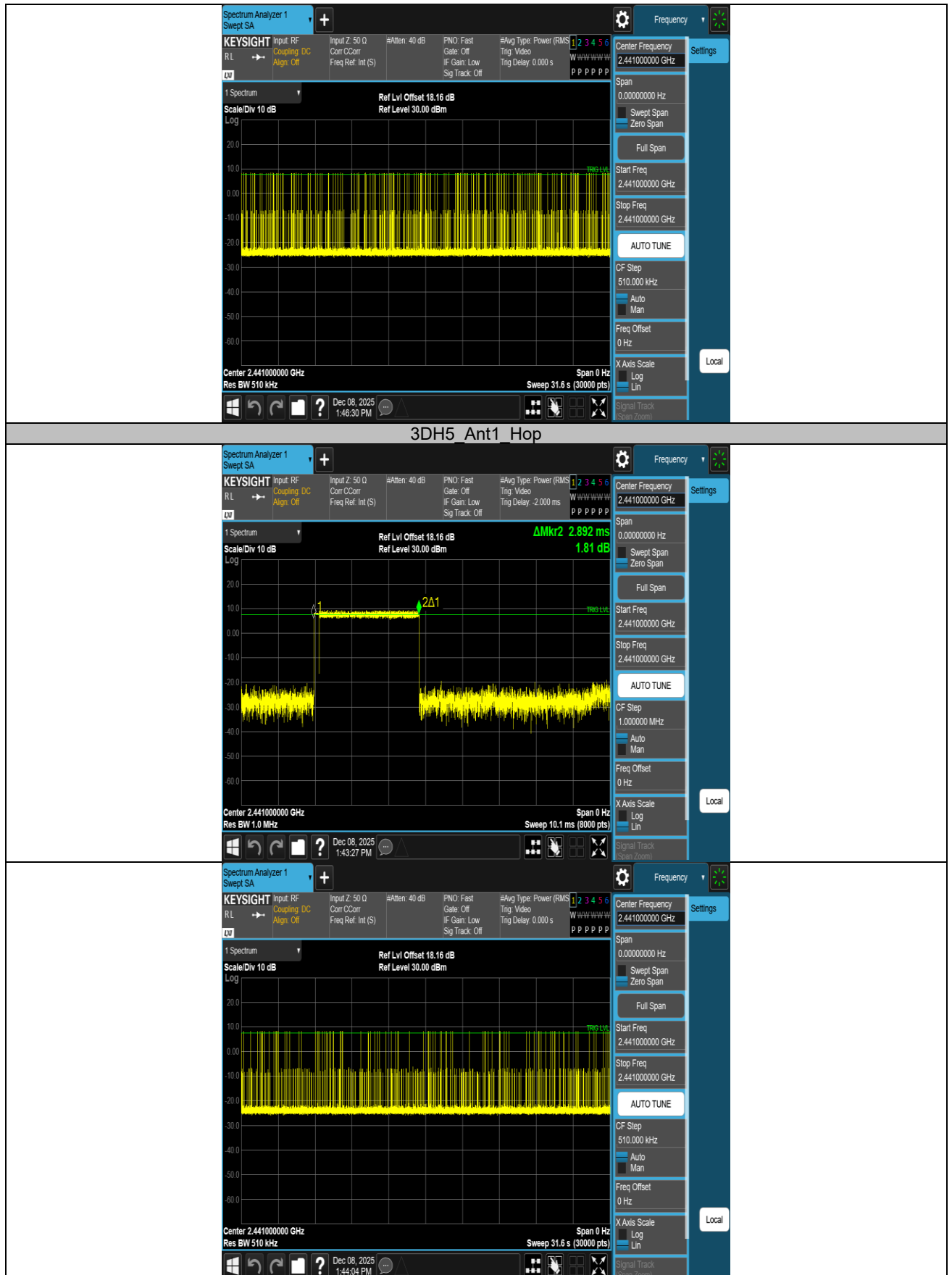
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.381	319	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.637	165	0.27	≤0.4	PASS
DH5	Ant1	Hop	2.885	113	0.326	≤0.4	PASS
3DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.640	155	0.254	≤0.4	PASS
3DH5	Ant1	Hop	2.892	91	0.263	≤0.4	PASS

Test Graphs









Appendix A.5: Test Results of Number of Hopping Frequency

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

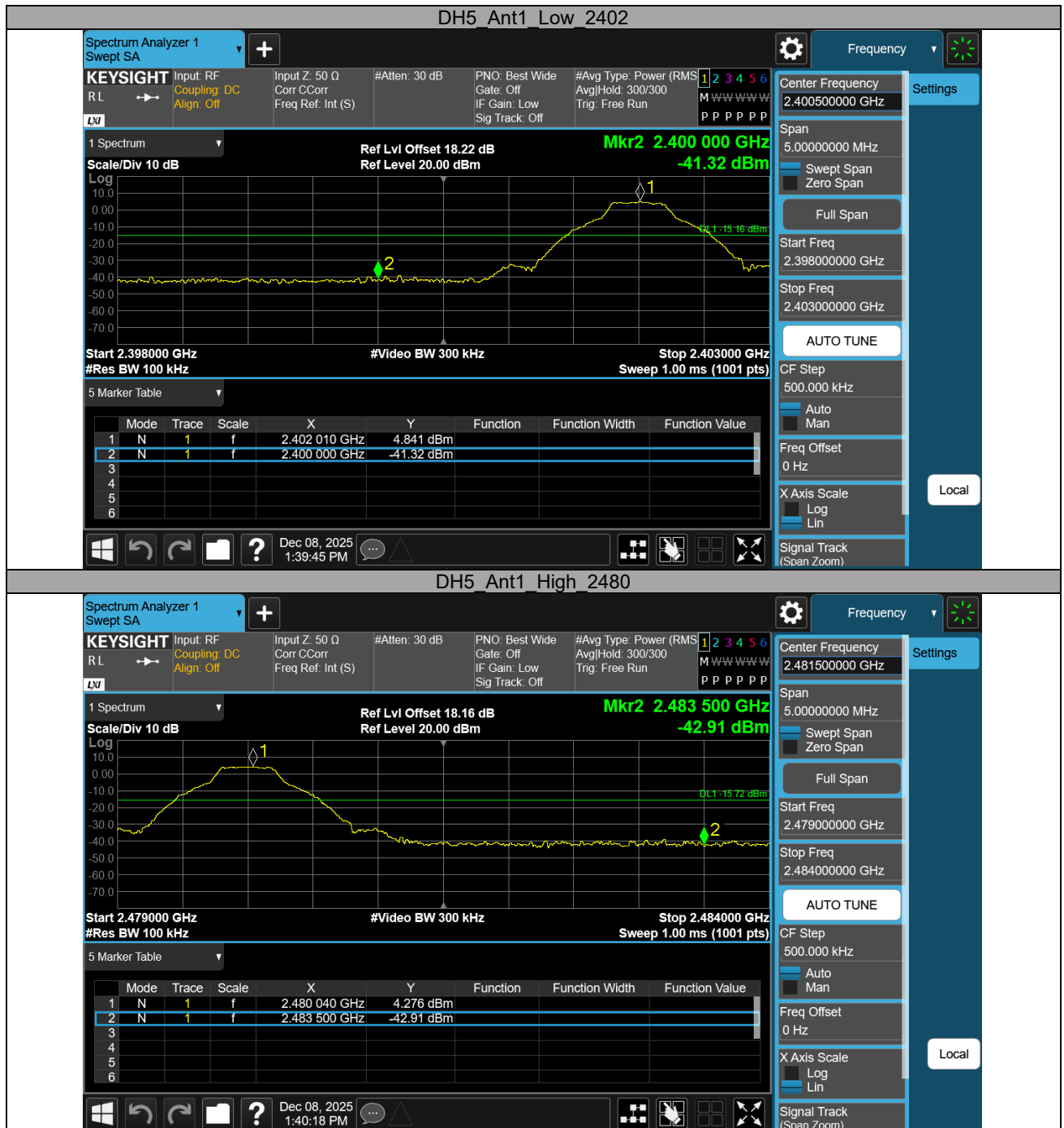


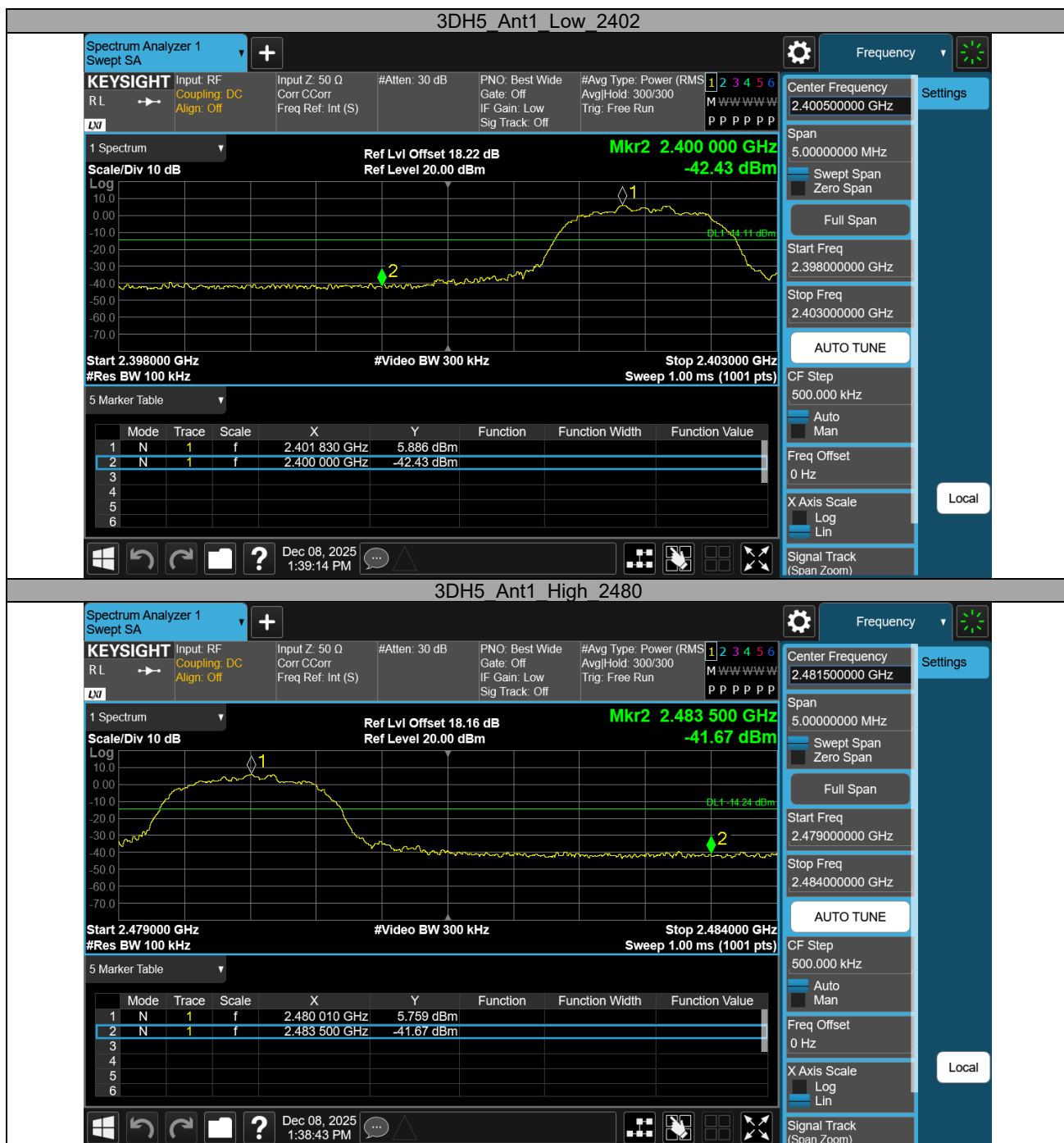
Appendix A.6: Test Results of Band Edge Measurements

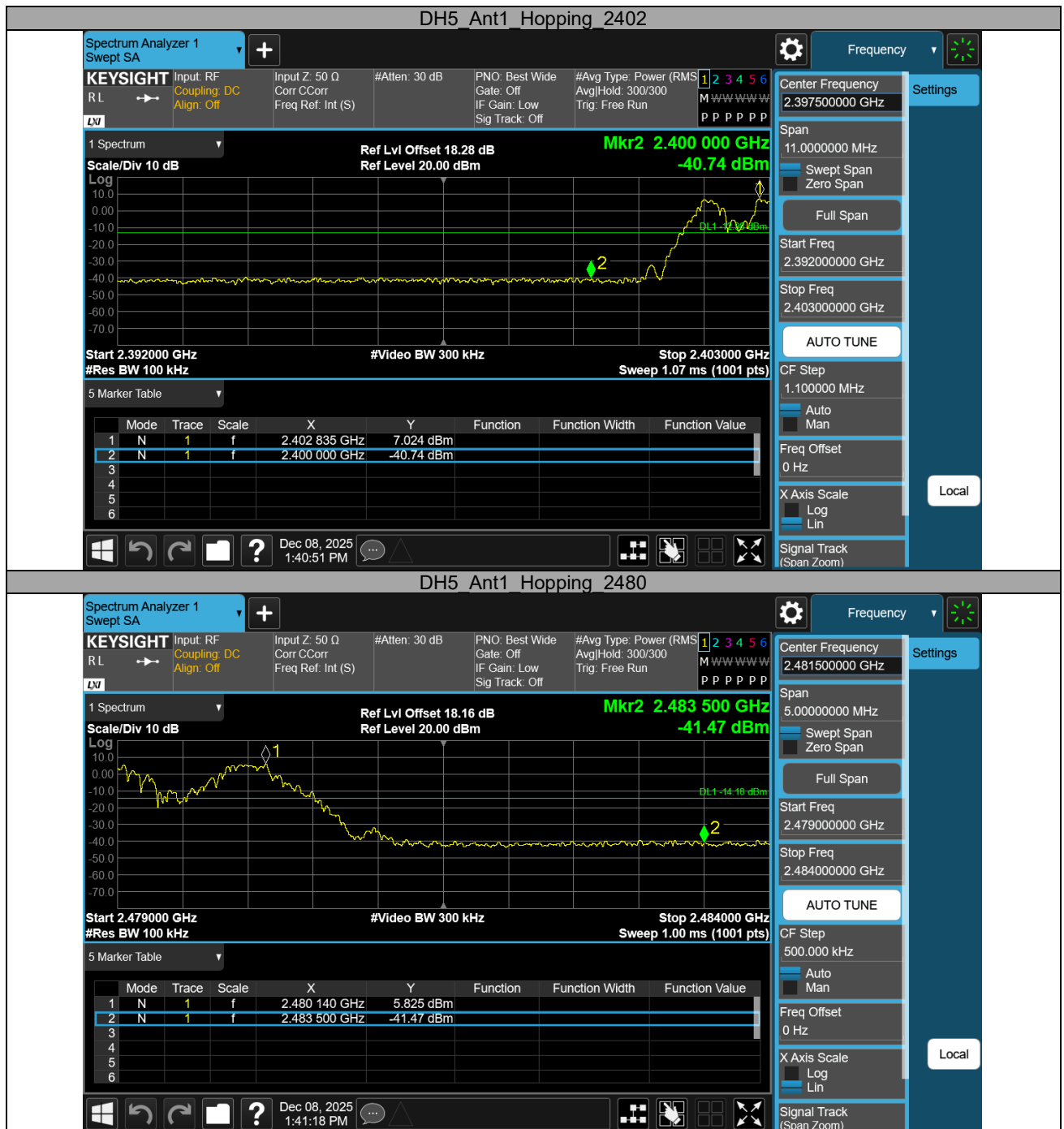
Test Result

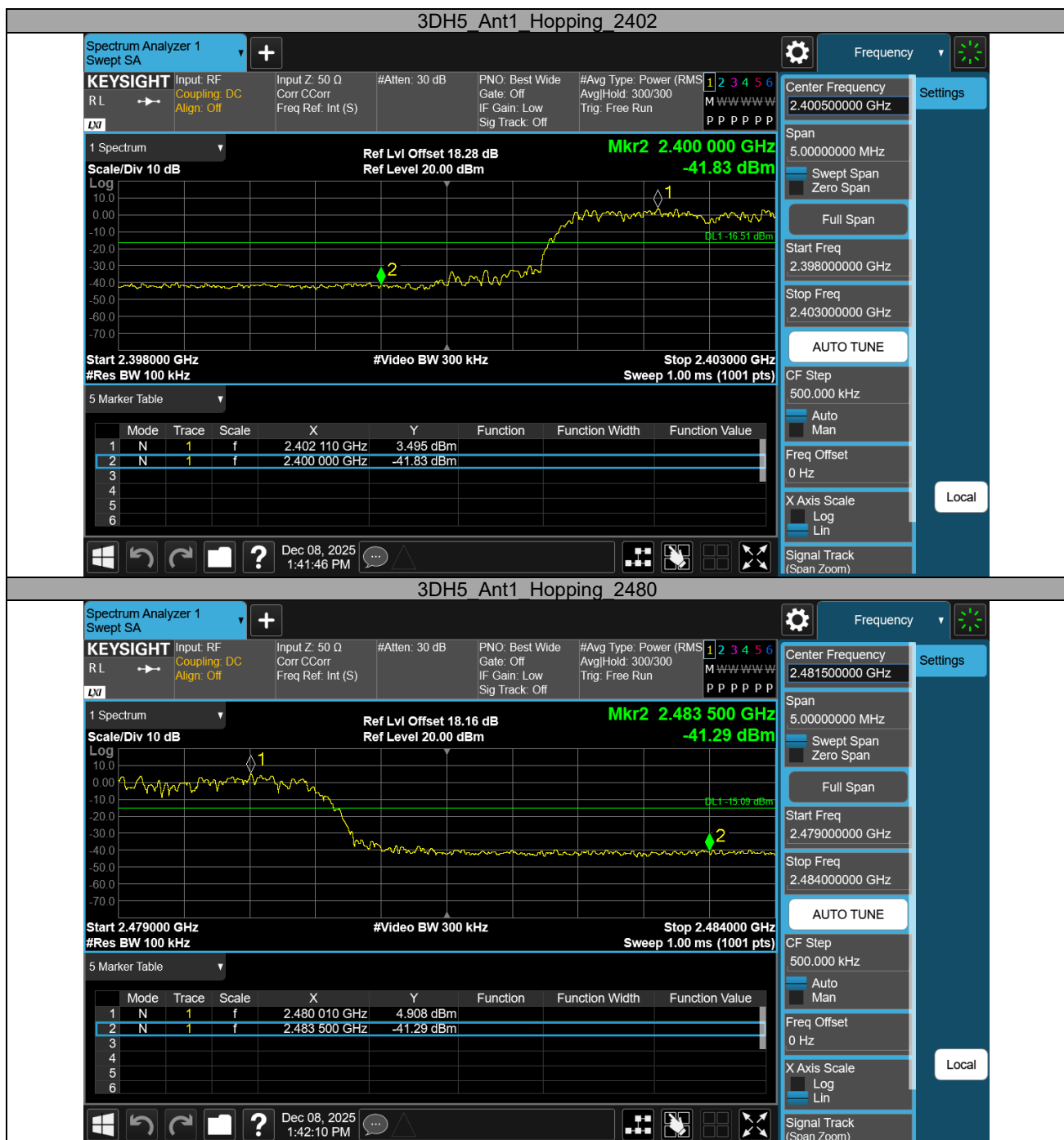
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.87	-41.32	≤-15.16	PASS
		High	2480	4.28	-42.91	≤-15.72	PASS
3DH5	Ant1	Low	2402	5.89	-42.43	≤-14.11	PASS
		High	2480	5.76	-41.67	≤-14.24	PASS
DH5	Ant1	Hopping	2402	7.02	-40.74	≤-12.98	PASS
		Hopping	2480	5.82	-41.47	≤-14.16	PASS
3DH5	Ant1	Hopping	2402	3.49	-41.83	≤-16.51	PASS
		Hopping	2480	4.91	-41.29	≤-15.09	PASS

Test Graphs







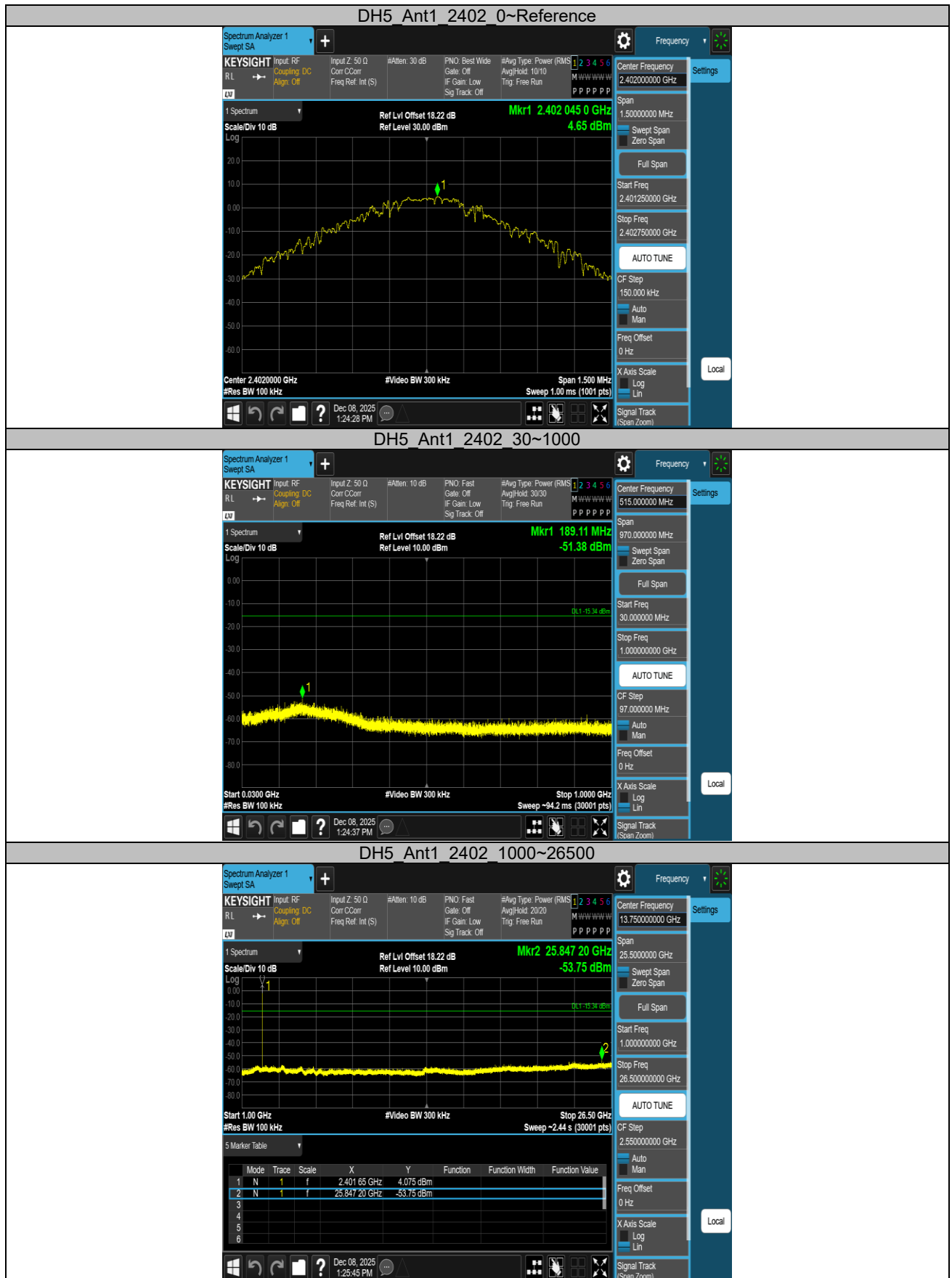


Appendix A.7: Test Results of Conducted Spurious Emission

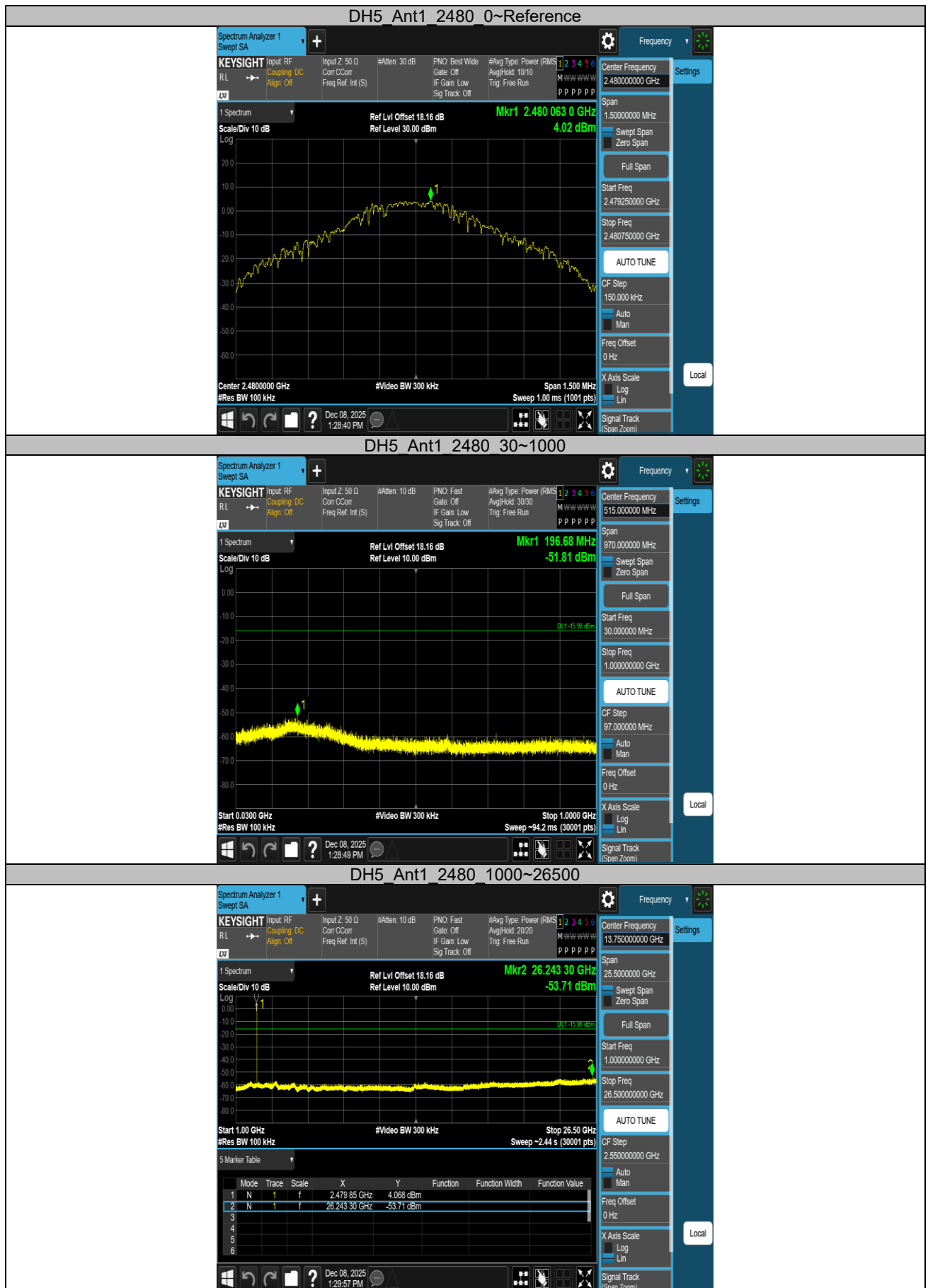
Test Result

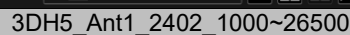
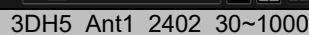
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	4.66	4.66	---	PASS
			30~1000	4.66	-51.39	≤-15.34	PASS
			1000~26500	4.66	-53.75	≤-15.34	PASS
		2441	Reference	4.35	4.35	---	PASS
			30~1000	4.35	-52.25	≤-15.65	PASS
			1000~26500	4.35	-54.55	≤-15.65	PASS
		2480	Reference	4.02	4.02	---	PASS
			30~1000	4.02	-51.81	≤-15.98	PASS
			1000~26500	4.02	-53.71	≤-15.98	PASS
3DH5	Ant1	2402	Reference	4.79	4.79	---	PASS
			30~1000	4.79	-51.85	≤-15.21	PASS
			1000~26500	4.79	-54.68	≤-15.21	PASS
		2441	Reference	4.43	4.43	---	PASS
			30~1000	4.43	-52.43	≤-15.57	PASS
			1000~26500	4.43	-53.59	≤-15.57	PASS
		2480	Reference	5.99	5.99	---	PASS
			30~1000	5.99	-52.34	≤-14.01	PASS
			1000~26500	5.99	-54.51	≤-14.01	PASS

Test Graphs













Appendix A.8: Test Results of Radiated Spurious Emissions

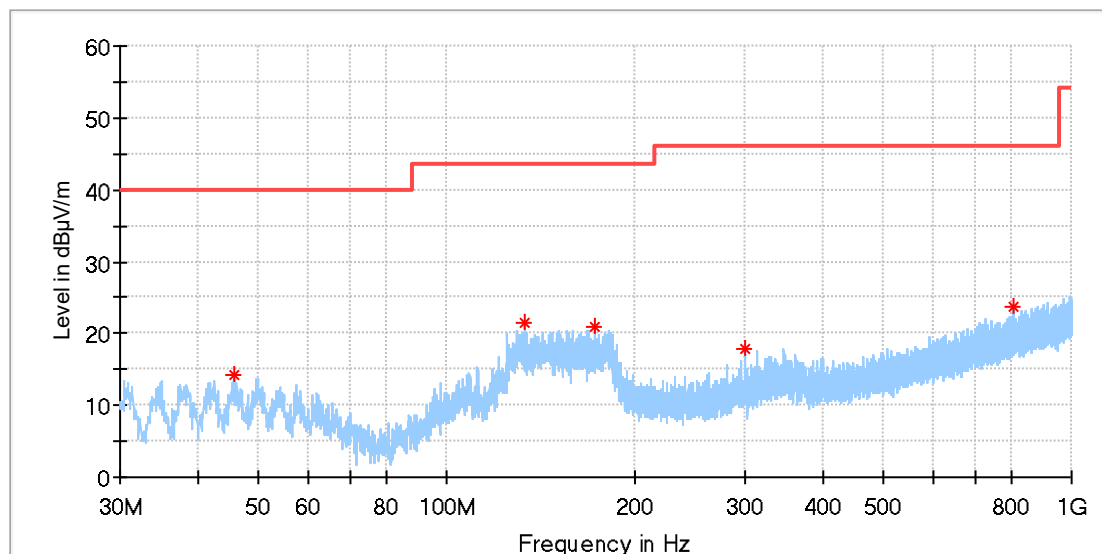
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30 MHz - 1GHz

EUT Information

EUT Name:	WIFI+BT Module
Model:	WKT82R1501
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168582607/A004129867-005
Test Voltage:	DC 3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

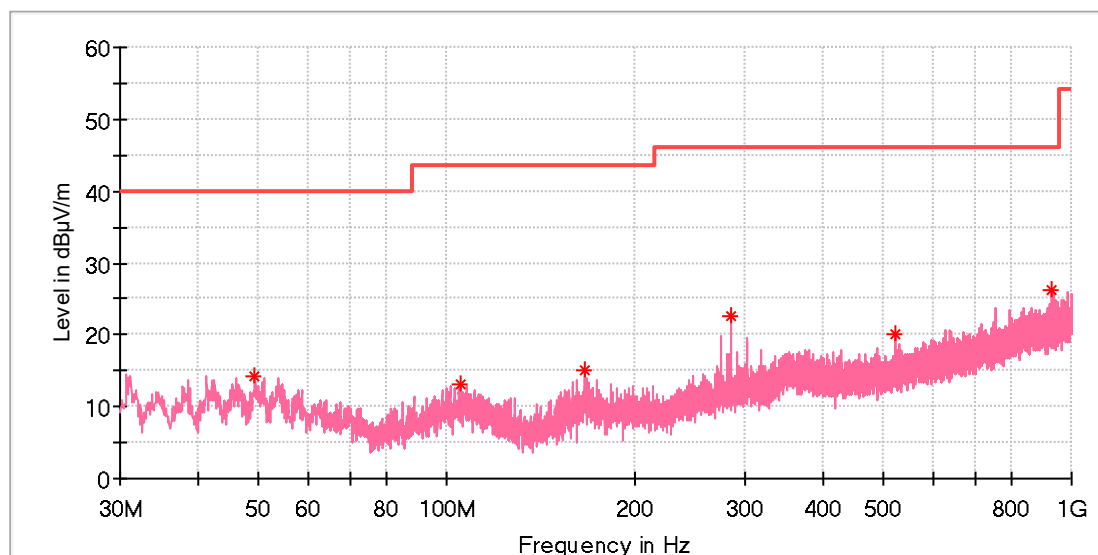
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.573889	14.18	40.00	25.82	100.0	H	74.0	-18.8
133.358889	21.43	43.50	22.07	100.0	H	172.0	-22.1
173.128889	20.88	43.50	22.62	100.0	H	43.0	-21.1
301.115000	17.98	46.00	28.02	100.0	H	281.0	-16.2
807.886111	23.72	46.00	22.28	100.0	H	265.0	-6.0

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	WIFI+BT Module
Model:	WKT82R1501
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168582607/A004129867-005
Test Voltage:	DC 3.3V
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.292222	14.34	40.00	25.66	100.0	V	301.0	-18.4
104.851667	12.98	43.50	30.52	100.0	V	146.0	-18.9
166.823889	15.01	43.50	28.49	100.0	V	272.0	-21.5
284.301667	22.58	46.00	23.42	100.0	V	72.0	-16.6
521.682222	20.10	46.00	25.90	100.0	V	43.0	-11.4
930.968333	26.15	46.00	19.85	100.0	V	192.0	-4.5

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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