

Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: SPORT OPEN EAR TWS ASST

Test Model: TWSSOEFT52-CP-BLK

Environmental Conditions

Temperature:	24.2°C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Yan Chen
Supervised by:	Fengliu Tang

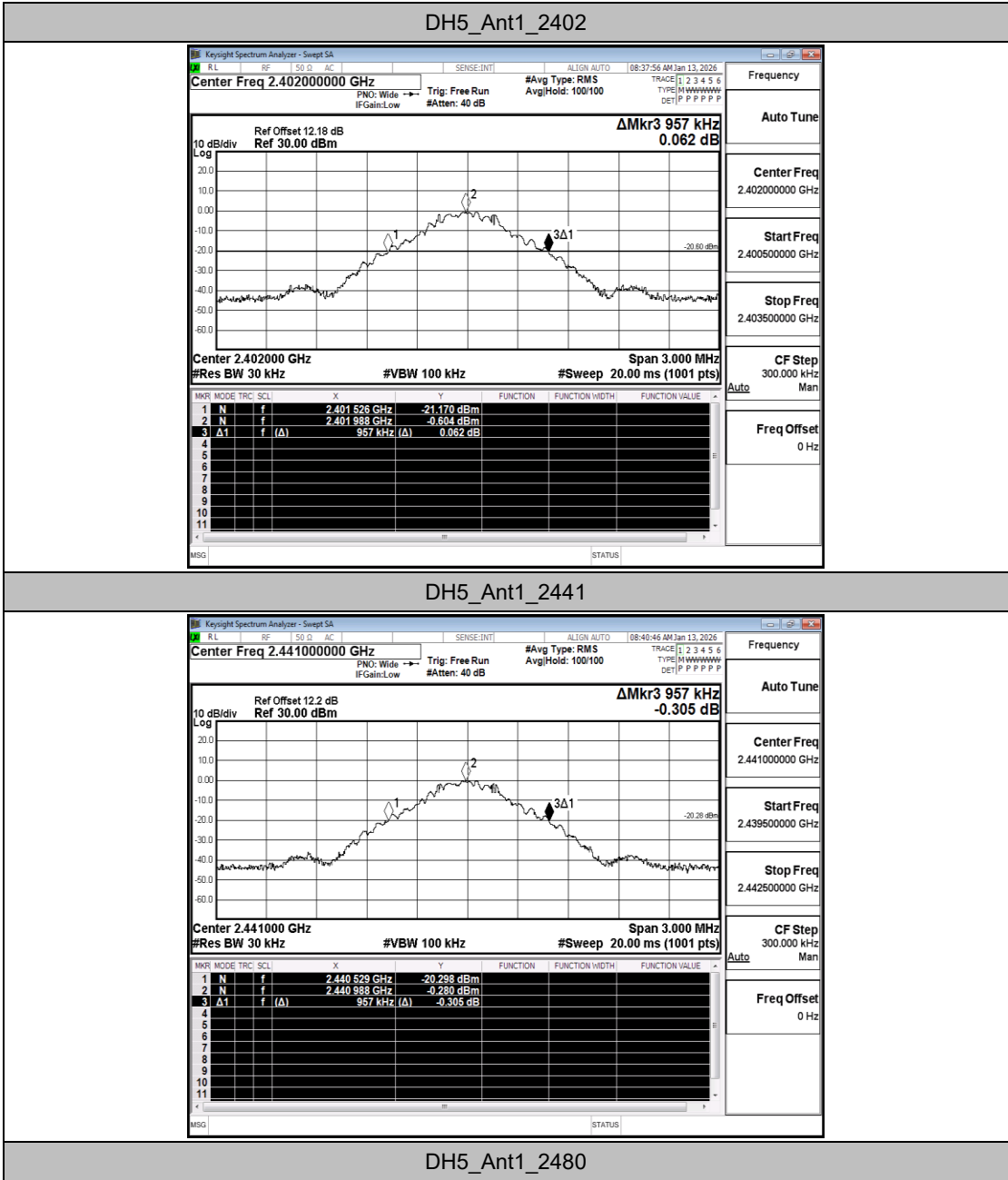
A.1 20dB Emission Bandwidth

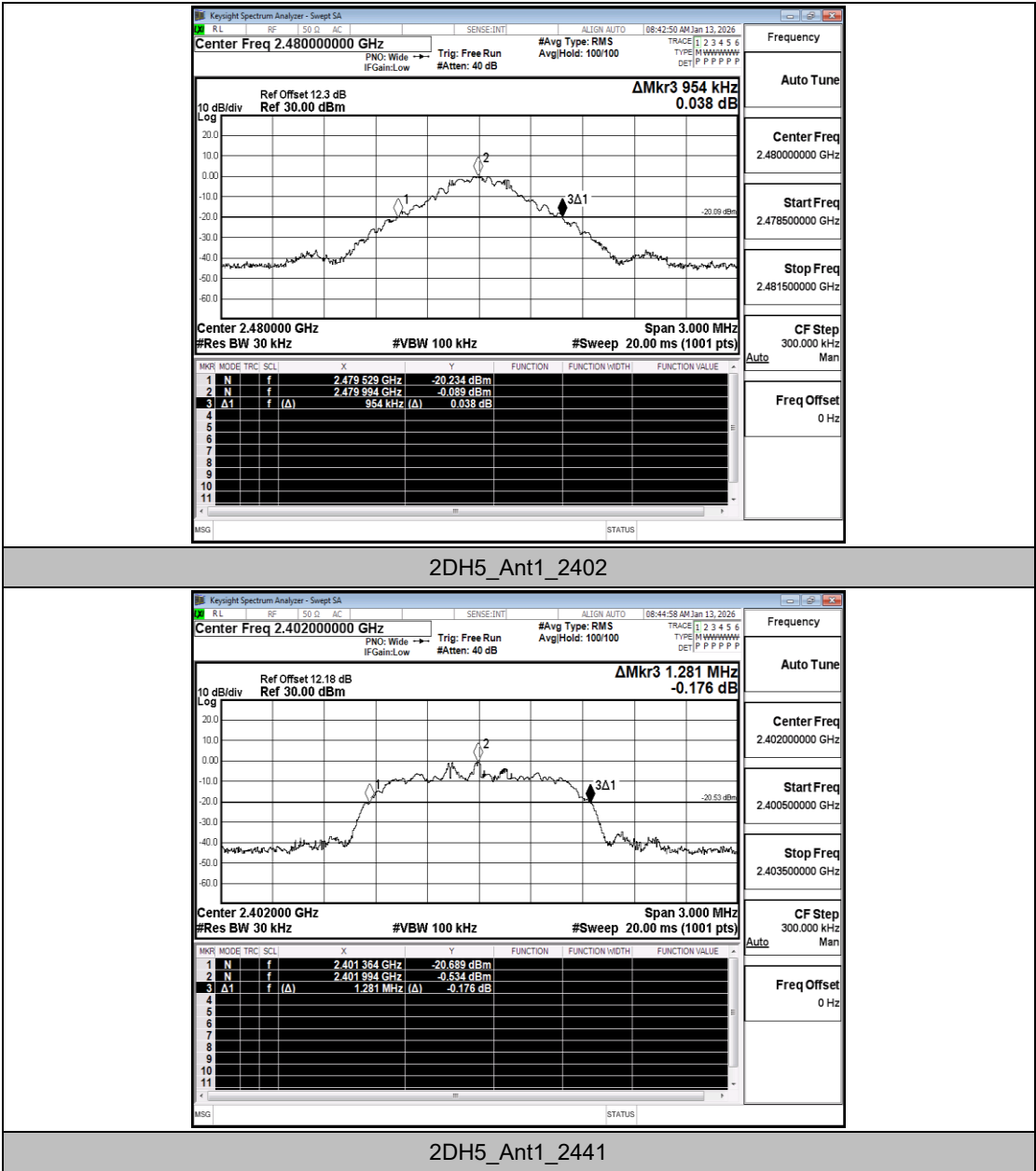
Test Result

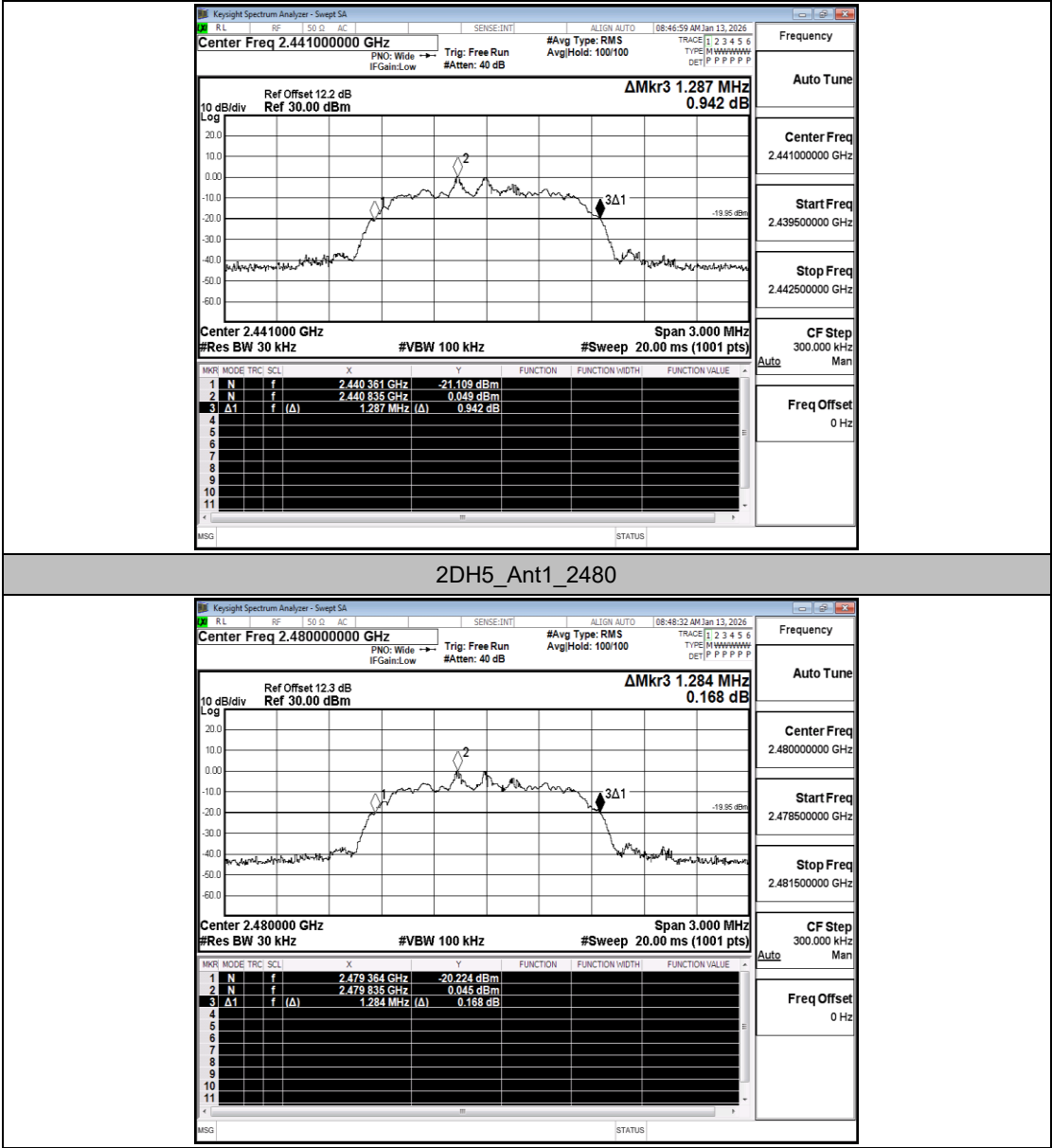
TestMode	Antenna	Freq (MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.957	2401.526	2402.483	---	---
		2441	0.957	2440.529	2441.486	---	---
		2480	0.954	2479.529	2480.483	---	---
2DH5	Ant1	2402	1.281	2401.364	2402.645	---	---
		2441	1.287	2440.361	2441.648	---	---
		2480	1.284	2479.364	2480.648	---	---

Note: offset=System attenuation +cabel loss

Test Graphs







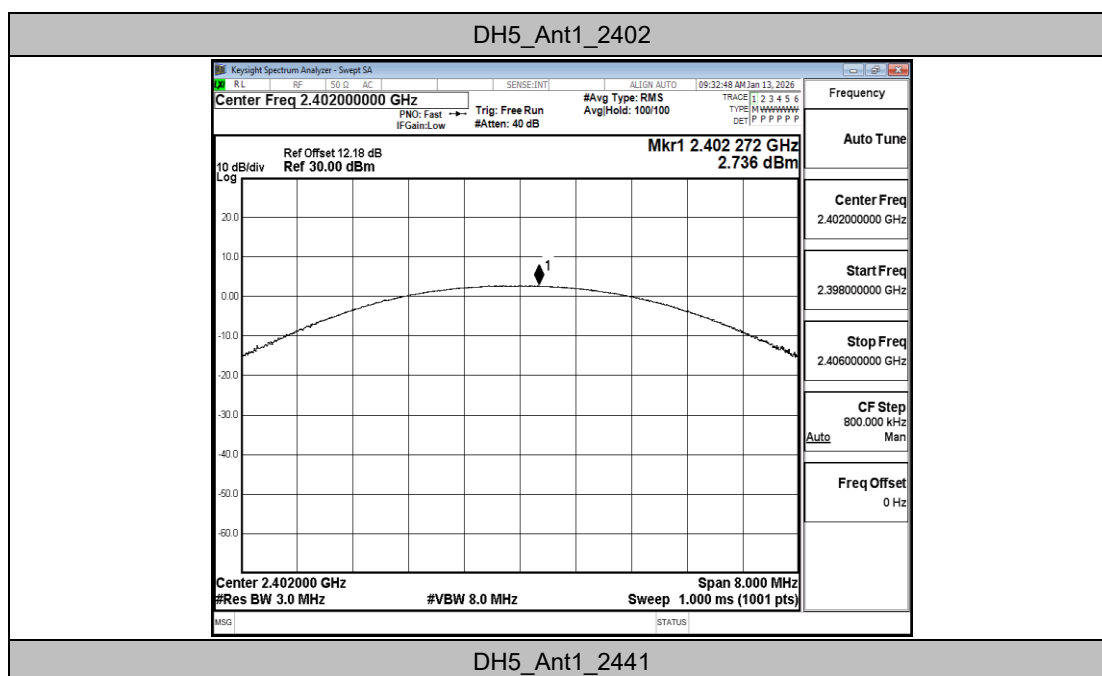
A.2 Maximum Peak conducted output power

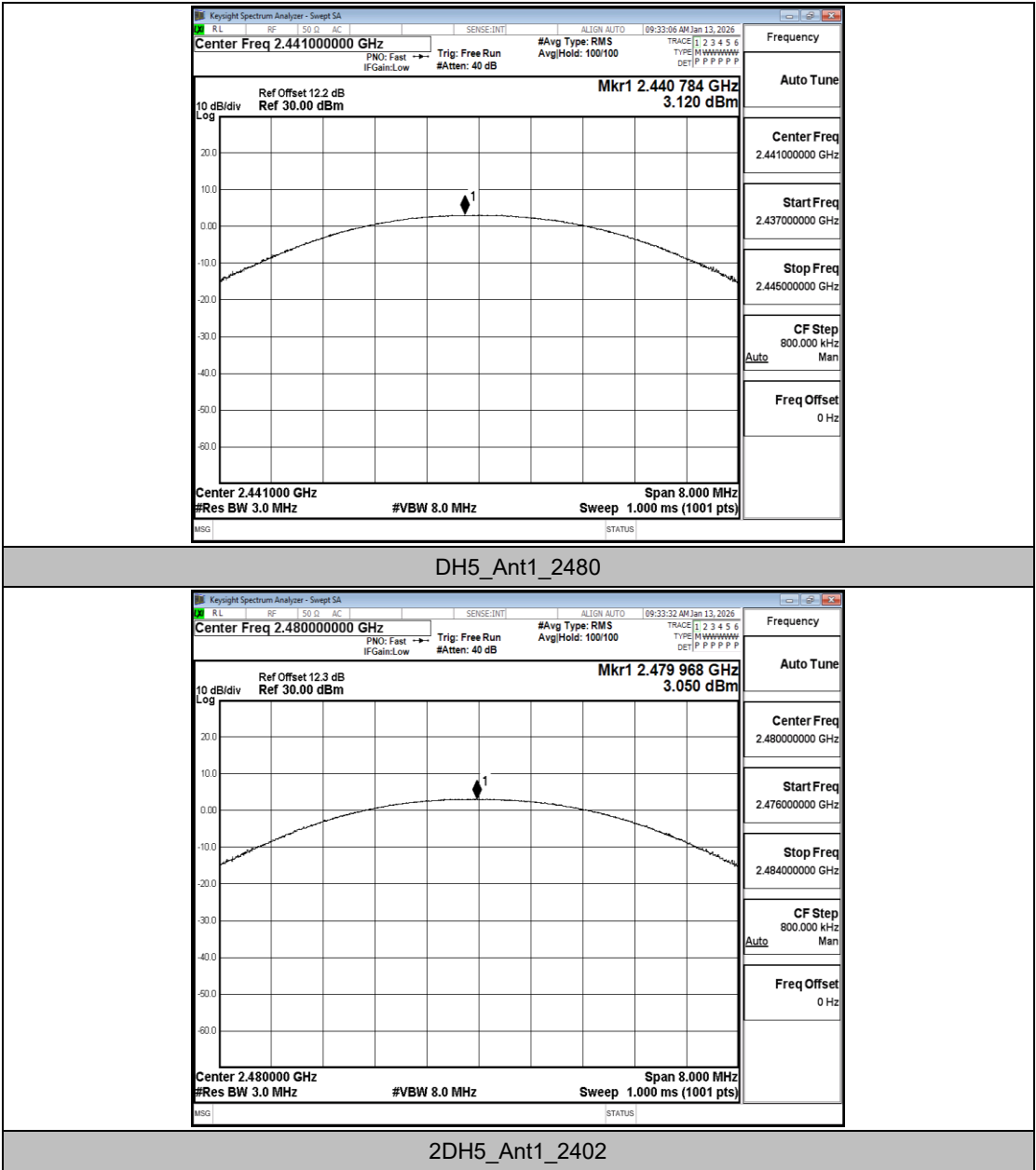
Test Result Peak

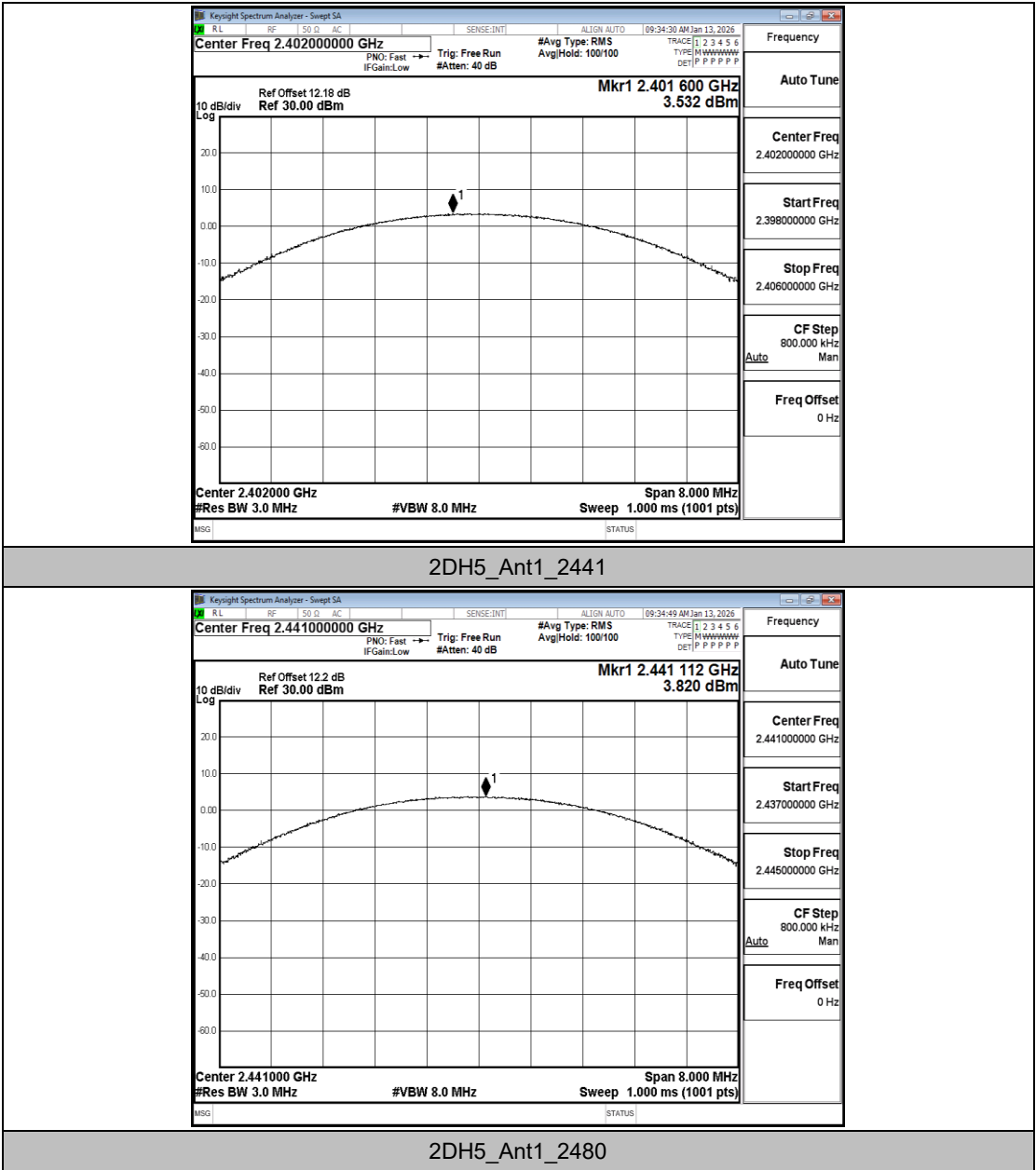
Test Mode	Antenna	Freq (MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	2.74	≤30	PASS
		2441	3.12	≤30	PASS
		2480	3.05	≤30	PASS
2DH5	Ant1	2402	3.53	≤20.97	PASS
		2441	3.82	≤20.97	PASS
		2480	3.92	≤20.97	PASS

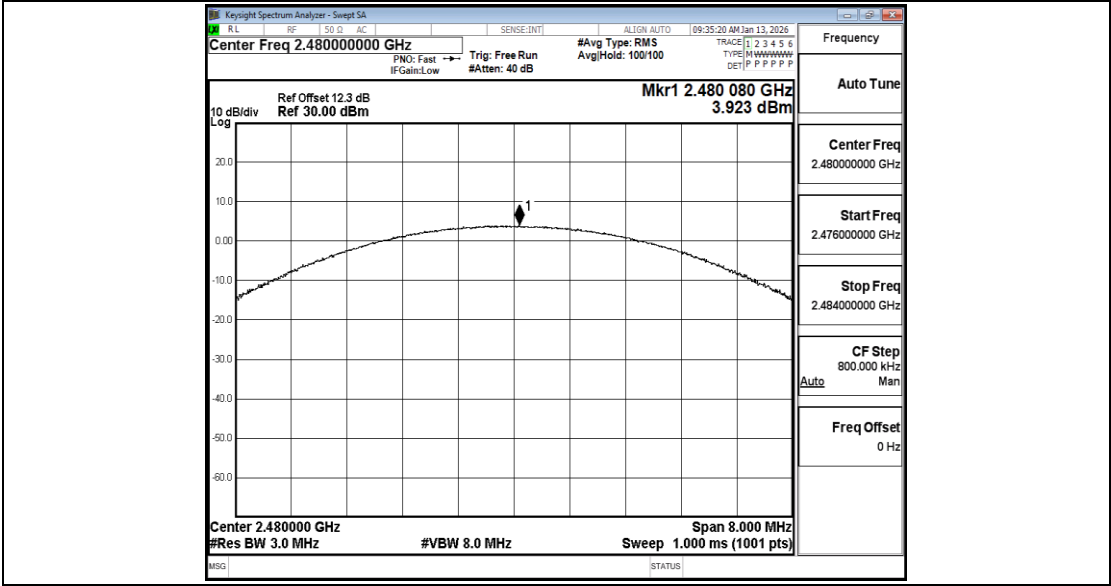
Note: offset=System attenuation +cabel loss

Test Graphs









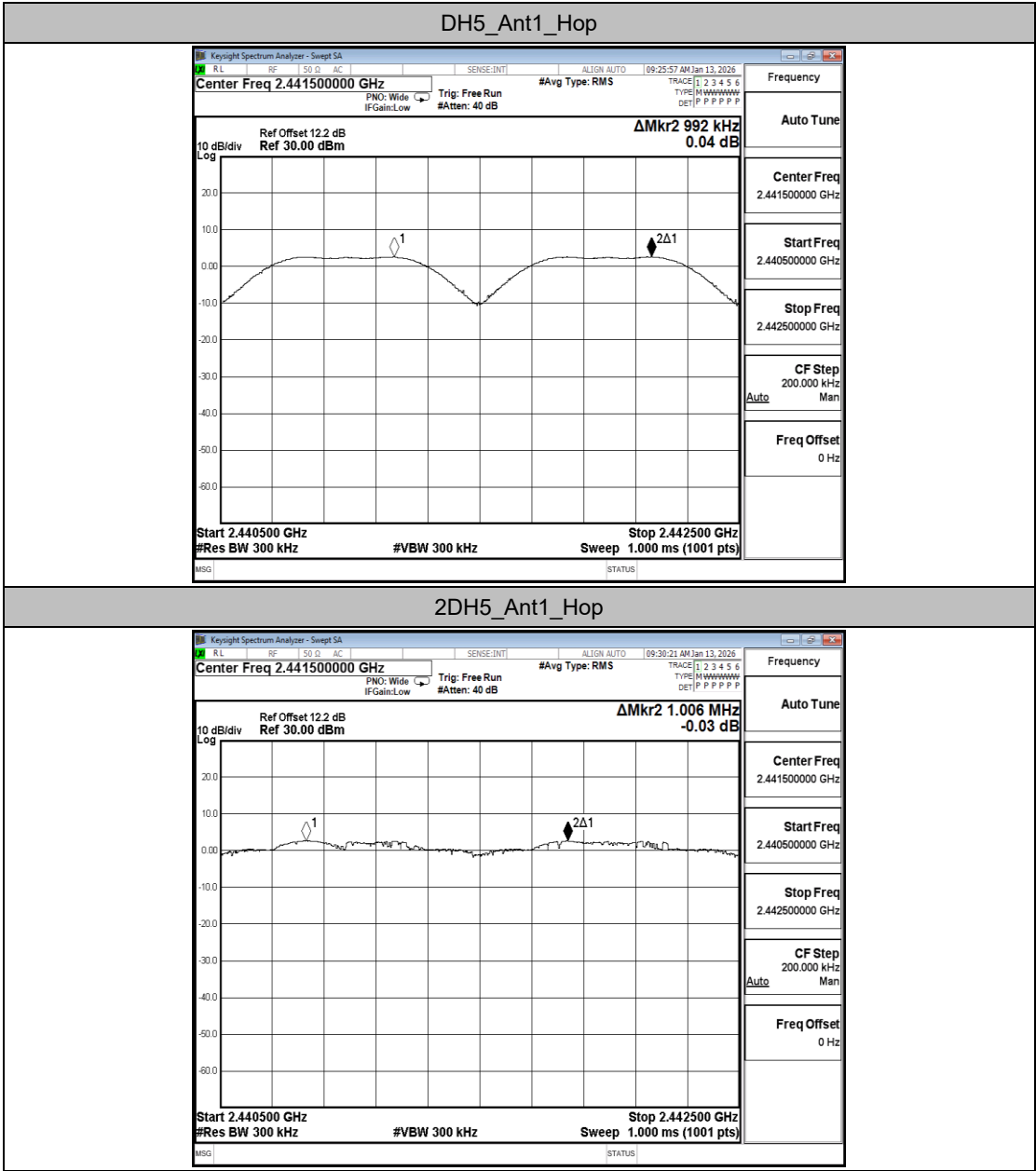
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Freq (MHz)	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.992	≥0.638	PASS
2DH5	Ant1	Hop	1.006	≥0.858	PASS

Note: offset=System attenuation +cabal loss

Test Graphs



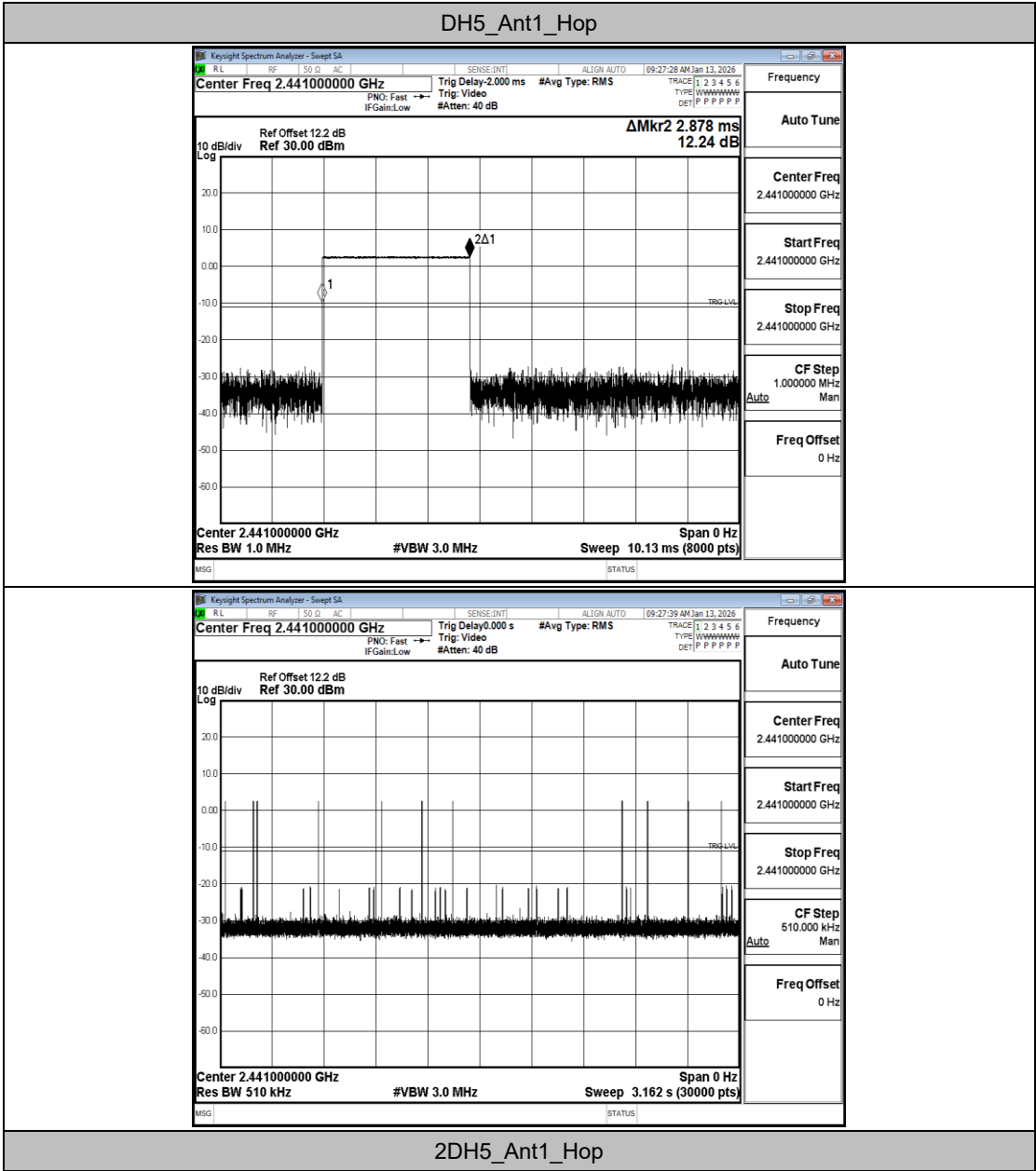
A.4 Time of occupancy

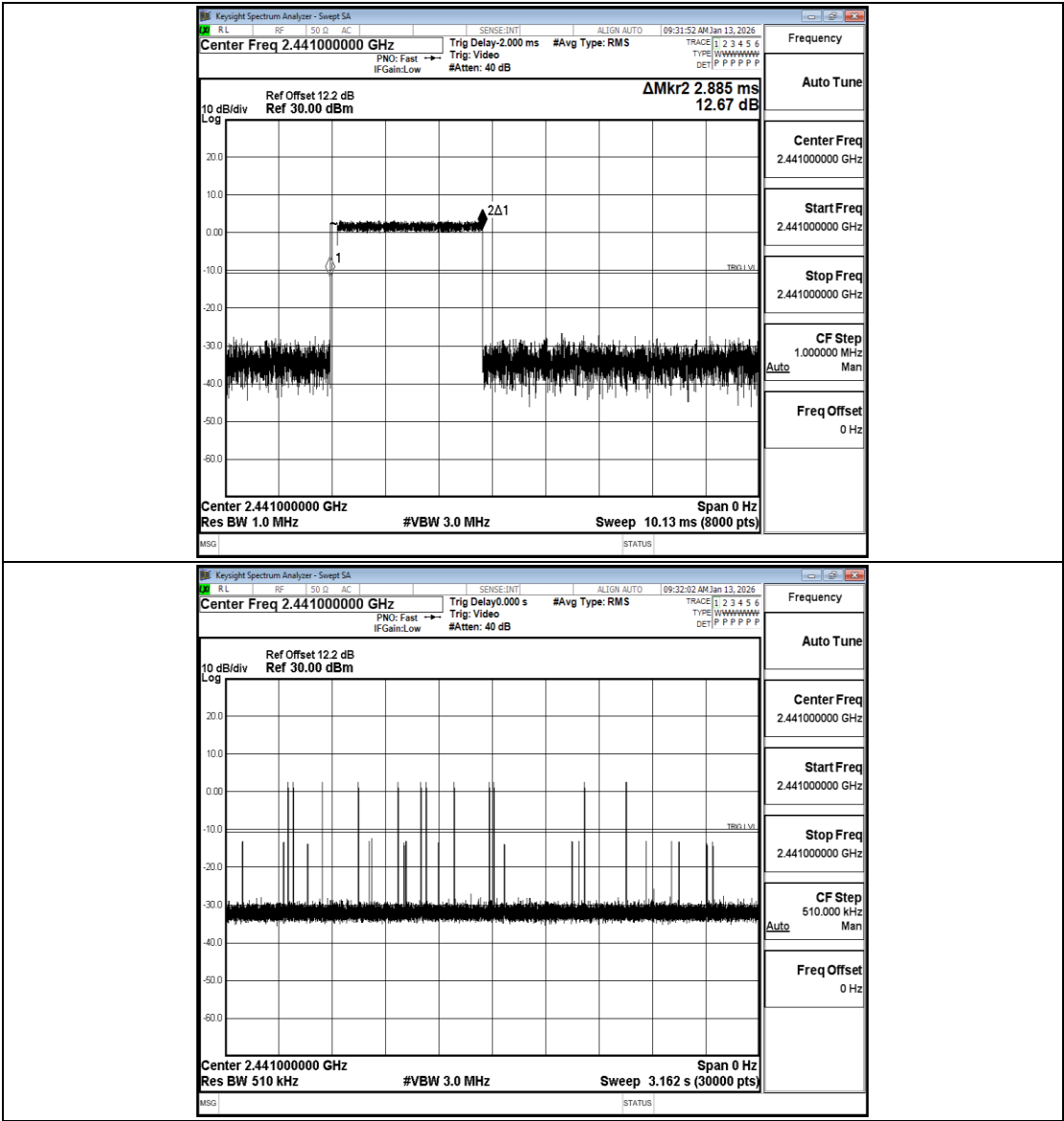
Test Result

TestMode	Antenna	Freq (MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS
2DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS

Note: offset=System attenuation +cabal loss

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

Note: offset=System attenuation +cable loss

Test Graphs



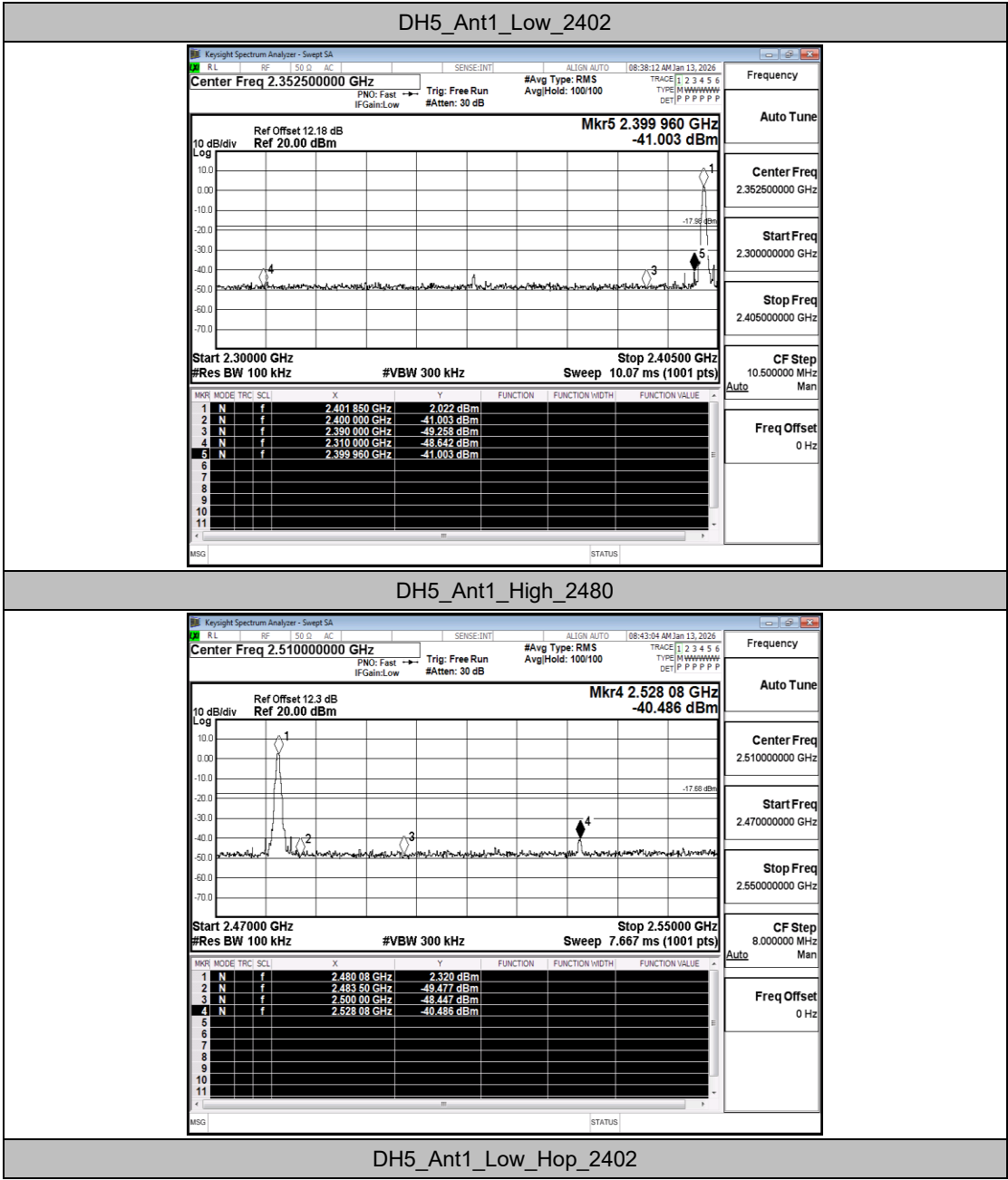
A.6 Band edge measurements

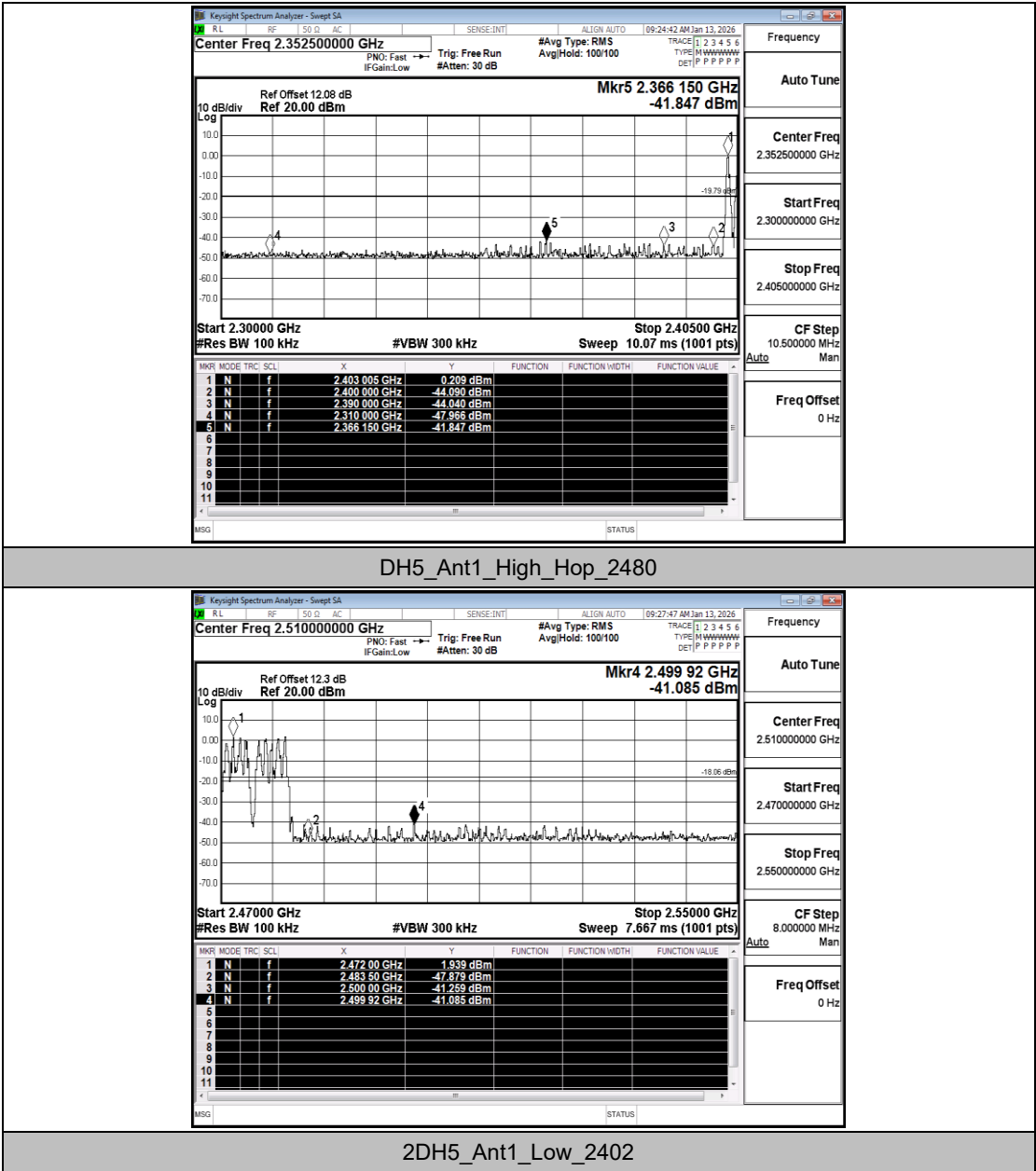
Test Result

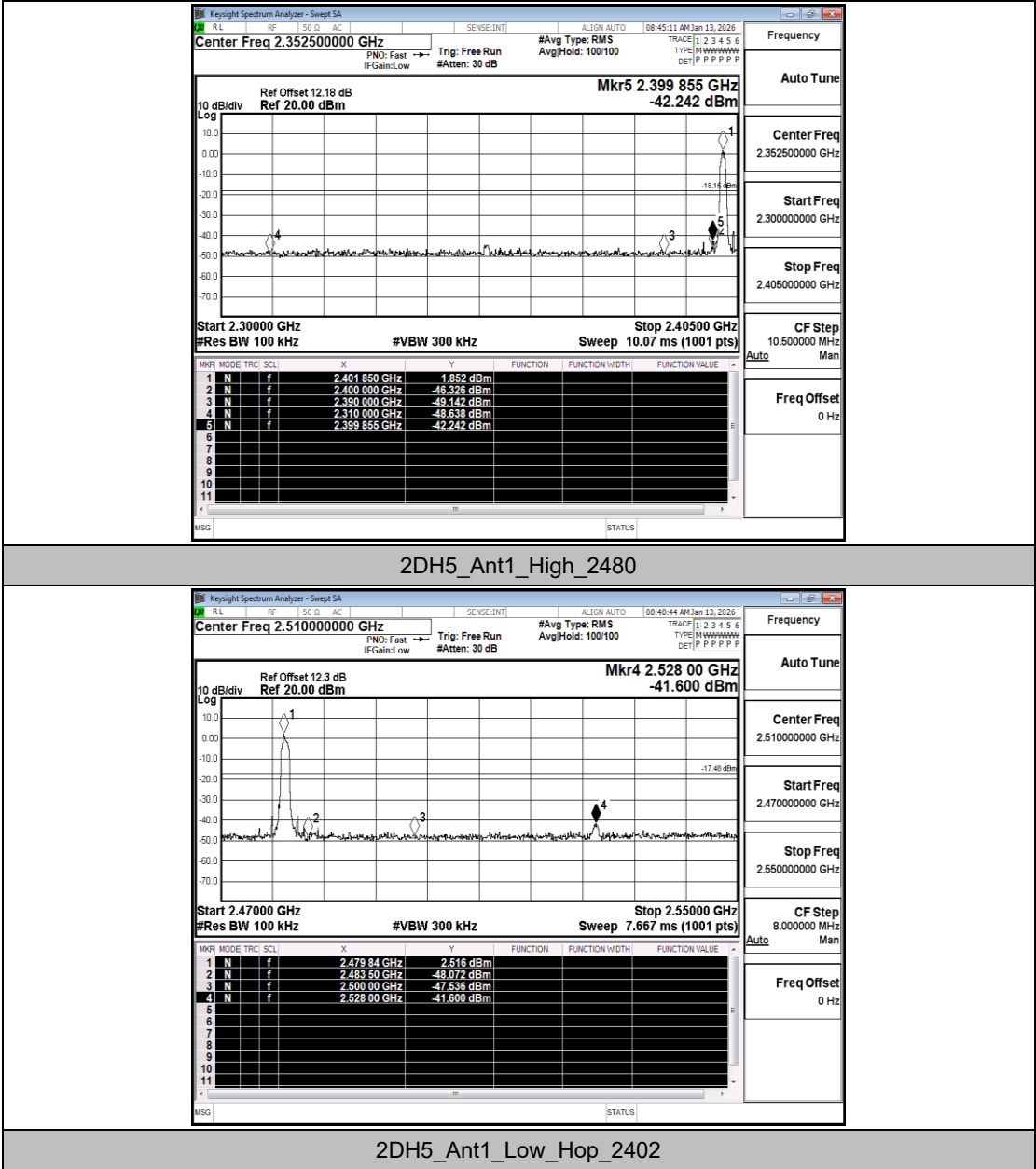
TestMode	Antenna	ChName	Freq (MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.02	-41	≤-17.98	PASS
		High	2480	2.32	-40.49	≤-17.68	PASS
		Low	Hop_2402	0.21	-41.85	≤-19.79	PASS
		High	Hop_2480	1.94	-41.09	≤-18.06	PASS
2DH5	Ant1	Low	2402	1.85	-42.24	≤-18.15	PASS
		High	2480	2.52	-41.6	≤-17.48	PASS
		Low	Hop_2402	-2.04	-42.94	≤-22.04	PASS
		High	Hop_2480	-0.35	-40.65	≤-20.35	PASS

Note: offset=System attenuation +cabel loss

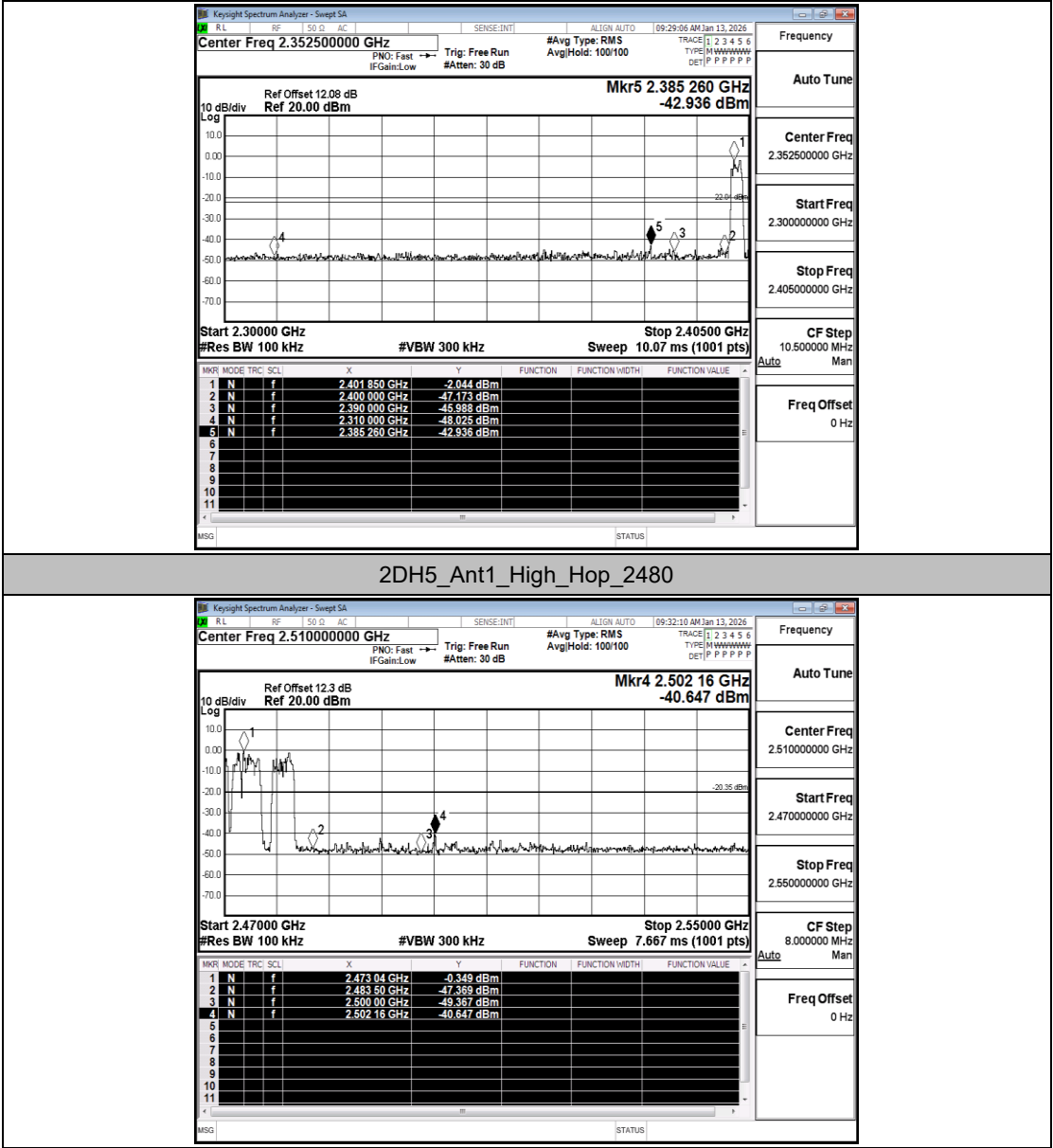
Test Graphs







2DH5_Ant1_Low_Hop_2402



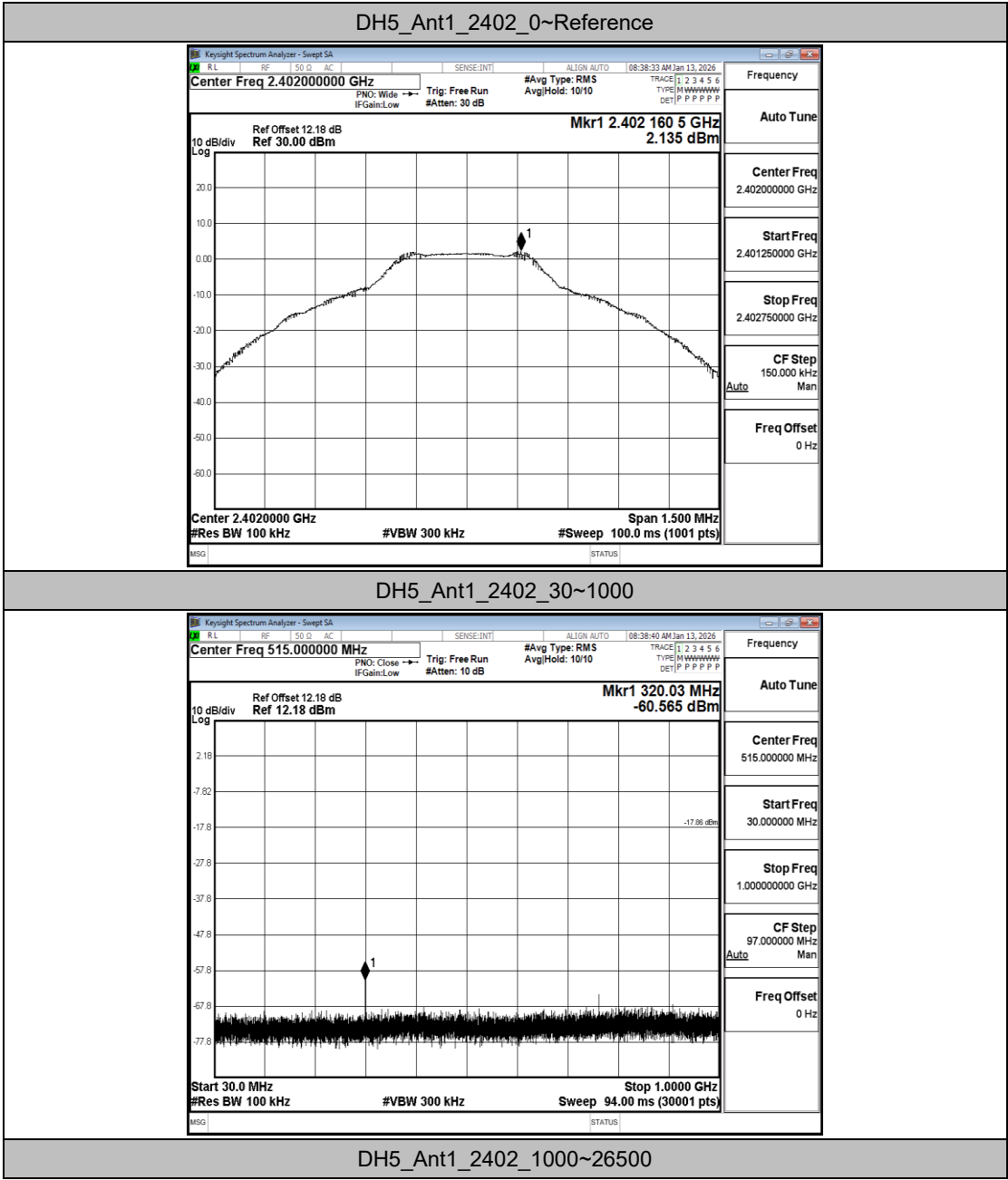
A.7 Conducted Spurious Emission

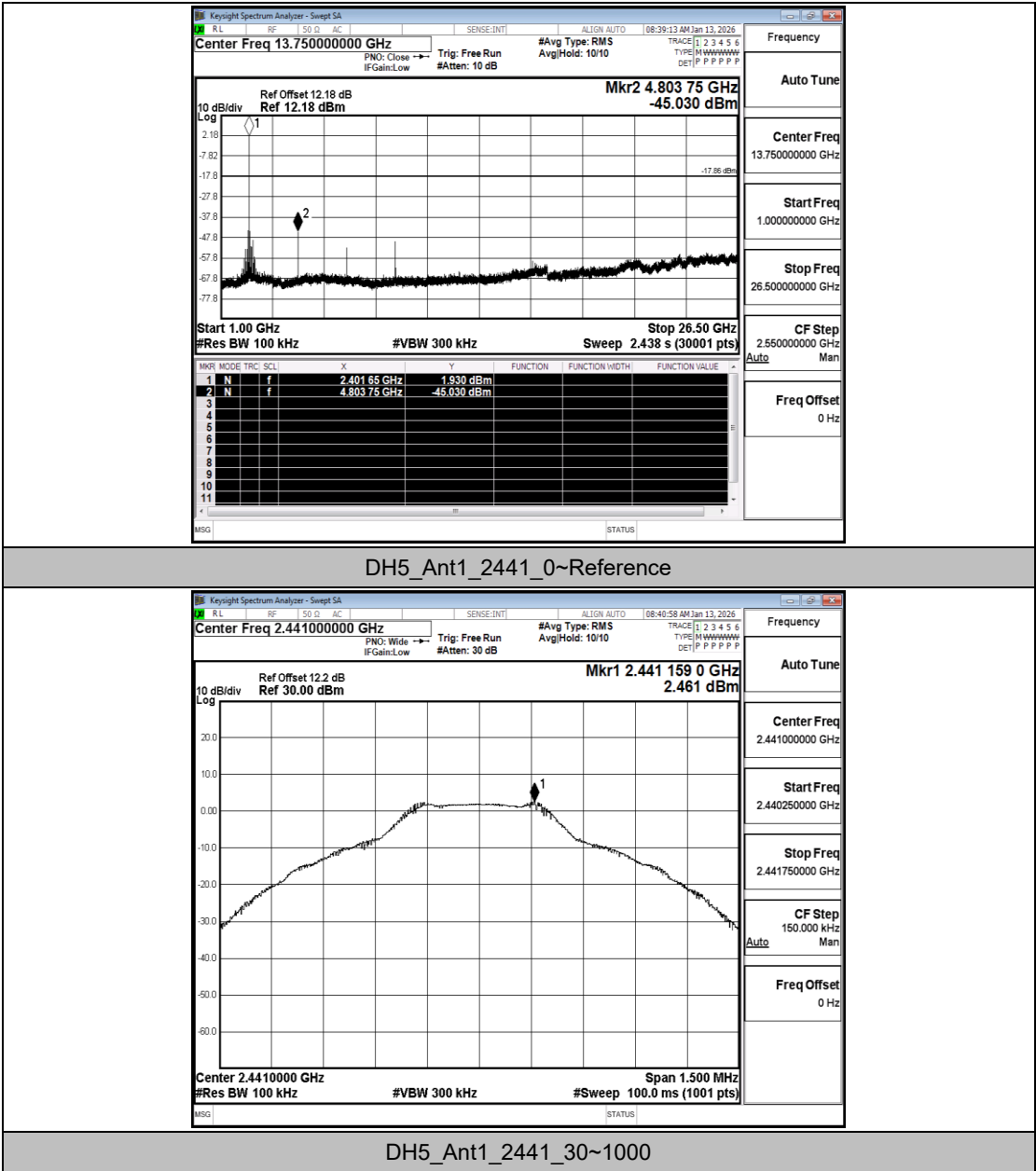
Test Result

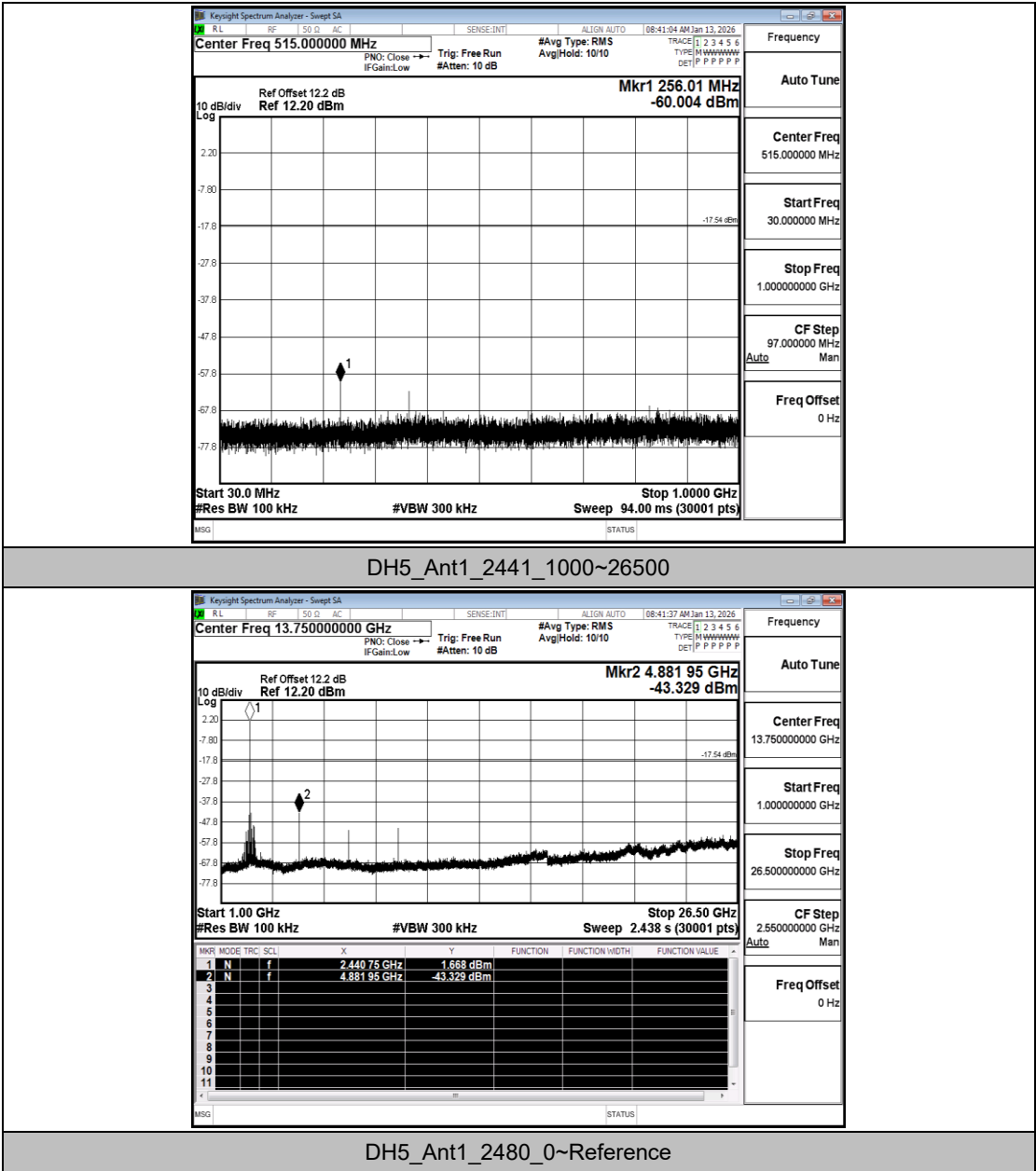
TestMode	Antenna	Freq (MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.14	2.14	---	PASS
			30~1000	2.14	-60.57	≤-17.86	PASS
			1000~26500	2.14	-45.03	≤-17.86	PASS
		2441	Reference	2.46	2.46	---	PASS
			30~1000	2.46	-60	≤-17.54	PASS
			1000~26500	2.46	-43.33	≤-17.54	PASS
		2480	Reference	2.55	2.55	---	PASS
			30~1000	2.55	-62.67	≤-17.45	PASS
			1000~26500	2.55	-43.24	≤-17.45	PASS
2DH5	Ant1	2402	Reference	2.19	2.19	---	PASS
			30~1000	2.19	-65.33	≤-17.81	PASS
			1000~26500	2.19	-48.94	≤-17.81	PASS
		2441	Reference	2.46	2.46	---	PASS
			30~1000	2.46	-66.05	≤-17.54	PASS
			1000~26500	2.46	-47.81	≤-17.54	PASS
		2480	Reference	2.57	2.57	---	PASS
			30~1000	2.57	-59.52	≤-17.43	PASS
			1000~26500	2.57	-47.33	≤-17.43	PASS

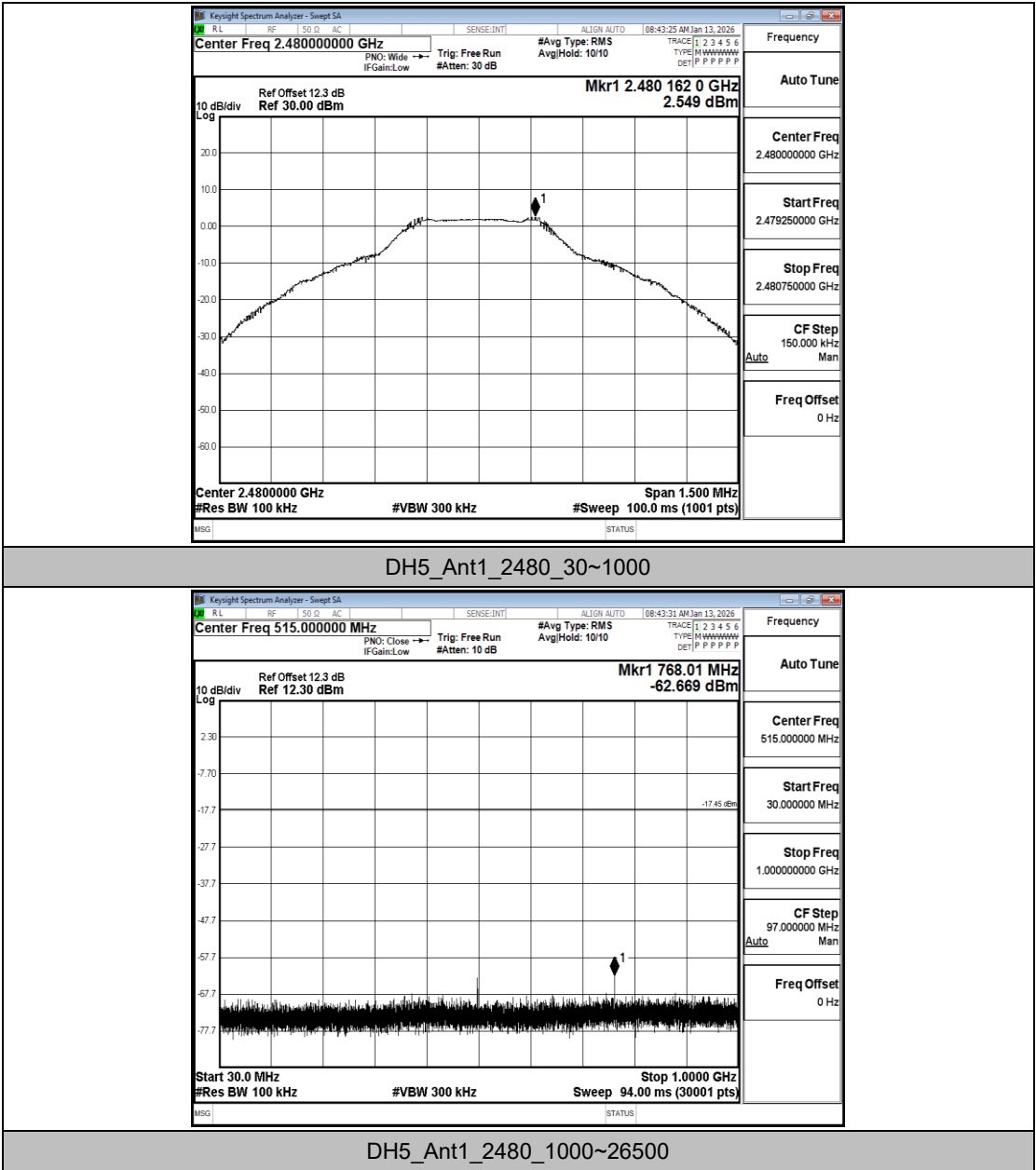
Note: Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the CORREC' of the Spectrum Analyzer during the test.

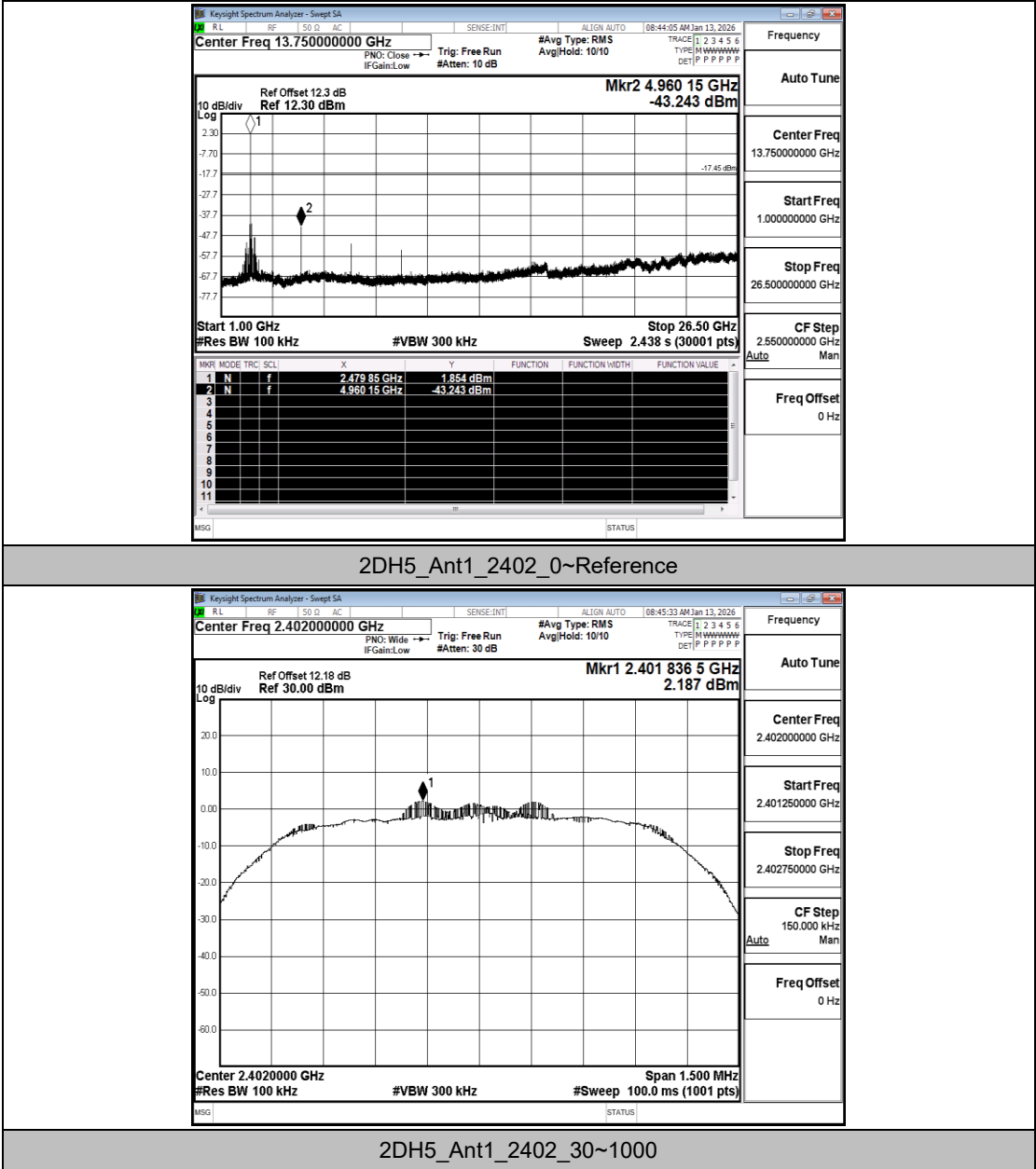
Test Graphs

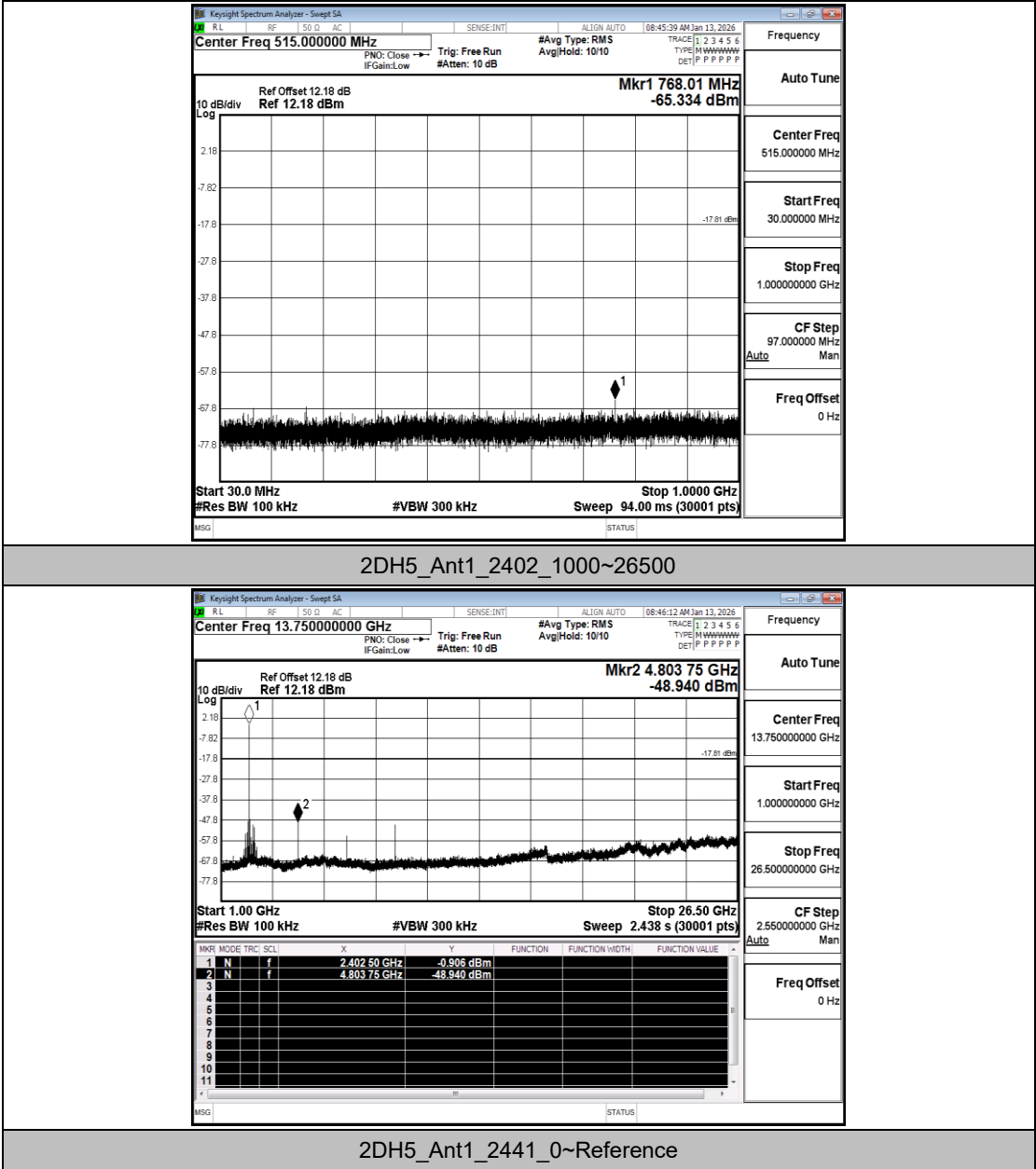


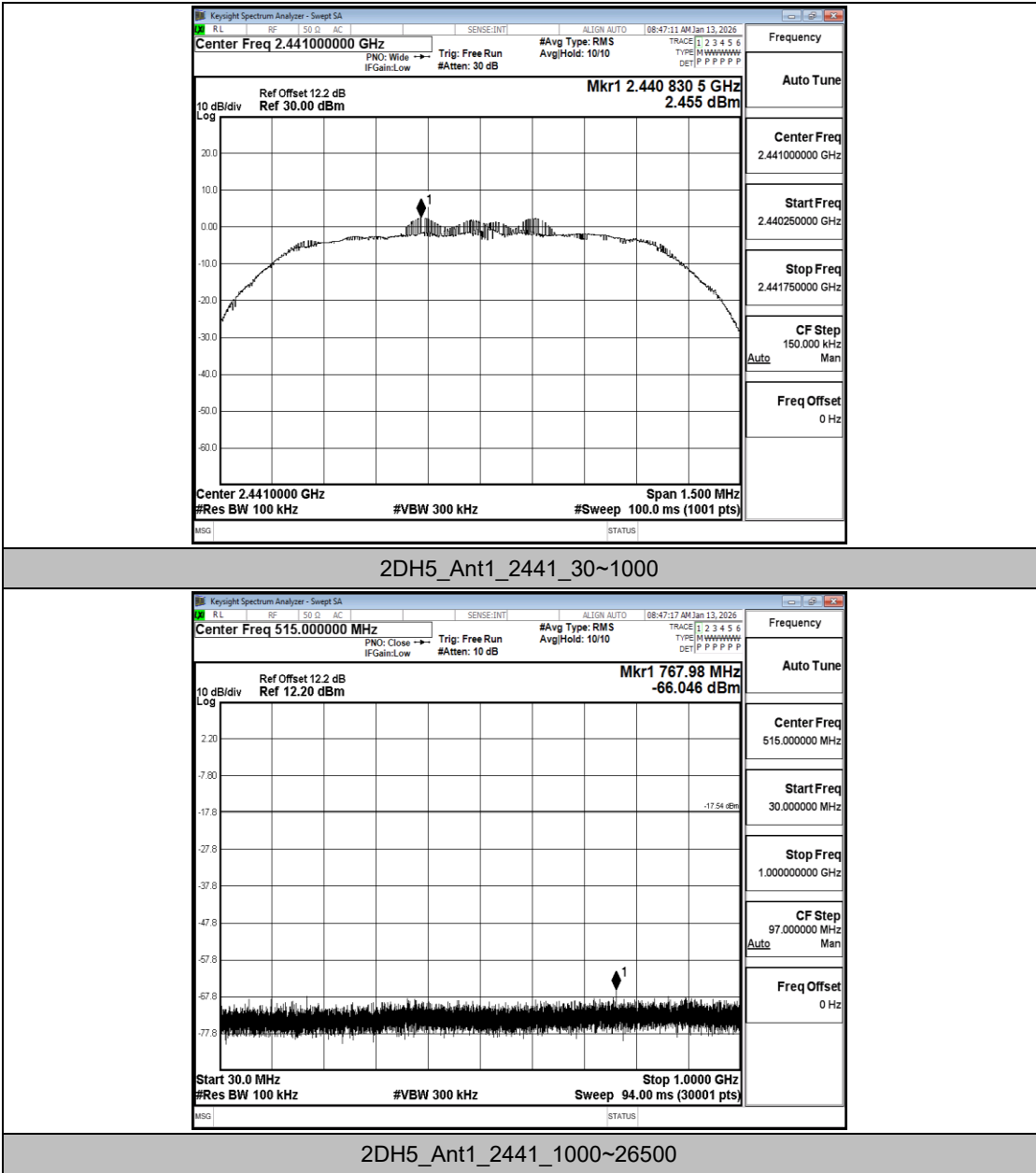


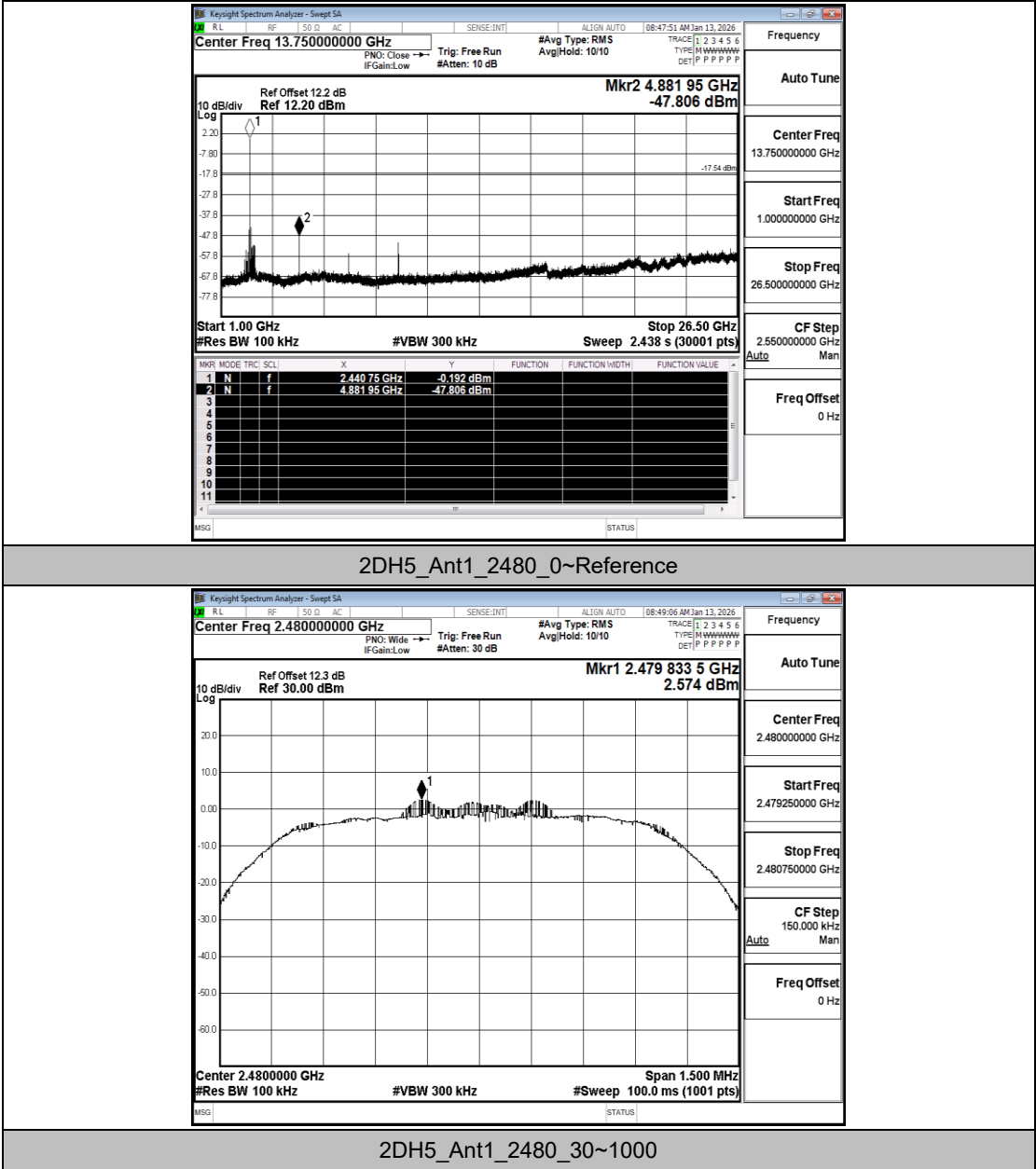


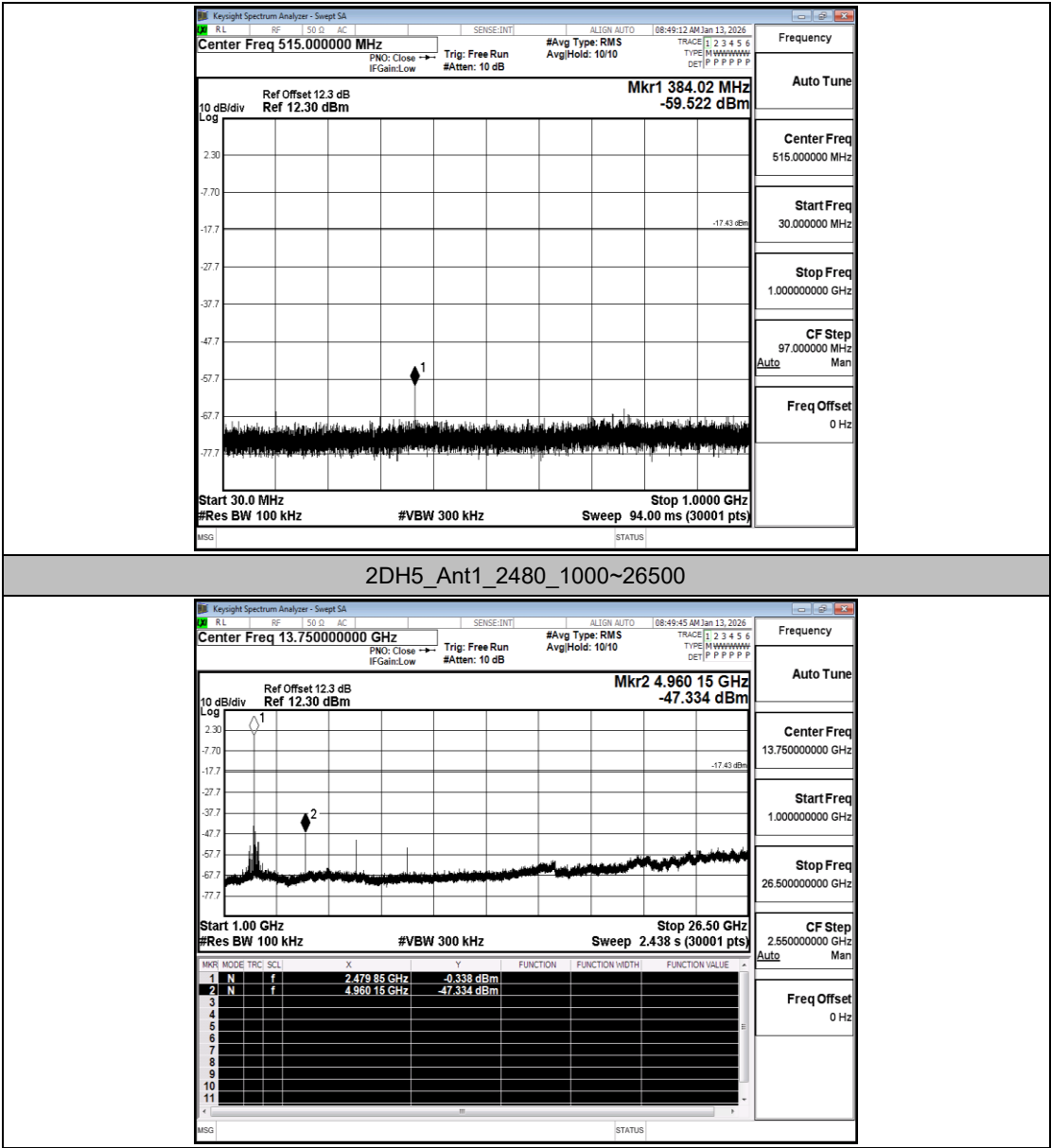












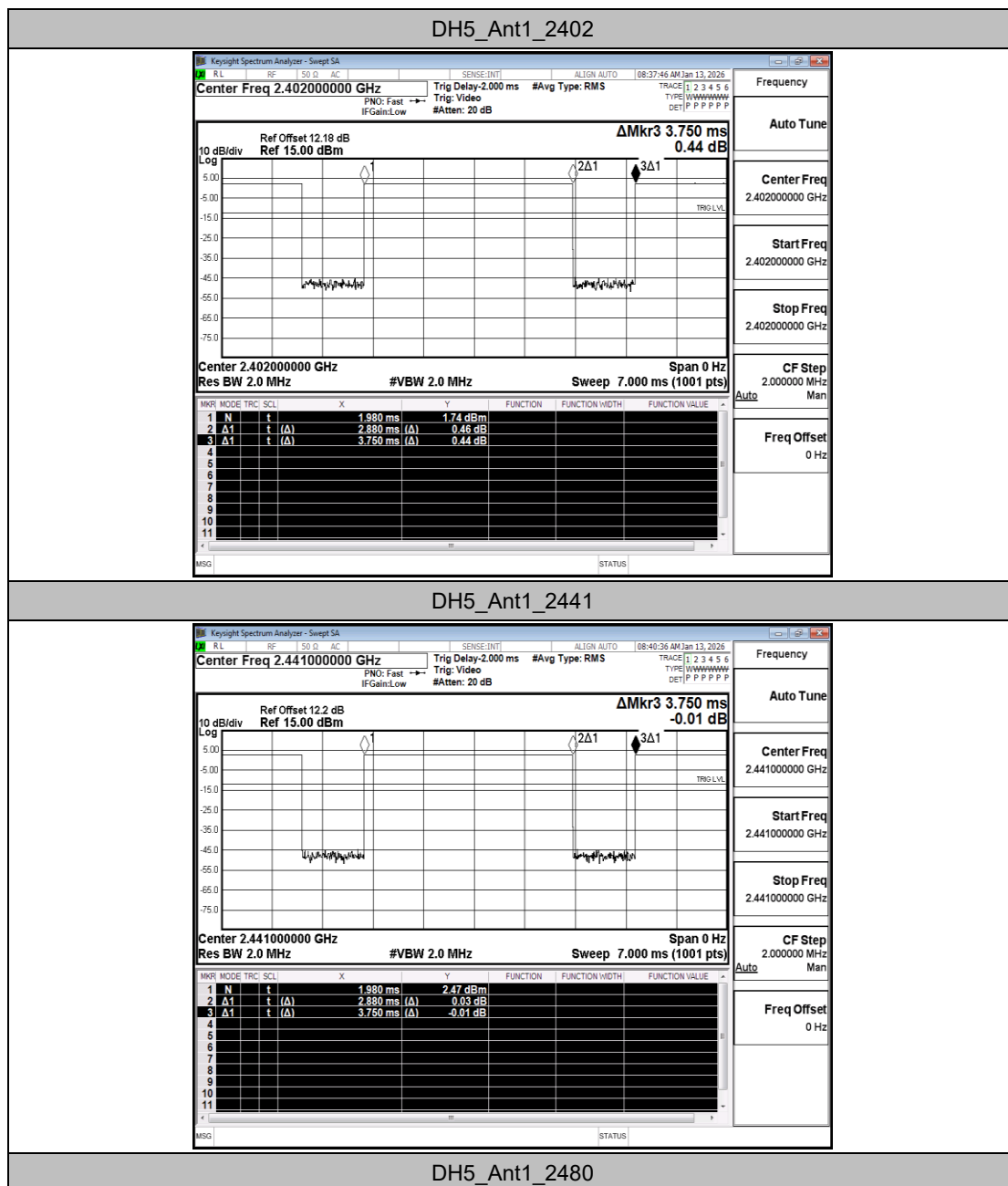
A.8 Duty Cycle

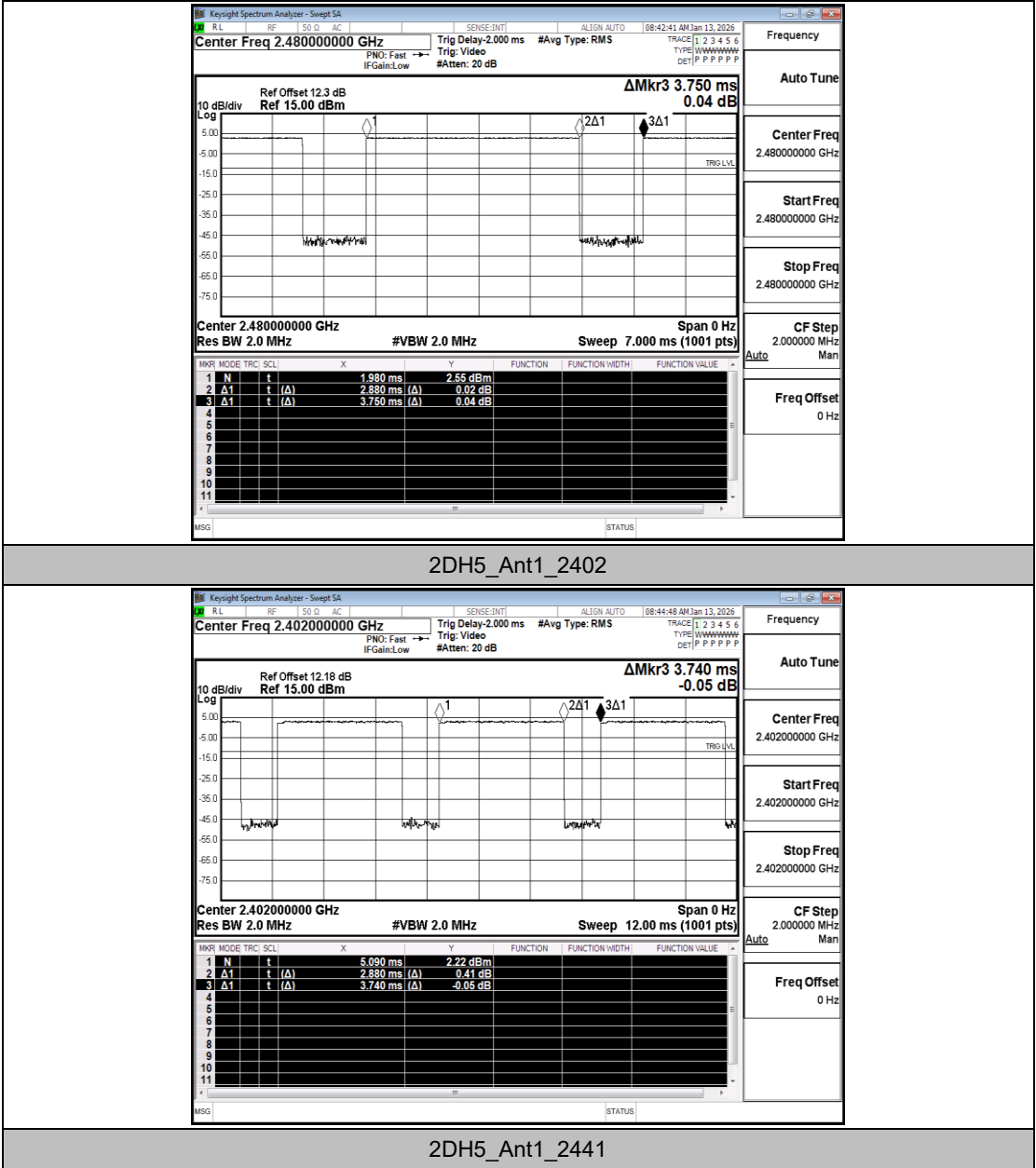
Test Result

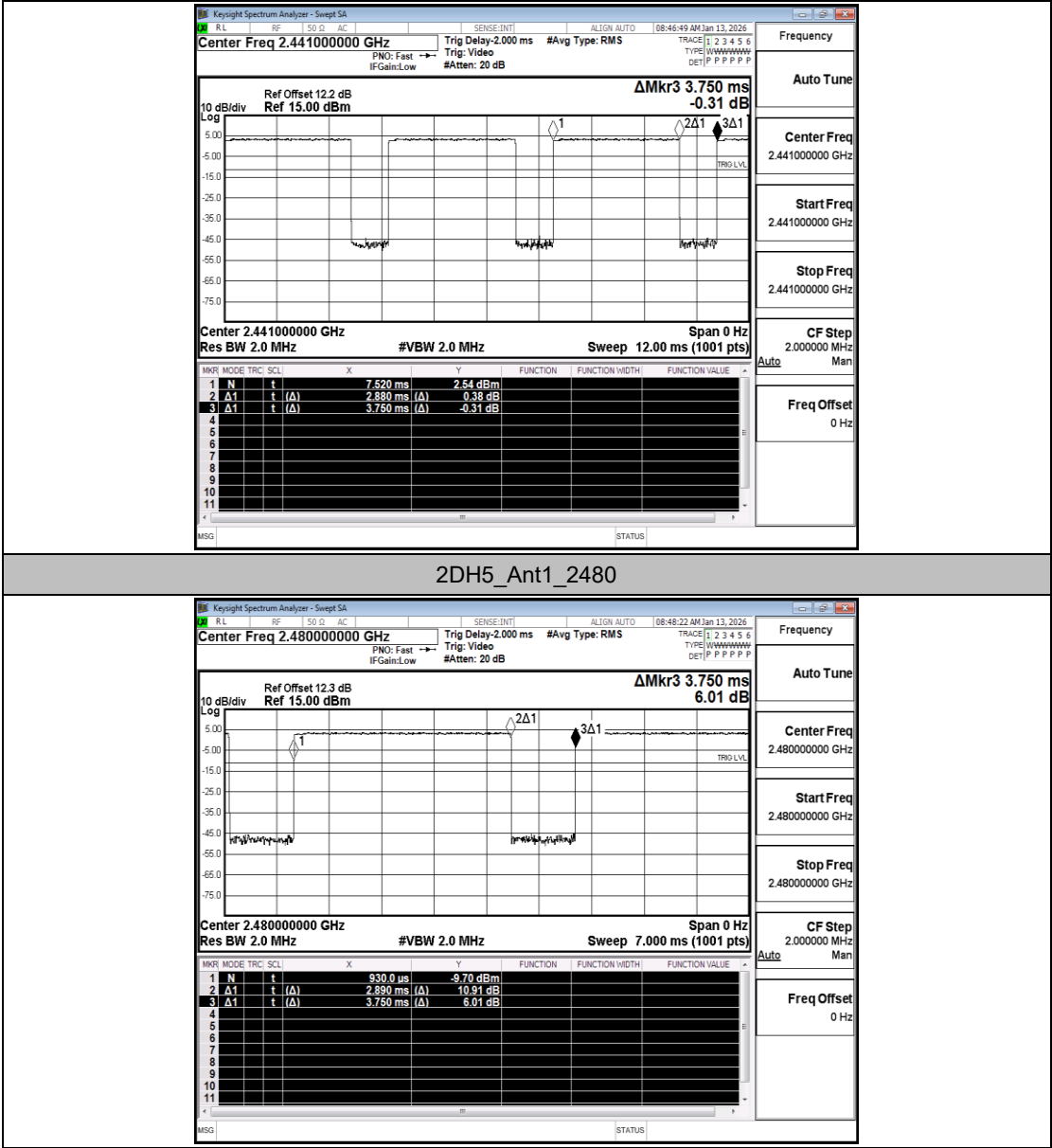
TestMode	Antenna	Freq (MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.88	3.75	76.80	1.15	---	---
		2441	2.88	3.75	76.80	1.15	---	---
		2480	2.88	3.75	76.80	1.15	---	---
2DH5	Ant1	2402	2.88	3.74	77.01	1.13	---	---
		2441	2.88	3.75	76.80	1.15	---	---
		2480	2.89	3.75	77.07	1.13	---	---

Note: offset=System attenuation +cabal loss

Test Graphs







A.9 Emissions in Restricted Bands

Test Result

Test Mode	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	-61.14	≤-45.05	2.70	1.15	37.91	≤54	PASS
				AV	2354.075	-45.31	≤-45.05	2.70	1.15	53.74	≤54	PASS
				AV	2390.000	-60.16	≤-45.05	2.70	1.15	38.89	≤54	PASS
				Peak	2310.000	-53.08	≤-23.90	2.70	0.00	44.82	≤74	PASS
				Peak	2354.180	-41.68	≤-23.90	2.70	0.00	56.22	≤74	PASS
				Peak	2390.000	-52.9	≤-23.90	2.70	0.00	45.00	≤74	PASS
		High	2480	AV	2483.500	-57.21	≤-45.05	2.70	1.15	41.84	≤54	PASS
				AV	2484.320	-55.15	≤-45.05	2.70	1.15	43.90	≤54	PASS
				AV	2500.000	-59.84	≤-45.05	2.70	1.15	39.21	≤54	PASS
				Peak	2483.500	-48.61	≤-23.90	2.70	0.00	49.29	≤74	PASS
				Peak	2485.920	-35.15	≤-23.90	2.70	0.00	62.75	≤74	PASS
				Peak	2500.000	-50.8	≤-23.90	2.70	0.00	47.10	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-50.89	≤-23.90	2.70	0.00	47.01	≤74	PASS
				Peak	2379.800	-41.44	≤-23.90	2.70	0.00	56.46	≤74	PASS
				Peak	2390.000	-42.38	≤-23.90	2.70	0.00	55.52	≤74	PASS
		High	Hop_2480	Peak	2483.500	-44.1	≤-23.90	2.70	0.00	53.80	≤74	PASS
				Peak	2484.240	-40.73	≤-23.90	2.70	0.00	57.17	≤74	PASS
				Peak	2500.000	-41.77	≤-23.90	2.70	0.00	56.13	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-60.8	≤-45.03	2.70	1.13	38.23	≤54	PASS
				AV	2354.075	-47.3	≤-45.03	2.70	1.13	51.73	≤54	PASS
				AV	2390.000	-60.42	≤-45.03	2.70	1.13	38.61	≤54	PASS
				Peak	2310.000	-53.63	≤-23.90	2.70	0.00	44.27	≤74	PASS
				Peak	2354.075	-41.82	≤-23.90	2.70	0.00	56.08	≤74	PASS
				Peak	2390.000	-51.16	≤-23.90	2.70	0.00	46.74	≤74	PASS
		High	2480	AV	2483.500	-57.18	≤-45.03	2.70	1.13	41.85	≤54	PASS
				AV	2486.080	-55.01	≤-45.03	2.70	1.13	44.02	≤54	PASS
				AV	2500.000	-59.79	≤-45.03	2.70	1.13	39.24	≤54	PASS
				Peak	2483.500	-49.22	≤-23.90	2.70	0.00	48.68	≤74	PASS
				Peak	2488.960	-38.77	≤-23.90	2.70	0.00	59.13	≤74	PASS
				Peak	2500.000	-51.97	≤-23.90	2.70	0.00	45.93	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-51.36	≤-23.90	2.70	0.00	46.54	≤74	PASS
				Peak	2381.165	-42.03	≤-23.90	2.70	0.00	55.87	≤74	PASS
				Peak	2390.000	-51.91	≤-23.90	2.70	0.00	45.99	≤74	PASS
		High	Hop_2480	Peak	2483.500	-44.09	≤-23.90	2.70	0.00	53.81	≤74	PASS

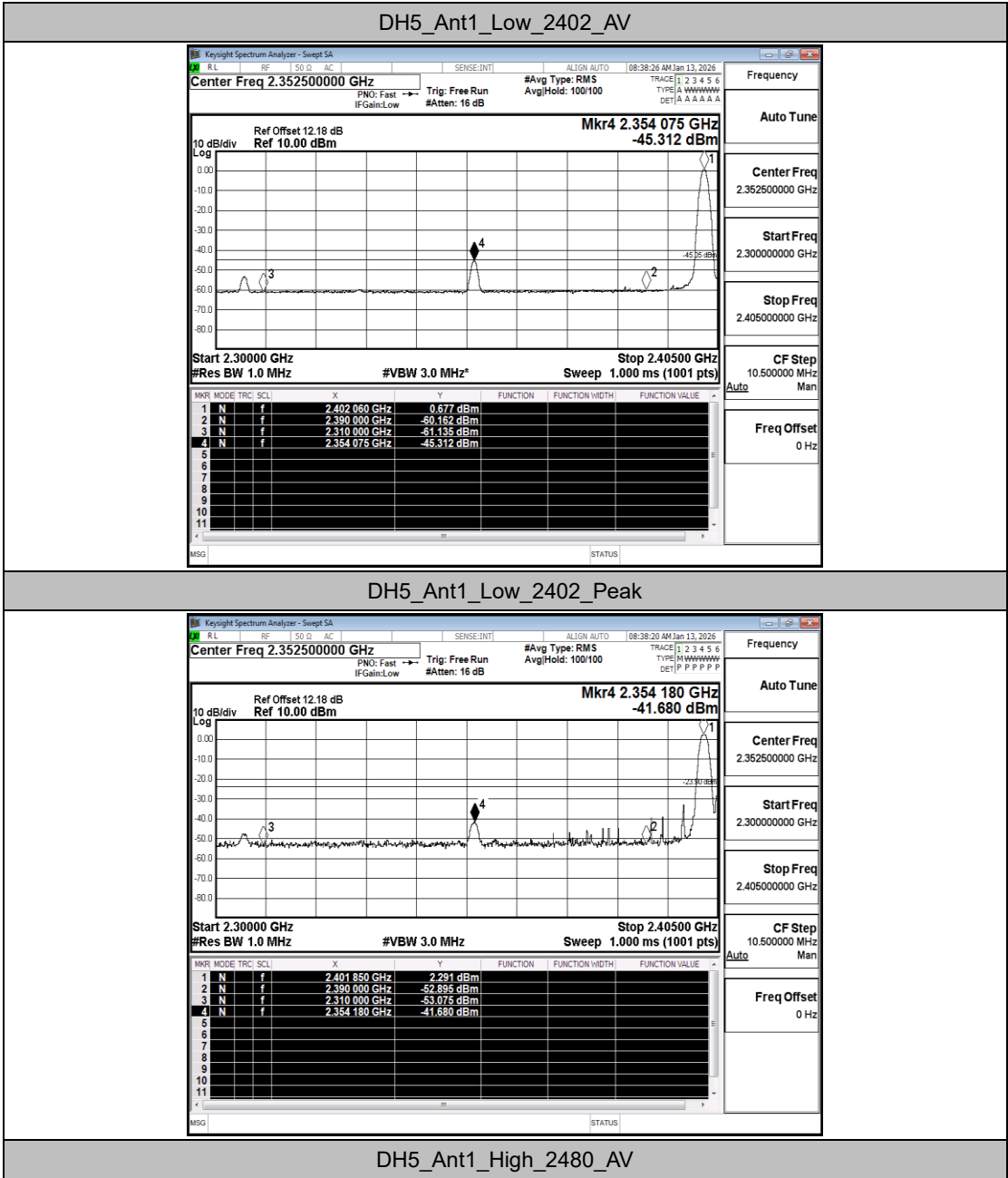
				Peak	2491.200	-41.5	≤-23.90	2.70	0.00	56.40	≤74	PASS
				Peak	2500.000	-42.67	≤-23.90	2.70	0.00	55.23	≤74	PASS

Note: offset=System attenuation +cable loss

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



DH5_Ant1_Low_2402_Peak

KeySight Spectrum Analyzer - Sweep SA

RL 50.0 AC SENSE:INT

ALIGN AUTO

08:38:20 AM Jan 13, 2026

Center Freq 2.352500000 GHz

PNO: Fast IFGain:Low Trig: Free Run #Atten: 16 dB

#Avg Type: RMS AvgHold: 100/100

TRACE 1 2 3 4 5 6

TYPE M W W W W W

DET P P P P P P

Ref Offset 12.18 dB

Ref 10.00 dBm

Mkr4 2.354 180 GHz

-41.680 dBm

10 dB/div

Log

Start 2.30000 GHz

#Res BW 1.0 MHz

#VBW 3.0 MHz

Stop 2.40500 GHz

Sweep 1.000 ms (1001 pts)

CF Step 10.500000 MHz

Auto Man

Auto Tune

Center Freq 2.352500000 GHz

Start Freq 2.300000000 GHz

Stop Freq 2.405000000 GHz

Freq Offset 0 Hz

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	f		2.401 850 GHz	2.291 dBm			
2	N	f		2.390 000 GHz	-52.895 dBm			
3	N	f		2.310 000 GHz	-53.075 dBm			
4	N	f		2.354 180 GHz	-41.680 dBm			
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

DH5_Ant1_High_2480_AV

