



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wireless Bone Conduction Headphone

Test Model: M100

Environmental Conditions

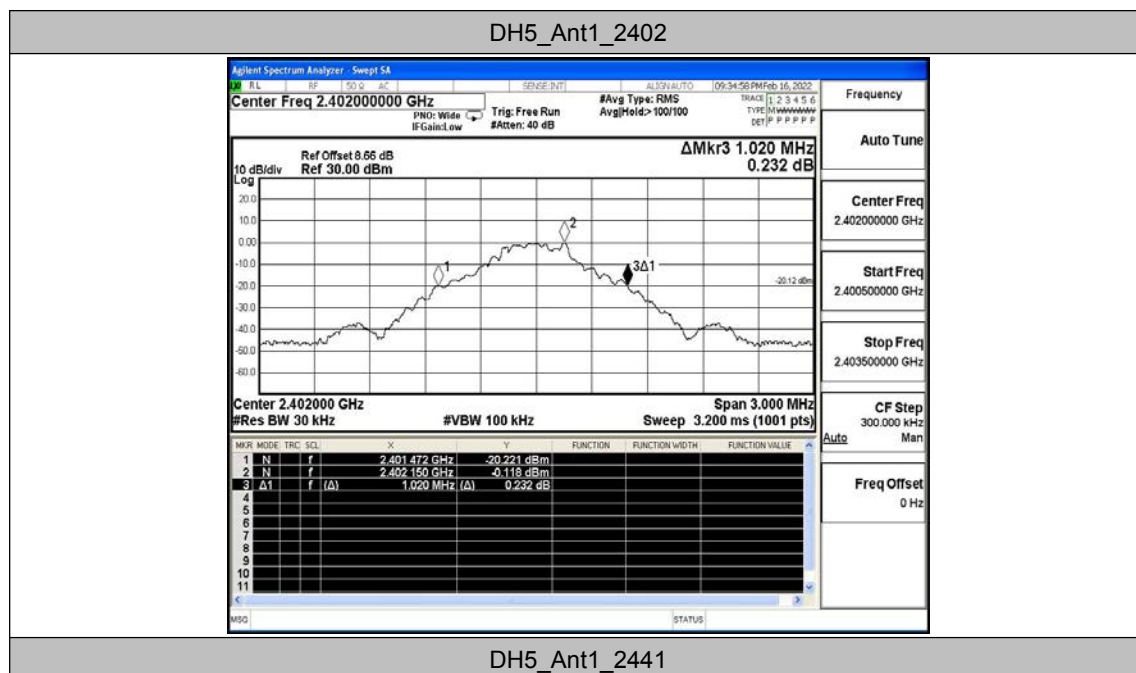
Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Nick Peng
Supervised by:	Li Huan

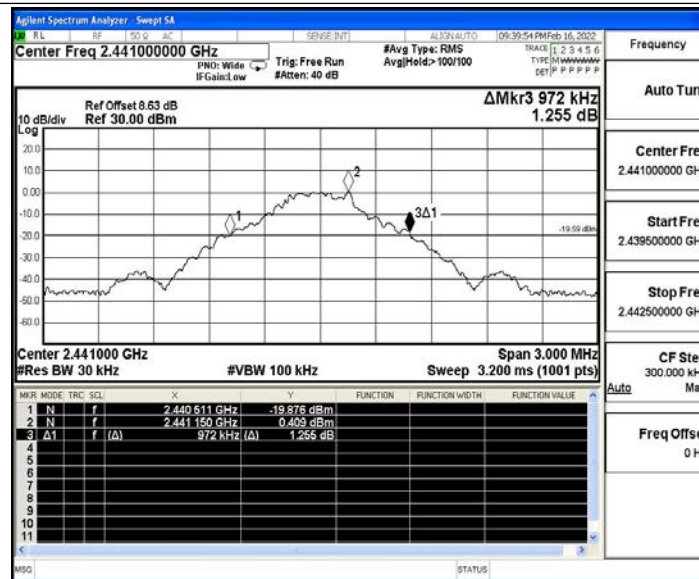
A.1 20dB Emission Bandwidth

Test Result

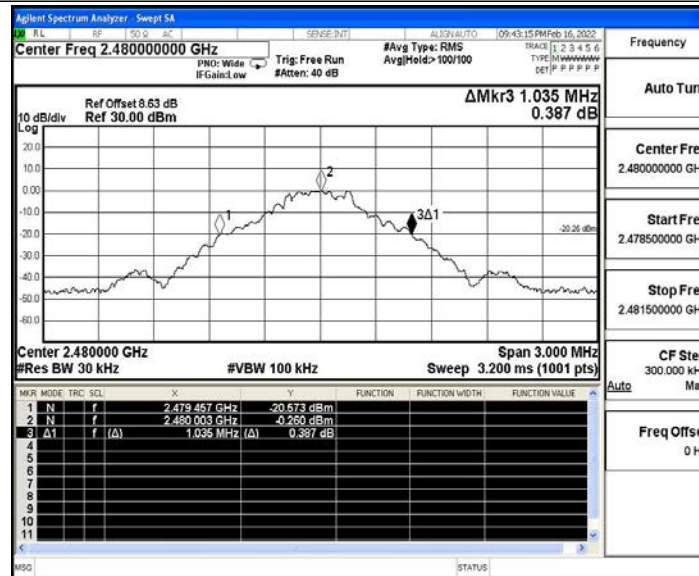
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.020	2401.472	2402.492	---	---
		2441	0.972	2440.511	2441.483	---	---
		2480	1.035	2479.457	2480.492	---	---
2DH5	Ant1	2402	1.323	2401.325	2402.648	---	---
		2441	1.293	2440.352	2441.645	---	---
		2480	1.296	2479.352	2480.648	---	---
3DH5	Ant1	2402	1.287	2401.343	2402.630	---	---
		2441	1.293	2440.343	2441.636	---	---
		2480	1.296	2479.340	2480.636	---	---

Test Graphs

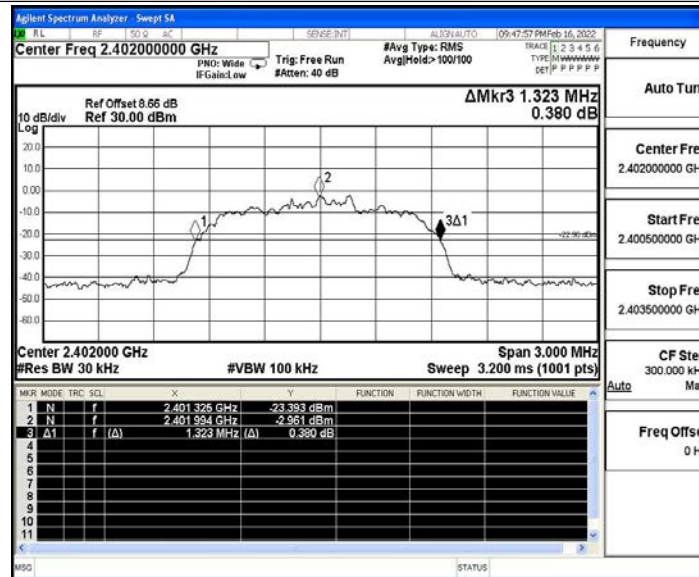




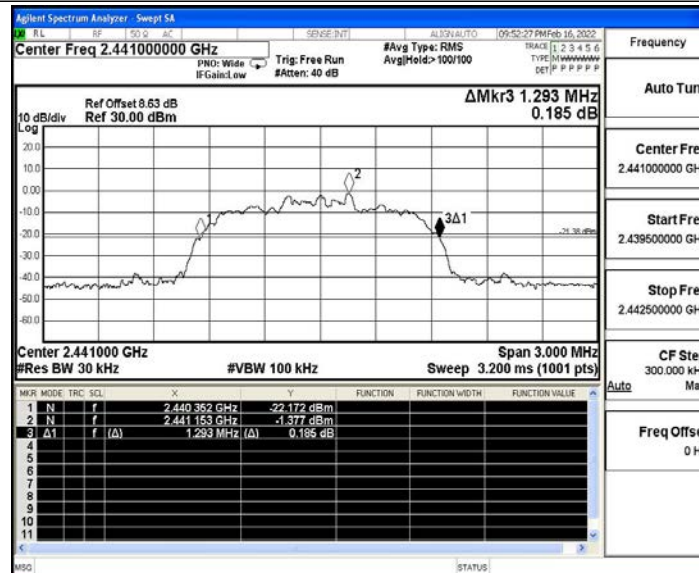
DH5_Ant1_2480



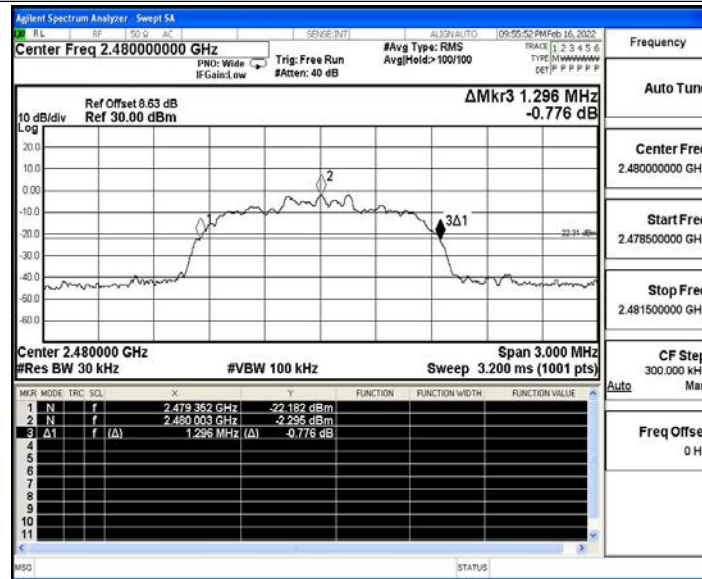
2DH5_Ant1_2402



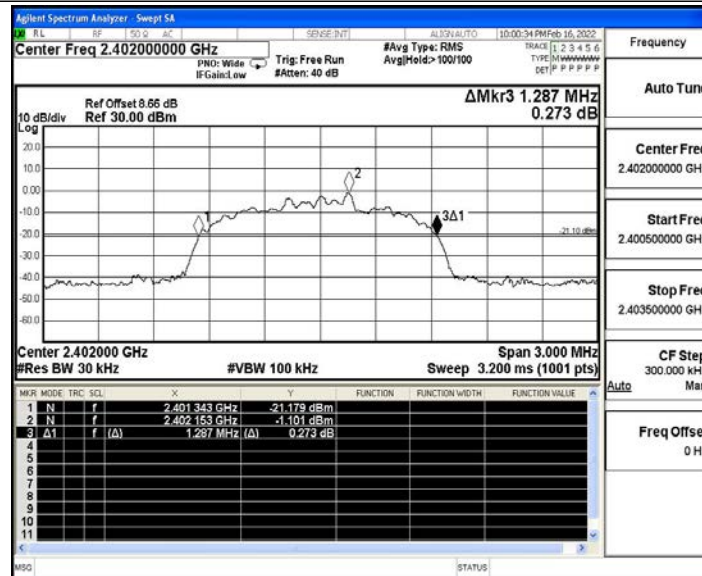
2DH5_Ant1_2441



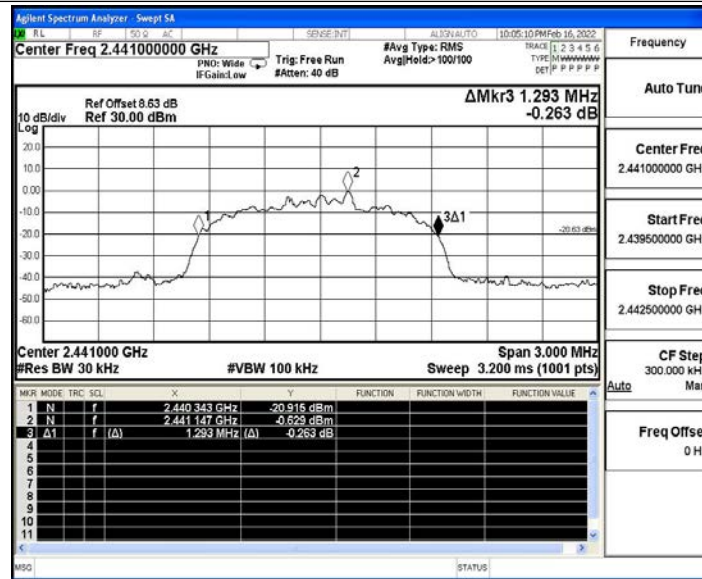
2DH5_Ant1_2480



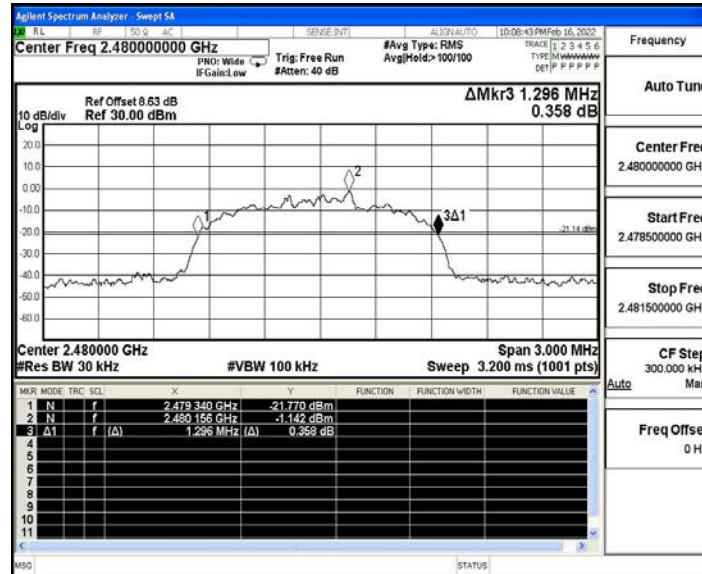
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



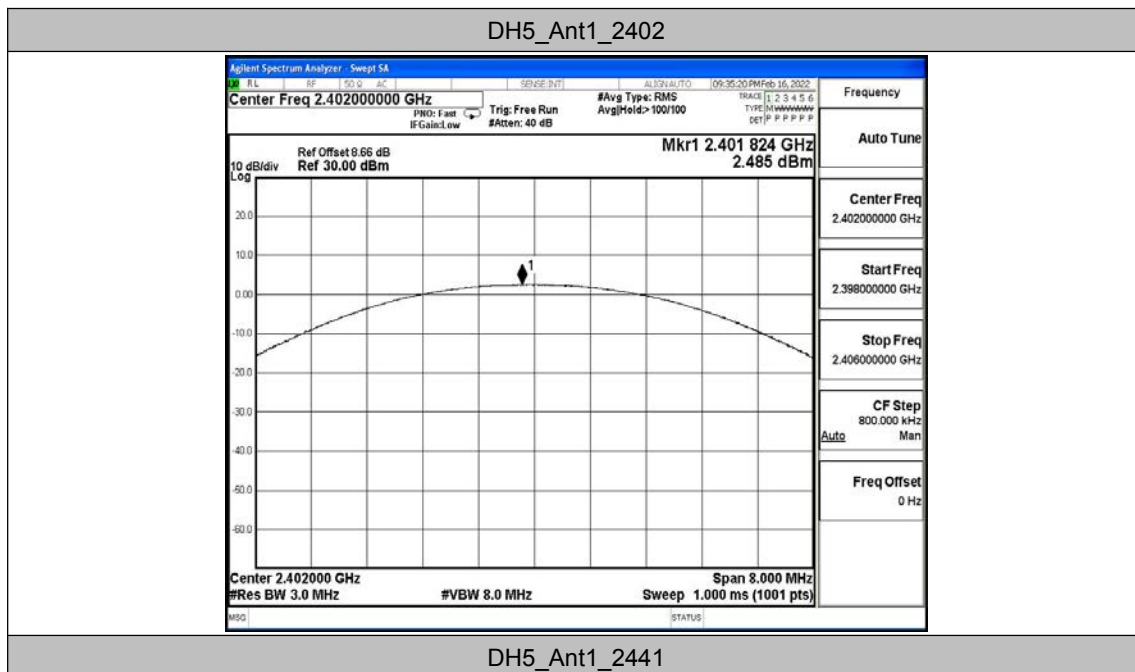


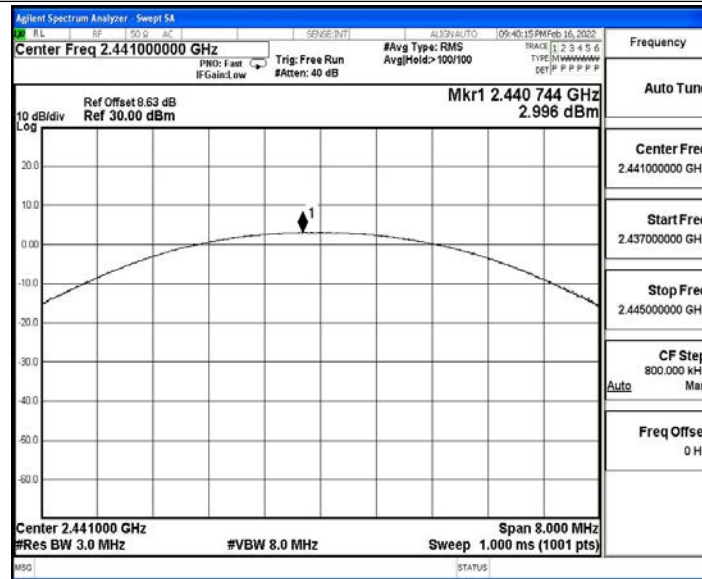
A.2 Maximum conducted output power

Test Result

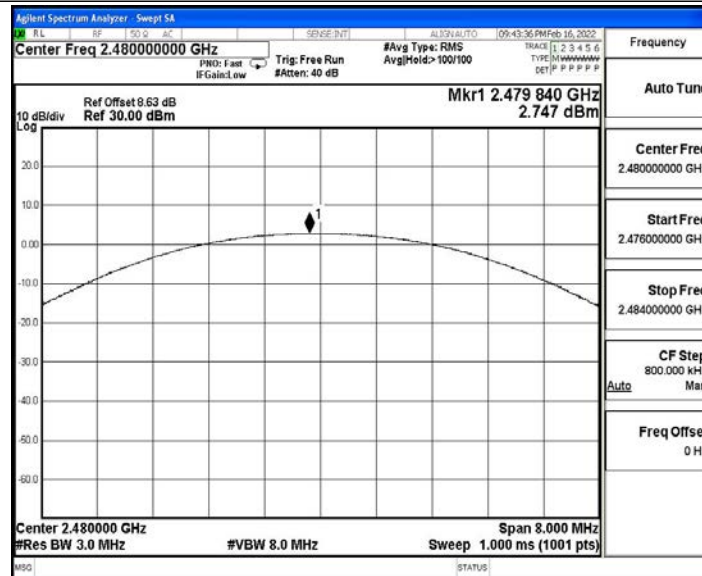
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.49	≤20.97	PASS
		2441	3.00	≤20.97	PASS
		2480	2.75	≤20.97	PASS
2DH5	Ant1	2402	2.24	≤20.97	PASS
		2441	2.80	≤20.97	PASS
		2480	2.53	≤20.97	PASS
3DH5	Ant1	2402	2.40	≤20.97	PASS
		2441	2.89	≤20.97	PASS
		2480	2.59	≤20.97	PASS

Test Graphs

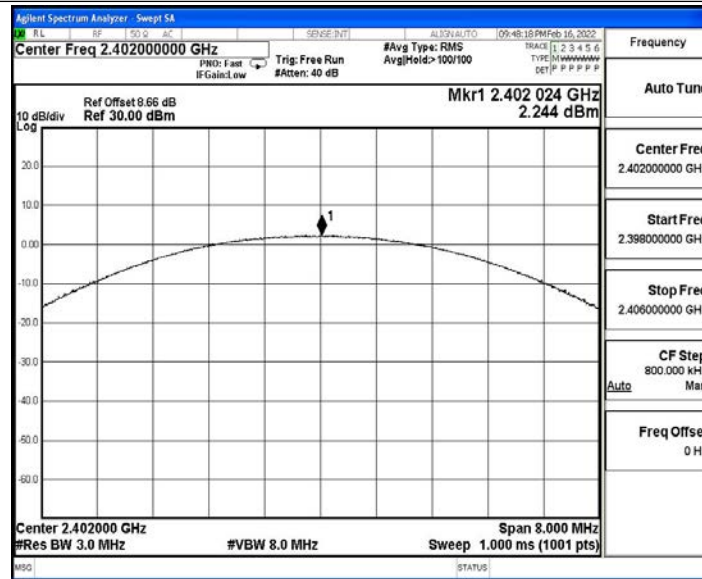




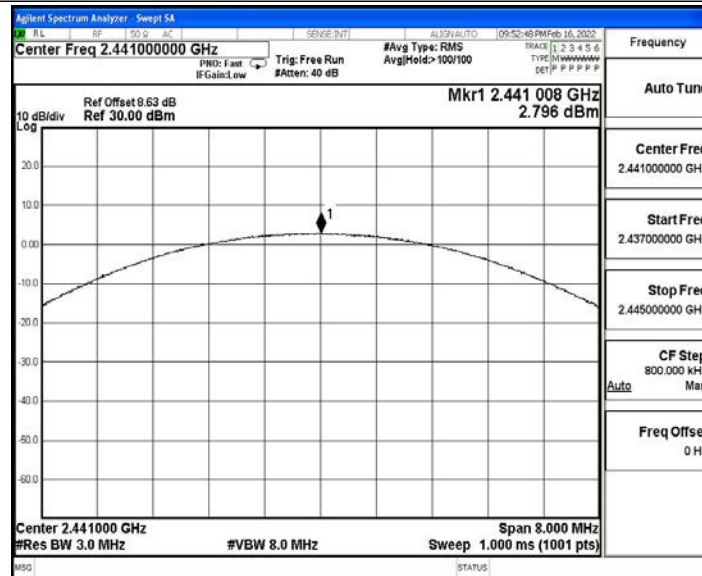
DH5_Ant1_2480



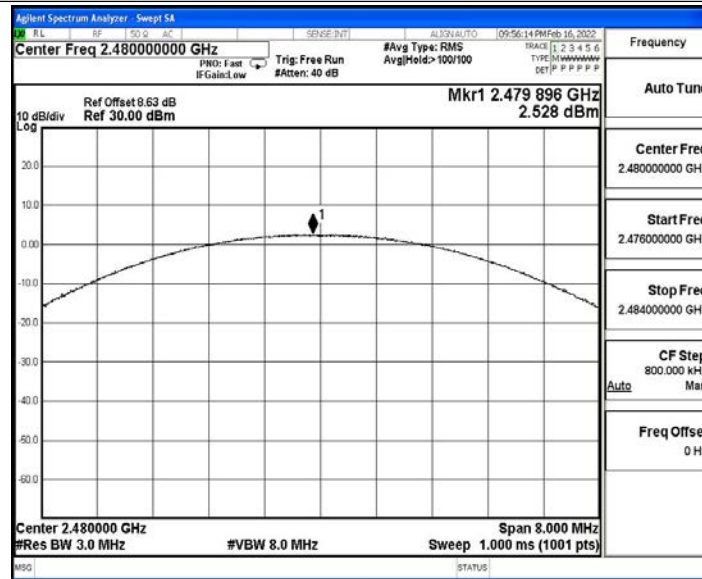
2DH5_Ant1_2402



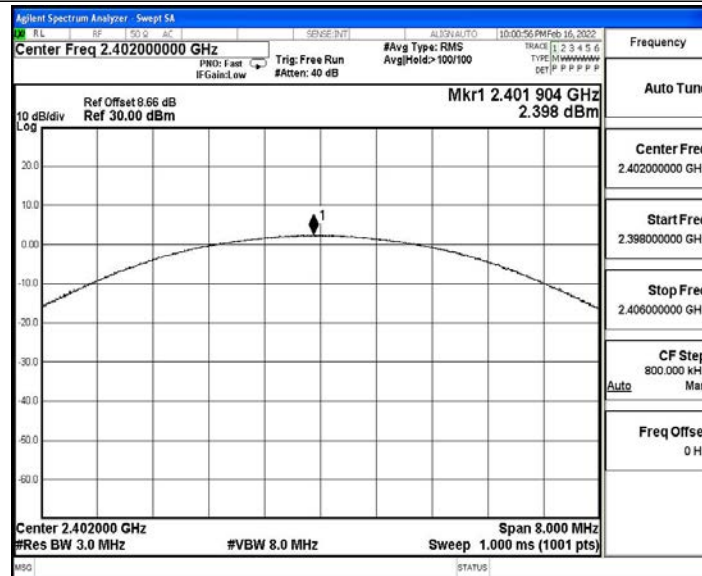
2DH5_Ant1_2441



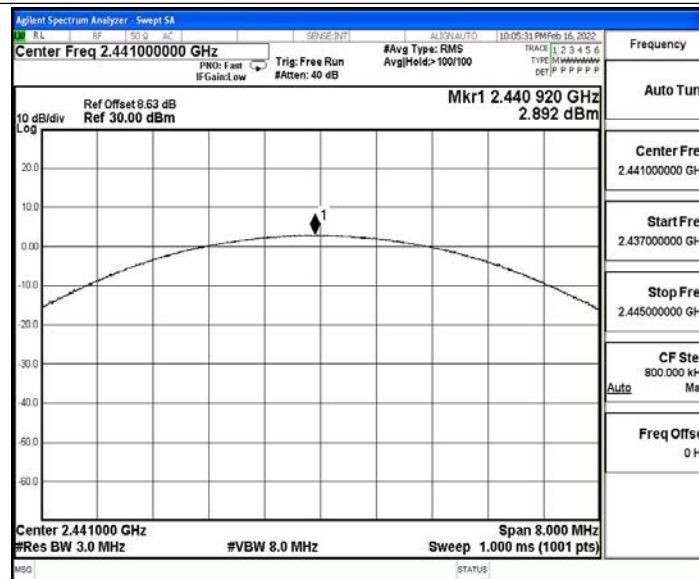
2DH5_Ant1_2480



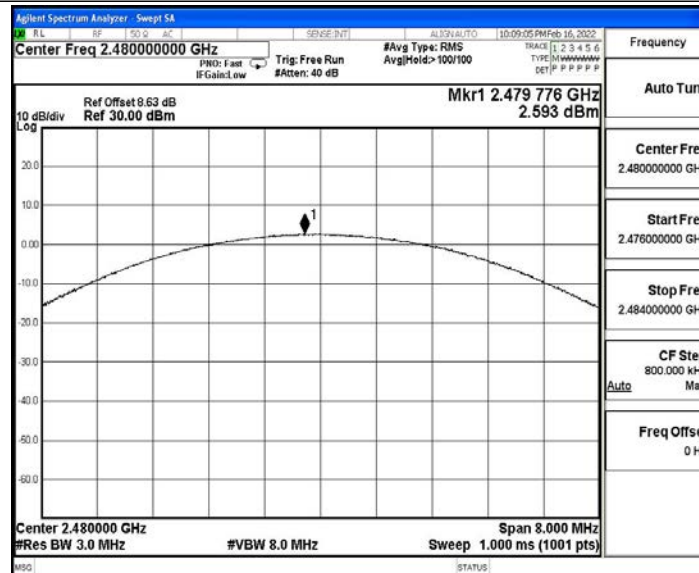
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



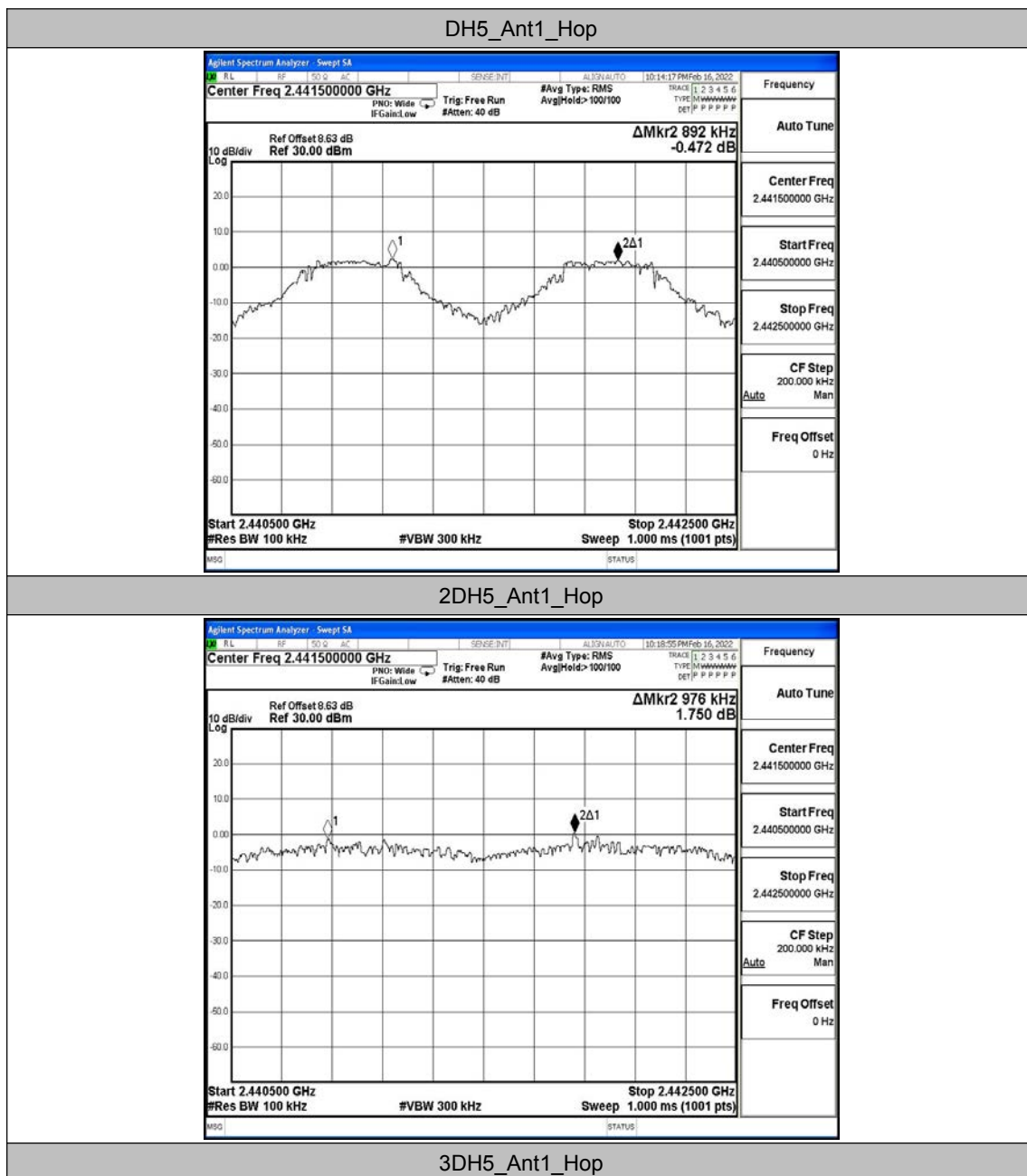


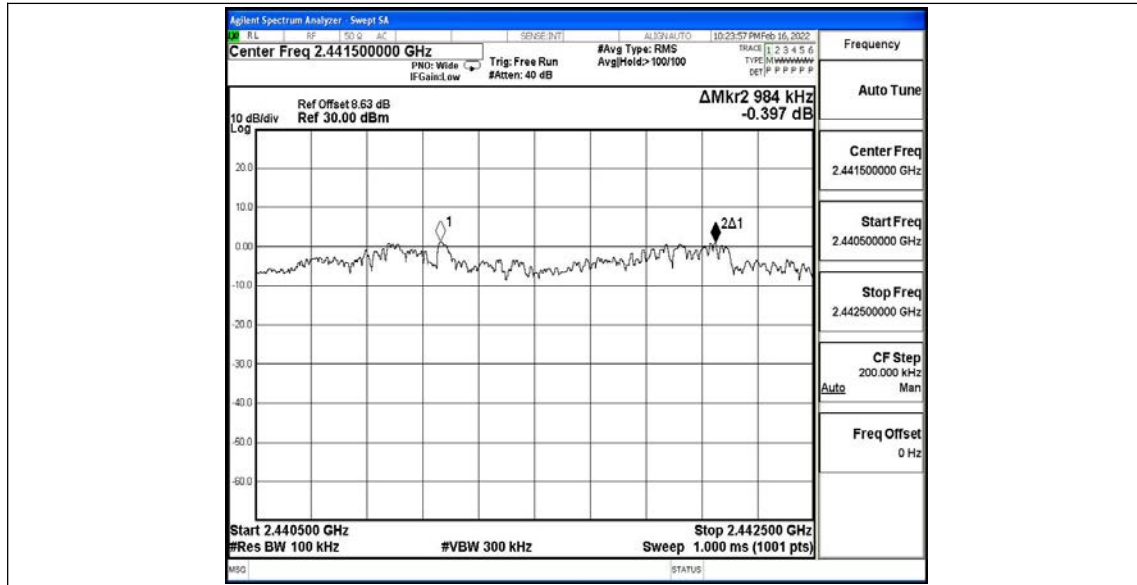
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.892	≥ 0.690	PASS
2DH5	Ant1	Hop	0.976	≥ 0.882	PASS
3DH5	Ant1	Hop	0.984	≥ 0.864	PASS

Test Graphs







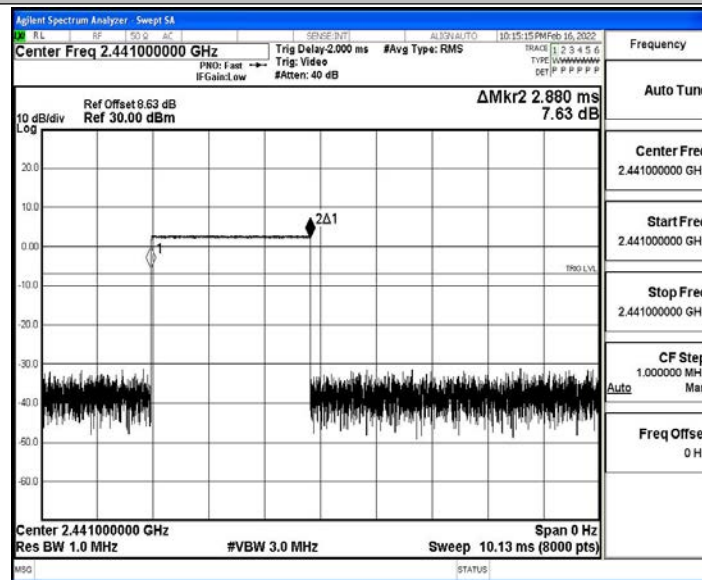
A.4 Time of occupancy

Test Result

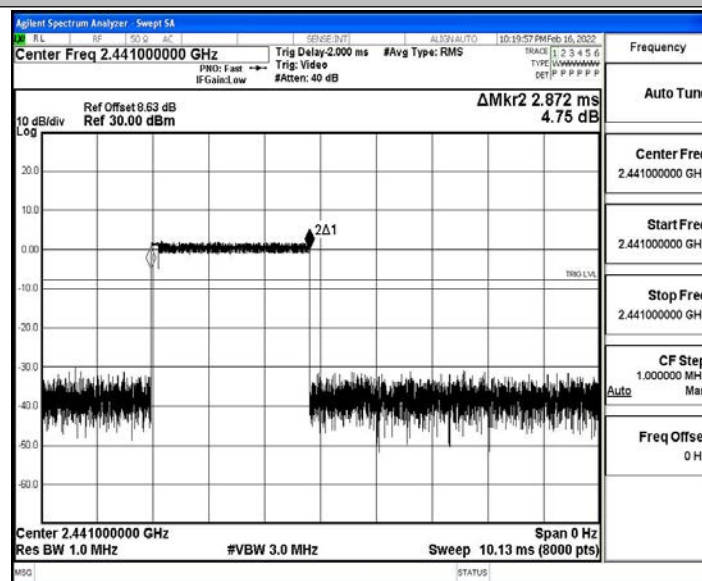
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.87	106.67	0.306	≤0.4	PASS
3DH5	Ant1	Hop	2.89	106.67	0.308	≤0.4	PASS

Test Graphs

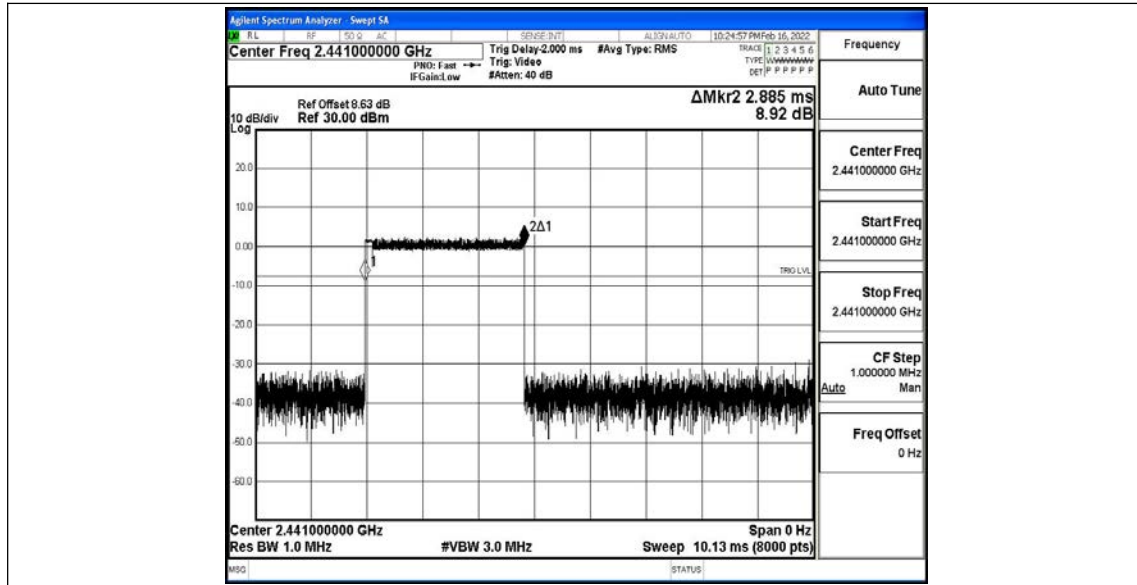
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



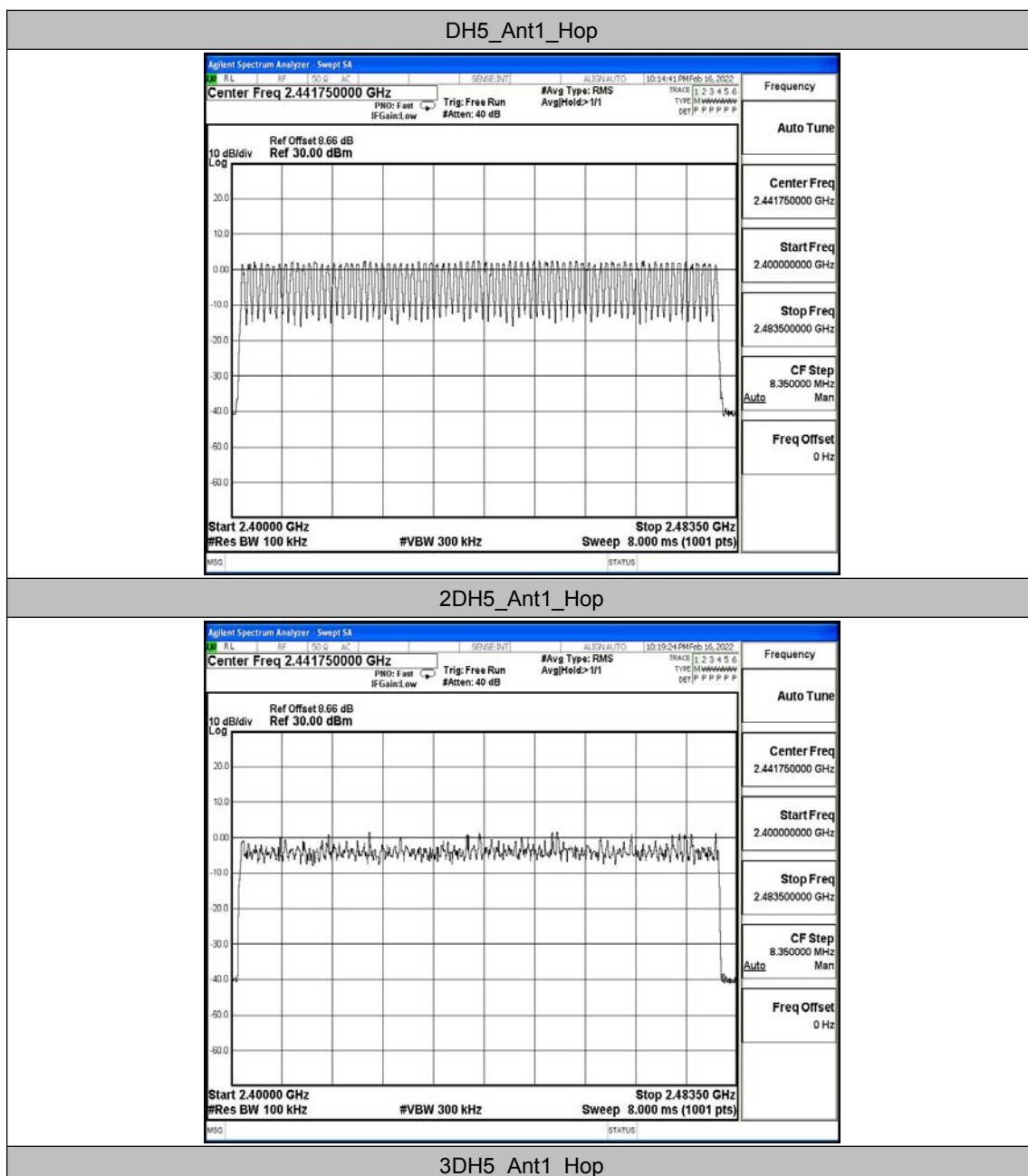


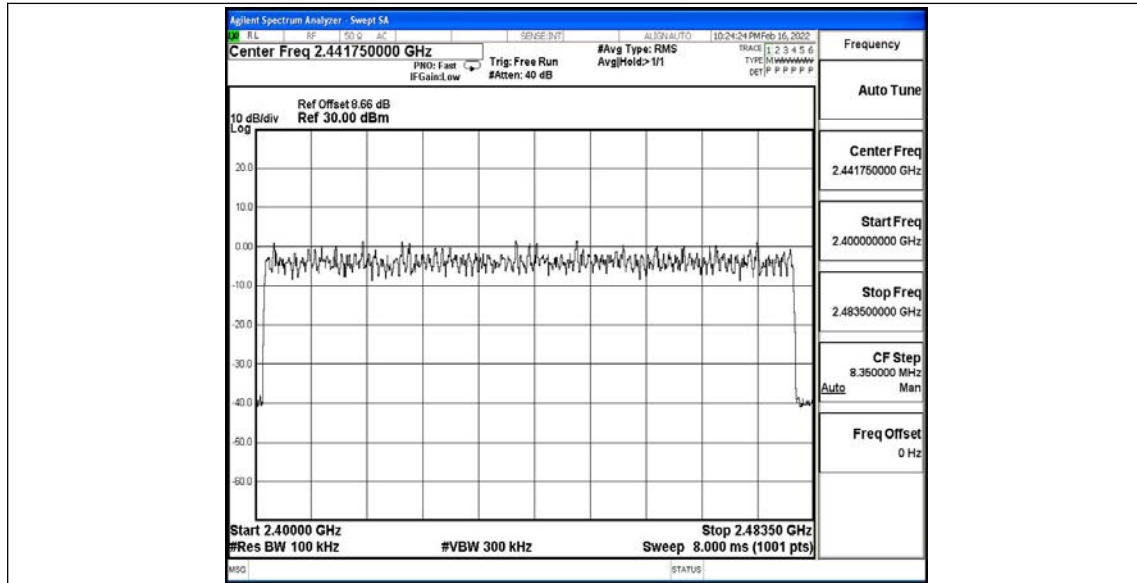
A.5 Number of hopping channels

Test Result

TestMode	Antenna	Channel	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





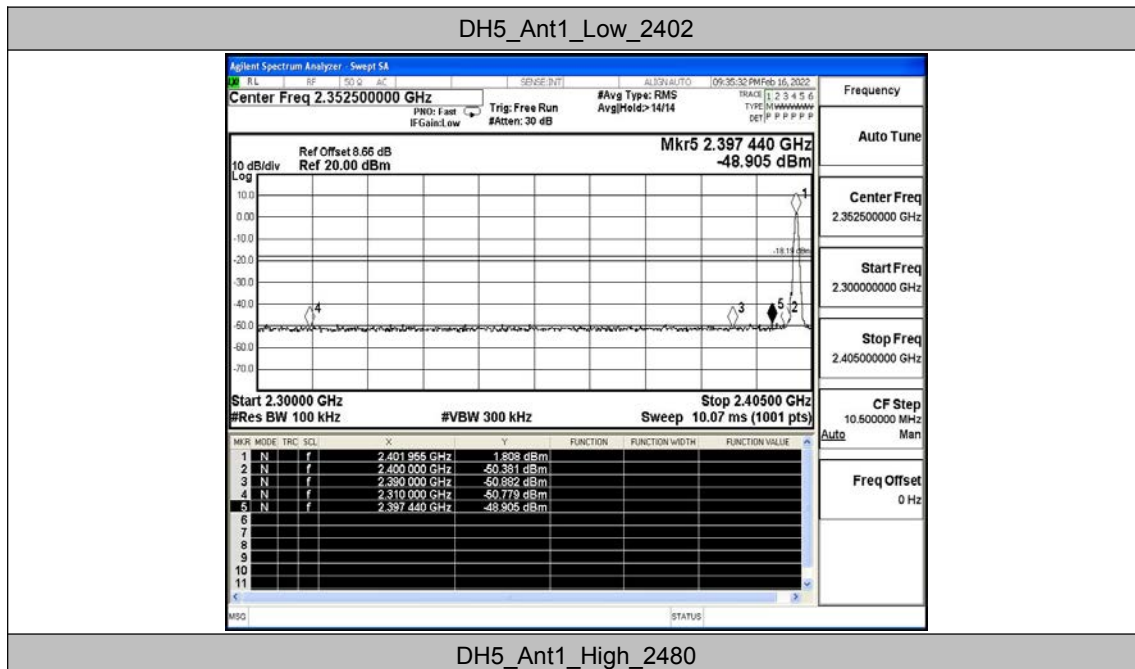


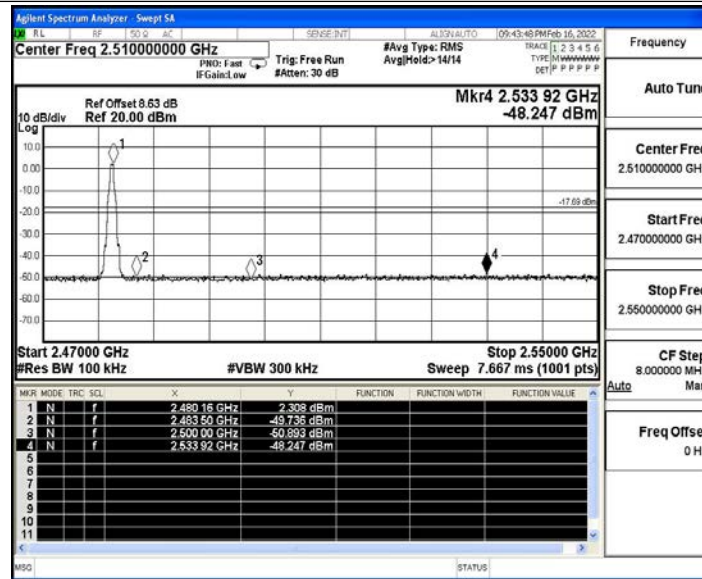
A.6 Band edge measurements

Test Result

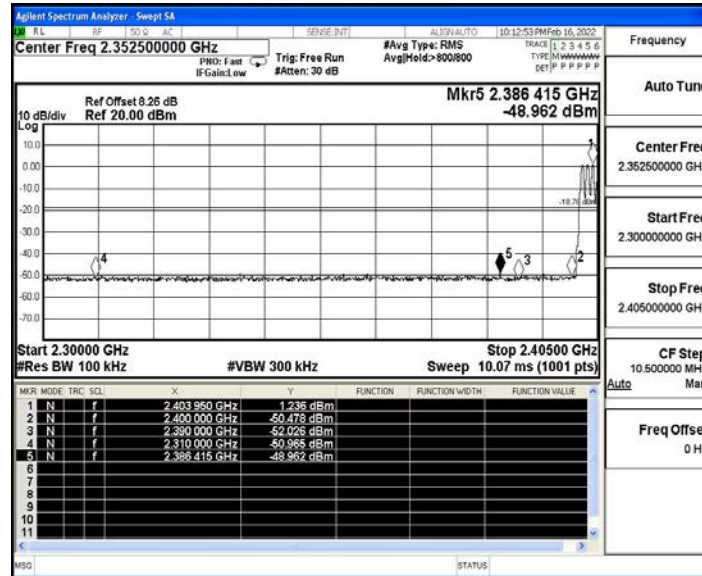
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.81	-48.91	≤-18.19	PASS
		High	2480	2.31	-48.25	≤-17.69	PASS
		Low	Hop_2402	1.24	-48.96	≤-18.76	PASS
		High	Hop_2480	1.99	-47.51	≤-18.01	PASS
2DH5	Ant1	Low	2402	1.07	-48.93	≤-18.93	PASS
		High	2480	1.15	-47.8	≤-18.85	PASS
		Low	Hop_2402	0.06	-49.34	≤-19.94	PASS
		High	Hop_2480	0.09	-47.26	≤-19.91	PASS
3DH5	Ant1	Low	2402	1.10	-48.23	≤-18.9	PASS
		High	2480	1.32	-48.02	≤-18.68	PASS
		Low	Hop_2402	-1.40	-49.2	≤-21.4	PASS
		High	Hop_2480	0.85	-48.01	≤-19.16	PASS

Test Graphs

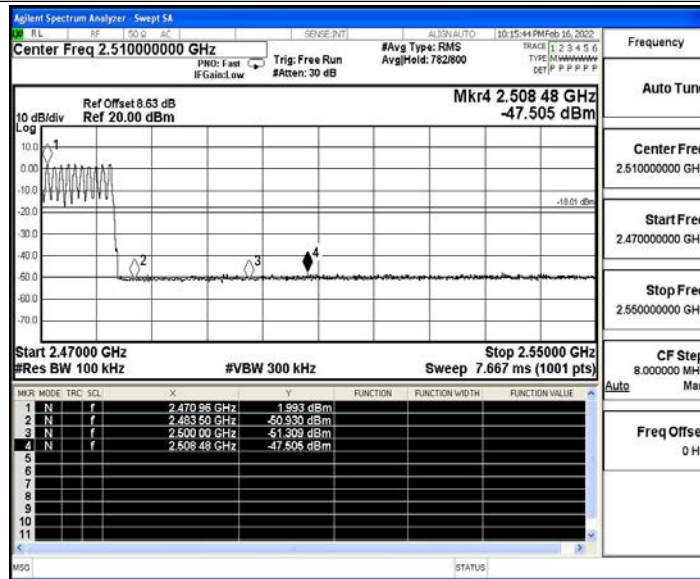




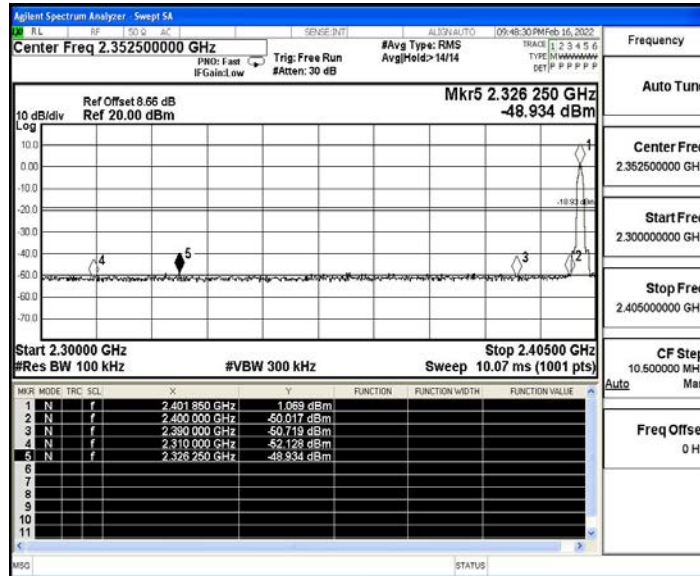
DH5_Ant1_Low_Hop_2402



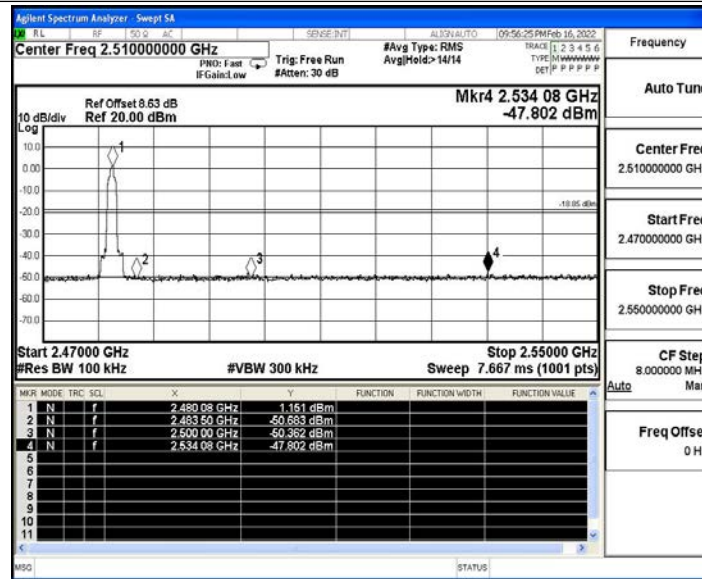
DH5_Ant1_High_Hop_2480



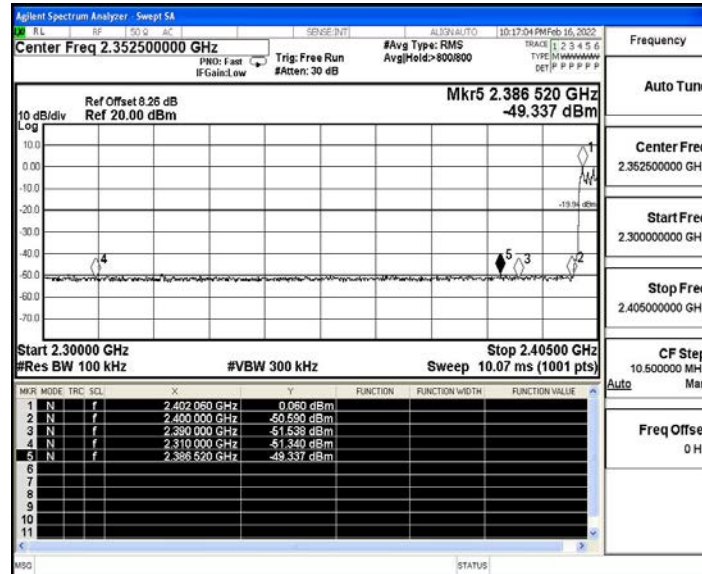
2DH5_Ant1_Low_2402



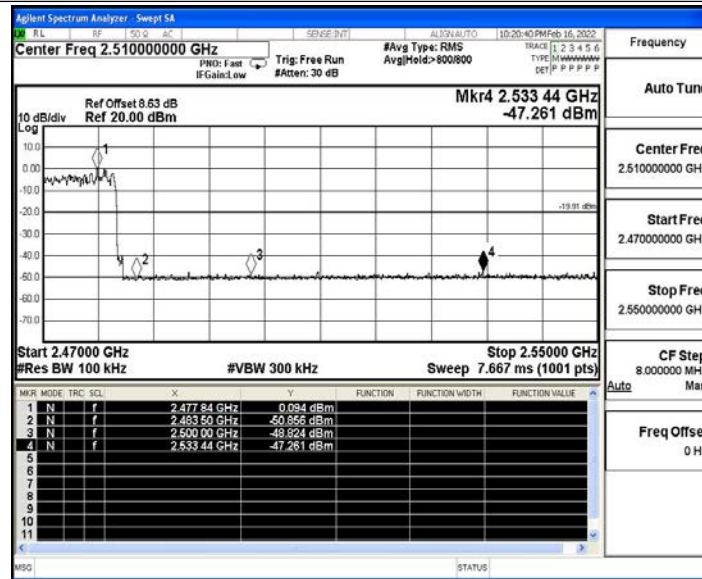
2DH5_Ant1_High_2480



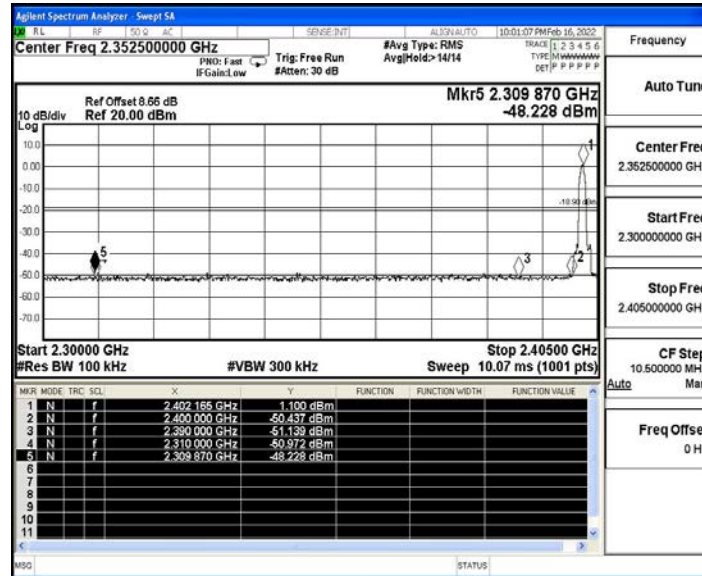
2DH5_Ant1_Low_Hop_2402



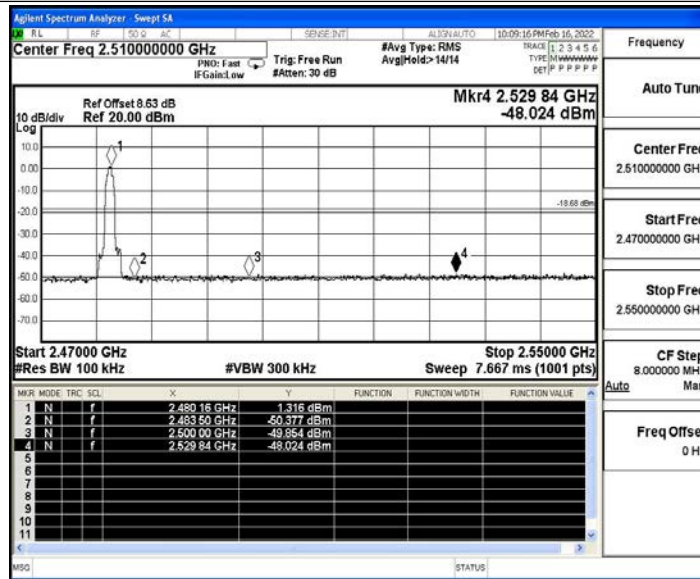
2DH5_Ant1_High_Hop_2480



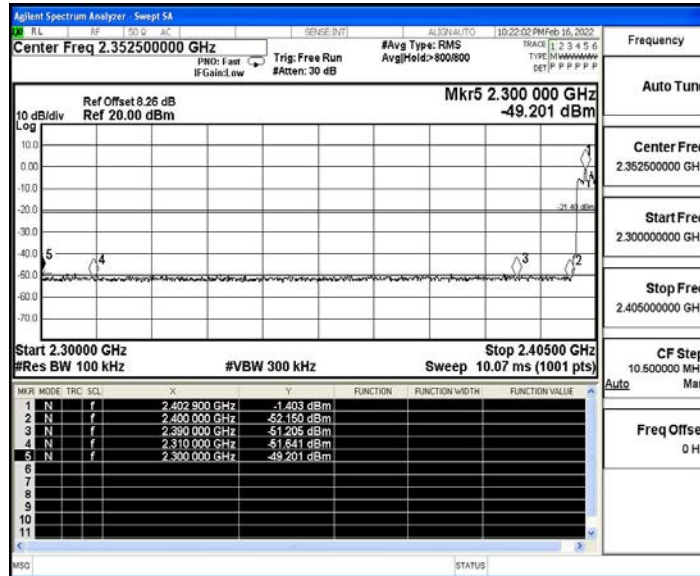
3DH5_Ant1_Low_2402



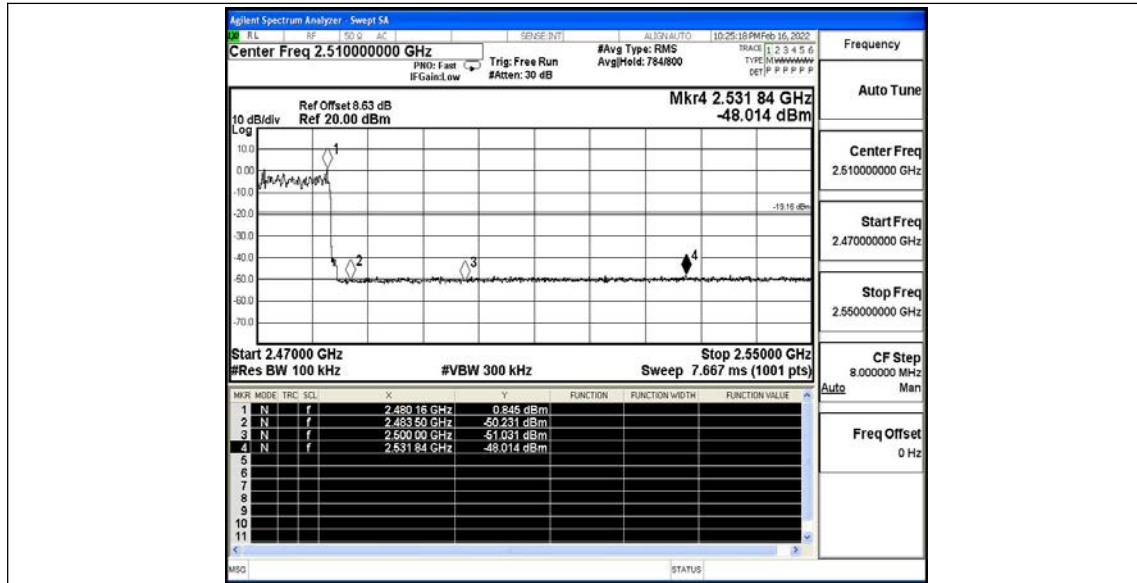
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





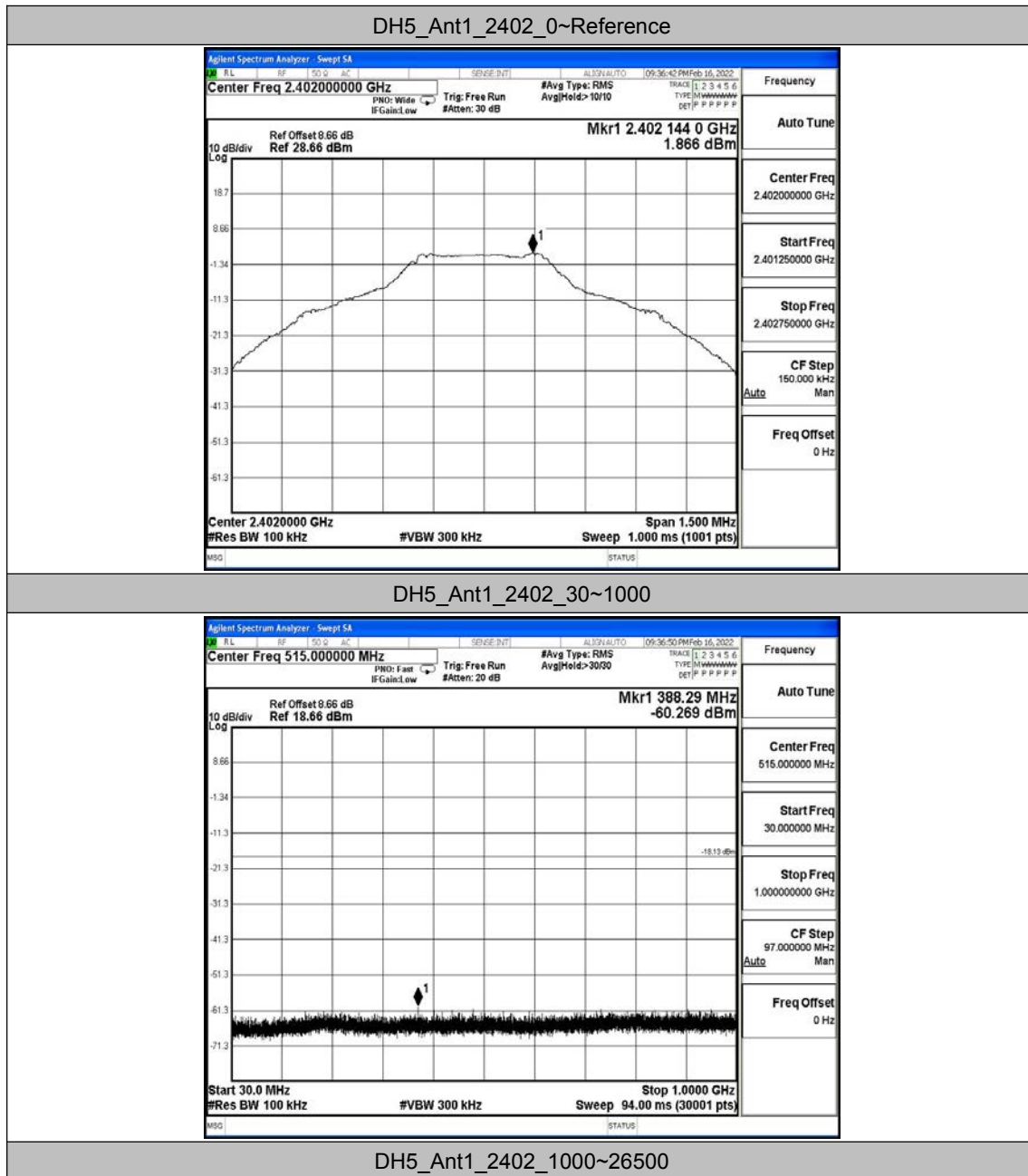
A.7 Conducted Spurious Emission

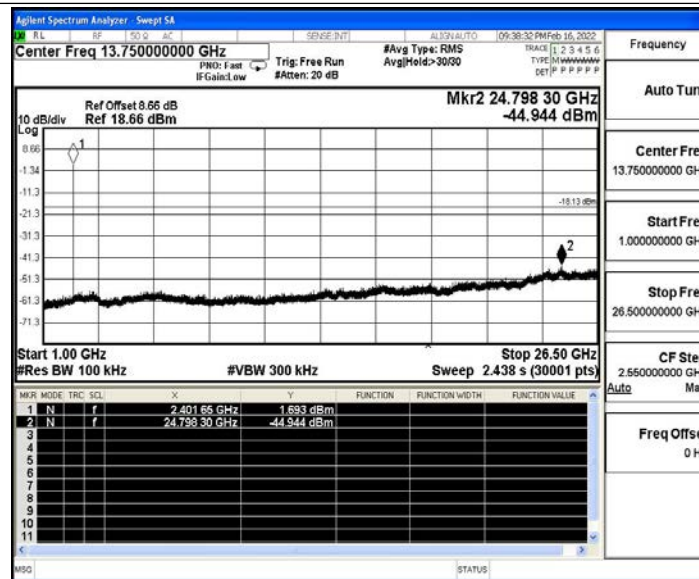
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-60.27	≤-18.13	PASS
			1000~26500	1.87	-44.94	≤-18.13	PASS
		2441	Reference	2.44	2.44	---	PASS
			30~1000	2.44	-60.69	≤-17.56	PASS
			1000~26500	2.44	-45.86	≤-17.56	PASS
		2480	Reference	2.21	2.21	---	PASS
			30~1000	2.21	-60.74	≤-17.79	PASS
			1000~26500	2.21	-45.77	≤-17.79	PASS
2DH5	Ant1	2402	Reference	0.93	0.93	---	PASS
			30~1000	0.93	-60.27	≤-19.07	PASS
			1000~26500	0.93	-46.01	≤-19.07	PASS
		2441	Reference	1.37	1.37	---	PASS
			30~1000	1.37	-61.12	≤-18.63	PASS
			1000~26500	1.37	-46.05	≤-18.63	PASS
		2480	Reference	1.09	1.09	---	PASS
			30~1000	1.09	-60.38	≤-18.91	PASS
			1000~26500	1.09	-46.41	≤-18.91	PASS
3DH5	Ant1	2402	Reference	0.98	0.98	---	PASS
			30~1000	0.98	-60.29	≤-19.02	PASS
			1000~26500	0.98	-46.07	≤-19.02	PASS
		2441	Reference	1.42	1.42	---	PASS
			30~1000	1.42	-59.97	≤-18.58	PASS
			1000~26500	1.42	-45.89	≤-18.58	PASS
		2480	Reference	1.16	1.16	---	PASS
			30~1000	1.16	-60.8	≤-18.84	PASS
			1000~26500	1.16	-46	≤-18.84	PASS

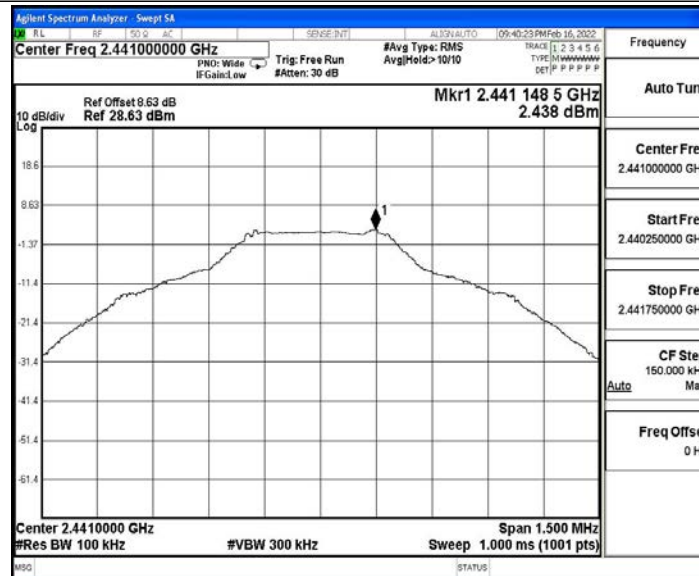


Test Graphs

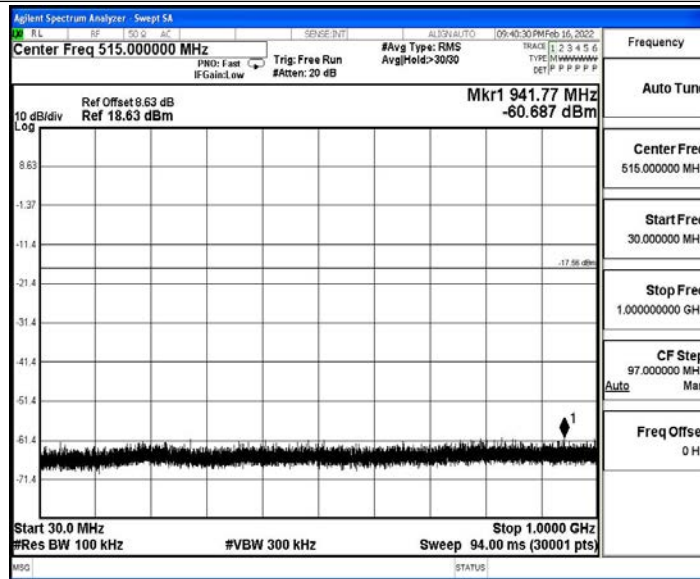




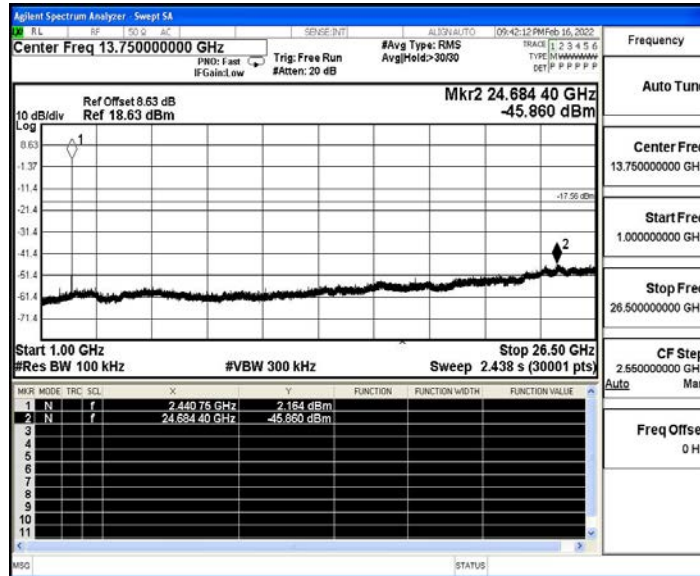
DH5_Ant1_2441_0~Reference



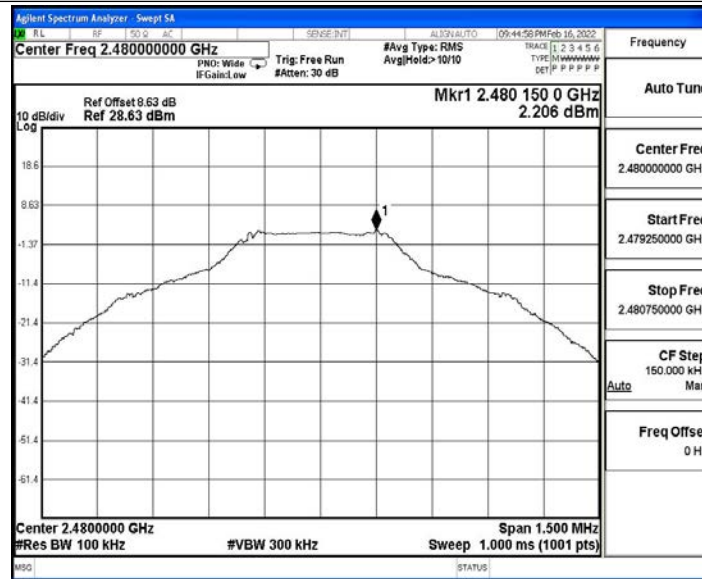
DH5_Ant1_2441_30~1000



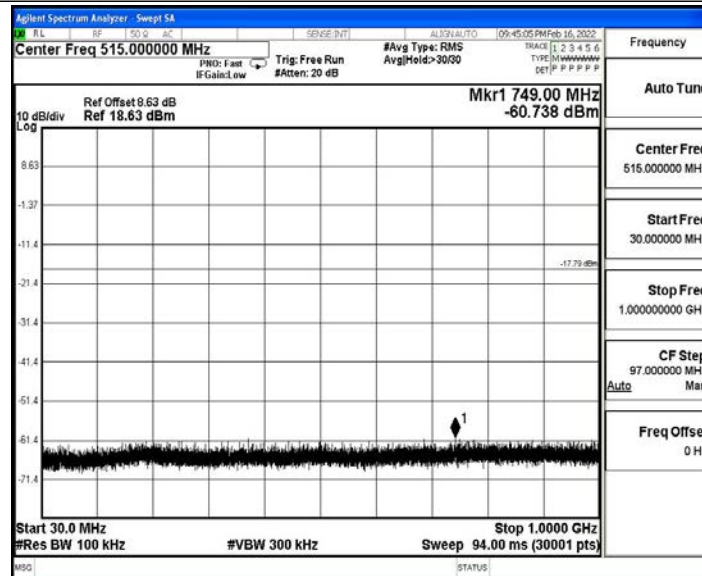
DH5_Ant1_2441_1000~26500



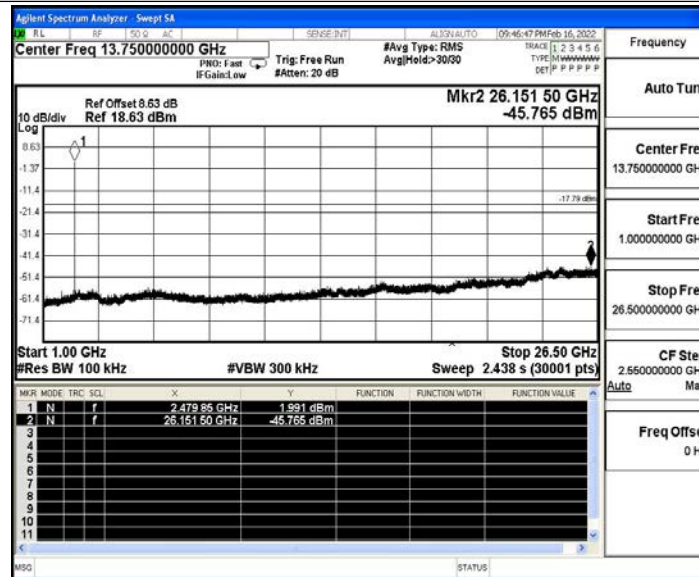
DH5_Ant1_2480_0~Reference



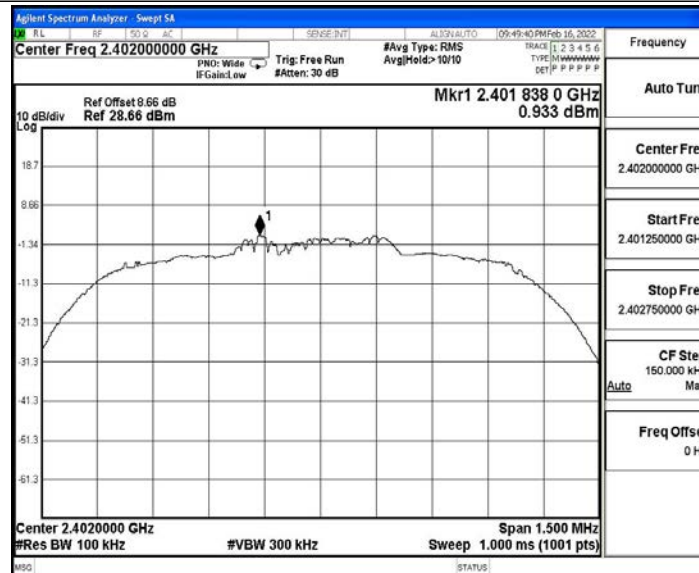
DH5_Ant1_2480_30~1000



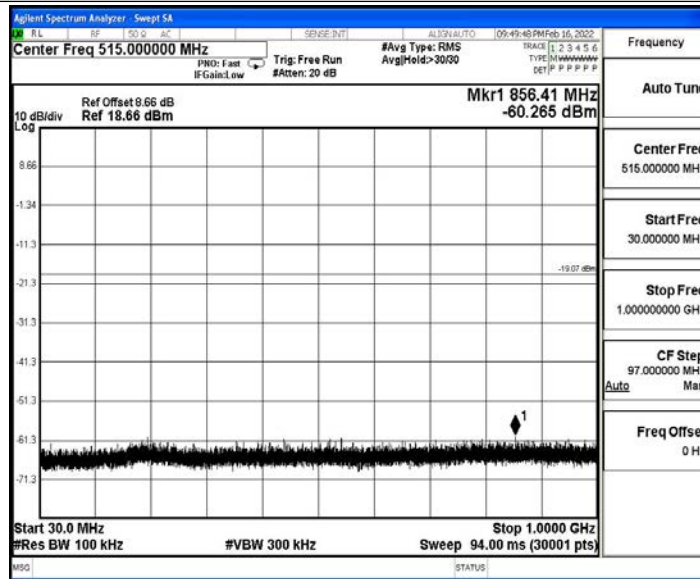
DH5_Ant1_2480_1000~26500



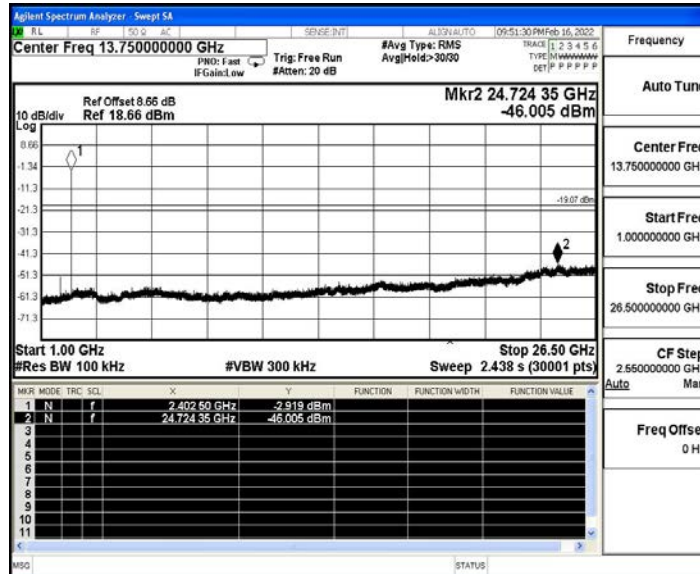
2DH5_Ant1_2402_0~Reference



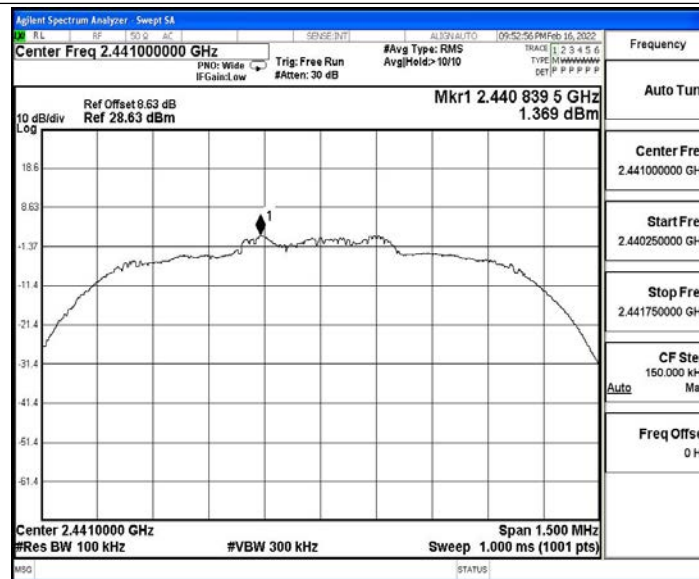
2DH5_Ant1_2402_30~1000



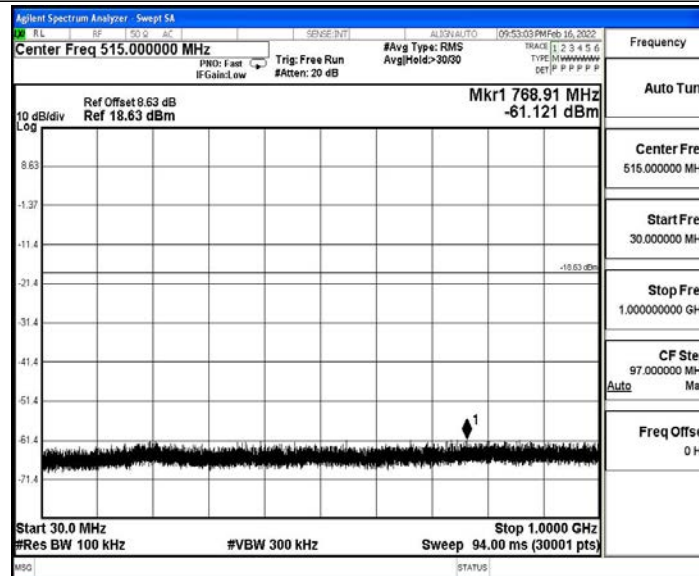
2DH5_Ant1_2402_1000~26500



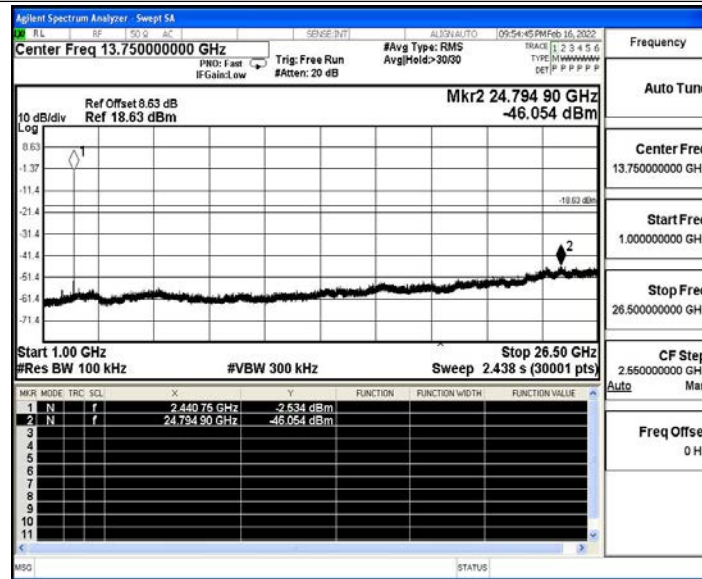
2DH5_Ant1_2441_0~Reference



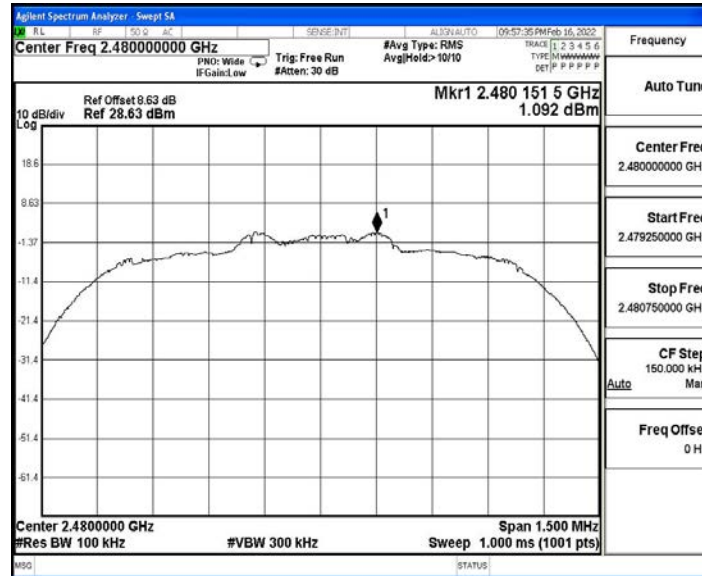
2DH5_Ant1_2441_30~1000



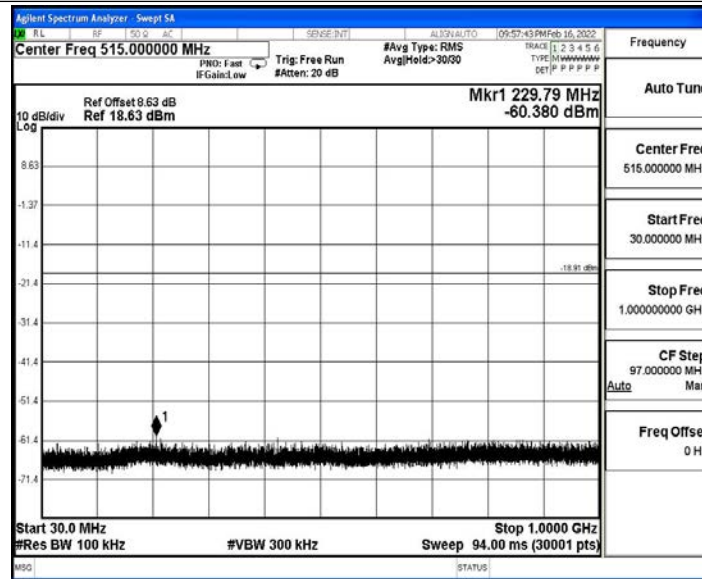
2DH5_Ant1_2441_1000~26500



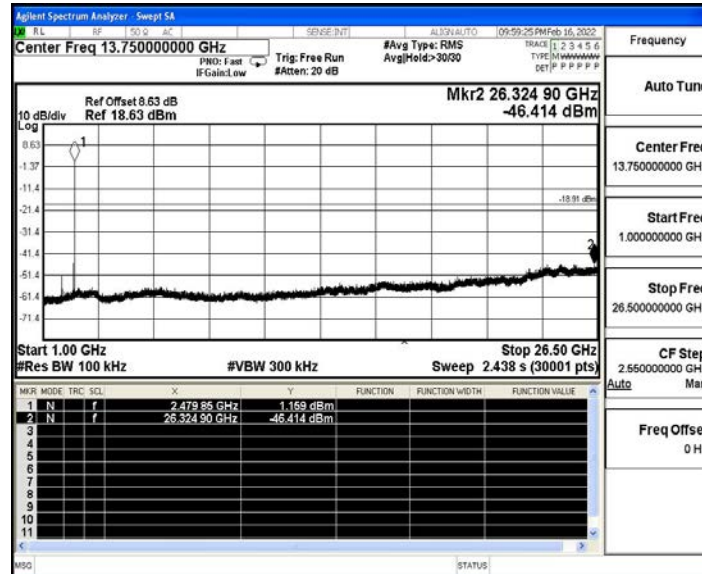
2DH5_Ant1_2480_0~Reference



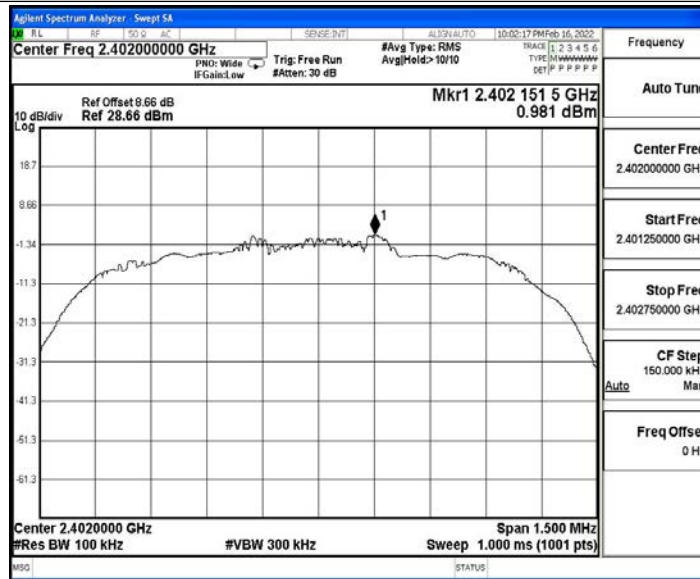
2DH5_Ant1_2480_30~1000



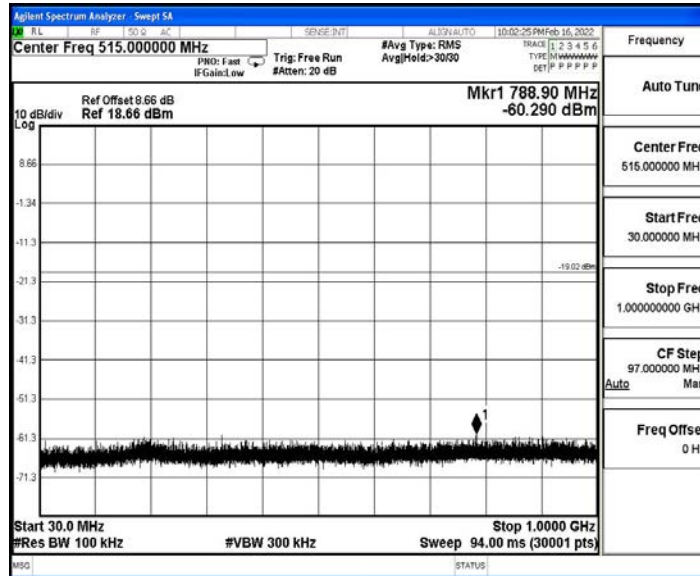
2DH5_Ant1_2480_1000~26500



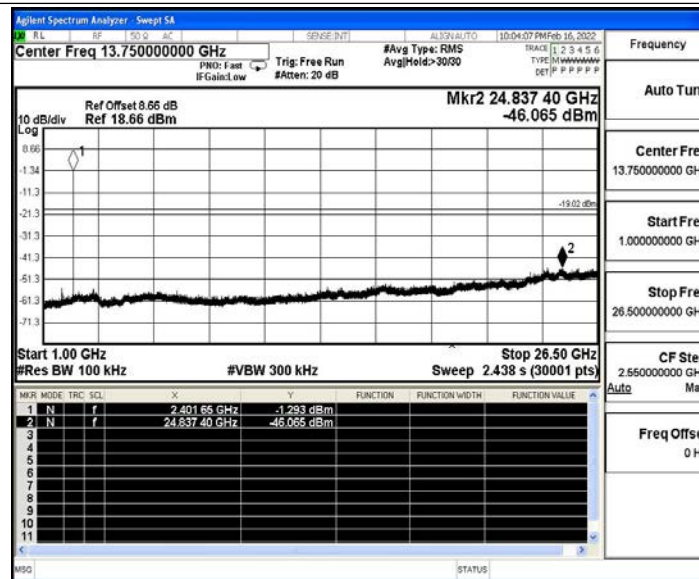
3DH5_Ant1_2402_0~Reference



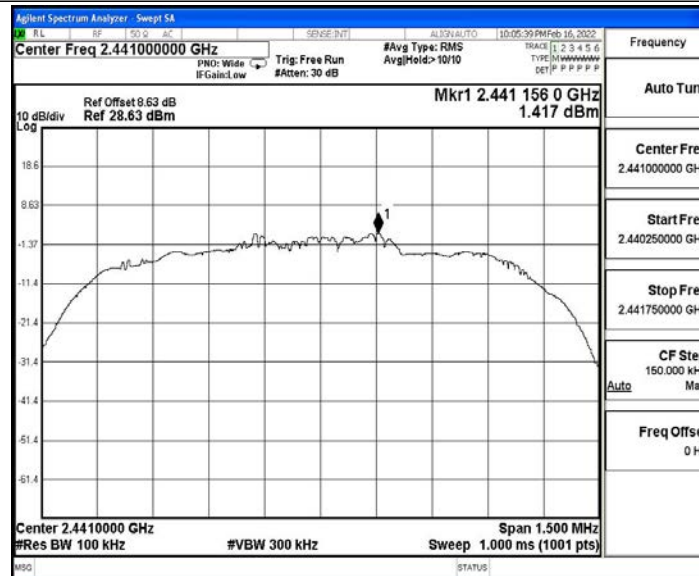
3DH5_Ant1_2402_30~1000



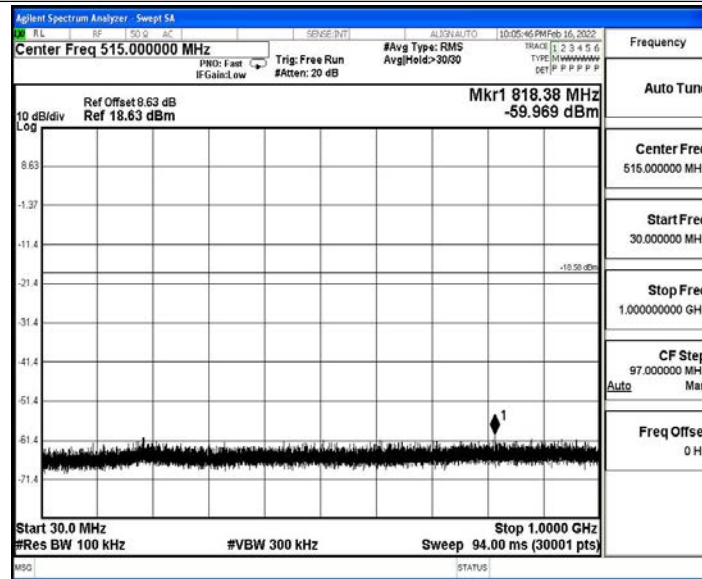
3DH5_Ant1_2402_1000~26500



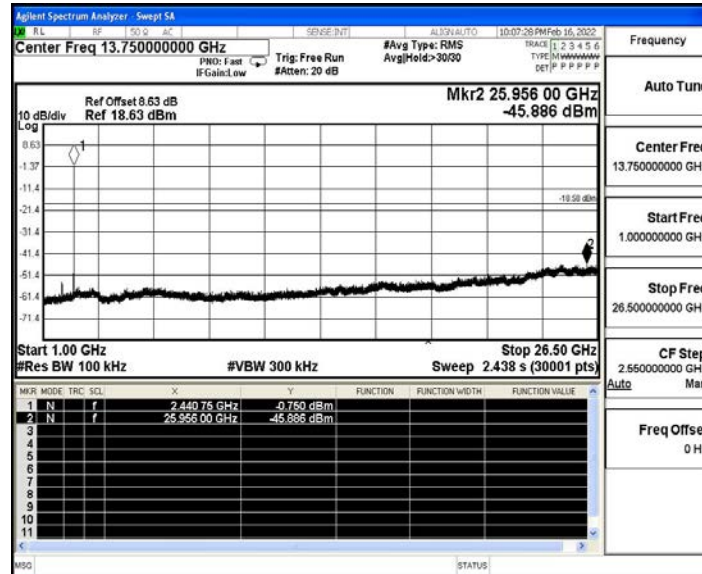
3DH5_Ant1_2441_0~Reference



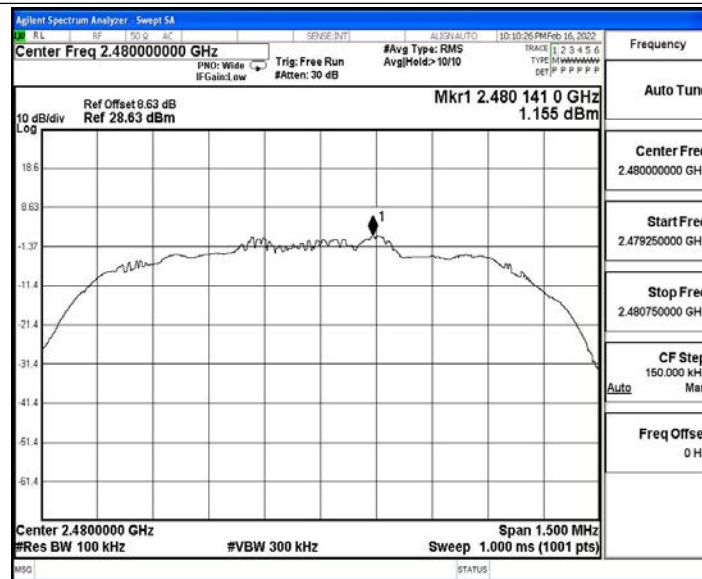
3DH5_Ant1_2441_30~1000



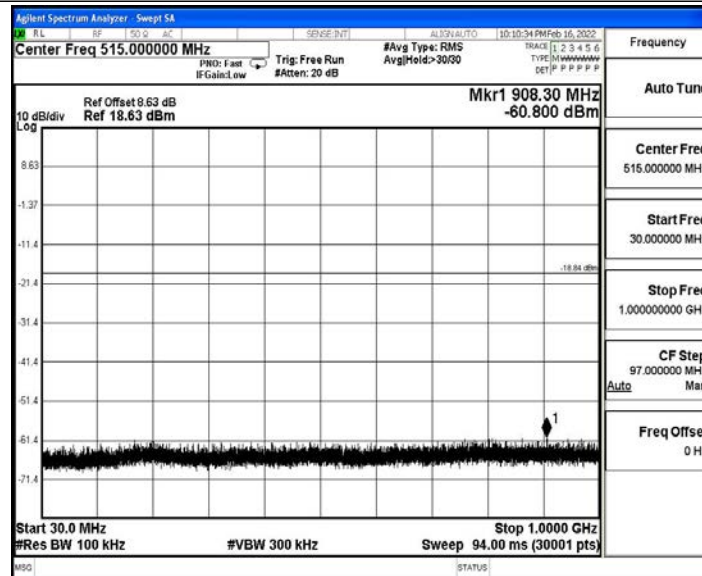
3DH5_Ant1_2441_1000~26500



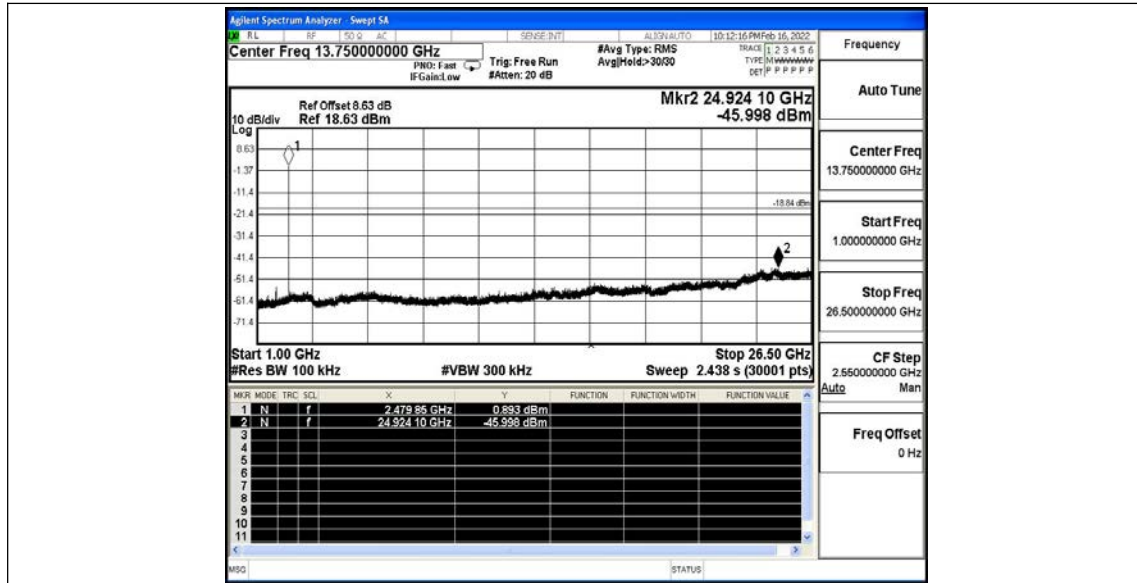
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500





A.8 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.28	≤-41.20	46.92	≤54	PASS
				AV	2386.940	-47.69	≤-41.20	47.51	≤54	PASS
				AV	2390.000	-47.94	≤-41.20	47.26	≤54	PASS
				Peak	2310.000	-38.39	≤-21.20	56.81	≤74	PASS
				Peak	2372.660	-36.24	≤-21.20	58.96	≤74	PASS
				Peak	2390.000	-38.4	≤-21.20	56.80	≤74	PASS
		High	2480	AV	2483.500	-47.07	≤-41.20	48.13	≤54	PASS
				AV	2483.520	-47.07	≤-41.20	48.13	≤54	PASS
				AV	2500.000	-47.21	≤-41.20	47.99	≤54	PASS
				Peak	2483.500	-37.31	≤-21.20	57.89	≤74	PASS
				Peak	2488.480	-36.12	≤-21.20	59.08	≤74	PASS
				Peak	2500.000	-37.67	≤-21.20	57.53	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.21	≤-41.20	46.99	≤54	PASS
				AV	2385.575	-47.71	≤-41.20	47.49	≤54	PASS
				AV	2390.000	-47.81	≤-41.20	47.39	≤54	PASS
				Peak	2310.000	-39.22	≤-21.20	55.98	≤74	PASS
				Peak	2343.260	-36.79	≤-21.20	58.41	≤74	PASS
				Peak	2390.000	-38.65	≤-21.20	56.55	≤74	PASS
		High	2480	AV	2483.500	-47.08	≤-41.20	48.12	≤54	PASS
				AV	2483.520	-47.08	≤-41.20	48.12	≤54	PASS
				AV	2500.000	-47.32	≤-41.20	47.88	≤54	PASS
				Peak	2483.500	-37.98	≤-21.20	57.22	≤74	PASS
				Peak	2492.640	-36.28	≤-21.20	58.92	≤74	PASS
				Peak	2500.000	-37.82	≤-21.20	57.38	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.29	≤-41.20	46.91	≤54	PASS
				AV	2389.775	-47.7	≤-41.20	47.50	≤54	PASS
				AV	2390.000	-47.88	≤-41.20	47.32	≤54	PASS
				Peak	2310.000	-37.59	≤-21.20	57.61	≤74	PASS
				Peak	2383.265	-36.72	≤-21.20	58.48	≤74	PASS
				Peak	2390.000	-38.1	≤-21.20	57.10	≤74	PASS
		High	2480	AV	2483.500	-47.13	≤-41.20	48.07	≤54	PASS
				AV	2483.520	-47.13	≤-41.20	48.07	≤54	PASS
				AV	2500.000	-47.32	≤-41.20	47.88	≤54	PASS
				Peak	2483.500	-36.18	≤-21.20	59.02	≤74	PASS
				Peak	2483.520	-36.18	≤-21.20	59.02	≤74	PASS
				Peak	2500.000	-36.7	≤-21.20	58.50	≤74	PASS



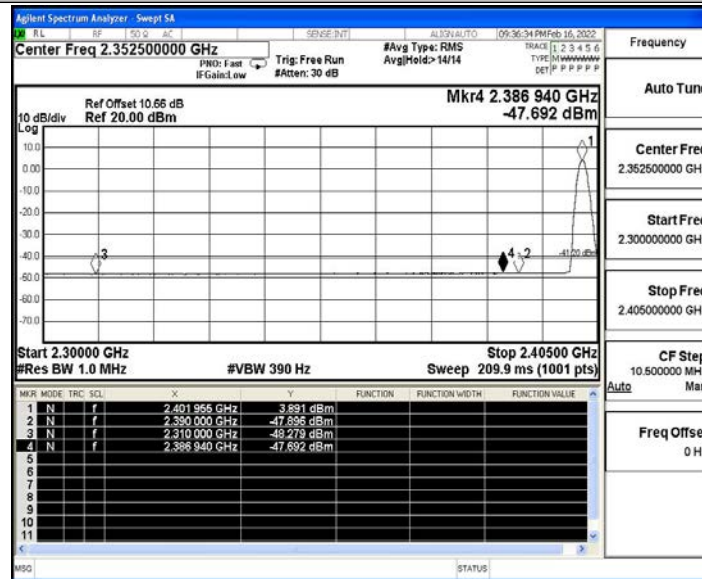
Note:

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.

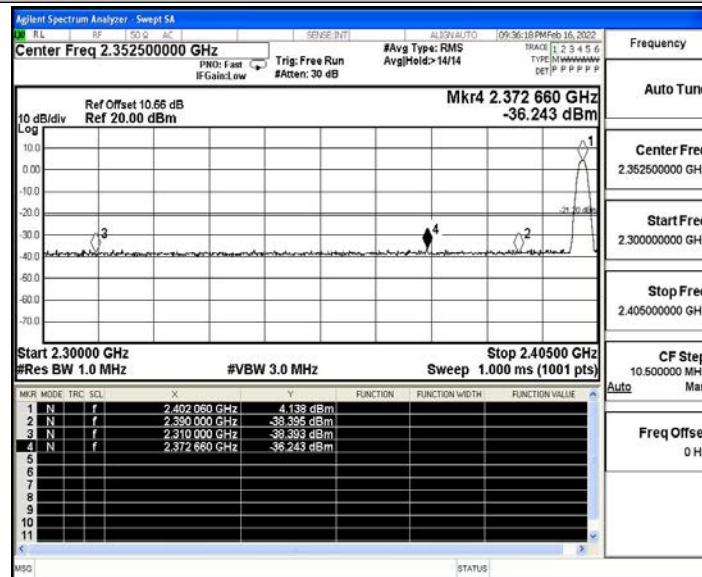


Test Graphs

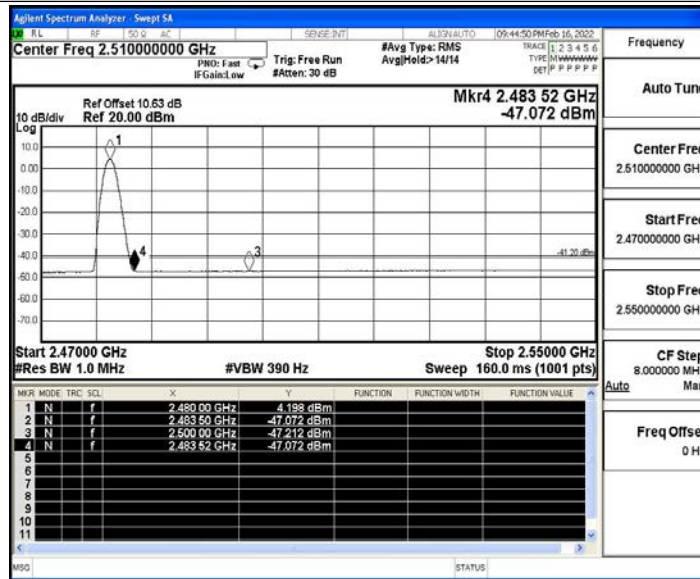
DH5_Ant1_Low_2402_AV



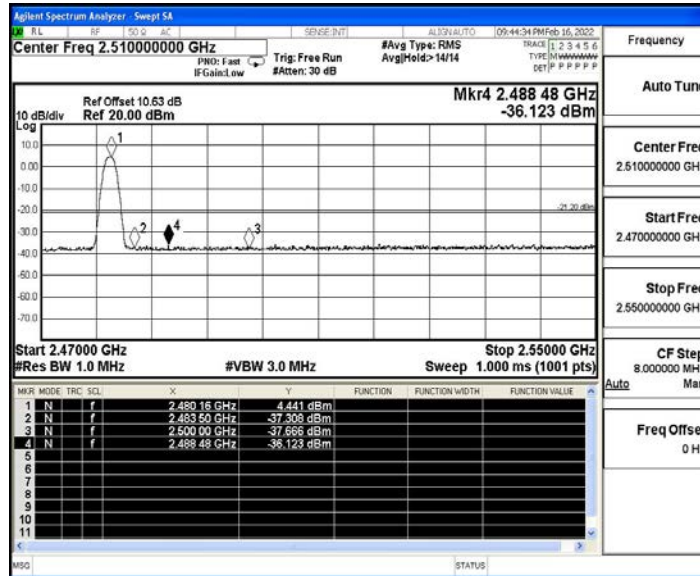
DH5_Ant1_Low_2402_Peak



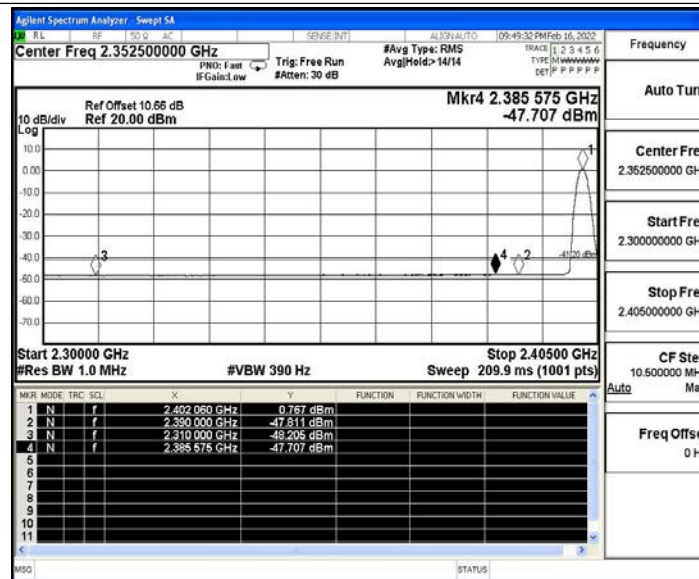
DH5_Ant1_High_2480_AV



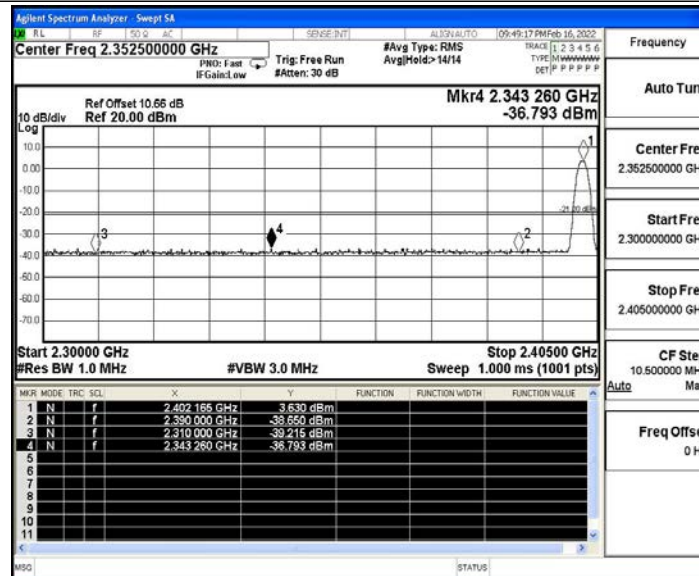
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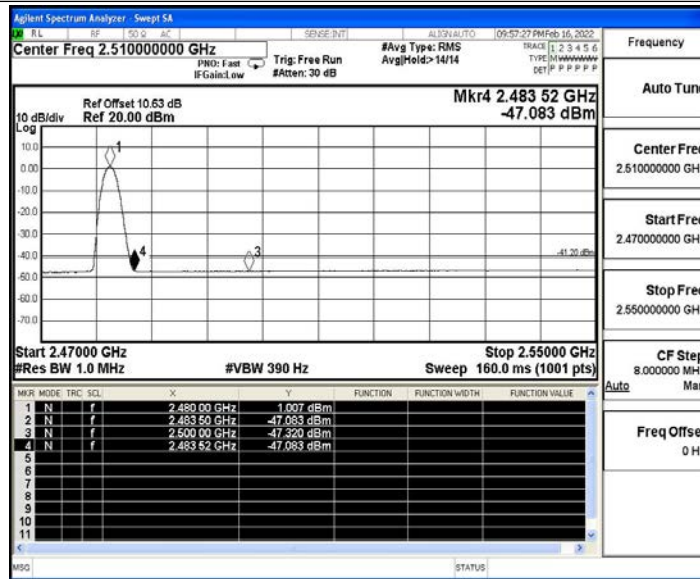
2DH5_Ant1_Low_2402_AV



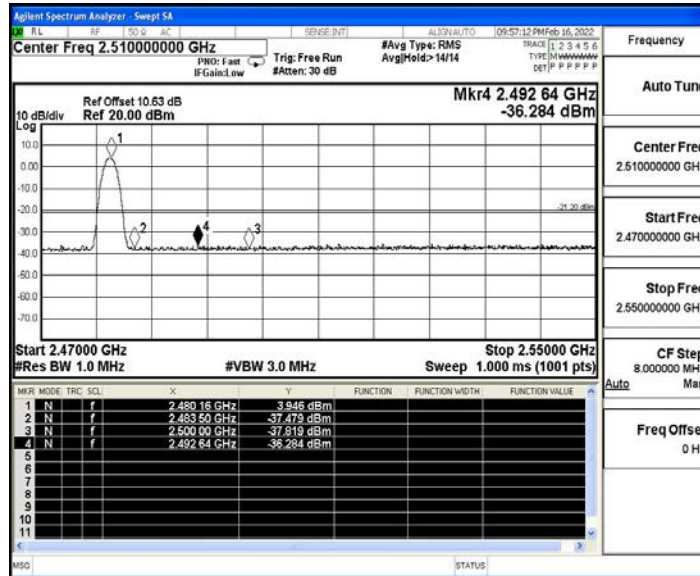
2DH5_Ant1_Low_2402_Peak



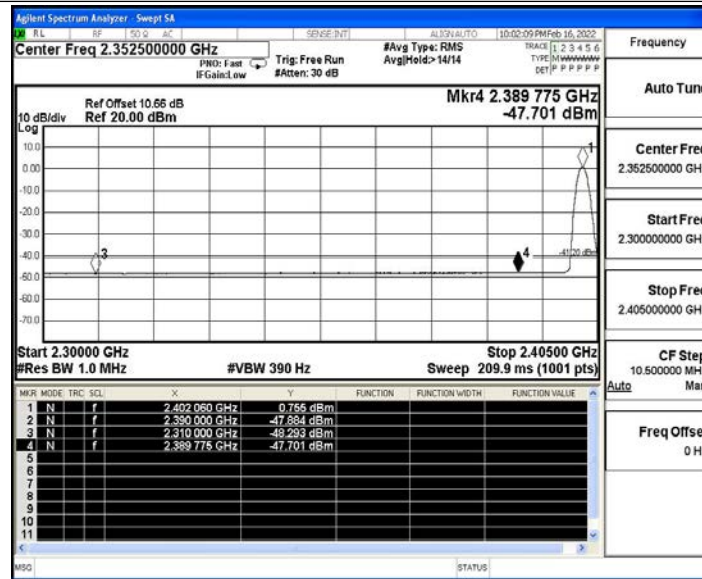
2DH5_Ant1_High_2480_AV



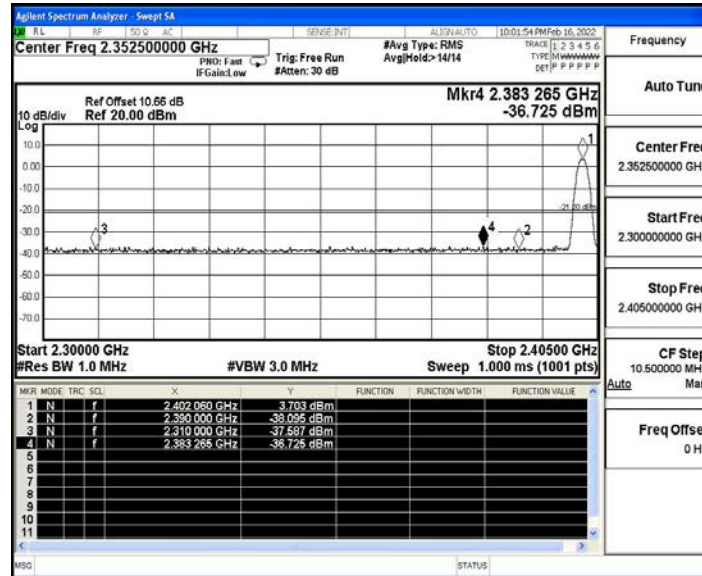
2DH5_Ant1_High_2480_Peak



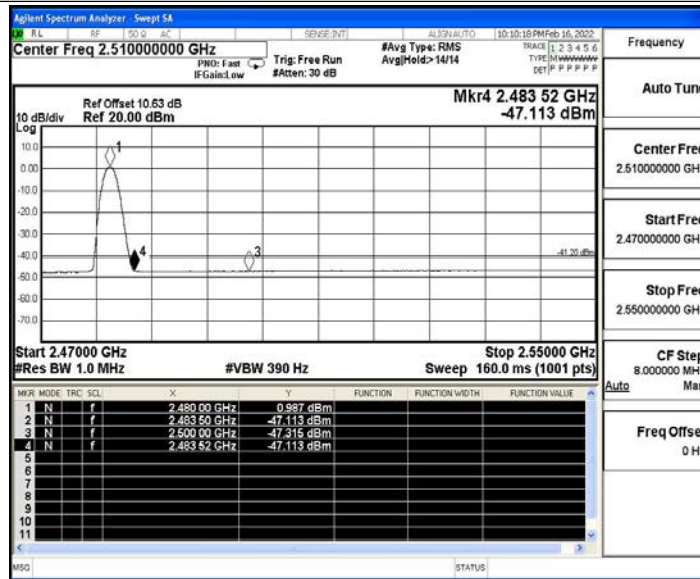
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

