

Appendix A

RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: MICRO Wireless Stereo

Trade Mark: N/A

Test Model: Micro M90

FCC ID: 2A30Q-MICROM90

Environmental Conditions

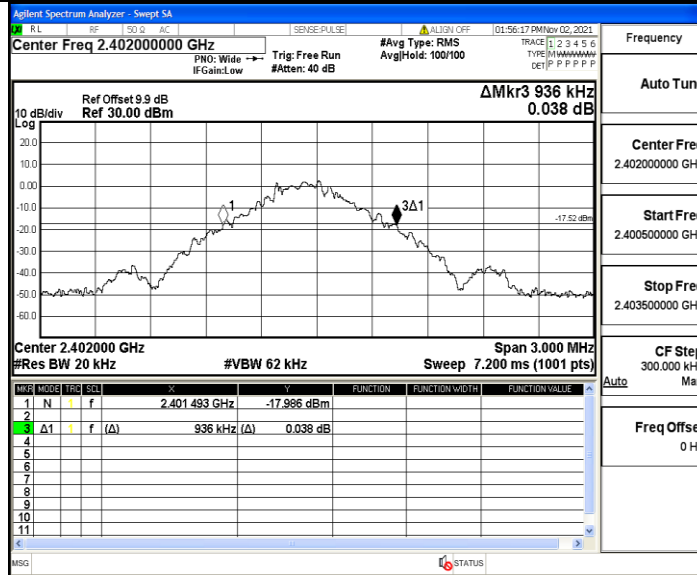
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

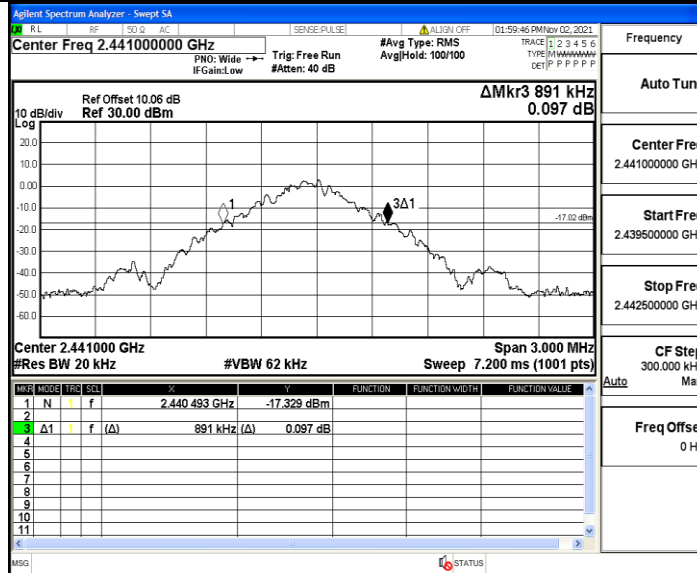
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.493	2402.429	---	PASS
		2441	0.891	2440.493	2441.384	---	PASS
		2480	0.939	2479.493	2480.432	---	PASS
2DH5	Ant1	2402	1.260	2401.322	2402.582	---	PASS
		2441	1.260	2440.322	2441.582	---	PASS
		2480	1.332	2479.286	2480.618	---	PASS

Test Graph

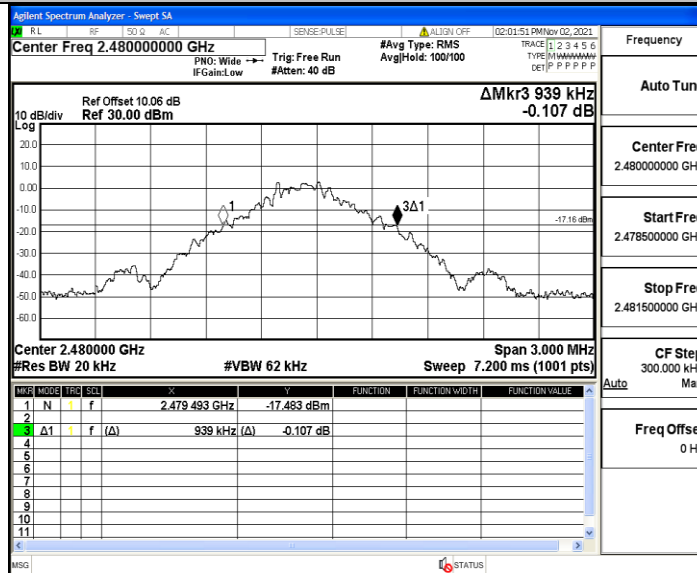
DH5_Ant1_2402



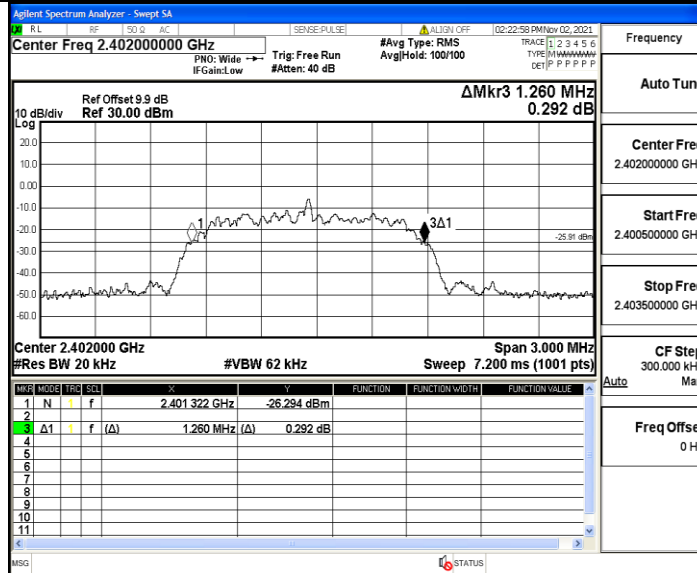
DH5_Ant1_2441



DH5_Ant1_2480

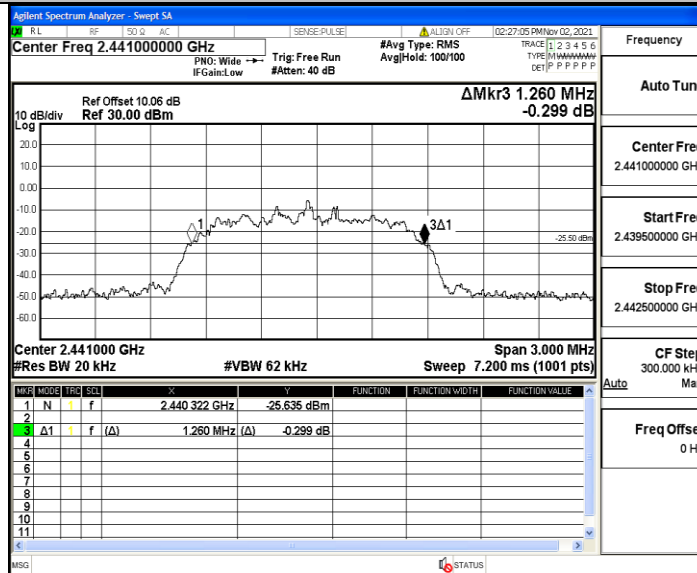


2DH5_Ant1_2402



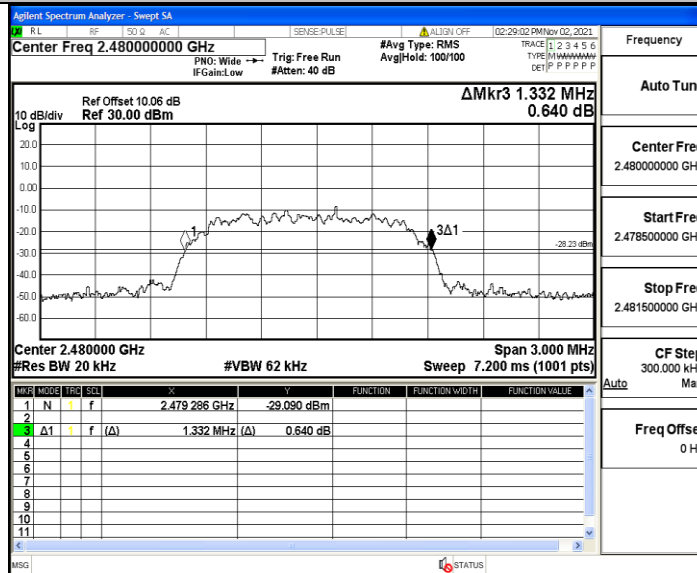
Frequency	Auto Tune
Center Freq	2.402000000 GHz
Start Freq	2.400500000 GHz
Stop Freq	2.403500000 GHz
CF Step	300.000 kHz
Freq Offset	0 Hz

2DH5_Ant1_2441



Frequency	Auto Tune
Center Freq	2.441000000 GHz
Start Freq	2.439500000 GHz
Stop Freq	2.442500000 GHz
CF Step	300.000 kHz
Freq Offset	0 Hz

2DH5_Ant1_2480



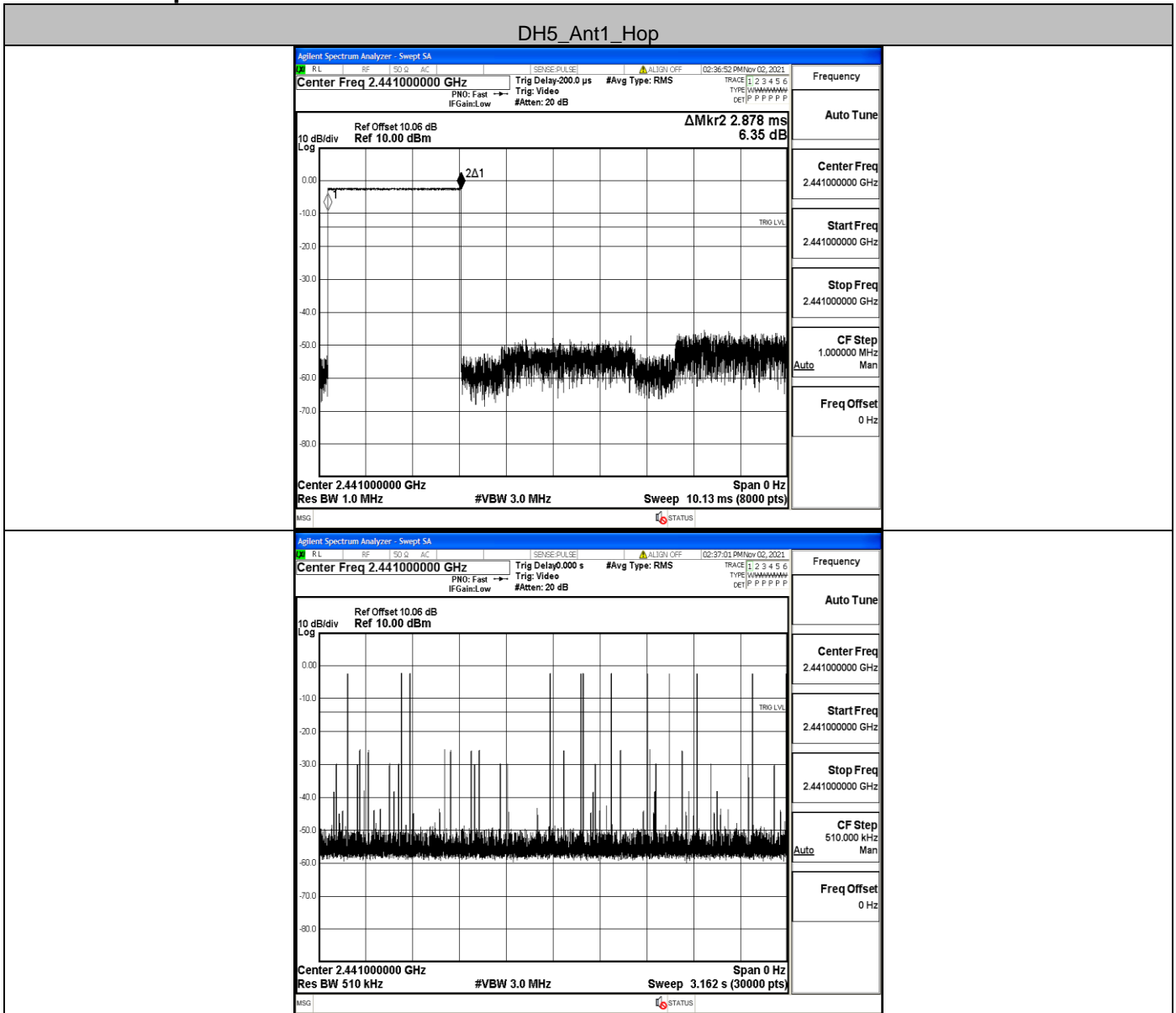
Frequency	Auto Tune
Center Freq	2.480000000 GHz
Start Freq	2.478500000 GHz
Stop Freq	2.481500000 GHz
CF Step	300.000 kHz
Freq Offset	0 Hz

A.2 Dwell Time

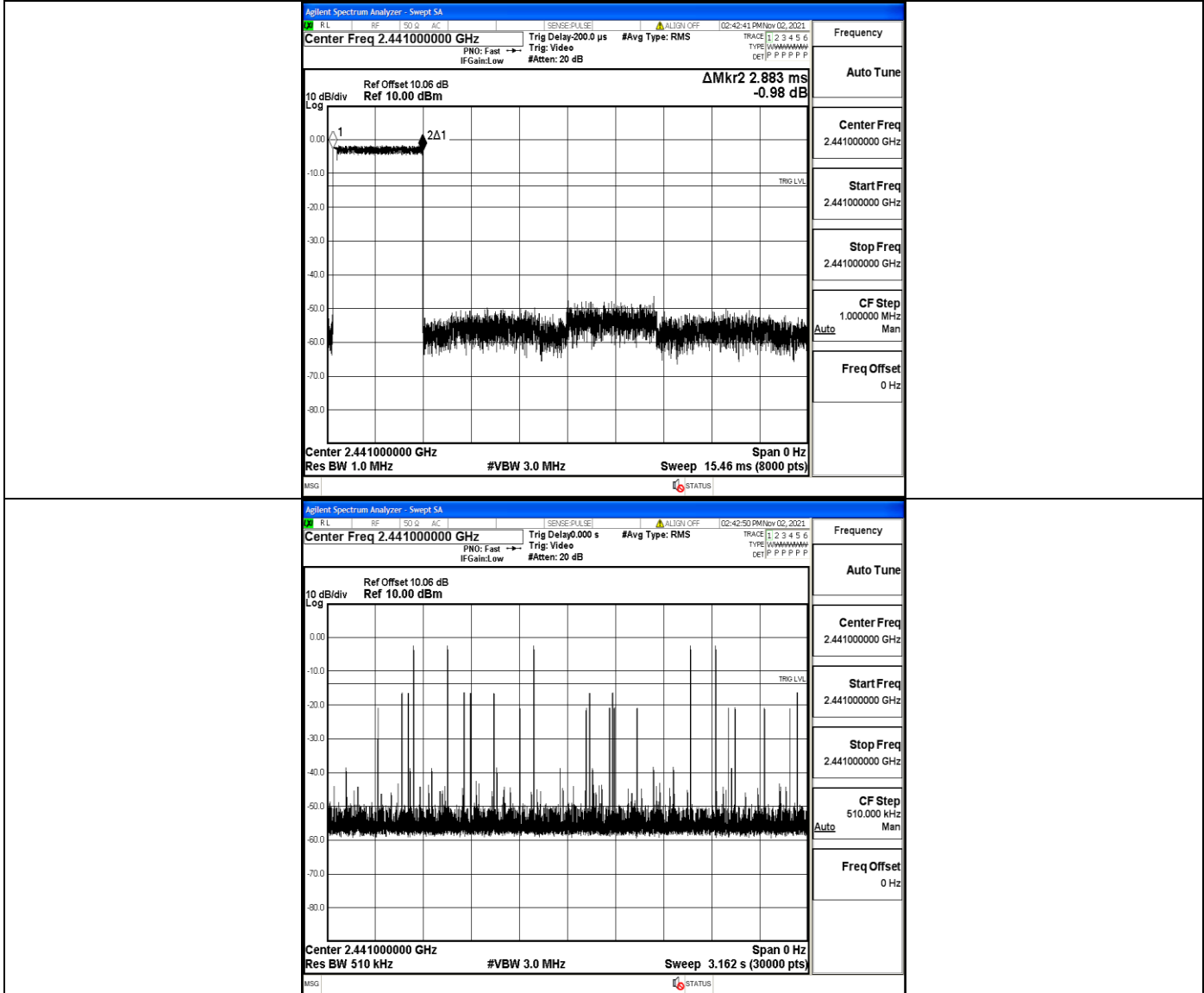
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	130	0.374	≤0.4	PASS
2DH5	Ant1	Hop	2.88	60	0.173	≤0.4	PASS

Test Graph

DH5_Ant1_Hop



2DH5_Ant1_Hop

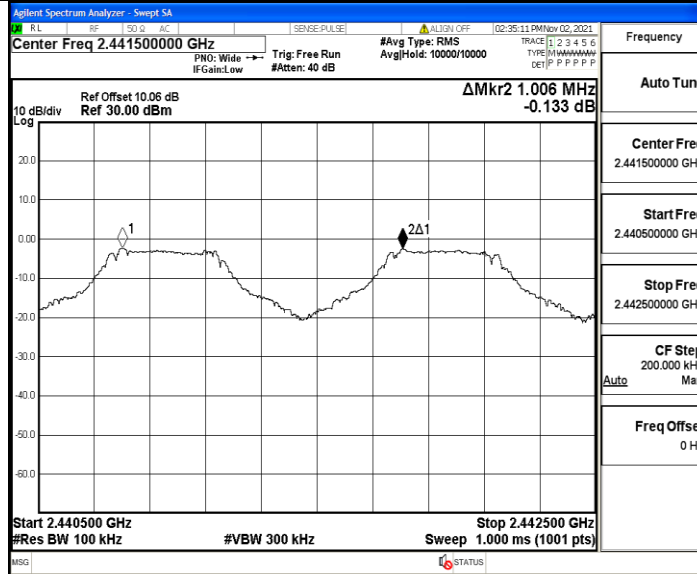


A.3 Carrier Frequency Separation

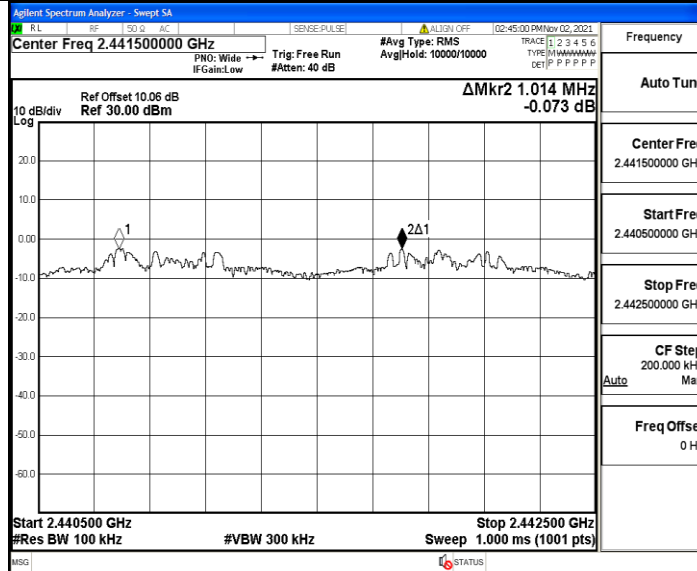
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.006	≥ 0.939	PASS
2DH5	Ant1	Hop	1.014	≥ 0.888	PASS

Test Graph

DH5_Ant1_Hop



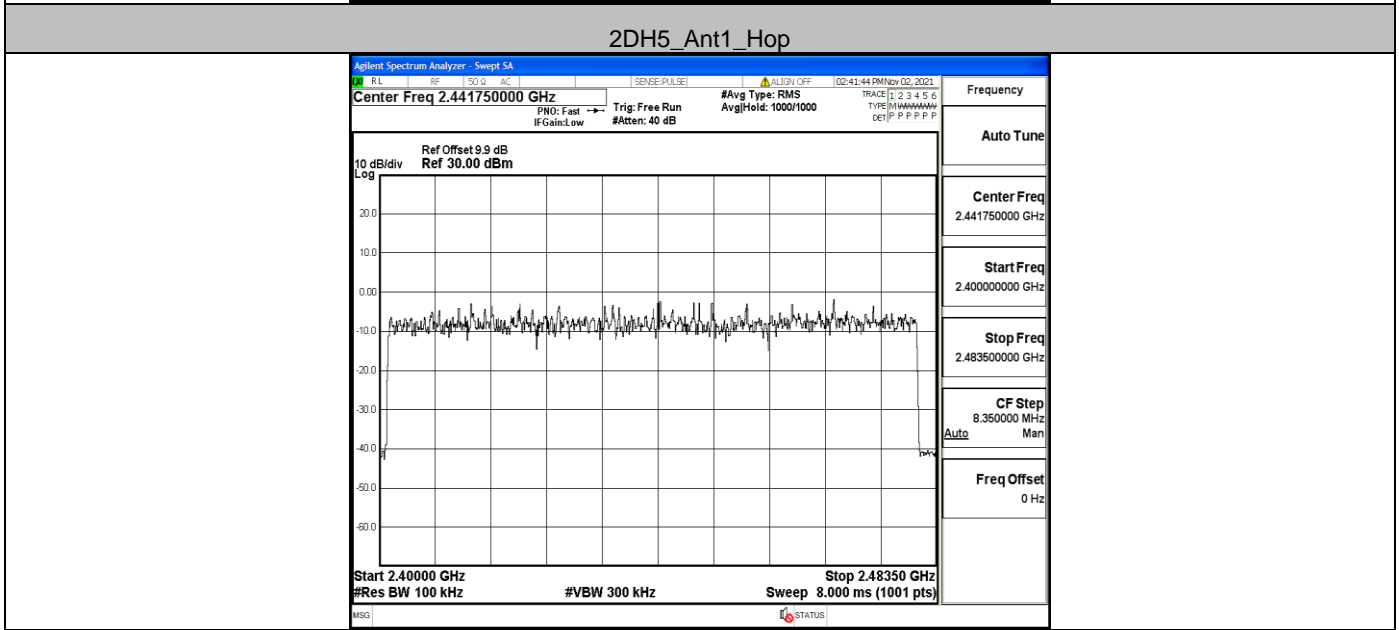
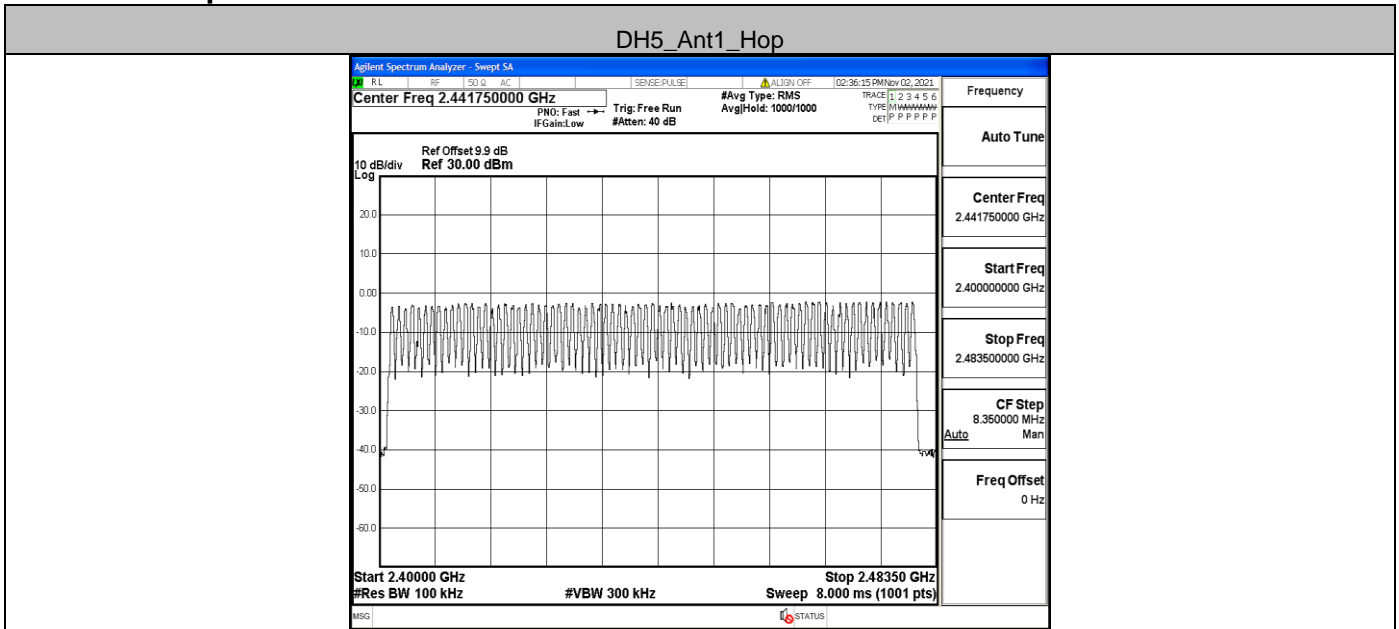
2DH5_Ant1_Hop



A.4 Hopping Channel Number

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS

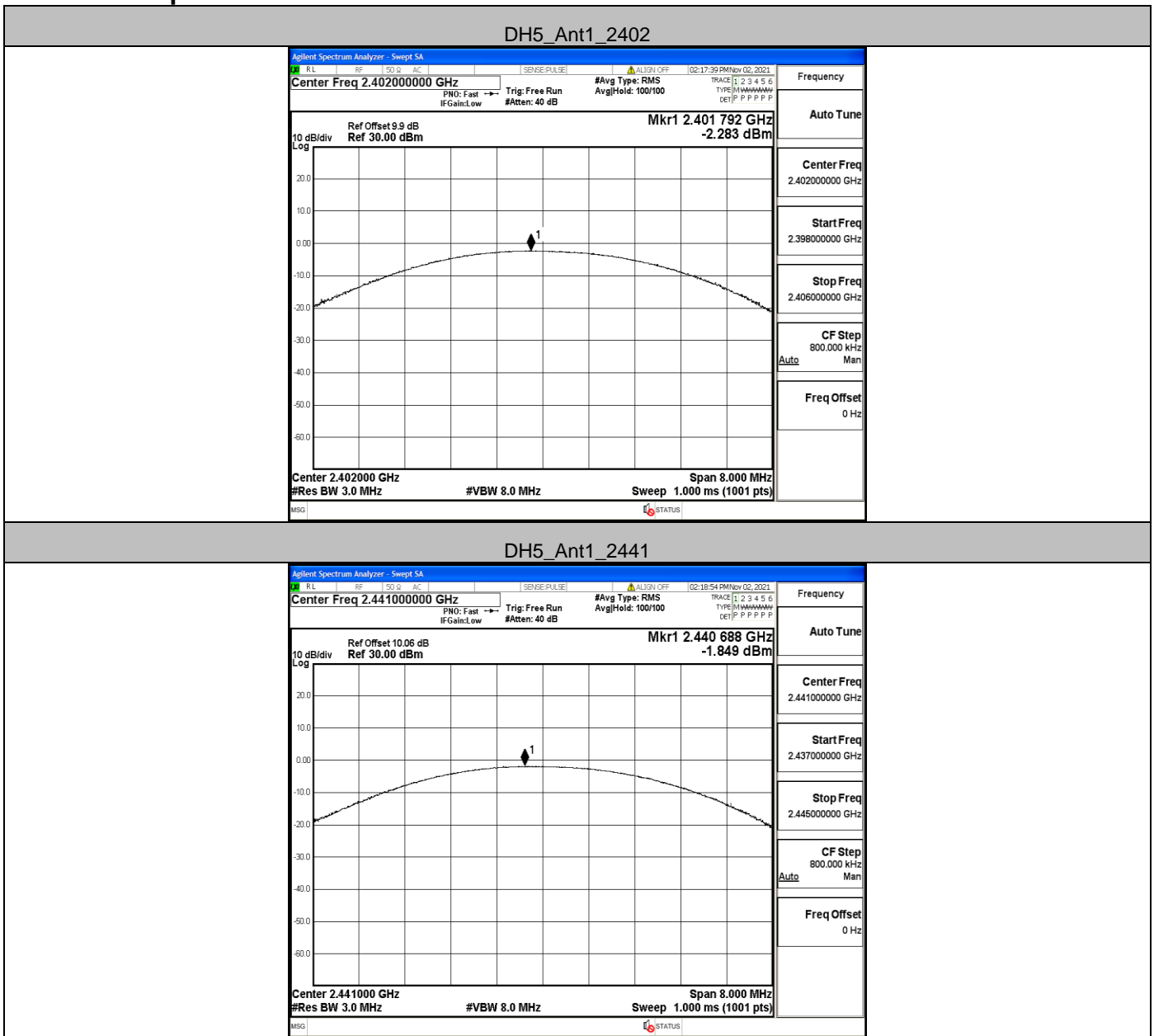
Test Graph



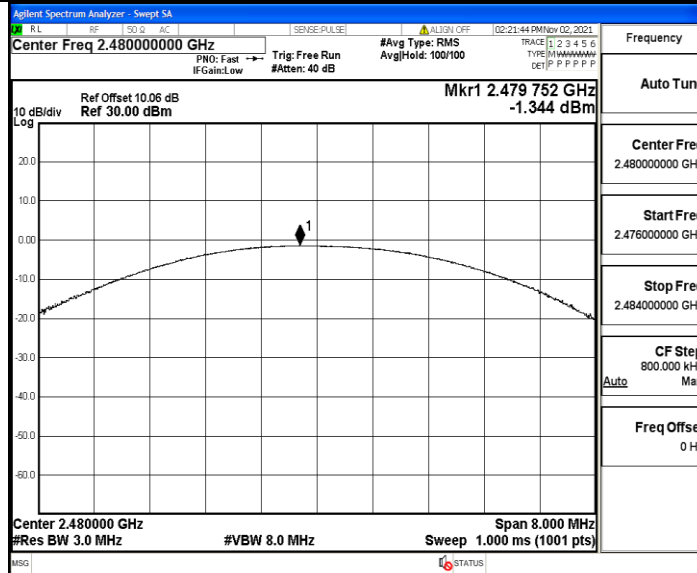
A.5 Conducted Peak Output Power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-2.28	≤20.97	PASS
		2441	-1.85	≤20.97	PASS
		2480	-1.34	≤20.97	PASS
2DH5	Ant1	2402	-1.58	≤20.97	PASS
		2441	-1.19	≤20.97	PASS
		2480	-0.64	≤20.97	PASS

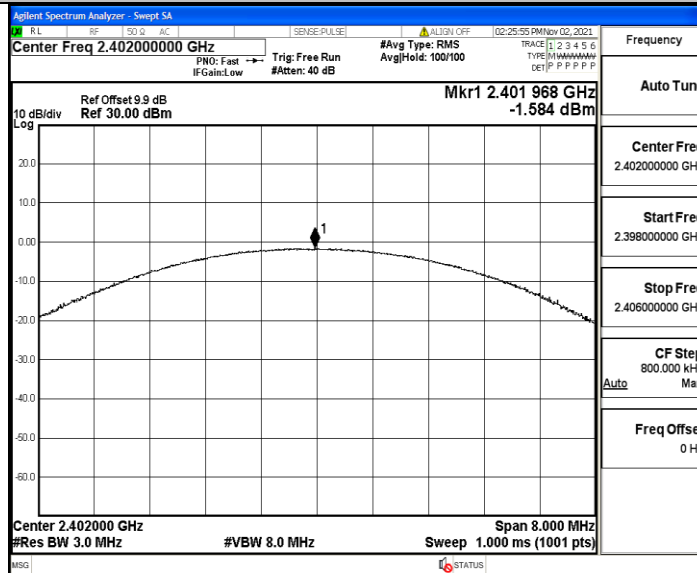
Test Graph



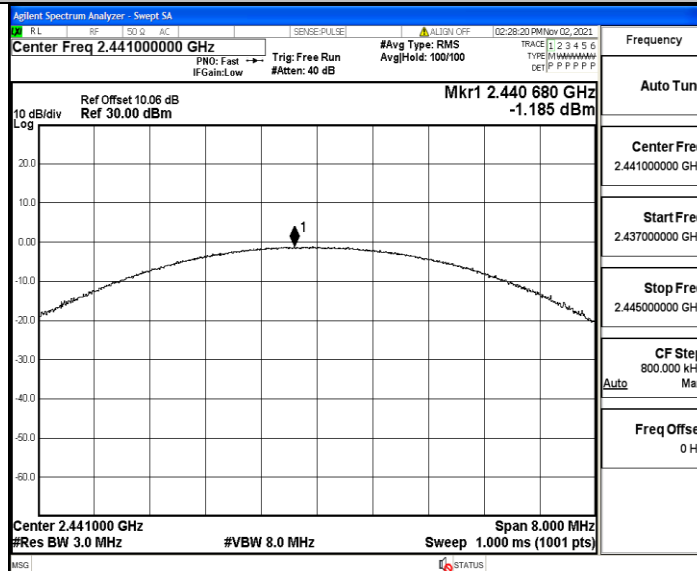
DH5_Ant1_2480



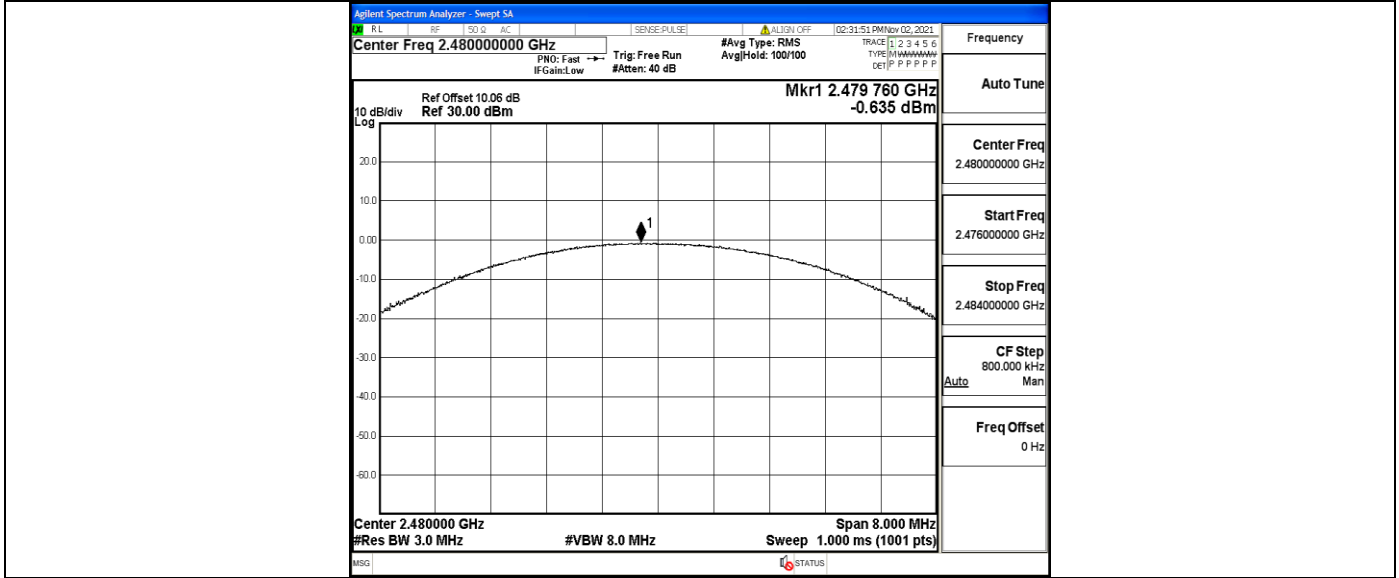
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

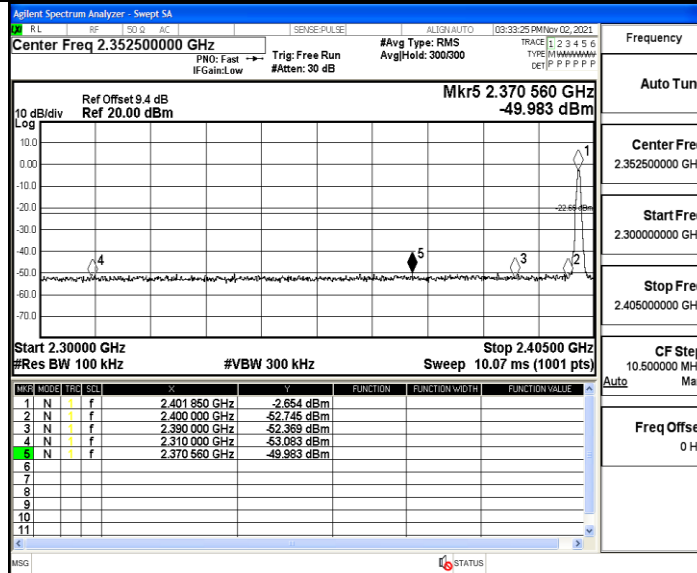


A.6 Band-edge for RF Conducted Emissions

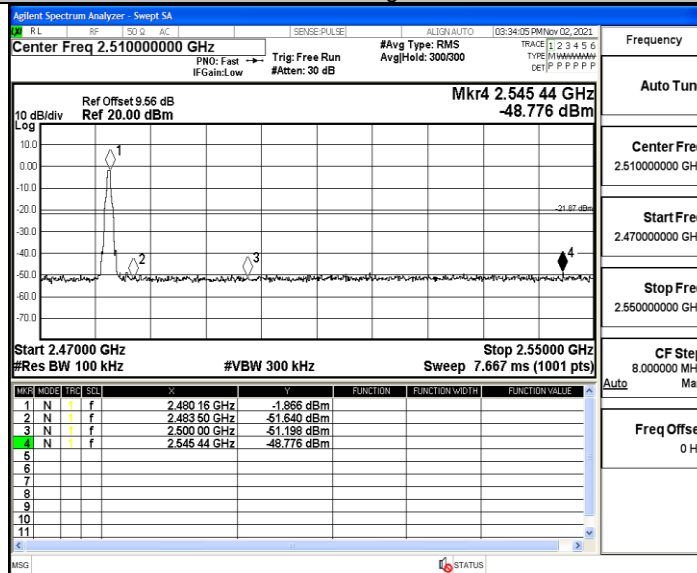
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-2.65	-49.98	≤-22.65	PASS
		High	2480	-1.87	-48.78	≤-21.87	PASS
		Low	Hop_2402	-2.98	-49.76	≤-22.98	PASS
		High	Hop_2480	-1.81	-47.27	≤-21.81	PASS
2DH5	Ant1	Low	2402	-2.59	-41.07	≤-22.59	PASS
		High	2480	-1.76	-47.74	≤-21.76	PASS
		Low	Hop_2402	-8.49	-48.86	≤-28.49	PASS
		High	Hop_2480	-3.59	-48.31	≤-23.59	PASS

Test Graph

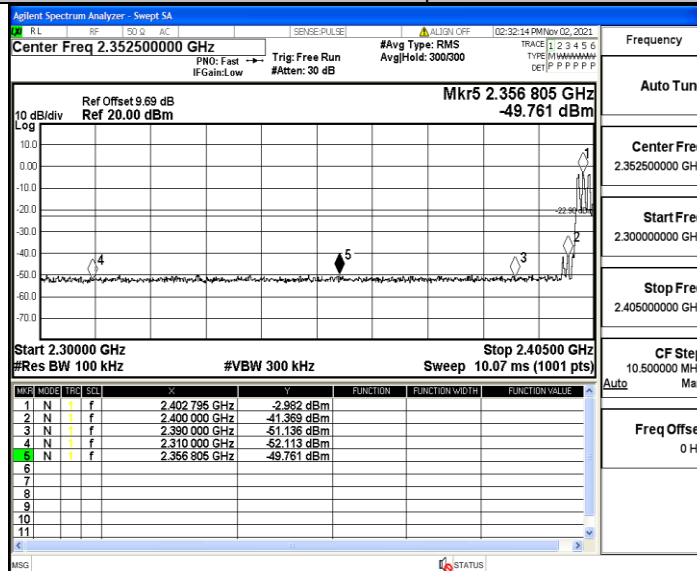
DH5_Ant1_Low_2402



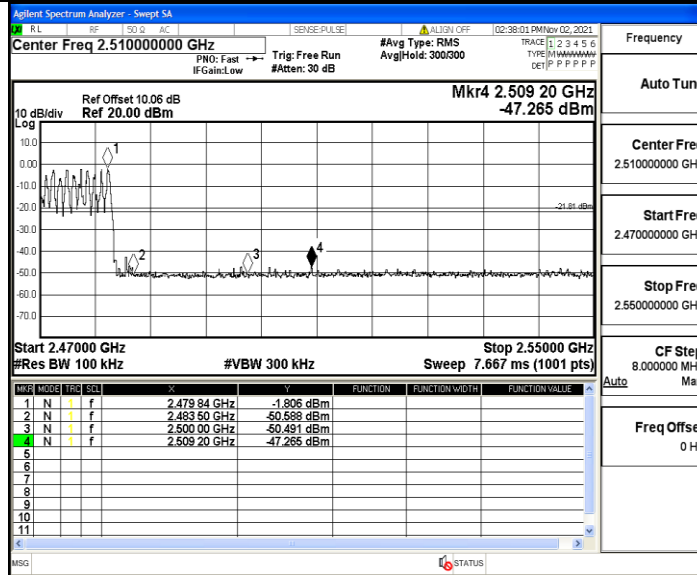
DH5_Ant1_High_2480



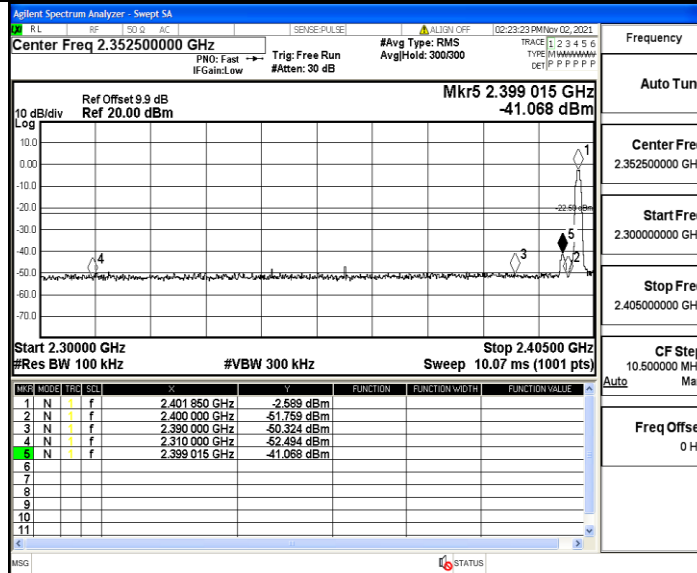
DH5_Ant1_Low_Hop_2402



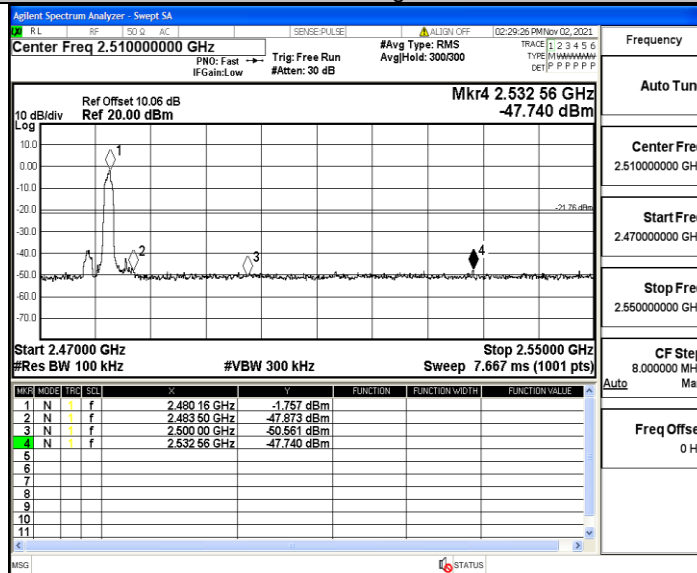
DH5_Ant1_High_Hop_2480



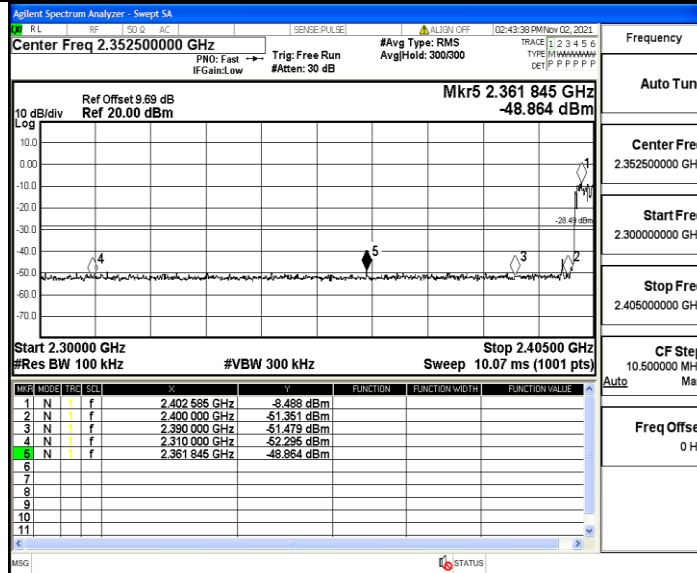
2DH5_Ant1_Low_2402



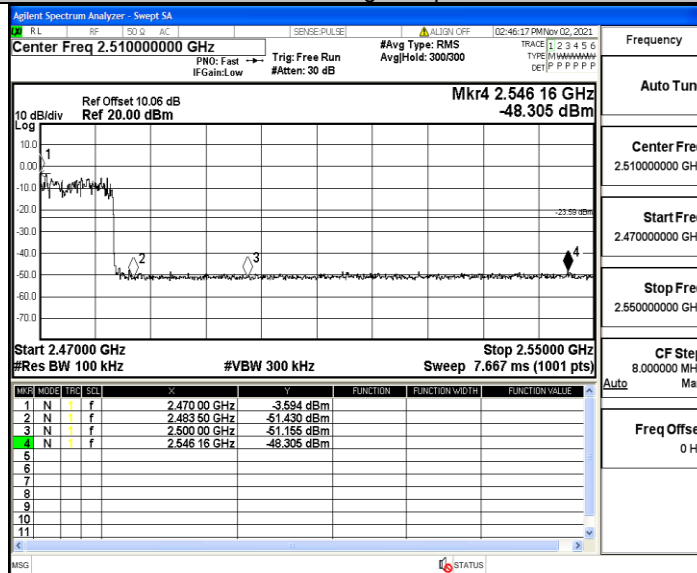
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402

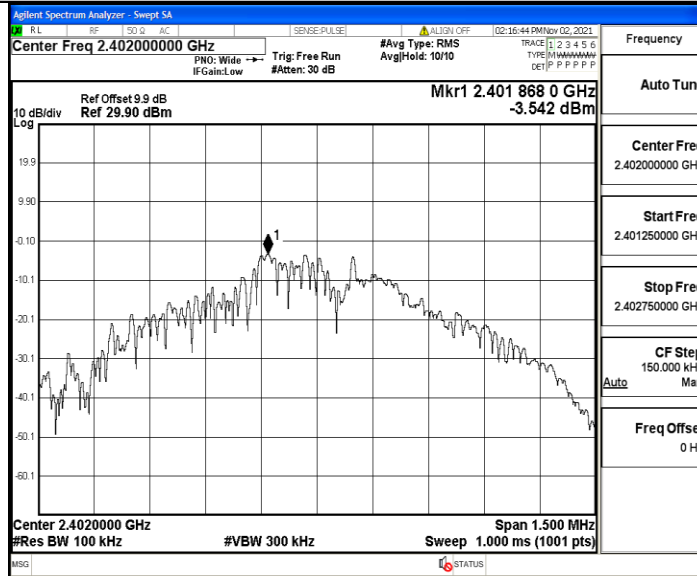


2DH5_Ant1_High_Hop_2480

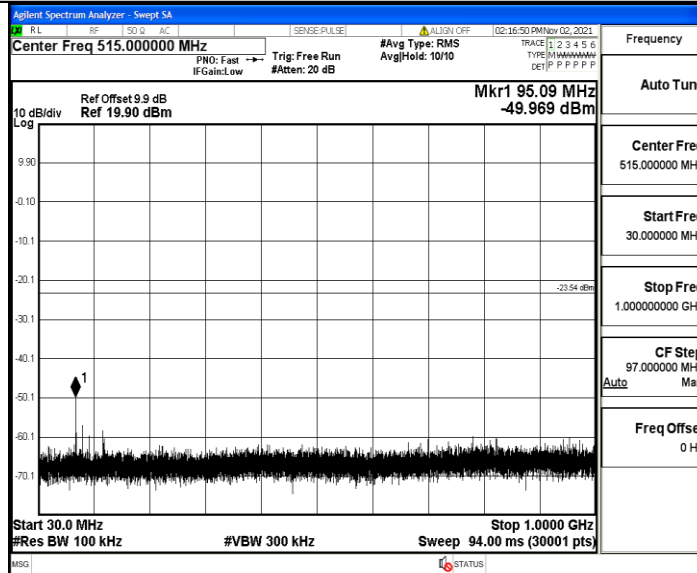


A.7 RF Conducted Spurious Emissions Test Graph

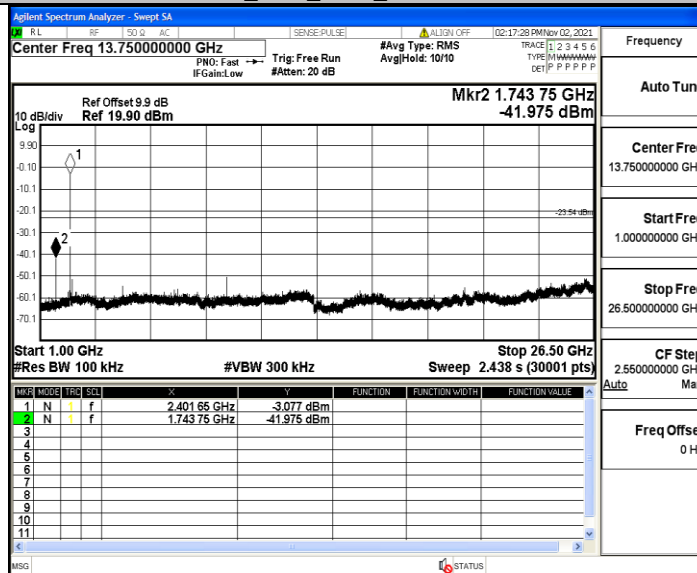
DH5_Ant1_2402_0~Reference



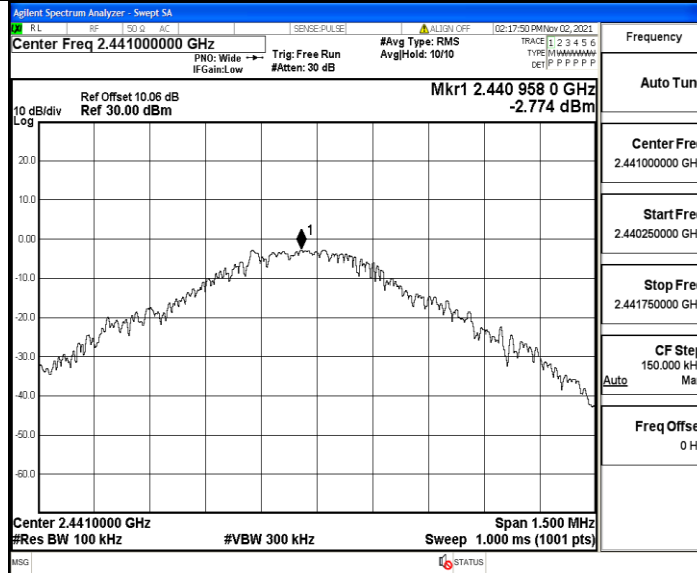
DH5_Ant1_2402_30~1000



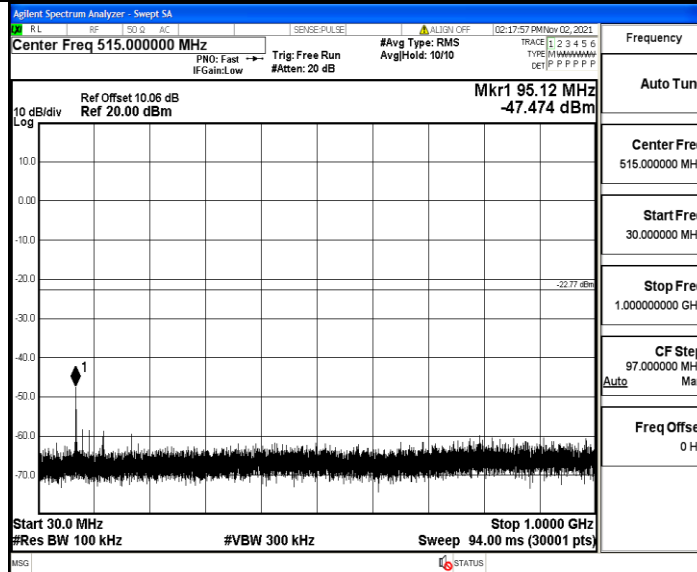
DH5_Ant1_2402_1000~26500



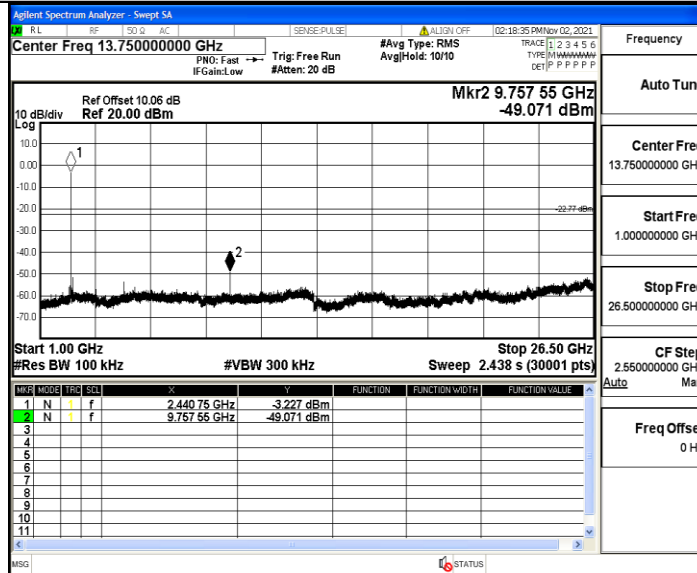
DH5_Ant1_2441_0~Reference



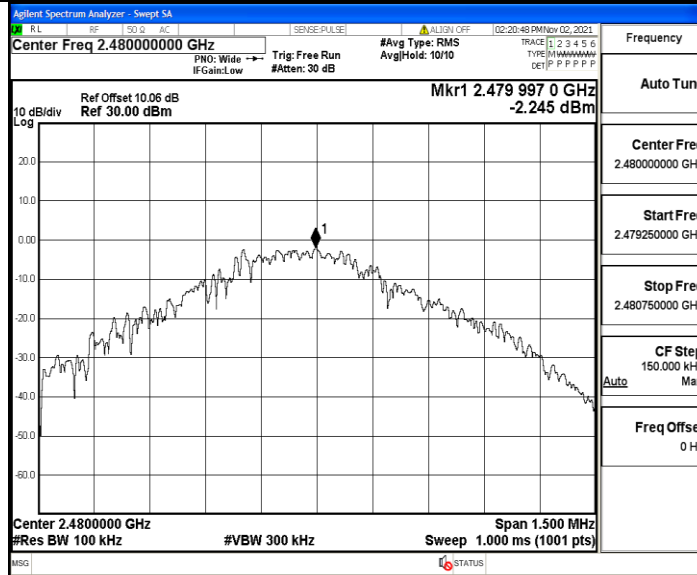
DH5_Ant1_2441_30~1000



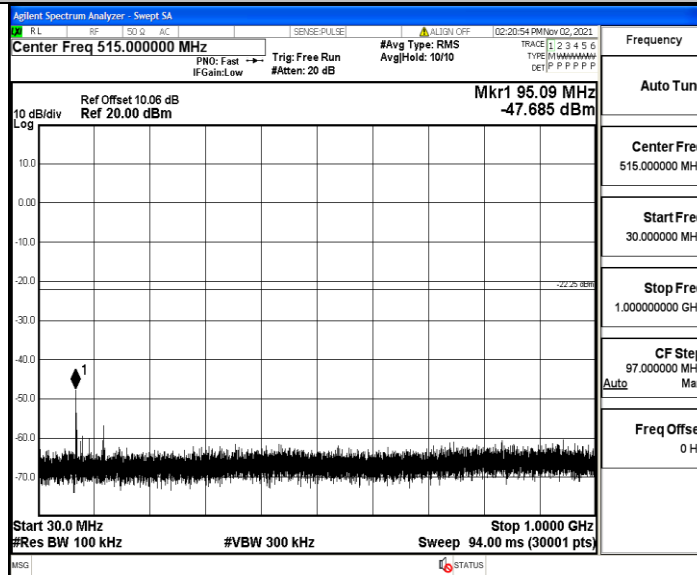
DH5_Ant1_2441_1000~26500



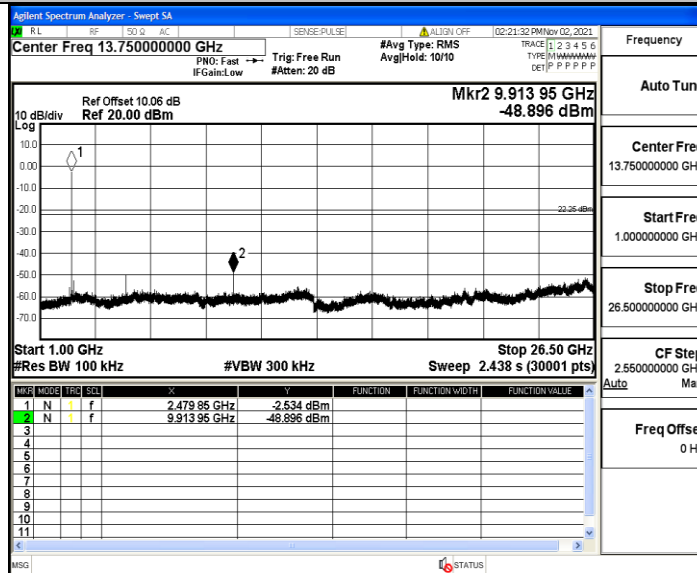
DH5_Ant1_2480_0-Reference



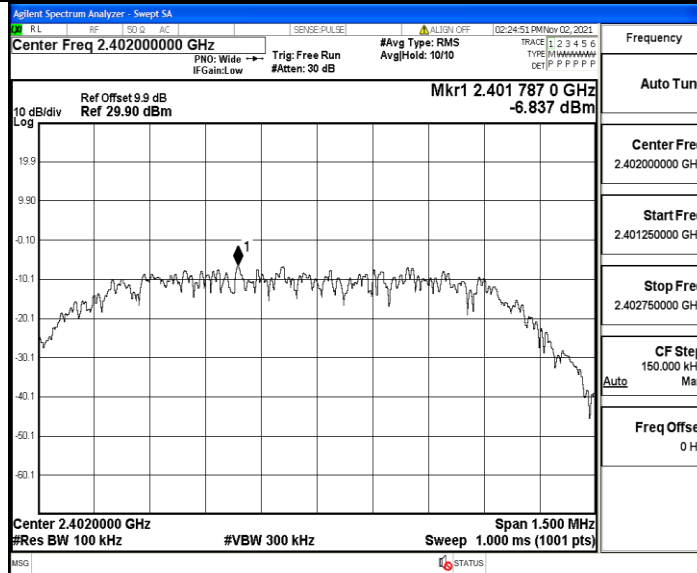
DH5_Ant1_2480_30-1000



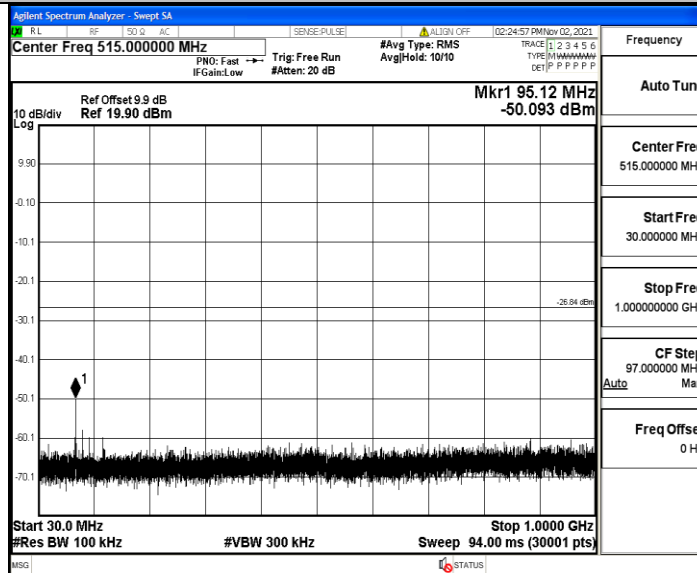
DH5_Ant1_2480_1000-26500



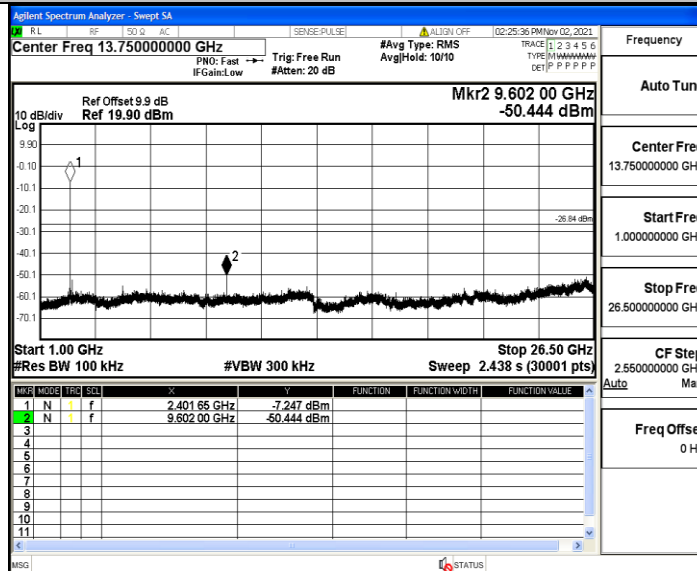
2DH5_Ant1_2402_0~Reference



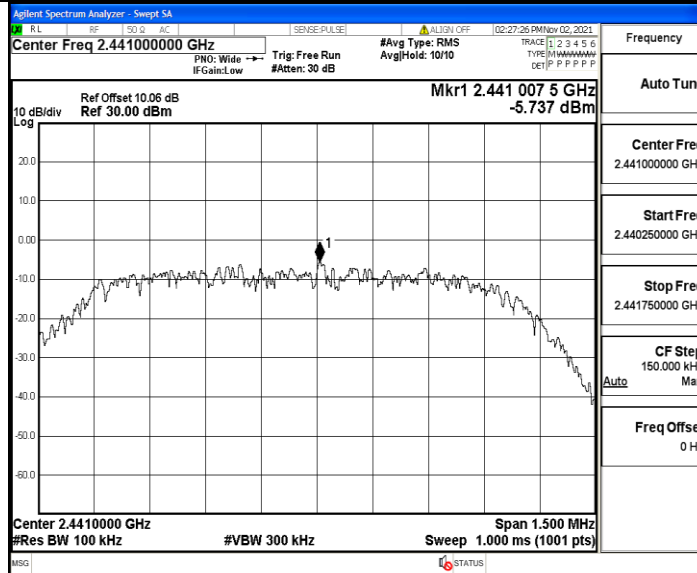
2DH5_Ant1_2402_30~1000



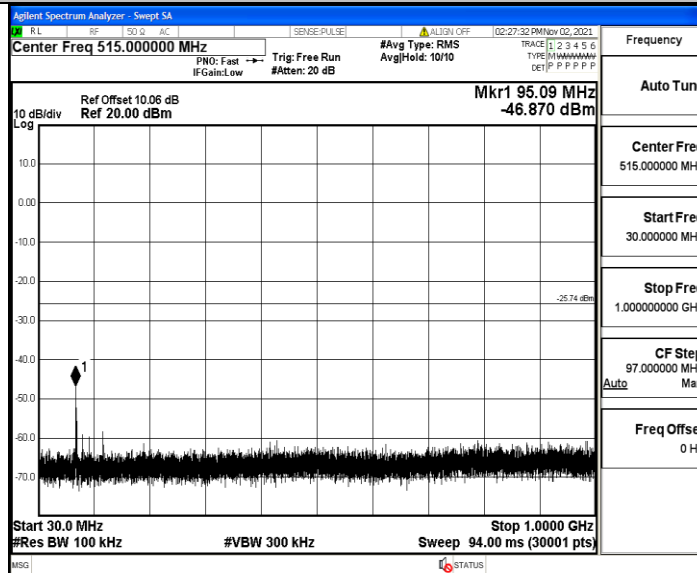
2DH5_Ant1_2402_1000~26500



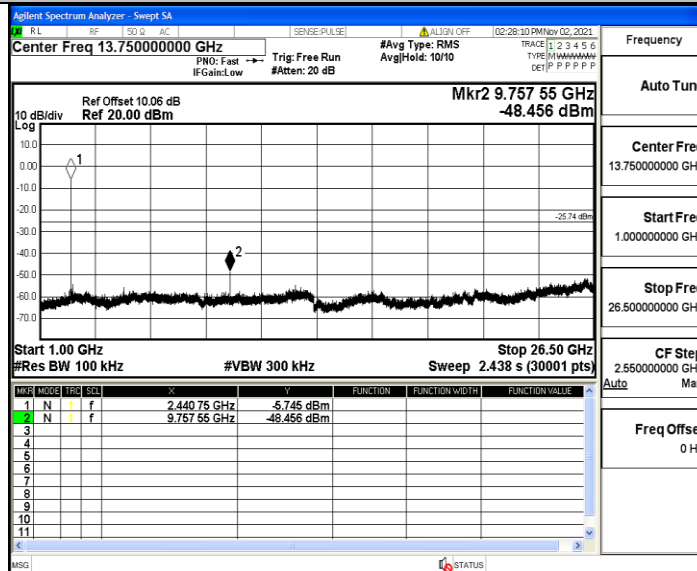
2DH5_Ant1_2441_0~Reference



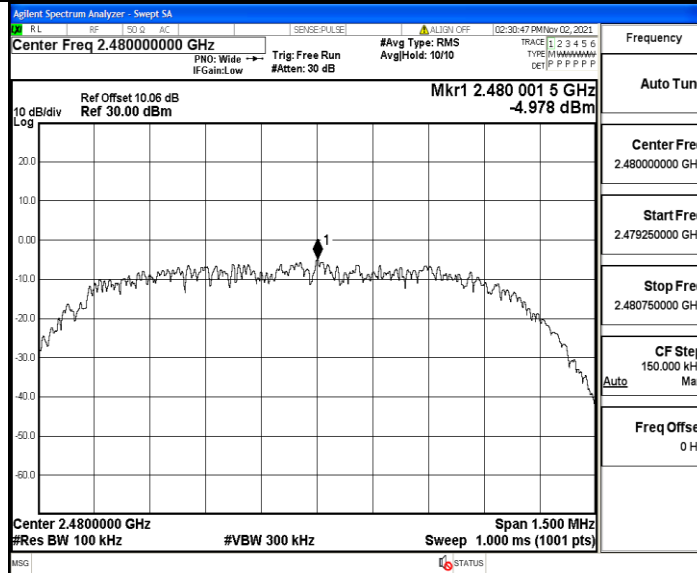
2DH5_Ant1_2441_30~1000



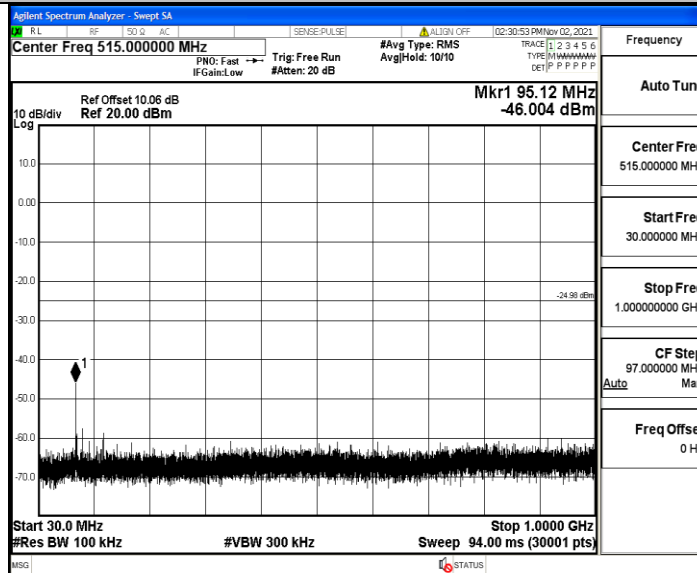
2DH5_Ant1_2441_1000~26500



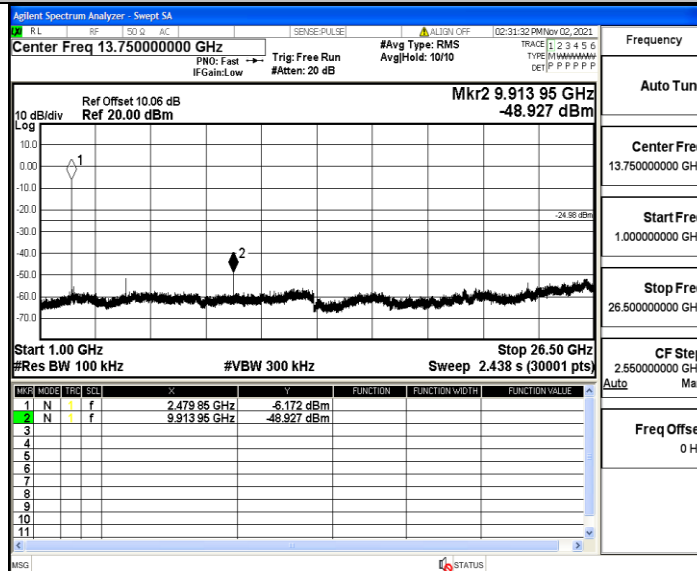
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



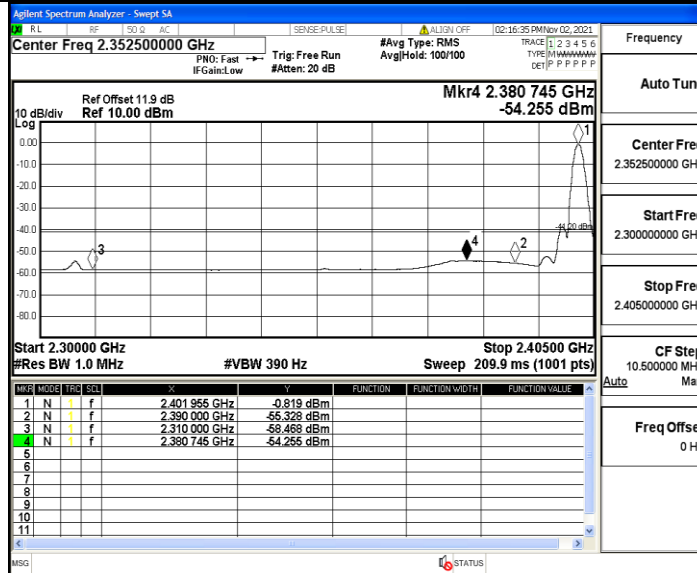
A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-58.47	≤-41.20	PASS
				AV	2380.745	-54.25	≤-41.20	PASS
				AV	2390.000	-55.33	≤-41.20	PASS
				Peak	2310.000	-51.21	≤-21.20	PASS
				Peak	2379.905	-45.48	≤-21.20	PASS
				Peak	2390.000	-48.36	≤-21.20	PASS
		High	2480	AV	2483.500	-44.64	≤-41.20	PASS
				AV	2483.520	-44.63	≤-41.20	PASS
				AV	2500.000	-53.86	≤-41.20	PASS
				Peak	2483.500	-40.77	≤-21.20	PASS
				Peak	2483.520	-40.77	≤-21.20	PASS
				Peak	2500.000	-46.32	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-58.62	≤-41.20	PASS
				AV	2381.900	-54.26	≤-41.20	PASS
				AV	2390.000	-55.3	≤-41.20	PASS
				Peak	2310.000	-52.05	≤-21.20	PASS
				Peak	2389.775	-45.43	≤-21.20	PASS
				Peak	2390.000	-47.62	≤-21.20	PASS
		High	2480	AV	2483.500	-47.13	≤-41.20	PASS
				AV	2483.520	-47.13	≤-41.20	PASS
				AV	2500.000	-53.68	≤-41.20	PASS
				Peak	2483.500	-40.22	≤-21.20	PASS
				Peak	2483.520	-40.22	≤-21.20	PASS
				Peak	2500.000	-44.64	≤-21.20	PASS

Note:

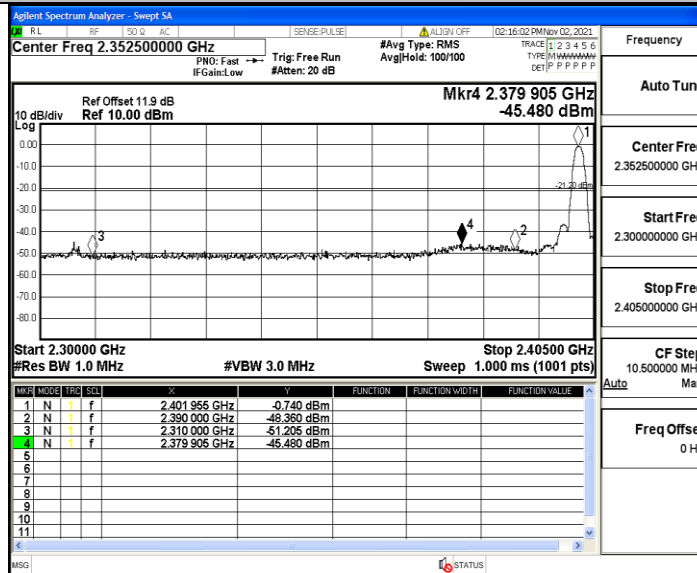
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

DH5_Ant1_Low_2402_AV



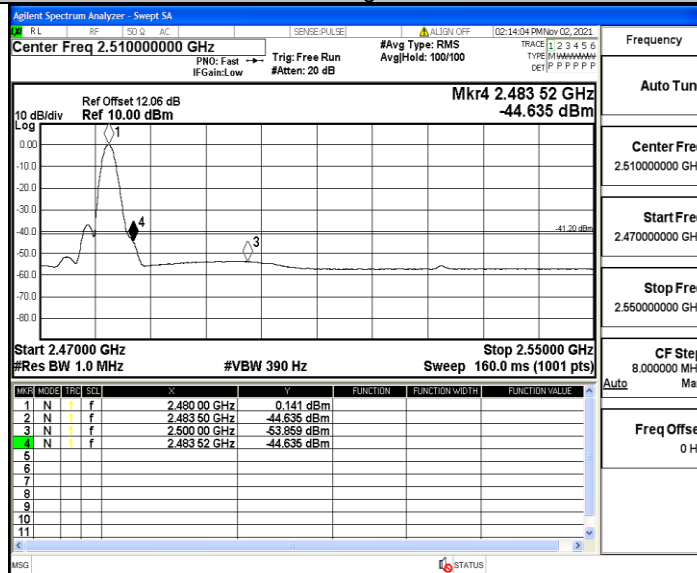
Frequency	Auto Tune
Center Freq	2.352500000 GHz
Start Freq	2.300000000 GHz
Stop Freq	2.405000000 GHz
CF Step	10.500000 MHz
Auto	Man
Freq Offset	0 Hz

DH5_Ant1_Low_2402_Peak



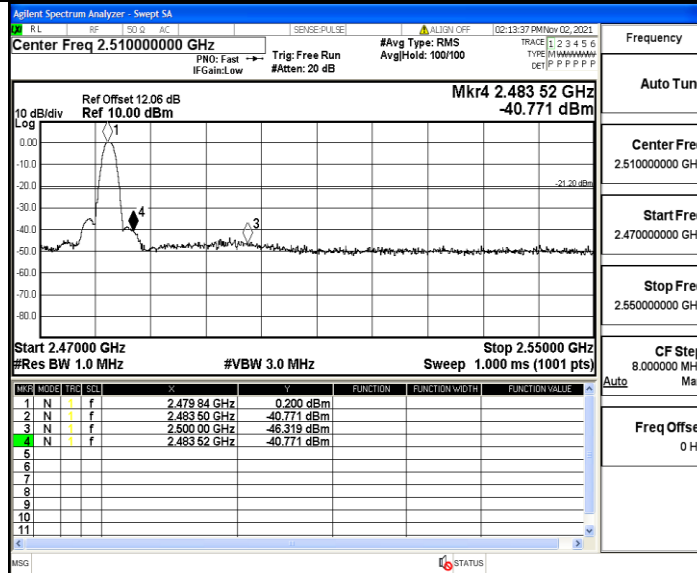
Frequency	Auto Tune
Center Freq	2.352500000 GHz
Start Freq	2.300000000 GHz
Stop Freq	2.405000000 GHz
CF Step	10.500000 MHz
Auto	Man
Freq Offset	0 Hz

DH5_Ant1_High_2480_AV



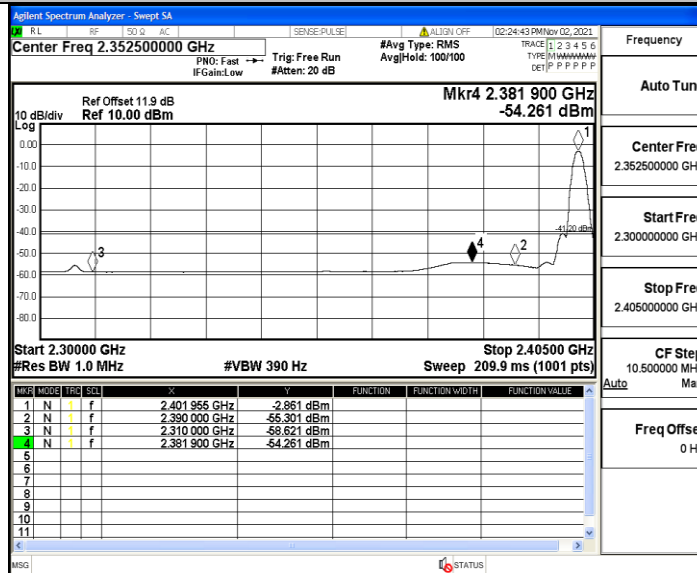
Frequency	Auto Tune
Center Freq	2.510000000 GHz
Start Freq	2.470000000 GHz
Stop Freq	2.550000000 GHz
CF Step	8.000000 MHz
Auto	Man
Freq Offset	0 Hz

DH5_Ant1_High_2480_Peak



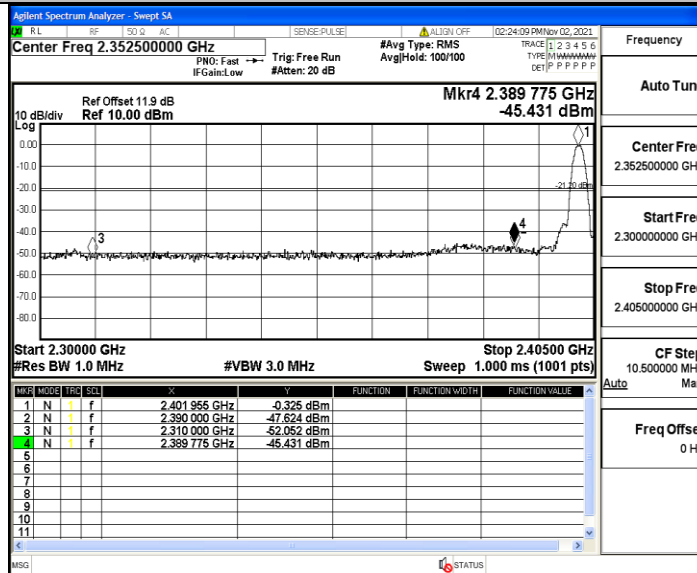
Frequency
Auto Tune
Center Freq
2.510000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.550000000 GHz
CF Step
8.000000 MHz
Freq Offset
0 Hz

2DH5_Ant1_Low_2402_AV



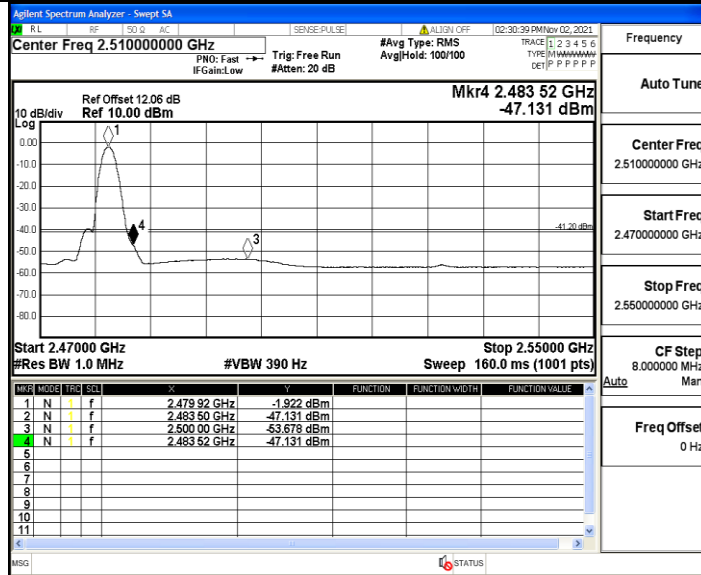
Frequency
Auto Tune
Center Freq
2.352500000 GHz
Start Freq
2.300000000 GHz
Stop Freq
2.405000000 GHz
CF Step
10.500000 MHz
Freq Offset
0 Hz

2DH5_Ant1_Low_2402_Peak



Frequency
Auto Tune
Center Freq
2.352500000 GHz
Start Freq
2.300000000 GHz
Stop Freq
2.405000000 GHz
CF Step
10.500000 MHz
Freq Offset
0 Hz

2DH5_Ant1_High_2480_AV



2DH5_Ant1_High_2480_Peak

