



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bazooka Speaker

Test Model: ARBT22

Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Mark Chen
Supervised by:	Li Huan



A.1 20dB Emission Bandwidth

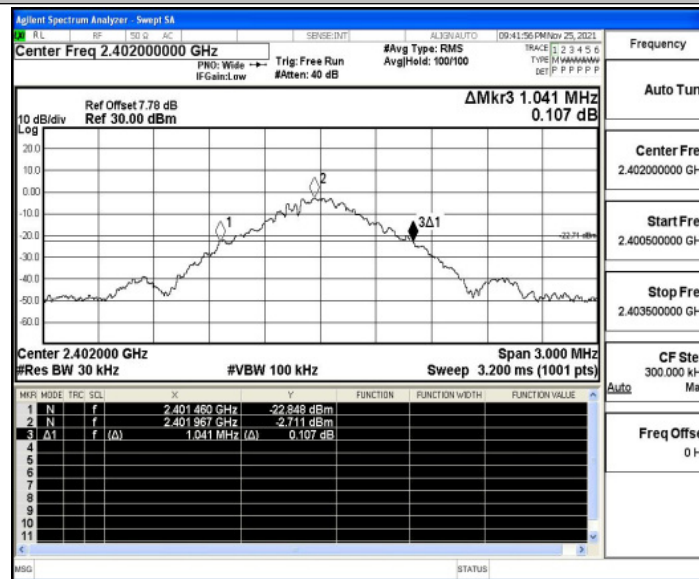
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.041	2401.460	2402.501	---	PASS
		2441	1.038	2440.463	2441.501	---	PASS
		2480	1.035	2479.463	2480.498	---	PASS
2DH5	Ant1	2402	1.320	2401.337	2402.657	---	PASS
		2441	1.323	2440.337	2441.660	---	PASS
		2480	1.329	2479.331	2480.660	---	PASS

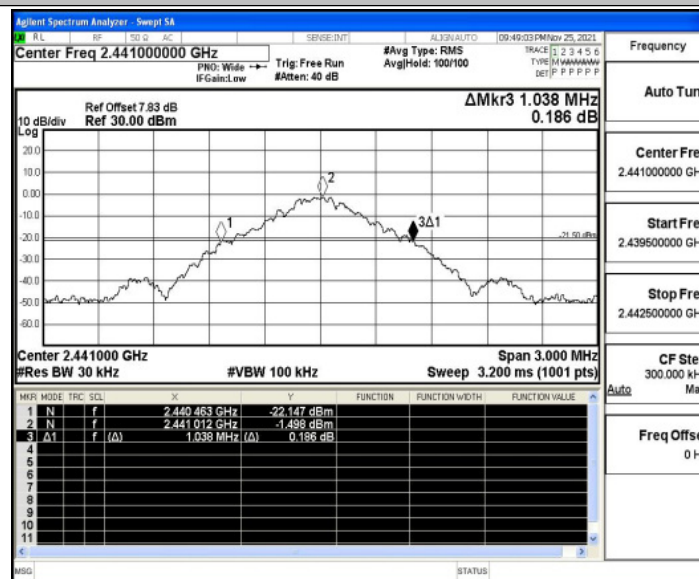


Test Graphs

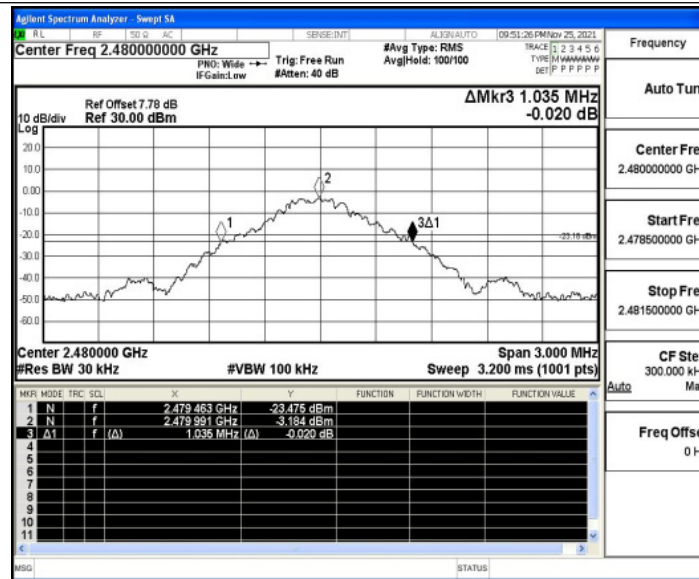
DH5_Ant1_2402



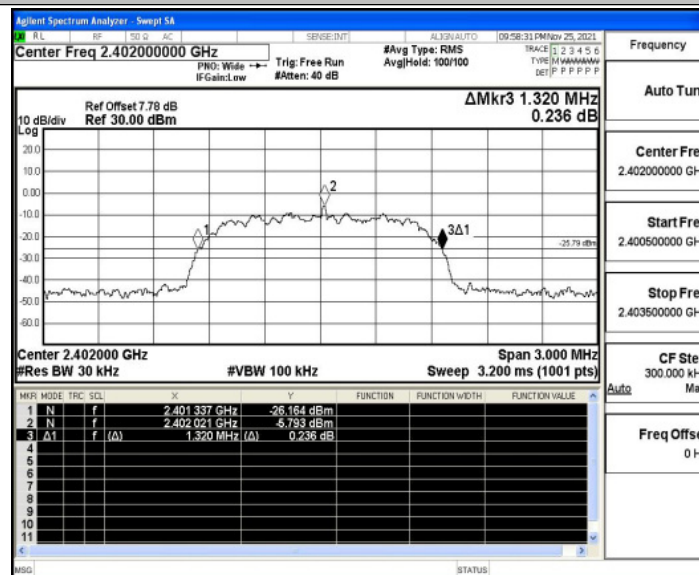
DH5_Ant1_2441



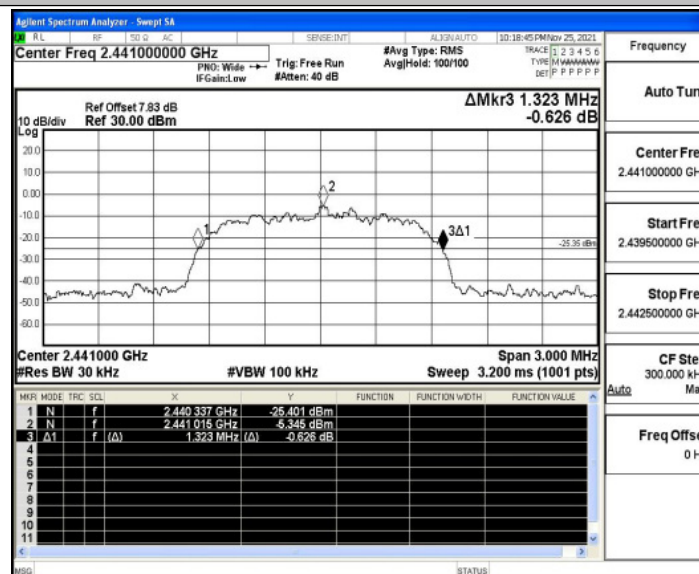
DH5_Ant1_2480



2DH5_Ant1_2402

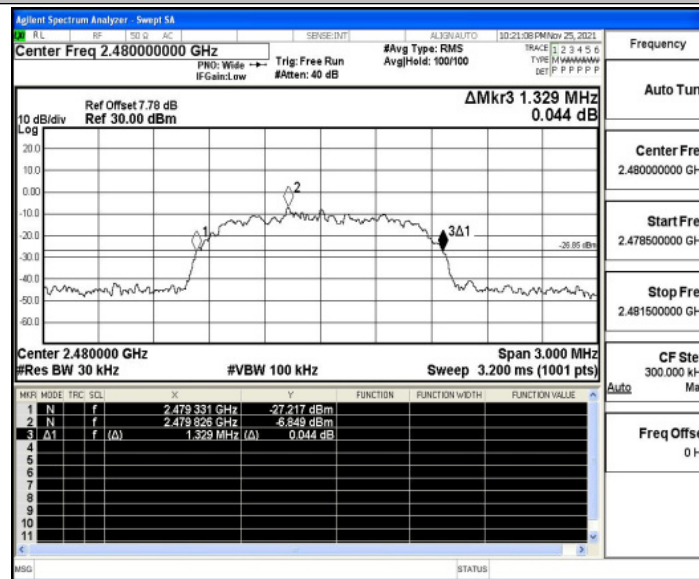


2DH5_Ant1_2441





2DH5_Ant1_2480





A.2 Maximum Peak conducted output power

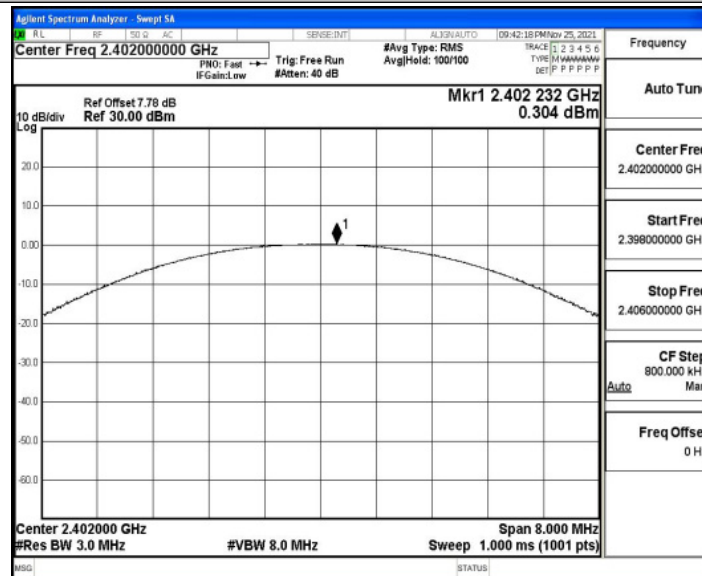
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.3	≤ 20.97	PASS
		2441	1.46	≤ 20.97	PASS
		2480	0.05	≤ 20.97	PASS
2DH5	Ant1	2402	-0.56	≤ 20.97	PASS
		2441	0.39	≤ 20.97	PASS
		2480	-0.96	≤ 20.97	PASS

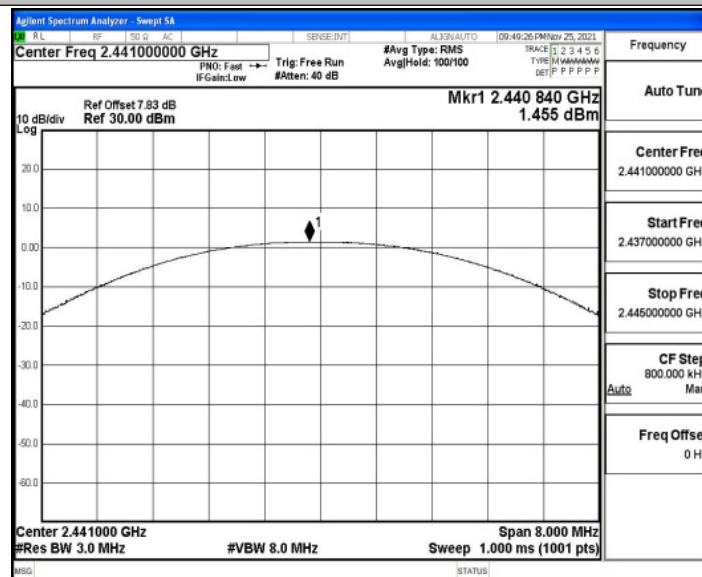


Test Graphs

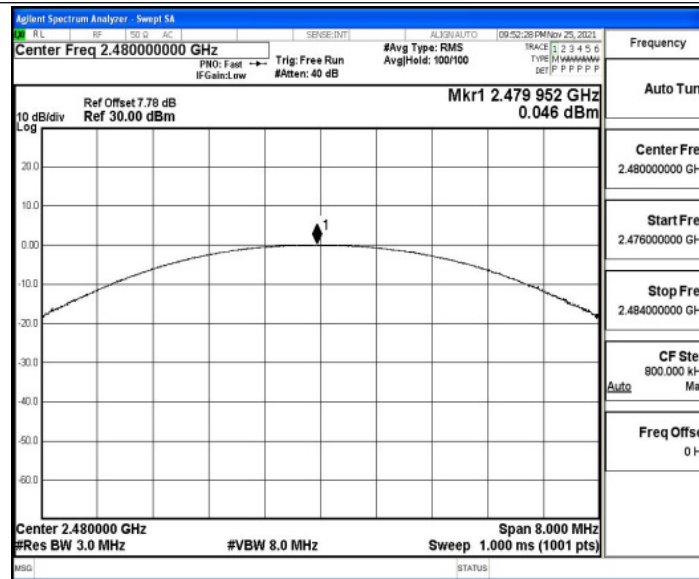
DH5_Ant1_2402



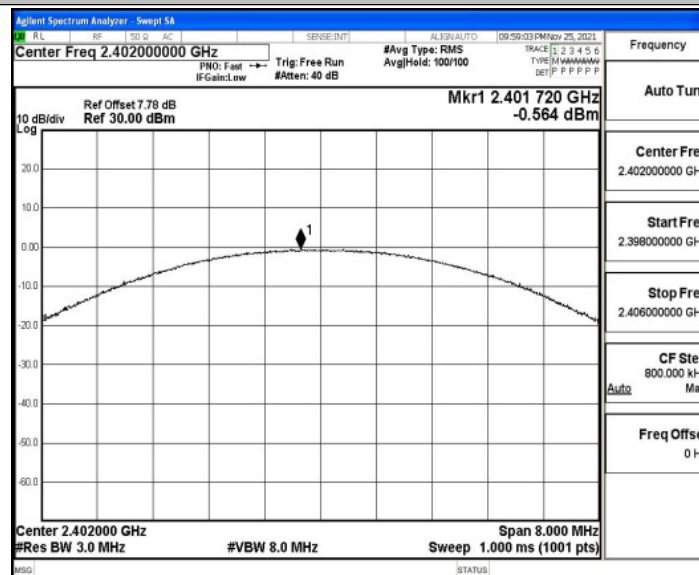
DH5_Ant1_2441



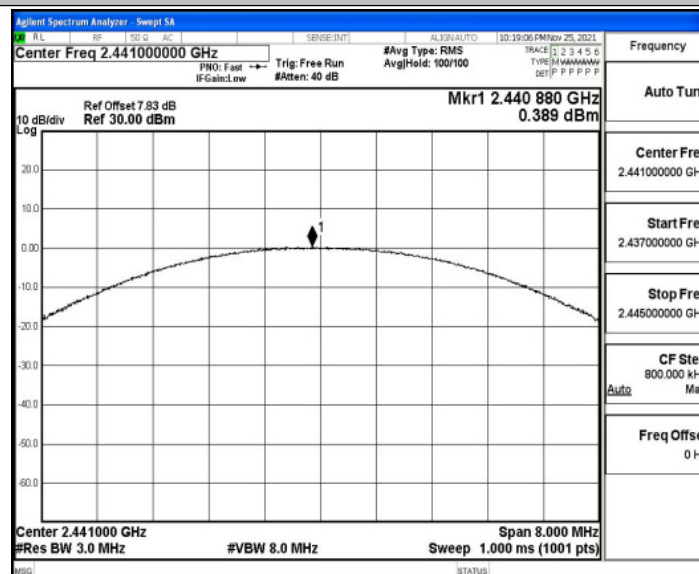
DH5_Ant1_2480



2DH5_Ant1_2402

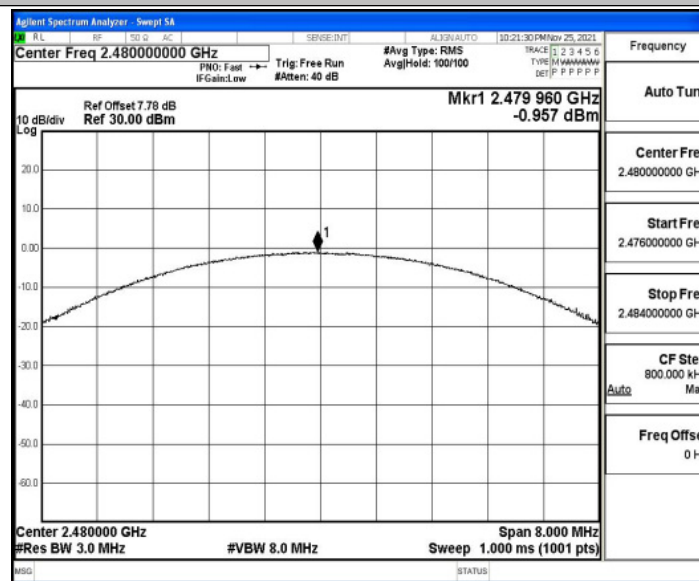


2DH5_Ant1_2441





2DH5_Ant1_2480



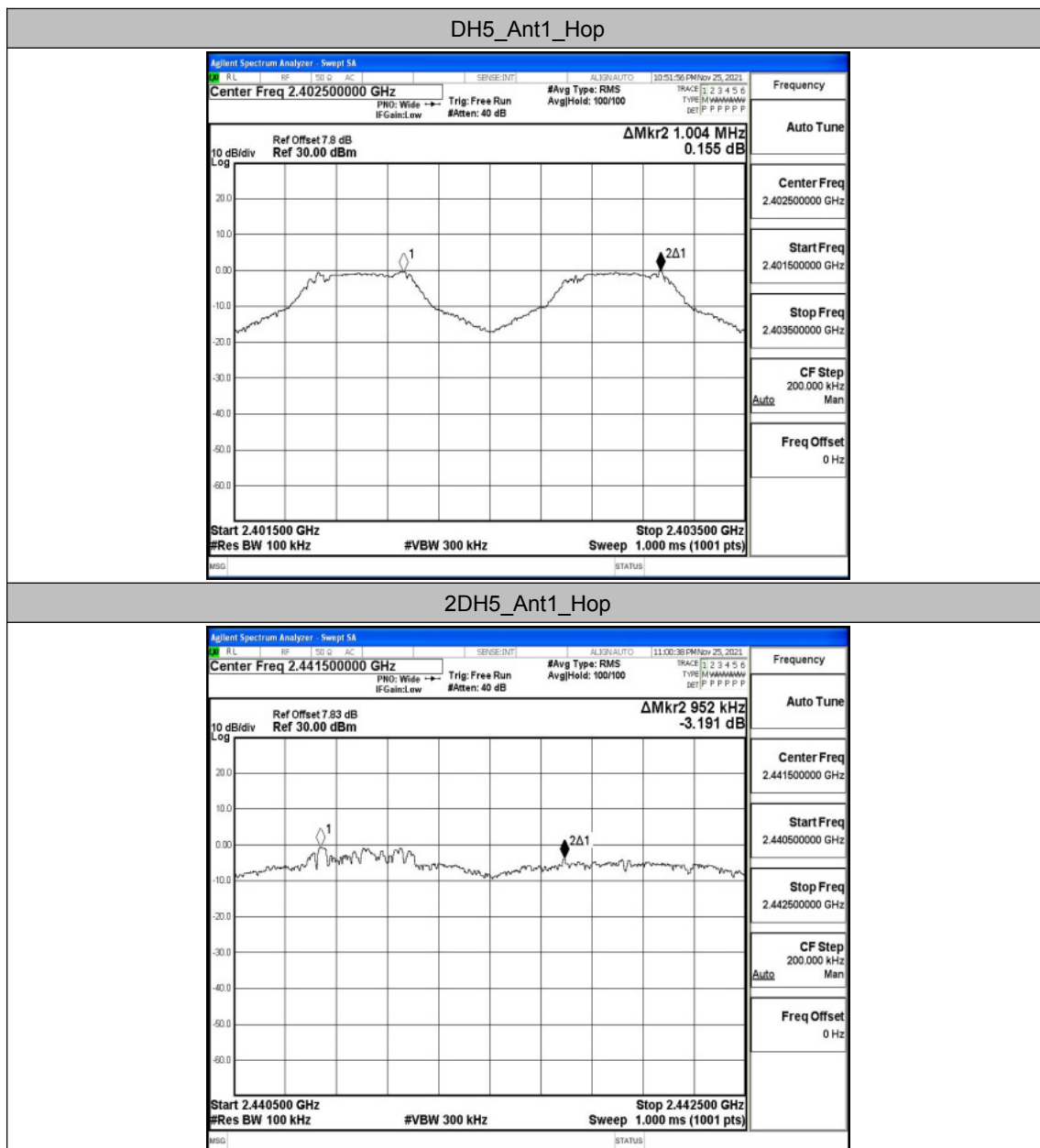


A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥ 0.694	PASS
2DH5	Ant1	Hop	0.952	≥ 0.886	PASS

Test Graphs



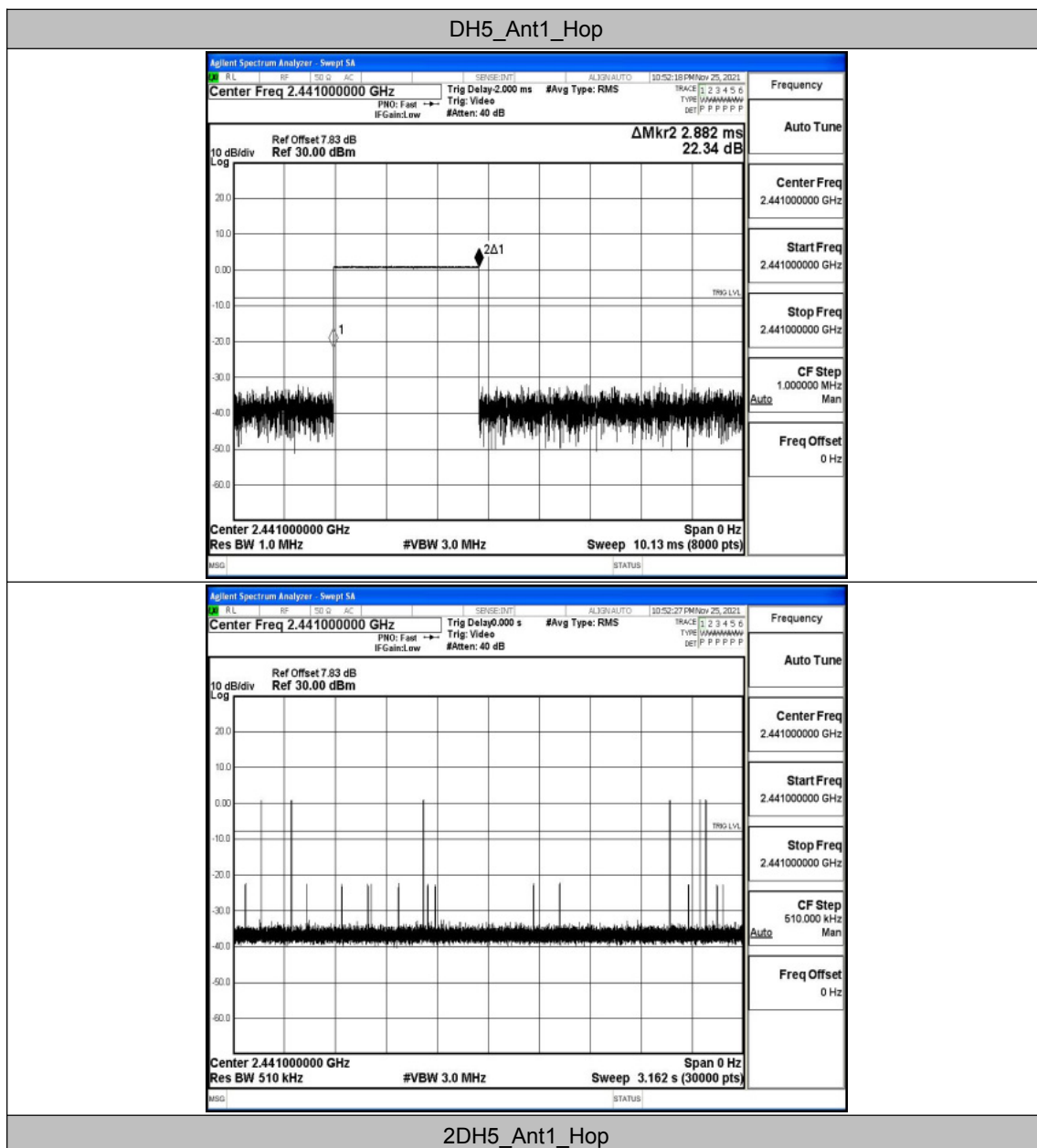


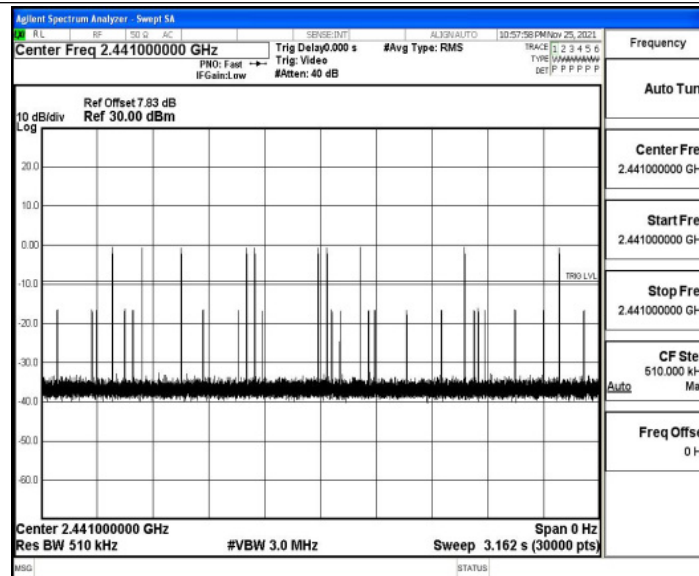
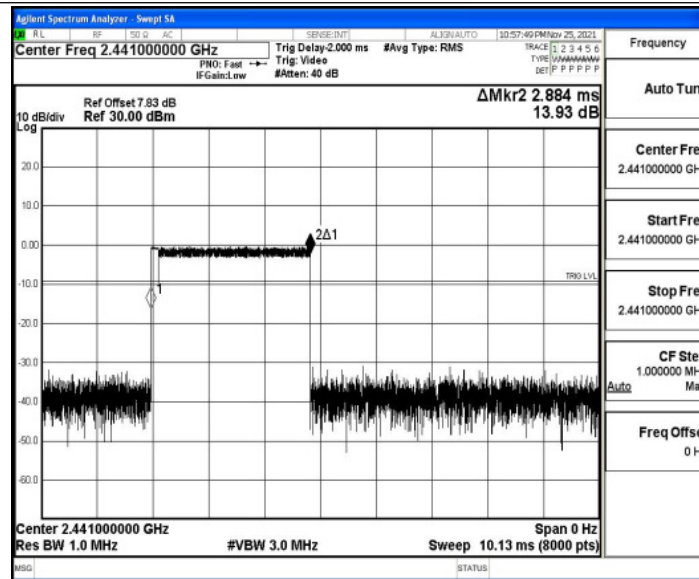
A.4 Time of occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	70	0.202	≤0.4	PASS
2DH5	Ant1	Hop	2.88	110	0.317	≤0.4	PASS

Test Graphs





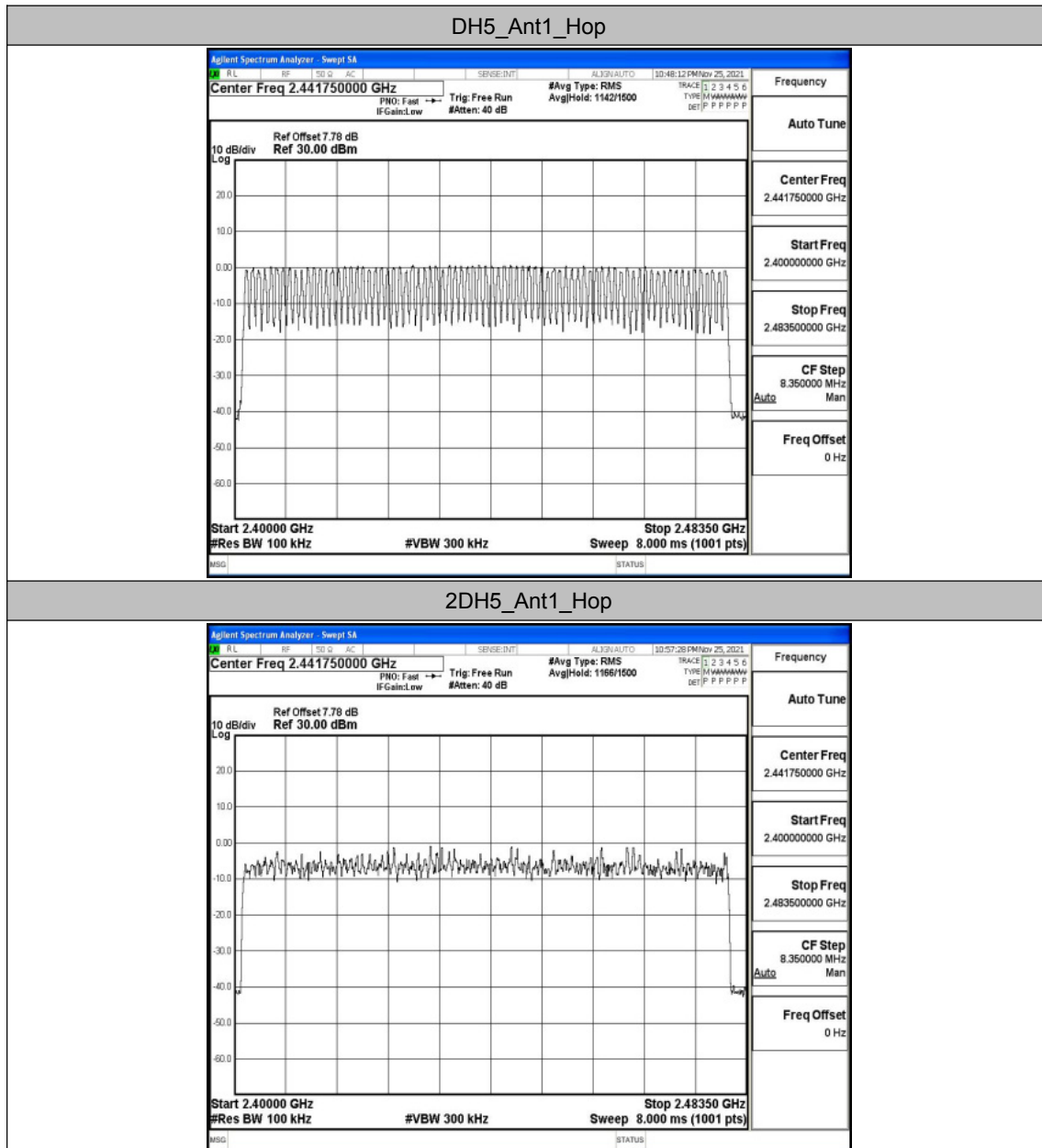


A.5 Number of hopping channels

Test Result

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

Test Graphs





A.6 Band edge measurements

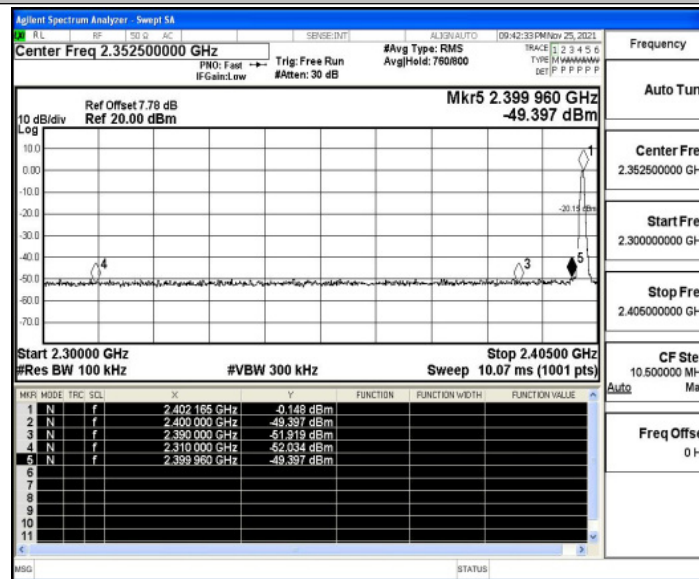
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.15	-49.4	≤ -20.15	PASS
		High	2480	-0.43	-48.57	≤ -20.43	PASS
		Low	Hop_2402	-0.40	-49.55	≤ -20.4	PASS
		High	Hop_2480	-0.49	-48.13	≤ -20.49	PASS
2DH5	Ant1	Low	2402	-1.86	-49.19	≤ -21.86	PASS
		High	2480	-2.11	-48.93	≤ -22.11	PASS
		Low	Hop_2402	-5.83	-49.62	≤ -25.83	PASS
		High	Hop_2480	-1.73	-47.44	≤ -21.73	PASS

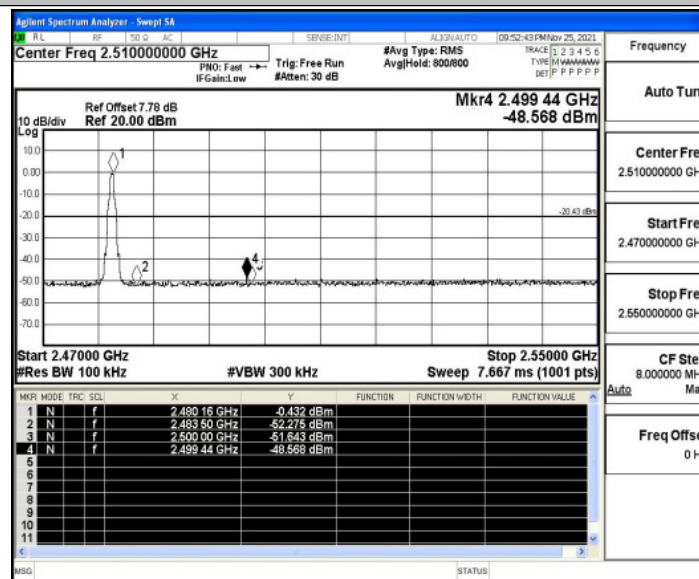


Test Graphs

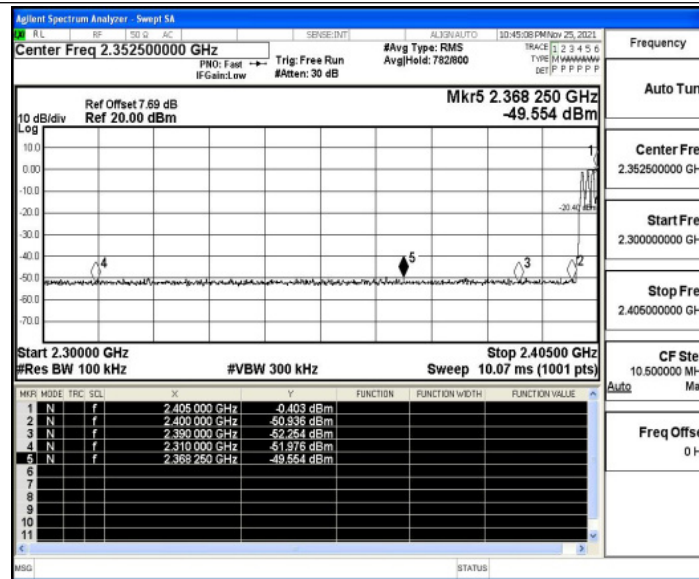
DH5_Ant1_Low_2402



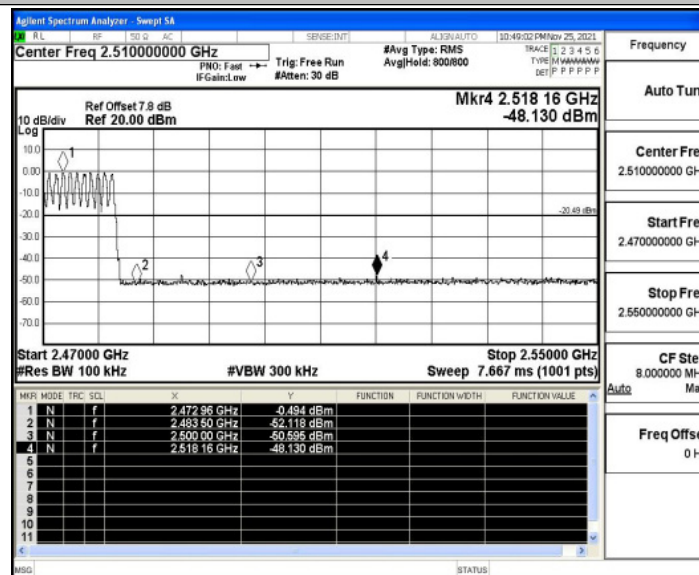
DH5_Ant1_High_2480



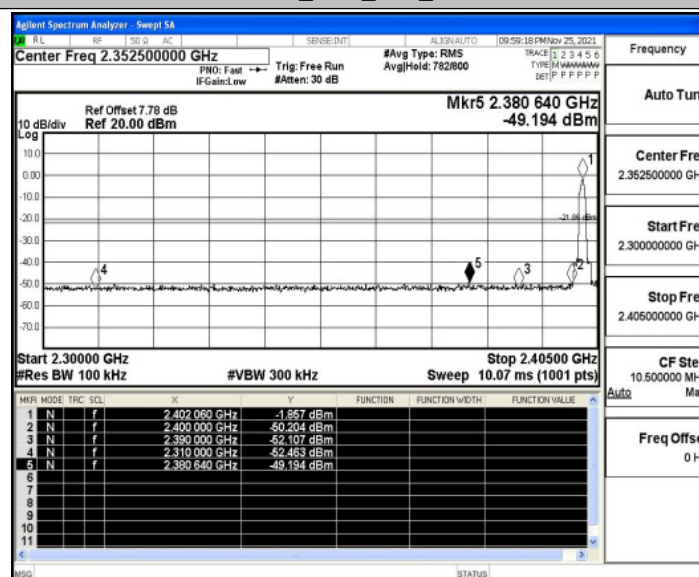
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

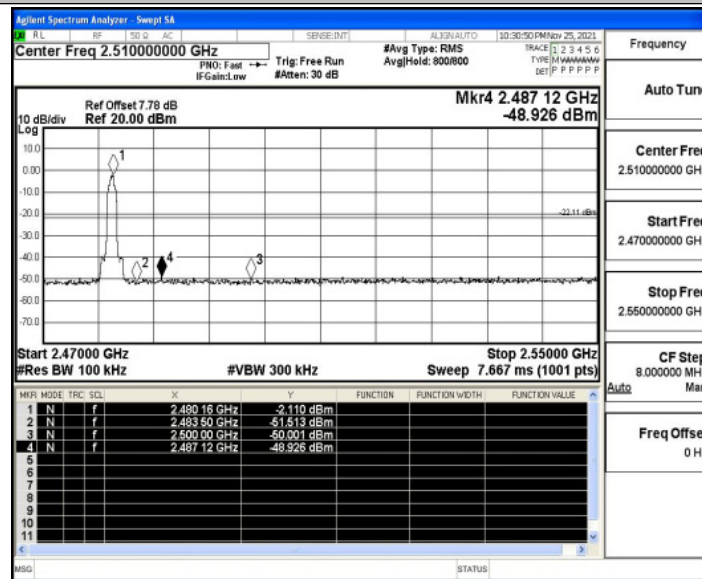


2DH5_Ant1_Low_2402

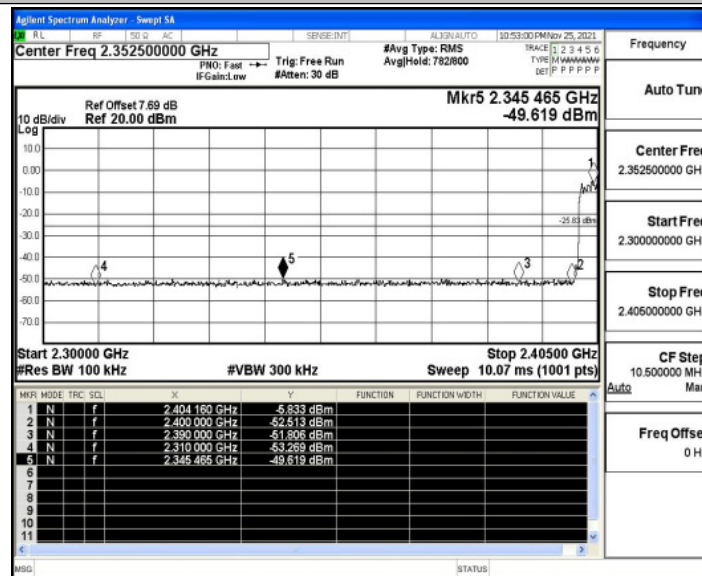




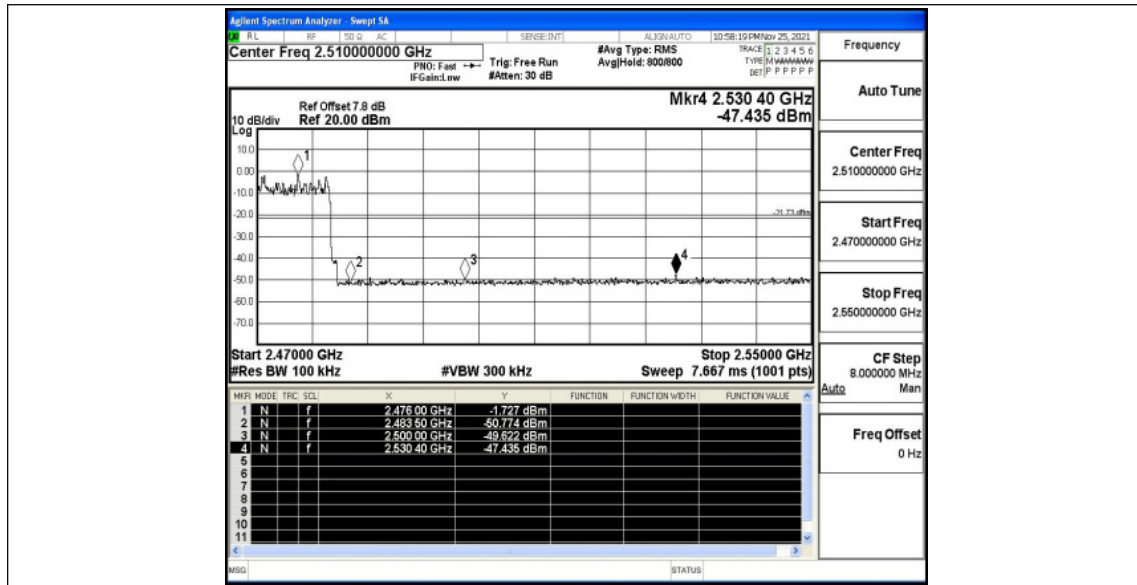
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

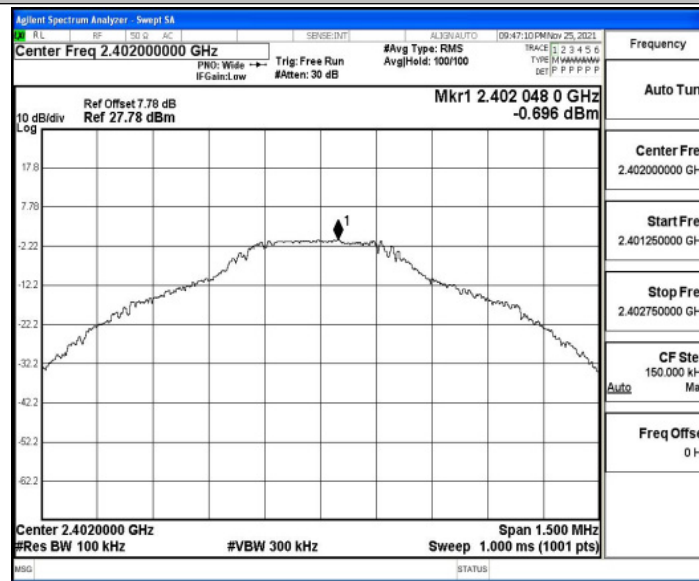
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-60.55	≤ -20.7	PASS
			1000~26500	-0.70	-47.01	≤ -20.7	PASS
		2441	Reference	0.81	0.81	---	PASS
			30~1000	0.81	-61.01	≤ -19.19	PASS
			1000~26500	0.81	-47.14	≤ -19.19	PASS
		2480	Reference	-0.56	-0.56	---	PASS
			30~1000	-0.56	-62.02	≤ -20.56	PASS
			1000~26500	-0.56	-47.05	≤ -20.56	PASS
2DH5	Ant1	2402	Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-61.51	≤ -21.64	PASS
			1000~26500	-1.64	-47.57	≤ -21.64	PASS
		2441	Reference	-1.82	-1.82	---	PASS
			30~1000	-1.82	-61.53	≤ -21.82	PASS
			1000~26500	-1.82	-46.66	≤ -21.82	PASS
		2480	Reference	-2.78	-2.78	---	PASS
			30~1000	-2.78	-60.64	≤ -22.78	PASS
			1000~26500	-2.78	-47.17	≤ -22.78	PASS

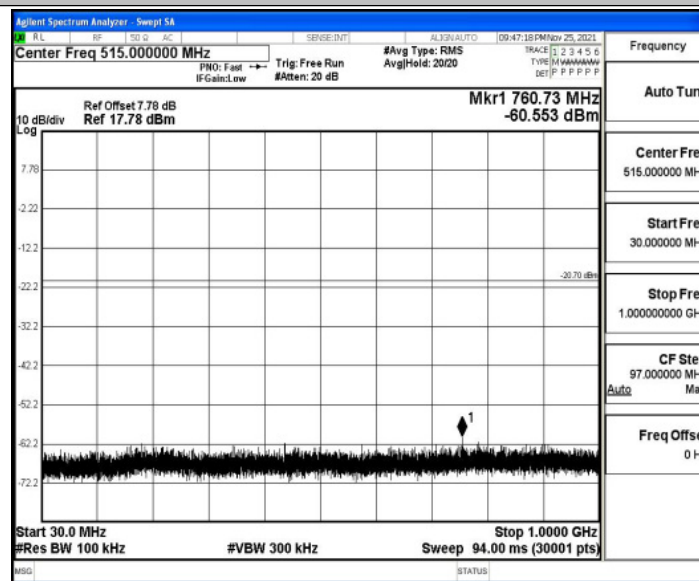


Test Graphs

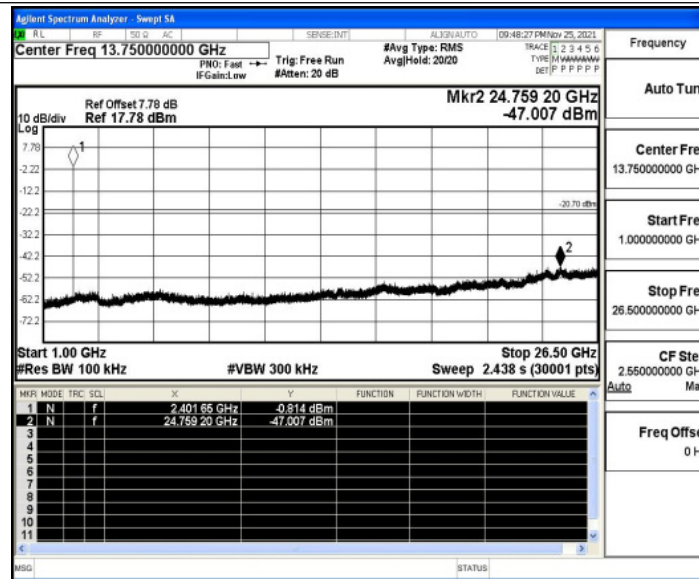
DH5_Ant1_2402_0~Reference



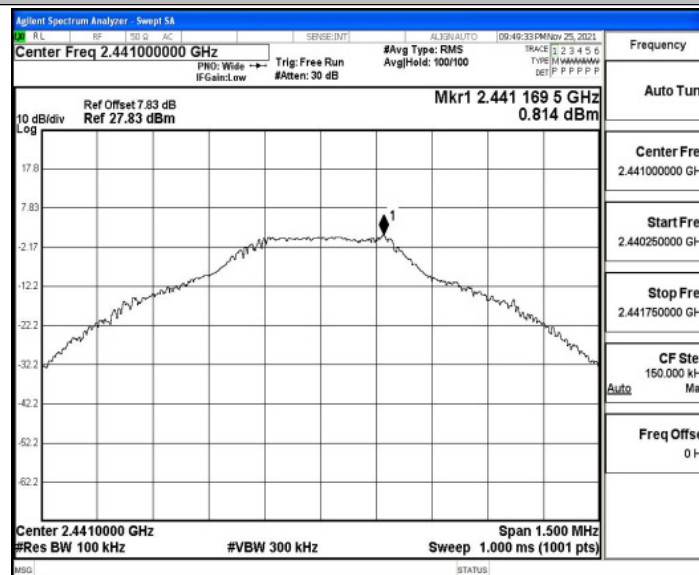
DH5_Ant1_2402_30~1000



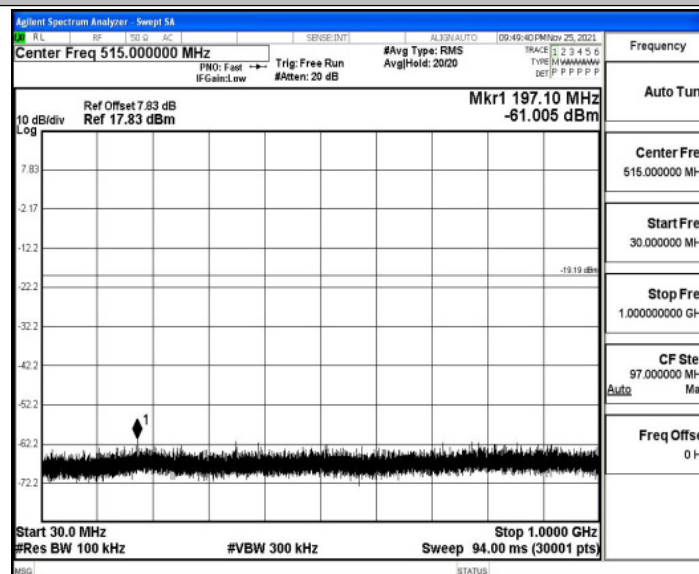
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

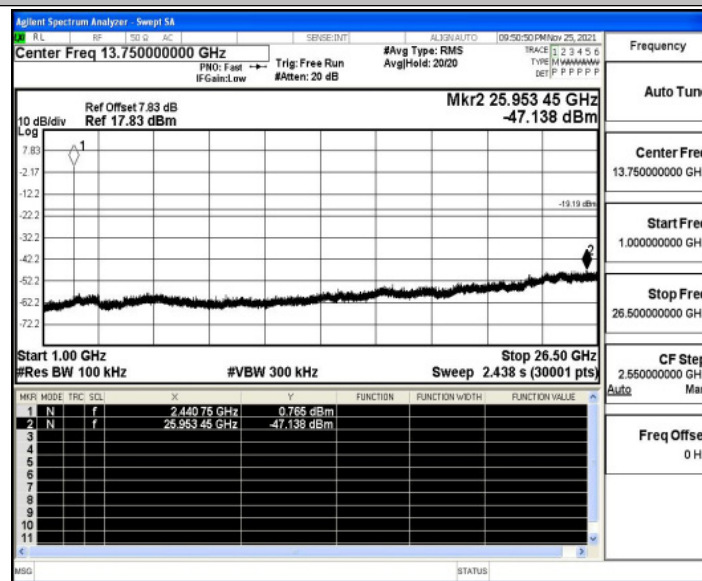


DH5_Ant1_2441_30~1000

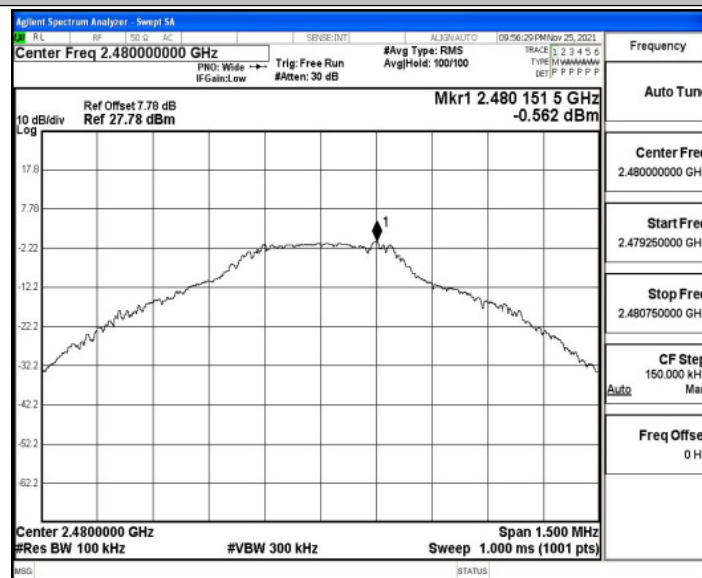




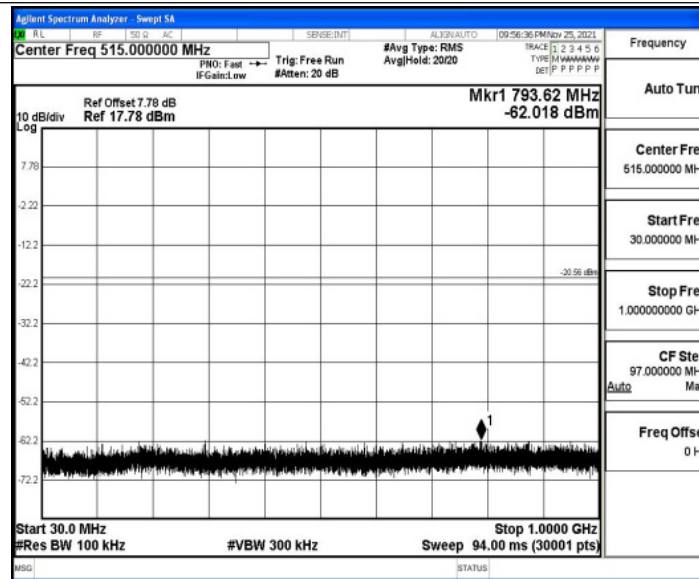
DH5_Ant1_2441_1000~26500



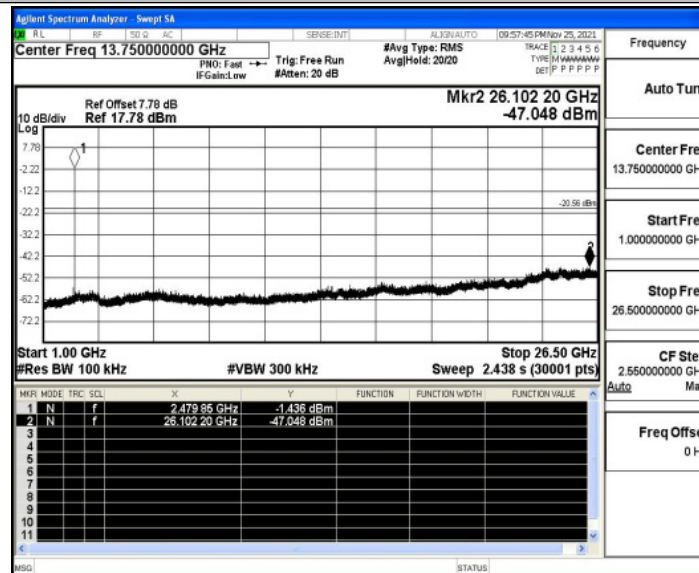
DH5_Ant1_2480_0~Reference



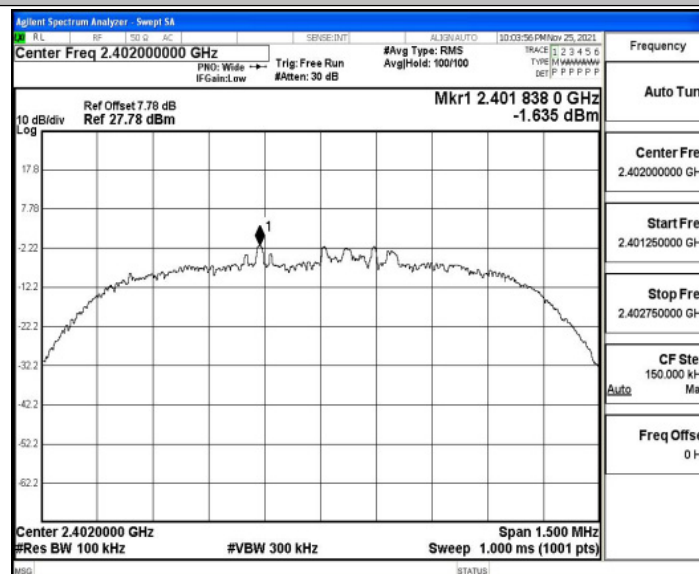
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

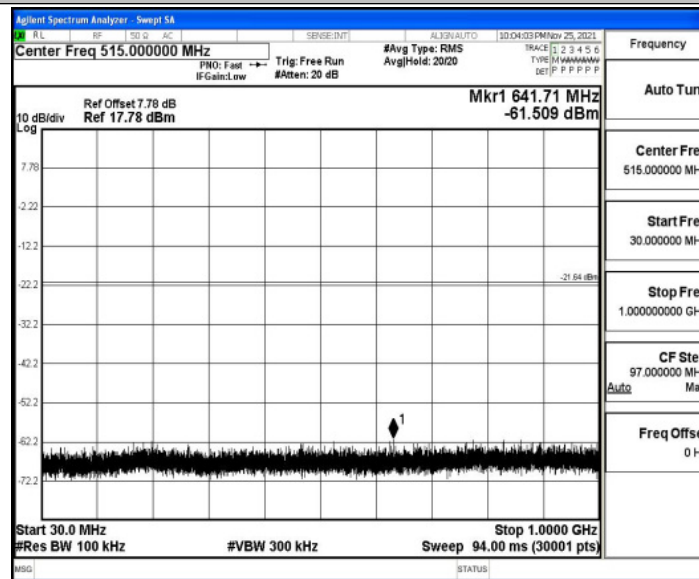


2DH5_Ant1_2402_0~Reference

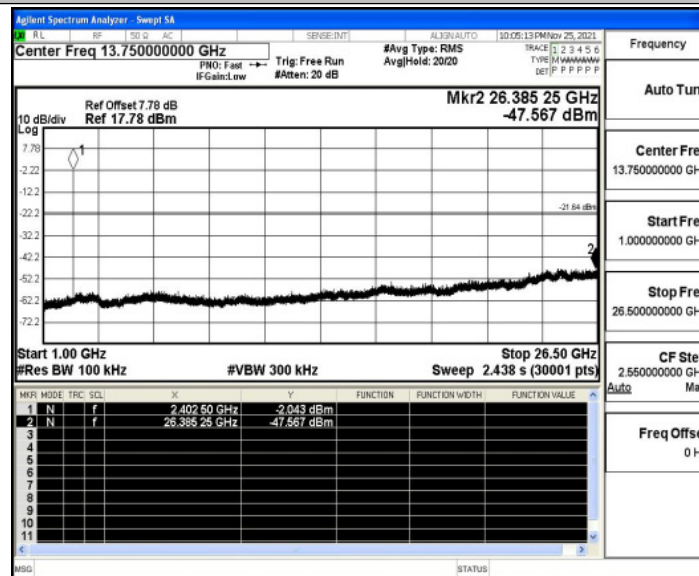




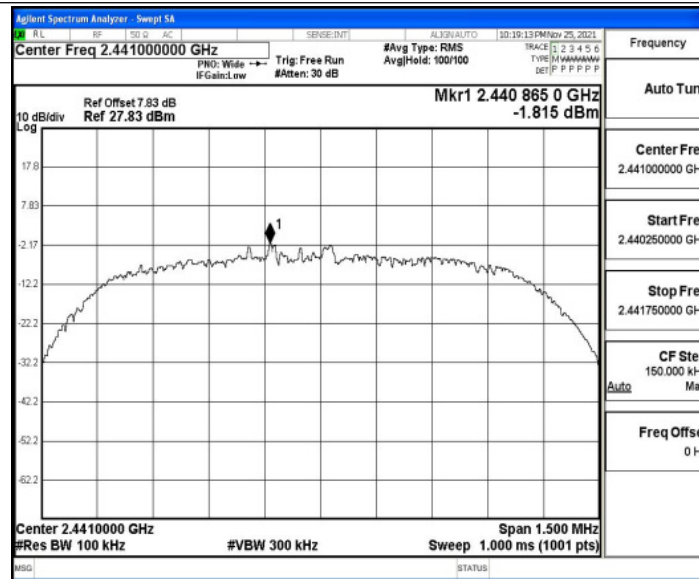
2DH5_Ant1_2402_30~1000



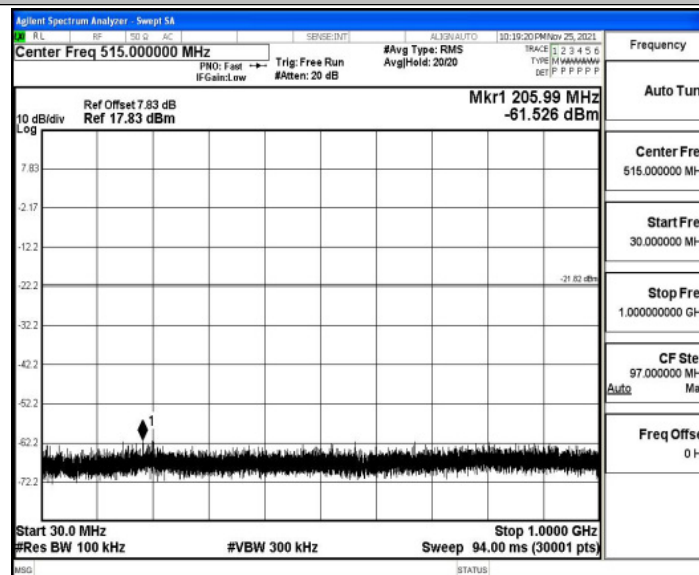
2DH5_Ant1_2402_1000~26500



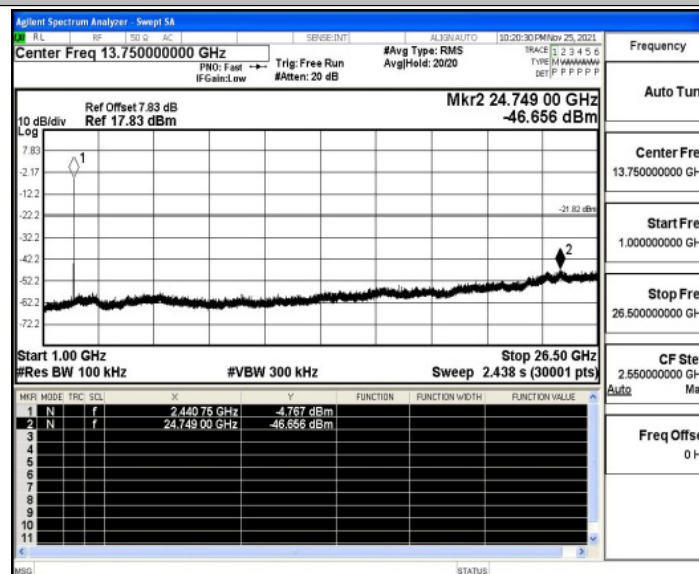
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

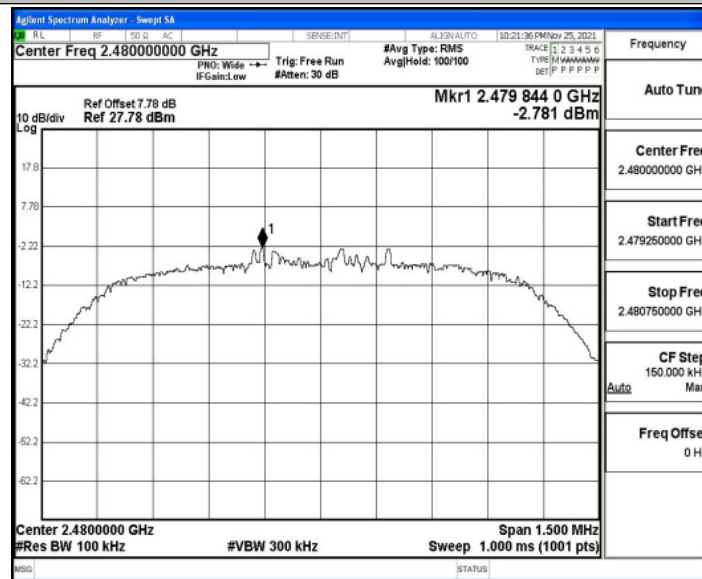


2DH5_Ant1_2441_1000~26500

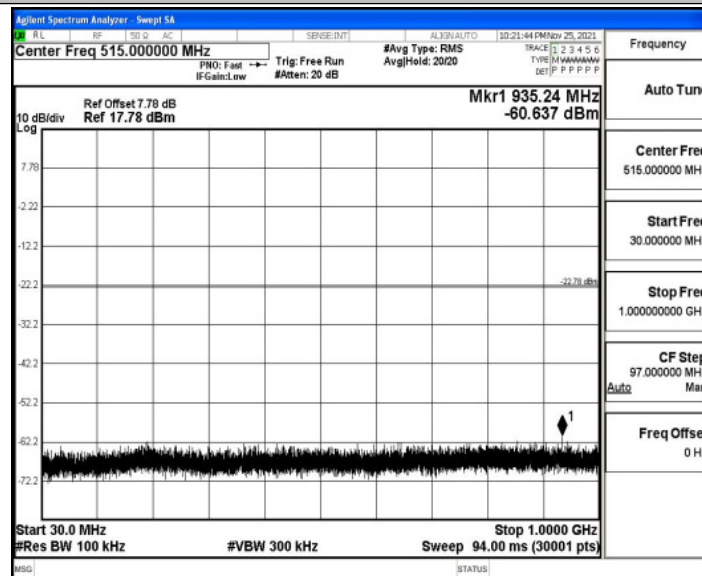




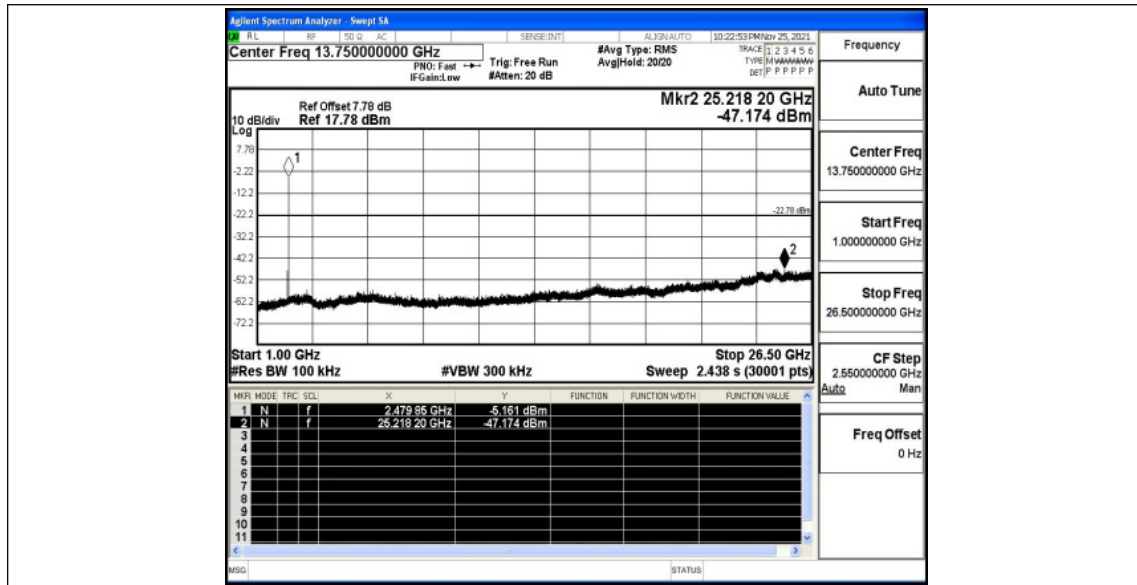
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500





A.8 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	-49	≤-41.20	46.20	≤54	PASS
				AV	2389.985	-48.48	≤-41.20	46.72	≤54	PASS
				AV	2390.000	-48.48	≤-41.20	46.72	≤54	PASS
				Peak	2310.000	-40.74	≤-21.20	54.46	≤74	PASS
				Peak	2387.780	-38.14	≤-21.20	57.06	≤74	PASS
				Peak	2390.000	-40.33	≤-21.20	54.87	≤74	PASS
		High	2480	AV	2483.500	-47.96	≤-41.20	47.24	≤54	PASS
				AV	2494.000	-47.93	≤-41.20	47.27	≤54	PASS
				AV	2500.000	-47.99	≤-41.20	47.21	≤54	PASS
				Peak	2483.500	-41.21	≤-21.20	53.99	≤74	PASS
				Peak	2498.160	-37.53	≤-21.20	57.67	≤74	PASS
				Peak	2500.000	-39.65	≤-21.20	55.55	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.01	≤-41.20	46.19	≤54	PASS
				AV	2389.565	-48.48	≤-41.20	46.72	≤54	PASS
				AV	2390.000	-48.62	≤-41.20	46.58	≤54	PASS
				Peak	2310.000	-39.75	≤-21.20	55.45	≤74	PASS
				Peak	2386.205	-37.54	≤-21.20	57.66	≤74	PASS
				Peak	2390.000	-40.25	≤-21.20	54.95	≤74	PASS
		High	2480	AV	2483.500	-48.04	≤-41.20	47.16	≤54	PASS
				AV	2499.440	-47.96	≤-41.20	47.24	≤54	PASS
				AV	2500.000	-48.02	≤-41.20	47.18	≤54	PASS
				Peak	2483.500	-39.21	≤-21.20	55.99	≤74	PASS
				Peak	2495.040	-37.28	≤-21.20	57.92	≤74	PASS
				Peak	2500.000	-38.72	≤-21.20	56.48	≤74	PASS

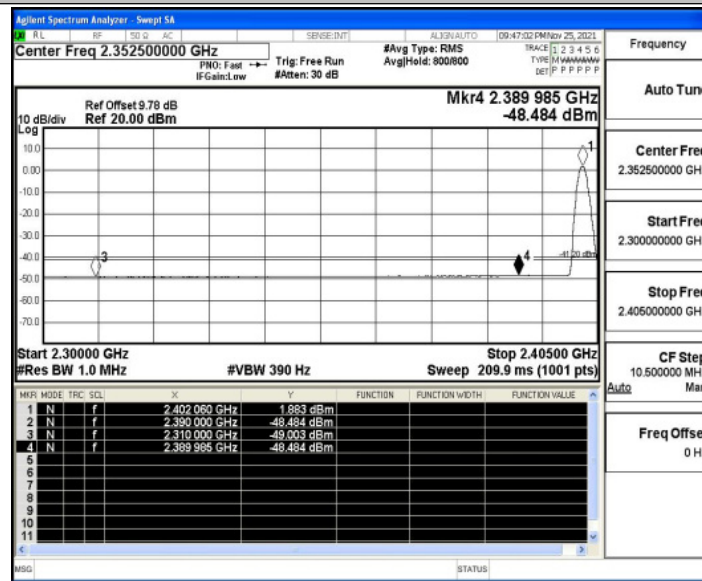
Note:

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.

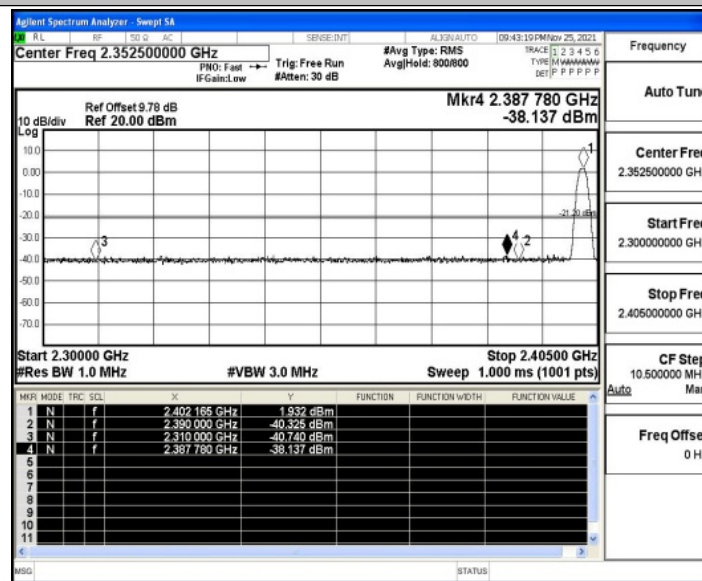


Test Graphs

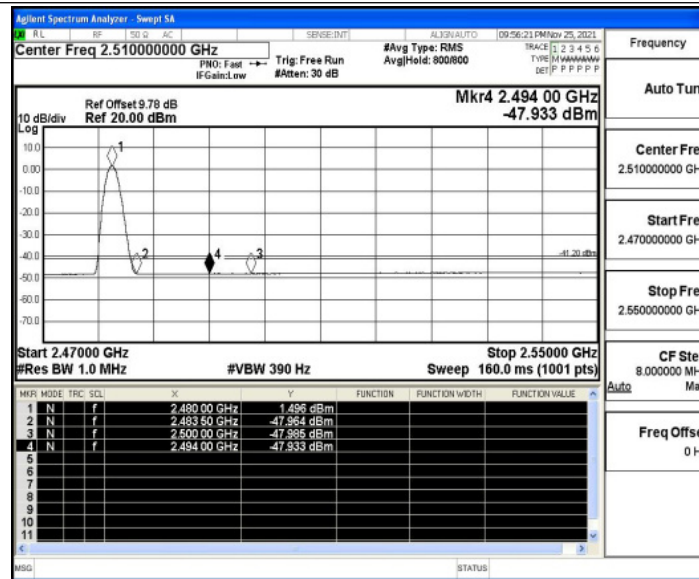
DH5_Ant1_Low_2402_AV



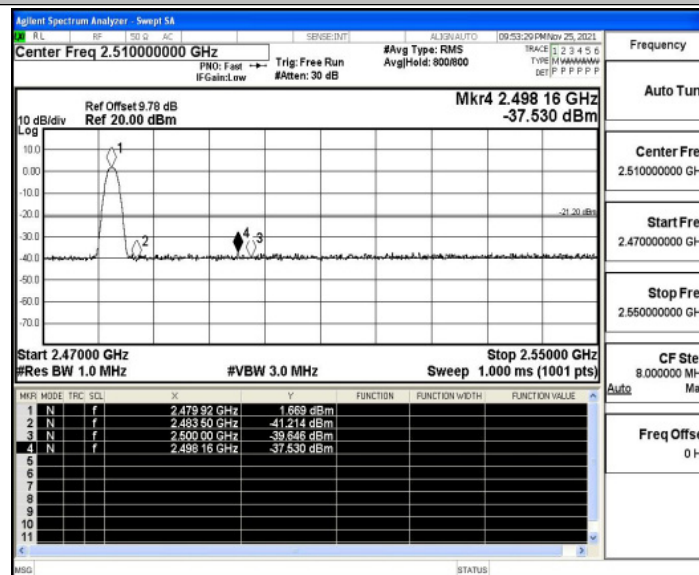
DH5_Ant1_Low_2402_Peak



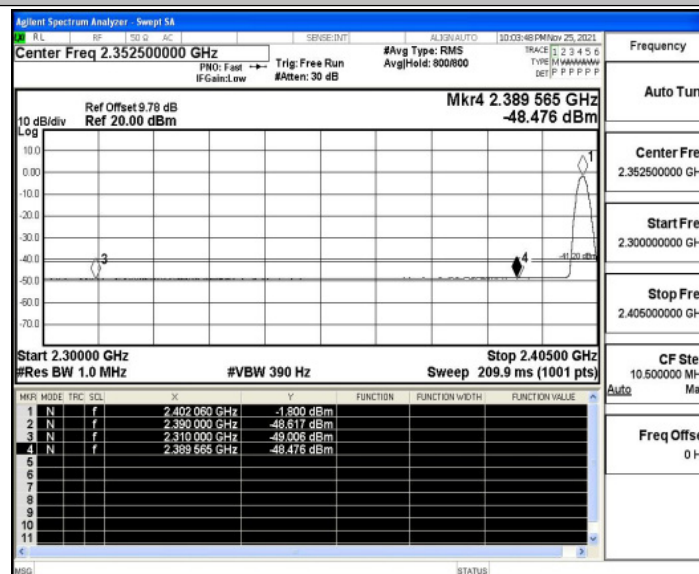
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

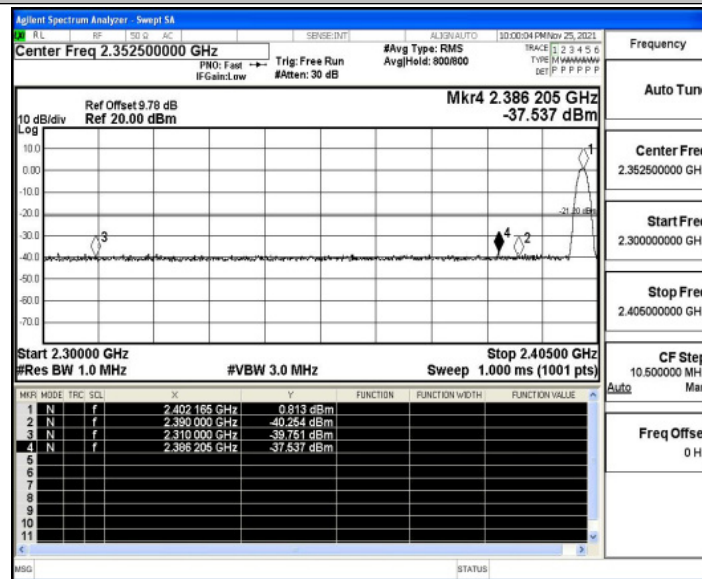


2DH5_Ant1_Low_2402_AV

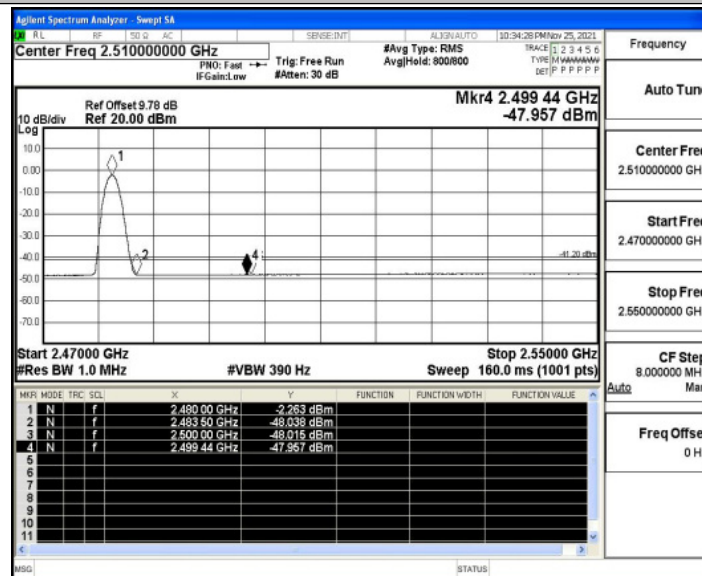




2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV



2DH5_Ant1_High_2480_Peak

