



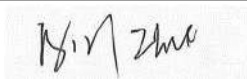
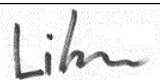
Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: AMPLIFIER

Test Model: PT696BT

Environmental Conditions

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



A.1 20dB Emission Bandwidth

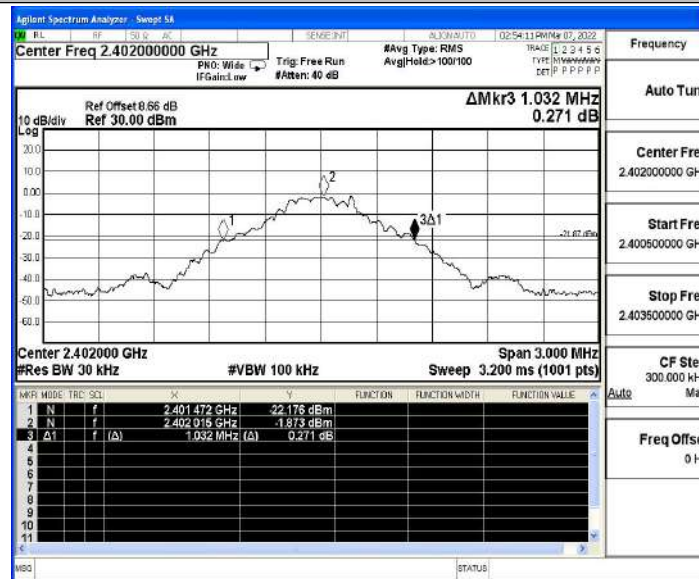
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.032	2401.472	2402.504	---	---
		2441	1.029	2440.469	2441.498	---	---
		2480	1.041	2479.463	2480.504	---	---
2DH5	Ant1	2402	1.293	2401.361	2402.654	---	---
		2441	1.326	2440.334	2441.660	---	---
		2480	1.293	2479.361	2480.654	---	---
3DH5	Ant1	2402	1.299	2401.349	2402.648	---	---
		2441	1.302	2440.349	2441.651	---	---
		2480	1.299	2479.349	2480.648	---	---

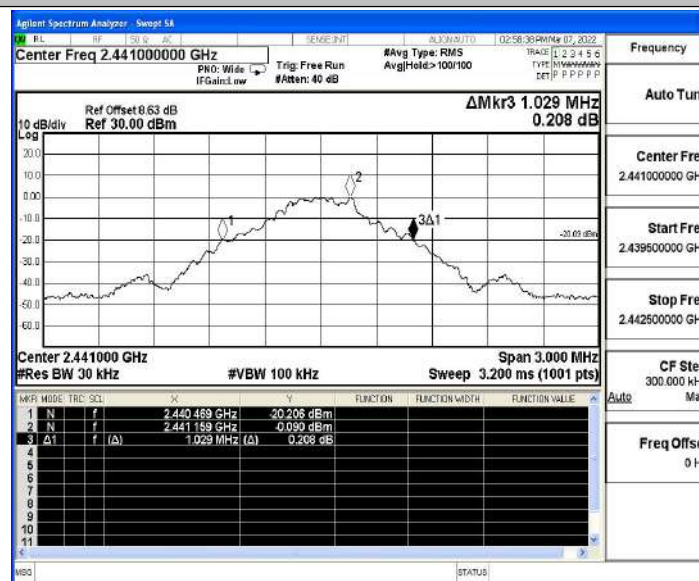


Test Graphs

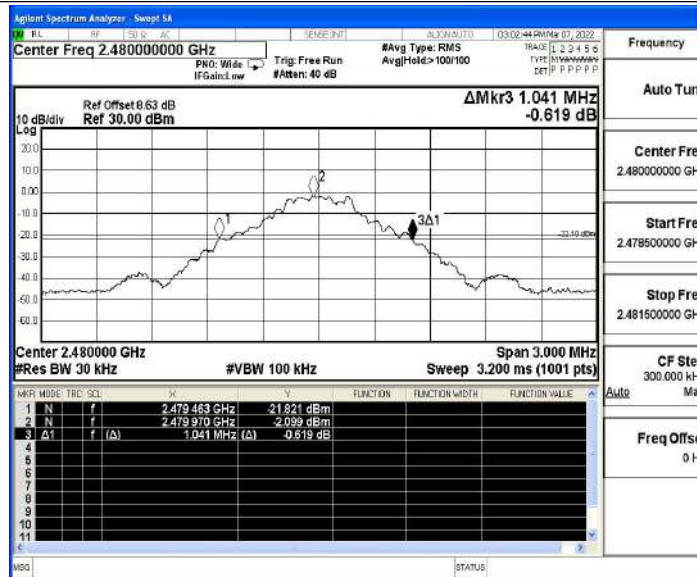
DH5_Ant1_2402



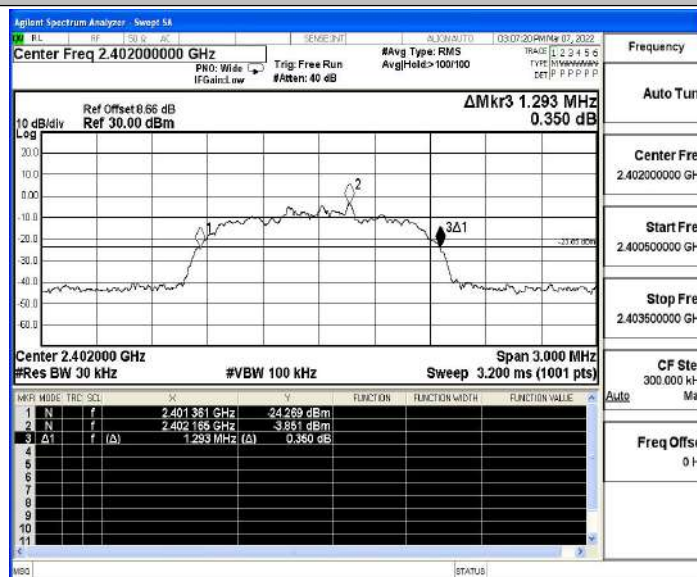
DH5_Ant1_2441



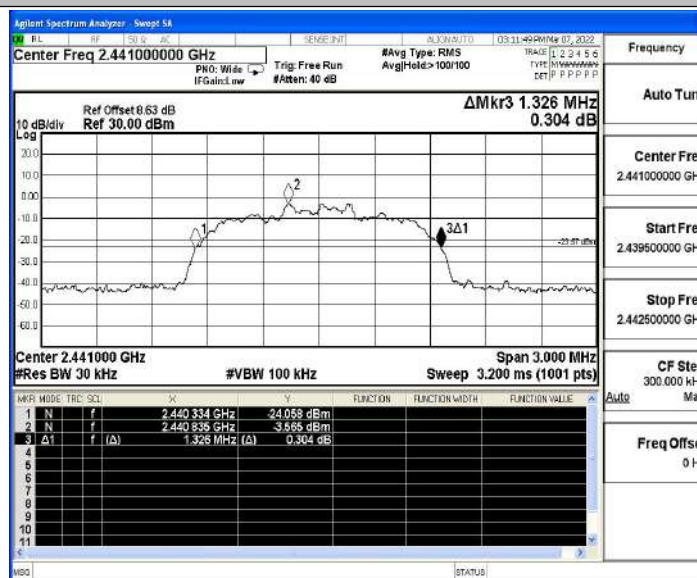
DH5_Ant1_2480



2DH5_Ant1_2402

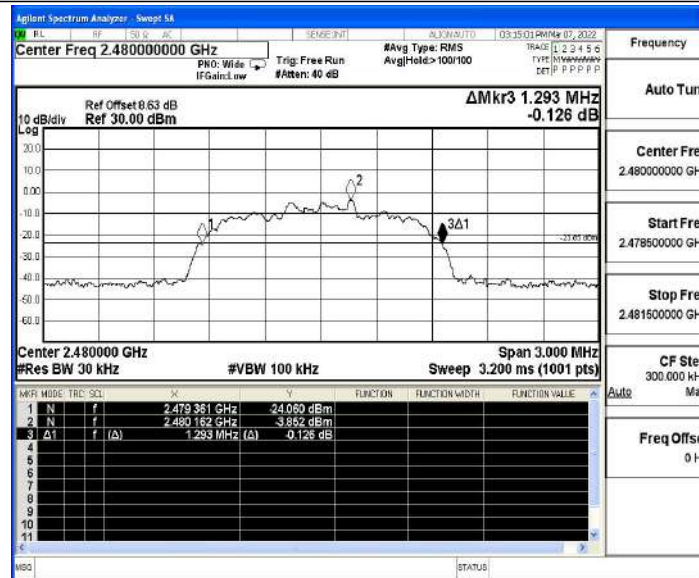


2DH5_Ant1_2441

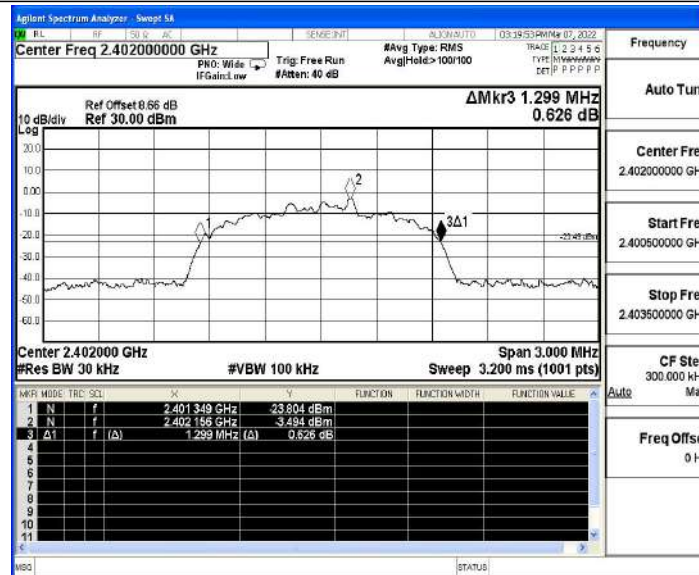




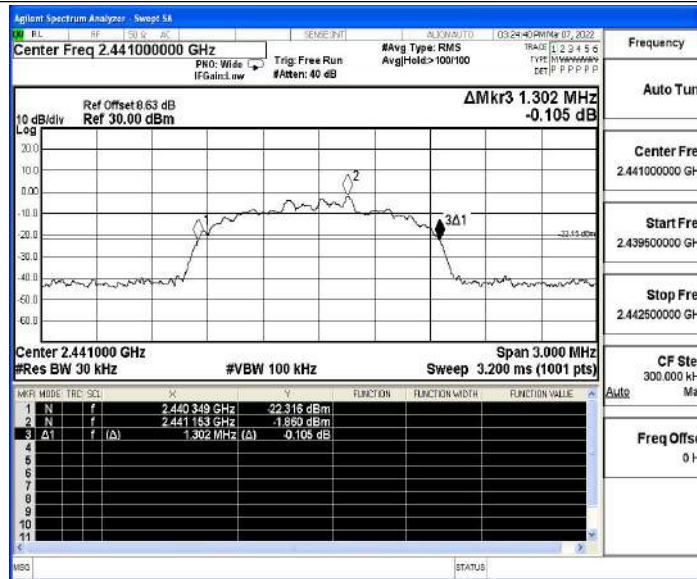
2DH5_Ant1_2480



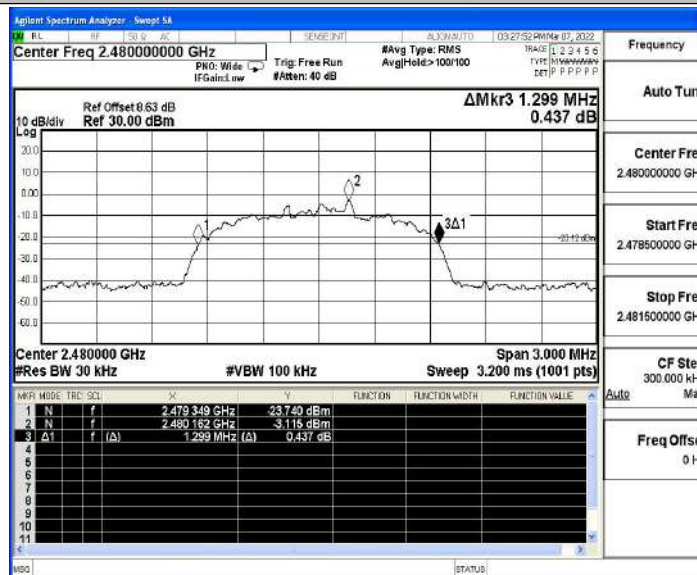
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.2 Maximum peak conducted output power

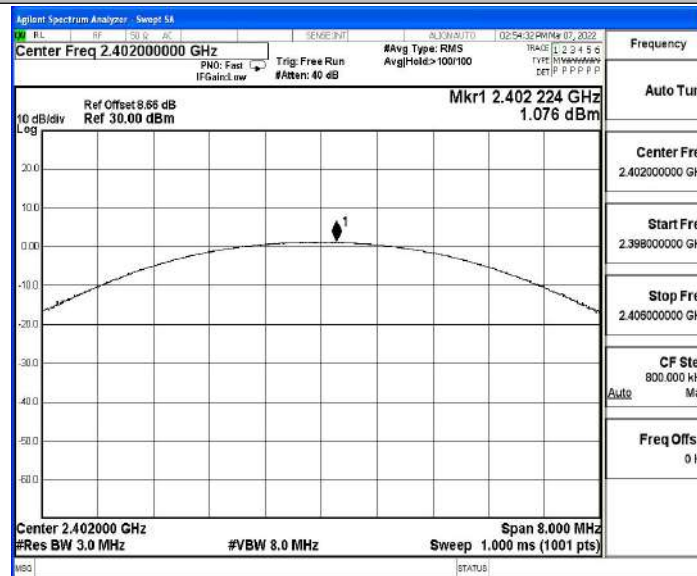
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.08	≤ 20.97	PASS
		2441	2.5	≤ 20.97	PASS
		2480	0.87	≤ 20.97	PASS
2DH5	Ant1	2402	0.24	≤ 20.97	PASS
		2441	1.68	≤ 20.97	PASS
		2480	0.03	≤ 20.97	PASS
3DH5	Ant1	2402	0.27	≤ 20.97	PASS
		2441	1.84	≤ 20.97	PASS
		2480	0.27	≤ 20.97	PASS

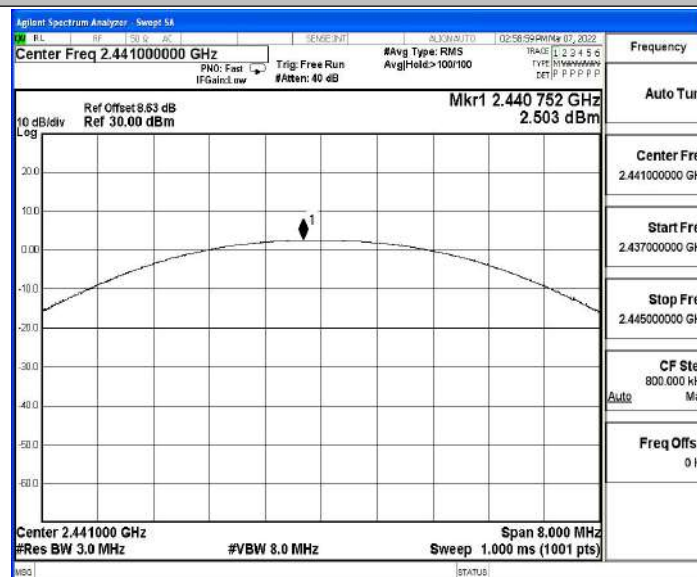


Test Graphs

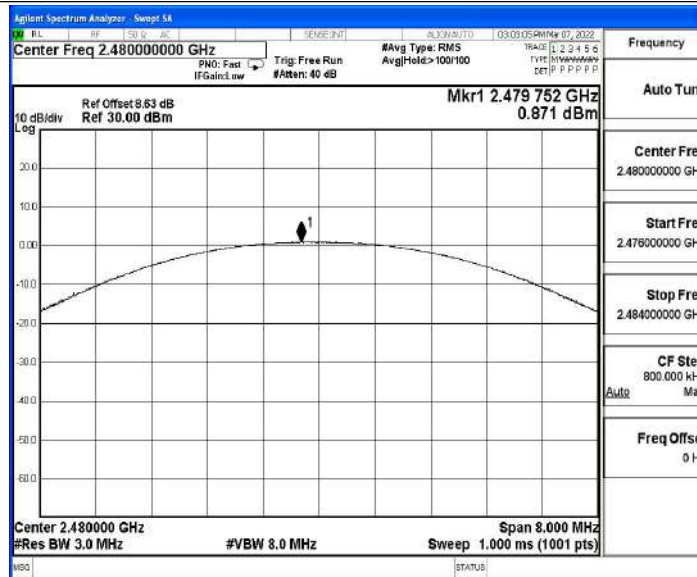
DH5_Ant1_2402



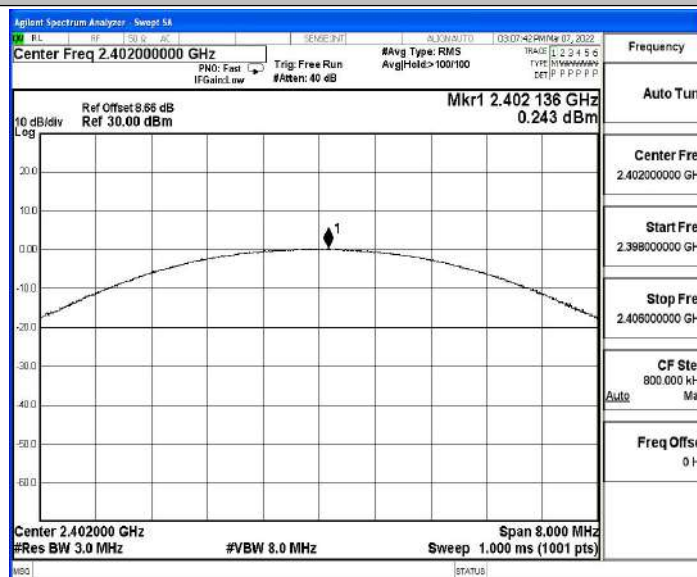
DH5_Ant1_2441



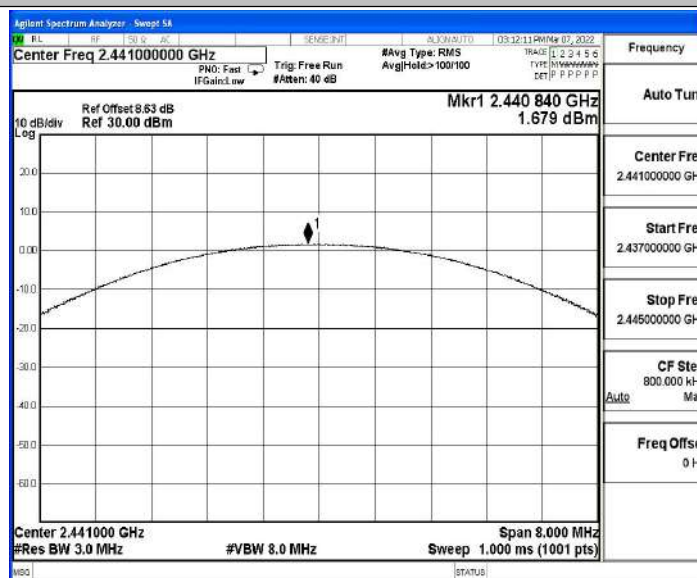
DH5_Ant1_2480



2DH5_Ant1_2402

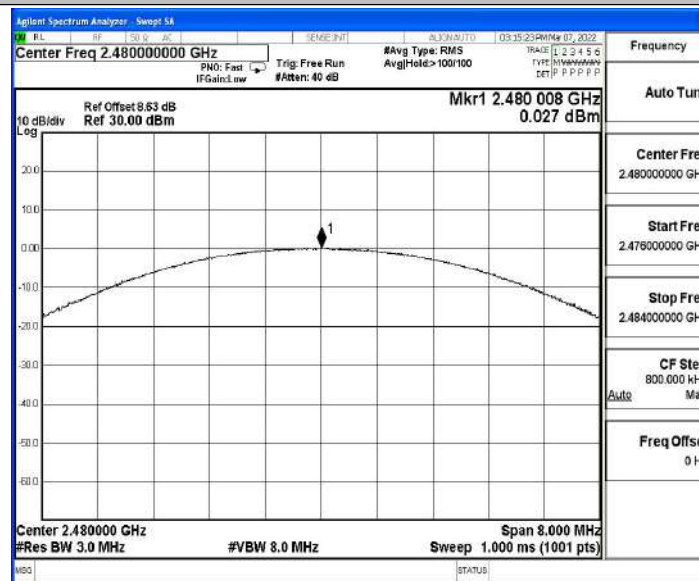


2DH5_Ant1_2441

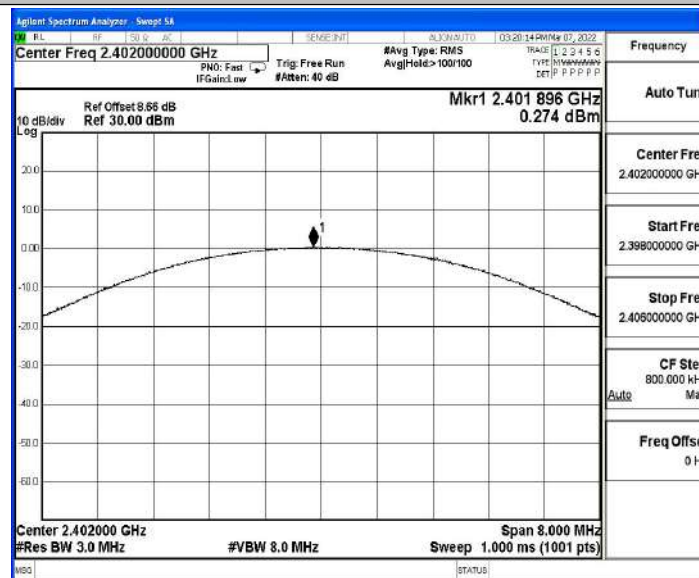




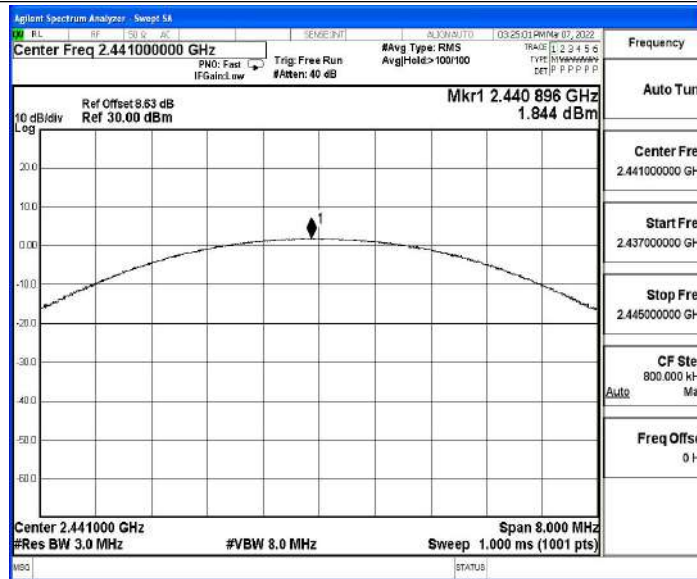
2DH5_Ant1_2480



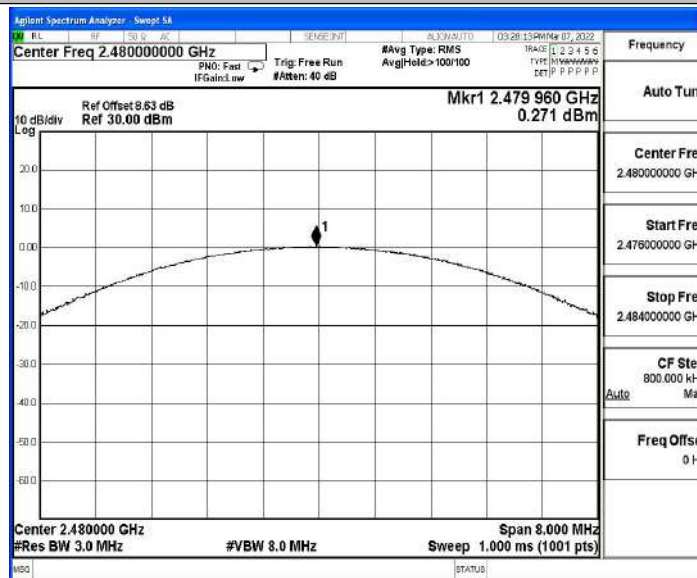
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.3 Carrier frequency separation

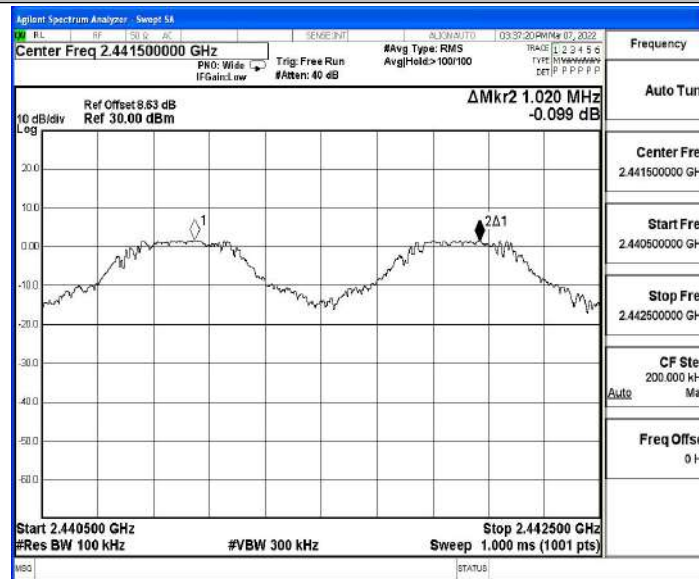
Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.02	≥ 0.694	PASS
2DH5	Ant1	Hop	0.944	≥ 0.884	PASS
3DH5	Ant1	Hop	0.966	≥ 0.868	PASS

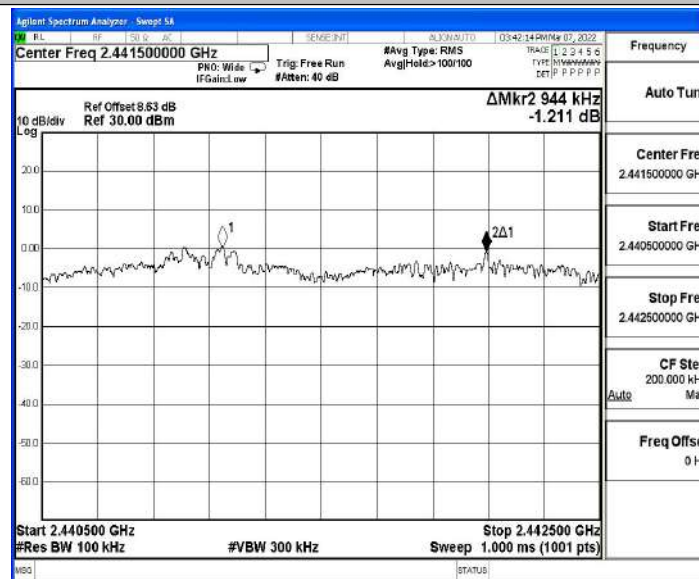


Test Graphs

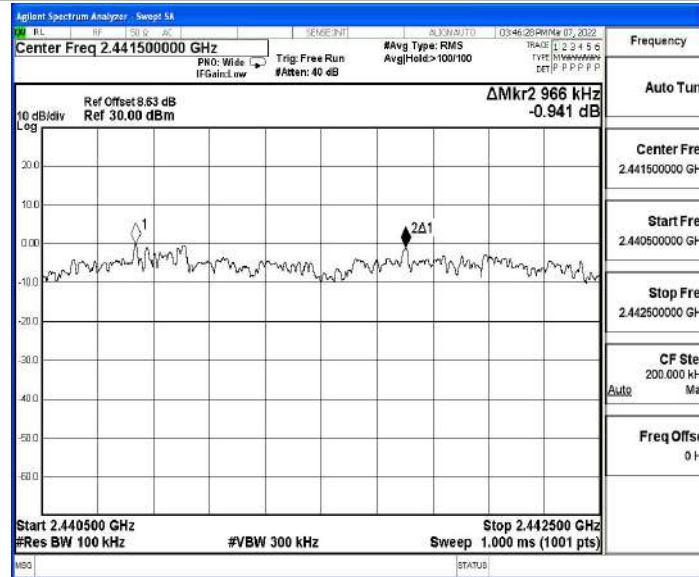
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.4 Time of occupancy

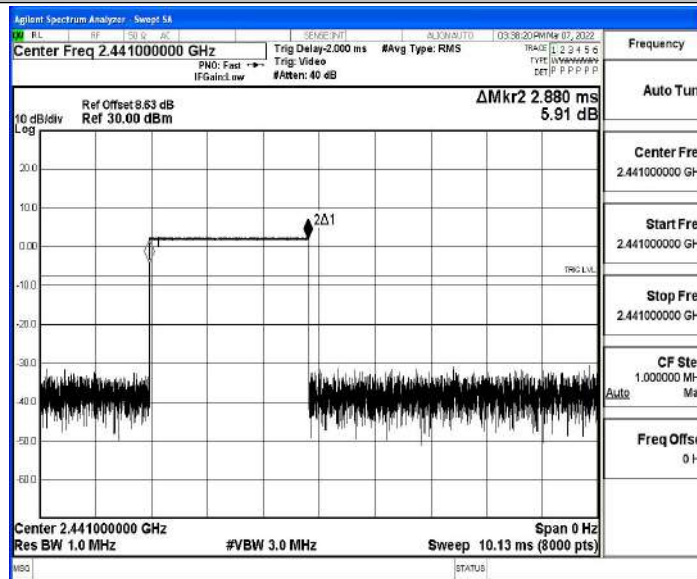
Test Result

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	2.88	106.67	0.308	≤0.4	PASS
3DH5	Ant1	Hop	2.89	106.67	0.308	≤0.4	PASS

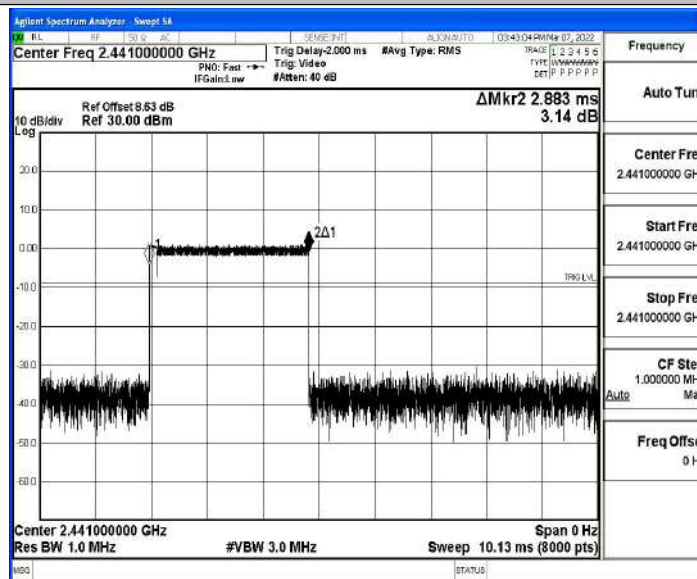


Test Graphs

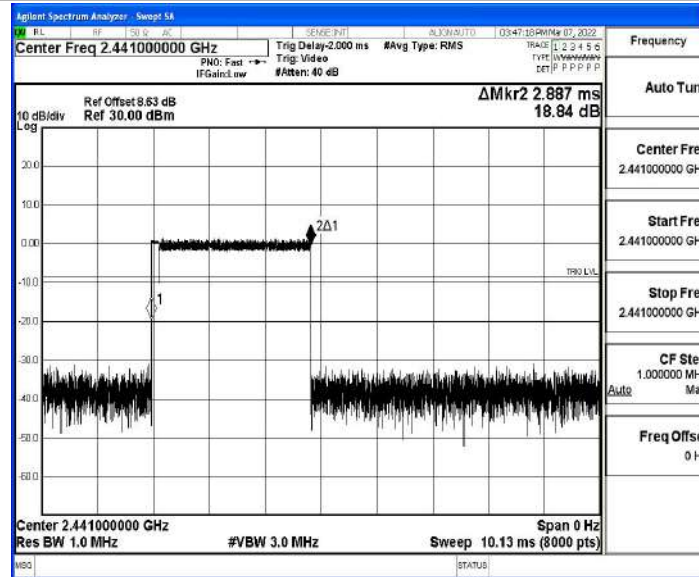
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.5 Number of hopping channels

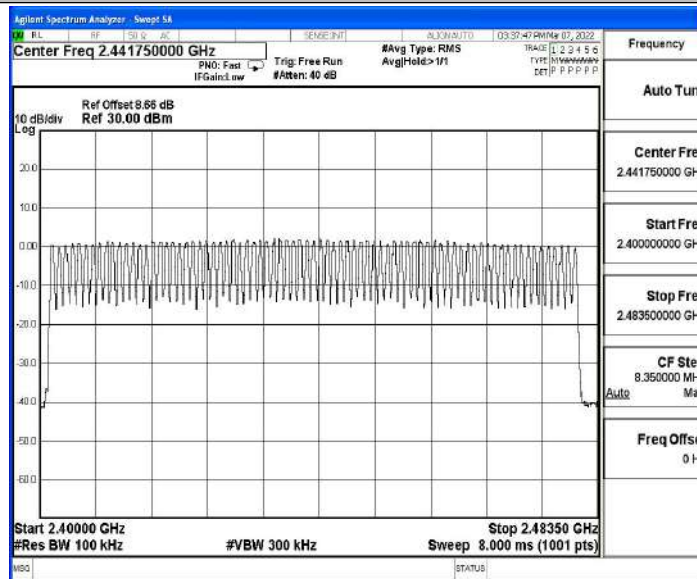
Test Result

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

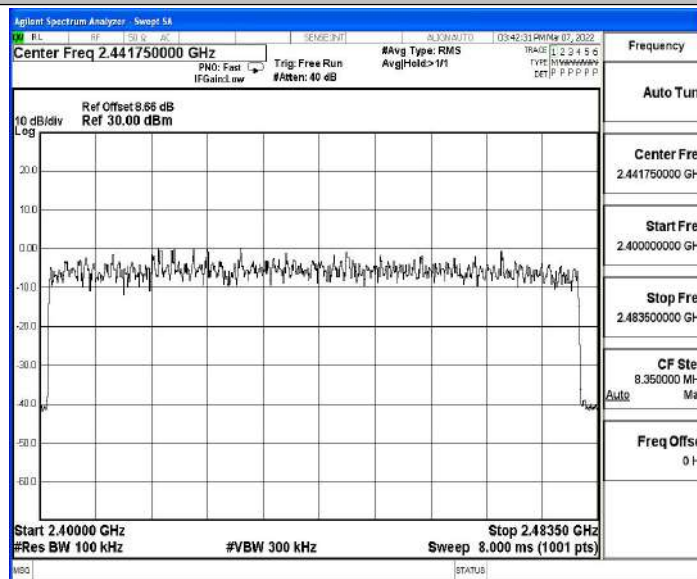


Test Graphs

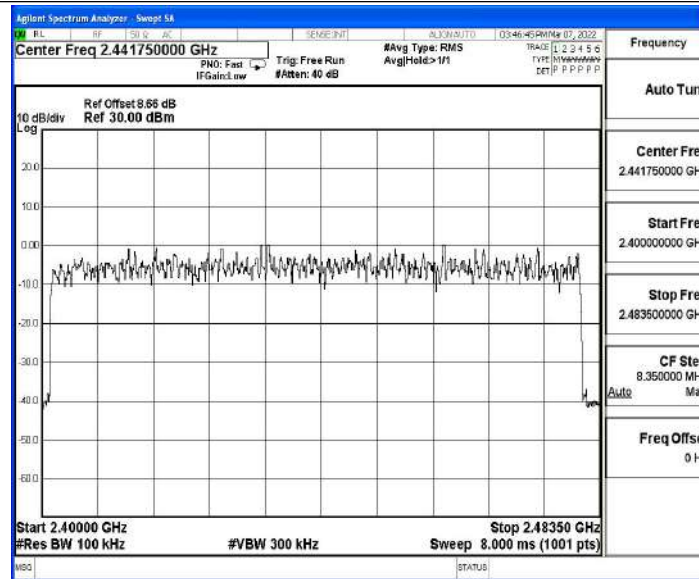
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.6 Band edge measurements

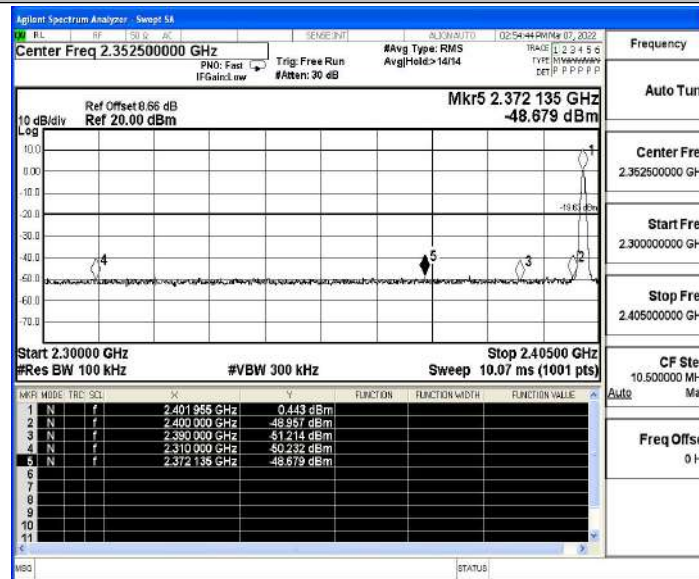
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.38	-48.68	≤ -19.63	PASS
		High	2480	0.51	-47	≤ -19.49	PASS
		Low	Hop_2402	0.21	-49.72	≤ -19.79	PASS
		High	Hop_2480	0.58	-48.13	≤ -19.42	PASS
2DH5	Ant1	Low	2402	-2.15	-49.17	≤ -22.15	PASS
		High	2480	-1.51	-48.02	≤ -21.51	PASS
		Low	Hop_2402	-1.03	-49.58	≤ -21.03	PASS
		High	Hop_2480	-1.41	-46.87	≤ -21.41	PASS
3DH5	Ant1	Low	2402	-3.54	-48.78	≤ -23.54	PASS
		High	2480	-1.04	-47.69	≤ -21.04	PASS
		Low	Hop_2402	-4.29	-48.59	≤ -24.29	PASS
		High	Hop_2480	-1.43	-47.59	≤ -21.43	PASS

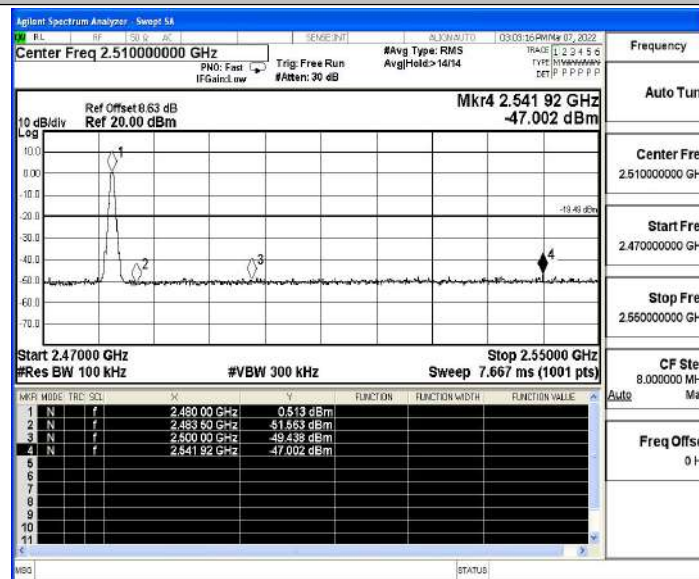


Test Graphs

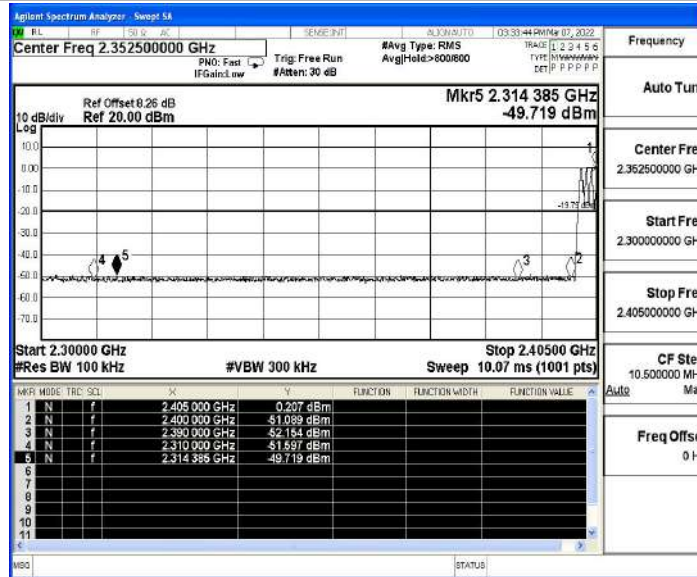
DH5_Ant1_Low_2402



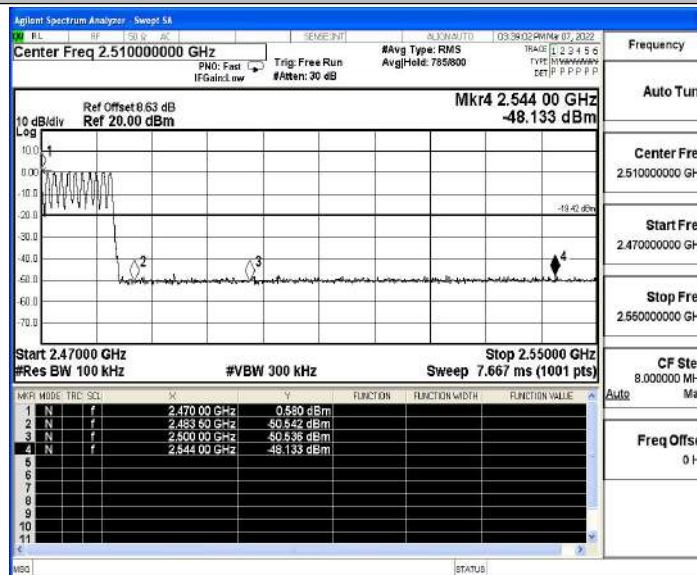
DH5_Ant1_High_2480



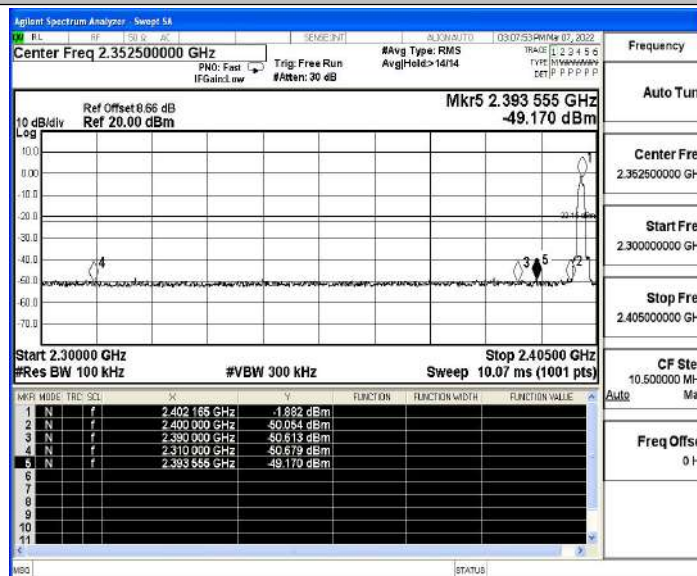
DH5_Ant1_Low_Hop_2402

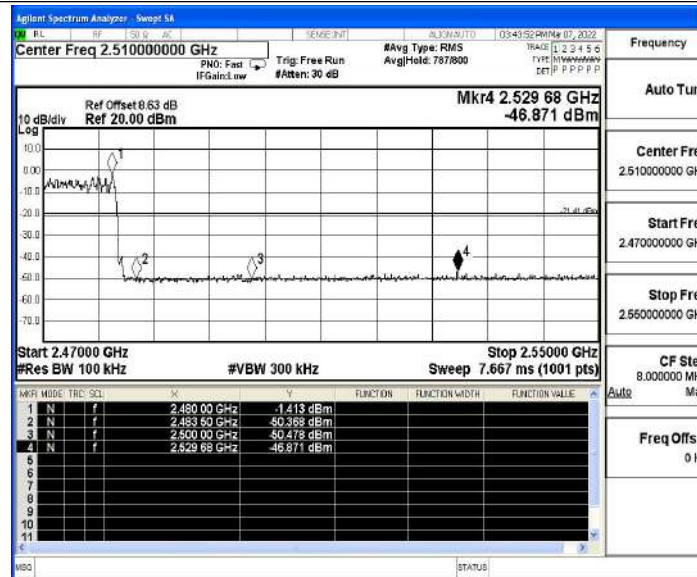


DH5_Ant1_High_Hop_2480

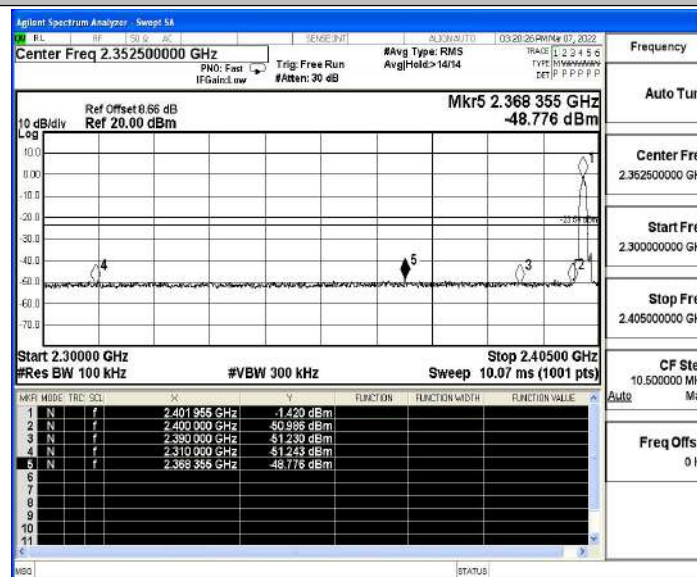


2DH5_Ant1_Low_2402

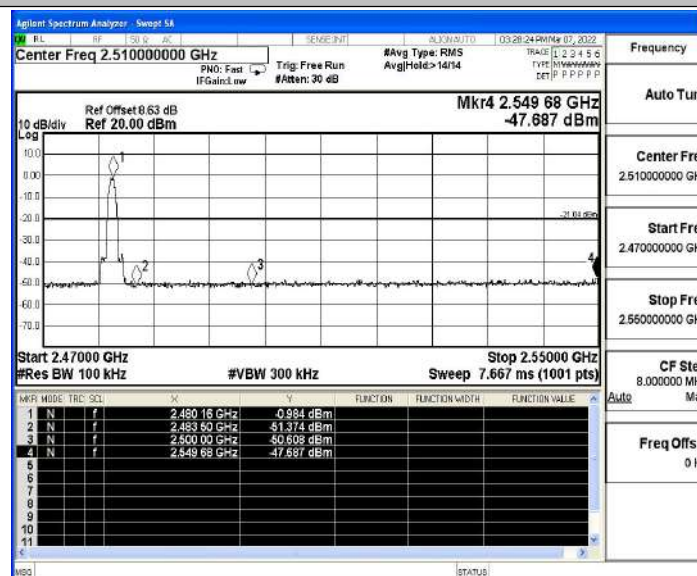




3DH5_Ant1_Low_2402

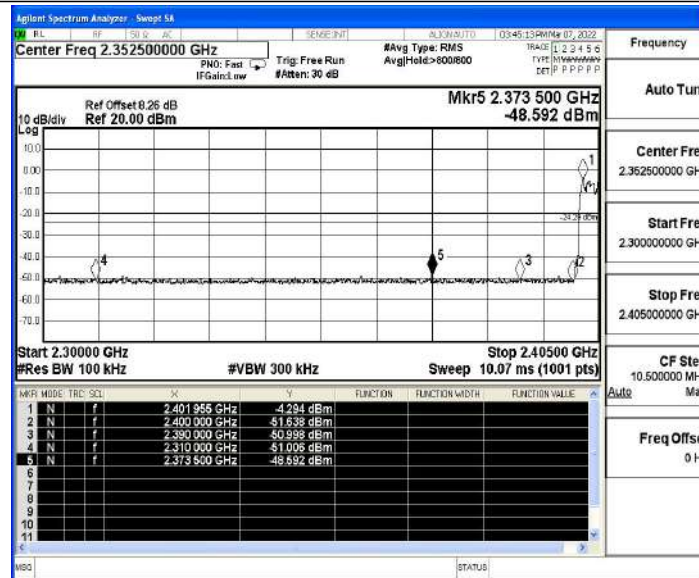


3DH5_Ant1_High_2480

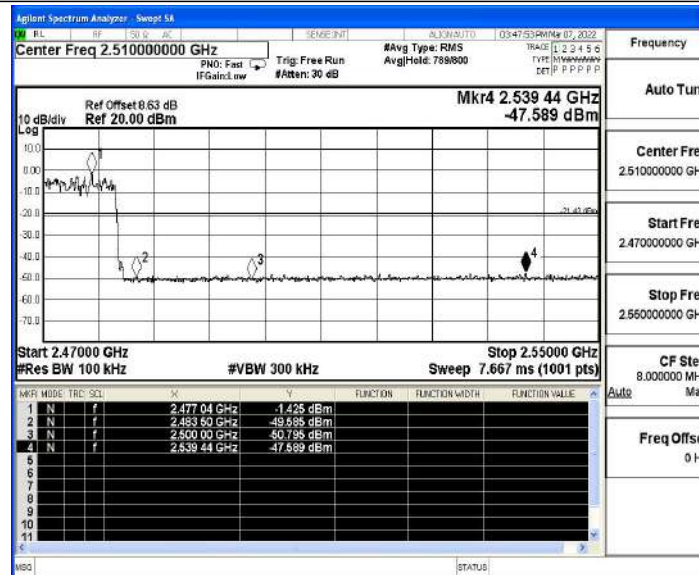




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

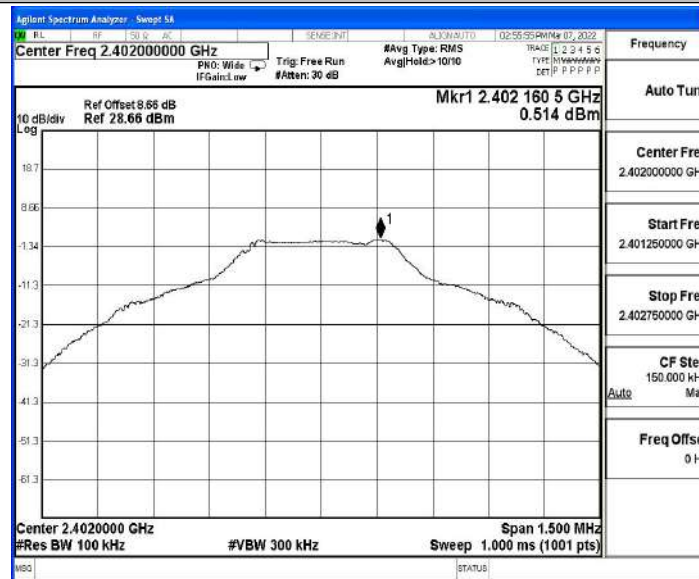
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.51	0.51	---	PASS
			30~1000	0.51	-45.18	≤ -19.49	PASS
			1000~26500	0.51	-46.26	≤ -19.49	PASS
		2441	Reference	1.95	1.95	---	PASS
			30~1000	1.95	-48.26	≤ -18.05	PASS
			1000~26500	1.95	-46.15	≤ -18.05	PASS
		2480	Reference	0.30	0.30	---	PASS
			30~1000	0.30	-46.54	≤ -19.7	PASS
			1000~26500	0.30	-46.8	≤ -19.7	PASS
2DH5	Ant1	2402	Reference	-1.28	-1.28	---	PASS
			30~1000	-1.28	-59.05	≤ -21.28	PASS
			1000~26500	-1.28	-45.99	≤ -21.28	PASS
		2441	Reference	0.33	0.33	---	PASS
			30~1000	0.33	-59.25	≤ -19.67	PASS
			1000~26500	0.33	-46.01	≤ -19.67	PASS
		2480	Reference	-1.29	-1.29	---	PASS
			30~1000	-1.29	-58.32	≤ -21.29	PASS
			1000~26500	-1.29	-46.43	≤ -21.29	PASS
3DH5	Ant1	2402	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-58.4	≤ -21.32	PASS
			1000~26500	-1.32	-45.93	≤ -21.32	PASS
		2441	Reference	0.52	0.52	---	PASS
			30~1000	0.52	-58.27	≤ -19.48	PASS
			1000~26500	0.52	-46.6	≤ -19.48	PASS
		2480	Reference	-1.07	-1.07	---	PASS
			30~1000	-1.07	-59.21	≤ -21.07	PASS
			1000~26500	-1.07	-45.94	≤ -21.07	PASS

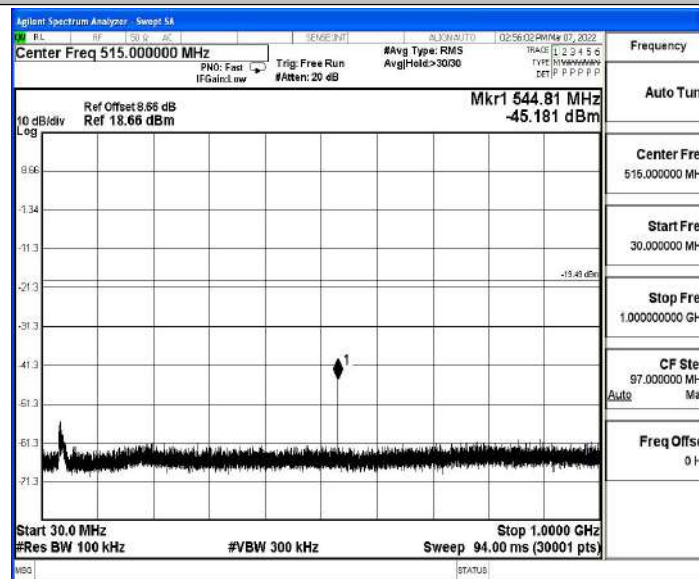


Test Graphs

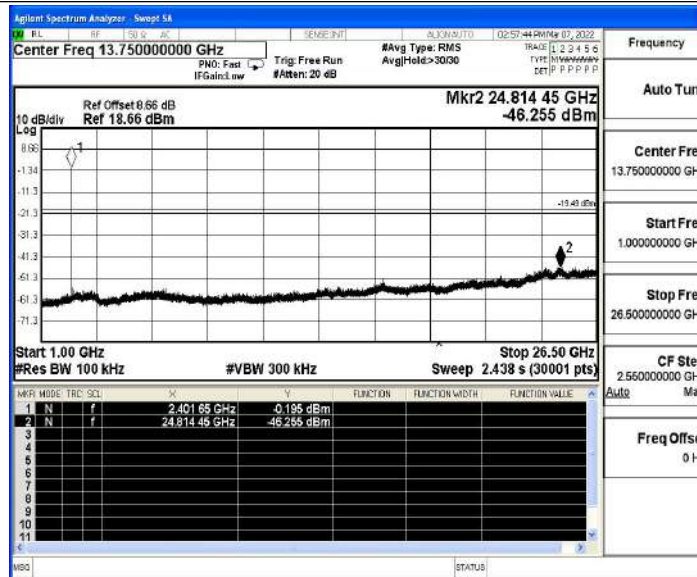
DH5_Ant1_2402_0~Reference



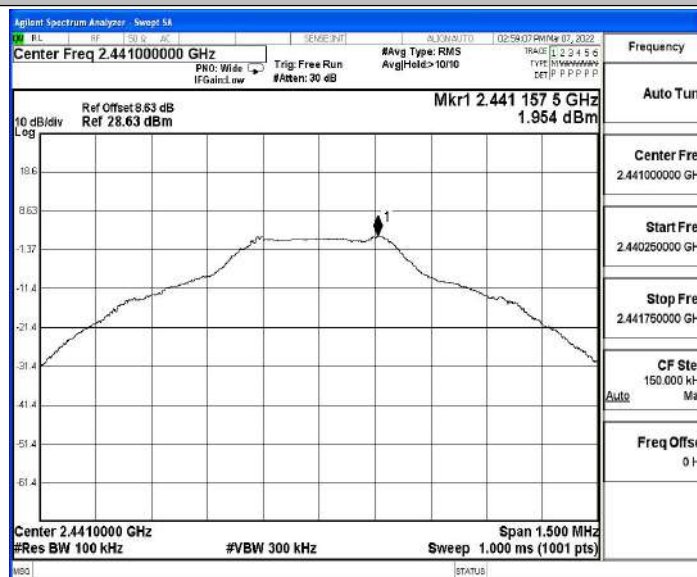
DH5_Ant1_2402_30~1000



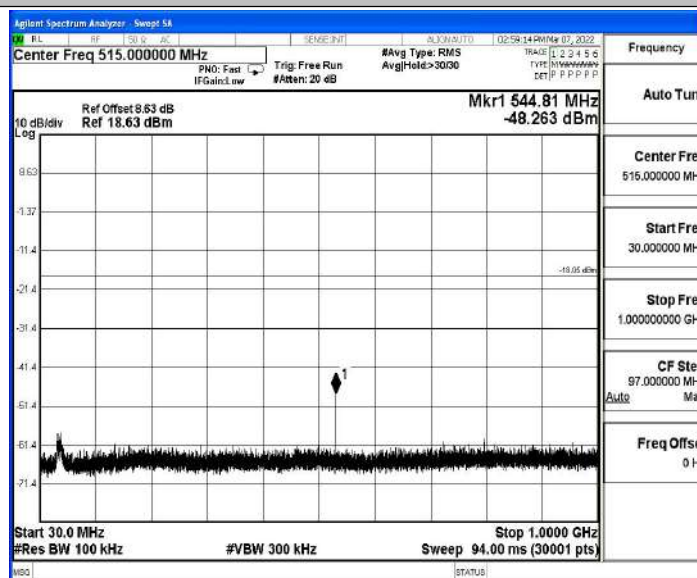
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

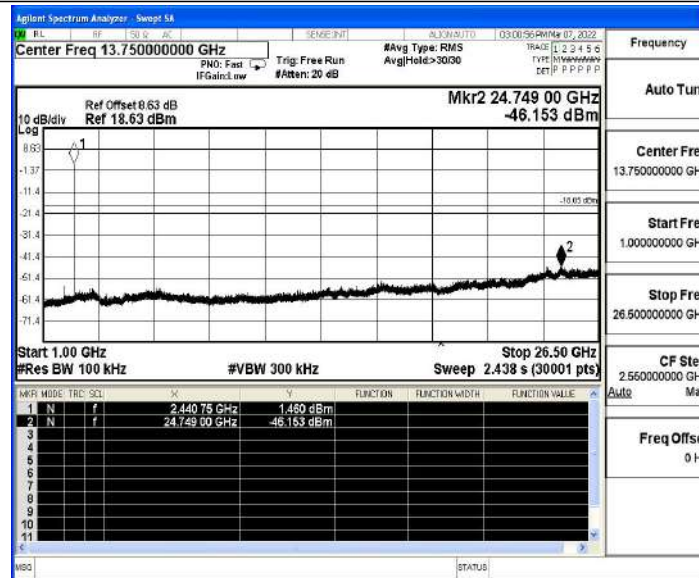


DH5_Ant1_2441_30~1000

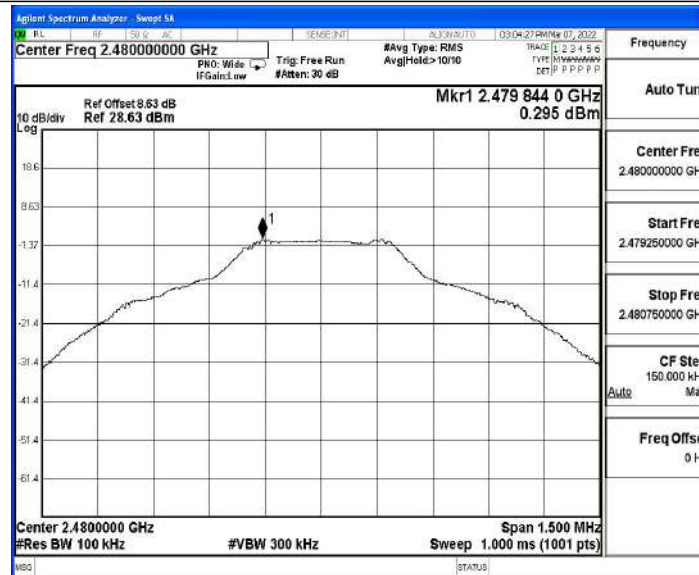




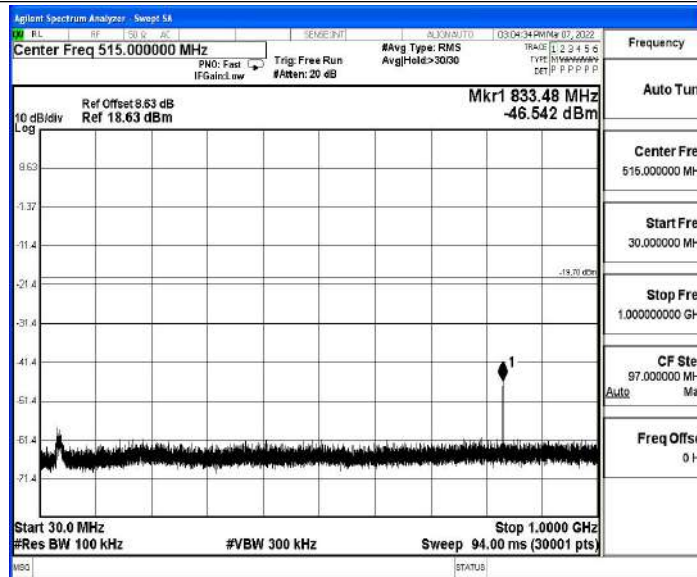
DH5_Ant1_2441_1000~26500



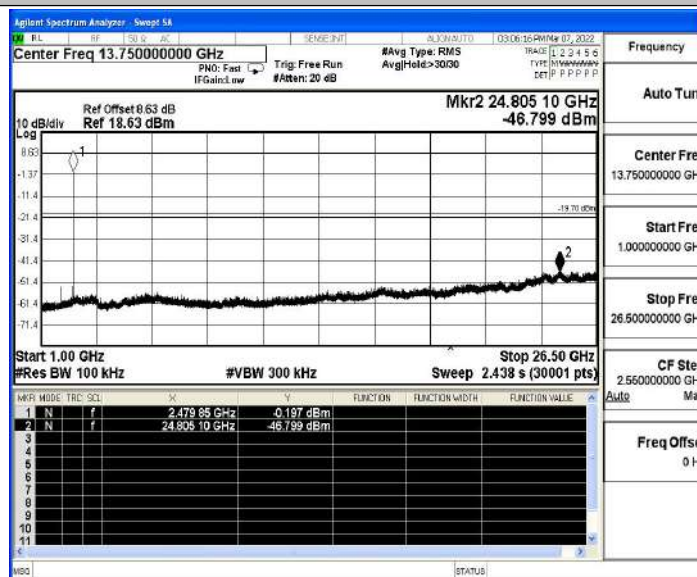
DH5_Ant1_2480_0~Reference



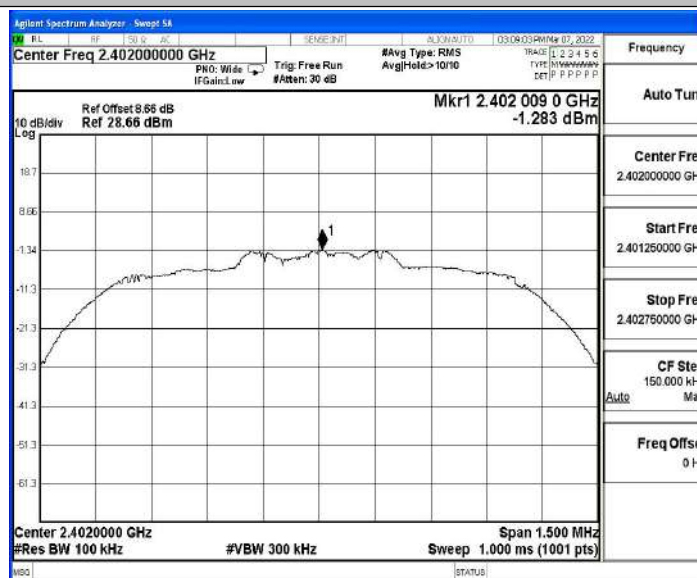
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

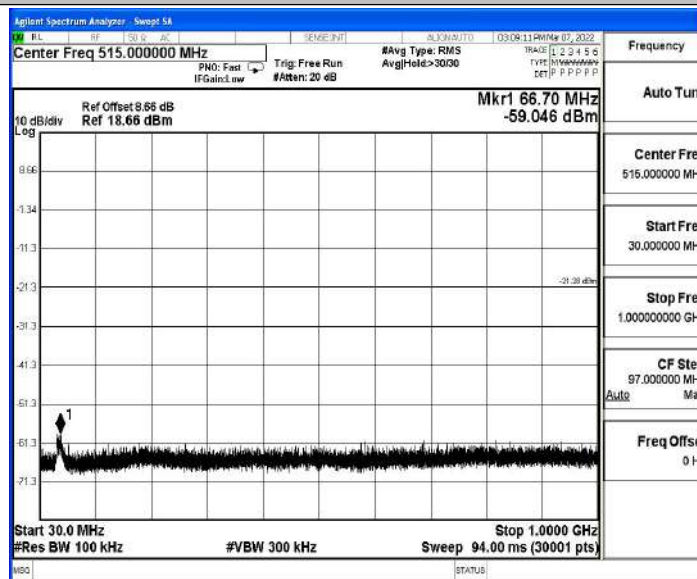


2DH5_Ant1_2402_0~Reference

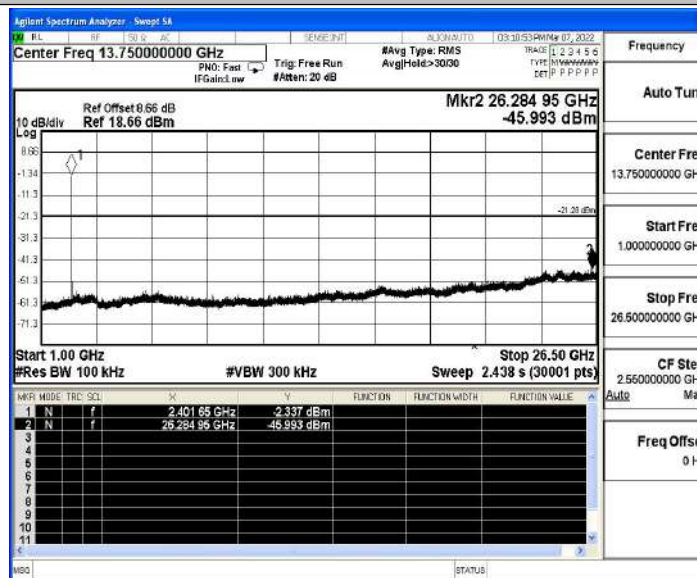




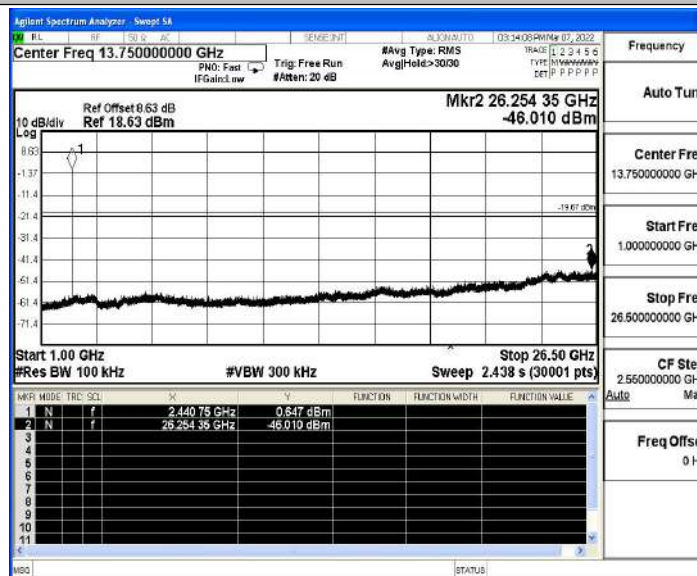
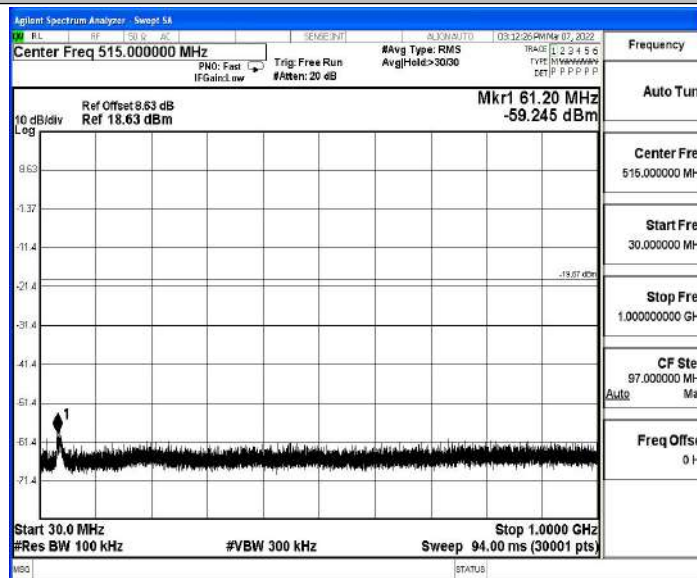
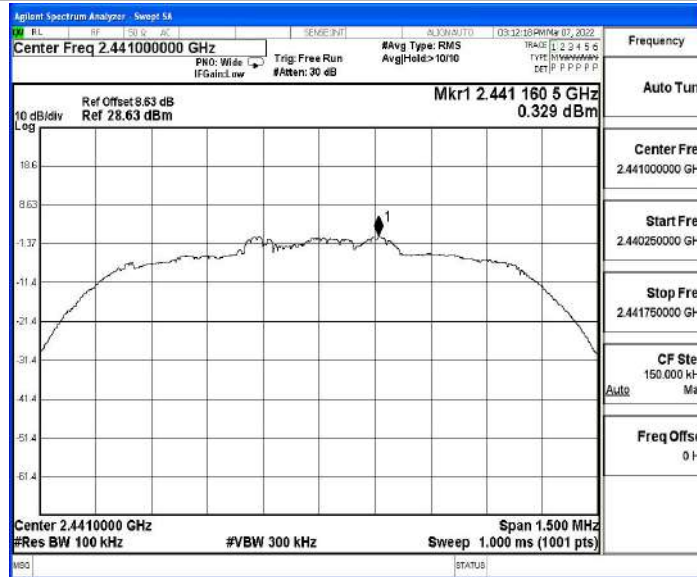
2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500

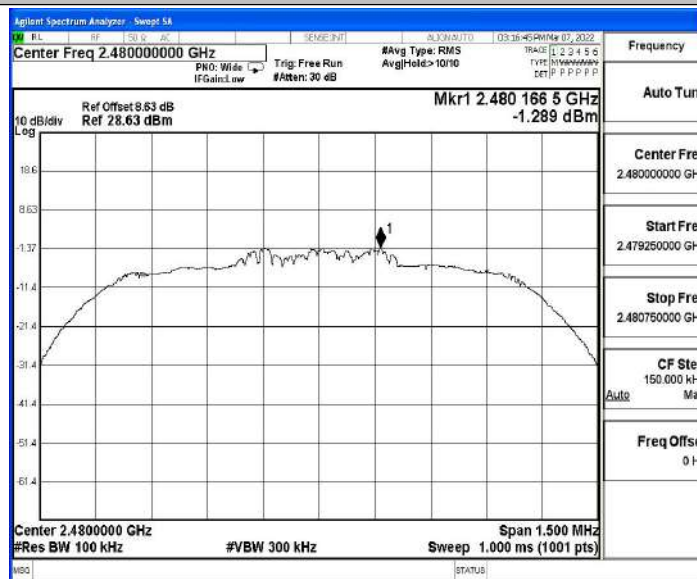


2DH5_Ant1_2441_0~Reference

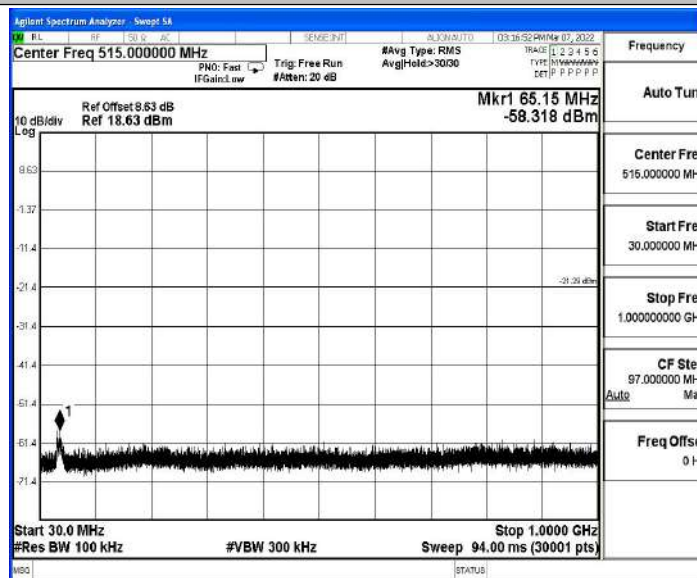




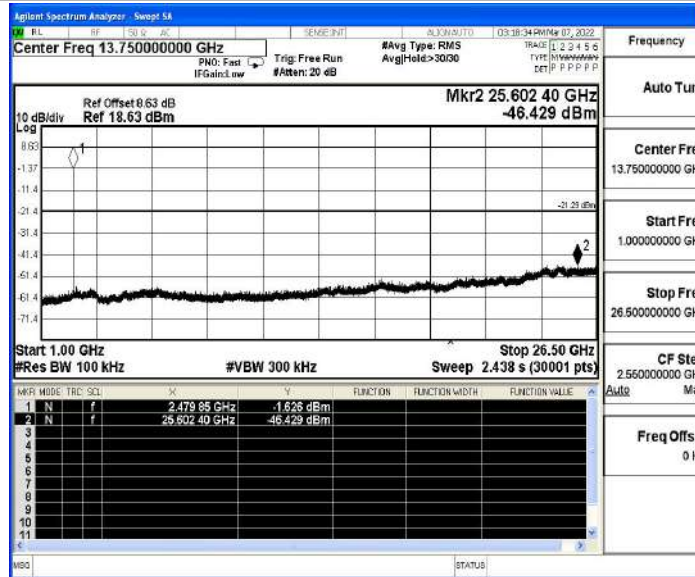
2DH5_Ant1_2480_0~Reference



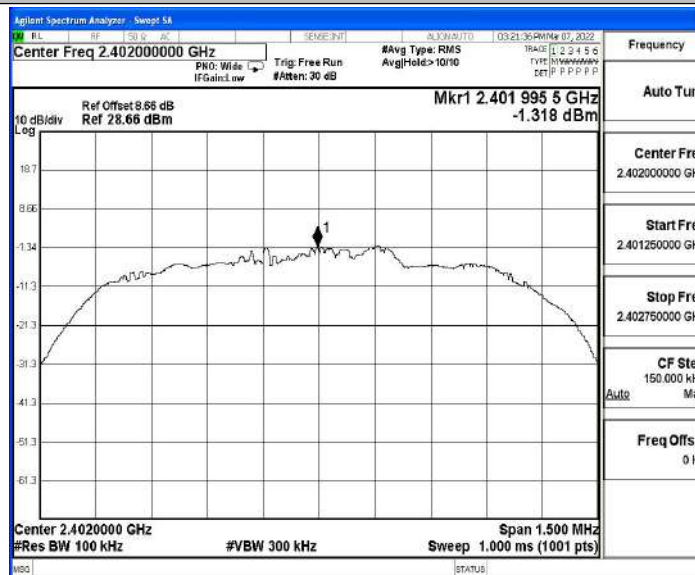
2DH5_Ant1_2480_30~1000



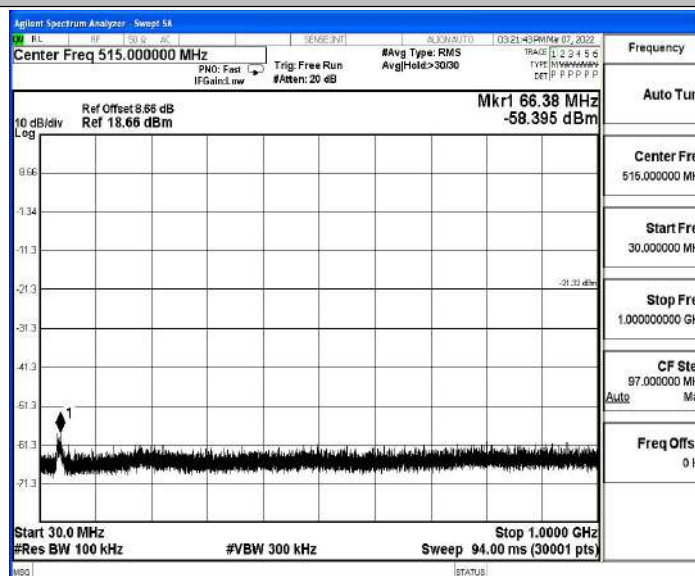
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference

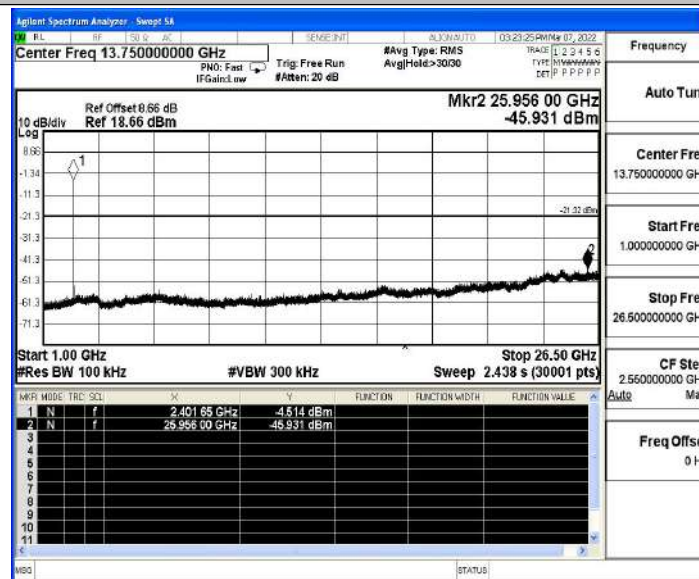


3DH5_Ant1_2402_30~1000

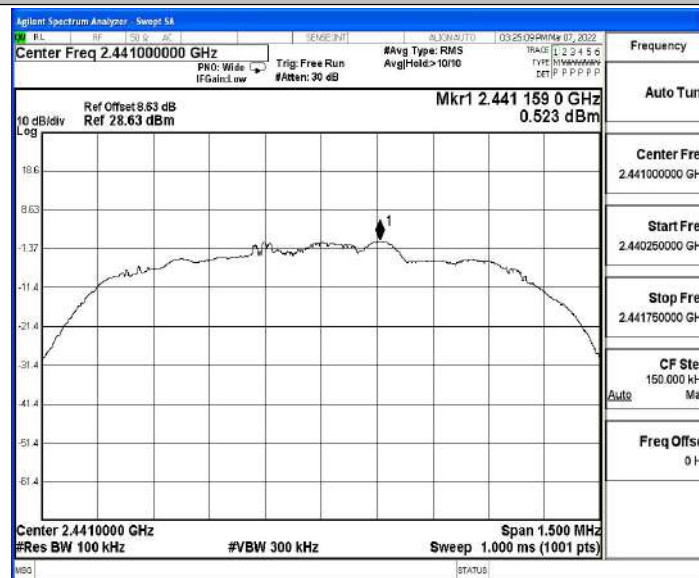




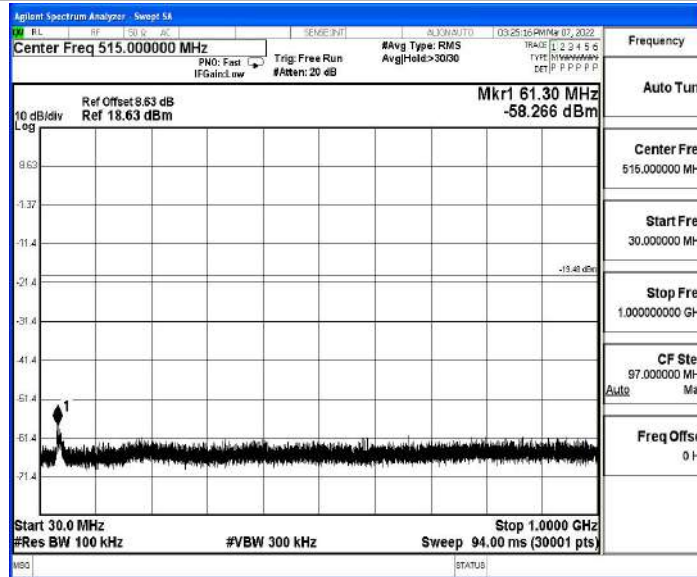
3DH5_Ant1_2402_1000~26500



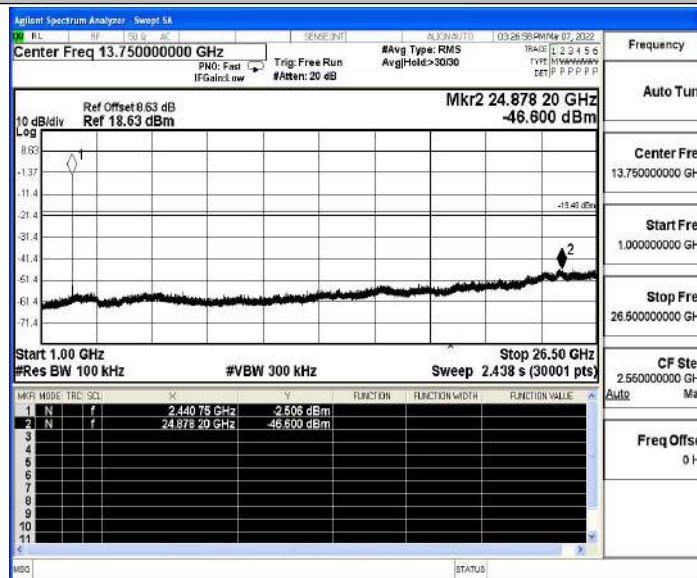
3DH5_Ant1_2441_0~Reference



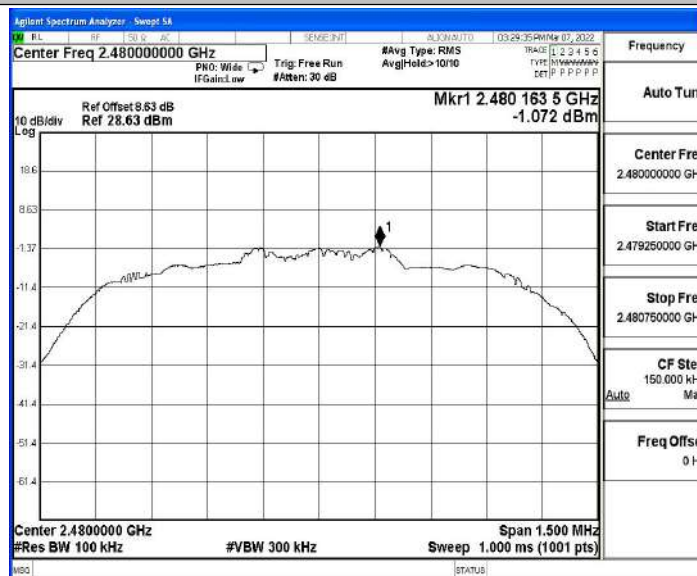
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

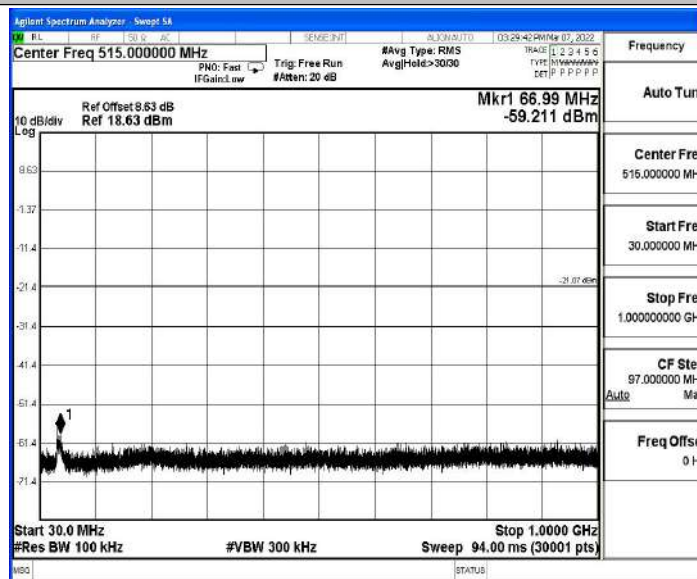


3DH5_Ant1_2480_0~Reference

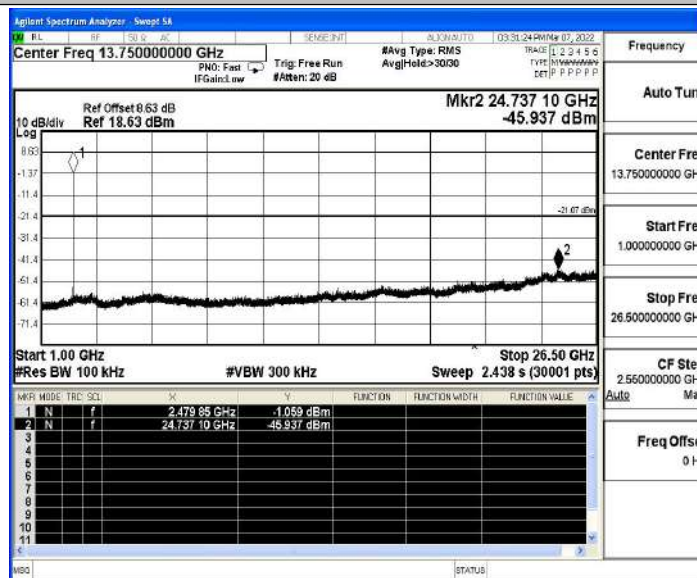




3DH5_Ant1_2480_30~1000



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	-48.32	≤-41.20	46.88	≤54	PASS
				AV	2387.990	-47.82	≤-41.20	47.38	≤54	PASS
				AV	2390.000	-48.01	≤-41.20	47.19	≤54	PASS
				Peak	2310.000	-38.47	≤-21.20	56.73	≤74	PASS
				Peak	2345.465	-36.45	≤-21.20	58.75	≤74	PASS
				Peak	2390.000	-38.79	≤-21.20	56.41	≤74	PASS
		High	2480	AV	2483.500	-47.39	≤-41.20	47.81	≤54	PASS
				AV	2499.200	-47.18	≤-41.20	48.02	≤54	PASS
				AV	2500.000	-47.36	≤-41.20	47.84	≤54	PASS
				Peak	2483.500	-37.98	≤-21.20	57.22	≤74	PASS
				Peak	2492.320	-36.73	≤-21.20	58.47	≤74	PASS
				Peak	2500.000	-38.09	≤-21.20	57.11	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2386.520	-47.82	≤-41.20	47.38	≤54	PASS
				AV	2390.000	-47.98	≤-41.20	47.22	≤54	PASS
				Peak	2310.000	-39.12	≤-21.20	56.08	≤74	PASS
				Peak	2357.330	-36.53	≤-21.20	58.67	≤74	PASS
				Peak	2390.000	-39.19	≤-21.20	56.01	≤74	PASS
		High	2480	AV	2483.500	-47.38	≤-41.20	47.82	≤54	PASS
				AV	2491.760	-47.32	≤-41.20	47.88	≤54	PASS
				AV	2500.000	-47.39	≤-41.20	47.81	≤54	PASS
				Peak	2483.500	-36.91	≤-21.20	58.29	≤74	PASS
				Peak	2489.520	-35.68	≤-21.20	59.52	≤74	PASS
				Peak	2500.000	-37.4	≤-21.20	57.80	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2381.375	-47.81	≤-41.20	47.39	≤54	PASS
				AV	2390.000	-48	≤-41.20	47.20	≤54	PASS
				Peak	2310.000	-38.29	≤-21.20	56.91	≤74	PASS
				Peak	2379.170	-35.75	≤-21.20	59.45	≤74	PASS
				Peak	2390.000	-38.18	≤-21.20	57.02	≤74	PASS
		High	2480	AV	2483.500	-47.27	≤-41.20	47.93	≤54	PASS
				AV	2499.600	-47.22	≤-41.20	47.98	≤54	PASS
				AV	2500.000	-47.45	≤-41.20	47.75	≤54	PASS
				Peak	2483.500	-38.48	≤-21.20	56.72	≤74	PASS
				Peak	2494.560	-35.75	≤-21.20	59.45	≤74	PASS
				Peak	2500.000	-37.49	≤-21.20	57.71	≤74	PASS



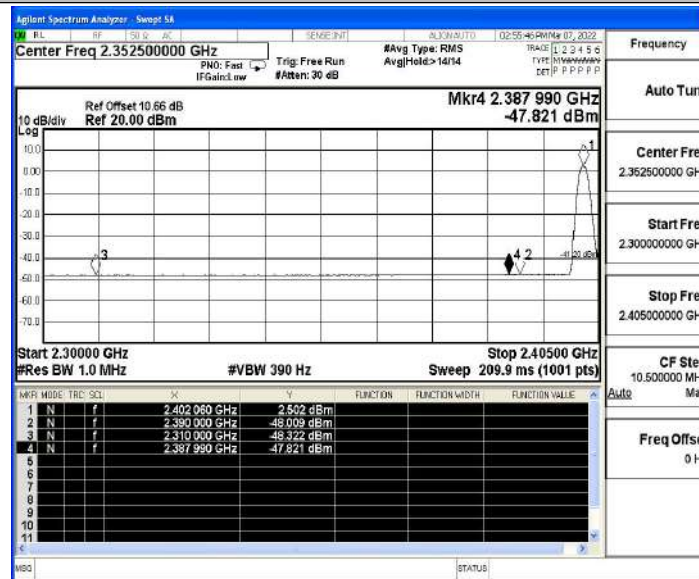
Note:

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.

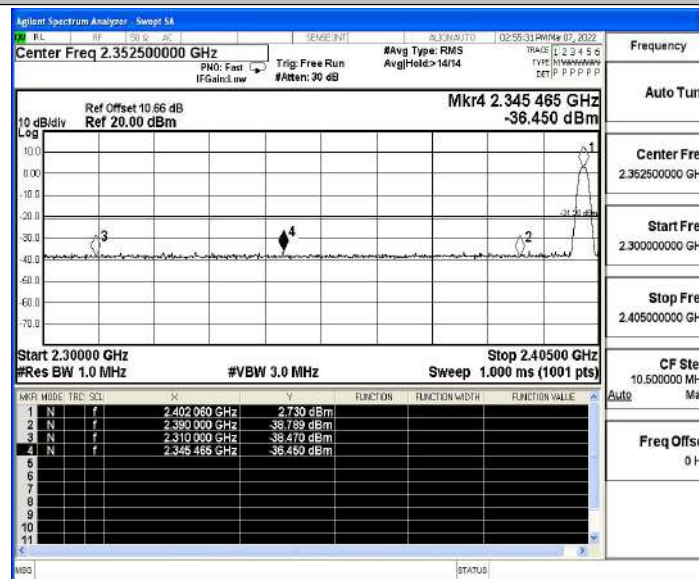


Test Graphs

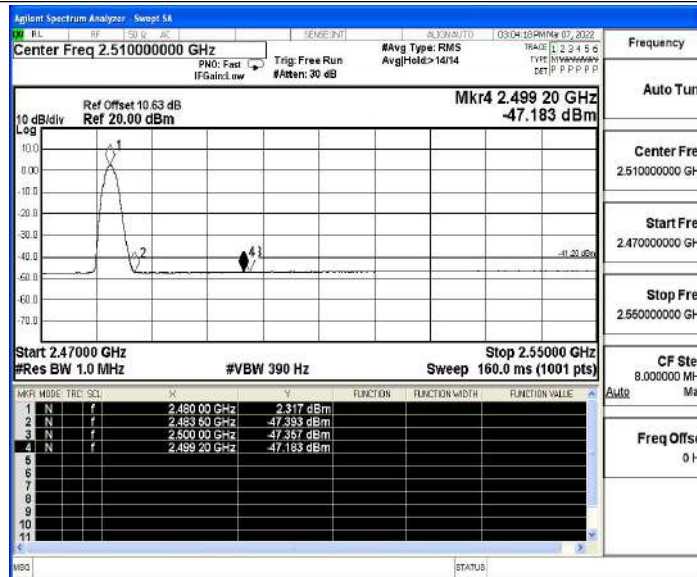
DH5_Ant1_Low_2402_AV



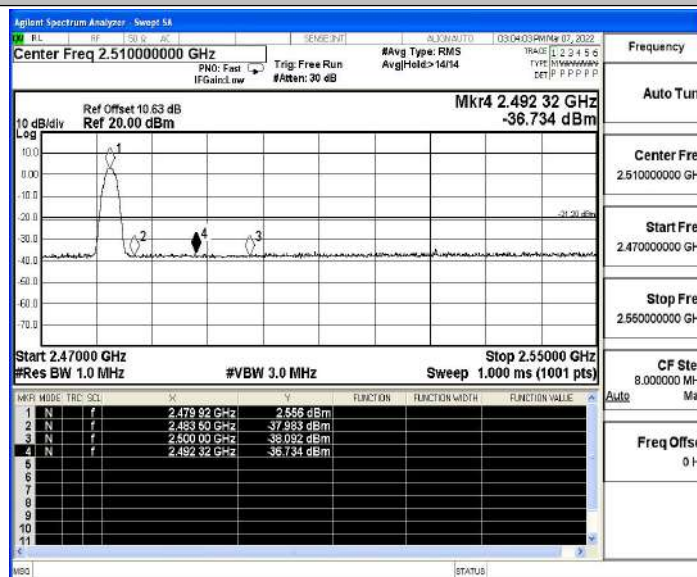
DH5_Ant1_Low_2402_Peak



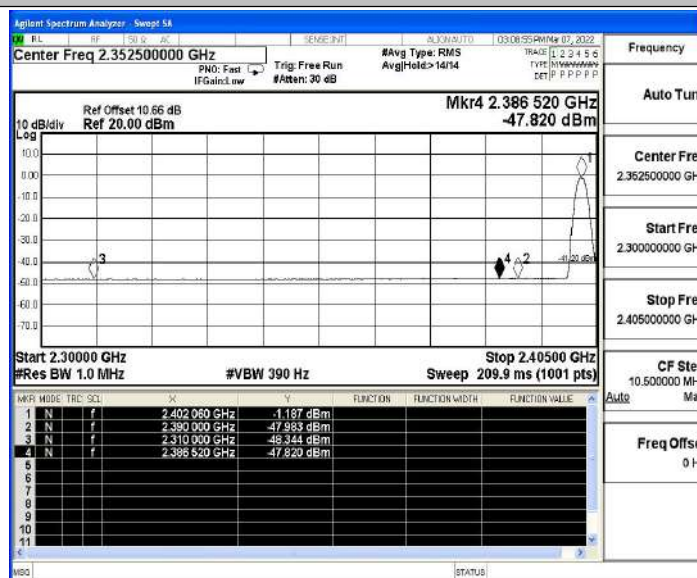
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

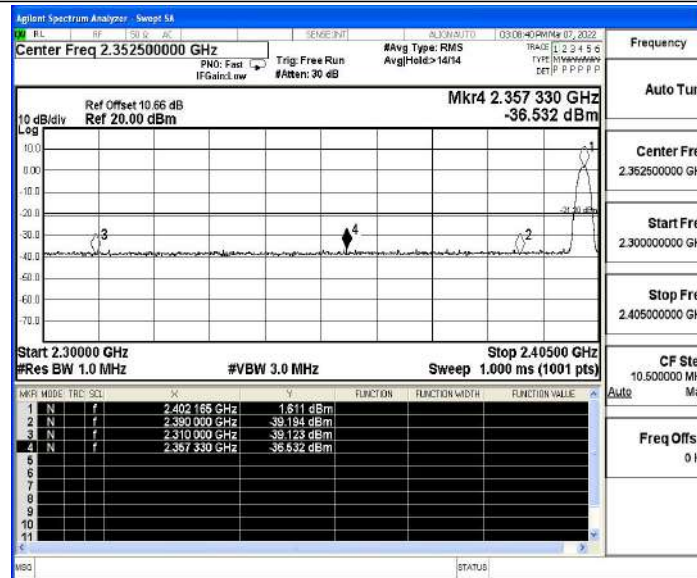


2DH5_Ant1_Low_2402_AV

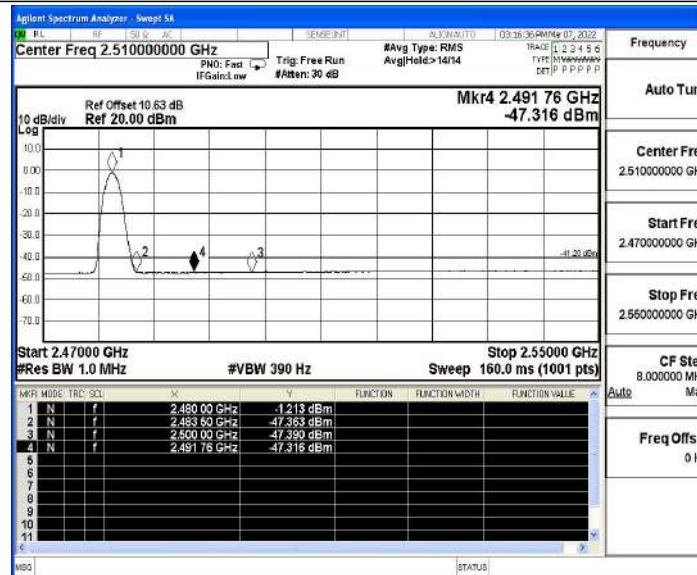




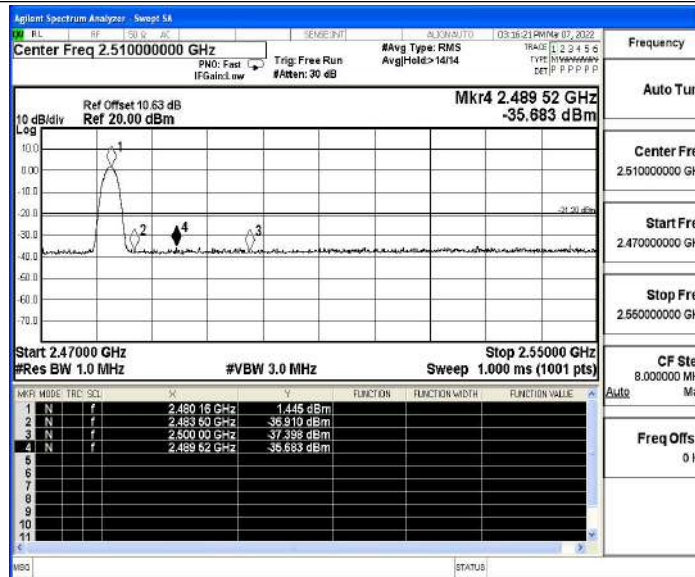
2DH5_Ant1_Low_2402_Peak



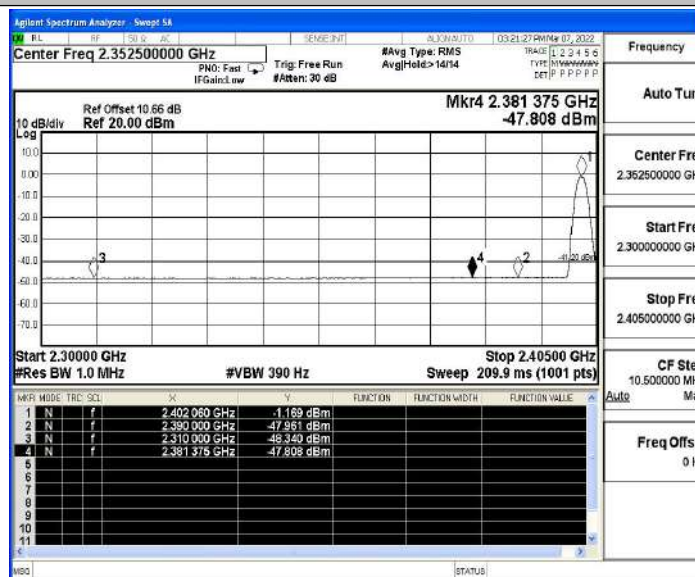
2DH5_Ant1_High_2480_AV



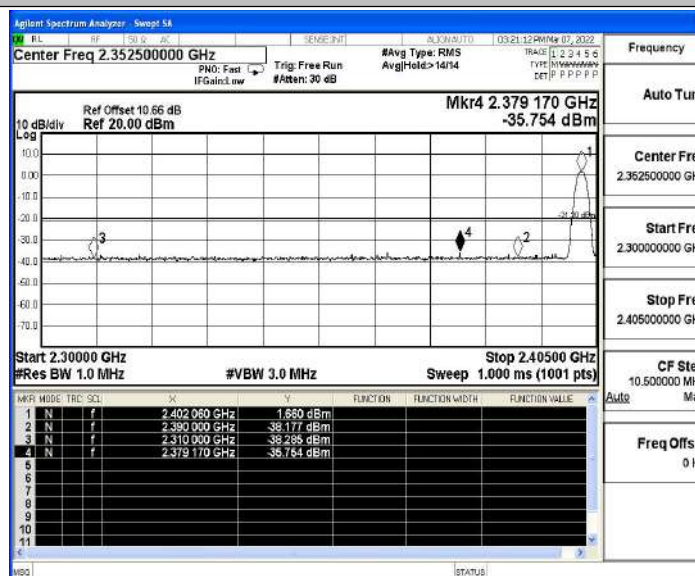
2DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_2402_AV

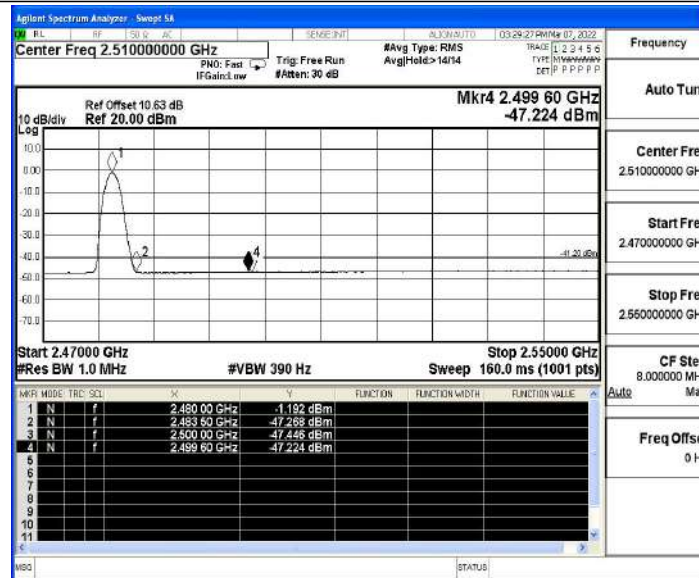


3DH5_Ant1_Low_2402_Peak





3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

