



Appendix A

RF Test Data for BT V5.0 (DSS) (Conducted Measurement)

Product Name: The Twin Peaks

Test Model: OT2875

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>monkey.Li</i> Monkey Li
Supervised by:	<i>Li Huan</i> Li Huan



A.1 20dB Emission Bandwidth

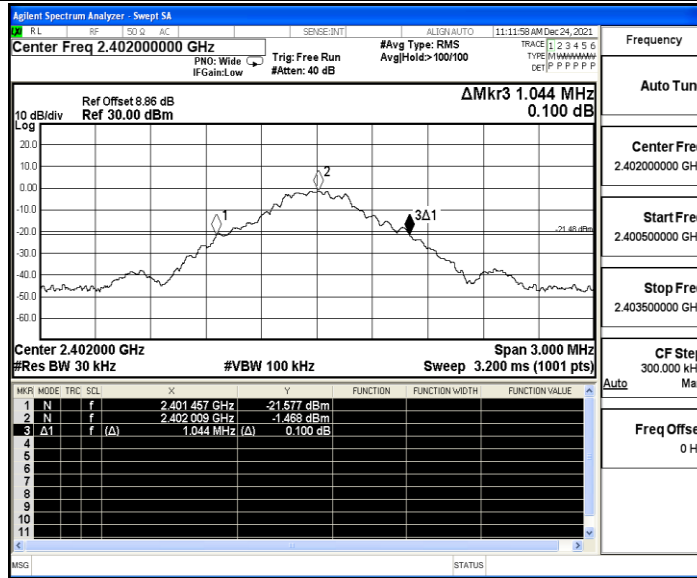
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.044	2401.457	2402.501	---	---
		2441	1.041	2440.460	2441.501	---	---
		2480	1.032	2479.466	2480.498	---	---
2DH5	Ant1	2402	1.329	2401.331	2402.660	---	---
		2441	1.293	2440.358	2441.651	---	---
		2480	1.314	2479.340	2480.654	---	---
3DH5	Ant1	2402	1.299	2401.346	2402.645	---	---
		2441	1.299	2440.346	2441.645	---	---
		2480	1.317	2479.340	2480.657	---	---

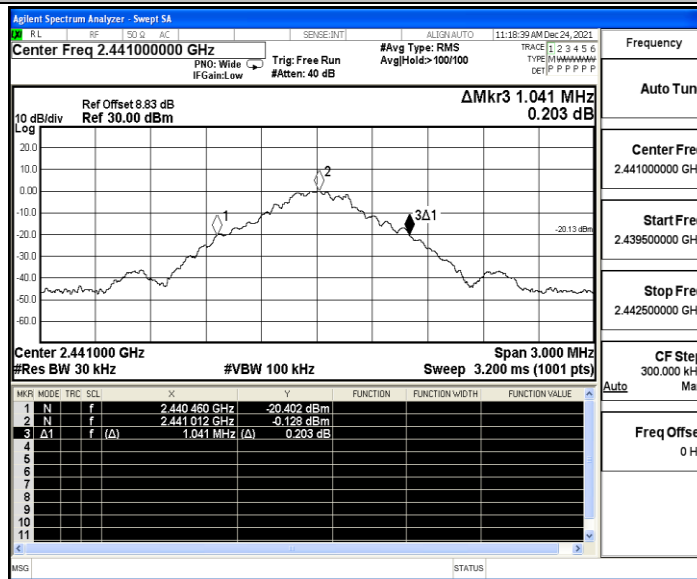


Test Graphs

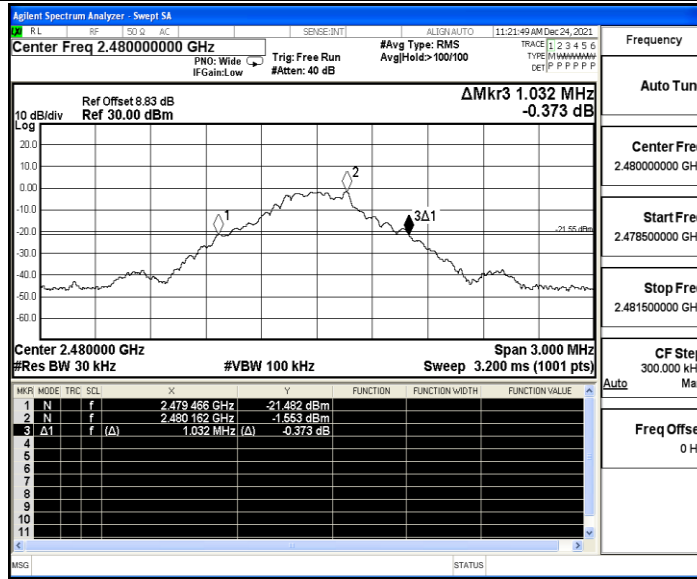
DH5_Ant1_2402



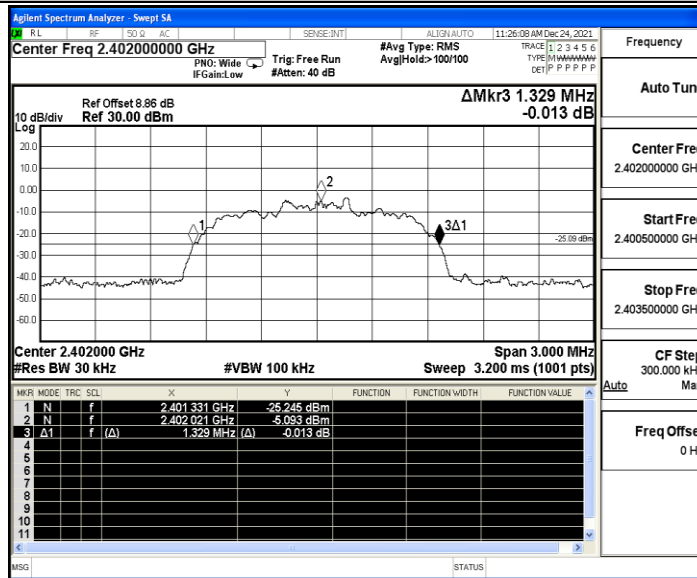
DH5_Ant1_2441



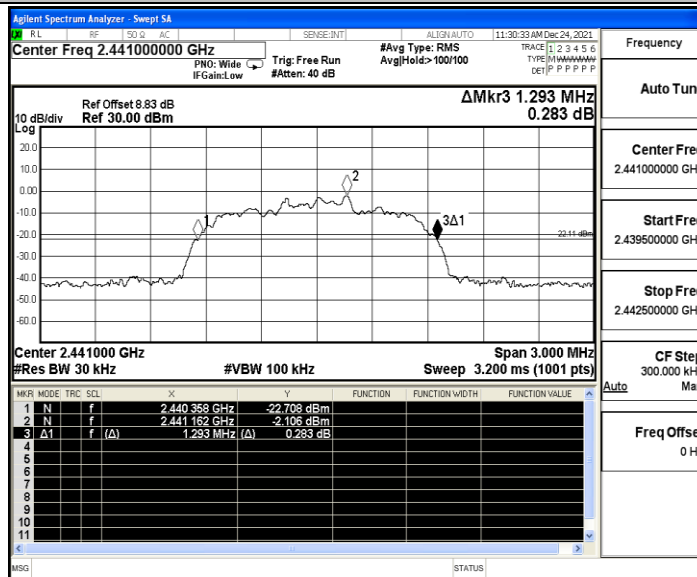
DH5_Ant1_2480



2DH5_Ant1_2402

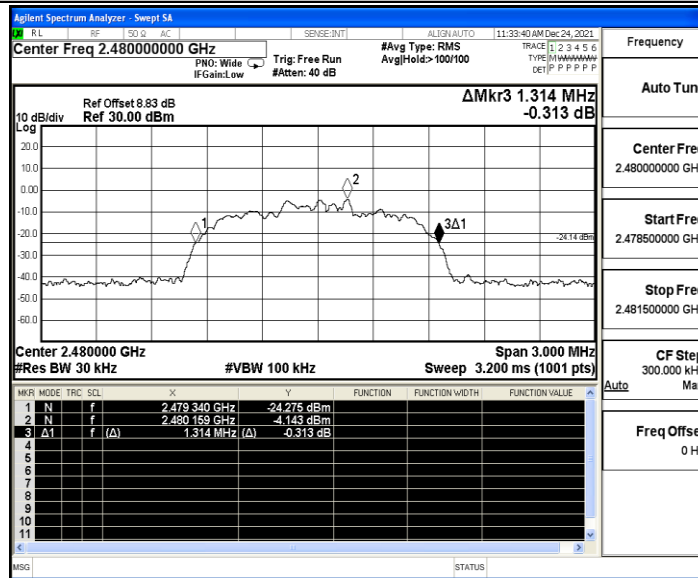


2DH5_Ant1_2441

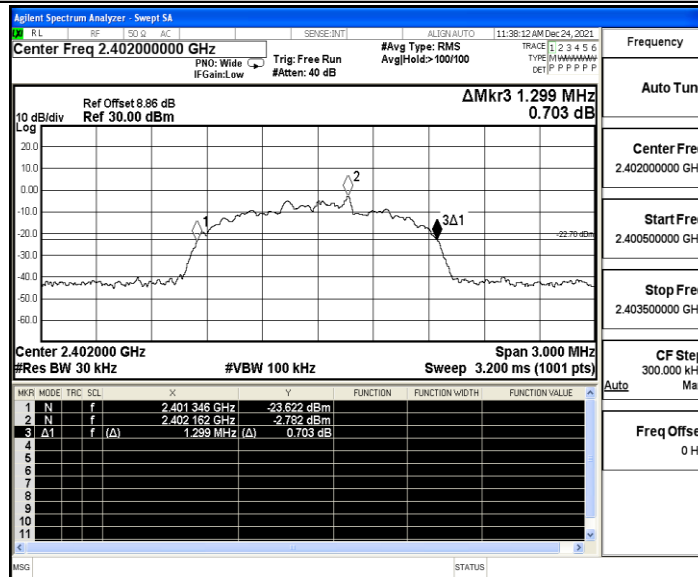




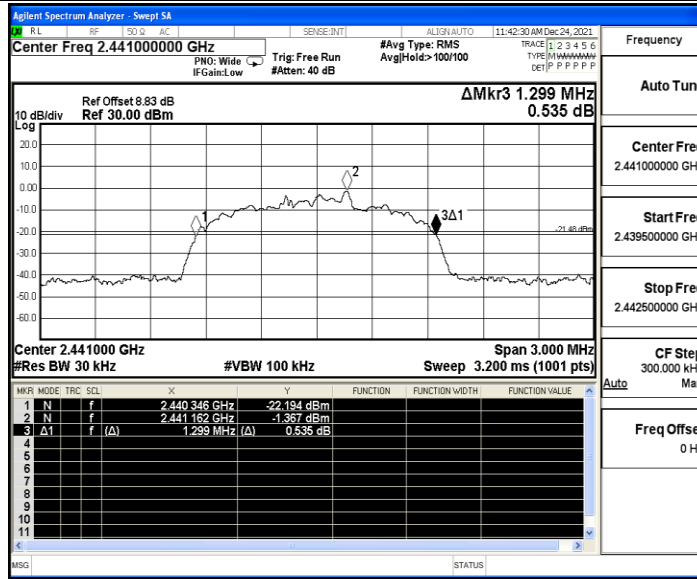
2DH5_Ant1_2480



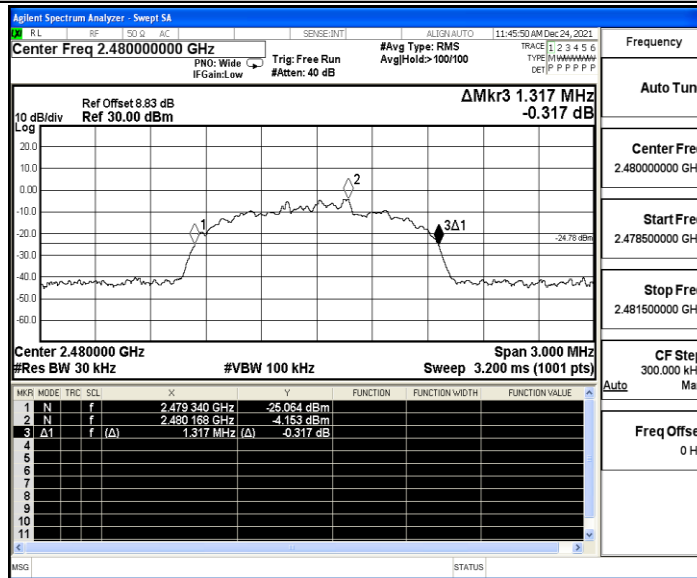
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.2 Maximum peak conducted output power

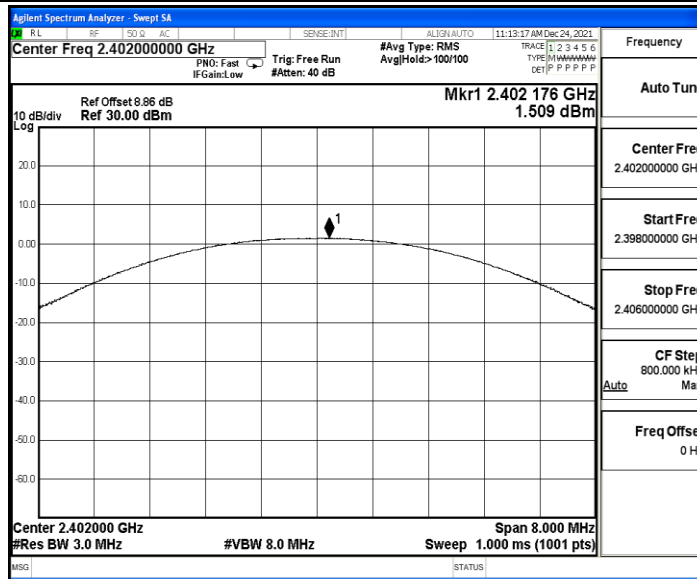
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.51	≤ 20.97	PASS
		2441	2.79	≤ 20.97	PASS
		2480	1.13	≤ 20.97	PASS
2DH5	Ant1	2402	0.67	≤ 20.97	PASS
		2441	1.91	≤ 20.97	PASS
		2480	0.32	≤ 20.97	PASS
3DH5	Ant1	2402	0.78	≤ 20.97	PASS
		2441	1.97	≤ 20.97	PASS
		2480	0.53	≤ 20.97	PASS

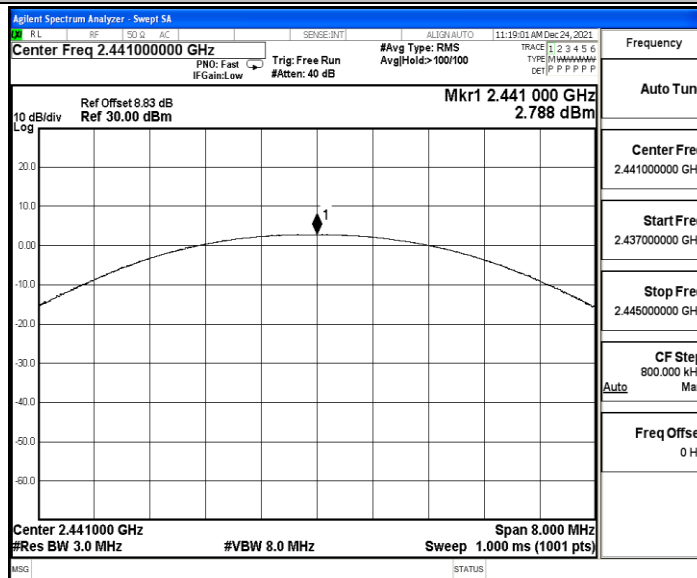


Test Graphs

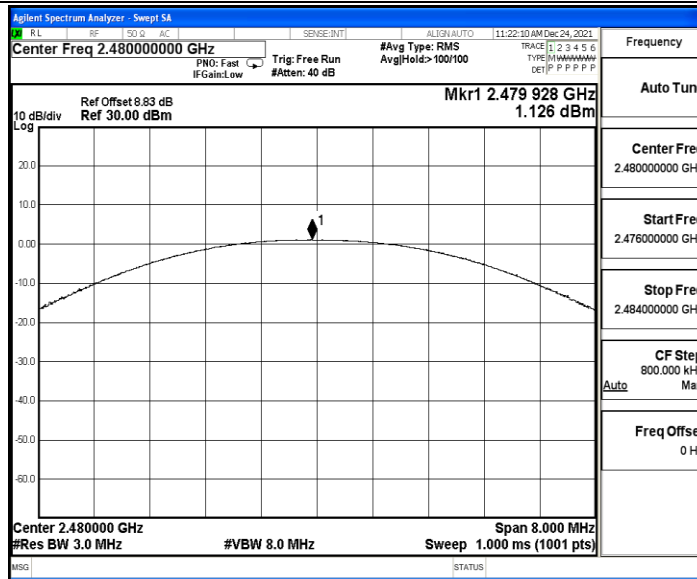
DH5_Ant1_2402



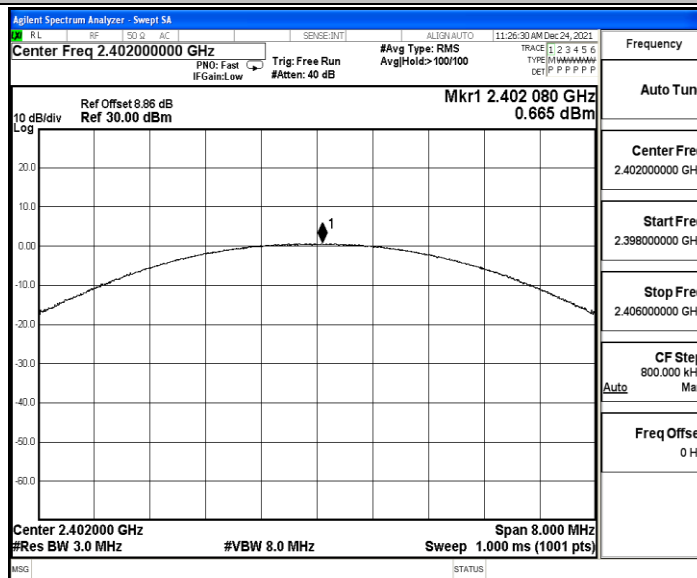
DH5_Ant1_2441



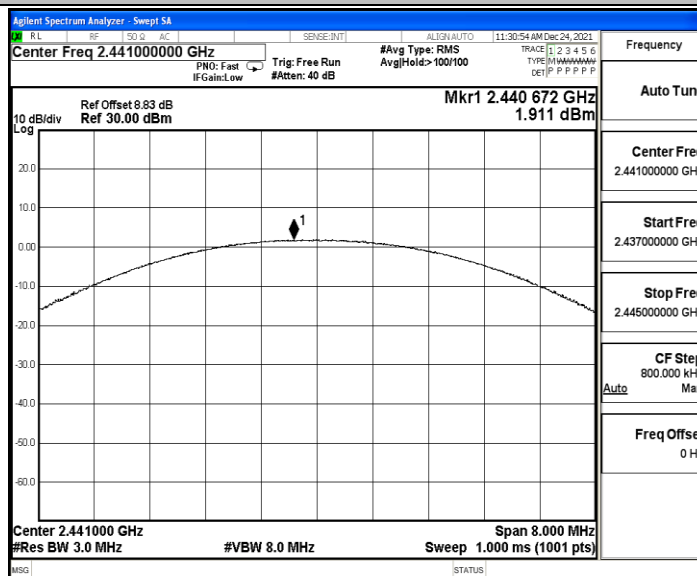
DH5_Ant1_2480



2DH5_Ant1_2402

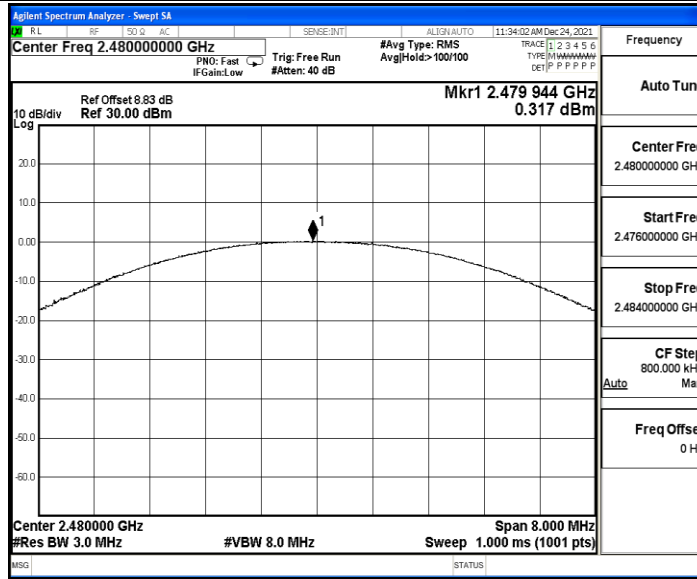


2DH5_Ant1_2441

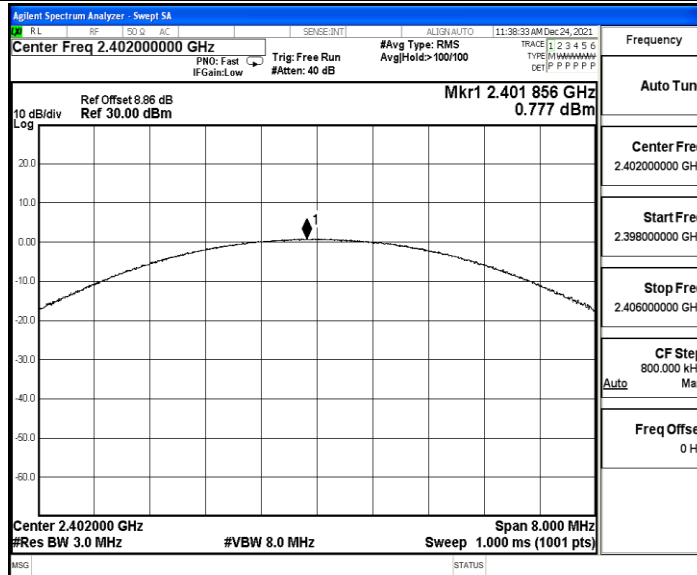




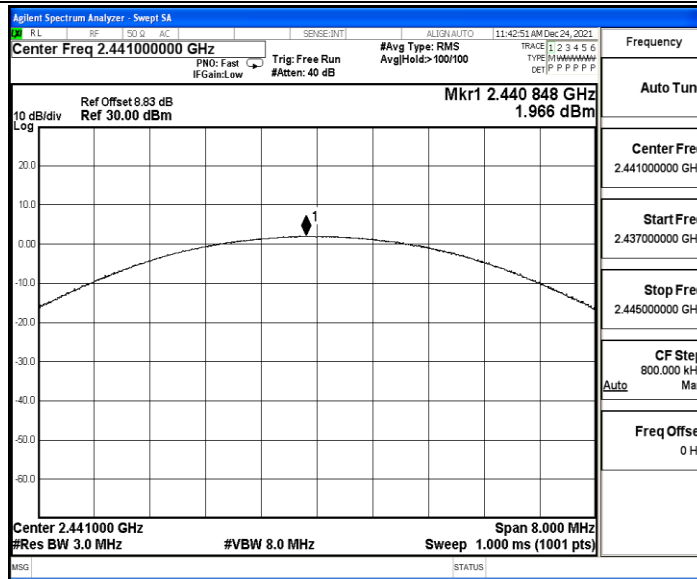
2DH5_Ant1_2480



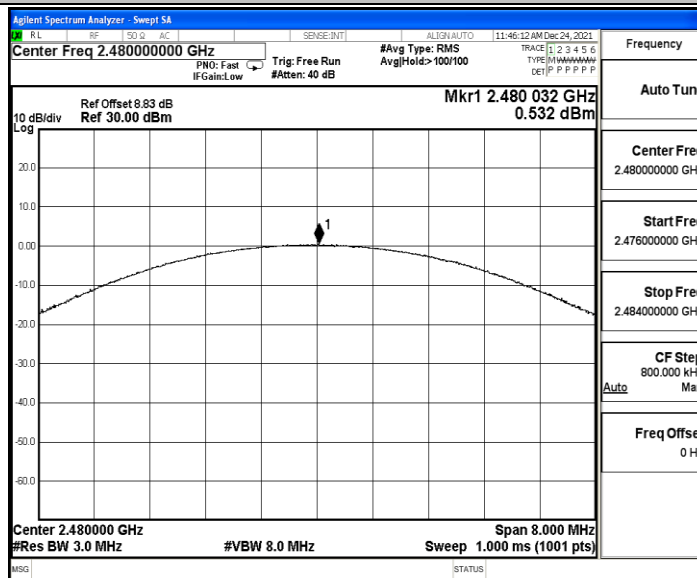
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.3 Carrier frequency separation

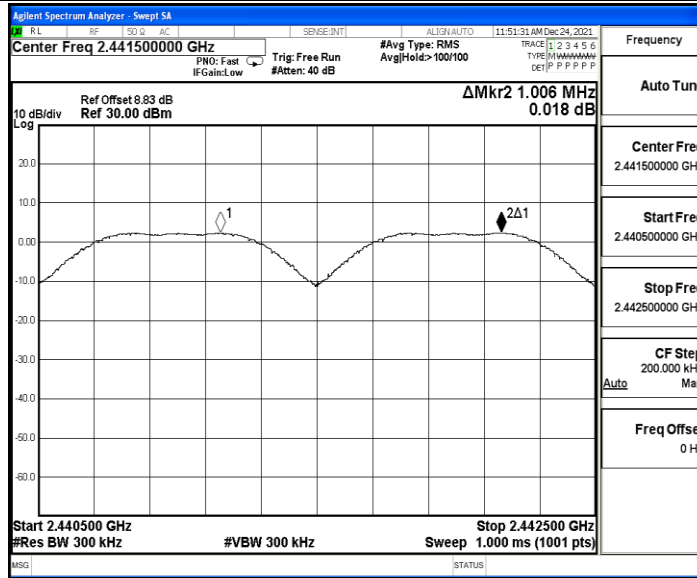
Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.006	≥ 0.696	PASS
2DH5	Ant1	Hop	1.006	≥ 0.886	PASS
3DH5	Ant1	Hop	1.338	≥ 1.317	PASS

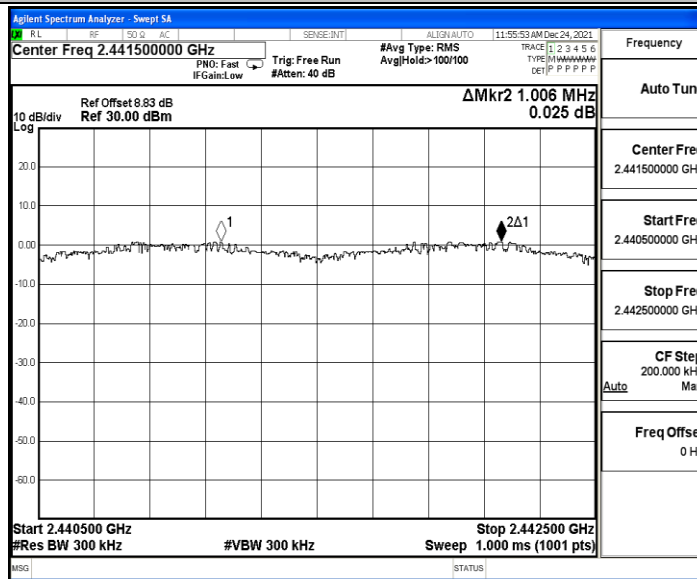


Test Graphs

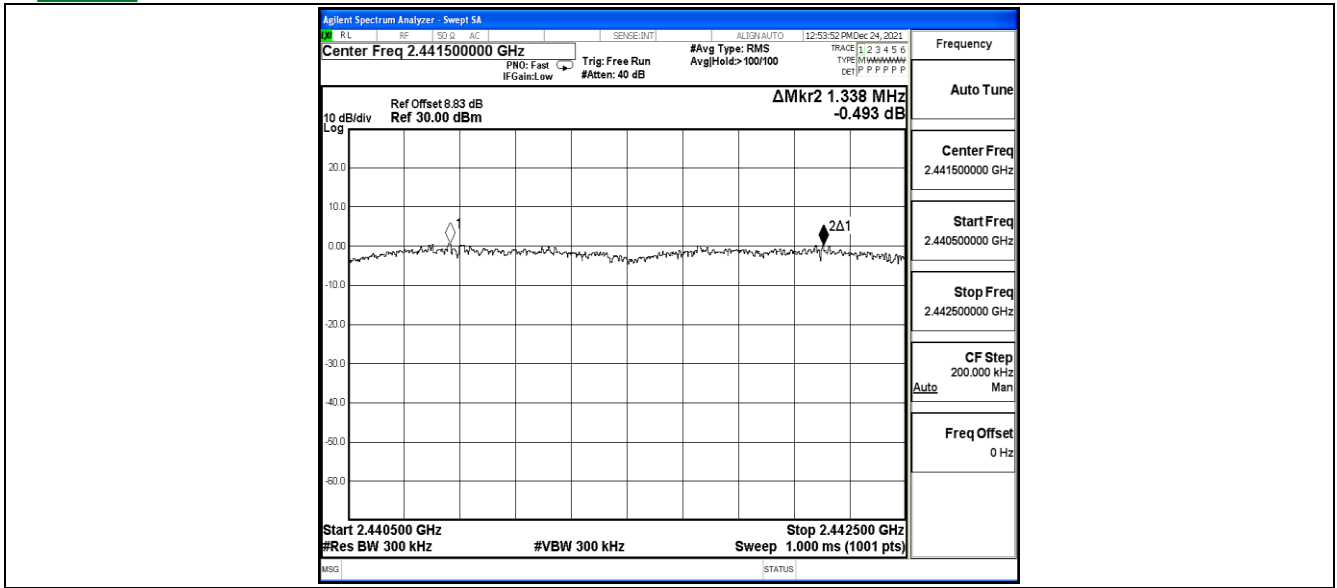
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.4 Time of occupancy

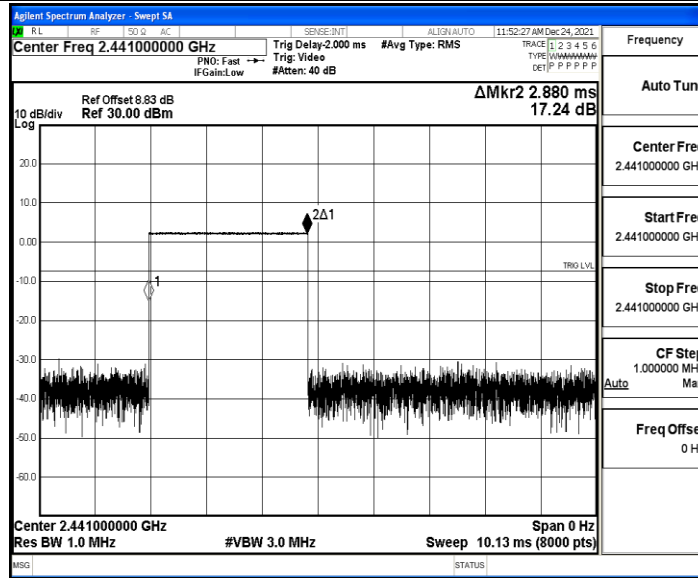
Test Result

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

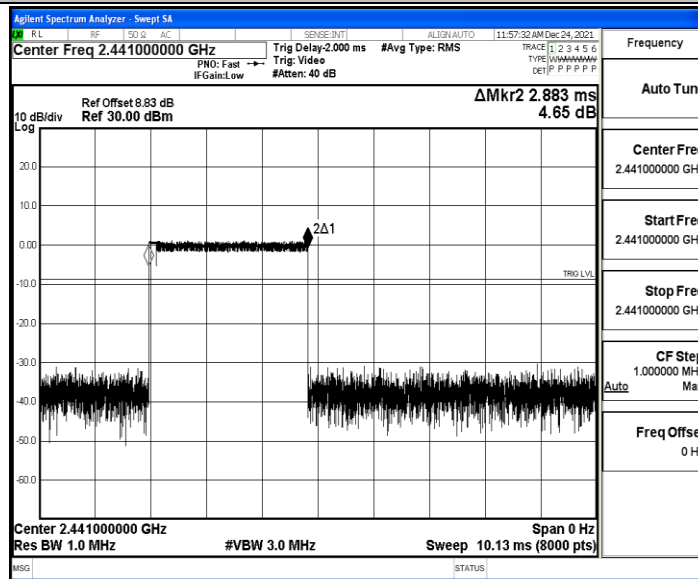


Test Graphs

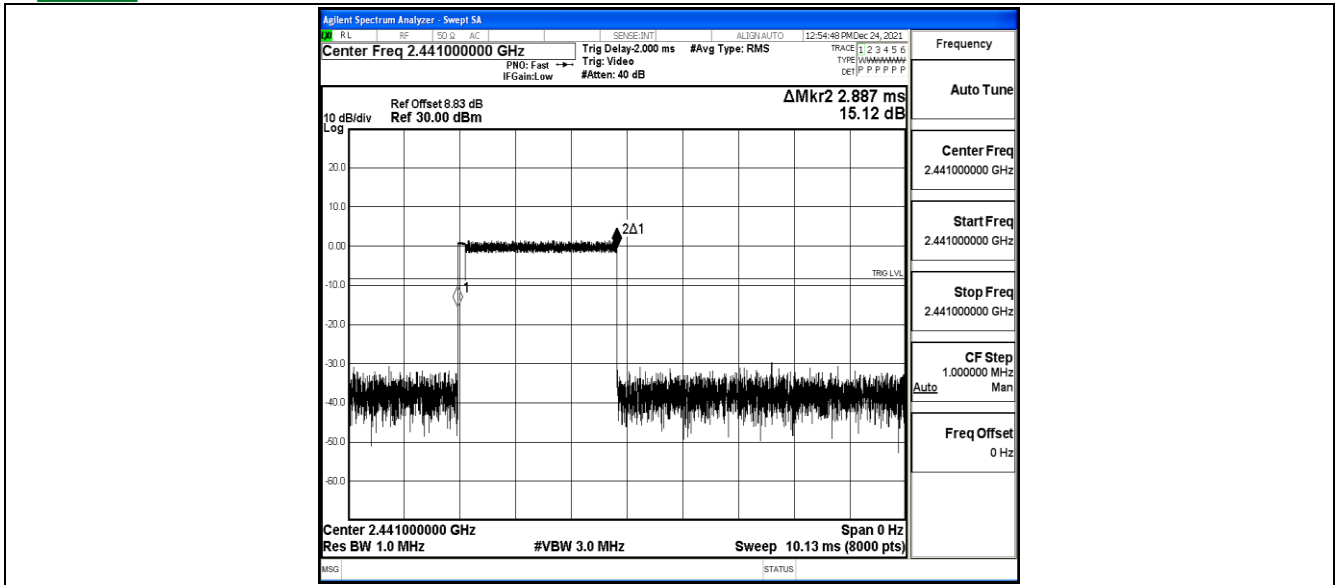
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.5 Number of hopping channels

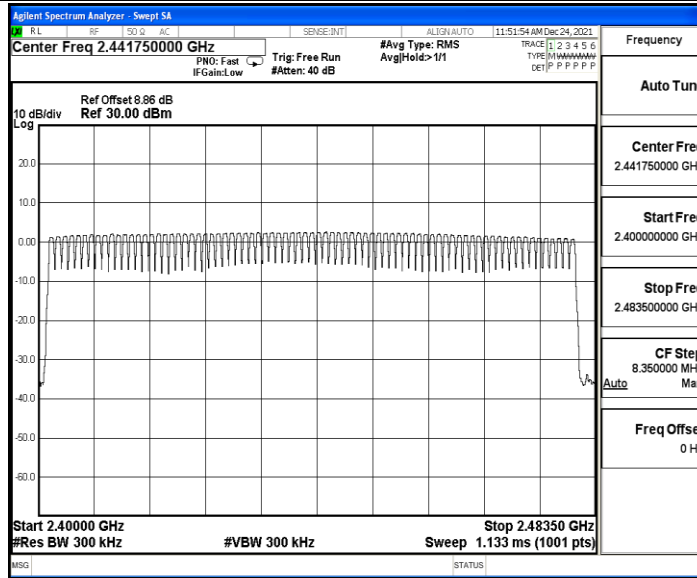
Test Result

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

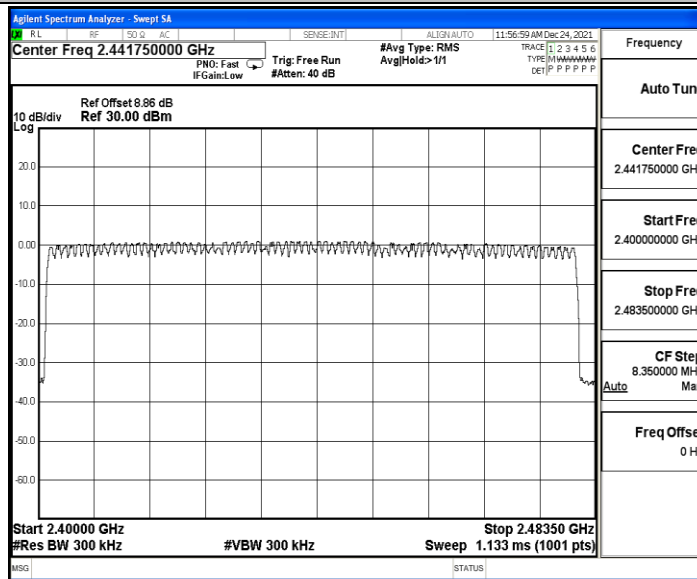


Test Graphs

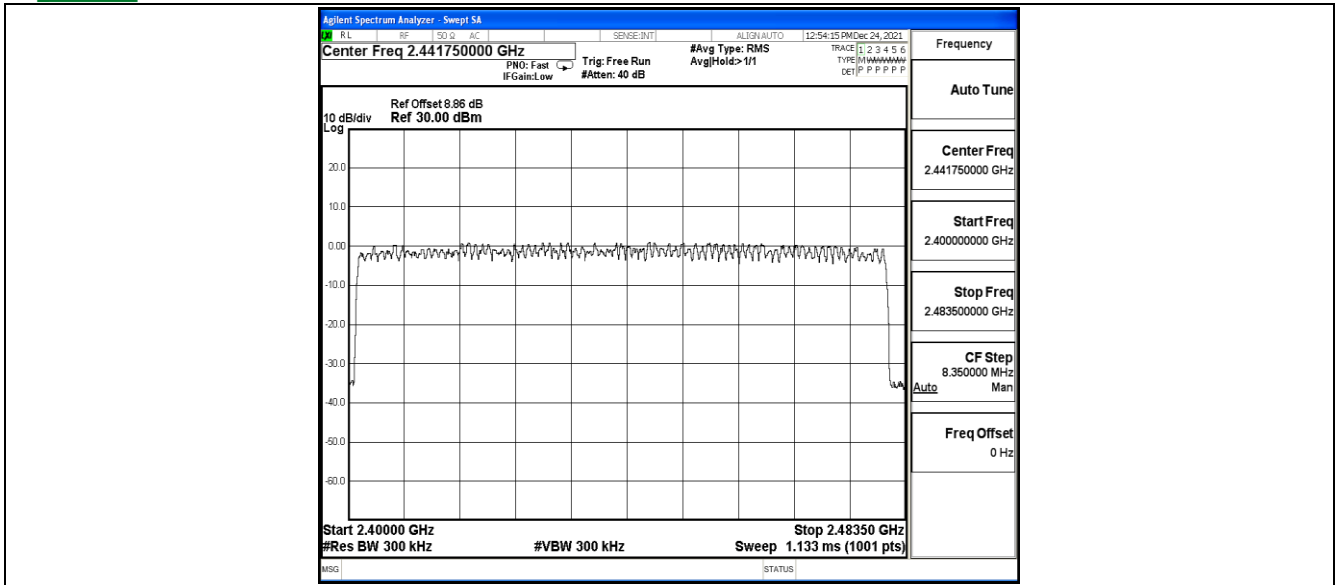
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.6 Band edge measurements

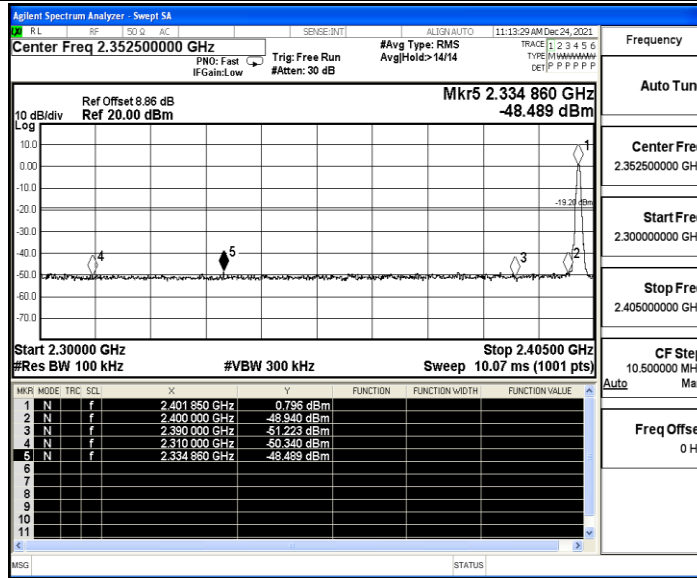
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.80	-48.49	≤ -19.2	PASS
		High	2480	0.73	-47.49	≤ -19.27	PASS
		Low	Hop_2402	0.27	-48.83	≤ -19.73	PASS
		High	Hop_2480	0.66	-47.47	≤ -19.34	PASS
2DH5	Ant1	Low	2402	-0.90	-48.22	≤ -20.9	PASS
		High	2480	-0.75	-47.37	≤ -20.75	PASS
		Low	Hop_2402	-1.37	-48.25	≤ -21.37	PASS
		High	Hop_2480	-0.38	-48.02	≤ -20.38	PASS
3DH5	Ant1	Low	2402	-0.35	-48.45	≤ -20.35	PASS
		High	2480	-0.85	-47.89	≤ -20.85	PASS
		Low	Hop_2402	-3.75	-48.61	≤ -23.75	PASS
		High	Hop_2480	-1.83	-47.72	≤ -21.83	PASS

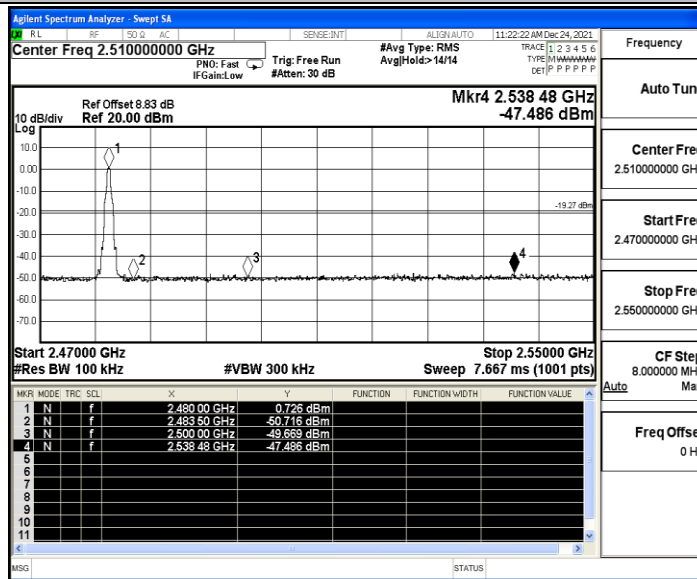


Test Graphs

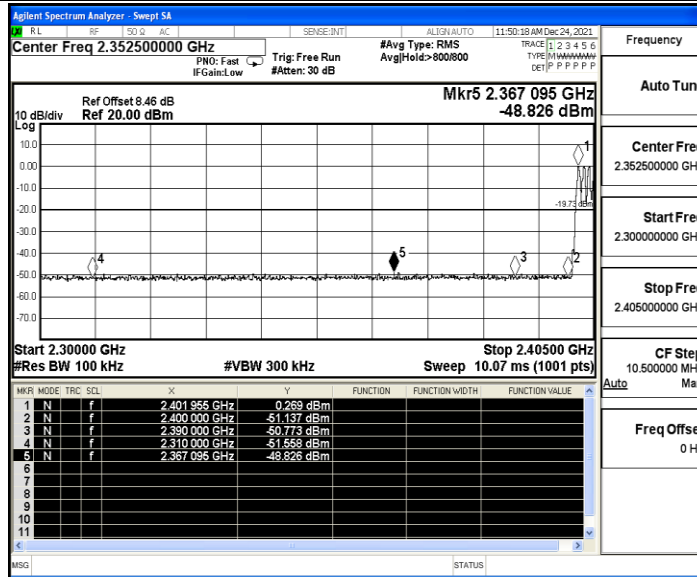
DH5_Ant1_Low_2402



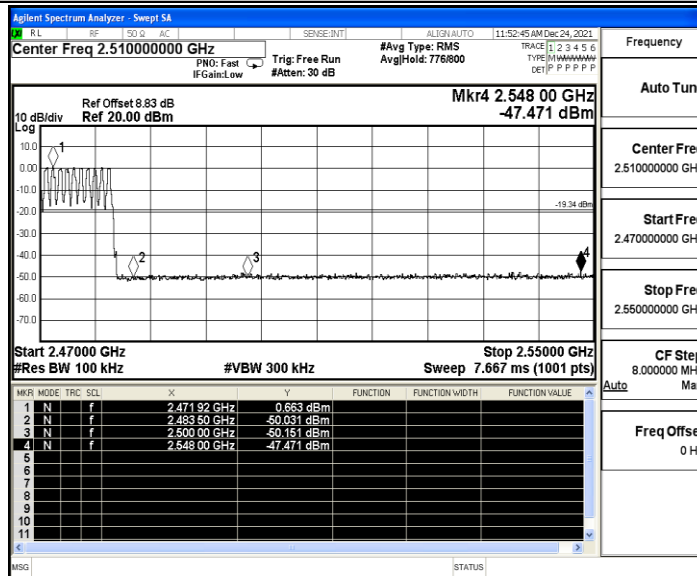
DH5_Ant1_High_2480



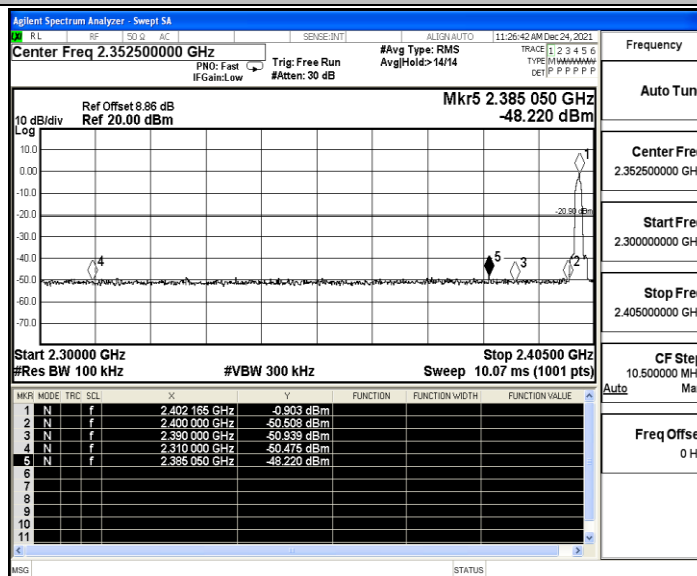
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

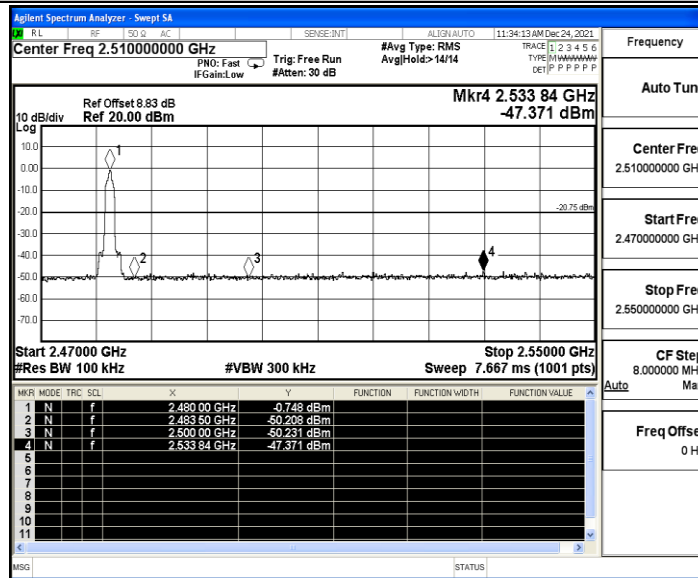


2DH5_Ant1_Low_2402

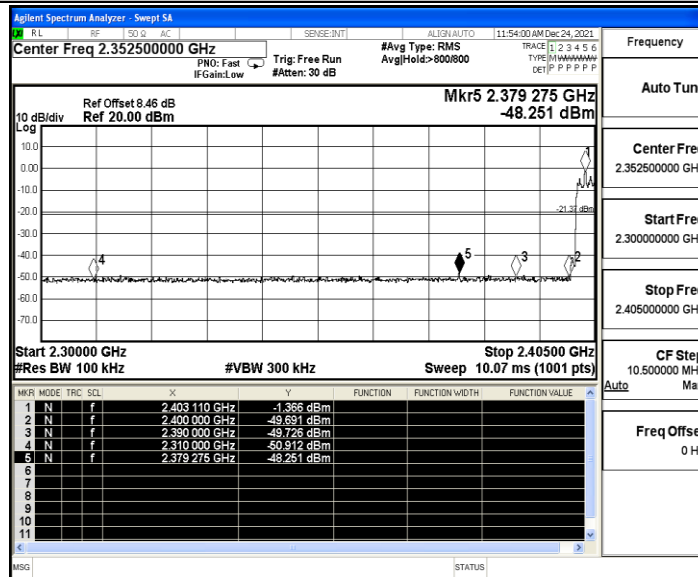




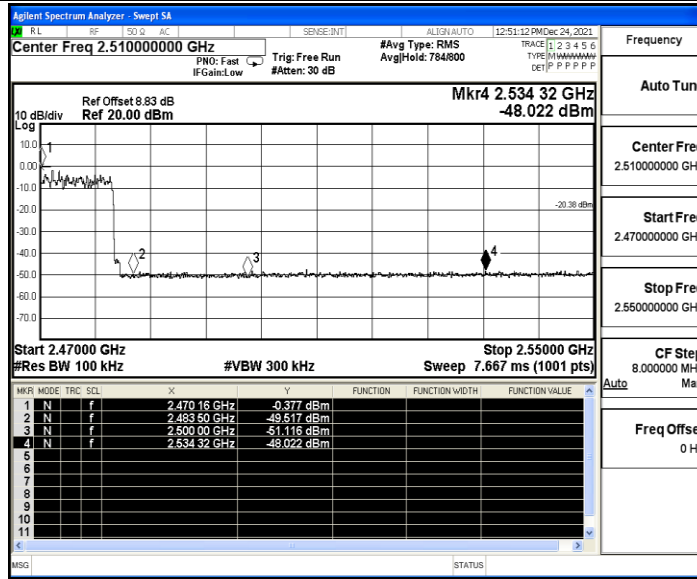
2DH5_Ant1_High_2480



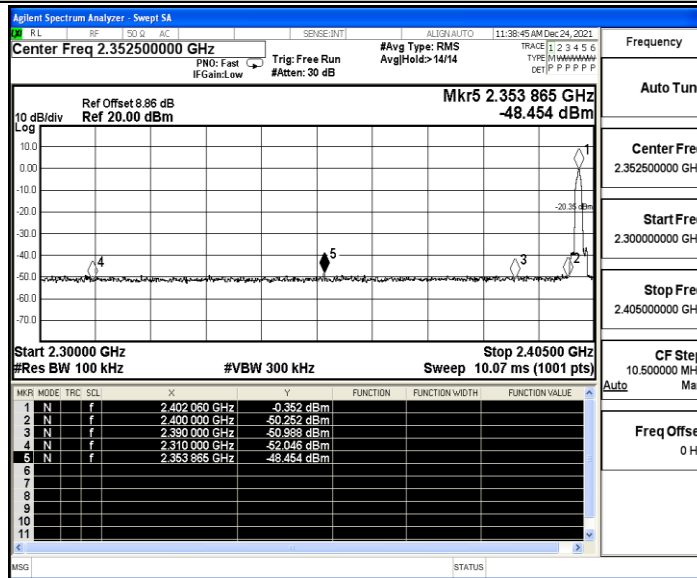
2DH5_Ant1_Low_Hop_2402



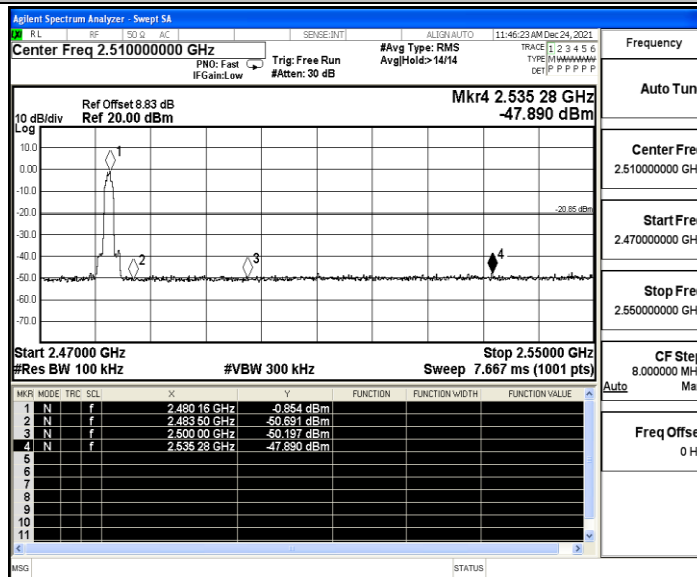
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

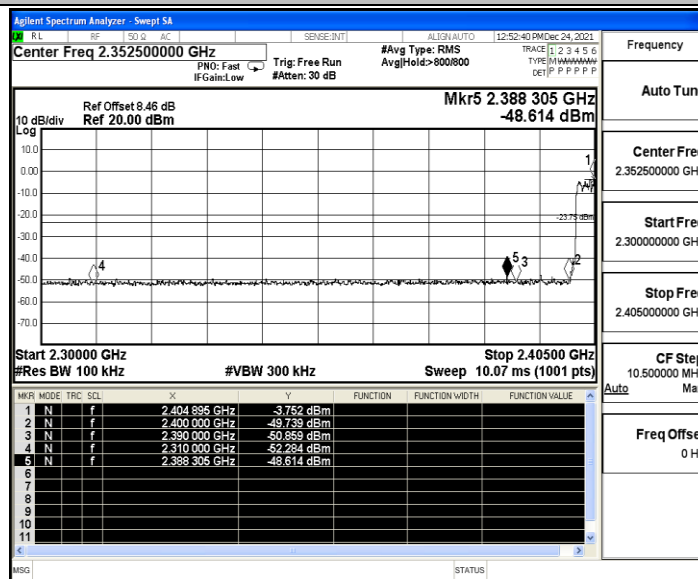


3DH5_Ant1_High_2480

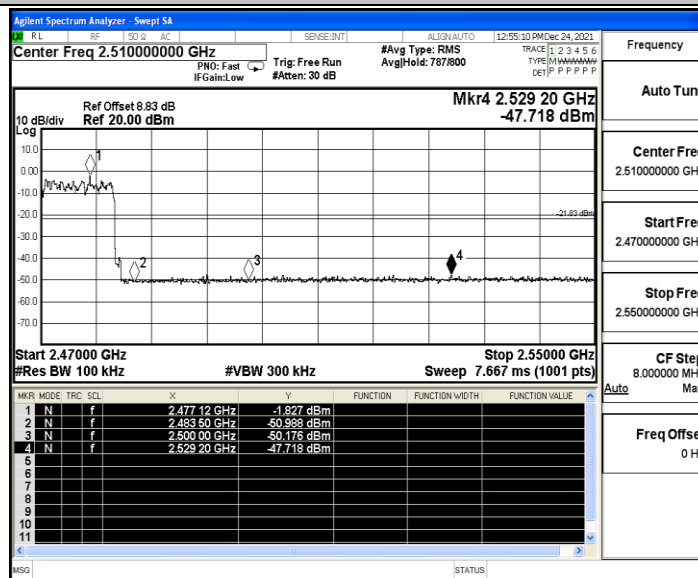




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

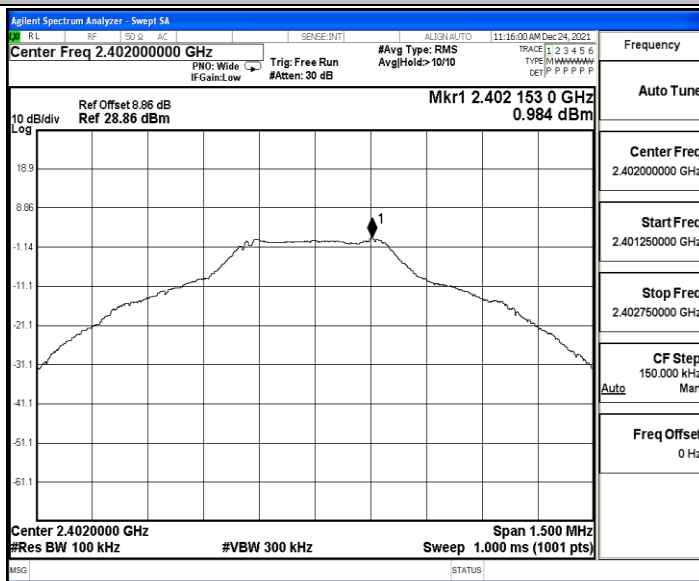
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.98	0.98	---	PASS
			30~1000	0.98	-47.65	≤-19.02	PASS
			1000~26500	0.98	-45.48	≤-19.02	PASS
		2441	Reference	2.24	2.24	---	PASS
			30~1000	2.24	-59.66	≤-17.76	PASS
			1000~26500	2.24	-45.94	≤-17.76	PASS
		2480	Reference	0.56	0.56	---	PASS
			30~1000	0.56	-60.15	≤-19.44	PASS
			1000~26500	0.56	-45.46	≤-19.44	PASS
2DH5	Ant1	2402	Reference	-0.64	-0.64	---	PASS
			30~1000	-0.64	-60.24	≤-20.64	PASS
			1000~26500	-0.64	-45.86	≤-20.64	PASS
		2441	Reference	0.58	0.58	---	PASS
			30~1000	0.58	-60.08	≤-19.42	PASS
			1000~26500	0.58	-45.88	≤-19.42	PASS
		2480	Reference	-1.02	-1.02	---	PASS
			30~1000	-1.02	-60.3	≤-21.02	PASS
			1000~26500	-1.02	-45.32	≤-21.02	PASS
3DH5	Ant1	2402	Reference	-0.49	-0.49	---	PASS
			30~1000	-0.49	-60.31	≤-20.49	PASS
			1000~26500	-0.49	-45.6	≤-20.49	PASS
		2441	Reference	0.61	0.61	---	PASS
			30~1000	0.61	-60.38	≤-19.39	PASS
			1000~26500	0.61	-46.15	≤-19.39	PASS
		2480	Reference	-0.98	-0.98	---	PASS
			30~1000	-0.98	-60.36	≤-20.98	PASS
			1000~26500	-0.98	-45.53	≤-20.98	PASS

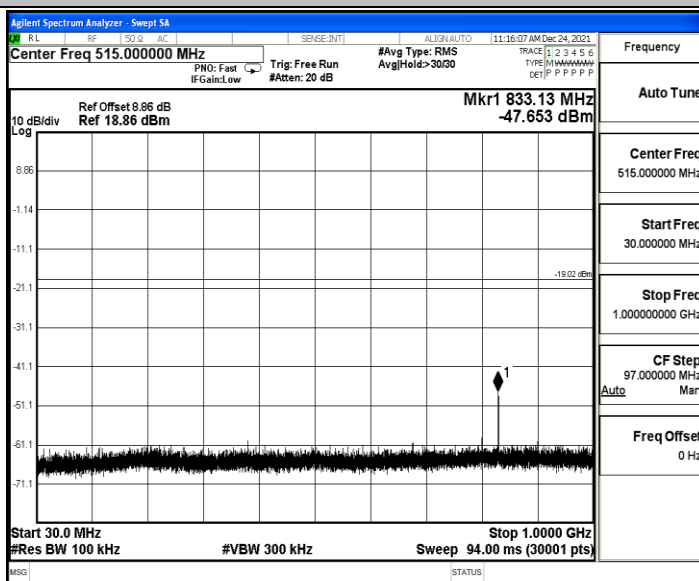


Test Graphs

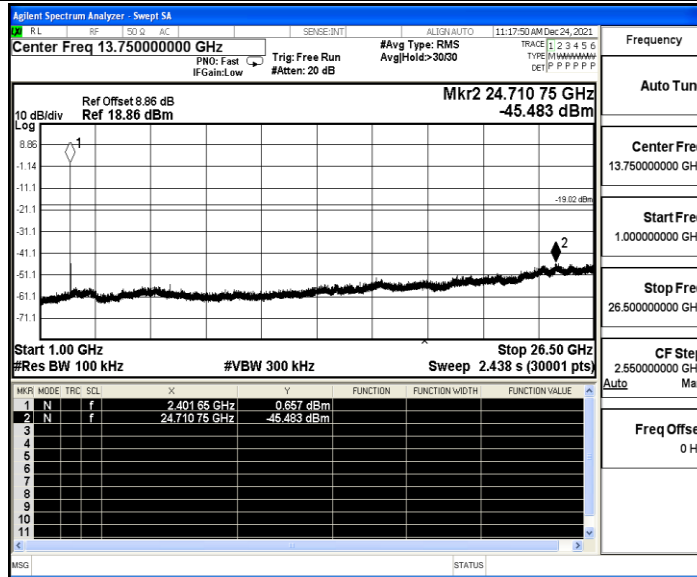
DH5_Ant1_2402_0~Reference



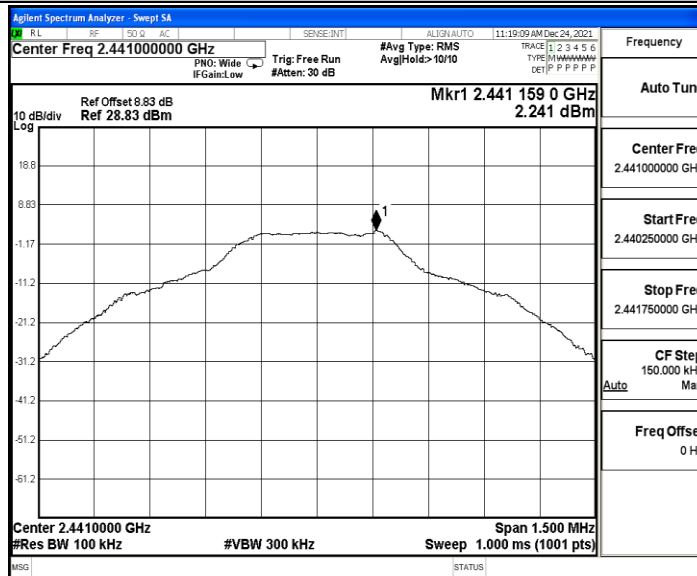
DH5_Ant1_2402_30~1000



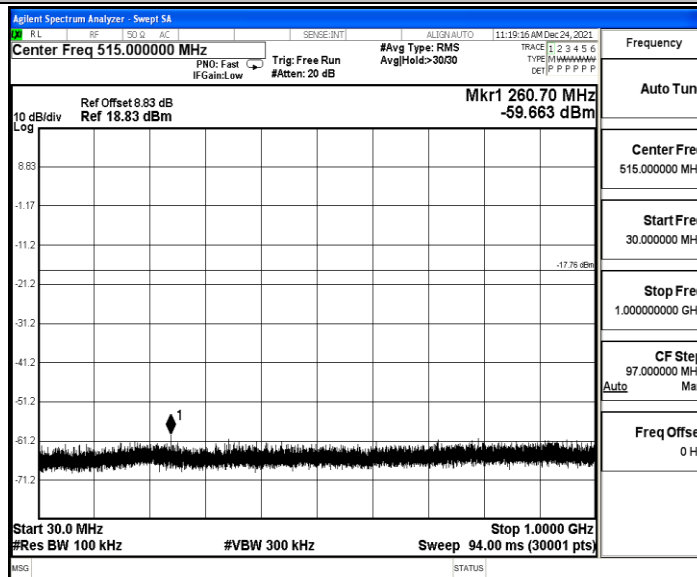
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0-Reference

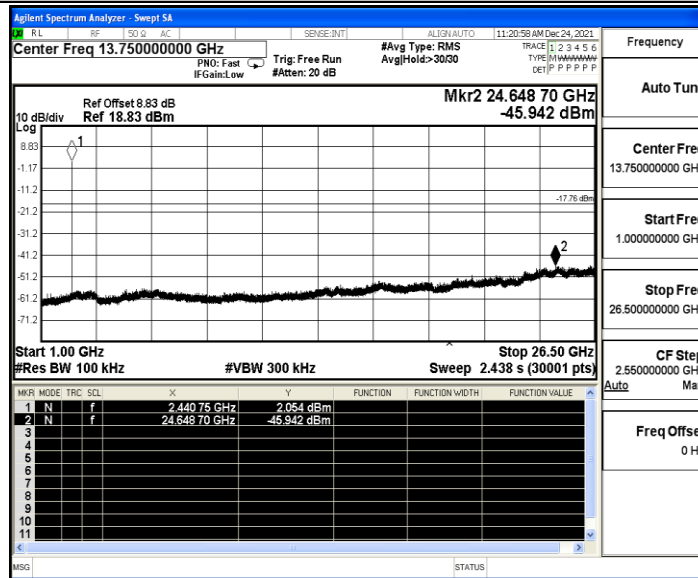


DH5_Ant1_2441_30~1000

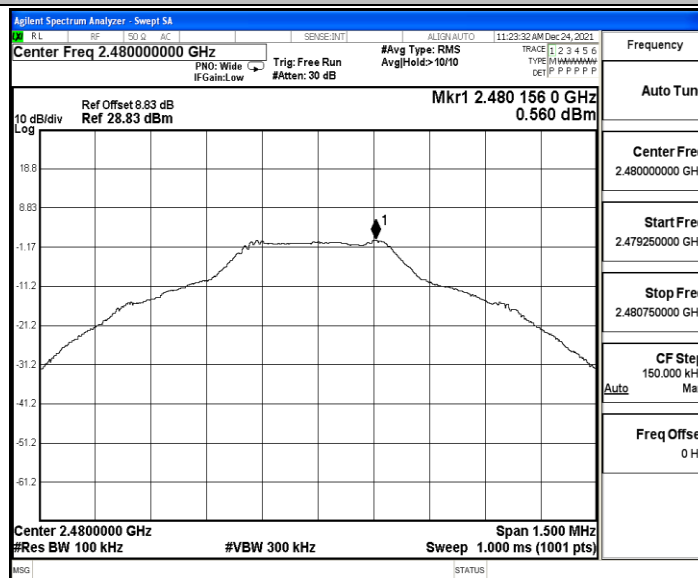




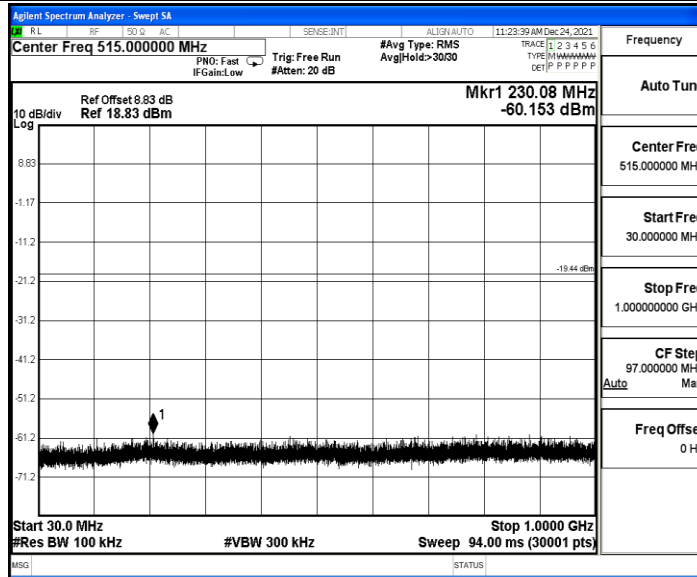
DH5_Ant1_2441_1000~26500



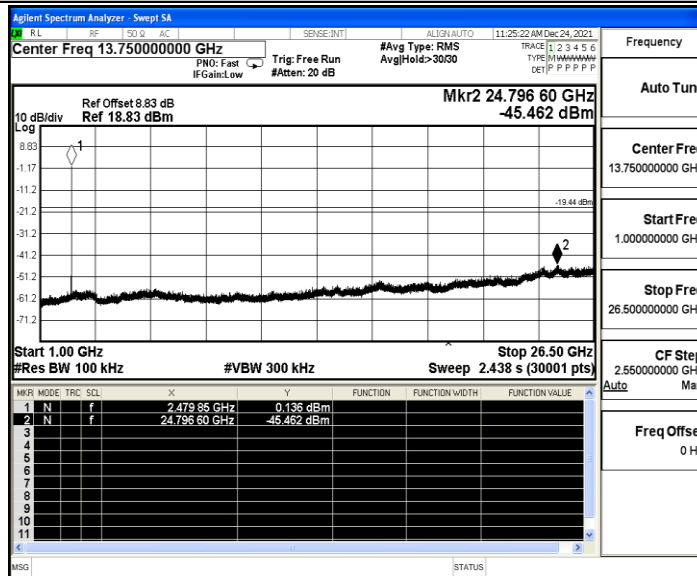
DH5_Ant1_2480_0~Reference



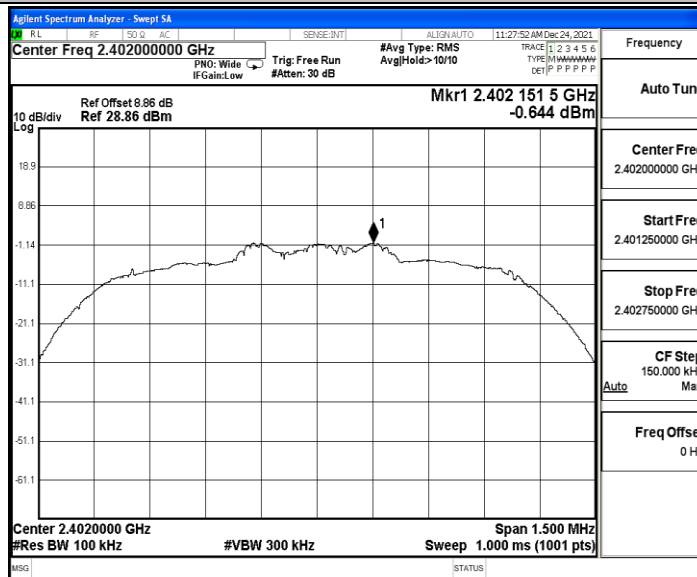
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

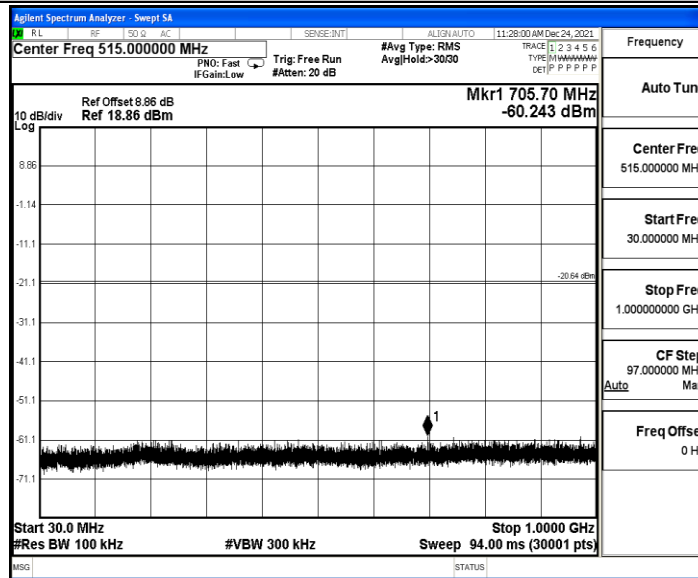


2DH5_Ant1_2402_0~Reference

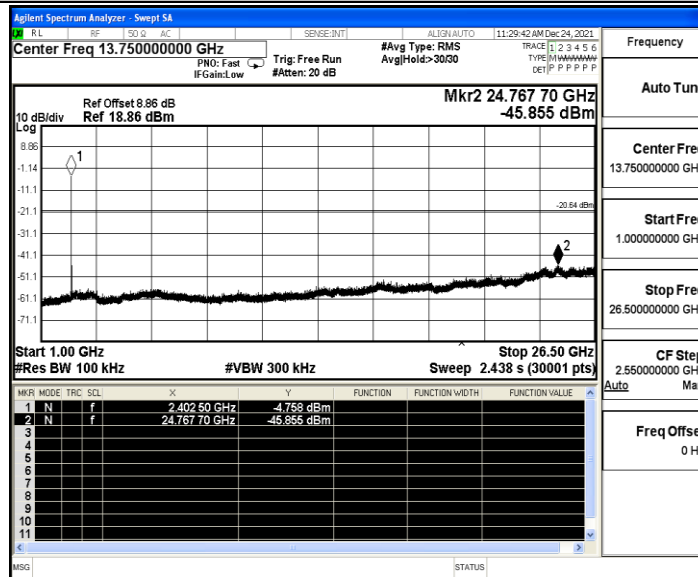




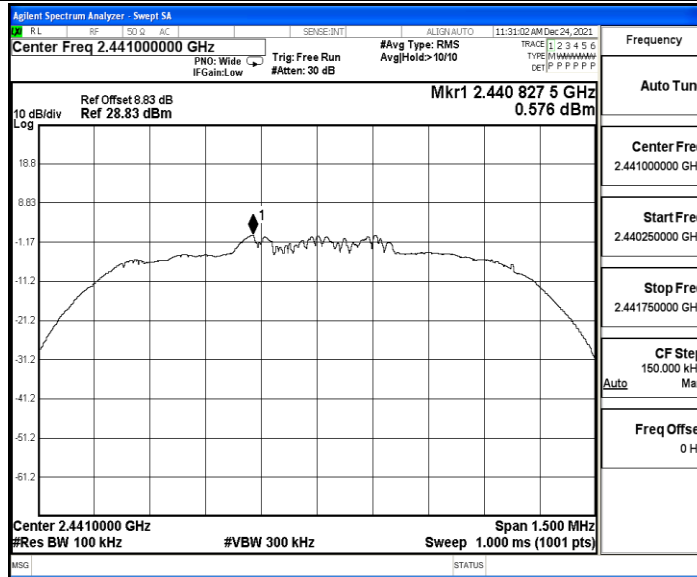
2DH5_Ant1_2402_30~1000



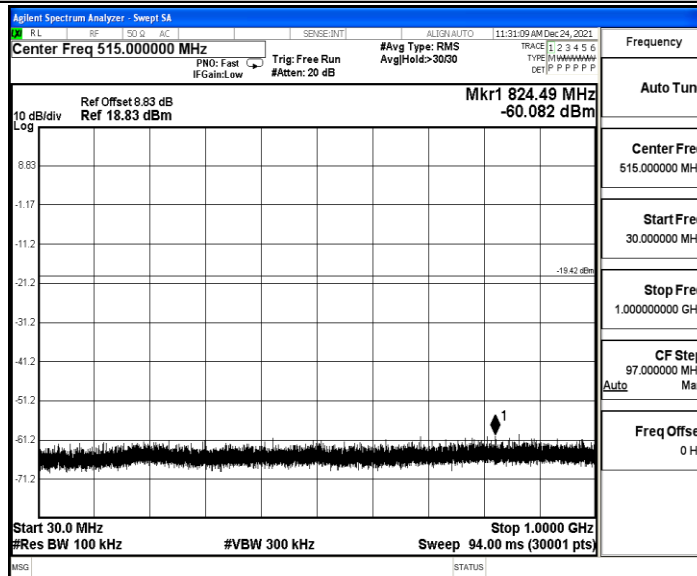
2DH5_Ant1_2402_1000~26500



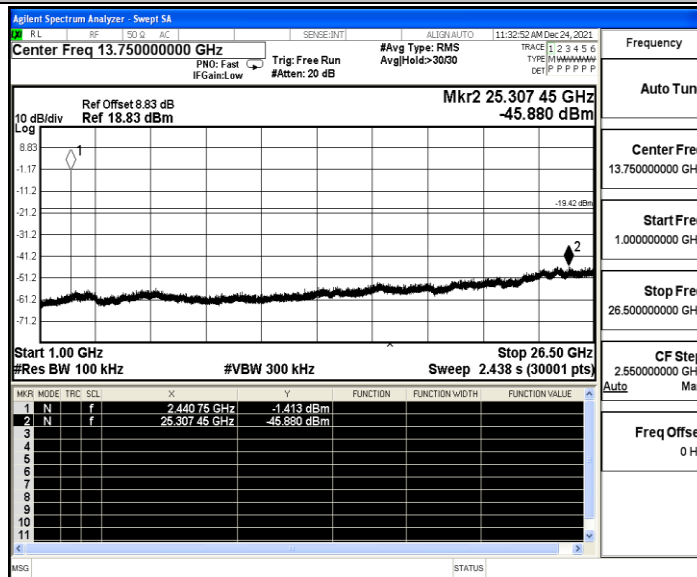
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

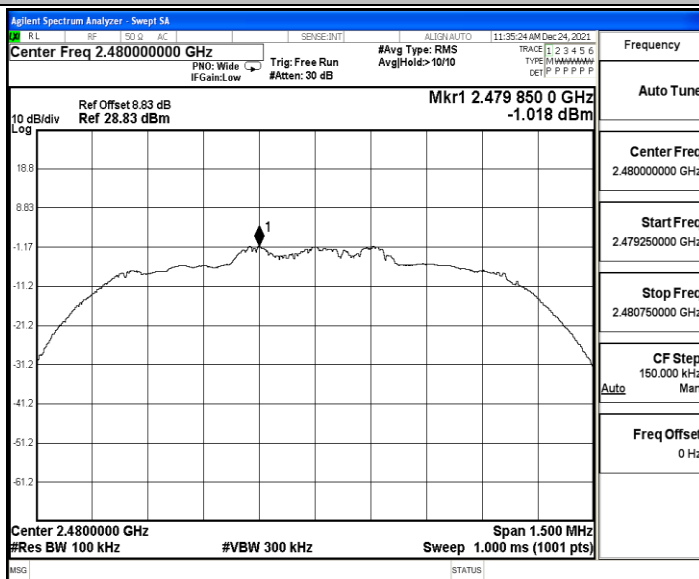


2DH5_Ant1_2441_1000~26500

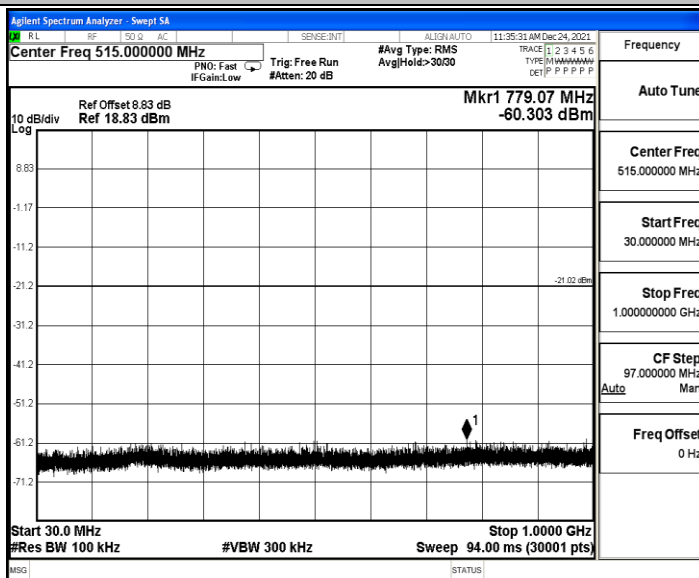




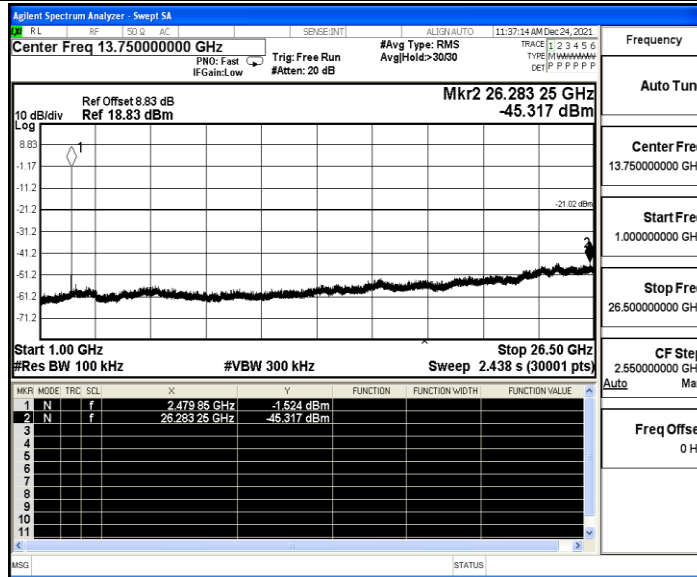
2DH5_Ant1_2480_0~Reference



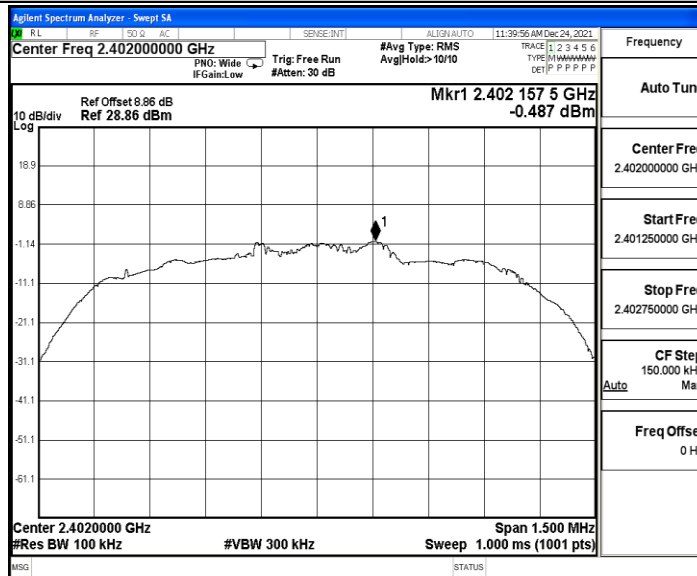
2DH5_Ant1_2480_30~1000



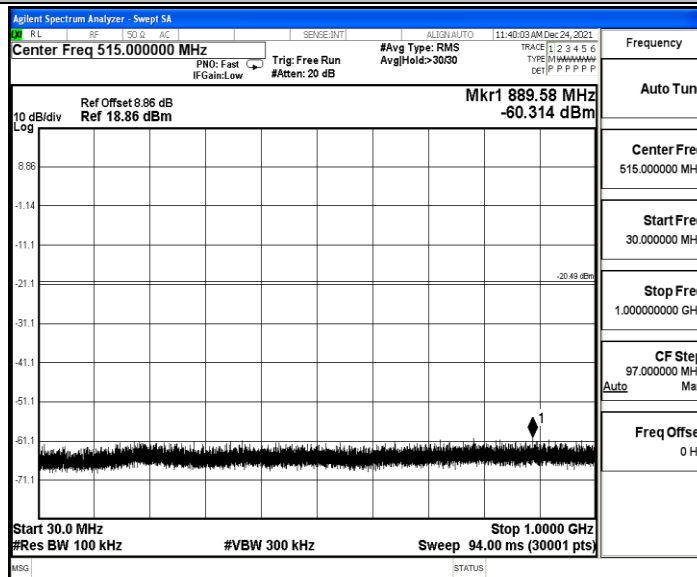
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference

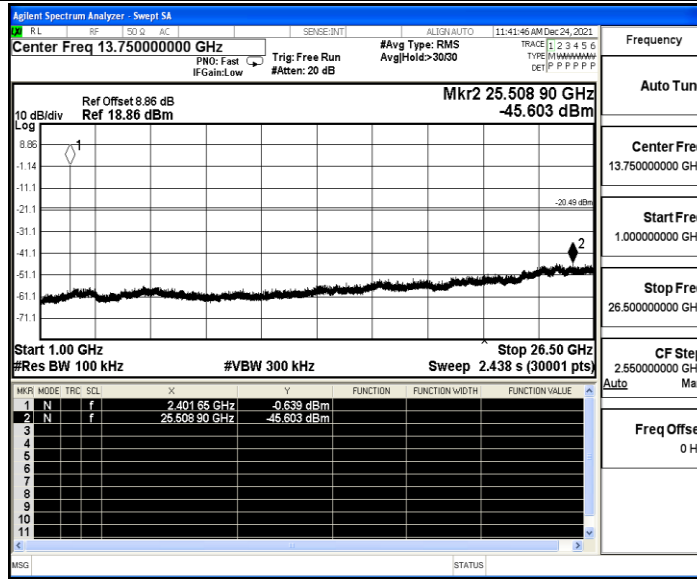


3DH5_Ant1_2402_30~1000

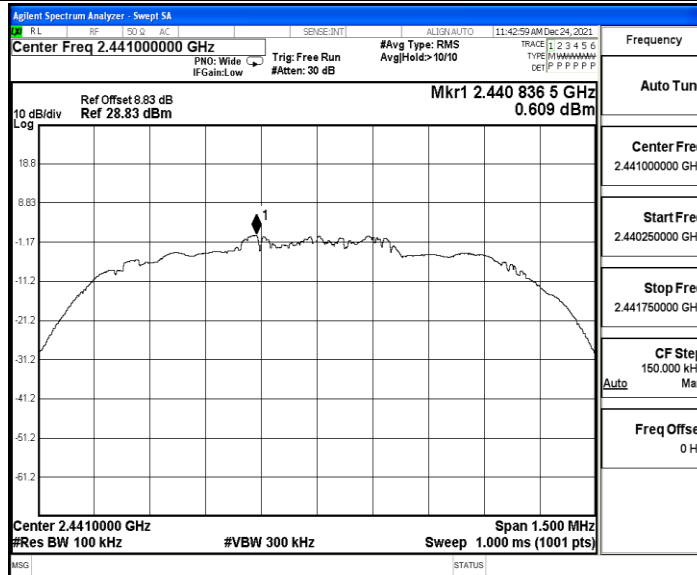




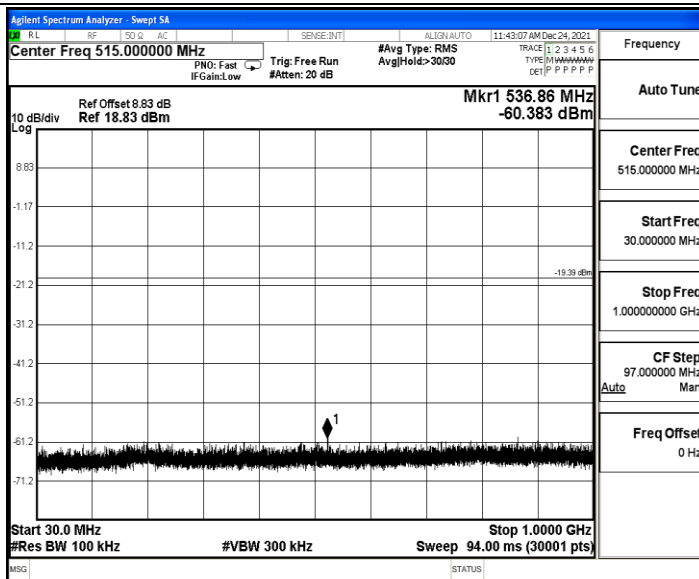
3DH5_Ant1_2402_1000~26500



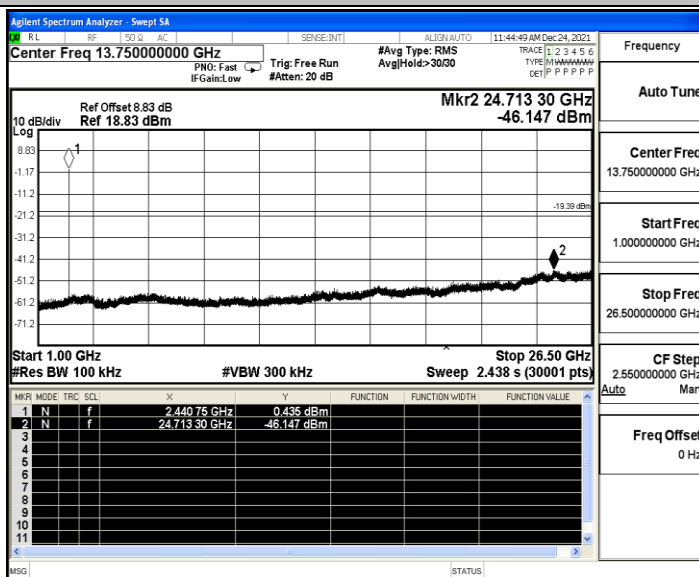
3DH5_Ant1_2441_0~Reference



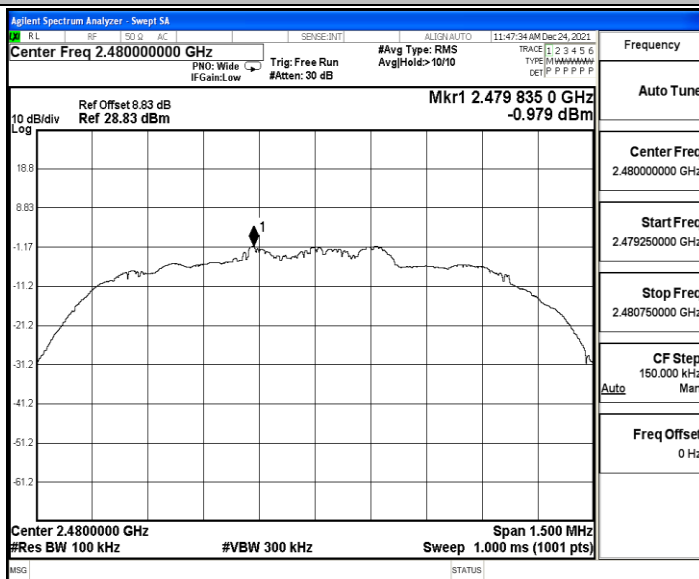
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

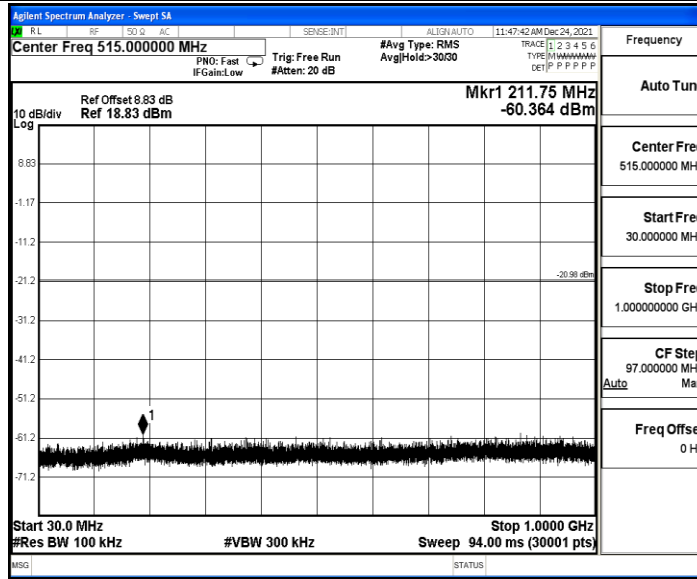


3DH5_Ant1_2480_0~Reference

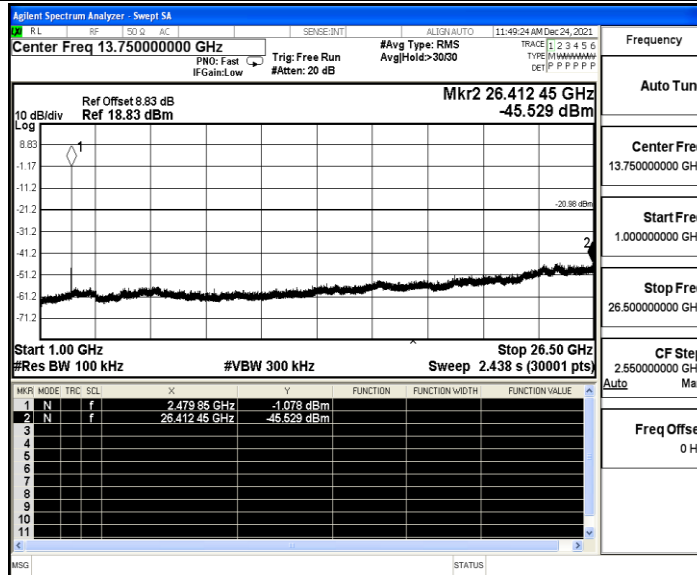




3DH5_Ant1_2480_30~1000



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	-48.1	≤-41.20	47.10	≤54	PASS
				AV	2389.985	-47.49	≤-41.20	47.71	≤54	PASS
				AV	2390.000	-47.49	≤-41.20	47.71	≤54	PASS
				Peak	2310.000	-38.73	≤-21.20	56.47	≤74	PASS
				Peak	2379.065	-36.49	≤-21.20	58.71	≤74	PASS
				Peak	2390.000	-37.47	≤-21.20	57.73	≤74	PASS
		High	2480	AV	2483.500	-47.01	≤-41.20	48.19	≤54	PASS
				AV	2498.880	-46.86	≤-41.20	48.34	≤54	PASS
				AV	2500.000	-47.03	≤-41.20	48.17	≤54	PASS
				Peak	2483.500	-37.47	≤-21.20	57.73	≤74	PASS
				Peak	2499.840	-35.33	≤-21.20	59.87	≤74	PASS
				Peak	2500.000	-38.02	≤-21.20	57.18	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-39.03	≤-21.20	56.17	≤74	PASS
				Peak	2380.430	-36.31	≤-21.20	58.89	≤74	PASS
				Peak	2390.000	-38.51	≤-21.20	56.69	≤74	PASS
		High	Hop_2480	Peak	2483.500	-37.26	≤-21.20	57.94	≤74	PASS
				Peak	2499.280	-36.12	≤-21.20	59.08	≤74	PASS
				Peak	2500.000	-37.94	≤-21.20	57.26	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.93	≤-41.20	47.27	≤54	PASS
				AV	2389.040	-47.54	≤-41.20	47.66	≤54	PASS
				AV	2390.000	-47.55	≤-41.20	47.65	≤54	PASS
				Peak	2310.000	-37.47	≤-21.20	57.73	≤74	PASS
				Peak	2328.035	-36.19	≤-21.20	59.01	≤74	PASS
				Peak	2390.000	-37.66	≤-21.20	57.54	≤74	PASS
		High	2480	AV	2483.500	-47	≤-41.20	48.20	≤54	PASS
				AV	2498.720	-46.84	≤-41.20	48.36	≤54	PASS
				AV	2500.000	-47.08	≤-41.20	48.12	≤54	PASS
				Peak	2483.500	-37.91	≤-21.20	57.29	≤74	PASS
				Peak	2487.600	-36.27	≤-21.20	58.93	≤74	PASS
				Peak	2500.000	-38.12	≤-21.20	57.08	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-38.73	≤-21.20	56.47	≤74	PASS
				Peak	2388.305	-36.3	≤-21.20	58.90	≤74	PASS
				Peak	2390.000	-37.4	≤-21.20	57.80	≤74	PASS
		High	Hop_2480	Peak	2483.500	-37.01	≤-21.20	58.19	≤74	PASS
				Peak	2483.680	-35.26	≤-21.20	59.94	≤74	PASS
				Peak	2500.000	-38.16	≤-21.20	57.04	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.03	≤-41.20	47.17	≤54	PASS



				AV	2385.680	-47.52	≤ -41.20	47.68	≤ 54	PASS
				AV	2390.000	-47.57	≤ -41.20	47.63	≤ 54	PASS
				Peak	2310.000	-39.22	≤ -21.20	55.98	≤ 74	PASS
				Peak	2360.585	-36.52	≤ -21.20	58.68	≤ 74	PASS
				Peak	2390.000	-38.34	≤ -21.20	56.86	≤ 74	PASS
		High	2480	AV	2483.500	-47.02	≤ -41.20	48.18	≤ 54	PASS
				AV	2498.080	-46.92	≤ -41.20	48.28	≤ 54	PASS
				AV	2500.000	-47.05	≤ -41.20	48.15	≤ 54	PASS
				Peak	2483.500	-36.93	≤ -21.20	58.27	≤ 74	PASS
				Peak	2494.640	-35.73	≤ -21.20	59.47	≤ 74	PASS
				Peak	2500.000	-37.75	≤ -21.20	57.45	≤ 74	PASS
		Low	Hop_24 02	Peak	2310.000	-38.19	≤ -21.20	57.01	≤ 74	PASS
				Peak	2355.650	-36.79	≤ -21.20	58.41	≤ 74	PASS
				Peak	2390.000	-38.82	≤ -21.20	56.38	≤ 74	PASS
		High	Hop_24 80	Peak	2483.500	-37.98	≤ -21.20	57.22	≤ 74	PASS
				Peak	2497.200	-35.84	≤ -21.20	59.36	≤ 74	PASS
				Peak	2500.000	-38.02	≤ -21.20	57.18	≤ 74	PASS

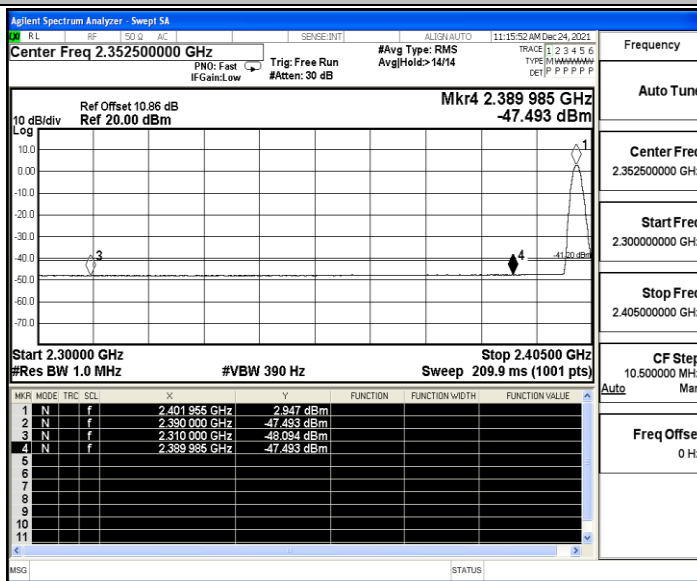
Note:

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.

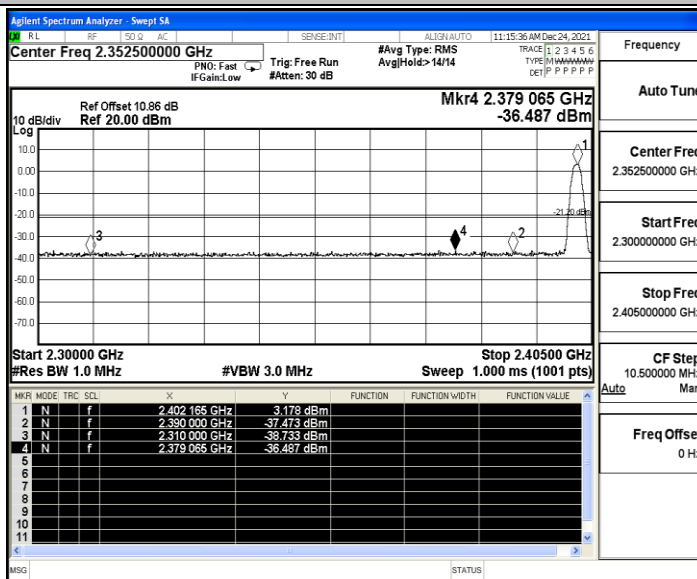


Test Graphs

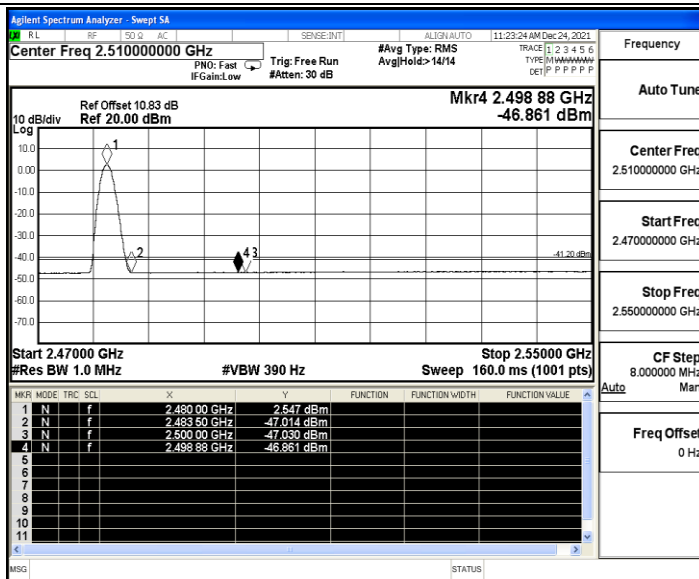
DH5_Ant1_Low_2402_AV



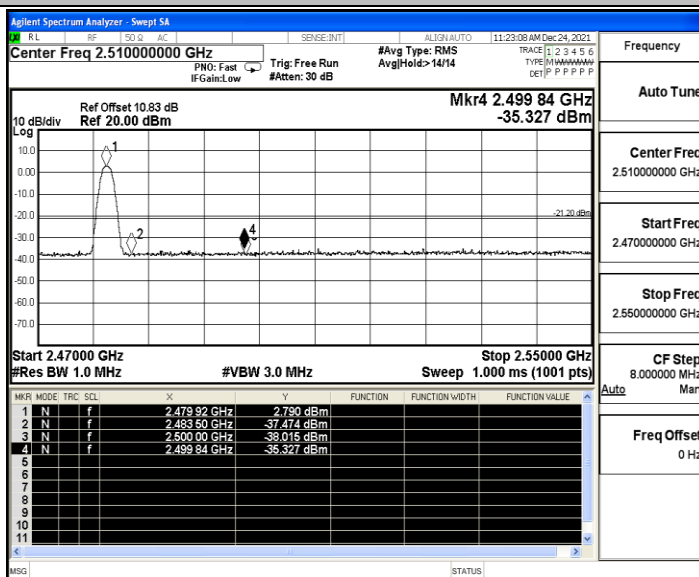
DH5_Ant1_Low_2402_Peak



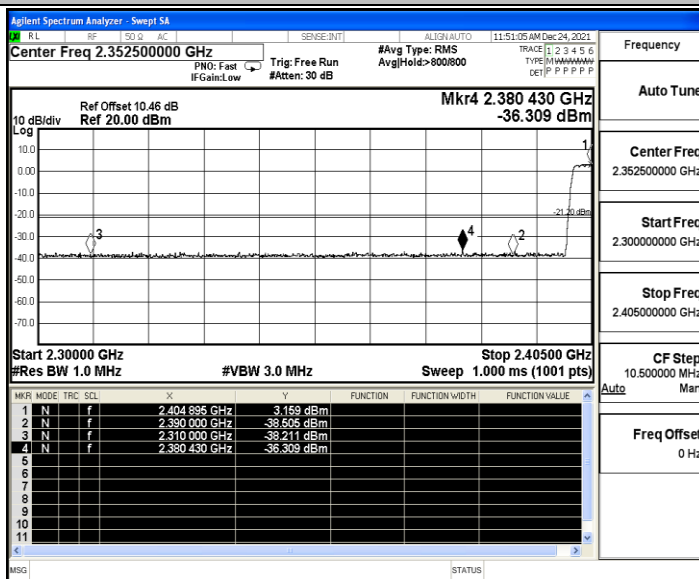
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

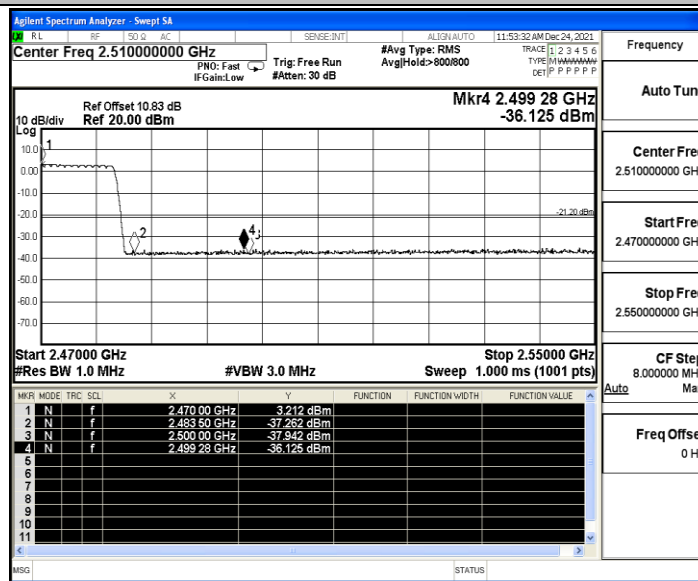


DH5_Ant1_Low_Hop_2402_Peak

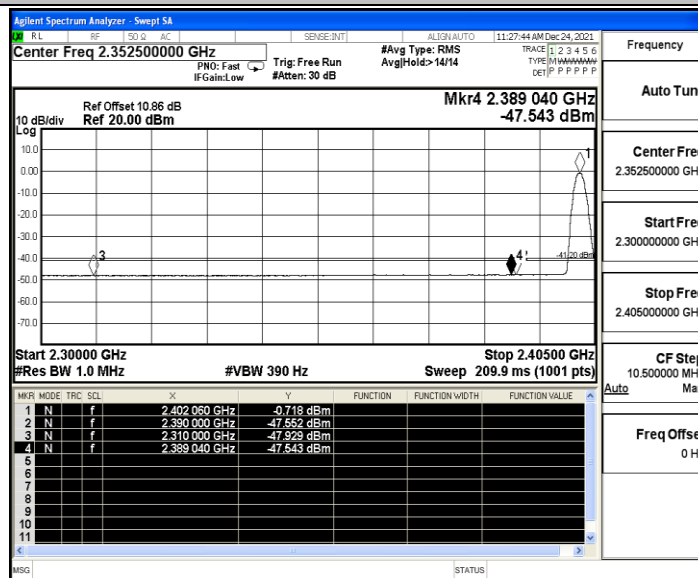




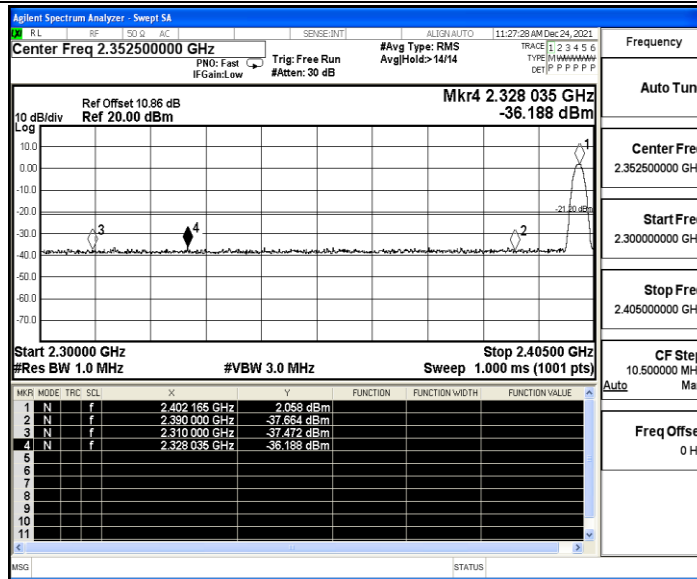
DH5_Ant1_High_Hop_2480_Peak



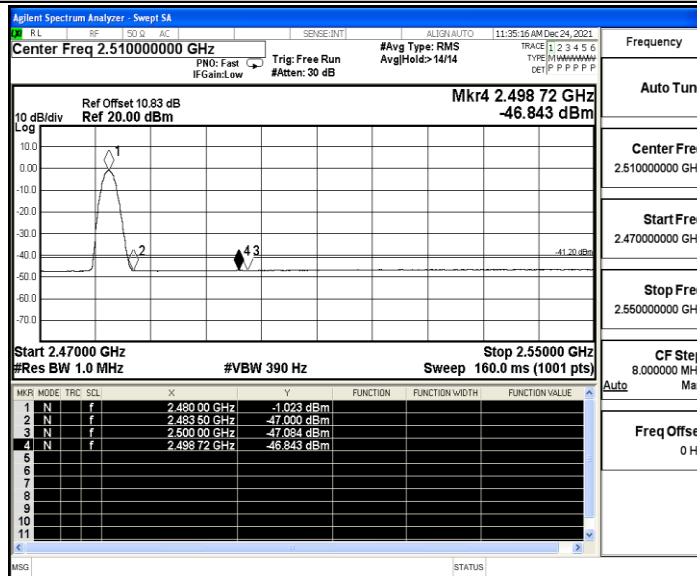
2DH5_Ant1_Low_2402_AV



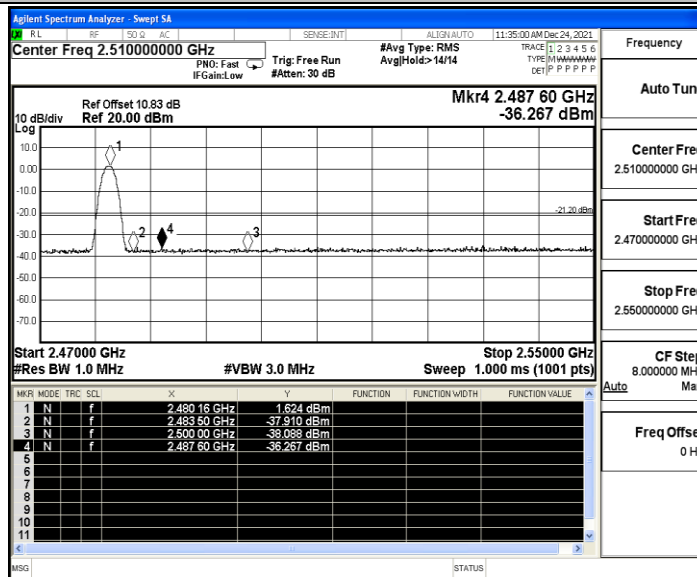
2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV

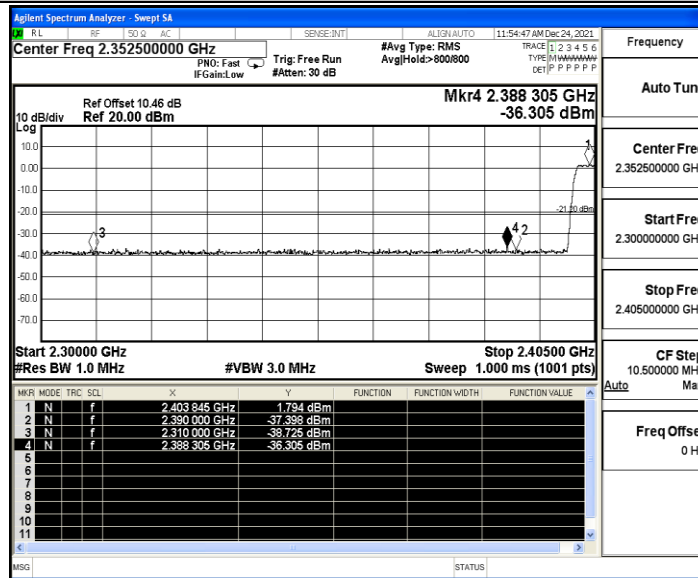


2DH5_Ant1_High_2480_Peak

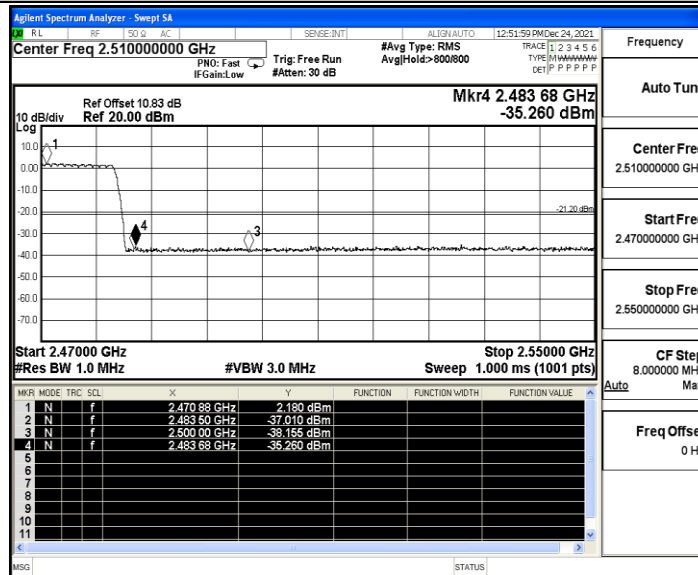




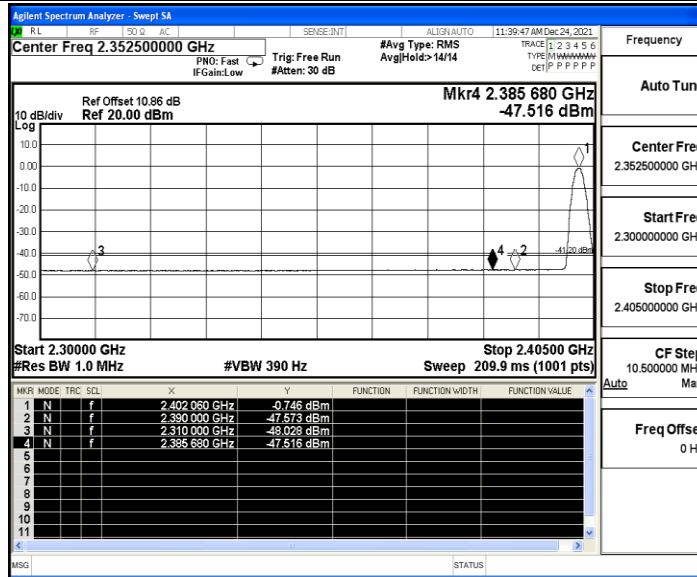
2DH5_Ant1_Low_Hop_2402_Peak



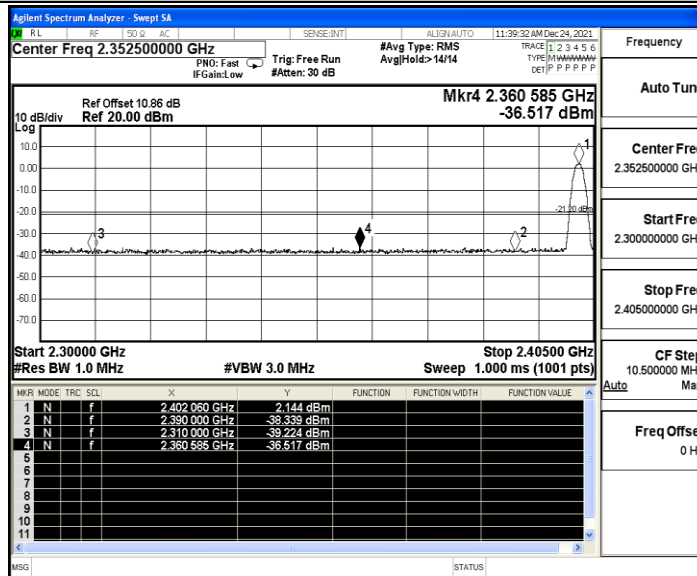
2DH5_Ant1_High_Hop_2480_Peak



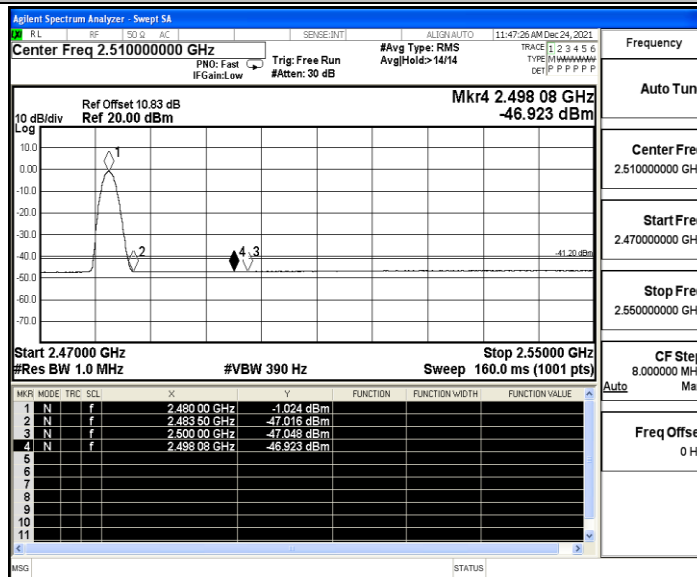
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak

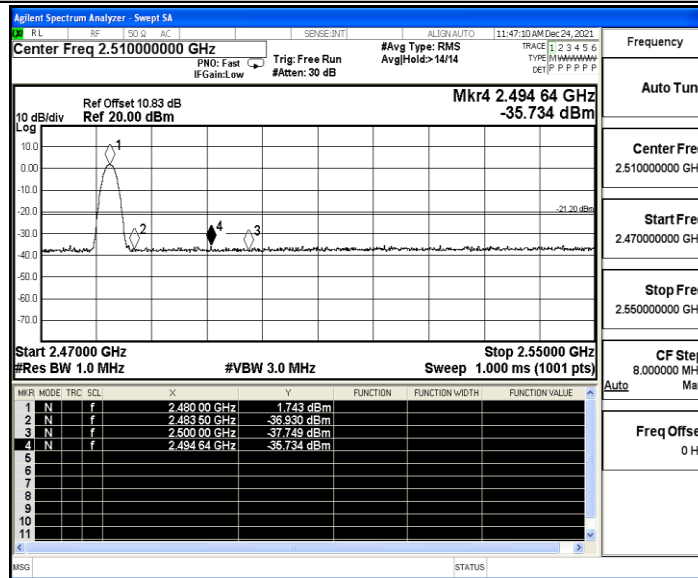


3DH5_Ant1_High_2480_AV

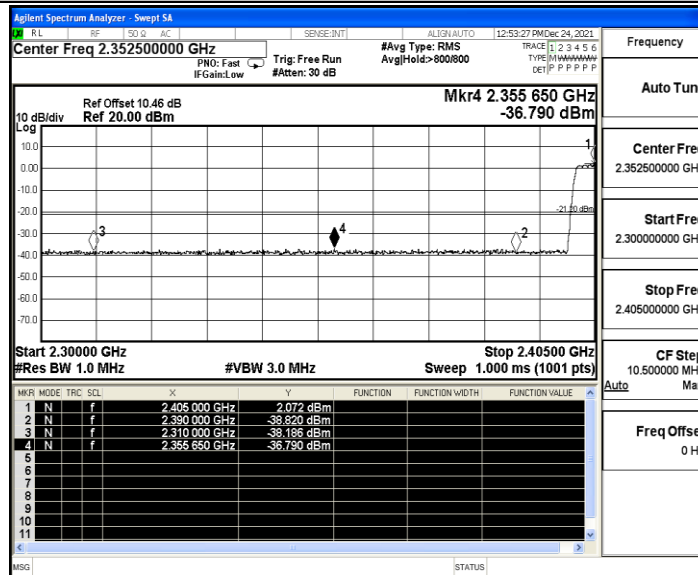




3DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

