



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: HYBOOK_PLUS

Test Model: 14CB8S01

Environmental Conditions

Temperature:	22.6° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan

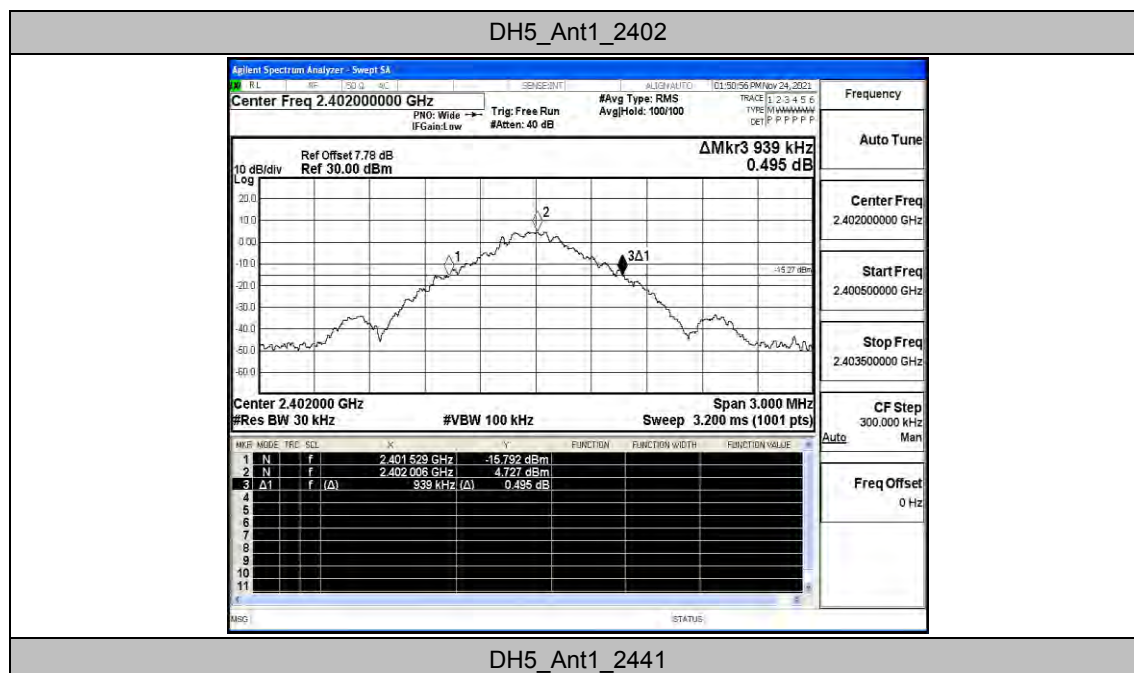


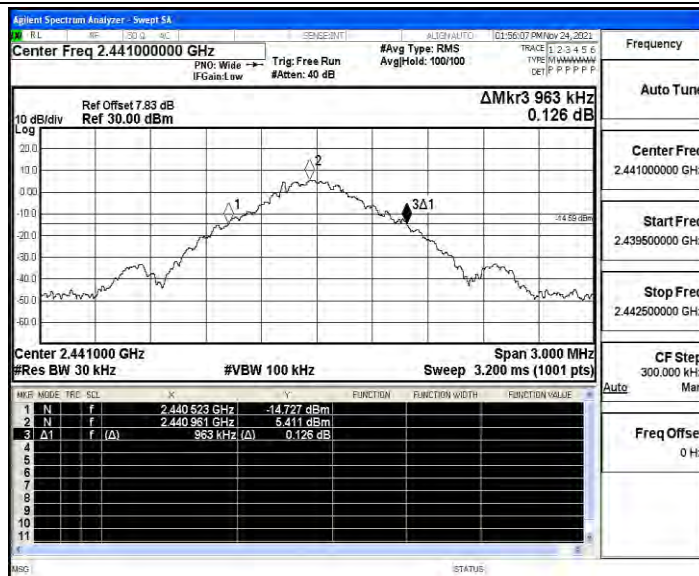
A.1 20dB Emission Bandwidth

Test Result

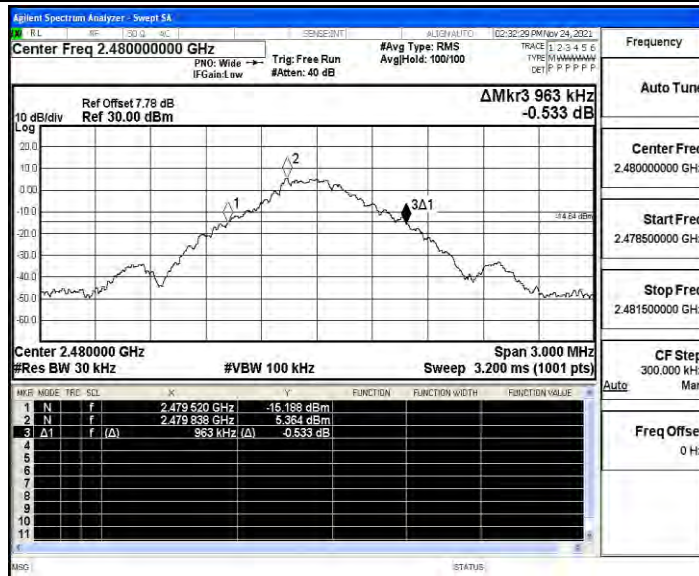
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.939	2401.529	2402.468	---	PASS
		2441	0.963	2440.523	2441.486	---	PASS
		2480	0.963	2479.520	2480.483	---	PASS
2DH5	Ant1	2402	1.518	2401.232	2402.750	---	PASS
		2441	1.515	2440.235	2441.750	---	PASS
		2480	1.509	2479.244	2480.753	---	PASS
3DH5	Ant1	2402	1.461	2401.274	2402.735	---	PASS
		2441	1.494	2440.256	2441.750	---	PASS
		2480	1.488	2479.259	2480.747	---	PASS

Test Graphs

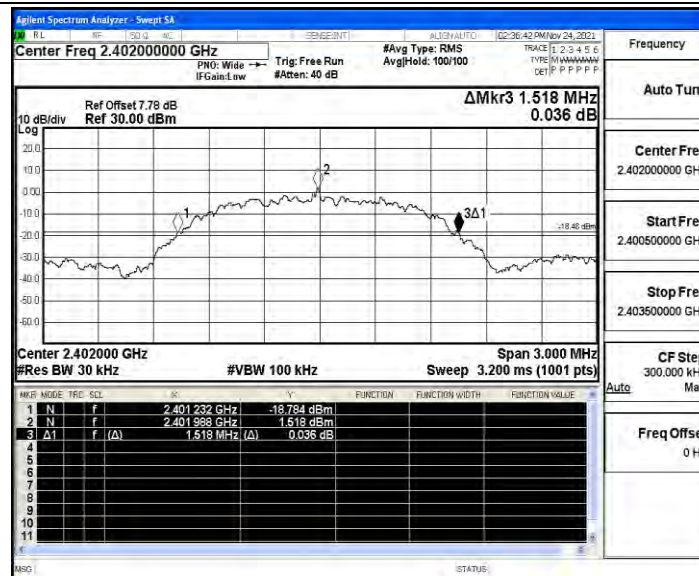




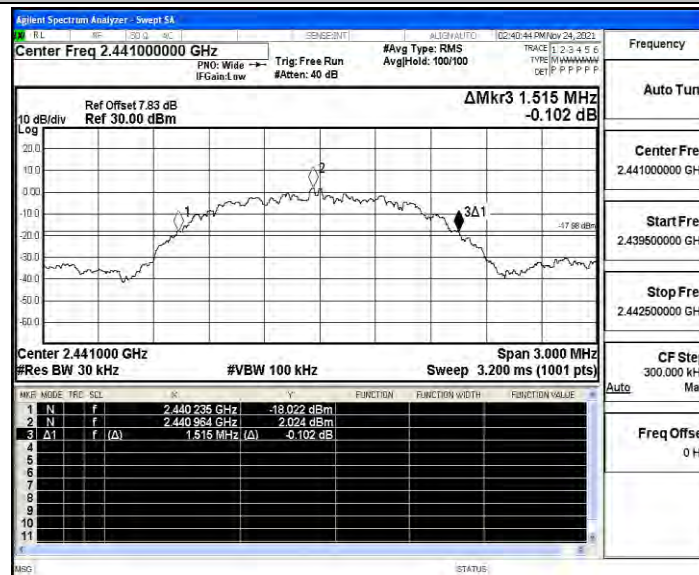
DH5_Ant1_2480



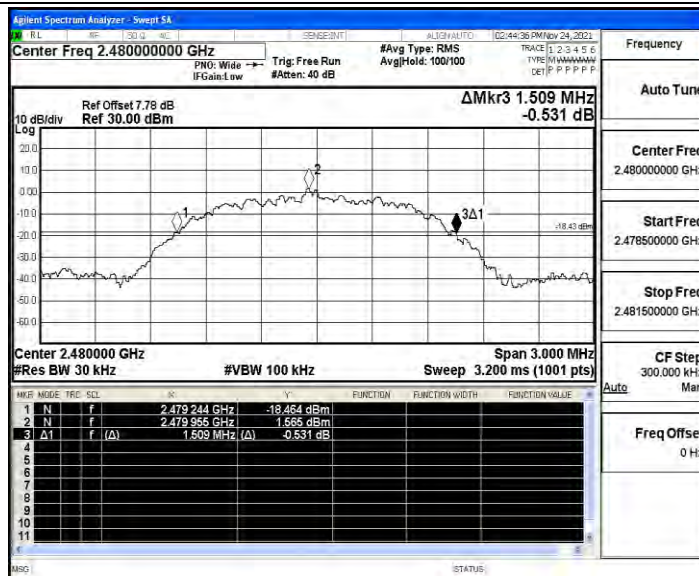
2DH5_Ant1_2402



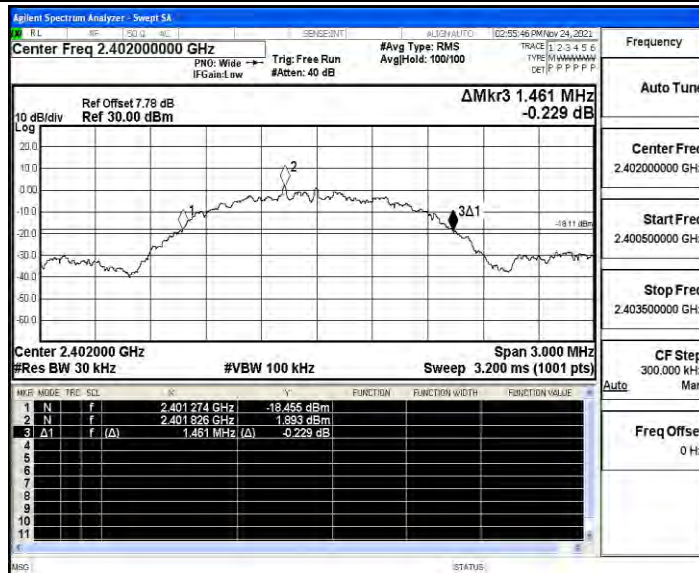
2DH5_Ant1_2441



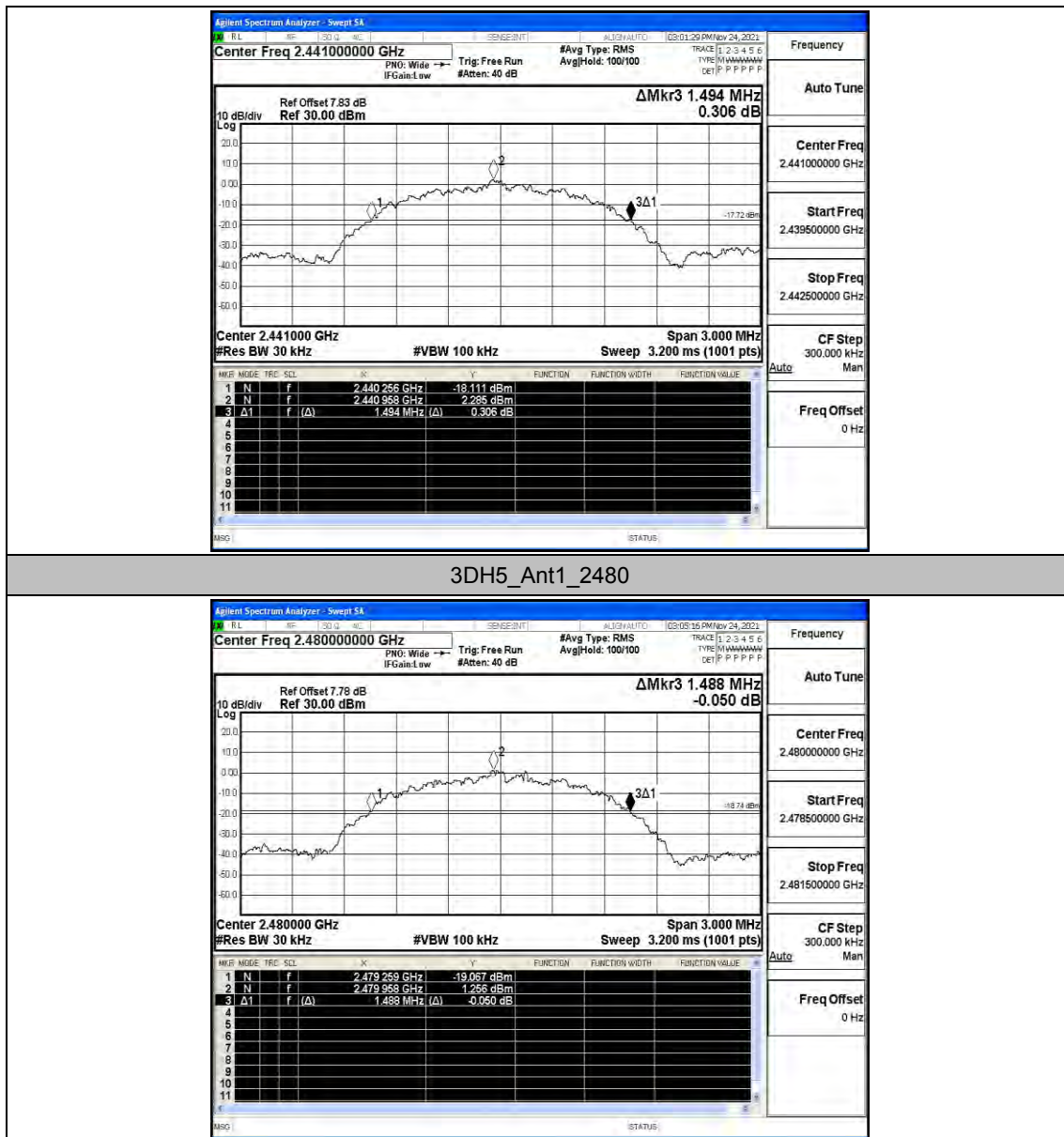
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



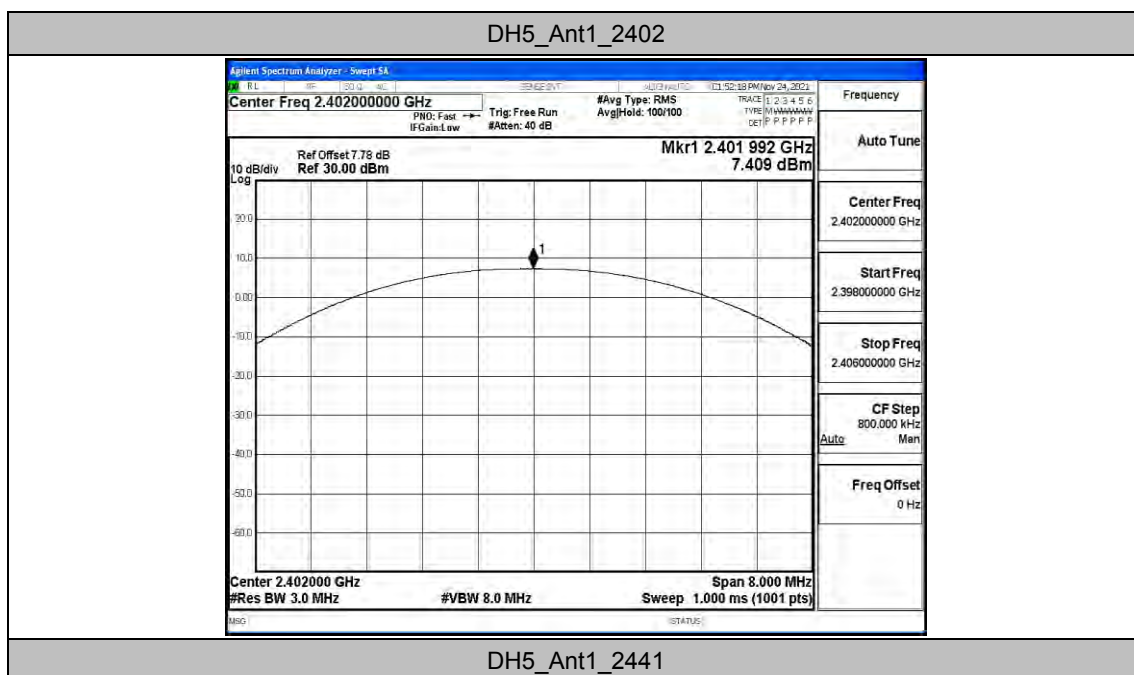


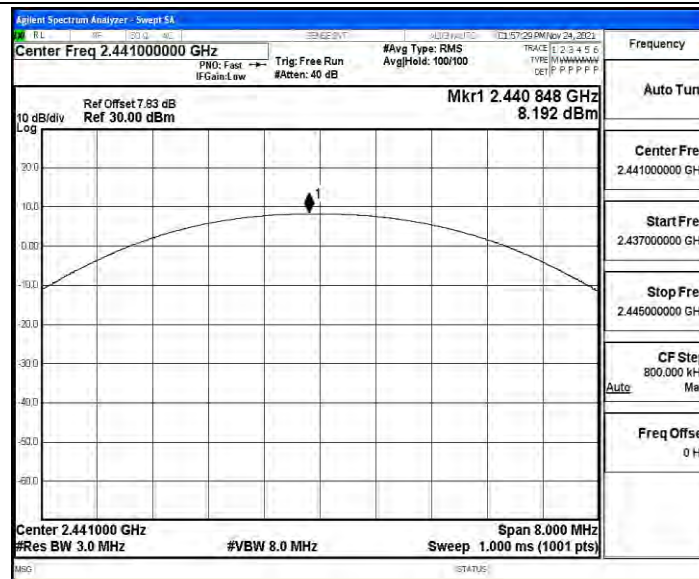
A.2 Maximum conducted output power

Test Result

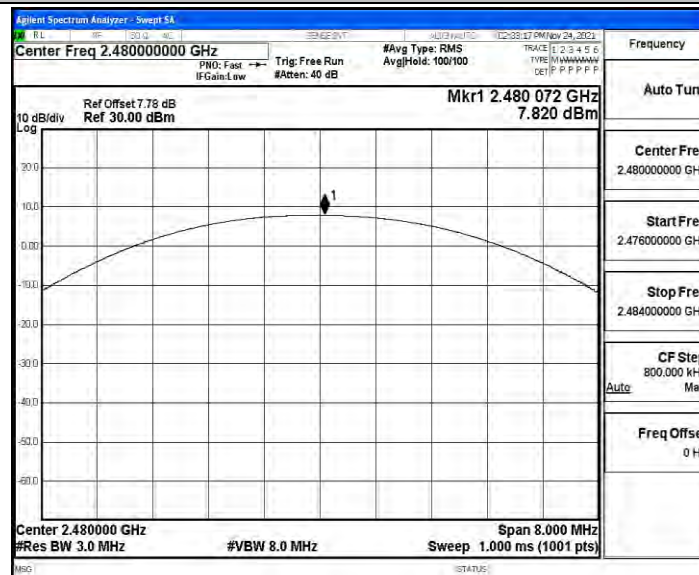
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	7.41	≤20.97	PASS
		2441	8.19	≤20.97	PASS
		2480	7.82	≤20.97	PASS
2DH5	Ant1	2402	6.62	≤20.97	PASS
		2441	7.3	≤20.97	PASS
		2480	6.79	≤20.97	PASS
3DH5	Ant1	2402	6.75	≤20.97	PASS
		2441	7.39	≤20.97	PASS
		2480	6.79	≤20.97	PASS

Test Graphs

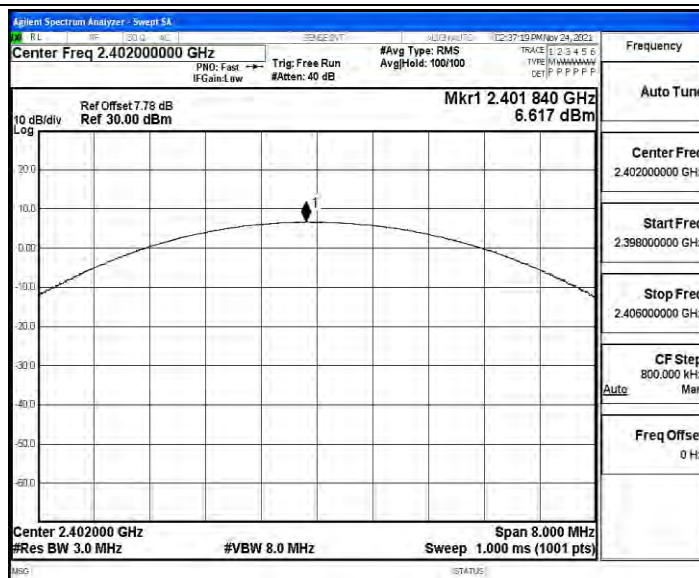




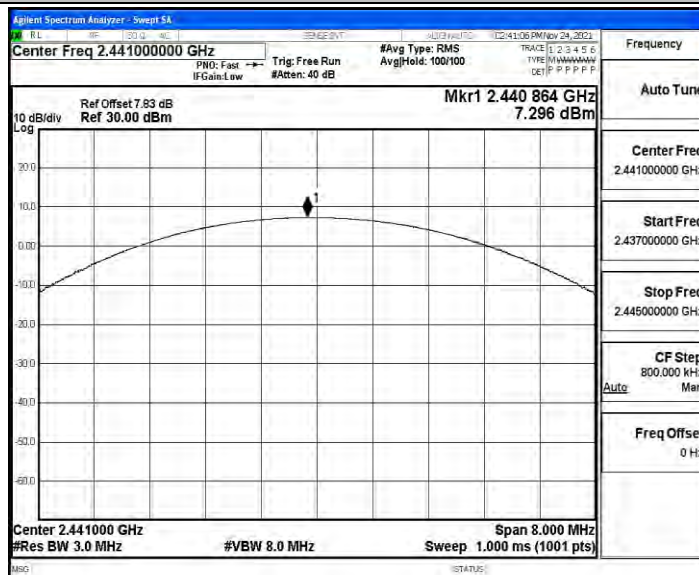
DH5_Ant1_2480



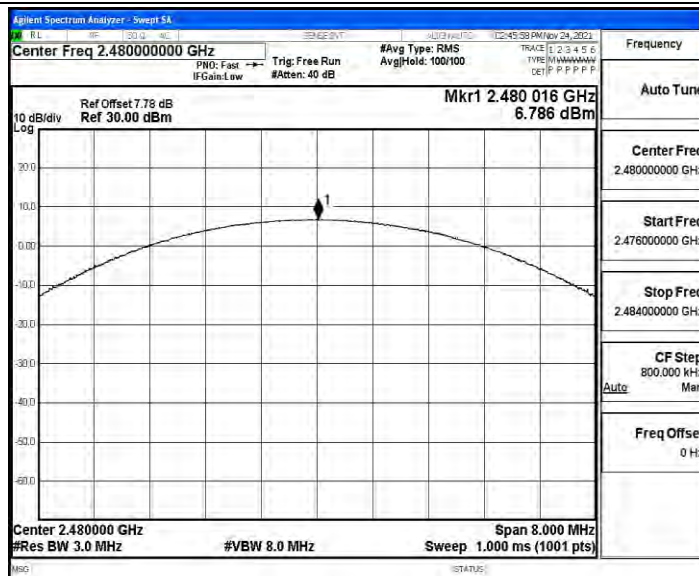
2DH5_Ant1_2402



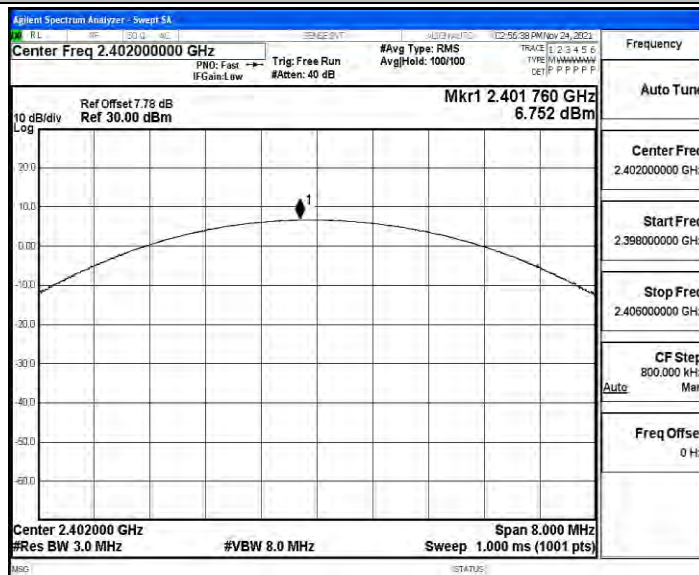
2DHS_Ant1_2441



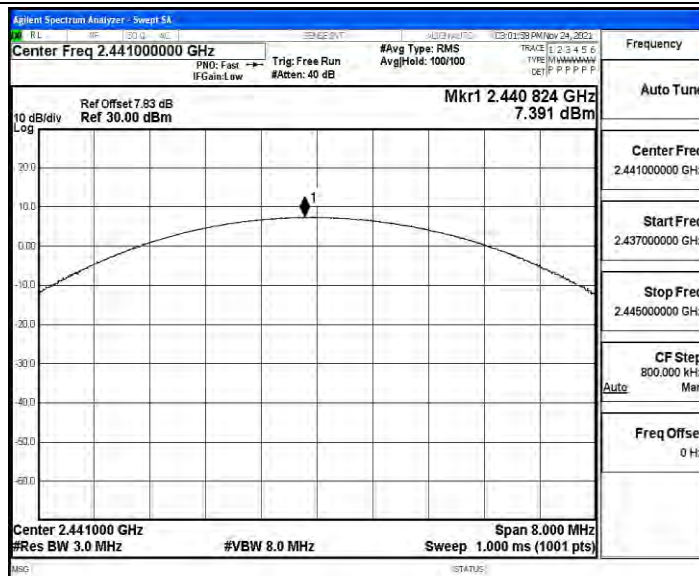
2DHS_Ant1_2480



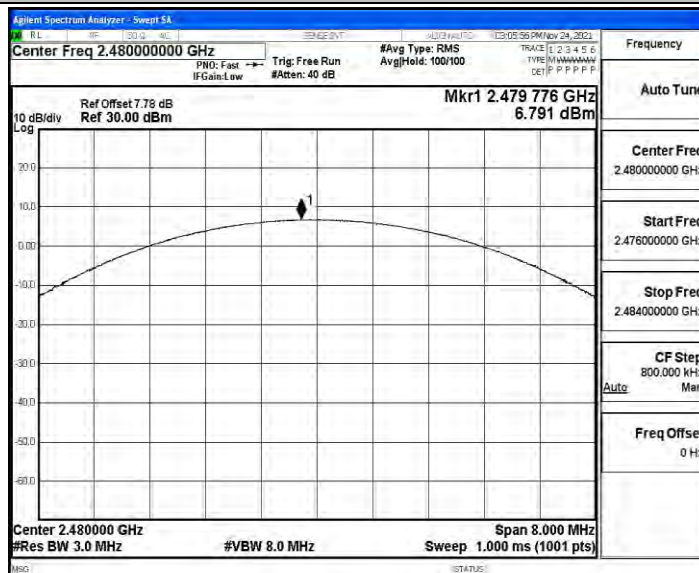
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



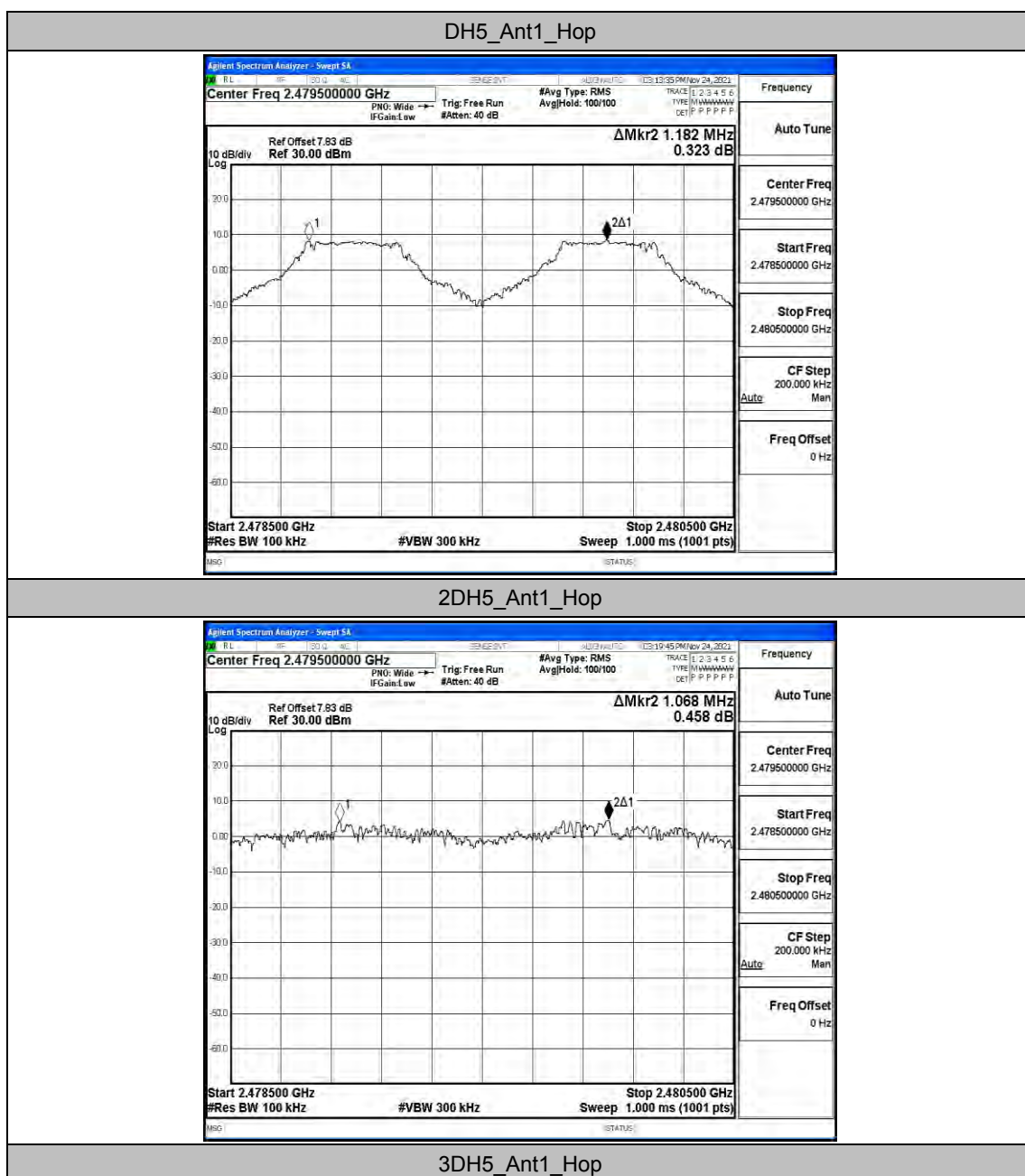


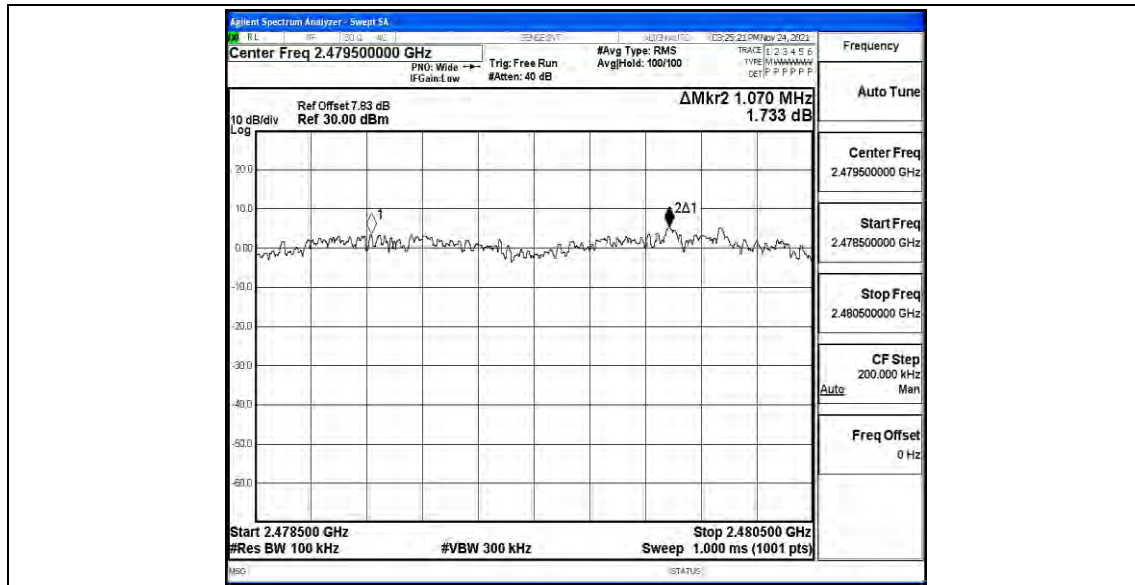
A.3 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.182	≥0.963	PASS
2DH5	Ant1	Hop	1.068	≥1.012	PASS
3DH5	Ant1	Hop	1.07	≥0.996	PASS

Test Graphs





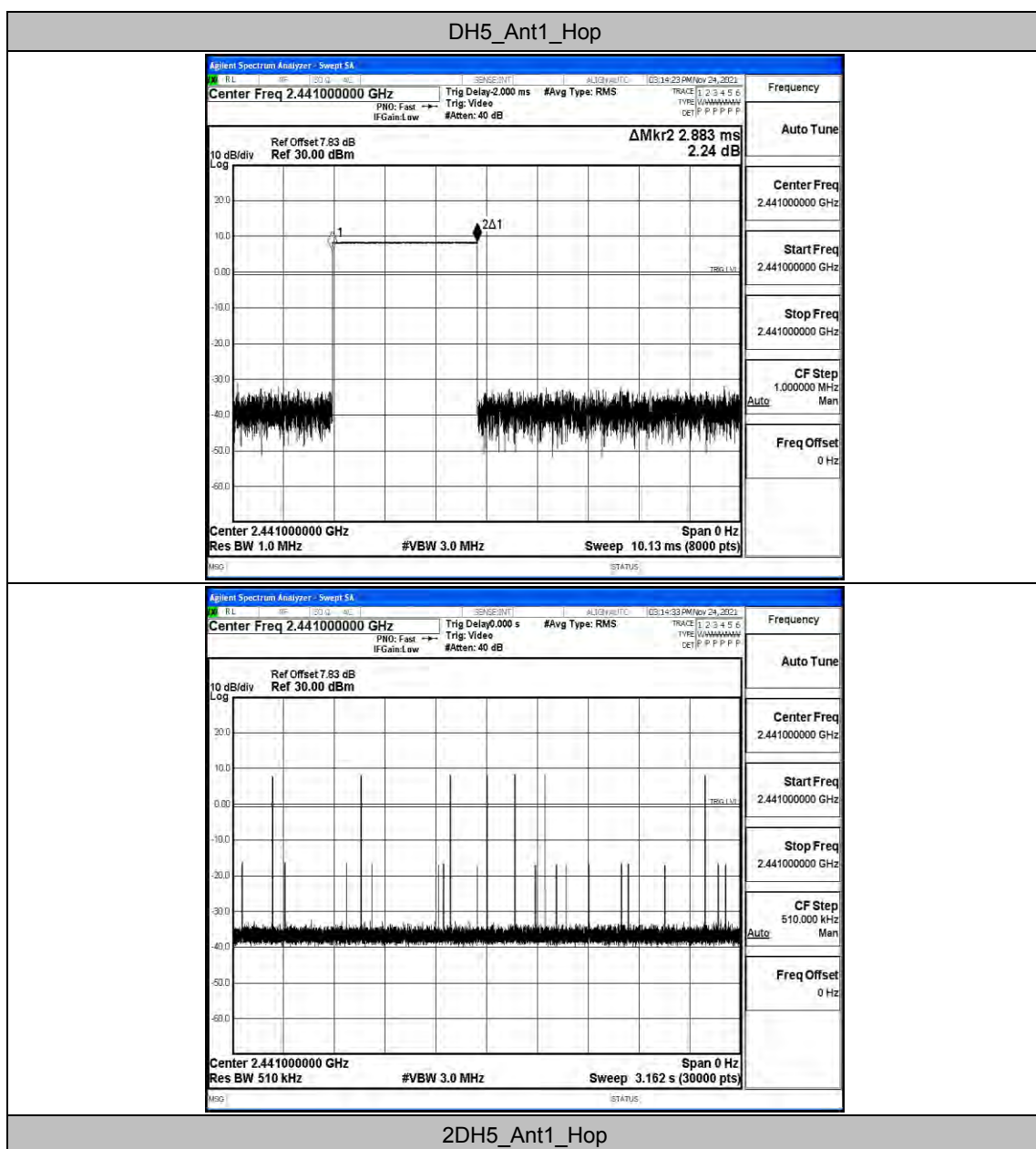


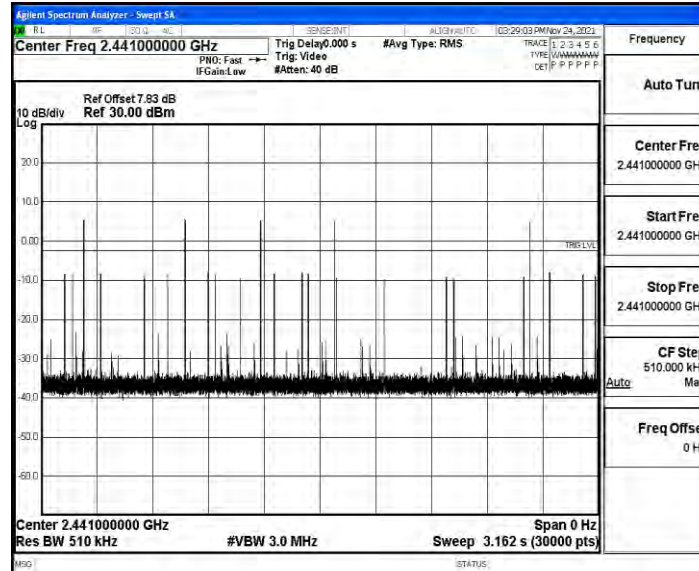
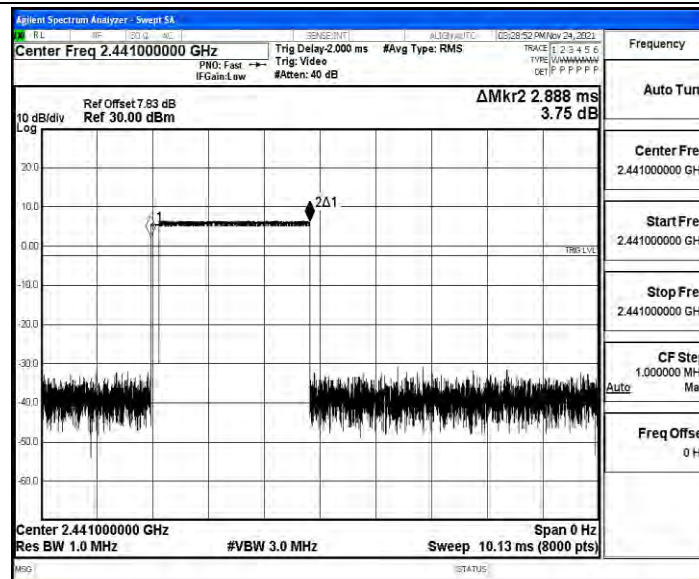
A.4 Time of occupancy

Test Result

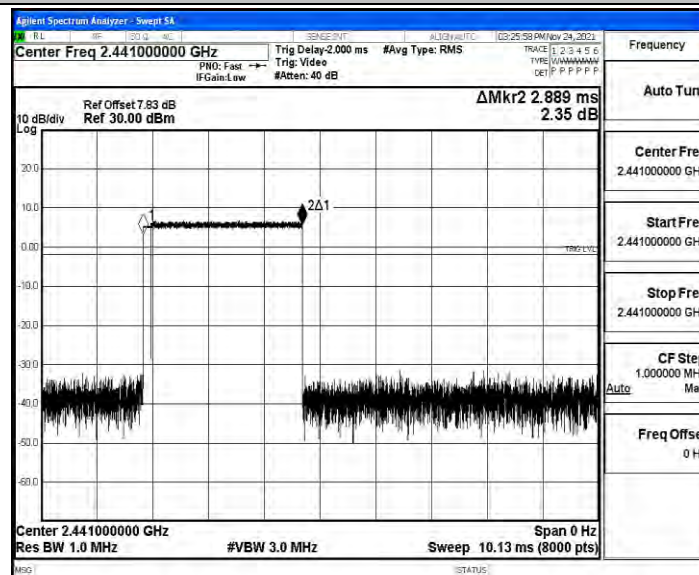
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	80	0.231	≤0.4	PASS
2DH5	Ant1	Hop	2.89	60	0.173	≤0.4	PASS
3DH5	Ant1	Hop	2.89	110	0.318	≤0.4	PASS

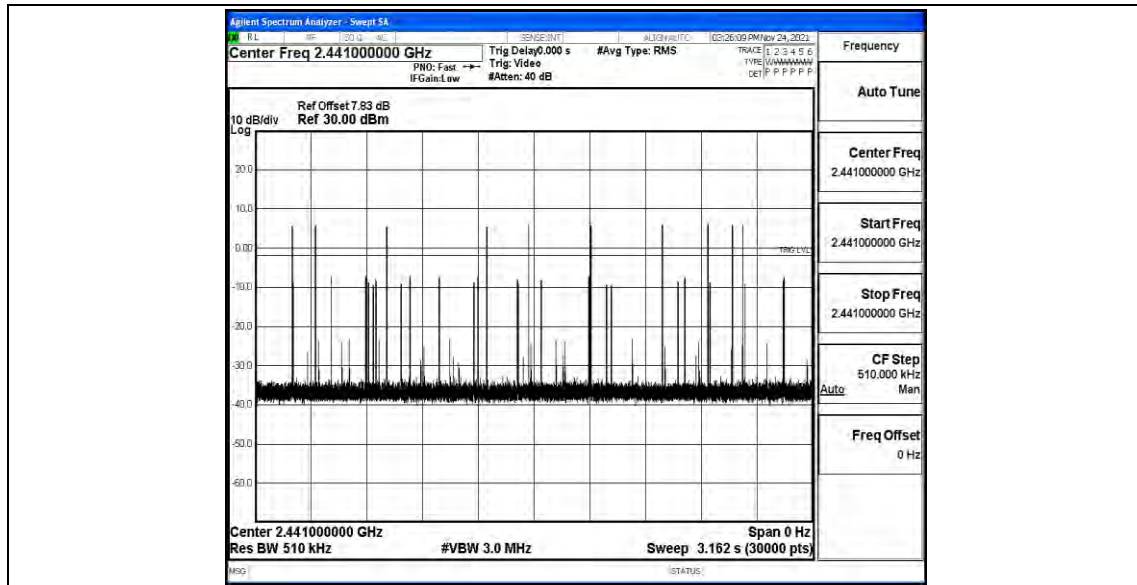
Test Graphs





3DH5_Ant1_Hop



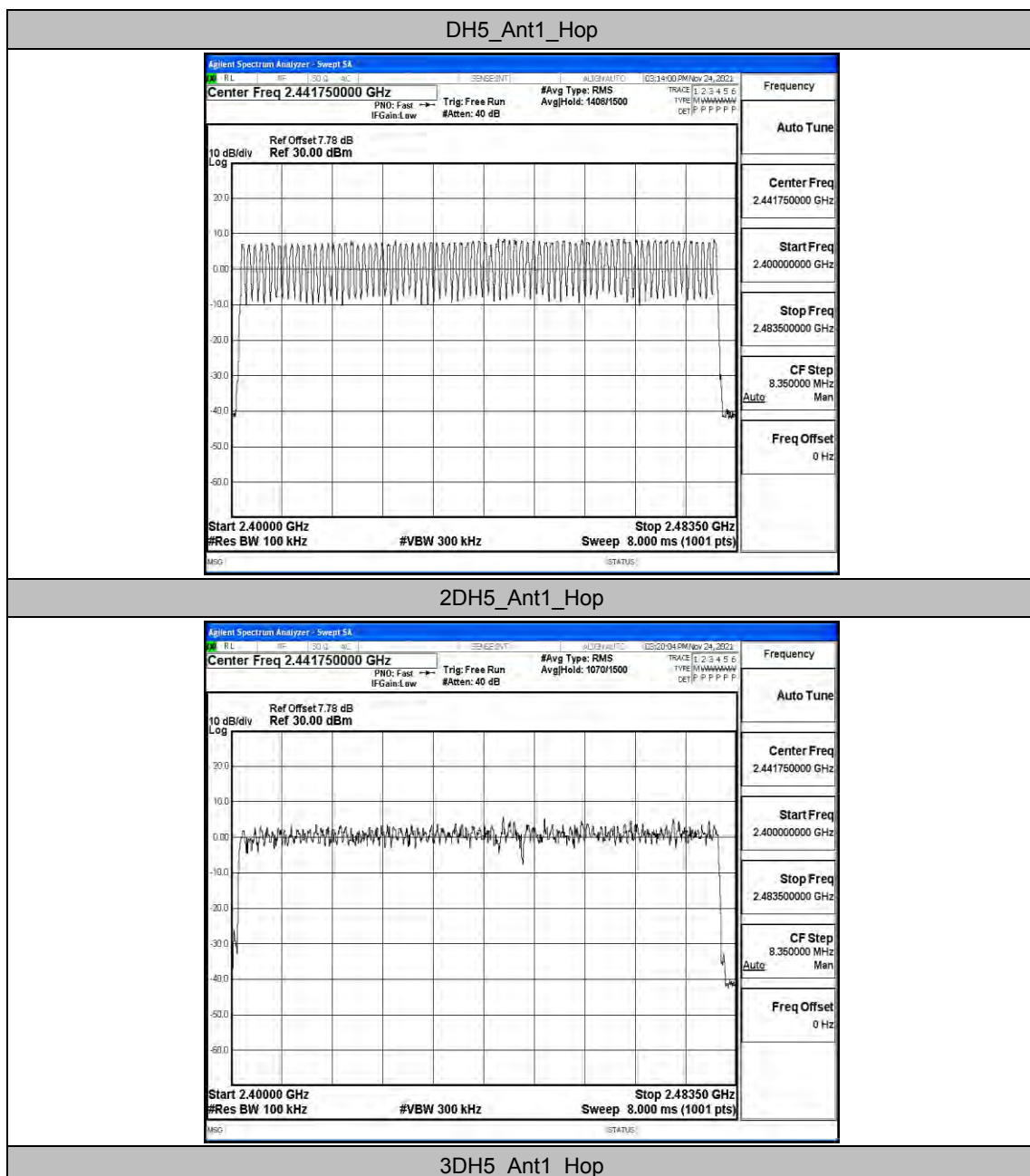


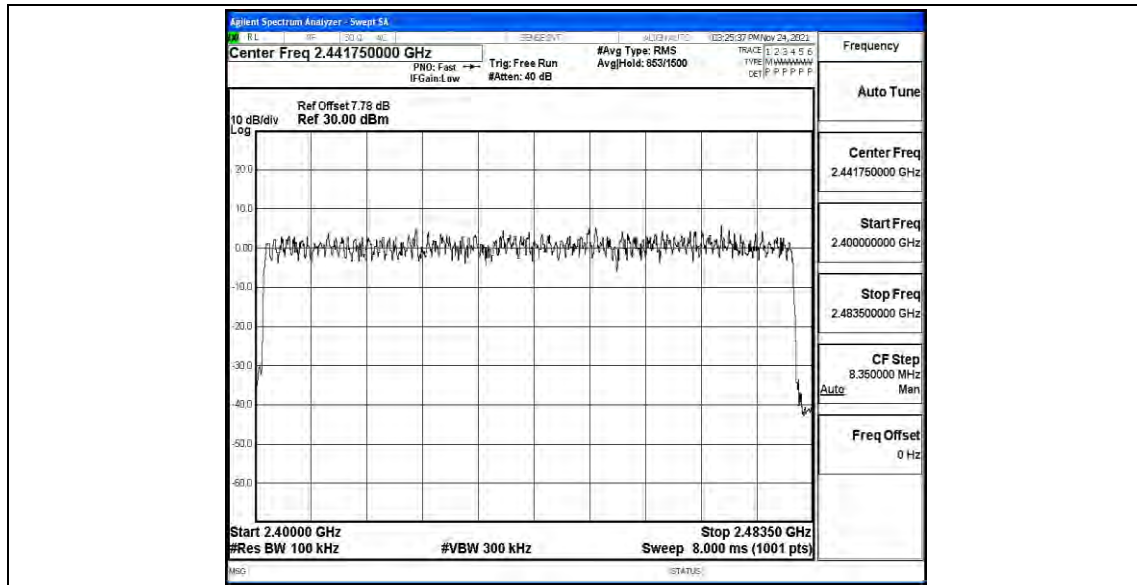
A.5 Number of hopping channels

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





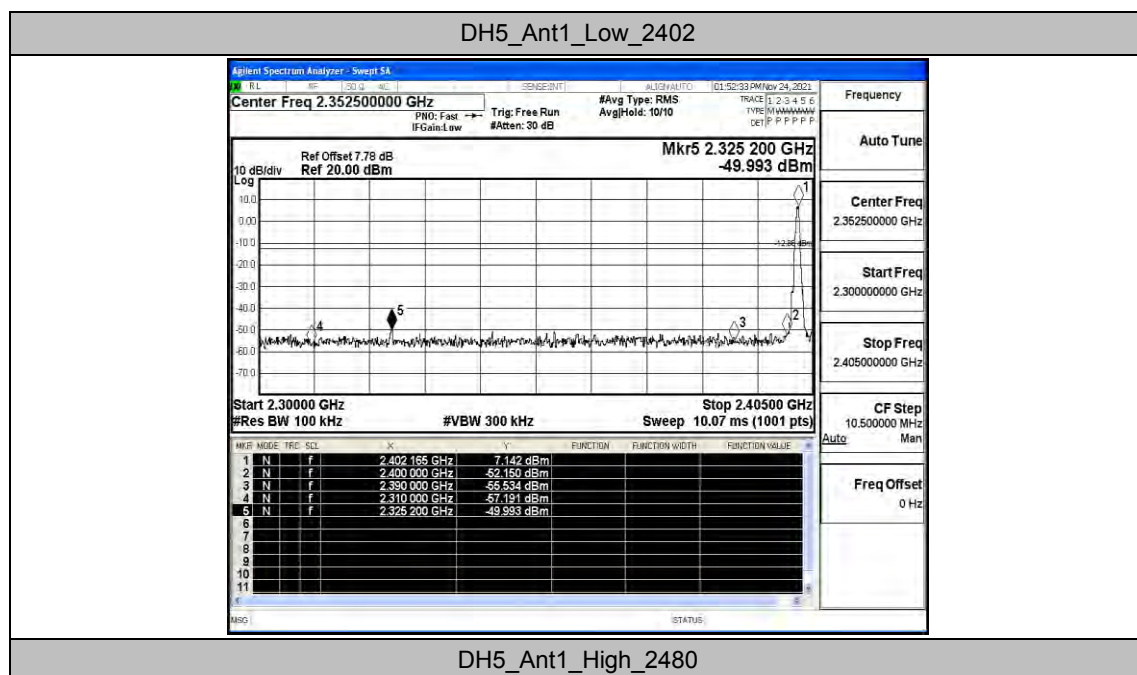


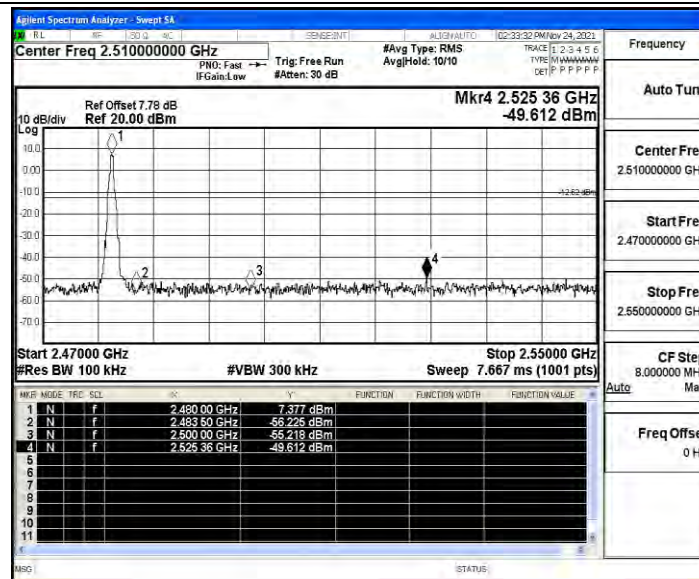
A.6 Band edge measurements

Test Result

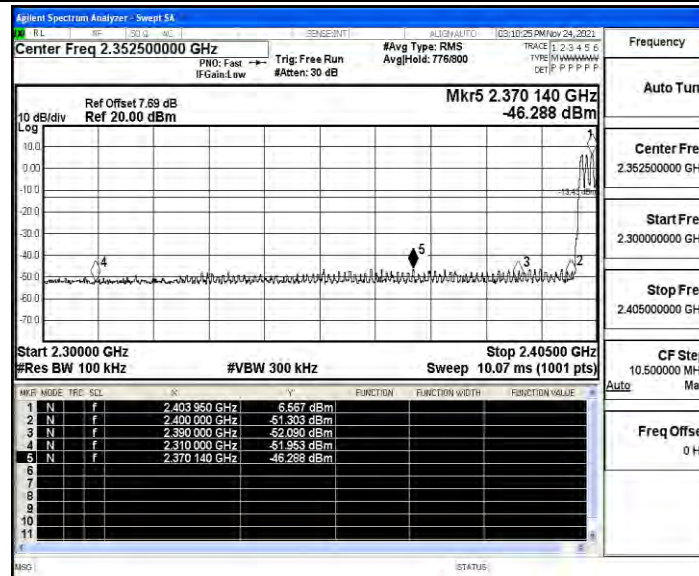
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	7.14	-49.99	≤-12.86	PASS
		High	2480	7.38	-49.61	≤-12.62	PASS
		Low	Hop_2402	6.57	-46.29	≤-13.43	PASS
		High	Hop_2480	8.18	-45.14	≤-11.82	PASS
2DH5	Ant1	Low	2402	1.68	-45.05	≤-18.32	PASS
		High	2480	1.57	-49.49	≤-18.43	PASS
		Low	Hop_2402	1.42	-47.48	≤-18.58	PASS
		High	Hop_2480	3.72	-42.16	≤-16.28	PASS
3DH5	Ant1	Low	2402	3.16	-46.61	≤-16.84	PASS
		High	2480	2.85	-49.81	≤-17.15	PASS
		Low	Hop_2402	3.19	-48.74	≤-16.81	PASS
		High	Hop_2480	5.62	-46.95	≤-14.39	PASS

Test Graphs

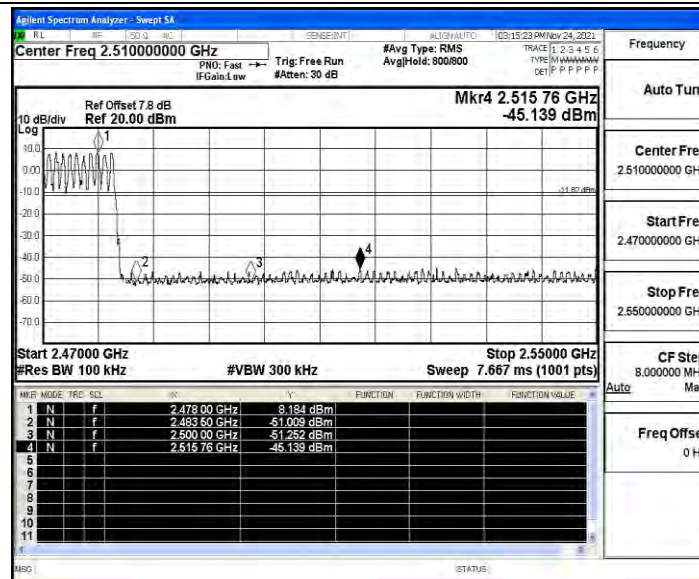




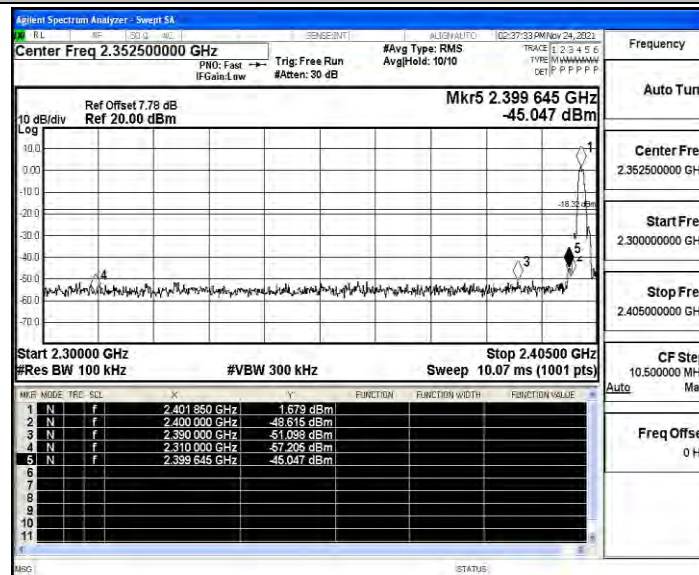
DH5_Ant1_Low_Hop_2402



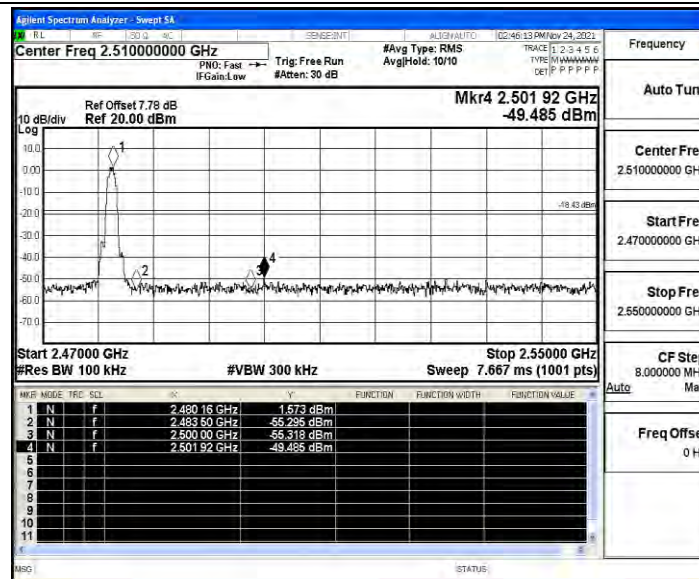
DH5_Ant1_High_Hop_2480



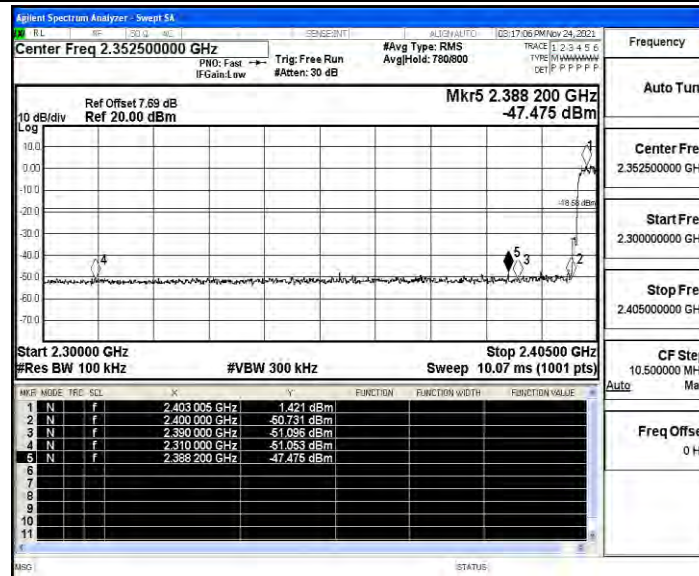
2DH5_Ant1_Low_2402



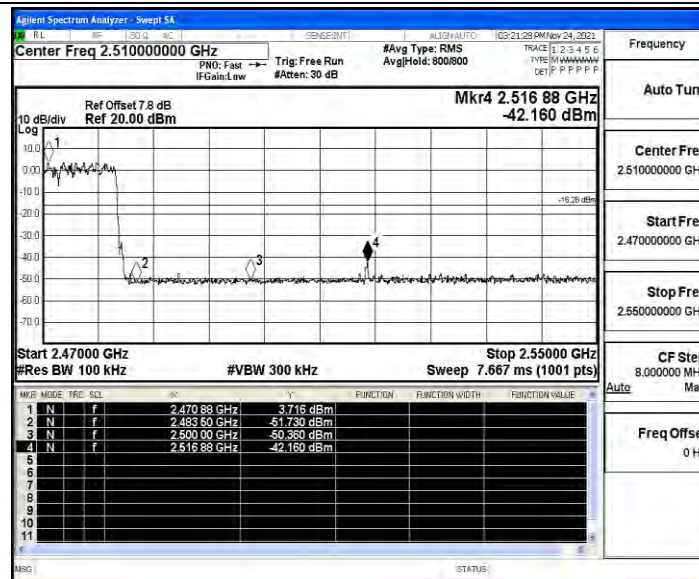
2DH5_Ant1_High_2480



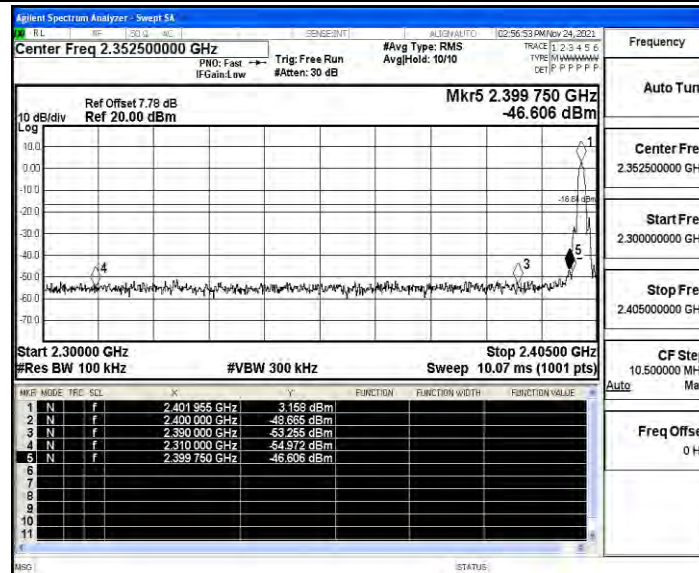
2DH5_Ant1_Low_Hop_2402



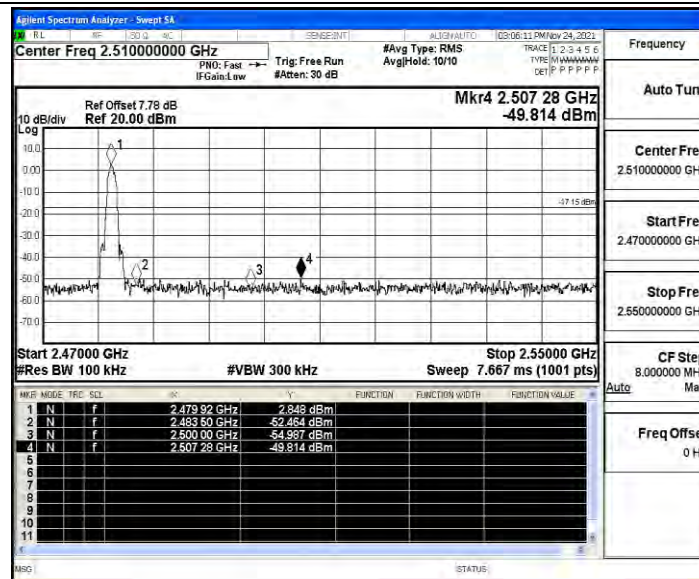
2DH5_Ant1_High_Hop_2480



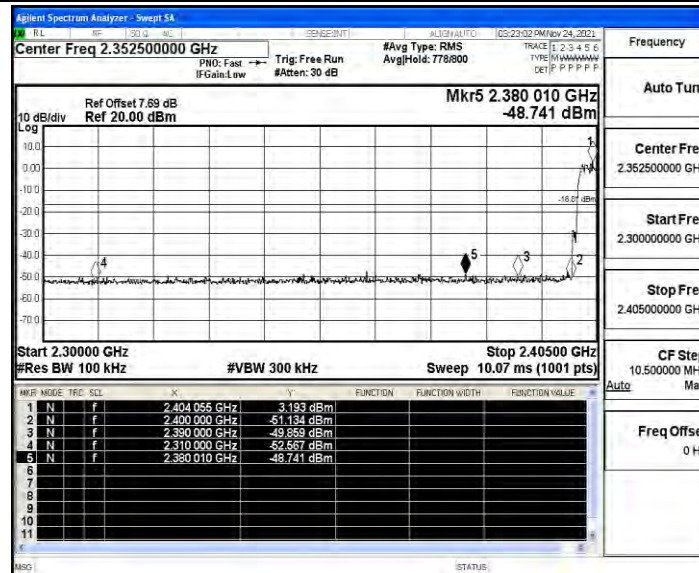
3DH5_Ant1_Low_2402



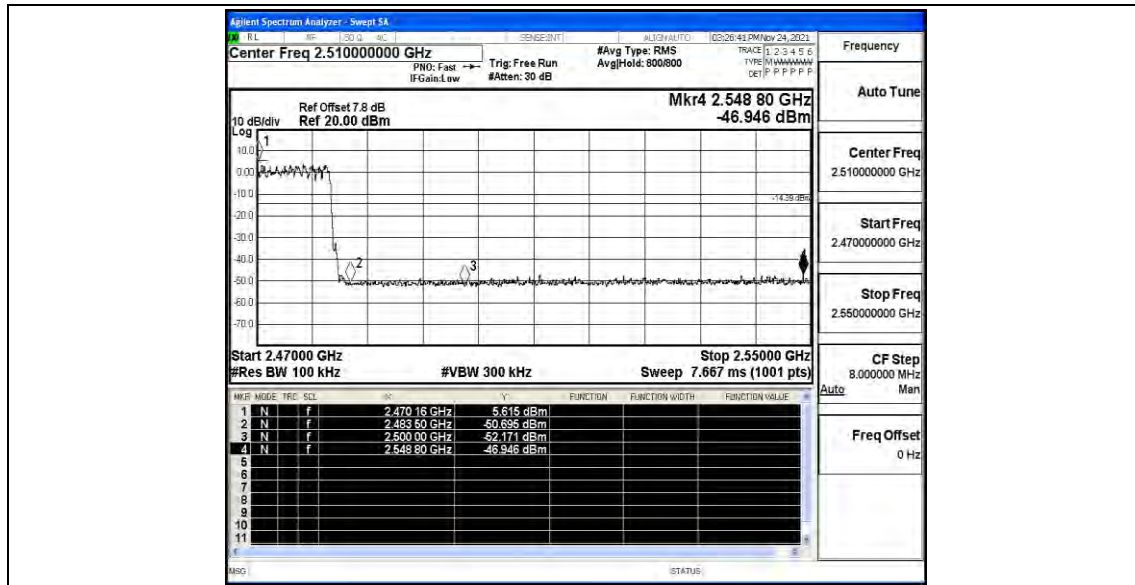
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

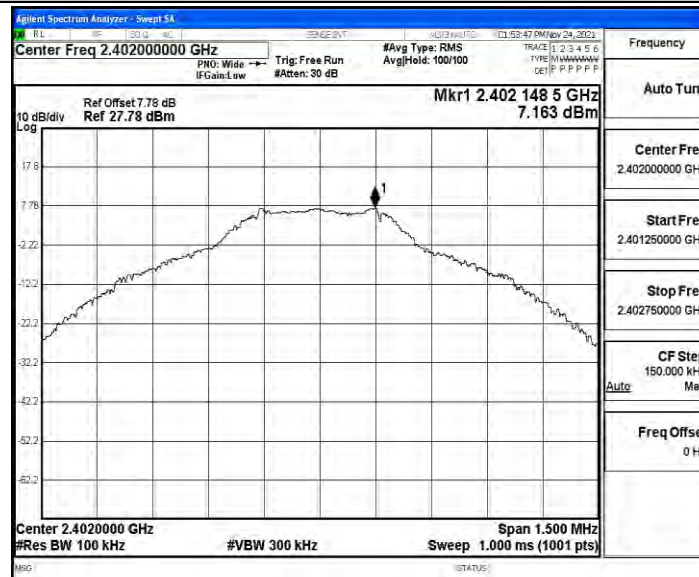
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	7.16	7.16	---	PASS
			30~1000	7.16	-62.05	≤-12.84	PASS
			1000~26500	7.16	-46.44	≤-12.84	PASS
		2441	Reference	7.47	7.47	---	PASS
			30~1000	7.47	-60.88	≤-12.53	PASS
			1000~26500	7.47	-46.04	≤-12.53	PASS
		2480	Reference	7.82	7.82	---	PASS
			30~1000	7.82	-61.31	≤-12.18	PASS
			1000~26500	7.82	-46.98	≤-12.18	PASS
2DH5	Ant1	2402	Reference	4.48	4.48	---	PASS
			30~1000	4.48	-61.23	≤-15.52	PASS
			1000~26500	4.48	-47.48	≤-15.52	PASS
		2441	Reference	5.15	5.15	---	PASS
			30~1000	5.15	-61.02	≤-14.85	PASS
			1000~26500	5.15	-47.04	≤-14.85	PASS
		2480	Reference	3.96	3.96	---	PASS
			30~1000	3.96	-60.23	≤-16.04	PASS
			1000~26500	3.96	-47.21	≤-16.04	PASS
3DH5	Ant1	2402	Reference	4.18	4.18	---	PASS
			30~1000	4.18	-61.01	≤-15.83	PASS
			1000~26500	4.18	-47.01	≤-15.83	PASS
		2441	Reference	5.07	5.07	---	PASS
			30~1000	5.07	-59.95	≤-14.93	PASS
			1000~26500	5.07	-47.2	≤-14.93	PASS
		2480	Reference	4.26	4.26	---	PASS
			30~1000	4.26	-61.79	≤-15.74	PASS
			1000~26500	4.26	-46.43	≤-15.74	PASS

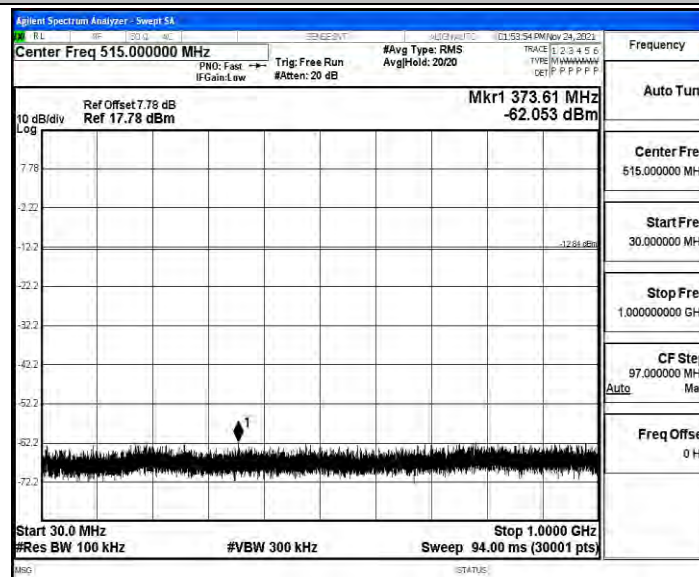


Test Graphs

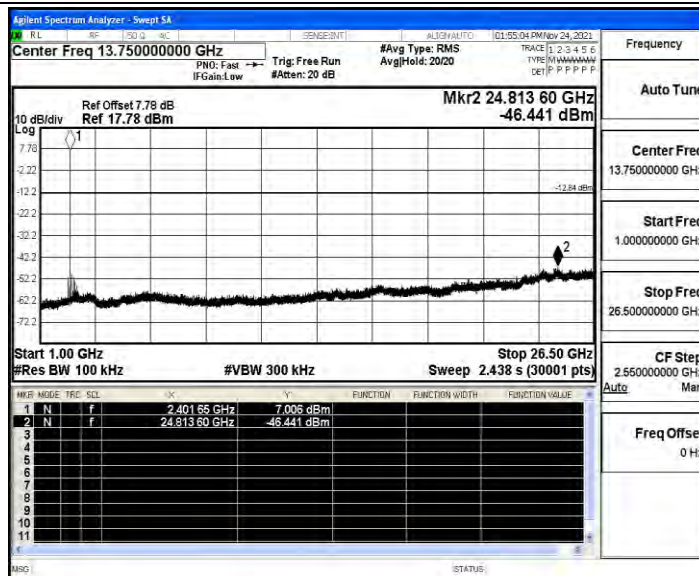
DH5_Ant1_2402_0~Reference



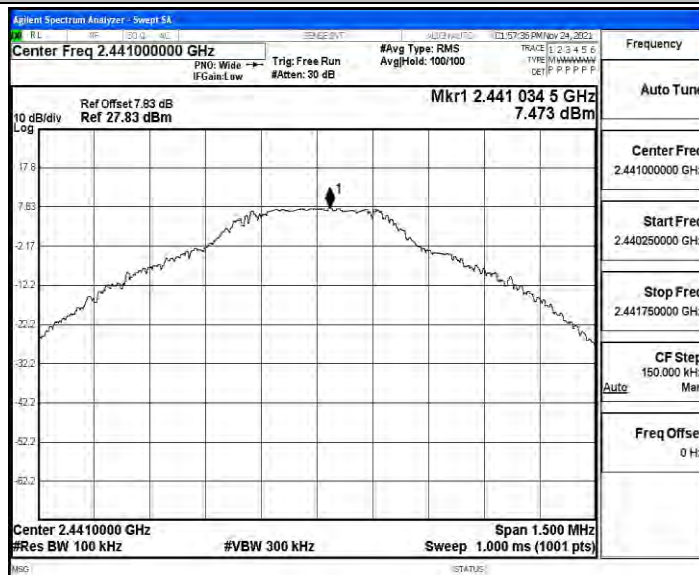
DH5_Ant1_2402_30~1000



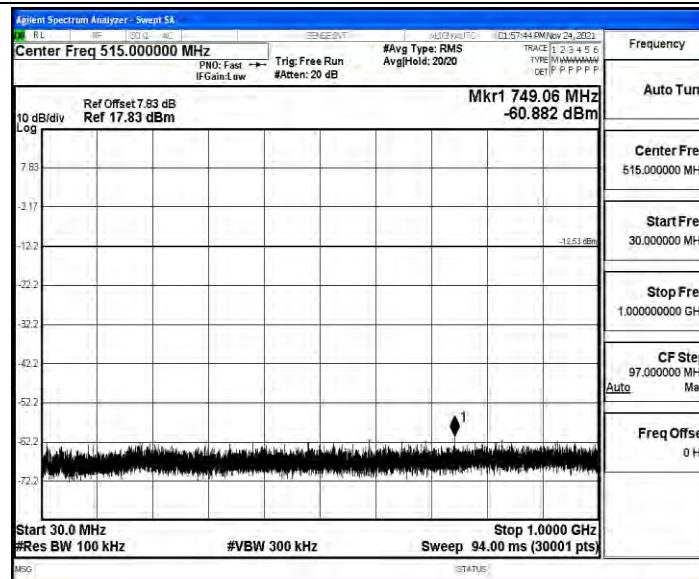
DH5_Ant1_2402_1000~26500



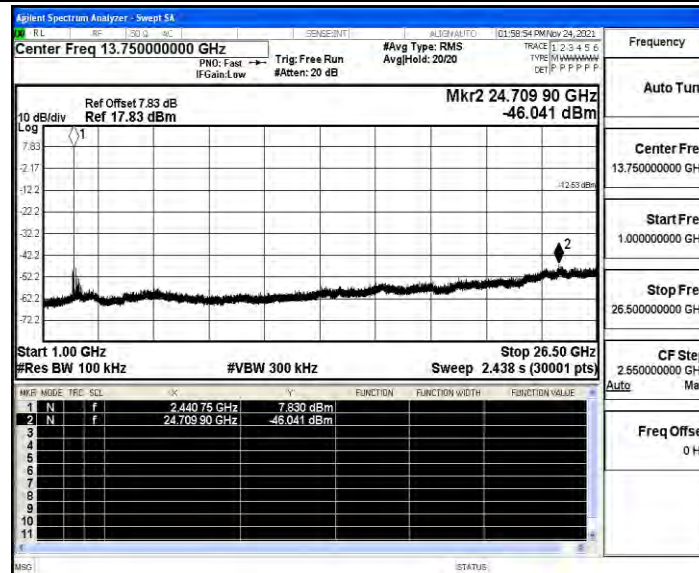
DH5_Ant1_2441_0~Reference



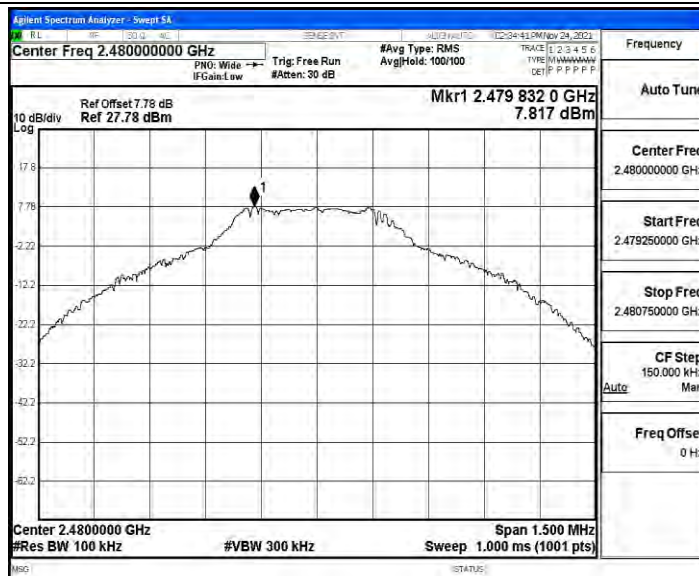
DH5_Ant1_2441_30~1000



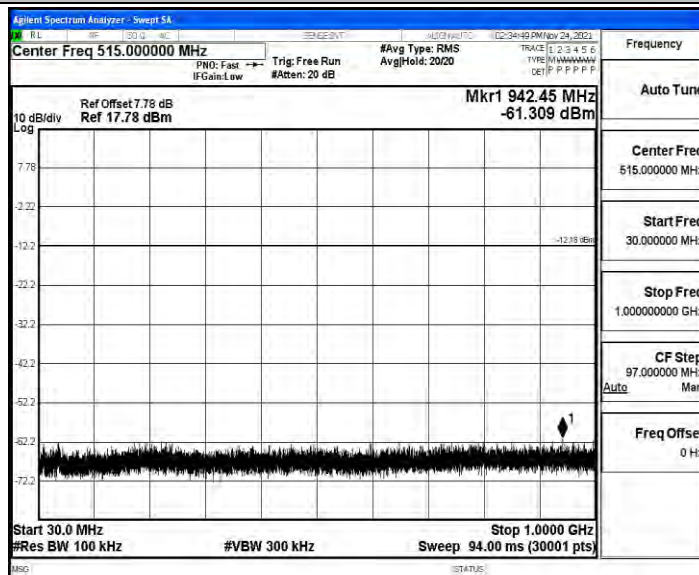
DH5_Ant1_2441_1000~26500



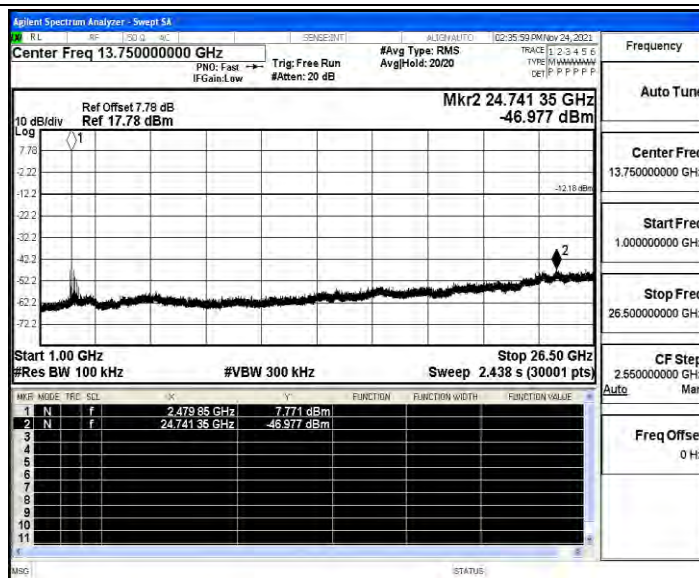
DH5_Ant1_2480_0~Reference



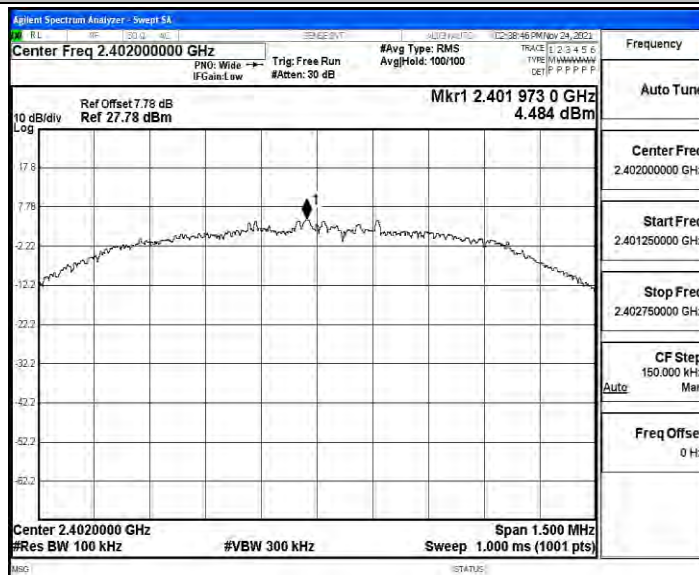
DH5_Ant1_2480_30~1000



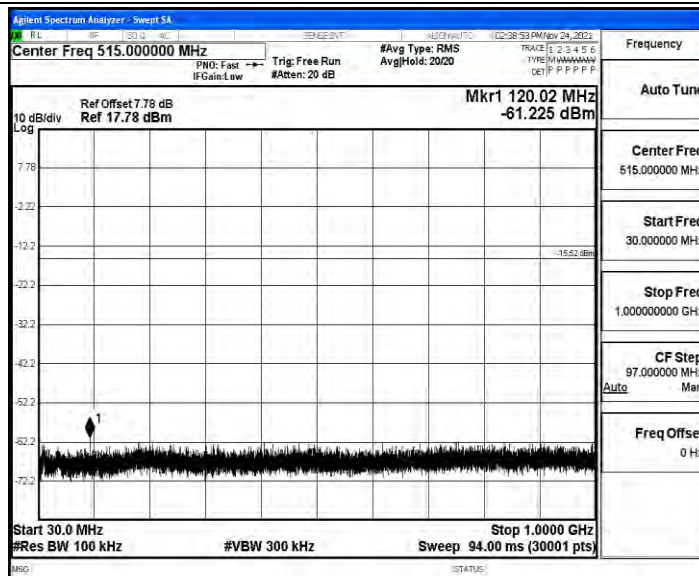
DH5_Ant1_2480_1000~26500



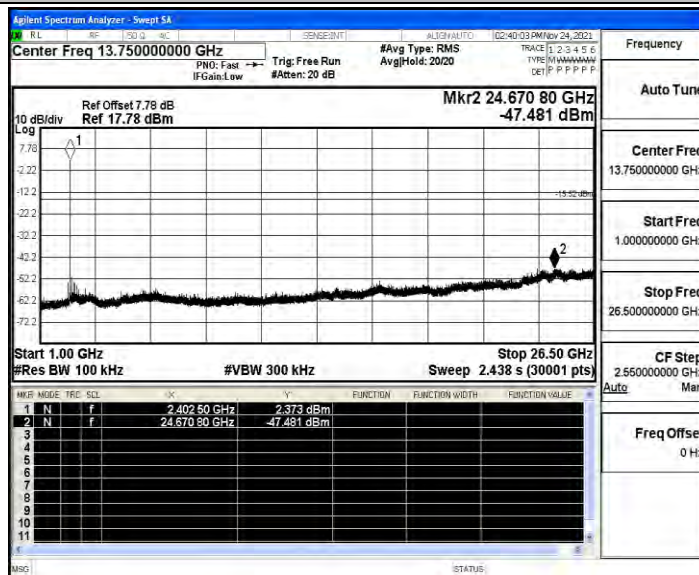
2DH5_Ant1_2402_0~Reference



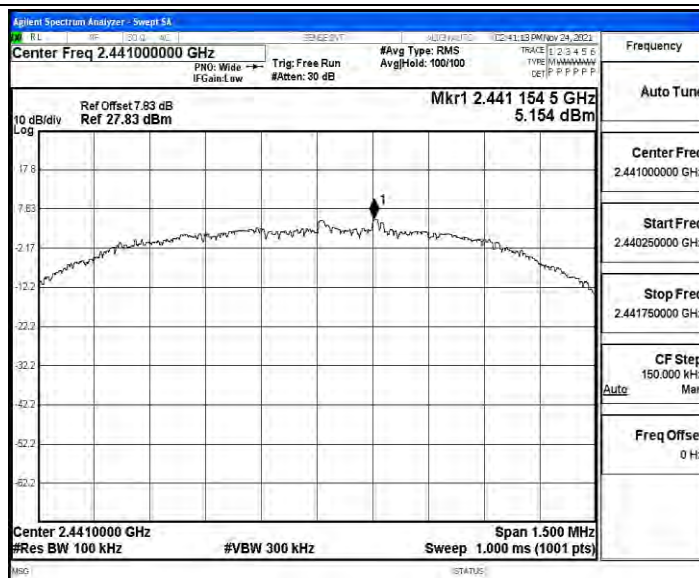
2DH5_Ant1_2402_30~1000



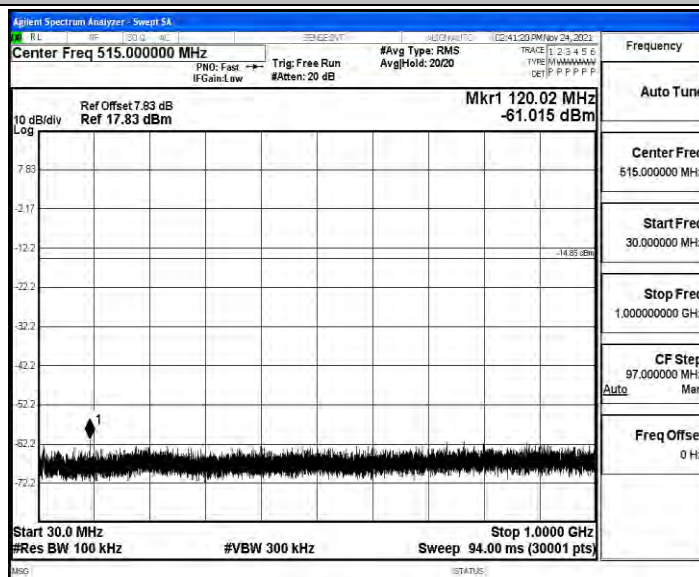
2DH5_Ant1_2402_1000~26500



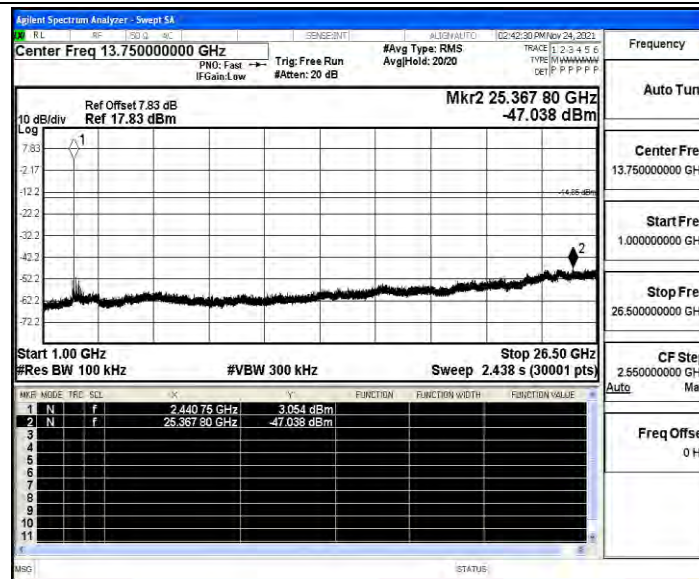
2DH5_Ant1_2441_0~Reference



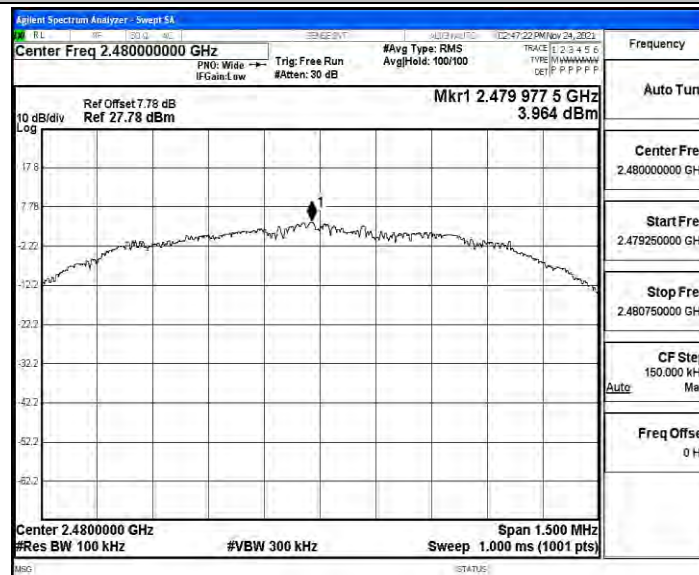
2DH5_Ant1_2441_30~1000



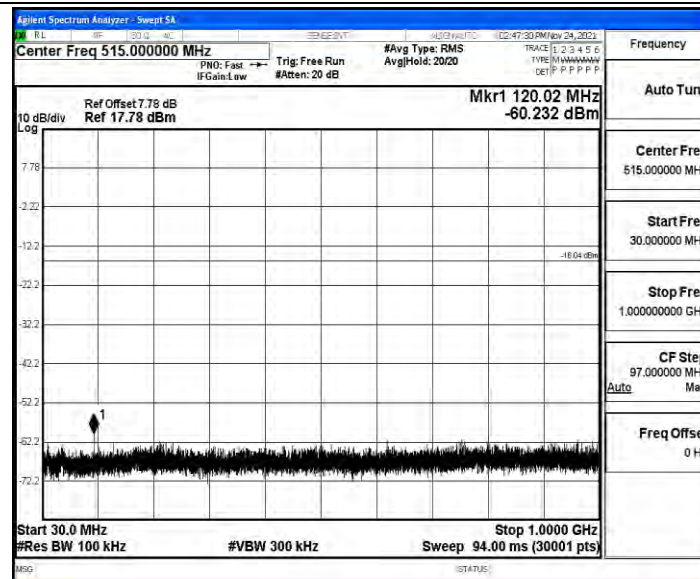
2DH5_Ant1_2441_1000~26500



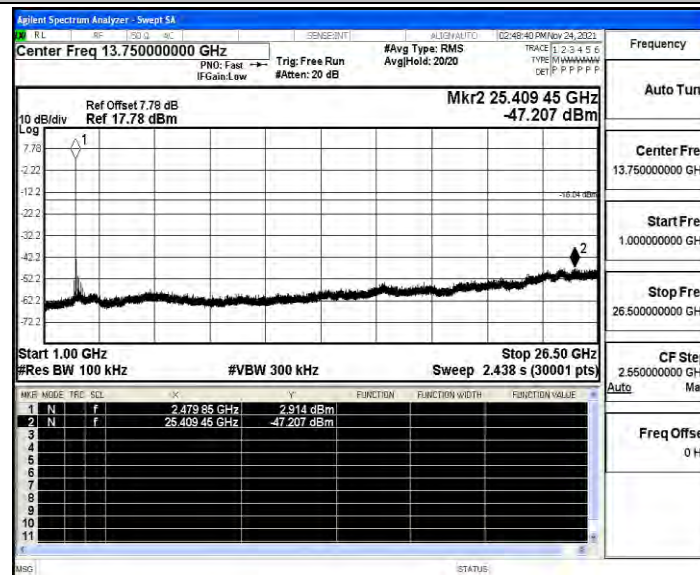
2DH5_Ant1_2480_0~Reference



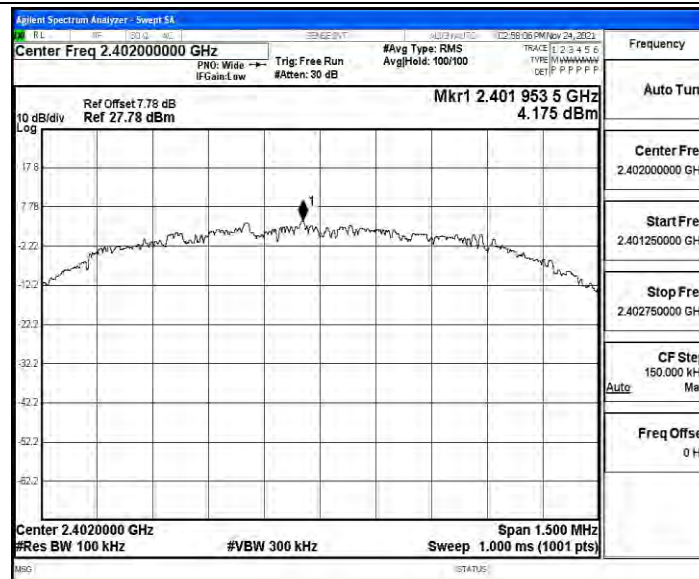
2DH5_Ant1_2480_30~1000



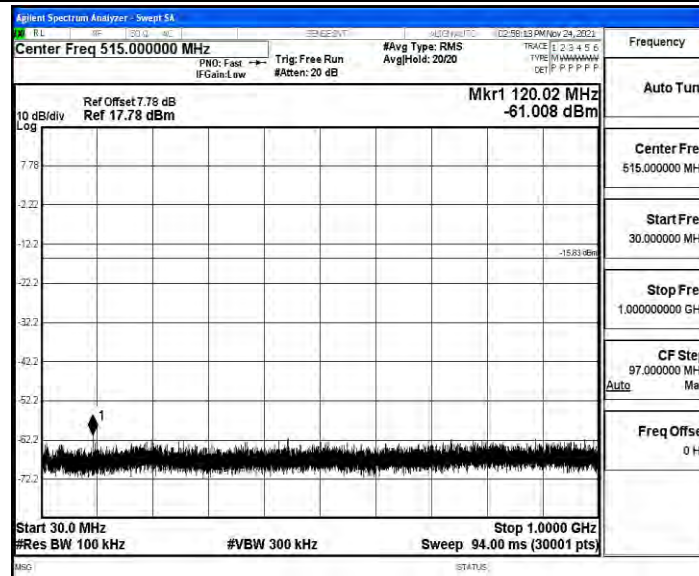
2DH5_Ant1_2480_1000~26500



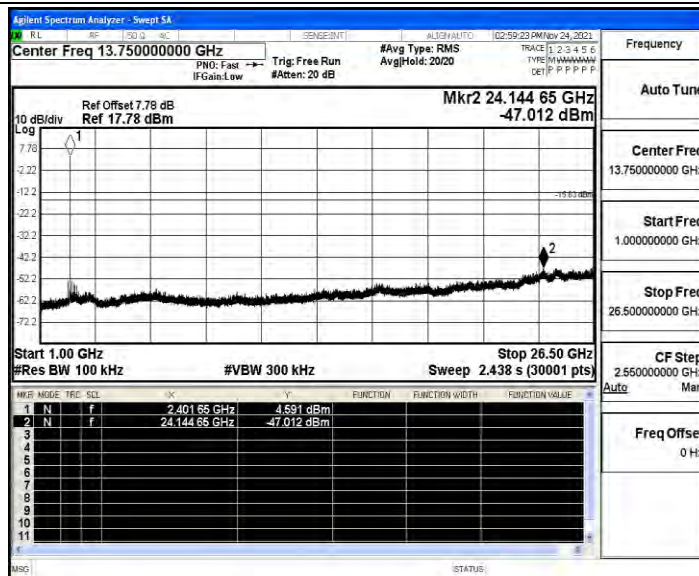
3DH5_Ant1_2402_0~Reference



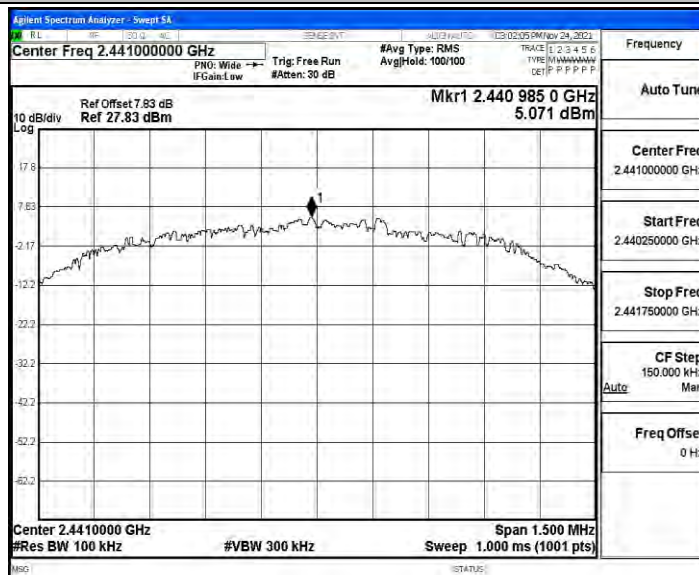
3DH5_Ant1_2402_30~1000



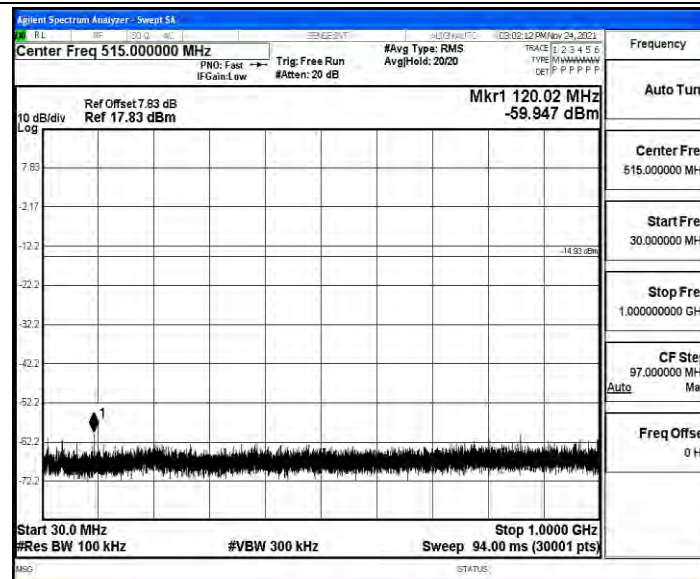
3DH5_Ant1_2402_1000~26500



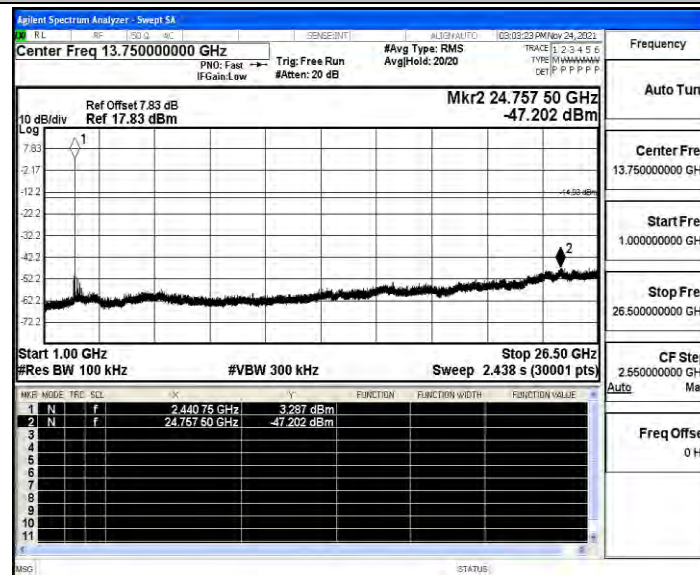
3DH5_Ant1_2441_0~Reference



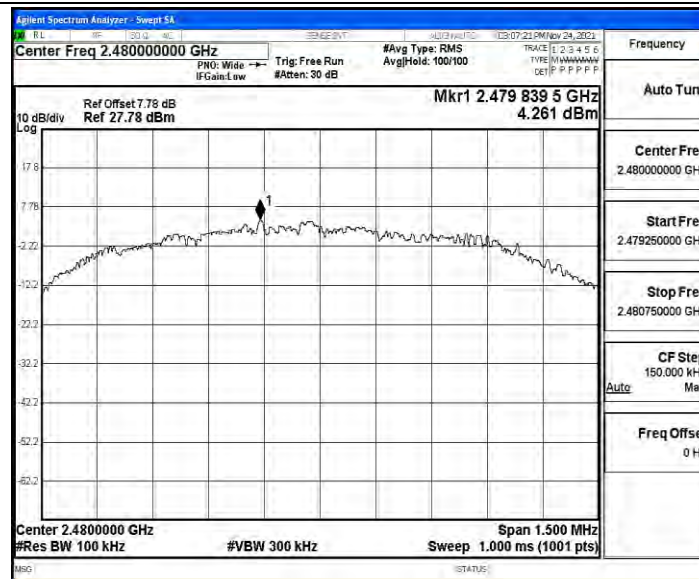
3DH5_Ant1_2441_30~1000



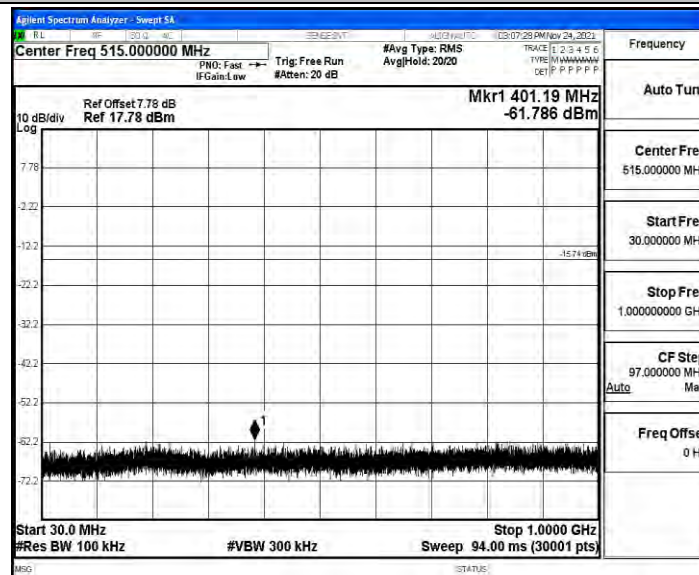
3DH5_Ant1_2441_1000~26500



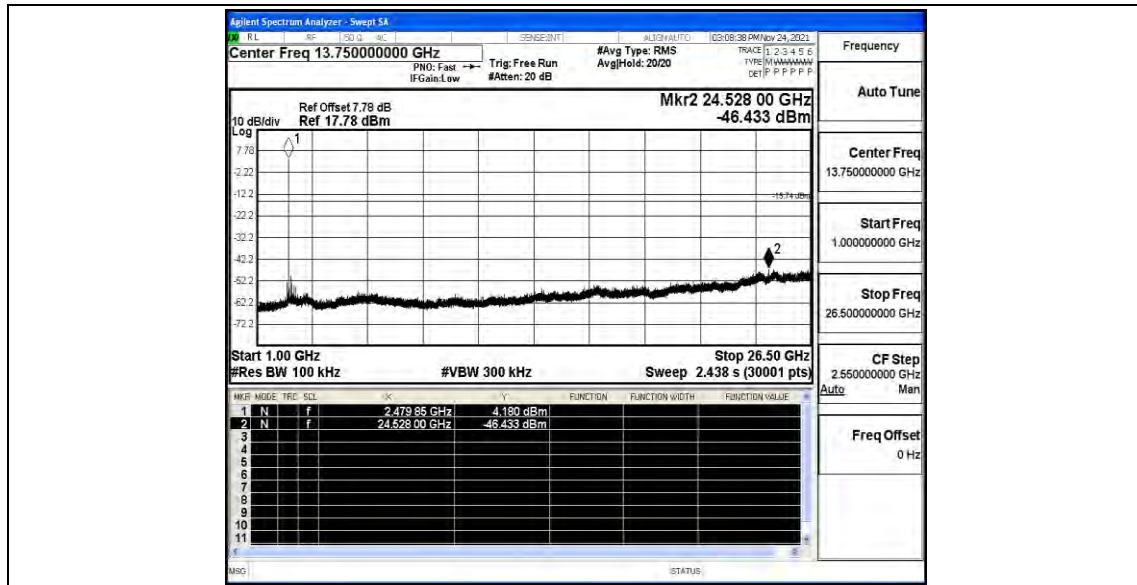
3DH5_Ant1_2480_0~Reference



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	-49.05	≤-41.20	46.15	≤54	PASS
				AV	2325.095	-45.75	≤-41.20	49.45	≤54	PASS
				AV	2390.000	-48.61	≤-41.20	46.59	≤54	PASS
				Peak	2310.000	-42.38	≤-21.20	52.82	≤74	PASS
				Peak	2325.305	-38.83	≤-21.20	56.37	≤74	PASS
				Peak	2390.000	-42.8	≤-21.20	52.40	≤74	PASS
		High	2480	AV	2483.500	-46.26	≤-41.20	48.94	≤54	PASS
				AV	2483.520	-46.26	≤-41.20	48.94	≤54	PASS
				AV	2500.000	-48.04	≤-41.20	47.16	≤54	PASS
				Peak	2483.500	-39.06	≤-21.20	56.14	≤74	PASS
				Peak	2485.920	-38.8	≤-21.20	56.40	≤74	PASS
				Peak	2500.000	-42.33	≤-21.20	52.87	≤74	PASS
		Low	Hop_24 02	Peak	2310.000	-40.87	≤-21.20	54.33	≤74	PASS
				Peak	2369.510	-36.32	≤-21.20	58.88	≤74	PASS
				Peak	2390.000	-39.88	≤-21.20	55.32	≤74	PASS
		High	Hop_24 80	Peak	2483.500	-38.85	≤-21.20	56.35	≤74	PASS
				Peak	2486.240	-37.48	≤-21.20	57.72	≤74	PASS
				Peak	2500.000	-39.52	≤-21.20	55.68	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.12	≤-41.20	46.08	≤54	PASS
				AV	2325.200	-46.89	≤-41.20	48.31	≤54	PASS
				AV	2390.000	-48.22	≤-41.20	46.98	≤54	PASS
				Peak	2310.000	-42.37	≤-21.20	52.83	≤74	PASS
				Peak	2359.850	-39.19	≤-21.20	56.01	≤74	PASS
				Peak	2390.000	-39.58	≤-21.20	55.62	≤74	PASS
		High	2480	AV	2483.500	-46.02	≤-41.20	49.18	≤54	PASS
				AV	2483.520	-46.02	≤-41.20	49.18	≤54	PASS
				AV	2500.000	-48	≤-41.20	47.20	≤54	PASS
				Peak	2483.500	-41.14	≤-21.20	54.06	≤74	PASS
				Peak	2496.960	-37.69	≤-21.20	57.51	≤74	PASS
				Peak	2500.000	-41.63	≤-21.20	53.57	≤74	PASS
		Low	Hop_24 02	Peak	2310.000	-40.3	≤-21.20	54.90	≤74	PASS
				Peak	2386.100	-37.78	≤-21.20	57.42	≤74	PASS
				Peak	2390.000	-39.62	≤-21.20	55.58	≤74	PASS
		High	Hop_24 80	Peak	2483.500	-39.05	≤-21.20	56.15	≤74	PASS
				Peak	2486.240	-35.35	≤-21.20	59.85	≤74	PASS
				Peak	2500.000	-39.95	≤-21.20	55.25	≤74	PASS



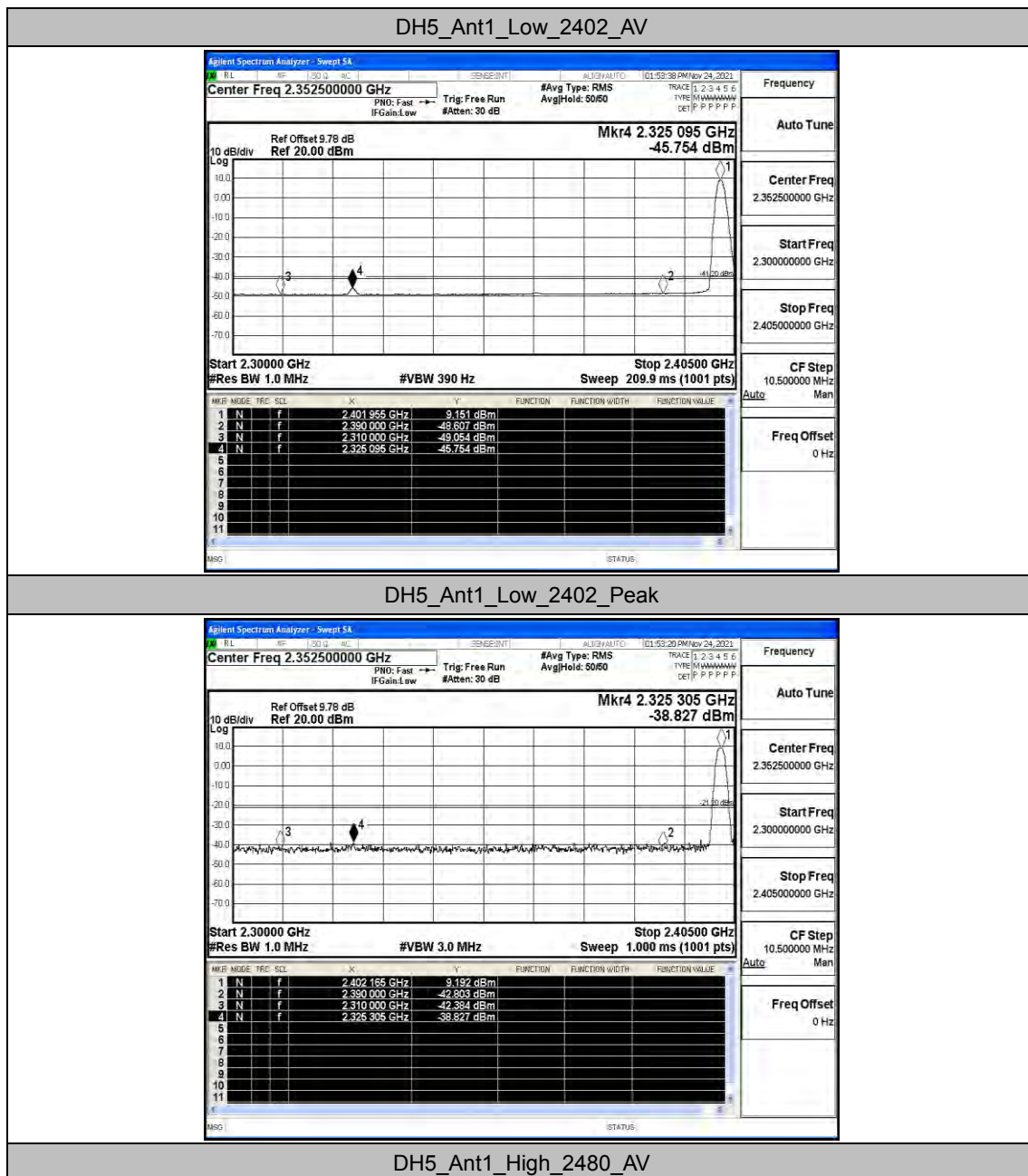
3DH5	Ant1	Low	2402	AV	2310.000	-49.02	≤-41.20	46.18	≤54	PASS
				AV	2325.095	-46.8	≤-41.20	48.40	≤54	PASS
				AV	2390.000	-48.23	≤-41.20	46.97	≤54	PASS
				Peak	2310.000	-41.4	≤-21.20	53.80	≤74	PASS
				Peak	2377.595	-38.13	≤-21.20	57.07	≤74	PASS
				Peak	2390.000	-39.43	≤-21.20	55.77	≤74	PASS
		High	2480	AV	2483.500	-45.64	≤-41.20	49.56	≤54	PASS
				AV	2483.520	-45.64	≤-41.20	49.56	≤54	PASS
				AV	2500.000	-47.78	≤-41.20	47.42	≤54	PASS
				Peak	2483.500	-40.86	≤-21.20	54.34	≤74	PASS
				Peak	2484.880	-37.42	≤-21.20	57.78	≤74	PASS
				Peak	2500.000	-41.4	≤-21.20	53.80	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-39.68	≤-21.20	55.52	≤74	PASS
				Peak	2375.075	-37.6	≤-21.20	57.60	≤74	PASS
				Peak	2390.000	-39.98	≤-21.20	55.22	≤74	PASS
		High	Hop_2480	Peak	2483.500	-38.05	≤-21.20	57.15	≤74	PASS
				Peak	2483.680	-37.13	≤-21.20	58.07	≤74	PASS
				Peak	2500.000	-40.03	≤-21.20	55.17	≤74	PASS

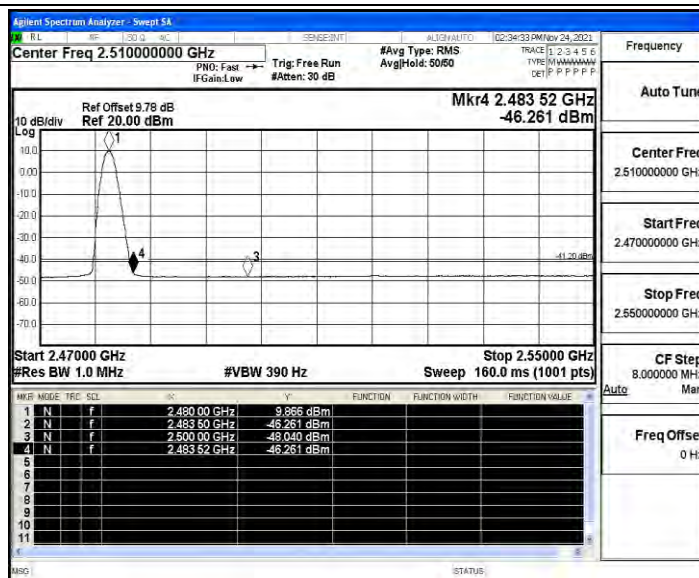
Note:

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.

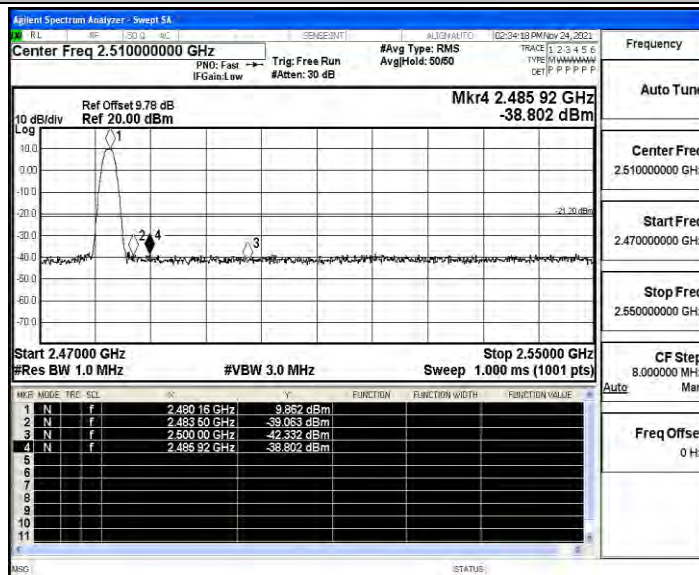


Test Graphs

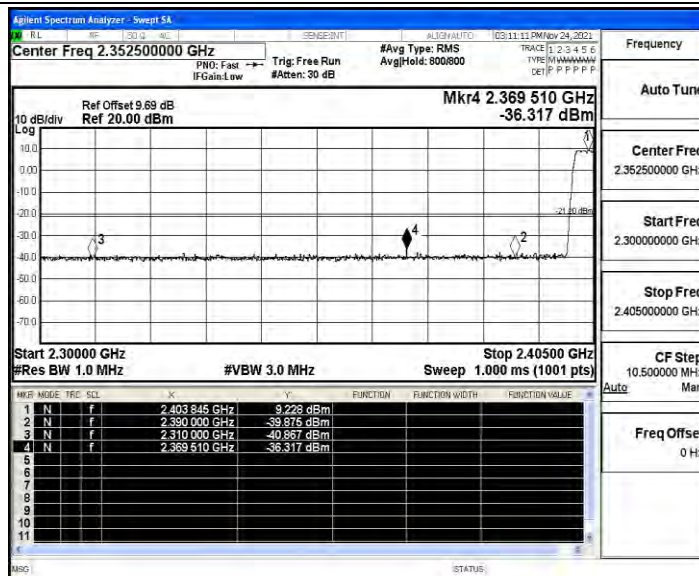




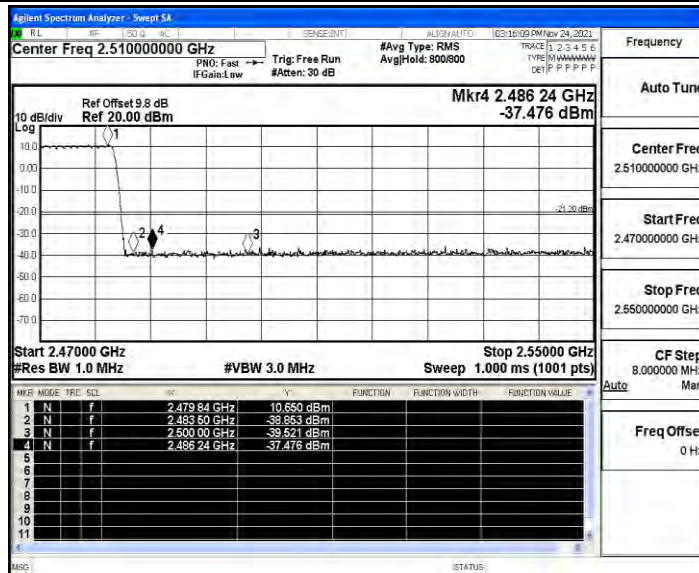
DH5_Ant1_High_2480_Peak



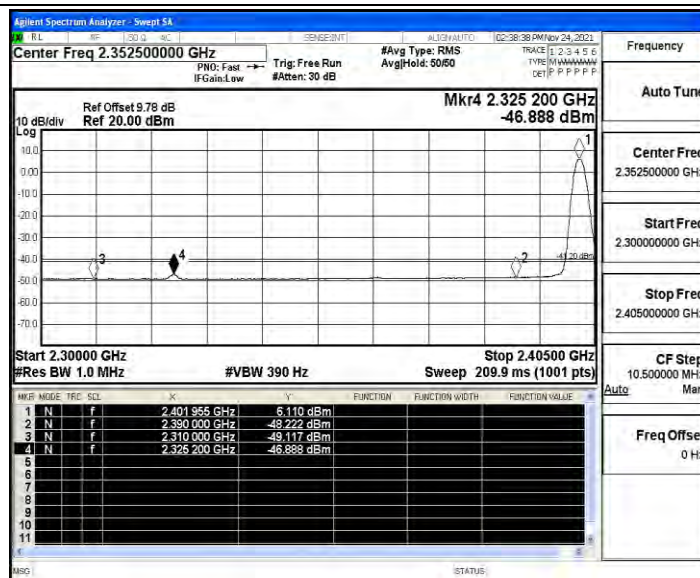
DH5_Ant1_Low_Hop_2402_Peak



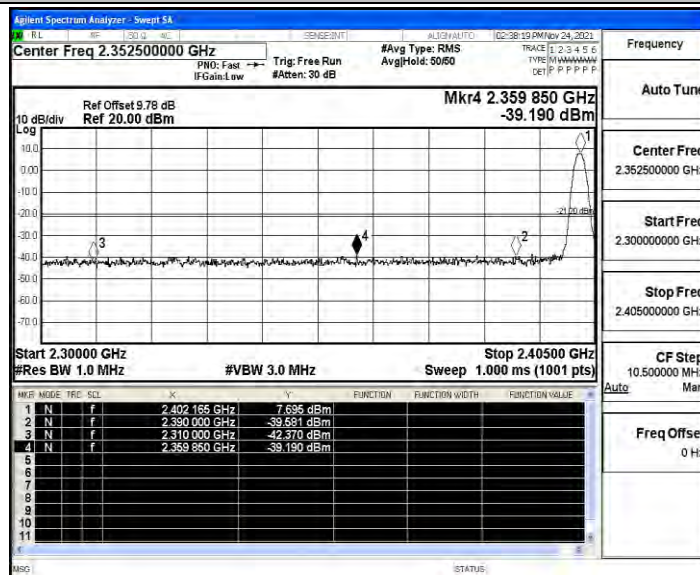
DH5_Ant1_High_Hop_2480_Peak



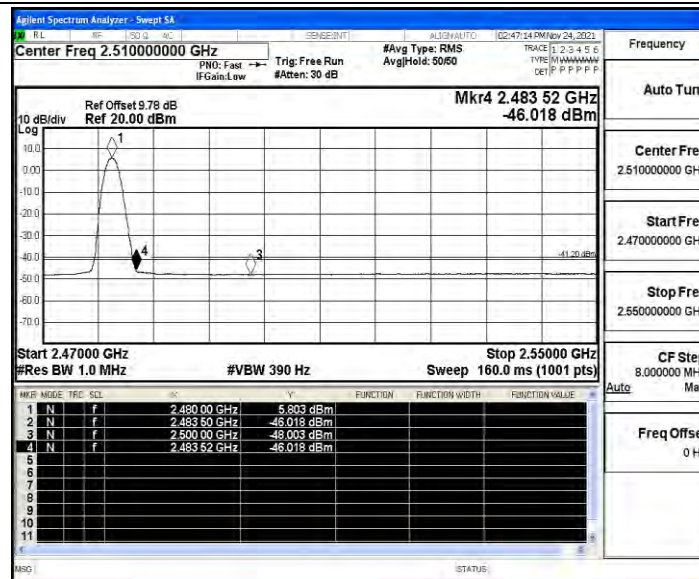
2DH5_Ant1_Low_2402_AV



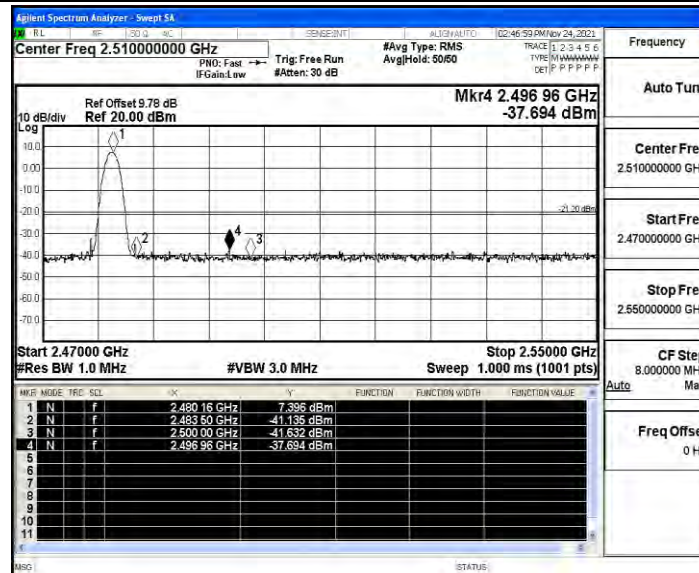
2DH5_Ant1_Low_2402_Peak



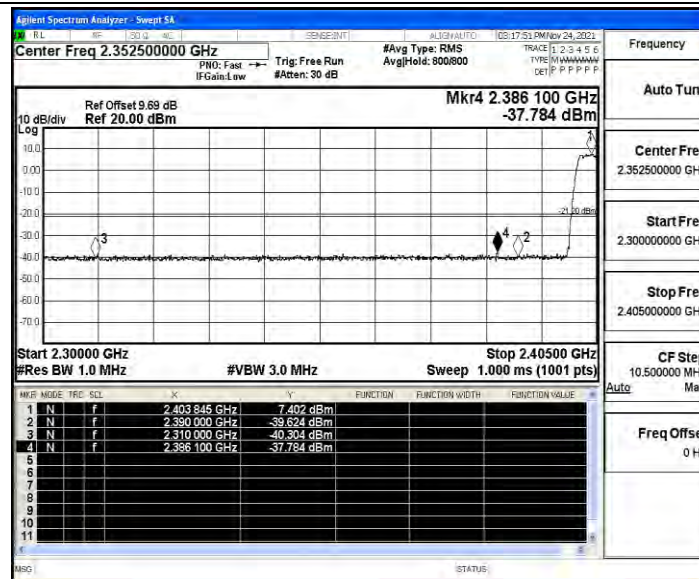
2DH5_Ant1_High_2480_AV



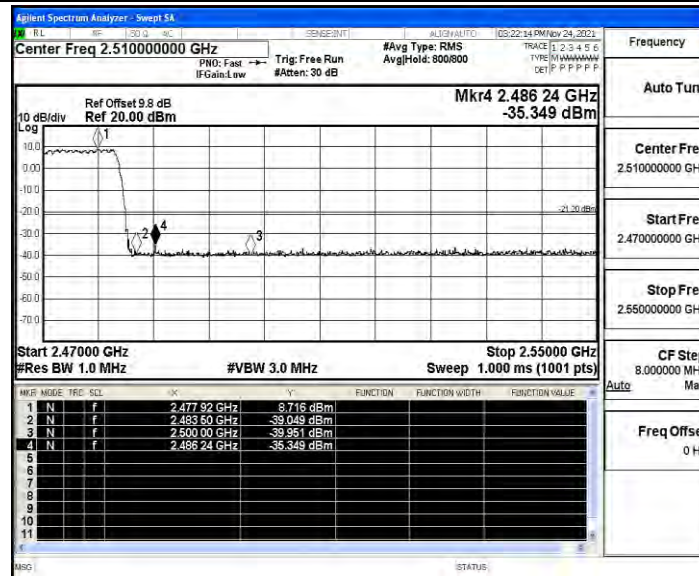
2DH5_Ant1_High_2480_Peak



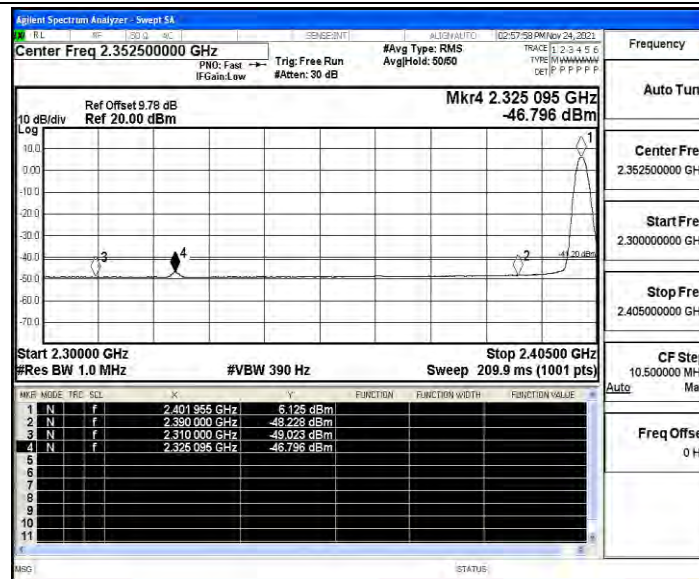
2DH5_Ant1_Low_Hop_2402_Peak



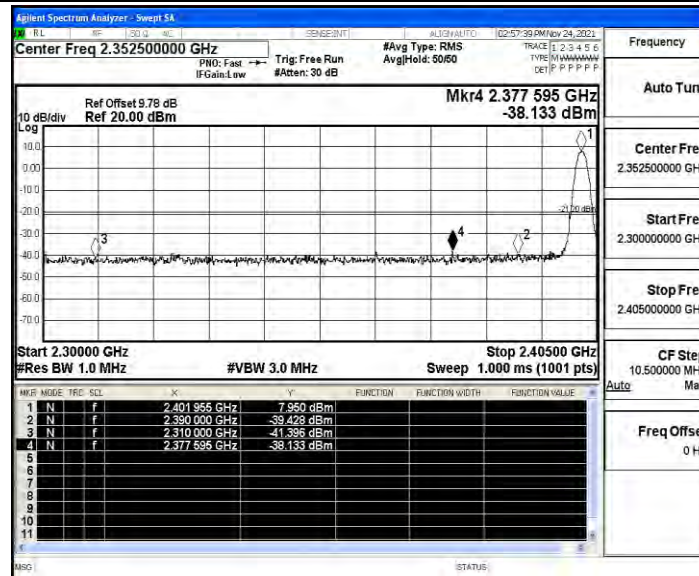
2DH5_Ant1_High_Hop_2480_Peak



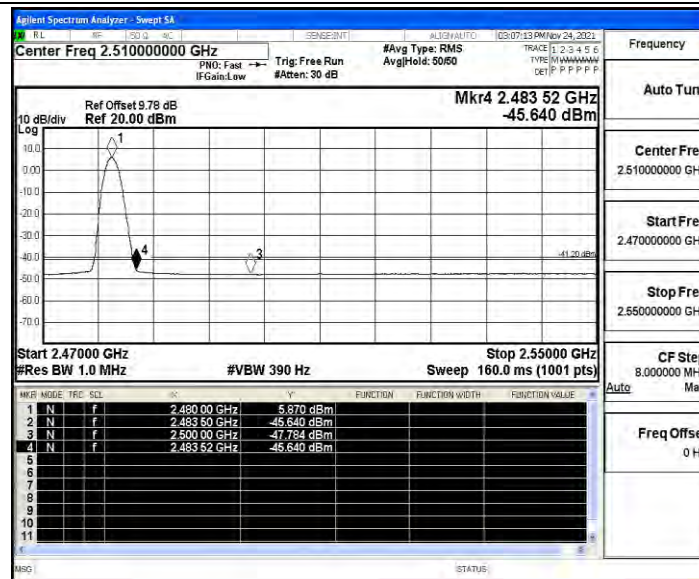
3DH5_Ant1_Low_2402_AV



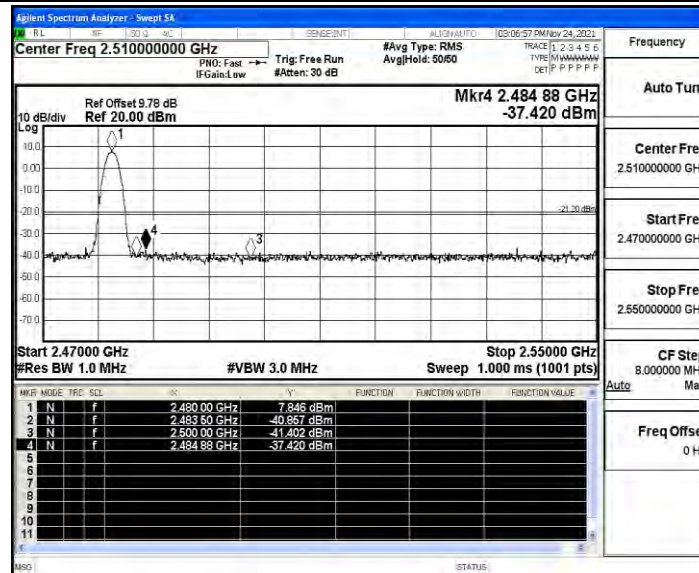
3DH5_Ant1_Low_2402_Peak



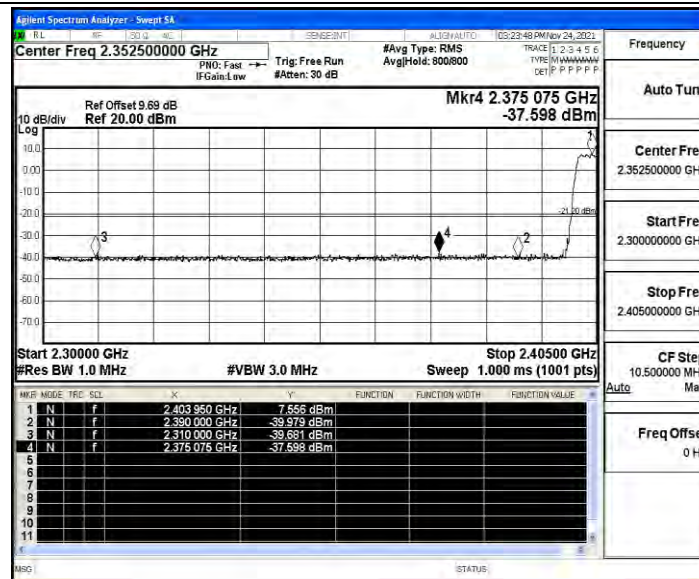
3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

