



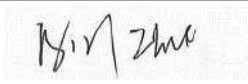
Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: AMPLIFIER

Test Model: PD1000BA

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

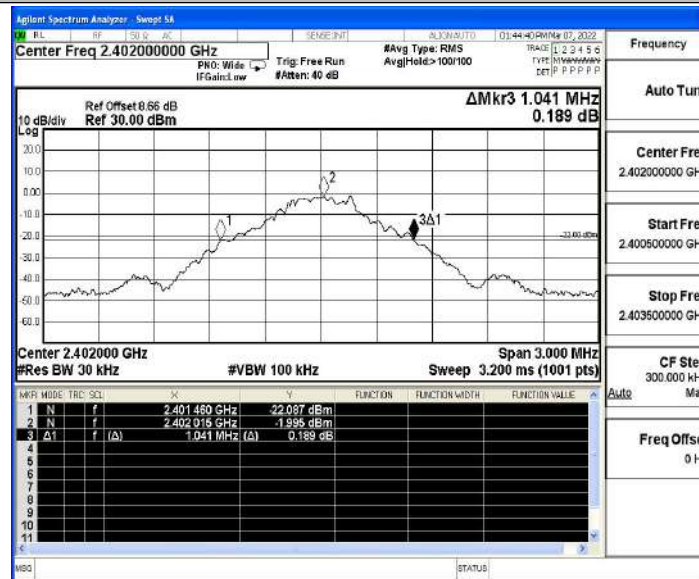
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.041	2401.460	2402.501	---	---
		2441	0.972	2440.529	2441.501	---	---
		2480	1.014	2479.481	2480.495	---	---
2DH5	Ant1	2402	1.290	2401.361	2402.651	---	---
		2441	1.293	2440.361	2441.654	---	---
		2480	1.296	2479.358	2480.654	---	---
3DH5	Ant1	2402	1.302	2401.349	2402.651	---	---
		2441	1.296	2440.349	2441.645	---	---
		2480	1.320	2479.340	2480.660	---	---

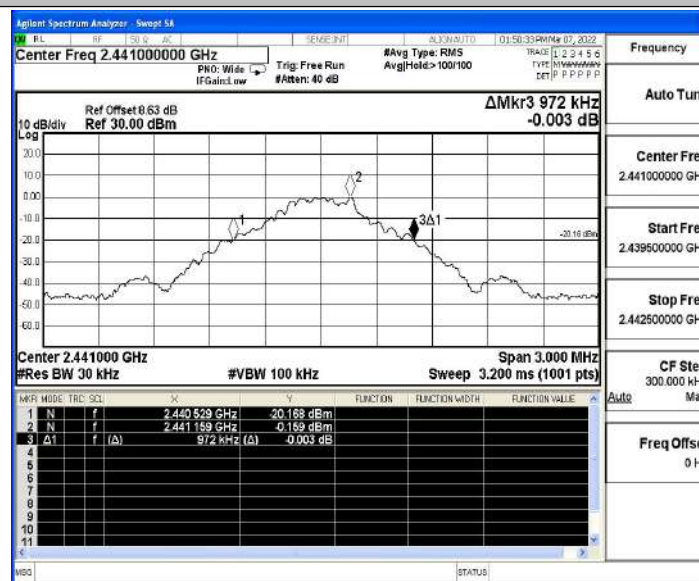


Test Graphs

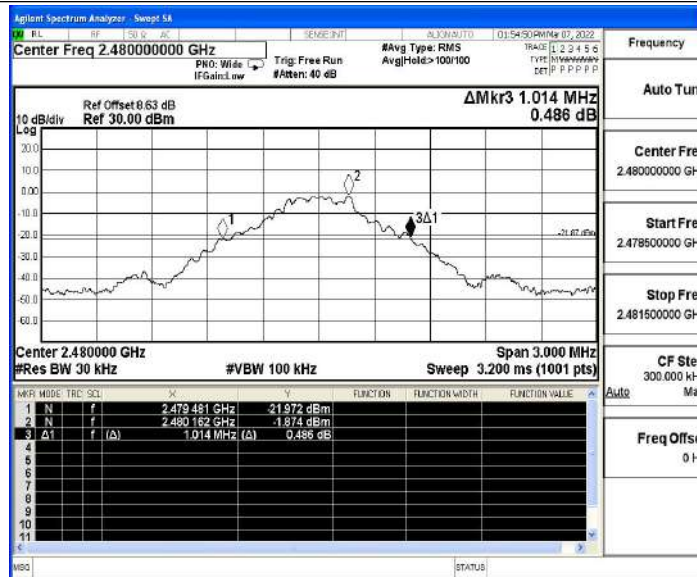
DH5_Ant1_2402



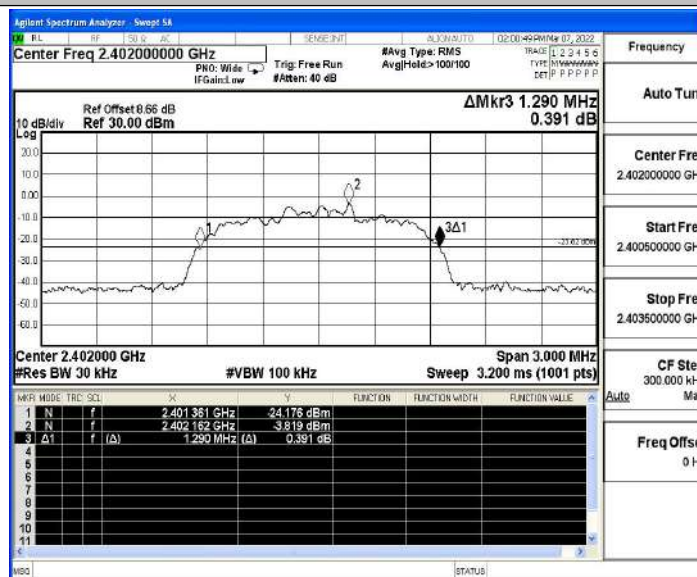
DH5_Ant1_2441



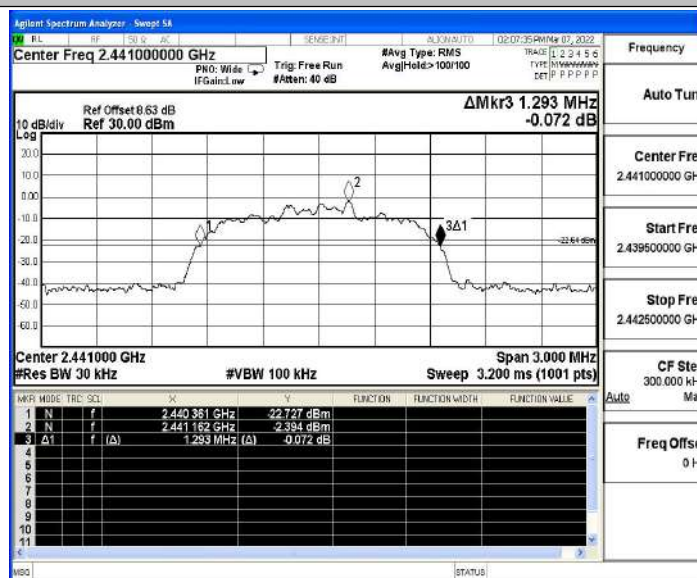
DH5_Ant1_2480



2DH5_Ant1_2402

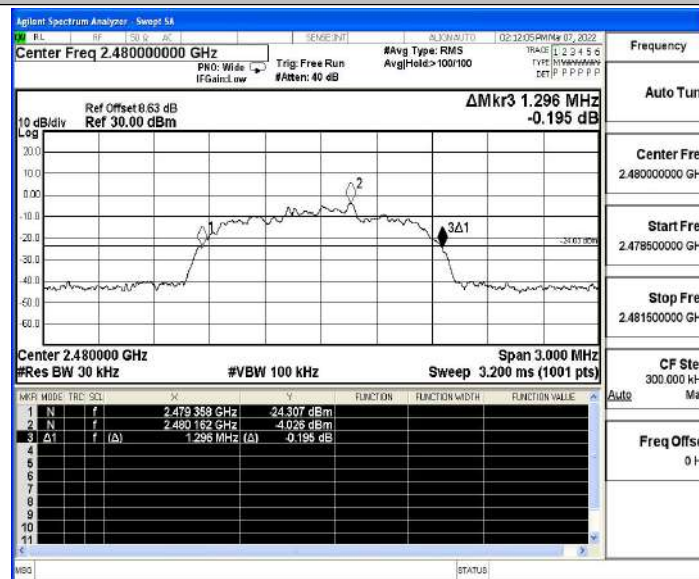


2DH5_Ant1_2441

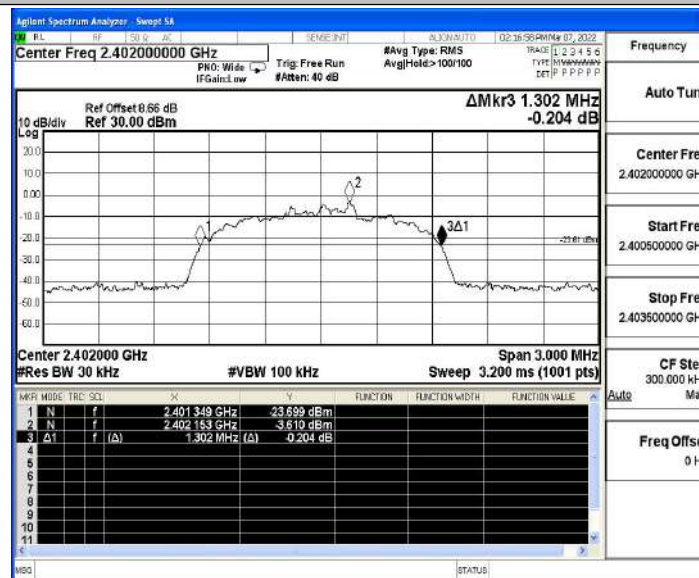




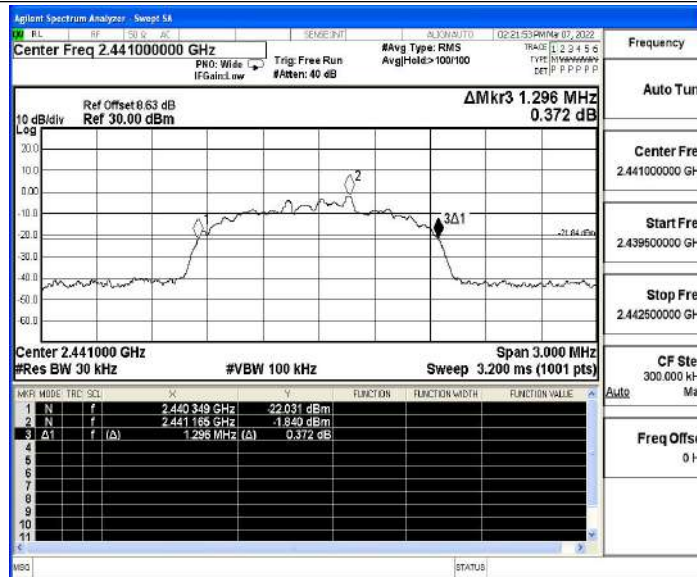
2DH5_Ant1_2480



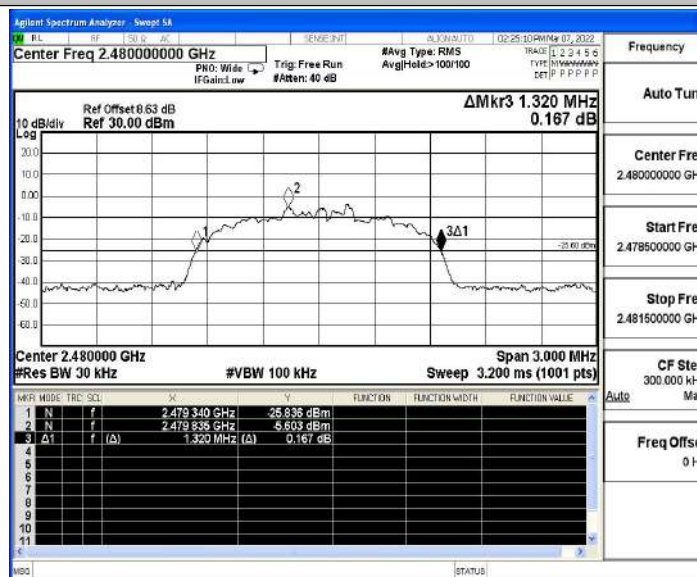
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.2 Maximum peak conducted output power

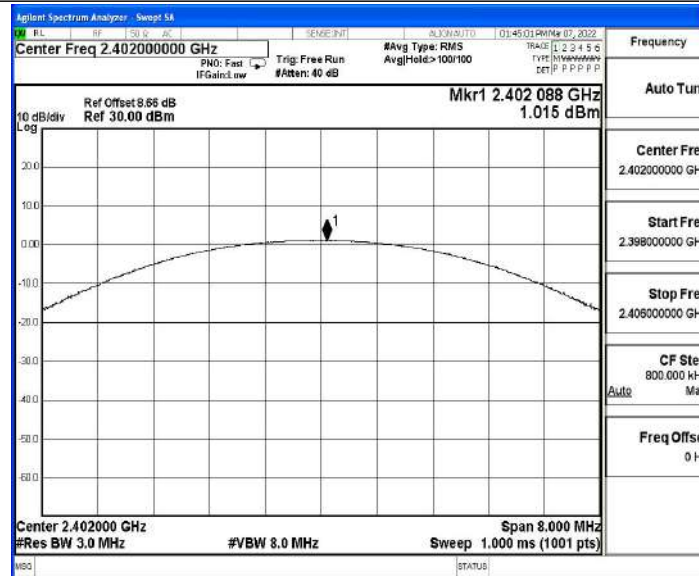
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.02	≤20.97	PASS
		2441	2.41	≤20.97	PASS
		2480	0.77	≤20.97	PASS
2DH5	Ant1	2402	0.1	≤20.97	PASS
		2441	1.62	≤20.97	PASS
		2480	-0.01	≤20.97	PASS
3DH5	Ant1	2402	0.34	≤20.97	PASS
		2441	1.67	≤20.97	PASS
		2480	0.15	≤20.97	PASS

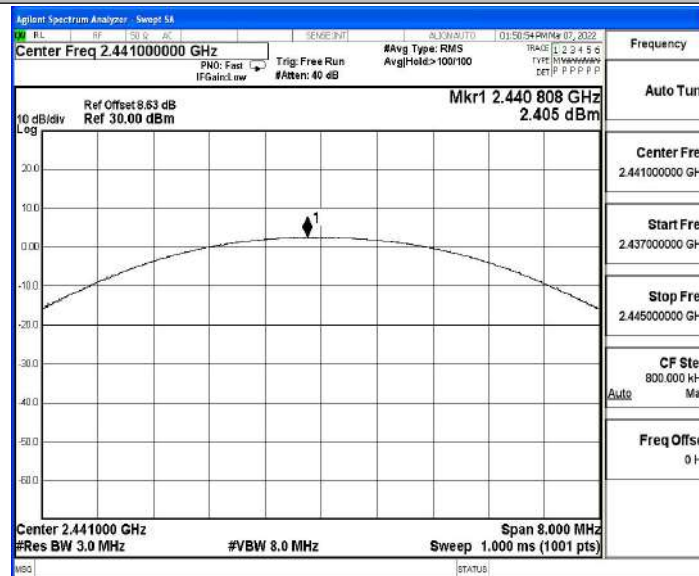


Test Graphs

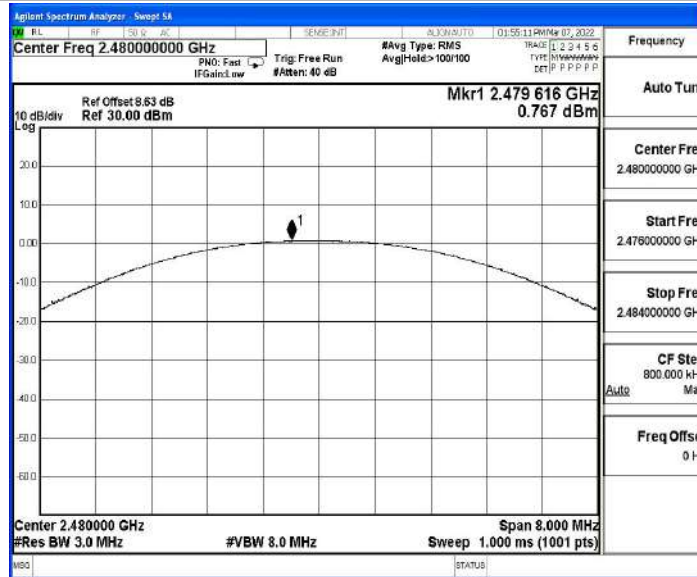
DH5_Ant1_2402



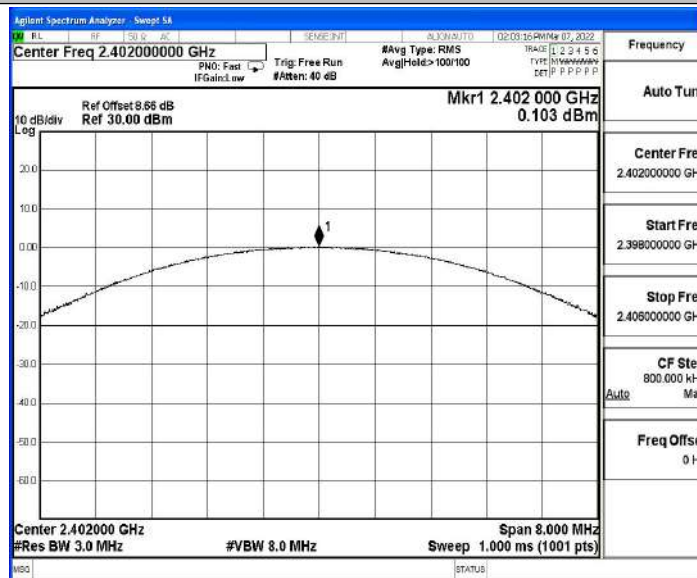
DH5_Ant1_2441



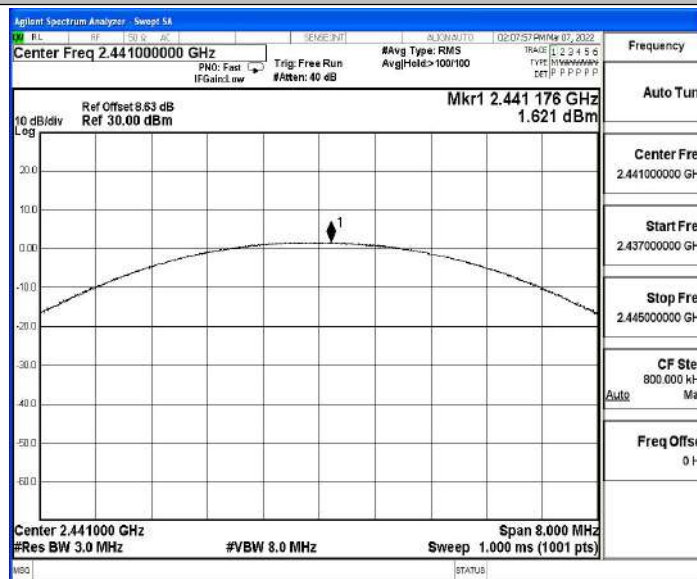
DH5_Ant1_2480



2DH5_Ant1_2402

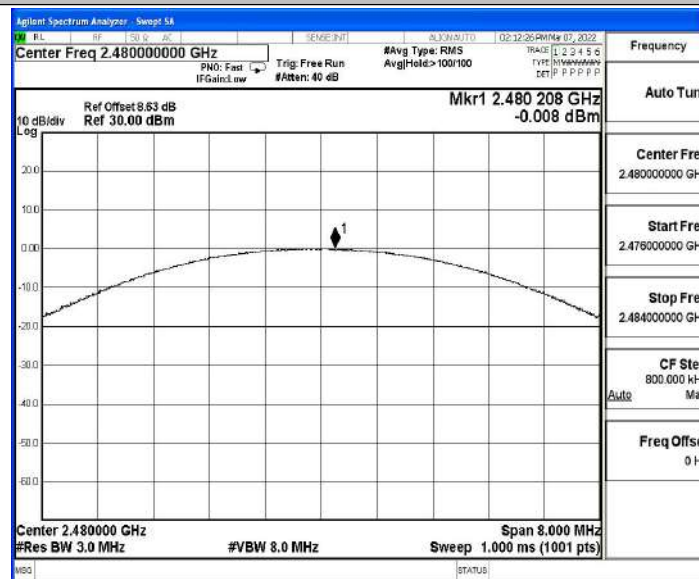


2DH5_Ant1_2441

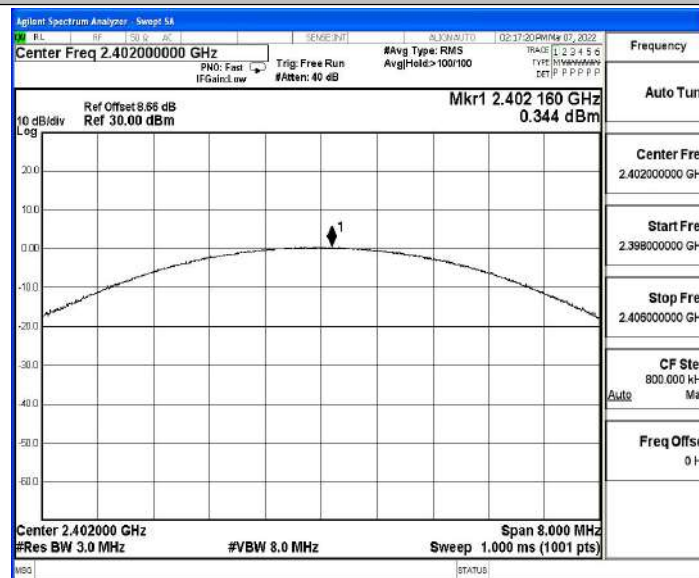




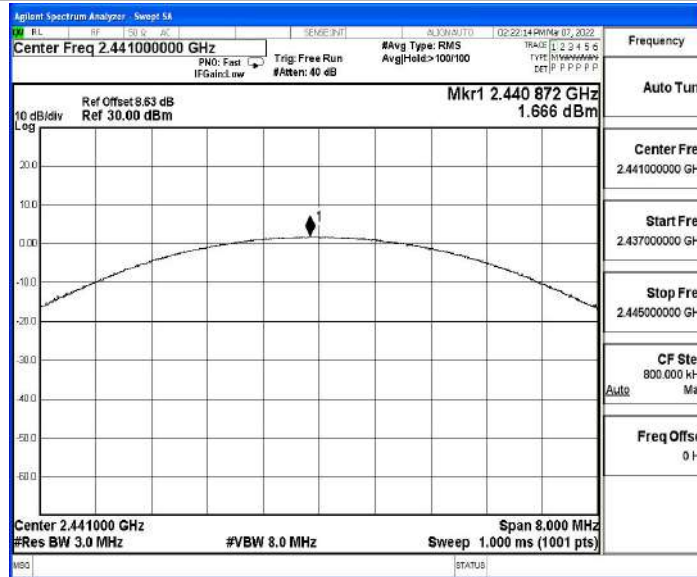
2DH5_Ant1_2480



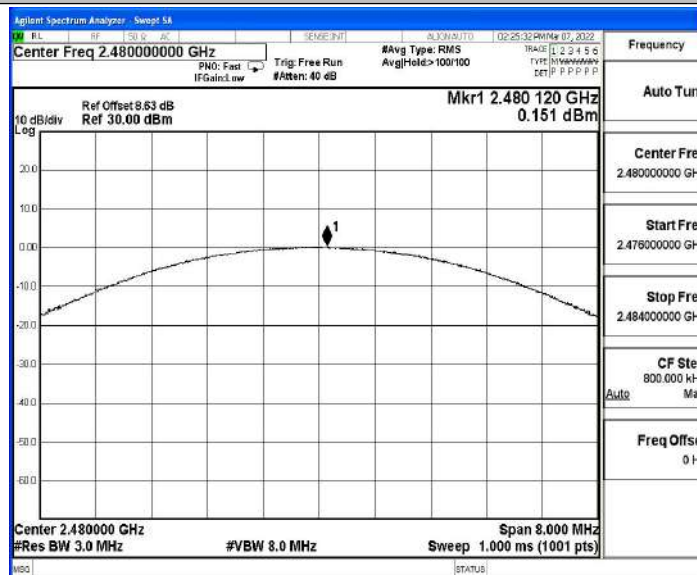
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.3 Carrier frequency separation

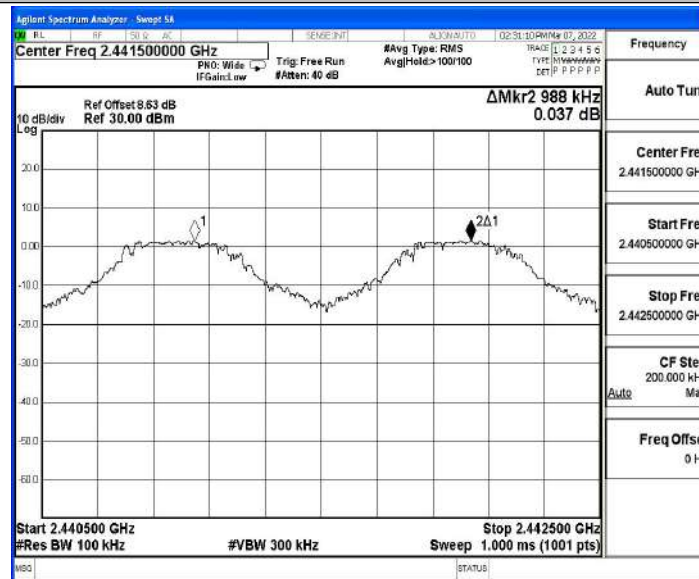
Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.988	≥ 0.694	PASS
2DH5	Ant1	Hop	1.148	≥ 0.864	PASS
3DH5	Ant1	Hop	1.2	≥ 0.880	PASS

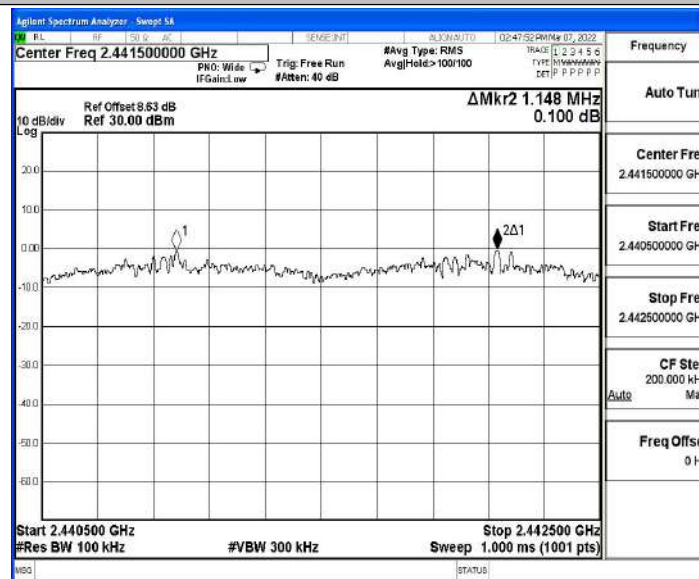


Test Graphs

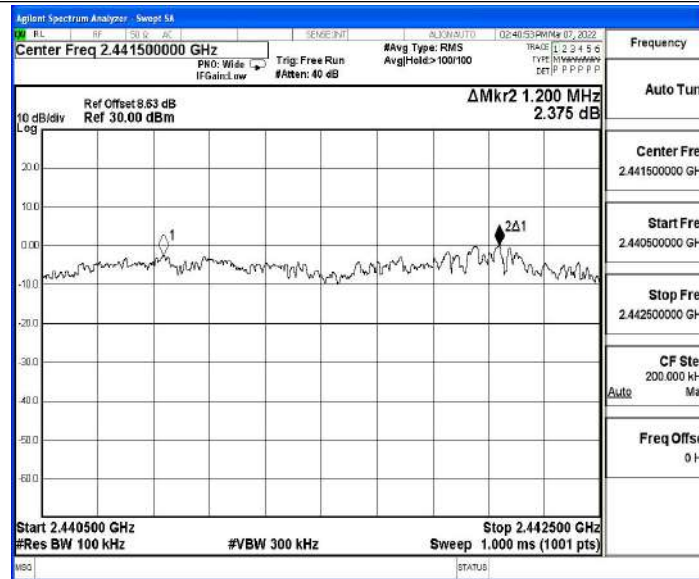
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.4 Time of occupancy

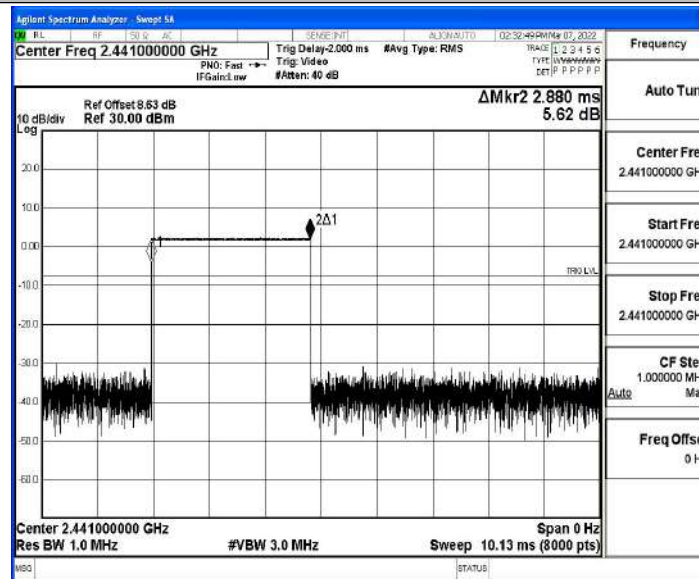
Test Result

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

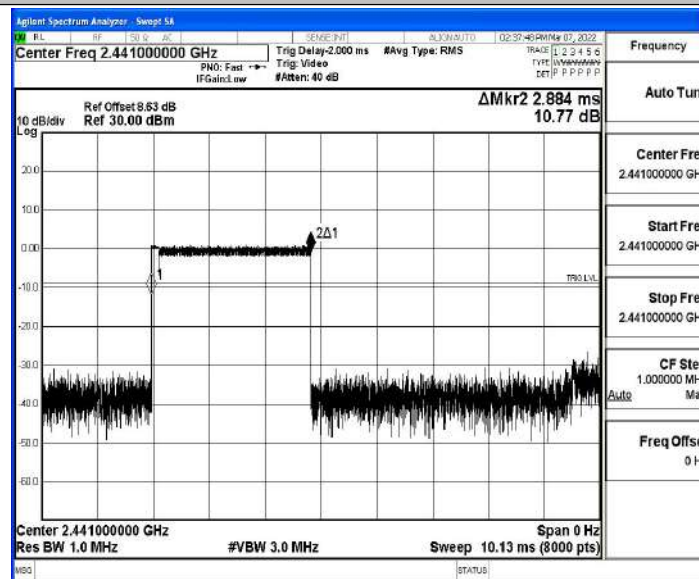


Test Graphs

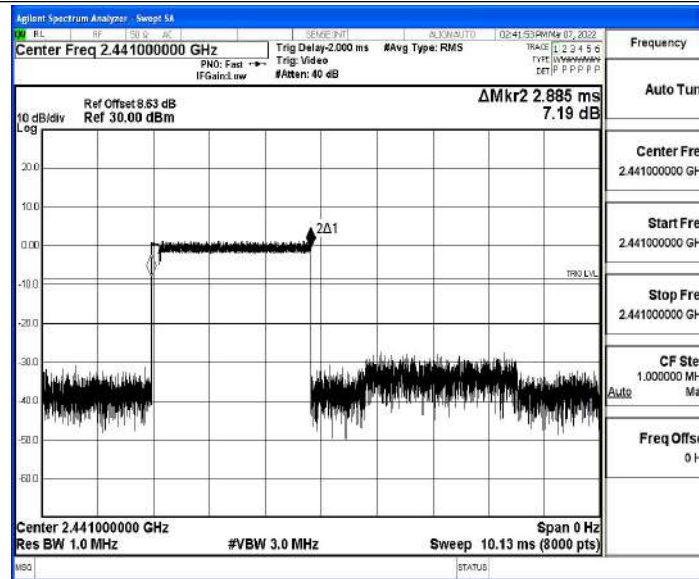
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.5 Number of hopping channels

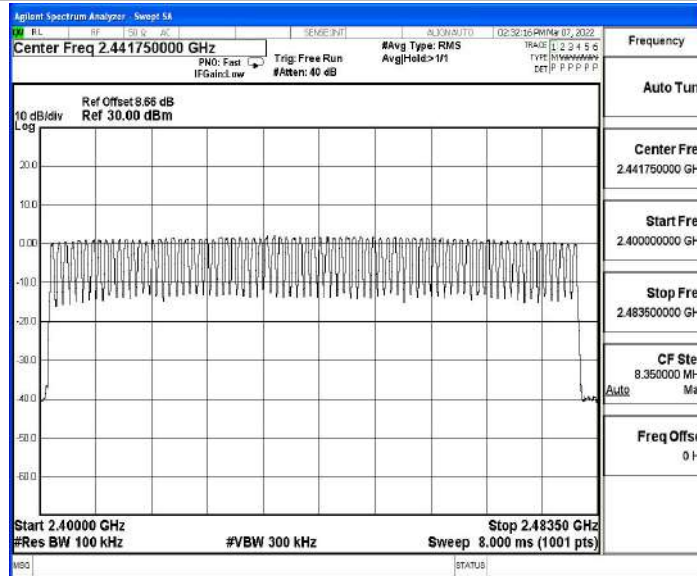
Test Result

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

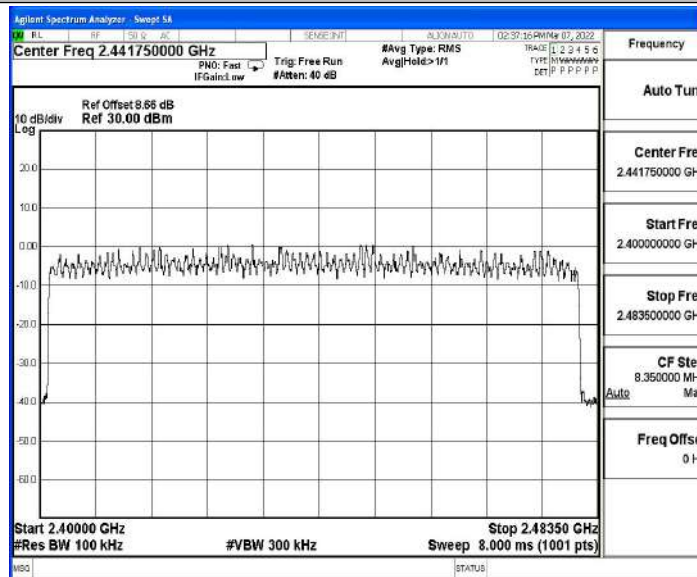


Test Graphs

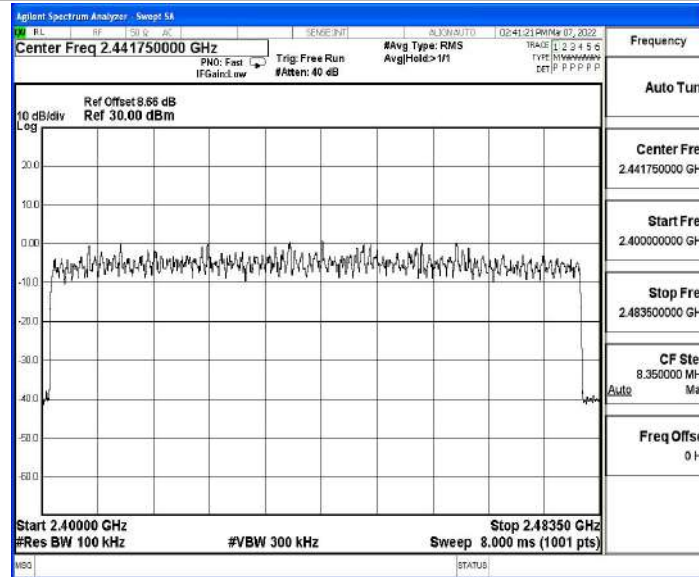
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.6 Band edge measurements

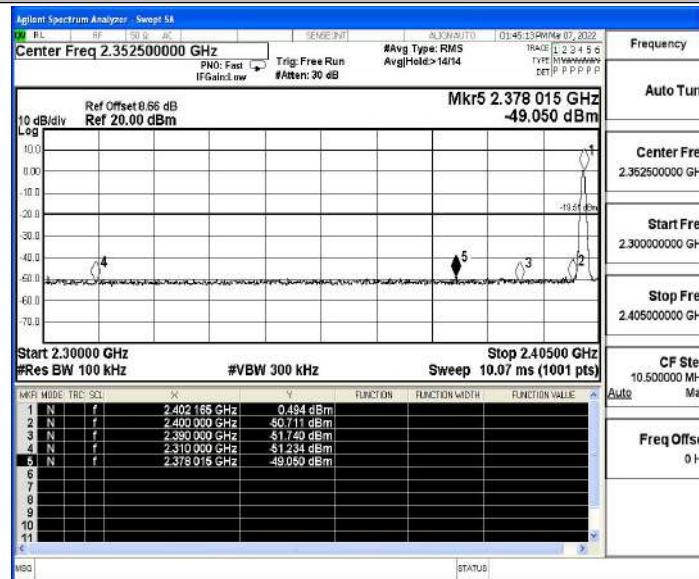
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.49	-49.05	≤ -19.51	PASS
		High	2480	0.30	-48.3	≤ -19.7	PASS
		Low	Hop_2402	0.12	-49.07	≤ -19.88	PASS
		High	Hop_2480	0.51	-48.14	≤ -19.5	PASS
2DH5	Ant1	Low	2402	-0.87	-48.99	≤ -20.87	PASS
		High	2480	-1.14	-48.42	≤ -21.14	PASS
		Low	Hop_2402	-1.33	-48.29	≤ -21.33	PASS
		High	Hop_2480	-1.49	-47.79	≤ -21.49	PASS
3DH5	Ant1	Low	2402	-2.31	-49.23	≤ -22.31	PASS
		High	2480	-1.16	-47.78	≤ -21.16	PASS
		Low	Hop_2402	-4.63	-48.96	≤ -24.63	PASS
		High	Hop_2480	-1.23	-48.24	≤ -21.23	PASS

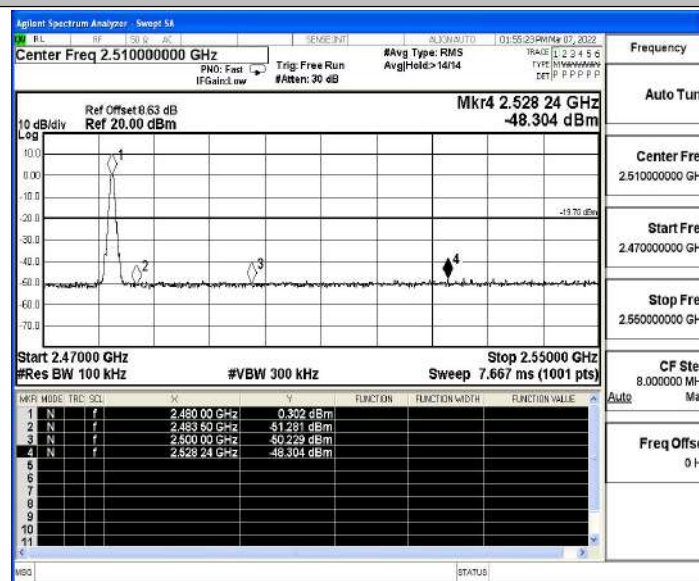


Test Graphs

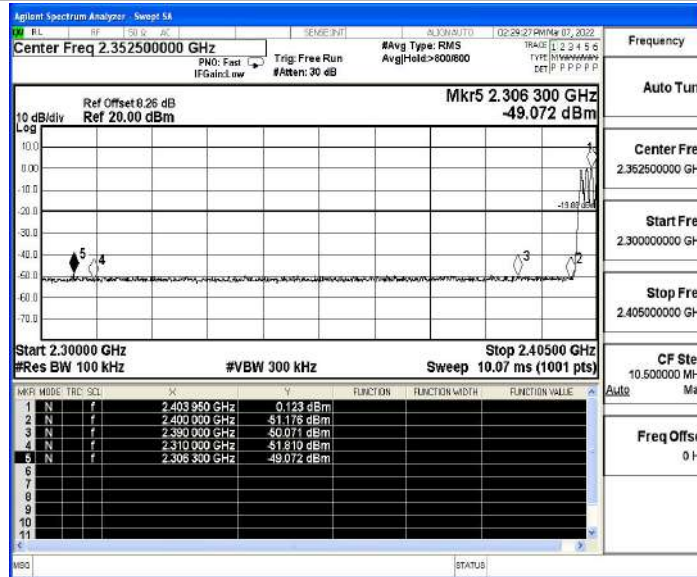
DH5_Ant1_Low_2402



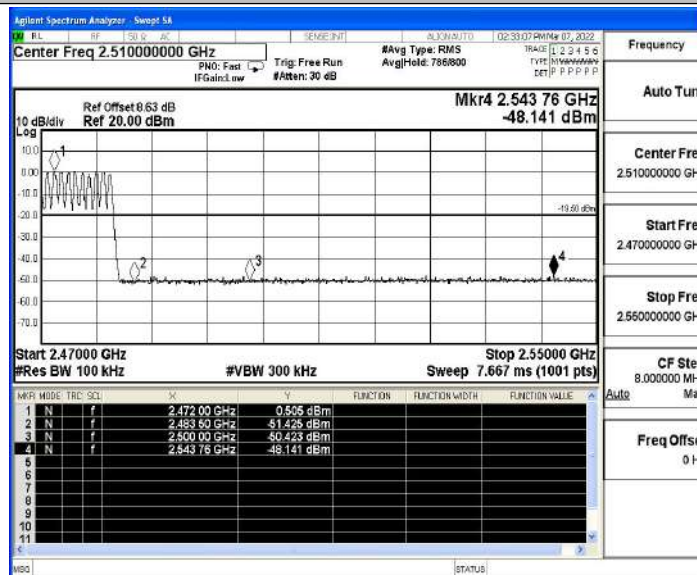
DH5_Ant1_High_2480



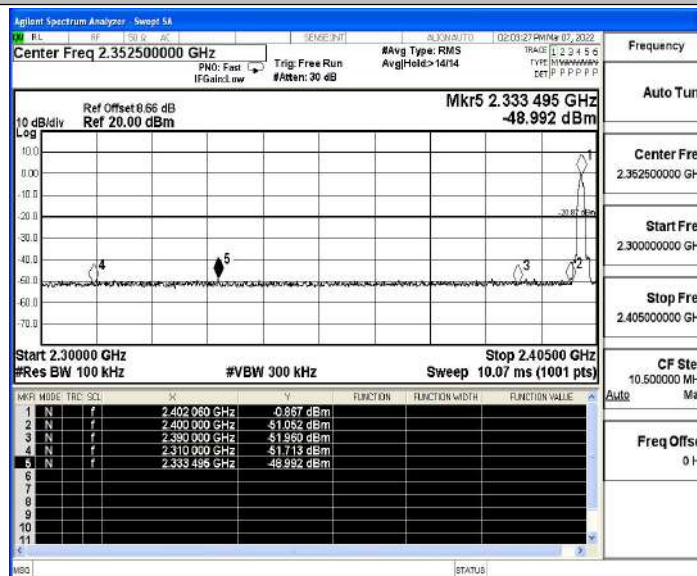
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

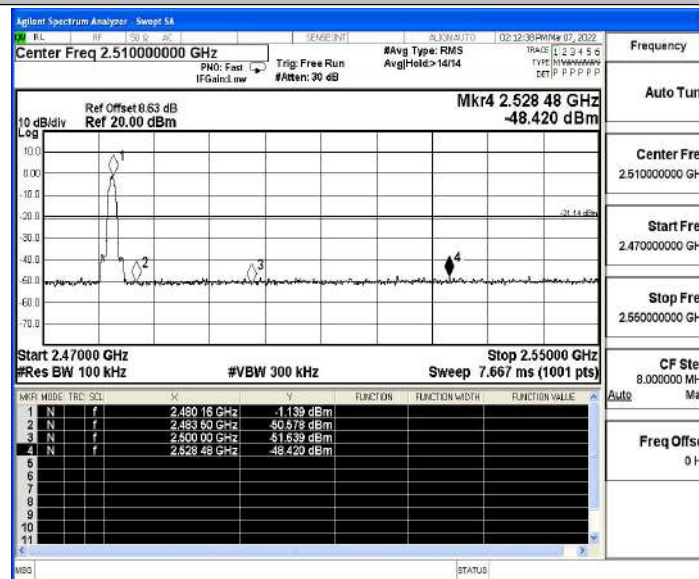


2DH5_Ant1_Low_2402

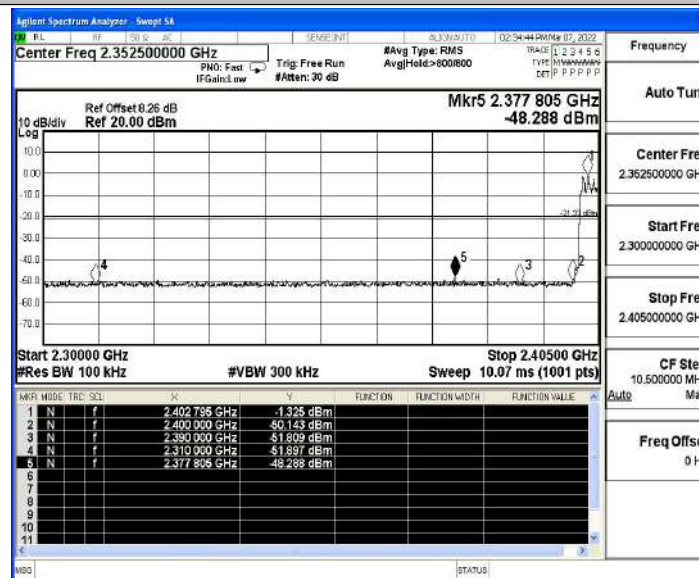




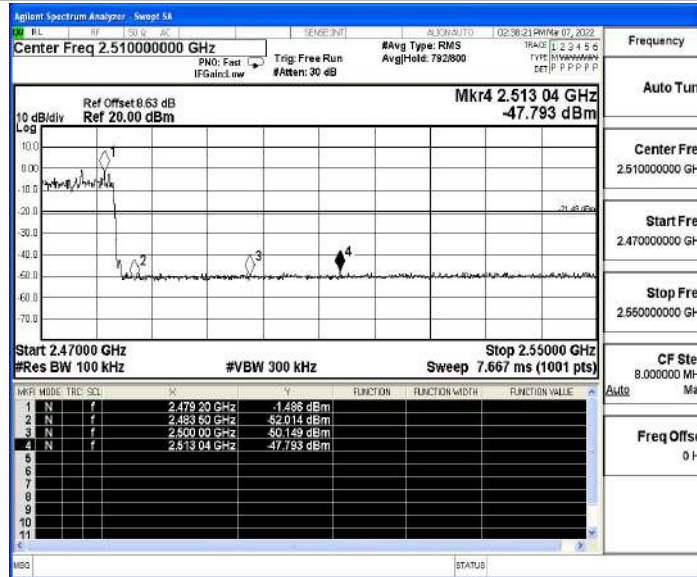
2DH5_Ant1_High_2480



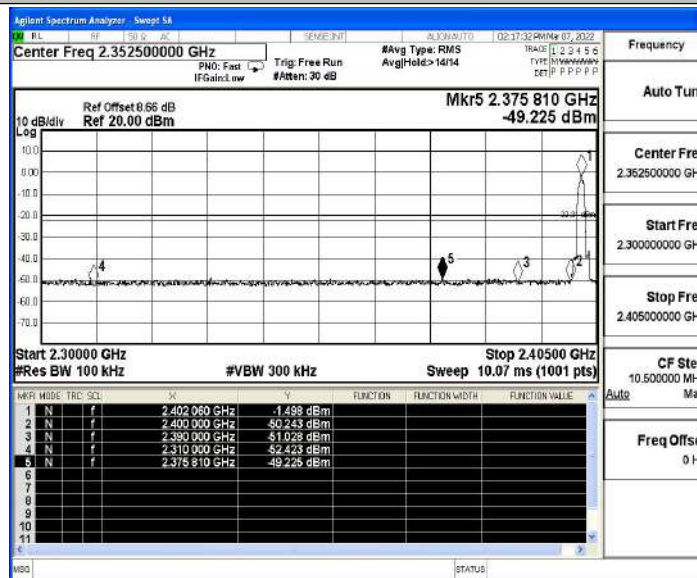
2DH5_Ant1_Low_Hop_2402



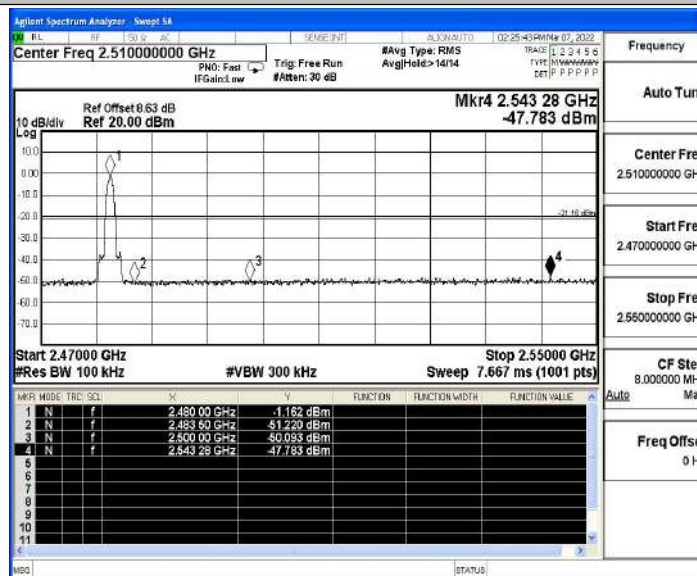
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

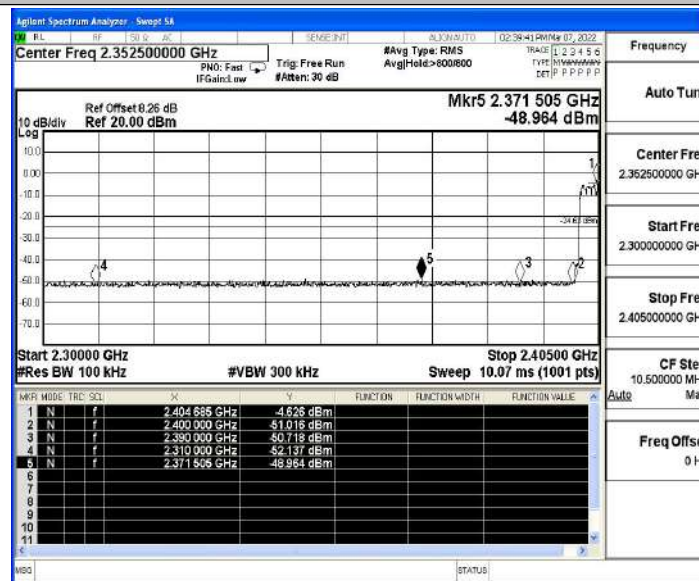


3DH5_Ant1_High_2480

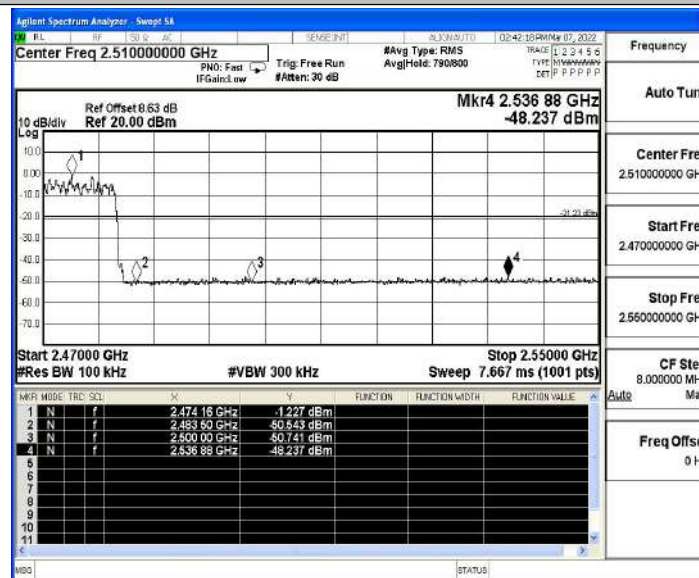




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

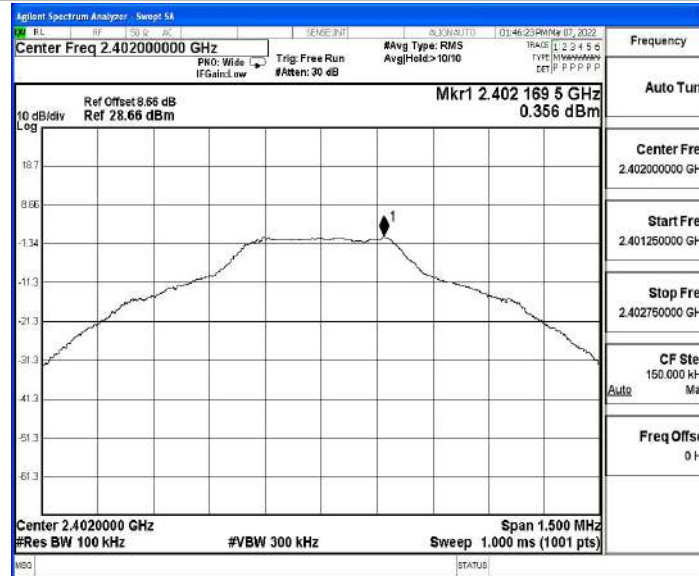
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.35	0.35	---	PASS
			30~1000	0.35	-58.45	≤ -19.65	PASS
			1000~26500	0.35	-45.27	≤ -19.65	PASS
		2441	Reference	1.88	1.88	---	PASS
			30~1000	1.88	-59.48	≤ -18.12	PASS
			1000~26500	1.88	-46.73	≤ -18.12	PASS
		2480	Reference	0.18	0.18	---	PASS
			30~1000	0.18	-58.91	≤ -19.82	PASS
			1000~26500	0.18	-46.73	≤ -19.82	PASS
2DH5	Ant1	2402	Reference	-1.32	-1.32	---	PASS
			30~1000	-1.32	-58.11	≤ -21.32	PASS
			1000~26500	-1.32	-45.81	≤ -21.32	PASS
		2441	Reference	0.39	0.39	---	PASS
			30~1000	0.39	-47.8	≤ -19.61	PASS
			1000~26500	0.39	-46.46	≤ -19.61	PASS
		2480	Reference	-1.13	-1.13	---	PASS
			30~1000	-1.13	-49.16	≤ -21.13	PASS
			1000~26500	-1.13	-46.51	≤ -21.13	PASS
3DH5	Ant1	2402	Reference	-1.15	-1.15	---	PASS
			30~1000	-1.15	-51.97	≤ -21.15	PASS
			1000~26500	-1.15	-39.6	≤ -21.15	PASS
		2441	Reference	0.10	0.10	---	PASS
			30~1000	0.10	-46.32	≤ -19.9	PASS
			1000~26500	0.10	-46.5	≤ -19.9	PASS
		2480	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-50.86	≤ -21.19	PASS
			1000~26500	-1.19	-45.27	≤ -21.19	PASS

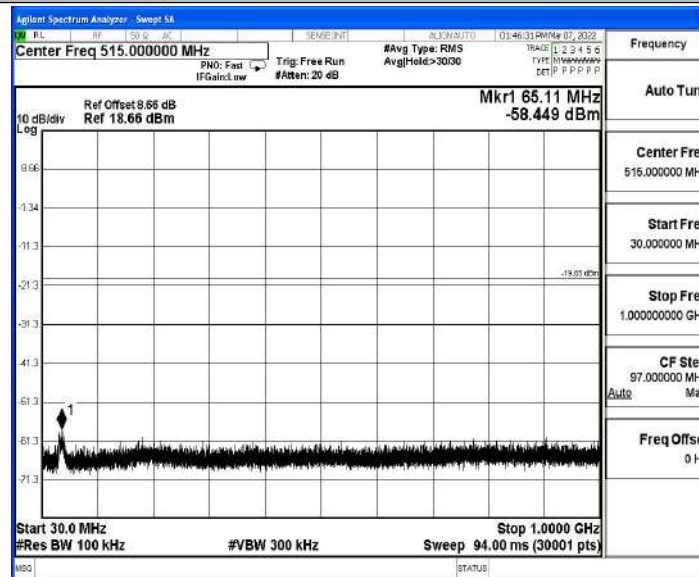


Test Graphs

DH5_Ant1_2402_0~Reference



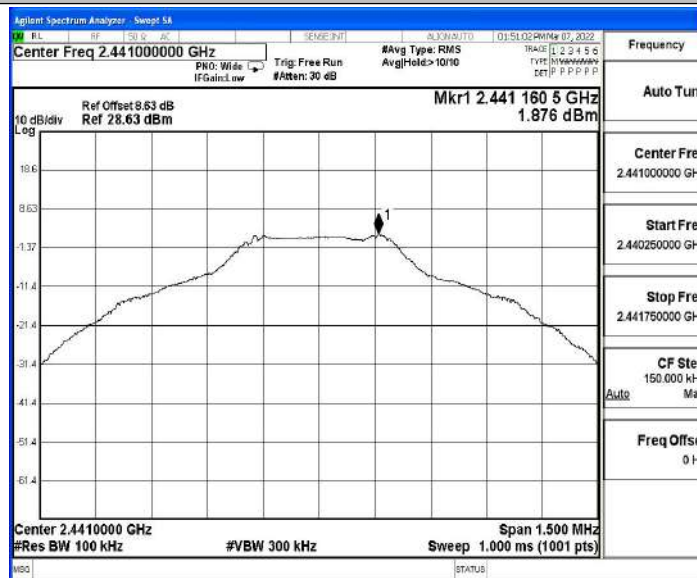
DH5_Ant1_2402_30~1000



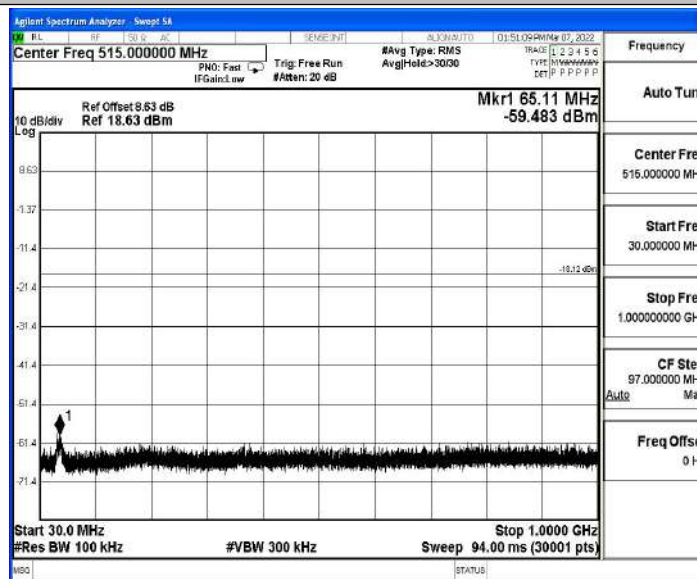
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

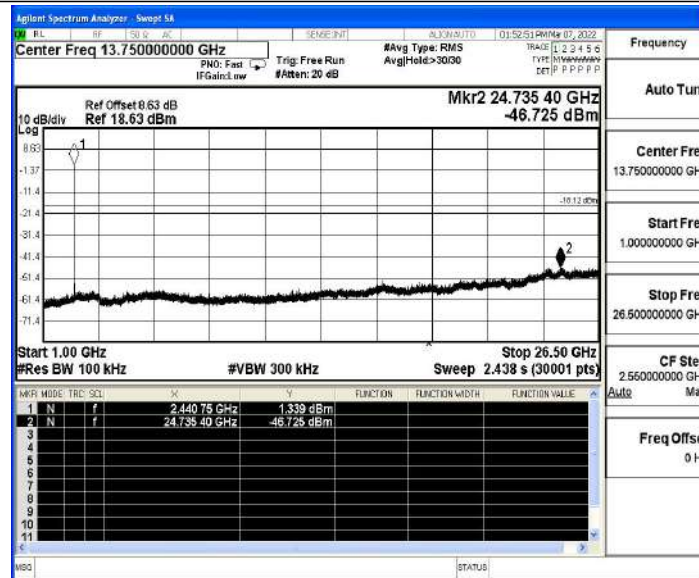


DH5_Ant1_2441_30~1000

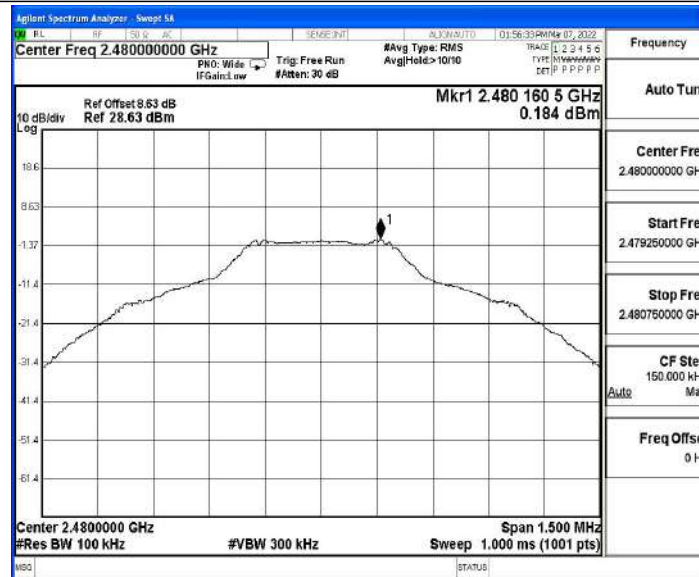




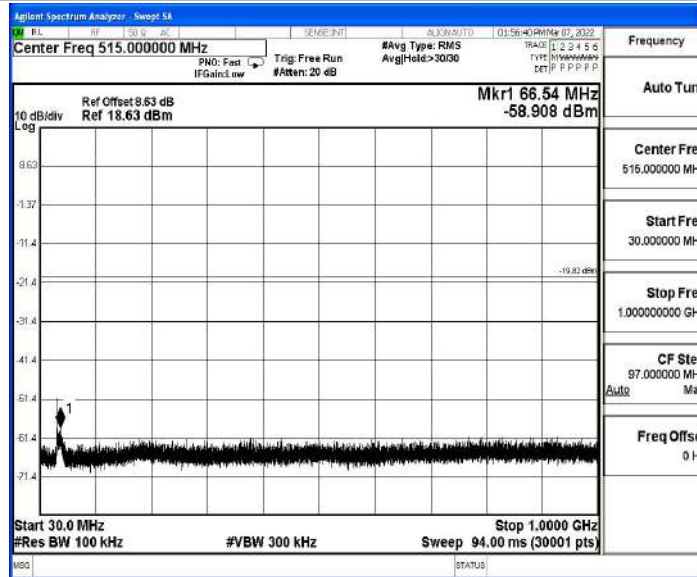
DH5_Ant1_2441_1000~26500



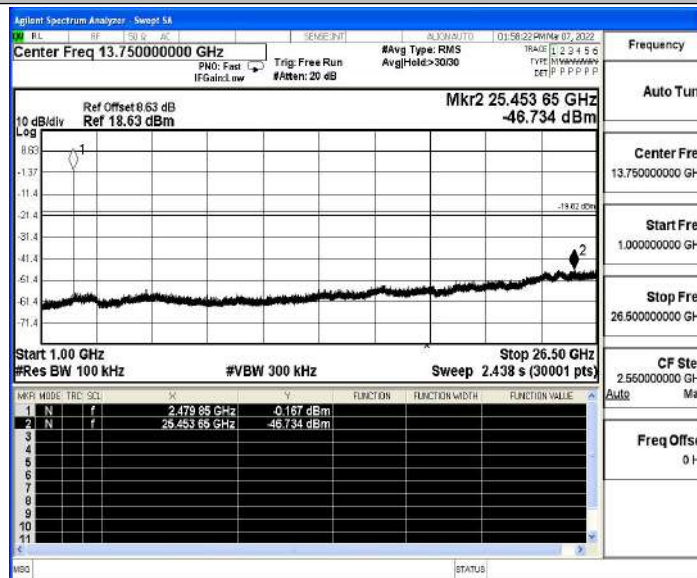
DH5_Ant1_2480_0~Reference



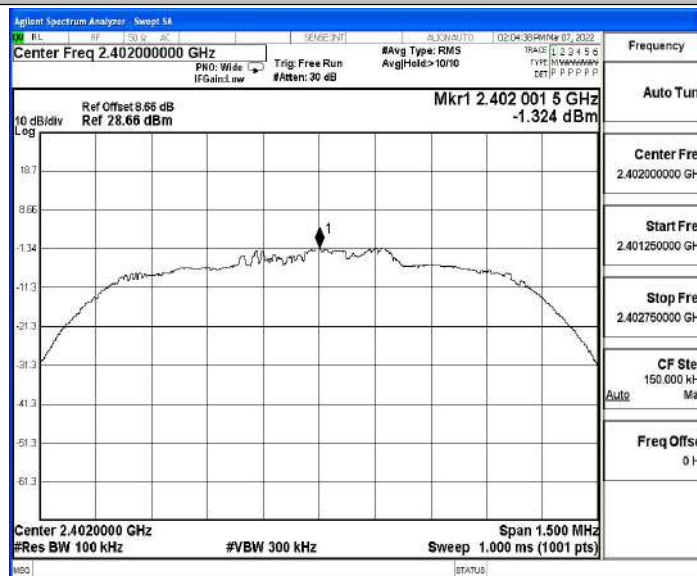
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

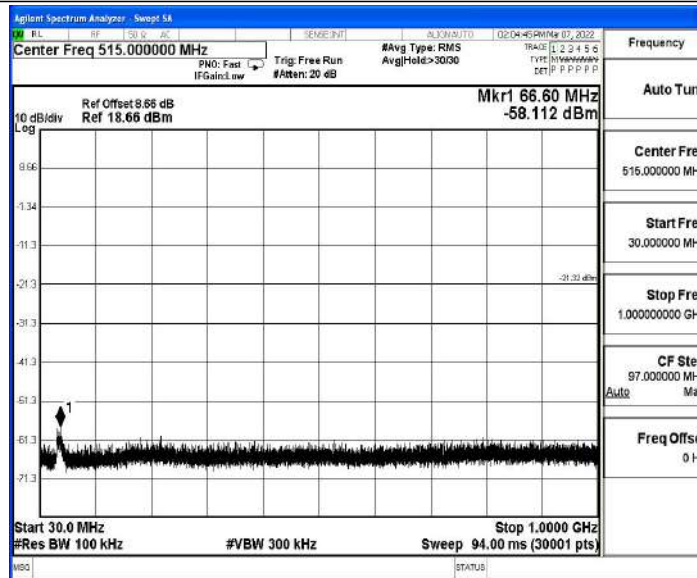


2DH5_Ant1_2402_0~Reference

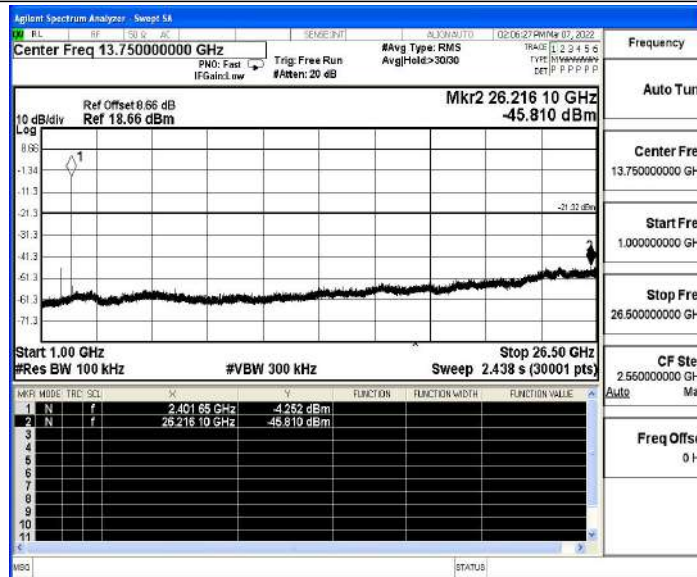




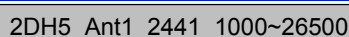
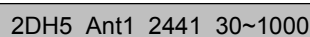
2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500

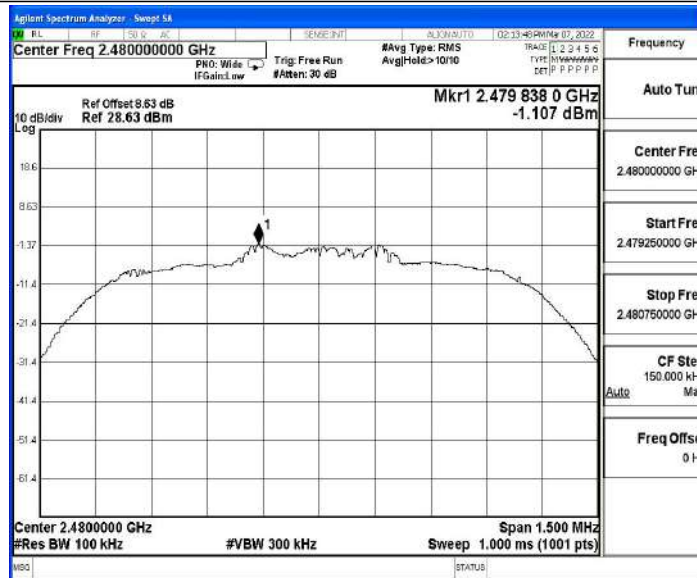


2DH5_Ant1_2441_0~Reference

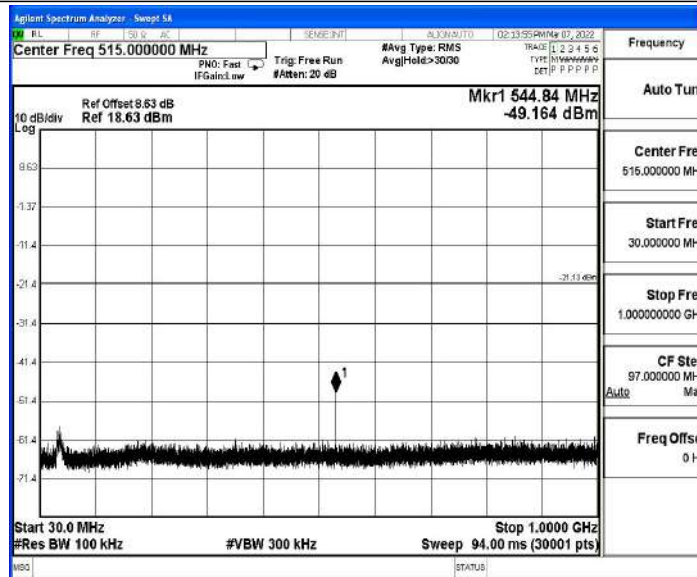




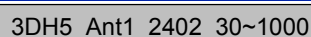
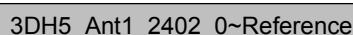
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000

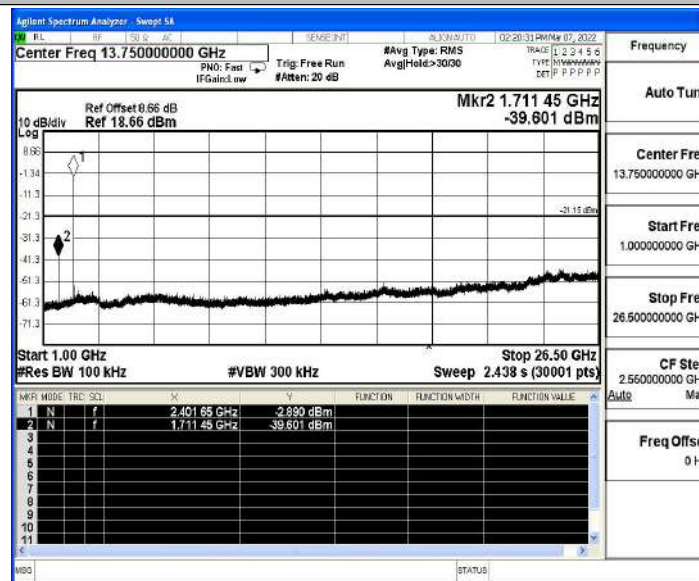


2DH5_Ant1_2480_1000~26500

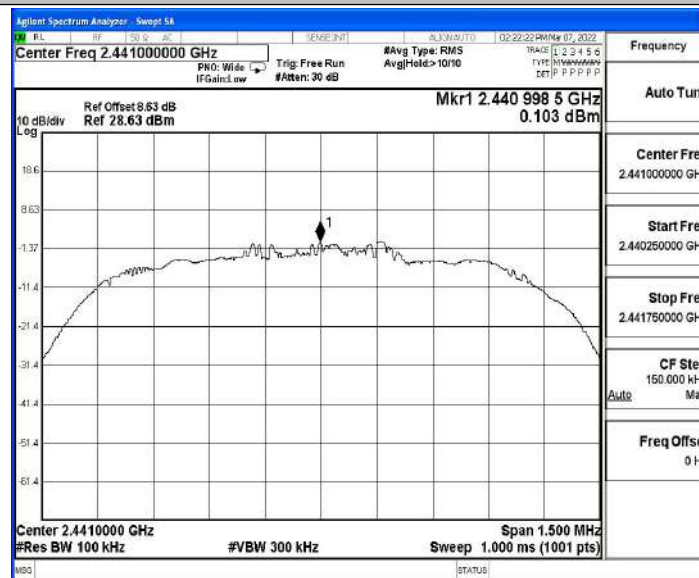




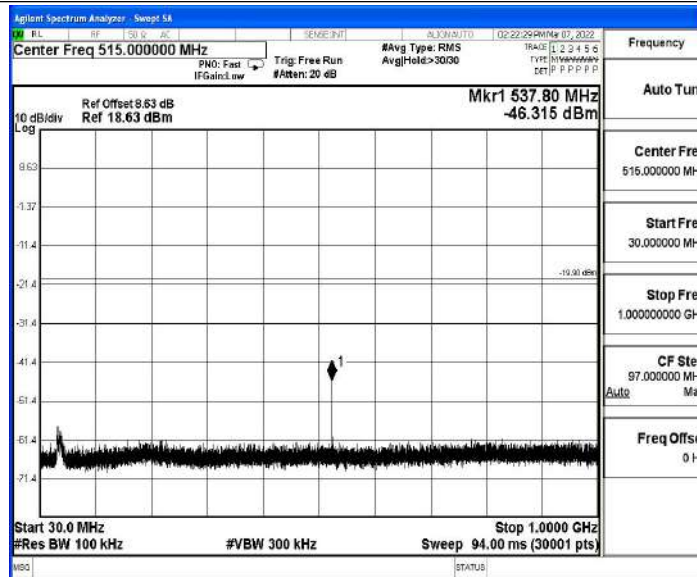
3DH5_Ant1_2402_1000~26500



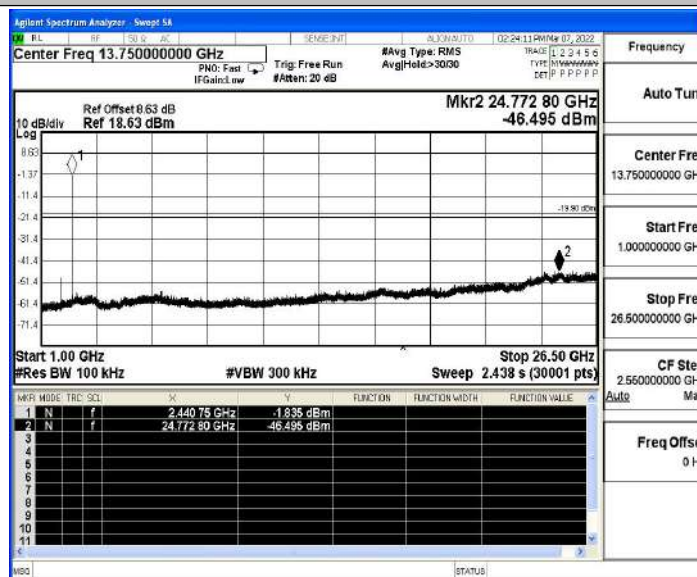
3DH5_Ant1_2441_0~Reference



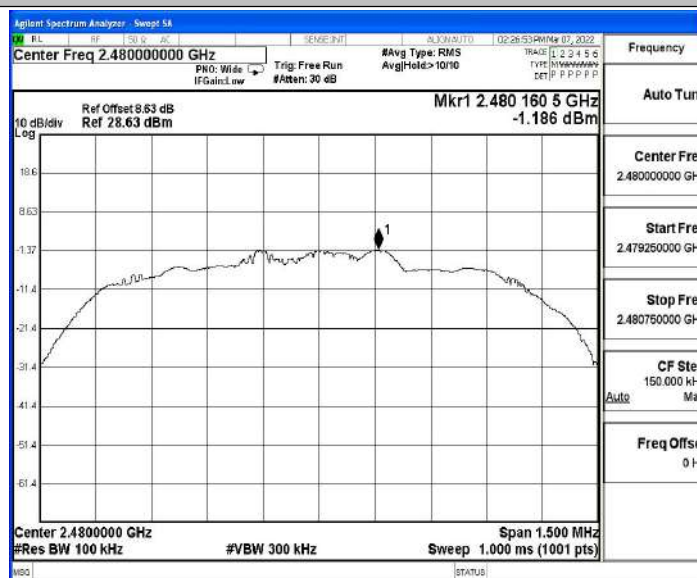
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

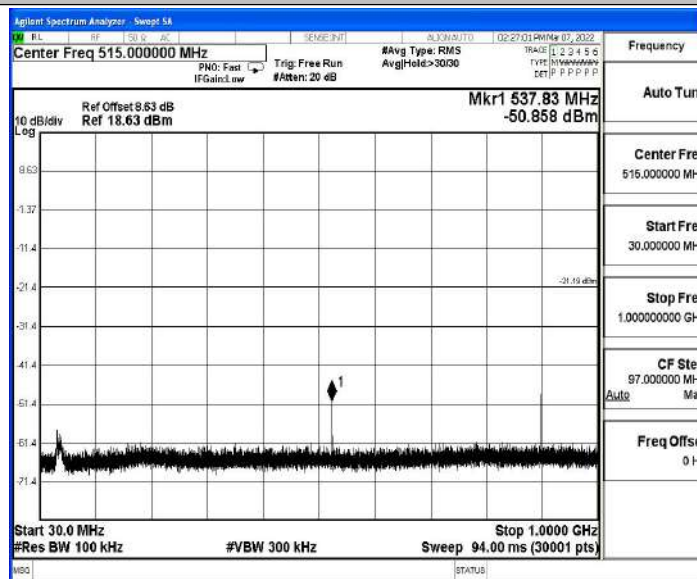


3DH5_Ant1_2480_0~Reference

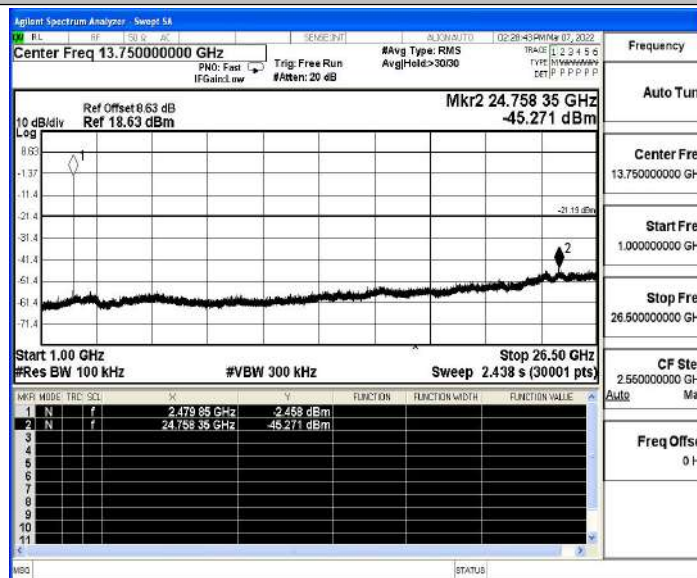




3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500





A.8 Emissions in Restricted Bands

Test Result

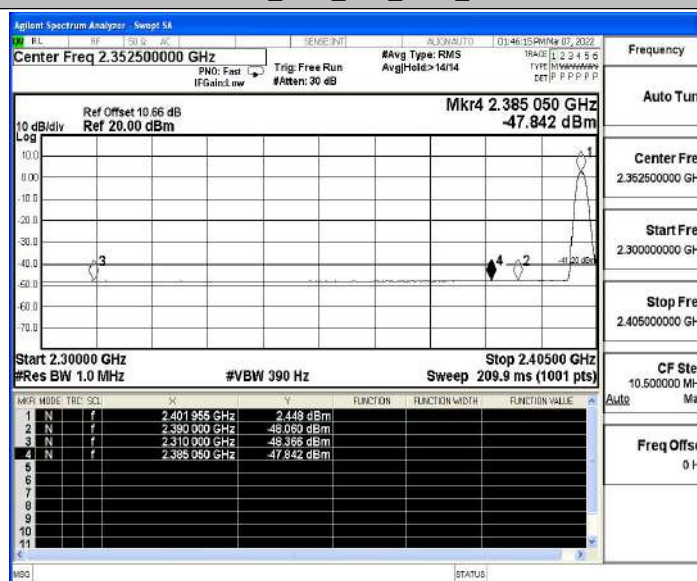
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-48.37	≤-41.20	46.83	≤54	PASS
				AV	2385.050	-47.84	≤-41.20	47.36	≤54	PASS
				AV	2390.000	-48.08	≤-41.20	47.12	≤54	PASS
				Peak	2310.000	-38.64	≤-21.20	56.56	≤74	PASS
				Peak	2347.565	-36.62	≤-21.20	58.58	≤74	PASS
				Peak	2390.000	-39.4	≤-21.20	55.80	≤74	PASS
		High	2480	AV	2483.500	-47.56	≤-41.20	47.64	≤54	PASS
				AV	2496.880	-47.34	≤-41.20	47.86	≤54	PASS
				AV	2500.000	-47.39	≤-41.20	47.81	≤54	PASS
				Peak	2483.500	-38.6	≤-21.20	56.60	≤74	PASS
				Peak	2493.200	-36.22	≤-21.20	58.98	≤74	PASS
				Peak	2500.000	-36.56	≤-21.20	58.64	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-48.39	≤-41.20	46.81	≤54	PASS
				AV	2388.515	-47.77	≤-41.20	47.43	≤54	PASS
				AV	2390.000	-48.09	≤-41.20	47.11	≤54	PASS
				Peak	2310.000	-39.07	≤-21.20	56.13	≤74	PASS
				Peak	2334.755	-36.52	≤-21.20	58.68	≤74	PASS
				Peak	2390.000	-38.54	≤-21.20	56.66	≤74	PASS
		High	2480	AV	2483.500	-47.32	≤-41.20	47.88	≤54	PASS
				AV	2499.040	-47.29	≤-41.20	47.91	≤54	PASS
				AV	2500.000	-47.34	≤-41.20	47.86	≤54	PASS
				Peak	2483.500	-38.54	≤-21.20	56.66	≤74	PASS
				Peak	2485.280	-36.11	≤-21.20	59.09	≤74	PASS
				Peak	2500.000	-37.56	≤-21.20	57.64	≤74	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-48.34	≤-41.20	46.86	≤54	PASS
				AV	2379.695	-47.89	≤-41.20	47.31	≤54	PASS
				AV	2390.000	-48.05	≤-41.20	47.15	≤54	PASS
				Peak	2310.000	-39.01	≤-21.20	56.19	≤74	PASS
				Peak	2356.490	-36.9	≤-21.20	58.30	≤74	PASS
				Peak	2390.000	-37.99	≤-21.20	57.21	≤74	PASS
		High	2480	AV	2483.500	-47.34	≤-41.20	47.86	≤54	PASS
				AV	2499.120	-47.25	≤-41.20	47.95	≤54	PASS
				AV	2500.000	-47.46	≤-41.20	47.74	≤54	PASS
				Peak	2483.500	-37.6	≤-21.20	57.60	≤74	PASS
				Peak	2490.240	-36.46	≤-21.20	58.74	≤74	PASS
				Peak	2500.000	-38.41	≤-21.20	56.79	≤74	PASS



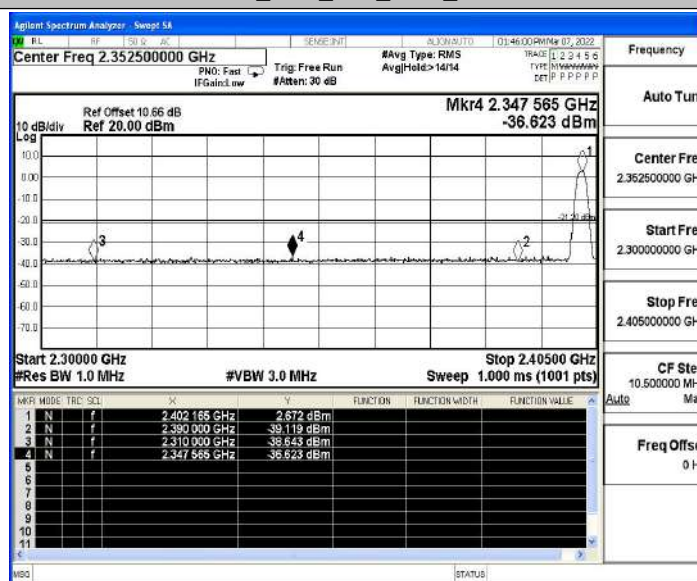
Note:

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.

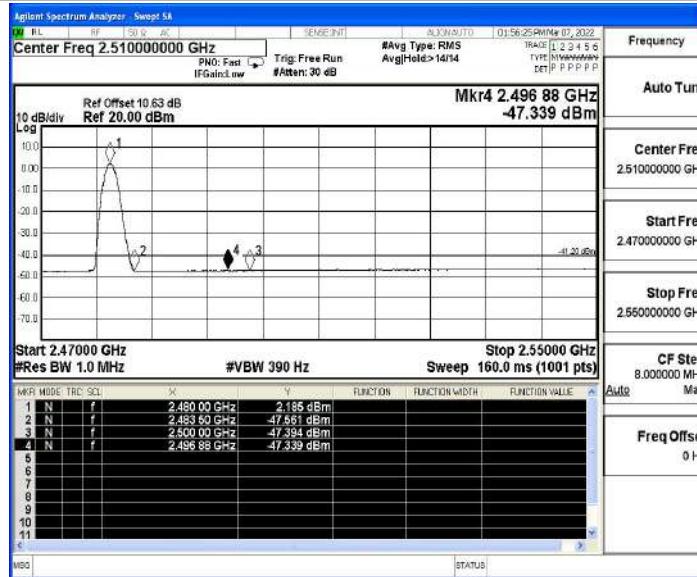
DH5 Ant1 Low 2402 AV



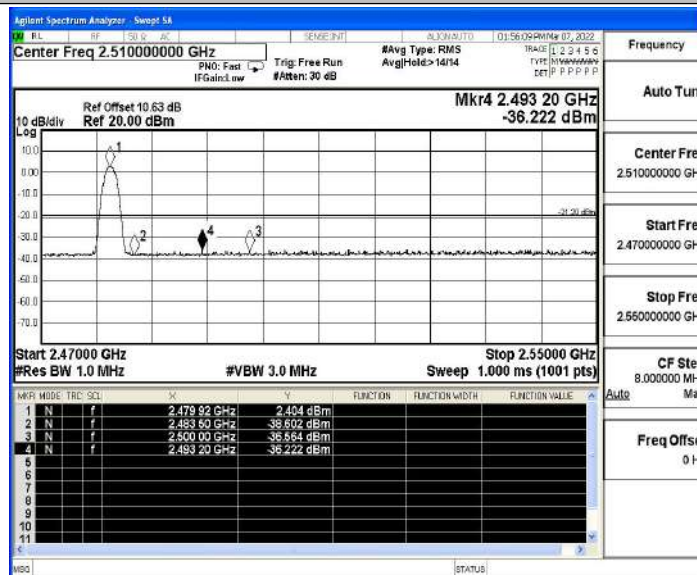
DH5 Ant1 Low 2402 Peak



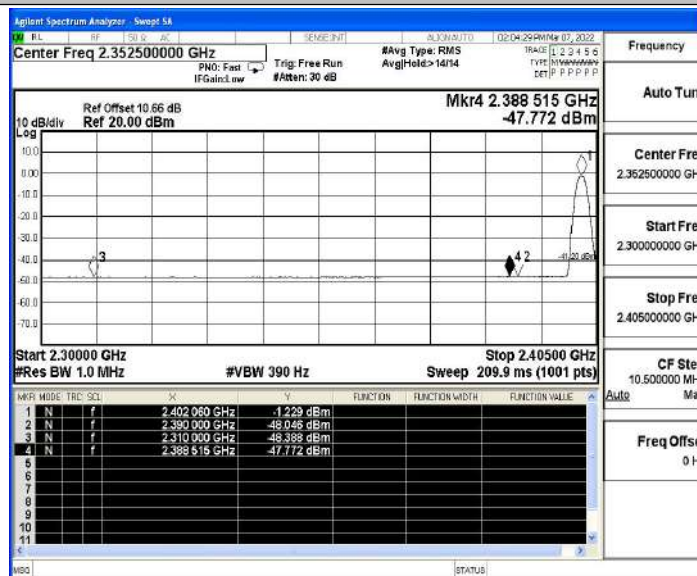
DH5_Ant1_High_2480_AV



DH5_Ant1_High_2480_Peak

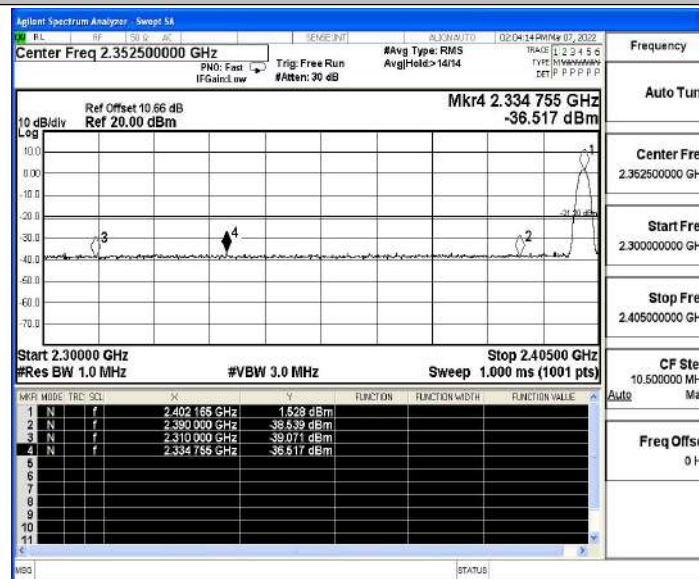


2DH5_Ant1_Low_2402_AV

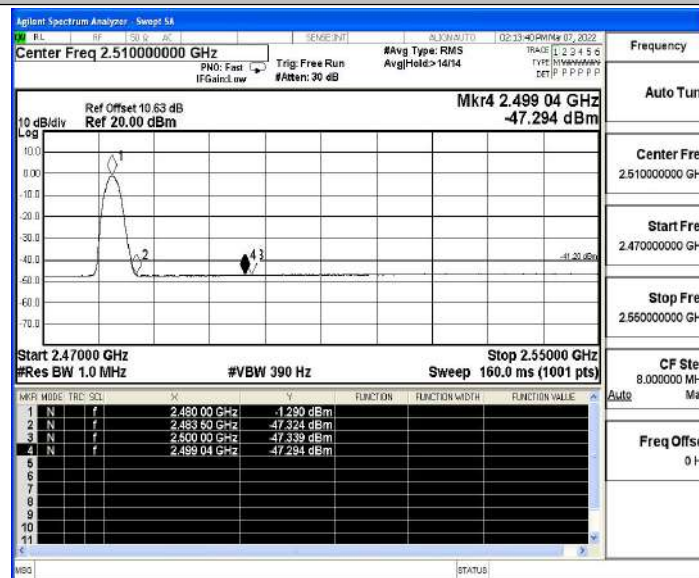




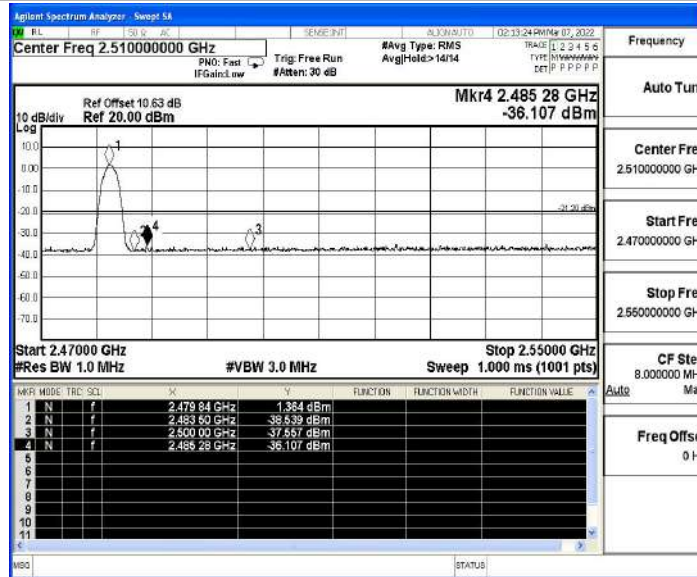
2DH5_Ant1_Low_2402_Peak



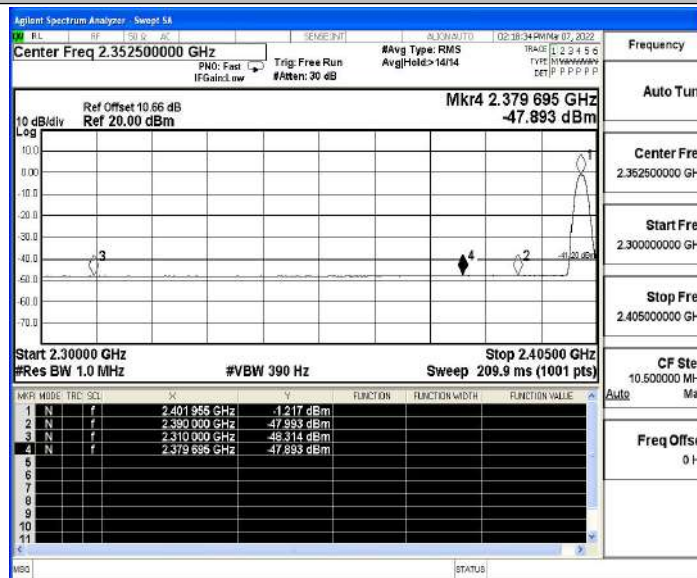
2DH5_Ant1_High_2480_AV



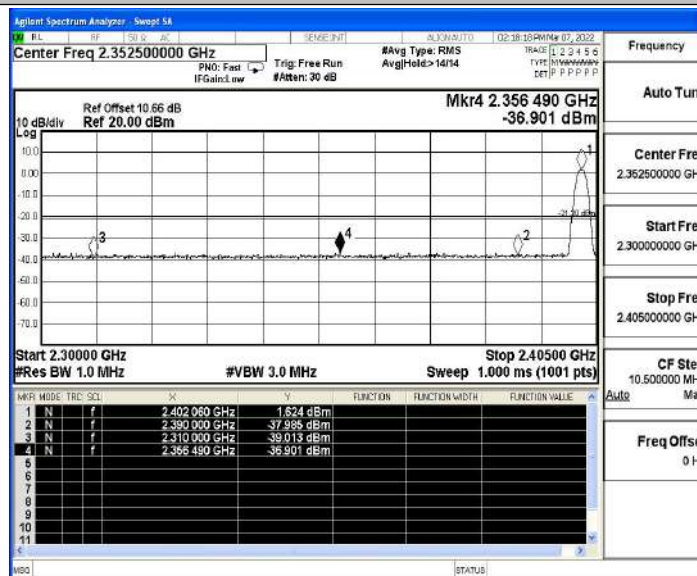
2DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_2402_AV

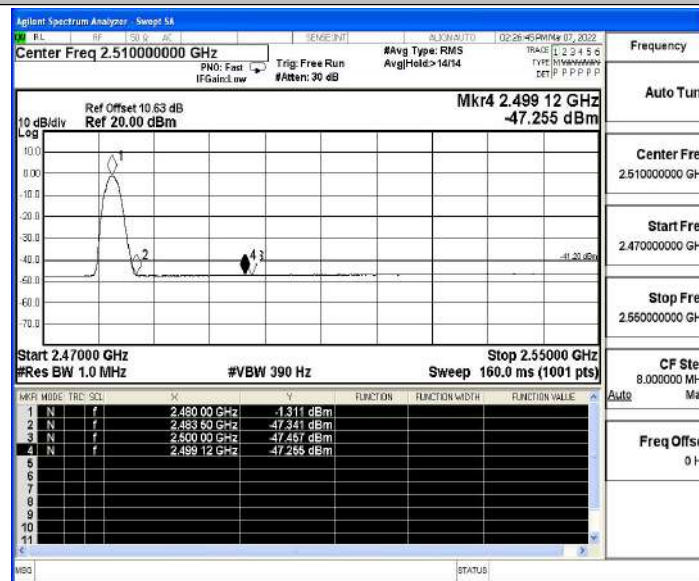


3DH5_Ant1_Low_2402_Peak





3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

