



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Turntable with Stereo Speakers

Test Model: ITTB751DW

Environmental Conditions

Temperature:	21.2° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan



A.1 20dB Emission Bandwidth

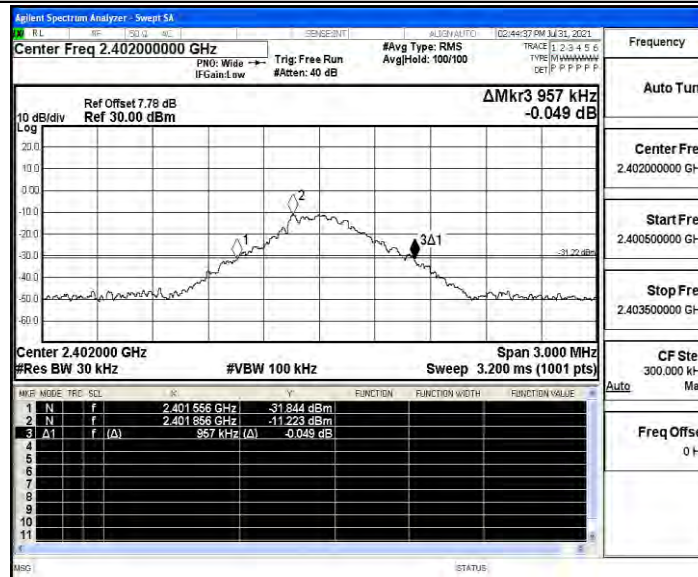
Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.957	2401.556	2402.513	---	PASS
		2441	0.957	2440.559	2441.516	---	PASS
		2480	0.942	2479.562	2480.504	---	PASS
2DH5	Ant1	2402	1.362	2401.331	2402.693	---	PASS
		2441	1.368	2440.349	2441.717	---	PASS
		2480	1.242	2479.412	2480.654	---	PASS
3DH5	Ant1	2402	1.269	2401.382	2402.651	---	PASS
		2441	1.278	2440.379	2441.657	---	PASS
		2480	1.380	2479.325	2480.705	---	PASS

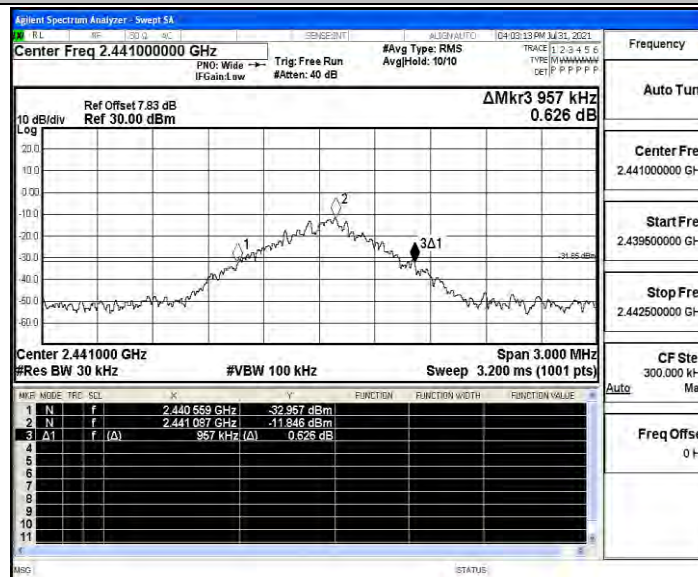


Test Graphs

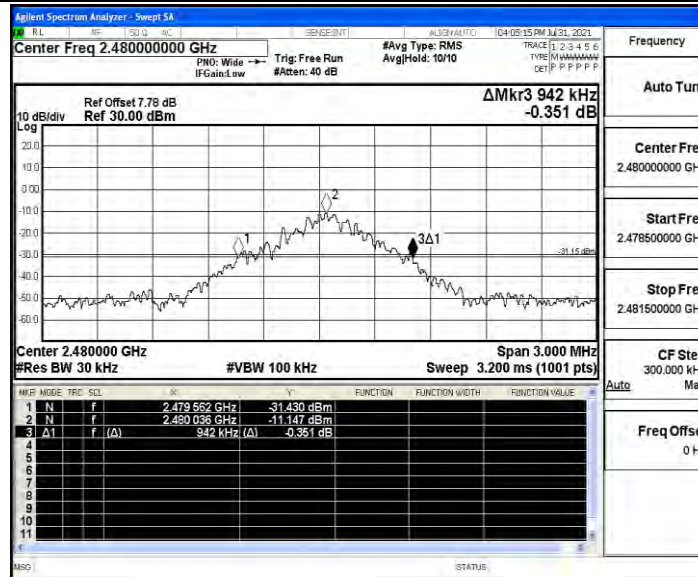
DH5_Ant1_2402



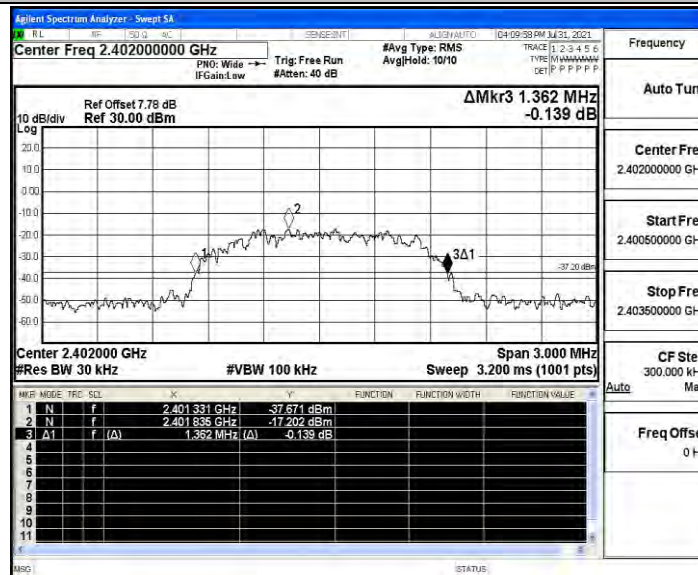
DH5_Ant1_2441



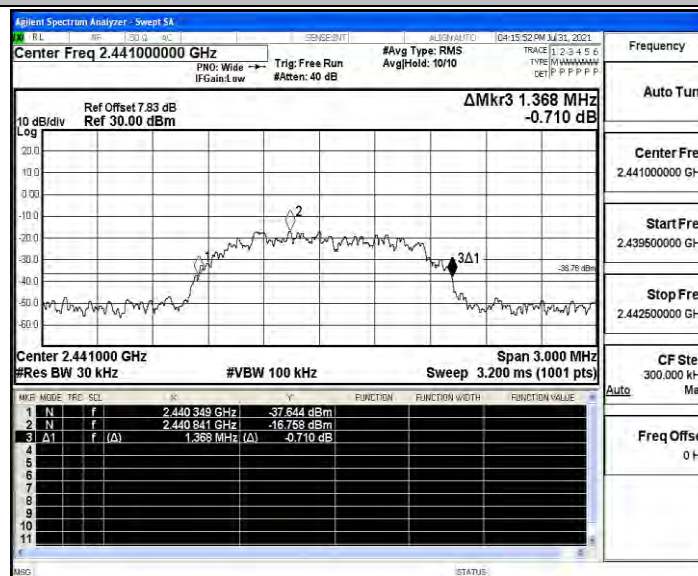
DH5_Ant1_2480



2DH5_Ant1_2402

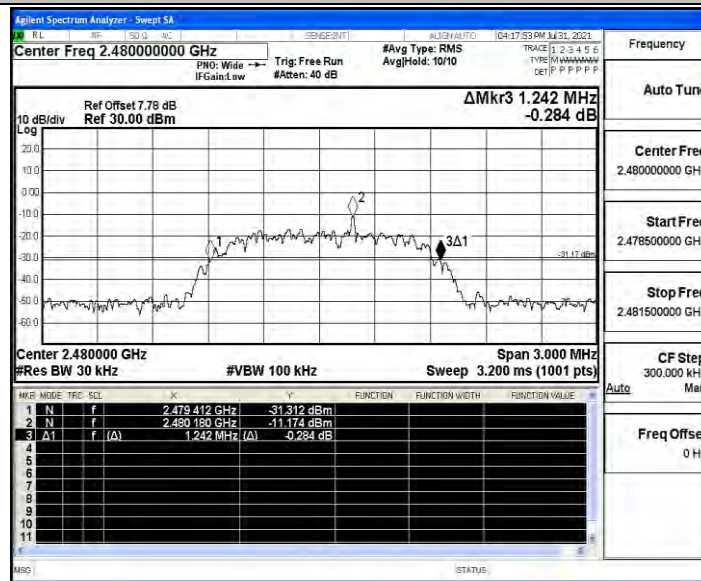


2DH5_Ant1_2441

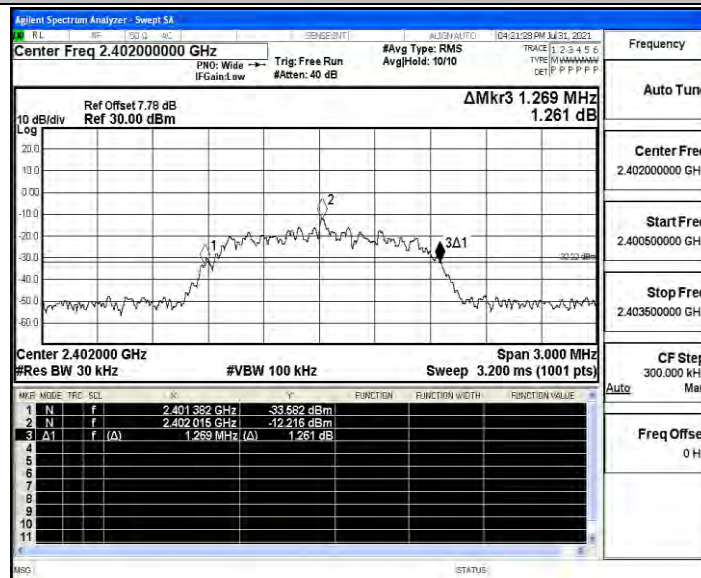




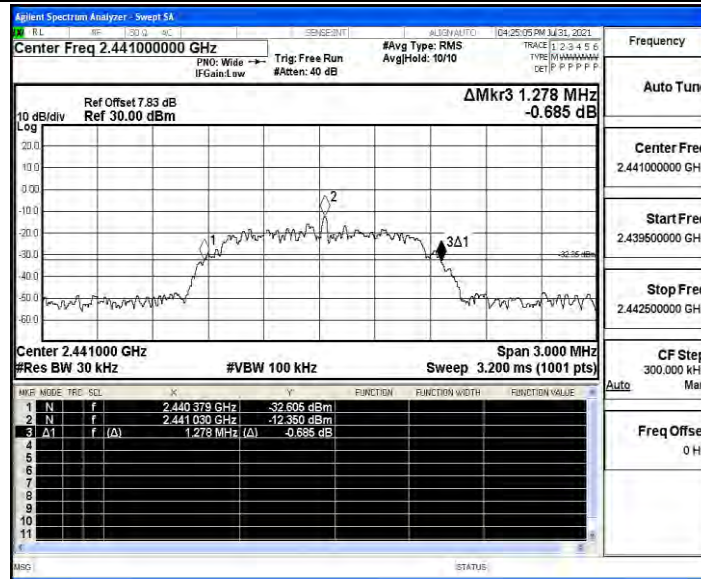
2DH5_Ant1_2480



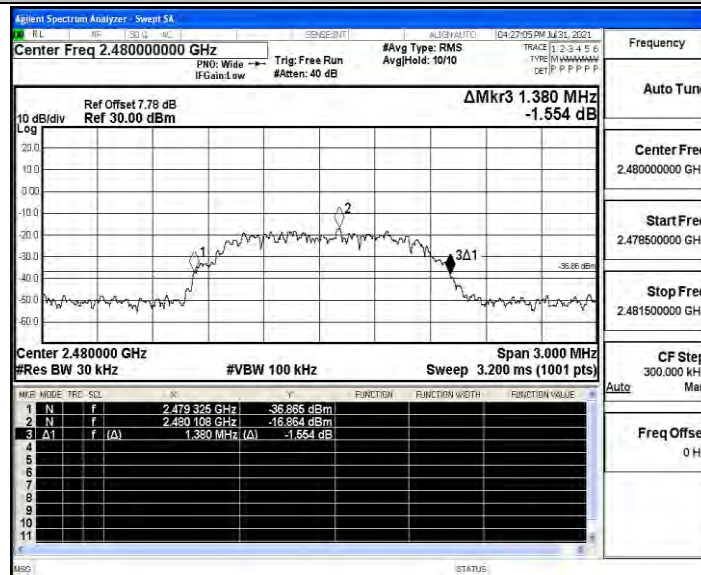
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.2 Occupied Channel Bandwidth

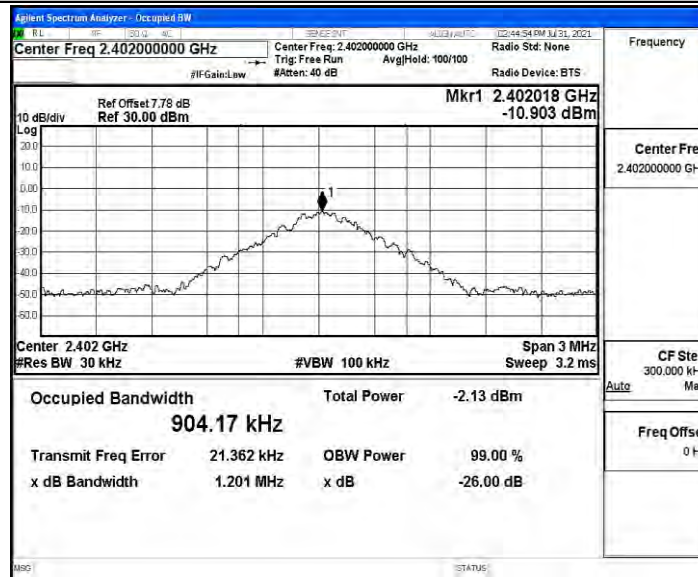
Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.90417	2401.569	2402.473	---	PASS
		2441	0.93771	2440.548	2441.485	---	PASS
		2480	0.85415	2479.606	2480.460	---	PASS
2DH5	Ant1	2402	1.2083	2401.429	2402.637	---	PASS
		2441	1.2359	2440.399	2441.635	---	PASS
		2480	1.2305	2479.399	2480.629	---	PASS
3DH5	Ant1	2402	1.2065	2401.412	2402.618	---	PASS
		2441	1.2067	2440.418	2441.625	---	PASS
		2480	1.2309	2479.394	2480.625	---	PASS

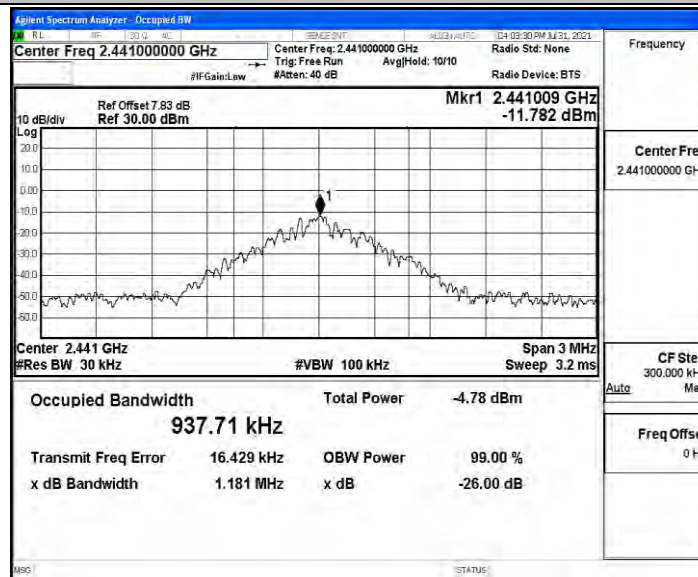


Test Graphs

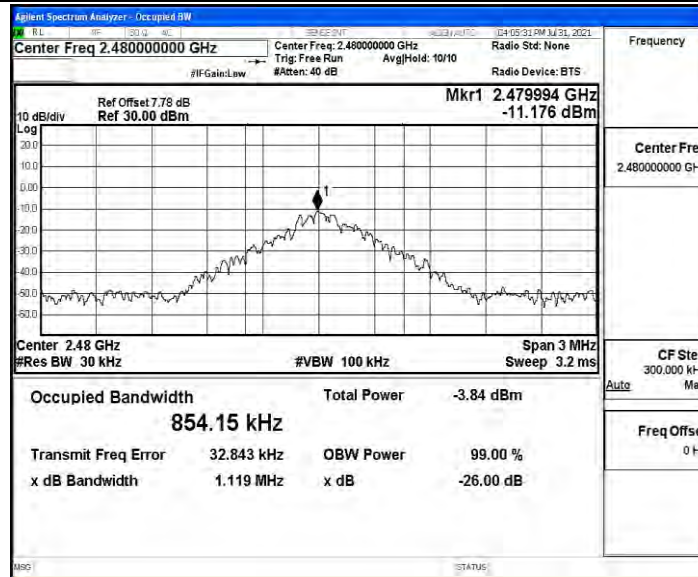
DH5_Ant1_2402



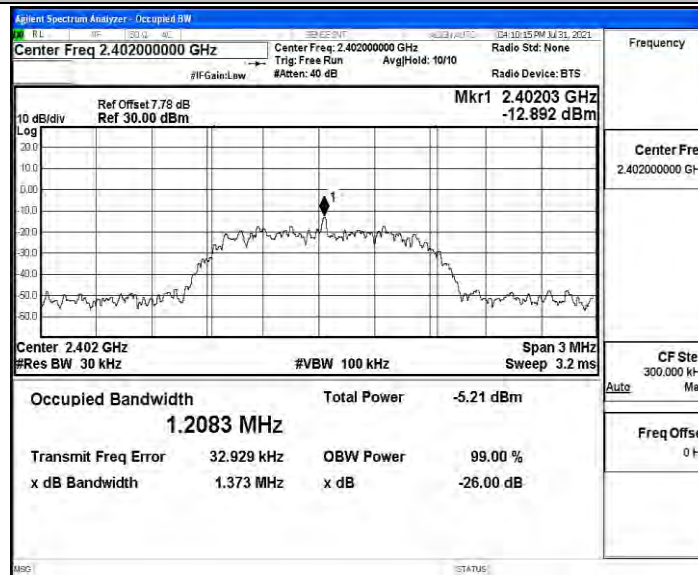
DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402

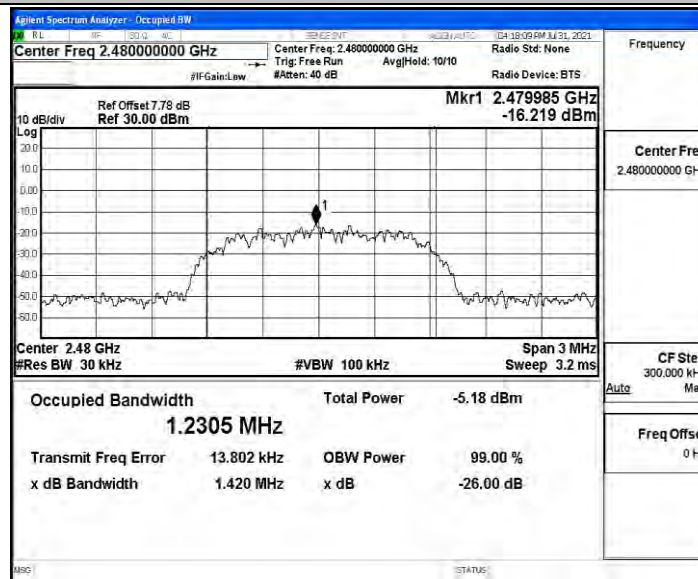


2DH5_Ant1_2441

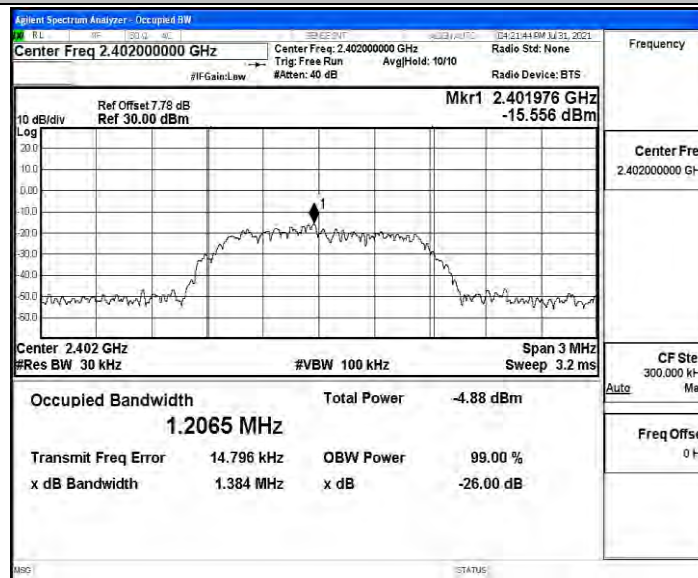




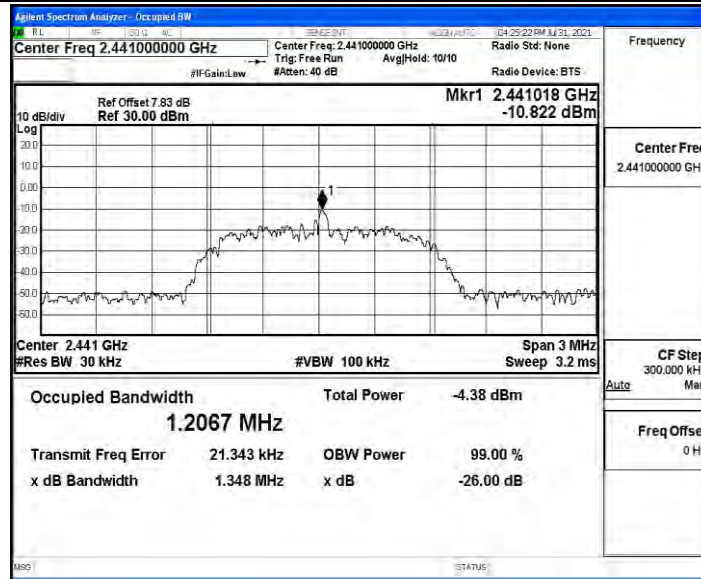
2DH5_Ant1_2480



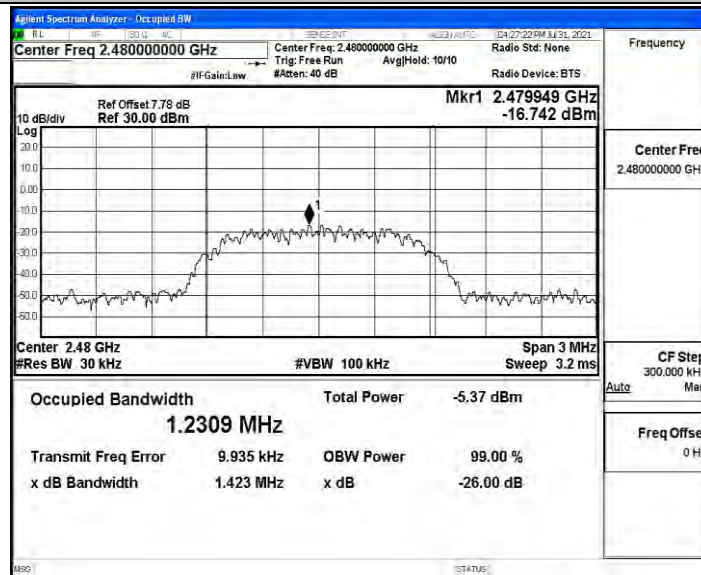
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480





A.3 Maximum conducted output power

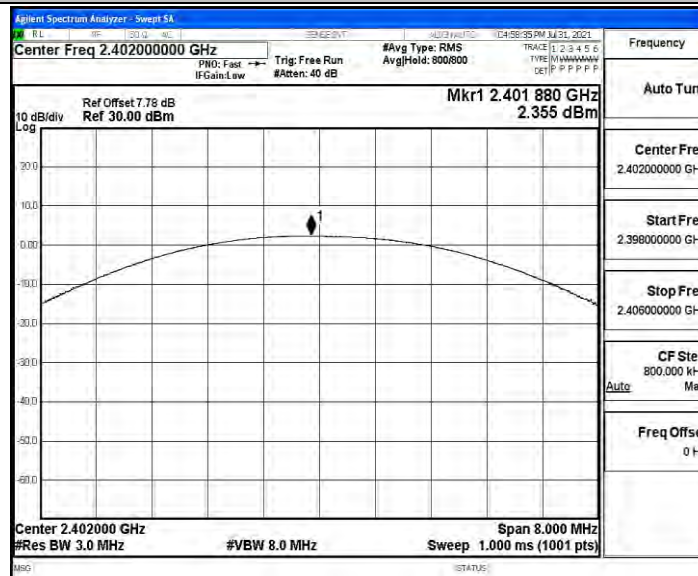
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.36	≤30	PASS
		2441	2.11	≤30	PASS
		2480	1.57	≤30	PASS
2DH5	Ant1	2402	3.1	≤20.97	PASS
		2441	2.64	≤20.97	PASS
		2480	1.94	≤20.97	PASS
3DH5	Ant1	2402	3.42	≤20.97	PASS
		2441	2.86	≤20.97	PASS
		2480	2.05	≤20.97	PASS

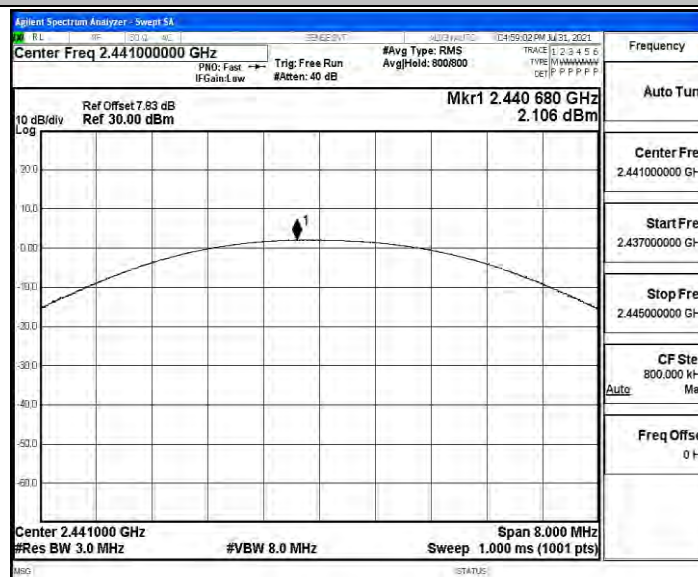


Test Graphs

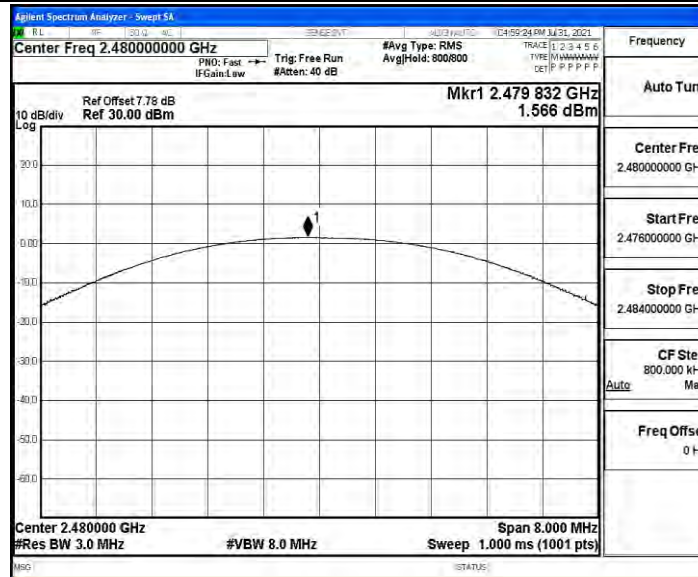
DH5_Ant1_2402



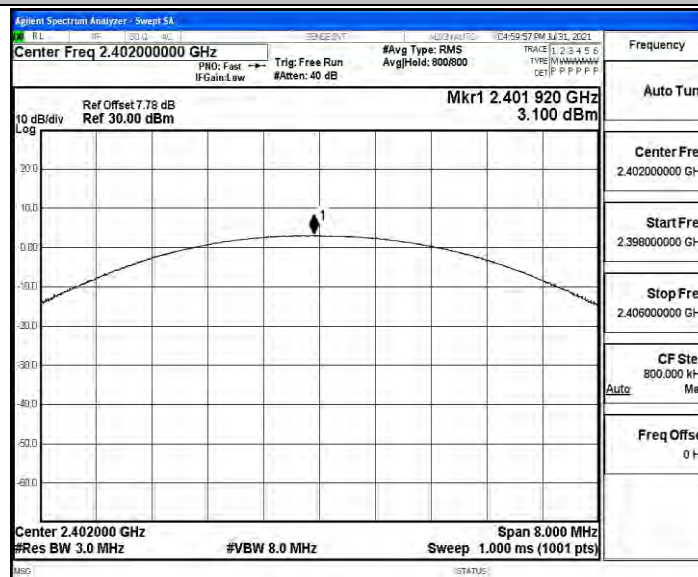
DH5_Ant1_2441



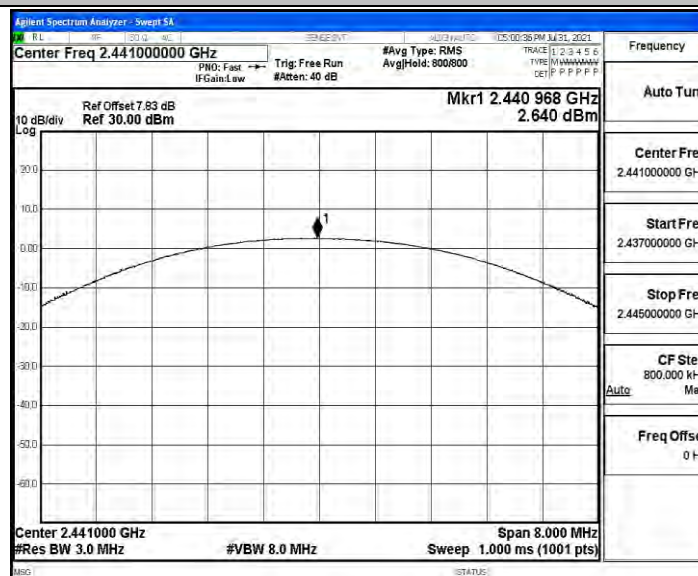
DH5_Ant1_2480



2DH5_Ant1_2402

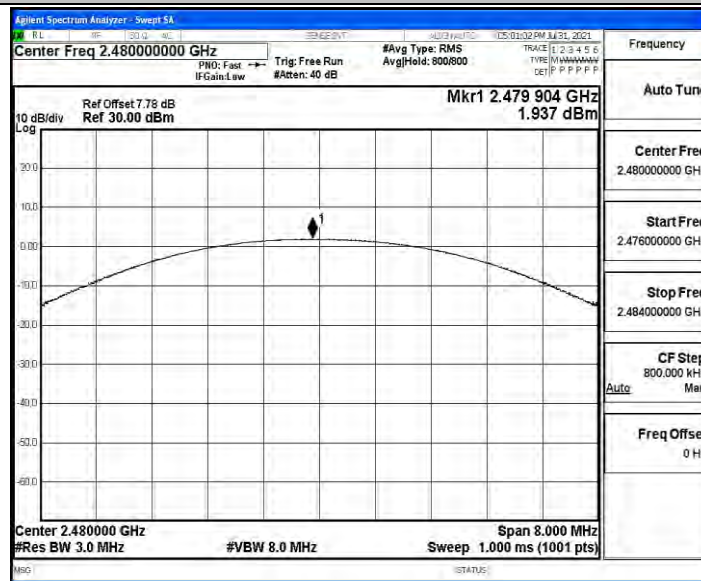


2DH5_Ant1_2441

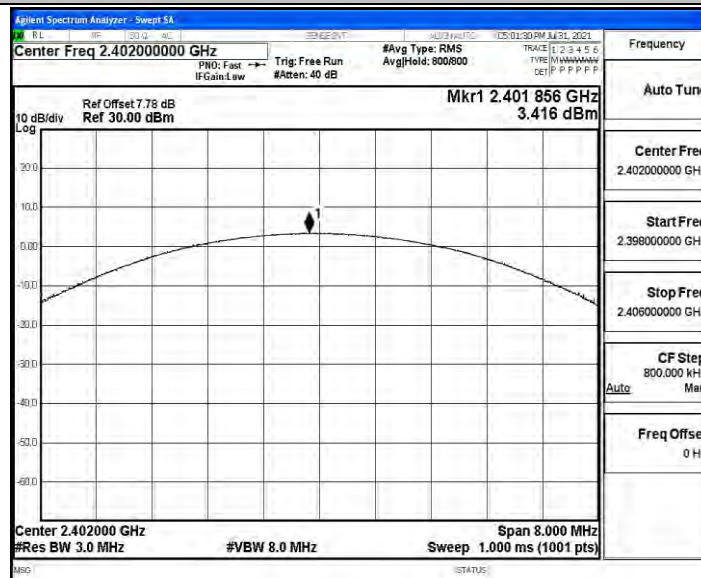




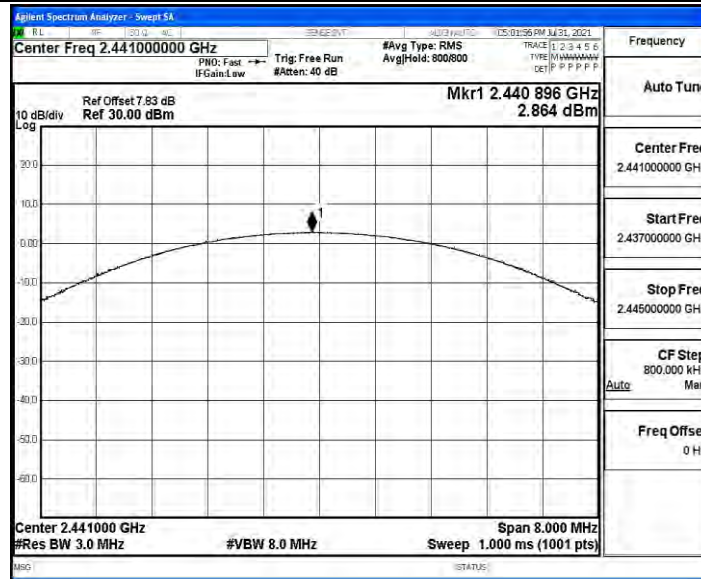
2DH5_Ant1_2480



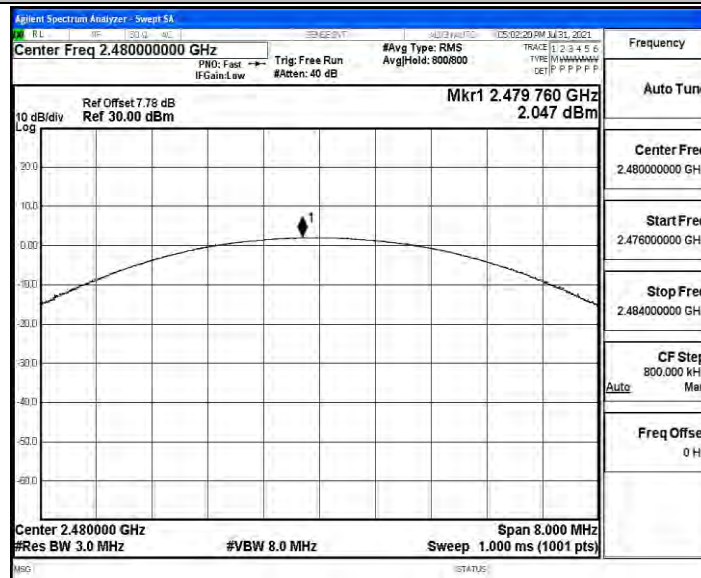
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



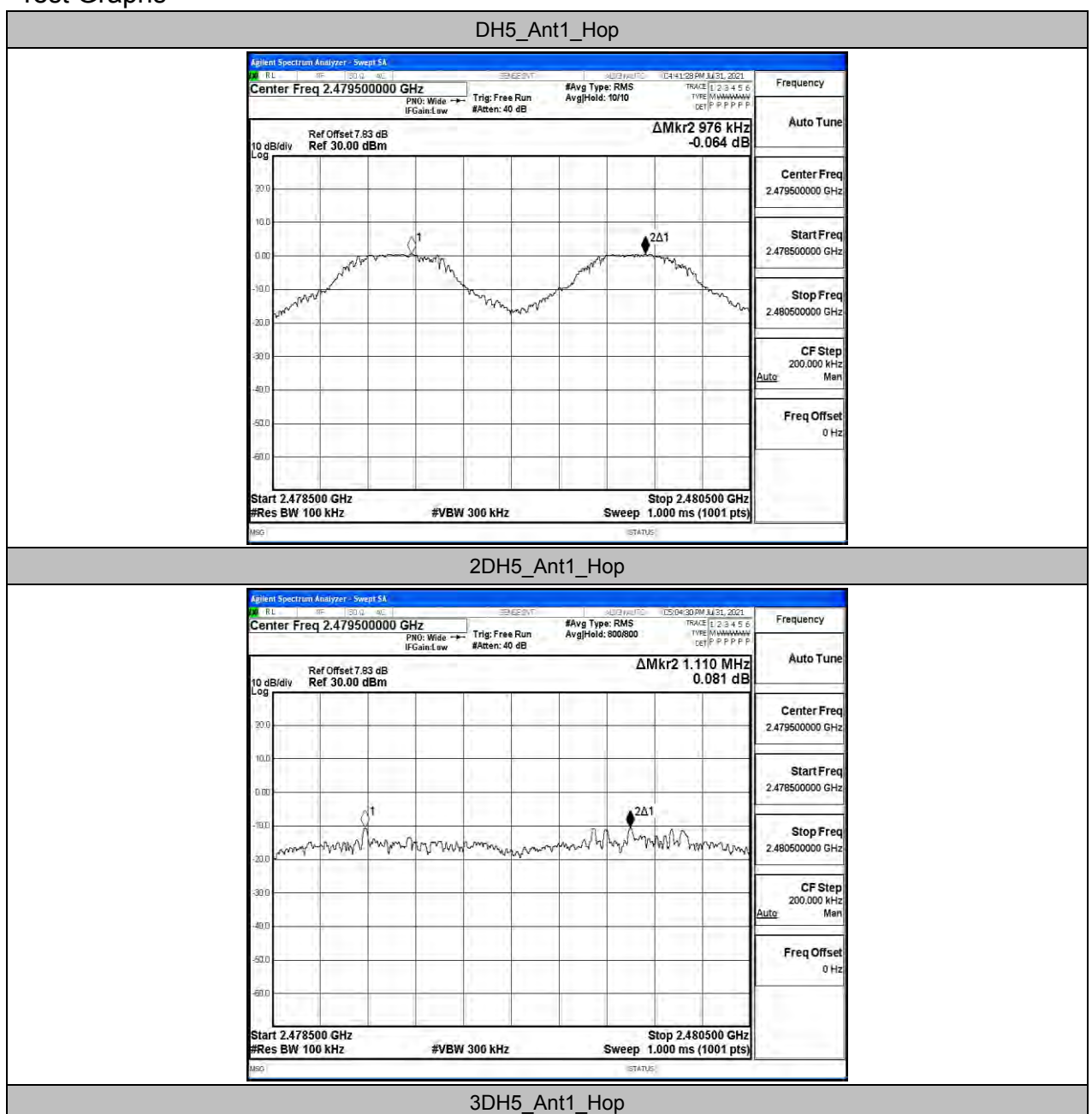


A.4 Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.976	≥ 0.957	PASS
2DH5	Ant1	Hop	1.11	≥ 0.912	PASS
3DH5	Ant1	Hop	1.23	≥ 0.920	PASS

Test Graphs



FCC ID: 2ATT8ITTB751DW

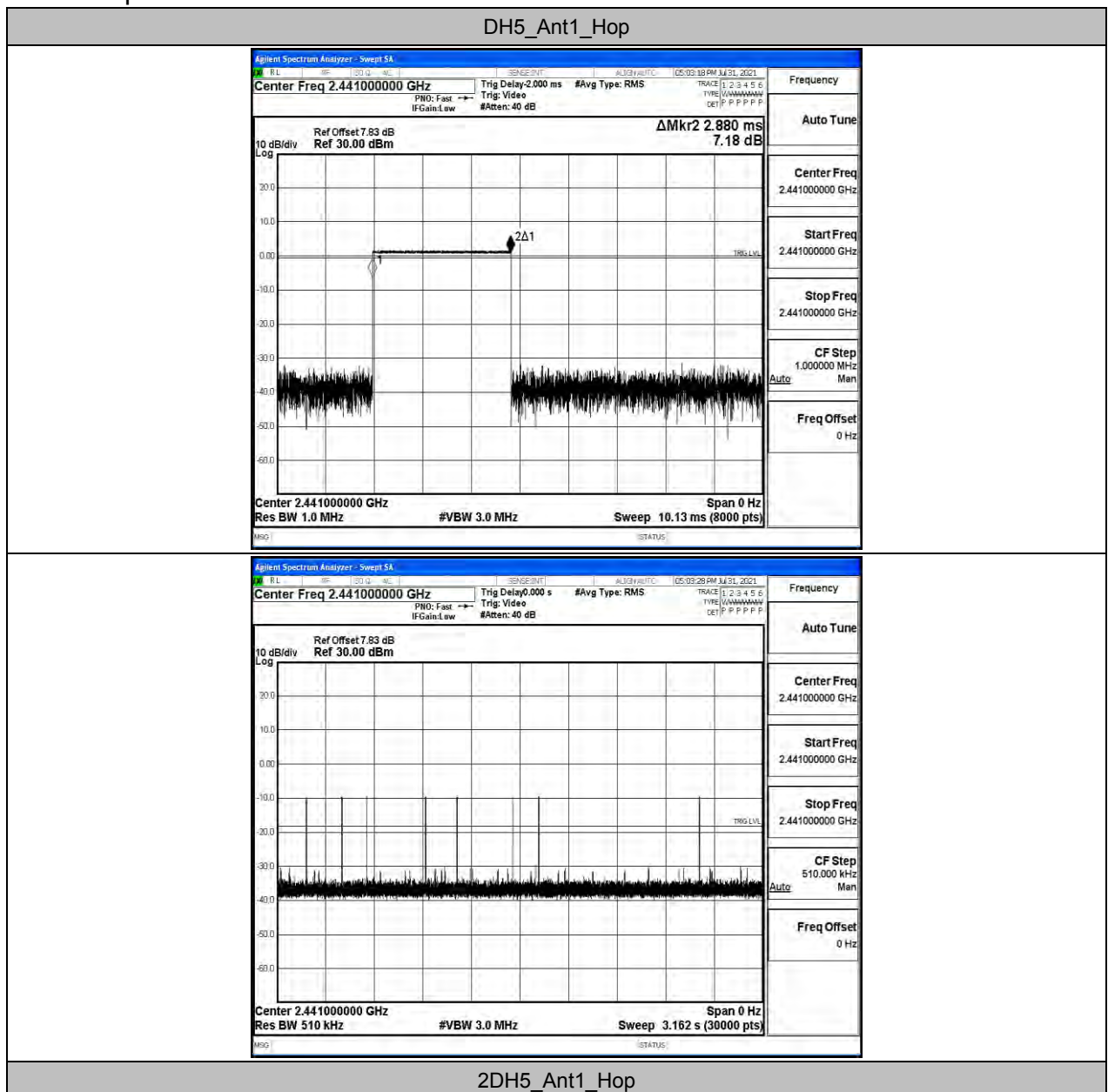


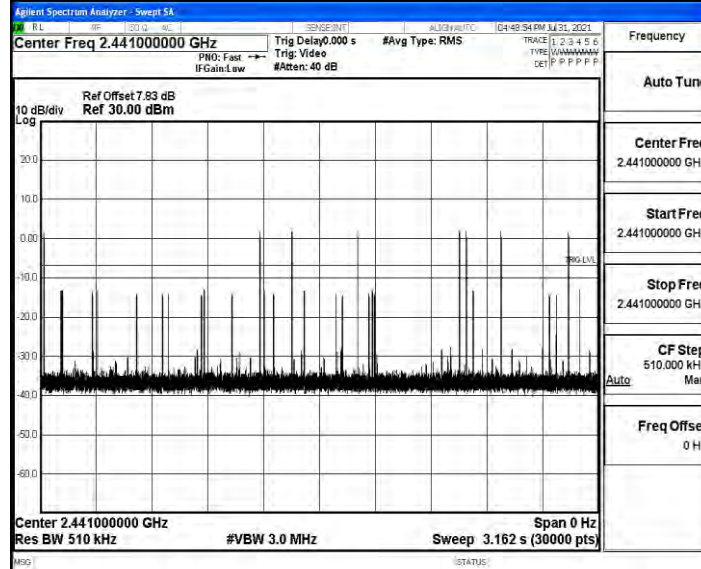
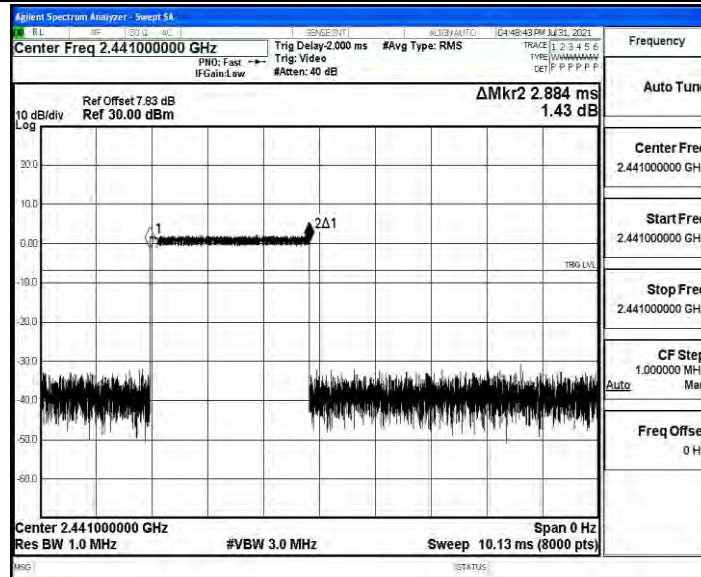
A.5 Time of occupancy

Test Result

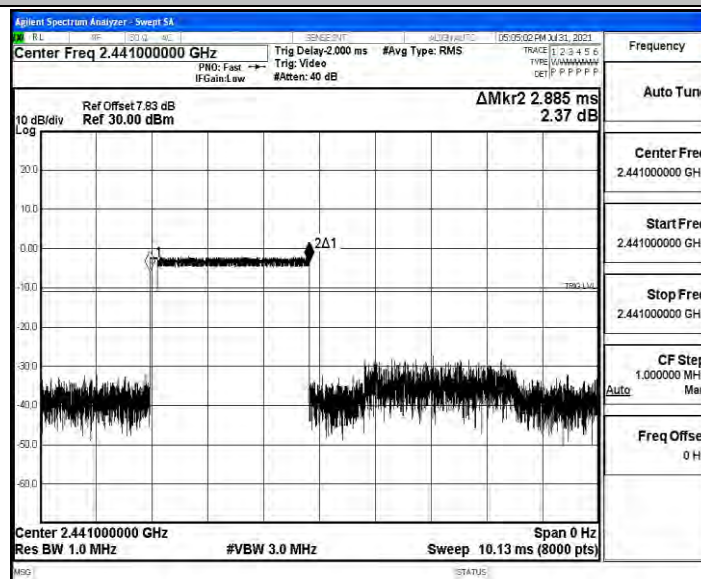
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.880	90	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.884	90	0.260	≤0.4	PASS
3DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS

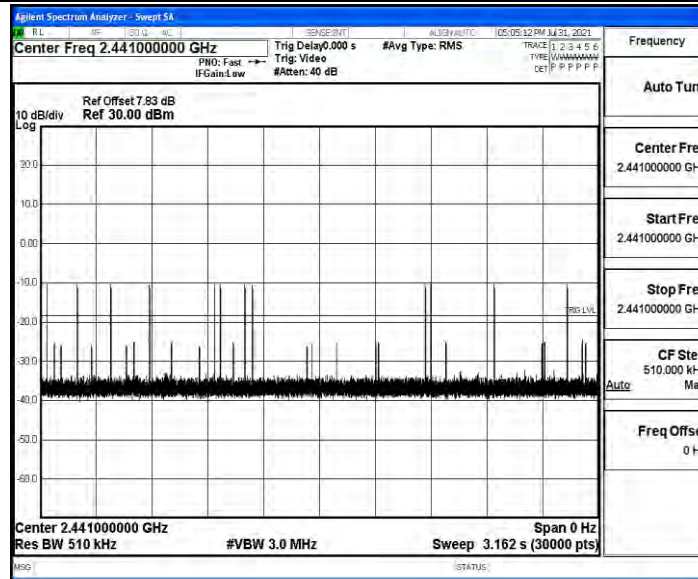
Test Graphs





3DH5_Ant1_Hop







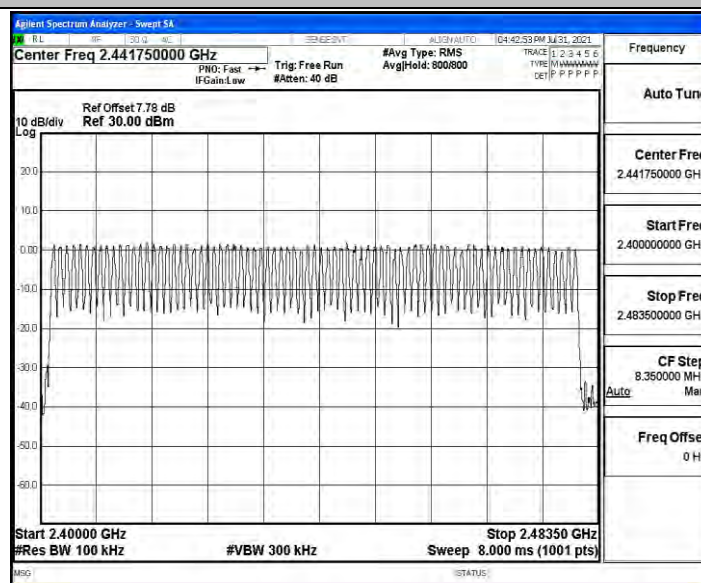
A.6 Number of hopping channels

Test Result

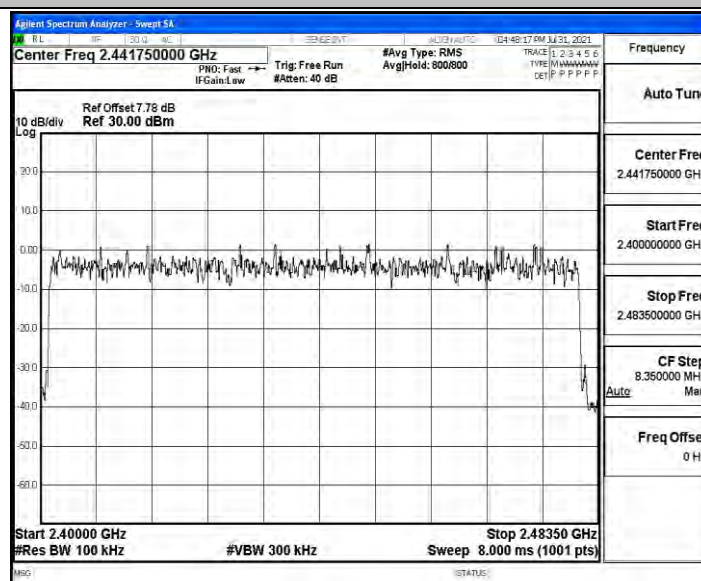
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

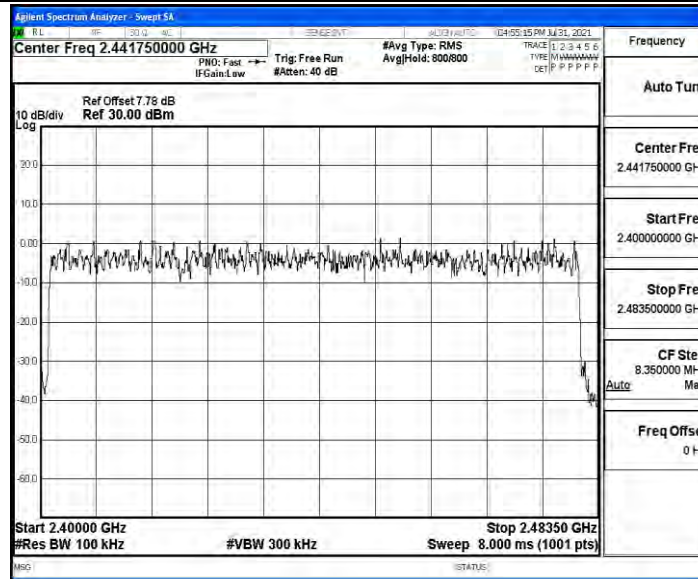
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





A.7 Band edge measurements

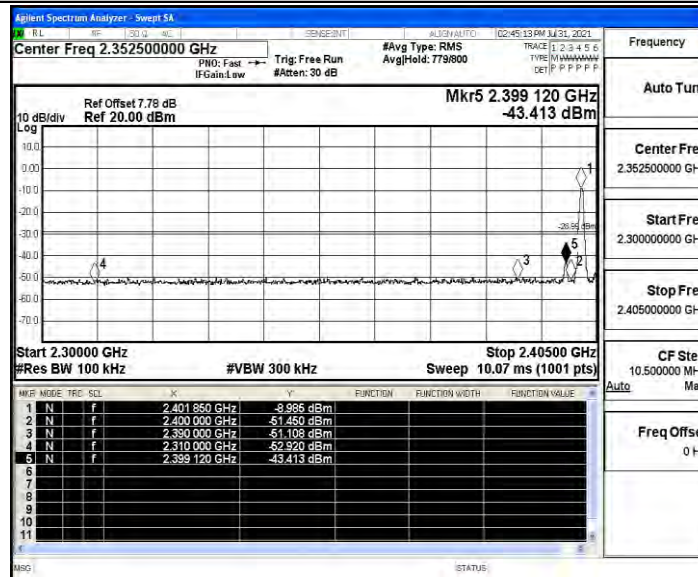
Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-8.99	-43.41	≤ -28.99	PASS
		High	2480	-8.95	-48.48	≤ -28.95	PASS
		Low	Hop_2402	0.62	-48.34	≤ -19.38	PASS
		High	Hop_2480	0.99	-47.49	≤ -19.01	PASS
2DH5	Ant1	Low	2402	-13.12	-44.65	≤ -33.12	PASS
		High	2480	-12.61	-50.19	≤ -32.61	PASS
		Low	Hop_2402	-2.52	-47.4	≤ -22.52	PASS
		High	Hop_2480	1.42	-32.76	≤ -18.58	PASS
3DH5	Ant1	Low	2402	-12.41	-48.25	≤ -32.41	PASS
		High	2480	-11.78	-50.5	≤ -31.78	PASS
		Low	Hop_2402	-0.24	-48.36	≤ -20.24	PASS
		High	Hop_2480	0.40	-34.67	≤ -19.6	PASS

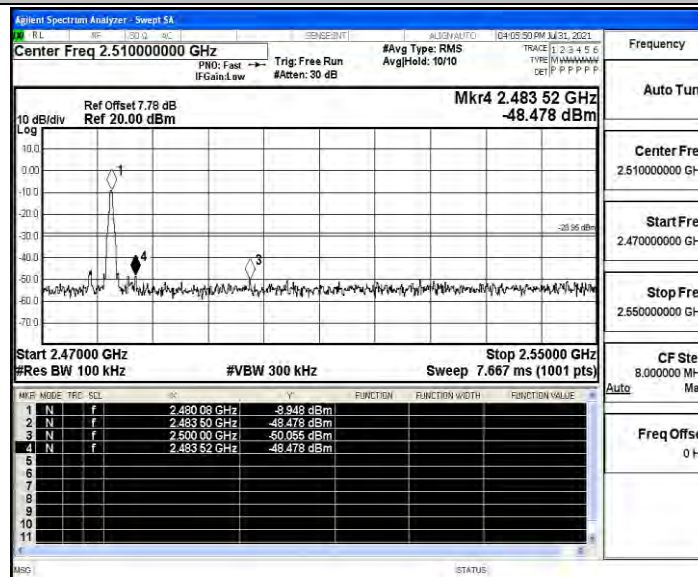


Test Graphs

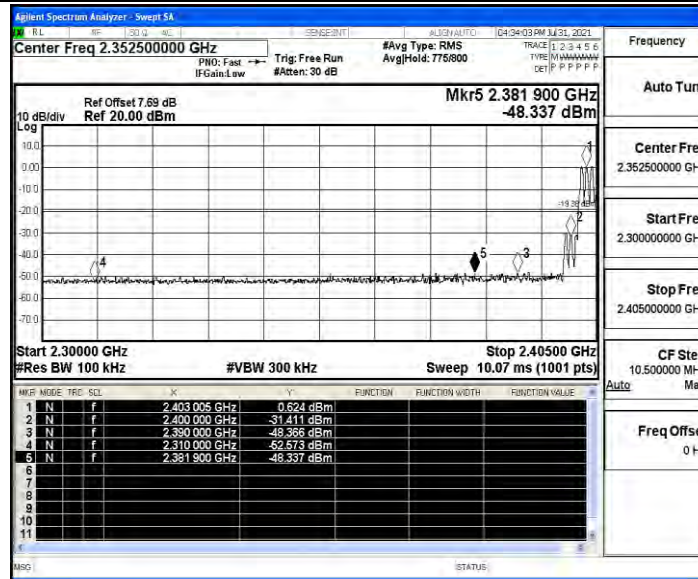
DH5_Ant1_Low_2402



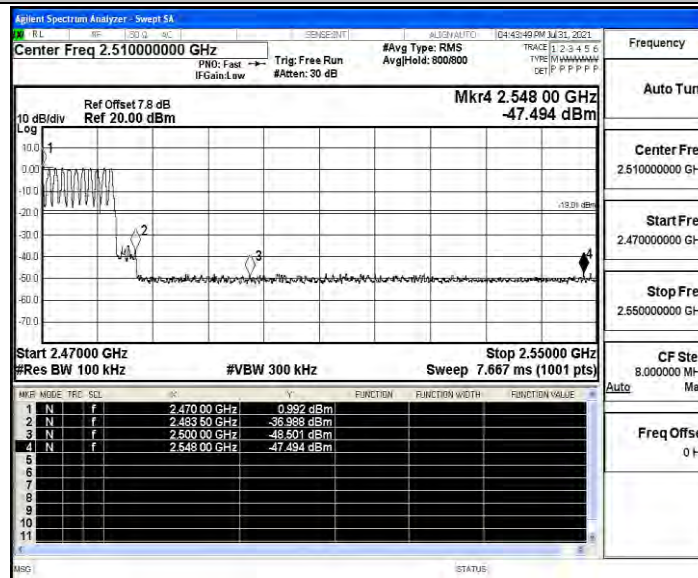
DH5_Ant1_High_2480



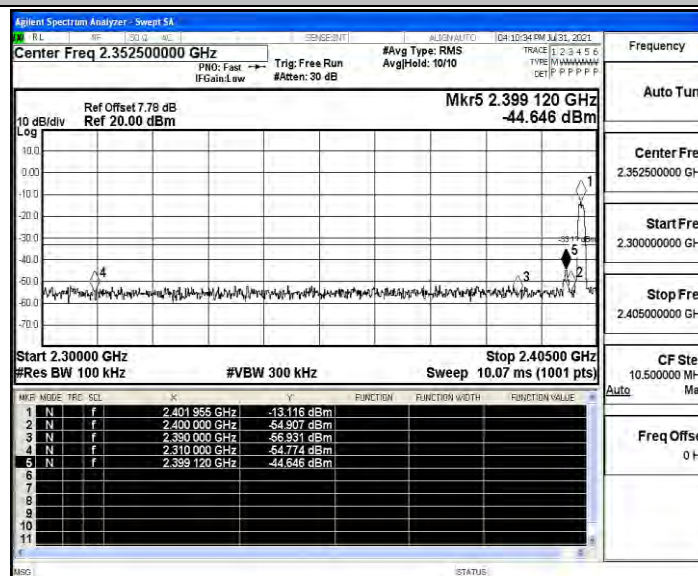
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480

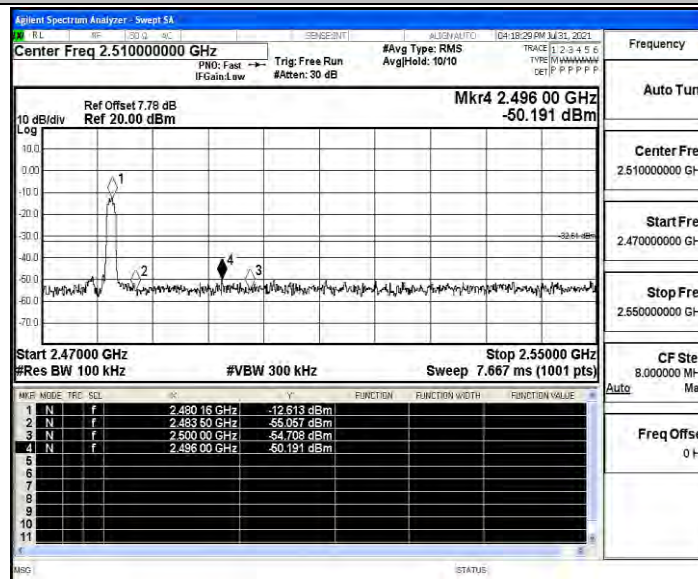


2DH5_Ant1_Low_2402

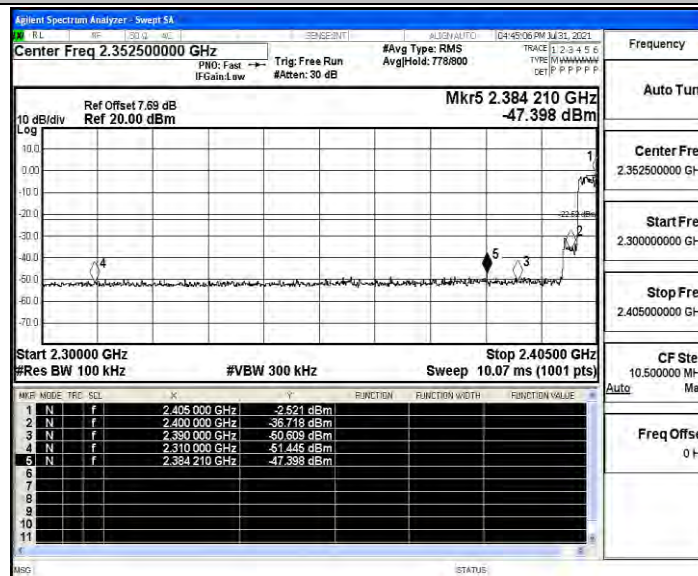




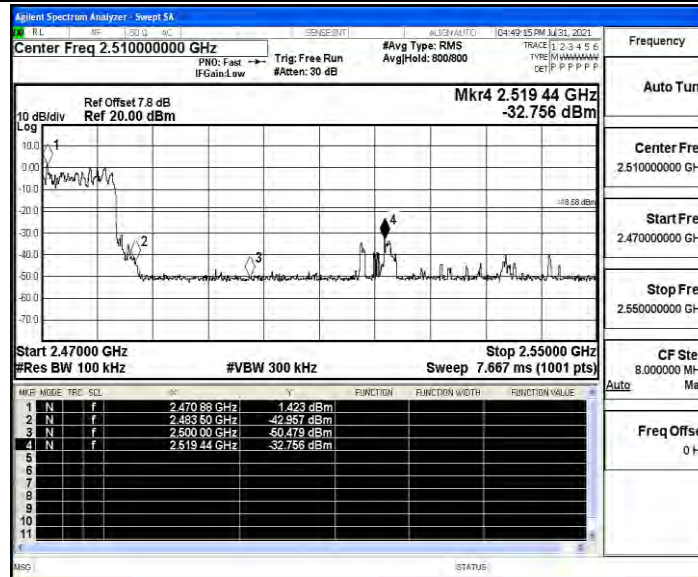
2DH5_Ant1_High_2480



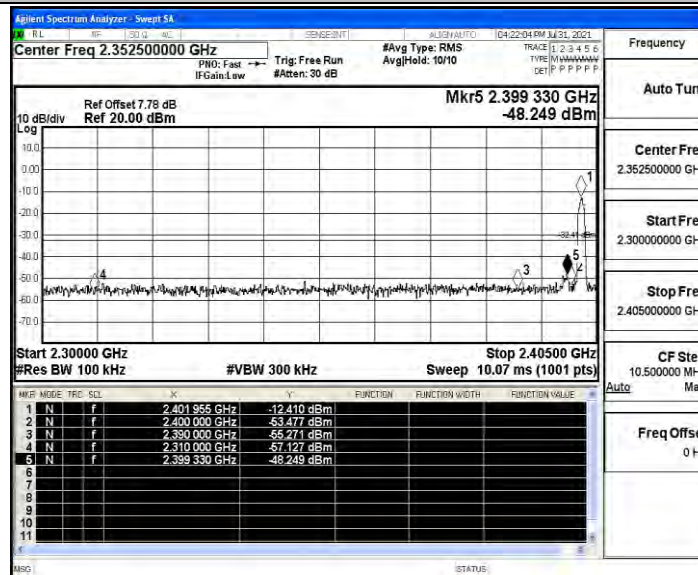
2DH5_Ant1_Low_Hop_2402



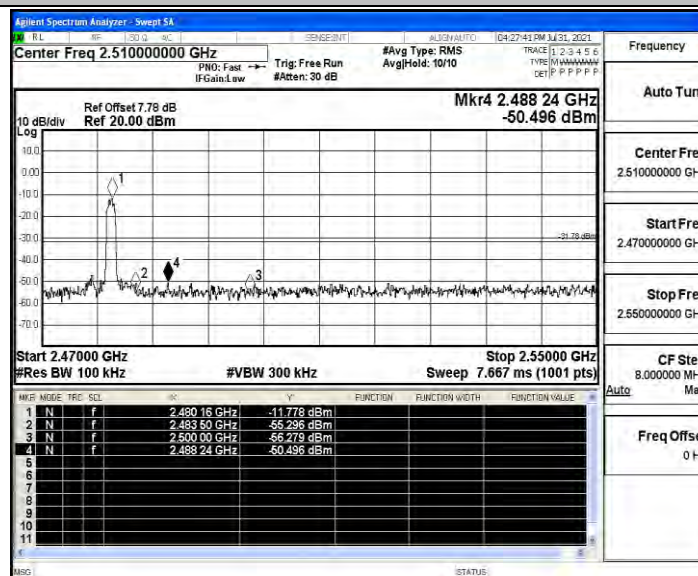
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_2402

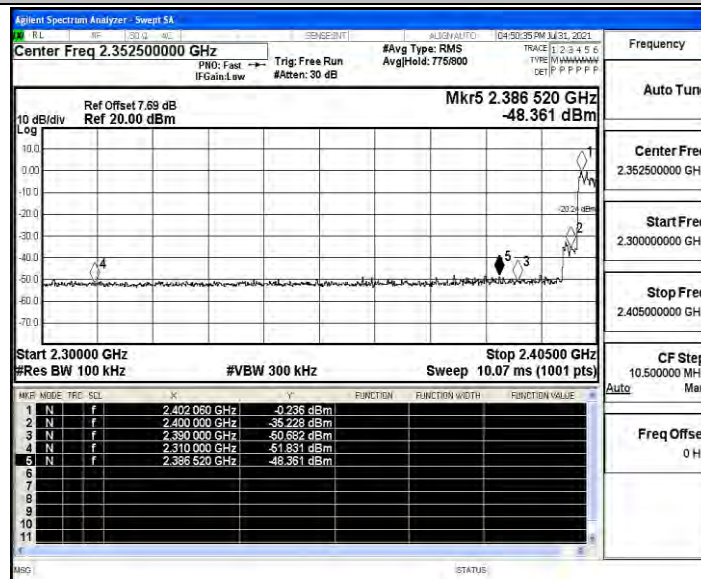


3DH5_Ant1_High_2480

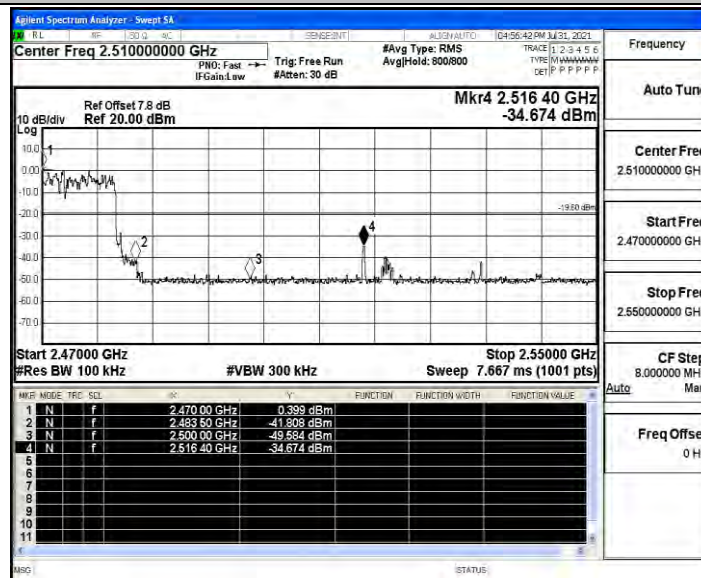




3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





A.8 Conducted Spurious Emission

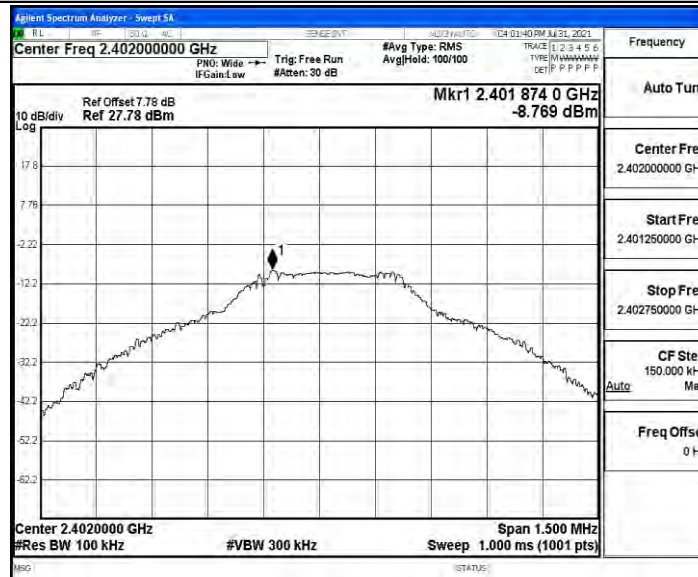
Test Result

TestMode	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	2402	Reference	-8.77	-8.77	---	PASS
		30~1000	-8.77	-50.21	≤ -28.77	PASS
		1000~26500	-8.77	-46.18	≤ -28.77	PASS
	2441	Reference	-9.11	-9.11	---	PASS
		30~1000	-9.11	-47.74	≤ -29.11	PASS
		1000~26500	-9.11	-47.15	≤ -29.11	PASS
	2480	Reference	-9.05	-9.05	---	PASS
		30~1000	-9.05	-47.59	≤ -29.05	PASS
		1000~26500	-9.05	-48.08	≤ -29.05	PASS
2DH5	2402	Reference	-9.41	-9.41	---	PASS
		30~1000	-9.41	-47.28	≤ -29.41	PASS
		1000~26500	-9.41	-47.44	≤ -29.41	PASS
	2441	Reference	-8.70	-8.70	---	PASS
		30~1000	-8.70	-46.88	≤ -28.7	PASS
		1000~26500	-8.70	-47.55	≤ -28.7	PASS
	2480	Reference	-8.90	-8.90	---	PASS
		30~1000	-8.90	-47.97	≤ -28.9	PASS
		1000~26500	-8.90	-39.25	≤ -28.9	PASS
3DH5	2402	Reference	-9.53	-9.53	---	PASS
		30~1000	-9.53	-47.4	≤ -29.53	PASS
		1000~26500	-9.53	-47.32	≤ -29.53	PASS
	2441	Reference	-8.91	-8.91	---	PASS
		30~1000	-8.91	-46.73	≤ -28.91	PASS
		1000~26500	-8.91	-47.64	≤ -28.91	PASS
	2480	Reference	-8.92	-8.92	---	PASS
		30~1000	-8.92	-47.36	≤ -28.92	PASS
		1000~26500	-8.92	-47.46	≤ -28.92	PASS

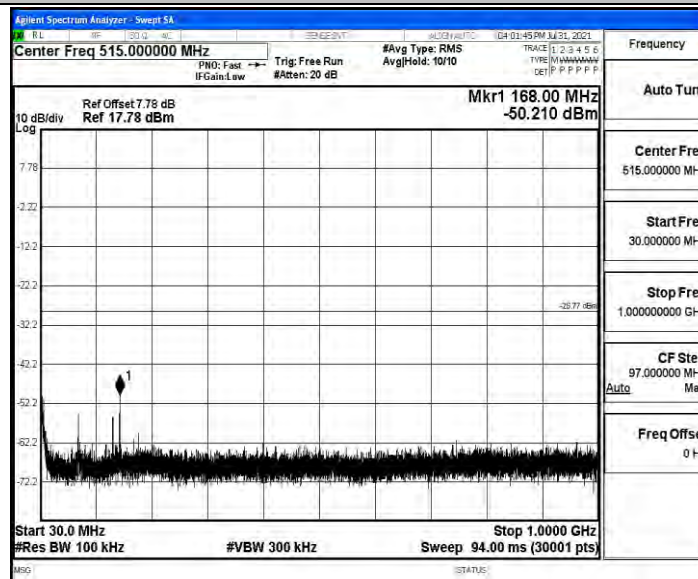


Test Graphs

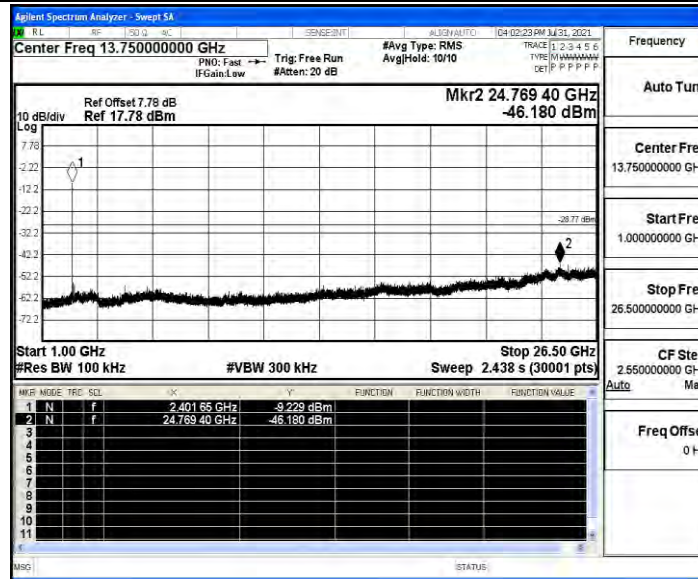
DH5_Ant1_2402_0~Reference



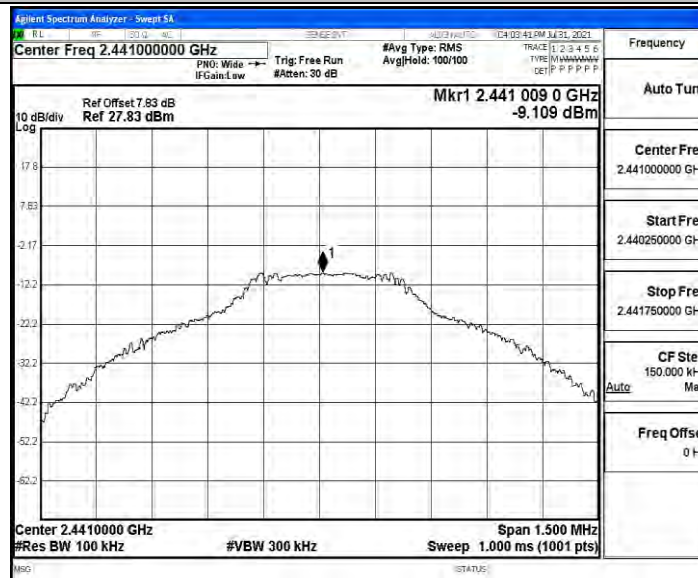
DH5_Ant1_2402_30~1000



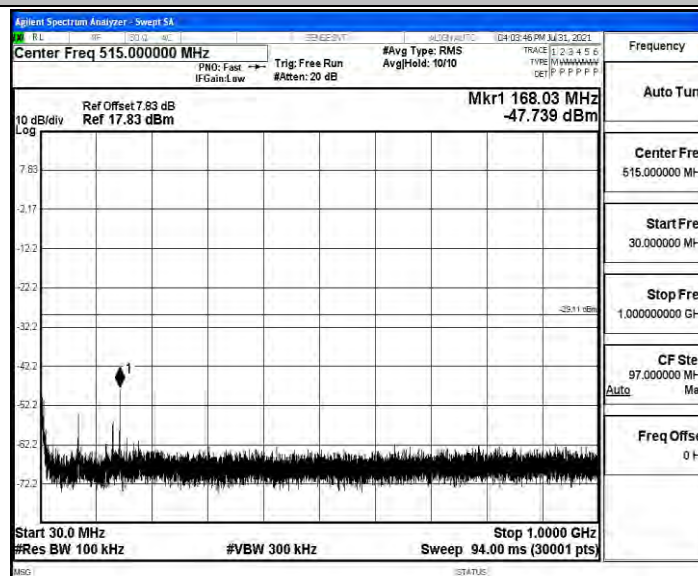
DH5_Ant1_2402_1000~26500



DH5_Ant1_2441_0~Reference

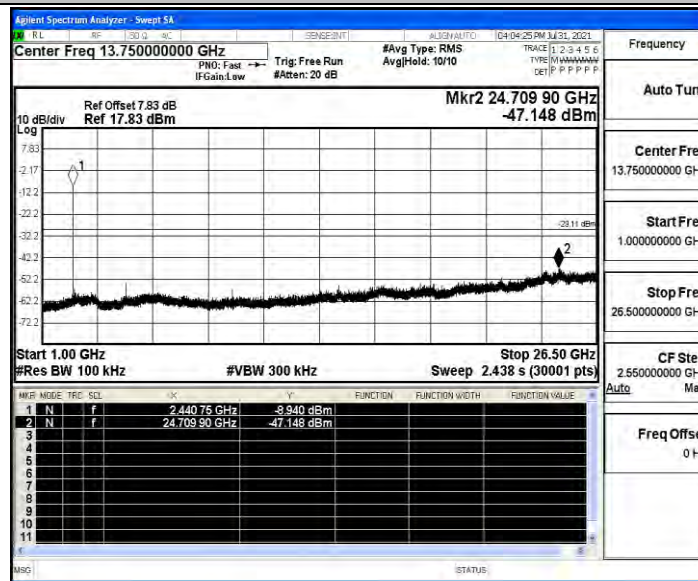


DH5_Ant1_2441_30~1000

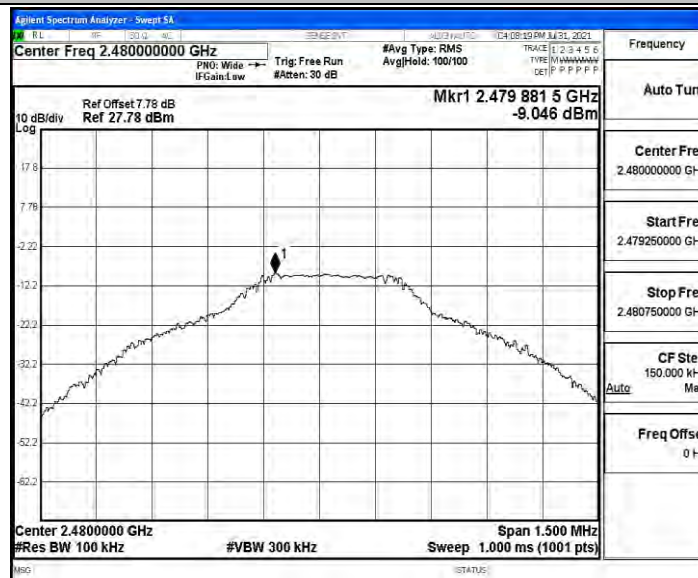




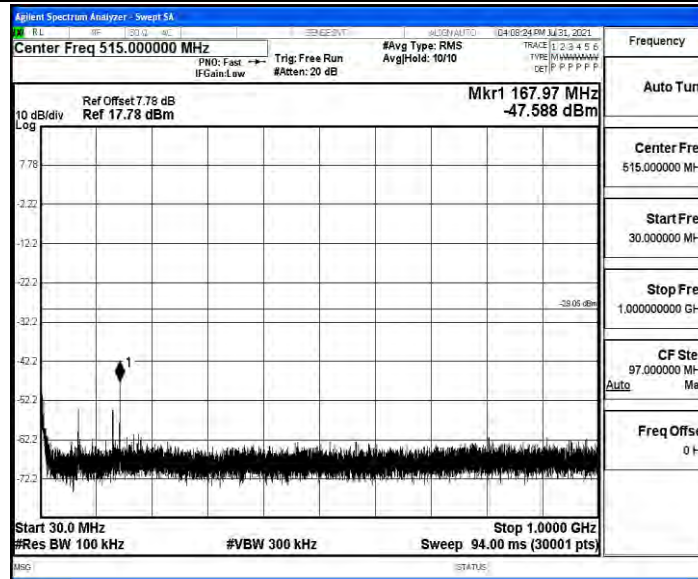
DH5_Ant1_2441_1000~26500



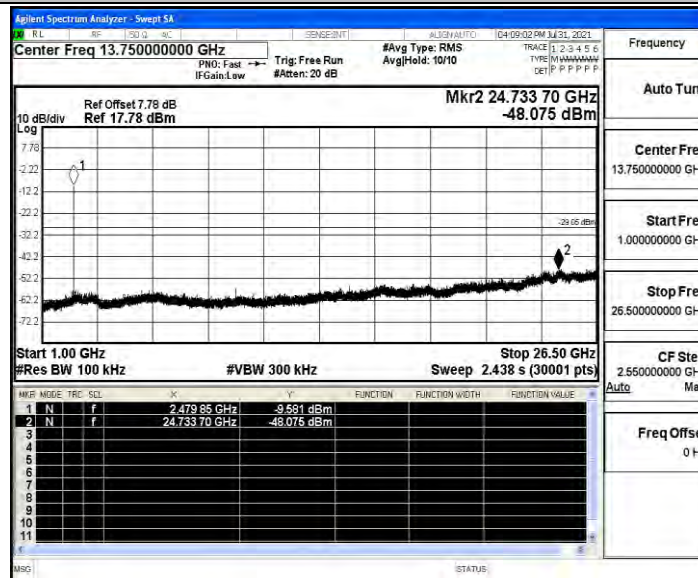
DH5_Ant1_2480_0~Reference



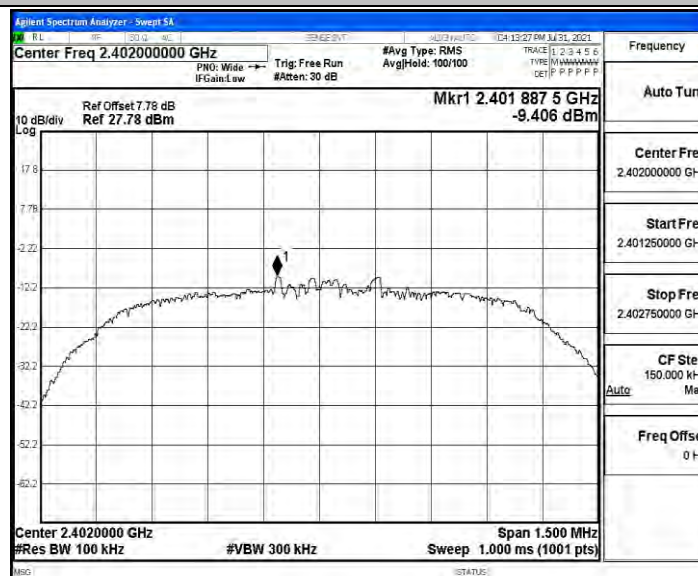
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

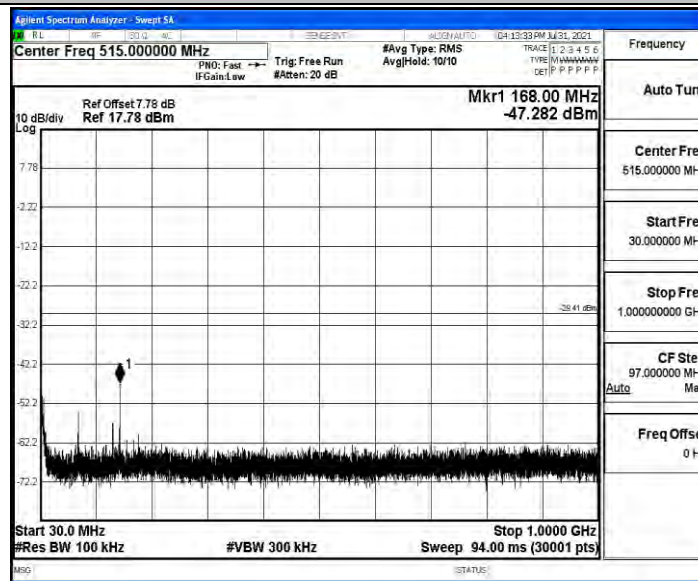


2DH5_Ant1_2402_0~Reference

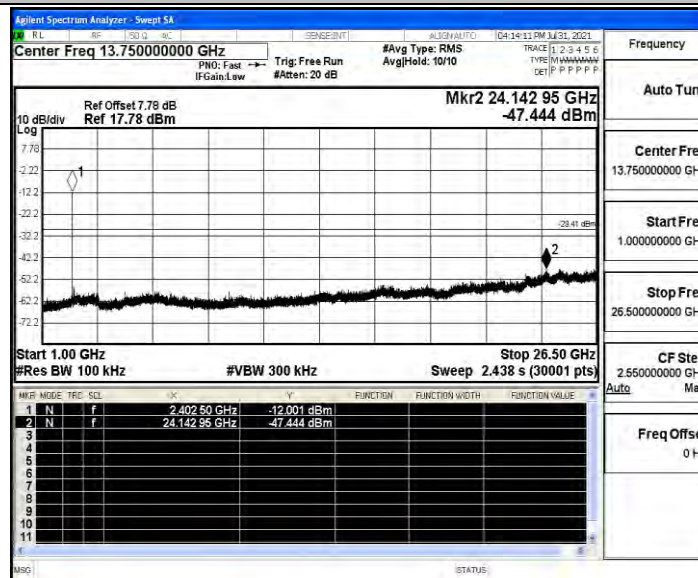




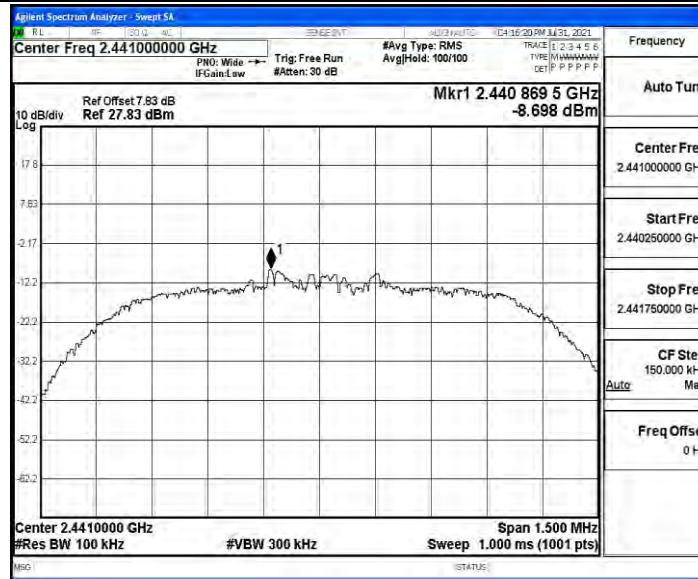
2DH5_Ant1_2402_30~1000



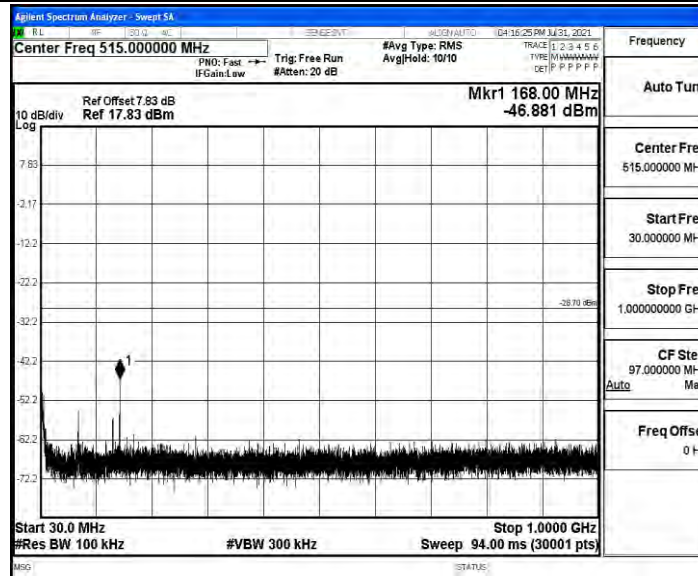
2DH5_Ant1_2402_1000~26500



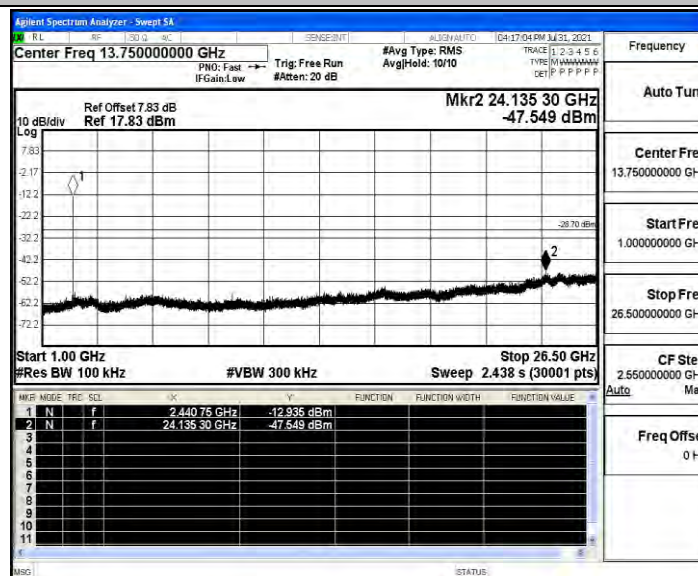
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000

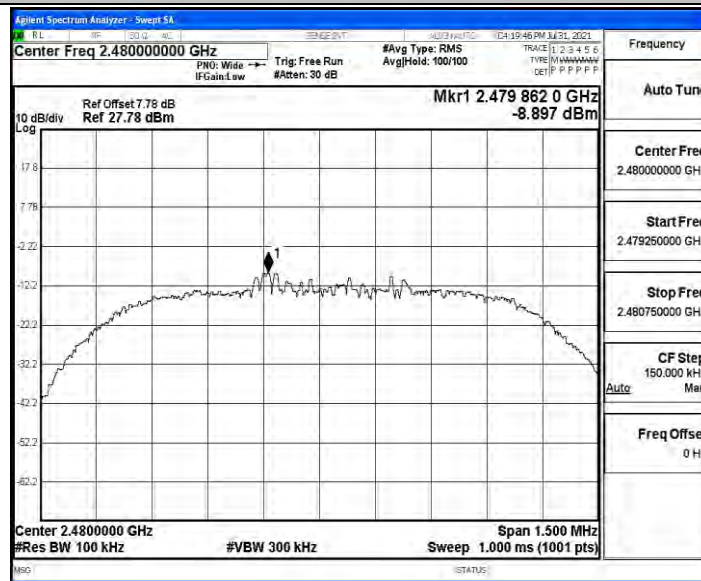


2DH5_Ant1_2441_1000~26500

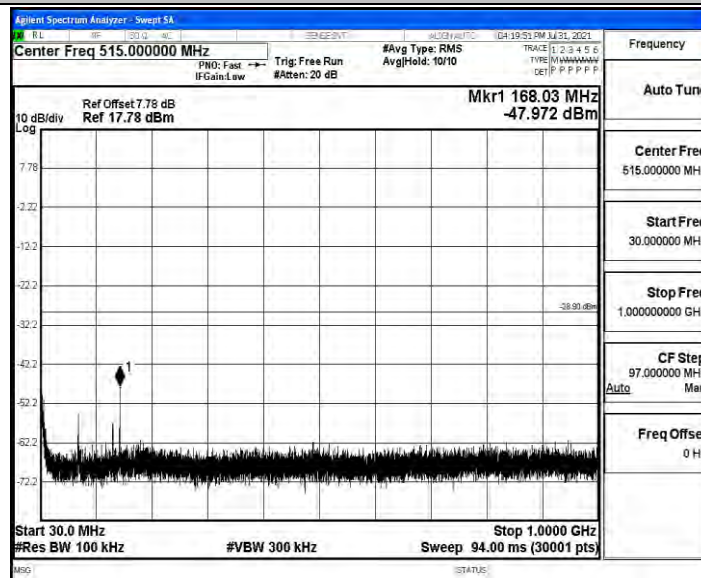




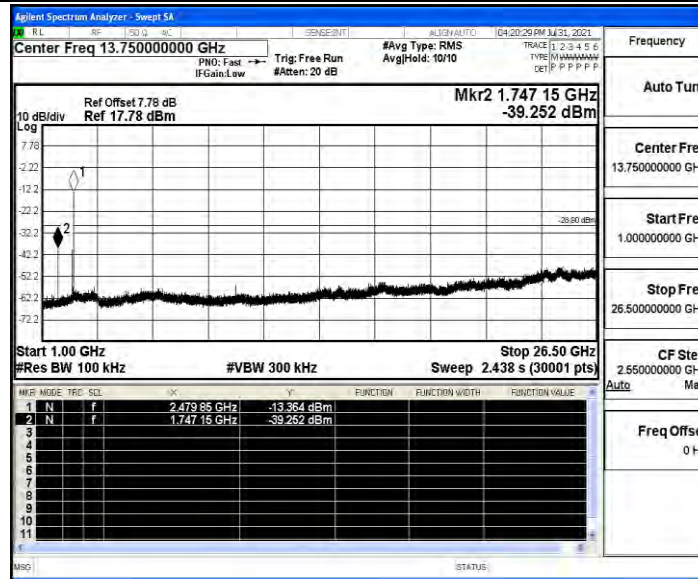
2DH5_Ant1_2480_0~Reference



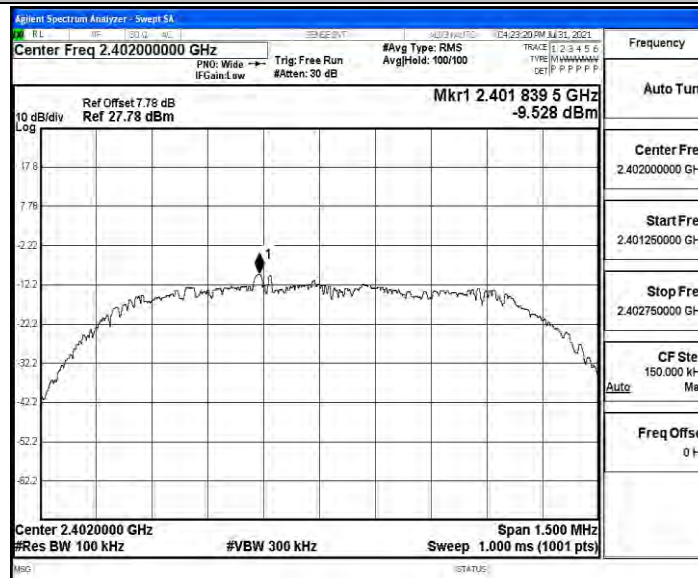
2DH5_Ant1_2480_30~1000



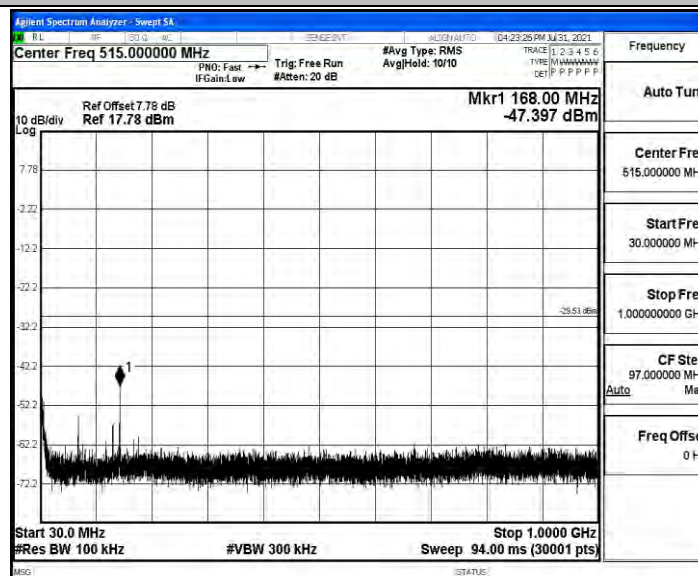
2DH5_Ant1_2480_1000~26500



3DH5_Ant1_2402_0~Reference

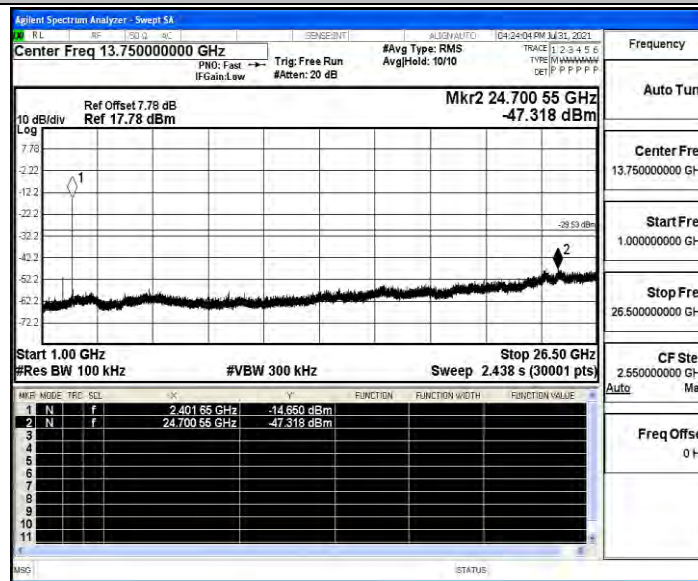


3DH5_Ant1_2402_30~1000

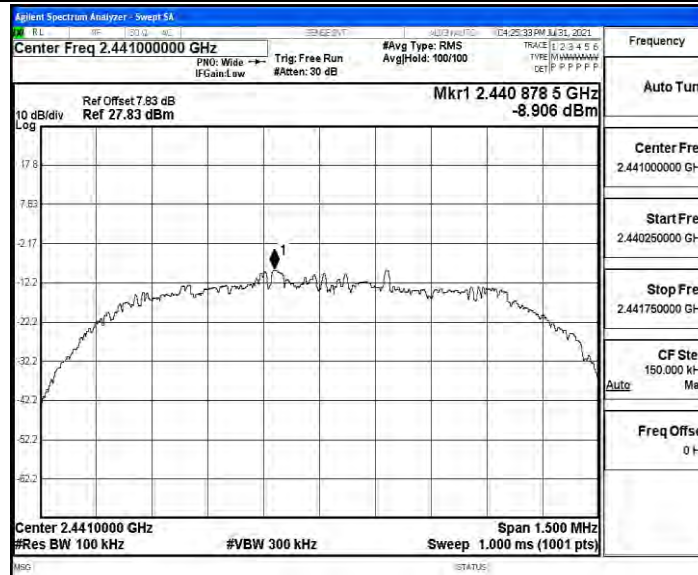




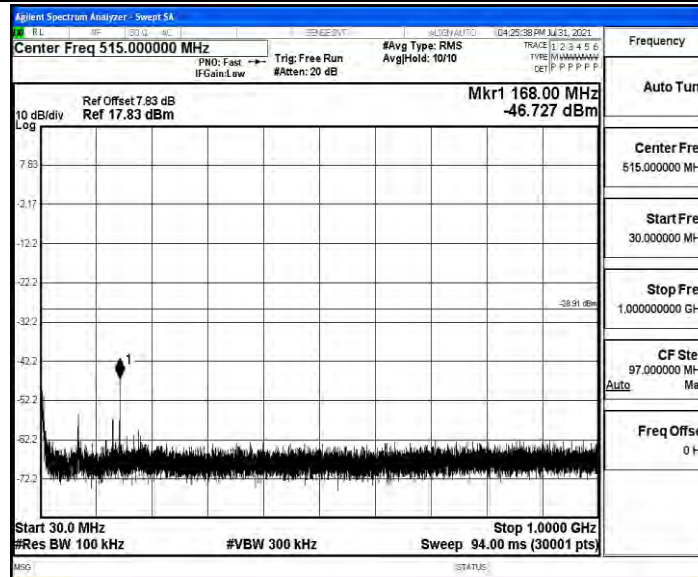
3DH5_Ant1_2402_1000~26500



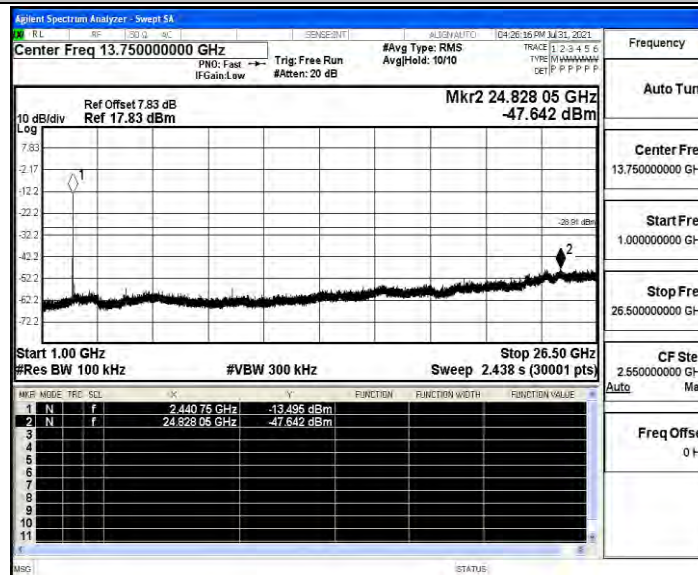
3DH5_Ant1_2441_0~Reference



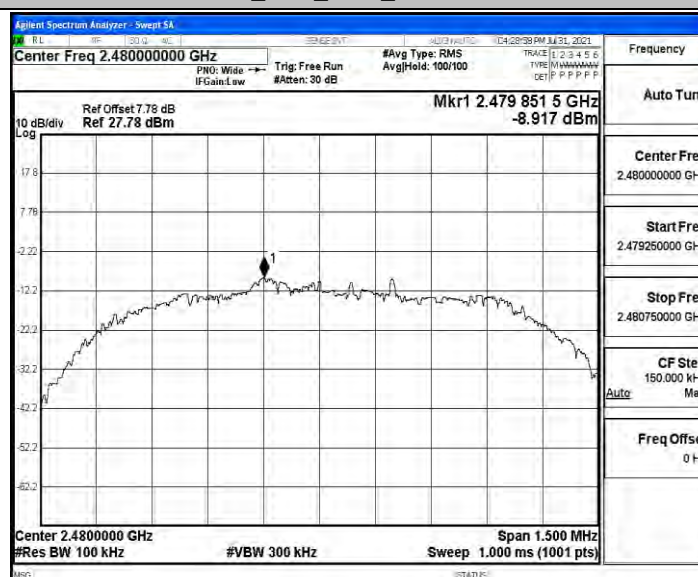
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

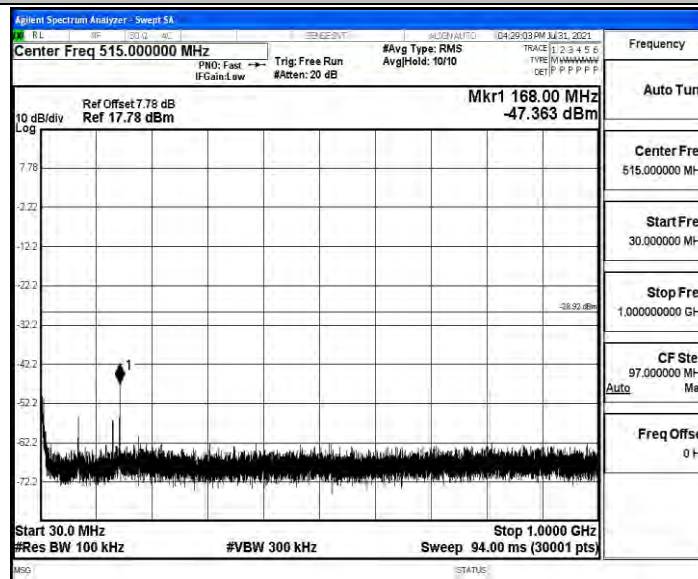


3DH5_Ant1_2480_0~Reference

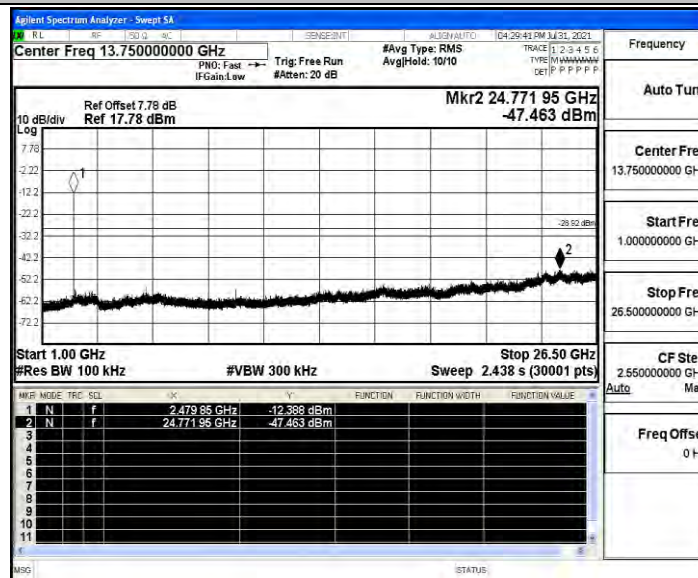




3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500





A.9 Emissions in Restricted Bands

Test Result

TestMode	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	2402	AV	2310.000	-49.46	≤-41.20	45.74	≤54	PASS
		AV	2377.910	-48.88	≤-41.20	46.32	≤54	PASS
		AV	2390.000	-49	≤-41.20	46.20	≤54	PASS
		Peak	2310.000	-45.8	≤-21.20	49.40	≤74	PASS
		Peak	2382.740	-40.62	≤-21.20	54.58	≤74	PASS
		Peak	2390.000	-43.58	≤-21.20	51.62	≤74	PASS
	2480	AV	2483.500	-46.46	≤-41.20	48.74	≤54	PASS
		AV	2483.520	-46.46	≤-41.20	48.74	≤54	PASS
		AV	2500.000	-48.36	≤-41.20	46.84	≤54	PASS
		Peak	2483.500	-39.57	≤-21.20	55.63	≤74	PASS
		Peak	2483.600	-39.56	≤-21.20	55.64	≤74	PASS
		Peak	2500.000	-42.01	≤-21.20	53.19	≤74	PASS
	Hop_2402	Peak	2310.000	-39.70	≤-21.20	55.50	≤74	PASS
		Peak	2320.000	-37.86	≤-21.20	57.34	≤74	PASS
		Peak	2390.000	-40.29	≤-21.20	54.91	≤74	PASS
	Hop_2480	Peak	2483.500	-31.27	≤-21.20	63.93	≤74	PASS
		Peak	2500.000	-39.47	≤-21.20	55.73	≤74	PASS
2DH5	2402	AV	2310.000	-49.43	≤-41.20	45.77	≤54	PASS
		AV	2378.015	-48.94	≤-41.20	46.26	≤54	PASS
		AV	2390.000	-49	≤-41.20	46.20	≤54	PASS
		Peak	2310.000	-44.65	≤-21.20	50.55	≤74	PASS
		Peak	2381.585	-40.11	≤-21.20	55.09	≤74	PASS
		Peak	2390.000	-45.18	≤-21.20	50.02	≤74	PASS
	2480	AV	2483.500	-46.97	≤-41.20	48.23	≤54	PASS
		AV	2483.520	-46.97	≤-41.20	48.23	≤54	PASS
		AV	2500.000	-48.03	≤-41.20	47.17	≤54	PASS
		Peak	2483.500	-41.13	≤-21.20	54.07	≤74	PASS
		Peak	2486.320	-38.93	≤-21.20	56.27	≤74	PASS
		Peak	2500.000	-45.32	≤-21.20	49.88	≤74	PASS
	Hop_2402	Peak	2310.000	-40.13	≤-21.20	55.07	≤74	PASS
		Peak	2355.755	-35.2	≤-21.20	60.00	≤74	PASS
		Peak	2390.000	-39.95	≤-21.20	55.25	≤74	PASS
	Hop_2480	Peak	2483.500	-31.48	≤-21.20	63.72	≤74	PASS
		Peak	2500.000	-39.92	≤-21.20	55.28	≤74	PASS
3DH5	2402	AV	2310.000	-49.1	≤-41.20	46.10	≤54	PASS
		AV	2385.890	-48.42	≤-41.20	46.78	≤54	PASS
		AV	2390.000	-48.78	≤-41.20	46.42	≤54	PASS



		Peak	2310.000	-43.11	≤ -21.20	52.09	≤ 74	PASS
		Peak	2387.045	-39.42	≤ -21.20	55.78	≤ 74	PASS
		Peak	2390.000	-45.3	≤ -21.20	49.90	≤ 74	PASS
	2480	AV	2483.500	-46.96	≤ -41.20	48.24	≤ 54	PASS
		AV	2483.520	-46.96	≤ -41.20	48.24	≤ 54	PASS
		AV	2500.000	-48.19	≤ -41.20	47.01	≤ 54	PASS
		Peak	2483.500	-41.4	≤ -21.20	53.80	≤ 74	PASS
		Peak	2486.640	-39.38	≤ -21.20	55.82	≤ 74	PASS
		Peak	2500.000	-44.21	≤ -21.20	50.99	≤ 74	PASS
		Peak	2310.000	-40.73	≤ -21.20	54.47	≤ 74	PASS
	Hop_2402	Peak	2358.380	-34.63	≤ -21.20	60.57	≤ 74	PASS
		Peak	2390.000	-38.2	≤ -21.20	57.00	≤ 74	PASS
		Peak	2483.500	-31.27	≤ -21.20	63.93	≤ 74	PASS
	Hop_2480	Peak	2483.500	-31.27	≤ -21.20	63.93	≤ 74	PASS
		Peak	2500.000	-38.65	≤ -21.20	56.55	≤ 74	PASS

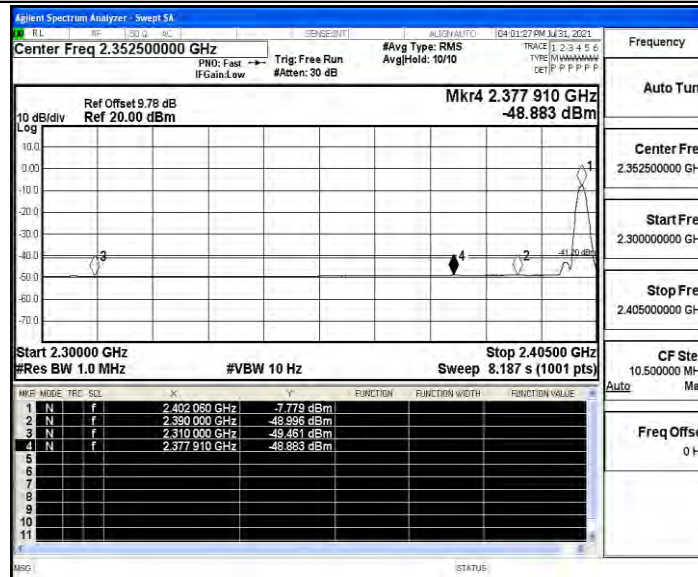
Note:

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.

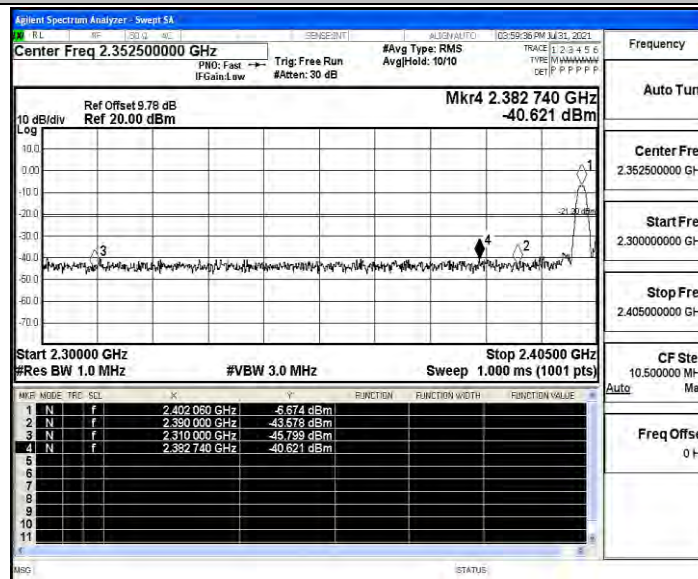


Test Graphs

DH5_Ant1_Low_2402_AV

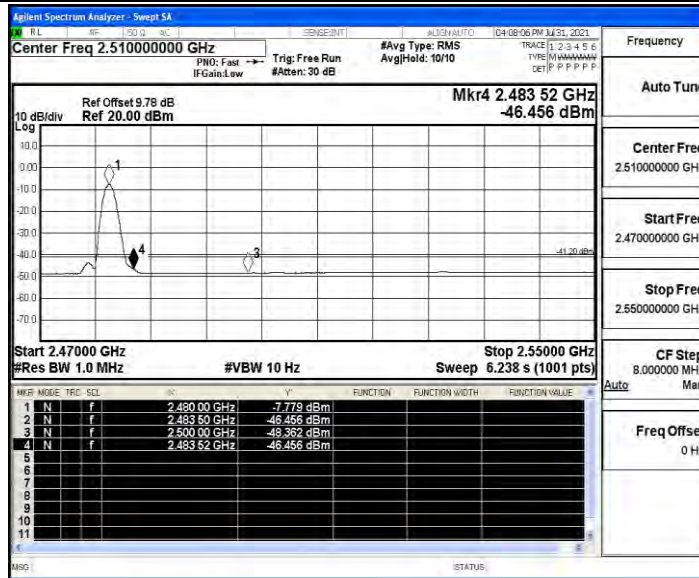


DH5_Ant1_Low_2402_Peak

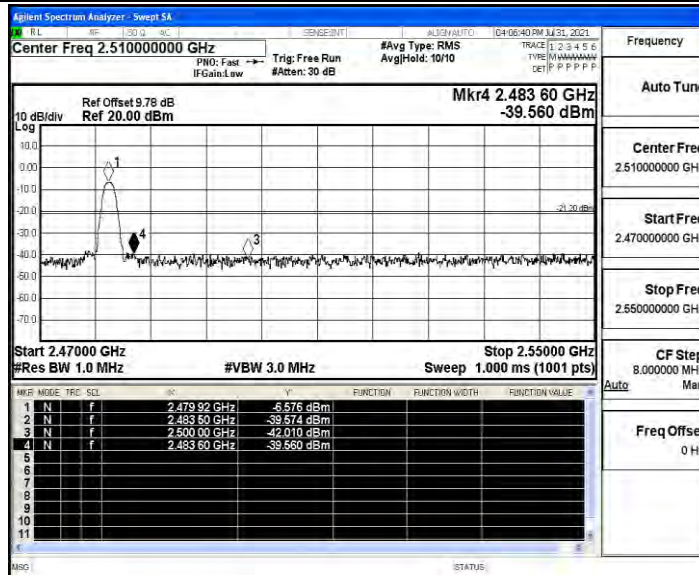




DH5_Ant1_High_2480_AV

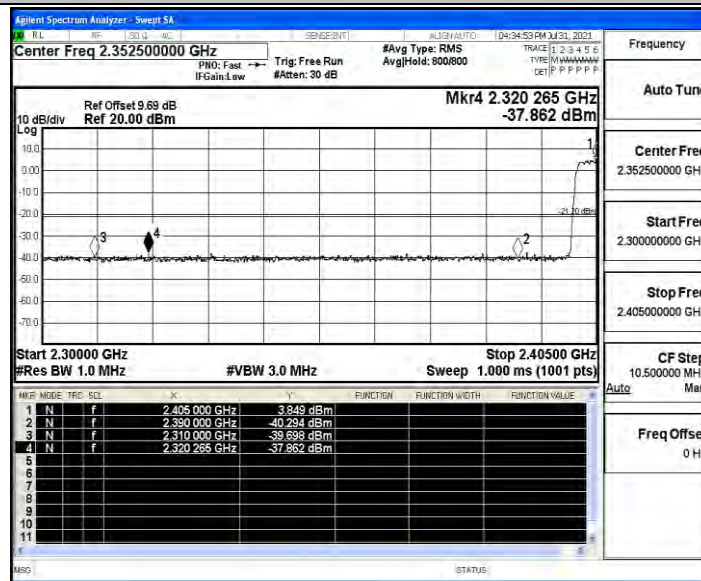


DH5_Ant1_High_2480_Peak

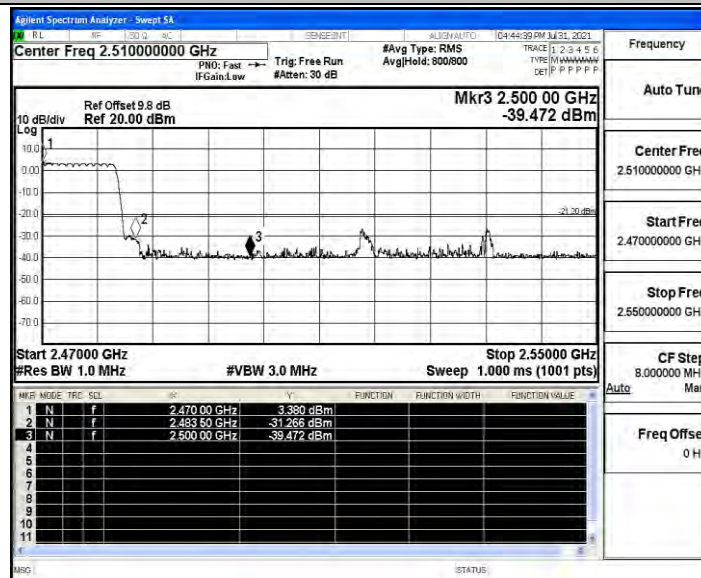




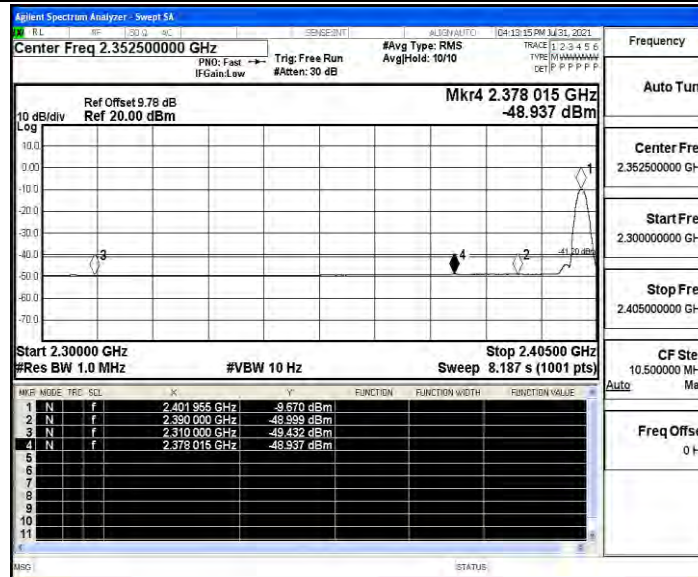
DH5_Ant1_Low_Hop_2402_Peak



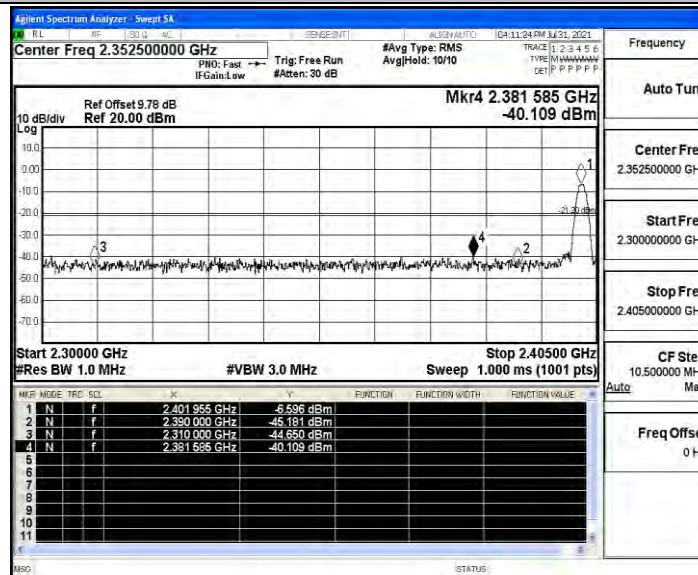
DH5_Ant1_High_Hop_2480_Peak



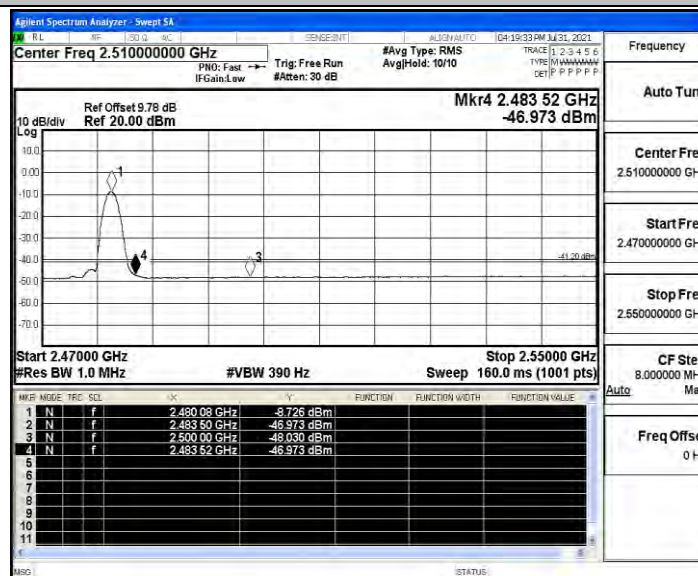
2DH5_Ant1_Low_2402_AV



2DH5_Ant1_Low_2402_Peak

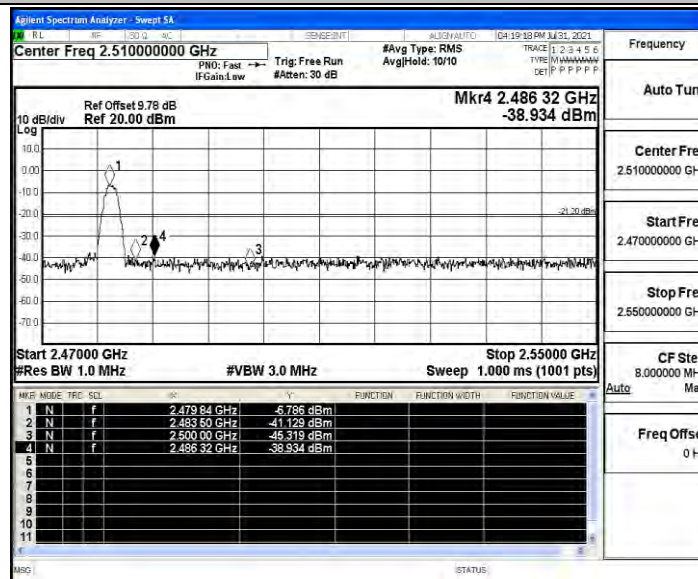


2DH5_Ant1_High_2480_AV

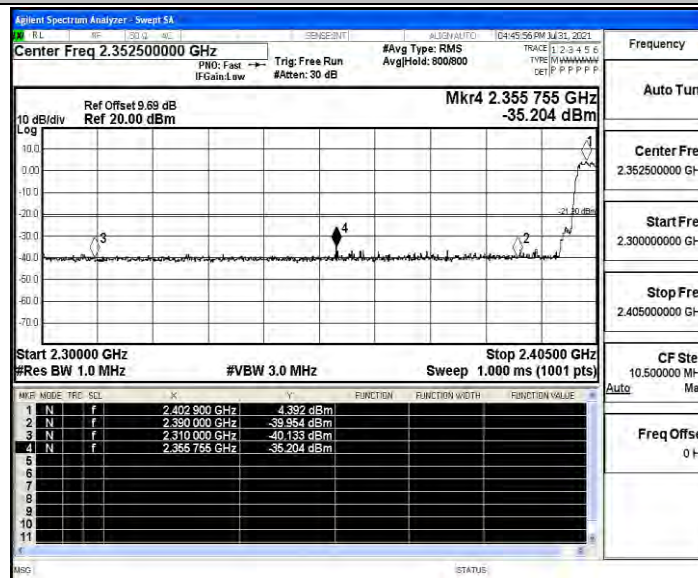




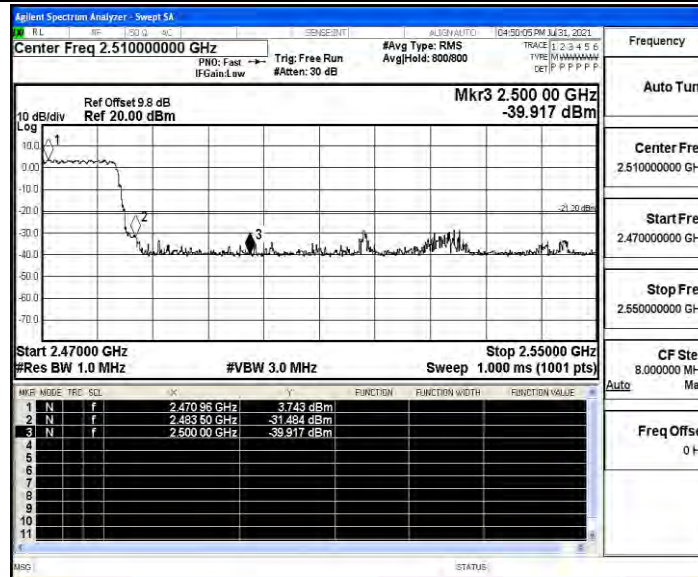
2DH5_Ant1_High_2480_Peak



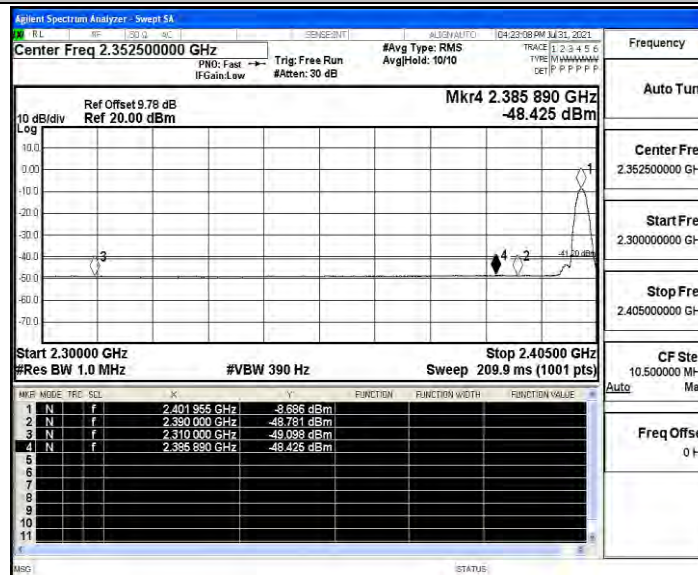
2DH5_Ant1_Low_Hop_2402_Peak



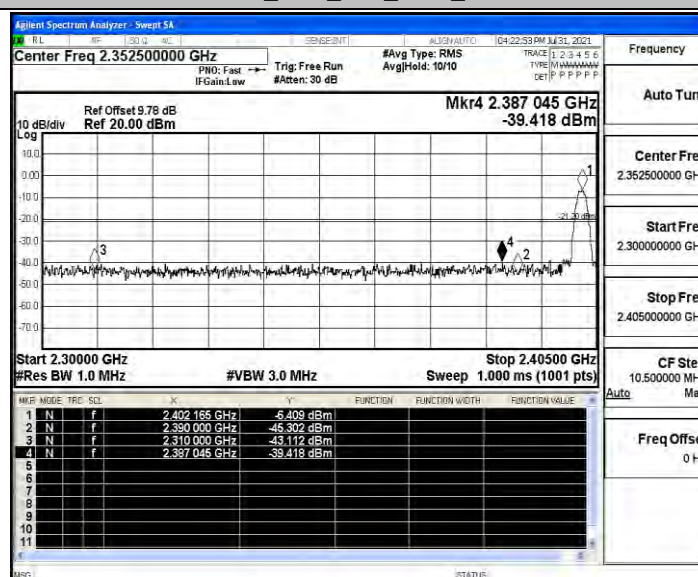
2DH5_Ant1_High_Hop_2480_Peak



3DH5_Ant1_Low_2402_AV

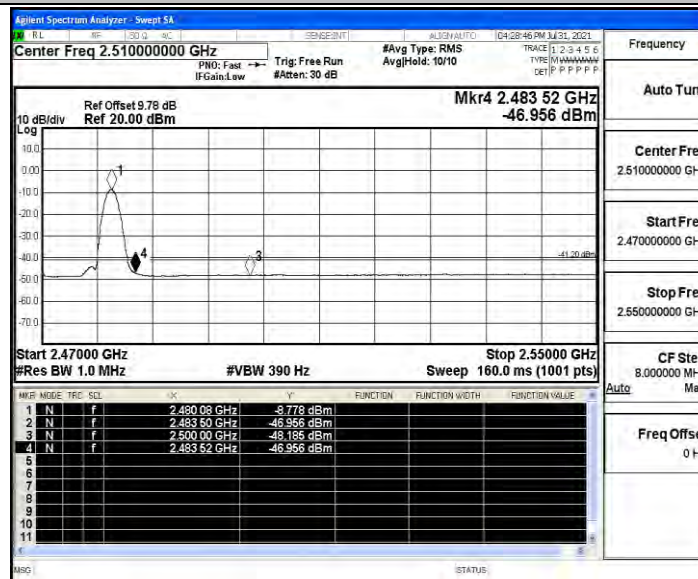


3DH5_Ant1_Low_2402_Peak

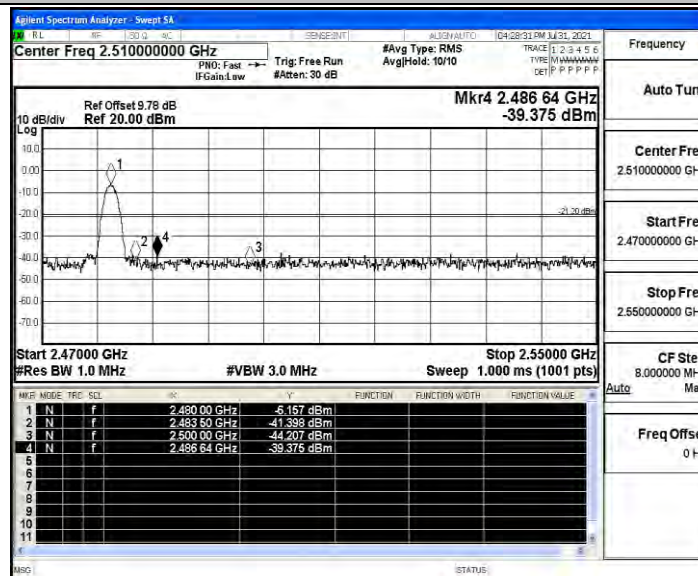




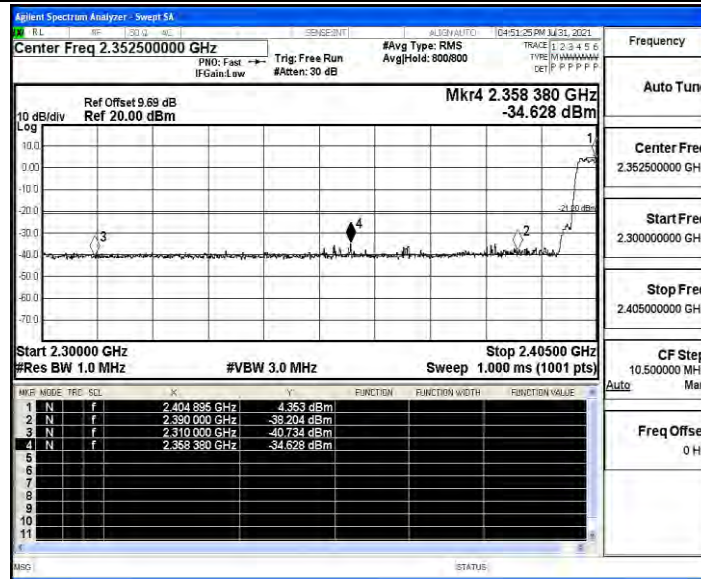
3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak

