

RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: OTT+speaker

Trade Mark: N/A

Test Model: SK410A

FCC ID: 2AOVU-SK410AX

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

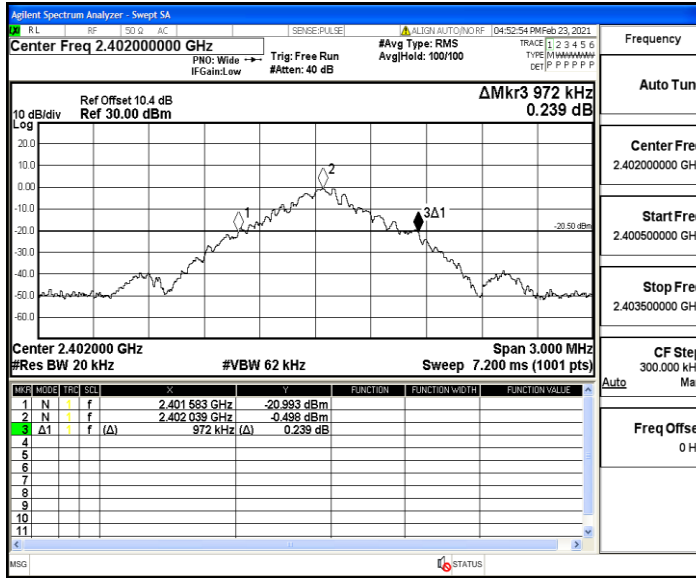
Appendix A: 20dB Emission Bandwidth

Test Result

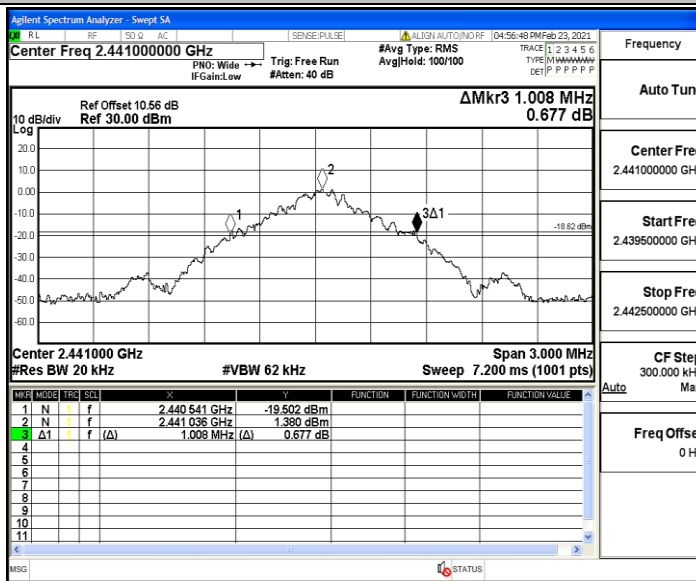
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.972	2401.583	2402.555	---	PASS
		2441	1.008	2440.541	2441.549	---	PASS
		2480	0.885	2479.571	2480.456	---	PASS
2DH5	Ant1	2402	1.326	2401.379	2402.705	---	PASS
		2441	1.323	2440.373	2441.696	---	PASS
		2480	1.326	2479.364	2480.690	---	PASS
3DH5	Ant1	2402	1.329	2401.373	2402.702	---	PASS
		2441	1.284	2440.385	2441.669	---	PASS
		2480	1.335	2479.358	2480.693	---	PASS

Test Graphs

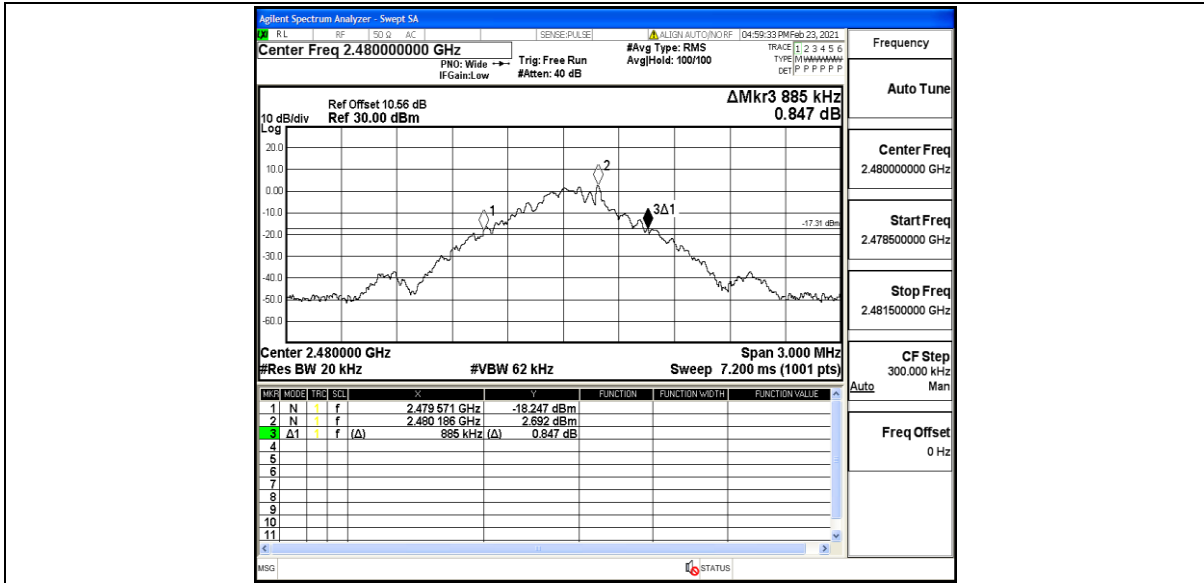
DH5_Ant1_2402



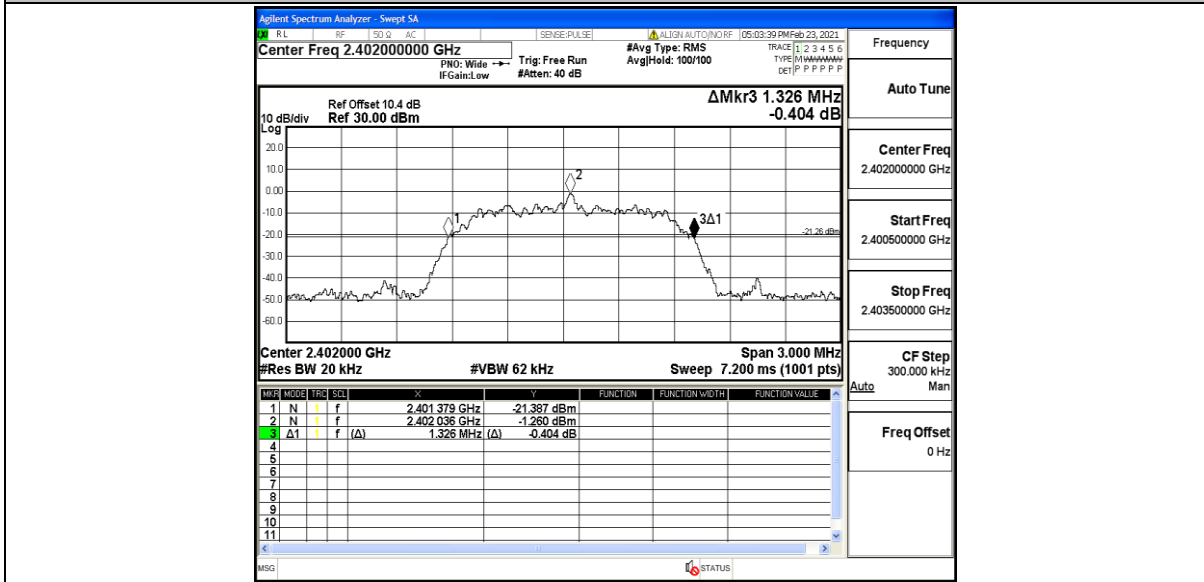
DH5_Ant1_2441



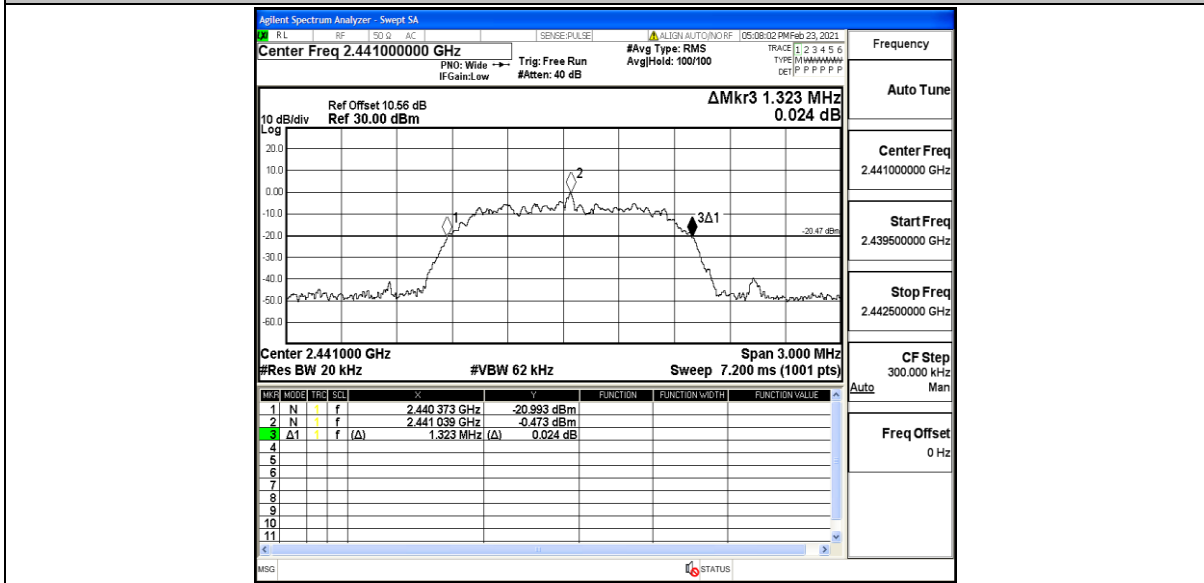
DH5_Ant1_2480



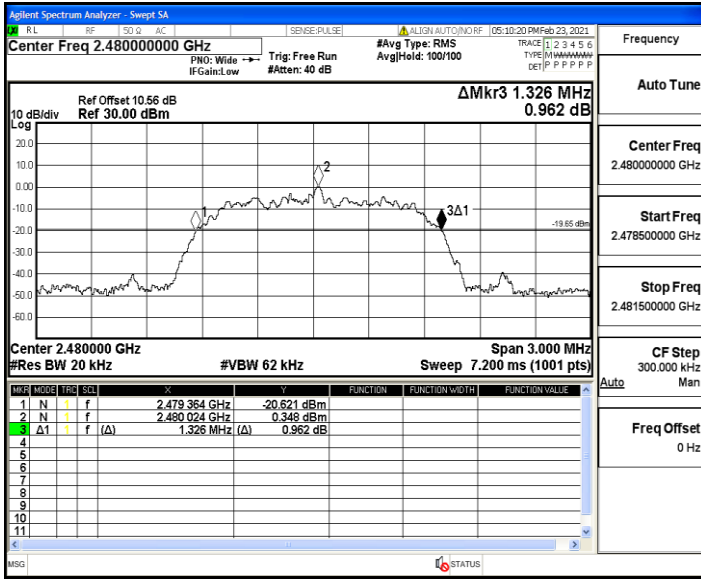
2DH5_Ant1_2402



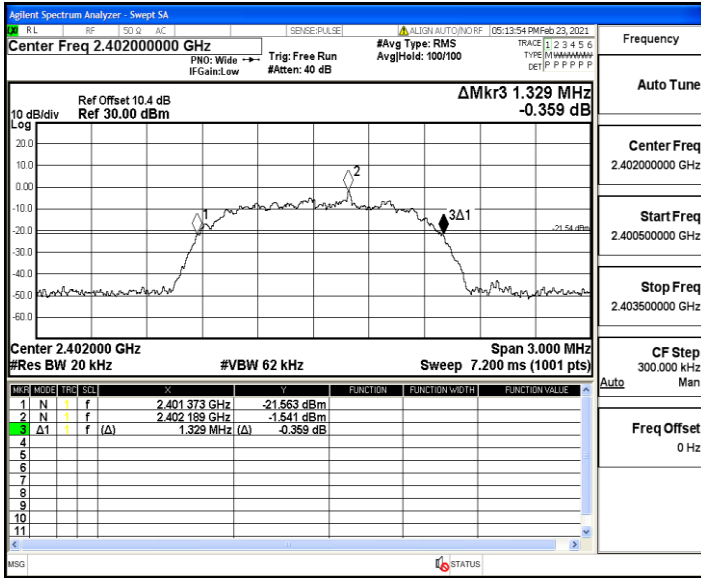
2DH5_Ant1_2441



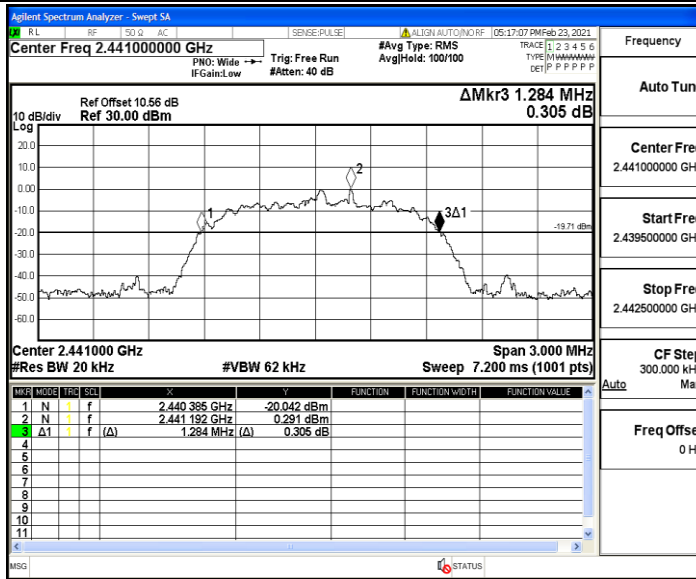
2DH5_Ant1_2480



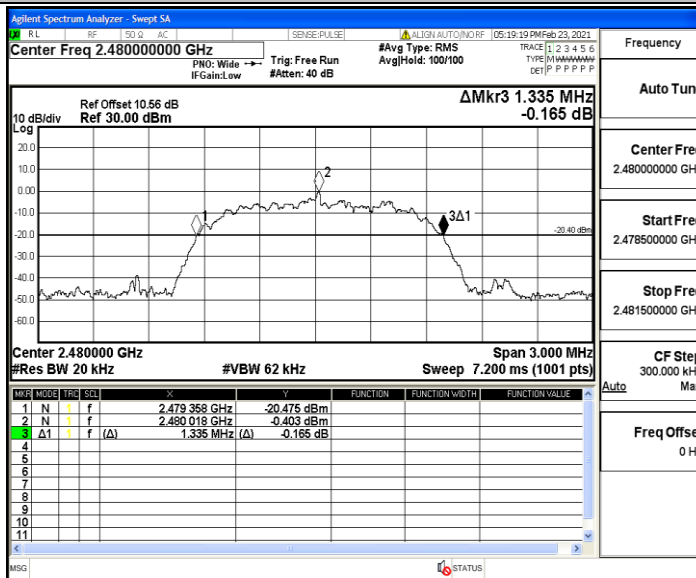
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



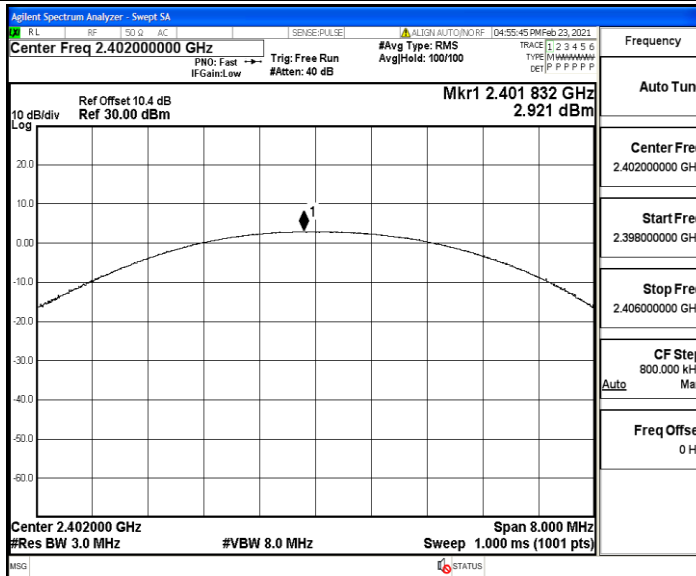
Appendix B: Maximum conducted output power

Test Result

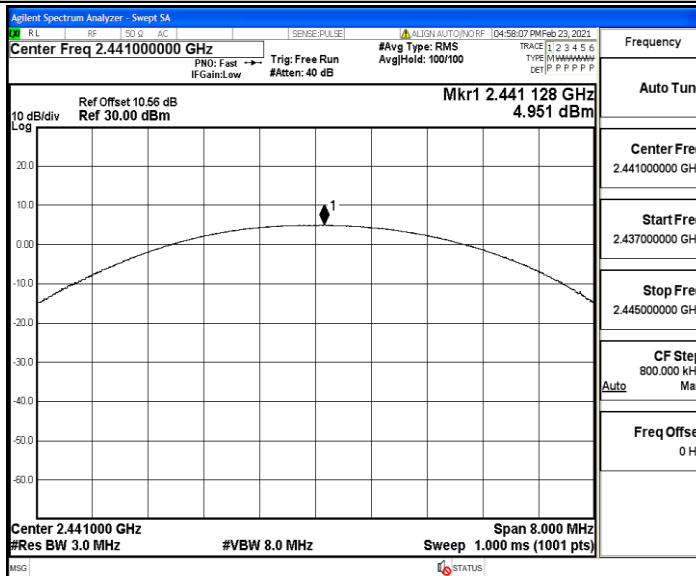
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	2.92	<=30.0	PASS
		2441	4.95	<=30.0	PASS
		2480	5.51	<=30.0	PASS
2DH5	Ant1	2402	4.68	<=20.97	PASS
		2441	5.8	<=20.97	PASS
		2480	6.4	<=20.97	PASS
3DH5	Ant1	2402	5.17	<=20.97	PASS
		2441	6.14	<=20.97	PASS
		2480	6.82	<=20.97	PASS

Test Graphs

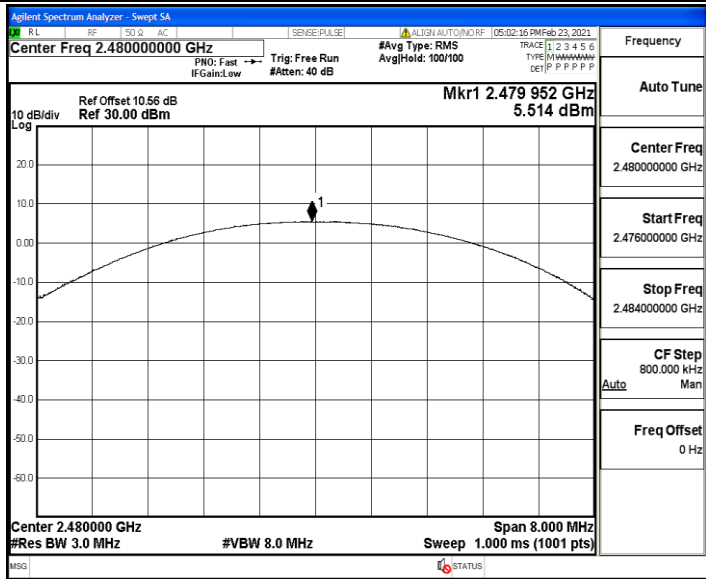
DH5_Ant1_2402



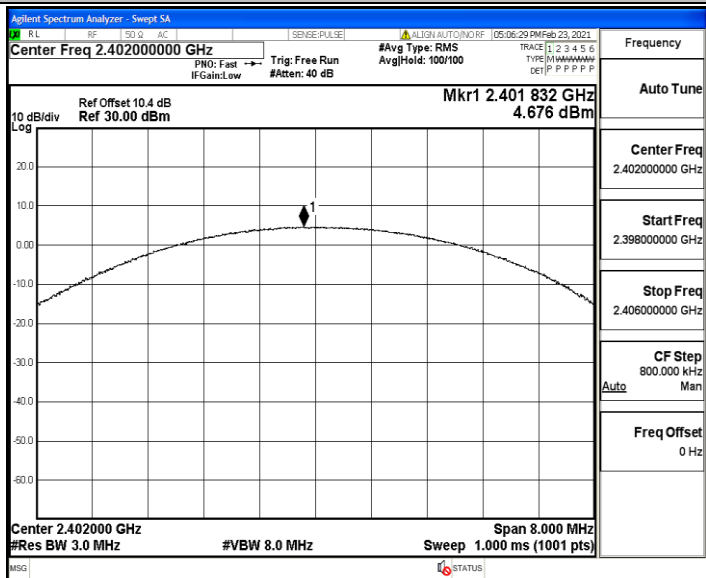
DH5_Ant1_2441



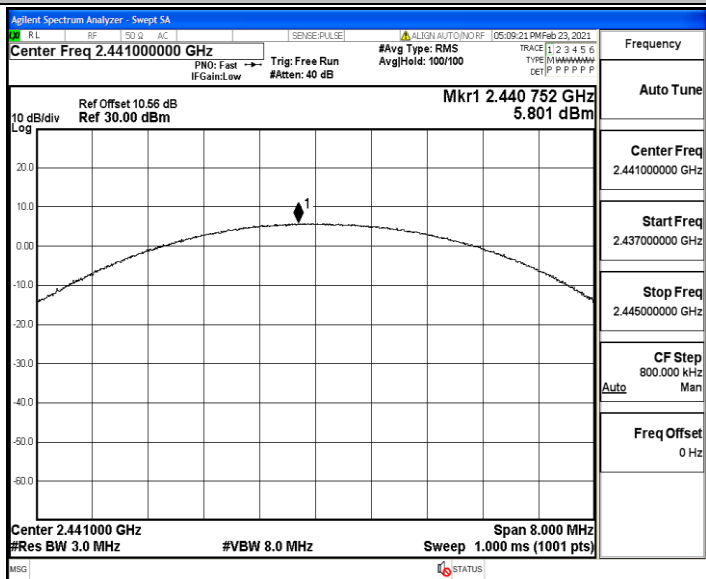
DH5_Ant1_2480



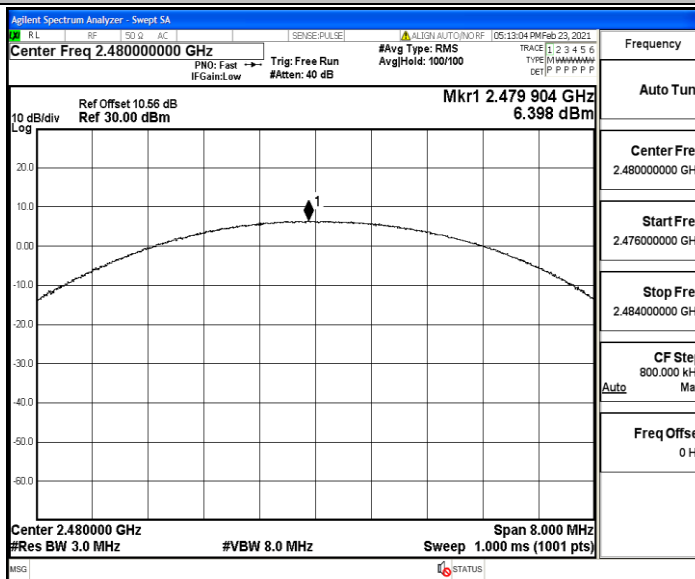
2DH5_Ant1_2402



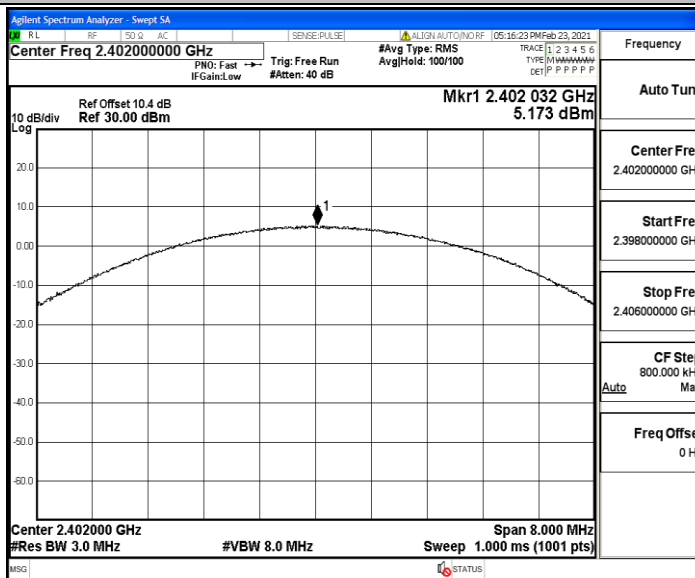
2DH5_Ant1_2441



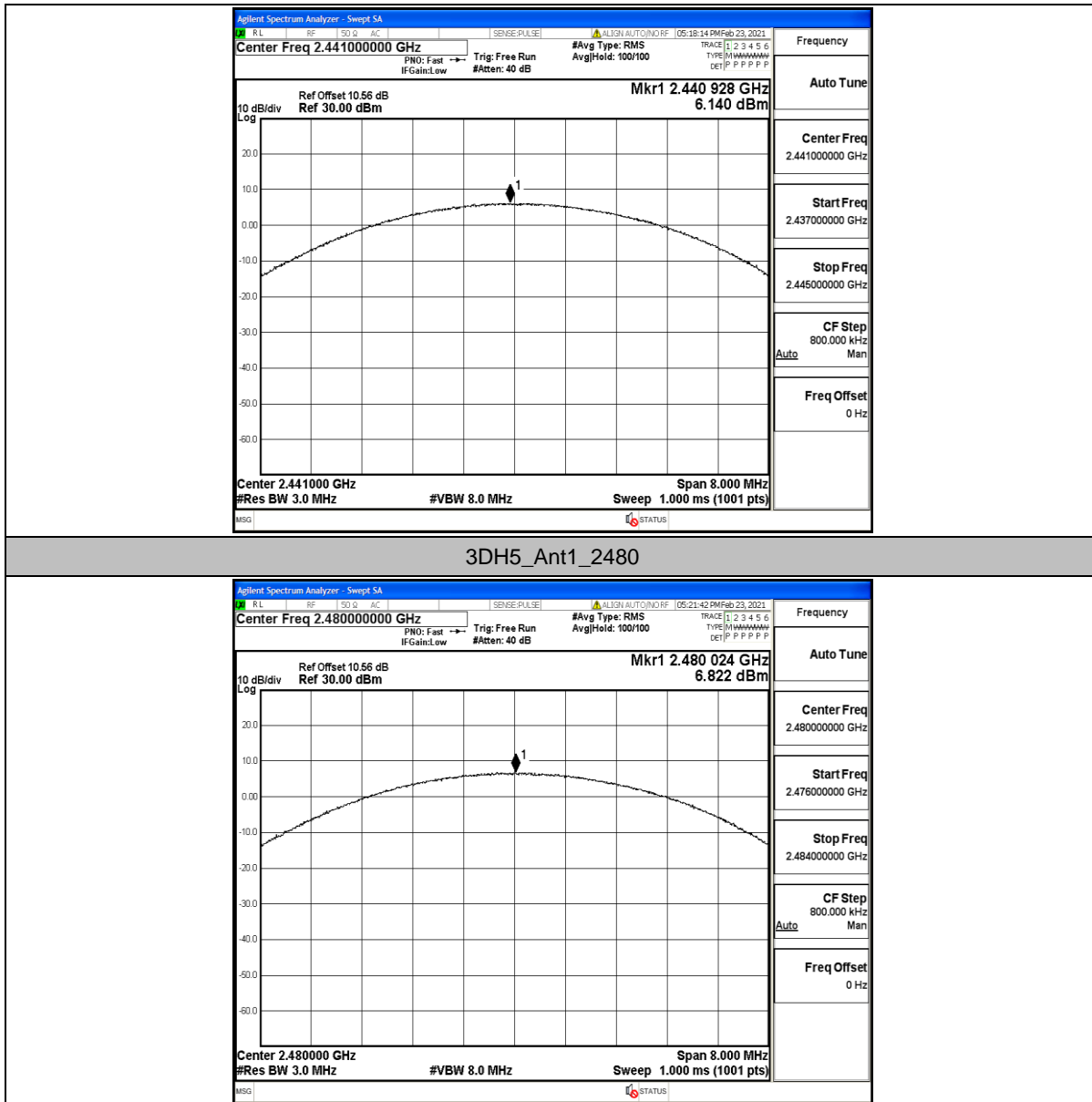
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441

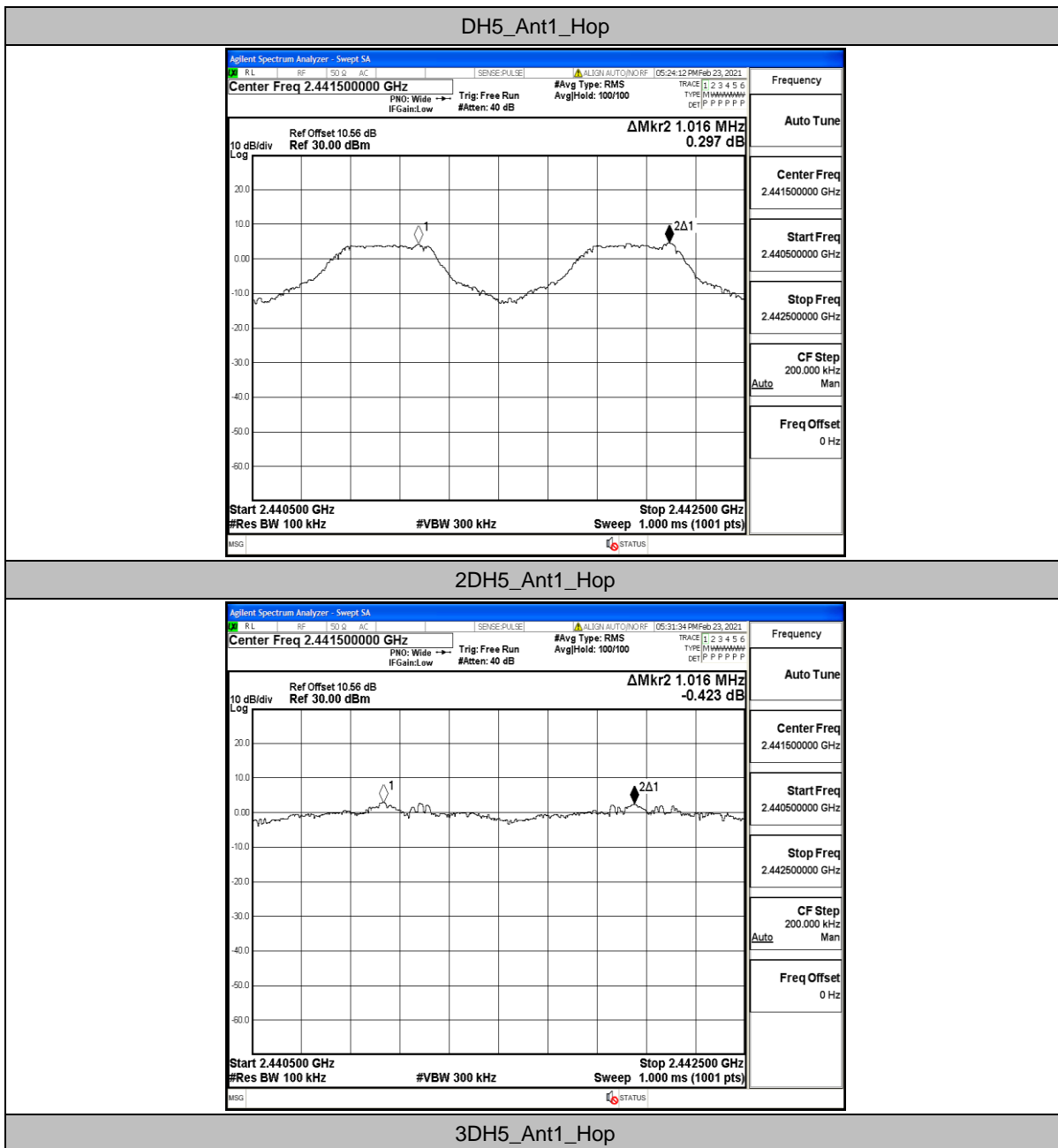


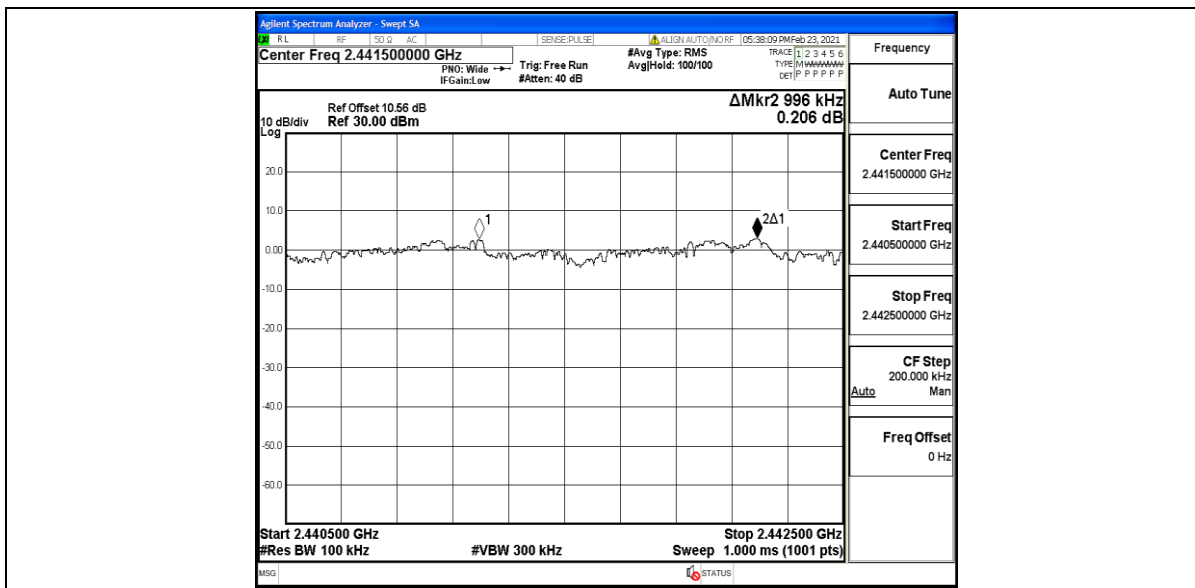
Appendix C: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 1.008	PASS
2DH5	Ant1	Hop	1.016	≥ 0.884	PASS
3DH5	Ant1	Hop	0.996	≥ 0.890	PASS

Test Graphs



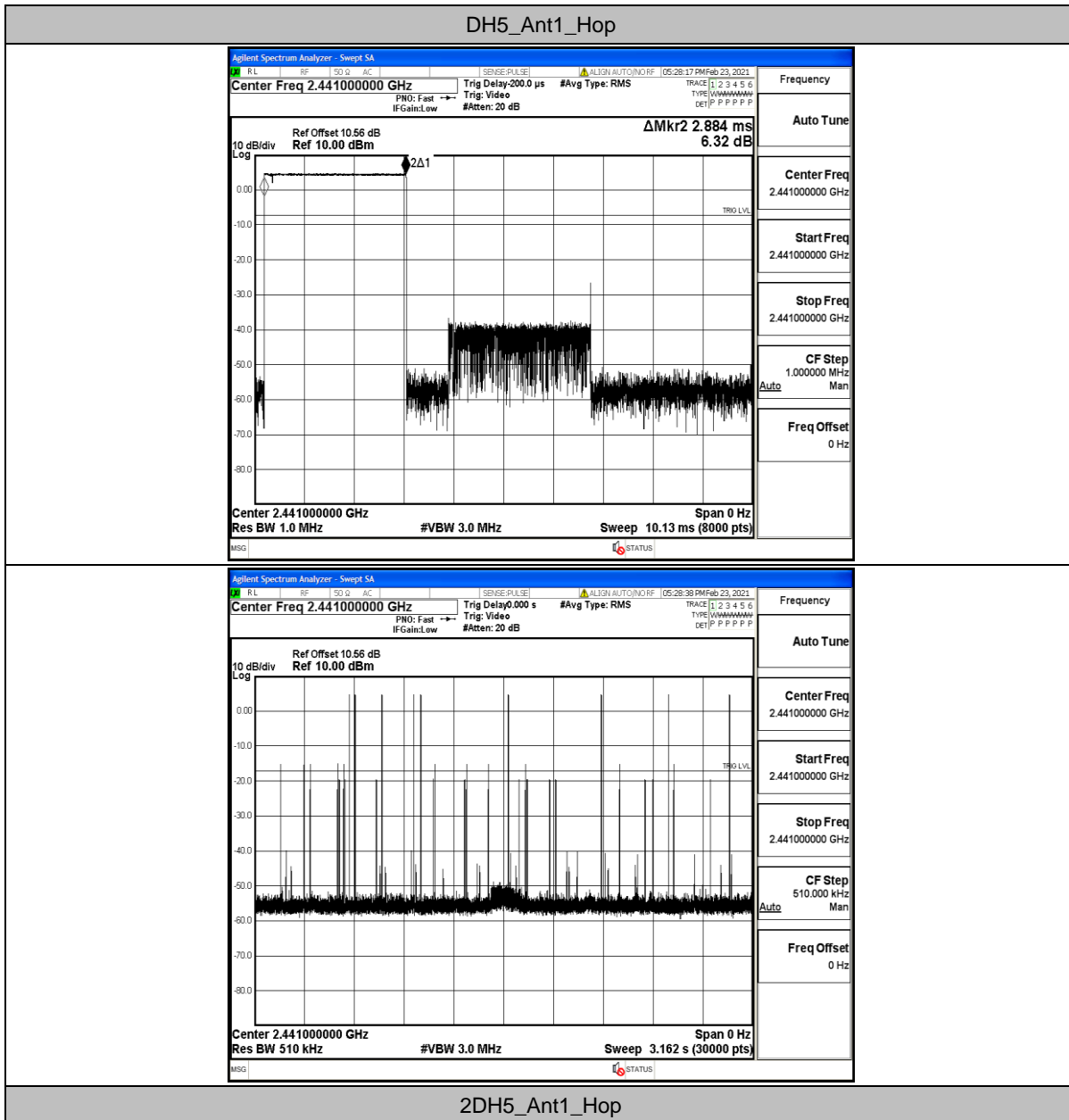


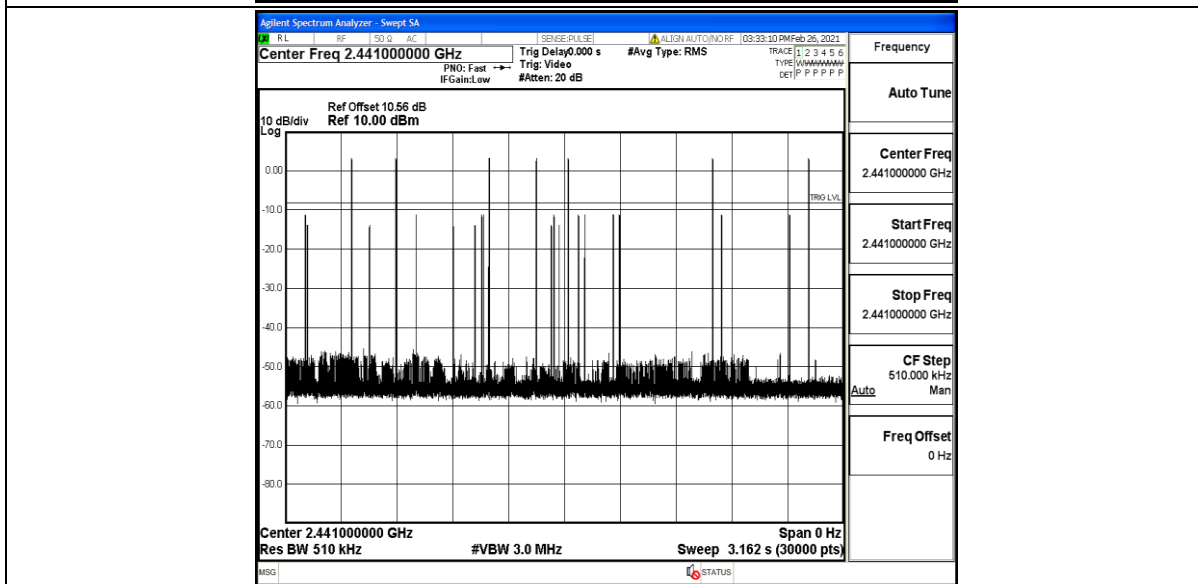
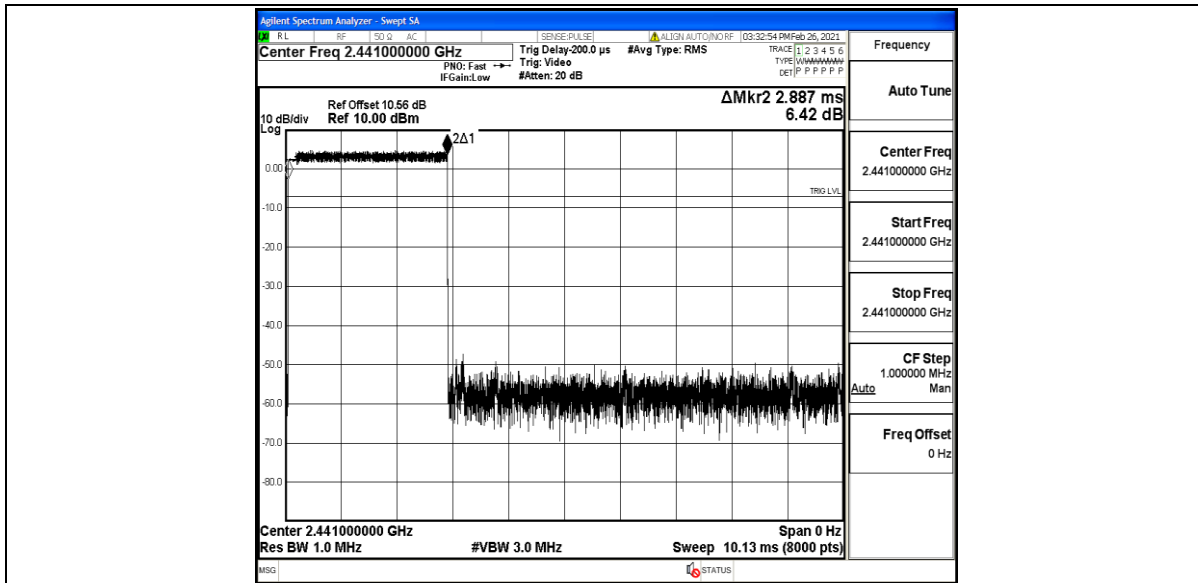
Appendix D: Time of occupancy

Test Result

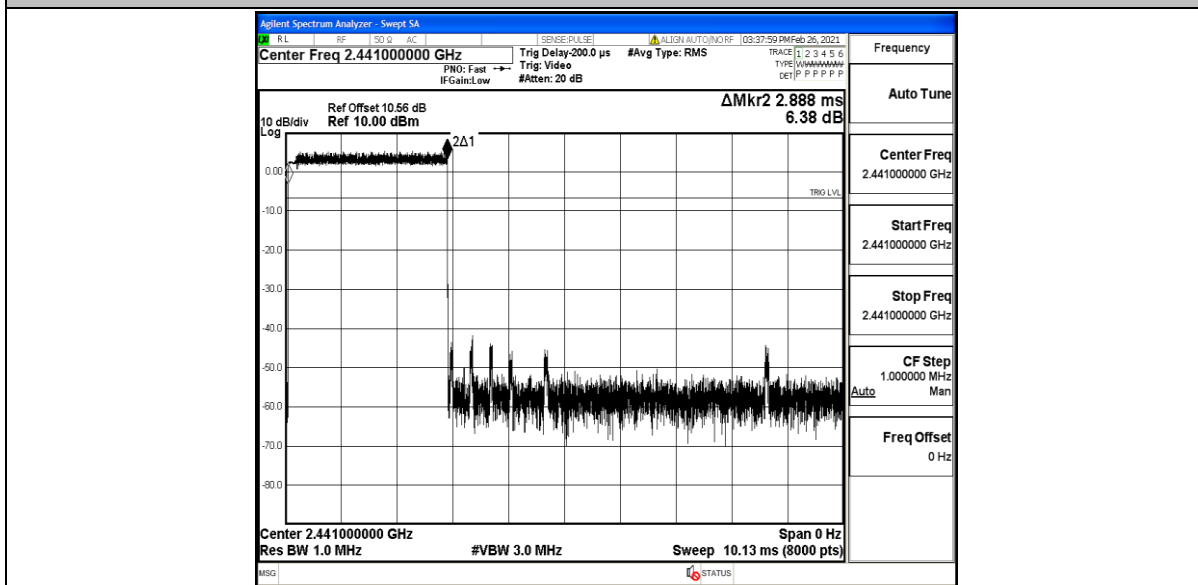
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	100	0.288	<=0.4	PASS
2DH5	Ant1	Hop	2.89	80	0.231	<=0.4	PASS
3DH5	Ant1	Hop	2.89	80	0.231	<=0.4	PASS

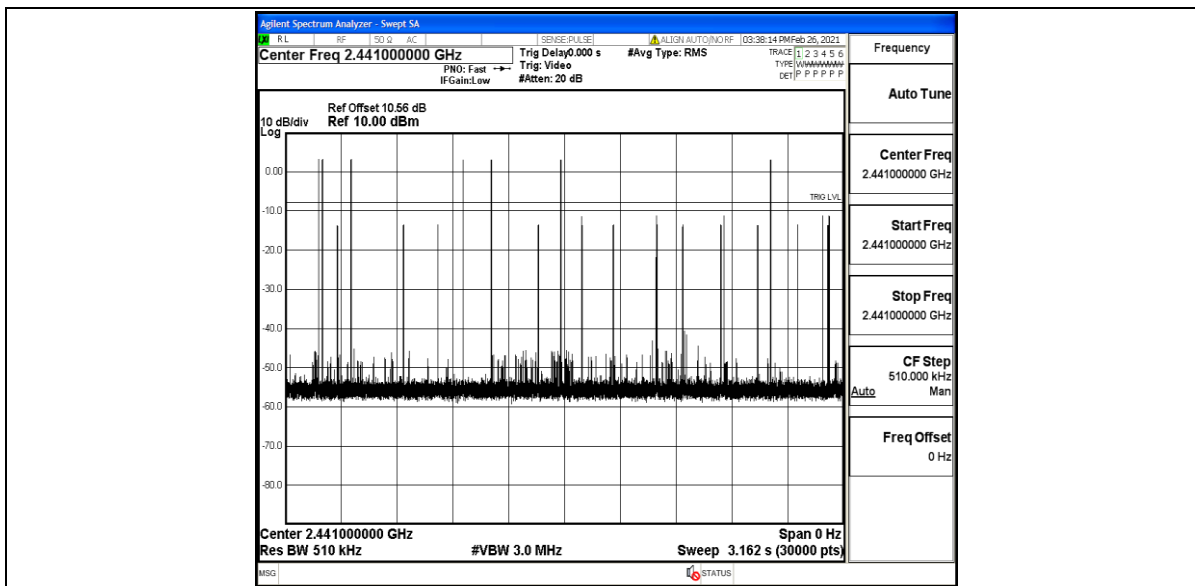
Test Graphs





3DH5_Ant1_Hop





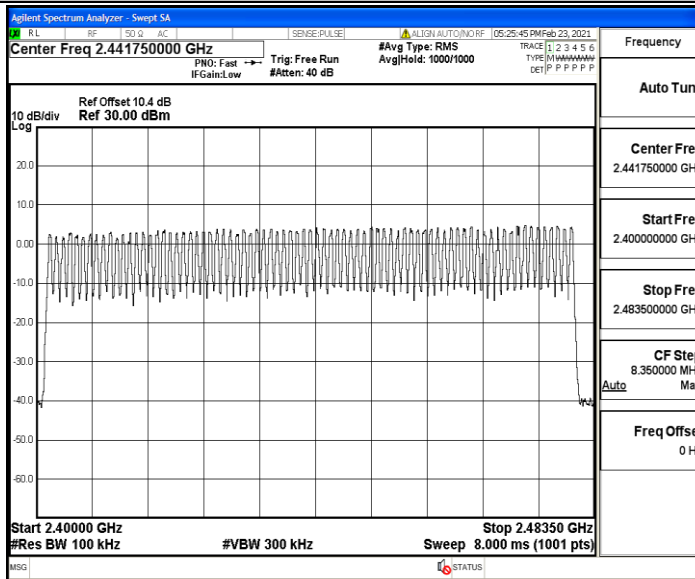
Appendix E: Number of hopping channels

Test Result

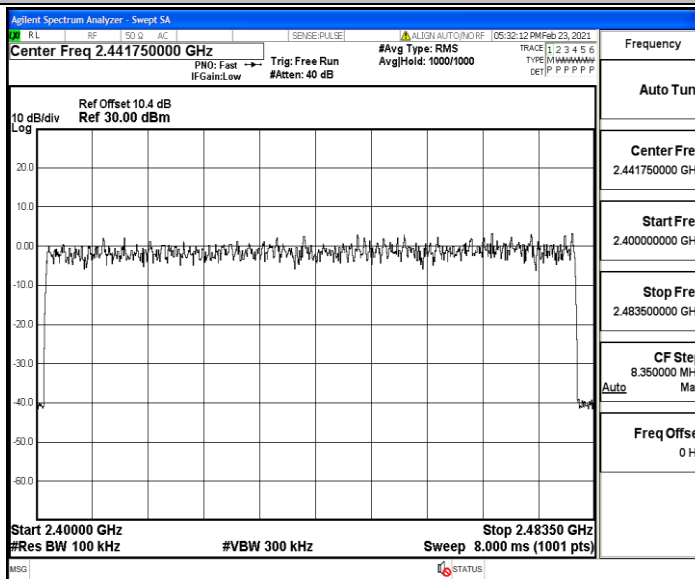
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS
2DH5	Ant1	Hop	79	>=15	PASS
3DH5	Ant1	Hop	79	>=15	PASS

Test Graphs

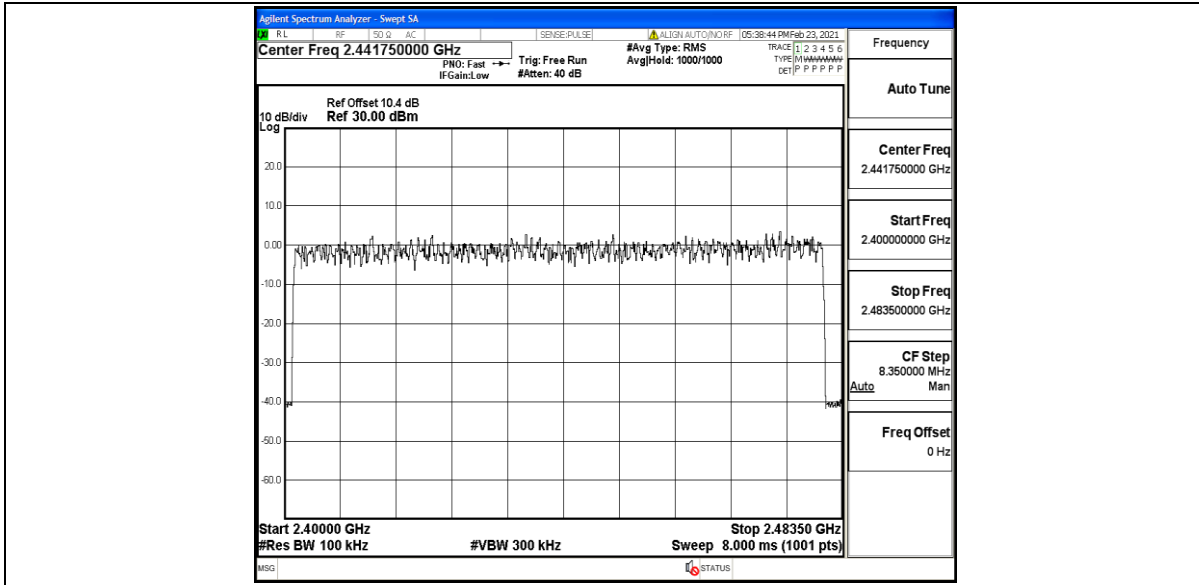
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



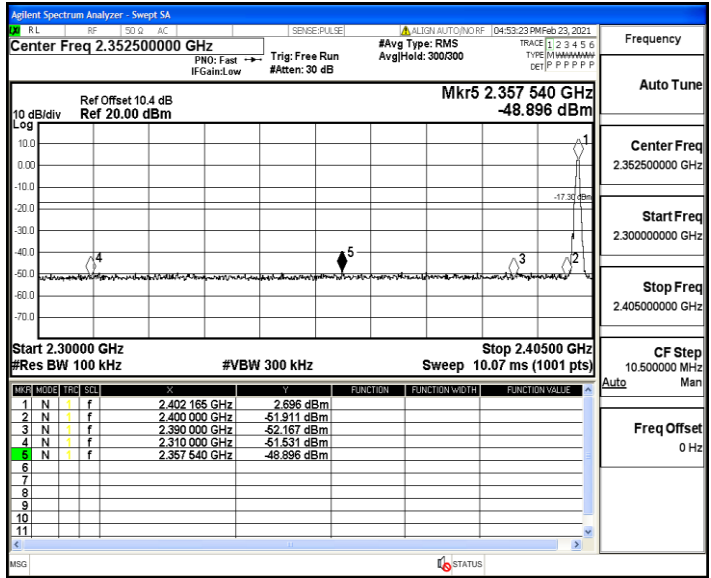
Appendix F: Band edge measurements

Test Result

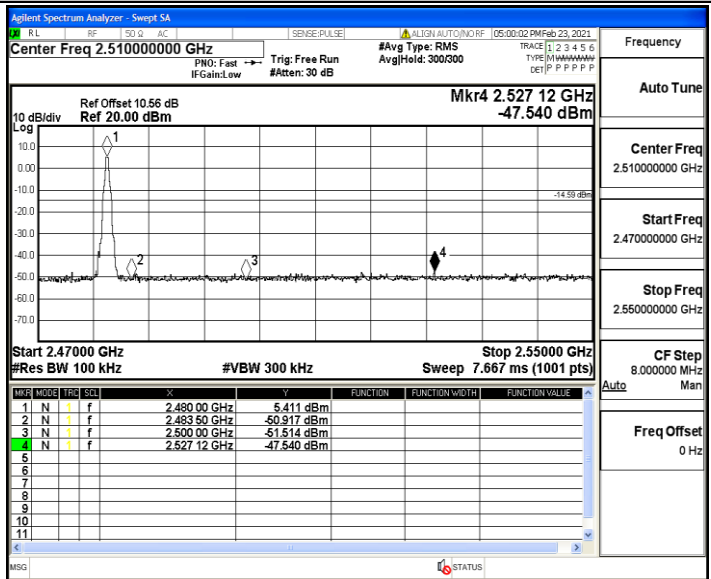
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.70	-48.9	<=-17.3	PASS
		High	2480	5.41	-47.54	<=-14.59	PASS
		Low	Hop_2402	1.69	-49.11	<=-18.31	PASS
		High	Hop_2480	5.06	-48.2	<=-14.94	PASS
2DH5	Ant1	Low	2402	1.87	-48.55	<=-18.13	PASS
		High	2480	3.65	-47.18	<=-16.35	PASS
		Low	Hop_2402	-0.98	-49.33	<=-20.98	PASS
		High	Hop_2480	1.57	-47.69	<=-18.43	PASS
3DH5	Ant1	Low	2402	1.95	-48.93	<=-18.05	PASS
		High	2480	3.60	-47.58	<=-16.41	PASS
		Low	Hop_2402	1.10	-49.4	<=-18.9	PASS
		High	Hop_2480	3.70	-47.62	<=-16.3	PASS

Test Graphs

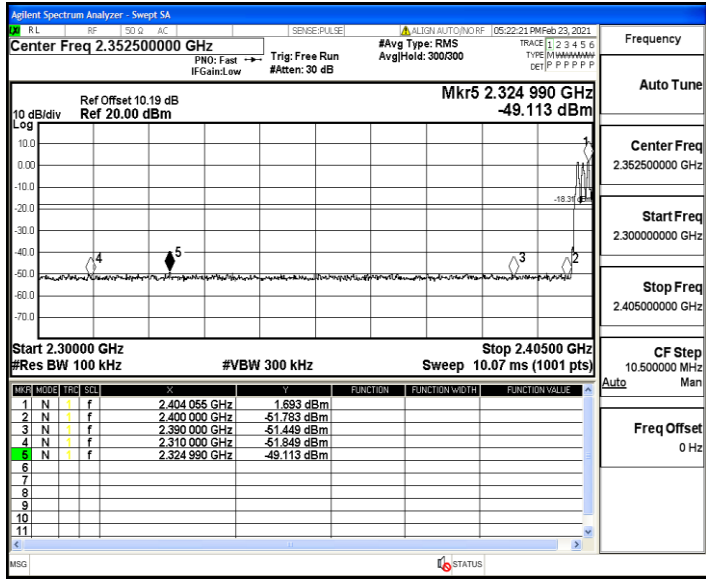
DH5_Ant1_Low_2402



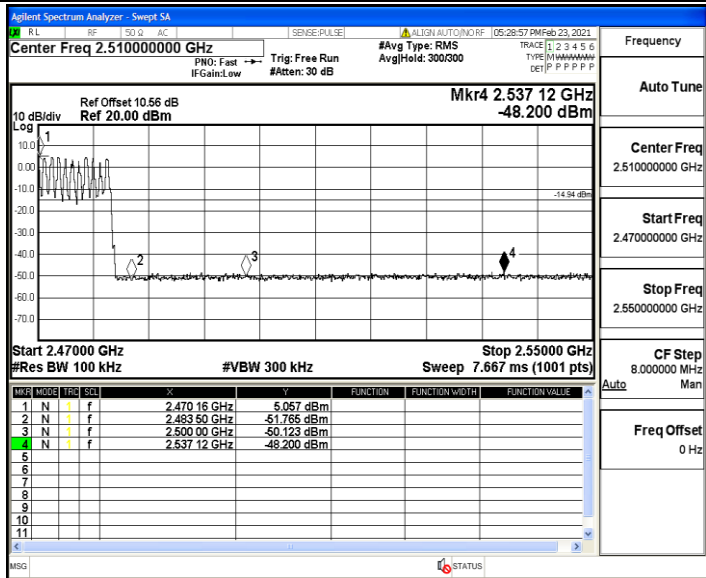
DH5_Ant1_High_2480



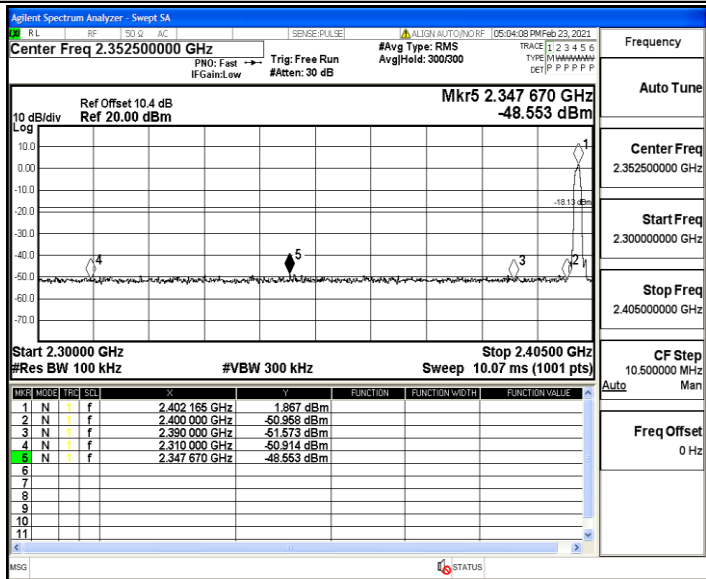
DH5_Ant1_Low_Hop_2402



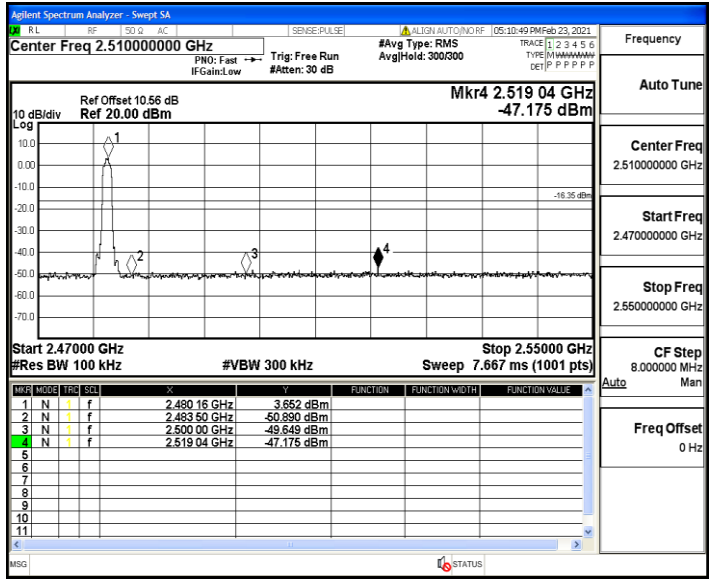
DH5_Ant1_High_Hop_2480



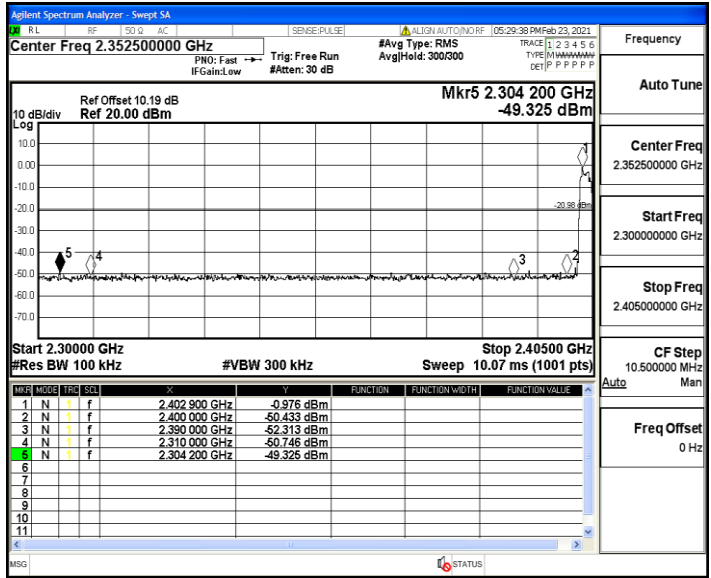
2DH5_Ant1_Low_2402



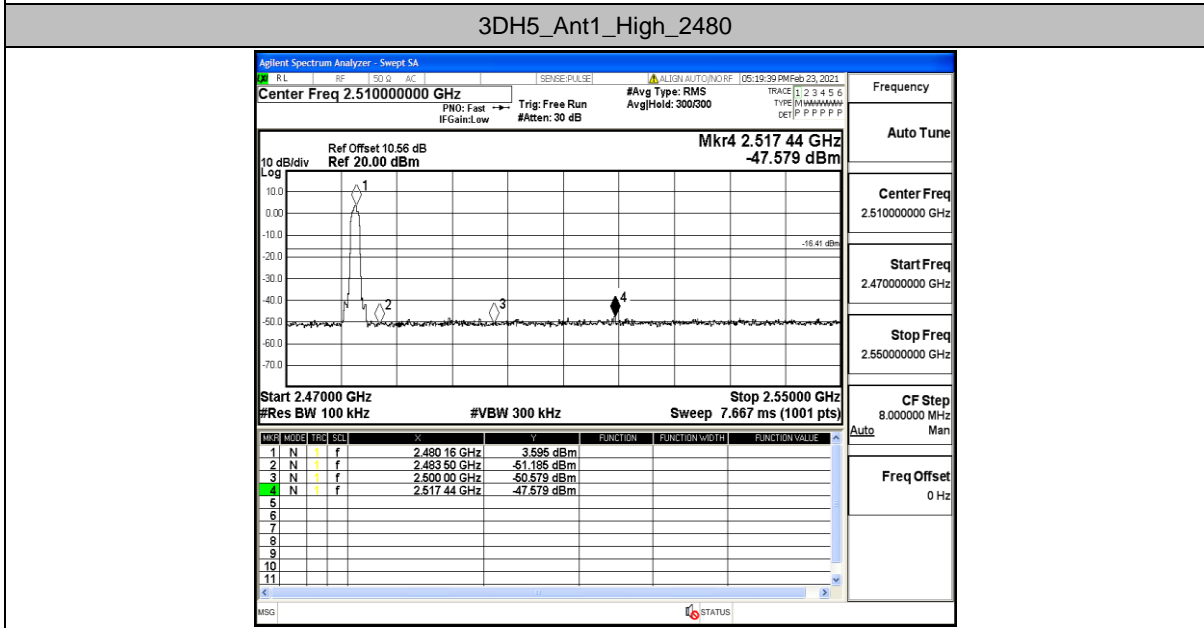
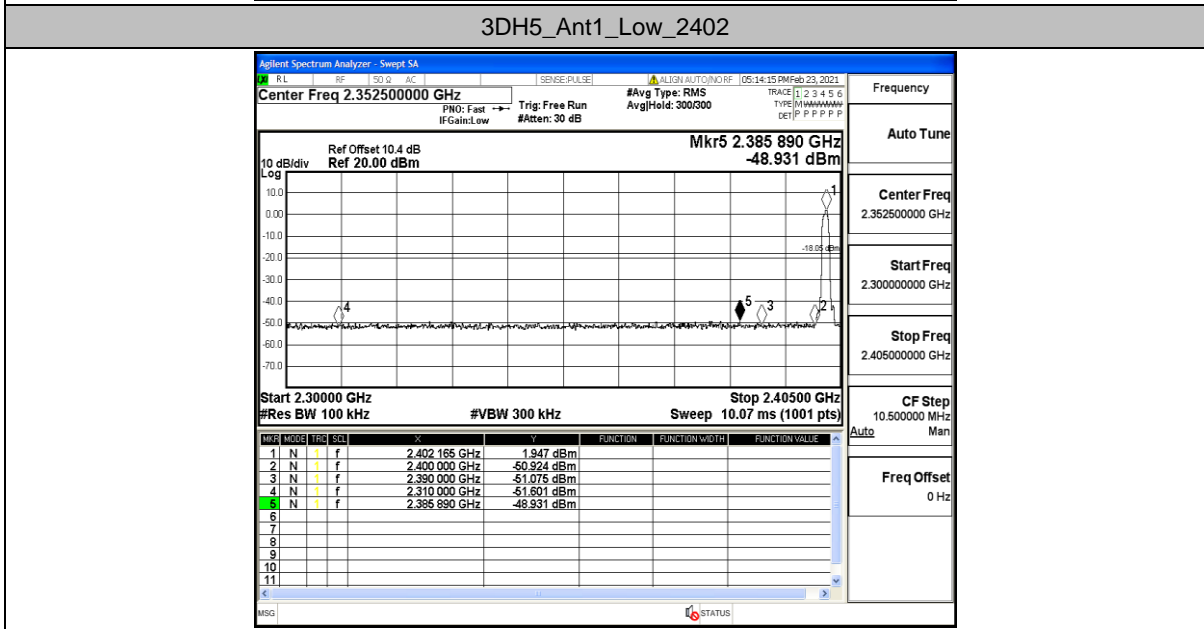
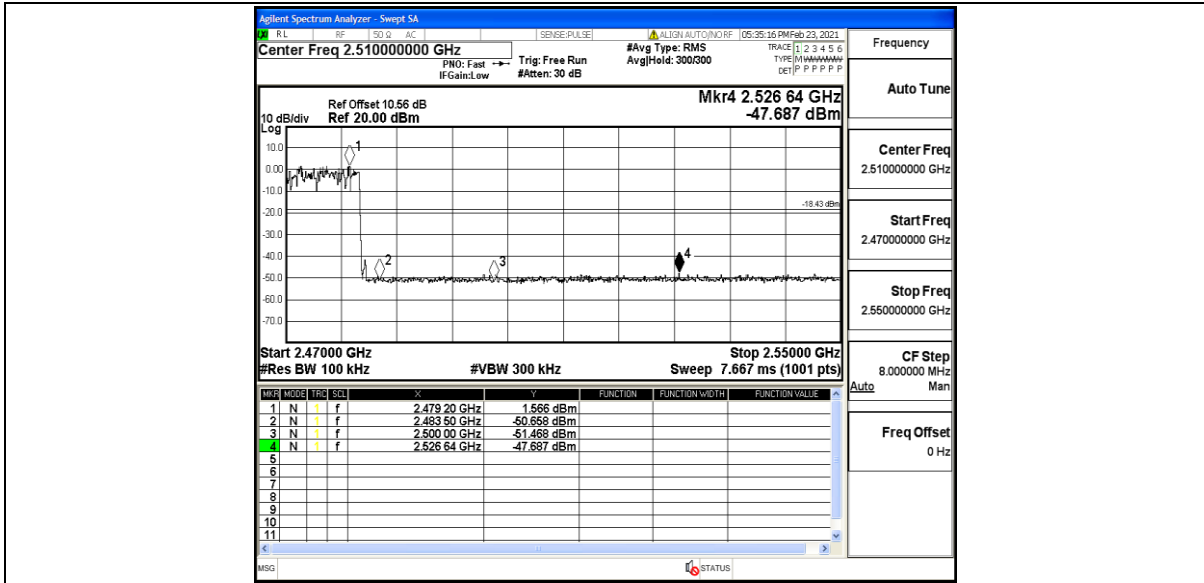
2DH5_Ant1_High_2480



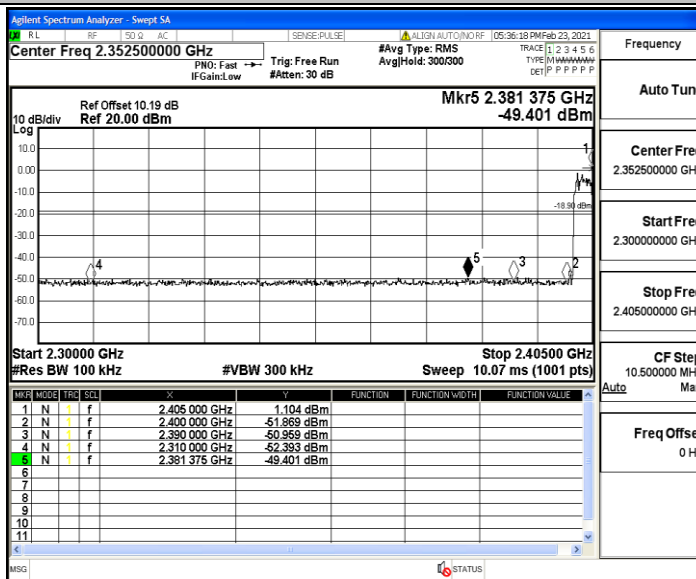
2DH5_Ant1_Low_Hop_2402



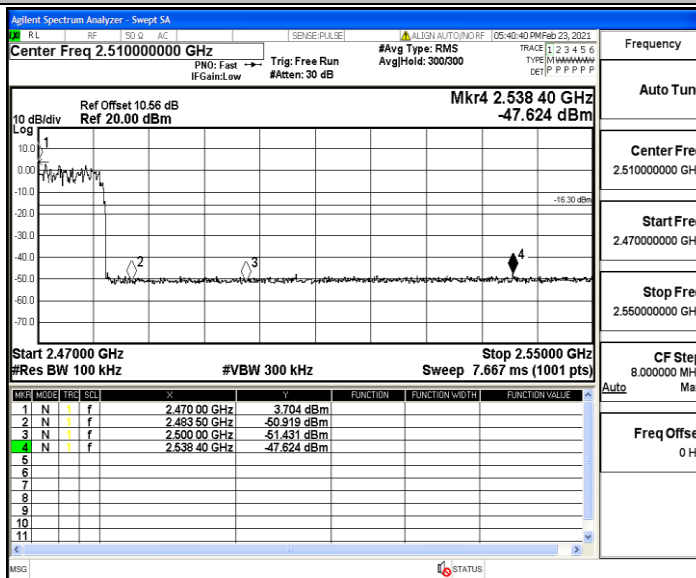
2DH5_Ant1_High_Hop_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



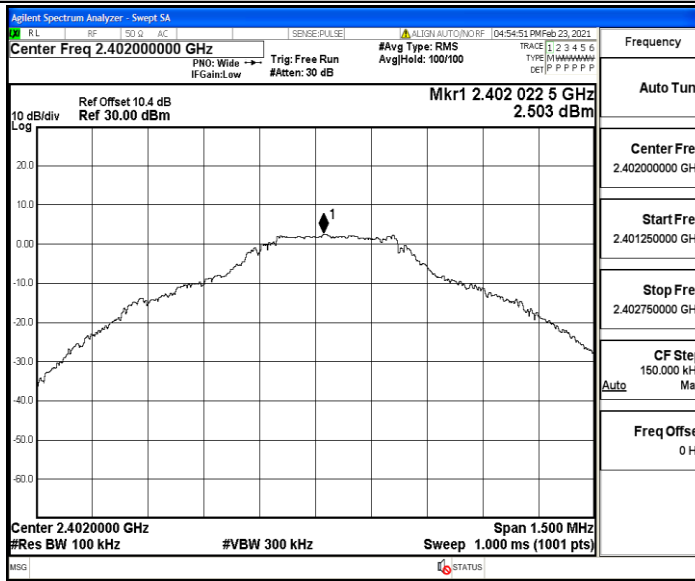
Appendix G: Conducted Spurious Emission

Test Result

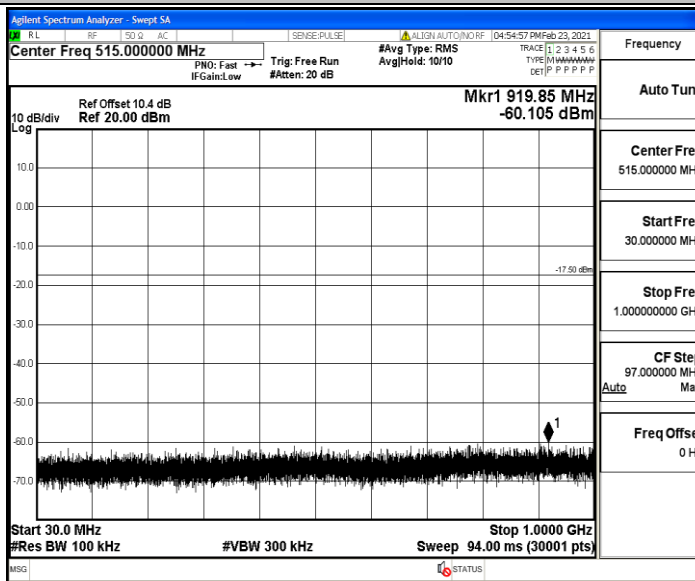
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.50	2.50	---	PASS
			30~1000	2.50	-60.11	<=-17.5	PASS
			1000~26500	2.50	-45.97	<=-17.5	PASS
		2441	Reference	4.51	4.51	---	PASS
			30~1000	4.51	-59.55	<=-15.49	PASS
			1000~26500	4.51	-45.9	<=-15.49	PASS
		2480	Reference	5.28	5.28	---	PASS
			30~1000	5.28	-60.38	<=-14.72	PASS
			1000~26500	5.28	-46.11	<=-14.72	PASS
2DH5	Ant1	2402	Reference	1.75	1.75	---	PASS
			30~1000	1.75	-60.28	<=-18.25	PASS
			1000~26500	1.75	-37.85	<=-18.25	PASS
		2441	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-59.47	<=-17.37	PASS
			1000~26500	2.63	-39.05	<=-17.37	PASS
		2480	Reference	3.36	3.36	---	PASS
			30~1000	3.36	-60.23	<=-16.64	PASS
			1000~26500	3.36	-41.43	<=-16.64	PASS
3DH5	Ant1	2402	Reference	1.83	1.83	---	PASS
			30~1000	1.83	-60.3	<=-18.17	PASS
			1000~26500	1.83	-37.79	<=-18.17	PASS
		2441	Reference	2.81	2.81	---	PASS
			30~1000	2.81	-59.85	<=-17.19	PASS
			1000~26500	2.81	-39.16	<=-17.19	PASS
		2480	Reference	3.47	3.47	---	PASS
			30~1000	3.47	-60	<=-16.54	PASS
			1000~26500	3.47	-41.18	<=-16.54	PASS

Test Graphs

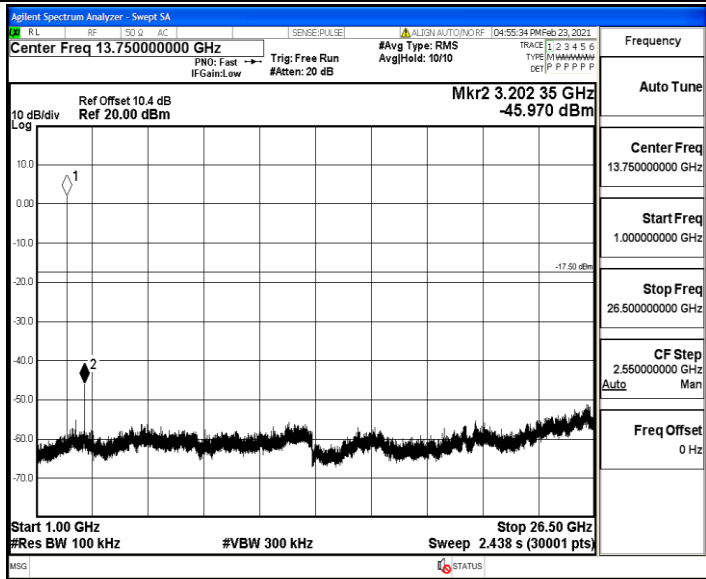
DH5_Ant1_2402_0~Reference



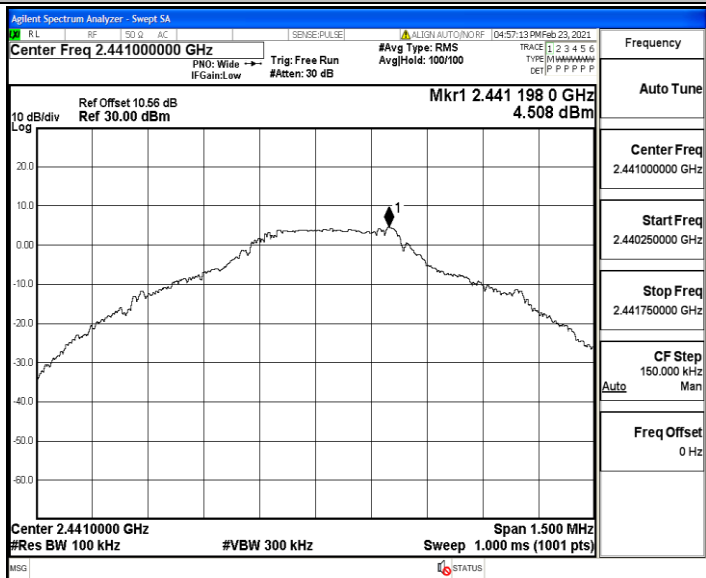
DH5_Ant1_2402_30~1000



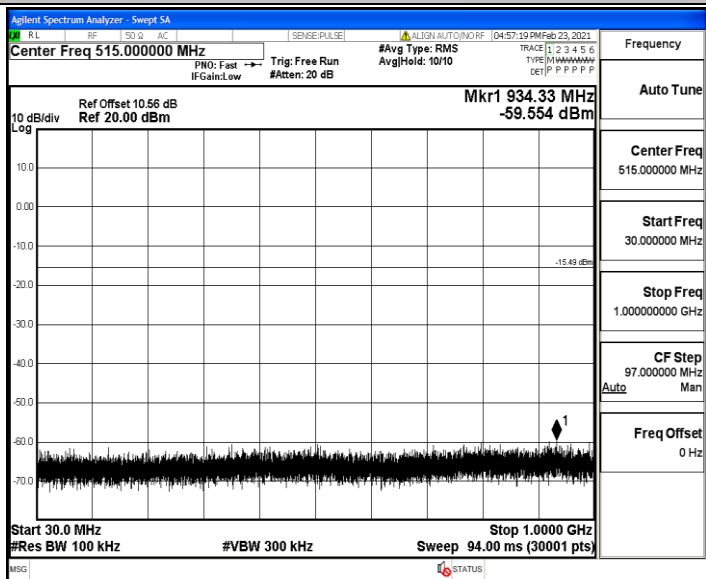
DH5_Ant1_2402_1000~26500



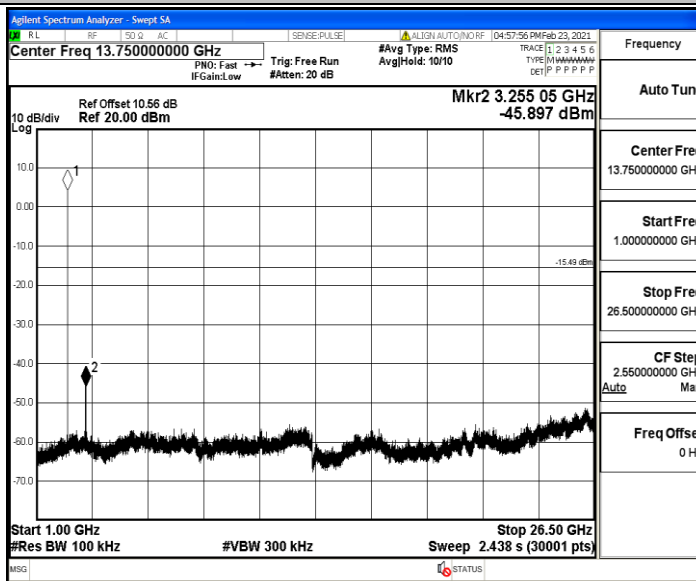
DH5_Ant1_2441_0~Reference



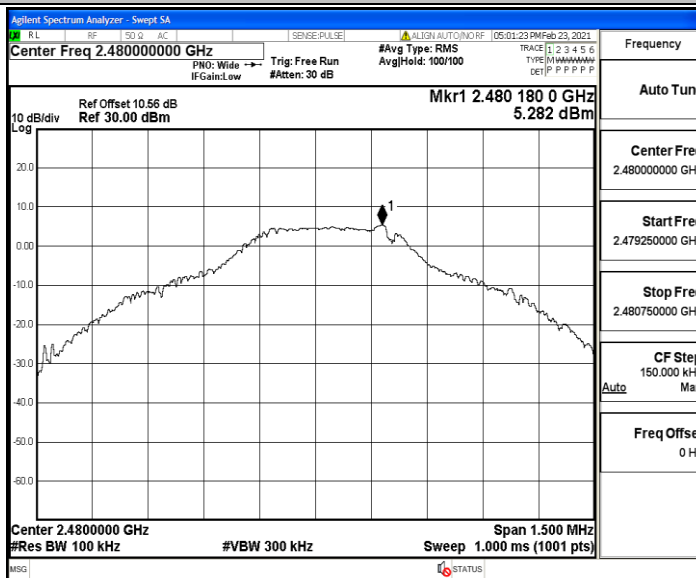
DH5_Ant1_2441_30~1000



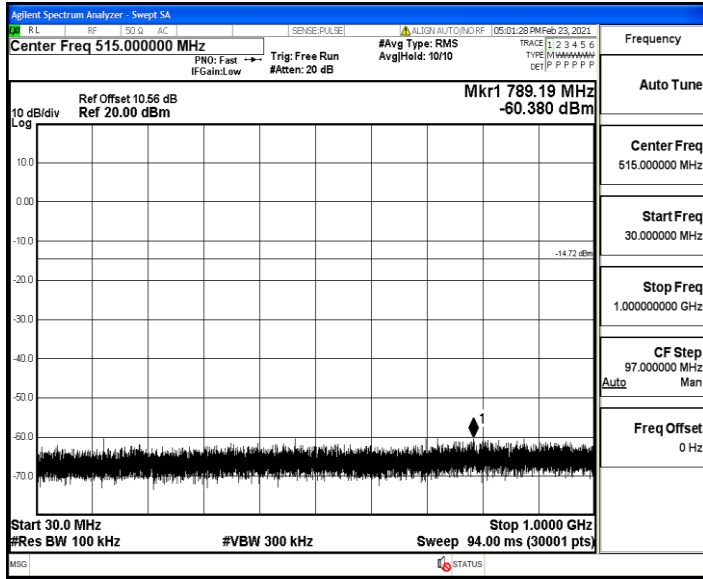
DH5_Ant1_2441_1000~26500



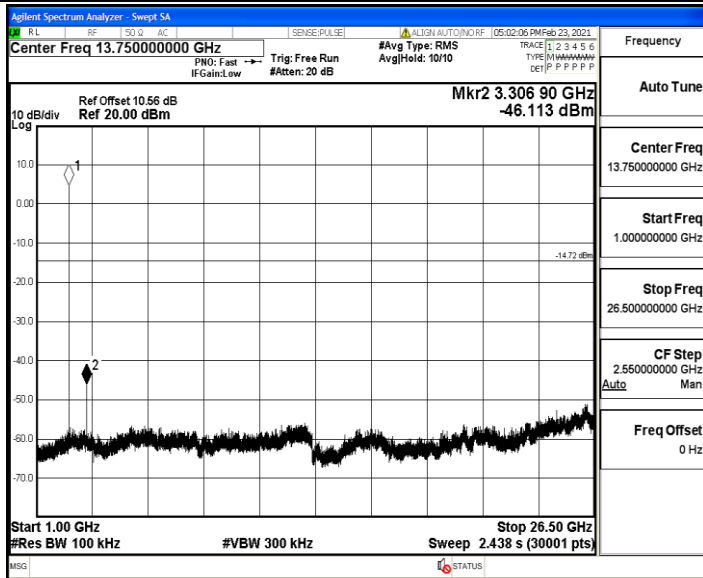
DH5_Ant1_2480_0~Reference



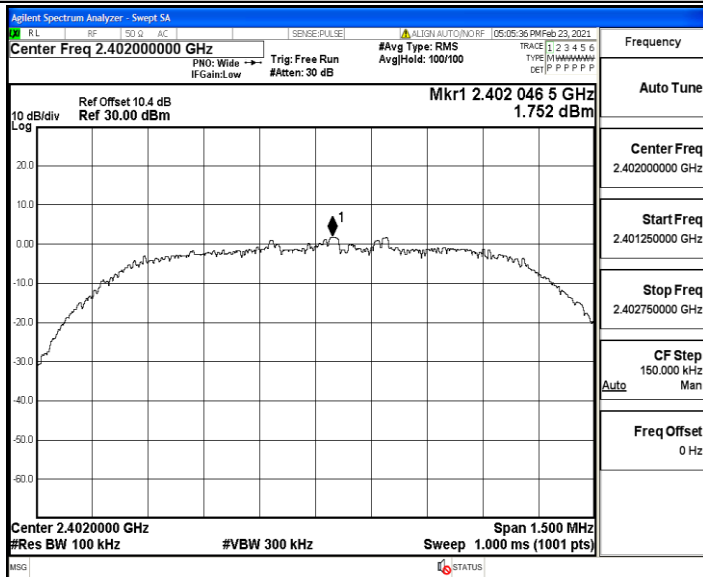
DH5_Ant1_2480_30~1000



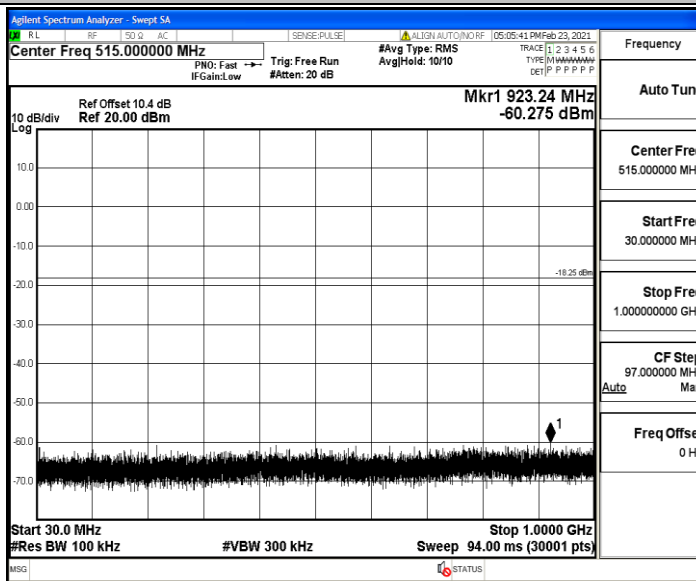
DH5_Ant1_2480_1000~26500



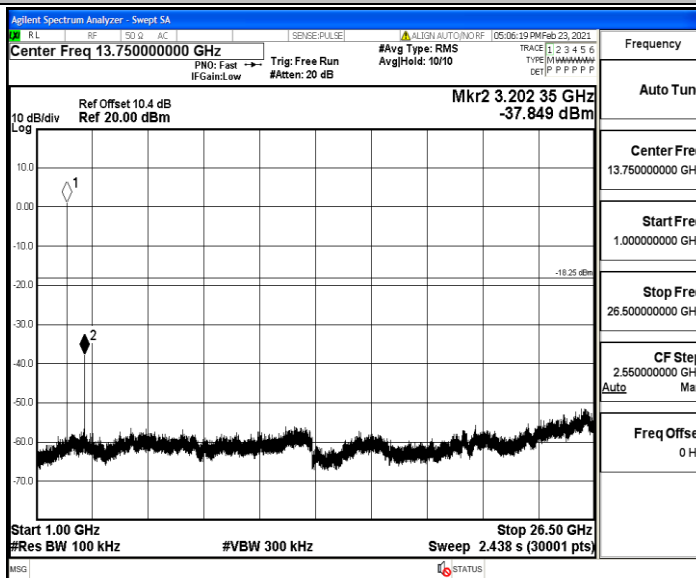
2DH5_Ant1_2402_0~Reference



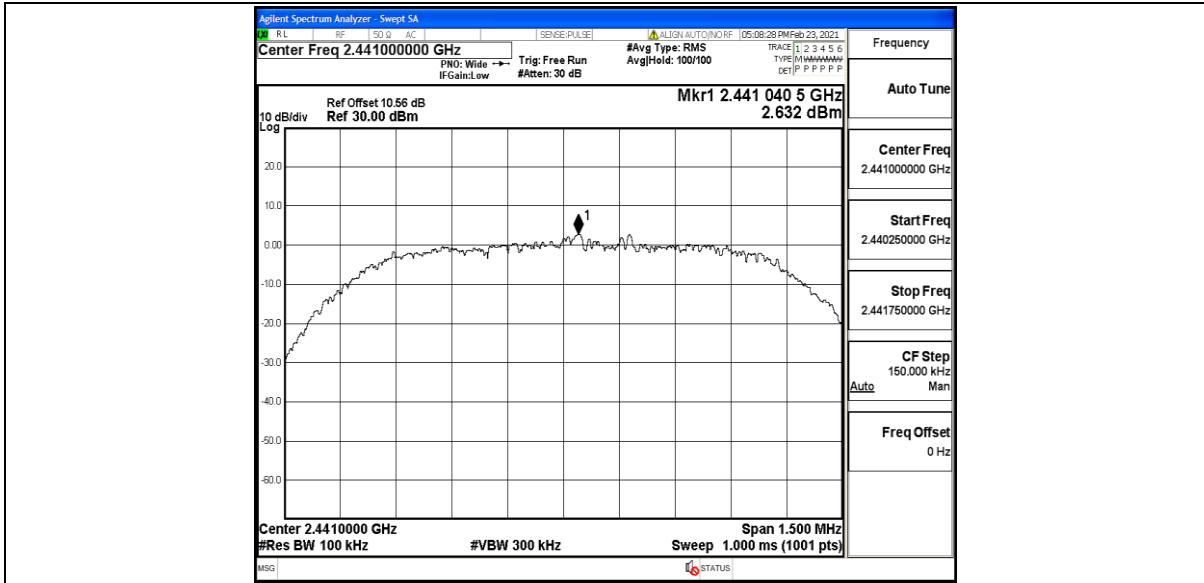
2DH5_Ant1_2402_30~1000



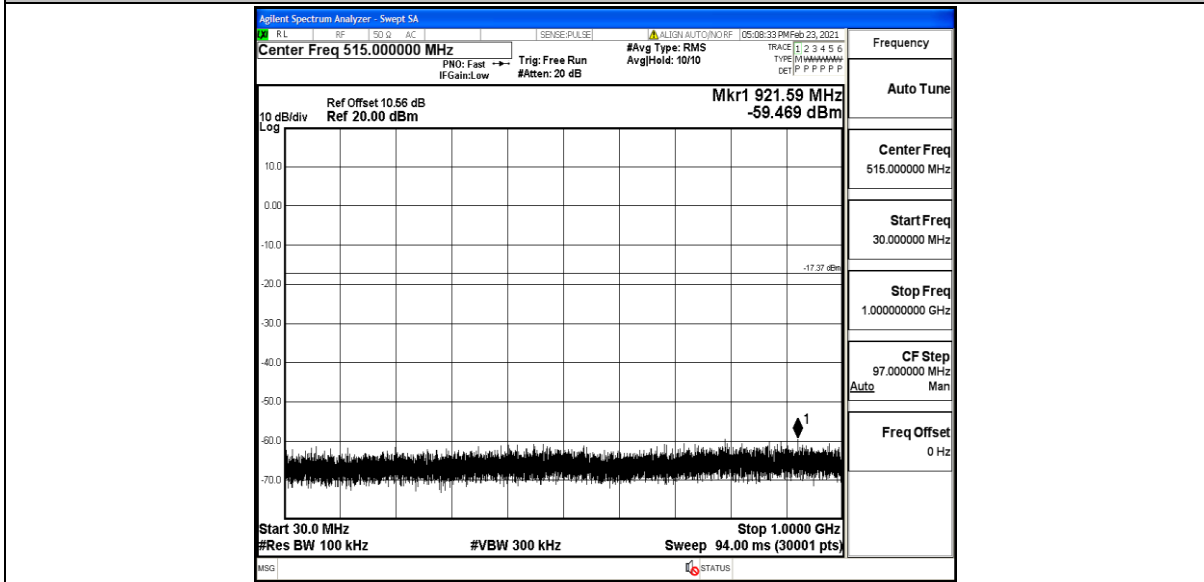
2DH5_Ant1_2402_1000~26500



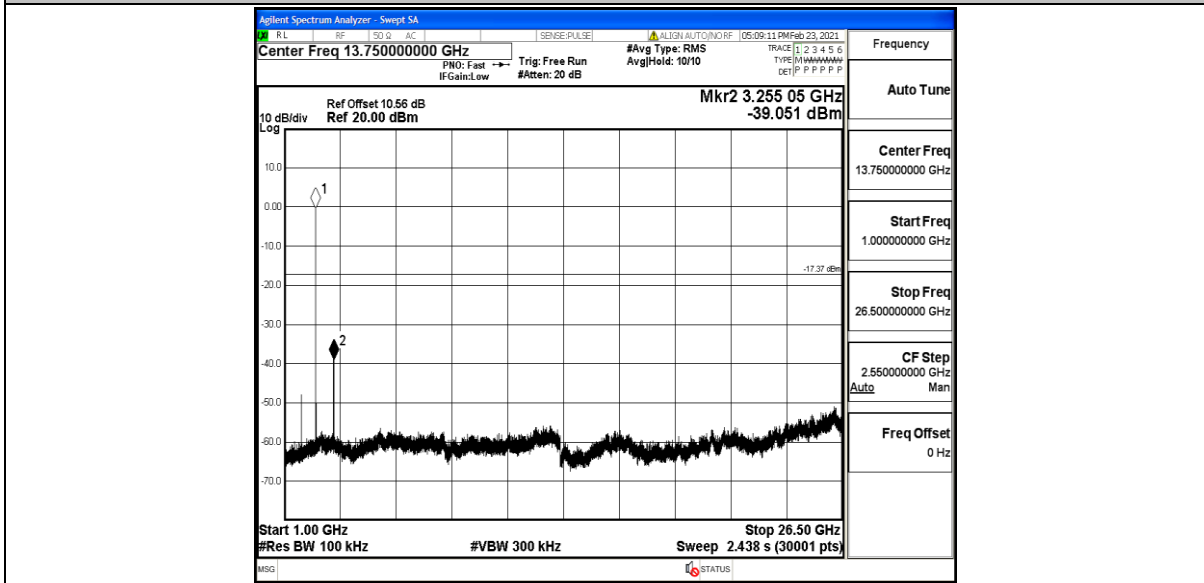
2DH5_Ant1_2441_0~Reference



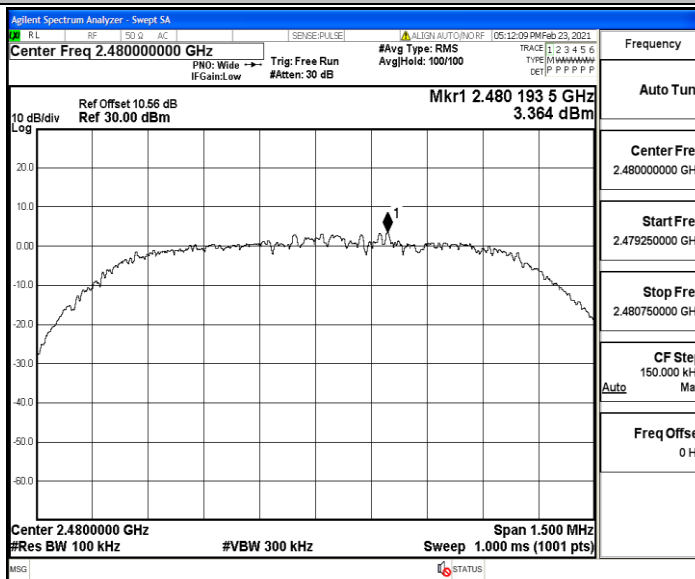
2DH5_Ant1_2441_30~1000



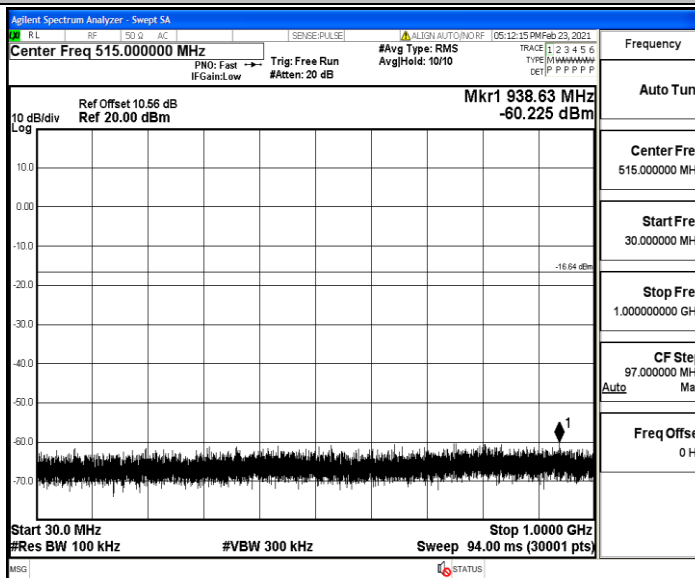
2DH5_Ant1_2441_1000~26500



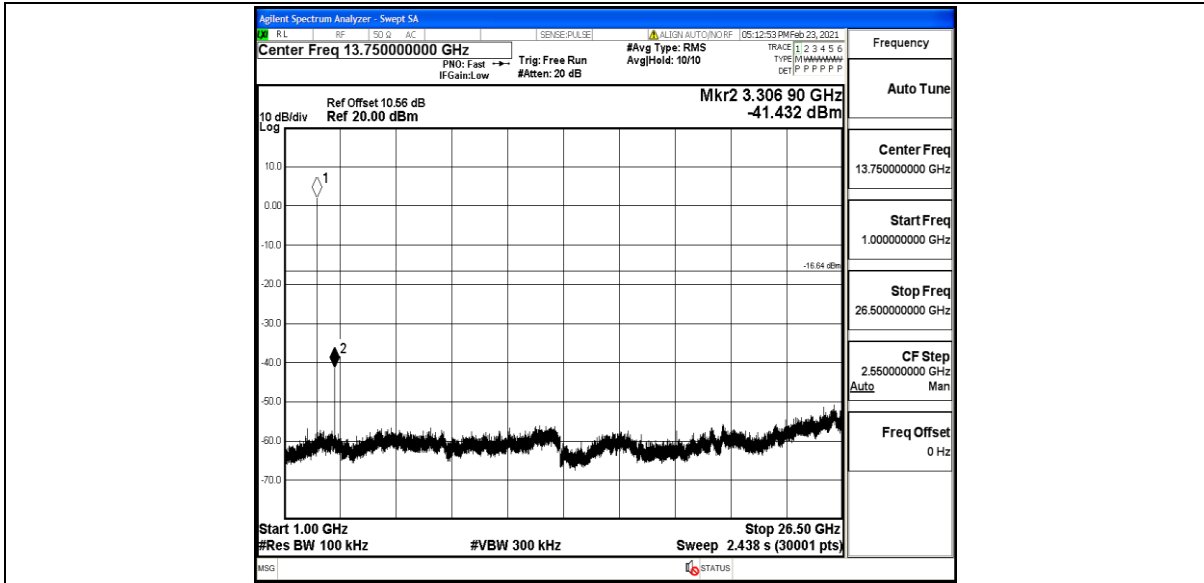
2DH5_Ant1_2480_0~Reference



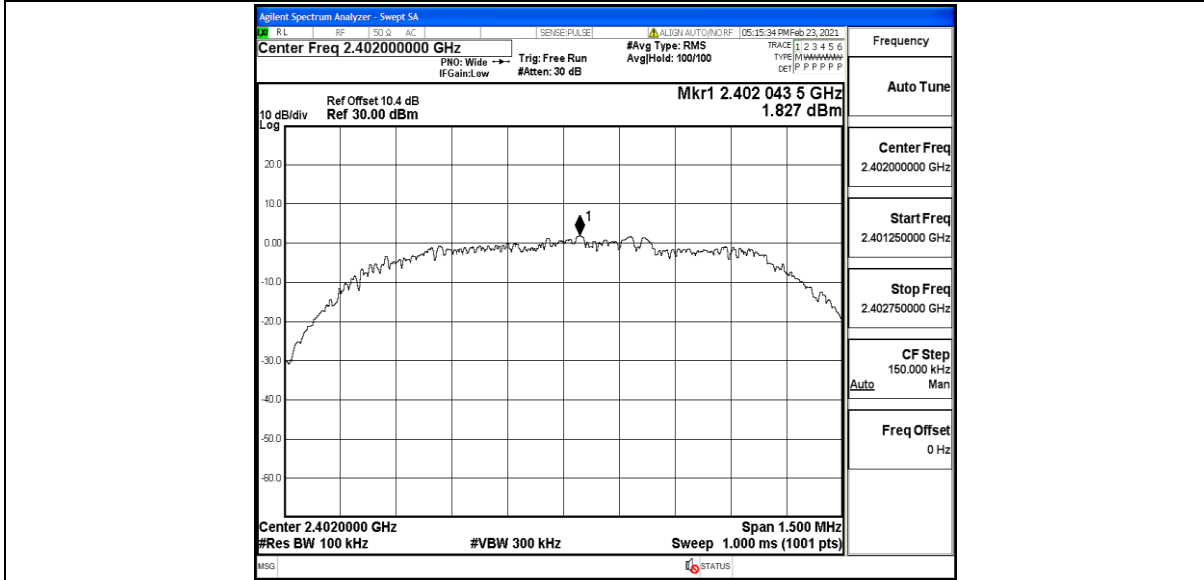
2DH5_Ant1_2480_30~1000



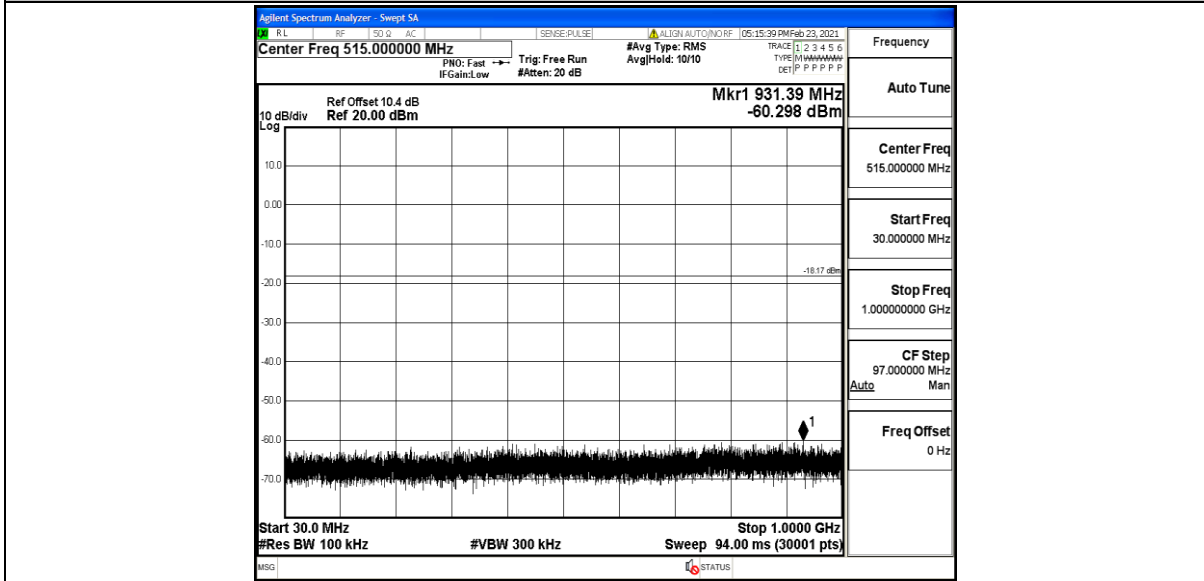
2DH5_Ant1_2480_1000~26500



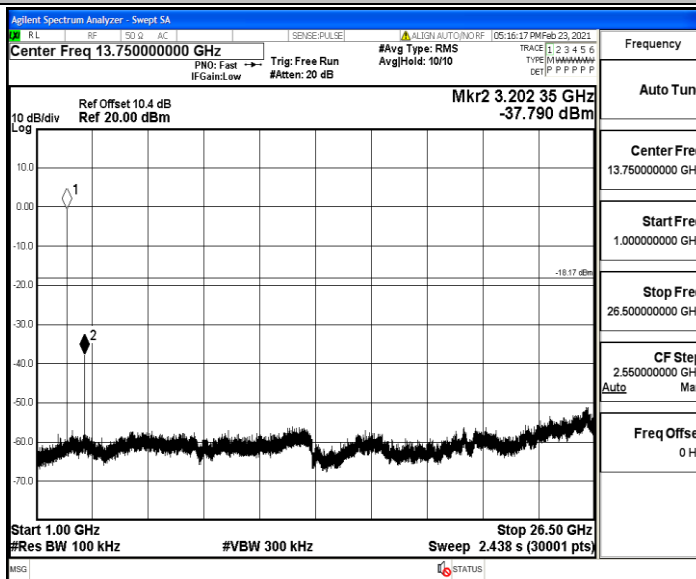
3DH5_Ant1_2402_0~Reference



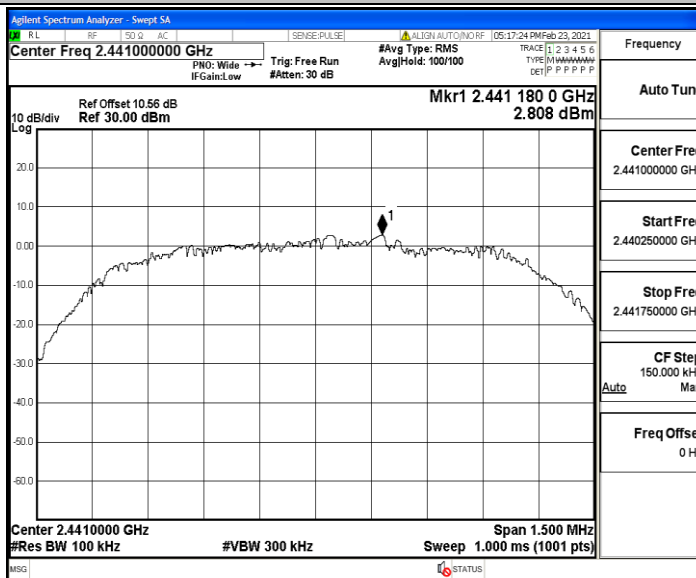
3DH5_Ant1_2402_30~1000



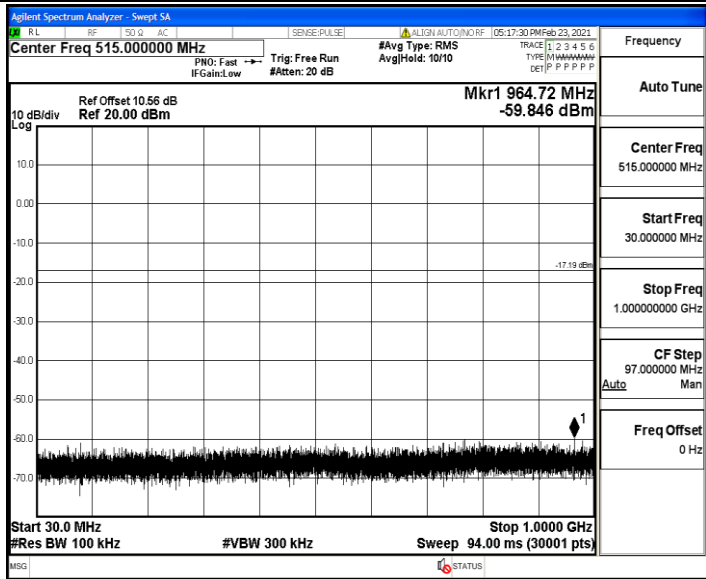
3DH5_Ant1_2402_1000~26500



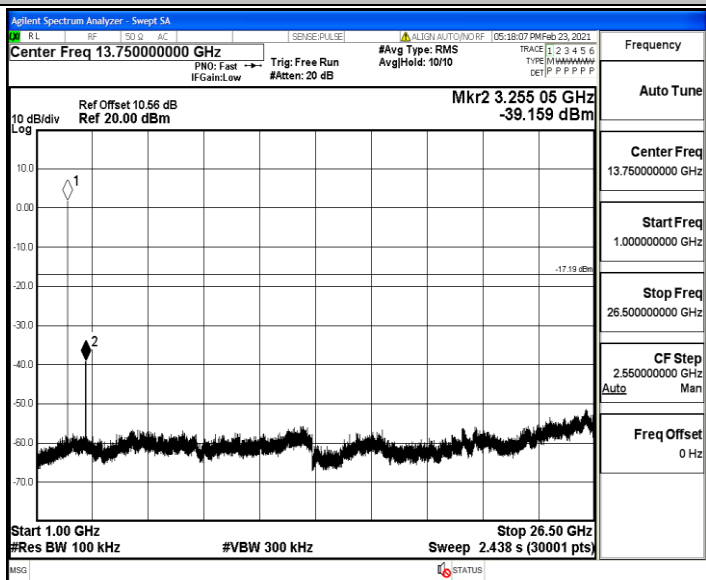
3DH5_Ant1_2441_0~Reference



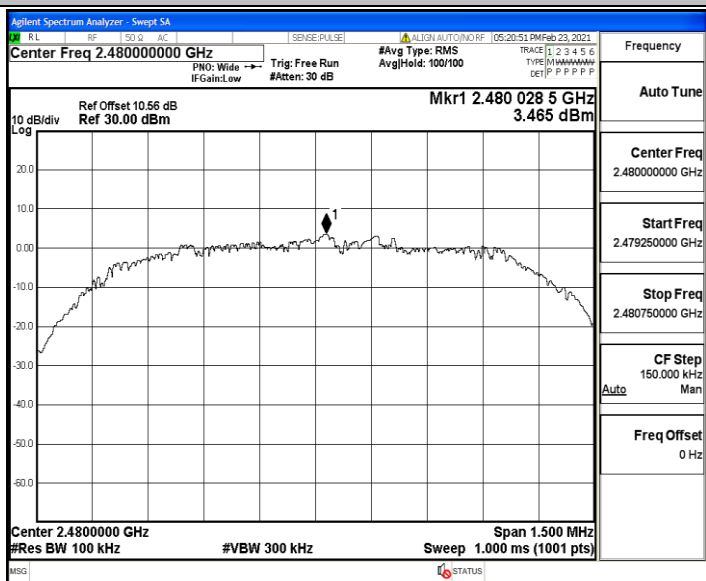
3DH5_Ant1_2441_30~1000

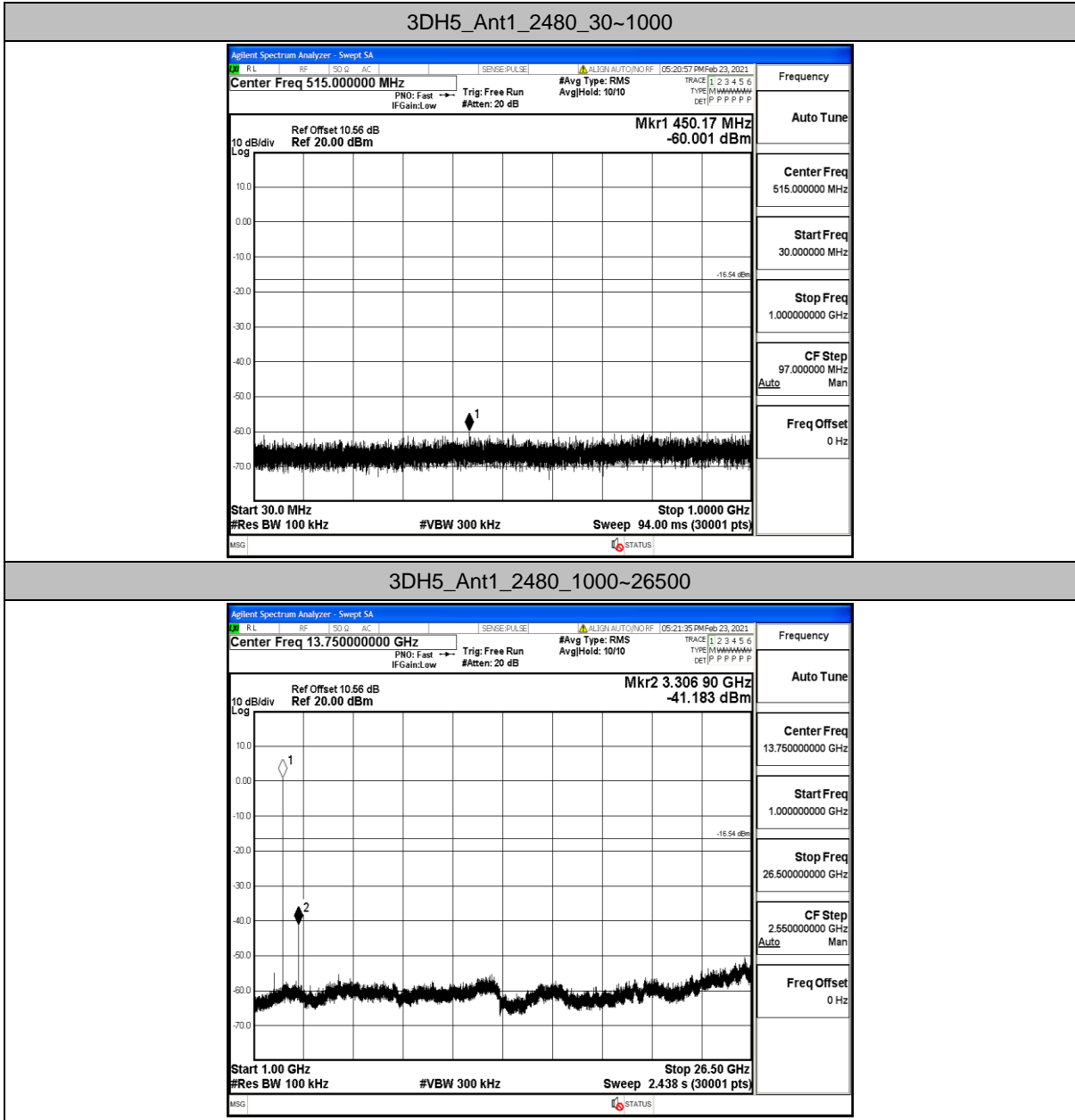


3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference





Appendix H: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq	Result	Limit	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-46.51	<=-41.20	PASS
				AV	2390.000	-46.2	<=-41.20	PASS
				Peak	2310.000	-40.3	<=-21.20	PASS
				Peak	2390.000	-39.34	<=-21.20	PASS
		High	2480	AV	2483.500	-45.01	<=-41.20	PASS
				AV	2500.000	-45.52	<=-41.20	PASS

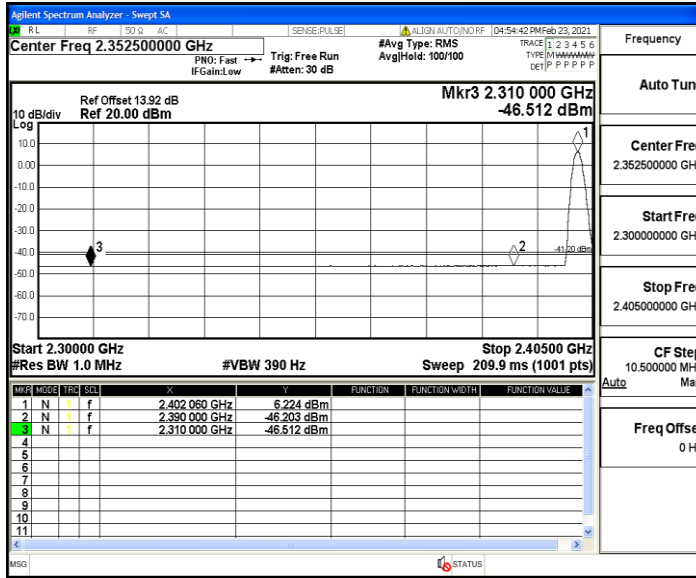
				Peak	2483.500	-37.88	<=-21.20	PASS
				Peak	2500.000	-39.11	<=-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-46.5	<=-41.20	PASS
				AV	2390.000	-46.28	<=-41.20	PASS
				Peak	2310.000	-39.42	<=-21.20	PASS
				Peak	2390.000	-39.91	<=-21.20	PASS
		High	2480	AV	2483.500	-44.68	<=-41.20	PASS
				AV	2500.000	-45.51	<=-41.20	PASS
				Peak	2483.500	-38.39	<=-21.20	PASS
				Peak	2500.000	-37.67	<=-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-46.56	<=-41.20	PASS
				AV	2390.000	-46.21	<=-41.20	PASS
				Peak	2310.000	-37.11	<=-21.20	PASS
				Peak	2390.000	-38.88	<=-21.20	PASS
		High	2480	AV	2483.500	-44.6	<=-41.20	PASS
				AV	2500.000	-45.41	<=-41.20	PASS
				Peak	2483.500	-38.78	<=-21.20	PASS
				Peak	2500.000	-39.36	<=-21.20	PASS

Note:

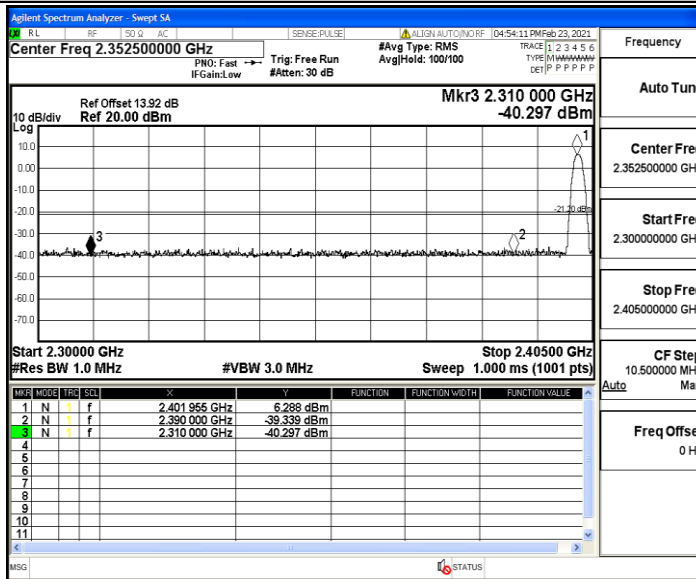
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

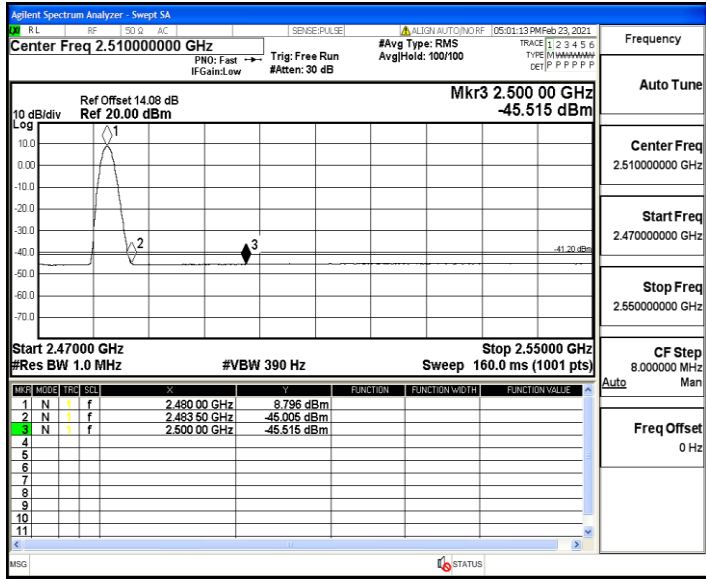
DH5_Ant1_Low_2402_AV



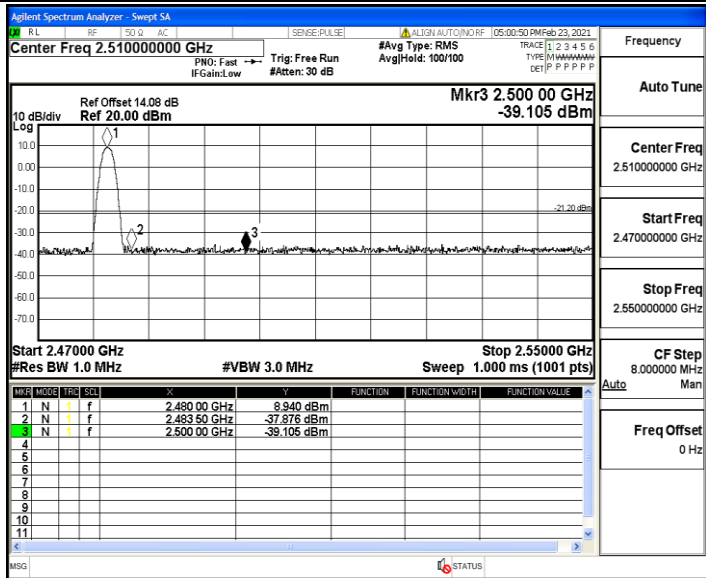
DH5_Ant1_Low_2402_Peak



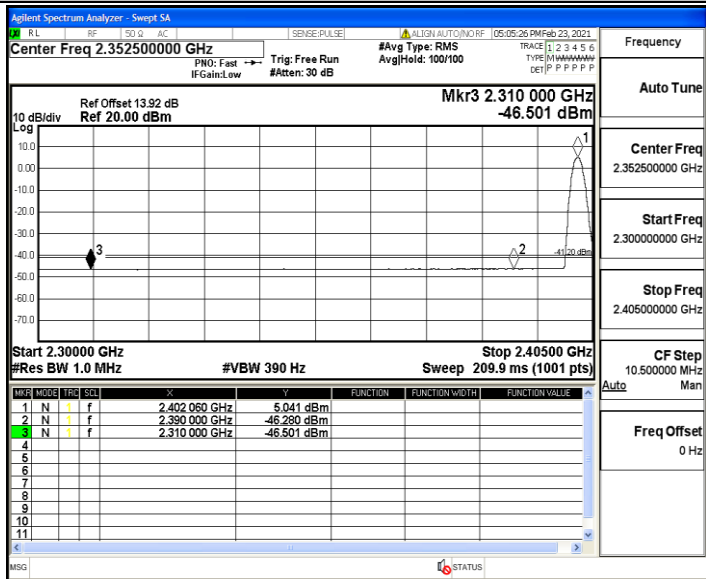
DH5_Ant1_High_2480_AV



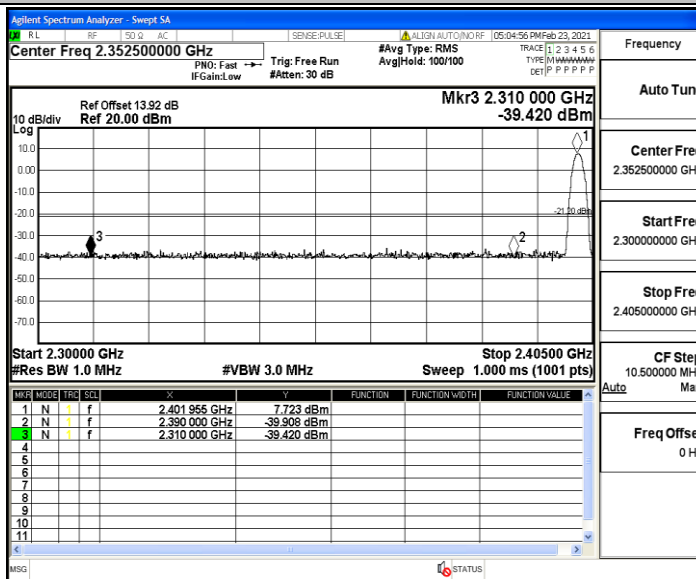
DH5_Ant1_High_2480_Peak



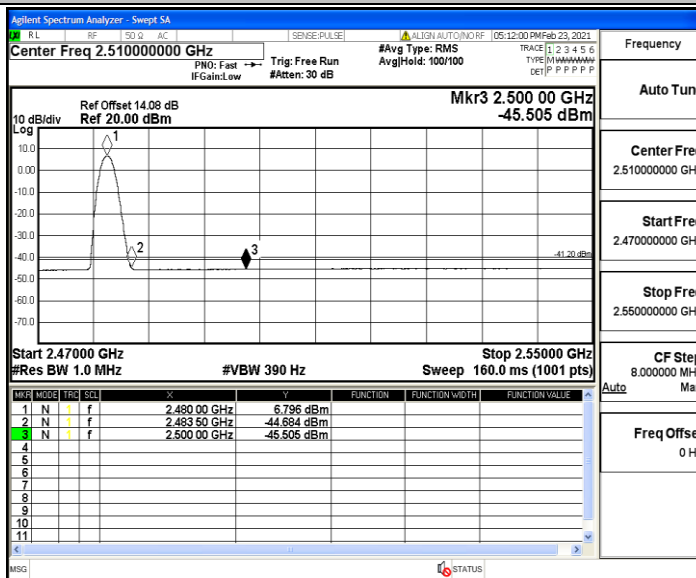
2DH5_Ant1_Low_2402_AV



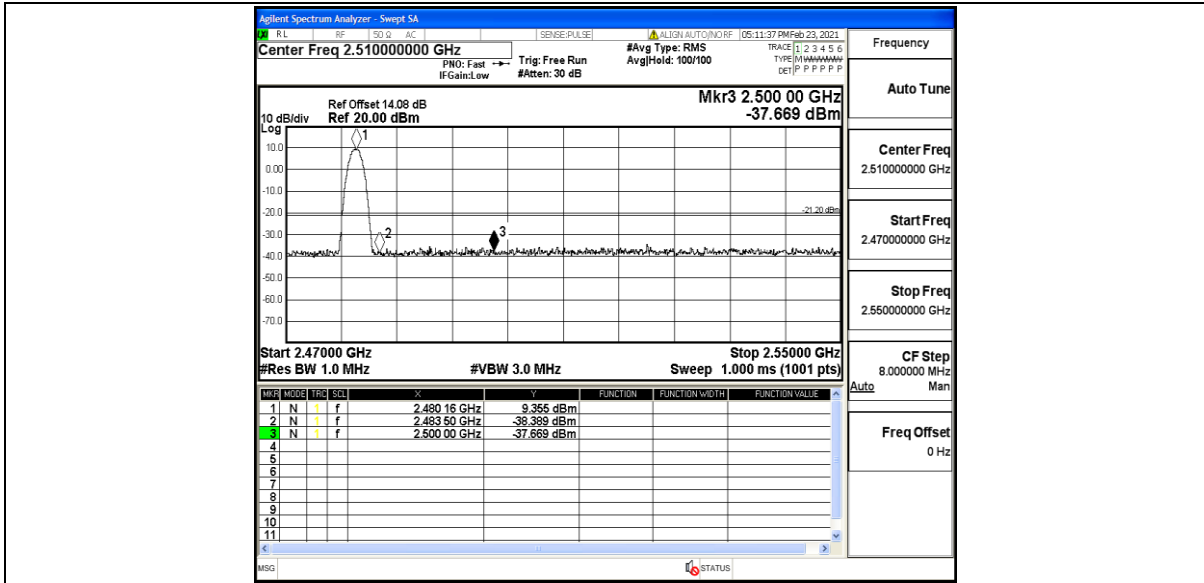
2DH5_Ant1_Low_2402_Peak



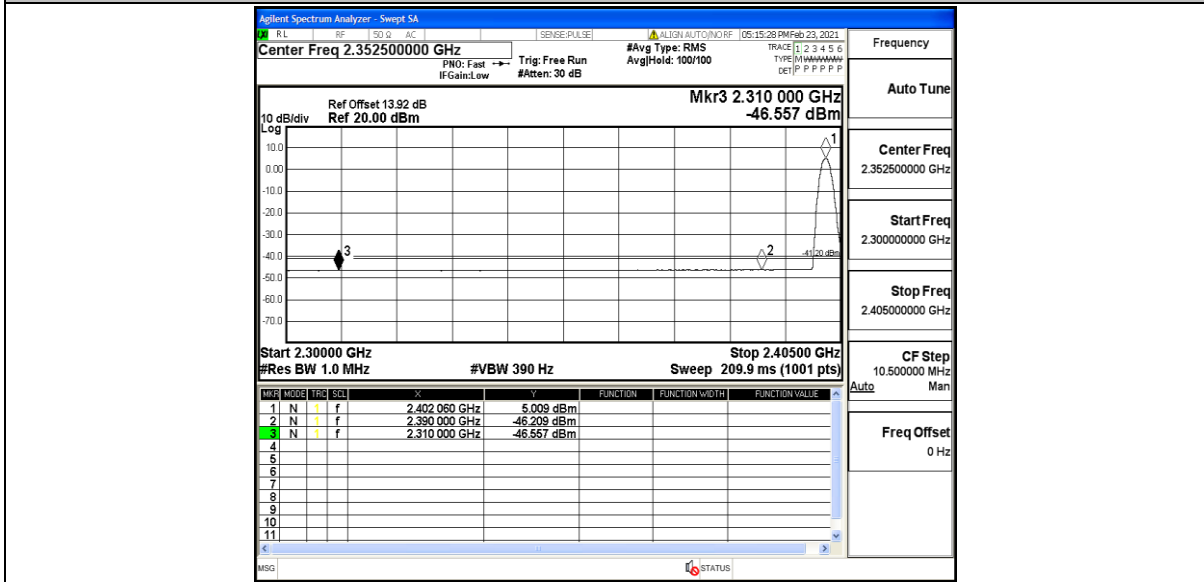
2DH5_Ant1_High_2480_AV



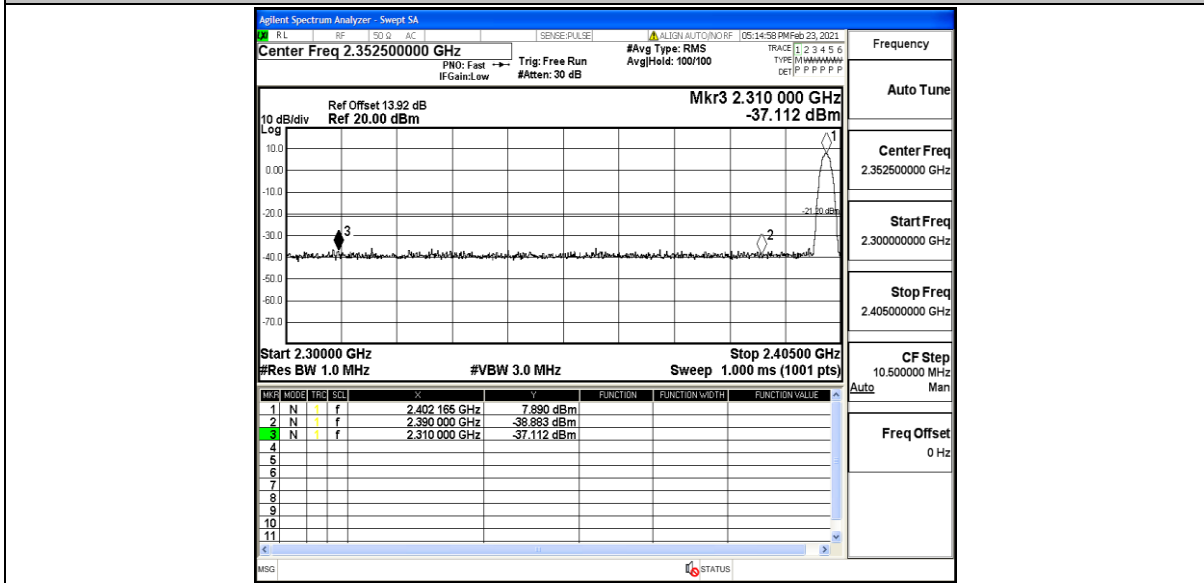
2DH5_Ant1_High_2480_Peak



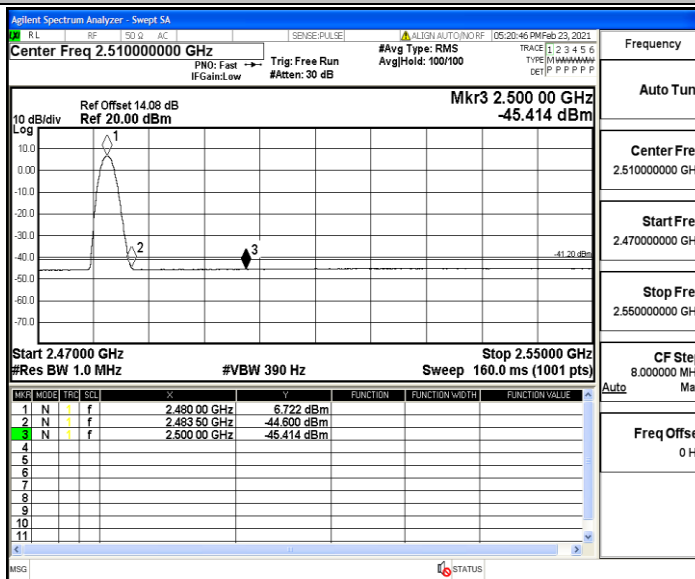
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

