

RF Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: NucBox5****Trade Mark: GMKtec****Test Model: KB5****FCC ID: 2AXUD-KB5****Environmental Conditions**

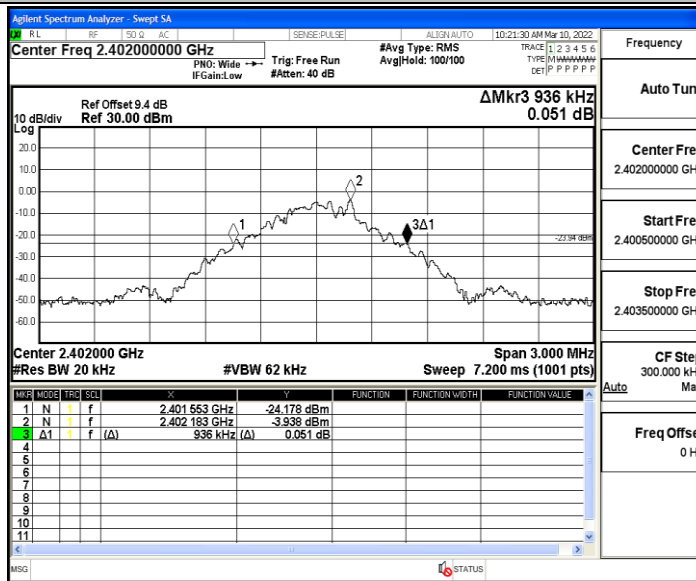
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth**Test Result**

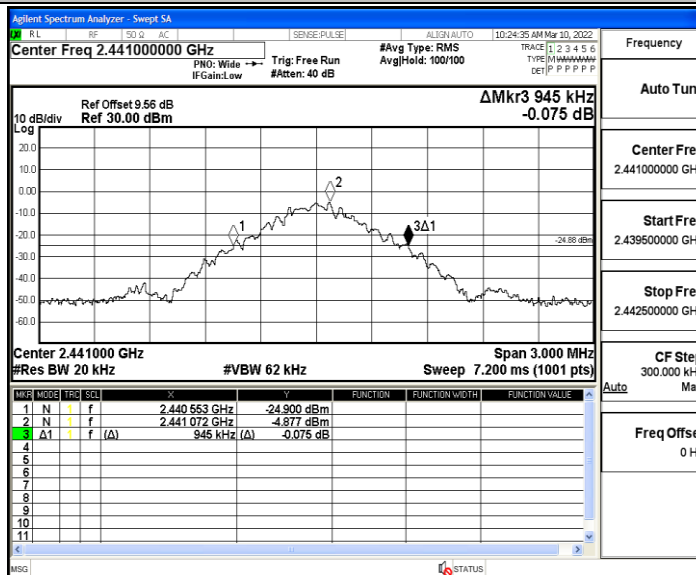
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.553	2402.489	---	PASS
		2441	0.945	2440.553	2441.498	---	PASS
		2480	0.939	2479.553	2480.492	---	PASS
2DH5	Ant1	2402	1.311	2401.355	2402.666	---	PASS
		2441	1.308	2440.358	2441.666	---	PASS
		2480	1.311	2479.358	2480.669	---	PASS
3DH5	Ant1	2402	1.296	2401.361	2402.657	---	PASS
		2441	1.302	2440.358	2441.660	---	PASS
		2480	1.275	2479.364	2480.639	---	PASS

Test Graphs

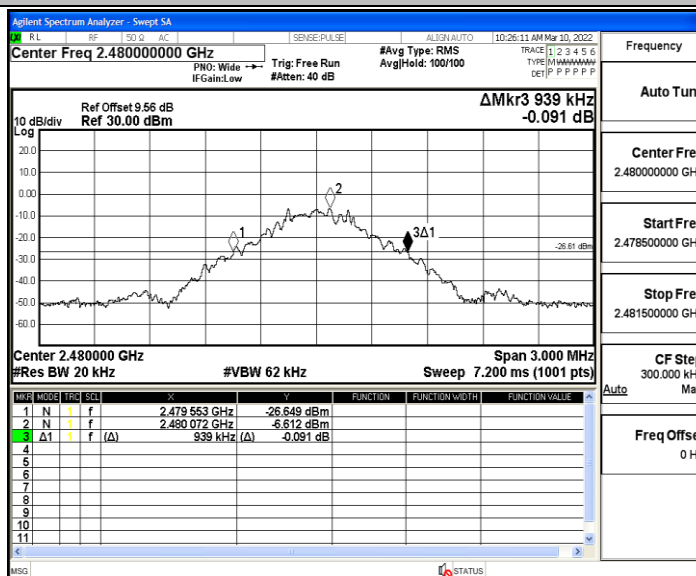
DH5_Ant1_2402



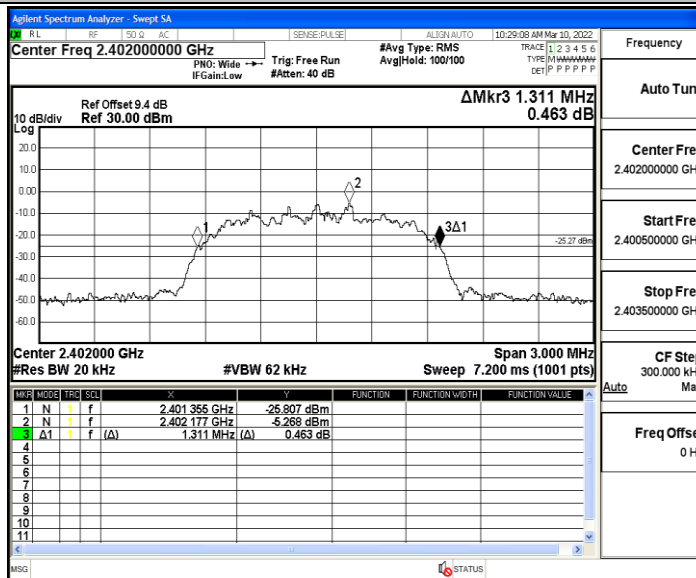
DH5_Ant1_2441



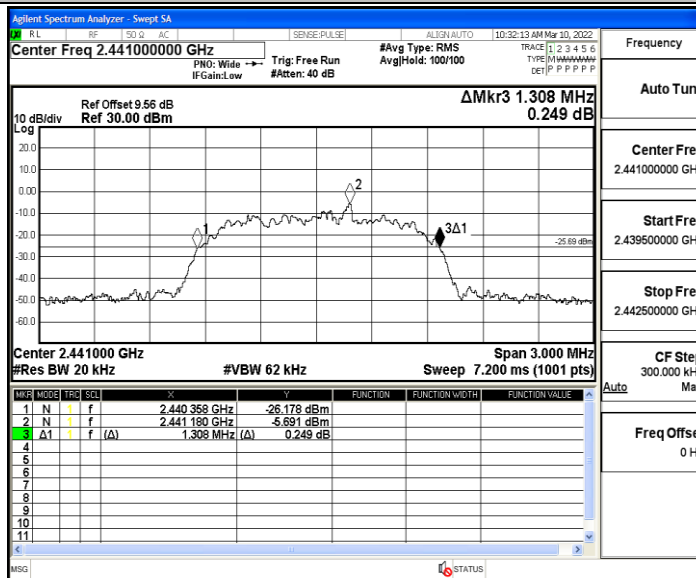
DH5_Ant1_2480



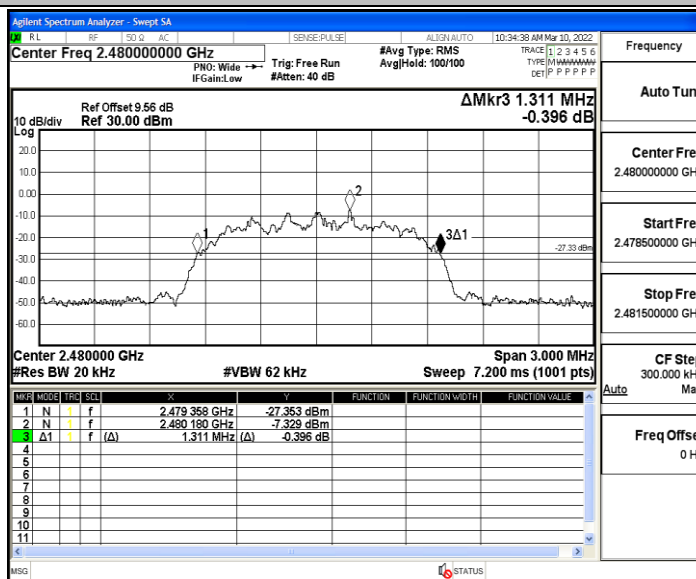
2DH5_Ant1_2402



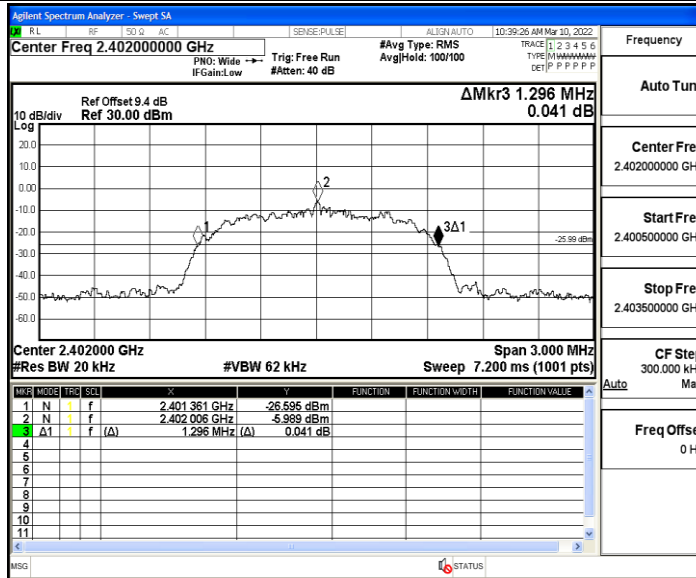
2DH5_Ant1_2441



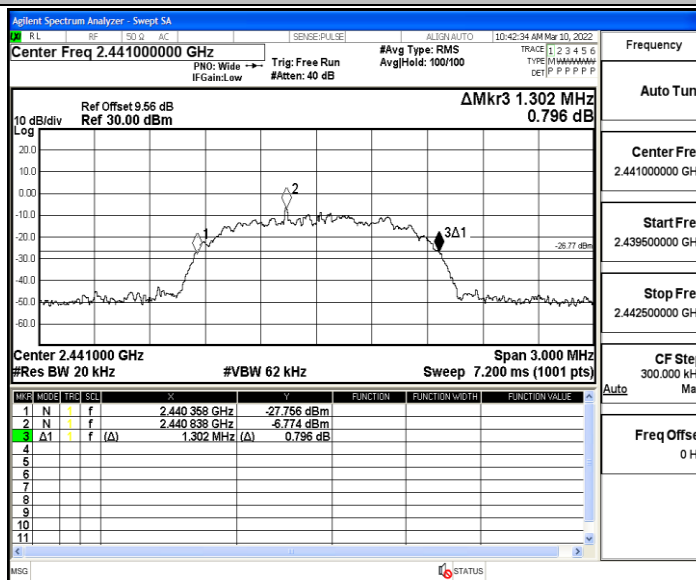
2DH5_Ant1_2480



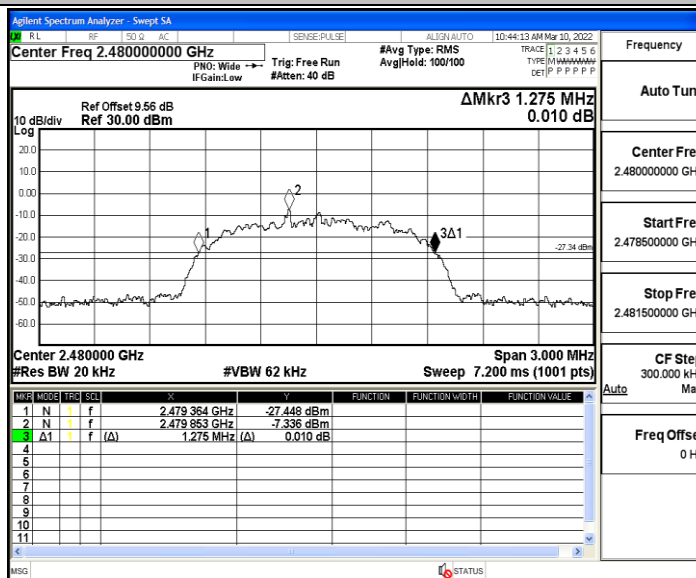
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



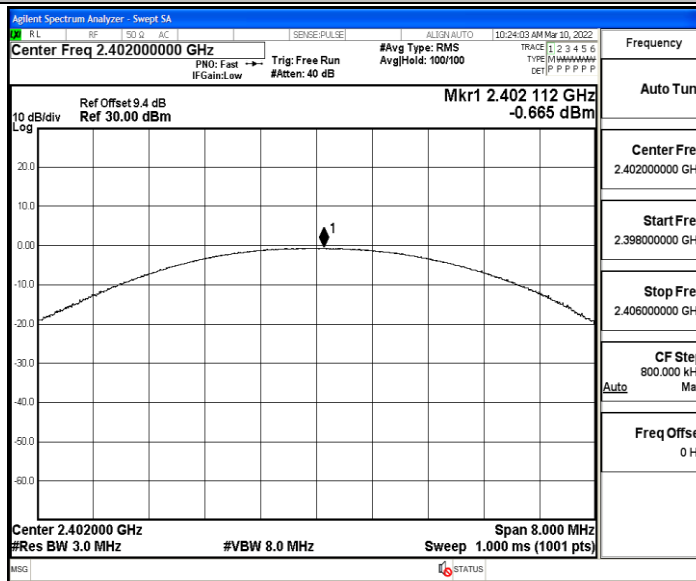
Appendix B: Maximum conducted output power

Test Result

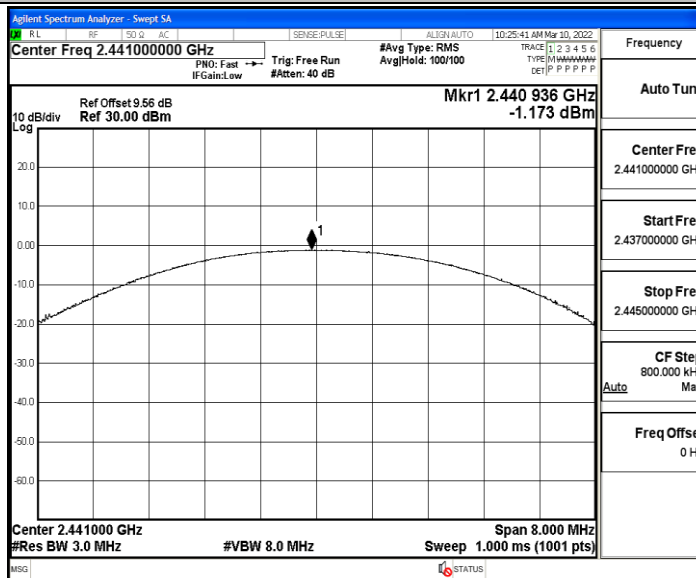
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-0.67	≤30.00	PASS
		2441	-1.17	≤30.00	PASS
		2480	-2.67	≤30.00	PASS
2DH5	Ant1	2402	0.37	≤20.97	PASS
		2441	-0.01	≤20.97	PASS
		2480	-1.61	≤20.97	PASS
3DH5	Ant1	2402	0.72	≤20.97	PASS
		2441	0.22	≤20.97	PASS
		2480	-1.06	≤20.97	PASS

Test Graphs

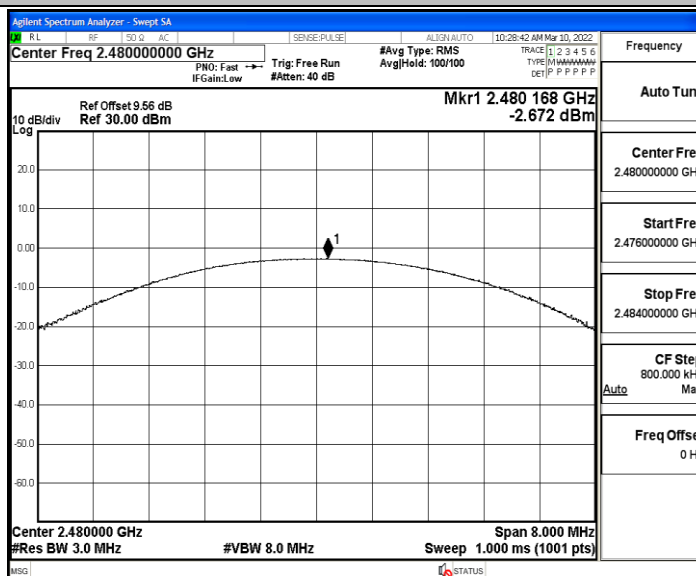
DH5_Ant1_2402



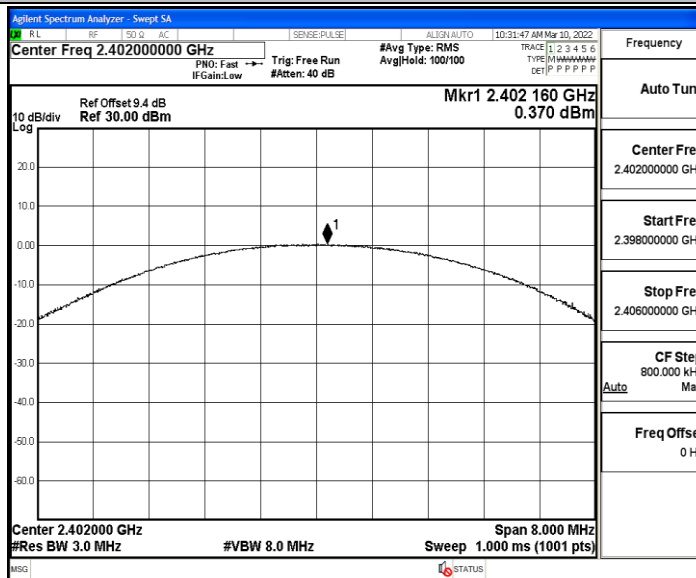
DH5_Ant1_2441



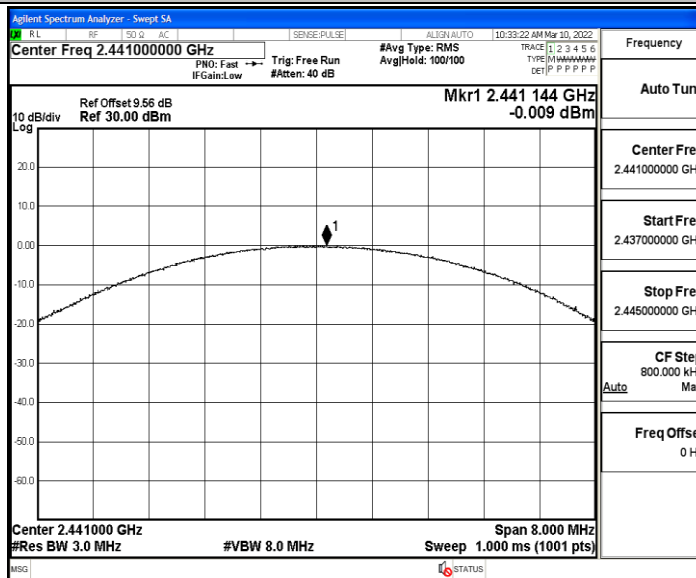
DH5_Ant1_2480



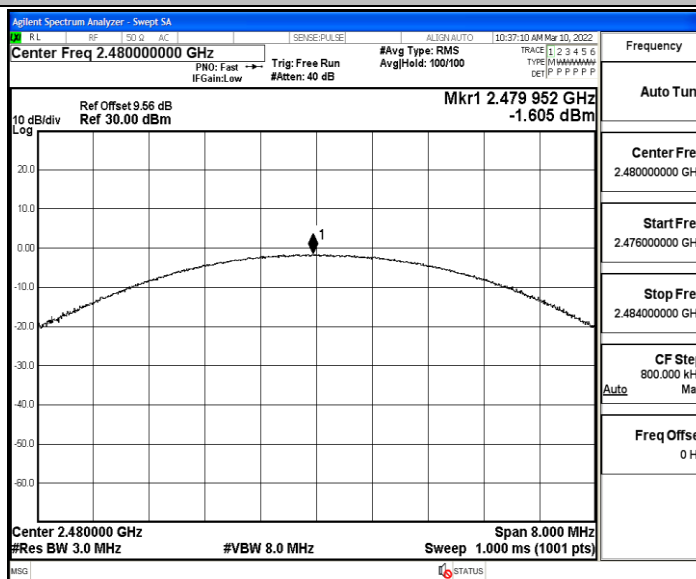
2DH5_Ant1_2402



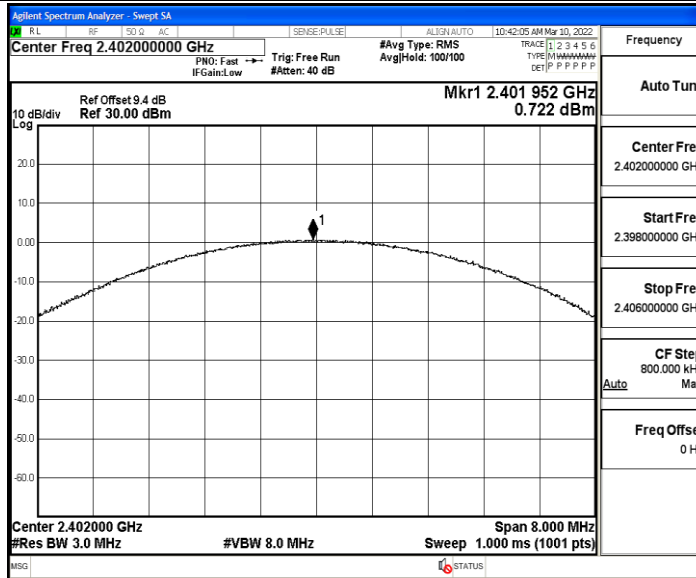
2DH5_Ant1_2441



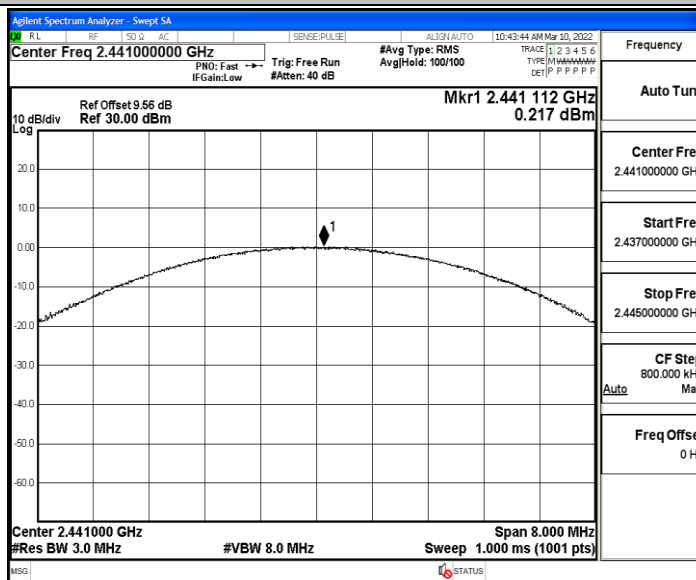
2DH5_Ant1_2480



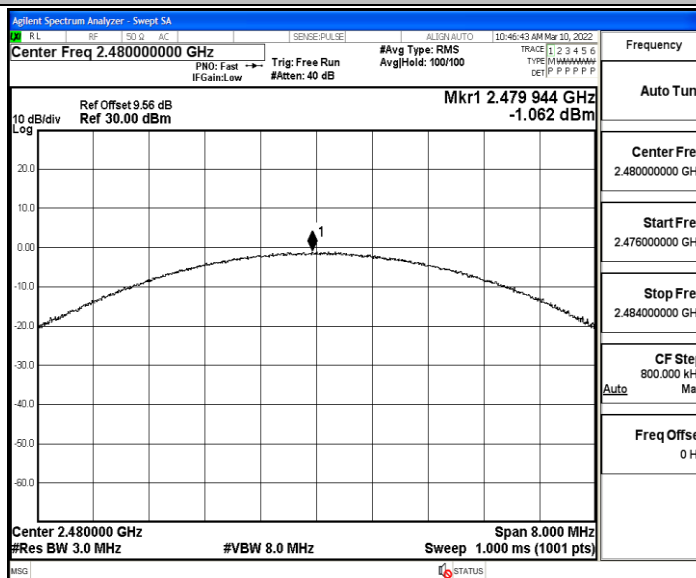
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



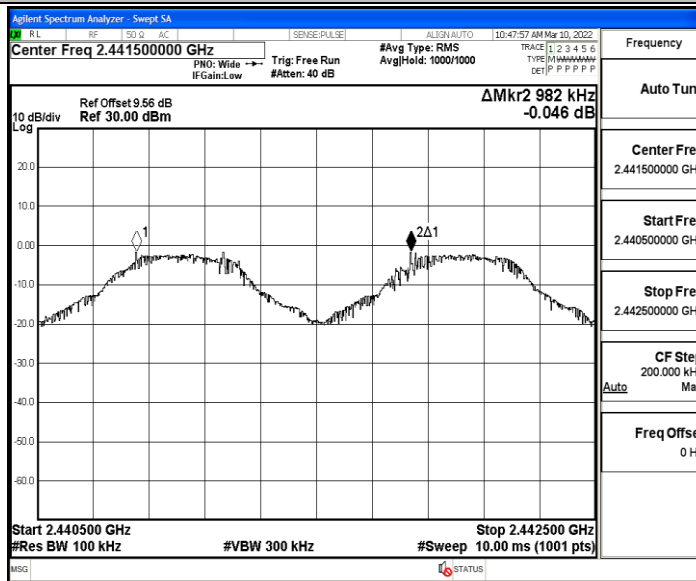
Appendix C: Carrier frequency separation

Test Result

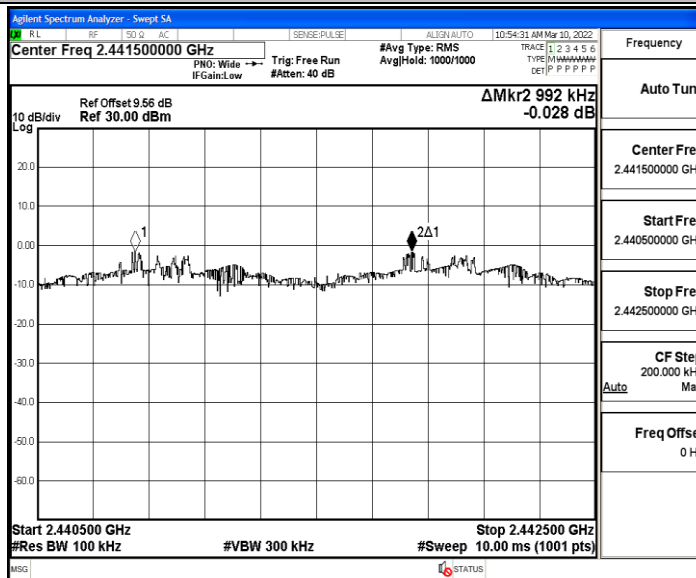
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.982	≥0.945	PASS
2DH5	Ant1	Hop	0.992	≥0.874	PASS
3DH5	Ant1	Hop	1.014	≥0.868	PASS

Test Graphs

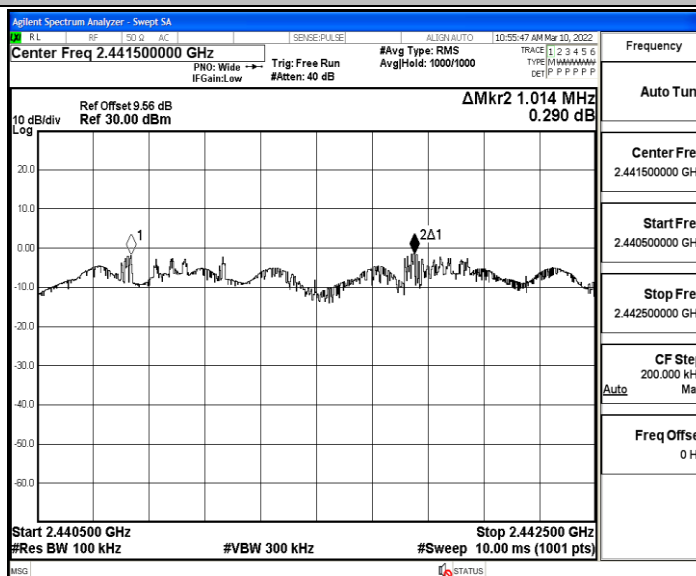
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



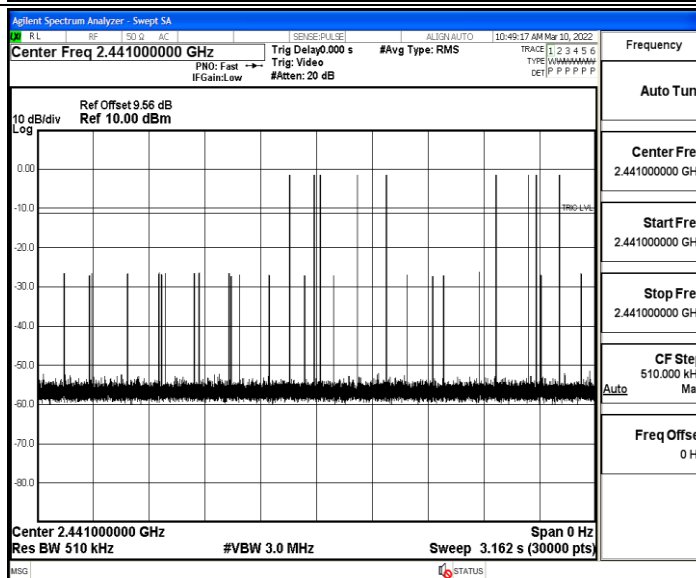
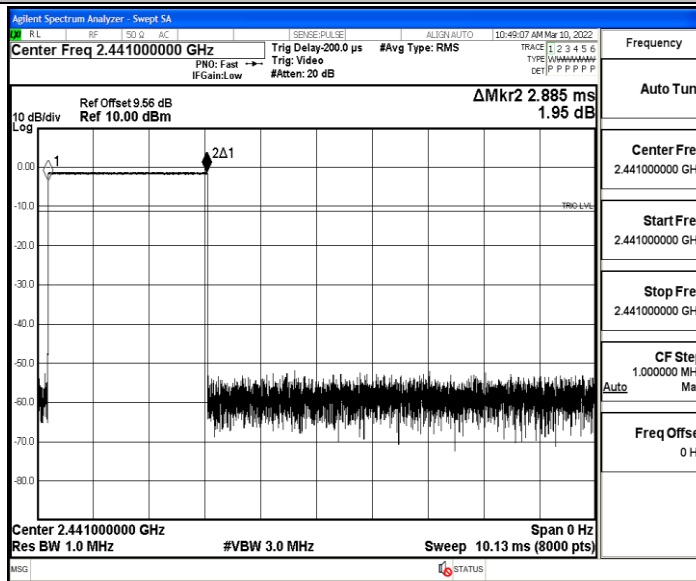
Appendix D: Time of occupancy

Test Result

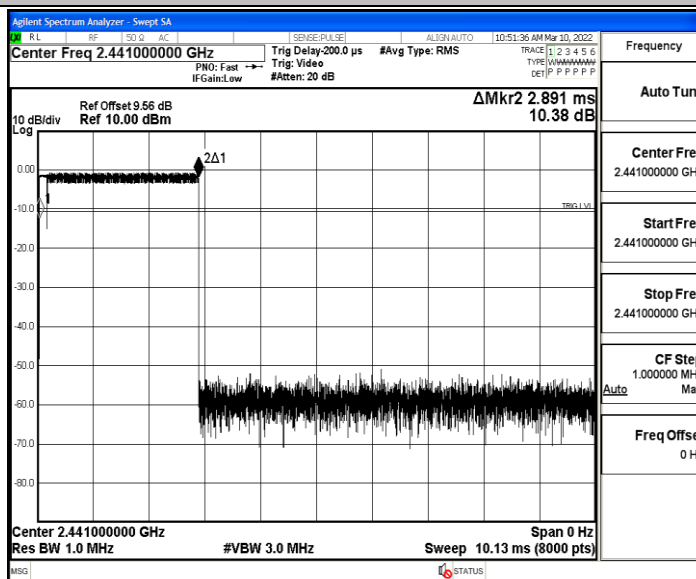
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	100	0.289	≤0.4	PASS
2DH5	Ant1	Hop	2.89	60	0.173	≤0.4	PASS
3DH5	Ant1	Hop	2.89	60	0.174	≤0.4	PASS

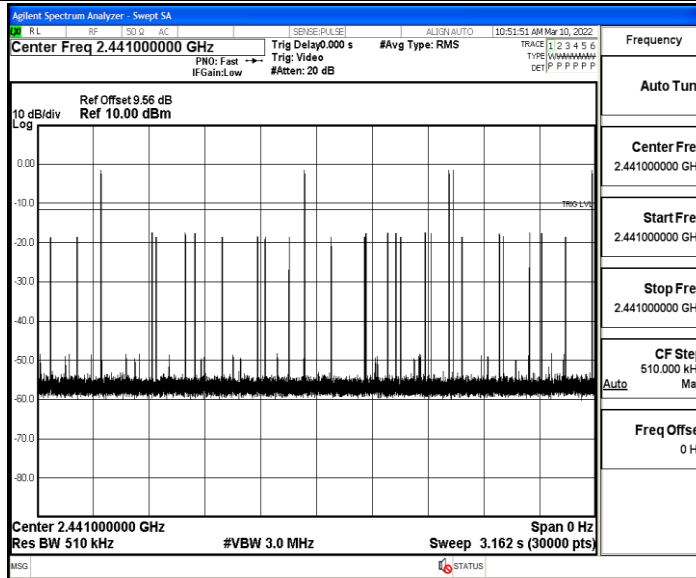
Test Graphs

DH5_Ant1_Hop

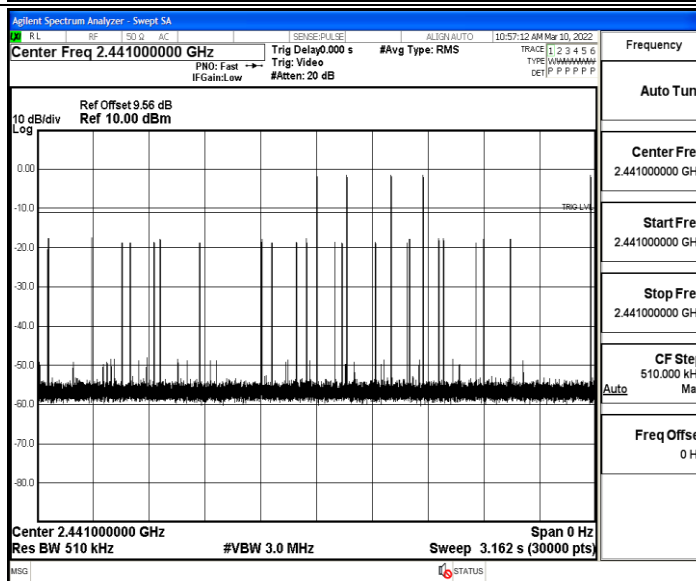
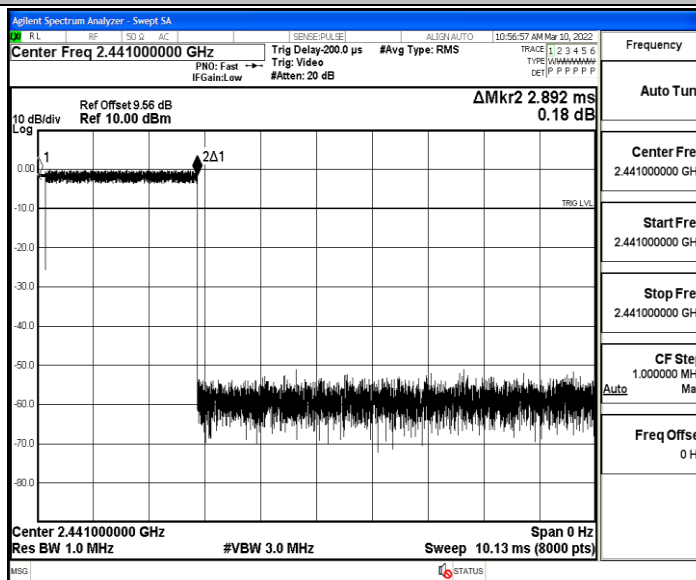


2DH5_Ant1_Hop





3DH5_Ant1_Hop



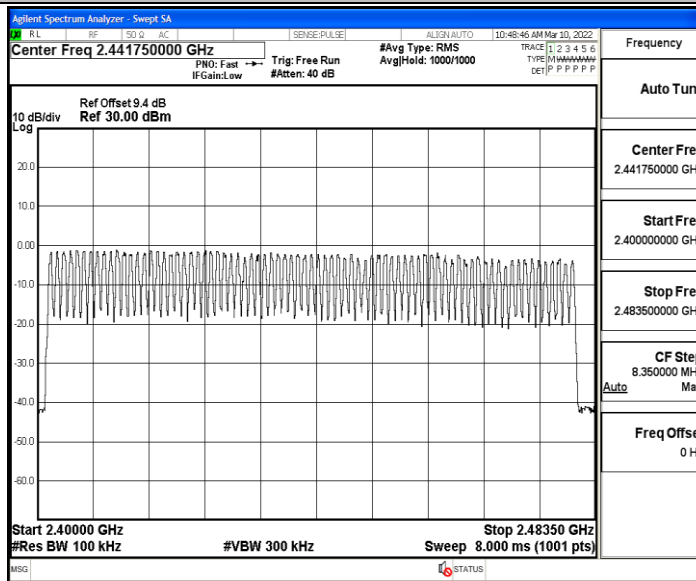
Appendix E: Number of hopping channels

Test Result

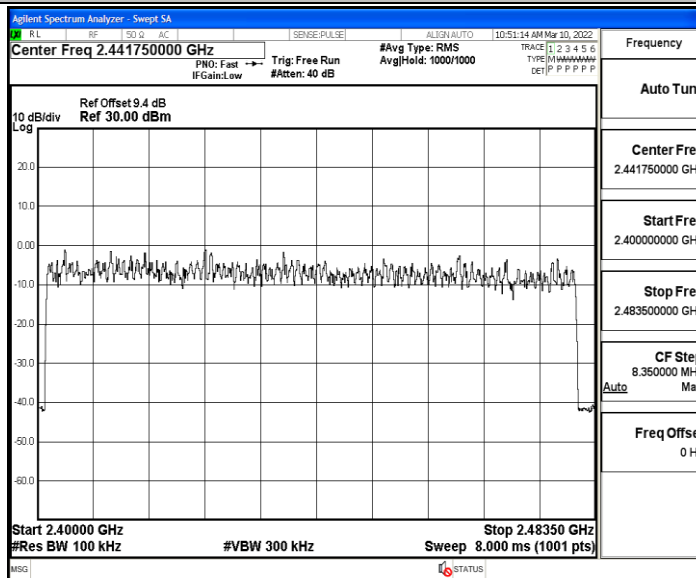
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

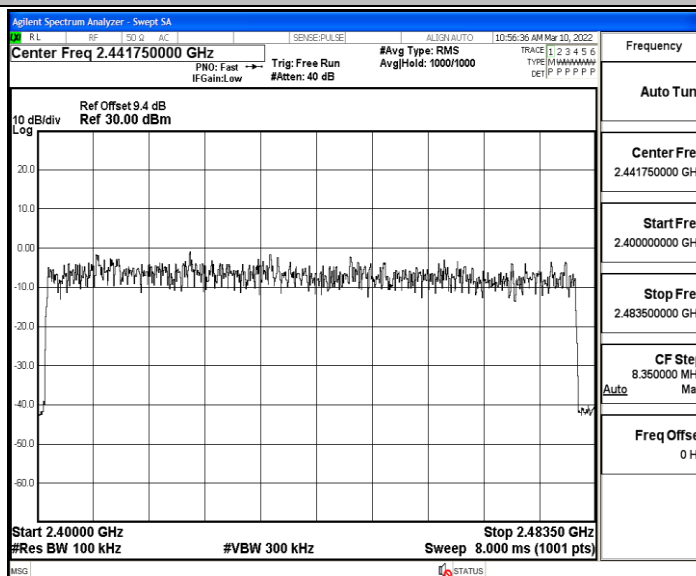
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



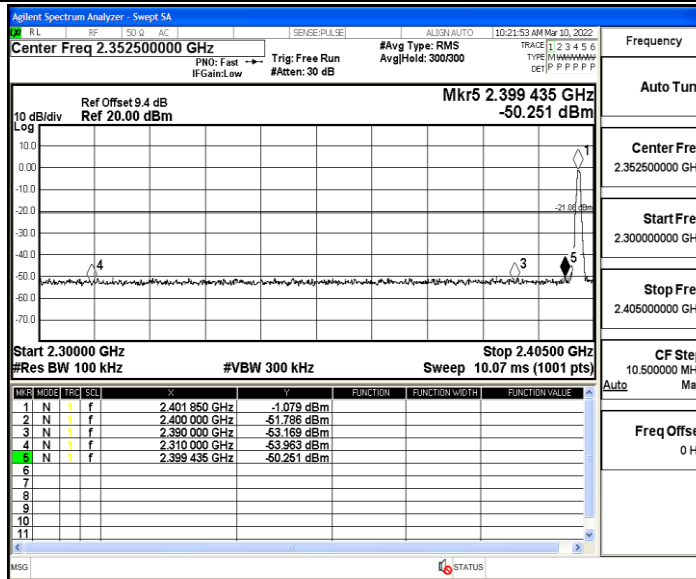
Appendix F: Band edge measurements

Test Result

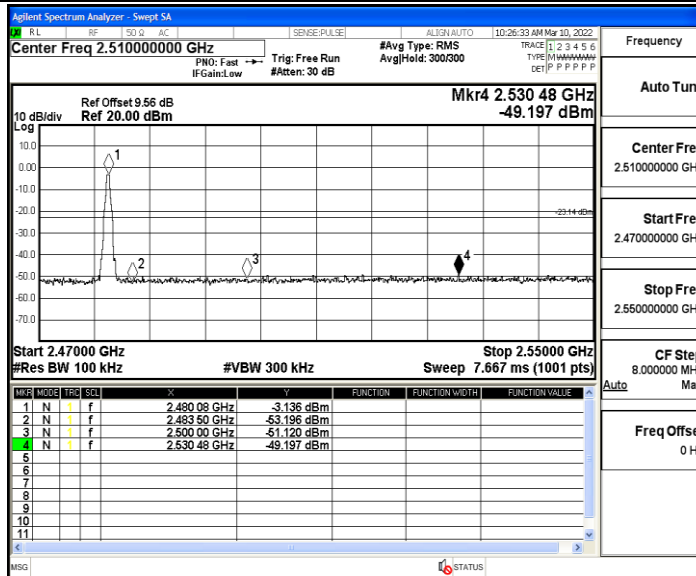
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.08	-50.25	≤ -21.08	PASS
		High	2480	-3.14	-49.2	≤ -23.14	PASS
		Low	Hop_2402	-2.29	-50.45	≤ -22.29	PASS
		High	Hop_2480	-3.45	-48.6	≤ -23.45	PASS
2DH5	Ant1	Low	2402	-1.10	-49.79	≤ -21.1	PASS
		High	2480	-3.28	-48.75	≤ -23.28	PASS
		Low	Hop_2402	-5.08	-49.73	≤ -25.08	PASS
		High	Hop_2480	-3.56	-48.2	≤ -23.56	PASS
3DH5	Ant1	Low	2402	-1.37	-49.82	≤ -21.37	PASS
		High	2480	-4.07	-48.59	≤ -24.07	PASS
		Low	Hop_2402	-4.07	-49.89	≤ -24.07	PASS
		High	Hop_2480	-4.92	-48.8	≤ -24.92	PASS

Test Graphs

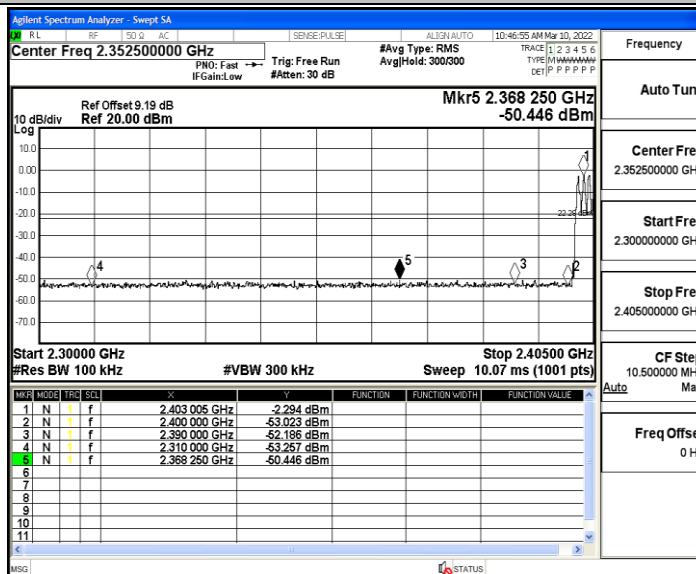
DH5_Ant1_Low_2402



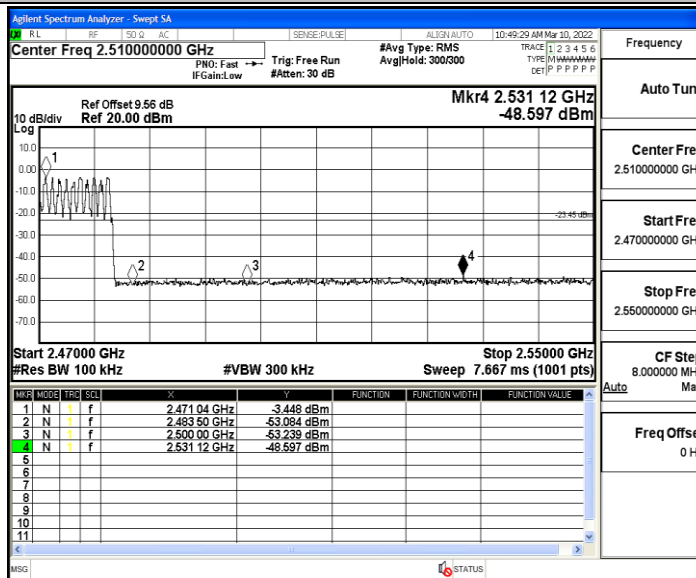
DH5_Ant1_High_2480



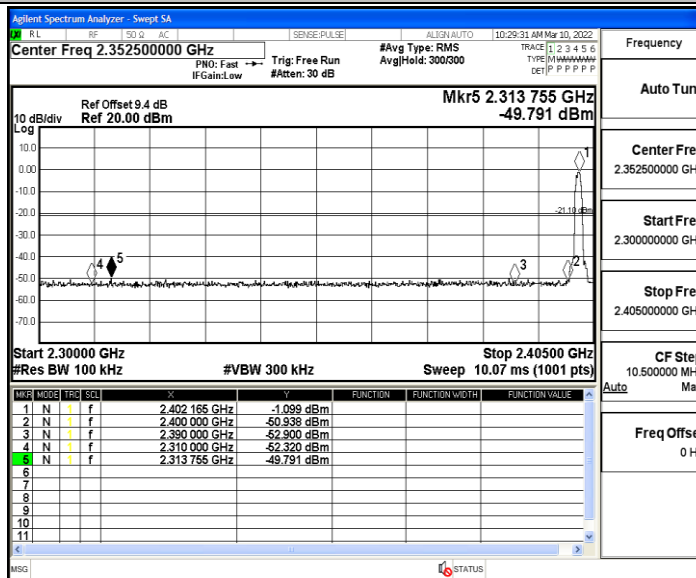
DH5_Ant1_Low_Hop_2402



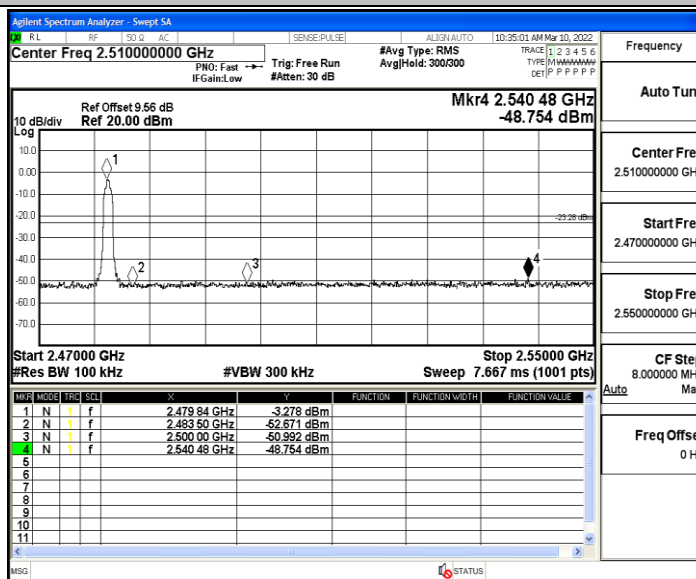
DH5_Ant1_High_Hop_2480



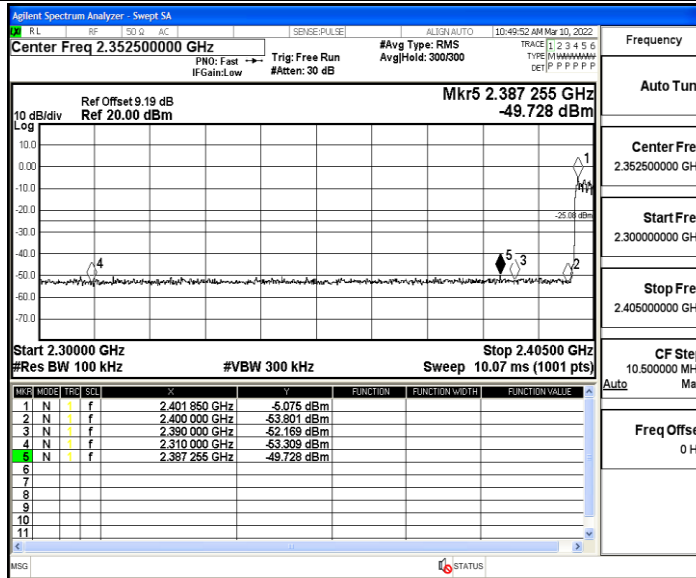
2DH5_Ant1_Low_2402



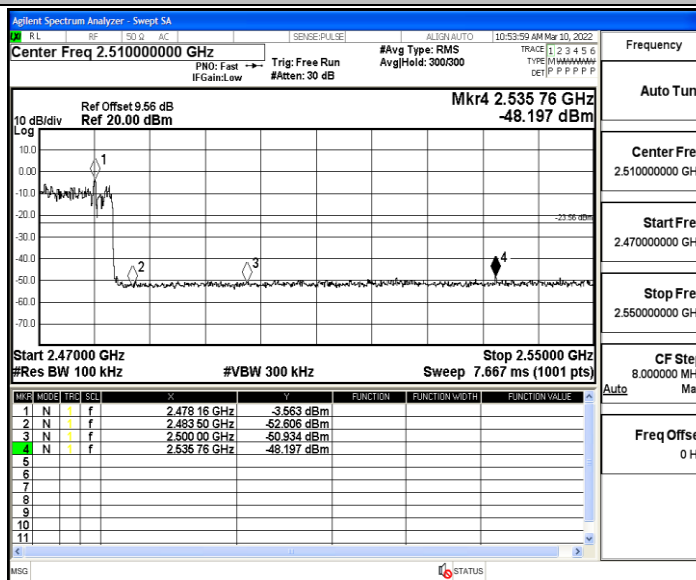
2DH5_Ant1_High_2480



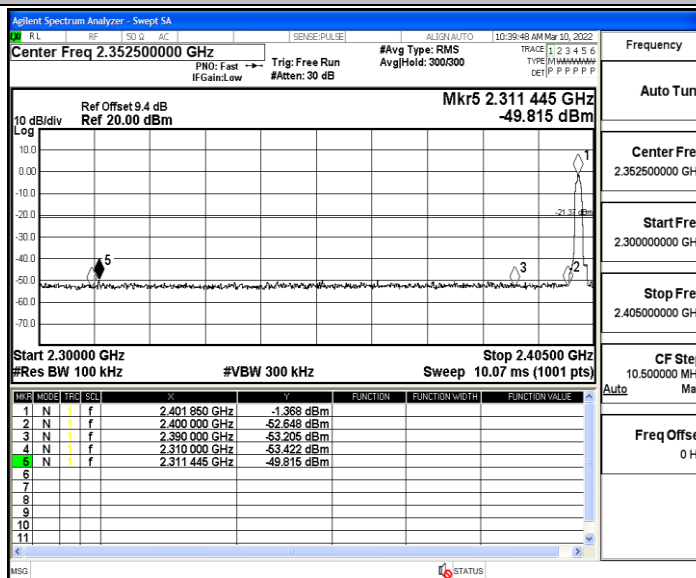
2DH5_Ant1_Low_Hop_2402



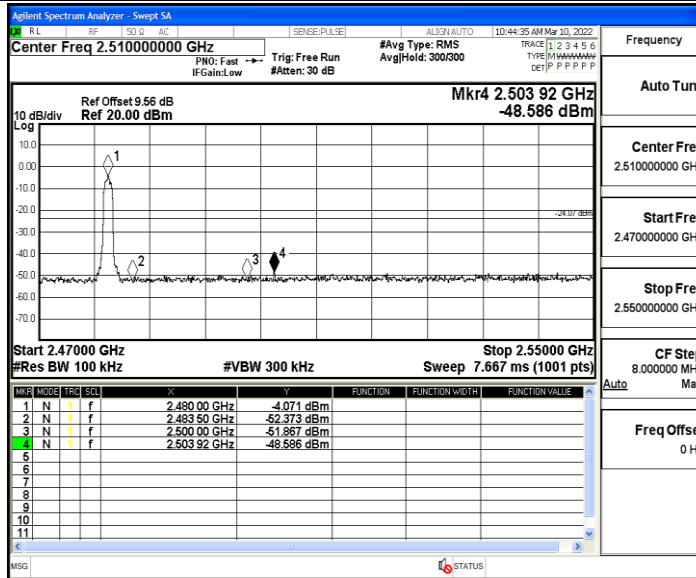
2DH5_Ant1_High_Hop_2480



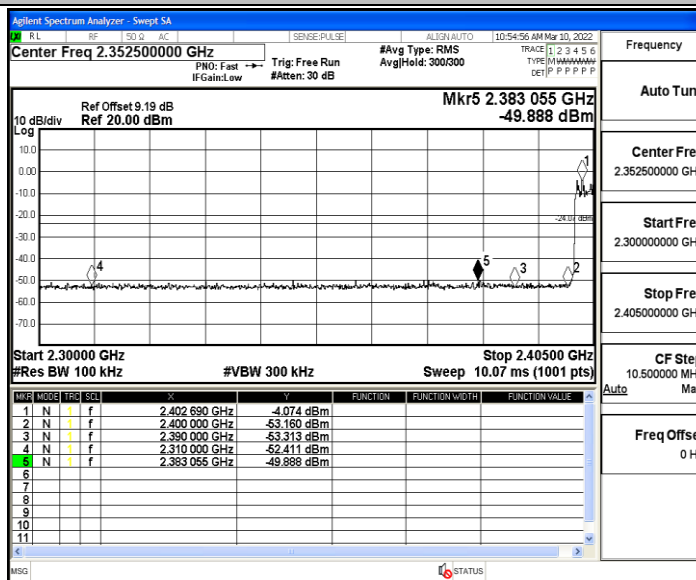
3DH5_Ant1_Low_2402



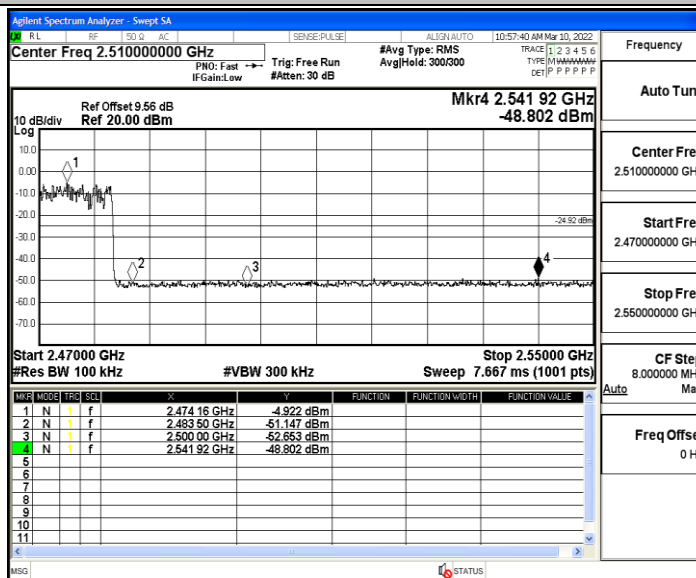
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



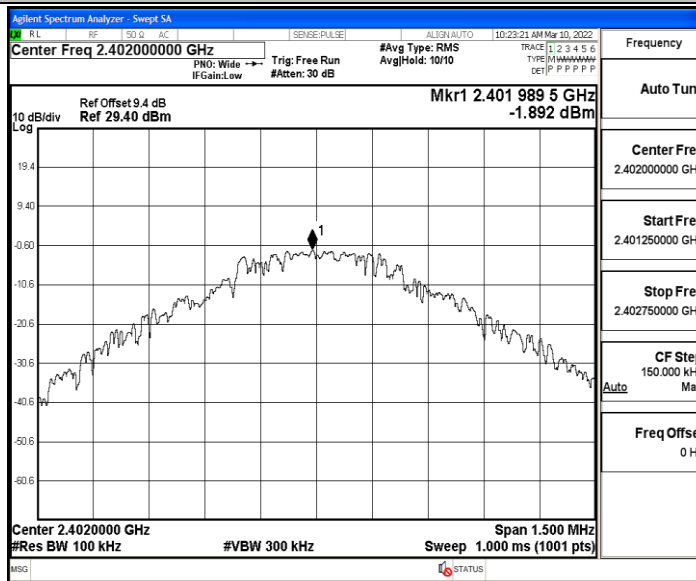
Appendix G: Conducted Spurious Emission

Test Result

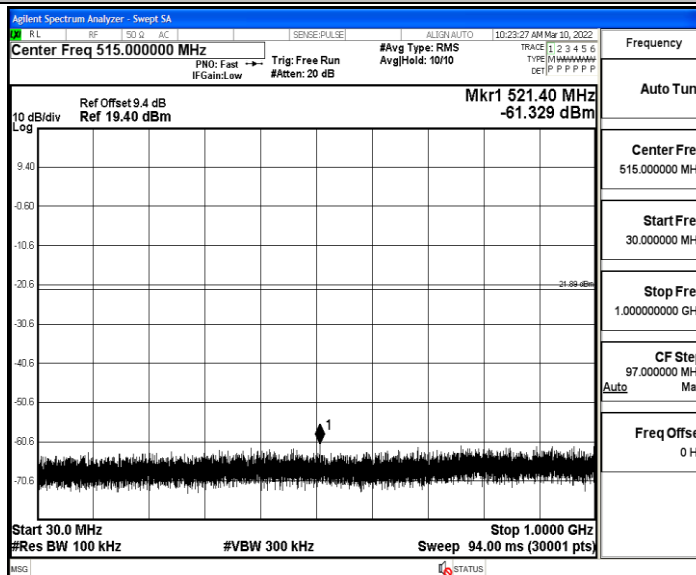
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.89	-1.89	---	PASS
			30~1000	-1.89	-61.33	≤-21.89	PASS
			1000~26500	-1.89	-51.45	≤-21.89	PASS
		2441	Reference	-2.23	-2.23	---	PASS
			30~1000	-2.23	-60.32	≤-22.23	PASS
			1000~26500	-2.23	-50.86	≤-22.23	PASS
		2480	Reference	-3.51	-3.51	---	PASS
			30~1000	-3.51	-61	≤-23.51	PASS
			1000~26500	-3.51	-51.42	≤-23.51	PASS
2DH5	Ant1	2402	Reference	-1.66	-1.66	---	PASS
			30~1000	-1.66	-61.27	≤-21.66	PASS
			1000~26500	-1.66	-49.23	≤-21.66	PASS
		2441	Reference	-5.14	-5.14	---	PASS
			30~1000	-5.14	-60.6	≤-25.14	PASS
			1000~26500	-5.14	-49.62	≤-25.14	PASS
		2480	Reference	-4.48	-4.48	---	PASS
			30~1000	-4.48	-61.3	≤-24.48	PASS
			1000~26500	-4.48	-51.04	≤-24.48	PASS
3DH5	Ant1	2402	Reference	-1.77	-1.77	---	PASS
			30~1000	-1.77	-60.03	≤-21.77	PASS
			1000~26500	-1.77	-49.72	≤-21.77	PASS
		2441	Reference	-1.68	-1.68	---	PASS
			30~1000	-1.68	-60.55	≤-21.68	PASS
			1000~26500	-1.68	-49.3	≤-21.68	PASS
		2480	Reference	-3.66	-3.66	---	PASS
			30~1000	-3.66	-60.94	≤-23.66	PASS
			1000~26500	-3.66	-49.23	≤-23.66	PASS

Test Graphs

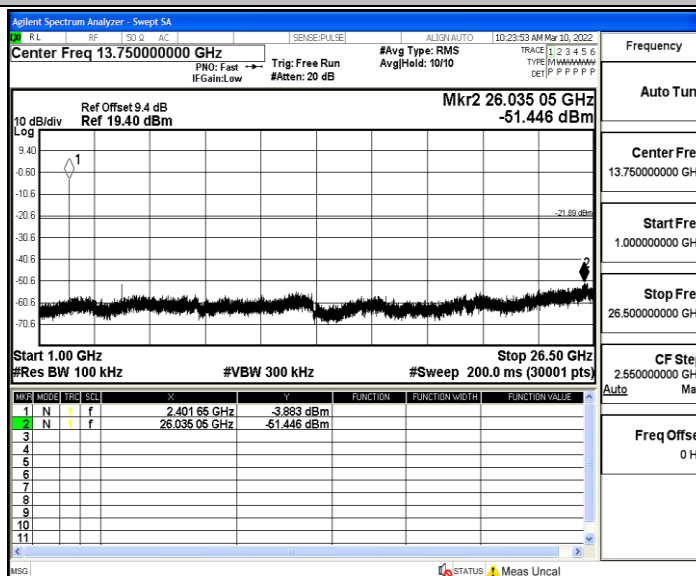
DH5_Ant1_2402_0~Reference



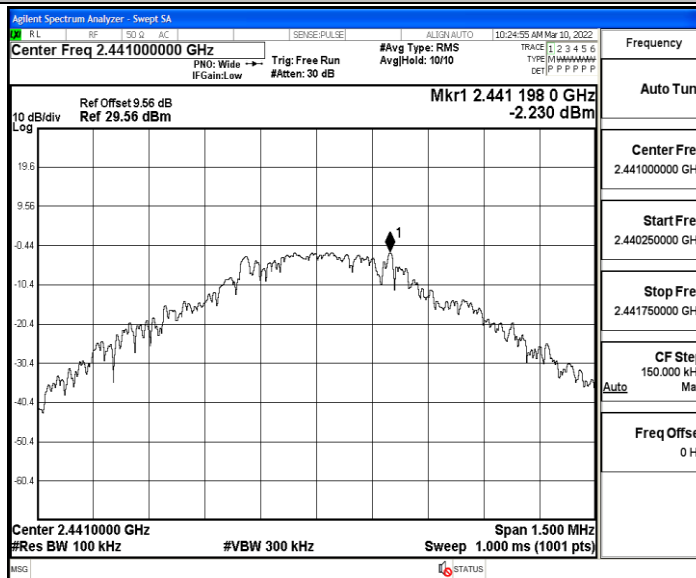
DH5_Ant1_2402_30~1000



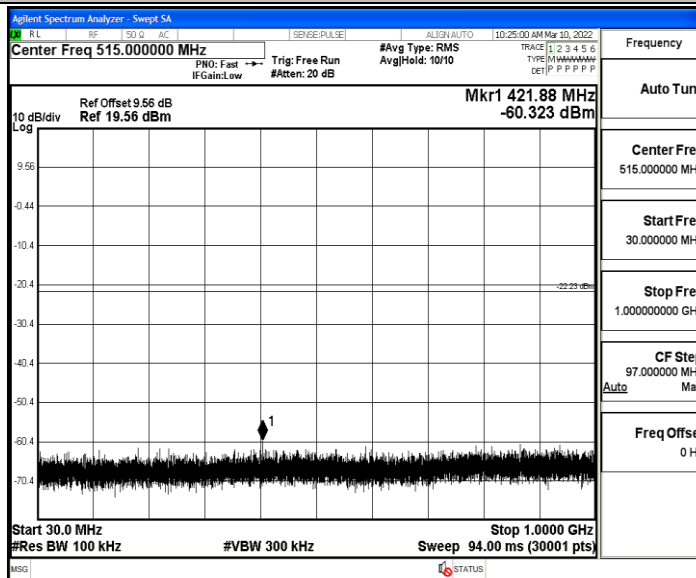
DH5_Ant1_2402_1000~26500



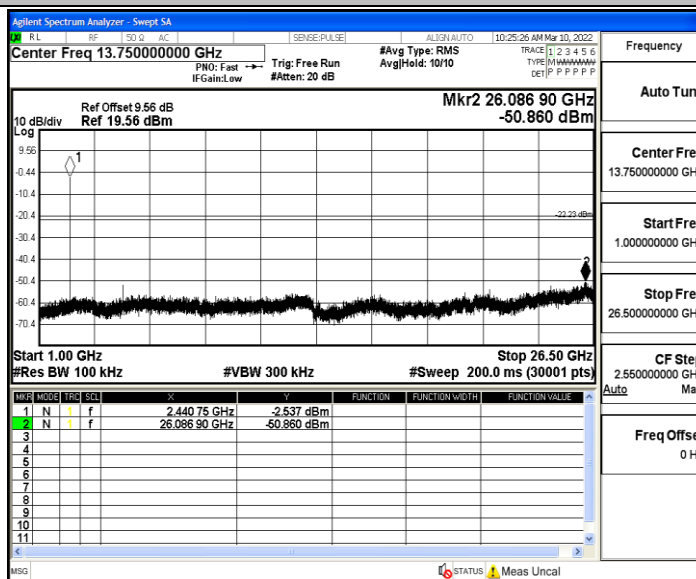
DH5_Ant1_2441_0~Reference



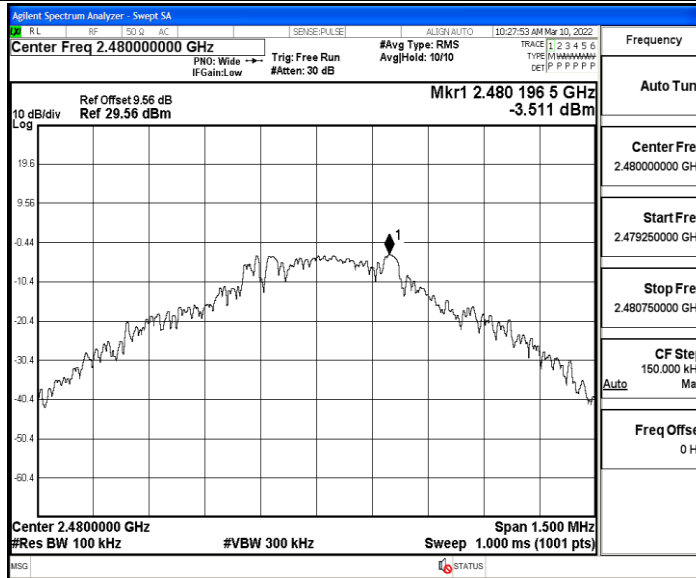
DH5_Ant1_2441_30~1000



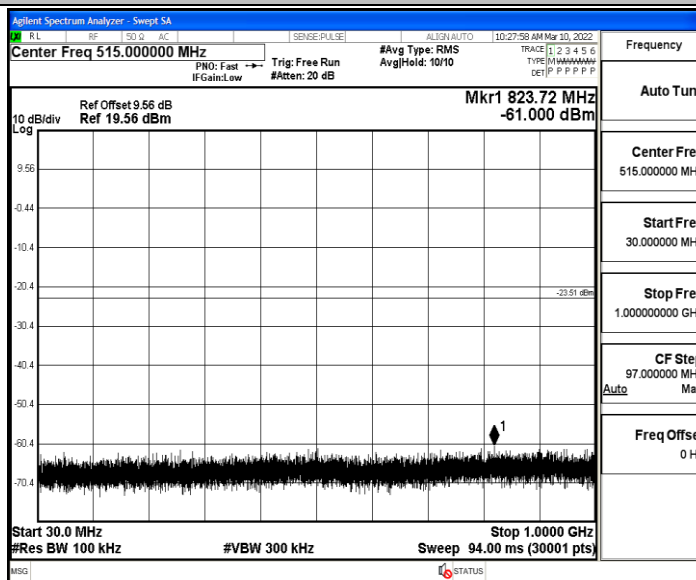
DH5_Ant1_2441_1000~26500



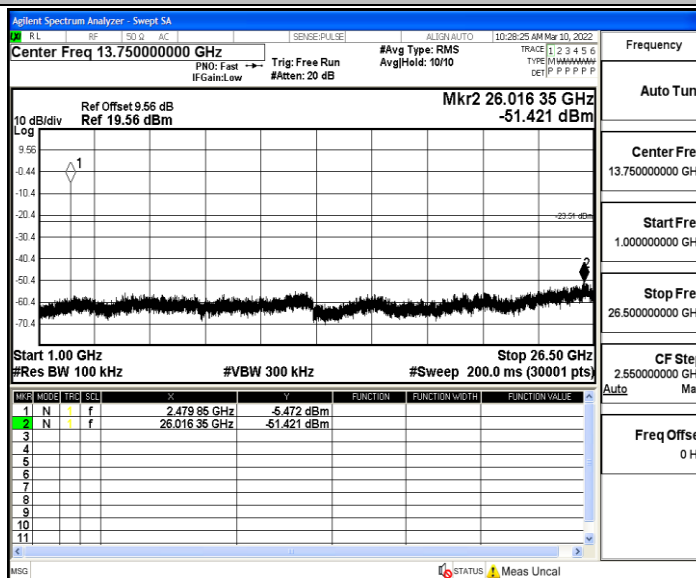
DH5_Ant1_2480_0~Reference



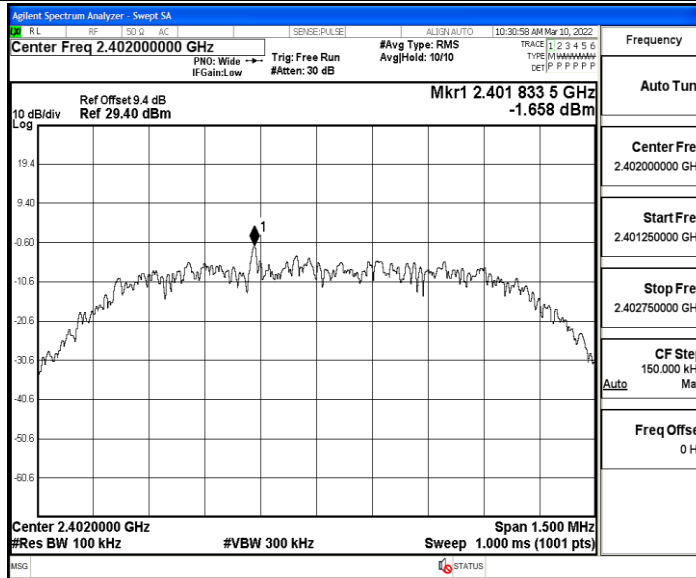
DH5_Ant1_2480_30~1000



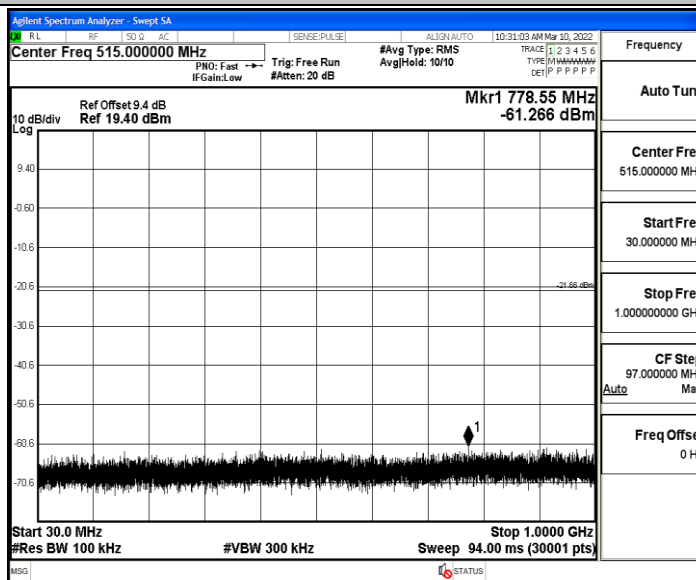
DH5_Ant1_2480_1000~26500



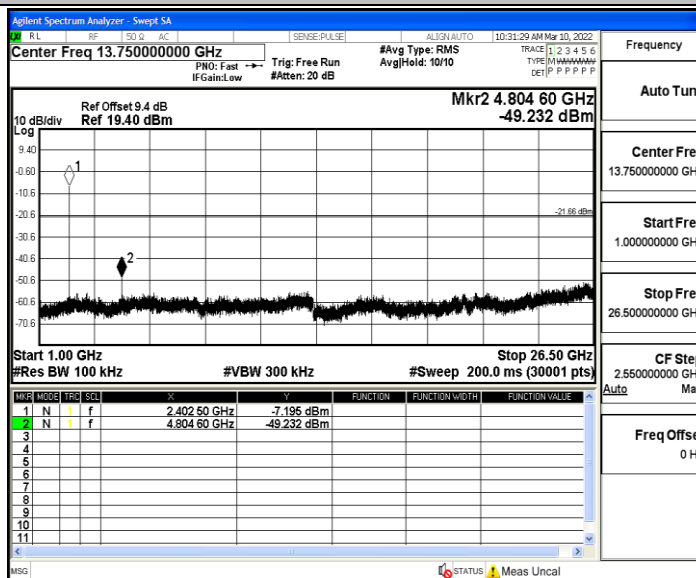
2DH5_Ant1_2402_0~Reference



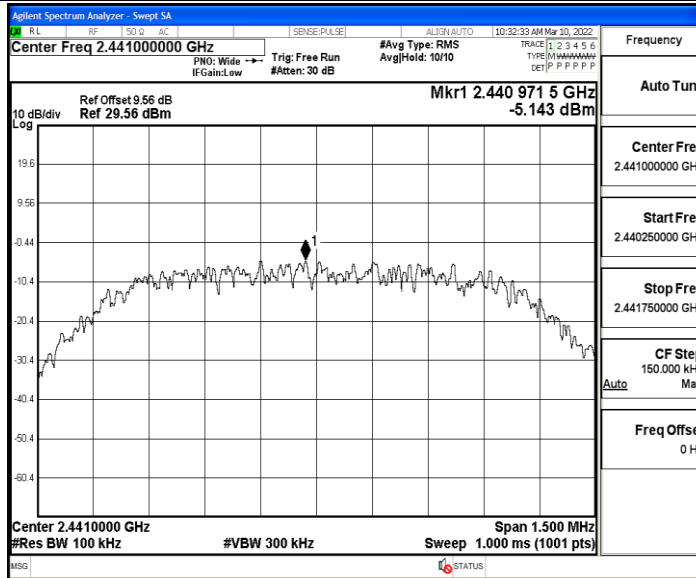
2DH5_Ant1_2402_30~1000



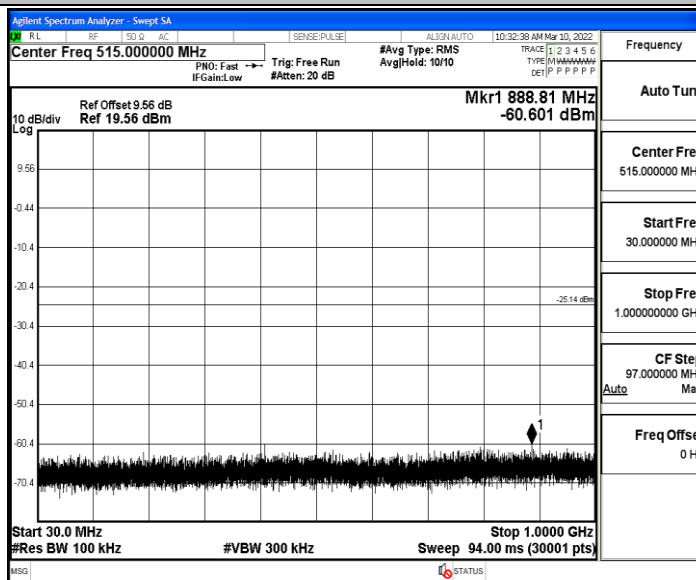
2DH5_Ant1_2402_1000~26500



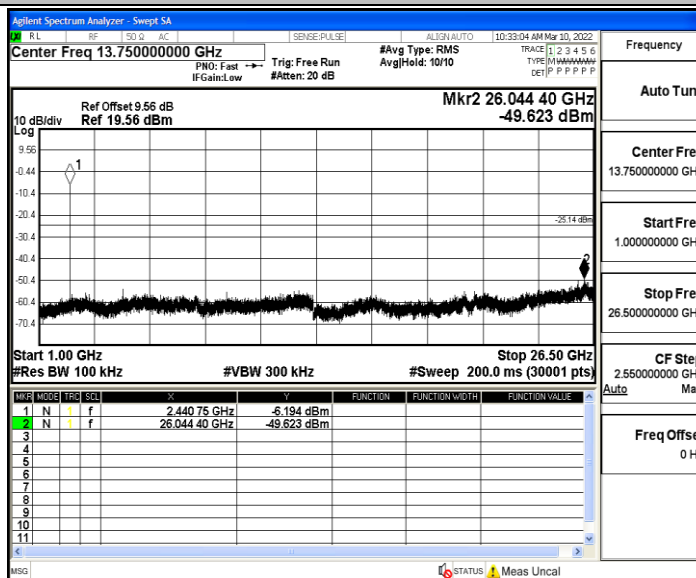
2DH5_Ant1_2441_0~Reference



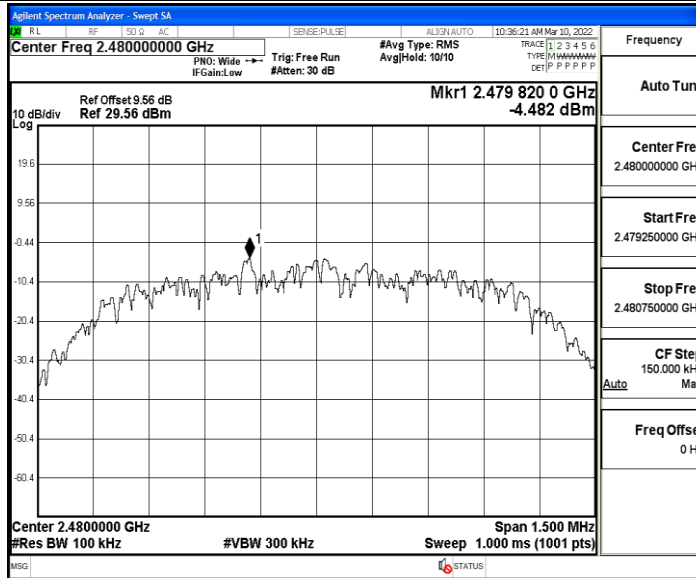
2DH5_Ant1_2441_30~1000



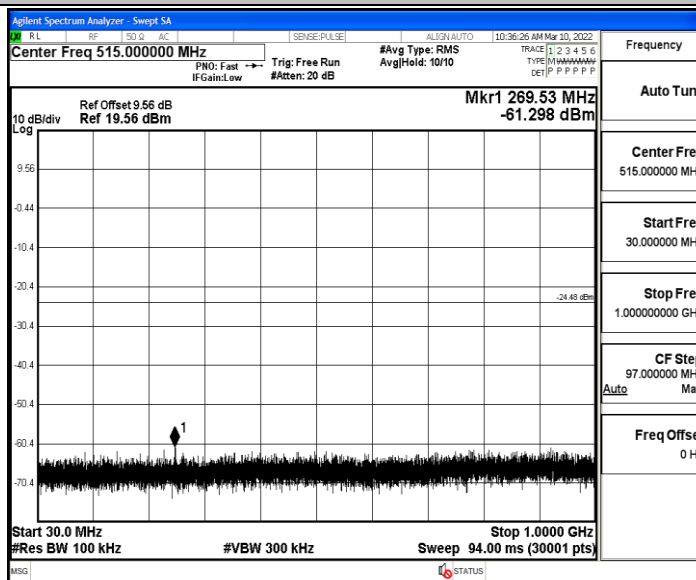
2DH5_Ant1_2441_1000~26500



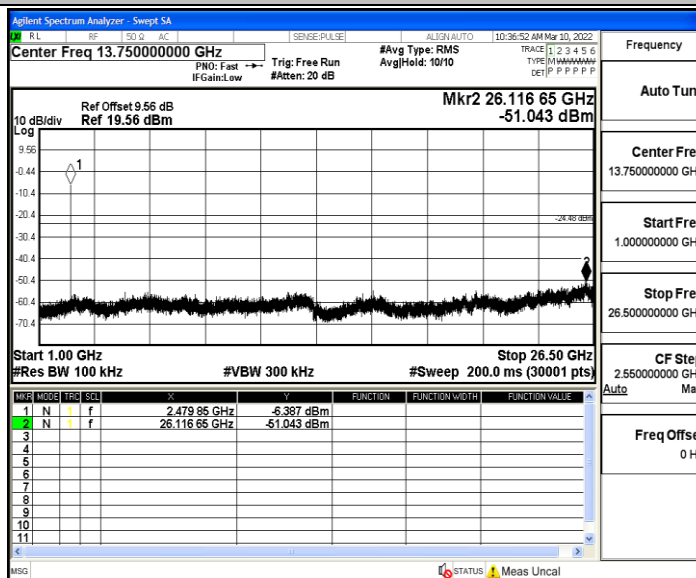
2DH5_Ant1_2480_0~Reference



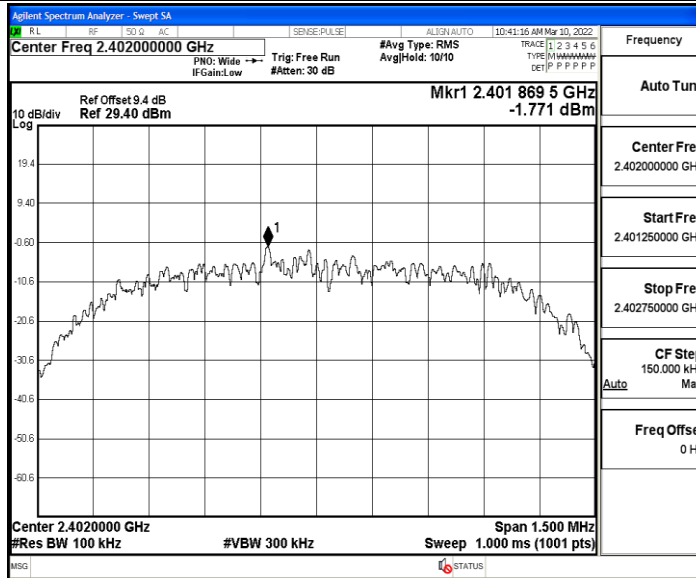
2DH5_Ant1_2480_30~1000



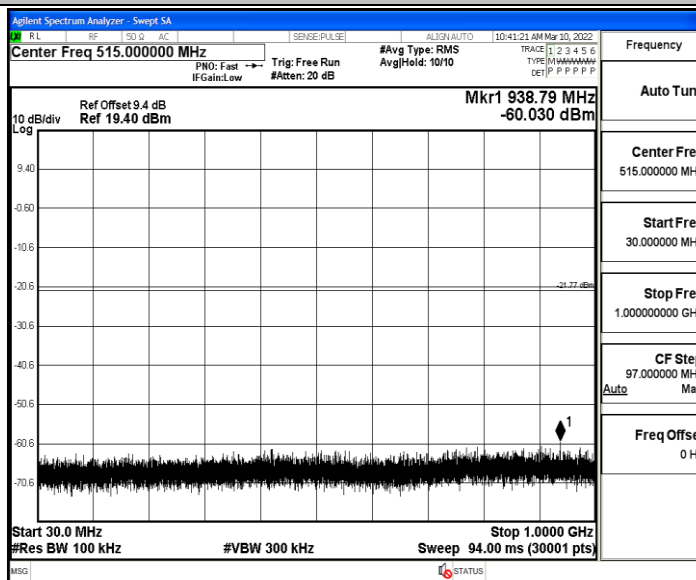
2DH5_Ant1_2480_1000~26500



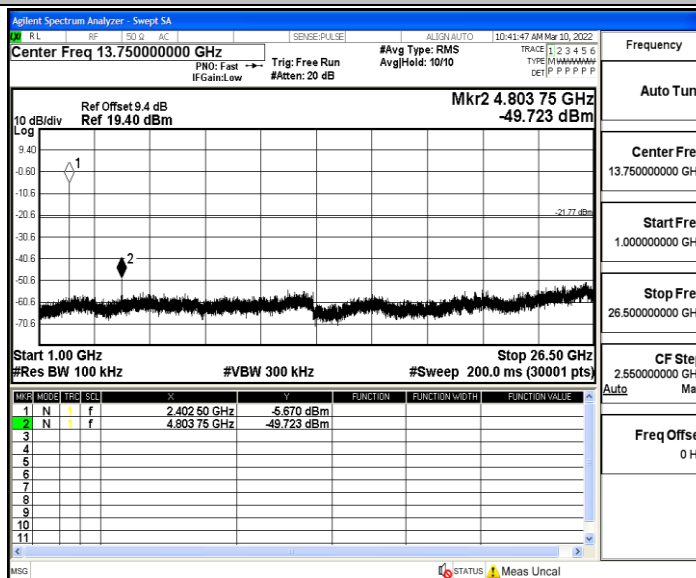
3DH5_Ant1_2402_0~Reference



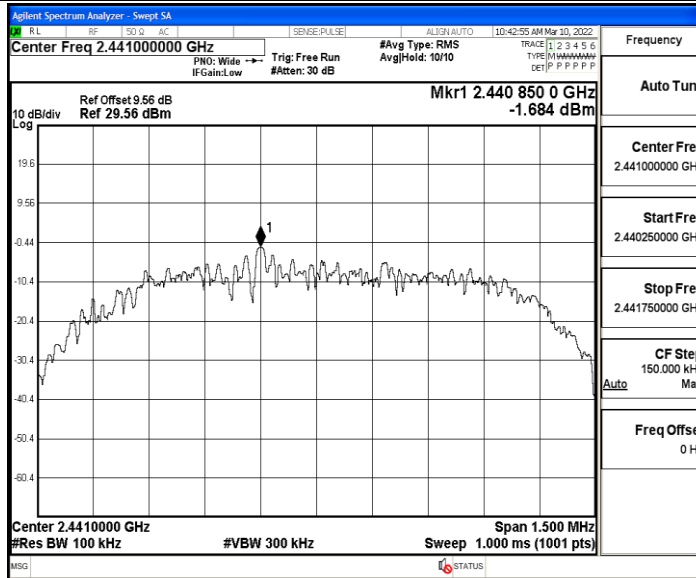
3DH5_Ant1_2402_30~1000



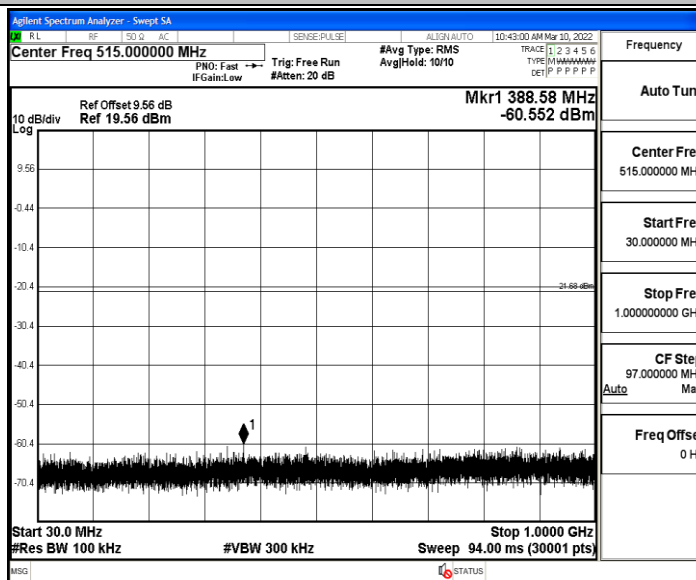
3DH5_Ant1_2402_1000~26500



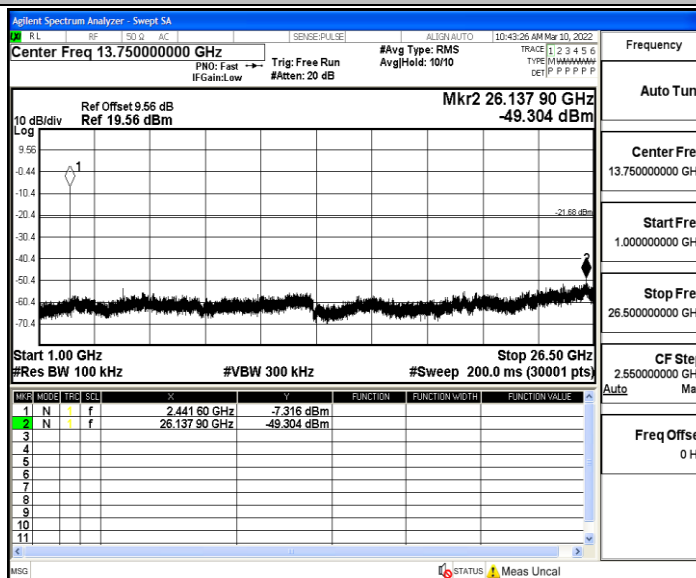
3DH5_Ant1_2441_0~Reference



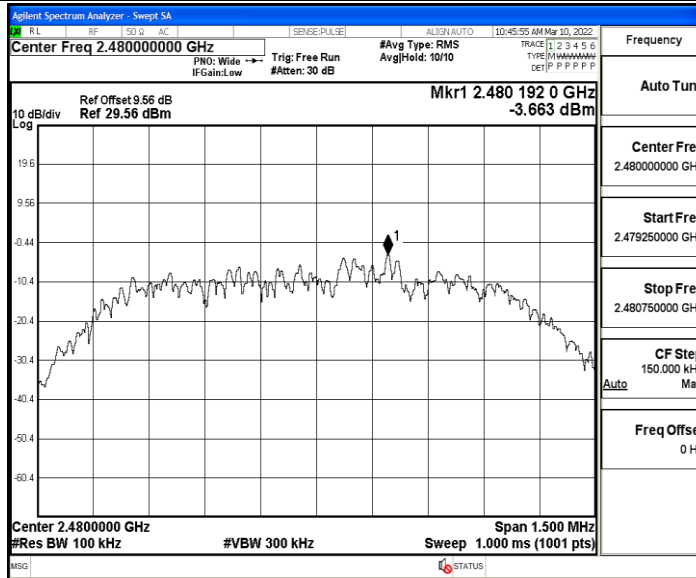
3DH5_Ant1_2441_30~1000



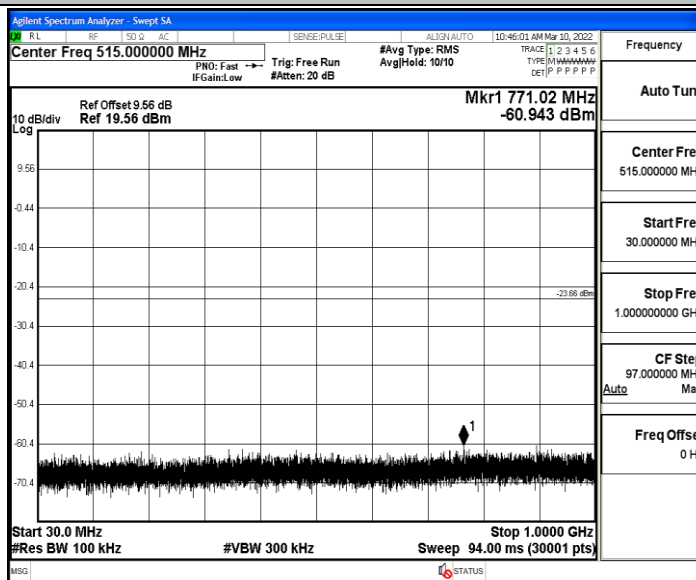
3DH5_Ant1_2441_1000~26500



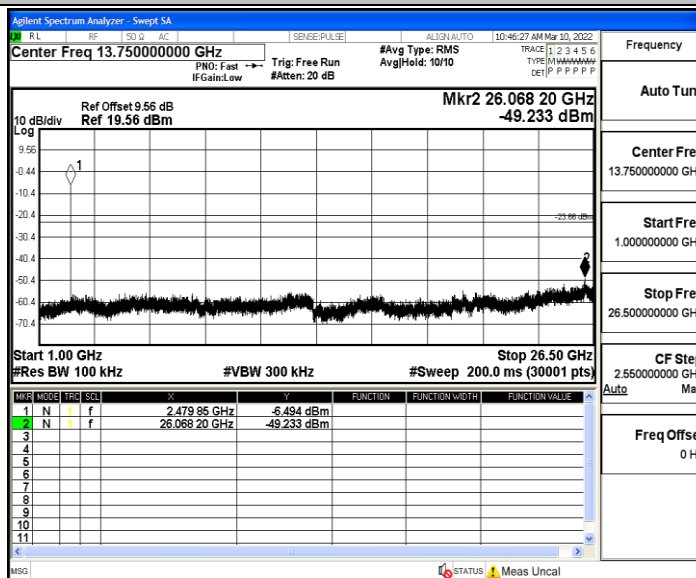
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



Appendix H: Emissions in Restricted Bands

Test Result

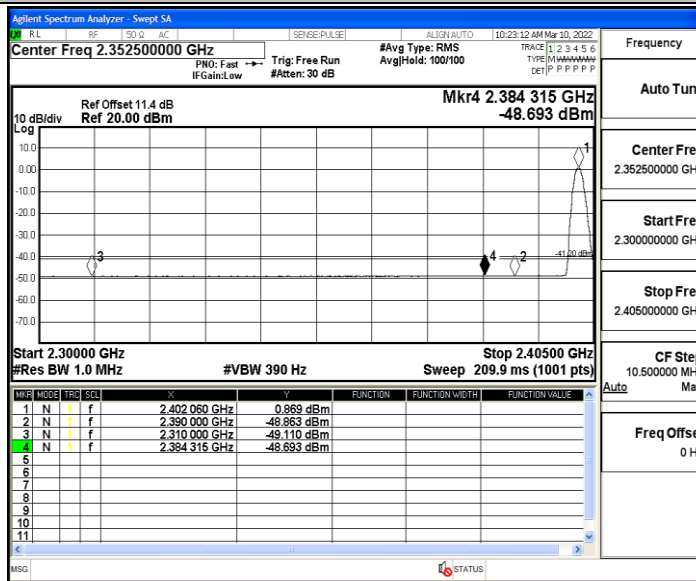
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.11	≤-41.20	PASS
				AV	2384.315	-48.69	≤-41.20	PASS
				AV	2390.000	-48.86	≤-41.20	PASS
				Peak	2310.000	-42.97	≤-21.20	PASS
				Peak	2329.505	-38.46	≤-21.20	PASS
				Peak	2390.000	-41.41	≤-21.20	PASS
		High	2480	AV	2483.500	-48.22	≤-41.20	PASS
				AV	2494.240	-47.95	≤-41.20	PASS
				AV	2500.000	-48.17	≤-41.20	PASS
				Peak	2483.500	-40.93	≤-21.20	PASS
				Peak	2497.040	-36.89	≤-21.20	PASS
				Peak	2500.000	-40.68	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.01	≤-41.20	PASS
				AV	2380.535	-48.71	≤-41.20	PASS
				AV	2390.000	-48.92	≤-41.20	PASS
				Peak	2310.000	-41.75	≤-21.20	PASS
				Peak	2365.940	-39.23	≤-21.20	PASS
				Peak	2390.000	-42.49	≤-21.20	PASS
		High	2480	AV	2483.500	-48.18	≤-41.20	PASS
				AV	2499.520	-48.01	≤-41.20	PASS
				AV	2500.000	-48.15	≤-41.20	PASS
				Peak	2483.500	-40.35	≤-21.20	PASS
				Peak	2498.960	-38.06	≤-21.20	PASS
				Peak	2500.000	-41.11	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-49.12	≤-41.20	PASS
				AV	2381.795	-48.65	≤-41.20	PASS
				AV	2390.000	-48.89	≤-41.20	PASS
				Peak	2310.000	-41.57	≤-21.20	PASS
				Peak	2369.615	-38.74	≤-21.20	PASS
				Peak	2390.000	-41.26	≤-21.20	PASS
		High	2480	AV	2483.500	-48.21	≤-41.20	PASS
				AV	2499.040	-48	≤-41.20	PASS
				AV	2500.000	-48.03	≤-41.20	PASS
				Peak	2483.500	-41.83	≤-21.20	PASS
				Peak	2492.320	-38.14	≤-21.20	PASS
				Peak	2500.000	-40.87	≤-21.20	PASS

Note:

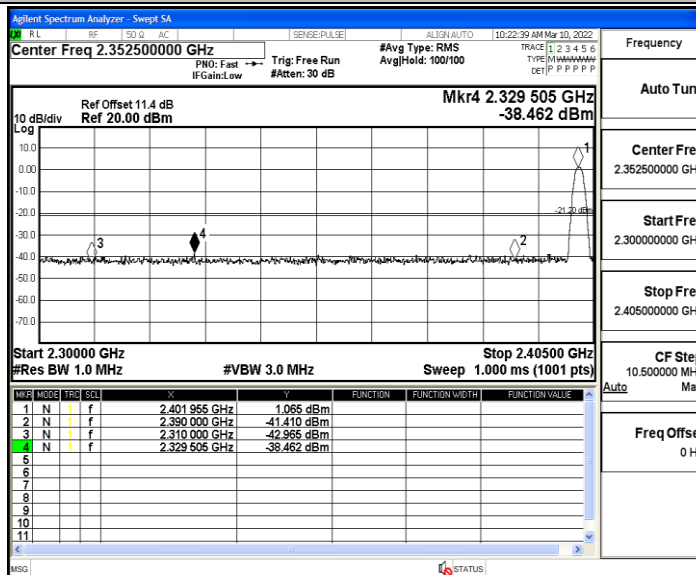
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

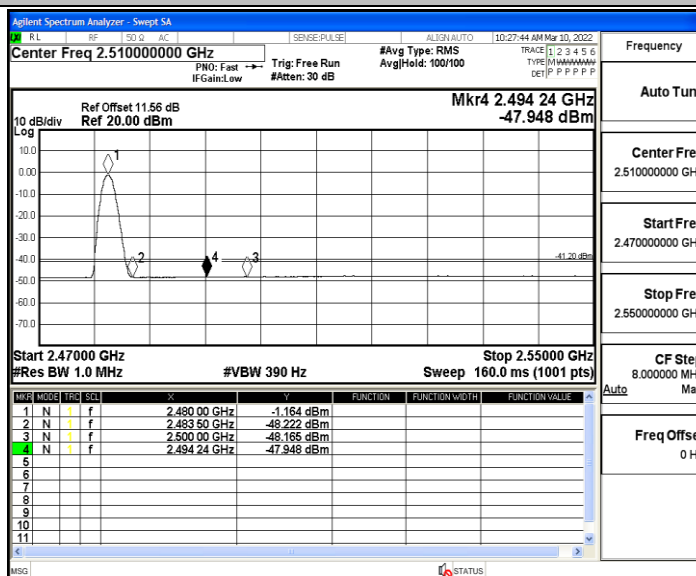
DH5_Ant1_Low_2402_AV



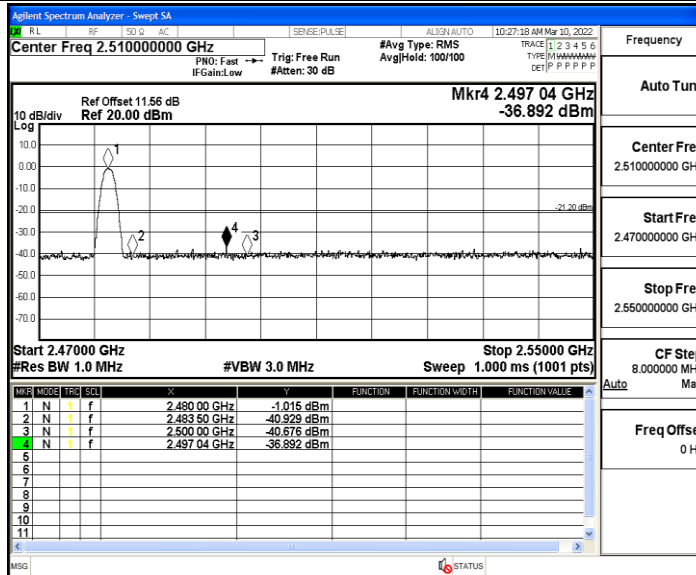
DH5_Ant1_Low_2402_Peak



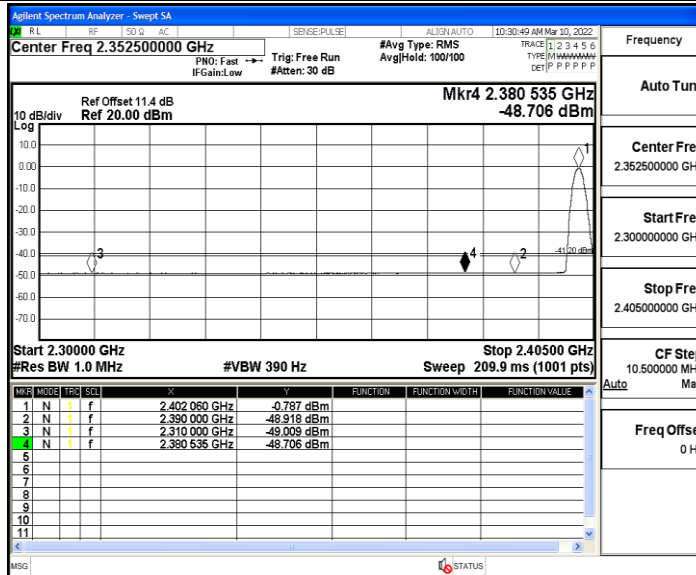
DH5_Ant1_High_2480_AV



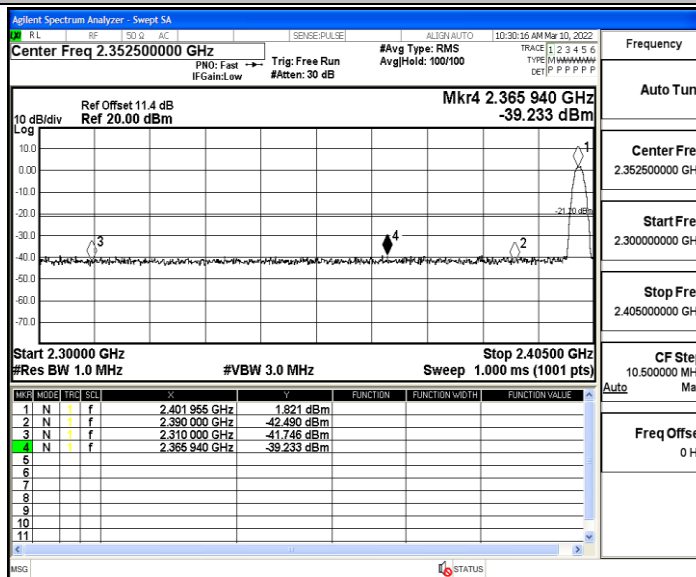
DH5_Ant1_High_2480_Peak



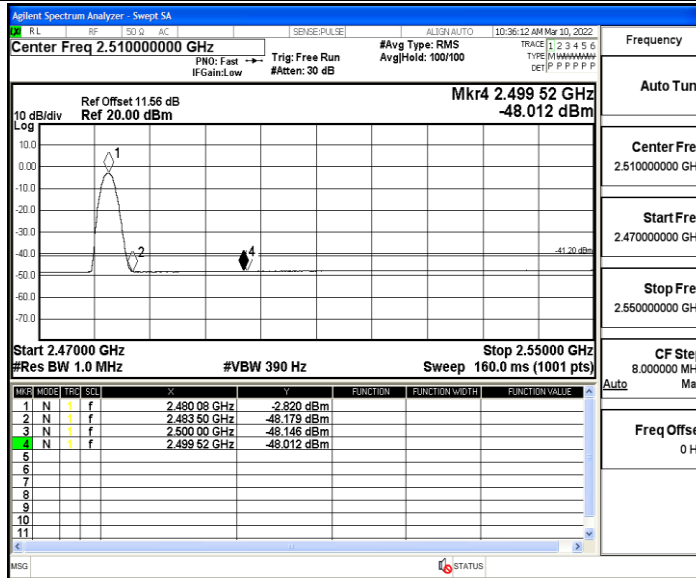
2DH5_Ant1_Low_2402_AV



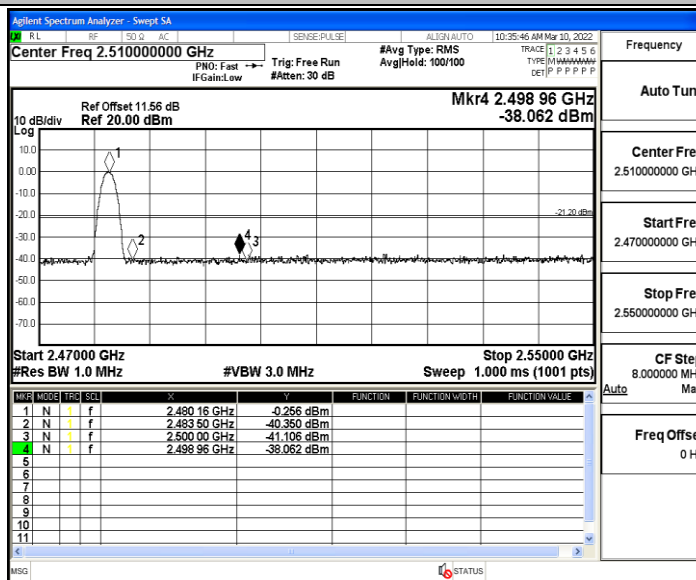
2DH5_Ant1_Low_2402_Peak



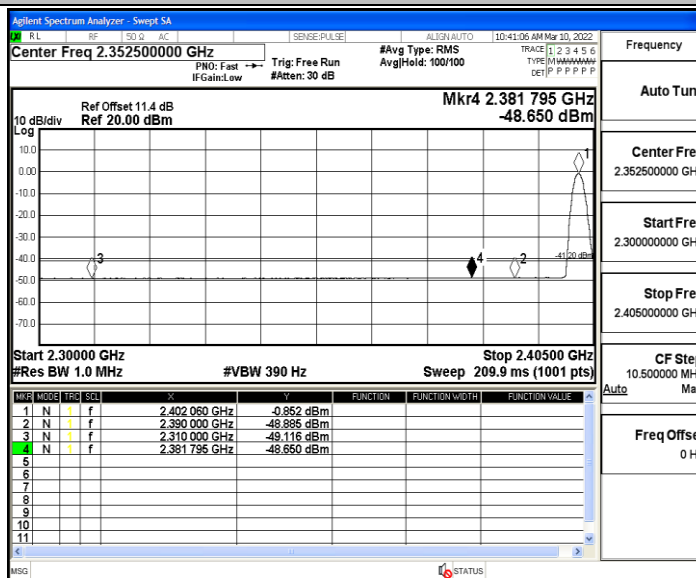
2DH5_Ant1_High_2480_AV



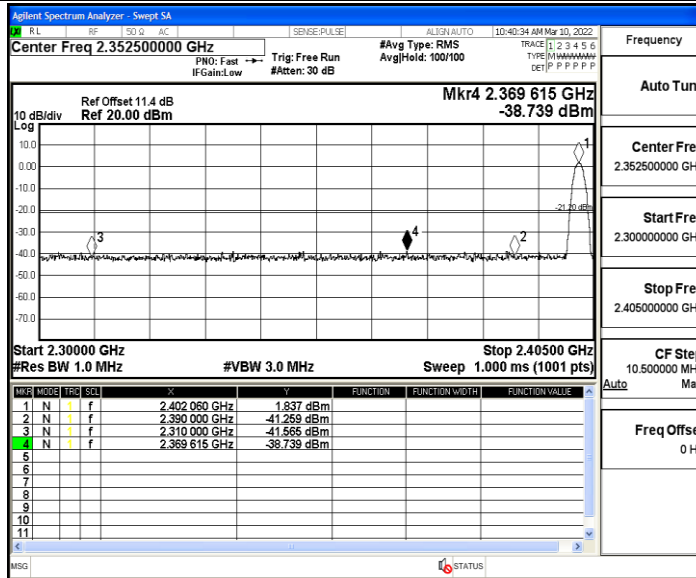
2DH5_Ant1_High_2480_Peak



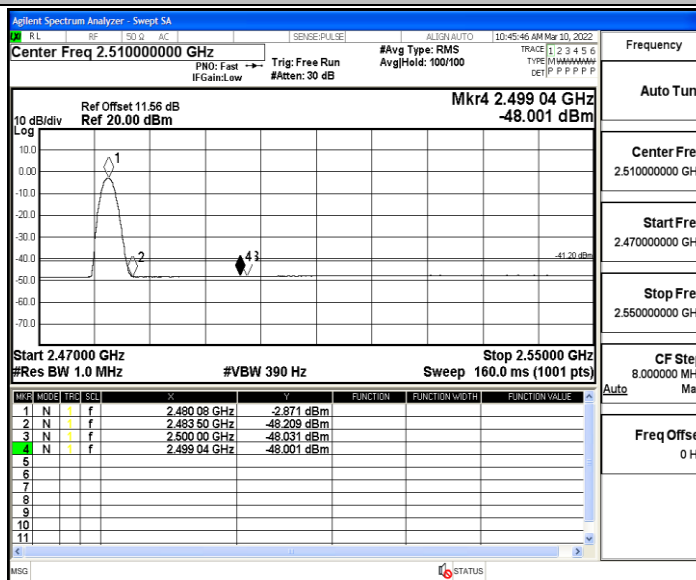
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

