

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Smartphone****Trade Mark: YEZZ****Test Model: LIV 3S LTE****FCC ID: 2APW4LIV3SL****Environmental Conditions**

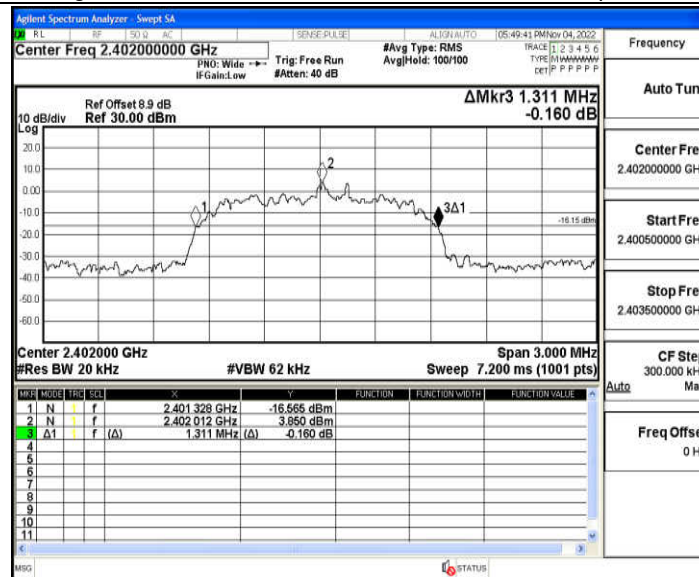
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

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

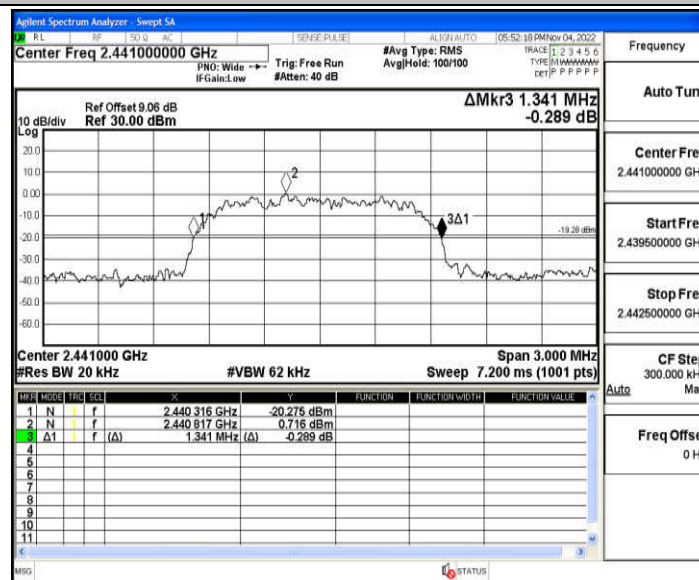
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.523	2402.468	---	---
		2441	0.942	2440.523	2441.465	---	---
		2480	0.924	2479.523	2480.447	---	---
2DH5	Ant1	2402	1.311	2401.328	2402.639	---	---
		2441	1.341	2440.316	2441.657	---	---
		2480	1.317	2479.325	2480.642	---	---
3DH5	Ant1	2402	1.272	2401.343	2402.615	---	---
		2441	1.278	2440.334	2441.612	---	---
		2480	1.332	2479.316	2480.648	---	---

Test Graphs

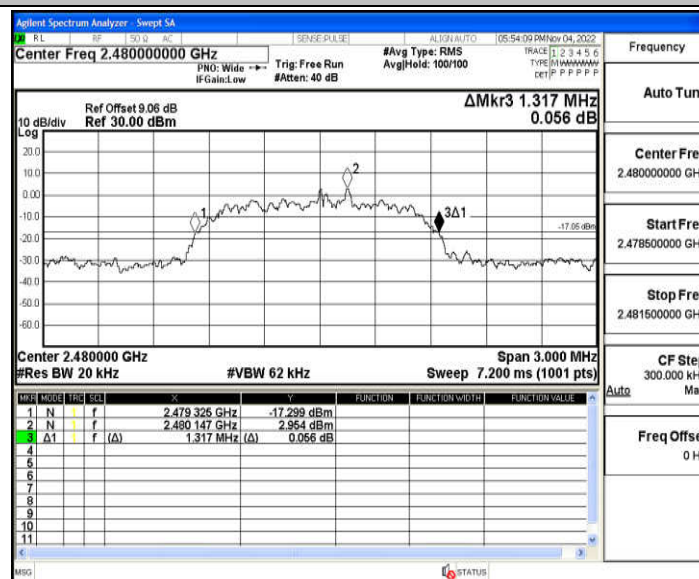




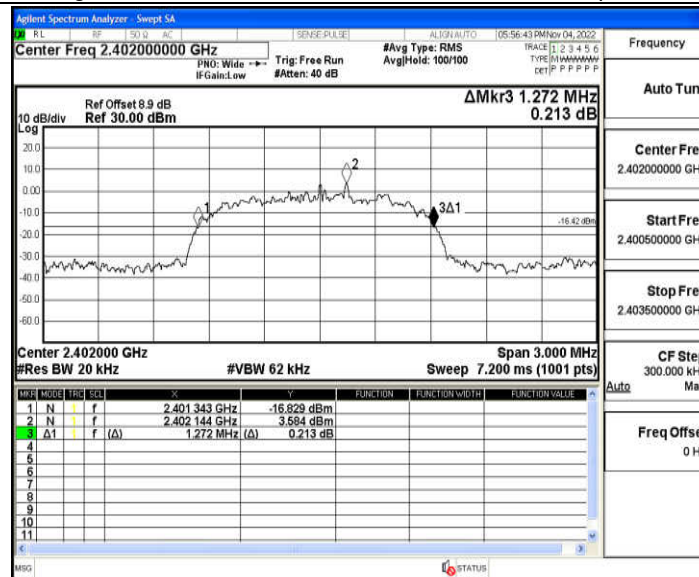
2DH5_Ant1_2441



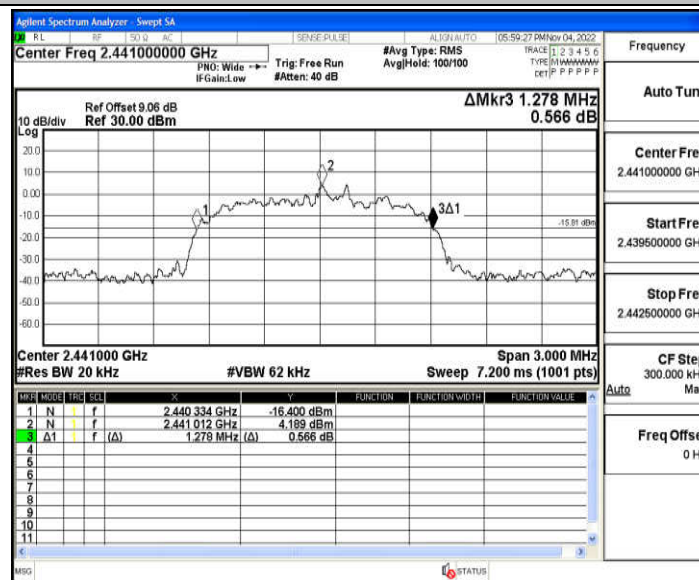
2DH5_Ant1_2480



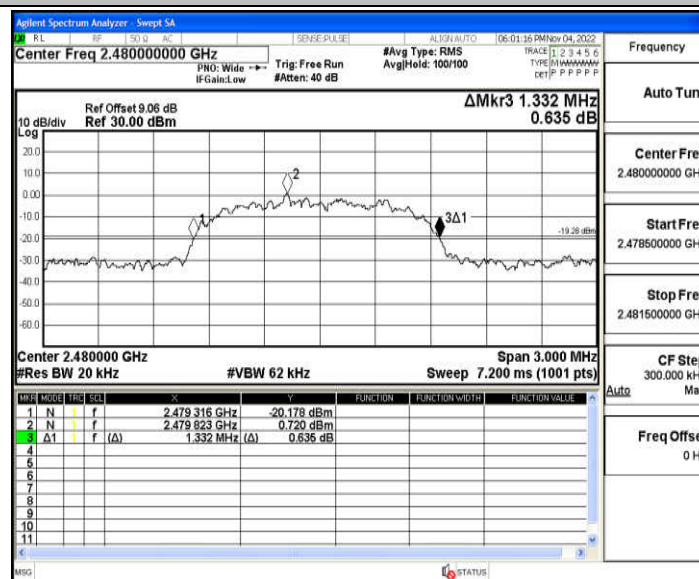
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



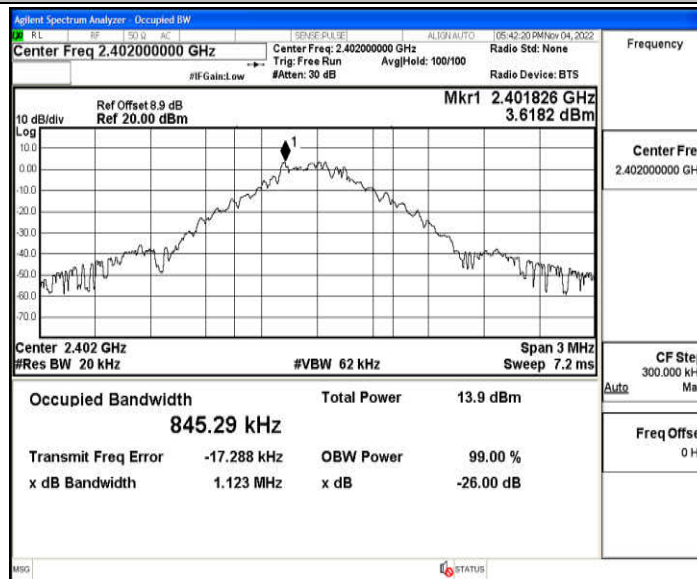
Appendix B: Occupied Channel Bandwidth

Test Result

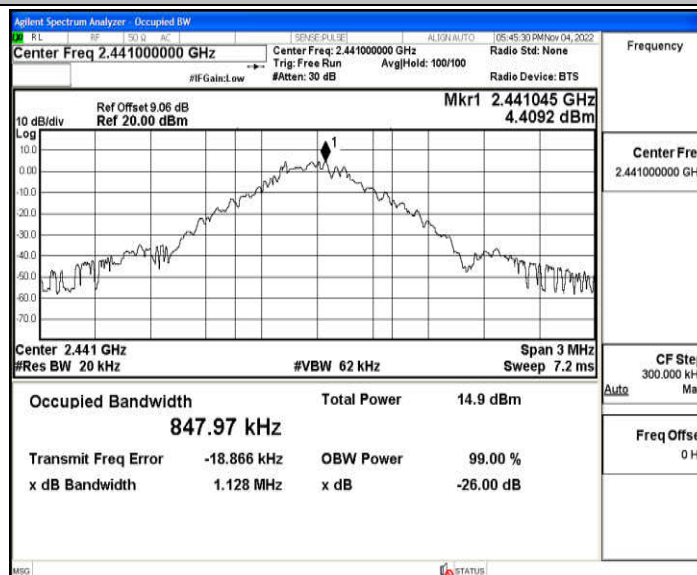
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.84529	2401.5601	2402.4054	---	---
		2441	0.84797	2440.5571	2441.4051	---	---
		2480	0.85622	2479.5540	2480.4102	---	---
2DH5	Ant1	2402	1.1958	2401.3888	2402.5846	---	---
		2441	1.1879	2440.3901	2441.5780	---	---
		2480	1.2242	2479.3763	2480.6005	---	---
3DH5	Ant1	2402	1.2037	2401.3750	2402.5787	---	---
		2441	1.1987	2440.3775	2441.5762	---	---
		2480	1.2208	2479.3656	2480.5864	---	---

Test Graphs

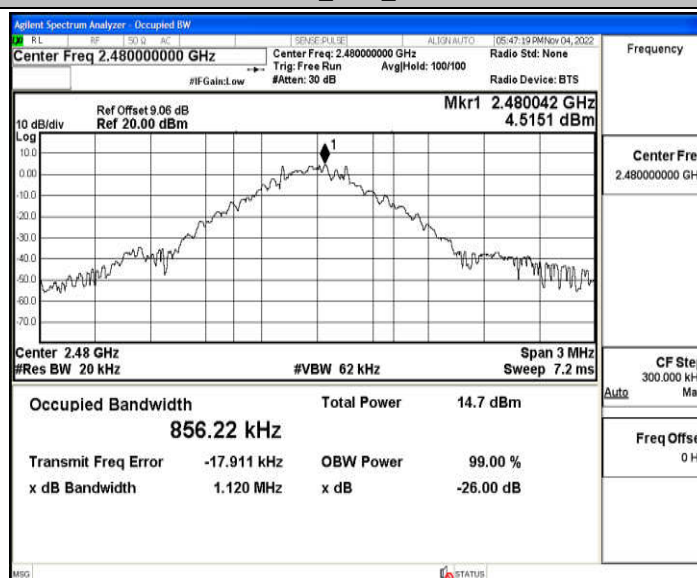
DH5_Ant1_2402



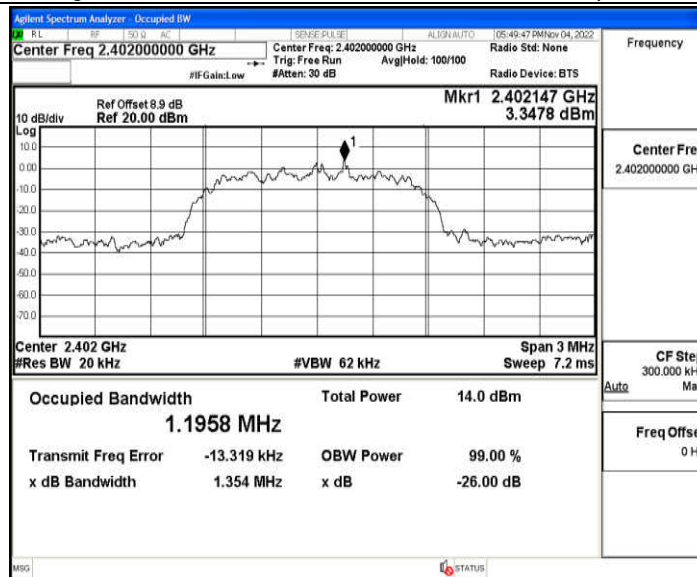
DH5_Ant1_2441



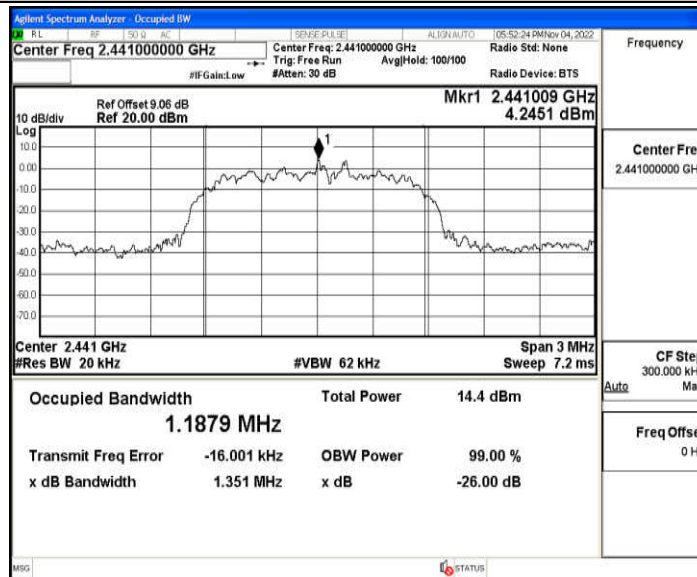
DH5_Ant1_2480



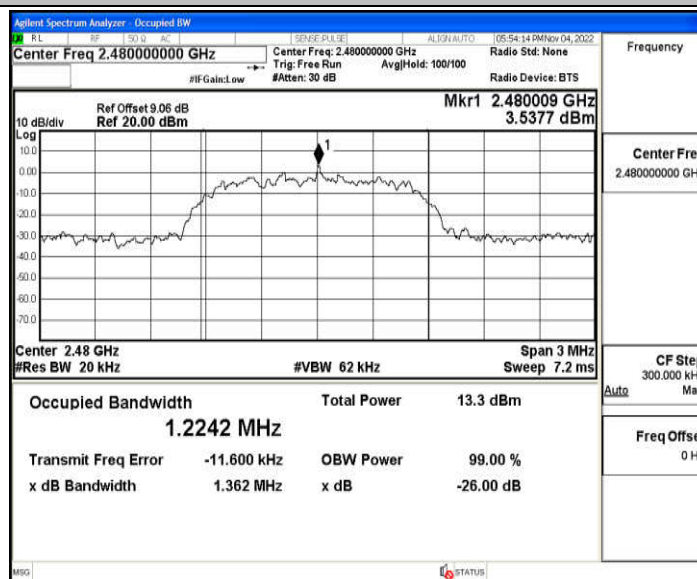
2DH5_Ant1_2402



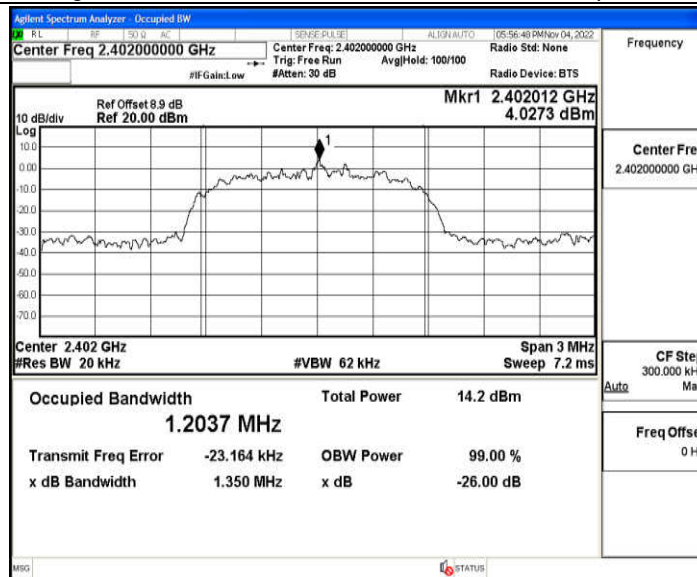
2DH5_Ant1_2441



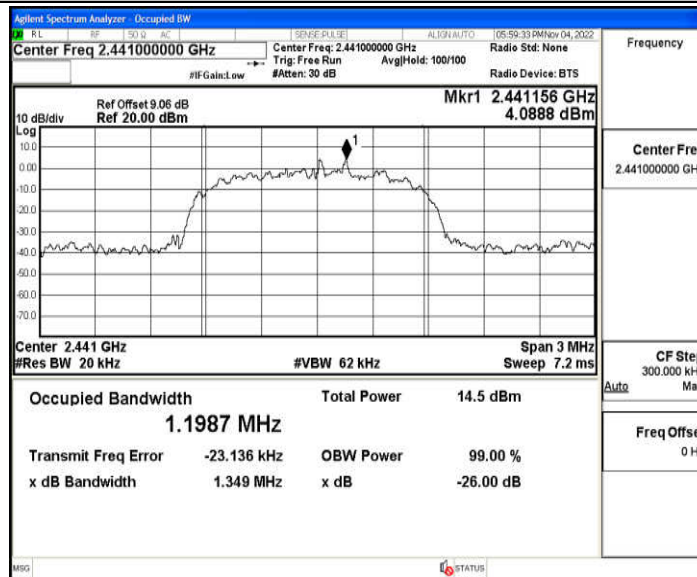
2DH5_Ant1_2480



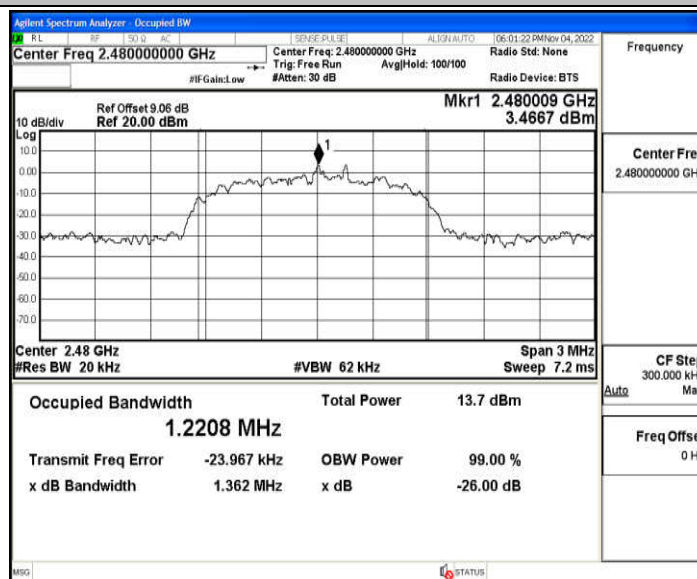
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

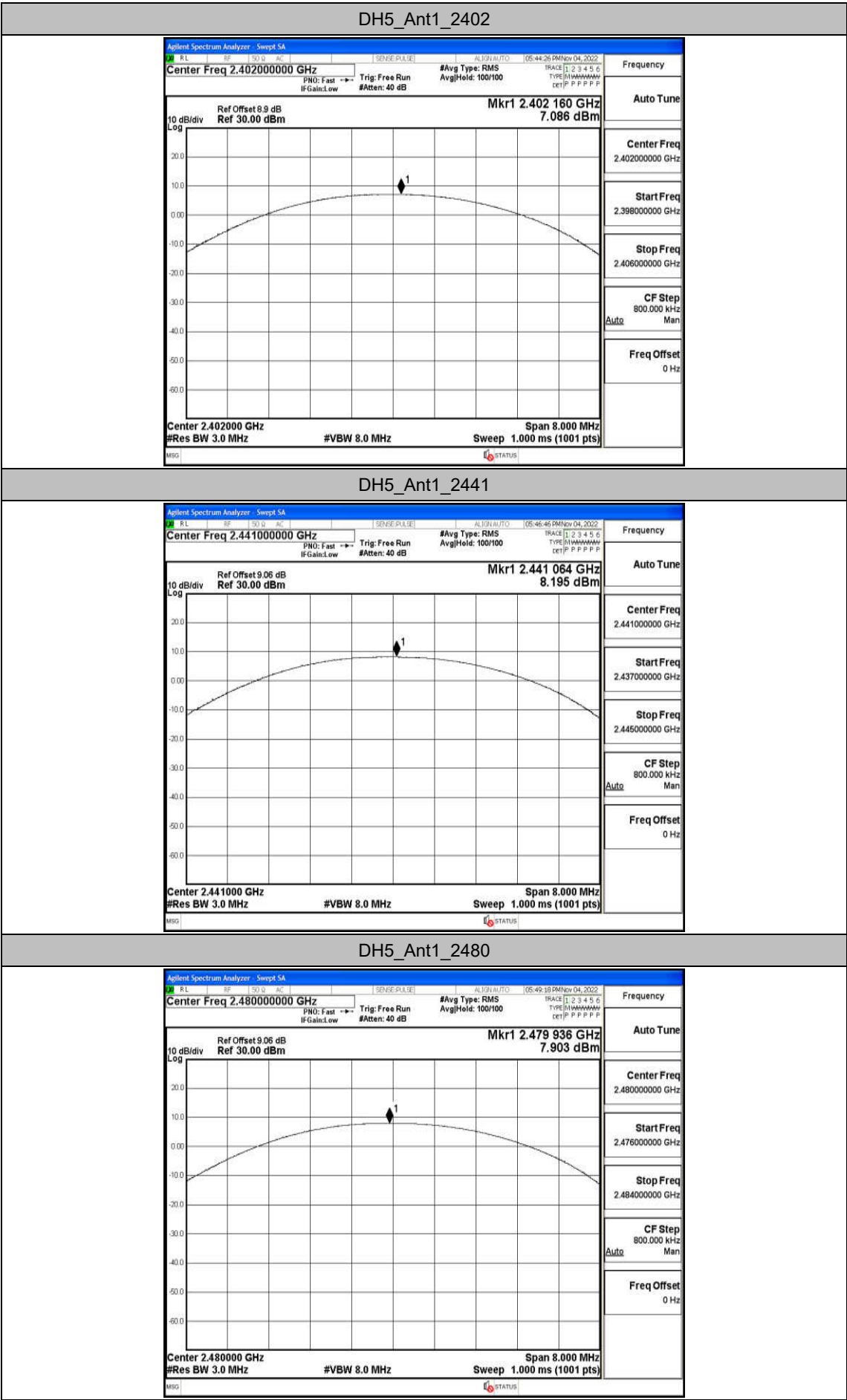


Appendix C: Maximum Peak conducted output power

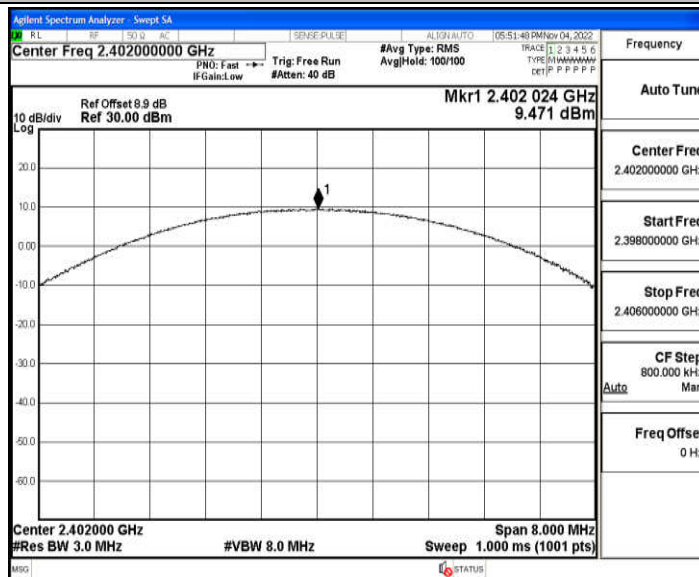
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	7.09	≤30.0	PASS
		2441	8.2	≤30.0	PASS
		2480	7.9	≤30.0	PASS
2DH5	Ant1	2402	9.47	≤20.97	PASS
		2441	9.82	≤20.97	PASS
		2480	8.37	≤20.97	PASS
3DH5	Ant1	2402	9.63	≤20.97	PASS
		2441	10.01	≤20.97	PASS
		2480	8.56	≤20.97	PASS

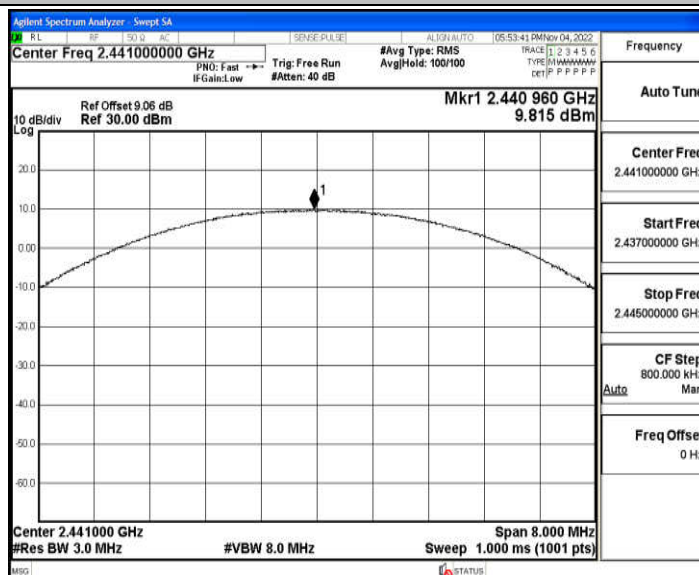
Test Graphs



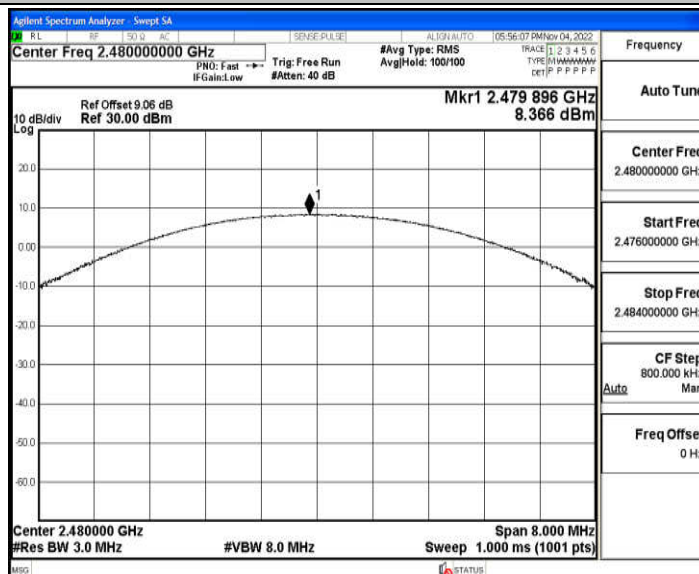
2DH5_Ant1_2402



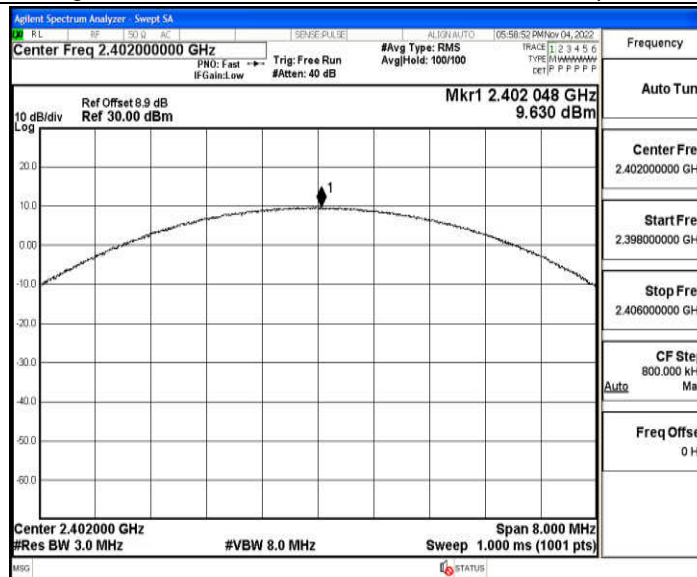
2DH5_Ant1_2441



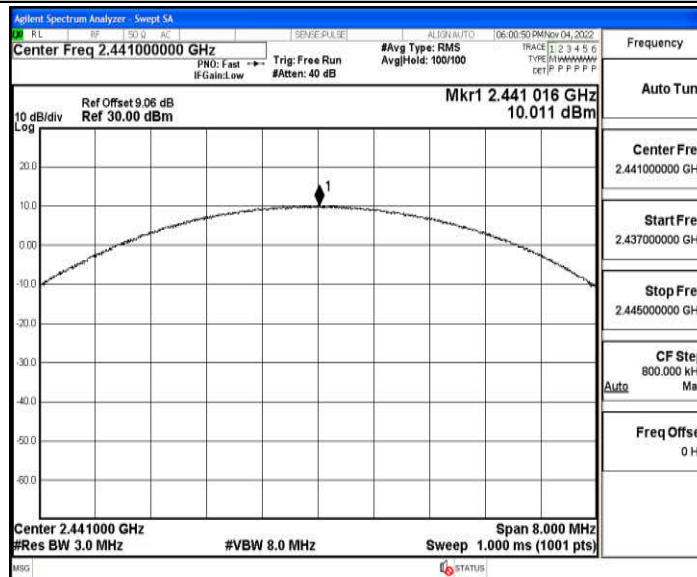
2DH5_Ant1_2480



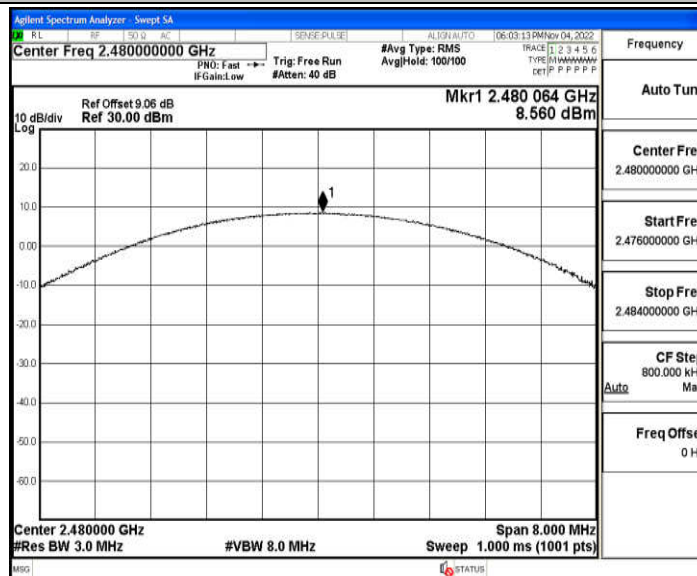
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

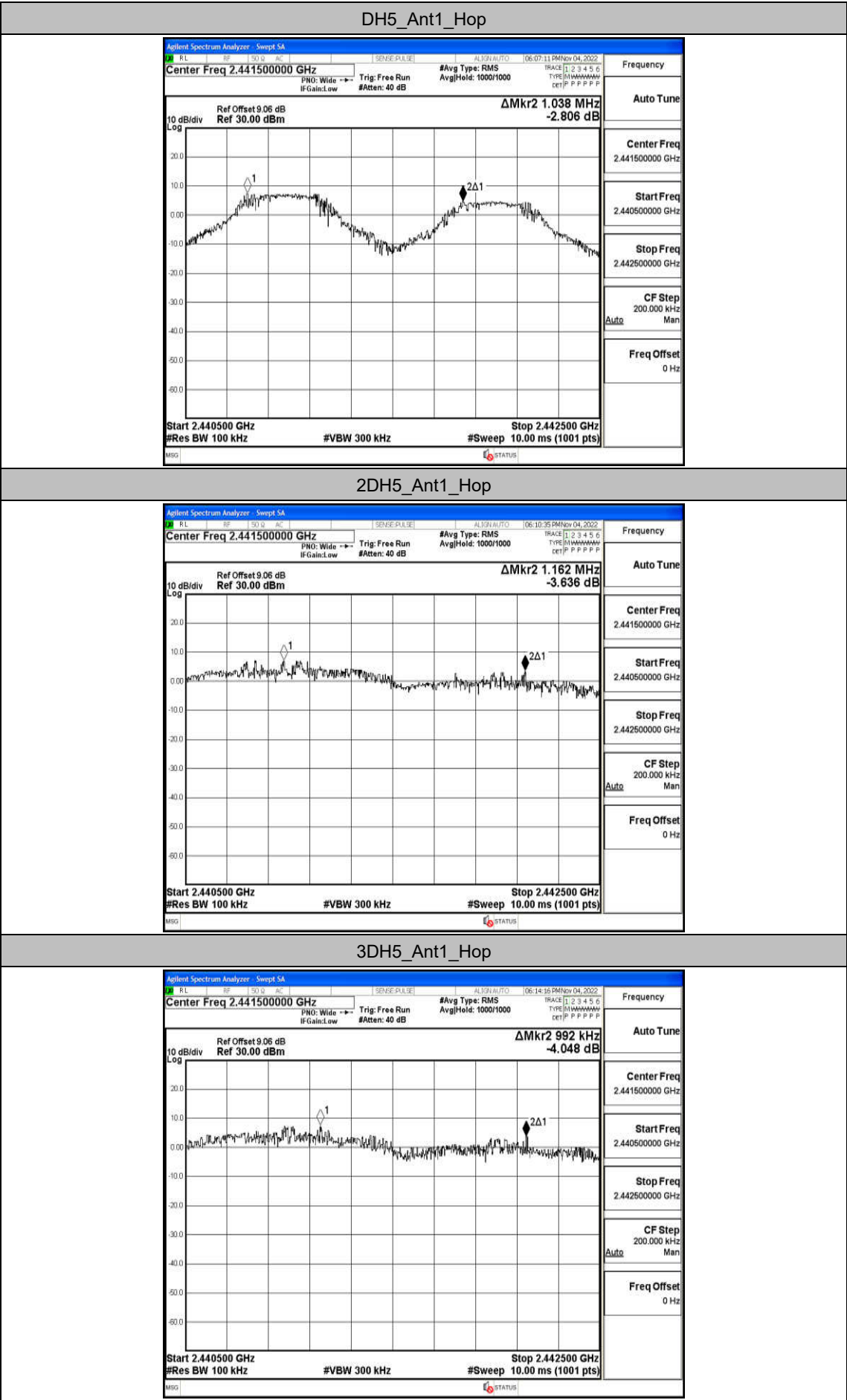


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.038	≥ 0.945	PASS
2DH5	Ant1	Hop	1.162	≥ 0.894	PASS
3DH5	Ant1	Hop	0.992	≥ 0.888	PASS

Test Graphs

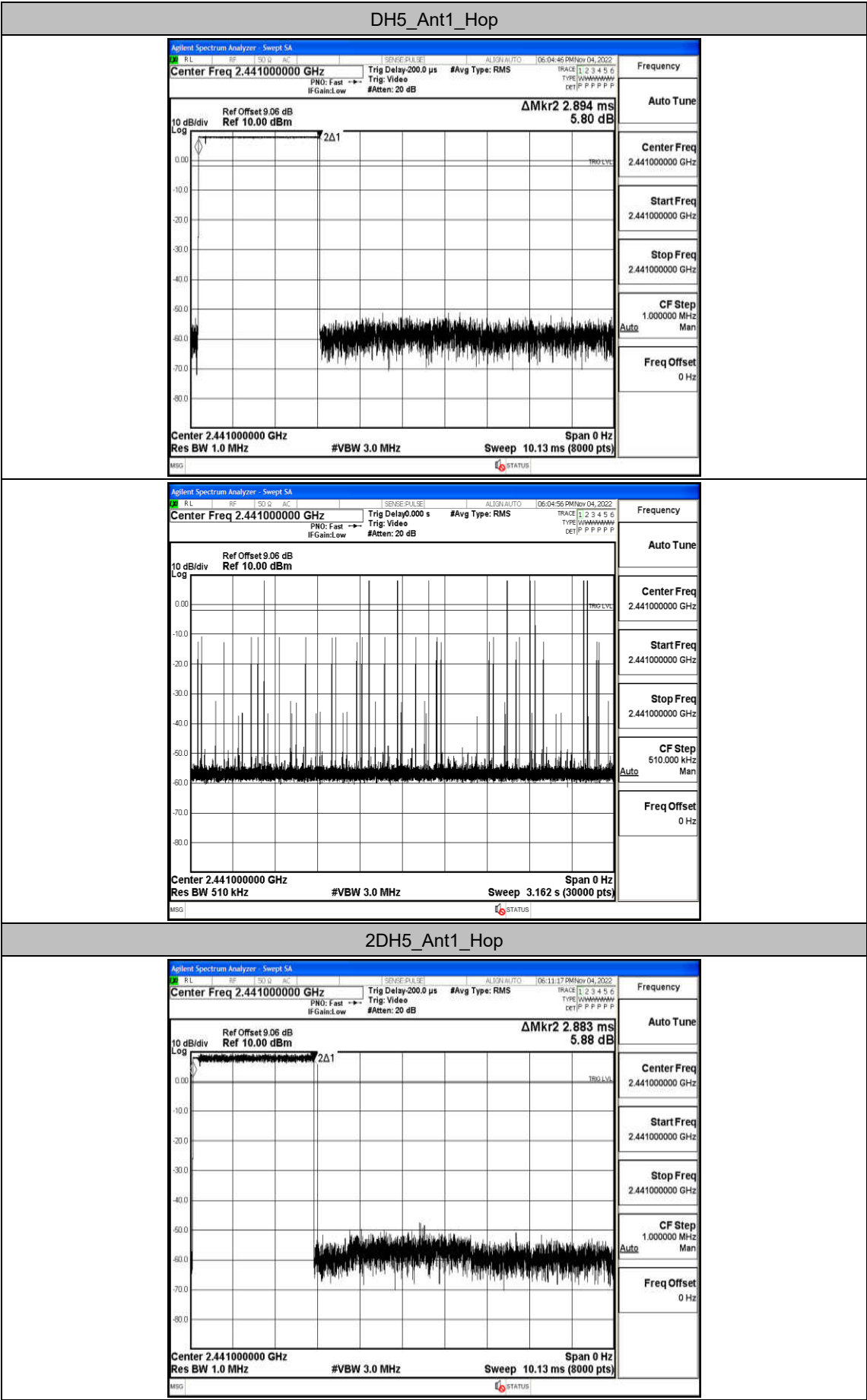


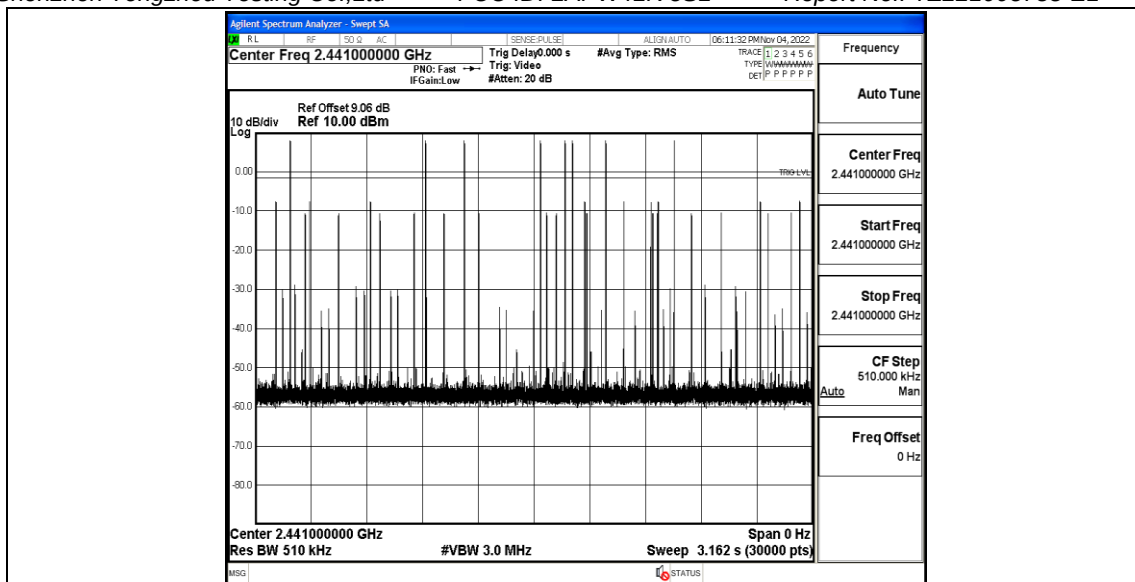
Appendix E: Time of occupancy

Test Result

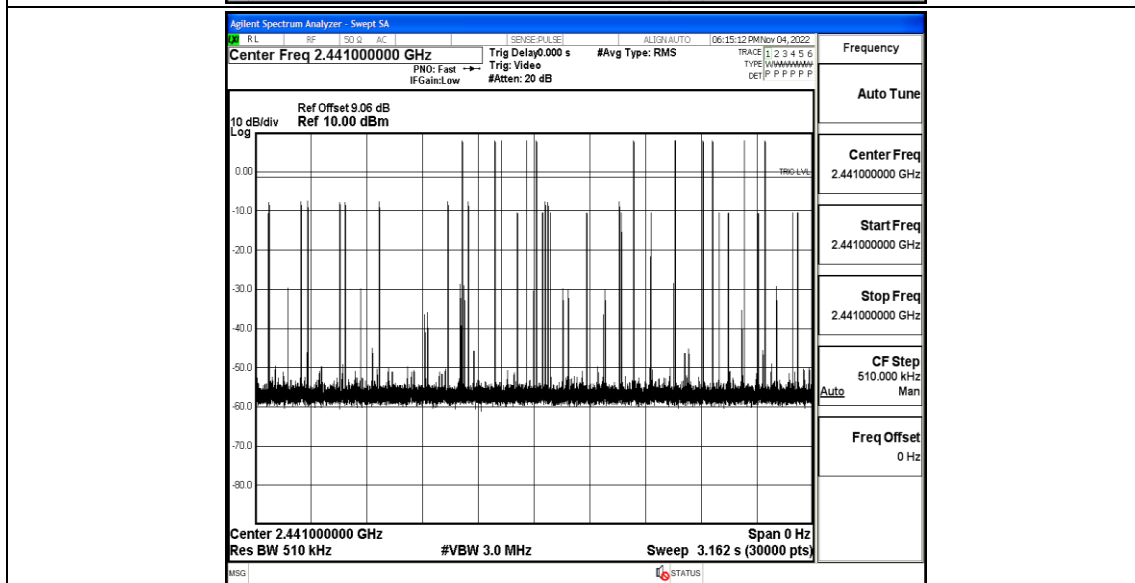
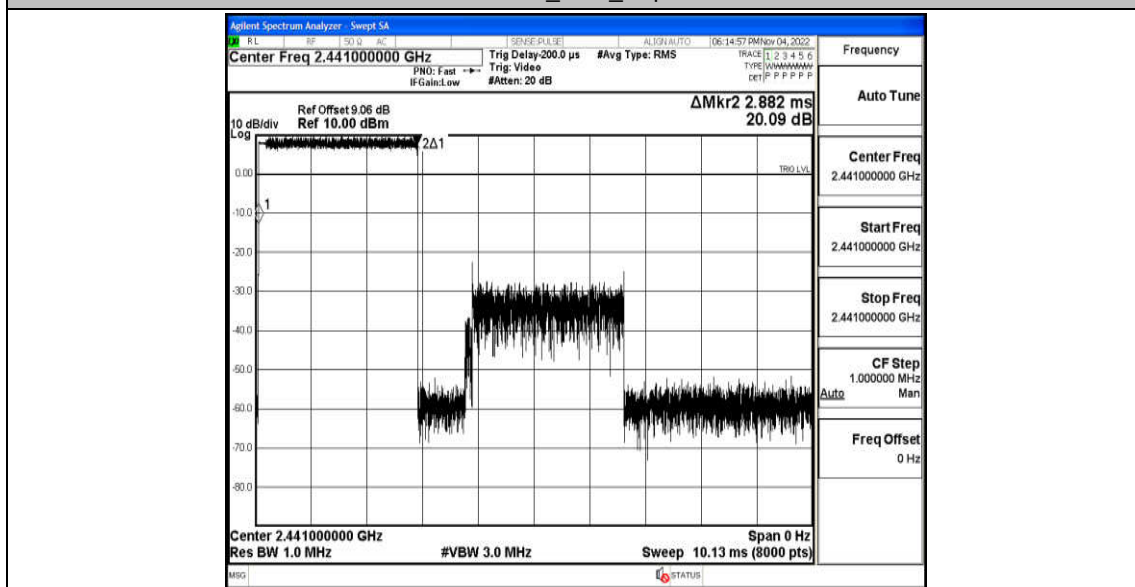
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.894	100	0.289	≤0.4	PASS
2DH5	Ant1	Hop	2.883	90	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.882	120	0.346	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop

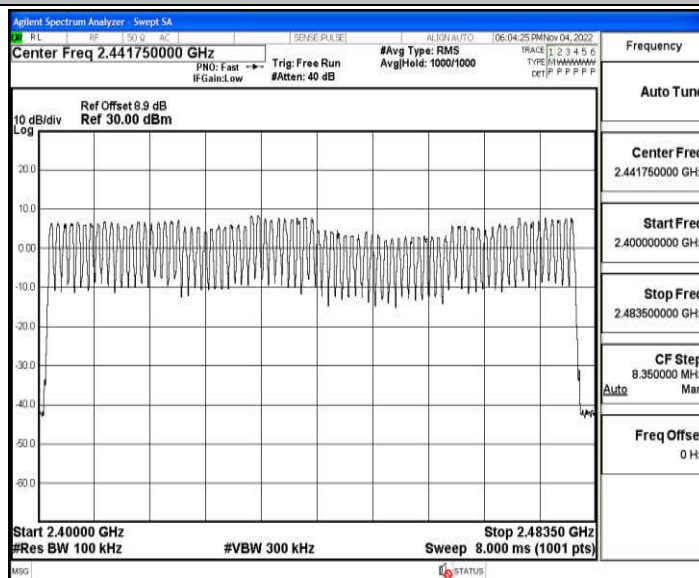


Appendix F: Number of hopping channels

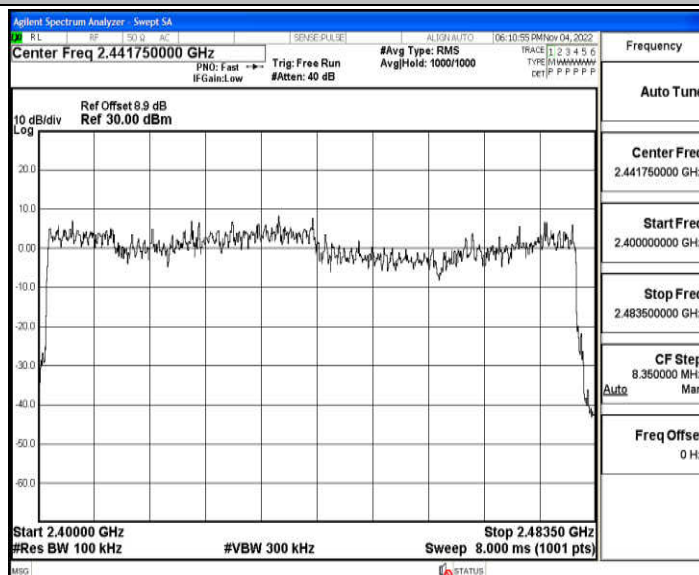
Test Result

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

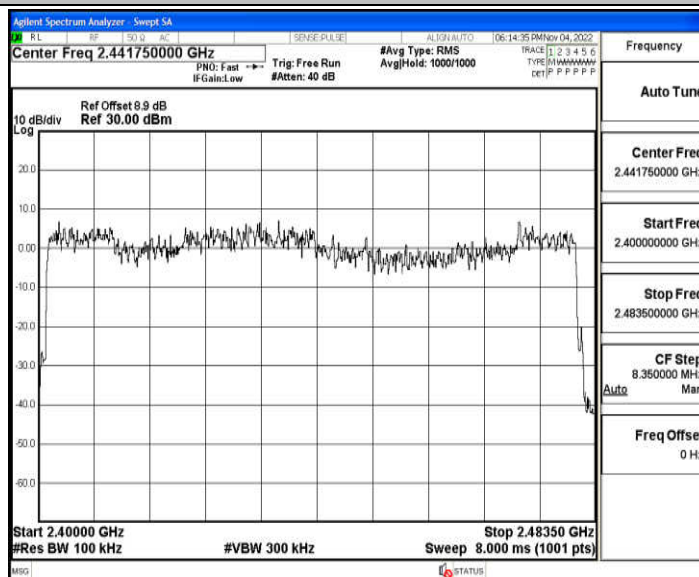
DH5 Ant1 Hop



2DH5 Ant1 Hop



3DH5 Ant1 Hop



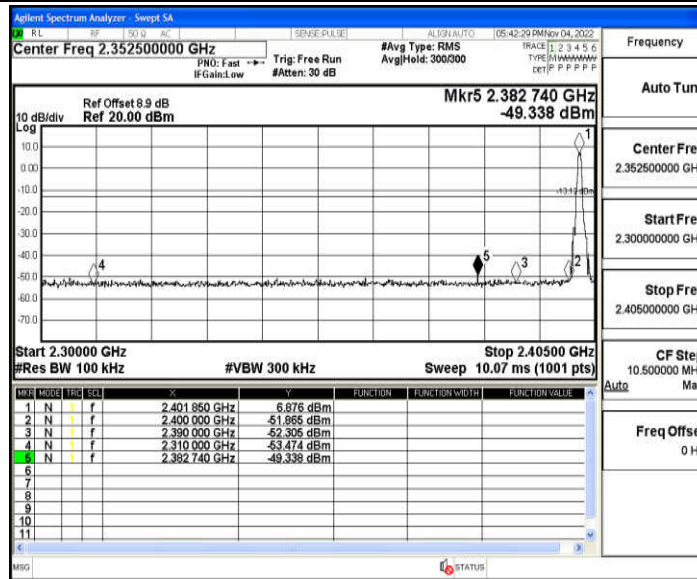
Appendix G: Band edge measurements

Test Result

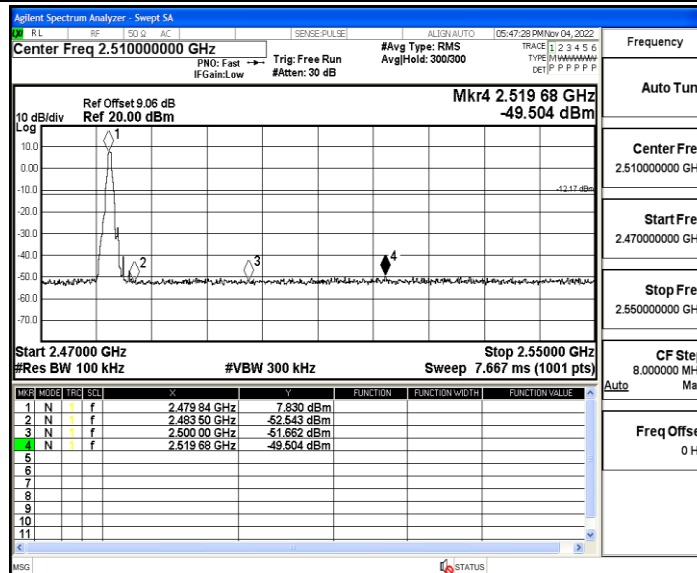
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.88	-49.34	≤ -13.12	PASS
		High	2480	7.83	-49.5	≤ -12.17	PASS
		Low	Hop_2402	5.51	-50.84	≤ -14.49	PASS
		High	Hop_2480	7.61	-48.39	≤ -12.39	PASS
2DH5	Ant1	Low	2402	7.46	-41.53	≤ -12.54	PASS
		High	2480	6.62	-46.43	≤ -13.38	PASS
		Low	Hop_2402	4.27	-50.9	≤ -15.74	PASS
		High	Hop_2480	6.85	-49.51	≤ -13.15	PASS
3DH5	Ant1	Low	2402	7.64	-40.86	≤ -12.36	PASS
		High	2480	5.88	-47.04	≤ -14.12	PASS
		Low	Hop_2402	4.46	-51.23	≤ -15.54	PASS
		High	Hop_2480	4.44	-49.48	≤ -15.56	PASS

Test Graphs

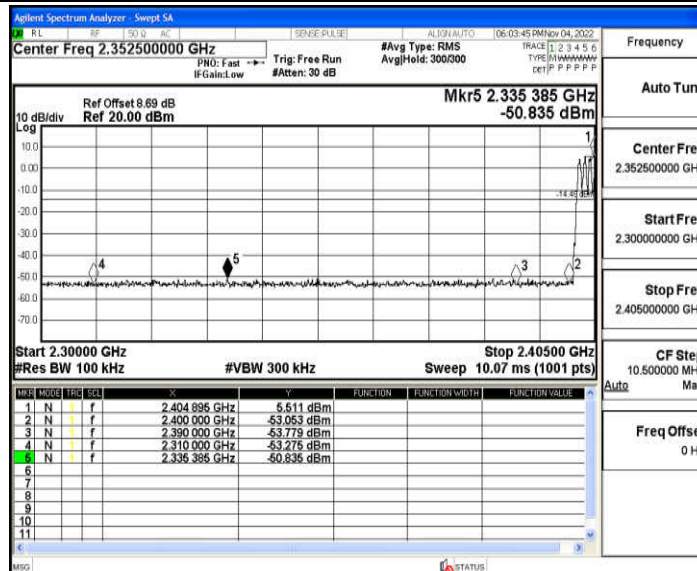
DH5_Ant1_Low_2402



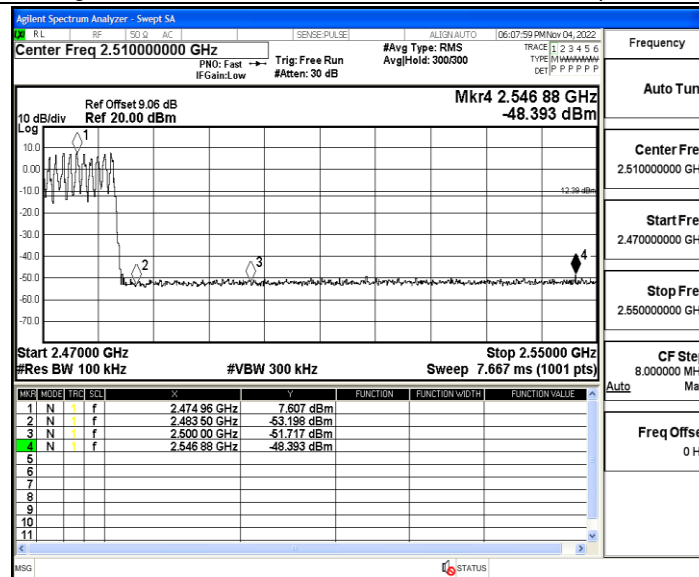
DH5_Ant1_High_2480



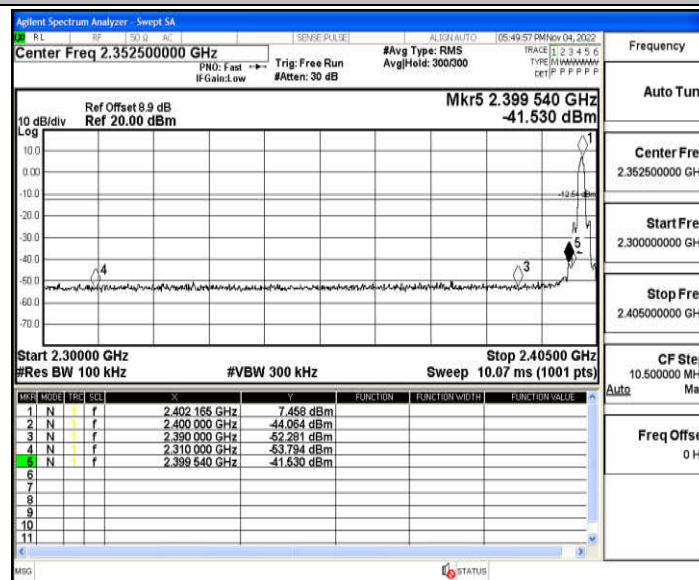
DH5_Ant1_Low_Hop_2402



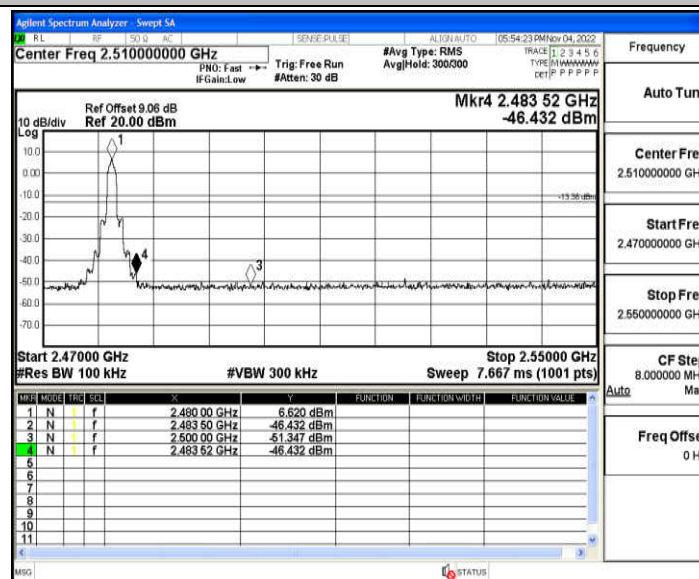
DH5_Ant1_High_Hop_2480



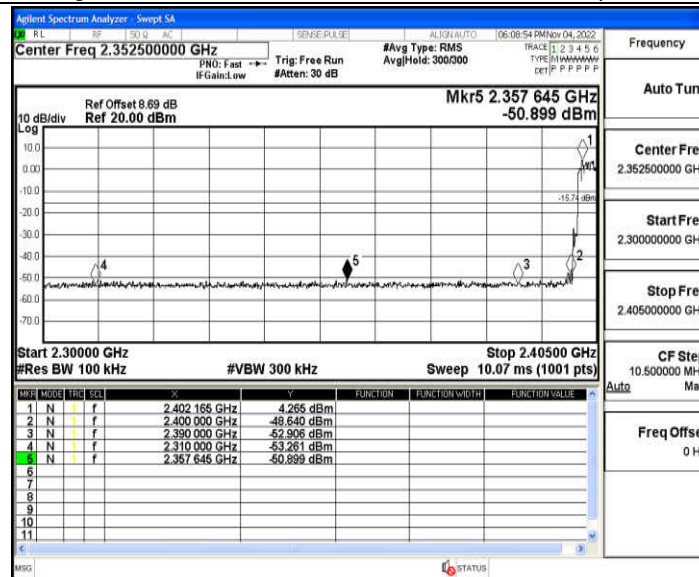
2DH5_Ant1_Low_2402



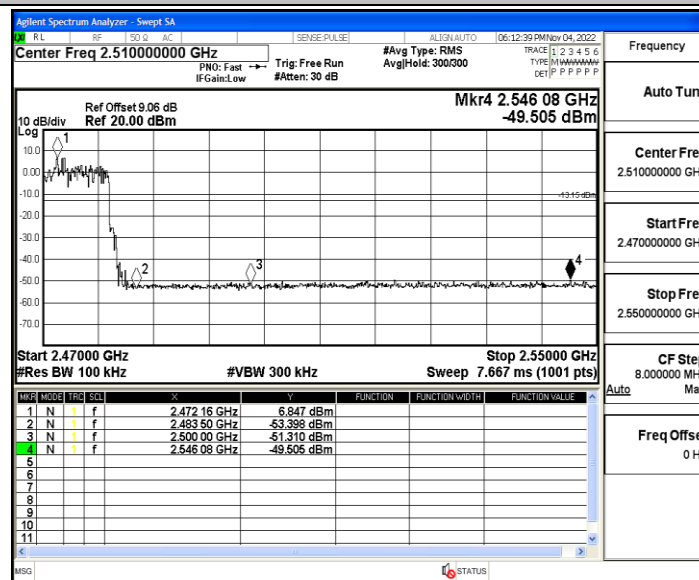
2DH5_Ant1_High_2480



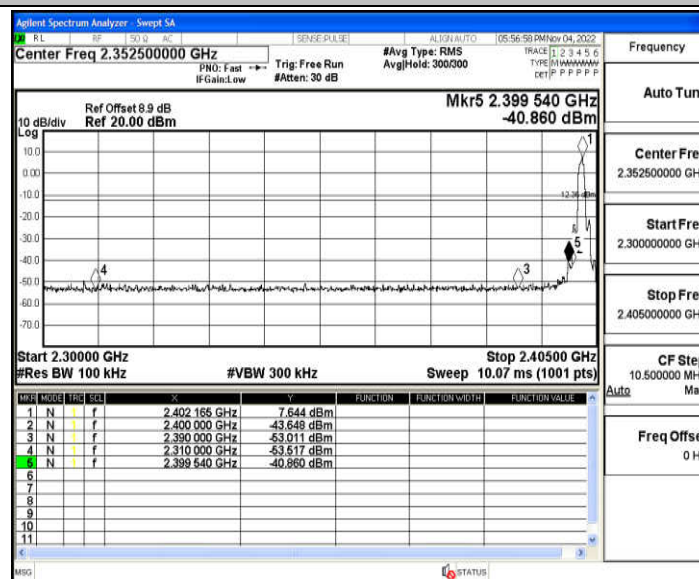
2DH5_Ant1_Low_Hop_2402



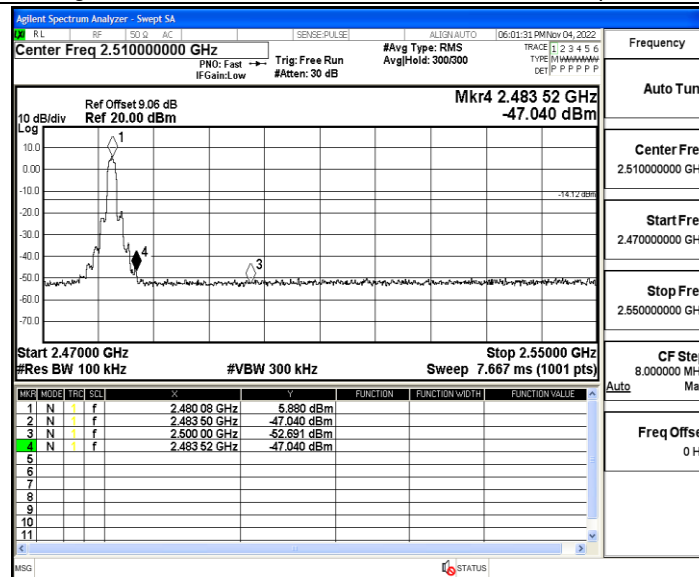
2DH5_Ant1_High_Hop_2480



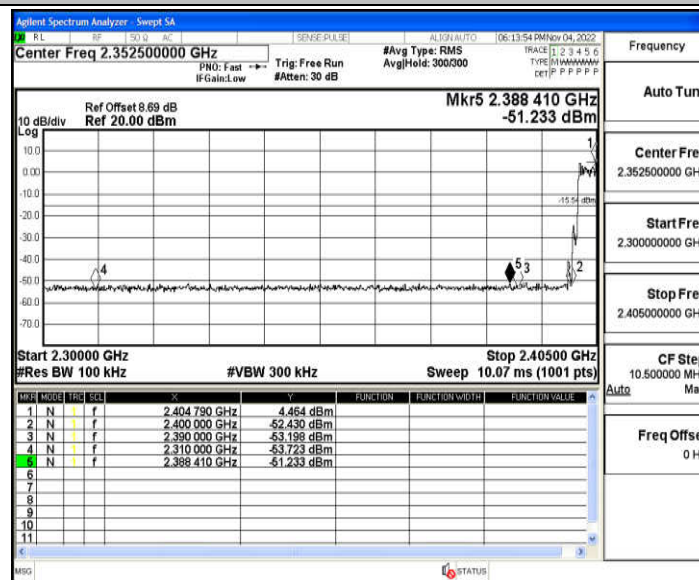
3DH5_Ant1_Low_2402



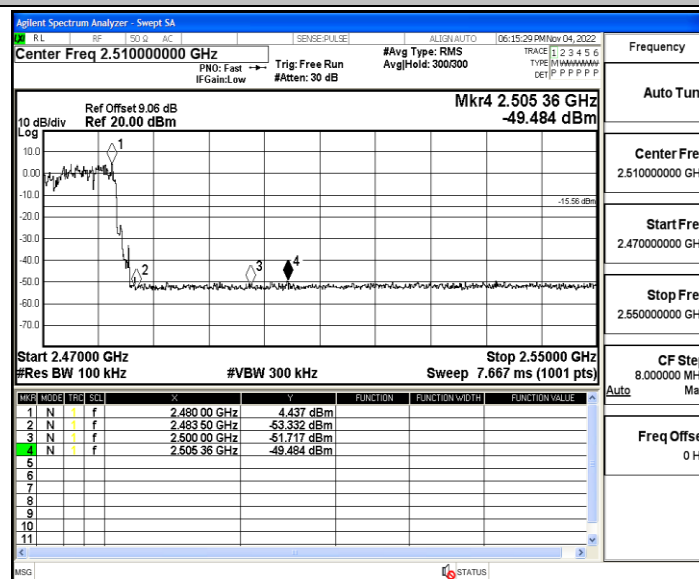
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

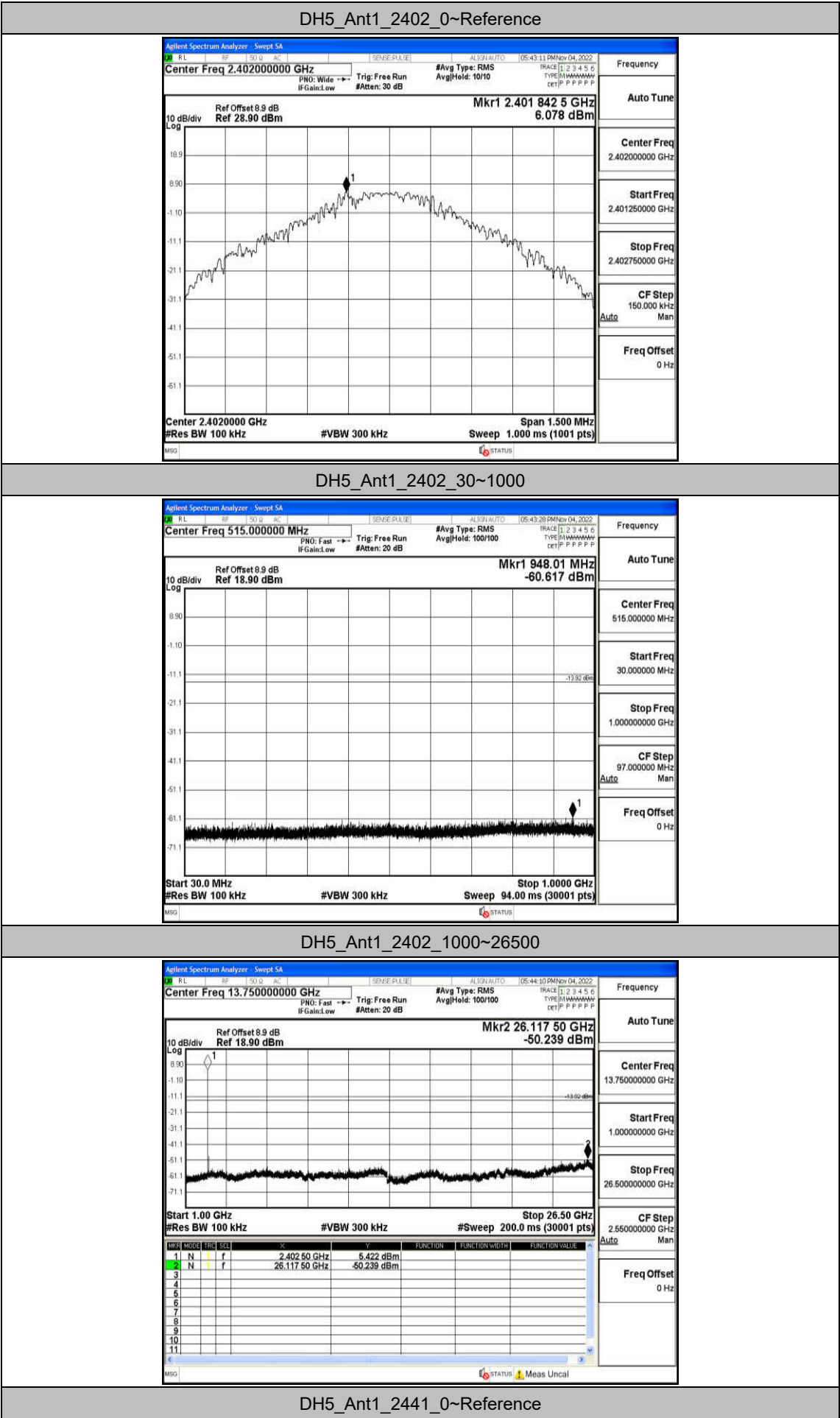


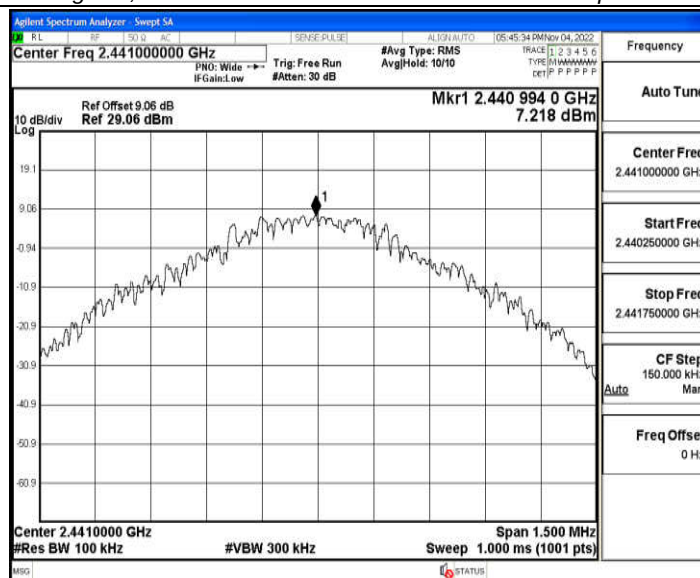
Appendix H: Conducted Spurious Emission

Test Result

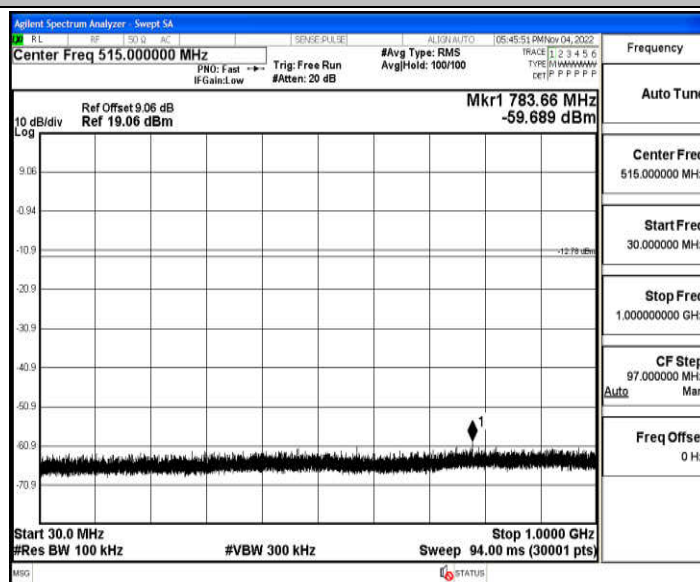
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	6.08	6.08	---	PASS
			30~1000	6.08	-60.62	≤-13.92	PASS
			1000~26500	6.08	-50.24	≤-13.92	PASS
		2441	Reference	7.22	7.22	---	PASS
			30~1000	7.22	-59.69	≤-12.78	PASS
			1000~26500	7.22	-50.62	≤-12.78	PASS
		2480	Reference	6.95	6.95	---	PASS
			30~1000	6.95	-61.05	≤-13.05	PASS
			1000~26500	6.95	-50.2	≤-13.05	PASS
2DH5	Ant1	2402	Reference	6.88	6.88	---	PASS
			30~1000	6.88	-60.73	≤-13.12	PASS
			1000~26500	6.88	-50.96	≤-13.12	PASS
		2441	Reference	6.75	6.75	---	PASS
			30~1000	6.75	-60.81	≤-13.25	PASS
			1000~26500	6.75	-50.35	≤-13.25	PASS
		2480	Reference	3.25	3.25	---	PASS
			30~1000	3.25	-60.71	≤-16.75	PASS
			1000~26500	3.25	-51.01	≤-16.75	PASS
3DH5	Ant1	2402	Reference	4.04	4.04	---	PASS
			30~1000	4.04	-60.99	≤-15.96	PASS
			1000~26500	4.04	-50.24	≤-15.96	PASS
		2441	Reference	4.56	4.56	---	PASS
			30~1000	4.56	-60.98	≤-15.44	PASS
			1000~26500	4.56	-50.73	≤-15.44	PASS
		2480	Reference	5.80	5.80	---	PASS
			30~1000	5.80	-60.94	≤-14.2	PASS
			1000~26500	5.80	-50.32	≤-14.2	PASS

Test Graphs

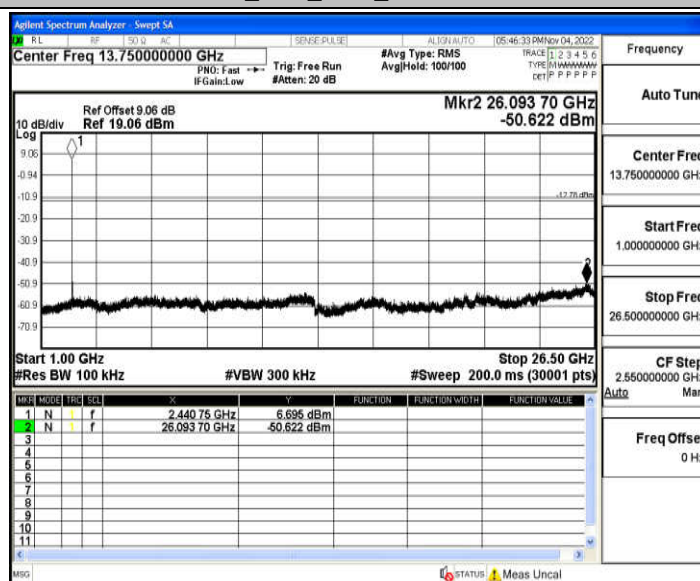




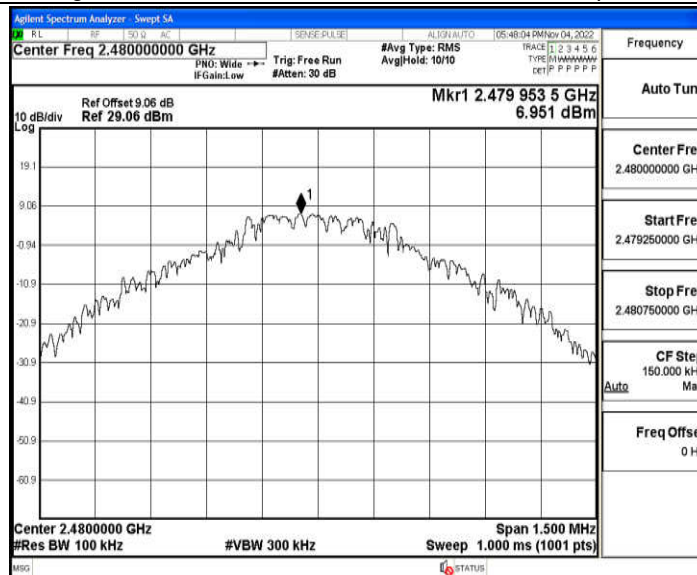
DH5_Ant1_2441_30~1000



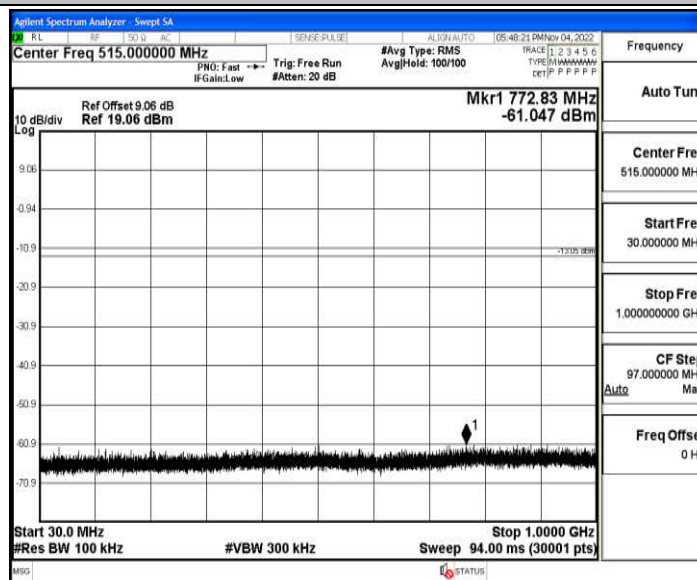
DH5_Ant1_2441_1000~26500



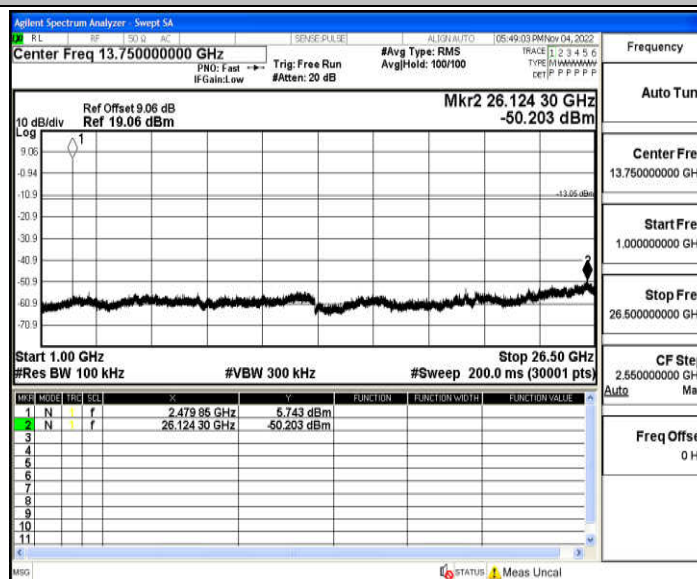
DH5_Ant1_2480_0~Reference



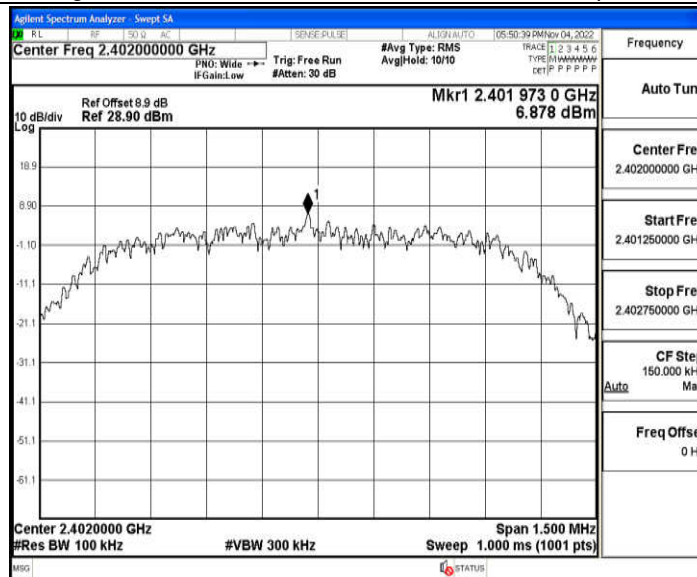
DH5_Ant1_2480_30~1000



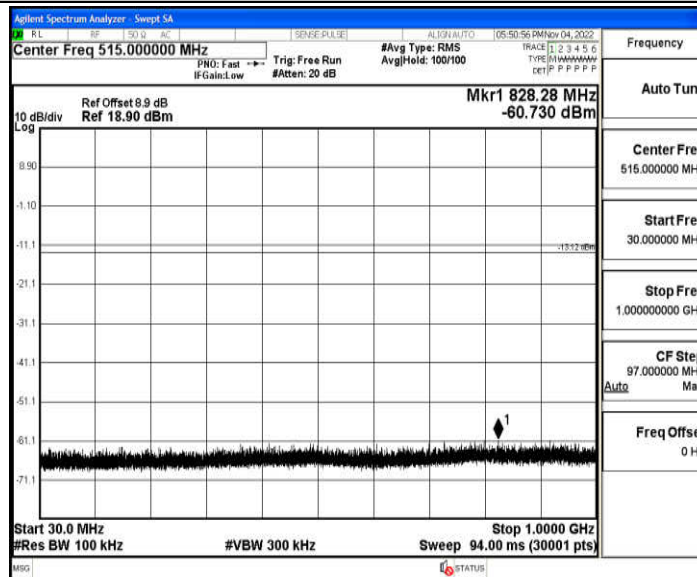
DH5_Ant1_2480_1000~26500



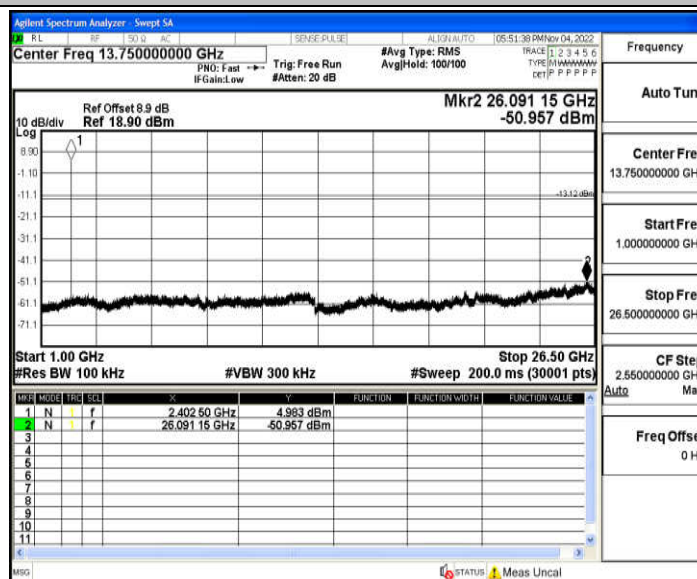
2DH5_Ant1_2402_0~Reference



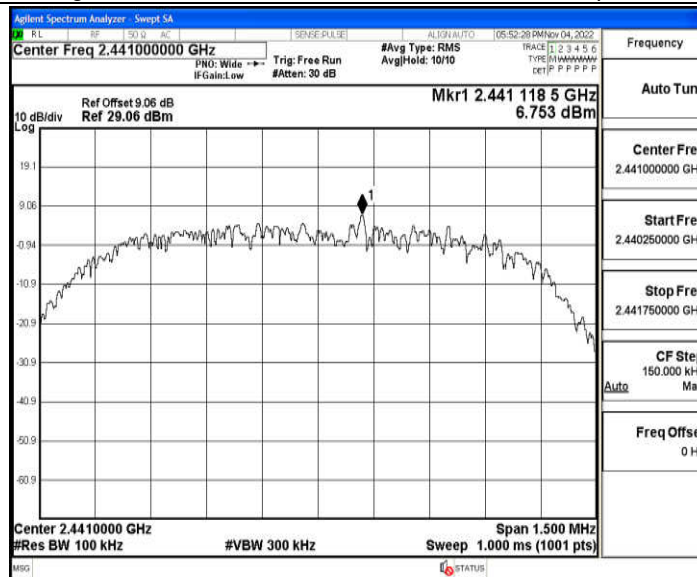
2DH5_Ant1_2402_30~1000



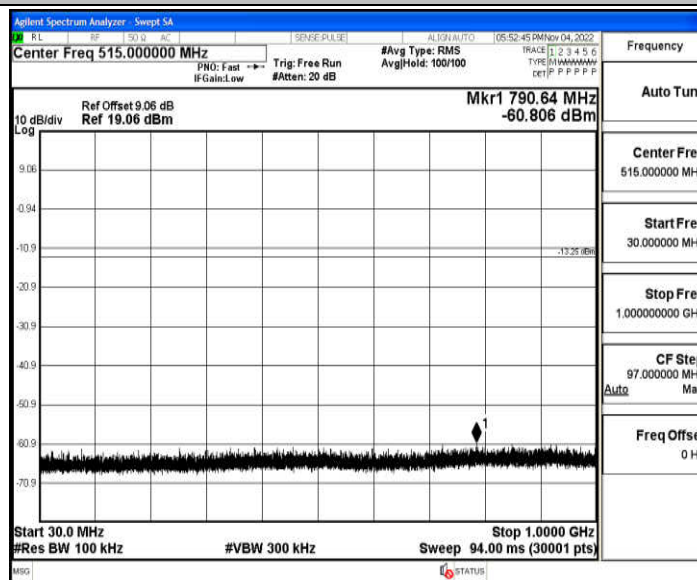
2DH5_Ant1_2402_1000~26500



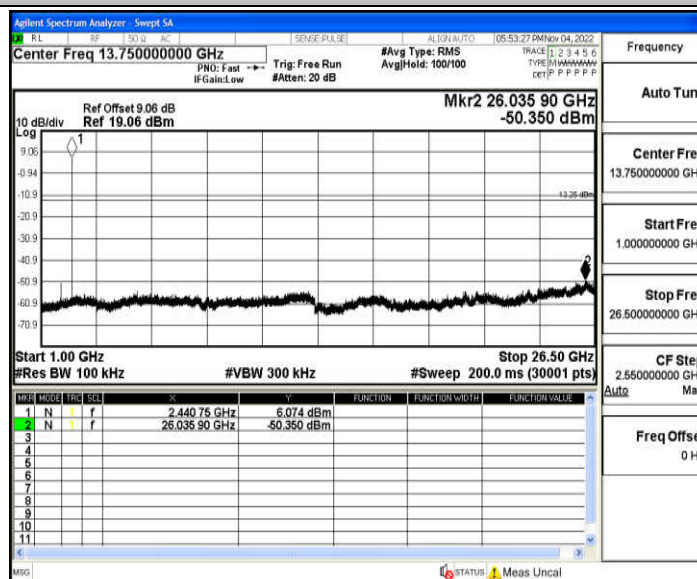
2DH5_Ant1_2441_0~Reference



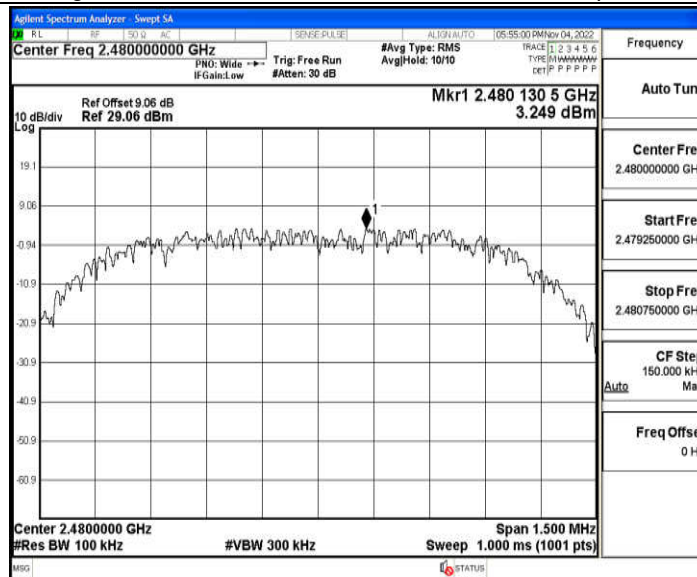
2DH5_Ant1_2441_30~1000



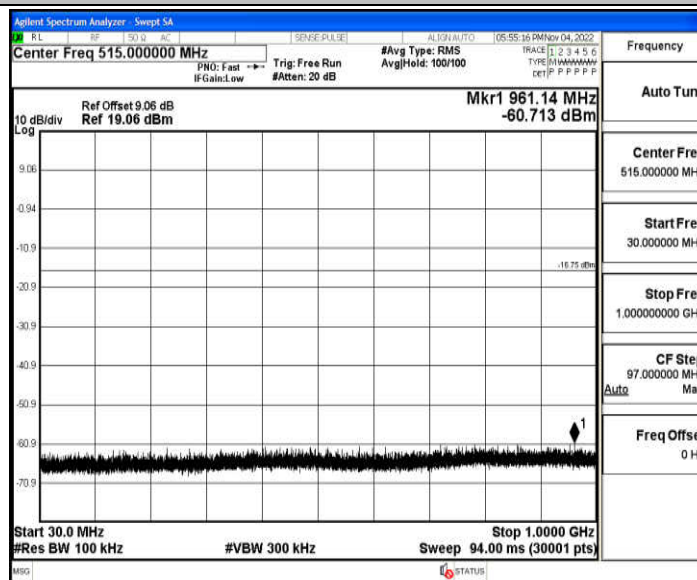
2DH5_Ant1_2441_1000~26500



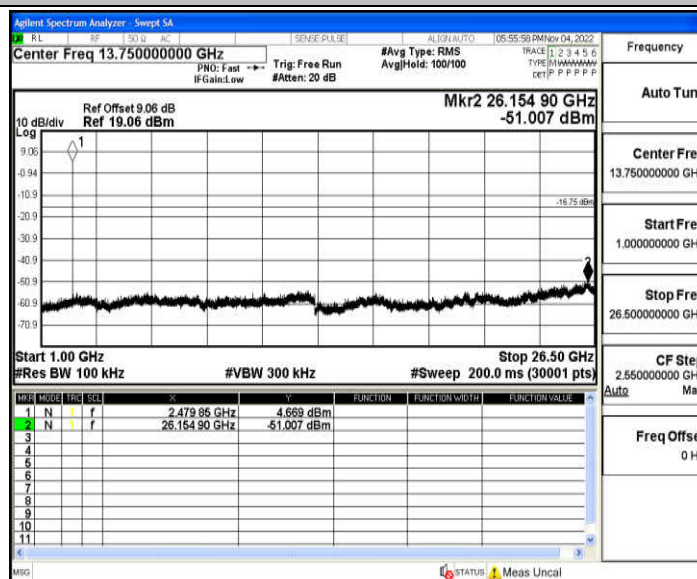
2DH5_Ant1_2480_0~Reference



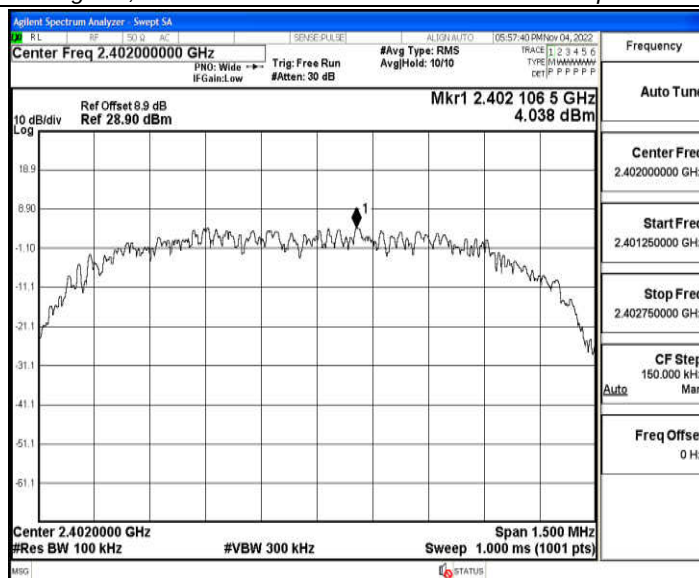
2DH5_Ant1_2480_30~1000



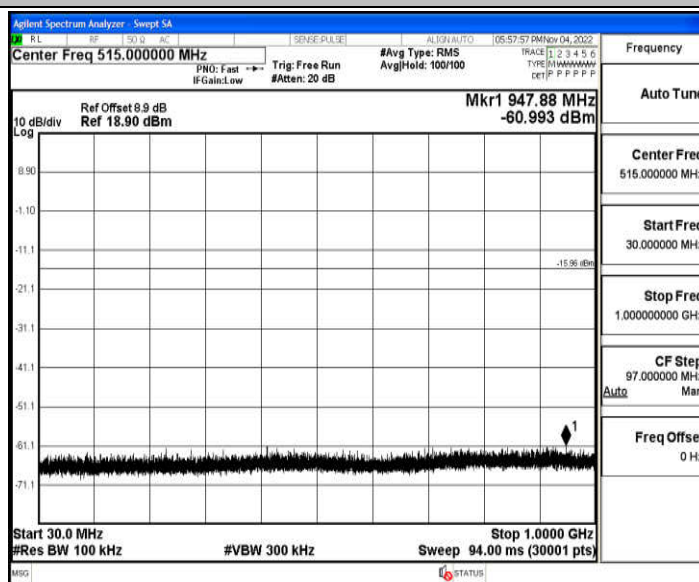
2DH5_Ant1_2480_1000~26500



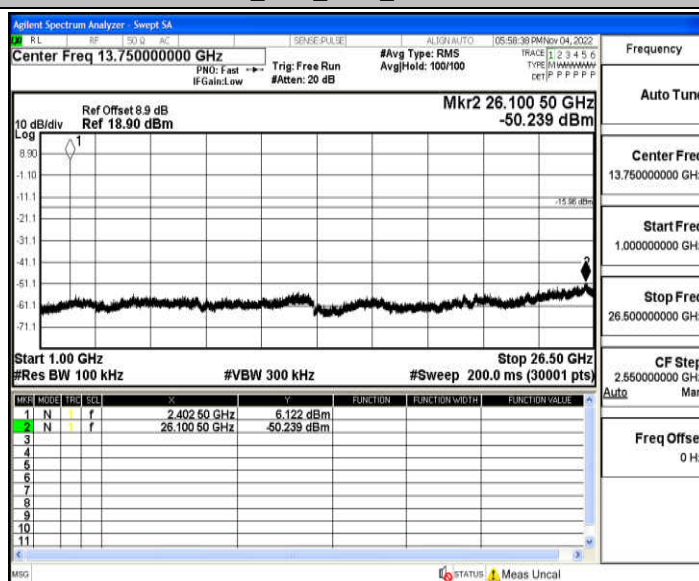
3DH5_Ant1_2402_0~Reference



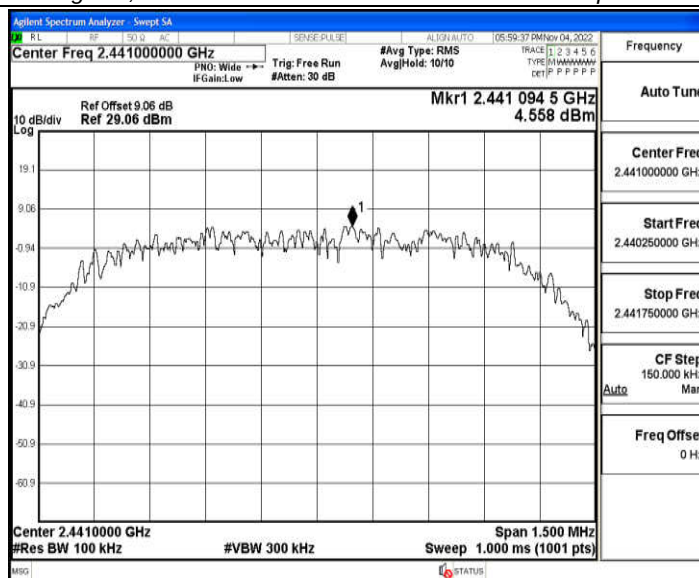
3DH5_Ant1_2402_30~1000



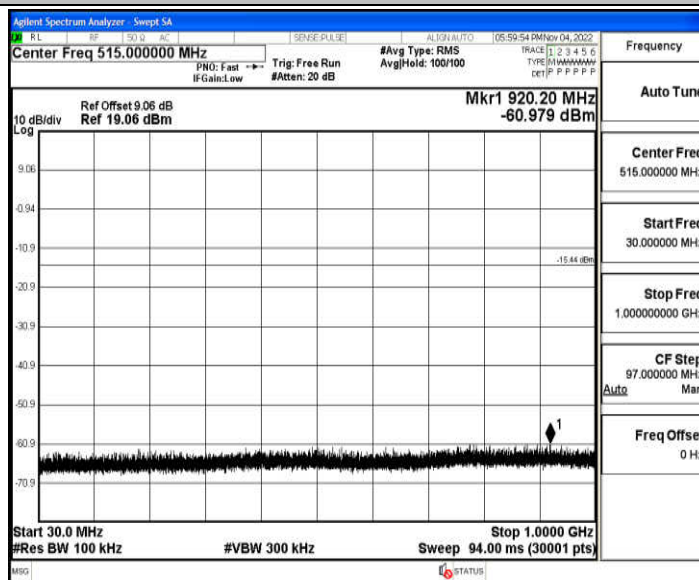
3DH5_Ant1_2402_1000~26500



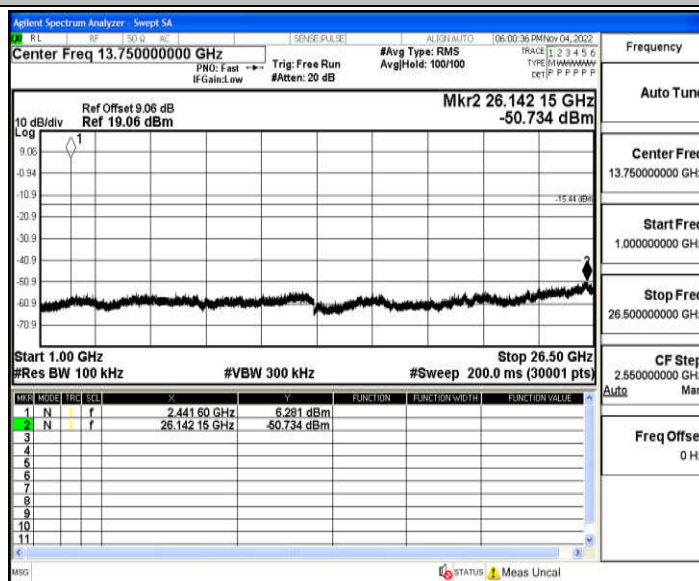
3DH5_Ant1_2441_0~Reference



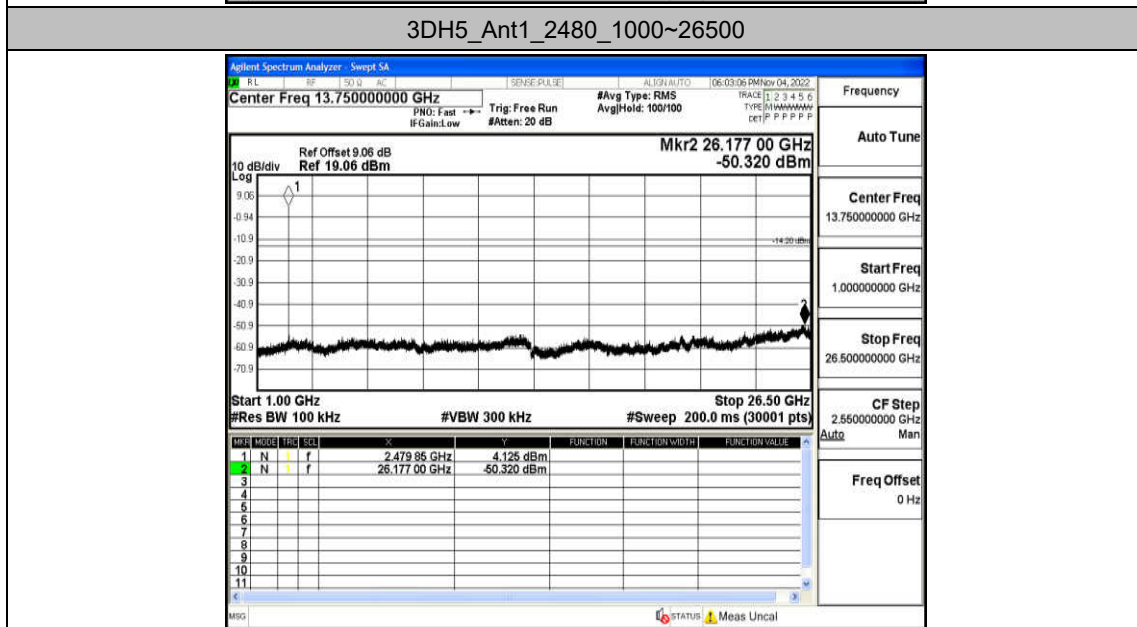
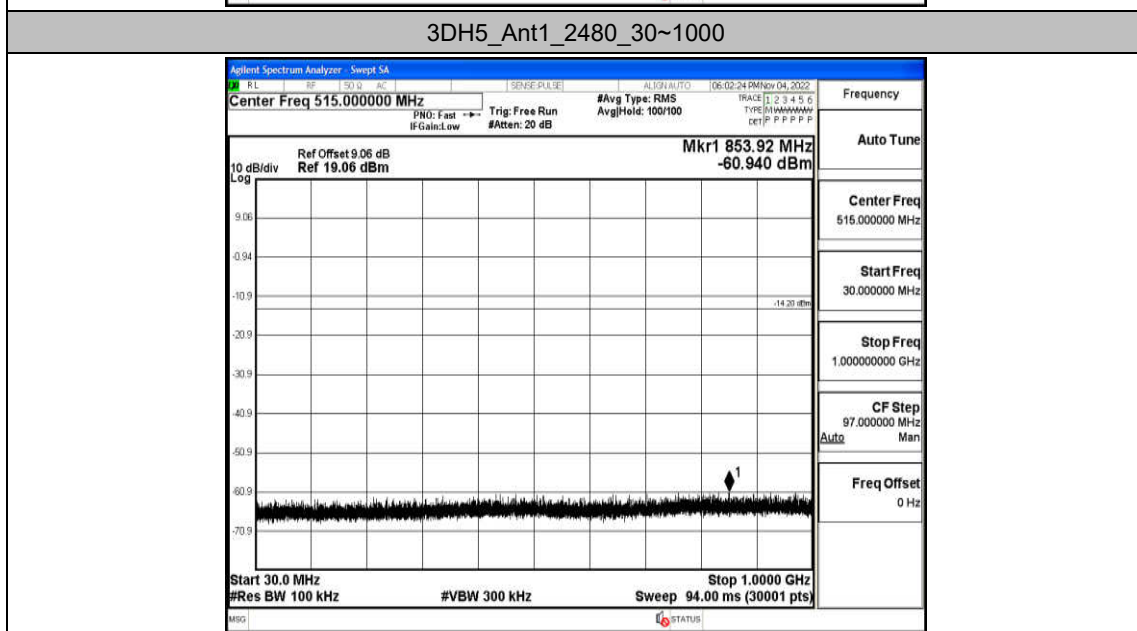
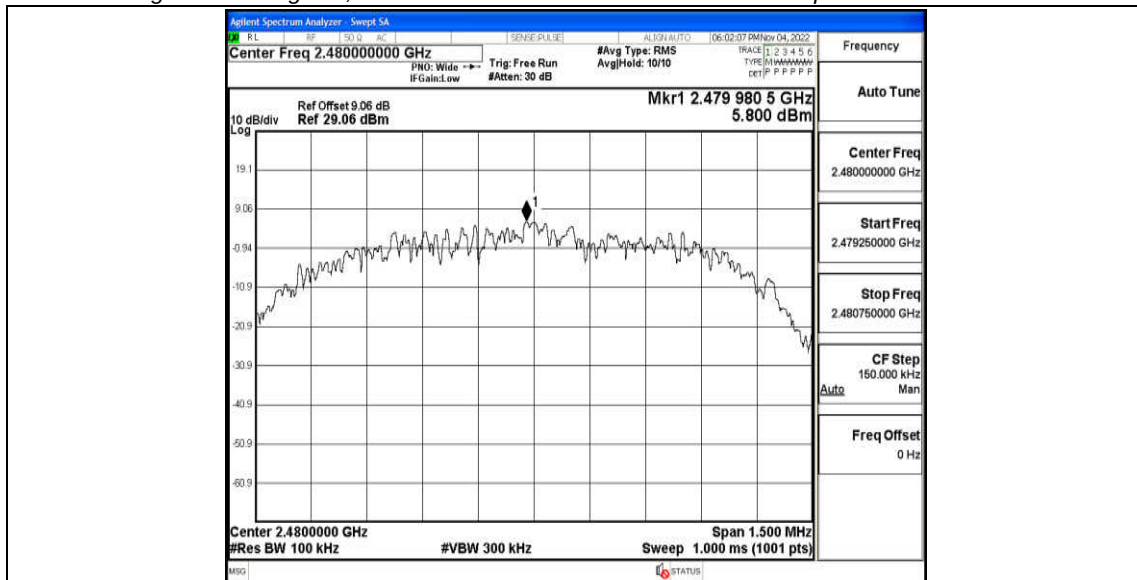
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference



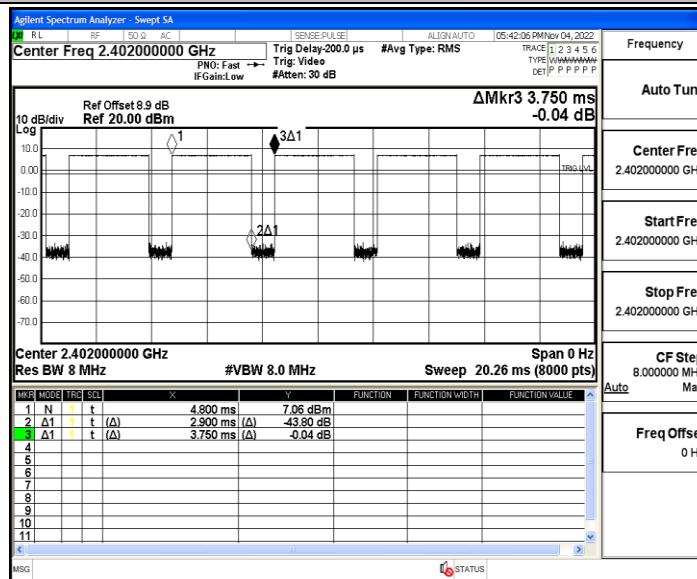
Appendix I: Duty Cycle

Test Result

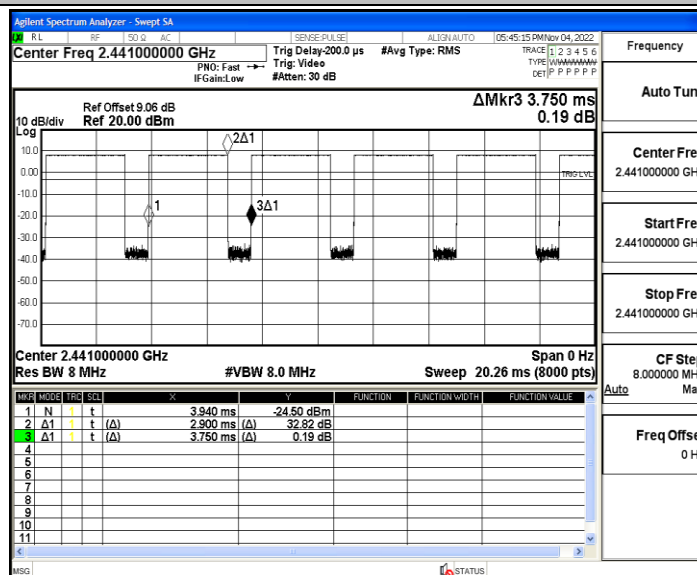
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.90	3.75	77.33	0.34
		2441	2.90	3.75	77.33	0.34
		2480	2.90	3.75	77.33	0.34
2DH5	Ant1	2402	2.89	3.75	77.07	0.35
		2441	2.88	3.75	76.80	0.35
		2480	2.88	3.74	77.01	0.35
3DH5	Ant1	2402	2.88	3.75	76.80	0.35
		2441	2.88	3.75	76.80	0.35
		2480	2.88	3.75	76.80	0.35

Test Graphs

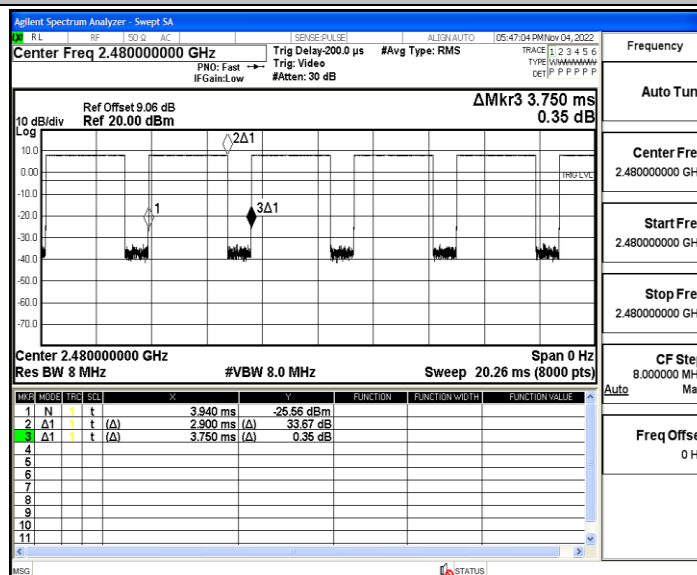
DH5_Ant1_2402



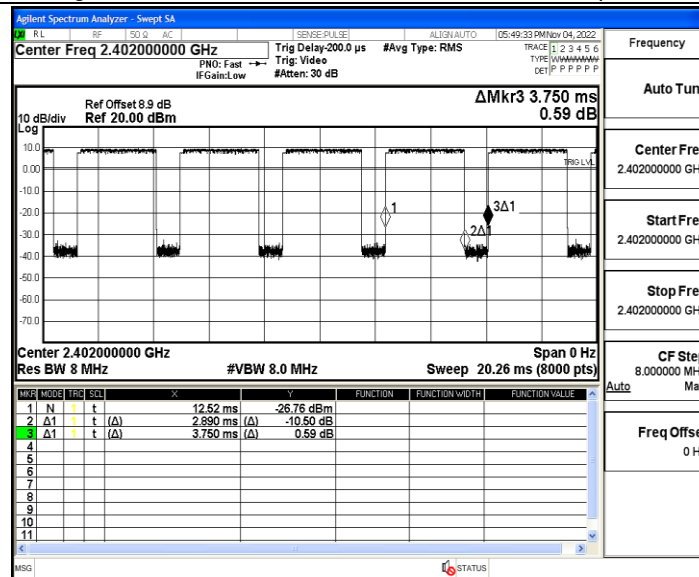
DH5_Ant1_2441



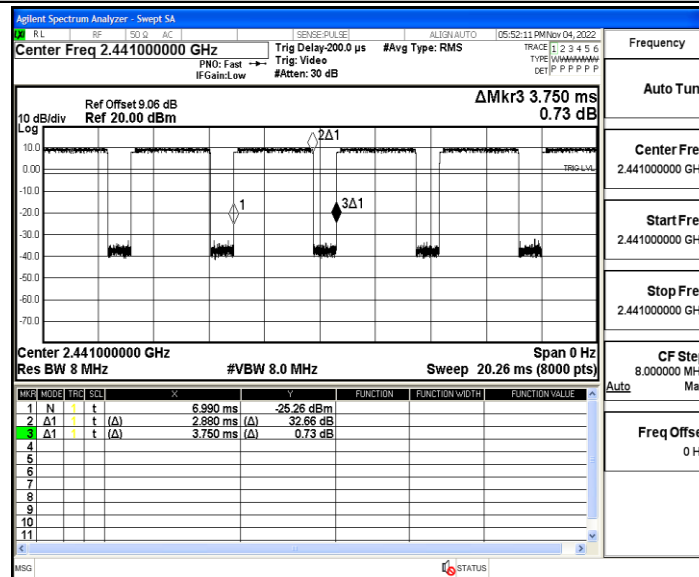
DH5_Ant1_2480



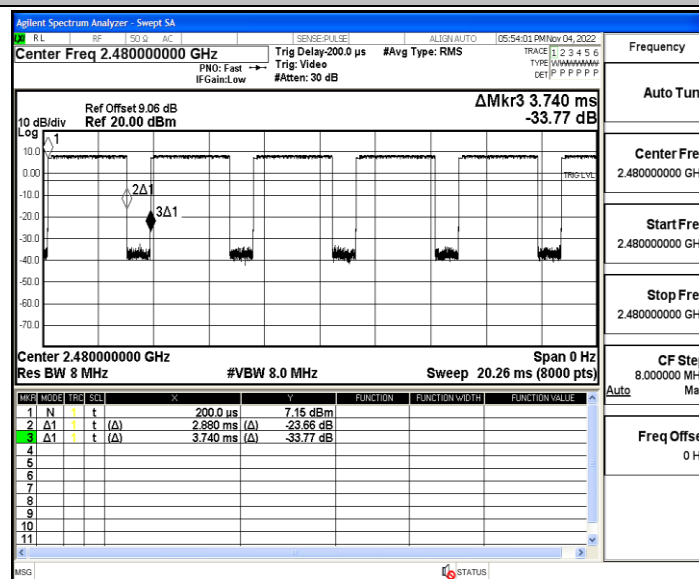
2DH5_Ant1_2402



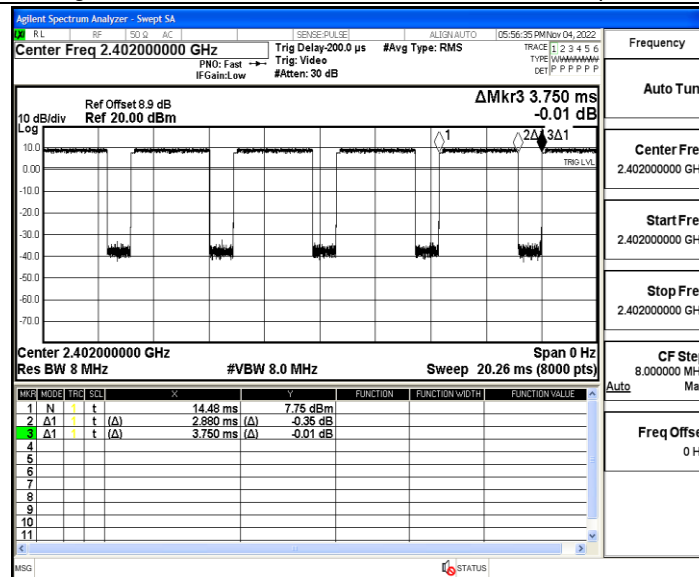
2DH5_Ant1_2441



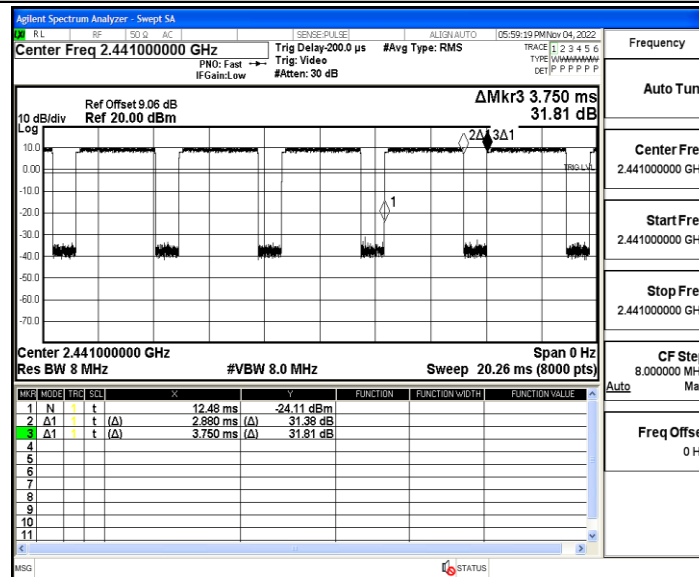
2DH5_Ant1_2480



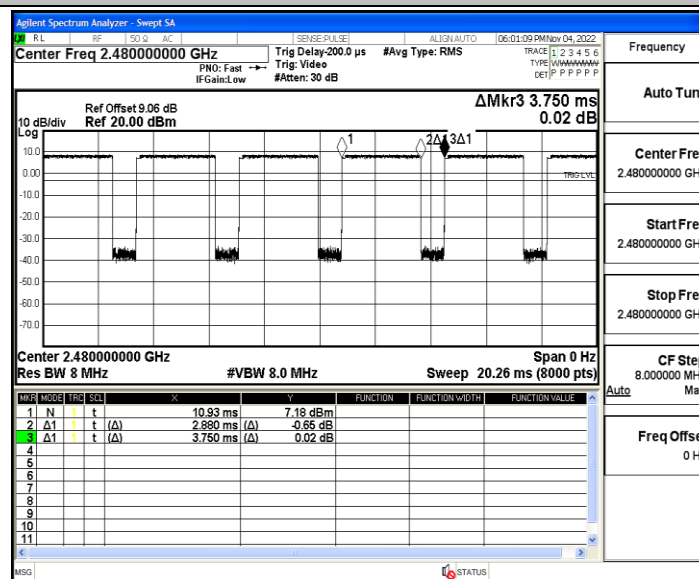
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

Test Result

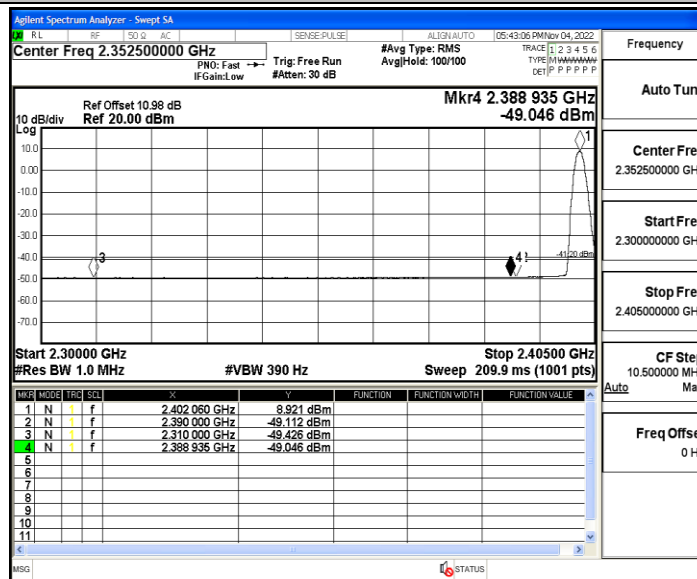
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.43	≤-41.20	PASS
				AV	2388.935	-49.05	≤-41.20	PASS
				AV	2390.000	-49.11	≤-41.20	PASS
				Peak	2310.000	-41.63	≤-21.20	PASS
				Peak	2348.615	-39.29	≤-21.20	PASS
				Peak	2390.000	-41.99	≤-21.20	PASS
		High	2480	AV	2483.500	-46.79	≤-41.20	PASS
				AV	2483.520	-46.79	≤-41.20	PASS
				AV	2500.000	-48.48	≤-41.20	PASS
				Peak	2483.500	-40.24	≤-21.20	PASS
				Peak	2484.160	-38.73	≤-21.20	PASS
				Peak	2500.000	-42.05	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.45	≤-41.20	PASS
				AV	2389.985	-49.02	≤-41.20	PASS
				AV	2390.000	-49.02	≤-41.20	PASS
				Peak	2310.000	-41.8	≤-21.20	PASS
				Peak	2359.535	-38.61	≤-21.20	PASS
				Peak	2390.000	-43.17	≤-21.20	PASS
		High	2480	AV	2483.500	-43.49	≤-41.20	PASS
				AV	2483.520	-43.49	≤-41.20	PASS
				AV	2500.000	-48.5	≤-41.20	PASS
				Peak	2483.500	-38.09	≤-21.20	PASS
				Peak	2483.600	-34.9	≤-21.20	PASS
				Peak	2500.000	-41.2	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-49.48	≤-41.20	PASS
				AV	2387.150	-49.05	≤-41.20	PASS
				AV	2390.000	-49.13	≤-41.20	PASS
				Peak	2310.000	-43.22	≤-21.20	PASS
				Peak	2362.370	-38.5	≤-21.20	PASS
				Peak	2390.000	-41.02	≤-21.20	PASS
		High	2480	AV	2483.500	-43.09	≤-41.20	PASS
				AV	2483.520	-43.09	≤-41.20	PASS
				AV	2500.000	-48.55	≤-41.20	PASS
				Peak	2483.500	-31.94	≤-21.20	PASS
				Peak	2483.520	-31.94	≤-21.20	PASS
				Peak	2500.000	-42.36	≤-21.20	PASS

Note:

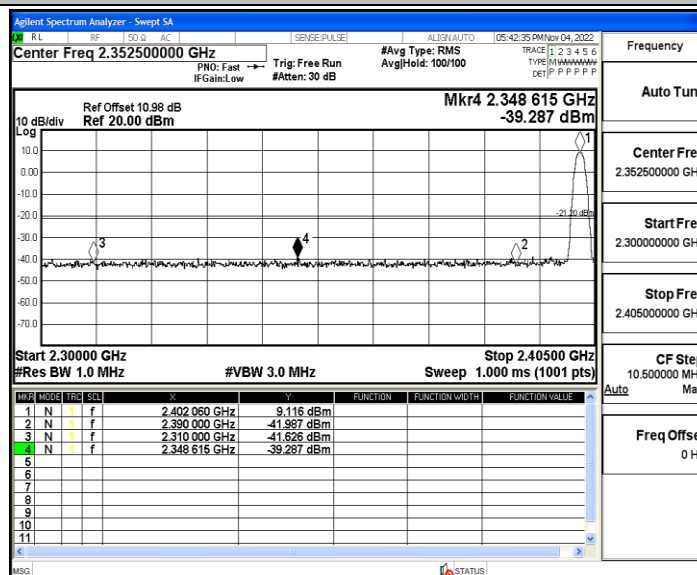
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

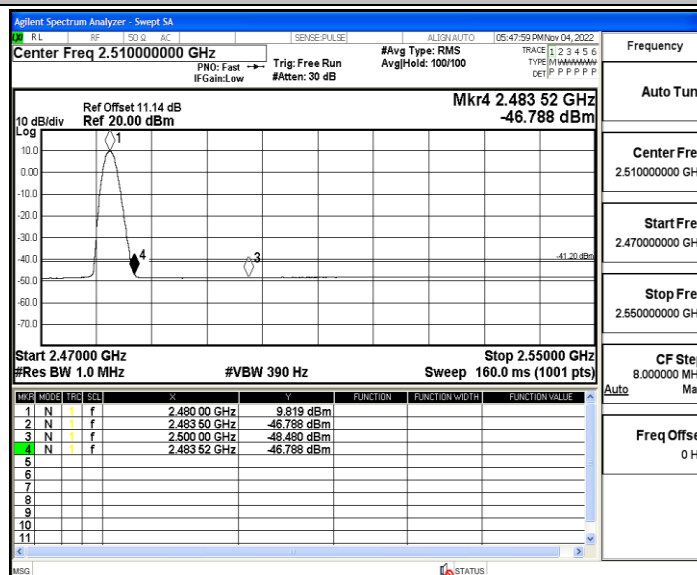
DH5_Ant1_Low_2402_AV



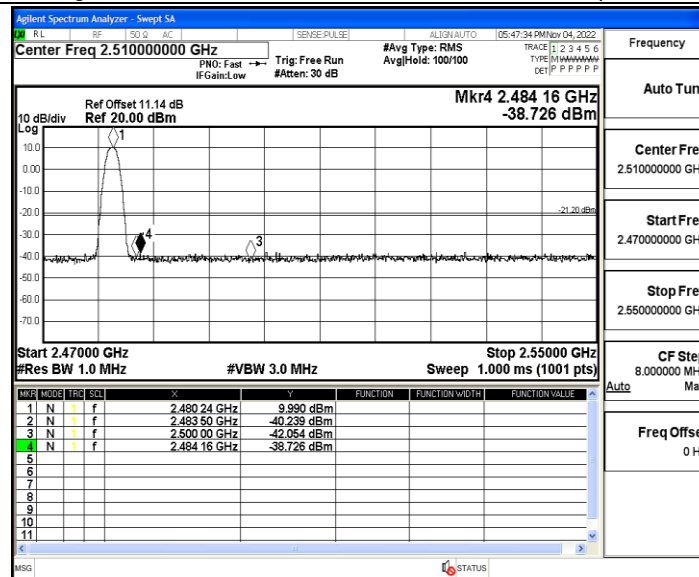
DH5_Ant1_Low_2402_Peak



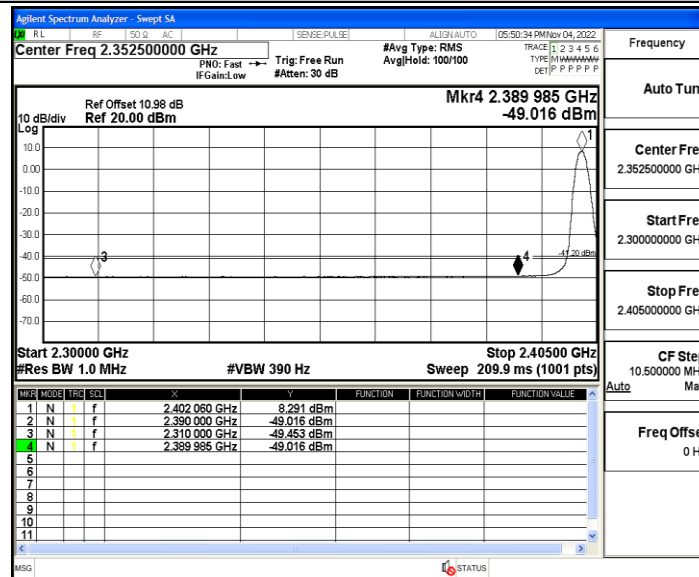
DH5_Ant1_High_2480_AV



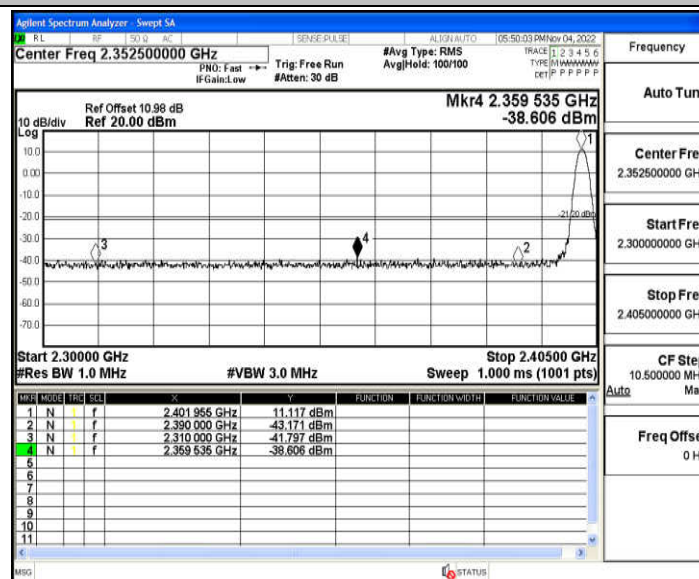
DH5_Ant1_High_2480_Peak



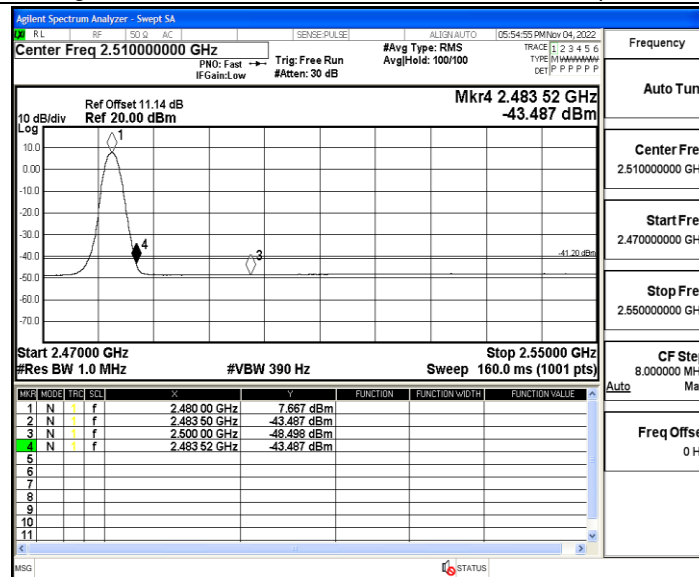
2DH5_Ant1_Low_2402_AV



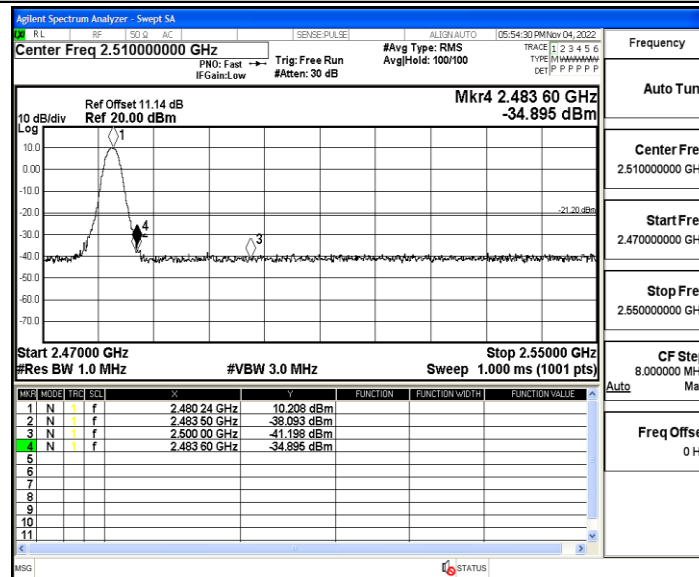
2DH5_Ant1_Low_2402_Peak



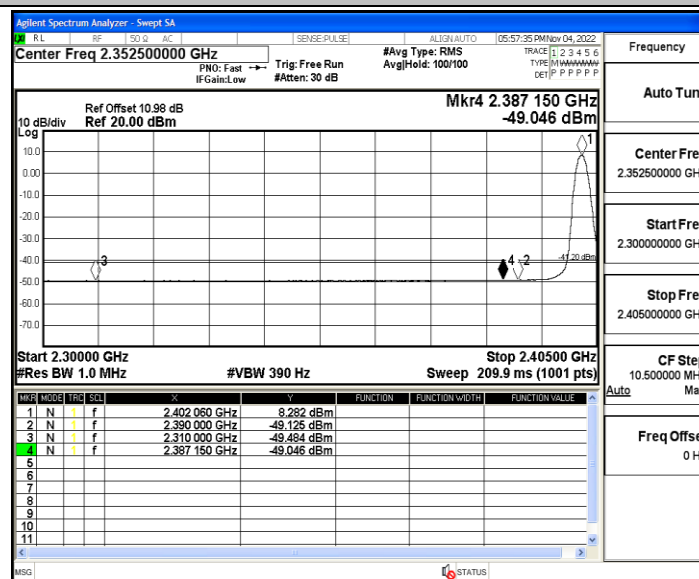
2DH5_Ant1_High_2480_AV



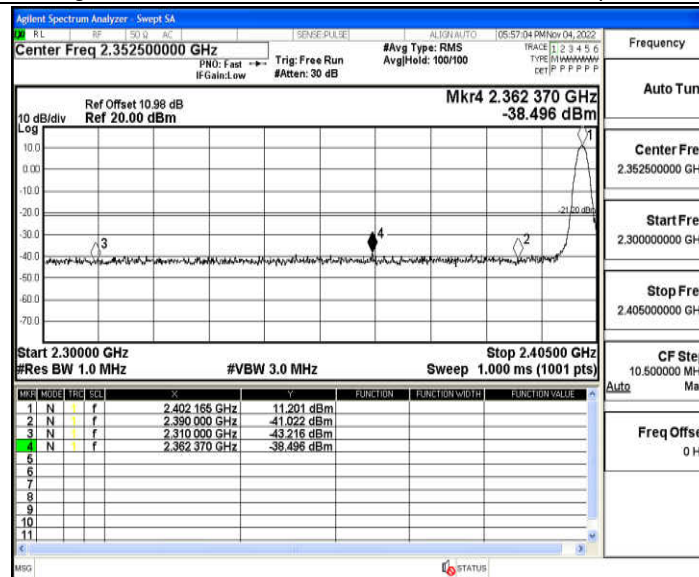
2DH5_Ant1_High_2480_Peak



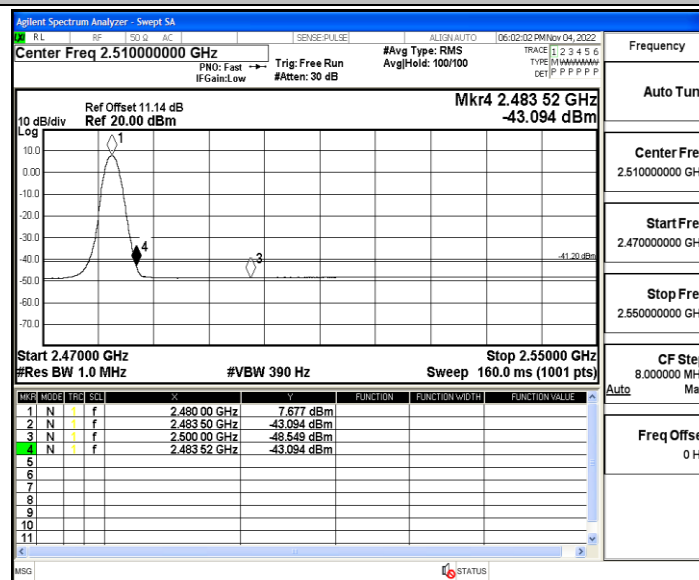
3DH5_Ant1_Low_2402_AV



3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak

