

## 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

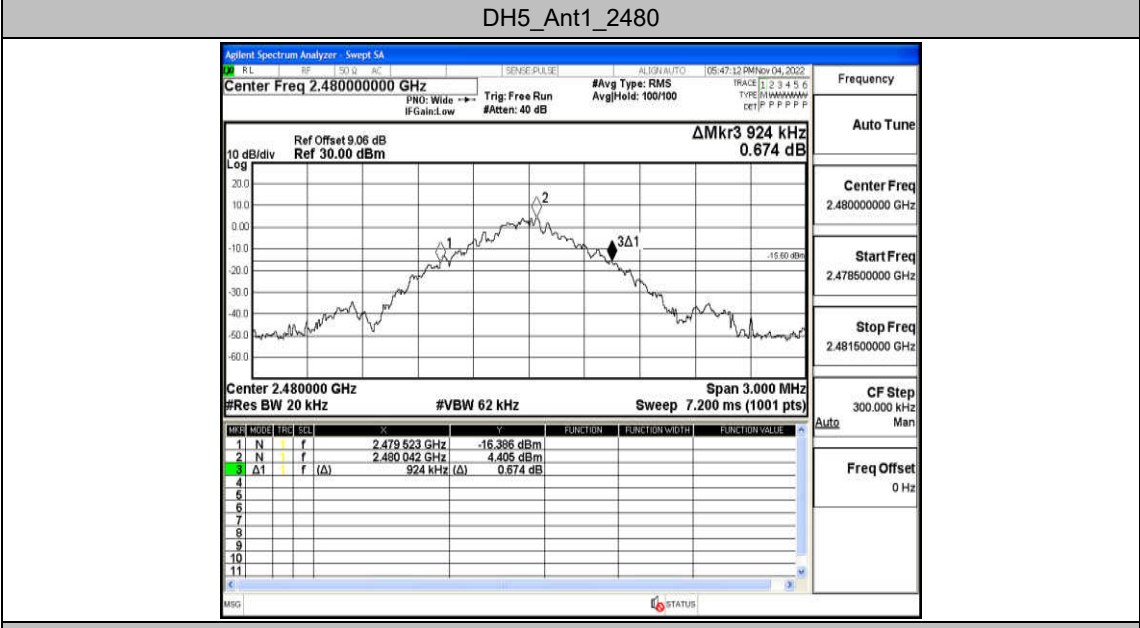
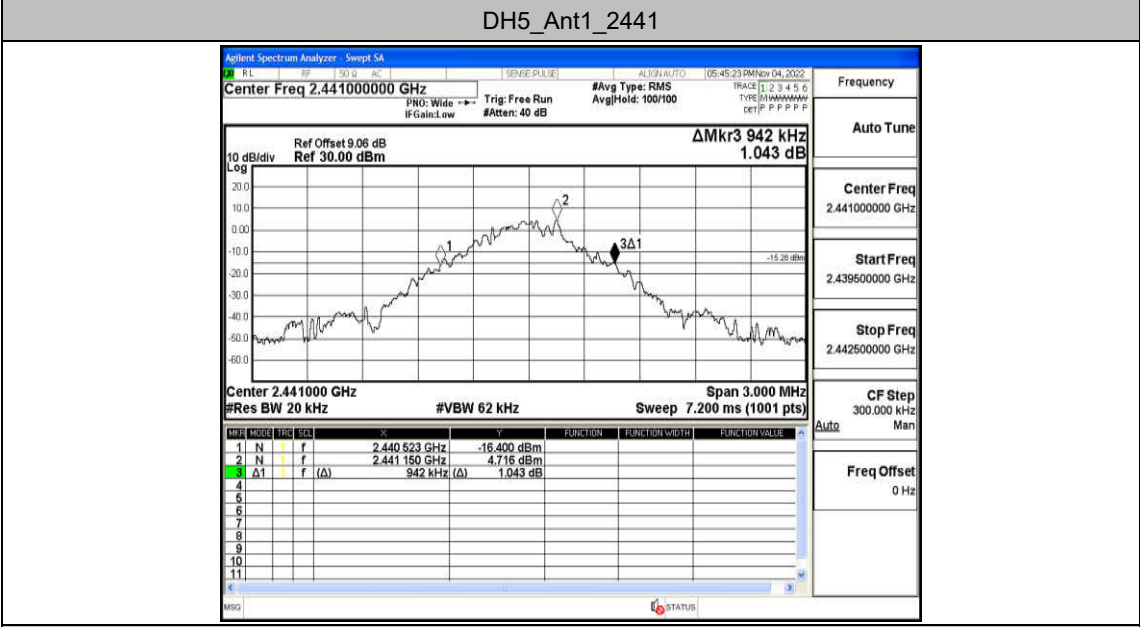
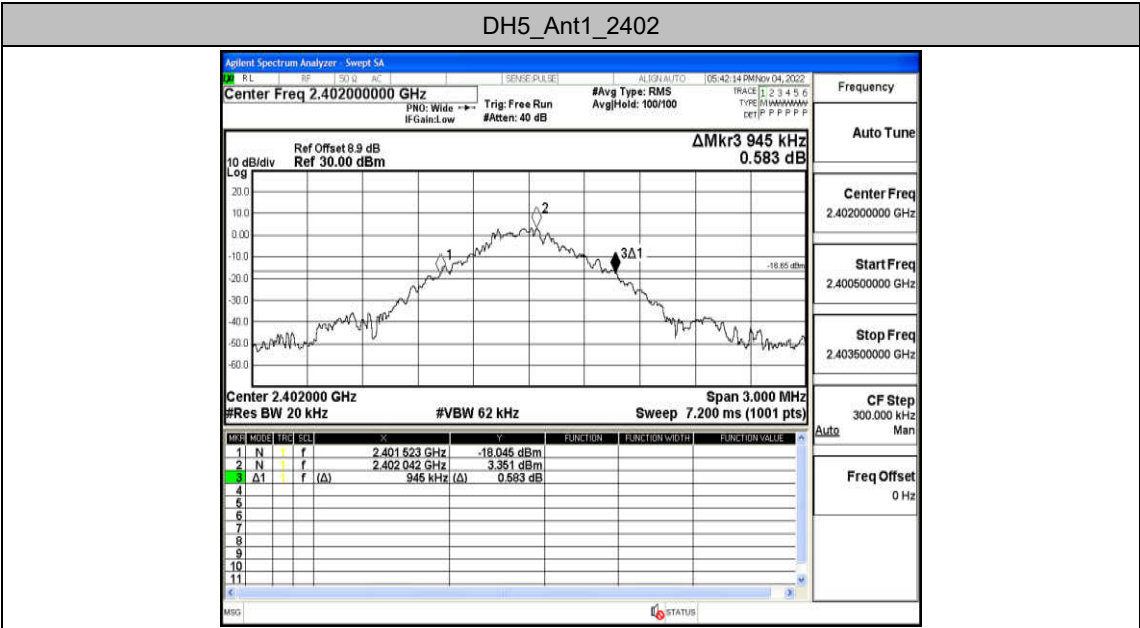
Temperature:	23.8°C
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

### Appendix A: 20dB Emission Bandwidth

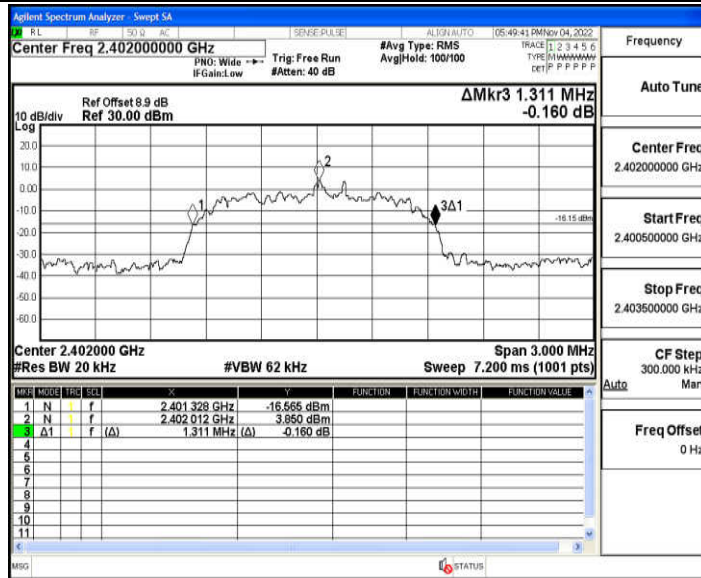
#### Test Result

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	---	---

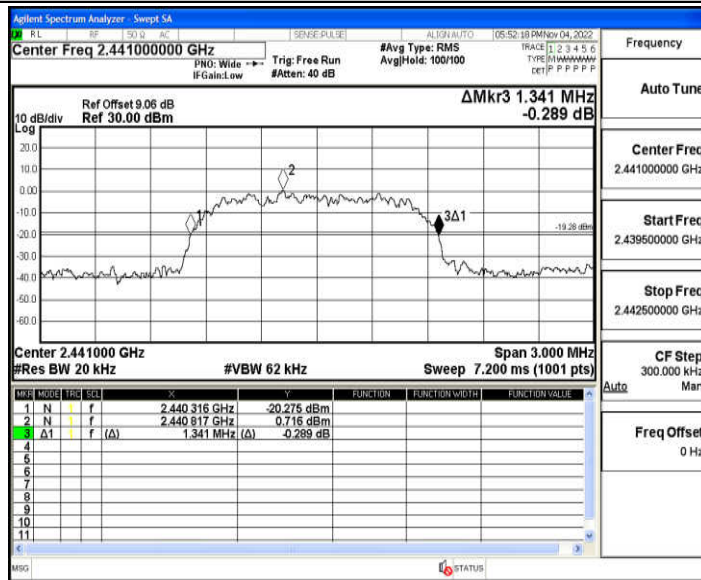
Test Graphs



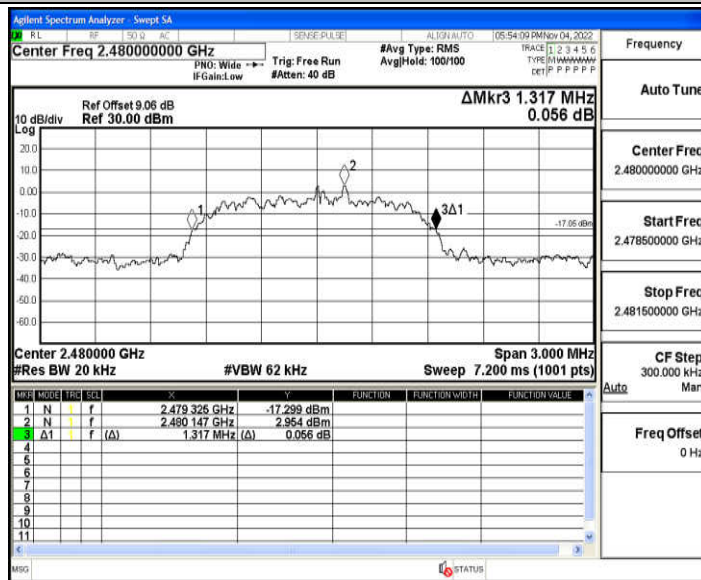
2DH5\_Ant1\_2402



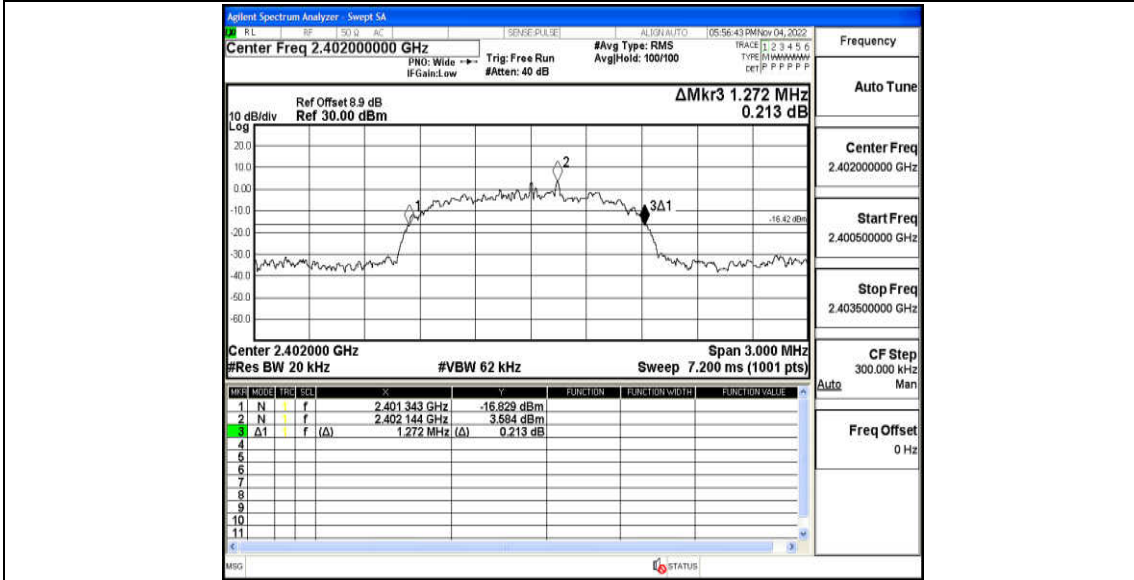
2DH5\_Ant1\_2441



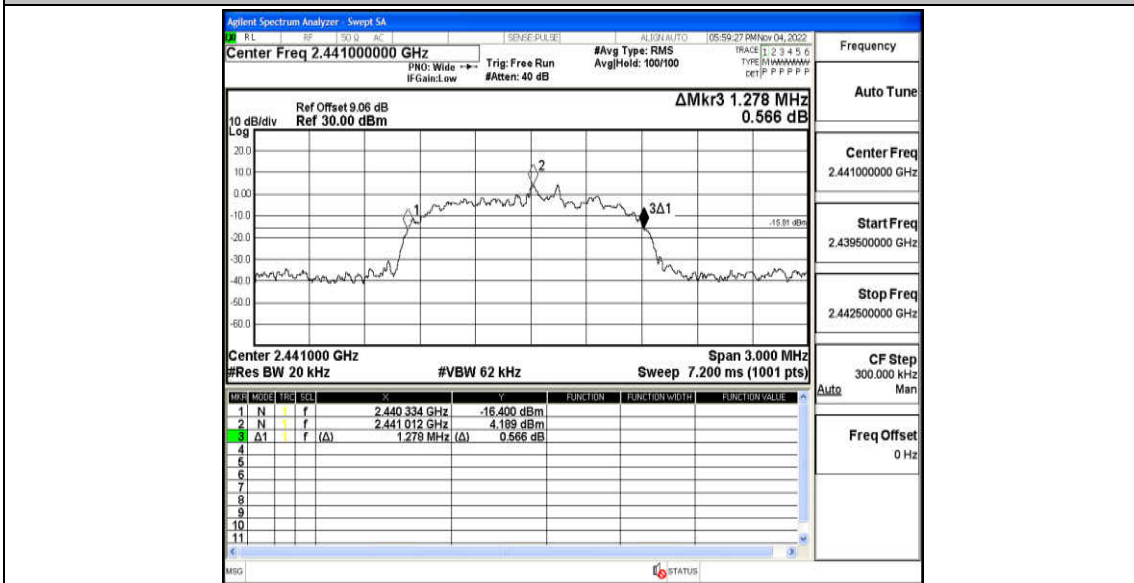
2DH5\_Ant1\_2480



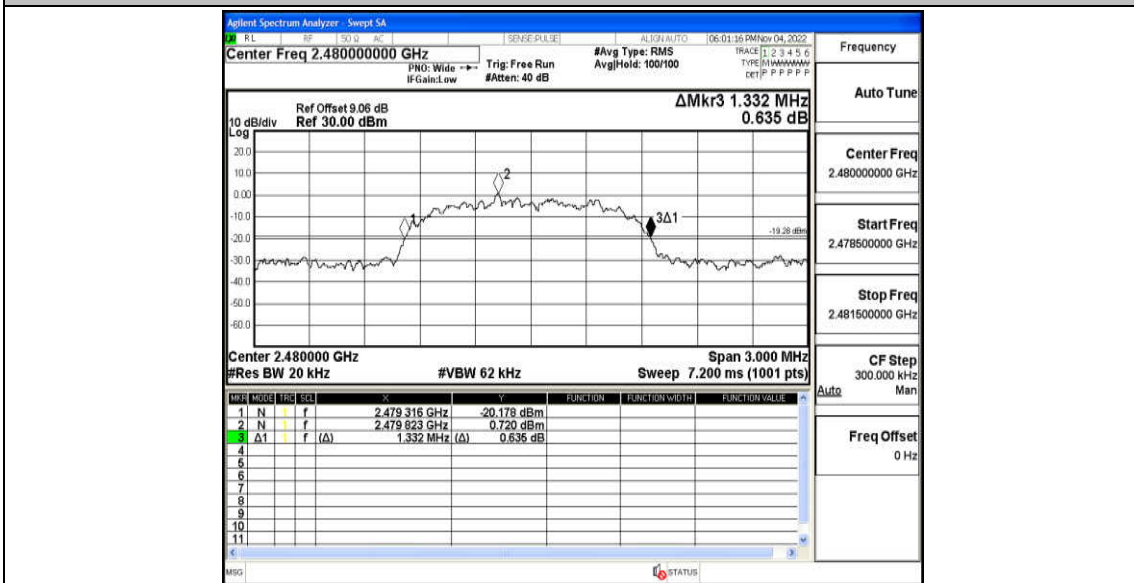
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

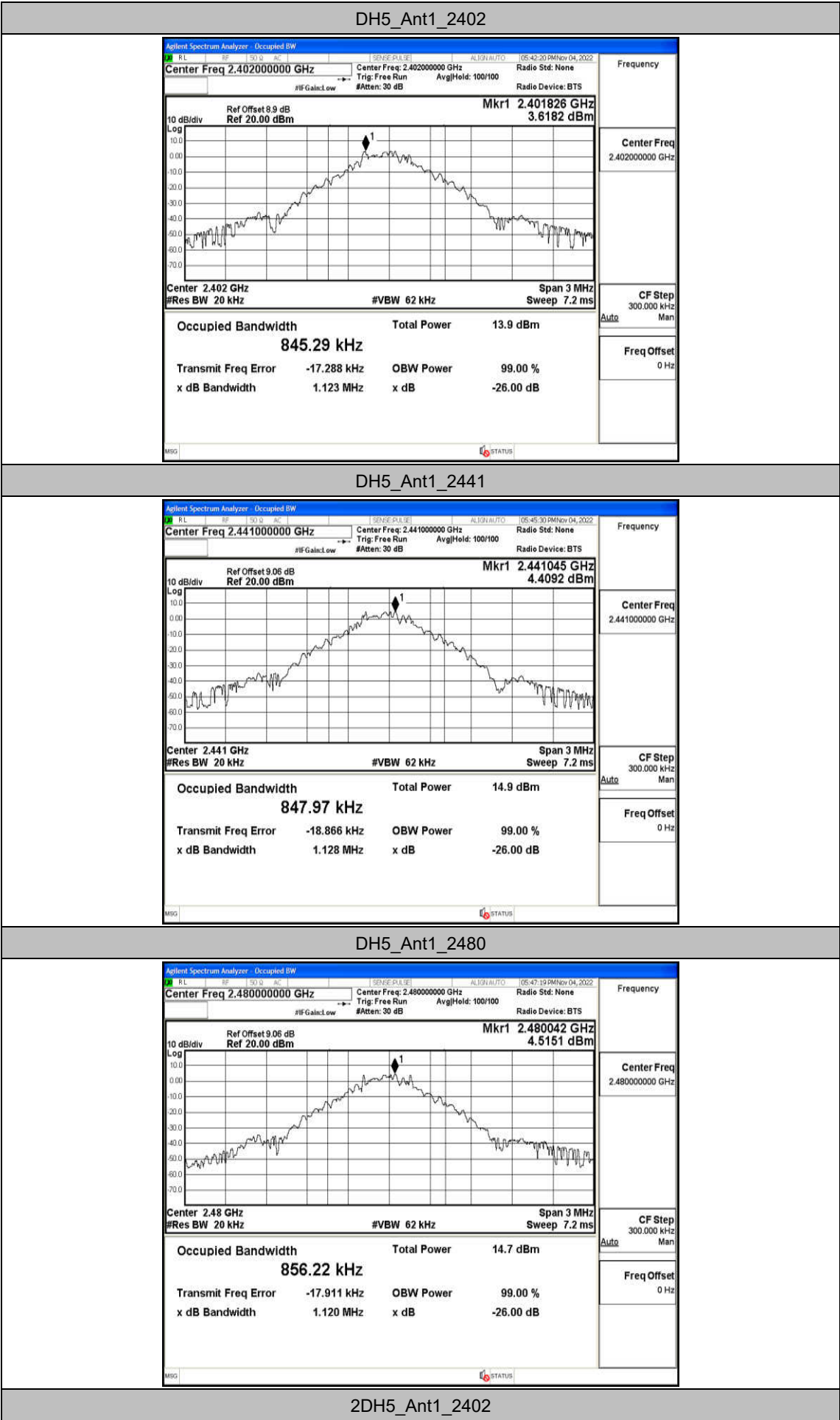


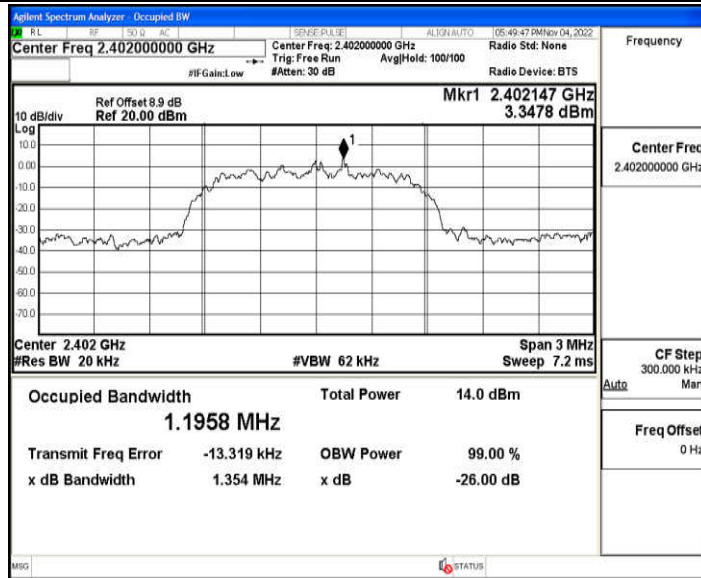
## Appendix B: Occupied Channel Bandwidth

### Test Result

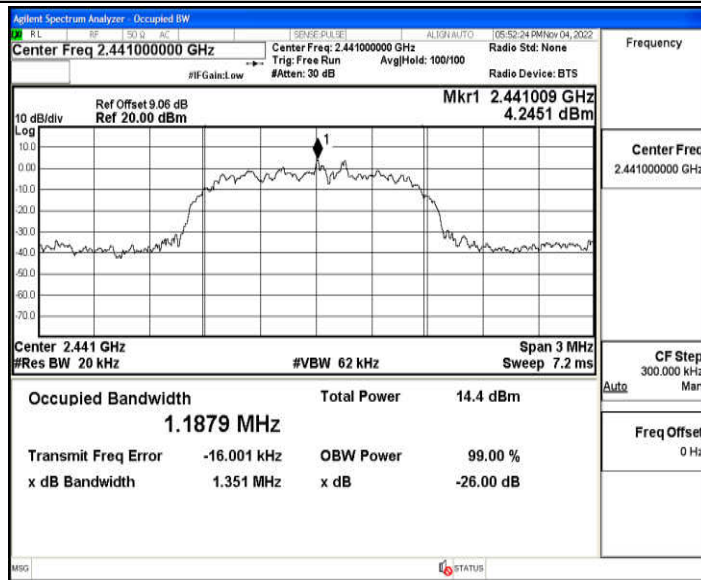
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.84529	2401.5601	2402.4054	---	---
		2441	0.84797	2440.5571	2441.4051	---	---
		2480	0.85622	2479.5540	2480.4102	---	---
2DH5	Ant1	2402	1.1958	2401.3888	2402.5846	---	---
		2441	1.1879	2440.3901	2441.5780	---	---
		2480	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

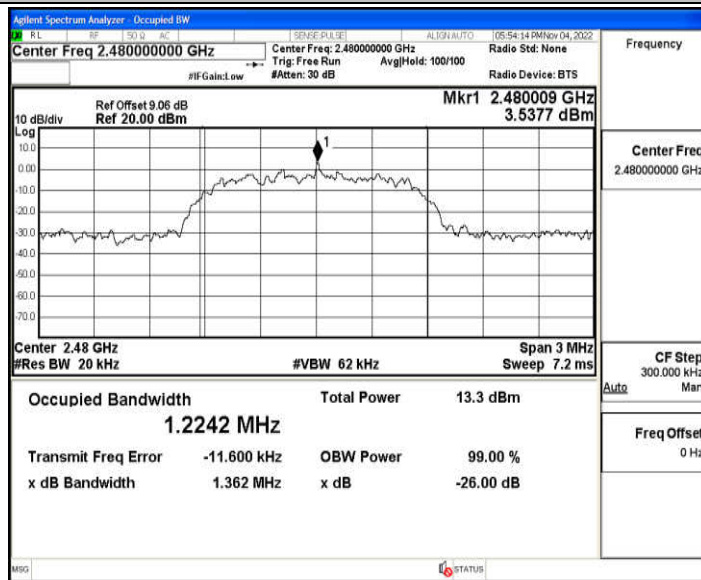




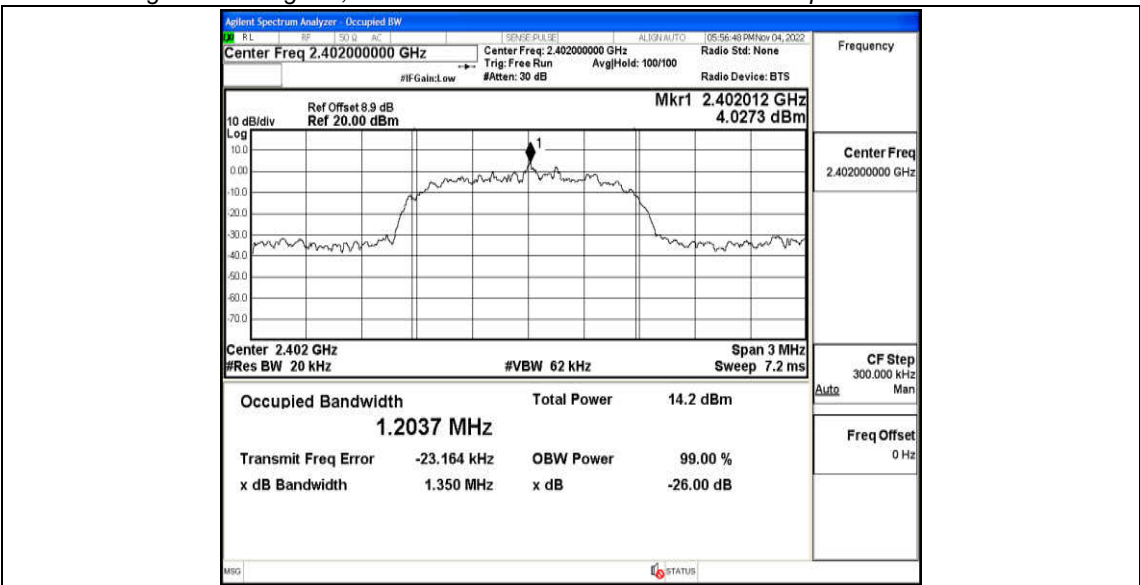
2DH5\_Ant1\_2441



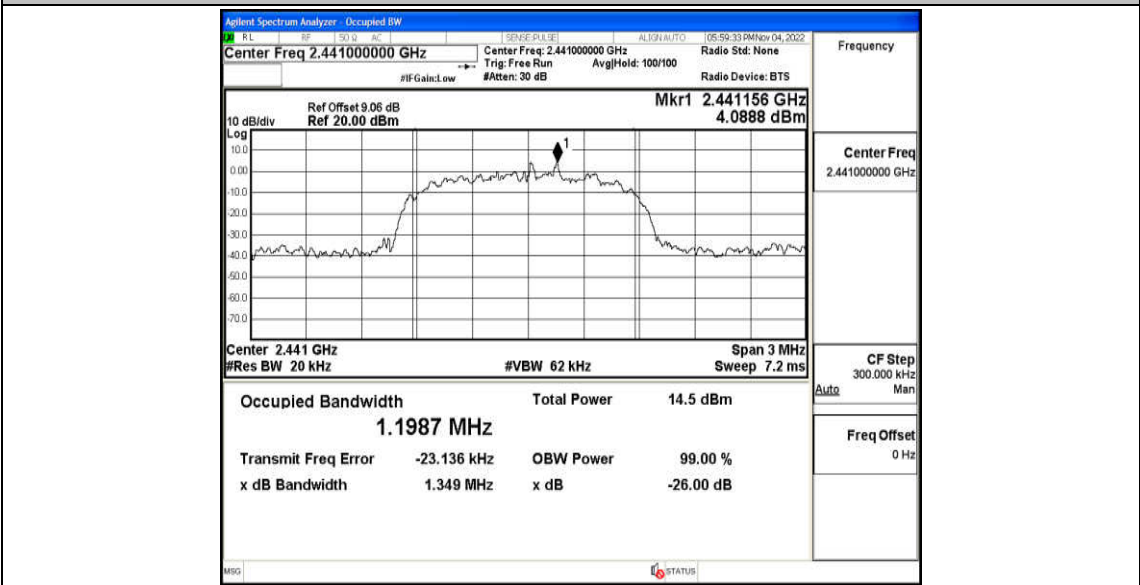
2DH5\_Ant1\_2480



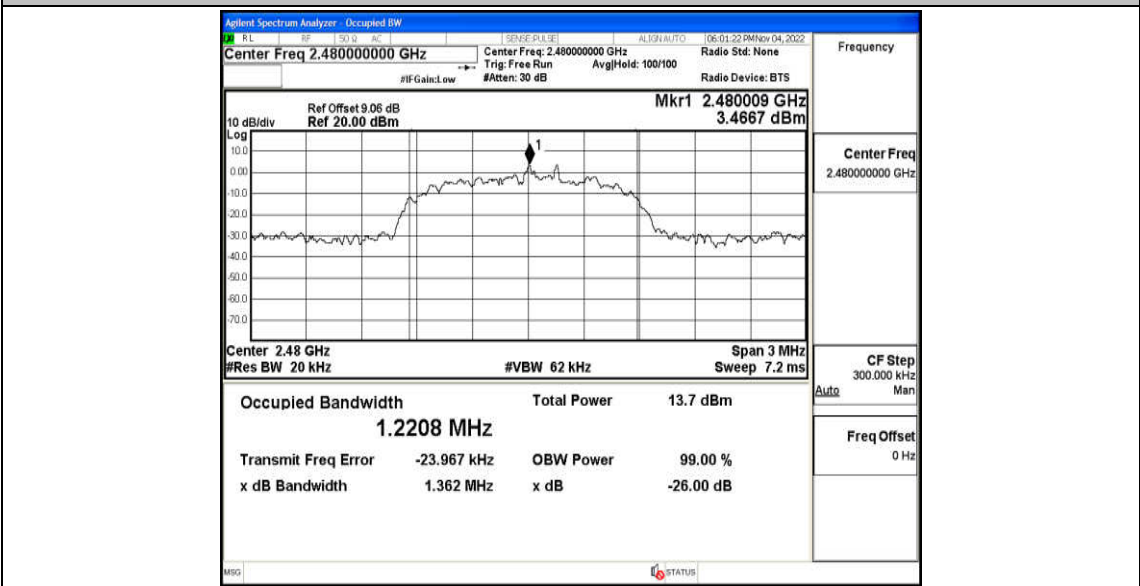
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



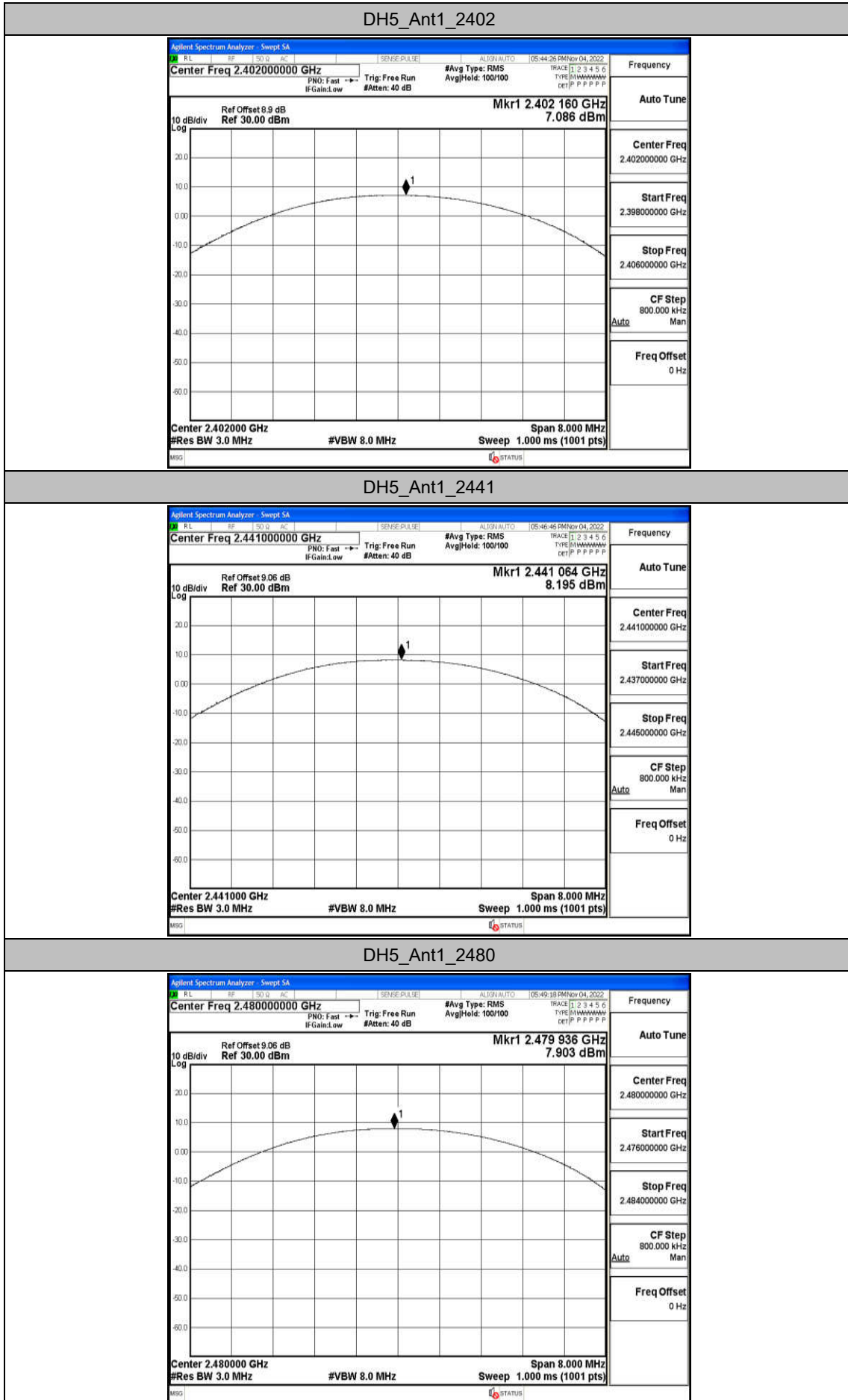


## Appendix C: Maximum Peak conducted output power

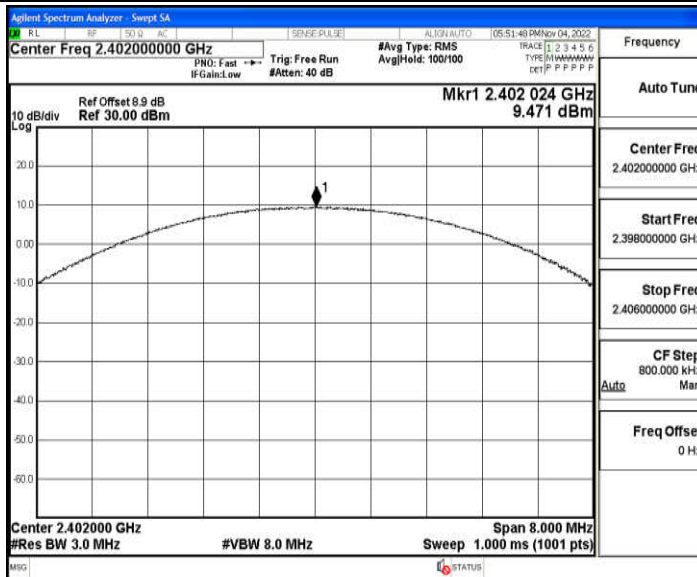
### Test Result

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

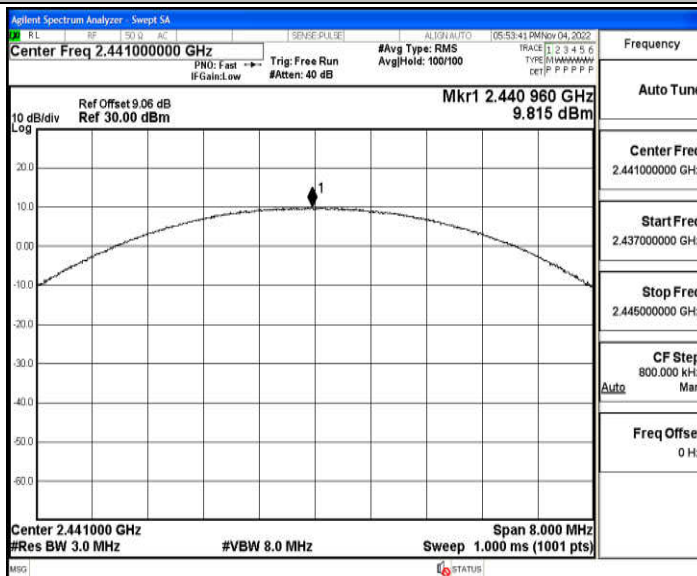
### Test Graphs



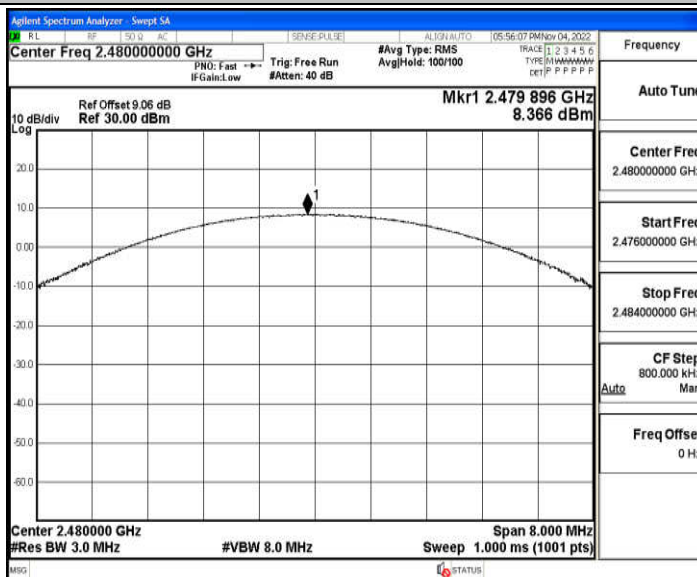
2DH5\_Ant1\_2402



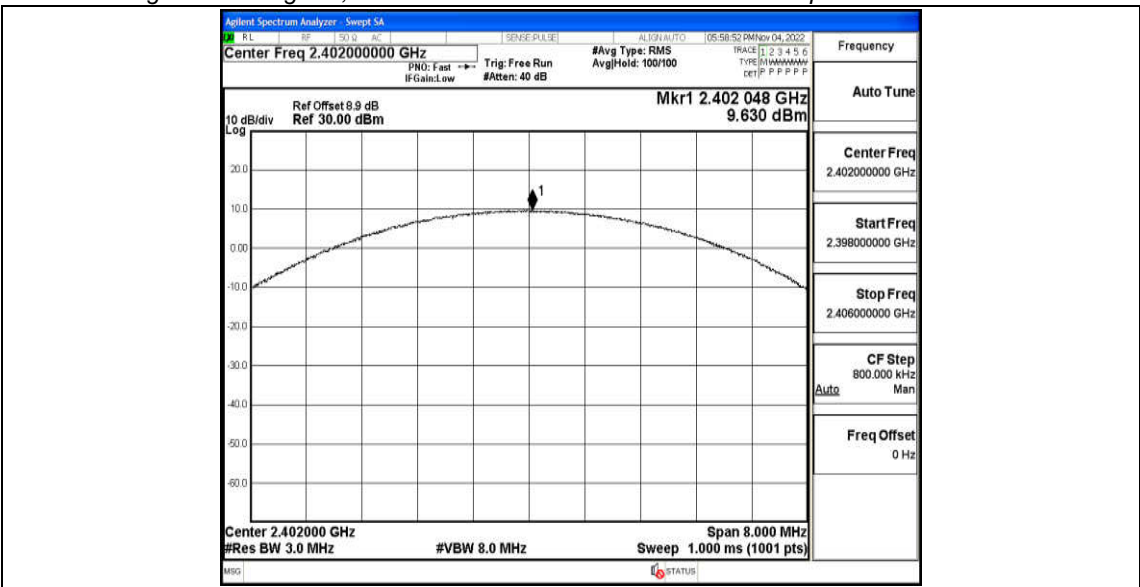
2DH5\_Ant1\_2441



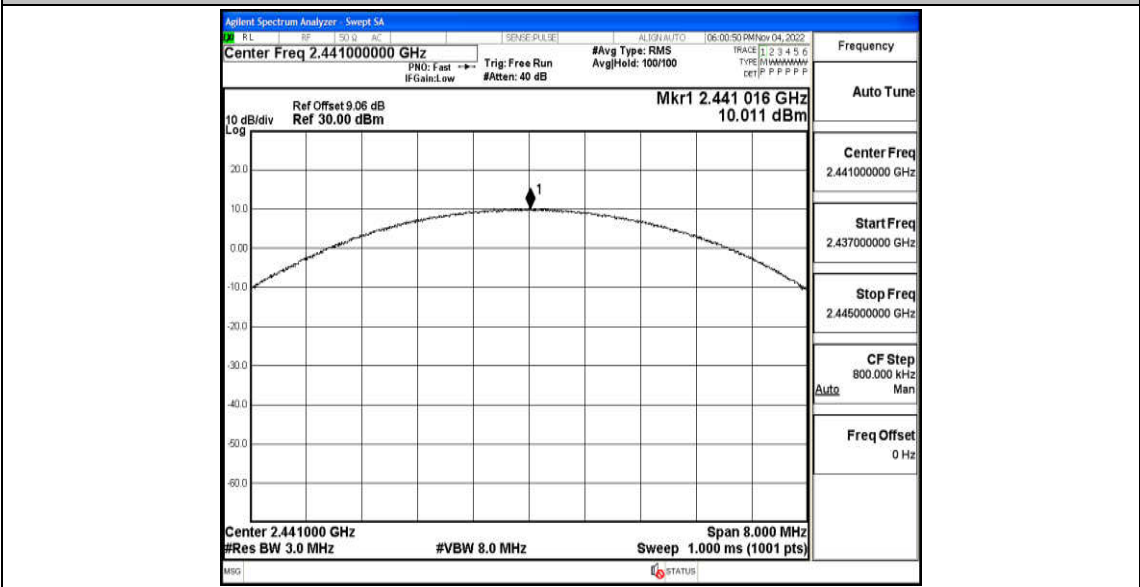
2DH5\_Ant1\_2480



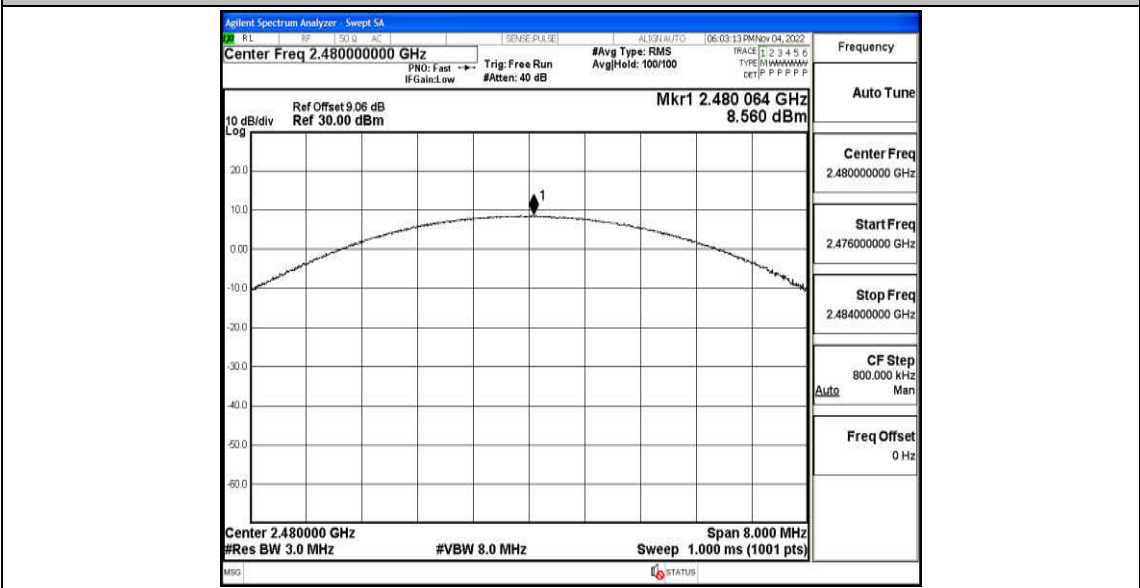
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

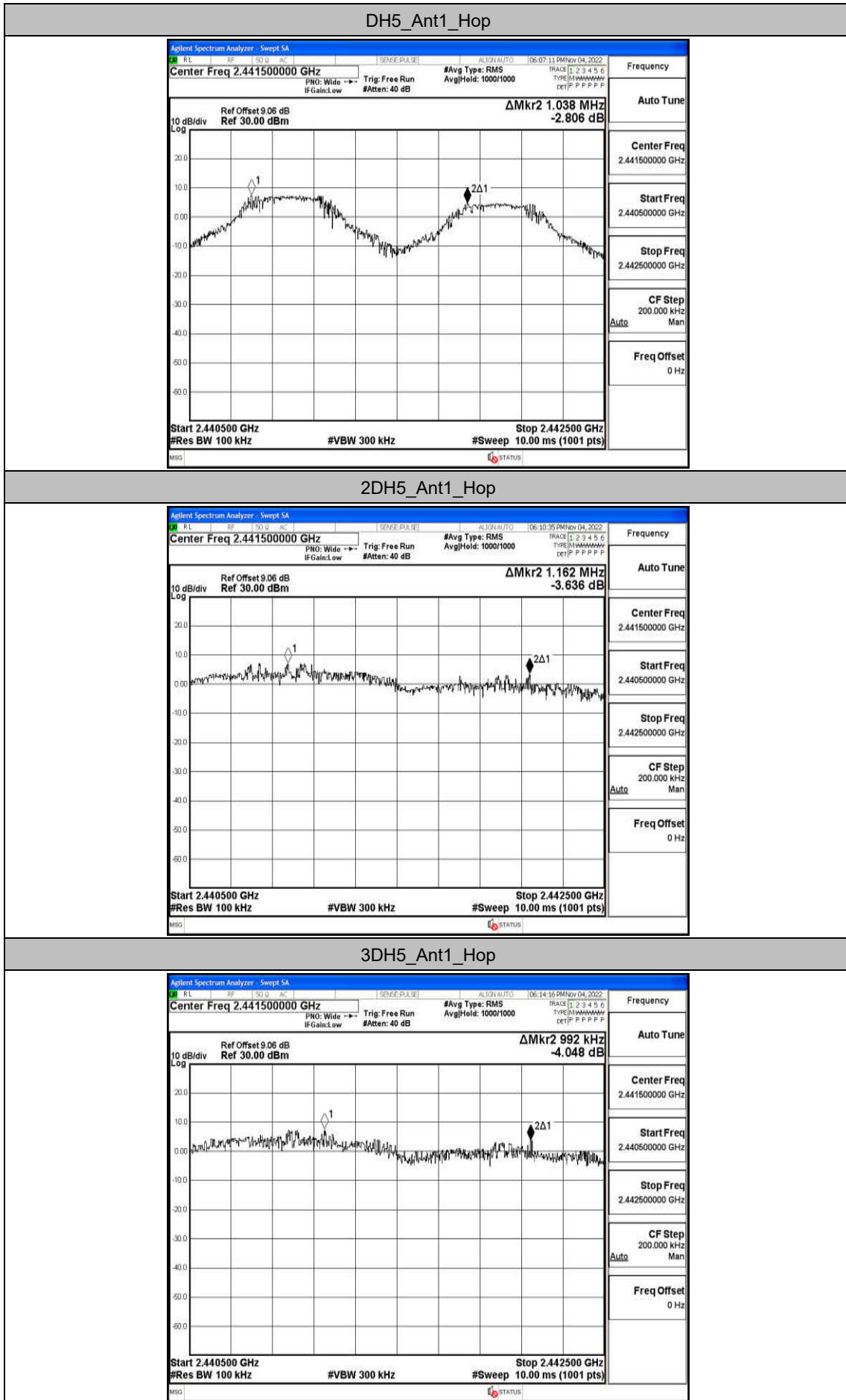


## Appendix D: Carrier frequency separation

### Test Result

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

### Test Graphs

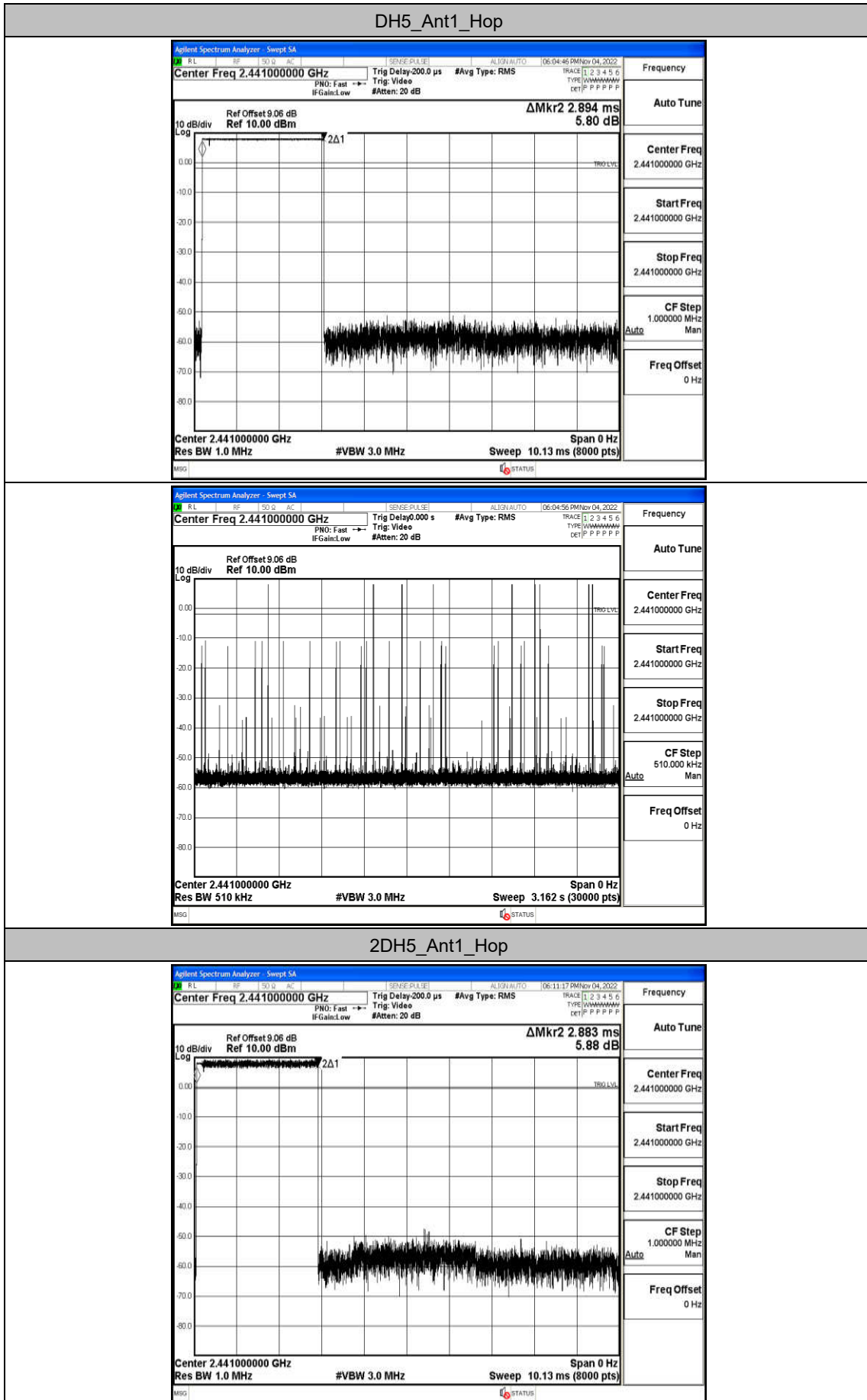


## Appendix E: Time of occupancy

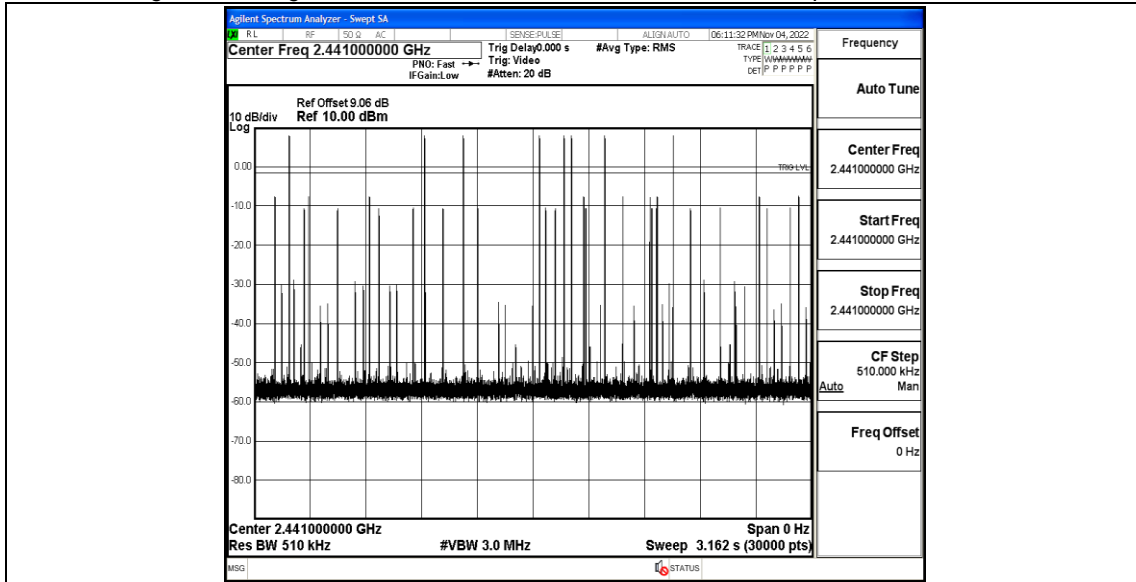
### Test Result

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

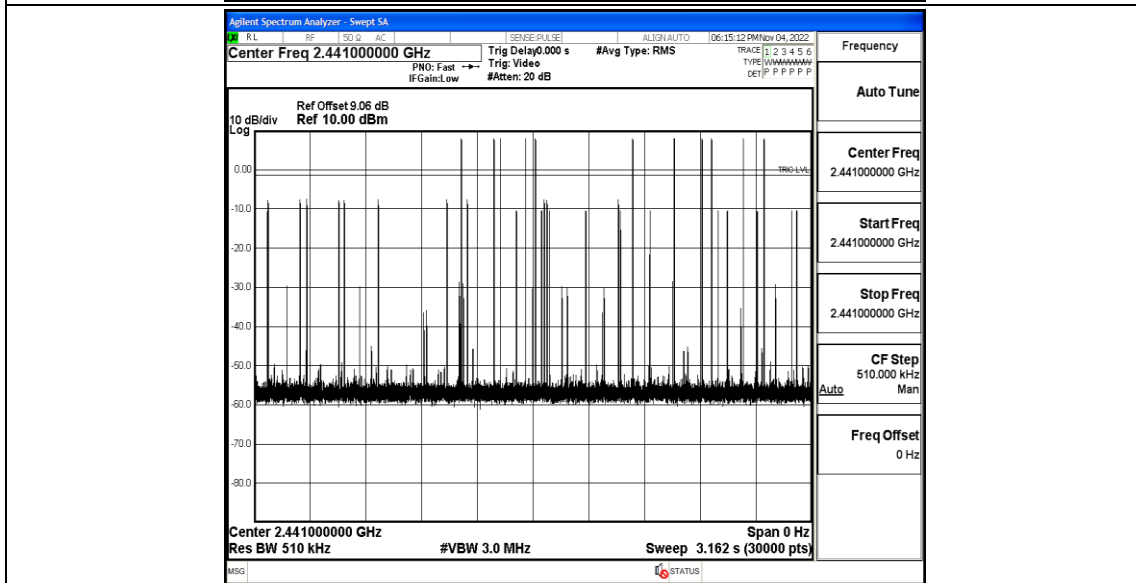
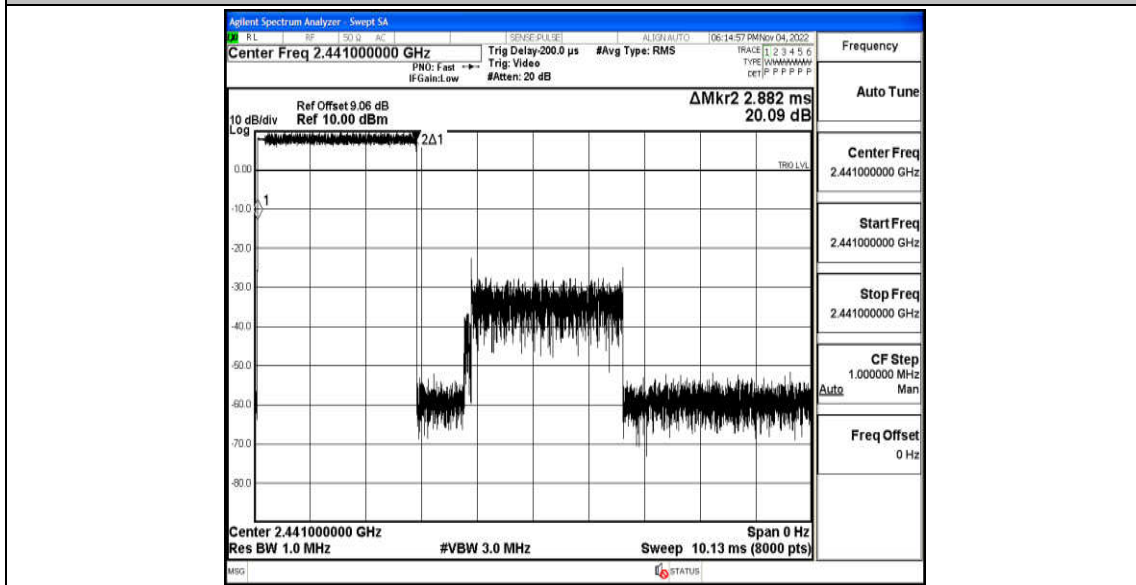
### Test Graphs







3DH5\_Ant1\_Hop

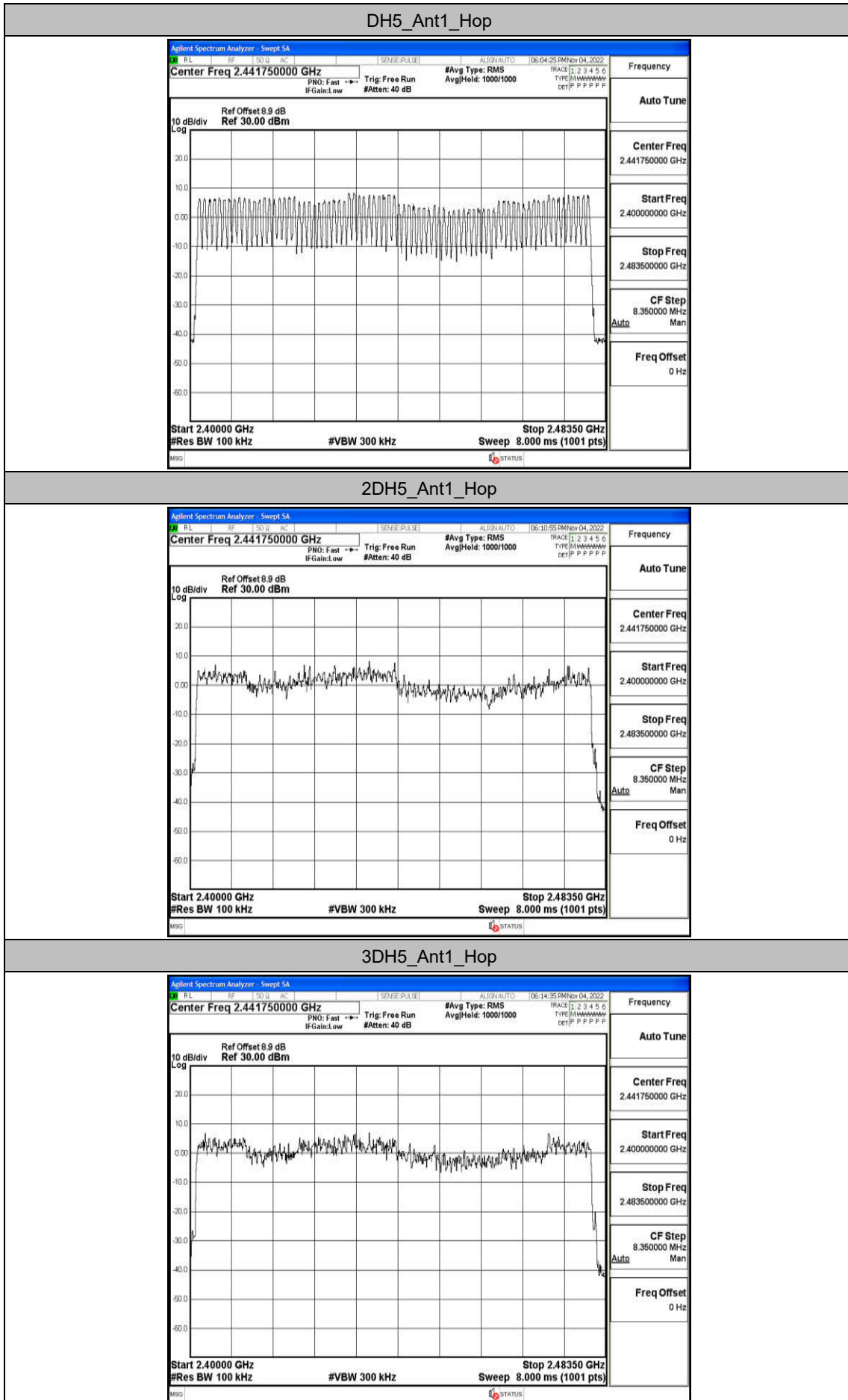


## Appendix F: Number of hopping channels

### 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

### Test Graphs



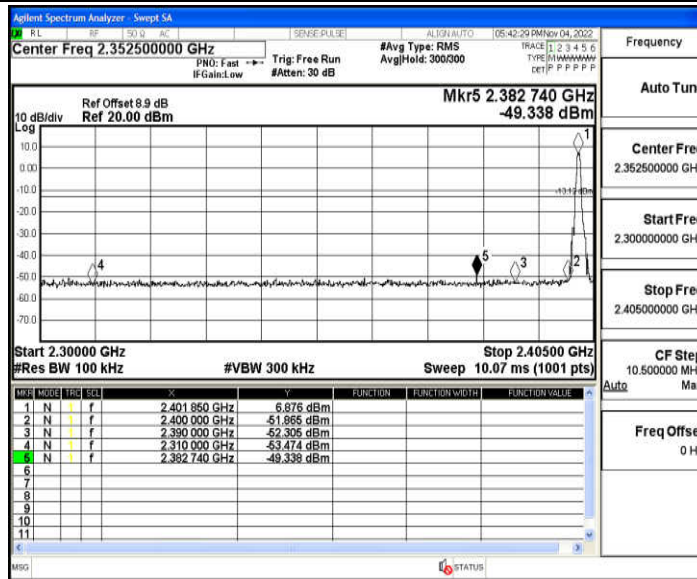
## Appendix G: Band edge measurements

### Test Result

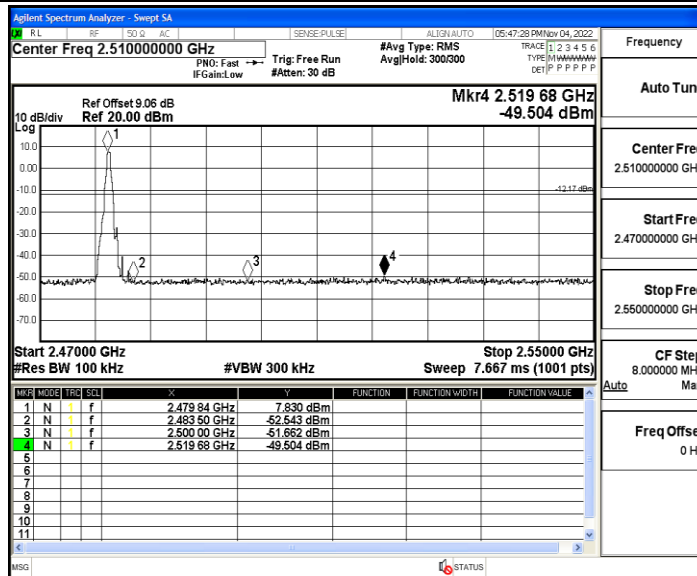
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.88	-49.34	≤-13.12	PASS
		High	2480	7.83	-49.5	≤-12.17	PASS
		Low	Hop_2402	5.51	-50.84	≤-14.49	PASS
		High	Hop_2480	7.61	-48.39	≤-12.39	PASS
2DH5	Ant1	Low	2402	7.46	-41.53	≤-12.54	PASS
		High	2480	6.62	-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

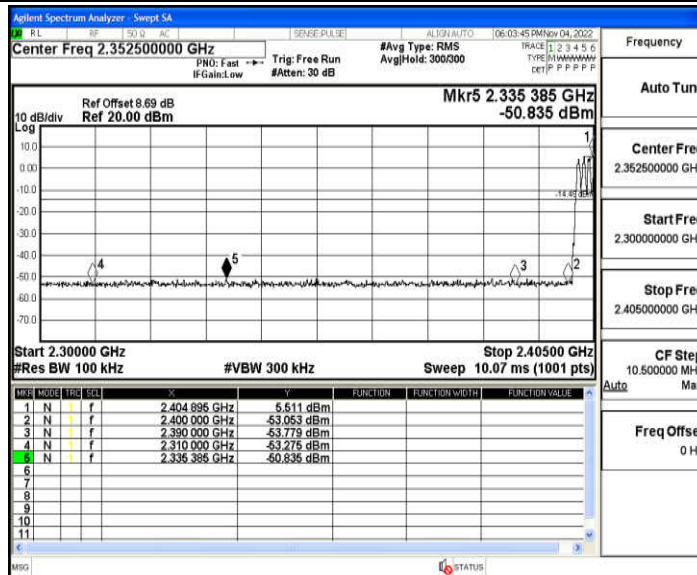
DH5\_Ant1\_Low\_2402



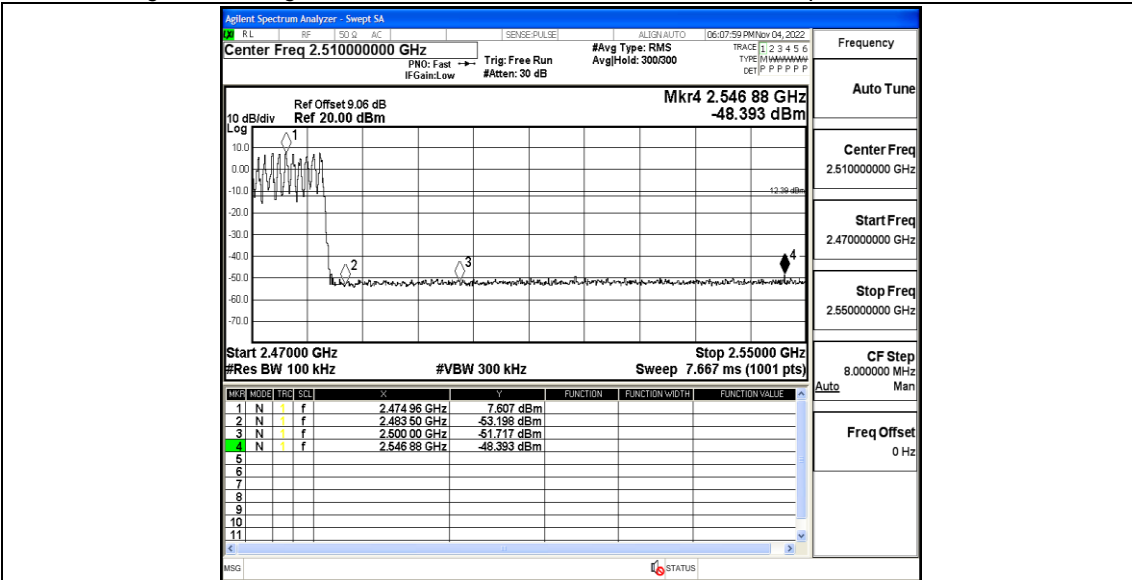
DH5\_Ant1\_High\_2480



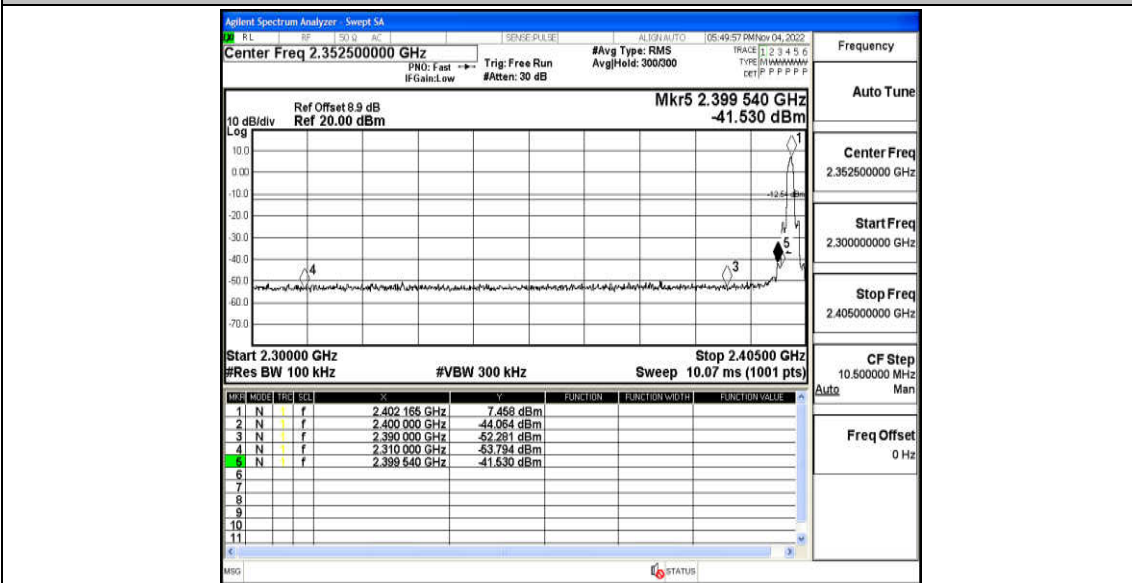
DH5\_Ant1\_Low\_Hop\_2402



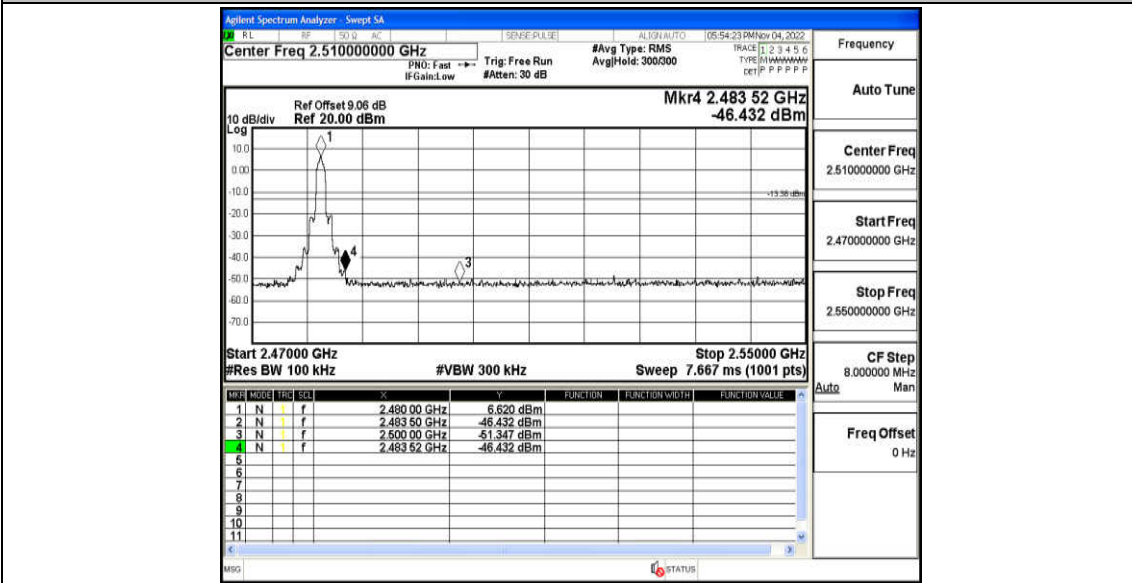
DH5\_Ant1\_High\_Hop\_2480



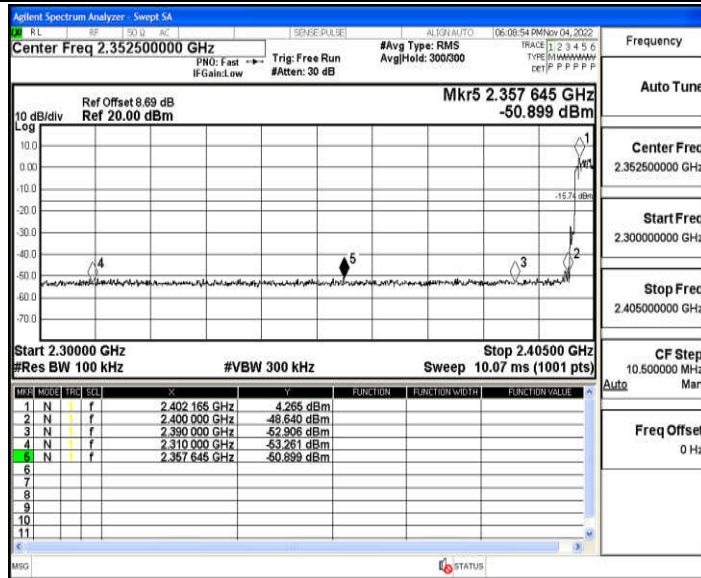
2DH5\_Ant1\_Low\_2402



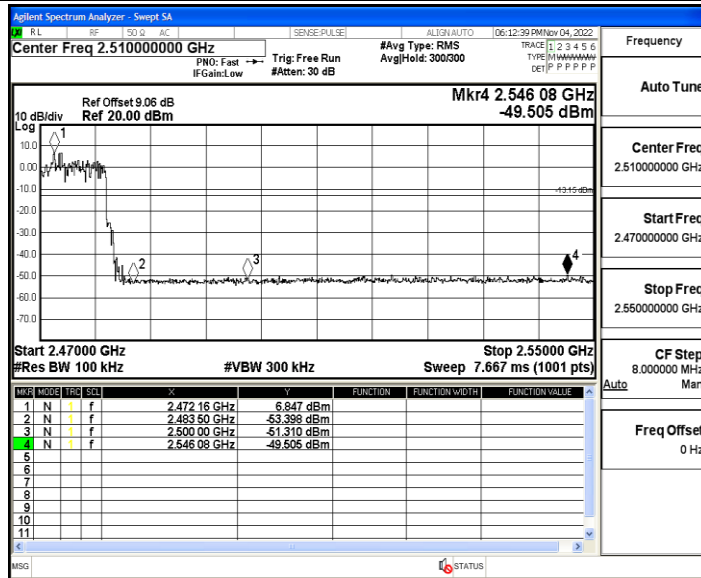
2DH5\_Ant1\_High\_2480



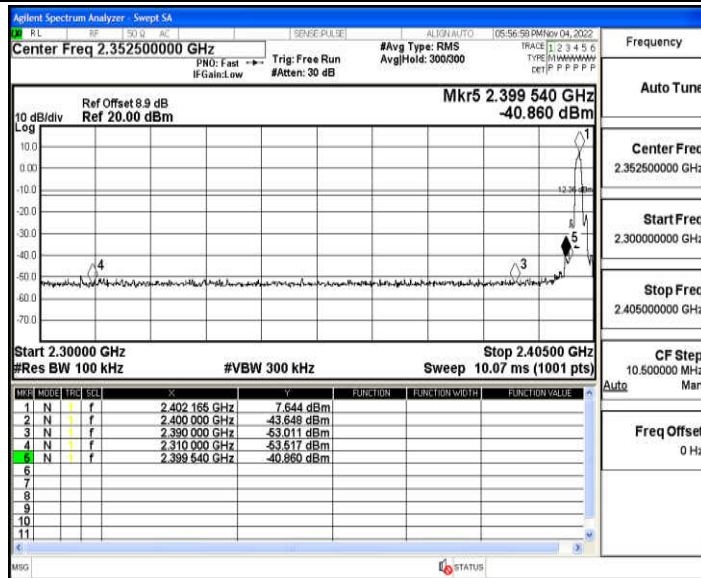
2DH5\_Ant1\_Low\_Hop\_2402



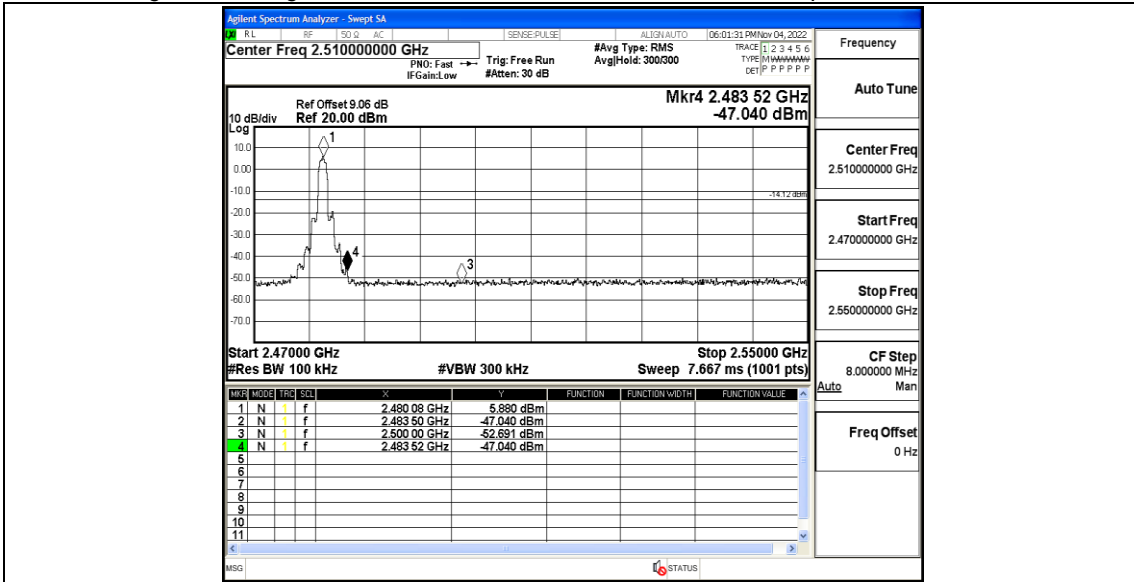
2DH5\_Ant1\_High\_Hop\_2480



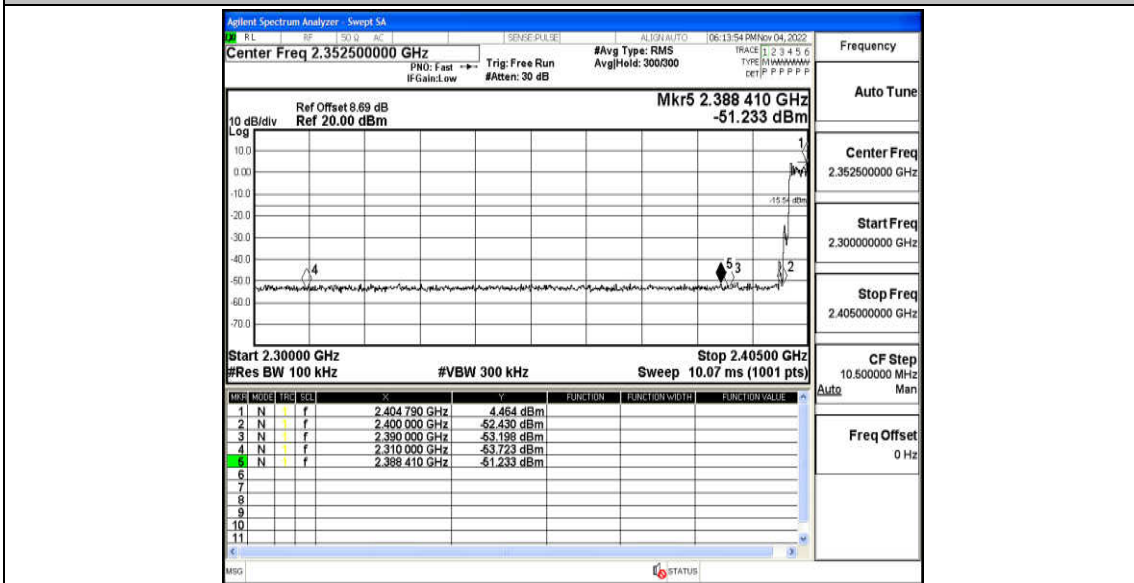
3DH5\_Ant1\_Low\_2402



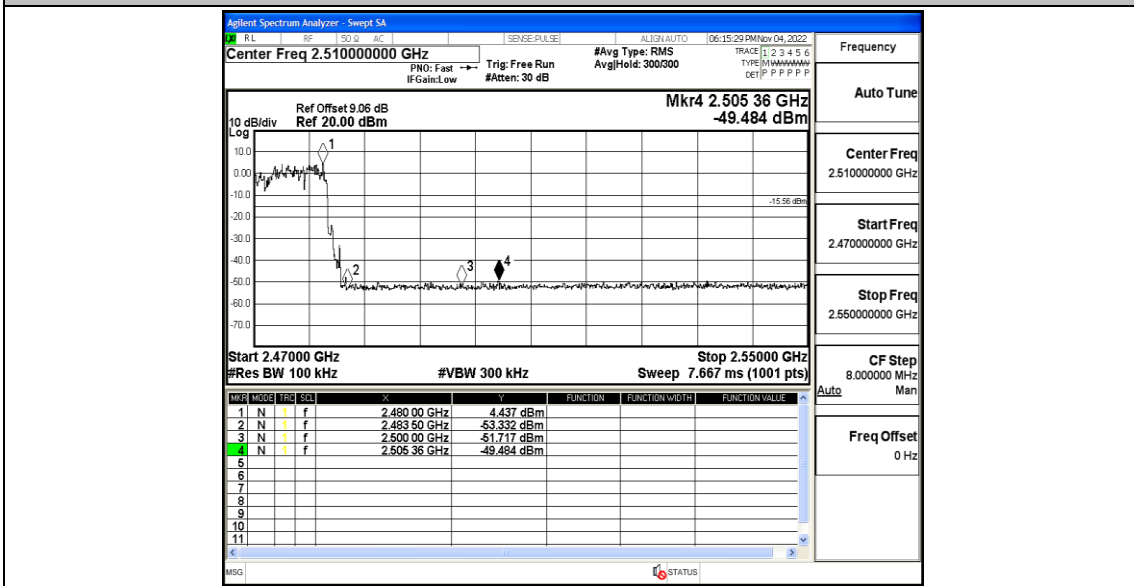
3DH5\_Ant1\_High\_2480



3DH5\_Ant1\_Low\_Hop\_2402



3DH5\_Ant1\_High\_Hop\_2480



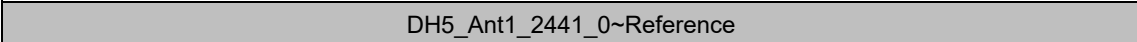
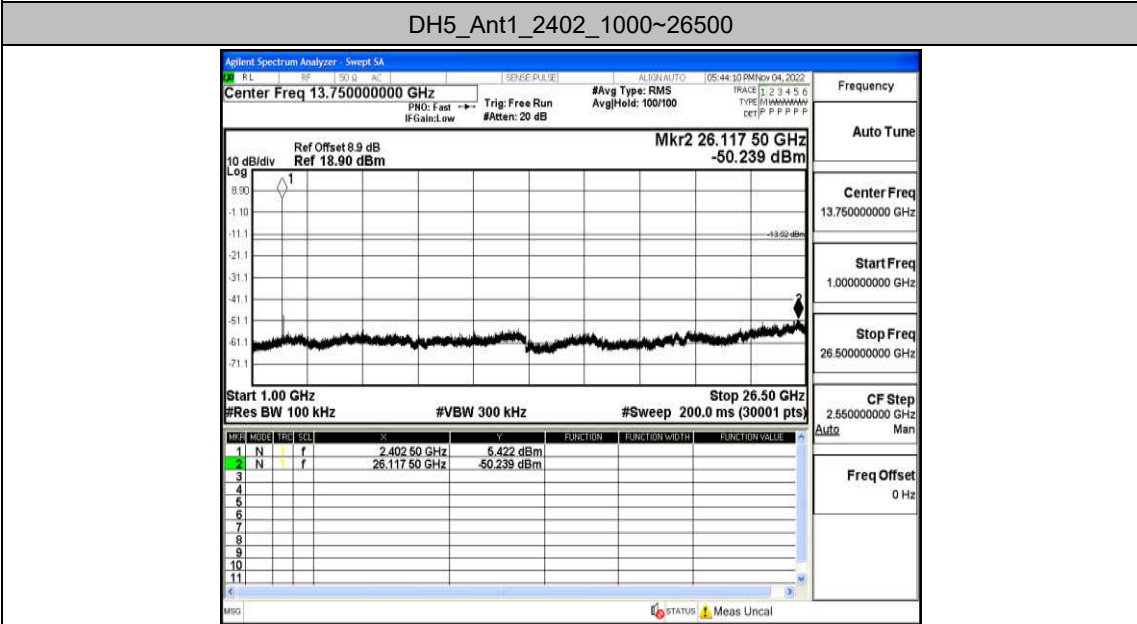
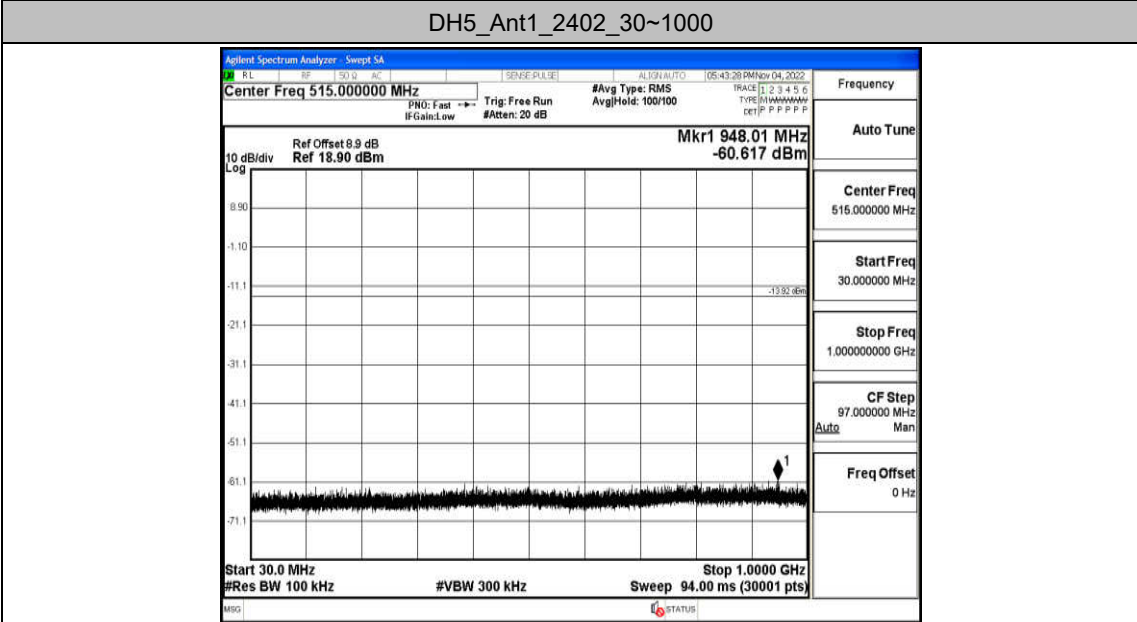
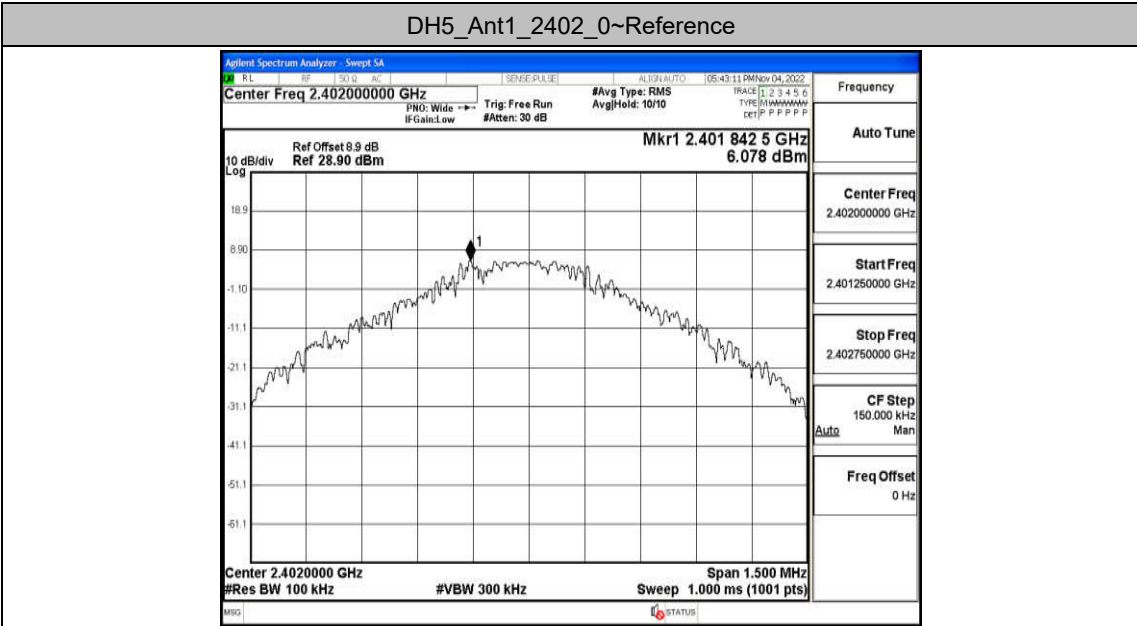


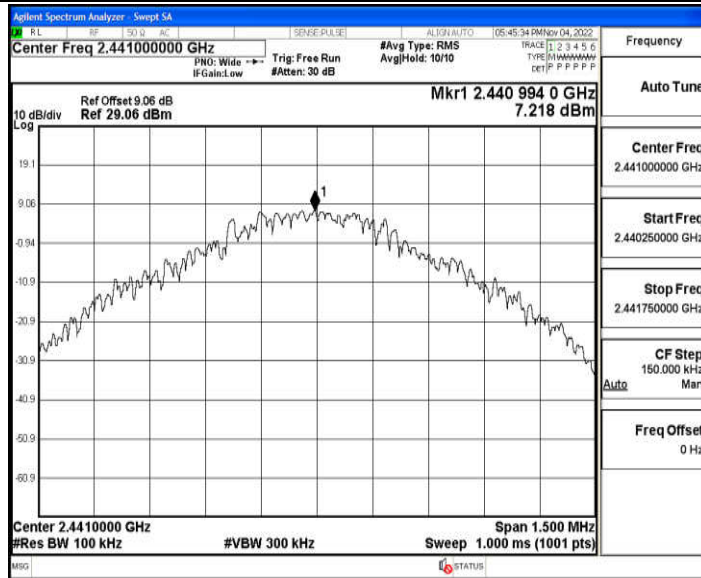
## Appendix H: Conducted Spurious Emission

### Test Result

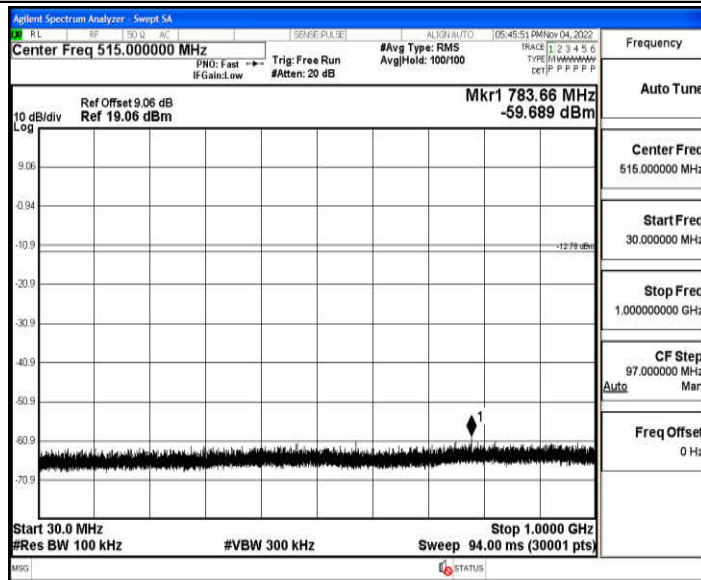
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	6.08	6.08	---	PASS
			30~1000	6.08	-60.62	≤-13.92	PASS
			1000~26500	6.08	-50.24	≤-13.92	PASS
		2441	Reference	7.22	7.22	---	PASS
			30~1000	7.22	-59.69	≤-12.78	PASS
			1000~26500	7.22	-50.62	≤-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

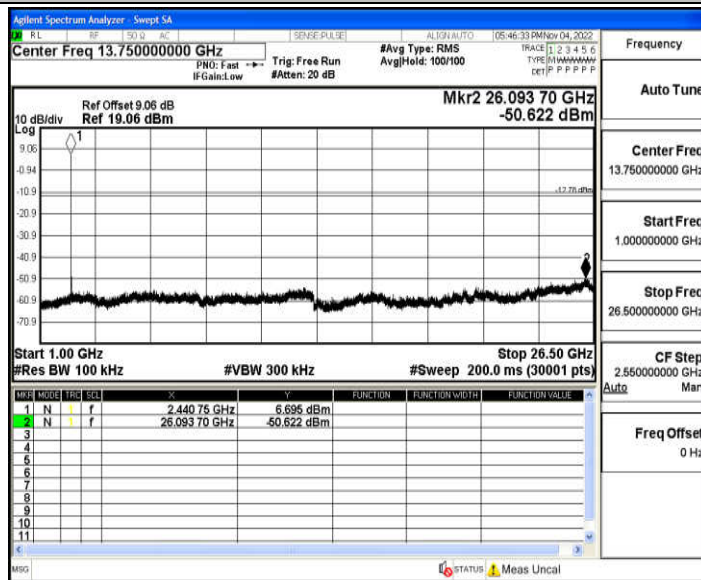




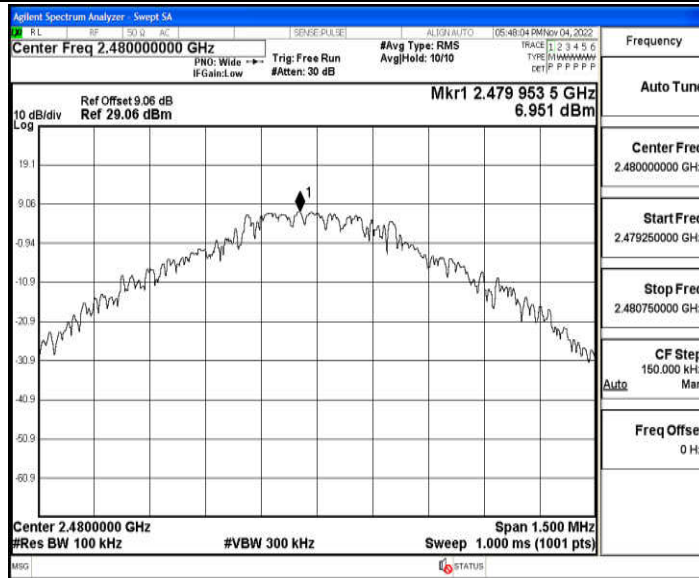
DH5\_Ant1\_2441\_30~1000



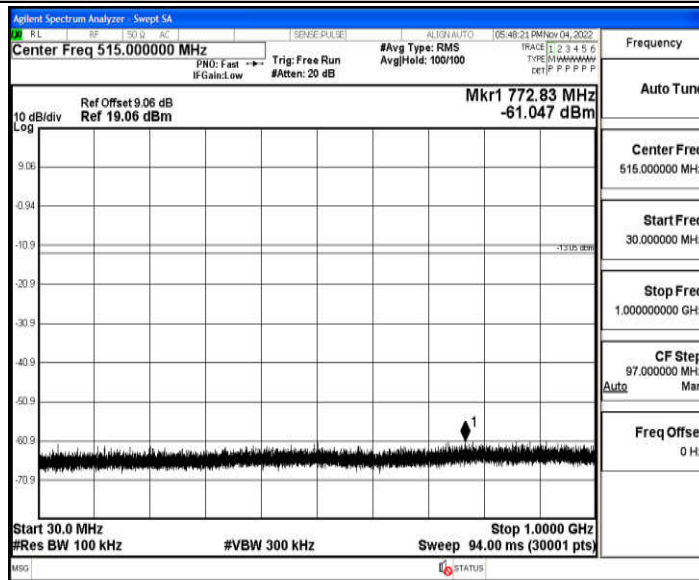
DH5\_Ant1\_2441\_1000~26500



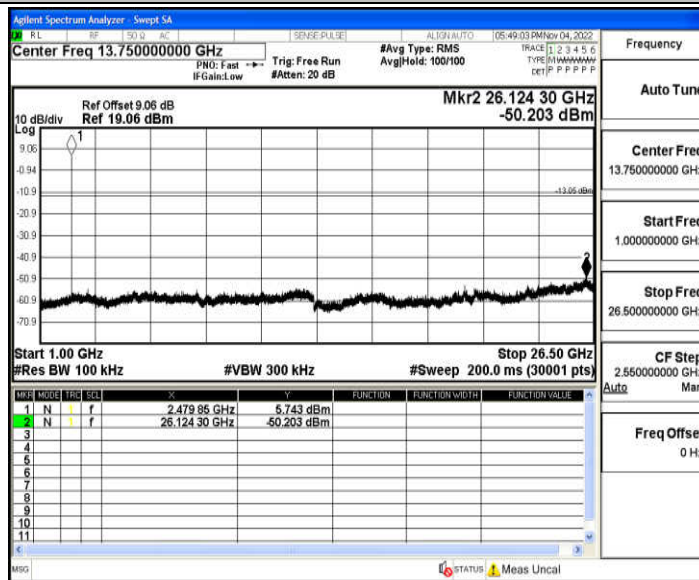
DH5\_Ant1\_2480\_0~Reference



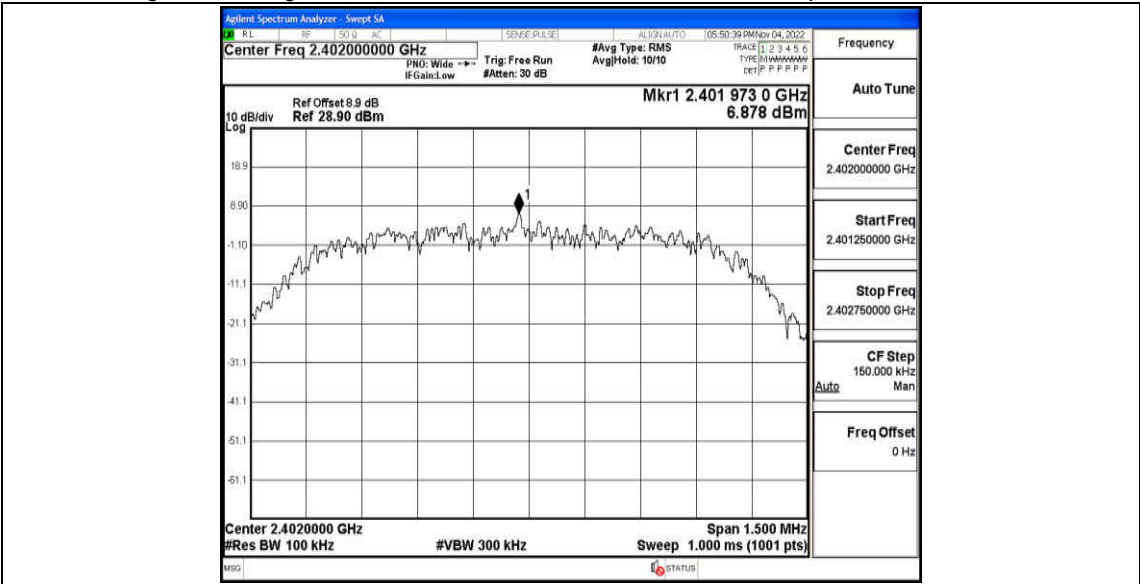
DH5\_Ant1\_2480\_30~1000



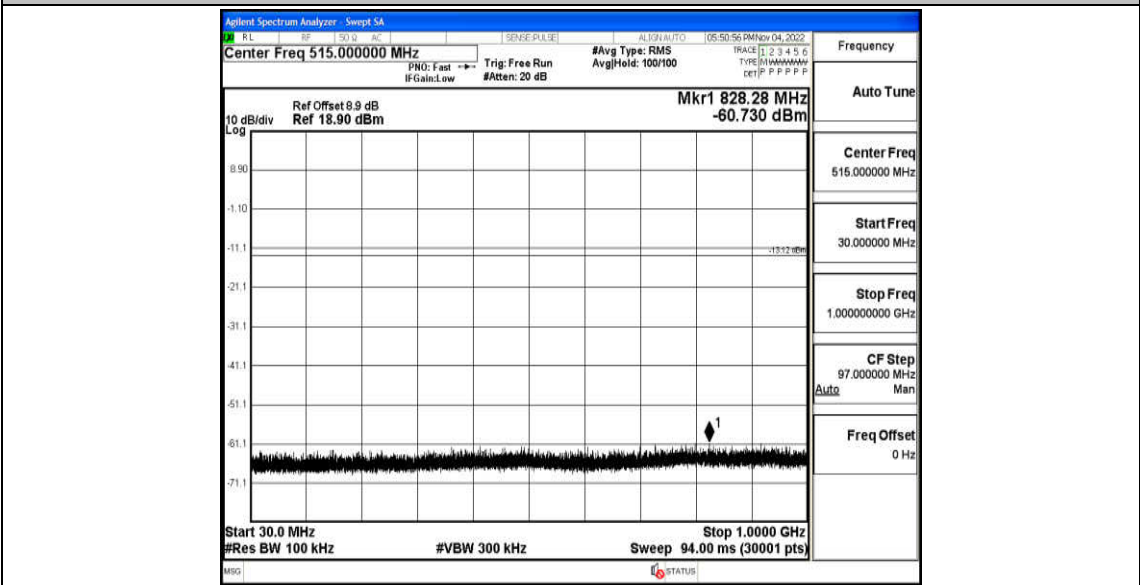
DH5\_Ant1\_2480\_1000~26500



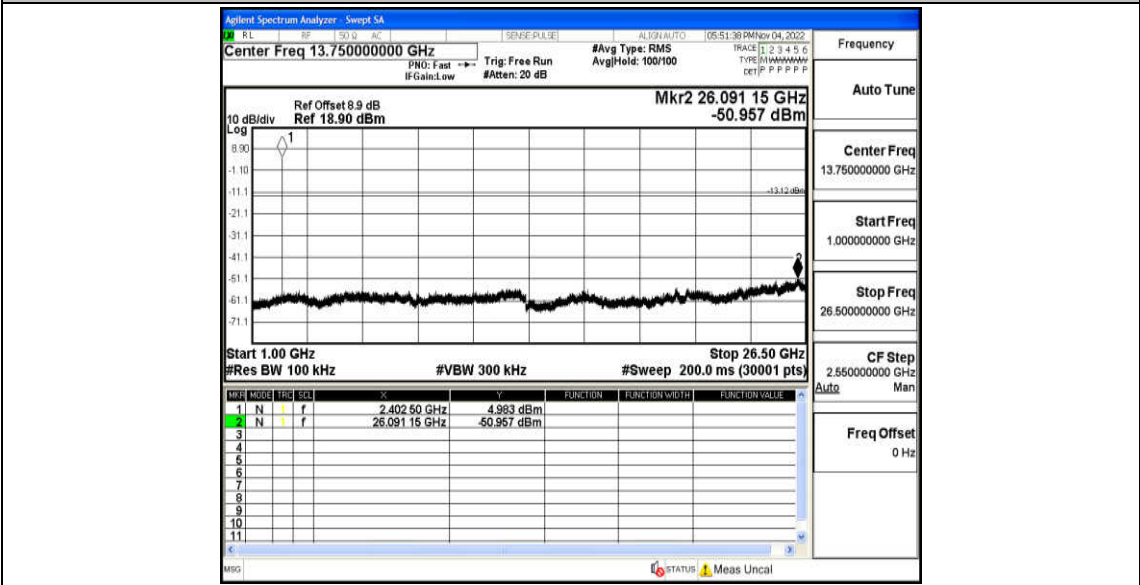
2DH5\_Ant1\_2402\_0~Reference



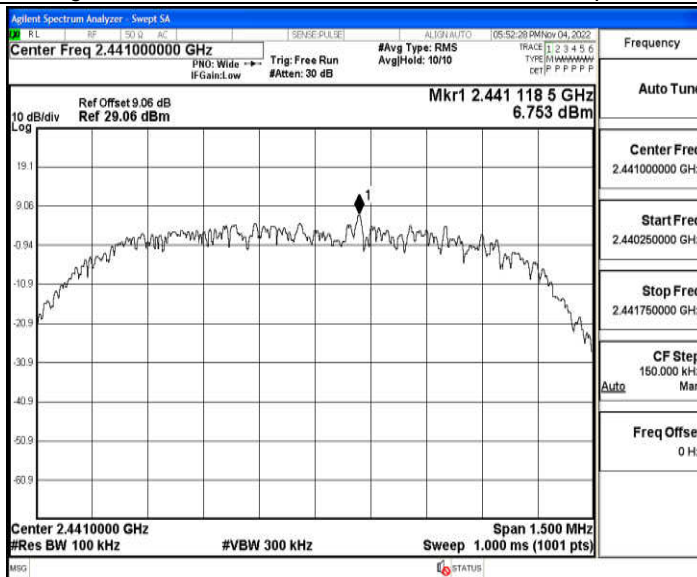
2DH5\_Ant1\_2402\_30~1000



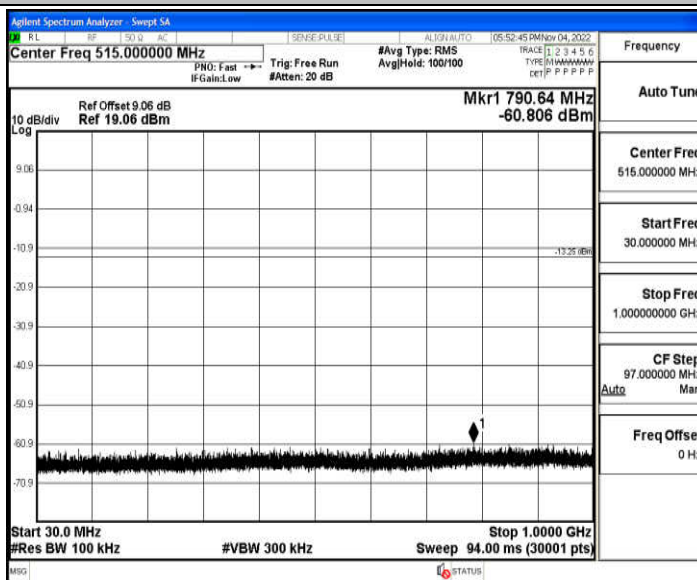
2DH5\_Ant1\_2402\_1000~26500



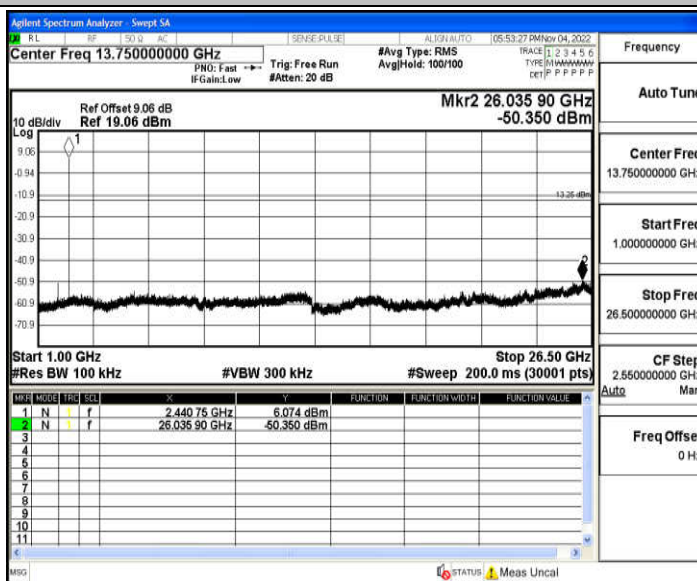
2DH5\_Ant1\_2441\_0~Reference



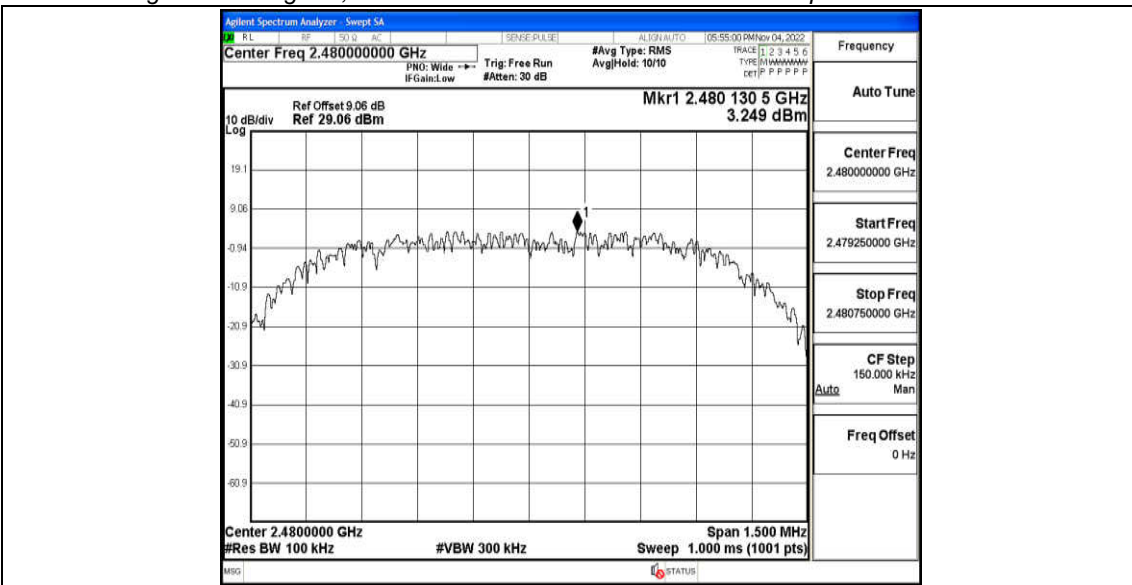
2DH5\_Ant1\_2441\_30~1000



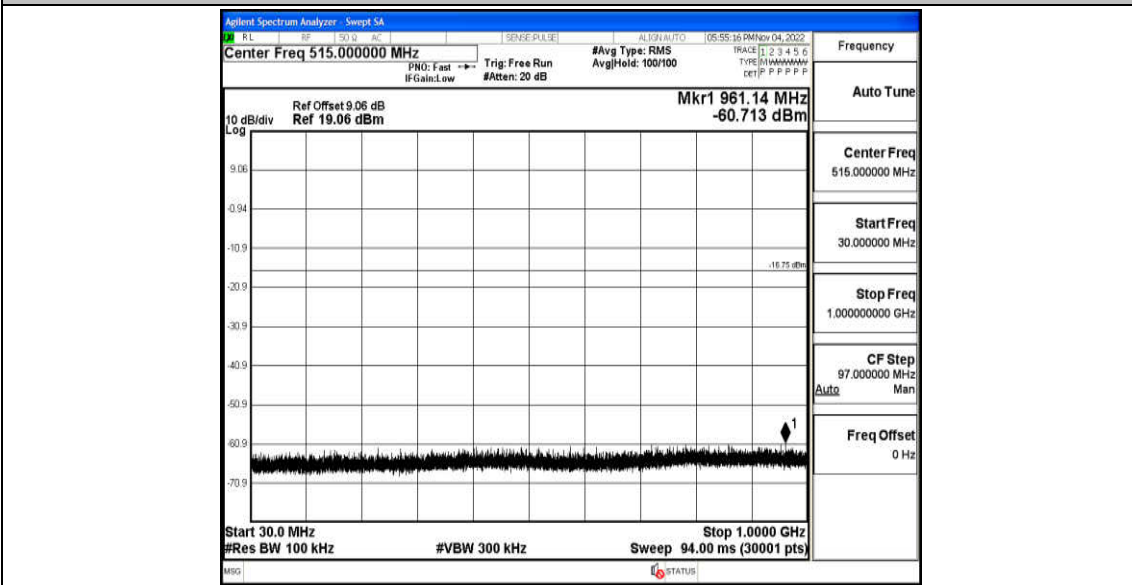
2DH5\_Ant1\_2441\_1000~26500



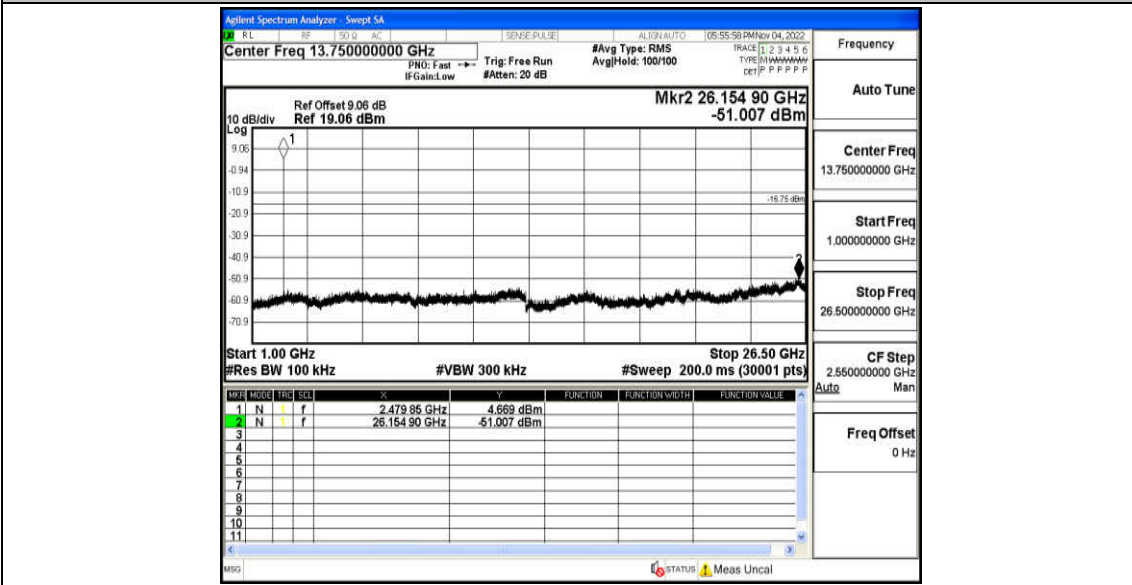
2DH5\_Ant1\_2480\_0~Reference



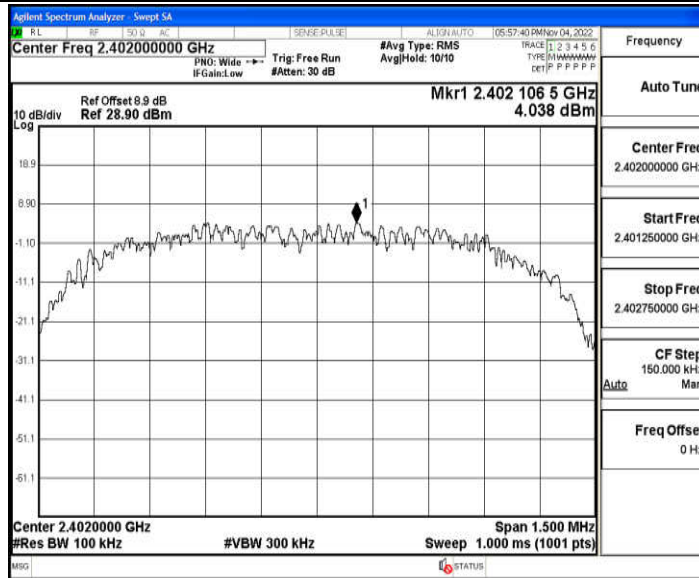
2DH5\_Ant1\_2480\_30~1000



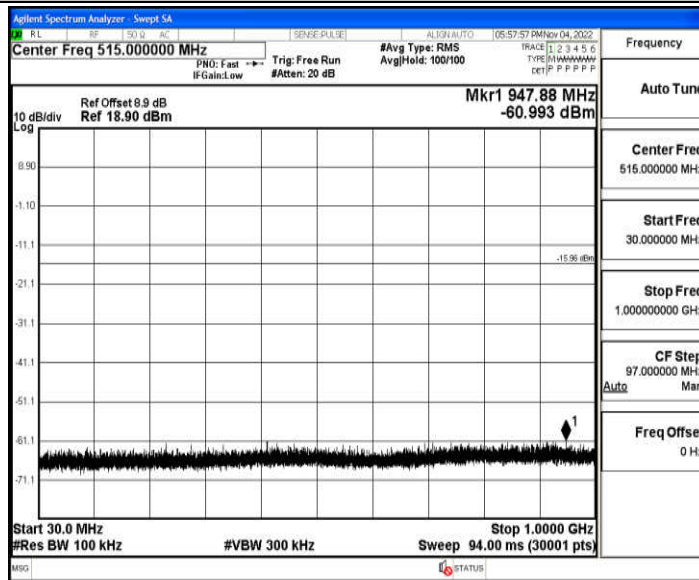
2DH5\_Ant1\_2480\_1000~26500



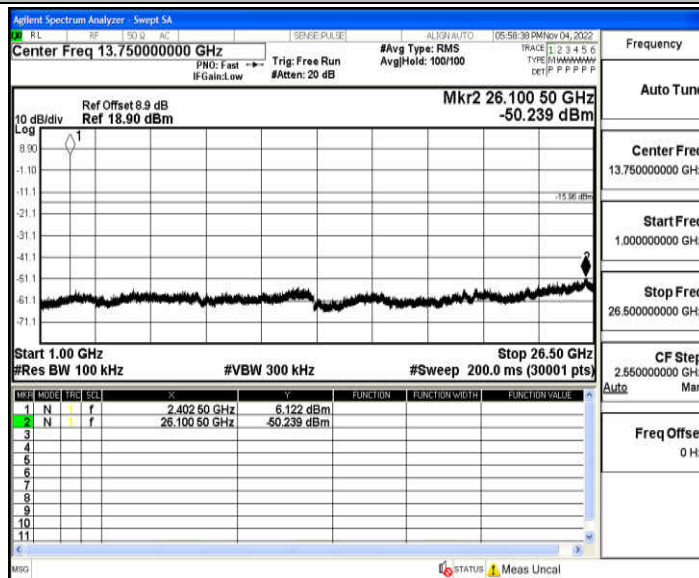
3DH5\_Ant1\_2402\_0~Reference



3DH5\_Ant1\_2402\_30~1000

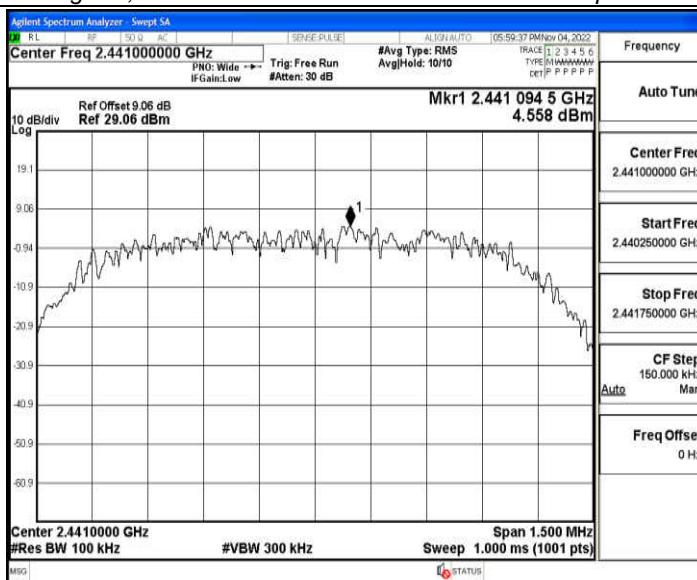


3DH5\_Ant1\_2402\_1000~26500

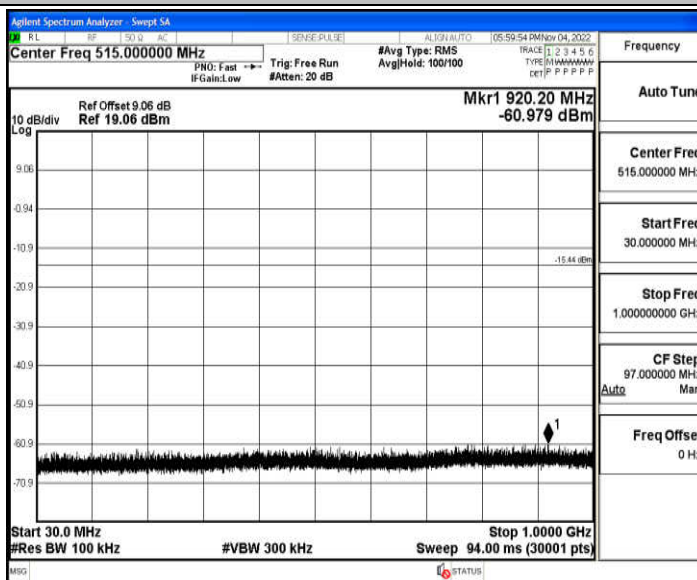


3DH5\_Ant1\_2441\_0~Reference

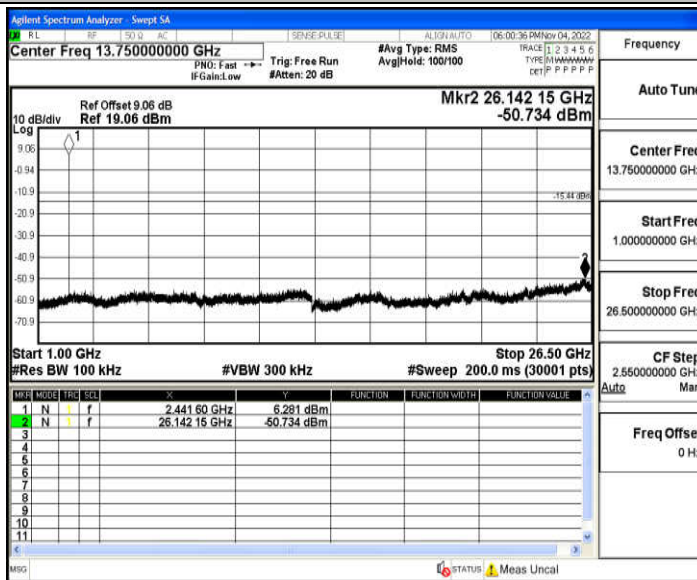




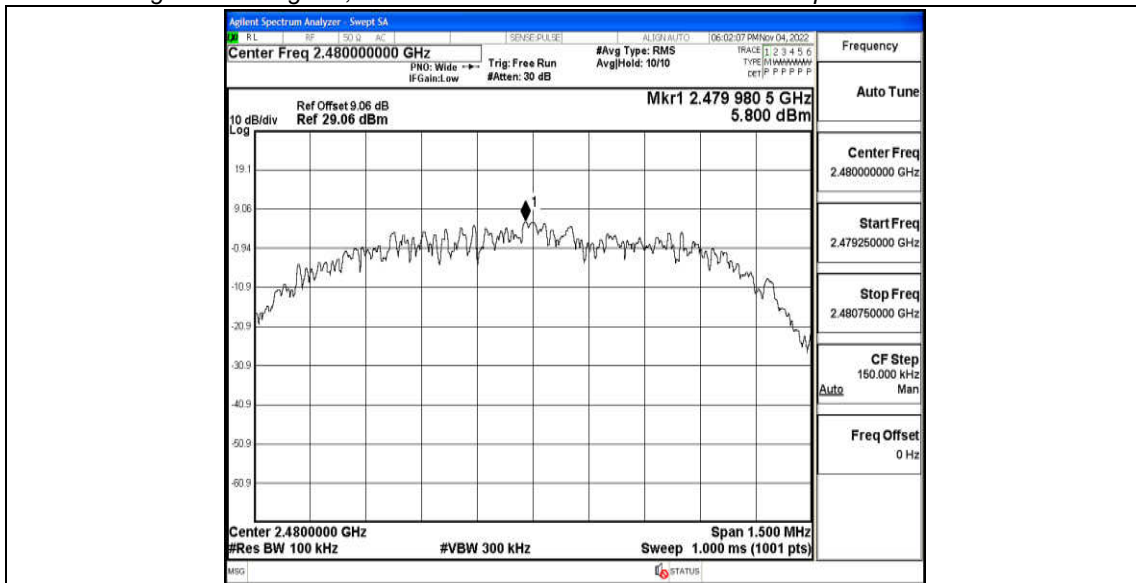
3DH5\_Ant1\_2441\_30~100



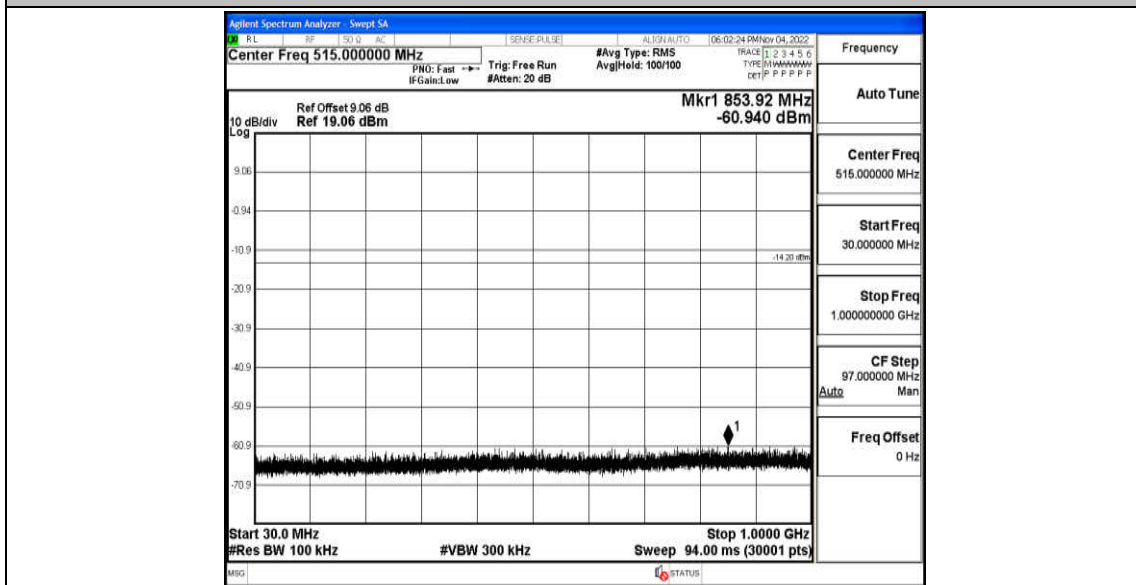
3DH5\_Ant1\_2441\_1000~26500



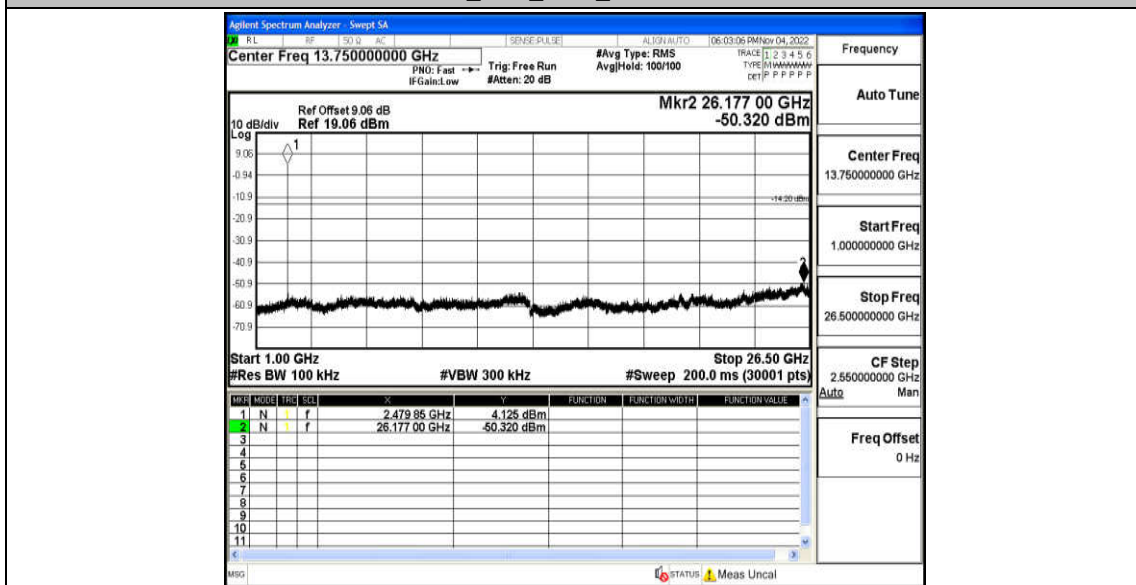
3DH5\_Ant1\_2480\_0~Reference



3DH5\_Ant1\_2480\_30~1000



3DH5\_Ant1\_2480\_1000~26500

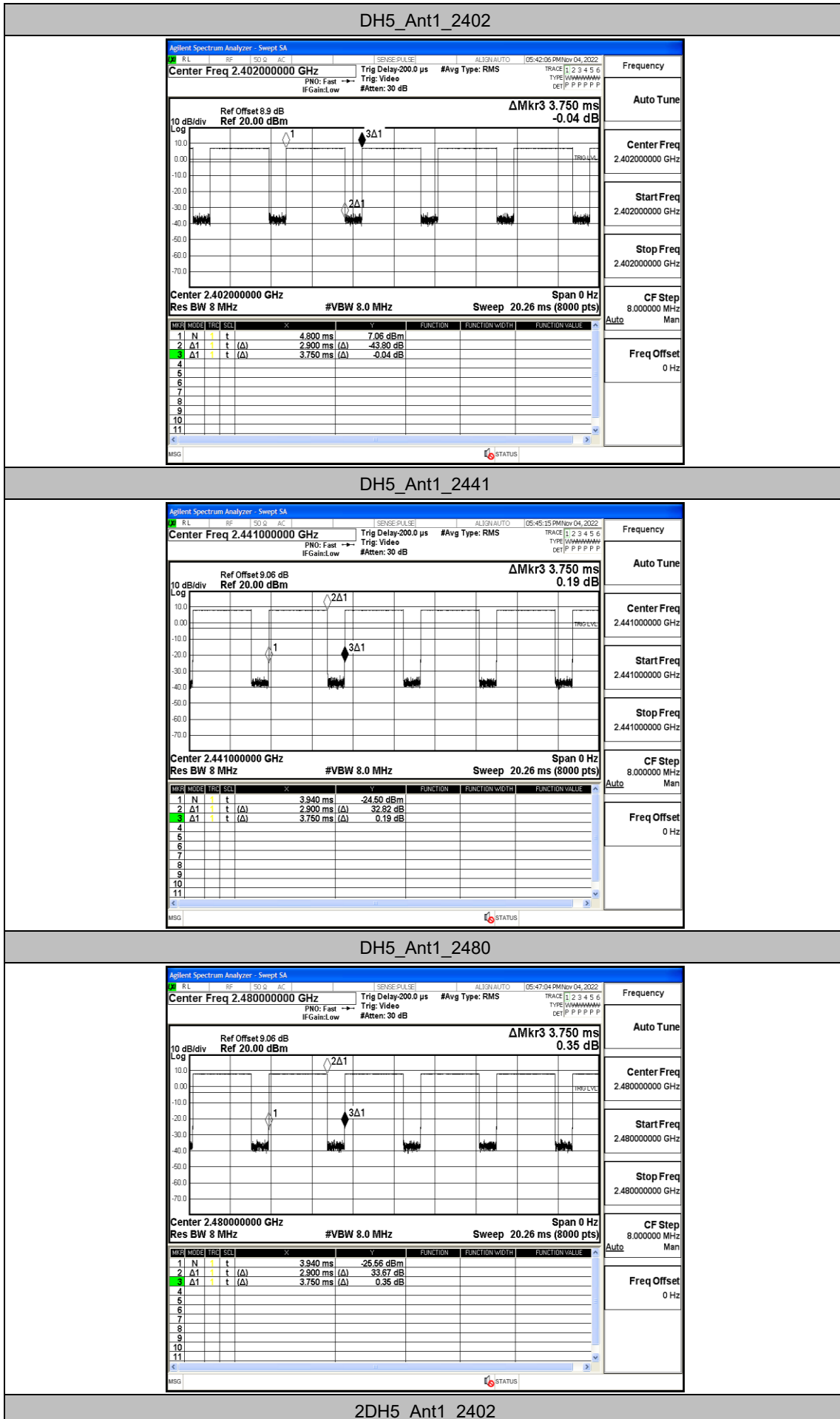


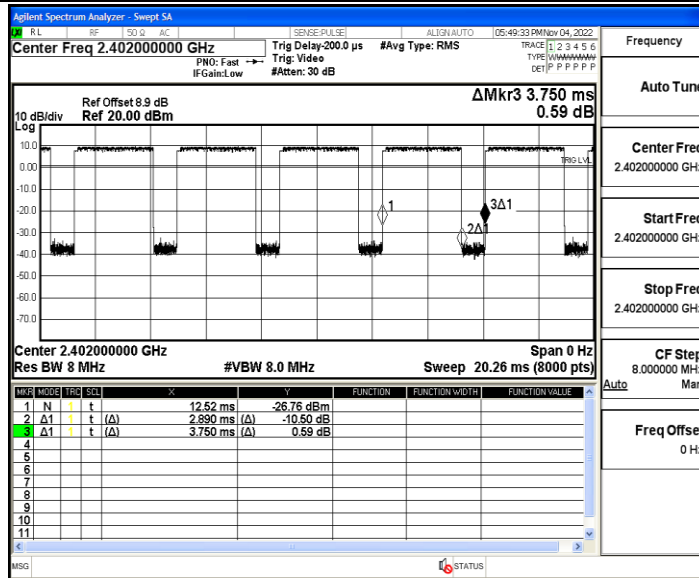
## Appendix I: Duty Cycle

### Test Result

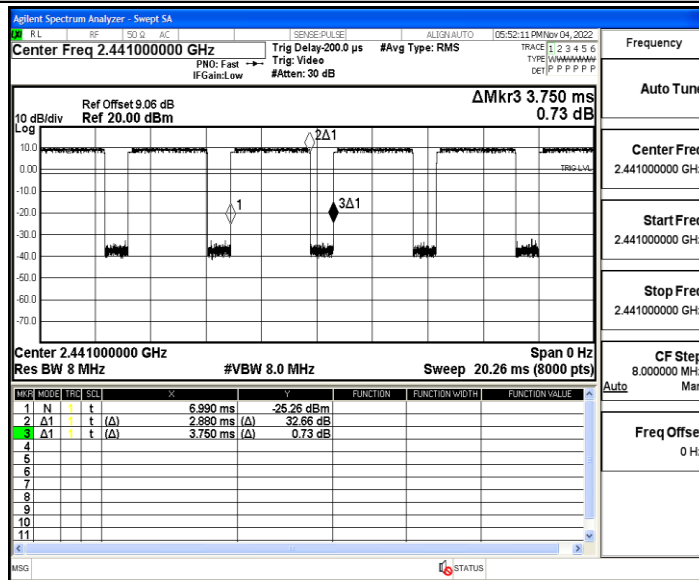
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.90	3.75	77.33	0.34
		2441	2.90	3.75	77.33	0.34
		2480	2.90	3.75	77.33	0.34
2DH5	Ant1	2402	2.89	3.75	77.07	0.35
		2441	2.88	3.75	76.80	0.35
		2480	2.88	3.74	77.01	0.35
3DH5	Ant1	2402	2.88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

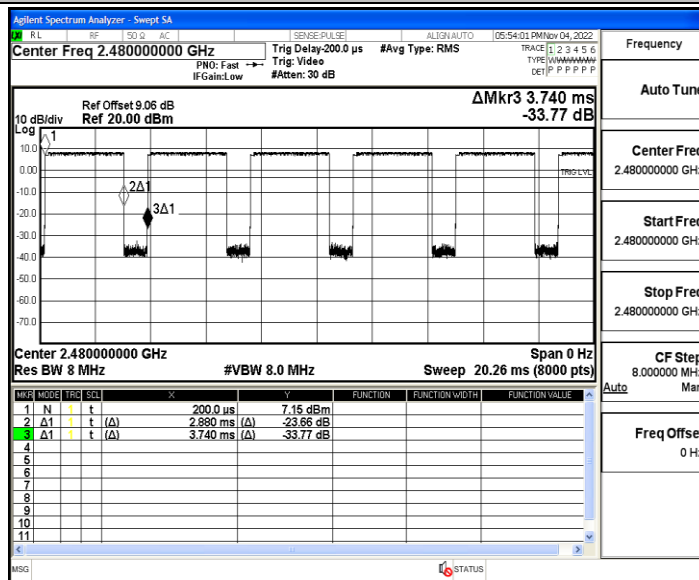




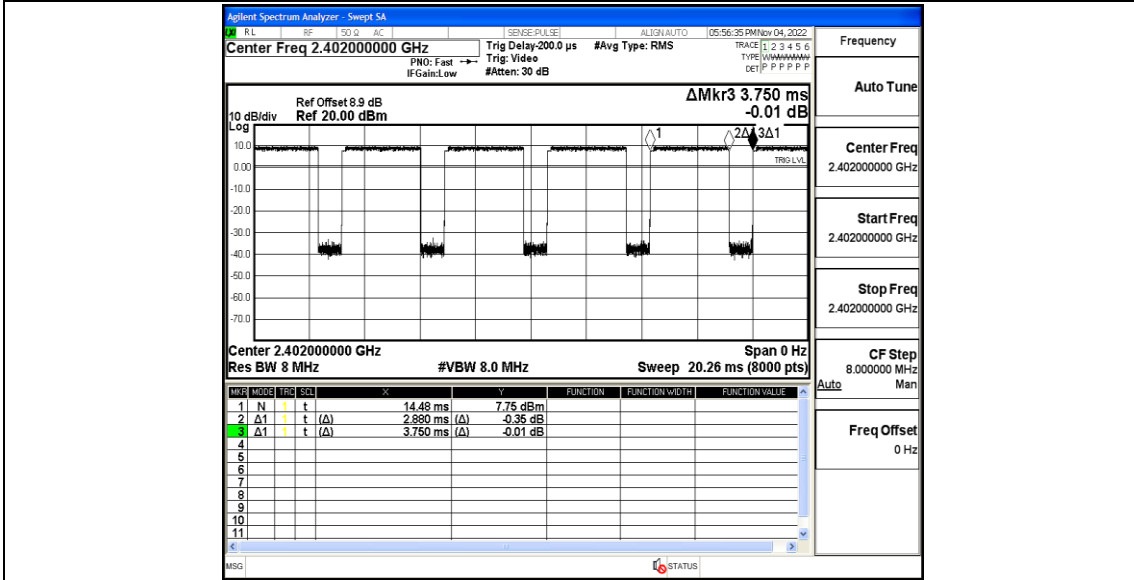
2DH5\_Ant1\_2441



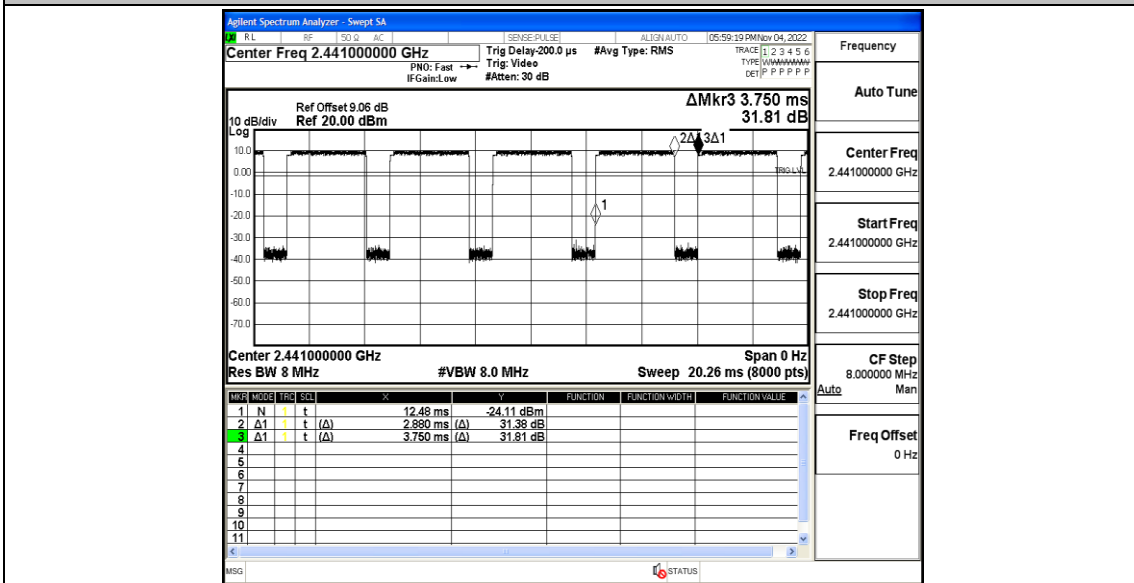
2DH5\_Ant1\_2480



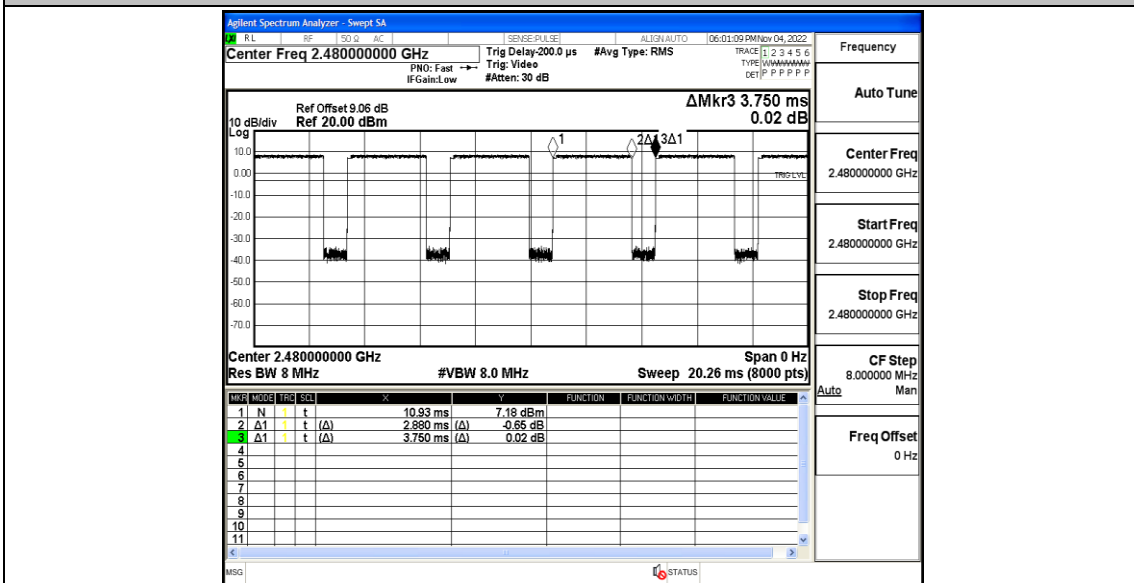
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## Appendix J: Emissions in Restricted Bands

### Test Result

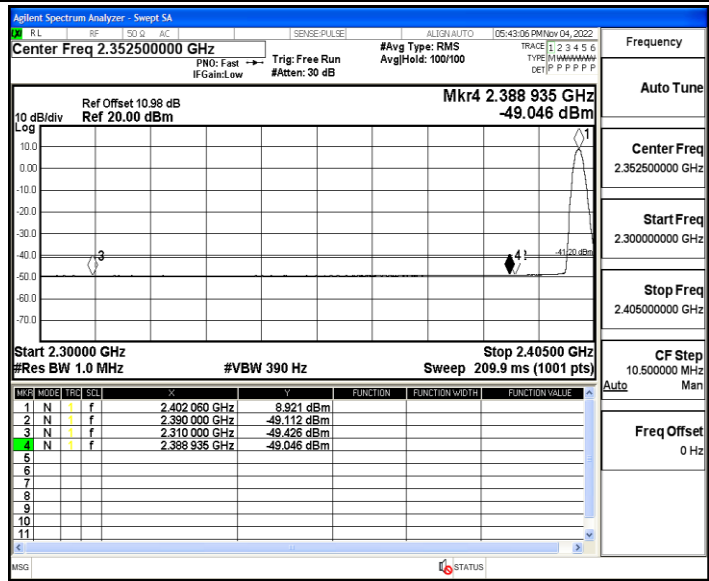
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.43	≤-41.20	PASS
				AV	2388.935	-49.05	≤-41.20	PASS
				AV	2390.000	-49.11	≤-41.20	PASS
				Peak	2310.000	-41.63	≤-21.20	PASS
				Peak	2348.615	-39.29	≤-21.20	PASS
				Peak	2390.000	-41.99	≤-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:

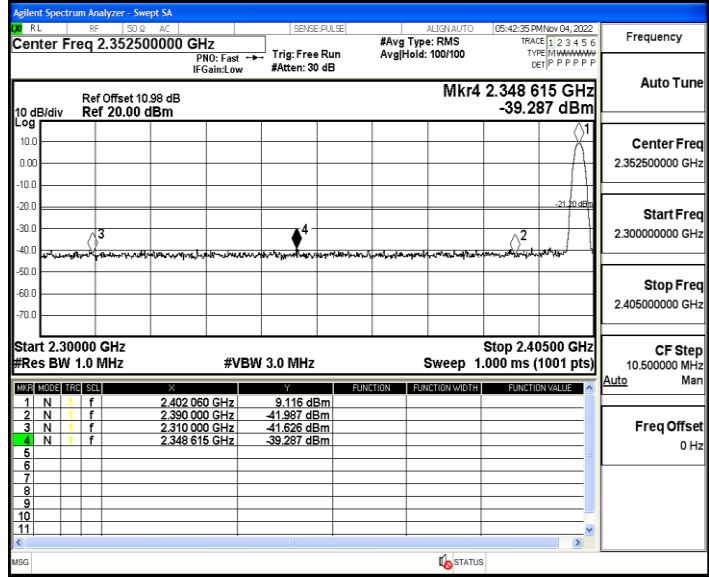
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

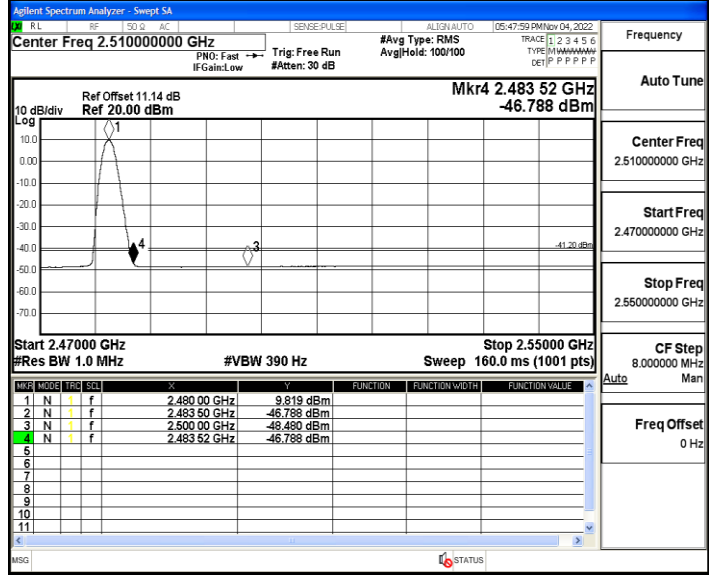
DH5\_Ant1\_Low\_2402\_AV



DH5\_Ant1\_Low\_2402\_Peak

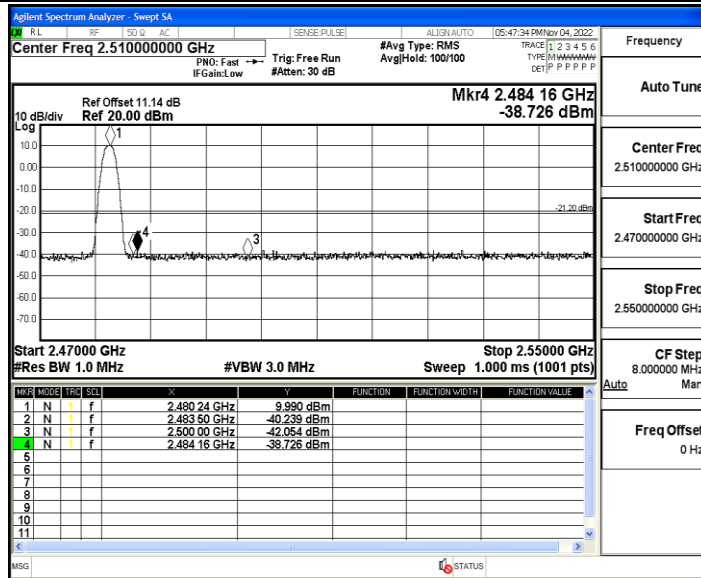


DH5\_Ant1\_High\_2480\_AV

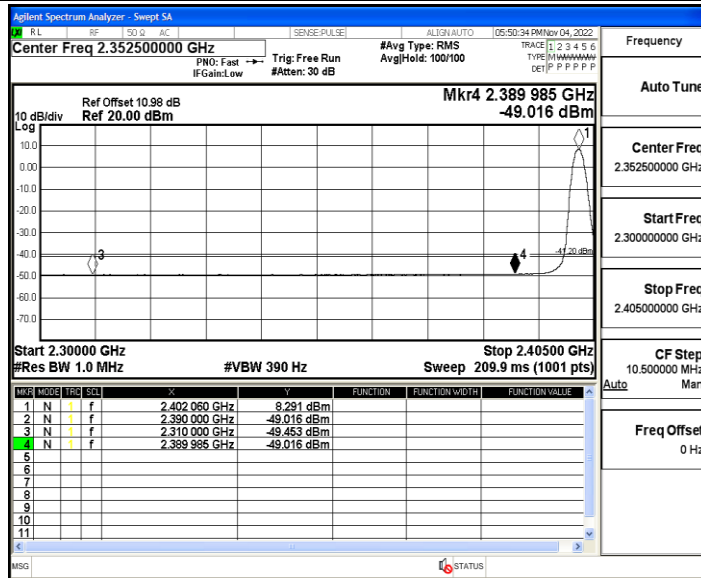


DH5\_Ant1\_High\_2480\_Peak

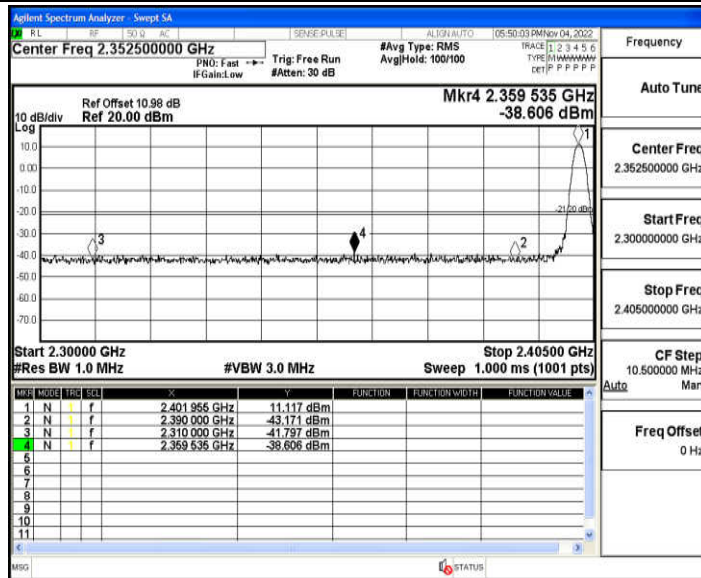




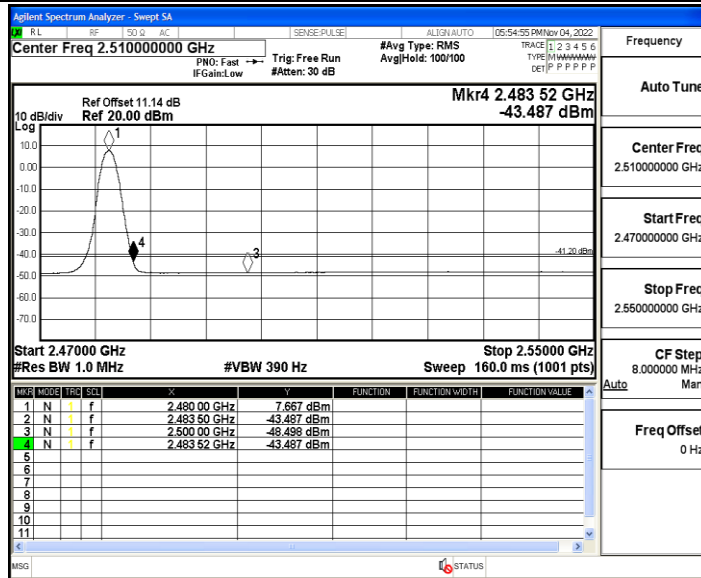
2DH5\_Ant1\_Low\_2402\_AV



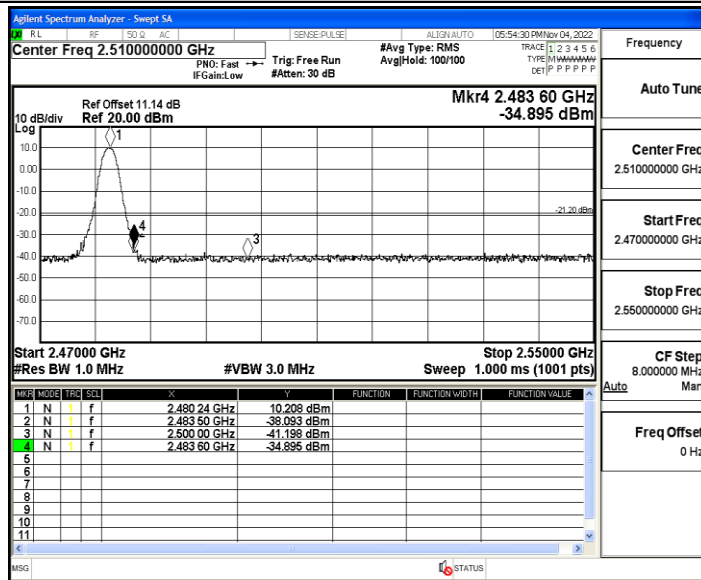
2DH5\_Ant1\_Low\_2402\_Peak



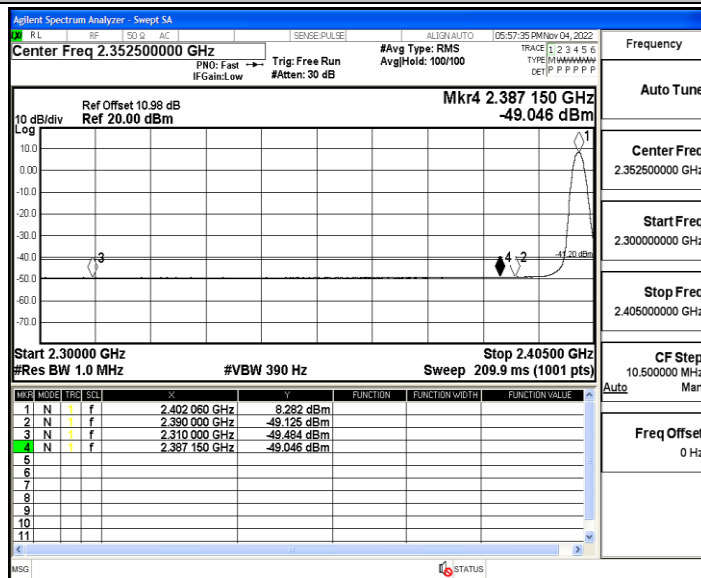
2DH5\_Ant1\_High\_2480\_AV



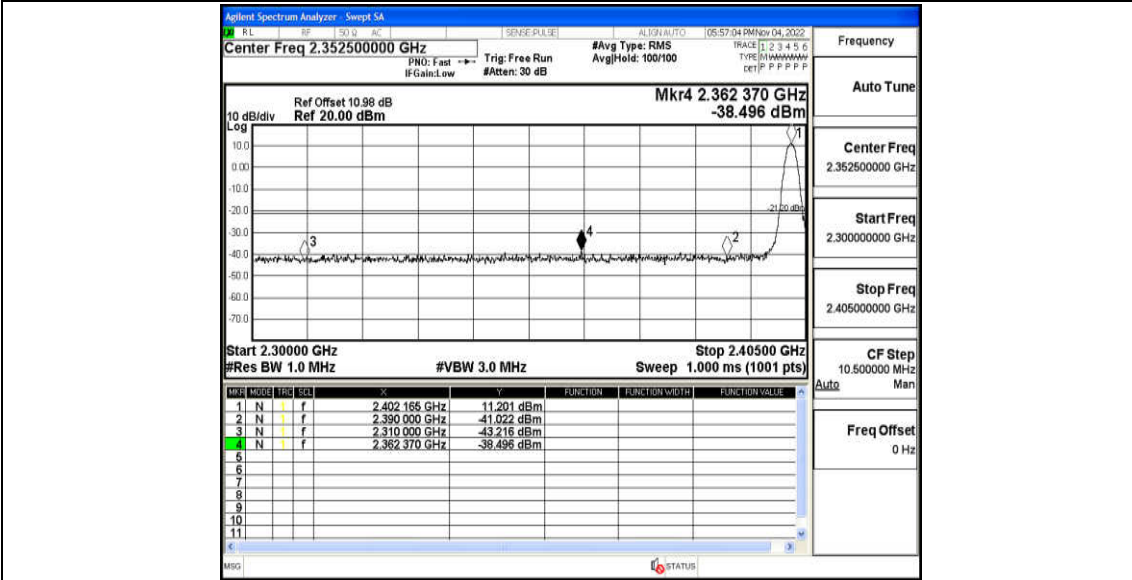
2DH5\_Ant1\_High\_2480\_Peak



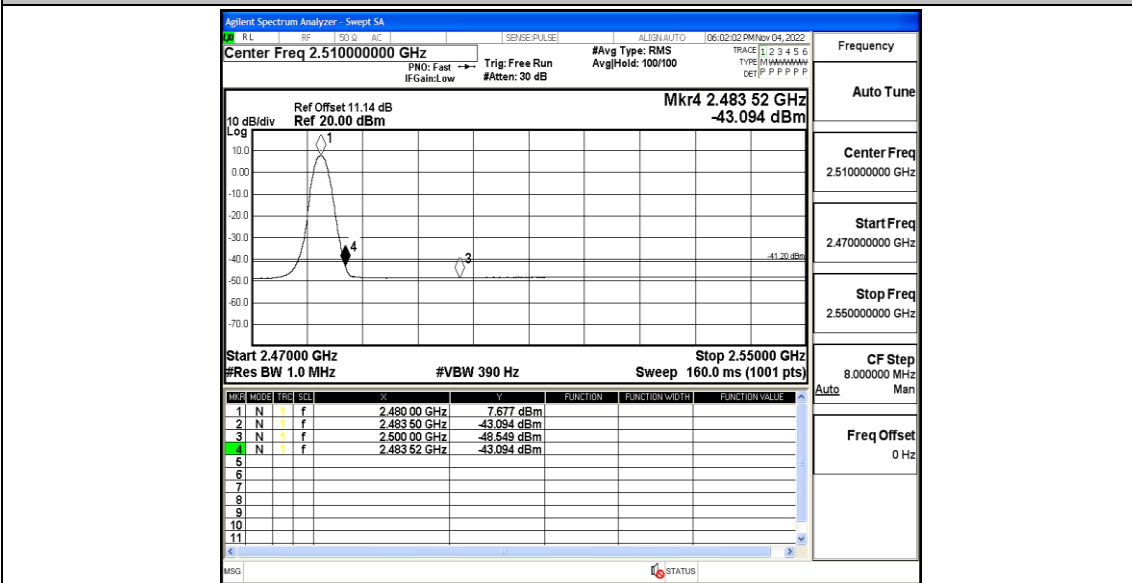
3DH5\_Ant1\_Low\_2402\_AV



3DH5\_Ant1\_Low\_2402\_Peak



3DH5\_Ant1\_High\_2480\_AV



3DH5\_Ant1\_High\_2480\_Peak

