

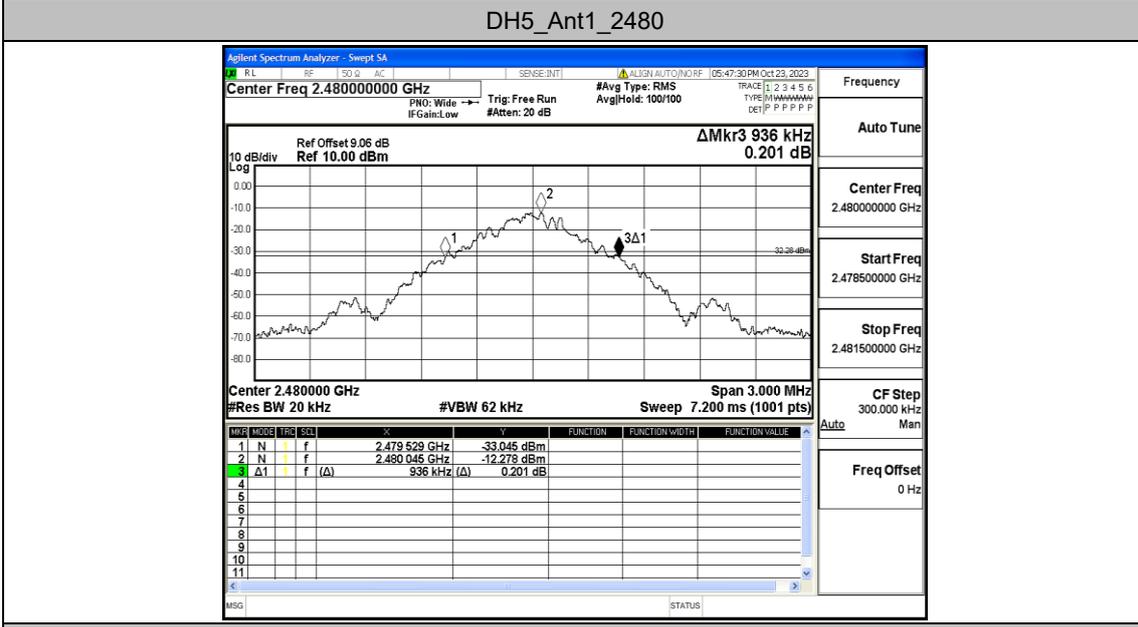
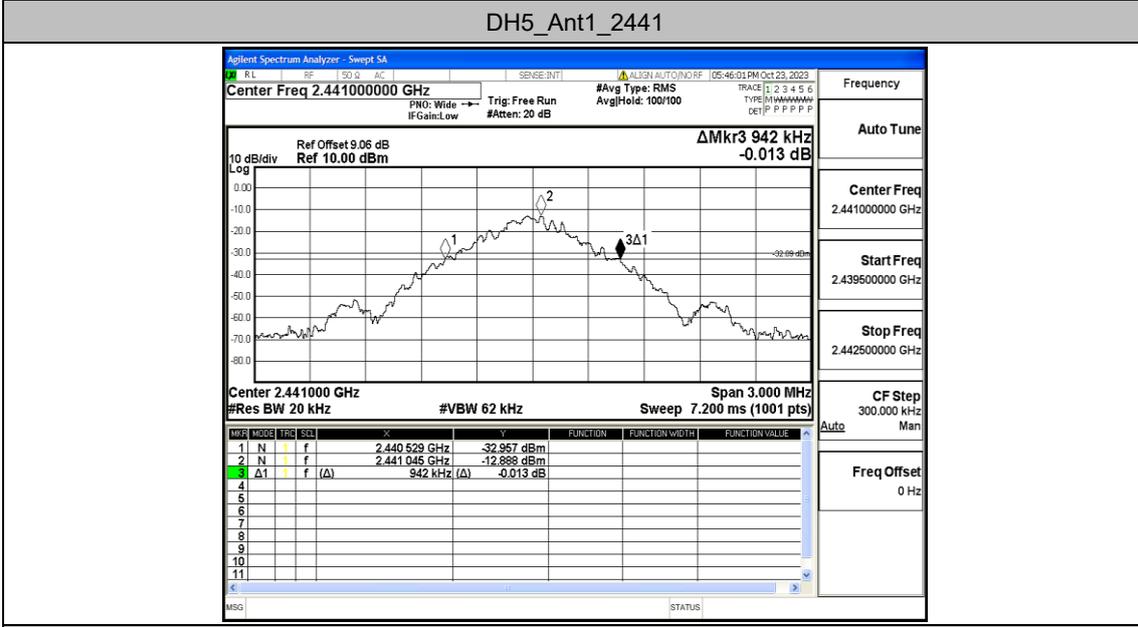
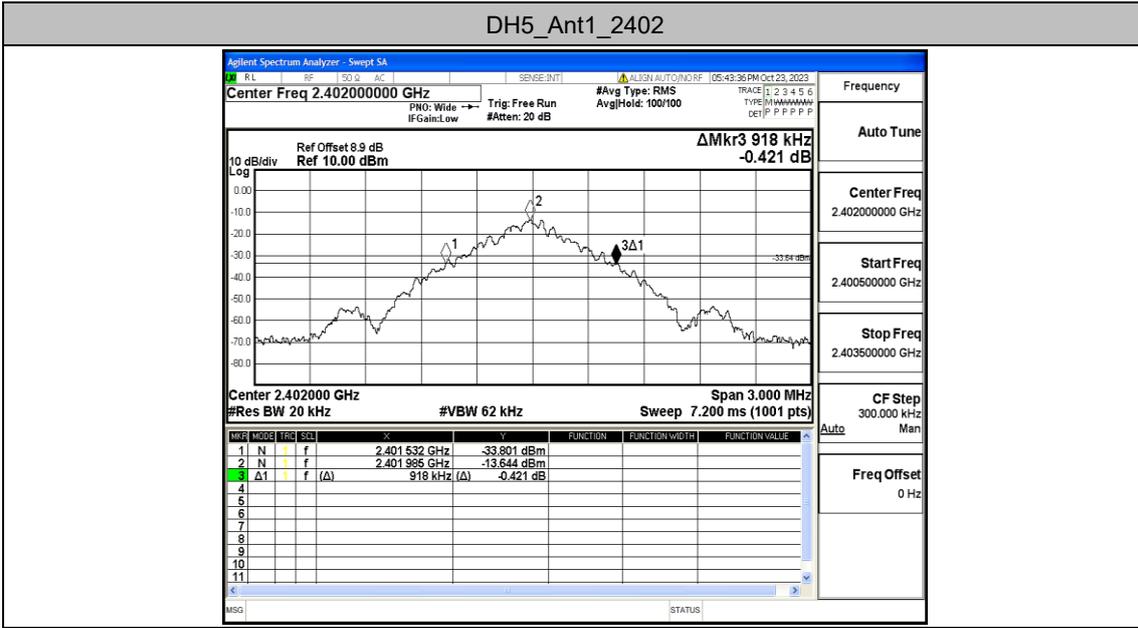
**Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)****Product Name: True Wireless Earbuds****Trade Mark: HAYLOU****Test Model: X1S****FCC ID: 2AMQ6-X1S****Environmental Conditions**

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

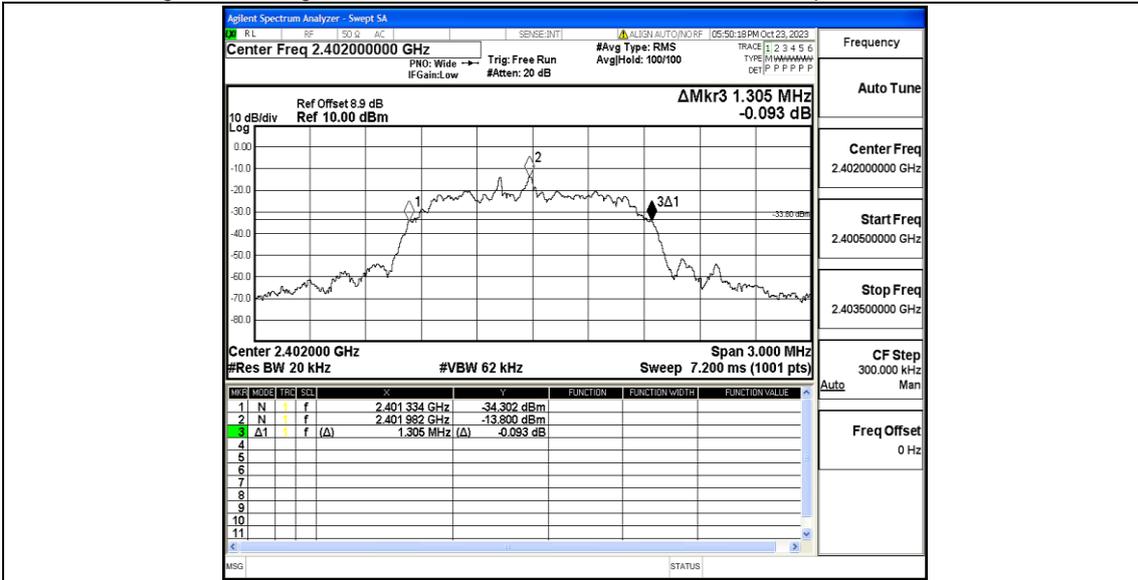
**Appendix A: 20dB Emission Bandwidth****Test Result**

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.918	2401.532	2402.450	---	---
		2441	0.942	2440.529	2441.471	---	---
		2480	0.936	2479.529	2480.465	---	---
2DH5	Ant1	2402	1.305	2401.334	2402.639	---	---
		2441	1.314	2440.331	2441.645	---	---
		2480	1.260	2479.355	2480.615	---	---

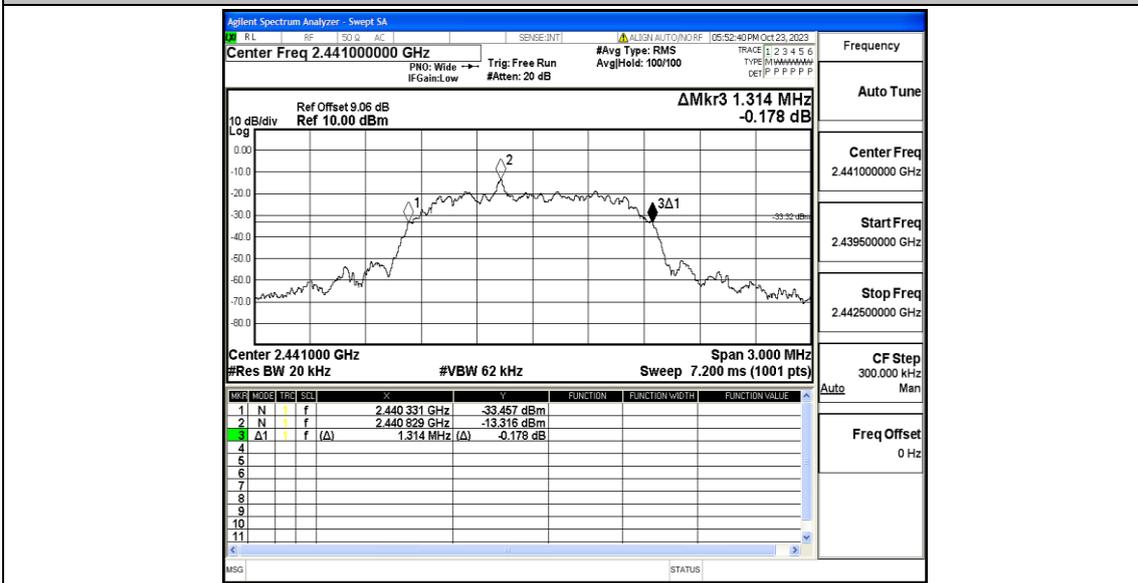
Test Graphs



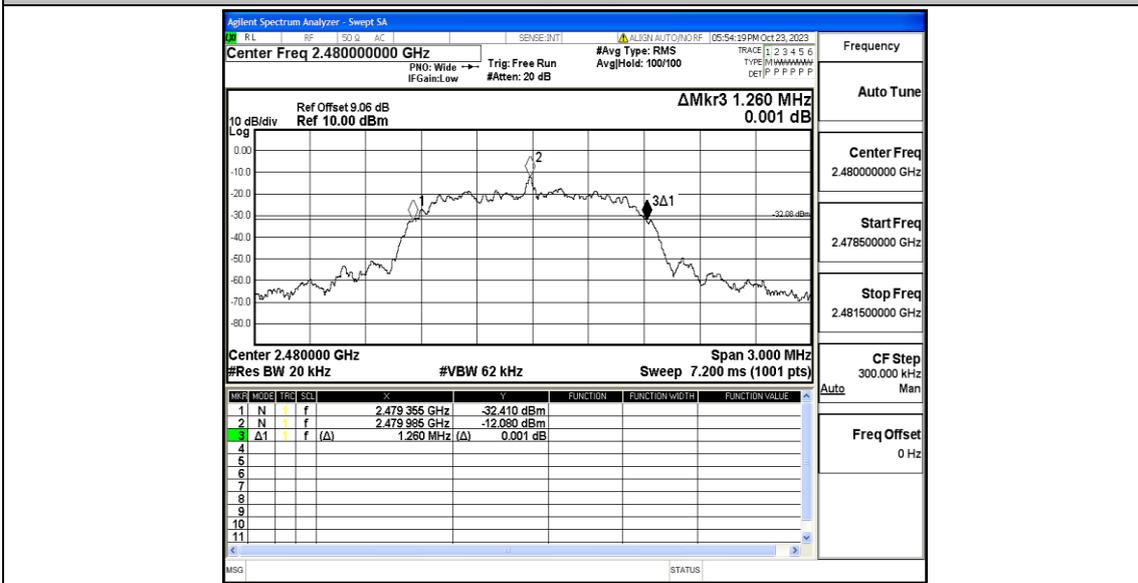
**2DH5\_Ant1\_2402**



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

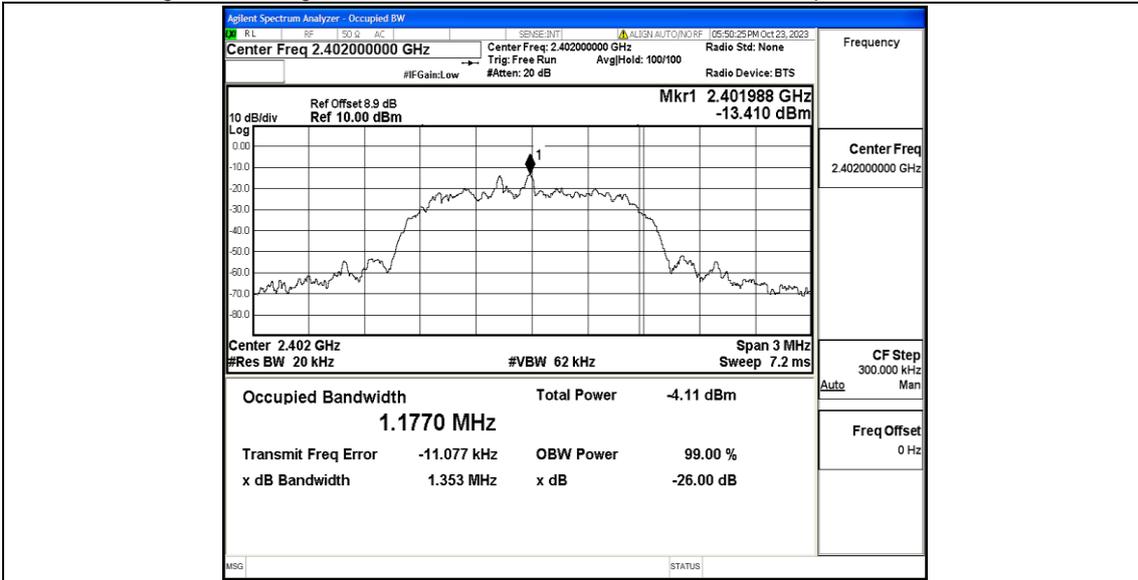


## Appendix B: Occupied Channel Bandwidth

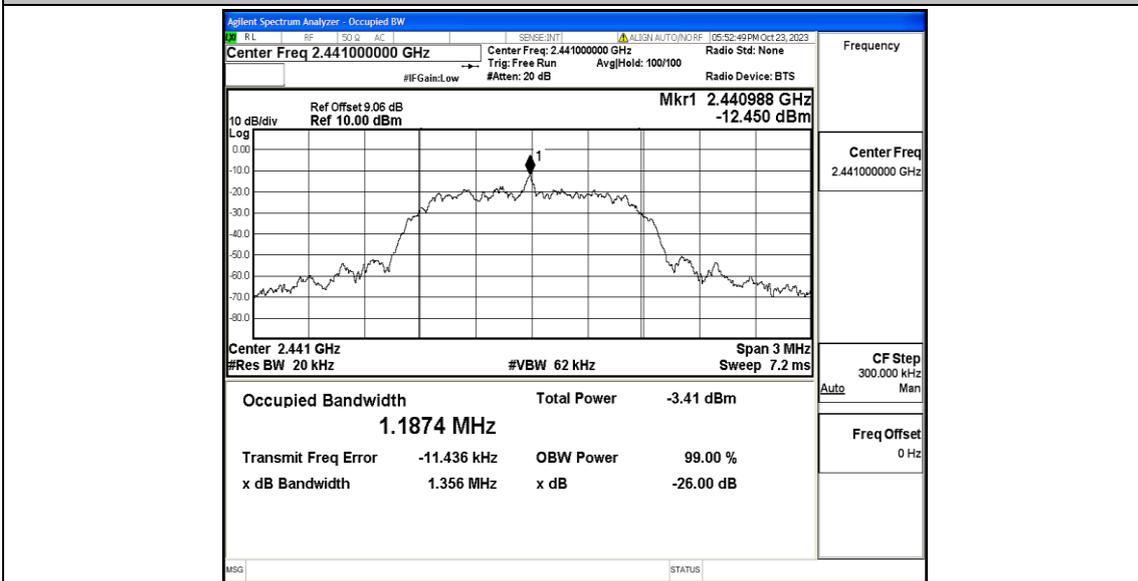
### Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.84983	2401.5617	2402.4115	---	---
		2441	0.85557	2440.5582	2441.4137	---	---
		2480	0.86443	2479.5520	2480.4164	---	---
2DH5	Ant1	2402	1.1770	2401.4004	2402.5774	---	---
		2441	1.1874	2440.3949	2441.5823	---	---
		2480	1.1820	2479.3968	2480.5788	---	---

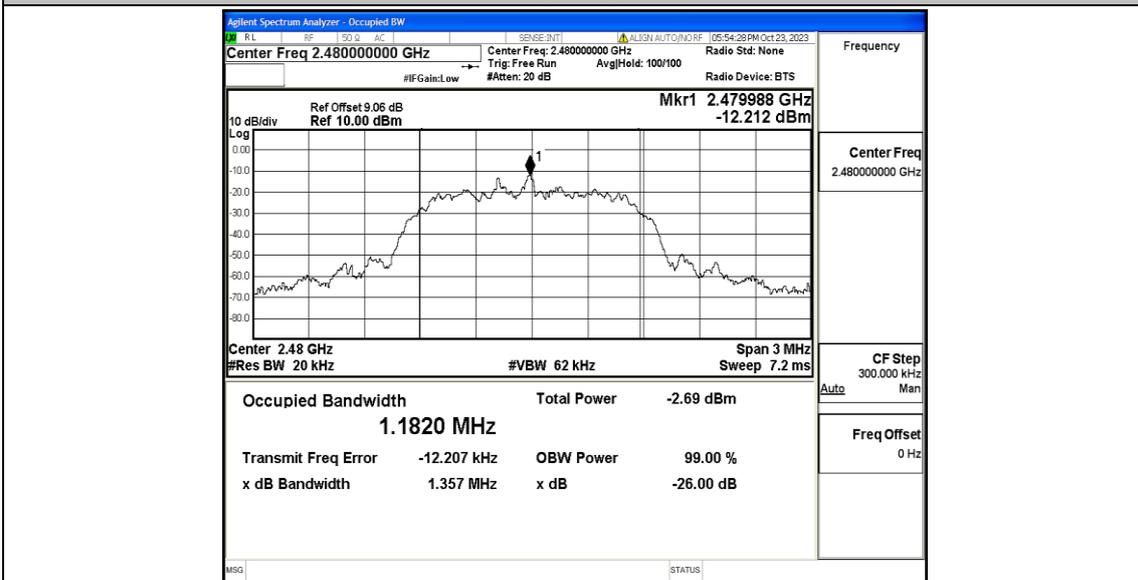




2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

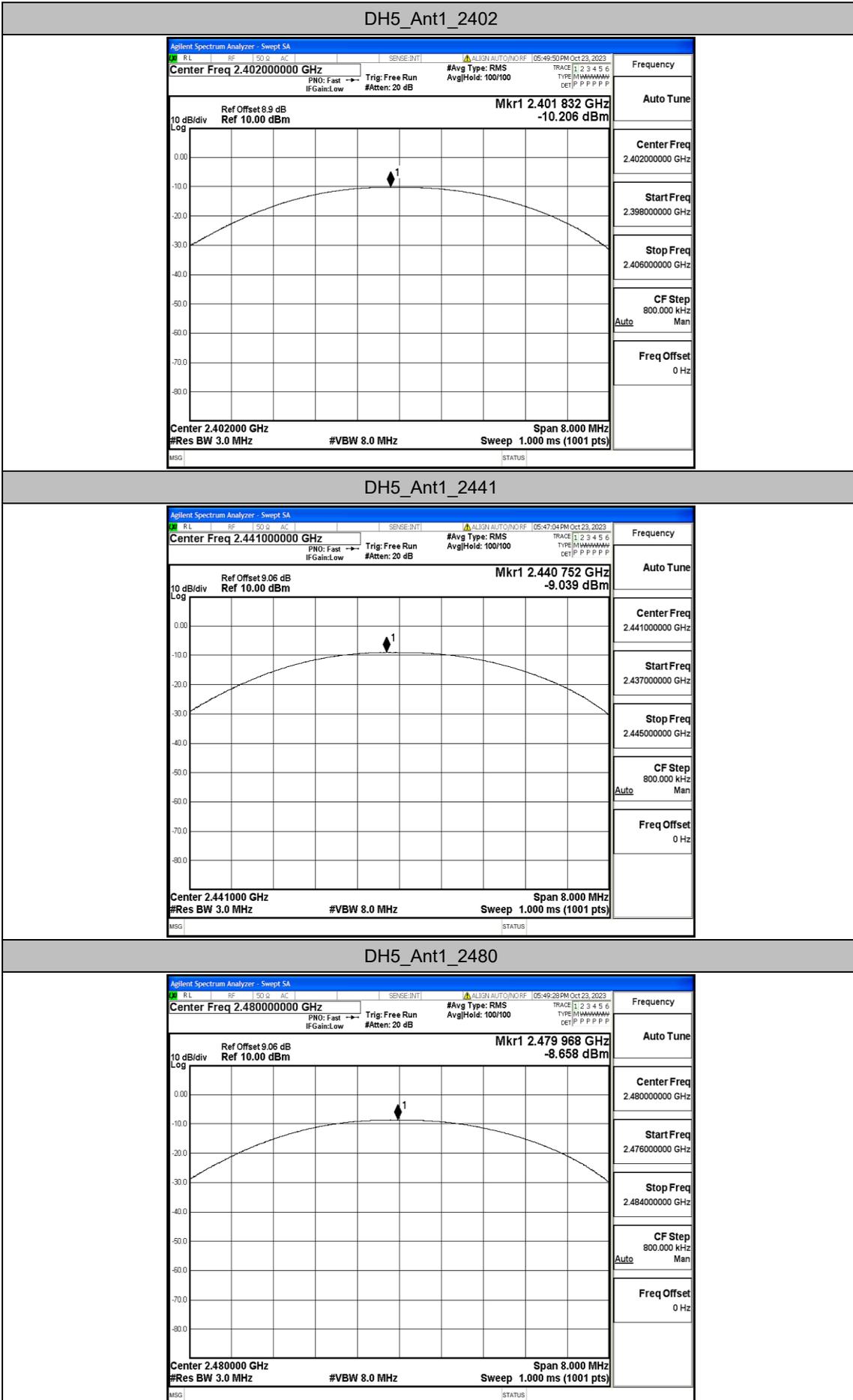


## Appendix C: Maximum Peak conducted output power

### Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-10.21	≤30	PASS
		2441	-9.04	≤30	PASS
		2480	-8.66	≤30	PASS
2DH5	Ant1	2402	-9.3	≤20.97	PASS
		2441	-8.14	≤20.97	PASS
		2480	-7.84	≤20.97	PASS

### Test Graphs



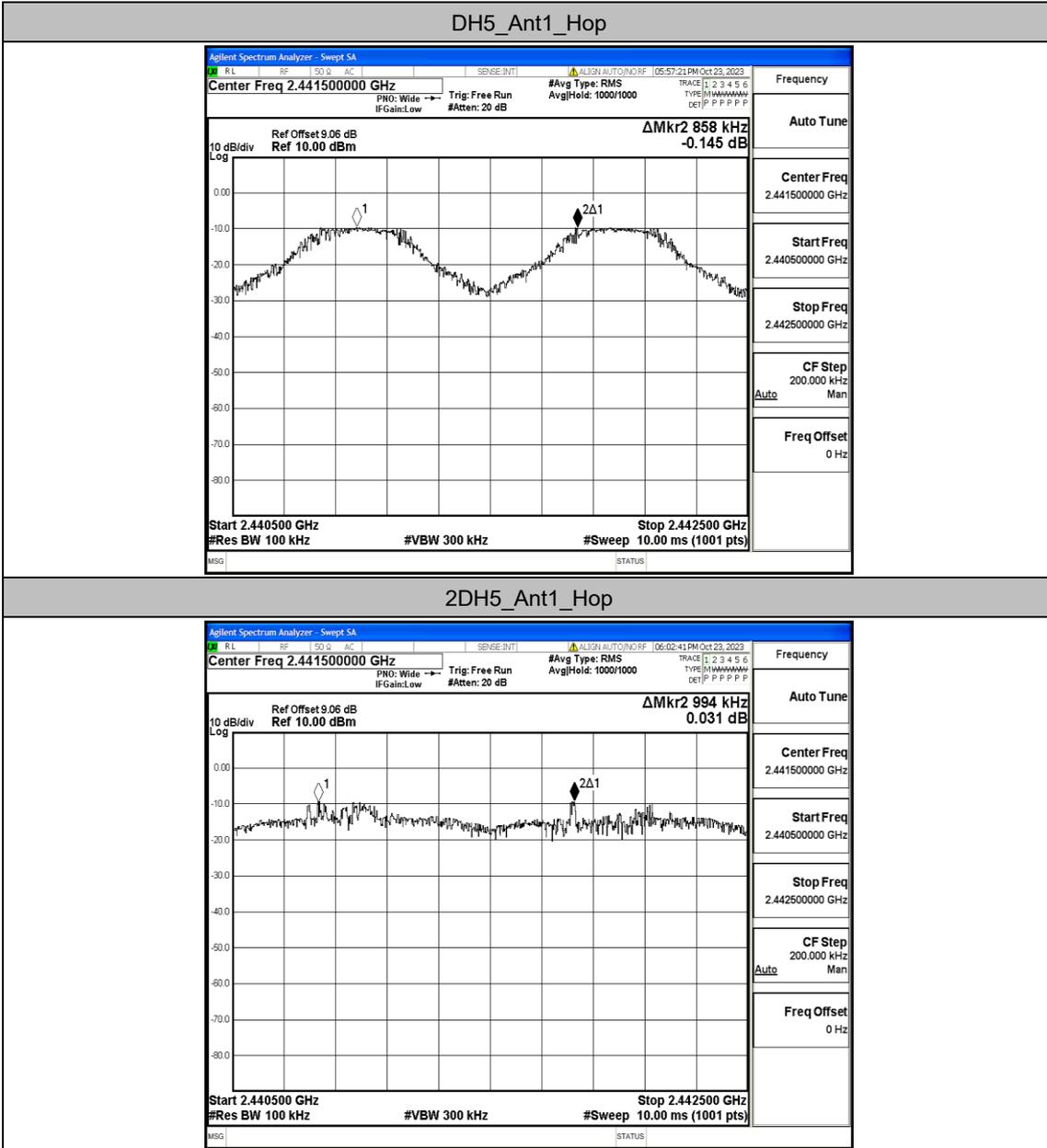


## Appendix D: Carrier frequency separation

### Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.858	$\geq 0.628$	PASS
2DH5	Ant1	Hop	0.994	$\geq 0.876$	PASS

### Test Graphs

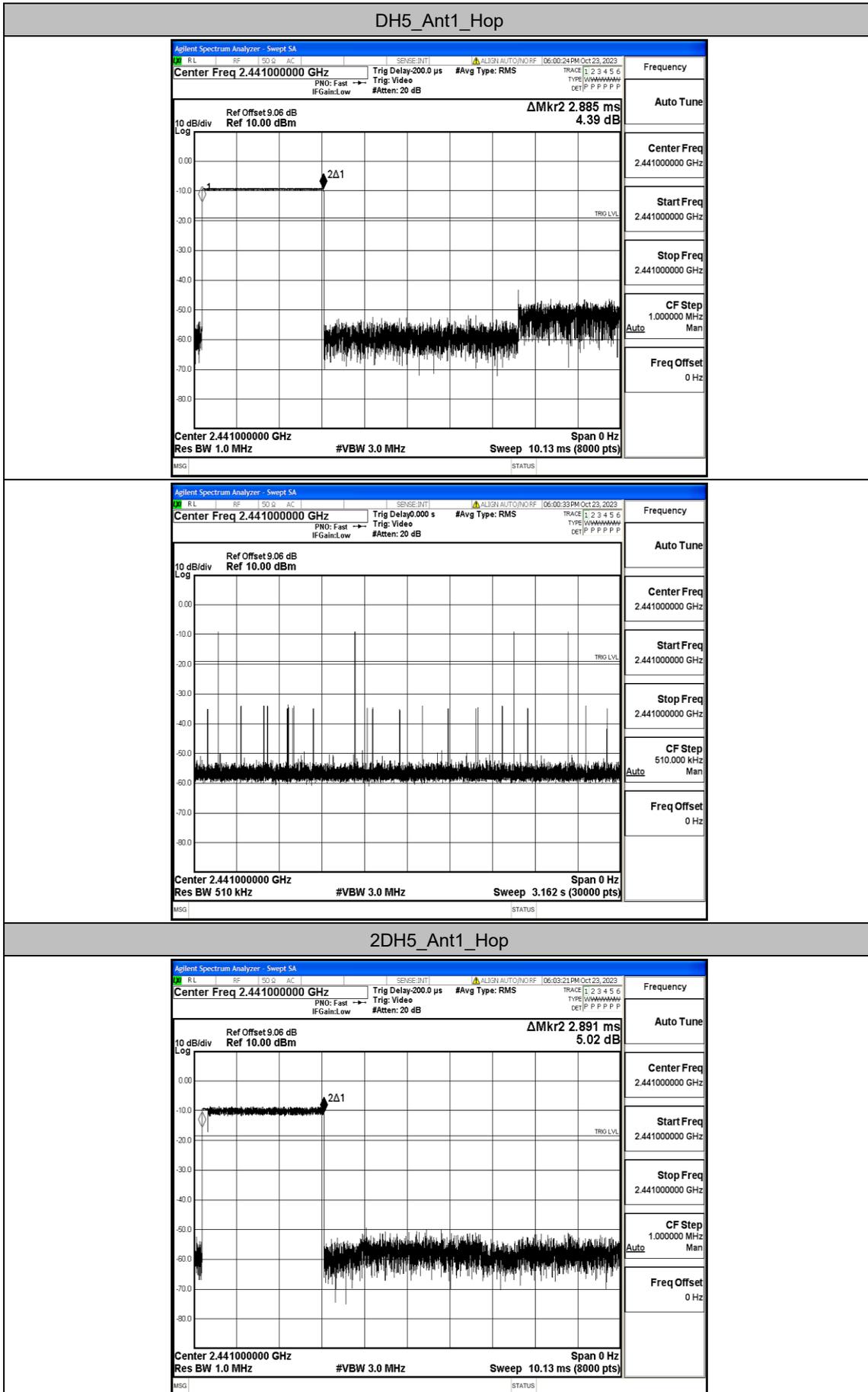


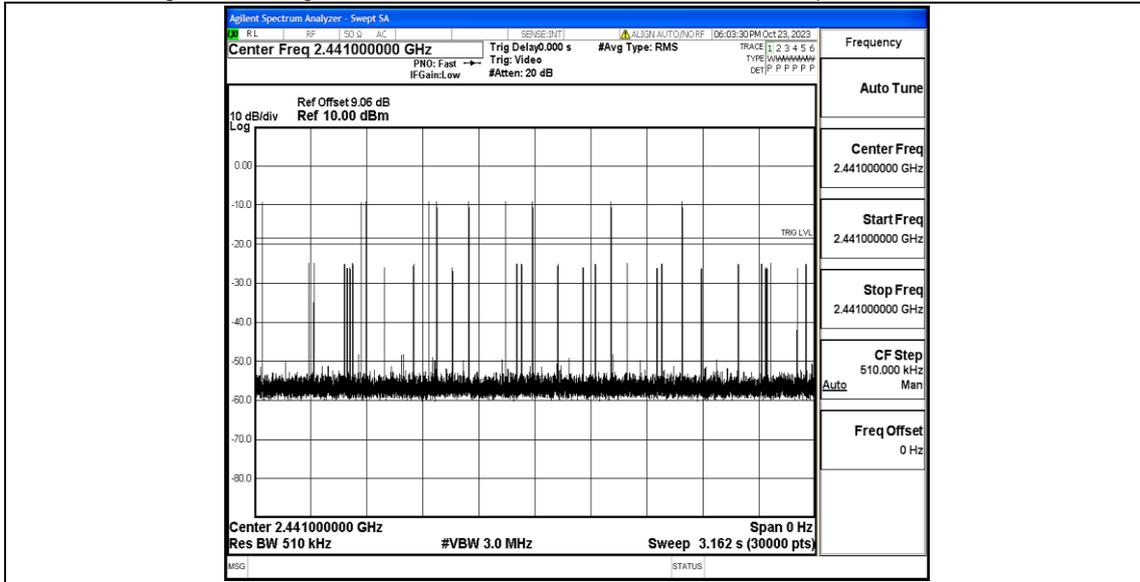
## Appendix E: Time of occupancy

### Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	50	0.144	≤0.4	PASS
2DH5	Ant1	Hop	2.891	110	0.318	≤0.4	PASS

### Test Graphs



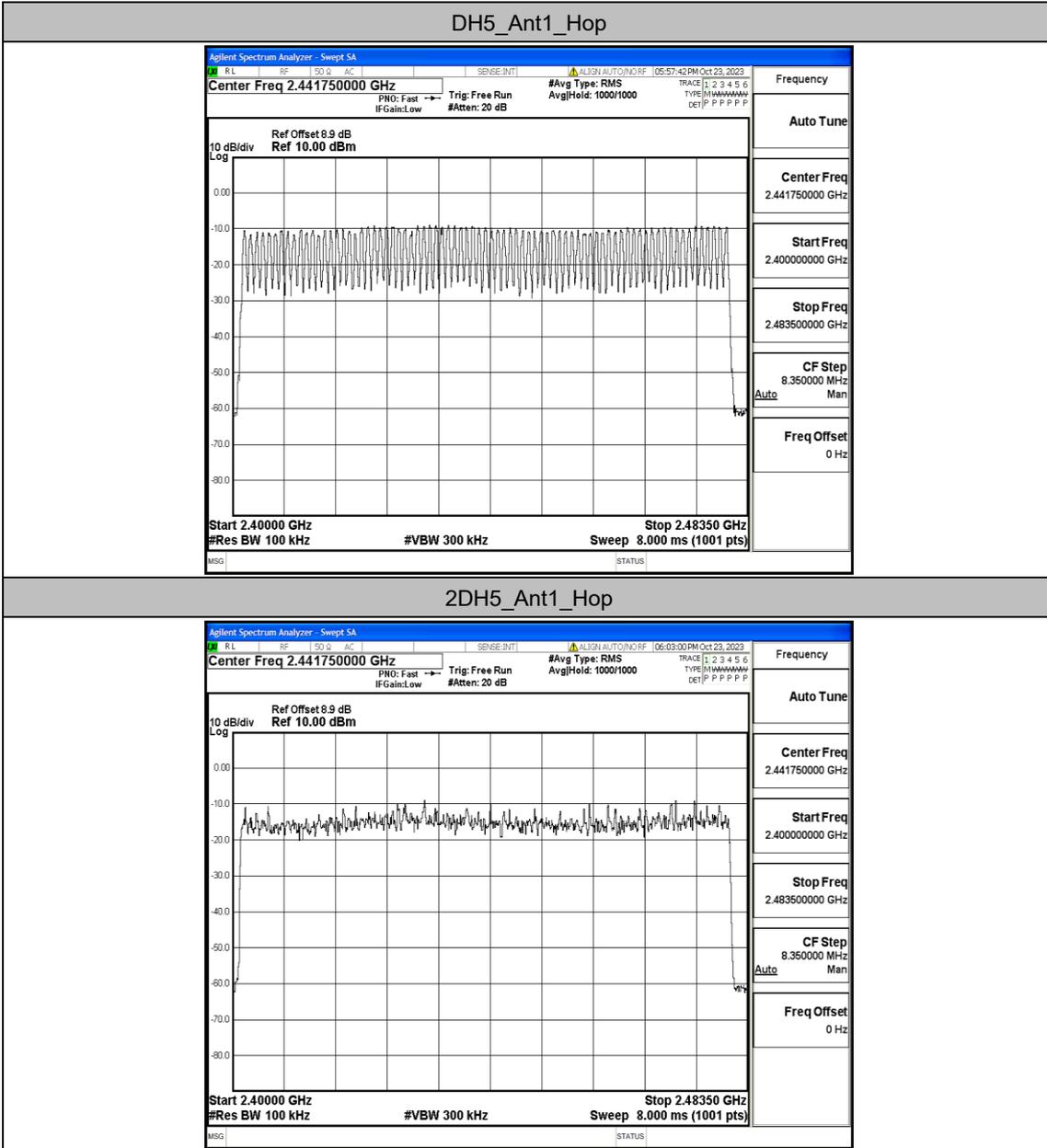


## Appendix F: Number of hopping channels

### Test Result

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

### Test Graphs



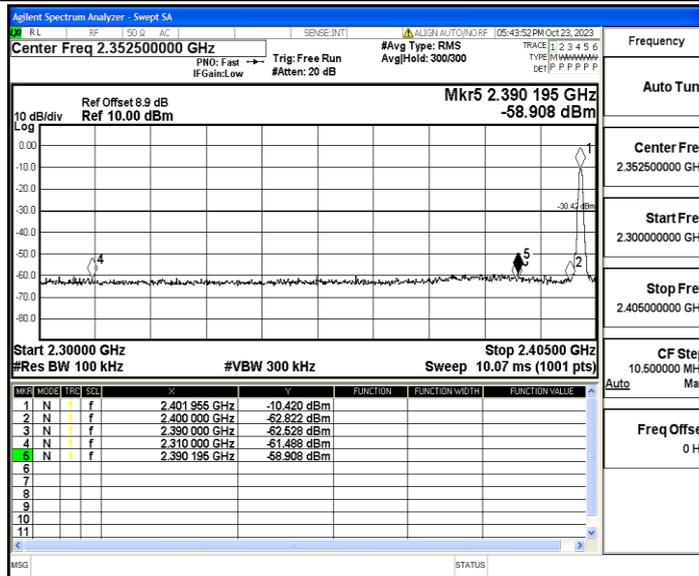
## Appendix G: Band edge measurements

### Test Result

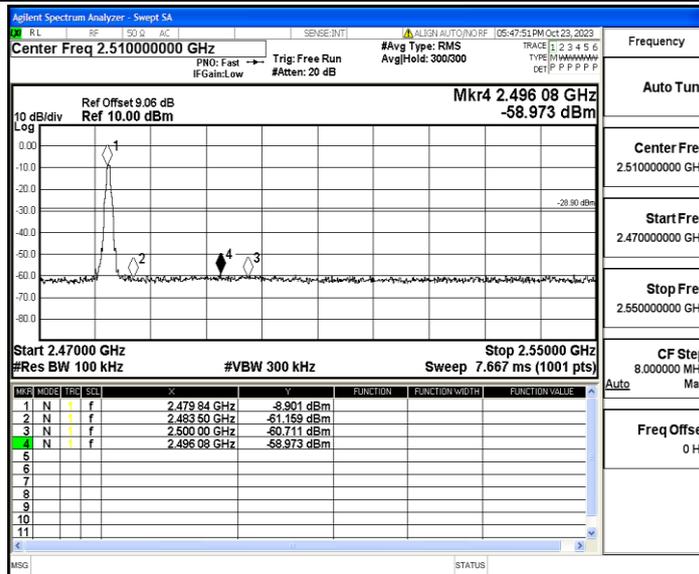
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-10.42	-58.91	≤-30.42	PASS
		High	2480	-8.90	-58.97	≤-28.9	PASS
		Low	Hop_2402	-11.27	-60.29	≤-31.27	PASS
		High	Hop_2480	-9.47	-59.58	≤-29.47	PASS
2DH5	Ant1	Low	2402	-10.46	-59.07	≤-30.46	PASS
		High	2480	-9.20	-58.85	≤-29.2	PASS
		Low	Hop_2402	-15.25	-60.42	≤-35.25	PASS
		High	Hop_2480	-9.32	-58.63	≤-29.32	PASS

Test Graphs

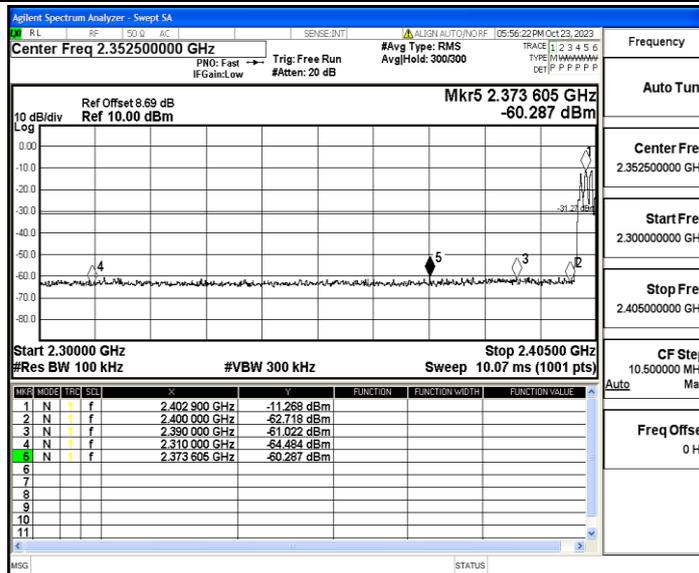
DH5\_Ant1\_Low\_2402



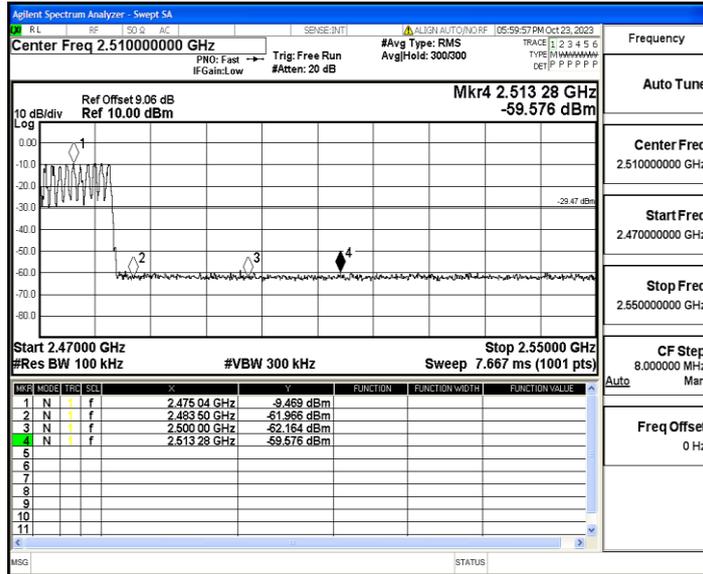
DH5\_Ant1\_High\_2480



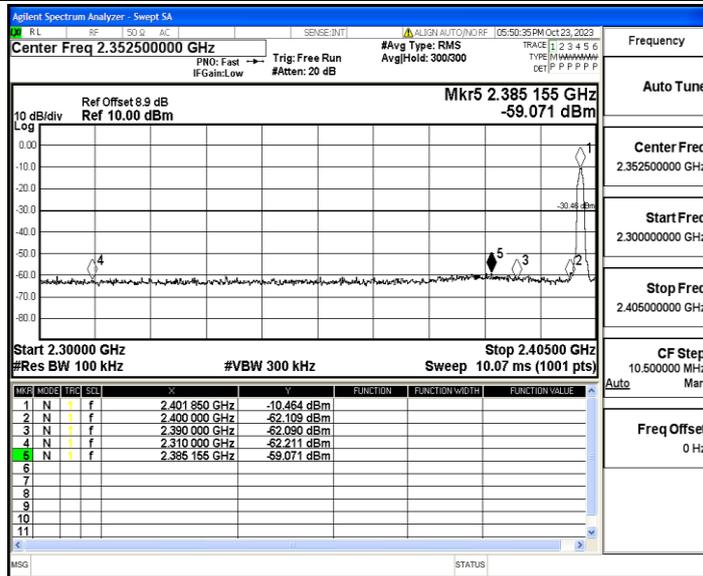
DH5\_Ant1\_Low\_Hop\_2402



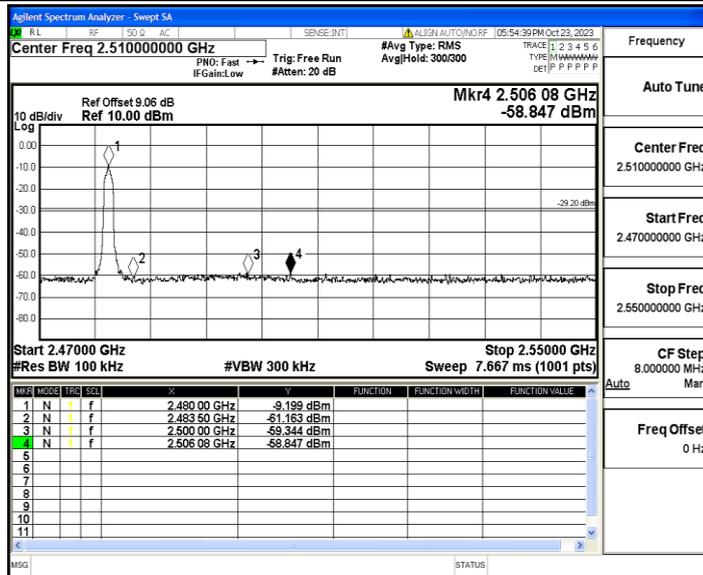
DH5\_Ant1\_High\_Hop\_2480



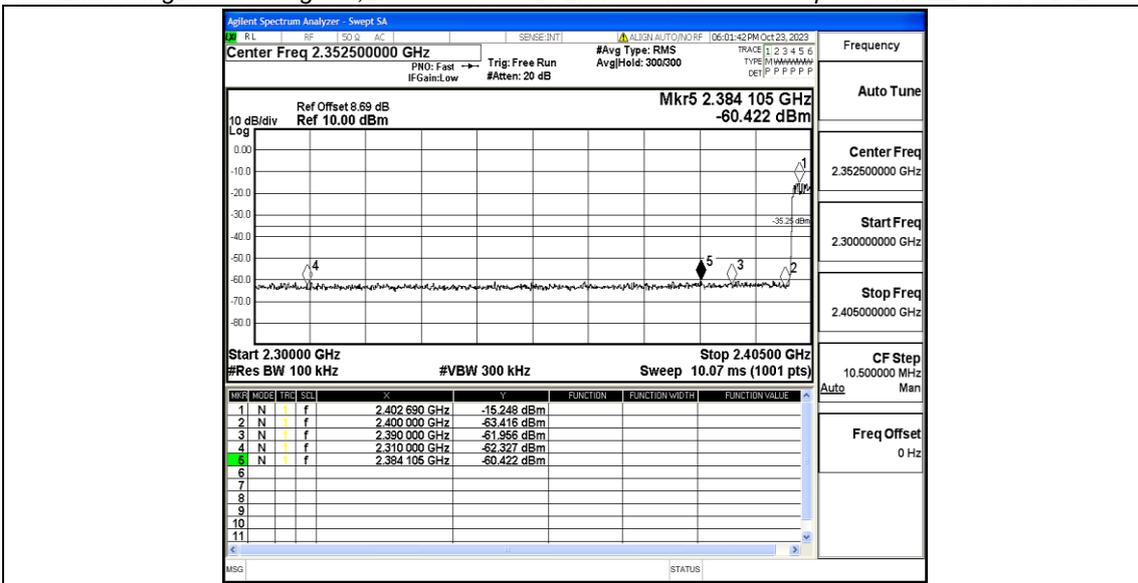
2DHS\_Ant1\_Low\_2402



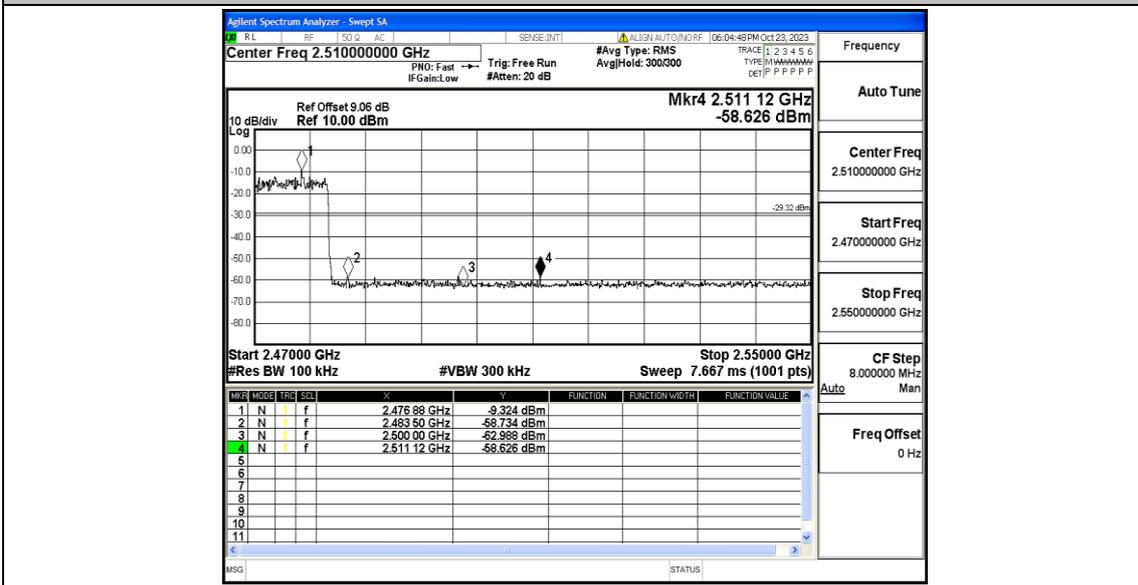
2DHS\_Ant1\_High\_2480



2DHS\_Ant1\_Low\_Hop\_2402



2DH5\_Ant1\_High\_Hop\_2480

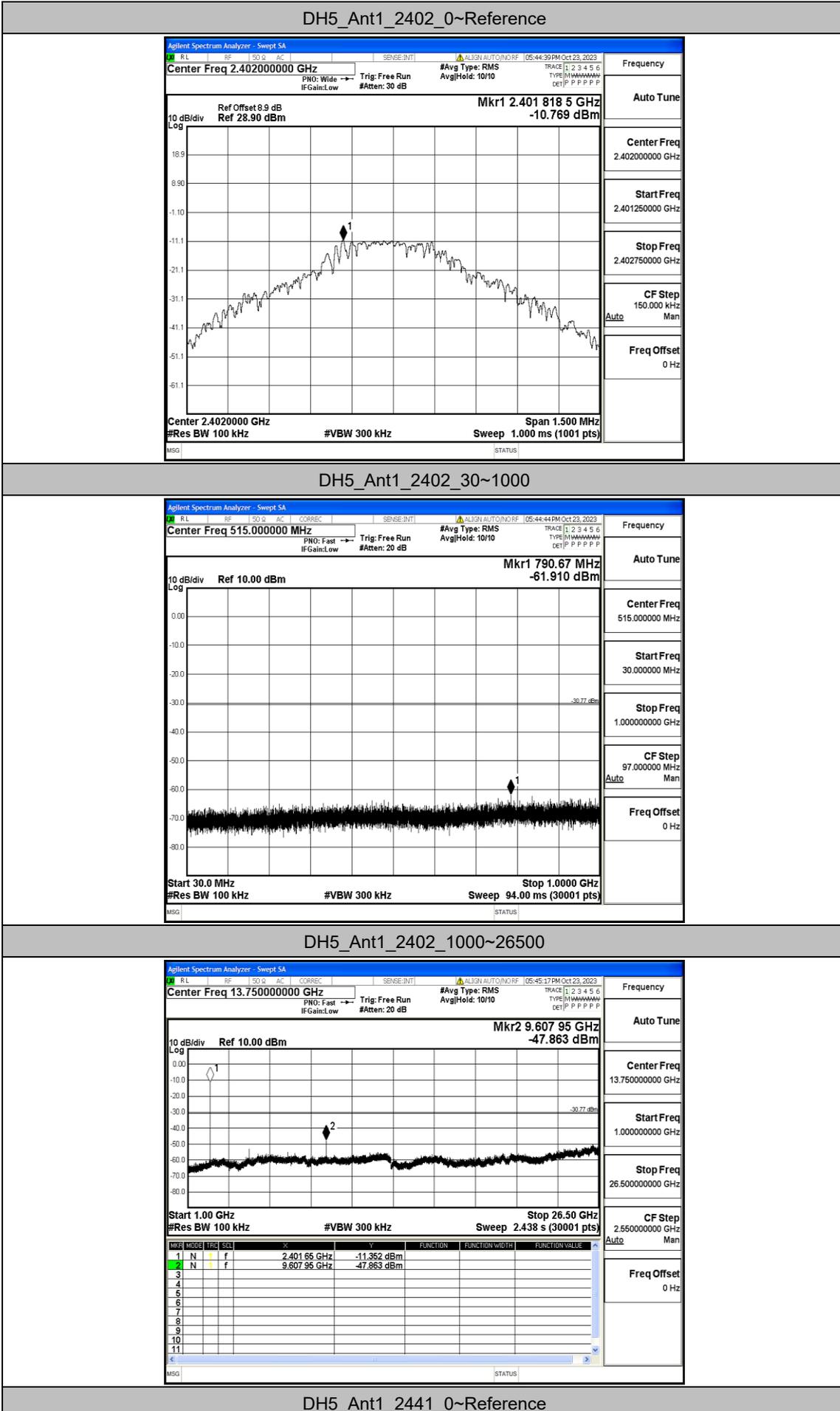


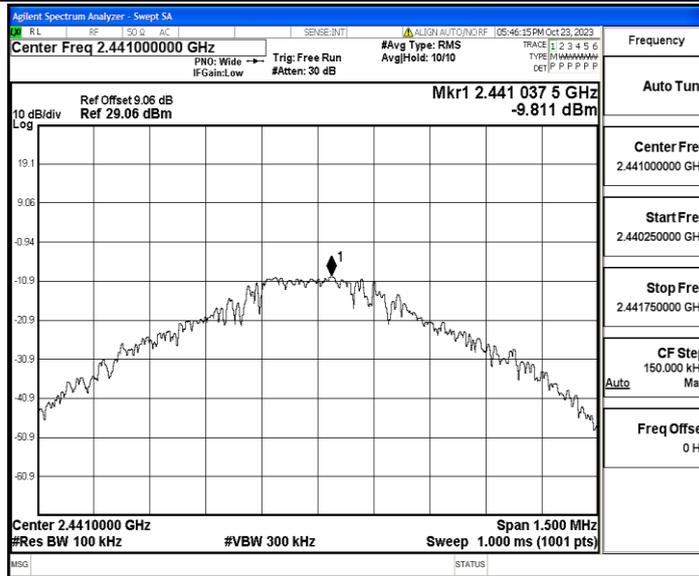
## Appendix H: Conducted Spurious Emission

### Test Result

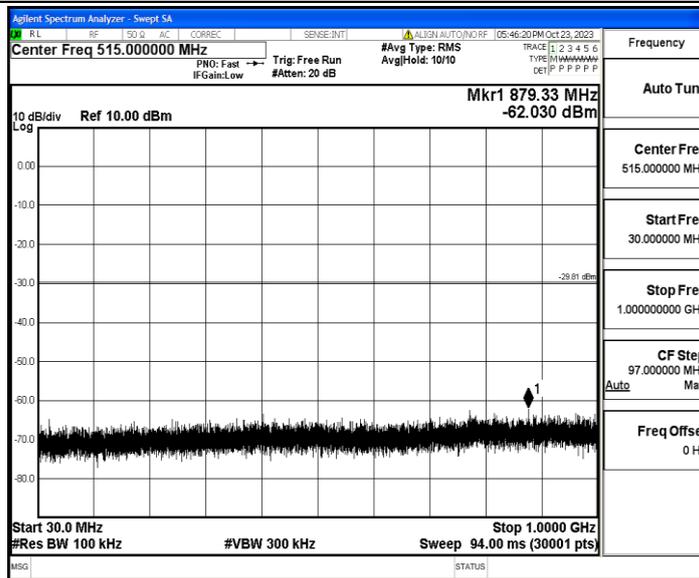
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-10.77	-10.77	---	PASS
			30~1000	-10.77	-61.91	≤-30.77	PASS
			1000~26500	-10.77	-47.86	≤-30.77	PASS
		2441	Reference	-9.81	-9.81	---	PASS
			30~1000	-9.81	-62.03	≤-29.81	PASS
			1000~26500	-9.81	-46.76	≤-29.81	PASS
		2480	Reference	-9.52	-9.52	---	PASS
			30~1000	-9.52	-63.15	≤-29.52	PASS
			1000~26500	-9.52	-46.98	≤-29.52	PASS
2DH5	Ant1	2402	Reference	-10.88	-10.88	---	PASS
			30~1000	-10.88	-62.87	≤-30.88	PASS
			1000~26500	-10.88	-47.47	≤-30.88	PASS
		2441	Reference	-9.49	-9.49	---	PASS
			30~1000	-9.49	-62.99	≤-29.49	PASS
			1000~26500	-9.49	-46.84	≤-29.49	PASS
		2480	Reference	-12.64	-12.64	---	PASS
			30~1000	-12.64	-61.71	≤-32.64	PASS
			1000~26500	-12.64	-46.51	≤-32.64	PASS

Test Graphs

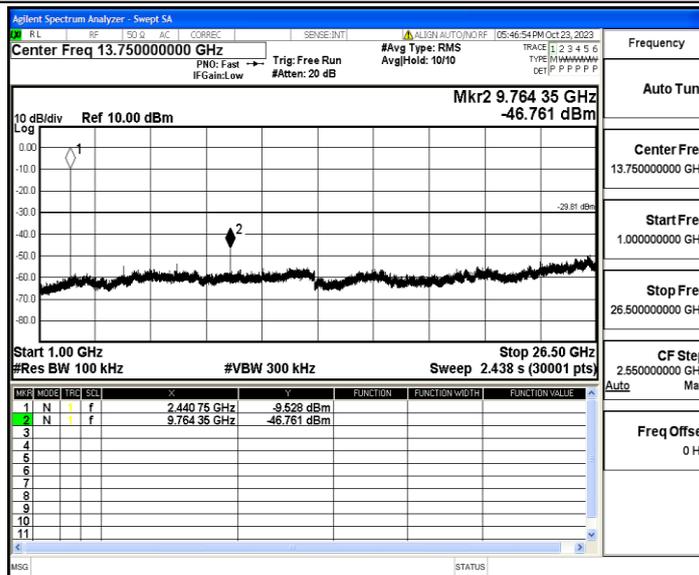




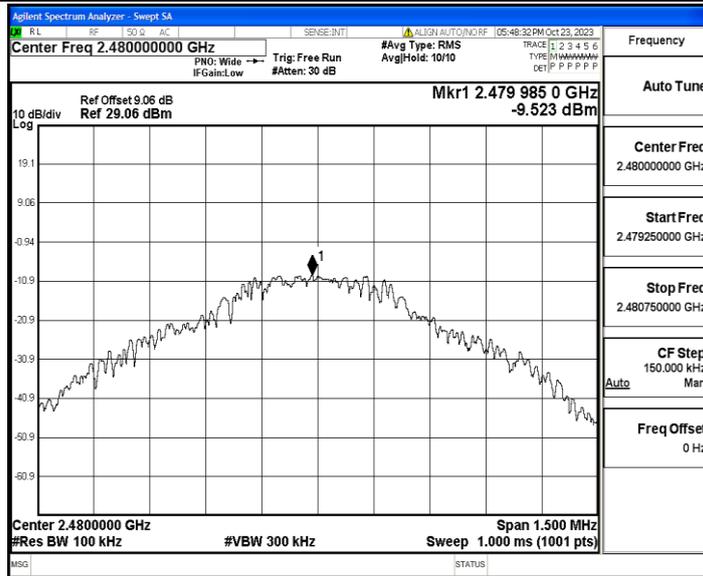
DH5\_Ant1\_2441\_30~1000



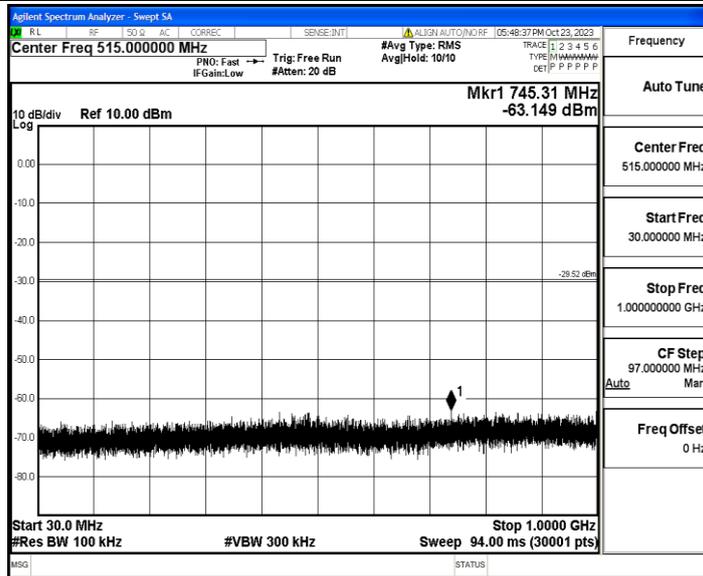
DH5\_Ant1\_2441\_1000~26500



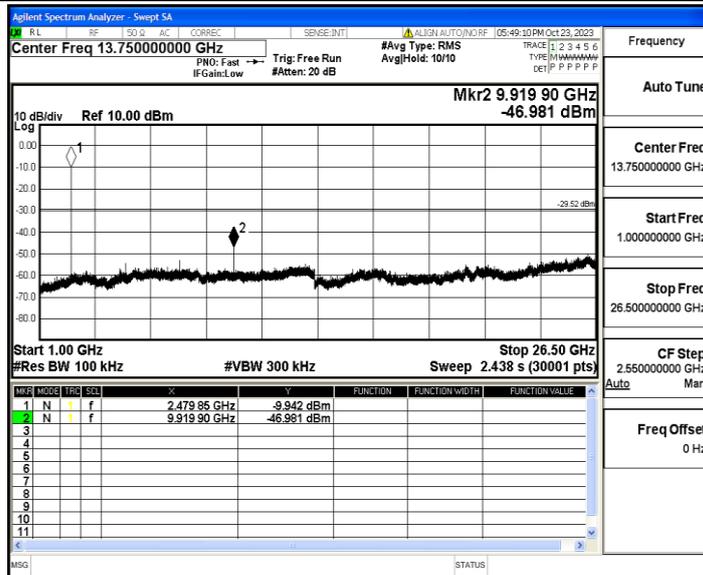
DH5\_Ant1\_2480\_0~Reference



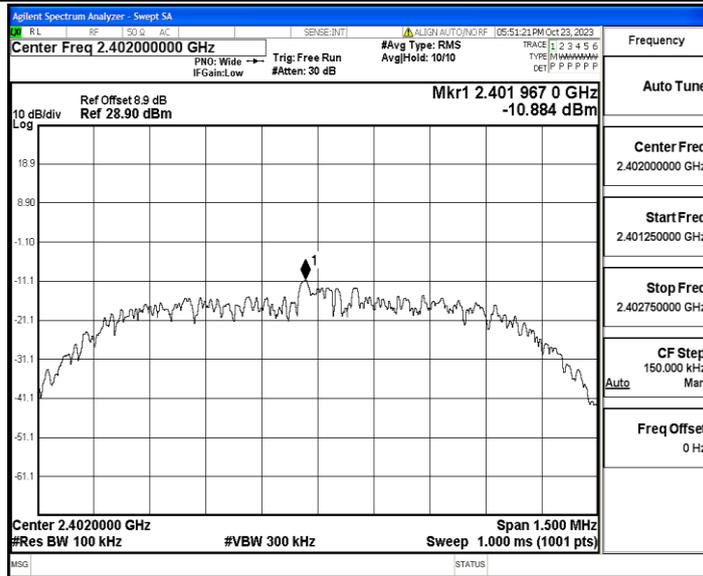
DH5\_Ant1\_2480\_30~1000



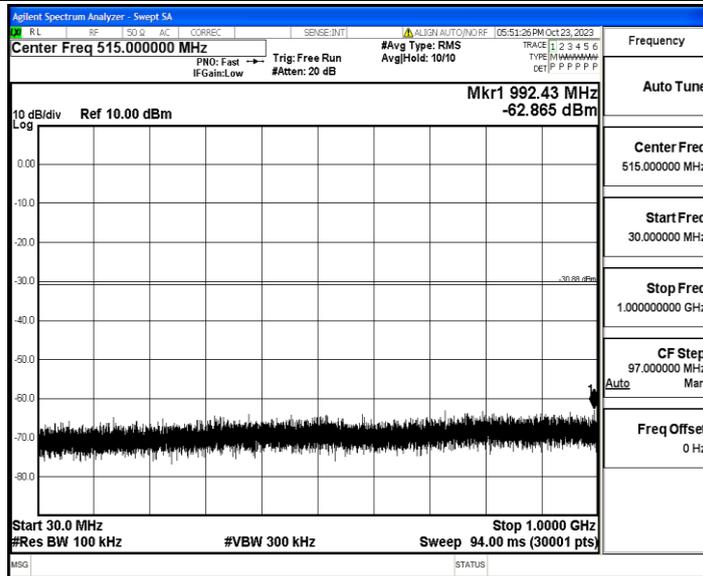
DH5\_Ant1\_2480\_1000~26500



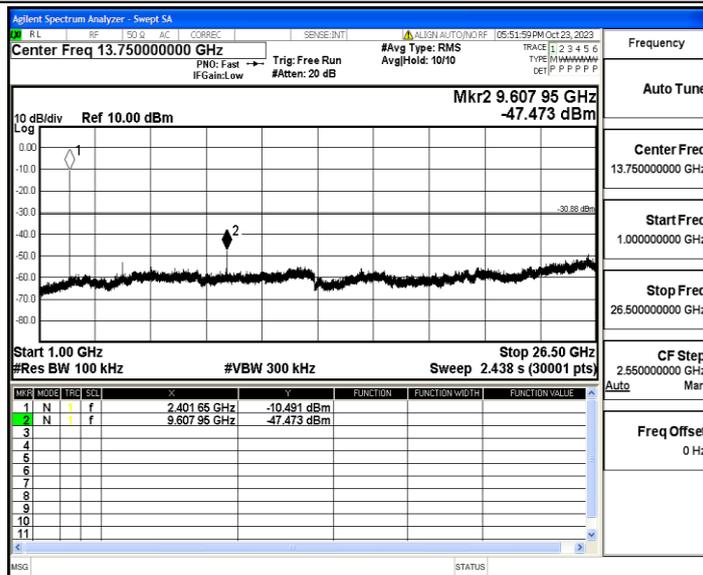
2DH5\_Ant1\_2402\_0~Reference



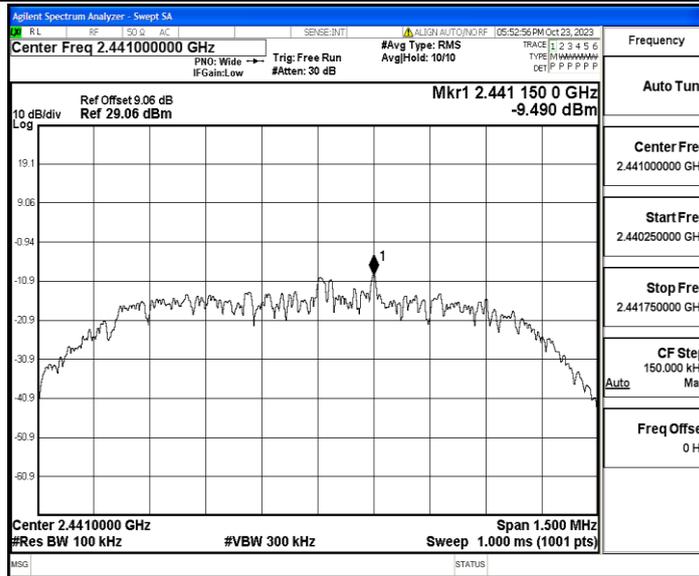
2DH5\_Ant1\_2402\_30~1000



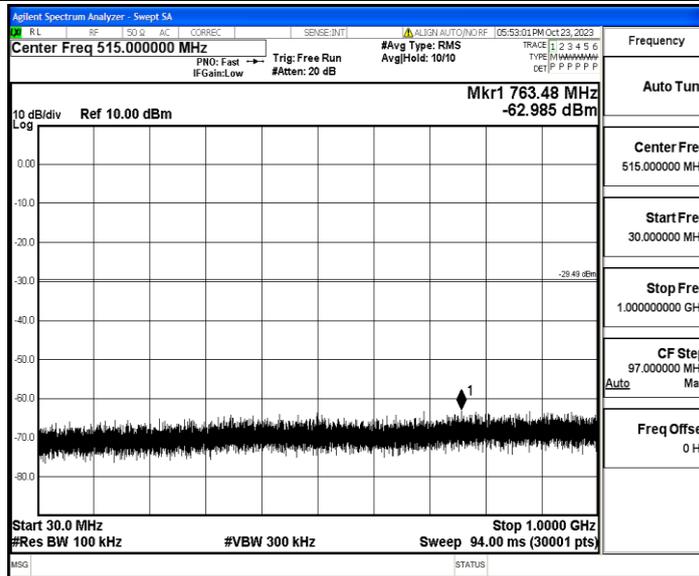
2DH5\_Ant1\_2402\_1000~26500



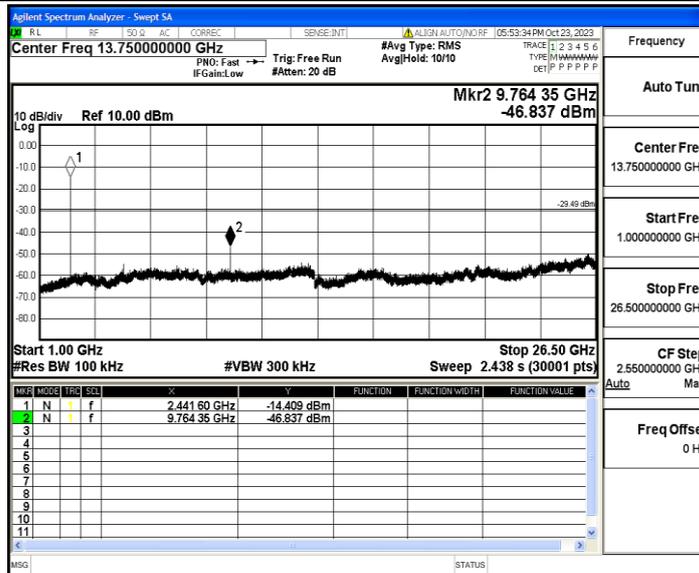
2DH5\_Ant1\_2441\_0~Reference



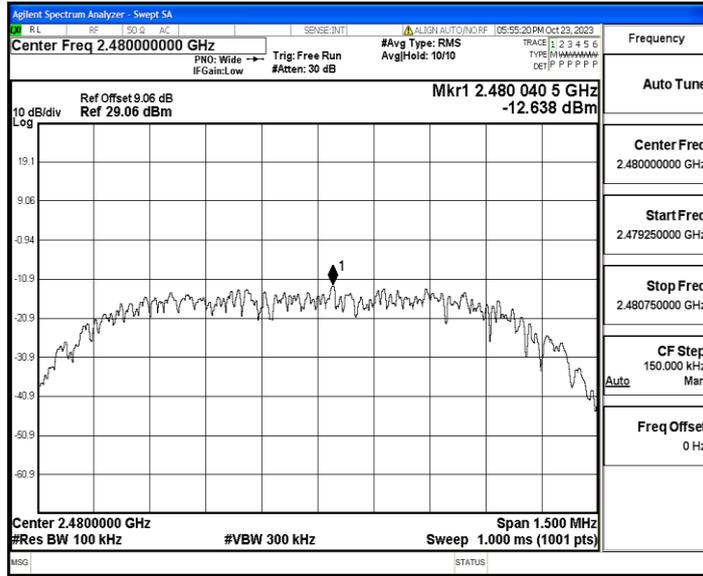
2DH5\_Ant1\_2441\_30~1000



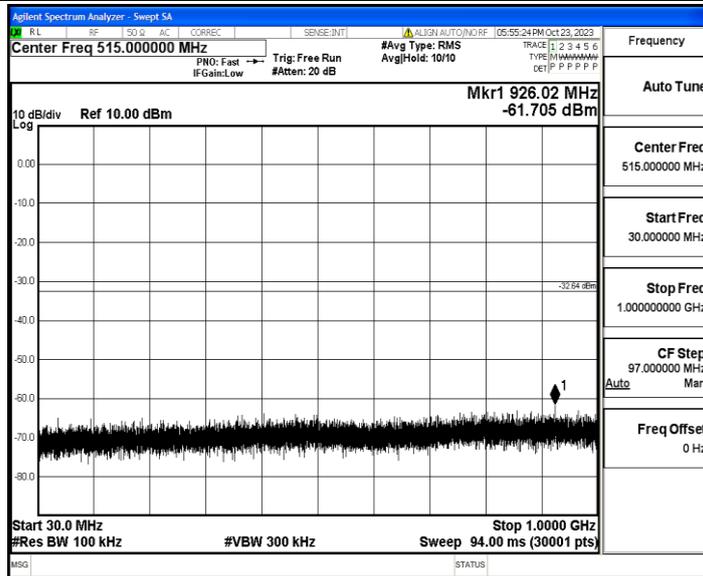
2DH5\_Ant1\_2441\_1000~26500



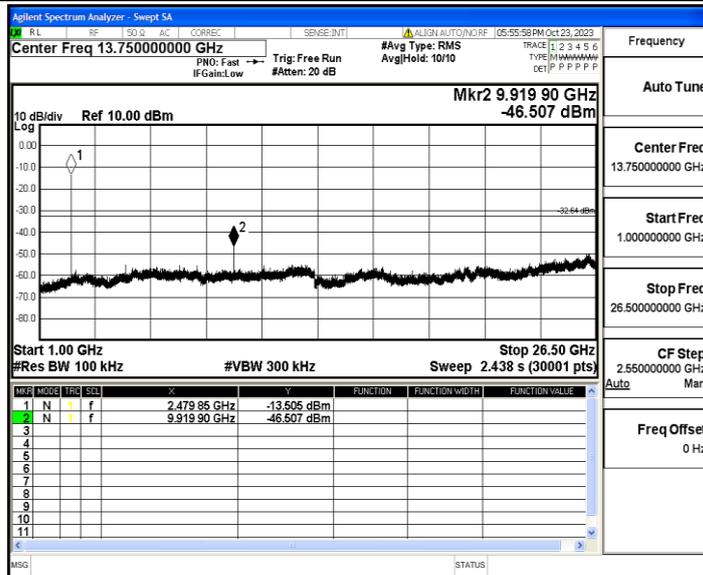
2DH5\_Ant1\_2480\_0~Reference



2DH5\_Ant1\_2480\_30~1000



2DH5\_Ant1\_2480\_1000~26500

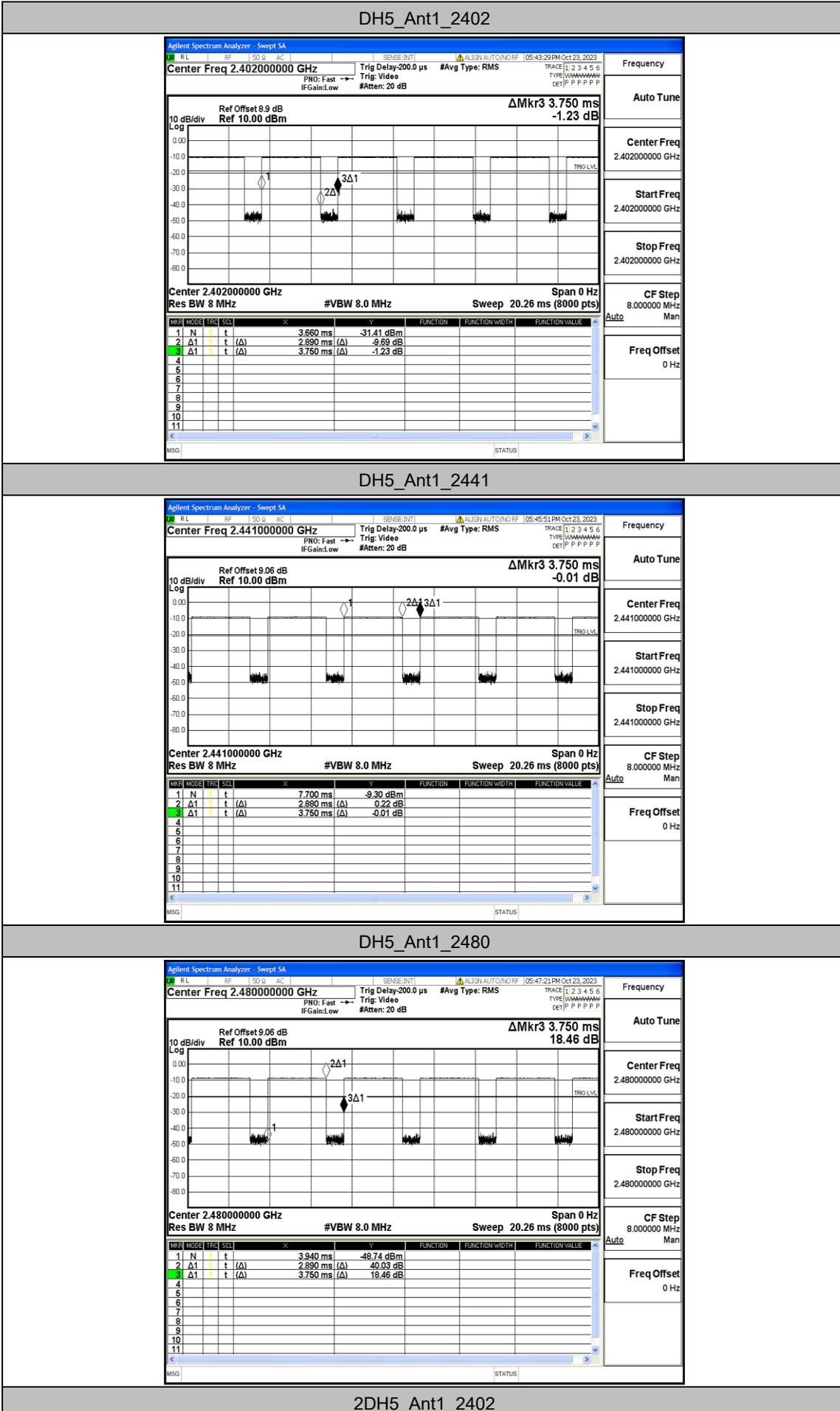


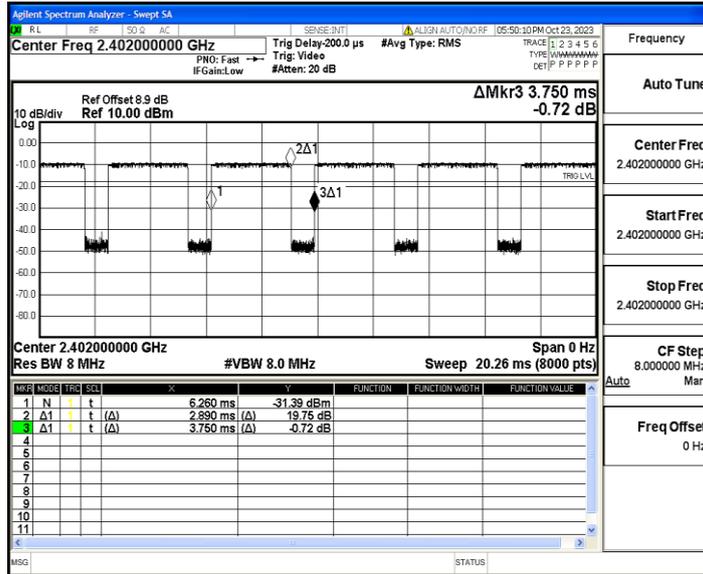
## Appendix I: Duty Cycle

### Test Result

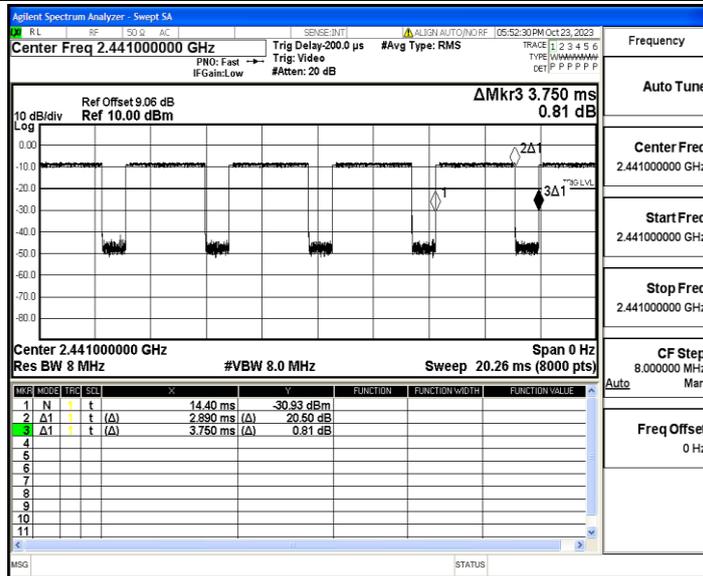
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.89	3.75	77.07	0.35
		2441	2.88	3.75	76.80	0.35
		2480	2.89	3.75	77.07	0.35
2DH5	Ant1	2402	2.89	3.75	77.07	0.35
		2441	2.89	3.75	77.07	0.35
		2480	2.89	3.75	77.07	0.35

### Test Graphs

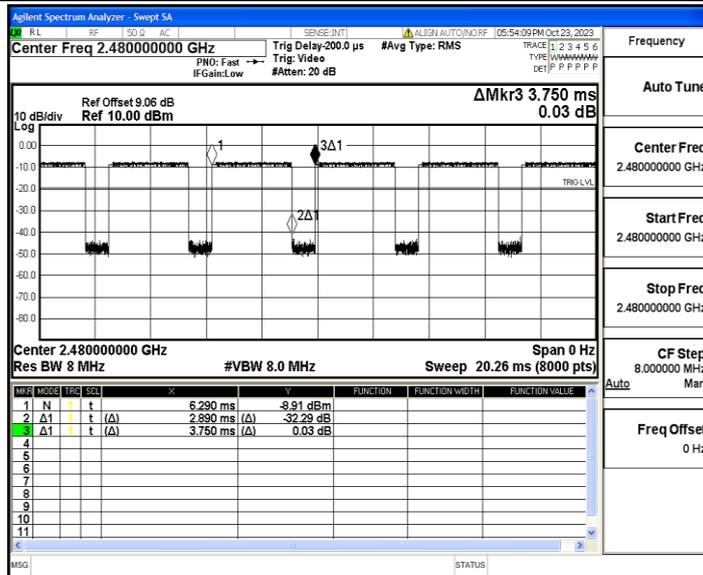




2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



## Appendix J: Emissions in Restricted Bands

### Test Result

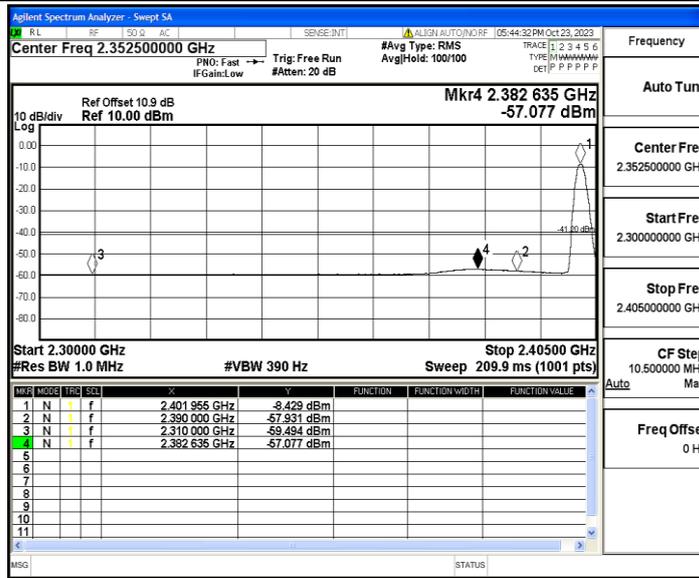
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-59.49	≤-41.20	PASS
				AV	2382.635	-57.08	≤-41.20	PASS
				AV	2390.000	-57.93	≤-41.20	PASS
				Peak	2310.000	-53.04	≤-21.20	PASS
				Peak	2384.840	-47.46	≤-21.20	PASS
				Peak	2390.000	-50.16	≤-21.20	PASS
		High	2480	AV	2483.500	-57.88	≤-41.20	PASS
				AV	2497.600	-56.96	≤-41.20	PASS
				AV	2500.000	-57.09	≤-41.20	PASS
				Peak	2483.500	-51.45	≤-21.20	PASS
				Peak	2496.880	-47.14	≤-21.20	PASS
				Peak	2500.000	-50.61	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-59.62	≤-41.20	PASS
				AV	2381.375	-57.09	≤-41.20	PASS
				AV	2390.000	-57.98	≤-41.20	PASS
				Peak	2310.000	-52.08	≤-21.20	PASS
				Peak	2387.780	-47.07	≤-21.20	PASS
				Peak	2390.000	-50.33	≤-21.20	PASS
		High	2480	AV	2483.500	-58.04	≤-41.20	PASS
				AV	2499.760	-56.99	≤-41.20	PASS
				AV	2500.000	-57.17	≤-41.20	PASS
				Peak	2483.500	-52.94	≤-21.20	PASS
				Peak	2493.680	-47.31	≤-21.20	PASS
				Peak	2500.000	-51.19	≤-21.20	PASS

Note:

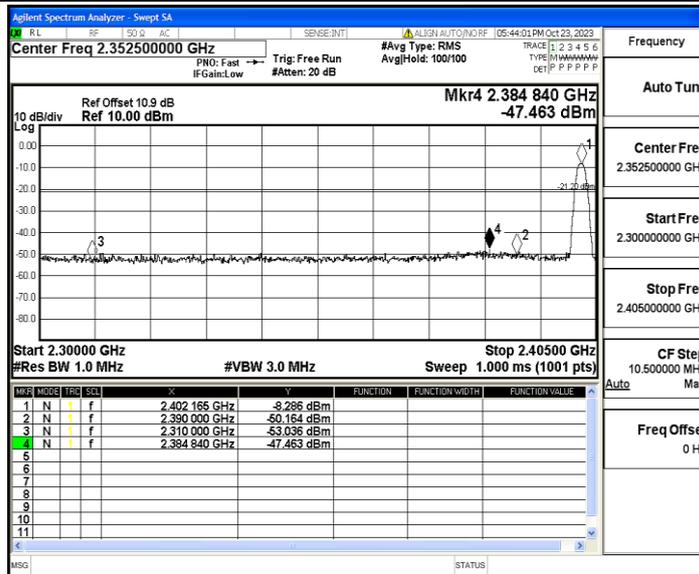
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

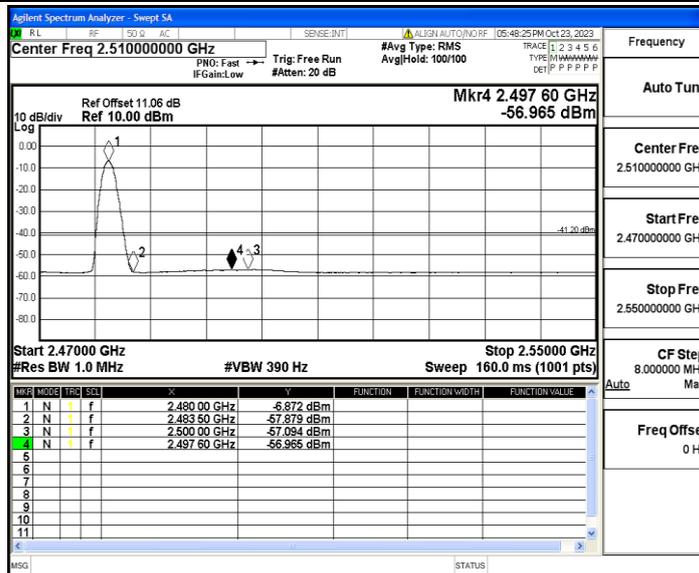
DH5\_Ant1\_Low\_2402\_AV



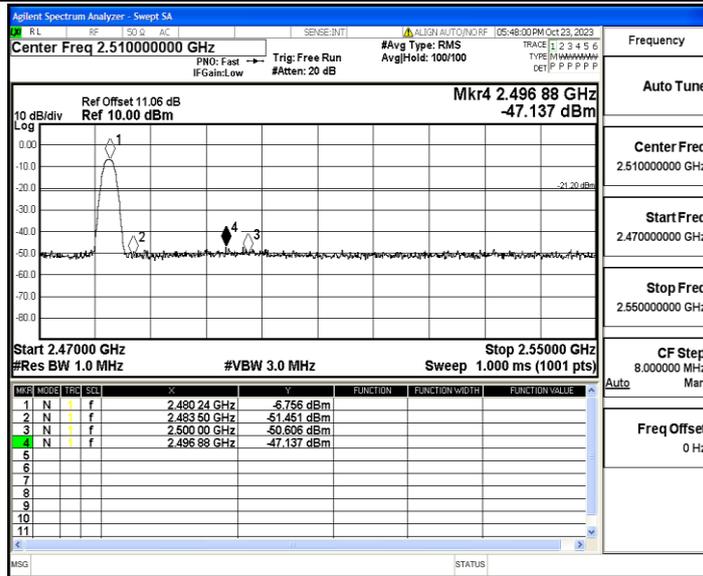
DH5\_Ant1\_Low\_2402\_Peak



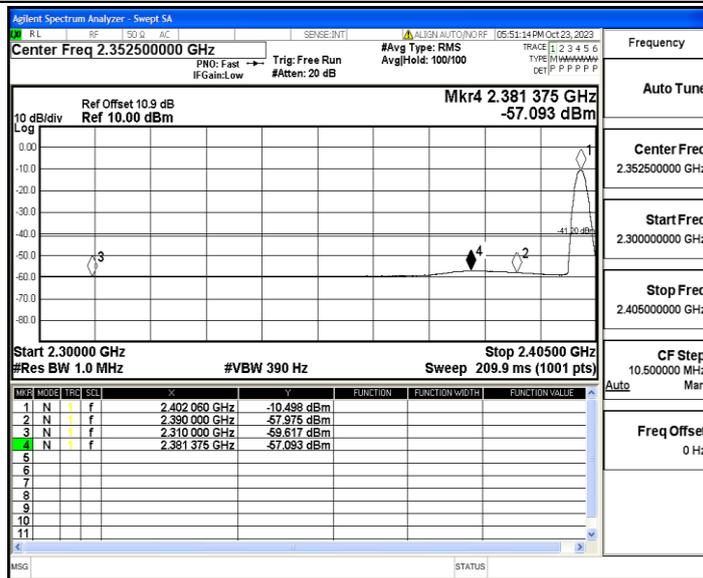
DH5\_Ant1\_High\_2480\_AV



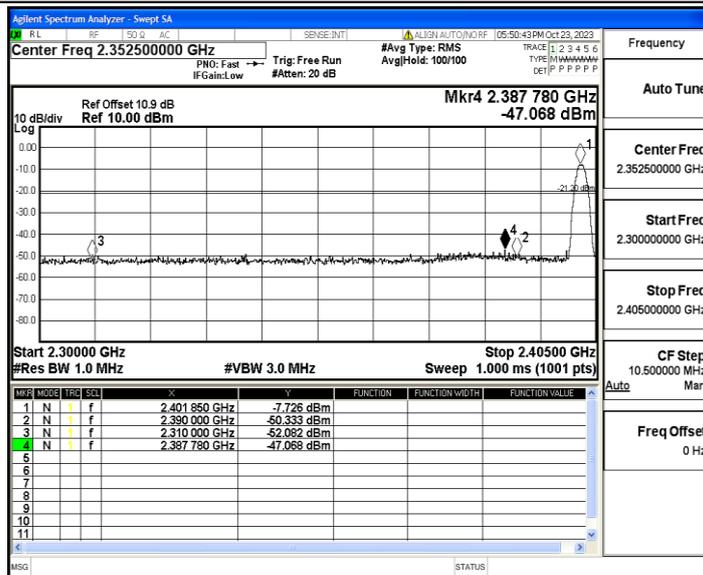
DH5\_Ant1\_High\_2480\_Peak



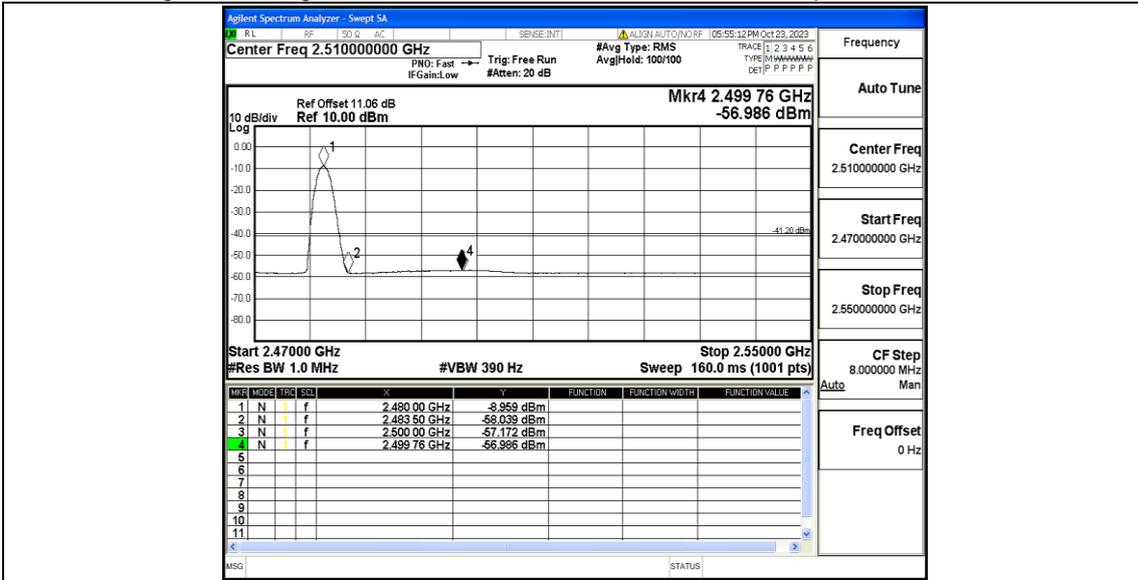
2D H5\_Ant1\_Low\_2402\_AV



2D H5\_Ant1\_Low\_2402\_Peak



2D H5\_Ant1\_High\_2480\_AV



2DH5\_Ant1\_High\_2480\_Peak

