

## Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth headset

Trade Mark: QCY

Test Model: BH23QT27A

FCC ID: RDR-BH23QT27A

### Environmental Conditions

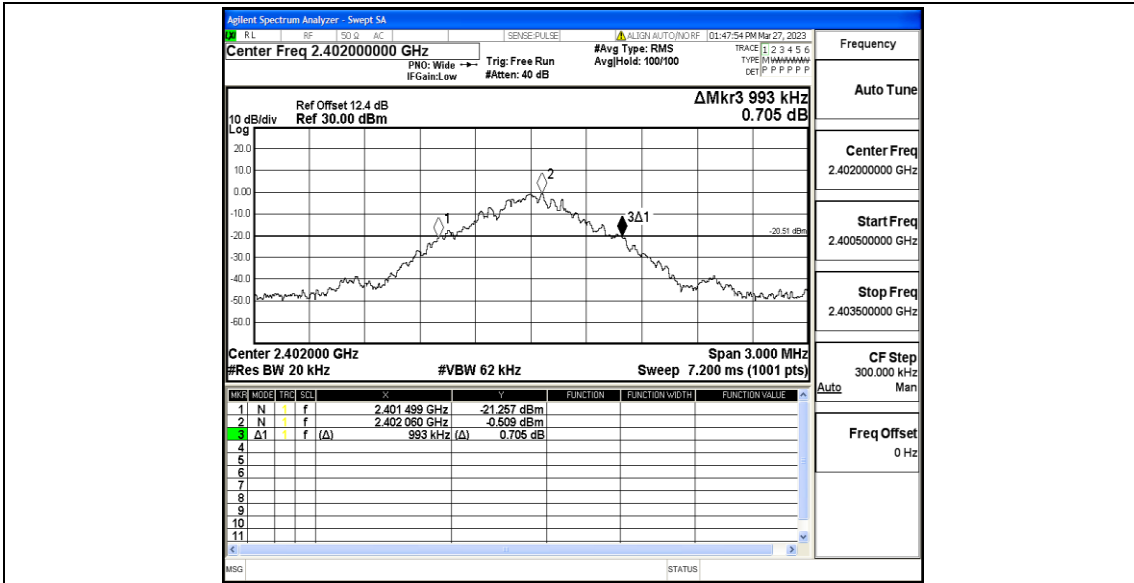
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

## Appendix A: 20dB Emission Bandwidth

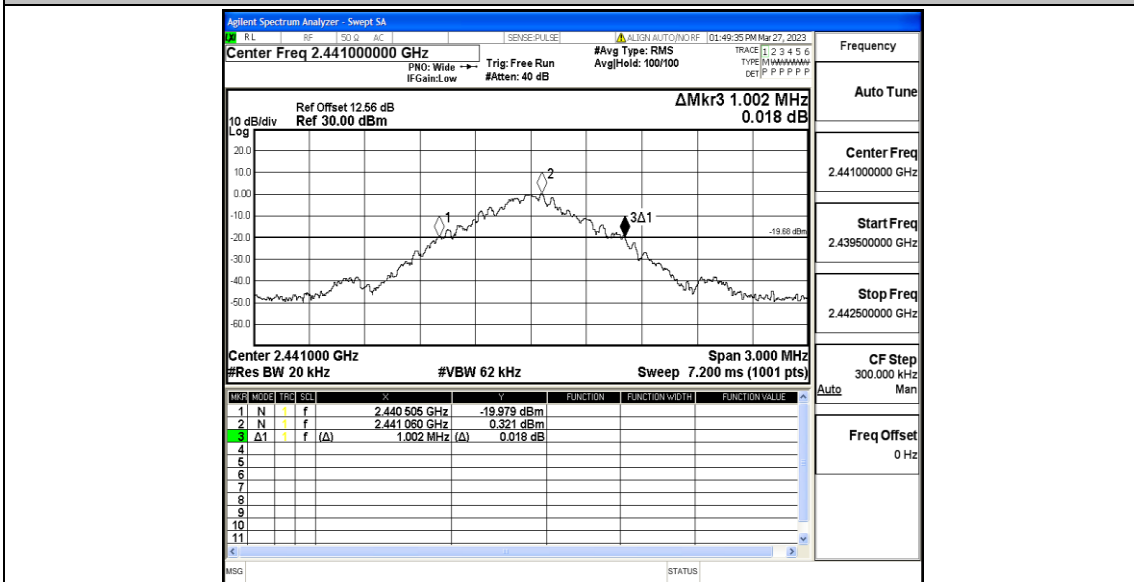
### Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.993	2401.499	2402.492	---	---
		2441	1.002	2440.505	2441.507	---	---
		2480	0.990	2479.490	2480.480	---	---
2DH5	Ant1	2402	1.326	2401.340	2402.666	---	---
		2441	1.311	2440.349	2441.660	---	---
		2480	1.299	2479.364	2480.663	---	---

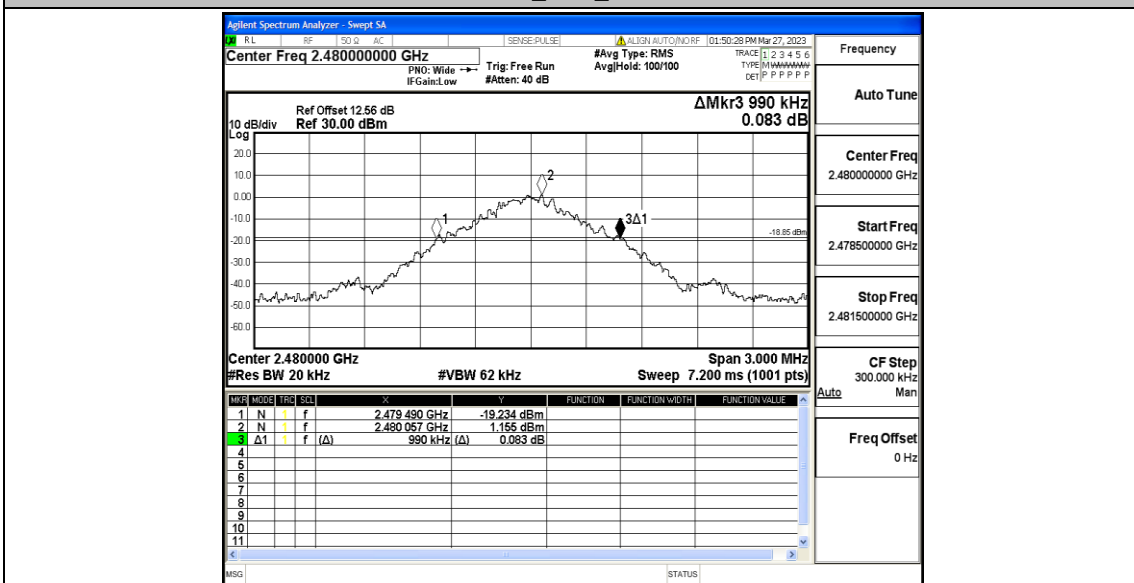
Test Graphs



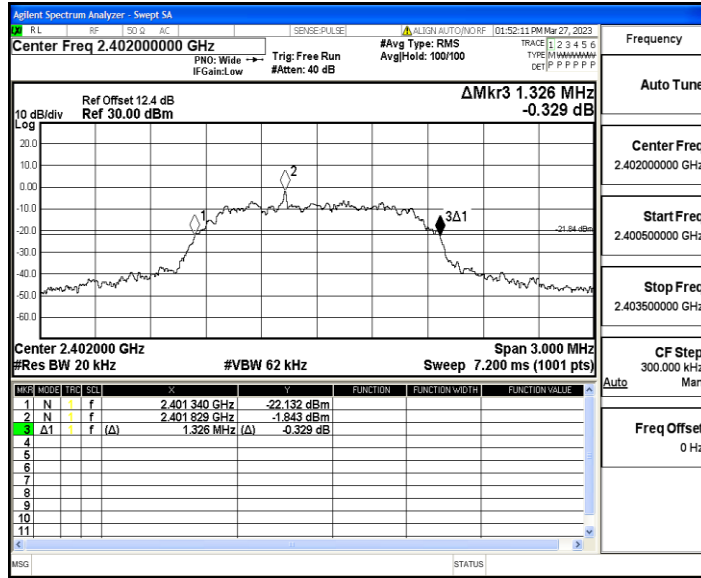
DH5\_Ant1\_2402



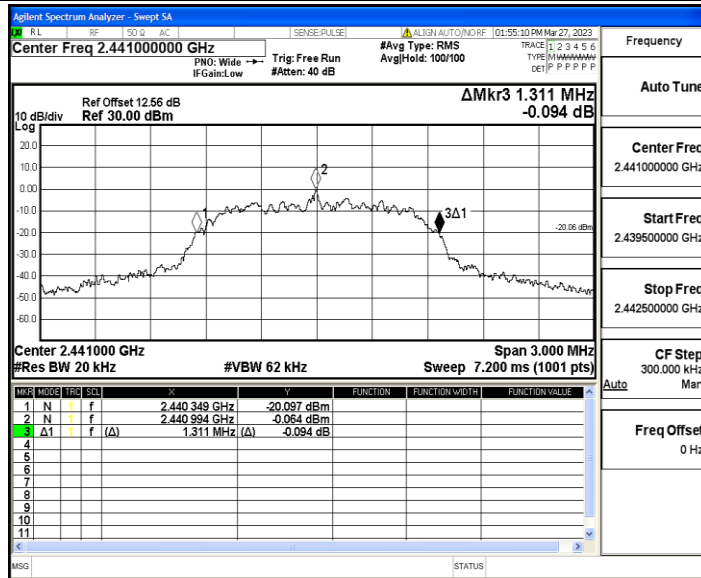
DH5\_Ant1\_2441



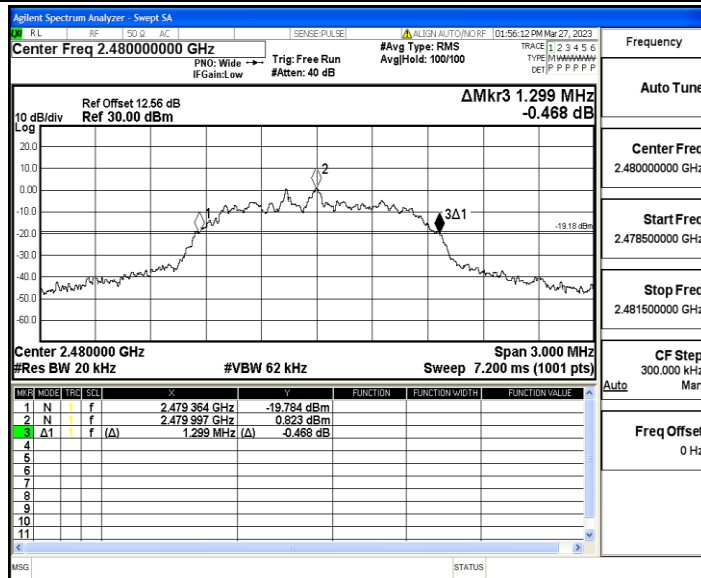
DH5\_Ant1\_2480



2Dh5\_Ant1\_2402



2Dh5\_Ant1\_2441



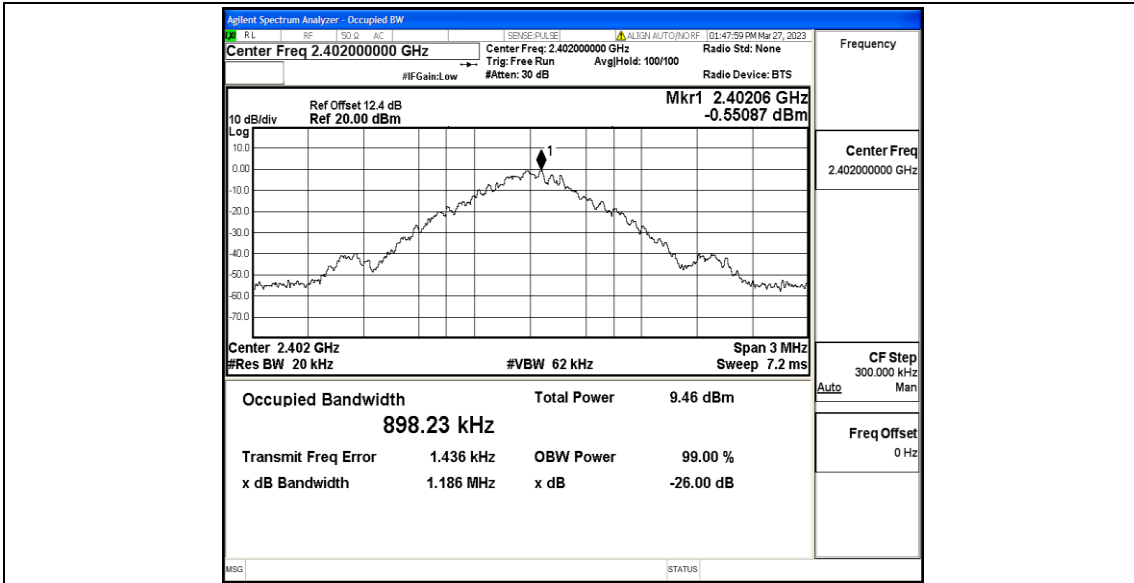
2Dh5\_Ant1\_2480

## Appendix B: Occupied Channel Bandwidth

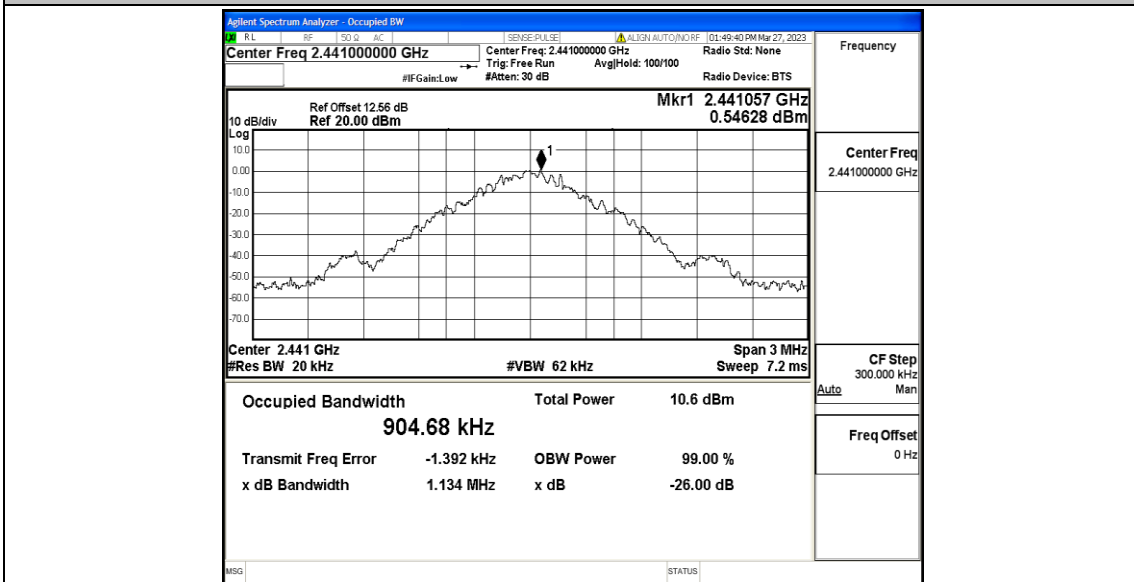
### Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.89823	2401.5523	2402.4506	---	---
		2441	0.90468	2440.5463	2441.4510	---	---
		2480	0.90867	2479.5434	2480.4521	---	---
2DH5	Ant1	2402	1.2076	2401.3982	2402.6058	---	---
		2441	1.2001	2440.4003	2441.6004	---	---
		2480	1.1866	2479.4096	2480.5962	---	---

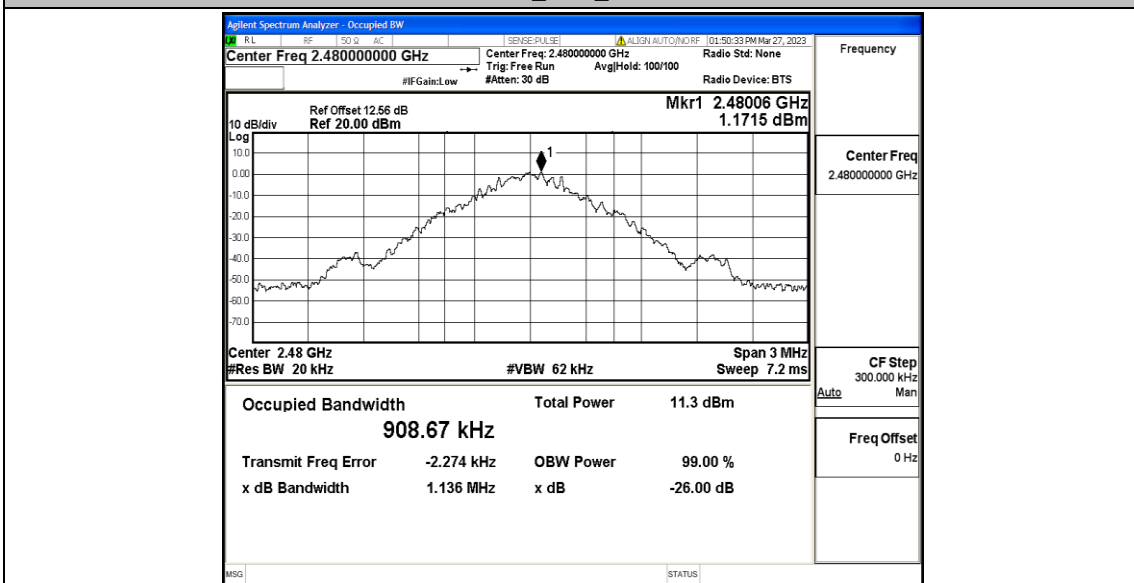
Test Graphs



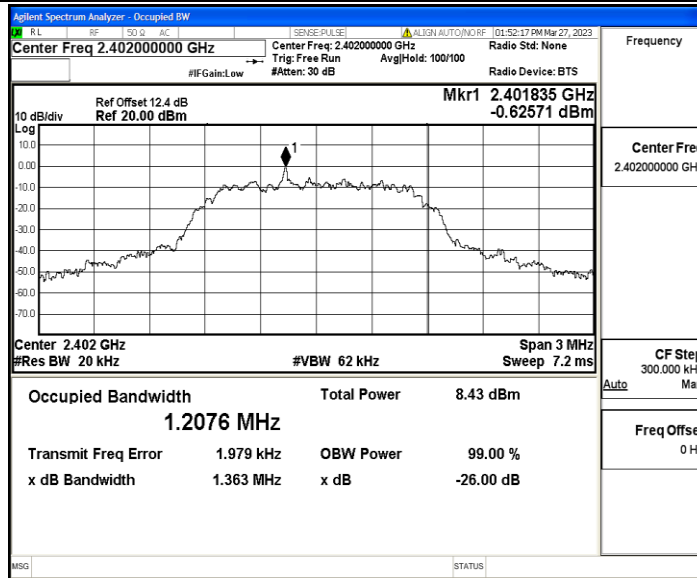
DH5\_Ant1\_2402



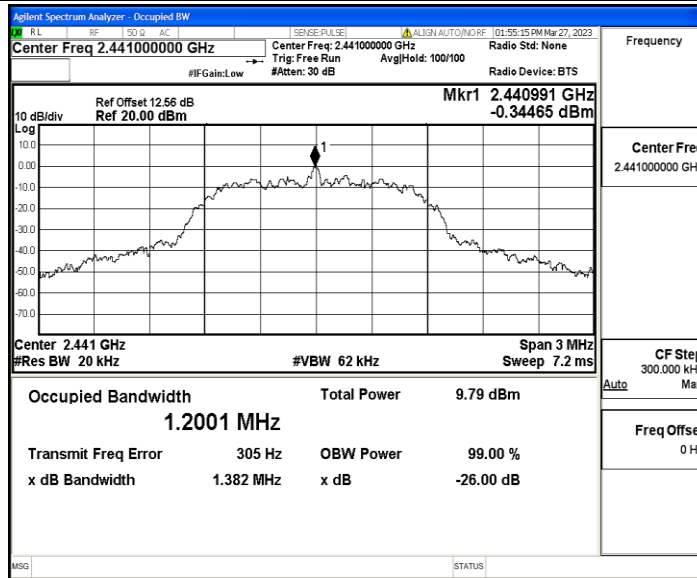
DH5\_Ant1\_2441



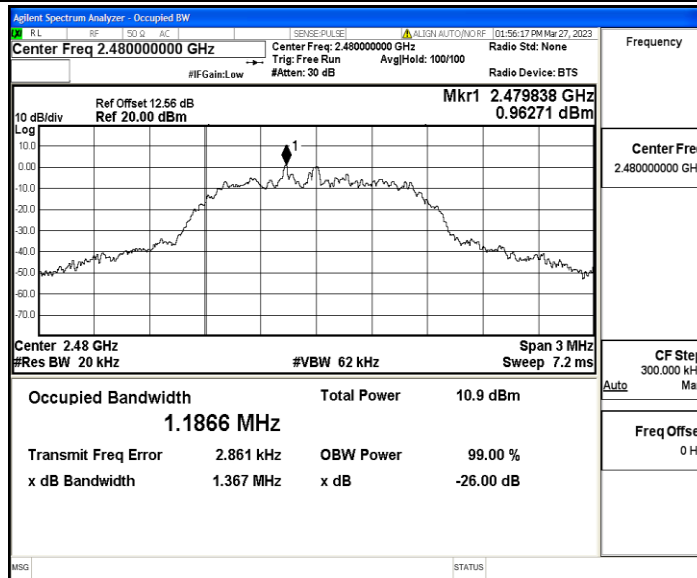
DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



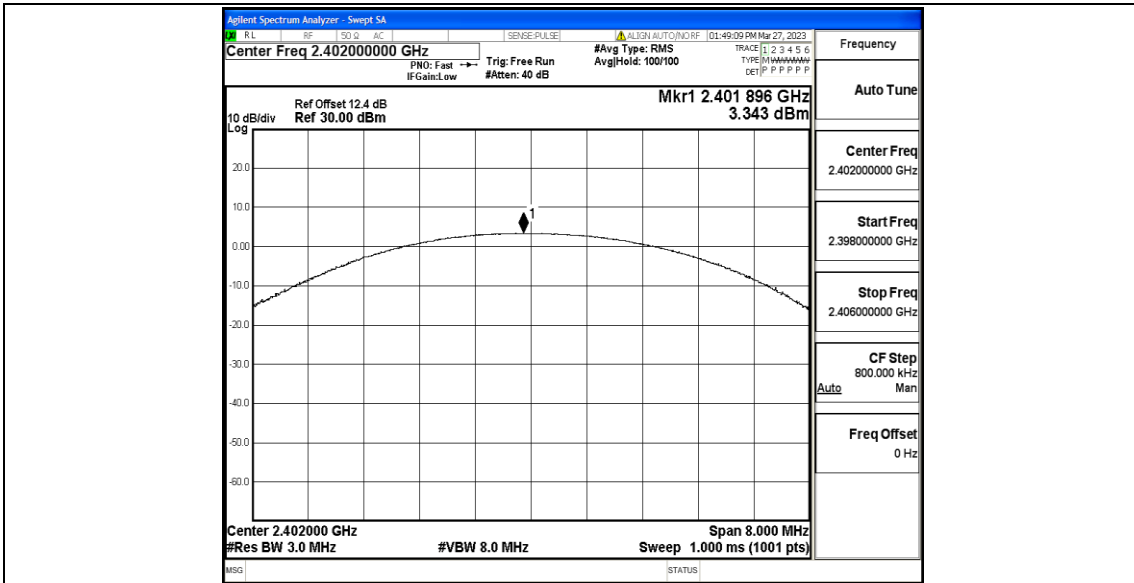
2DH5\_Ant1\_2480

## Appendix C: Maximum Peak conducted output power

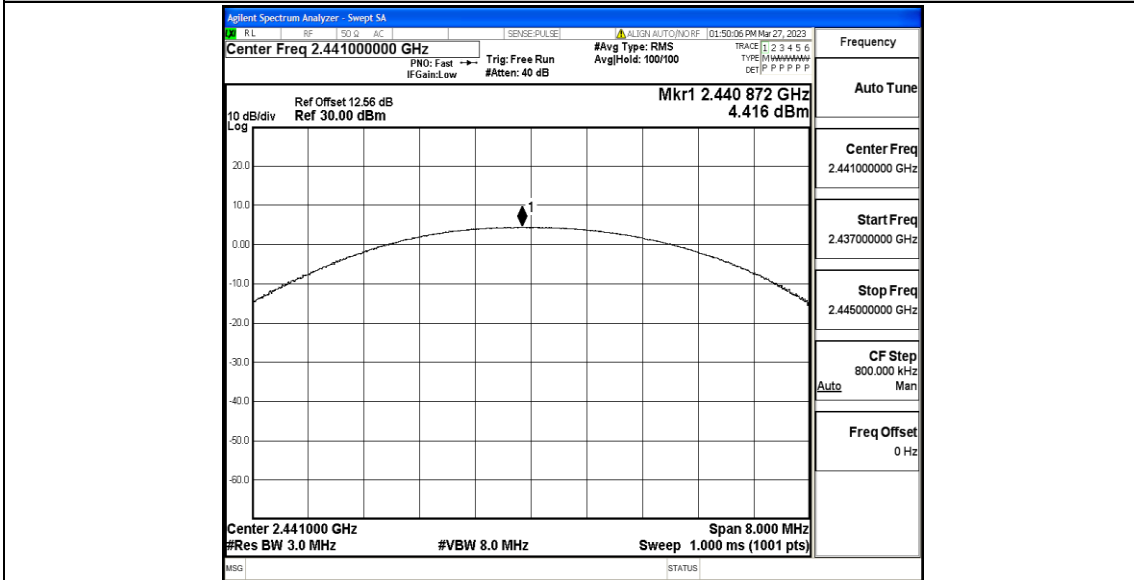
### Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	3.34	≤30	PASS
		2441	4.42	≤30	PASS
		2480	5.03	≤30	PASS
2DH5	Ant1	2402	4.11	≤20.97	PASS
		2441	5.19	≤20.97	PASS
		2480	5.78	≤20.97	PASS

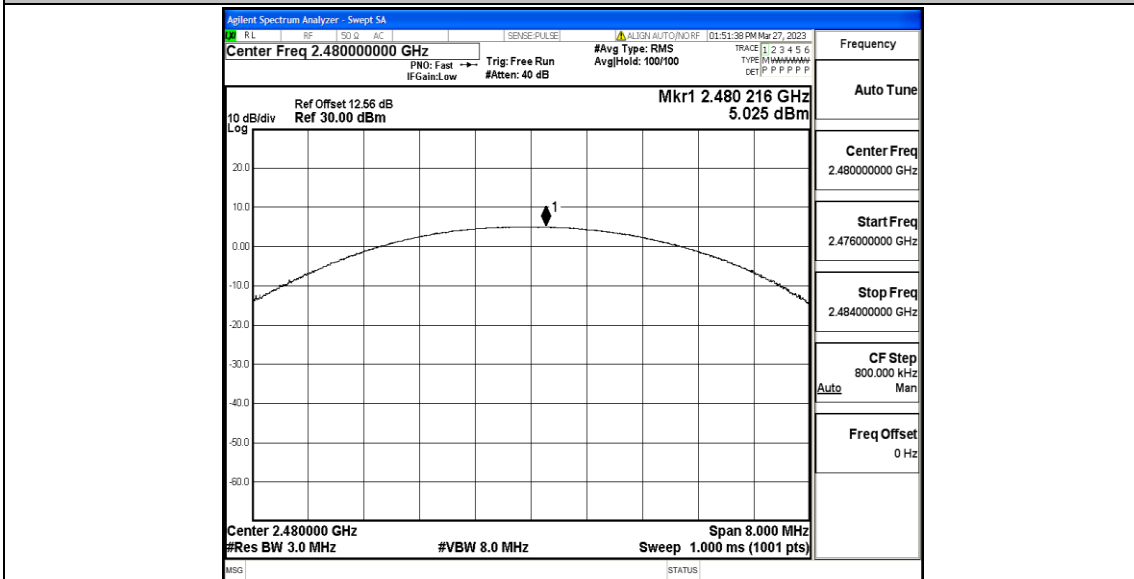
### Test Graphs



DH5\_Ant1\_2402

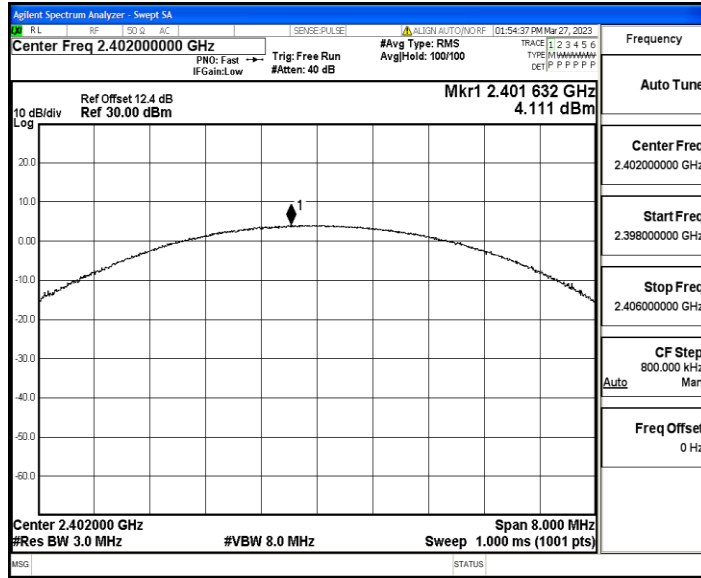


DH5\_Ant1\_2441

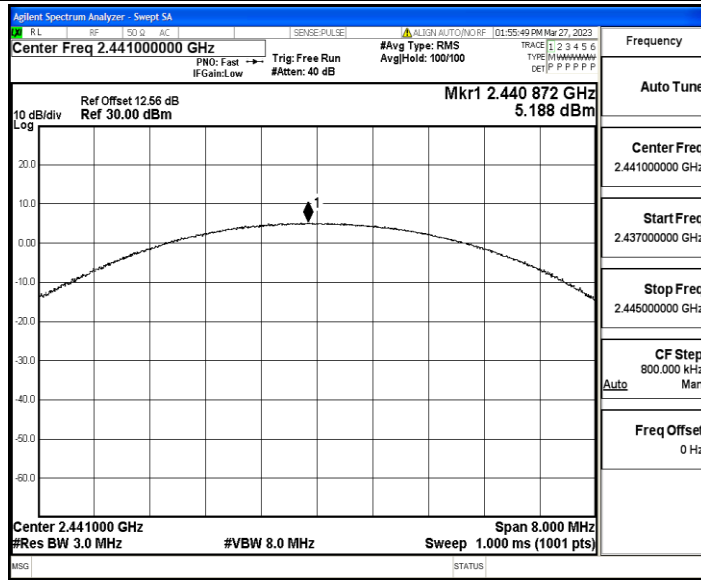


DH5\_Ant1\_2480

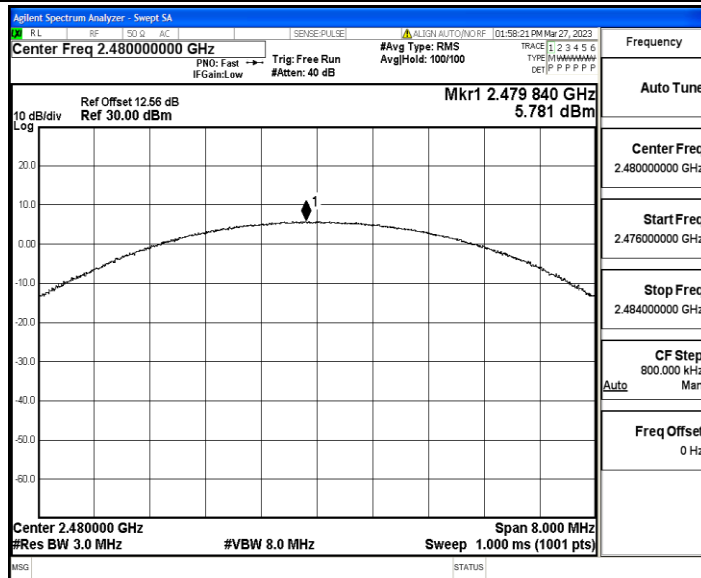




2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



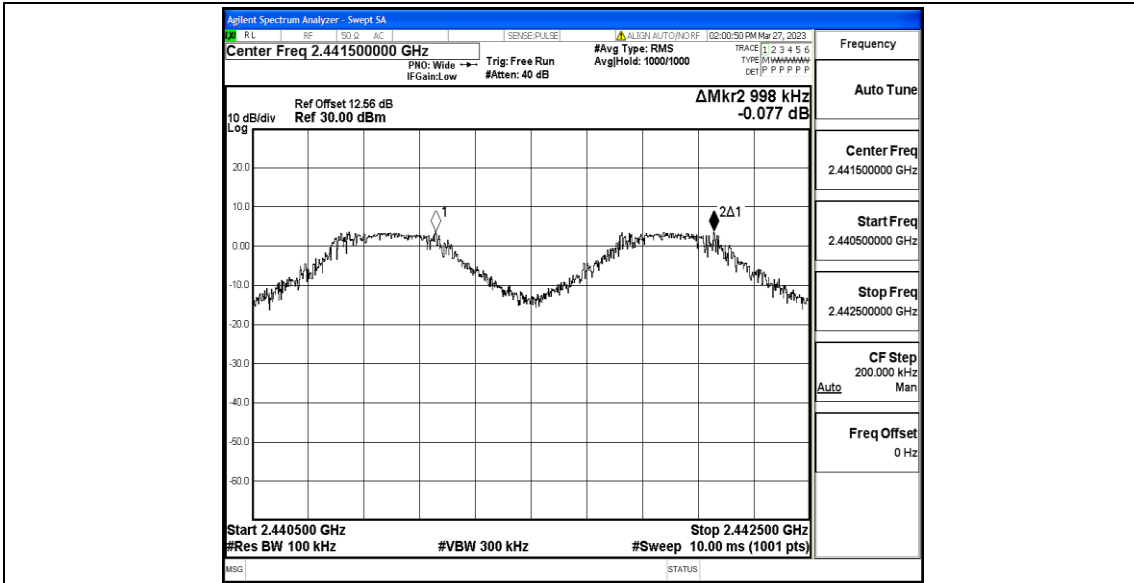
2DH5\_Ant1\_2480

## Appendix D: Carrier frequency separation

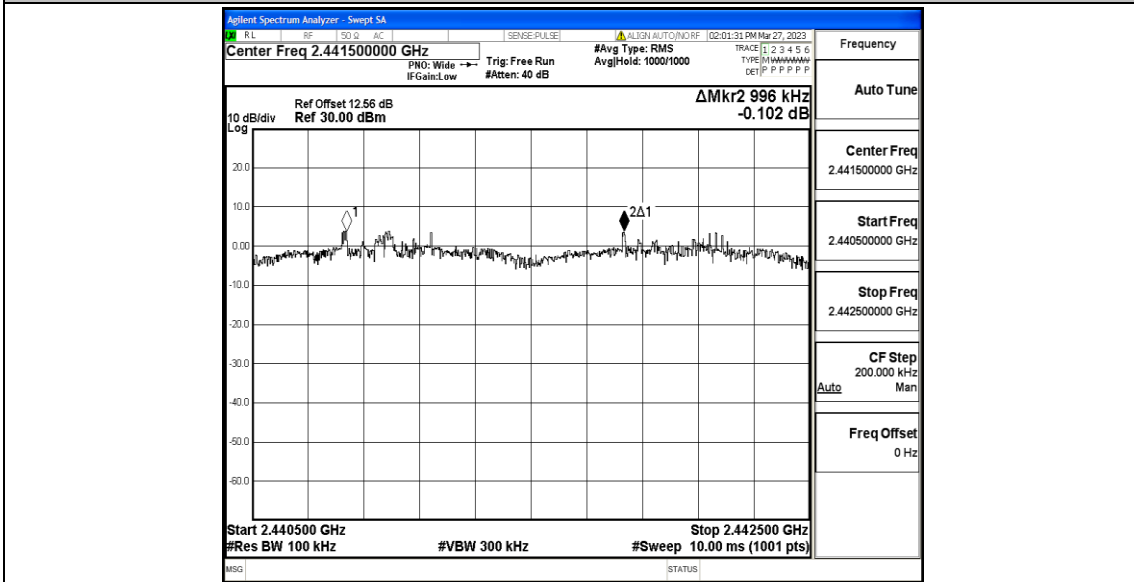
### Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.998	$\geq 0.668$	PASS
2DH5	Ant1	Hop	0.996	$\geq 0.884$	PASS

### Test Graphs



DH5\_Ant1\_Hop



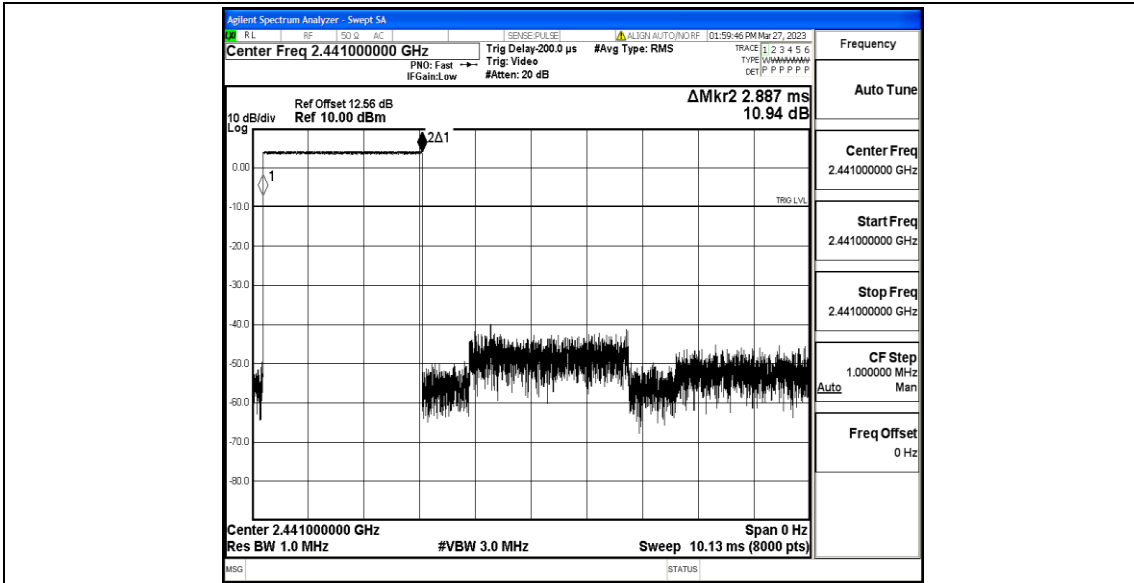
2DH5\_Ant1\_Hop

## Appendix E: Time of occupancy

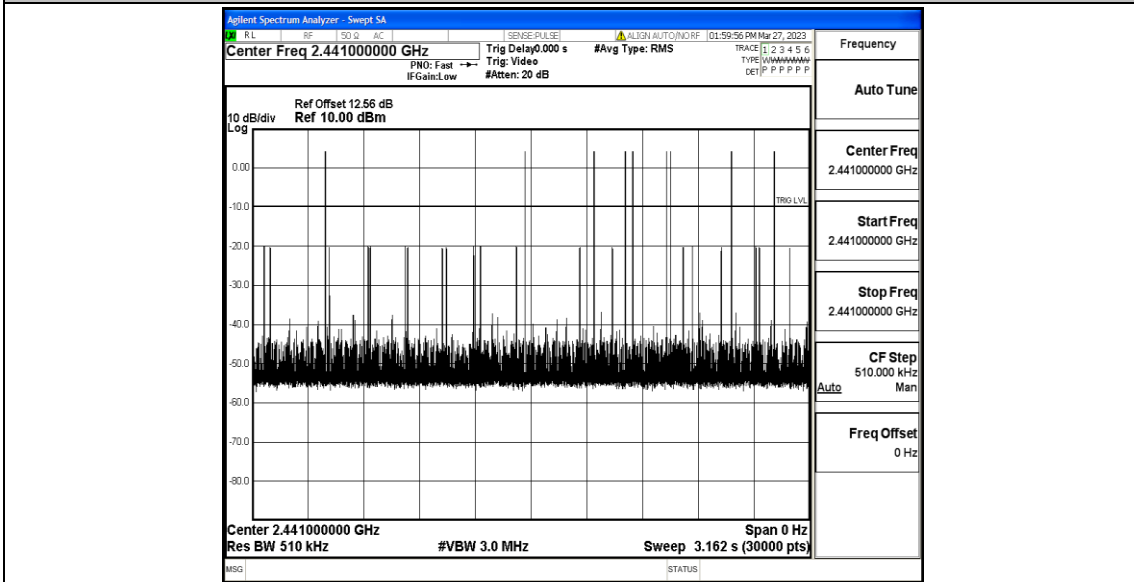
### Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.887	100	0.289	≤0.4	PASS
2DH5	Ant1	Hop	2.891	130	0.376	≤0.4	PASS

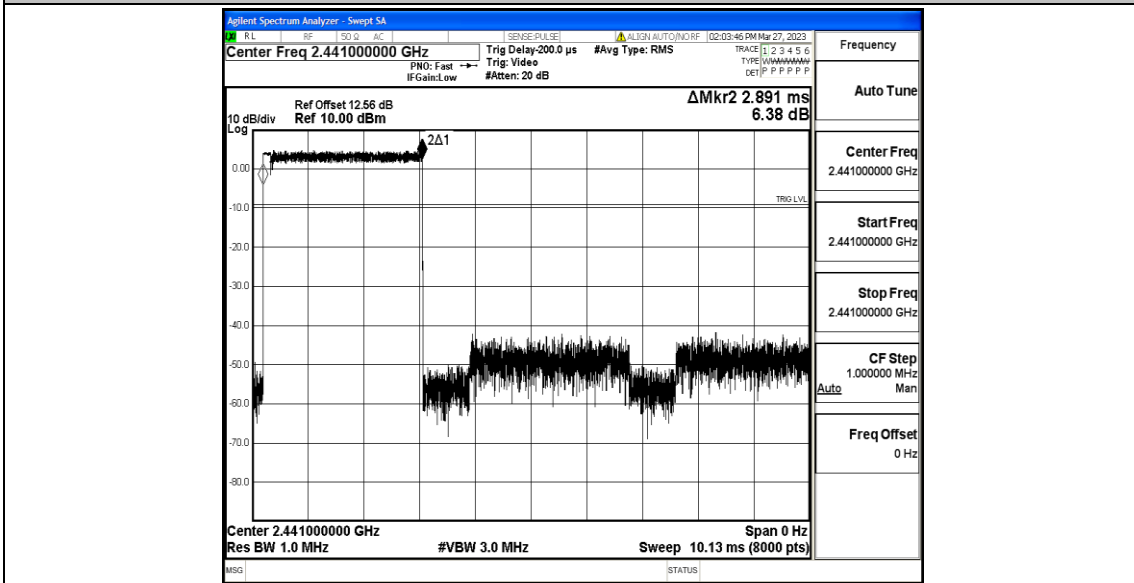
### Test Graphs



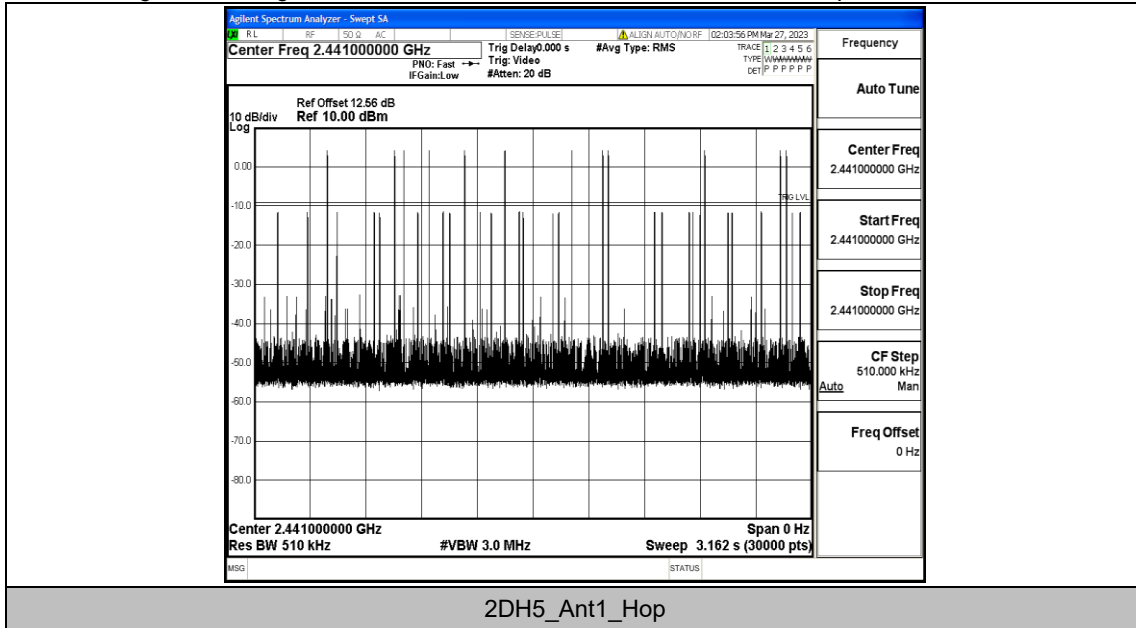
DH5\_Ant1\_Hop



DH5\_Ant1\_Hop



2DH5\_Ant1\_Hop



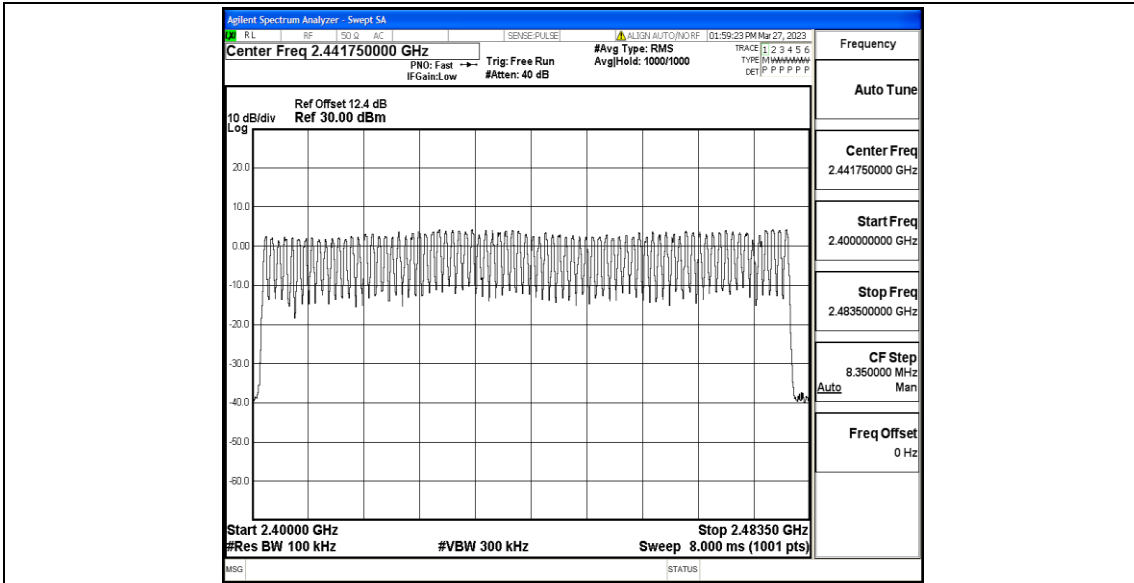
2DH5\_Ant1\_Hop

## Appendix F: Number of hopping channels

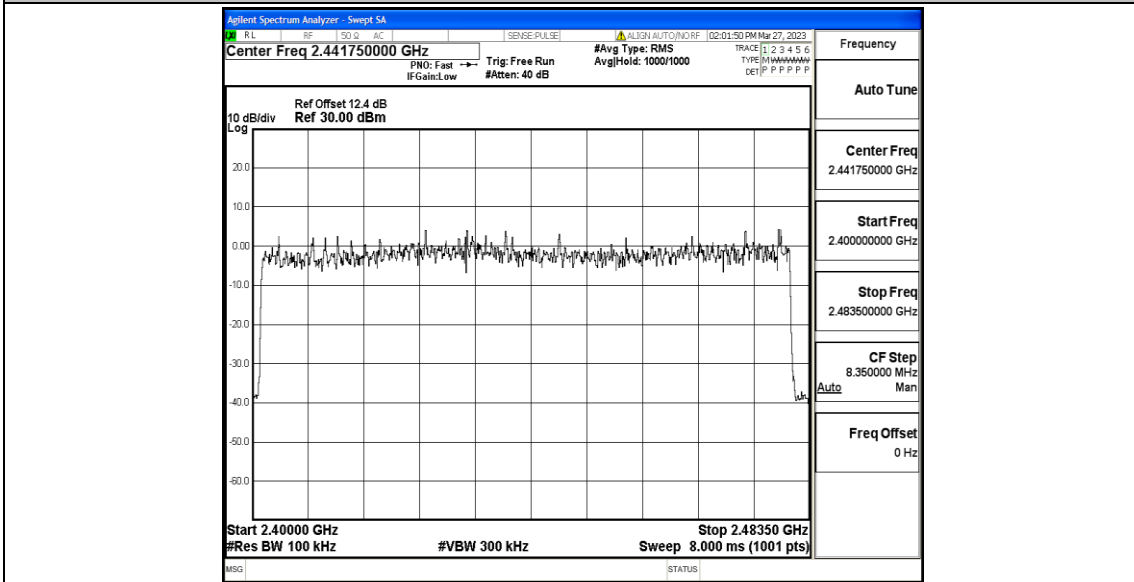
### Test Result

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

### Test Graphs



DH5\_Ant1\_Hop



2DH5\_Ant1\_Hop

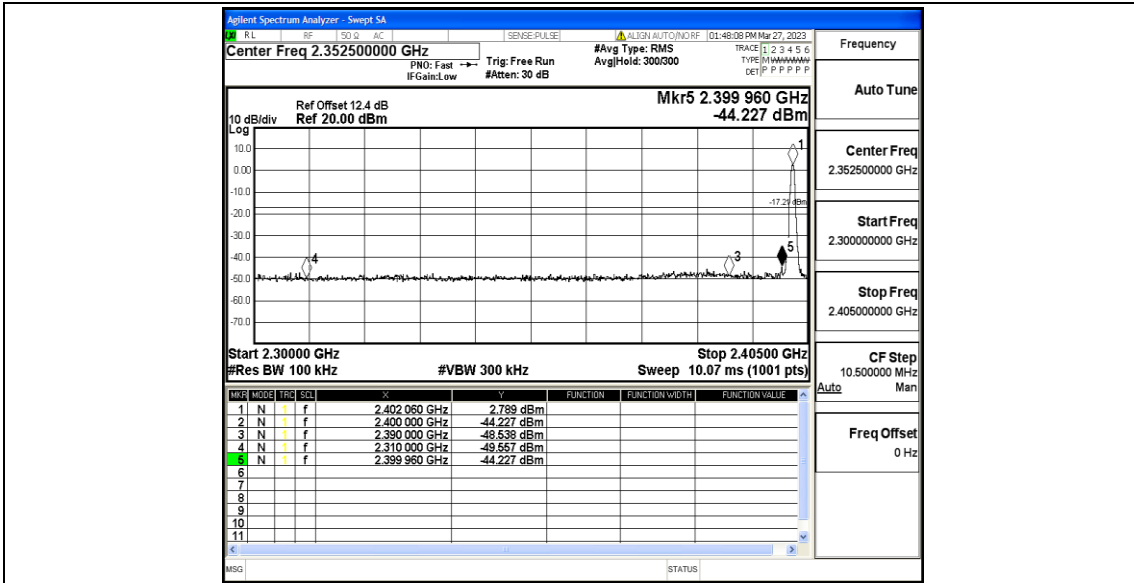


## Appendix G: Band edge measurements

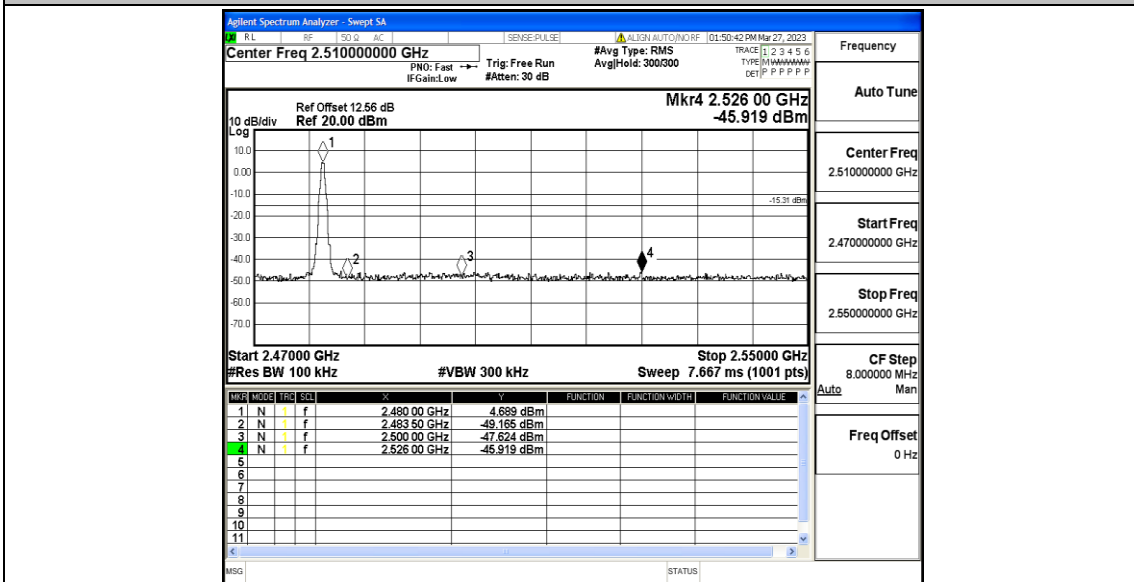
### Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.79	-44.23	≤-17.21	PASS
		High	2480	4.69	-45.92	≤-15.31	PASS
		Low	Hop_2402	1.78	-46.85	≤-18.22	PASS
		High	Hop_2480	3.93	-45.87	≤-16.07	PASS
2DH5	Ant1	Low	2402	2.79	-45.64	≤-17.21	PASS
		High	2480	4.43	-45.26	≤-15.57	PASS
		Low	Hop_2402	-1.98	-46.61	≤-21.98	PASS
		High	Hop_2480	4.45	-45.75	≤-15.55	PASS

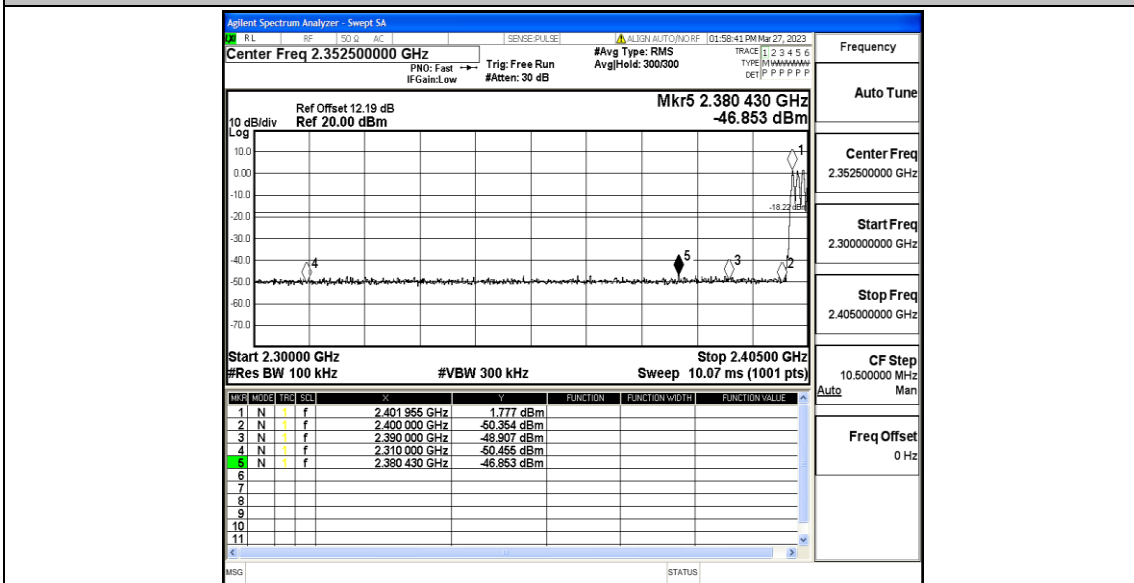
Test Graphs



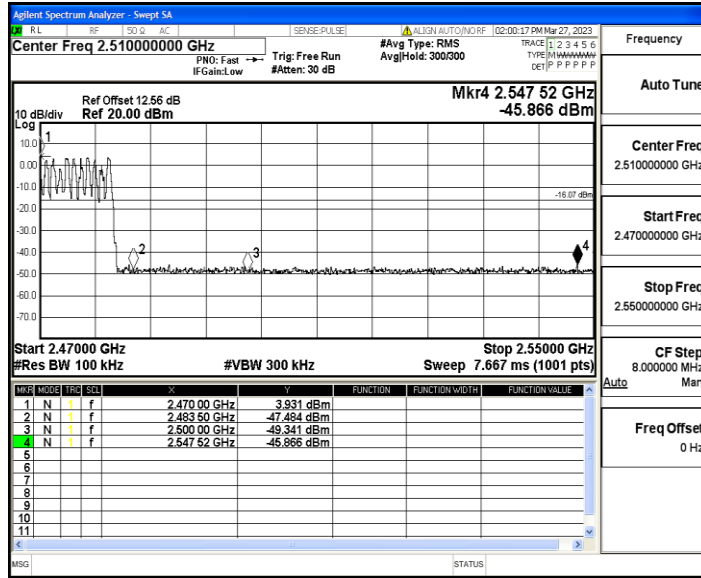
DH5\_Ant1\_Low\_2402



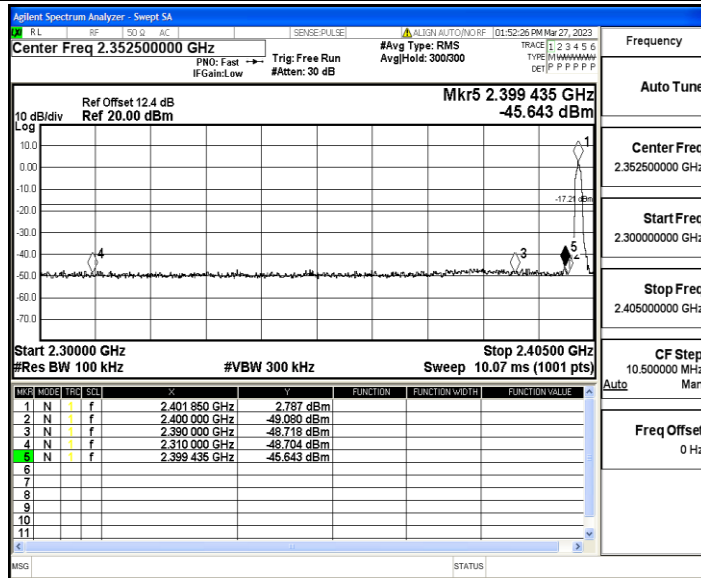
DH5\_Ant1\_High\_2480



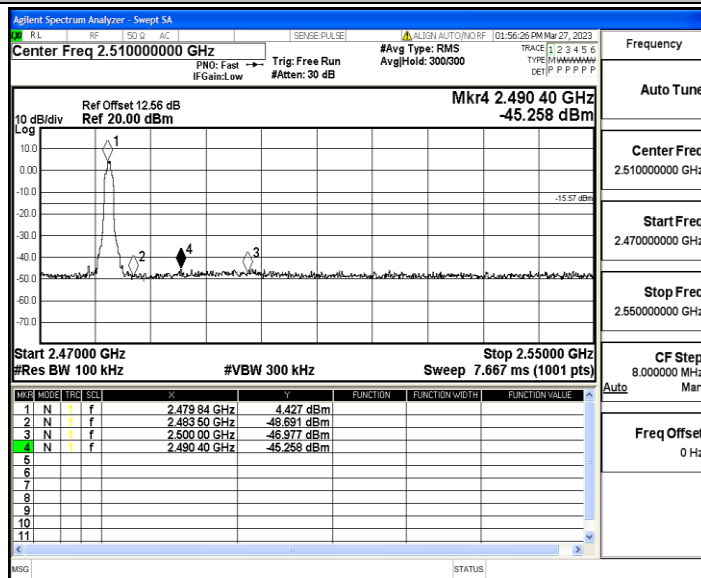
DH5\_Ant1\_Low\_Hop\_2402



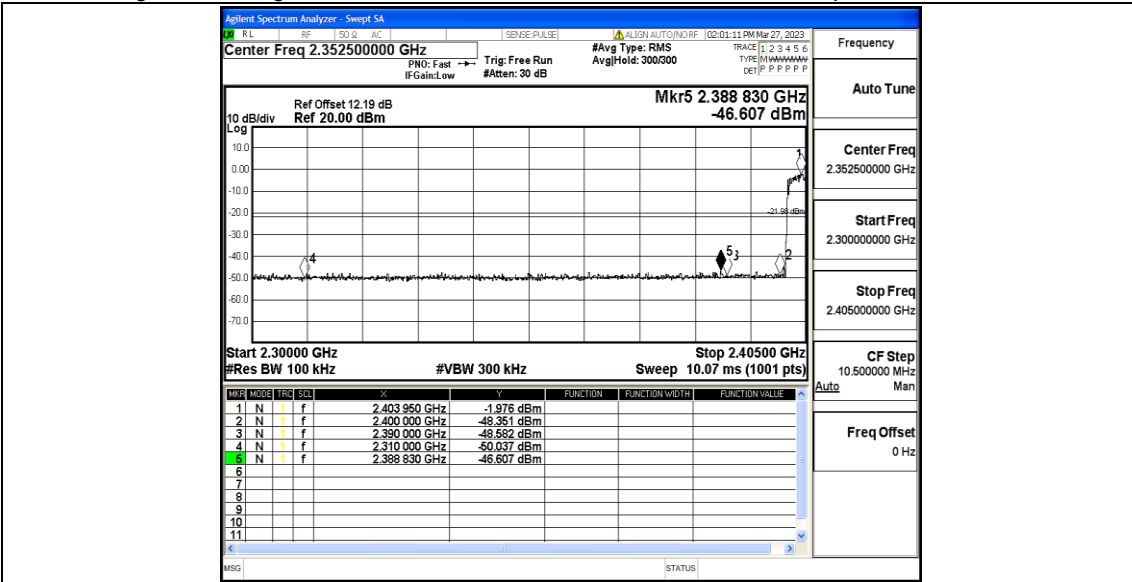
DH5\_Ant1\_High\_Hop\_2480



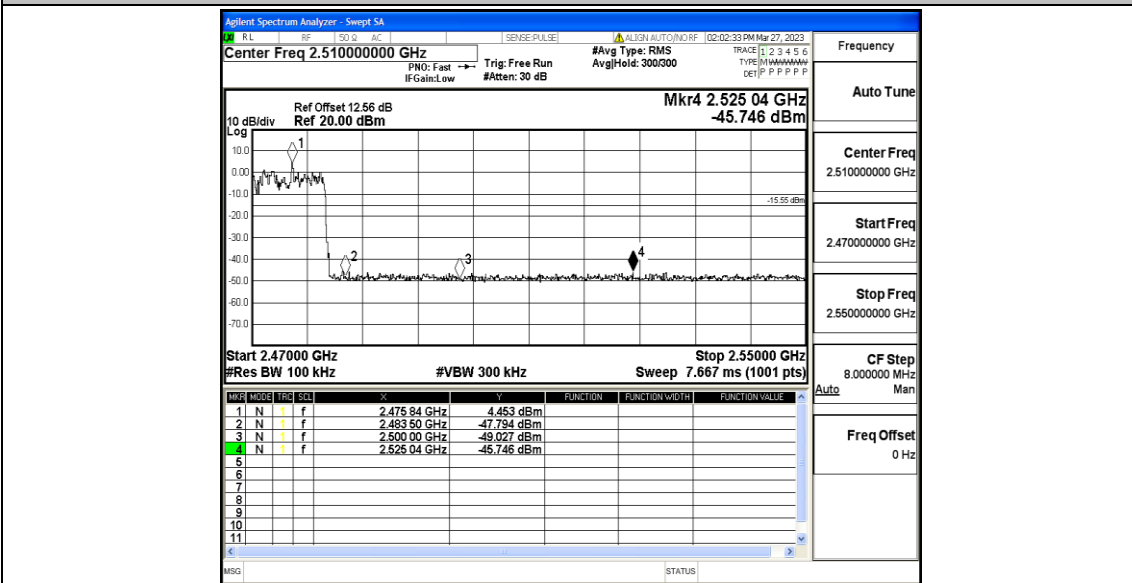
2DH5\_Ant1\_Low\_2402



2DH5\_Ant1\_High\_2480



2DH5\_Ant1\_Low\_Hop\_2402



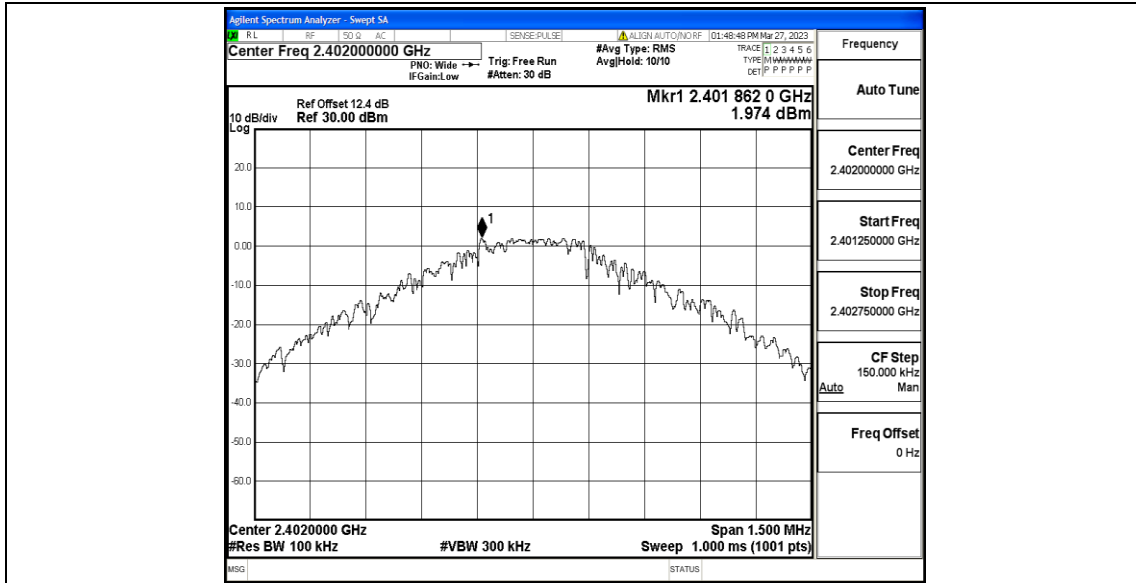
2DH5\_Ant1\_High\_Hop\_2480

## Appendix H: Conducted Spurious Emission

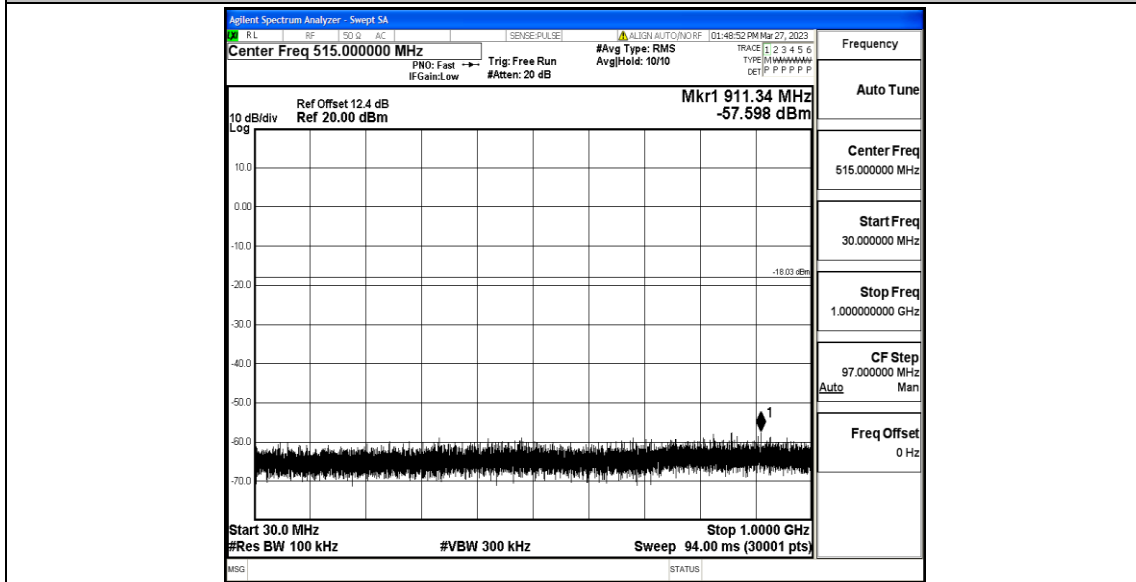
### Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	1.97	1.97	---	PASS
			30~1000	1.97	-57.6	≤-18.03	PASS
			1000~26500	1.97	-47.85	≤-18.03	PASS
		2441	Reference	3.54	3.54	---	PASS
			30~1000	3.54	-58.41	≤-16.46	PASS
			1000~26500	3.54	-47.98	≤-16.46	PASS
		2480	Reference	3.79	3.79	---	PASS
			30~1000	3.79	-57.76	≤-16.21	PASS
			1000~26500	3.79	-46.41	≤-16.21	PASS
2DH5	Ant1	2402	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-57.66	≤-18.13	PASS
			1000~26500	1.87	-49.09	≤-18.13	PASS
		2441	Reference	2.64	2.64	---	PASS
			30~1000	2.64	-58.48	≤-17.36	PASS
			1000~26500	2.64	-48.81	≤-17.36	PASS
		2480	Reference	1.70	1.70	---	PASS
			30~1000	1.70	-57.78	≤-18.3	PASS
			1000~26500	1.70	-47.07	≤-18.3	PASS

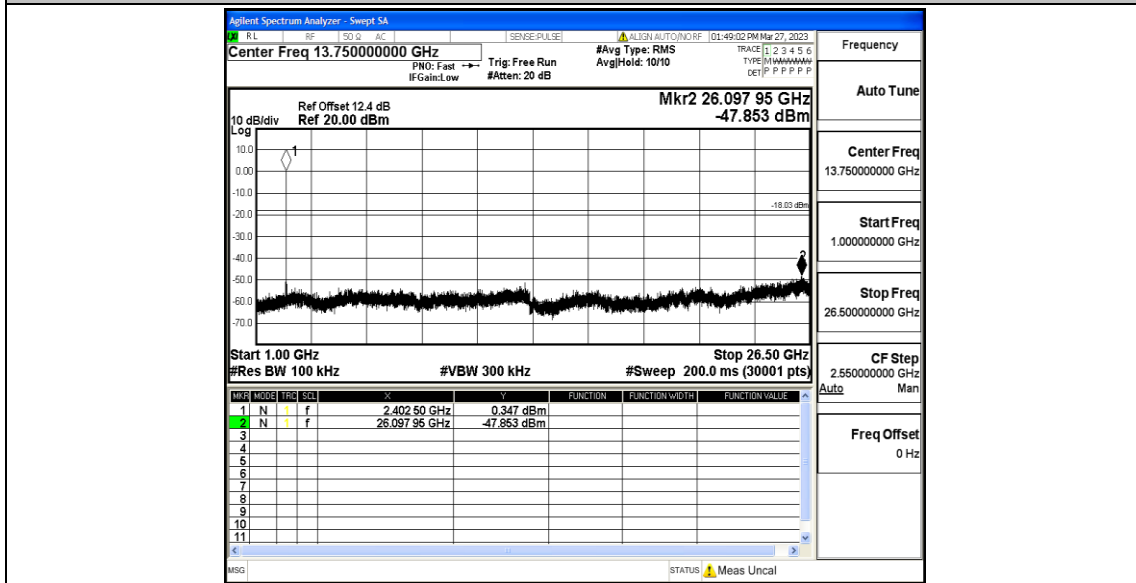
### Test Graphs



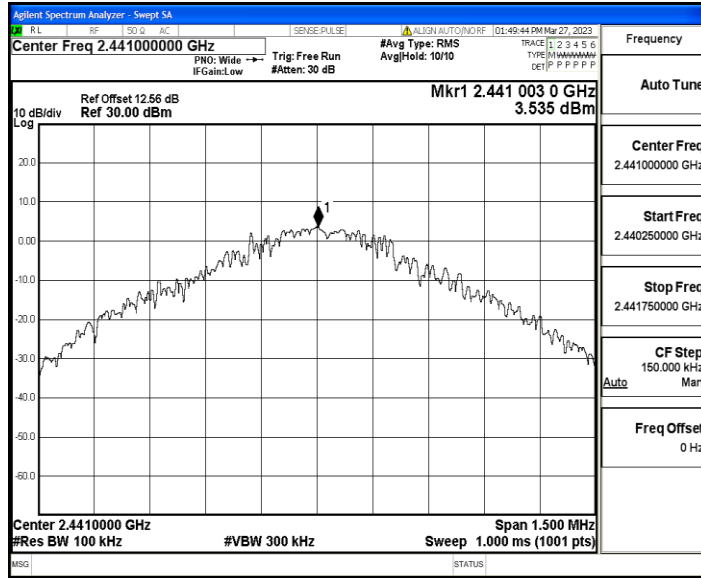
DH5\_Ant1\_2402\_0~Reference



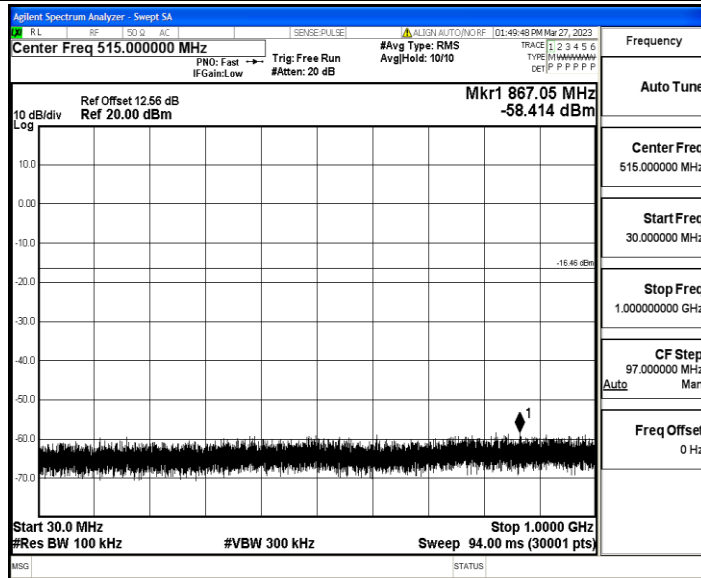
DH5\_Ant1\_2402\_30~1000



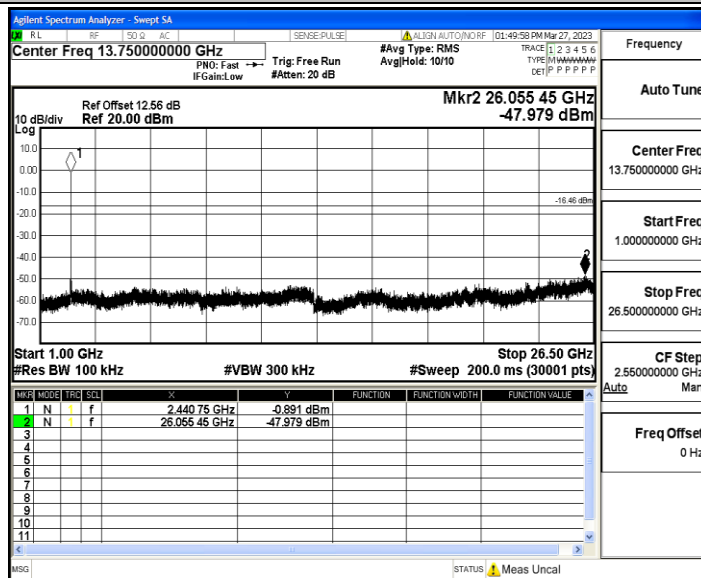
DH5\_Ant1\_2402\_1000~26500



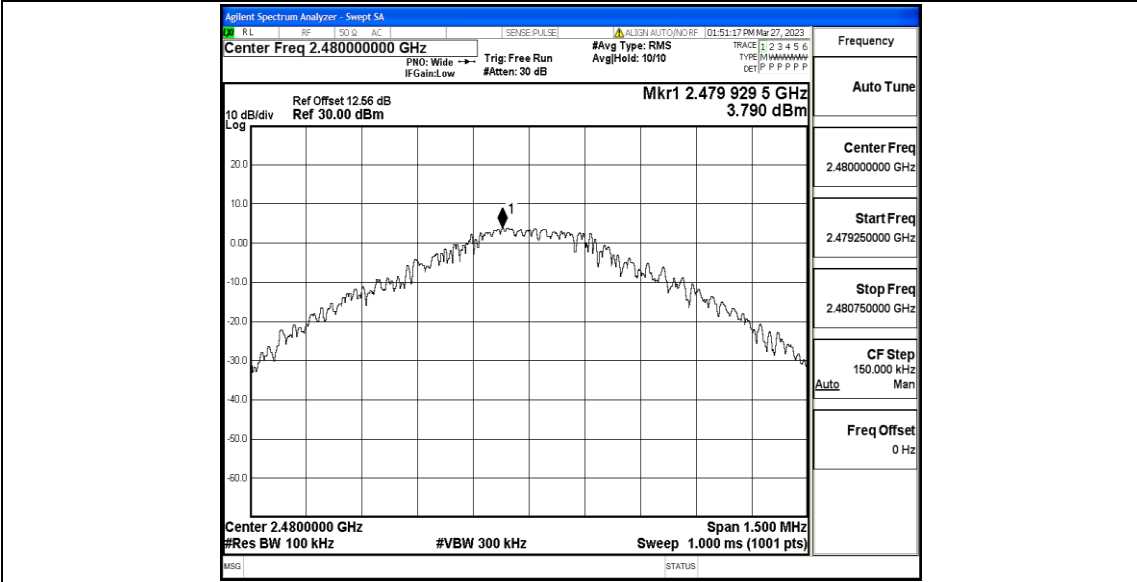
DH5\_Ant1\_2441\_0~Reference



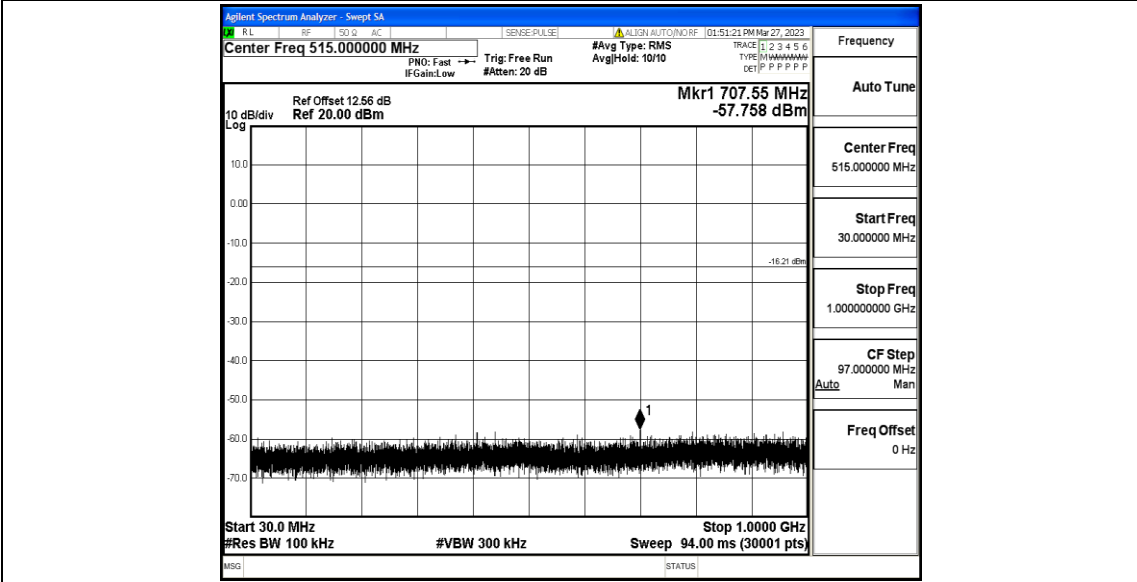
DH5\_Ant1\_2441\_30~1000



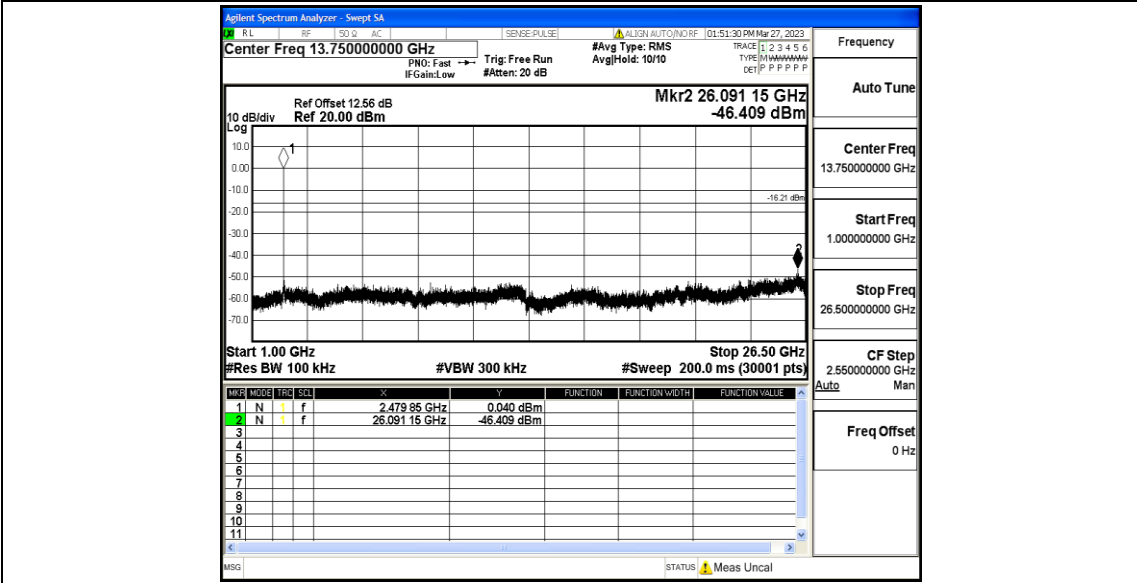
DH5\_Ant1\_2441\_1000~26500



DH5\_Ant1\_2480\_0~Reference

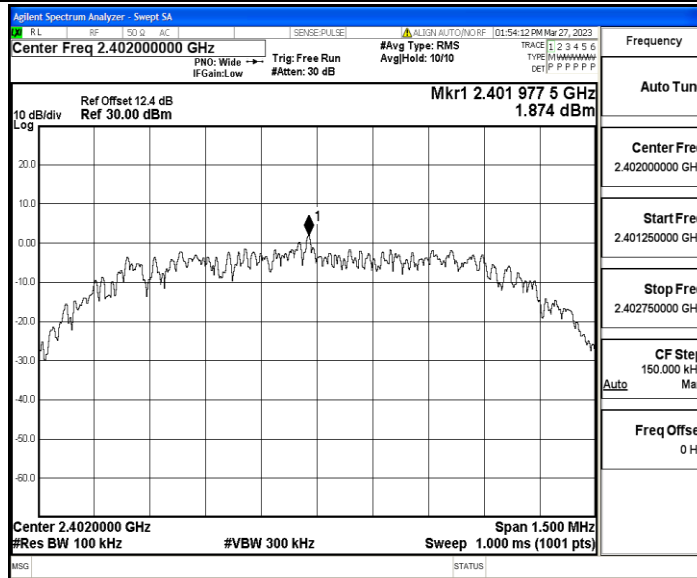


DH5\_Ant1\_2480\_30~1000

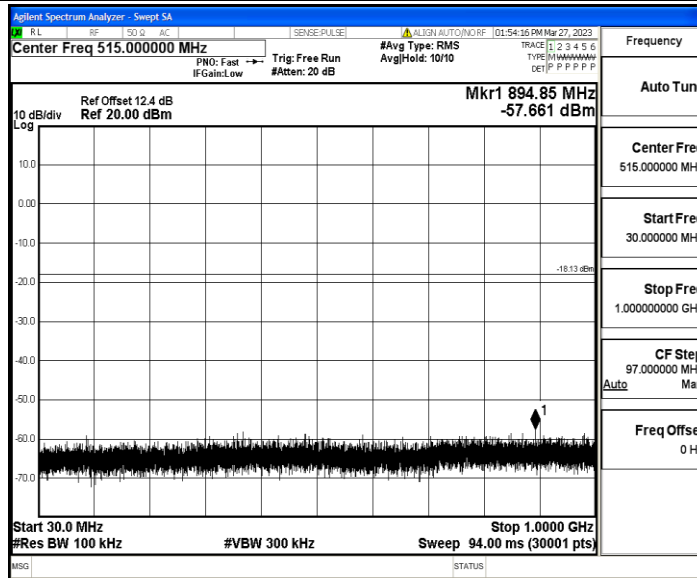


DH5\_Ant1\_2480\_1000~26500

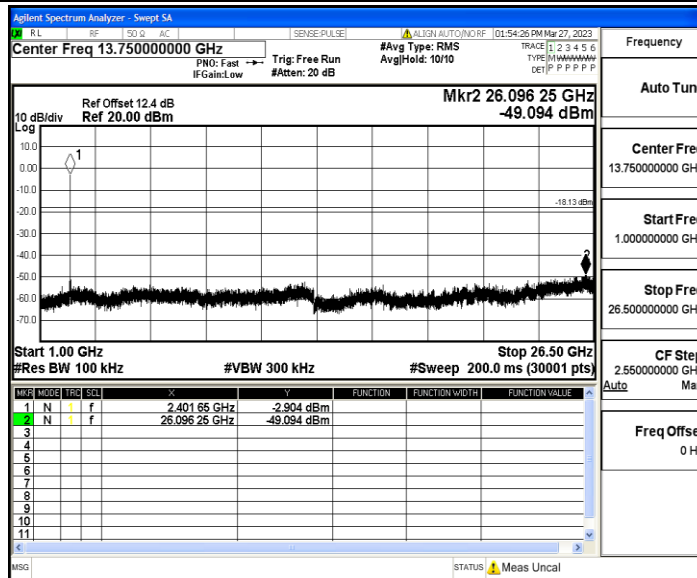




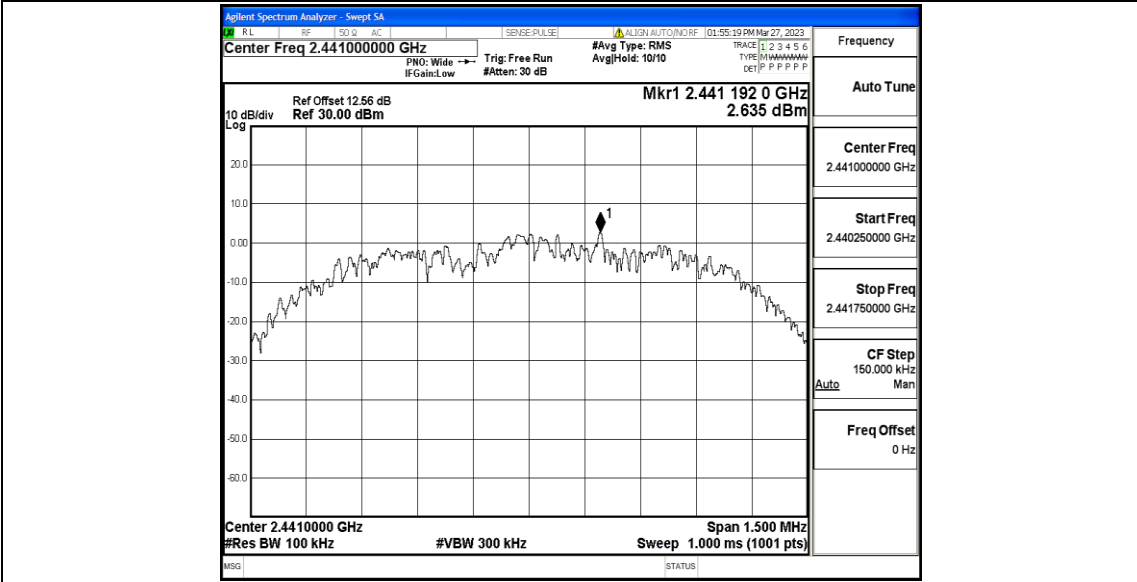
2DH5\_Ant1\_2402\_0~Reference



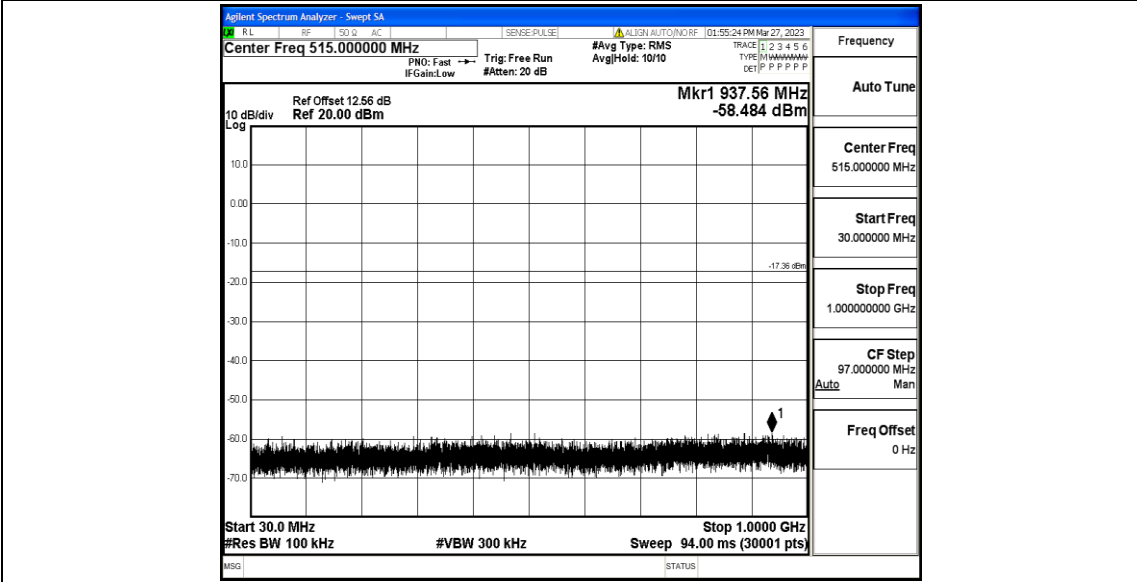
2DH5\_Ant1\_2402\_30~1000



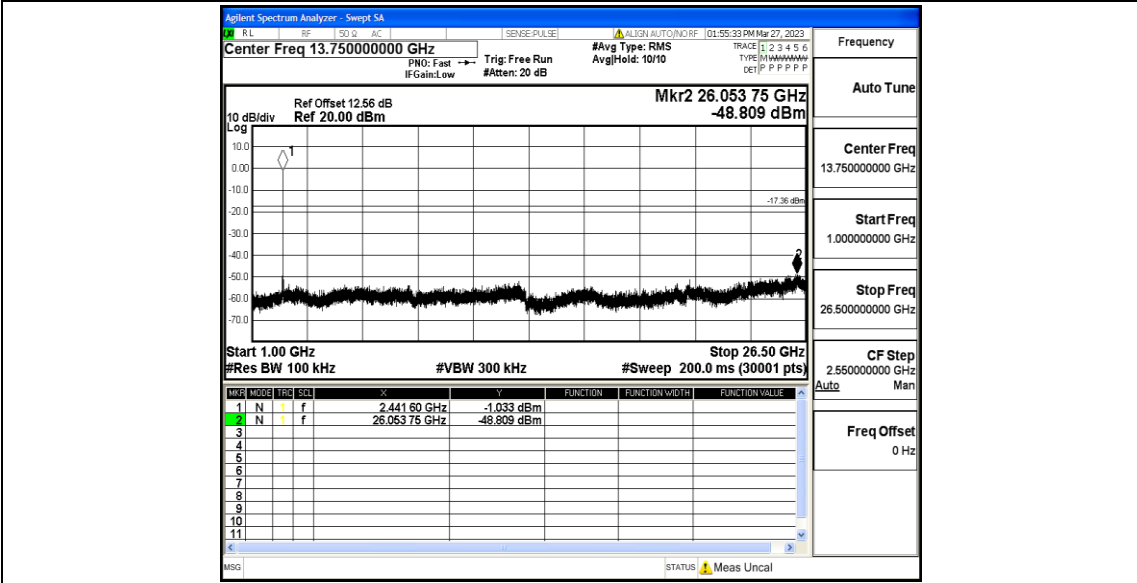
2DH5\_Ant1\_2402\_1000~26500



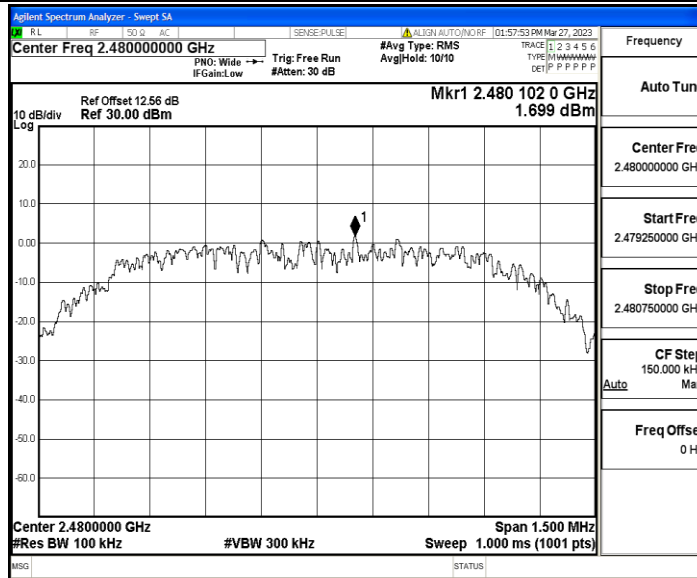
2DH5\_Ant1\_2441\_0~Reference



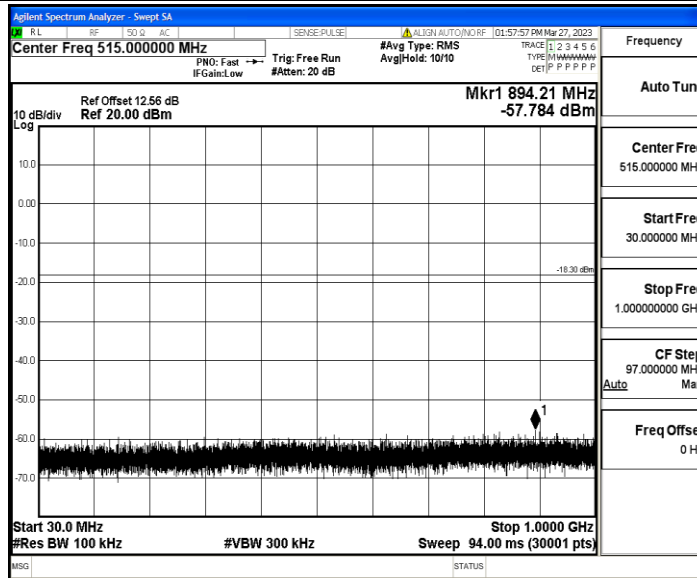
2DH5\_Ant1\_2441\_30~1000



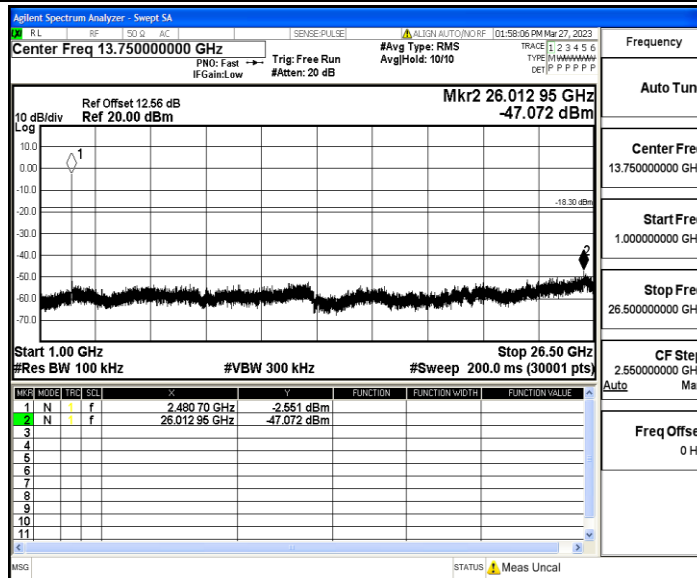
2DH5\_Ant1\_2441\_1000~26500



2DH5\_Ant1\_2480\_0~Reference



2DH5\_Ant1\_2480\_30~1000



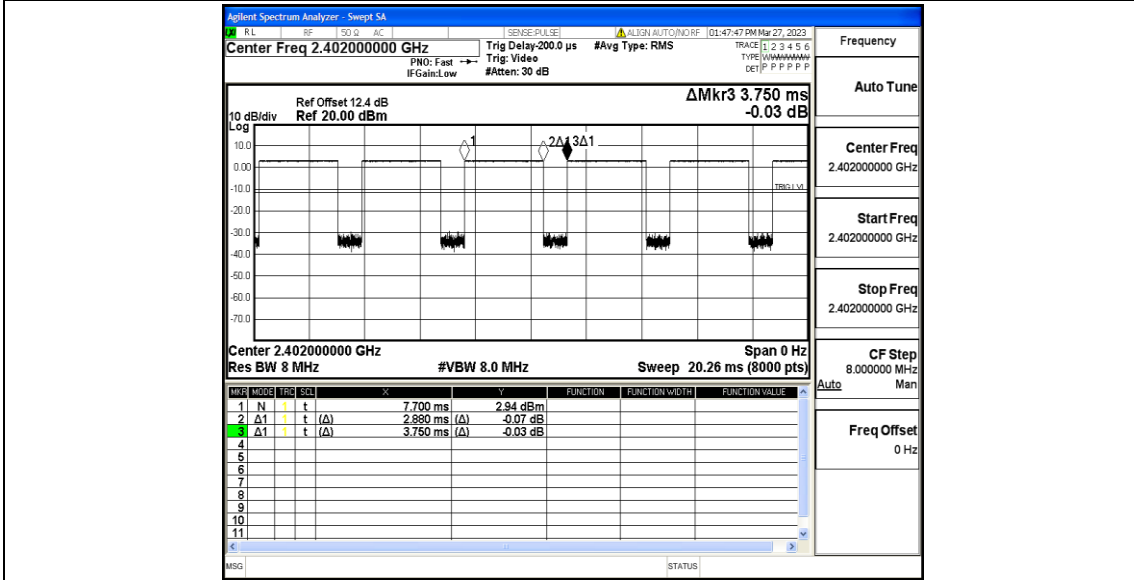
2DH5\_Ant1\_2480\_1000~26500

## Appendix I: Duty Cycle

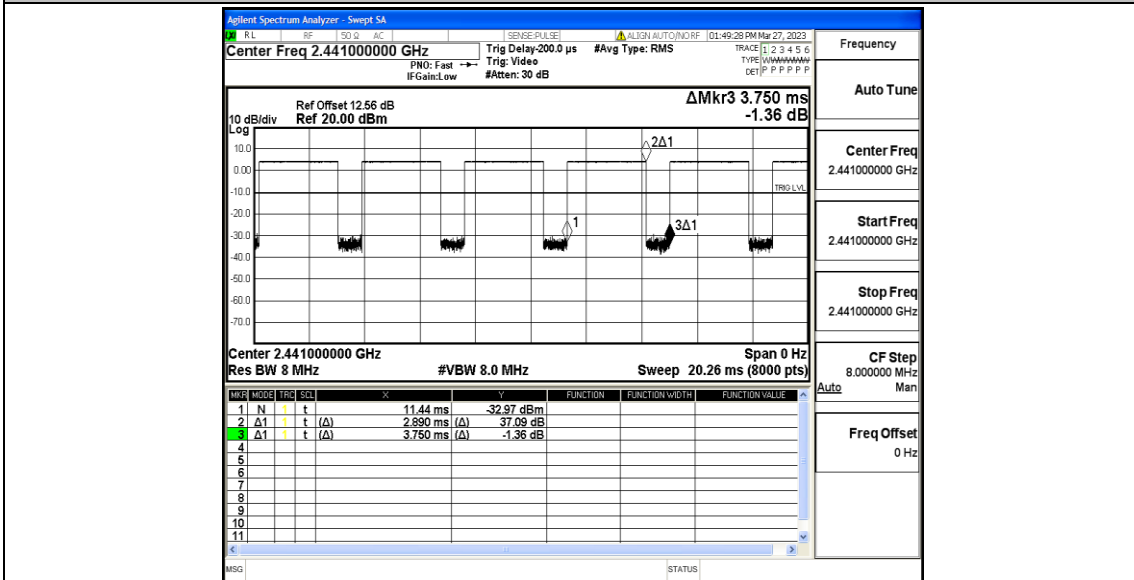
### Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.88	3.75	76.80	0.35
		2441	2.89	3.75	77.07	0.35
		2480	2.89	3.75	77.07	0.35
2DH5	Ant1	2402	0.00	0.85	100	$\infty$
		2441	0.00	0.85	100	$\infty$
		2480	0.00	0.85	100	$\infty$

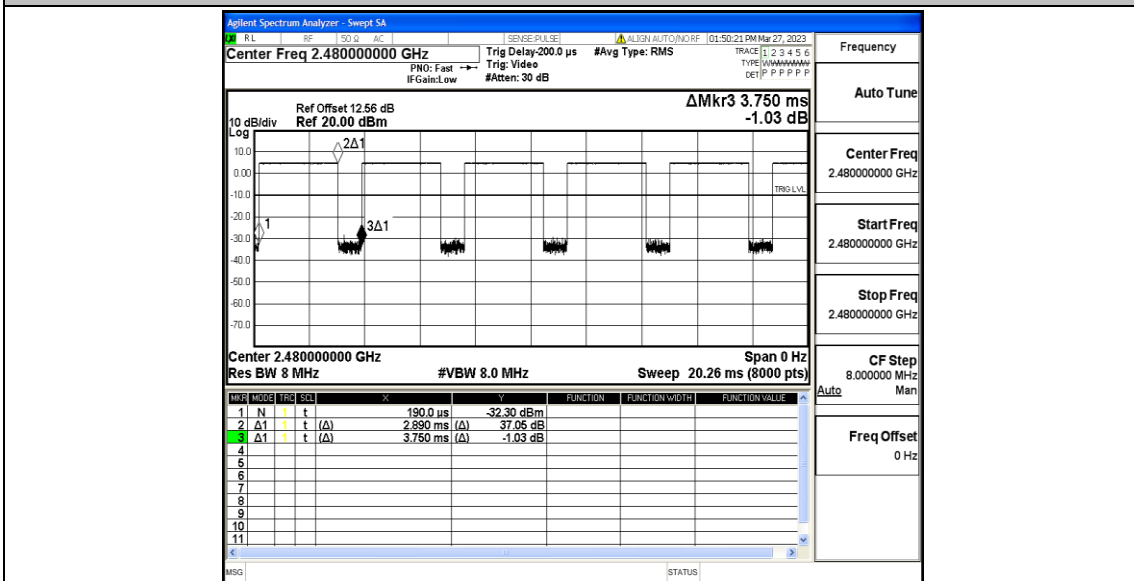
Test Graphs



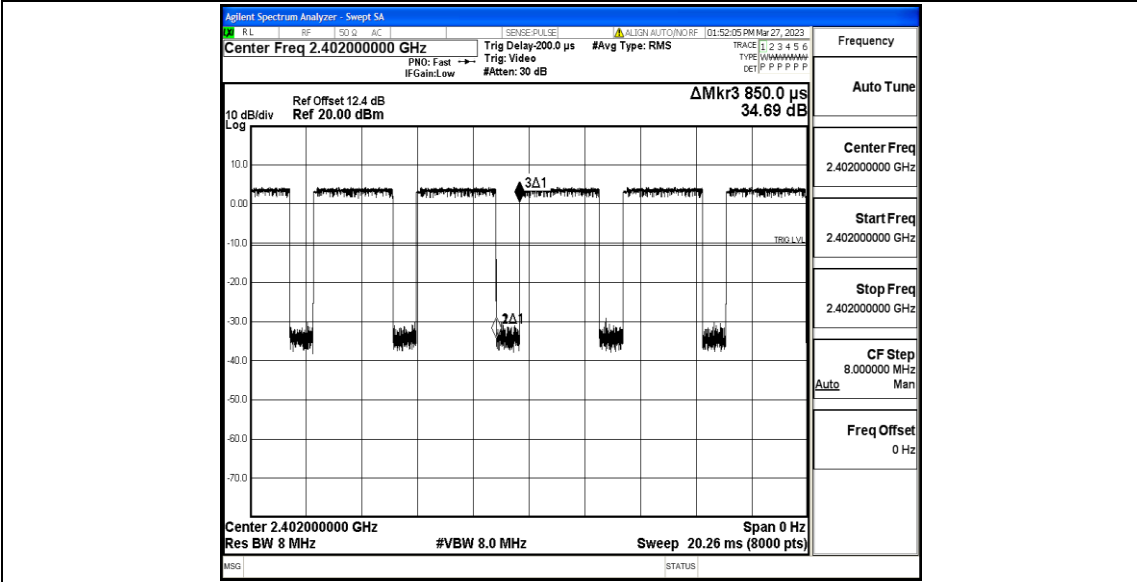
DH5\_Ant1\_2402



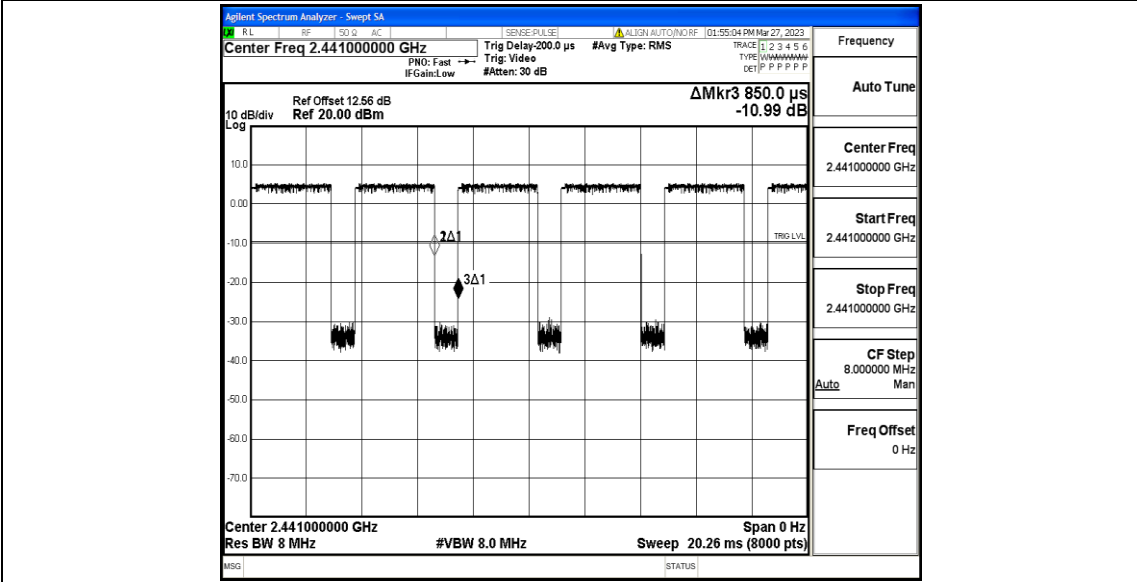
DH5\_Ant1\_2441



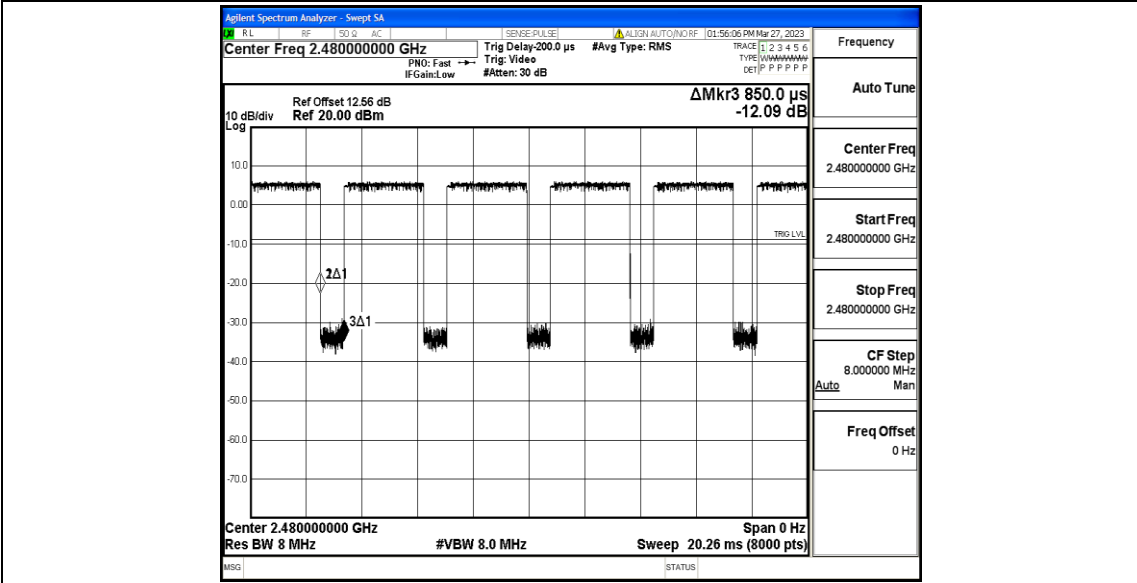
DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

## Appendix J: Emissions in Restricted Bands

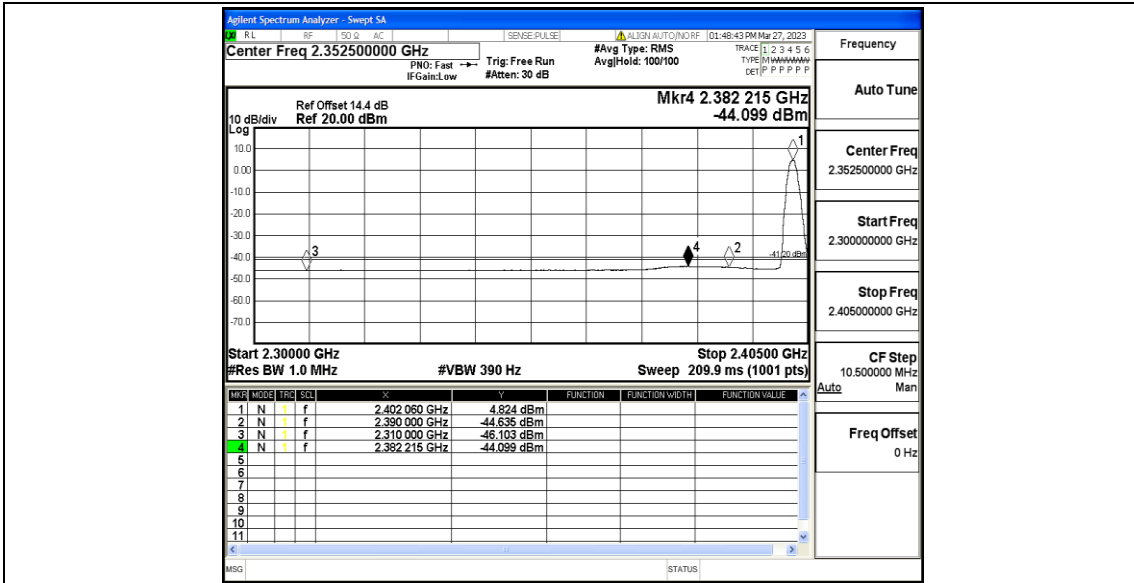
### Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-46.1	≤-41.20	PASS
				AV	2382.215	-44.1	≤-41.20	PASS
				AV	2390.000	-44.64	≤-41.20	PASS
				Peak	2310.000	-38.29	≤-21.20	PASS
				Peak	2381.375	-35.01	≤-21.20	PASS
				Peak	2390.000	-37.72	≤-21.20	PASS
		High	2480	AV	2483.500	-44.33	≤-41.20	PASS
				AV	2498.640	-43.4	≤-41.20	PASS
				AV	2500.000	-43.61	≤-41.20	PASS
				Peak	2483.500	-38.44	≤-21.20	PASS
				Peak	2498.080	-32.38	≤-21.20	PASS
				Peak	2500.000	-36.16	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-46.44	≤-41.20	PASS
				AV	2383.580	-44.72	≤-41.20	PASS
				AV	2390.000	-45.18	≤-41.20	PASS
				Peak	2310.000	-41.17	≤-21.20	PASS
				Peak	2389.670	-36.25	≤-21.20	PASS
				Peak	2390.000	-42.43	≤-21.20	PASS
		High	2480	AV	2483.500	-44.65	≤-41.20	PASS
				AV	2499.280	-44.09	≤-41.20	PASS
				AV	2500.000	-44.11	≤-41.20	PASS
				Peak	2483.500	-38.33	≤-21.20	PASS
				Peak	2498.320	-35.41	≤-21.20	PASS
				Peak	2500.000	-39.13	≤-21.20	PASS

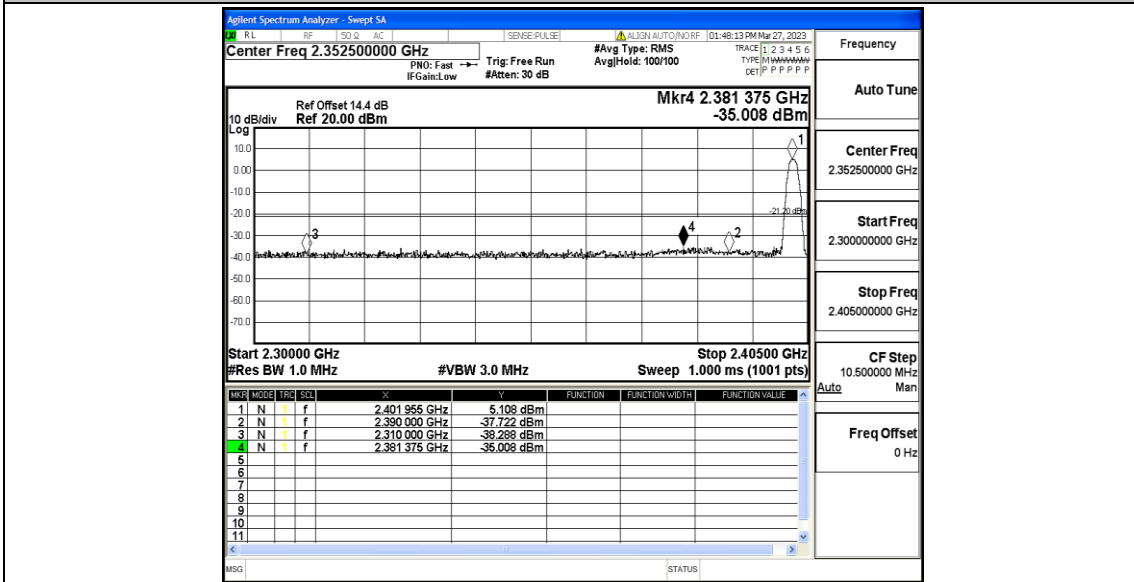
Note:

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.

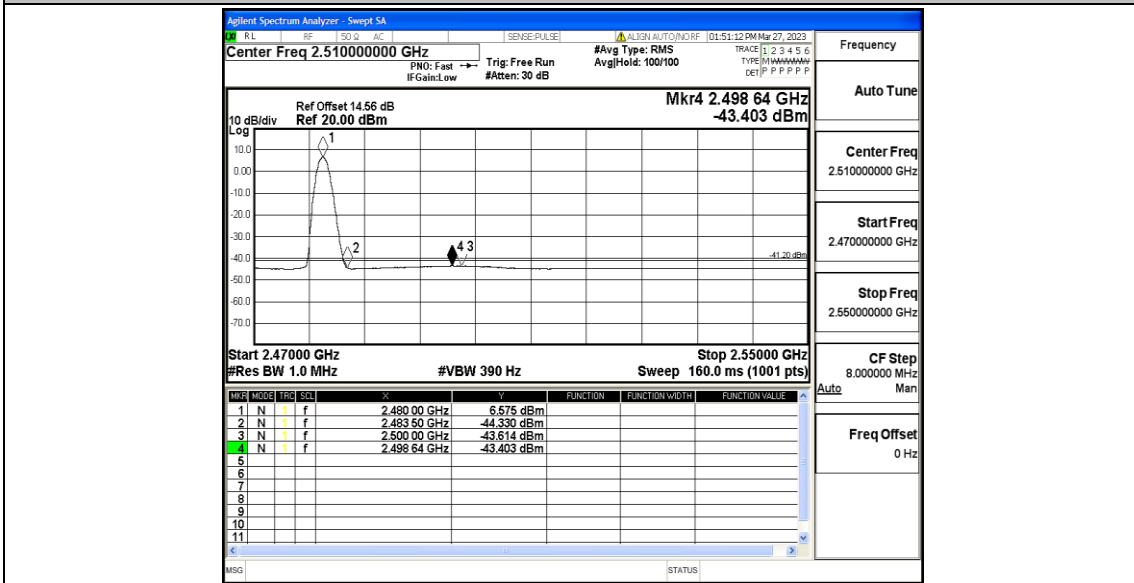
Test Graphs



DH5\_Ant1\_Low\_2402\_AV

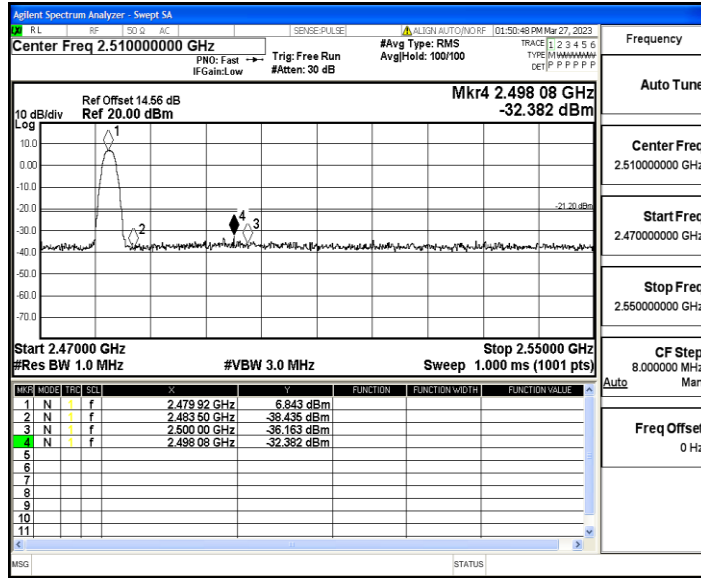


DH5\_Ant1\_Low\_2402\_Peak

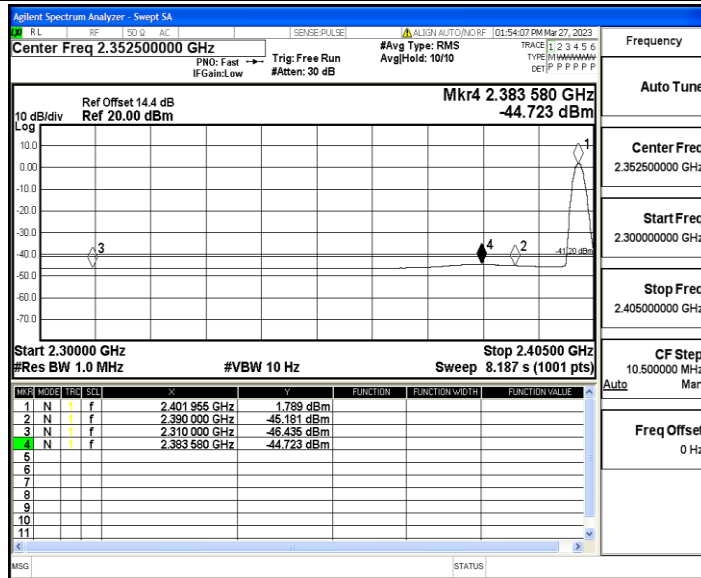


DH5\_Ant1\_High\_2480\_AV

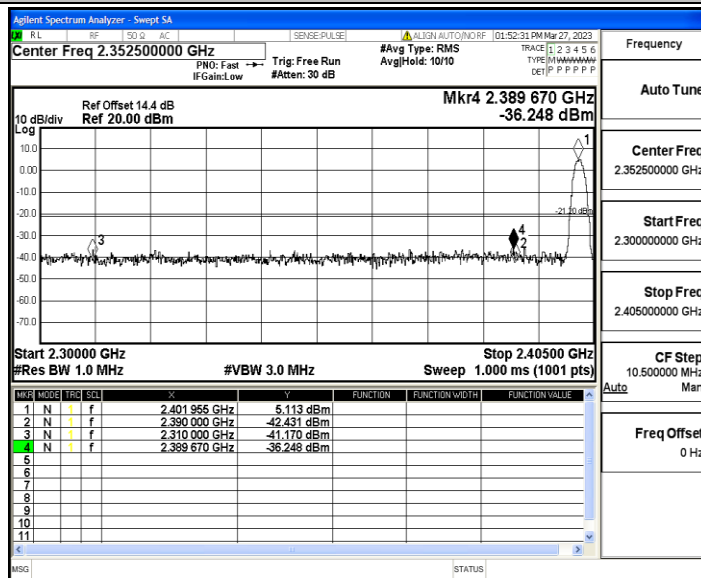




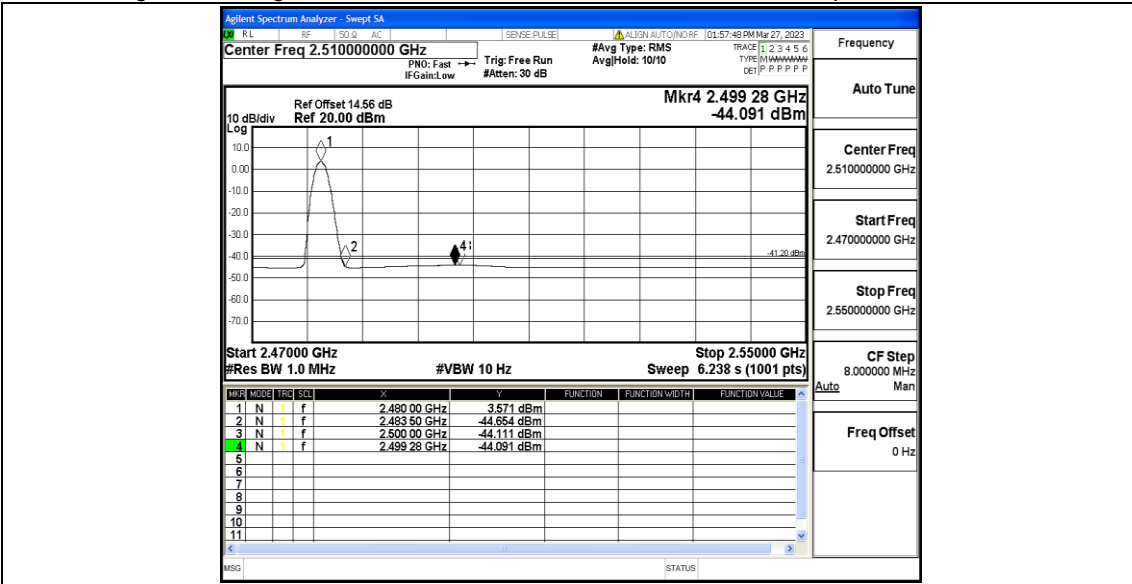
DH5\_Ant1\_High\_2480\_Peak



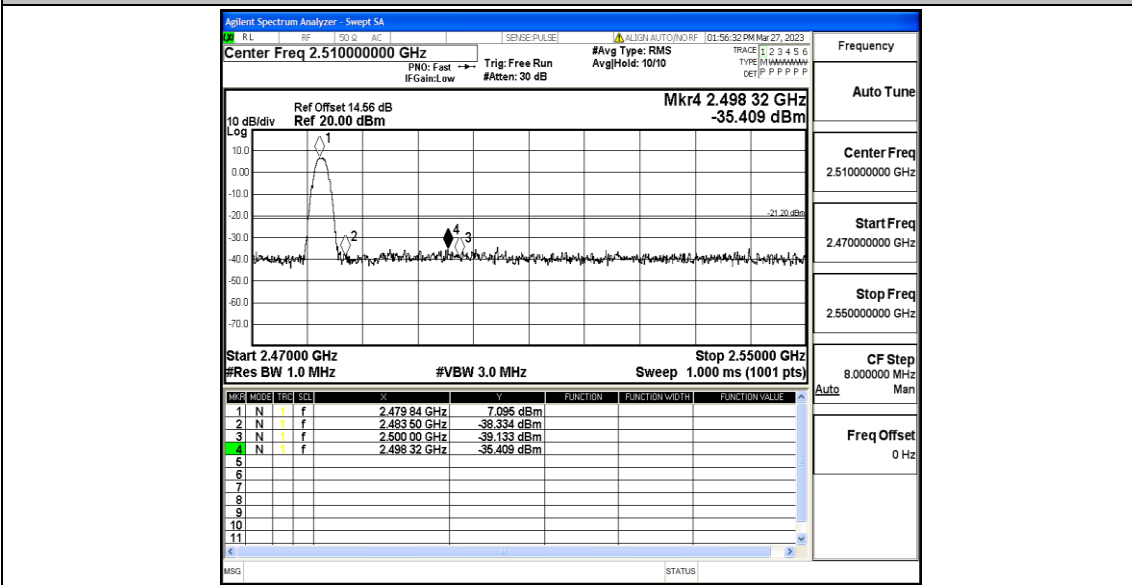
2DH5\_Ant1\_Low\_2402\_AV



2DH5\_Ant1\_Low\_2402\_Peak



2DH5\_Ant1\_High\_2480\_AV



2DH5\_Ant1\_High\_2480\_Peak