

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

Product Name: True Wireless Stereo Bluetooth Headset

Trade Mark: aigo

Test Model: SA03

FCC ID: 2ASNB-SA03

### Environmental Conditions

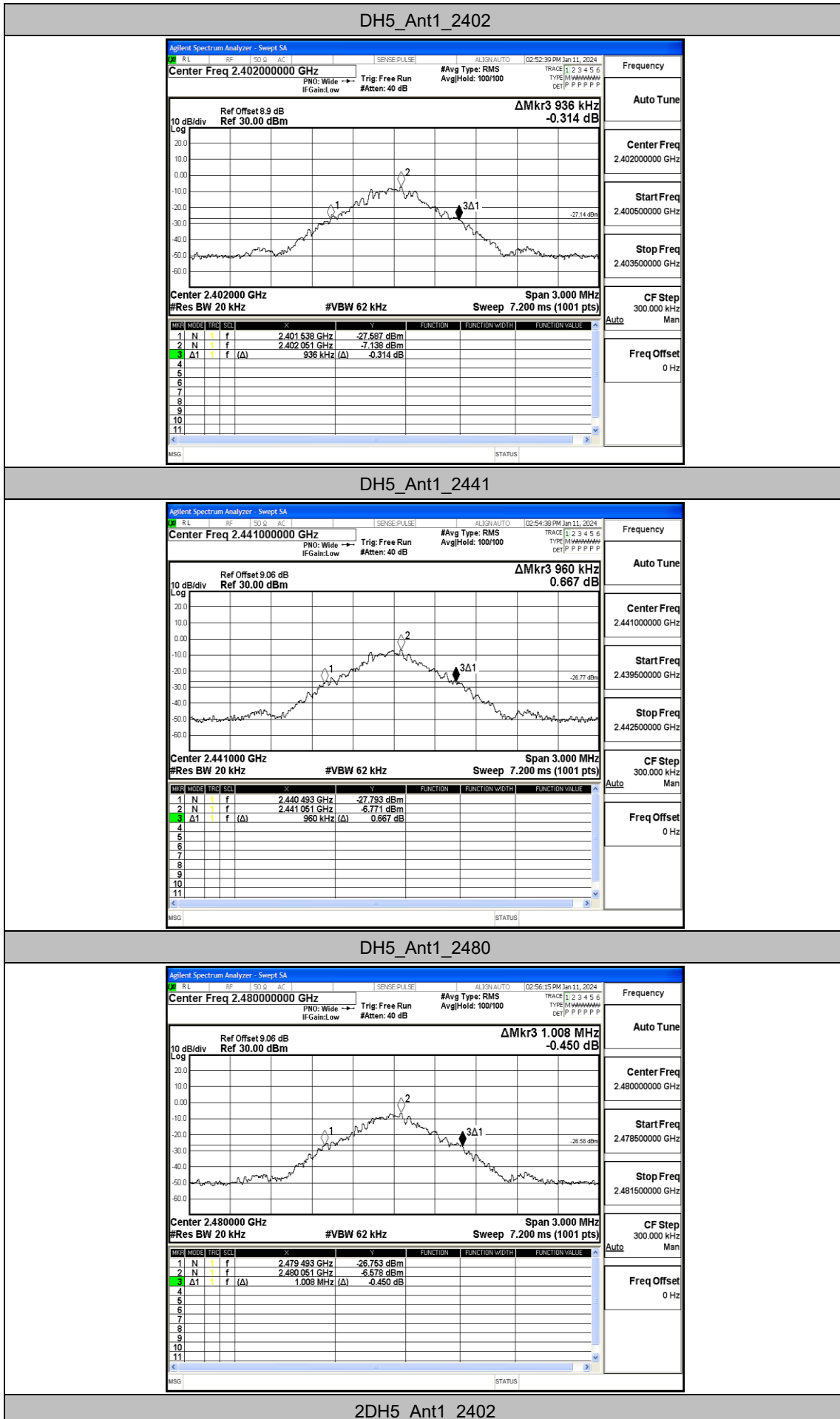
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

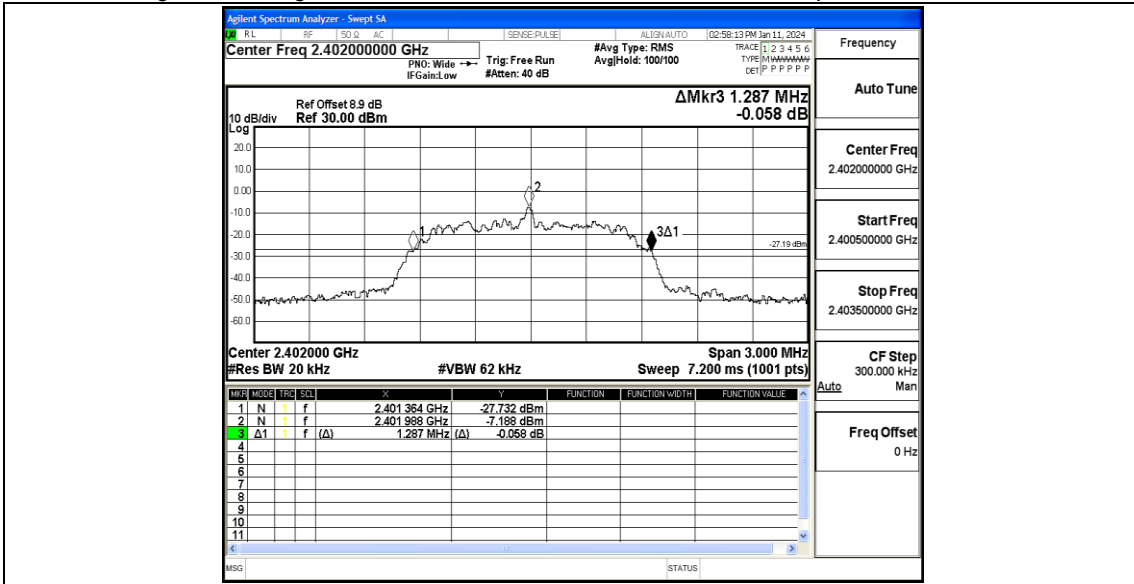
## Appendix A: 20dB Emission Bandwidth

### Test Result

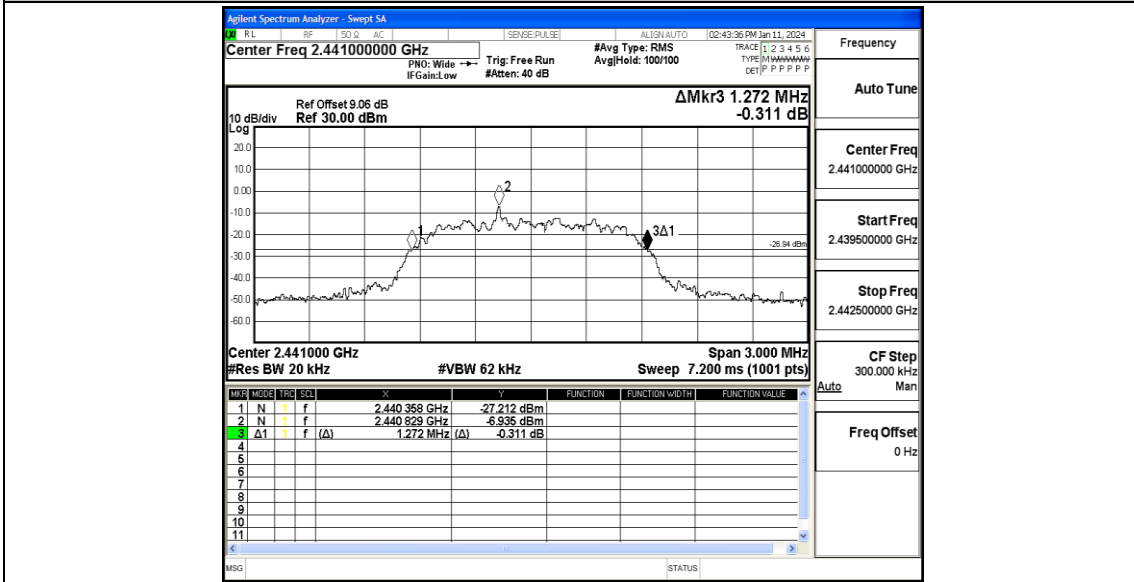
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.538	2402.474	---	---
		2441	0.960	2440.493	2441.453	---	---
		2480	1.008	2479.493	2480.501	---	---
2DH5	Ant1	2402	1.287	2401.364	2402.651	---	---
		2441	1.272	2440.358	2441.630	---	---
		2480	1.356	2479.322	2480.678	---	---

Test Graphs

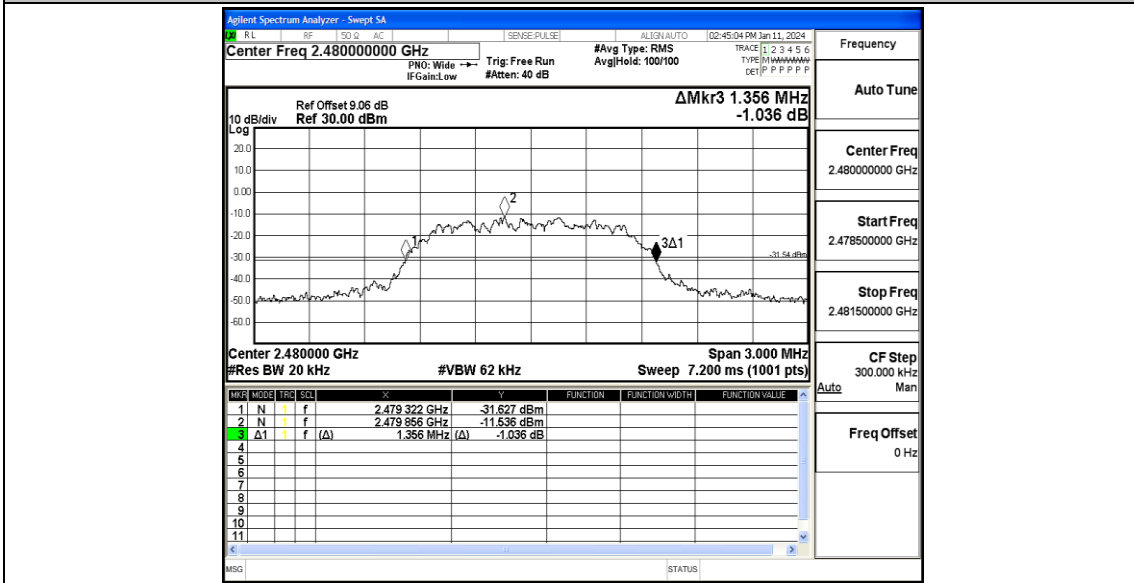




2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

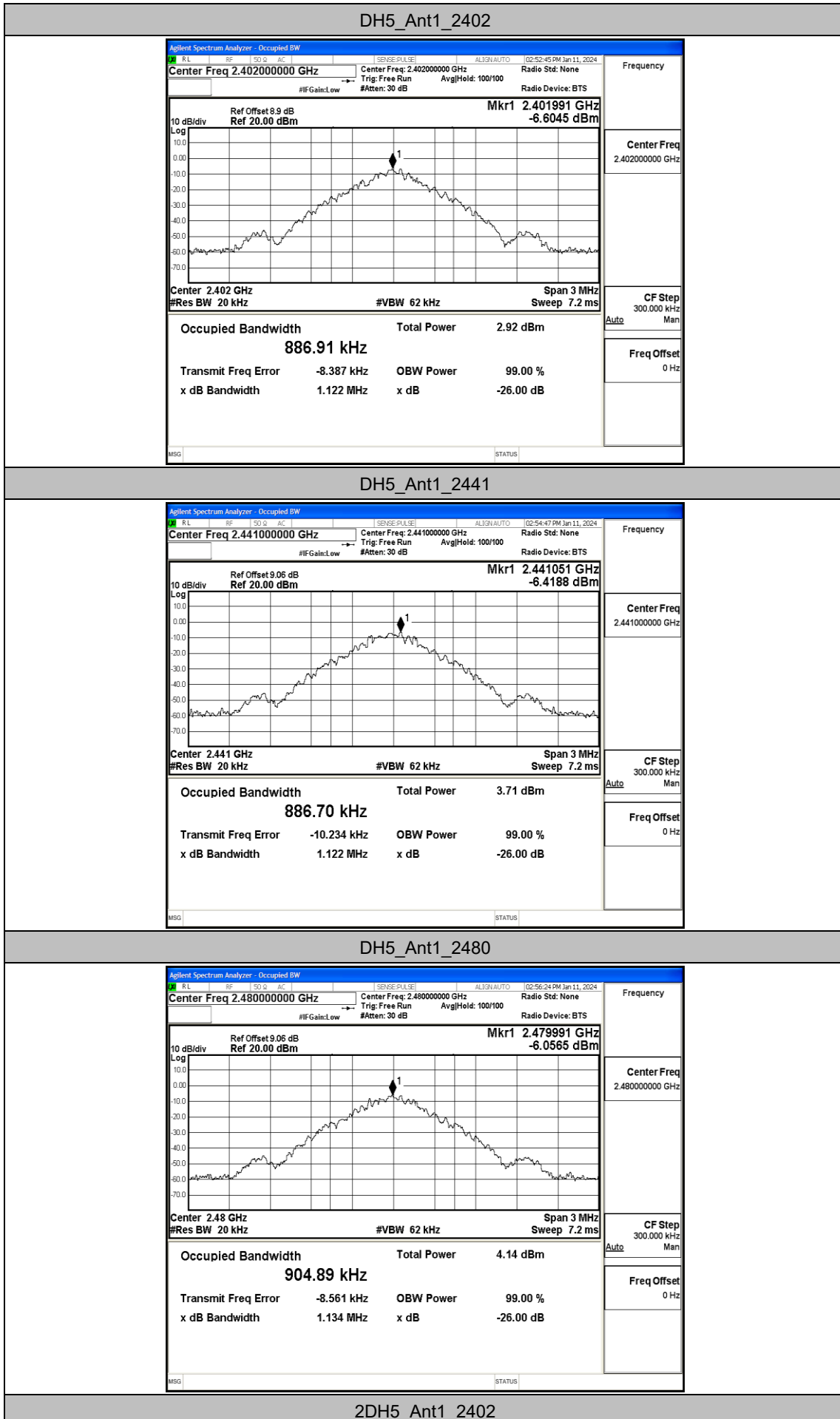


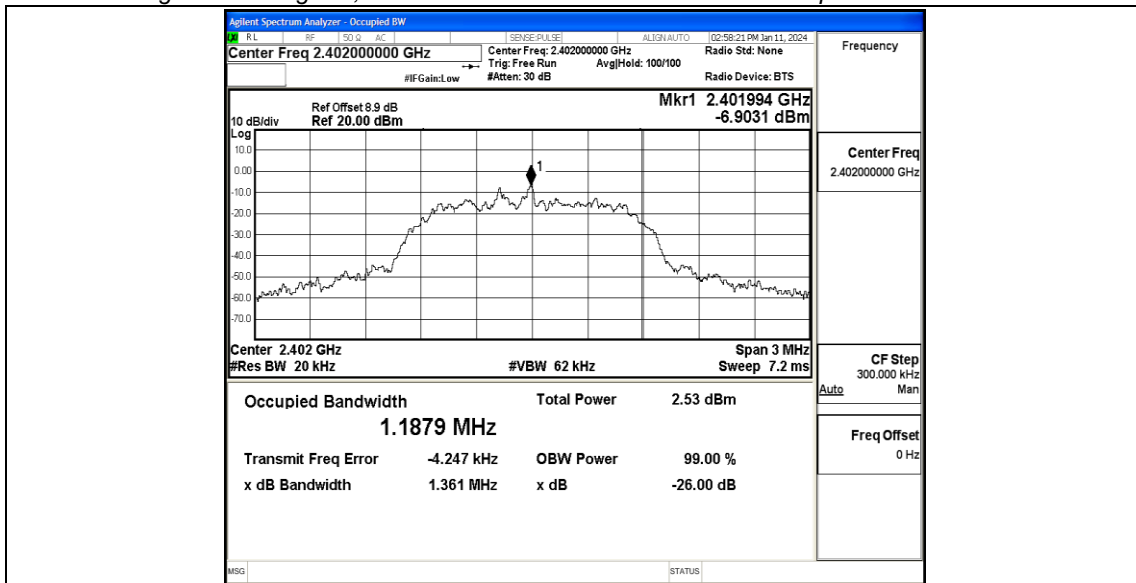
## Appendix B: Occupied Channel Bandwidth

### Test Result

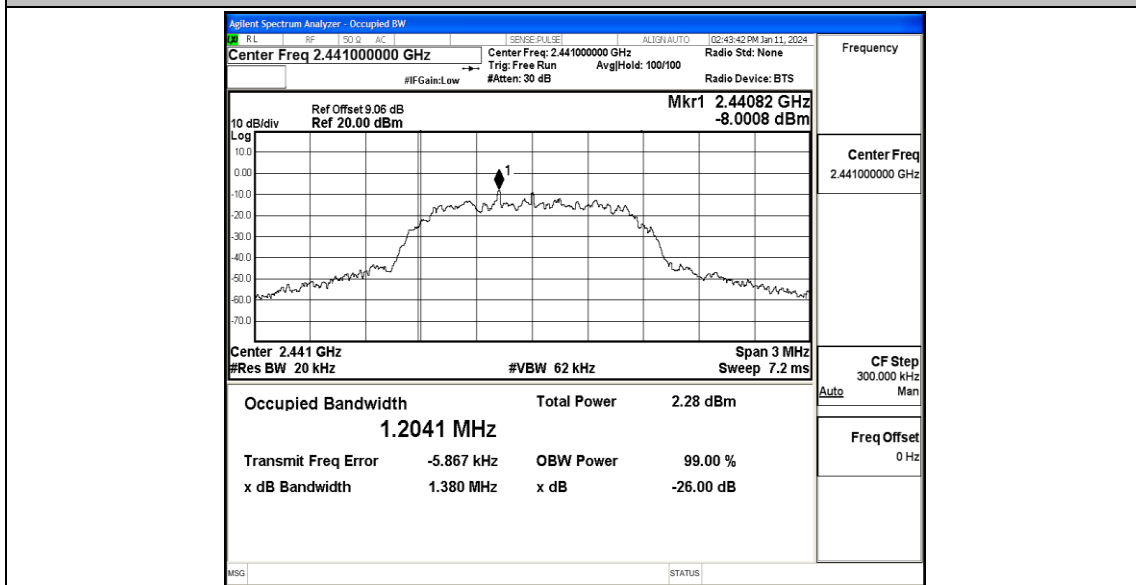
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88691	2401.5482	2402.4351	---	---
		2441	0.88670	2440.5464	2441.4331	---	---
		2480	0.90489	2479.5390	2480.4439	---	---
2DH5	Ant1	2402	1.1879	2401.4018	2402.5897	---	---
		2441	1.2041	2440.3921	2441.5962	---	---
		2480	1.1923	2479.3986	2480.5909	---	---

### Test Graphs

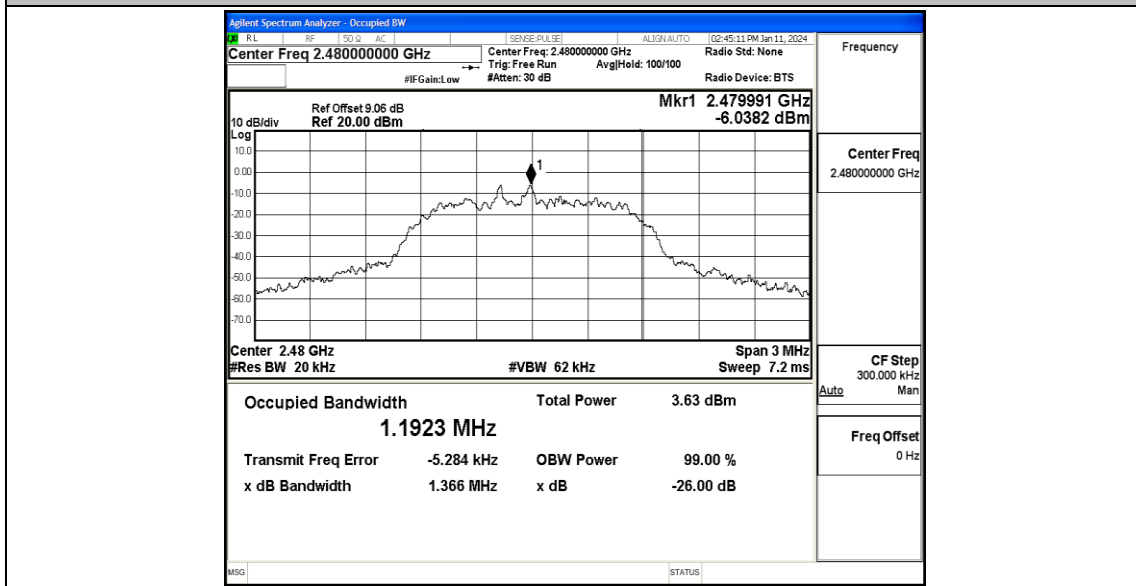




2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

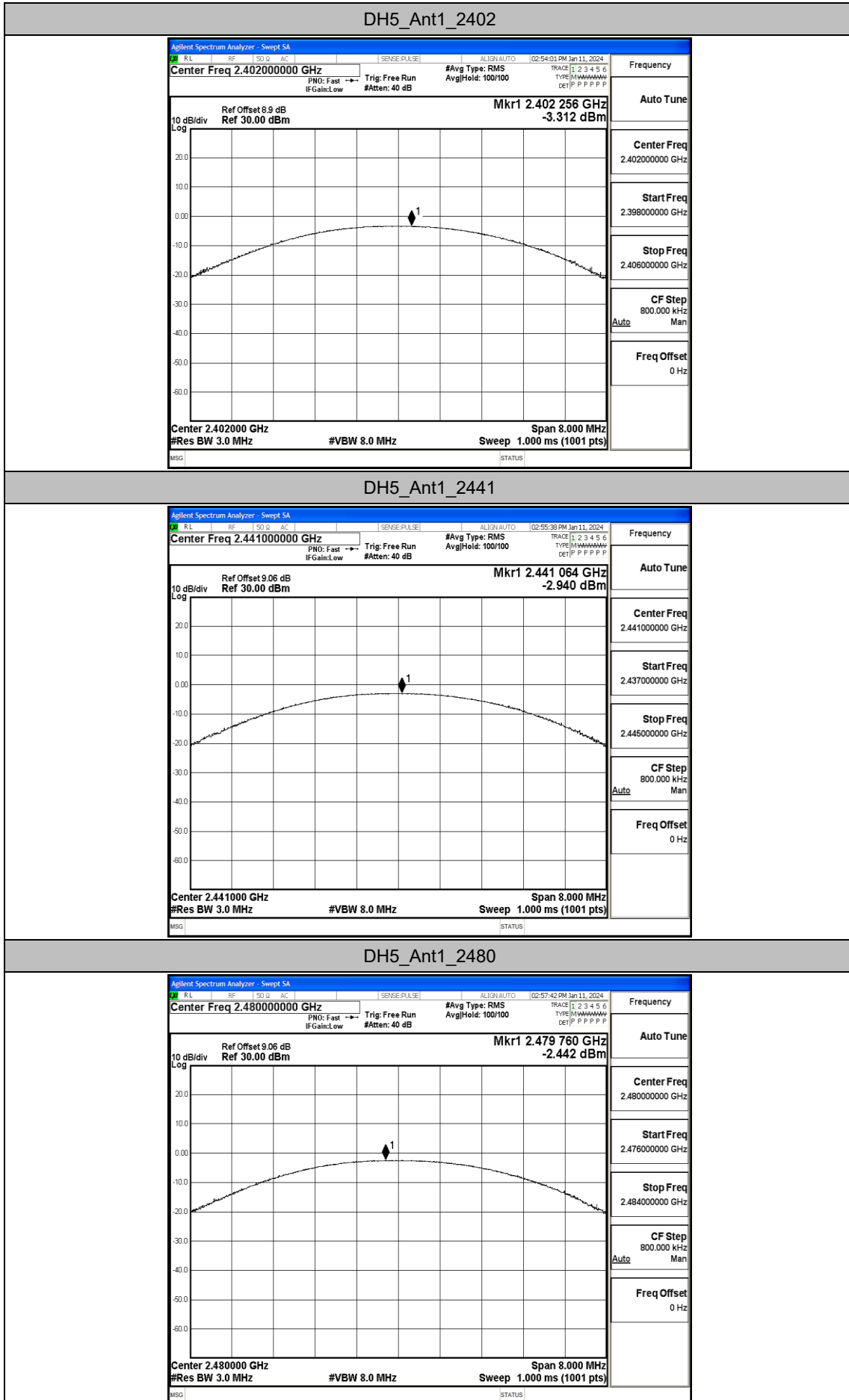


## Appendix C: Maximum Peak conducted output power

### Test Result

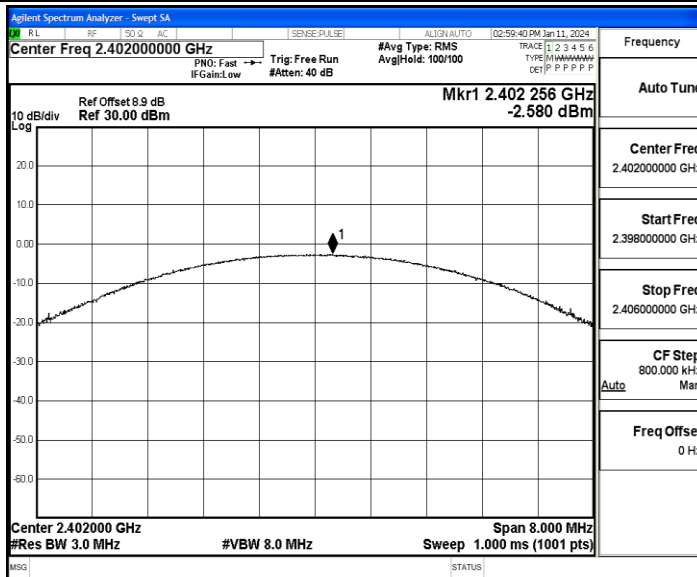
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-3.31	≤30	PASS
		2441	-2.94	≤30	PASS
		2480	-2.44	≤30	PASS
2DH5	Ant1	2402	-2.58	≤20.97	PASS
		2441	-2.18	≤20.97	PASS
		2480	-1.67	≤20.97	PASS

### Test Graphs

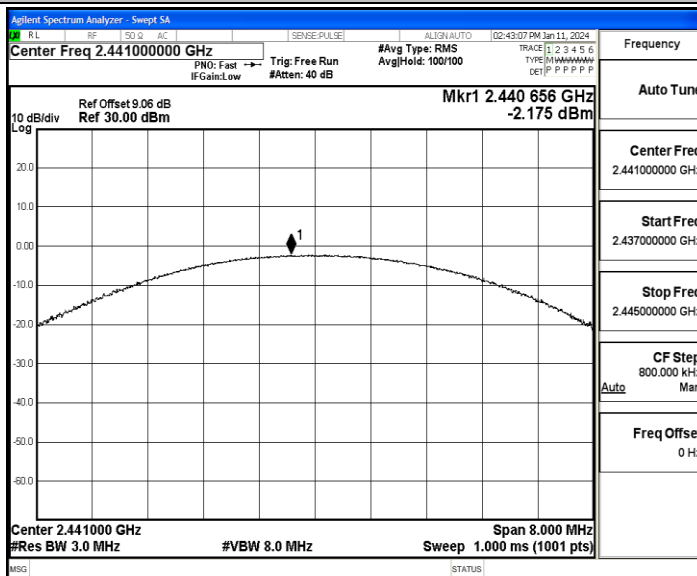




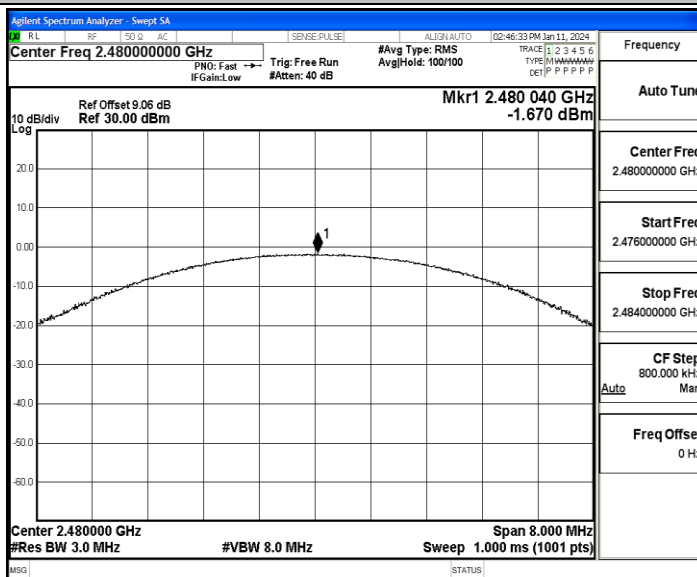
2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480

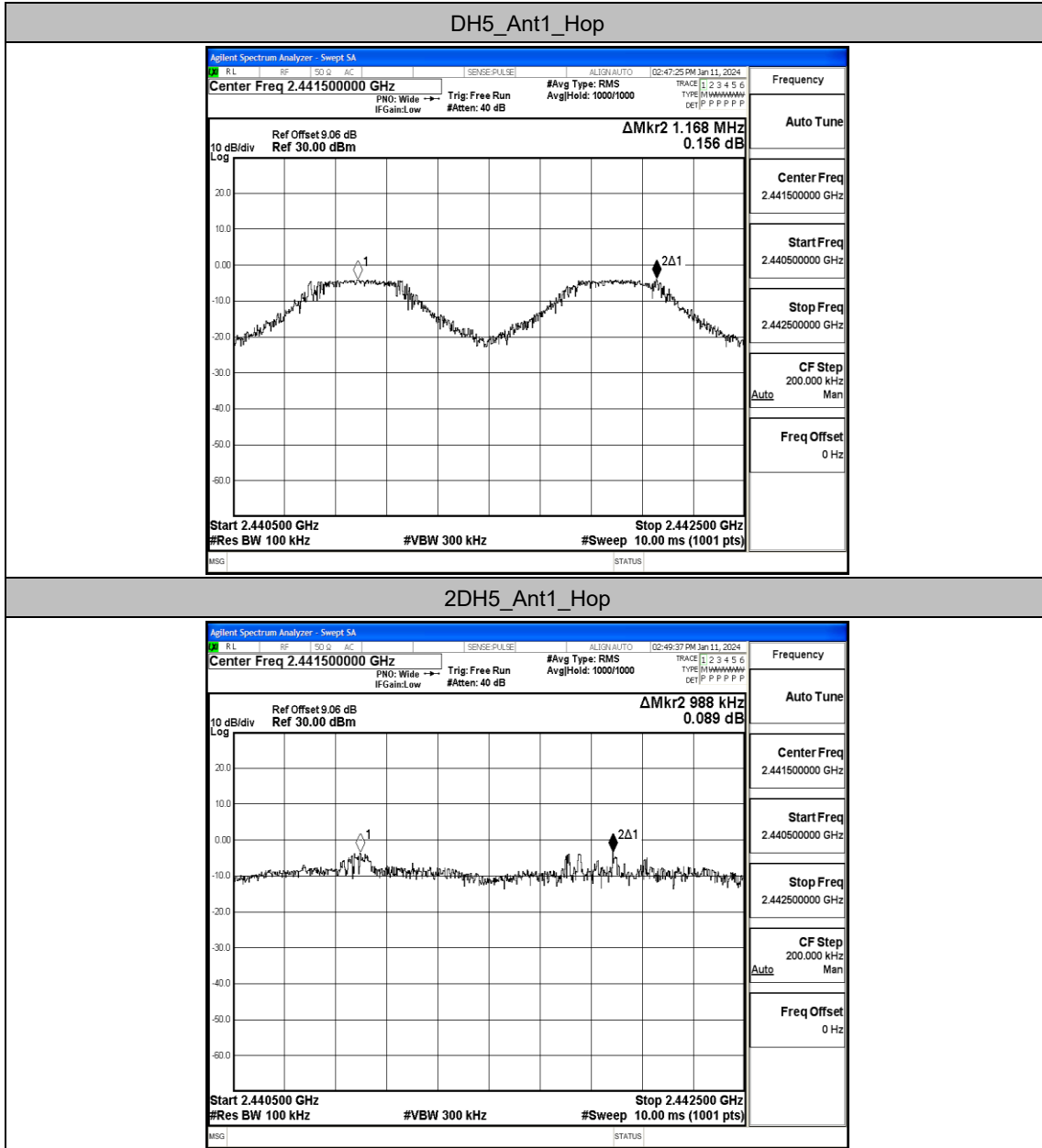


## Appendix D: Carrier frequency separation

### Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.168	$\geq 1.026$	PASS
2DH5	Ant1	Hop	0.988	$\geq 0.906$	PASS

### Test Graphs

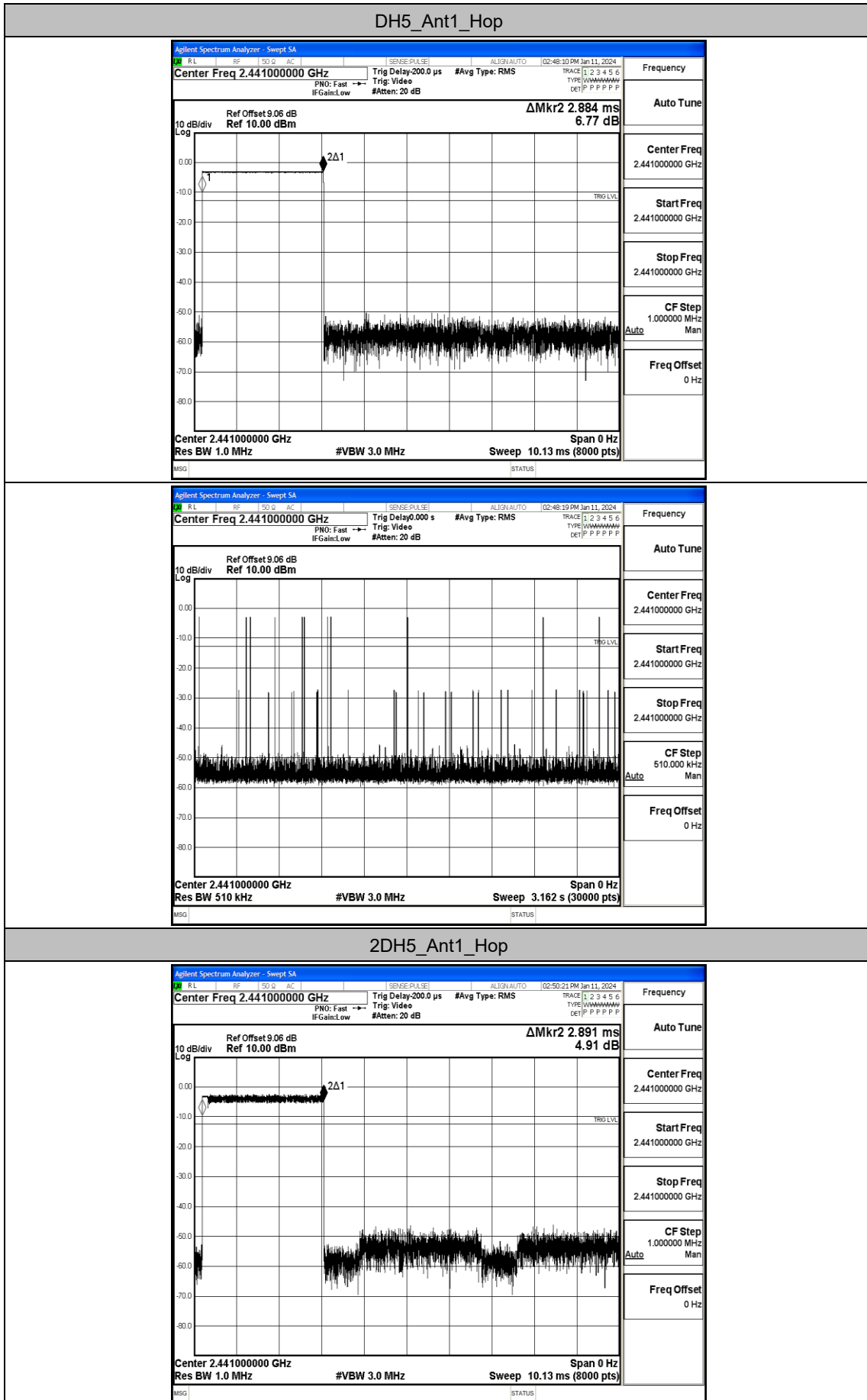


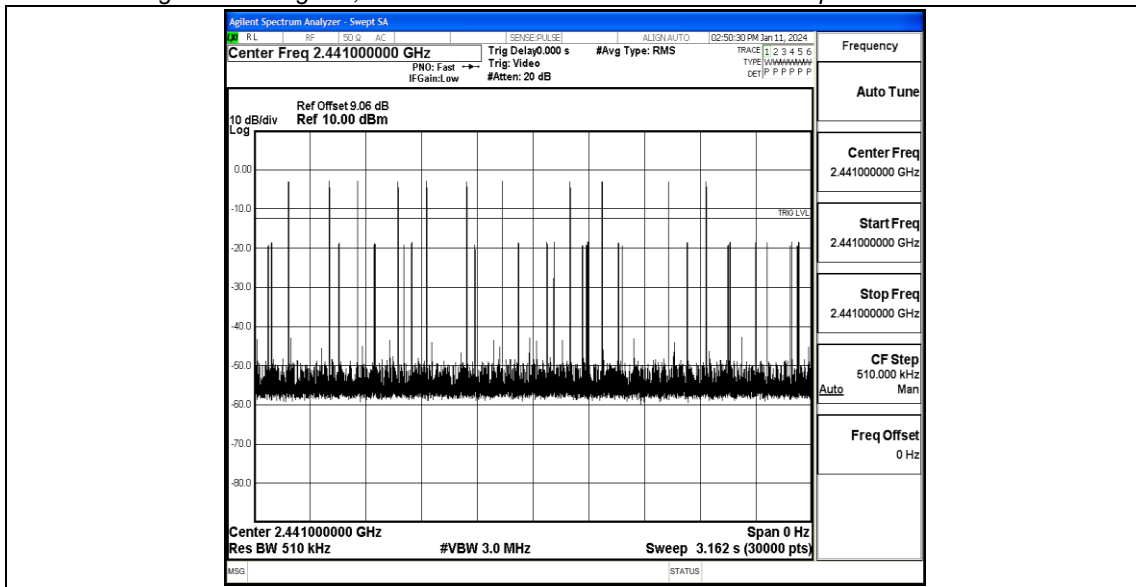
## Appendix E: Time of occupancy

### Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.884	120	0.346	≤0.4	PASS
2DH5	Ant1	Hop	2.891	120	0.347	≤0.4	PASS

### Test Graphs



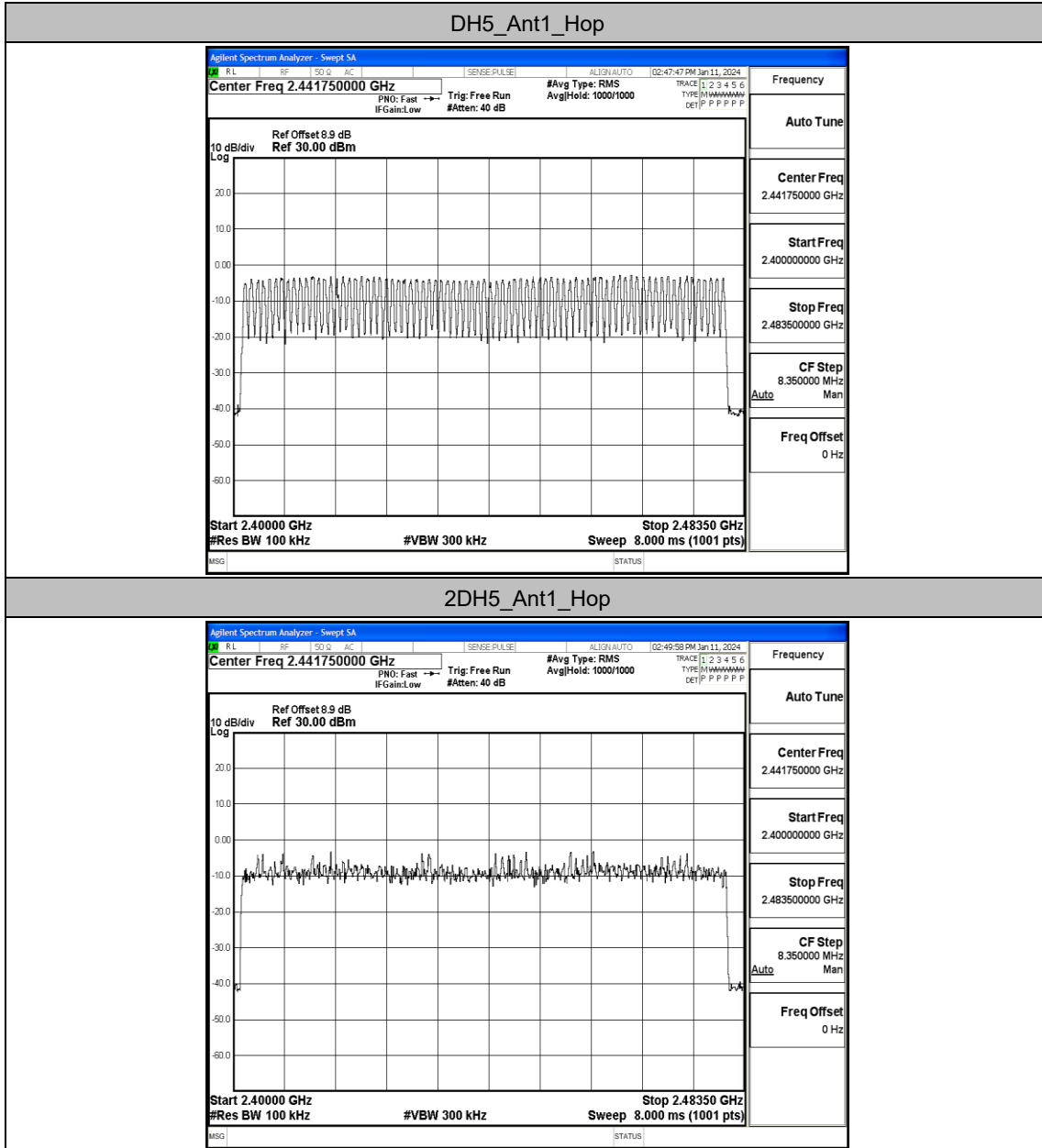


## Appendix F: Number of hopping channels

### Test Result

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

### Test Graphs



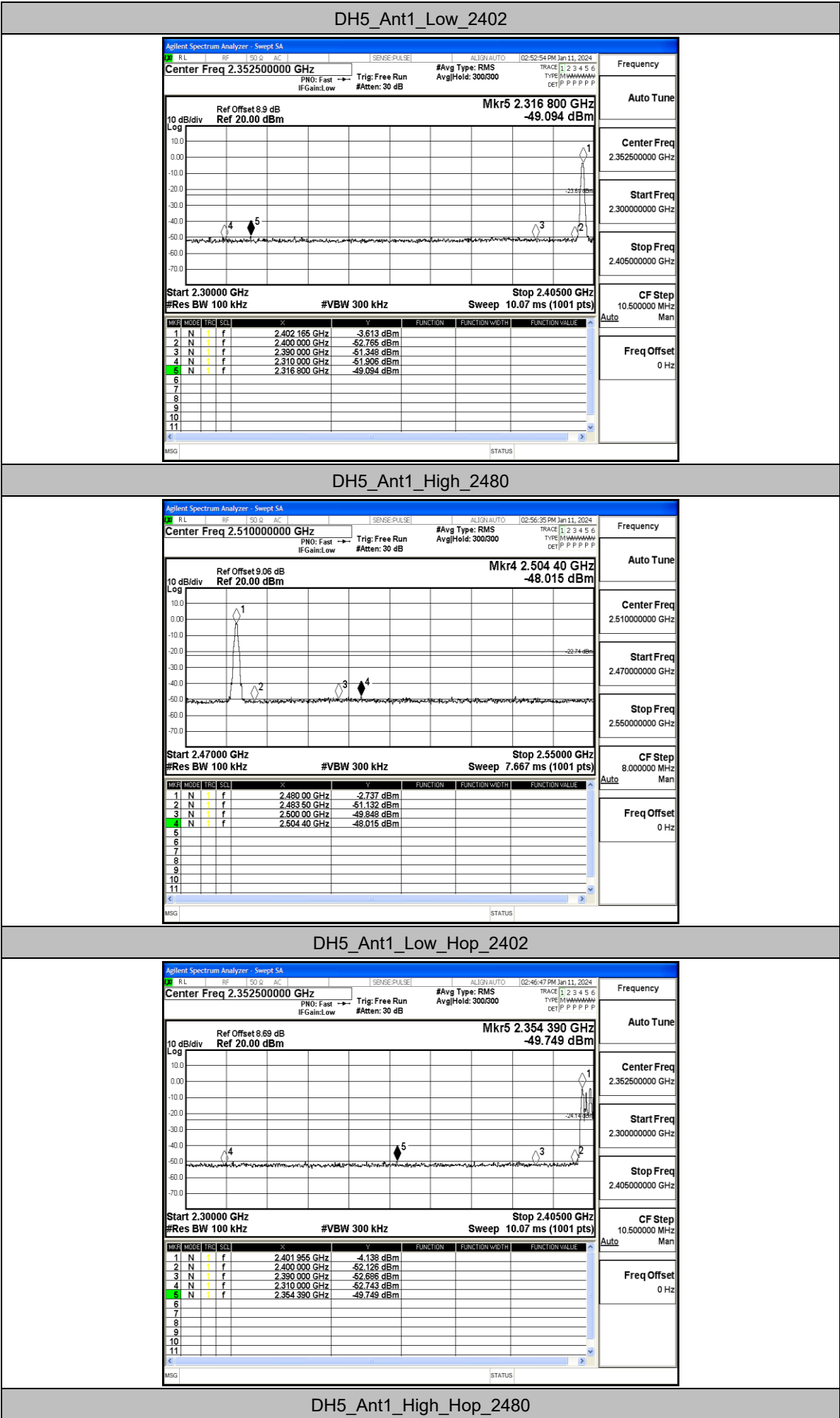


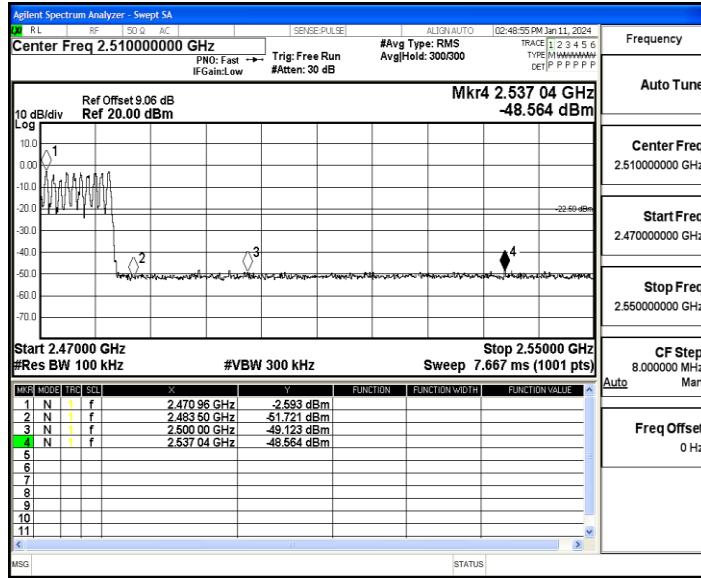
## Appendix G: Band edge measurements

### Test Result

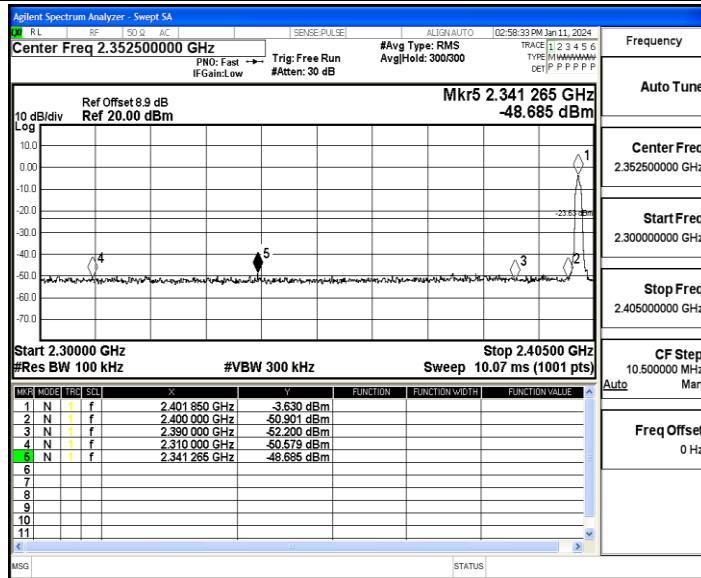
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.61	-49.09	≤-23.61	PASS
		High	2480	-2.74	-48.02	≤-22.74	PASS
		Low	Hop_2402	-4.14	-49.75	≤-24.14	PASS
		High	Hop_2480	-2.59	-48.56	≤-22.59	PASS
2DH5	Ant1	Low	2402	-3.63	-48.69	≤-23.63	PASS
		High	2480	-2.76	-46.54	≤-22.76	PASS
		Low	Hop_2402	-5.27	-50.11	≤-25.27	PASS
		High	Hop_2480	-4.22	-48.55	≤-24.22	PASS

Test Graphs

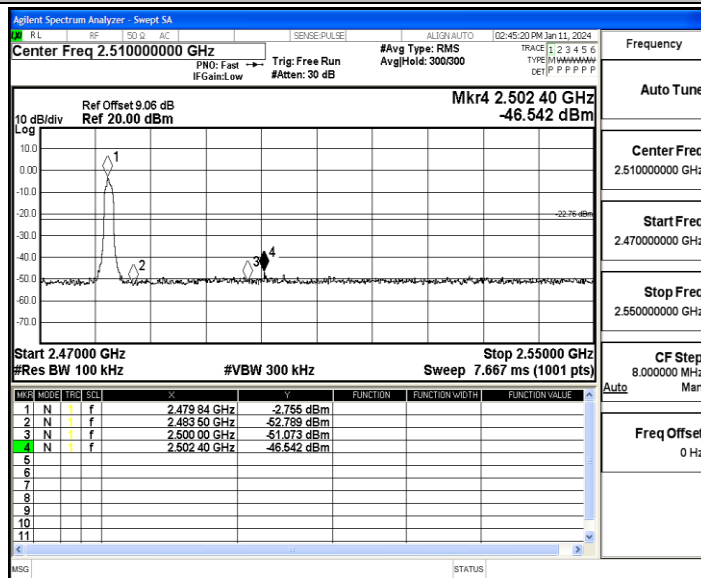




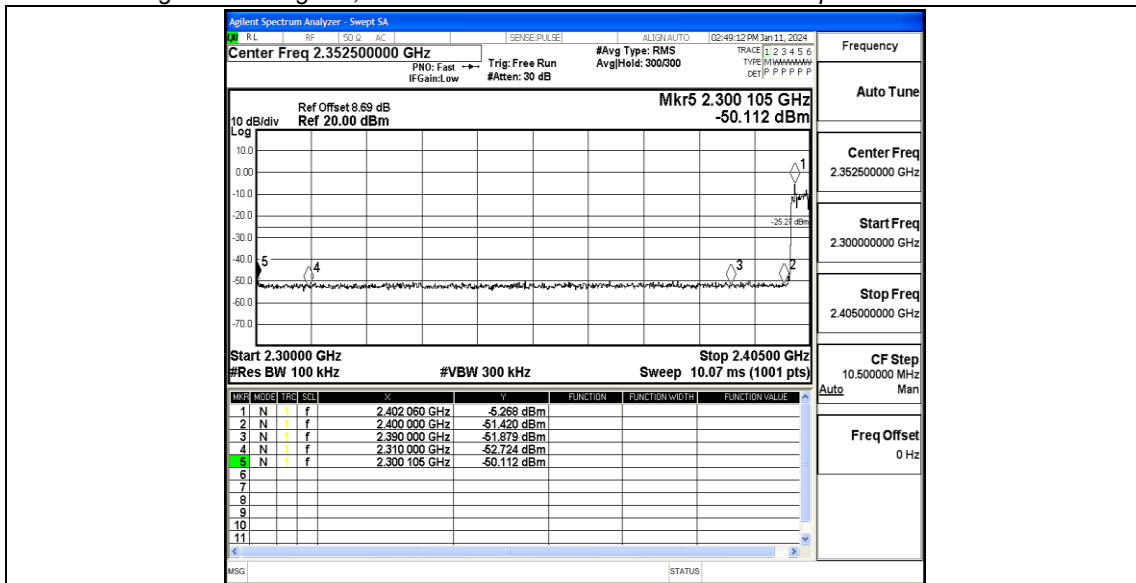
2D5\_Ant1\_Low\_2402



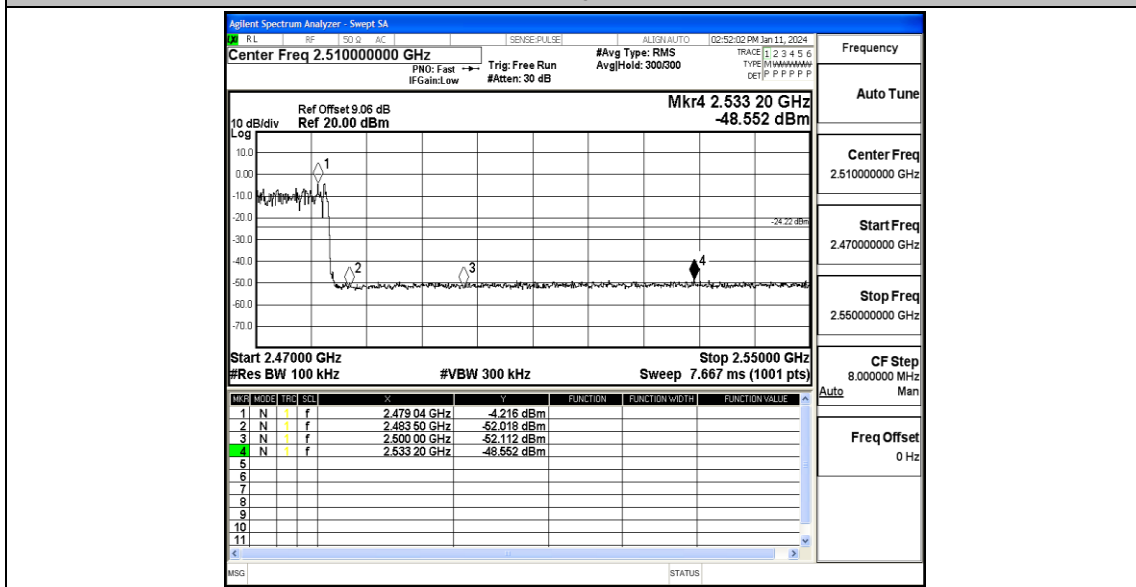
2D5\_Ant1\_High\_2480



2D5\_Ant1\_Low\_Hop\_2402



2DH5\_Ant1\_High\_Hop\_2480

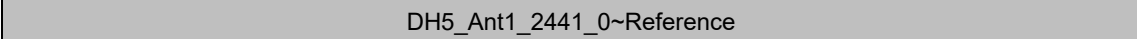
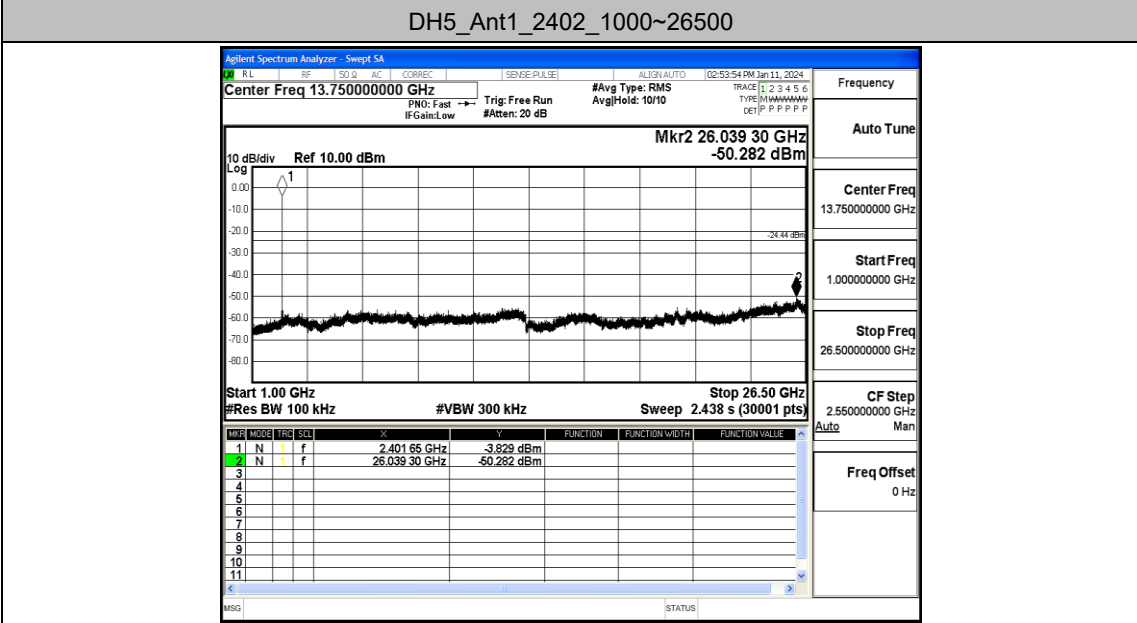
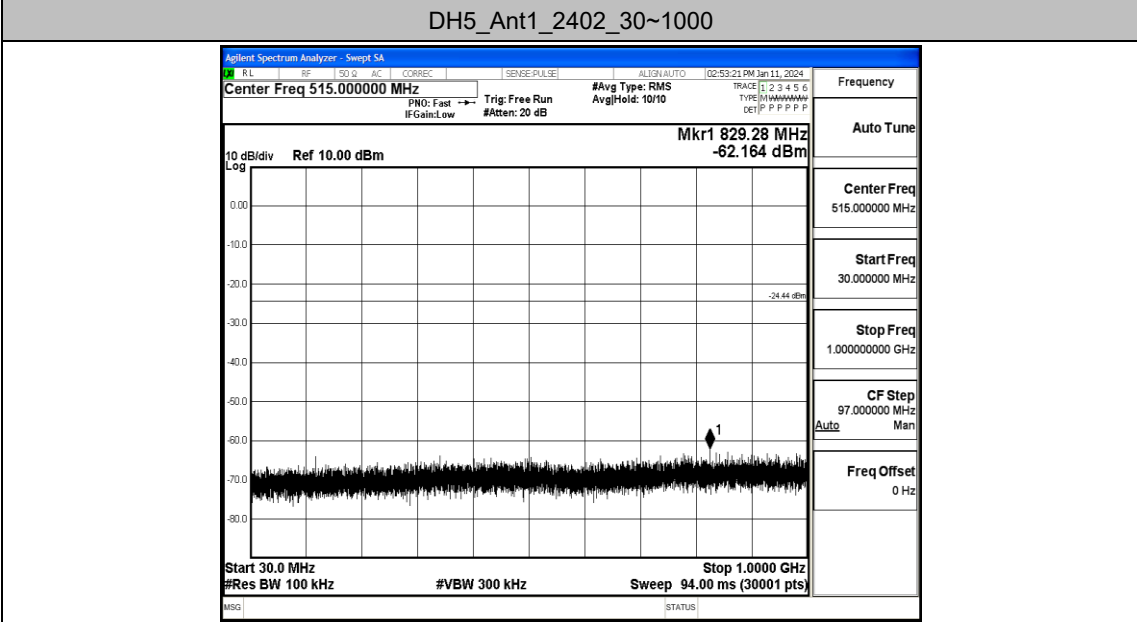
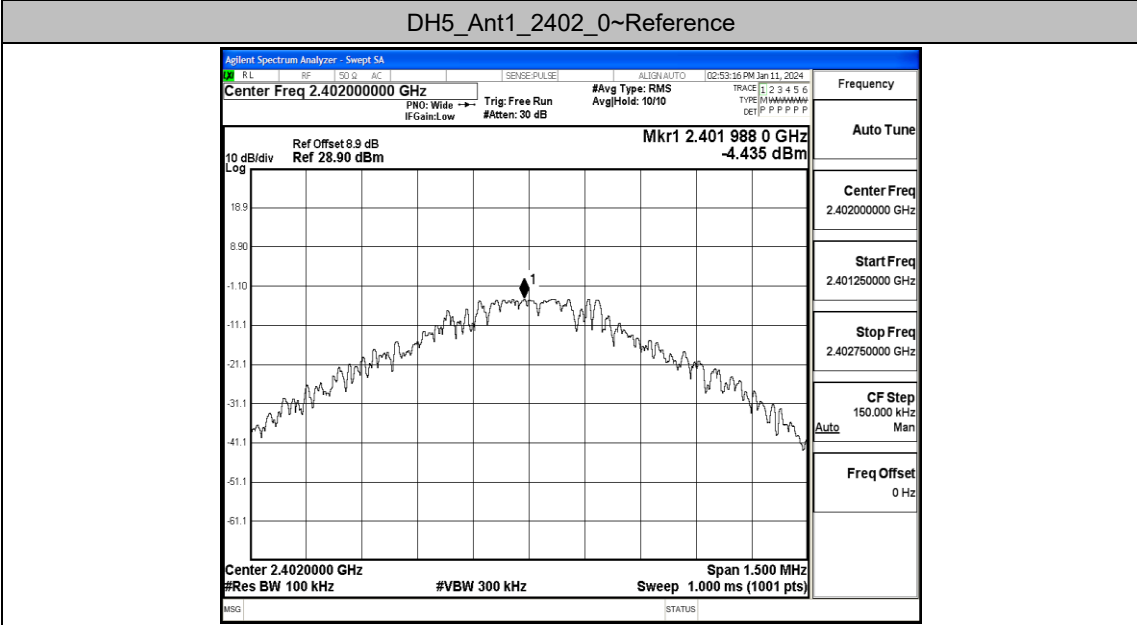


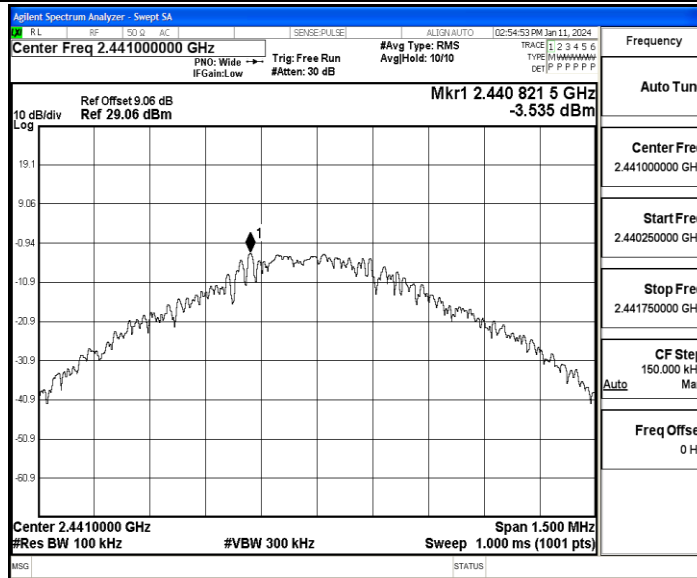
## Appendix H: Conducted Spurious Emission

### Test Result

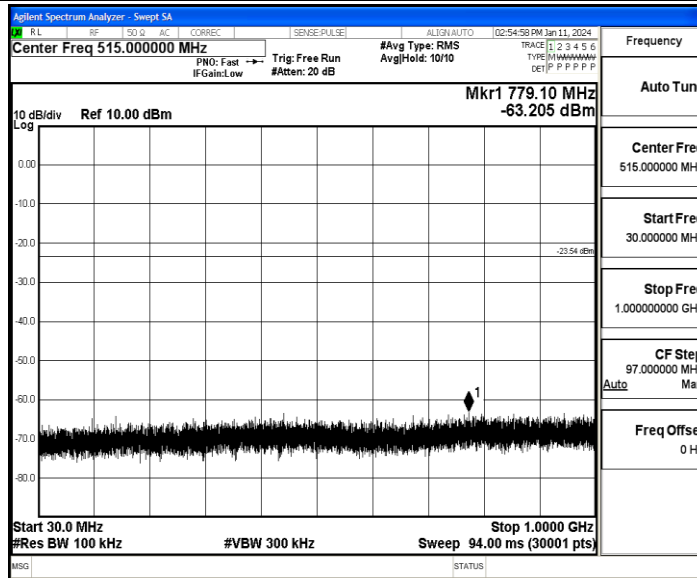
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-4.44	-4.44	---	PASS
			30~1000	-4.44	-62.16	≤-24.44	PASS
			1000~26500	-4.44	-50.28	≤-24.44	PASS
		2441	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-63.21	≤-23.54	PASS
			1000~26500	-3.54	-50.82	≤-23.54	PASS
		2480	Reference	-3.17	-3.17	---	PASS
			30~1000	-3.17	-63.06	≤-23.17	PASS
			1000~26500	-3.17	-51.22	≤-23.17	PASS
2DH5	Ant1	2402	Reference	-4.86	-4.86	---	PASS
			30~1000	-4.86	-62.3	≤-24.86	PASS
			1000~26500	-4.86	-50.81	≤-24.86	PASS
		2441	Reference	-3.41	-3.41	---	PASS
			30~1000	-3.41	-61.72	≤-23.41	PASS
			1000~26500	-3.41	-50.65	≤-23.41	PASS
		2480	Reference	-5.24	-5.24	---	PASS
			30~1000	-5.24	-62.27	≤-25.24	PASS
			1000~26500	-5.24	-50.65	≤-25.24	PASS

Test Graphs

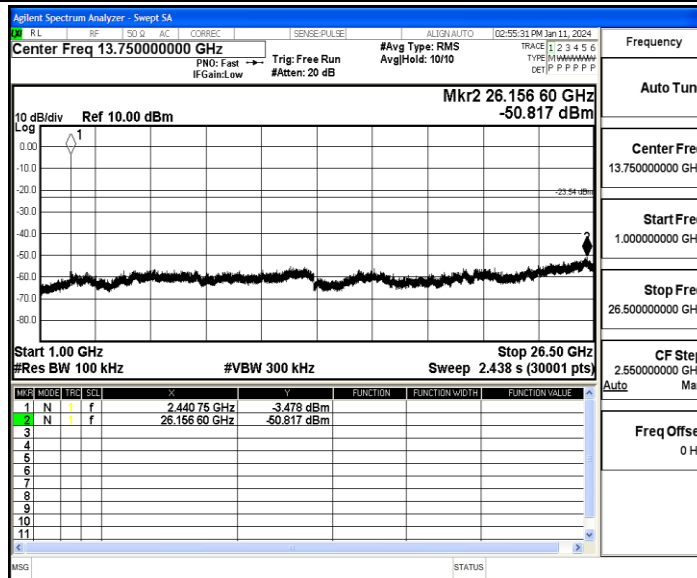




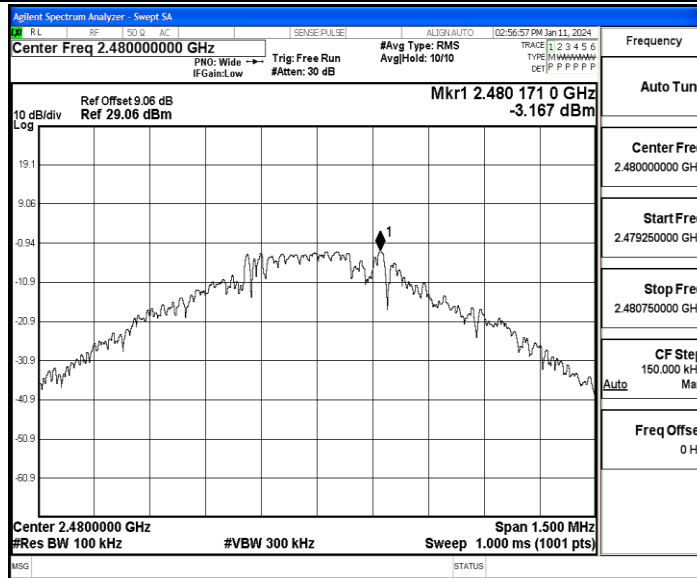
DH5\_Ant1\_2441\_30~1000



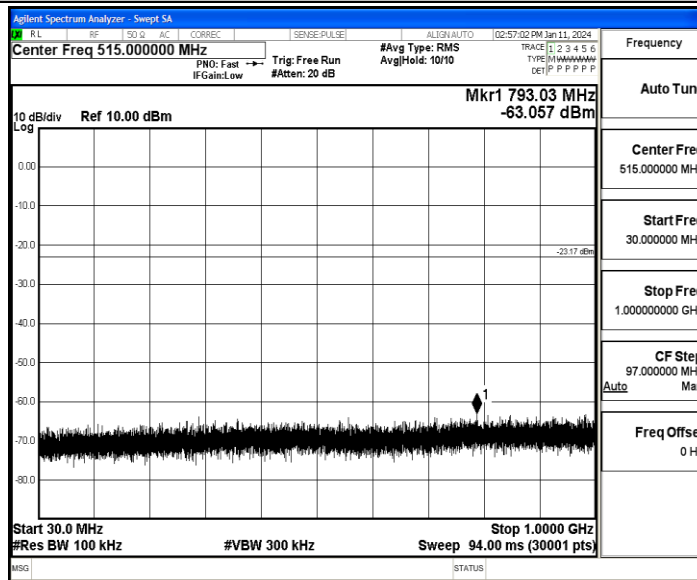
DH5\_Ant1\_2441\_1000~26500



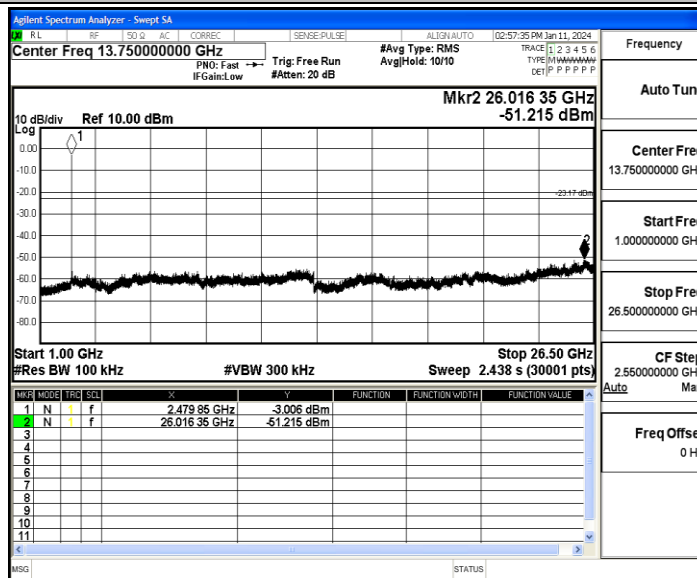
DH5\_Ant1\_2480\_0~Reference



DH5\_Ant1\_2480\_30~1000

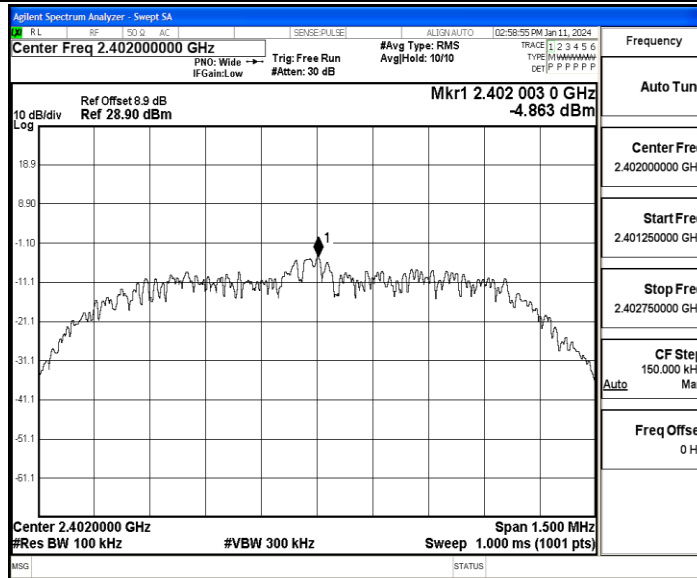


DH5\_Ant1\_2480\_1000~26500

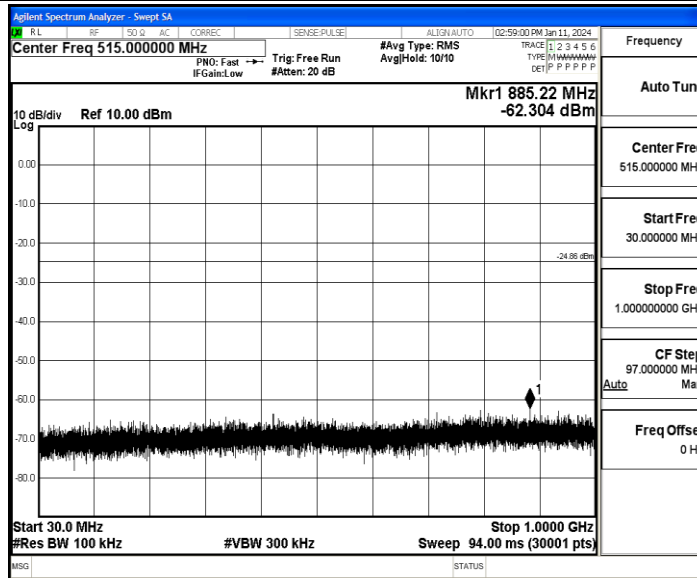


2DH5\_Ant1\_2402\_0~Reference

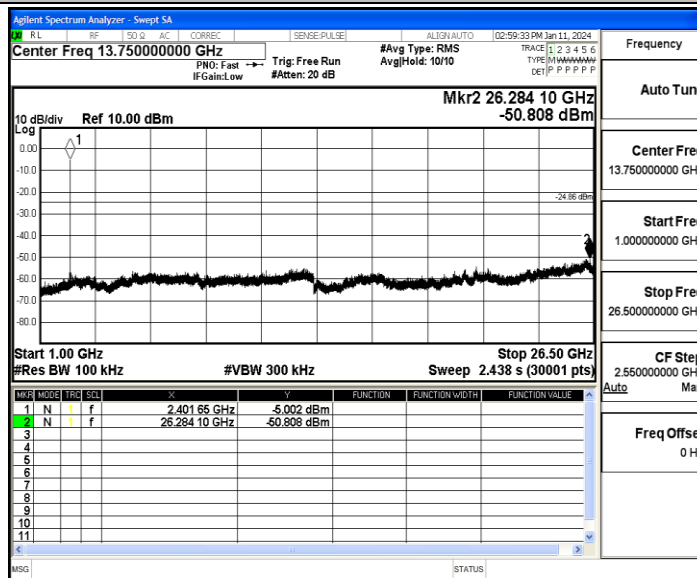




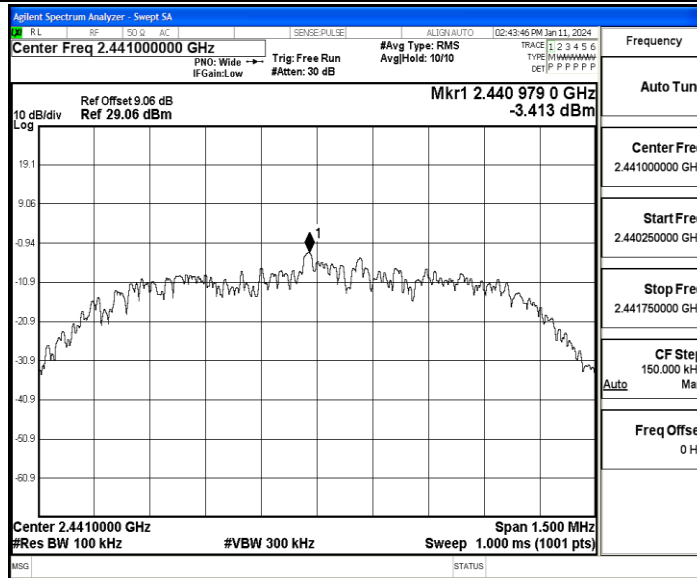
2DH5\_Ant1\_2402\_30~1000



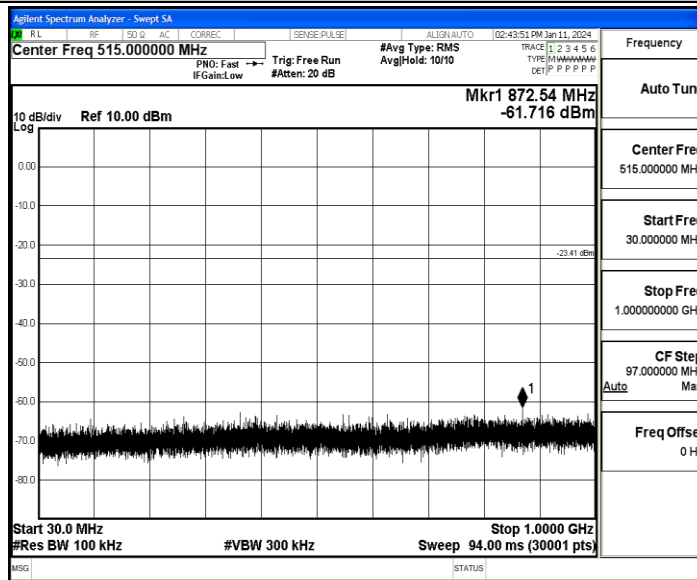
2DH5\_Ant1\_2402\_1000~26500



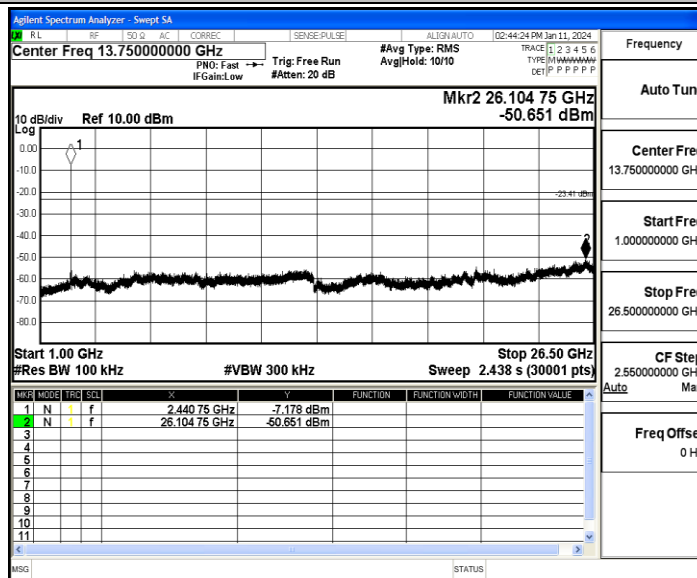
2DH5\_Ant1\_2441\_0~Reference



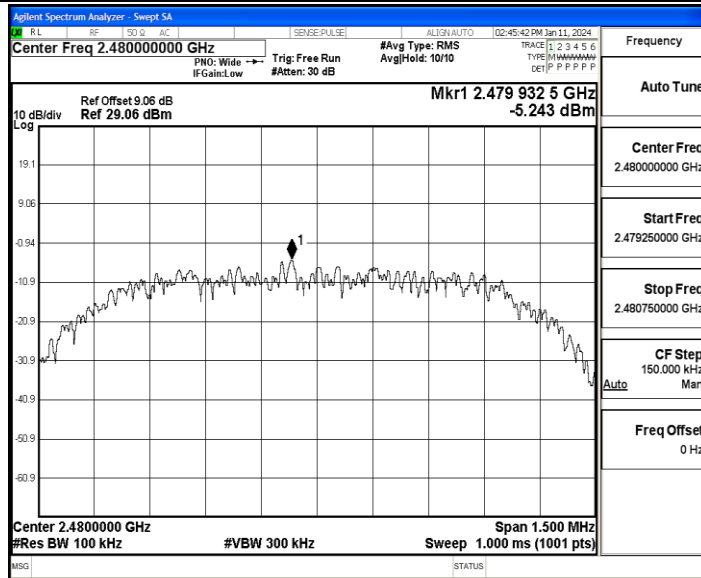
2DH5\_Ant1\_2441\_30~1000



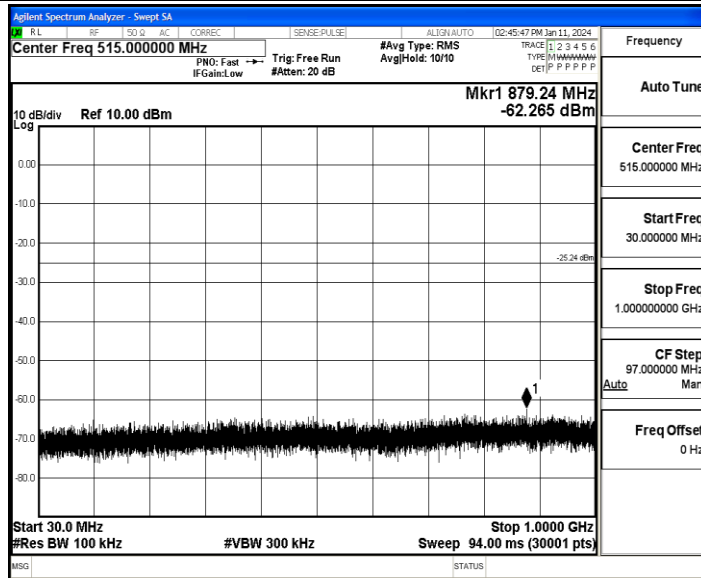
2DH5\_Ant1\_2441\_1000~26500



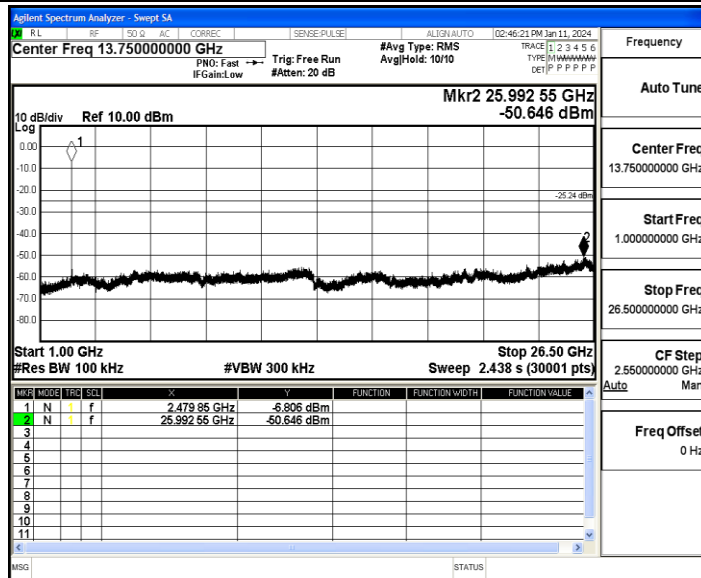
2DH5\_Ant1\_2480\_0~Reference



2DH5\_Ant1\_2480\_30~1000



2DH5\_Ant1\_2480\_1000~26500

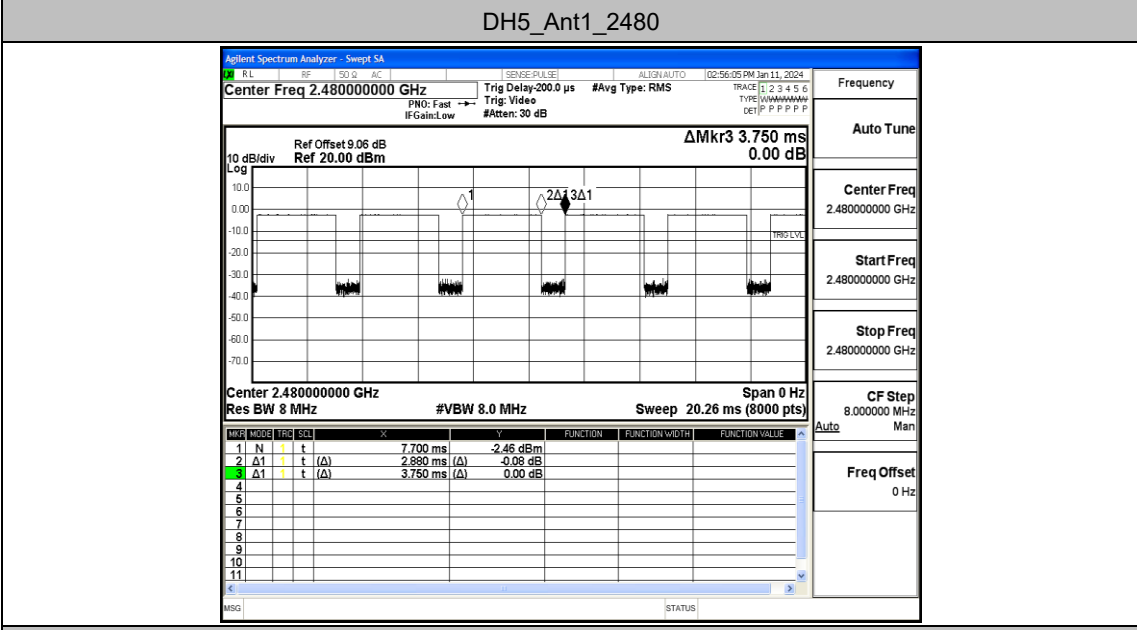
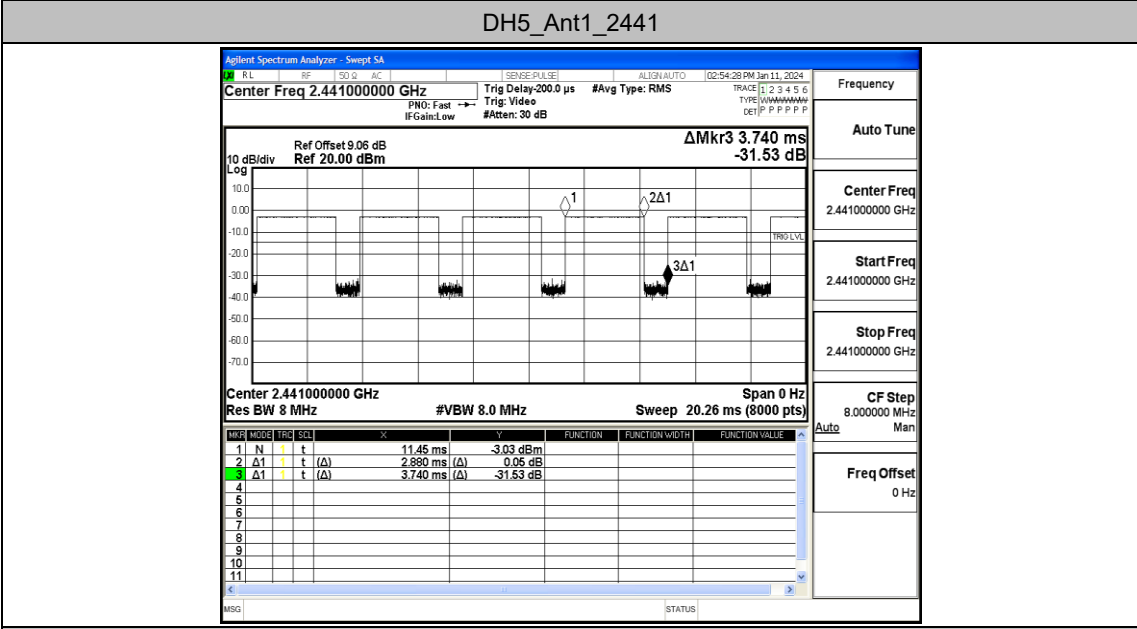
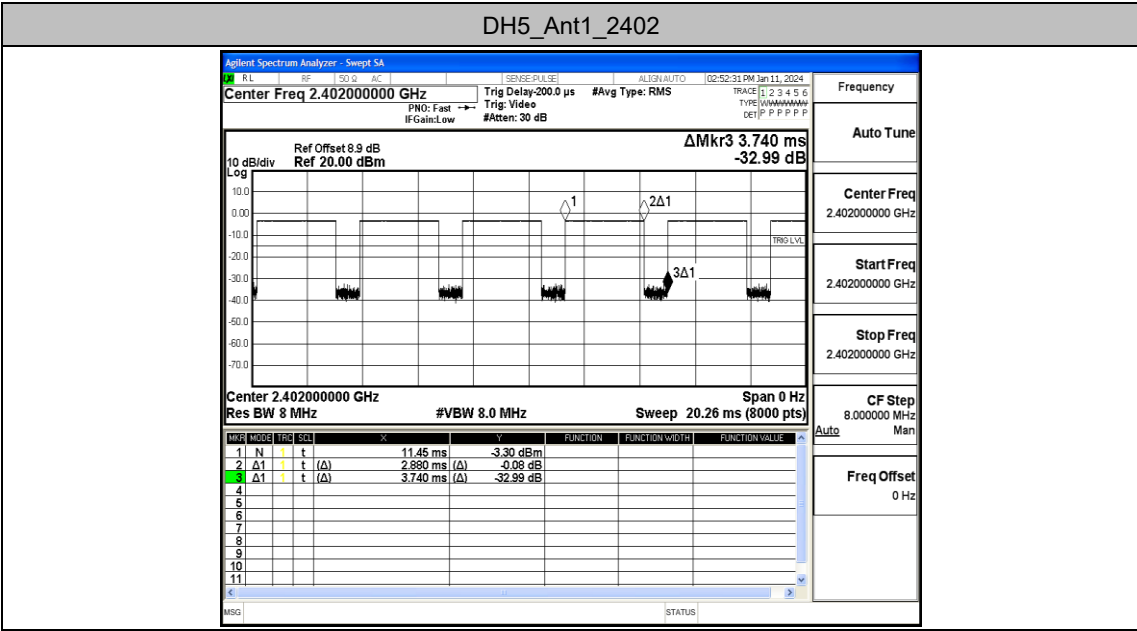


## Appendix I: Duty Cycle

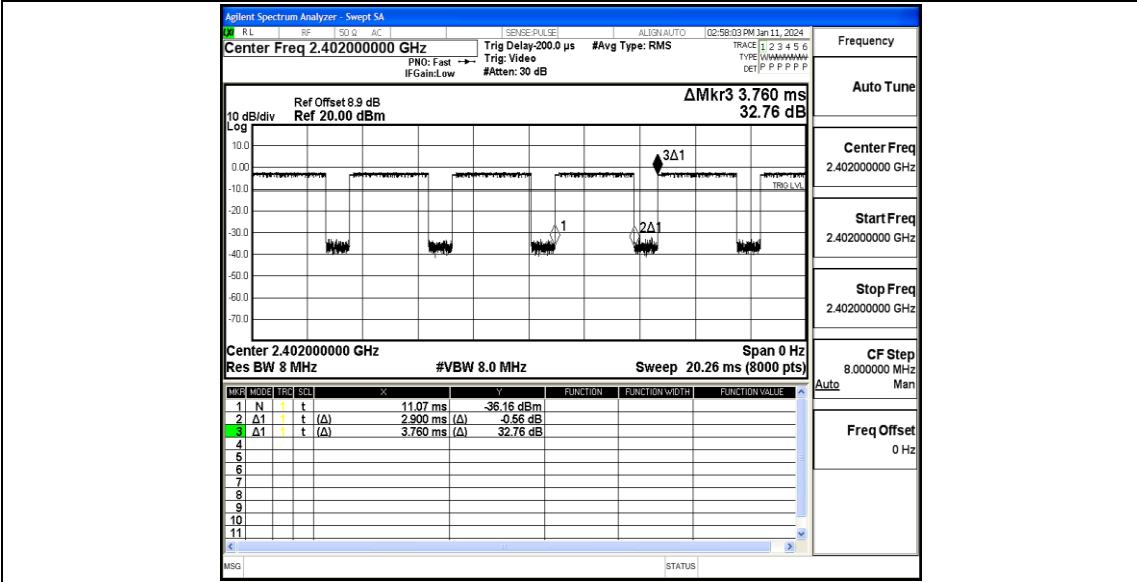
### Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.88	3.74	77.01	0.35
		2441	2.88	3.74	77.01	0.35
		2480	2.88	3.75	76.80	0.35
2DH5	Ant1	2402	2.90	3.76	77.13	0.34
		2441	2.89	3.75	77.07	0.35
		2480	2.89	3.74	77.27	0.35

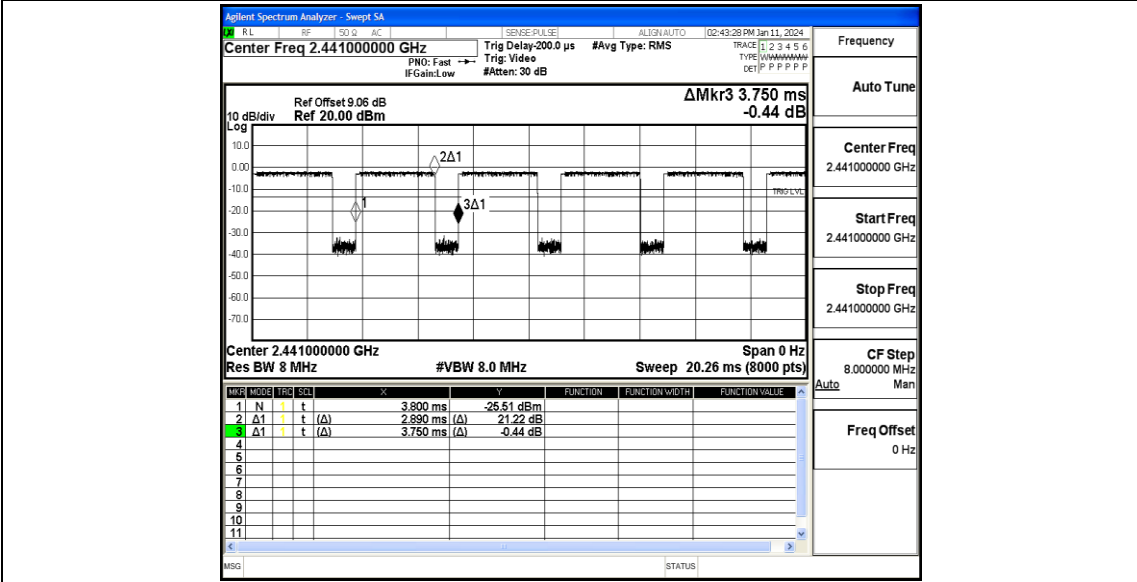
### Test Graphs



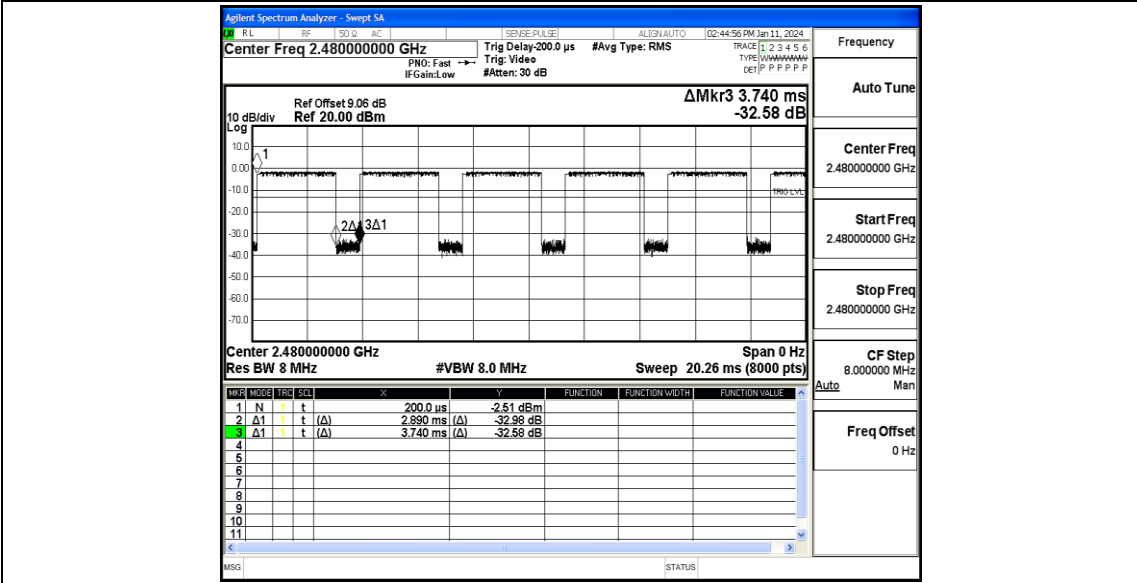
2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



2DH5\_Ant1\_2480



## Appendix J: Emissions in Restricted Bands

### Test Result

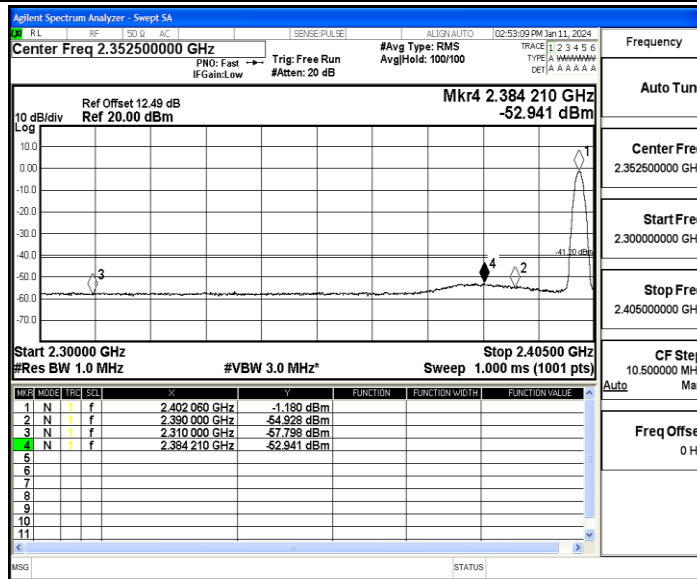
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-57.8	≤-41.20	PASS
				AV	2384.210	-52.94	≤-41.20	PASS
				AV	2390.000	-54.93	≤-41.20	PASS
				Peak	2310.000	-54.72	≤-21.20	PASS
				Peak	2381.585	-50.19	≤-21.20	PASS
				Peak	2390.000	-52.4	≤-21.20	PASS
		High	2480	AV	2483.500	-56.41	≤-41.20	PASS
				AV	2499.040	-52.01	≤-41.20	PASS
				AV	2500.000	-52.64	≤-41.20	PASS
				Peak	2483.500	-53.42	≤-21.20	PASS
				Peak	2499.200	-49.63	≤-21.20	PASS
				Peak	2500.000	-50.08	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-58.11	≤-41.20	PASS
				AV	2381.480	-52.94	≤-41.20	PASS
				AV	2390.000	-55.07	≤-41.20	PASS
				Peak	2310.000	-54.7	≤-21.20	PASS
				Peak	2382.740	-50.23	≤-21.20	PASS
				Peak	2390.000	-52.04	≤-21.20	PASS
		High	2480	AV	2483.500	-56.13	≤-41.20	PASS
				AV	2499.520	-51.86	≤-41.20	PASS
				AV	2500.000	-52.41	≤-41.20	PASS
				Peak	2483.500	-53.36	≤-21.20	PASS
				Peak	2499.520	-49.24	≤-21.20	PASS
				Peak	2500.000	-50.72	≤-21.20	PASS

Note:

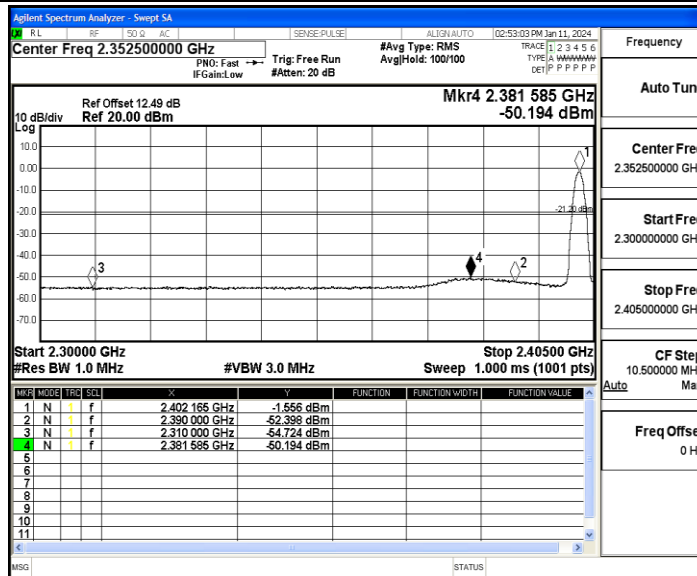
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

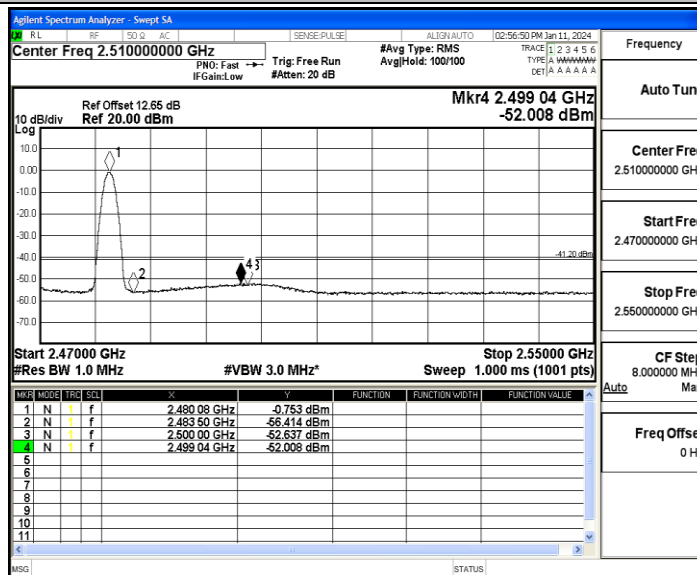
DH5\_Ant1\_Low\_2402\_AV



DH5\_Ant1\_Low\_2402\_Peak

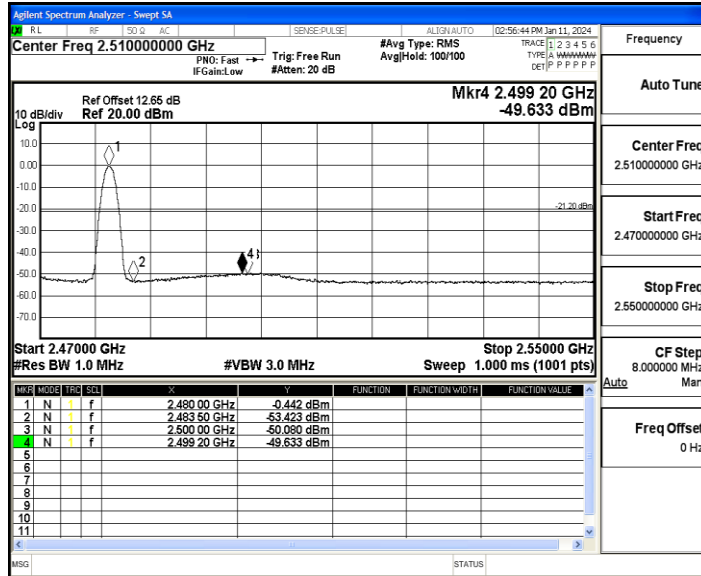


DH5\_Ant1\_High\_2480\_AV

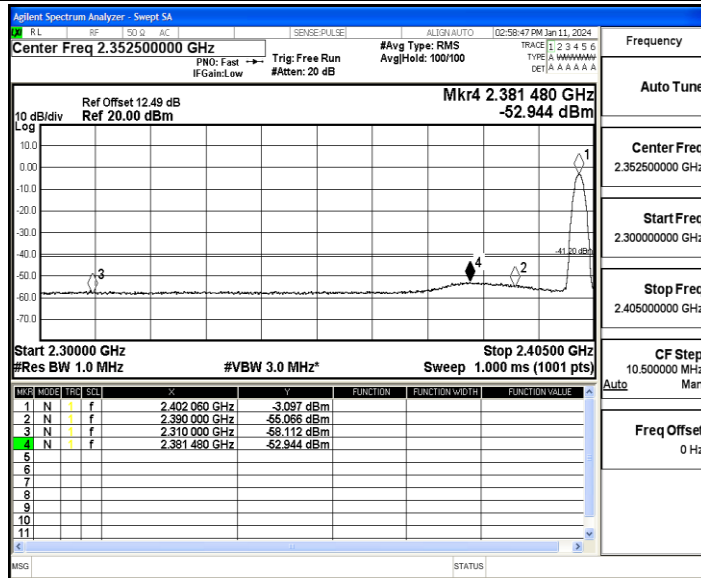


DH5\_Ant1\_High\_2480\_Peak

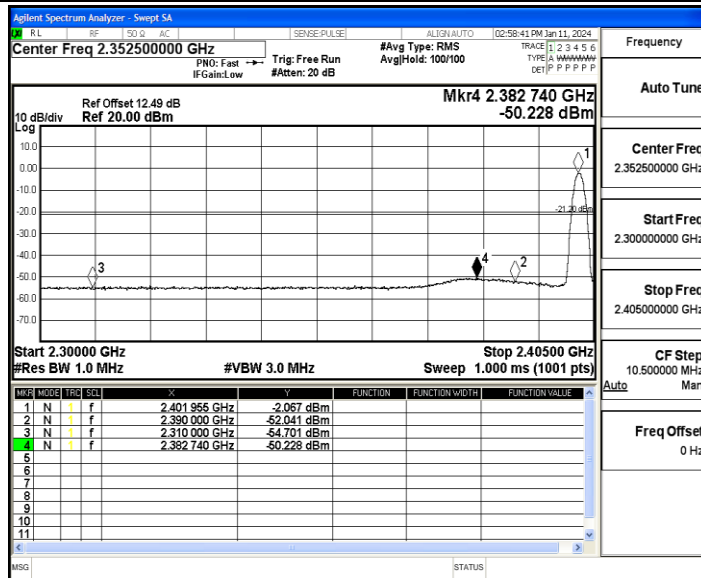




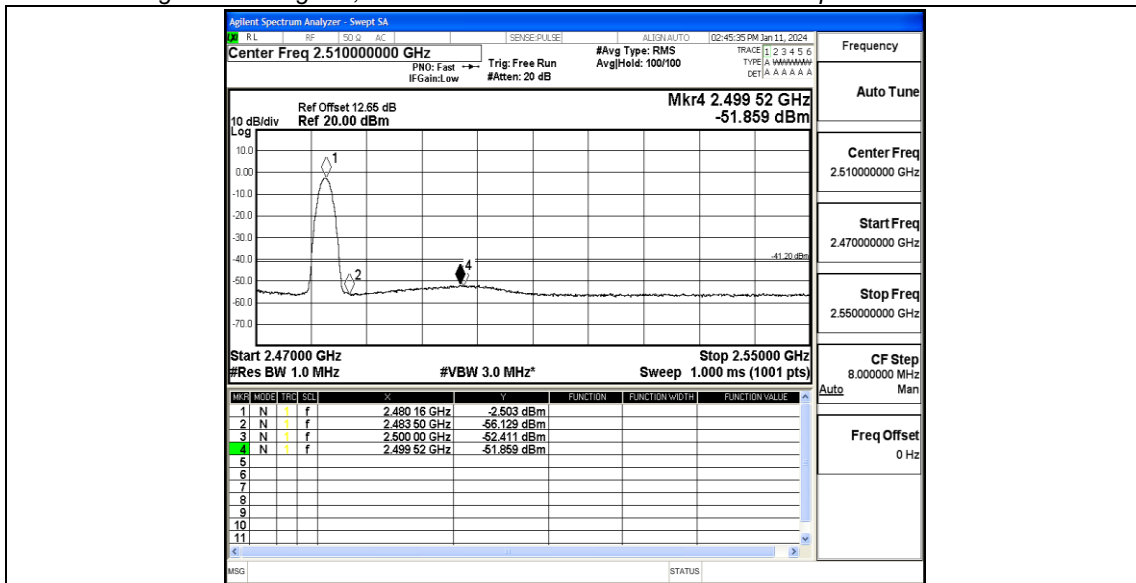
2DH5\_Ant1\_Low\_2402\_AV



2DH5\_Ant1\_Low\_2402\_Peak



2DH5\_Ant1\_High\_2480\_AV



2DH5\_Ant1\_High\_2480\_Peak

