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

Product Name: SMART WATCH

Trade Mark: N/A

Test Model: SK50

FCC ID: 2BDN3-SK50

Environmental Conditions

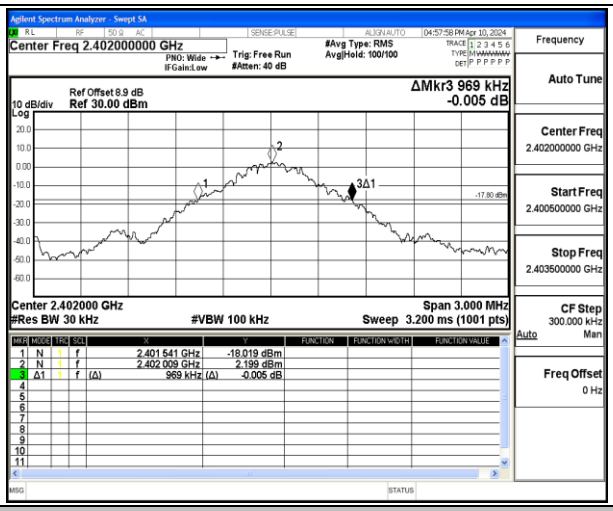
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth

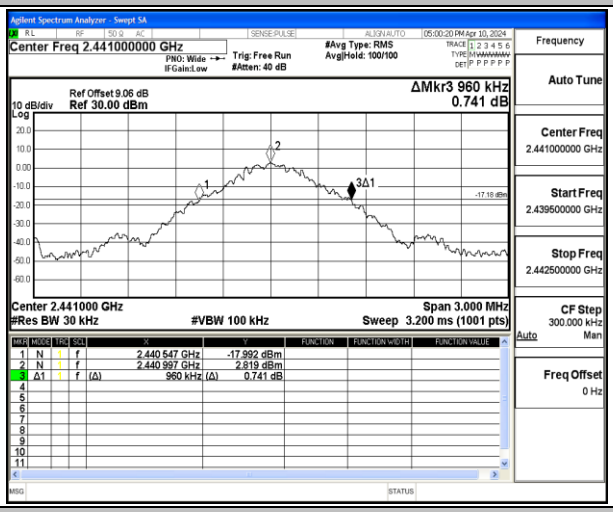
Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.969	2401.541	2402.510	---	---
DH5	Ant1	2441	0.960	2440.547	2441.507	---	---
DH5	Ant1	2480	0.948	2479.550	2480.498	---	---
2DH5	Ant1	2402	1.317	2401.355	2402.672	---	---
2DH5	Ant1	2441	1.323	2440.349	2441.672	---	---
2DH5	Ant1	2480	1.335	2479.346	2480.681	---	---

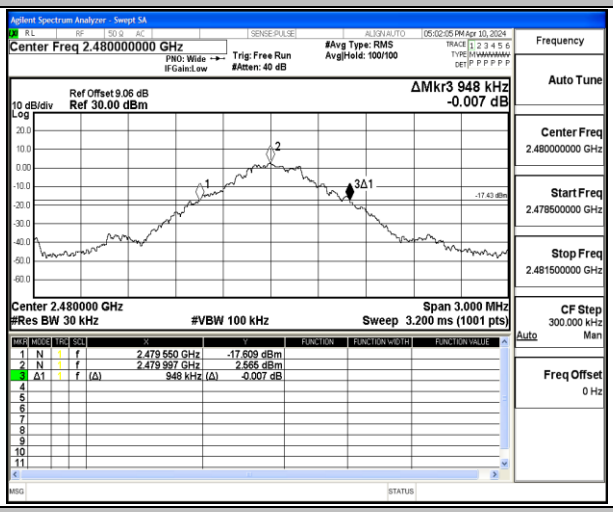
Test Graphs



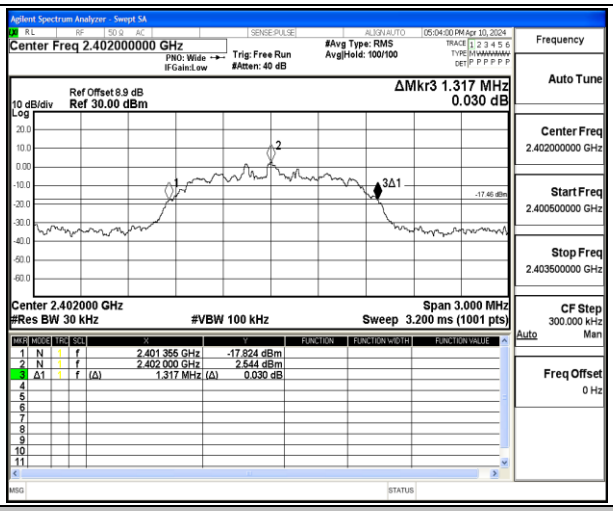
DH5-Ant1-2402



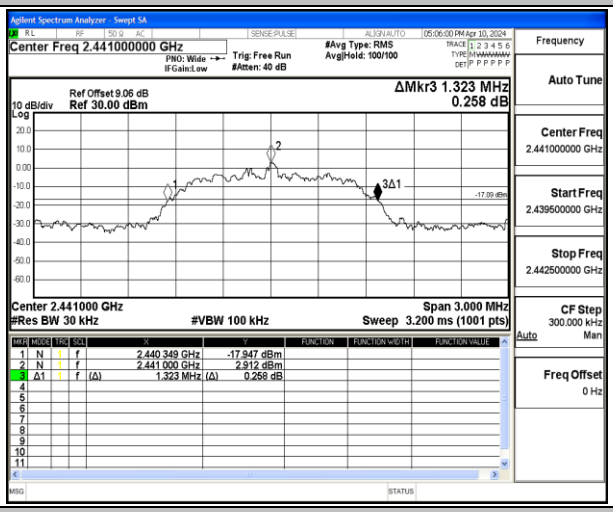
DH5-Ant1-2441



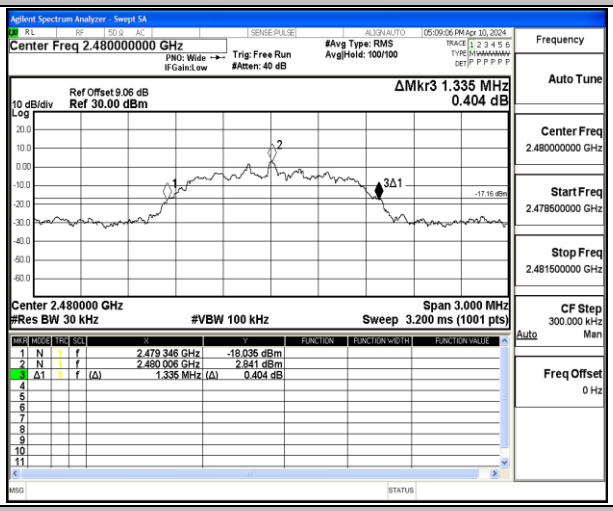
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



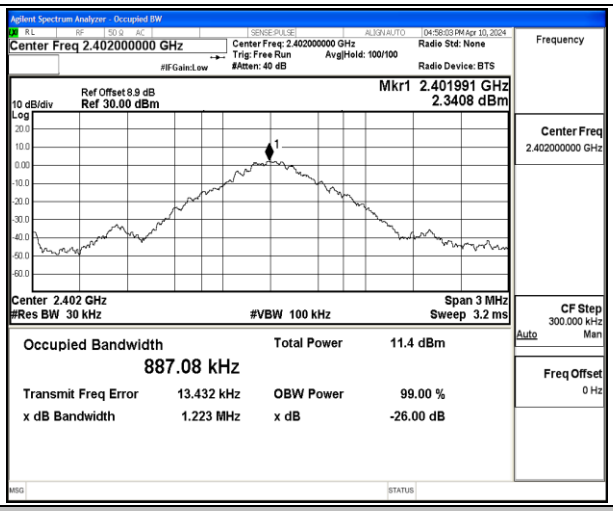
2DH5-Ant1-2480

Appendix B: Occupied Channel Bandwidth

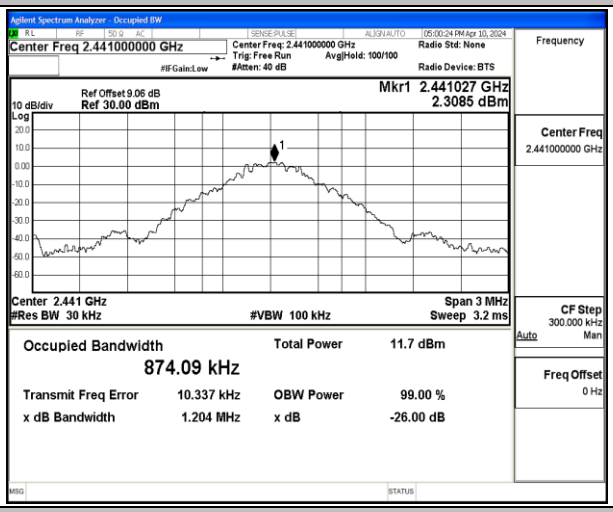
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88708	2401.5699	2402.4570	---	---
DH5	Ant1	2441	0.87409	2440.5733	2441.4474	---	---
DH5	Ant1	2480	0.87406	2479.5789	2480.4530	---	---
2DH5	Ant1	2402	1.2205	2401.4030	2402.6235	---	---
2DH5	Ant1	2441	1.2377	2440.3968	2441.6345	---	---
2DH5	Ant1	2480	1.2762	2479.3770	2480.6532	---	---

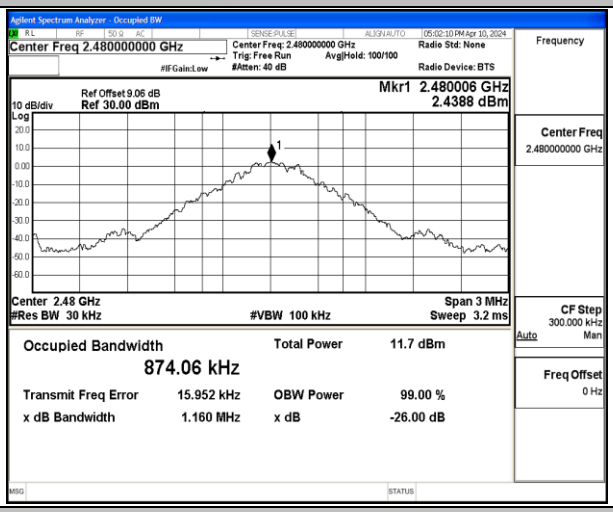
Test Graphs



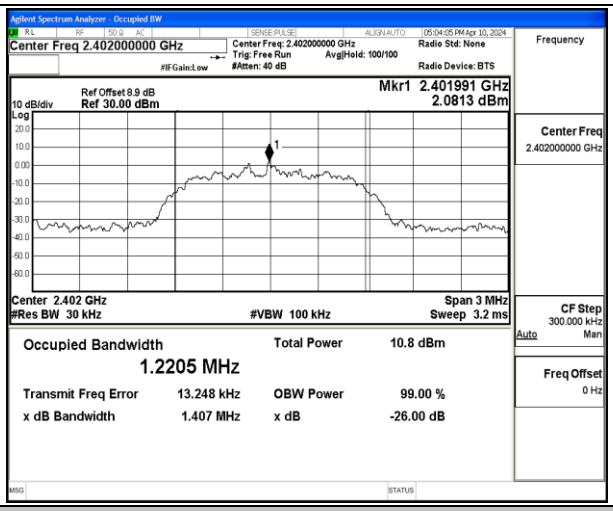
DH5-Ant1-2402



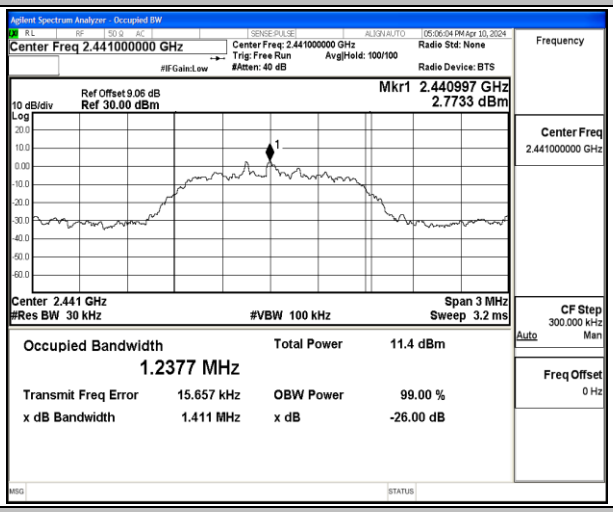
DH5-Ant1-2441



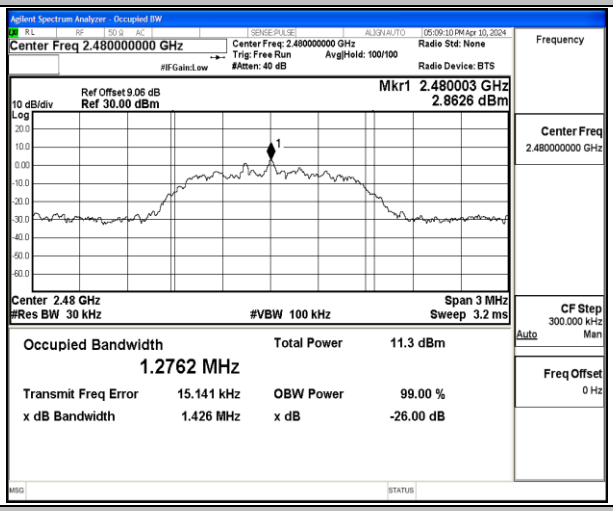
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



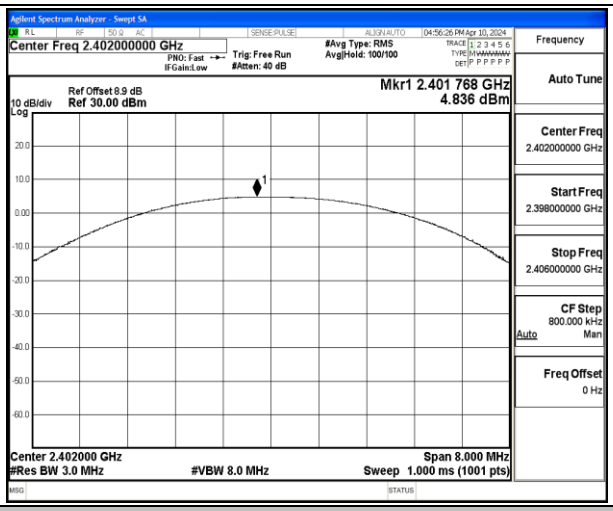
2DH5-Ant1-2480

Appendix C: Maximum peak conducted output power

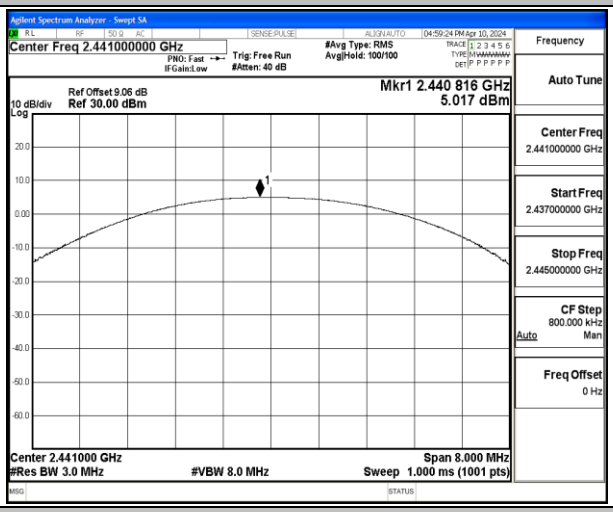
Test Result

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	4.84	≤30	PASS
DH5	Ant1	2441	5.02	≤30	PASS
DH5	Ant1	2480	4.92	≤30	PASS
2DH5	Ant1	2402	5.22	≤20.97	PASS
2DH5	Ant1	2441	5.25	≤20.97	PASS
2DH5	Ant1	2480	5.19	≤20.97	PASS

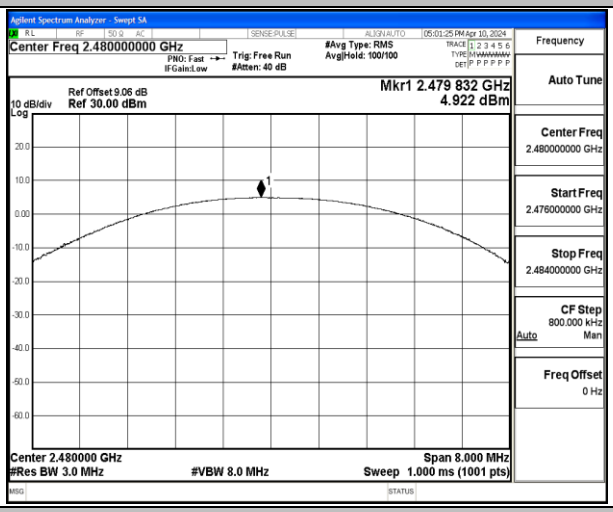
Test Graphs



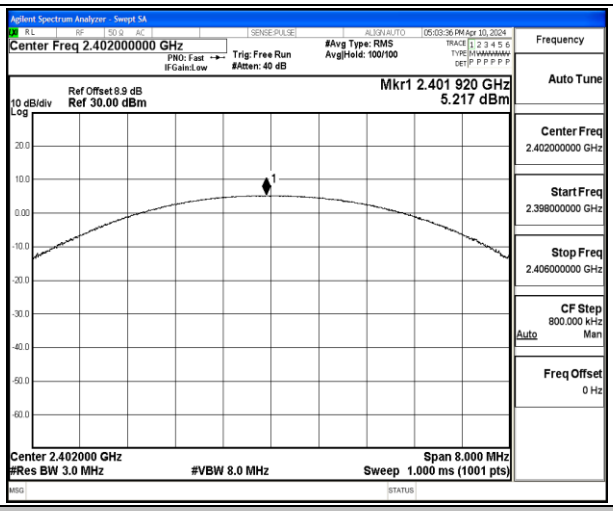
DH5-Ant1-2402-PASS



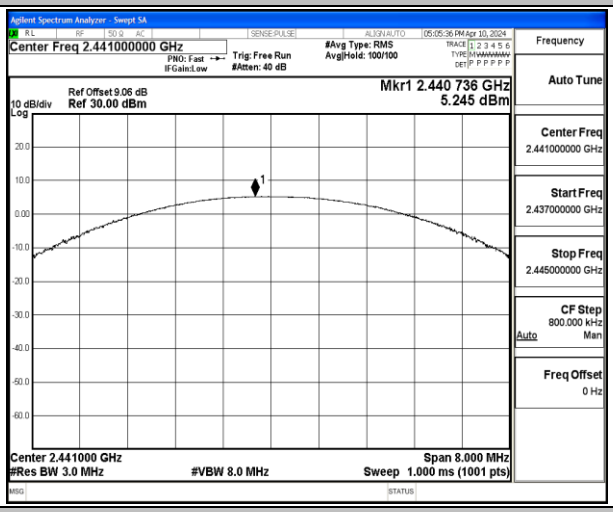
DH5-Ant1-2441-PASS



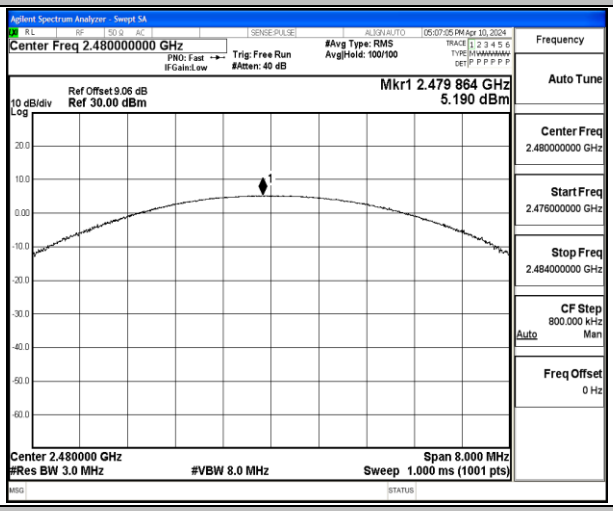
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS



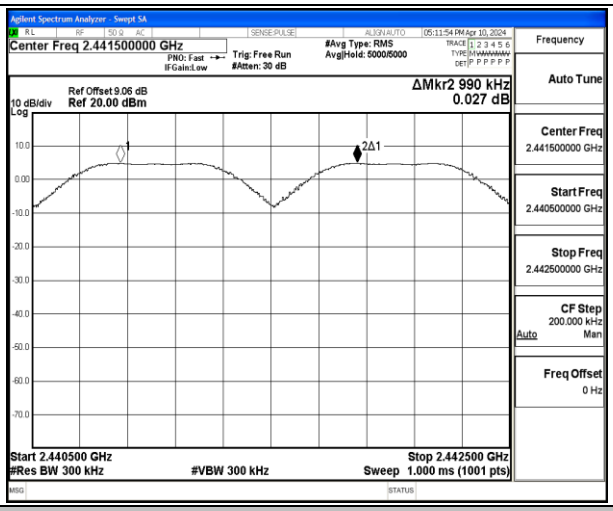
2DH5-Ant1-2480-PASS

Appendix D: Carrier frequency separation

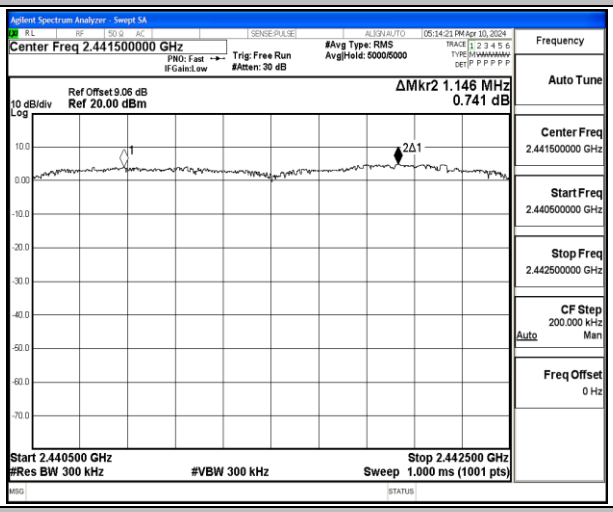
Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.99	≥0.969	PASS
2DH5	Ant1	Hop	1.146	≥0.890	PASS

Test Graphs



DH5-Ant1-Hop-PASS



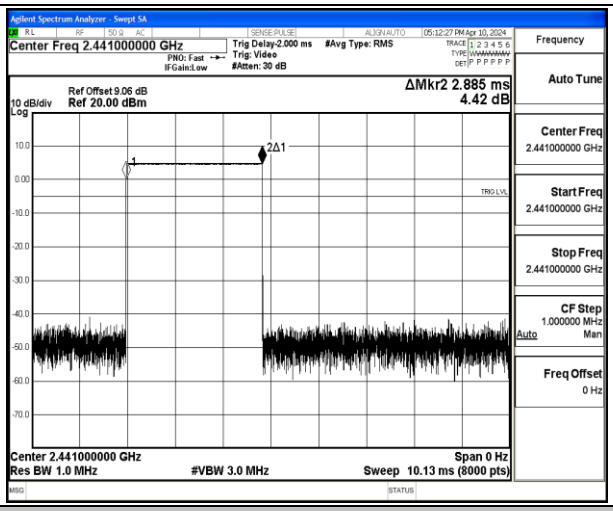
2DH5-Ant1-Hop-PASS

Appendix E: Time of occupancy

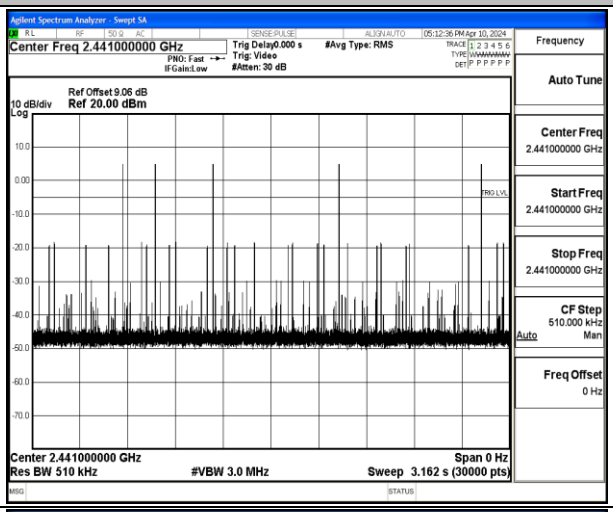
Test Result

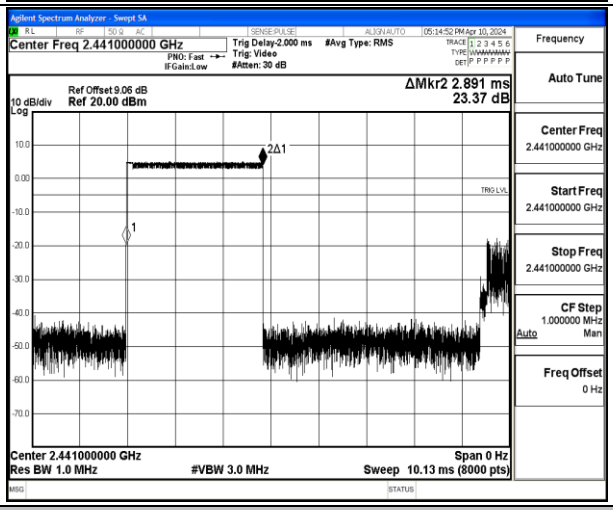
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	60	0.173	≤0.4	PASS
2DH5	Ant1	Hop	2.891	100	0.289	≤0.4	PASS

Test Graphs

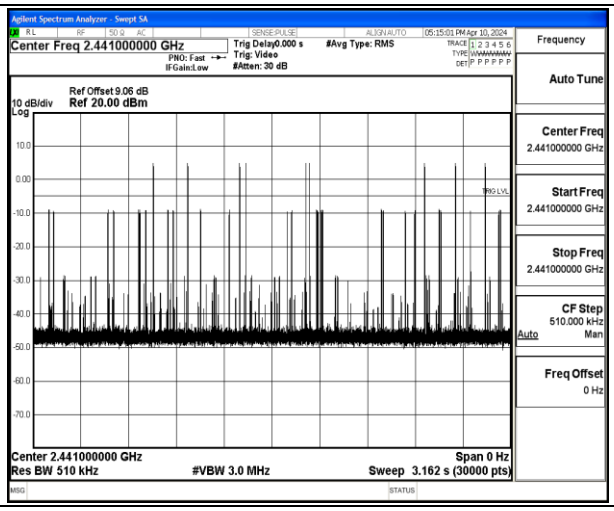


DH5-Ant1-Hop-PASS





2DH5-Ant1-Hop-PASS

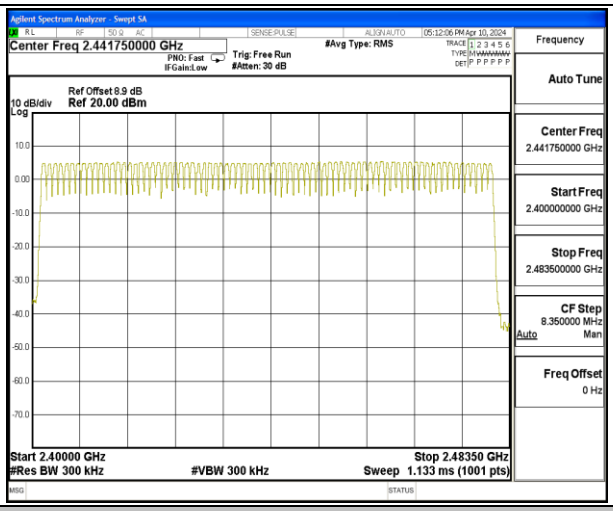

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay0.000 s
Trig: Video
#Atten: 30 dB
#Avg Type: RMS
05:15:01 PM Apr 10, 2024
Frequency
Auto Tune
Ref Offset 9.06 dB
10 dB/div Ref 20.00 dBm
Log
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
510.000 kHz
Auto Man
Freq Offset
0 Hz
Center 2.441000000 GHz
Span 0 Hz
Res BW 510 kHz
#VBW 3.0 MHz
Sweep 3.162 s (30000 pts)

Appendix F: Number of hopping channels

Test Result

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

Test Graphs



DH5-Ant1-Hop-PASS

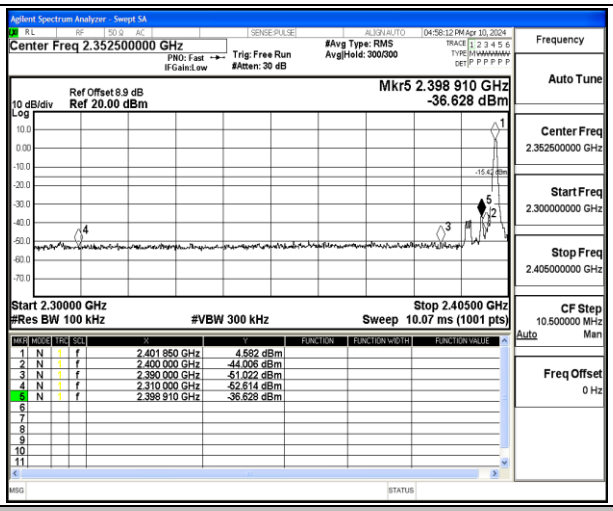
2DH5-Ant1-Hop-PASS

Appendix G: Band edge measurements

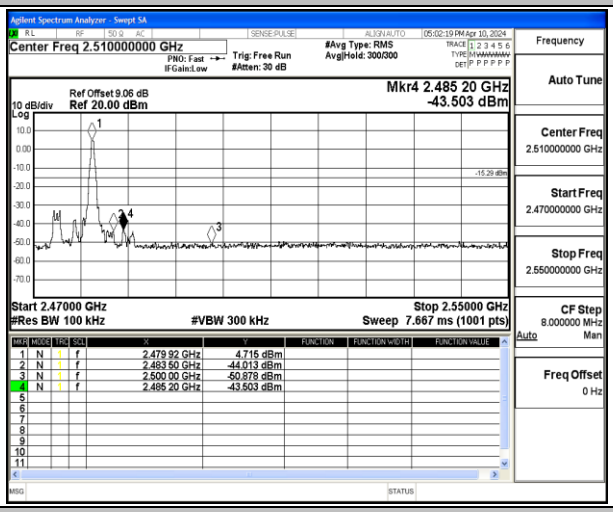
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.58	-36.63	≤-15.42	PASS
DH5	Ant1	High	2480	4.72	-43.5	≤-15.29	PASS
DH5	Ant1	Low	Hop_2402	3.34	-38.47	≤-16.66	PASS
DH5	Ant1	High	Hop_2480	4.49	-45.63	≤-15.51	PASS
2DH5	Ant1	Low	2402	3.59	-37.09	≤-16.41	PASS
2DH5	Ant1	High	2480	4.54	-42.9	≤-15.46	PASS
2DH5	Ant1	Low	Hop_2402	2.59	-41.09	≤-17.41	PASS
2DH5	Ant1	High	Hop_2480	4.84	-46.43	≤-15.16	PASS

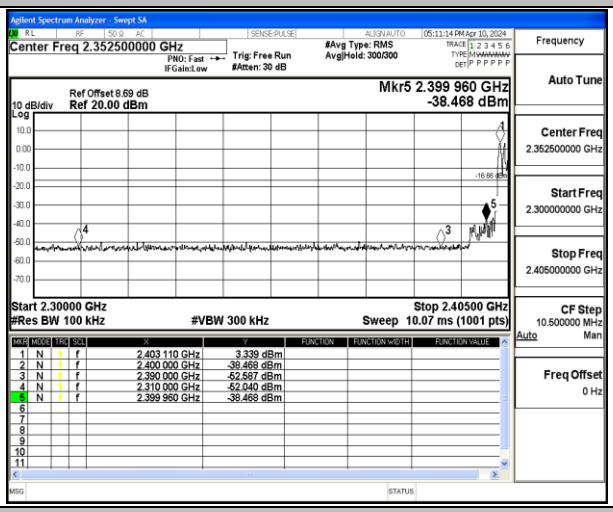
Test Graphs



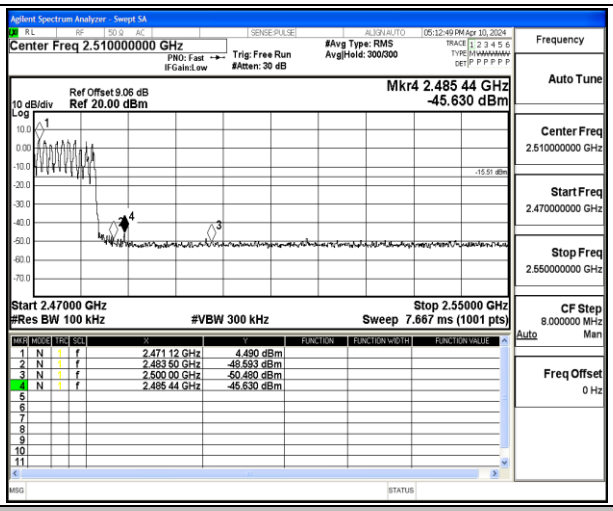
DH5-Ant1-2402-PASS



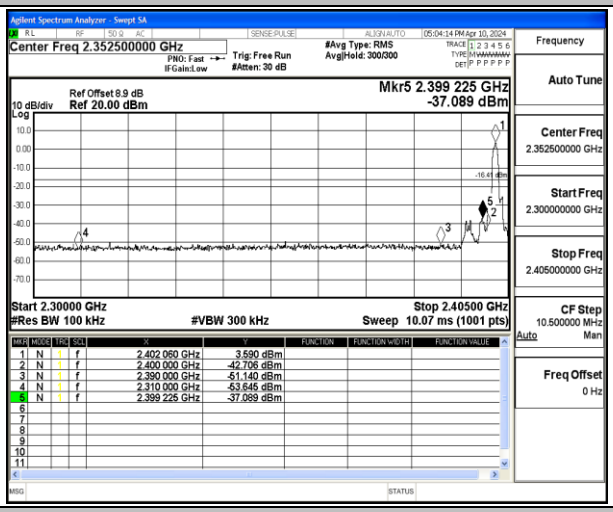
DH5-Ant1-2480-PASS



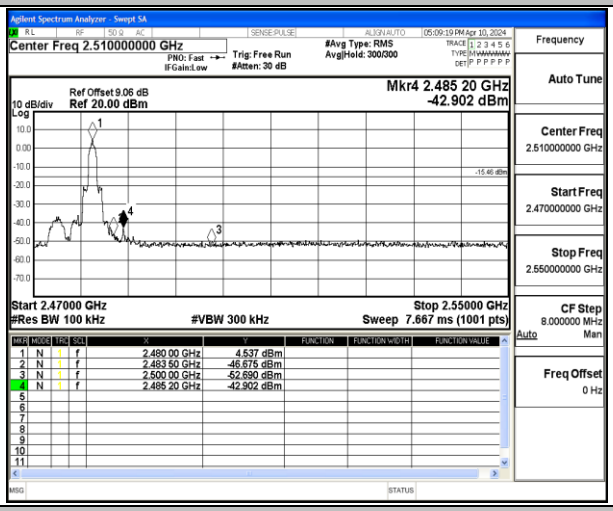
DH5-Ant1-Hop_2402-PASS



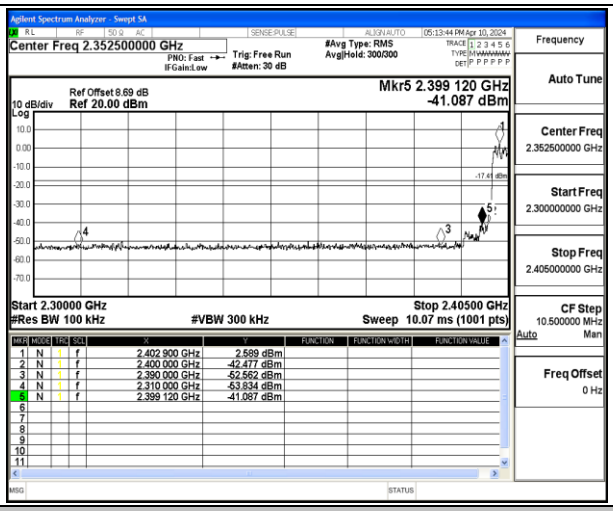
DH5-Ant1-Hop_2480-PASS



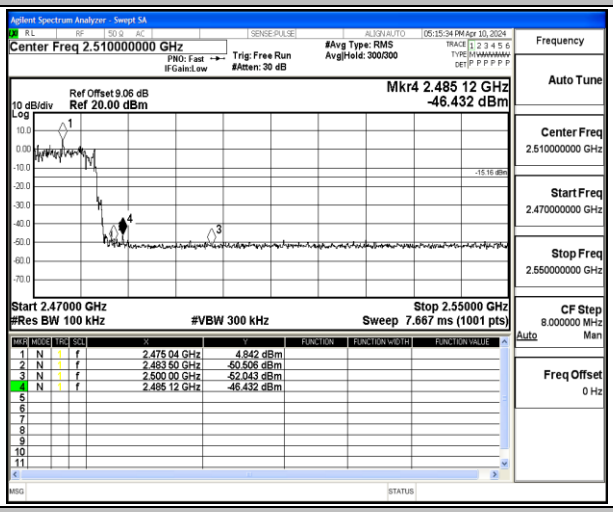
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



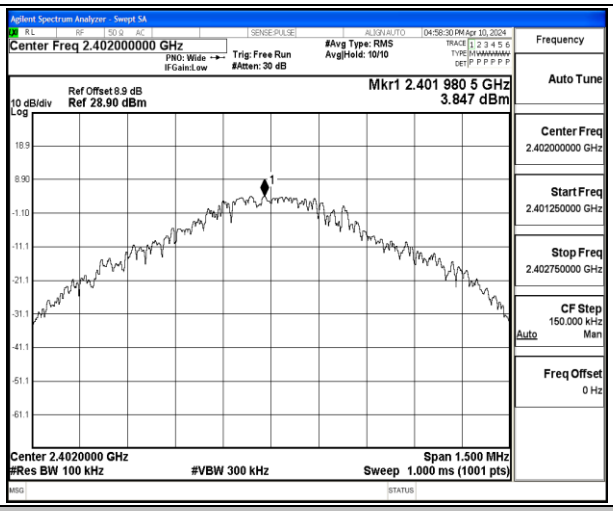
2DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

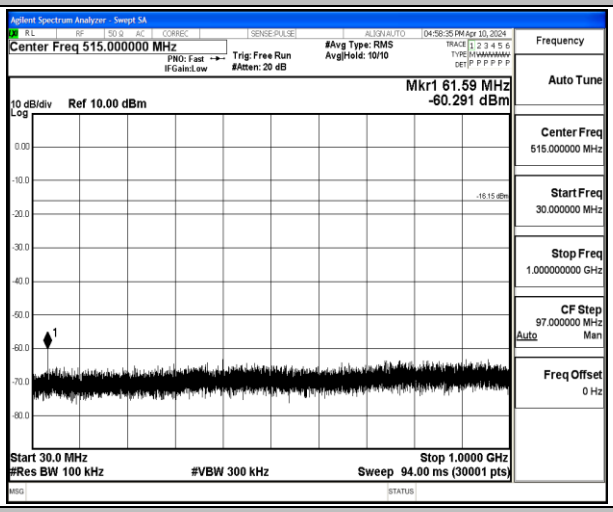
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	3.85	3.85	---	PASS
DH5	Ant1	2402	30~1000	3.85	-60.29	≤-16.15	PASS
DH5	Ant1	2402	1000~26500	3.85	-43.64	≤-16.15	PASS
DH5	Ant1	2441	0~Reference	4.30	4.30	---	PASS
DH5	Ant1	2441	30~1000	4.30	-61.84	≤-15.7	PASS
DH5	Ant1	2441	1000~26500	4.30	-44.99	≤-15.7	PASS
DH5	Ant1	2480	0~Reference	4.10	4.10	---	PASS
DH5	Ant1	2480	30~1000	4.10	-62.34	≤-15.9	PASS
DH5	Ant1	2480	1000~26500	4.10	-42.76	≤-15.9	PASS
2DH5	Ant1	2402	0~Reference	1.68	1.68	---	PASS
2DH5	Ant1	2402	30~1000	1.68	-61.17	≤-18.32	PASS
2DH5	Ant1	2402	1000~26500	1.68	-46.55	≤-18.32	PASS
2DH5	Ant1	2441	0~Reference	4.58	4.58	---	PASS
2DH5	Ant1	2441	30~1000	4.58	-61.19	≤-15.42	PASS
2DH5	Ant1	2441	1000~26500	4.58	-45.37	≤-15.42	PASS
2DH5	Ant1	2480	0~Reference	4.36	4.36	---	PASS
2DH5	Ant1	2480	30~1000	4.36	-61.62	≤-15.64	PASS
2DH5	Ant1	2480	1000~26500	4.36	-45.93	≤-15.64	PASS

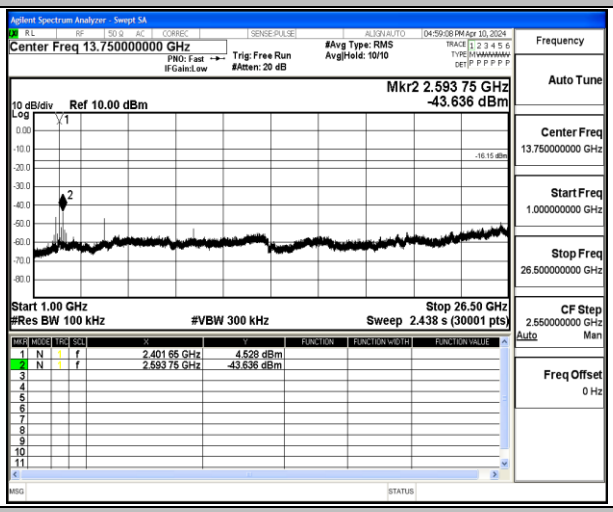
Test Graphs



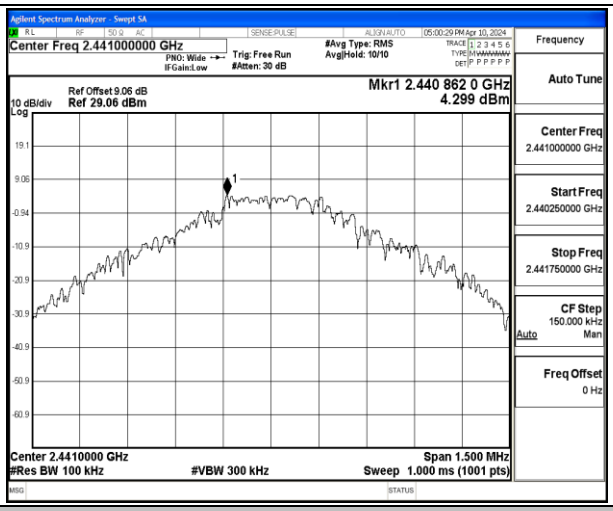
DH5-Ant1-2402-0~Reference-PASS



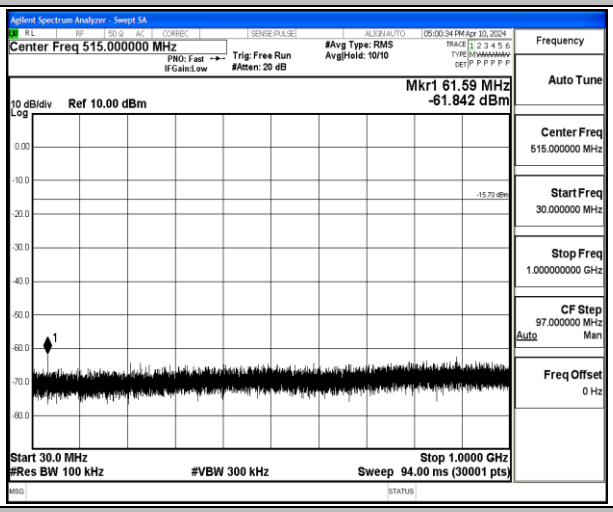
DH5-Ant1-2402-30~1000-PASS



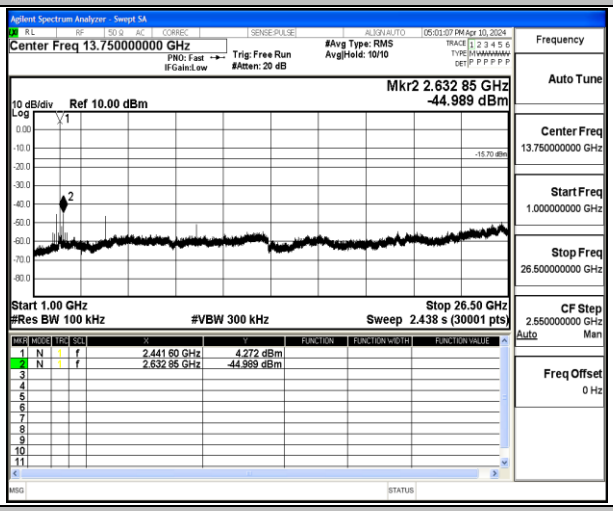
DH5-Ant1-2402-1000~26500-PASS



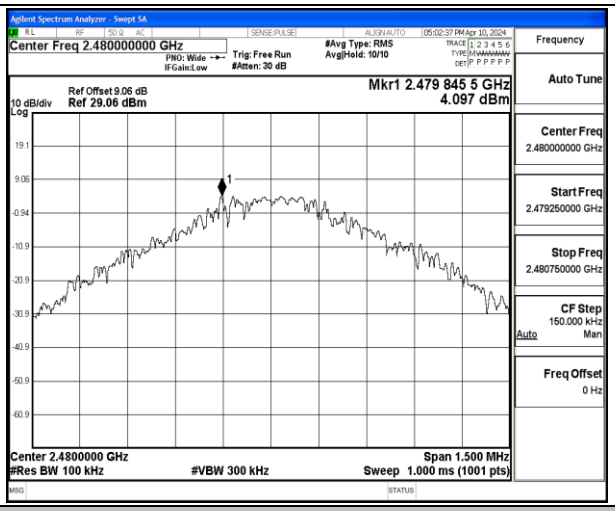
DH5-Ant1-2441-0~Reference-PASS



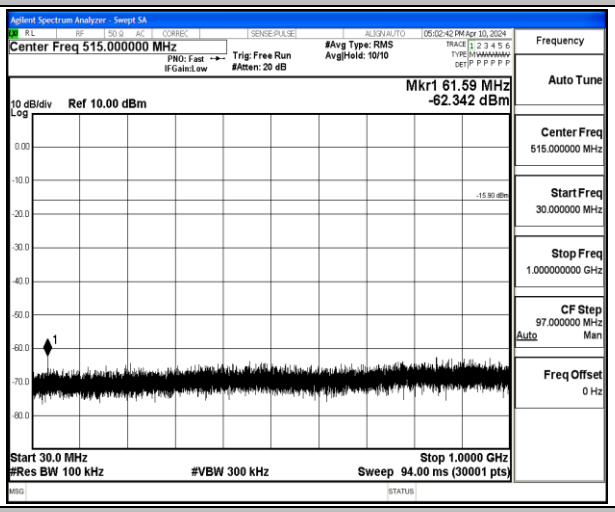
DH5-Ant1-2441-30~1000-PASS



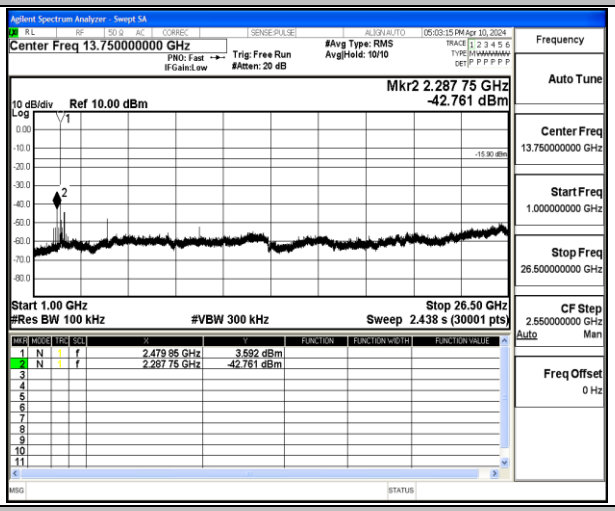
DH5-Ant1-2441-1000~26500-PASS



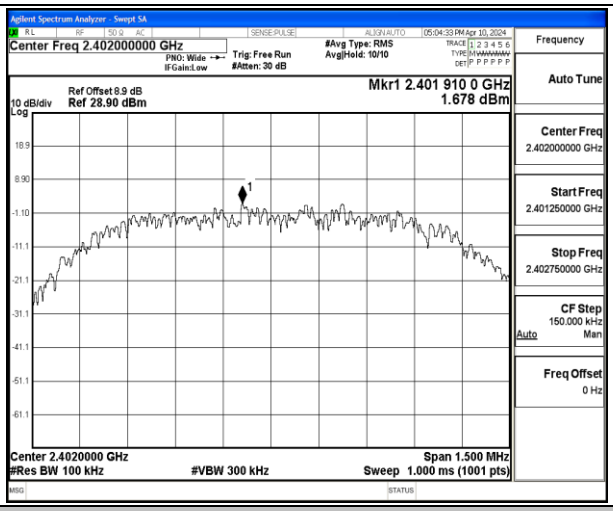
DH5-Ant1-2480-0~Reference-PASS



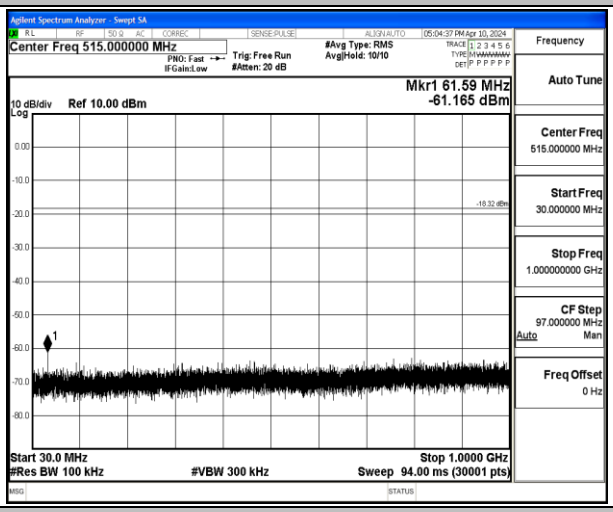
DH5-Ant1-2480-30~1000-PASS



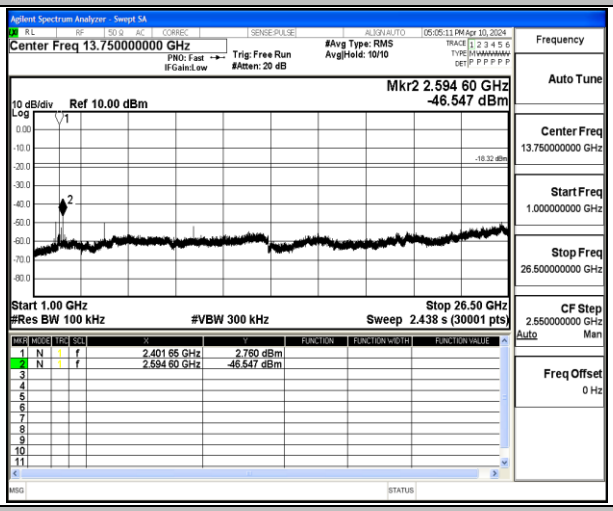
DH5-Ant1-2480-1000~26500-PASS



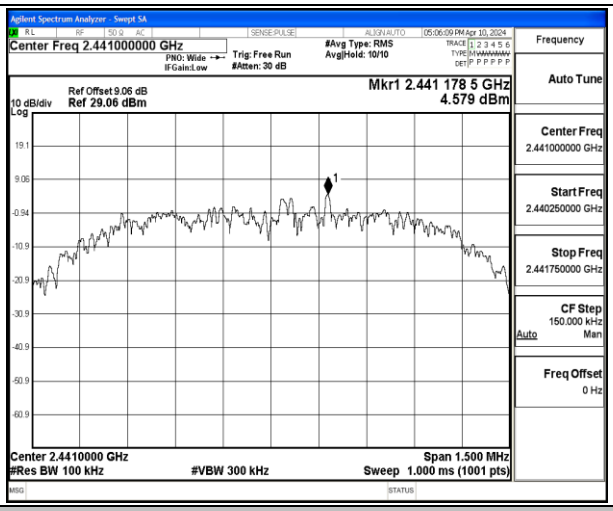
2DH5-Ant1-2402-0~Reference-PASS



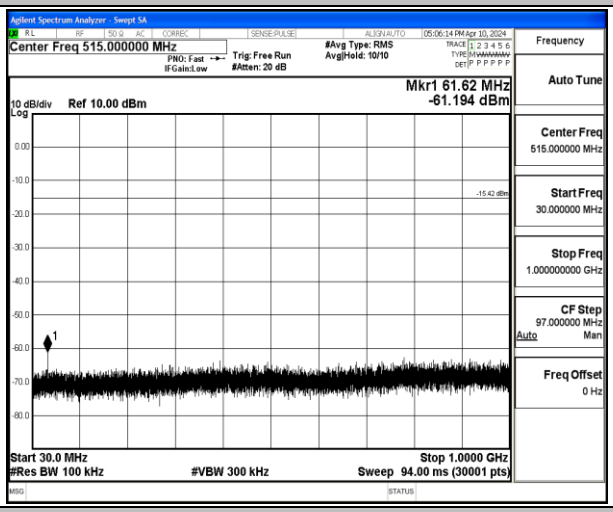
2DH5-Ant1-2402-30~1000-PASS



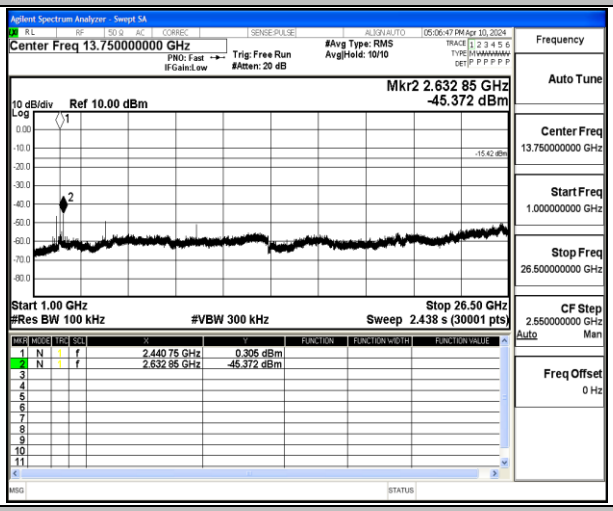
2DH5-Ant1-2402-1000~26500-PASS



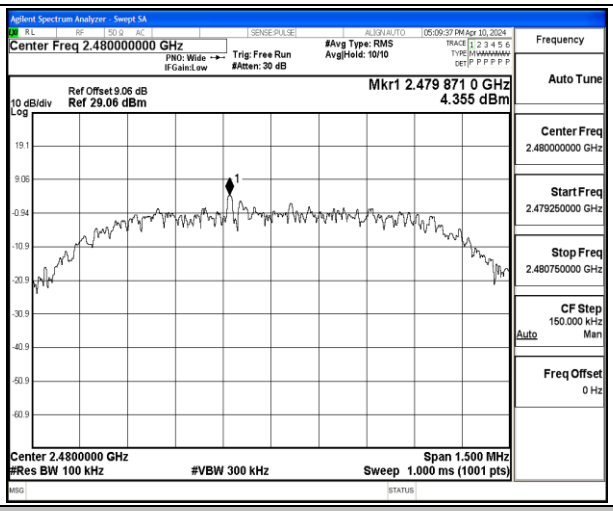
2DH5-Ant1-2441-0~Reference-PASS



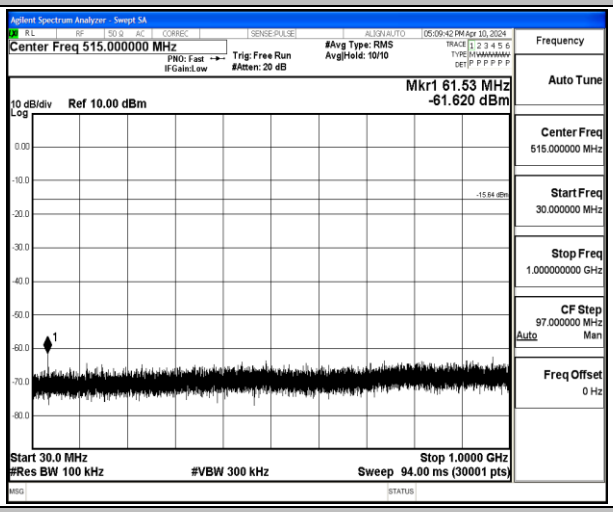
2DH5-Ant1-2441-30~1000-PASS



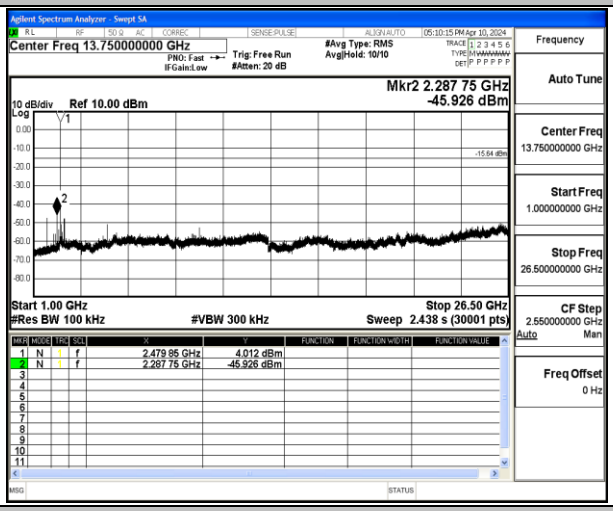
2DH5-Ant1-2441-1000~26500-PASS



2DH5-Ant1-2480-0~Reference-PASS



2DH5-Ant1-2480-30~1000-PASS



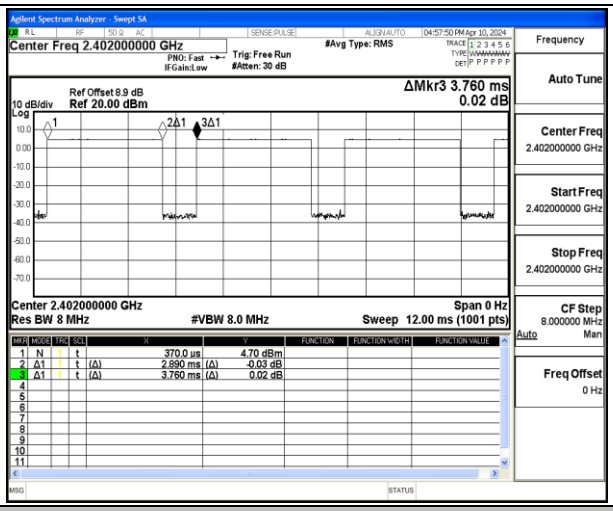
2DH5-Ant1-2480-1000~26500-PASS

Appendix I: Duty Cycle

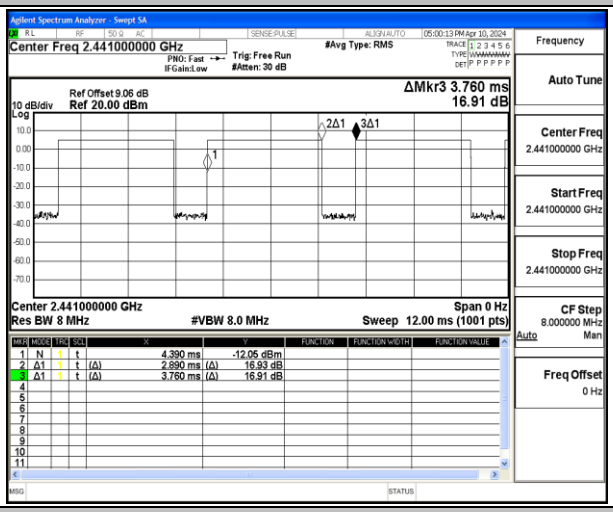
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.89	3.76	76.86	1.14
DH5	Ant1	2441	2.89	3.76	76.86	1.14
DH5	Ant1	2480	2.89	3.74	77.27	1.12
2DH5	Ant1	2402	2.90	3.75	77.33	1.12
2DH5	Ant1	2441	2.90	3.75	77.33	1.12
2DH5	Ant1	2480	2.90	3.75	77.33	1.12

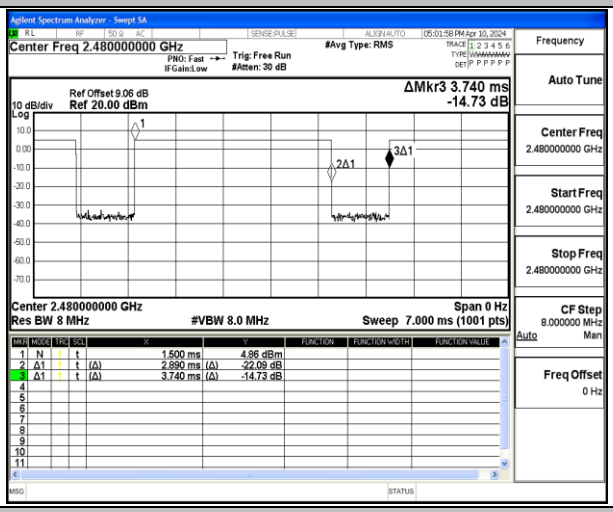
Test Graphs



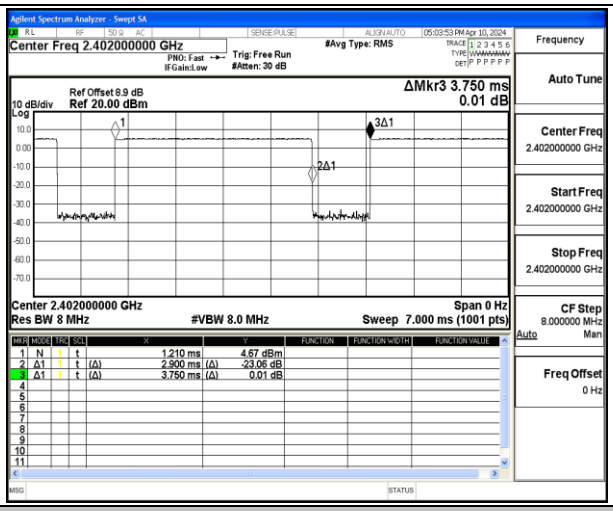
NTNV-DH5-Ant1-2402



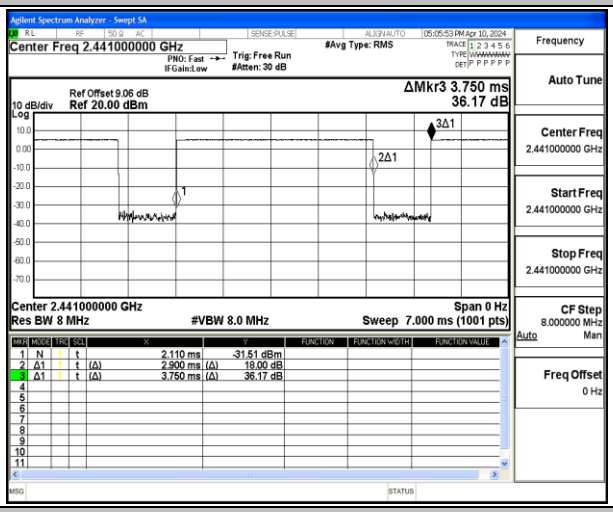
NTNV-DH5-Ant1-2441



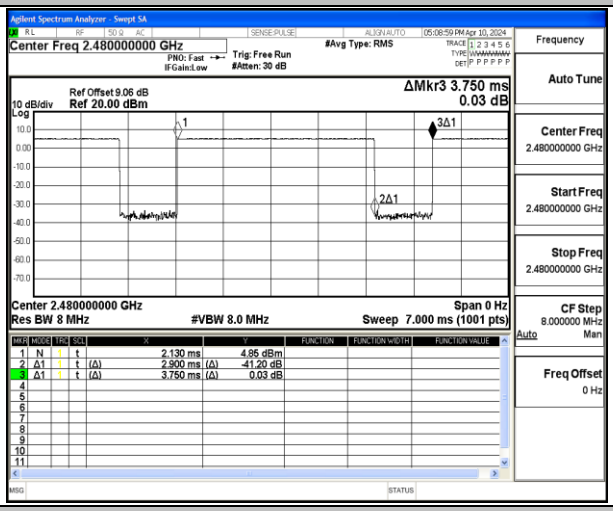
NTNV-DH5-Ant1-2480



NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480

Appendix J: Emissions in Restricted Bands

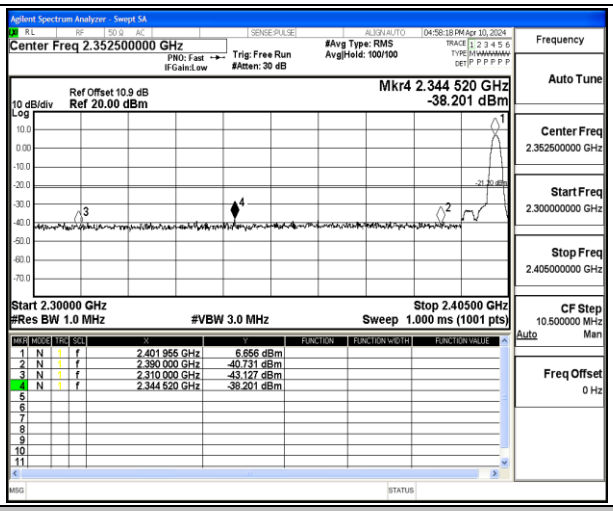
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	Peak	2390.000	-40.73	≤-21.20	54.47	≤74	PASS
DH5	Ant1	Low	2402	Peak	2310.000	-43.13	≤-21.20	52.07	≤74	PASS
DH5	Ant1	Low	2402	Peak	2344.520	-38.2	≤-21.20	57.00	≤74	PASS
DH5	Ant1	Low	2402	AV	2390.000	-48.56	≤-41.20	46.64	≤54	PASS
DH5	Ant1	Low	2402	AV	2310.000	-49.11	≤-41.20	46.09	≤54	PASS
DH5	Ant1	Low	2402	AV	2363.105	-47.94	≤-41.20	47.26	≤54	PASS
DH5	Ant1	High	2480	Peak	2483.500	-37.04	≤-21.20	58.16	≤74	PASS
DH5	Ant1	High	2480	Peak	2500.000	-41.76	≤-21.20	53.44	≤74	PASS
DH5	Ant1	High	2480	Peak	2485.600	-35.43	≤-21.20	59.77	≤74	PASS
DH5	Ant1	High	2480	AV	2483.500	-43	≤-41.20	52.20	≤54	PASS
DH5	Ant1	High	2480	AV	2500.000	-47.85	≤-41.20	47.35	≤54	PASS
DH5	Ant1	High	2480	AV	2486.800	-42.69	≤-41.20	52.51	≤54	PASS
2DH5	Ant1	Low	2402	Peak	2390.000	-41.71	≤-21.20	53.49	≤74	PASS
2DH5	Ant1	Low	2402	Peak	2310.000	-42.64	≤-21.20	52.56	≤74	PASS
2DH5	Ant1	Low	2402	Peak	2352.920	-39.38	≤-21.20	55.82	≤74	PASS
2DH5	Ant1	Low	2402	AV	2390.000	-48.92	≤-41.20	46.28	≤54	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.34	≤-41.20	45.86	≤54	PASS
2DH5	Ant1	Low	2402	AV	2388.515	-47.72	≤-41.20	47.48	≤54	PASS
2DH5	Ant1	High	2480	Peak	2483.500	-33.32	≤-21.20	61.88	≤74	PASS
2DH5	Ant1	High	2480	Peak	2500.000	-40.69	≤-21.20	54.51	≤74	PASS
2DH5	Ant1	High	2480	Peak	2483.520	-33.32	≤-21.20	61.88	≤74	PASS
2DH5	Ant1	High	2480	AV	2483.500	-43.08	≤-41.20	52.12	≤54	PASS
2DH5	Ant1	High	2480	AV	2500.000	-47.79	≤-41.20	47.41	≤54	PASS
2DH5	Ant1	High	2480	AV	2483.520	-43.08	≤-41.20	52.12	≤54	PASS

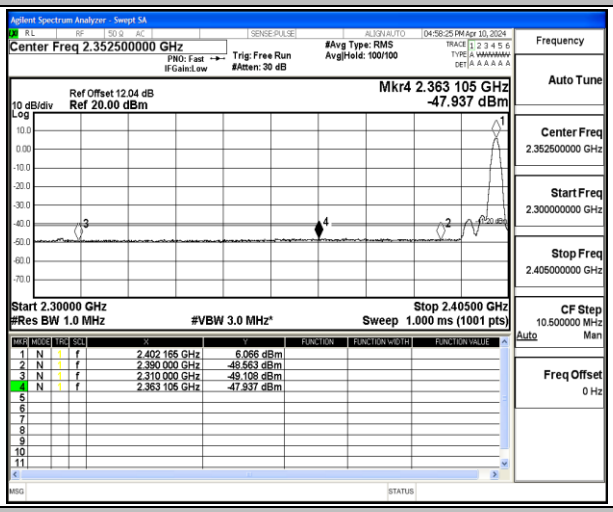
Note：

1. The Antenna Gain is compensated in the graph.
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.

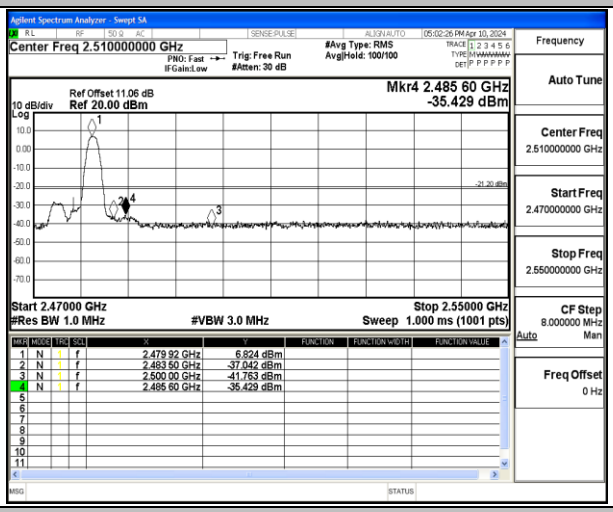
Test Graphs



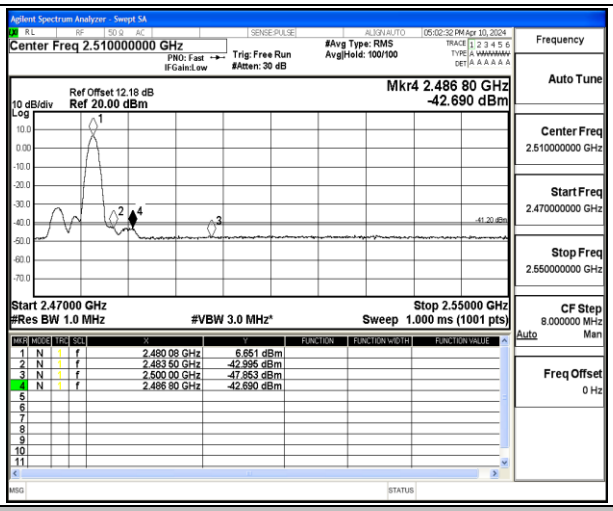
DH5-Ant1-2402-PASS



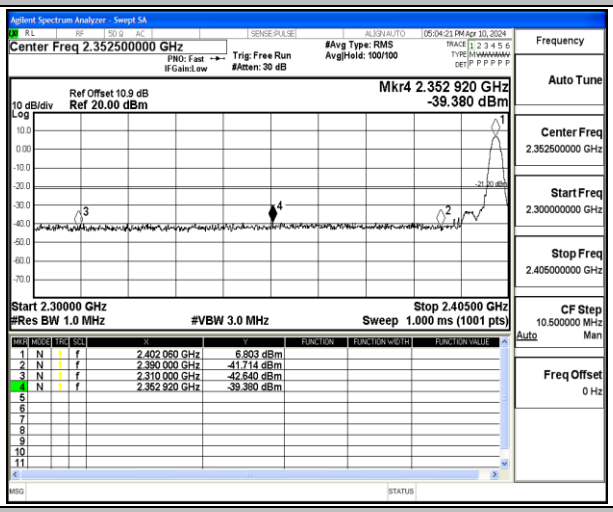
DH5-Ant1-2402-PASS



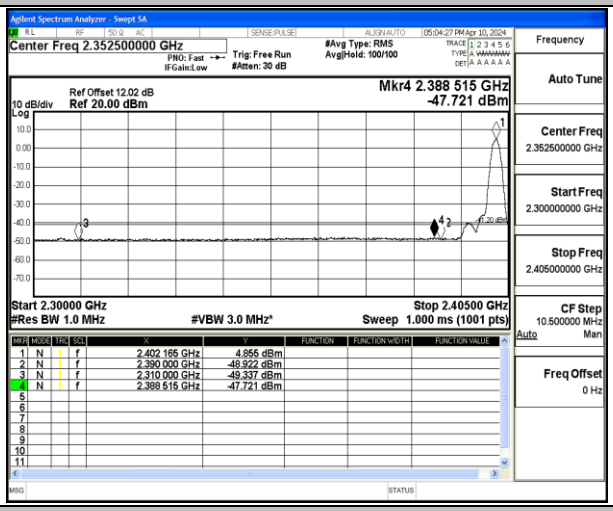
DH5-Ant1-2480-PASS



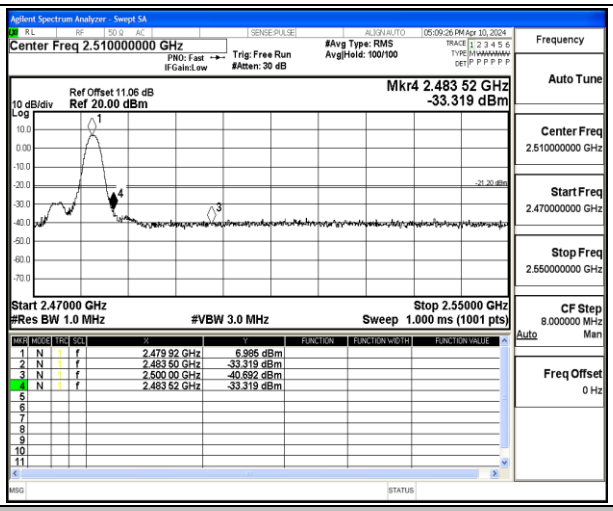
DH5-Ant1-2480-PASS



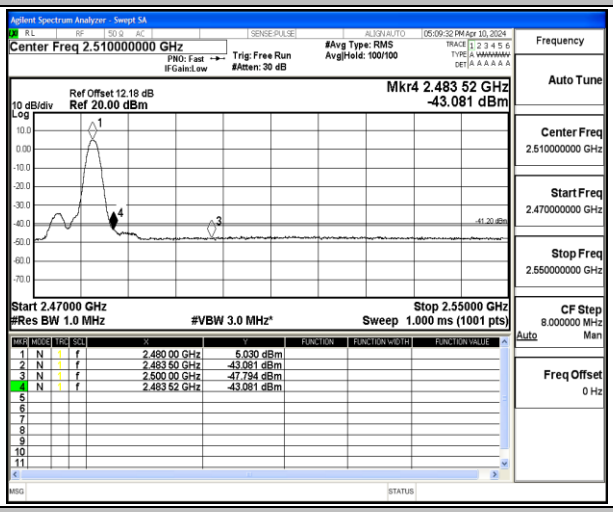
2DH5-Ant1-2402-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-2480-PASS