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

Product Name: Portable Light up Bluetooth Speaker

Trade Mark: /

Test Model: YS-BS0553

FCC ID: 2AWHS-BS0553

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: 20dB Emission Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	20db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.957	2401.574	2402.531	---	---
DH5	Ant1	2441	0.954	2440.574	2441.528	---	---
DH5	Ant1	2480	0.957	2479.574	2480.531	---	---
2DH5	Ant1	2402	1.338	2401.367	2402.705	---	---
2DH5	Ant1	2441	1.305	2440.385	2441.690	---	---
2DH5	Ant1	2480	1.314	2479.382	2480.696	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

DH5-Ant1-2402

DH5-Ant1-2441

DH5-Ant1-2480

2DH5-Ant1-2402

2DH5-Ant1-2441

2DH5-Ant1-2480

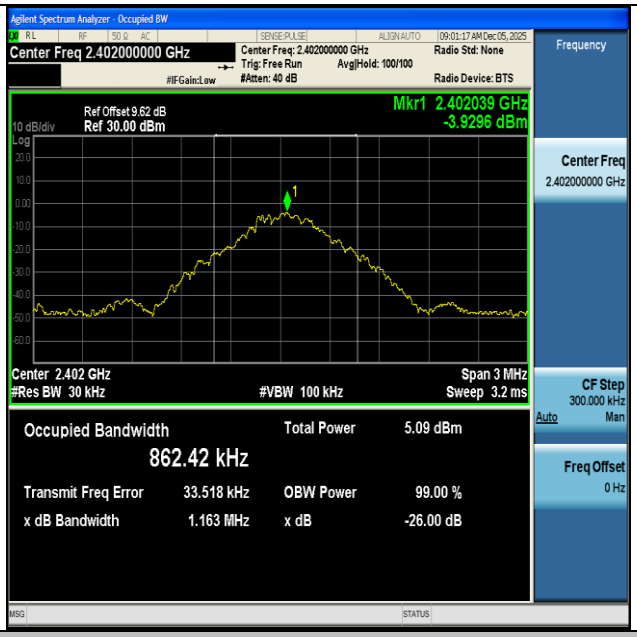
Appendix B: Occupied Channel Bandwidth

Test Result

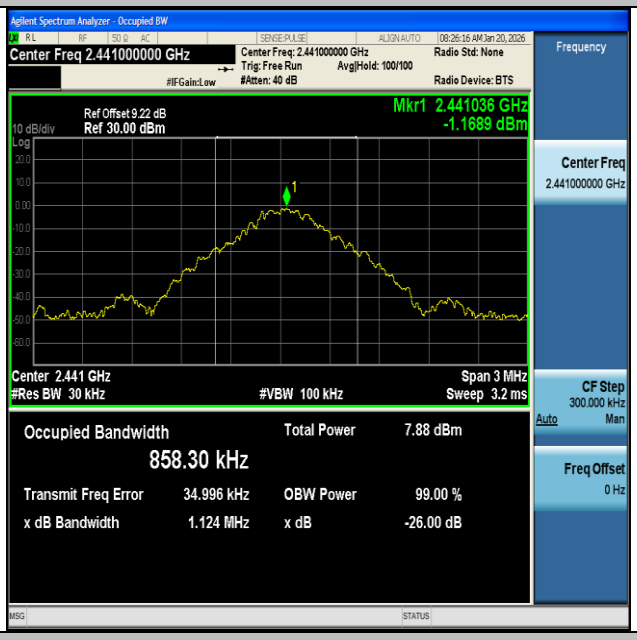
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
DH5	Ant1	2402	0.86242	2401.6023	2402.4647	---	---
DH5	Ant1	2441	0.85830	2440.6059	2441.4642	---	---
DH5	Ant1	2480	0.85209	2479.6089	2480.4610	---	---
2DH5	Ant1	2402	1.1961	2401.4408	2402.6369	---	---
2DH5	Ant1	2441	1.1860	2440.4449	2441.6309	---	---
2DH5	Ant1	2480	1.1726	2479.4513	2480.6239	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

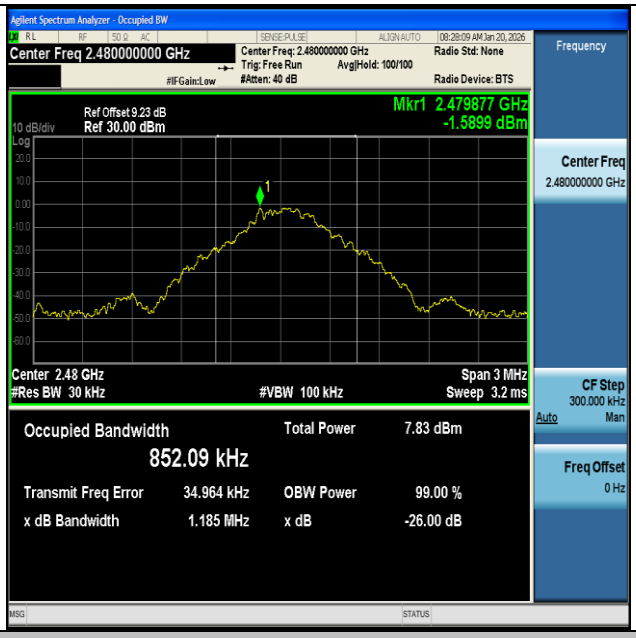
Test Graphs



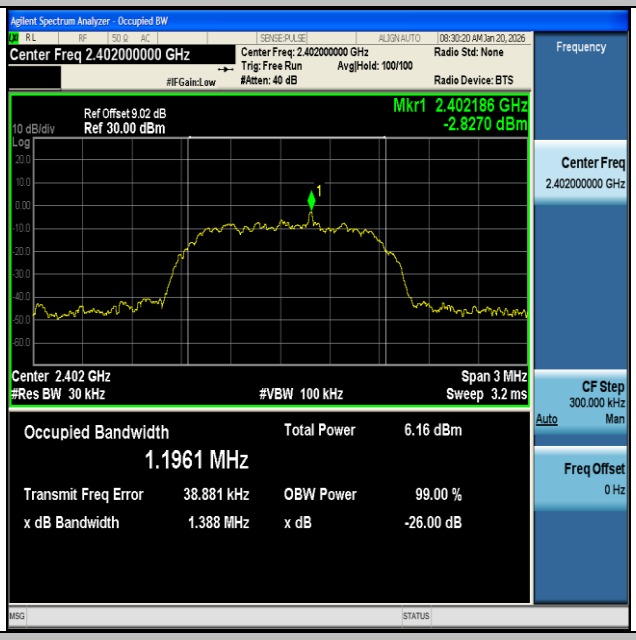
DH5-Ant1-2402



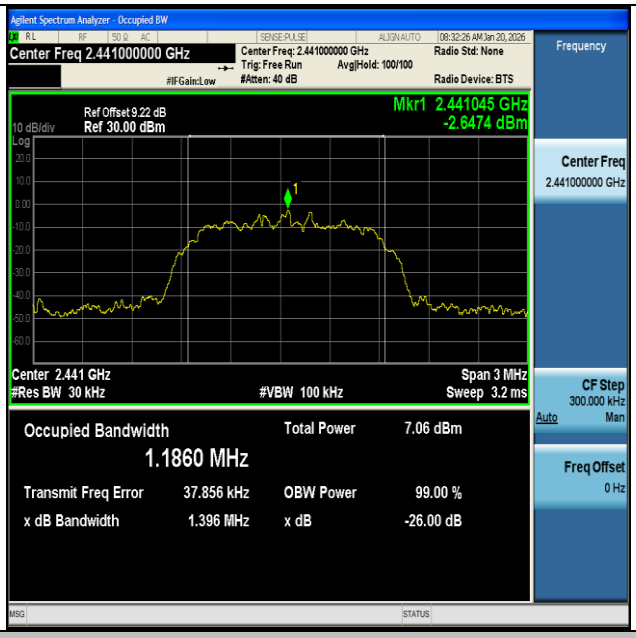
DH5-Ant1-2441



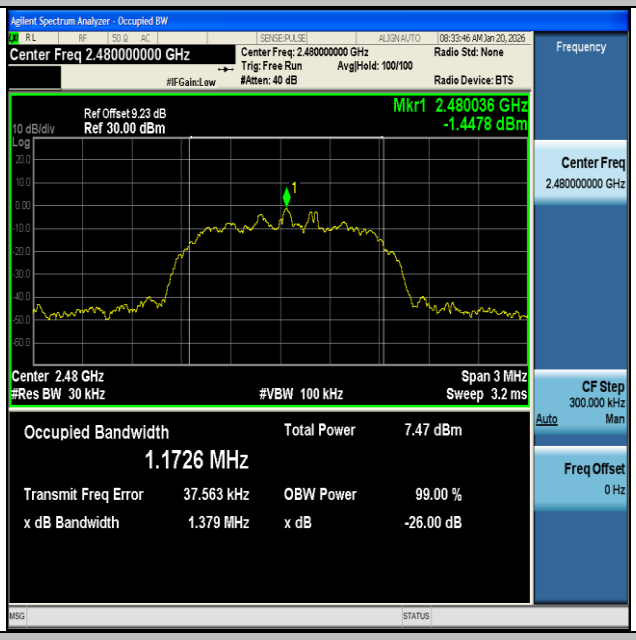
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



2DH5-Ant1-2480

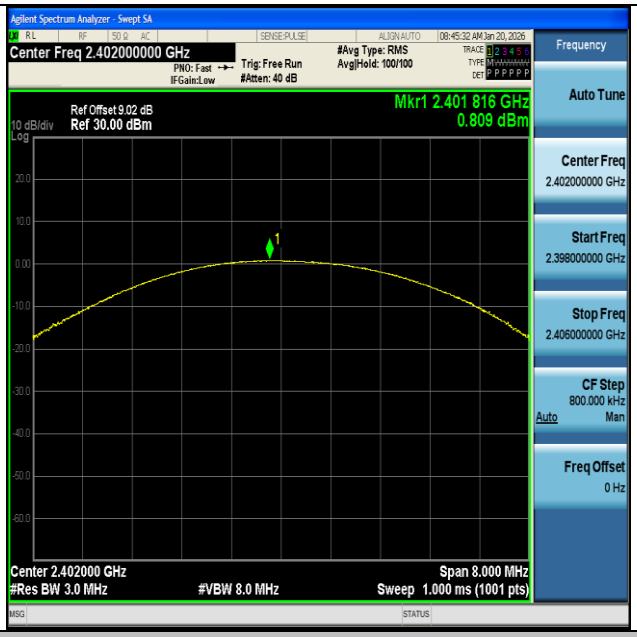
Appendix C: Maximum peak conducted output power

Test Result

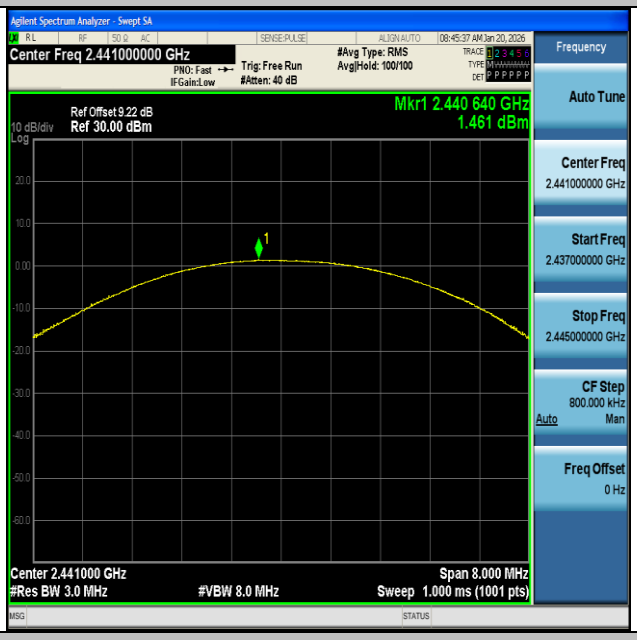
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	0.81	≤30	PASS
DH5	Ant1	2441	1.46	≤30	PASS
DH5	Ant1	2480	1.20	≤30	PASS
2DH5	Ant1	2402	1.49	≤20.97	PASS
2DH5	Ant1	2441	2.08	≤20.97	PASS
2DH5	Ant1	2480	1.92	≤20.97	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

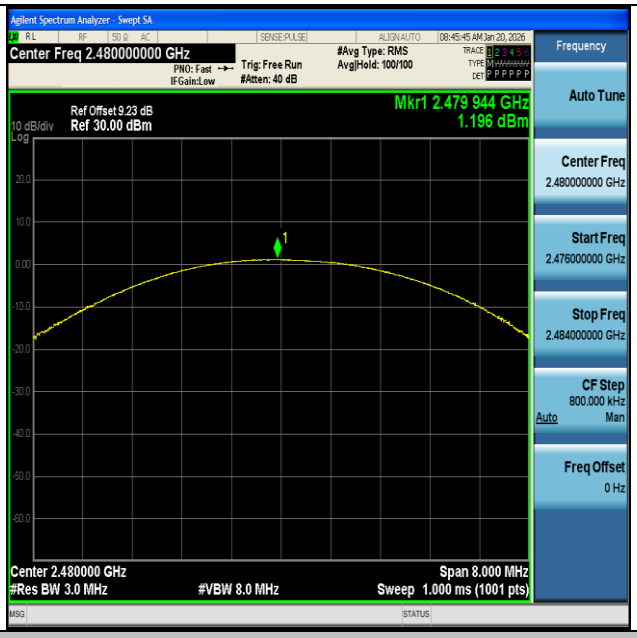
Test Graphs



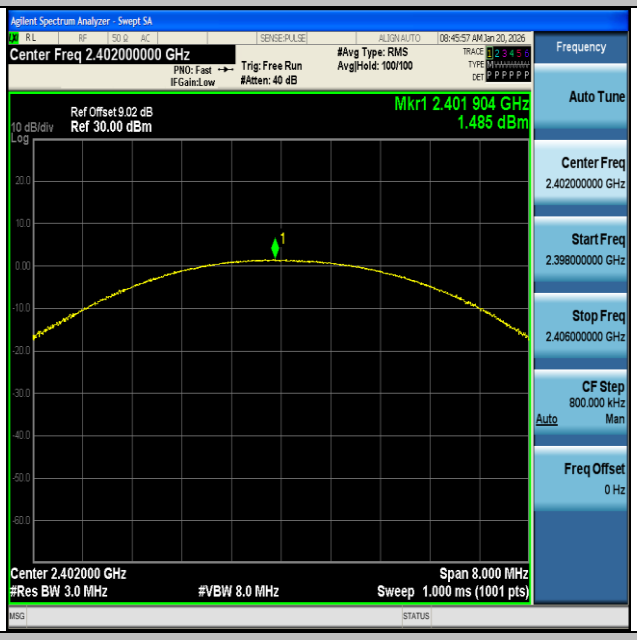
DH5-Ant1-2402-PASS



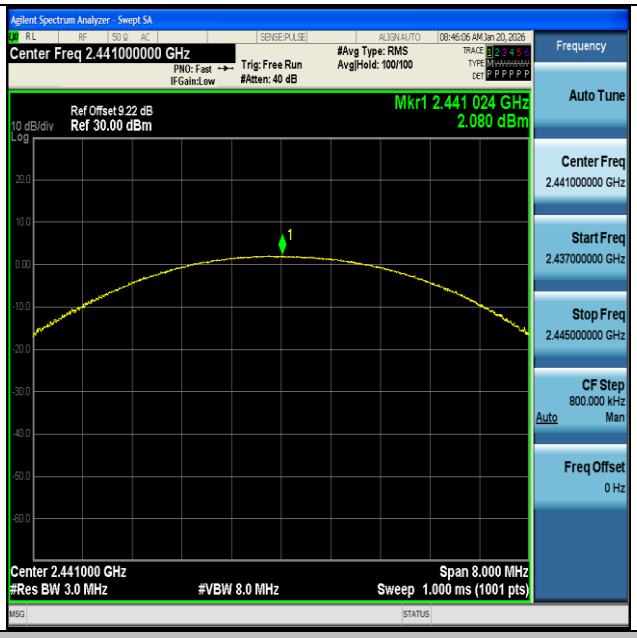
DH5-Ant1-2441-PASS



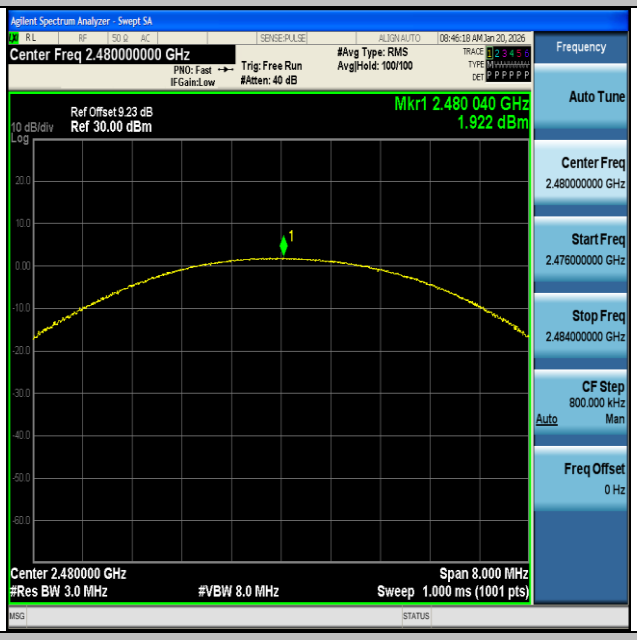
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS



2DH5-Ant1-2480-PASS

Appendix D: Carrier frequency separation

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [MHz]	Limit [MHz]	Verdict
DH5	Ant1	Hop	0.992	≥0.957	PASS
2DH5	Ant1	Hop	1.004	≥0.892	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

DH5-Ant1-Hop-PASS

2DH5-Ant1-Hop-PASS

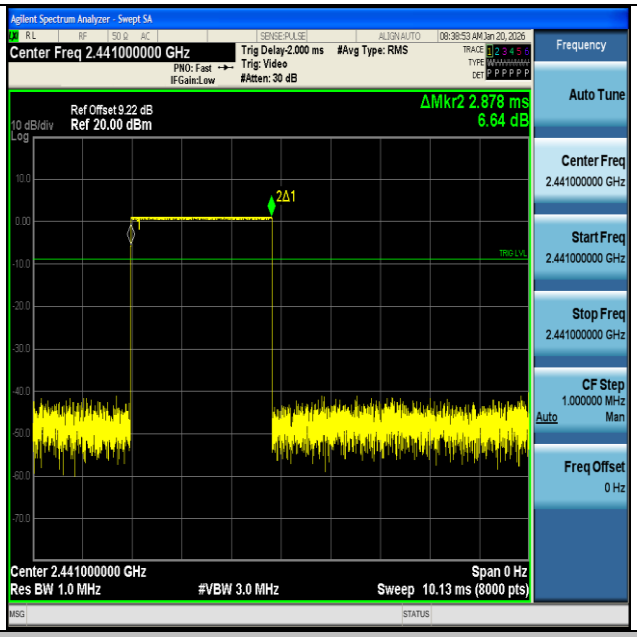
Appendix E: Time of occupancy

Test Result

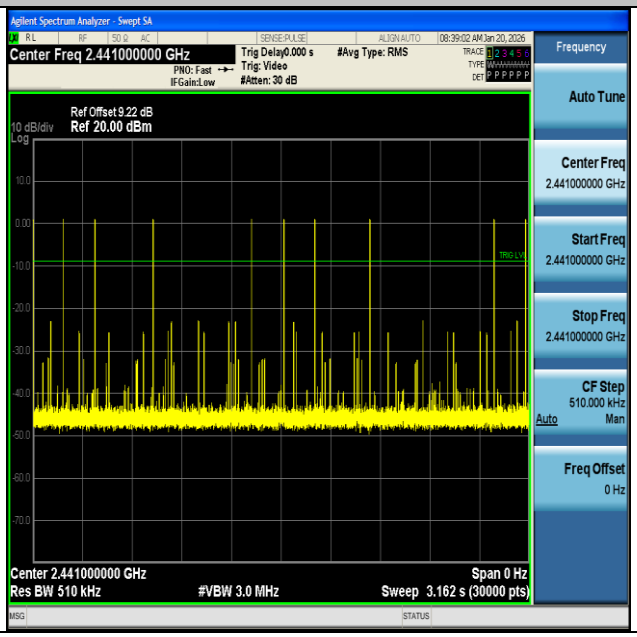
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.878	100	0.288	≤0.4	PASS
2DH5	Ant1	Hop	2.884	50	0.144	≤0.4	PASS

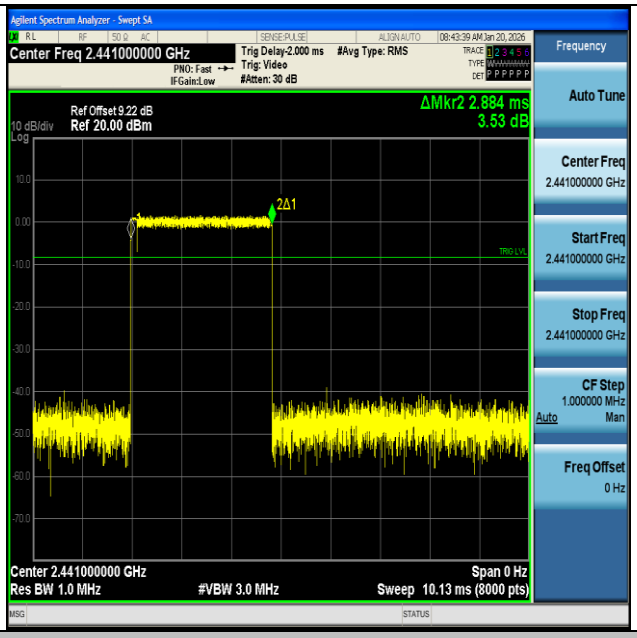
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs

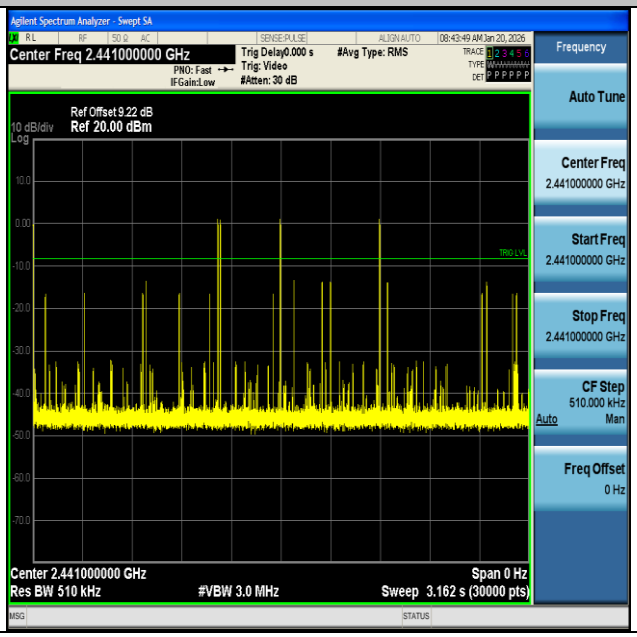


DH5-Ant1-Hop-PASS





2DH5-Ant1-Hop-PASS



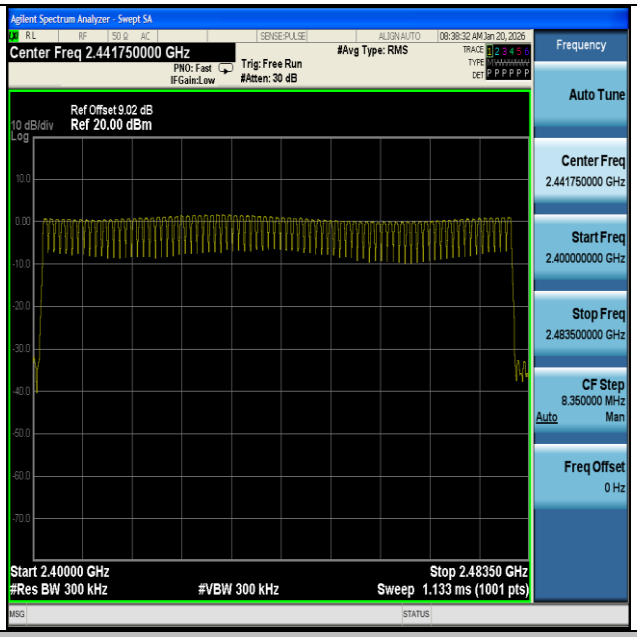
Appendix F: Number of hopping channels

Test Result

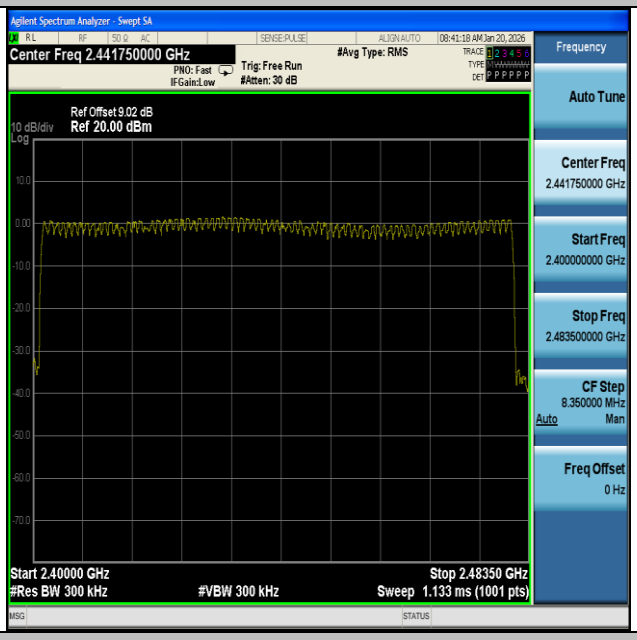
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



DH5-Ant1-Hop-PASS



2DH5-Ant1-Hop-PASS

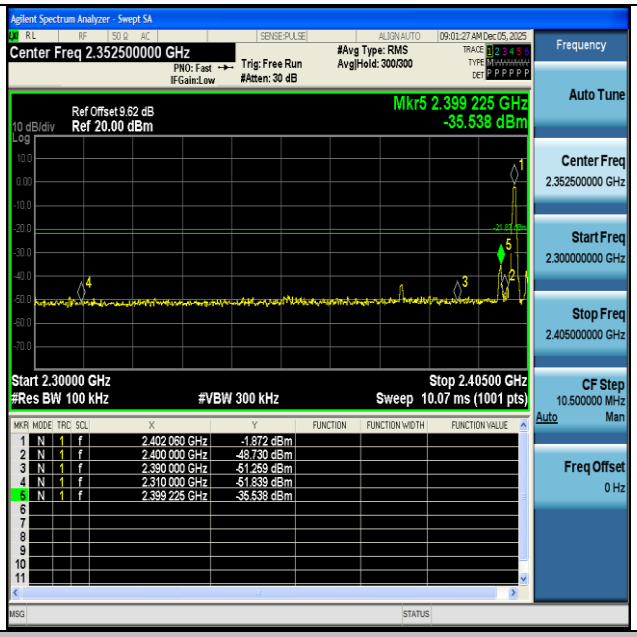
Appendix G: Band edge measurements

Test Result

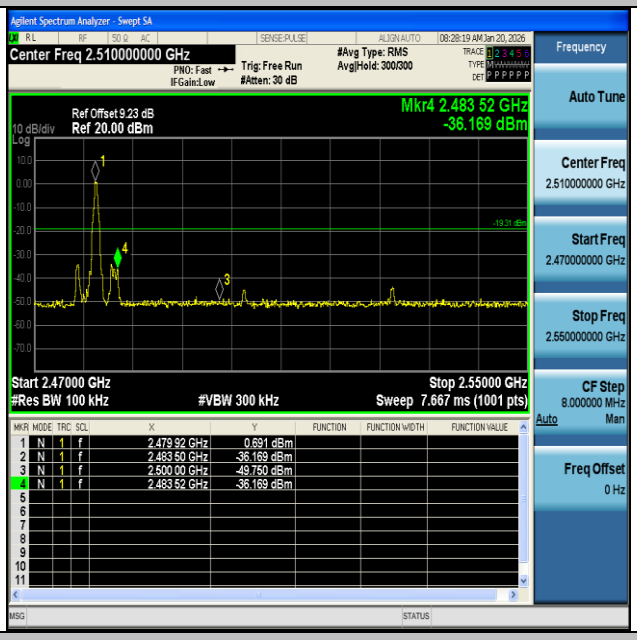
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.87	-35.54	≤-21.87	PASS
DH5	Ant1	High	2480	0.69	-36.17	≤-19.31	PASS
DH5	Ant1	Low	Hop_2402	-0.03	-33.53	≤-20.03	PASS
DH5	Ant1	High	Hop_2480	0.05	-43.2	≤-19.95	PASS
2DH5	Ant1	Low	2402	0.30	-31.93	≤-19.7	PASS
2DH5	Ant1	High	2480	0.77	-36.72	≤-19.23	PASS
2DH5	Ant1	Low	Hop_2402	-0.67	-37.12	≤-20.67	PASS
2DH5	Ant1	High	Hop_2480	-1.32	-45.2	≤-21.32	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

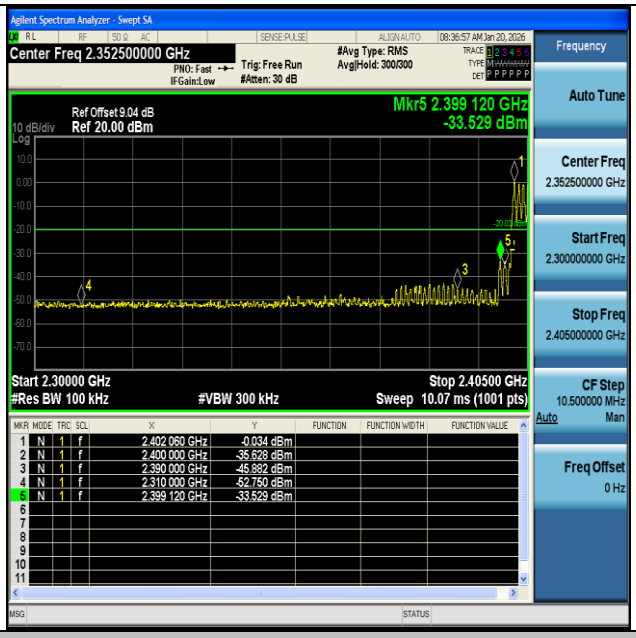
Test Graphs



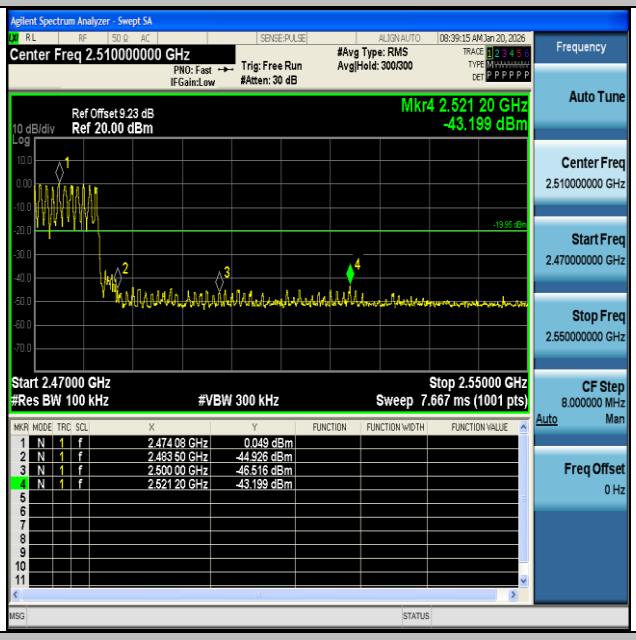
DH5-Ant1-2402-PASS



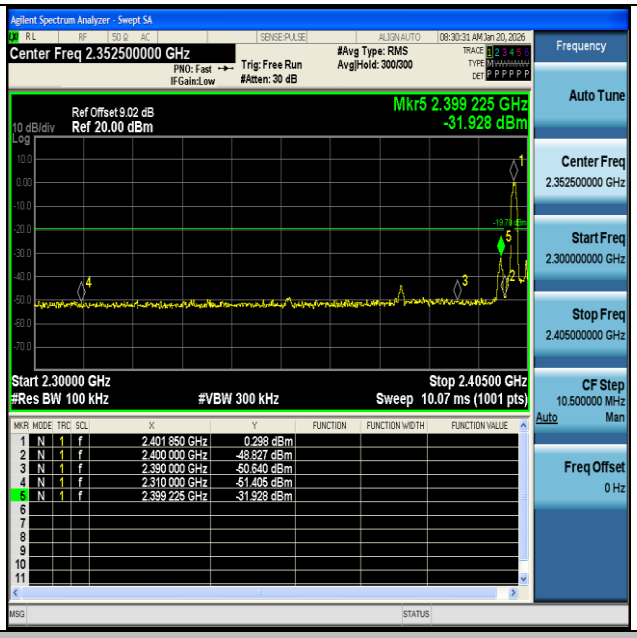
DH5-Ant1-2480-PASS



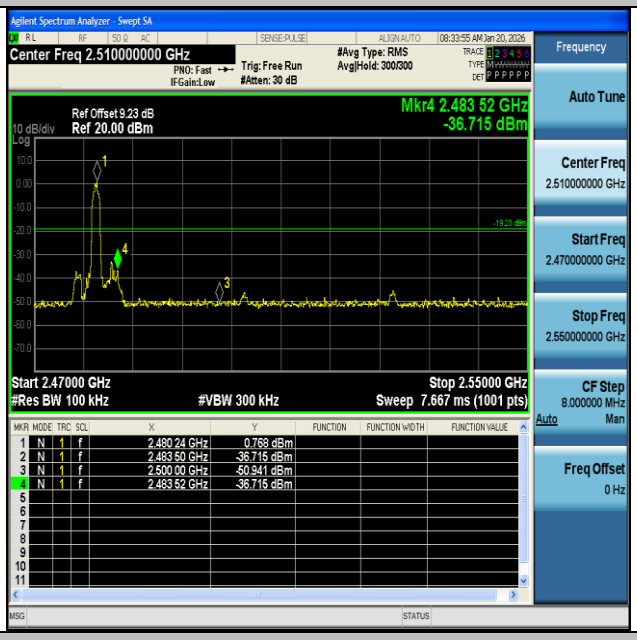
DH5-Ant1-Hop_2402-PASS



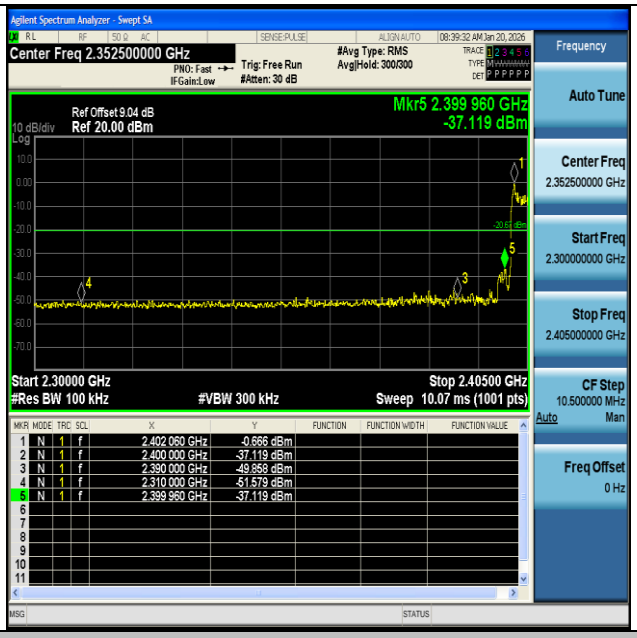
DH5-Ant1-Hop_2480-PASS



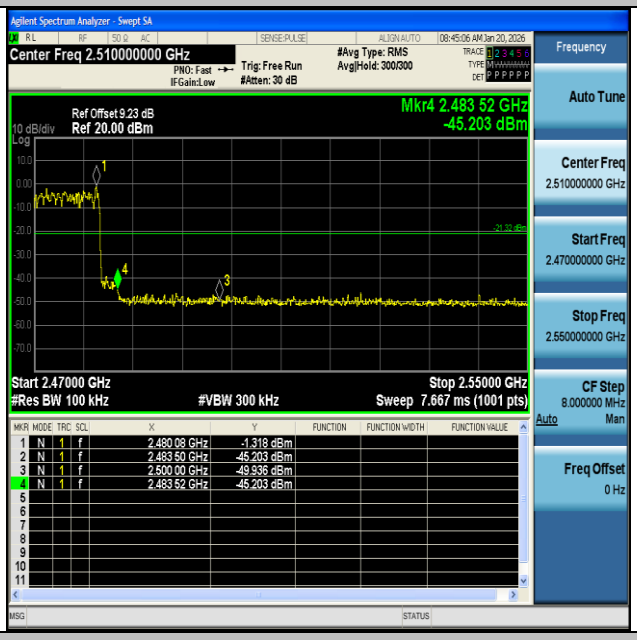
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



2DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

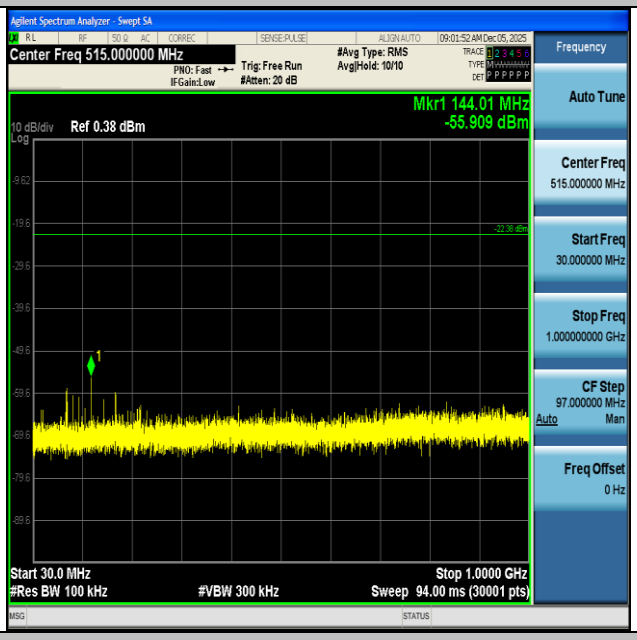
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-2.38	-2.38	---	PASS
DH5	Ant1	2402	30~1000	-2.38	-55.91	≤-22.38	PASS
DH5	Ant1	2402	1000~26500	-0.24	-37.3	≤-20.24	PASS
DH5	Ant1	2441	0~Reference	0.00	0.00	---	PASS
DH5	Ant1	2441	30~1000	0.00	-54.91	≤-20	PASS
DH5	Ant1	2441	1000~26500	0.00	-37.36	≤-20	PASS
DH5	Ant1	2480	0~Reference	0.20	0.20	---	PASS
DH5	Ant1	2480	30~1000	0.20	-55.93	≤-19.8	PASS
DH5	Ant1	2480	1000~26500	0.20	-37.75	≤-19.8	PASS
2DH5	Ant1	2402	0~Reference	-3.31	-3.31	---	PASS
2DH5	Ant1	2402	30~1000	-3.31	-56.17	≤-23.31	PASS
2DH5	Ant1	2402	1000~26500	-3.31	-37.59	≤-23.31	PASS
2DH5	Ant1	2441	0~Reference	-0.30	-0.30	---	PASS
2DH5	Ant1	2441	30~1000	-0.30	-57.49	≤-20.3	PASS
2DH5	Ant1	2441	1000~26500	-0.30	-37.37	≤-20.3	PASS
2DH5	Ant1	2480	0~Reference	-1.50	-1.50	---	PASS
2DH5	Ant1	2480	30~1000	-1.50	-56.87	≤-21.5	PASS
2DH5	Ant1	2480	1000~26500	-1.50	-37.54	≤-21.5	PASS

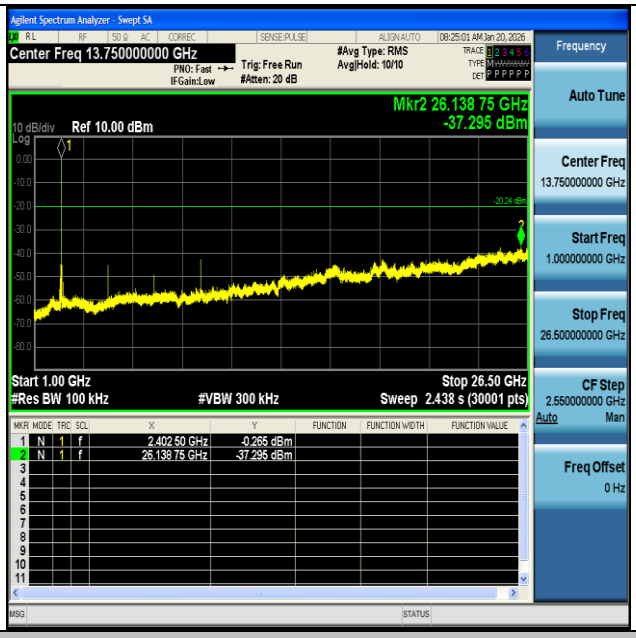
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

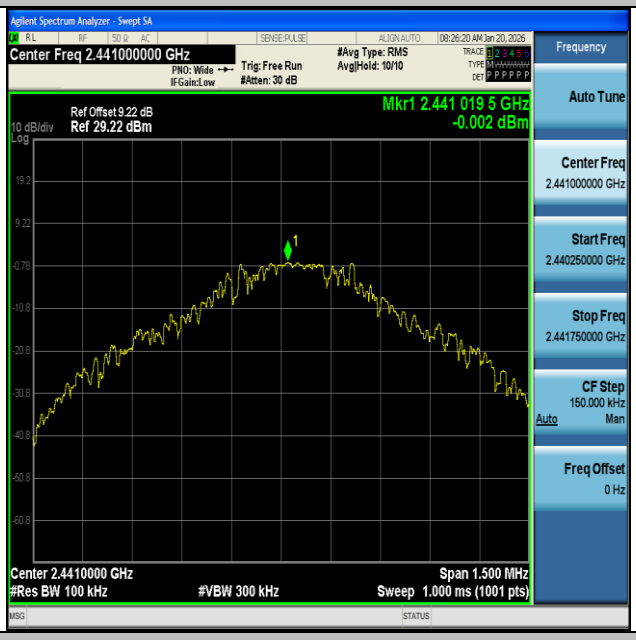
DH5-Ant1-2402-0~Reference-PASS



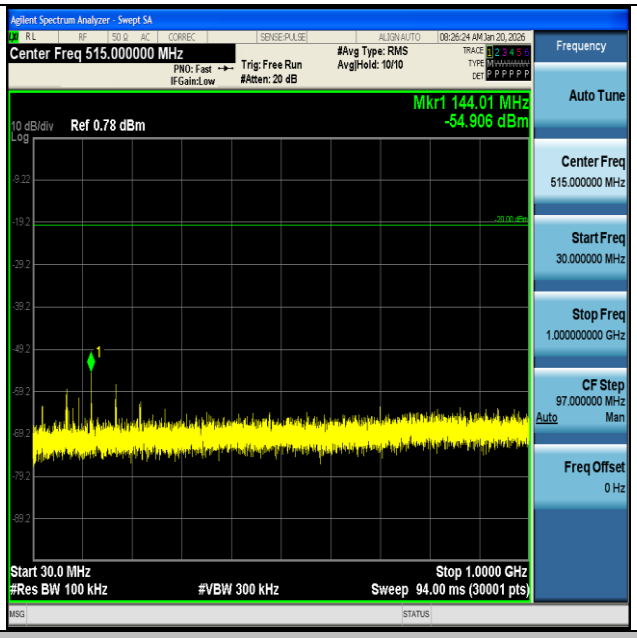
DH5-Ant1-2402-30~1000-PASS



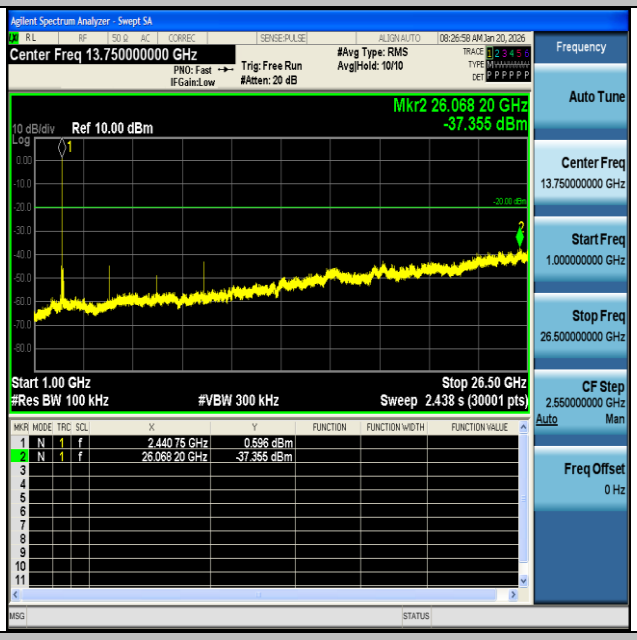
DH5-Ant1-2402-1000~26500-PASS



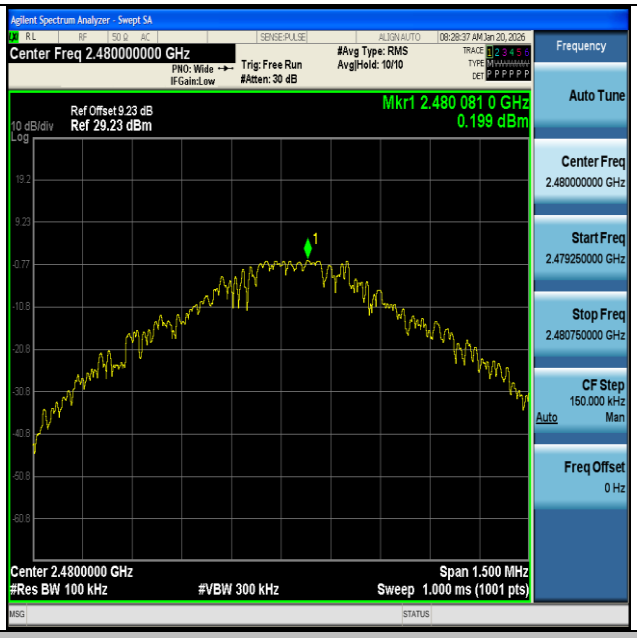
DH5-Ant1-2441-0~Reference-PASS



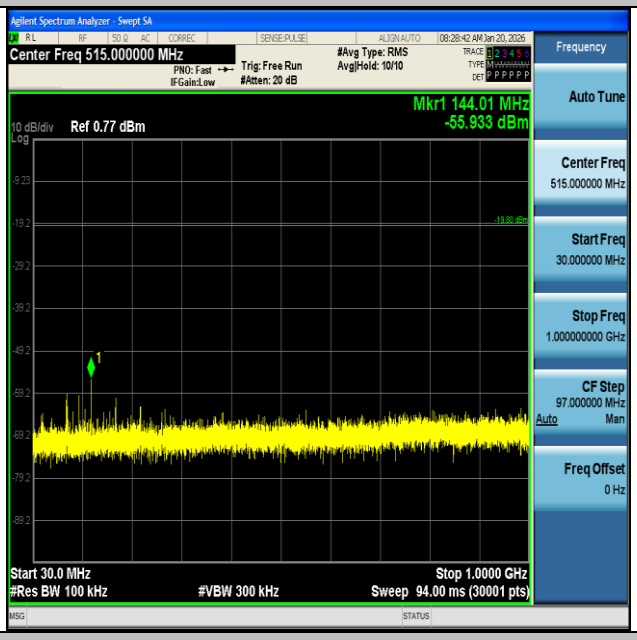
DH5-Ant1-2441-30~1000-PASS



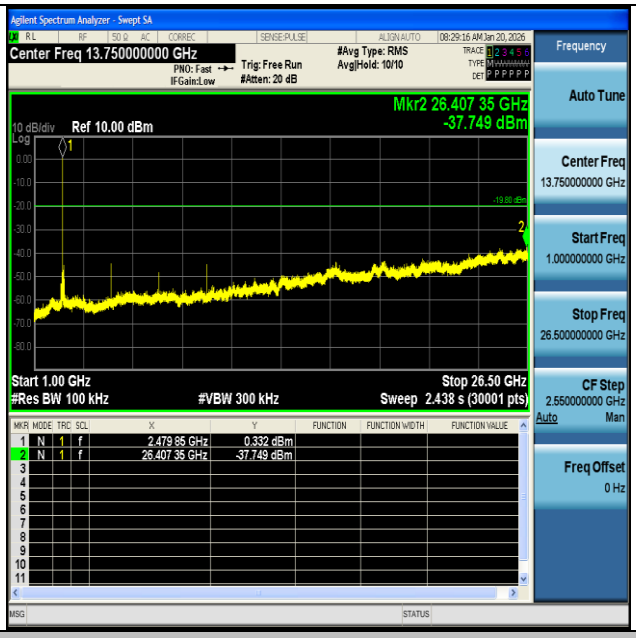
DH5-Ant1-2441-1000~26500-PASS



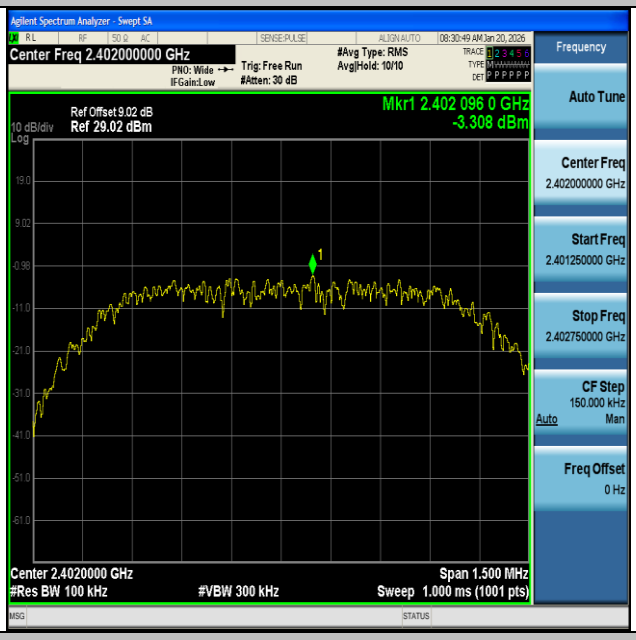
DH5-Ant1-2480-0~Reference-PASS



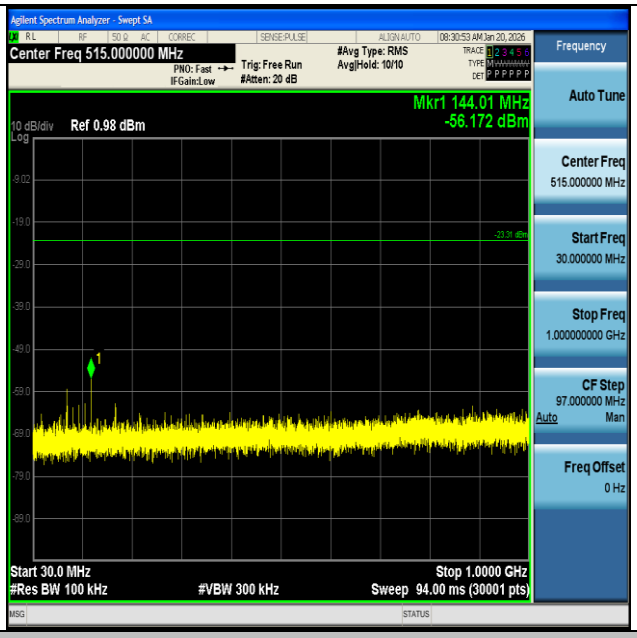
DH5-Ant1-2480-30~1000-PASS



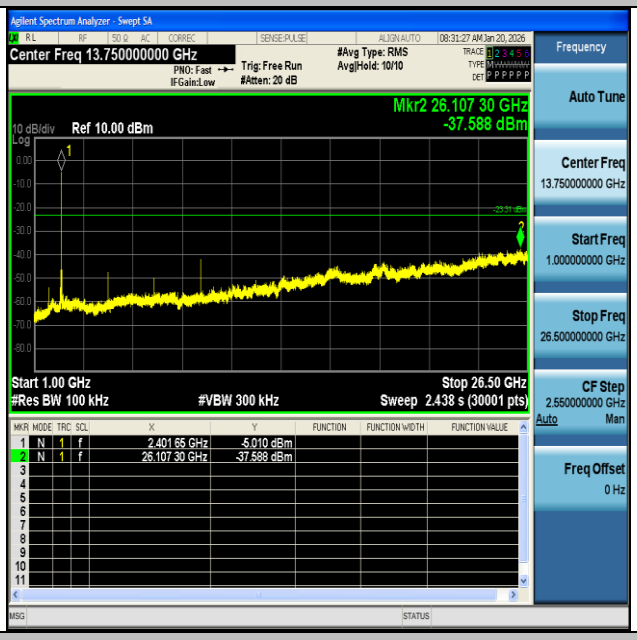
DH5-Ant1-2480-1000~26500-PASS



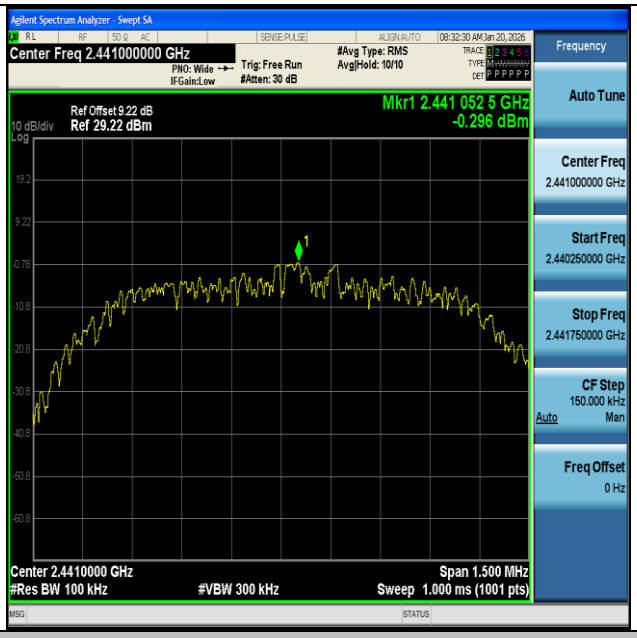
2DH5-Ant1-2402-0~Reference-PASS



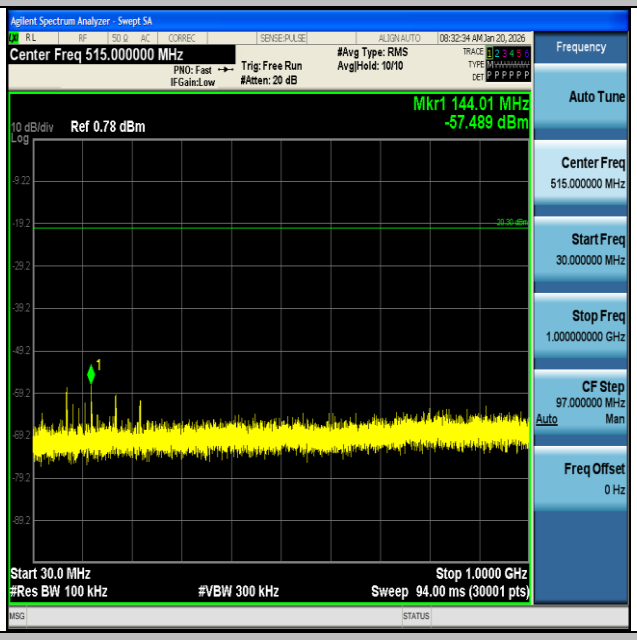
2DH5-Ant1-2402-30~1000-PASS



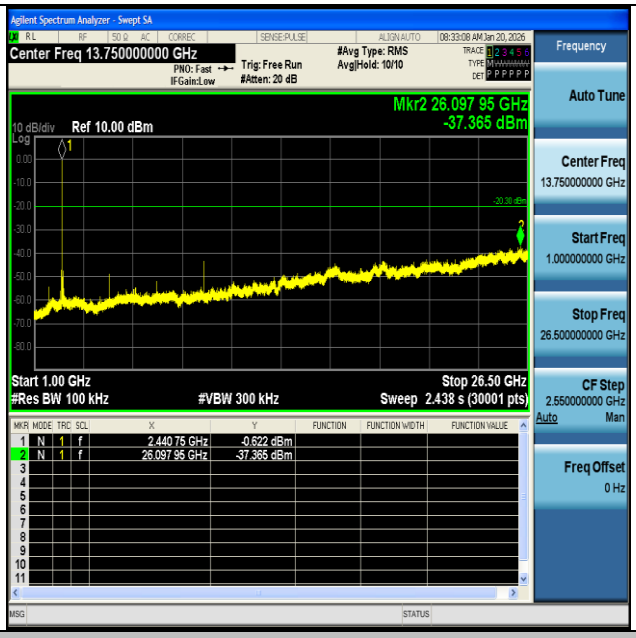
2DH5-Ant1-2402-1000~26500-PASS



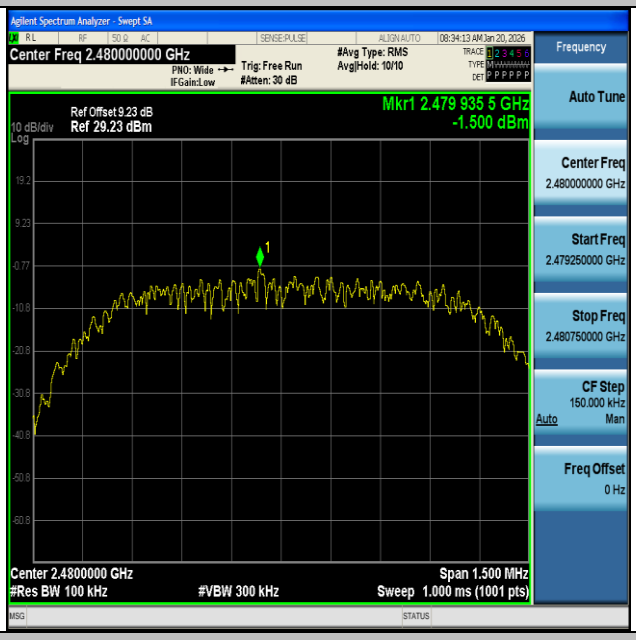
2DH5-Ant1-2441-0~Reference-PASS



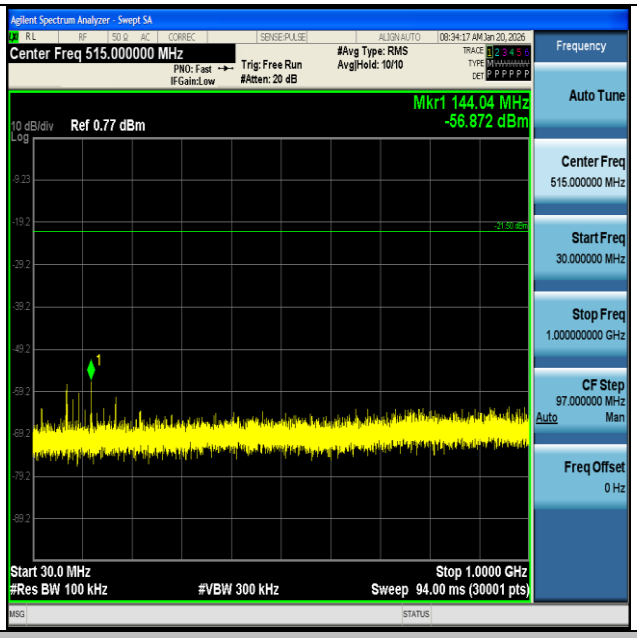
2DH5-Ant1-2441-30~1000-PASS



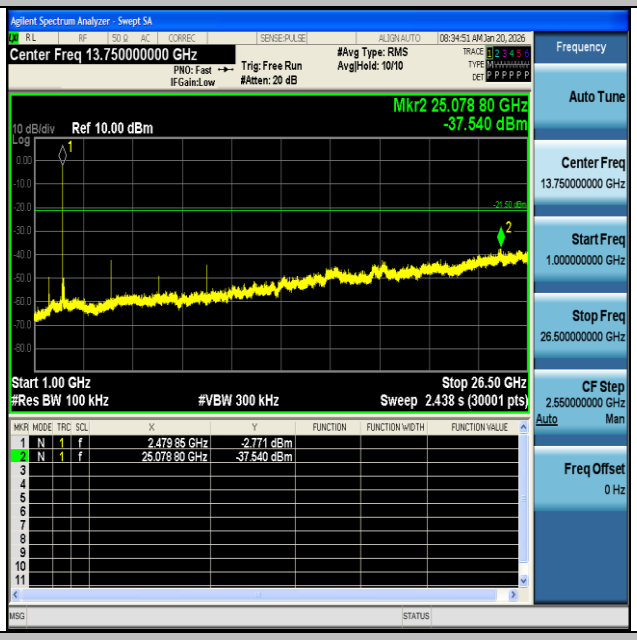
2DH5-Ant1-2441-1000~26500-PASS



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



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



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

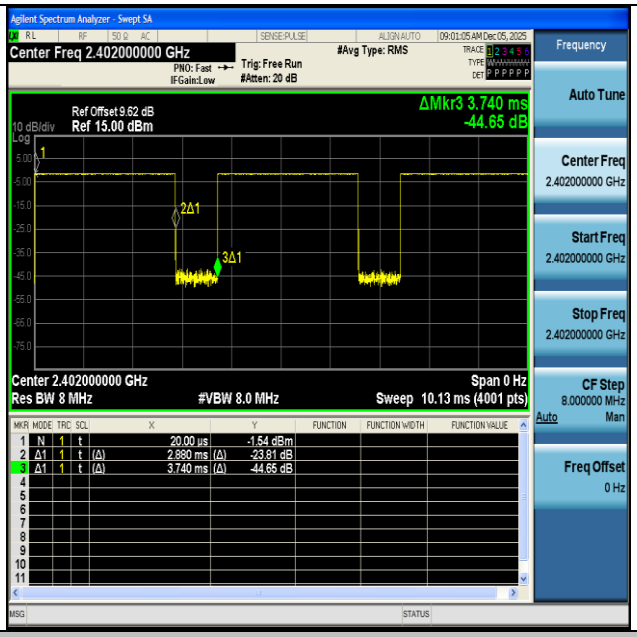
Appendix I: Duty Cycle

Test Result

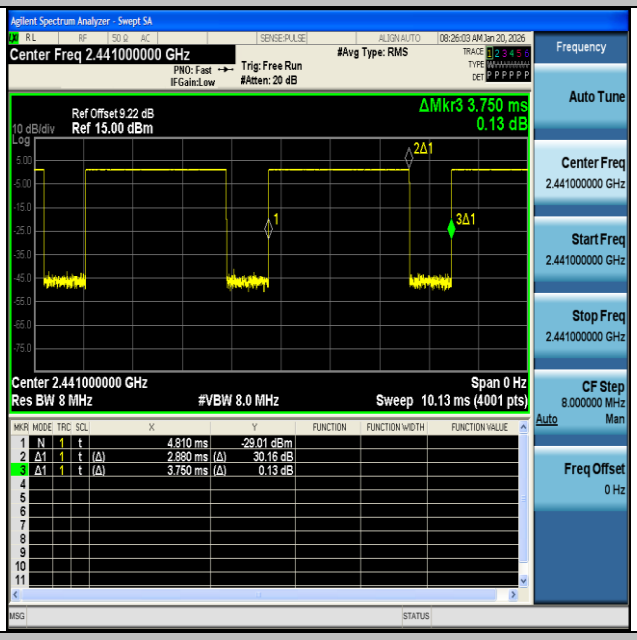
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
DH5	Ant1	2402	2.88	3.74	77.01	1.13
DH5	Ant1	2441	2.88	3.75	76.80	1.15
DH5	Ant1	2480	2.88	3.75	76.80	1.15
2DH5	Ant1	2402	2.89	3.75	77.07	1.13
2DH5	Ant1	2441	2.88	3.75	76.80	1.15
2DH5	Ant1	2480	2.89	3.75	77.07	1.13

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

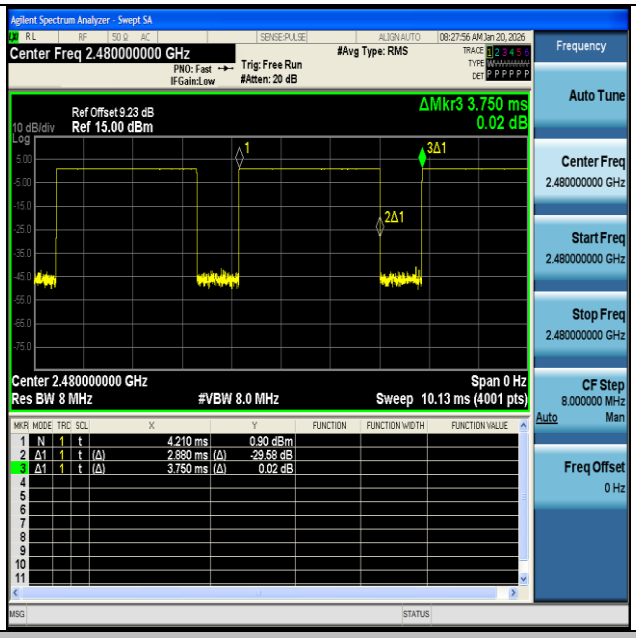
Test Graphs



NTNV-DH5-Ant1-2402



NTNV-DH5-Ant1-2441



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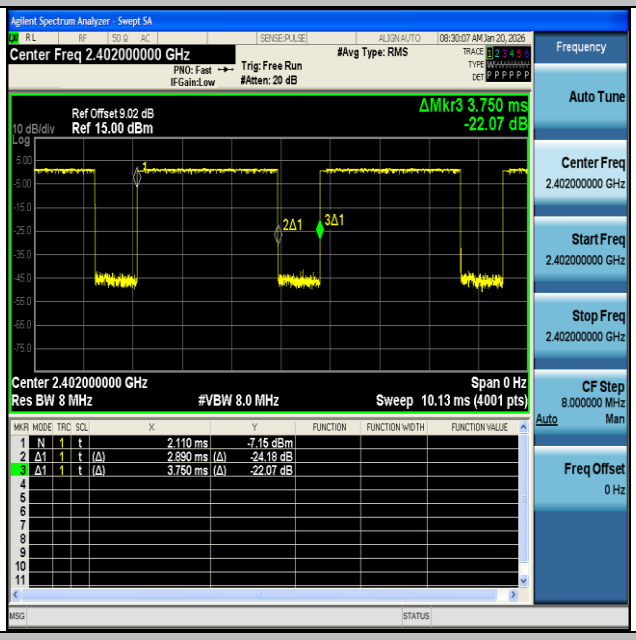
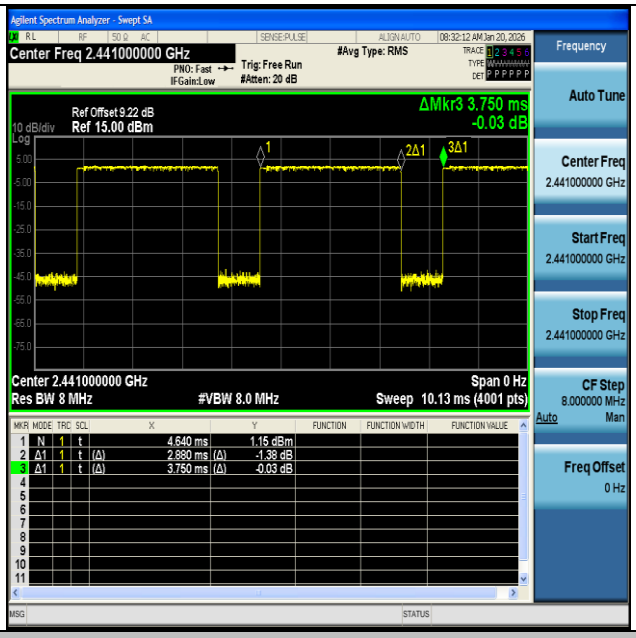
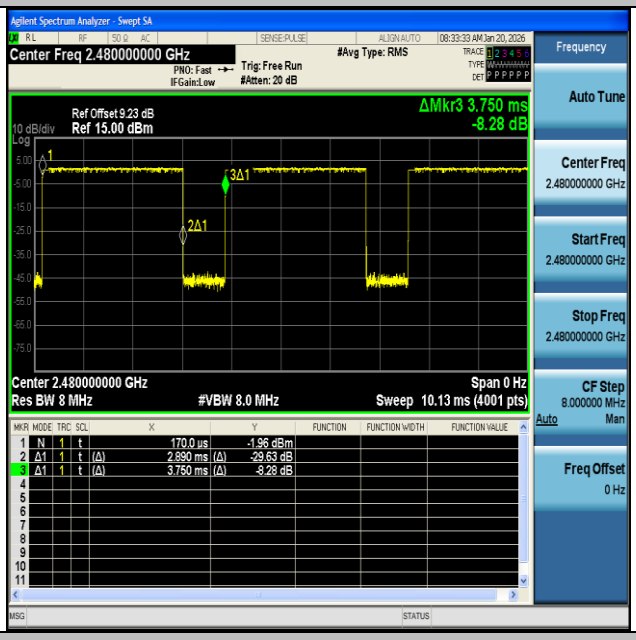


NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480