



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

Product Name: Lighting Speaker with stand PEANUTS

Trade Mark: /

Test Model: S160PN_09

FCC ID: UU8-S160

Environmental Conditions

Temperature:	23.5°C
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	1.035	2401.622	2402.657	---	---
DH5	Ant1	2441	1.041	2440.619	2441.660	---	---
DH5	Ant1	2480	1.056	2479.613	2480.669	---	---
2DH5	Ant1	2402	1.356	2401.469	2402.825	---	---
2DH5	Ant1	2441	1.329	2440.478	2441.807	---	---
2DH5	Ant1	2480	1.329	2479.481	2480.810	---	---

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





Test Graphs





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	0.94580	2401.6604	2402.6062	---	---
DH5	Ant1	2441	0.95481	2440.6578	2441.6126	---	---
DH5	Ant1	2480	0.97135	2479.6542	2480.6255	---	---
2DH5	Ant1	2402	1.2177	2401.5320	2402.7497	---	---
2DH5	Ant1	2441	1.2161	2440.5341	2441.7502	---	---
2DH5	Ant1	2480	1.2329	2479.5304	2480.7633	---	---

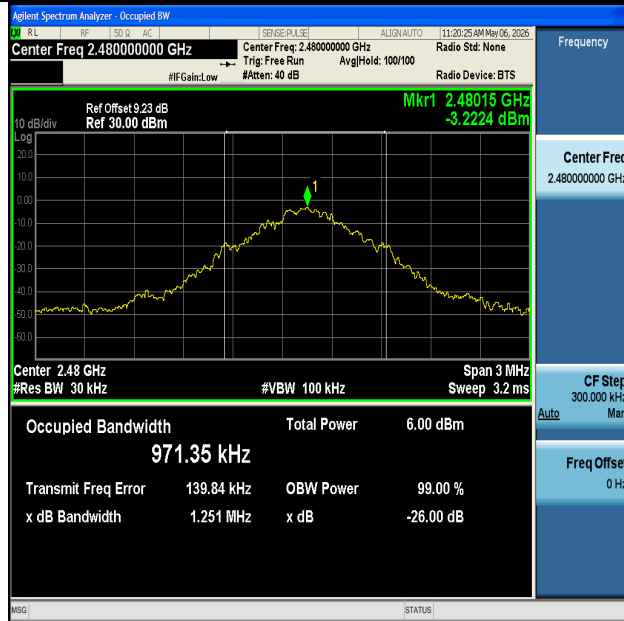
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



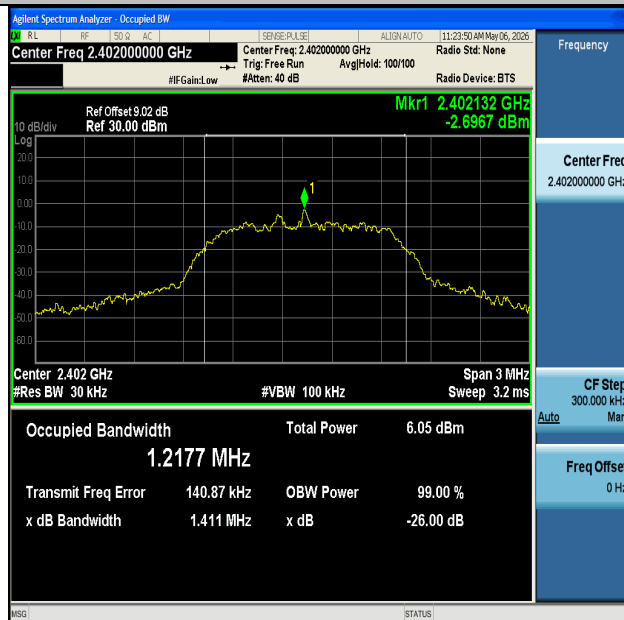


Test Graphs



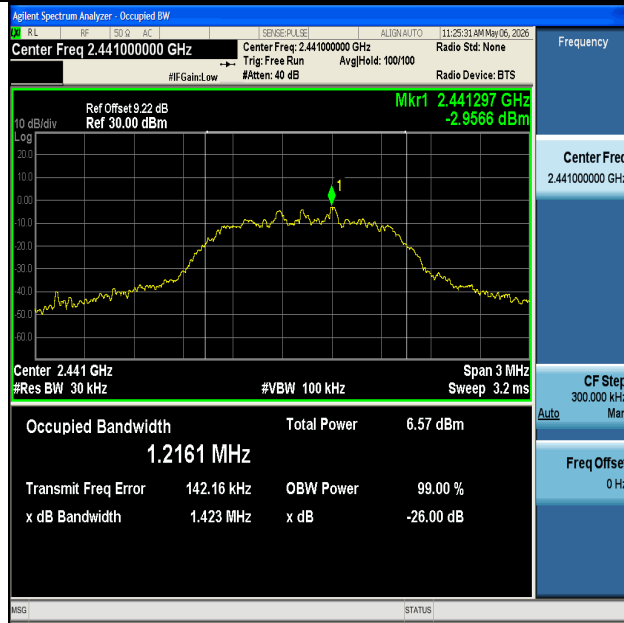


DH5-Ant1-2480



2DH5-Ant1-2402





2DH5-Ant1-2441



2DH5-Ant1-2480





Appendix C: Maximum peak conducted output power

Test Result

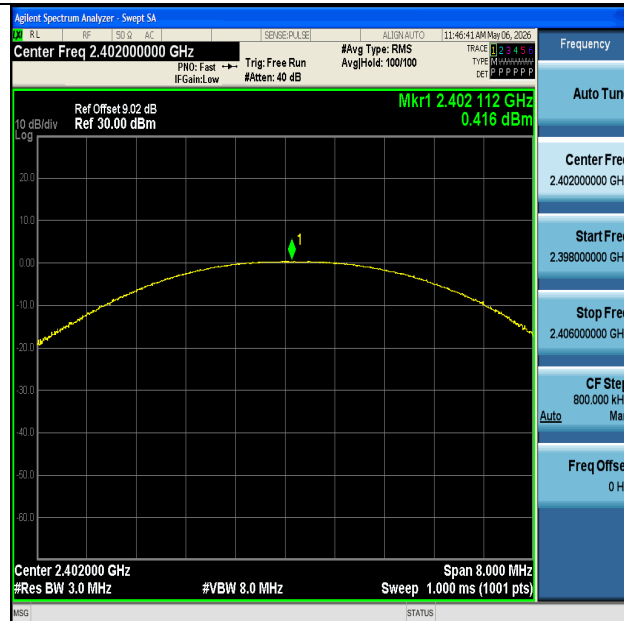
Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
DH5	Ant1	2402	0.42	≤30	PASS
DH5	Ant1	2441	0.30	≤30	PASS
DH5	Ant1	2480	-0.26	≤30	PASS
2DH5	Ant1	2402	1.13	≤20.97	PASS
2DH5	Ant1	2441	1.04	≤20.97	PASS
2DH5	Ant1	2480	0.44	≤20.97	PASS

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

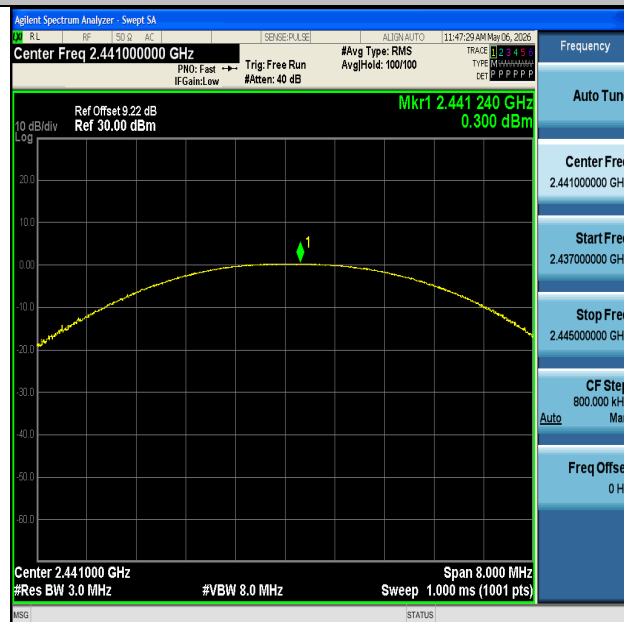




Test Graphs

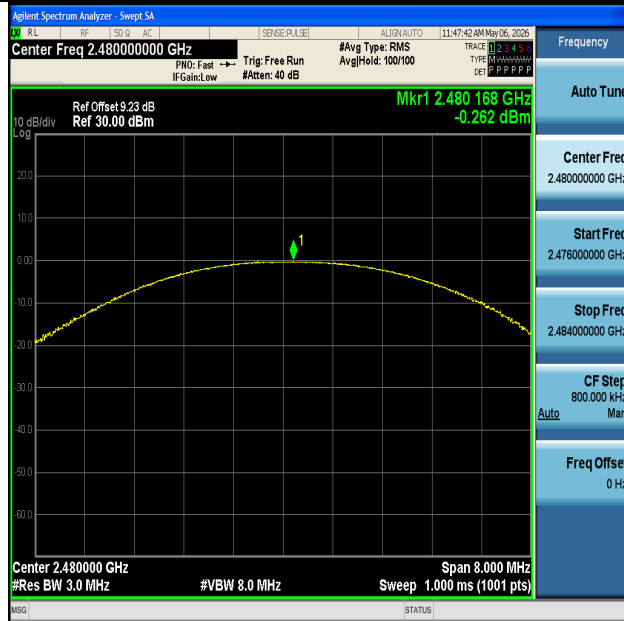


DH5-Ant1-2402-PASS

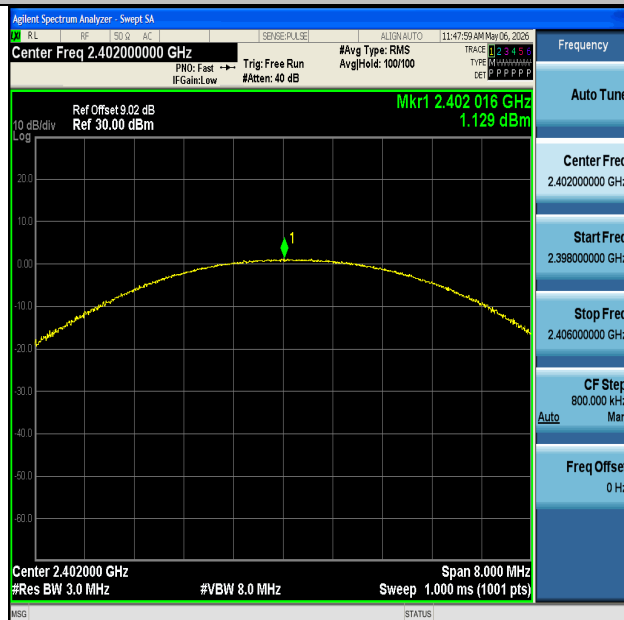


DH5-Ant1-2441-PASS



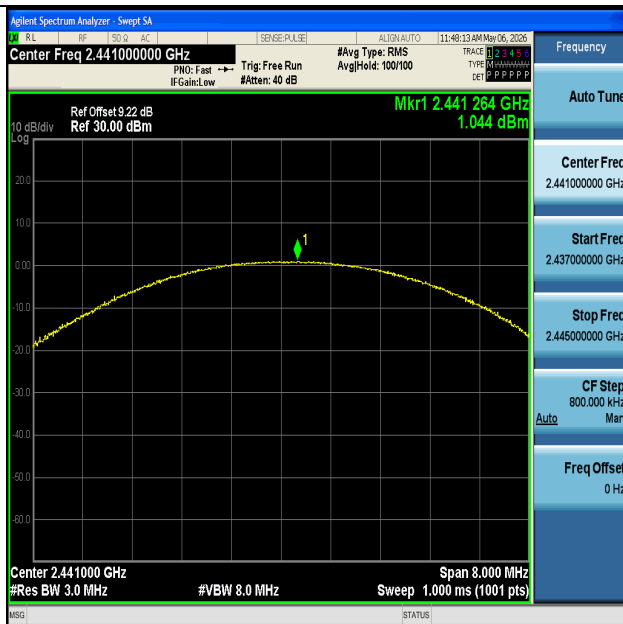


DH5-Ant1-2480-PASS

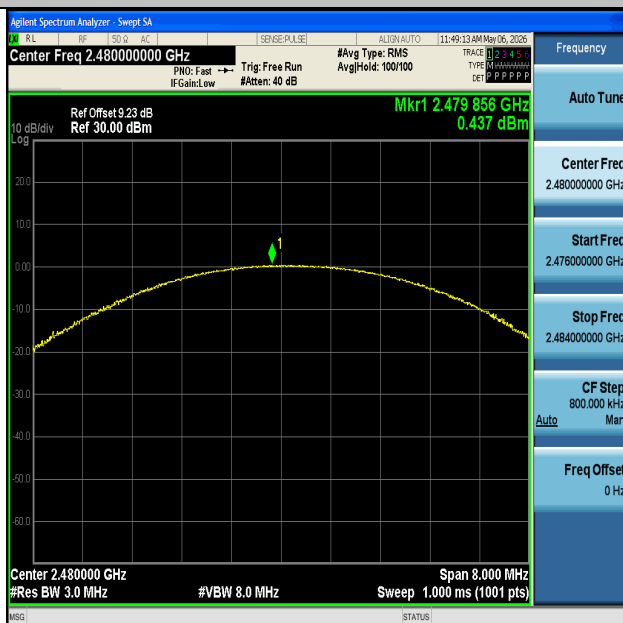


2DH5-Ant1-2402-PASS





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	1.13	≥ 1.056	PASS
2DH5	Ant1	Hop	1	≥ 0.904	PASS

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





Test Graphs





Appendix E: Time of occupancy

Test Result

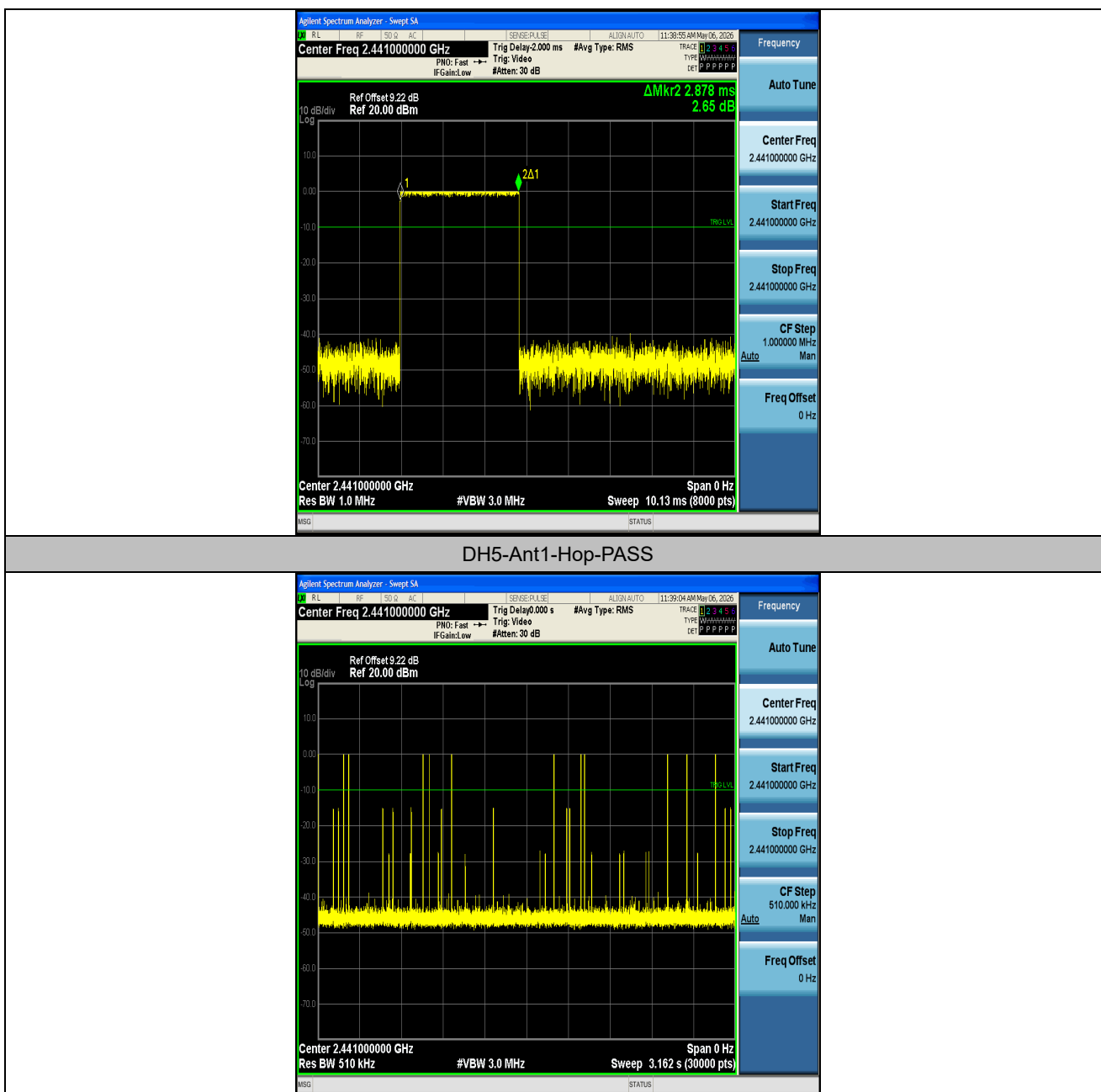
Test Mode	Antenna	Frequency [MHz]	Burst Width [ms]	TotalHops [Num]	Result [s]	Limit [s]	Verdict
DH5	Ant1	Hop	2.878	120	0.345	≤0.4	PASS
2DH5	Ant1	Hop	2.883	100	0.288	≤0.4	PASS

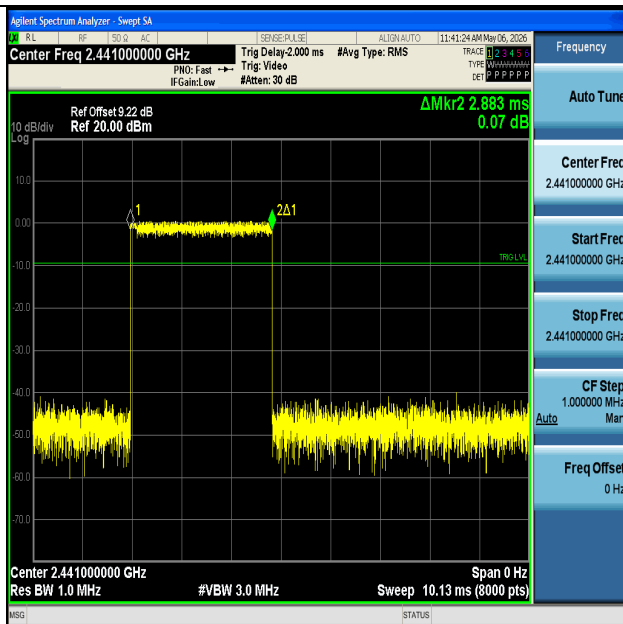
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



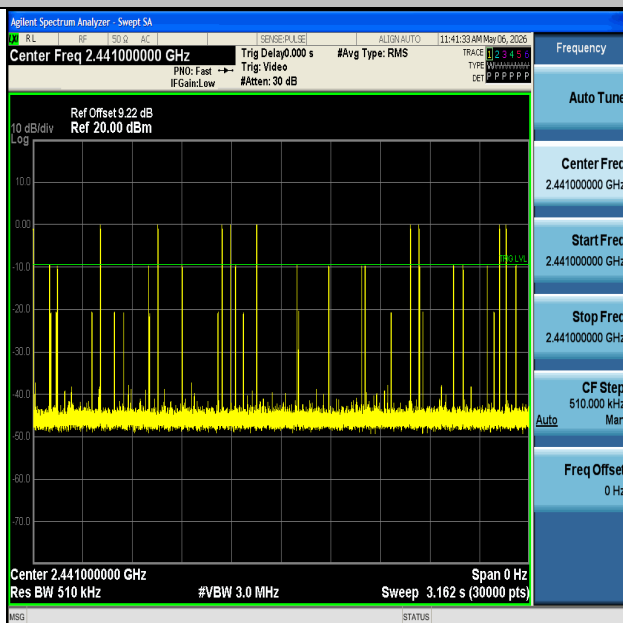


Test Graphs





2DH5-Ant1-Hop-PASS





Appendix F: Number of hopping channels

Test Result

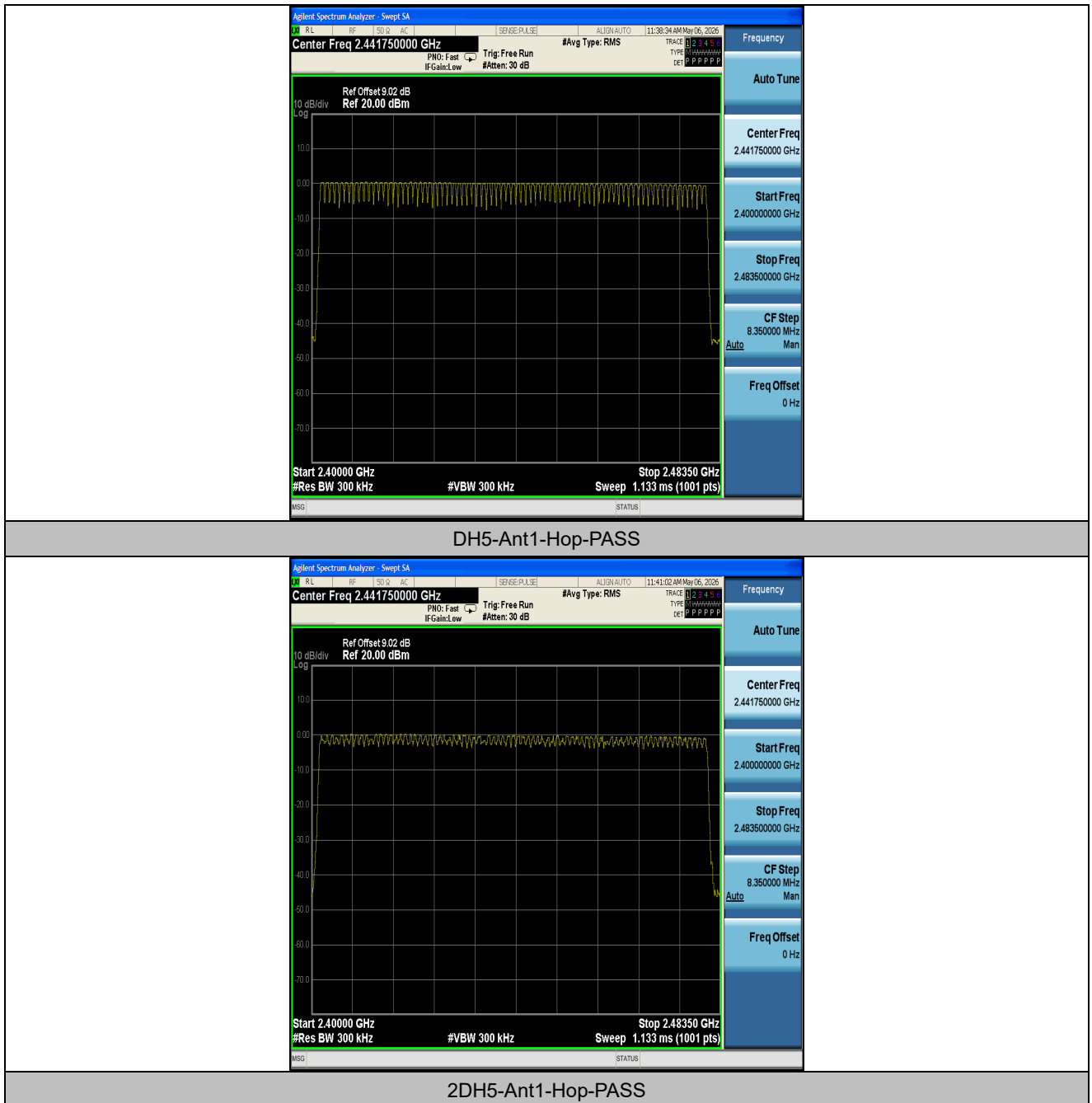
Test Mode	Antenna	Frequency [MHz]	Result [Num]	Limit [Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

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





Test Graphs





Appendix G: Band edge measurements

Test Result

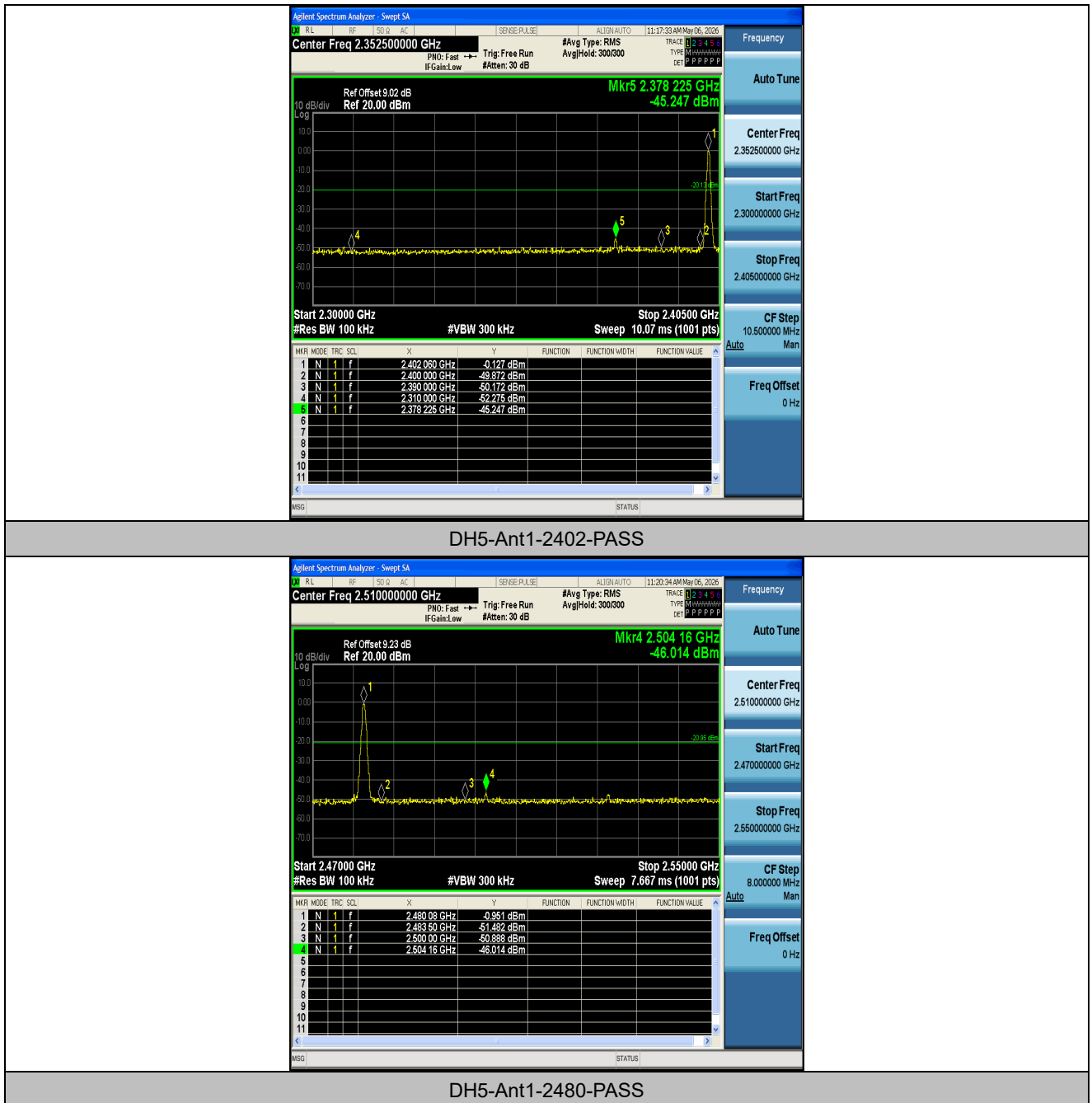
Test Mode	Antenna	Ch.Name	Frequency [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.13	-45.25	≤-20.13	PASS
DH5	Ant1	High	2480	-0.95	-46.01	≤-20.95	PASS
DH5	Ant1	Low	Hop_2402	-0.38	-45.98	≤-20.38	PASS
DH5	Ant1	High	Hop_2480	-1.14	-46.32	≤-21.14	PASS
2DH5	Ant1	Low	2402	-0.21	-45.45	≤-20.21	PASS
2DH5	Ant1	High	2480	-2.59	-48	≤-22.59	PASS
2DH5	Ant1	Low	Hop_2402	-3.40	-47.35	≤-23.4	PASS
2DH5	Ant1	High	Hop_2480	-0.87	-47.6	≤-20.87	PASS

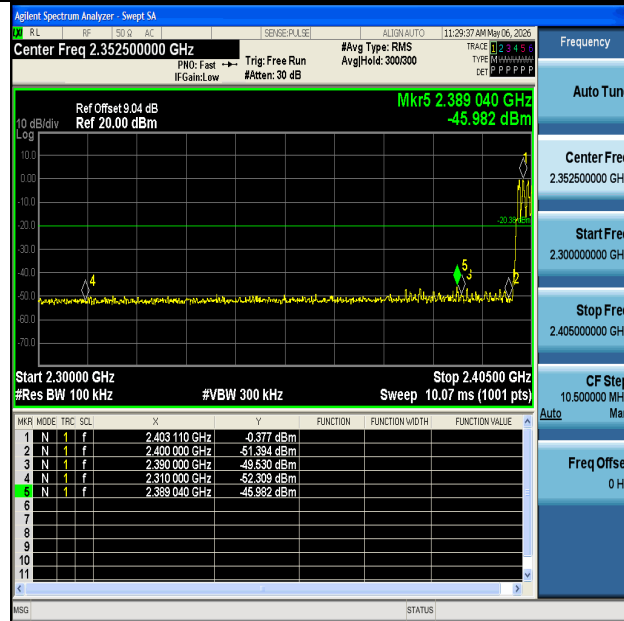
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



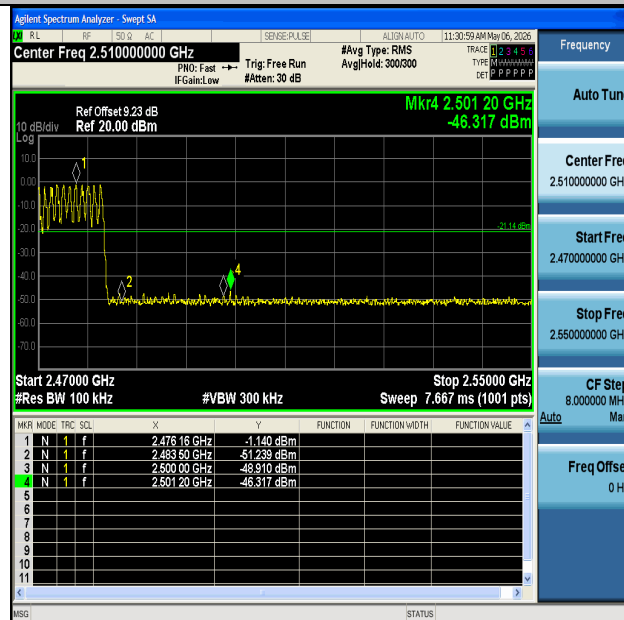


Test Graphs



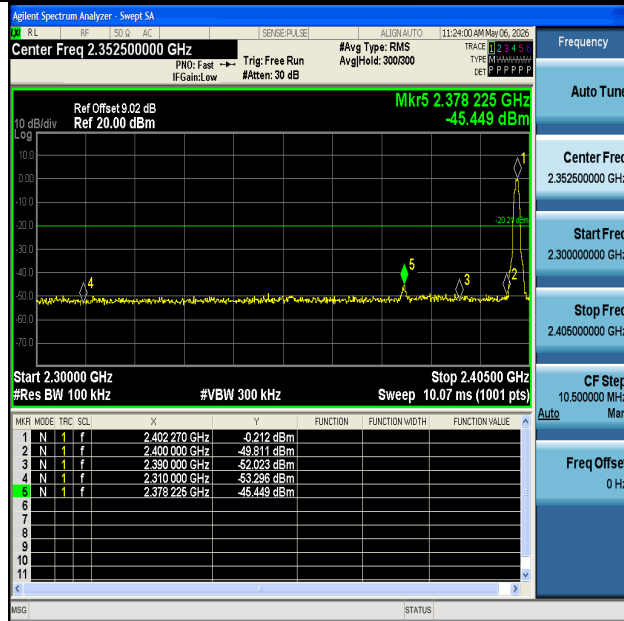


DH5-Ant1-Hop_2402-PASS

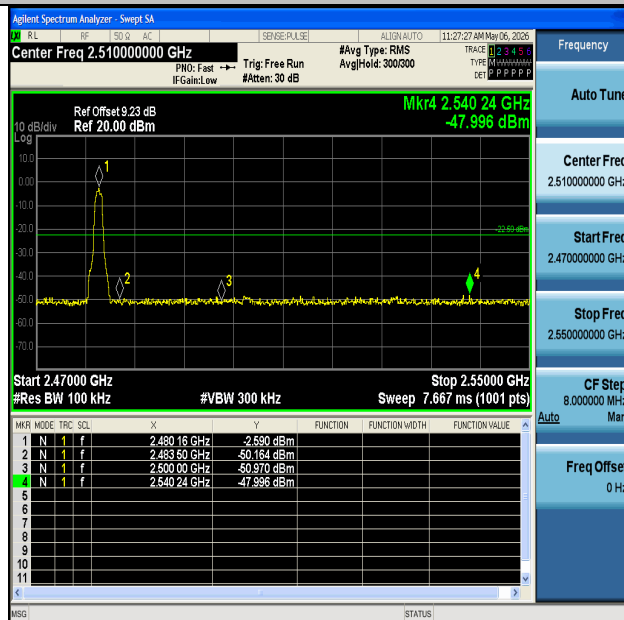


DH5-Ant1-Hop_2480-PASS



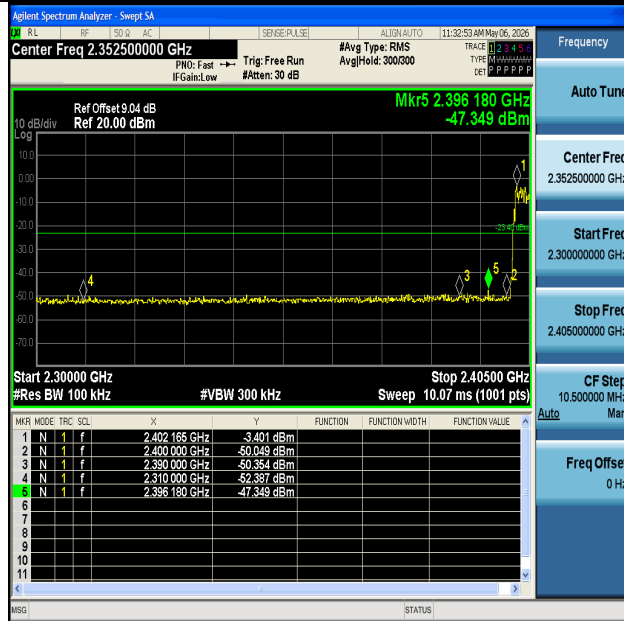


2DH5-Ant1-2402-PASS

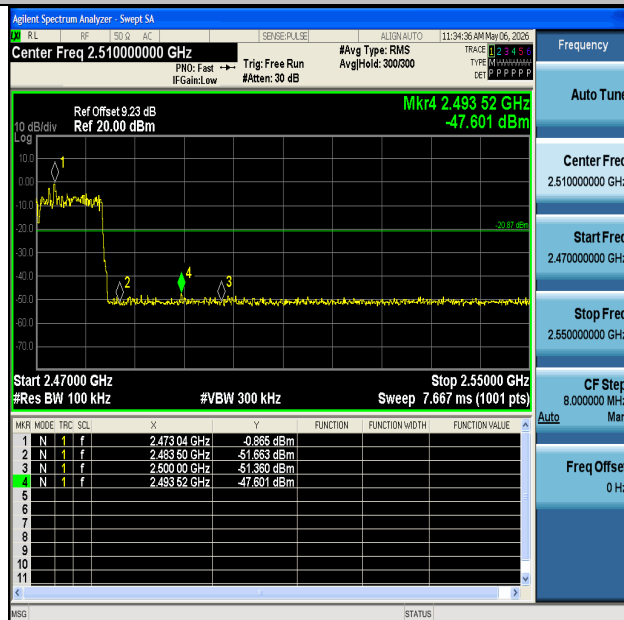


2DH5-Ant1-2480-PASS





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	-0.77	-0.77	---	PASS
DH5	Ant1	2402	30~1000	-0.77	-62.28	≤ -20.77	PASS
DH5	Ant1	2402	1000~26500	-0.77	-37.92	≤ -20.77	PASS
DH5	Ant1	2441	0~Reference	-0.63	-0.63	---	PASS
DH5	Ant1	2441	30~1000	-0.63	-63.12	≤ -20.63	PASS
DH5	Ant1	2441	1000~26500	-0.63	-37.47	≤ -20.63	PASS
DH5	Ant1	2480	0~Reference	-1.30	-1.30	---	PASS
DH5	Ant1	2480	30~1000	-1.30	-62.18	≤ -21.3	PASS
DH5	Ant1	2480	1000~26500	-1.30	-37.94	≤ -21.3	PASS
2DH5	Ant1	2402	0~Reference	-1.66	-1.66	---	PASS
2DH5	Ant1	2402	30~1000	-1.66	-62.76	≤ -21.66	PASS
2DH5	Ant1	2402	1000~26500	-1.66	-37.78	≤ -21.66	PASS
2DH5	Ant1	2441	0~Reference	-1.28	-1.28	---	PASS
2DH5	Ant1	2441	30~1000	-1.28	-62.35	≤ -21.28	PASS
2DH5	Ant1	2441	1000~26500	-1.28	-37.9	≤ -21.28	PASS
2DH5	Ant1	2480	0~Reference	-1.06	-1.06	---	PASS
2DH5	Ant1	2480	30~1000	-1.06	-62.42	≤ -21.06	PASS
2DH5	Ant1	2480	1000~26500	-1.06	-36.5	≤ -21.06	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.

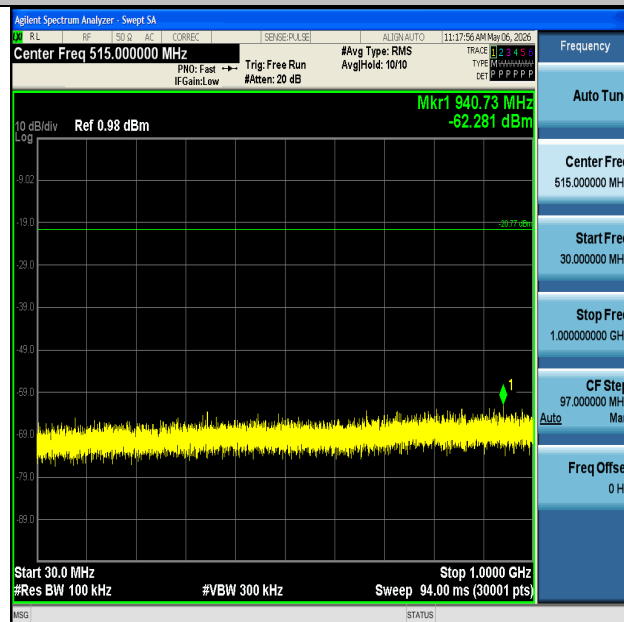




Test Graphs

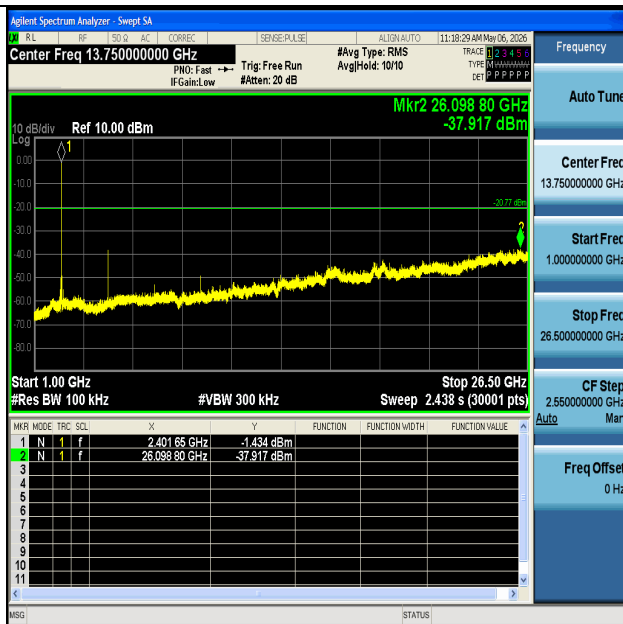


DH5-Ant1-2402-0~Reference-PASS

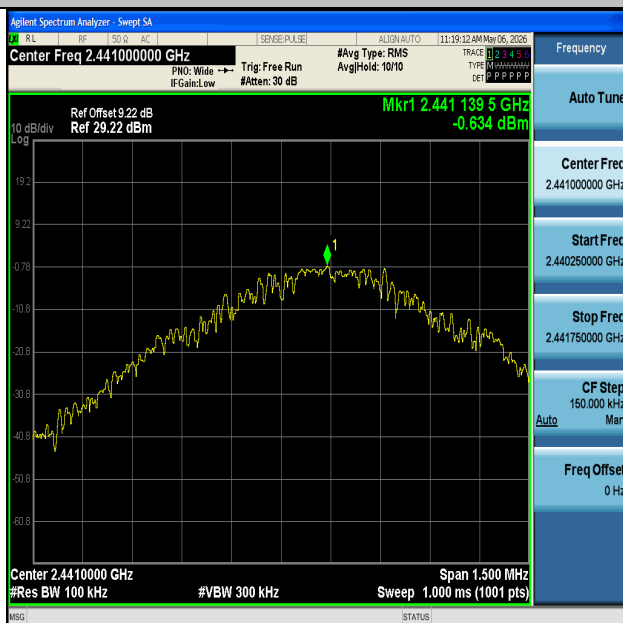


DH5-Ant1-2402-30~1000-PASS



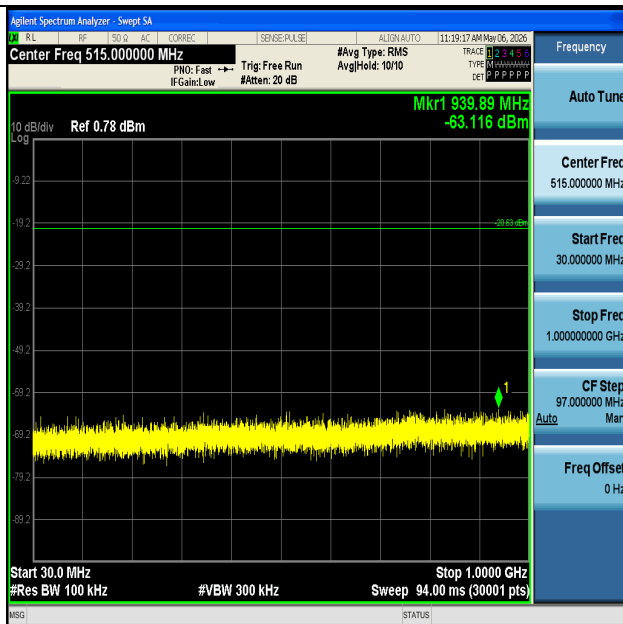


DH5-Ant1-2402-1000~26500-PASS

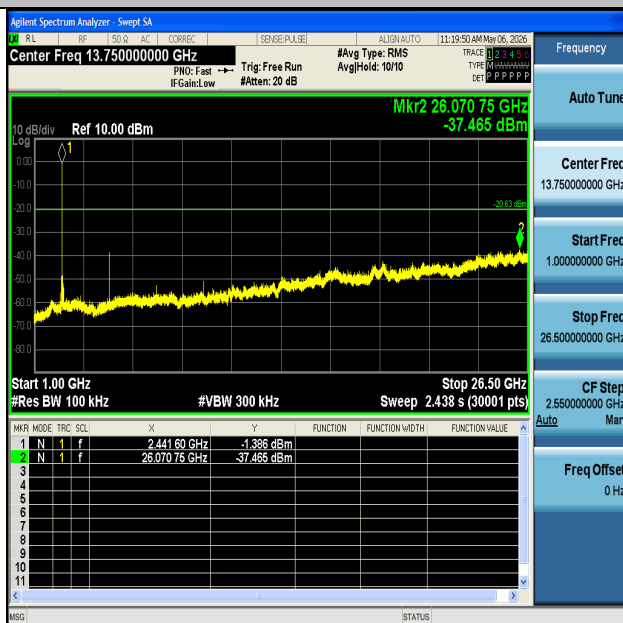


DH5-Ant1-2441-0~Reference-PASS



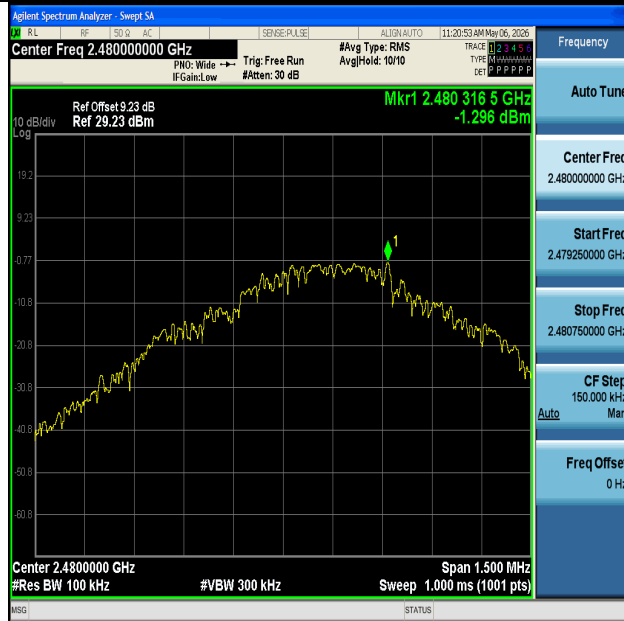


DH5-Ant1-2441-30~1000-PASS

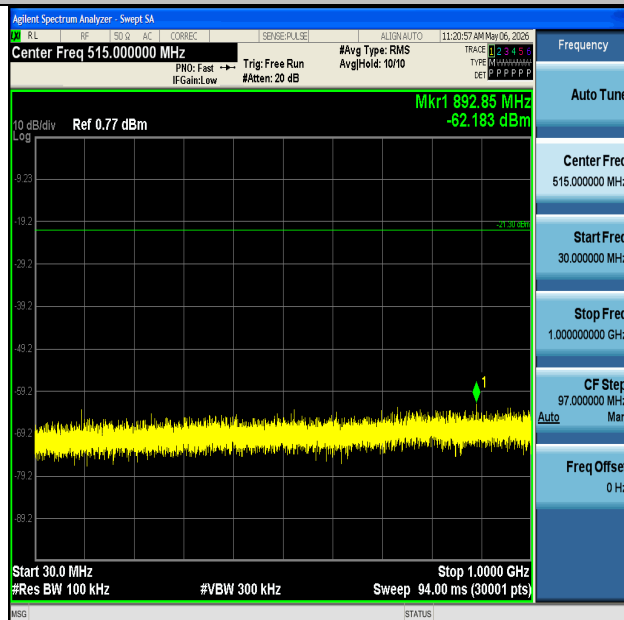


DH5-Ant1-2441-1000~26500-PASS



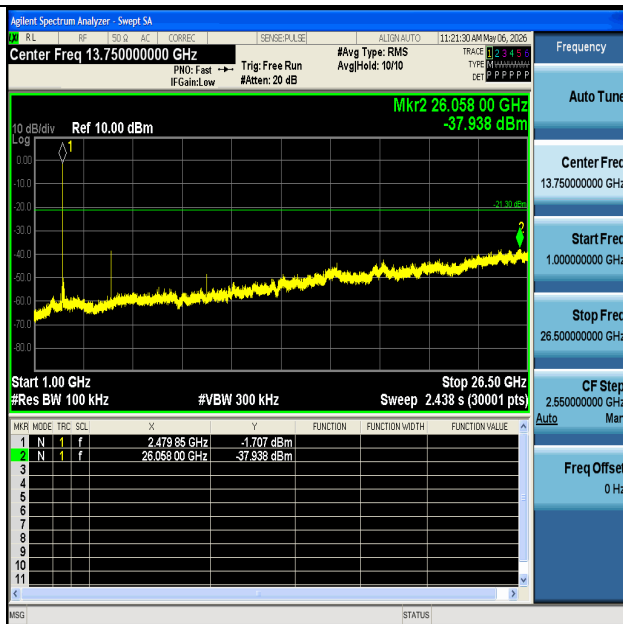


DH5-Ant1-2480-0~Reference-PASS

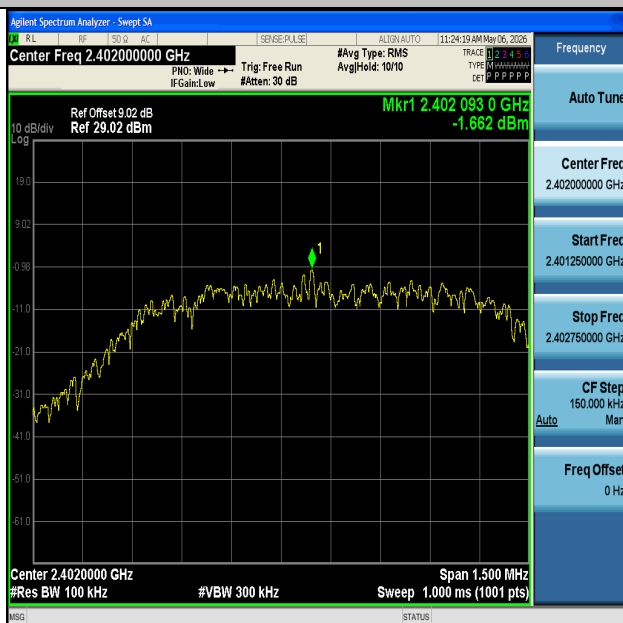


DH5-Ant1-2480-30~1000-PASS



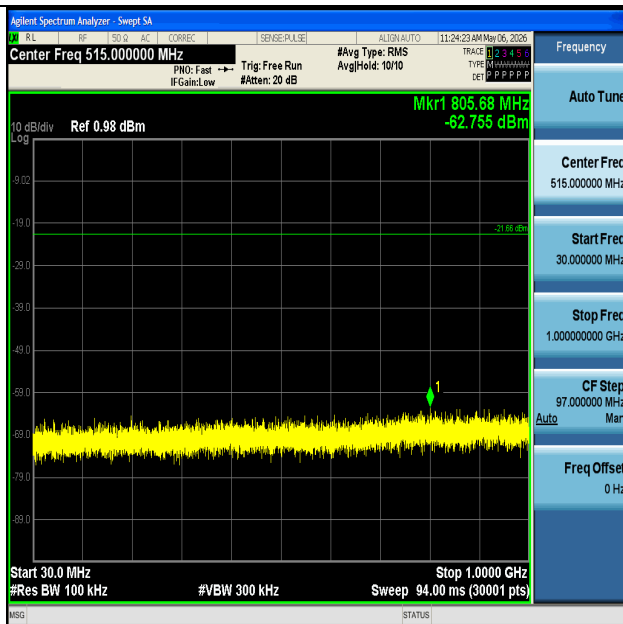


DH5-Ant1-2480-1000~26500-PASS

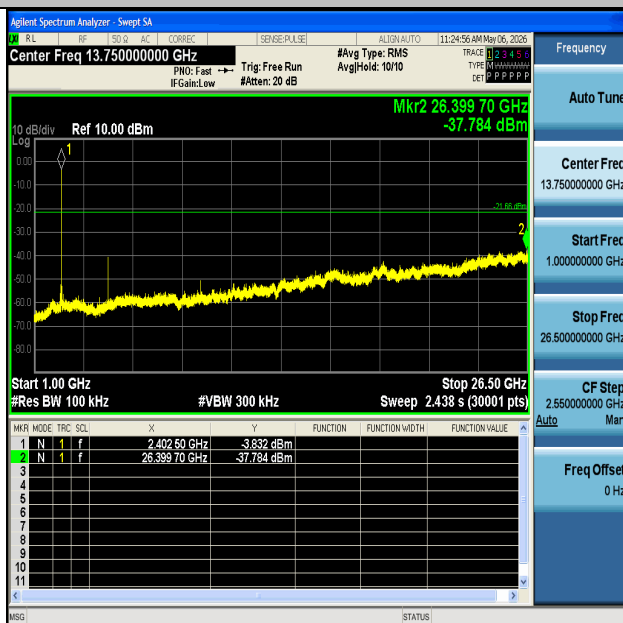


2DH5-Ant1-2402-0~Reference-PASS



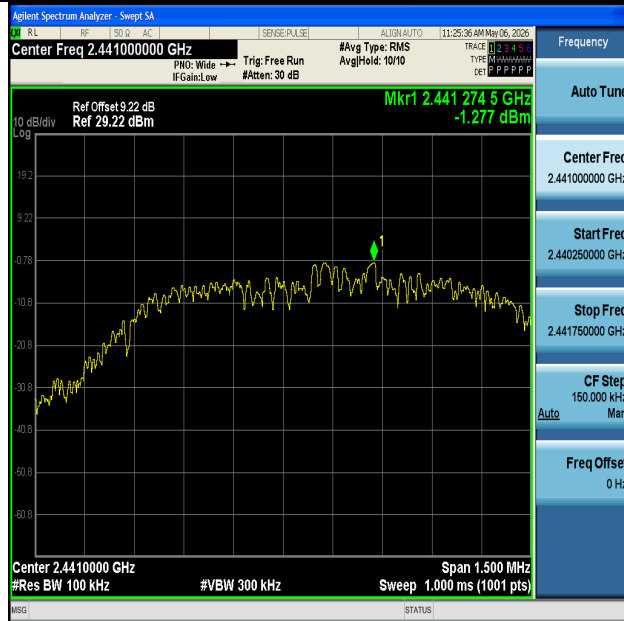


2DH5-Ant1-2402-30~1000-PASS

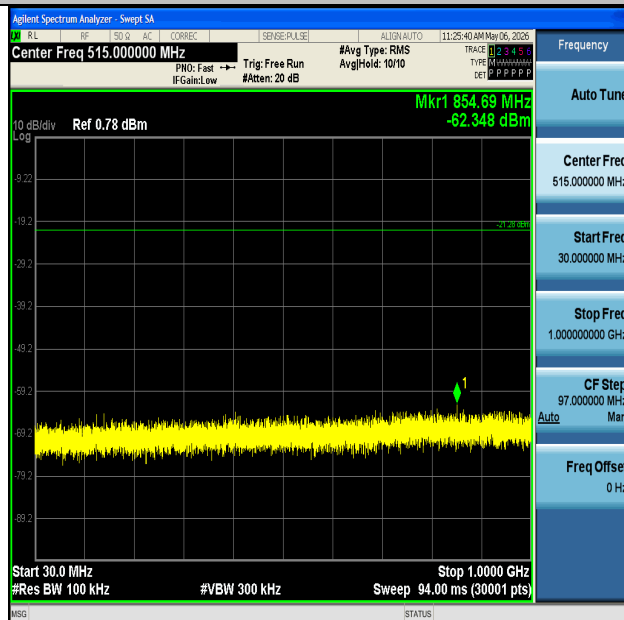


2DH5-Ant1-2402-1000~26500-PASS



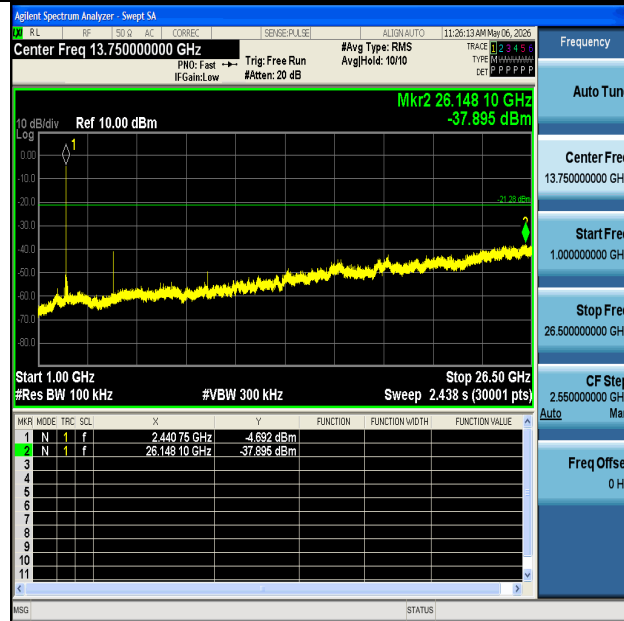


2DH5-Ant1-2441-0~Reference-PASS

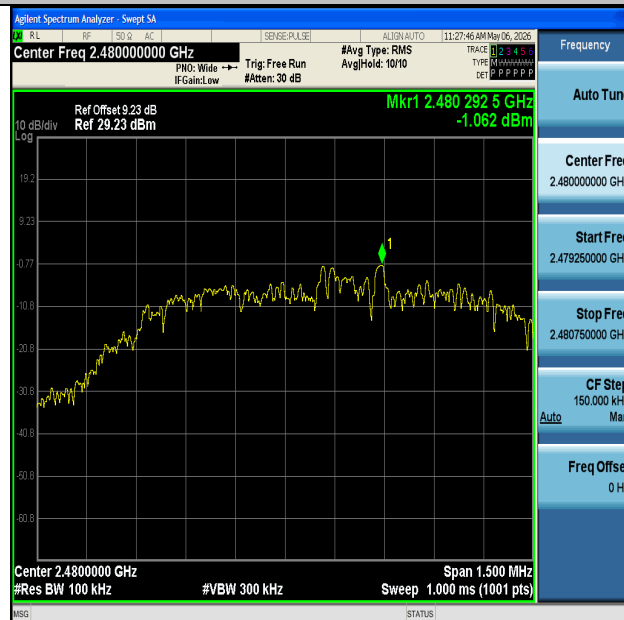


2DH5-Ant1-2441-30~1000-PASS



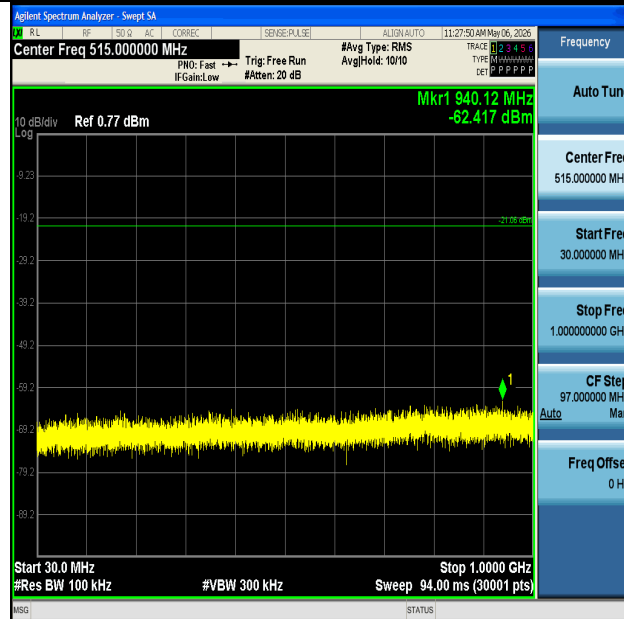


2DH5-Ant1-2441-1000~26500-PASS

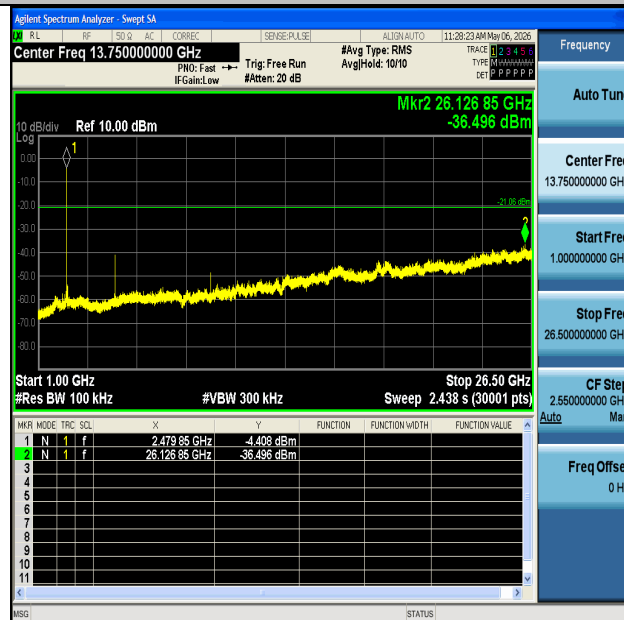


2DH5-Ant1-2480-0~Reference-PASS





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	3.75	76.80	1.15
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	2.88	3.75	76.80	1.15

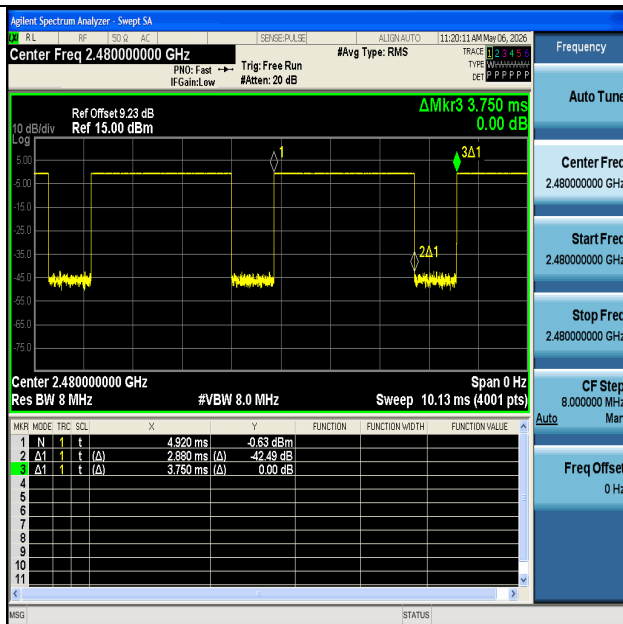
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



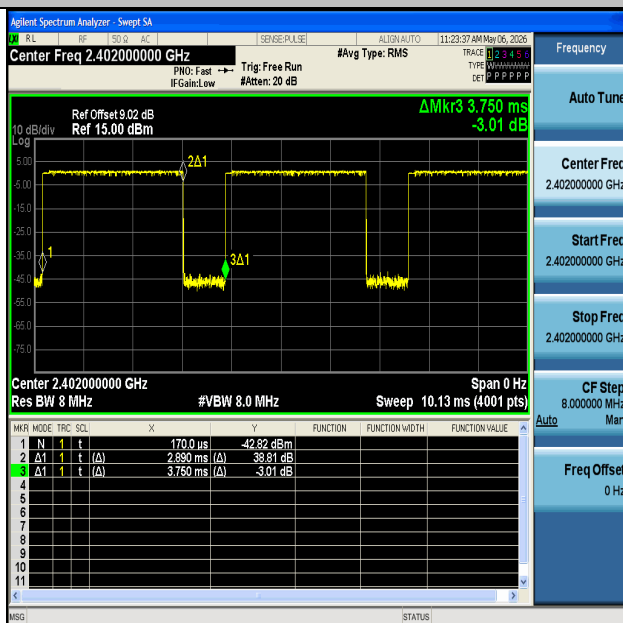


Test Graphs



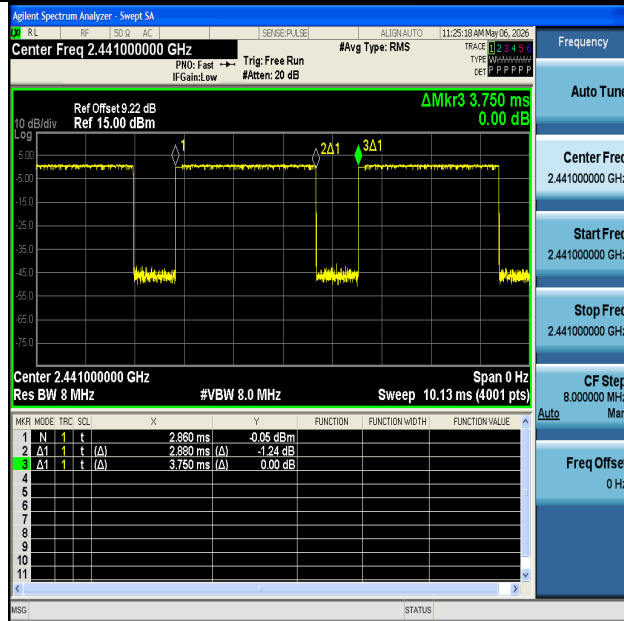


NTNV-DH5-Ant1-2480

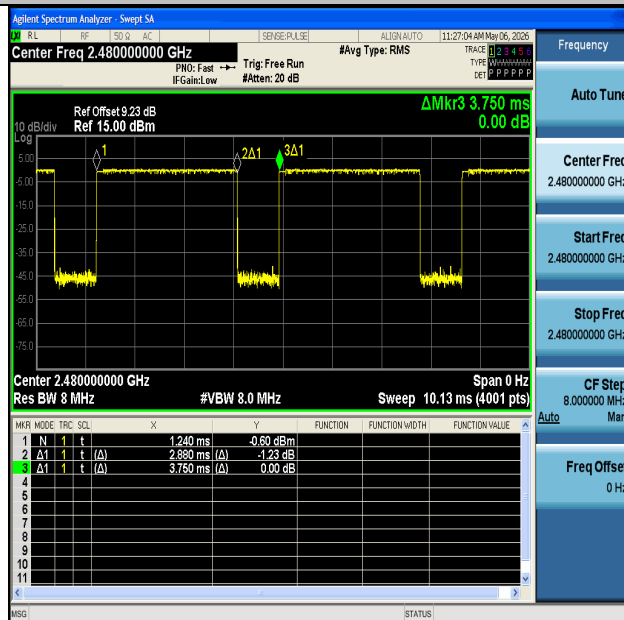


NTNV-2DH5-Ant1-2402





NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480

