

FCC Appendix RF Test Data for BT

FCC ID : 2BV5T-A48DSP

Company : Guangdong Ruiyuda Electronic Technology Co., Ltd.

EUT : Mixer

Model Number : A48DSP

Report No. : CTA26041101701

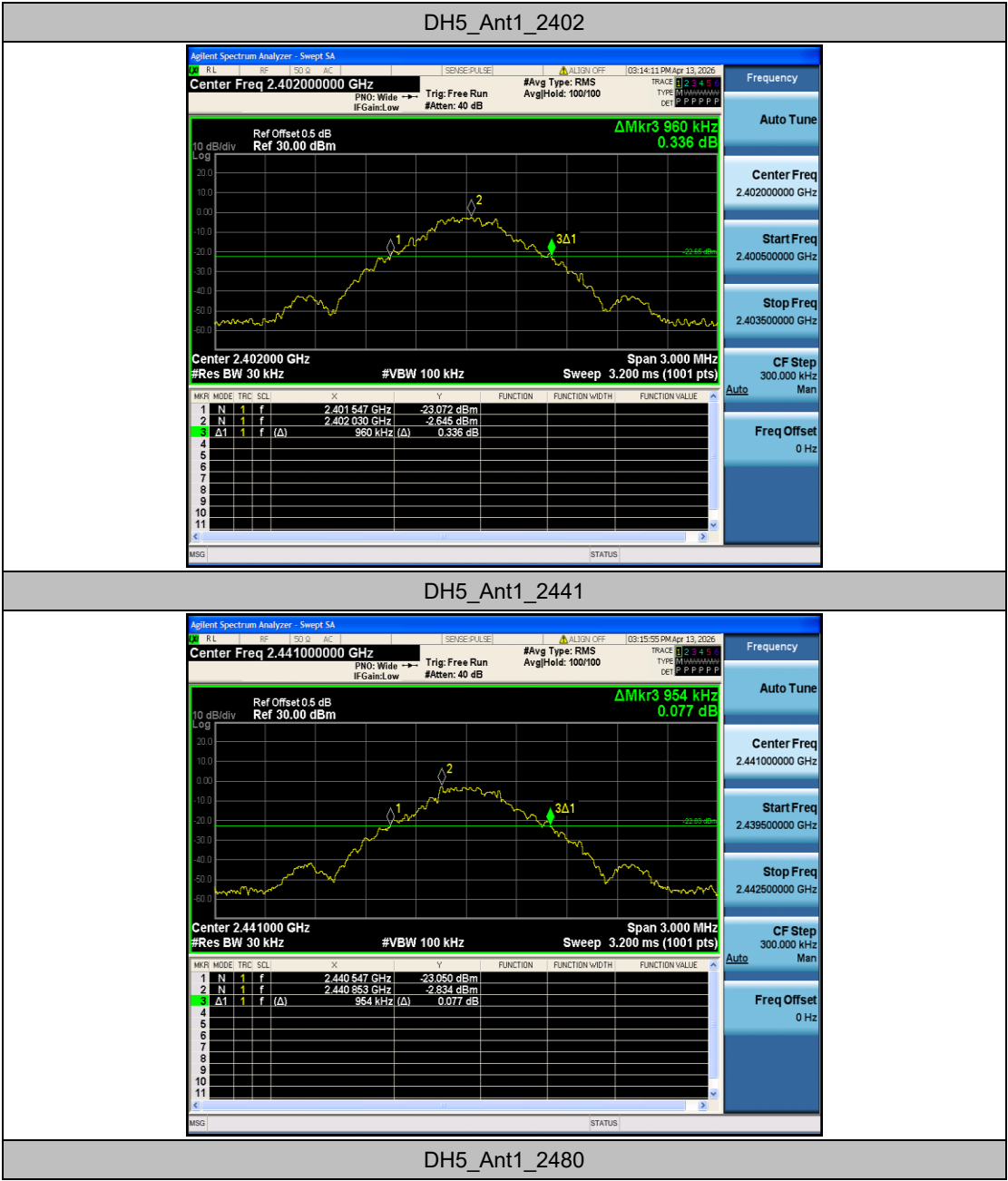
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.960	2401.547	2402.507	---	---
		2441	0.954	2440.547	2441.501	---	---
		2480	0.951	2479.550	2480.501	---	---
2DH5	Ant1	2402	1.320	2401.352	2402.672	---	---
		2441	1.326	2440.349	2441.675	---	---
		2480	1.308	2479.361	2480.669	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

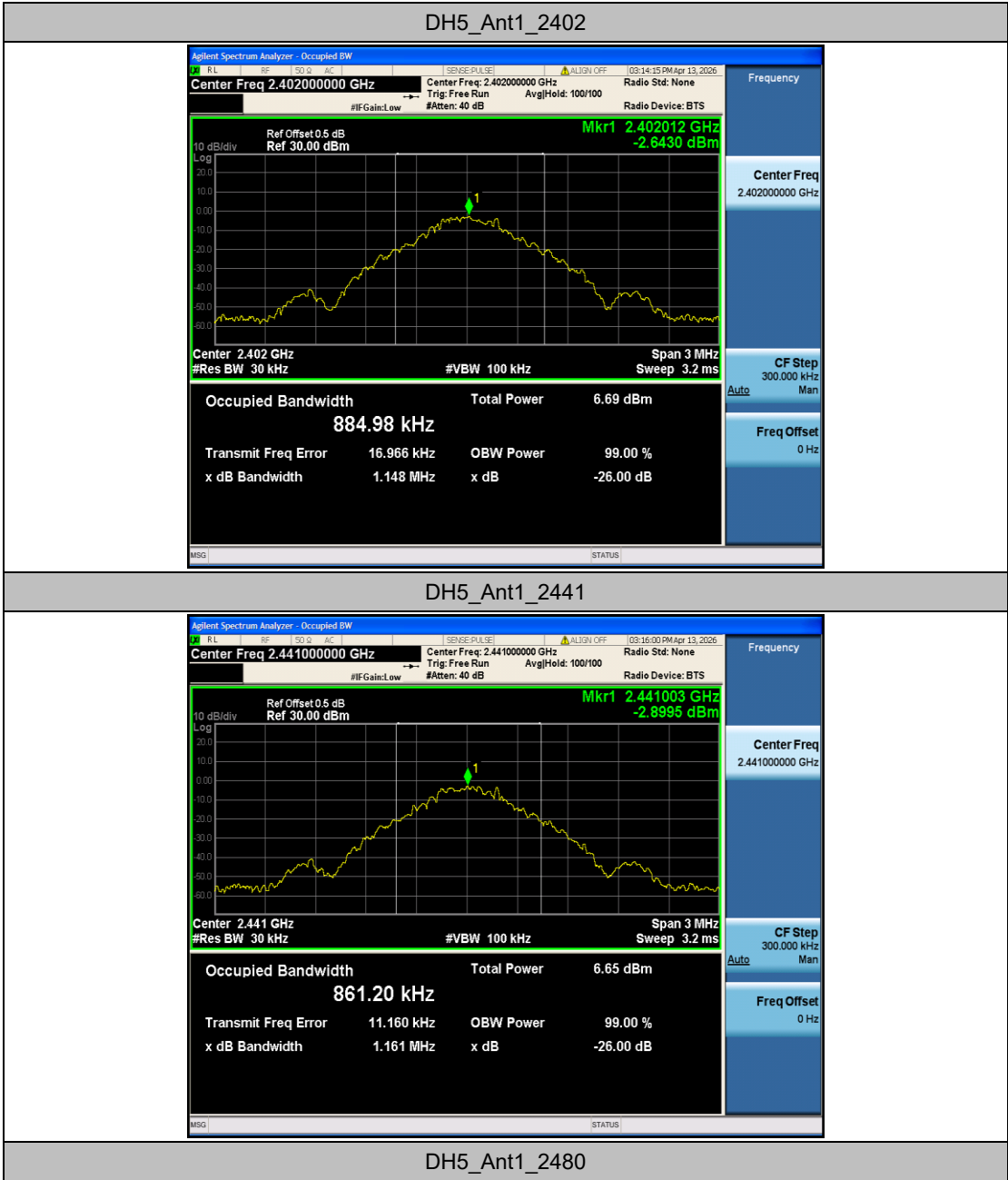


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88498	2401.5745	2402.4595	---	---
		2441	0.86120	2440.5806	2441.4418	---	---
		2480	0.86595	2479.5845	2480.4505	---	---
2DH5	Ant1	2402	1.1937	2401.4160	2402.6097	---	---
		2441	1.1957	2440.4155	2441.6112	---	---
		2480	1.2027	2479.4120	2480.6147	---	---

Test Graphs



DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.38	≤20.97	PASS
		2441	0.01	≤20.97	PASS
		2480	0.00	≤20.97	PASS
2DH5	Ant1	2402	3.06	≤20.97	PASS
		2441	2.63	≤20.97	PASS
		2480	2.57	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.018	≥ 0.960	PASS
2DH5	Ant1	Hop	0.952	≥ 0.884	PASS

Test Graphs

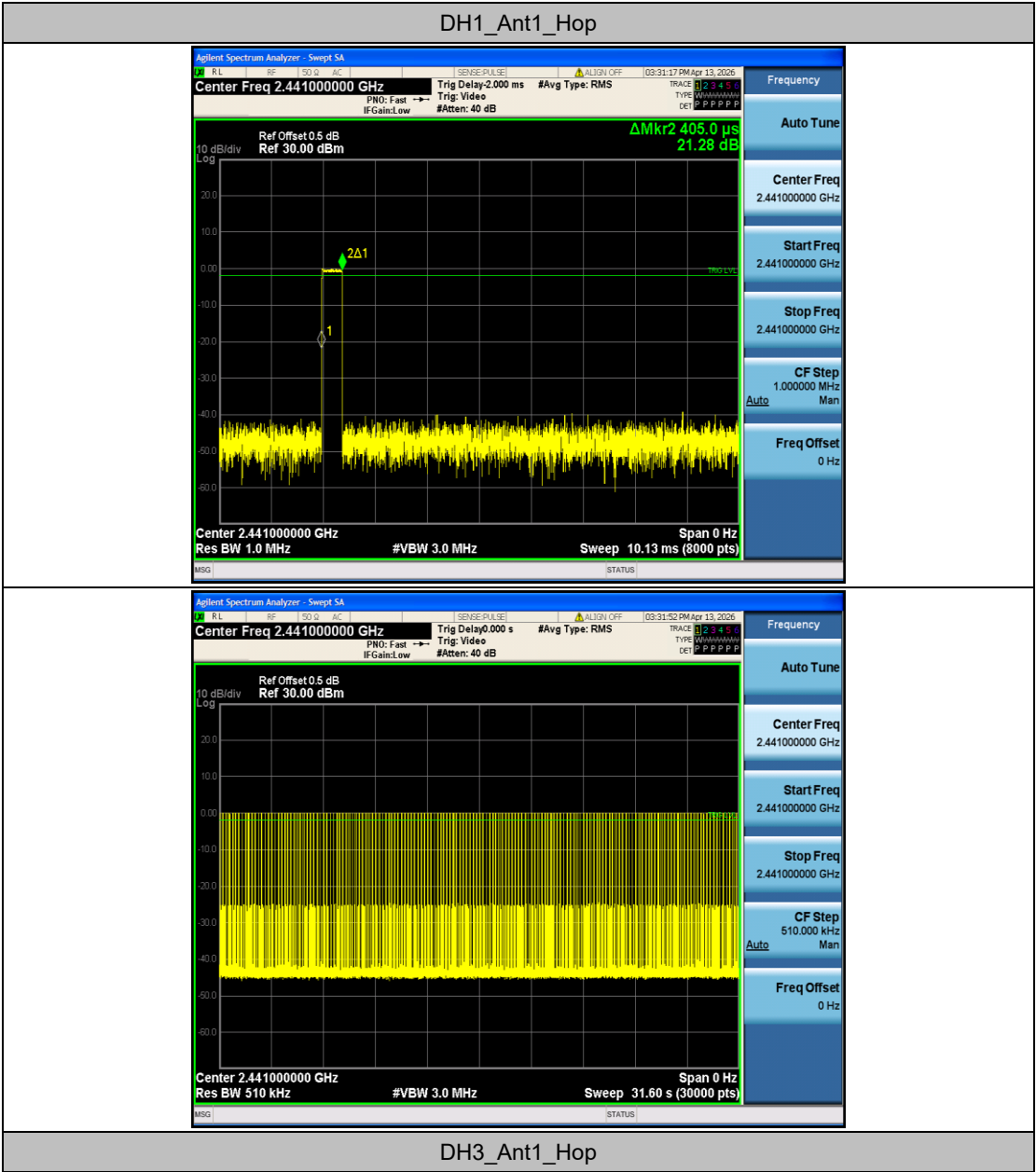


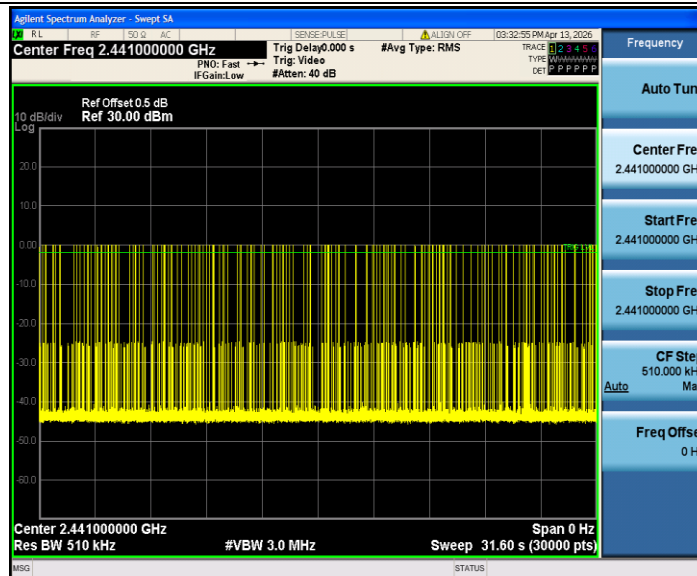
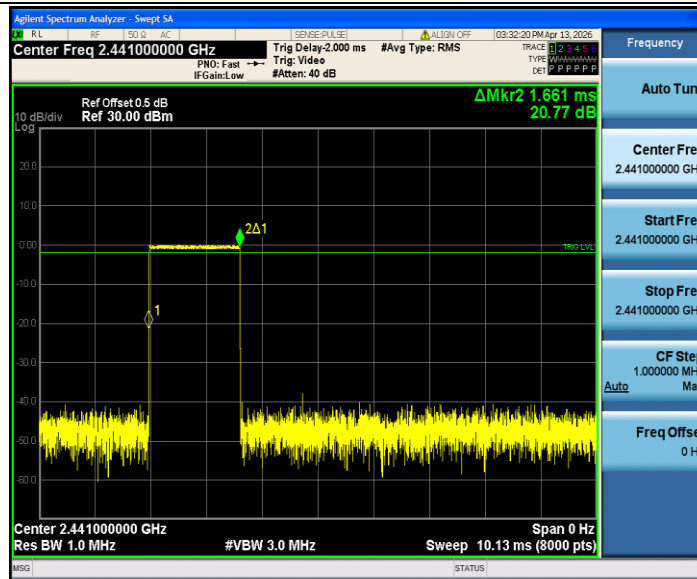
Appendix E: Time of occupancy

Test Result

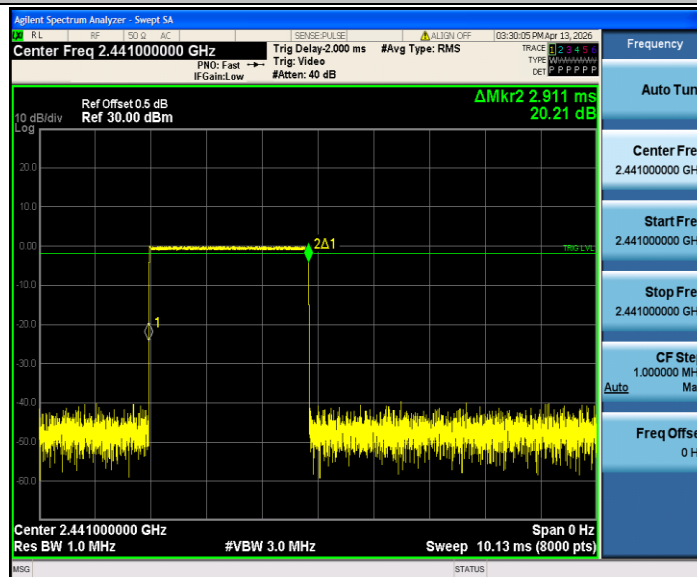
TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.405	318	0.129	≤0.4	PASS
DH3	Ant1	Hop	1.661	163	0.271	≤0.4	PASS
DH5	Ant1	Hop	2.911	110	0.32	≤0.4	PASS
2DH1	Ant1	Hop	0.415	318	0.132	≤0.4	PASS
2DH3	Ant1	Hop	1.667	157	0.262	≤0.4	PASS
2DH5	Ant1	Hop	2.915	110	0.321	≤0.4	PASS

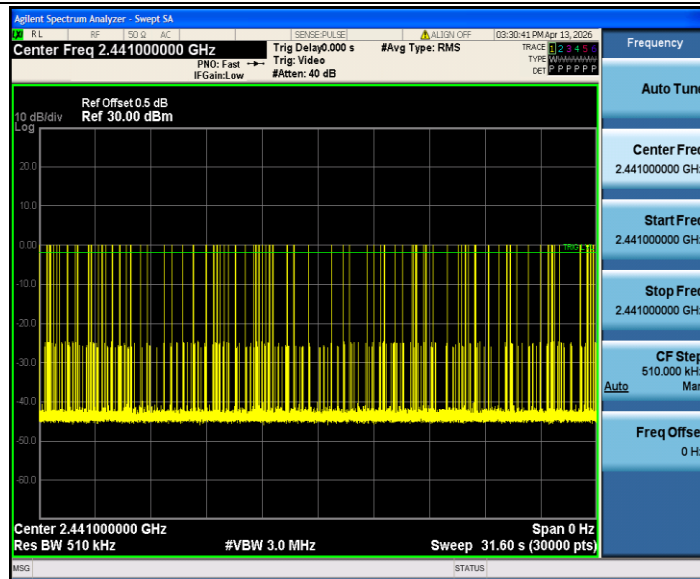
Test Graphs



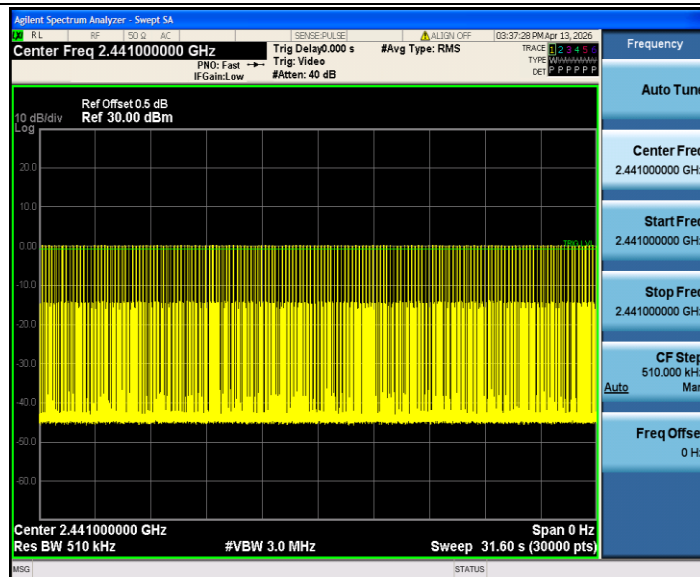
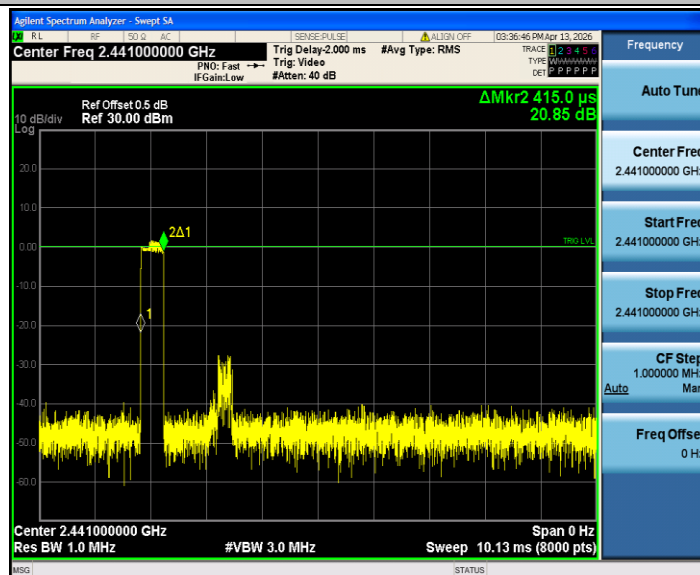


DH5_Ant1_Hop

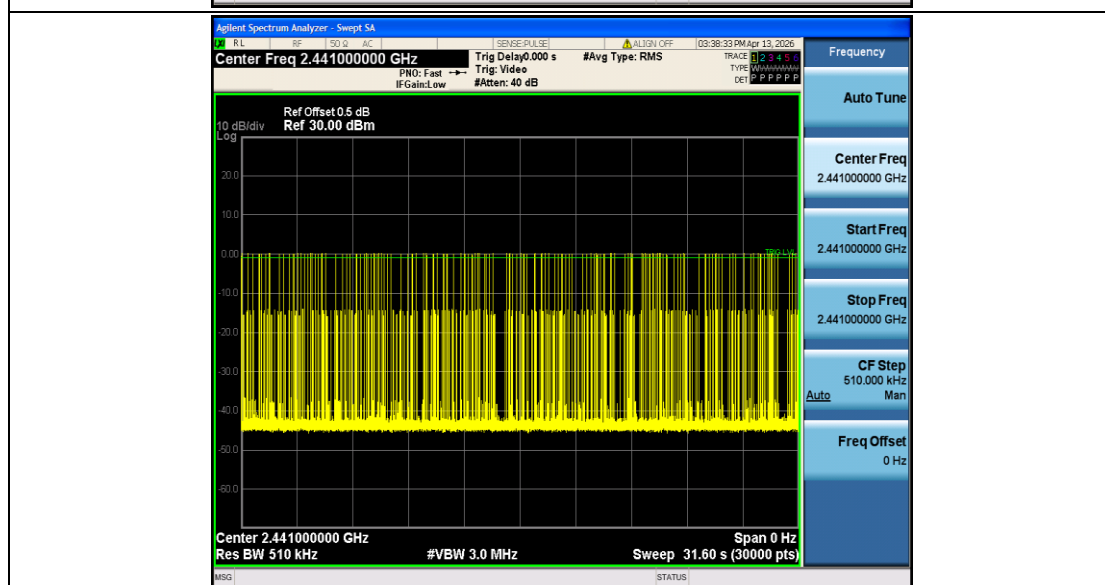
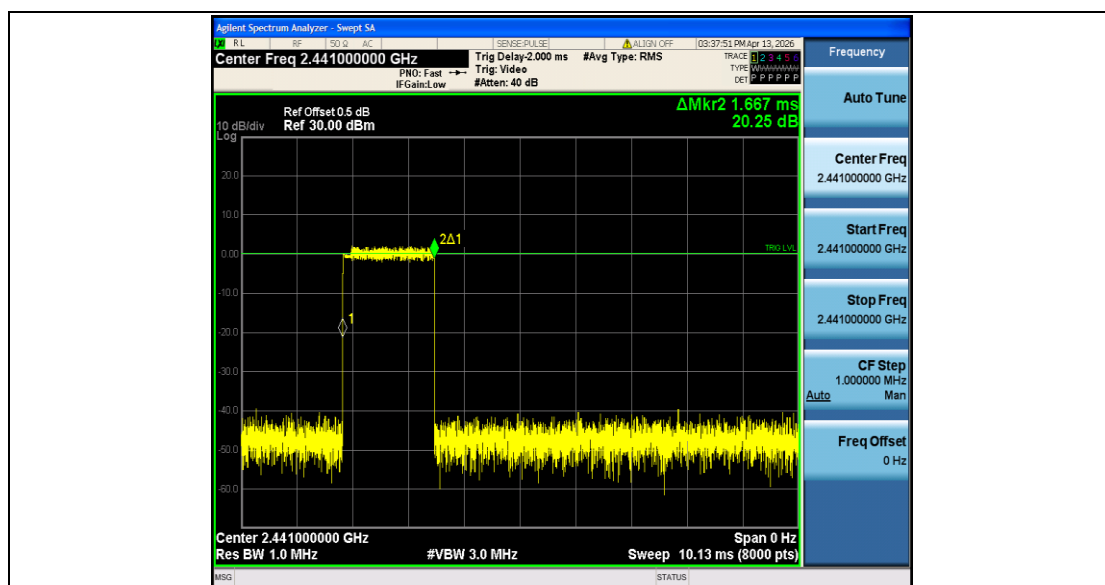




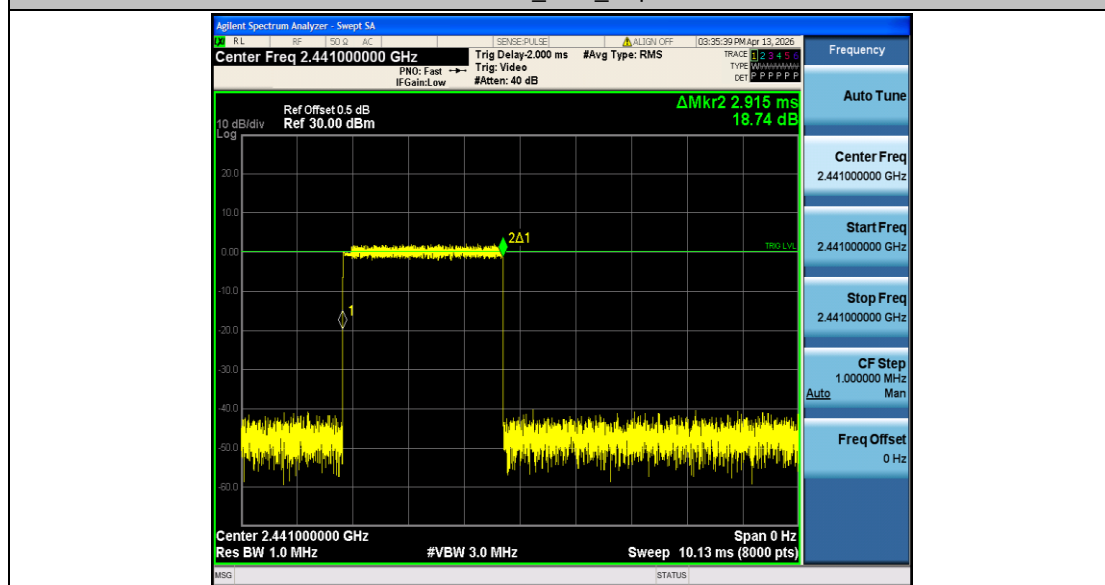
2DH1_Ant1_Hop

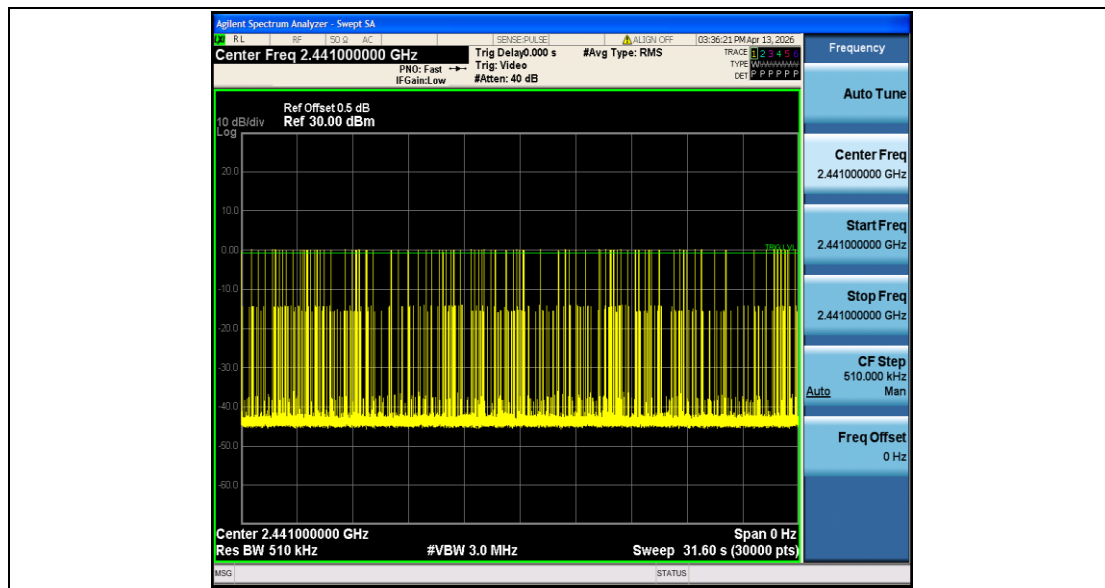


2DH3_Ant1_Hop



2DH5_Ant1_Hop



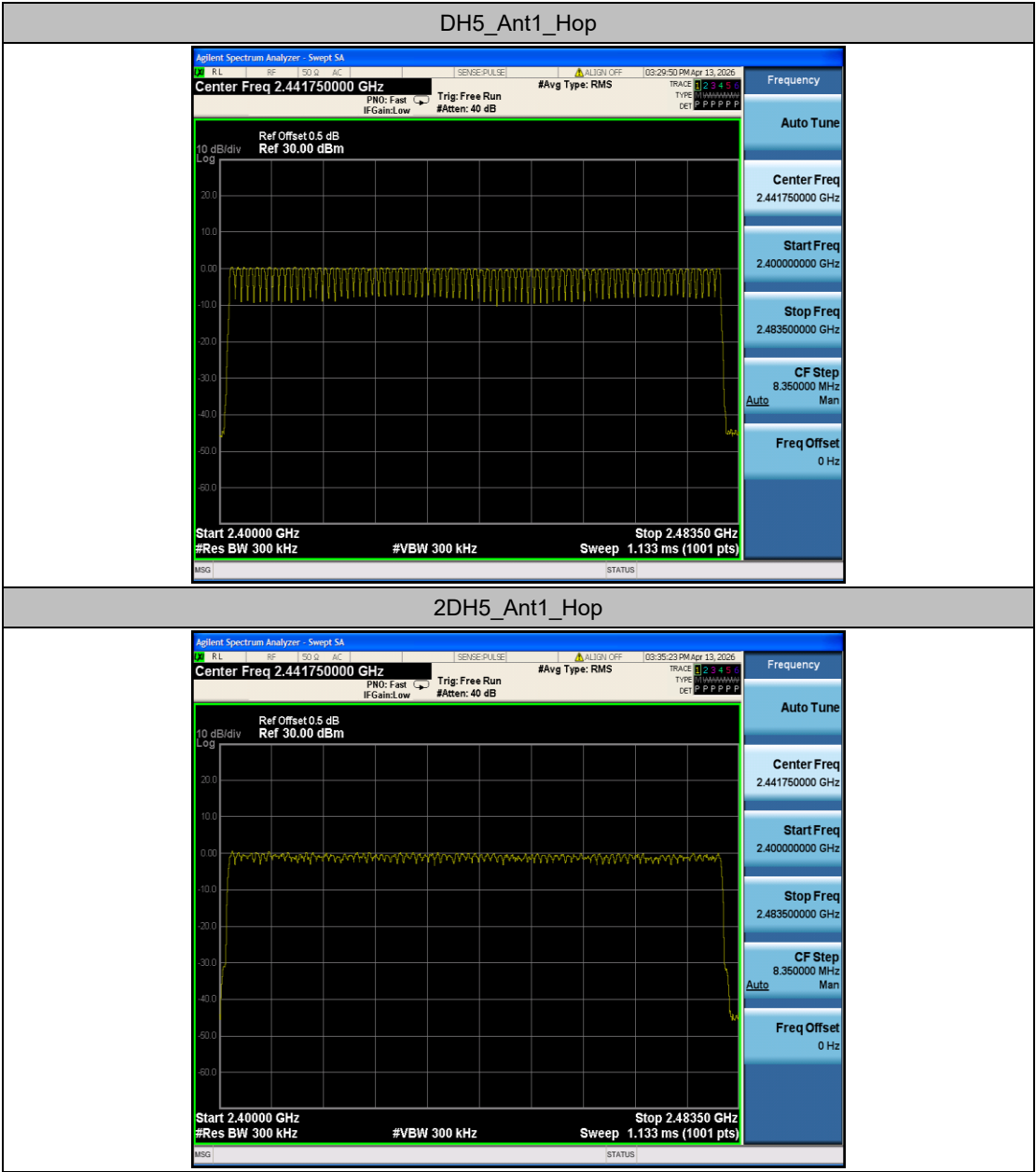


Appendix F: Number of hopping channels

Test Result

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

Test Graphs

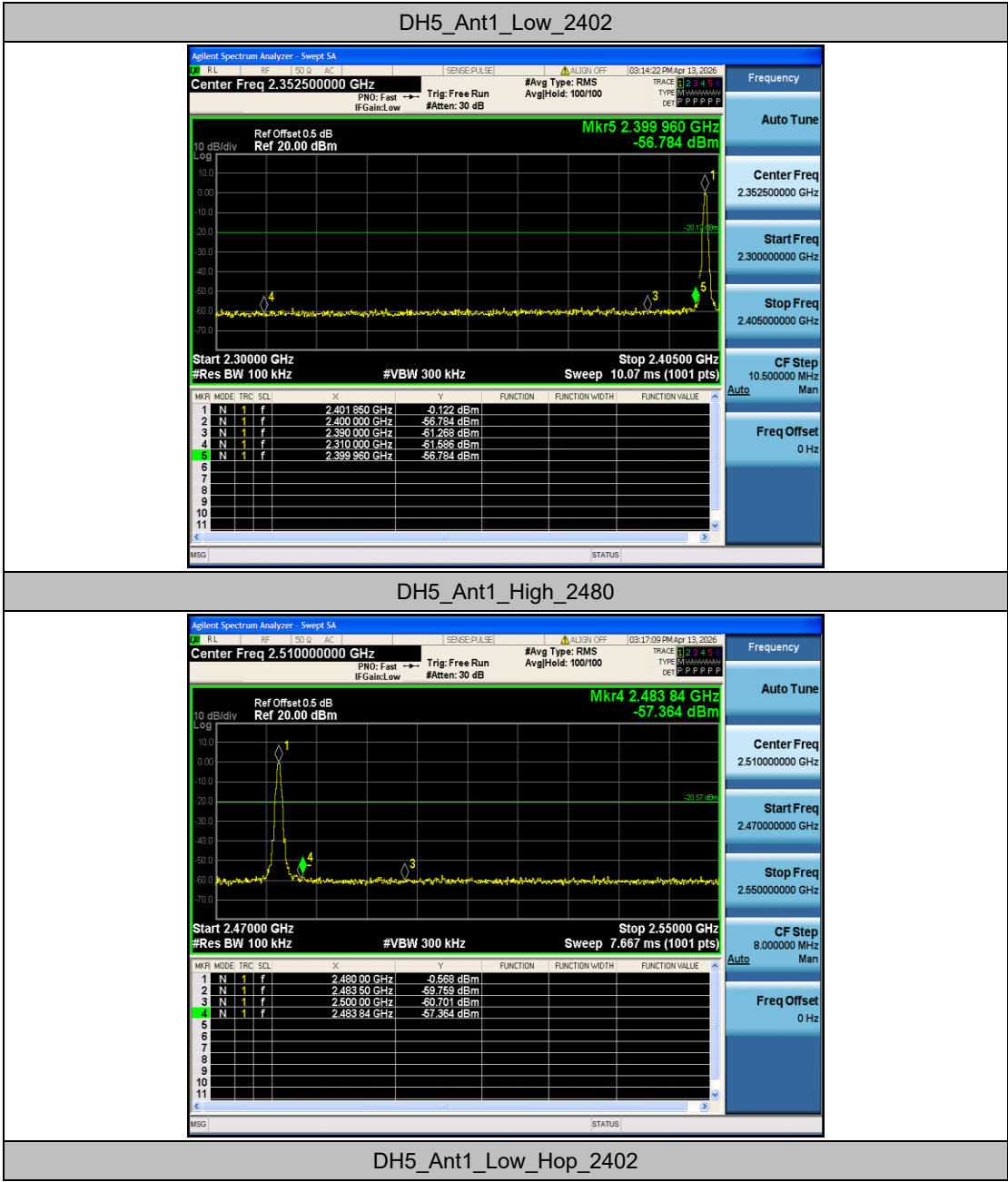


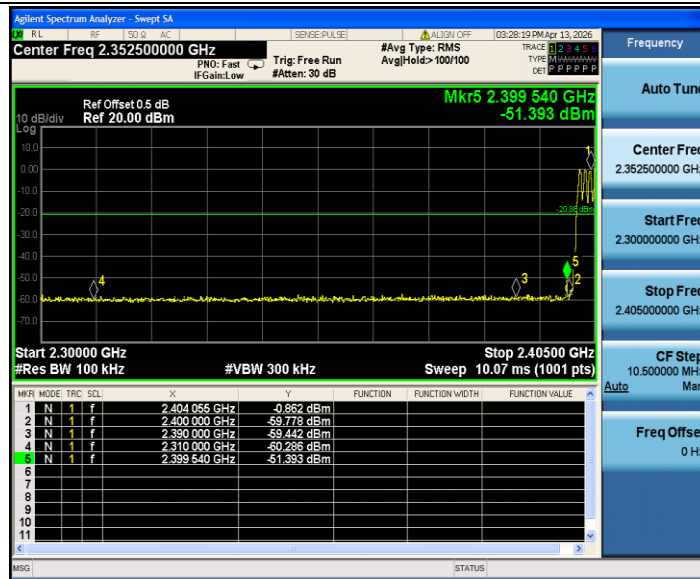
Appendix G: Band edge measurements

Test Result

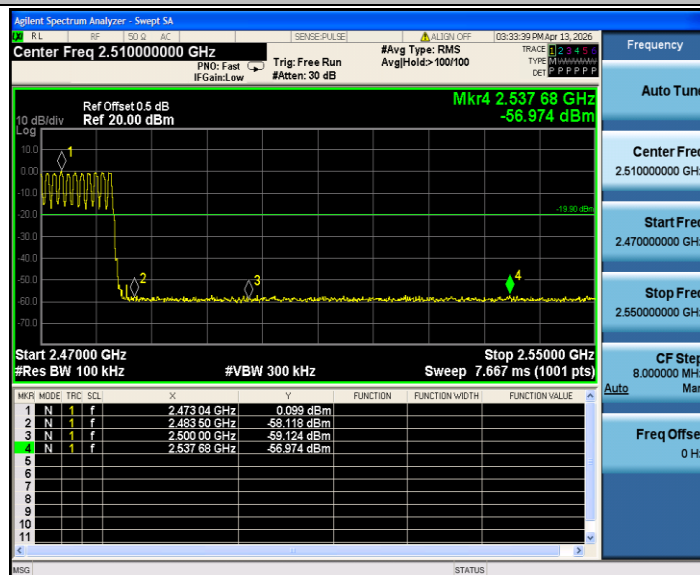
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.12	-56.78	≤ -20.12	PASS
		High	2480	-0.57	-57.36	≤ -20.57	PASS
		Low	Hop_2402	-0.86	-51.39	≤ -20.86	PASS
		High	Hop_2480	0.10	-56.97	≤ -19.9	PASS
2DH5	Ant1	Low	2402	-1.63	-50.03	≤ -21.63	PASS
		High	2480	-0.75	-57.24	≤ -20.75	PASS
		Low	Hop_2402	-2.06	-54.48	≤ -22.06	PASS
		High	Hop_2480	-0.20	-56.97	≤ -20.2	PASS

Test Graphs

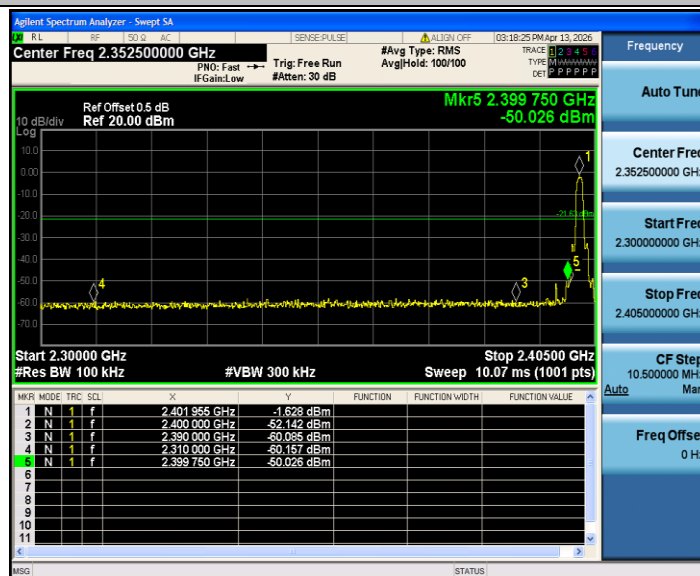




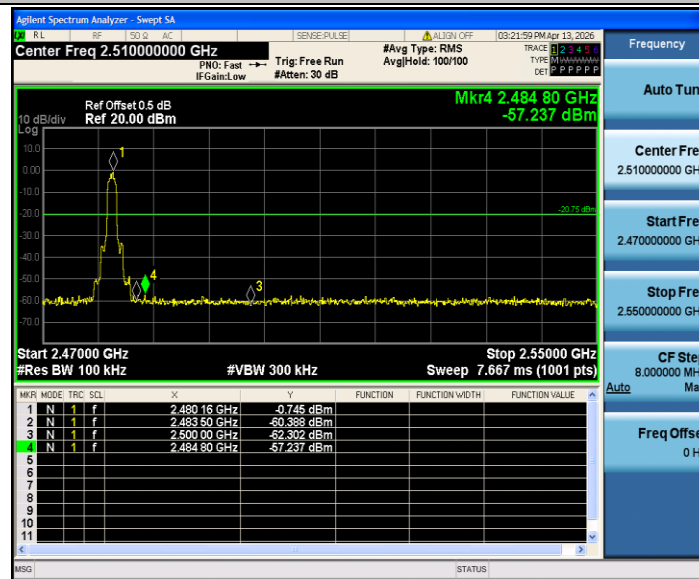
DH5_Ant1_High_Hop_2480



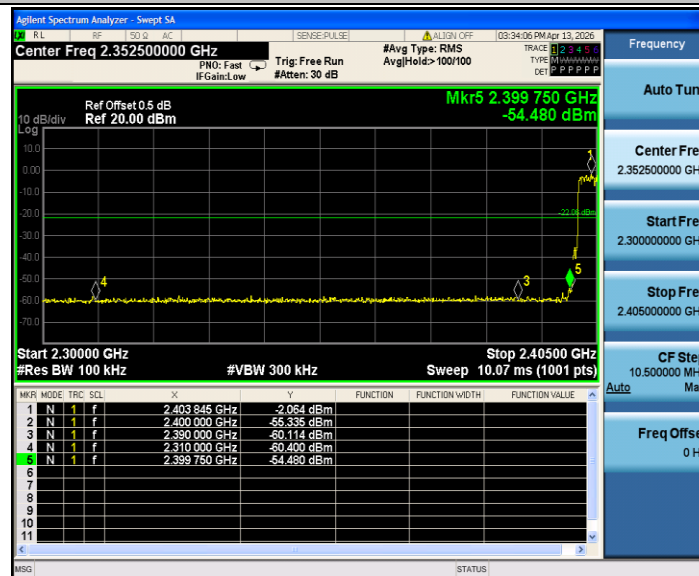
2DH5_Ant1_Low_2402



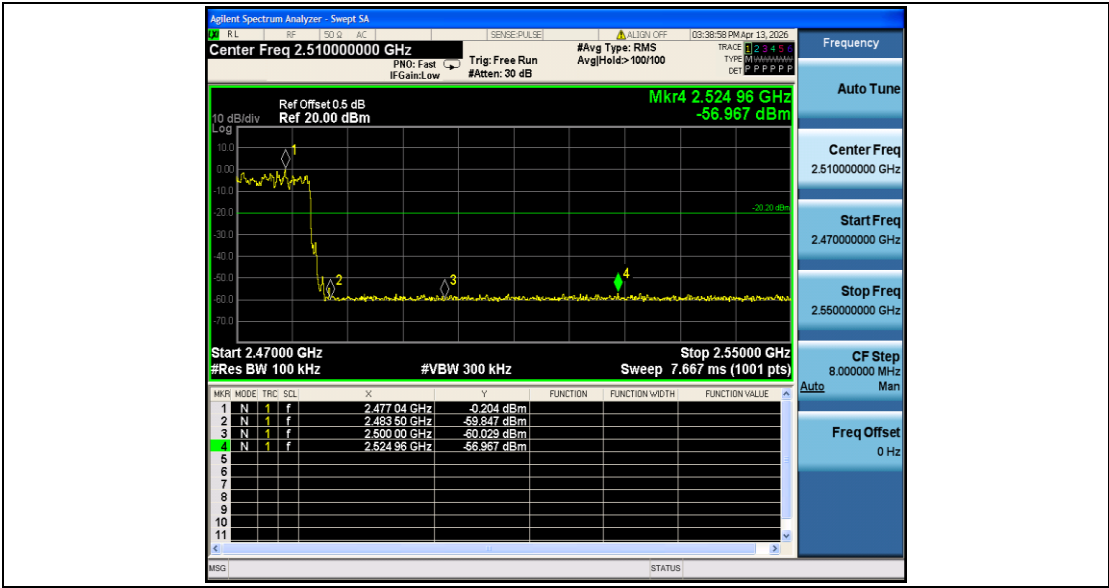
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

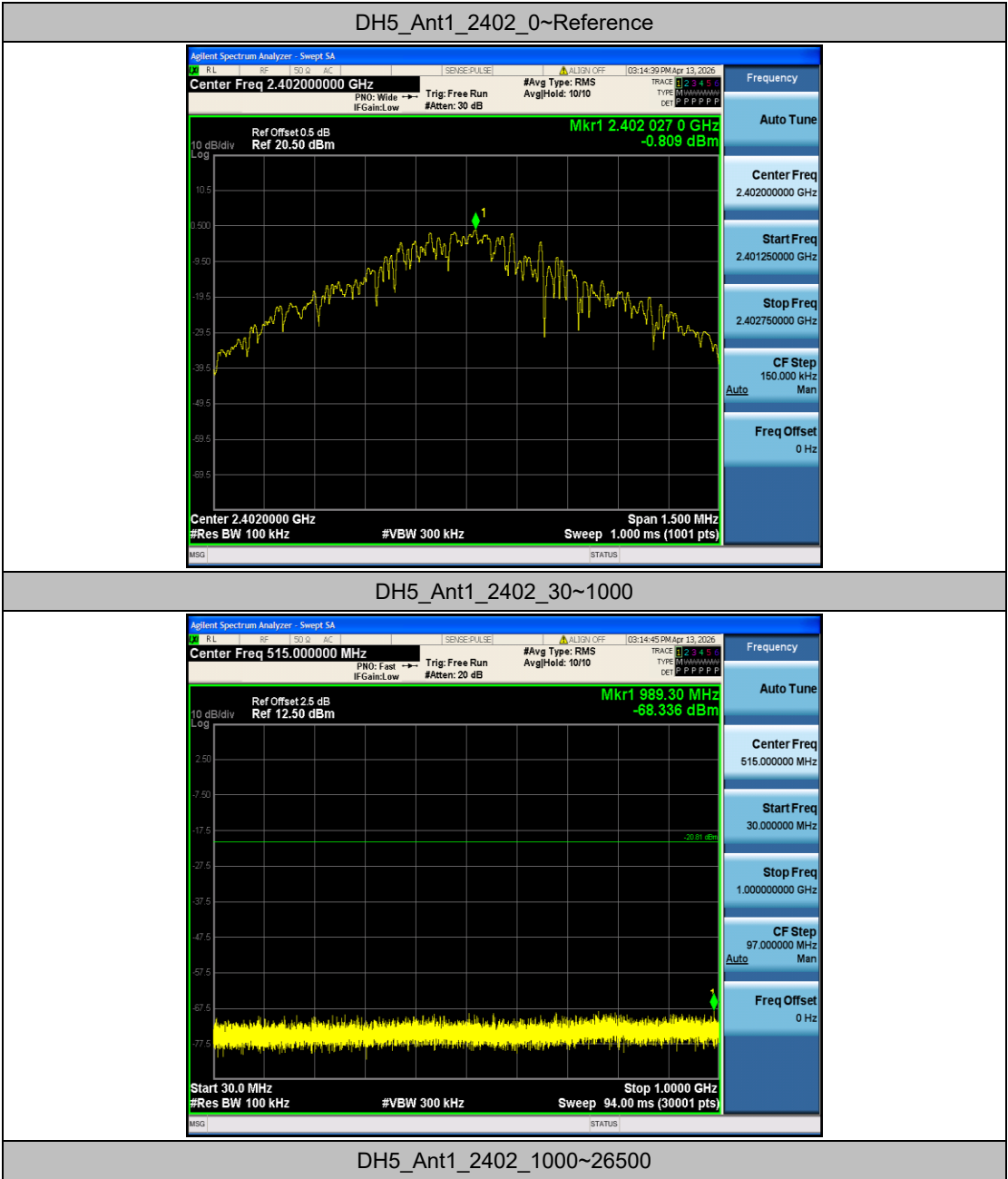


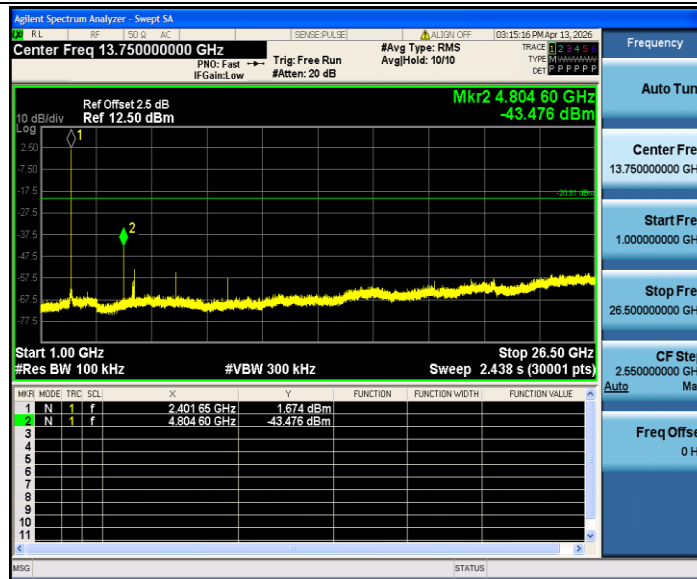
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.81	-0.81	---	PASS
			30~1000	-0.81	-68.34	≤-20.81	PASS
			1000~26500	-0.81	-43.48	≤-20.81	PASS
		2441	Reference	-0.07	-0.07	---	PASS
			30~1000	-4.57	-67.91	≤-24.57	PASS
			1000~26500	-4.57	-48.86	≤-24.57	PASS
		2480	Reference	-0.10	-0.10	---	PASS
			30~1000	-4.45	-68.27	≤-24.45	PASS
			1000~26500	-4.45	-49.67	≤-24.45	PASS
2DH5	Ant1	2402	Reference	0.19	0.19	---	PASS
			30~1000	0.19	-67.07	≤-19.81	PASS
			1000~26500	0.19	-43.98	≤-19.81	PASS
		2441	Reference	-2.07	-2.07	---	PASS
			30~1000	-2.07	-67.59	≤-22.07	PASS
			1000~26500	-2.07	-45.04	≤-22.07	PASS
		2480	Reference	-1.74	-1.74	---	PASS
			30~1000	-1.74	-67.46	≤-21.74	PASS
			1000~26500	-1.74	-46.56	≤-21.74	PASS

Test Graphs

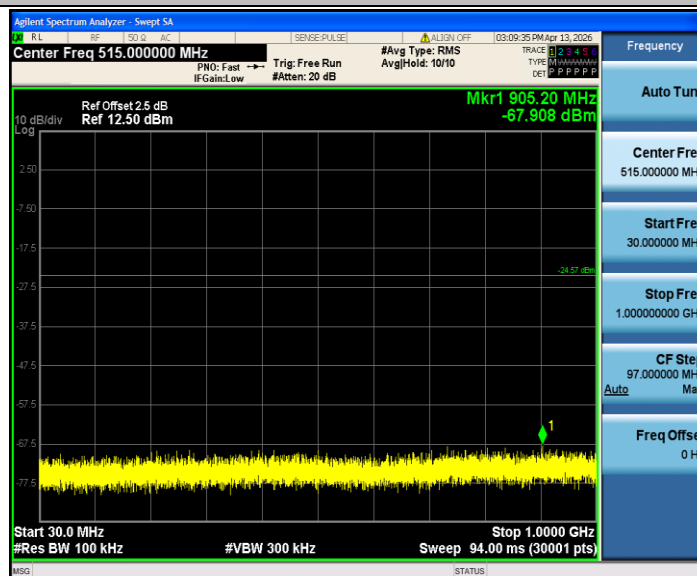




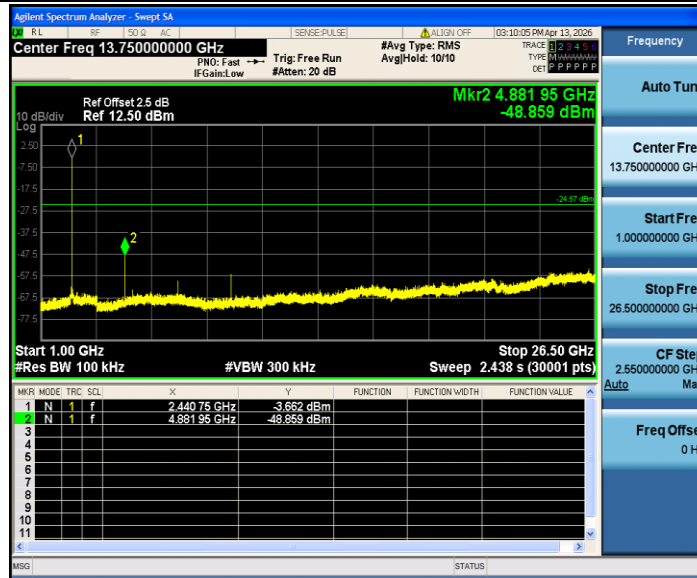
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



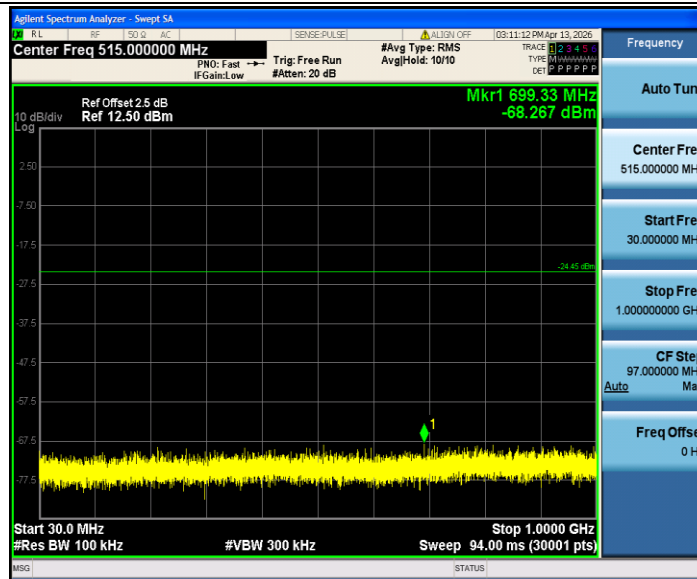
DH5_Ant1_2441_1000~26500



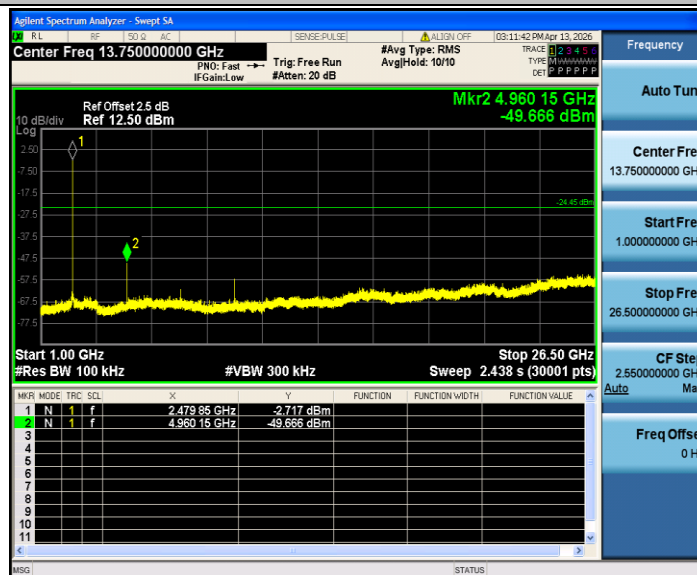
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



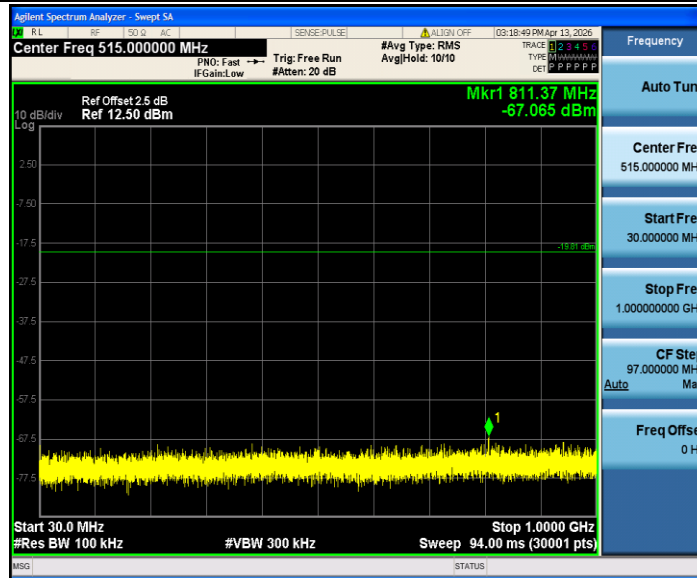
DH5_Ant1_2480_1000~26500



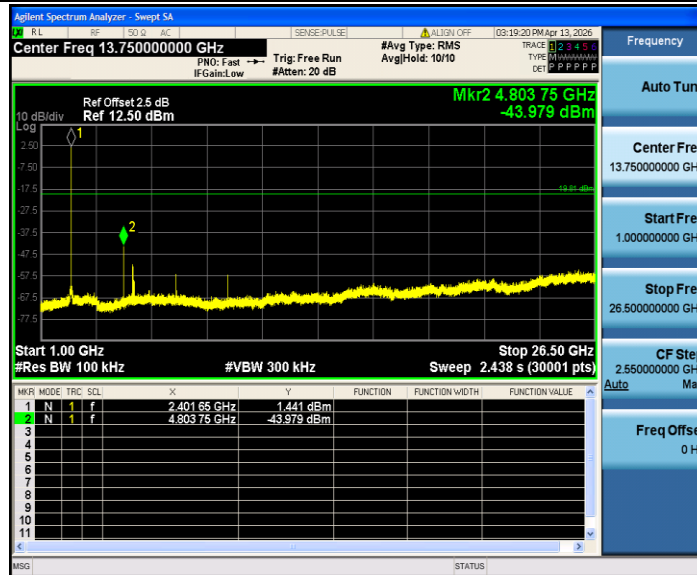
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



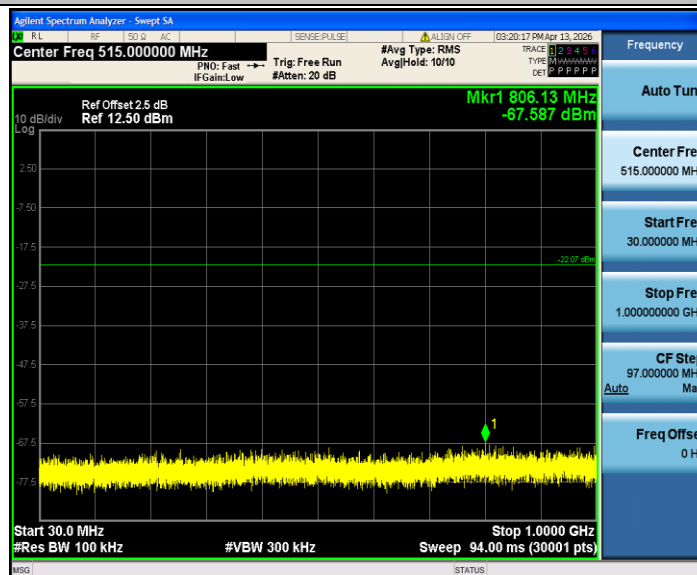
2DH5_Ant1_2402_1000~26500



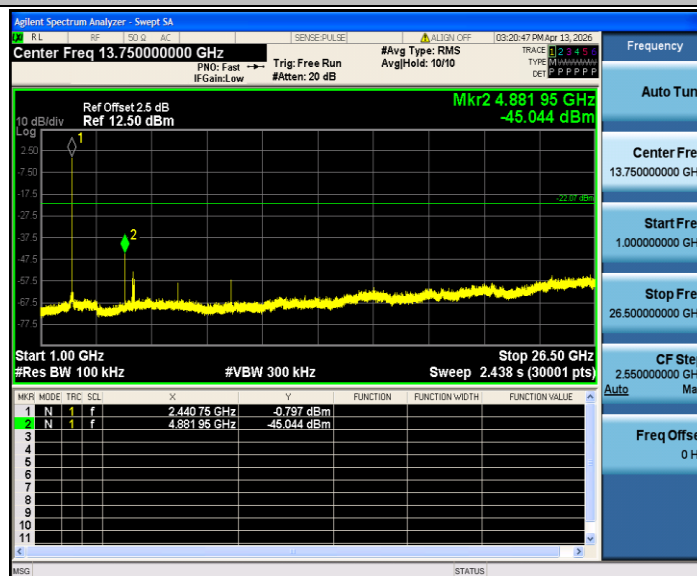
2DH5_Ant1_2441_0~Reference



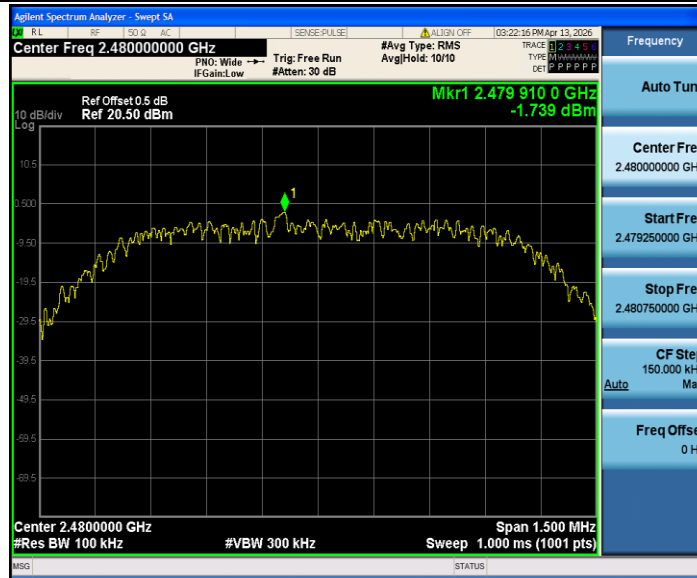
2DH5_Ant1_2441_30~1000



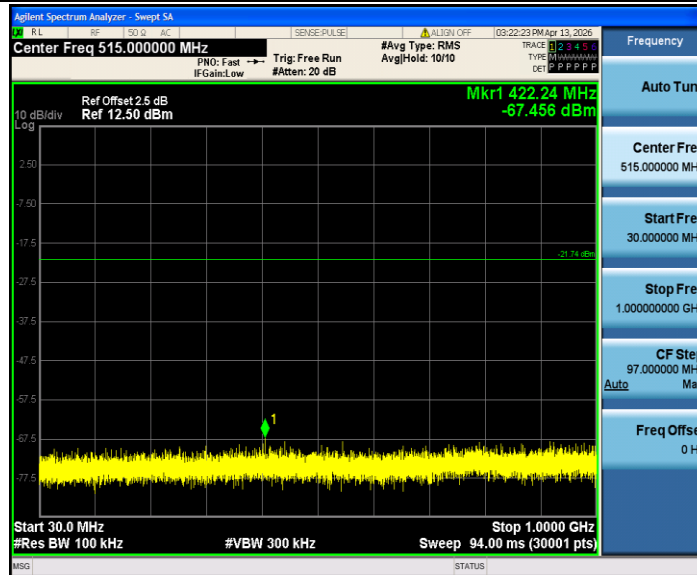
2DH5_Ant1_2441_1000~26500



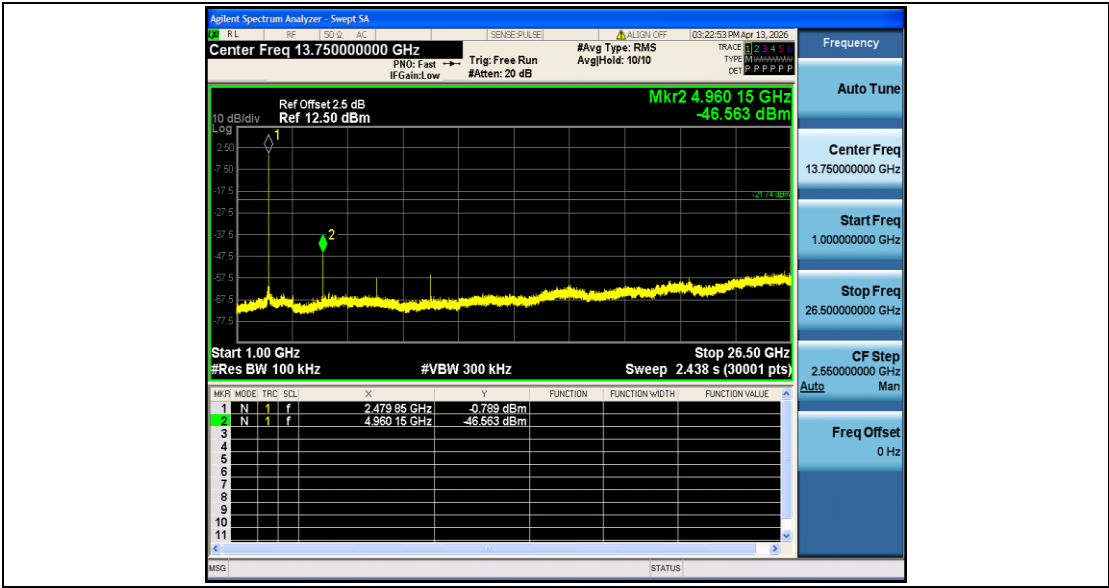
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500



Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.91	3.75	77.60	1.10	---	---