

FCC Appendix RF Test Data

FCC ID : 2A9JD-Q8

Company : Shenzhen Jingyun Wulian Technology CO.,Ltd

EUT : smart glasses

Model Number : Q8

Report No. : CTA25070301801

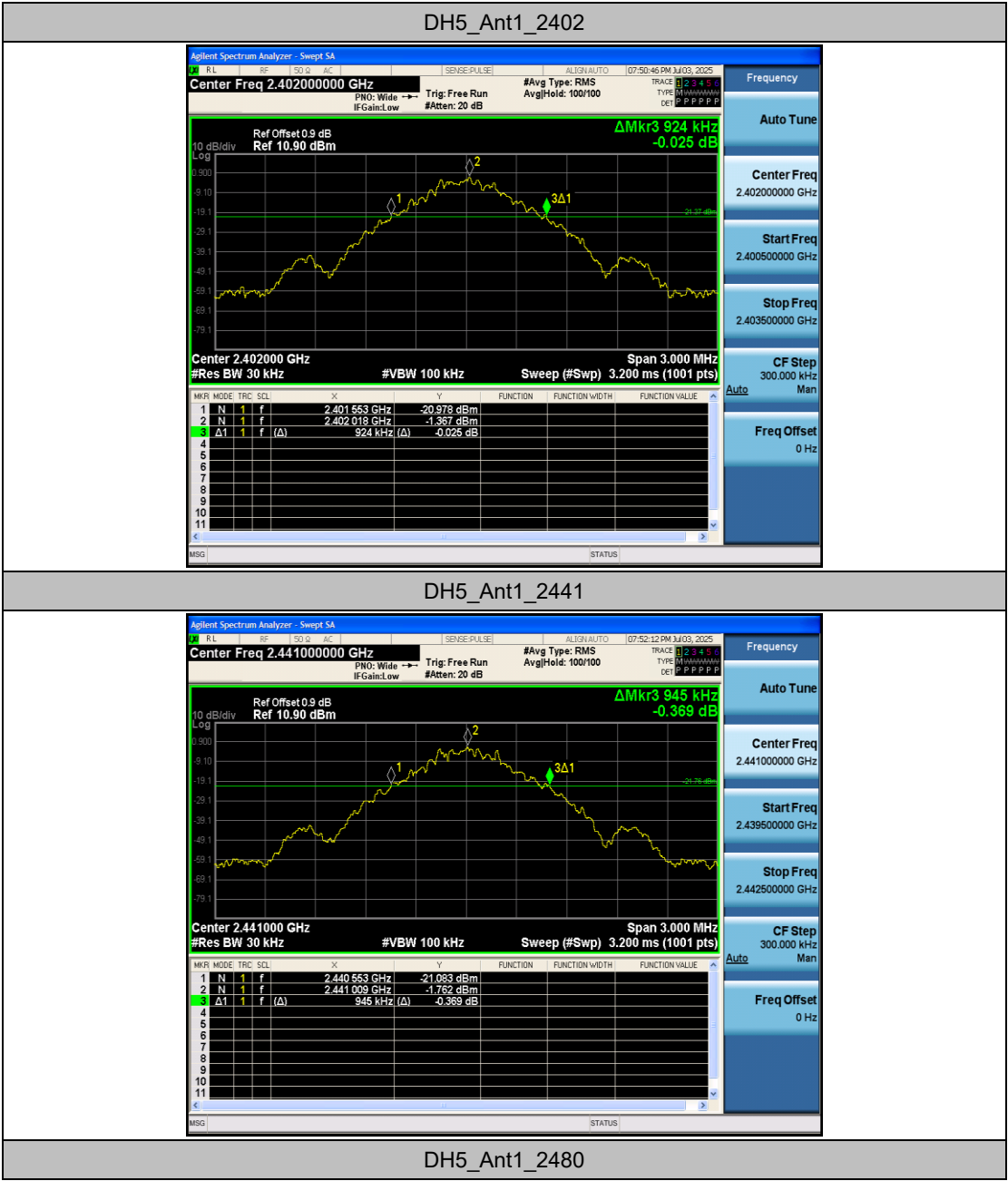
Reviewed By : Eric Wang

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.924	2401.553	2402.477	---	---
		2441	0.945	2440.553	2441.498	---	---
		2480	0.933	2479.553	2480.486	---	---
2DH5	Ant1	2402	1.314	2401.352	2402.666	---	---
		2441	1.275	2440.382	2441.657	---	---
		2480	1.278	2479.382	2480.660	---	---

Test Graphs





2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

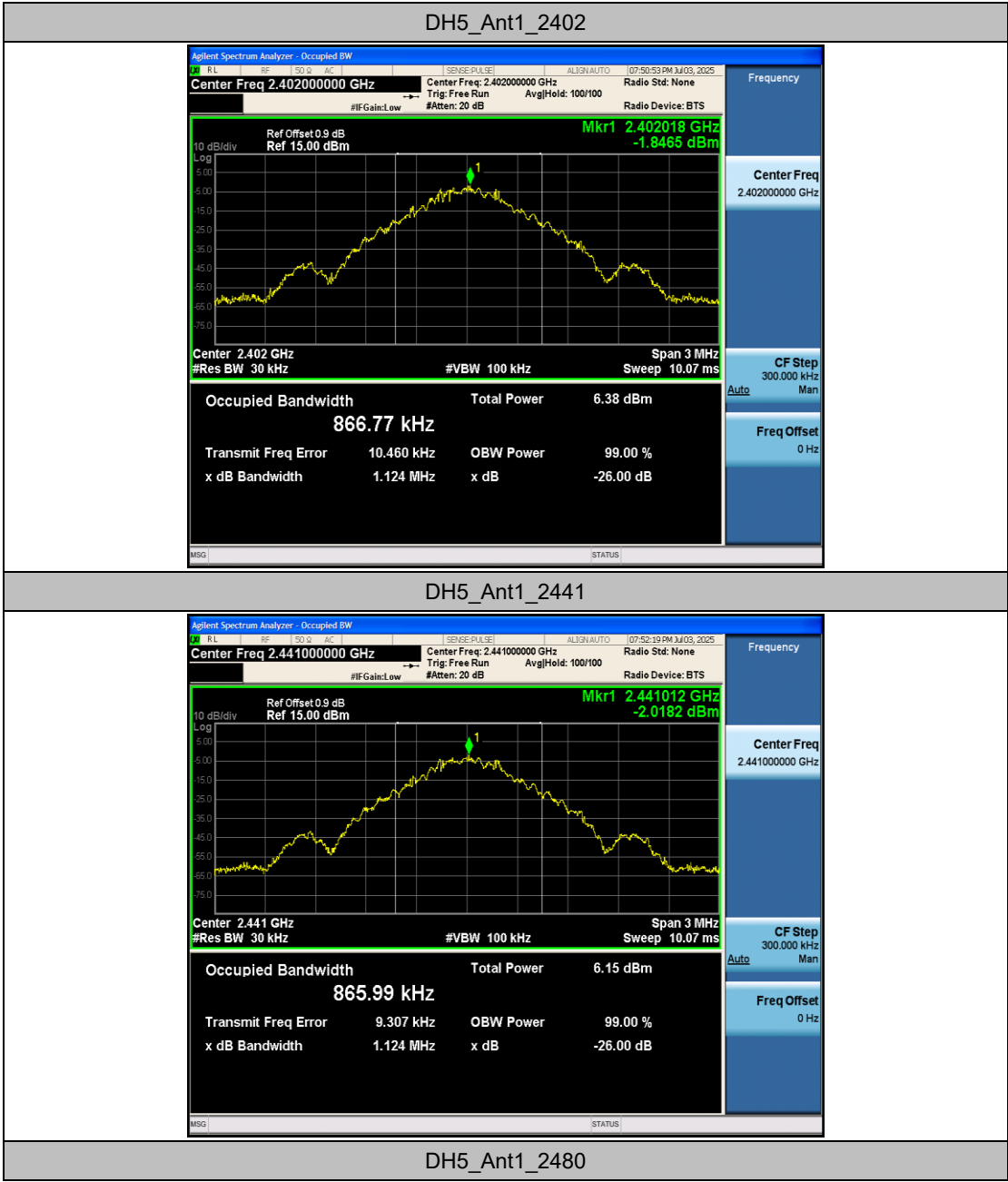


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86677	2401.5771	2402.4438	---	---
		2441	0.86599	2440.5763	2441.4423	---	---
		2480	0.87452	2479.5712	2480.4457	---	---
2DH5	Ant1	2402	1.1818	2401.4190	2402.6008	---	---
		2441	1.1851	2440.4163	2441.6014	---	---
		2480	1.1902	2479.4150	2480.6052	---	---

Test Graphs





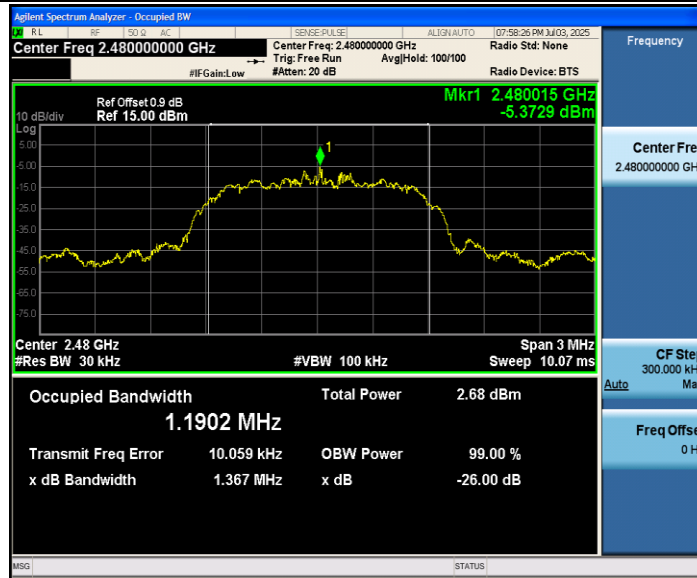
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

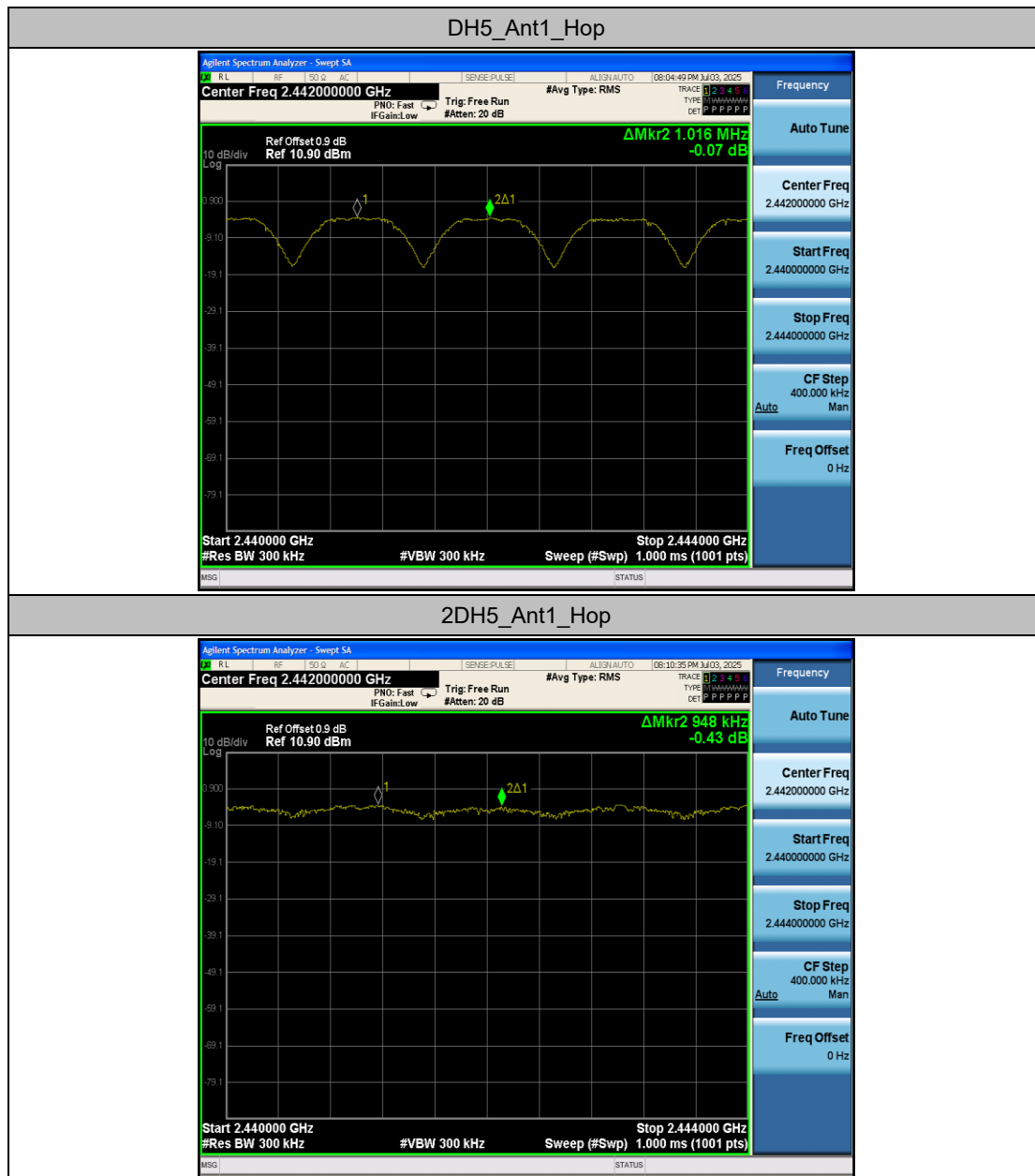
Test Mode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.42	≤20.97	PASS
		2441	0.15	≤20.97	PASS
		2480	0.04	≤20.97	PASS
2DH5	Ant1	2402	-0.42	≤20.97	PASS
		2441	-0.63	≤20.97	PASS
		2480	-0.74	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.016	≥ 0.945	PASS
2DH5	Ant1	Hop	0.948	≥ 0.876	PASS

Test Graphs

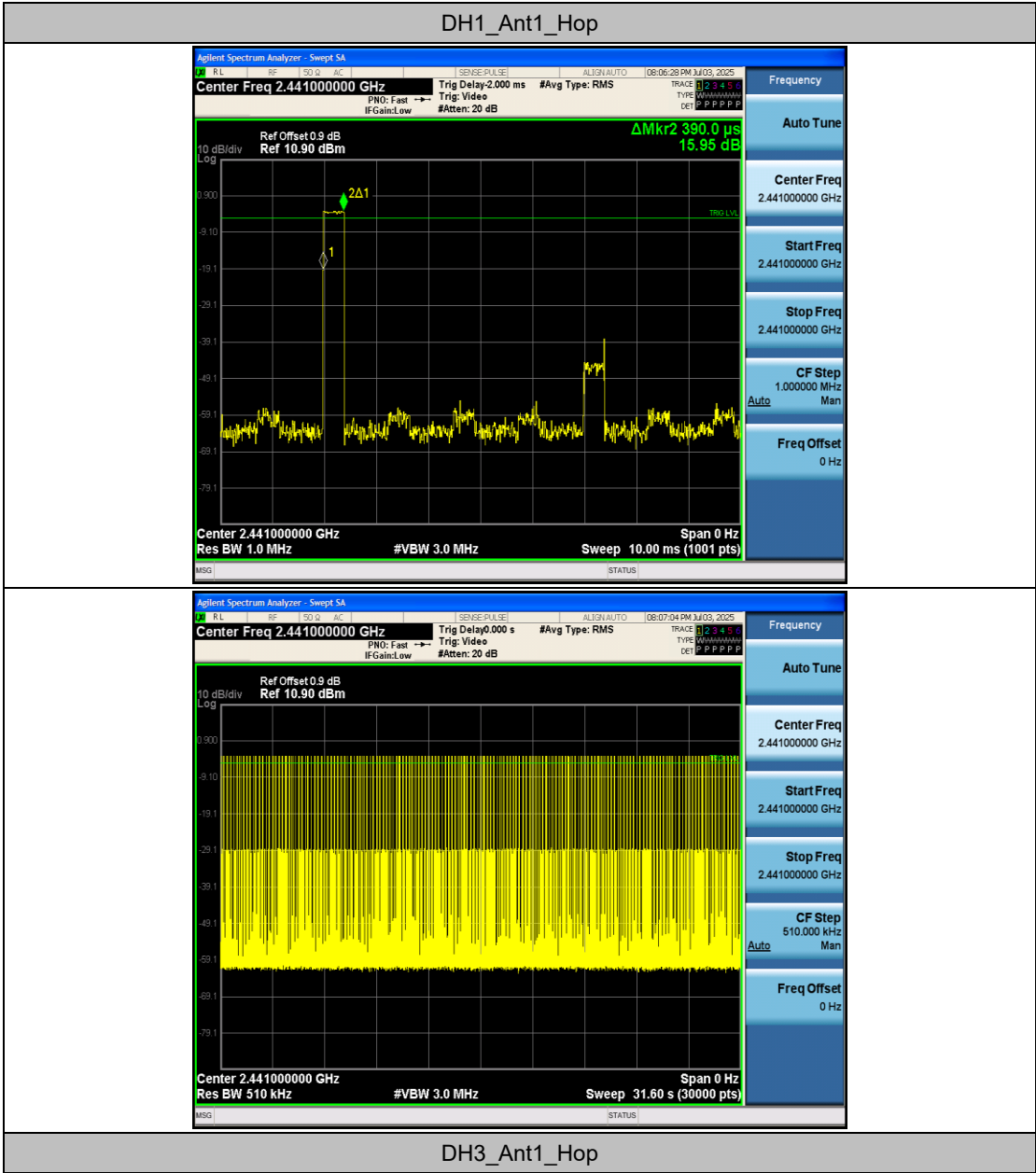


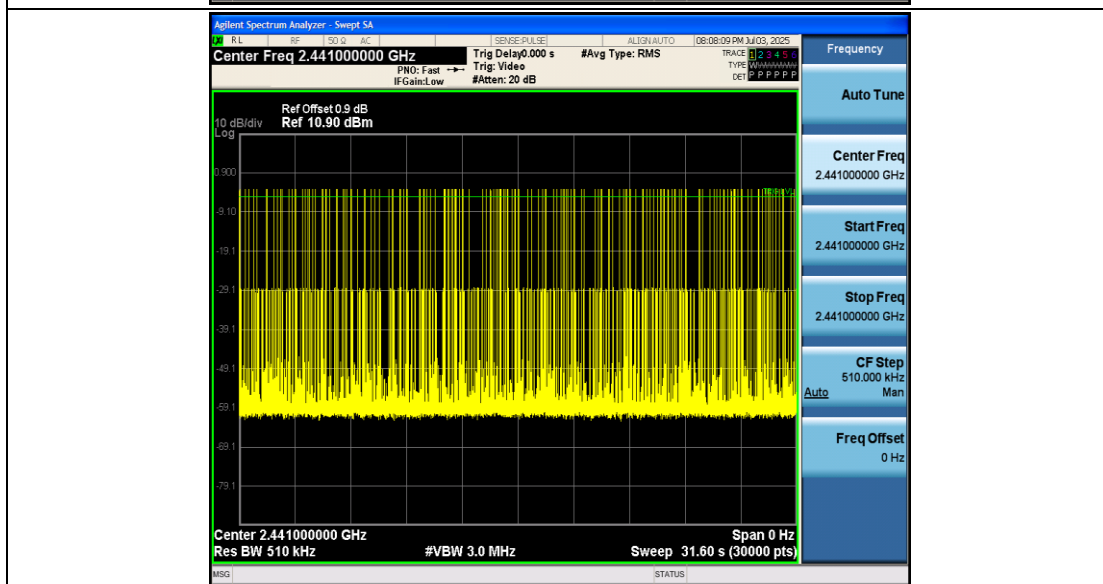
Appendix E: Time of occupancy

Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.390	318	0.124	≤0.4	PASS
DH3	Ant1	Hop	1.650	166	0.274	≤0.4	PASS
DH5	Ant1	Hop	2.890	120	0.347	≤0.4	PASS
2DH1	Ant1	Hop	0.400	318	0.127	≤0.4	PASS
2DH3	Ant1	Hop	1.650	151	0.249	≤0.4	PASS
2DH5	Ant1	Hop	2.900	101	0.293	≤0.4	PASS

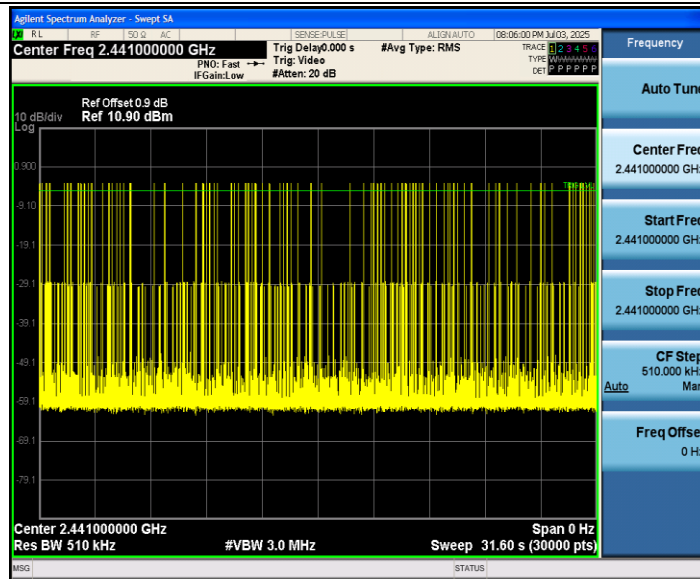
Test Graphs



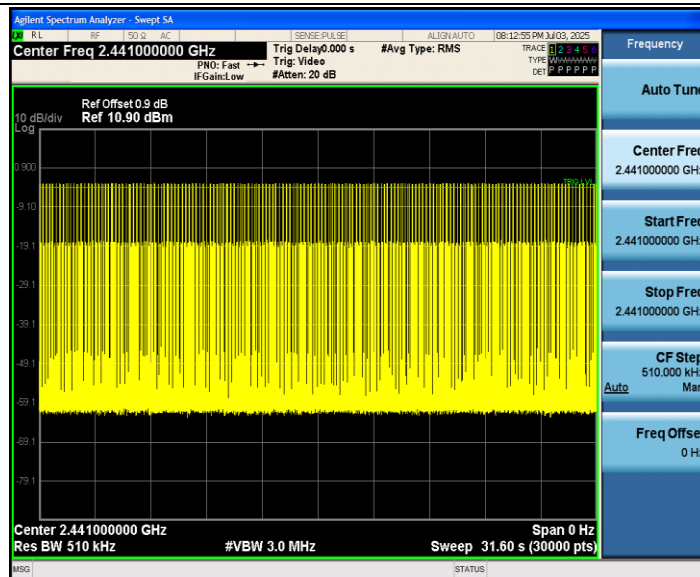
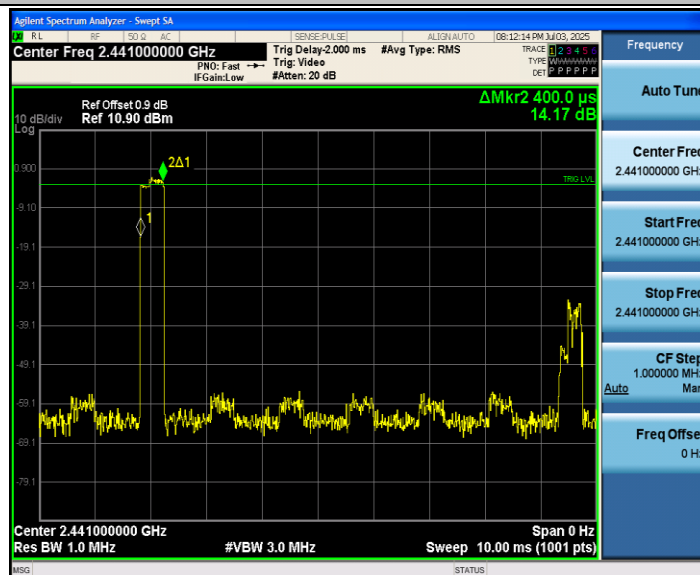


DH5_Ant1_Hop

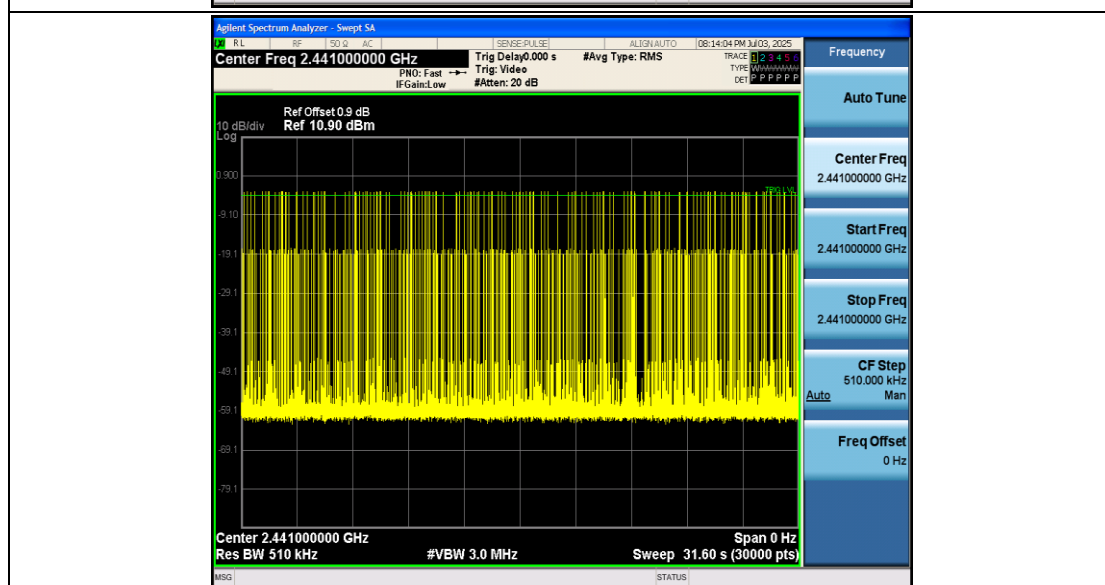
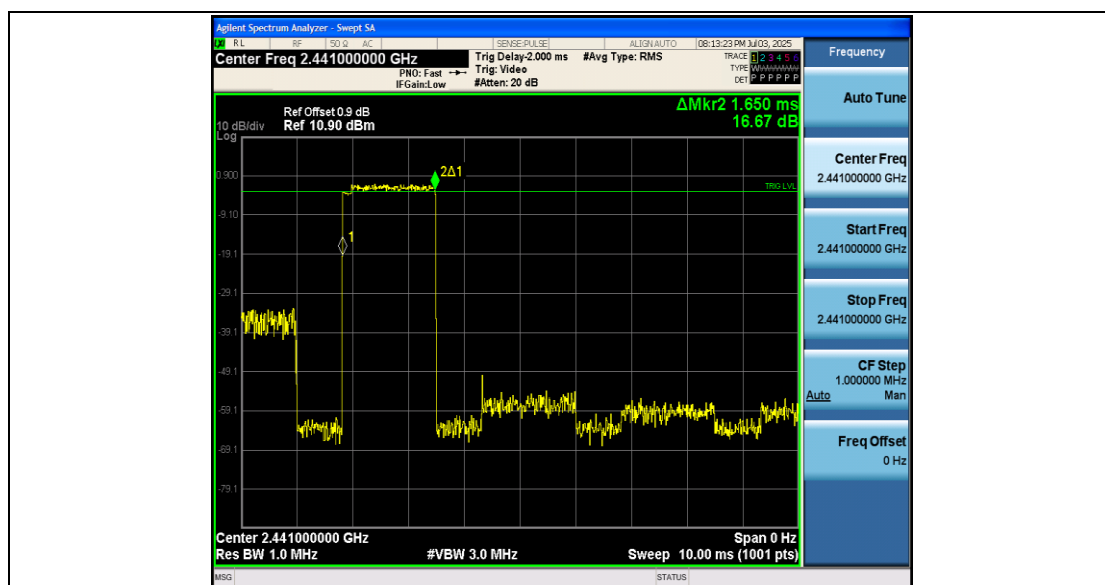




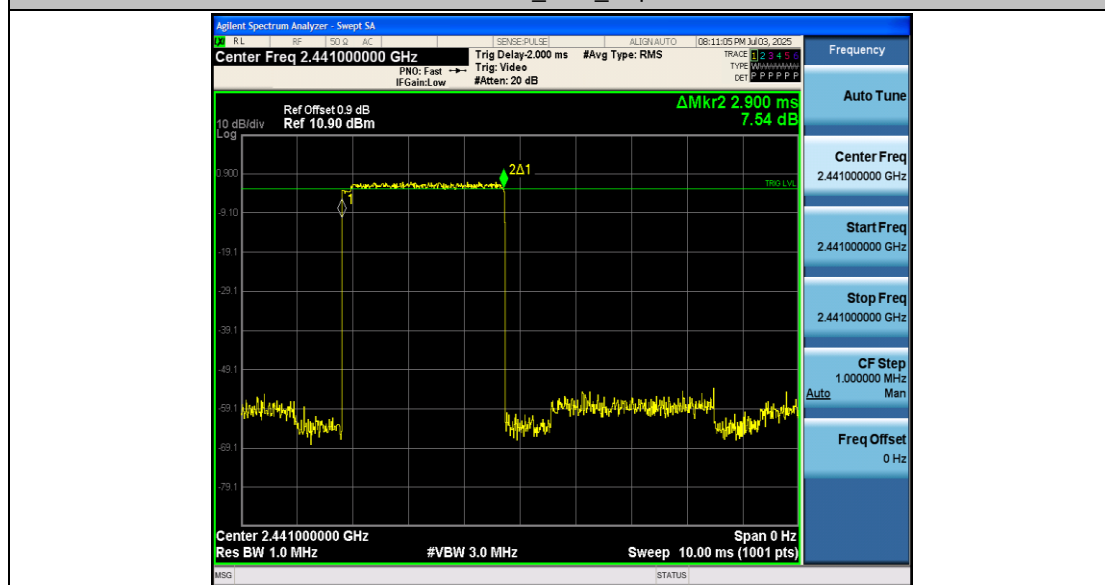
2DH1_Ant1_Hop

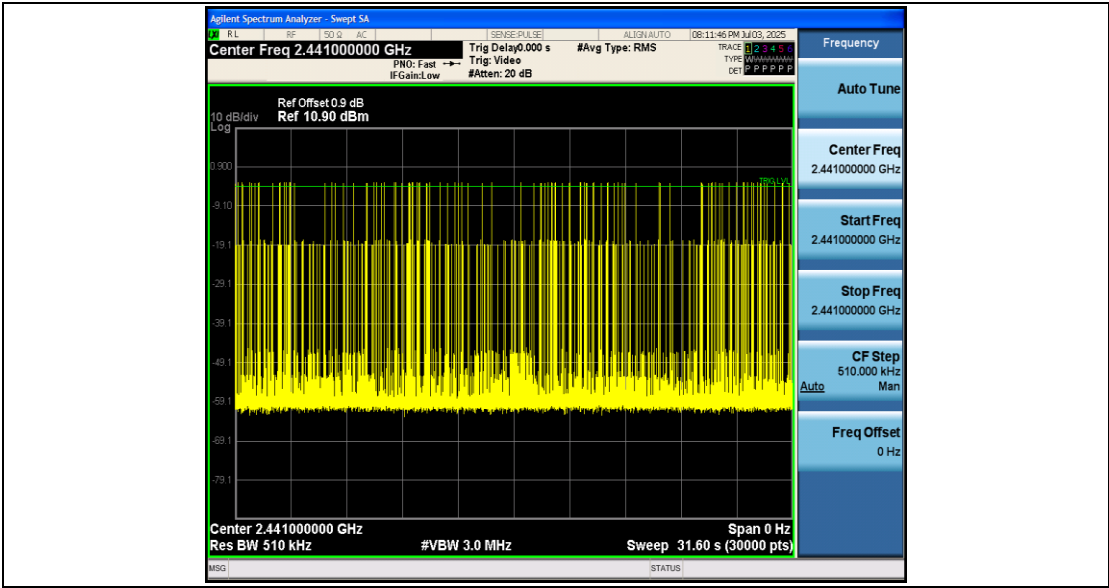


2DH3_Ant1_Hop



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

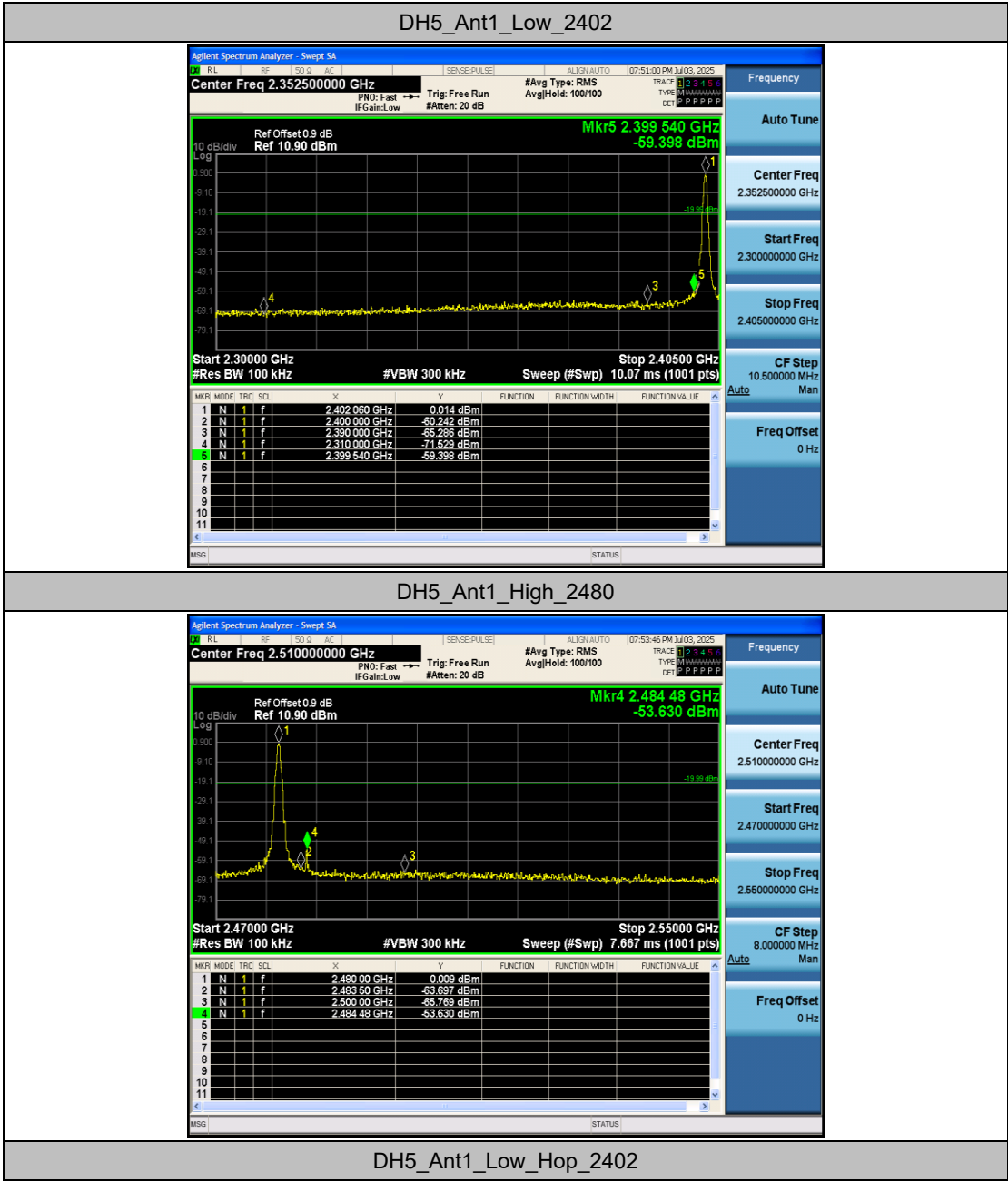


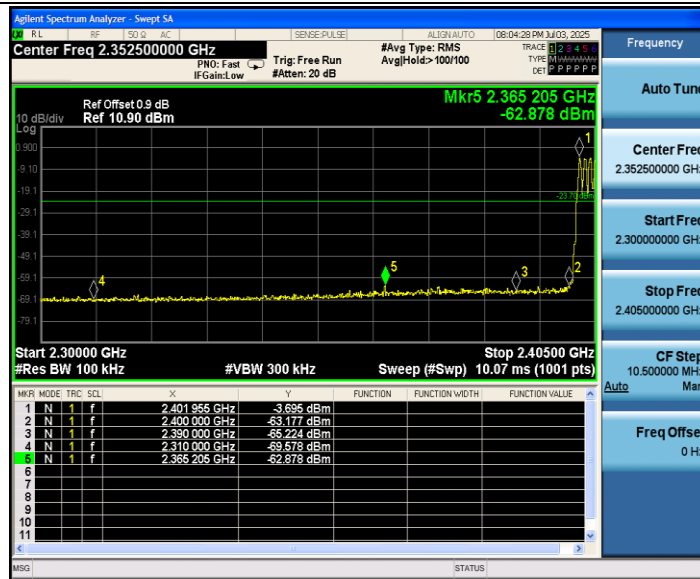
Appendix G: Band edge measurements

Test Result

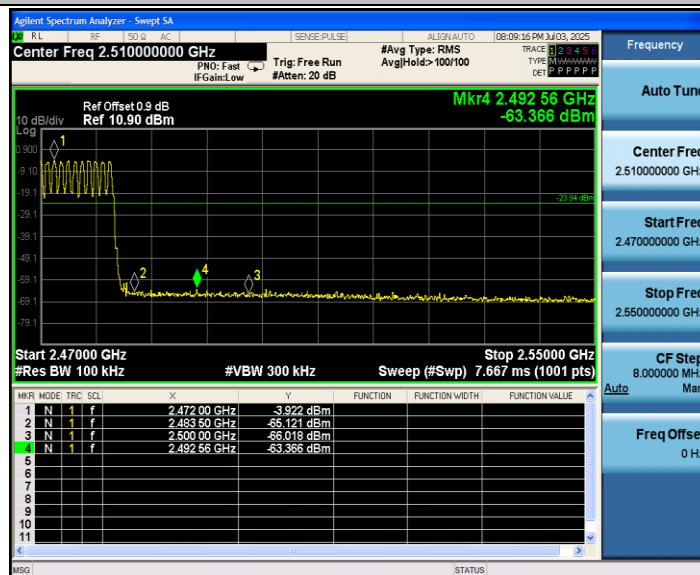
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.01	-59.4	≤-19.99	PASS
		High	2480	0.01	-53.63	≤-19.99	PASS
		Low	Hop_2402	-3.70	-62.88	≤-23.7	PASS
		High	Hop_2480	-3.94	-63.37	≤-23.94	PASS
2DH5	Ant1	Low	2402	-3.75	-59.49	≤-23.75	PASS
		High	2480	-4.49	-62.14	≤-24.49	PASS
		Low	Hop_2402	-4.45	-58.21	≤-24.45	PASS
		High	Hop_2480	-3.58	-63.74	≤-23.58	PASS

Test Graphs

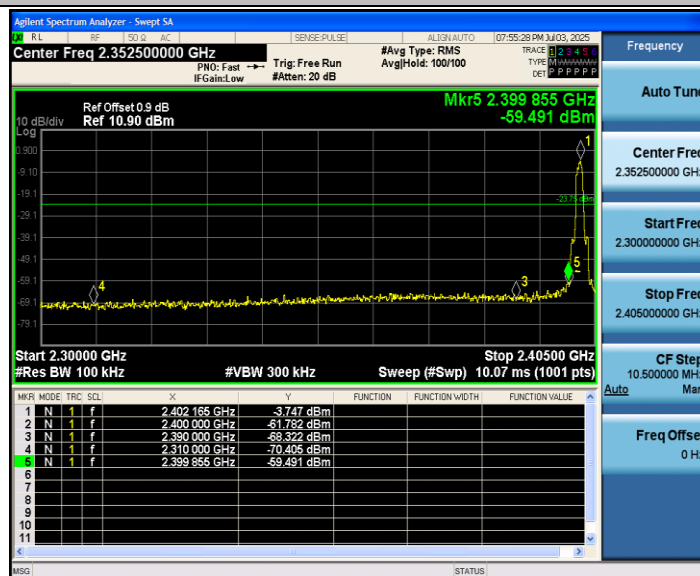




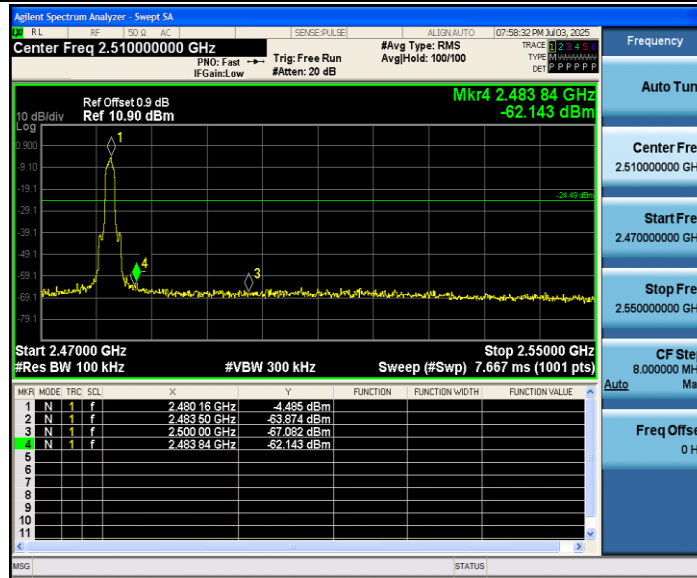
DH5_Ant1_High_Hop_2480



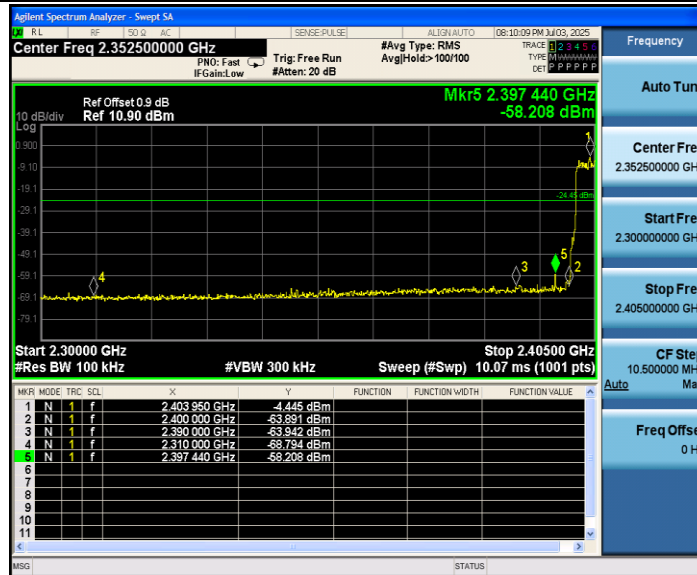
2DH5_Ant1_Low_2402



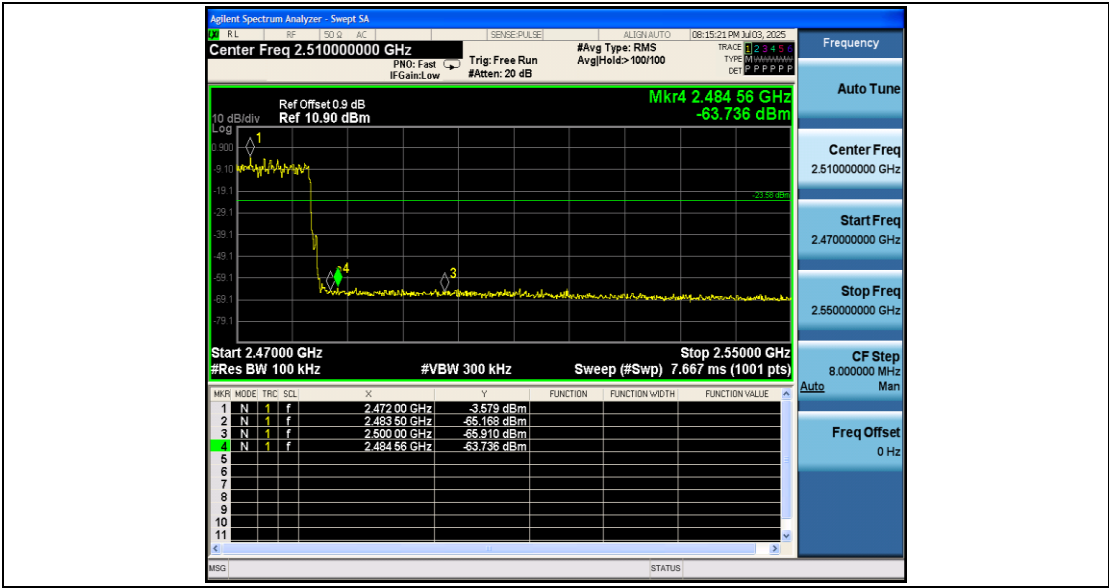
2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

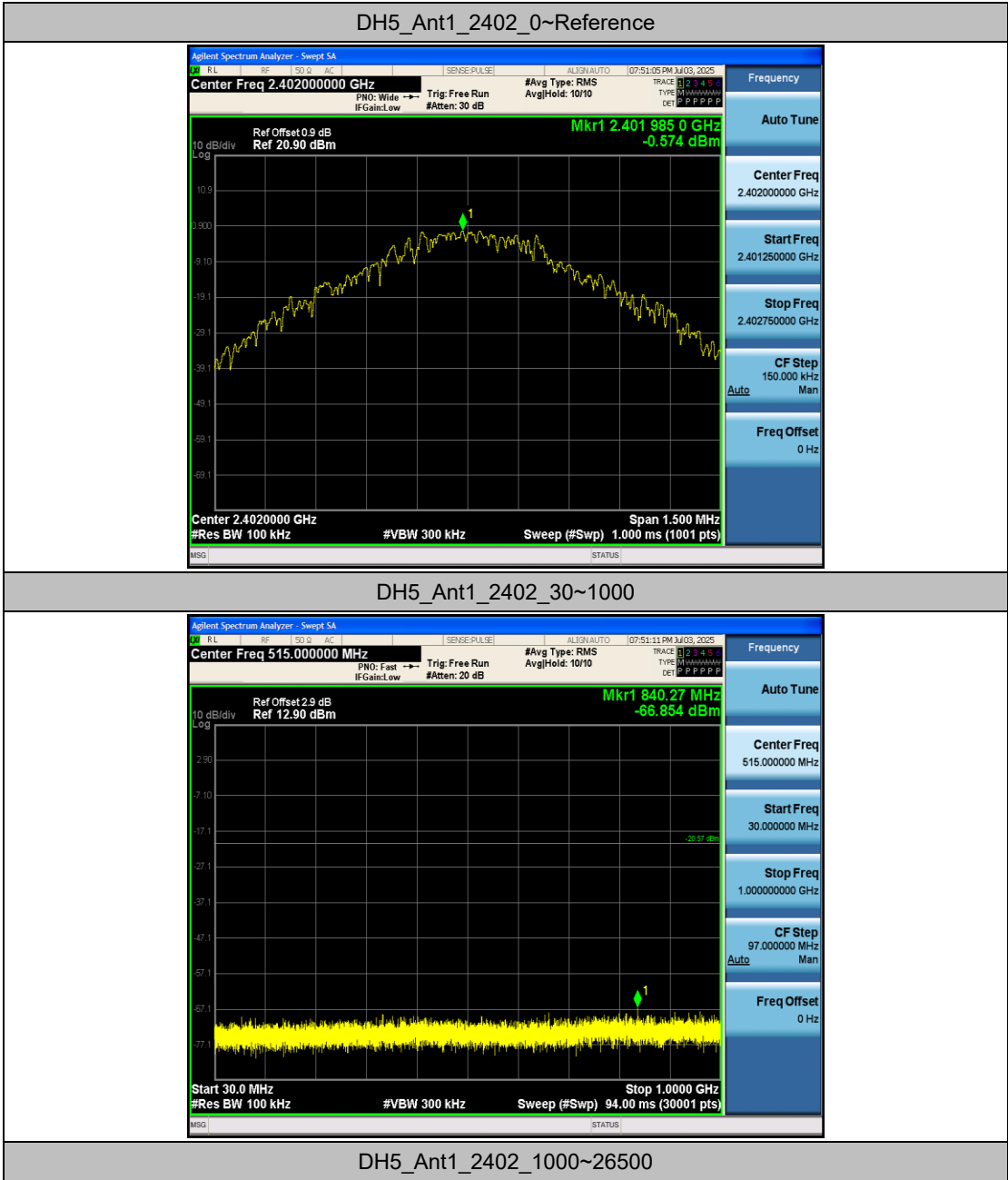


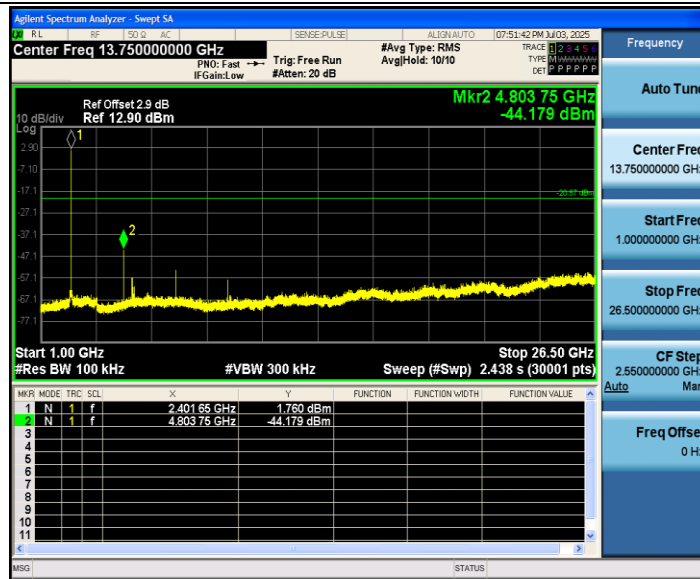
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.57	-0.57	---	PASS
			30~1000	-0.57	-66.85	≤-20.57	PASS
			1000~26500	-0.57	-44.18	≤-20.57	PASS
		2441	Reference	-1.00	-1.00	---	PASS
			30~1000	-1.00	-67.79	≤-21	PASS
			1000~26500	-1.00	-43.83	≤-21	PASS
		2480	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-66.8	≤-20.79	PASS
			1000~26500	-0.79	-43.71	≤-20.79	PASS
2DH5	Ant1	2402	Reference	-3.51	-3.51	---	PASS
			30~1000	-3.51	-67.63	≤-23.51	PASS
			1000~26500	-3.51	-47.42	≤-23.51	PASS
		2441	Reference	-4.88	-4.88	---	PASS
			30~1000	-4.88	-66.82	≤-24.88	PASS
			1000~26500	-4.88	-42.08	≤-24.88	PASS
		2480	Reference	-5.18	-5.18	---	PASS
			30~1000	-5.18	-67.28	≤-25.18	PASS
			1000~26500	-5.18	-48.52	≤-25.18	PASS

Test Graphs

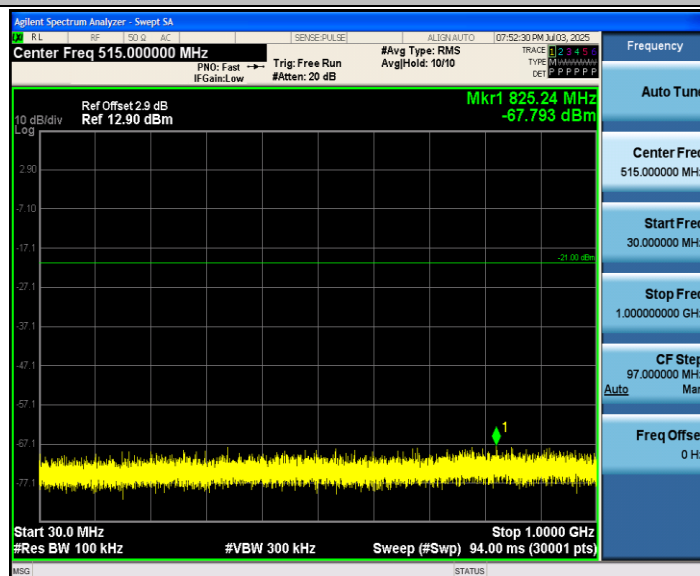




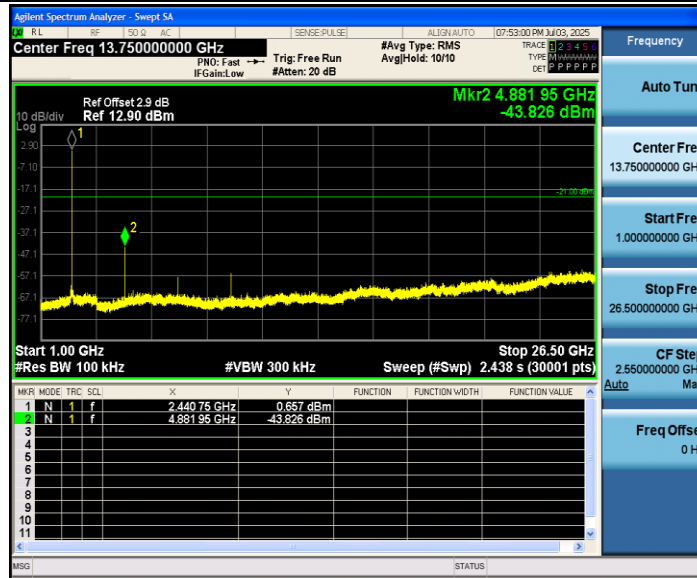
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



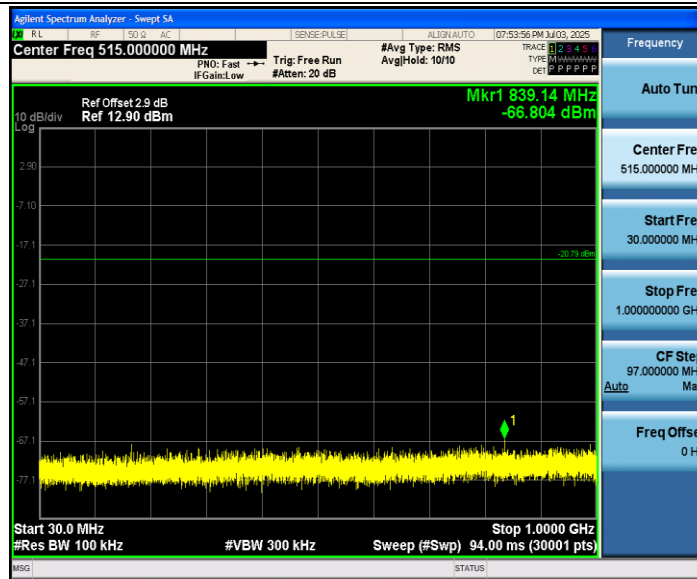
DH5_Ant1_2441_1000~26500



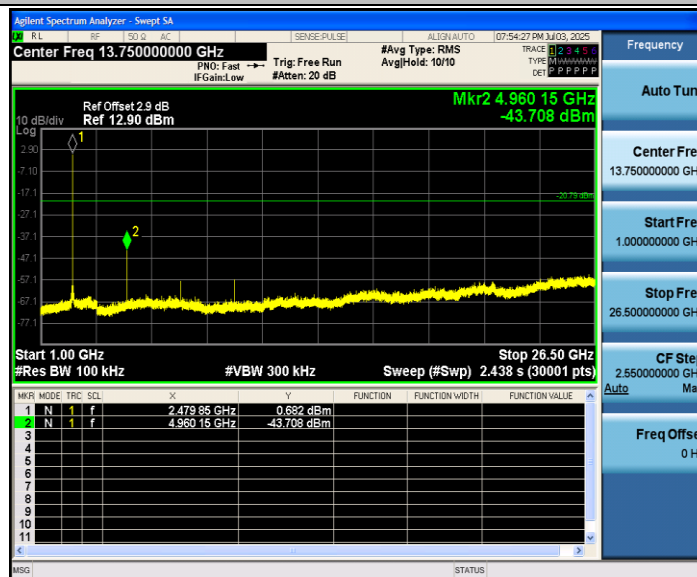
DH5_Ant1_2480_0~Reference



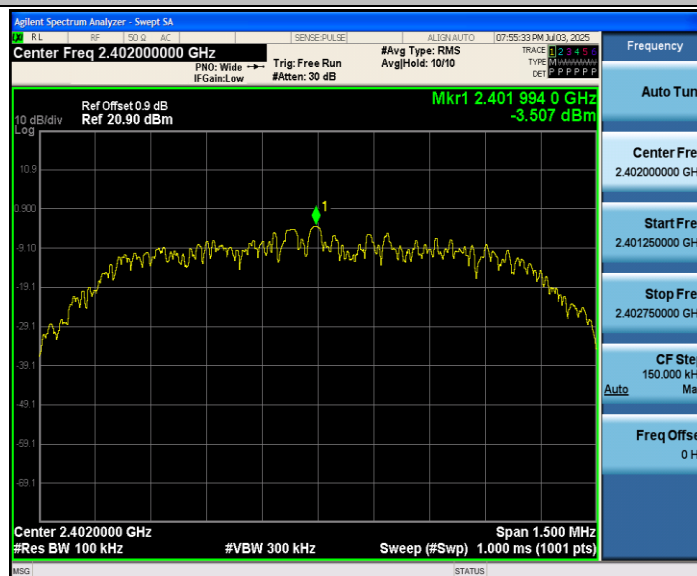
DH5_Ant1_2480_30~1000



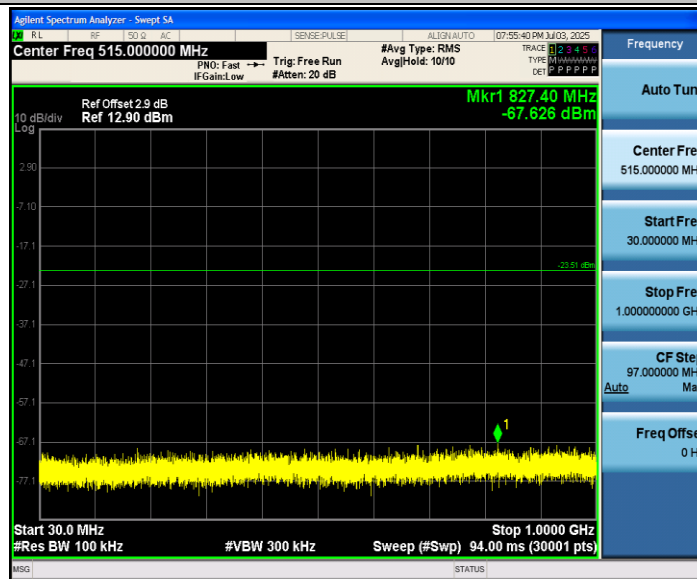
DH5_Ant1_2480_1000~26500



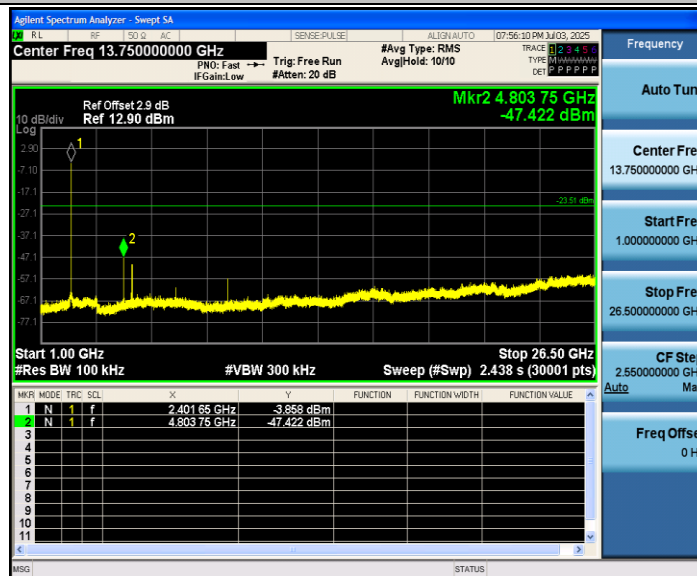
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



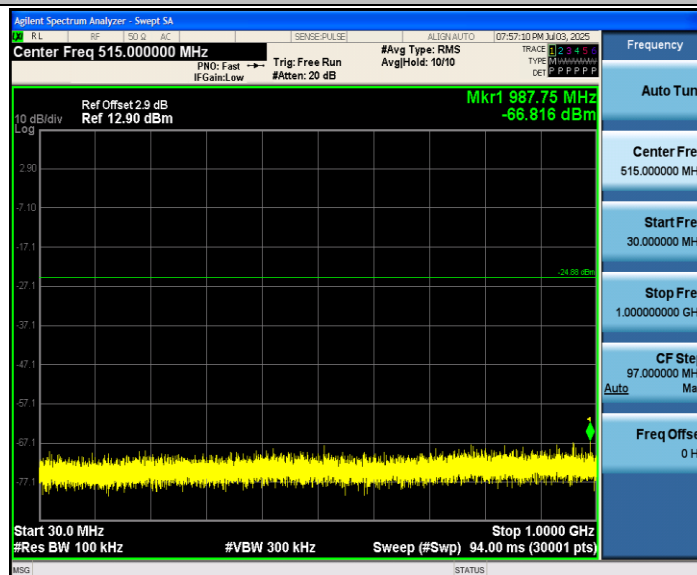
2DH5_Ant1_2402_1000~26500



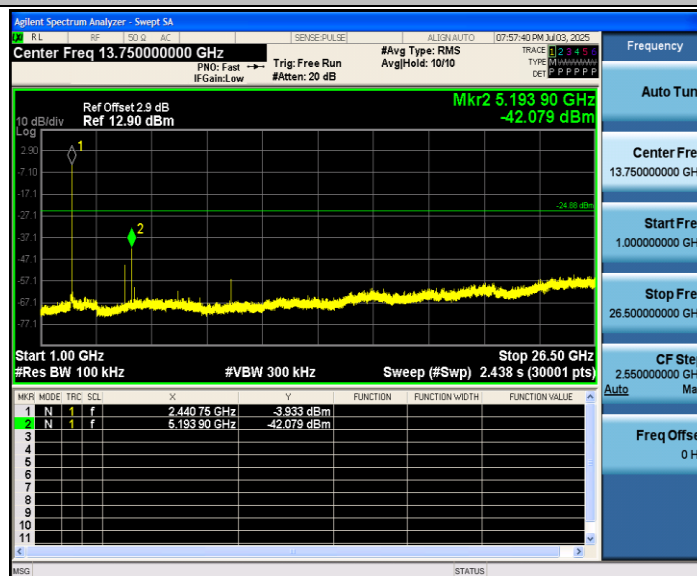
2DH5_Ant1_2441_0~Reference



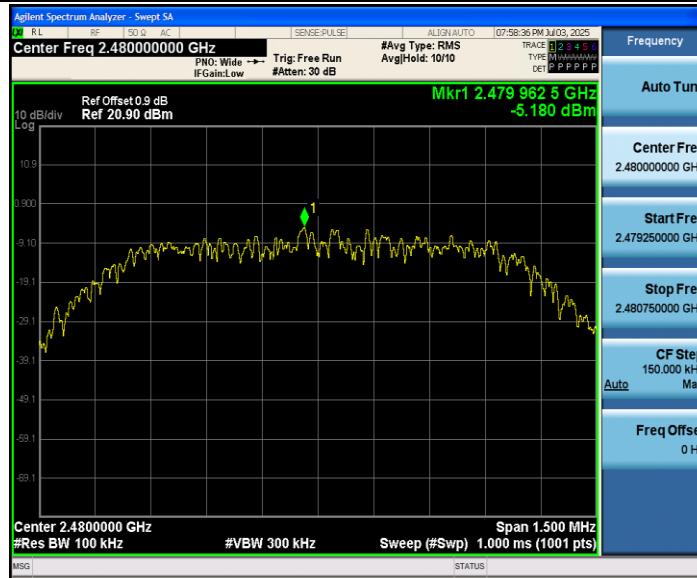
2DH5_Ant1_2441_30~1000



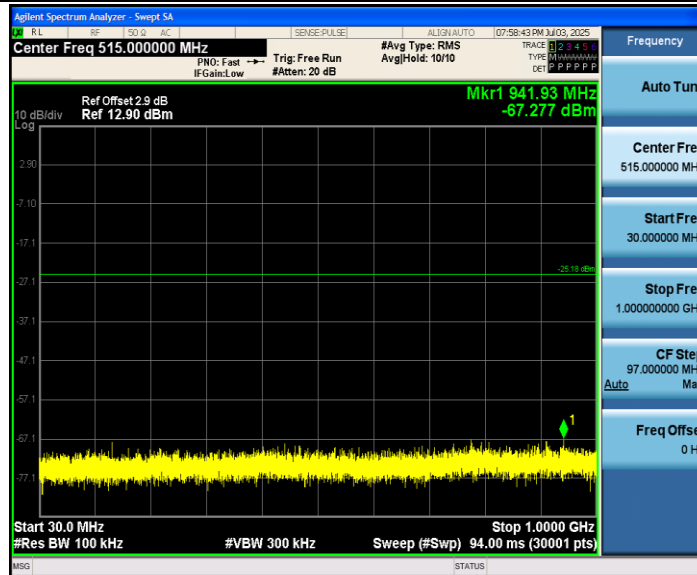
2DH5_Ant1_2441_1000~26500



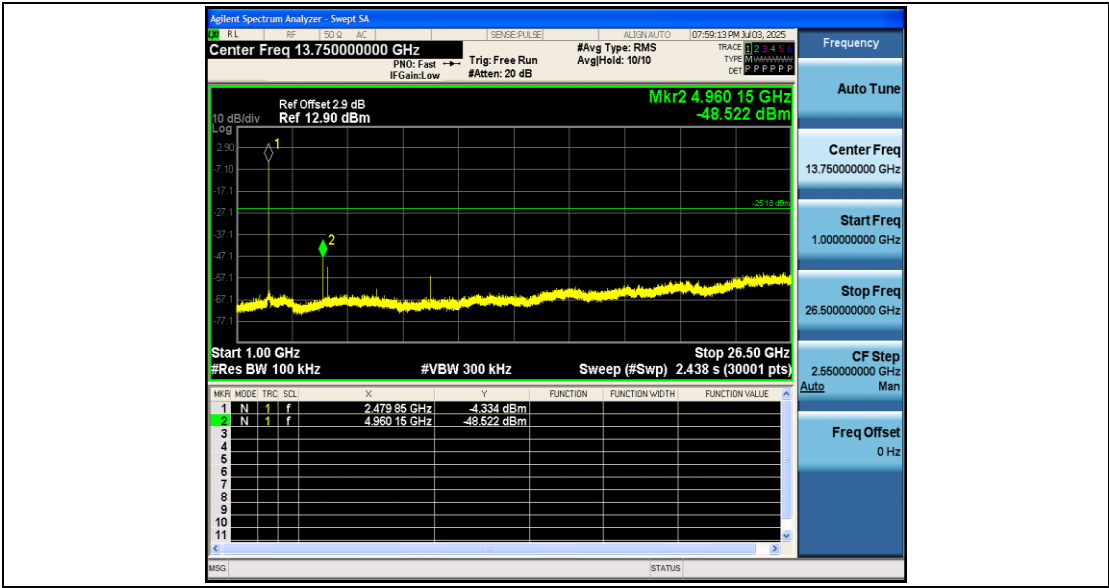
2DH5_Ant1_2480_0~Reference



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	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.91	3.75	77.60	1.10	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---

Figure 10 shows two screenshots of the Agilent Spectrum Analyzer interface, displaying the results of a sweep measurement for two different antennas, DH5_Ant1_2402 and DH5_Ant1_2441. Both screenshots show a plot of power spectral density (dBm/Hz) versus frequency (GHz). The plots are centered at 2.402000000 GHz and 2.441000000 GHz, respectively. The plots show a significant signal at the center frequency, with a peak level of approximately -15.55 dBm for DH5_Ant1_2402 and -20.04 dBm for DH5_Ant1_2441. The plots also show a noise floor around -40 dBm. The measurement parameters for both are: Center Freq: 2.402000000 GHz (for DH5_Ant1_2402) and 2.441000000 GHz (for DH5_Ant1_2441), Res BW: 8 MHz, Span: 0 Hz, Sweep: 5.000 ms (1001 pts), #VBW: 8.0 MHz, #Att: 30 dB, Ref Offset: 0.9 dB, Ref: 20.00 dBm, ΔMkr3: 3.750 ms, -0.11 dB (for DH5_Ant1_2402) and -0.47 dB (for DH5_Ant1_2441).

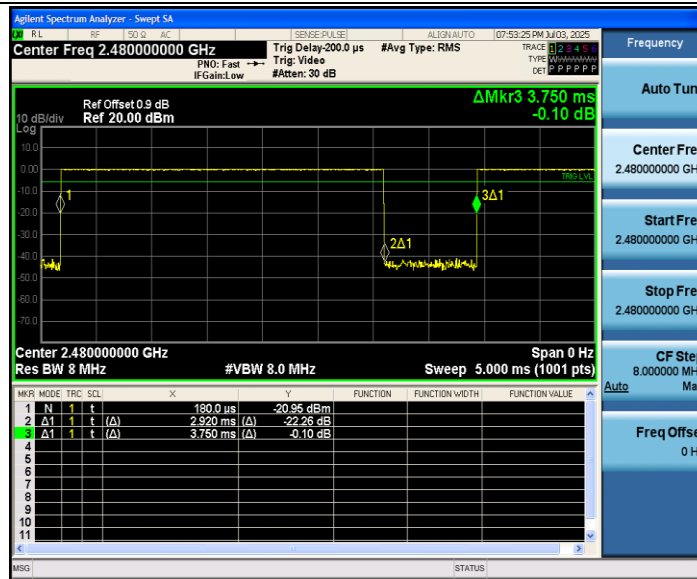
Figure 10: Agilent Spectrum Analyzer - Sweep SA

Top Screenshot (DH5_Ant1_2402):

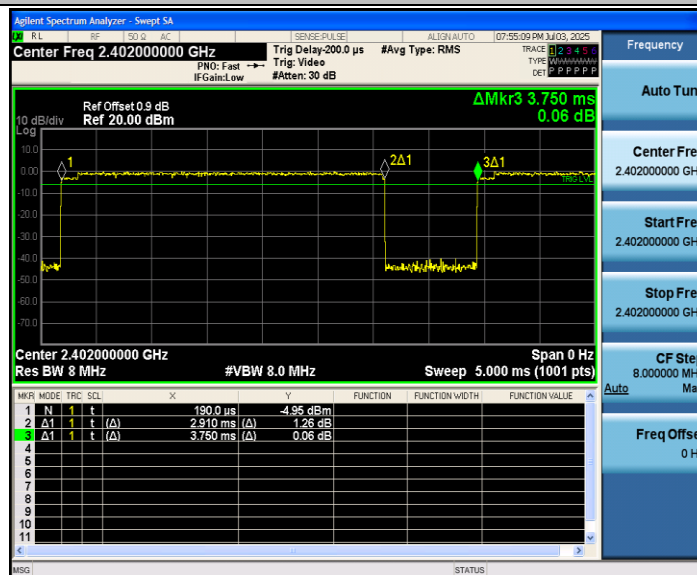
- Center Freq: 2.402000000 GHz
- Ref Offset: 0.9 dB
- Ref: 20.00 dBm
- ΔMkr3: 3.750 ms, -0.11 dB
- Center Freq: 2.402000000 GHz
- Start Freq: 2.402000000 GHz
- Stop Freq: 2.402000000 GHz
- CF Step: 8.000000 MHz
- Freq Offset: 0 Hz

Bottom Screenshot (DH5_Ant1_2441):

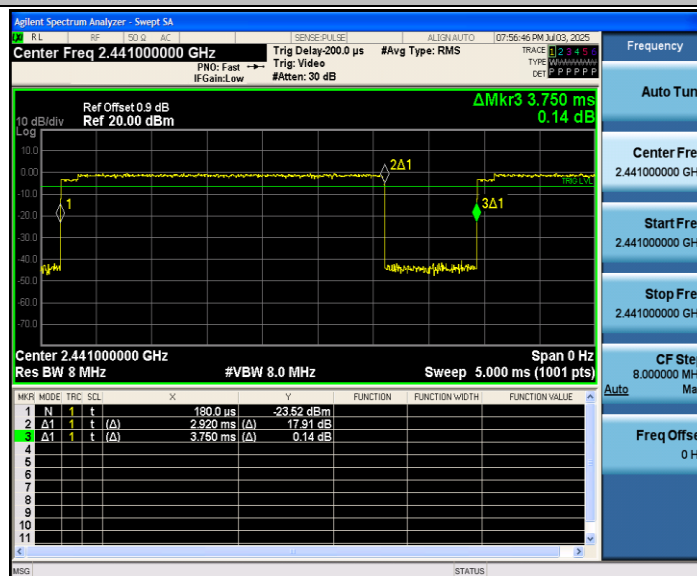
- Center Freq: 2.441000000 GHz
- Ref Offset: 0.9 dB
- Ref: 20.00 dBm
- ΔMkr3: 3.750 ms, -0.47 dB
- Center Freq: 2.441000000 GHz
- Start Freq: 2.441000000 GHz
- Stop Freq: 2.441000000 GHz
- CF Step: 8.000000 MHz
- Freq Offset: 0 Hz



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

