

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

Product Name: TWS EARBUDS

Trade Mark: ARGOMTECH

Test Model: ARG-HS-5085BK

FCC ID: 2AUGW-5085BK

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

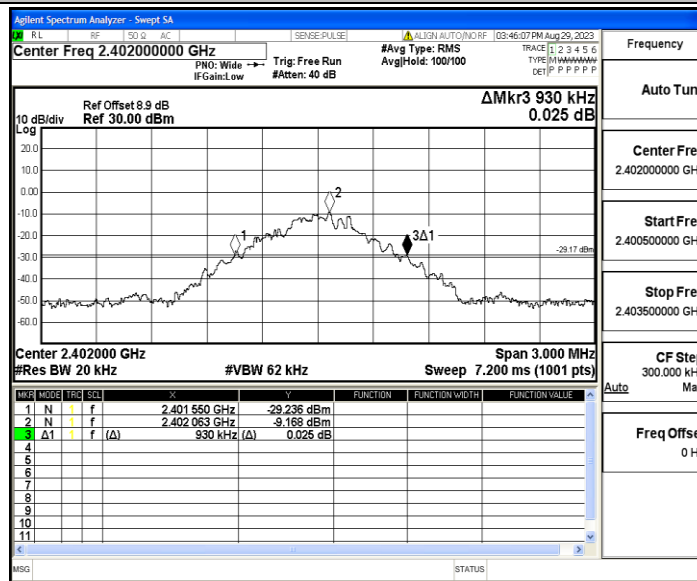
Appendix A: 20dB Emission Bandwidth

Test Result

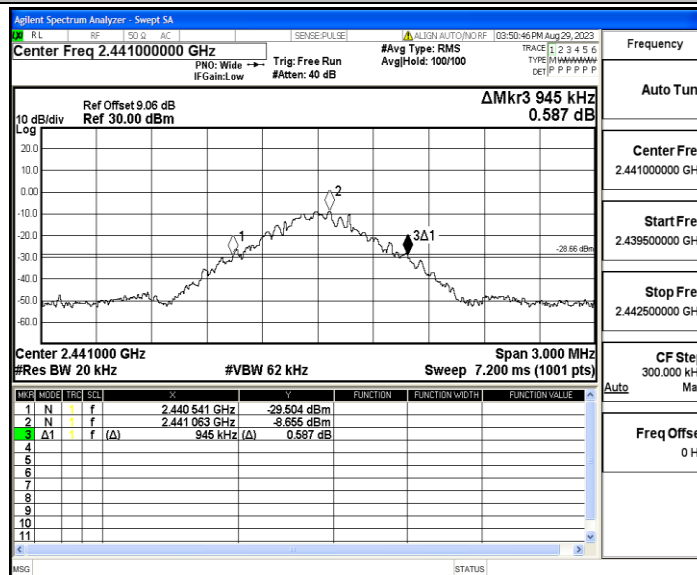
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.930	2401.550	2402.480	---	---
		2441	0.945	2440.541	2441.486	---	---
		2480	0.942	2479.544	2480.486	---	---
2DH5	Ant1	2402	1.326	2401.340	2402.666	---	---
		2441	1.326	2440.340	2441.666	---	---
		2480	1.353	2479.331	2480.684	---	---
3DH5	Ant1	2402	1.323	2401.337	2402.660	---	---
		2441	1.308	2440.349	2441.657	---	---
		2480	1.329	2479.334	2480.663	---	---

Test Graphs

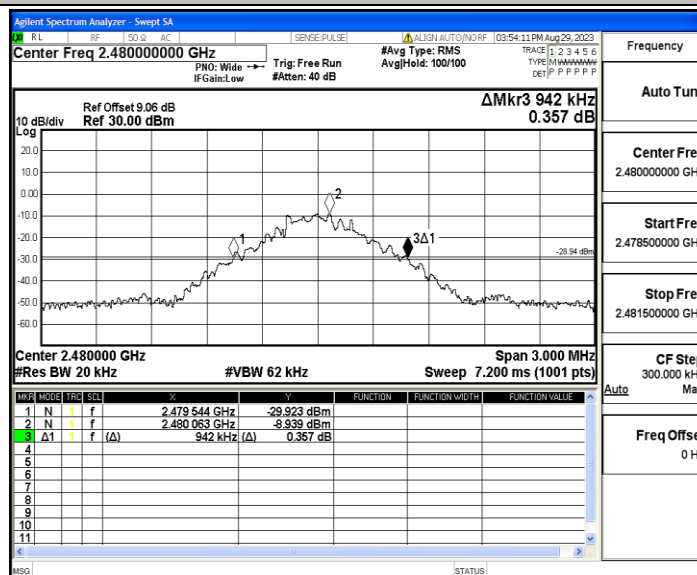
DH5_Ant1_2402



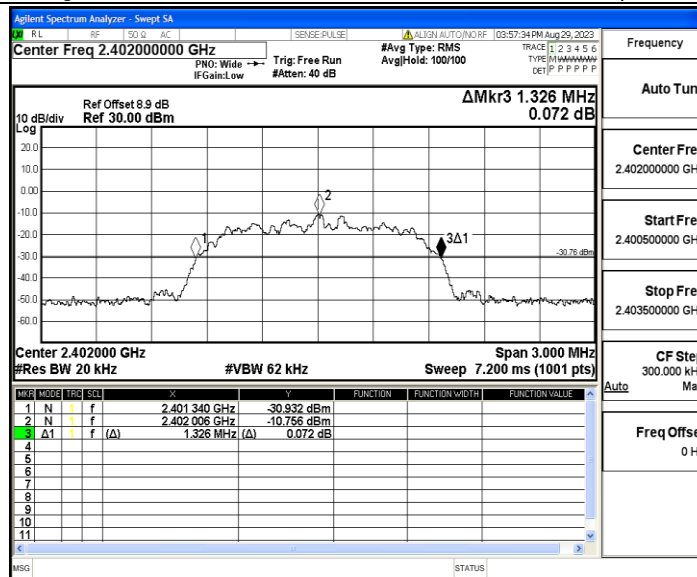
DH5_Ant1_2441



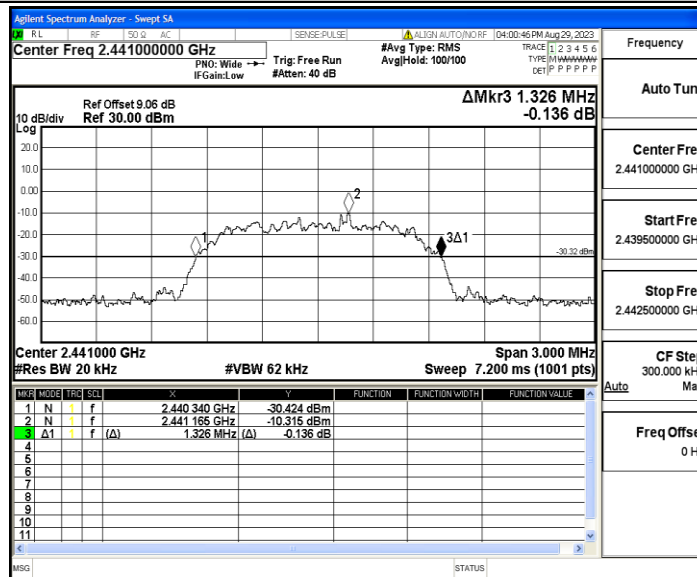
DH5_Ant1_2480



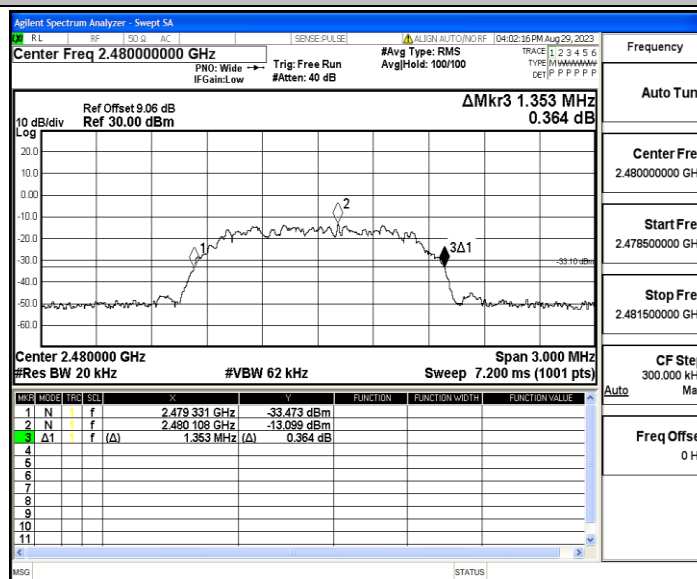
2DH5_Ant1_2402



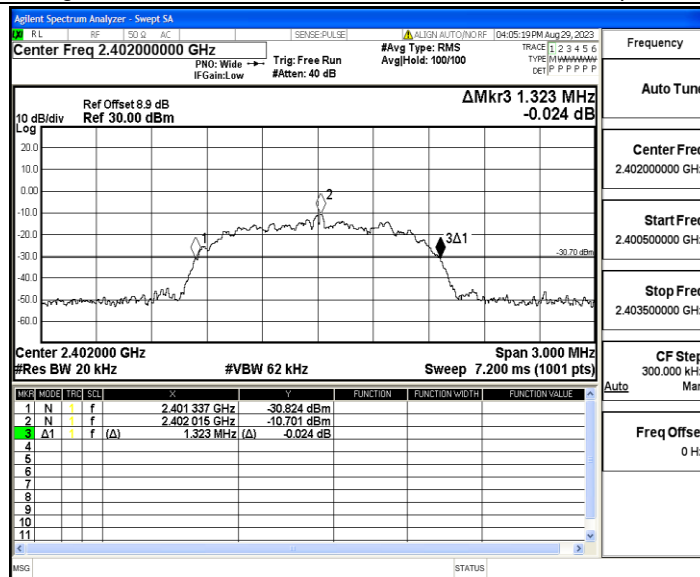
2DH5_Ant1_2441



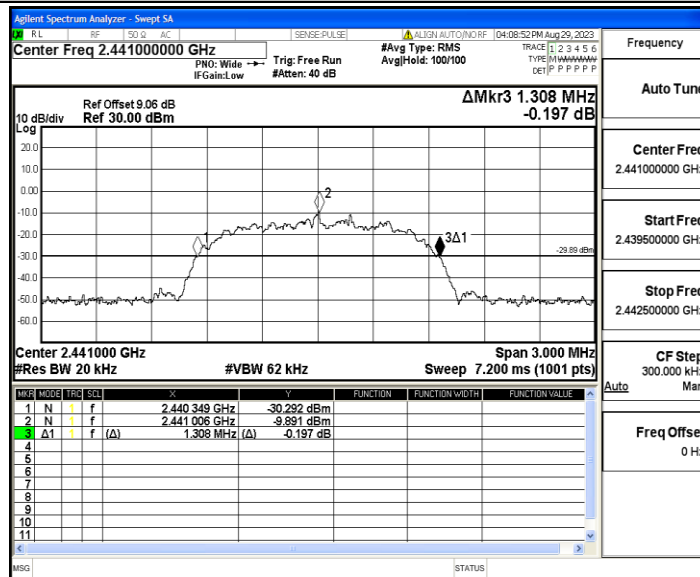
2DH5_Ant1_2480



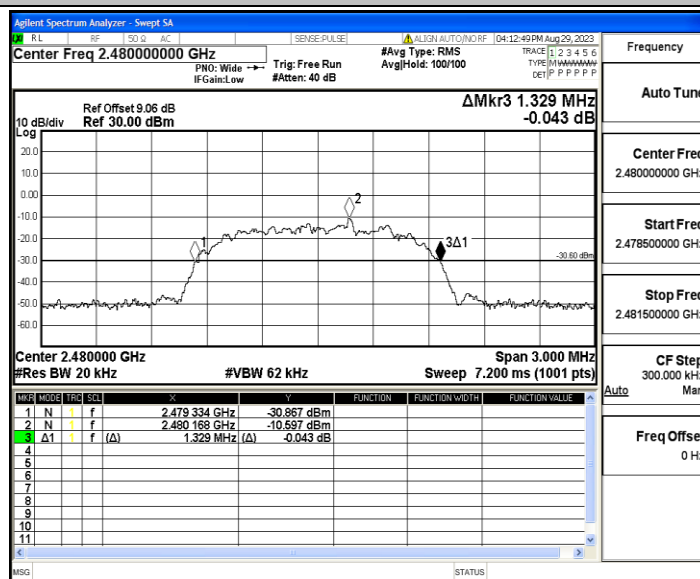
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

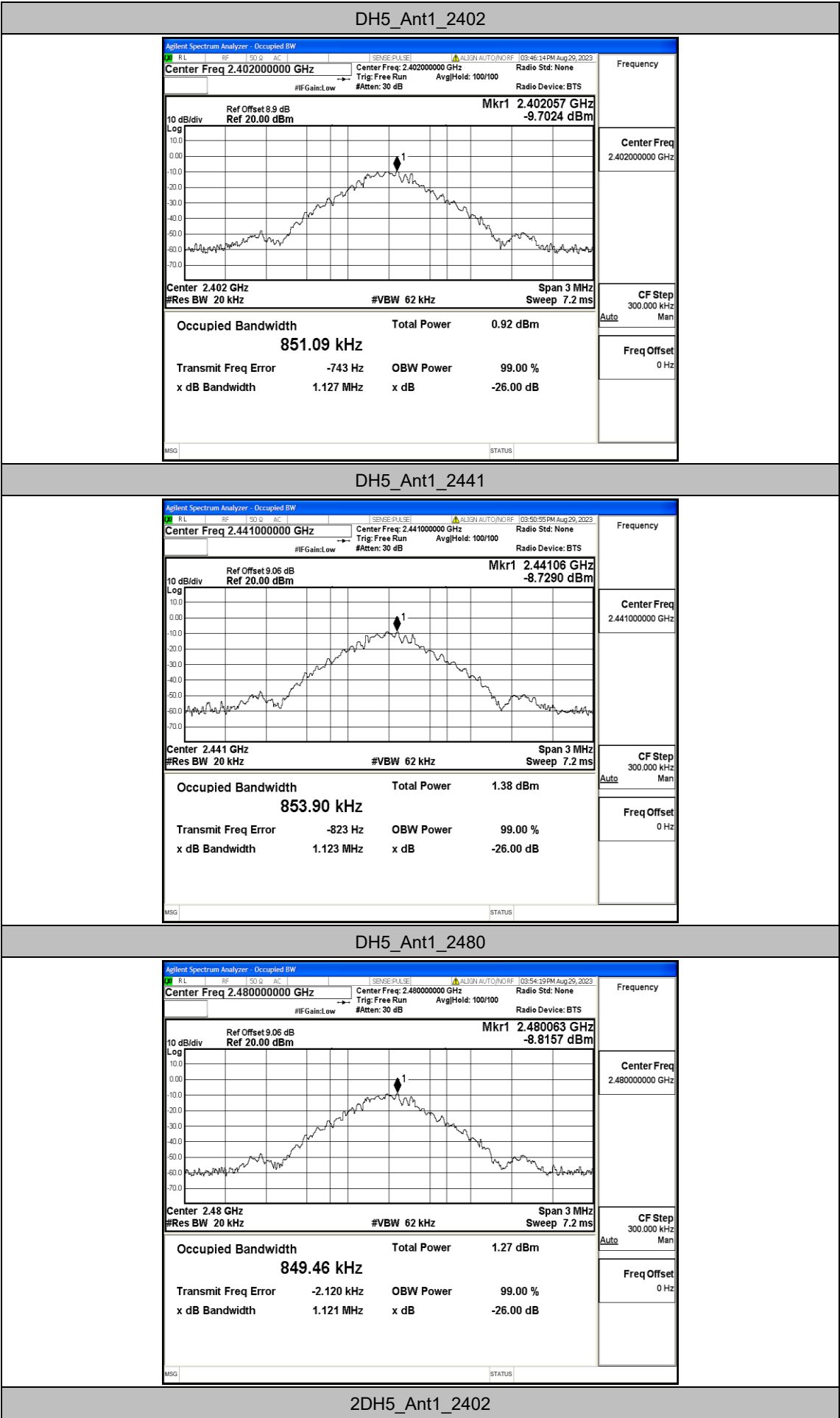


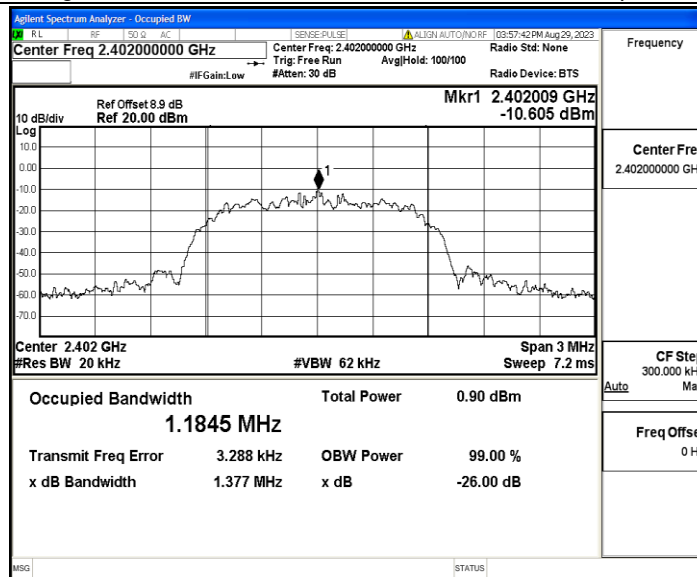
Appendix B: Occupied Channel Bandwidth

Test Result

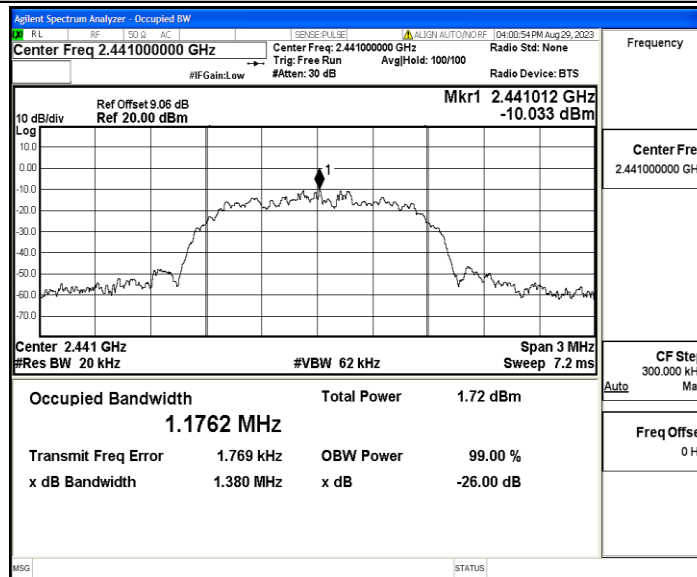
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85109	2401.5737	2402.4248	---	---
		2441	0.85390	2440.5722	2441.4261	---	---
		2480	0.84946	2479.5732	2480.4226	---	---
2DH5	Ant1	2402	1.1845	2401.4110	2402.5955	---	---
		2441	1.1762	2440.4137	2441.5899	---	---
		2480	1.1806	2479.4124	2480.5930	---	---
3DH5	Ant1	2402	1.1835	2401.4048	2402.5883	---	---
		2441	1.1793	2440.4125	2441.5918	---	---
		2480	1.1802	2479.4084	2480.5886	---	---

Test Graphs

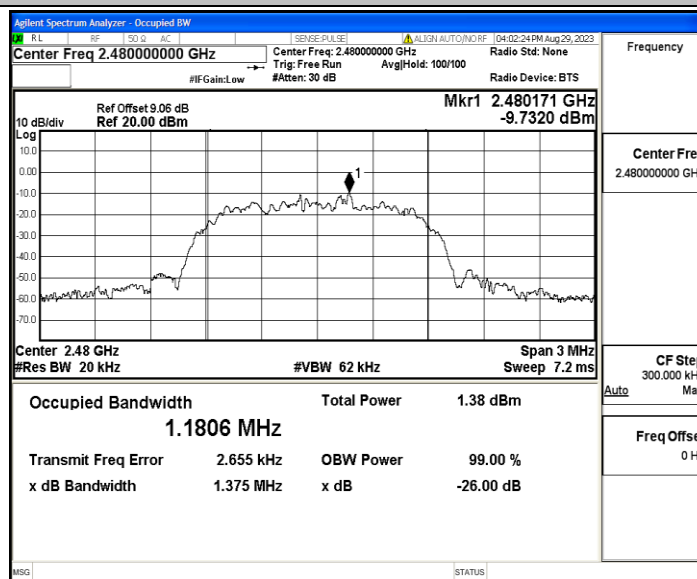




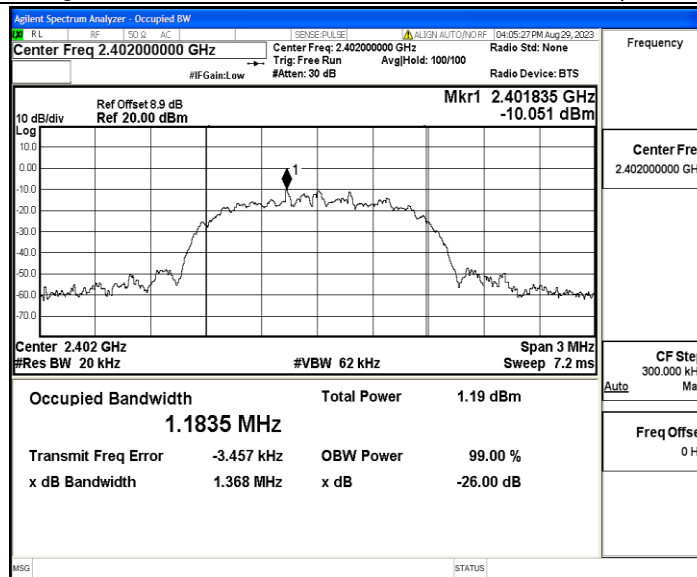
2DH5_Ant1_2441



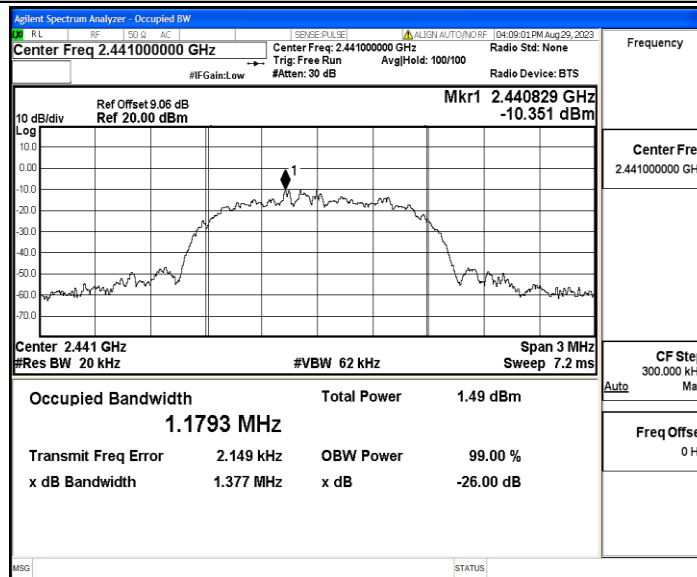
2DH5_Ant1_2480



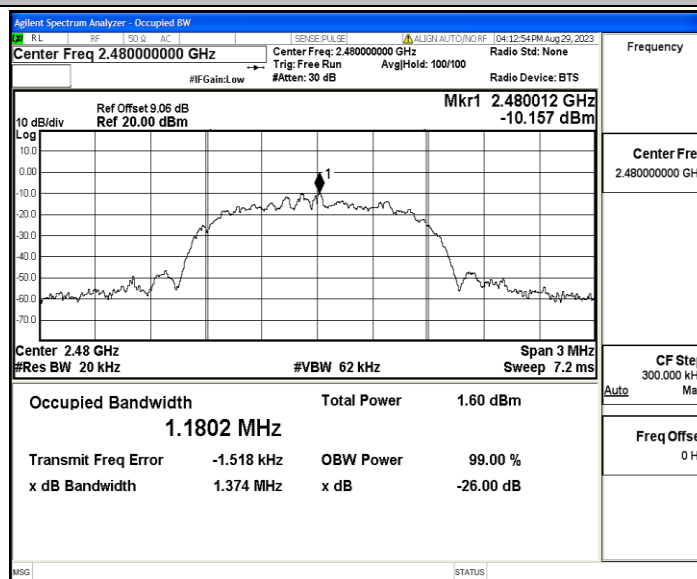
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

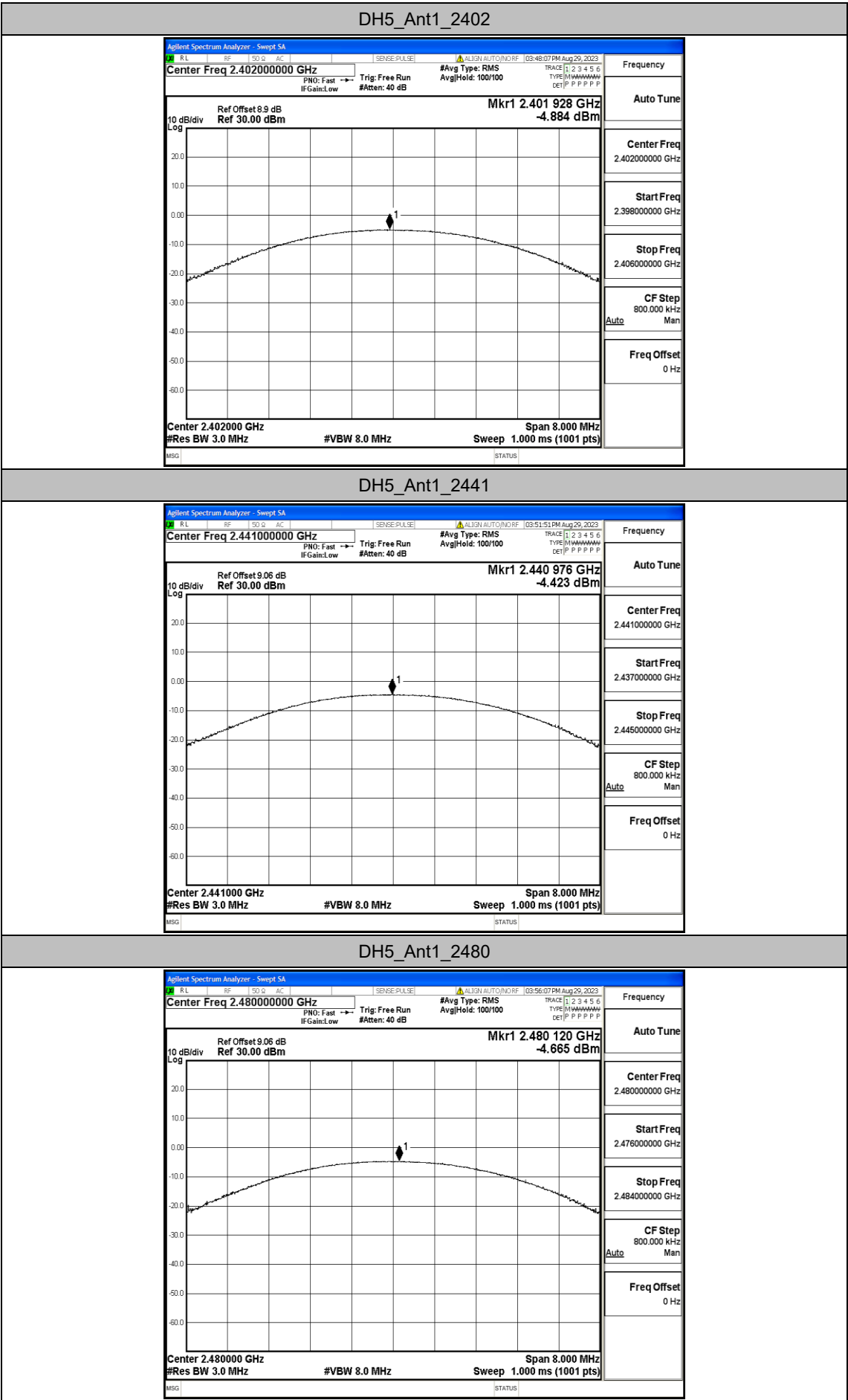


Appendix C: Maximum Peak conducted output power

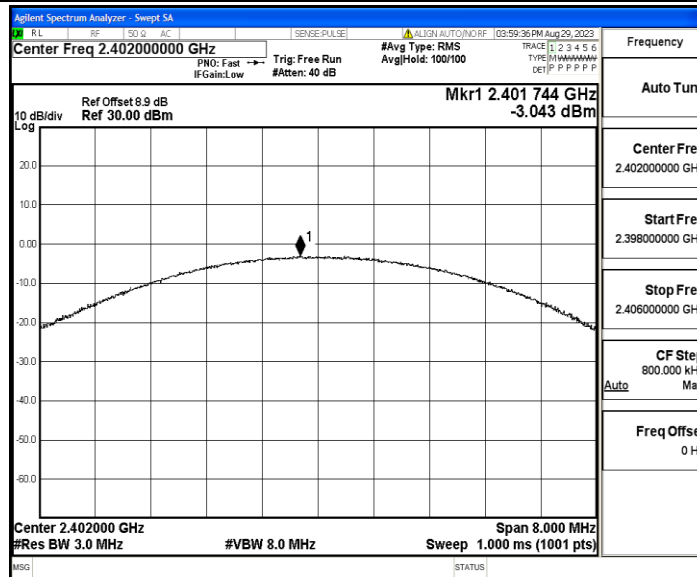
Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-4.88	≤30	PASS
		2441	-4.42	≤30	PASS
		2480	-4.67	≤30	PASS
2DH5	Ant1	2402	-3.04	≤20.97	PASS
		2441	-2.59	≤20.97	PASS
		2480	-2.82	≤20.97	PASS
3DH5	Ant1	2402	-2.47	≤20.97	PASS
		2441	-1.97	≤20.97	PASS
		2480	-2.38	≤20.97	PASS

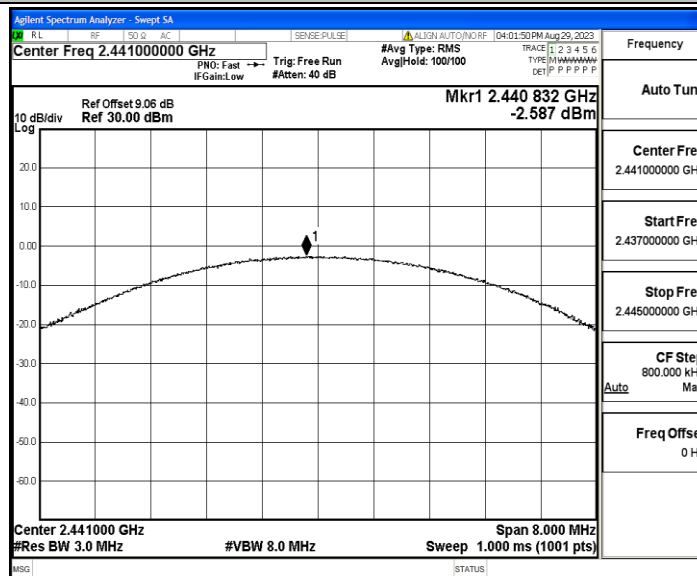
Test Graphs



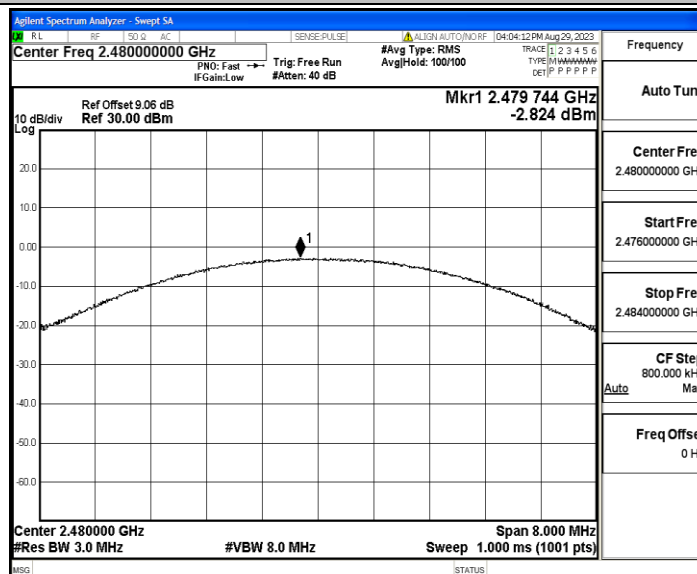
2DH5_Ant1_2402



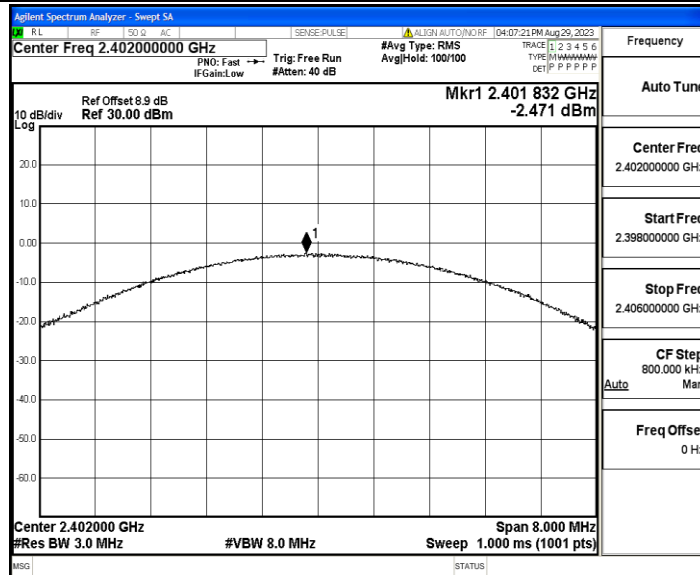
2DH5_Ant1_2441



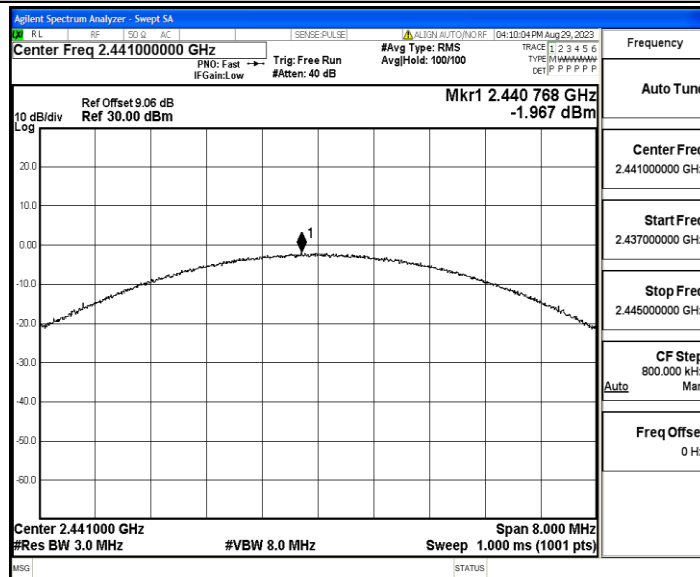
2DH5_Ant1_2480



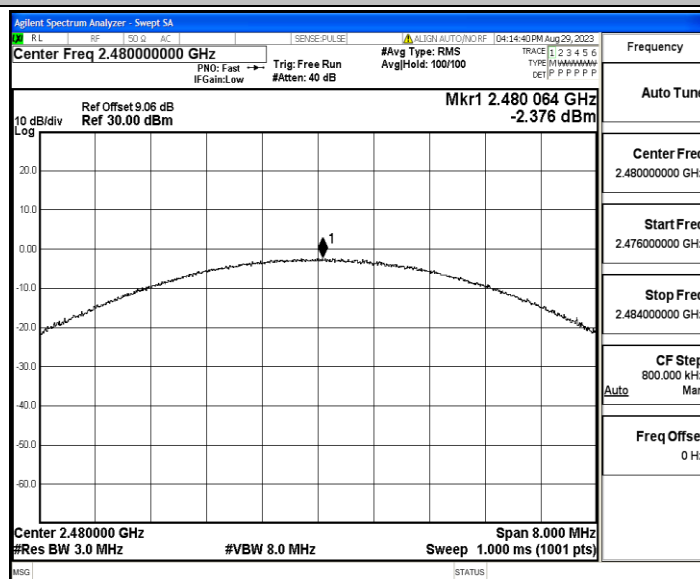
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

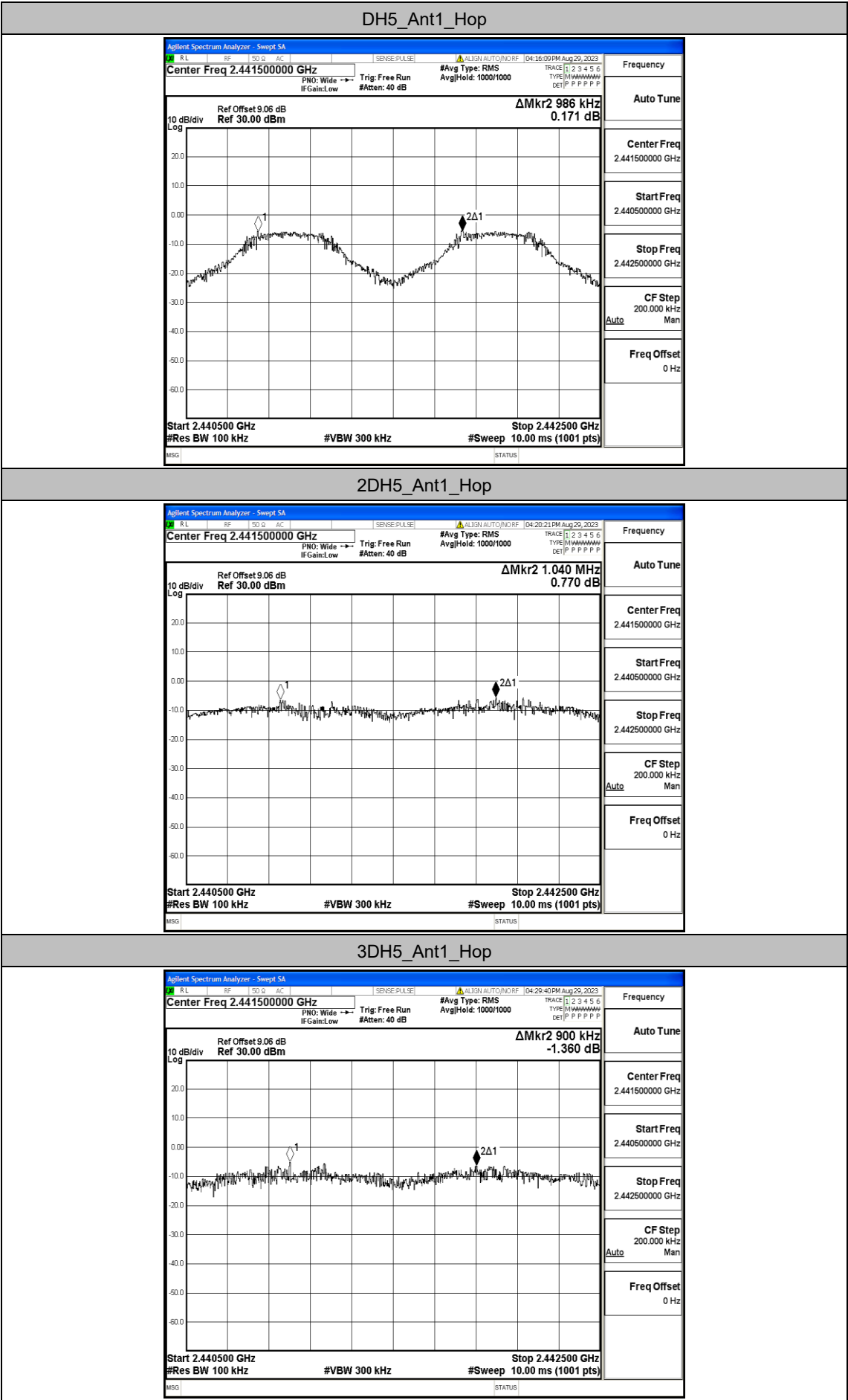


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.986	≥ 0.945	PASS
2DH5	Ant1	Hop	1.04	≥ 0.902	PASS
3DH5	Ant1	Hop	0.9	≥ 0.886	PASS

Test Graphs

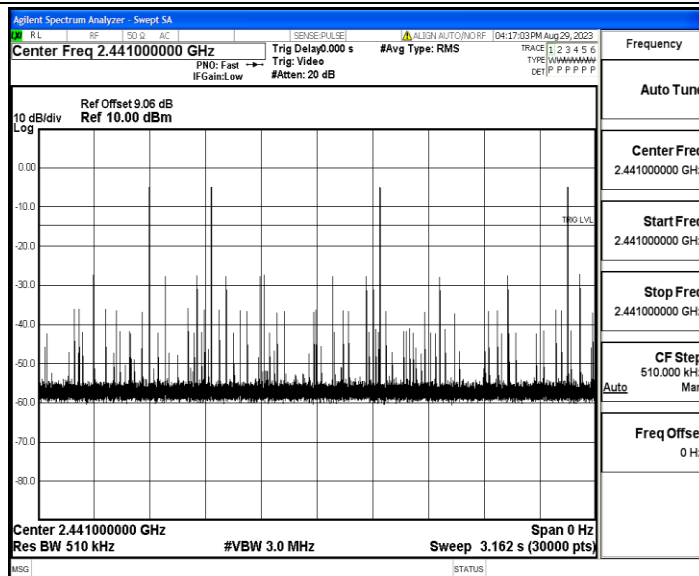
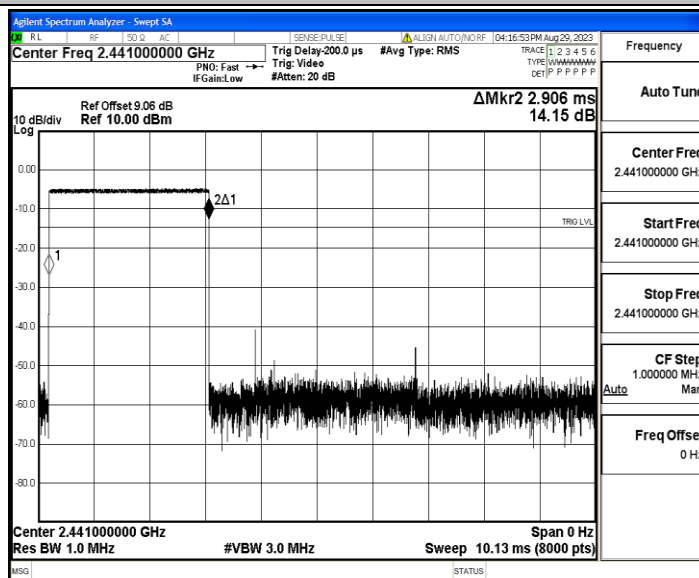


Appendix E: Time of occupancy

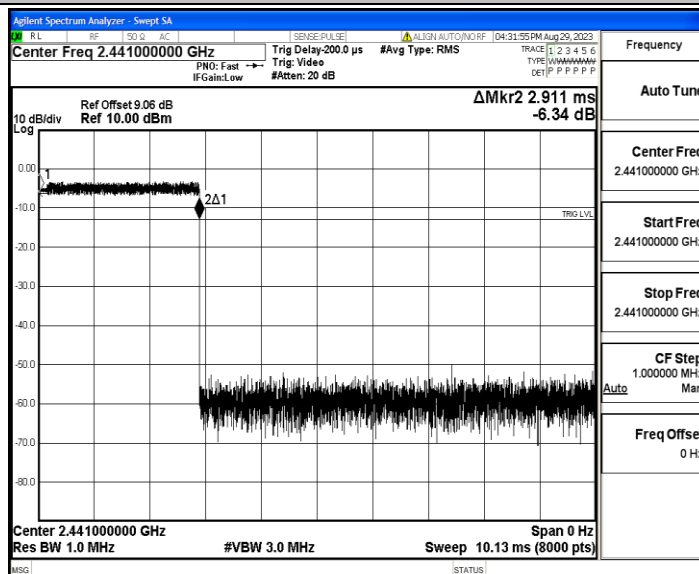
Test Result

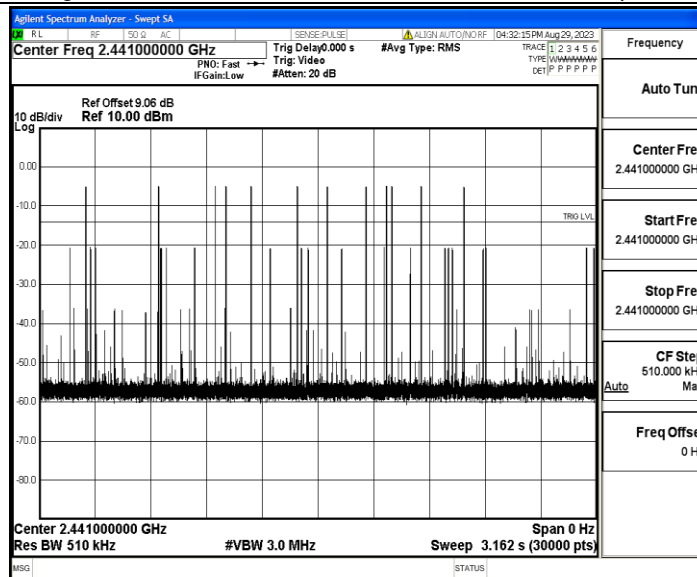
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.906	50	0.145	≤0.4	PASS
2DH5	Ant1	Hop	2.911	130	0.378	≤0.4	PASS
3DH5	Ant1	Hop	2.908	130	0.378	≤0.4	PASS

DH5 Ant1 Hop

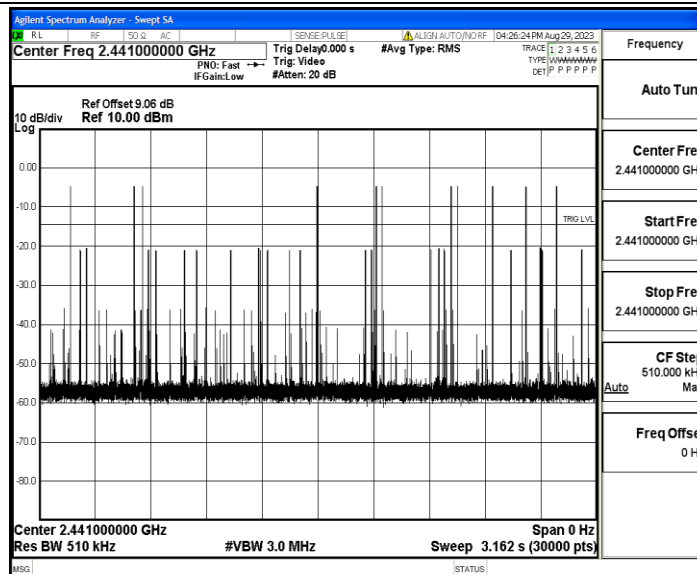
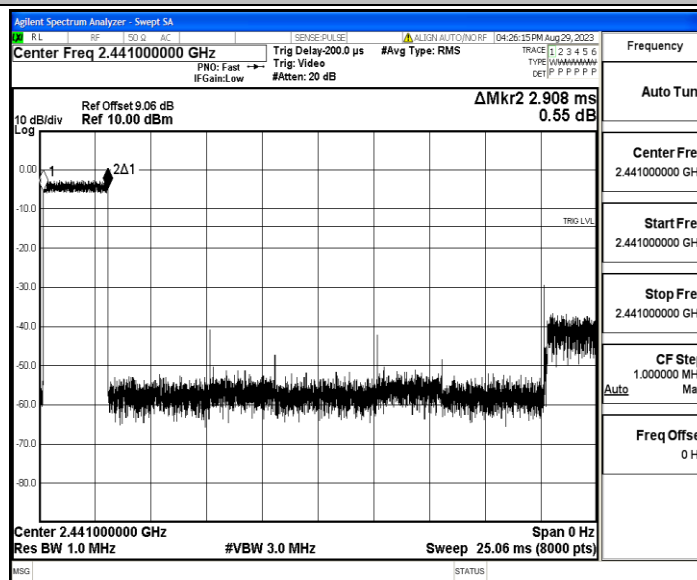


2DH5 Ant1 Hop





3DH5_Ant1_Hop

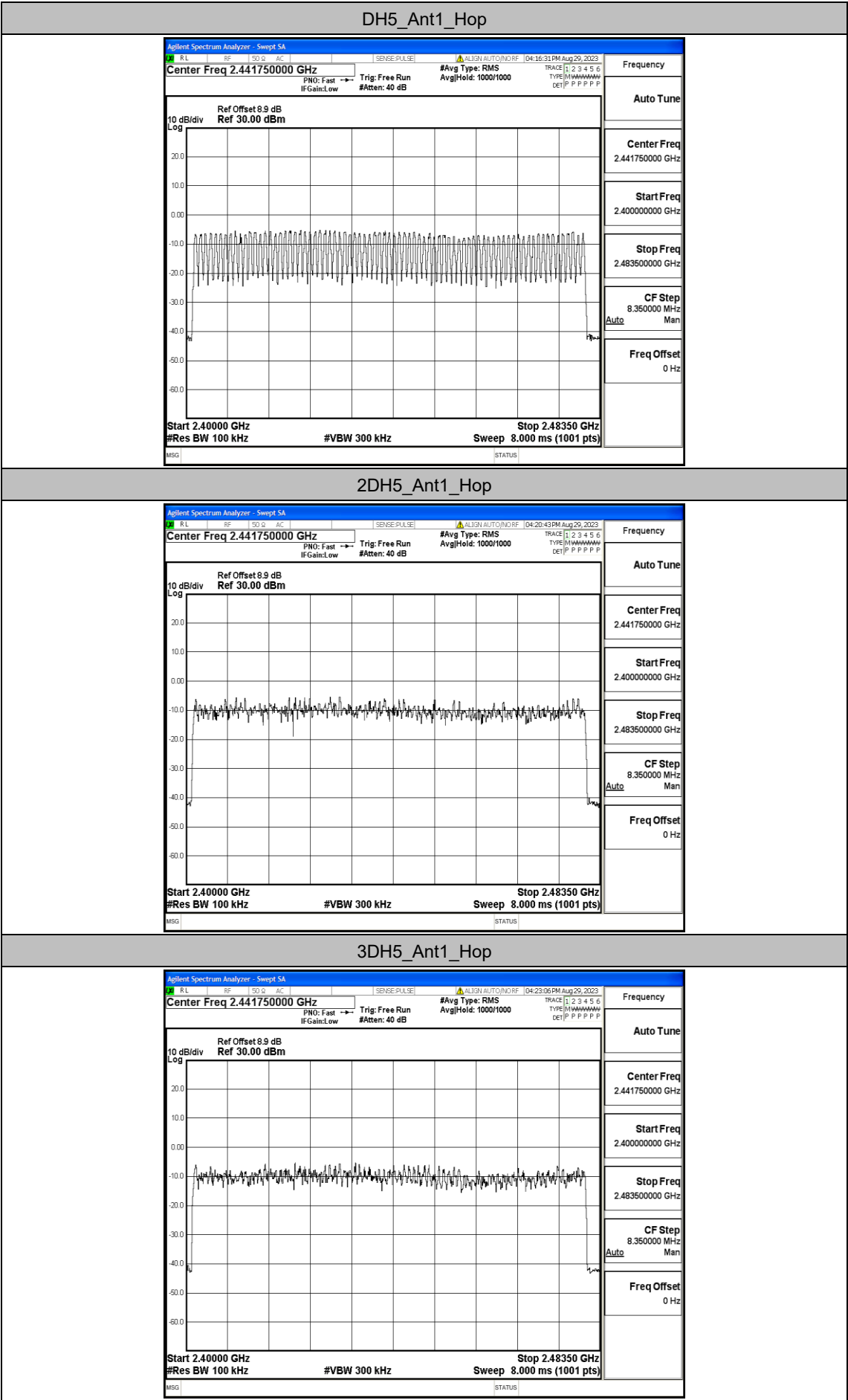


Appendix F: Number of hopping channels

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



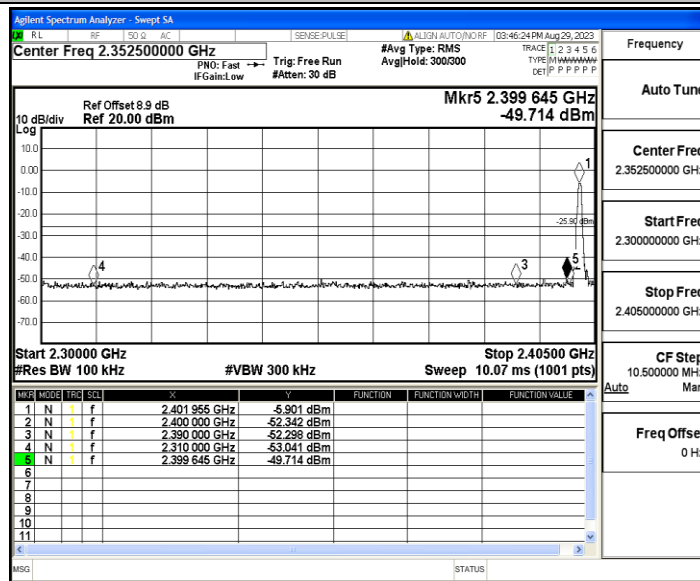
Appendix G: Band edge measurements

Test Result

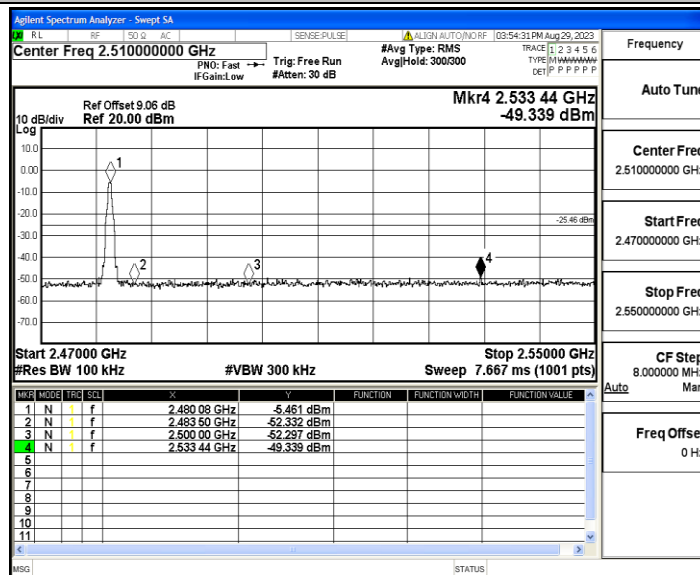
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-5.90	-49.71	≤ -25.9	PASS
		High	2480	-5.46	-49.34	≤ -25.46	PASS
		Low	Hop_2402	-6.14	-51.06	≤ -26.14	PASS
		High	Hop_2480	-6.14	-49.67	≤ -26.14	PASS
2DH5	Ant1	Low	2402	-5.90	-48.5	≤ -25.9	PASS
		High	2480	-5.58	-48.17	≤ -25.58	PASS
		Low	Hop_2402	-7.47	-50.74	≤ -27.47	PASS
		High	Hop_2480	-5.84	-49.53	≤ -25.84	PASS
3DH5	Ant1	Low	2402	-5.92	-49.39	≤ -25.92	PASS
		High	2480	-5.67	-48.99	≤ -25.67	PASS
		Low	Hop_2402	-6.72	-50.89	≤ -26.72	PASS
		High	Hop_2480	-6.66	-49.57	≤ -26.66	PASS

Test Graphs

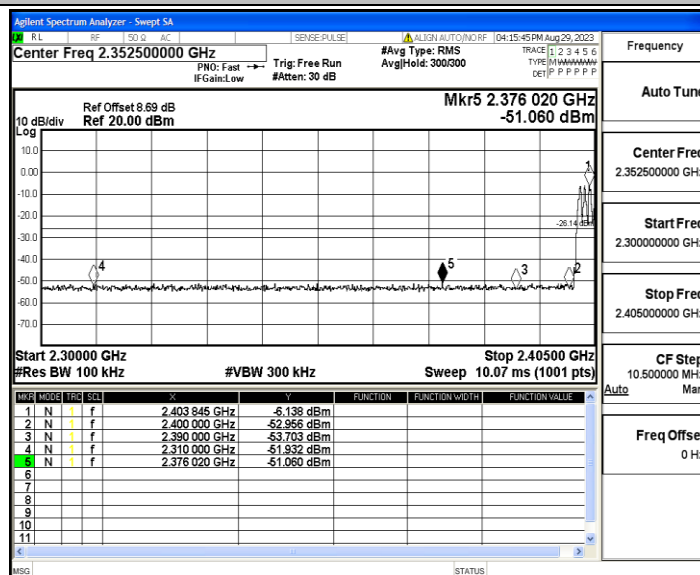
DH5_Ant1_Low_2402



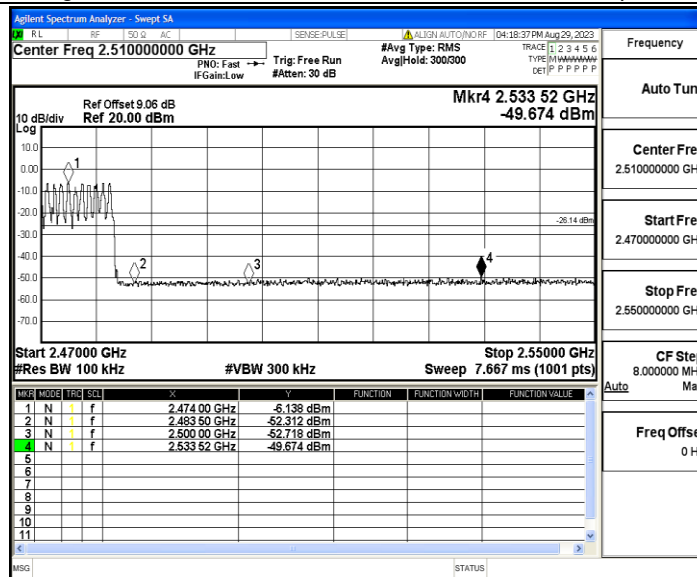
DH5_Ant1_High_2480



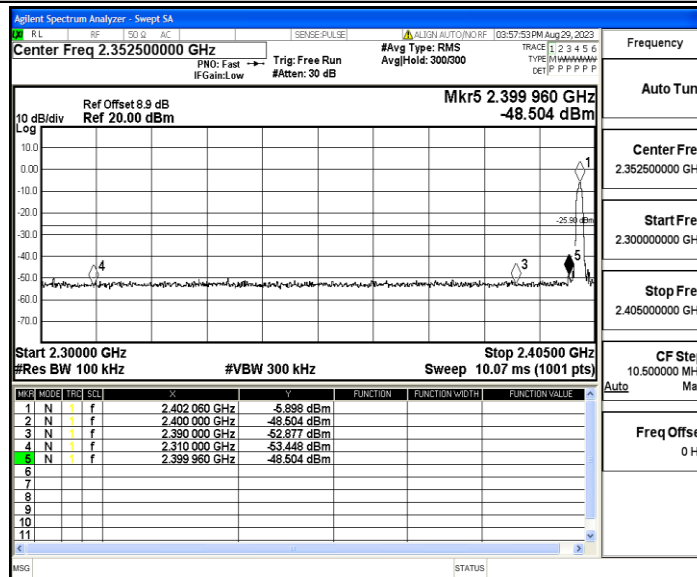
DH5_Ant1_Low_Hop_2402



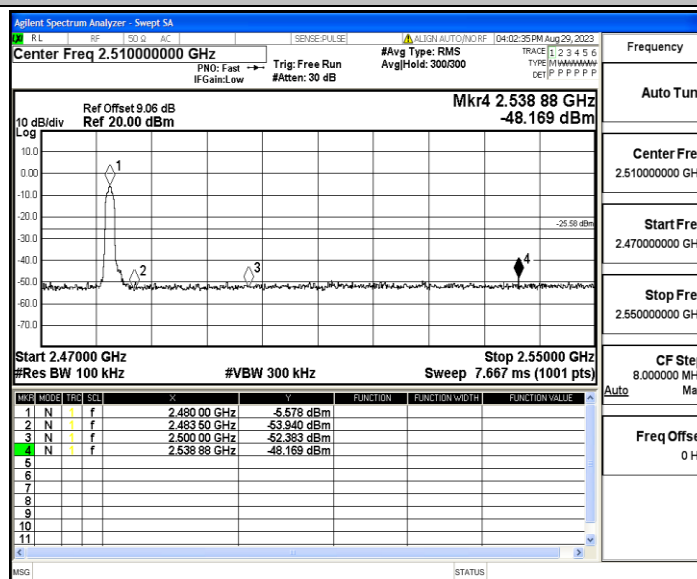
DH5_Ant1_High_Hop_2480



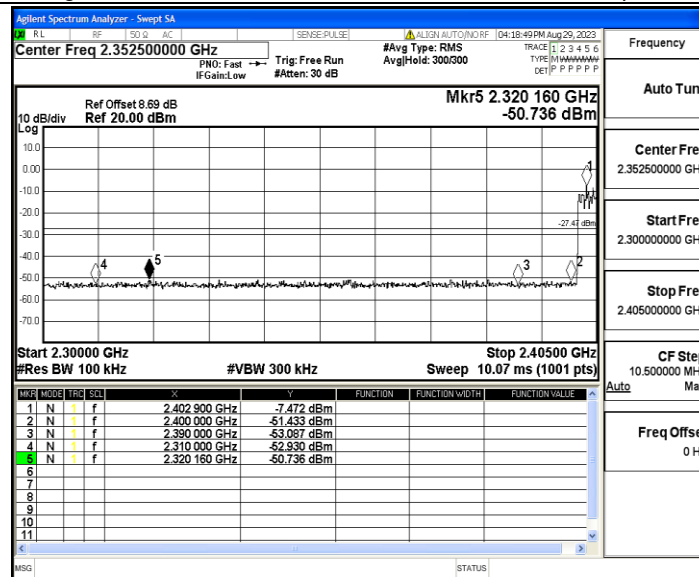
2DH5_Ant1_Low_2402



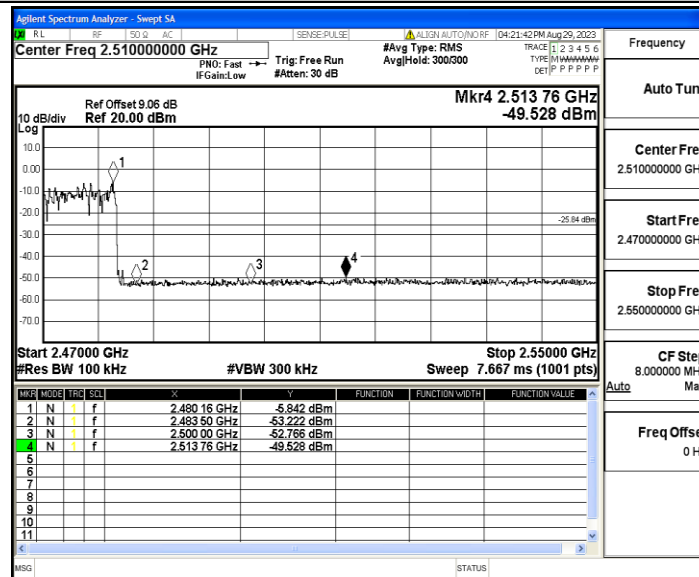
2DH5_Ant1_High_2480



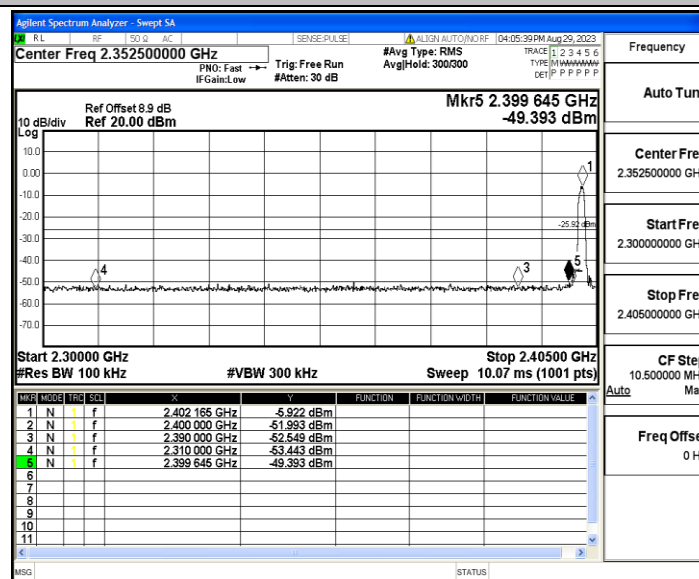
2DH5_Ant1_Low_Hop_2402



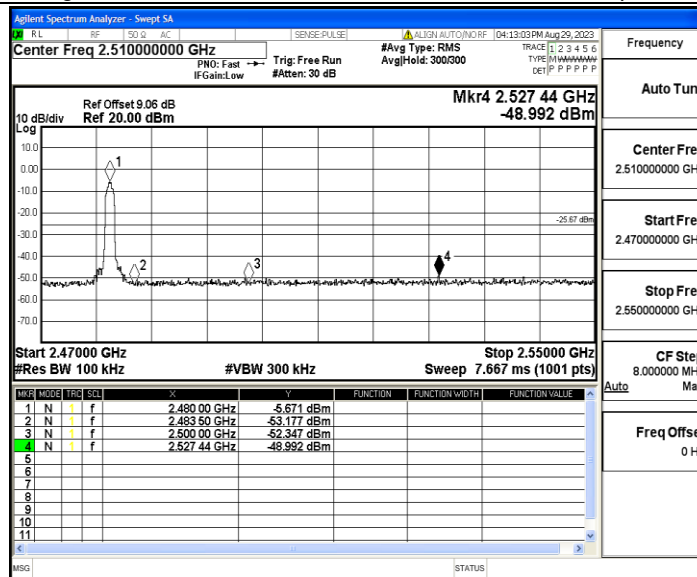
2DH5_Ant1_High_Hop_2480



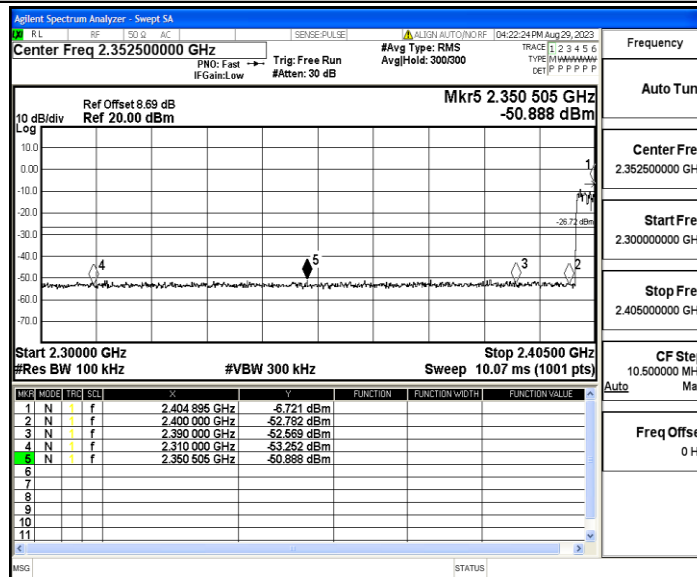
3DH5_Ant1_Low_2402



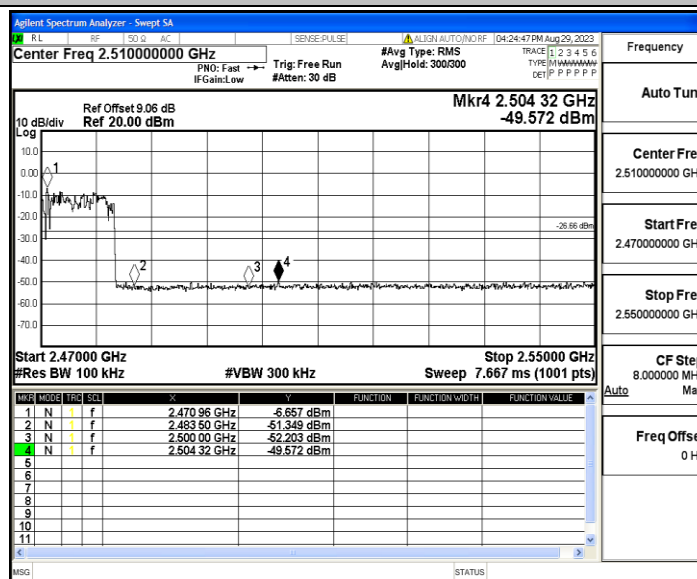
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

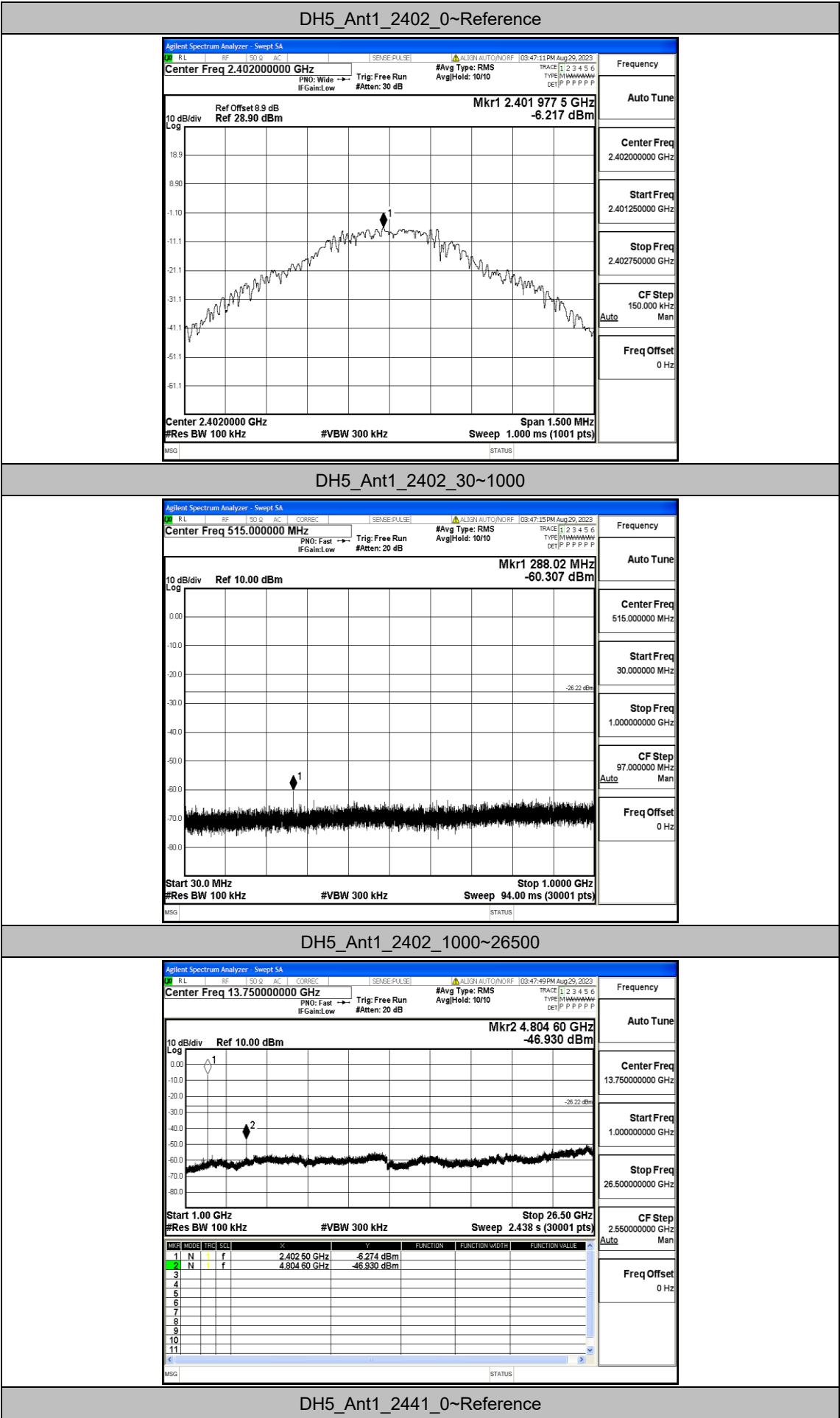


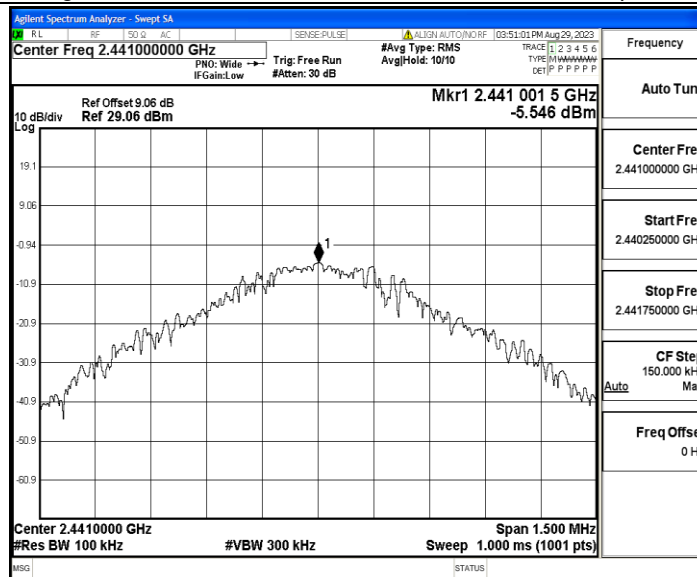
Appendix H: Conducted Spurious Emission

Test Result

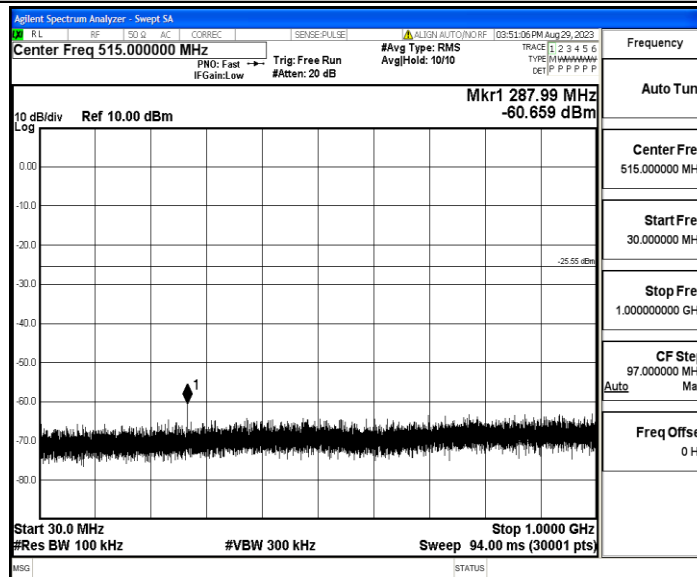
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-6.22	-6.22	---	PASS
			30~1000	-6.22	-60.31	≤-26.22	PASS
			1000~26500	-6.22	-46.93	≤-26.22	PASS
		2441	Reference	-5.55	-5.55	---	PASS
			30~1000	-5.55	-60.66	≤-25.55	PASS
			1000~26500	-5.55	-47.57	≤-25.55	PASS
		2480	Reference	-6.12	-6.12	---	PASS
			30~1000	-6.12	-61.31	≤-26.12	PASS
			1000~26500	-6.12	-47.91	≤-26.12	PASS
2DH5	Ant1	2402	Reference	-8.80	-8.80	---	PASS
			30~1000	-8.80	-62.02	≤-28.8	PASS
			1000~26500	-8.80	-46.8	≤-28.8	PASS
		2441	Reference	-6.04	-6.04	---	PASS
			30~1000	-6.04	-61.24	≤-26.04	PASS
			1000~26500	-6.04	-45.56	≤-26.04	PASS
		2480	Reference	-6.56	-6.56	---	PASS
			30~1000	-6.56	-61.04	≤-26.56	PASS
			1000~26500	-6.56	-48.96	≤-26.56	PASS
3DH5	Ant1	2402	Reference	-6.58	-6.58	---	PASS
			30~1000	-6.58	-62.18	≤-26.58	PASS
			1000~26500	-6.58	-47.07	≤-26.58	PASS
		2441	Reference	-7.02	-7.02	---	PASS
			30~1000	-7.02	-62.05	≤-27.02	PASS
			1000~26500	-7.02	-49.35	≤-27.02	PASS
		2480	Reference	-7.63	-7.63	---	PASS
			30~1000	-7.63	-60.84	≤-27.63	PASS
			1000~26500	-7.63	-50.22	≤-27.63	PASS

Test Graphs

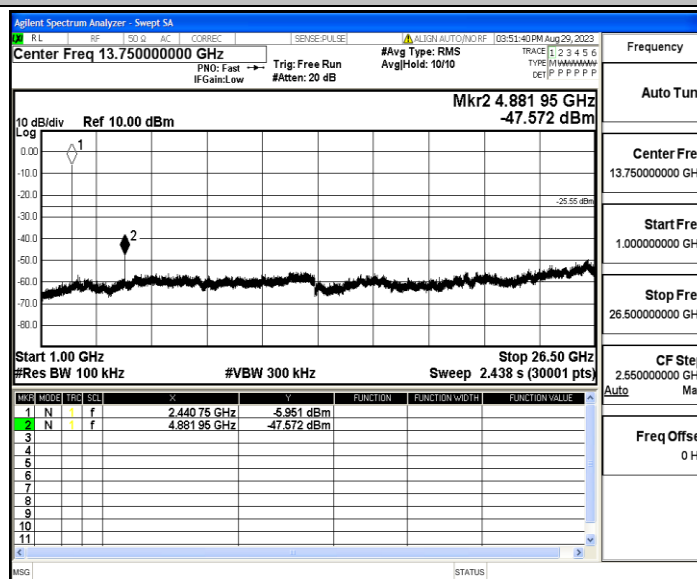




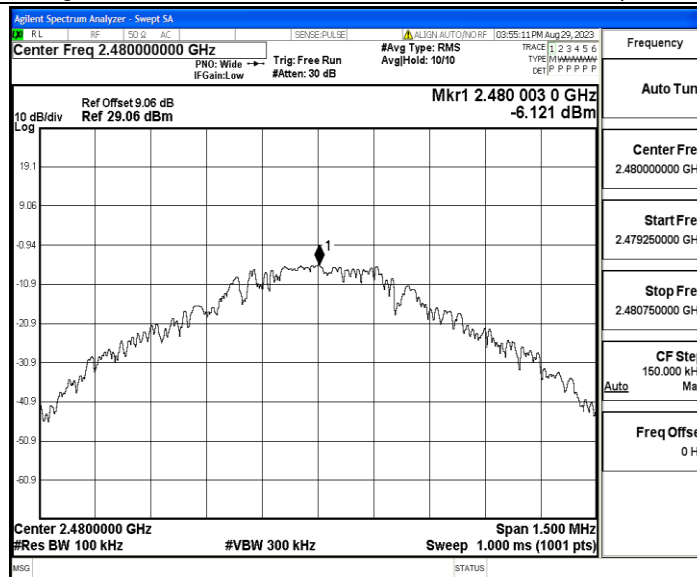
DH5_Ant1_2441_30~1000



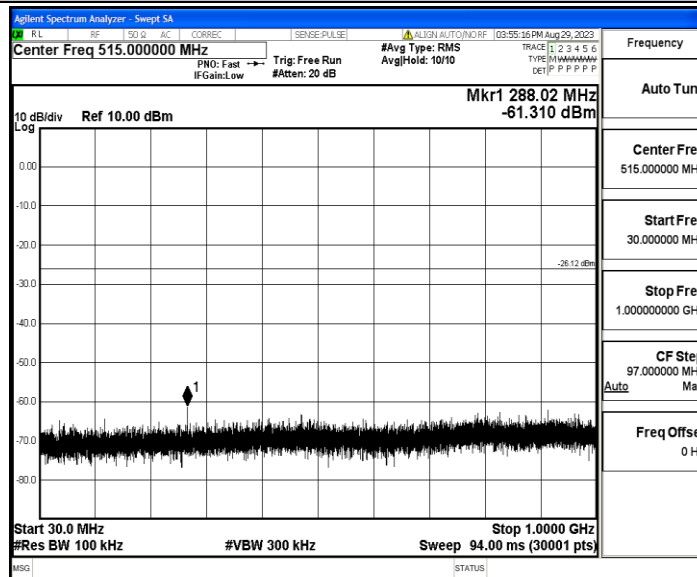
DH5_Ant1_2441_1000~26500



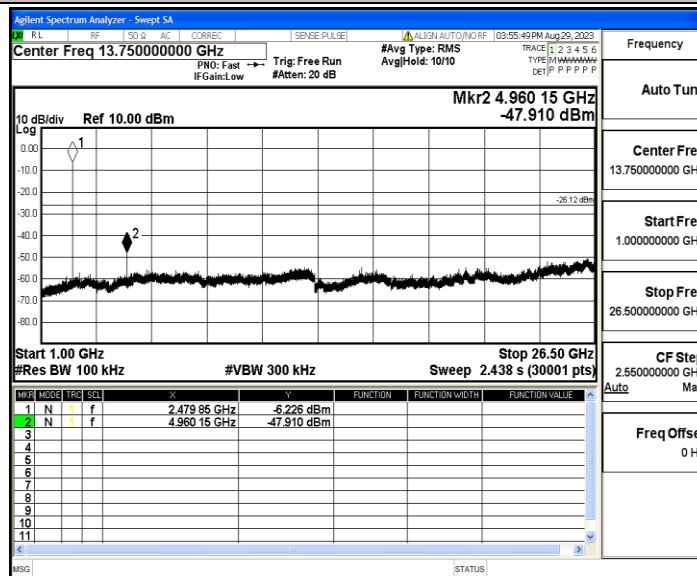
DH5_Ant1_2480_0~Reference



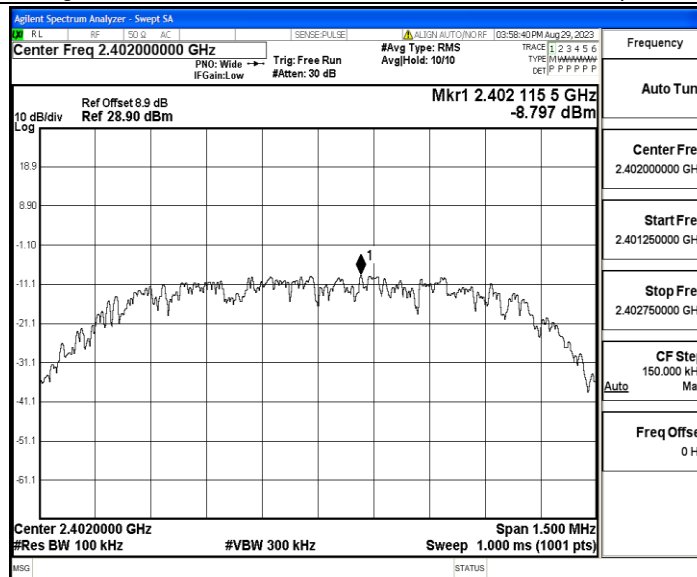
DH5_Ant1_2480_30~1000



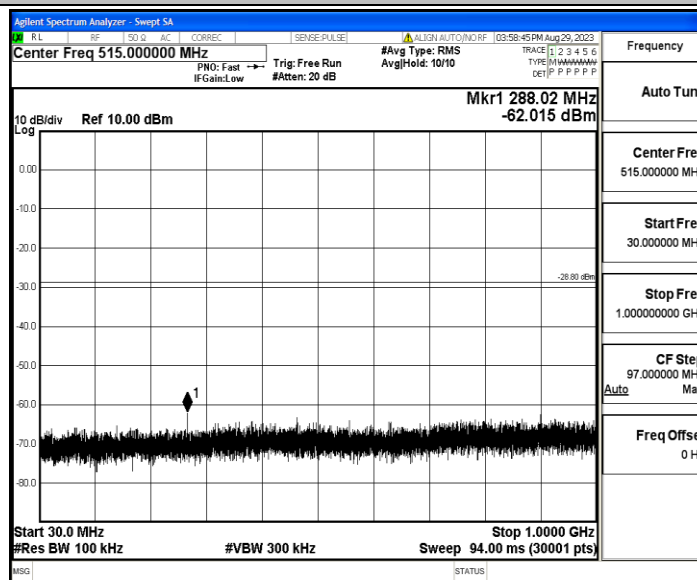
DH5_Ant1_2480_1000~26500



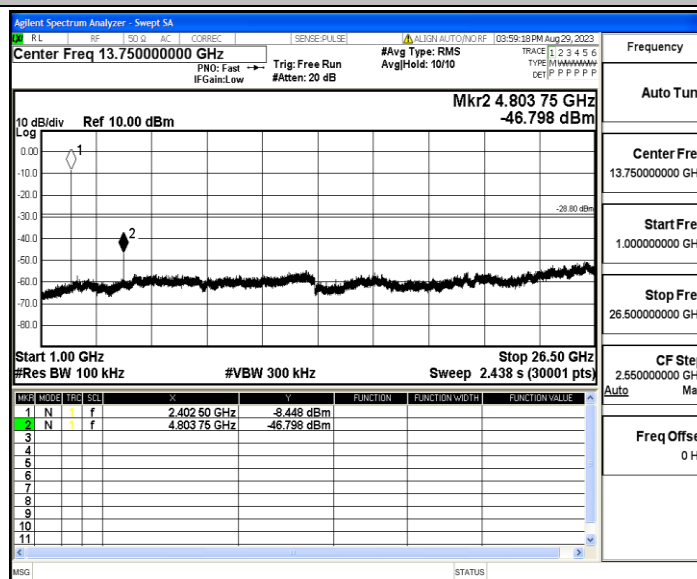
2DH5_Ant1_2402_0~Reference



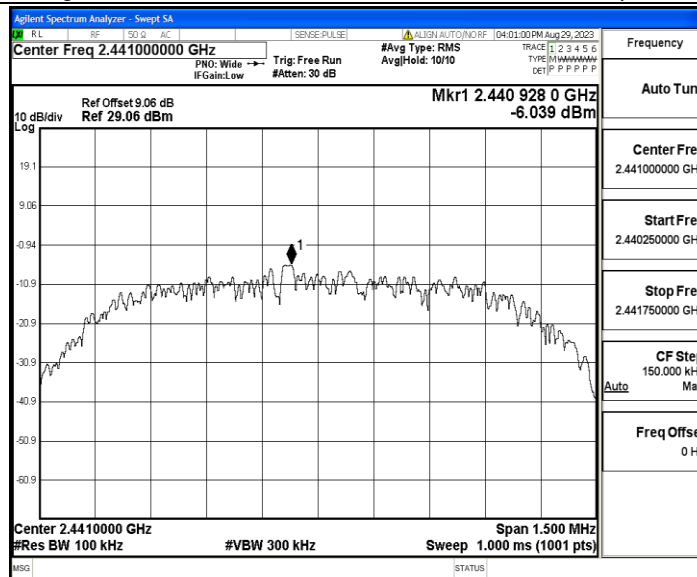
2DH5_Ant1_2402_30~1000



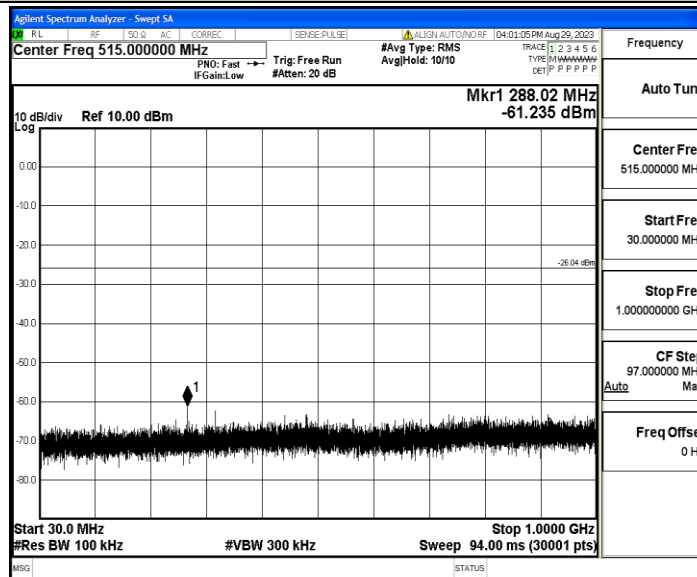
2DH5_Ant1_2402_1000~26500



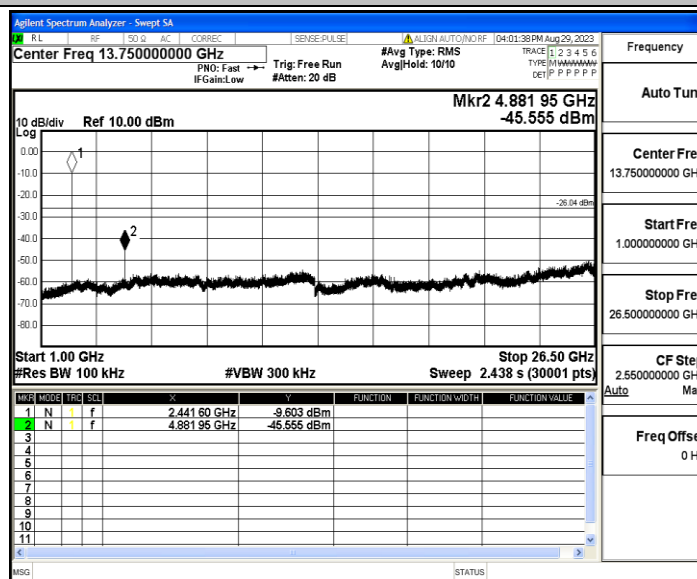
2DH5_Ant1_2441_0~Reference



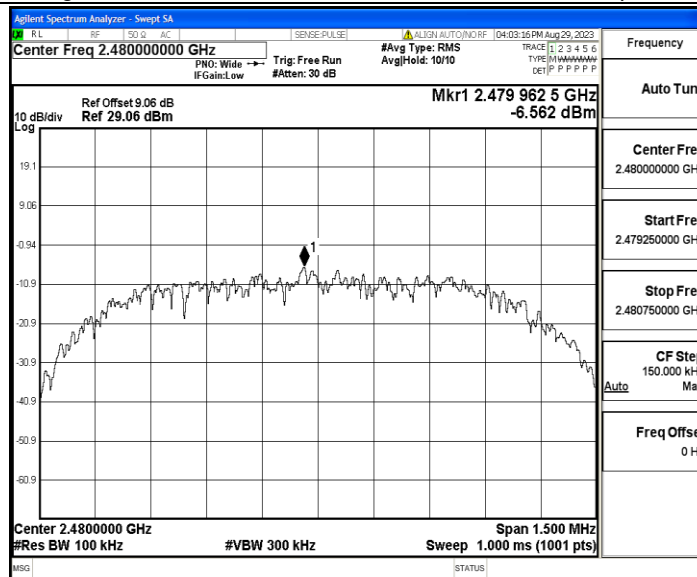
2DH5_Ant1_2441_30~1000



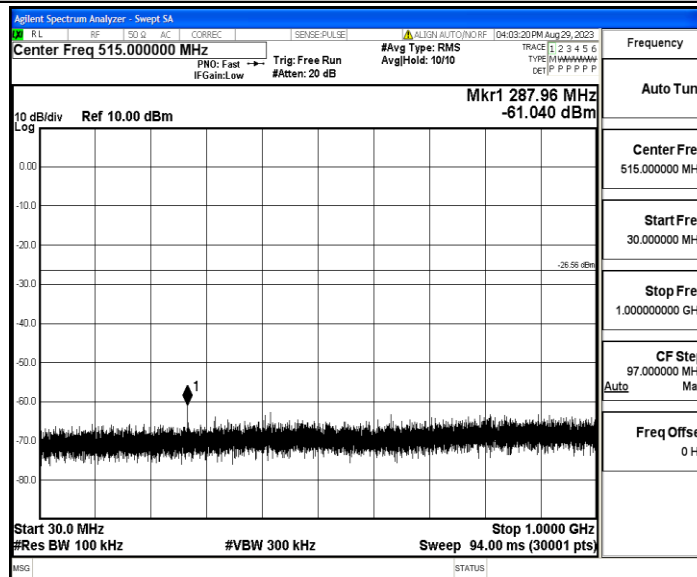
2DH5_Ant1_2441_1000~26500



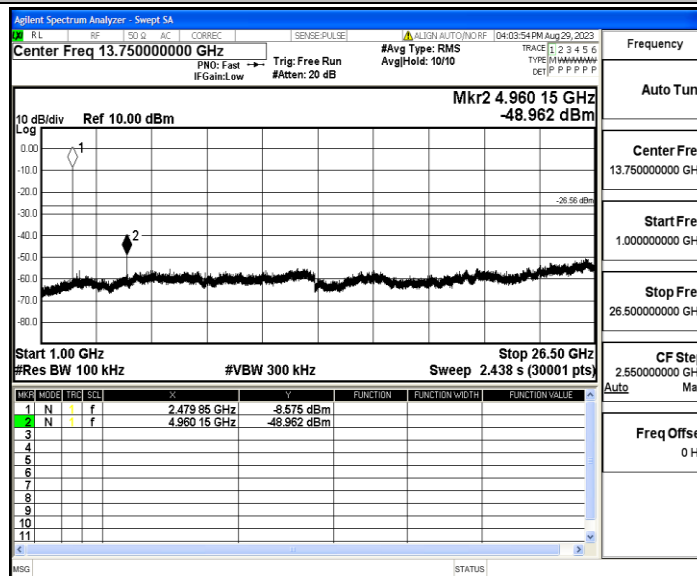
2DH5_Ant1_2480_0~Reference



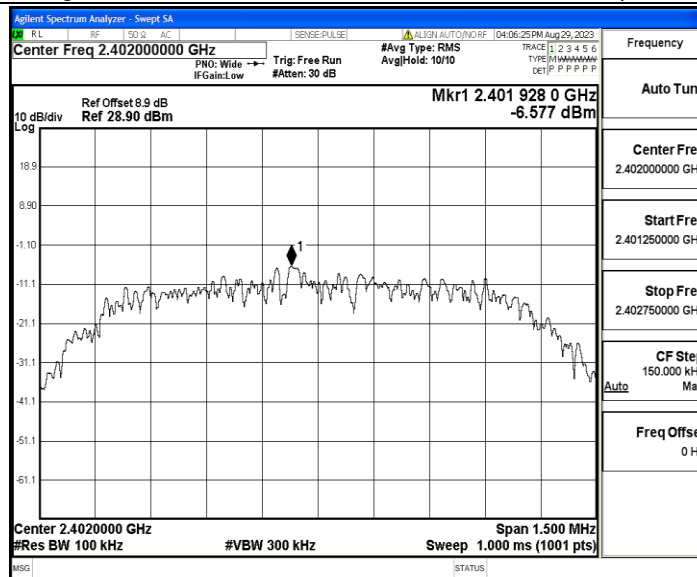
2DH5_Ant1_2480_30~1000



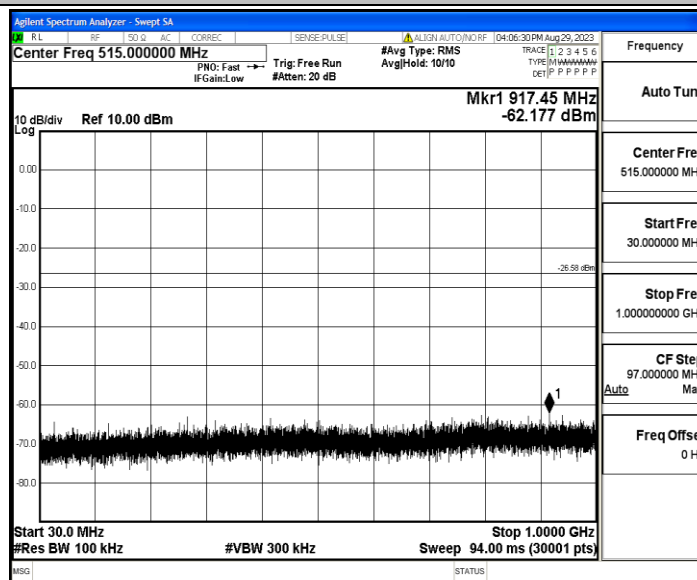
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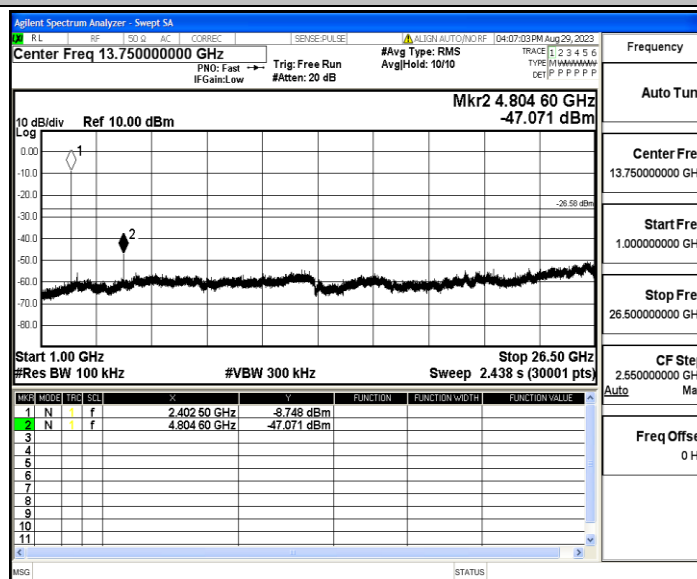
3DH5_Ant1_2402_0~Reference



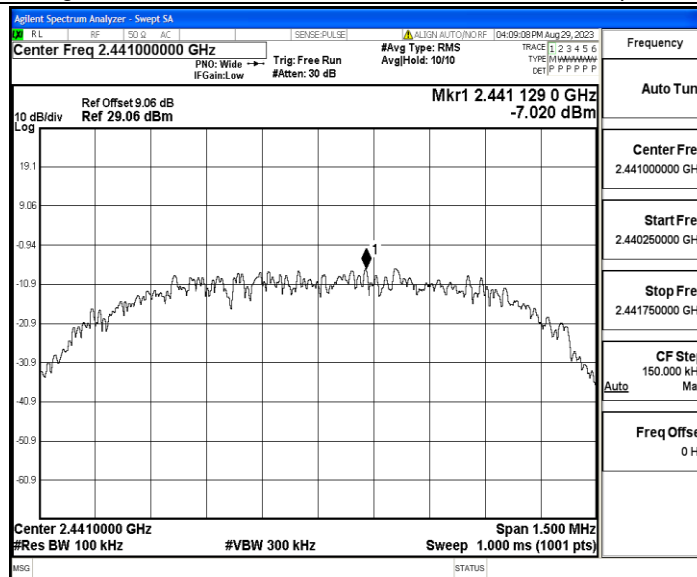
3DH5_Ant1_2402_30~1000



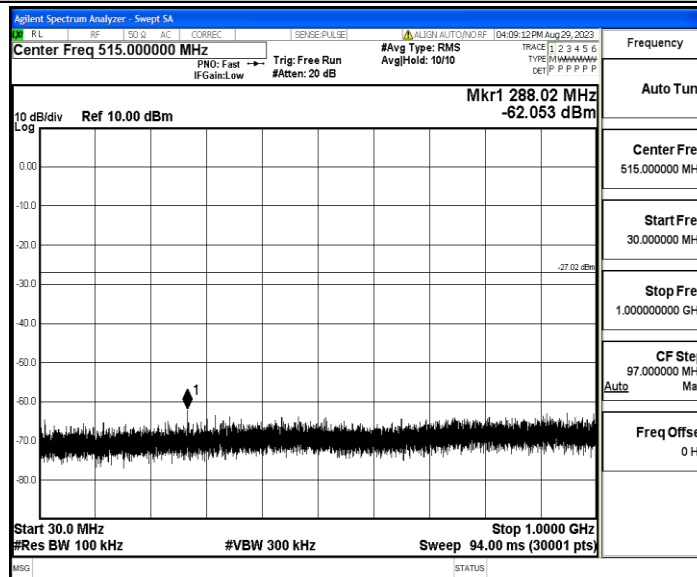
3DH5_Ant1_2402_1000~26500



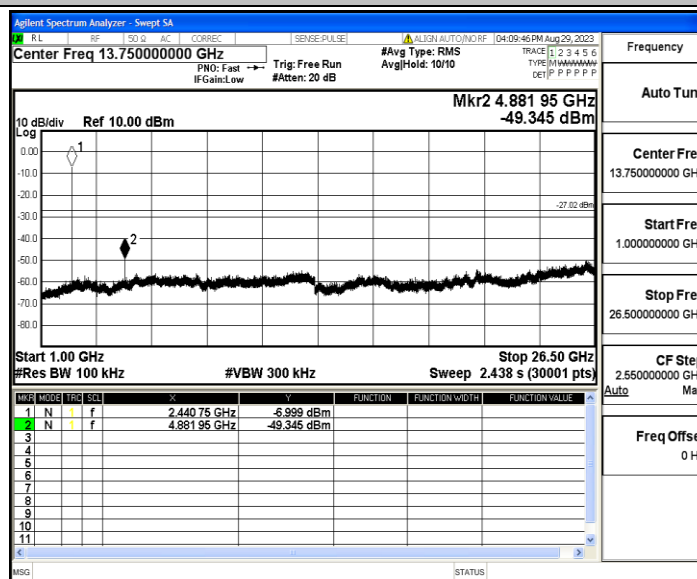
3DH5_Ant1_2441_0~Reference



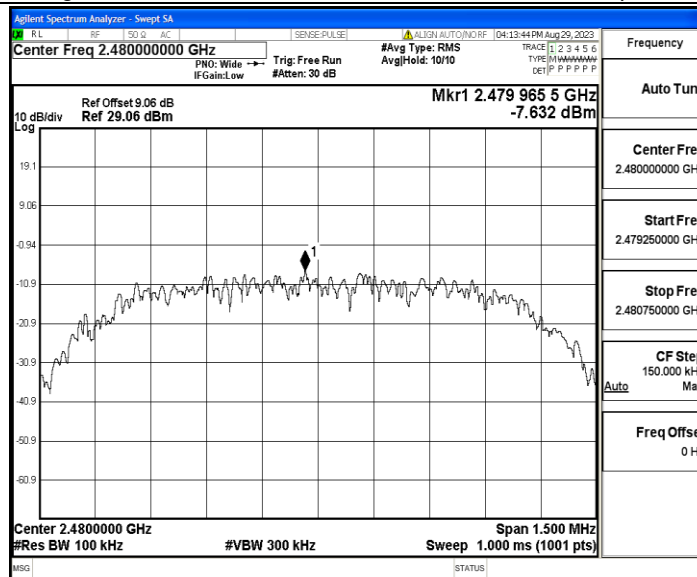
3DH5_Ant1_2441_30~1000



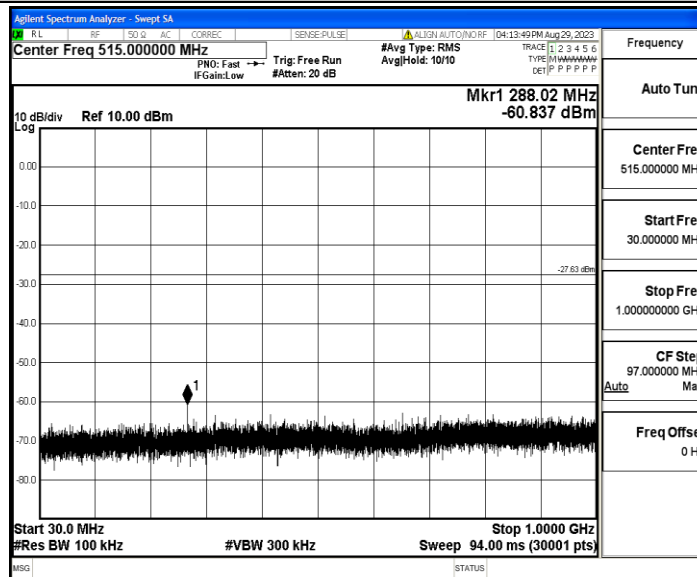
3DH5_Ant1_2441_1000~26500



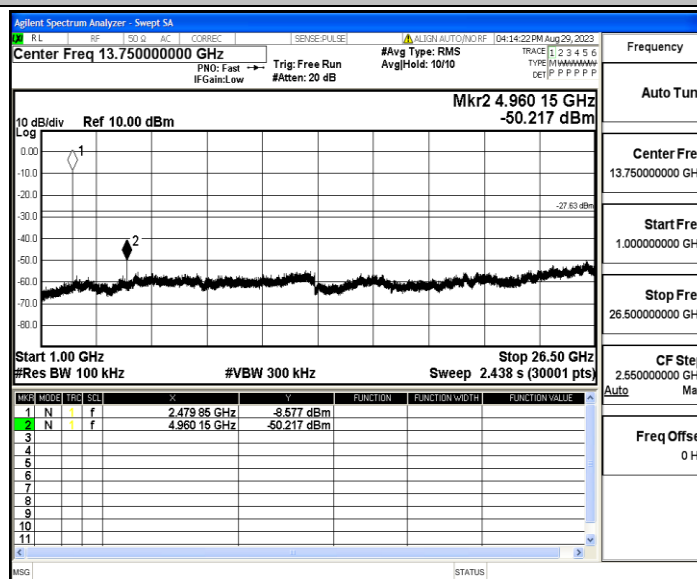
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



Appendix I: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T[kHz]
DH5	Ant1	2402	2.90	3.75	77.33	0.34
		2441	2.90	3.75	77.33	0.34
		2480	2.90	3.74	77.54	0.34
2DH5	Ant1	2402	2.92	3.75	77.87	0.34
		2441	2.91	3.75	77.60	0.34
		2480	2.91	3.75	77.60	0.34
3DH5	Ant1	2402	2.91	3.75	77.60	0.34
		2441	2.91	3.75	77.60	0.34
		2480	2.91	3.75	77.60	0.34

Test Graphs

