

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

Product Name: Alpha Egg Dictionary Pen

Trade Mark: ALPHA EGG

Test Model: TYP-AIR10

FCC ID: 2A7P5TYP-AIR10

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

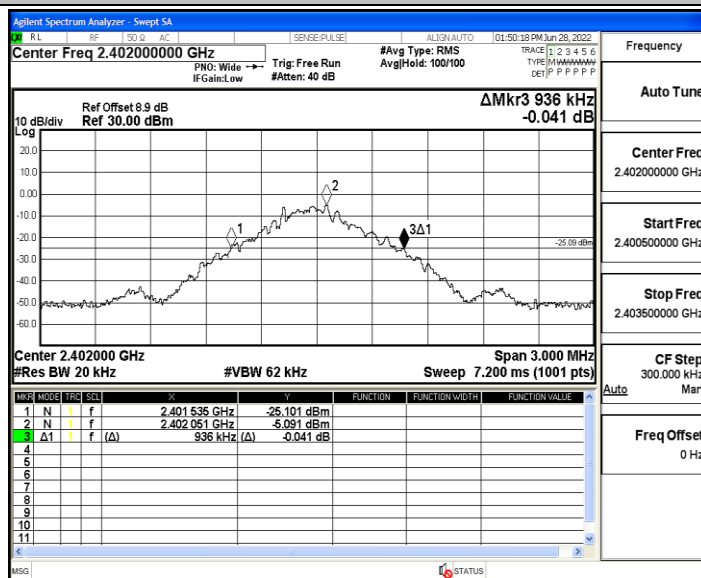
Appendix A: 20dB Emission Bandwidth

Test Result

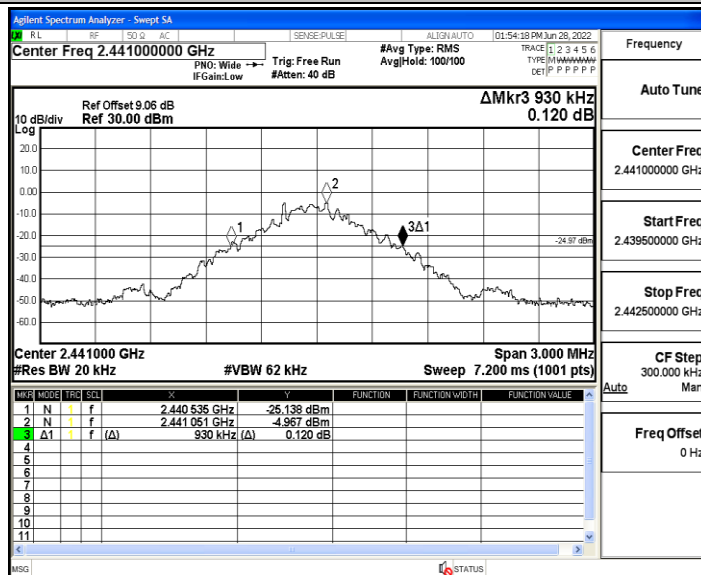
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.936	2401.535	2402.471	---	---
		2441	0.930	2440.535	2441.465	---	---
		2480	0.945	2479.532	2480.477	---	---
2DH5	Ant1	2402	1.332	2401.331	2402.663	---	---
		2441	1.320	2440.334	2441.654	---	---
		2480	1.323	2479.331	2480.654	---	---
3DH5	Ant1	2402	1.332	2401.322	2402.654	---	---
		2441	1.350	2440.316	2441.666	---	---
		2480	1.281	2479.346	2480.627	---	---

Test Graphs

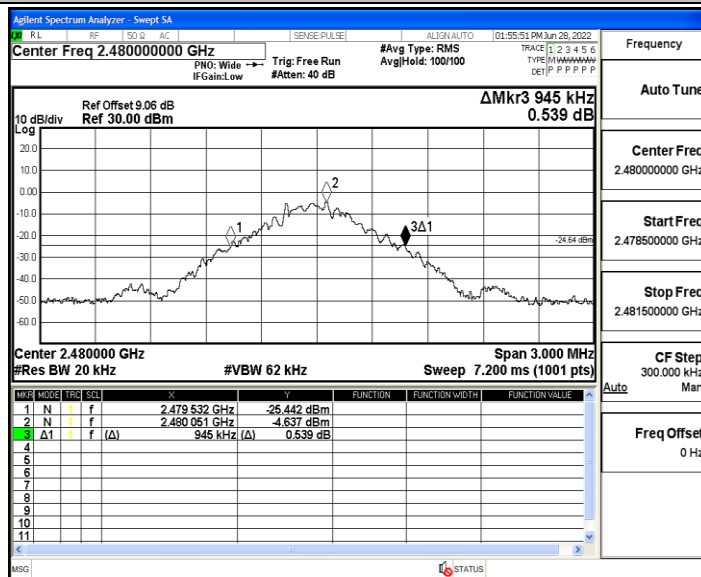
DH5_Ant1_2402



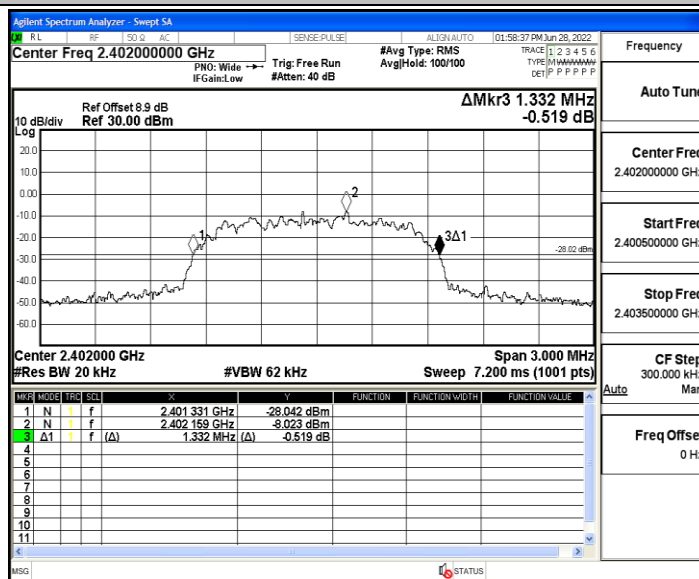
DH5_Ant1_2441



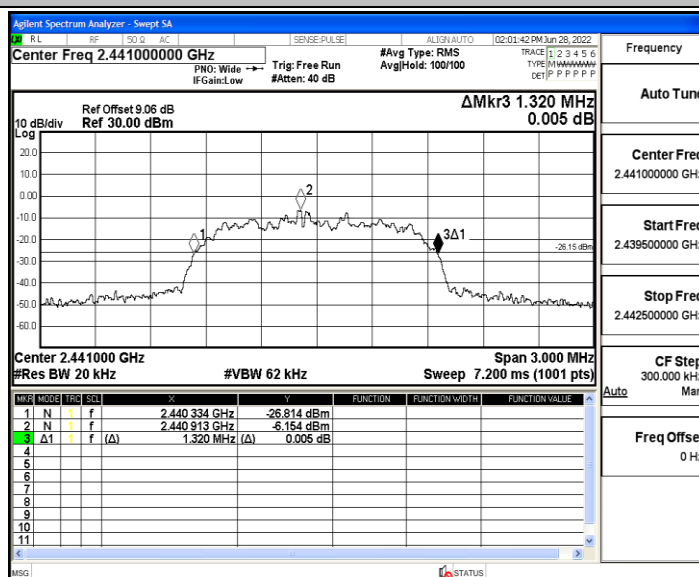
DH5_Ant1_2480



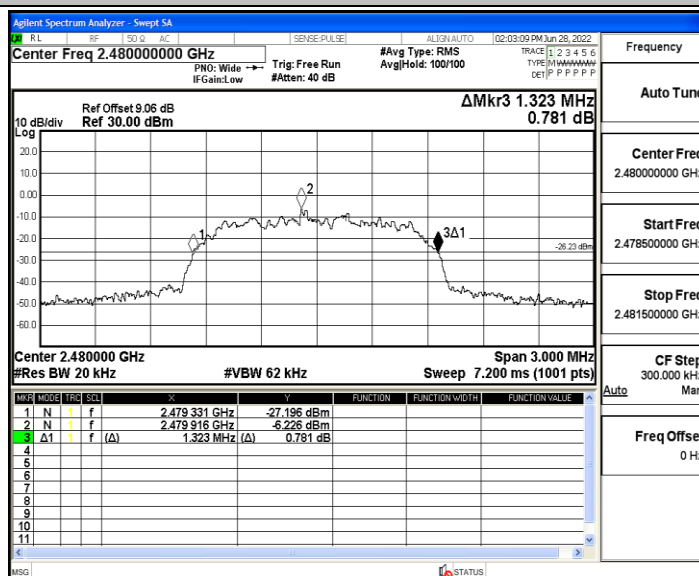
2DH5_Ant1_2402



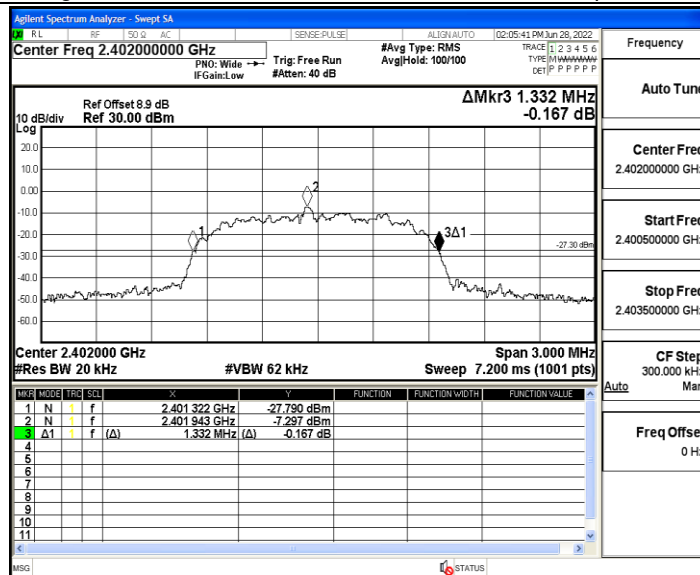
2DH5_Ant1_2441



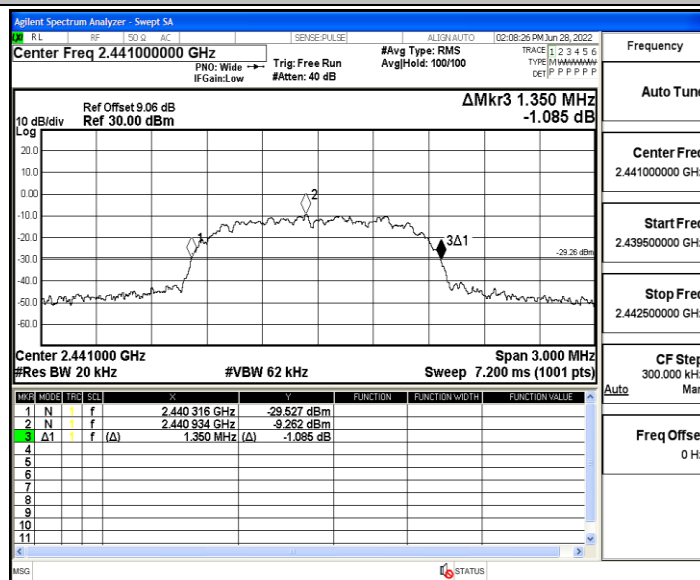
2DH5_Ant1_2480



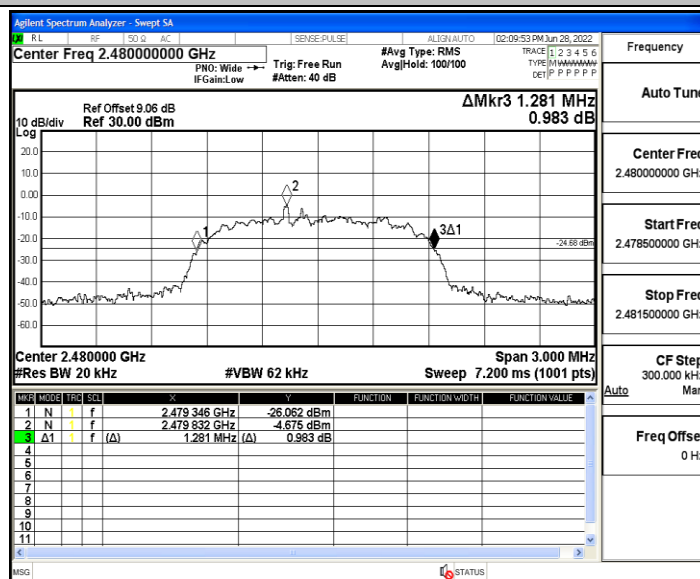
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



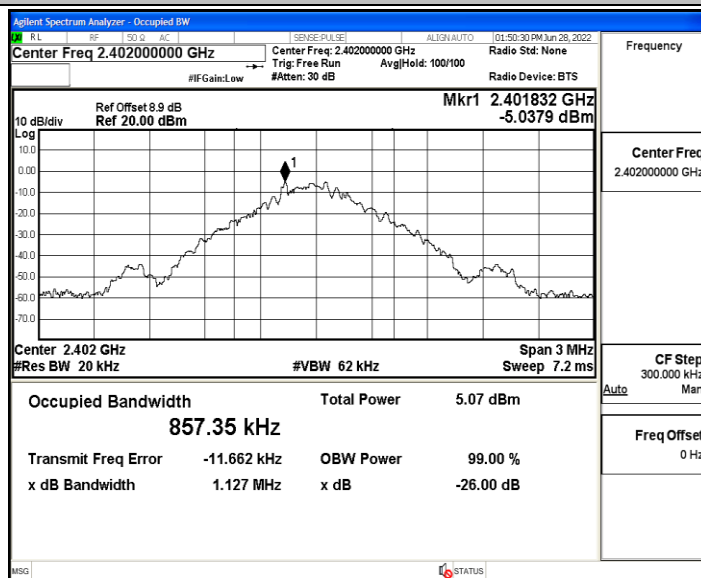
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.85735	2401.560	2402.417	---	---
		2441	0.85760	2440.560	2441.417	---	---
		2480	0.87293	2479.553	2480.425	---	---
2DH5	Ant1	2402	1.1920	2401.397	2402.589	---	---
		2441	1.1897	2440.398	2441.588	---	---
		2480	1.1856	2479.399	2480.585	---	---
3DH5	Ant1	2402	1.1922	2401.392	2402.585	---	---
		2441	1.1924	2440.394	2441.586	---	---
		2480	1.1941	2479.391	2480.585	---	---

Test Graphs

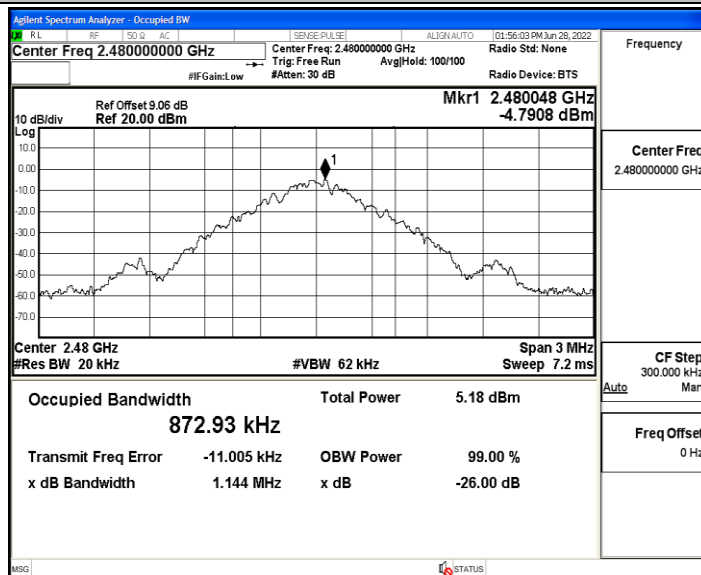
DH5_Ant1_2402



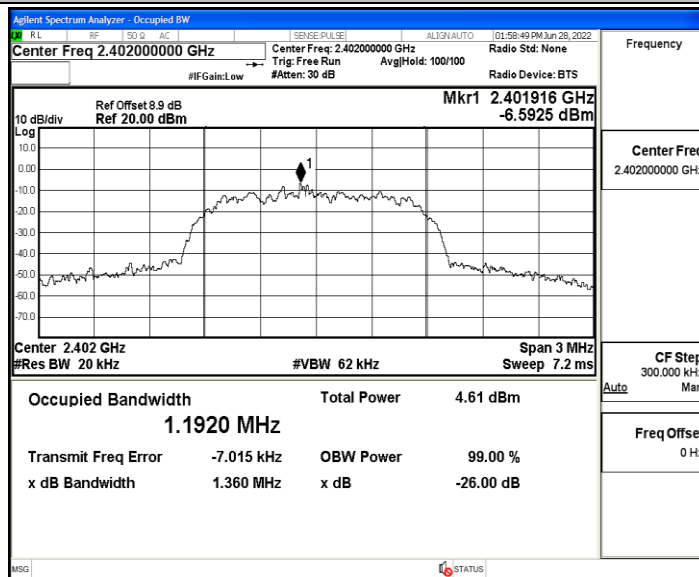
DH5_Ant1_2441



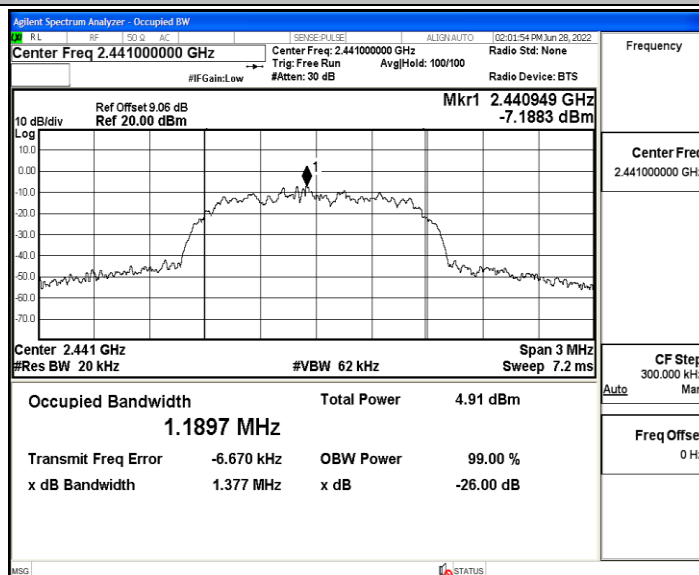
DH5_Ant1_2480



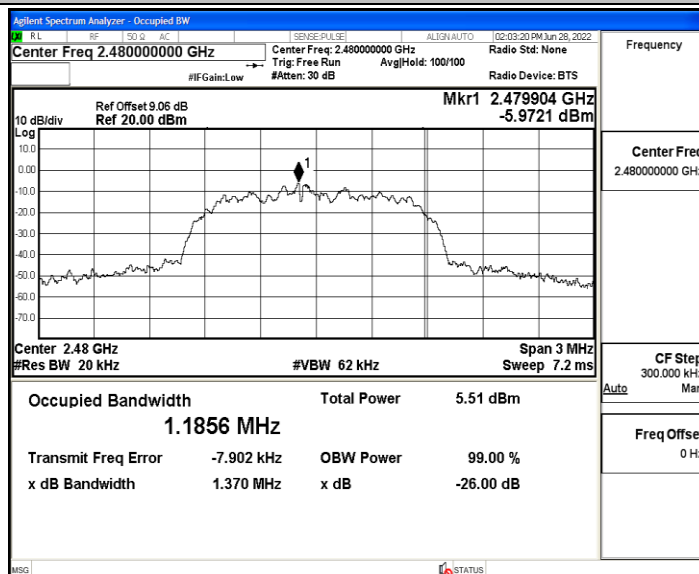
2DH5_Ant1_2402



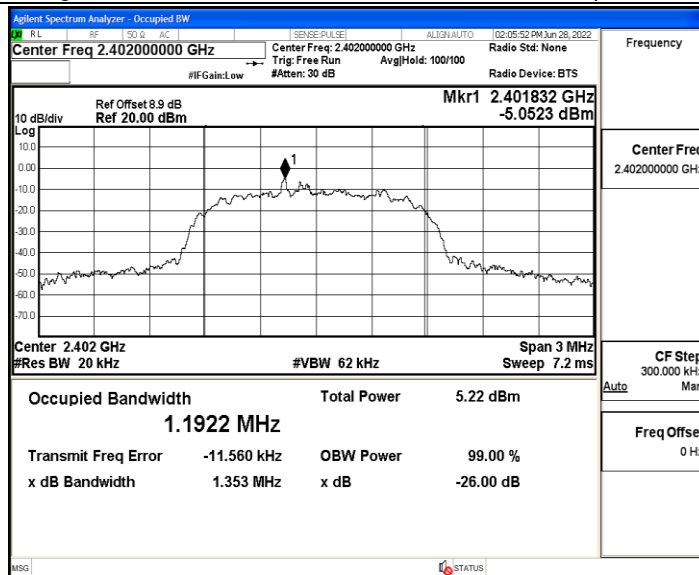
2DH5_Ant1_2441



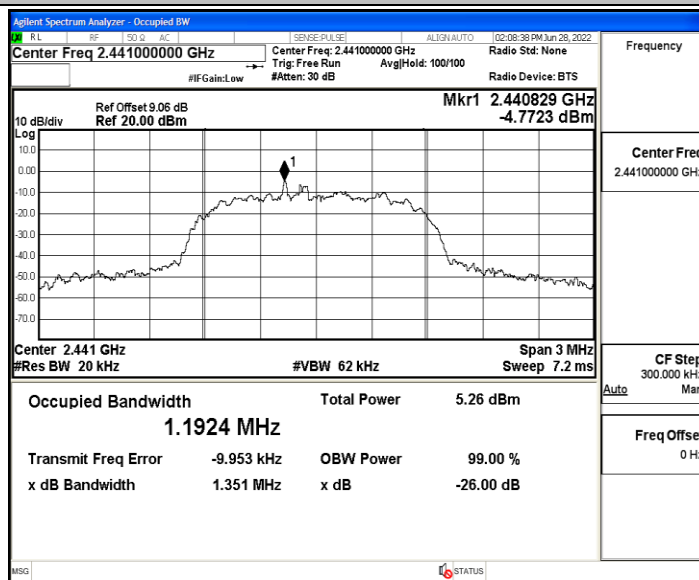
2DH5_Ant1_2480



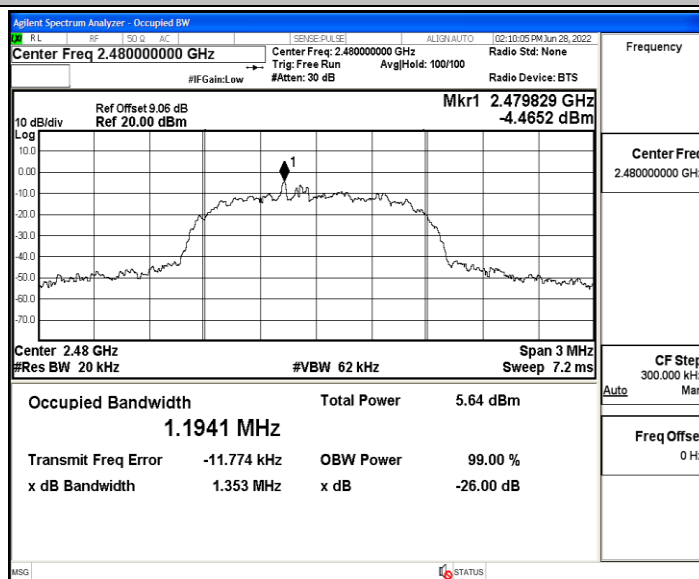
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



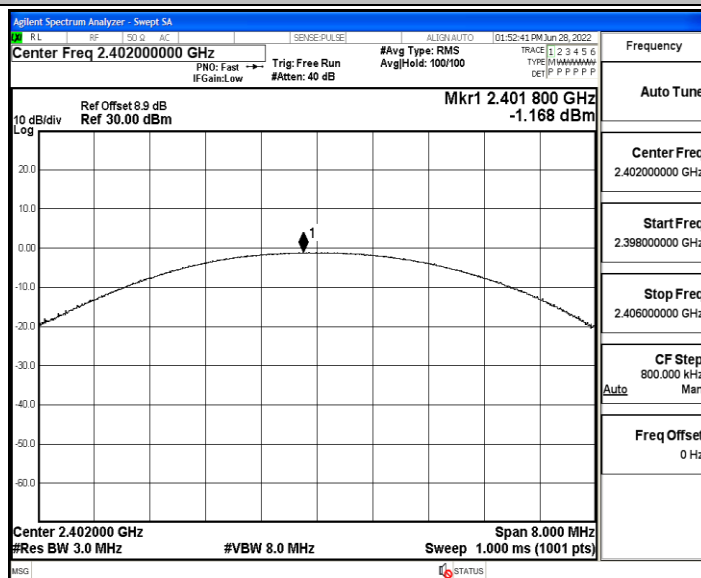
Appendix C: Maximum Peak conducted output power

Test Result

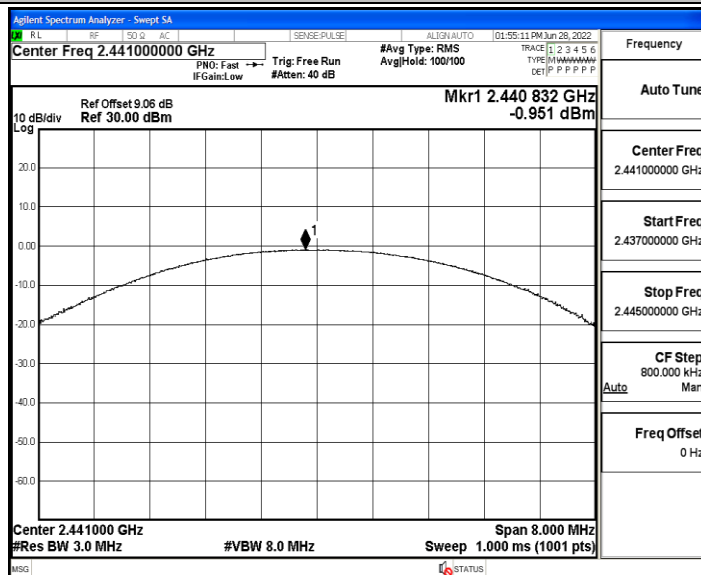
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-1.17	≤30	PASS
		2441	-0.95	≤30	PASS
		2480	-0.67	≤30	PASS
2DH5	Ant1	2402	0.88	≤20.97	PASS
		2441	1.08	≤20.97	PASS
		2480	1.29	≤20.97	PASS
3DH5	Ant1	2402	1.57	≤20.97	PASS
		2441	1.77	≤20.97	PASS
		2480	2.02	≤20.97	PASS

Test Graphs

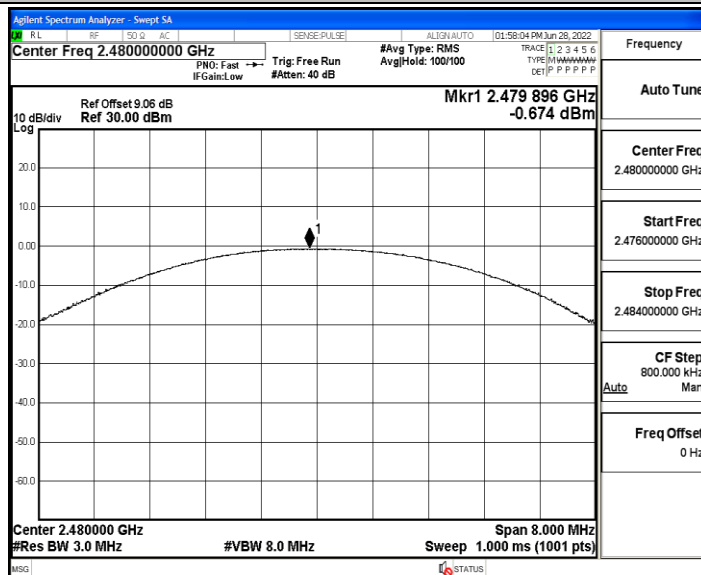
DH5_Ant1_2402



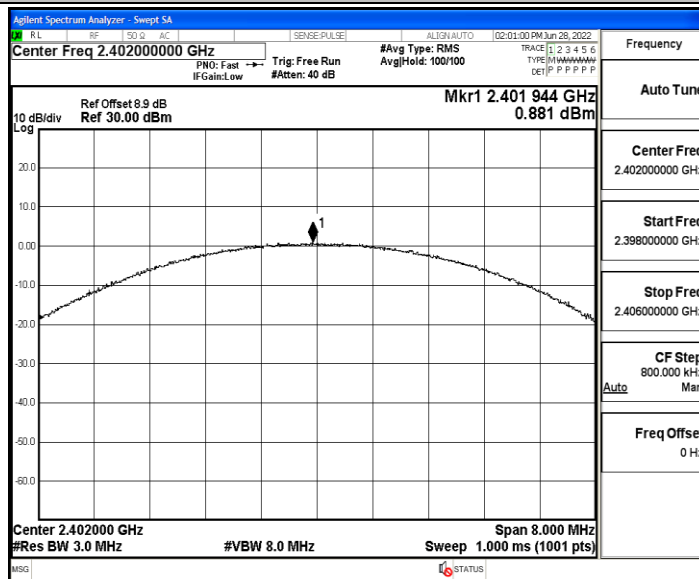
DH5_Ant1_2441



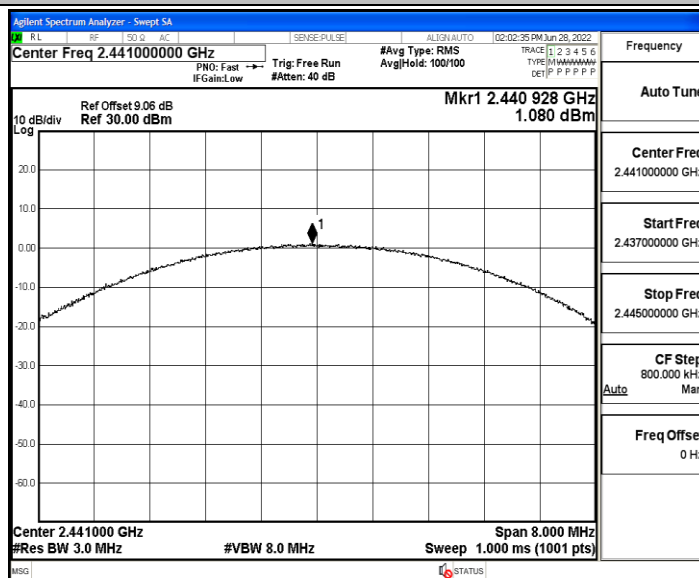
DH5_Ant1_2480



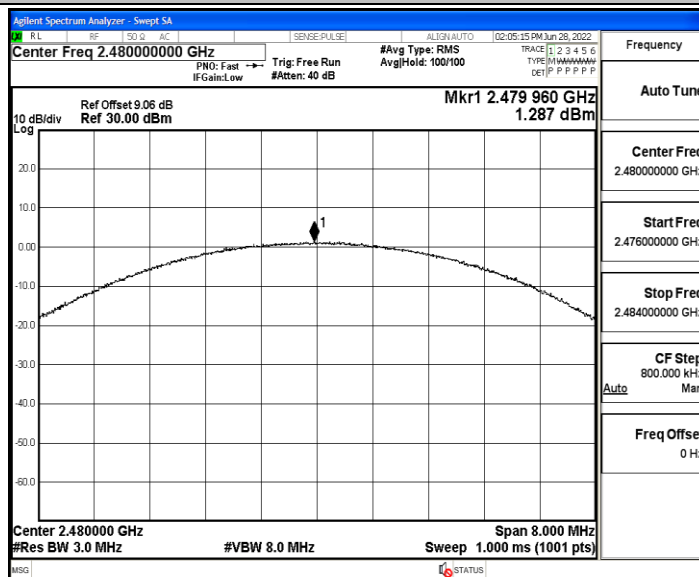
2DH5_Ant1_2402



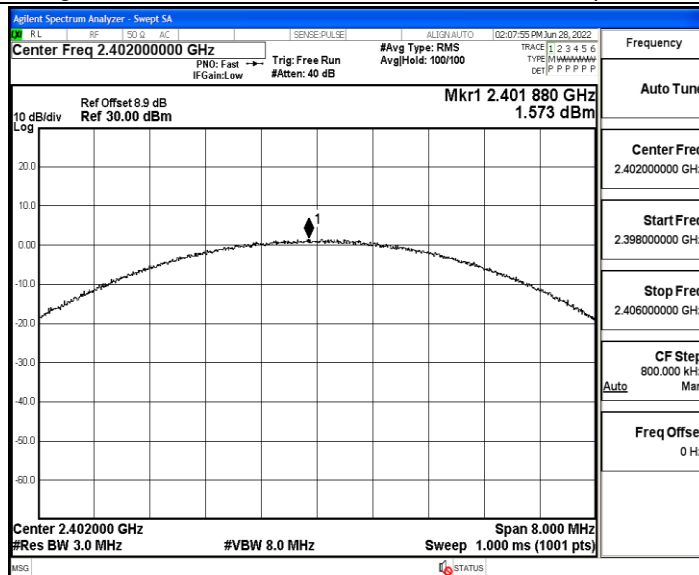
2DH5_Ant1_2441



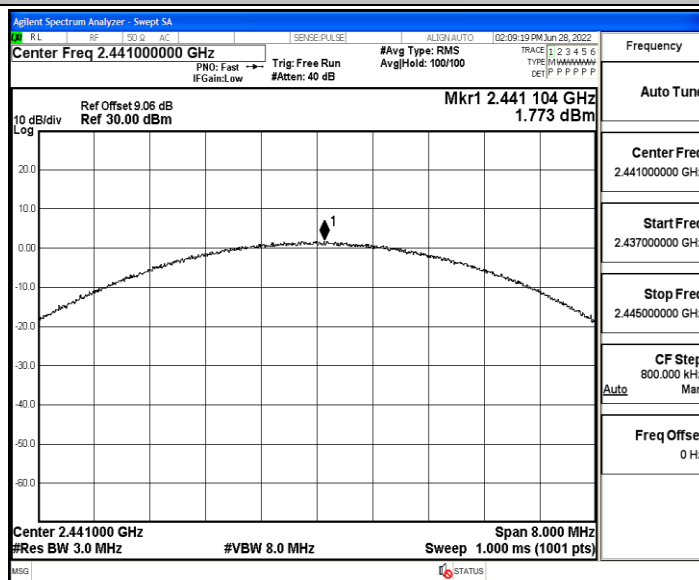
2DH5_Ant1_2480



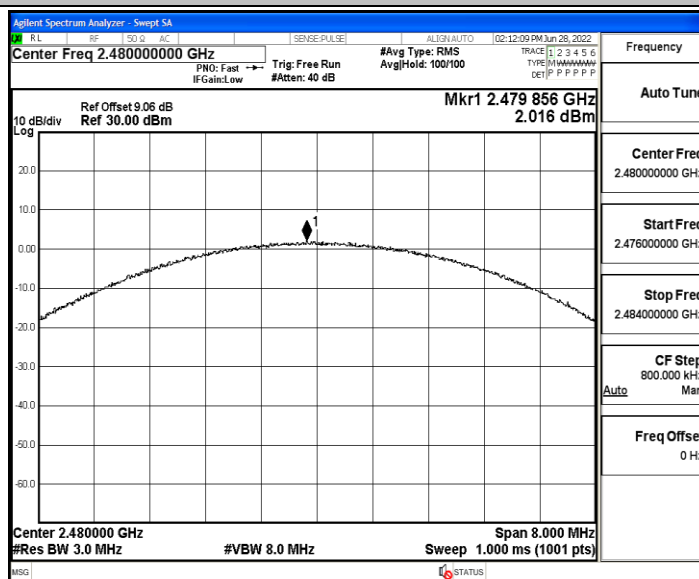
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

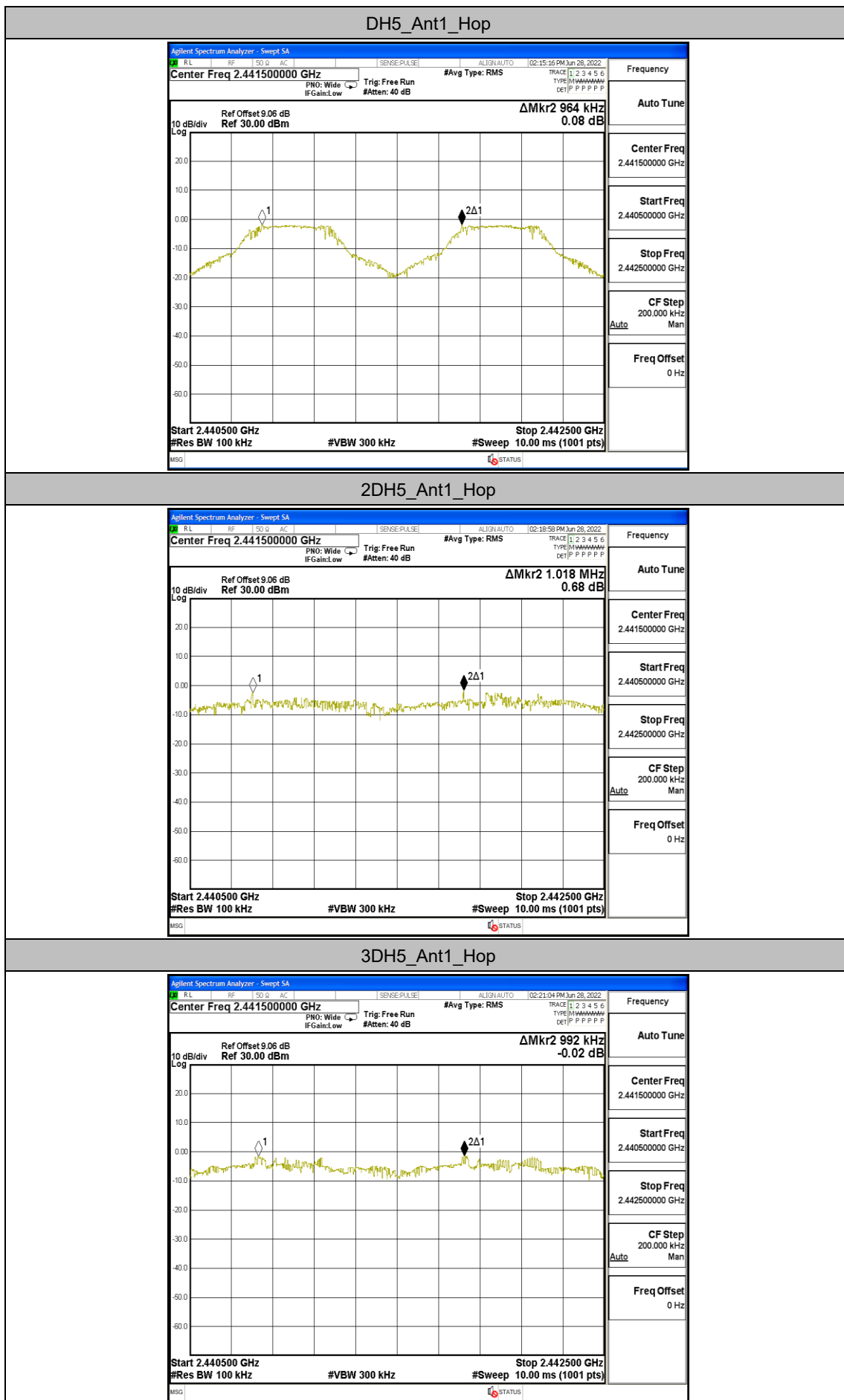


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.964	≥ 0.945	PASS
2DH5	Ant1	Hop	1.018	≥ 0.888	PASS
3DH5	Ant1	Hop	0.992	≥ 0.900	PASS

Test Graphs

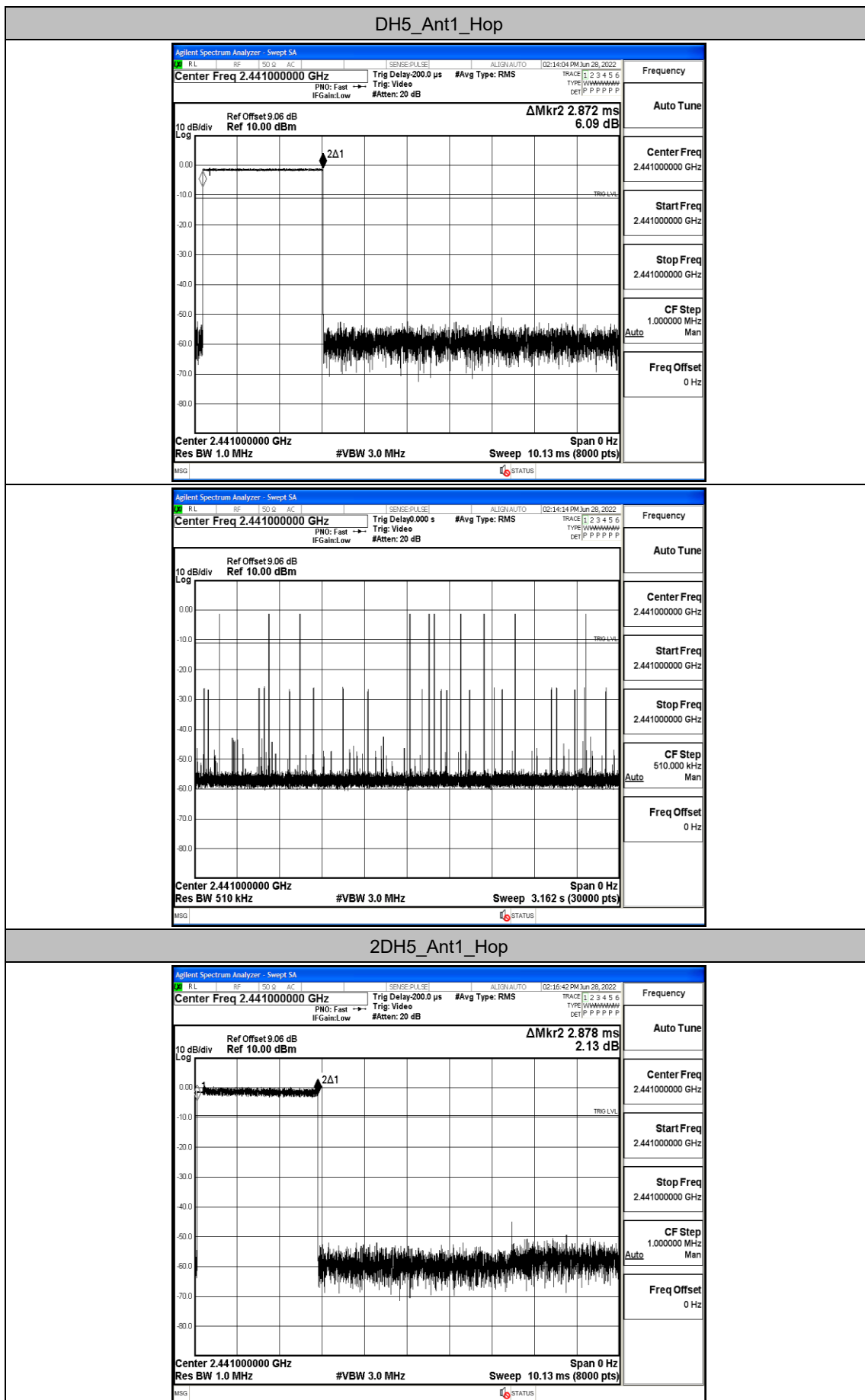


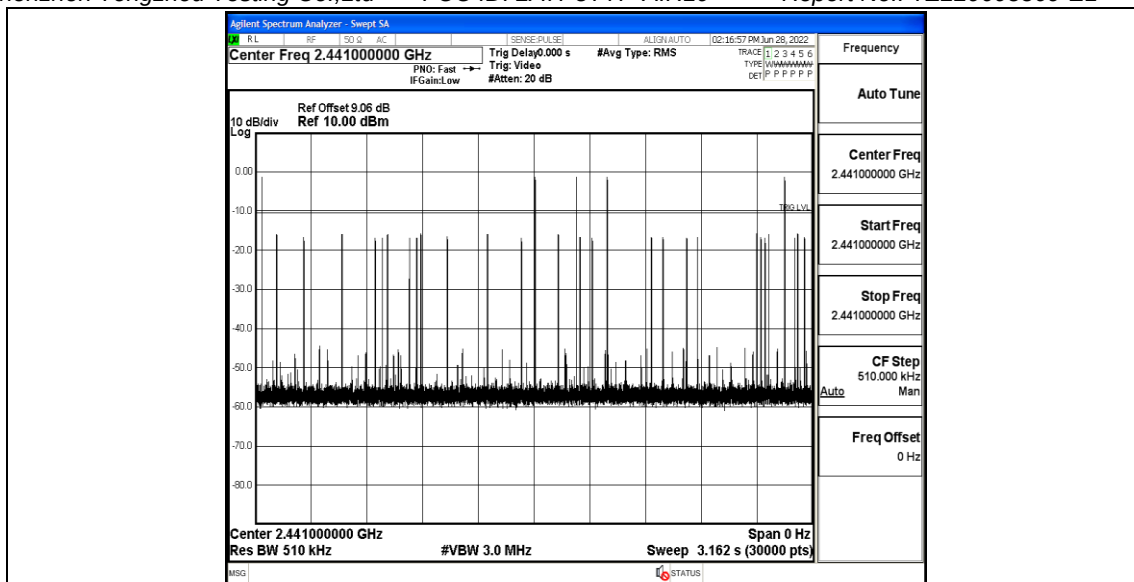
Appendix E: Time of occupancy

Test Result

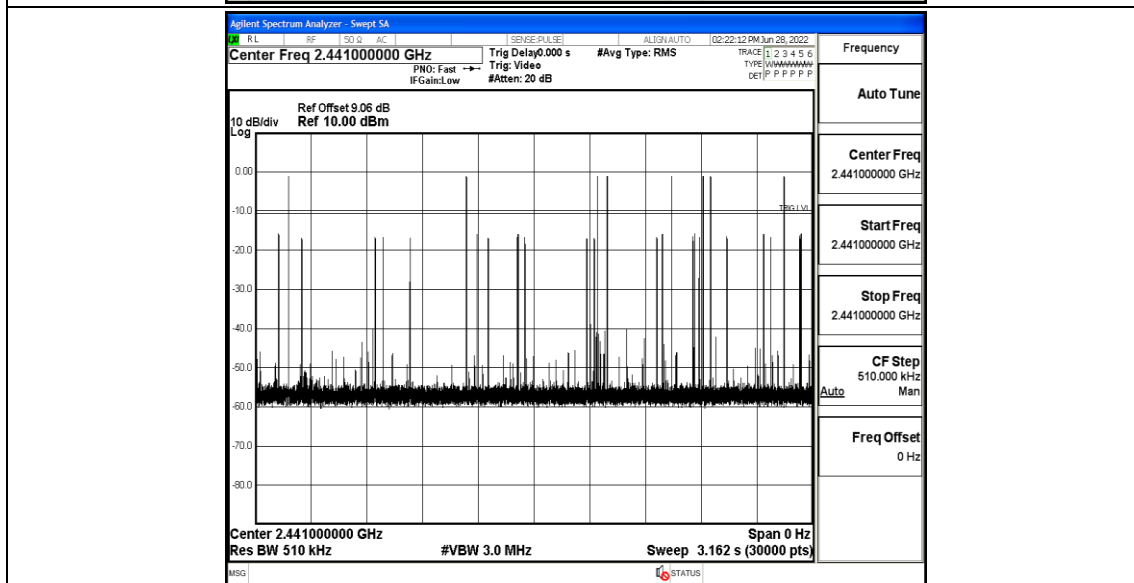
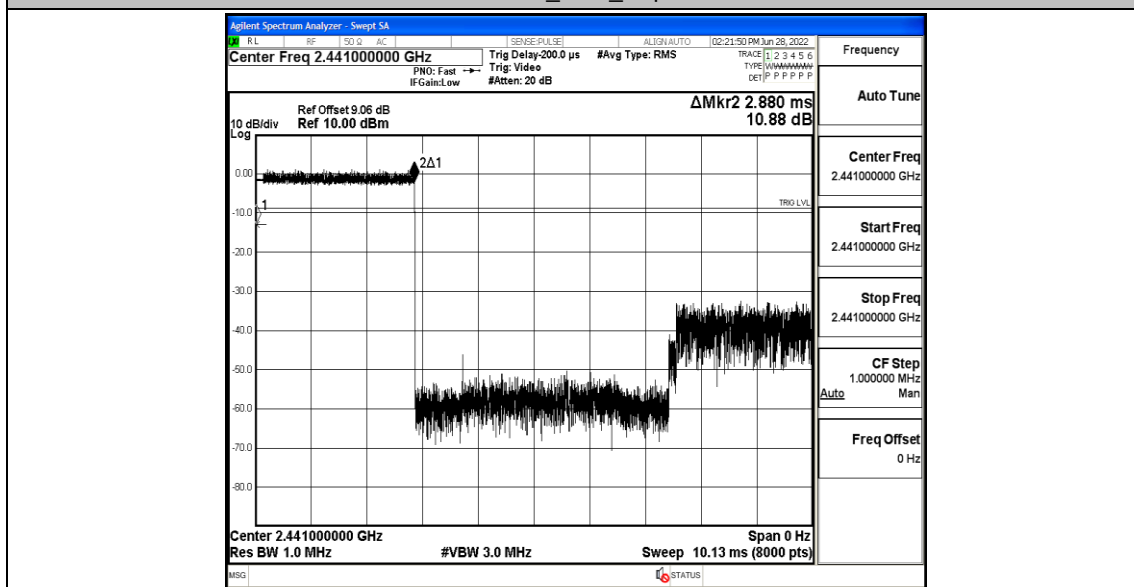
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.87	110	0.316	≤0.4	PASS
2DH5	Ant1	Hop	2.88	70	0.201	≤0.4	PASS
3DH5	Ant1	Hop	2.88	90	0.259	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop

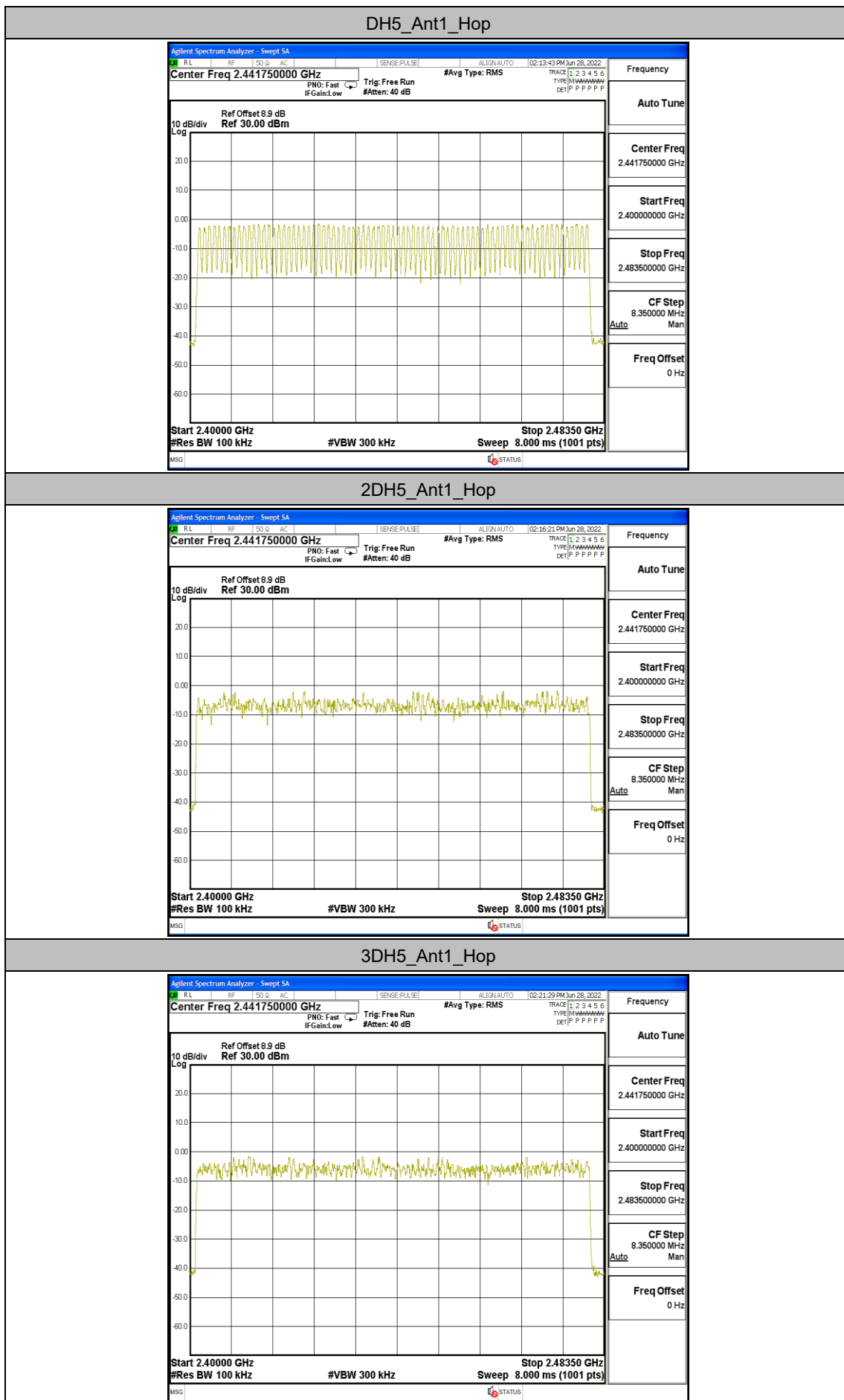


Appendix F: Number of hopping channels

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



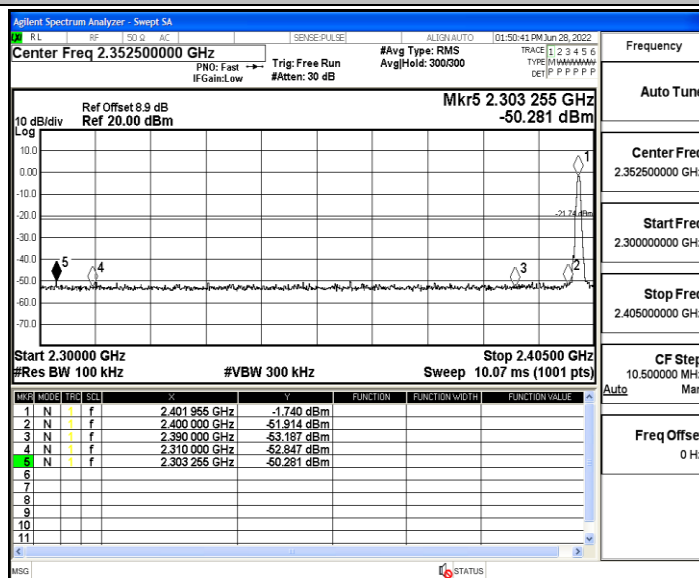
Appendix G: Band edge measurements

Test Result

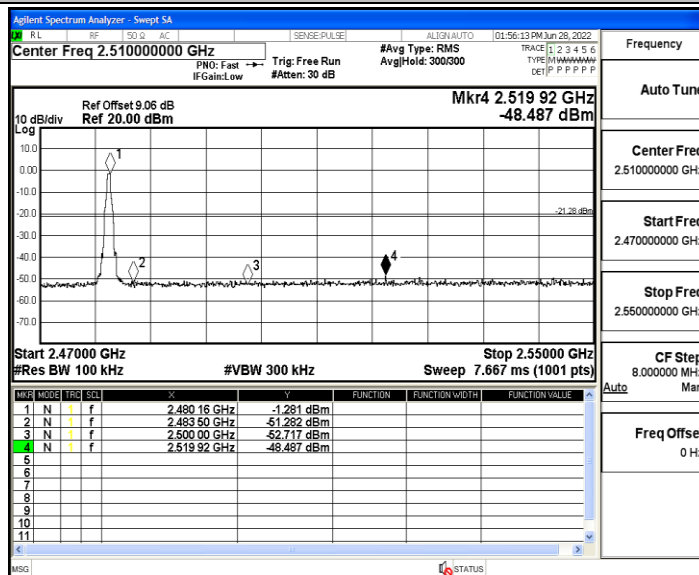
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.74	-50.28	≤ -21.74	PASS
		High	2480	-1.28	-48.49	≤ -21.28	PASS
		Low	Hop_2402	-2.41	-49.81	≤ -22.41	PASS
		High	Hop_2480	-1.51	-49.2	≤ -21.51	PASS
2DH5	Ant1	Low	2402	-1.80	-50.61	≤ -21.8	PASS
		High	2480	-2.00	-50.2	≤ -22	PASS
		Low	Hop_2402	-2.70	-50.61	≤ -22.7	PASS
		High	Hop_2480	-1.94	-49.14	≤ -21.94	PASS
3DH5	Ant1	Low	2402	-1.74	-50.74	≤ -21.74	PASS
		High	2480	-1.24	-49.35	≤ -21.24	PASS
		Low	Hop_2402	-4.71	-50.65	≤ -24.71	PASS
		High	Hop_2480	-1.42	-49.59	≤ -21.42	PASS

Test Graphs

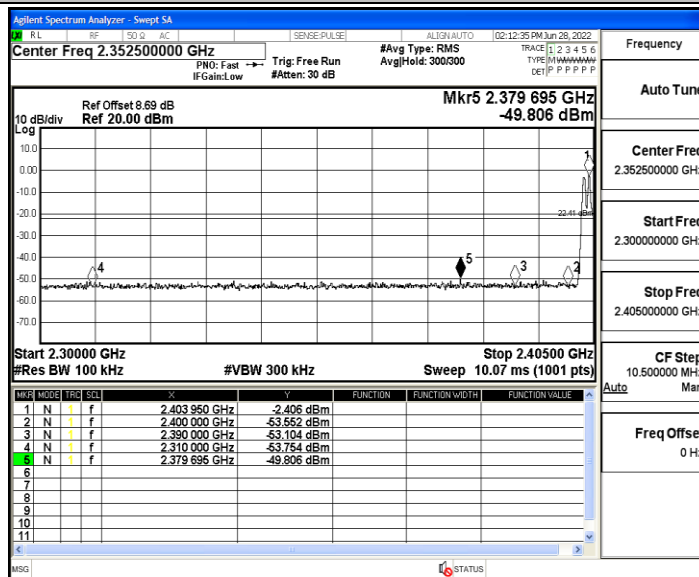
DH5_Ant1_Low_2402



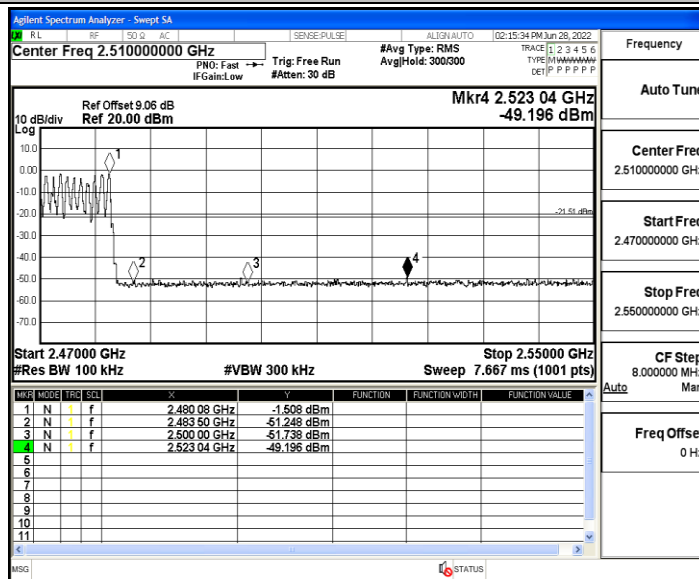
DH5_Ant1_High_2480



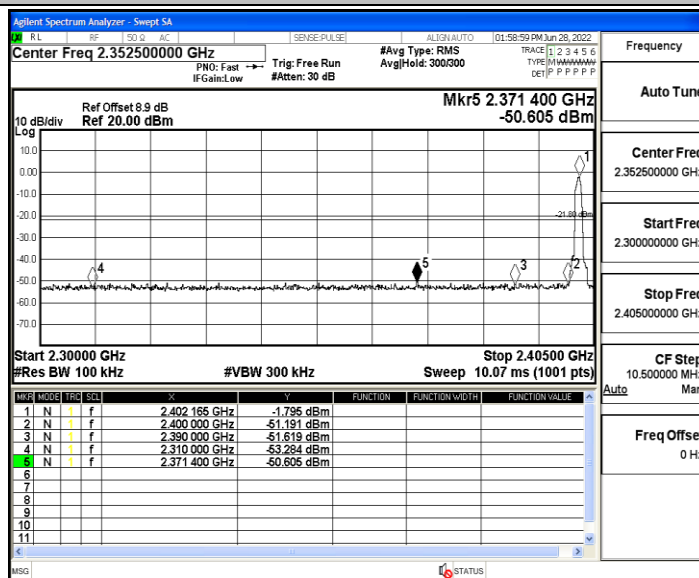
DH5_Ant1_Low_Hop_2402



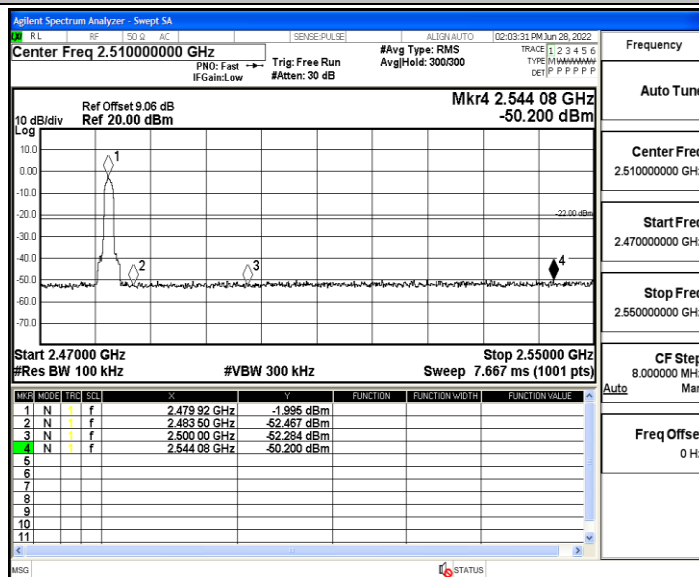
DH5_Ant1_High_Hop_2480



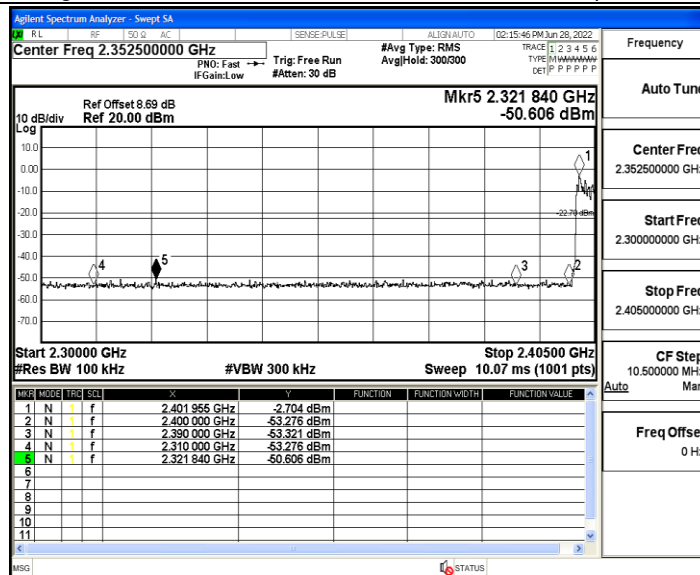
2DH5_Ant1_Low_2402



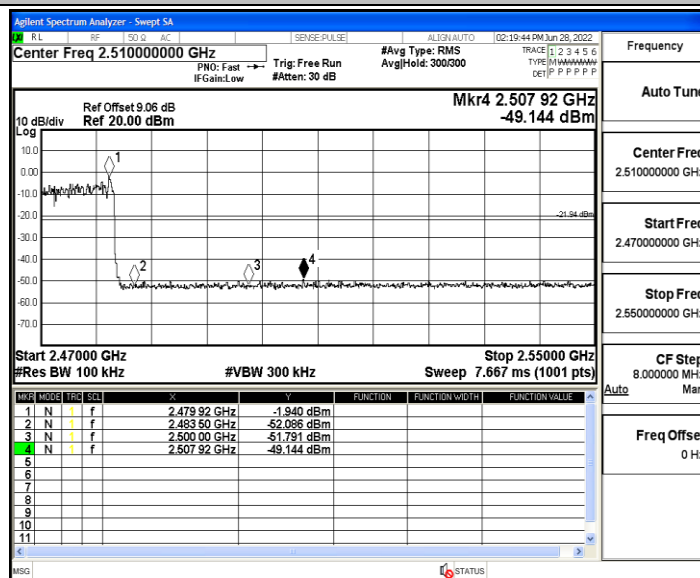
2DH5_Ant1_High_2480



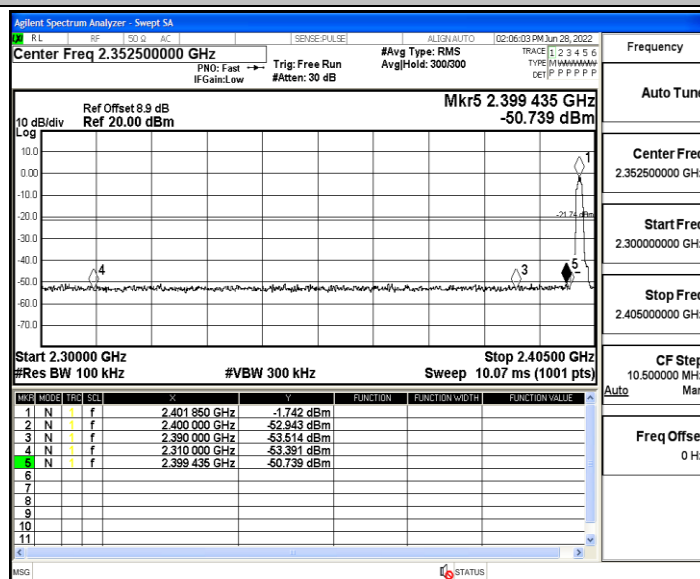
2DH5_Ant1_Low_Hop_2402



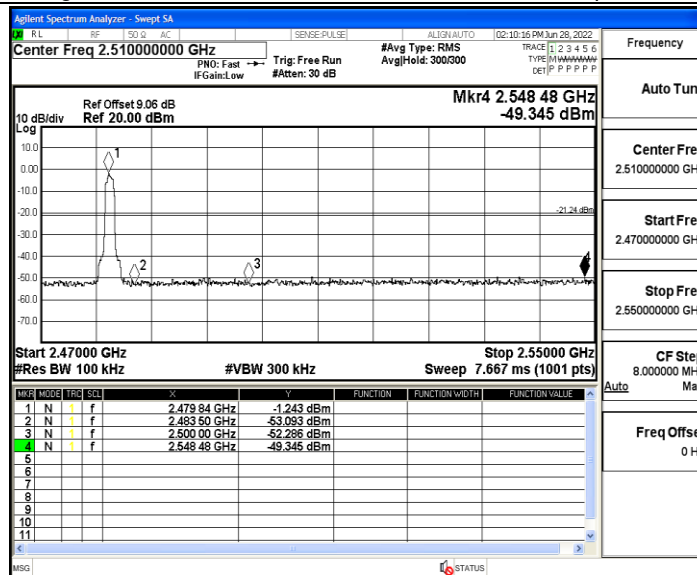
2DH5_Ant1_High_Hop_2480



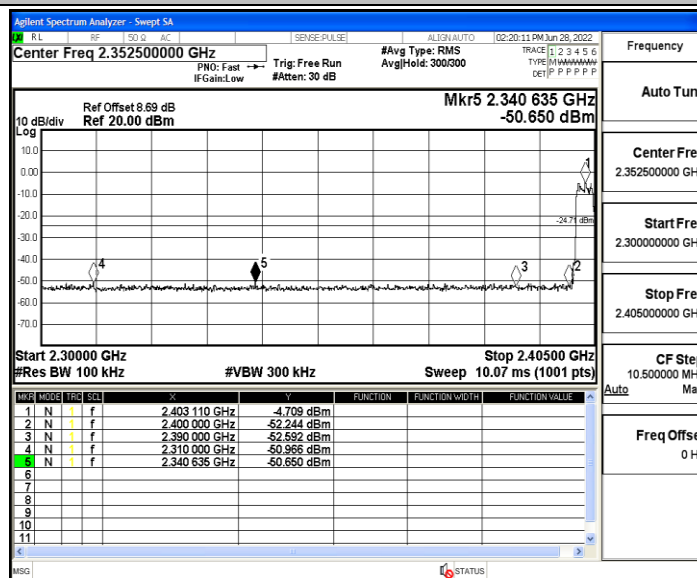
3DH5_Ant1_Low_2402



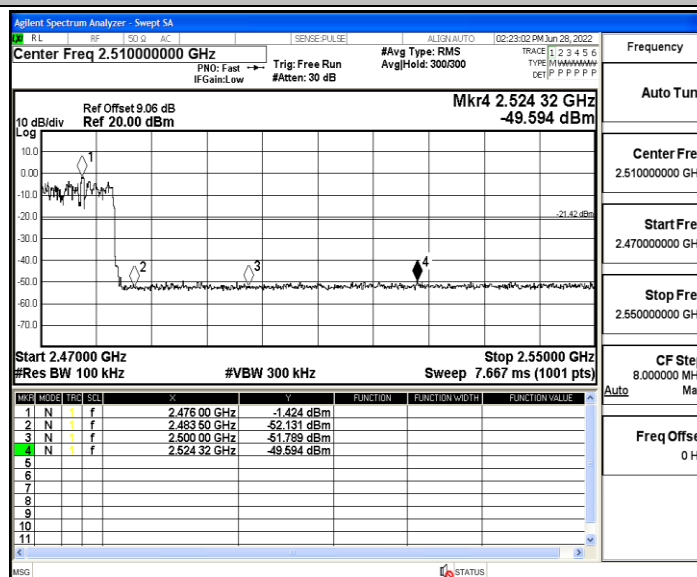
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

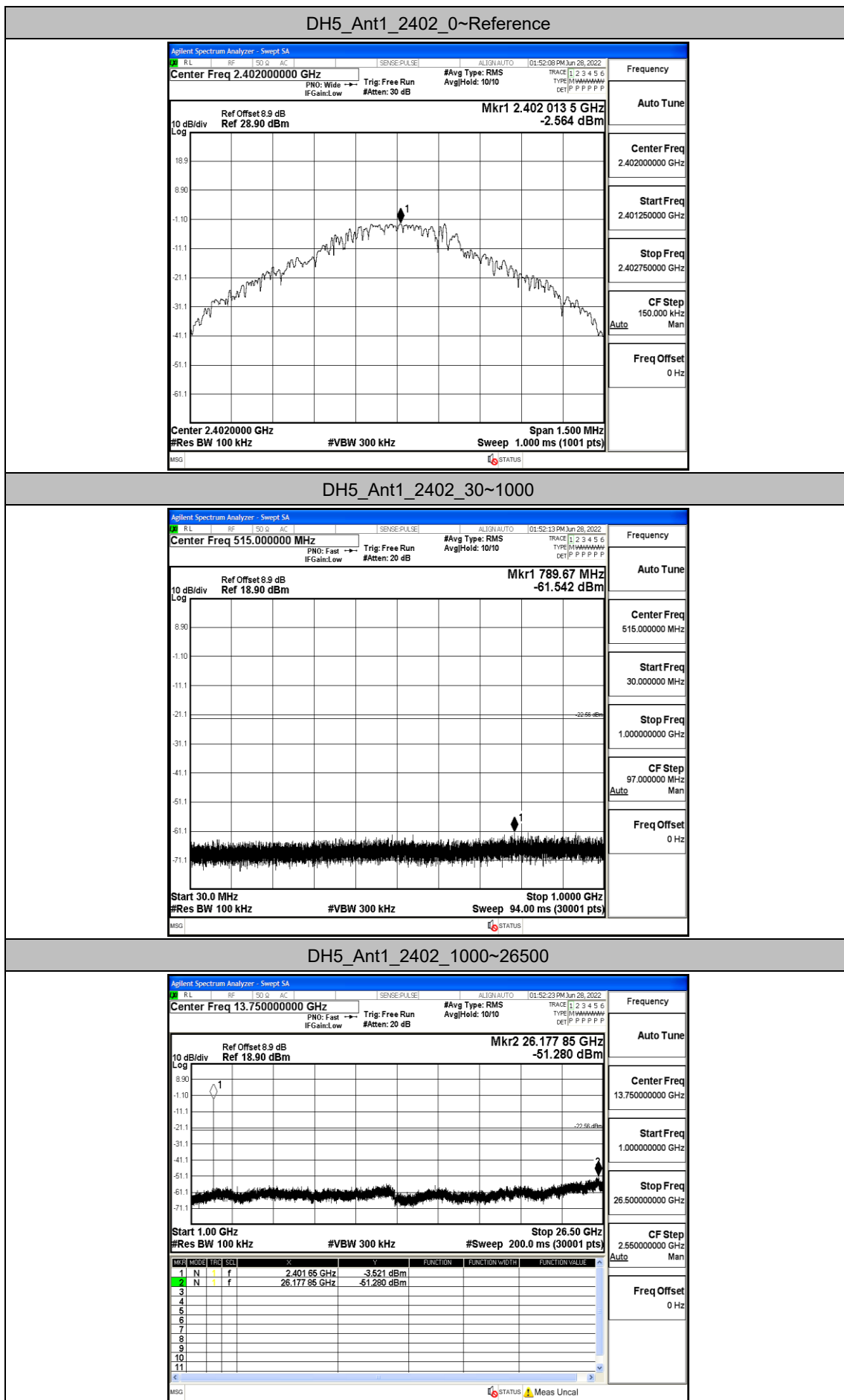


Appendix H: Conducted Spurious Emission

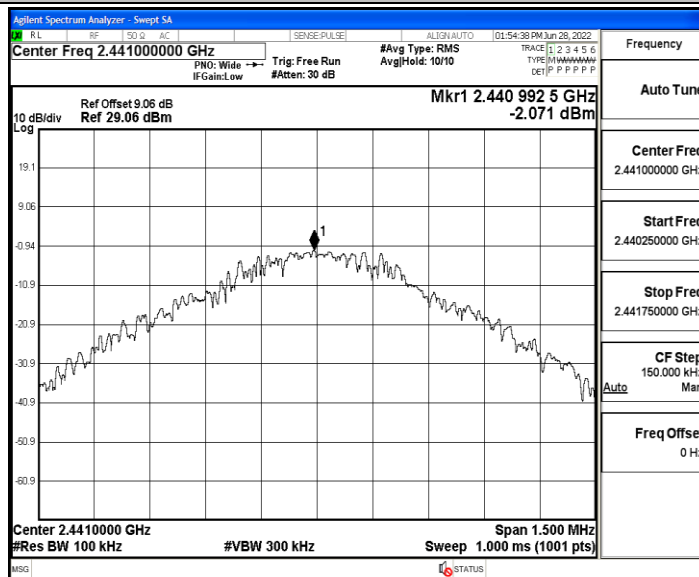
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-2.56	-2.56	---	PASS
			30~1000	-2.56	-61.54	≤-22.56	PASS
			1000~26500	-2.56	-51.28	≤-22.56	PASS
		2441	Reference	-2.07	-2.07	---	PASS
			30~1000	-2.07	-60.64	≤-22.07	PASS
			1000~26500	-2.07	-49.91	≤-22.07	PASS
		2480	Reference	-2.02	-2.02	---	PASS
			30~1000	-2.02	-61.51	≤-22.02	PASS
			1000~26500	-2.02	-50.55	≤-22.02	PASS
2DH5	Ant1	2402	Reference	-4.15	-4.15	---	PASS
			30~1000	-4.15	-61.47	≤-24.15	PASS
			1000~26500	-4.15	-50.24	≤-24.15	PASS
		2441	Reference	-2.29	-2.29	---	PASS
			30~1000	-2.29	-61.62	≤-22.29	PASS
			1000~26500	-2.29	-50.02	≤-22.29	PASS
		2480	Reference	-2.32	-2.32	---	PASS
			30~1000	-2.32	-61.82	≤-22.32	PASS
			1000~26500	-2.32	-50.87	≤-22.32	PASS
3DH5	Ant1	2402	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-60.77	≤-22.76	PASS
			1000~26500	-2.76	-50.31	≤-22.76	PASS
		2441	Reference	-1.75	-1.75	---	PASS
			30~1000	-1.75	-59.7	≤-21.75	PASS
			1000~26500	-1.75	-51.2	≤-21.75	PASS
		2480	Reference	-2.25	-2.25	---	PASS
			30~1000	-2.25	-61.5	≤-22.25	PASS
			1000~26500	-2.25	-51.69	≤-22.25	PASS

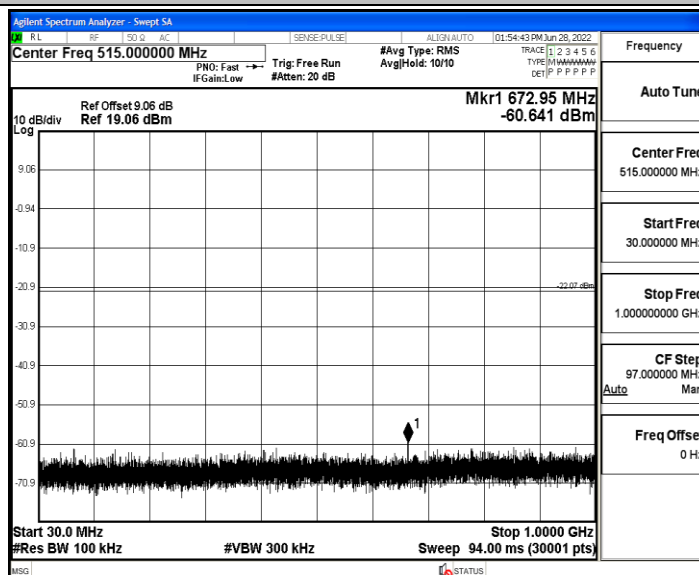
Test Graphs



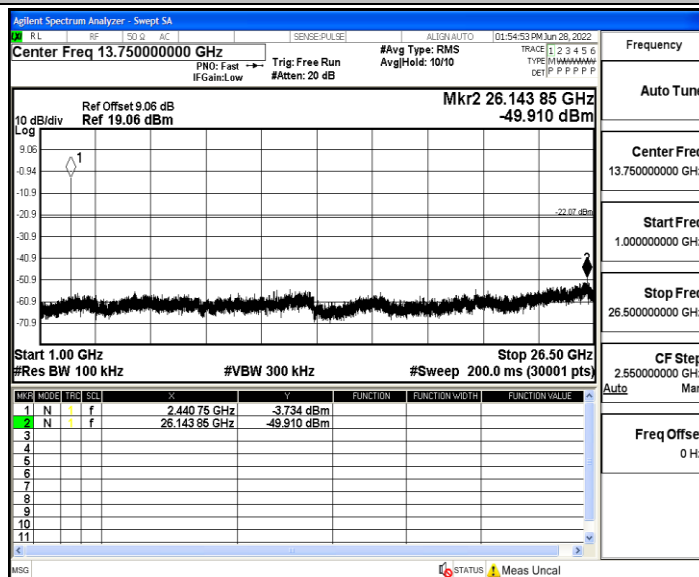
DH5_Ant1_2441_0~Reference



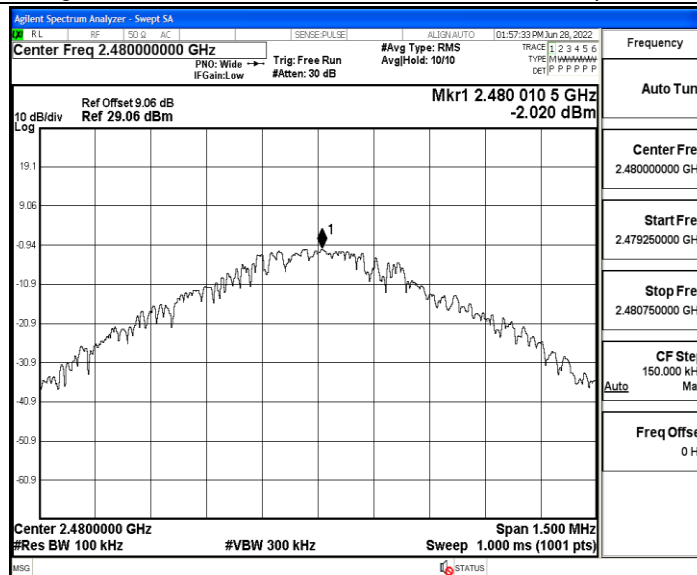
DH5_Ant1_2441_30~1000



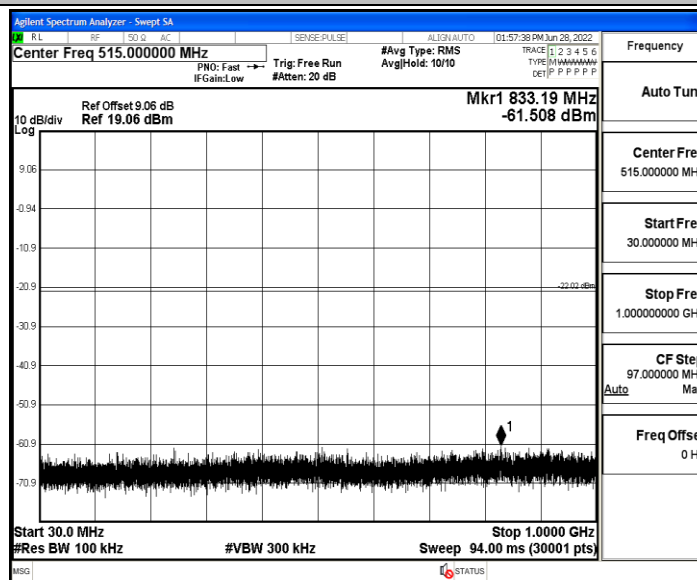
DH5_Ant1_2441_1000~26500



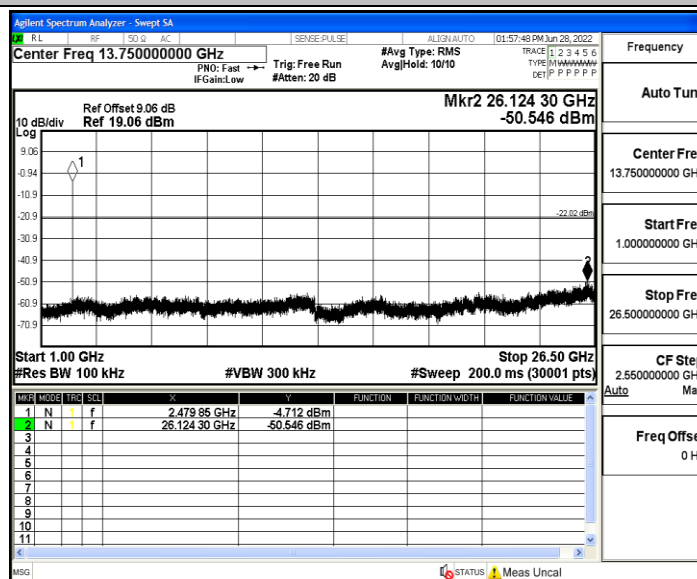
DH5_Ant1_2480_0~Reference



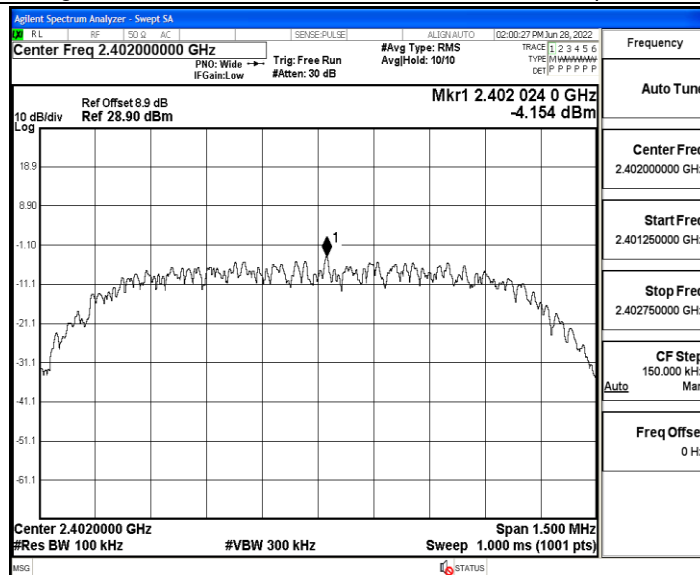
DH5_Ant1_2480_30~1000



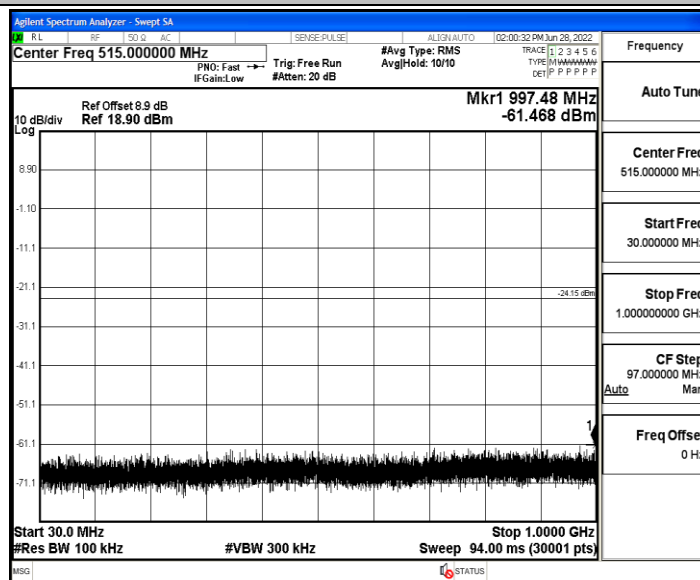
DH5_Ant1_2480_1000~26500



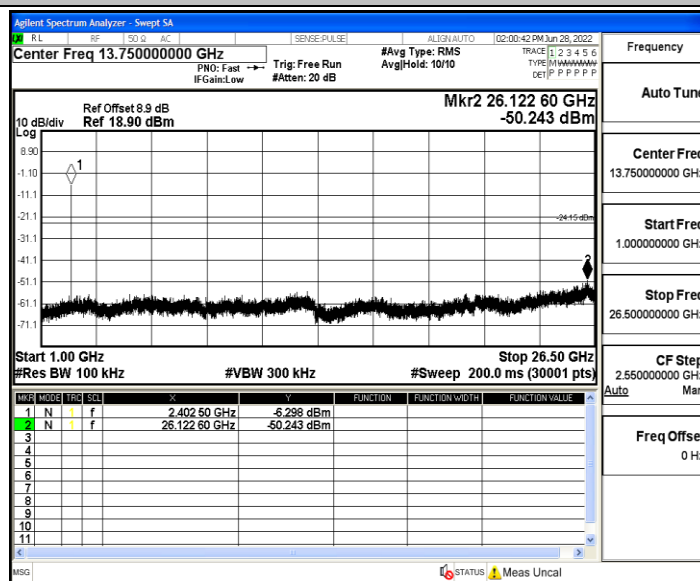
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference