Appendix A

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

Product Name: yellow boombox

Trade Mark: N/A

Test Model: UO-BTBB-YEL

FCC ID: 2AQ4QUO-BTBB-YEL

Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

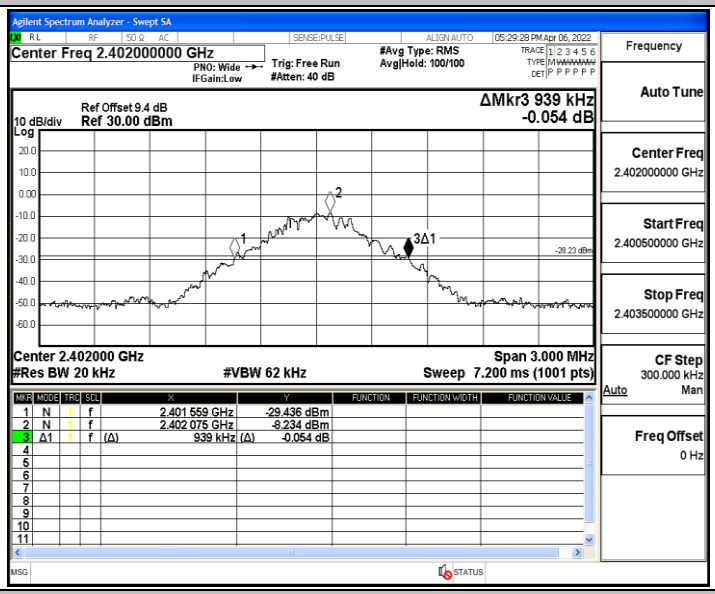
Appendix A: 20dB Emission Bandwidth

Test Result

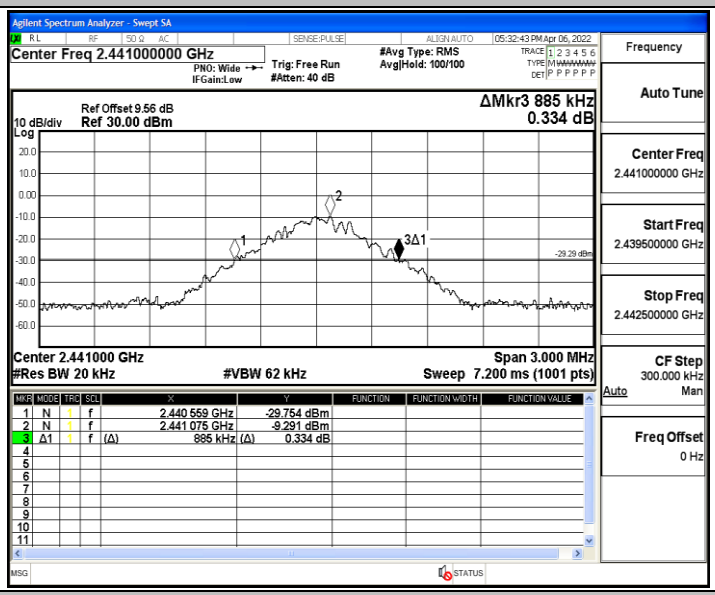
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.939	2401.559	2402.498	---	---
		2441	0.885	2440.559	2441.444	---	---
		2480	0.888	2479.559	2480.447	---	---
2DH5	Ant1	2402	1.266	2401.382	2402.648	---	---
		2441	1.323	2440.352	2441.675	---	---
		2480	1.320	2479.355	2480.675	---	---
3DH5	Ant1	2402	1.299	2401.361	2402.660	---	---
		2441	1.284	2440.373	2441.657	---	---
		2480	1.275	2479.376	2480.651	---	---

Test Graphs

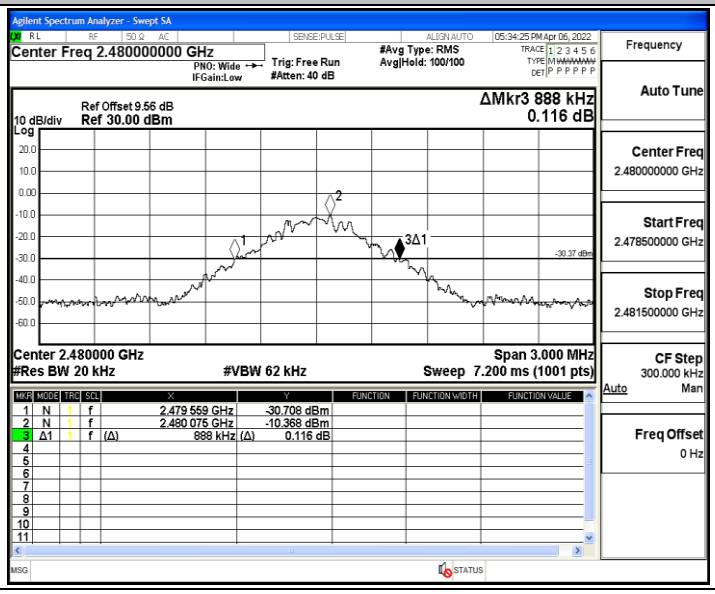
DH5_Ant1_2402



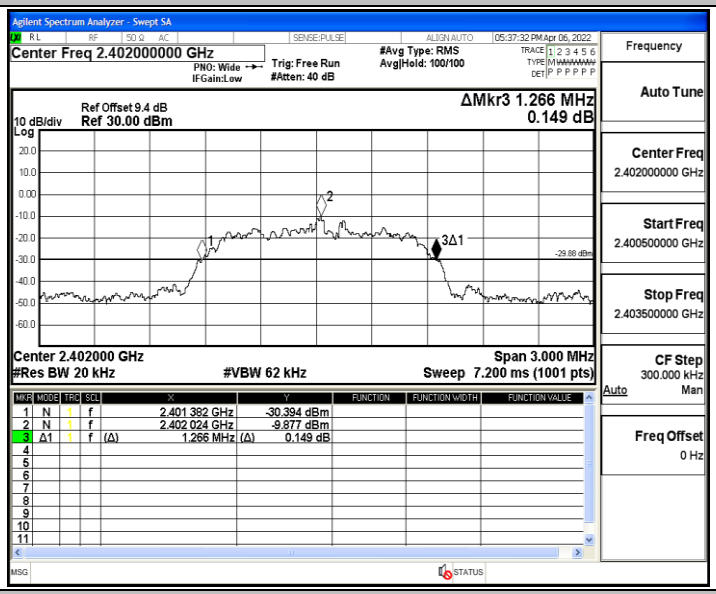
DH5_Ant1_2441



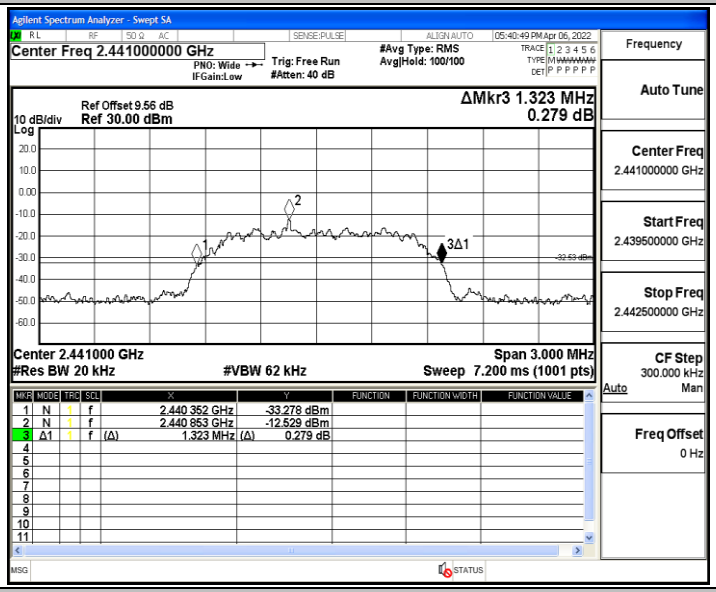
DH5_Ant1_2480



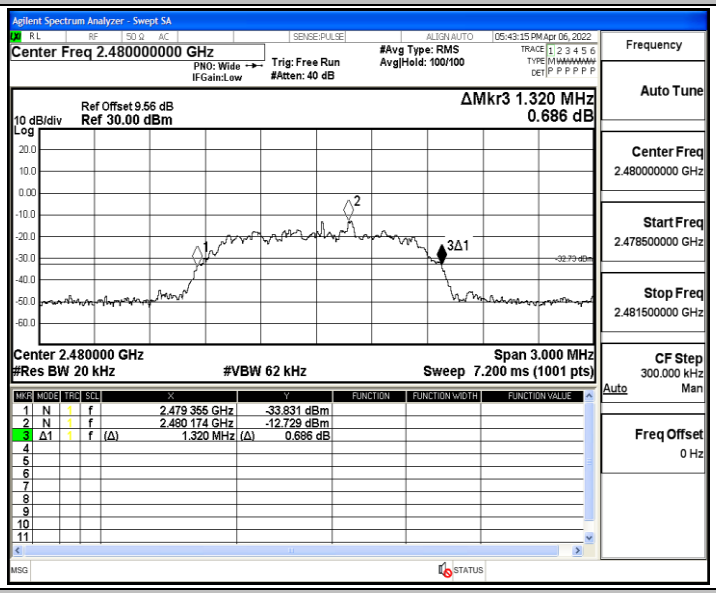
2DH5_Ant1_2402



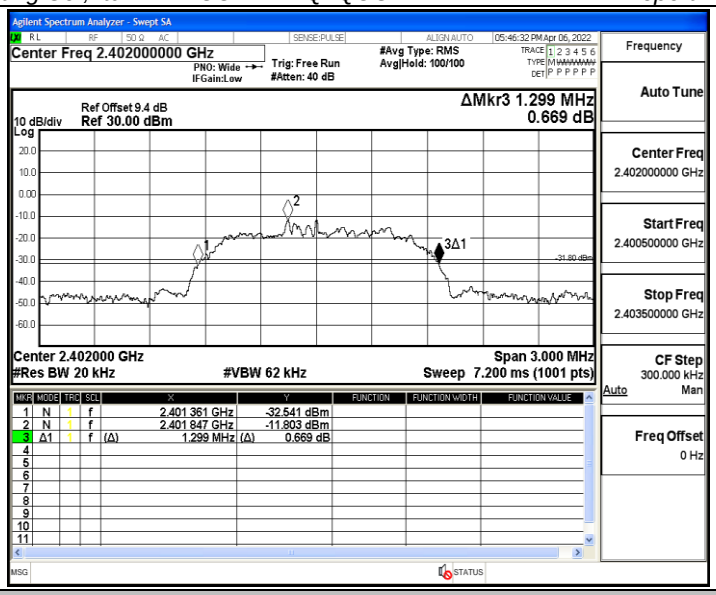
2DH5_Ant1_2441



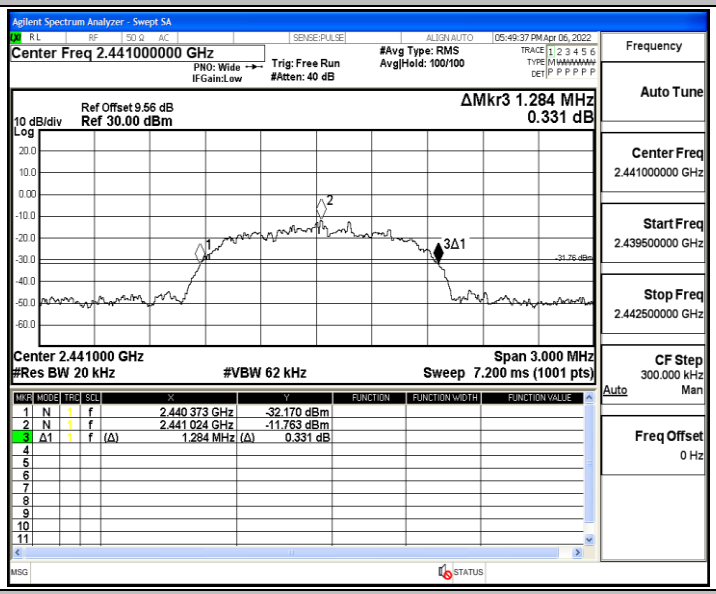
2DH5_Ant1_2480



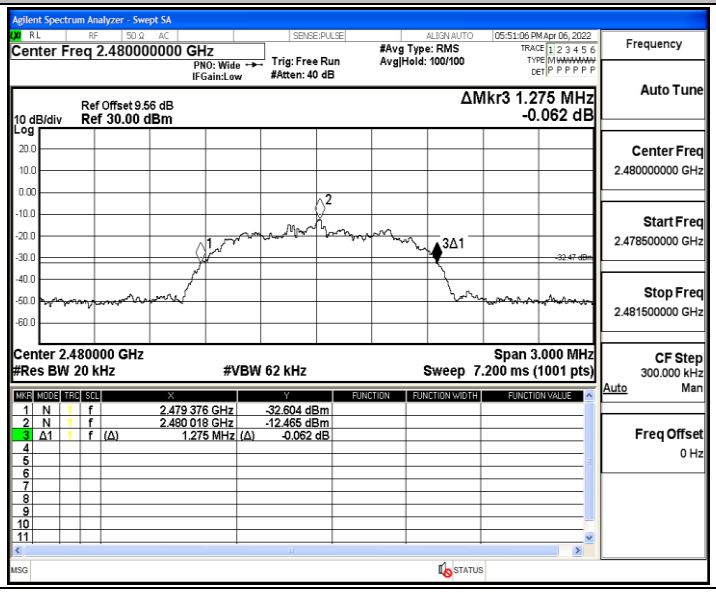
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



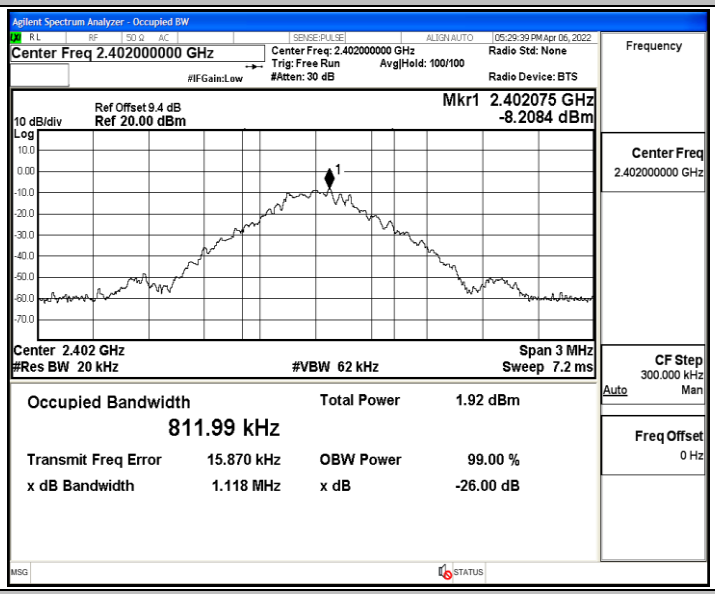
Appendix B: Occupied Channel Bandwidth

Test Result

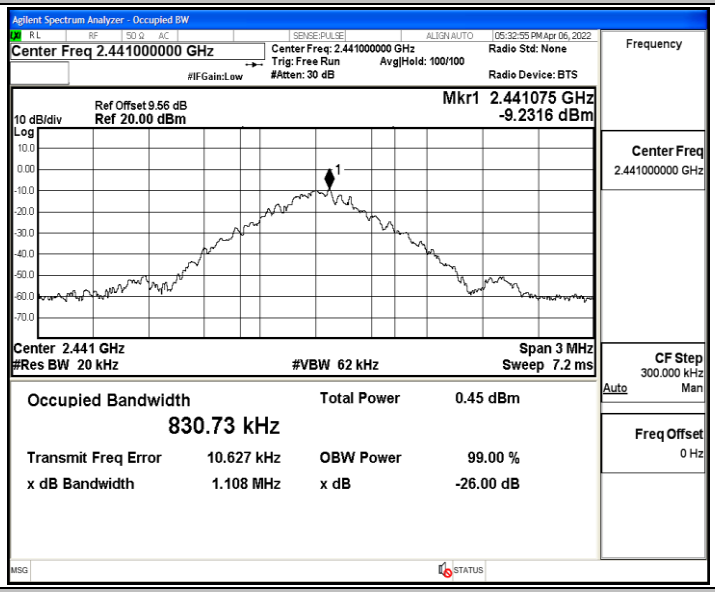
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.81199	2401.610	2402.422	---	---
		2441	0.83073	2440.595	2441.426	---	---
		2480	0.81717	2479.602	2480.419	---	---
2DH5	Ant1	2402	1.1835	2401.424	2402.607	---	---
		2441	1.1761	2440.426	2441.602	---	---
		2480	1.1663	2479.429	2480.596	---	---
3DH5	Ant1	2402	1.1702	2401.426	2402.596	---	---
		2441	1.1734	2440.426	2441.599	---	---
		2480	1.1780	2479.426	2480.604	---	---

Test Graphs

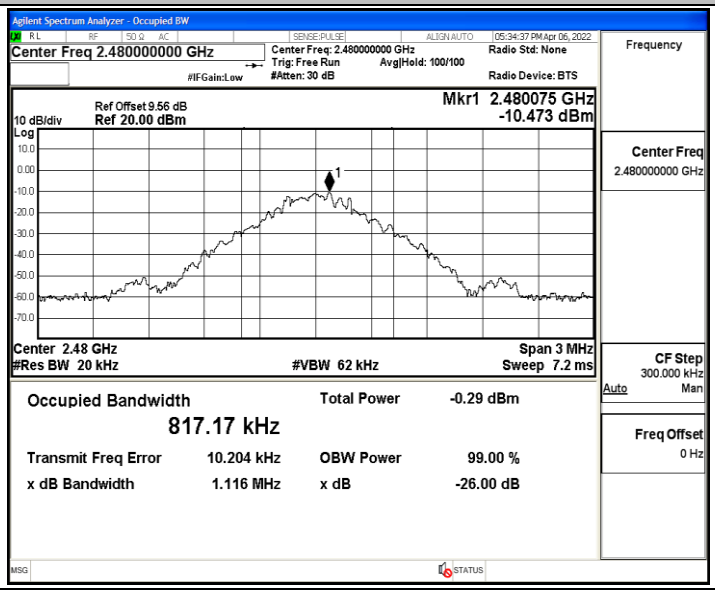
DH5_Ant1_2402



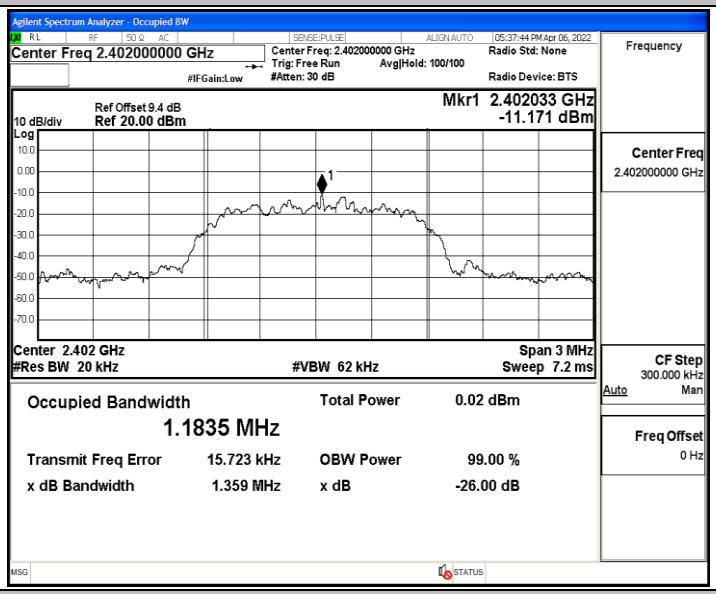
DH5_Ant1_2441



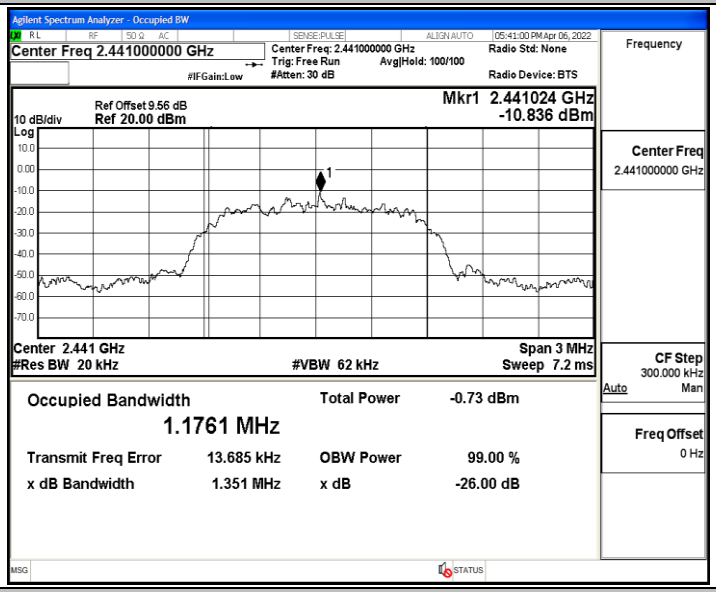
DH5_Ant1_2480



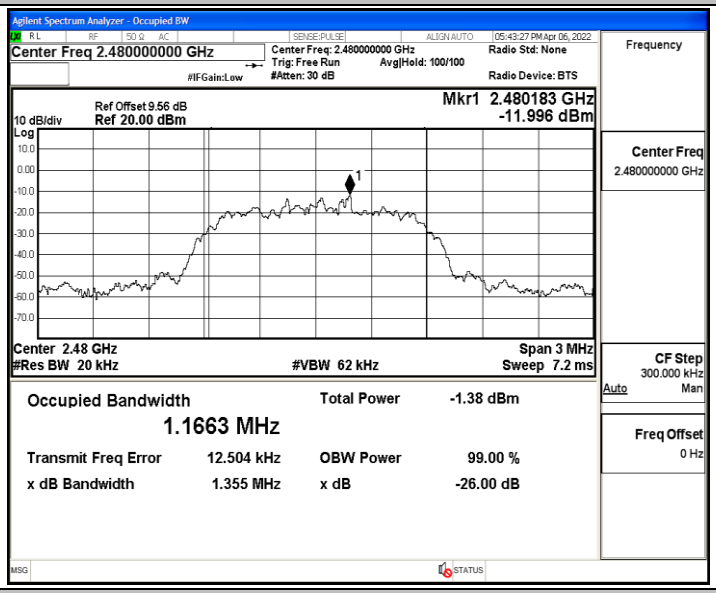
2DH5_Ant1_2402



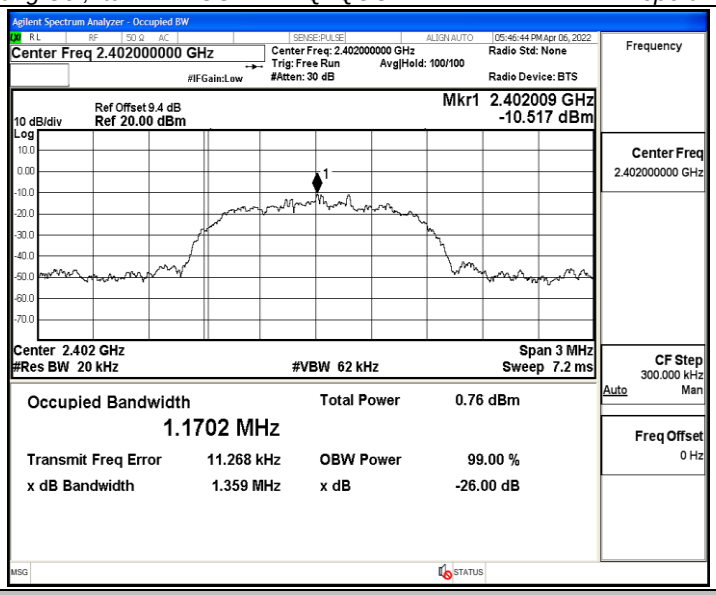
2DH5_Ant1_2441



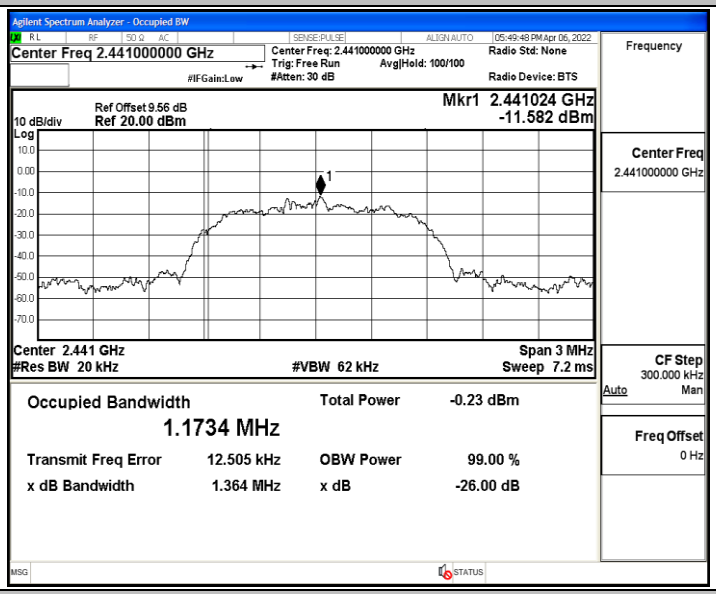
2DH5_Ant1_2480



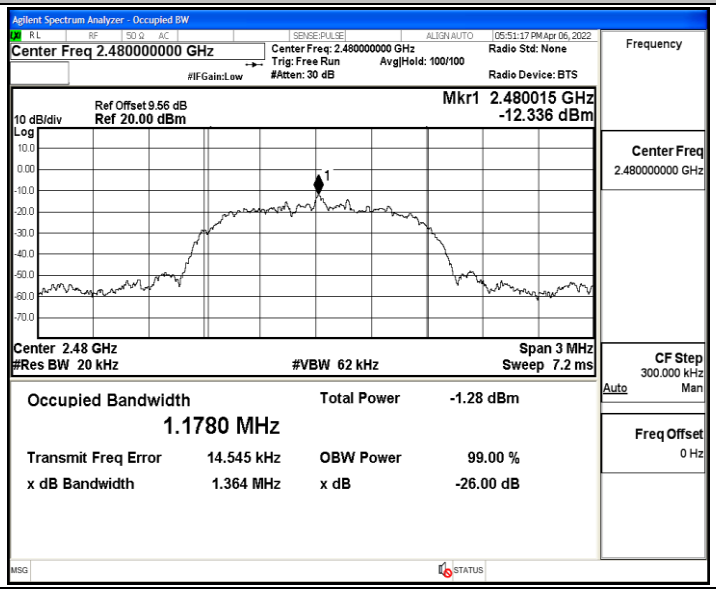
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



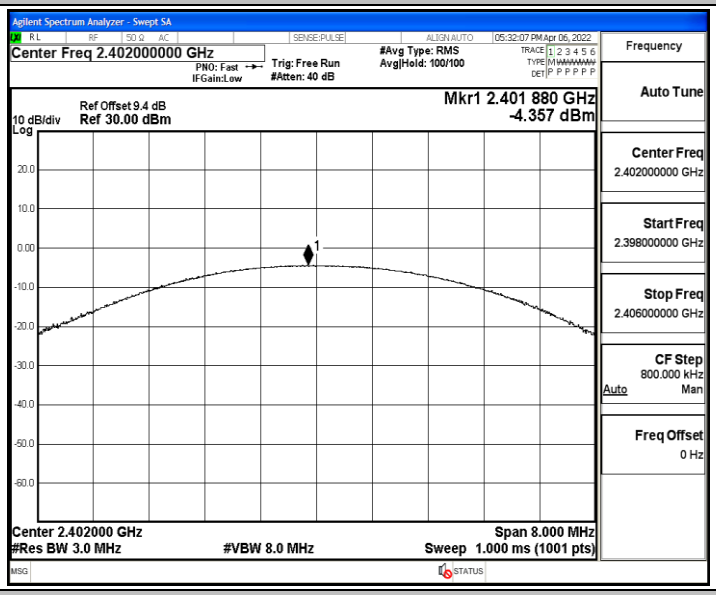
Appendix C: Maximum conducted output power

Test Result

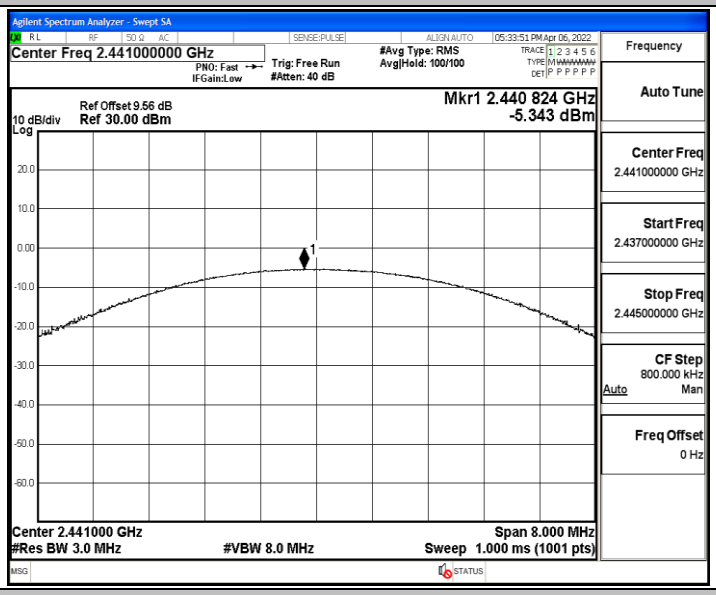
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-4.36	≤30	PASS
		2441	-5.34	≤30	PASS
		2480	-6.4	≤30	PASS
2DH5	Ant1	2402	-3.7	≤20.97	PASS
		2441	-4.71	≤20.97	PASS
		2480	-5.75	≤20.97	PASS
3DH5	Ant1	2402	-3.03	≤20.97	PASS
		2441	-4.19	≤20.97	PASS
		2480	-5.17	≤20.97	PASS

Test Graphs

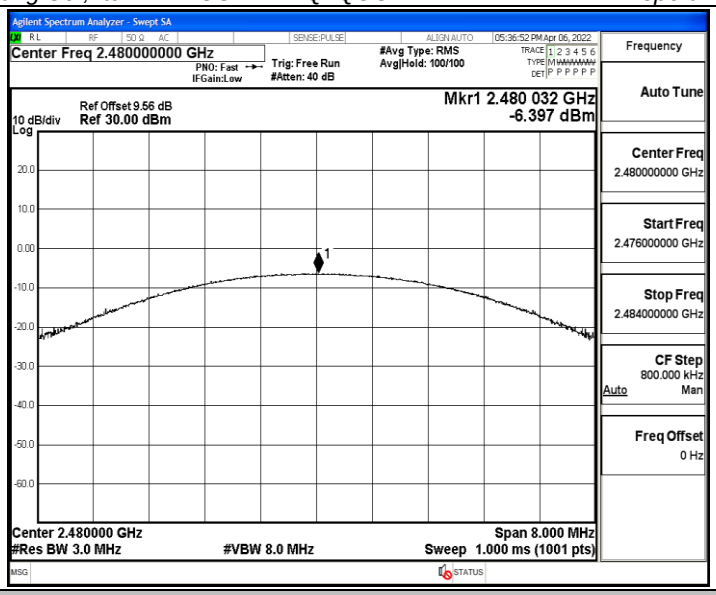
DH5_Ant1_2402



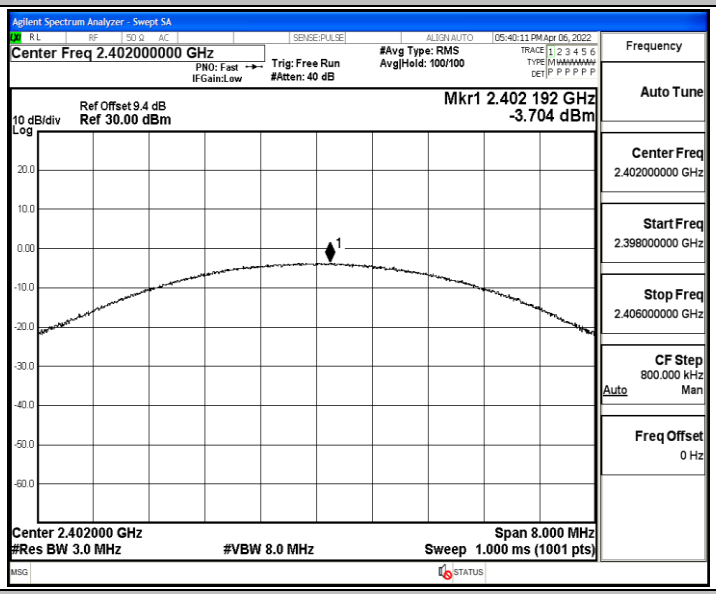
DH5_Ant1_2441



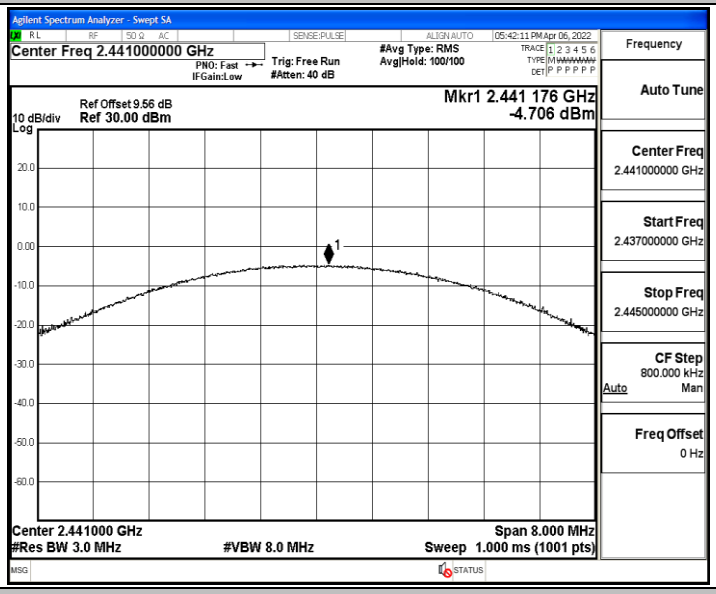
DH5_Ant1_2480



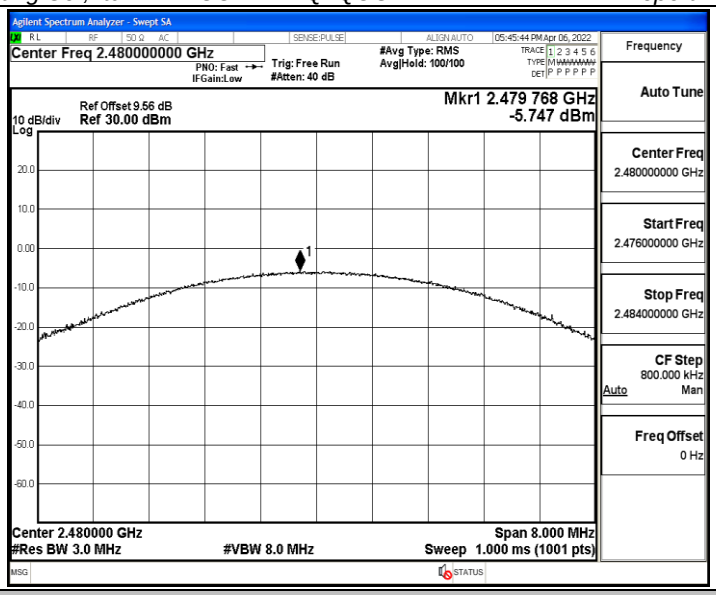
2DH5_Ant1_2402



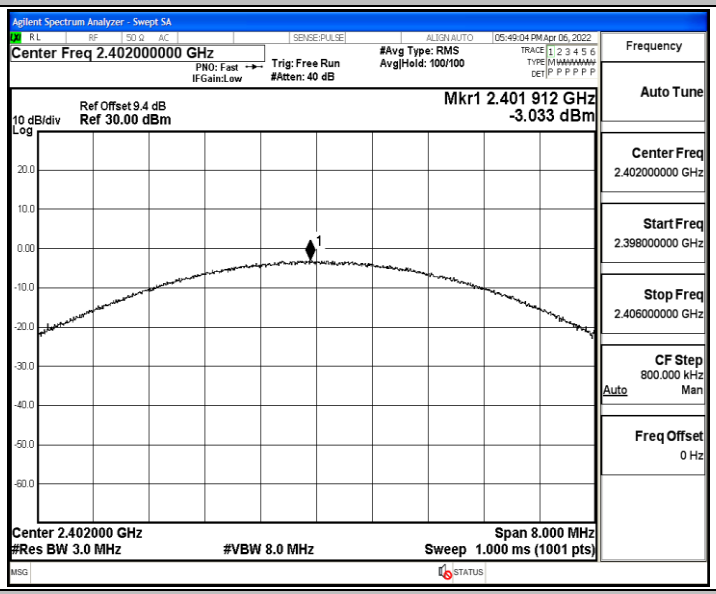
2DH5_Ant1_2441



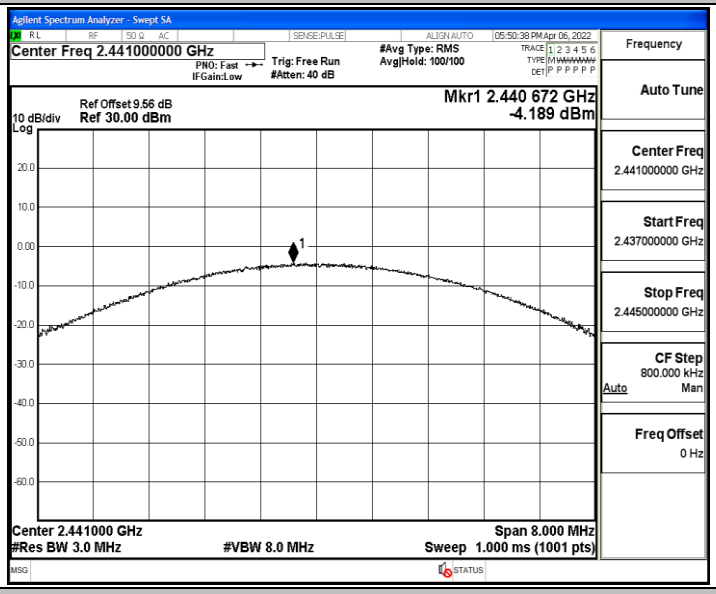
2DH5_Ant1_2480



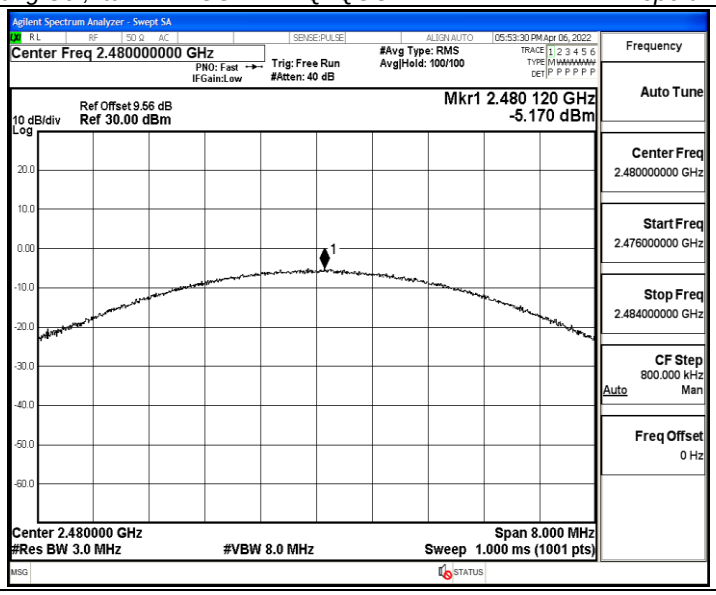
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
05:53:30 PM Apr 06, 2022
Ref Offset 9.56 dB
10 dB/div
Ref 30.00 dBm
Mkr1 2.480 120 GHz
-5.170 dBm
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 8.000 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.484000000 GHz
CF Step
800.000 kHz
Auto
Man
Freq Offset
0 Hz

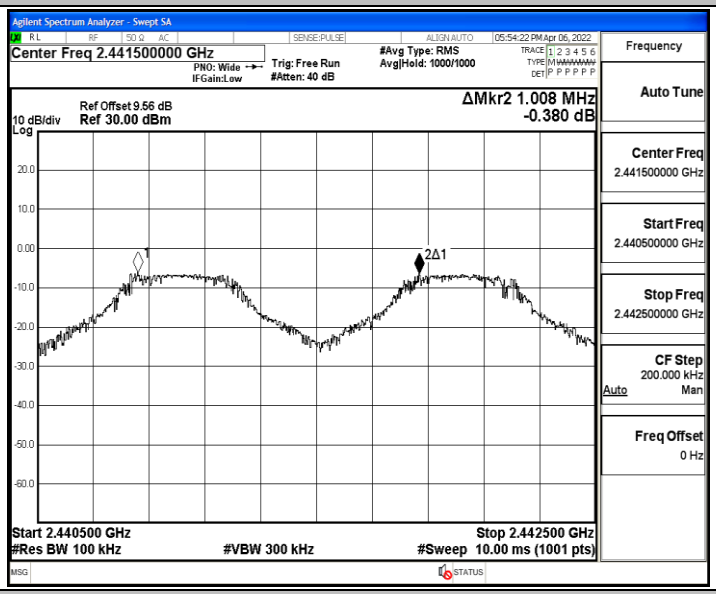
Appendix D: Carrier frequency separation

Test Result

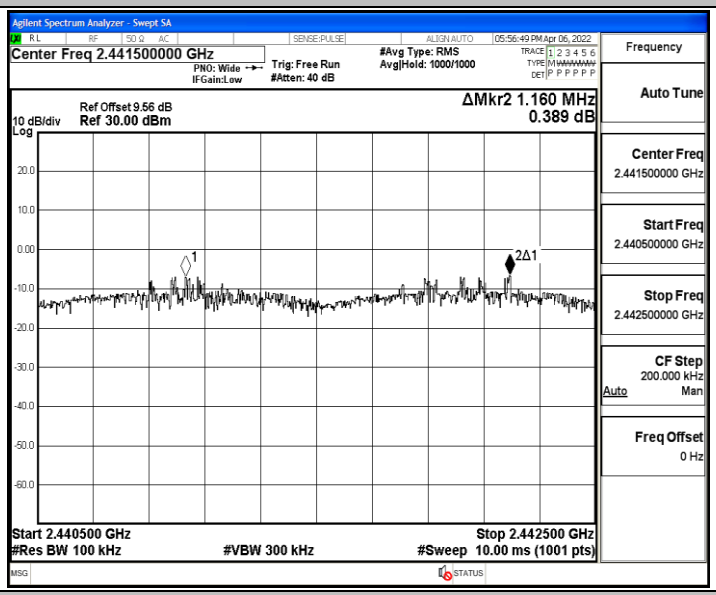
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.008	≥0.939	PASS
2DH5	Ant1	Hop	1.16	≥0.882	PASS
3DH5	Ant1	Hop	0.972	≥0.866	PASS

Test Graphs

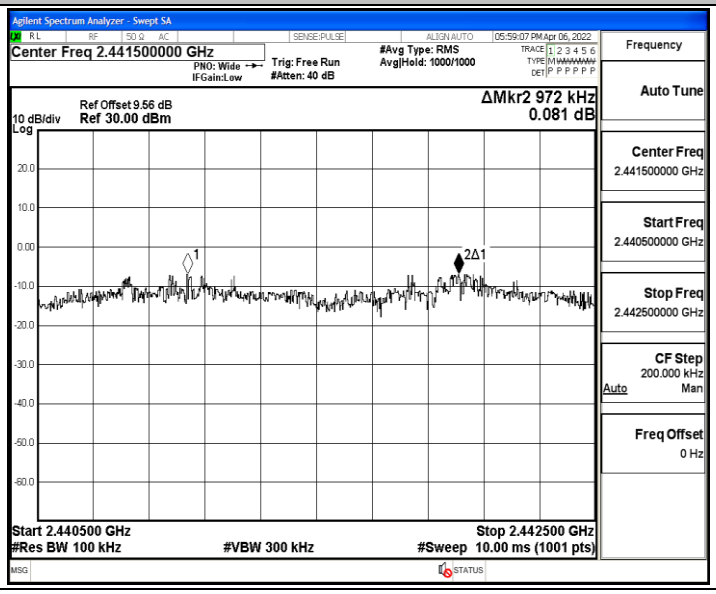
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



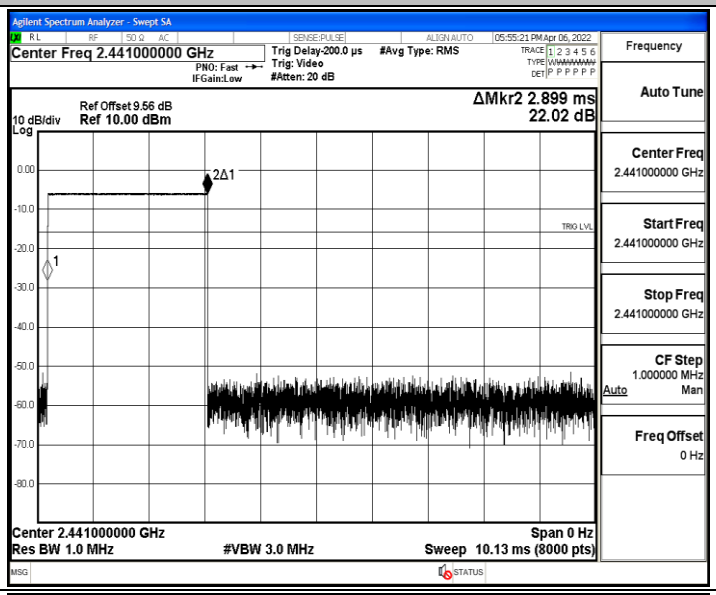
Appendix E: Time of occupancy

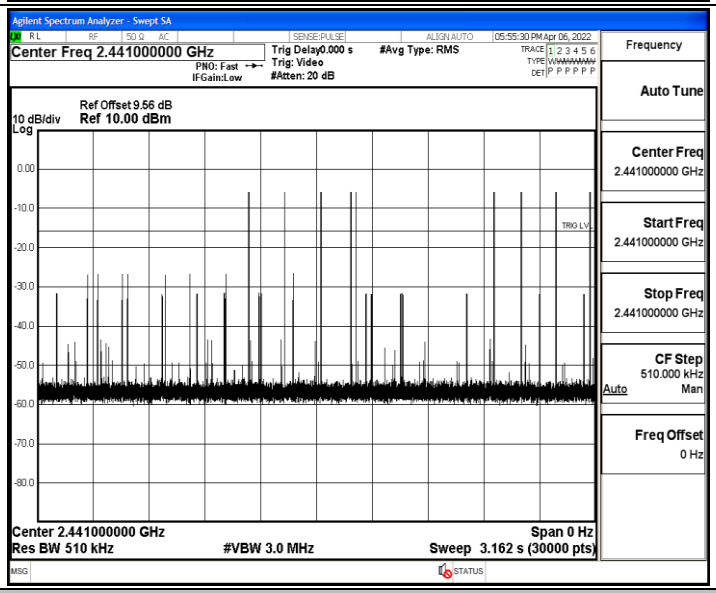
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.90	100	0.29	≤0.4	PASS
2DH5	Ant1	Hop	2.91	80	0.232	≤0.4	PASS
3DH5	Ant1	Hop	2.91	130	0.378	≤0.4	PASS

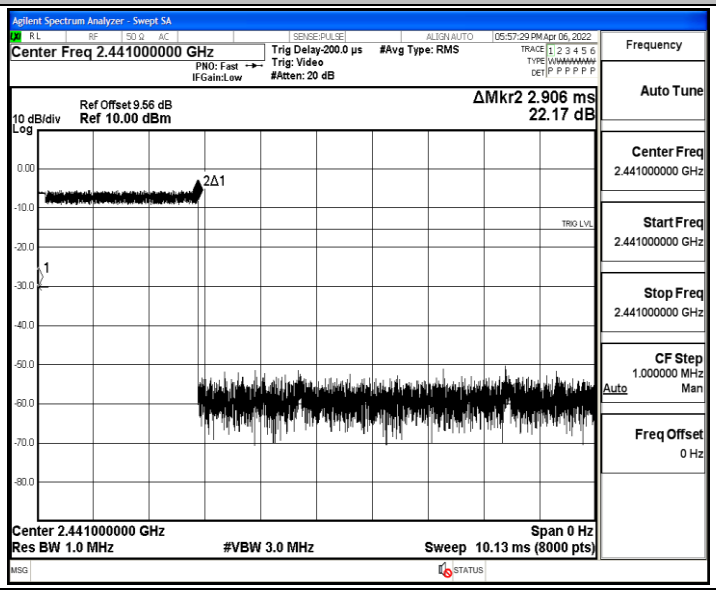
Test Graphs

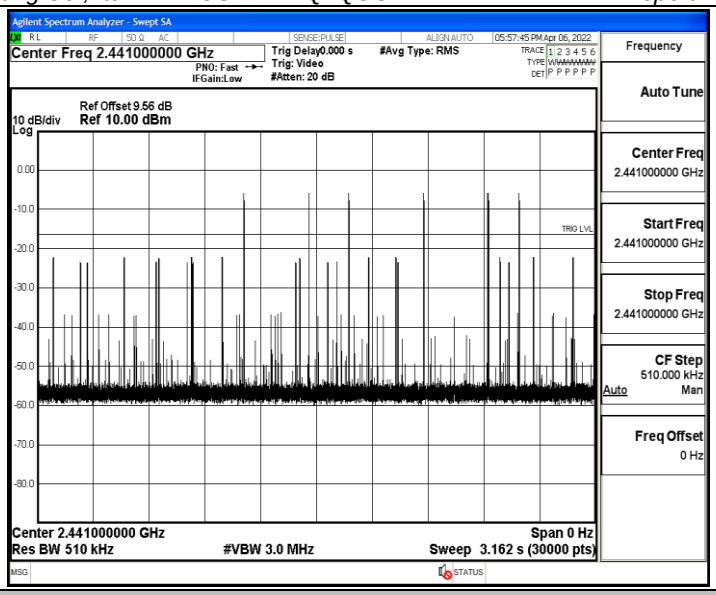
DH5_Ant1_Hop



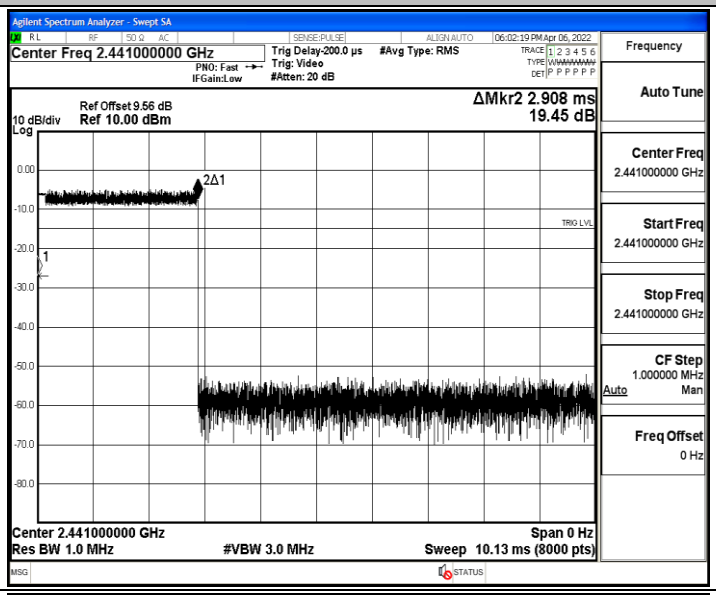


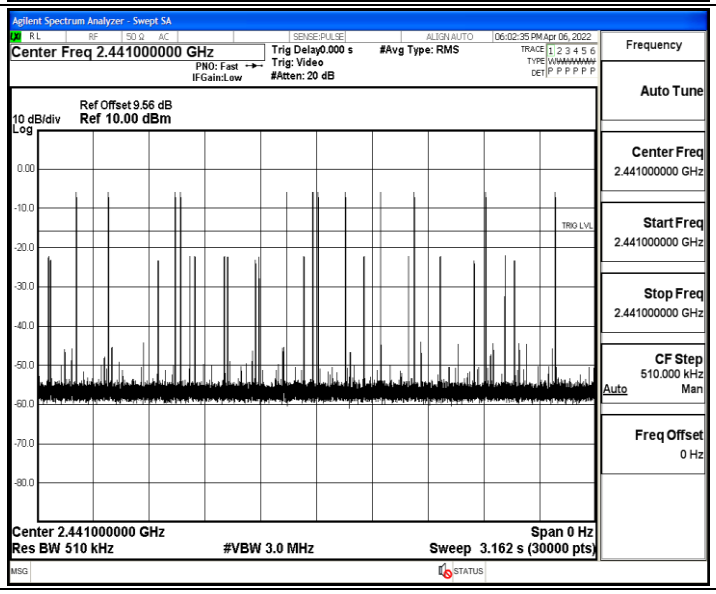
2DH5_Ant1_Hop





3DH5_Ant1_Hop





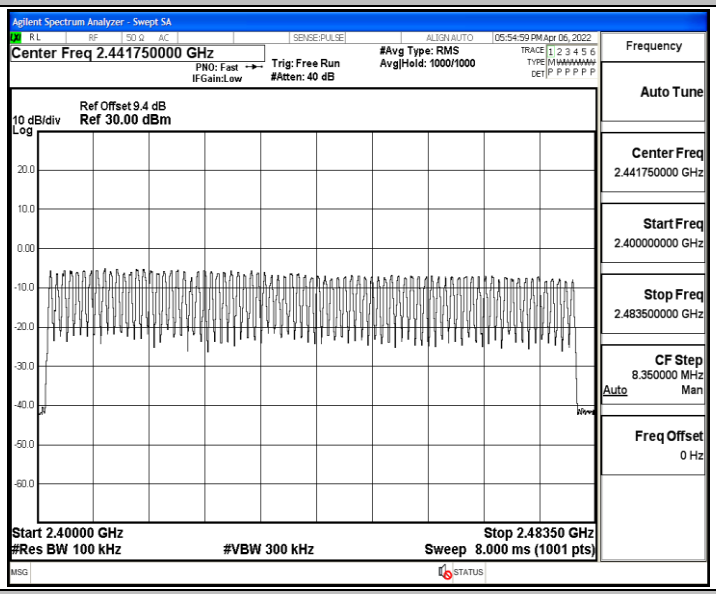
Appendix F: Number of hopping channels

Test Result

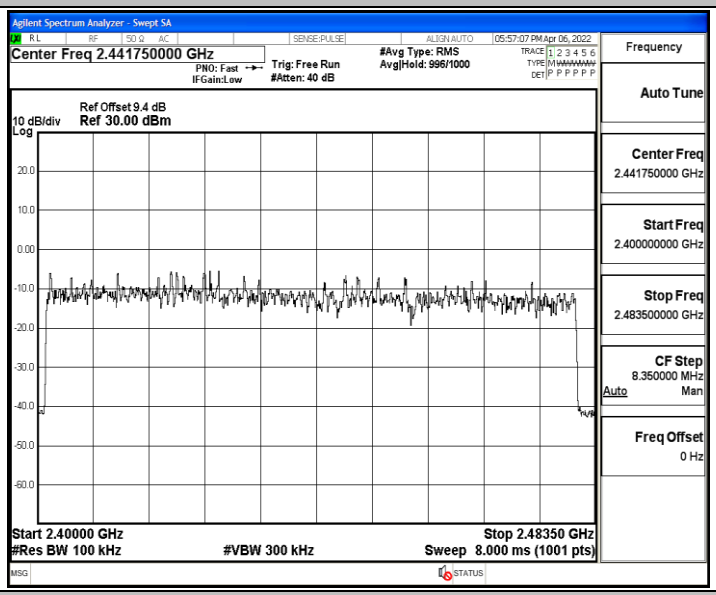
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

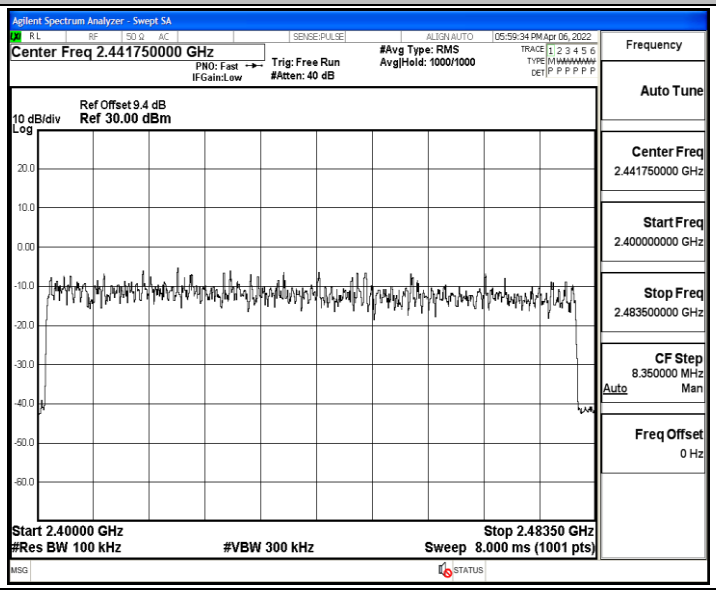
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



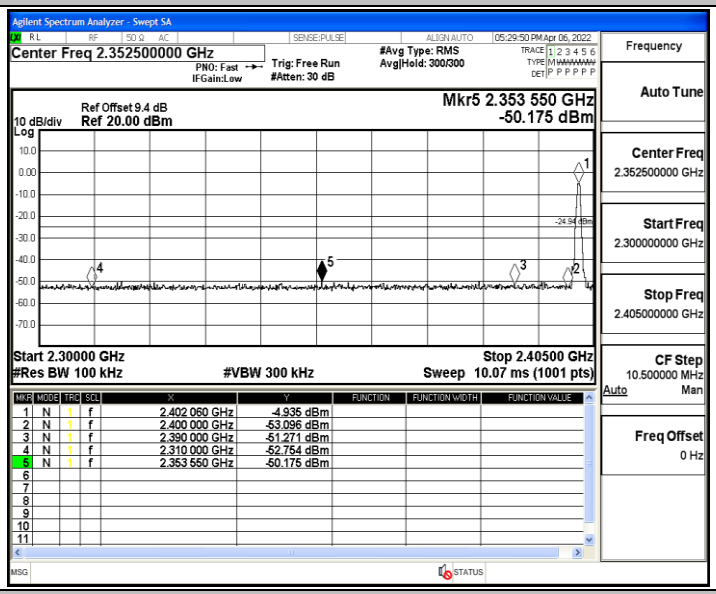
Appendix G: Band edge measurements

Test Result

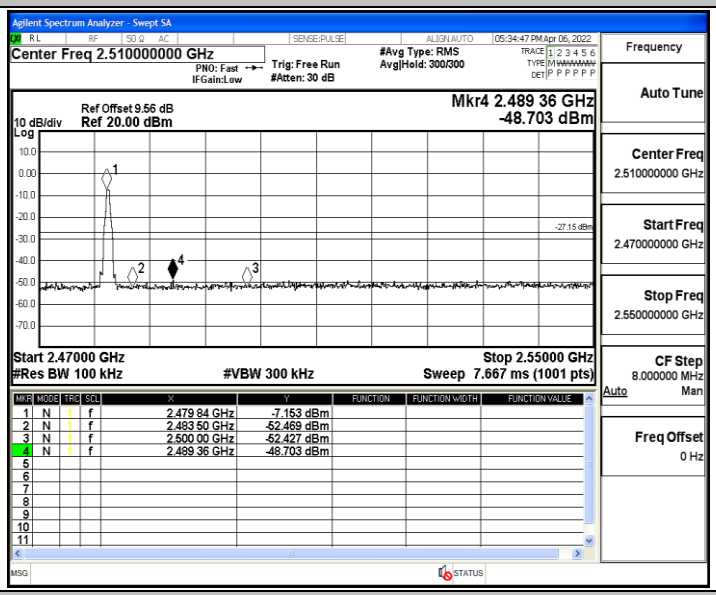
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-4.94	-50.18	≤-24.94	PASS
		High	2480	-7.15	-48.7	≤-27.15	PASS
		Low	Hop_2402	-6.11	-50.54	≤-26.11	PASS
		High	Hop_2480	-7.41	-49.27	≤-27.41	PASS
2DH5	Ant1	Low	2402	-5.60	-50.14	≤-25.6	PASS
		High	2480	-7.42	-49.08	≤-27.42	PASS
		Low	Hop_2402	-9.03	-50.62	≤-29.03	PASS
		High	Hop_2480	-7.64	-49.12	≤-27.64	PASS
3DH5	Ant1	Low	2402	-5.04	-50.21	≤-25.04	PASS
		High	2480	-7.14	-48.63	≤-27.14	PASS
		Low	Hop_2402	-9.54	-50.67	≤-29.54	PASS
		High	Hop_2480	-8.65	-48.95	≤-28.65	PASS

Test Graphs

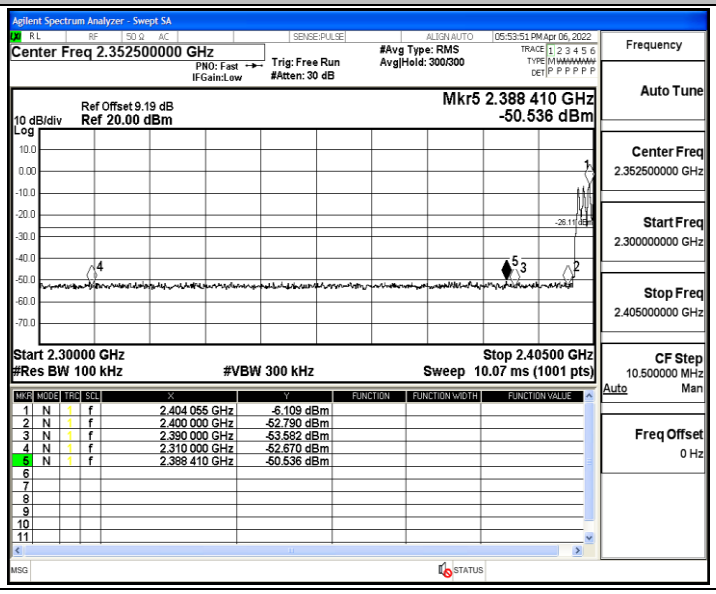
DH5_Ant1_Low_2402



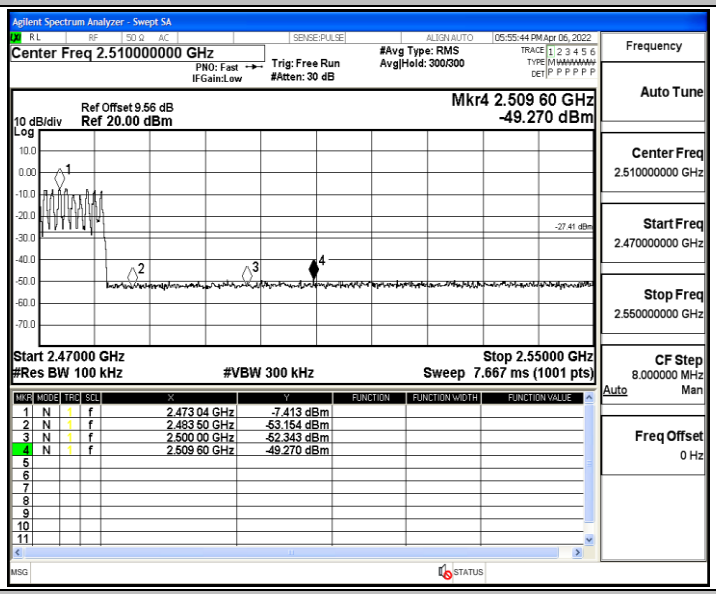
DH5_Ant1_High_2480



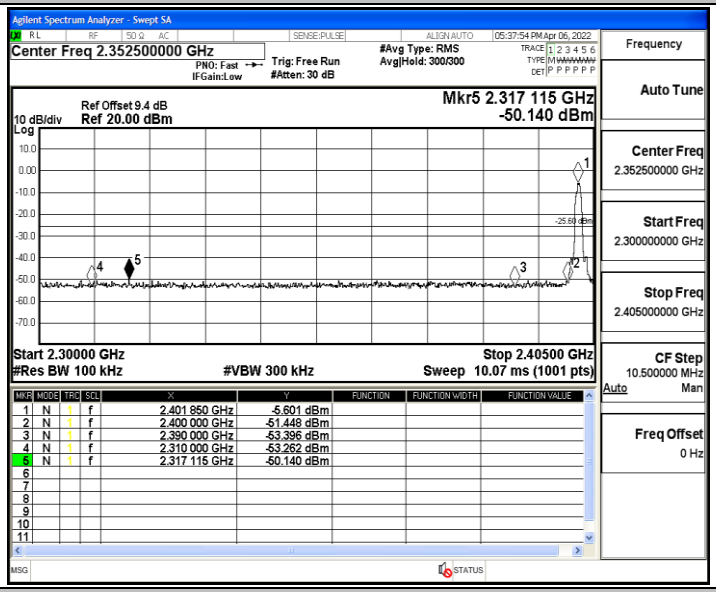
DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402



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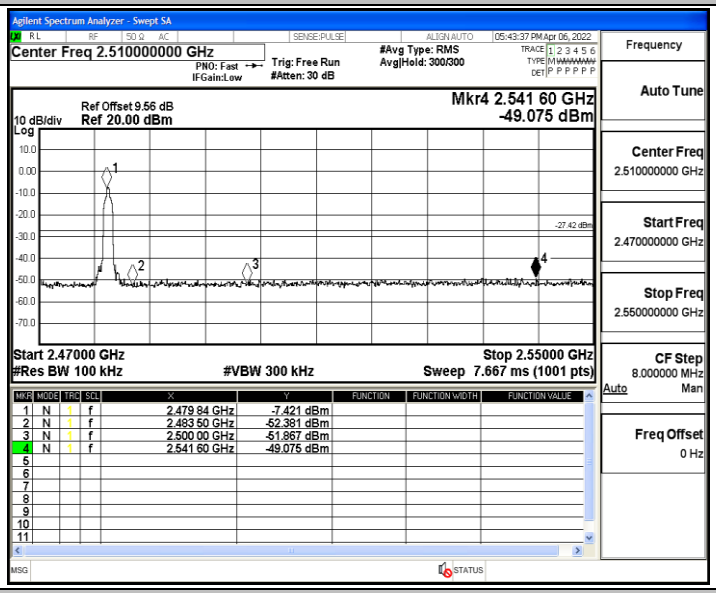

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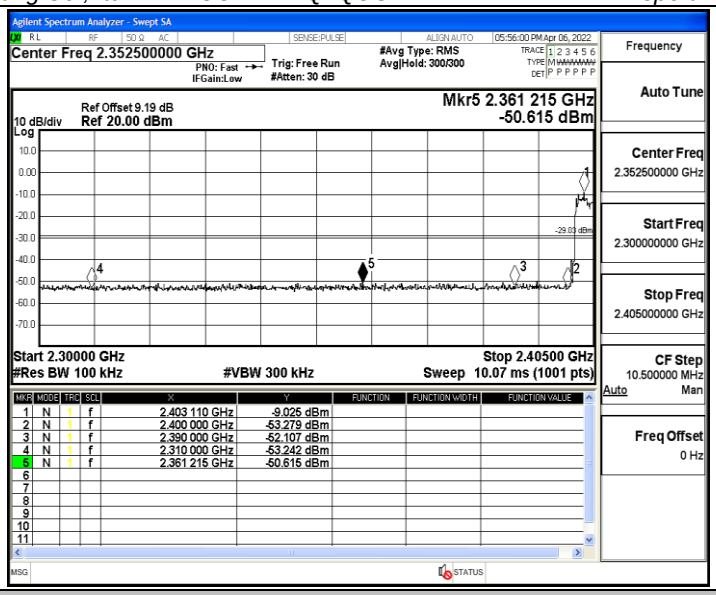

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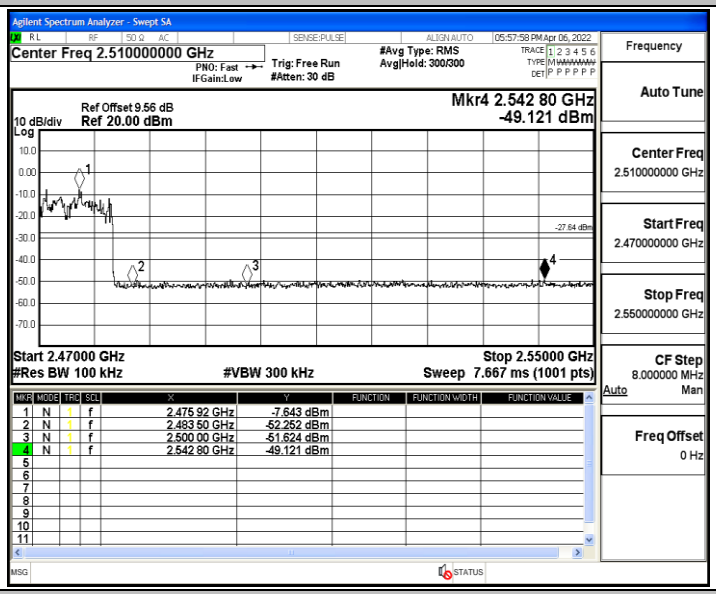
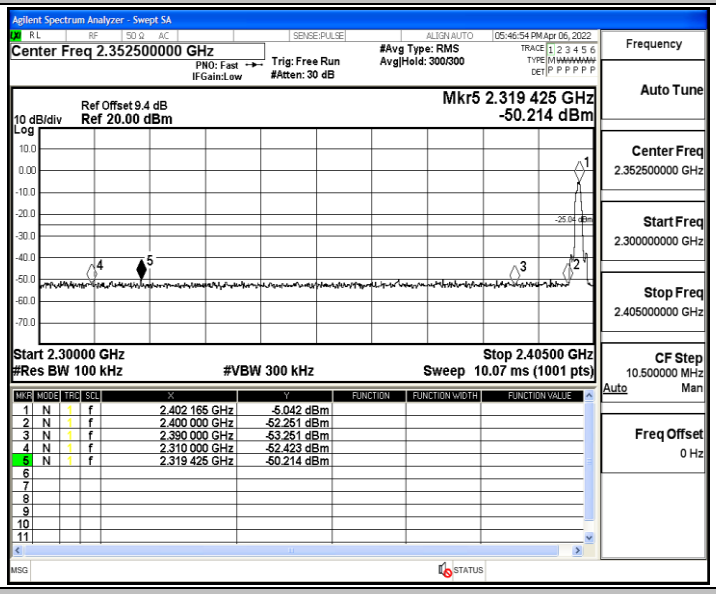


3DH5_Ant1_Low_2402



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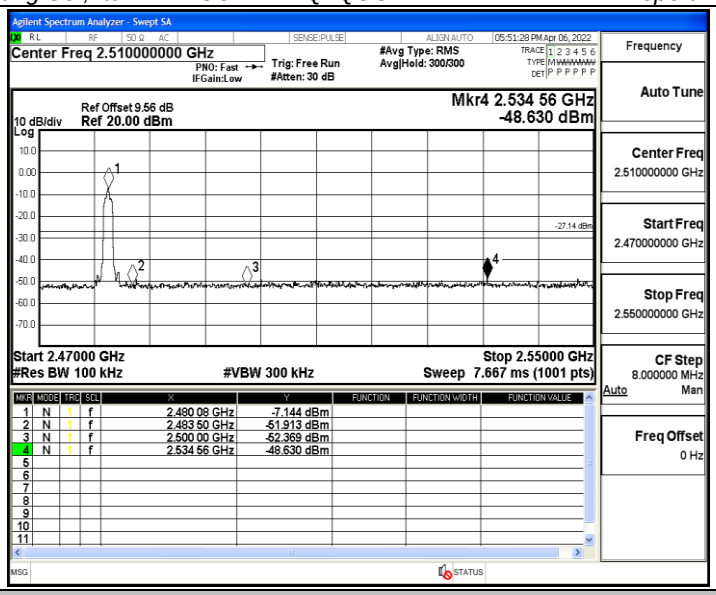

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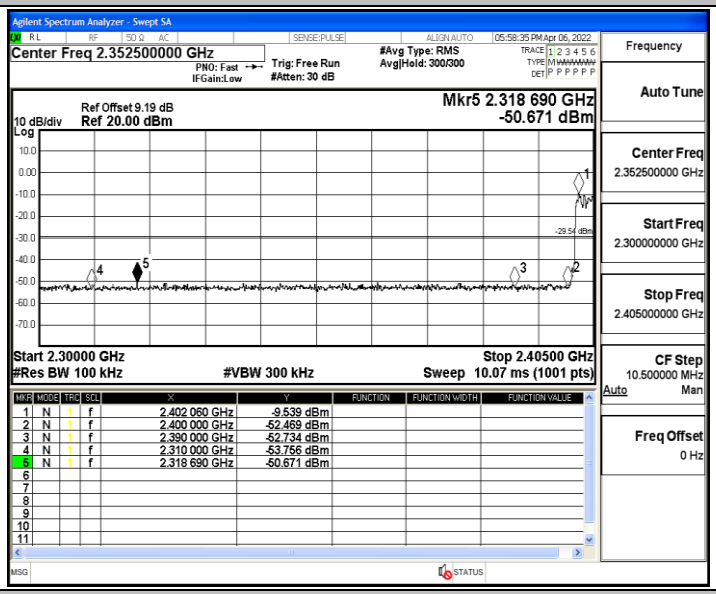
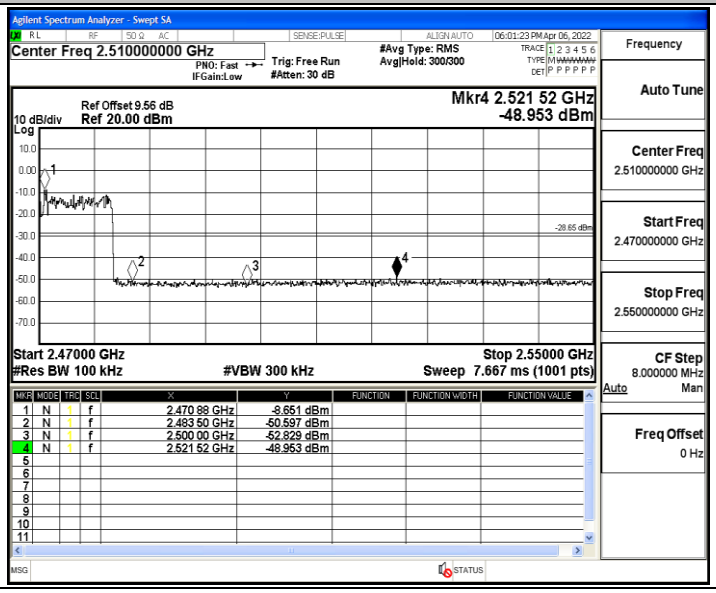


3DH5_Ant1_High_Hop_2480



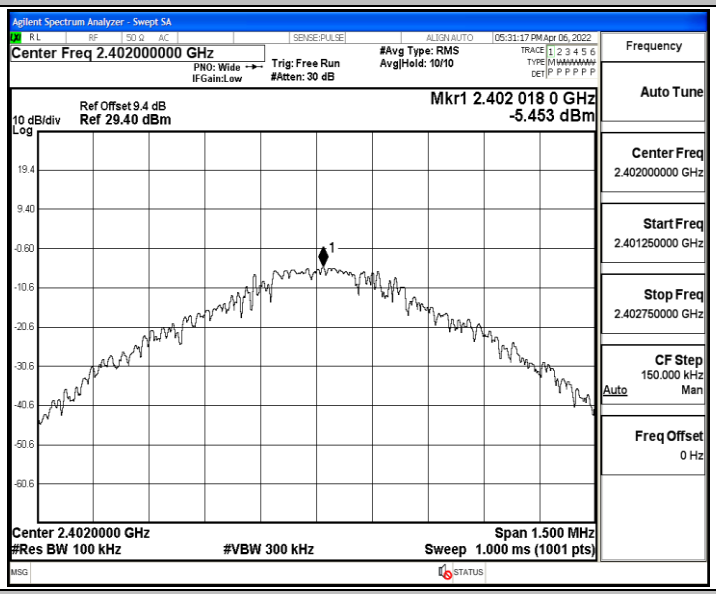
Appendix H: Conducted Spurious Emission

Test Result

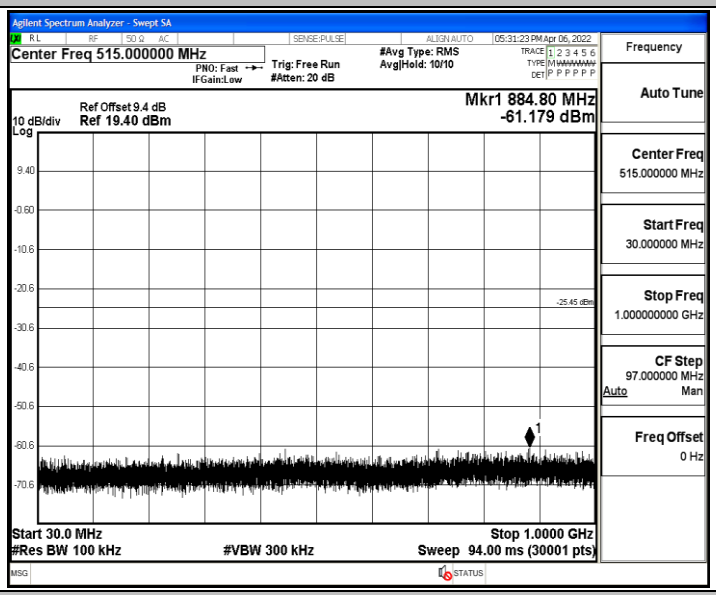
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-5.45	-5.45	---	PASS
			30~1000	-5.45	-61.18	≤-25.45	PASS
			1000~26500	-5.45	-50.94	≤-25.45	PASS
		2441	Reference	-6.69	-6.69	---	PASS
			30~1000	-6.69	-61.23	≤-26.69	PASS
			1000~26500	-6.69	-49.99	≤-26.69	PASS
		2480	Reference	-7.62	-7.62	---	PASS
			30~1000	-7.62	-60.85	≤-27.62	PASS
			1000~26500	-7.62	-52	≤-27.62	PASS
2DH5	Ant1	2402	Reference	-7.57	-7.57	---	PASS
			30~1000	-7.57	-60.97	≤-27.57	PASS
			1000~26500	-7.57	-50.07	≤-27.57	PASS
		2441	Reference	-8.63	-8.63	---	PASS
			30~1000	-8.63	-60.5	≤-28.63	PASS
			1000~26500	-8.63	-51.5	≤-28.63	PASS
		2480	Reference	-7.91	-7.91	---	PASS
			30~1000	-7.91	-61.16	≤-27.91	PASS
			1000~26500	-7.91	-51.78	≤-27.91	PASS
3DH5	Ant1	2402	Reference	-9.08	-9.08	---	PASS
			30~1000	-9.08	-61.06	≤-29.08	PASS
			1000~26500	-9.08	-49.9	≤-29.08	PASS
		2441	Reference	-10.41	-10.41	---	PASS
			30~1000	-10.41	-61.61	≤-30.41	PASS
			1000~26500	-10.41	-51.21	≤-30.41	PASS
		2480	Reference	-11.29	-11.29	---	PASS
			30~1000	-11.29	-60.72	≤-31.29	PASS
			1000~26500	-11.29	-50.93	≤-31.29	PASS

Test Graphs

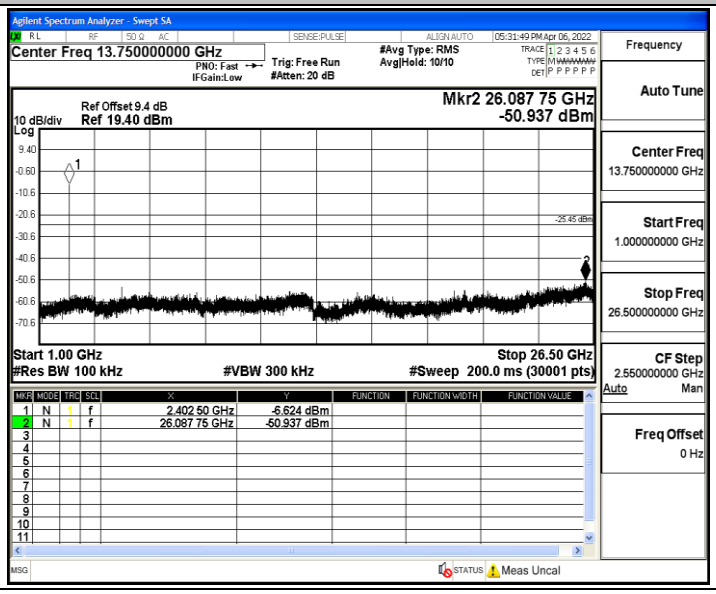
DH5_Ant1_2402_0~Reference



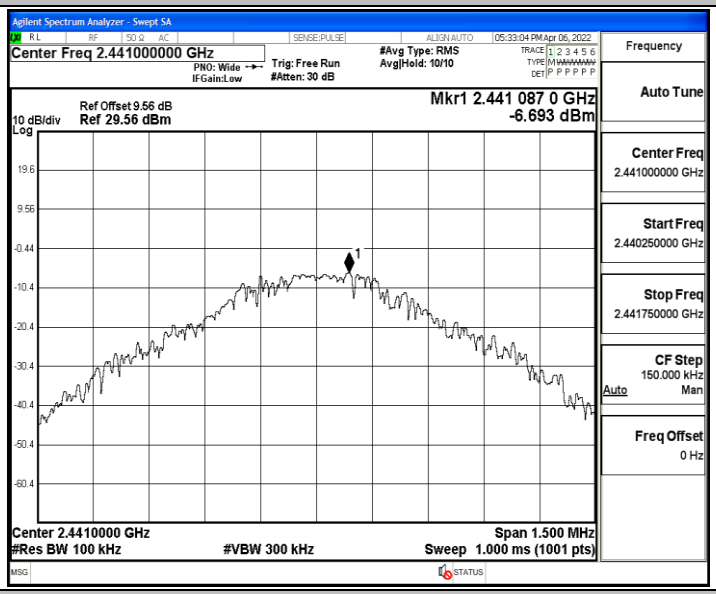
DH5_Ant1_2402_30~1000



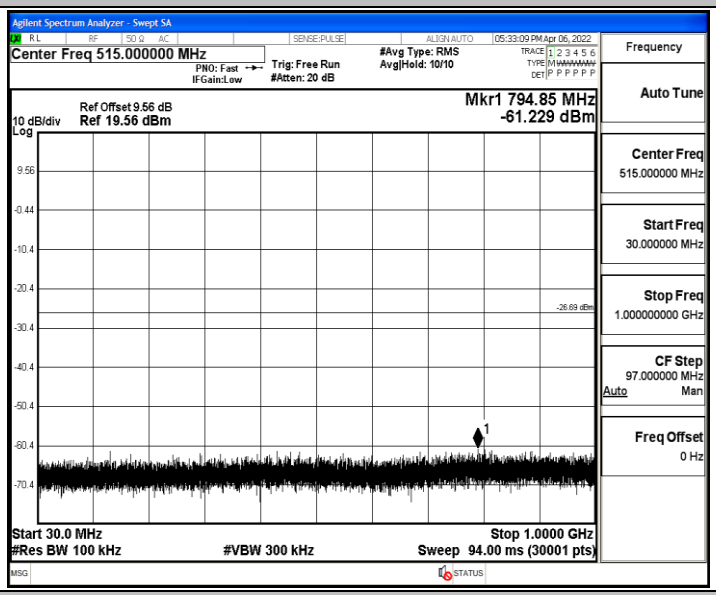
DH5_Ant1_2402_1000~26500



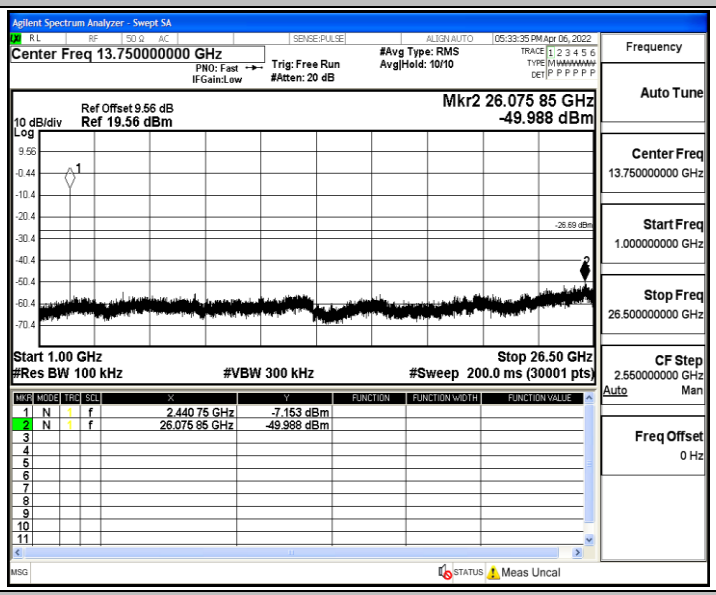
DH5_Ant1_2441_0~Reference



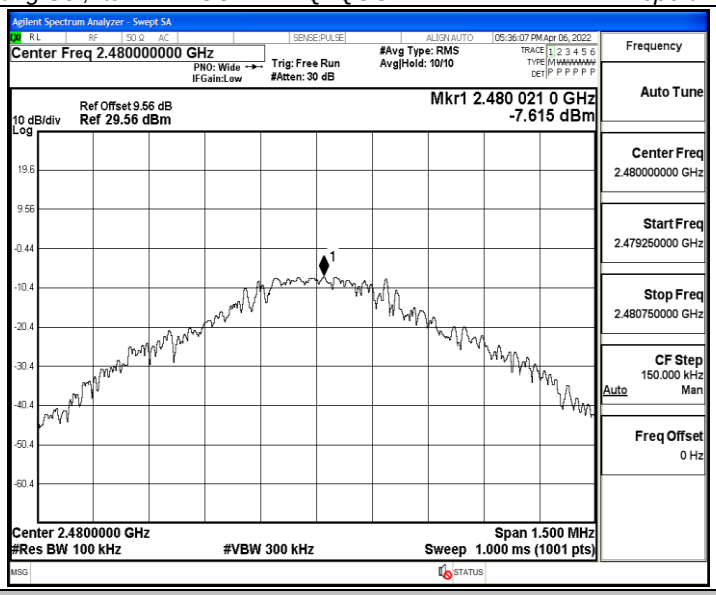
DH5_Ant1_2441_30~1000



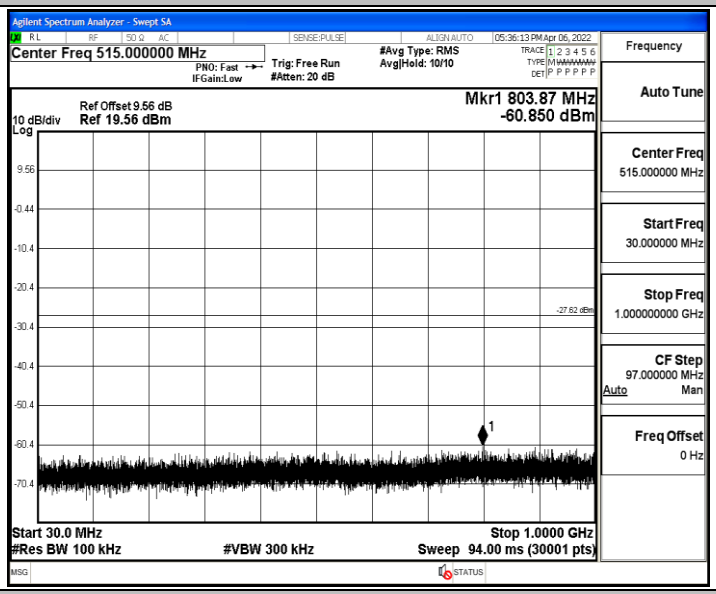
DH5_Ant1_2441_1000~26500



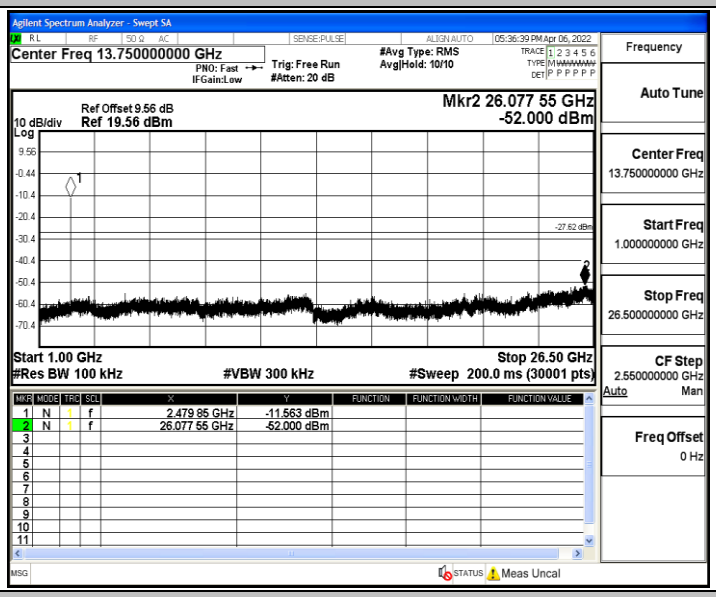
DH5_Ant1_2480_0~Reference



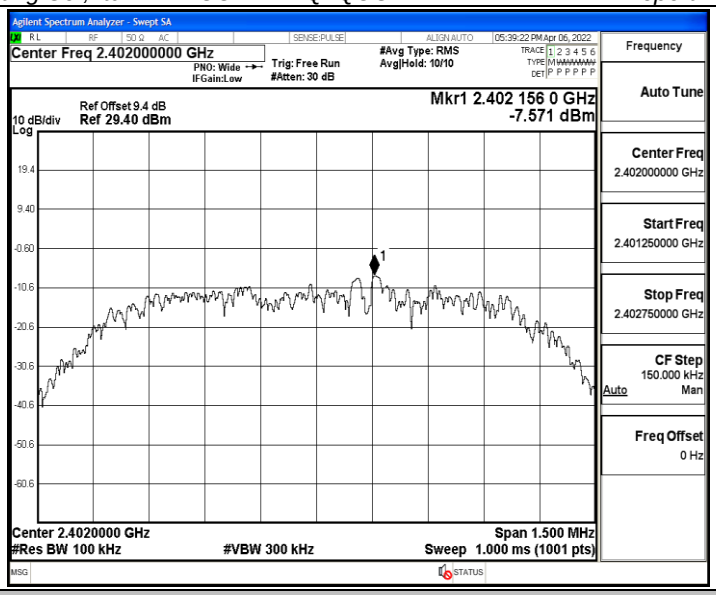
DH5_Ant1_2480_30~1000



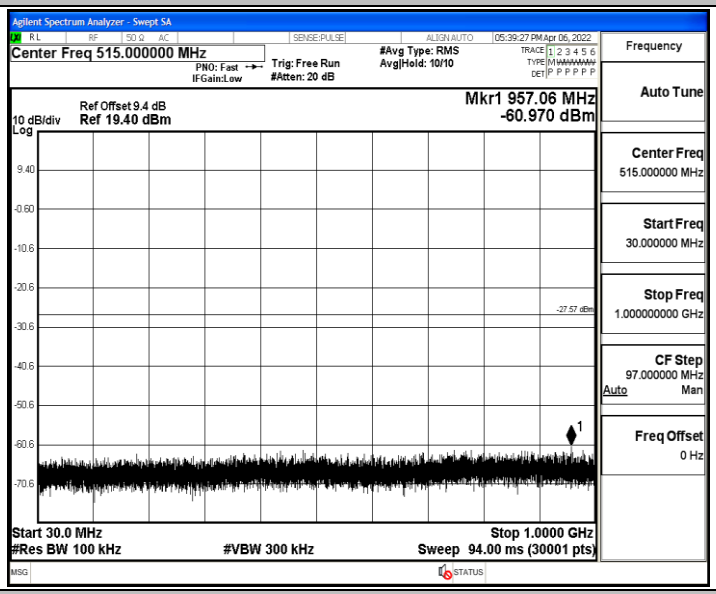
DH5_Ant1_2480_1000~26500



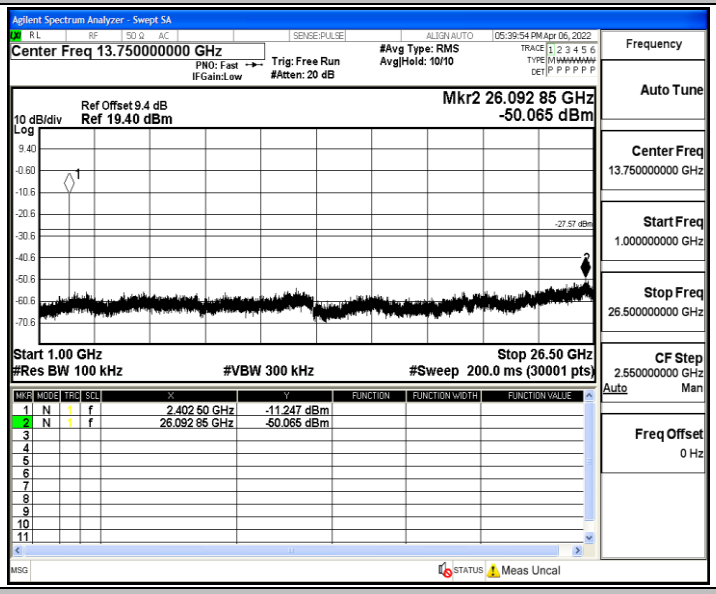
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500



2DH5_Ant1_2441_0~Reference