Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.771	2401.559	2402.330	---	---
		2441	0.621	2440.715	2441.336	---	---
		2480	0.807	2479.553	2480.360	---	---
2DH5	Ant1	2402	1.278	2401.358	2402.636	---	---
		2441	1.242	2440.361	2441.603	---	---
		2480	1.245	2479.361	2480.606	---	---
3DH5	Ant1	2402	1.254	2401.355	2402.609	---	---
		2441	1.275	2440.352	2441.627	---	---
		2480	1.278	2479.346	2480.624	---	---

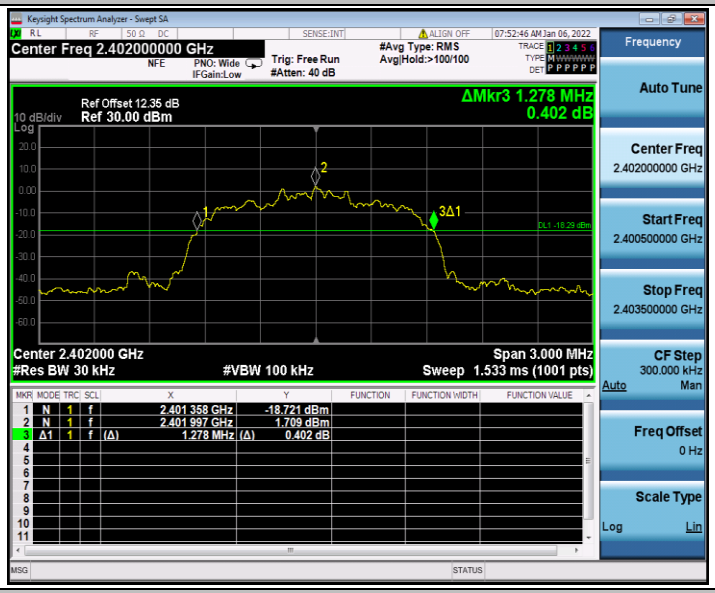
Test Graphs

DH5_Ant1_2402

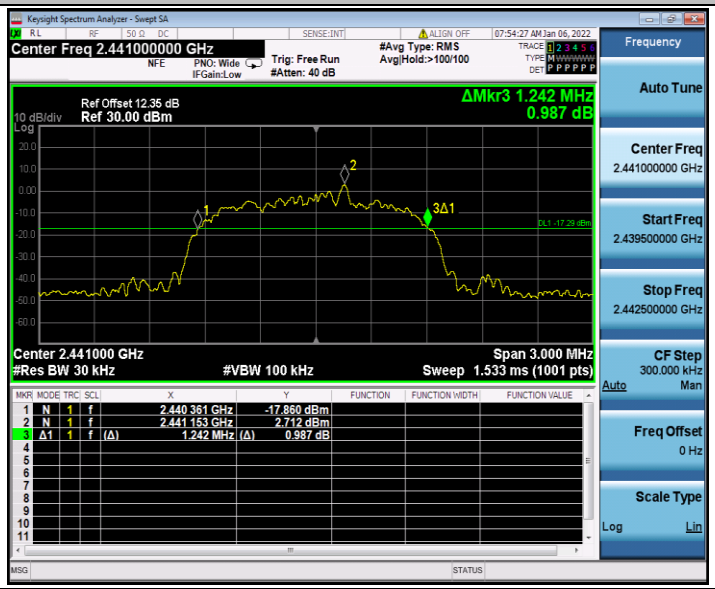
DH5_Ant1_2441

DH5_Ant1_2480

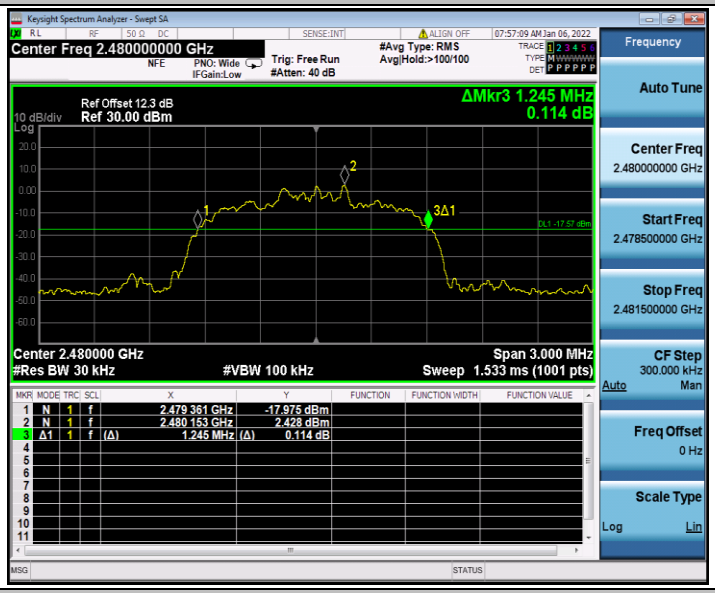
2DH5_Ant1_2402



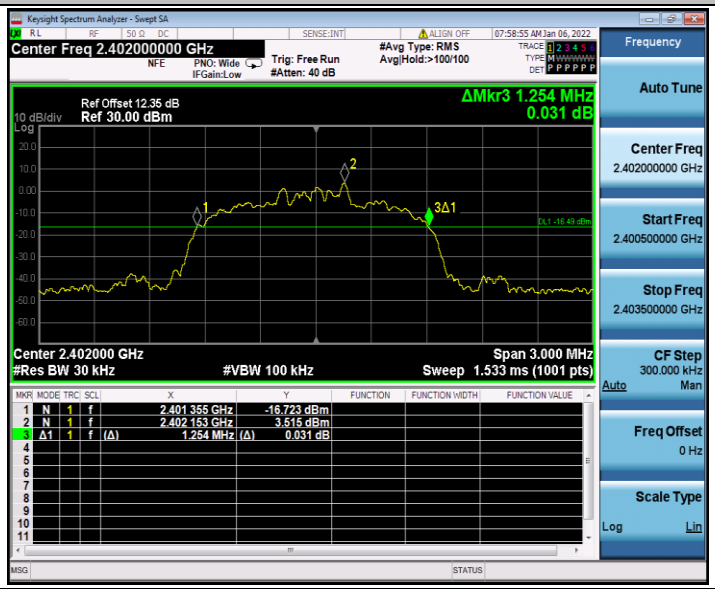
2DH5_Ant1_2441



2DH5_Ant1_2480

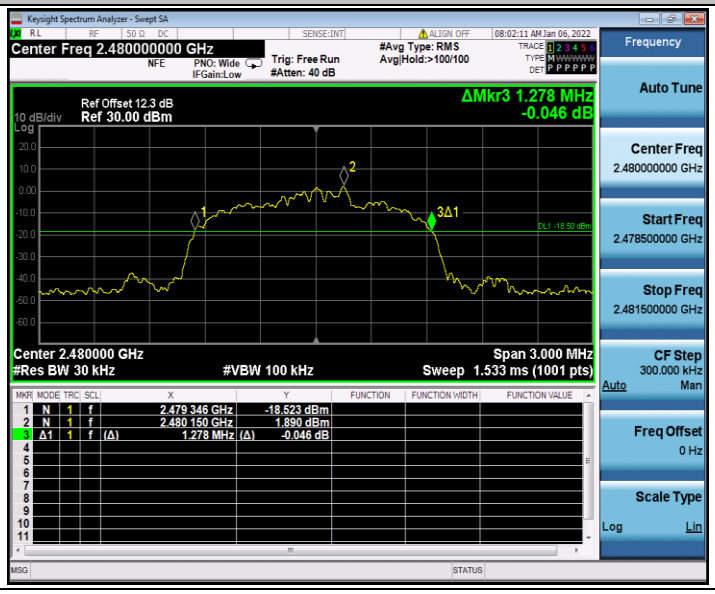


3DH5_Ant1_2402



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	0.75563	2401.631	2402.386	---	---
		2441	0.81538	2440.579	2441.394	---	---
		2480	0.88037	2479.535	2480.416	---	---
2DH5	Ant1	2402	1.1600	2401.407	2402.567	---	---
		2441	1.1684	2440.403	2441.571	---	---
		2480	1.1802	2479.399	2480.579	---	---
3DH5	Ant1	2402	1.1614	2401.408	2402.570	---	---
		2441	1.1670	2440.409	2441.576	---	---
		2480	1.1642	2479.413	2480.577	---	---

Test Graphs

DH5_Ant1_2402

DH5_Ant1_2441

DH5_Ant1_2480

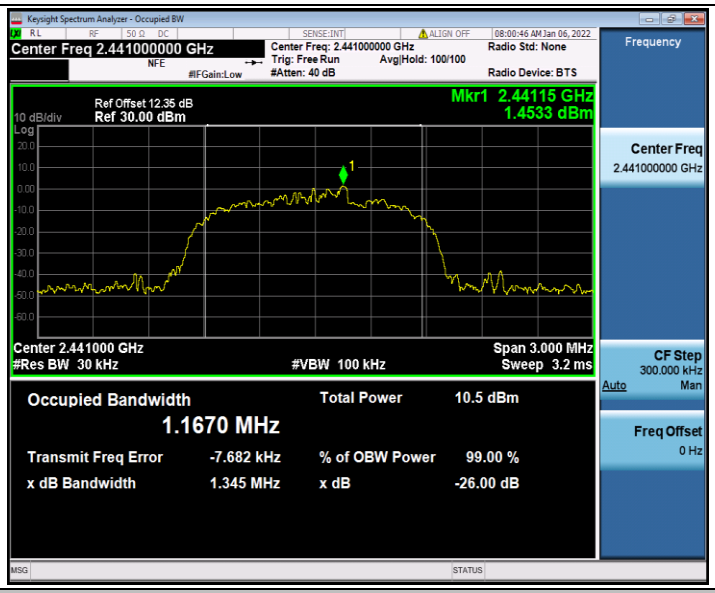
2DH5_Ant1_2402

2DH5_Ant1_2441

2DH5_Ant1_2480

3DH5_Ant1_2402

3DH5_Ant1_2441



3DH5_Ant1_2480

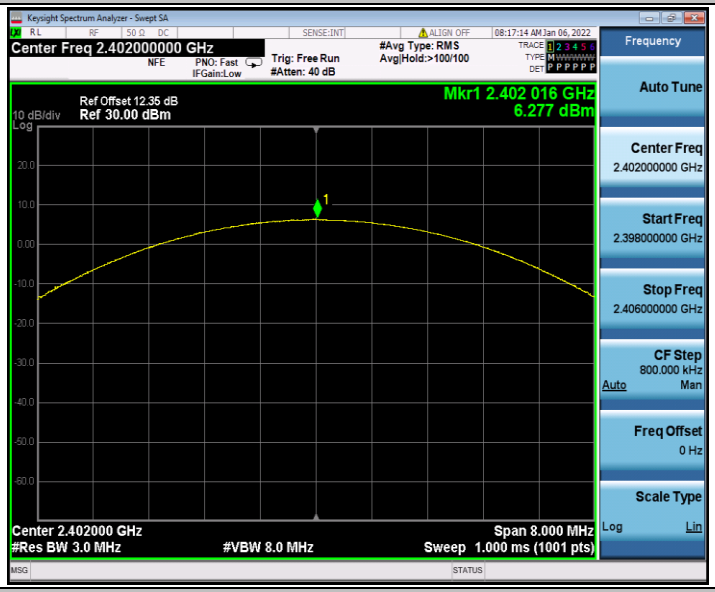
Appendix C: Maximum conducted output power

Test Result Peak

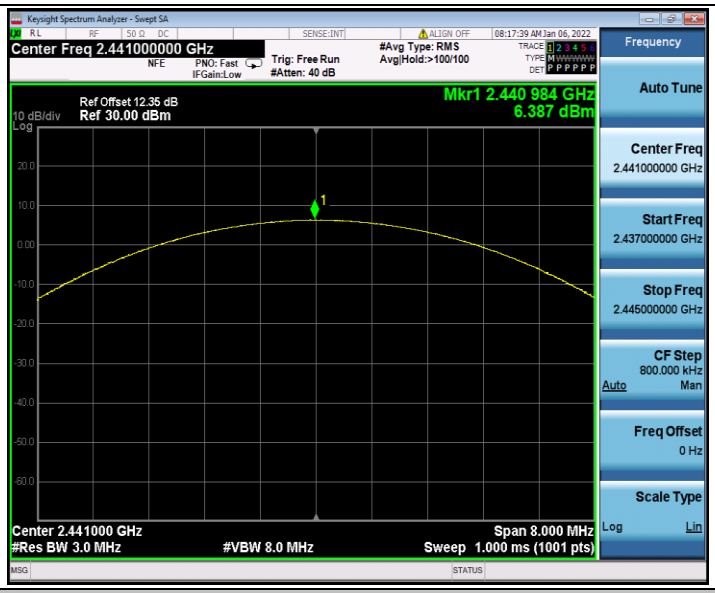
Test Mode	Antenna	Channel	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	6.24	≤20.97	PASS
		2441	6.39	≤20.97	PASS
		2480	6.13	≤20.97	PASS
2DH5	Ant1	2402	6.12	≤20.97	PASS
		2441	6.19	≤20.97	PASS
		2480	6.03	≤20.97	PASS
3DH5	Ant1	2402	6.17	≤20.97	PASS
		2441	6.26	≤20.97	PASS
		2480	6.04	≤20.97	PASS

Test Graphs

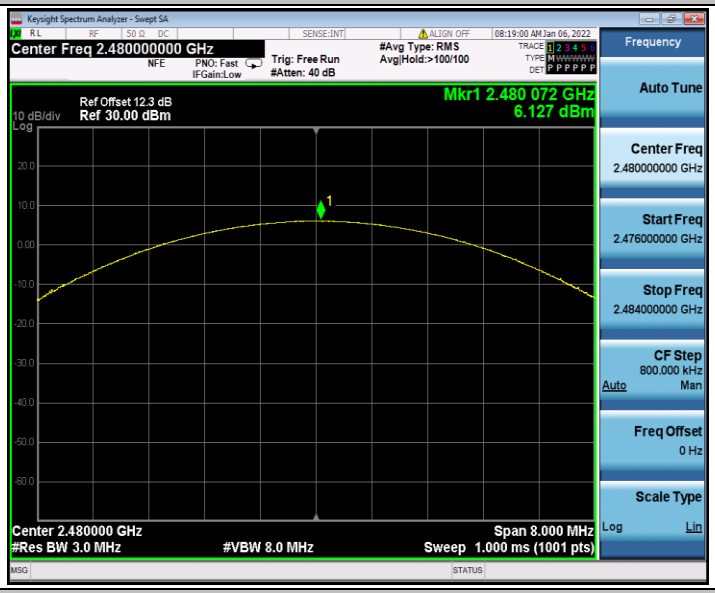
DH5_Ant1_2402



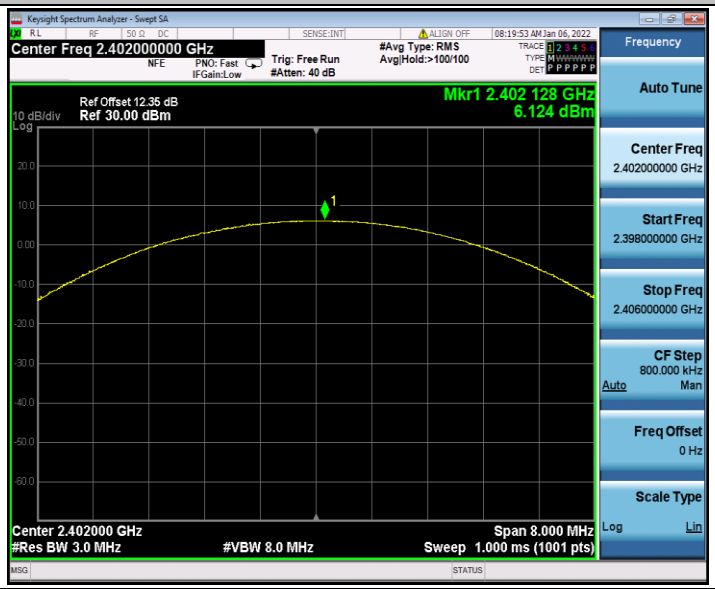
DH5_Ant1_2441



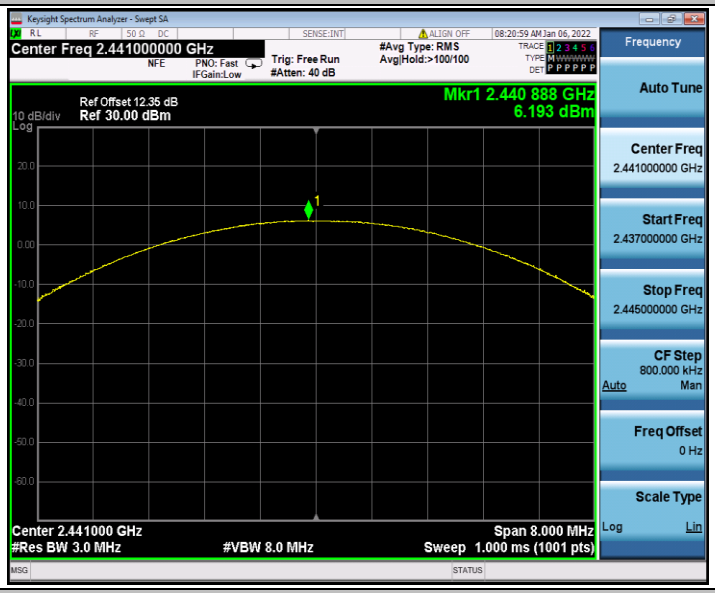
DH5_Ant1_2480



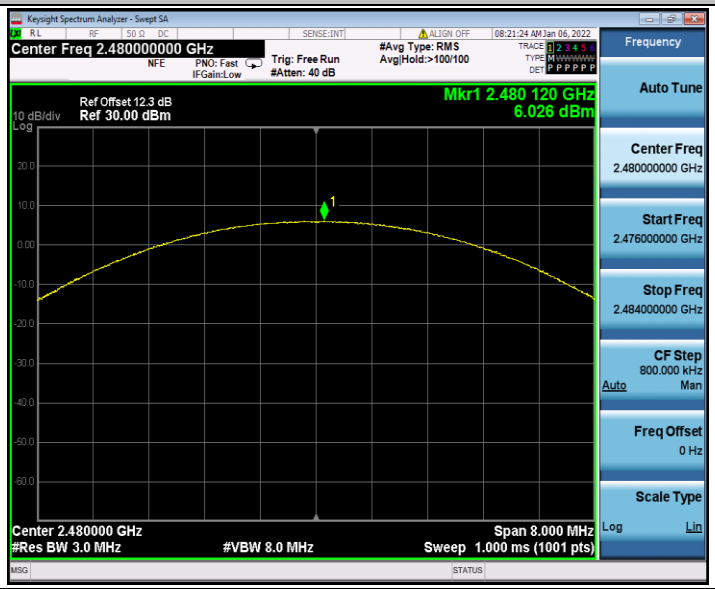
2DH5_Ant1_2402



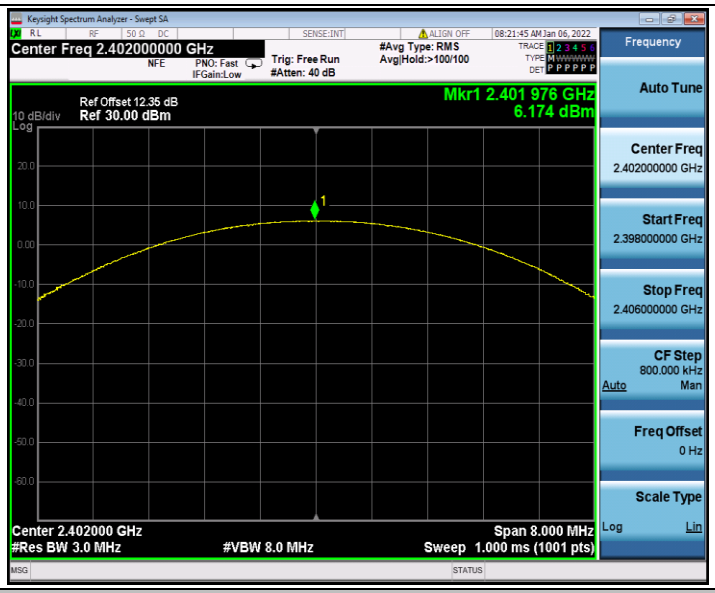
2DH5_Ant1_2441



2DH5_Ant1_2480

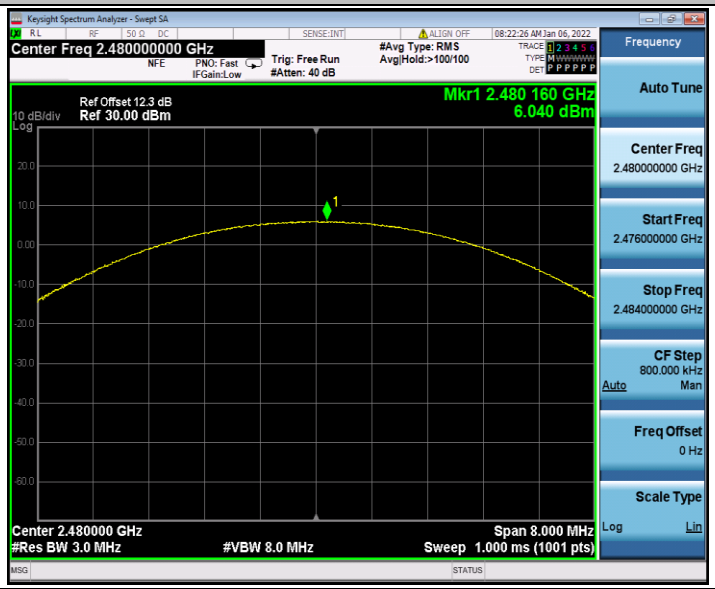


3DH5_Ant1_2402



3DH5_Ant1_2441

3DH5_Ant1_2480

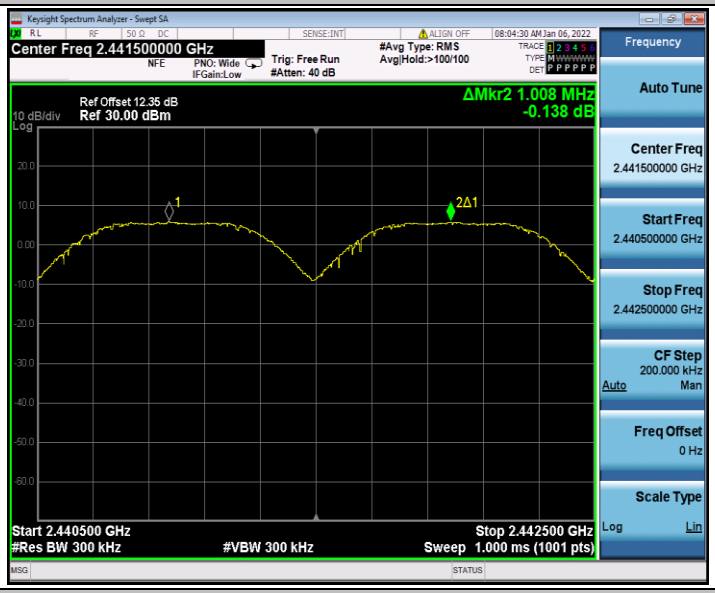
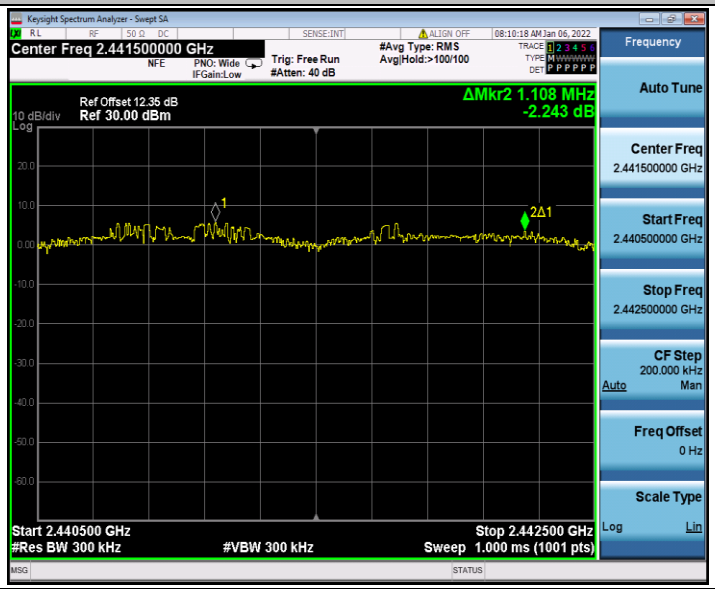


Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	Hop	1.008	≥0.807	PASS
2DH5	Ant1	Hop	1.108	≥0.852	PASS
3DH5	Ant1	Hop	1.028	≥0.852	PASS

Test Graphs

DH5_Ant1_Hop

2DH5_Ant1_Hop

3DH5_Ant1_Hop

Keysight Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:INT
ALIGN OFF
08:14:27 AM Jan 06, 2022
Center Freq 2.441500000 GHz
NFE
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P P P P P P
Frequency
Auto Tune
Center Freq
2.441500000 GHz
Start Freq
2.440500000 GHz
Stop Freq
2.442500000 GHz
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin
Ref Offset 12.35 dB
10 dB/div
Ref 30.00 dBm
Log
ΔMkr2 1.028 MHz
-0.168 dB
1
2Δ1
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Start 2.440500 GHz
#Res BW 300 kHz
#VBW 300 kHz
Stop 2.442500 GHz
Sweep 1.000 ms (1001 pts)
MSG
STATUS

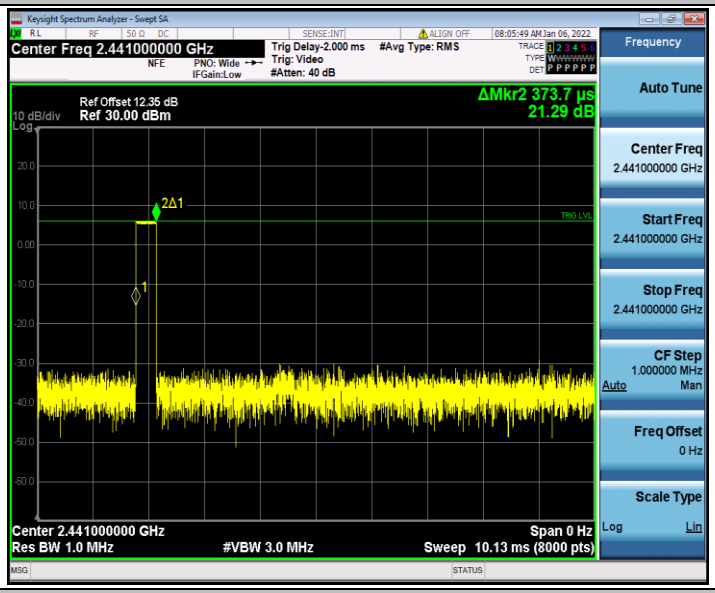
Appendix E: Time of occupancy

Test Result

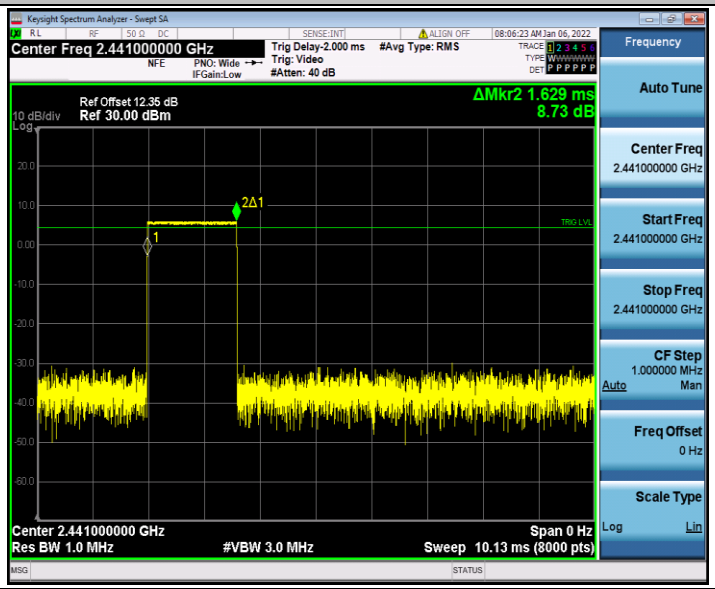
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.37	320	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.63	160	0.261	≤0.4	PASS
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.63	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.88	106.67	0.308	≤0.4	PASS

Test Graphs

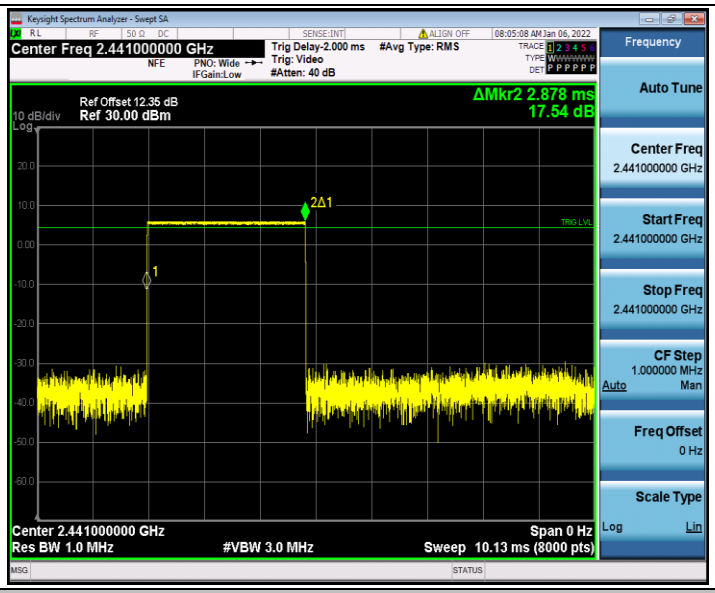
DH1_Ant1_Hop



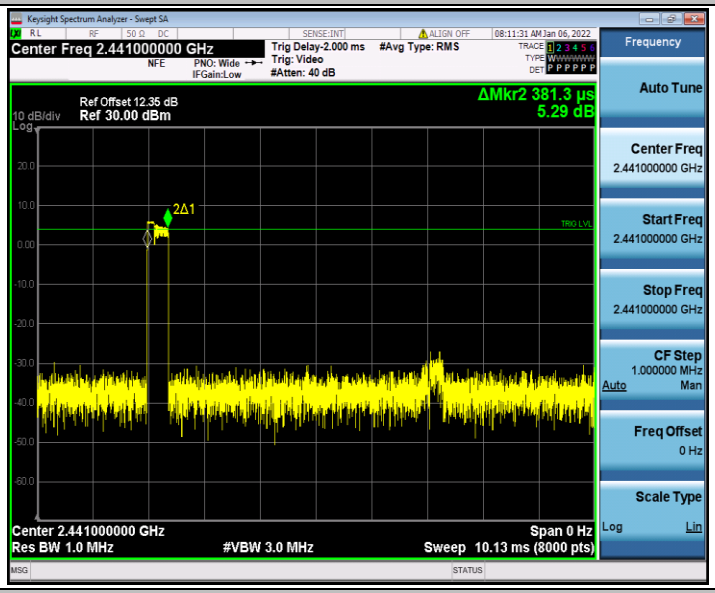
DH3_Ant1_Hop



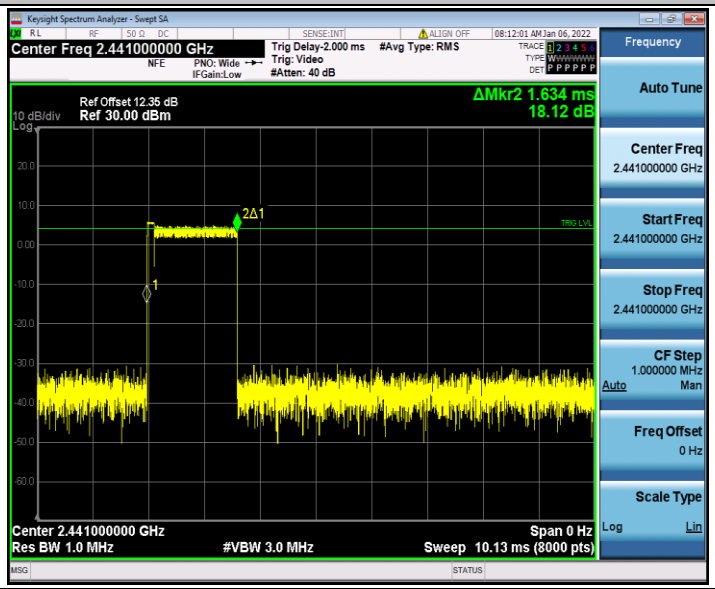
DH5_Ant1_Hop



2DH1_Ant1_Hop

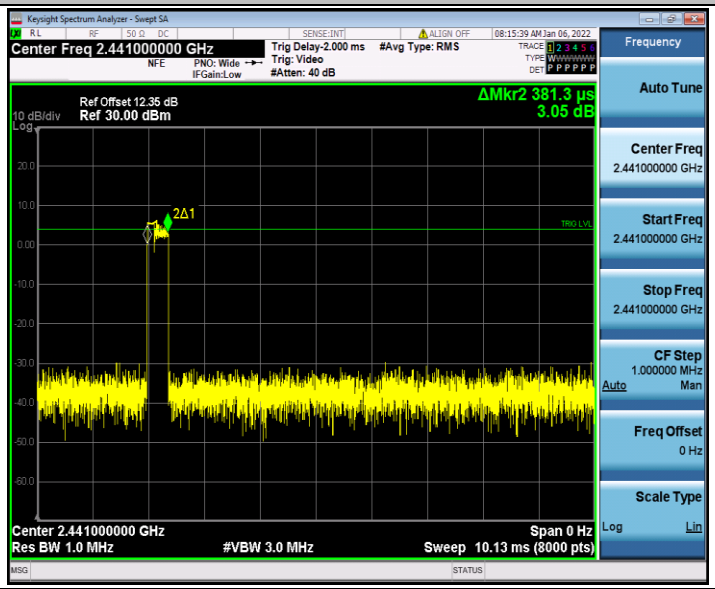


2DH3_Ant1_Hop

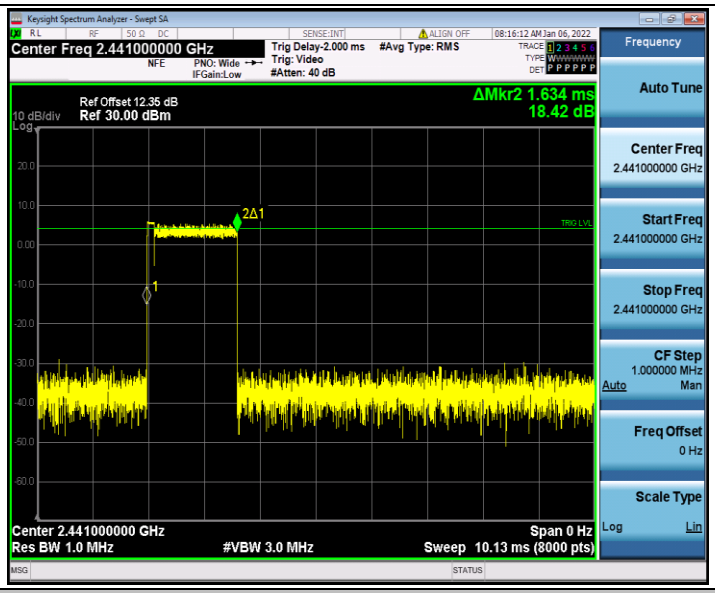


2DH5_Ant1_Hop

3DH1_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop

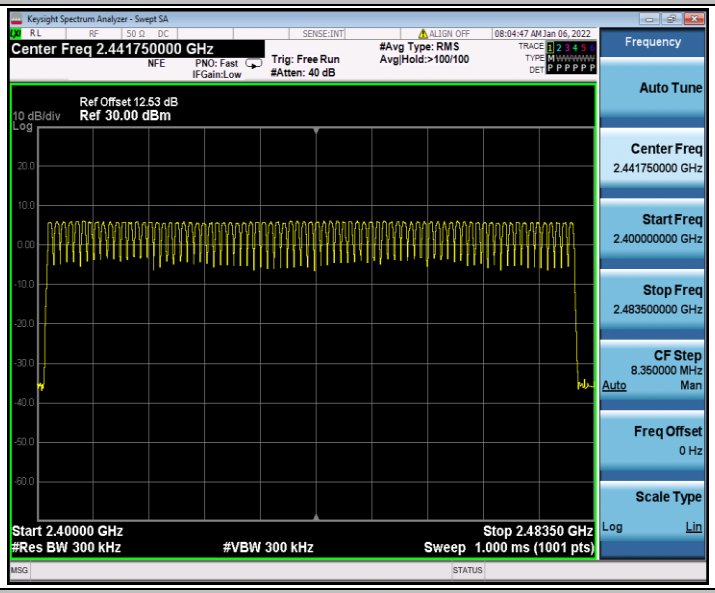
Appendix F: Number of hopping channels

Test Result

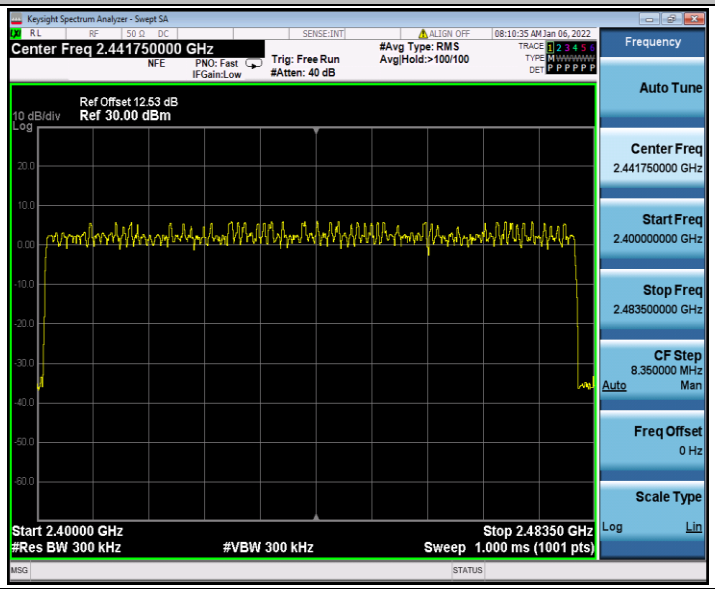
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

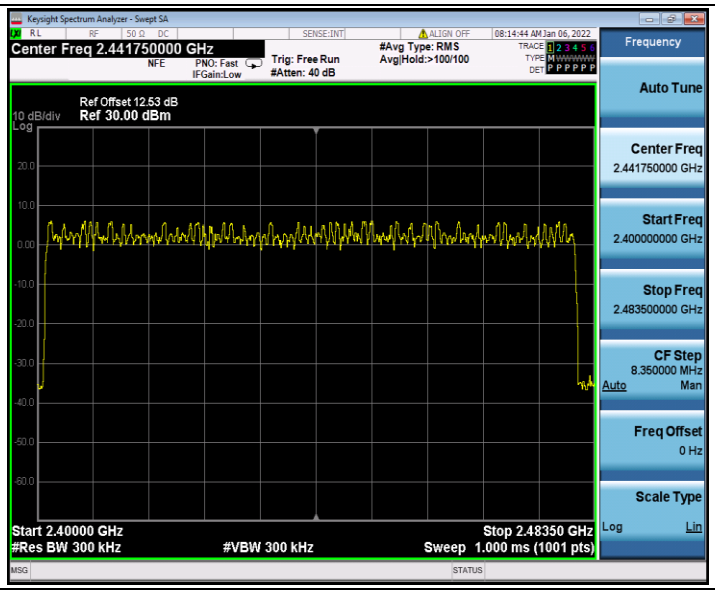
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Keysight Spectrum Analyzer - Swept SA
RL
RF
50 Ω DC
SENSE:INT
ALIGN OFF
08:14:44 AM Jan 06, 2022
Center Freq 2.441750000 GHz
NFE
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold:>100/100
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P P P P P P
Ref Offset 12.53 dB
10 dB/div
Ref 30.00 dBm
Log
20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
Start 2.40000 GHz
#Res BW 300 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 1.000 ms (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

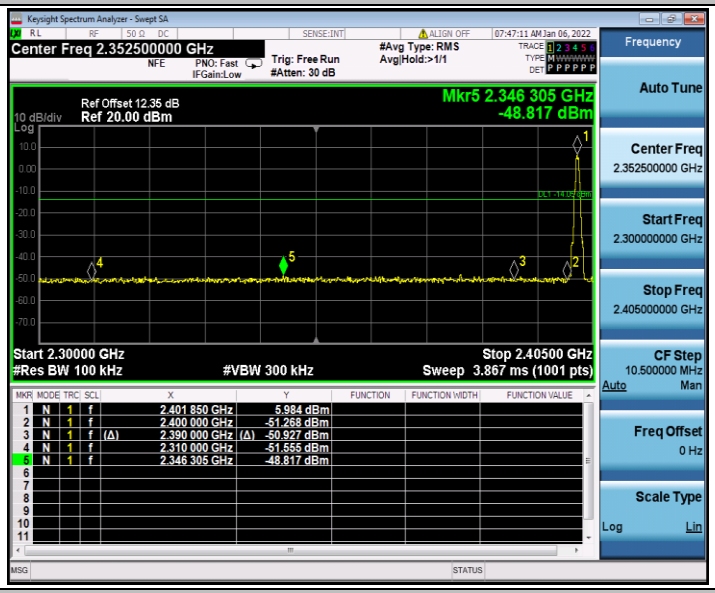
Appendix G: Band edge measurements

Test Result

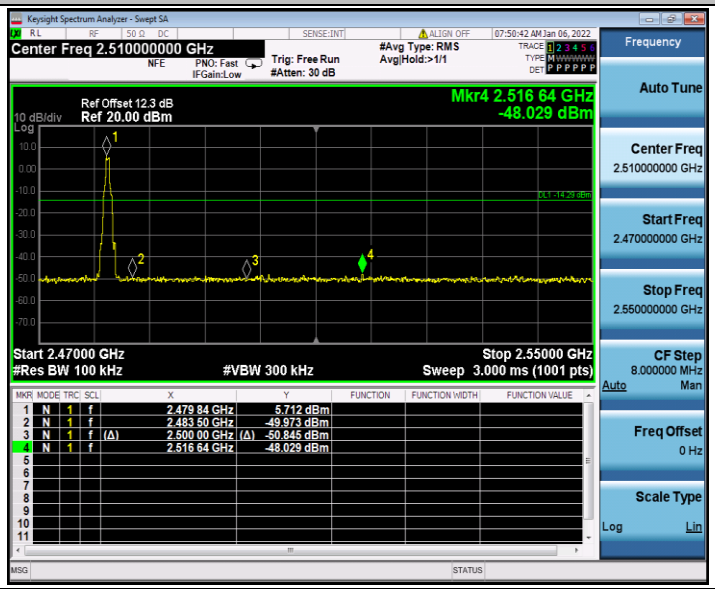
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	5.95	-48.82	≤-14.05	PASS
		High	2480	5.71	-48.03	≤-14.29	PASS
		Low	Hop_2402	5.00	-48.75	≤-15	PASS
		High	Hop_2480	5.29	-48.06	≤-14.71	PASS
2DH5	Ant1	Low	2402	5.15	-47.56	≤-14.85	PASS
		High	2480	5.17	-48.23	≤-14.83	PASS
		Low	Hop_2402	4.91	-47.78	≤-15.09	PASS
		High	Hop_2480	5.34	-47.91	≤-14.66	PASS
3DH5	Ant1	Low	2402	5.73	-48.47	≤-14.27	PASS
		High	2480	5.30	-47.99	≤-14.7	PASS
		Low	Hop_2402	0.94	-49.29	≤-19.06	PASS
		High	Hop_2480	0.73	-47.63	≤-19.27	PASS

Test Graphs

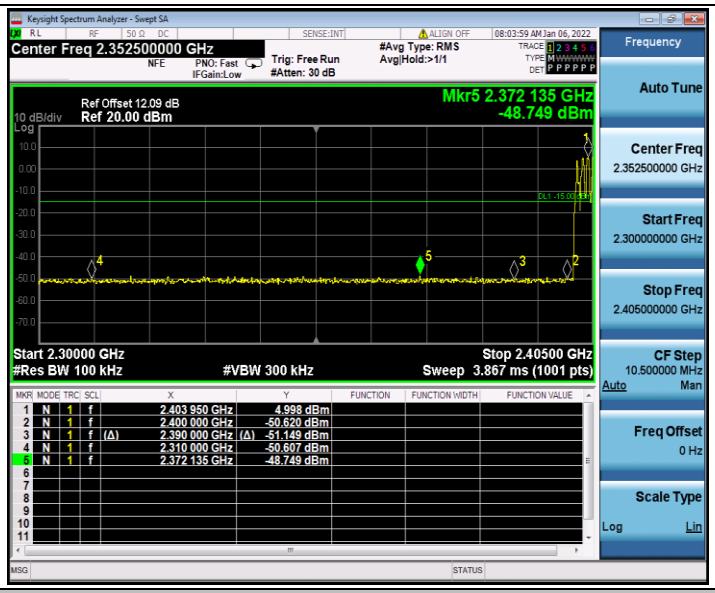
DH5_Ant1_Low_2402



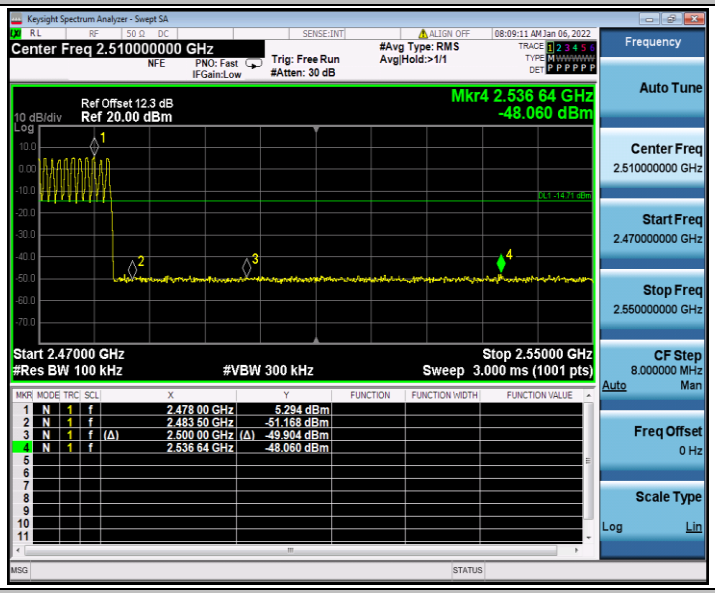
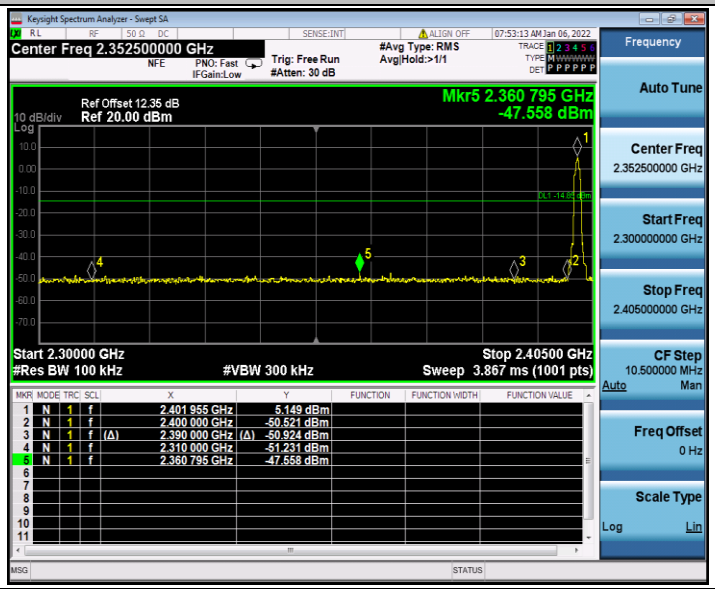
DH5_Ant1_High_2480



DH5_Ant1_Low_Hop_2402



DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402