Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.044	2401.493	2402.537	---	---
		2441	1.068	2440.469	2441.537	---	---
		2480	1.041	2479.496	2480.537	---	---
2DH5	Ant1	2402	1.359	2401.343	2402.702	---	---
		2441	1.323	2440.364	2441.687	---	---
		2480	1.365	2479.334	2480.699	---	---
3DH5	Ant1	2402	1.308	2401.364	2402.672	---	---
		2441	1.290	2440.364	2441.654	---	---
		2480	1.317	2479.346	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

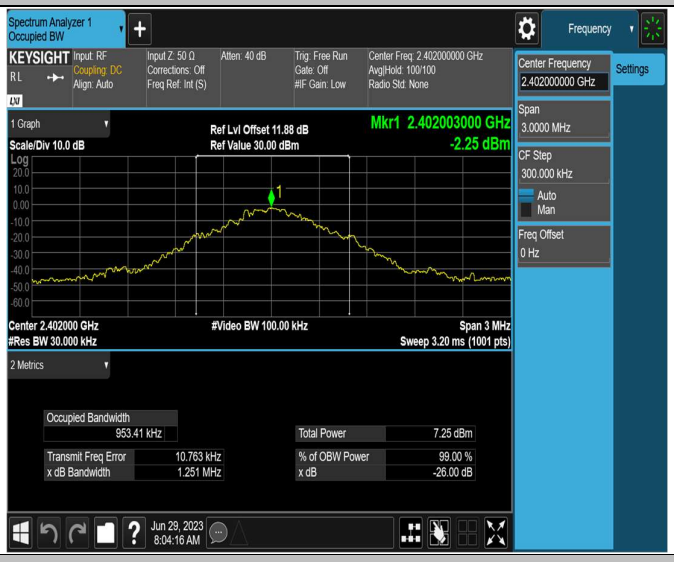
Appendix B: Occupied Channel Bandwidth

Test Result

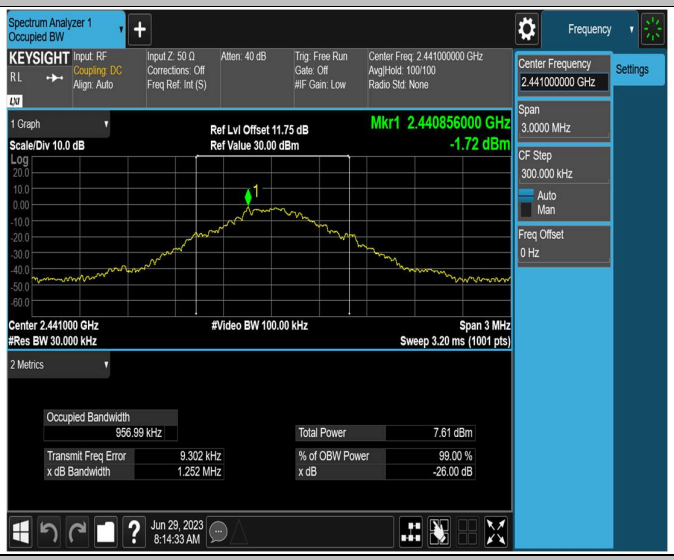
TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95341	2401.5341	2402.4875	---	---
		2441	0.95699	2440.5308	2441.4878	---	---
		2480	0.96171	2479.5285	2480.4902	---	---
2DH5	Ant1	2402	1.2273	2401.4076	2402.6349	---	---
		2441	1.2296	2440.4079	2441.6375	---	---
		2480	1.2232	2479.4097	2480.6329	---	---
3DH5	Ant1	2402	1.2246	2401.3981	2402.6227	---	---
		2441	1.2285	2440.3978	2441.6263	---	---
		2480	1.2179	2479.4046	2480.6225	---	---

Test Graphs

DH5_Ant1_2402

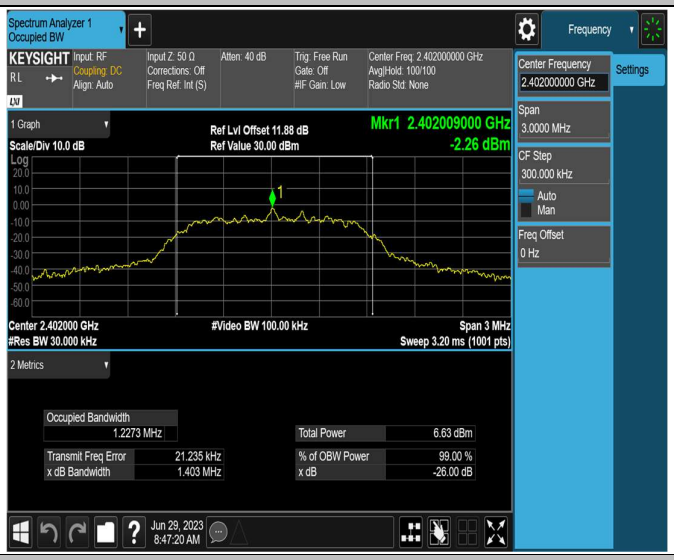


DH5_Ant1_2441



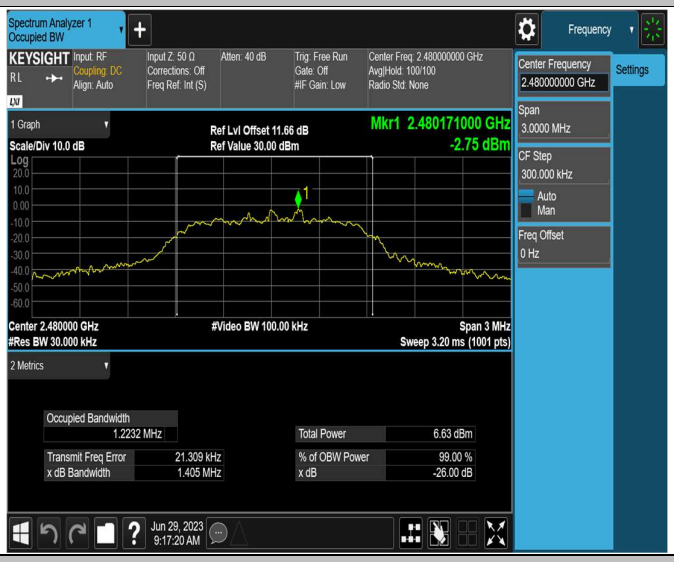
DH5_Ant1_2480

2DH5_Ant1_2402



2DH5_Ant1_2441

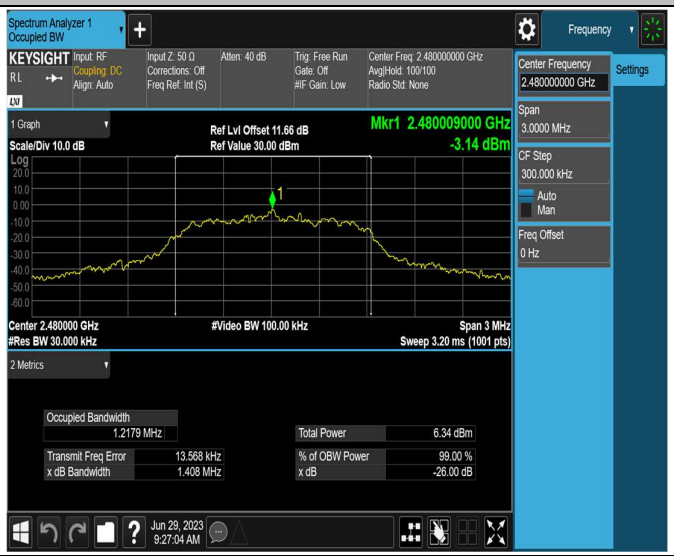
2DH5_Ant1_2480



3DH5_Ant1_2402

3DH5_Ant1_2441

3DH5_Ant1_2480



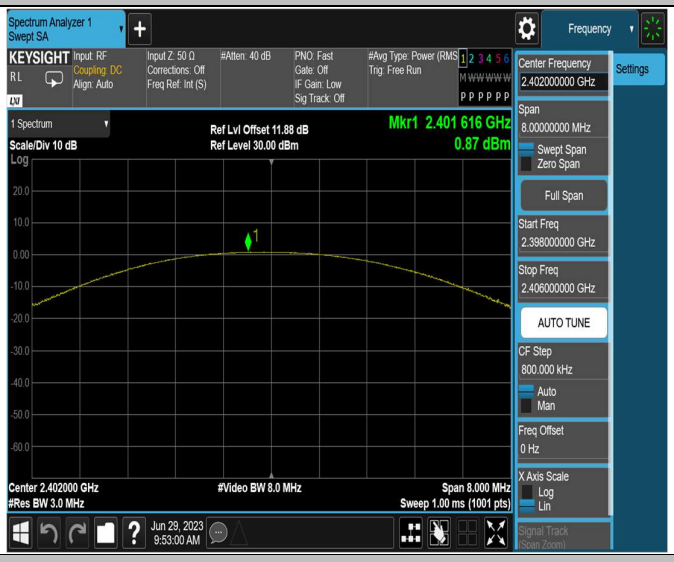
Appendix C: Maximum conducted output power

Test Result Peak

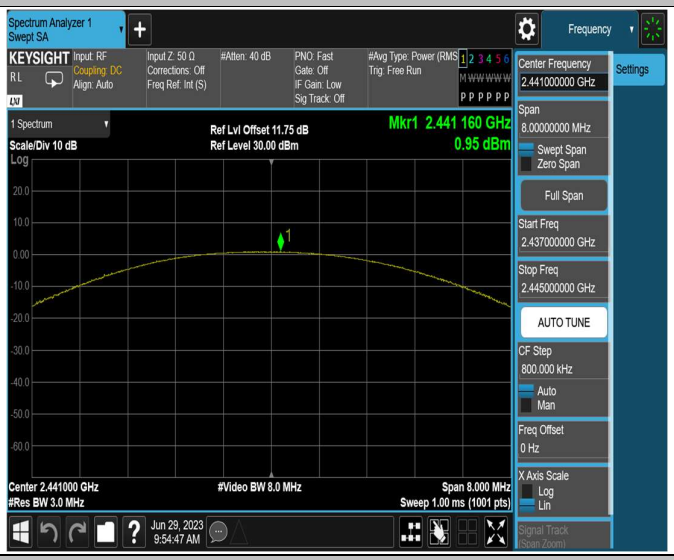
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.87	≤30	PASS
		2441	0.95	≤30	PASS
		2480	0.77	≤30	PASS
2DH5	Ant1	2402	1.58	≤20.97	PASS
		2441	1.65	≤20.97	PASS
		2480	1.37	≤20.97	PASS
3DH5	Ant1	2402	1.94	≤20.97	PASS
		2441	1.97	≤20.97	PASS
		2480	1.73	≤20.97	PASS

Test Graphs

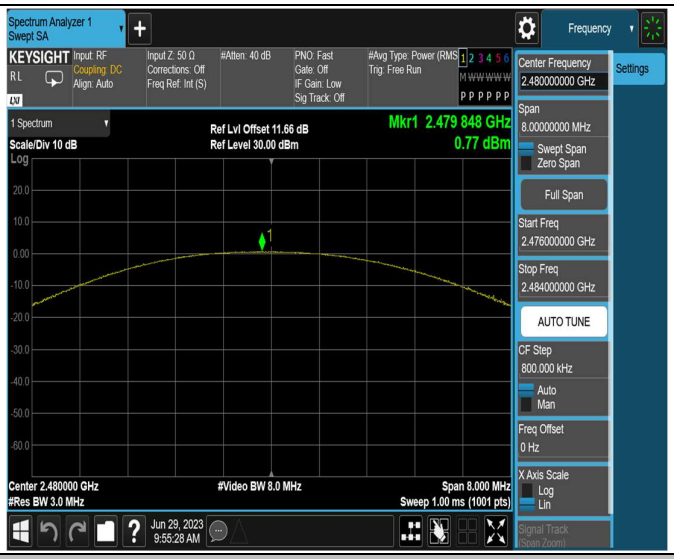
DH5_Ant1_2402



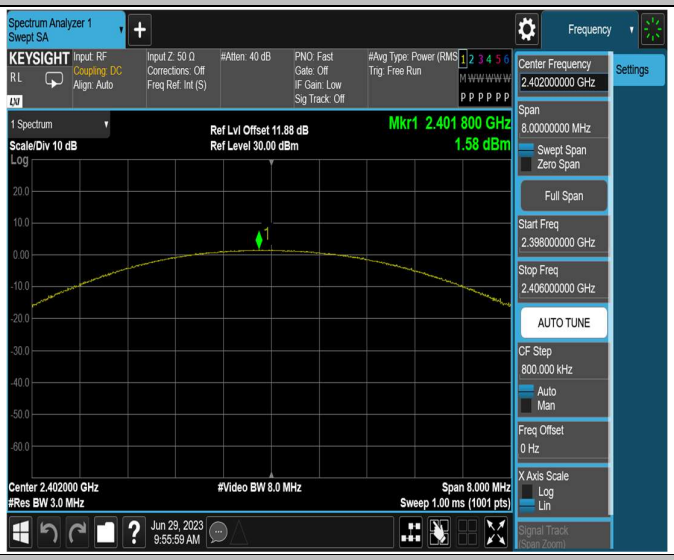
DH5_Ant1_2441



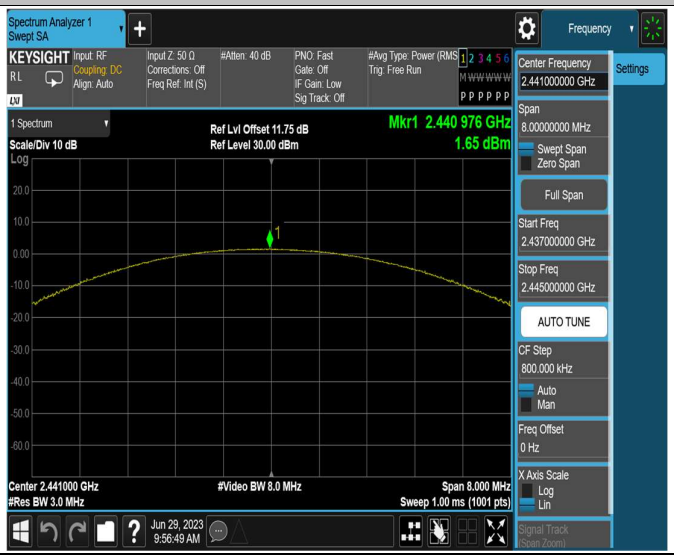
DH5_Ant1_2480



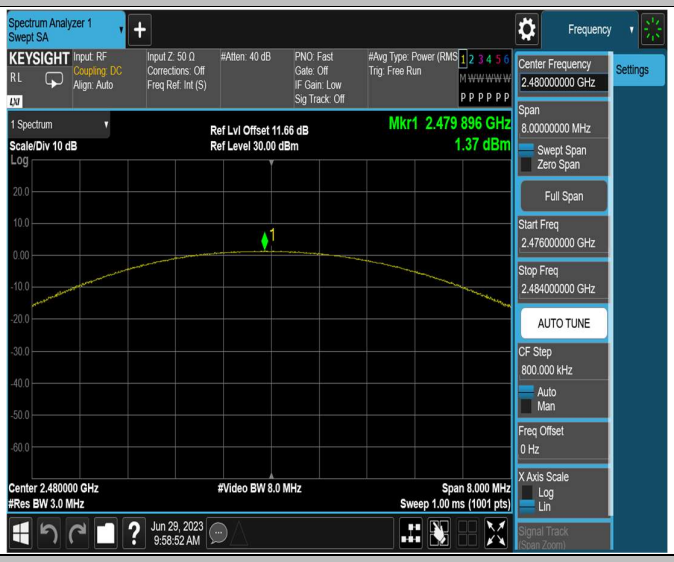
2DH5_Ant1_2402



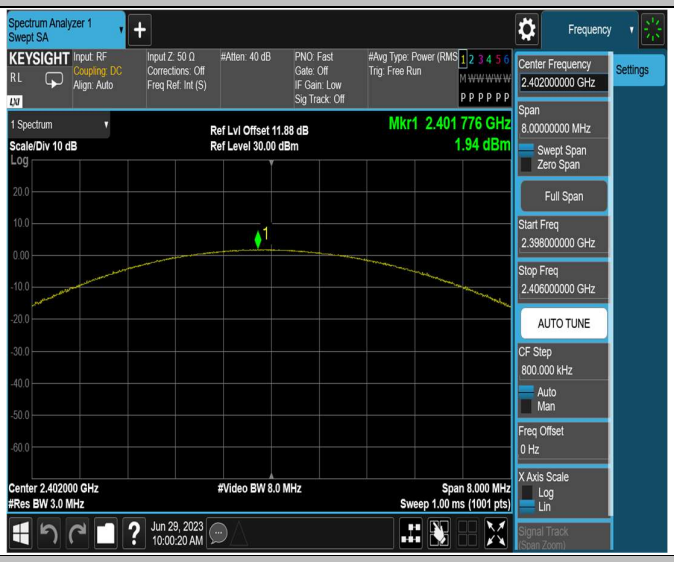
2DH5_Ant1_2441



2DH5_Ant1_2480

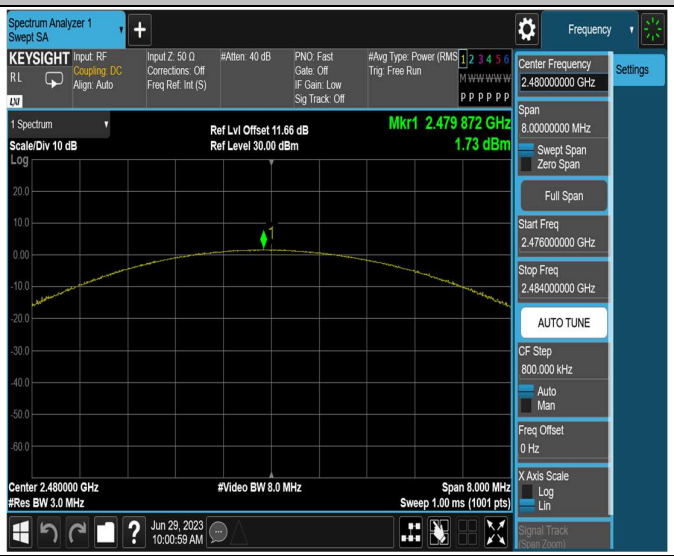


3DH5_Ant1_2402



3DH5_Ant1_2441

3DH5_Ant1_2480



Appendix D: Carrier frequency separation

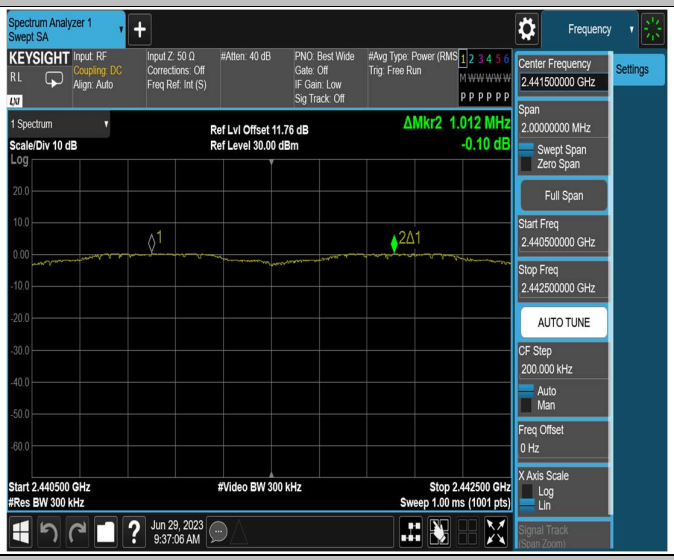
Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.162	≥1.068	PASS
2DH5	Ant1	Hop	1.012	≥0.910	PASS
3DH5	Ant1	Hop	0.956	≥0.878	PASS

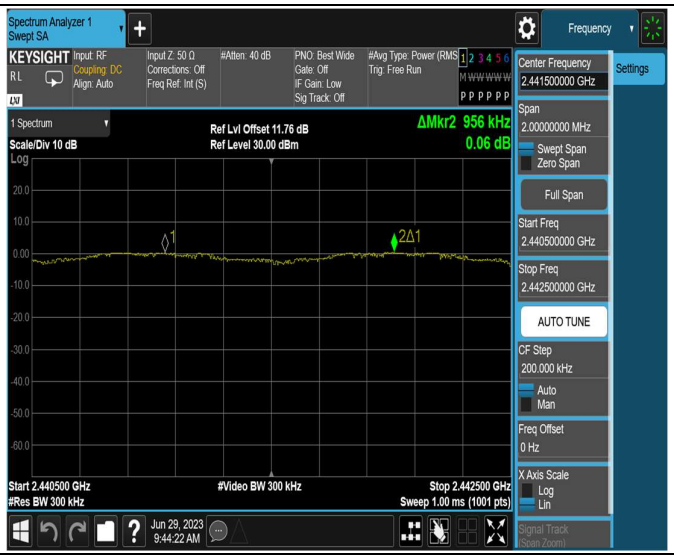
Test Graphs

DH5_Ant1_Hop

2DH5_Ant1_Hop



3DH5_Ant1_Hop


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Best Wide
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Trig: Free Run
Frequency
Center Frequency
2.441500000 GHz
Settings
Span
2.00000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
2.440500000 GHz
Stop Freq
2.442500000 GHz
AUTO TUNE
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 11.76 dB
Ref Level 30.00 dBm
ΔMkr2 956 kHz
0.06 dB
Start 2.440500 GHz
#Res BW 300 kHz
#Video BW 300 kHz
Stop 2.442500 GHz
Sweep 1.00 ms (1001 pts)
Jun 29, 2023
9:44:22 AM

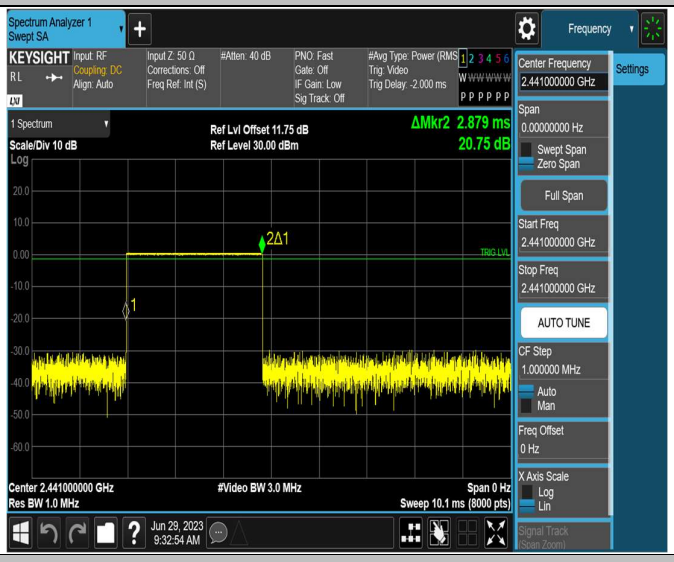
Appendix E: Time of occupancy

Test Result

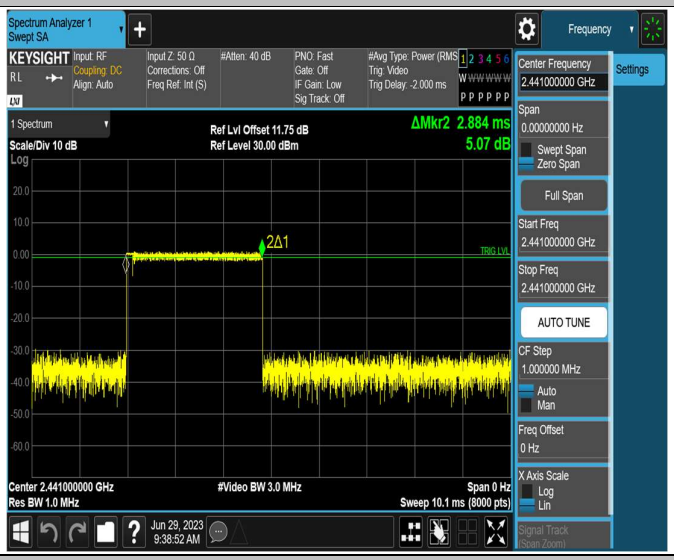
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.879	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.884	106.67	0.308	≤0.4	PASS
3DH5	Ant1	Hop	2.887	106.67	0.308	≤0.4	PASS

Test Graphs

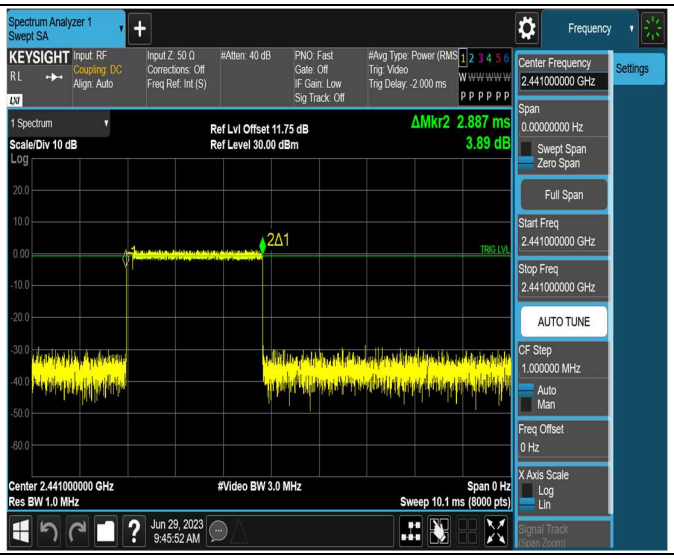
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Trig: Video
Trig Delay: -2.000 ms
Frequency
Settings
Center Frequency
2.441000000 GHz
Span
0.00000000 Hz
Swept Span
Zero Span
Full Span
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
AUTO TUNE
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 11.75 dB
Ref Level 30.00 dBm
ΔMkr2 2.887 ms
3.89 dB
2Δ1
TRIG LVL
Center 2.441000000 GHz
Res BW 1.0 MHz
#Video BW 3.0 MHz
Span 0 Hz
Sweep 10.1 ms (8000 pts)
Jun 29, 2023
9:45:52 AM

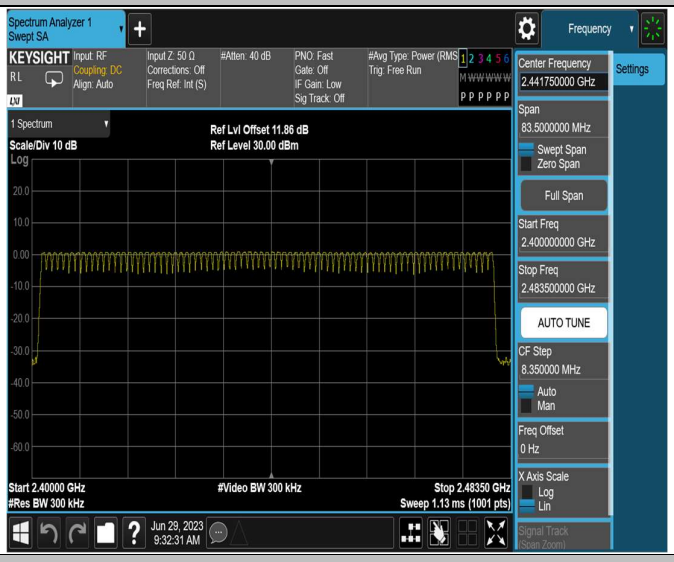
Appendix F: Number of hopping channels

Test Result

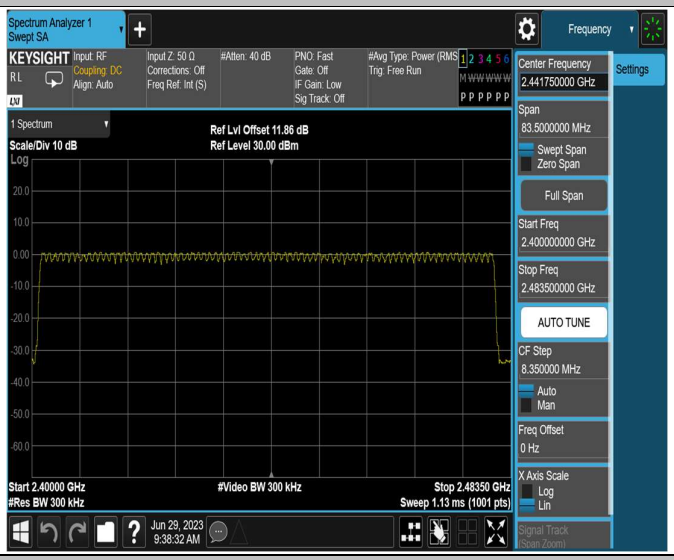
TestMode	Antenna	Frequency[MHz]	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs

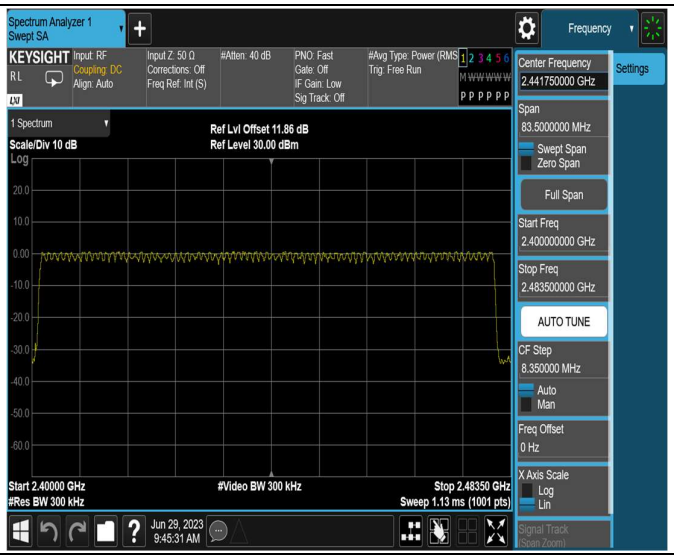
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop


Spectrum Analyzer 1
Swept SA
KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)
#Atten: 40 dB
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off
#Avg Type: Power (RMS)
Trig: Free Run
Frequency
Settings
Center Frequency
2.441750000 GHz
Span
83.5000000 MHz
Swept Span
Zero Span
Full Span
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
AUTO TUNE
CF Step
8.350000 MHz
Auto
Man
Freq Offset
0 Hz
X Axis Scale
Log
Lin
Signal Track
(Span Zoom)
1 Spectrum
Ref Lvl Offset 11.86 dB
Ref Level 30.00 dBm
Scale/Div 10 dB
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
#Video BW 300 kHz
Stop 2.48350 GHz
Sweep 1.13 ms (1001 pts)
Jun 29, 2023
9:45:31 AM

Appendix G: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.01	-45.31	≤-19.99	PASS
		High	2480	0.15	-45.56	≤-19.85	PASS
		Low	Hop_2402	0.22	-46.33	≤-19.78	PASS
		High	Hop_2480	0.16	-46.02	≤-19.84	PASS
2DH5	Ant1	Low	2402	0.25	-46.38	≤-19.75	PASS
		High	2480	0.02	-46.3	≤-19.98	PASS
		Low	Hop_2402	-2.78	-46.72	≤-22.78	PASS
		High	Hop_2480	0.14	-46.19	≤-19.86	PASS
3DH5	Ant1	Low	2402	0.14	-46.72	≤-19.86	PASS
		High	2480	-0.22	-46.59	≤-20.22	PASS
		Low	Hop_2402	-2.23	-46.13	≤-22.23	PASS
		High	Hop_2480	0.11	-45.69	≤-19.89	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