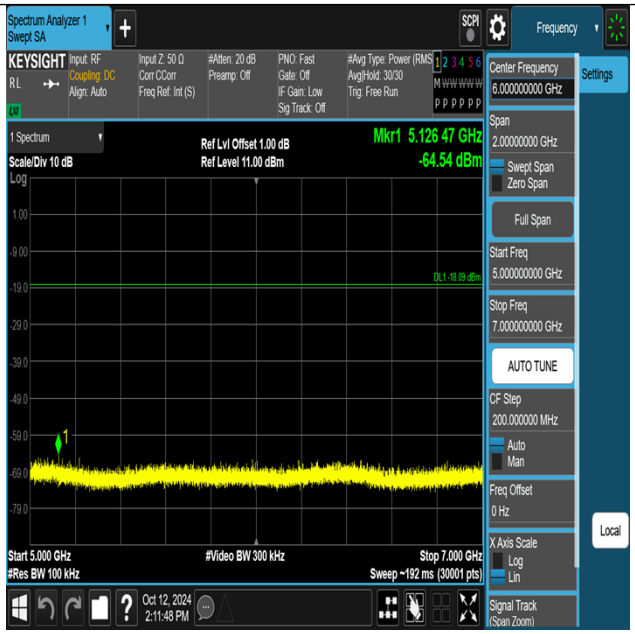
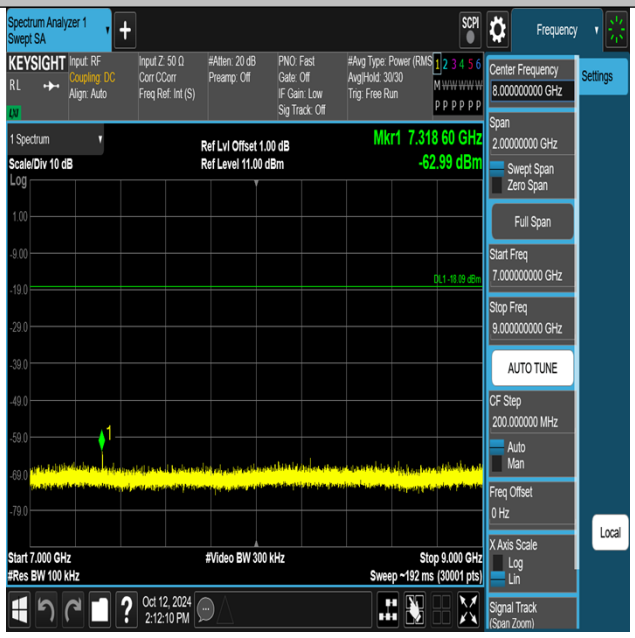
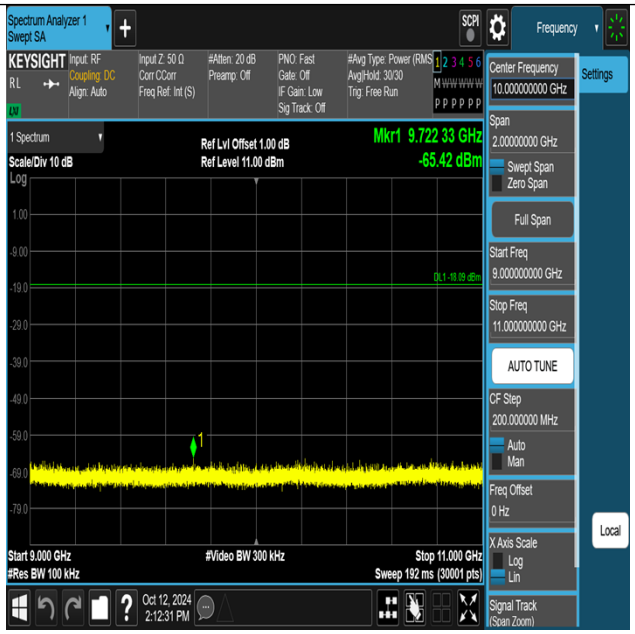


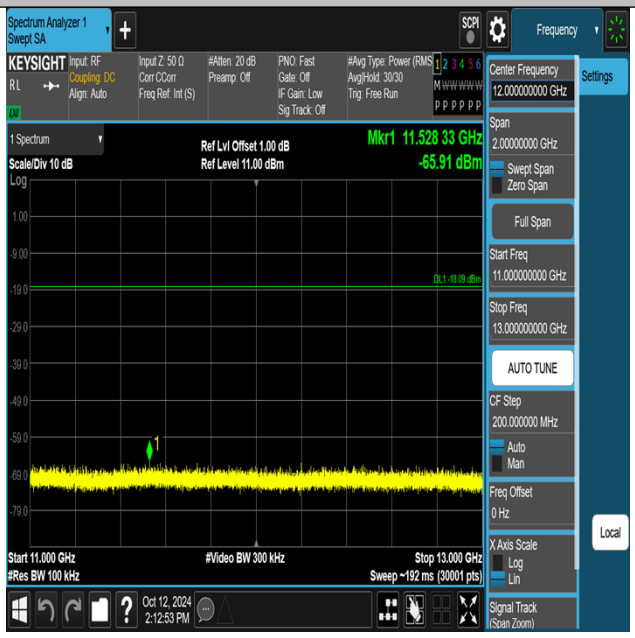
Thread-Ant1-2440-5000~7000-PASS



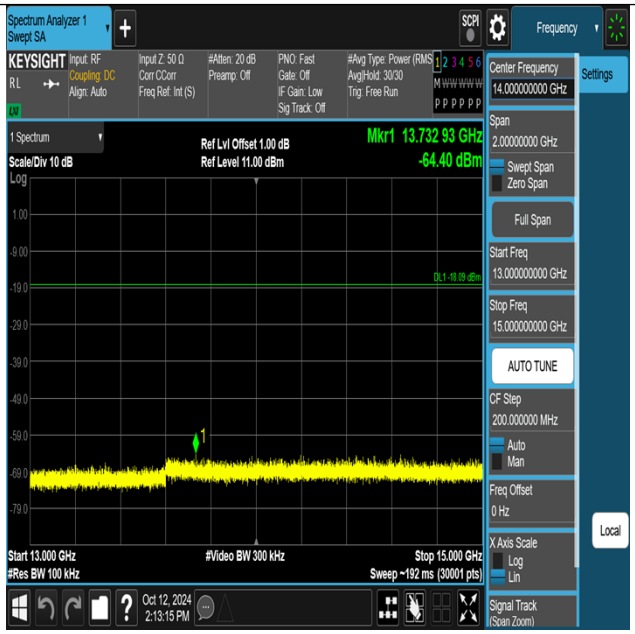
Thread-Ant1-2440-7000~9000-PASS



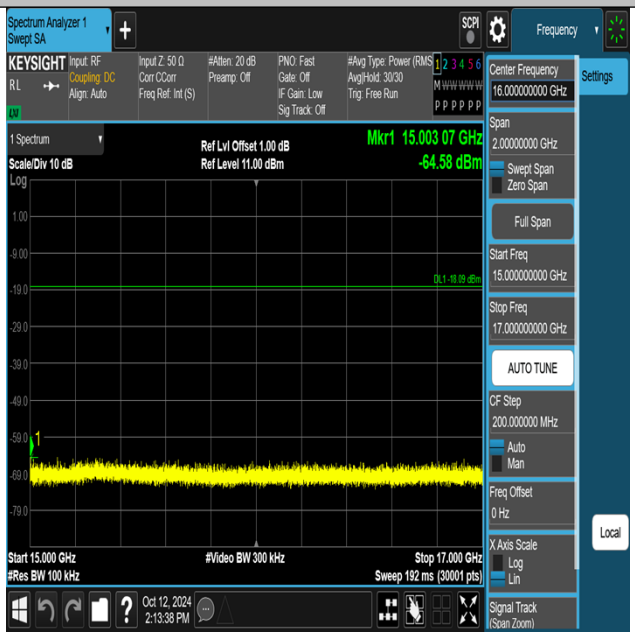
Thread-Ant1-2440-9000~11000-PASS



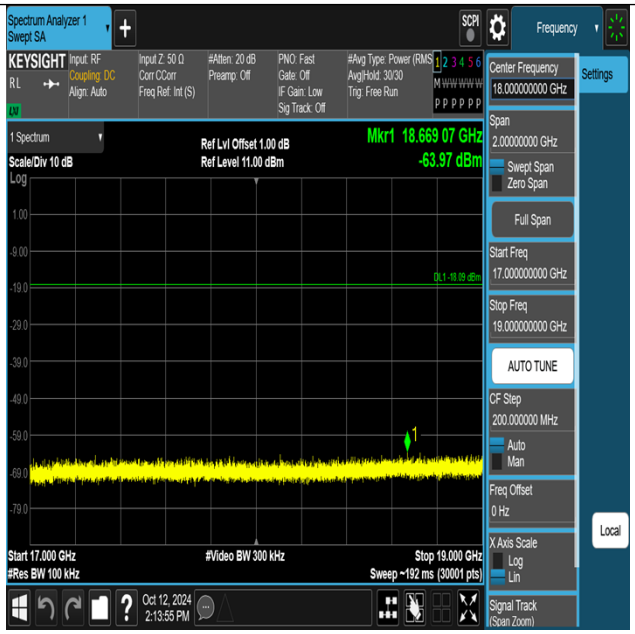
Thread-Ant1-2440-11000~13000-PASS



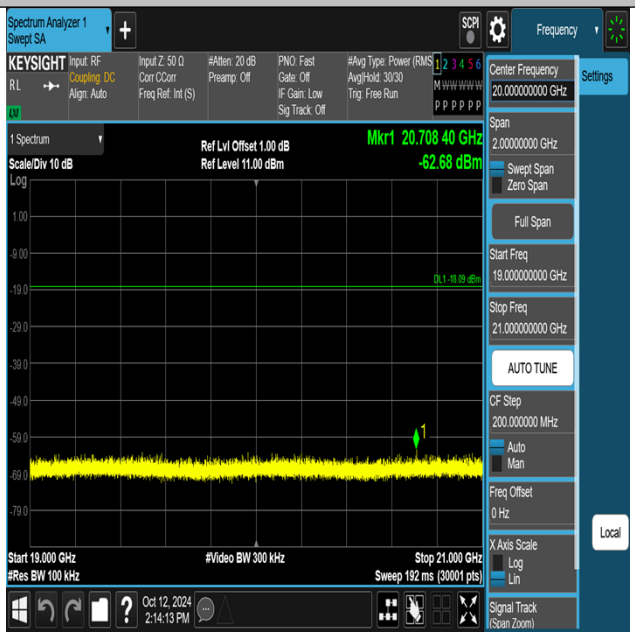
Thread-Ant1-2440-13000~15000-PASS



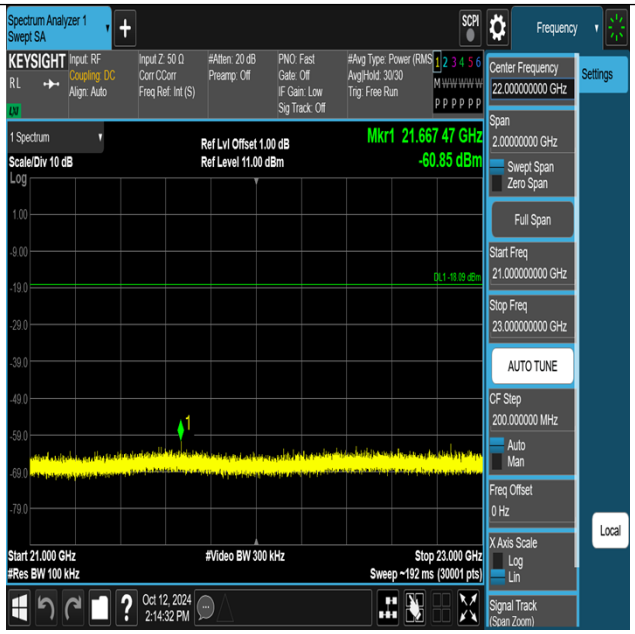
Thread-Ant1-2440-15000~17000-PASS



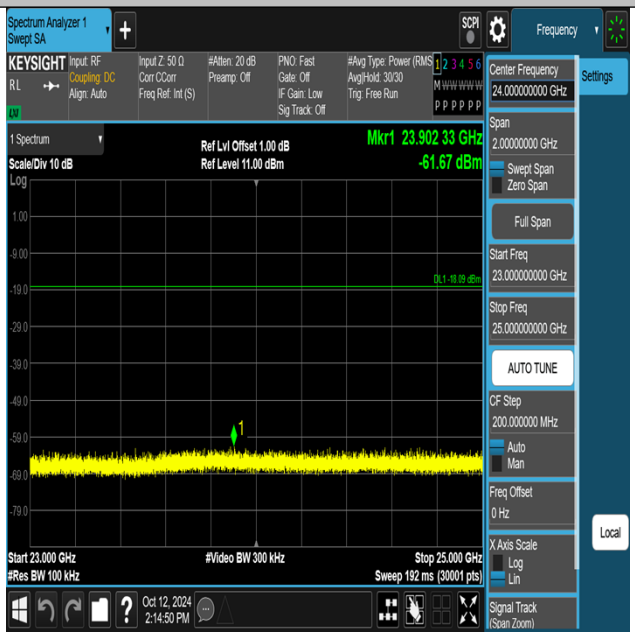
Thread-Ant1-2440-17000~19000-PASS



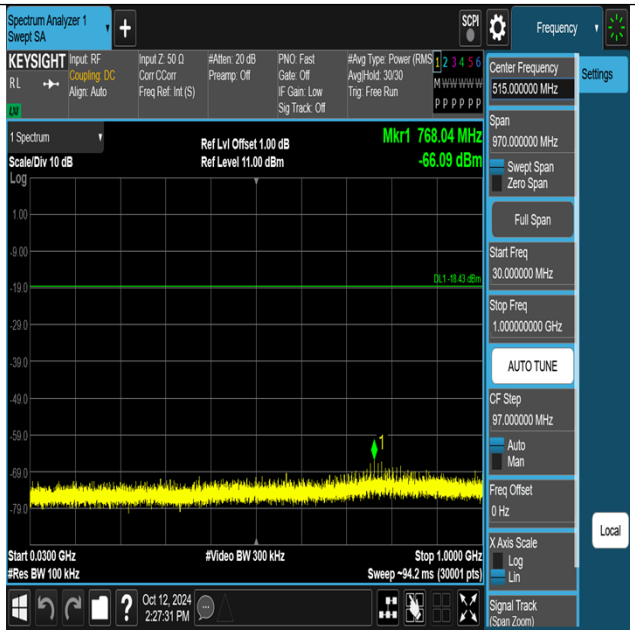
Thread-Ant1-2440-19000~21000-PASS



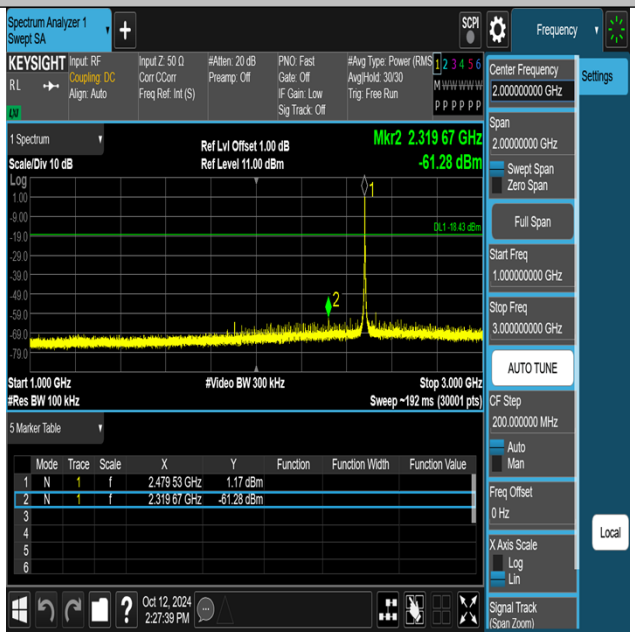
Thread-Ant1-2440-21000~23000-PASS



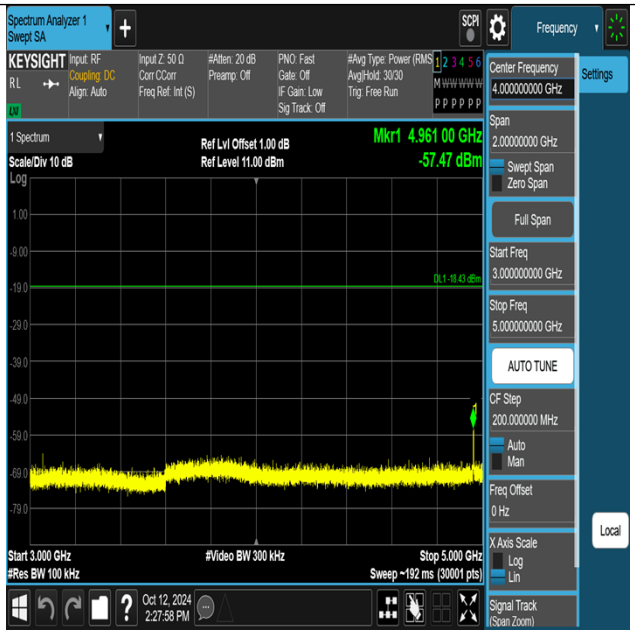
Thread-Ant1-2440-23000~25000-PASS



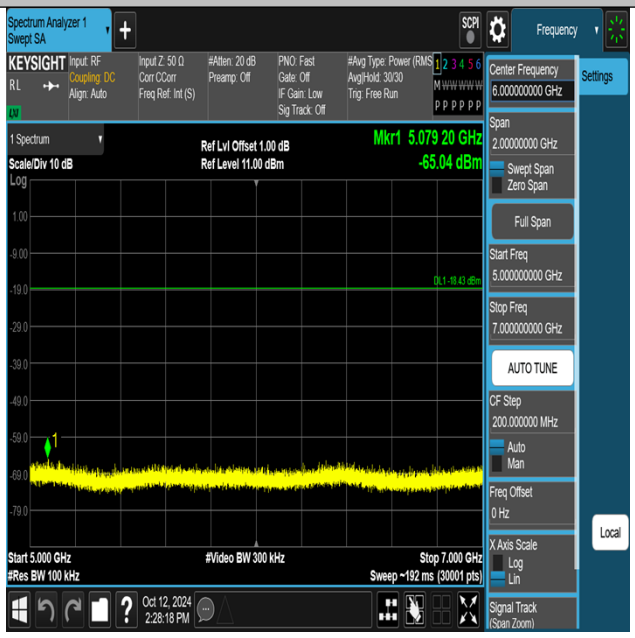
Thread-Ant1-2480-30~1000-PASS



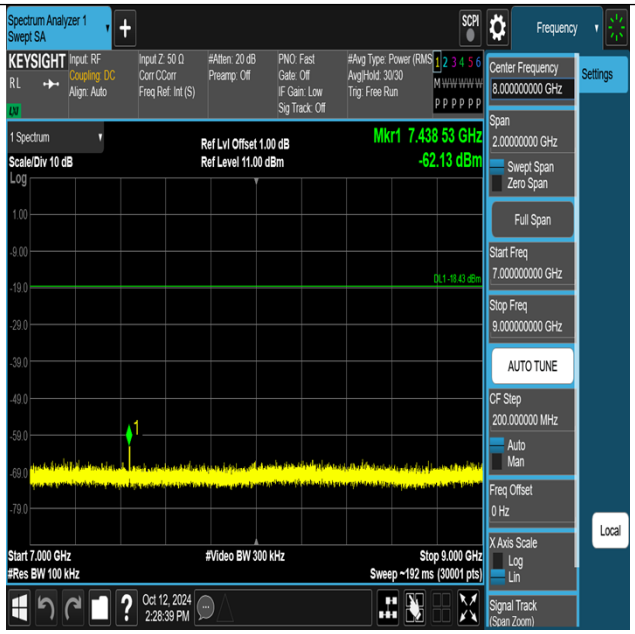
Thread-Ant1-2480-1000~3000-PASS



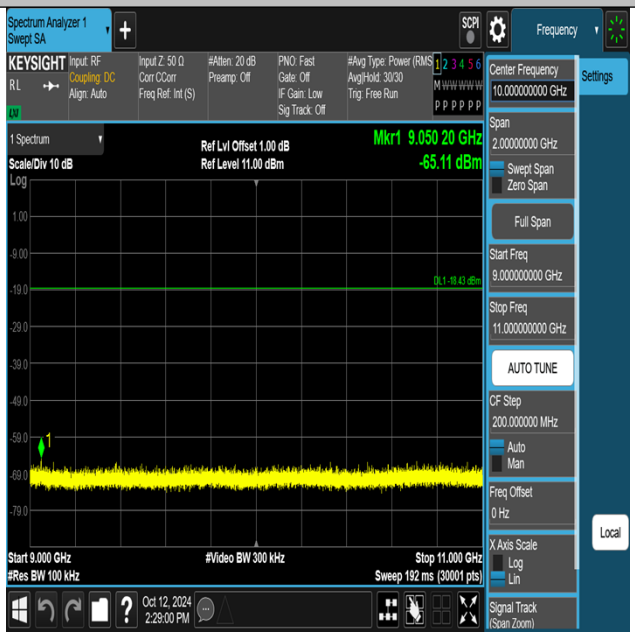
Thread-Ant1-2480-3000~5000-PASS



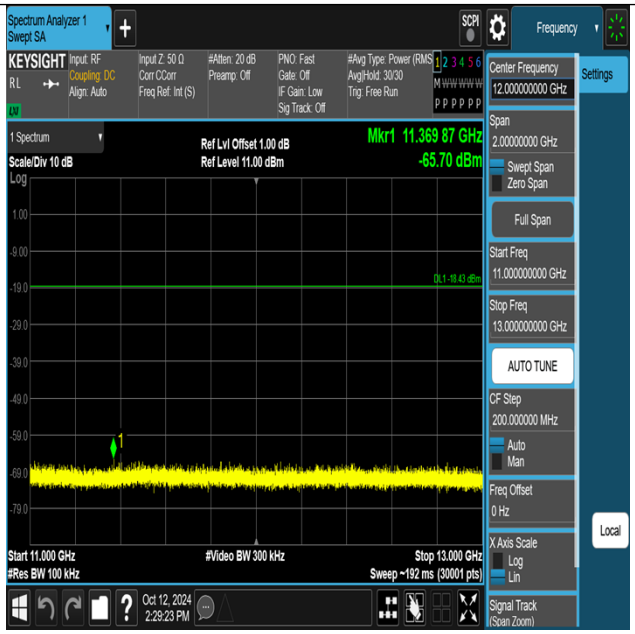
Thread-Ant1-2480-5000~7000-PASS



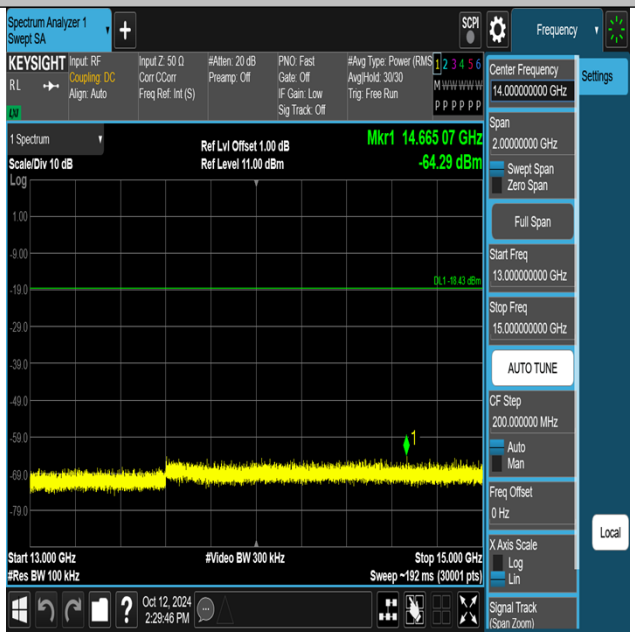
Thread-Ant1-2480-7000~9000-PASS



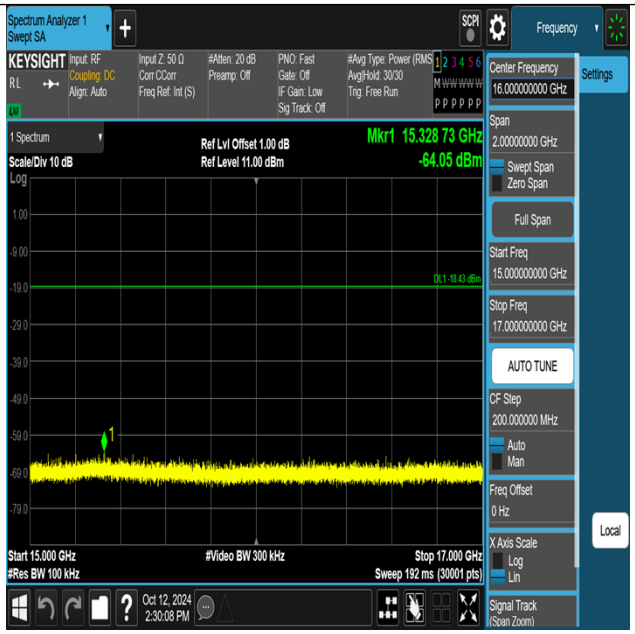
Thread-Ant1-2480-9000~11000-PASS



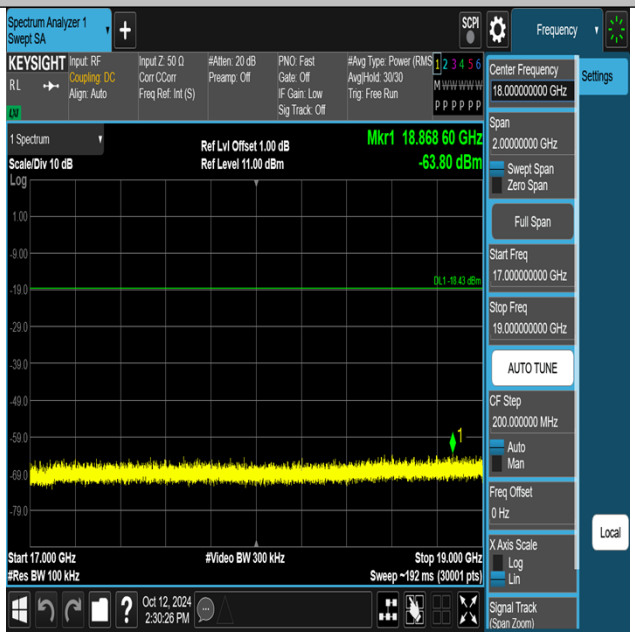
Thread-Ant1-2480-11000~13000-PASS



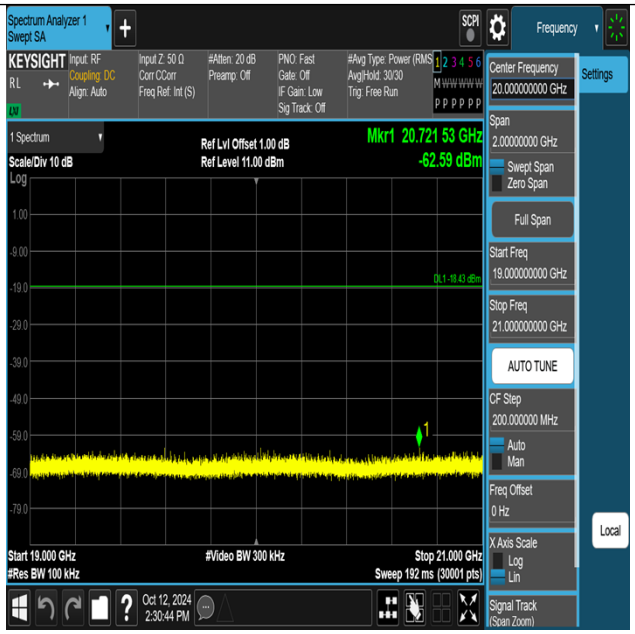
Thread-Ant1-2480-13000~15000-PASS



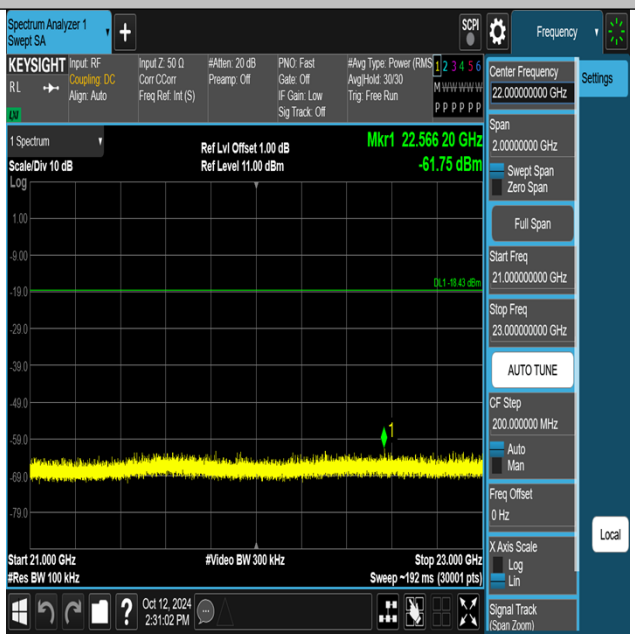
Thread-Ant1-2480-15000~17000-PASS



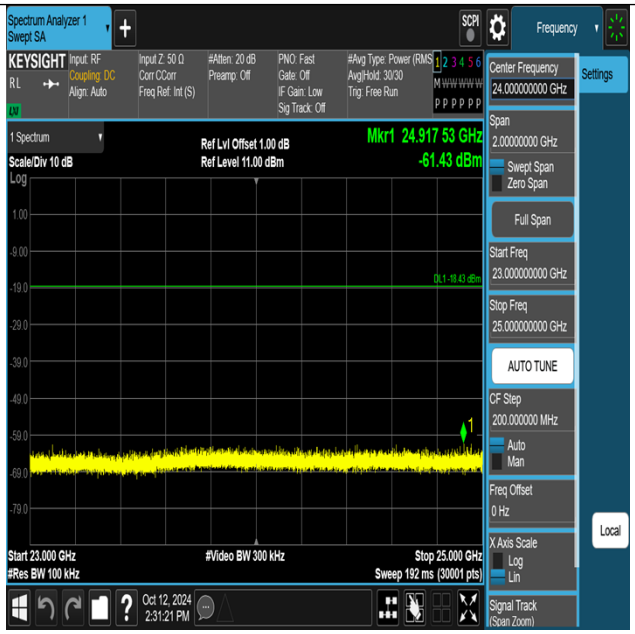
Thread-Ant1-2480-17000~19000-PASS



Thread-Ant1-2480-19000~21000-PASS



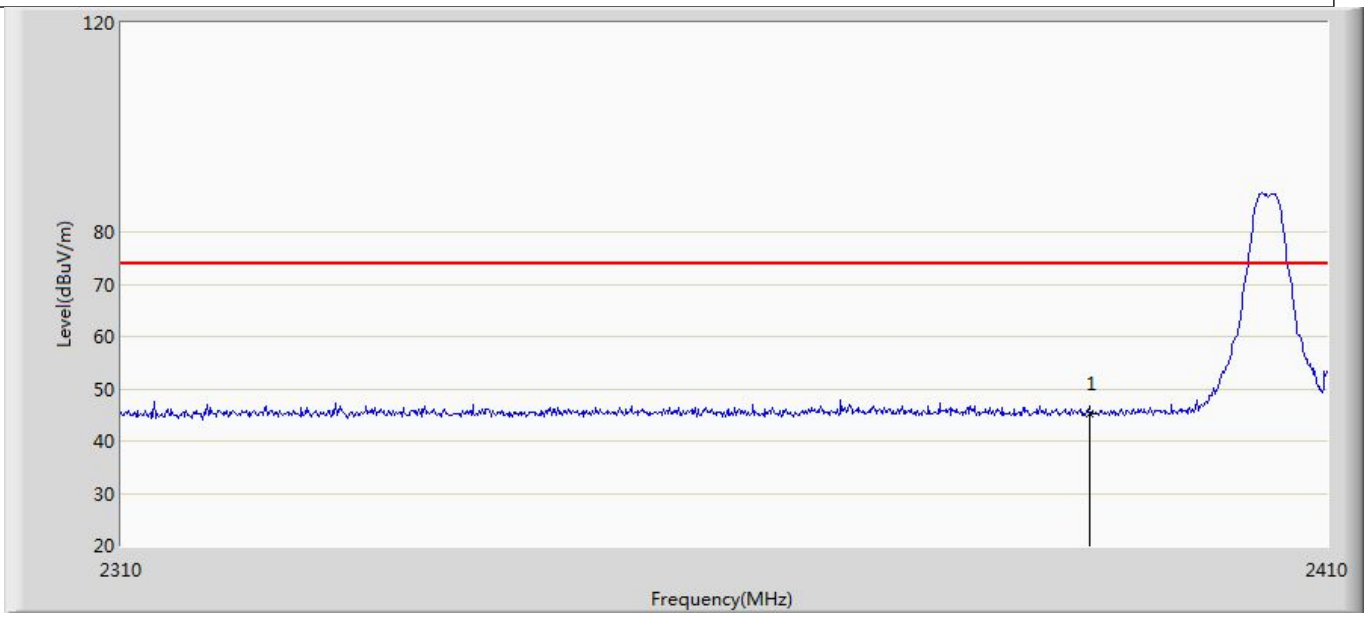
Thread-Ant1-2480-21000~23000-PASS



Thread-Ant1-2480-23000~25000-PASS

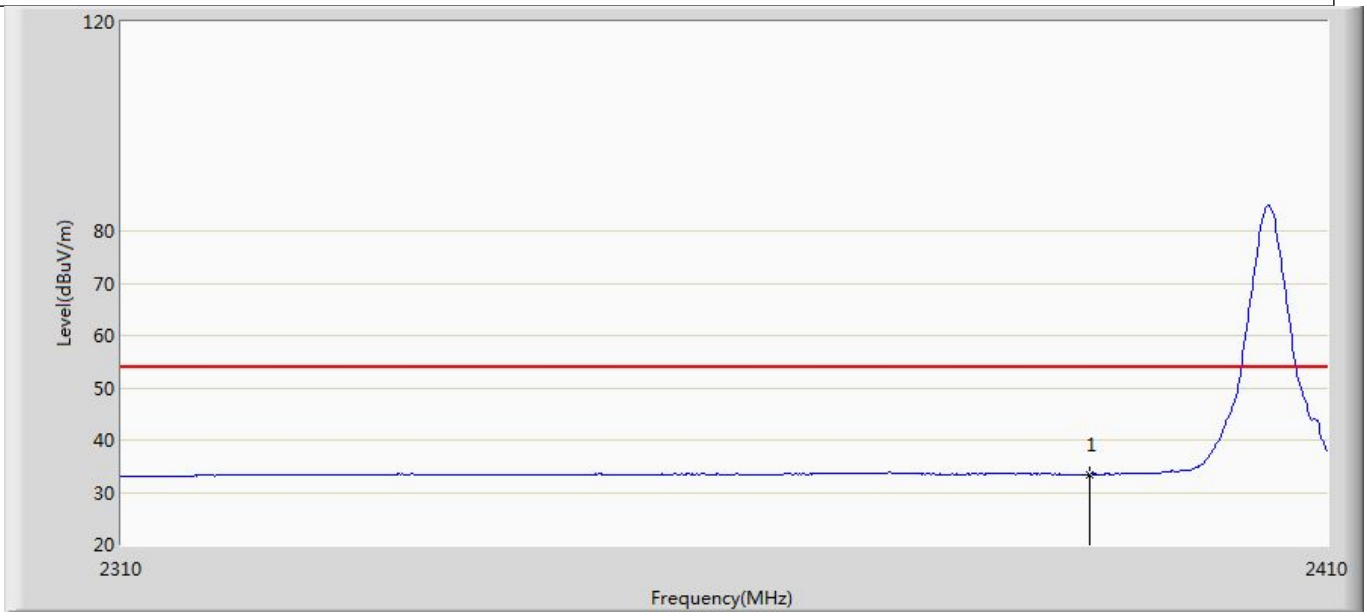
Appendix D: Radiated Emission Band Edge

Profile: 2490822R	Page No.: 1
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2405MHz by Thread	



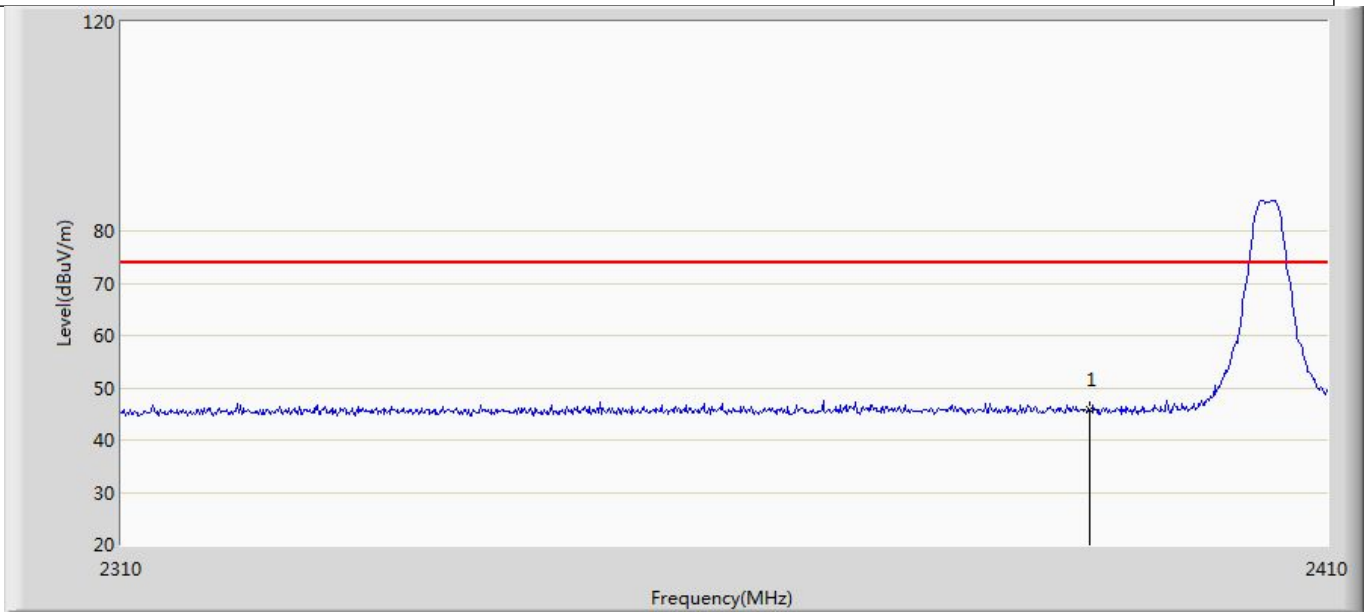
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.346	11.245	-28.654	74.000	34.102	PK

Profile: 2490822R	Page No.: 2
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2405MHz by Thread	



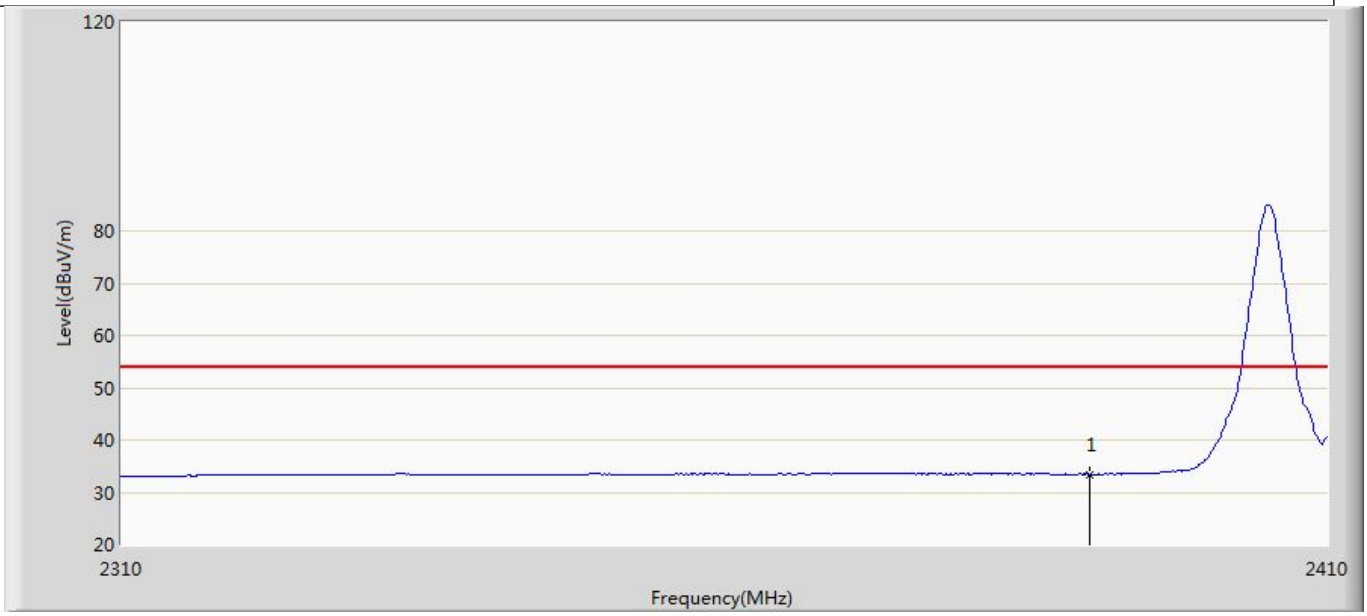
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.449	-0.652	-20.551	54.000	34.102	AV

Profile: 2490822R	Page No.: 3
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2405MHz by Thread	



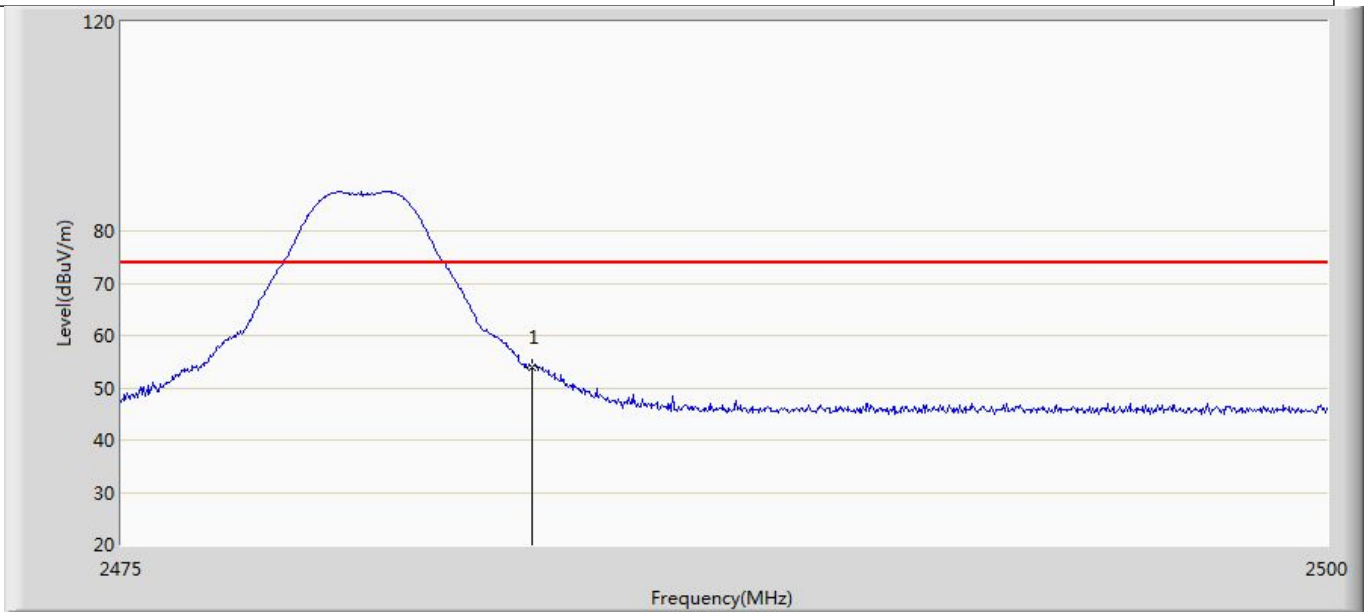
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	45.696	11.595	-28.304	74.000	34.102	PK

Profile: 2490822R	Page No.: 4
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:22
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2405MHz by Thread	



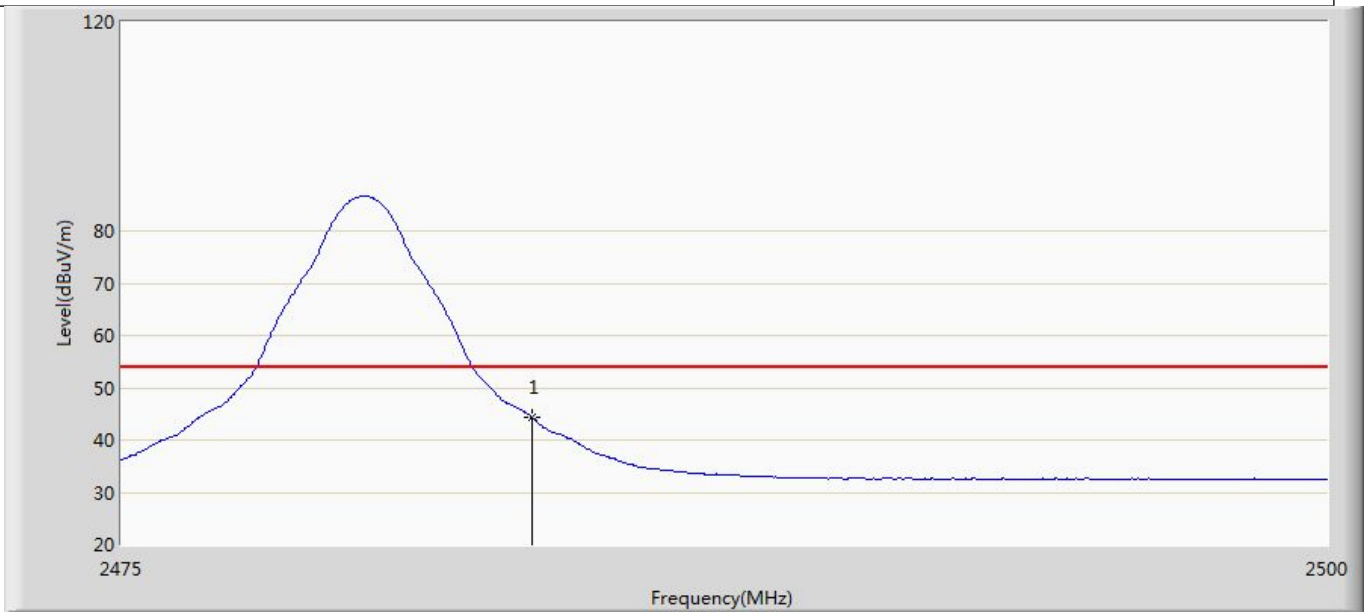
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	33.434	-0.667	-20.566	54.000	34.102	AV

Profile: 2490822R	Page No.: 5
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:26
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2480MHz by Thread	



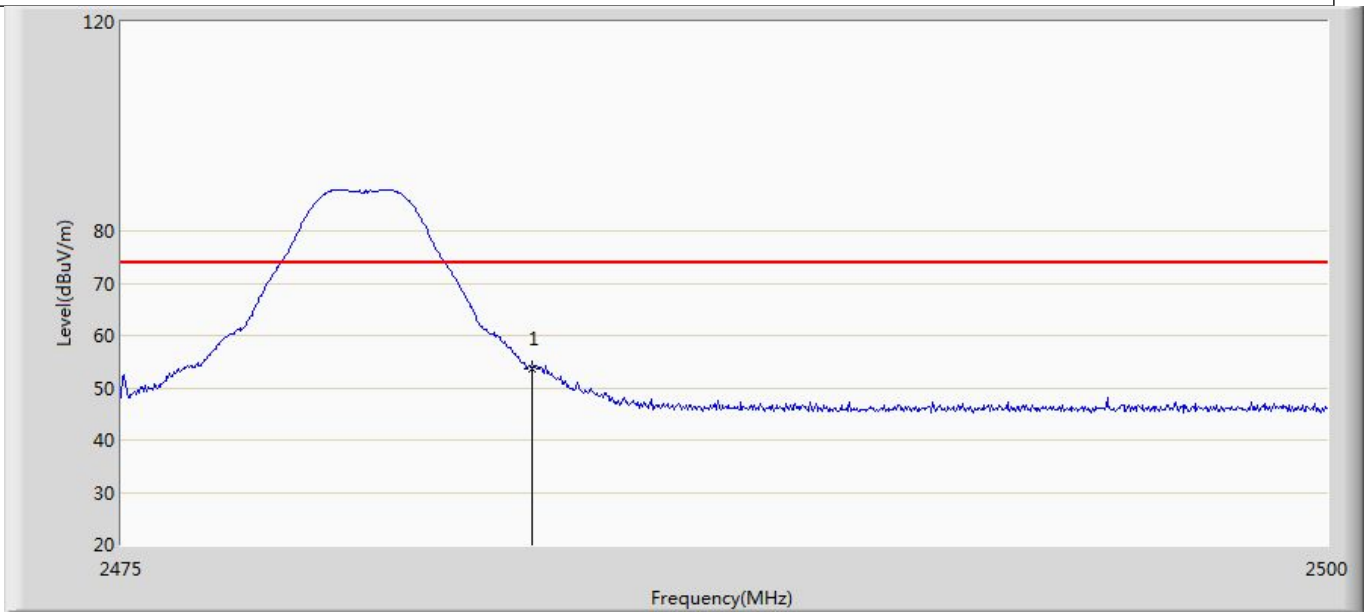
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.936	19.823	-20.064	74.000	34.114	PK

Profile: 2490822R	Page No.: 6
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:29
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Horizontal
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2480MHz by Thread	



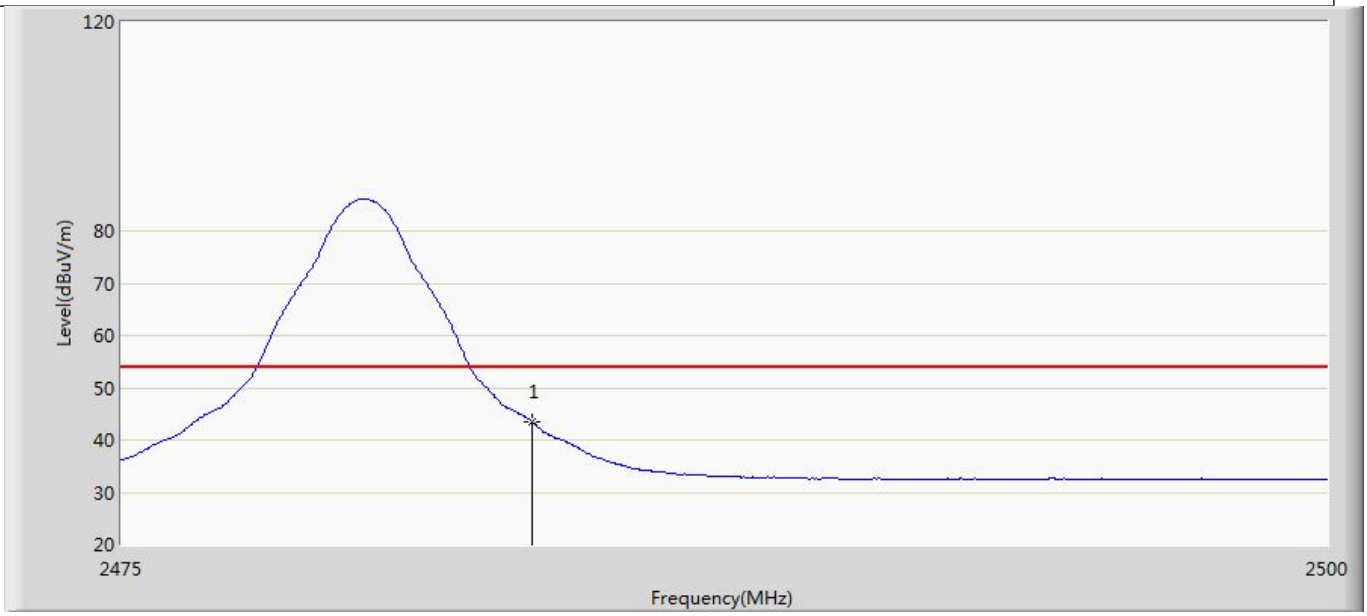
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	44.298	10.185	-9.702	54.000	34.114	AV

Profile: 2490822R	Page No.: 7
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:33
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2480MHz by Thread	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.762	19.649	-20.238	74.000	34.114	PK

Profile: 2490822R	Page No.: 8
Engineer: Yuliu	
Site: AC5	Time: 2024/10/10 - 20:36
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055_(1-18GHz)	Polarity: Vertical
EUT: Level lock	Power: Battery 3Vdc
Note: Mode 1: Transmit at 2480MHz by Thread	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	43.479	9.366	-10.521	54.000	34.114	AV

Note:
1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp).

Appendix F: Fundamental emission output power

TestMode	Frequency[MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
Mode 1	2405	5.51	≤30	-0.99	≤36	PASS
	2440	5.82	≤30	-0.68	≤36	PASS
	2480	5.71	≤30	-0.79	≤36	PASS

Appendix G: DTS Bandwidth

6dB bandwidth:

TestMode	Frequency[MHz]	DTS BW [MHz] (6dB bandwidth)	Limit[MHz]	Verdict
Mode 1	2405	1.540	0.5	PASS
	2440	1.490	0.5	PASS
	2480	1.490	0.5	PASS

Test Graphs:

Thread-Ant1-2405-PASS

Thread-Ant1-2440-PASS

Thread-Ant1-2480-PASS

99% Occupied bandwidth:

TestMode	Frequency[MHz]	99% OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
Mode 1	2405	2.2639	2403.8683	2406.1322	Within band	Pass
	2440	2.2650	2438.8703	2441.1353	Within band	Pass
	2480	2.2928	2478.8568	2481.1496	Within band	Pass

Test Graphs

Thread-Ant1-2405

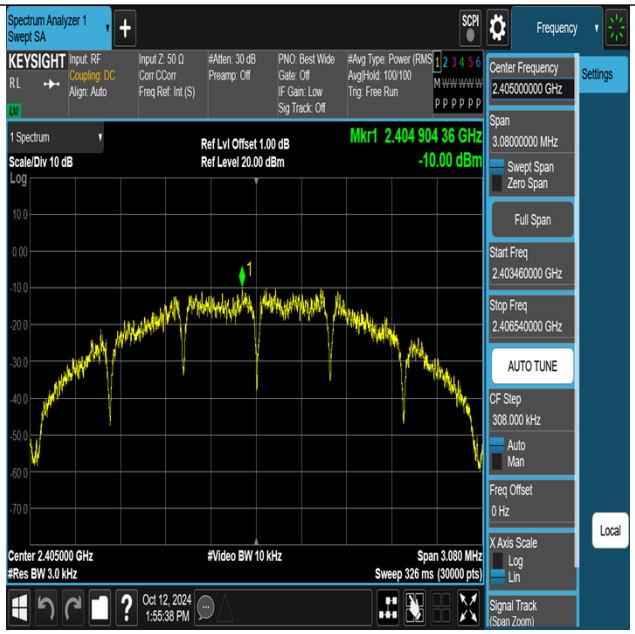
Thread-Ant1-2440

Thread-Ant1-2480

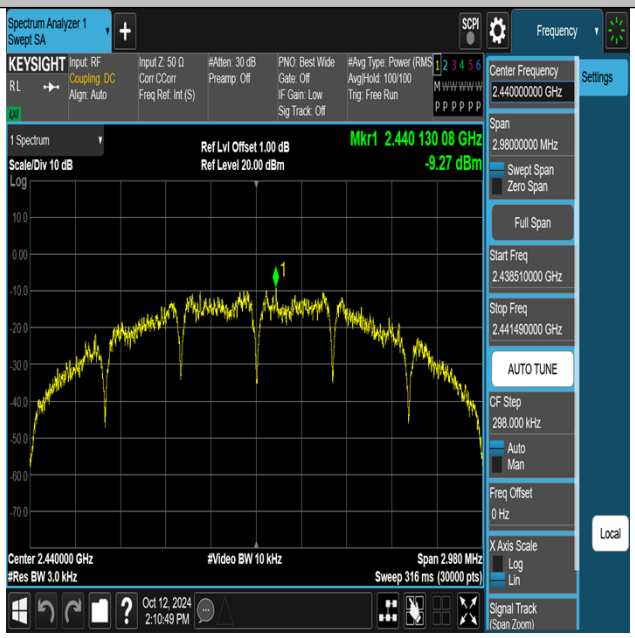
Appendix H: Power Spectral Density

TestMode	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
Mode 1	2405	-10.00	≤8.00	PASS
	2440	-9.27	≤8.00	PASS
	2480	-9.29	≤8.00	PASS

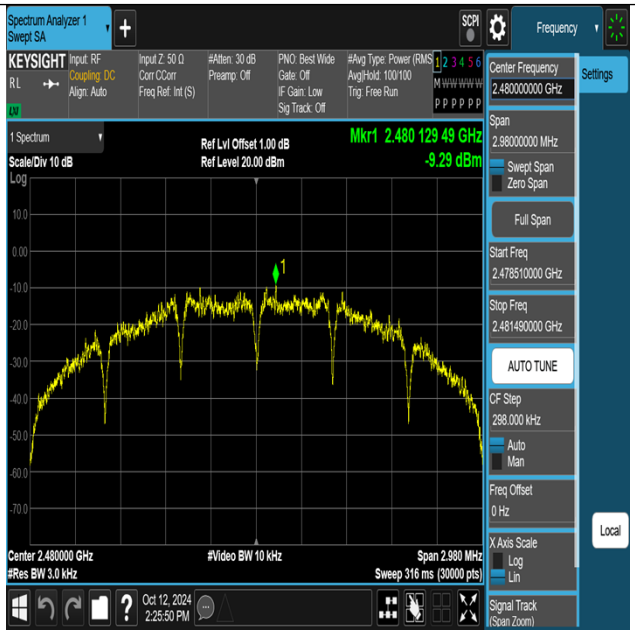
Test Graphs



Thread-Ant1-2405-PASS



Thread-Ant1-2440-PASS



Thread-Ant1-2480-PASS

The End