

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.160	2407.400	2416.560	0.5	PASS
		2437	9.200	2432.360	2441.560	0.5	PASS
		2462	9.200	2457.360	2466.560	0.5	PASS
11G	Ant1	2412	16.000	2403.960	2419.960	0.5	PASS
		2437	15.440	2429.160	2444.600	0.5	PASS
		2462	15.800	2454.080	2469.880	0.5	PASS
11N20SI SO	Ant1	2412	16.040	2403.920	2419.960	0.5	PASS
		2437	15.760	2429.080	2444.840	0.5	PASS
		2462	15.760	2453.960	2469.720	0.5	PASS

Test Graphs





11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MH z]	Verdict
11B	Ant1	2412	14.024	2404.9449	2418.9689	---	---
		2437	14.065	2429.9230	2443.9880	---	---
		2462	14.051	2454.9397	2468.9907	---	---
11G	Ant1	2412	16.751	2403.5852	2420.3362	---	---
		2437	16.739	2428.6101	2445.3491	---	---
		2462	16.787	2453.5859	2470.3729	---	---
11N20SI SO	Ant1	2412	16.764	2403.5978	2420.3618	---	---
		2437	16.781	2428.5824	2445.3634	---	---
		2462	16.805	2453.5767	2470.3817	---	---

Test Graphs



11B_Ant1_2437

Spectrum Analyzer 1
Occupied BW

KEYSIGHT
Input: RF
Coupling: DC
Align: Auto
RL

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

Atten: 40 dB

Trig: Free Run
Gate: Off
#IF Gain: Low

Center Freq: 2.437000000 GHz
Avg/Hold: >100/100
Radio Std: None

Frequency

Center Frequency
2.437000000 GHz

Span
40.000 MHz

CF Step
4.000000 MHz

Auto
Man

Freq Offset
0 Hz

1 Graph

Ref Lvl Offset 11.74 dB
Ref Value 30.00 dBm

Mkr1 2.436480000 GHz
8.06 dBm

Scale/Div 10.0 dB

Log

20.0

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

Center 2.43700 GHz
#Res BW 430.00 kHz

#Video BW 1.3000 MHz

Span 40 MHz

Sweep 1.00 ms (1001 pts)

2 Metrics

Occupied Bandwidth
14.075 MHz

Total Power
18.8 dBm

Transmit Freq Error
-44.317 kHz

% of OBW Power
99.00 %

x dB Bandwidth
17.37 MHz

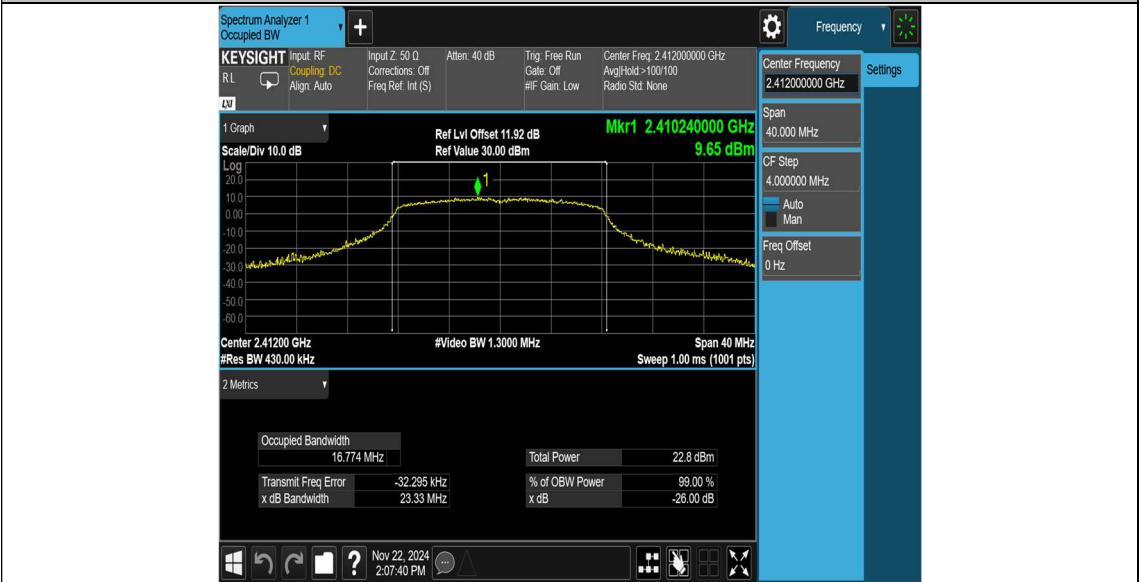
x dB
-26.00 dB

Nov 22, 2024
10:27:42 AM

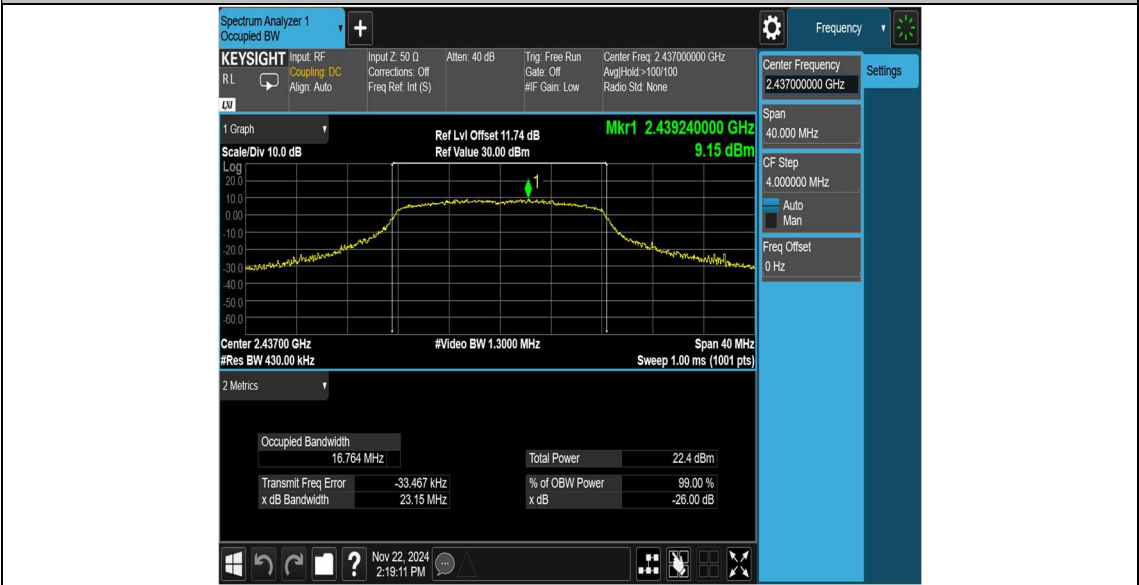
11B_Ant1_2462



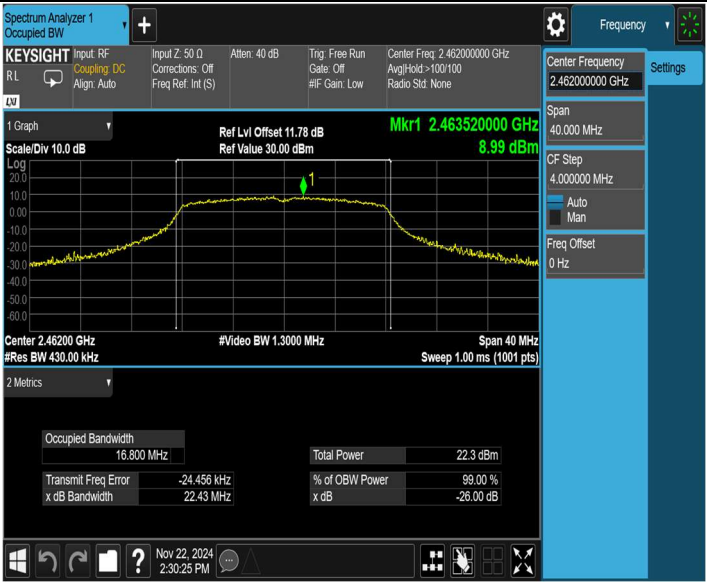
11G_Ant1_2412



11G_Ant1_2437



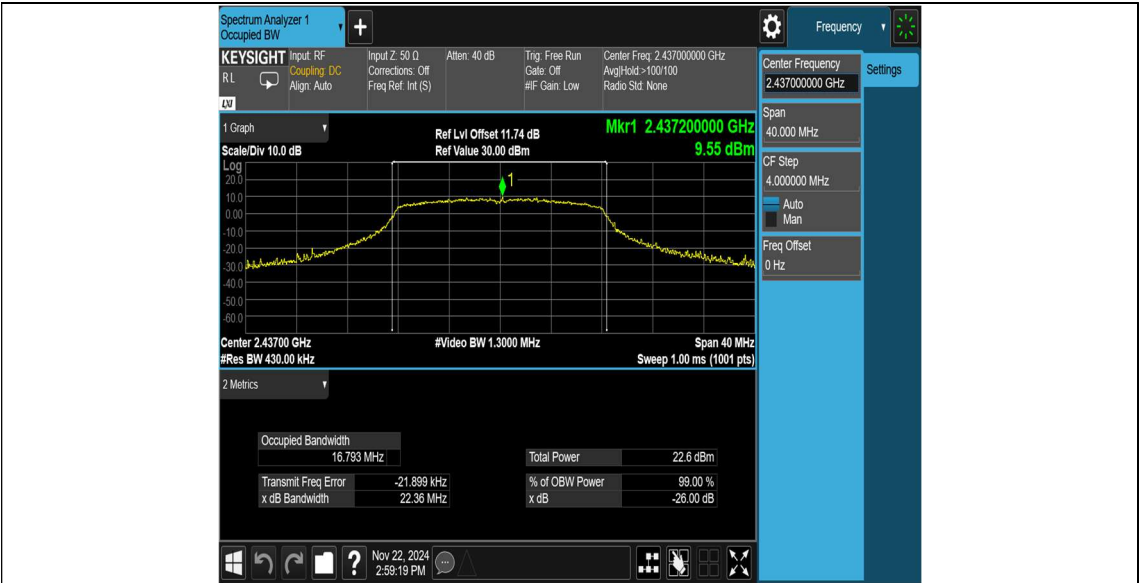
11G_Ant1_2462



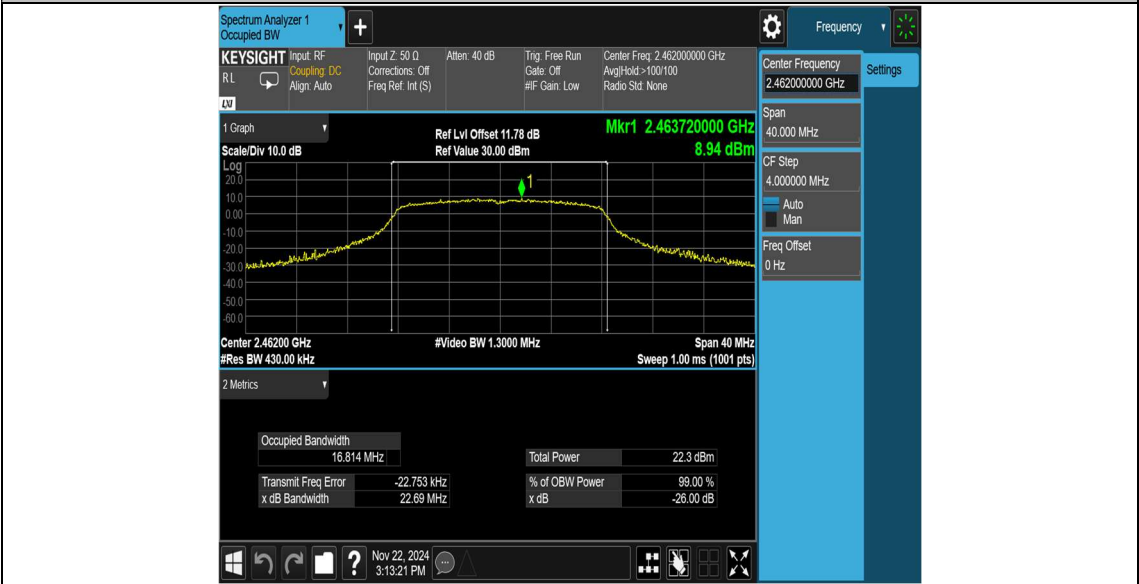
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix C: Maximum conducted output power

Test Result Average

Test Mode	Antenna	Frequency [MHz]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	100.00	0.00	16.15	≤30.00	2.87	19.02	≤36.00	PASS
		2437	99.77	0.01	15.74	≤30.00	2.87	18.61	≤36.00	PASS
		2462	100.00	0.00	15.76	≤30.00	2.87	18.63	≤36.00	PASS
11G	Ant1	2412	98.62	0.06	15.61	≤30.00	2.87	18.48	≤36.00	PASS
		2437	98.62	0.06	15.34	≤30.00	2.87	18.21	≤36.00	PASS
		2462	98.62	0.06	15.17	≤30.00	2.87	18.04	≤36.00	PASS
11N20SI SO	Ant1	2412	98.62	0.06	15.66	≤30.00	2.87	18.53	≤36.00	PASS
		2437	98.62	0.06	15.40	≤30.00	2.87	18.27	≤36.00	PASS
		2462	98.62	0.06	15.18	≤30.00	2.87	18.05	≤36.00	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.63	≤8.00	PASS
		2437	-14.61	≤8.00	PASS
		2462	-15.05	≤8.00	PASS
11G	Ant1	2412	-17.58	≤8.00	PASS
		2437	-17.88	≤8.00	PASS
		2462	-18.11	≤8.00	PASS
11N20SISO	Ant1	2412	-17.55	≤8.00	PASS
		2437	-17.88	≤8.00	PASS
		2462	-18.06	≤8.00	PASS

Test Graphs



11B_Ant1_2437

Spectrum Analyzer 1
Swept SA

KEYSIGHT Input: RF
Coupling: DC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

#Atten: 30 dB

PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off

#Avg Type: Power (RMS)
Trig: Free Run

1 2 3 4 5 6
A W W W W W
A A A A A A

Center Frequency
2.43700000 GHz

Span
28.1300000 MHz

Swept Span
Zero Span

Full Span

Start Freq
2.422835000 GHz

Stop Freq
2.451065000 GHz

AUTO TUNE

CF Step
2.813000 MHz

Auto
Man

Freq Offset
0 Hz

XAxis Scale
Log
Lin

Signal Track
(Span Zoom)

1 Spectrum
Scale/Div 10 dB
LogRef Lvl Offset 11.75 dB
Ref Level 20.00 dBmMkr1 2.437 987 9 GHz
-14.608 dBmCenter 2.43700 GHz
#Res BW 3.0 kHz

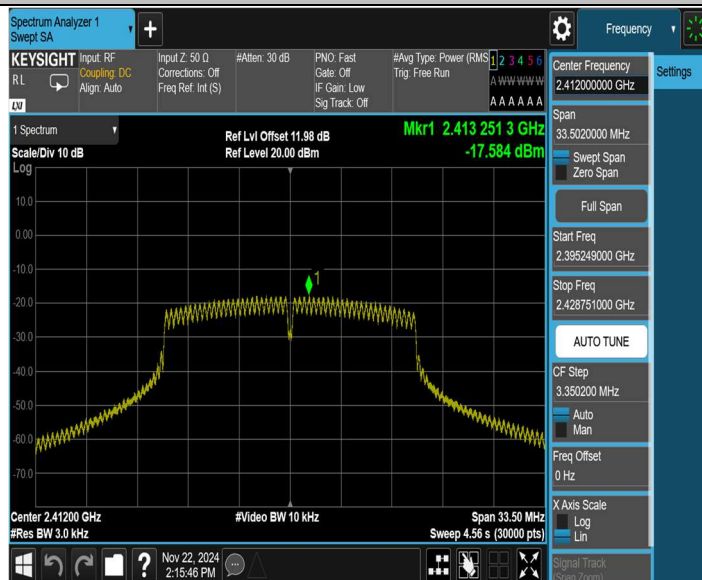
#Video BW 10 kHz

Span 28.13 MHz
Sweep 3.83 s (30000 pts)Nov 22, 2024
10:34:35 AM

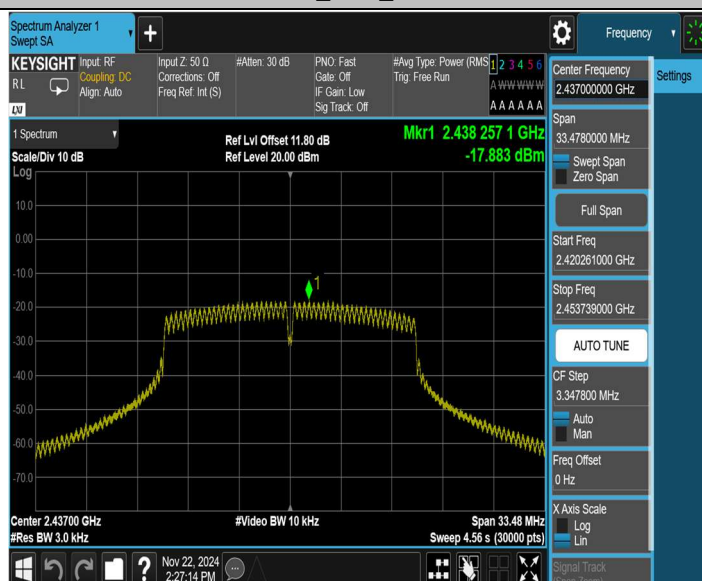
11B_Ant1_2462



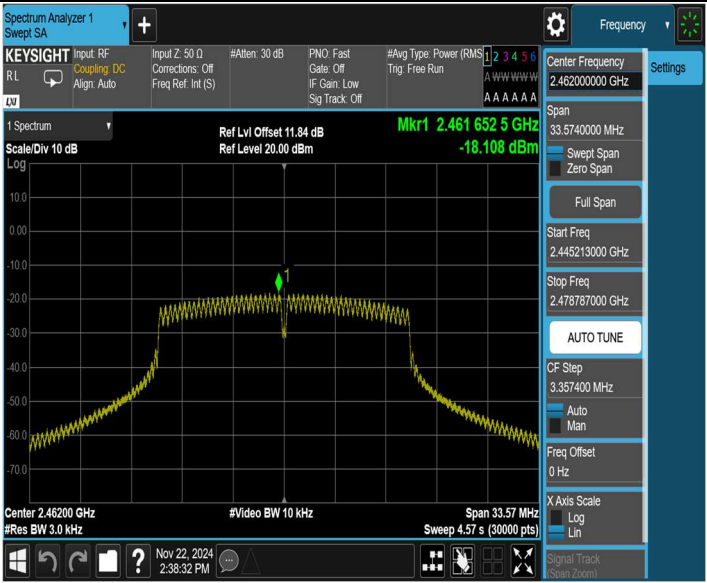
11G_Ant1_2412



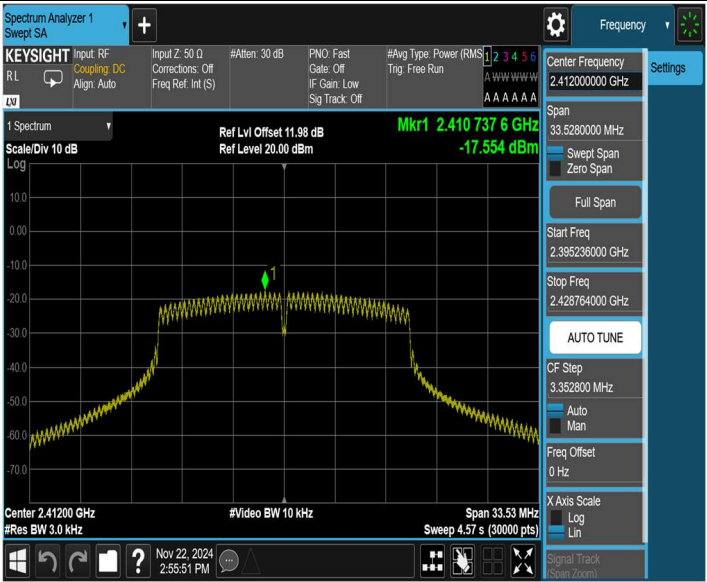
11G_Ant1_2437



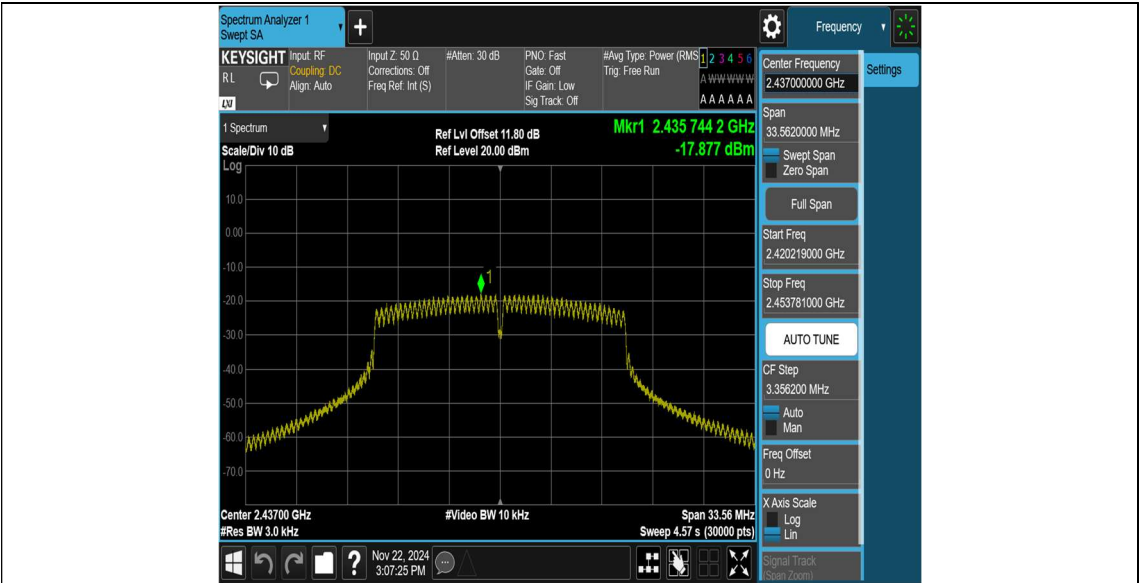
11G_Ant1_2462



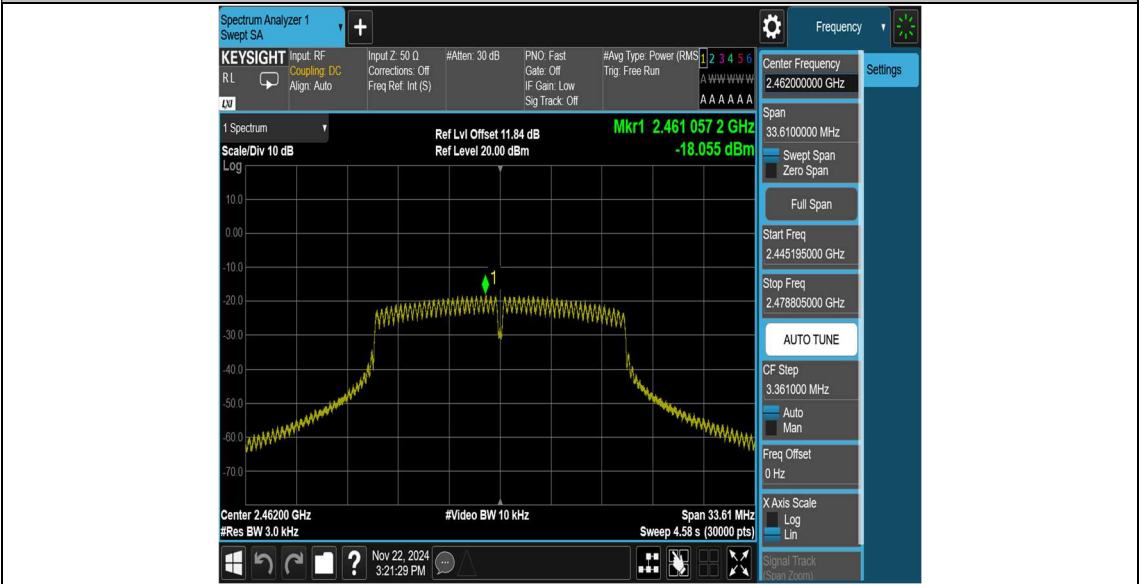
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462



Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.18	-32	≤-21.82	PASS
		High	2462	7.71	-45.22	≤-22.29	PASS
11G	Ant1	Low	2412	5.28	-27	≤-24.72	PASS
		High	2462	4.35	-42.41	≤-25.65	PASS
11N20SI SO	Ant1	Low	2412	4.85	-25.54	≤-25.16	PASS
		High	2462	4.48	-41.91	≤-25.52	PASS

Test Graphs





11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency [MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.20	8.20	---	PASS
			30~1000	8.20	-58.39	≤-21.8	PASS
			1000~26500	8.20	-49.97	≤-21.8	PASS
		2437	Reference	8.12	8.12	---	PASS
			30~1000	8.12	-58.87	≤-21.88	PASS
			1000~26500	8.12	-50.2	≤-21.88	PASS
		2462	Reference	7.70	7.70	---	PASS
			30~1000	7.70	-56.75	≤-22.3	PASS
			1000~26500	7.70	-49.83	≤-22.3	PASS
11G	Ant1	2412	Reference	5.66	5.66	---	PASS
			30~1000	5.66	-57.87	≤-24.34	PASS
			1000~26500	5.66	-50.14	≤-24.34	PASS
		2437	Reference	5.22	5.22	---	PASS
			30~1000	5.22	-54.73	≤-24.78	PASS
			1000~26500	5.22	-49.82	≤-24.78	PASS
		2462	Reference	5.07	5.07	---	PASS
			30~1000	5.07	-58.53	≤-24.93	PASS
			1000~26500	5.07	-49.63	≤-24.93	PASS
11N20SI SO	Ant1	2412	Reference	5.34	5.34	---	PASS
			30~1000	5.34	-57.88	≤-24.66	PASS
			1000~26500	5.34	-50.11	≤-24.66	PASS
		2437	Reference	5.36	5.36	---	PASS
			30~1000	5.36	-58.47	≤-24.64	PASS
			1000~26500	5.36	-49.84	≤-24.64	PASS
		2462	Reference	5.10	5.10	---	PASS
			30~1000	5.10	-58.66	≤-24.9	PASS
			1000~26500	5.10	-50.28	≤-24.9	PASS

Test Graphs

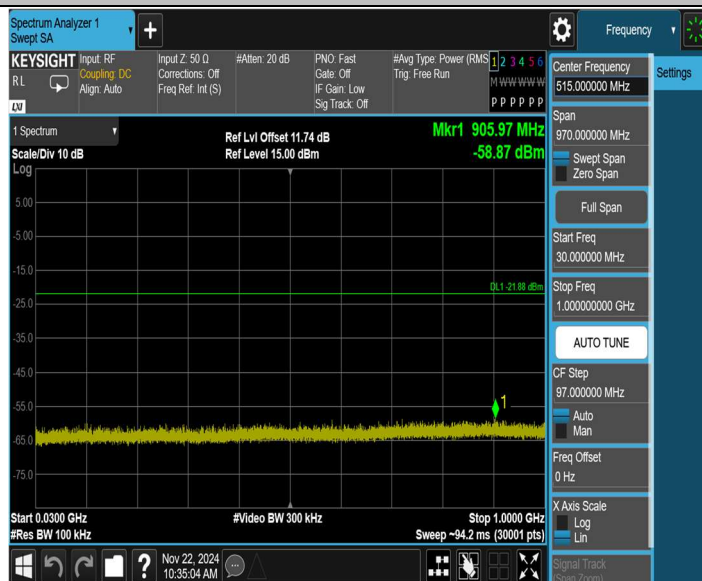




11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



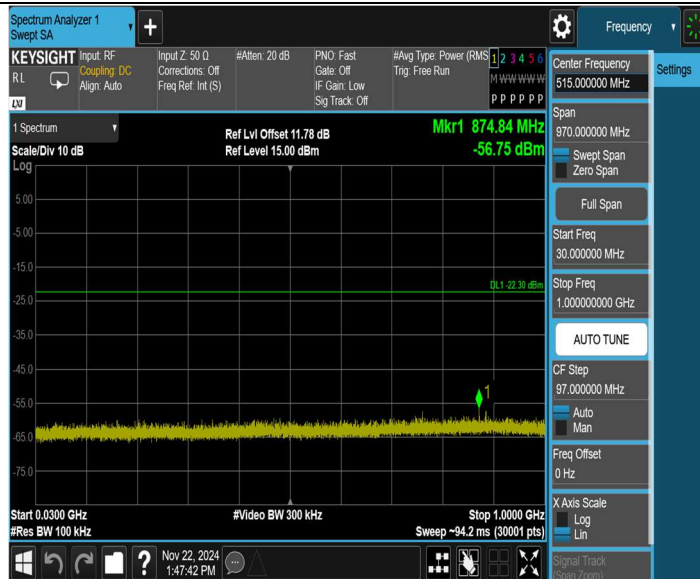
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference

