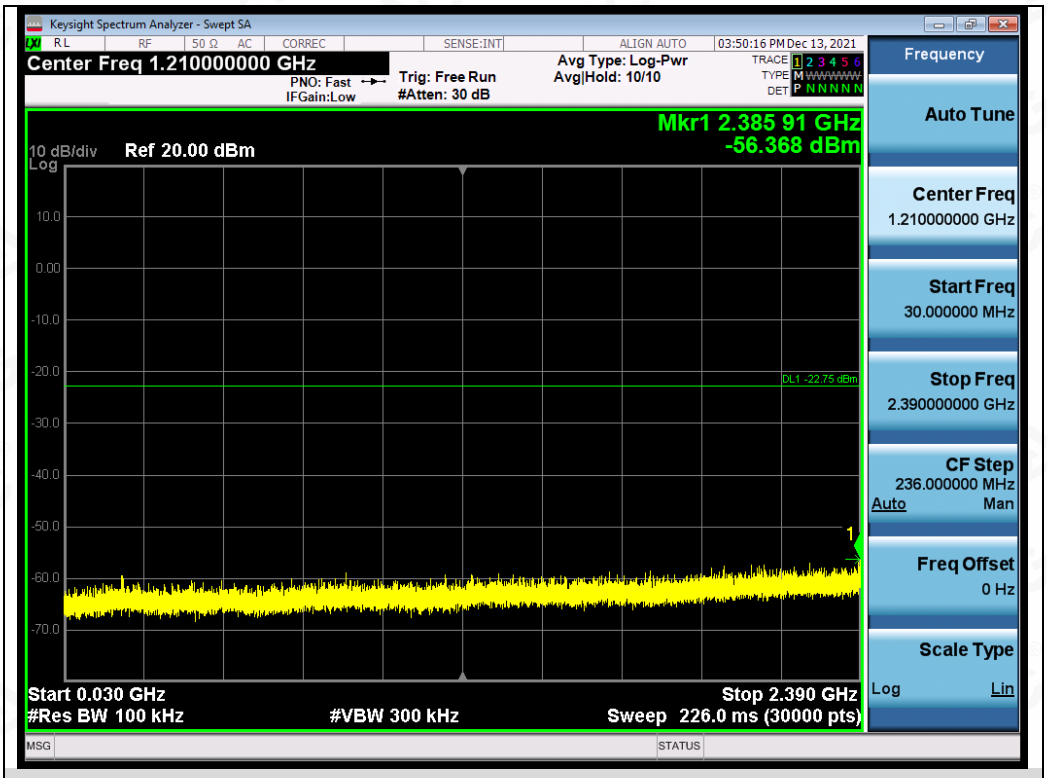
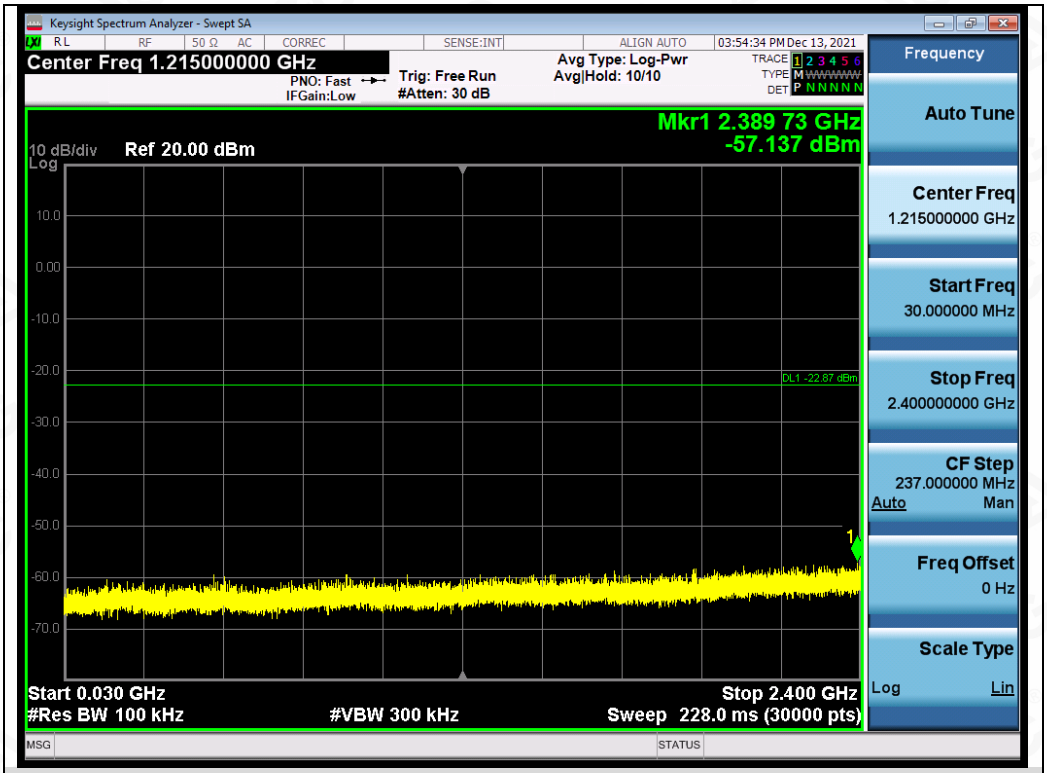
Test Graphs of Spurious Emissions in Non-Restricted Frequency Bands



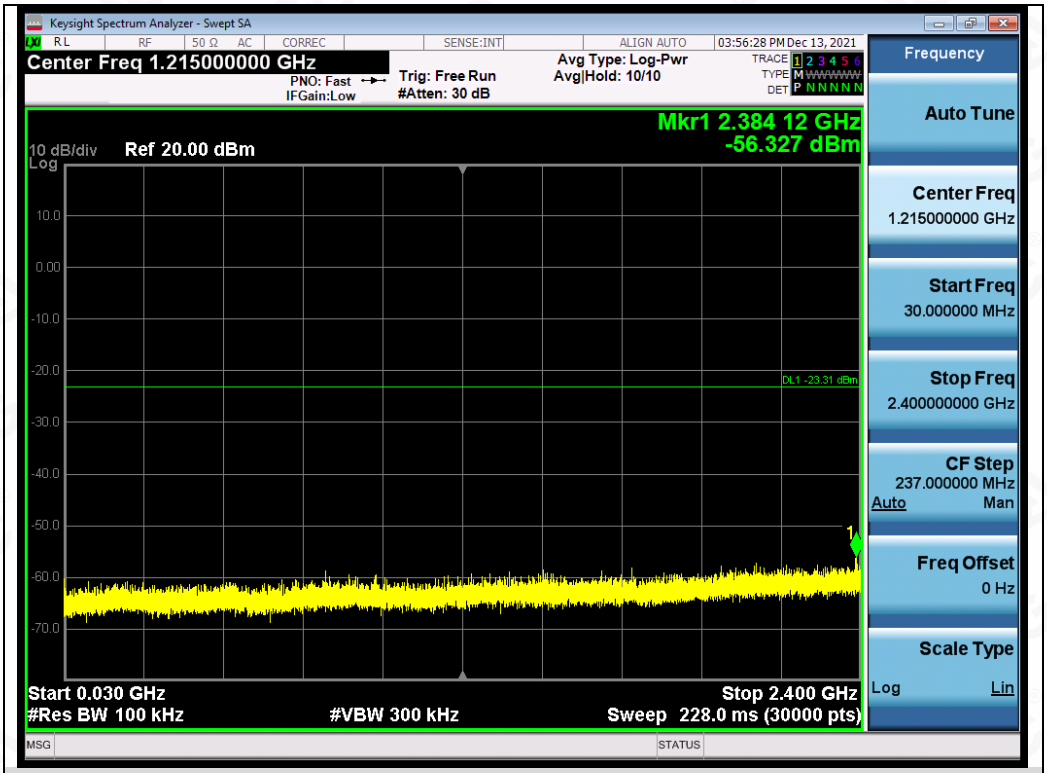
Test_Graph_802.11b_ANT1_2412_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT1_2412_1Mbps_Higher Band Emissions



Test_Graph_802.11b_ANT1_2437_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT1_2437_1Mbps_Higher Band Emissions

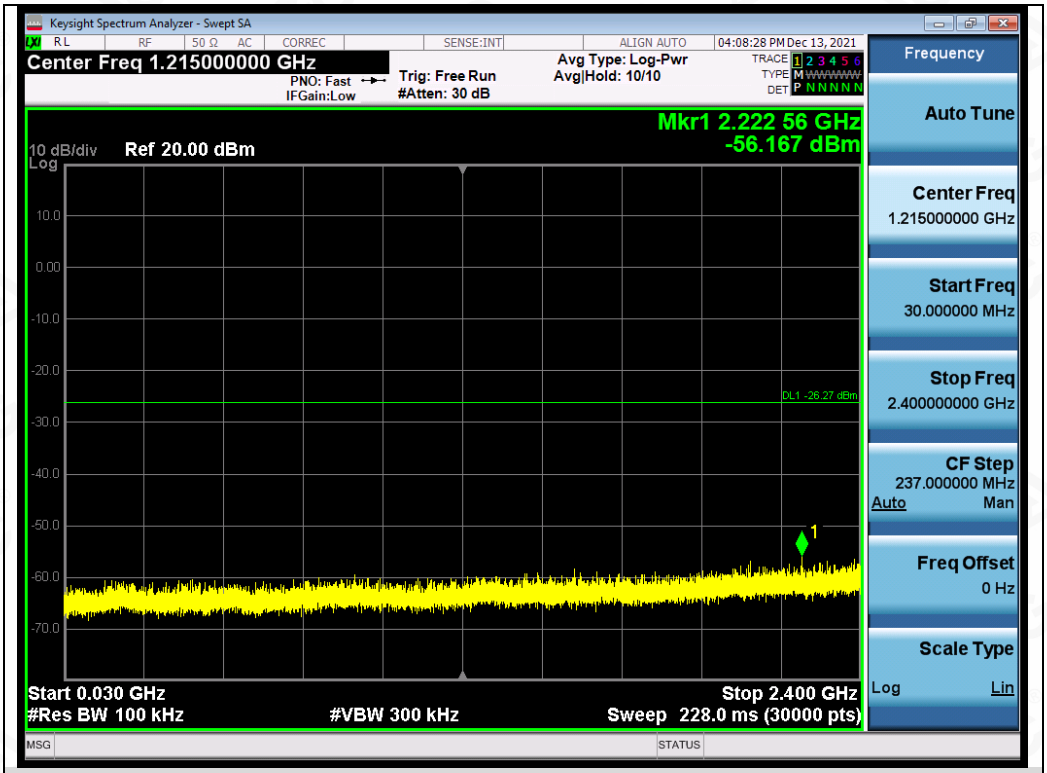


Test_Graph_802.11b_ANT1_2462_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT1_2462_1Mbps_Higher Band Emissions

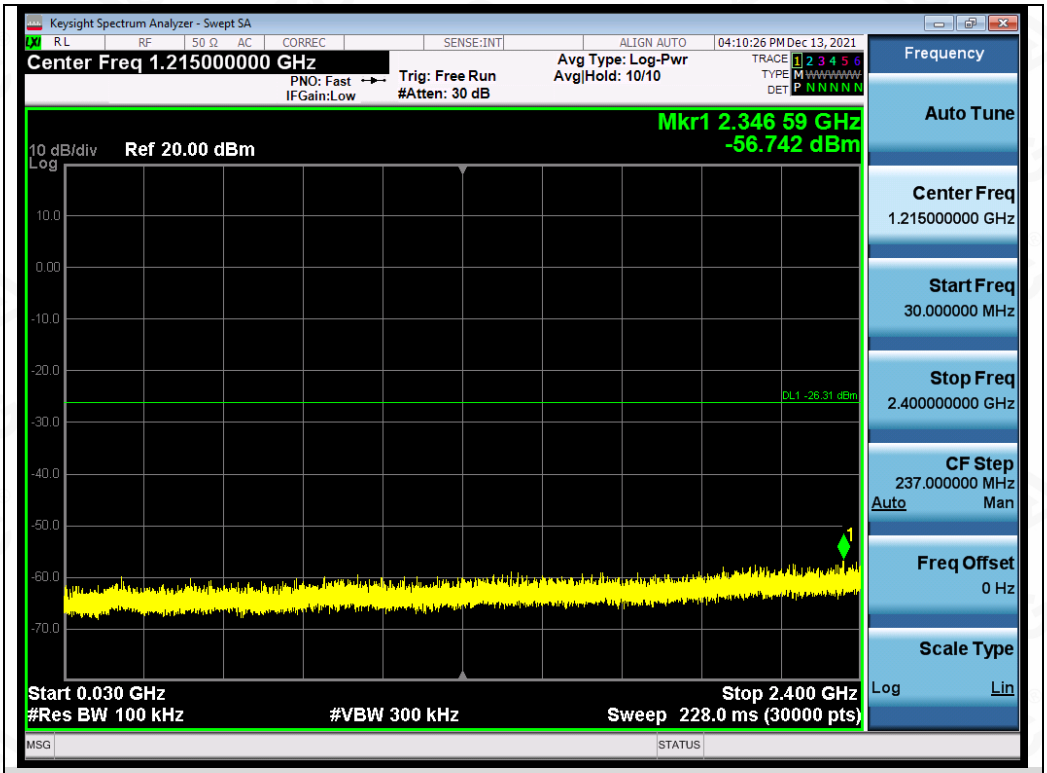
Test_Graph_802.11g_ANT1_2412_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT1_2412_6Mbps_Higher Band Emissions



Test_Graph_802.11g_ANT1_2437_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT1_2437_6Mbps_Higher Band Emissions

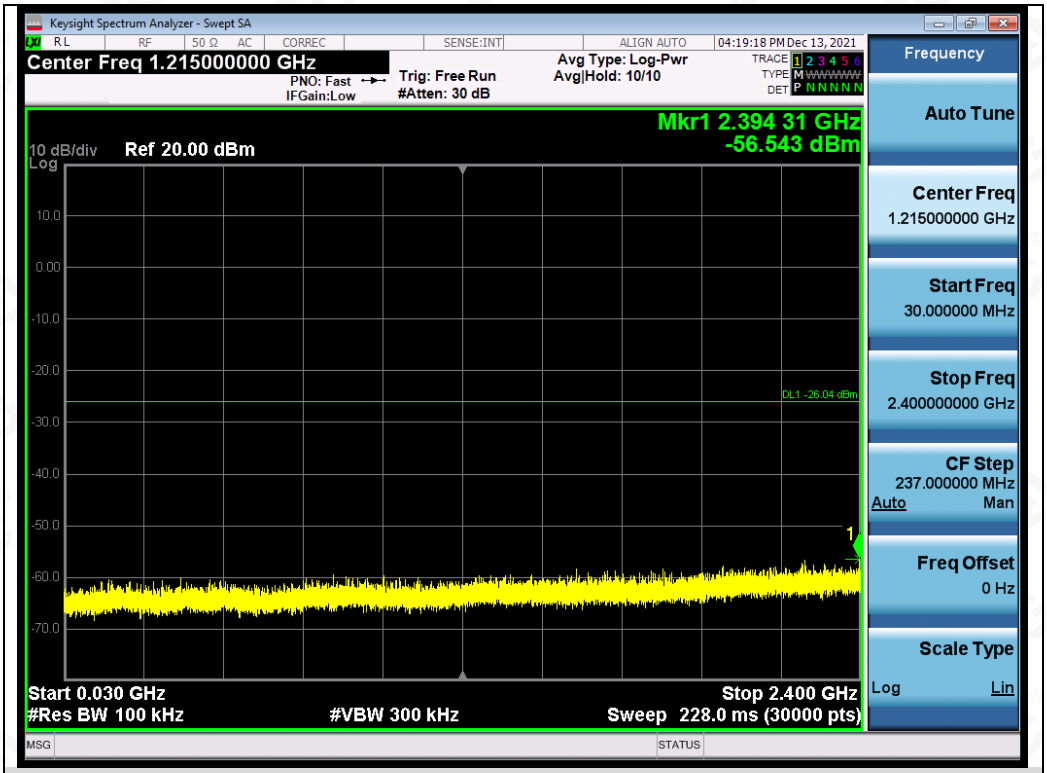


Test_Graph_802.11g_ANT1_2462_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT1_2462_6Mbps_Higher Band Emissions

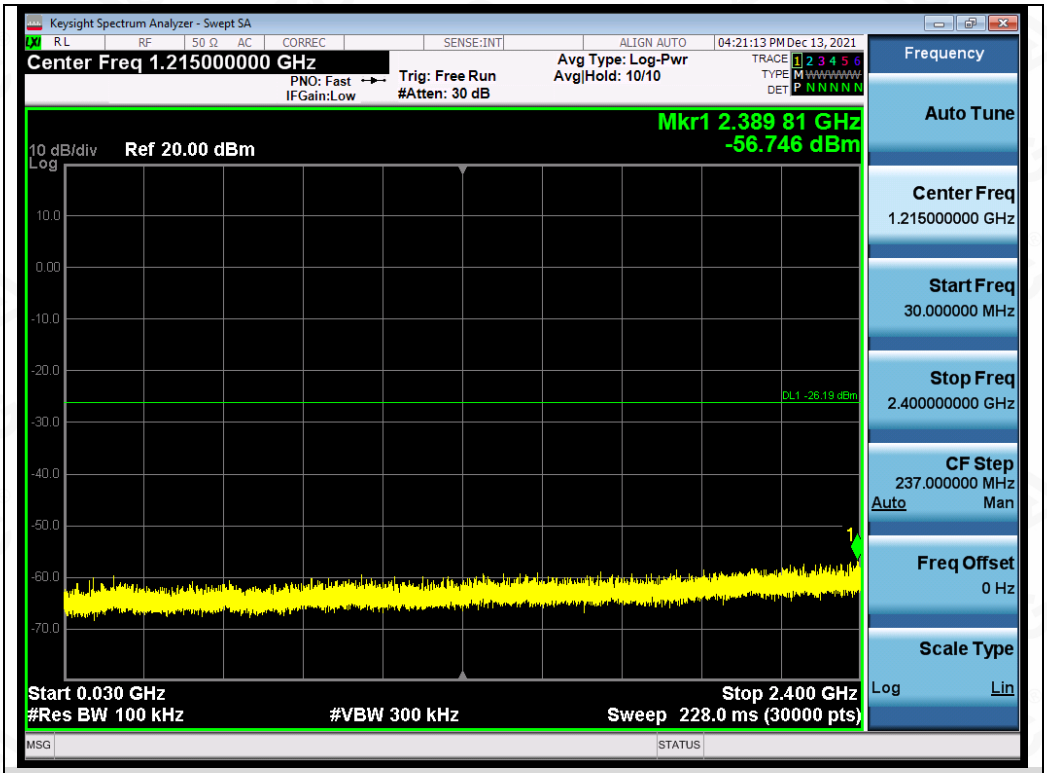
Test_Graph_802.11n20_ANT1_2412_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT1_2412_MCS0_Higher Band Emissions



Test_Graph_802.11n20_ANT1_2437_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT1_2437_MCS0_Higher Band Emissions

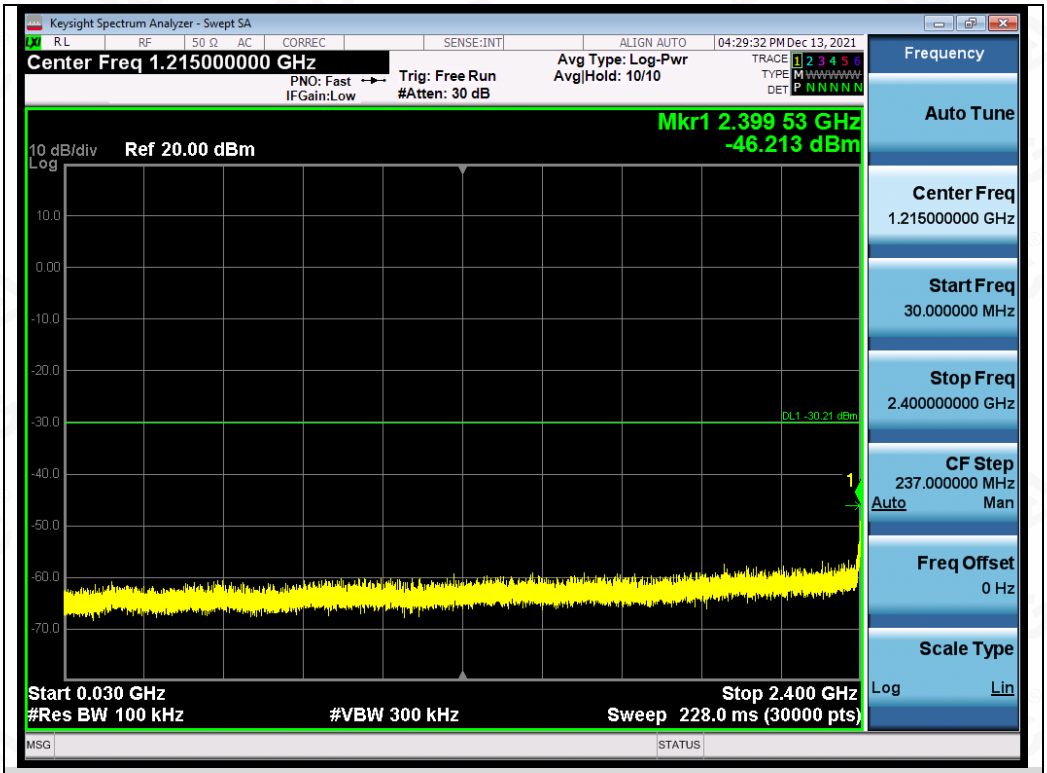


Test_Graph_802.11n20_ANT1_2462_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT1_2462_MCS0_Higher Band Emissions

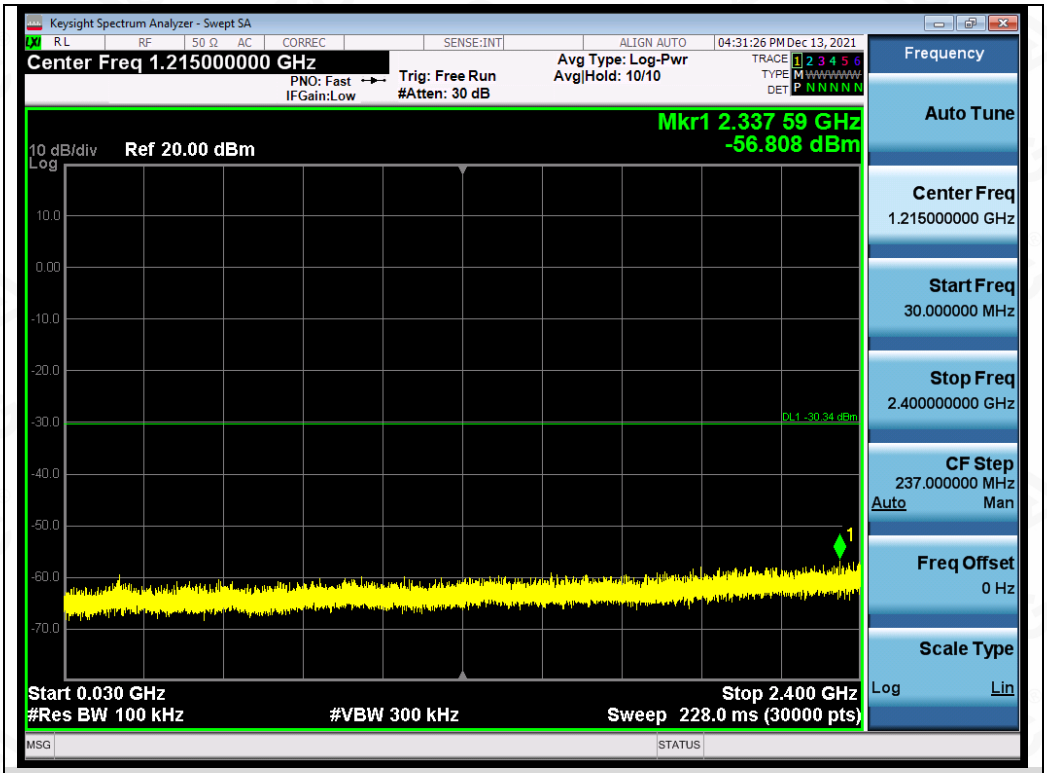
Test_Graph_802.11n40_ANT1_2422_MCS0_Lower Band Emissions

Test_Graph_802.11n40_ANT1_2422_MCS0_Higher Band Emissions



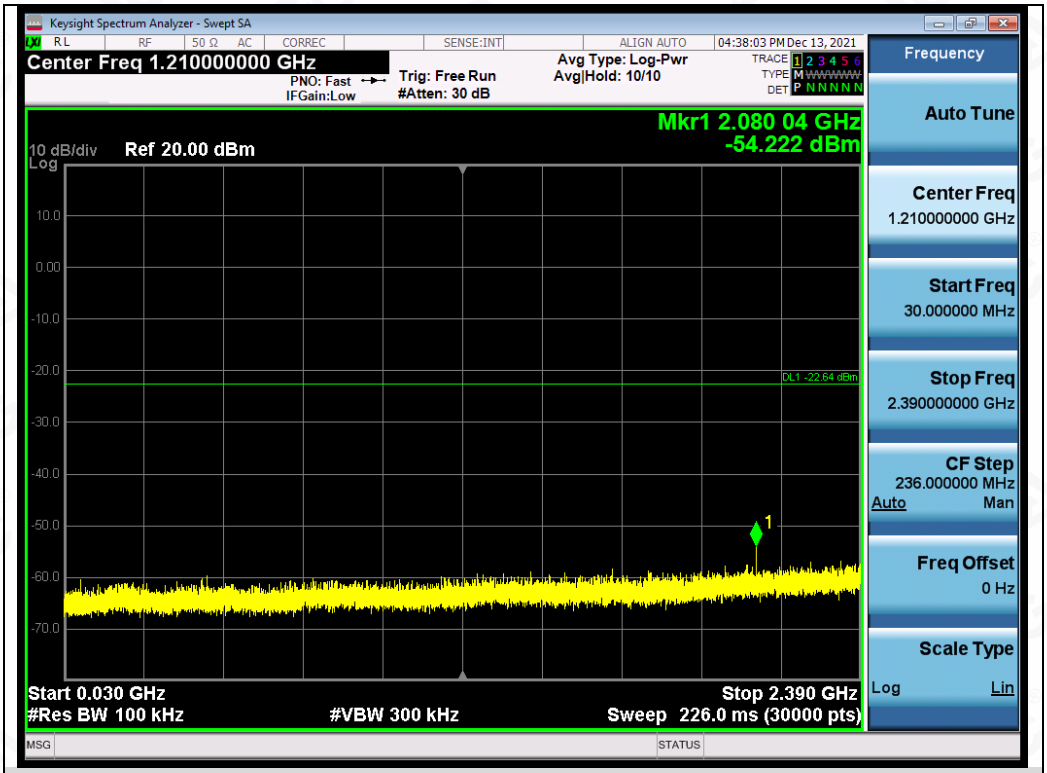
Test_Graph_802.11n40_ANT1_2437_MCS0_Lower Band Emissions

Test_Graph_802.11n40_ANT1_2437_MCS0_Higher Band Emissions



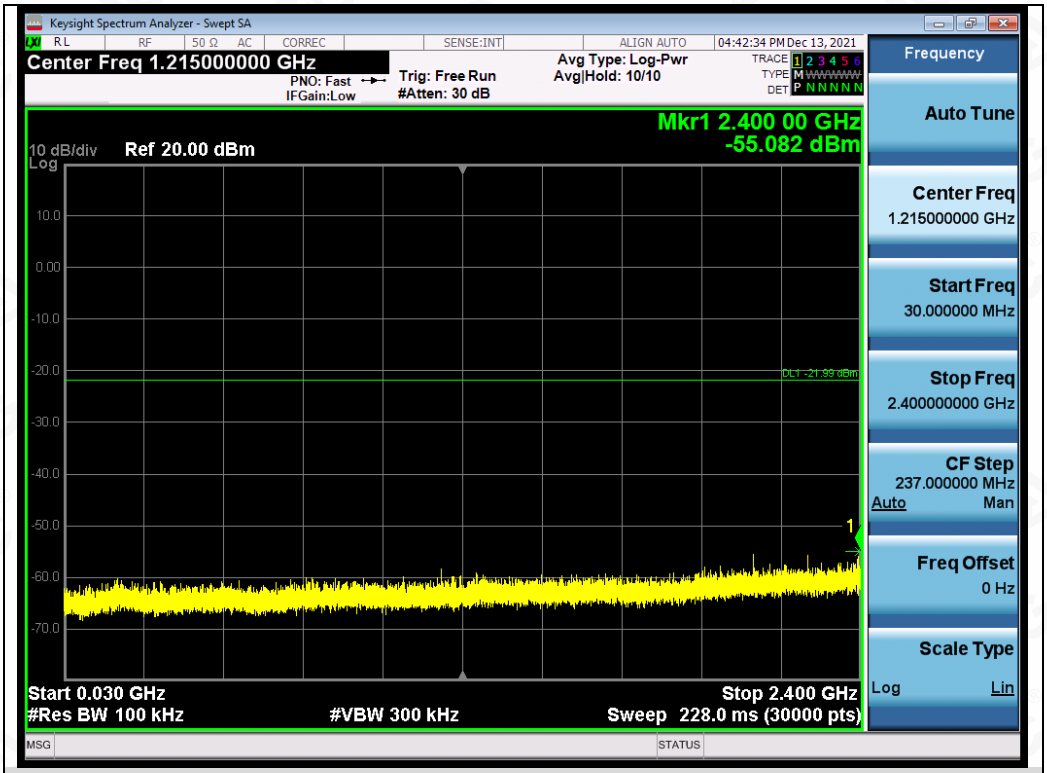
Test_Graph_802.11n40_ANT1_2452_MCS0_Lower Band Emissions

Test_Graph_802.11n40_ANT1_2452_MCS0_Higher Band Emissions



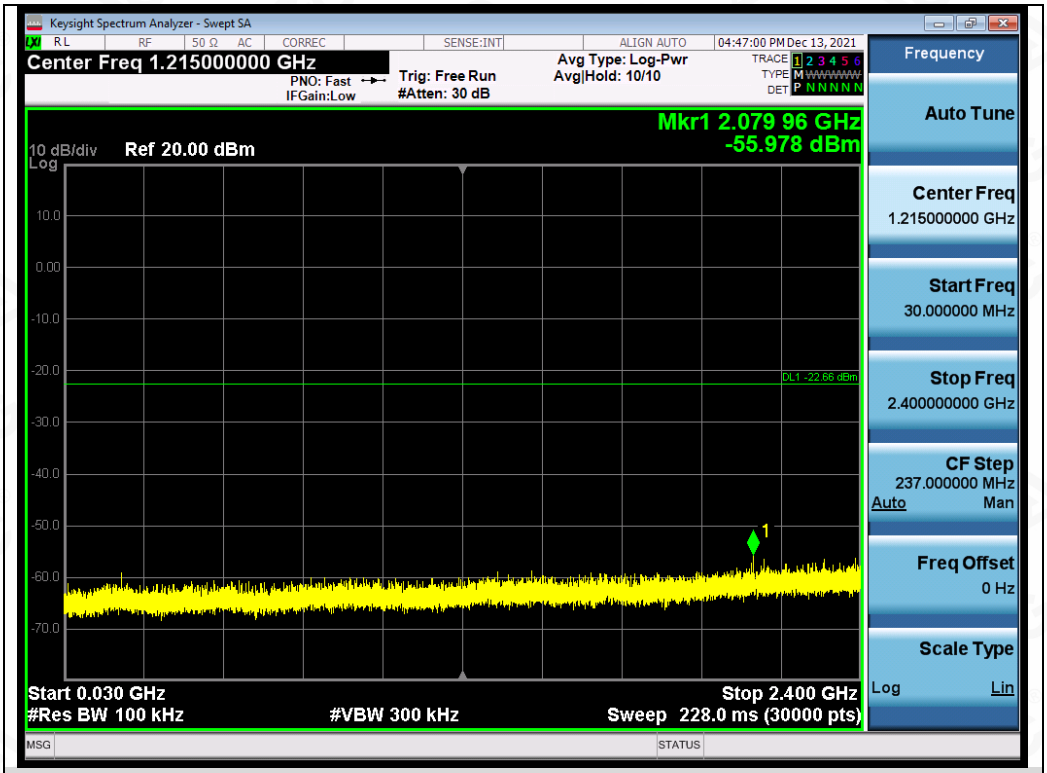
Test_Graph_802.11b_ANT2_2412_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT2_2412_1Mbps_Higher Band Emissions



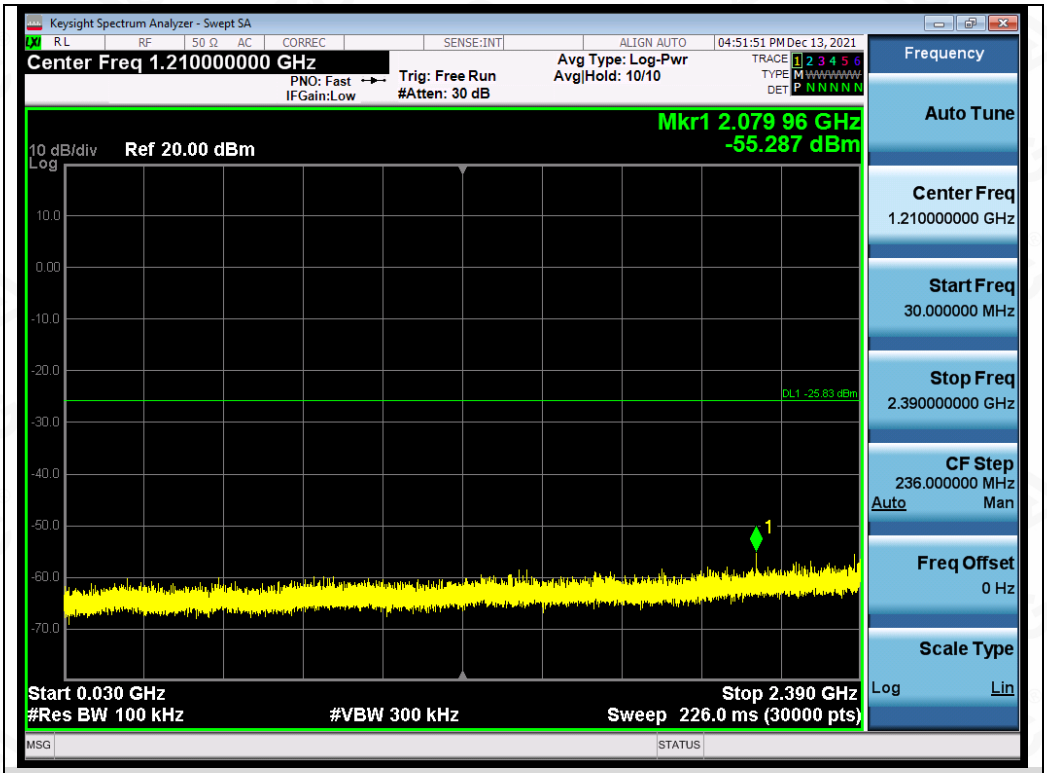
Test_Graph_802.11b_ANT2_2437_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT2_2437_1Mbps_Higher Band Emissions



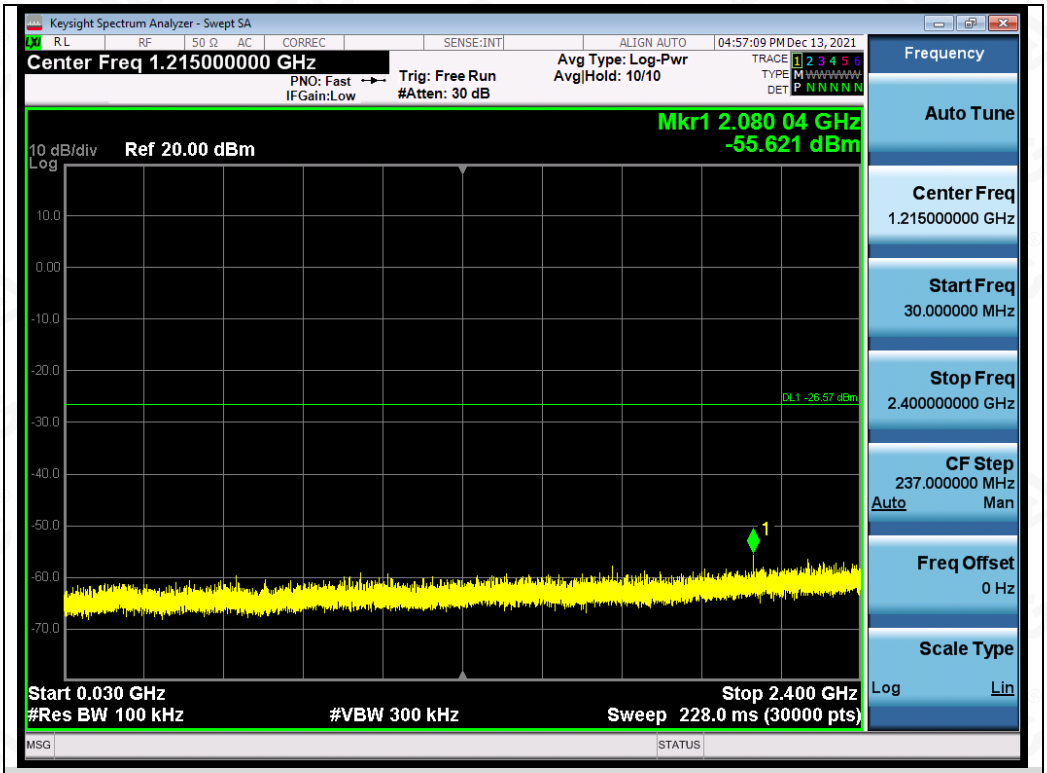
Test_Graph_802.11b_ANT2_2462_1Mbps_Lower Band Emissions

Test_Graph_802.11b_ANT2_2462_1Mbps_Higher Band Emissions



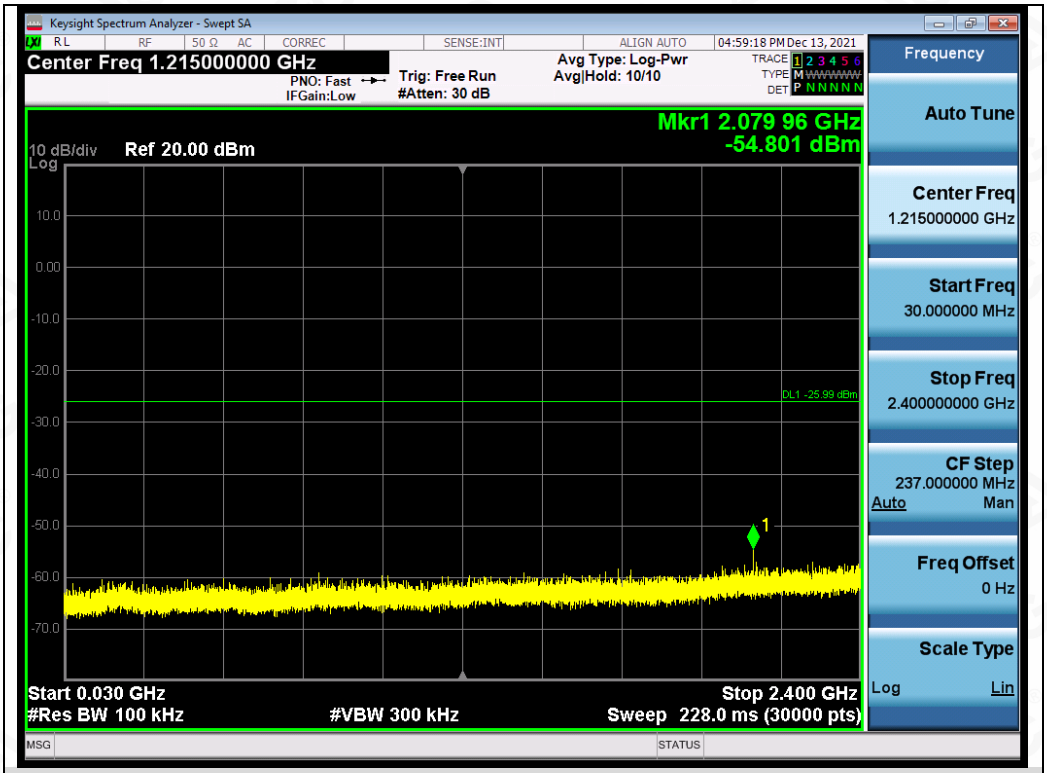
Test_Graph_802.11g_ANT2_2412_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT2_2412_6Mbps_Higher Band Emissions



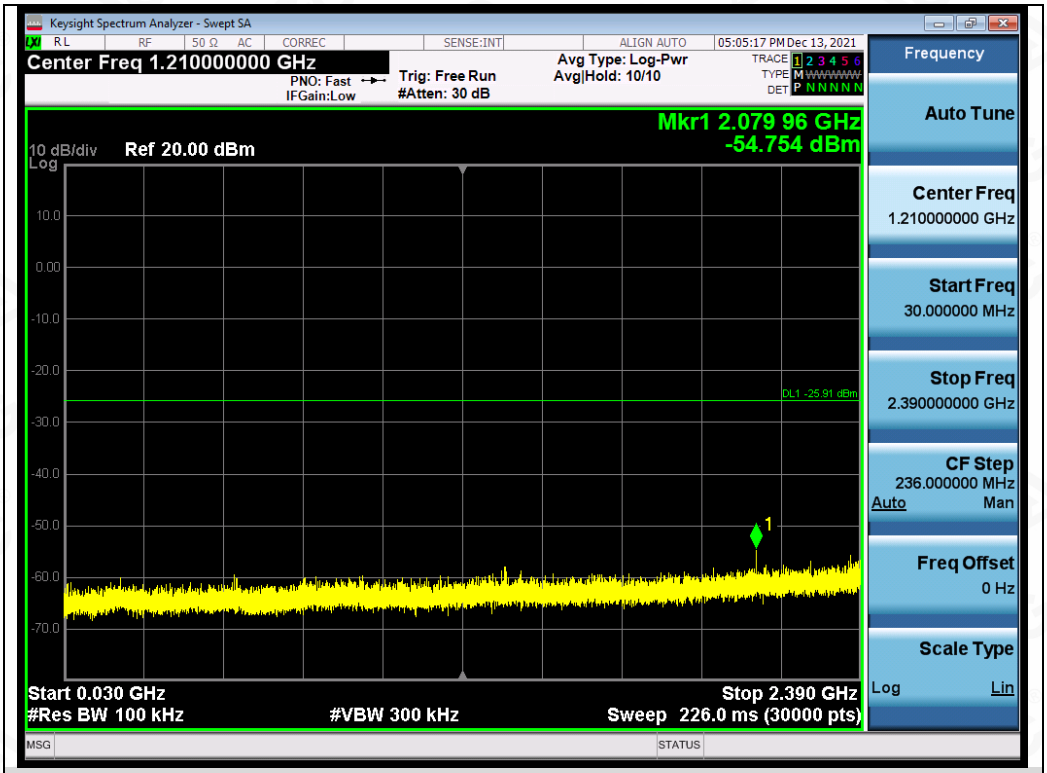
Test_Graph_802.11g_ANT2_2437_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT2_2437_6Mbps_Higher Band Emissions



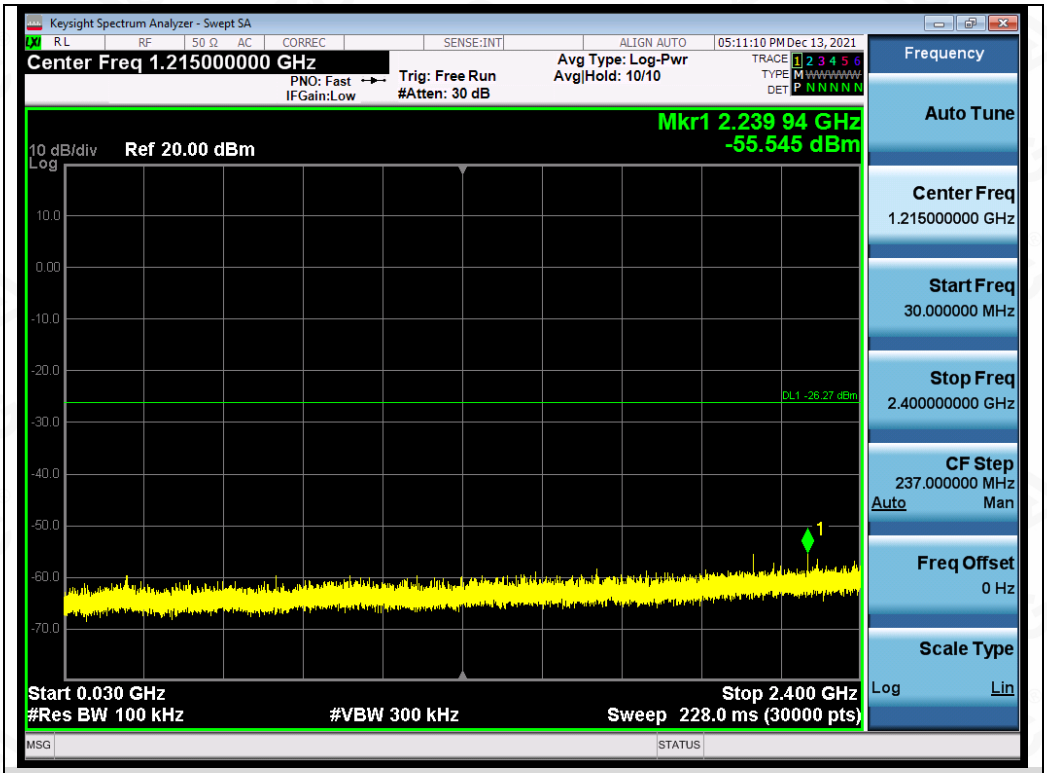
Test_Graph_802.11g_ANT2_2462_6Mbps_Lower Band Emissions

Test_Graph_802.11g_ANT2_2462_6Mbps_Higher Band Emissions



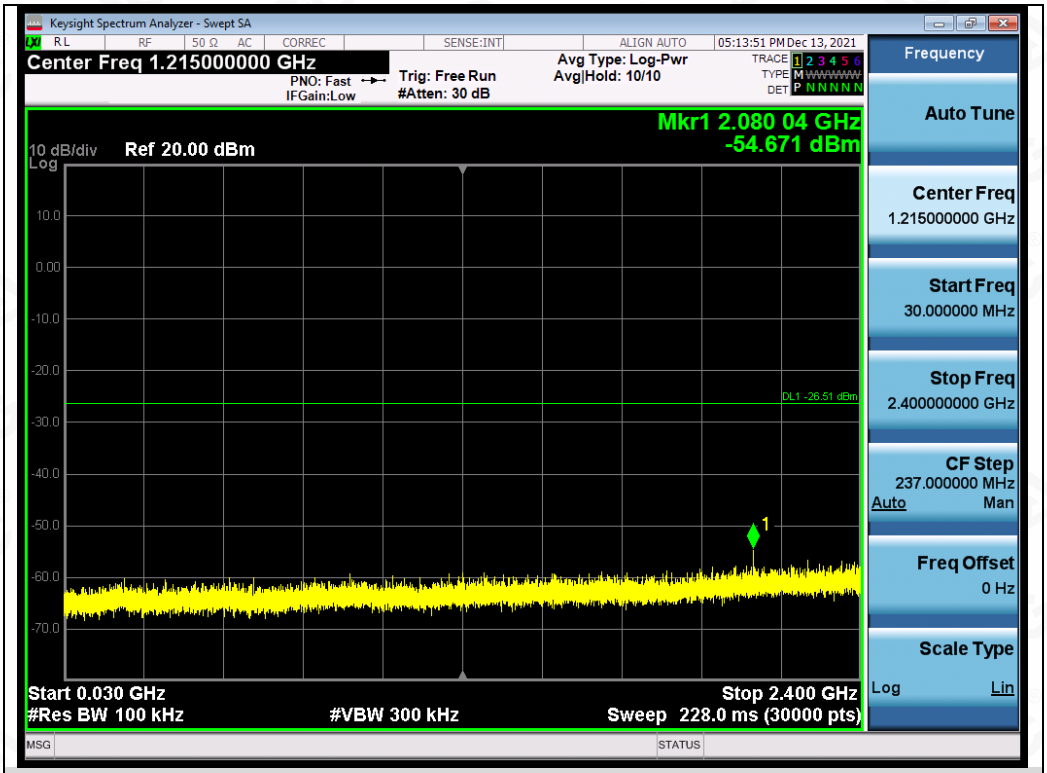
Test_Graph_802.11n20_ANT2_2412_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT2_2412_MCS0_Higher Band Emissions



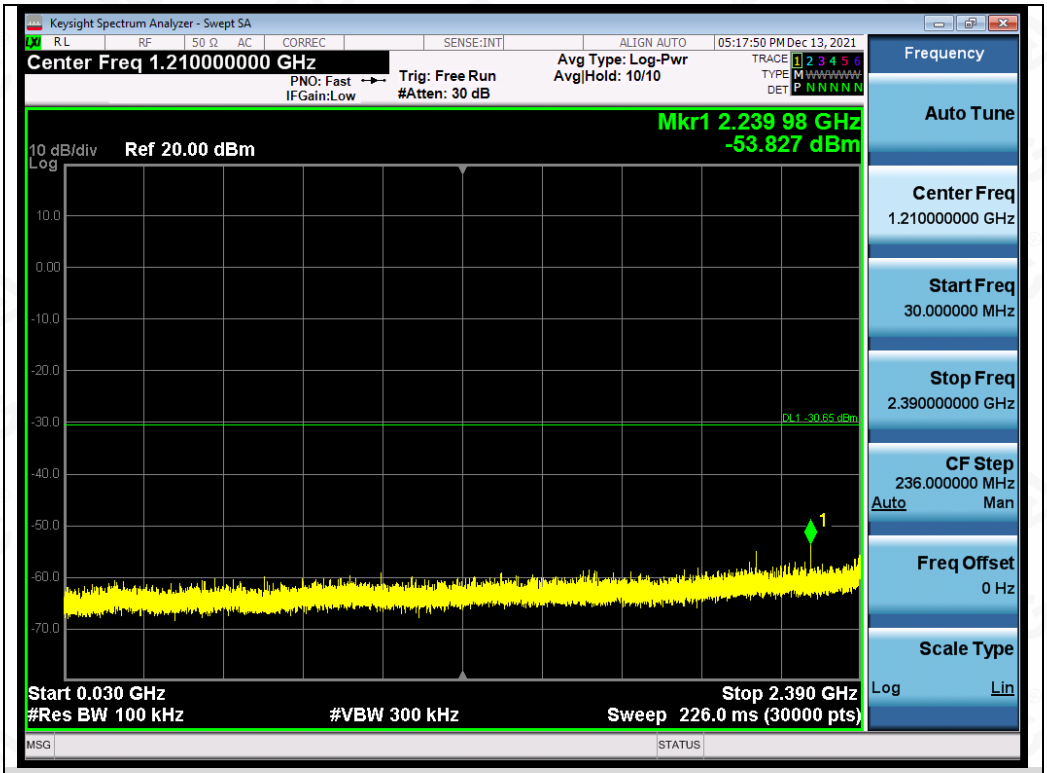
Test_Graph_802.11n20_ANT2_2437_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT2_2437_MCS0_Higher Band Emissions



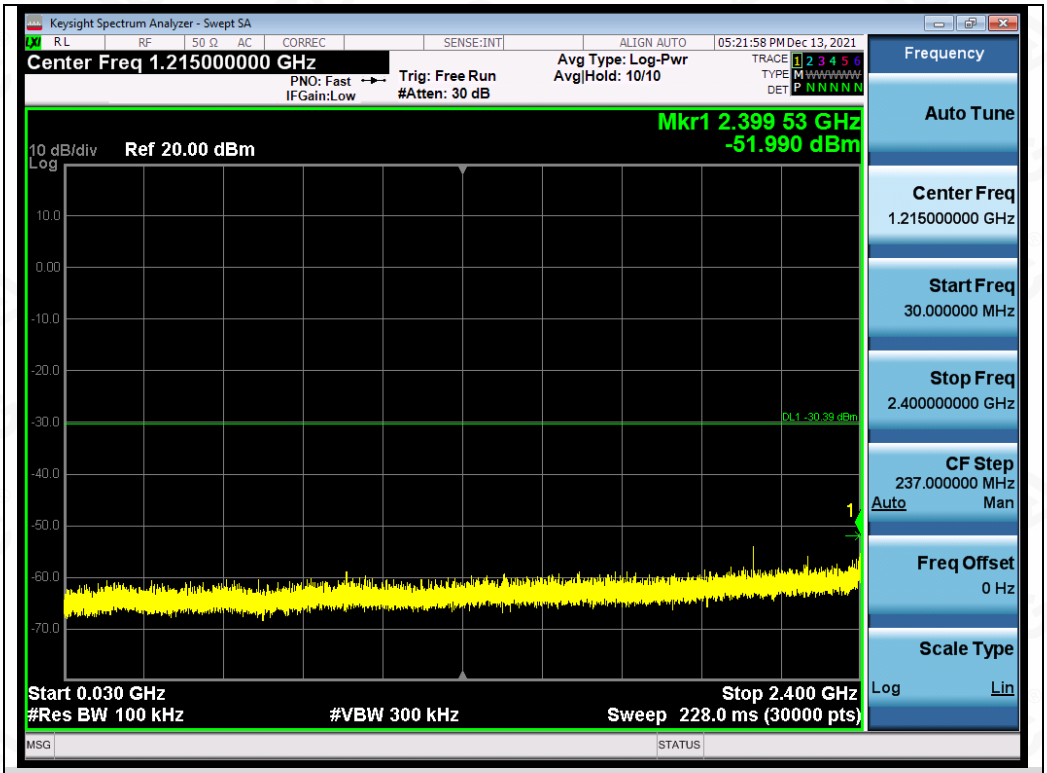
Test_Graph_802.11n20_ANT2_2462_MCS0_Lower Band Emissions

Test_Graph_802.11n20_ANT2_2462_MCS0_Higher Band Emissions



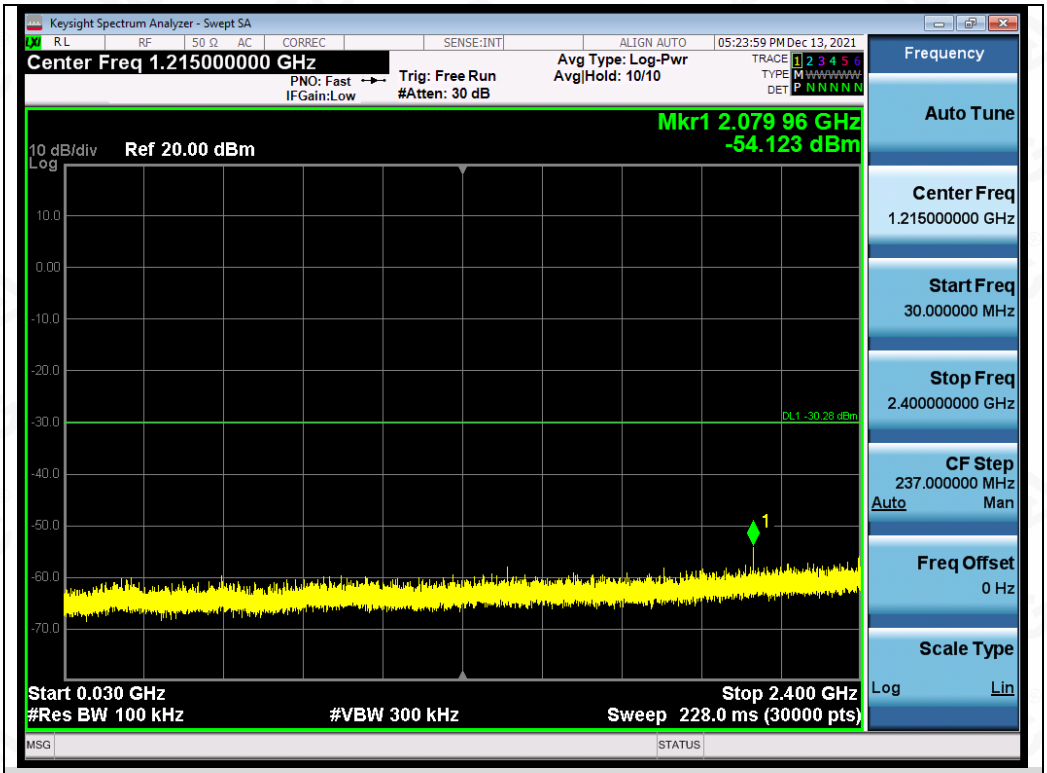
Test_Graph_802.11n40_ANT2_2422_MCS0_Lower Band Emissions

Test_Graph_802.11n40_ANT2_2422_MCS0_Higher Band Emissions



Test_Graph_802.11n40_ANT2_2437_MCS0_Lower Band Emissions

Test_Graph_802.11n40_ANT2_2437_MCS0_Higher Band Emissions

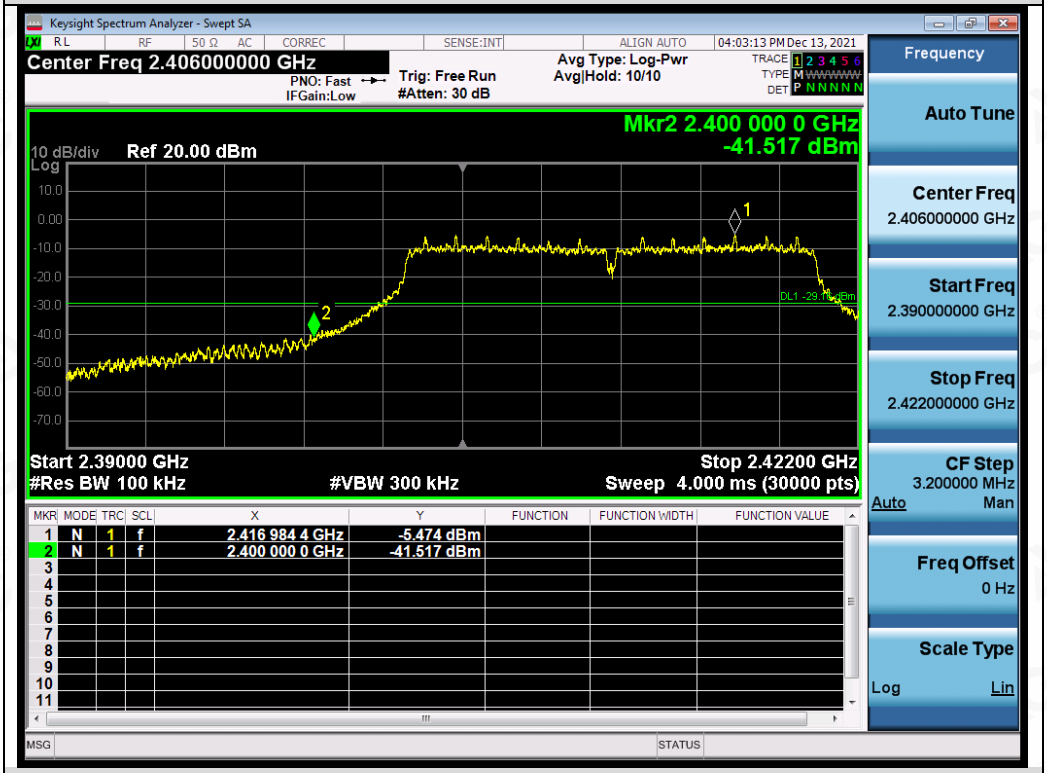


Test_Graph_802.11n40_ANT2_2452_MCS0_Lower Band Emissions

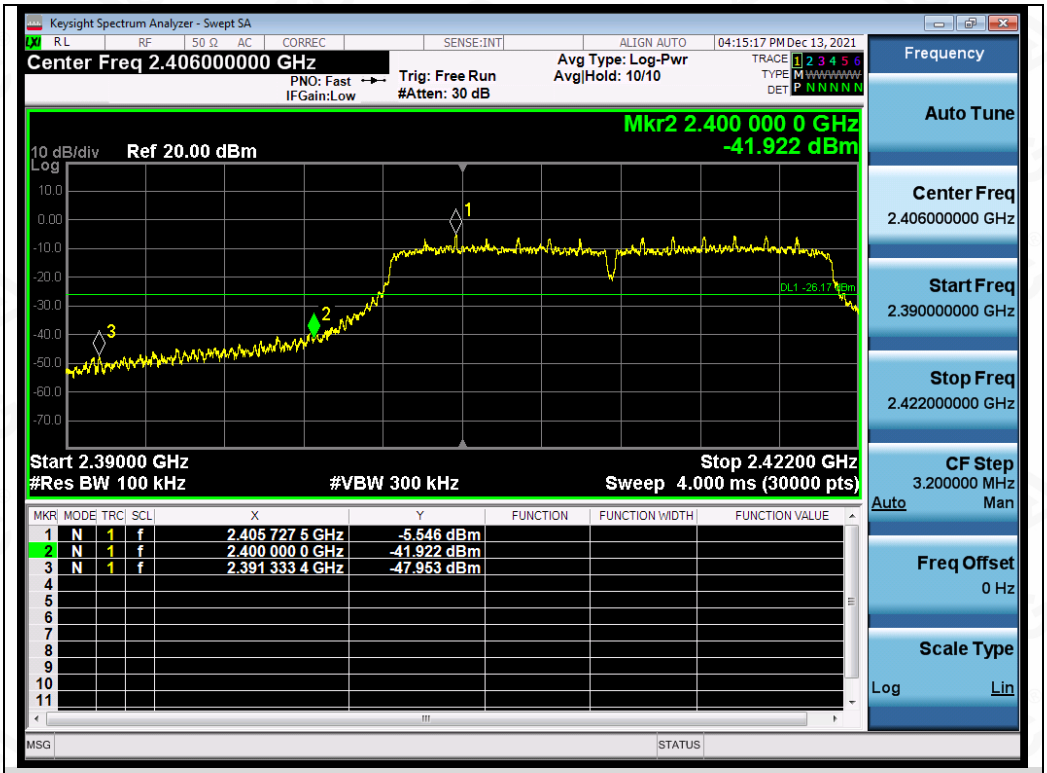
Test_Graph_802.11n40_ANT2_2452_MCS0_Higher Band Emissions

Test Graphs of Band Edge Emissions in Non-Restricted Frequency Bands

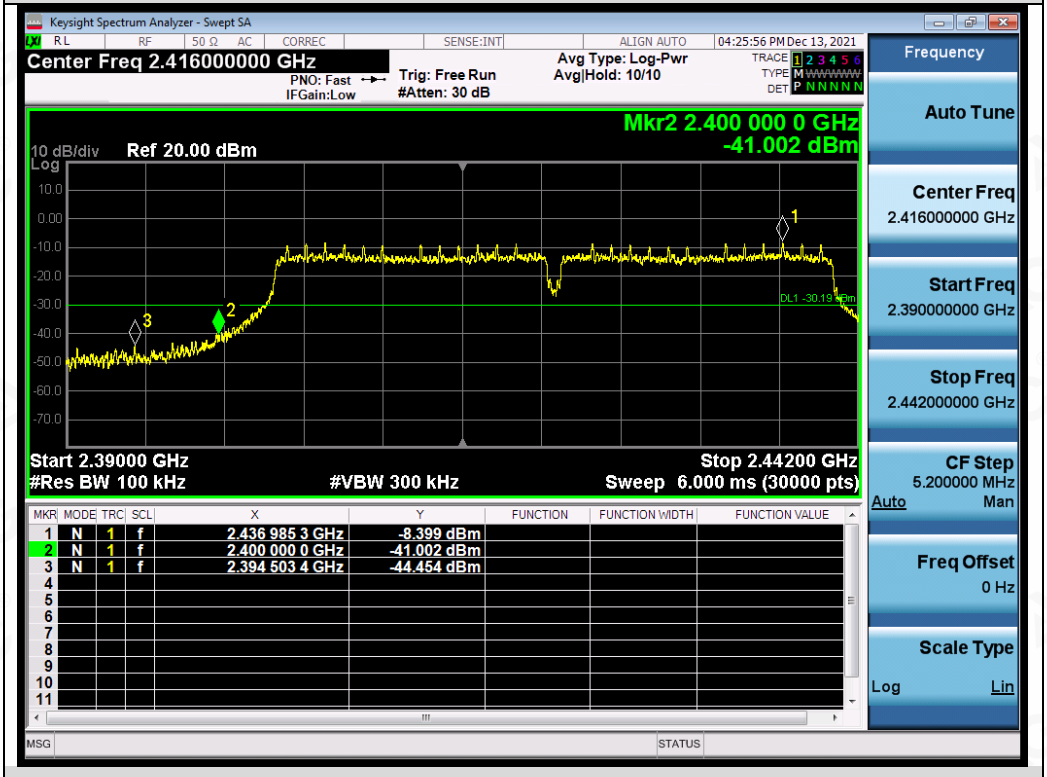
Test_Graph_802.11b_ANT1_2412_1Mbps_Lower Band Edge Emissions



Test_Graph_802.11g_ANT1_2412_6Mbps_Lower Band Edge Emissions

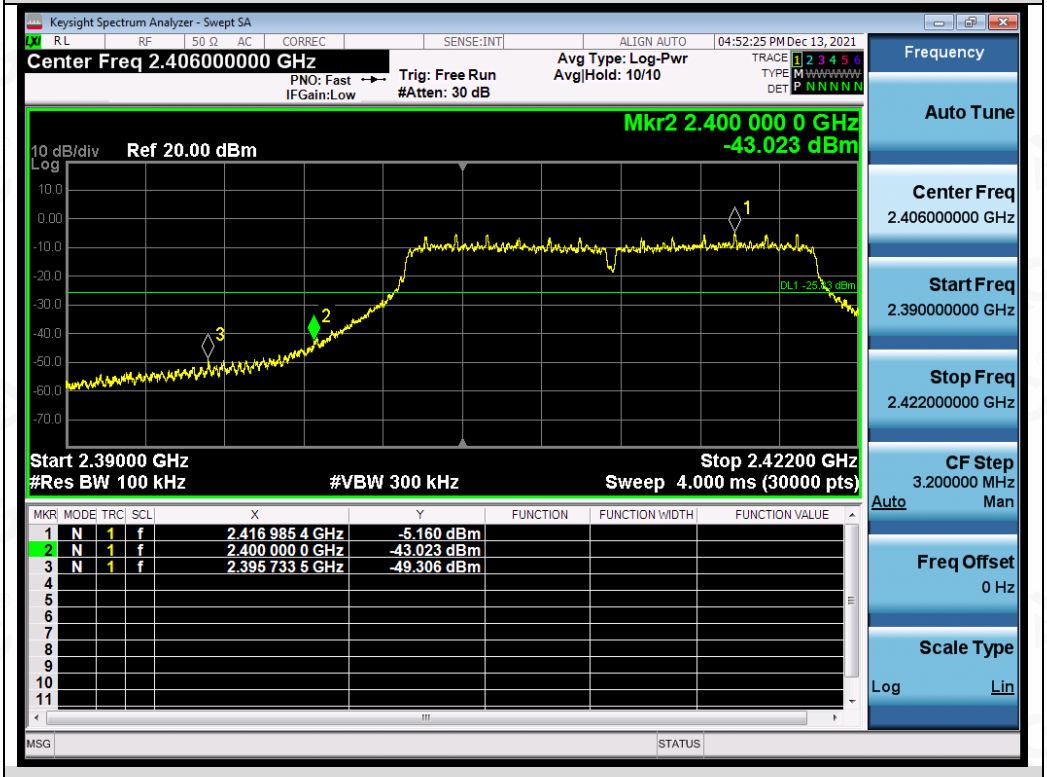


Test_Graph_802.11n20_ANT1_2412_MCS0_Lower Band Edge Emissions

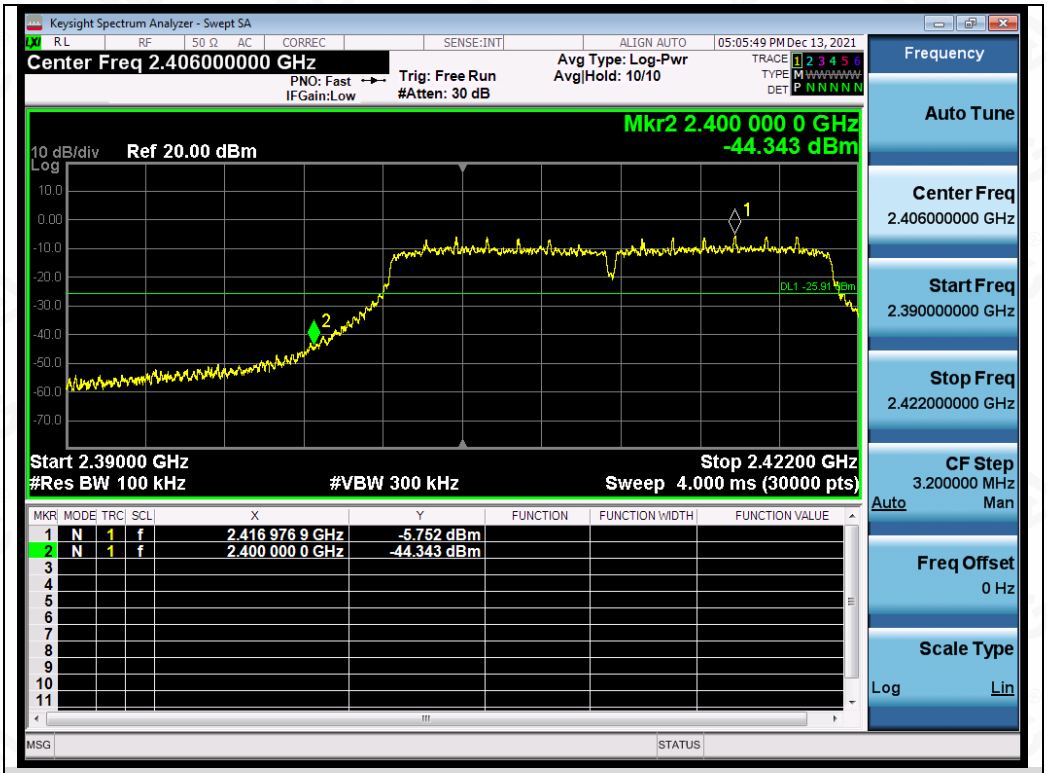


Test_Graph_802.11n40_ANT1_2422_MCS0_Lower Band Edge Emissions

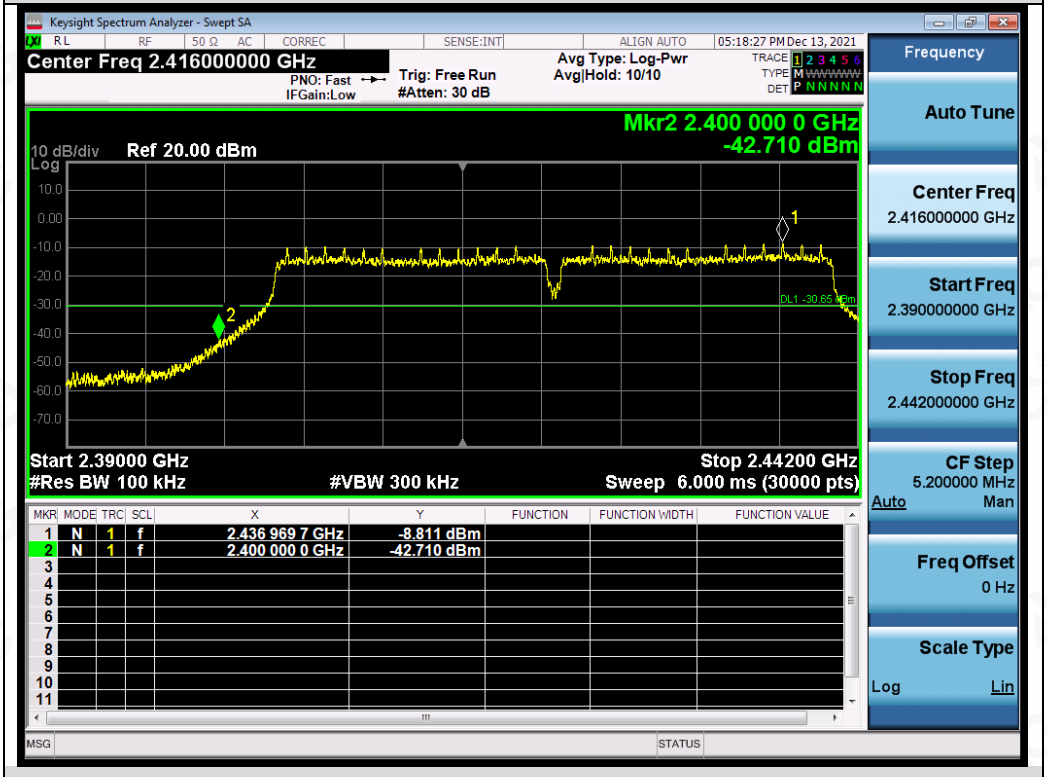
Test_Graph_802.11b_ANT2_2412_1Mbps_Lower Band Edge Emissions



Test_Graph_802.11g_ANT2_2412_6Mbps_Lower Band Edge Emissions



Test_Graph_802.11n20_ANT2_2412_MCS0_Lower Band Edge Emissions



Test_Graph_802.11n40_ANT2_2422_MCS0_Lower Band Edge Emissions

Note:

1. Emissions from 2483.5-2500MHz which fall in the restricted bands had been considered with the radiated emission limits specified.
2. All the antennas have been pre-tested, and all modes of each antenna are tested. The In 802.11b, 802.11g mode antenna 2 is the worst case and recorded in the report; For 802.11n mode, the worst case Antenna 2 has more than 3dB margins, so the MIMO mode also compliance the limit.

10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

10.1 MEASUREMENT PROCEDURE

(1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator

(2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.

(3). Set SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the ANSI C63.10 (2013) item 11.10 was used in this testing.

10.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer to Section 8.2.

10.3 MEASUREMENT EQUIPMENT USED

Refer to Section 6.

10.4 LIMITS AND MEASUREMENT RESULT

Test Data of Conducted Output Power Spectral Density-antenna 1					
Test Mode	Test Channel (MHz)	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
802.11b	2412	-8.713	-16.952	≤8	Pass
	2437	-8.250	-16.489	≤8	Pass
	2462	-9.259	-17.498	≤8	Pass
802.11g	2412	-11.837	-20.076	≤8	Pass
	2437	-11.964	-20.203	≤8	Pass
	2462	-12.448	-20.687	≤8	Pass
802.11n20	2412	-11.471	-19.71	≤8	Pass
	2437	-11.511	-19.75	≤8	Pass
	2462	-12.019	-20.258	≤8	Pass
802.11n40	2422	-14.127	-22.366	≤8	Pass
	2437	-14.087	-22.326	≤8	Pass
	2452	-14.199	-22.438	≤8	Pass

Test Data of Conducted Output Power Spectral Density-antenna 2					
Test Mode	Test Channel (MHz)	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
802.11b	2412	-6.988	-15.227	≤8	Pass
	2437	-7.219	-15.458	≤8	Pass
	2462	-7.050	-15.289	≤8	Pass
802.11g	2412	-11.120	-19.359	≤8	Pass
	2437	-11.739	-19.978	≤8	Pass
	2462	-11.437	-19.676	≤8	Pass
802.11n20	2412	-11.728	-19.967	≤8	Pass
	2437	-11.406	-19.645	≤8	Pass
	2462	-11.709	-19.948	≤8	Pass
802.11n40	2422	-13.819	-22.058	≤8	Pass
	2437	-13.672	-21.911	≤8	Pass
	2452	-13.634	-21.873	≤8	Pass

Test Data of Conducted Output Power Spectral Density-antenna 1+2					
Test Mode	Test Channel (MHz)	Power density (dBm/20kHz)	Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail
802.11n20	2412	-8.59	-16.83	≤8	Pass
	2437	-8.45	-16.69	≤8	Pass
	2462	-8.85	-17.09	≤8	Pass
802.11n40	2422	-10.96	-19.20	≤8	Pass
	2437	-10.86	-19.10	≤8	Pass
	2452	-10.90	-19.14	≤8	Pass

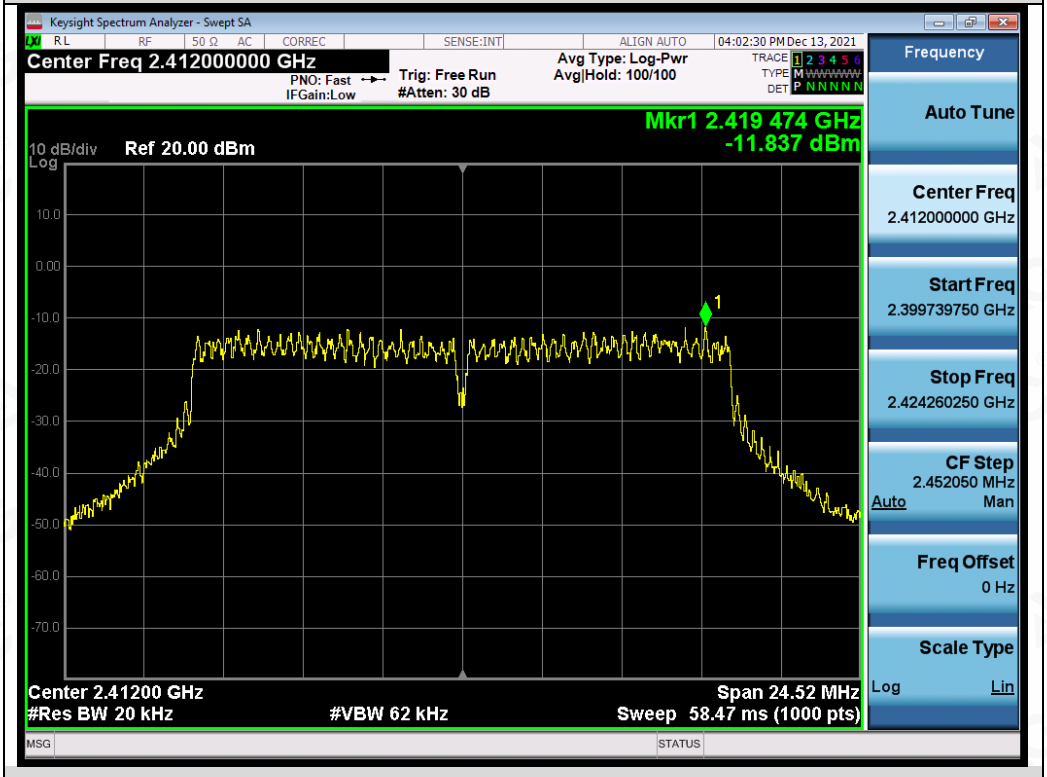
Note: Power density(dBm/3kHz) = Power density(dBm/20kHz) – 10*log(20/3).

Test Graphs of Conducted Output Power Spectral Density

Test_Graph_802.11b_ANT1_2412_1Mbps_PSD

Test_Graph_802.11b_ANT1_2437_1Mbps_PSD

Test_Graph_802.11b_ANT1_2462_1Mbps_PSD



Test_Graph_802.11g_ANT1_2412_6Mbps_PSD