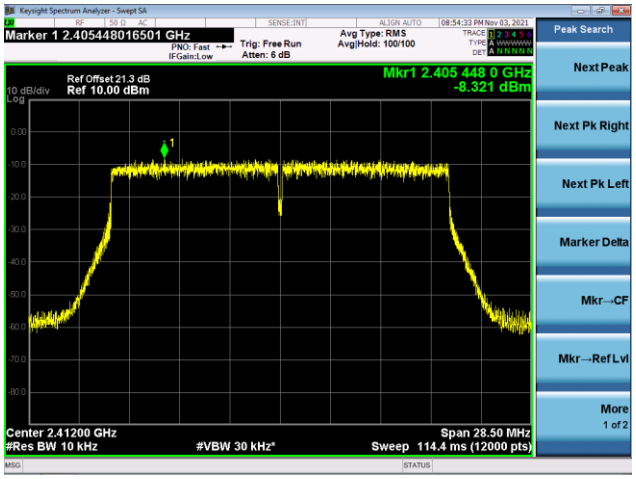
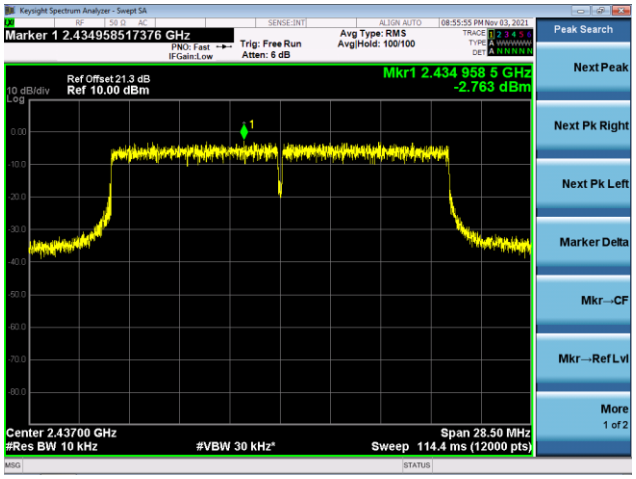
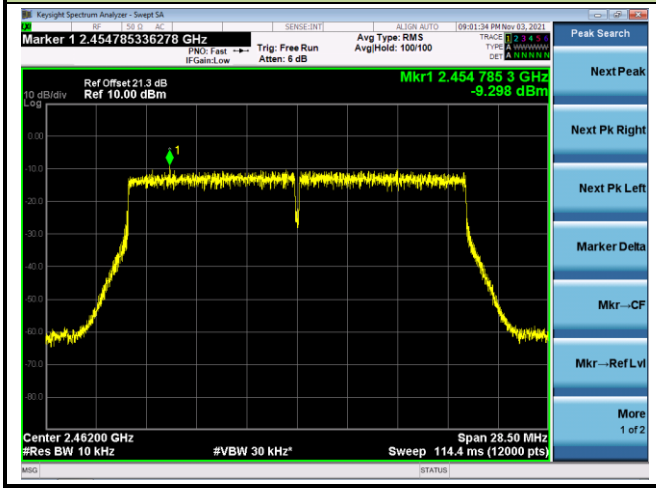
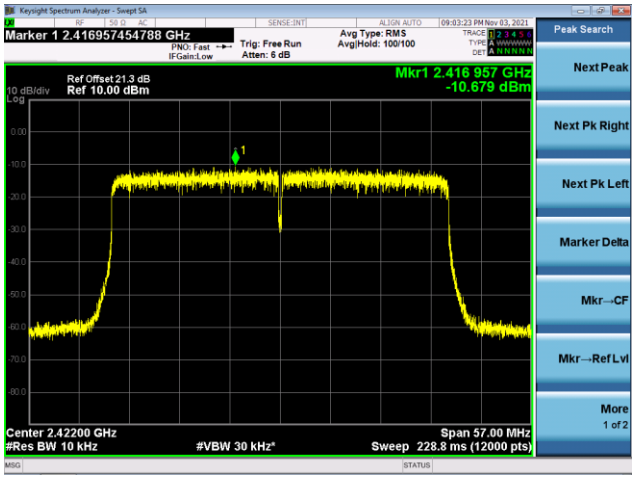
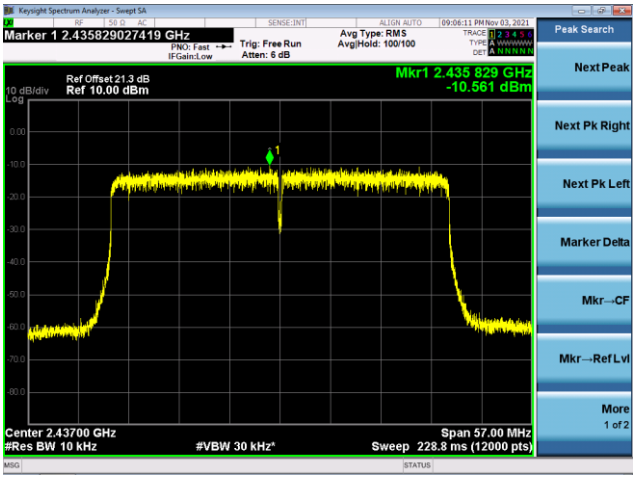
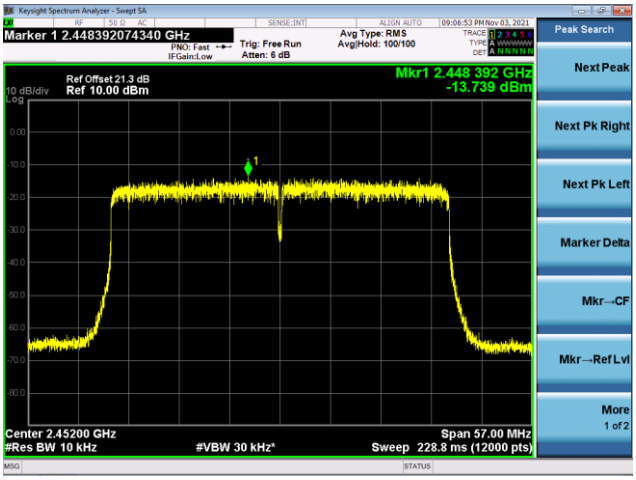
802.11ax-HE20 – AVGPSD -Ant 1	
Channel 01 (2412MHz)	Channel 06 (2437MHz)
	
Channel 11 (2462MHz)	
	

802.11ax-HE40 – AVGPSD -Ant 1	
Channel 03 (2422MHz)	Channel 06 (2437MHz)
	
Channel 09 (2452MHz)	
	

6.5. Conducted Band Edge and Out-of-Band Emissions

6.5.1.Test Limit

The limit for out-of-band spurious emissions at the band edge is 30dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth per the PSD procedure.

6.5.2.Test Procedure Used

ANSI C63.10 Section 11.11

6.5.3.Test Setting

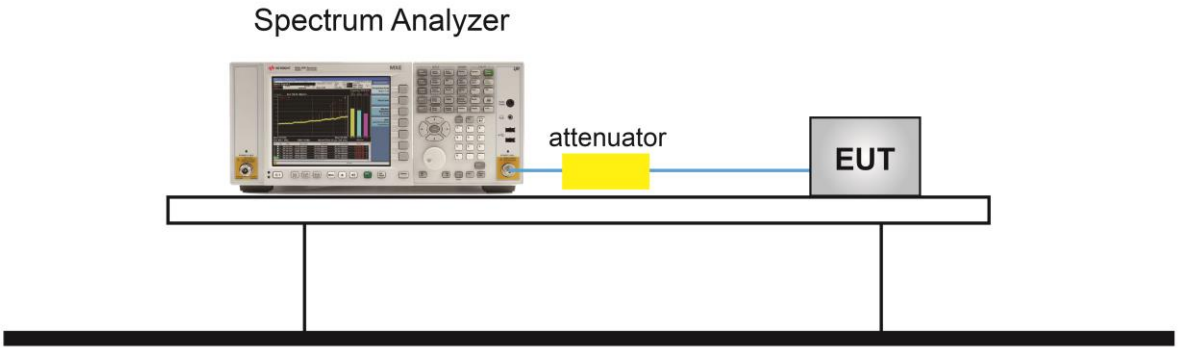
Reference level measurement

1. Set instrument center frequency to DTS channel center frequency
2. Set the span to ≥ 1.5 times the DTS bandwidth
3. Set the RBW = 100 kHz
4. Set the VBW ≥ 3 x RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize

Emission level measurement

1. Set the center frequency and span to encompass frequency range to be measured
2. RBW = 100Hz
3. VBW = 300Hz
4. Detector = Peak
5. Trace mode = max hold
6. Sweep time = auto couple
7. The trace was allowed to stabilize

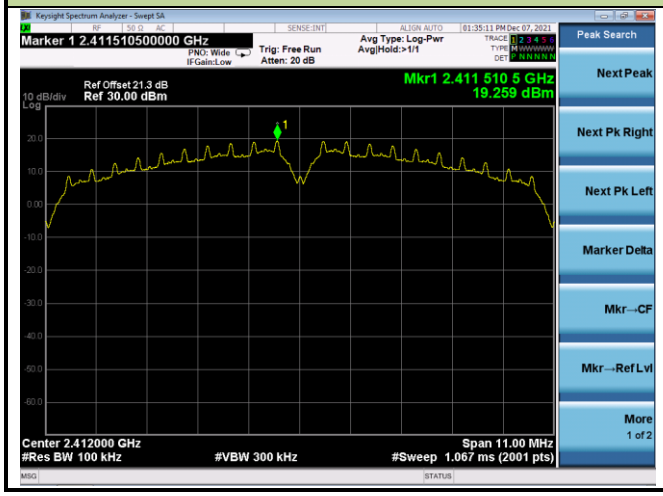
6.5.4.Test Setup



6.5.5.Test Result

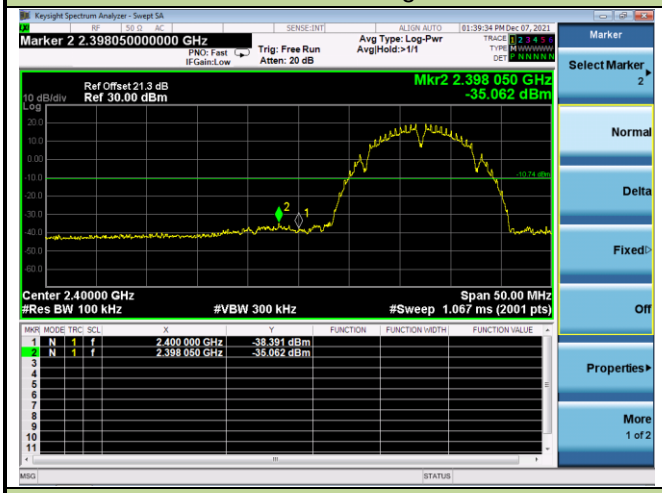
Product	AXE5400 Tri-Band Wi-Fi 6E Router	Temperature	23°C
Test Engineer	Eric Lin	Relative Humidity	54%
Test Site	SR2	Test Date	2021/12/07

Test Mode	Data Rate / MCS	Channel No.	Frequency (MHz)	Limit (dBc)	Result
802.11b	1Mbps	01	2412	30	Pass
802.11b	1Mbps	06	2437	30	Pass
802.11b	1Mbps	11	2462	30	Pass
802.11g	6Mbps	01	2412	30	Pass
802.11g	6Mbps	06	2437	30	Pass
802.11g	6Mbps	11	2462	30	Pass
802.11n-HT20	MCS0	01	2412	30	Pass
802.11n-HT20	MCS0	06	2437	30	Pass
802.11n-HT20	MCS0	11	2462	30	Pass
802.11n-HT40	MCS0	03	2422	30	Pass
802.11n-HT40	MCS0	06	2437	30	Pass
802.11n-HT40	MCS0	09	2452	30	Pass
802.11ax-HE20	MCS0	01	2412	30	Pass
802.11ax-HE20	MCS0	06	2437	30	Pass
802.11ax-HE20	MCS0	11	2462	30	Pass
802.11ax-HE40	MCS0	03	2422	30	Pass
802.11ax-HE40	MCS0	06	2437	30	Pass
802.11ax-HE40	MCS0	09	2452	30	Pass

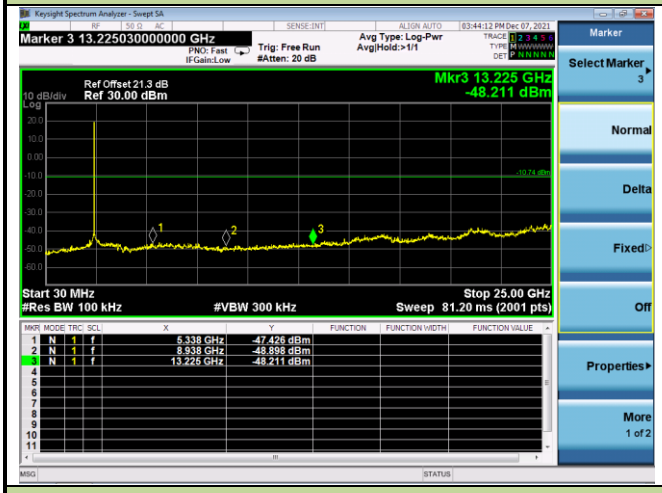
100kHz PSD reference Level	
	

802.11b Out-of-Band Emissions - Ant 0

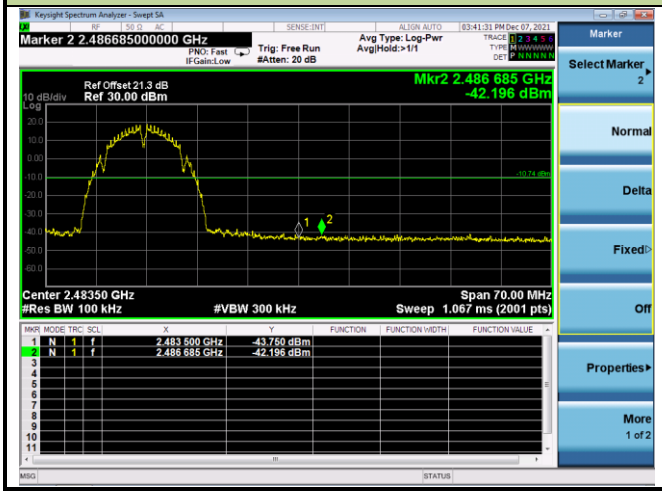
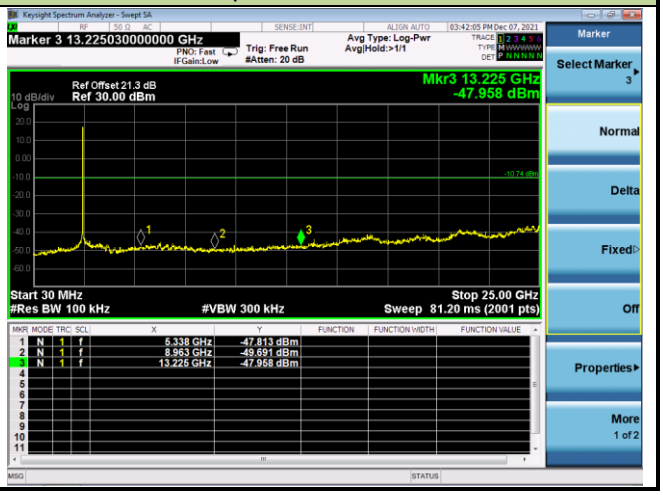
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

Spurious Emission	
	

Channel 11 (2462MHz)

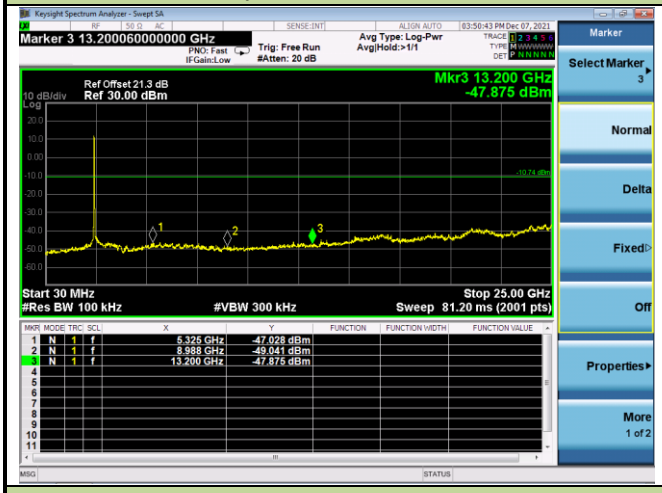
High Band Edge	Spurious Emission
	

802.11g Out-of-Band Emissions- Ant 0

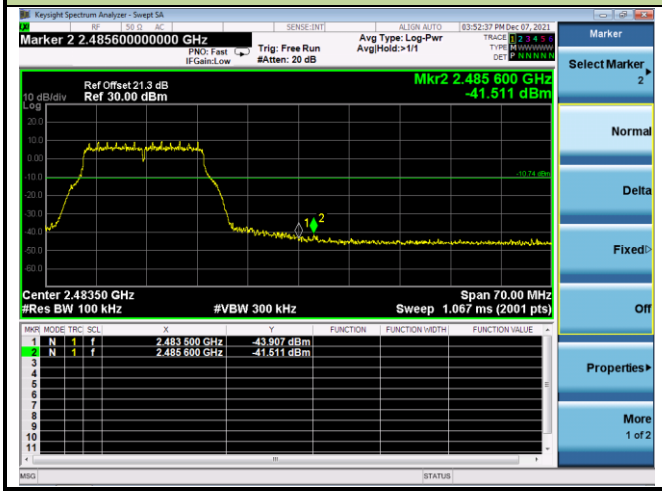
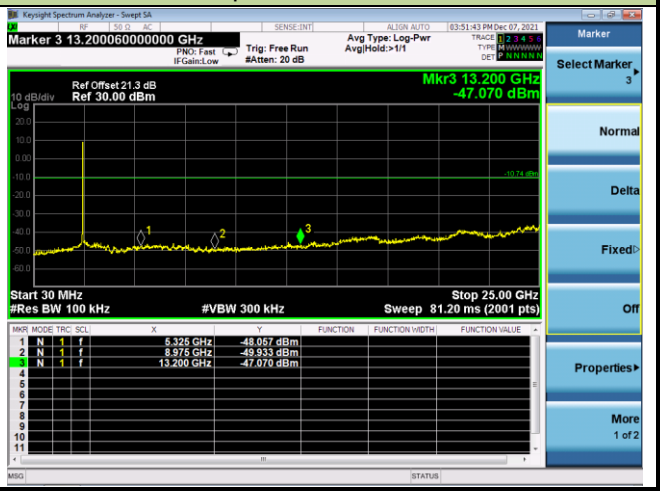
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission

Channel 06 (2437MHz)

Spurious Emission	
	

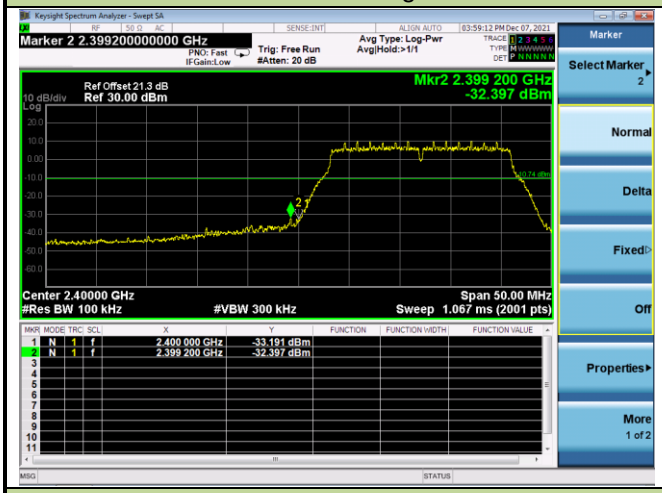
Channel 11 (2462MHz)

High Band Edge	Spurious Emission
	

802.11n-HT20 Out-of-Band Emissions- Ant 0

Channel 01 (2412MHz)

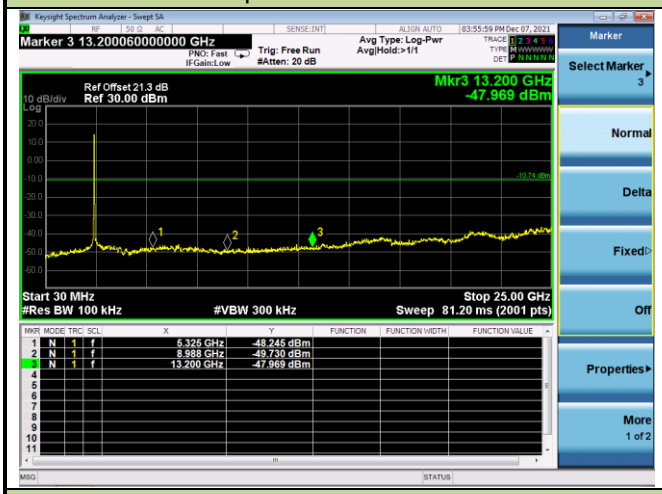
Low Band Edge



Spurious Emission

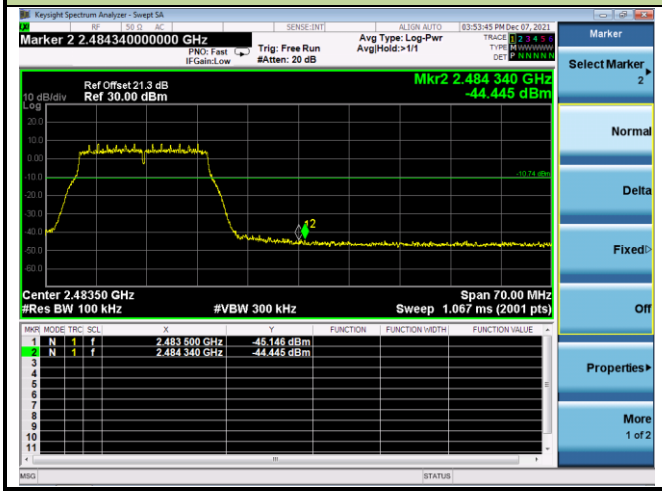
Channel 06 (2437MHz)

Spurious Emission

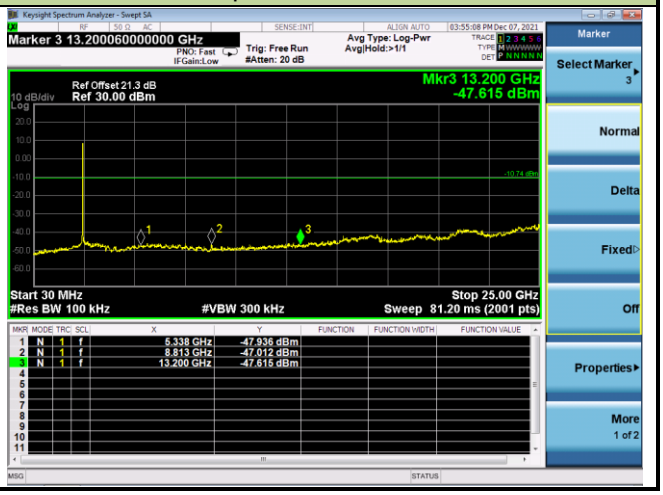


Channel 11 (2462MHz)

High Band Edge

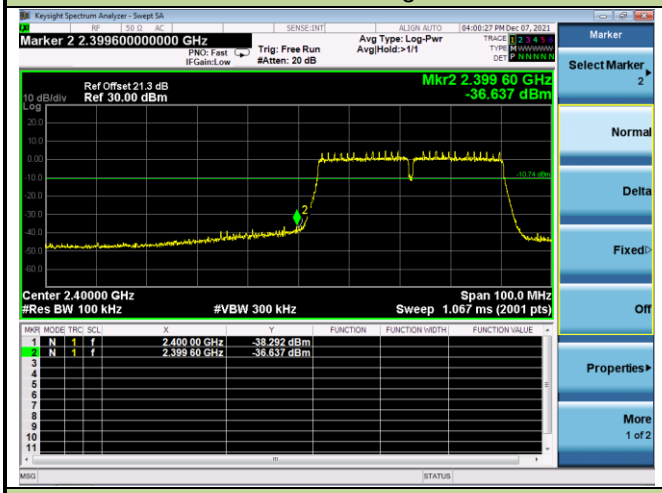


Spurious Emission

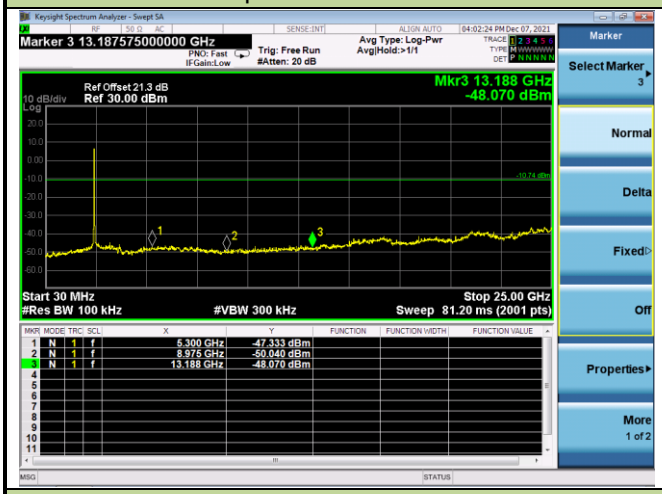


802.11n-HT40 Out-of-Band Emissions- Ant 0

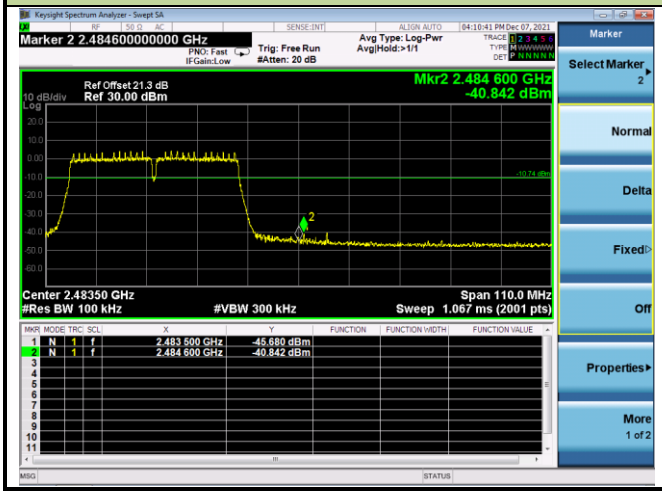
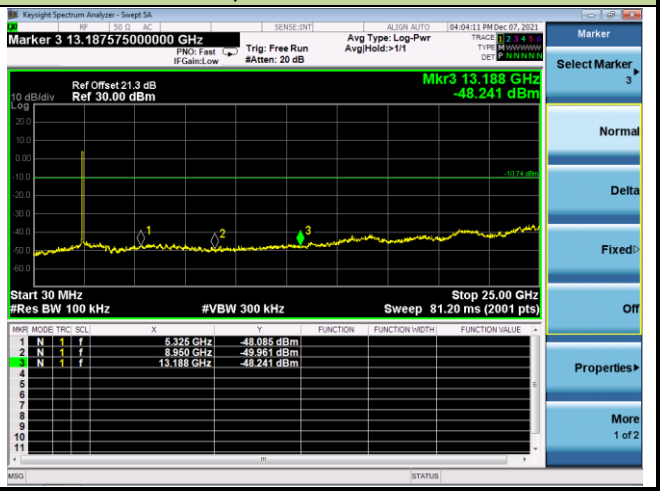
Channel 03 (2422MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

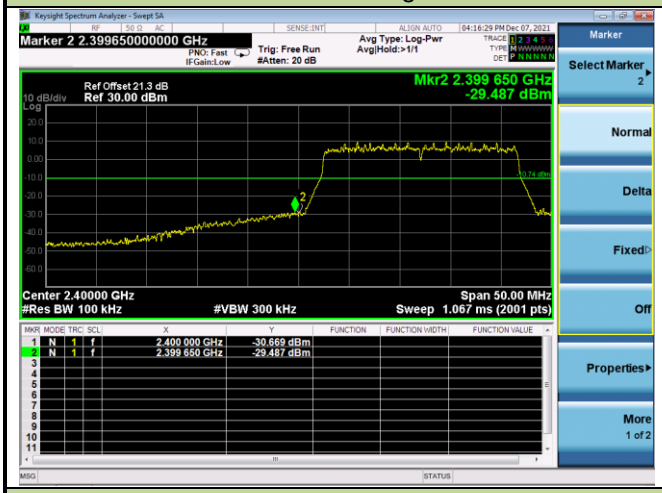
Spurious Emission	
	

Channel 09 (2452MHz)

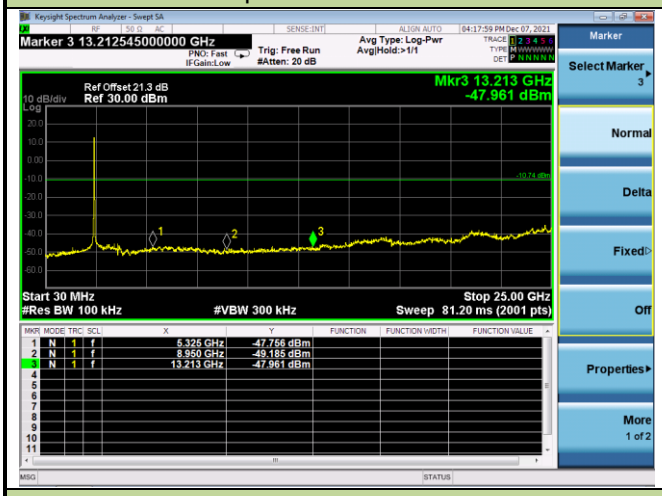
High Band Edge	Spurious Emission
	

802.11ax-HE20 Out-of-Band Emissions- Ant 0

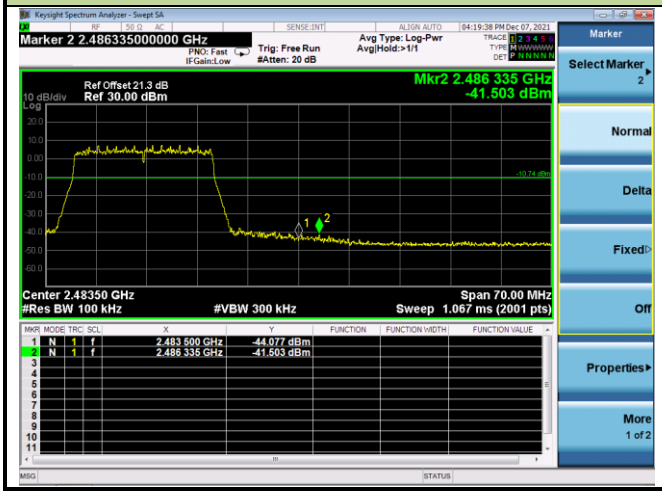
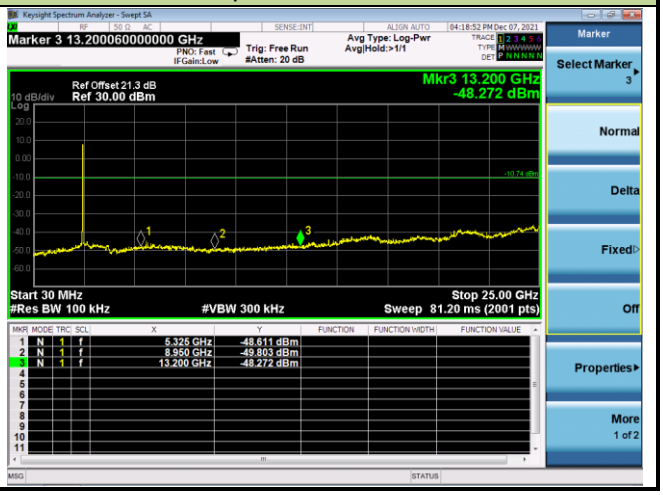
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

Spurious Emission	
	

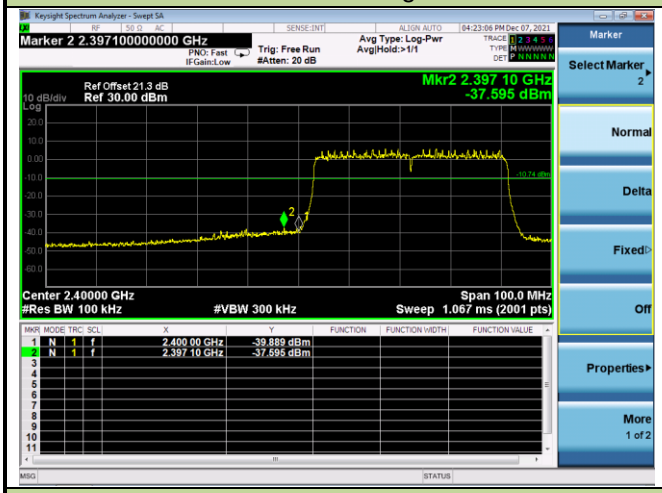
Channel 11 (2462MHz)

High Band Edge	Spurious Emission
	

802.11ax-HE40 Out-of-Band Emissions- Ant 0

Channel 03 (2422MHz)

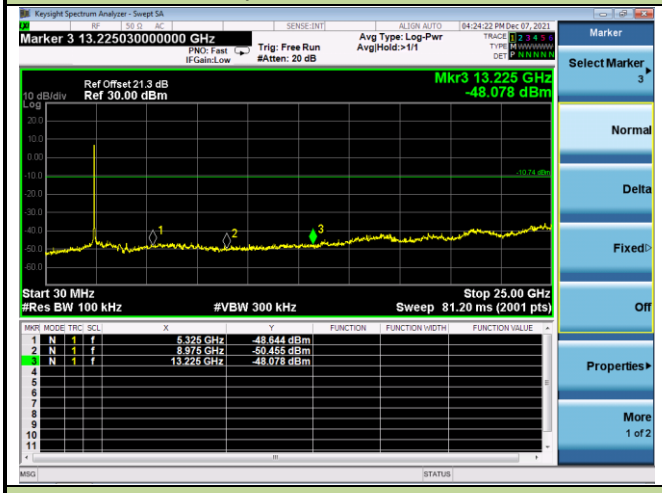
Low Band Edge



Spurious Emission

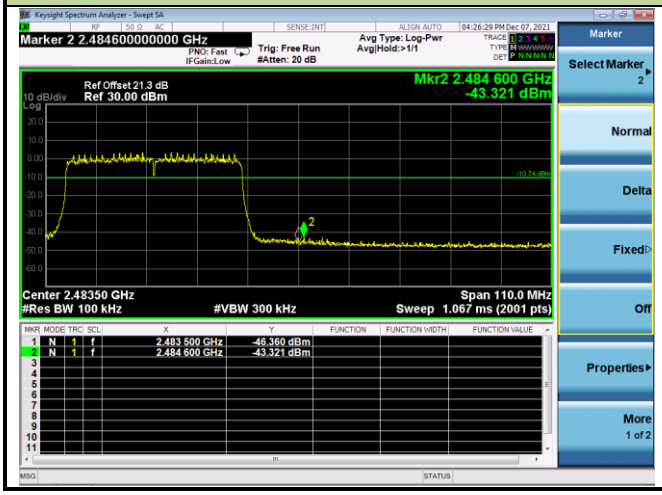
Channel 06 (2437MHz)

Spurious Emission



Channel 09 (2452MHz)

High Band Edge



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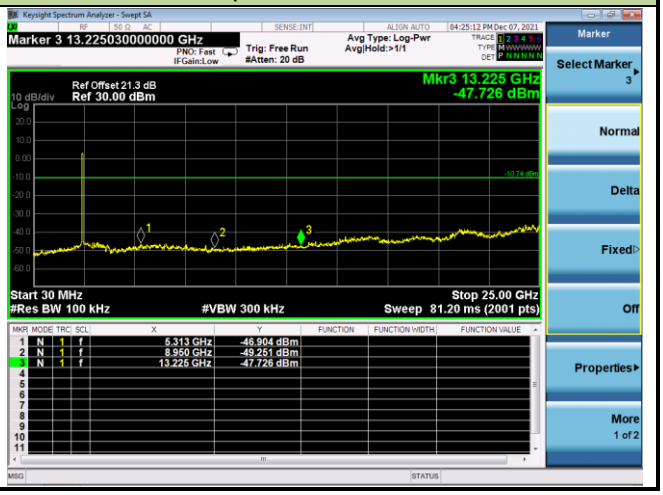
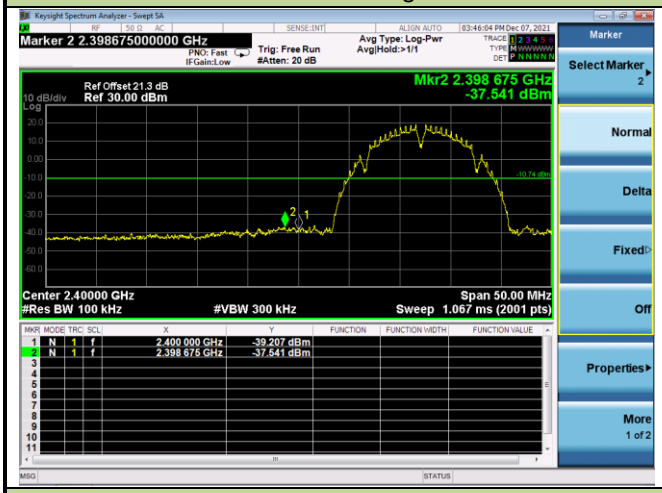
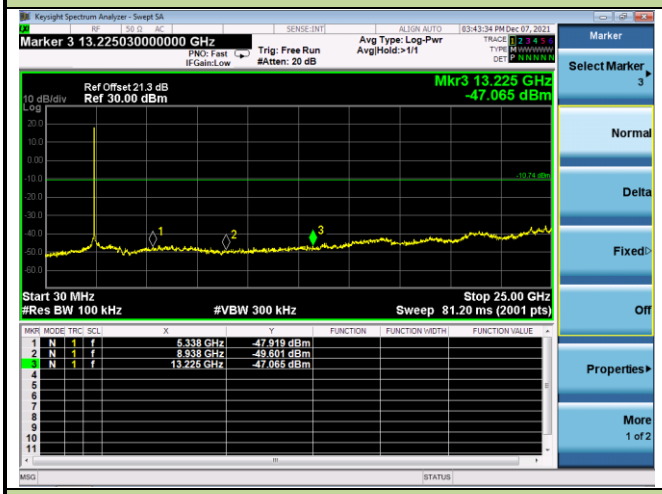


802.11b Out-of-Band Emissions - Ant 1

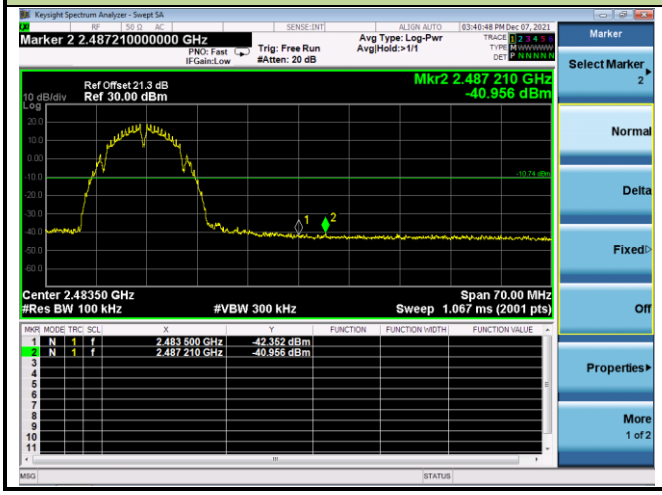
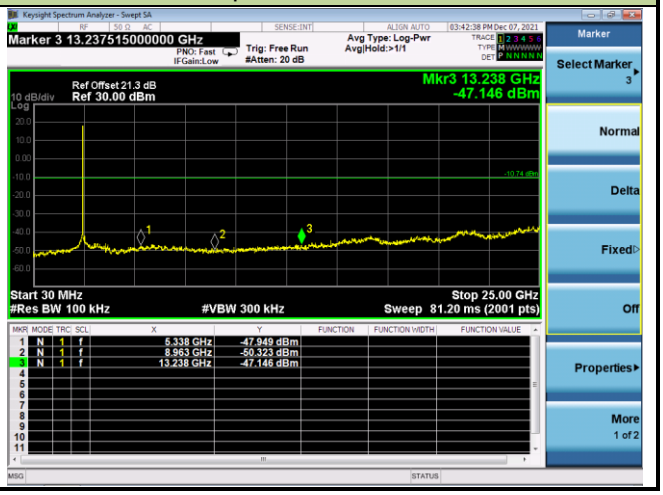
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

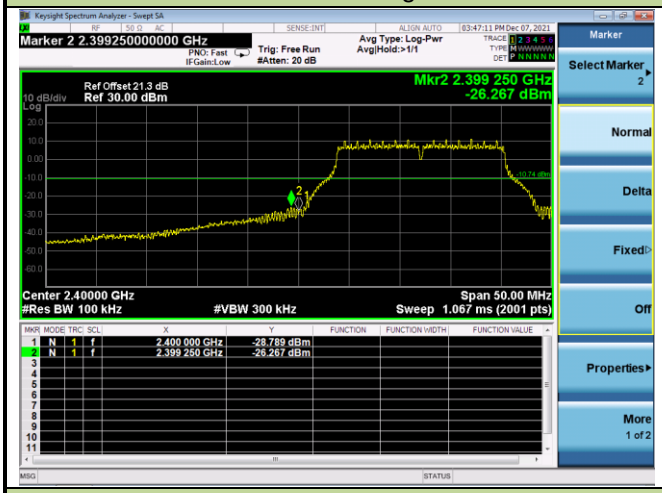
Spurious Emission	
	

Channel 11 (2462MHz)

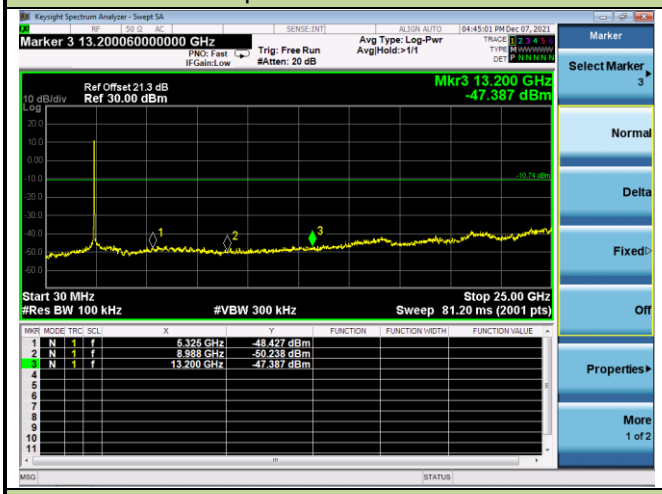
High Band Edge	Spurious Emission
	

802.11g Out-of-Band Emissions- Ant 1

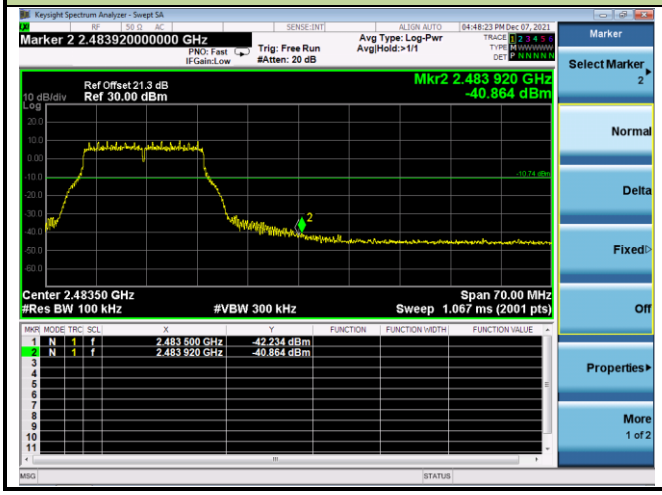
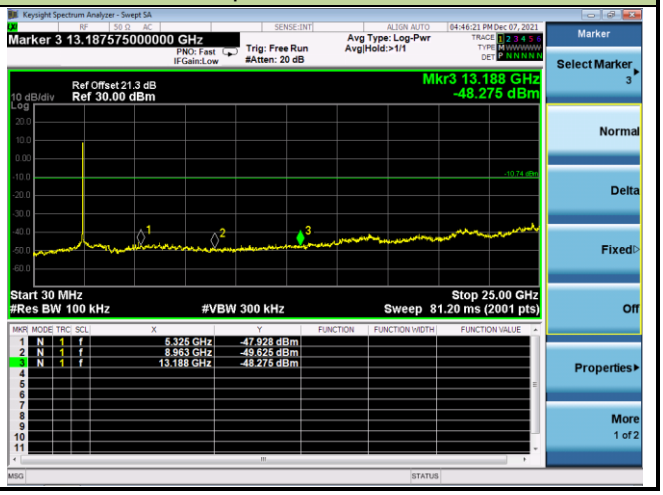
Channel 01 (2412MHz)

Low Band Edge	Spurious Emission
	

Channel 06 (2437MHz)

Spurious Emission	
	

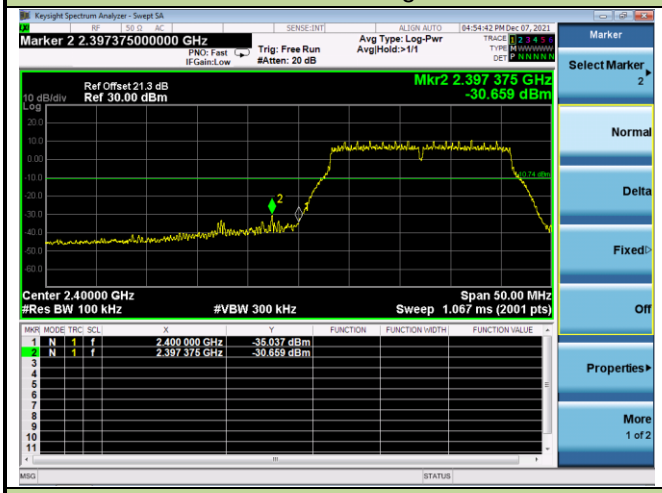
Channel 11 (2462MHz)

High Band Edge	Spurious Emission
	

802.11n-HT20 Out-of-Band Emissions- Ant 1

Channel 01 (2412MHz)

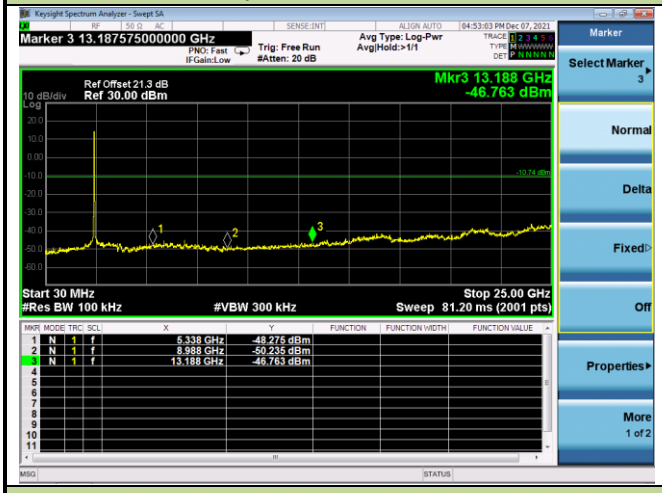
Low Band Edge



Spurious Emission

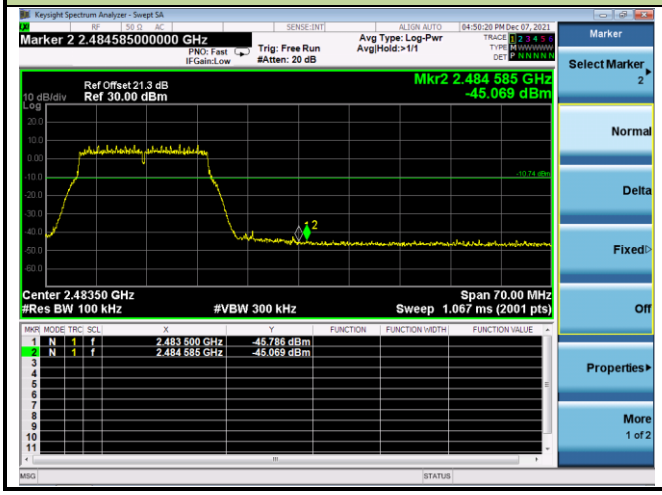
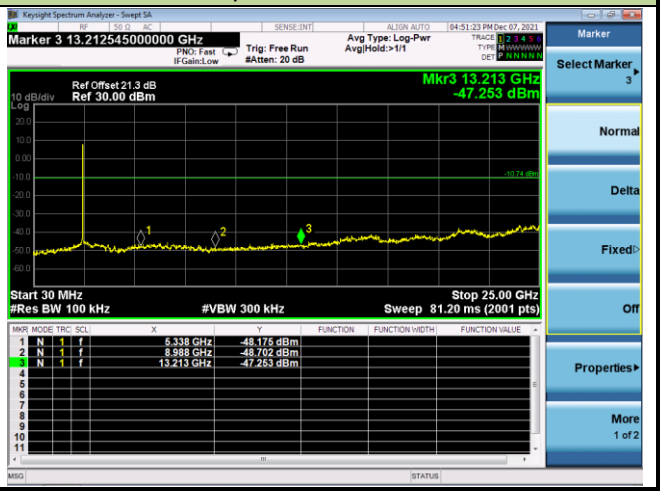
Channel 06 (2437MHz)

Spurious Emission



Channel 11 (2462MHz)

High Band Edge



Spurious Emission