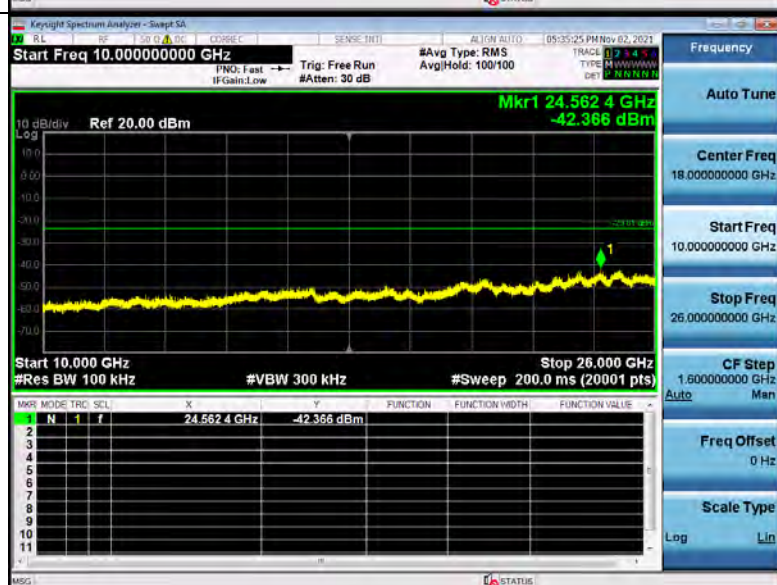
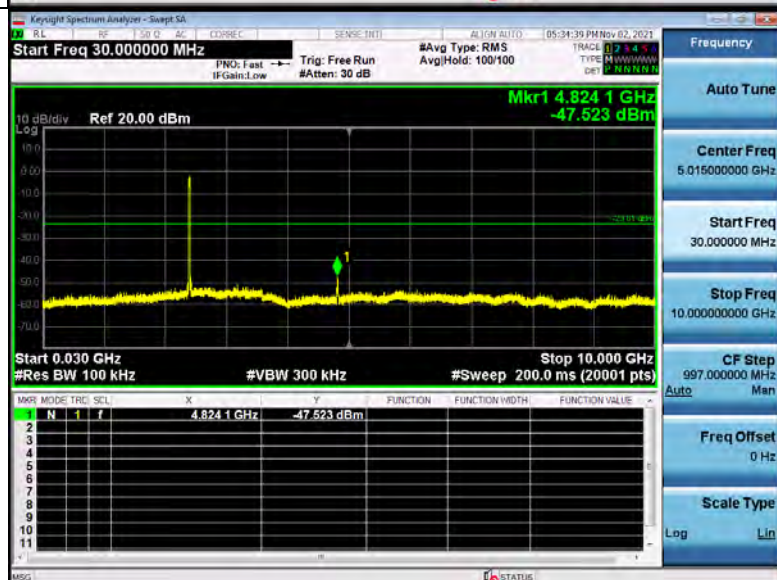


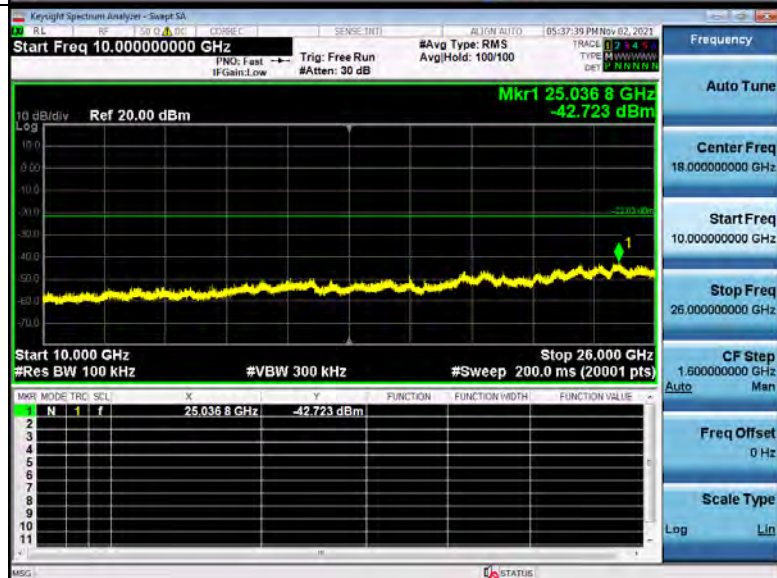
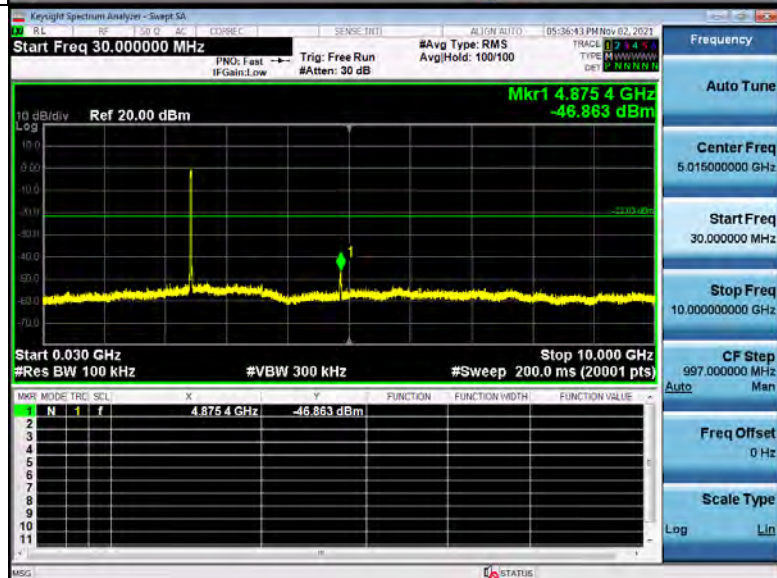
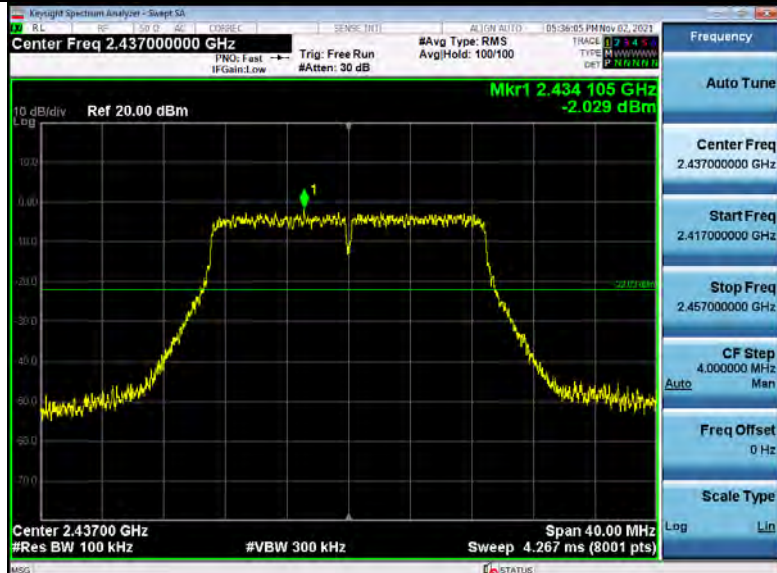
802.11n20 Modulation

Spurious emission

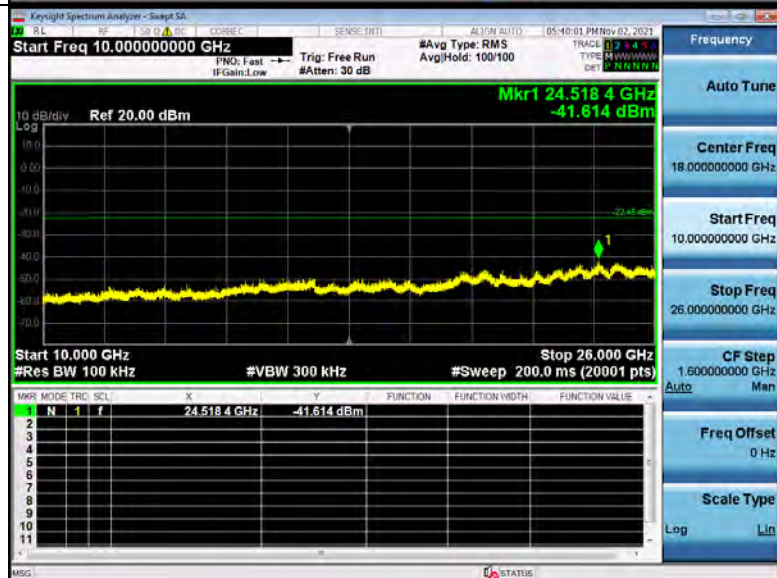
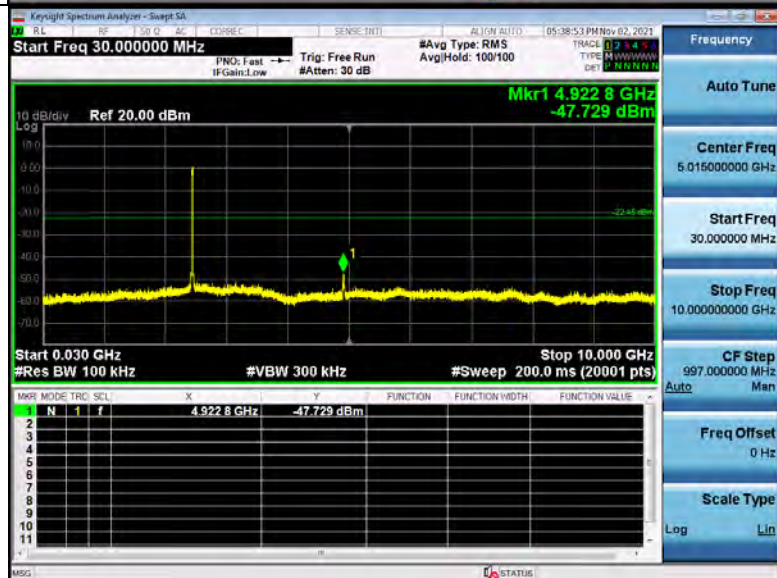
Low Channel



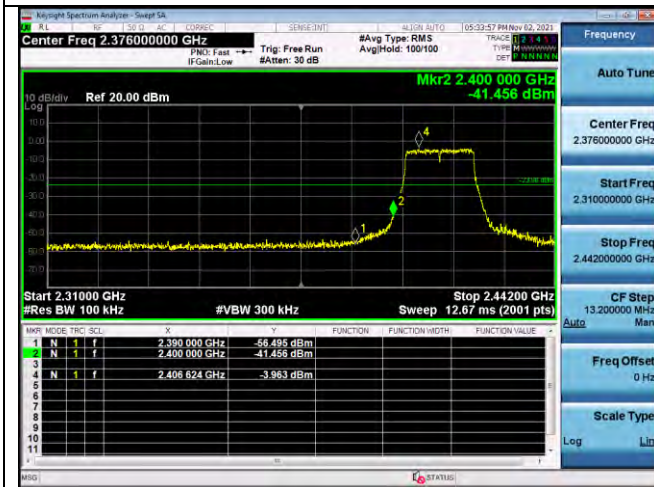
Middle Channel



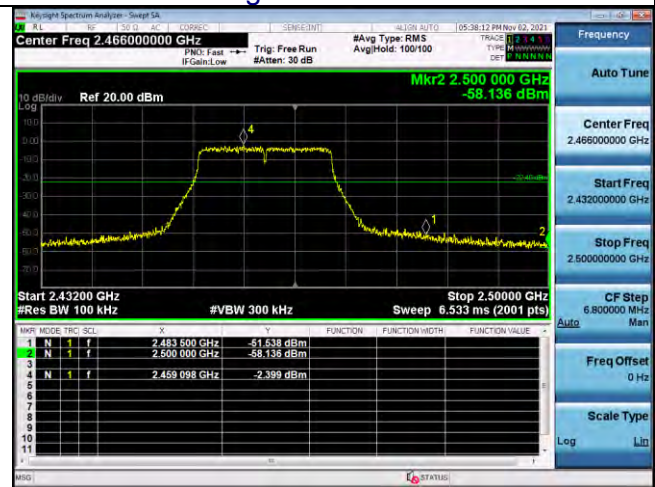
High Channel



Lowest Channel



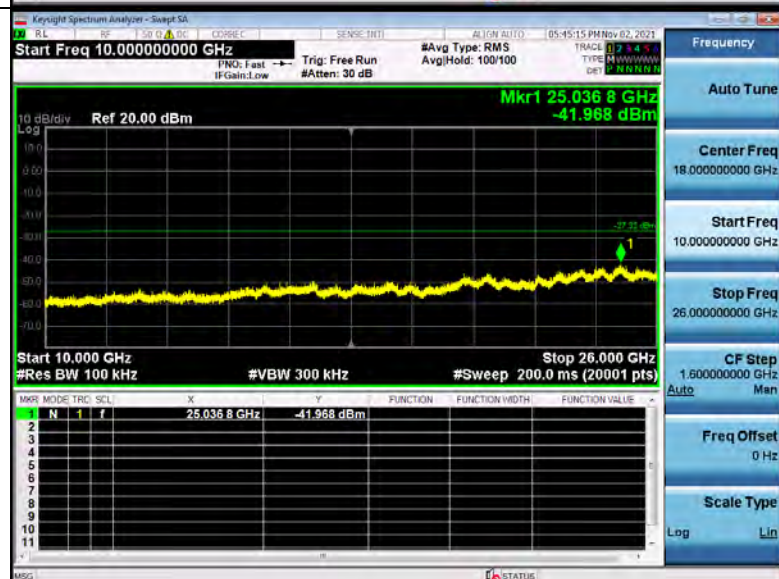
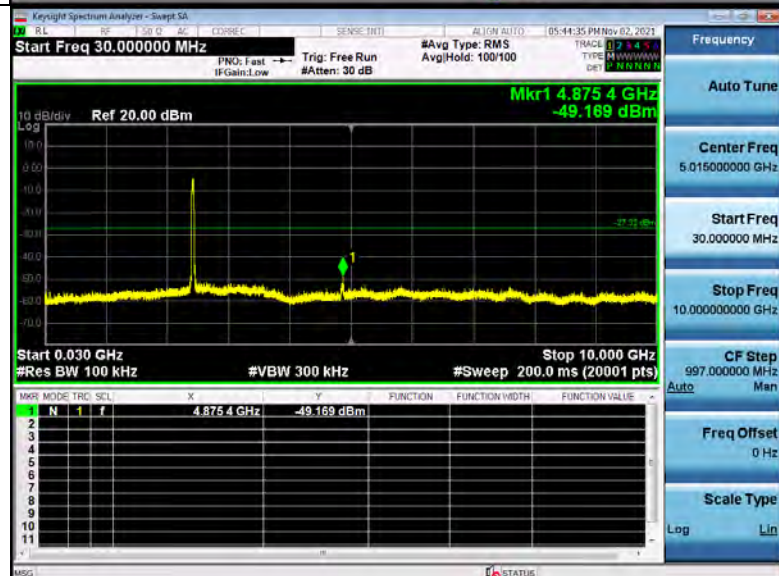
Highest Channel



Left Band Edge

Right Band Edge

Middle Channel



Keysight Spectrum Analyzer - Setup SA

07 01 150 0 50 CORP C

SEND/CTRL

ALION AUTO 05:47:25 PM Nov 02, 2021

Center Freq 2.452000000 GHz

#Avg Type: RMS

Avg/Hold: 100/100

TRAC 1 1 7 1 4 9 1

TYPE M W W W W W W

DET P R N A N A

PNO: Fast

IF Gain: Low

Trig: Free Run

#Atten: 30 dB

10 dB/div

Ref 20.00 dBm

Log

Mkr1 2.465 35 GHz

-7.172 dBm

0.00

10.00

20.00

30.00

40.00

50.00

60.00

70.00

Center 2.45200 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 80.00 MHz

Sweep 8.000 ms (8001 pts)

Frequency

Auto Tune

Center Freq

2.452000000 GHz

Start Freq

2.412000000 GHz

Stop Freq

2.492000000 GHz

CF Step

8.000000 MHz

Auto Man

Freq Offset

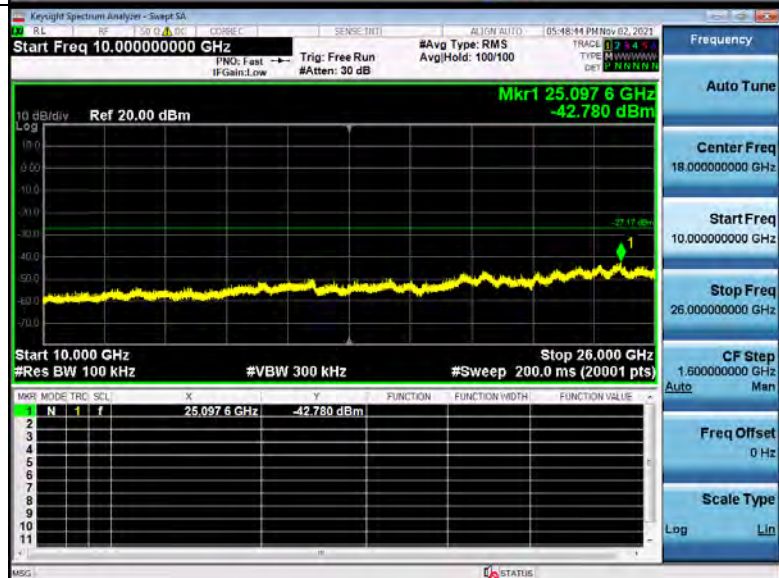
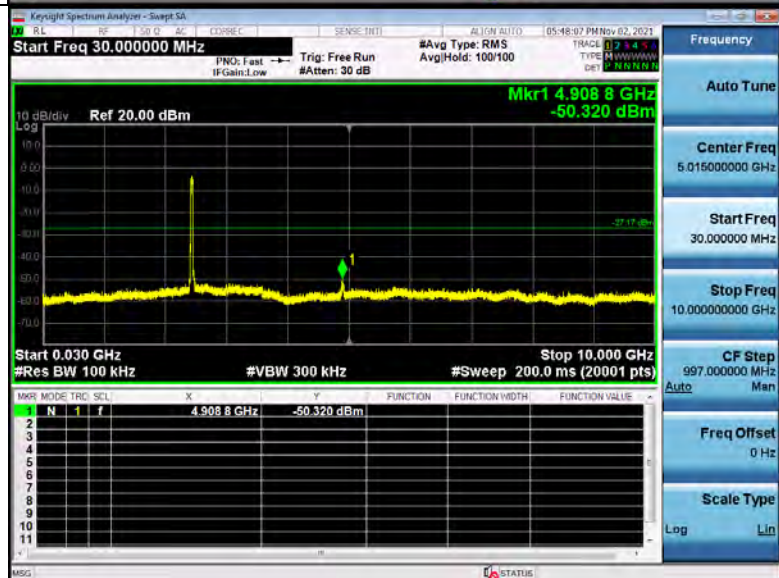
0 Hz

Scale Type

Log Lin

MSO

STATUS



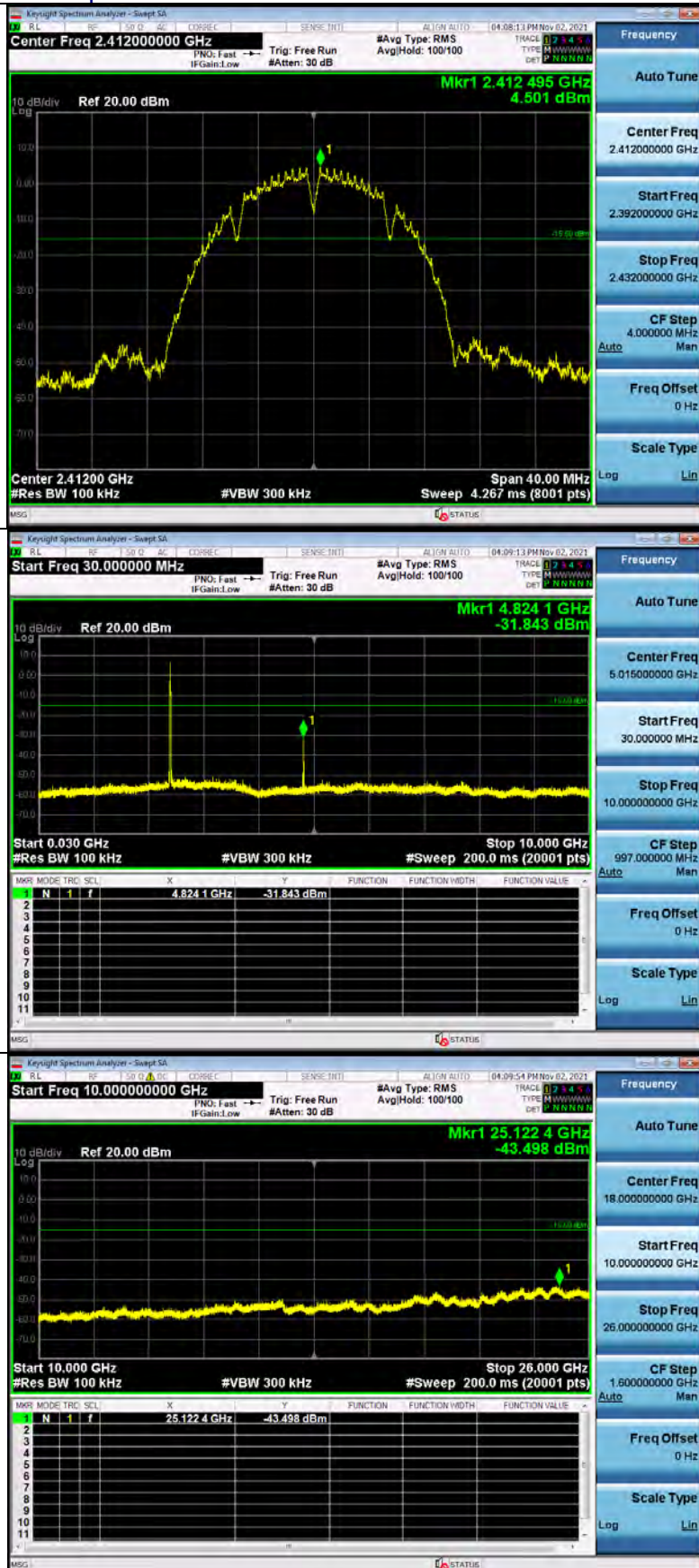


ANT2

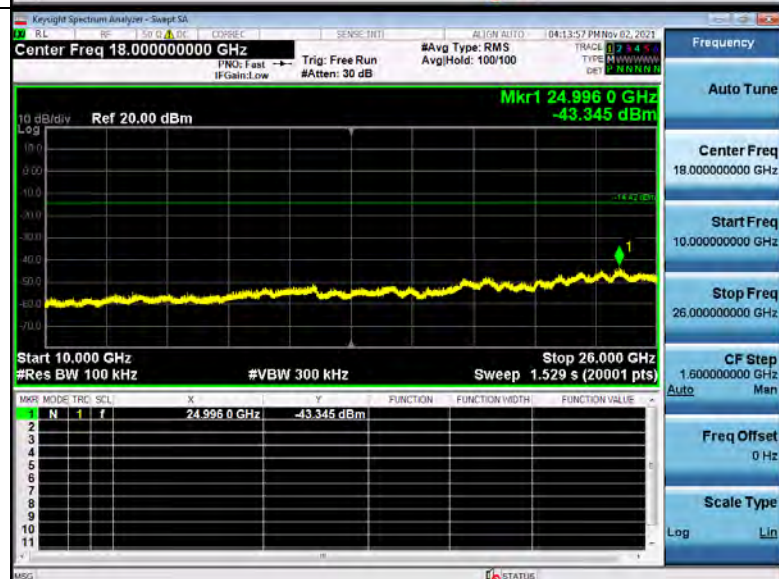
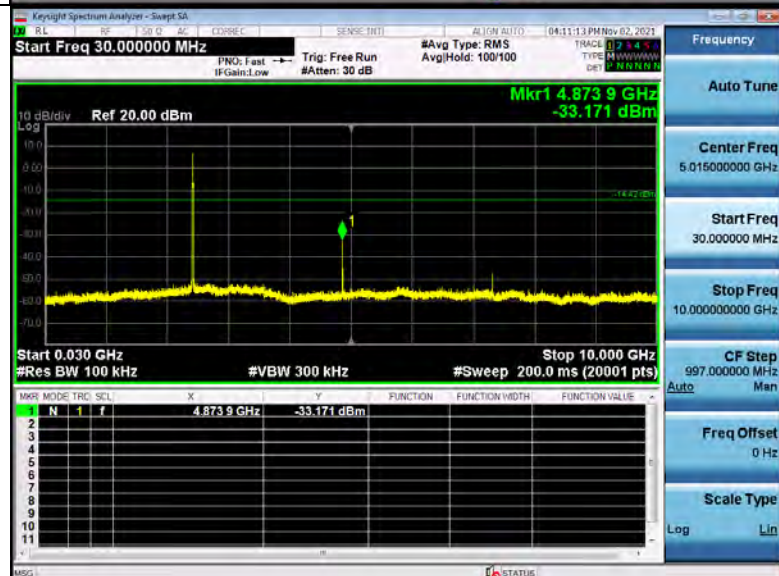
802.11b Modulation

Spurious emission

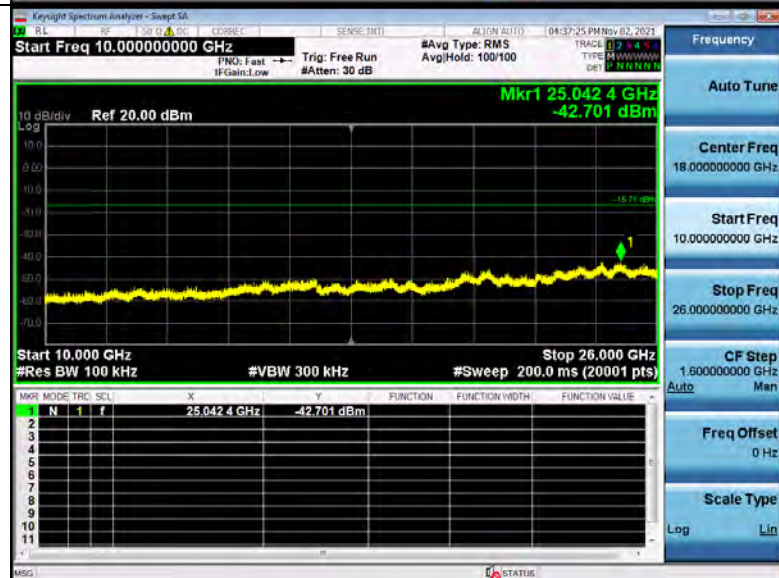
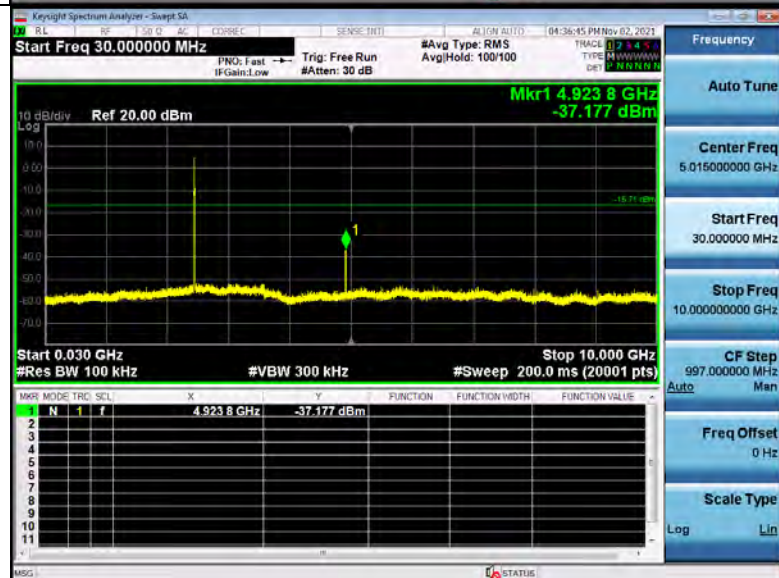
Low Channel



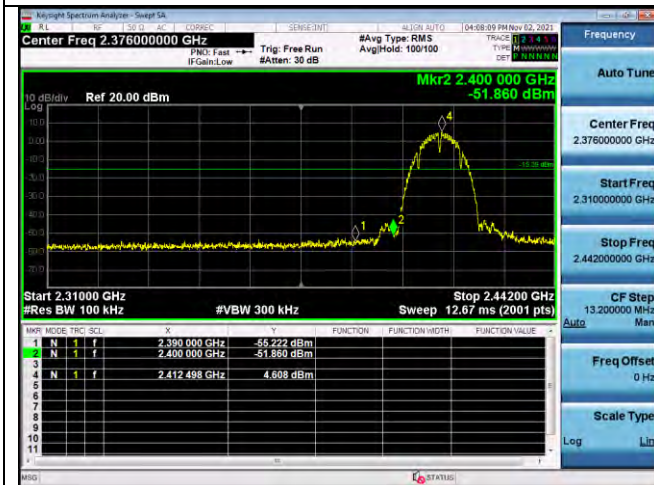
Middle Channel



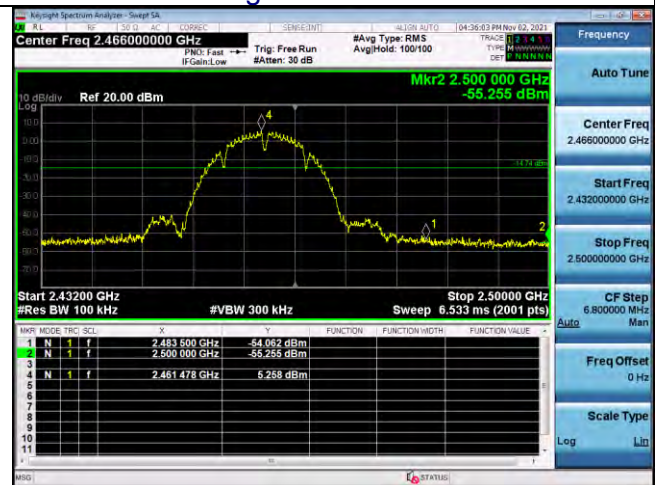
High Channel



Lowest Channel



Highest Channel



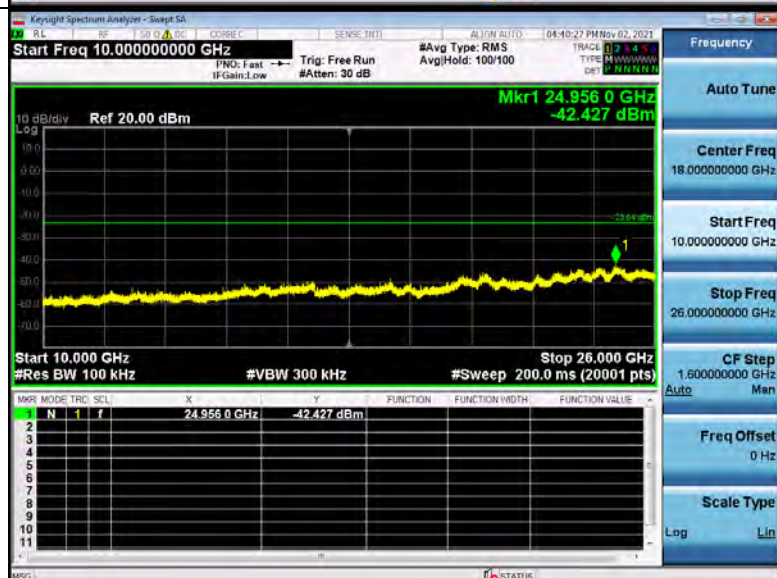
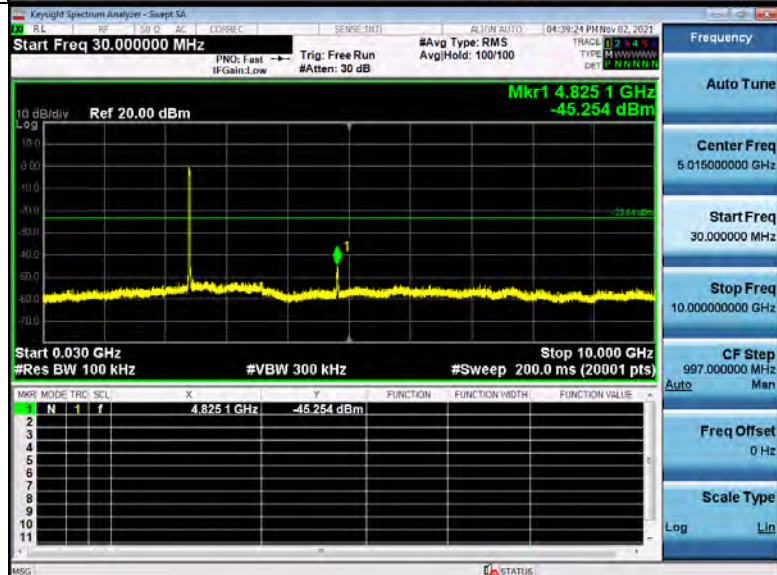
Left Band Edge

Right Band Edge

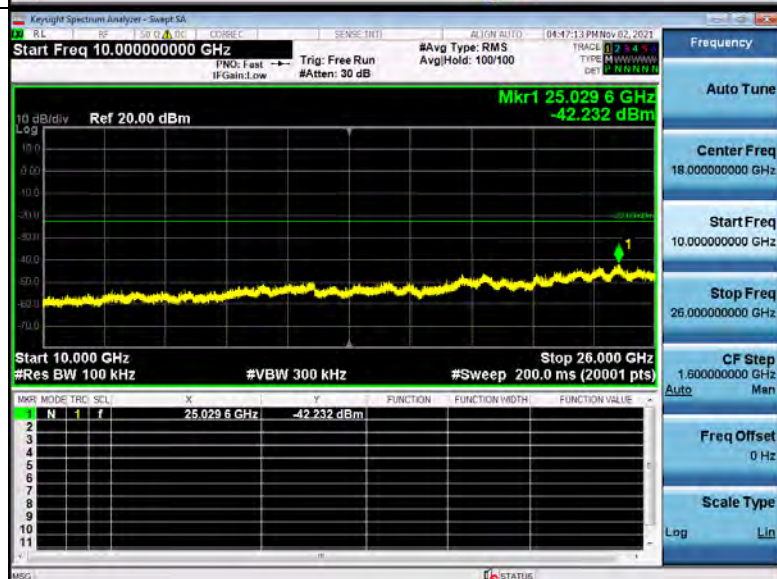
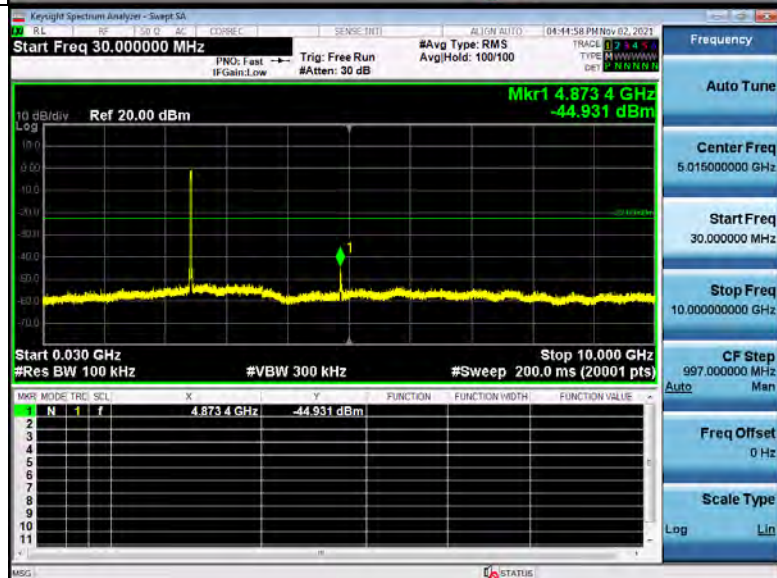
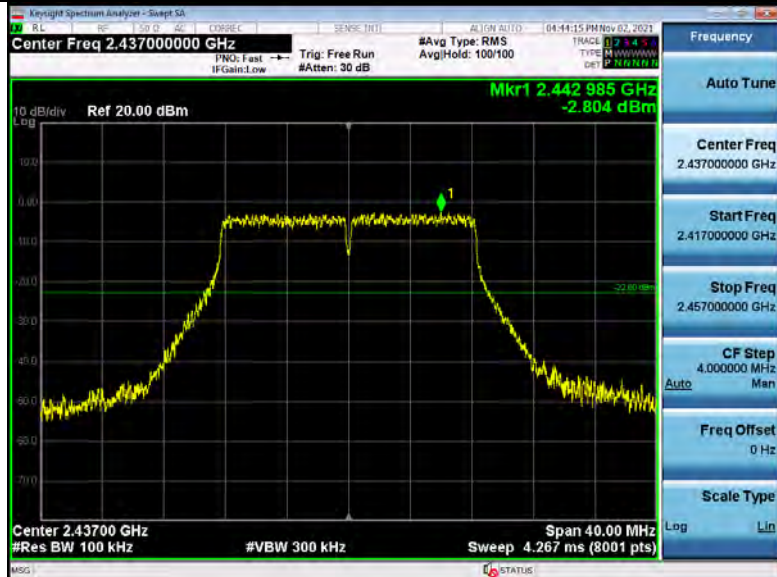
802.11g Modulation

Spurious emission

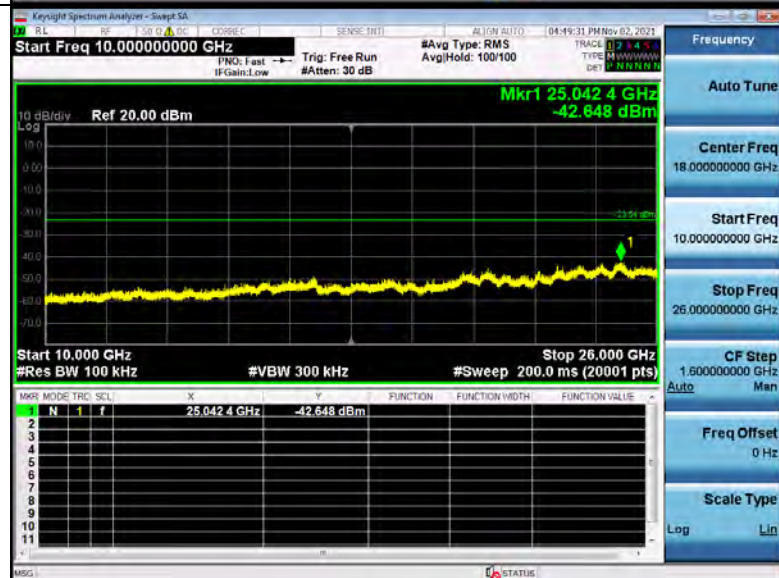
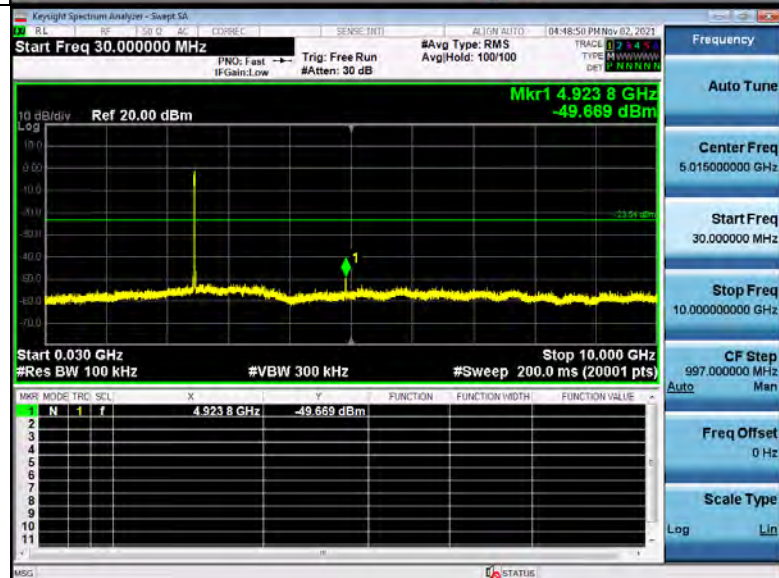
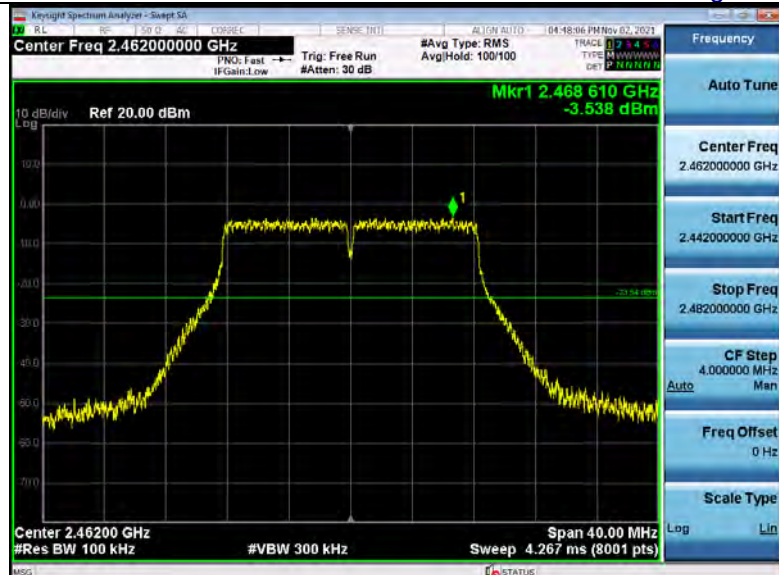
Low Channel



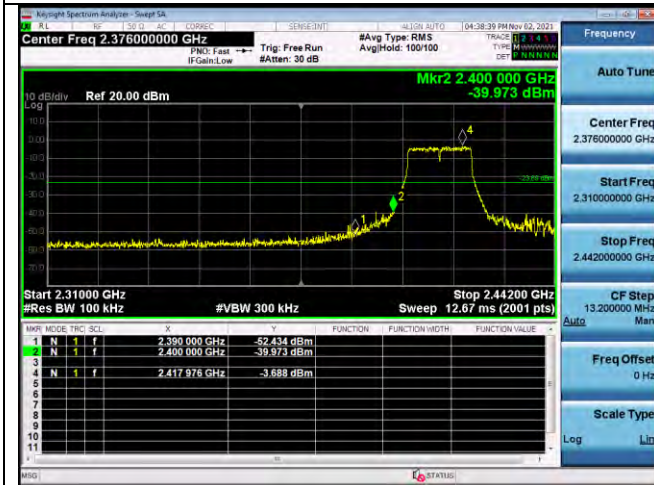
Middle Channel



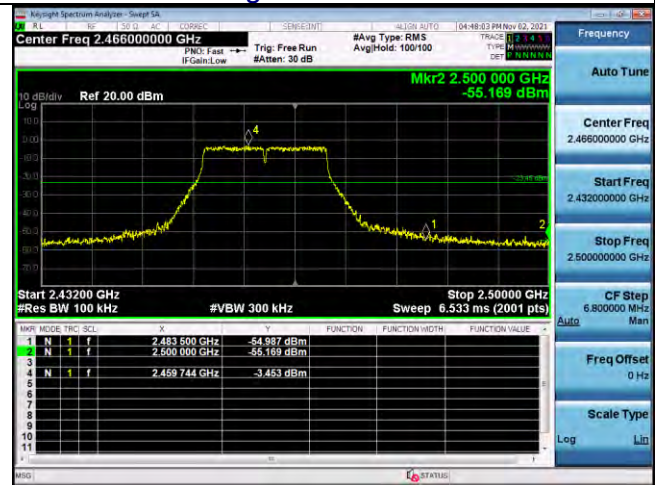
High Channel



Lowest Channel



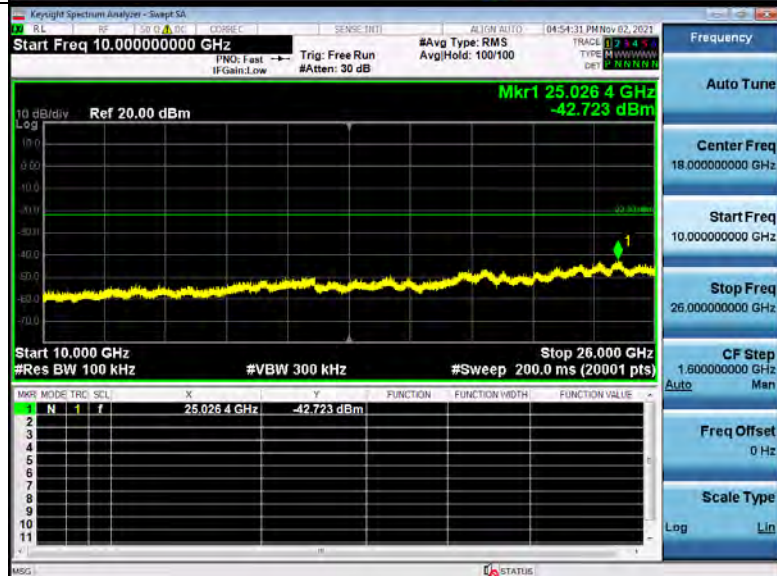
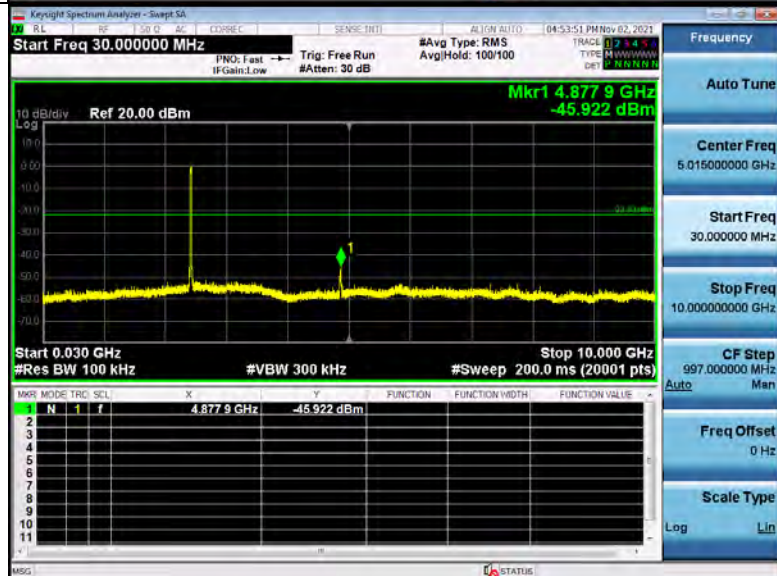
Highest Channel



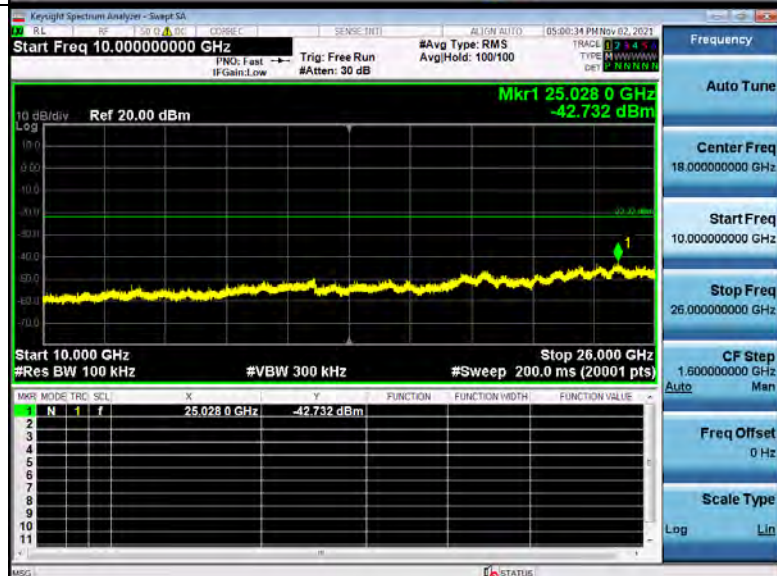
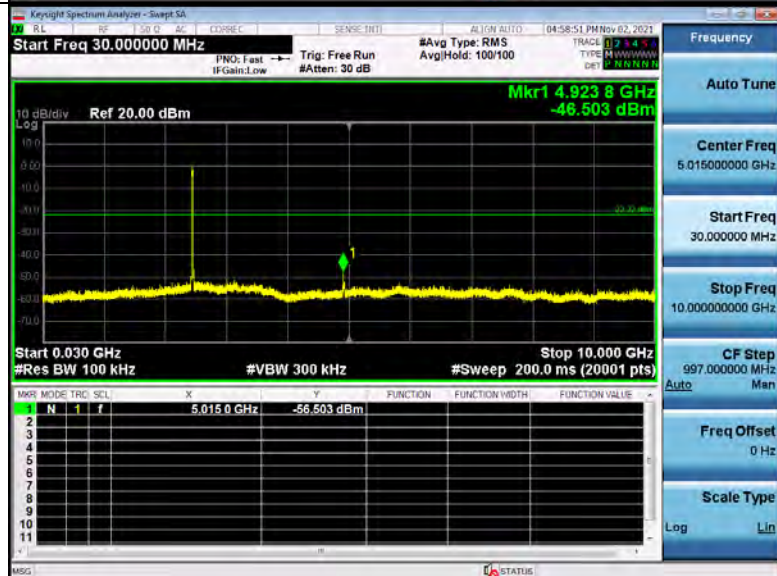
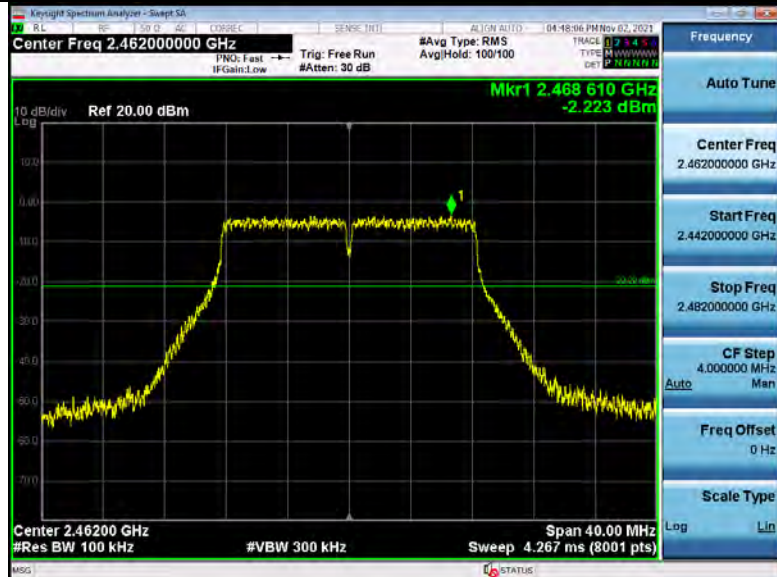
Left Band Edge

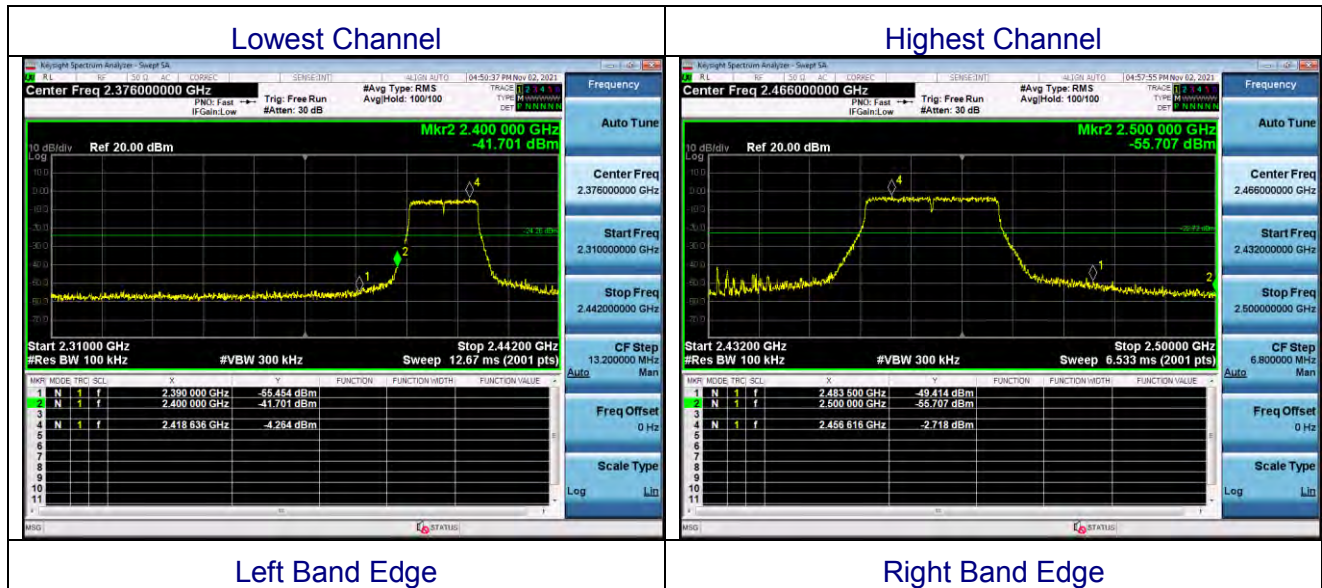
Right Band Edge

Middle Channel



High Channel

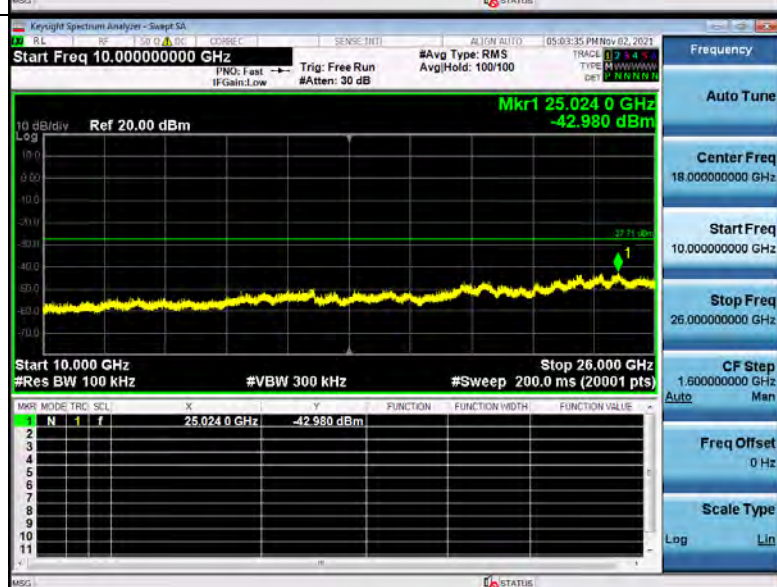
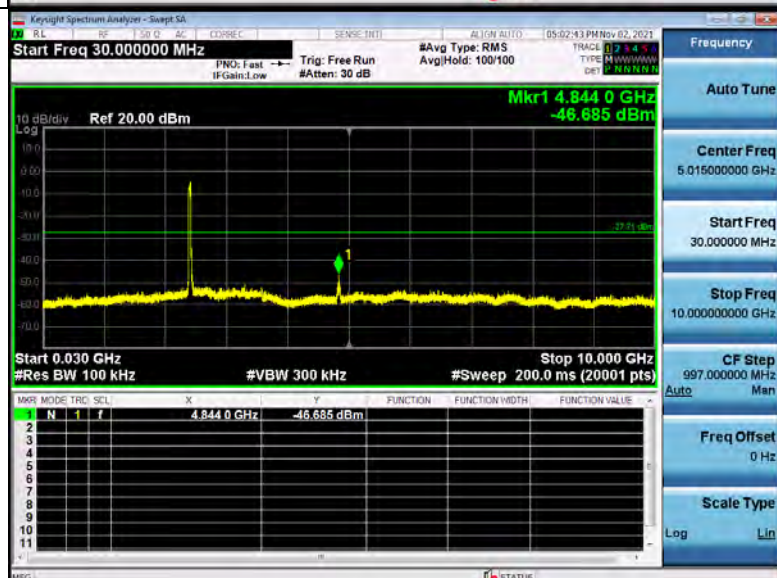
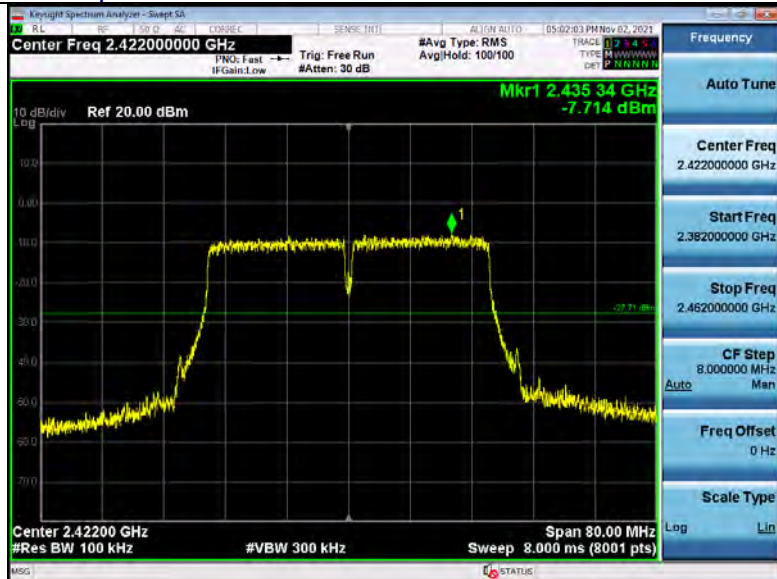




802.11n40 Modulation

Spurious emission

Low Channel



Keysight Spectrum Analyzer - Screenshot

RF: 1.50 GHz, COUPL: C, SENS: T, ALN: AUTO, 05:04:19 PM Nov 02, 2021

Center Freq 2.437000000 GHz, #Avg Type: RMS, Avg/Hold: 100/100, TRAC: 1 2 3 4 5, TYPE: M, MARK: M, CH1: P, 2.437000000

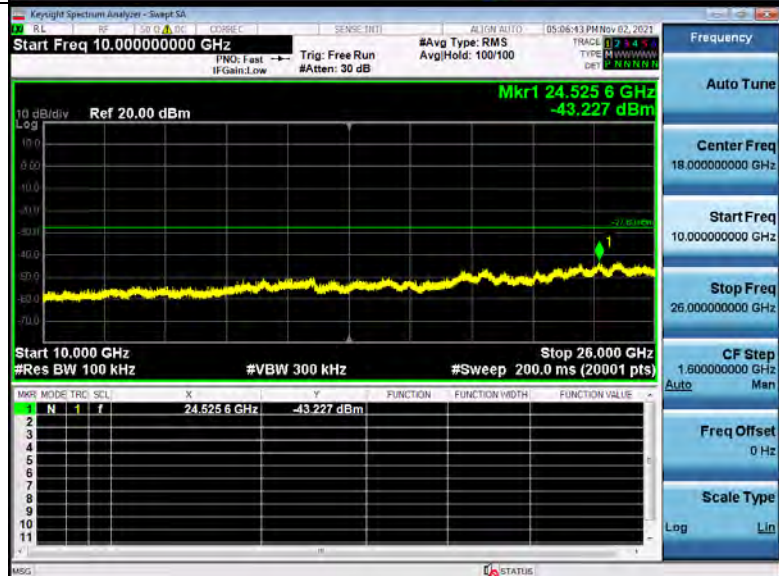
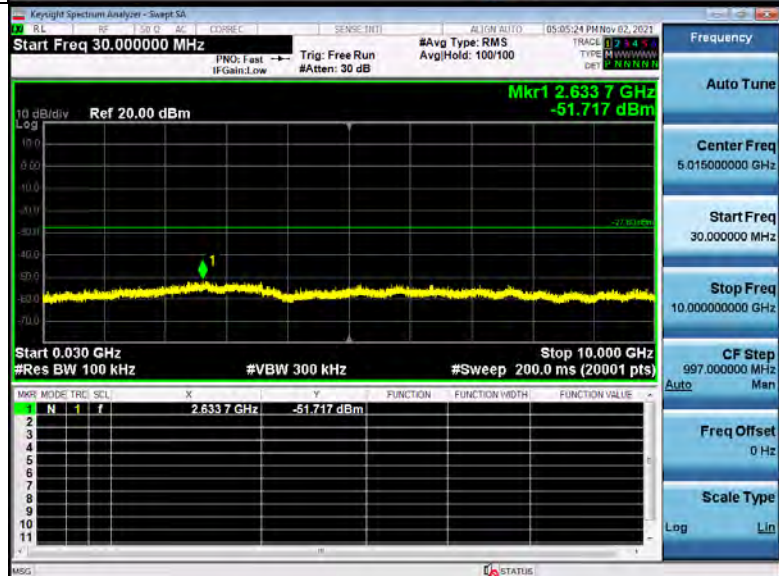
PNO: Fast, IF Gain: Low, Trig: Free Run, #Atten: 30 dB

10 dB/div, Ref 20.00 dBm

Mkr1 2.444 73 GHz, -7.796 dBm

Center 2.43700 GHz, #Res BW 100 kHz, #VBW 300 kHz, Span 80.00 MHz, Sweep 8.000 ms (8001 pts)

Frequency, Auto Tune, Center Freq 2.437000000 GHz, Start Freq 2.397000000 GHz, Stop Freq 2.477000000 GHz, CF Step 8.000000 MHz, Auto, Man, Freq Offset 0 Hz, Scale Type, Log, Lin



Keysight Spectrum Analyzer - Setup SA

BL RE 100 GHz COUSE C SENSE INT

Center Freq 2.45200000 GHz

#Avg Type: RMS Avg/Hold: 100/100

TRAC 1 1 7 1 4 2 TYPE M W W W W W W W DET P A N N N N N N

65:07:45 PM Nov 02, 2021

10 dB/div Ref 20.00 dBm

Mkr1 2.46536 GHz -7.365 dBm

Center Freq 2.45200000 GHz

Start Freq 2.412000000 GHz

Stop Freq 2.492000000 GHz

CF Step 8.000000 MHz

Freq Offset 0 Hz

Scale Type

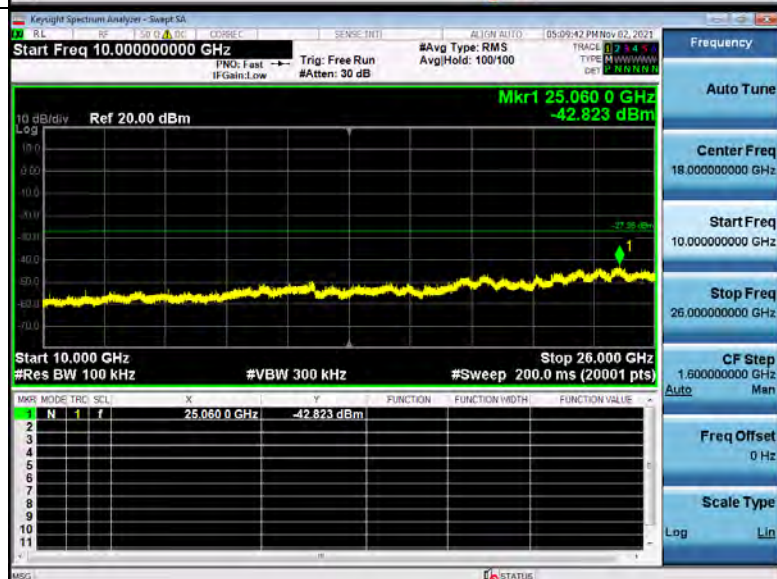
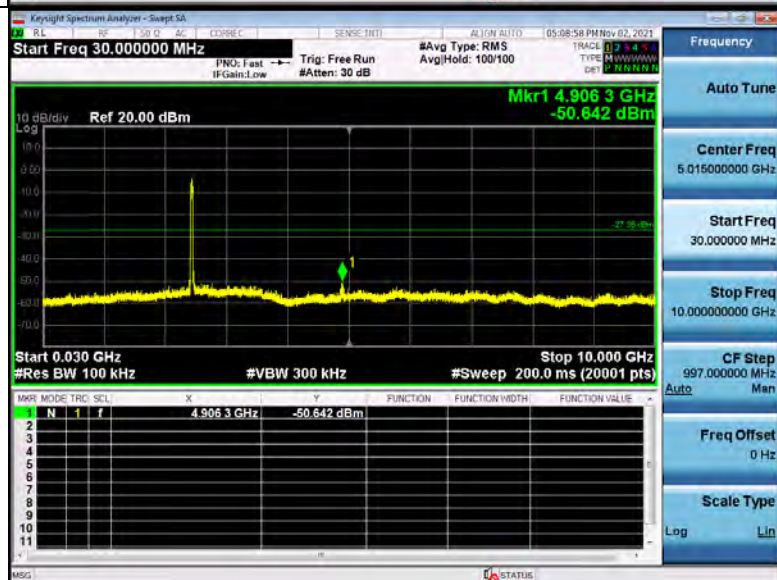
Center 2.45200 GHz

#Res BW 100 kHz

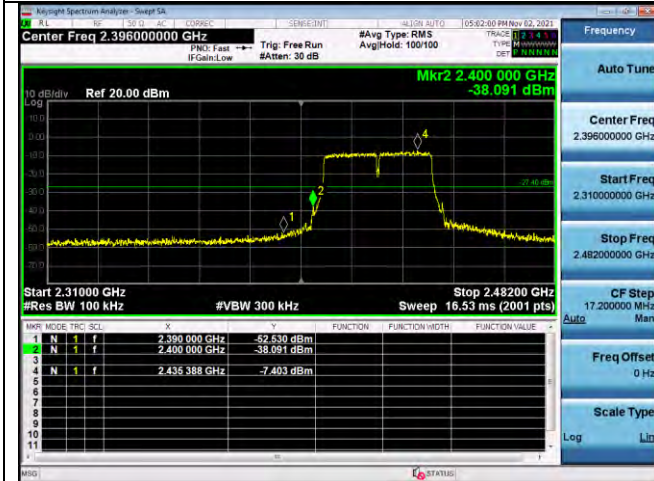
#VBW 300 kHz

Span 80.00 MHz

Sweep 8.000 ms (8001 pts)

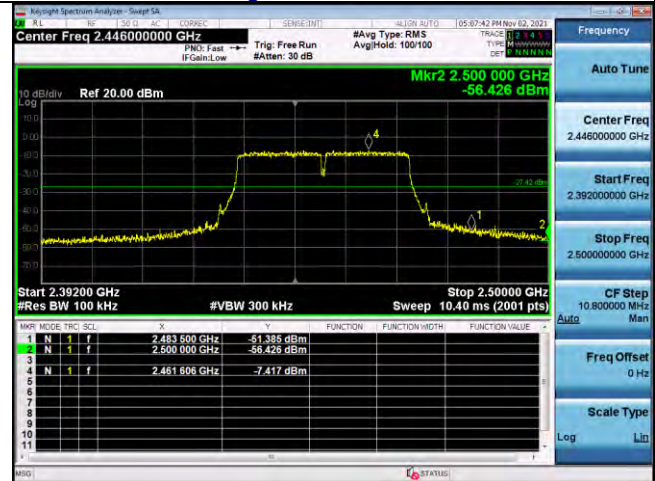


Lowest Channel



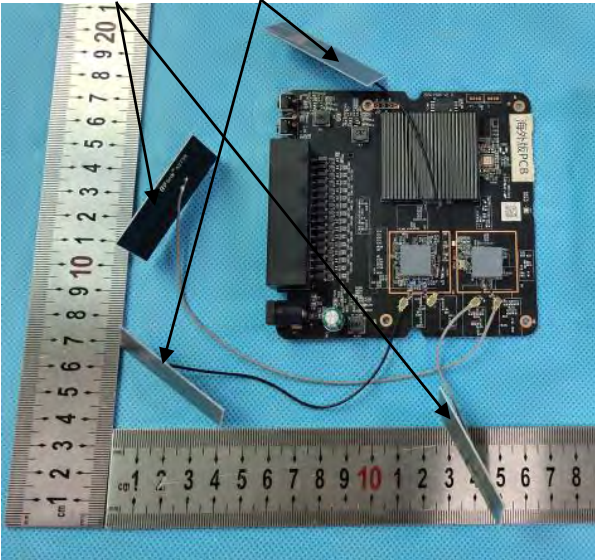
Left Band Edge

Highest Channel



Right Band Edge

10. ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
<p>For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247, if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.</p> <p>Refer to statement below for compliance.</p> <p>The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.</p> <p>Antenna Connected Construction</p> <p>The antenna used in this product is a Glue stick antenna, and the best case gain of the antenna is antenna port 1:5dBi and Antenna port 2:5dBi.</p> <p>EUT Antenna:</p> <p>2.4Gwifi ant 5Gwifi ant</p> 	

11. TEST SETUP PHOTO





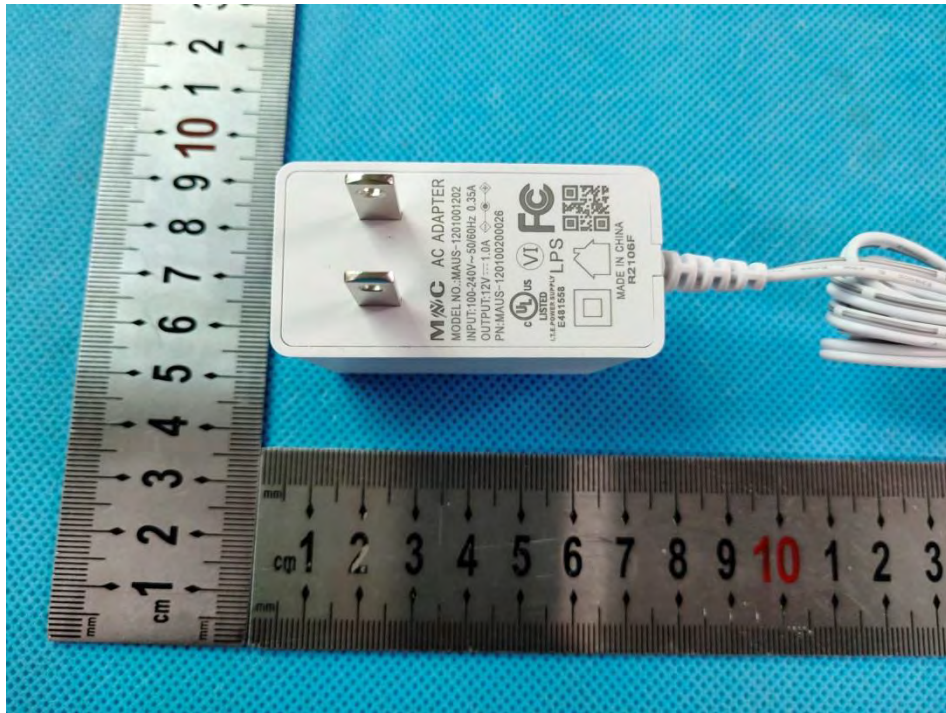
12. EUT CONSTRUCTIONAL DETAILS

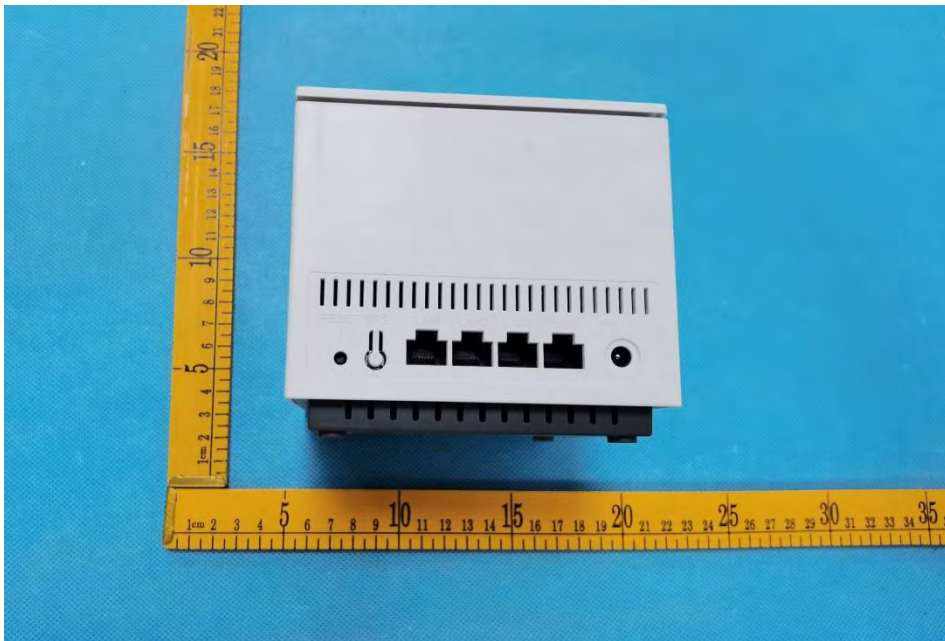
External photos





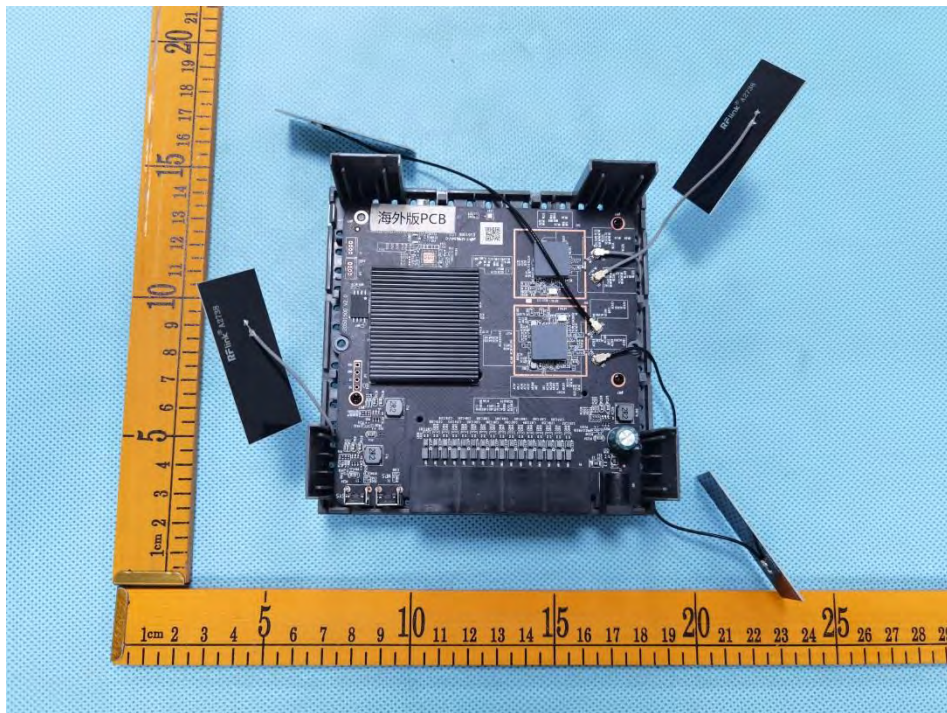
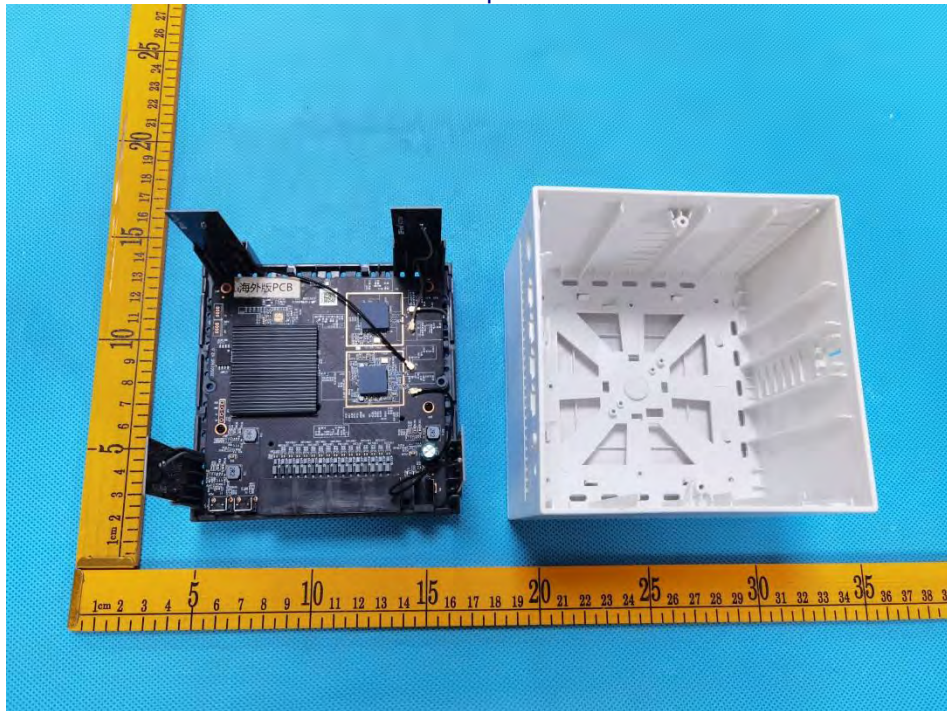


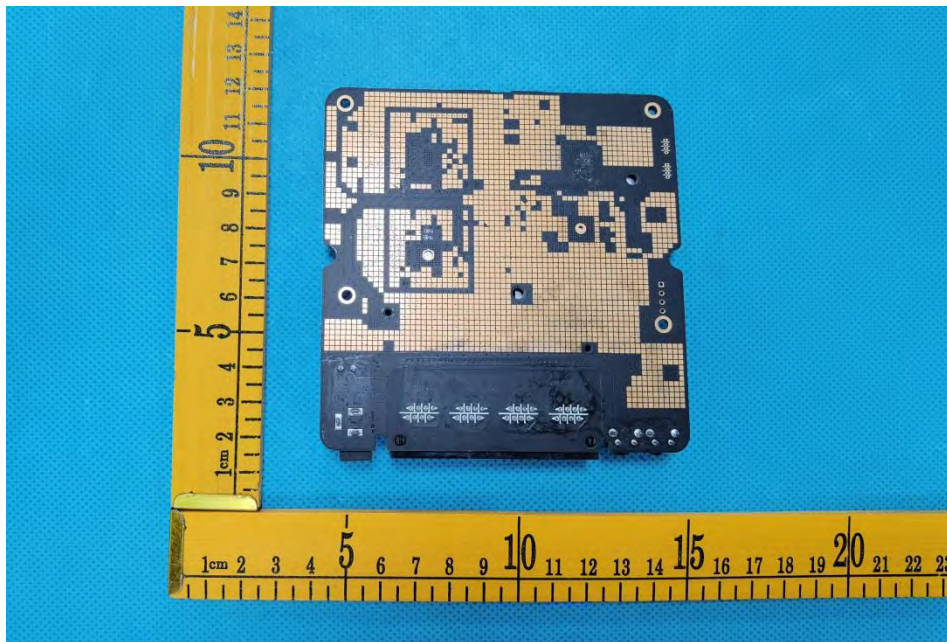
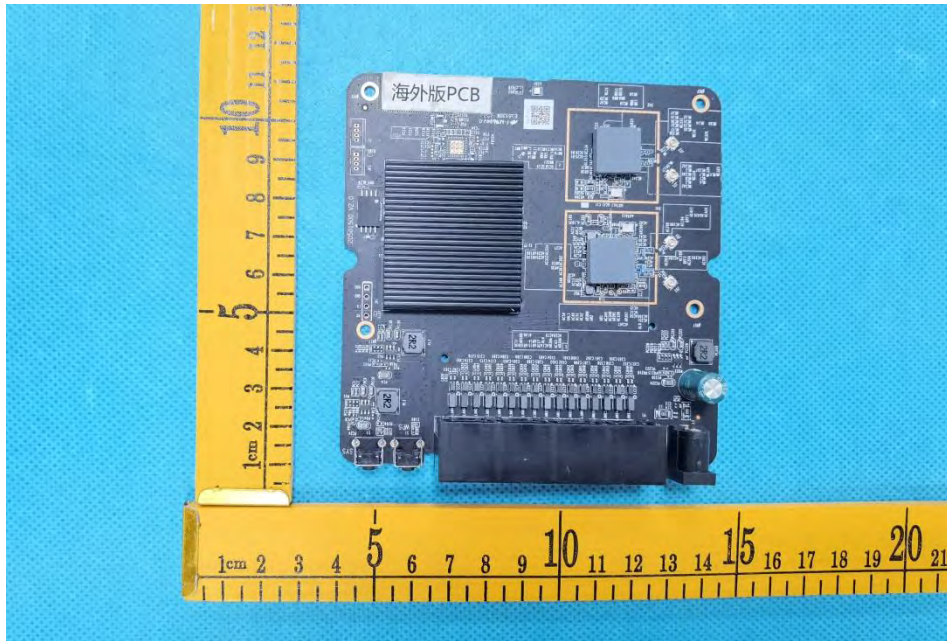


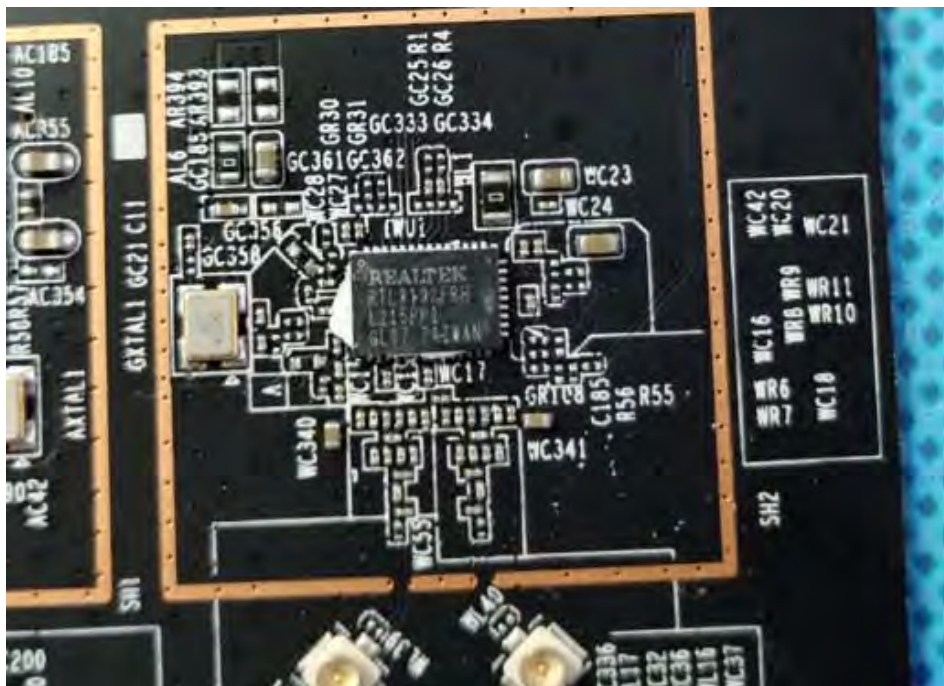
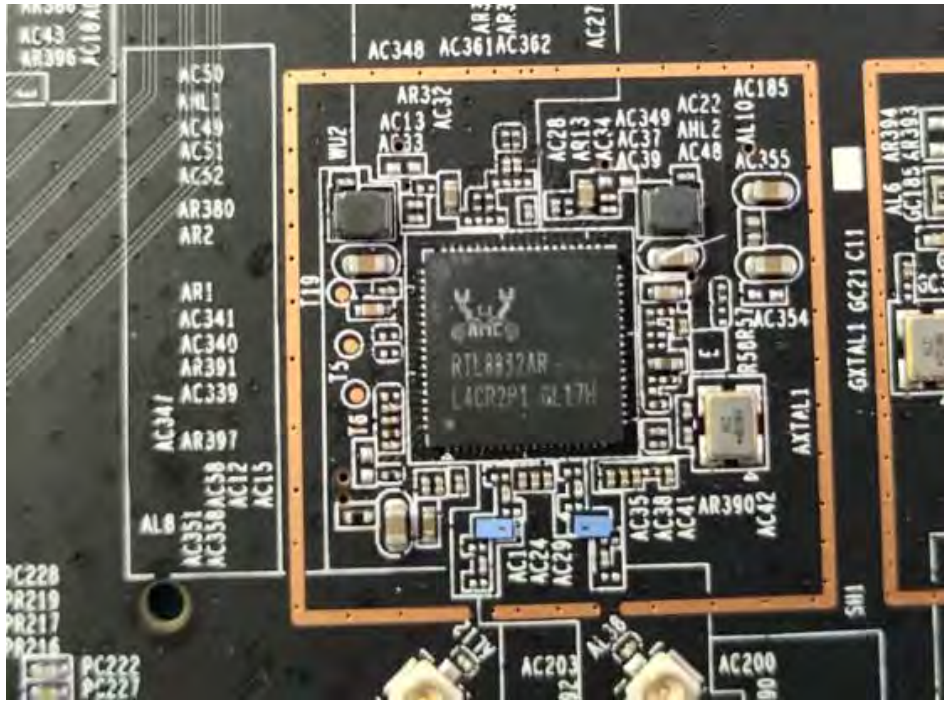




Internal photos







***** END OF REPORT *****