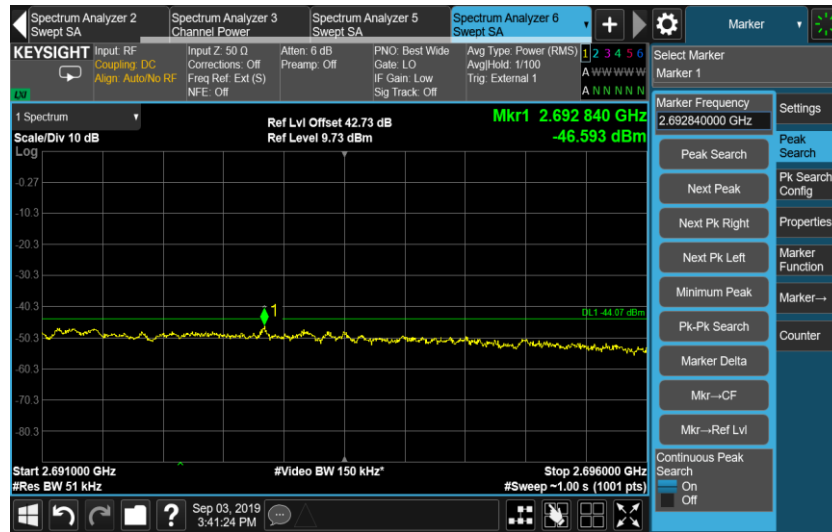


Port 55, Channel Position B, 60.0MHz



Port 55, Channel Position T, 60.0MHz

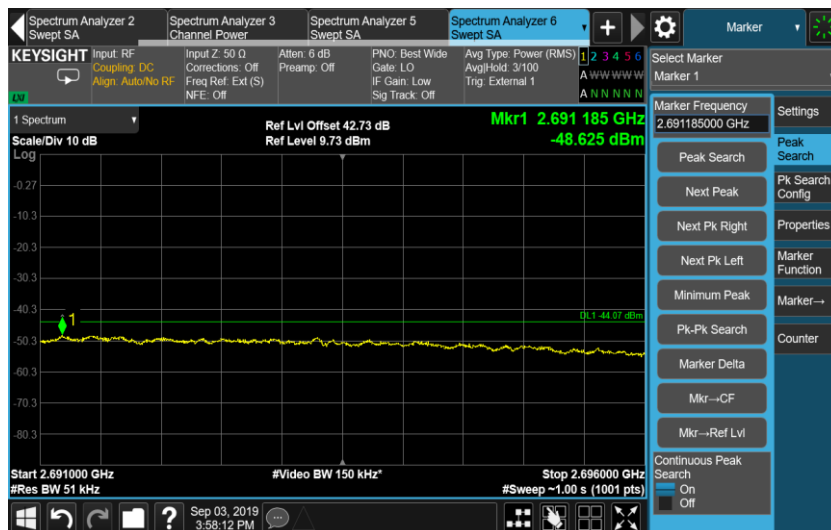




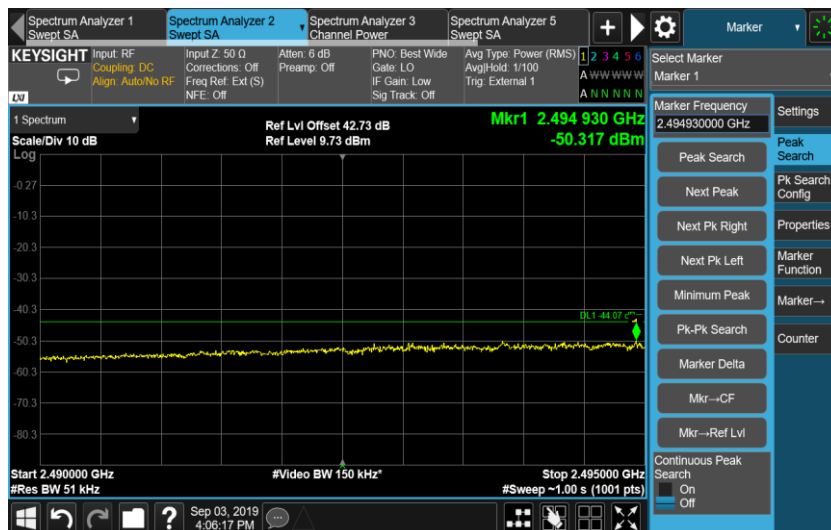
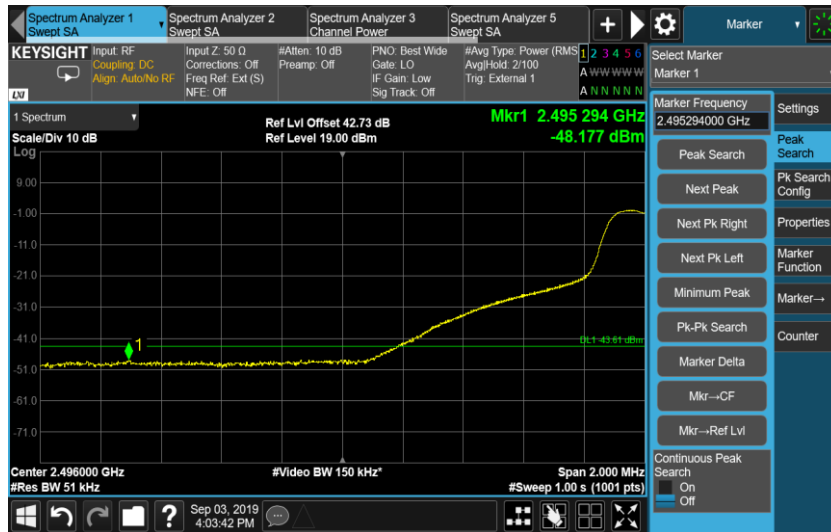
Port 55, Channel Position B, 80.0MHz



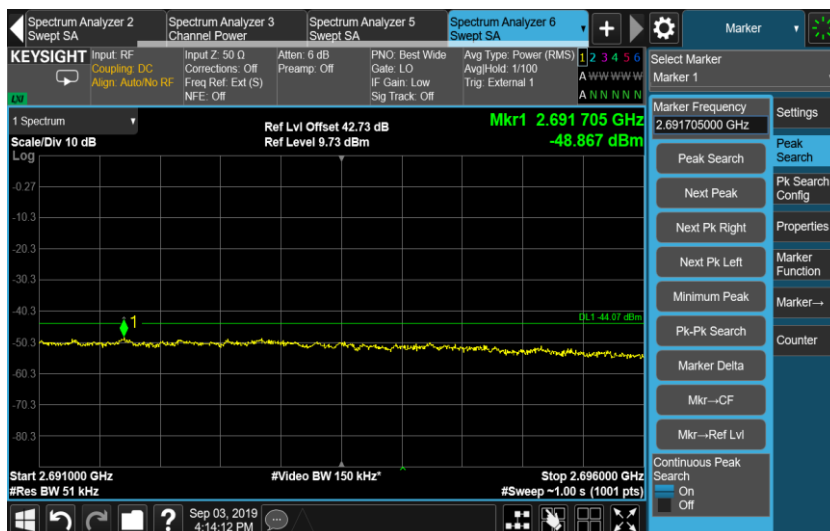
Port 55, Channel Position T, 80.0MHz



Port 55, Channel Position B, 90.0MHz



Port 55, Channel Position T, 90.0MHz



A.4 Conducted Spurious Emission

A.4.1 Reference

FCC CFR 47 Part 2, Clause 2.1051

FCC CFR 47 Part 27, Clause 27.53(m)

A.4.2 Method of measurement

In accordance with FCC rules, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

The spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using an attenuator and the frequency spectrum investigated from 3KHz to 27GHz. The resolution bandwidth of 1MHz was employed for frequency band 3KHz to 27GHz. The spectrum analyzer detector was set to RMS.

For MIMO mode configurations, the limit was adjusted with a correction of -18.06dB [$10\log(1/64)$] by using the Measure and Add $10\log(N)$ dB technique according to KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports. Then the limit was adjusted to -31.06dBm.

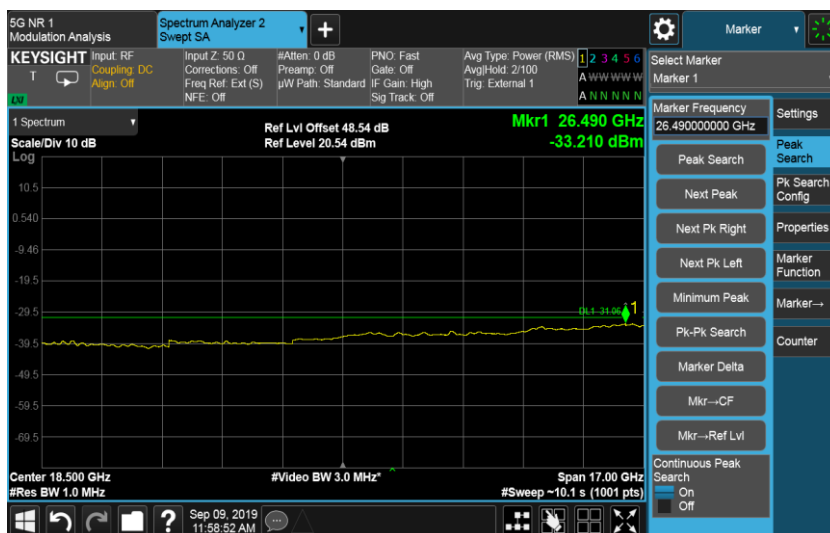
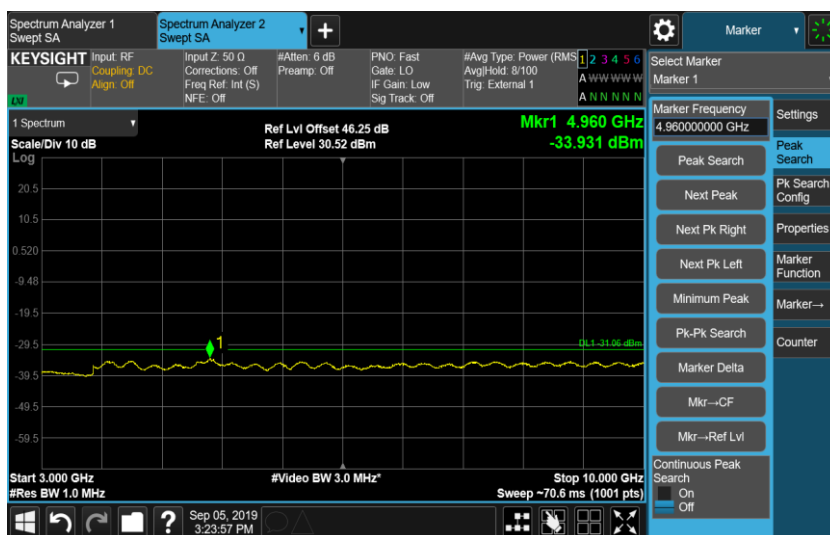
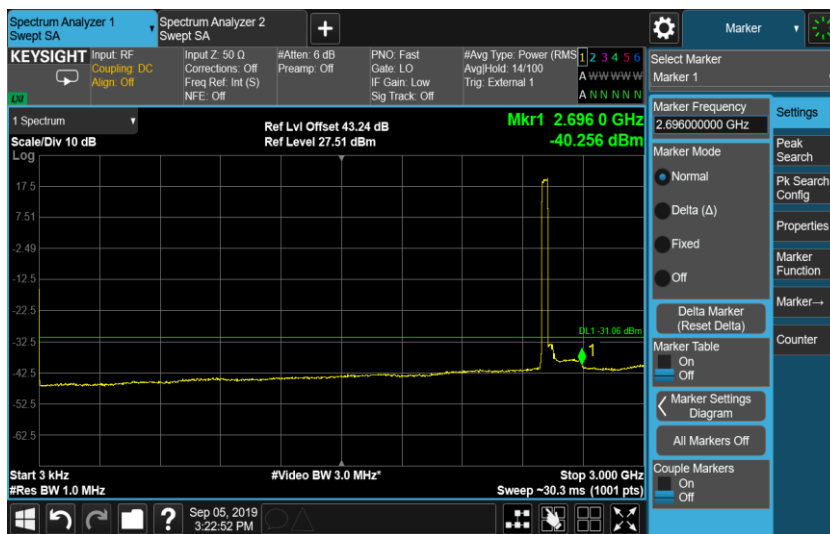
A.4.3 Measurement limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

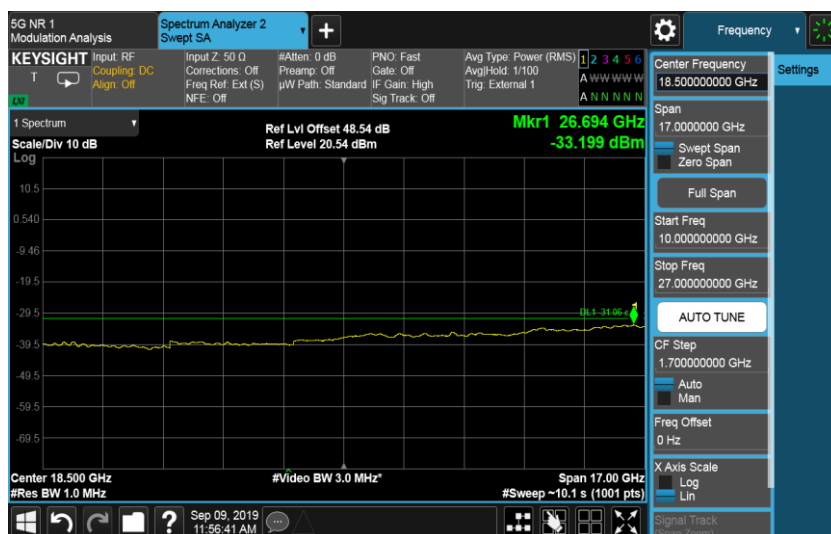
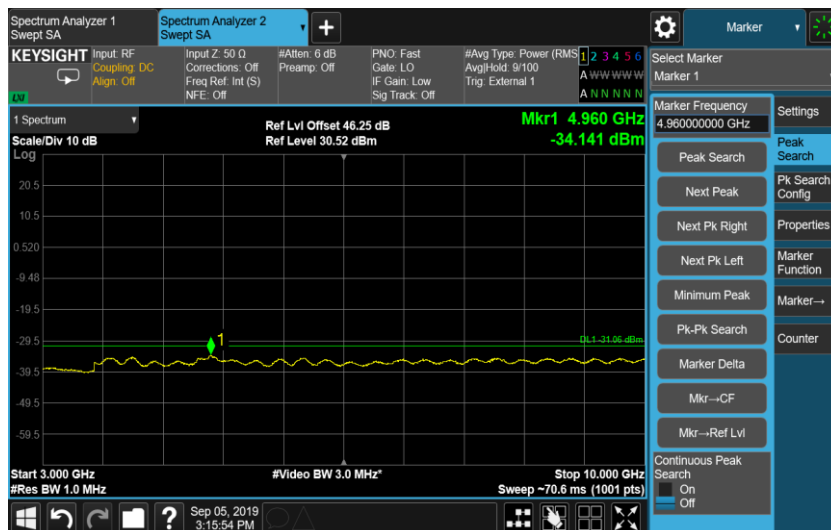
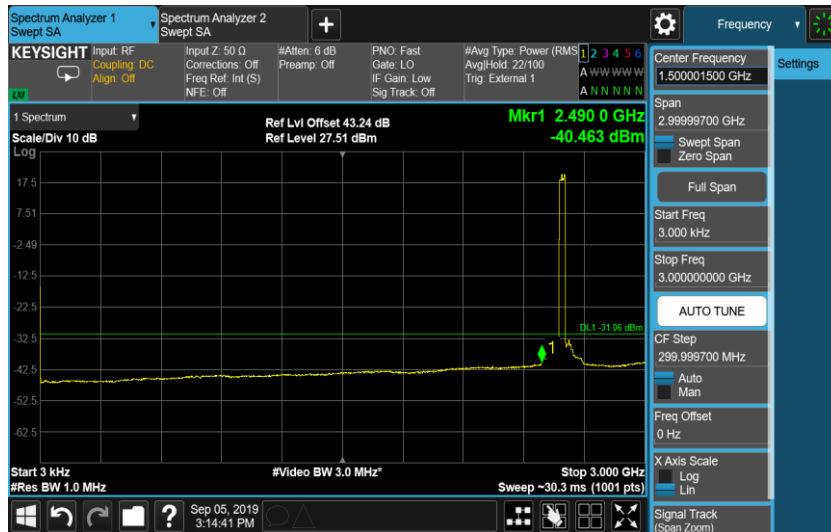
A.4.4 Measurement results

Configuration NR-MIMO-1C 30M, QPSK

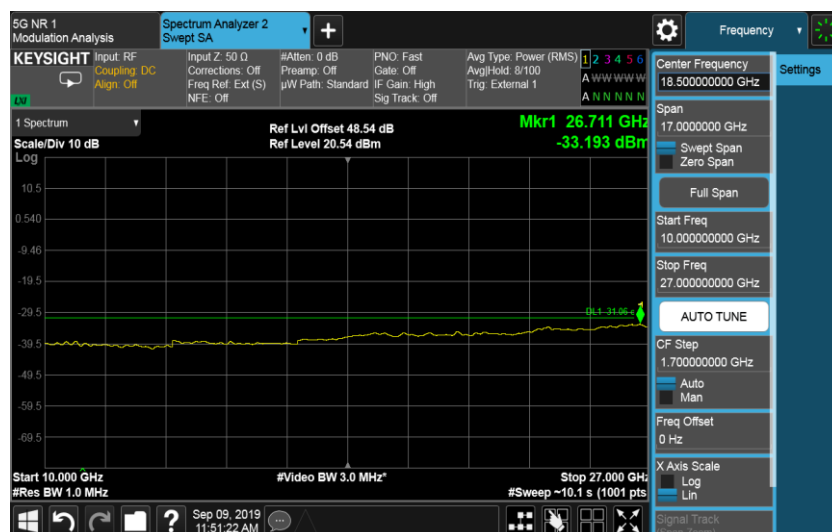
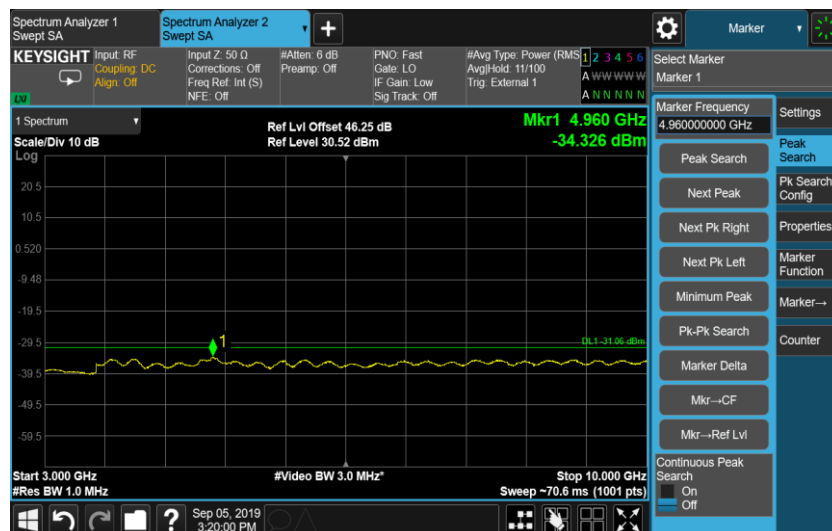
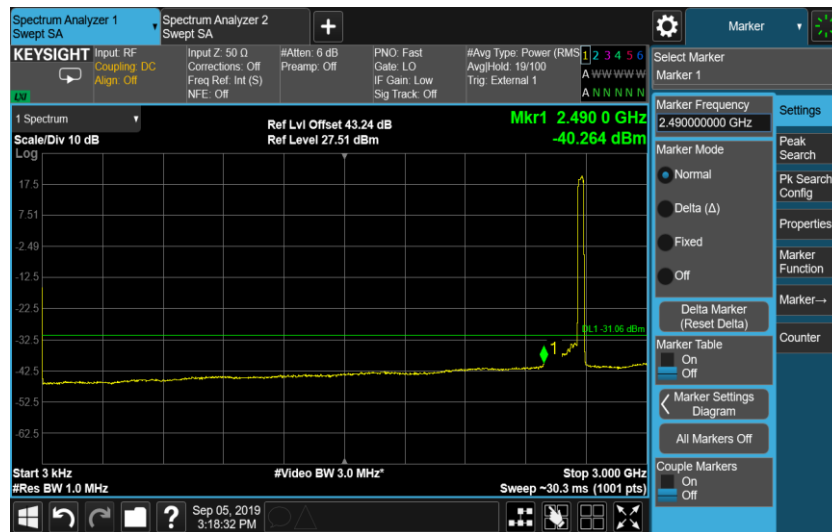
Port 55, Channel Position B



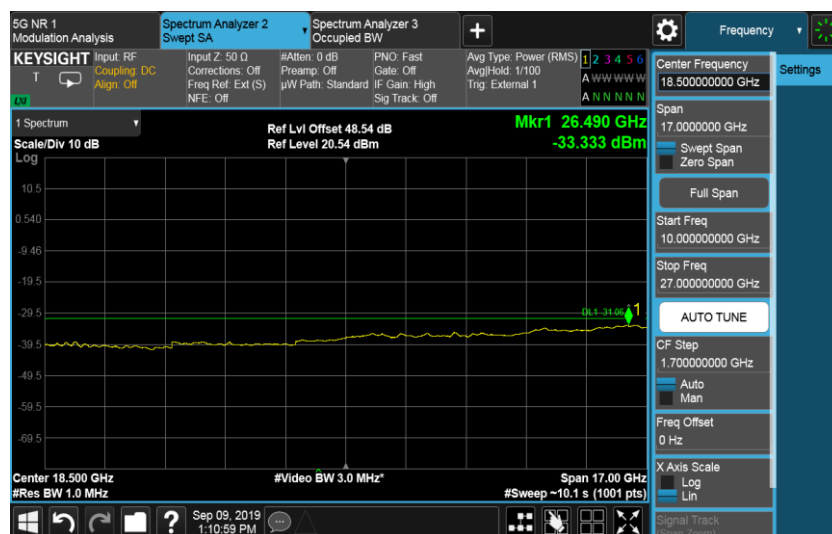
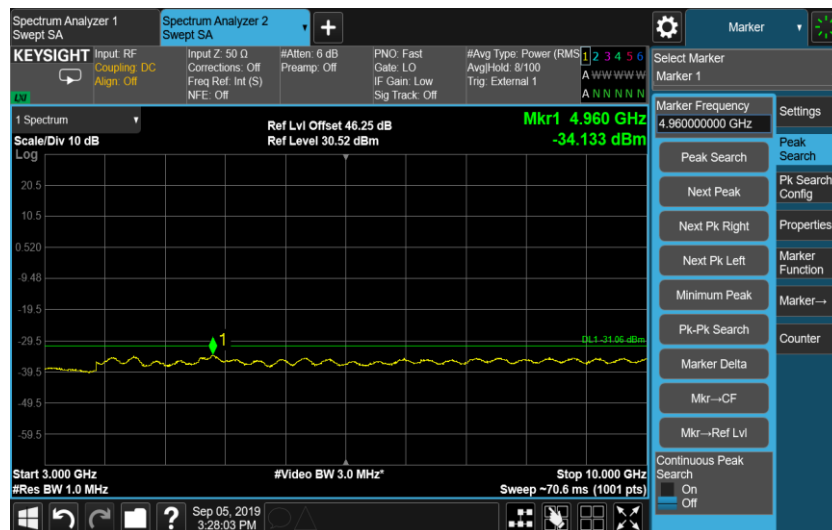
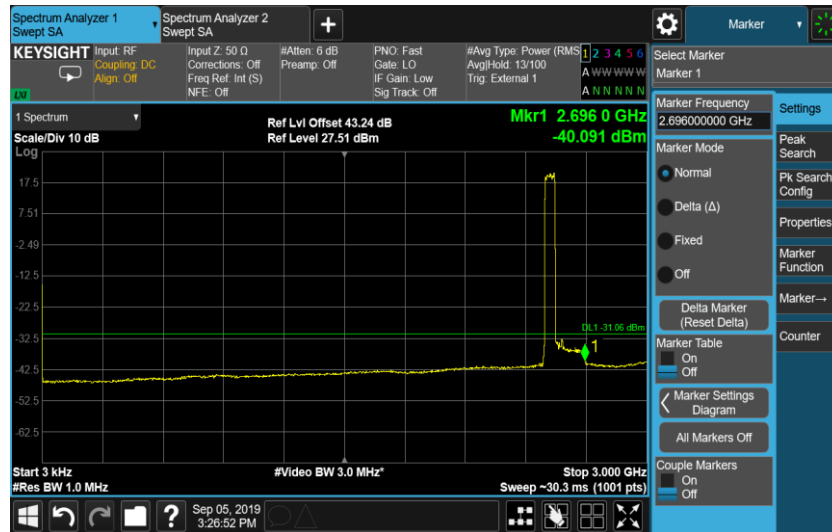
Port 55, Channel Position M

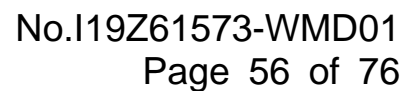


Port 55, Channel Position T

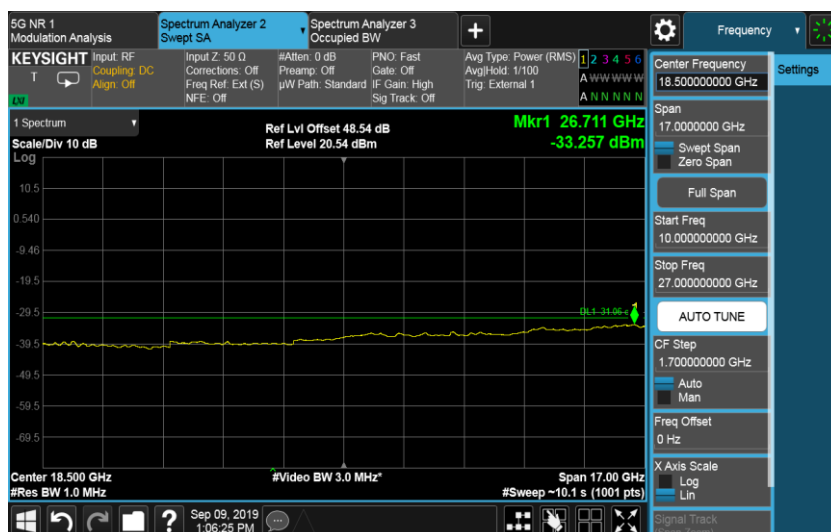
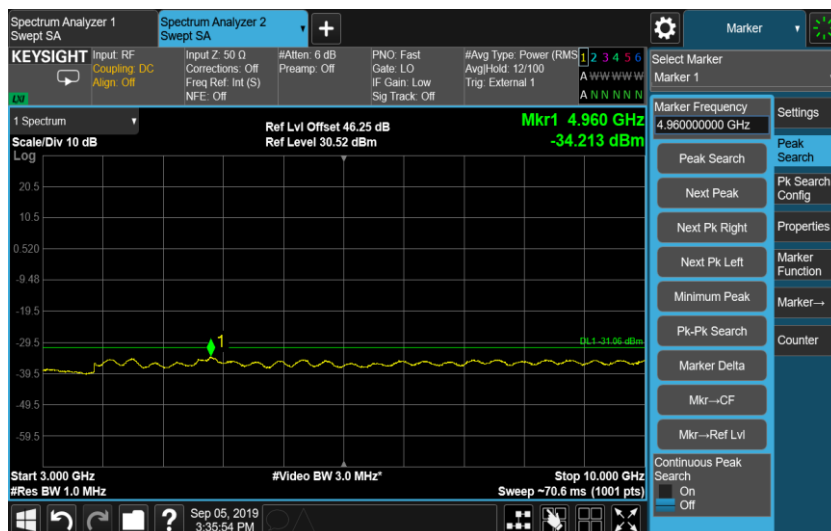


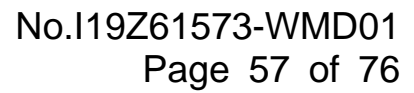
Configuration NR-MIMO-1C 50M, QPSK
Port 55, Channel Position B





The screenshot displays a Spectrum Analyzer interface. At the top, there are two tabs: "Spectrum Analyzer 1" (selected) and "Spectrum Analyzer 2". Below the tabs, various settings are visible: Input: RF, Coupling: DC, Align: Off; Input Z: 50 Ω, Corrections: Off, Freq Ref: Int (S), NFE: Off; #Atten: 6 dB, Preamp: Off; PNO: Fast, Gate: LO, IF Gain: Low, Sig Track: Off; #Avg Type: Power (RMS), Avg/Hold: 9/100, Trg: External 1; and a frequency range of 1.2 to 3.4 GHz with a resolution bandwidth (RBW) of 30 kHz. The main display area shows a spectrum plot with a yellow trace. A prominent peak is labeled "Mkr1 2.490 0 GHz -38.512 dBm". The plot has a logarithmic scale from -62.5 dBm to 17.5 dBm. The x-axis is labeled "Start 3 kHz" and "Sweep 3.000 GHz". The y-axis is labeled "Scale/Div 10 dB" and "Log". On the right side, there are several control panels: "Marker" (set to Marker 1), "Marker Frequency" (2.49000000 GHz), "Marker Mode" (Normal), "Marker Table" (On), and "Couple Markers" (On). The bottom status bar shows the date and time: "Sep 05, 2019 3:34:18 PM".





Spectrum Analyzer 2
Swept SA

KEYSIGHT Input: RF
Coupling: DC
Align: Off

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

#Atten: 6 dB
Preamp: Off

PNO: Fast
Gate: LO
IF Scan: Low
Sig Track: Off

#Avg Type: Power (RMS)
Avt/Hold: 10/100
Trig: External 1

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

Select Marker
Marker 1

Marker Frequency
2.490000000 GHz

Marker Mode
☒ Normal
☐ Delta (Δ)
☐ Fixed
☐ Off

Delta Marker
(Reset Delta)

Marker Table
☒ On
☐ Off

Marker Settings
Diagram

All Markers Off

Couple Markers
☒ On
☐ Off

1 Spectrum
Scale/Div 10 dB
Log

Ref Lvl Offset 43.24 dB
Ref Level 27.51 dBm

Mkr1 2.490 0 GHz
-36.058 dBm

Start 3 kHz
#Res BW 1.0 MHz

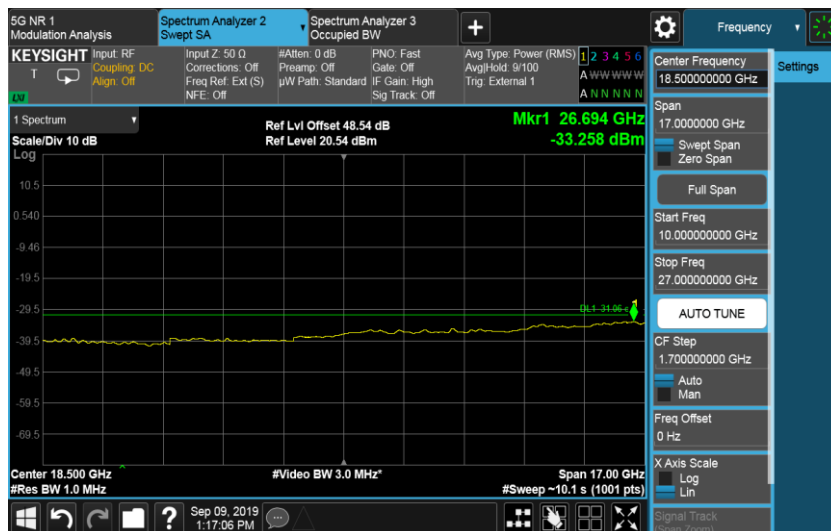
#Video BW 3.0 MHz

Sweep 3.000 GHz
-30.3 ms (1001 pts)

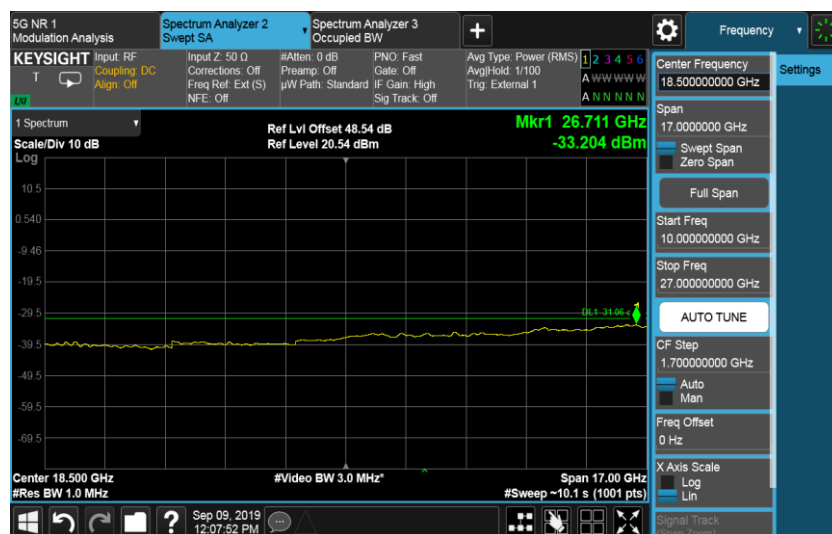
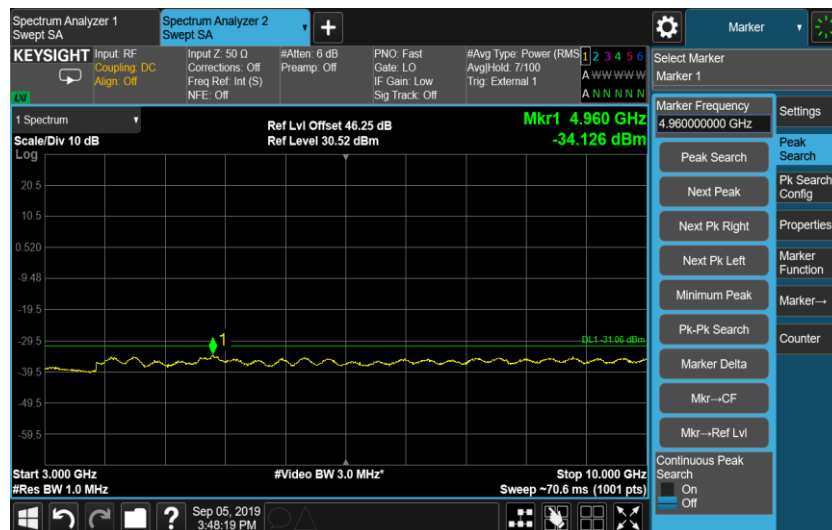
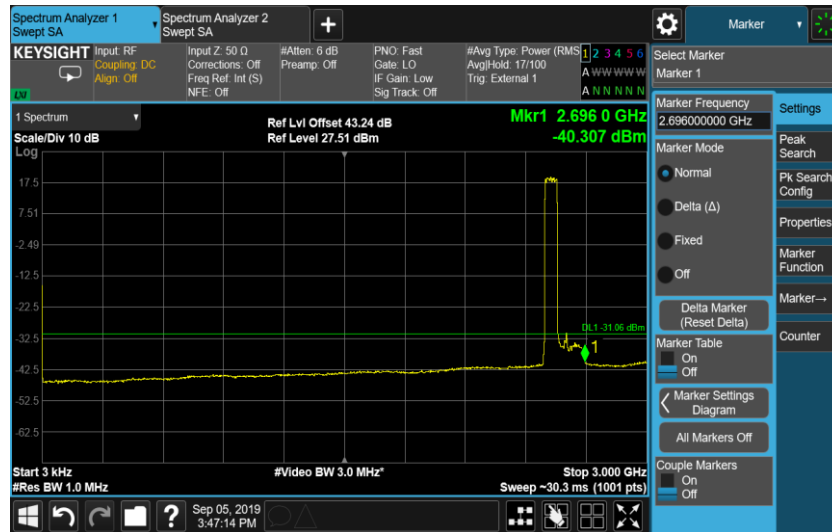
Start 3 kHz
#Res BW 1.0 MHz

#Video BW 3.0 MHz

Sweep 3.000 GHz
-30.3 ms (1001 pts)



Configuration NR-MIMO-1C 60M, QPSK
Port 55, Channel Position B



Port 55, Channel Position T

