

10.5 Spurious RF conducted emissions

Test Method

1. The RF output of EUT was connected to the spectrum analyzer by RF cable. The path loss was compensated to the results for each measurement.
2. Set to the maximum power setting, the instrument center frequency is set to the nominal EUT channel center frequency enable the EUT transmit continuously.
3. Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 100 kHz, VBW $\geq$ 3RBW, Sweep = auto, Detector function = peak, Trace = max hold
4. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded.
5. The level displayed must comply with the limit specified in this Section. Submit these plots.
6. Repeat above procedures until all frequencies measured were complete.

Limit

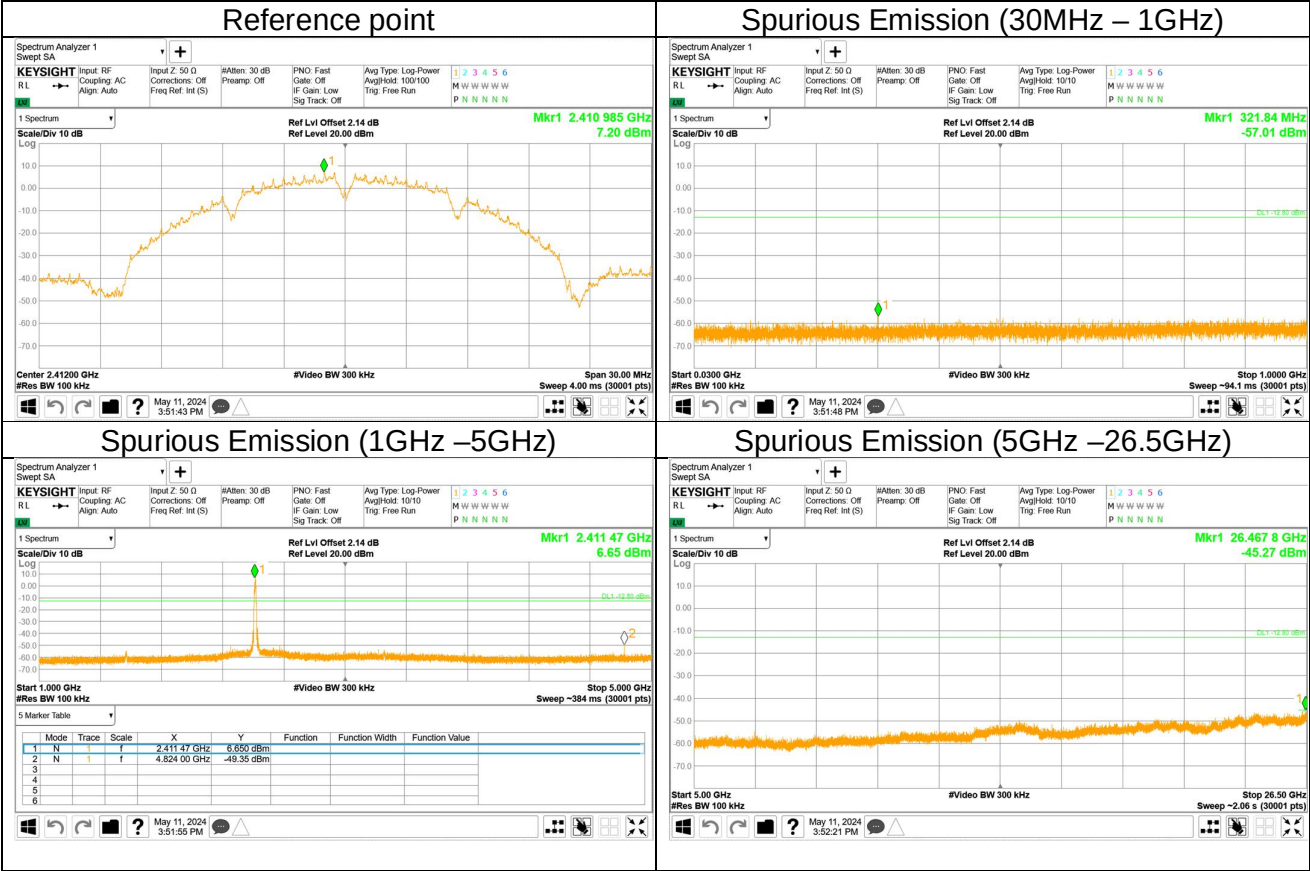
Frequency Range MHz	Limit (dBc)
30-25000	-20

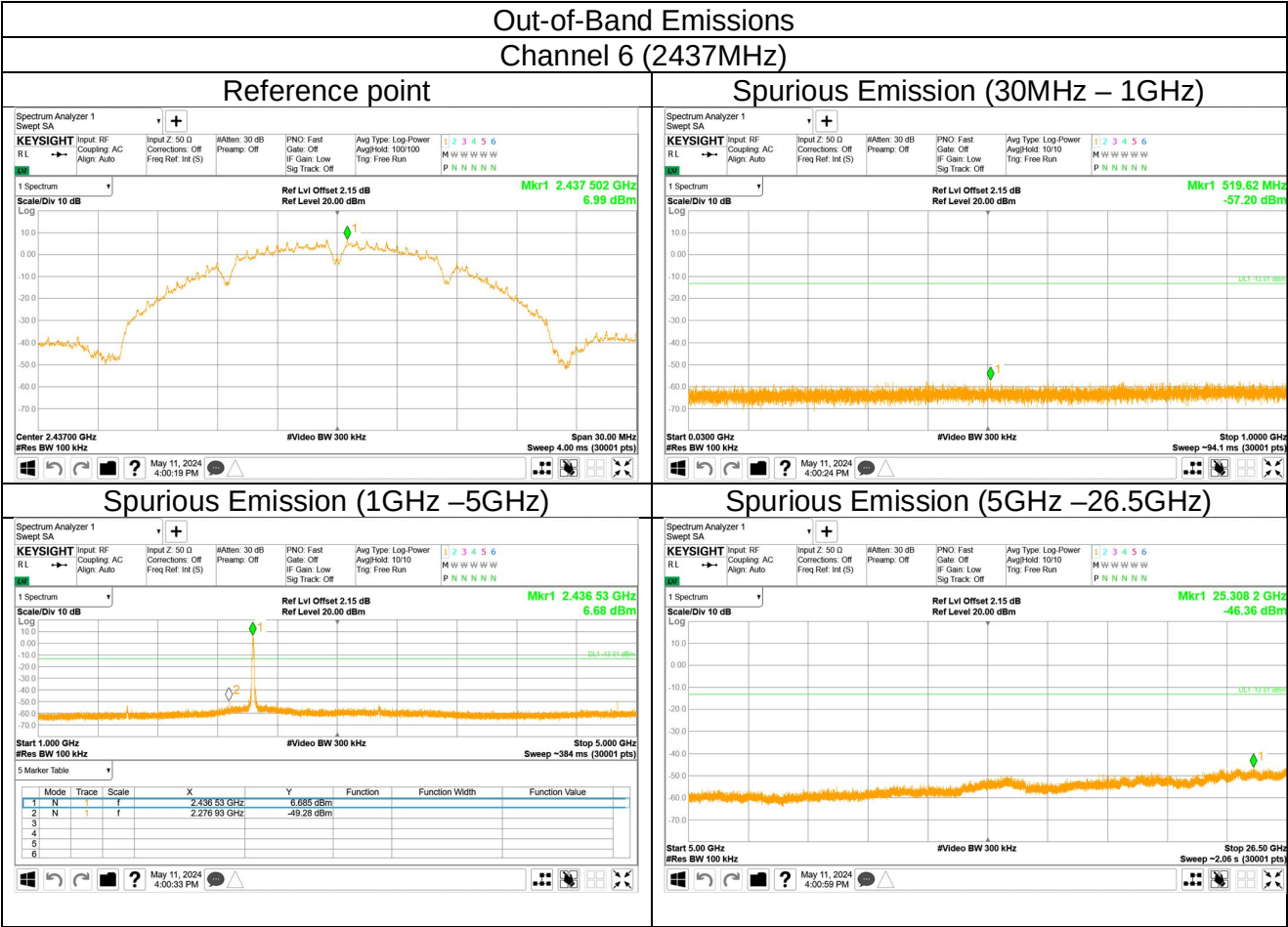


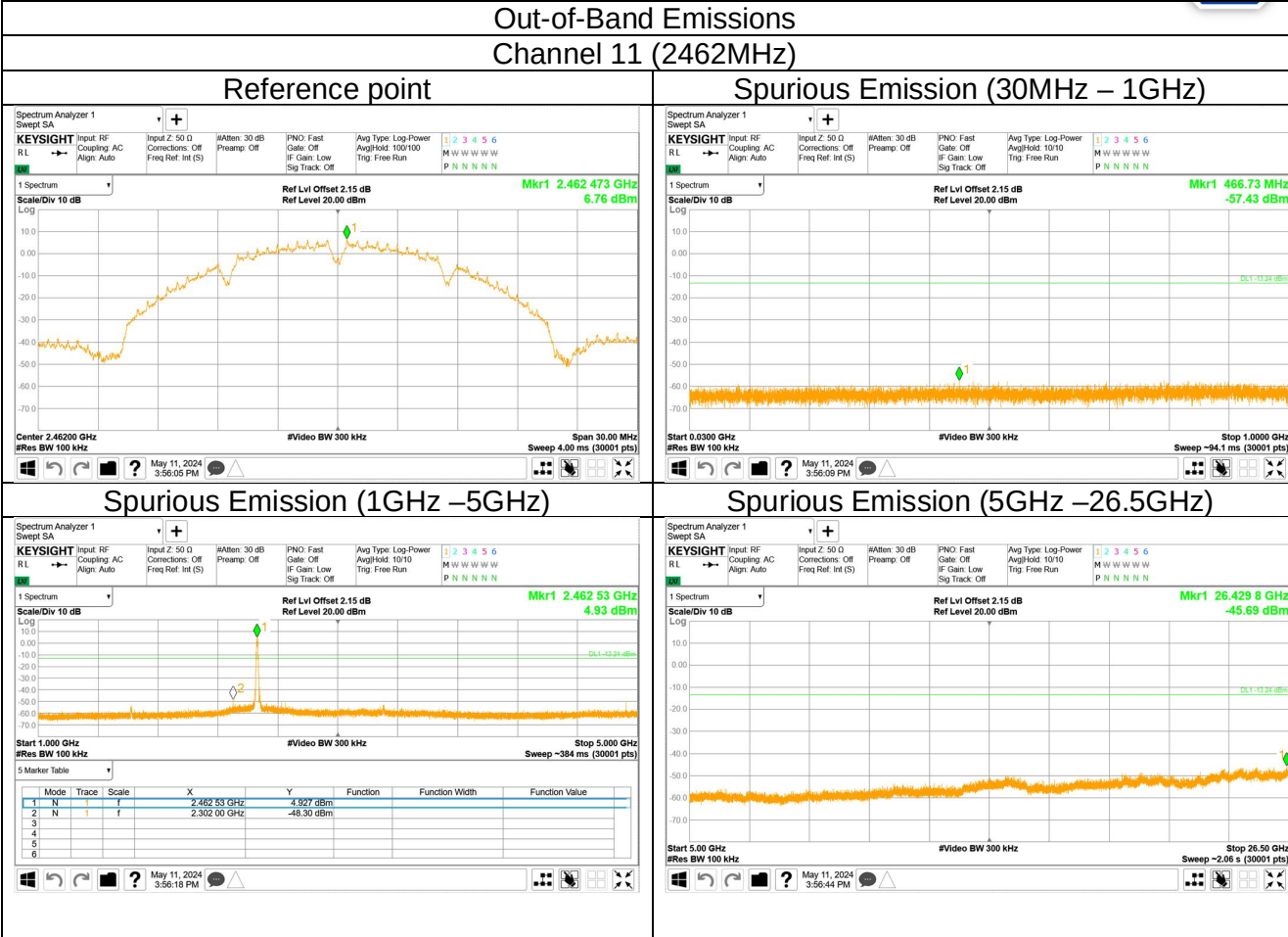
Spurious RF conducted emissions

802.11 B

Out-of-Band Emissions
Channel 1 (2412MHz)







Spurious Emission (5GHz –26.5GHz)

Spectrum Analyzer 1

Sweep SA

KEYSIGHT

Input RF

Coupling AC

Align Auto

Input Z 50 Ω

Corrections Off

Freq Ref Int (S)

Attenu 30 dB

Preamp Off

PNO Fast

Gate Off

IF Gain Low

Sig Track Off

Avg Type Log-Power

Avghold 10/10

Trig Free Run

1 2 3 4 5 6

M W W W W W

P N N N N N

1 Spectrum

Scale/Div 10 dB

Log

Ref Lvl Offset 2.15 dB

Ref Level 20.00 dBm

Mkr1 26.429 8 GHz

-45.69 dBm

Start 5.00 GHz

#Video BW 300 kHz

Stop 26.50 GHz

Sweep -2.06 s (30001 pts)

May 11, 2024 3:56:44 PM



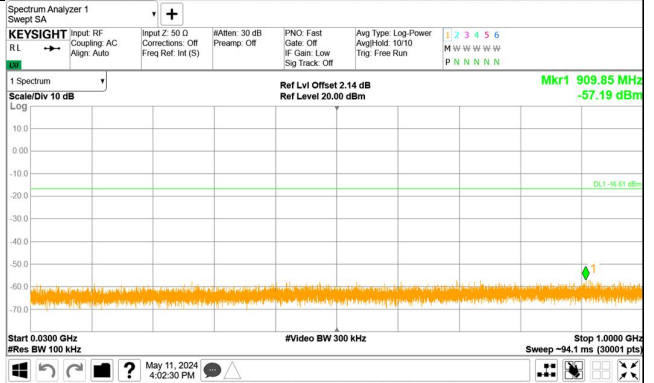
802.11 G

Out-of-Band Emissions
Channel 1 (2412MHz)

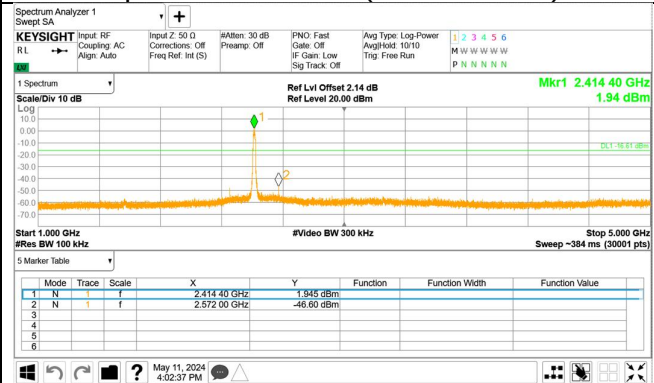
Reference point



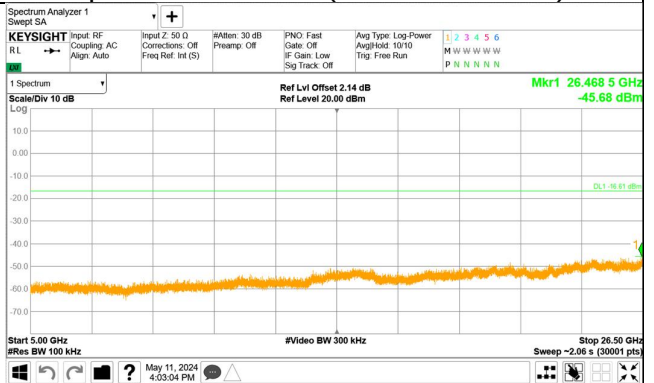
Spurious Emission (30MHz – 1GHz)

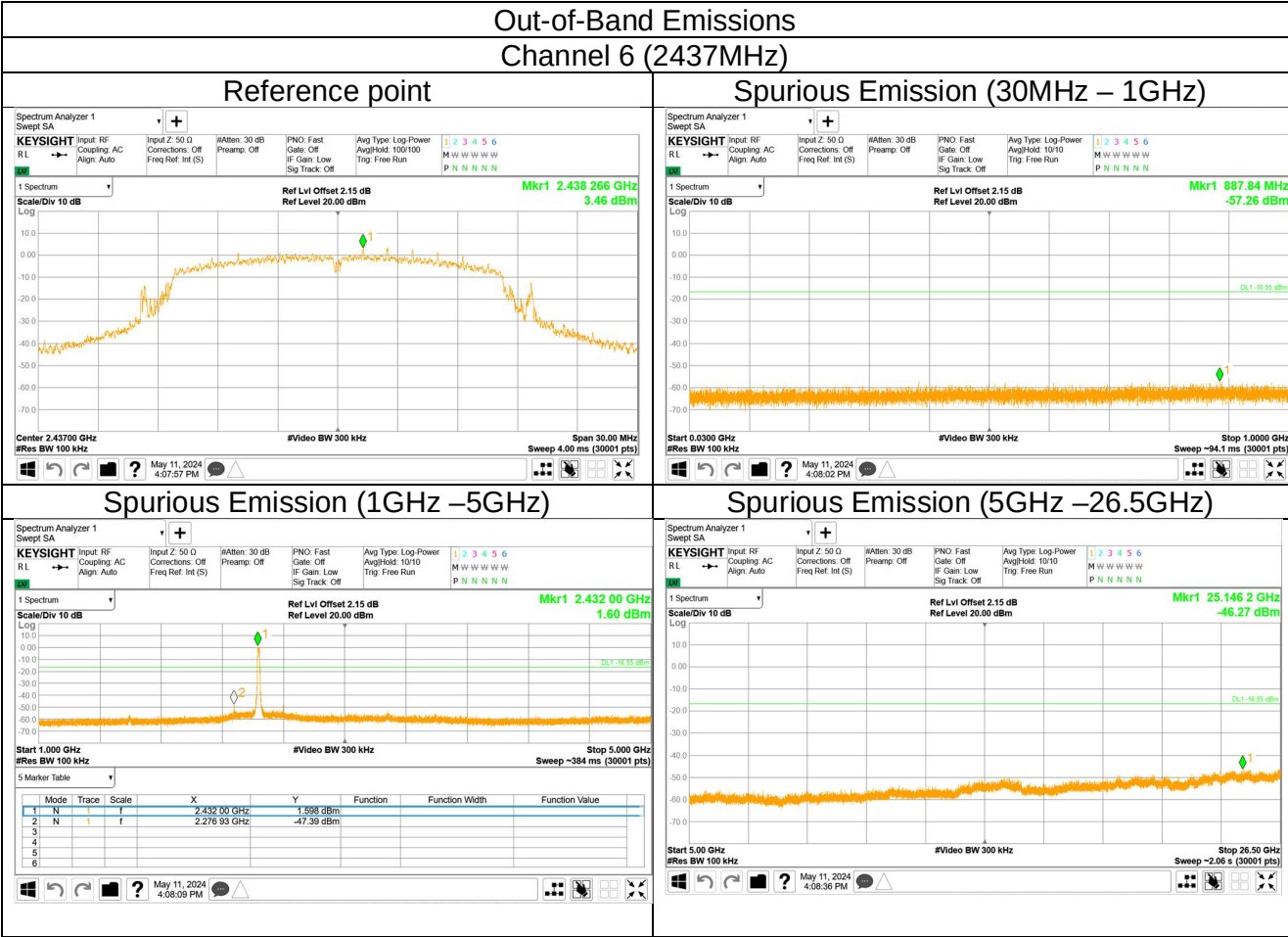


Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)

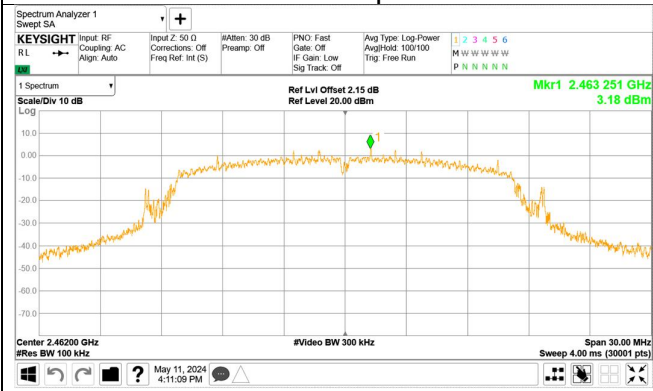




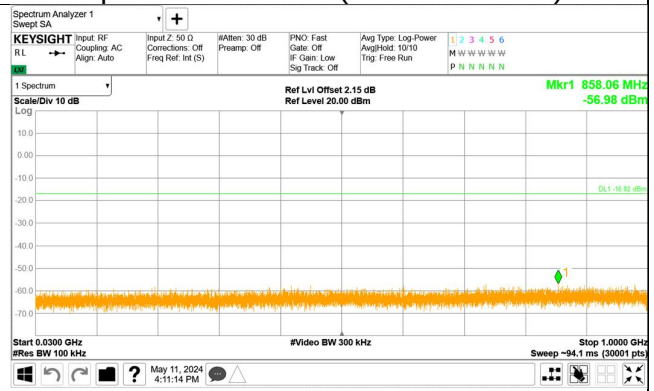


Out-of-Band Emissions
Channel 11 (2462MHz)

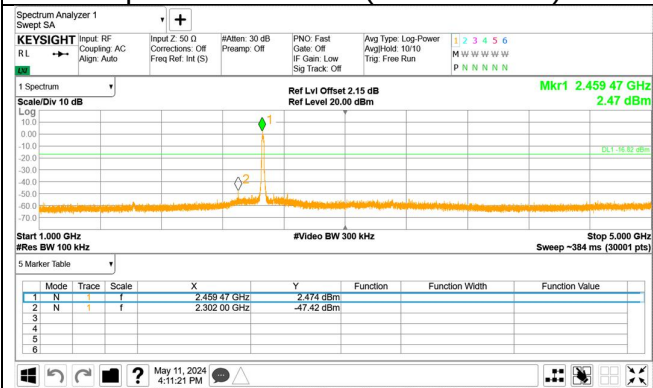
Reference point



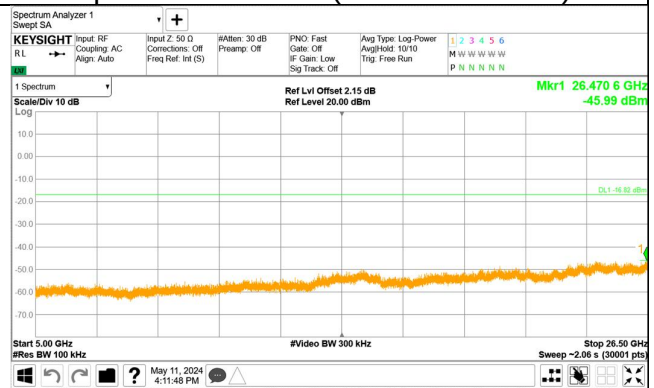
Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)

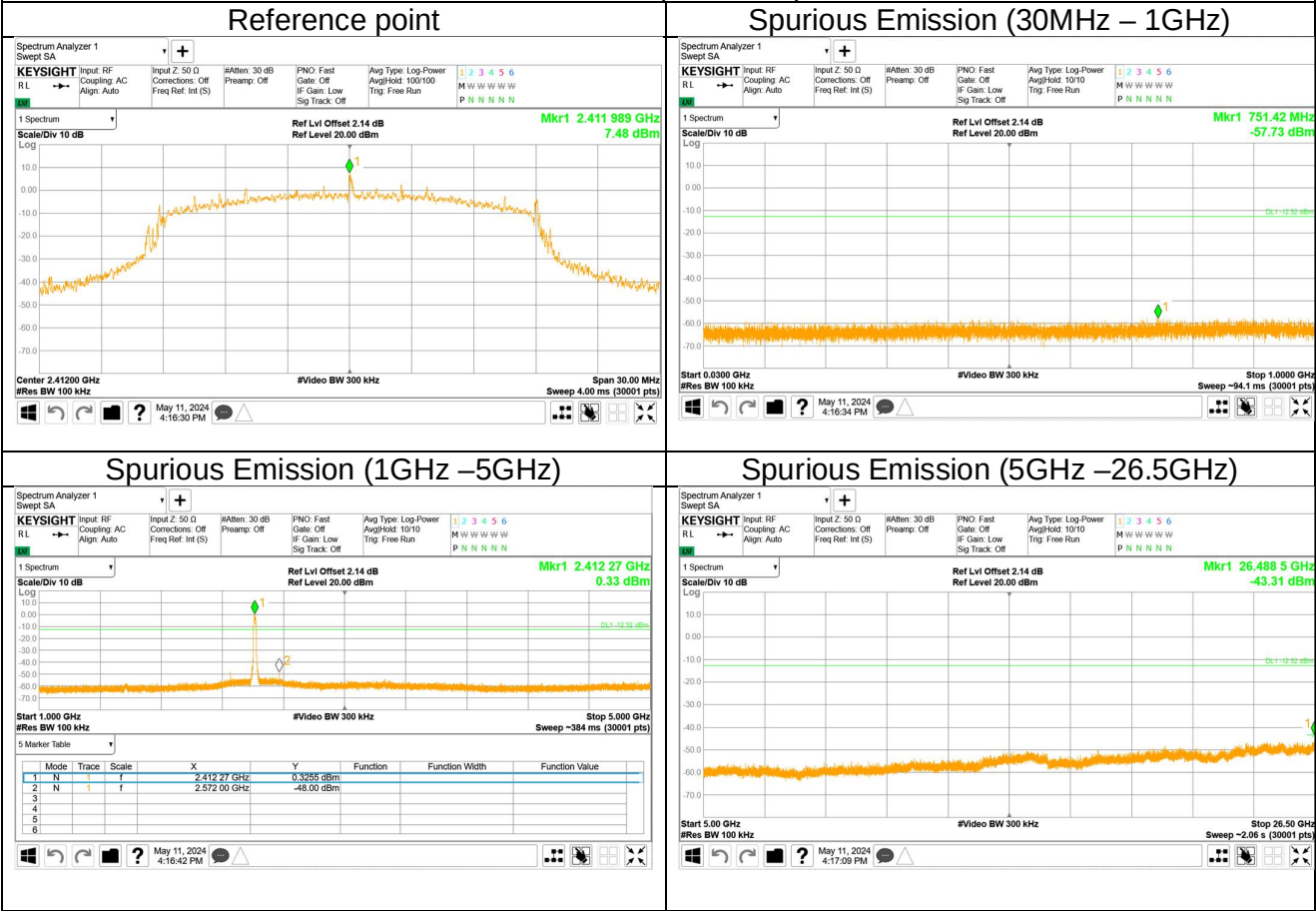


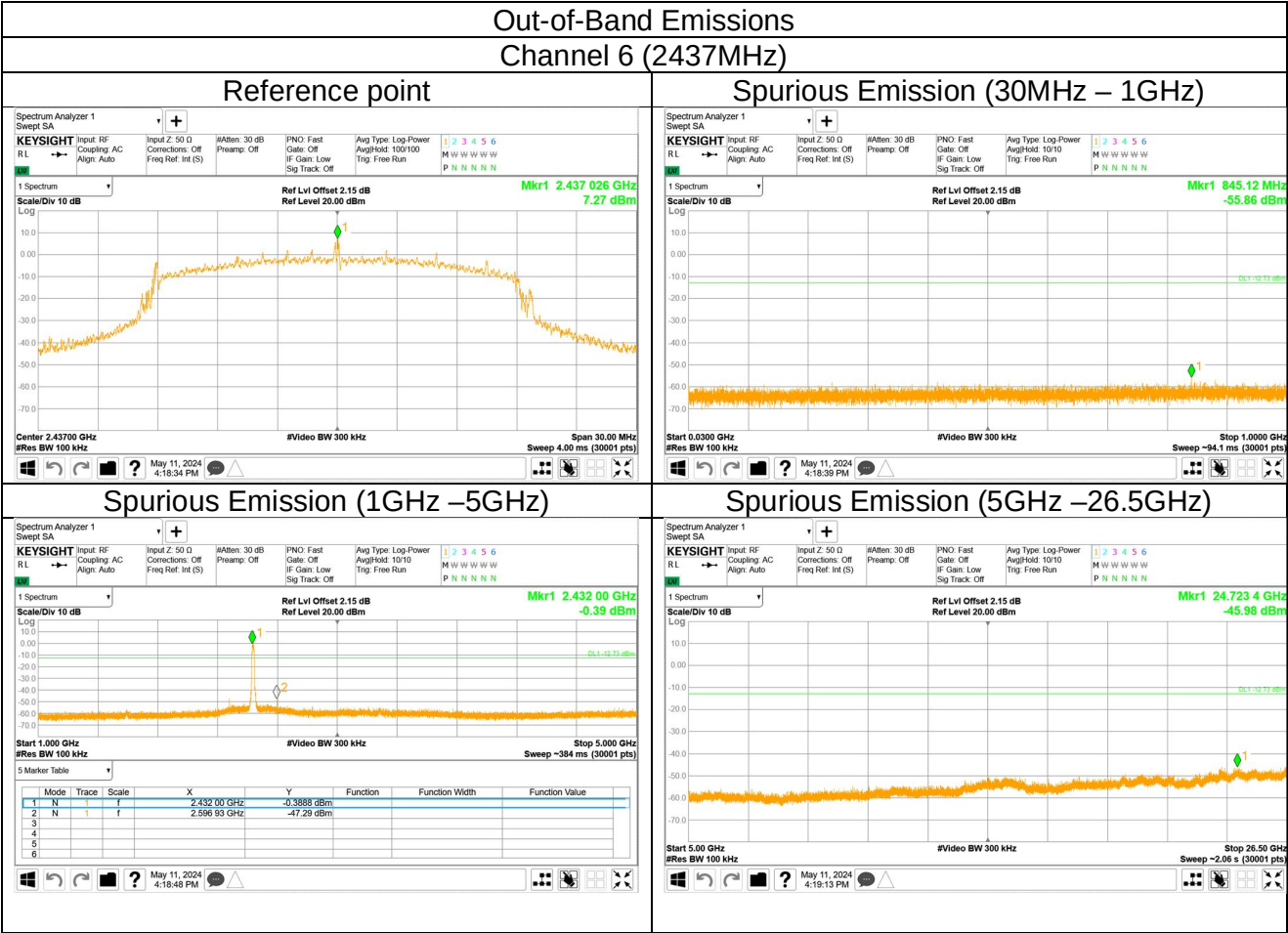
Spurious Emission (5GHz –26.5GHz)

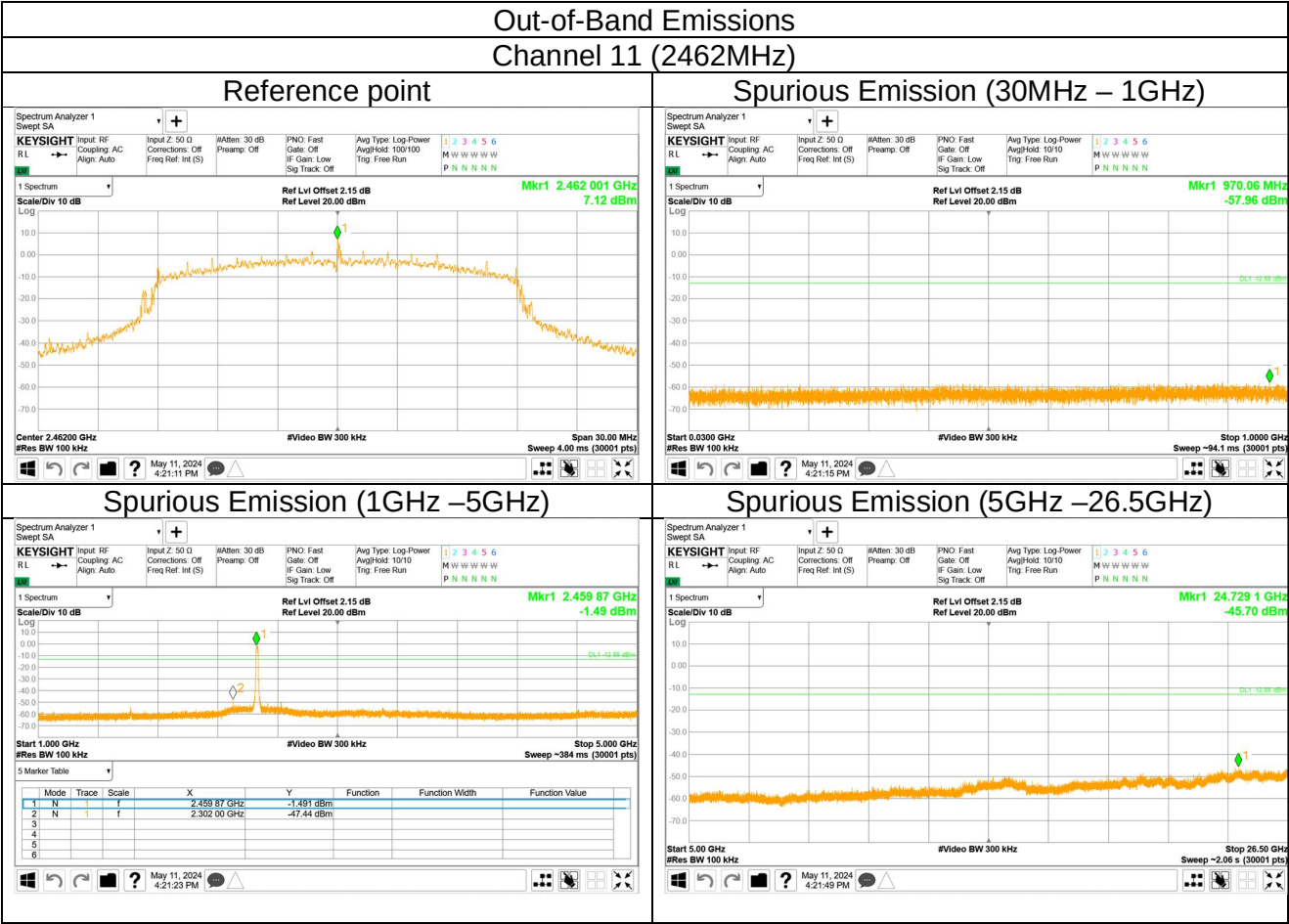




802.11 N HT20
Out-of-Band Emissions
Channel 1 (2412MHz)



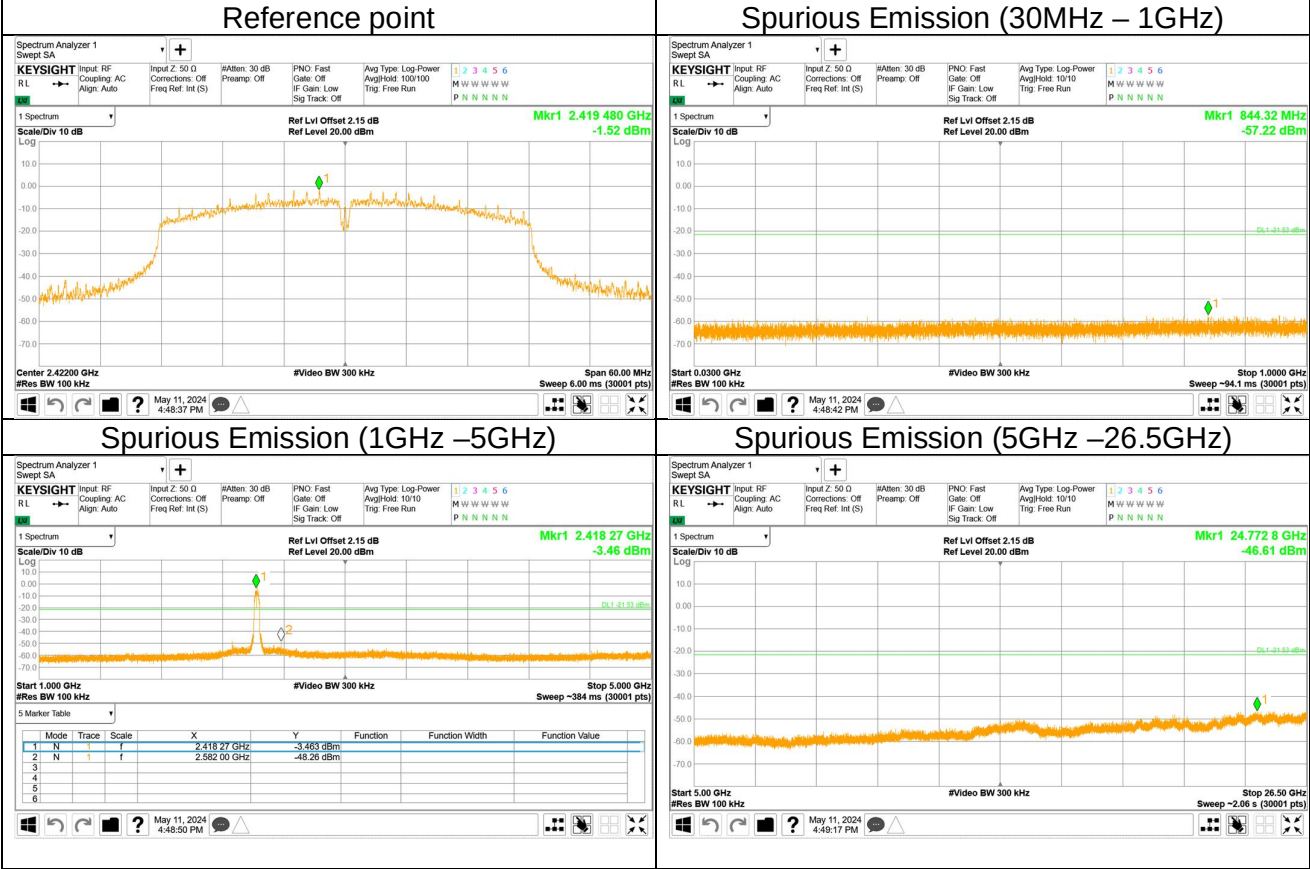


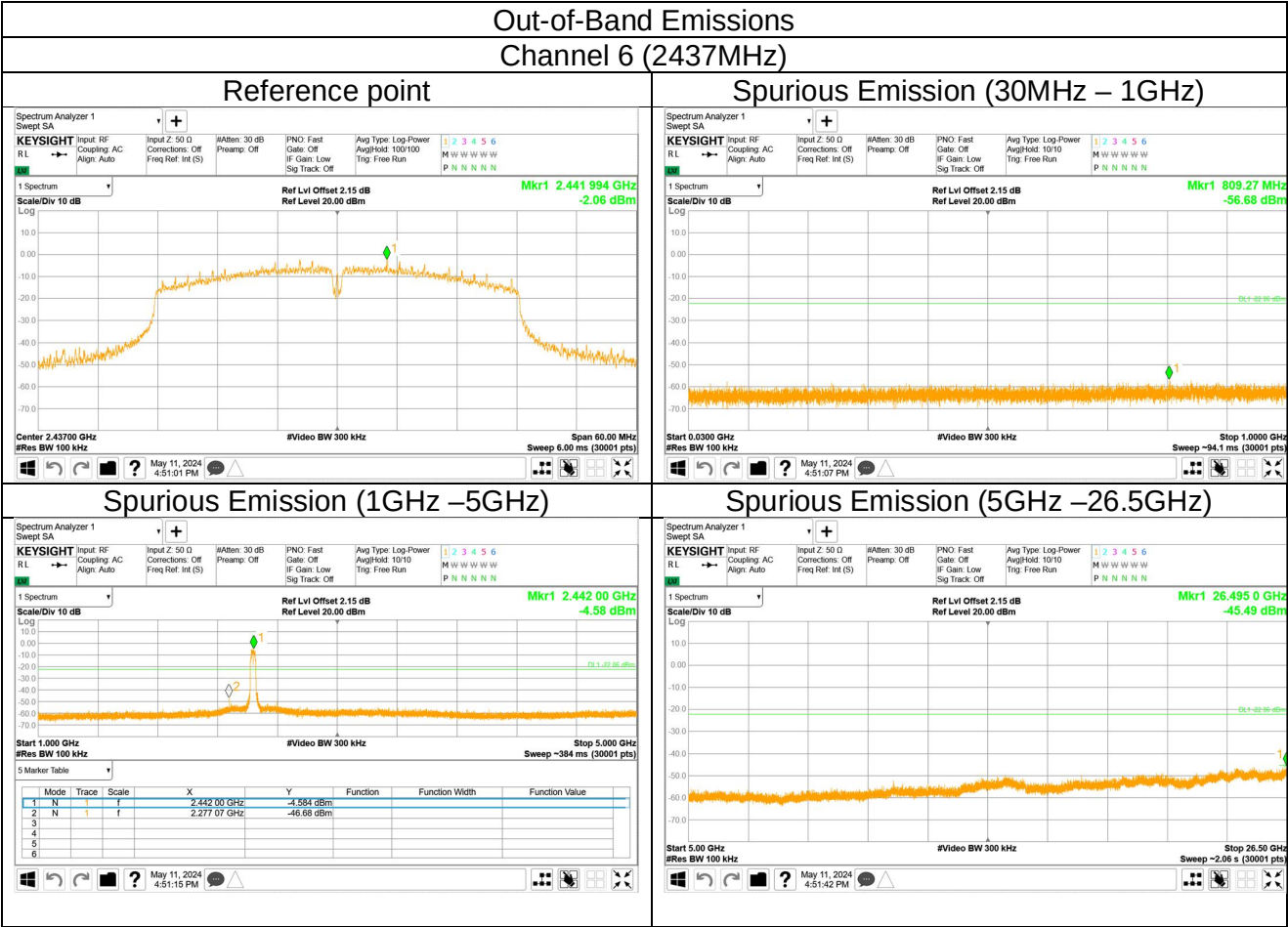


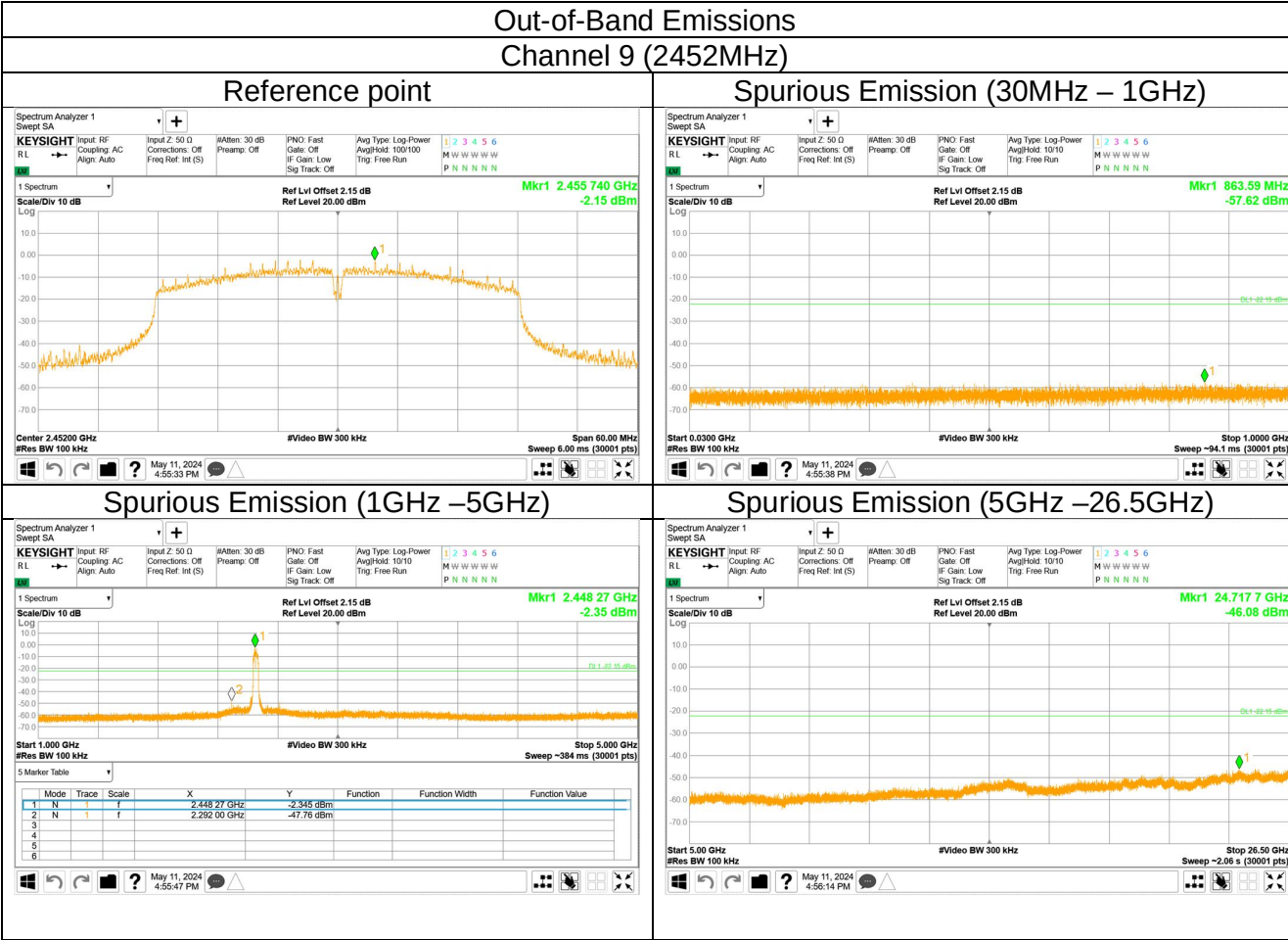


802.11 N HT40

Out-of-Band Emissions
Channel 3 (2422MHz)



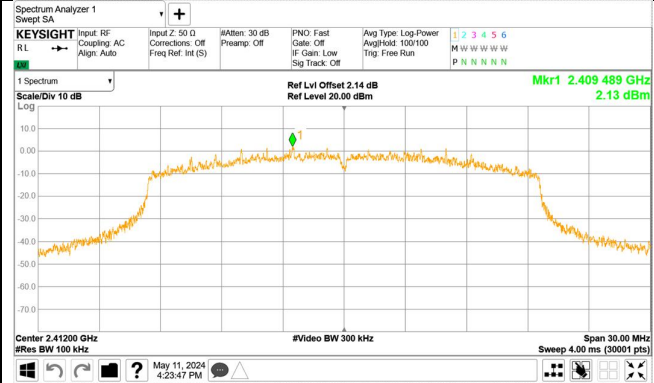






802.11 ax HE20
Out-of-Band Emissions
Channel 1 (2412MHz)

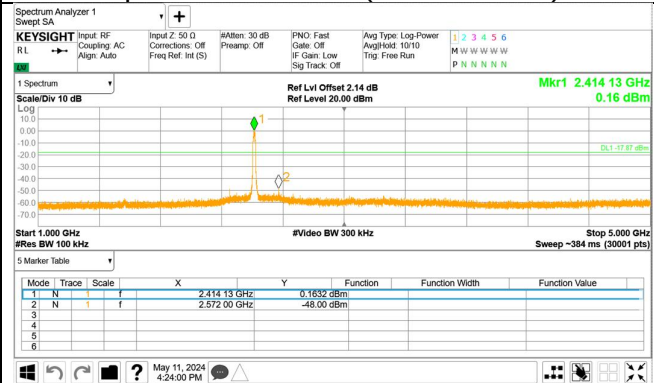
Reference point



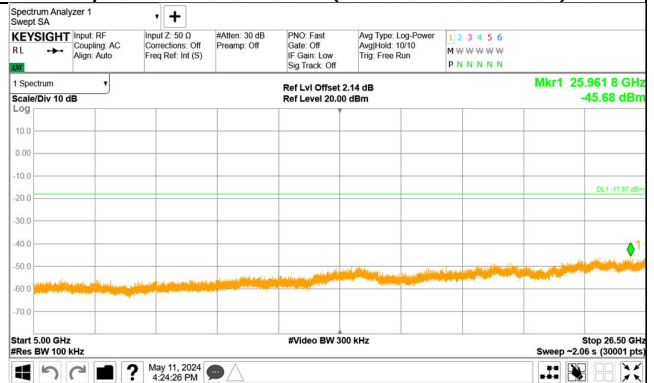
Spurious Emission (30MHz – 1GHz)

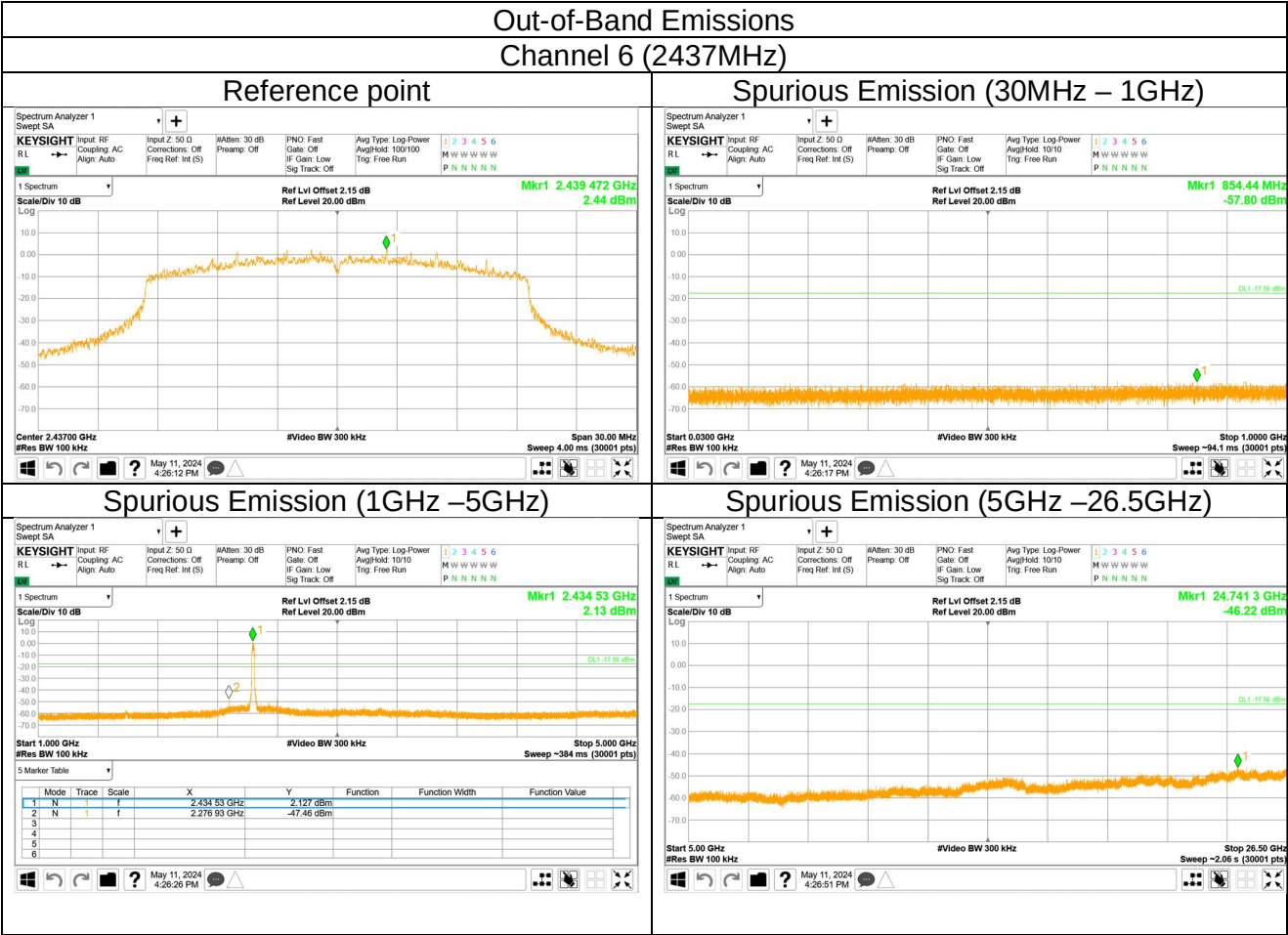


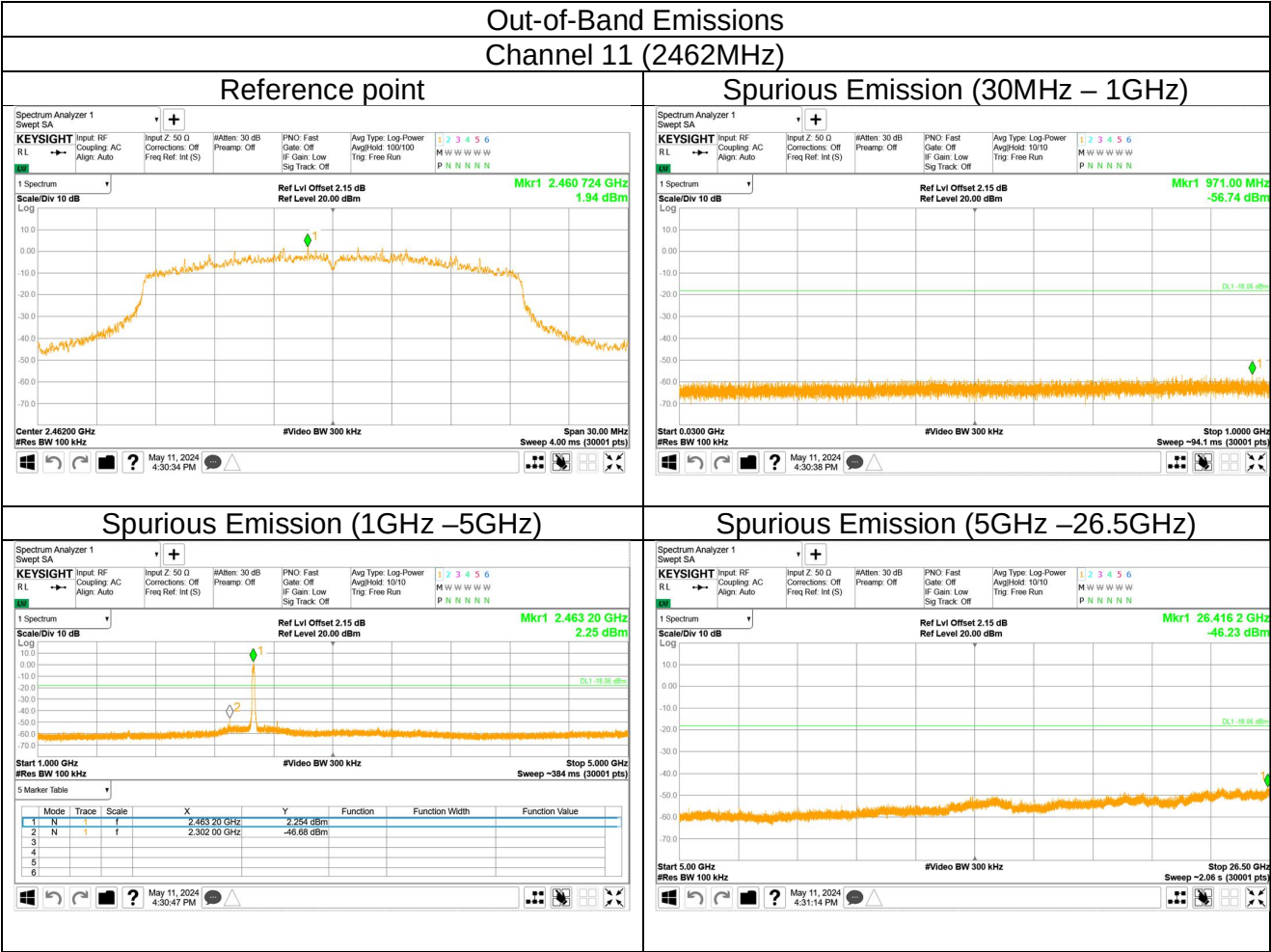
Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)



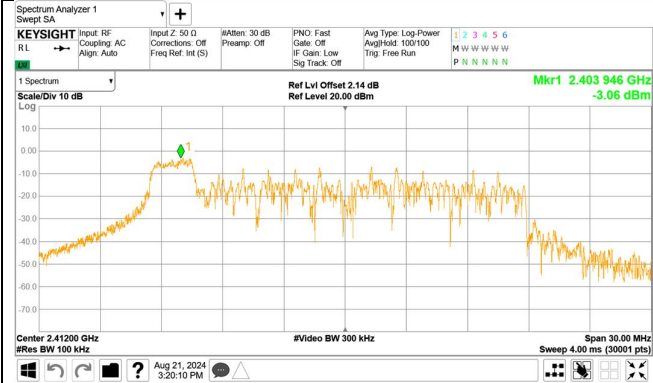




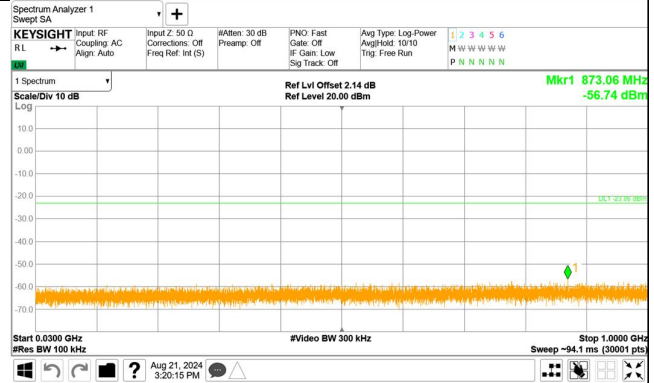


802.11 ax HE20
Out-of-Band Emissions
RU 26_0 Channel 1 (2412MHz)

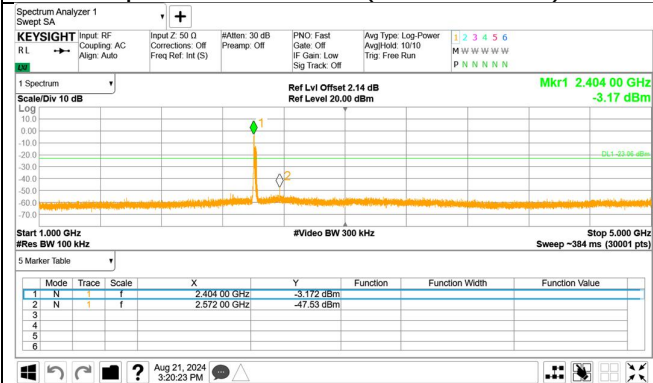
Reference point



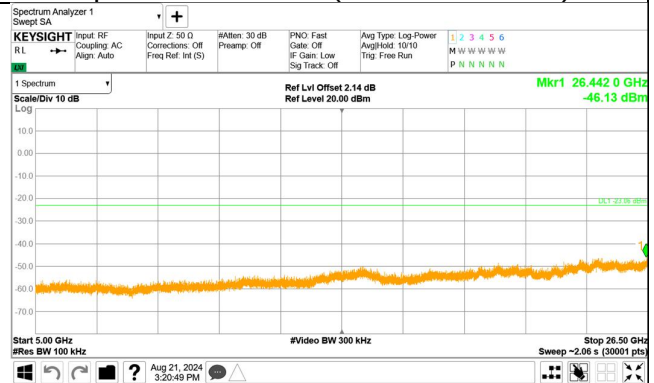
Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)



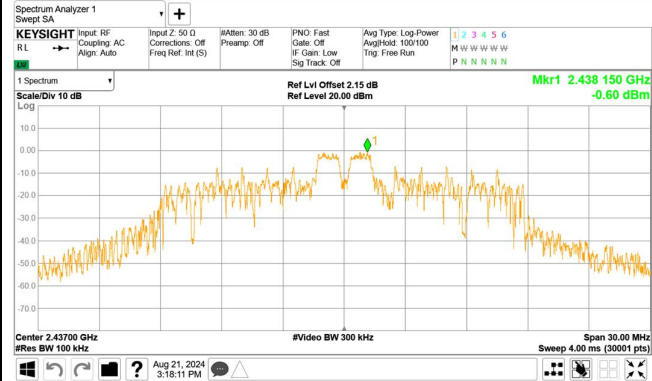
Spurious Emission (5GHz –26.5GHz)





Out-of-Band Emissions
RU 26 4 Channel 6 (2437MHz)

Reference point



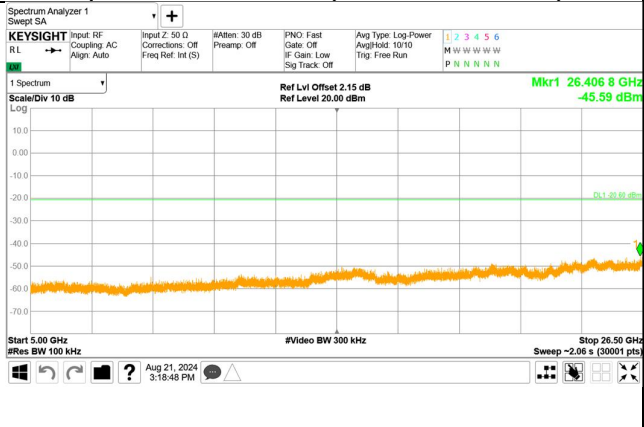
Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)



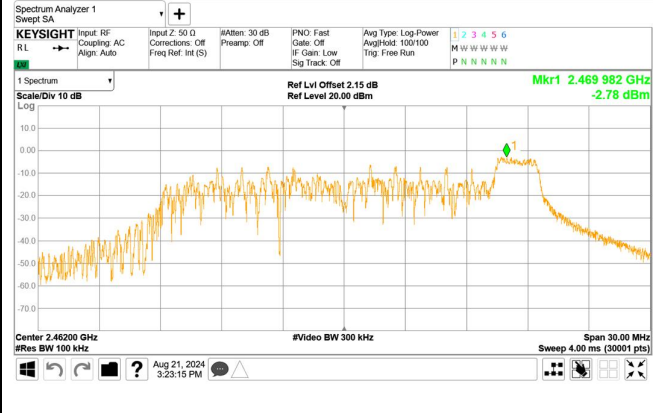
Spurious Emission (5GHz –26.5GHz)



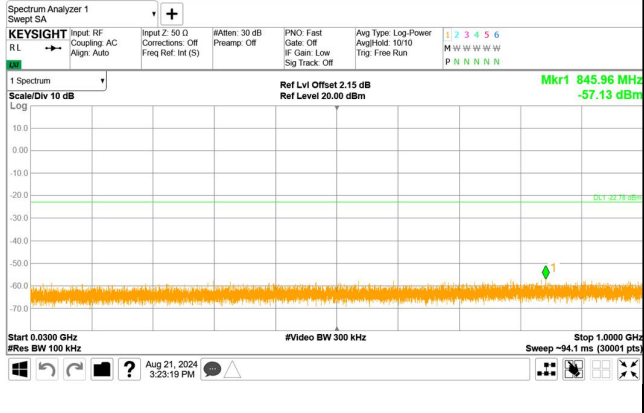


Out-of-Band Emissions
RU 26_8 Channel 11 (2462MHz)

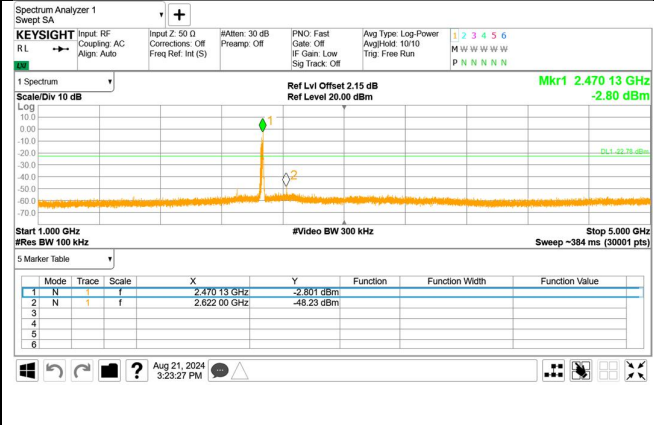
Reference point



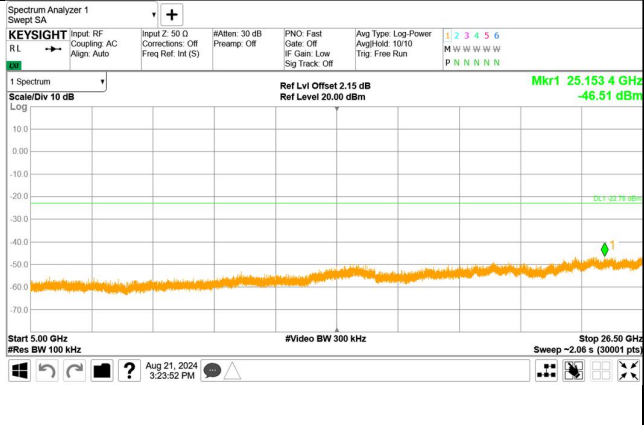
Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)





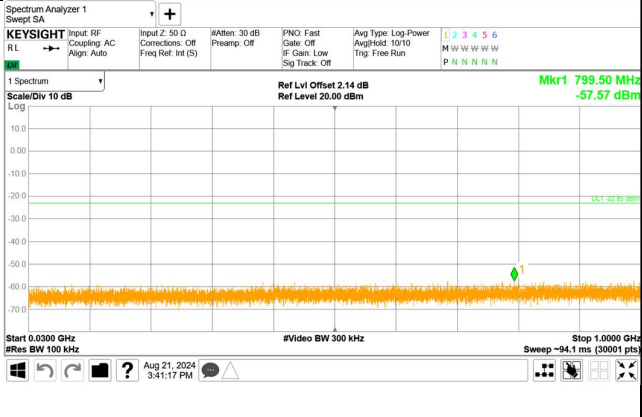
802.11 ax HE20

Out-of-Band Emissions

RU 52_37 Channel 1 (2412MHz)

Reference point

Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)

Spurious Emission (5GHz –26.5GHz)

