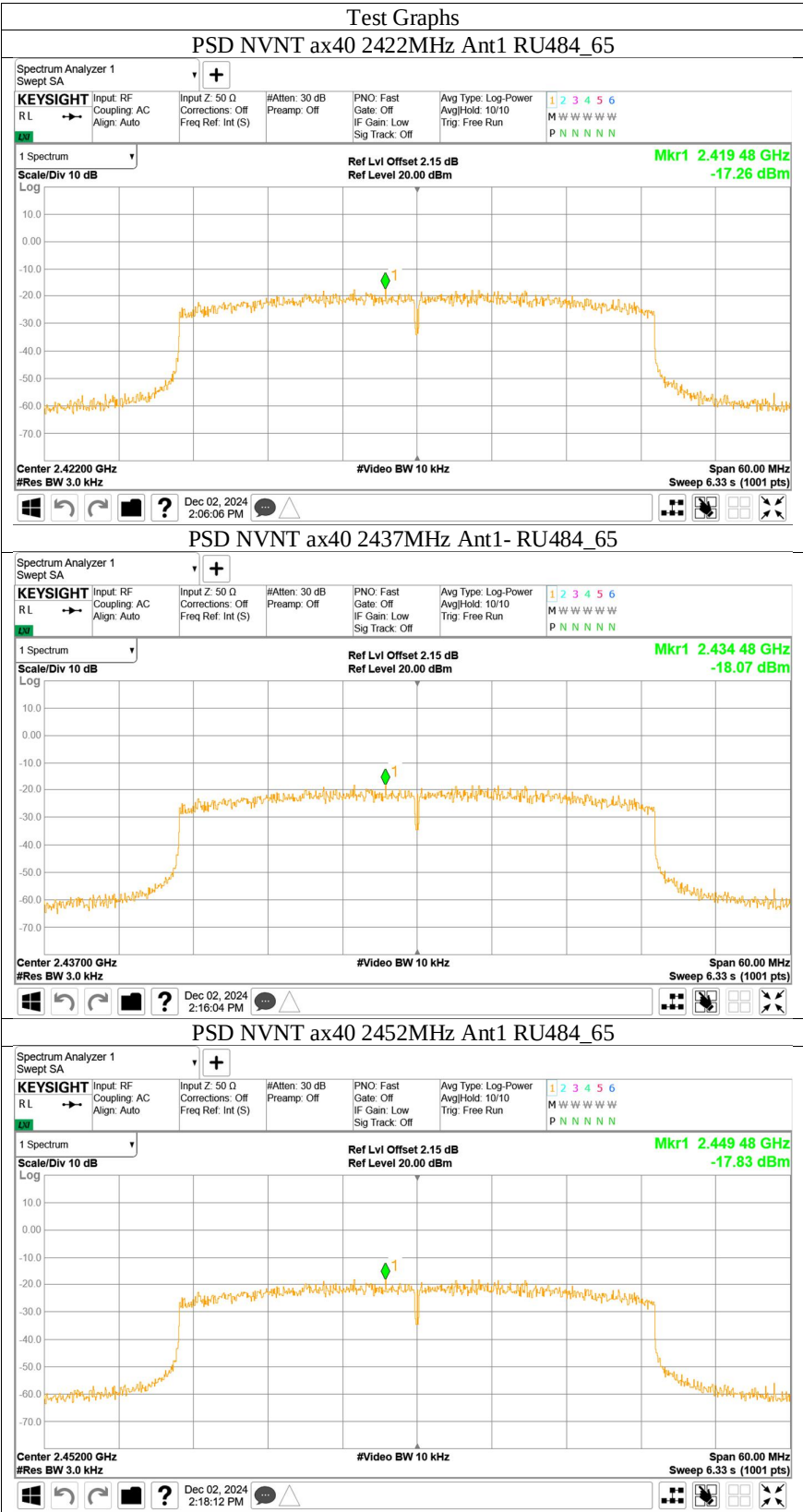




10.5 Spurious RF conducted emissions

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.

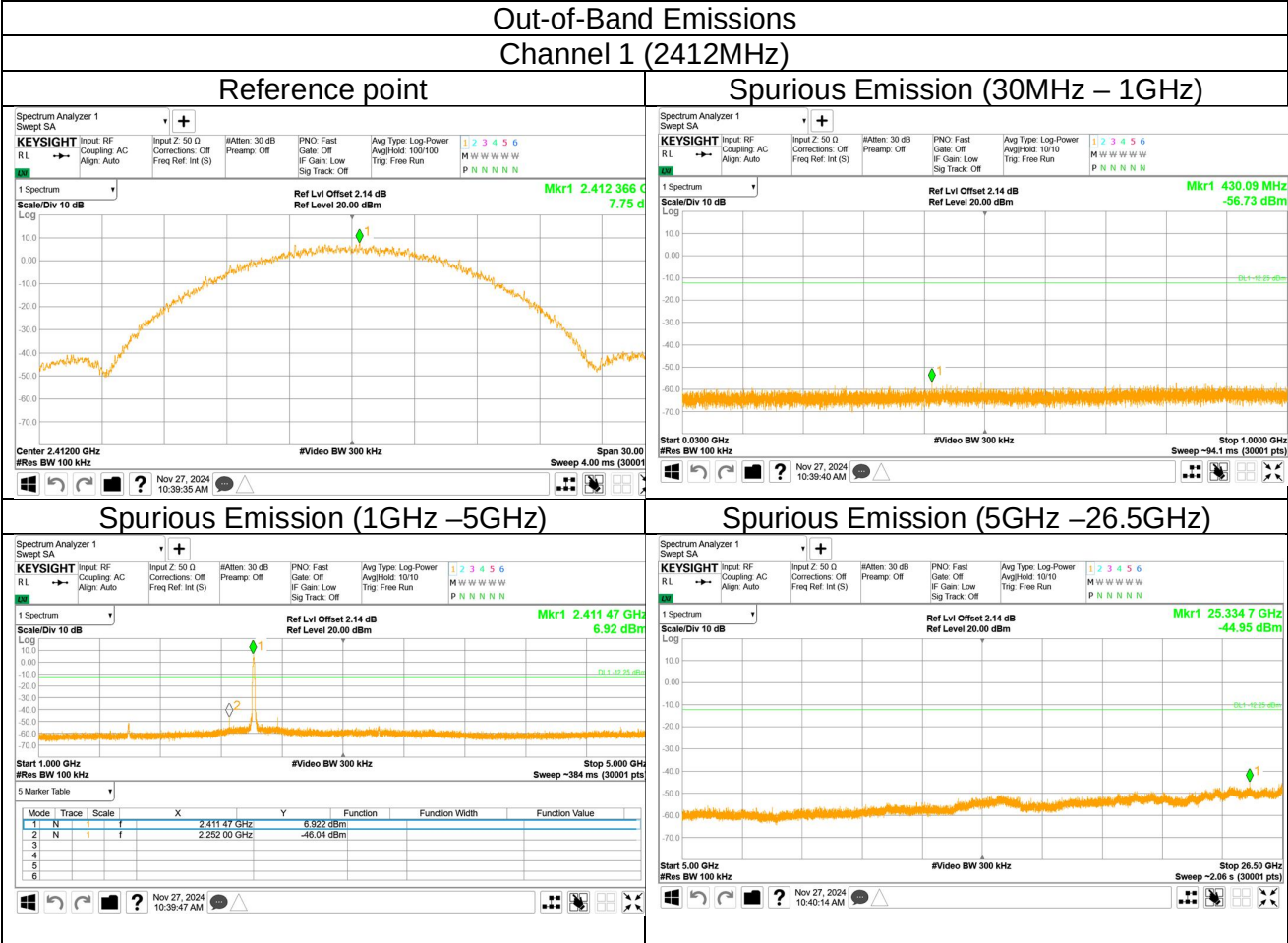
Limit

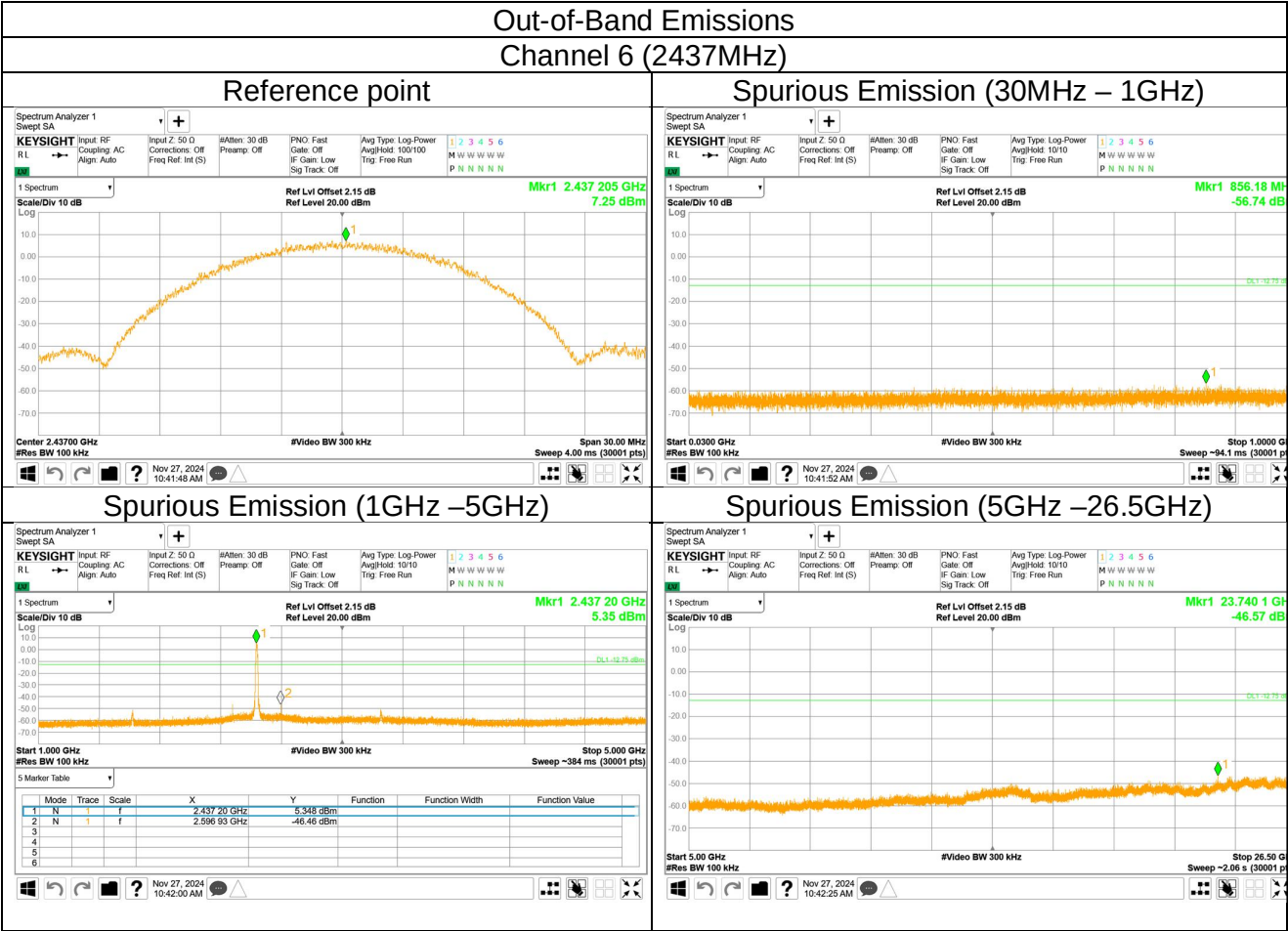
Frequency Range MHz	Limit (dBc)
30-25000	-20

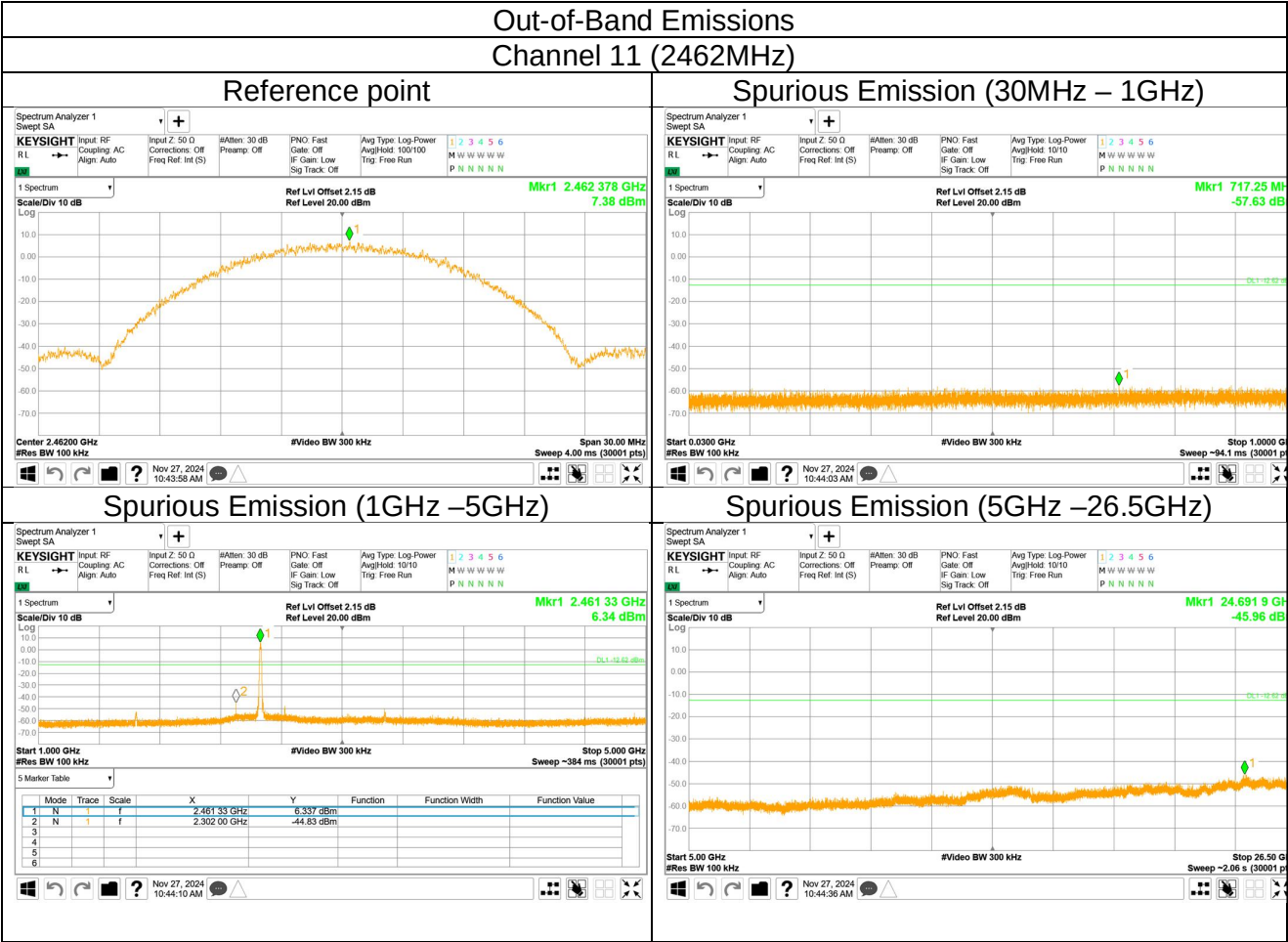


Spurious RF conducted emissions

802.11 B





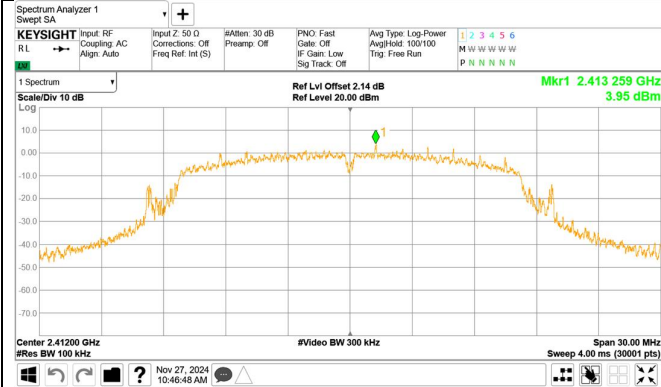




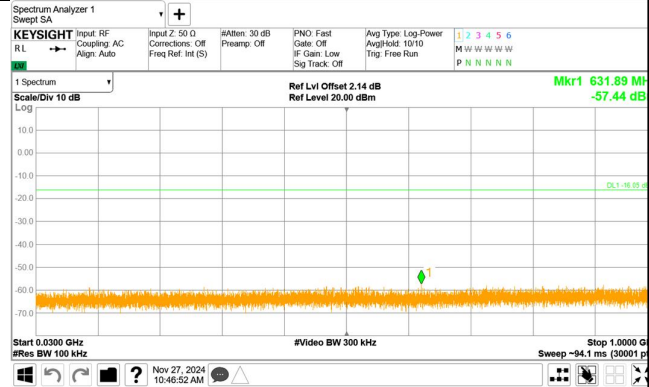
802.11 G

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

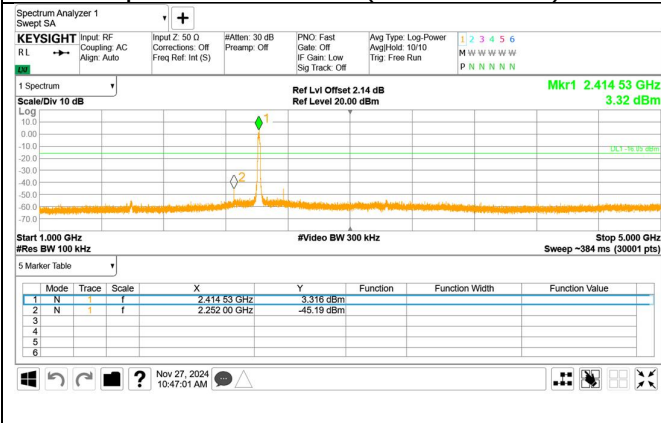
Reference point



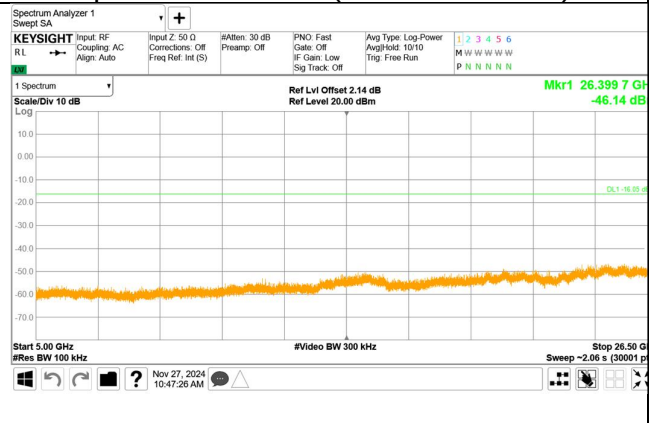
Spurious Emission (30MHz – 1GHz)

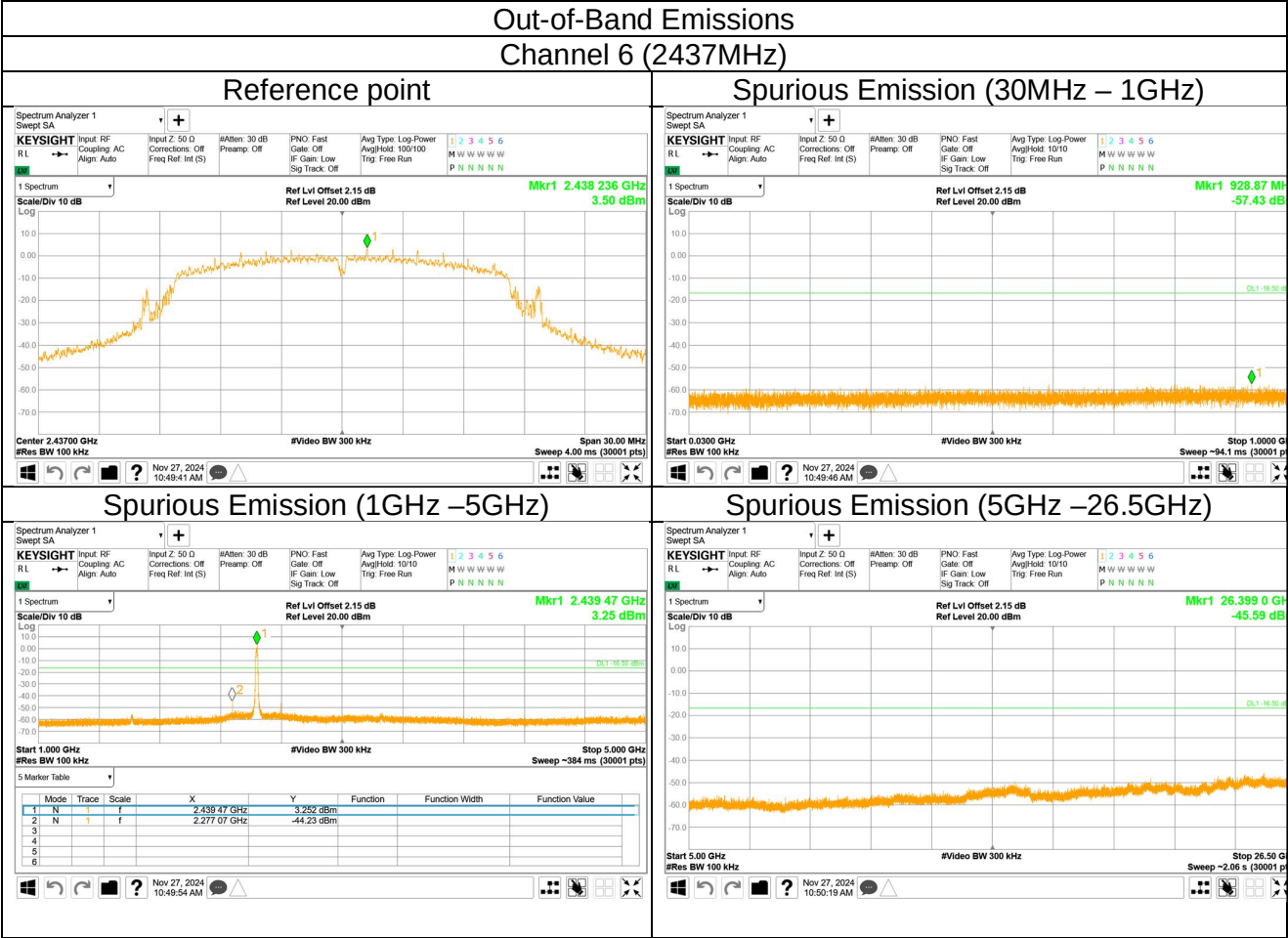


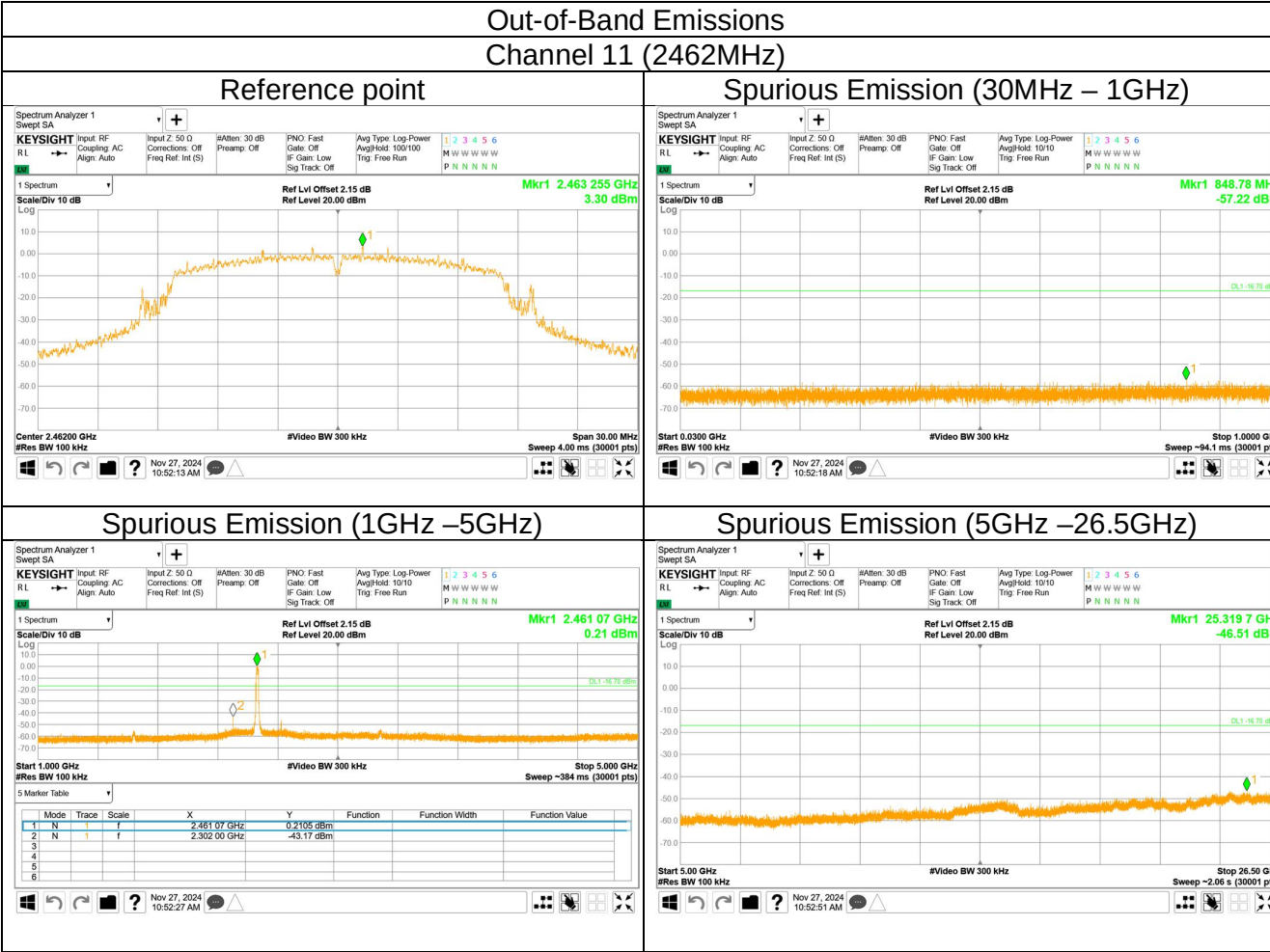
Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)

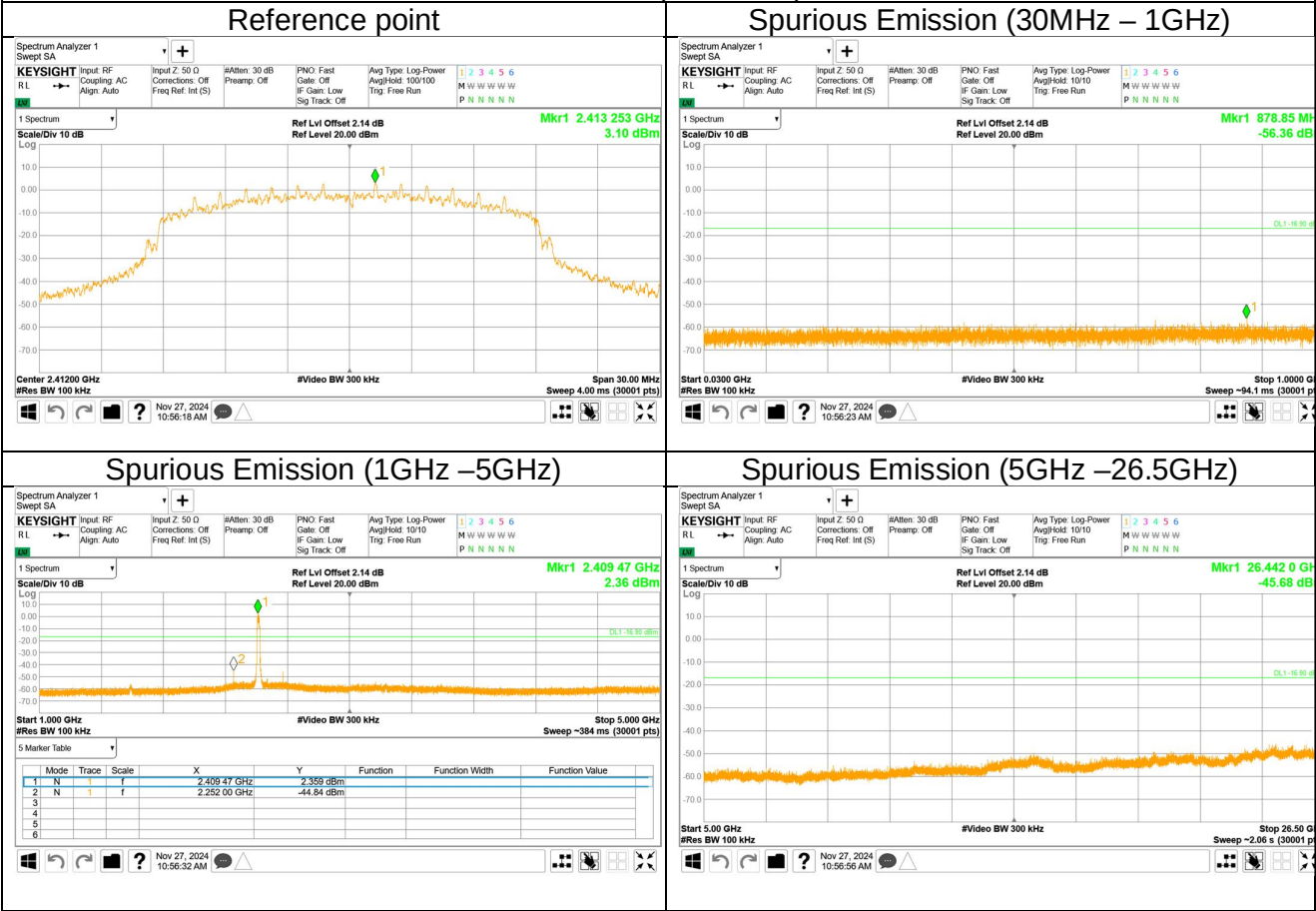


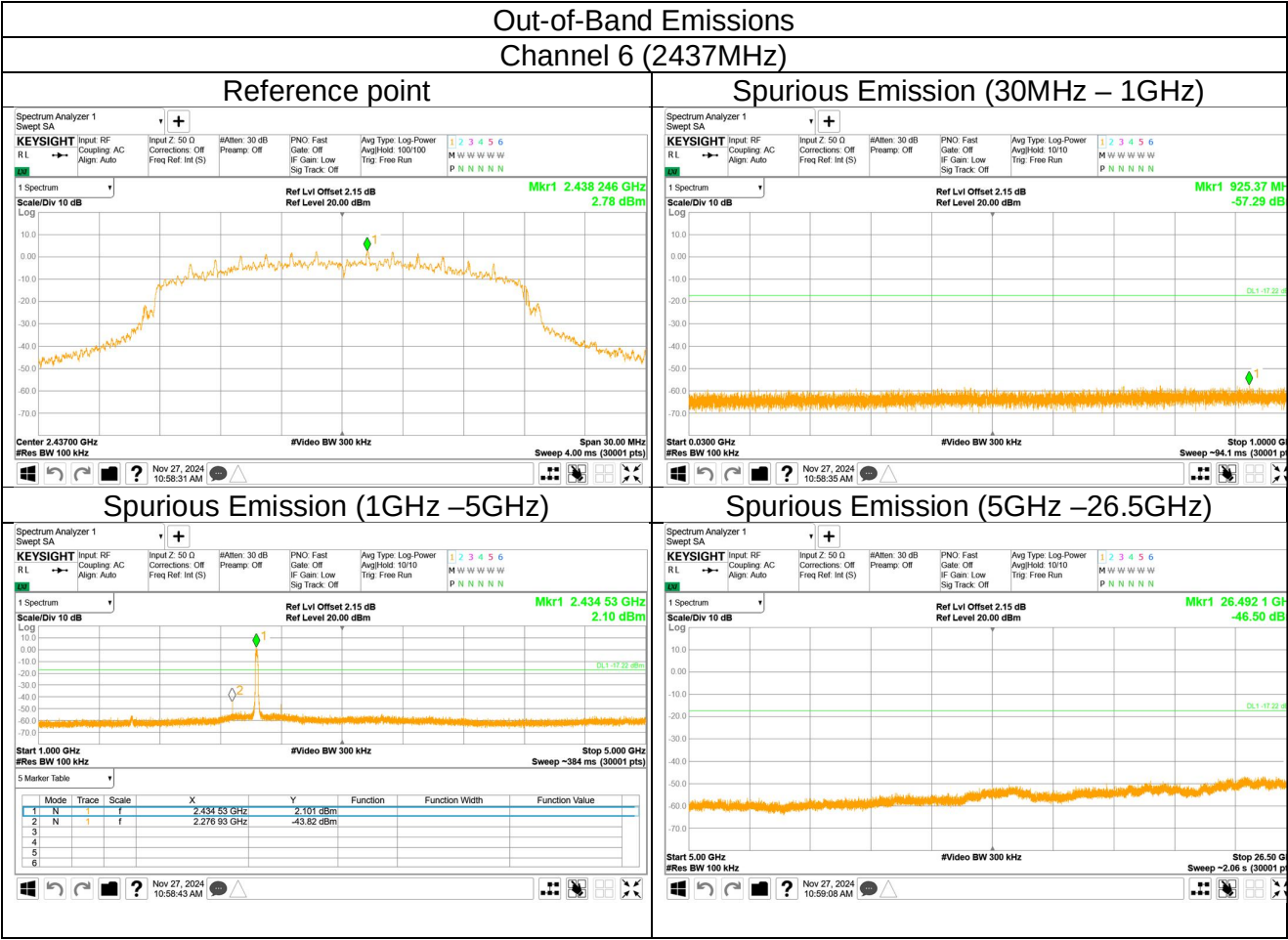


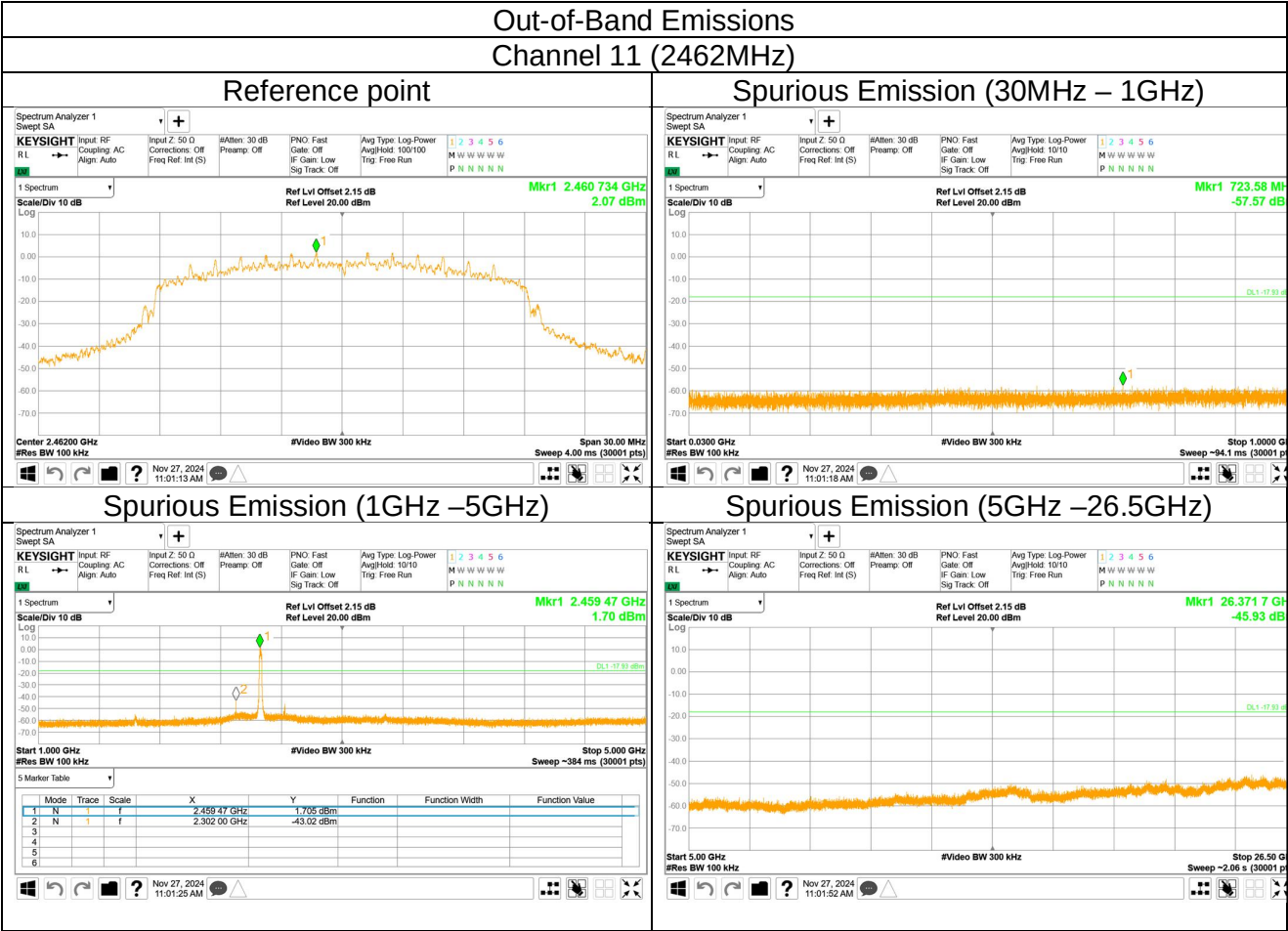




802.11 N HT20
Out-of-Band Emissions
Channel 1 (2412MHz)







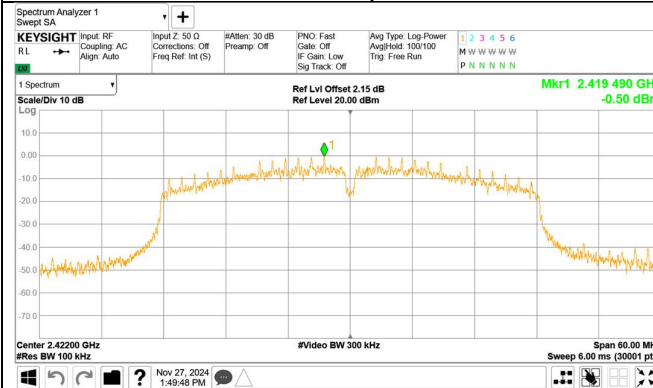


802.11 N HT40

Out-of-Band Emissions

Channel 3 (2422MHz)

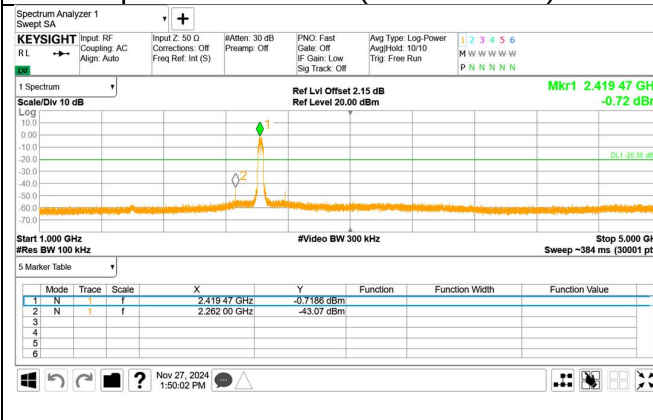
Reference point



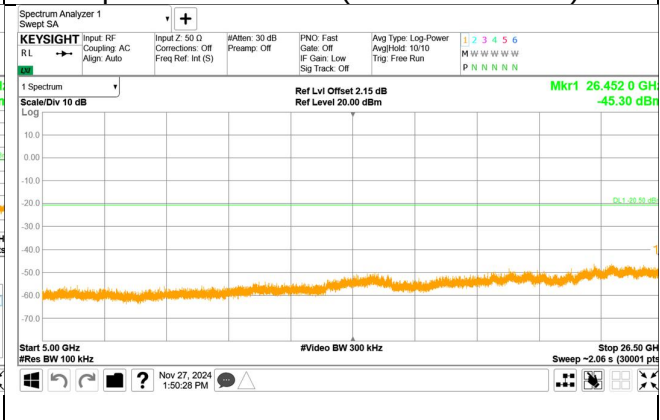
Spurious Emission (30MHz – 1GHz)

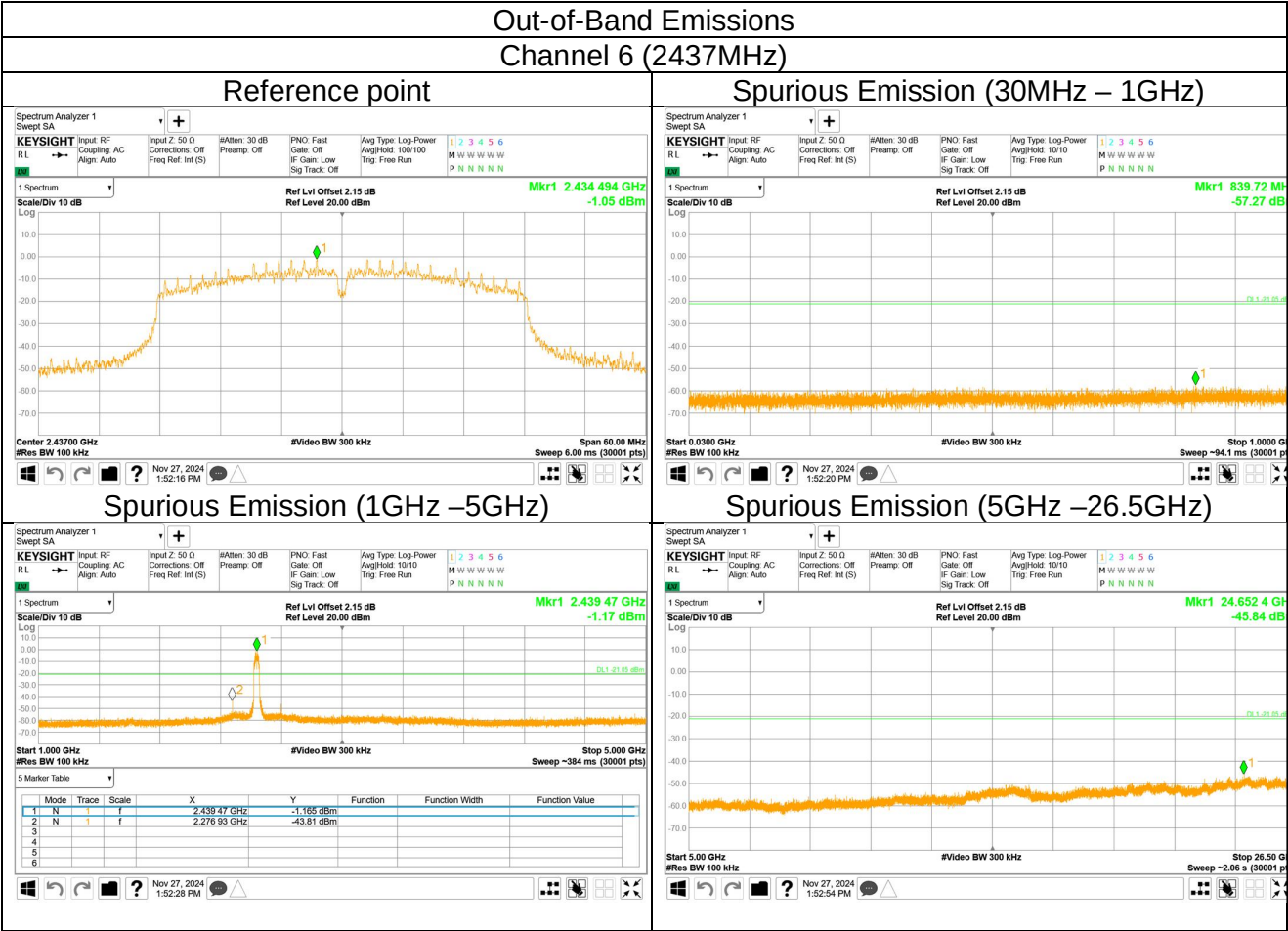


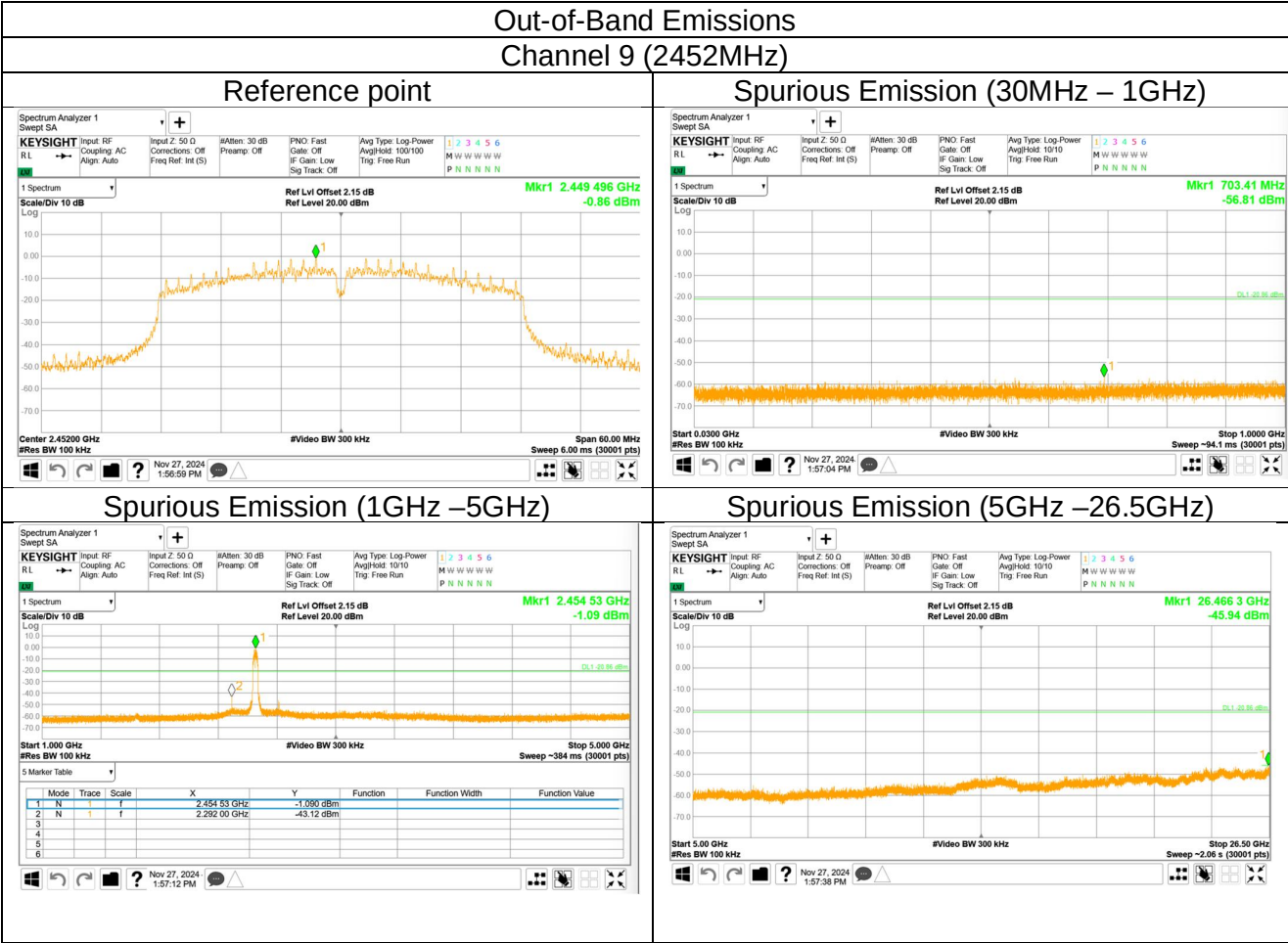
Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)

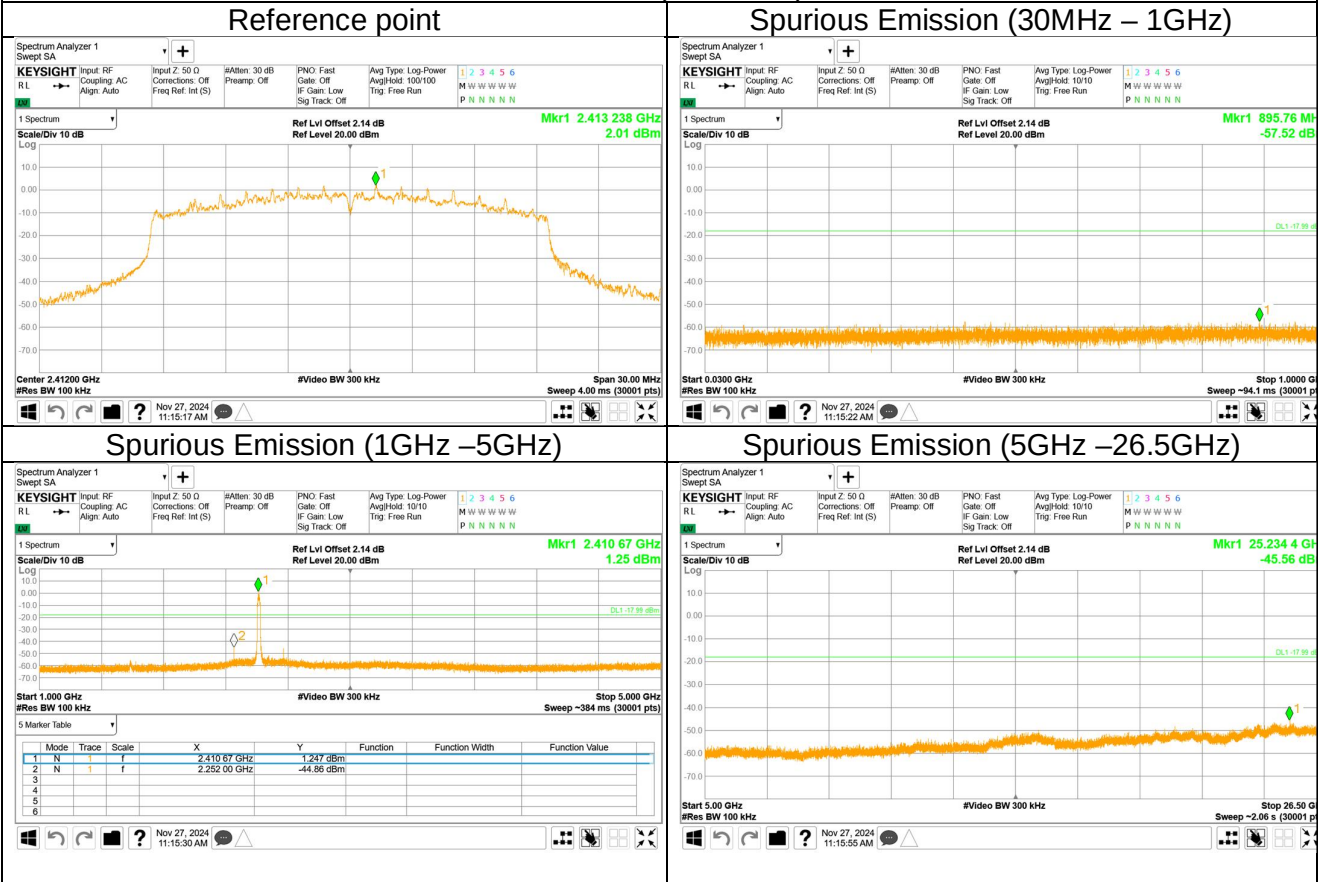


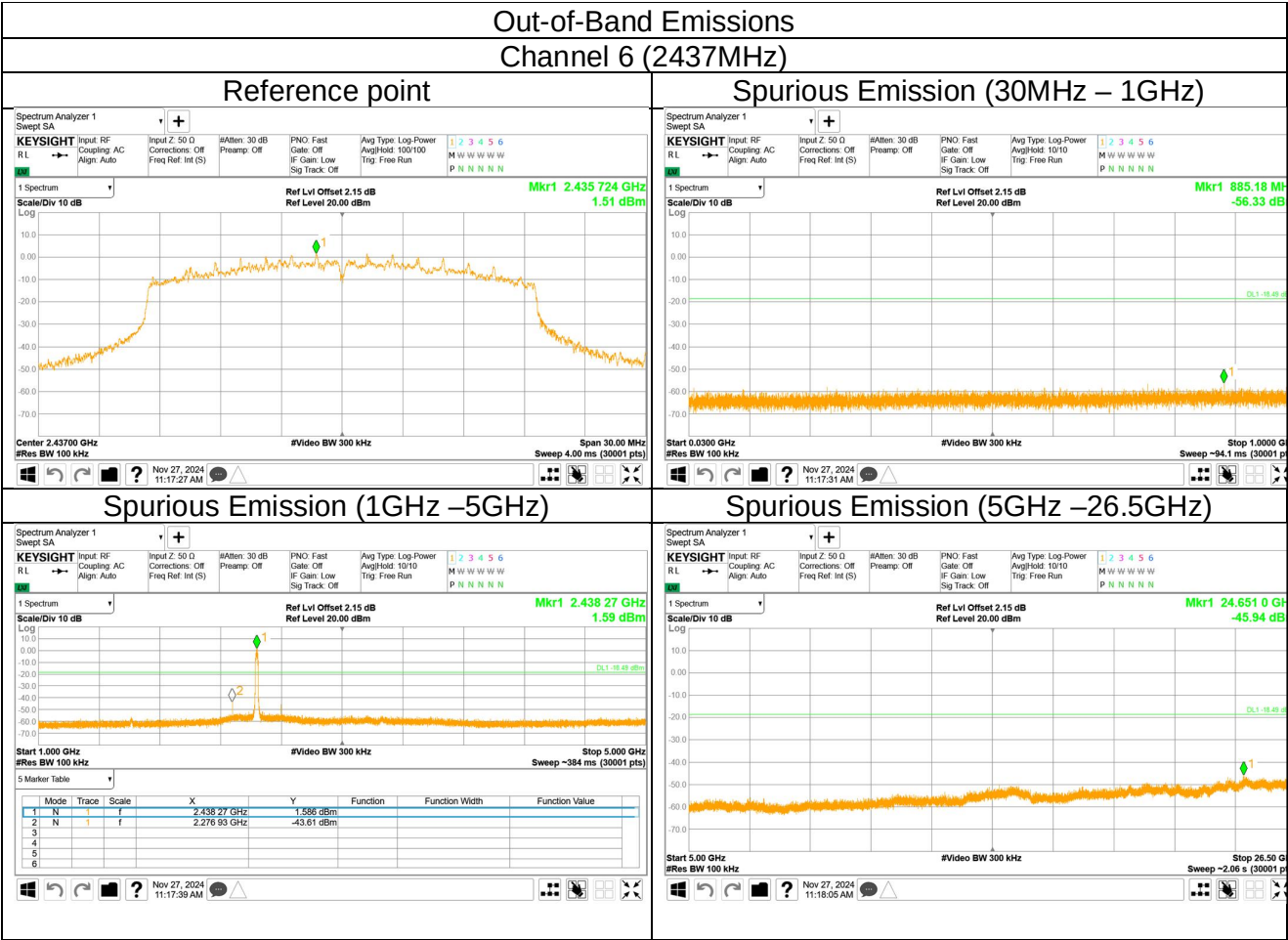


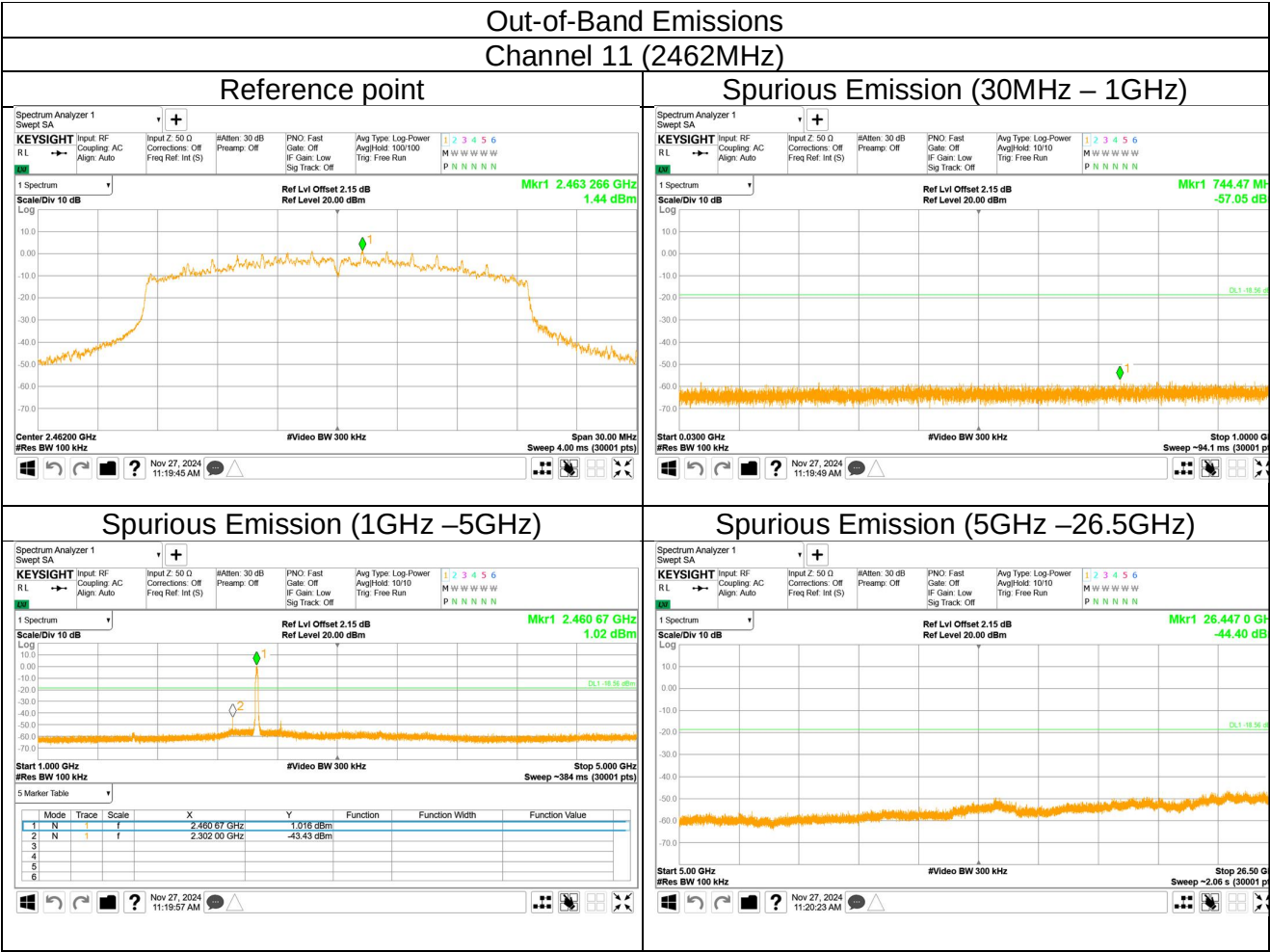




802.11 ax HE20
Out-of-Band Emissions
Channel 1 (2412MHz)



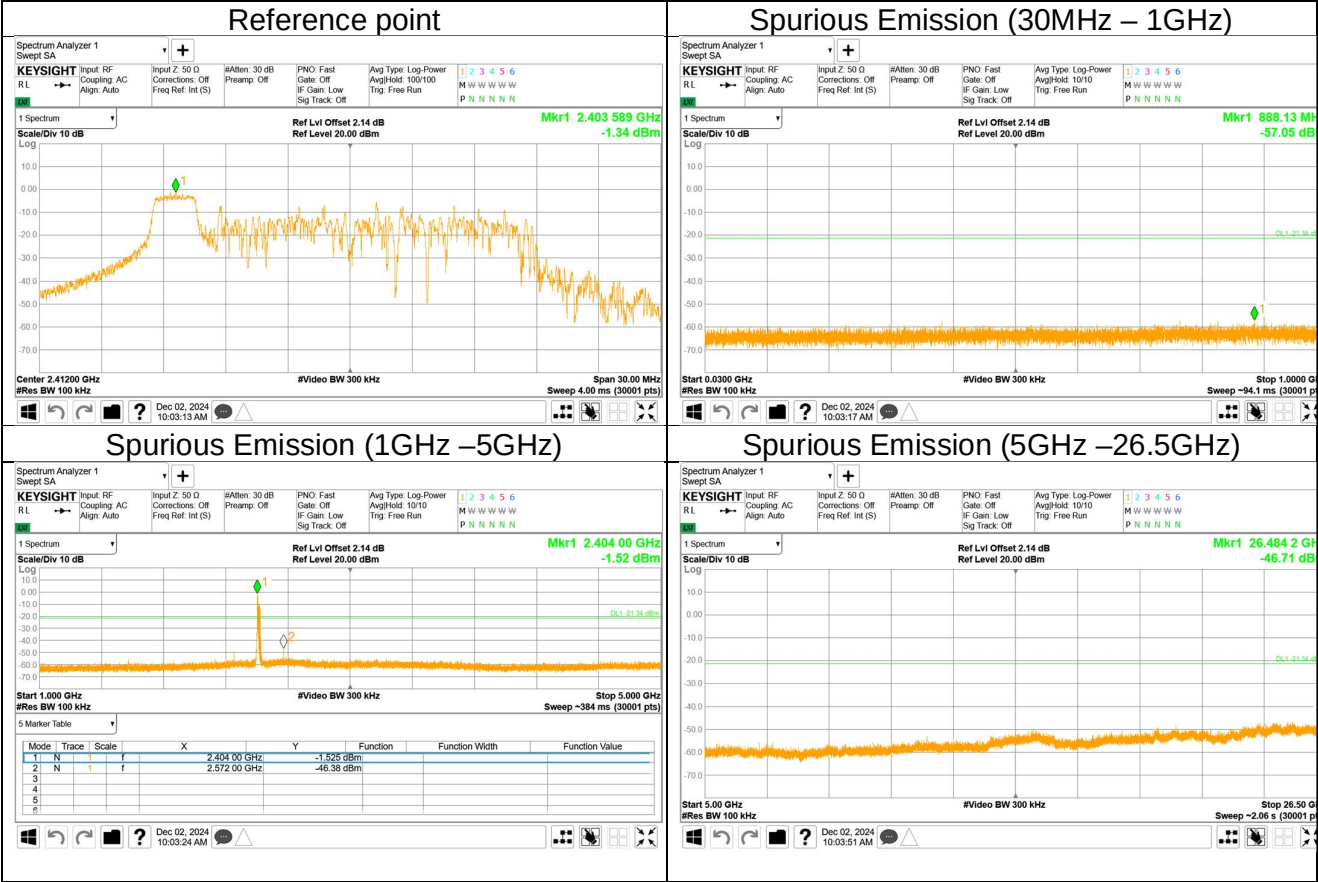


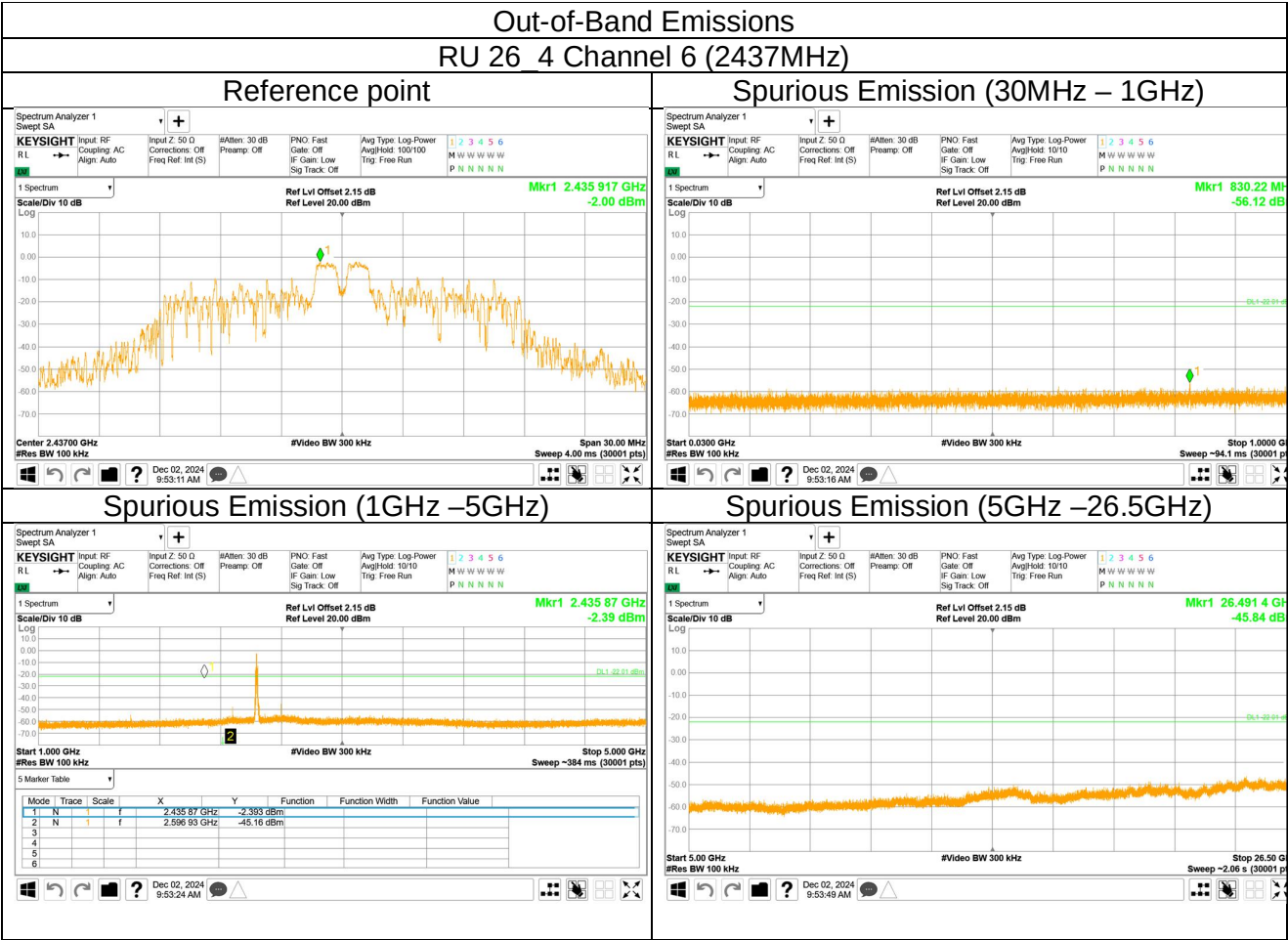




802.11 ax HE20

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





Spurious Emission (1GHz –5GHz)

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)

#Atten: 30 dB
Preamp: Off

PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off

Avg Type: Log-Power
Ave/Hold: 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 2.435 87 GHz
-2.39 dBm

Start 1.000 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 5.000 GHz
Sweep ~384 ms (30001 pts)

5 Marker Table

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	f	2.435 87 GHz	-2.393 dBm			
2	N	f	2.596 93 GHz	-45.10 dBm			
3							
4							
5							
6							

Dec 02, 2024 9:53:24 AM

Spectrum Analyzer 1
Sweep SA

KEYSIGHT Input: RF
Coupling: AC
Align: Auto

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

#Atten: 30 dB
Preamp: Off

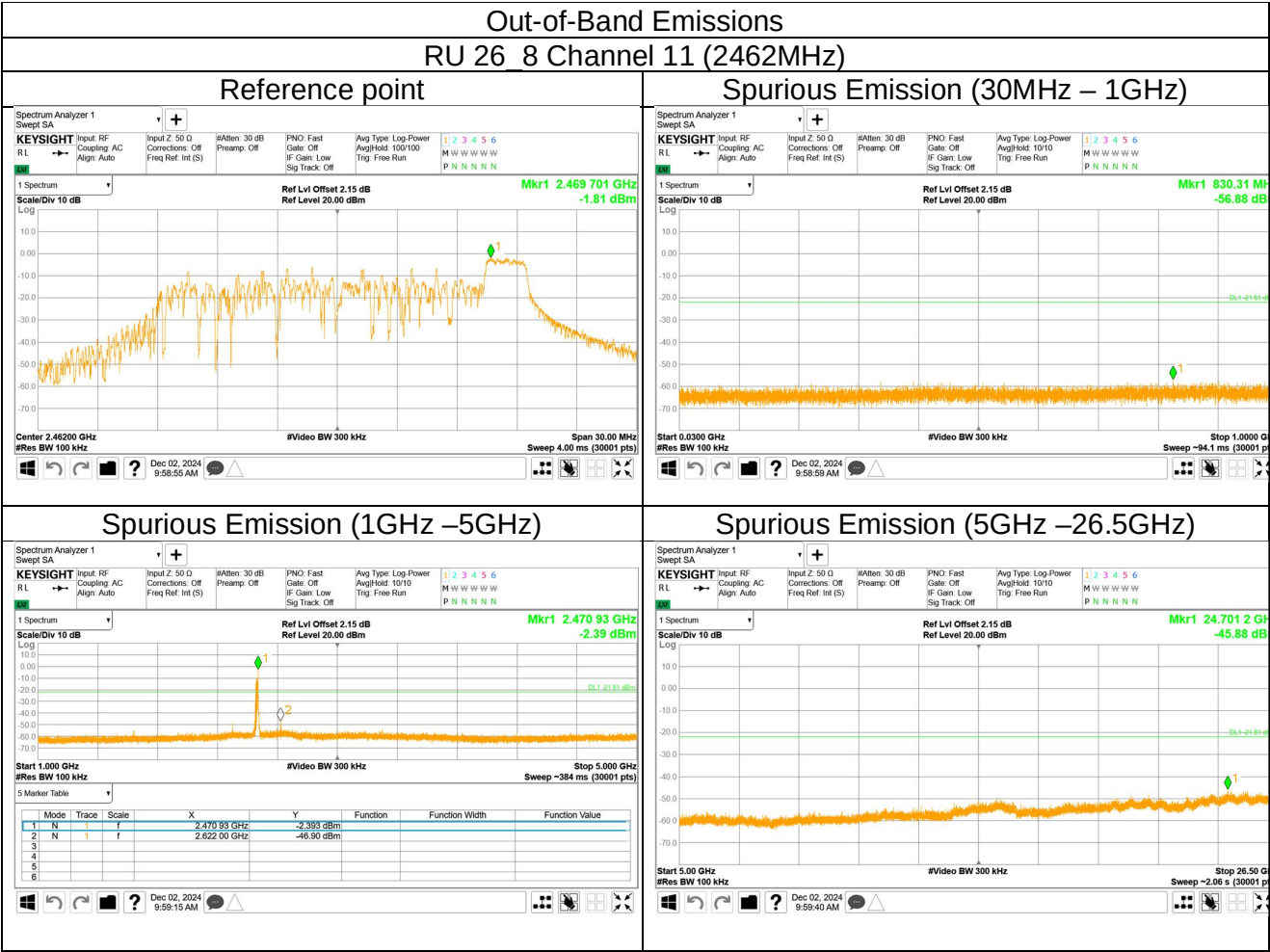
PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off

Avg Type: Log-Power
Ave/Hold: 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
LogRef Lvl Offset 2.15 dB
Ref Level 20.00 dBmMkr1 26.491 4 GHz
-45.84 dBStart 5.00 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Stop 26.50 GHz
Sweep ~2.06 s (30001 pts)

Dec 02, 2024 9:53:49 AM



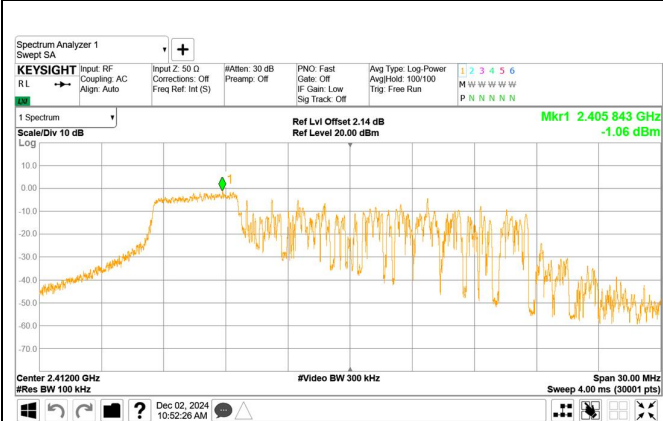


802.11 ax HE20

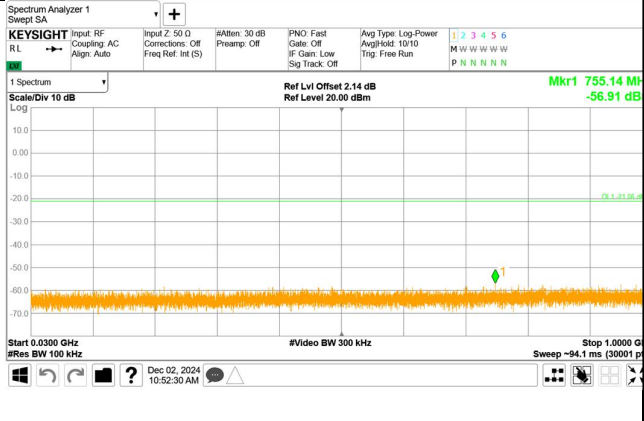
Out-of-Band Emissions

RU 52_37 Channel 1 (2412MHz)

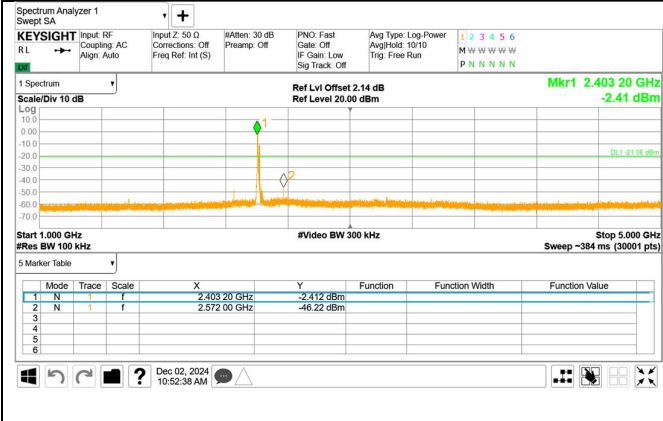
Reference point



Spurious Emission (30MHz – 1GHz)



Spurious Emission (1GHz –5GHz)



Spurious Emission (5GHz –26.5GHz)

