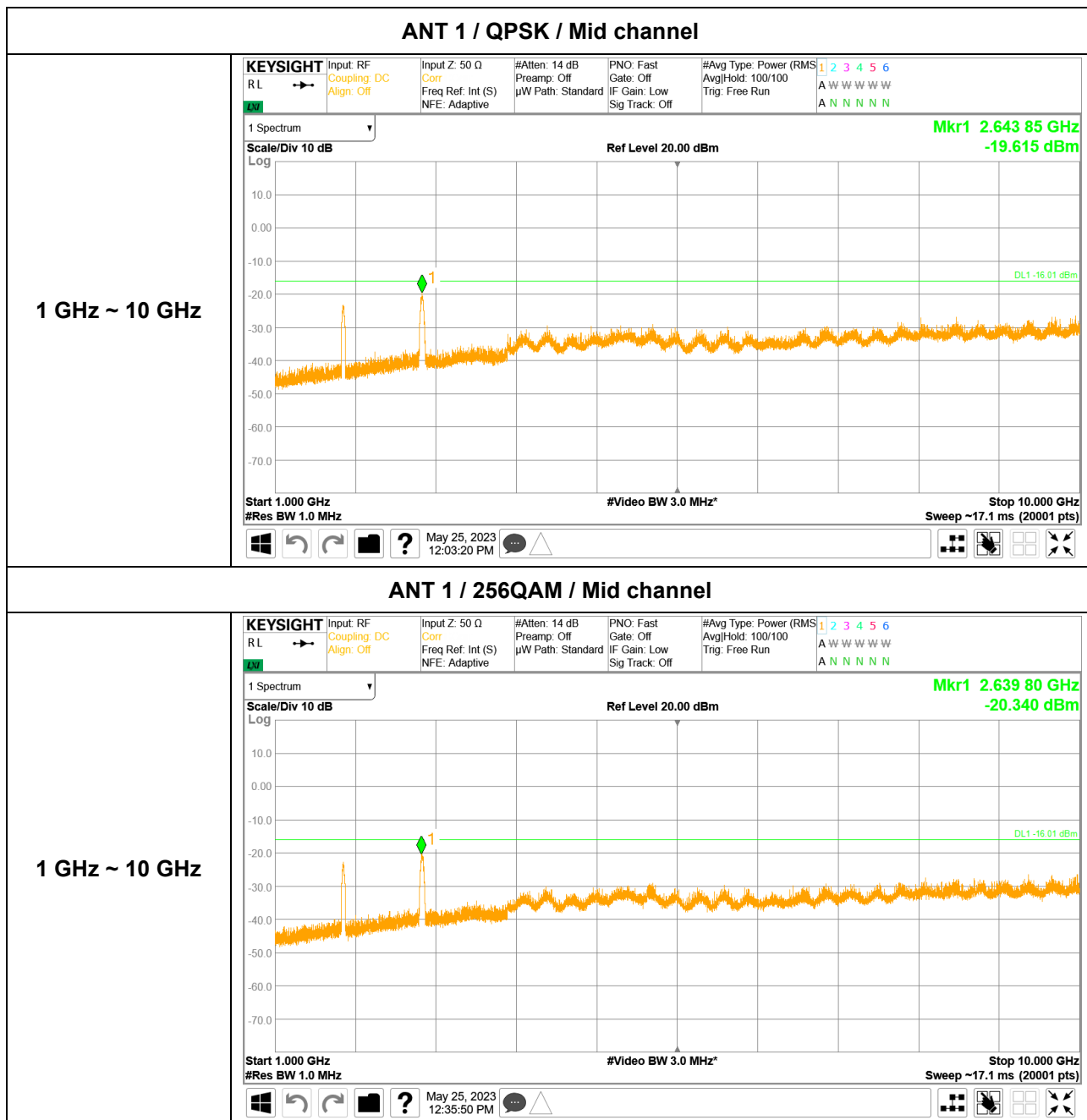
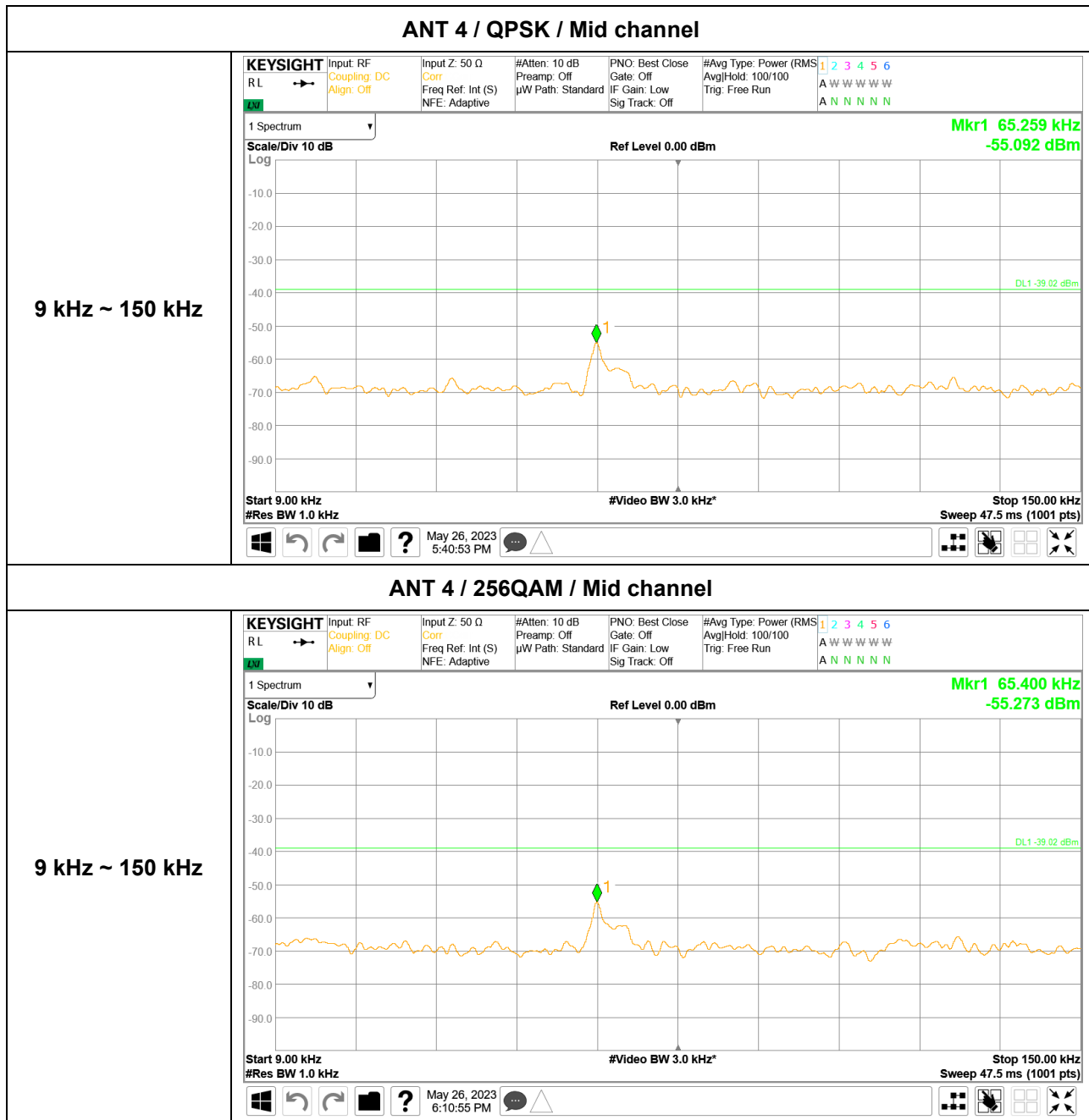
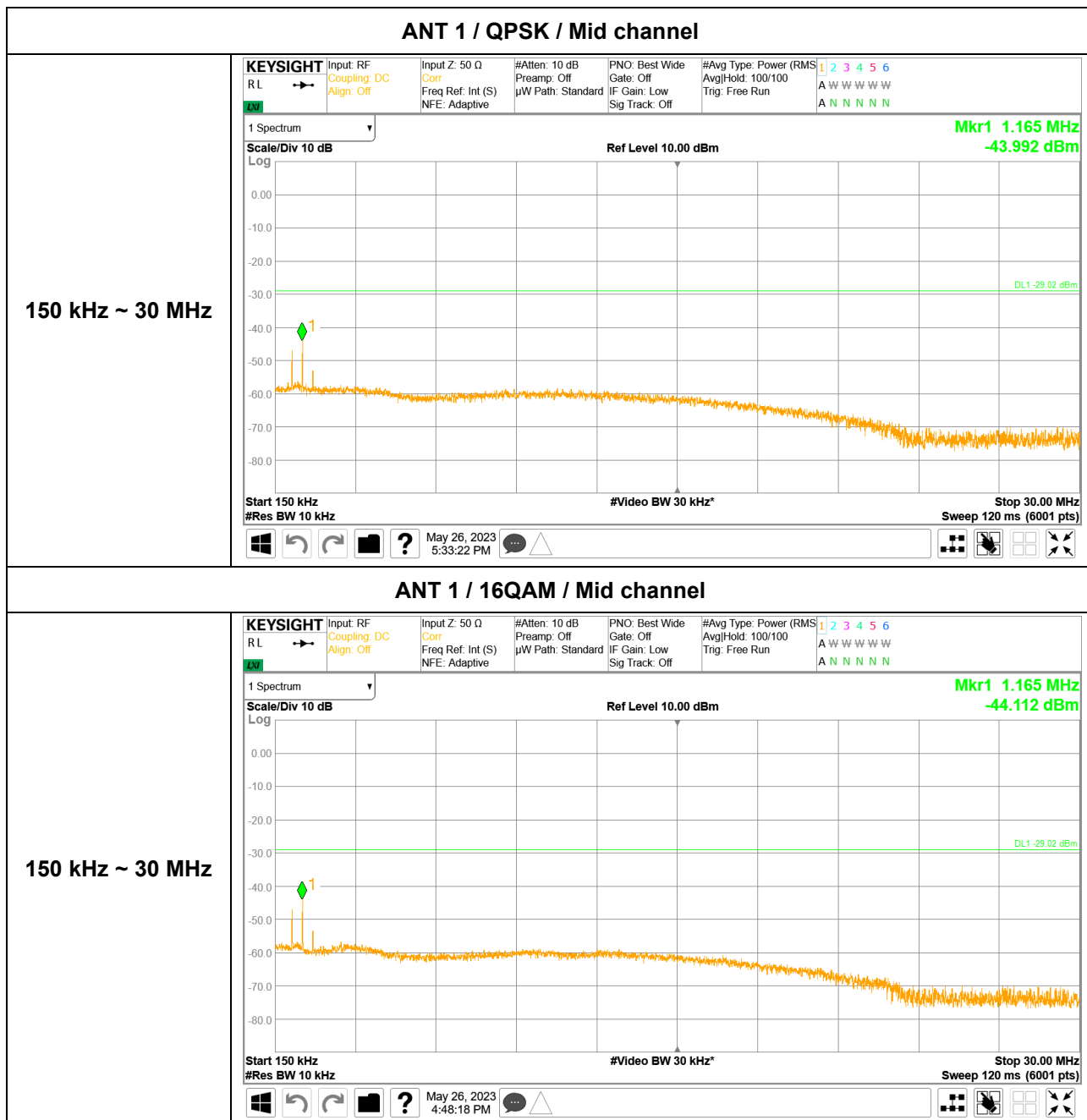
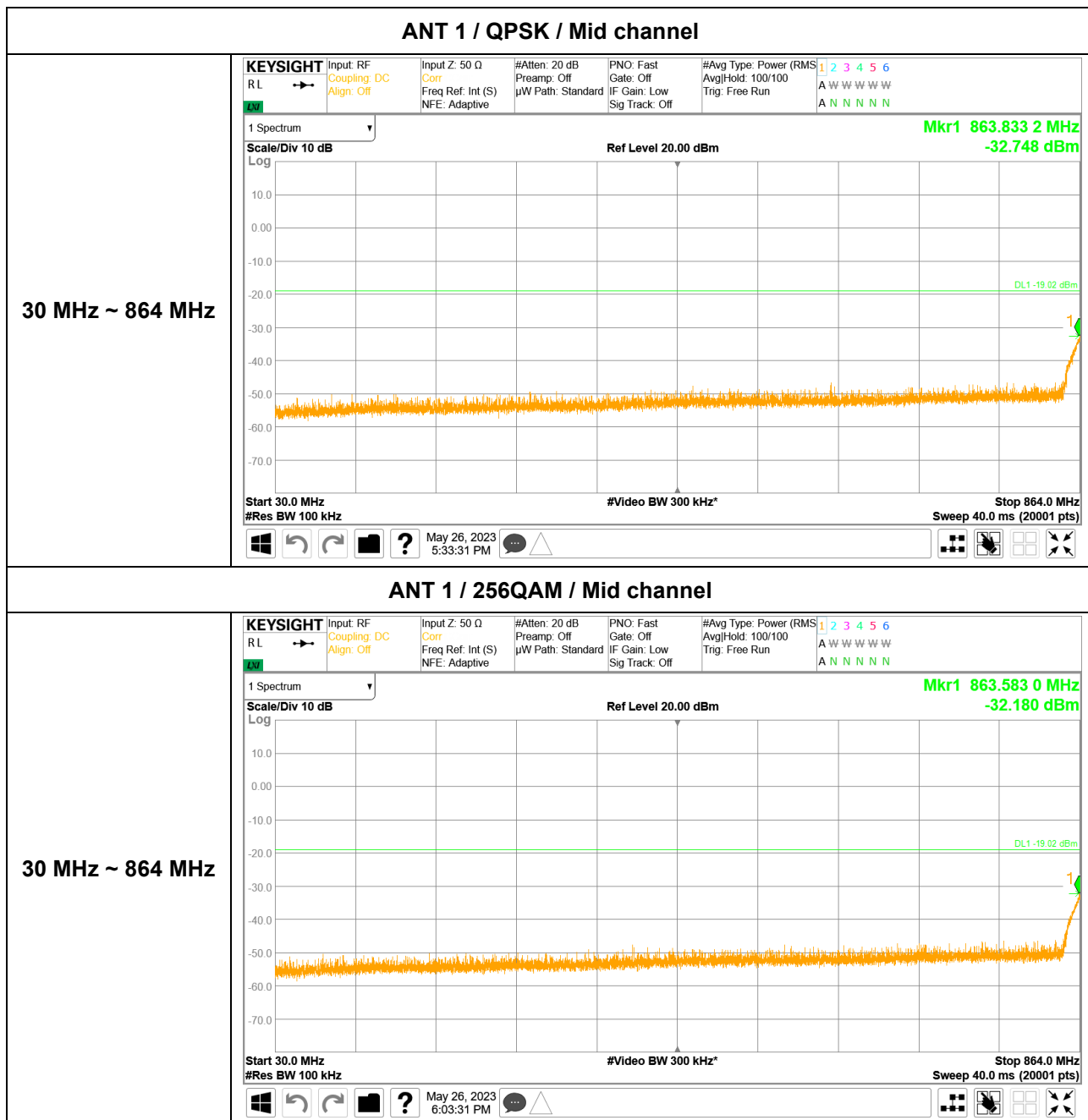


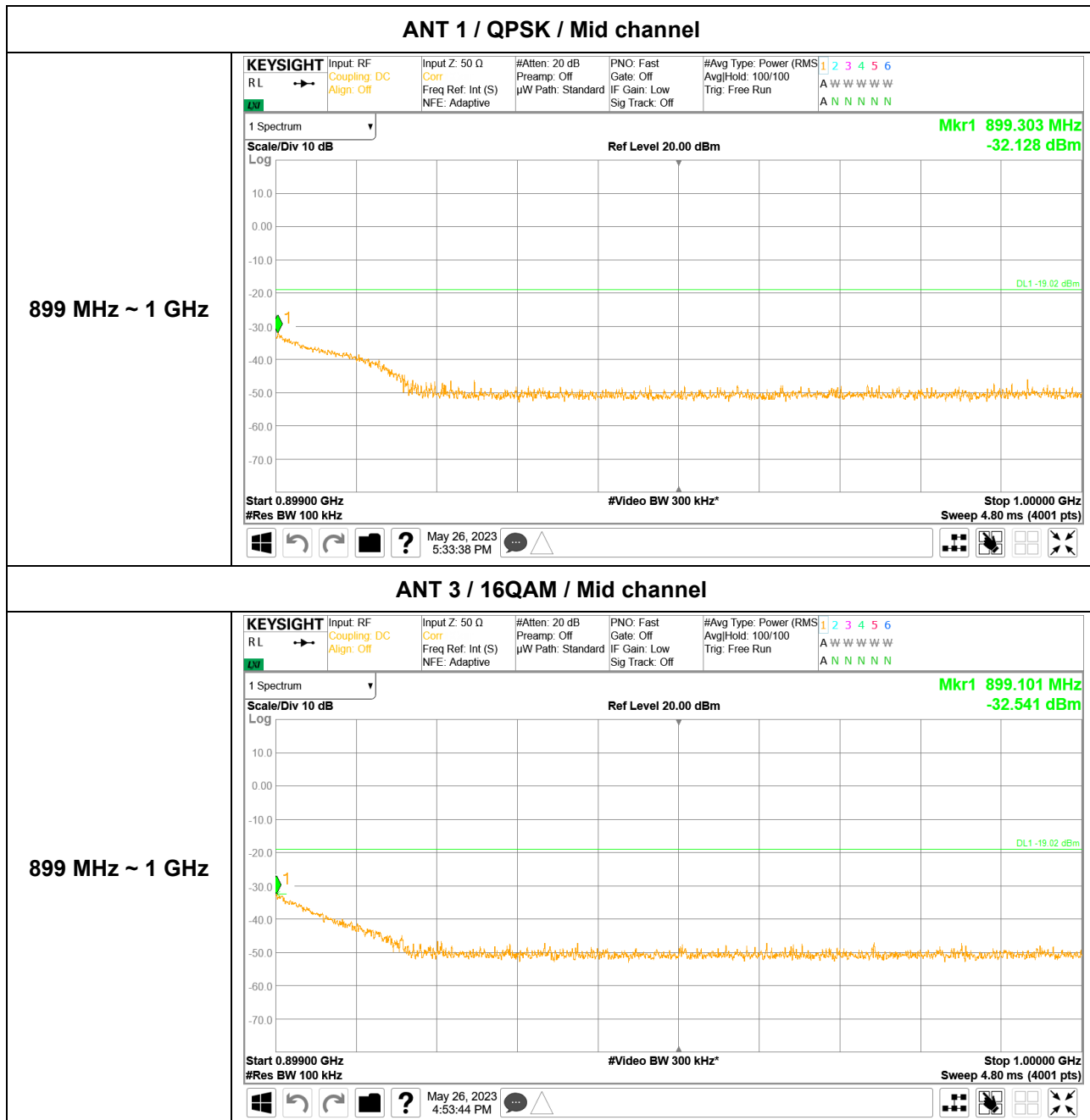


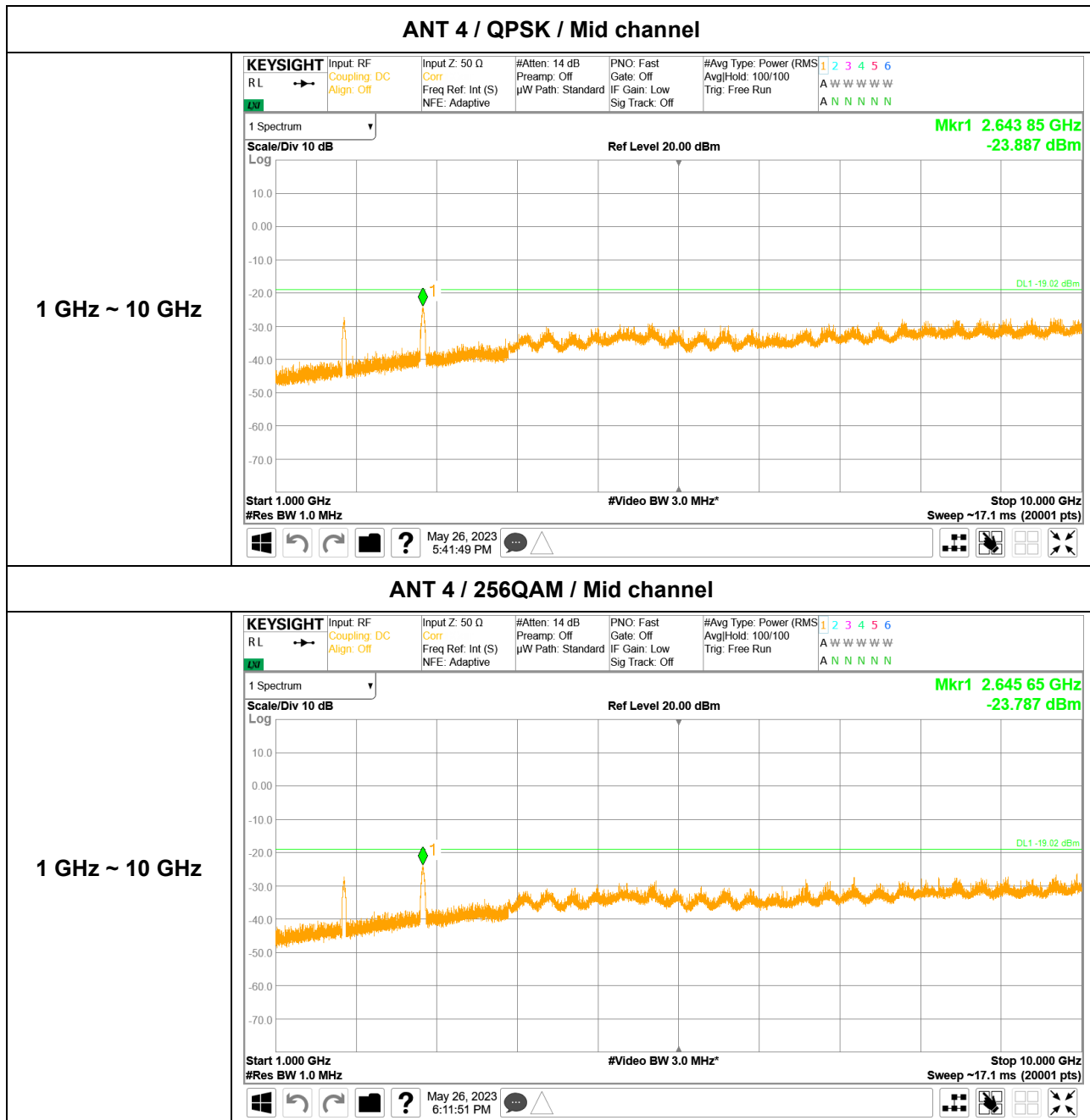
5G NR n5 15 MHz 1C + LTE B5 10 MHz 1C (2 Carrier) – 4TX - Contiguous



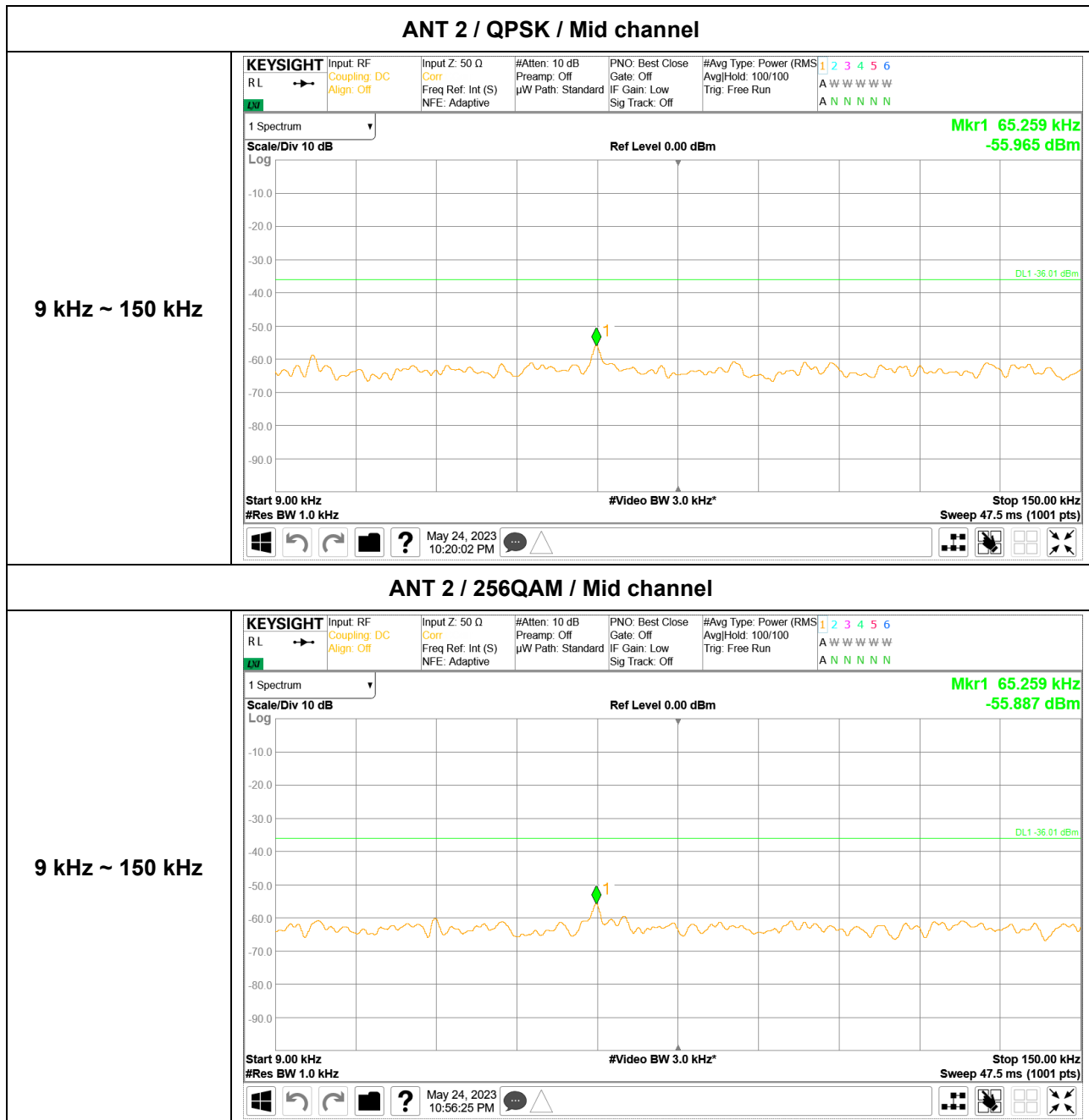


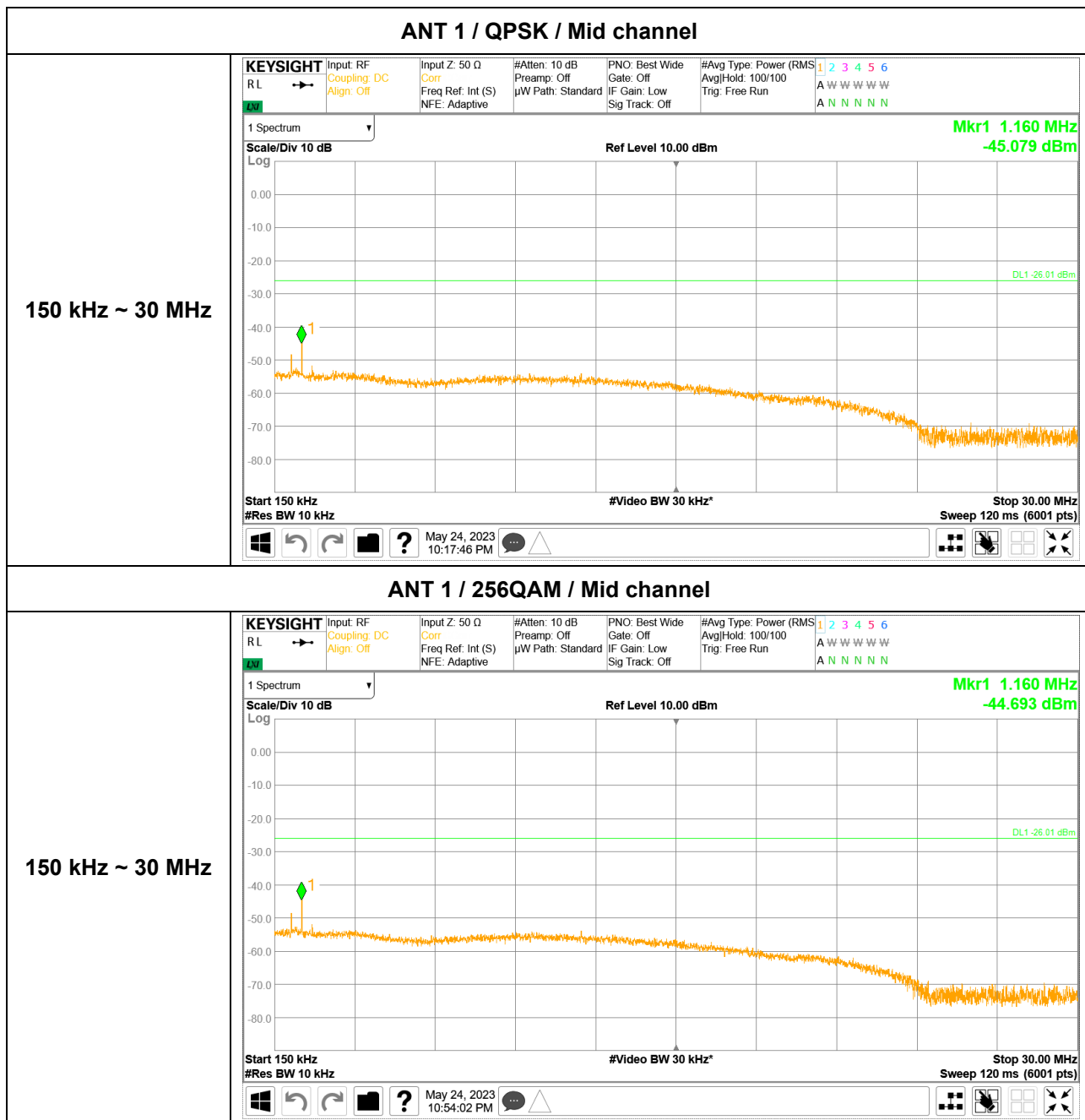


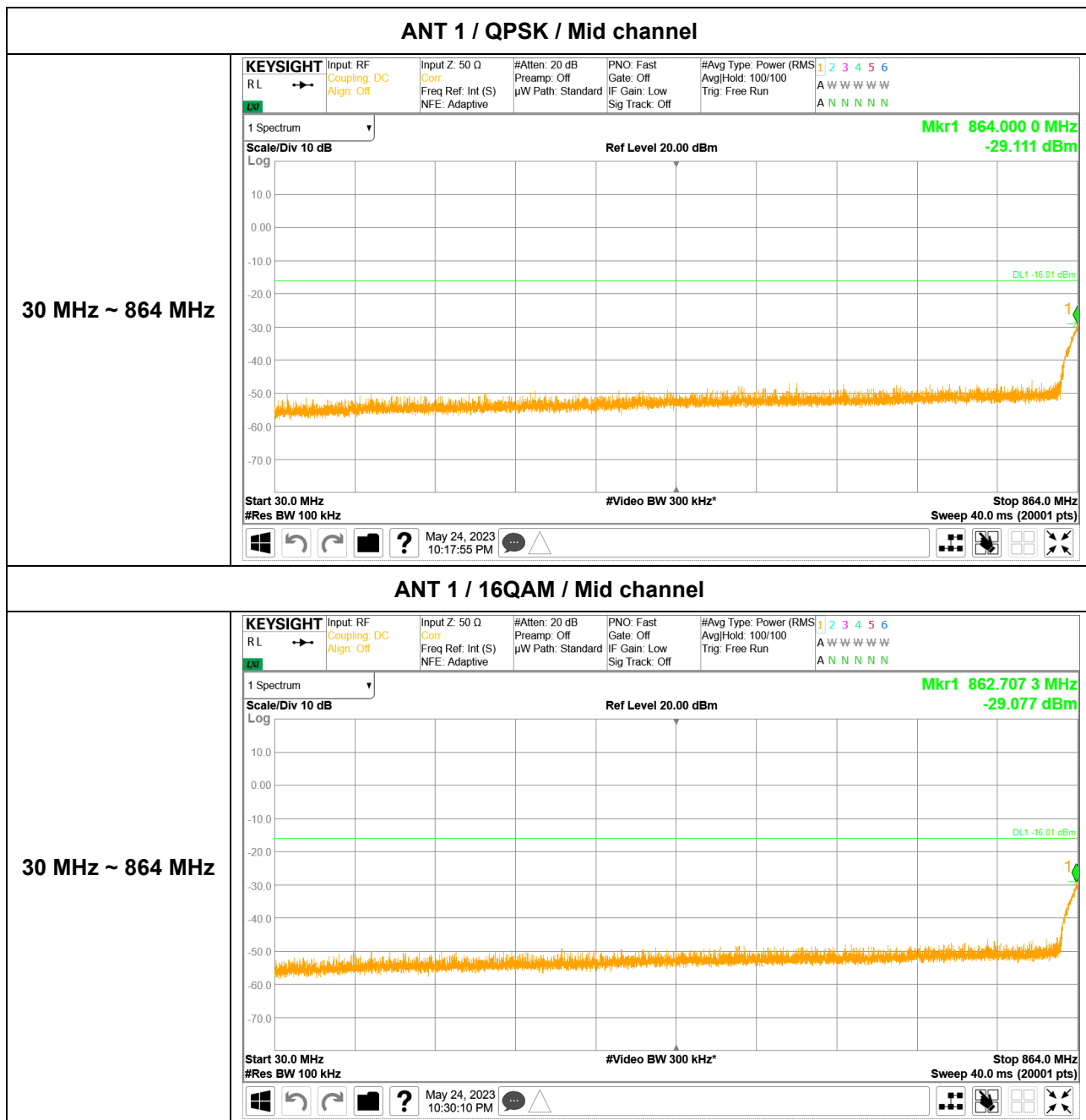


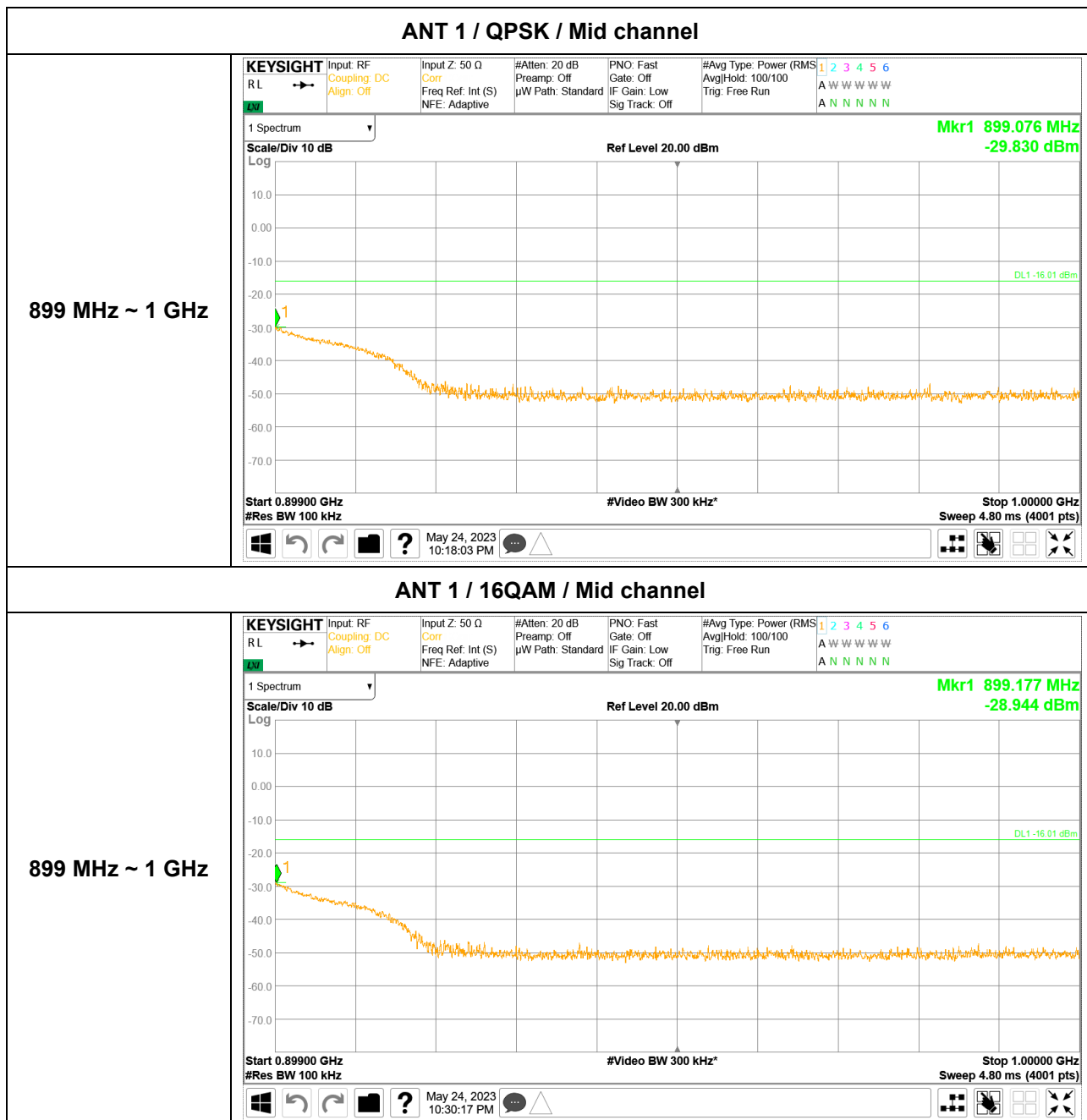


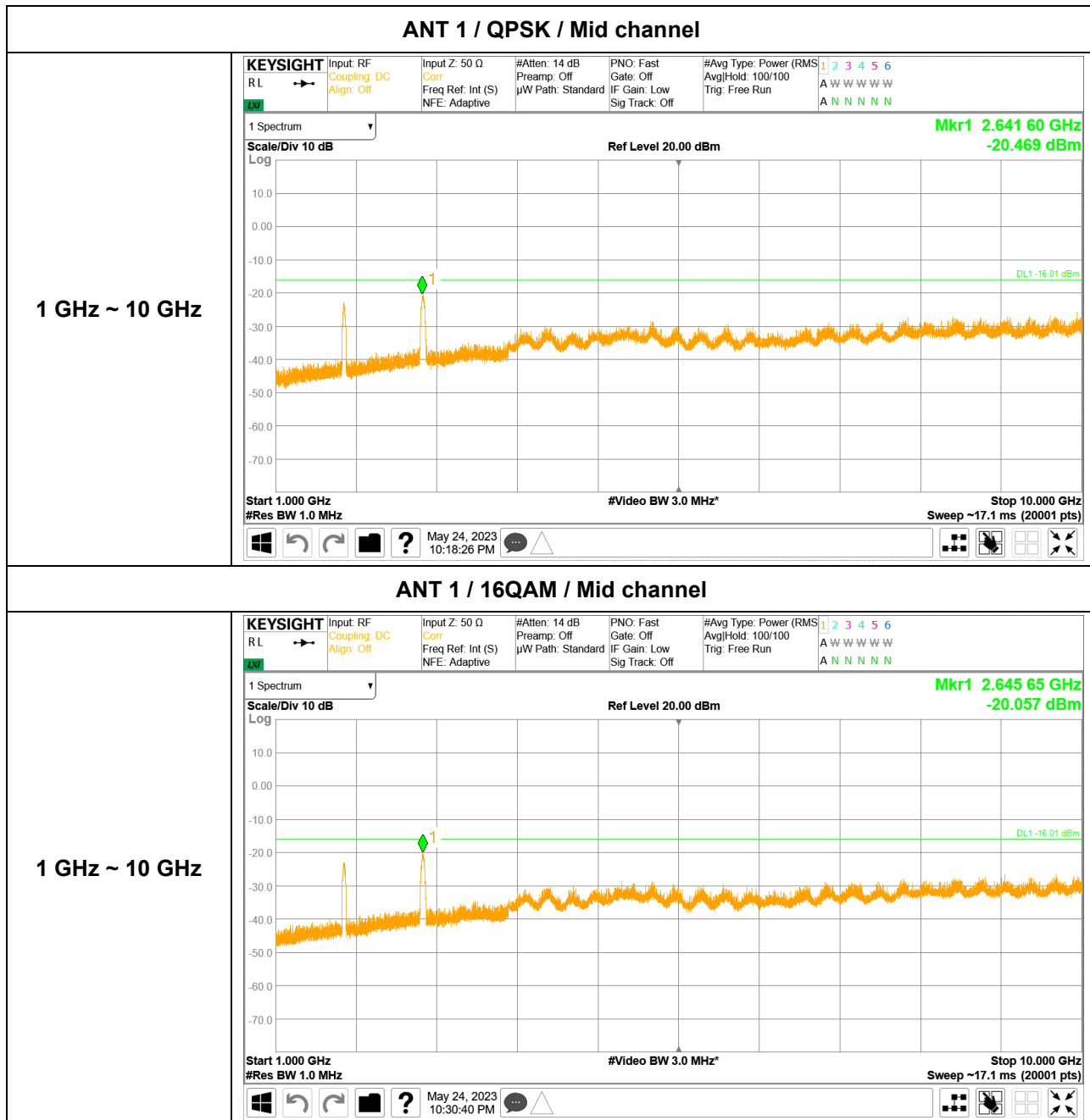
5G NR n5 5 MHz 1C + 5G NR n5 15 MHz 1C + LTE B5 5 MHz 1C (3 Carrier) – 2TX - Contiguous



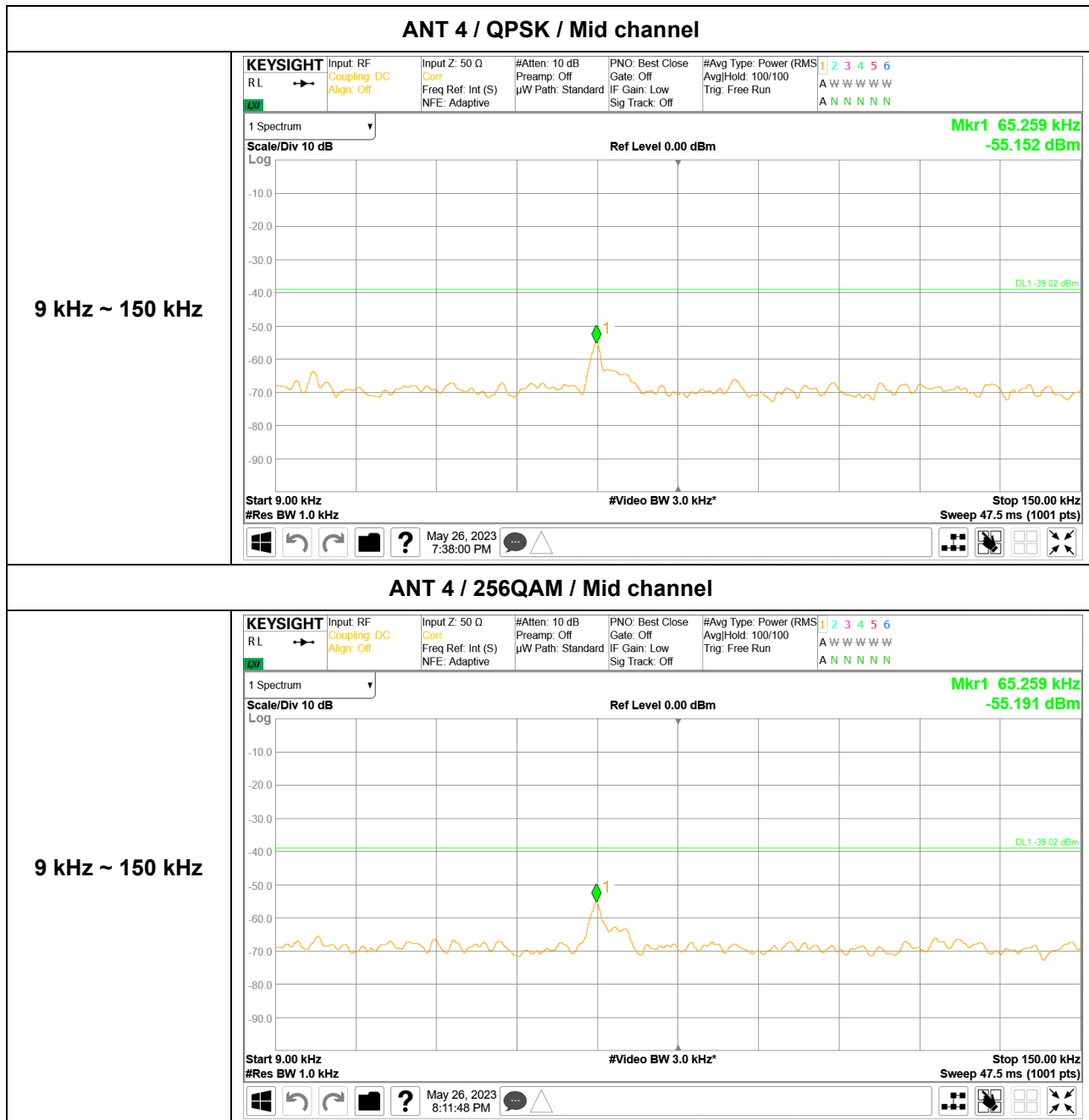








5G NR n5 5 MHz 1C + 5G NR n5 15 MHz 1C + LTE B5 5 MHz 1C (3 Carrier) – 4TX - Contiguous

**ANT 4 / 256QAM / Mid channel**

9 kHz ~ 150 kHz

KEYSIGHT	Input: RF Coupling: DC Align: Off	Input Z: 50 Ω Corr Freq Ref: Int (S) NFE: Adaptive	#Atten: 10 dB Preamp: Off μW Path: Standard	PNO: Best Close Gate: Off IF Gain: Low Sig Track: Off	#Avg Type: Power (RMS) Avg/Hold: 100/100 Trig: Free Run	1 2 3 4 5 6 A W W W W W A N N N N N
-----------------	---	---	---	--	---	---

1 Spectrum

Scale/Div 10 dB

Log

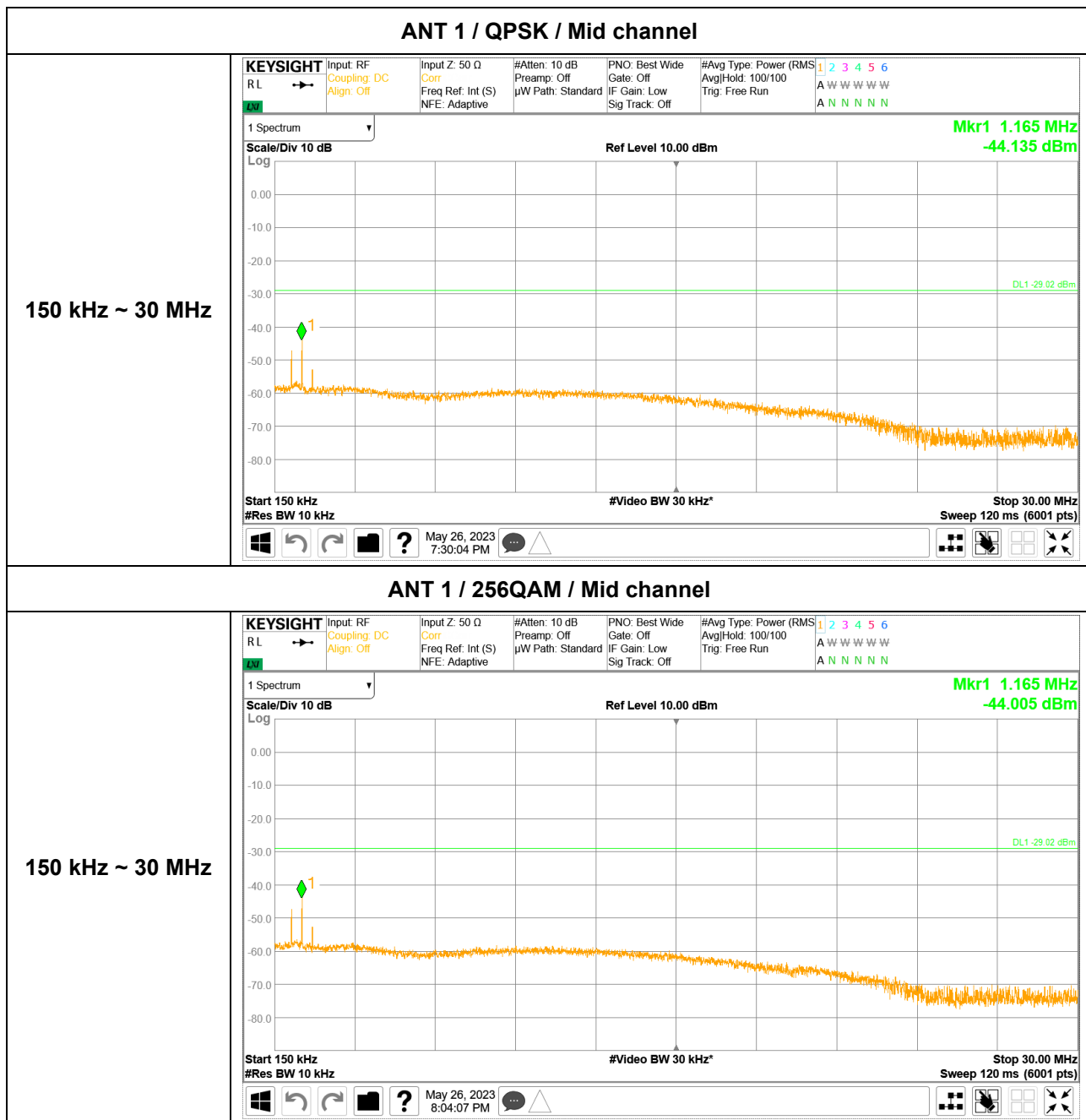
Mkr1 65.259 kHz
-55.191 dBm

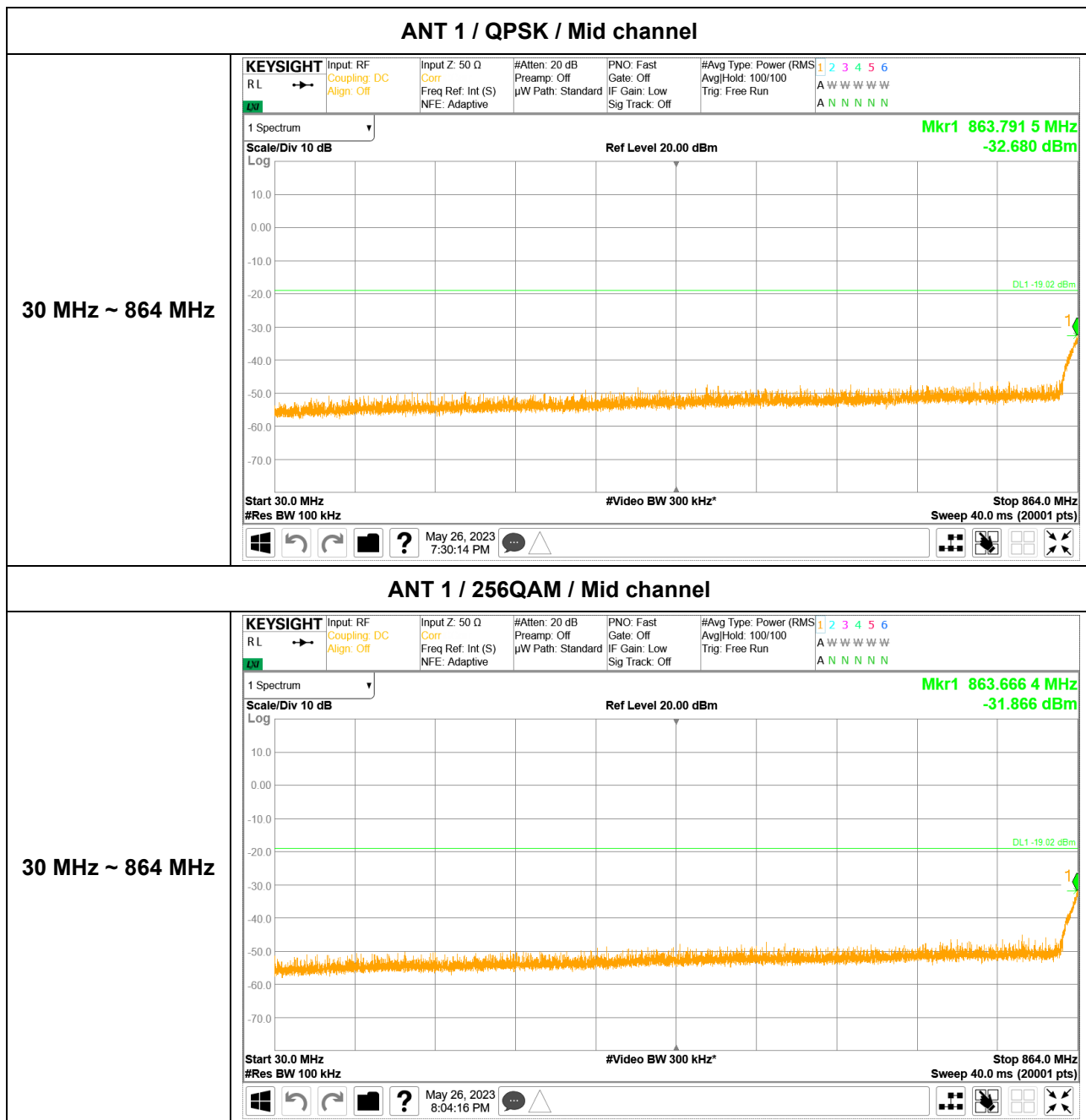
DL1 -39.02 dBm

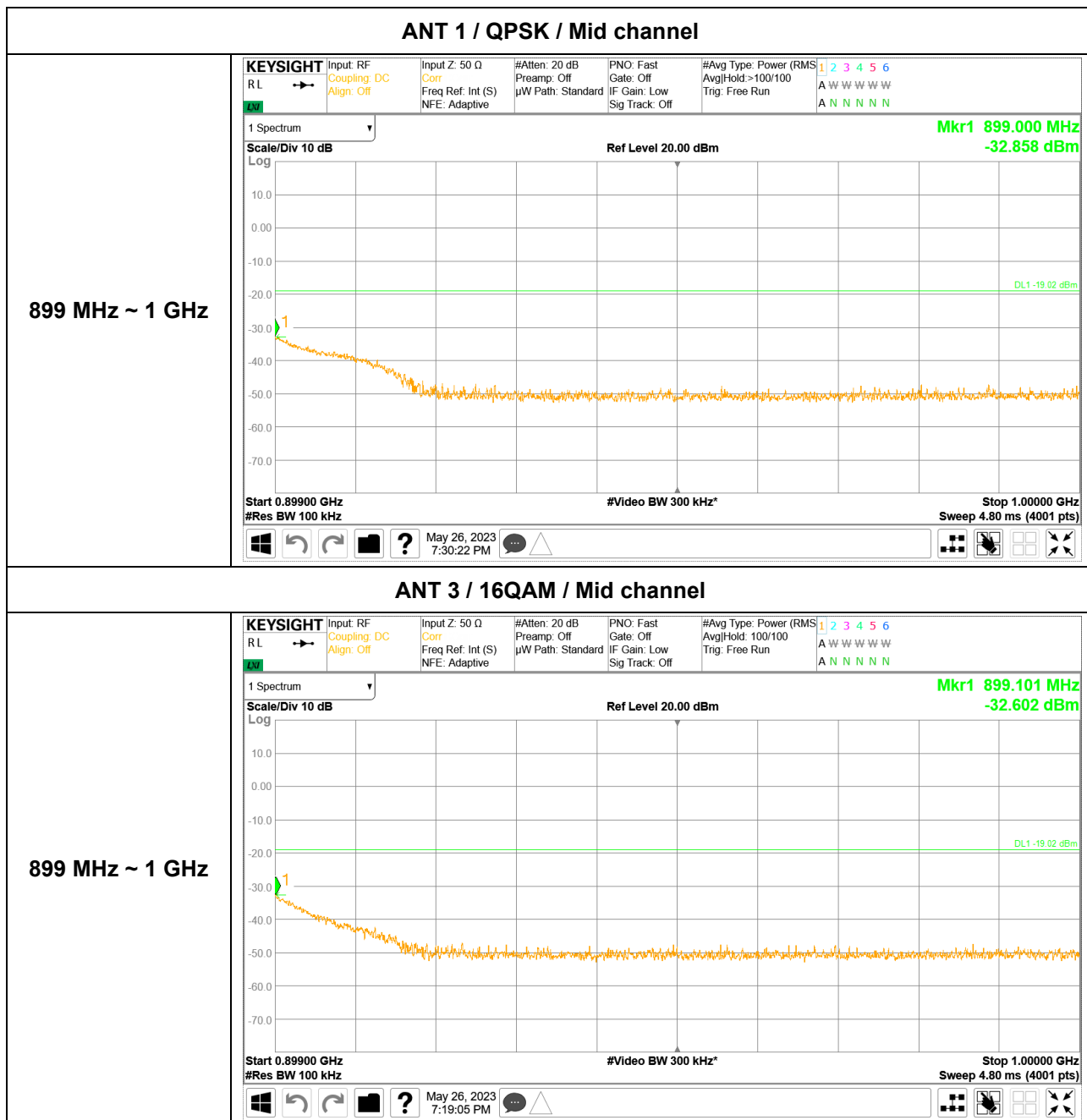
Start 9.00 kHz #Video BW 3.0 kHz* Stop 150.00 kHz

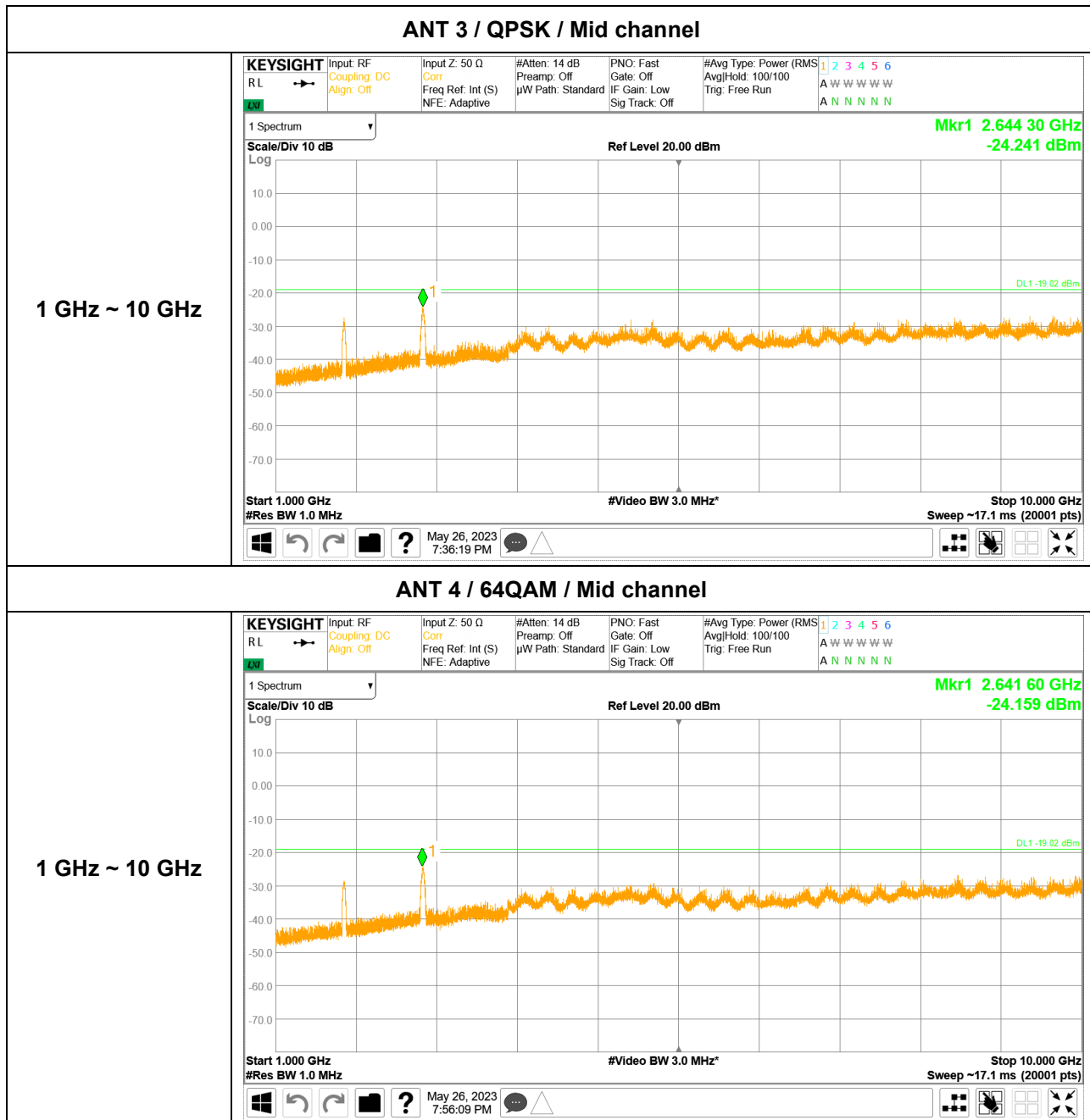
#Res BW 1.0 kHz Sweep 47.5 ms (1001 pts)

May 26, 2023 8:11:48 PM







**ANT 4 / 64QAM / Mid channel**

1 GHz ~ 10 GHz

KEYSIGHT
 Input: RF
 R.L. →
 Coupling: DC
 Align: Off

Input Z: 50 Ω
 Corr
 Freq Ref: Int (S)
 NFE: Adaptive

#Atten: 14 dB
 Preamp: Off
 μW Path: Standard

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

#Avg Type: Power (RMS)
 Avg/Hold: 100/100
 Trig: Free Run

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

1 Spectrum

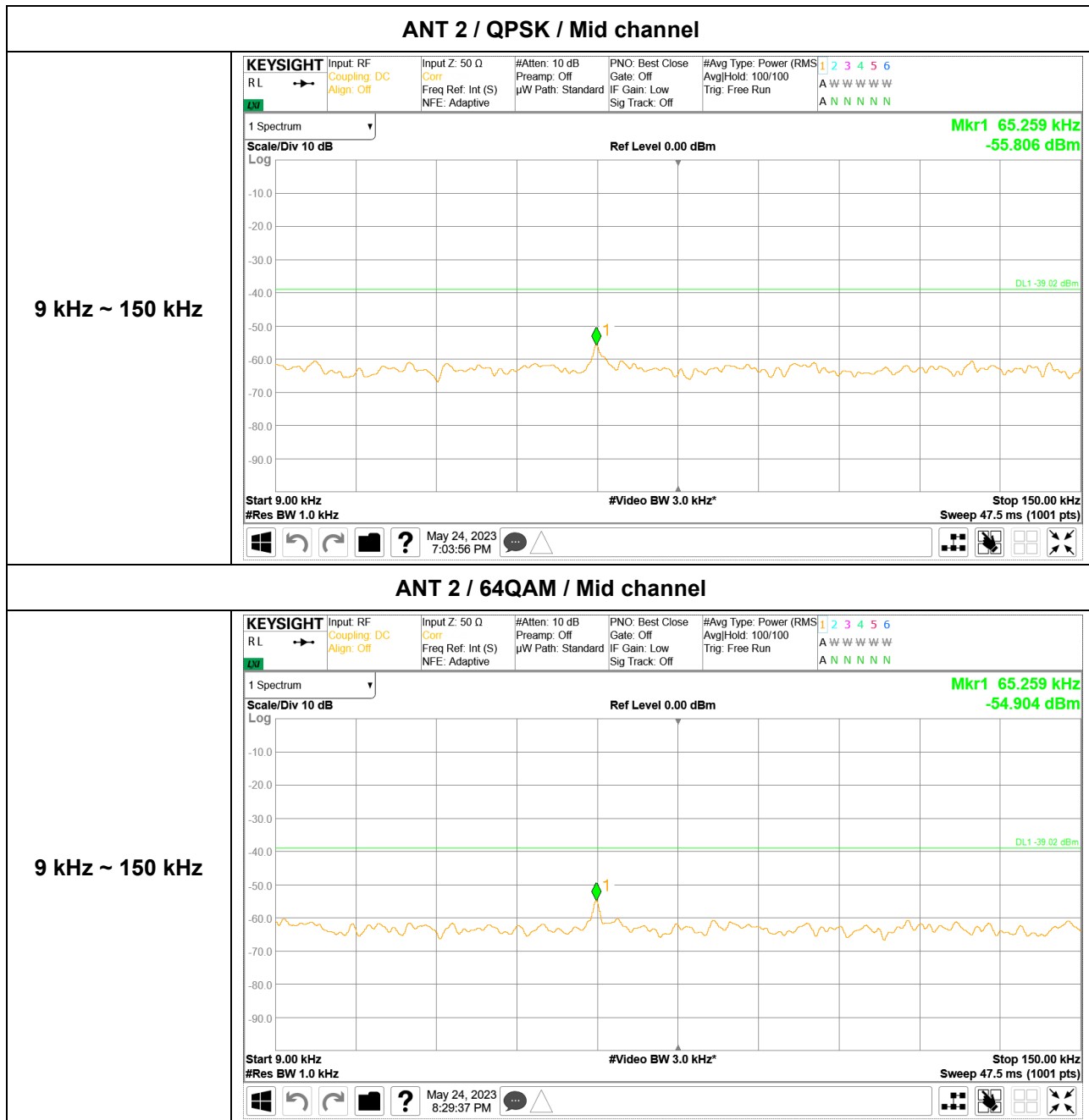
Scale/Div 10 dB Ref Level 20.00 dBm

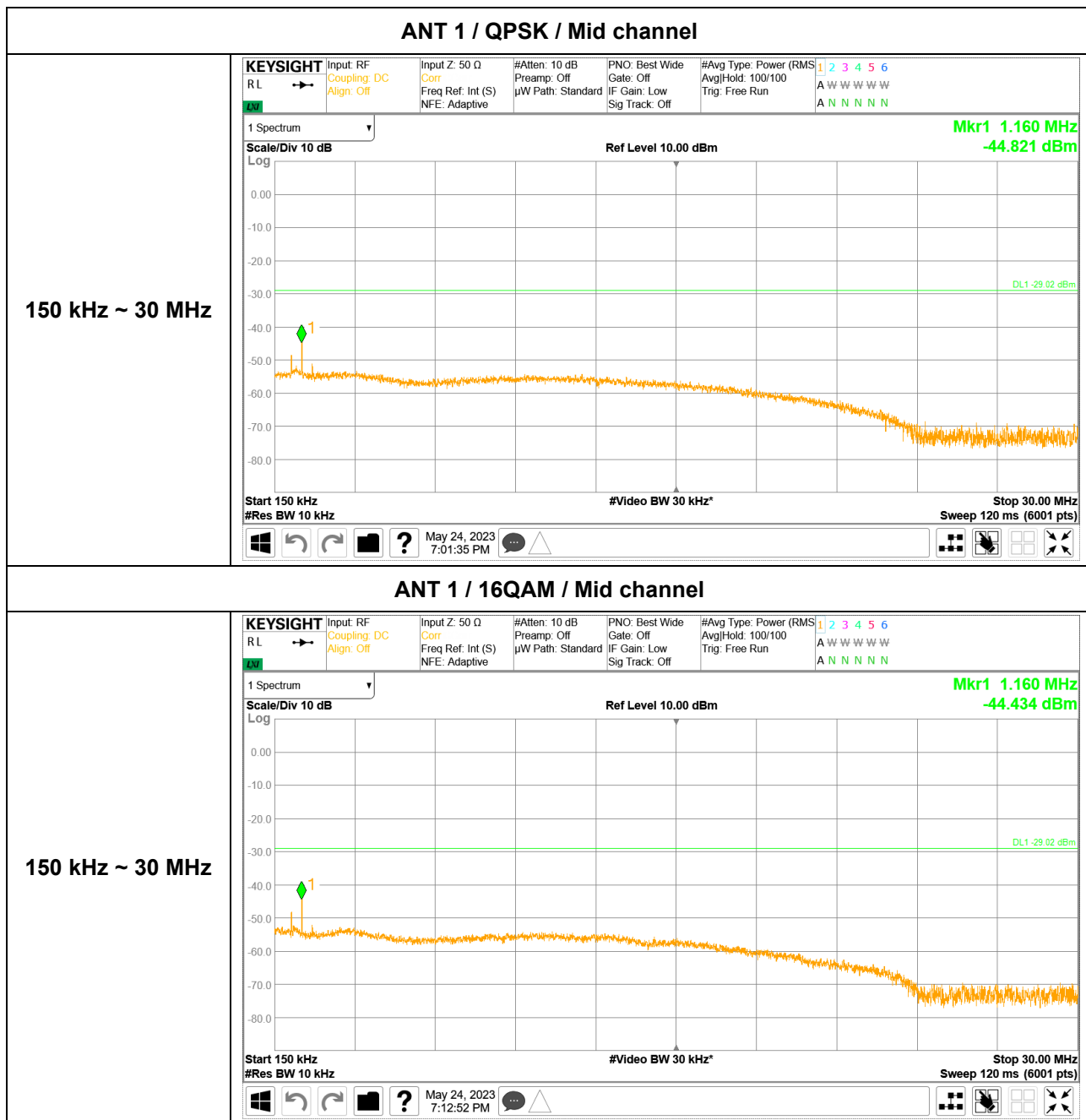
Start 1.000 GHz #Video BW 3.0 MHz* Stop 10.000 GHz

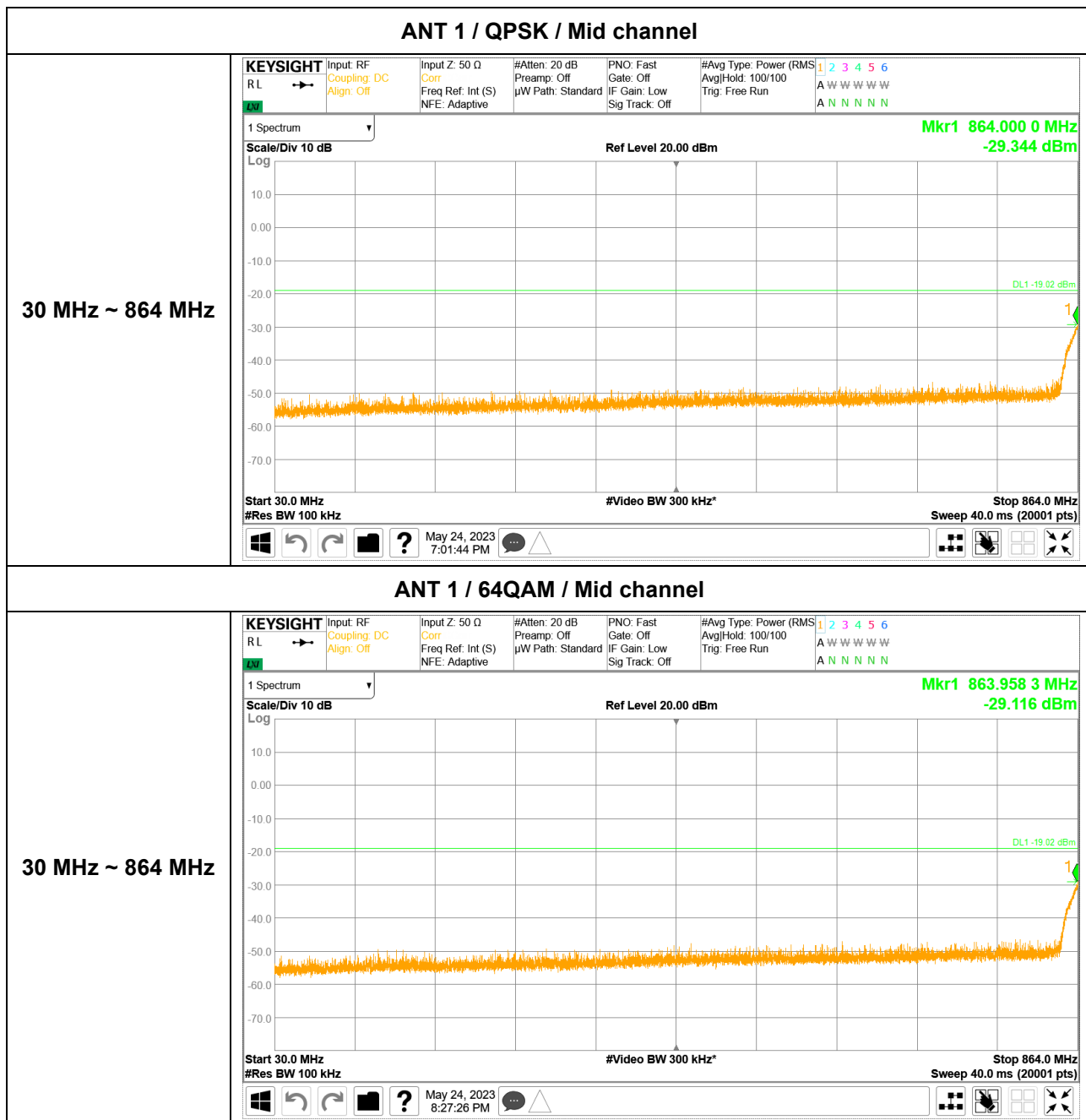
#Res BW 1.0 MHz Sweep ~17.1 ms (20001 pts)

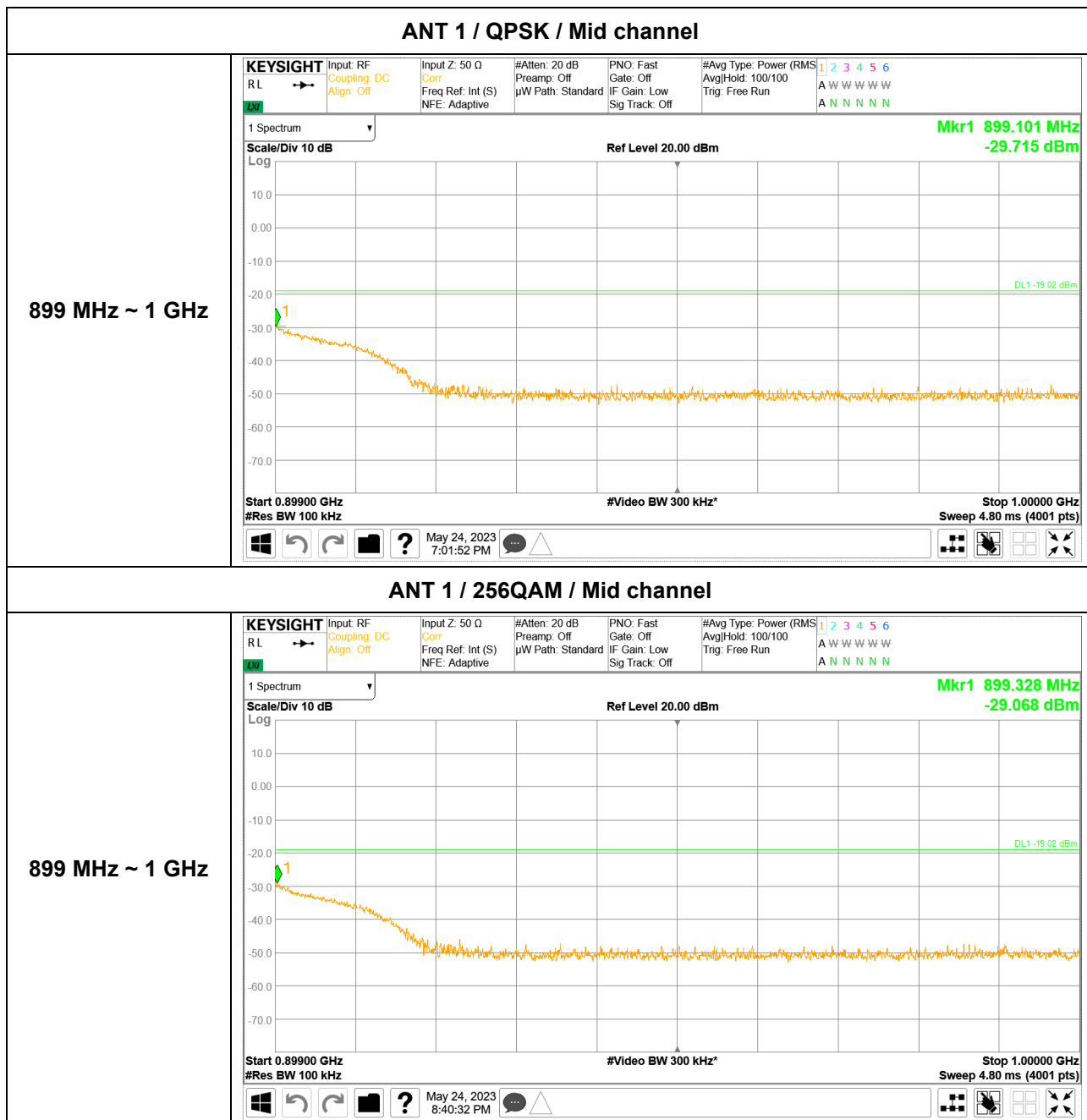
May 26, 2023
7:56:09 PM

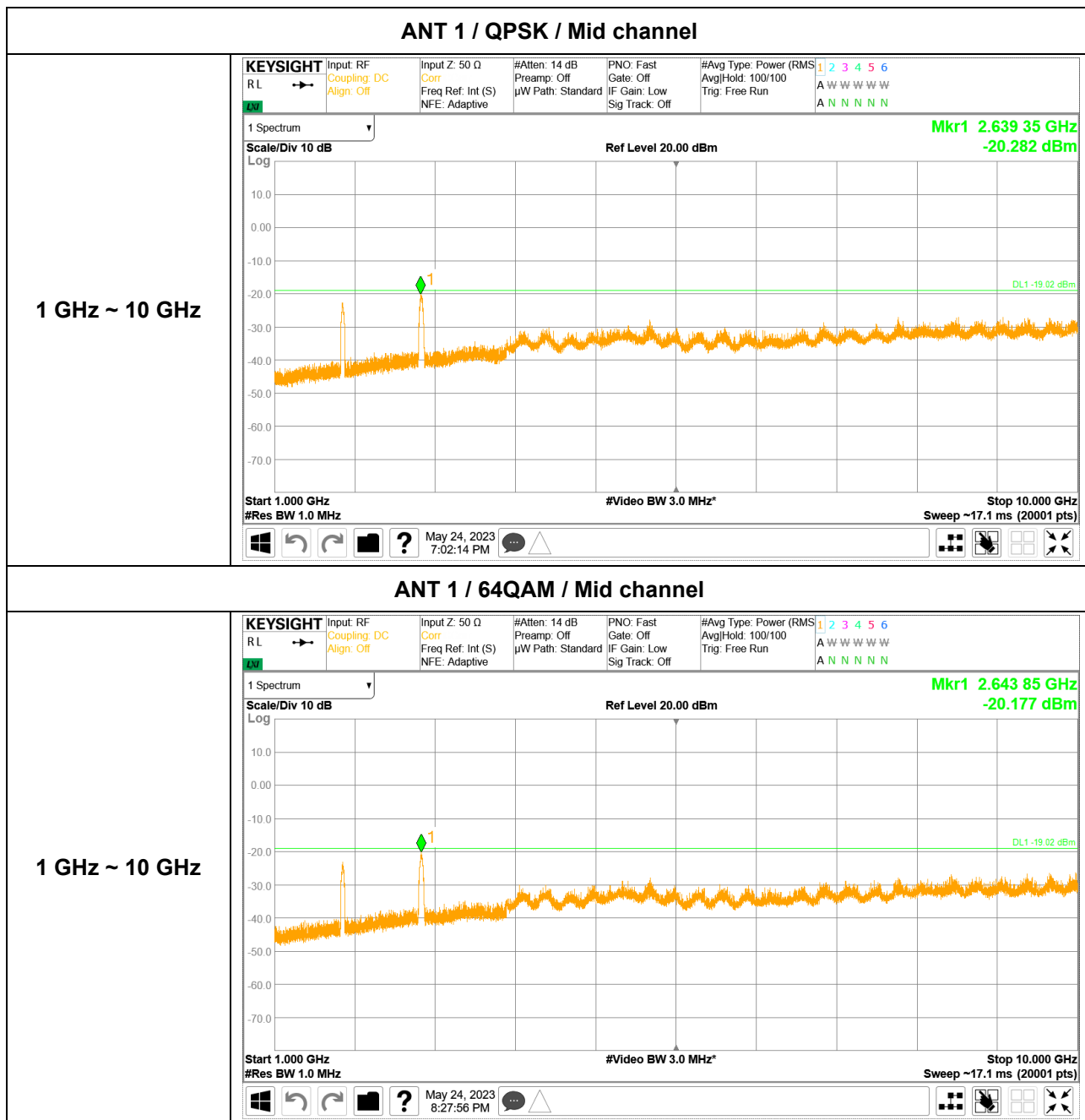
DSS B5 10 MHz 1C + 5G NR n5 15 MHz 1C (2 Carrier) – 2TX - Contiguous



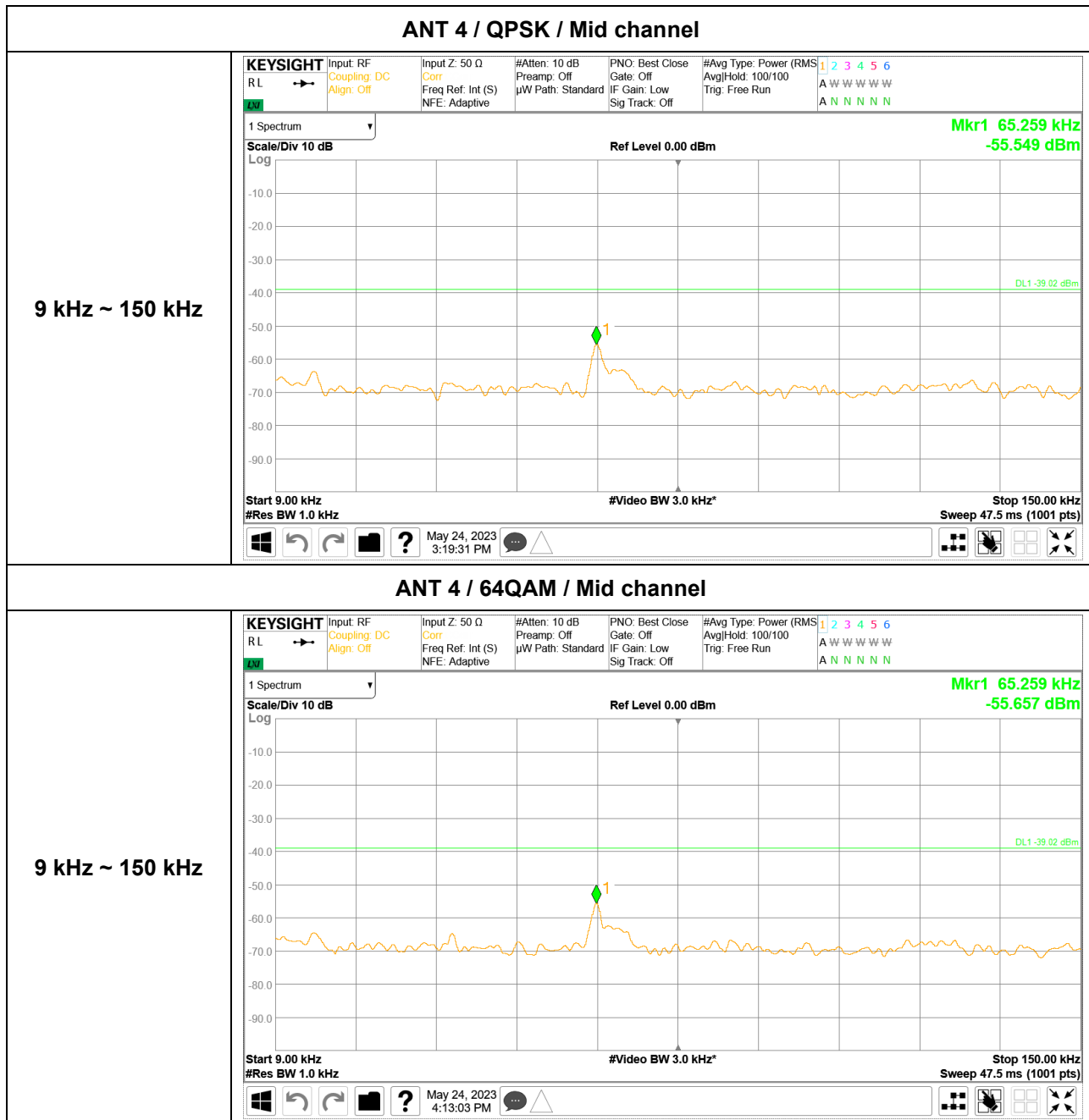


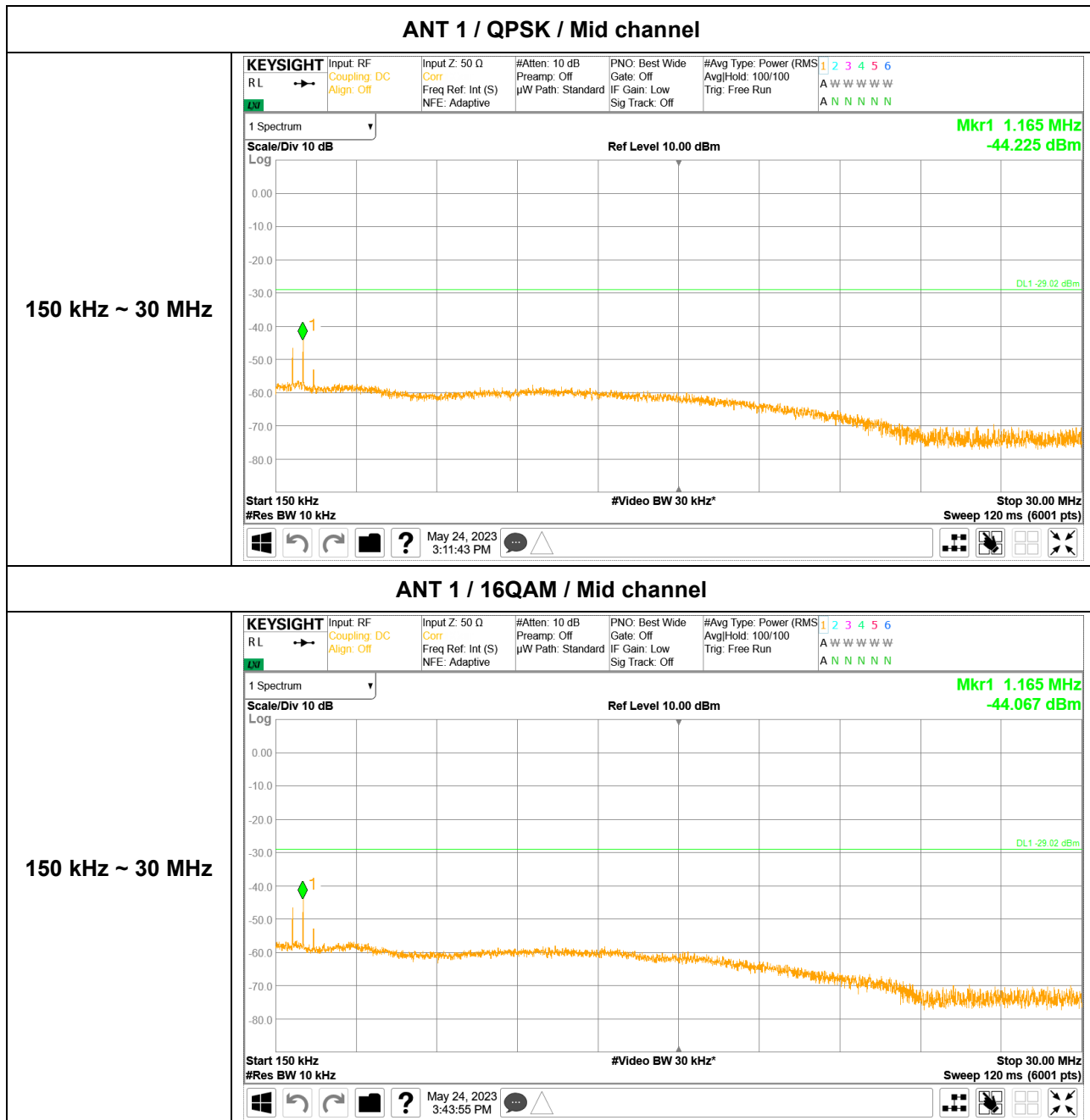


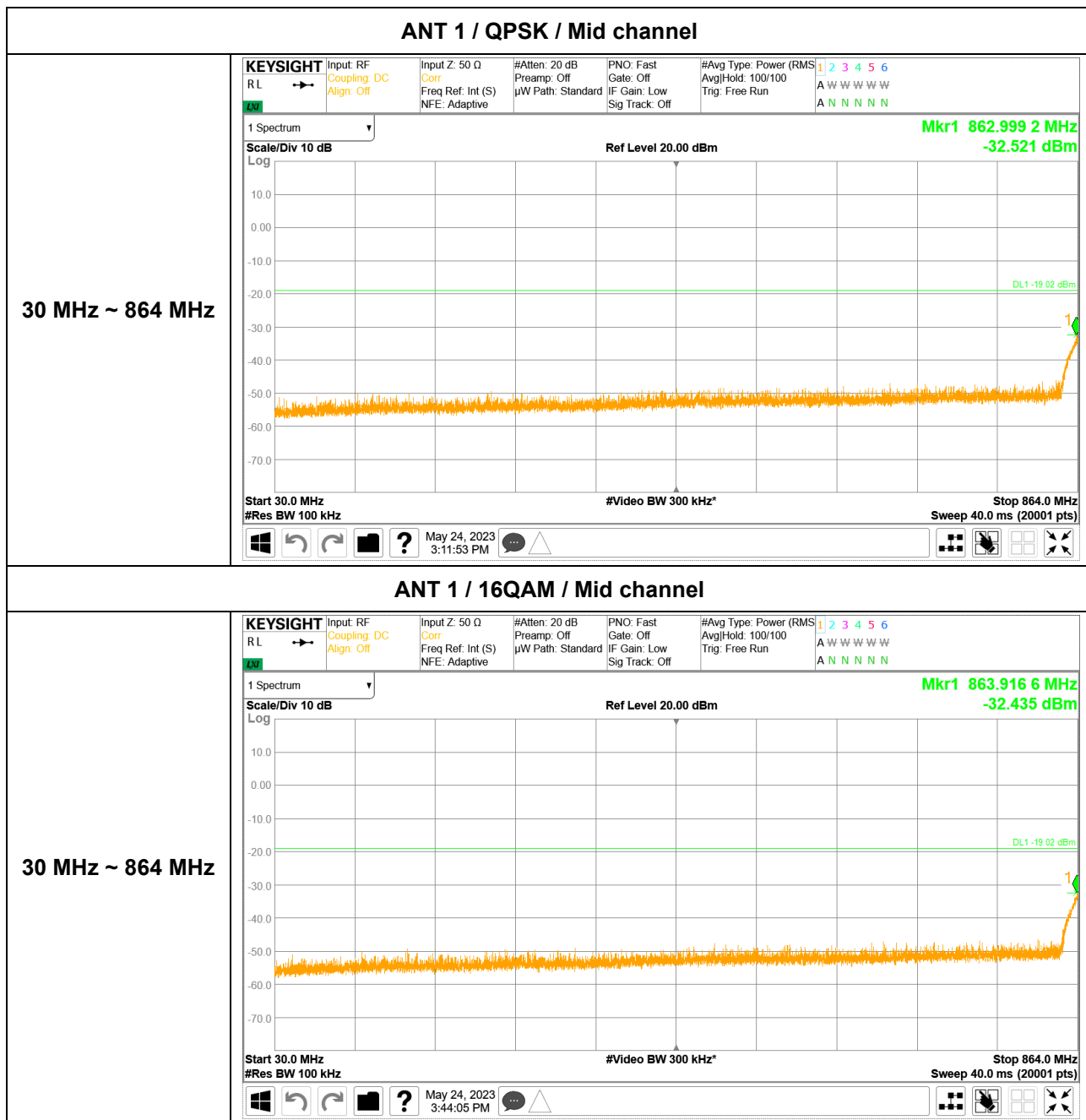


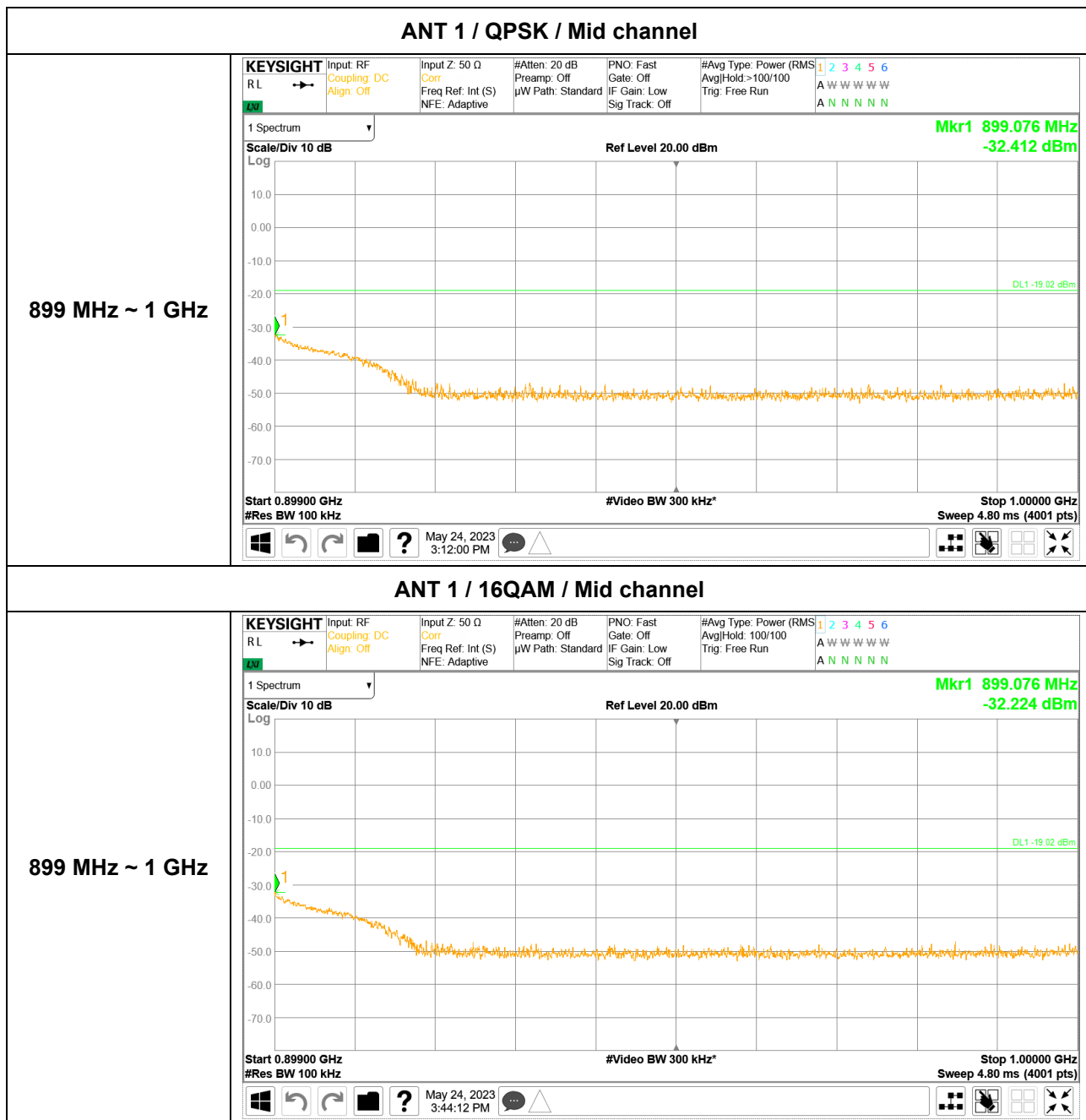


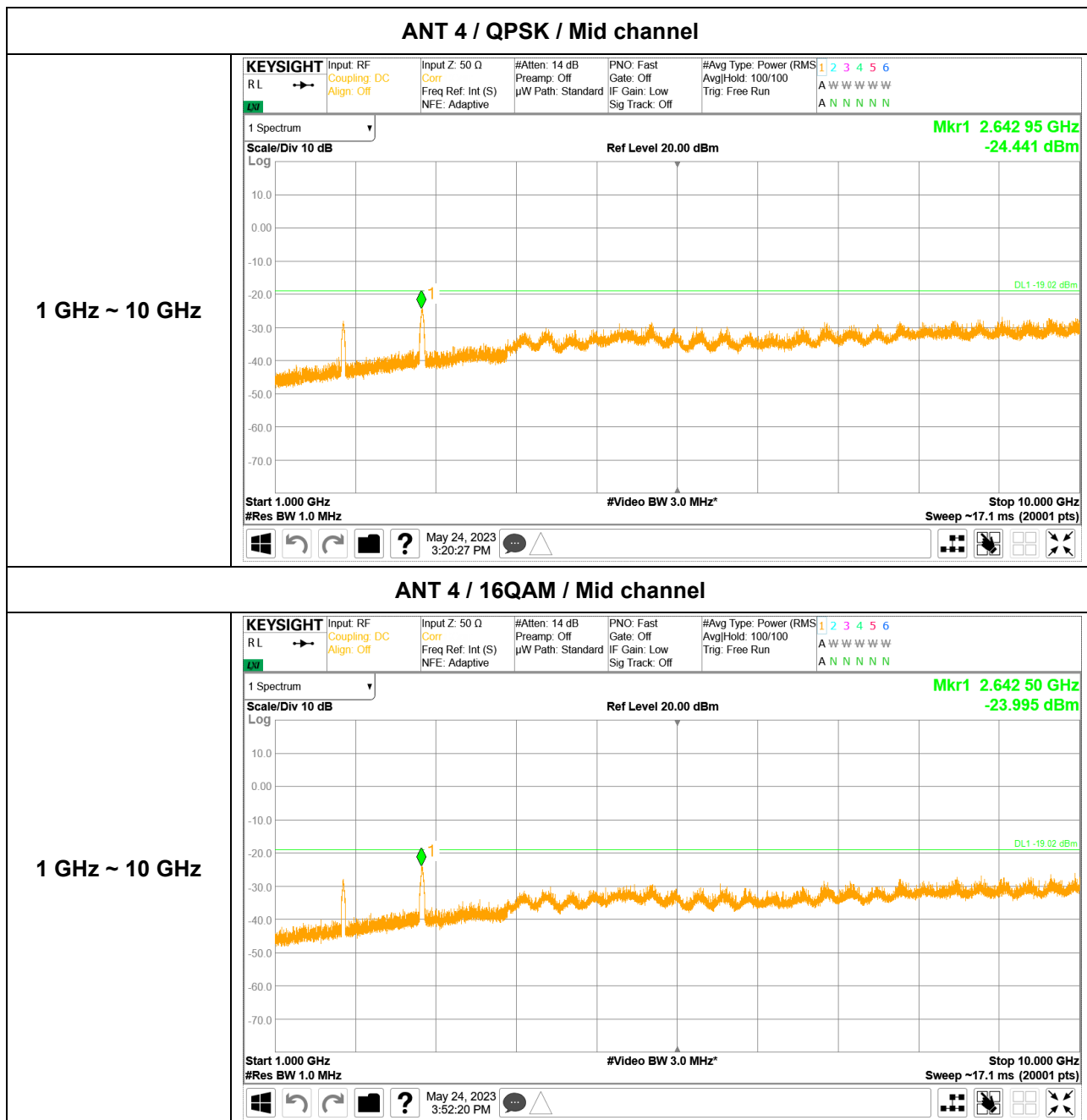
DSS B5 10 MHz 1C + 5G NR n5 15 MHz 1C (2 Carrier) – 4TX - Contiguous











8.6. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055

LIMITS

(a) The frequency stability shall be measured with variation of ambient temperature as follows:

- (1) From -30° to $+50^{\circ}$ centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section.

TEST PROCEDURE

According to the section 5.6.3, 5.6.4, 5.6.5 of ANSI C63.26

RESULTS

See the following pages.

8.6.1. FREQUENCY STABILITY RESULTS

5G NR n5 15 MHz (1 Carrier)

Reference Frequency : 881.5 MHz @ 20°C					
Power Supply [Vdc]	Environment Temperature [°C]	Frequency Deviation Measured with Time Elapse			
		Frequency [Hz]	Error [Hz]	Deviation [Hz]	Delta [ppm]
-48.00	+ 50	881 500 000.384	-0.384	-0.219	-0.0002
	+ 40	881 500 000.205	-0.205	-0.040	0.0000
	+ 30	881 500 000.225	-0.225	-0.060	-0.0001
	+ 20	881 500 000.165	-0.165	0.000	0.0000
	+ 10	881 500 000.385	-0.385	-0.220	-0.0002
	+ 0	881 500 000.328	-0.328	-0.163	-0.0002
	- 10	881 500 000.274	-0.274	-0.109	-0.0001
	- 20	881 500 000.246	-0.246	-0.081	-0.0001
	- 30	881 500 000.526	-0.526	-0.361	-0.0004
-55.20	+ 20	881 500 000.366	-0.366	-0.201	-0.0002
-40.80	+ 20	881 500 000.329	-0.329	-0.164	-0.0002

Note: The test results of the frequency stability shown above table are result for ANT 1.
The results of all ports are similar, and the worst of them has been reported.

8.7. RADIATED EMISSIONS

RULE PART(S)

FCC : §2.1053, §22.917

LIMIT

§22.917

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.

(a) Out of band emissions. 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.

(b) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a reference bandwidth as follows:

(1) In the spectrum below 1 GHz, instrumentation should employ a reference bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy, provided that the measured power is integrated over the full required reference bandwidth (i.e., 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(2) In the spectrum above 1 GHz, instrumentation should employ a reference bandwidth of 1 MHz.

(c) Alternative out of band emission limit. Licensees in this service may establish an alternative out of band emission limit to be used at specified band edge(s) in specified geographical areas, in lieu of that set forth in this section, pursuant to a private contractual arrangement of all affected licensees and applicants. In this event, each party to such contract shall maintain a copy of the contract in their station files and disclose it to prospective assignees or transferees and, upon request, to the FCC.

(d) Interference caused by out of band emissions. If any emission from a transmitter operating in this service results in interference to users of another radio service, the FCC may require a greater attenuation of that emission than specified in this section.

TEST PROCEDURE

According to the section 5.5.4.2 of ANSI C63.26:

- a) Place the EUT in the center of the turntable. The EUT shall be configured to transmit into the standard non-radiating load (for measuring radiated spurious emissions), connected with cables of minimal length unless specified otherwise. If the EUT uses an adjustable antenna, the antenna shall be positioned to the length that produces the worst case emission at the fundamental operating frequency.
- b) Each emission under consideration shall be evaluated:
 - 1) Raise and lower the measurement antenna in accordance 5.5.2, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
 - 2) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
 - 3) Return the turntable to the azimuth where the highest emission amplitude level was observed.
 - 4) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
 - 5) Record the measured emission amplitude level and frequency using the appropriate RBW.
- c) Repeat step b) for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- d) ~ j) Omitted
- k) Provide the complete measurement results as a part of the test report.

Note1. All transmitting ports were terminated.

Note2. The results of the Radiated Emission test are measured at the minimum margin (for conducted spurious data), and data values are attached only in the worst case.

Note3. For all radiated emissions, any emission outside of the operating frequency bands was not exceed the limit.

Note4. The amplitude of spurious emissions which are attenuated more than 20 dB below the permissible values was not recorded. (ANSI C63.26, clause 5.1.1., c)

RESULTS

See the following pages.

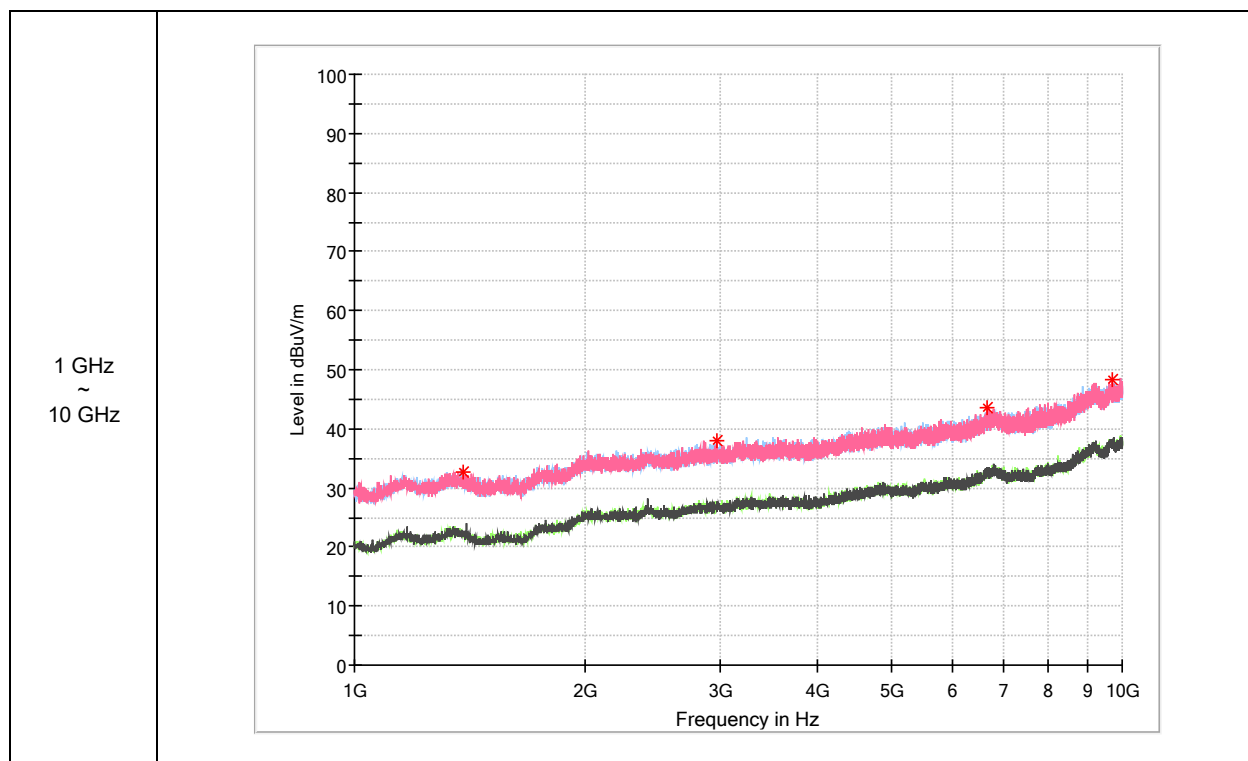
8.7.1. SPURIOUS RADIATION RESULTS

5G NR n5 15 MHz QPSK (1 Carrier) – 2TX

CH	Frequency	Measured Level (dBuV/m)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Gain (dB)	Pol.	Result	
							dBuV/m	dBm
No critical peak emissions were found.								

Note.

Data Result (dBm) = Measured Level + Ant. Factor + [Filter + Cable loss - Amp gain] - 95.2



Note. Only the worst case plot for Radiated Spurious Emissions.

END OF TEST REPORT