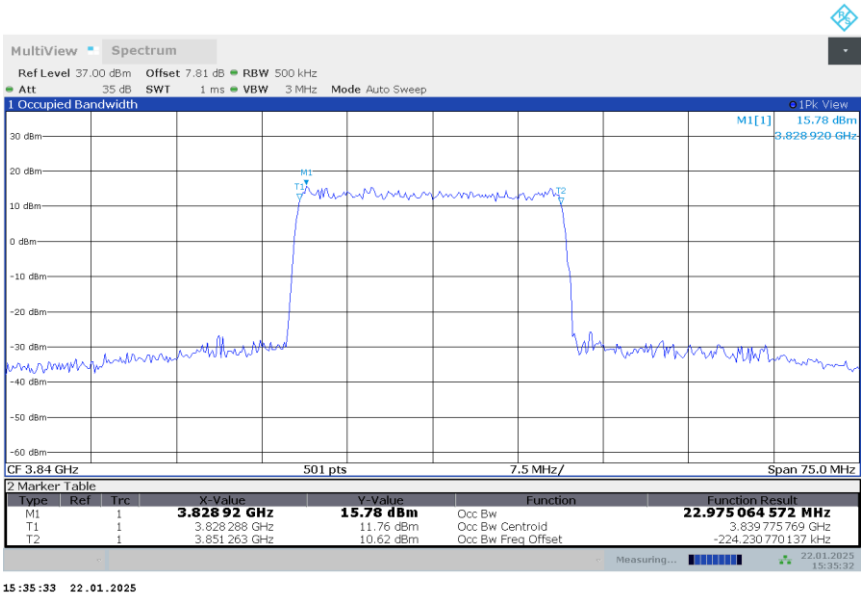
n77H,25MHz Bandwidth,DFT-s-16QAM (99% BW)



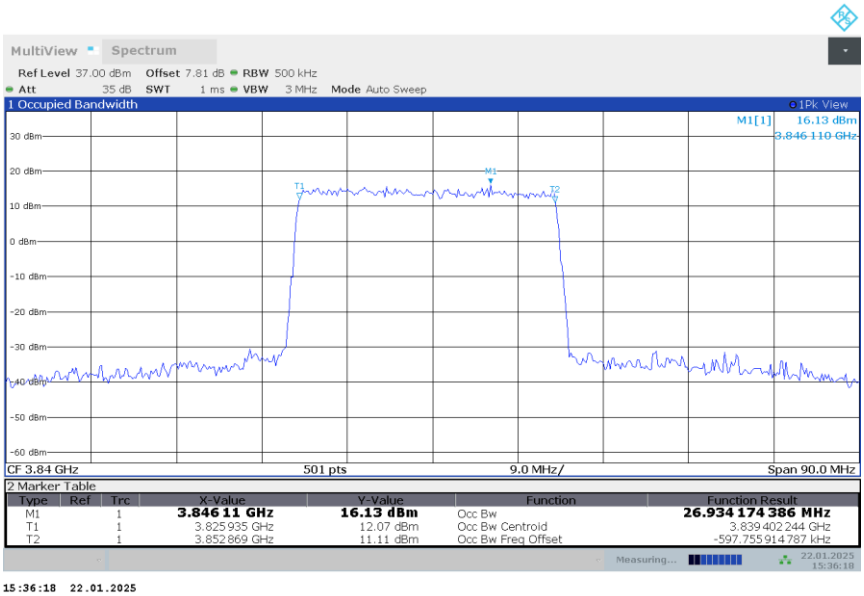
©Copyright. All rights reserved by CTTL.

n77H

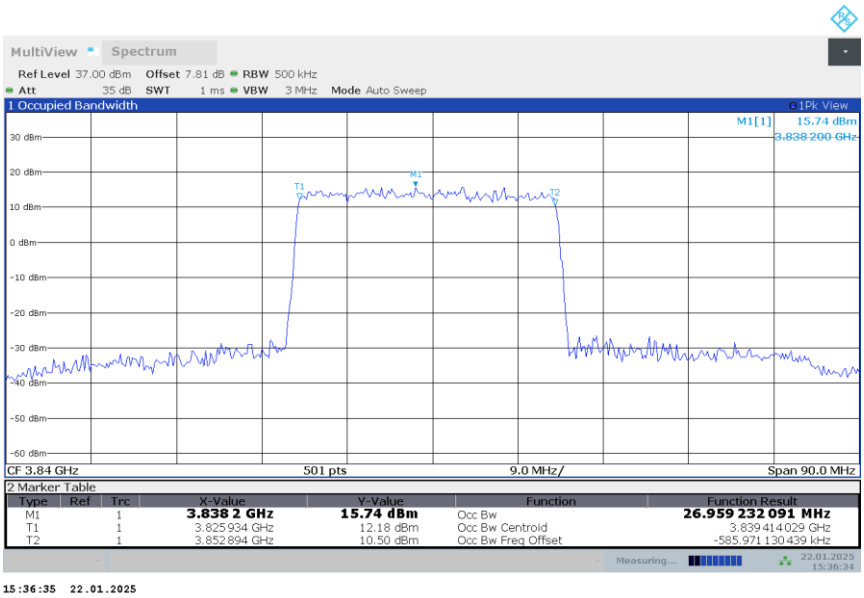
n77H,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	26.934	26.959	26.935

n77H,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

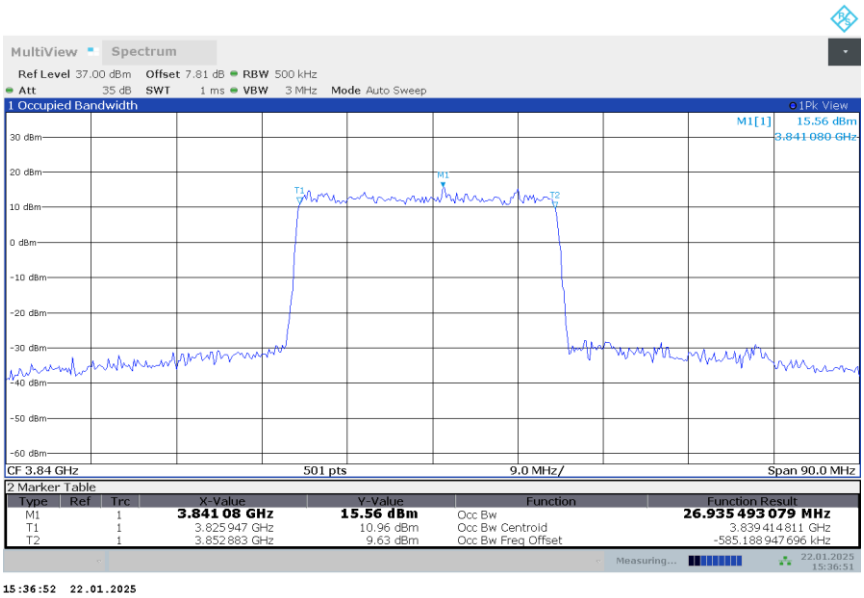


n77H,30MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,30MHz Bandwidth,DFT-s-16QAM (99% BW)



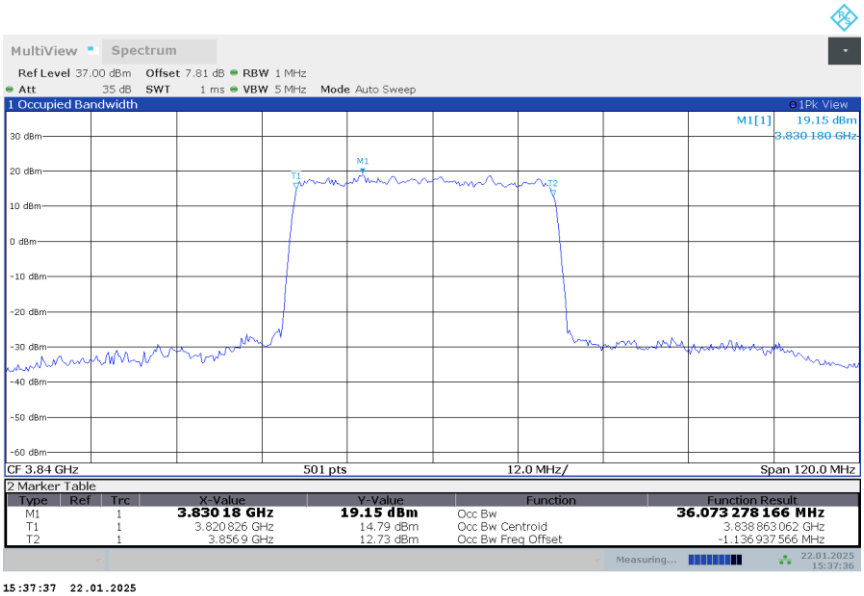
©Copyright. All rights reserved by CTTL.

n77H

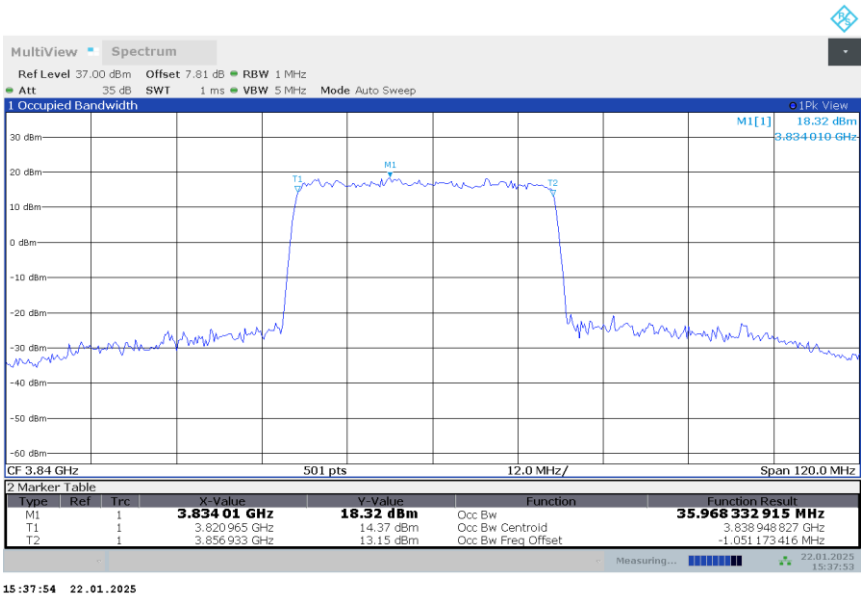
n77H,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	36.073	35.968	36.105

n77H,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

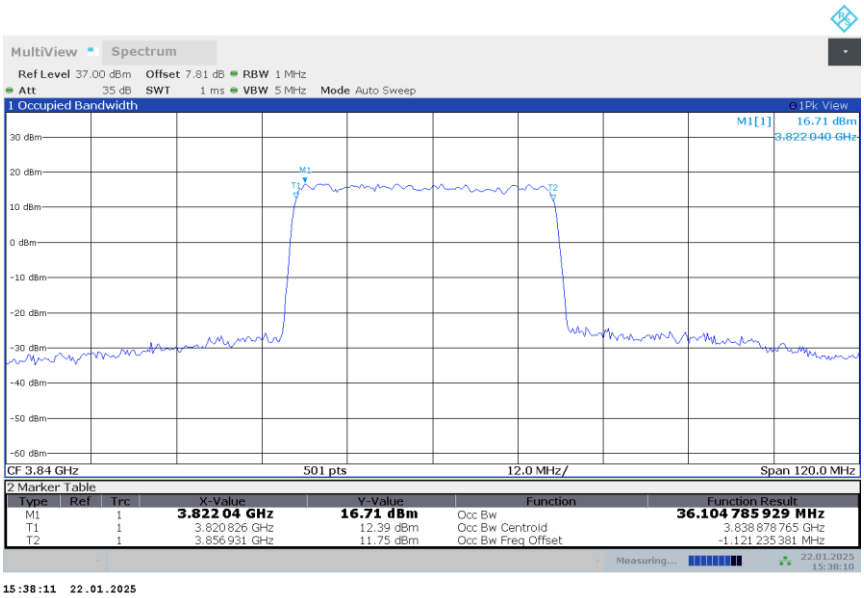


n77H,40MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,40MHz Bandwidth,DFT-s-16QAM (99% BW)



15:38:11 22.01.2025

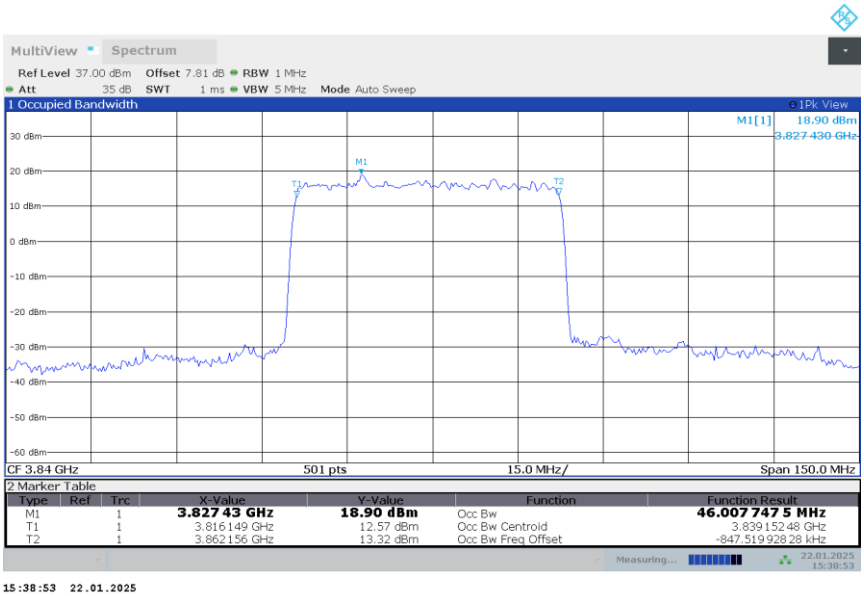
©Copyright. All rights reserved by CTTL.

n77H

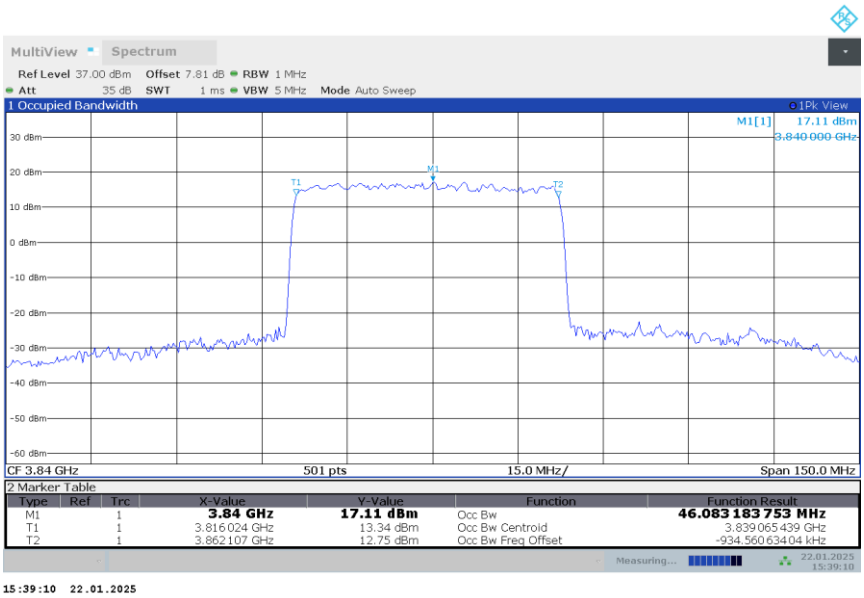
n77H,50MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	46.008	46.083	45.904

n77H,50MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

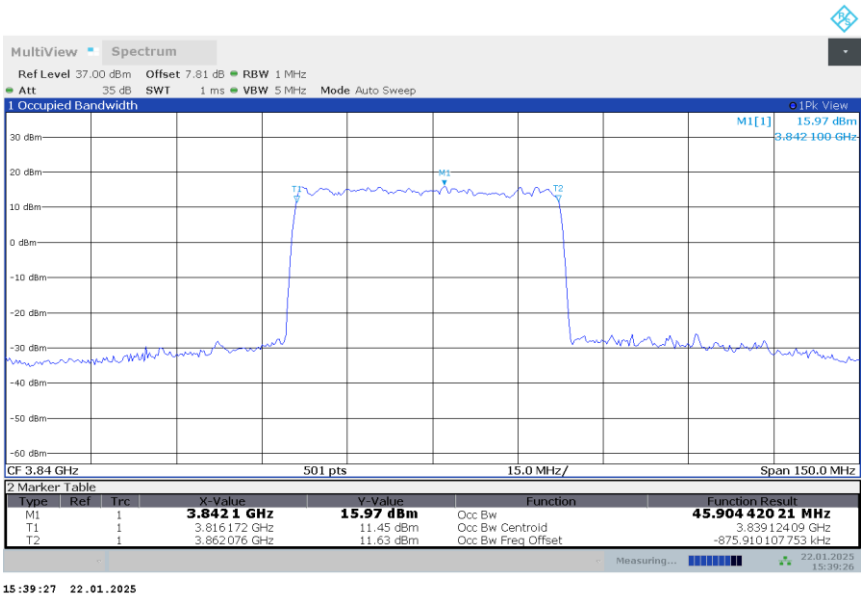


n77H,50MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,50MHz Bandwidth,DFT-s-16QAM (99% BW)



15:39:27 22.01.2025

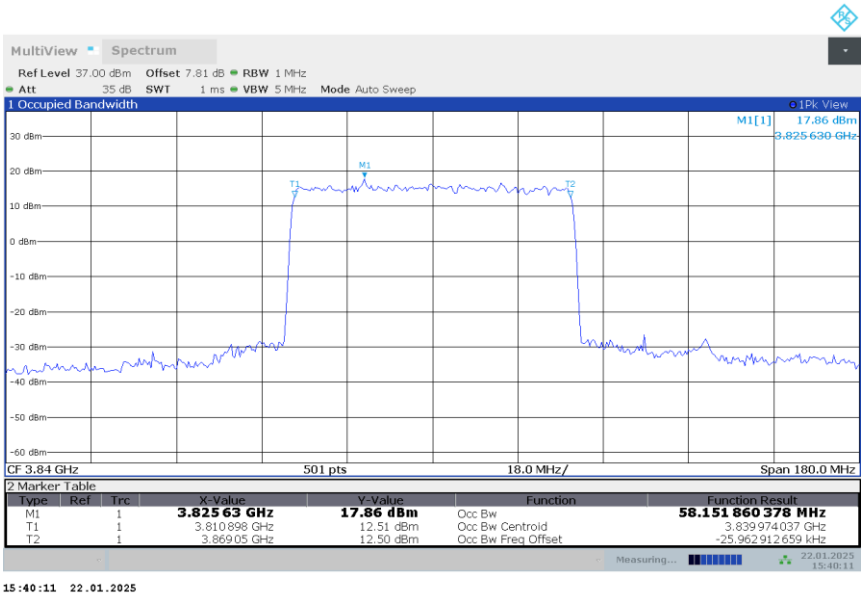
©Copyright. All rights reserved by CTTL.

n77H

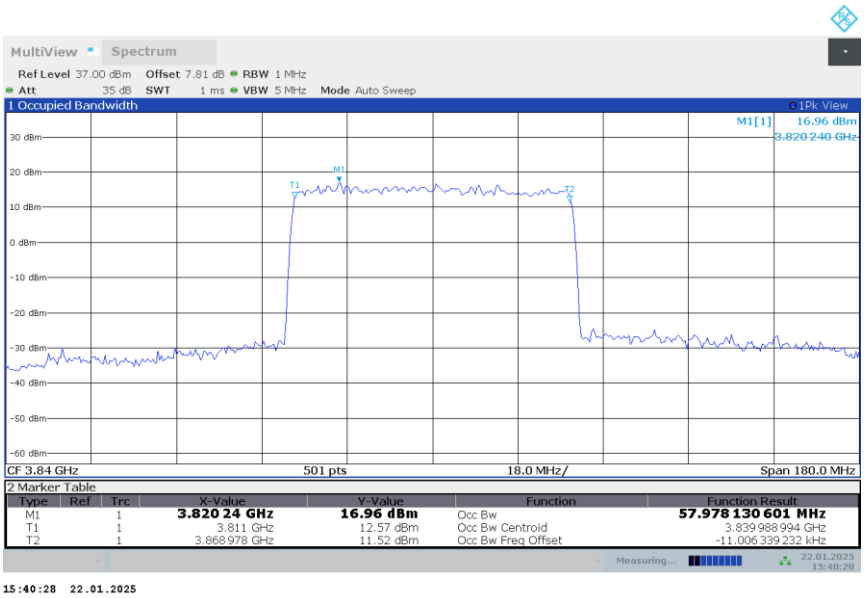
n77H,60MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	58.152	57.978	58.021

n77H,60MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

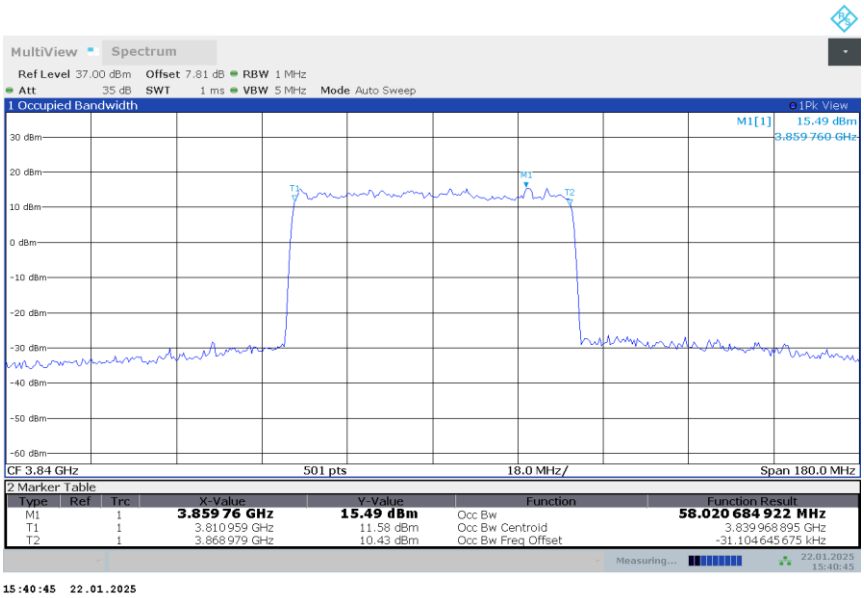


n77H,60MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,60MHz Bandwidth,DFT-s-16QAM (99% BW)



15:40:45 22.01.2025

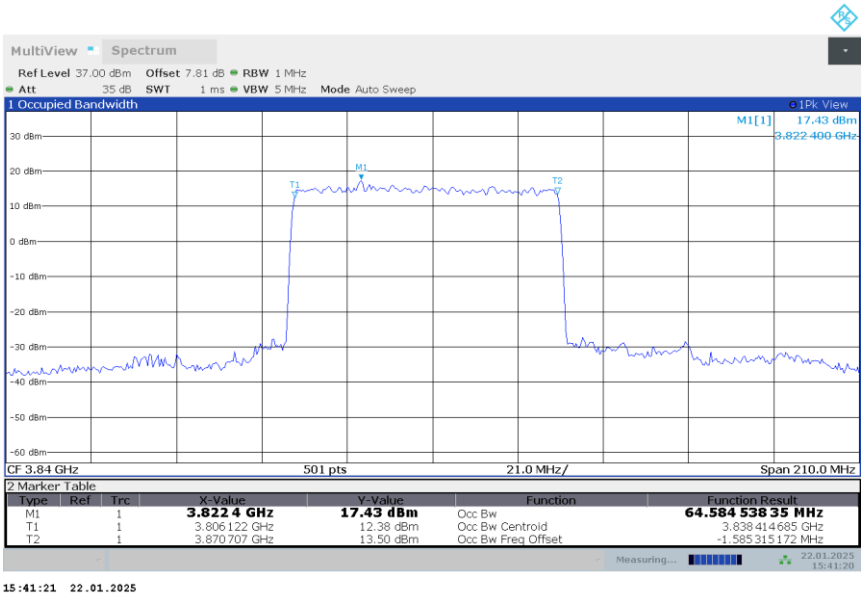
©Copyright. All rights reserved by CTTL.

n77H

n77H,70MHz(99%)

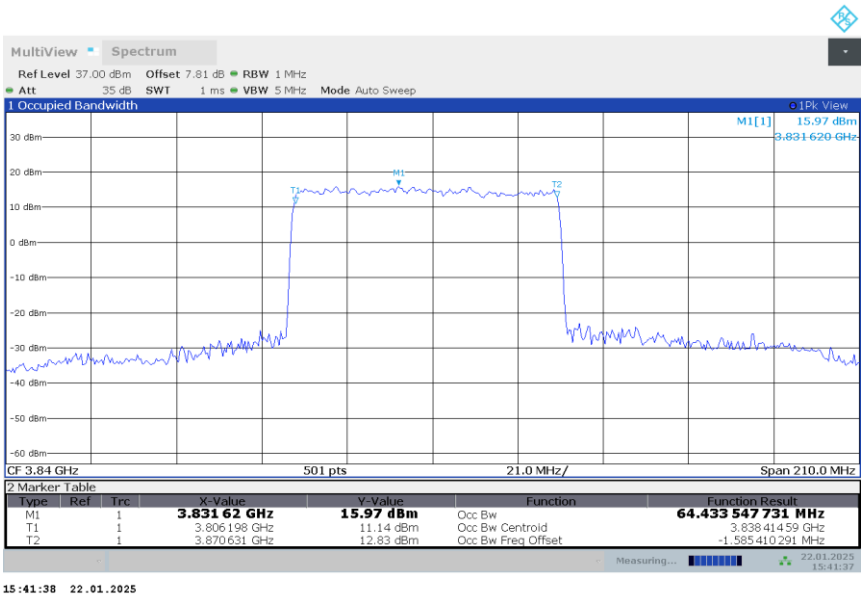
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	64.585	64.434	64.535

n77H,70MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



15:41:21 22.01.2025

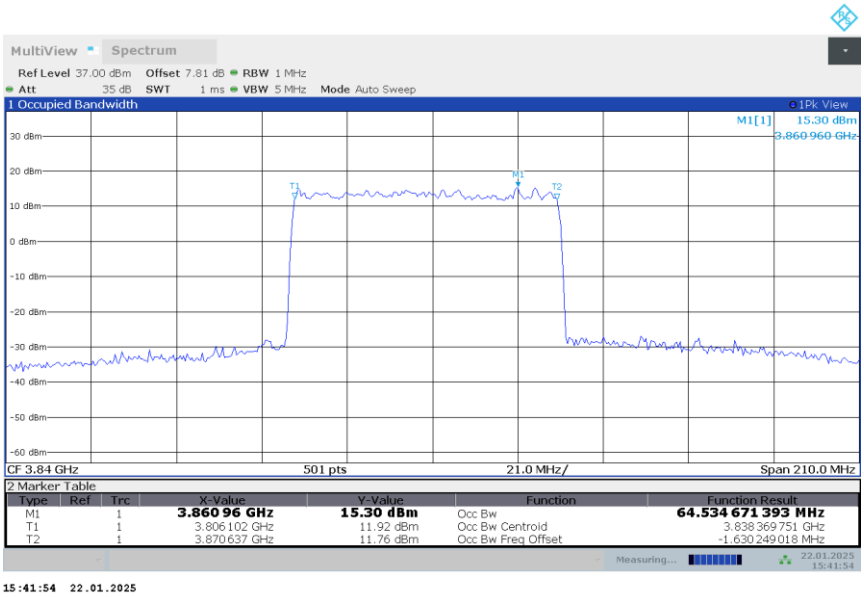
n77H,70MHz Bandwidth,DFT-s-QPSK (99% BW)



15:41:38 22.01.2025

©Copyright. All rights reserved by CTTL.

n77H,70MHz Bandwidth,DFT-s-16QAM (99% BW)



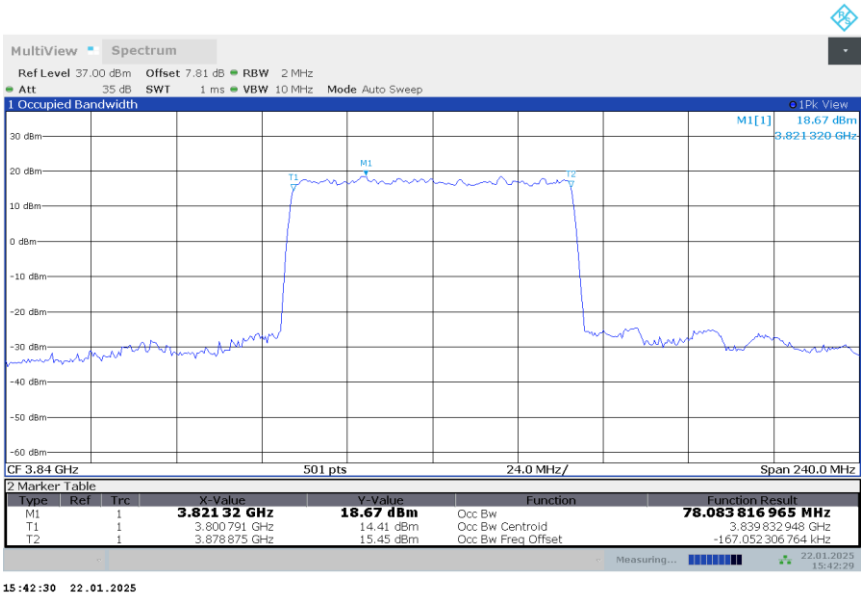
©Copyright. All rights reserved by CTTL.

n77H

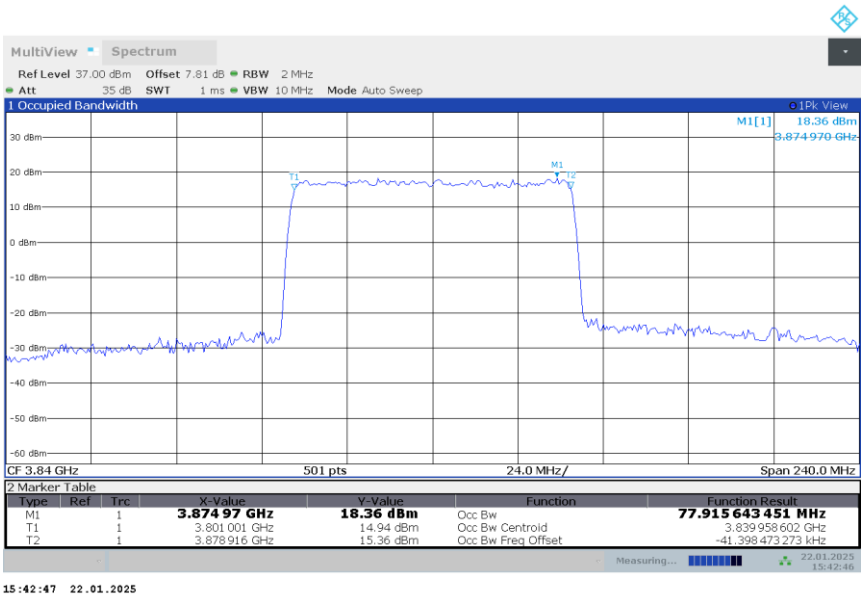
n77H,80MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	78.084	77.916	77.796

n77H,80MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

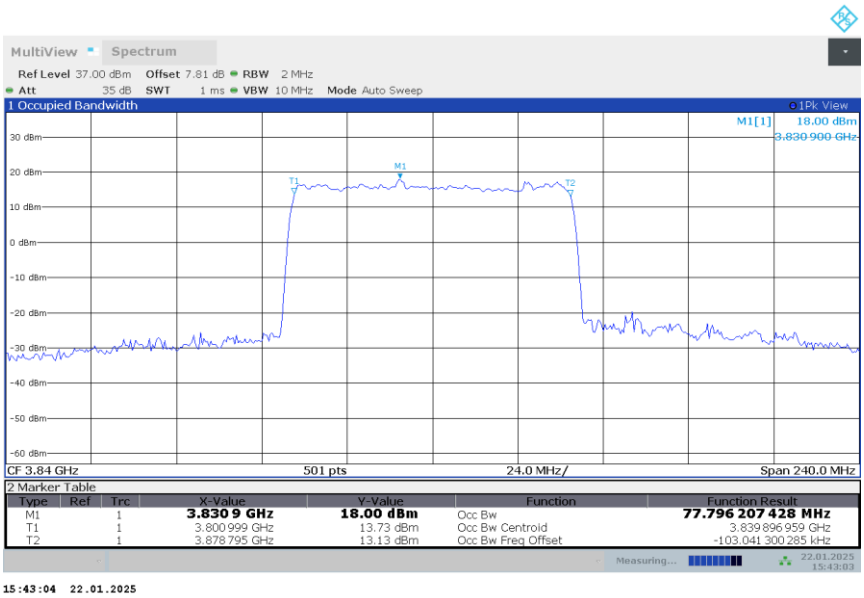


n77H,80MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,80MHz Bandwidth,DFT-s-16QAM (99% BW)



15:43:04 22.01.2025

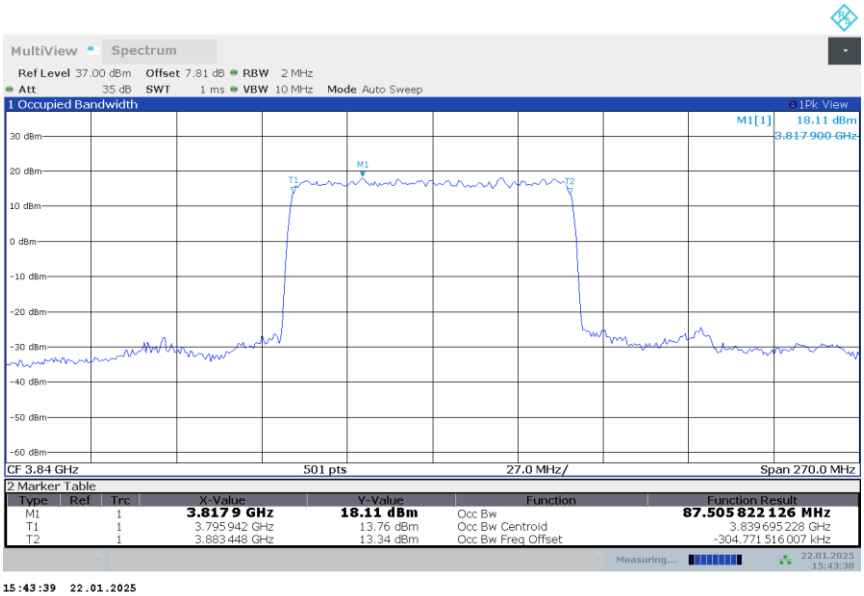
©Copyright. All rights reserved by CTTL.

n77H

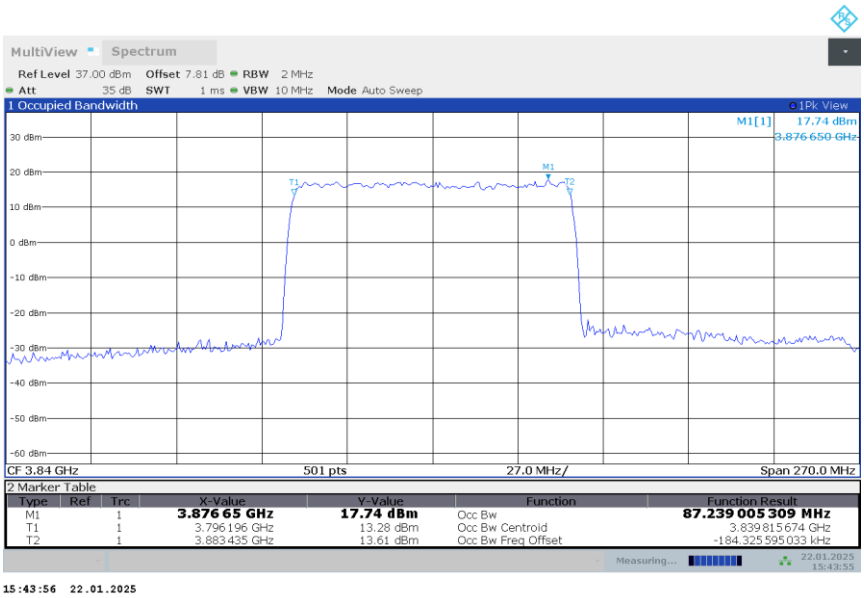
n77H,90MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	87.506	87.239	87.247

n77H,90MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

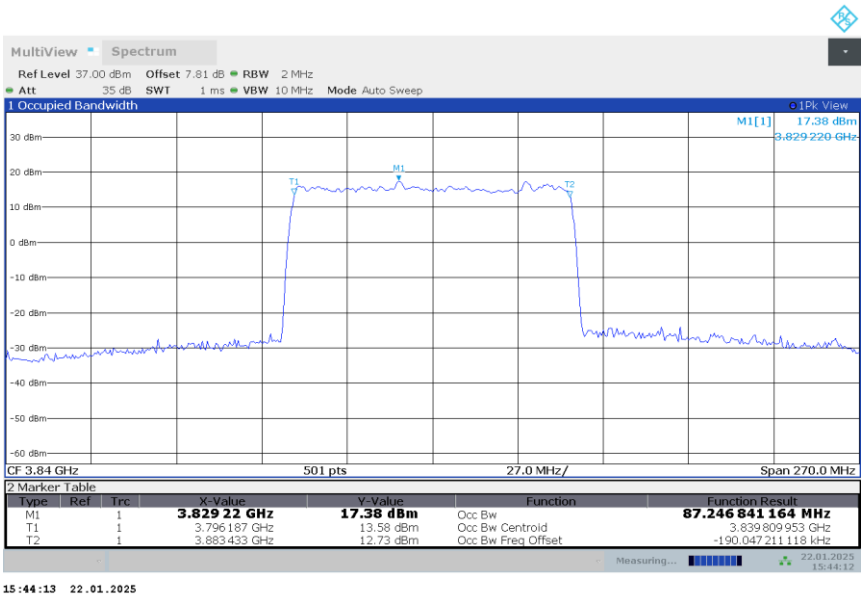


n77H,90MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n77H,90MHz Bandwidth,DFT-s-16QAM (99% BW)



15:44:13 22.01.2025

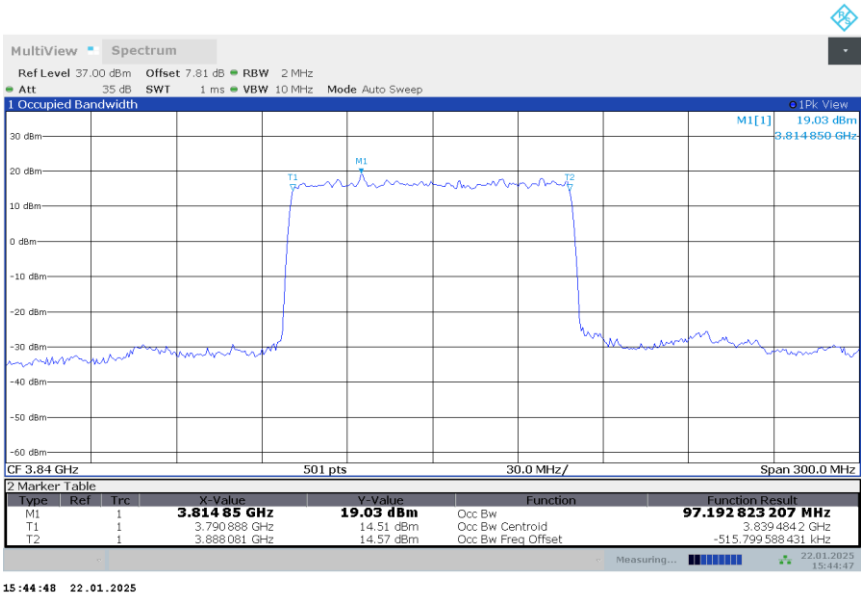
©Copyright. All rights reserved by CTTL.

n77H

n77H,100MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3840	97.193	96.817	96.920

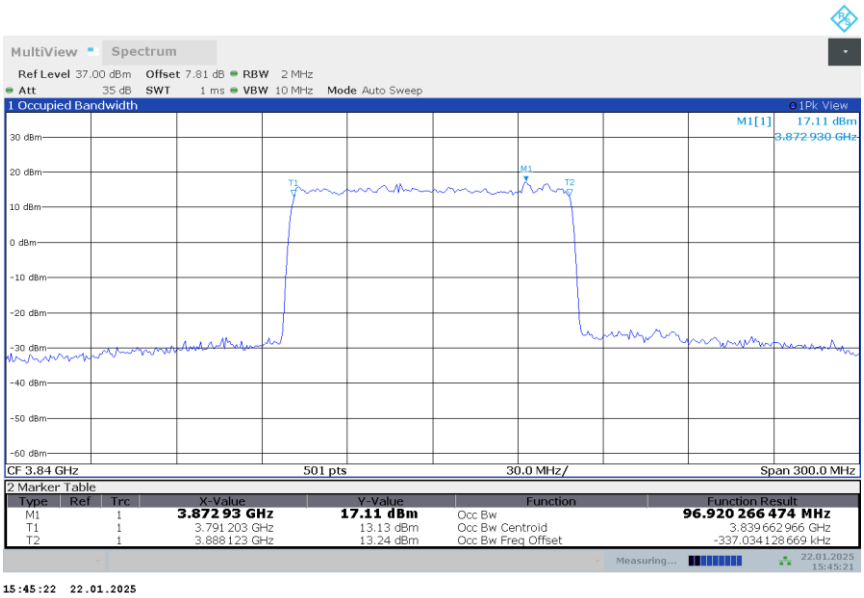
n77H,100MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



n77H,100MHz Bandwidth,DFT-s-QPSK (99% BW)

©Copyright. All rights reserved by CTTL.

n77H,100MHz Bandwidth,DFT-s-16QAM (99% BW)



15:45:22 22.01.2025

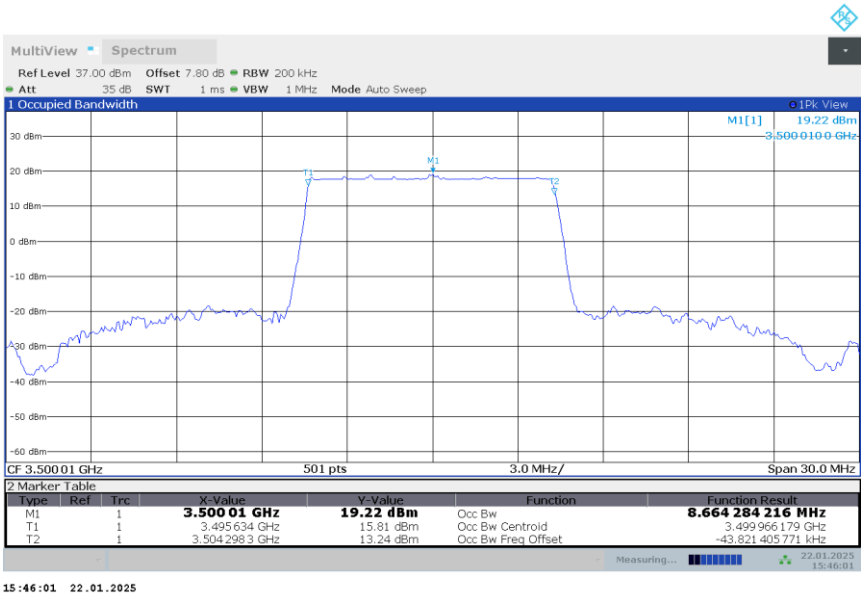
©Copyright. All rights reserved by CTTL.

n78L

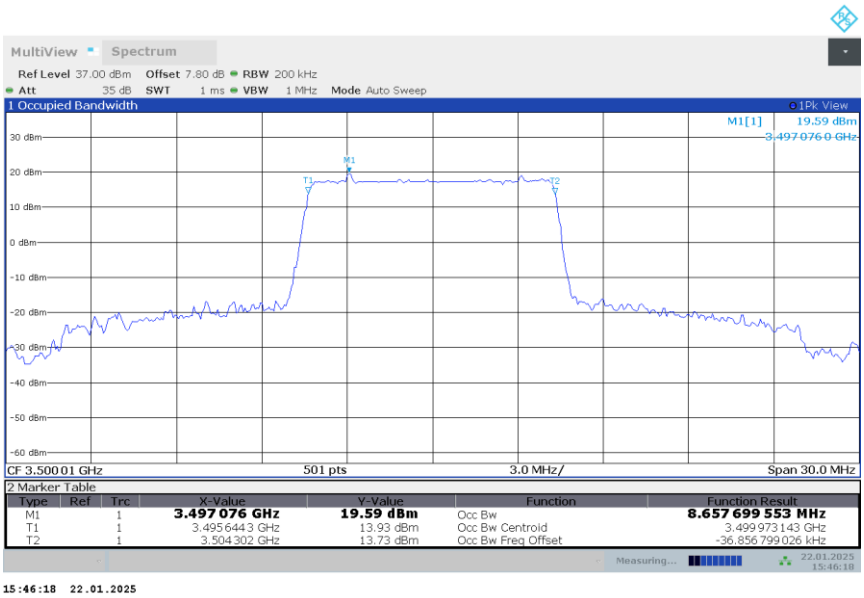
n78L,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	8.664	8.658	8.614

n78L,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

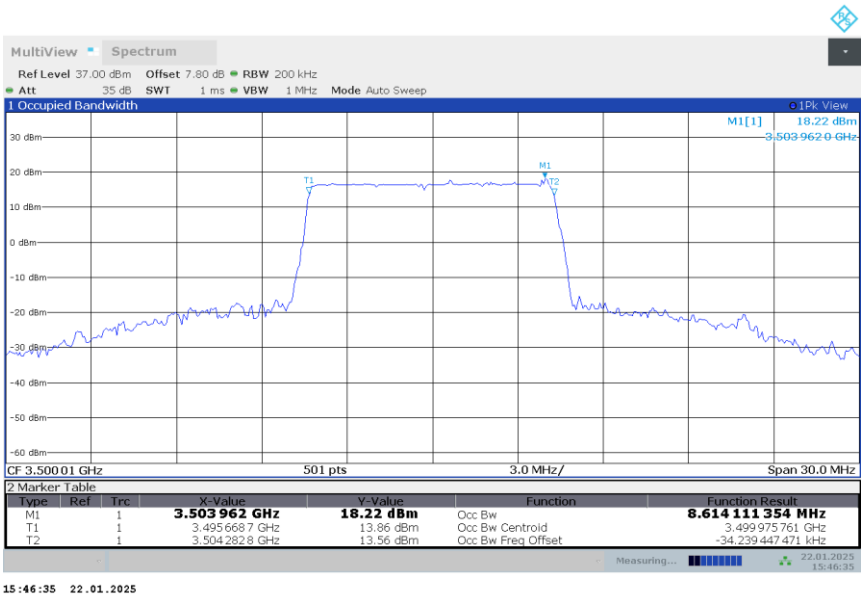


n78L,10MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,10MHz Bandwidth,DFT-s-16QAM (99% BW)



15:46:35 22.01.2025

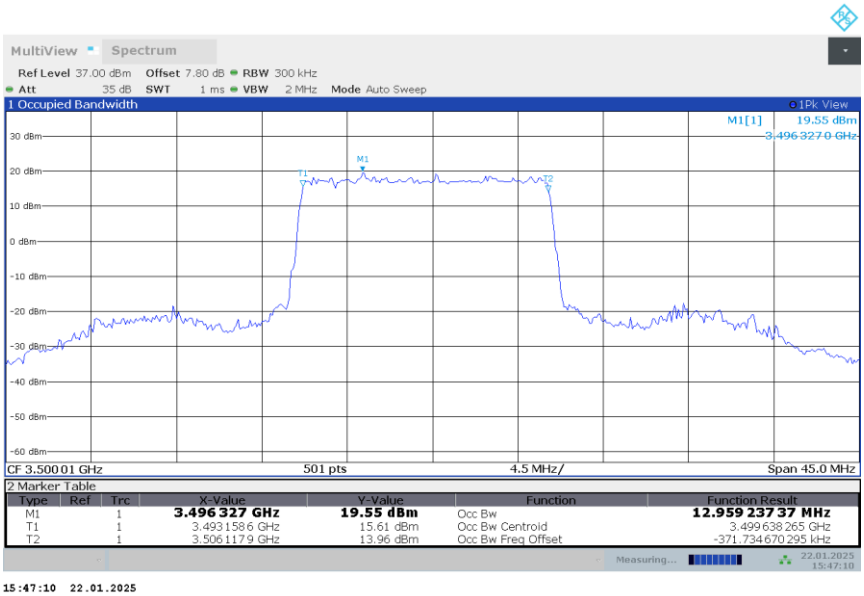
©Copyright. All rights reserved by CTTL.

n78L

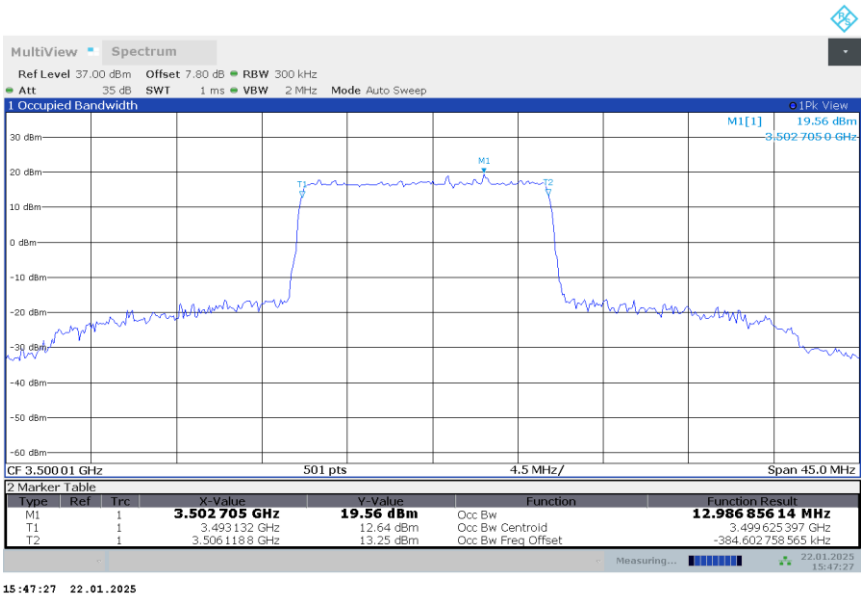
n78L,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	12.959	12.987	13.007

n78L,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

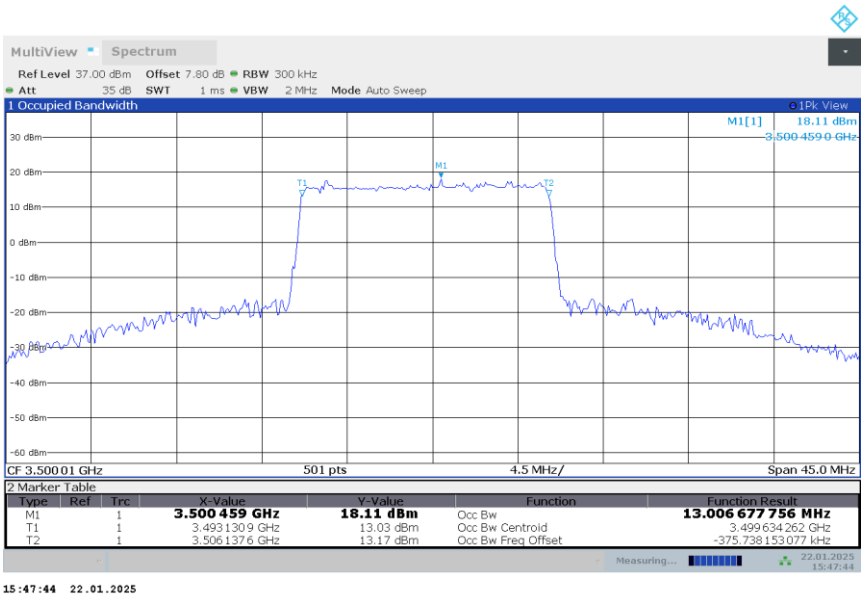


n78L,15MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,15MHz Bandwidth,DFT-s-16QAM (99% BW)



15:47:44 22.01.2025

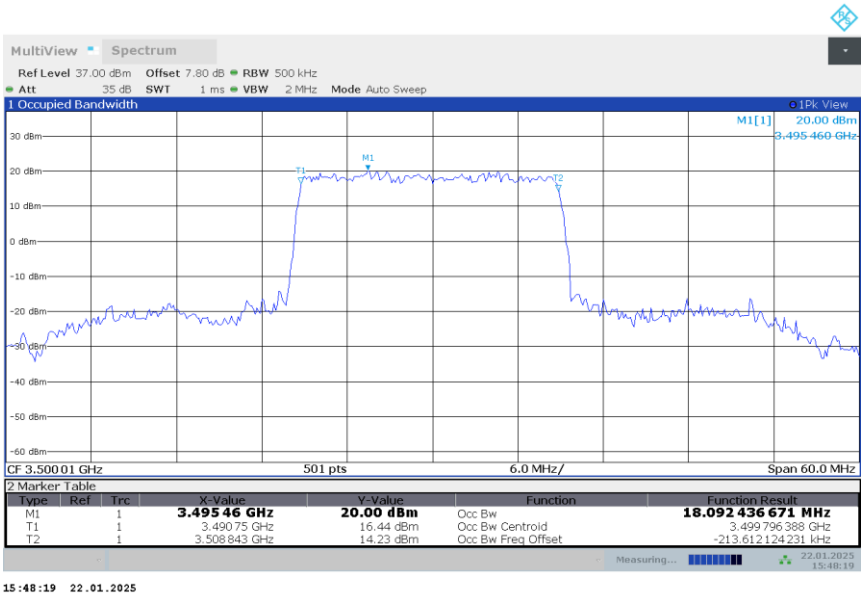
©Copyright. All rights reserved by CTTL.

n78L

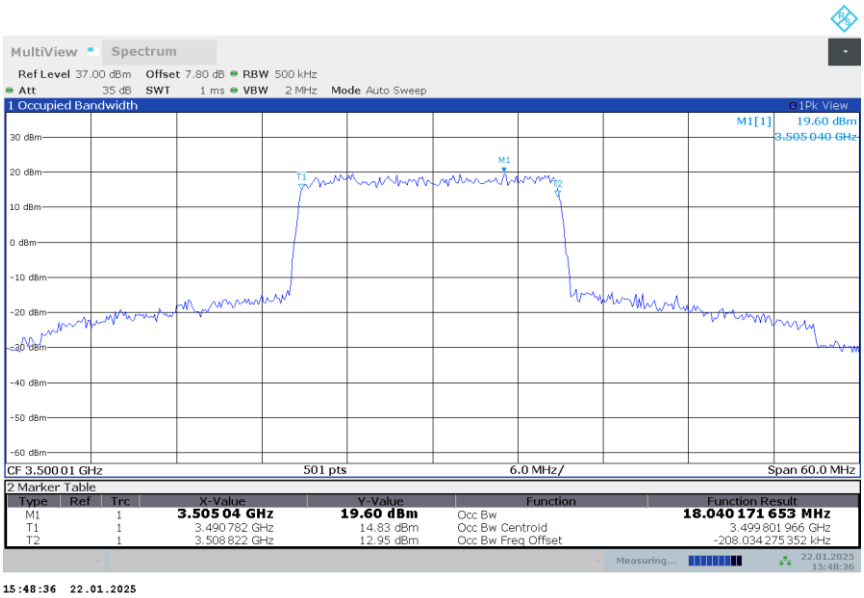
n78L,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	18.092	18.040	18.113

n78L,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

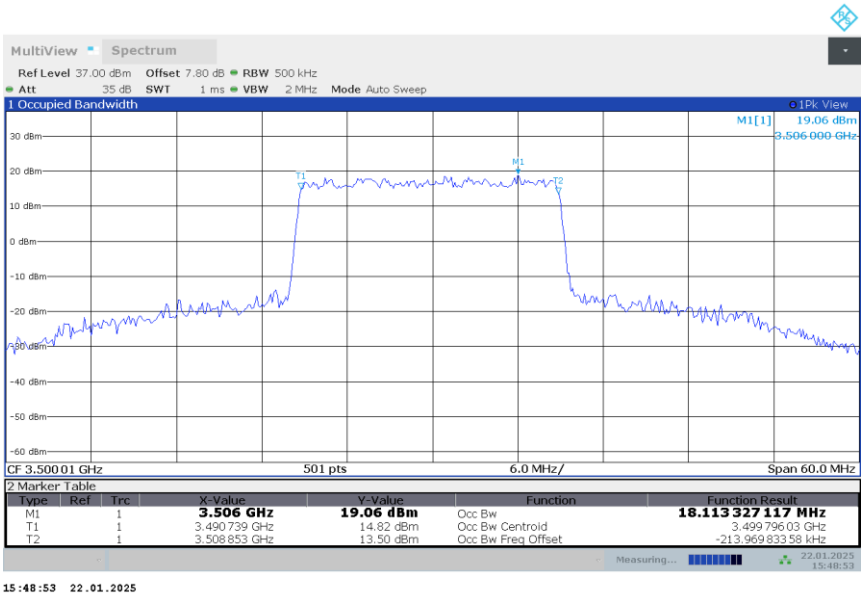


n78L,20MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,20MHz Bandwidth,DFT-s-16QAM (99% BW)



15:48:53 22.01.2025

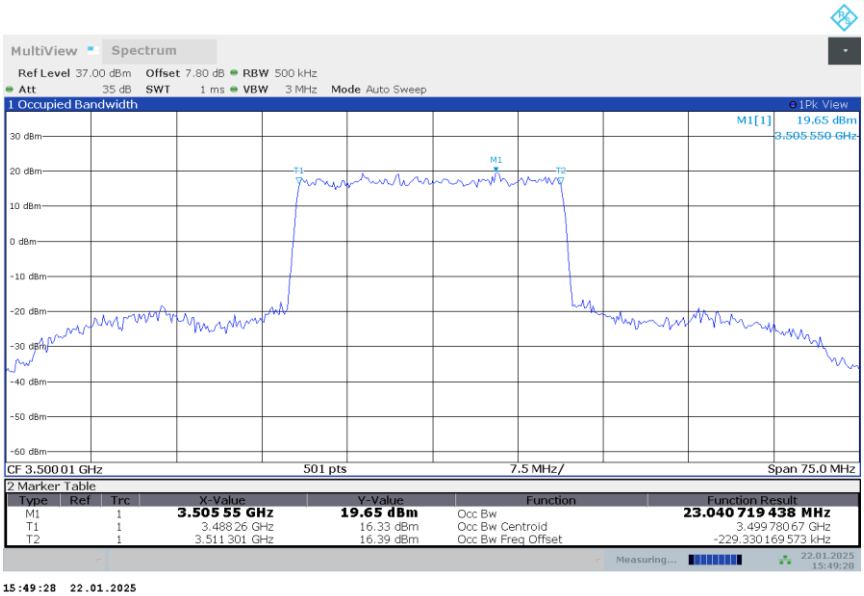
©Copyright. All rights reserved by CTTL.

n78L

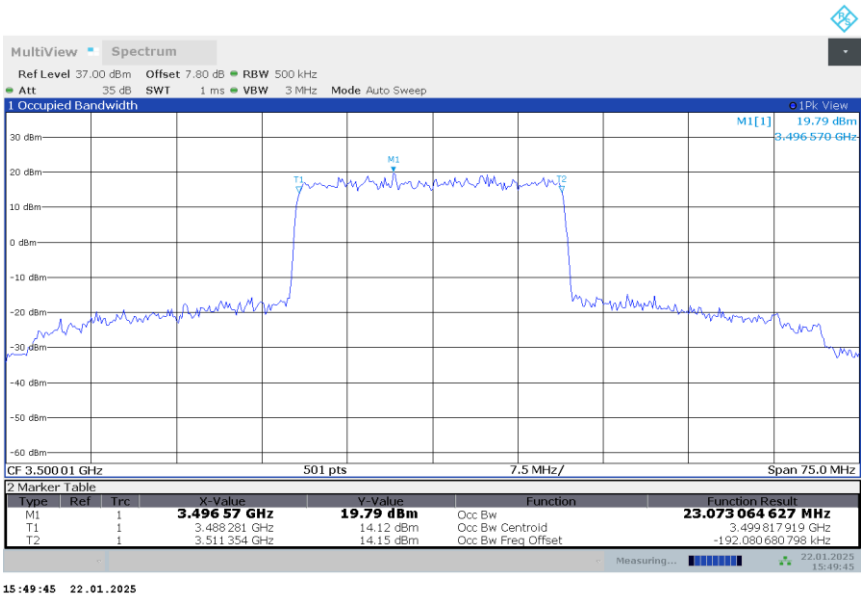
n78L,25MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	23.041	23.073	23.074

n78L,25MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

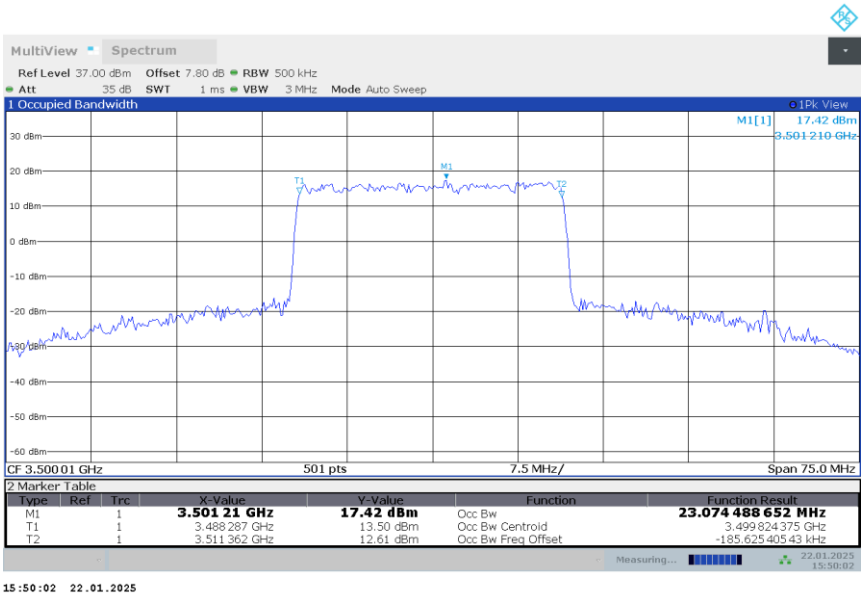


n78L,25MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,25MHz Bandwidth,DFT-s-16QAM (99% BW)



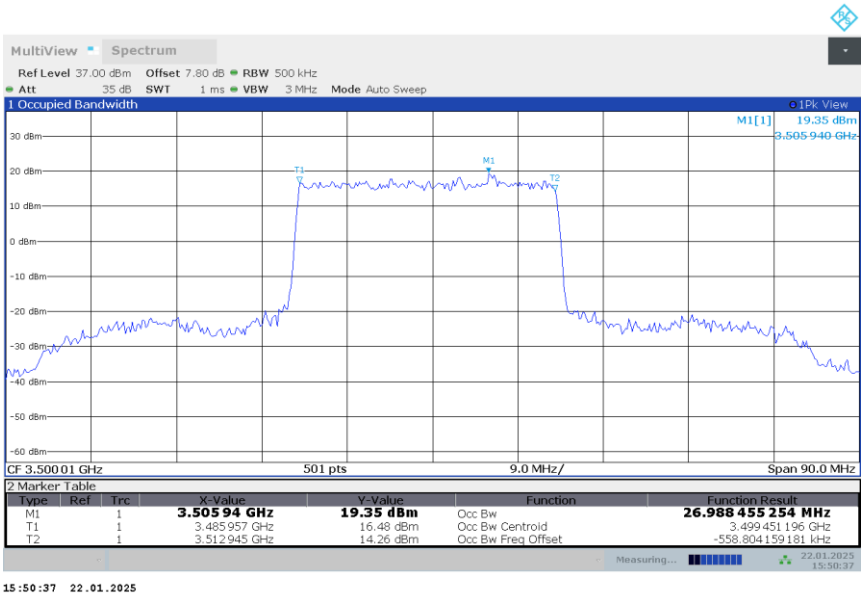
©Copyright. All rights reserved by CTTL.

n78L

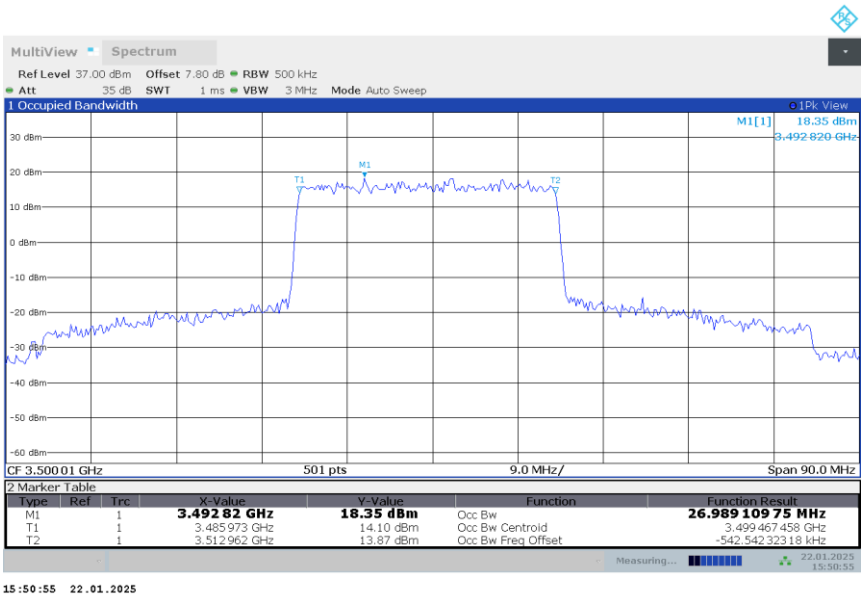
n78L,30MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	26.988	26.989	26.976

n78L,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

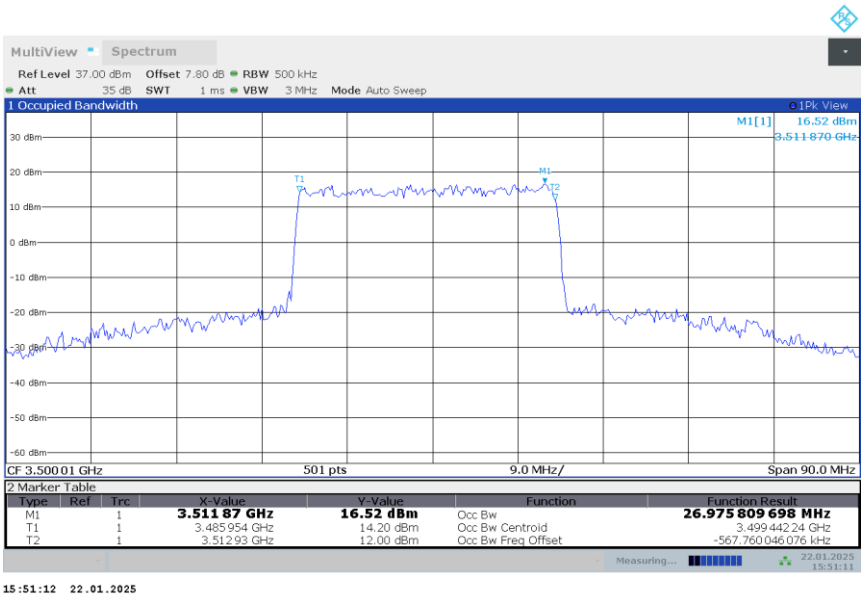


n78L,30MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,30MHz Bandwidth,DFT-s-16QAM (99% BW)



15:51:12 22.01.2025

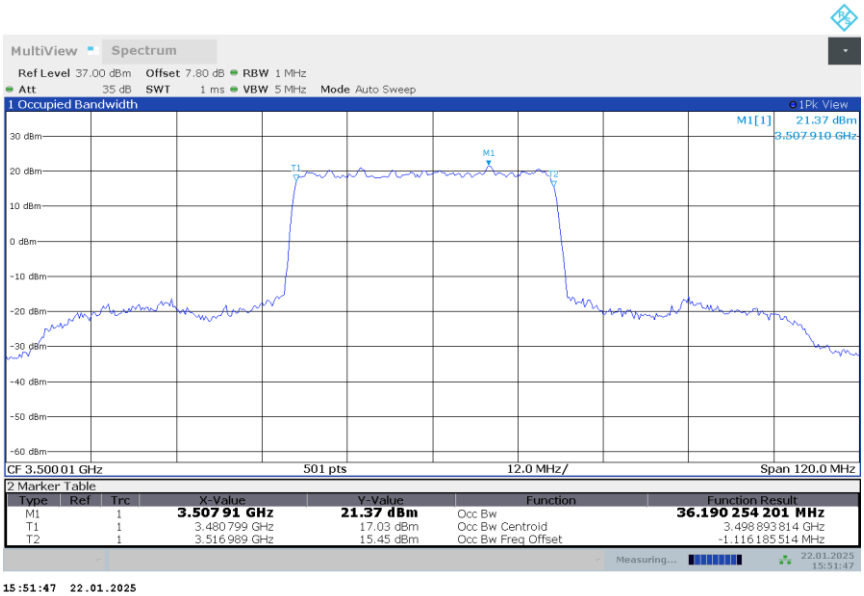
©Copyright. All rights reserved by CTTL.

n78L

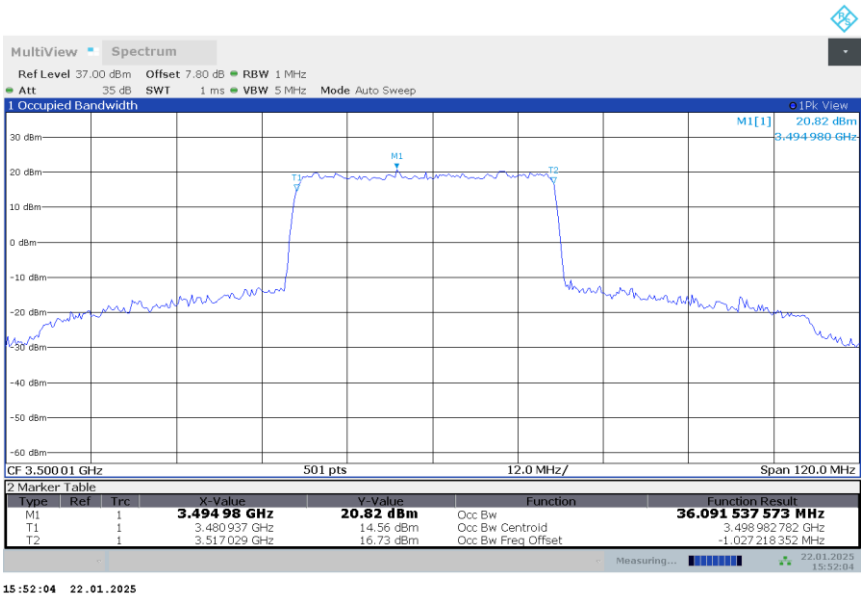
n78L,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	36.190	36.092	36.184

n78L,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

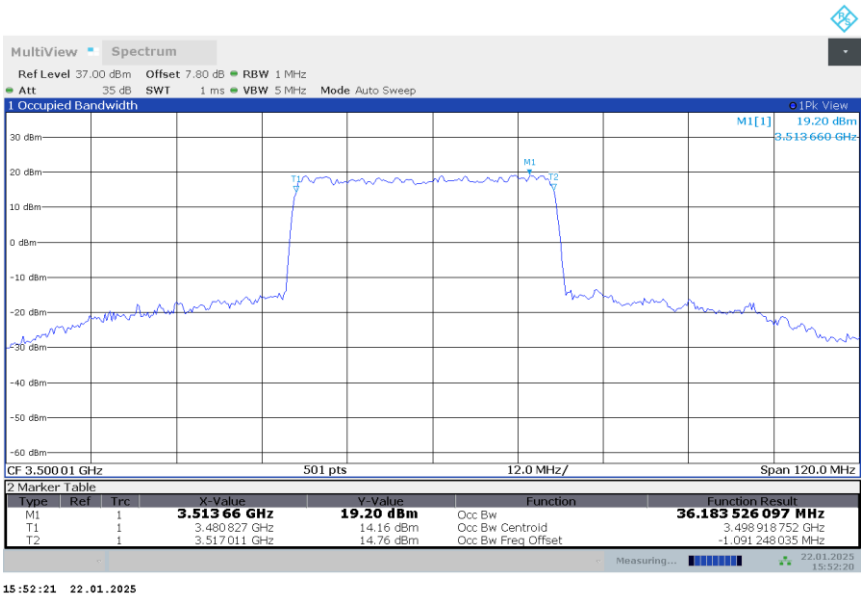


n78L,40MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,40MHz Bandwidth,DFT-s-16QAM (99% BW)



15:52:21 22.01.2025

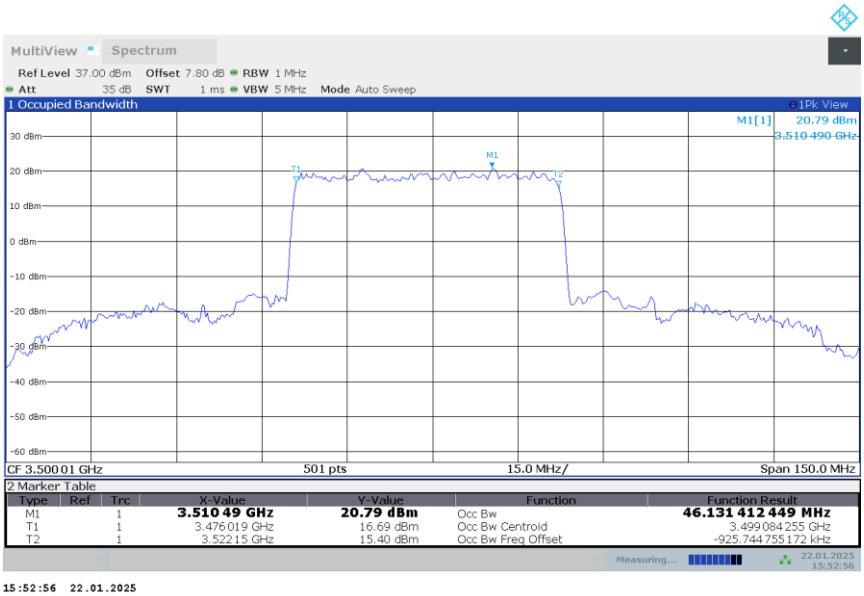
©Copyright. All rights reserved by CTTL.

n78L

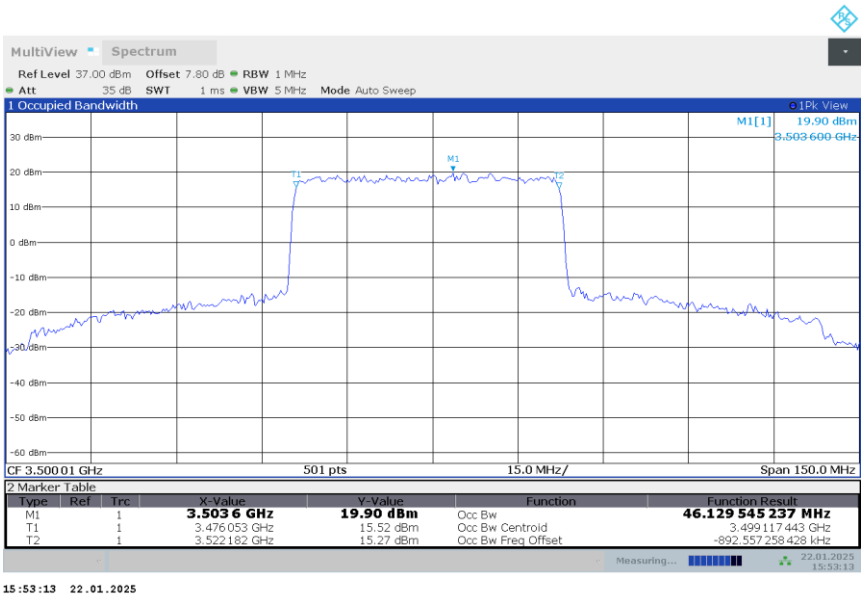
n78L,50MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	46.131	46.130	46.020

n78L,50MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

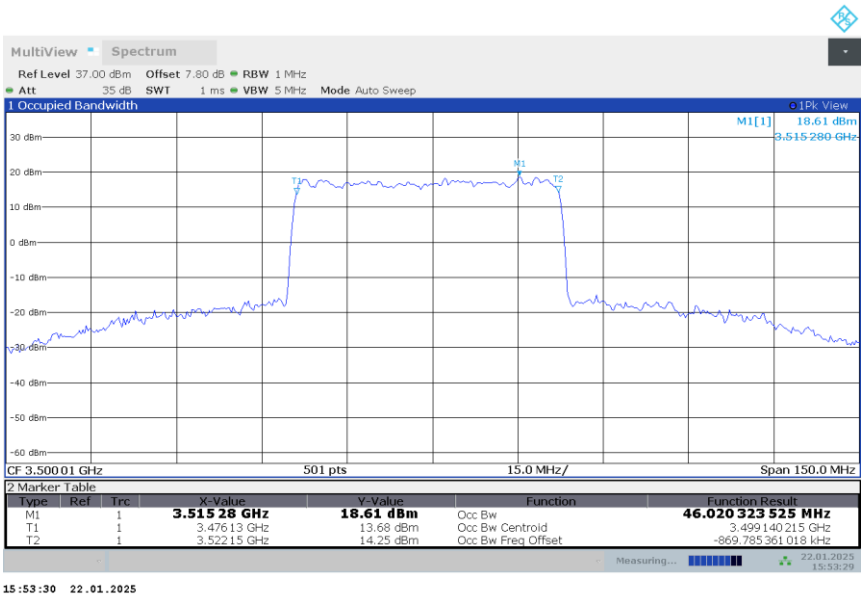


n78L,50MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,50MHz Bandwidth,DFT-s-16QAM (99% BW)



15:53:30 22.01.2025

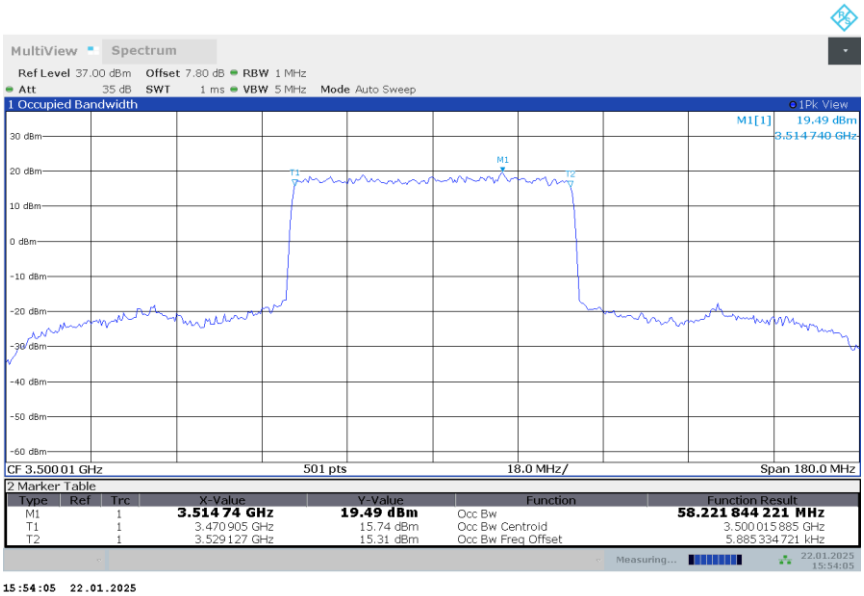
©Copyright. All rights reserved by CTTL.

n78L

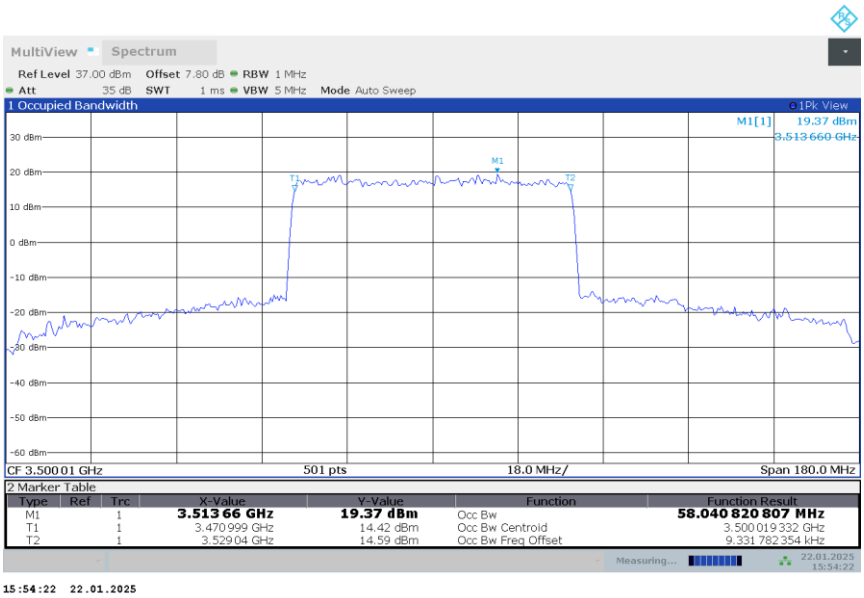
n78L,60MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	58.222	58.041	58.142

n78L,60MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

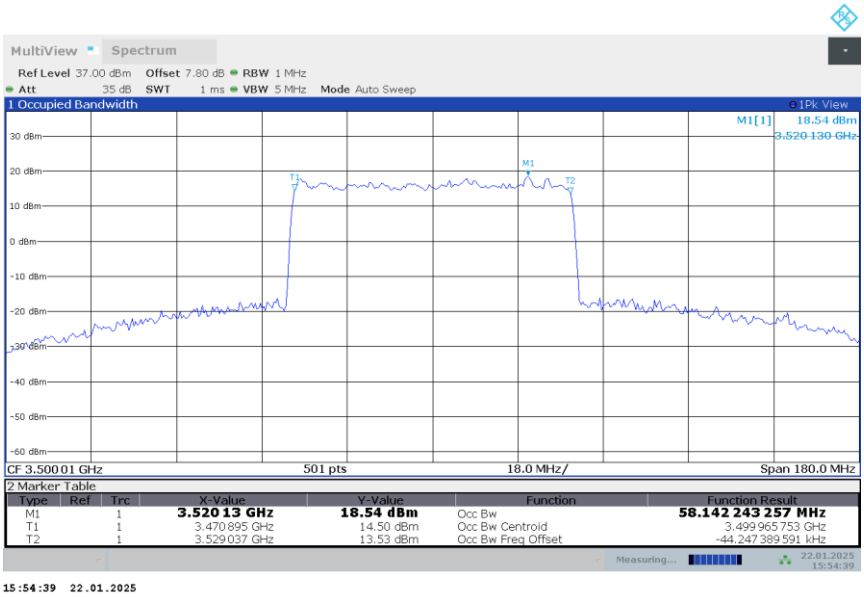


n78L,60MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,60MHz Bandwidth,DFT-s-16QAM (99% BW)



15:54:39 22.01.2025

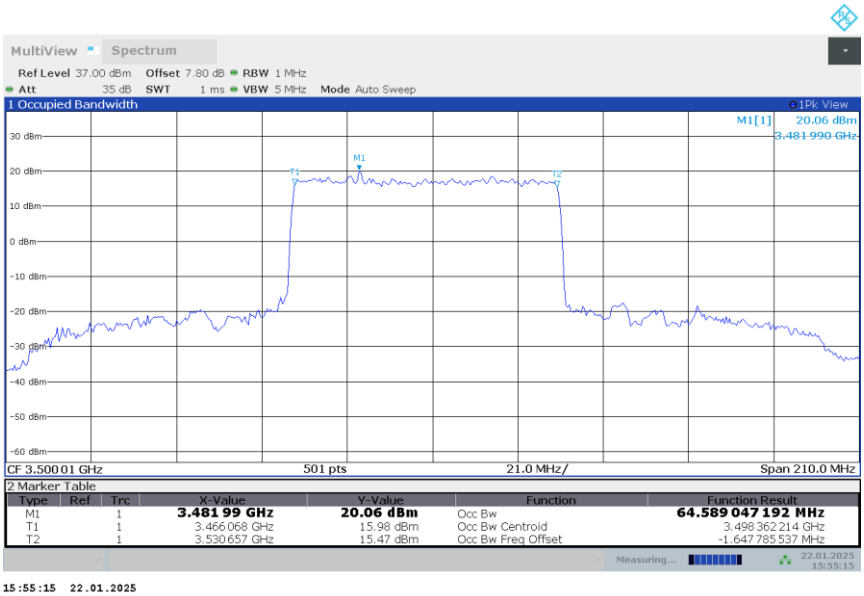
©Copyright. All rights reserved by CTTL.

n78L

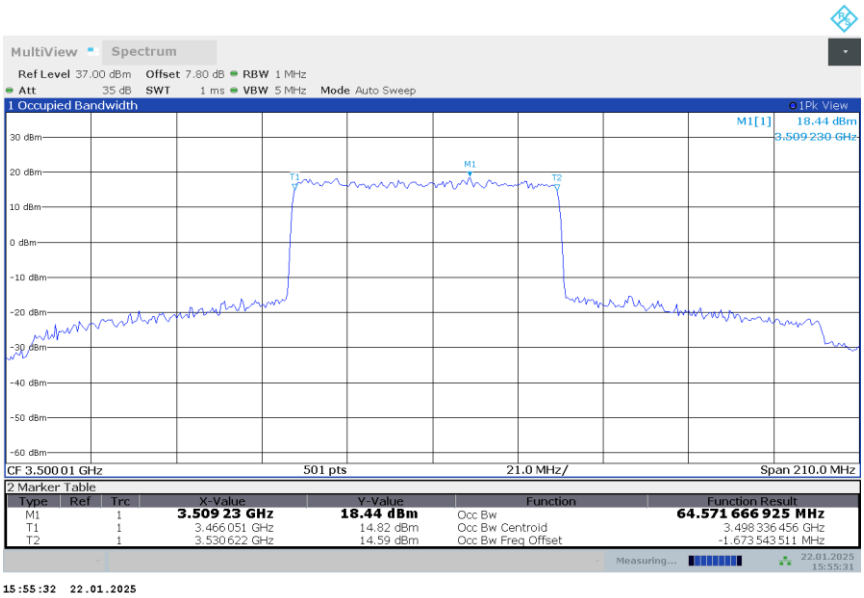
n78L,70MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	64.589	64.572	64.488

n78L,70MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

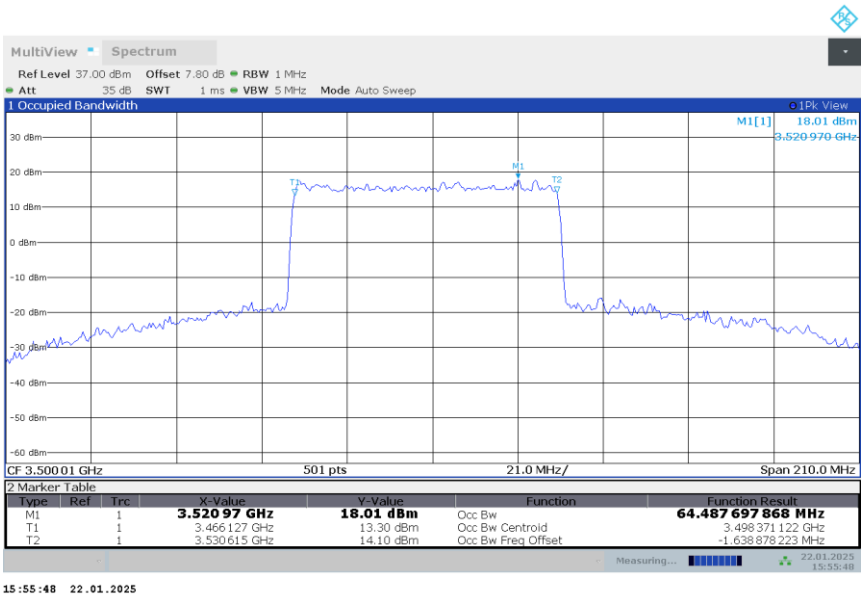


n78L,70MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,70MHz Bandwidth,DFT-s-16QAM (99% BW)



15:55:48 22.01.2025

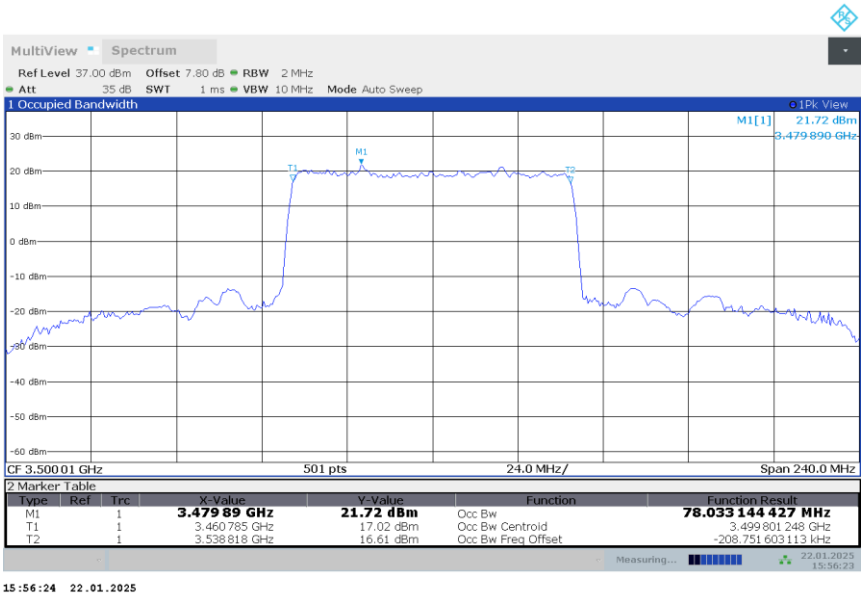
©Copyright. All rights reserved by CTTL.

n78L

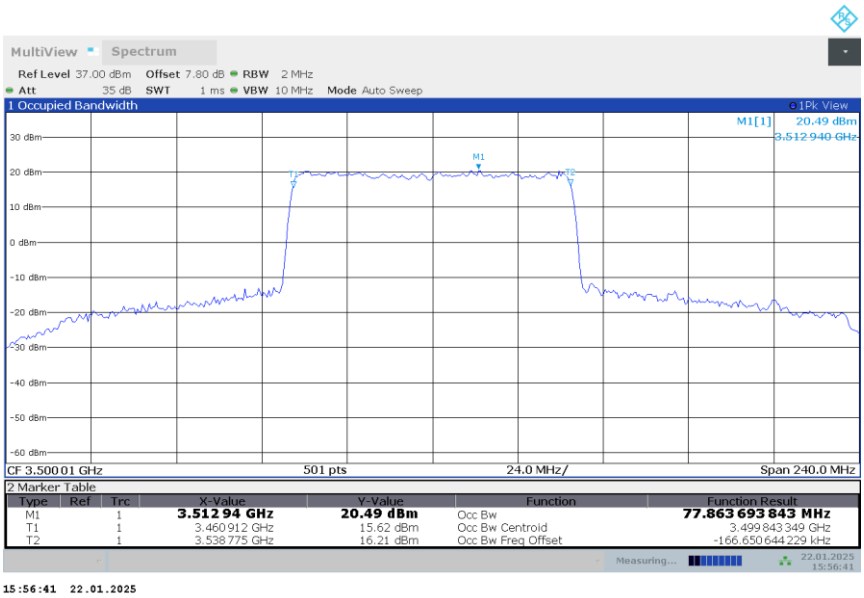
n78L,80MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	78.033	77.864	78.033

n78L,80MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

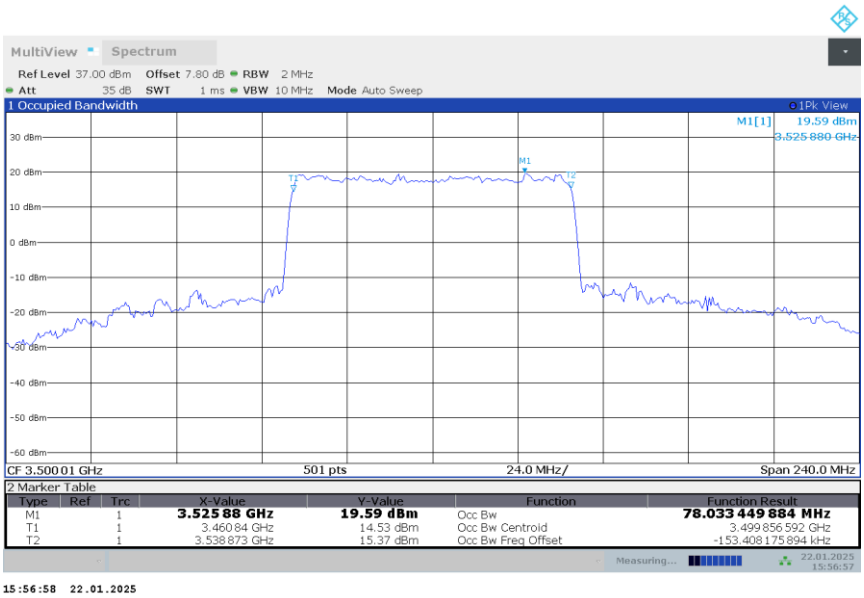


n78L,80MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,80MHz Bandwidth,DFT-s-16QAM (99% BW)



15:56:58 22.01.2025

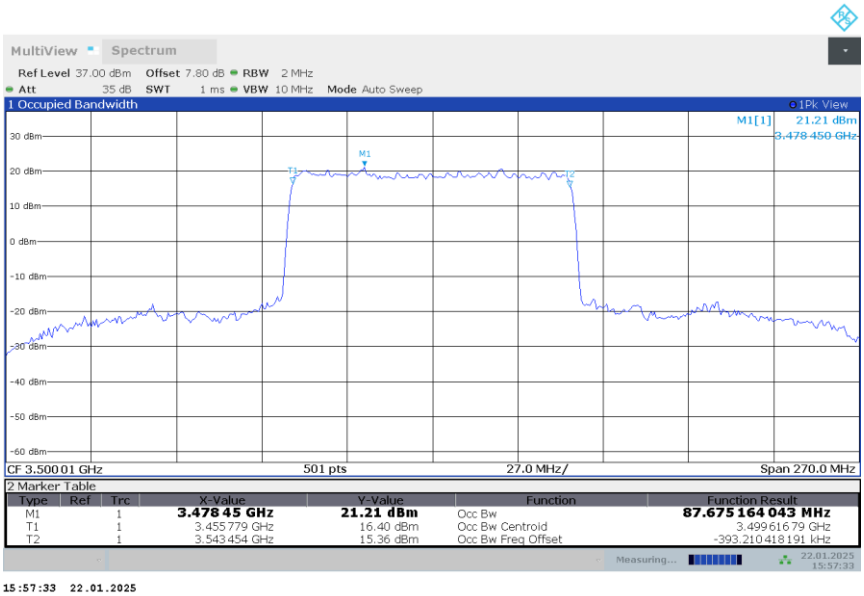
©Copyright. All rights reserved by CTTL.

n78L

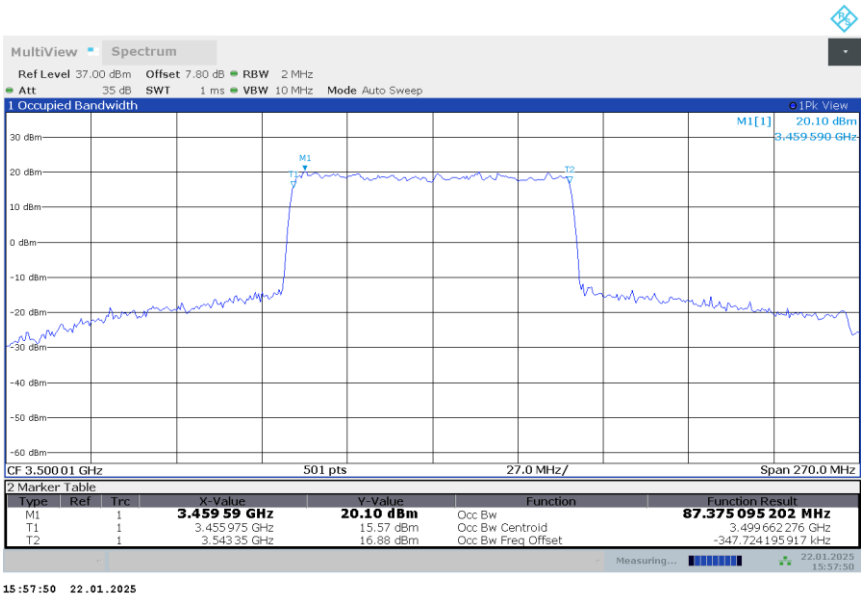
n78L,90MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	87.675	87.375	87.365

n78L,90MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

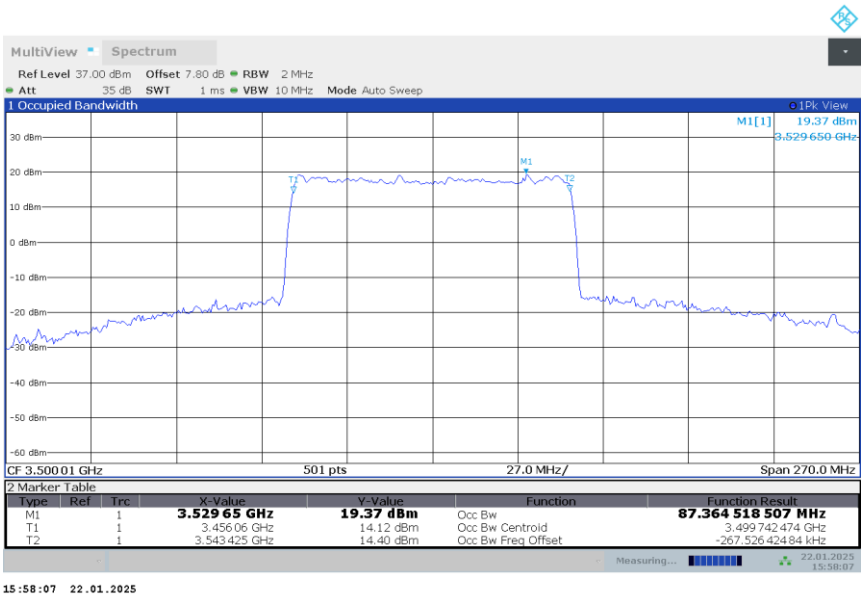


n78L,90MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,90MHz Bandwidth,DFT-s-16QAM (99% BW)



15:58:07 22.01.2025

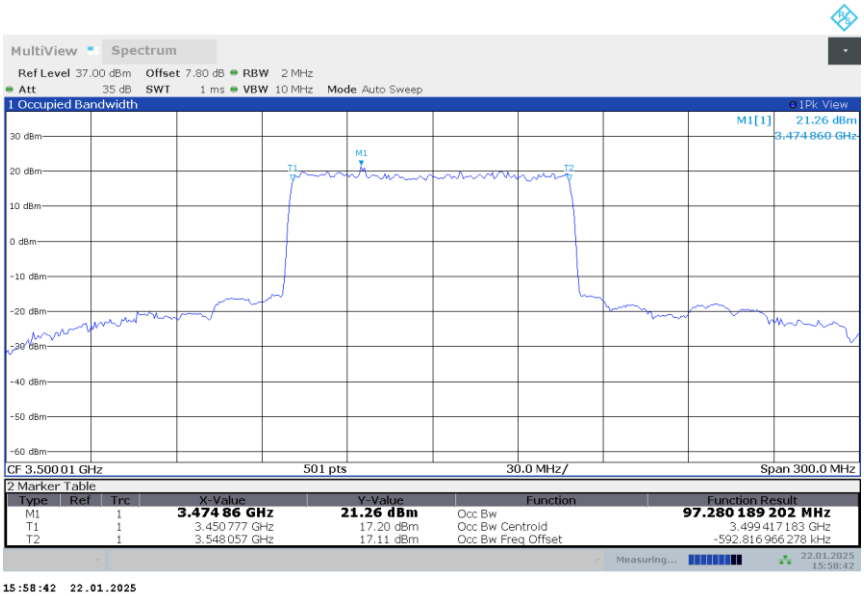
©Copyright. All rights reserved by CTTL.

n78L

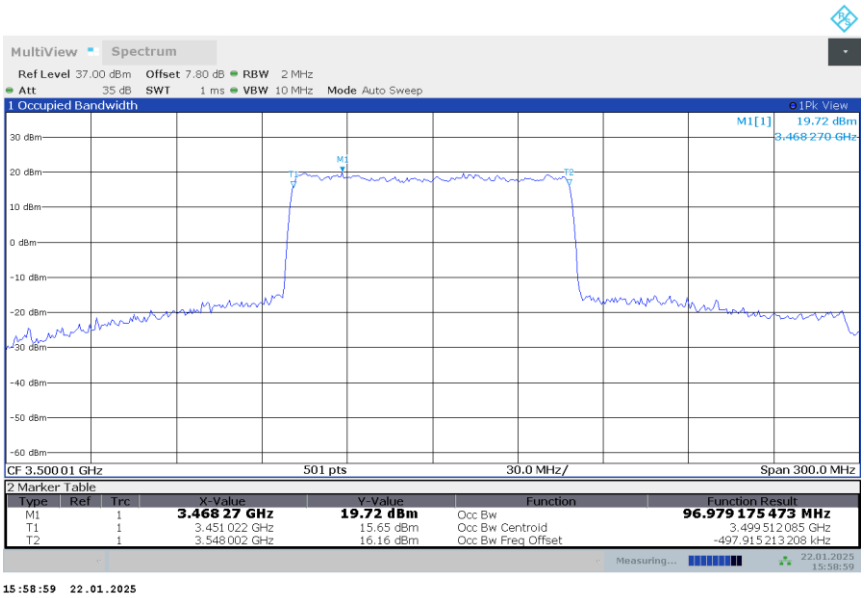
n78L,100MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
3500.01	97.280	96.979	97.134

n78L,100MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)

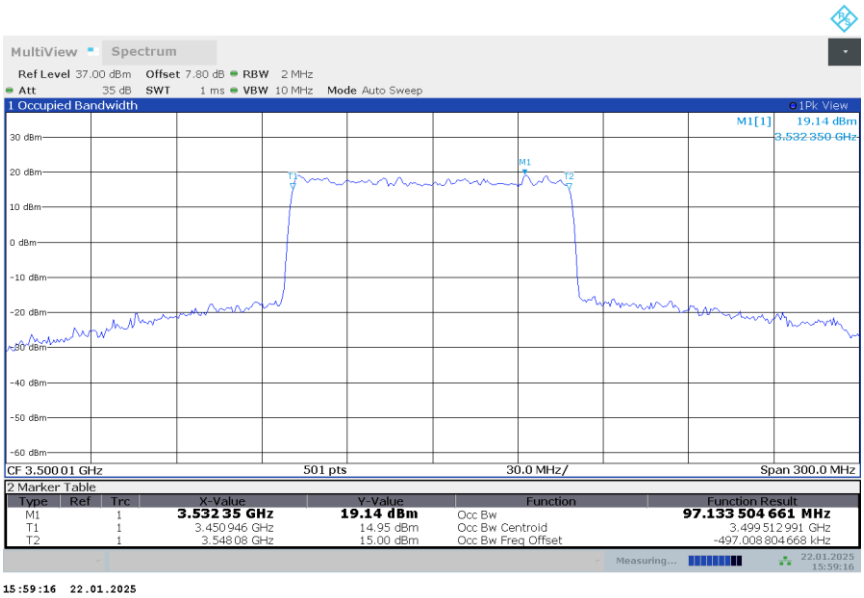


n78L,100MHz Bandwidth,DFT-s-QPSK (99% BW)



©Copyright. All rights reserved by CTTL.

n78L,100MHz Bandwidth,DFT-s-16QAM (99% BW)



15:59:16 22.01.2025

©Copyright. All rights reserved by CTTL.

A.5 Emission Bandwidth

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.
The measurement method is from ANSI C63.26:
a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
b) The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set ≥ 3 × RBW.
c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target "−X dB" requirement, i.e., if the requirement calls for measuring the −26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.

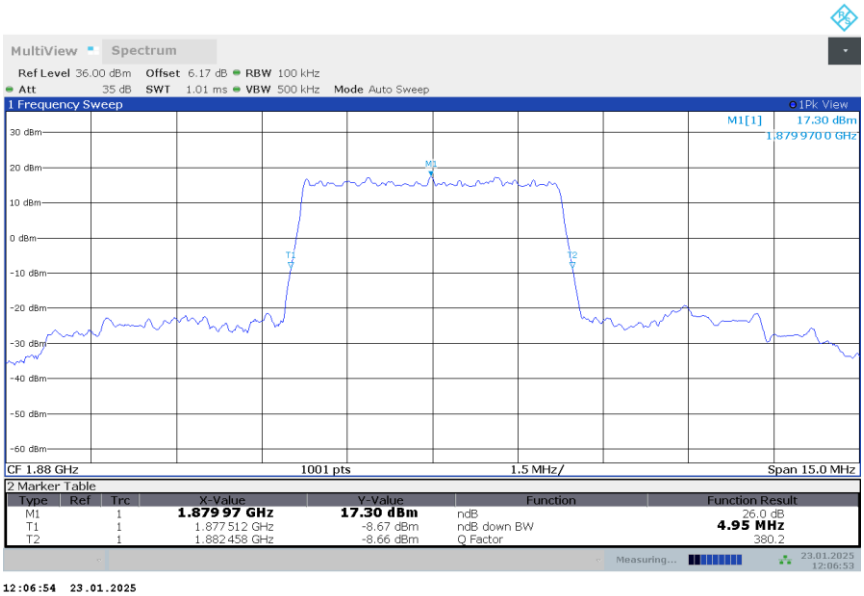
©Copyright. All rights reserved by CTTL.

n2

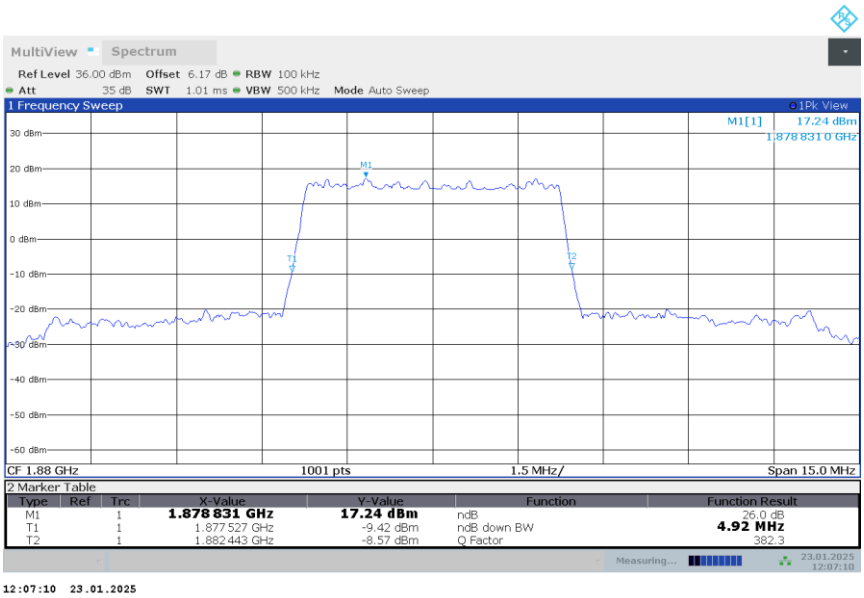
n2,5MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
1880	4.945	4.915	4.960

n2,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)

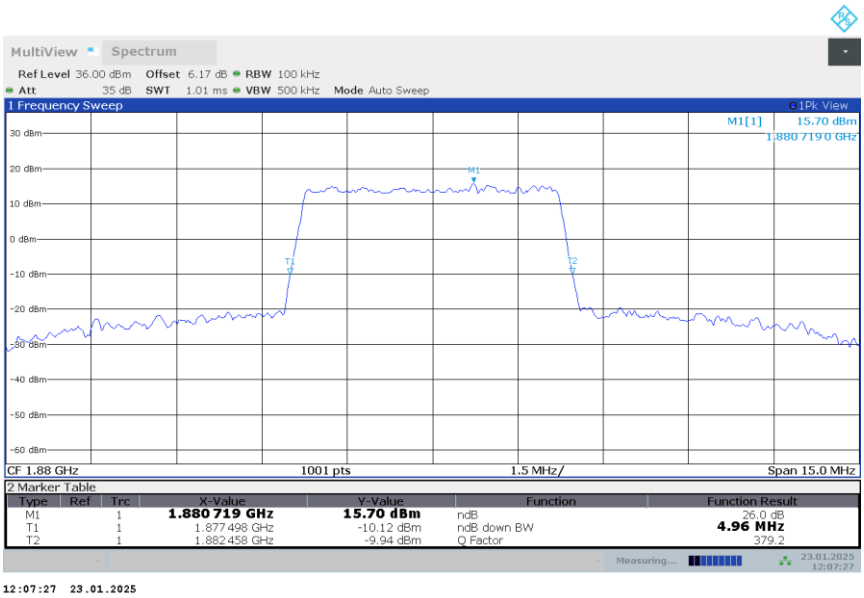


n2,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



©Copyright. All rights reserved by CTTL.

n2,5MHz Bandwidth,DFT-s-16QAM (-26dBc BW)



12:07:27 23.01.2025

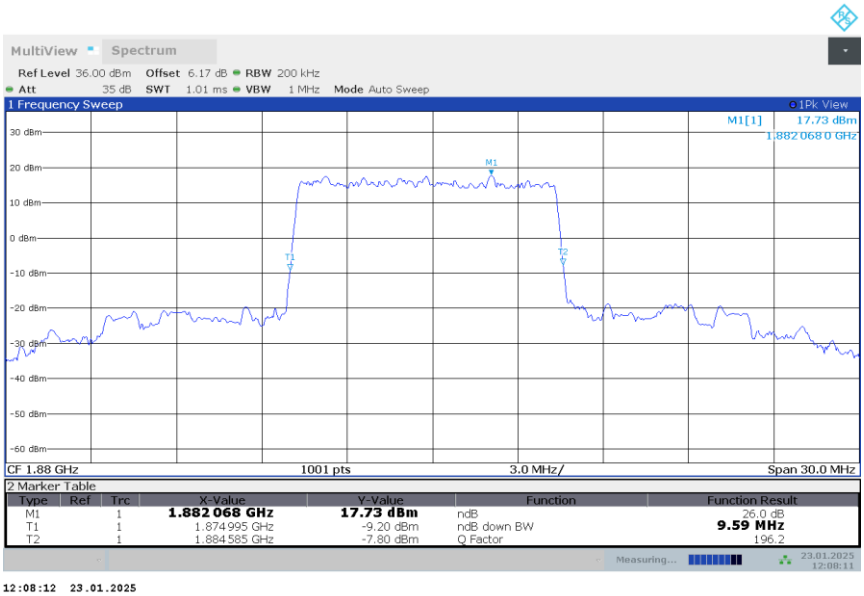
©Copyright. All rights reserved by CTTL.

n2

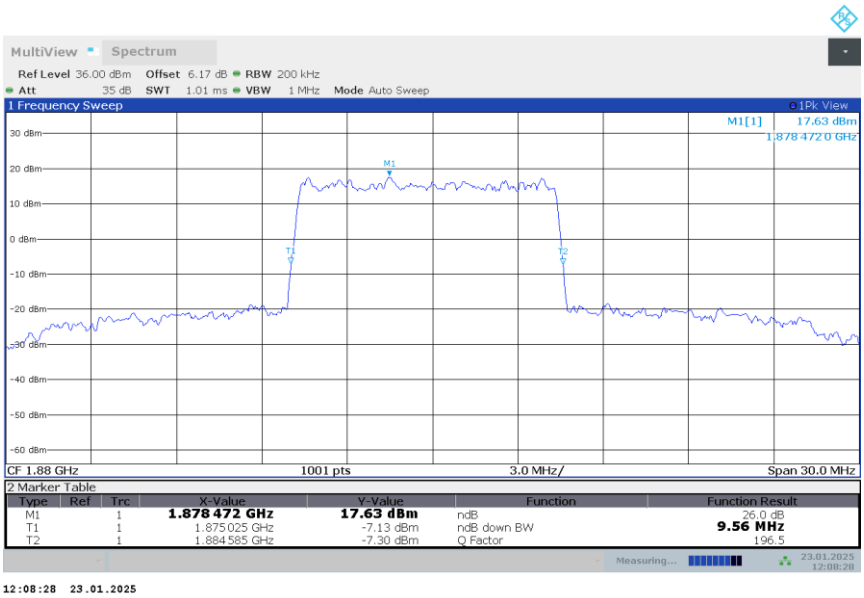
n2,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)		
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM
1880	9.590	9.560	9.530

n2,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n2,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



©Copyright. All rights reserved by CTTL.