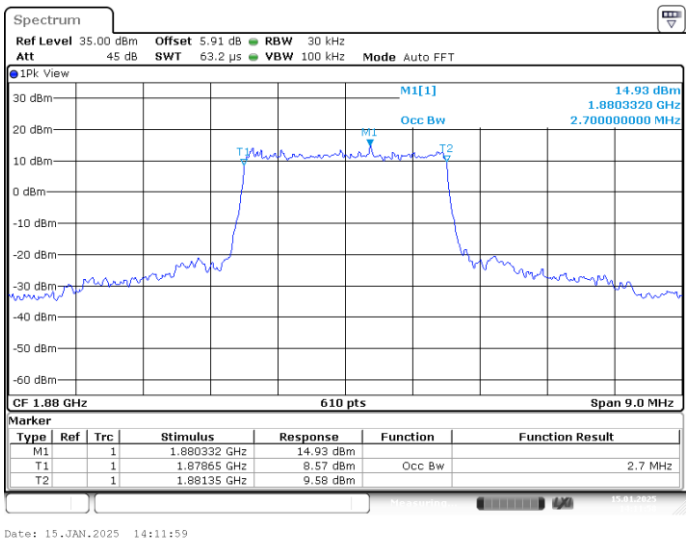
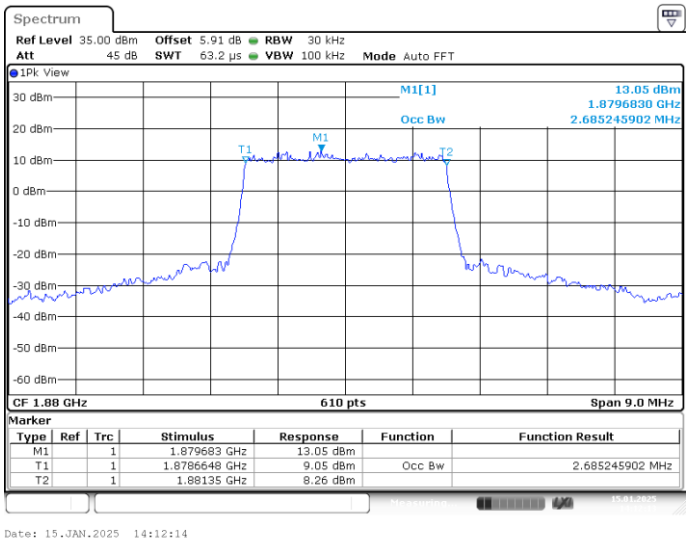
LTE band 2,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	2.700	2.685

LTE band 2 , 3MHz Bandwidth,MID,QPSK (99% BW)



LTE band 2 , 3MHz Bandwidth,MID,16QAM (99% BW)

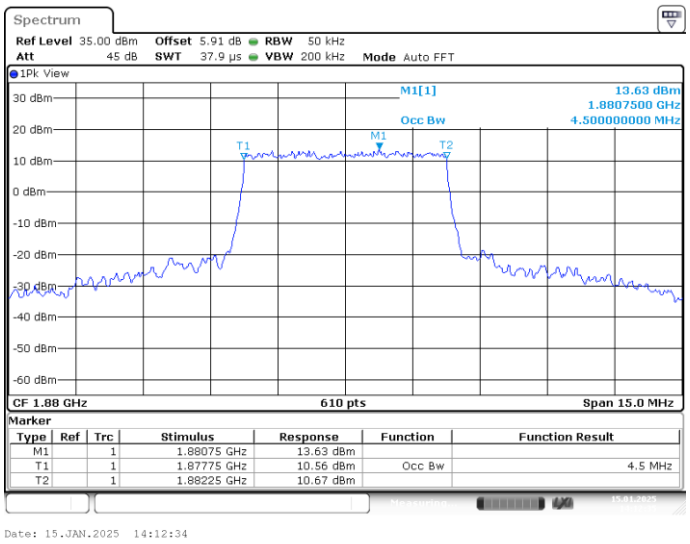


©Copyright. All rights reserved by CTTL.

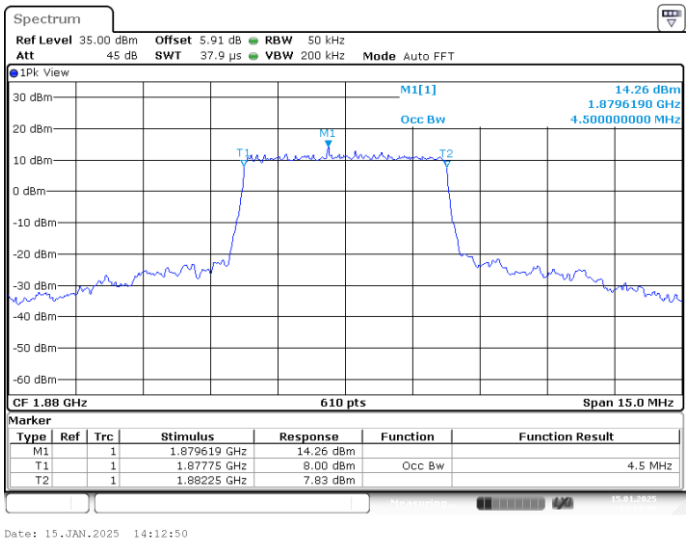
LTE band 2,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	4.500	4.500

LTE band 2 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 2 , 5MHz Bandwidth,MID,16QAM (99% BW)

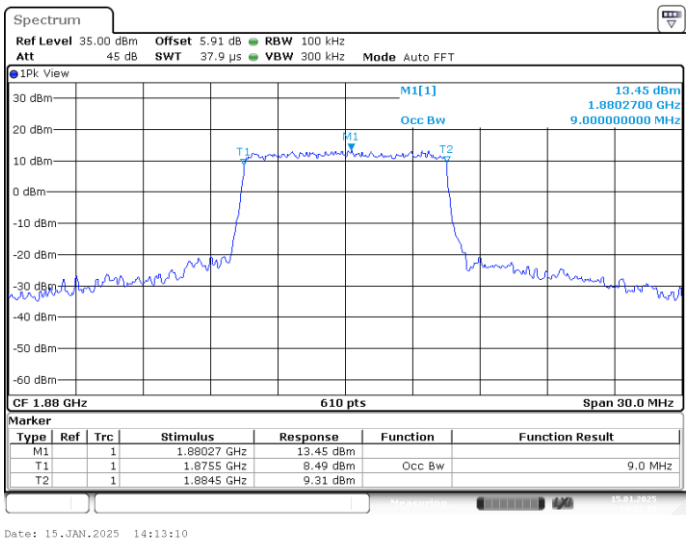


©Copyright. All rights reserved by CTTL.

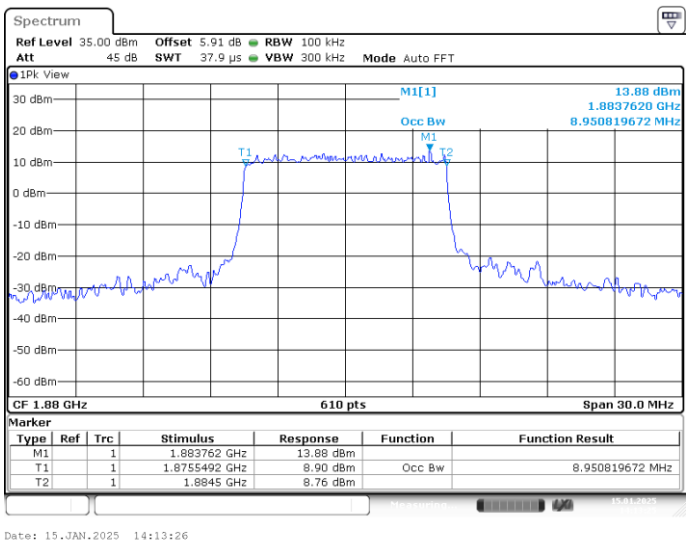
LTE band 2,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	9.000	8.951

LTE band 2 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 2 , 10MHz Bandwidth,MID,16QAM (99% BW)

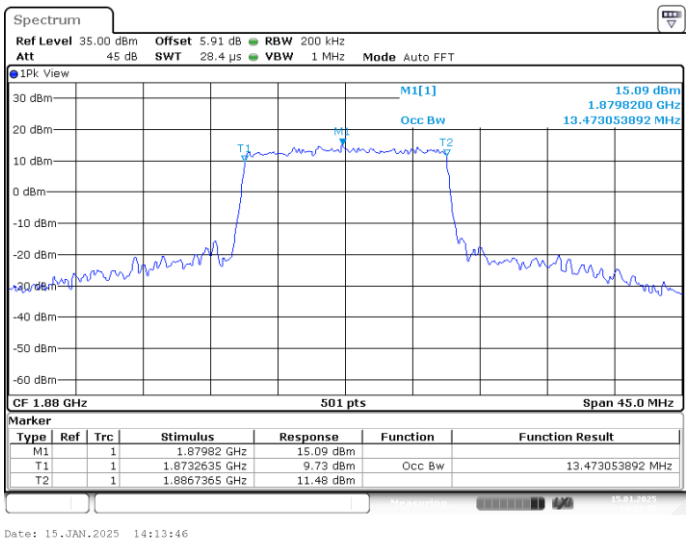


©Copyright. All rights reserved by CTTL.

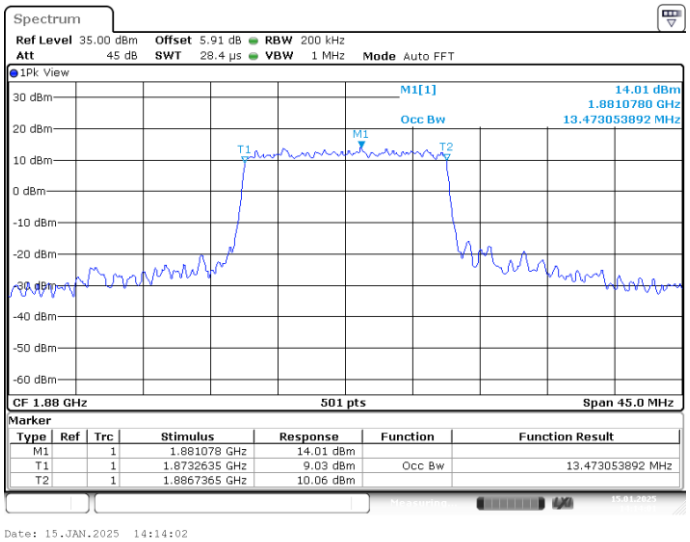
LTE band 2,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	13.473	13.473

LTE band 2 , 15MHz Bandwidth,MID,QPSK (99% BW)



LTE band 2 , 15MHz Bandwidth,MID,16QAM (99% BW)

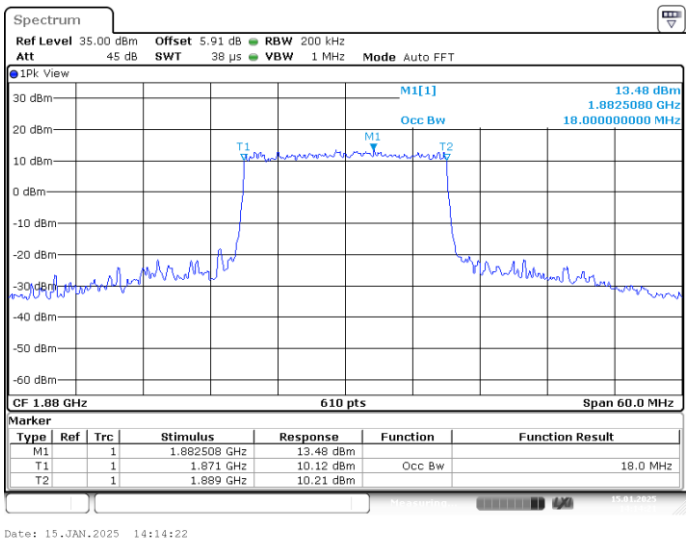


©Copyright. All rights reserved by CTTL.

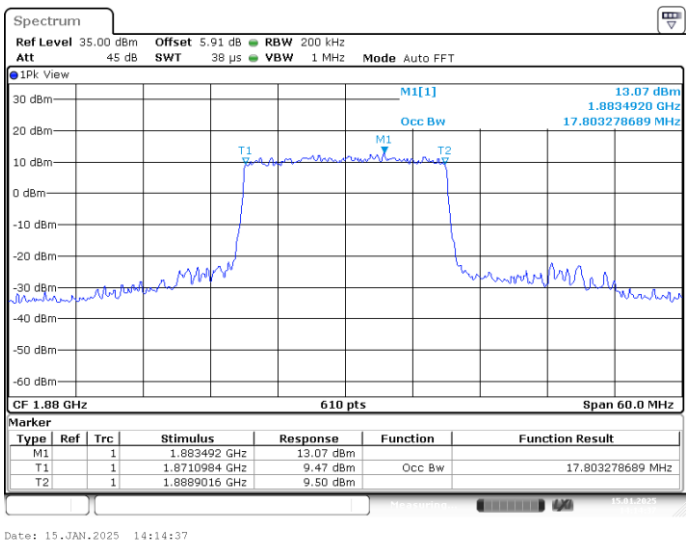
LTE band 2,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	18.000	17.803

LTE band 2 , 20MHz Bandwidth,MID,QPSK (99% BW)



LTE band 2 , 20MHz Bandwidth,MID,16QAM (99% BW)

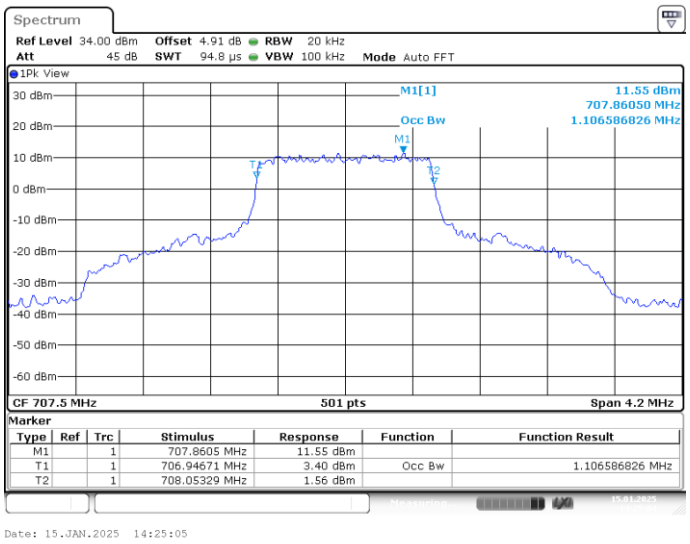


©Copyright. All rights reserved by CTTL.

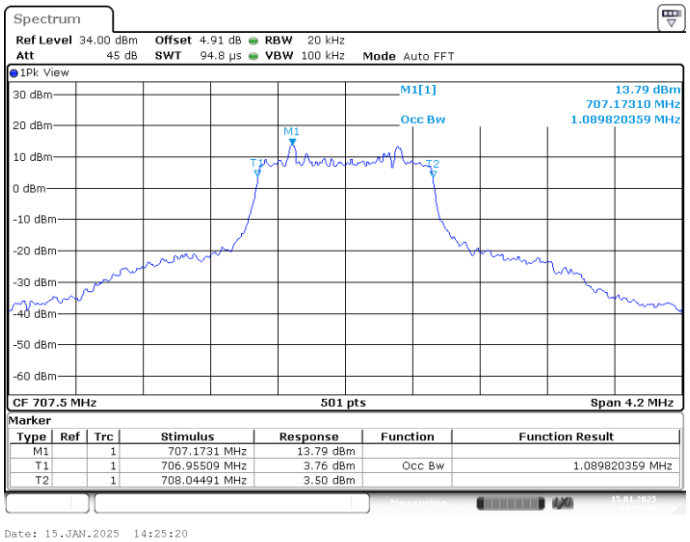
LTE band 12,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	1.107	1.090

LTE band 12 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



LTE band 12 , 1.4MHz Bandwidth,MID,16QAM (99% BW)

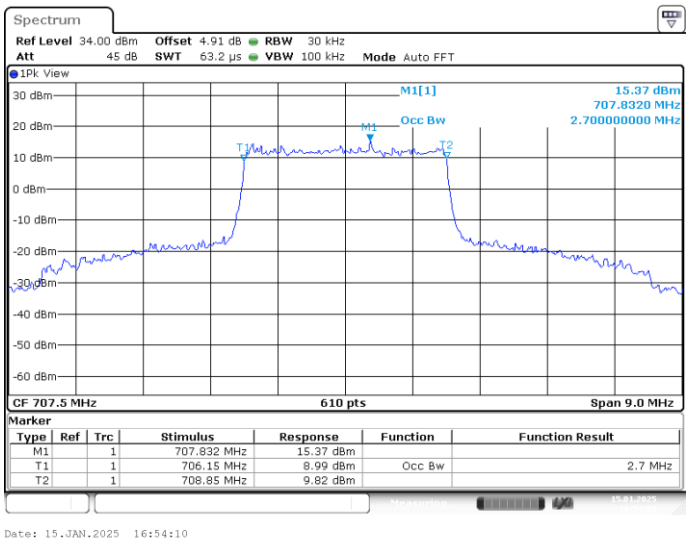


©Copyright. All rights reserved by CTTL.

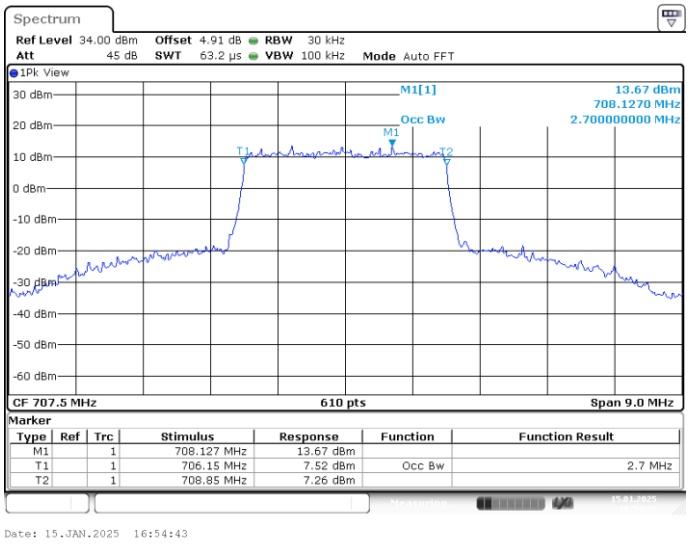
LTE band 12,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	2.700	2.700

LTE band 12 , 3MHz Bandwidth,MID,QPSK (99% BW)



LTE band 12 , 3MHz Bandwidth,MID,16QAM (99% BW)

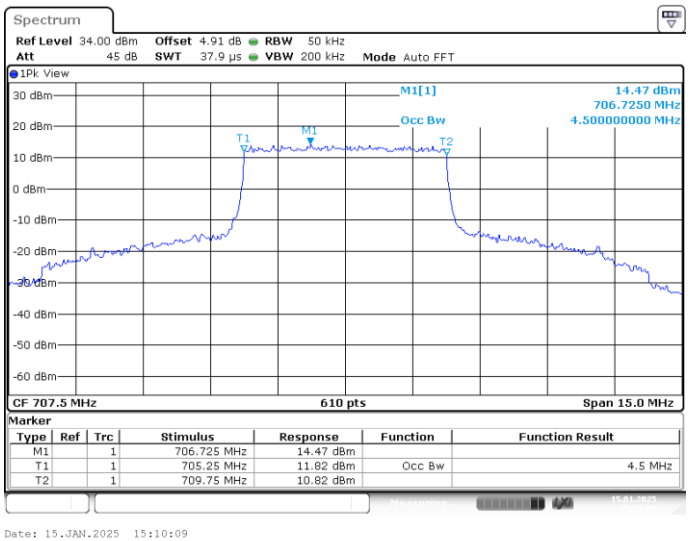


©Copyright. All rights reserved by CTTL.

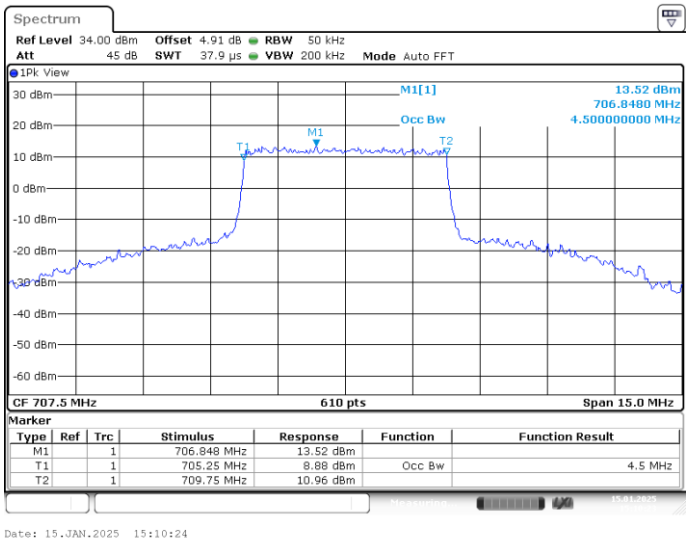
LTE band 12,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	4.500	4.500

LTE band 12 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 12 , 5MHz Bandwidth,MID,16QAM (99% BW)

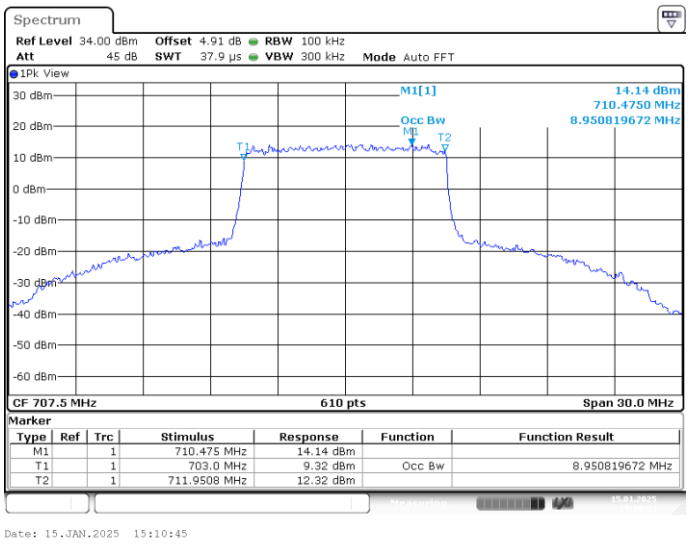


©Copyright. All rights reserved by CTTL.

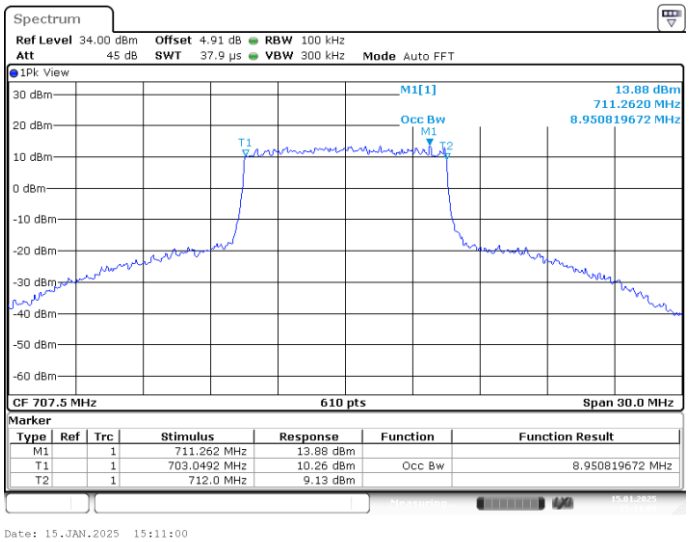
LTE band 12,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
707.5	8.951	8.951

LTE band 12 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 12 , 10MHz Bandwidth,MID,16QAM (99% BW)

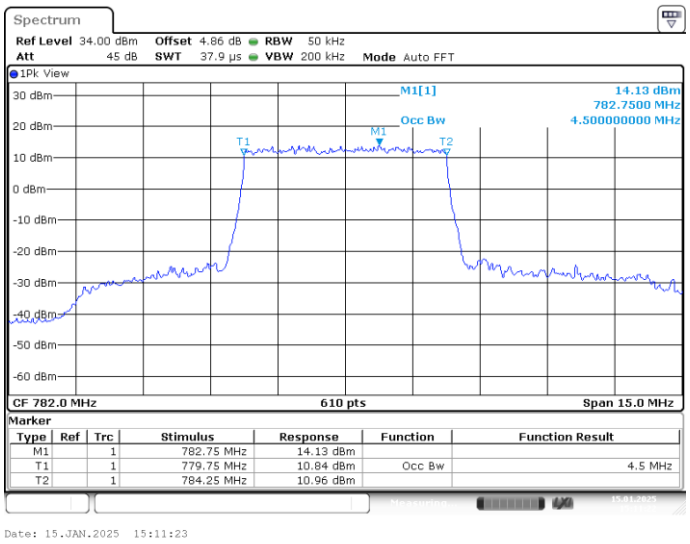


©Copyright. All rights reserved by CTTL.

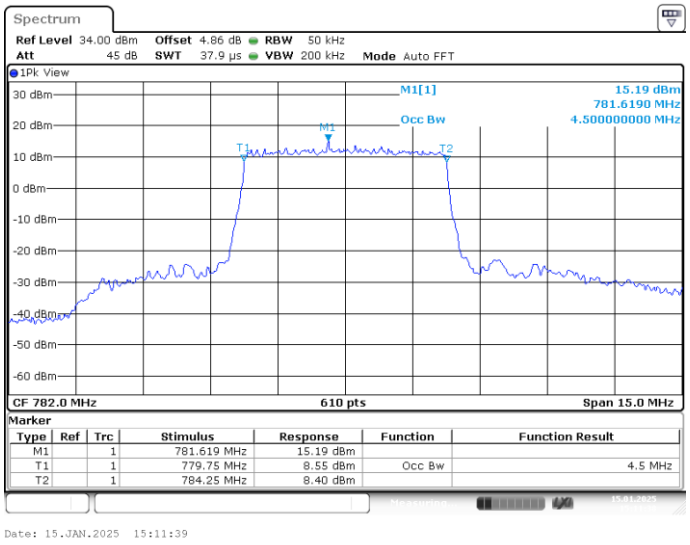
LTE band 13,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
782	4.500	4.500

LTE band 13 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 13 , 5MHz Bandwidth,MID,16QAM (99% BW)

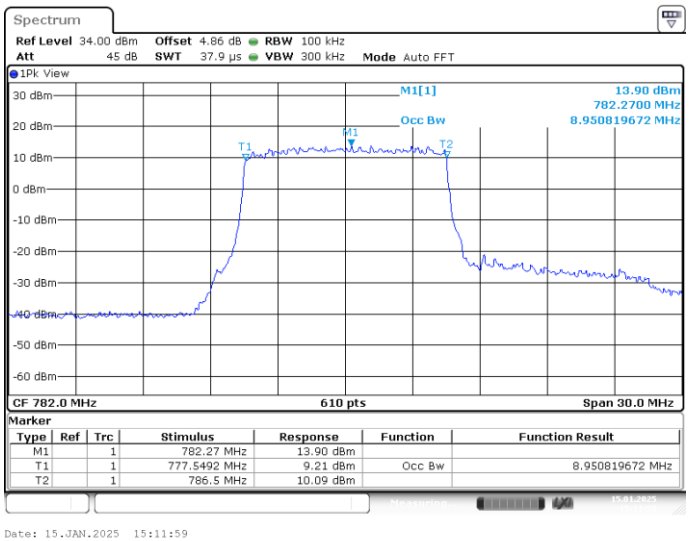


©Copyright. All rights reserved by CTTL.

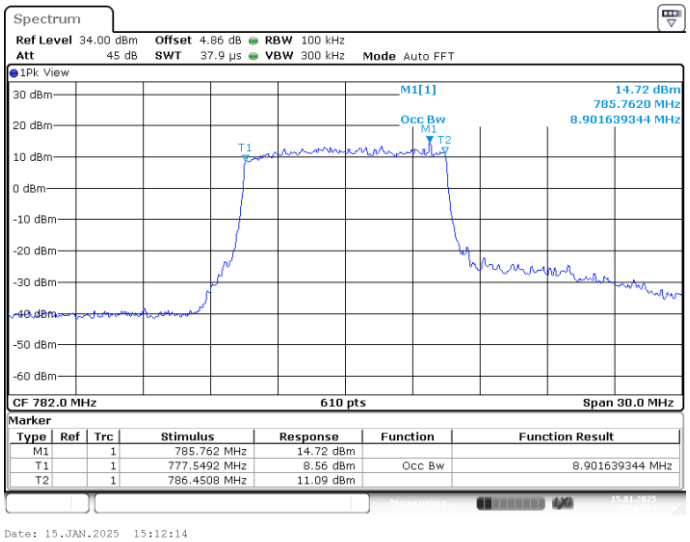
LTE band 13,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
782	8.951	8.902

LTE band 13 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 13 , 10MHz Bandwidth,MID,16QAM (99% BW)

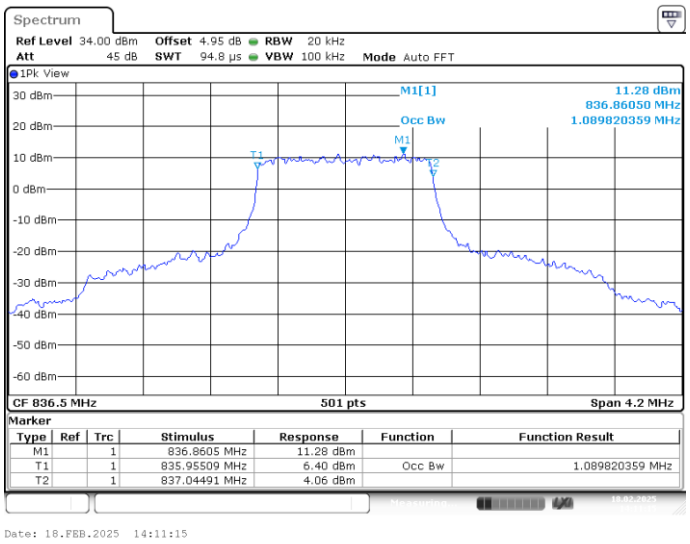


©Copyright. All rights reserved by CTTL.

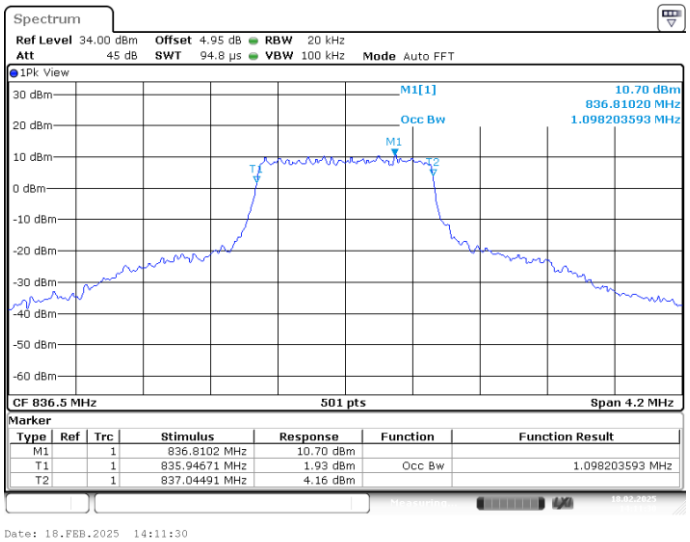
LTE band 26_Part22,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	1.090	1.098

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (99% BW)

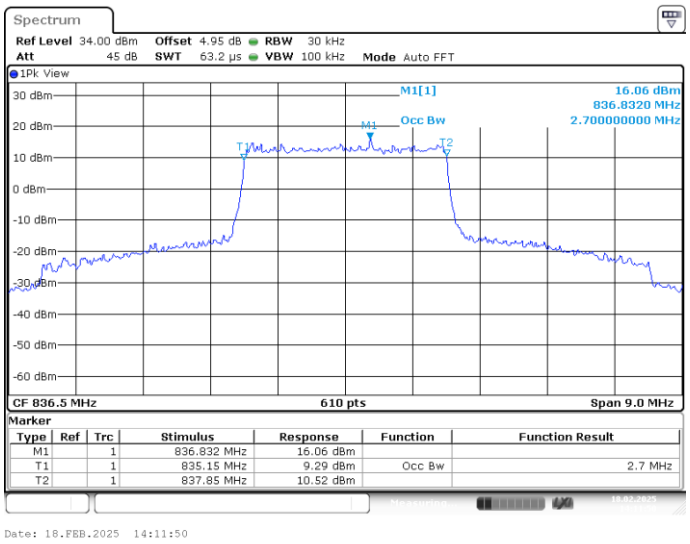


©Copyright. All rights reserved by CTTL.

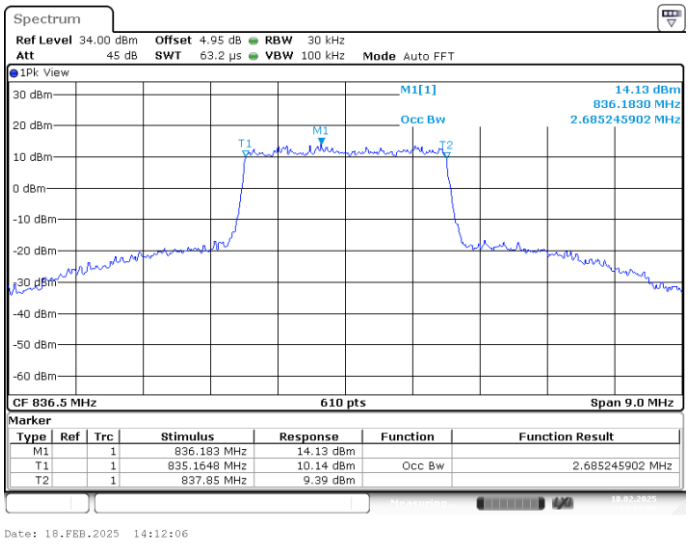
LTE band 26_Part22,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	2.700	2.685

LTE band 26 , 3MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 3MHz Bandwidth,MID,16QAM (99% BW)

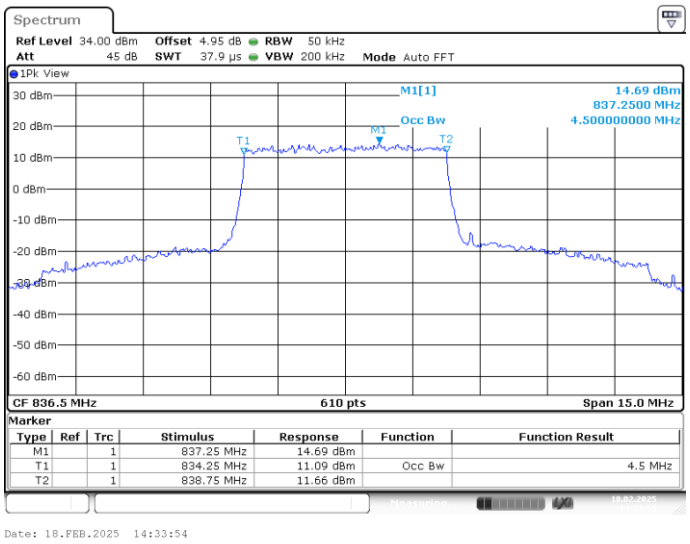


©Copyright. All rights reserved by CTTL.

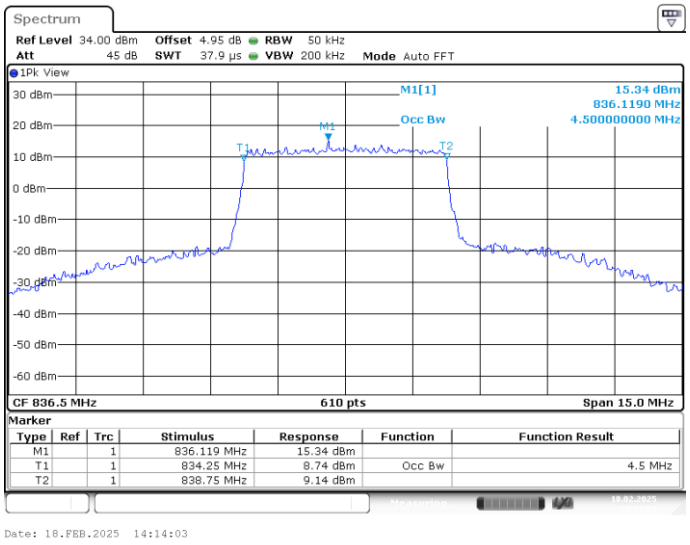
LTE band 26_Part22,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	4.500	4.500

LTE band 26 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 5MHz Bandwidth,MID,16QAM (99% BW)

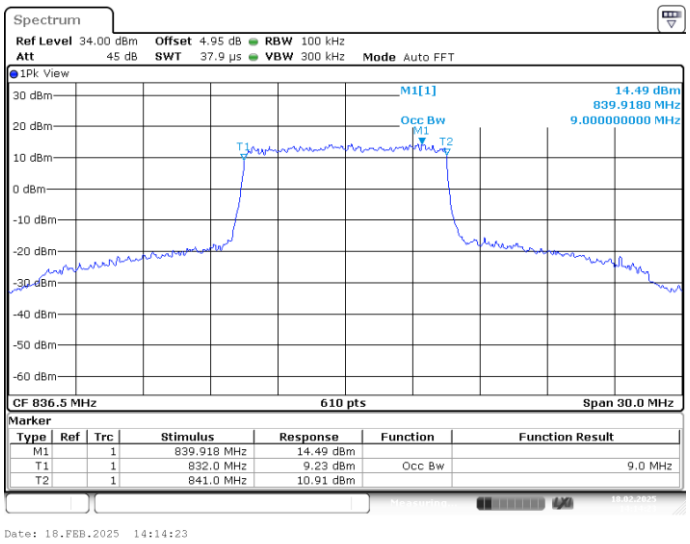


©Copyright. All rights reserved by CTTL.

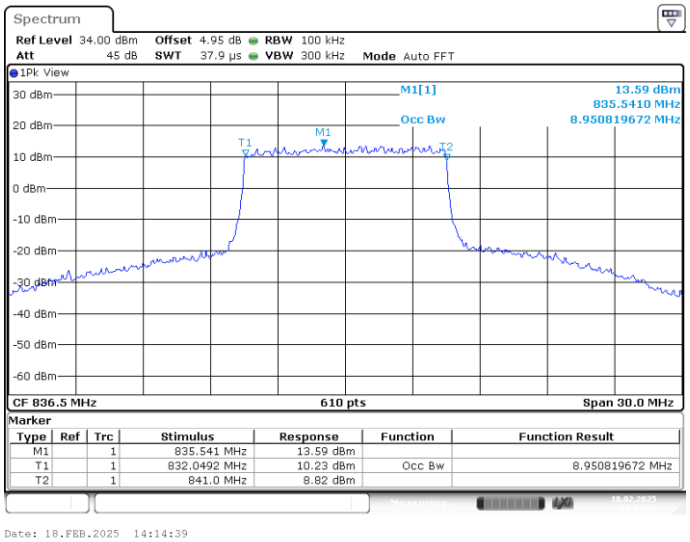
LTE band 26_Part22,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	9.000	8.951

LTE band 26 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 10MHz Bandwidth,MID,16QAM (99% BW)

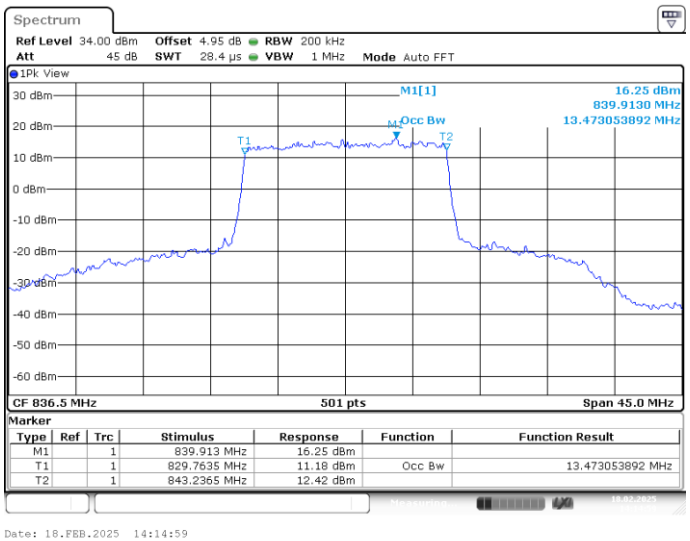


©Copyright. All rights reserved by CTTL.

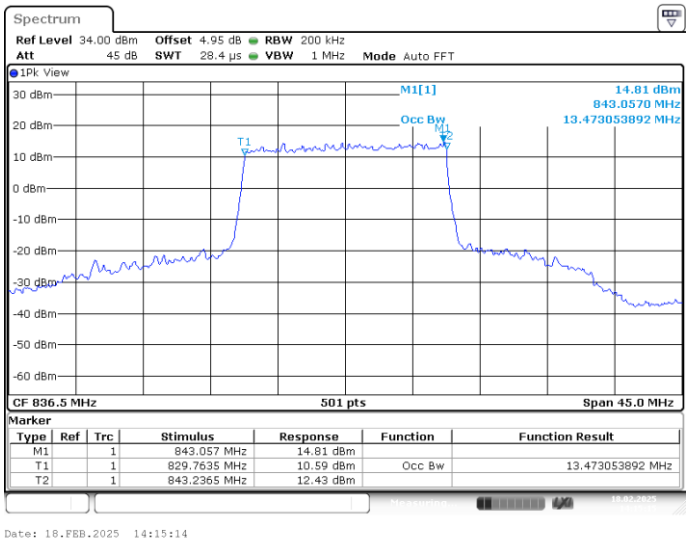
LTE band 26_Part22,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
836.5	13.473	13.473

LTE band 26 , 15MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 15MHz Bandwidth,MID,16QAM (99% BW)

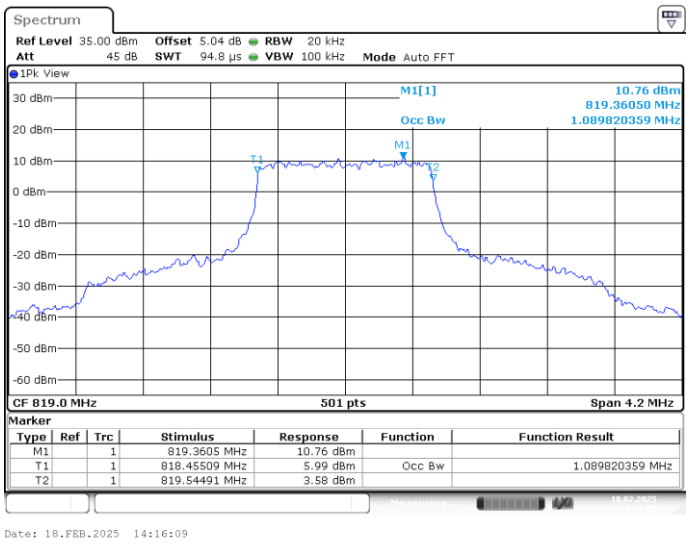


©Copyright. All rights reserved by CTTL.

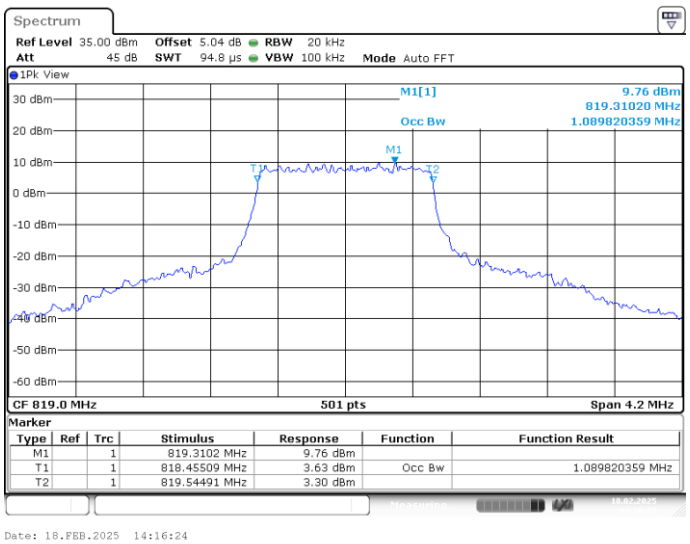
LTE band 26_Part90,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	1.090	1.090

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (99% BW)

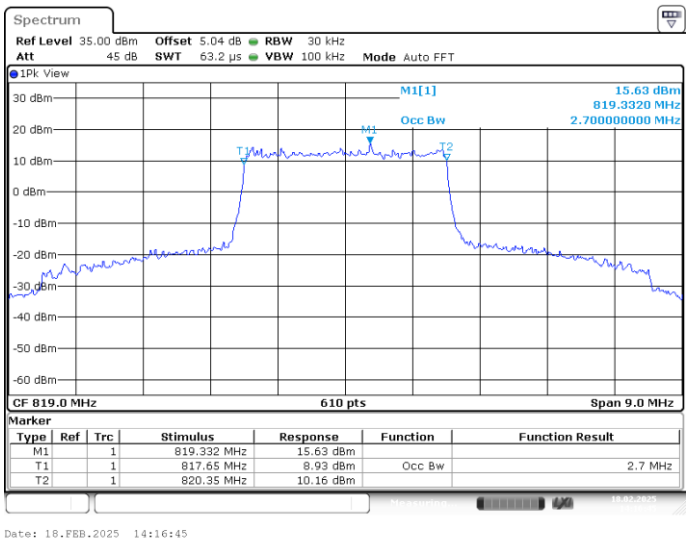


©Copyright. All rights reserved by CTTL.

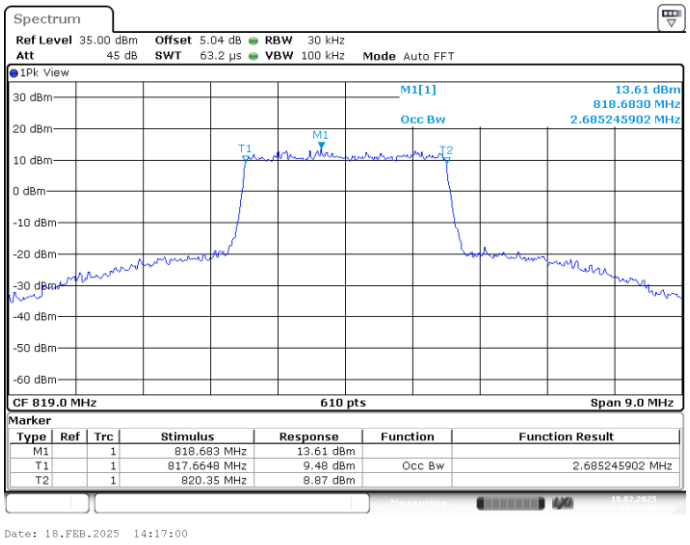
LTE band 26_Part90,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	2.700	2.685

LTE band 26 , 3MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 3MHz Bandwidth,MID,16QAM (99% BW)

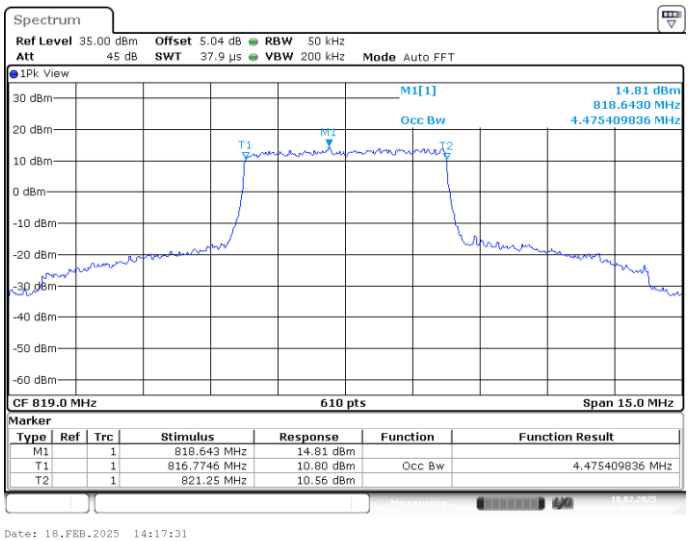


©Copyright. All rights reserved by CTTL.

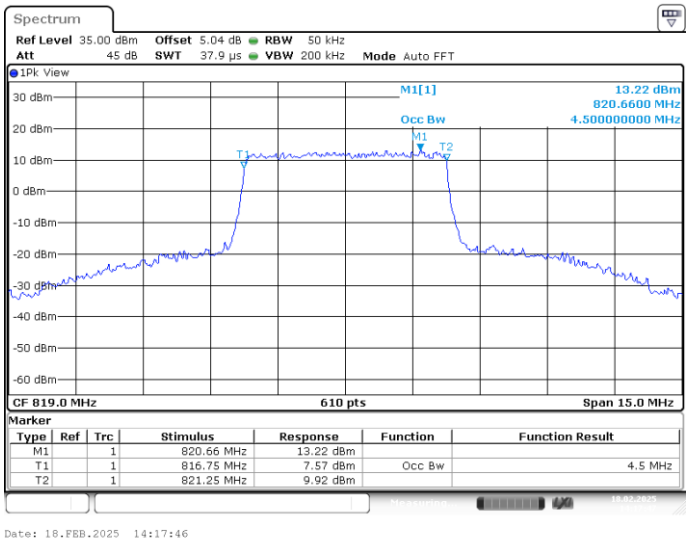
LTE band 26_Part90,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	4.475	4.500

LTE band 26 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 5MHz Bandwidth,MID,16QAM (99% BW)

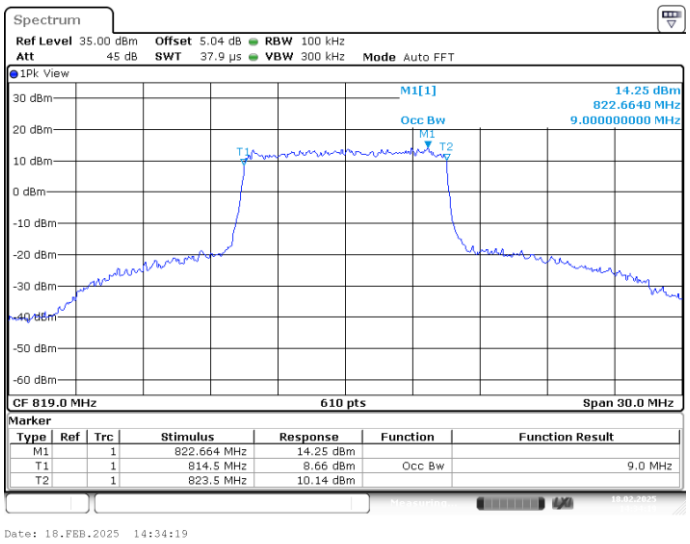


©Copyright. All rights reserved by CTTL.

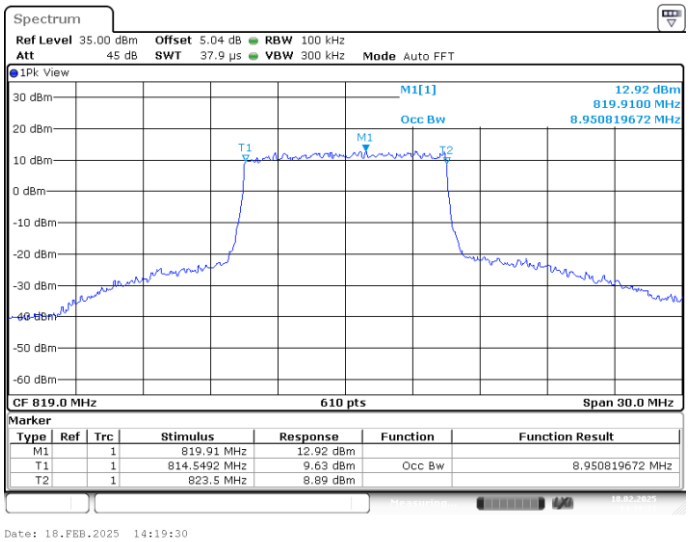
LTE band 26_Part90,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
819	9.000	8.951

LTE band 26 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 26 , 10MHz Bandwidth,MID,16QAM (99% BW)

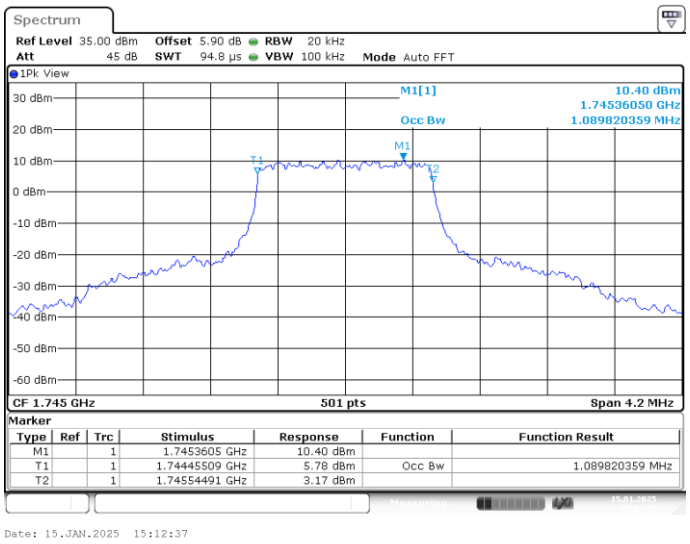


©Copyright. All rights reserved by CTTL.

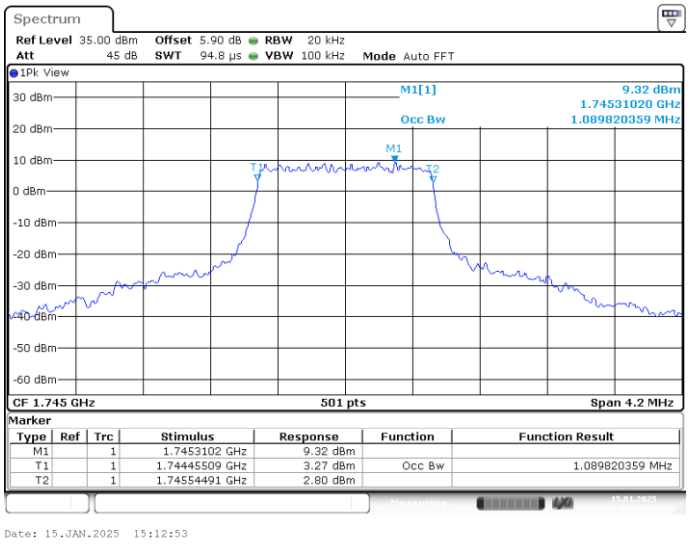
LTE band 66,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	1.090	1.090

LTE band 66 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 1.4MHz Bandwidth,MID,16QAM (99% BW)

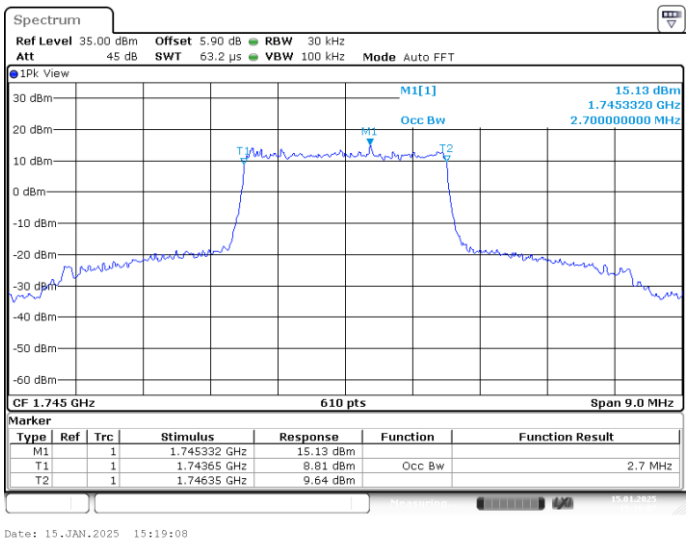


©Copyright. All rights reserved by CTTL.

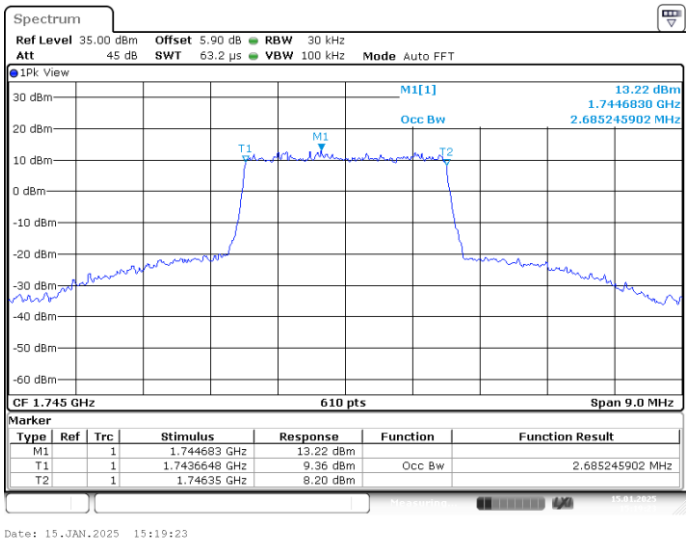
LTE band 66,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	2.700	2.685

LTE band 66 , 3MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 3MHz Bandwidth,MID,16QAM (99% BW)

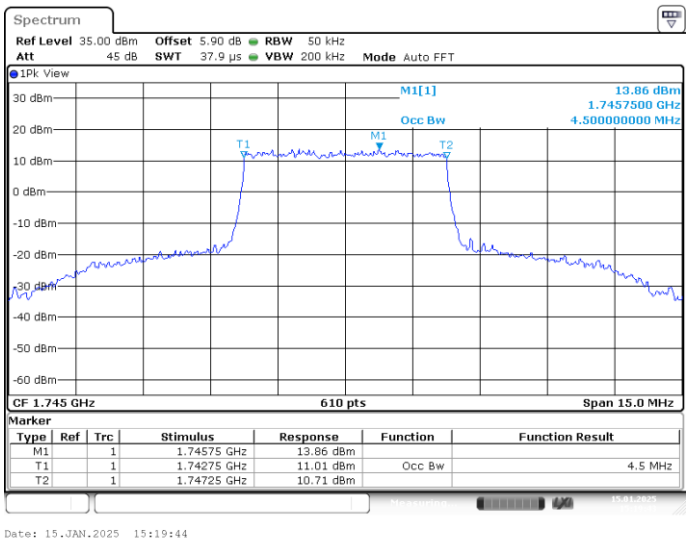


©Copyright. All rights reserved by CTTL.

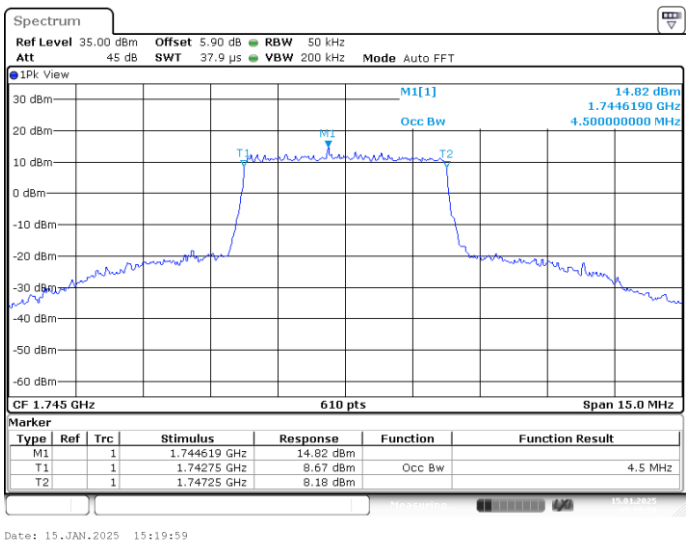
LTE band 66,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	4.500	4.500

LTE band 66 , 5MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 5MHz Bandwidth,MID,16QAM (99% BW)

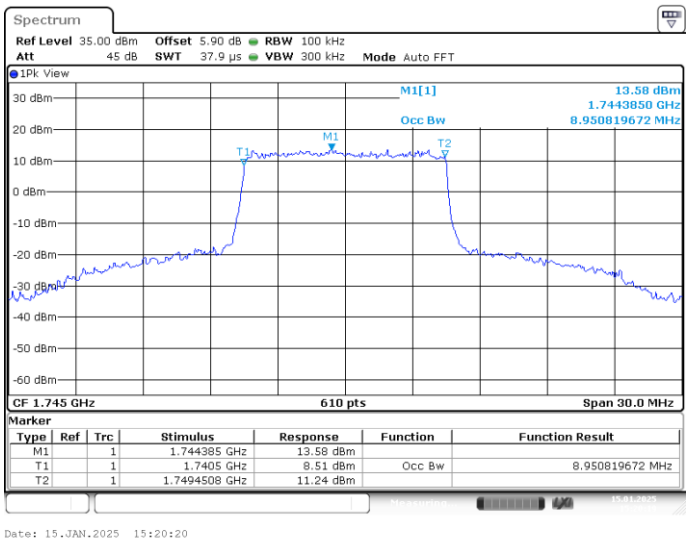


©Copyright. All rights reserved by CTTL.

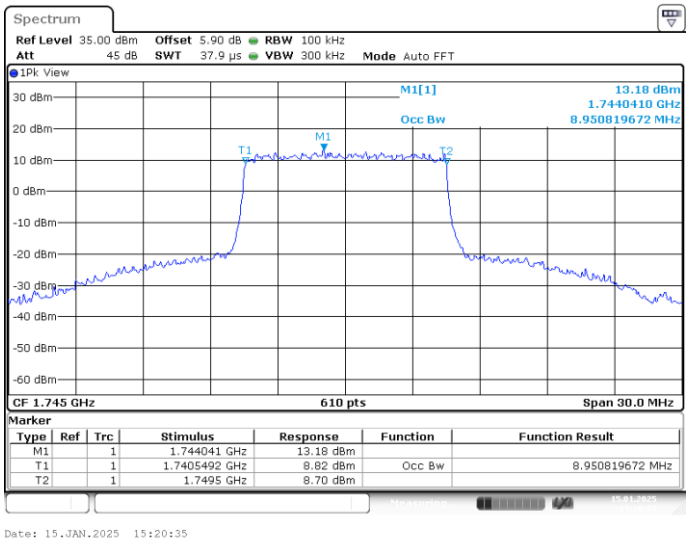
LTE band 66,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	8.951	8.951

LTE band 66 , 10MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 10MHz Bandwidth,MID,16QAM (99% BW)

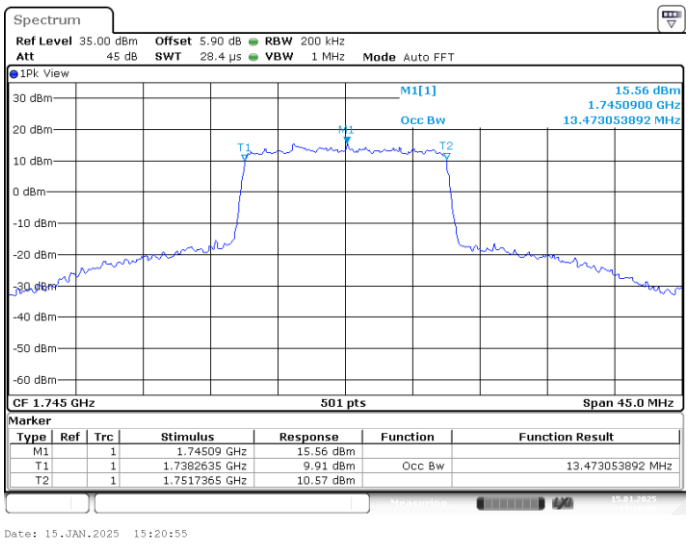


©Copyright. All rights reserved by CTTL.

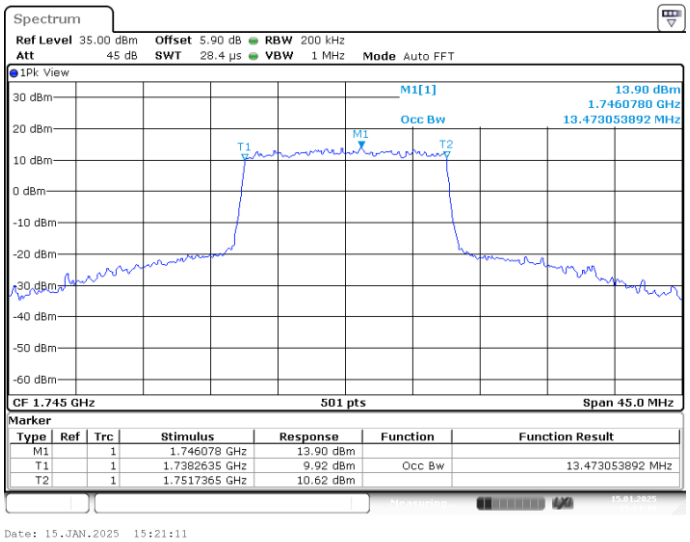
LTE band 66,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	13.473	13.473

LTE band 66 , 15MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 15MHz Bandwidth,MID,16QAM (99% BW)

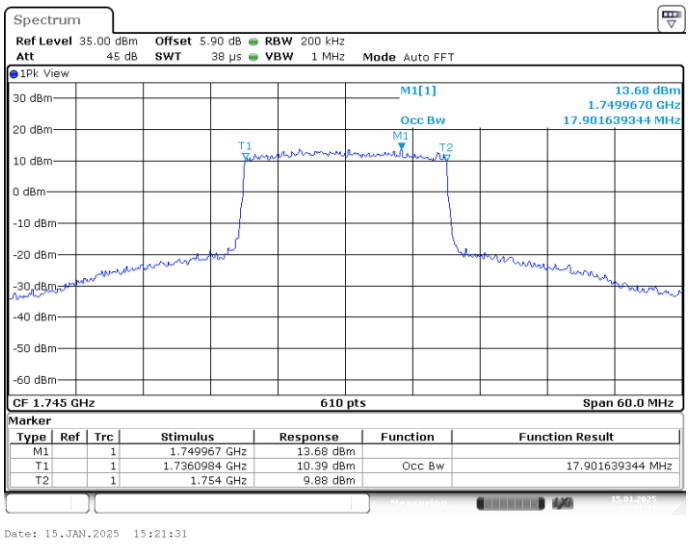


©Copyright. All rights reserved by CTTL.

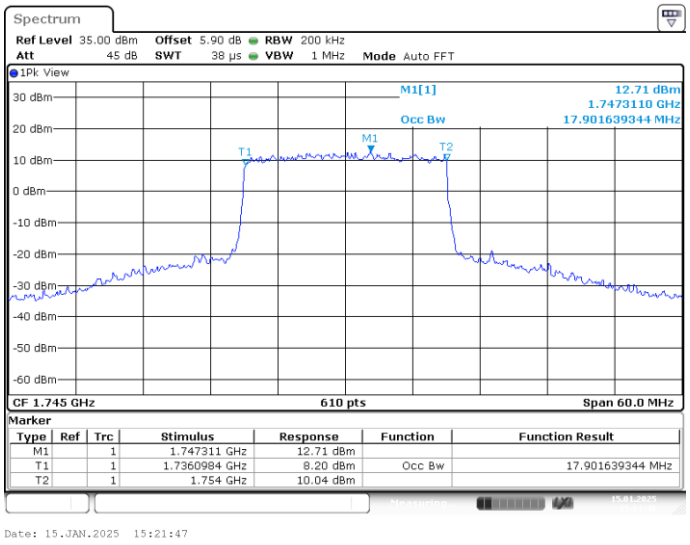
LTE band 66,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1745	17.902	17.902

LTE band 66 , 20MHz Bandwidth,MID,QPSK (99% BW)



LTE band 66 , 20MHz Bandwidth,MID,16QAM (99% BW)



©Copyright. All rights reserved by CTTL.

A.5 Emission Bandwidth

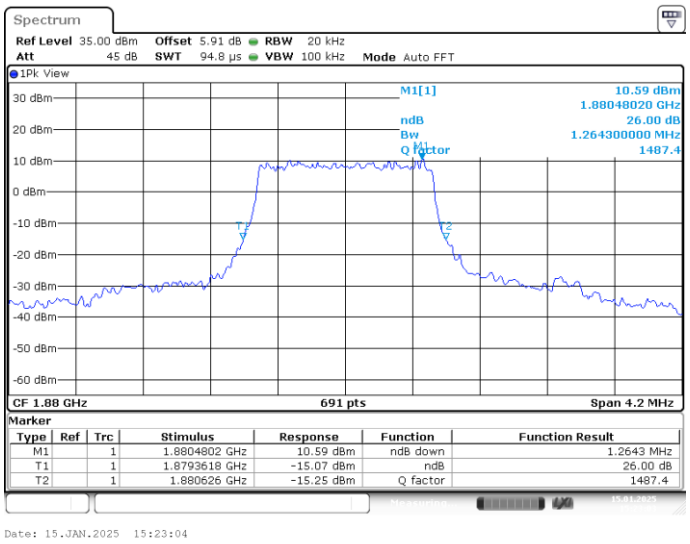
The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
The measurement method is from ANSI C63.26:
a) 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.

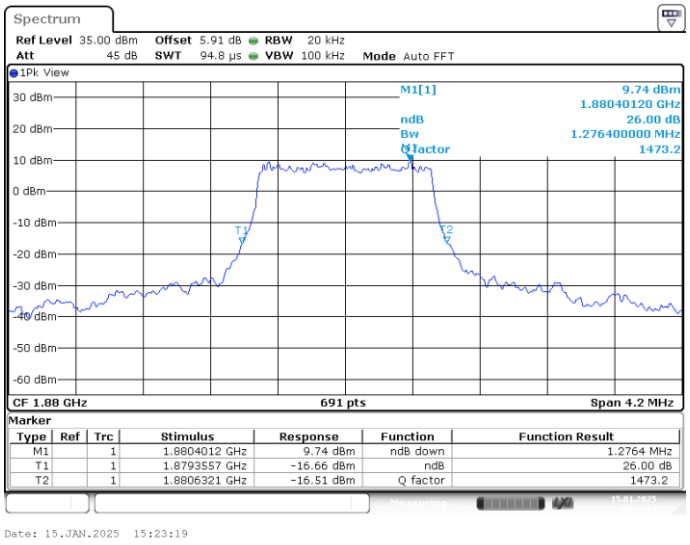
LTE band 2,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	1.264	1.276

LTE band 2 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)

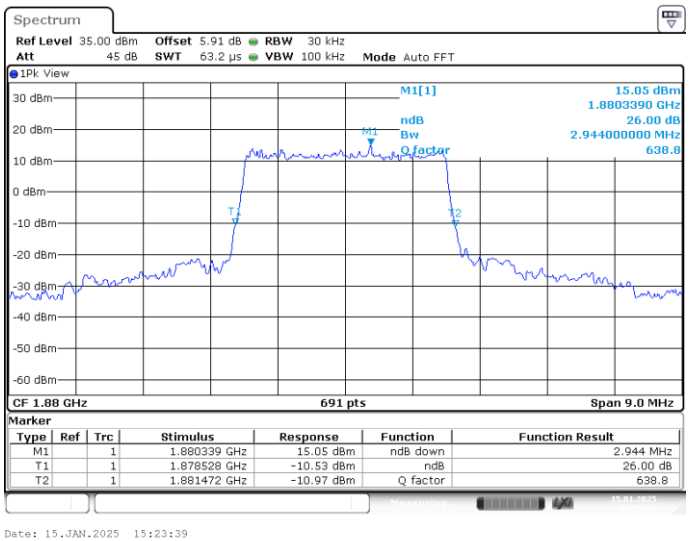


©Copyright. All rights reserved by CTTL.

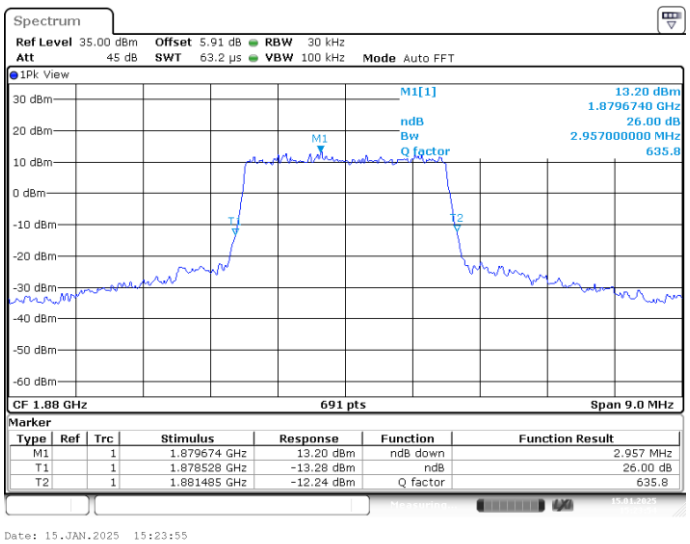
LTE band 2,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	2.944	2.957

LTE band 2 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)

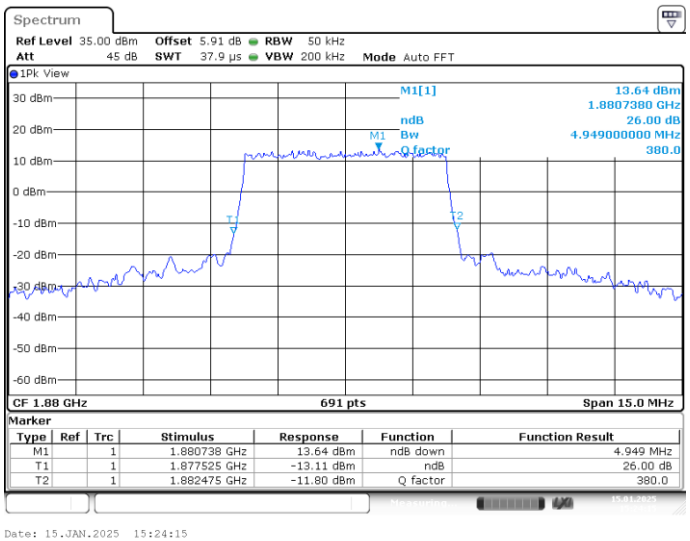


©Copyright. All rights reserved by CTTL.

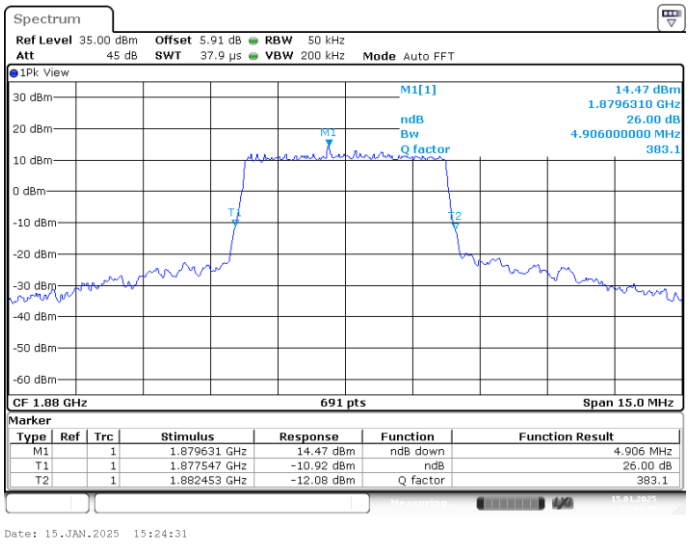
LTE band 2,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	4.949	4.906

LTE band 2 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

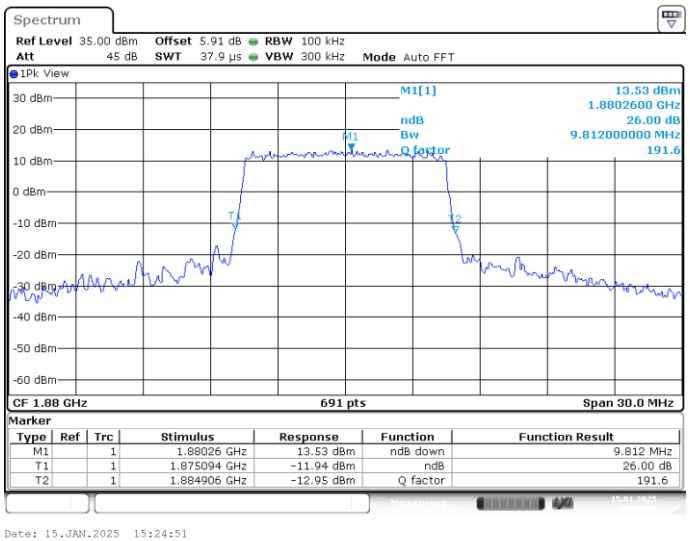


©Copyright. All rights reserved by CTTL.

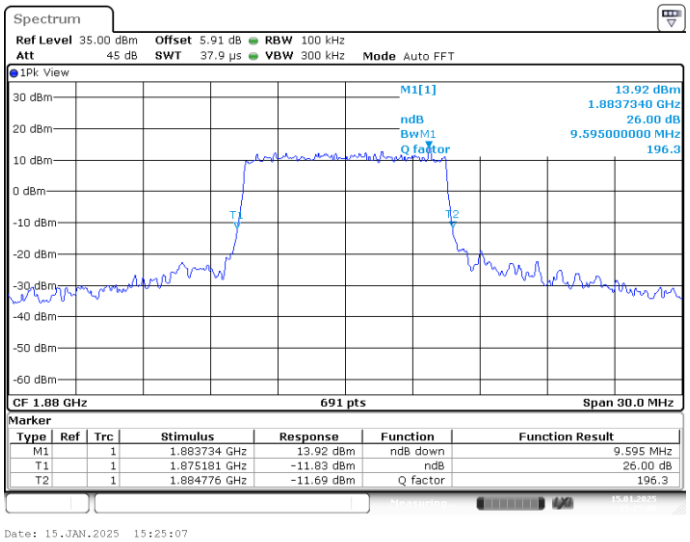
LTE band 2,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	9.812	9.595

LTE band 2 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)

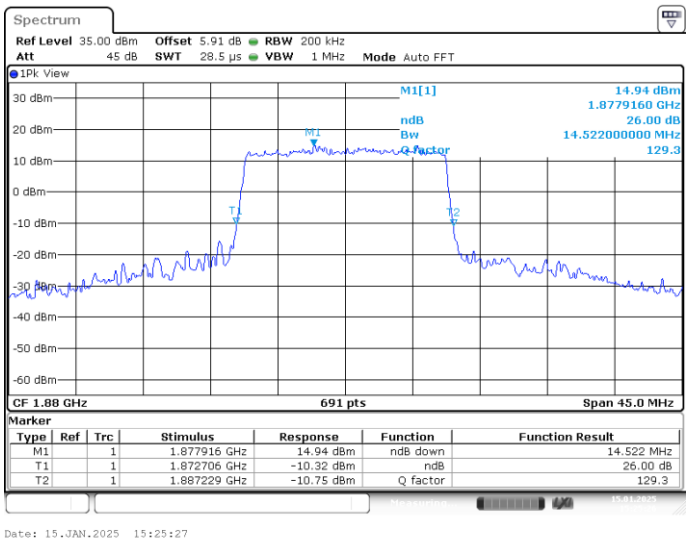


©Copyright. All rights reserved by CTTL.

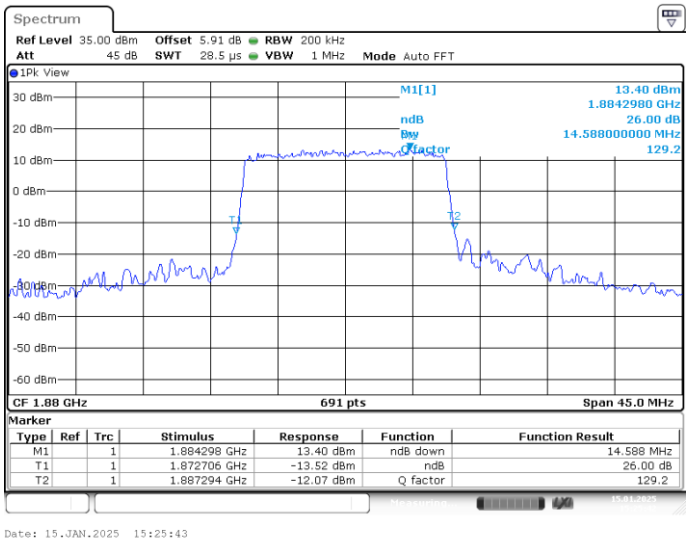
LTE band 2,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	14.522	14.588

LTE band 2 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)

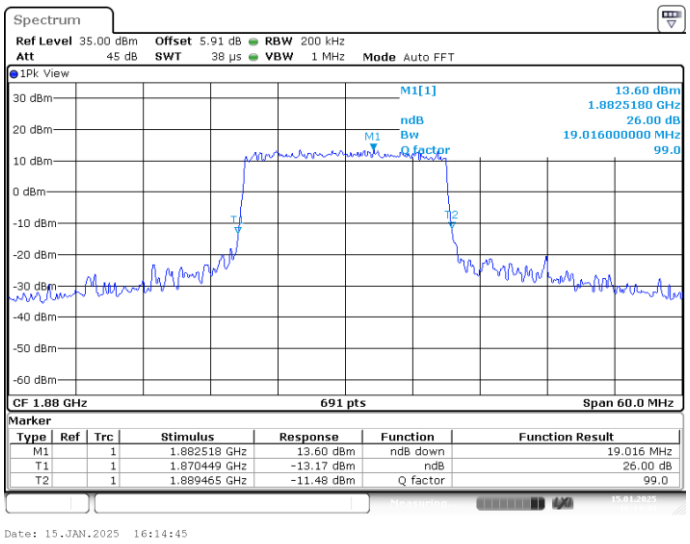


©Copyright. All rights reserved by CTTL.

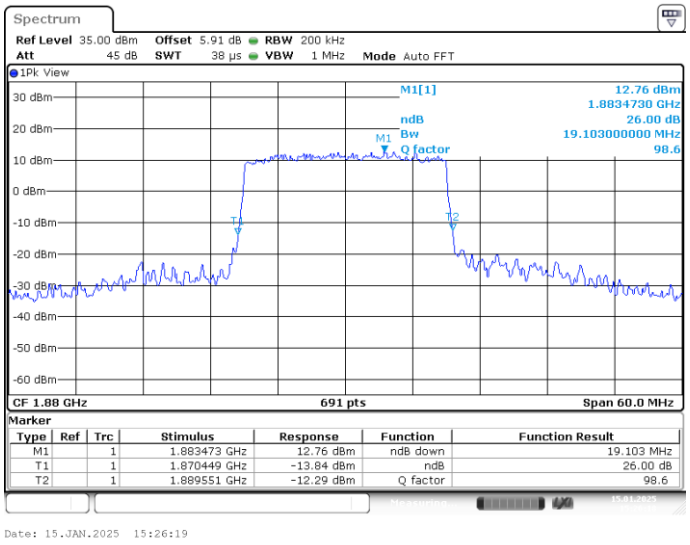
LTE band 2,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1880	19.016	19.103

LTE band 2 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 2 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)

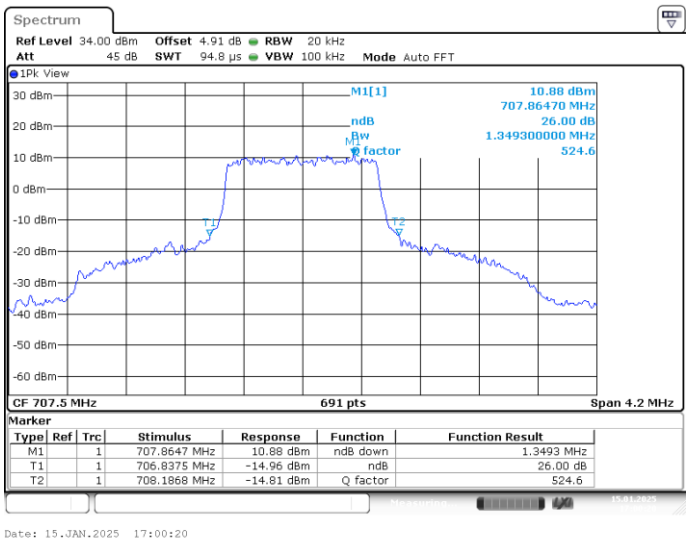


©Copyright. All rights reserved by CTTL.

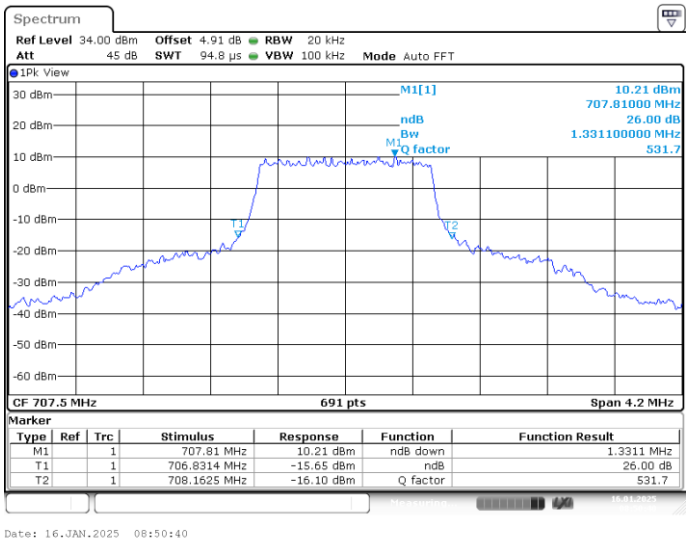
LTE band 12,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	1.349	1.331

LTE band 12 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 12 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)

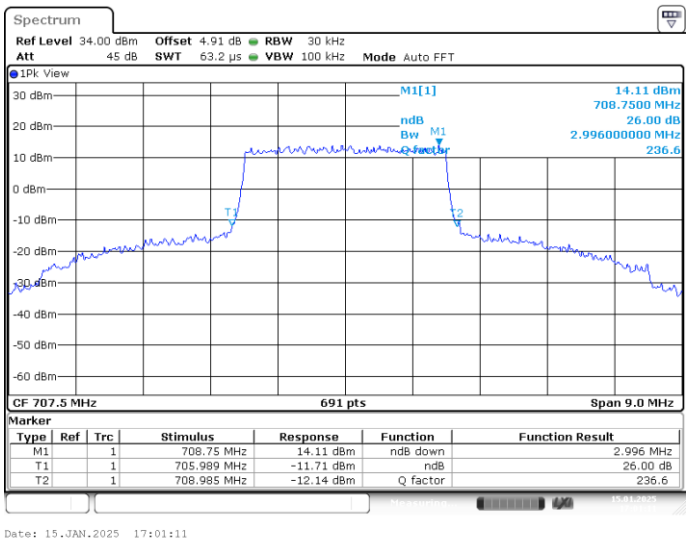


©Copyright. All rights reserved by CTTL.

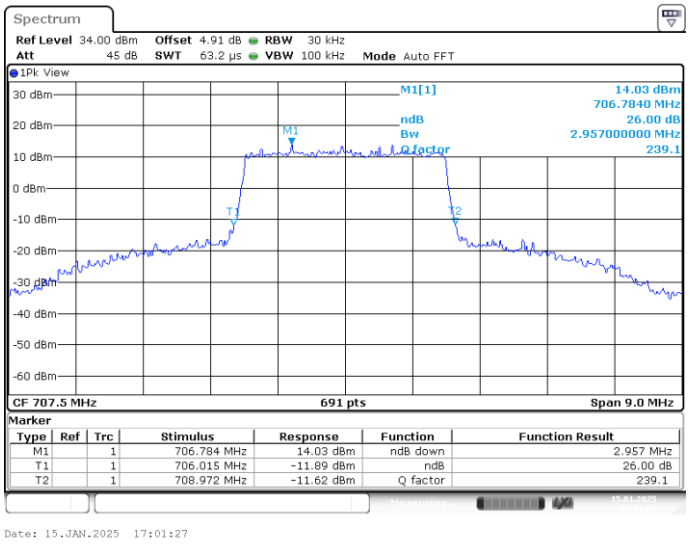
LTE band 12,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	2.996	2.957

LTE band 12 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 12 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)

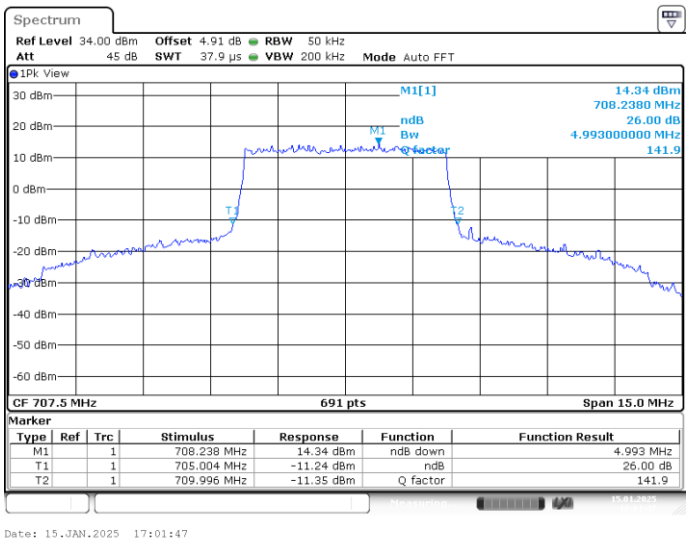


©Copyright. All rights reserved by CTTL.

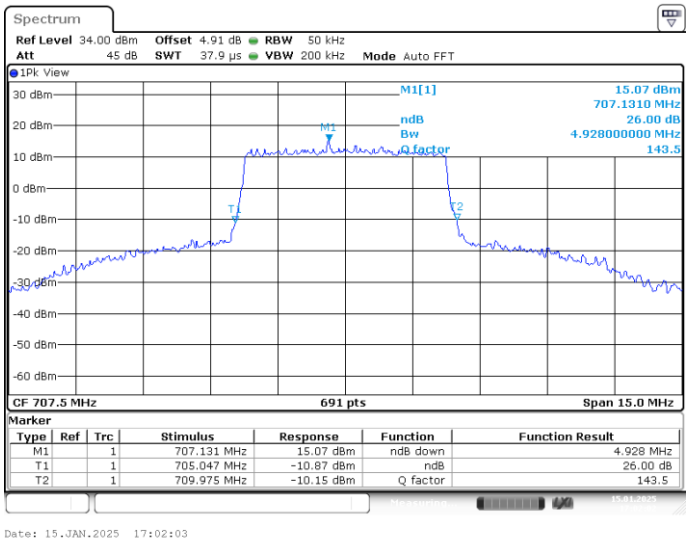
LTE band 12,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	4.993	4.928

LTE band 12 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 12 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

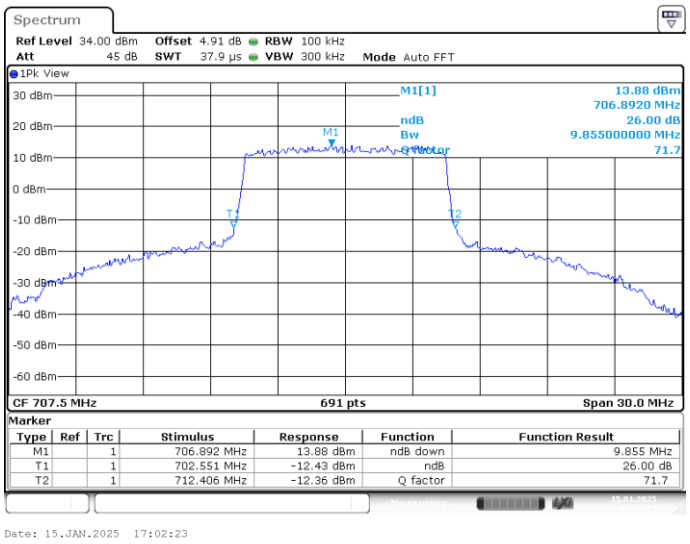


©Copyright. All rights reserved by CTTL.

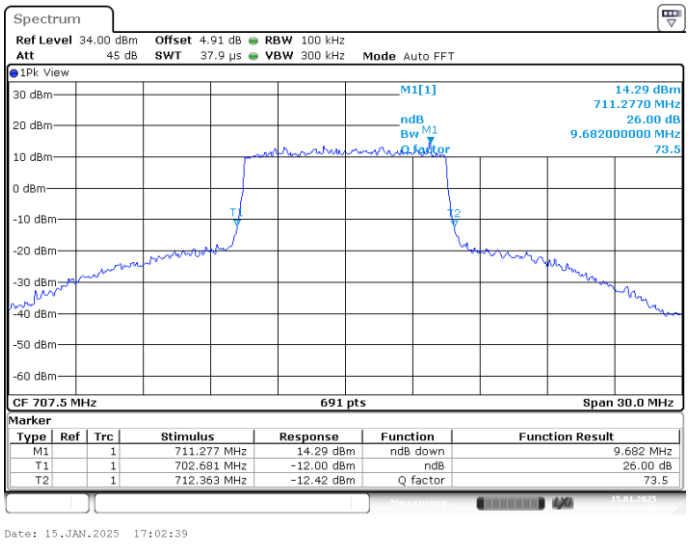
LTE band 12,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	9.855	9.682

LTE band 12 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 12 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)

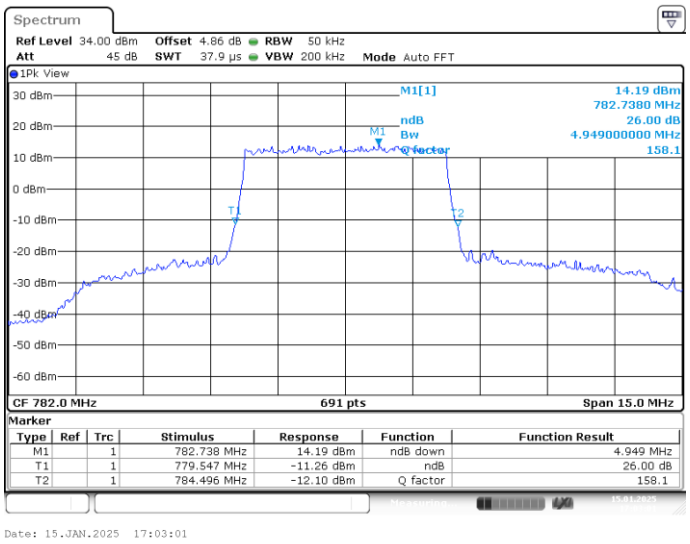


©Copyright. All rights reserved by CTTL.

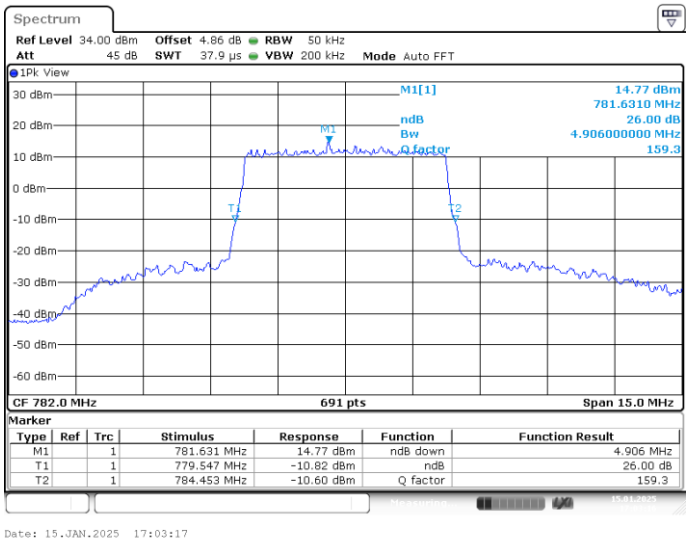
LTE band 13,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	4.949	4.906

LTE band 13 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 13 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

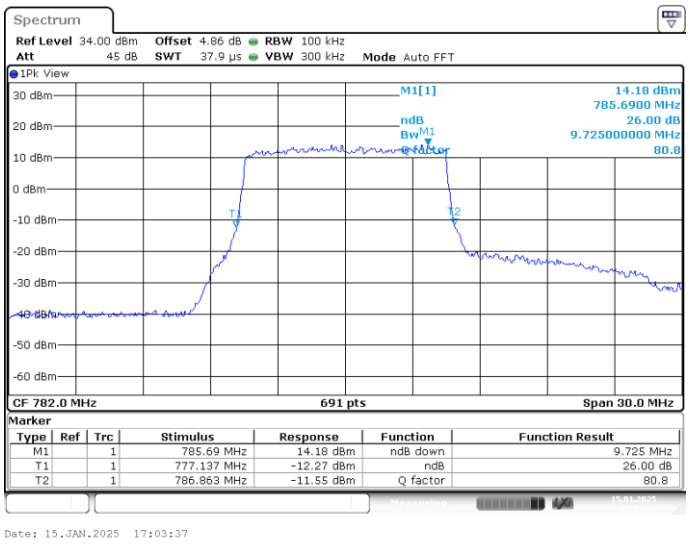


©Copyright. All rights reserved by CTTL.

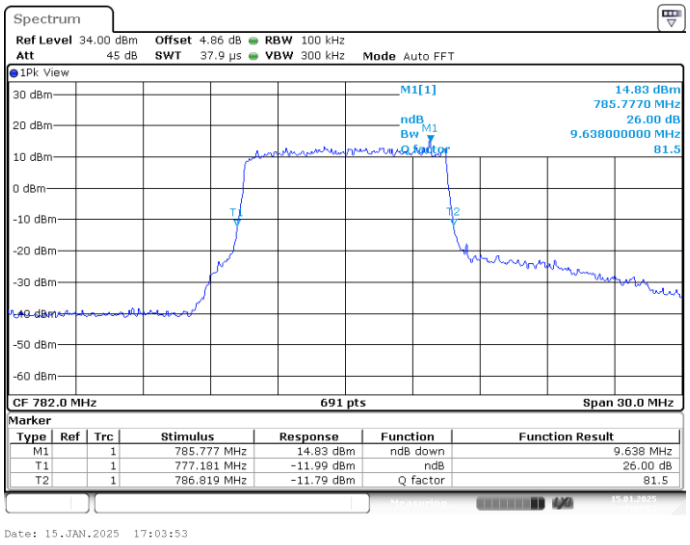
LTE band 13,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	9.725	9.638

LTE band 13 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 13 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)

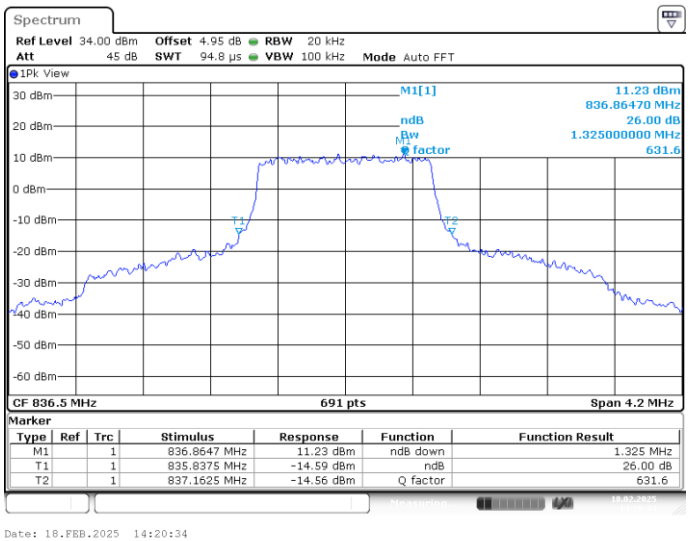


©Copyright. All rights reserved by CTTL.

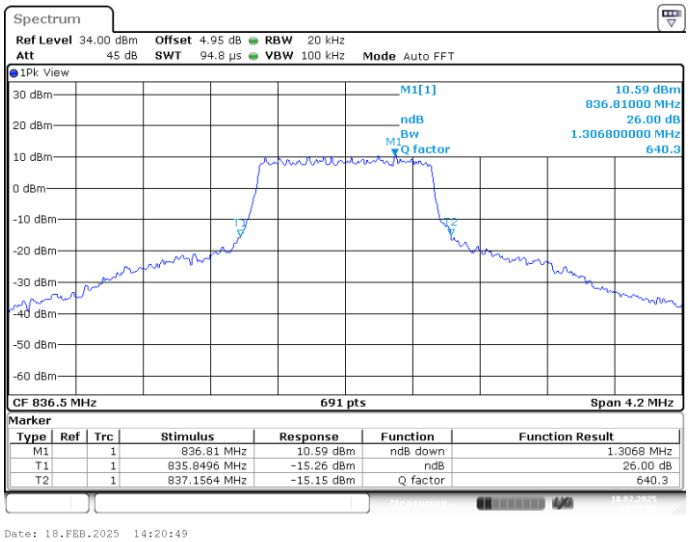
LTE band 26_Part22,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	1.325	1.307

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)

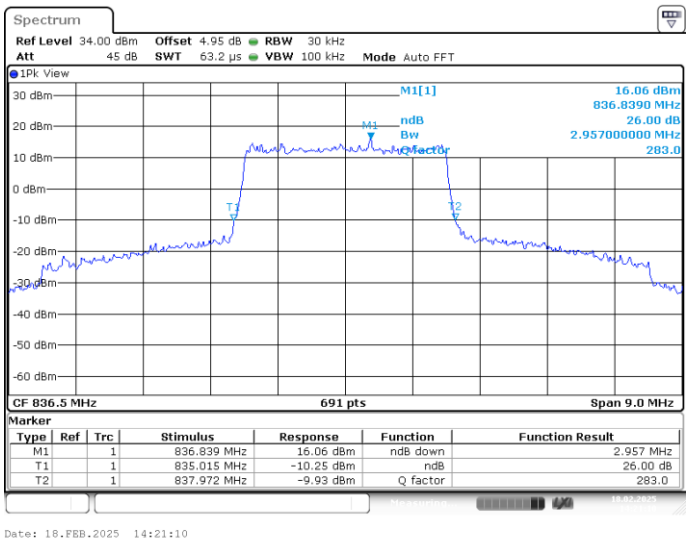


©Copyright. All rights reserved by CTTL.

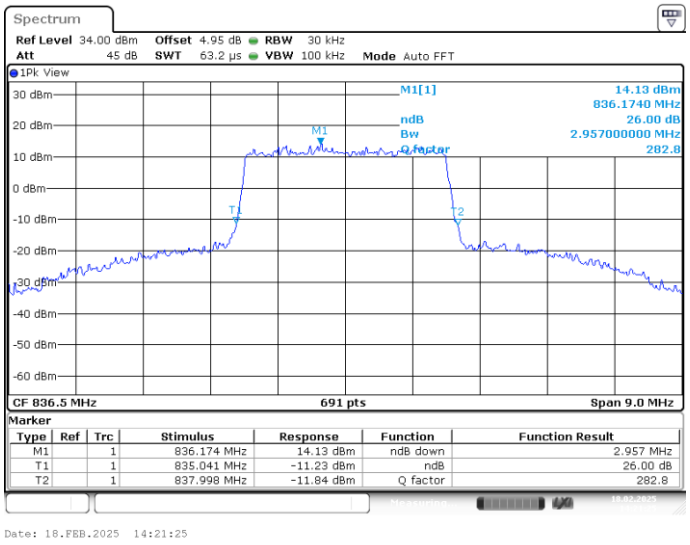
LTE band 26_Part22,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	2.957	2.957

LTE band 26 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)

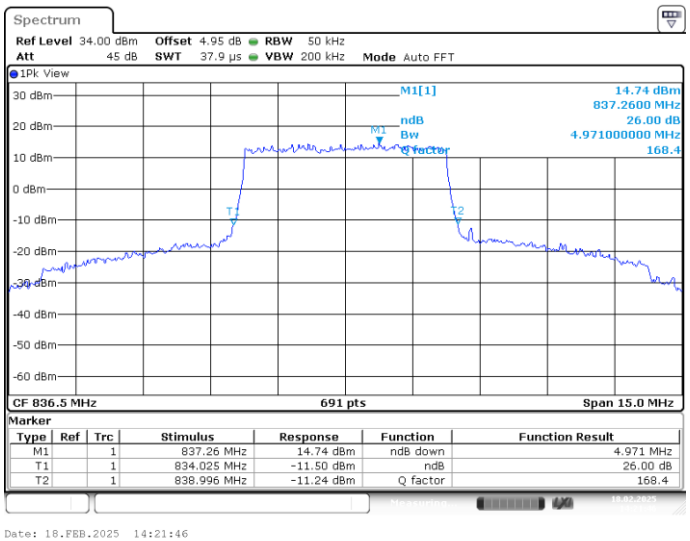


©Copyright. All rights reserved by CTTL.

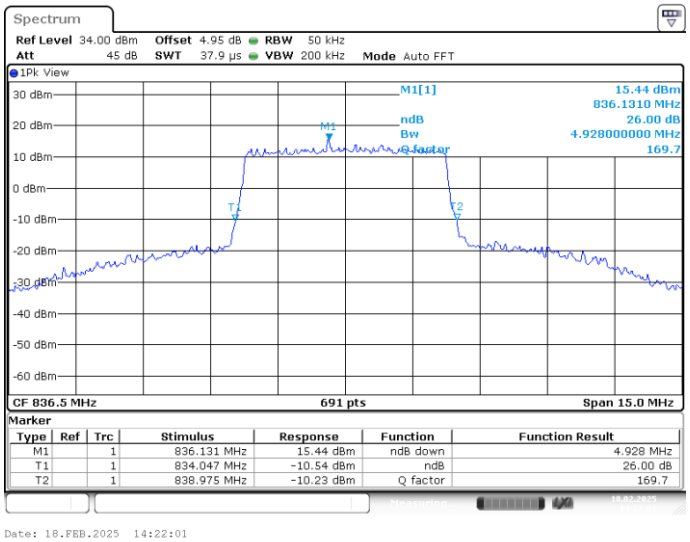
LTE band 26_Part22,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	4.971	4.928

LTE band 26 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

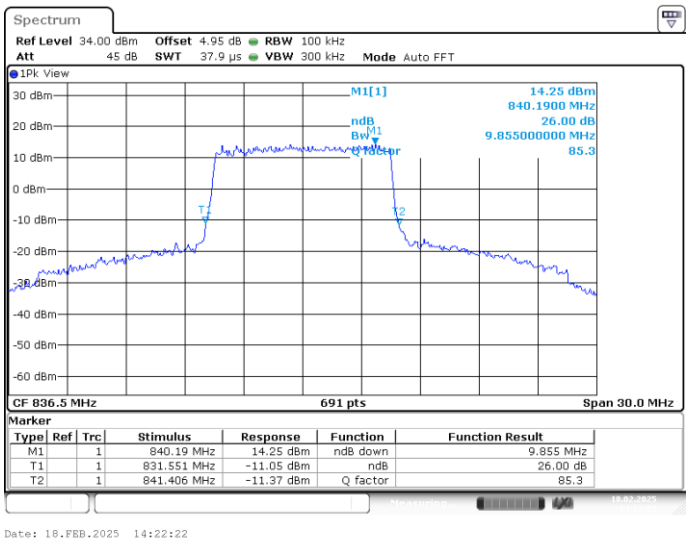


©Copyright. All rights reserved by CTTL.

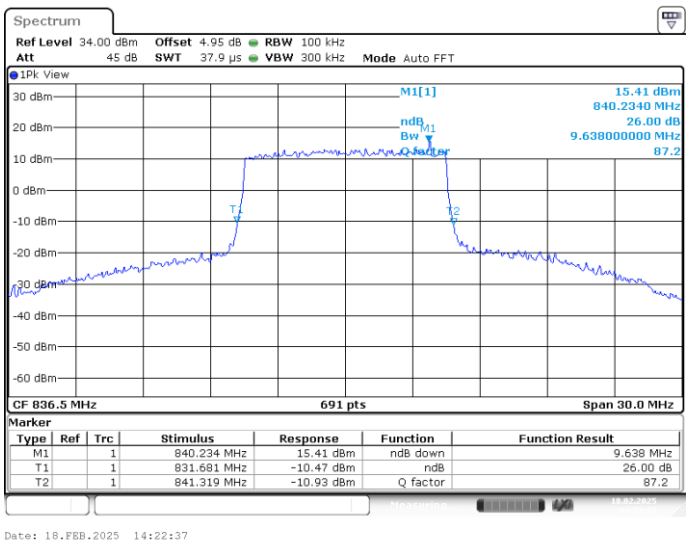
LTE band 26_Part22,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	9.855	9.638

LTE band 26 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)

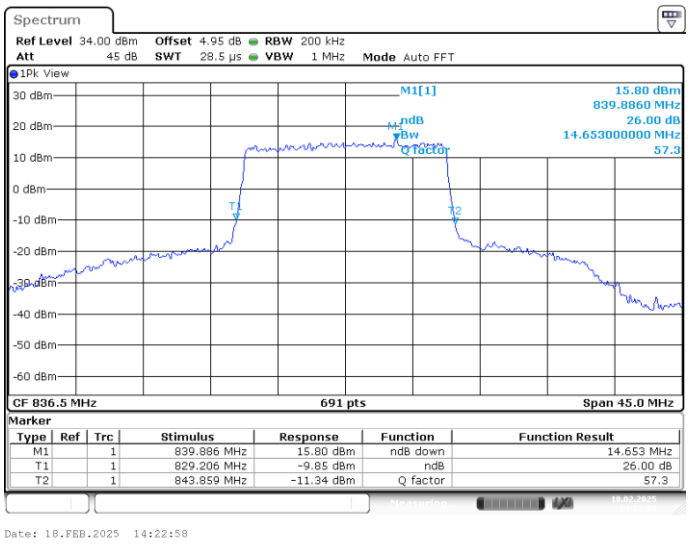


©Copyright. All rights reserved by CTTL.

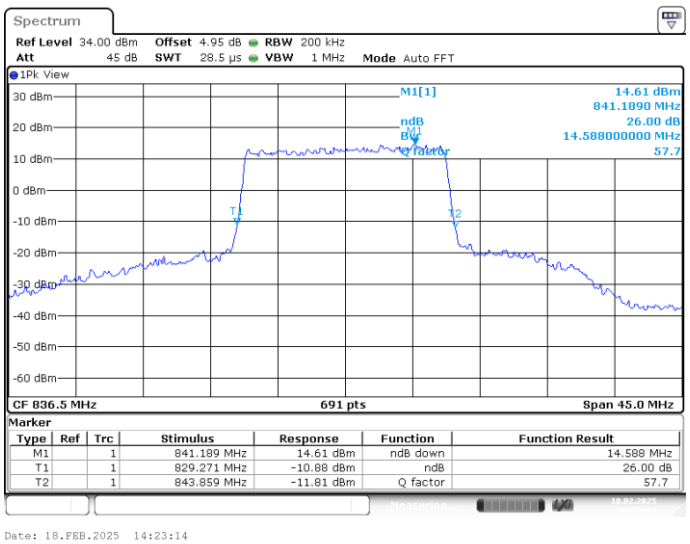
LTE band 26_Part22,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	14.653	14.588

LTE band 26 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)

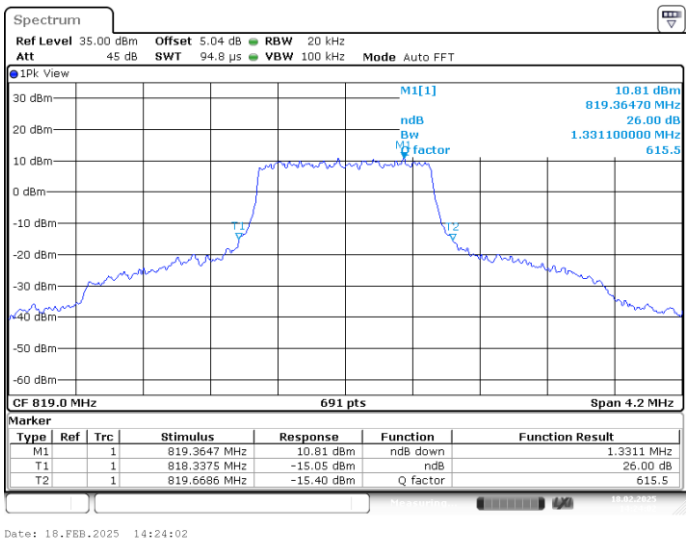


©Copyright. All rights reserved by CTTL.

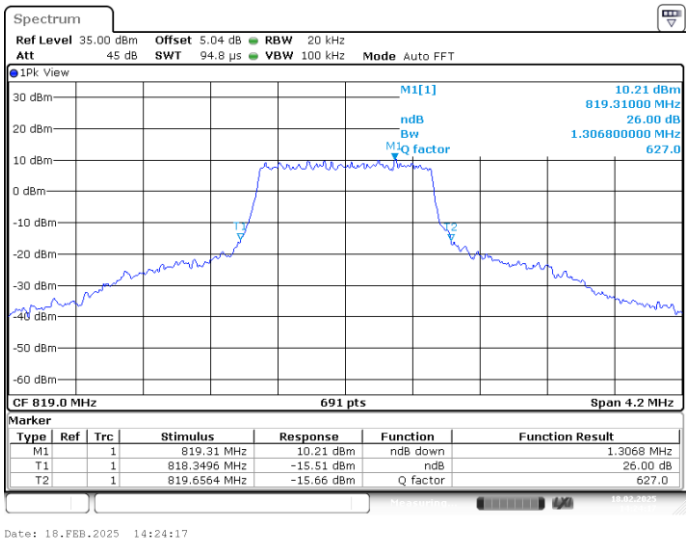
LTE band 26_Part90,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	1.331	1.307

LTE band 26 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)

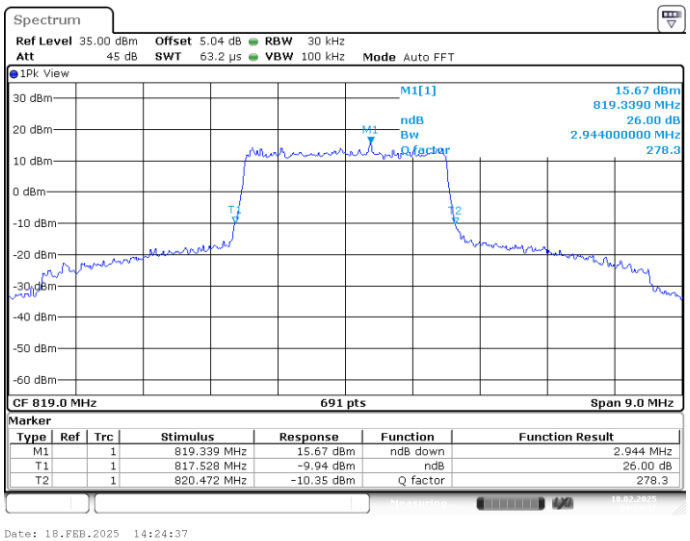


©Copyright. All rights reserved by CTTL.

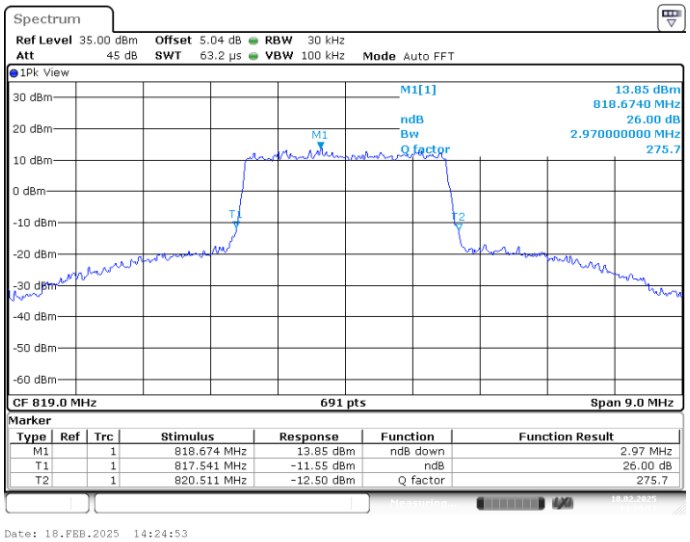
LTE band 26_Part90,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	2.944	2.970

LTE band 26 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)

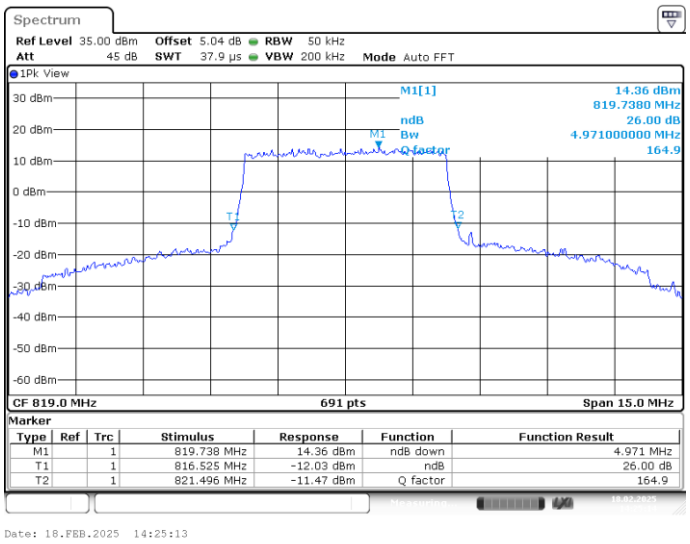


©Copyright. All rights reserved by CTTL.

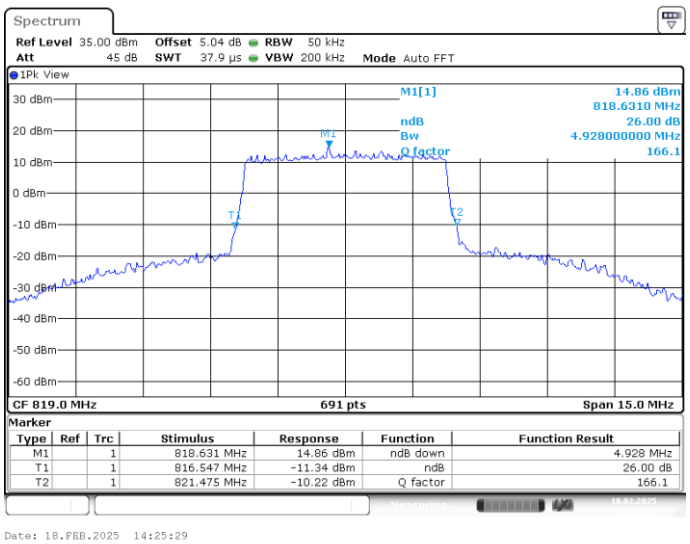
LTE band 26_Part90,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	4.971	4.928

LTE band 26 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)

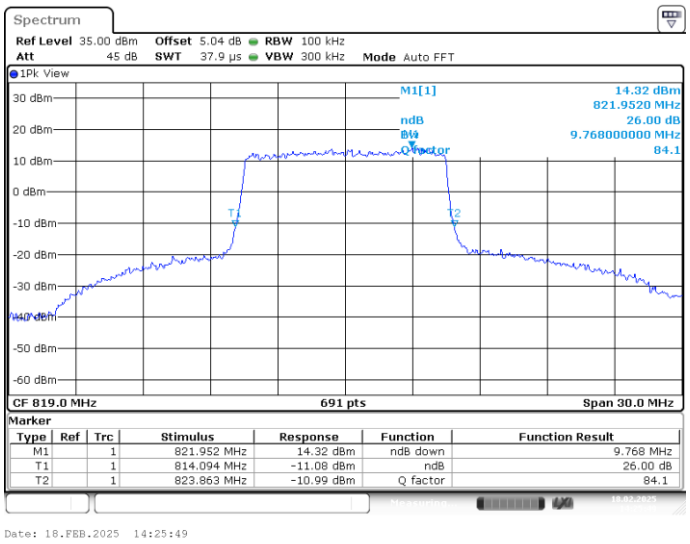


©Copyright. All rights reserved by CTTL.

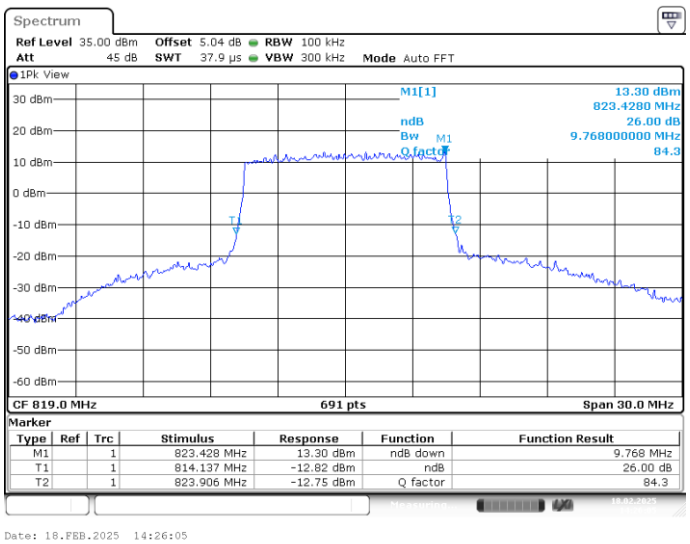
LTE band 26_Part90,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	9.768	9.768

LTE band 26 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 26 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)

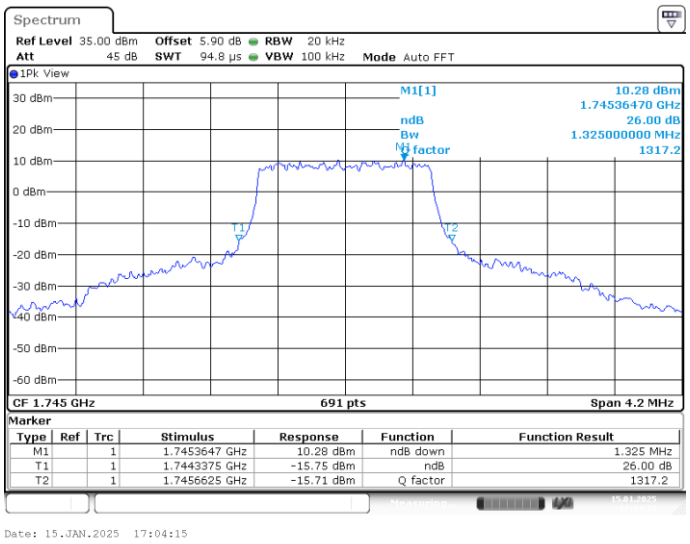


©Copyright. All rights reserved by CTTL.

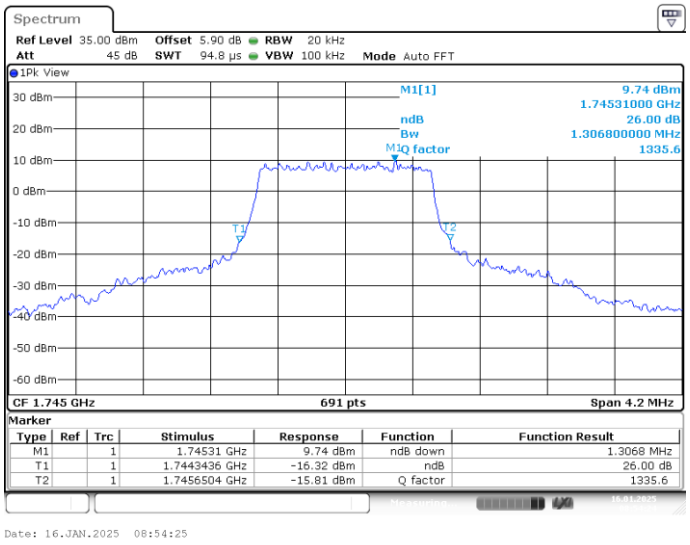
LTE band 66,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	1.325	1.307

LTE band 66 , 1.4MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 66 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)

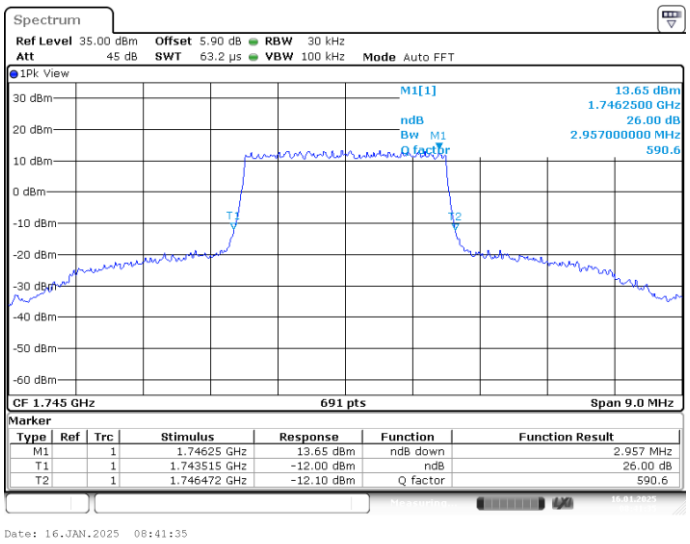


©Copyright. All rights reserved by CTTL.

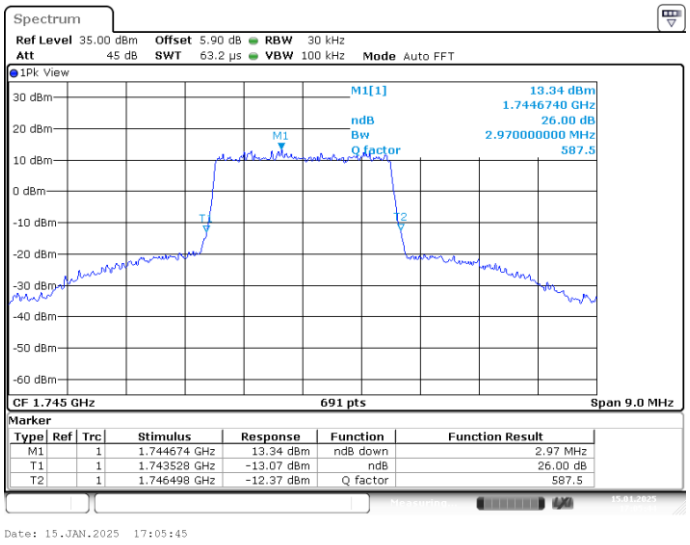
LTE band 66,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	2.957	2.970

LTE band 66 , 3MHz Bandwidth,MID,QPSK (-26dBc BW)



LTE band 66 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



©Copyright. All rights reserved by CTTL.