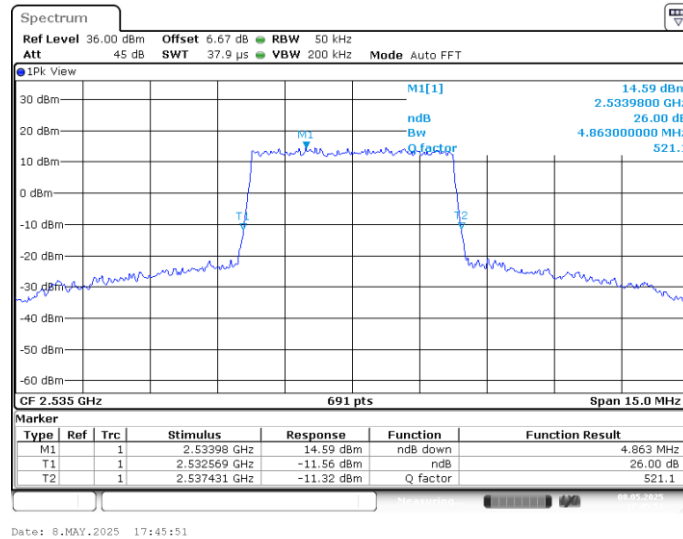


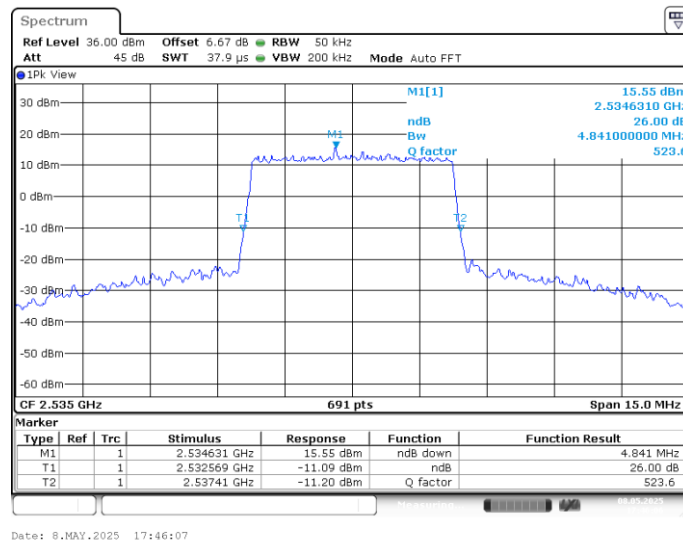
### LTE band 7,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	4.863	4.841

### LTE band 7 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



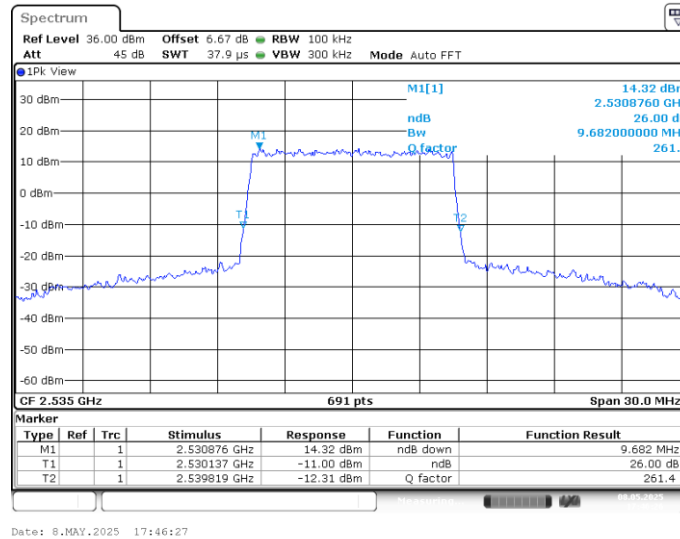
### LTE band 7 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



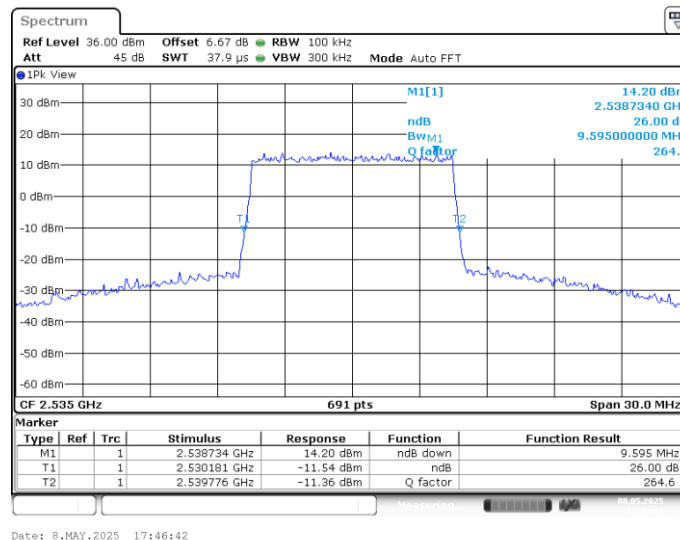
### LTE band 7,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	9.682	9.595

### LTE band 7 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



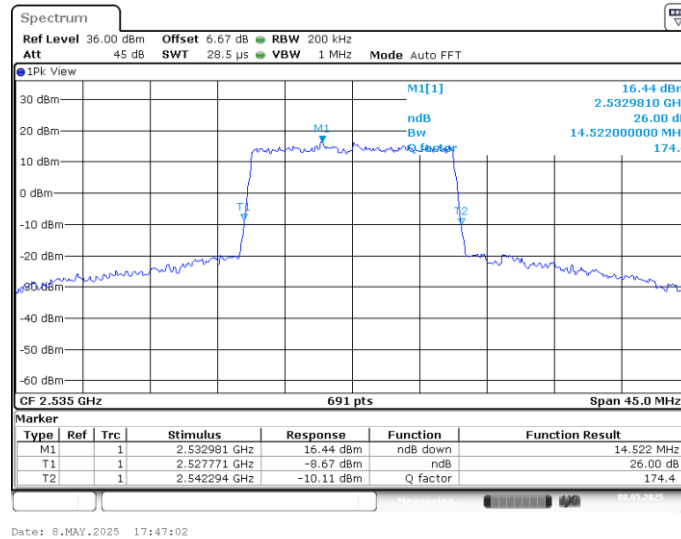
### LTE band 7 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



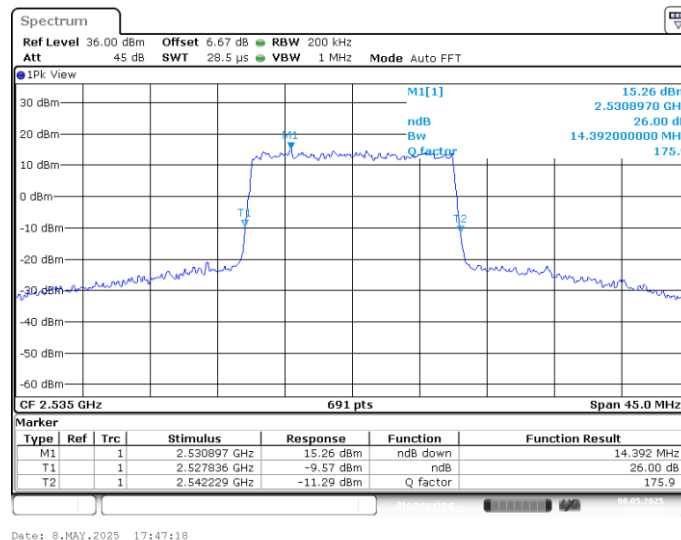
### LTE band 7,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	14.522	14.392

### LTE band 7 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



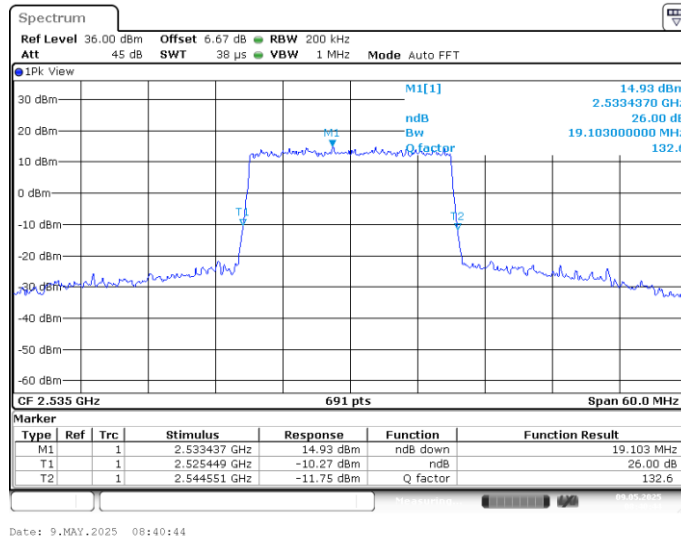
### LTE band 7 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



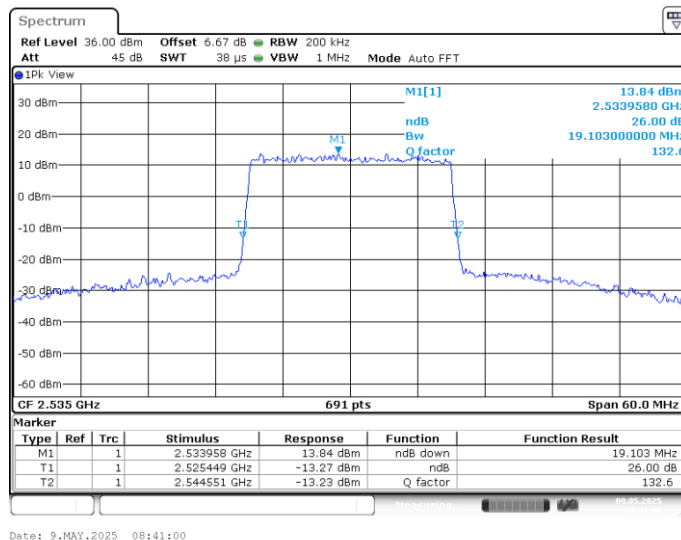
### LTE band 7,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2535	19.103	19.103

### LTE band 7 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



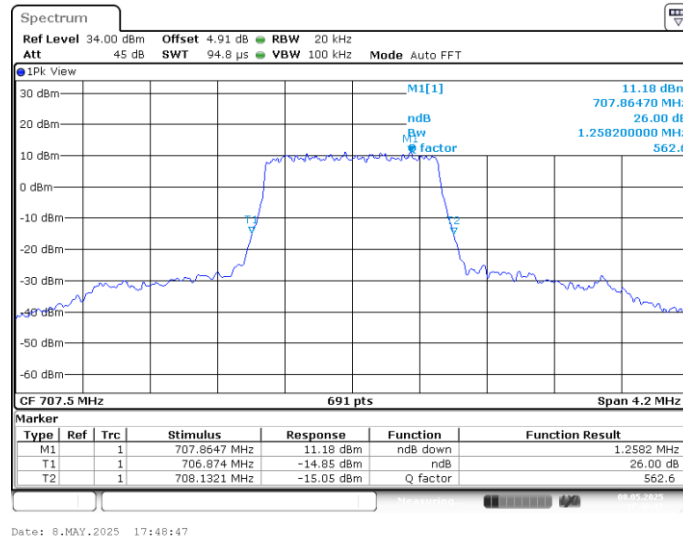
### LTE band 7 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)



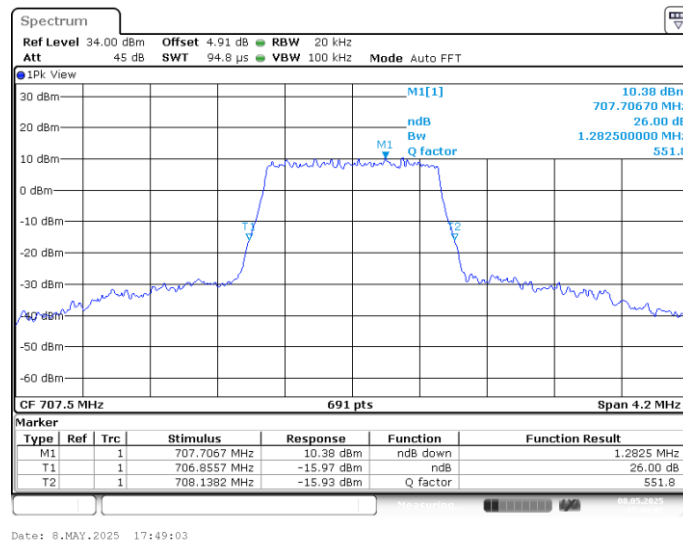
### LTE band 12,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	1.258	1.282

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



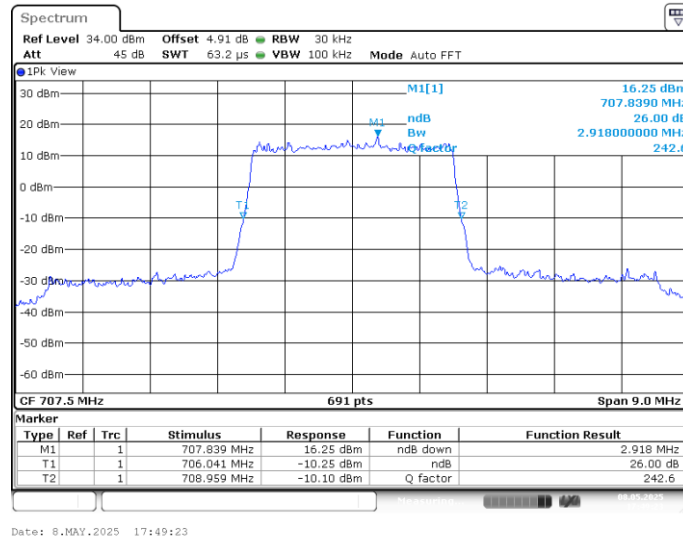
### LTE band 12 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)



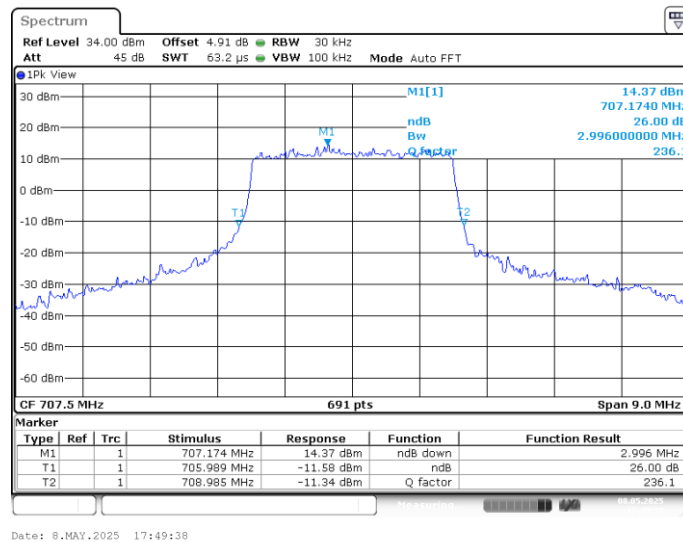
### LTE band 12,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	2.918	2.996

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



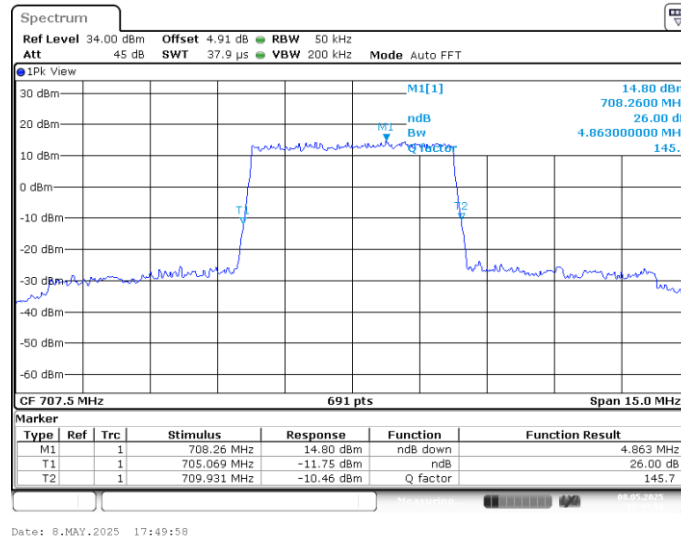
### LTE band 12 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



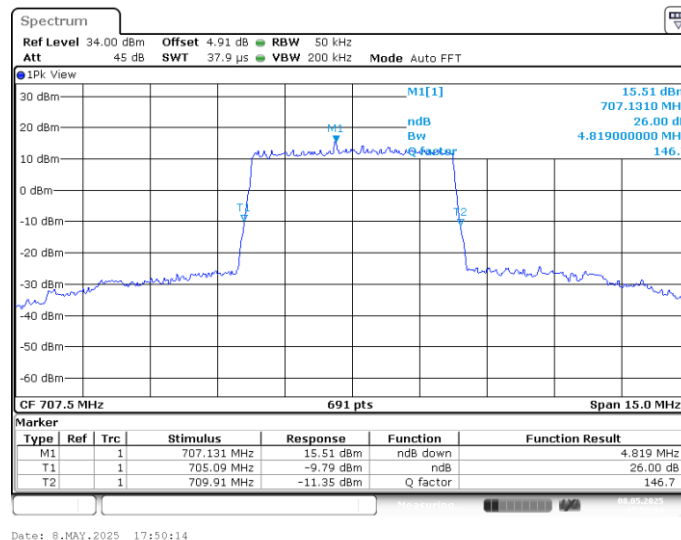
### LTE band 12,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	4.863	4.819

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



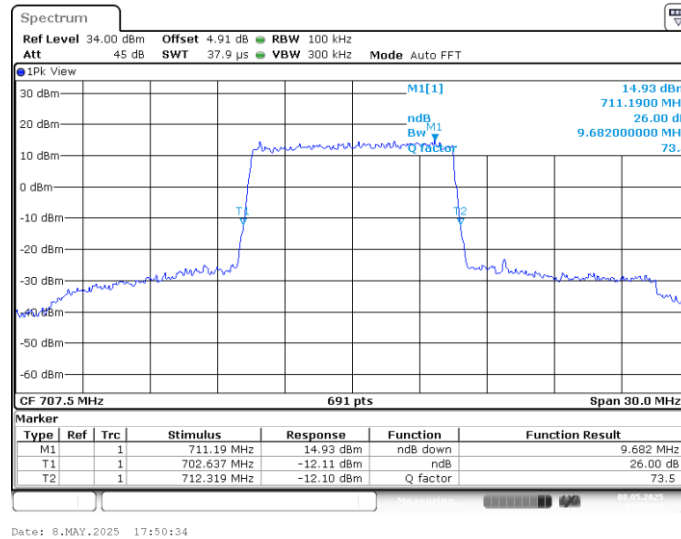
### LTE band 12 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



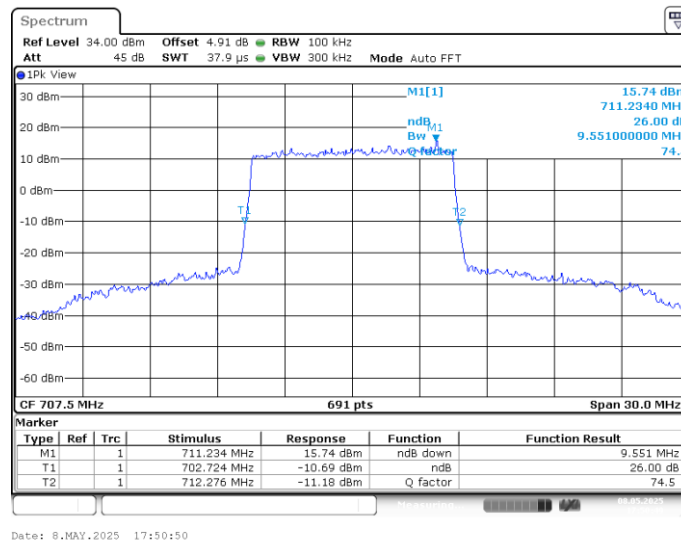
### LTE band 12,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
707.5	9.682	9.551

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



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

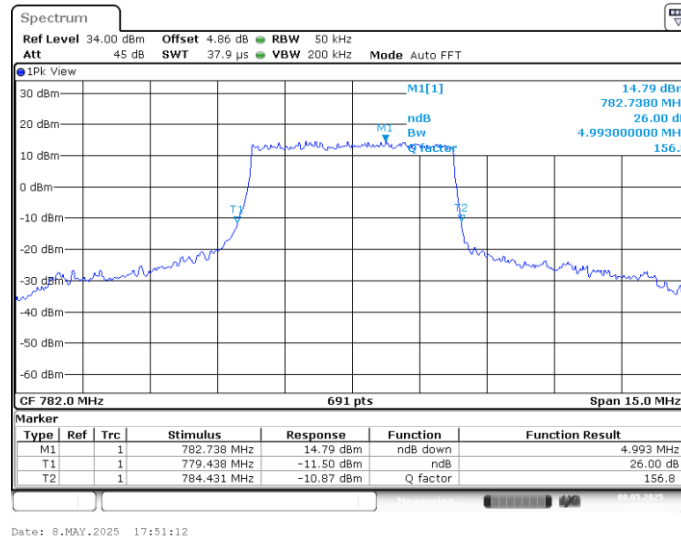




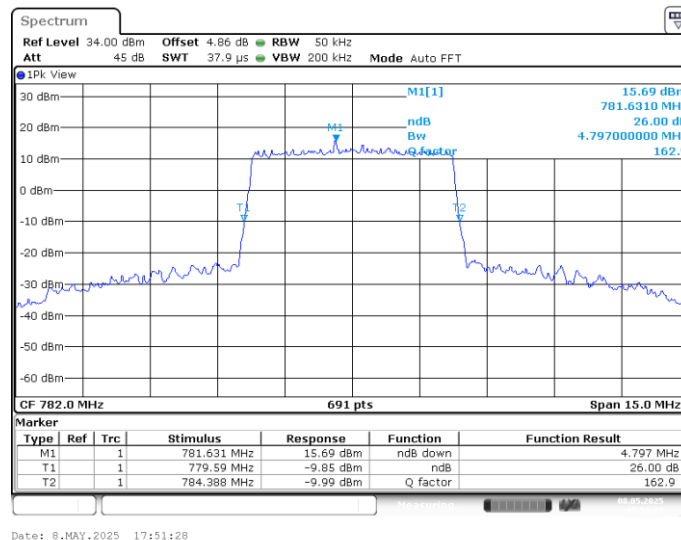
### LTE band 13,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	4.993	4.797

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



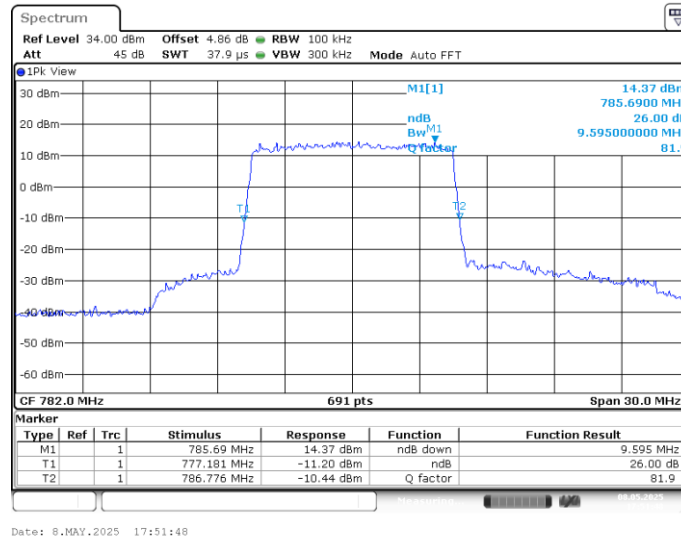
### LTE band 13 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



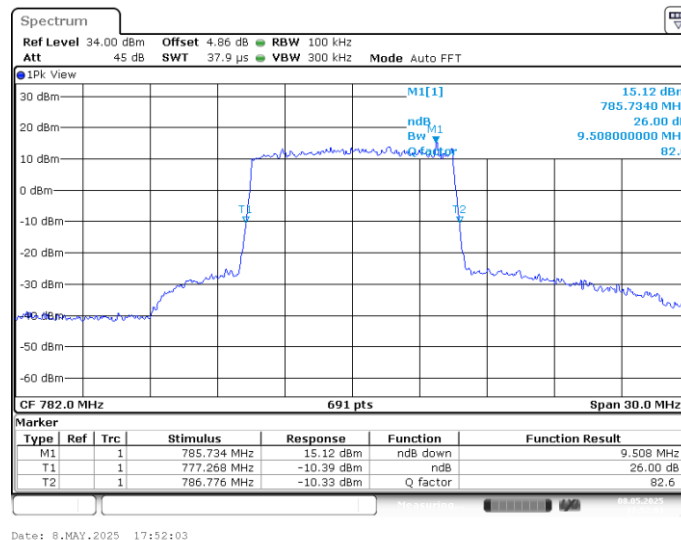
### LTE band 13,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
782	9.595	9.508

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



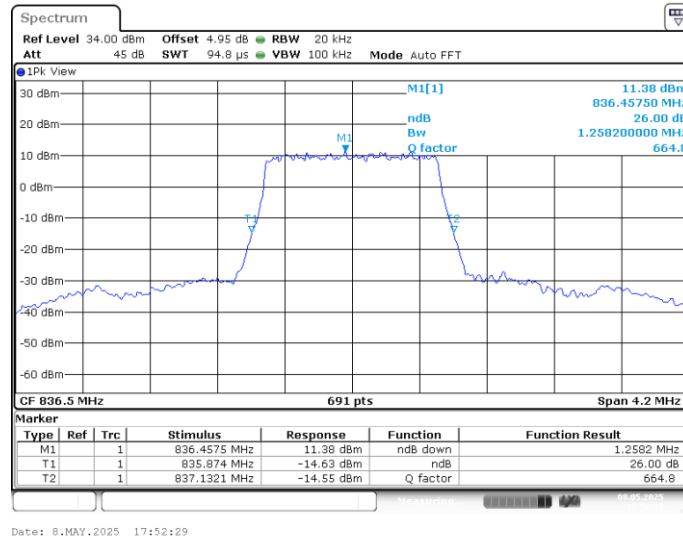
### LTE band 13 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



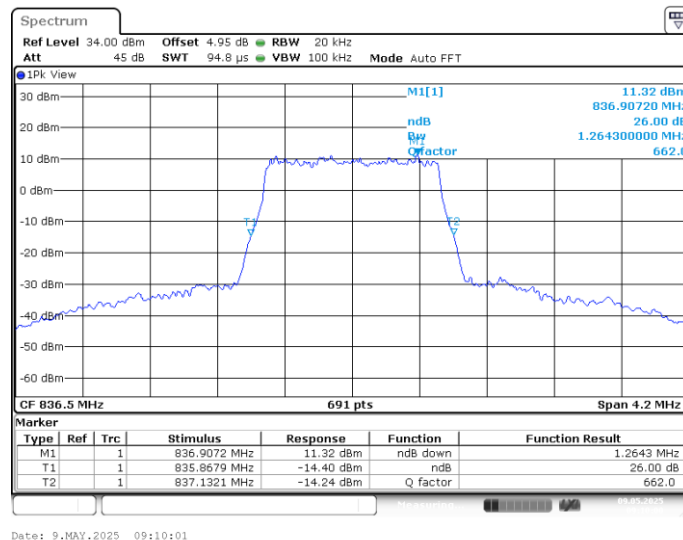
### LTE band 26\_Part22,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	1.258	1.264

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



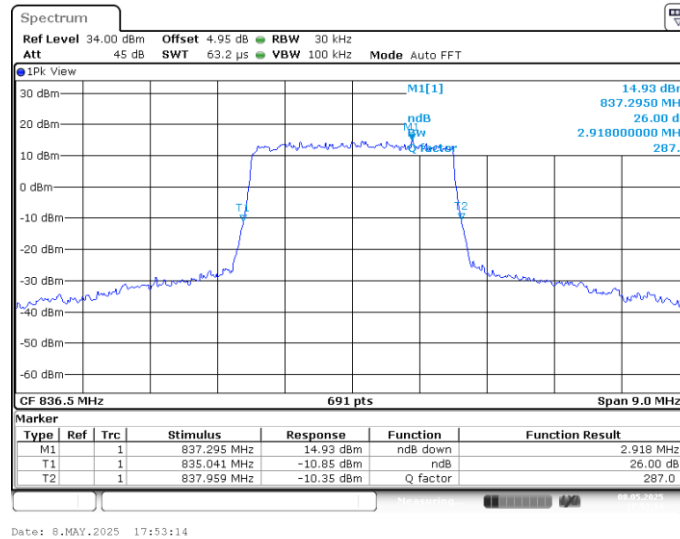
### LTE band 26 , 1.4MHz Bandwidth,MID,16QAM (-26dBc BW)



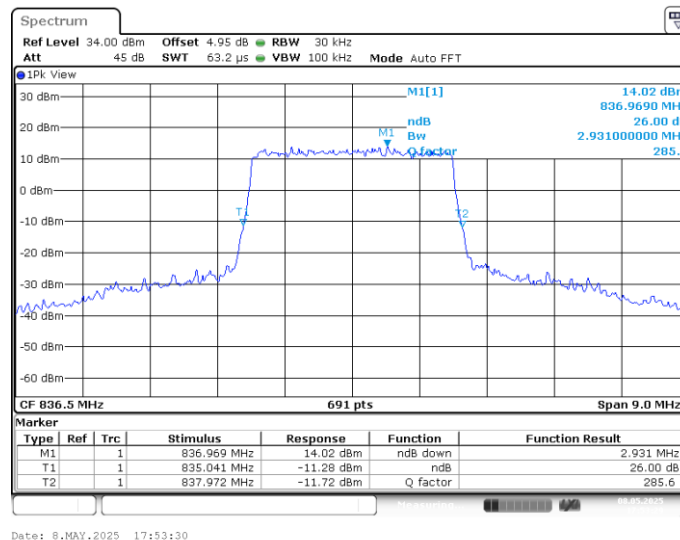
### LTE band 26\_Part22,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	2.918	2.931

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



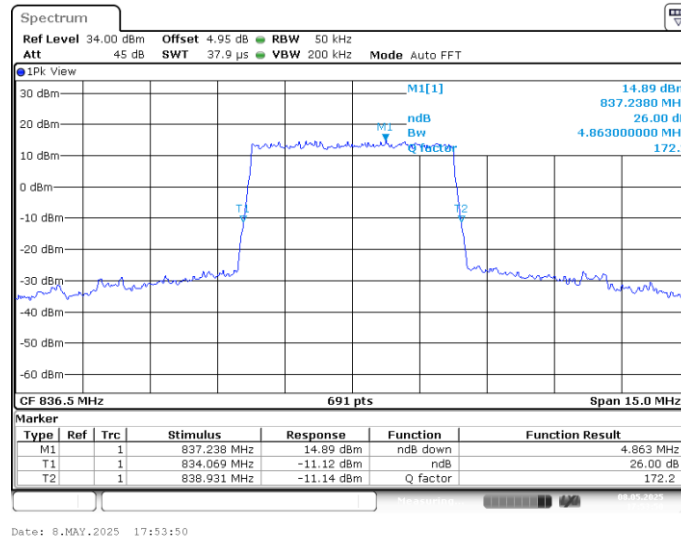
### LTE band 26 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



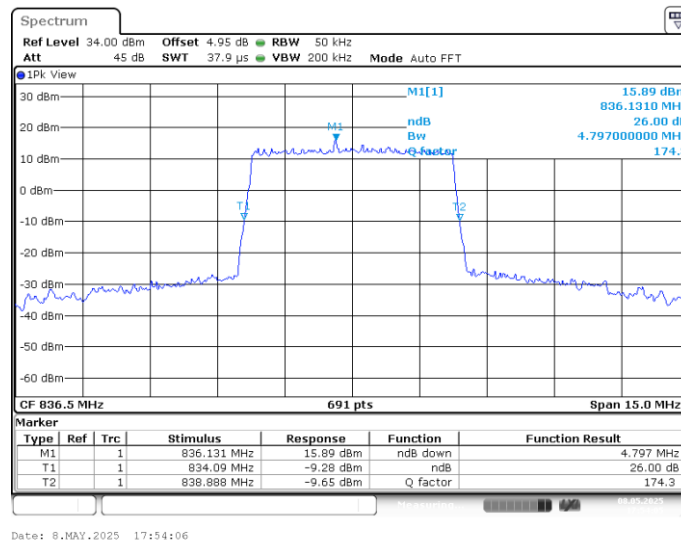
### LTE band 26\_Part22,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	4.863	4.797

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



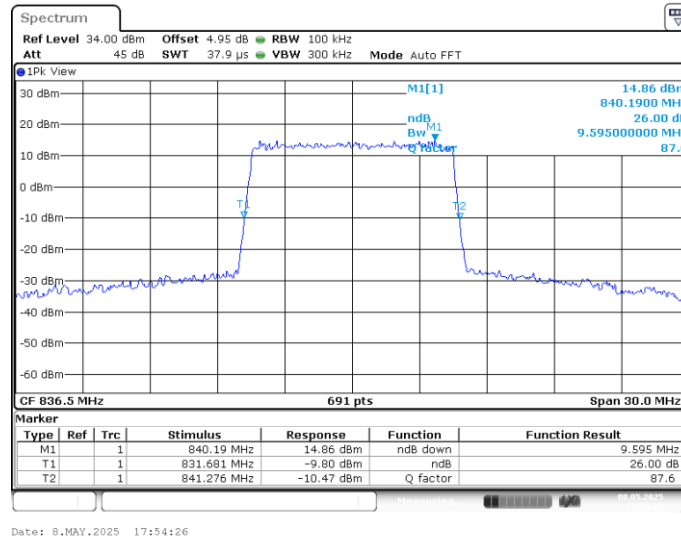
### LTE band 26 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



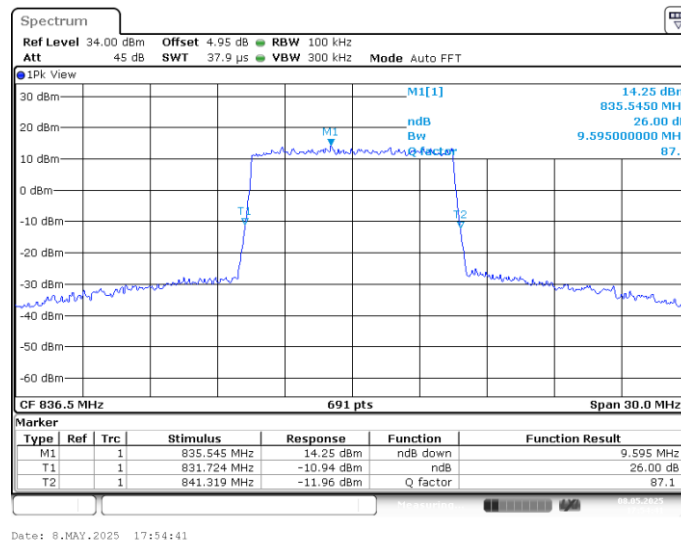
### LTE band 26\_Part22,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	9.595	9.595

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



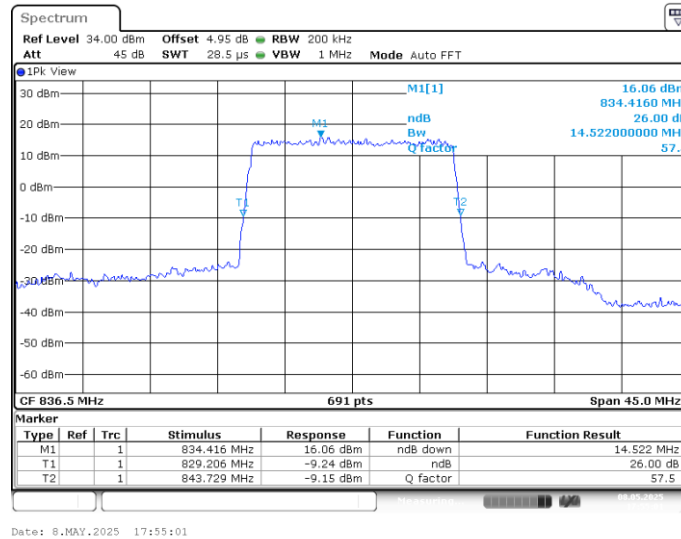
### LTE band 26 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



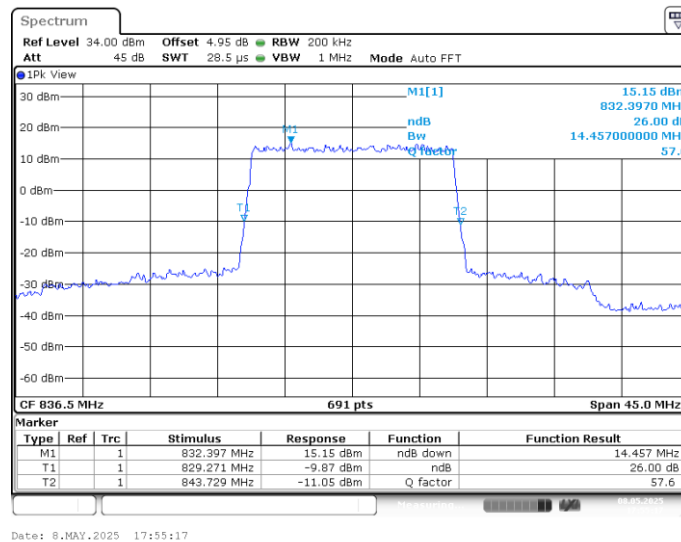
### LTE band 26\_Part22,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
836.5	14.522	14.457

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



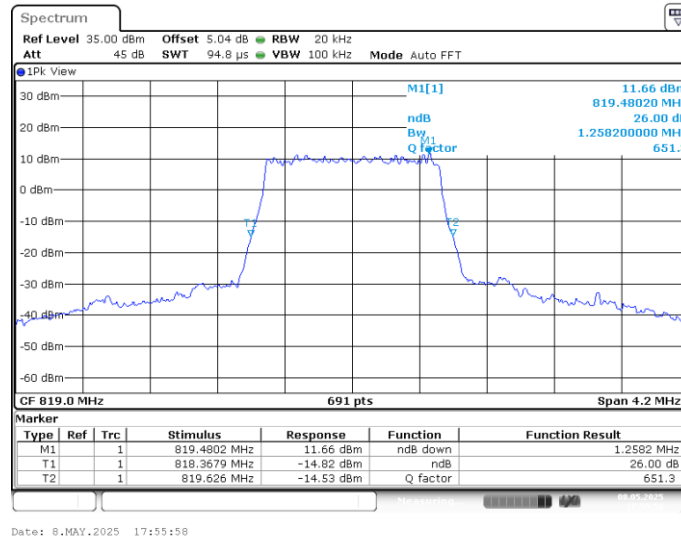
### LTE band 26 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



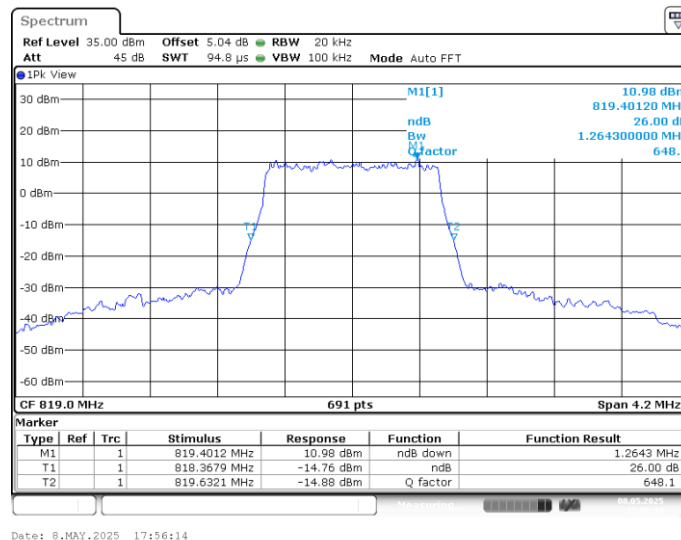
### LTE band 26\_Part90,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	1.258	1.264

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



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

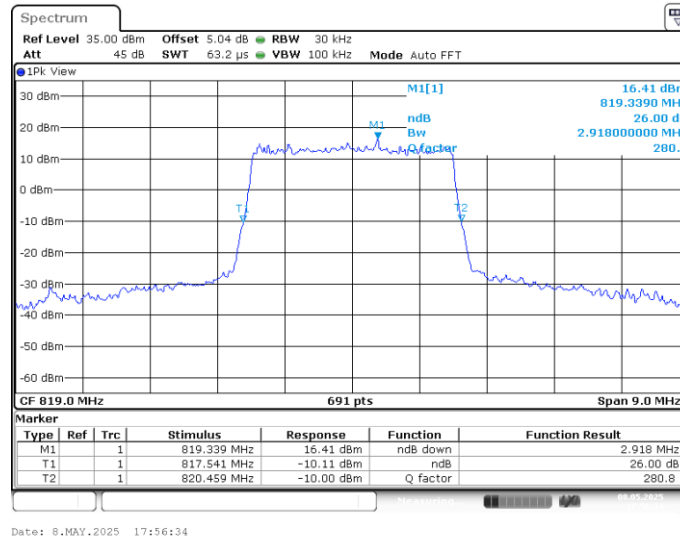




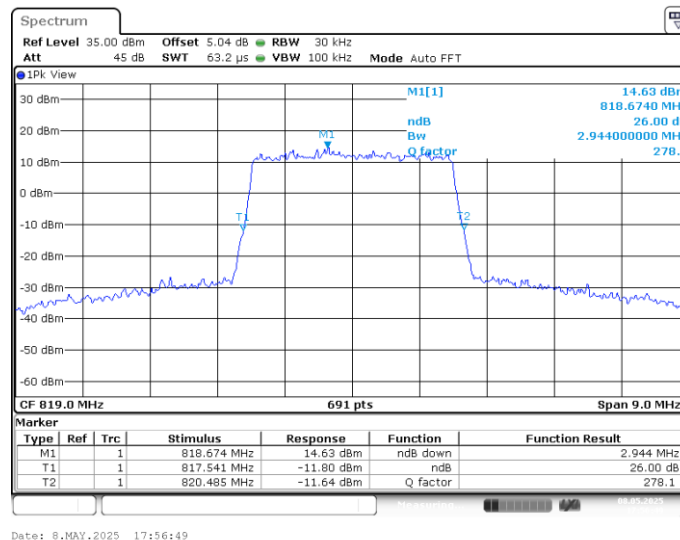
### LTE band 26\_Part90,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	2.918	2.944

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



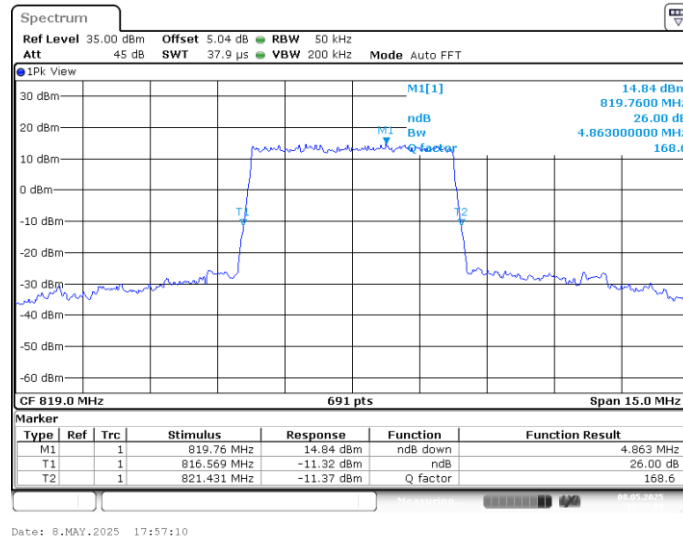
### LTE band 26 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



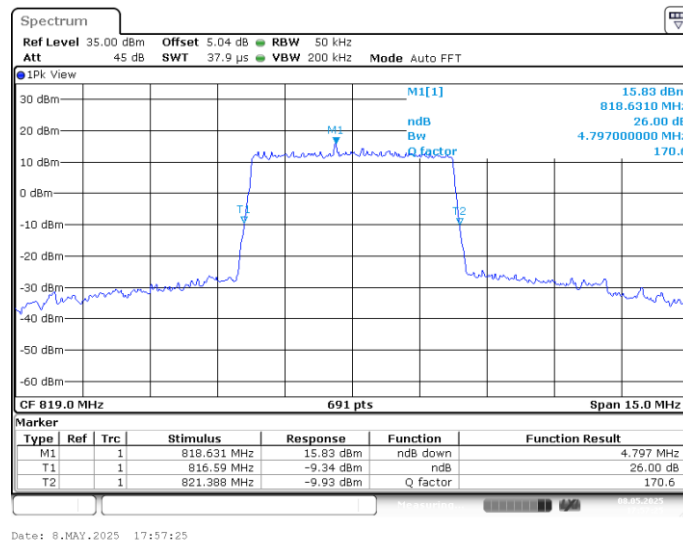
### LTE band 26\_Part90,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	4.863	4.797

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



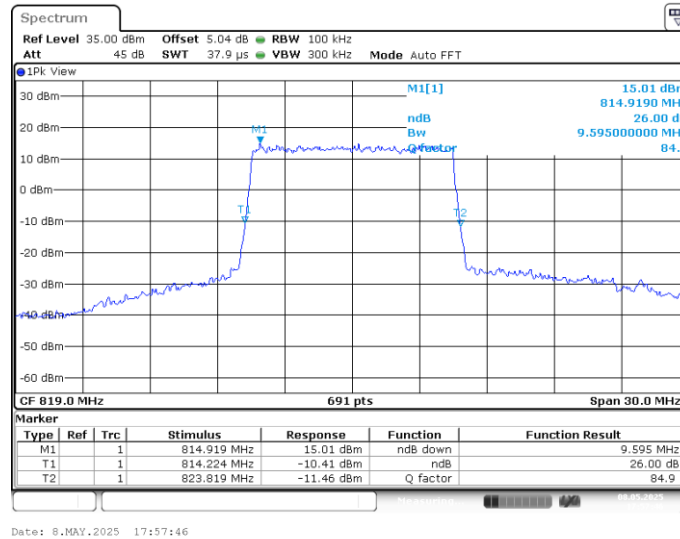
### LTE band 26 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



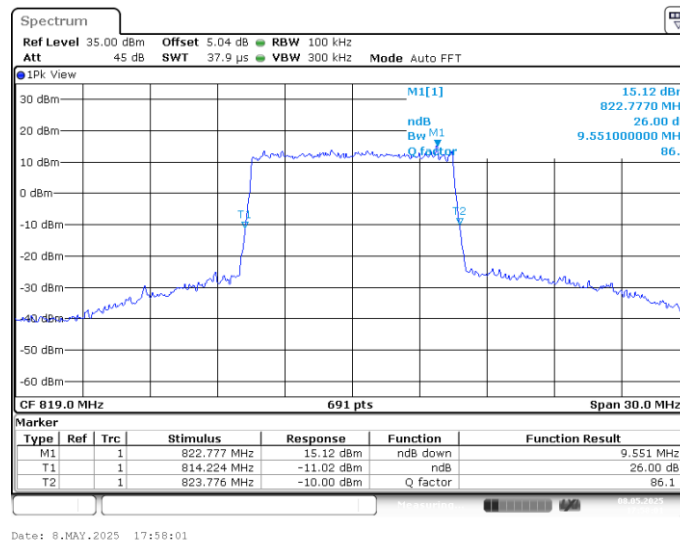
### LTE band 26\_Part90,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
819	9.595	9.551

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



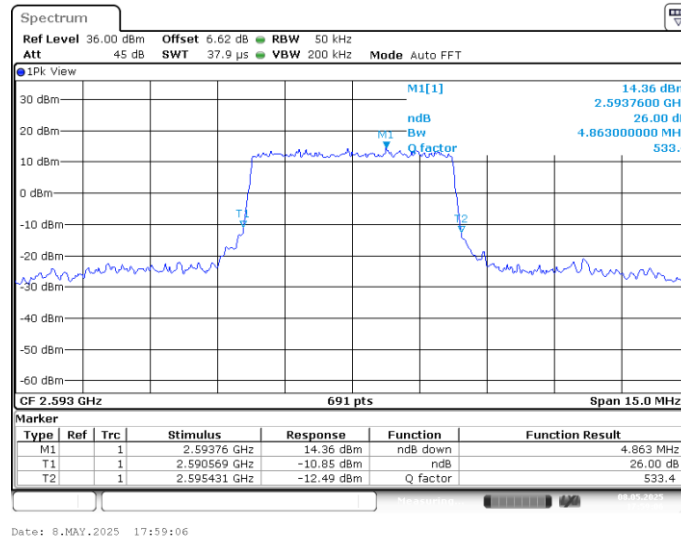
### LTE band 26 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



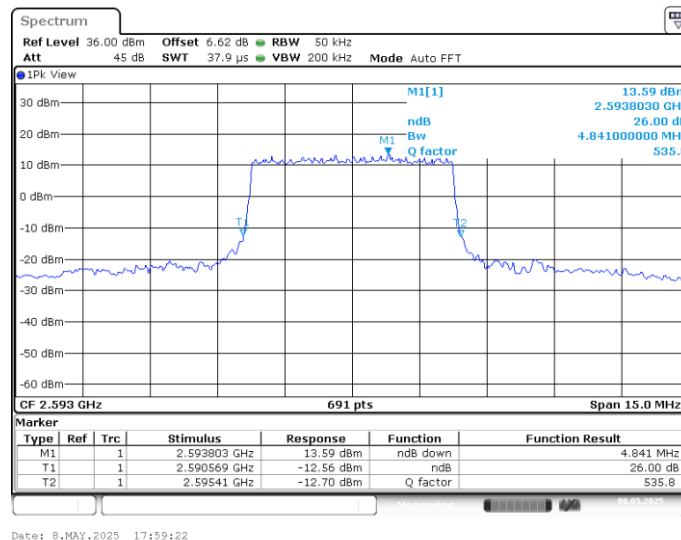
### LTE band 41,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2593	4.863	4.841

### LTE band 41 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



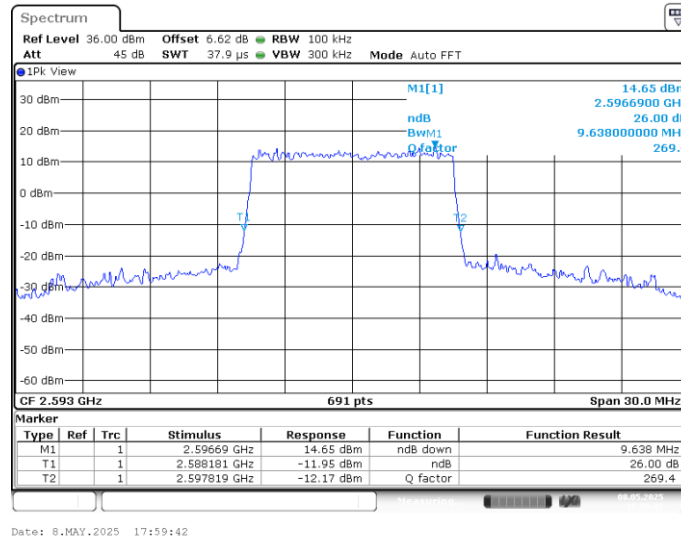
### LTE band 41 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



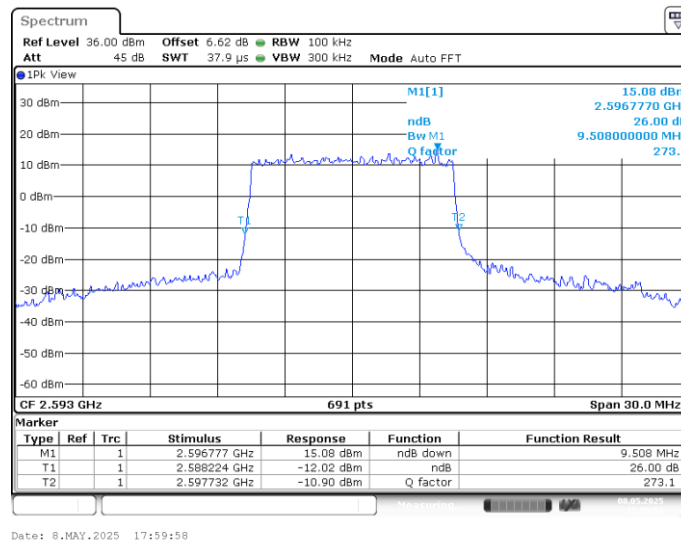
### LTE band 41,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2593	9.638	9.508

### LTE band 41 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



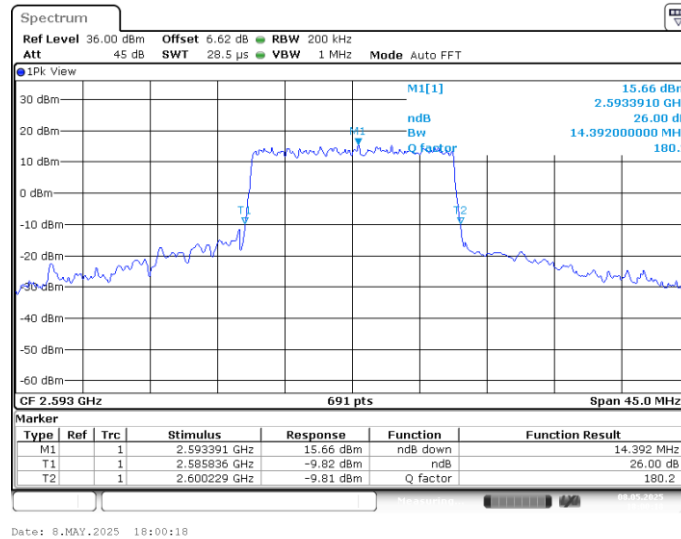
### LTE band 41 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



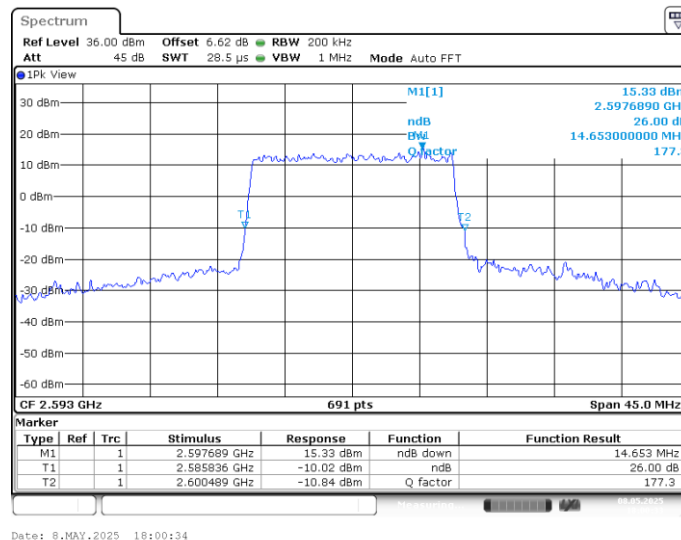
### LTE band 41,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2593	14.392	14.653

### LTE band 41 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



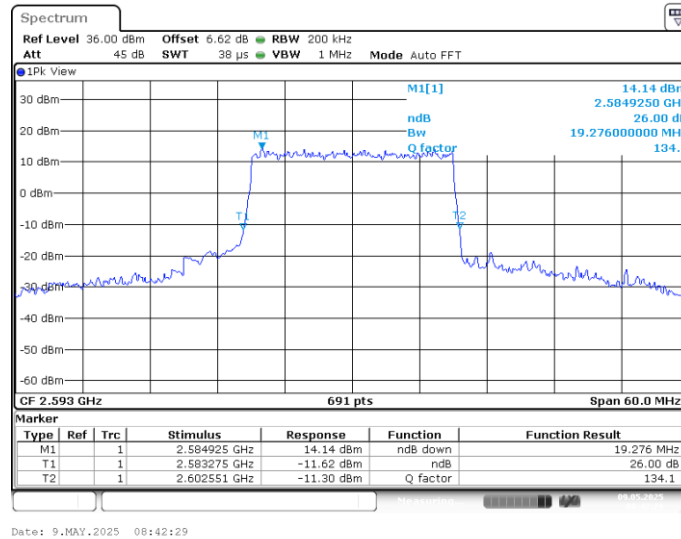
### LTE band 41 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



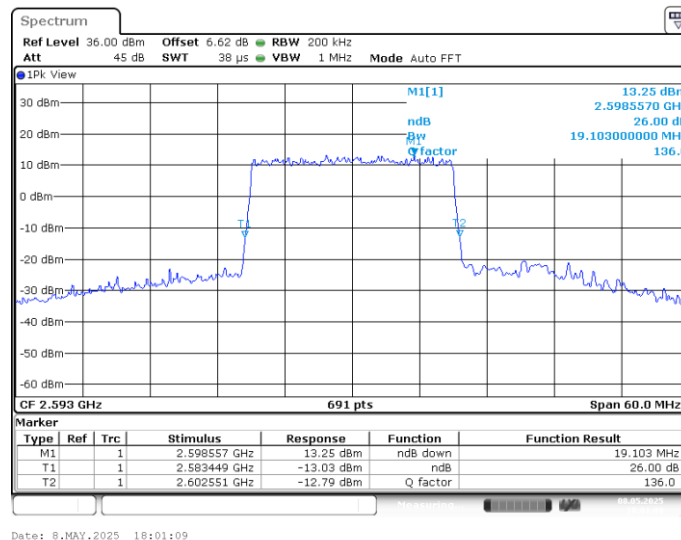
### LTE band 41,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
2593	19.276	19.103

### LTE band 41 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



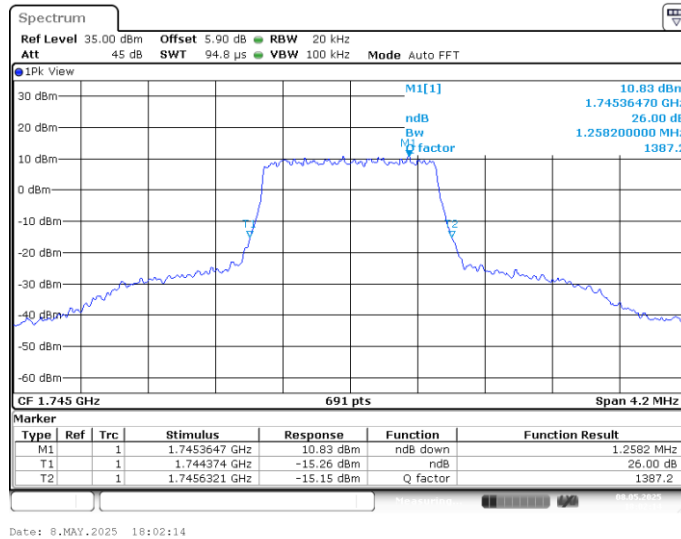
### LTE band 41 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)



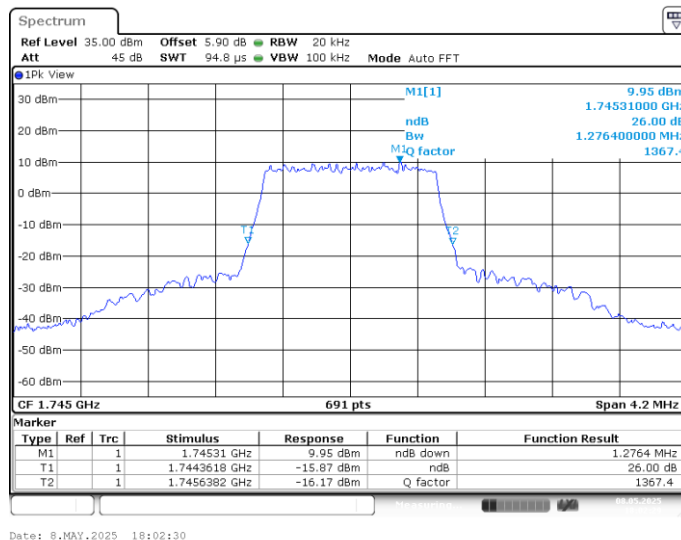
### LTE band 66,1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	1.258	1.276

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



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

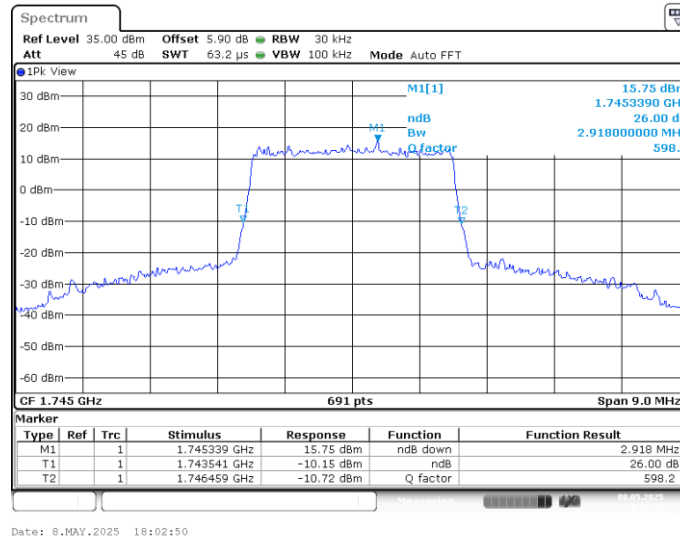




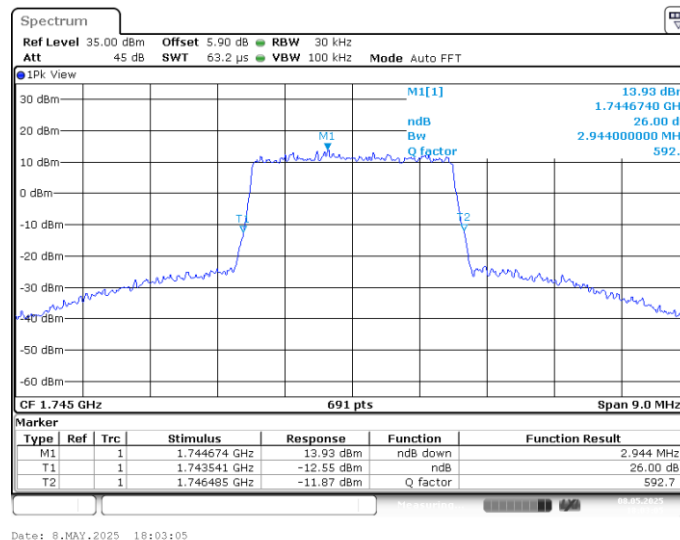
### LTE band 66,3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	2.918	2.944

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



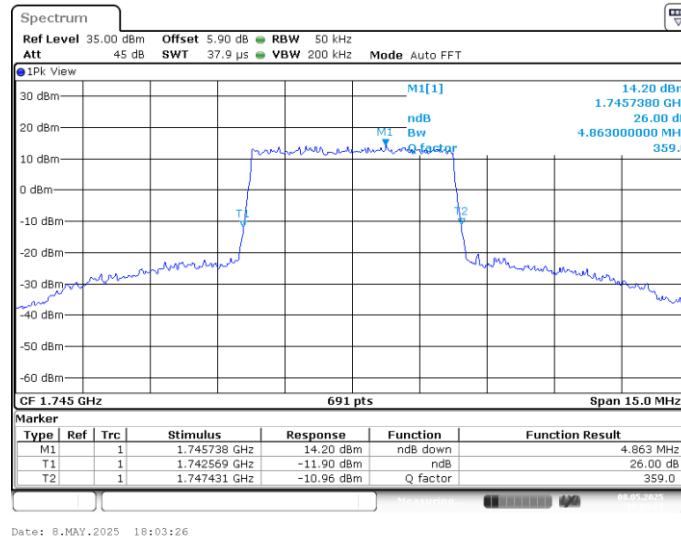
### LTE band 66 , 3MHz Bandwidth,MID,16QAM (-26dBc BW)



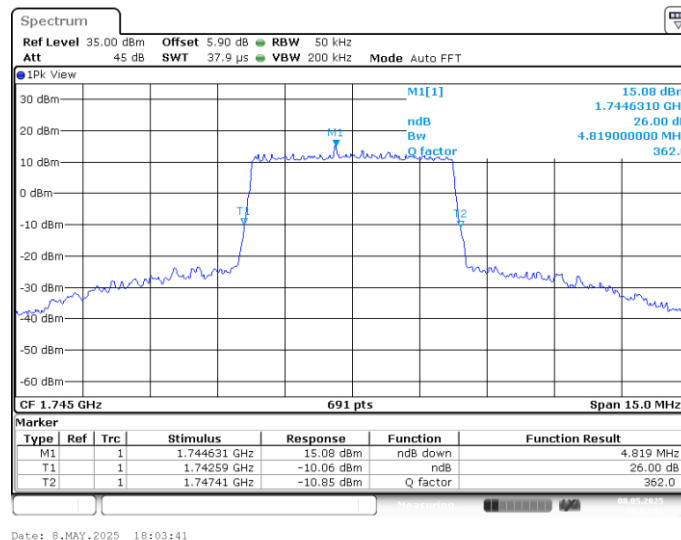
### LTE band 66,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	4.863	4.819

### LTE band 66 , 5MHz Bandwidth,MID,QPSK (-26dBc BW)



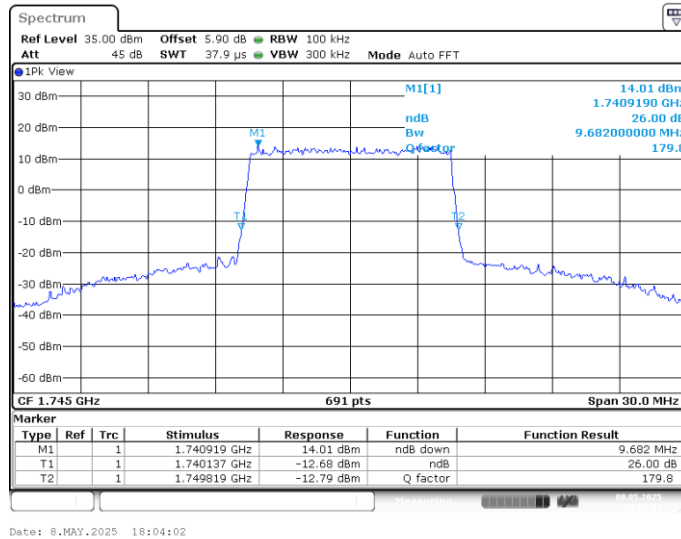
### LTE band 66 , 5MHz Bandwidth,MID,16QAM (-26dBc BW)



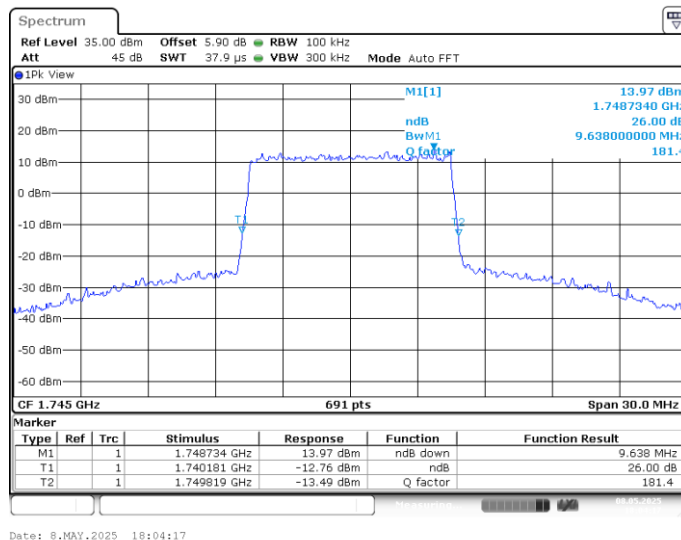
### LTE band 66,10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	9.682	9.638

### LTE band 66 , 10MHz Bandwidth,MID,QPSK (-26dBc BW)



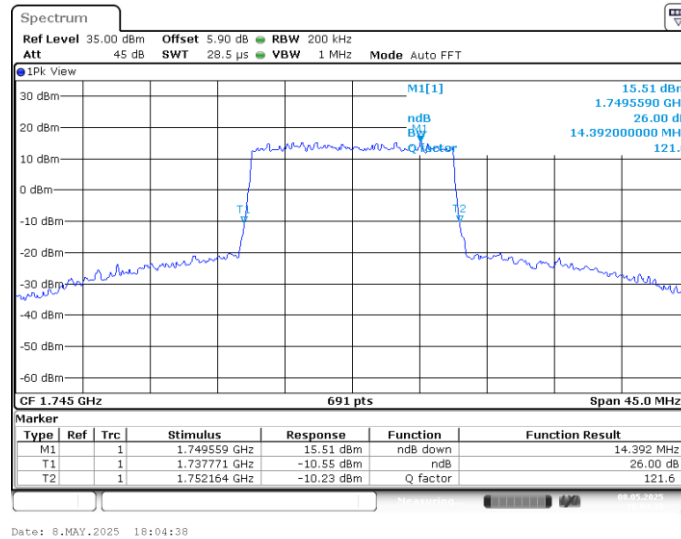
### LTE band 66 , 10MHz Bandwidth,MID,16QAM (-26dBc BW)



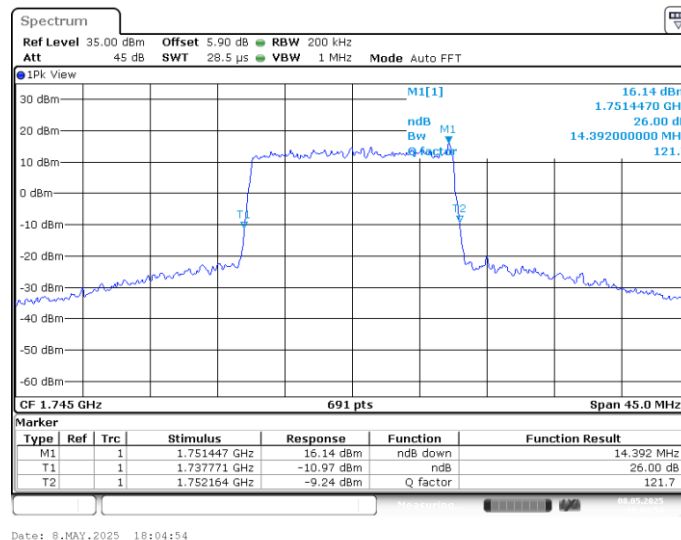
### LTE band 66,15MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	14.392	14.392

### LTE band 66 , 15MHz Bandwidth,MID,QPSK (-26dBc BW)



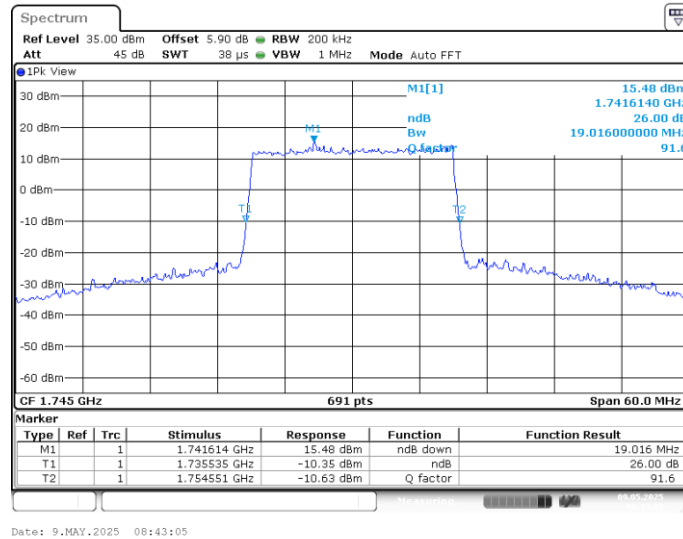
### LTE band 66 , 15MHz Bandwidth,MID,16QAM (-26dBc BW)



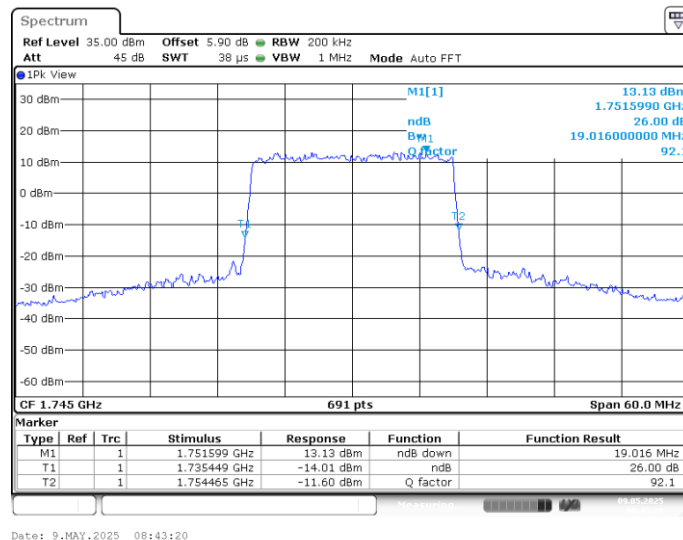
### LTE band 66,20MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)	
	QPSK	16QAM
1745	19.016	19.016

### LTE band 66 , 20MHz Bandwidth,MID,QPSK (-26dBc BW)



### LTE band 66 , 20MHz Bandwidth,MID,16QAM (-26dBc BW)



## **A.6 Band Edge Compliance**

### **A.6.1 Measurement limit**

Part 22.917, Part 24.238 and Part 27.53(h) specify that 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.

Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log(P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log(P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log(P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(c) states for operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB; (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log(P)$  dB; (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than  $65 + 10 \log(P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.

Part 27.53(g) states for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log(P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 90.691 states that out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows: For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency

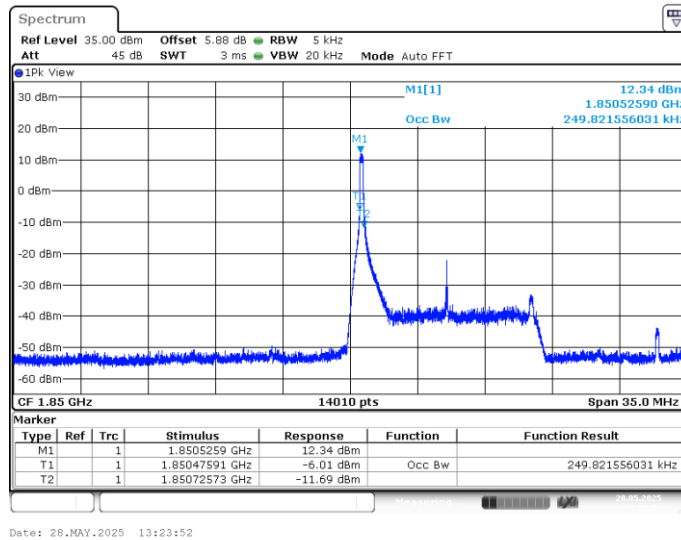
removed from the center of the outer channel in the block in kilohertz and where  $f$  is greater than 37.5 kHz.

The spectrum analyzer readings are corrected by  $[10 \log (1/\text{duty cycle})]$  for the non-continuous transmitting scenario.

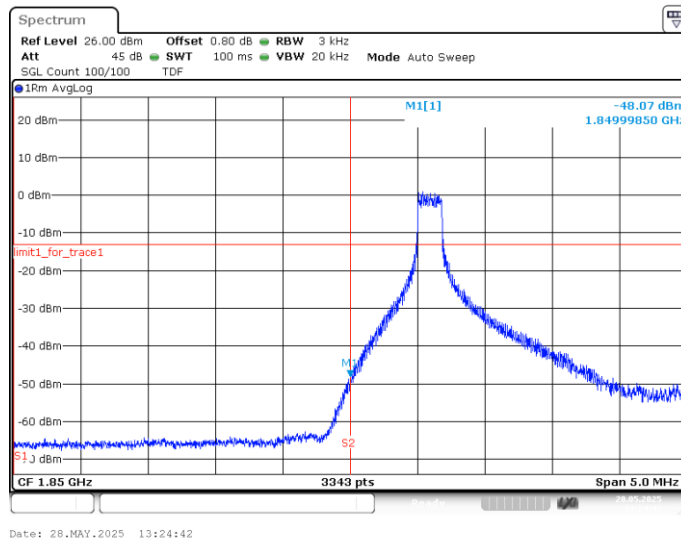
## A.6.2 Measurement result

### LTE band 2

#### OBW: 1RB-LOW\_offset

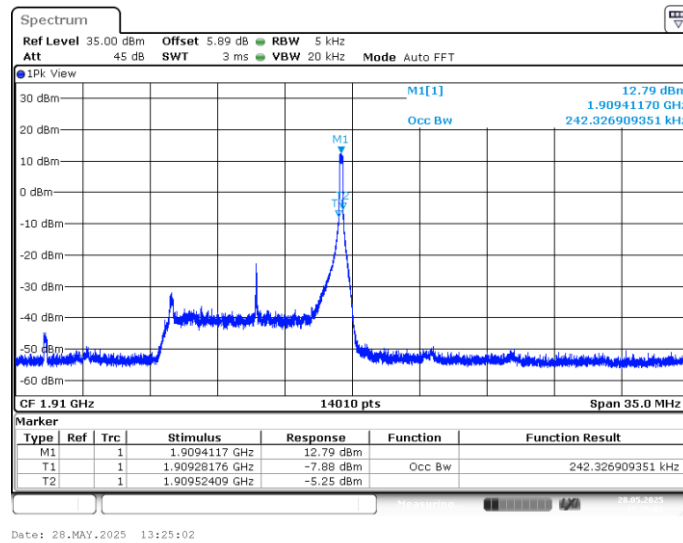


#### LOW BAND EDGE BLOCK-1RB-LOW\_offset

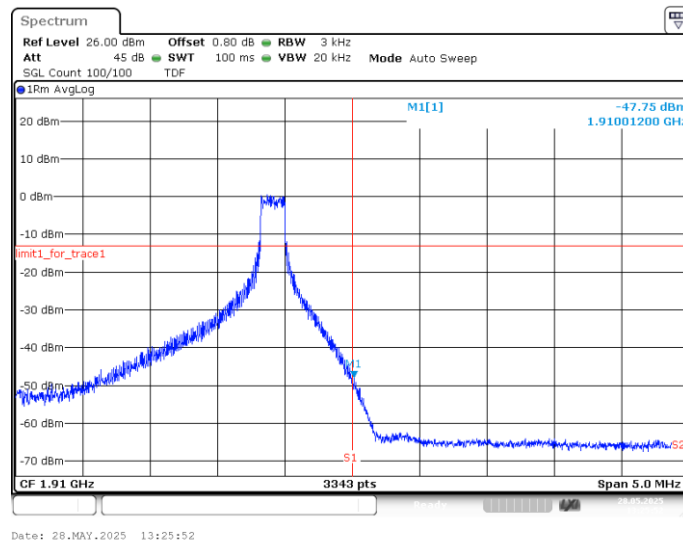




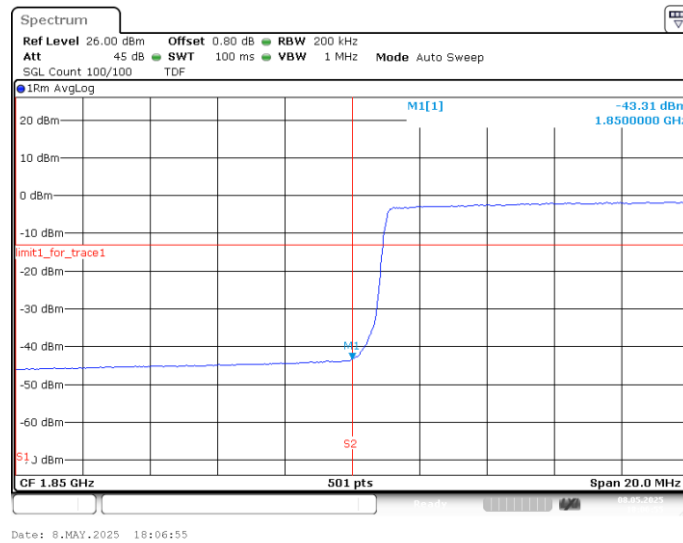
## OBW: 1RB-HIGH\_offset



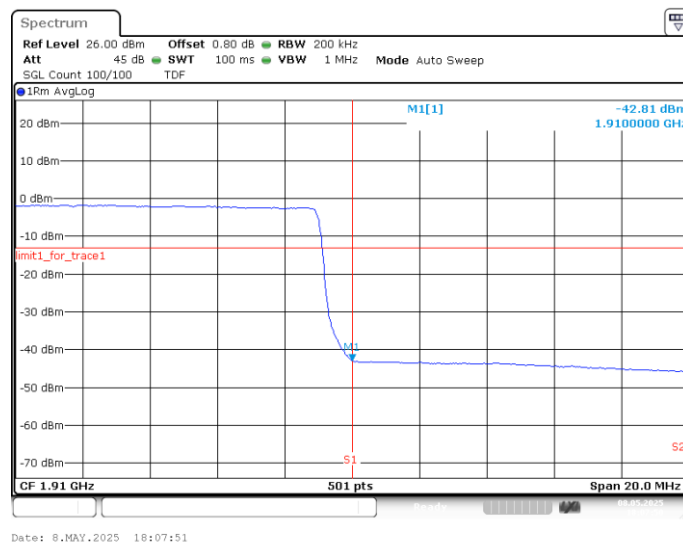
## HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



## LOW BAND EDGE BLOCK-20MHz-100%RB

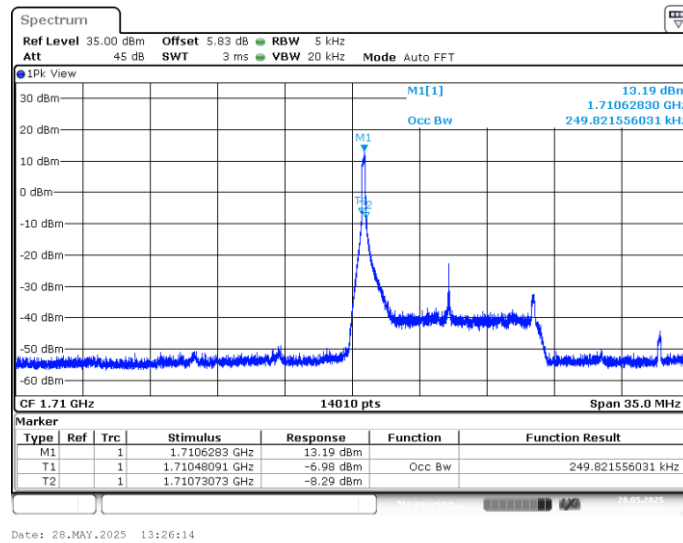


## HIGH BAND EDGE BLOCK-20MHz-100%RB

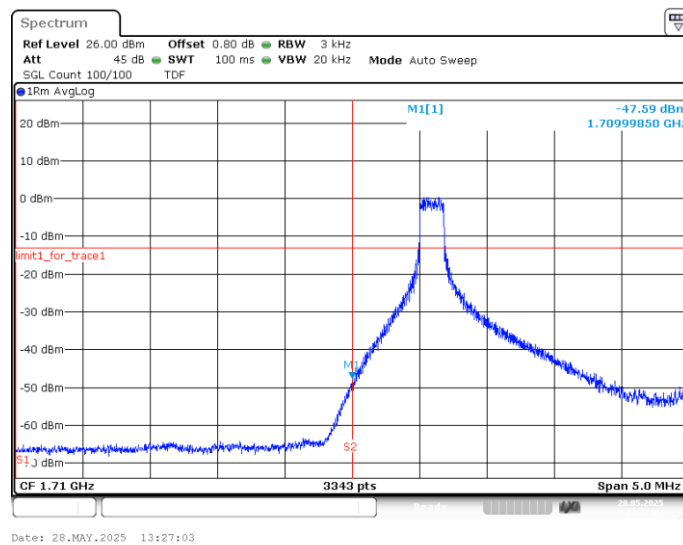


## LTE band 4

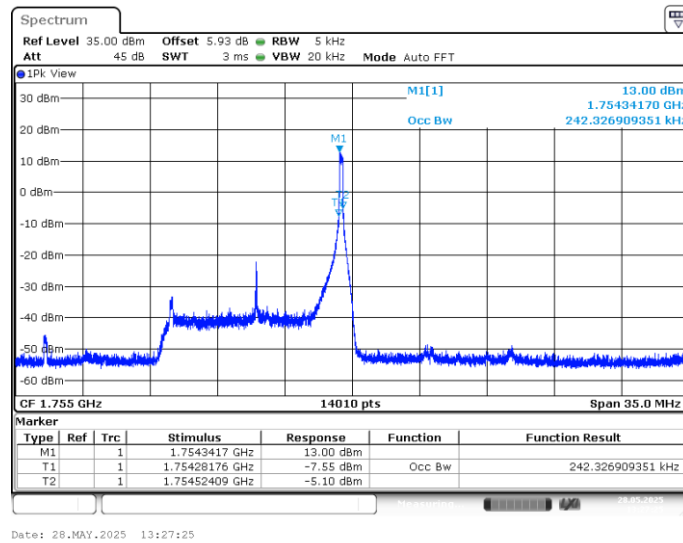
### OBW: 1RB-LOW\_offset



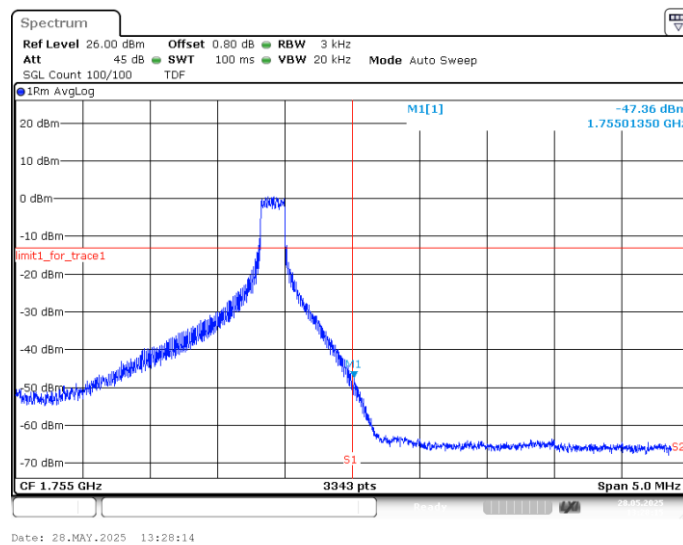
### LOW BAND EDGE BLOCK-1RB-LOW\_offset



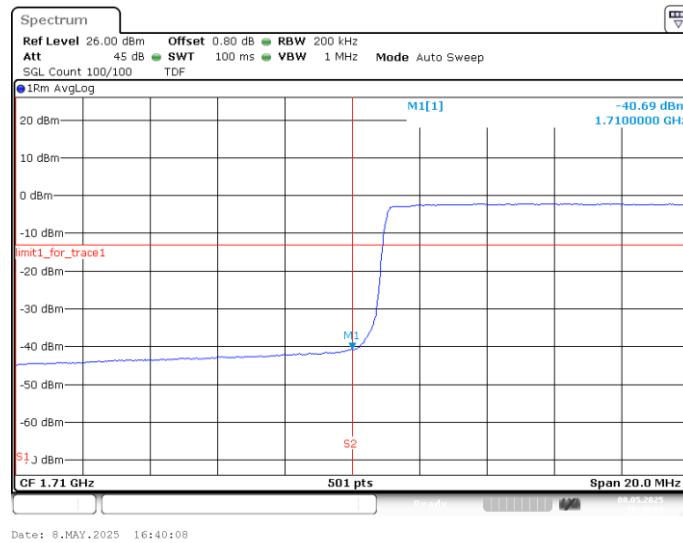
## OBW: 1RB-HIGH\_offset



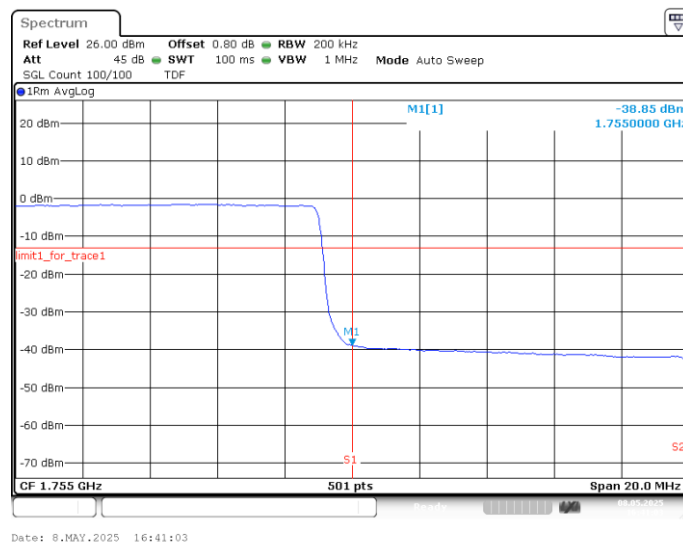
## HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



## LOW BAND EDGE BLOCK-20MHz-100%RB

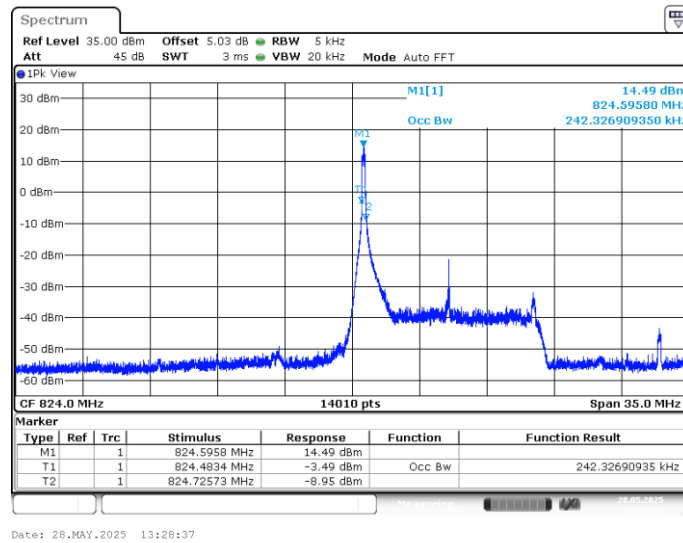


## HIGH BAND EDGE BLOCK-20MHz-100%RB

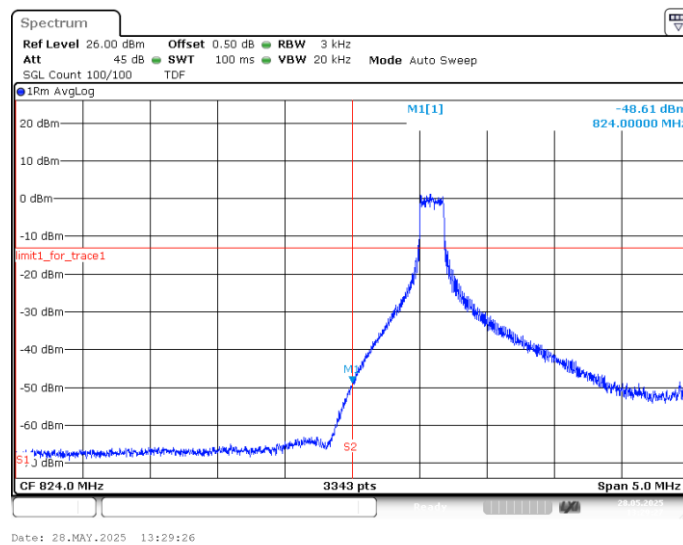


## LTE band 5

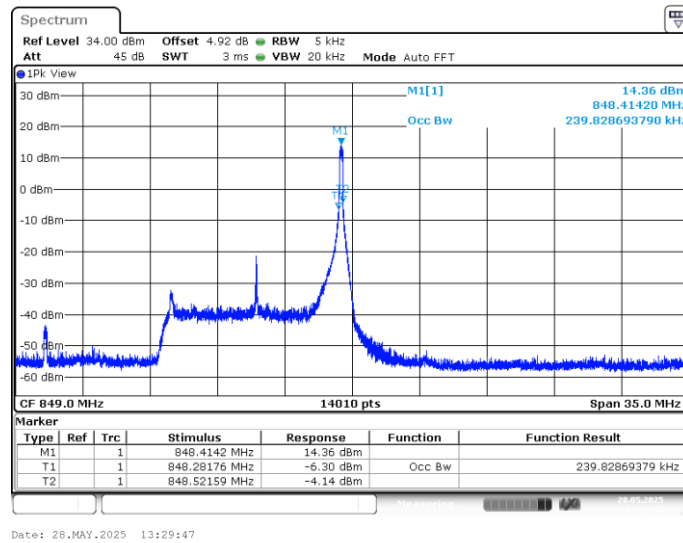
### OBW: 1RB-LOW\_offset



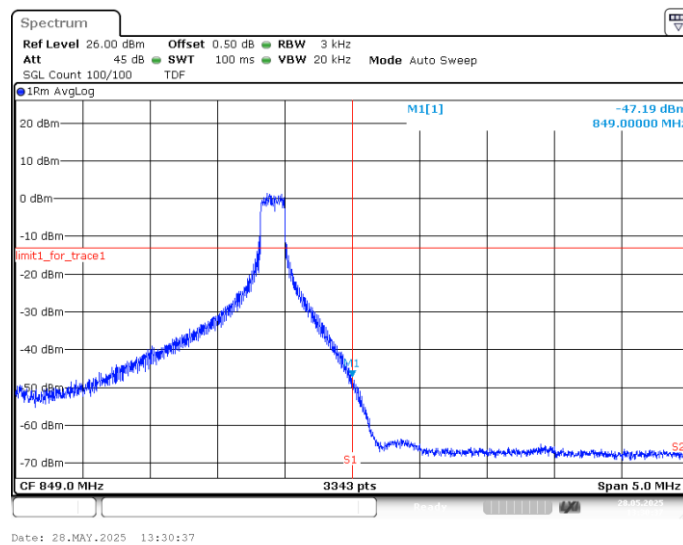
### LOW BAND EDGE BLOCK-1RB-LOW\_offset



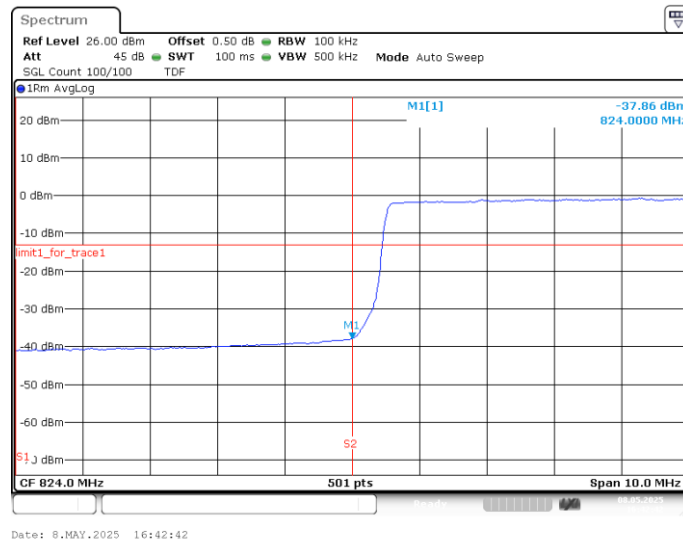
## OBW: 1RB-HIGH\_offset



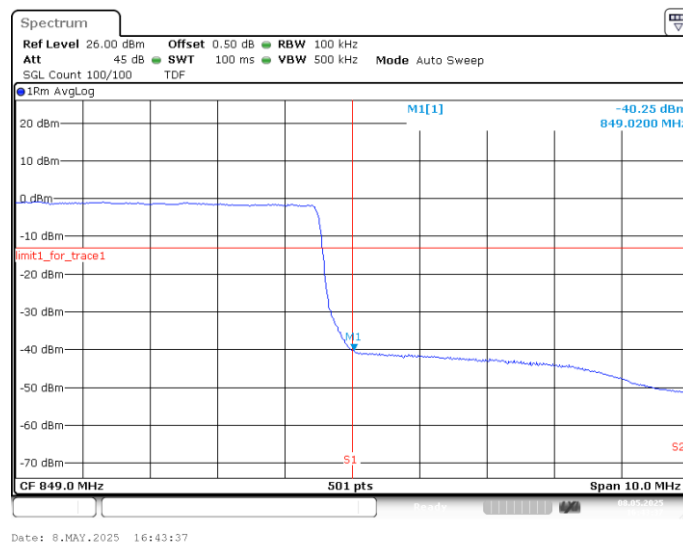
## HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



## LOW BAND EDGE BLOCK-10MHz-100%RB



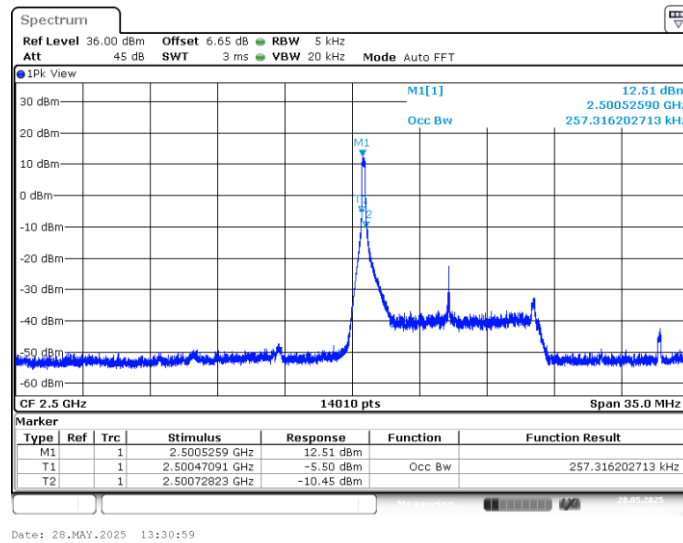
## HIGH BAND EDGE BLOCK-10MHz-100%RB



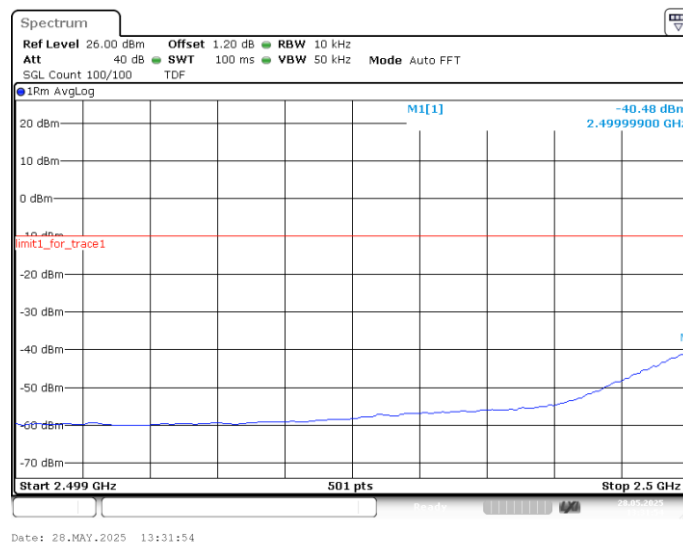


LTE band 7

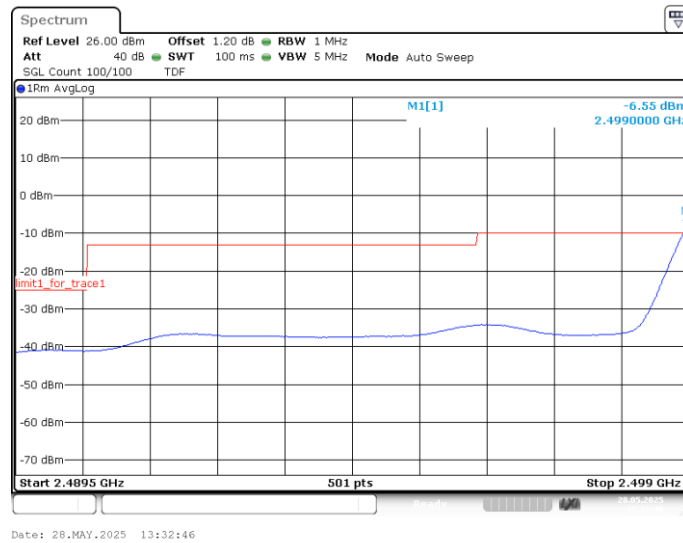
OBW: 1RB-LOW\_offset



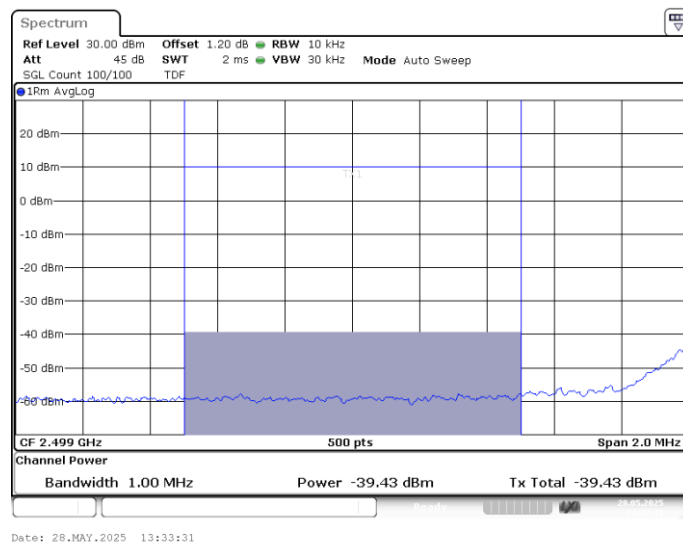
LOW BAND EDGE BLOCK-1RB-LOW\_offset



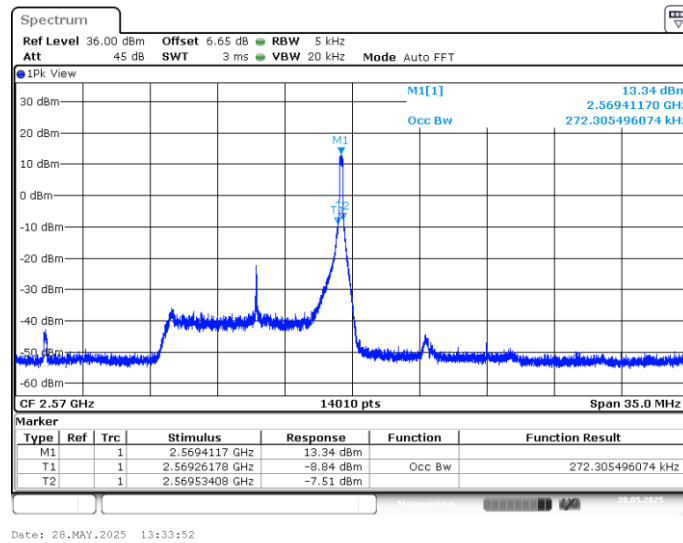
## LOW BAND EDGE BLOCK-1RB-LOW\_offset



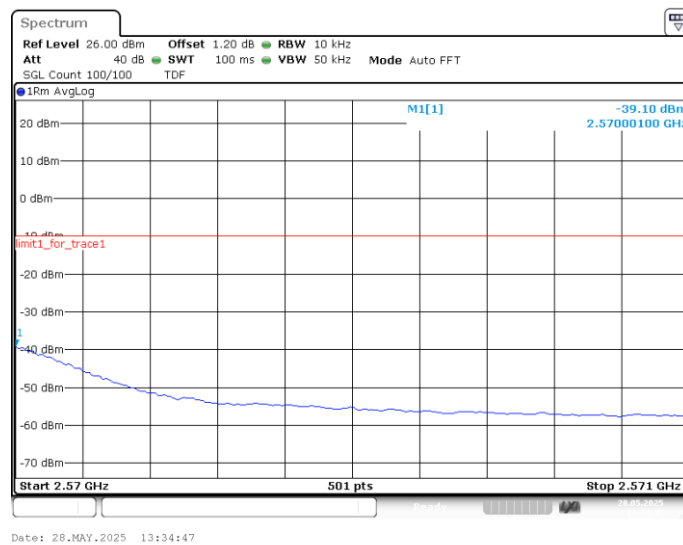
## Channel power



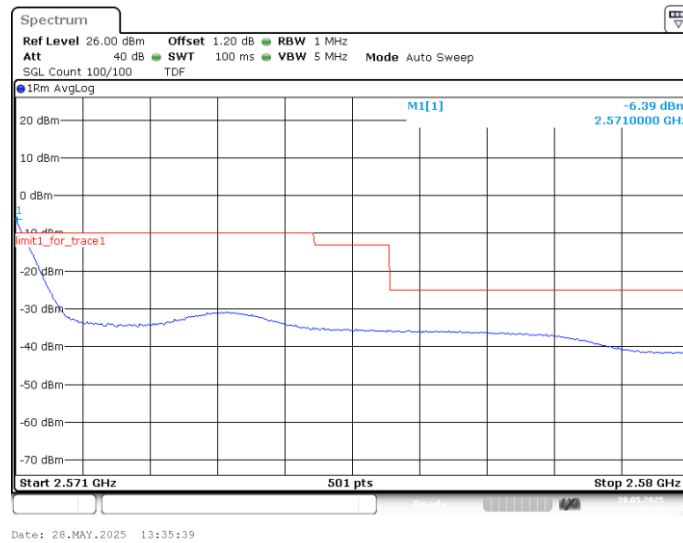
## OBW: 1RB-HIGH\_offset



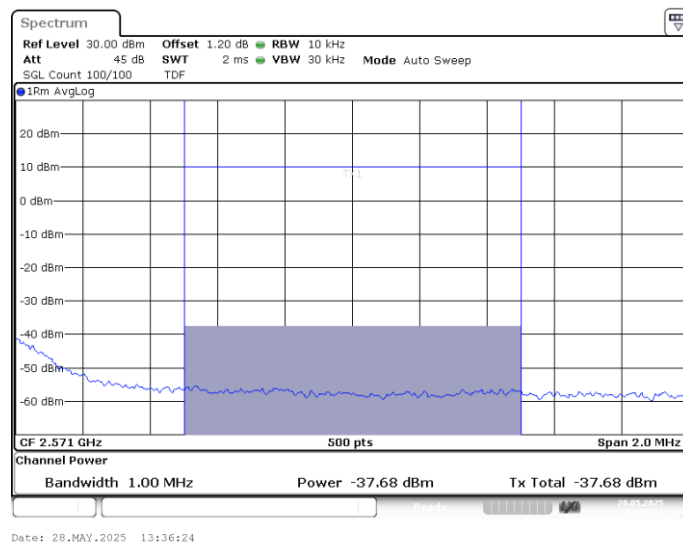
## HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



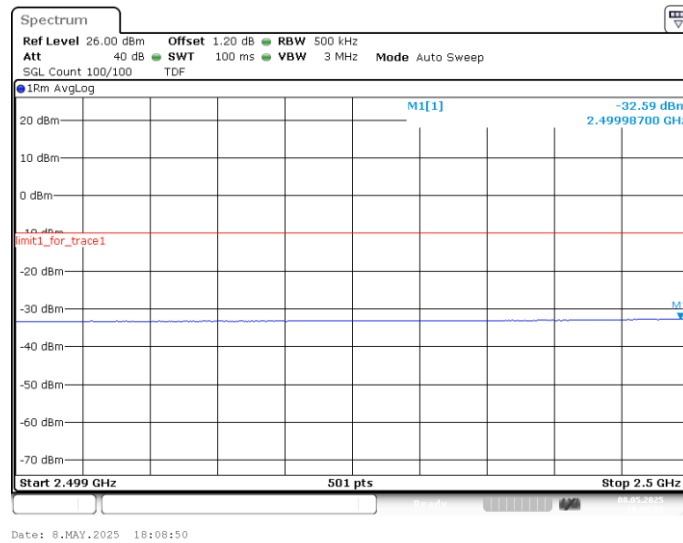
## HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



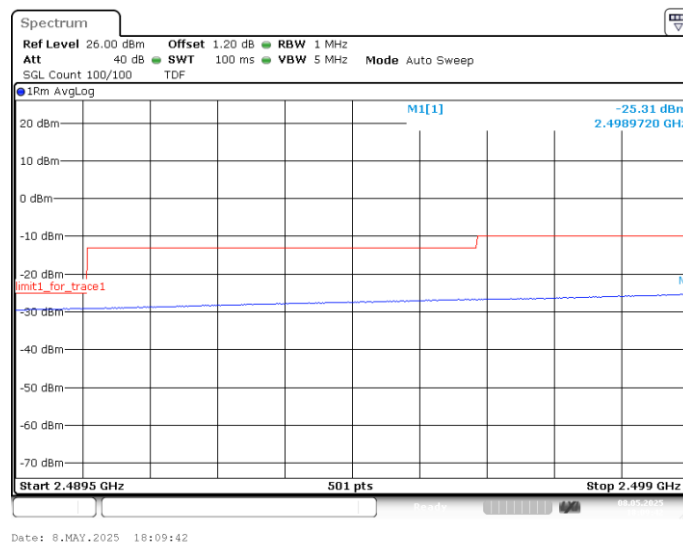
## Channel power



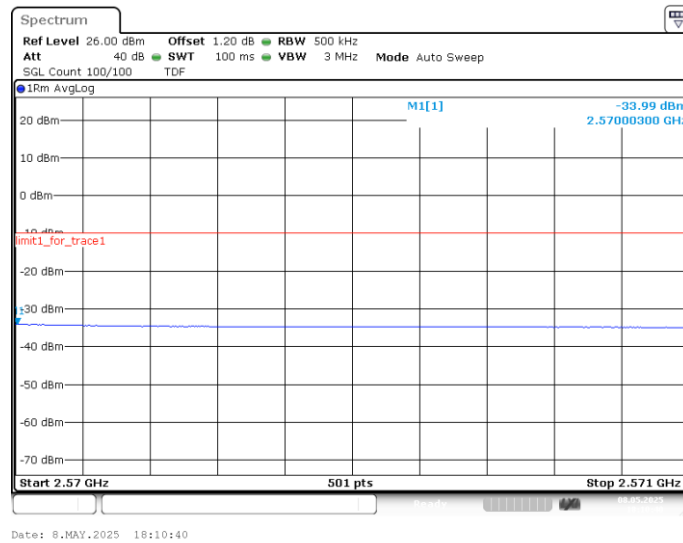
## LOW BAND EDGE BLOCK-20MHz-100%RB



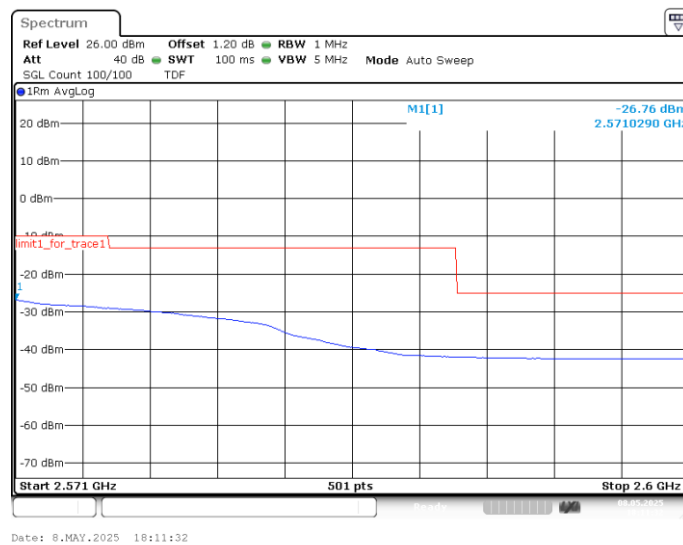
## LOW BAND EDGE BLOCK-20MHz-100%RB



## HIGH BAND EDGE BLOCK-20MHz-100%RB

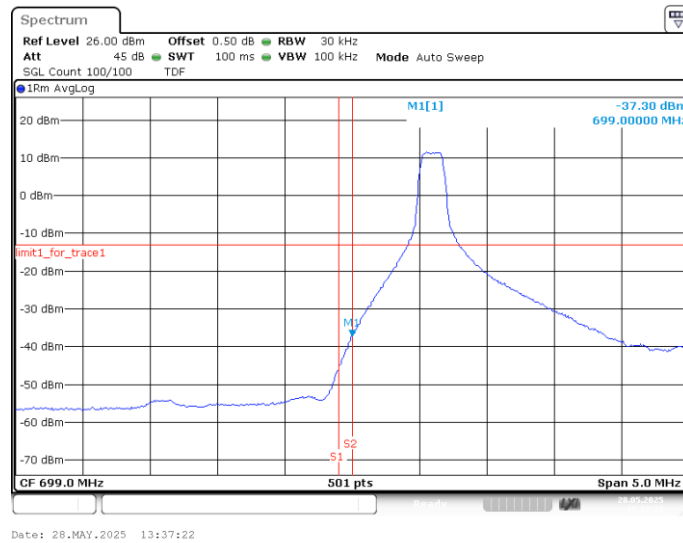


## HIGH BAND EDGE BLOCK-20MHz-100%RB

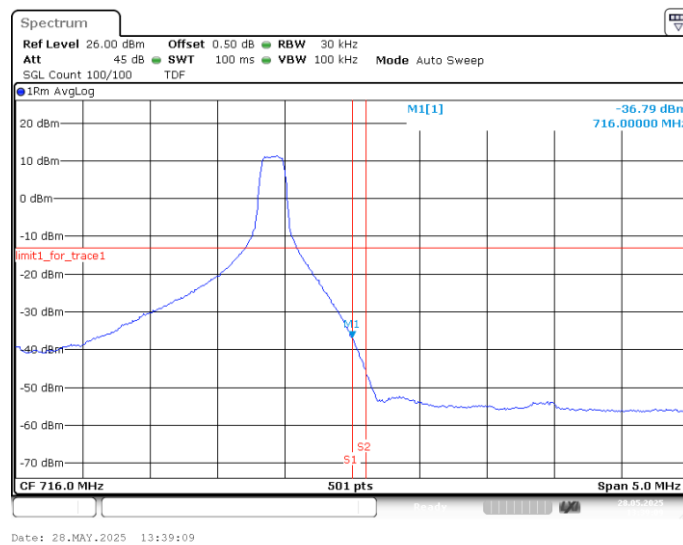


## LTE band 12

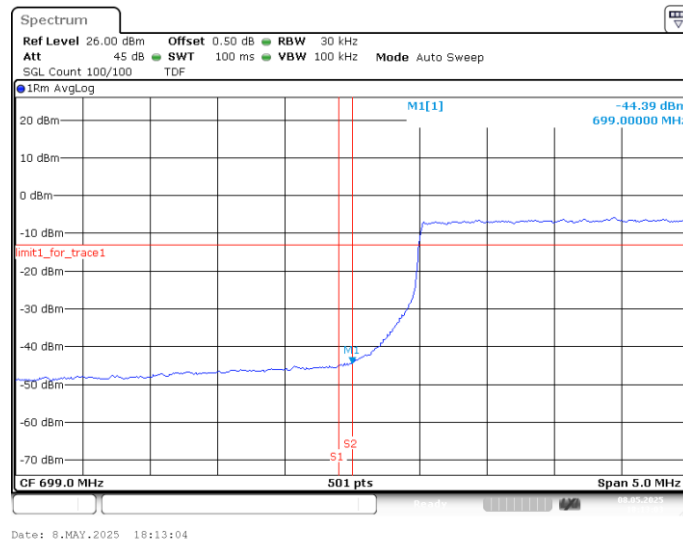
### LOW BAND EDGE BLOCK-1RB-LOW\_offset



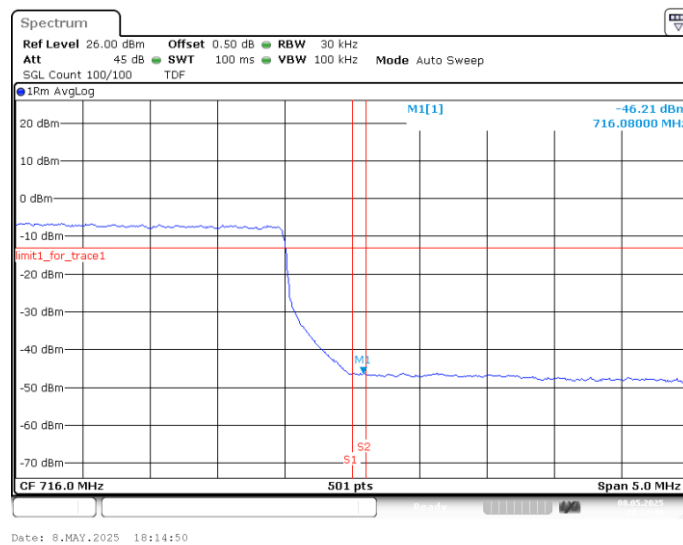
### HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



## LOW BAND EDGE BLOCK-10MHz-100%RB



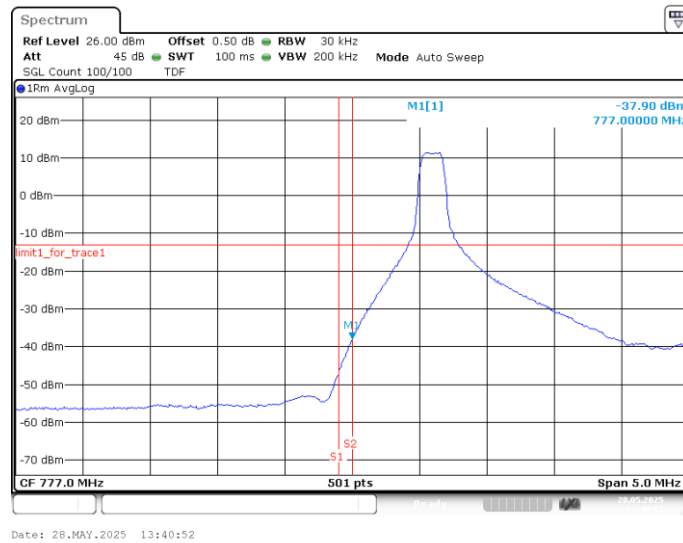
## HIGH BAND EDGE BLOCK-10MHz-100%RB



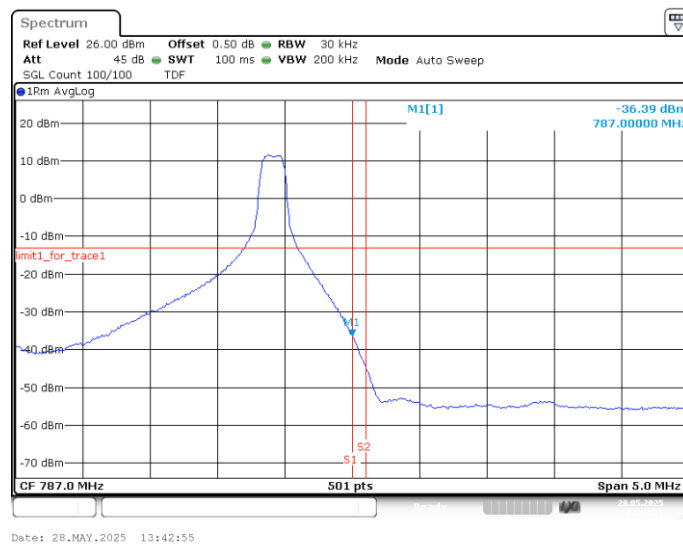


## LTE band 13

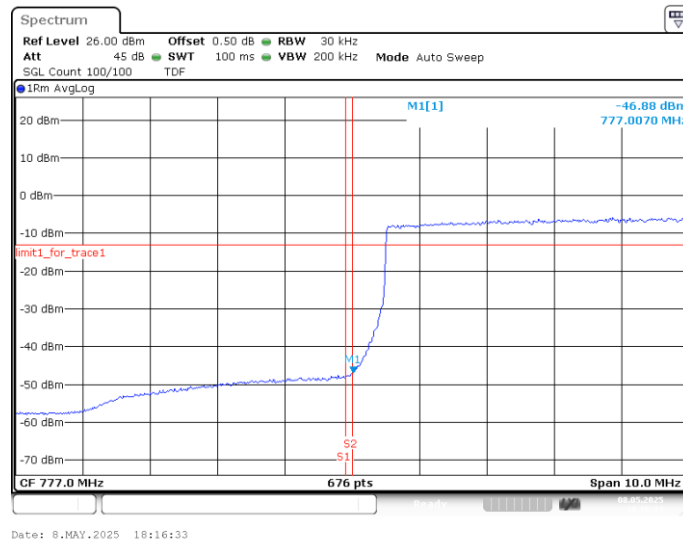
### LOW BAND EDGE BLOCK-1RB-LOW\_offset



### HIGH BAND EDGE BLOCK-1RB-HIGH\_offset



## LOW BAND EDGE BLOCK-10MHz-100%RB



## HIGH BAND EDGE BLOCK-10MHz-100%RB

