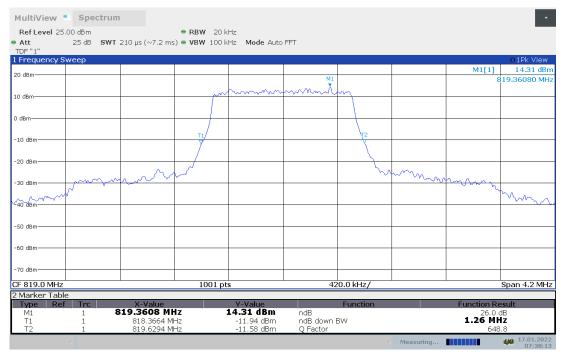


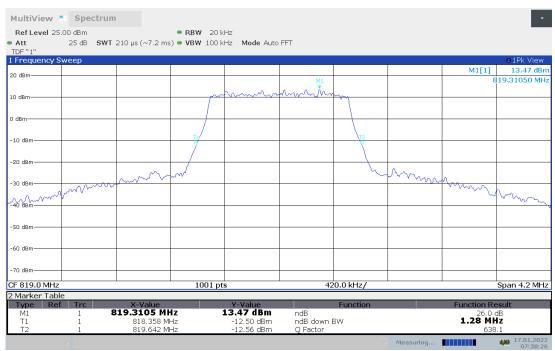
LTE band 26(814MHz-824MHz),BW1.4MHz(-26dBc)

	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
819.00	1.26	1.28	

LTE band 26(814MHz-824MHz), BW1.4MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), BW1.4MHz Bandwidth,16QAM (-26dBc BW)

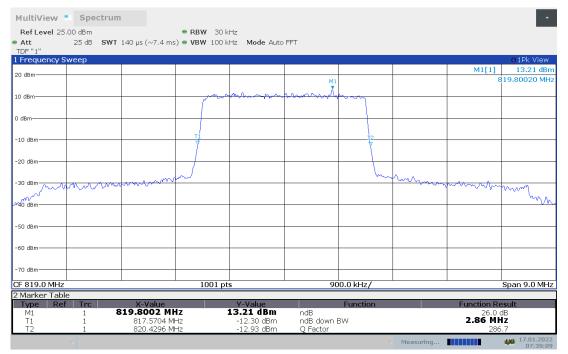




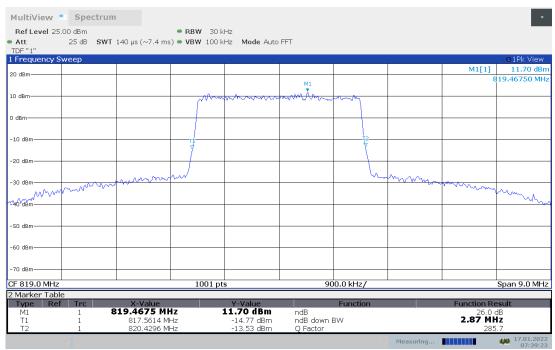
LTE band 26(814MHz-824MHz),3MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
	QPSK	16QAM	
819.00	2.86	2.87	

LTE band 26(814MHz-824MHz), 3MHz Bandwidth,QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 3MHz Bandwidth,16QAM (-26dBc BW)

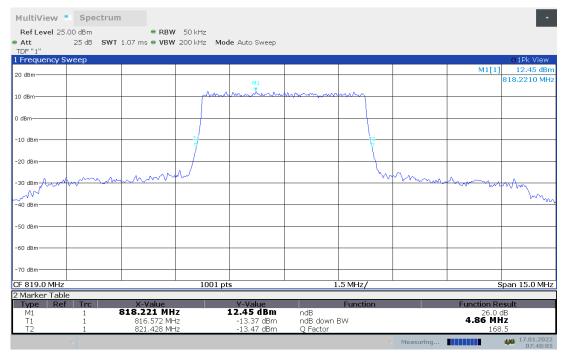




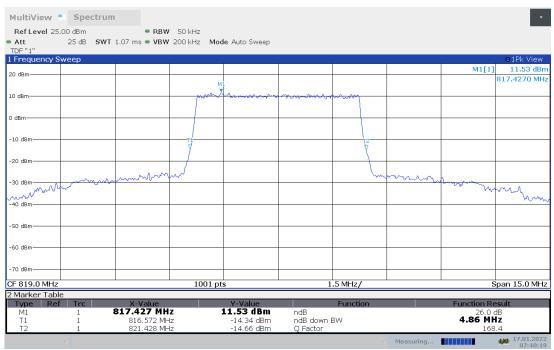
LTE band 26(814MHz-824MHz),5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHZ)	QPSK	16QAM	
819.00	4.86	4.86	

LTE band 26(814MHz-824MHz), 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 5MHz Bandwidth,16QAM (-26dBc BW)

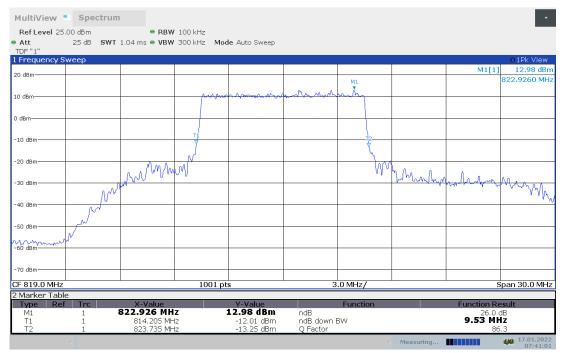




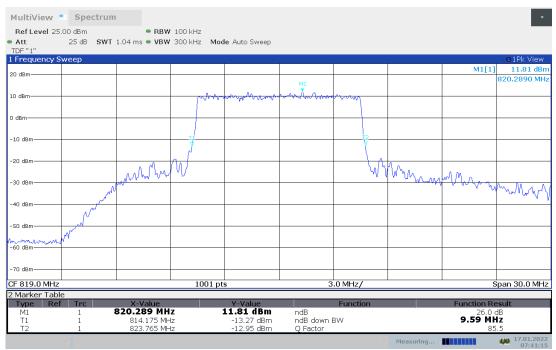
LTE band 26(814MHz-824MHz),10MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHZ)	QPSK	16QAM	
819.00	9.53	9.59	

LTE band 26(814MHz-824MHz), 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 10MHz Bandwidth,16QAM (-26dBc BW)

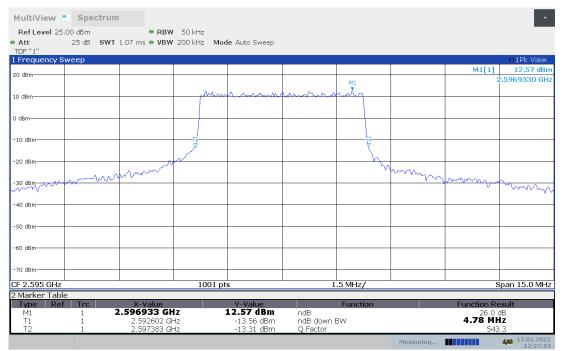




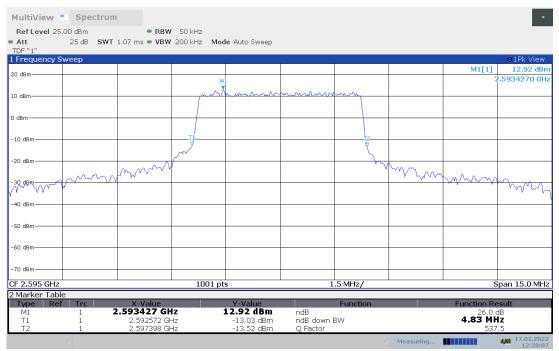
LTE band 38,5MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHZ)	QPSK	16QAM	
2595.00	4.78	4.83	

LTE band 38, 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 38, 5MHz Bandwidth, 16QAM (-26dBc BW)

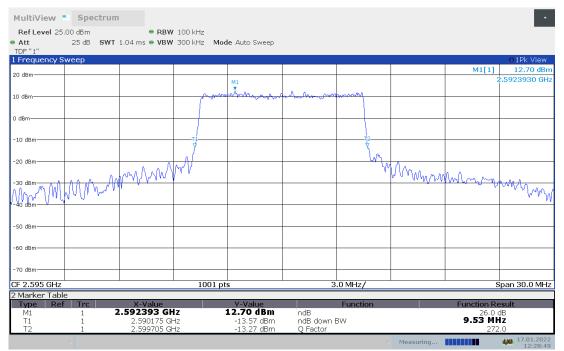




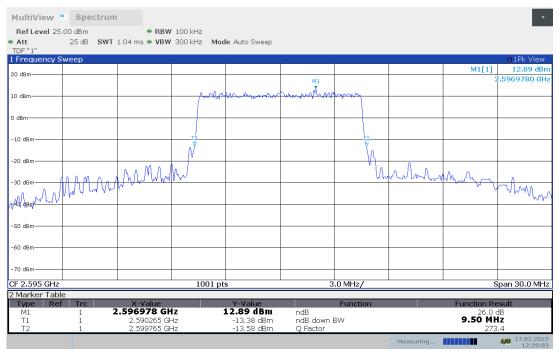
LTE band 38,10MHz(-26dBc)

Frequency/(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
2595.00	9.53	9.50	

LTE band 38 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 38 , 10MHz Bandwidth,16QAM (-26dBc BW)

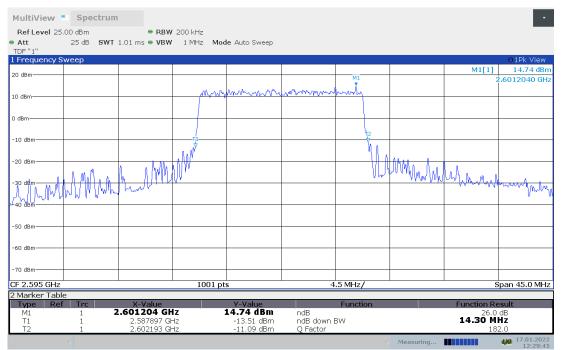




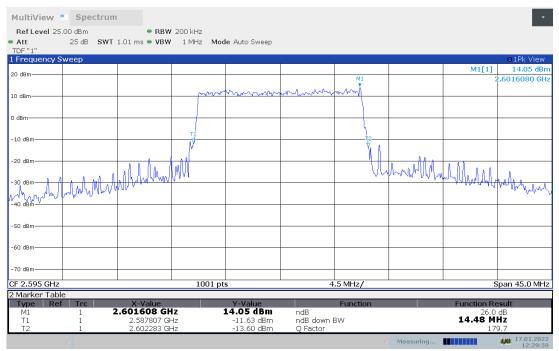
LTE band 38,15MHz(-26dBc)

	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
2595.00	14.30	14.48	

LTE band 38 , 15MHz Bandwidth,QPSK (-26dBc BW)



LTE band 38 , 15MHz Bandwidth,16QAM (-26dBc BW)

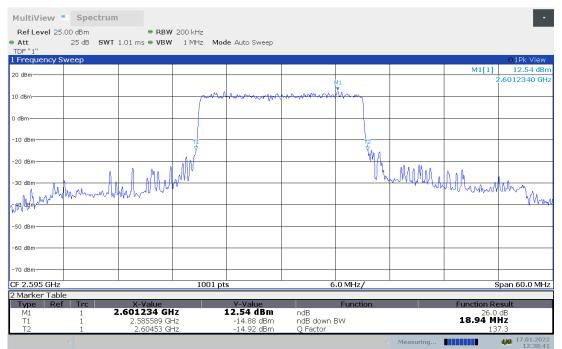




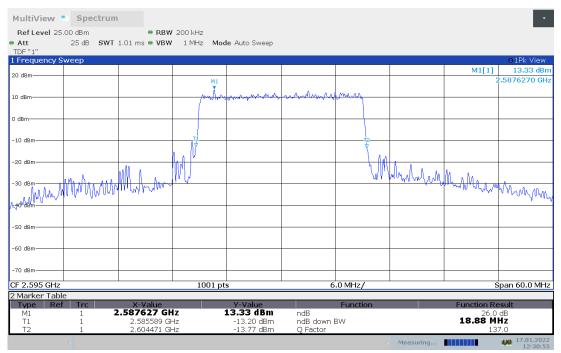
LTE band 38,20MHz(-26dBc)

Frequency/(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
2595.00	18.94	18.88	

LTE band 38 , 20MHz Bandwidth, QPSK (-26dBc BW)



LTE band 38 , 20MHz Bandwidth,16QAM (-26dBc BW)

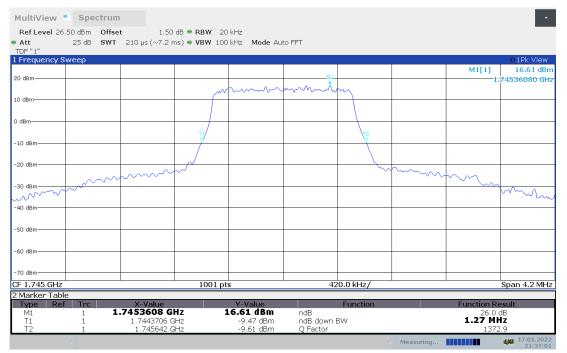




LTE band 66,BW1.4MHz(-26dBc)

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
1745.00	1.27	1.28	

LTE band 66 , BW1.4MHz Bandwidth,QPSK (-26dBc BW)



LTE band 66 , BW1.4MHz Bandwidth,16QAM (-26dBc BW)

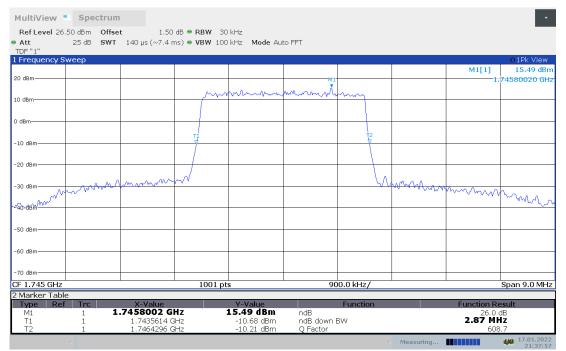
				M1			M1[1]	16.04 dB
					1		1	.74531050 GI
			mon	Amonto Am			1	4551050 0
		\vdash			m			-
		/						
		1			12			
					(-
						nm_		
~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u>~~</u>			V		$\sim\sim\sim\sim\sim$	
~~~ V							````	mon
							L	
								
		1001 pt	s	42	20.0 kHz/			Span 4.2 M
	~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						



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

Frequency(MHz)	Emission Bandwidth (-26dBc)(MHz)		
Frequency(MHz)	QPSK	16QAM	
1745.00	2.87	2.86	

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



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

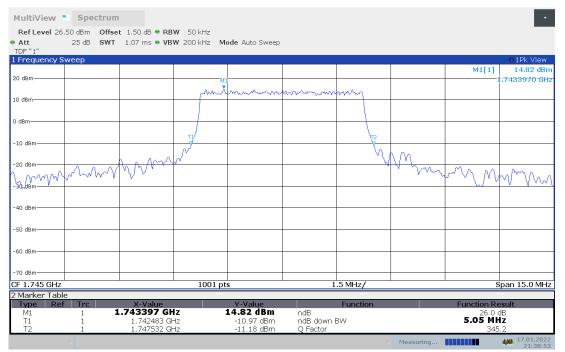
TDF "1" 1 Frequency		140 µs (~7.4 n	ns) 🗢 VBW 10	0 kHz <b>Mode</b> Au	to FFT				o1Pk View
								M1[1]	14.49 dBr
0 dBm					M1			1.	.74547650 GI
0 dBm			mm	mumm	monther	mm			
dBm									
			т			12			
10 dBm			7			Ý			-
20 dBm									
20 0011									
-30 dBm	- Coold	hand	m			ha	mono	A. A.	
man	And the second						0	m	mm
40 dBm									
50 dBm									
-60 dBm									
70 dBm									
F 1.745 GH			1001 p	ts	90	0.0 kHz/	1		Span 9.0 MH
Marker Tal		V 11-1		V 11-1		E			
Type Re M1		X-Value	Hz	Y-Value 14.49 dBm	ndB	Function		Function Ro	
T1 T2	1	1.7435704 G 1.7464296 G		-10.96 dBm -11.90 dBm	ndB down Q Factor	BW		2.86 MH 610	Ηz



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

	equency(MHz) Emission Bandwid			
Frequency(MHZ)	QPSK	16QAM		
1745.00	5.05	5.05		

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



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

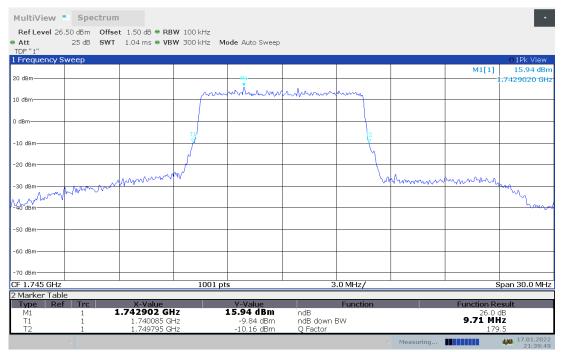
Frequency S	weep	1.07 ms 🖷 VB	1 200 KHZ M	ode Auto Sweep					o1Pk View
0 dBm								M1[1]	14.05 dB
J UBIII			M						. <del>.7434270</del> G
D dBm			mon	mun	mmm	www			
dBm			⊢_/						
10 dBm						V2			
			N						
20 dBm						$\downarrow$	1		
	n mar	mm	Y			V V	ma a		
30 dBm	1 400 100 100 1							harrow was a start was a st	mon
40 dBm									
50 dBm									
50 dBm									
70 dBm									
/o ubm			1001 pt	S	1	.5 MHz/		S	pan 15.0 MH
F 1.745 GHz									
		X-Value		Y-Value		Function		Function Re	



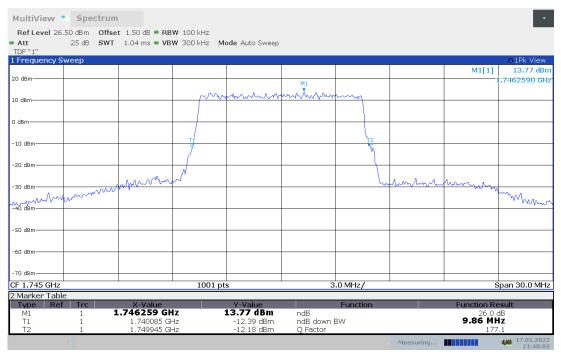
### LTE band 66,10MHz(-26dBc)

Frequency/MHz)	Emission Bandy	width (-26dBc)(MHz)
Frequency(MHz)	QPSK	16QAM
1745.00	9.71	9.86

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



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

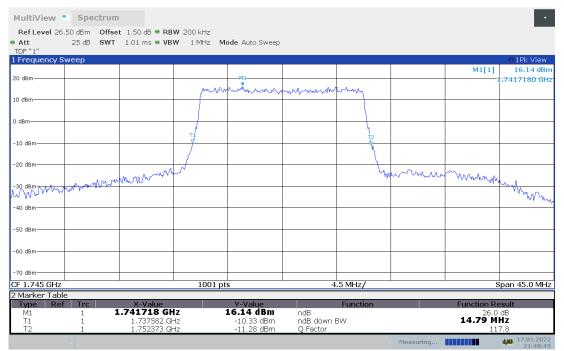




### LTE band 66,15MHz(-26dBc)

	Emission Band	width (-26dBc)(MHz)
Frequency(MHz)	QPSK	16QAM
1745.00	14.79	14.79

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



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

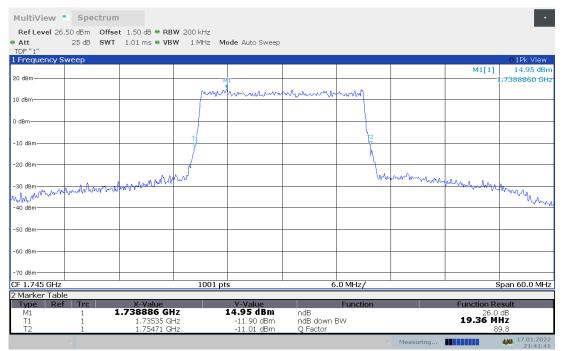
DF "1" Frequency S	Sweep						1				o1Pk Viev
) dBm					MI					M1[1]	15.47 dB 1.7422130 G
				mm	_	man	A. 6.1.				1.7422130 0
) dBm				( in the second s	a mar manya	All	mound				
dBm							+				
			Ţ				1 L	12			
0 dBm								ŧ-			
			18					1			
0 dBm								1			-
		1. Martin	$\mathbb{N}^{\mathbb{N}}$					. fre	mm	march and a	
0 dBm	M. m. Marmarter	Marine .							mm	- moringing	WW 1
- AND IN IN											mon
0 dBm-											-
0 dBm											-
0 dBm											
0 dBm											
1.745 GHz			]	1001 pt	s	4	1.5 MHz/				Span 45.0 M
Marker Tab Type Re		X-Value	_		Y-Value		Functior	2		Function R	ocult
		L.742213 GH			15.47 dBm	ndB	Tunction				) dB



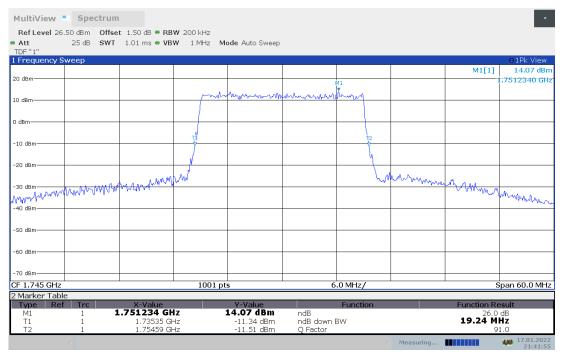
### LTE band 66,20MHz(-26dBc)

	Emission Band	width (-26dBc)(MHz)
Frequency(MHz)	QPSK	16QAM
1745.00	19.36	19.24

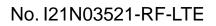
# LTE band 66 , 20MHz Bandwidth,QPSK (-26dBc BW)



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



Note: Expanded measurement uncertainty is U = 3428 Hz, k = 2





# A.6 BAND EDGE COMPLIANCE

#### Reference

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53, 90.691.

### A.6.1 Measurement limit

Part 22.917 For operations in the 824–849MHz band, the FCC limit is 43 +10 log (P)dB below the transmitter power(P) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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 that 43 + 10log (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(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.

# A.6.2Measurement Procedure

The testing follows ANSI C63.26

a) The EUT was connected to spectrum analyzer and system simulator via a power divider.

b) The band edges of low and high channels for the highest RF powers were measured.

c) Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.

d) Set spectrum analyzer with RMS detector.

e) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

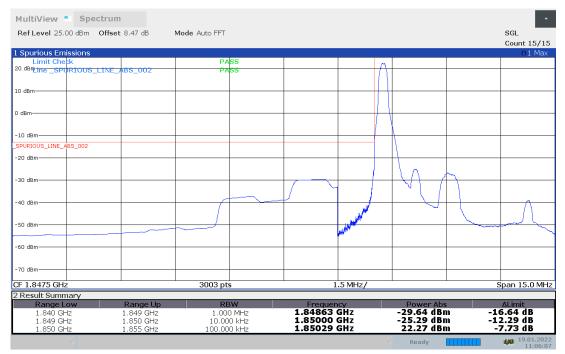
f) Checked that all the results comply with the emission limit line.

#### A.6.3 Measurement result

Only worst case result is given below



# LTE band 2 OBW: 1RB-low_offset LOW BAND EDGE BLOCK-1RB-low_offset

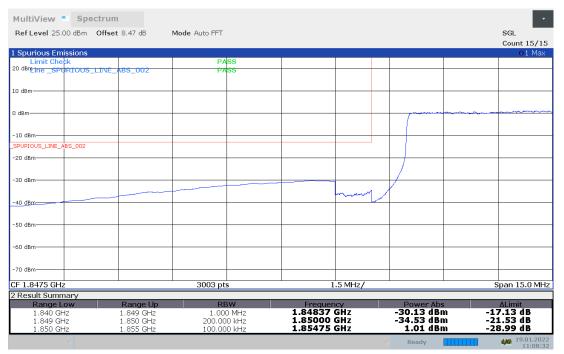


# HIGH BAND EDGE BLOCK-1RB-high_offset



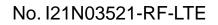


# LOW BAND EDGE BLOCK-20MHz-100%RB



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

MultiView Spectrum Ref Level 25.00 dBm Offset 8.47 dB	Mode Auto FFT			SGL Count 15/15
1 Spurious Emissions				o1 Max
SPURIOUS_LINE_ABS_002	PASS			
20 dBnLine _SPURIOUS_LINE_ABS_002	PASS			
10 dBm				
0 dBm				
-10 dBm				
-20 dBm				
-30 dBm				
-40 dBm				
-50 dBm				
-60 dBm				
-70 dBm				
CF 1.9125 GHz	3003 pts	1.5 MHz/		Span 15.0 MHz
2 Result Summary			0 41	
Range Low         Range U           1.905 GHz         1.910 GHz           1.910 GHz         1.911 GHz           1.911 GHz         1.920 GHz	100.000 kHz 500.000 kHz	Frequency 1.90519 GHz 1.91000 GHz 1.91100 GHz	Power Abs 1.81 dBm -29.05 dBm -27.30 dBm	∆Limit -28.19 dB -16.05 dB -14.30 dB
v		-	Ready	19.01.2022 11:07:39

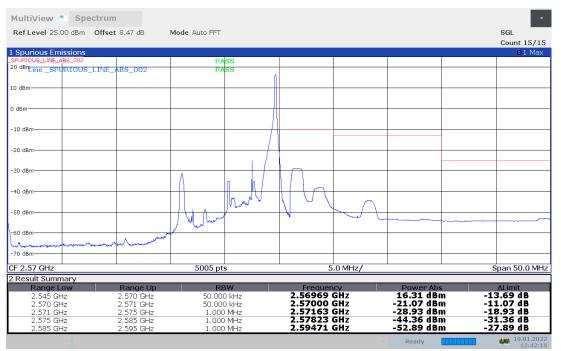




# LTE band 7 LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset



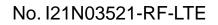


# LOW BAND EDGE BLOCK-20MHz-100%RB



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

MultiView Spectru Ref Level 25.00 dBm Offe		Mode Auto FFT			SGL Count 15/15
1 Spurious Emissions					01 Max
SPURIOUS LINE ABS 002		PASS			OI MOA
20 dBm_ine_SPURIOUS_LINE	ABS 002	PASS			
		1,000			
10 dBm					
10 dBm					
0 dBm					
perature		and the second second and the second s			
-10 dBm					
10 00.00					
-20 dBm					
-30 dBm					
1 martine					
and the second second second					
-40 dBm					
-50 dBm					
-60 dBm					
-70 dBm					
CF 2.57 GHz		5005 pts	5.0 MHz/		Span 50.0 MHz
2 Result Summary					
Range Low	Range Up	RBW	Frequency	Power Abs	∆Limit
2.545 GHz	2.570 GHz	50.000 kHz	2.55358 GHz	-2.12 dBm	-32.12 dB
2.570 GHz	2.571 GHz	50.000 kHz	2.57012 GHz	-34.46 dBm	-24.46 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-23.50 dBm	-13.50 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57500 GHz	-26.62 dBm	-13.62 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58500 GHz	-36.87 dBm	-11.87 dB
~				🗸 Ready	19.01.2022 12:35:33





# LTE band 12 LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset



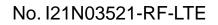


# LOW BAND EDGE BLOCK-10MHz-100%RB



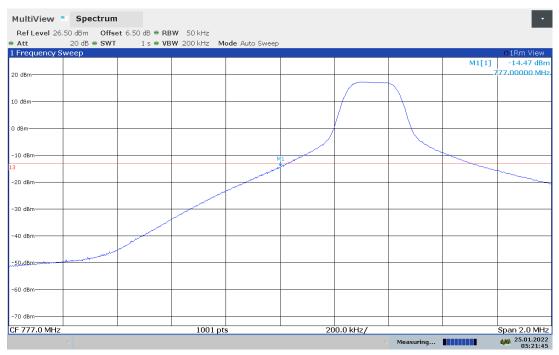
#### HIGH BAND EDGE BLOCK-10MHz-100%RB



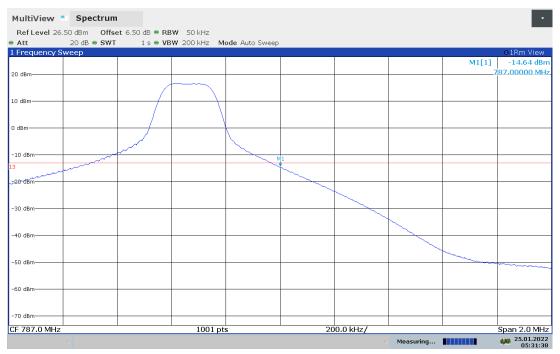




# LTE band 13 LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset



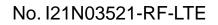


### LOW BAND EDGE BLOCK-5MHz-100%RB

MultiView	Spectrum	1							•
Ref Level 26	.50 dBm Offs	et 6.50 dB 🖷 RB	W 50 kHz						
Att	20 dB 🖷 SWT	1 s 👄 VB	<b>W</b> 200 kHz 🛛 <b>M</b>	ode Auto Sweep					
1 Frequency S	weep	1	r	1			1	1	O1Rm View
								M1[1]	-24.93 dBm
20 dBm									77.00000 MHz.
10 dBm									
0 dBm							······		
0 ubili									
						/			
-10 dBm						/			
13									
					and the second				
-20 dBm				N	1 manual binary				
					and and a second second				
-30 dBm				a series and the second s					
den Marine Marine Marine									
-40 dBm									
-50 dBm									
-60 dBm									
-70 dBm									
			1001						
CF 777.0 MHz			1001 pt	S	20	0.0 kHz/			Span 2.0 MHz
							Measuring		<pre>\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$</pre>

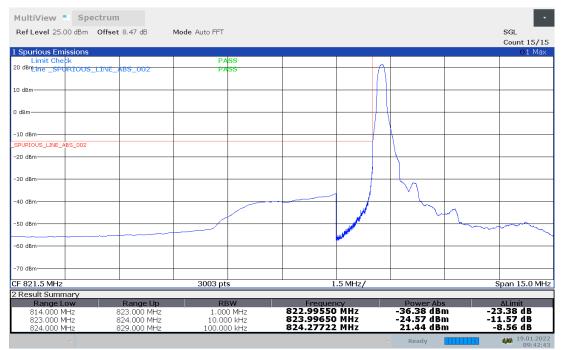
# HIGH BAND EDGE BLOCK-5MHz-100%RB

MultiView	Spectrum	I III							•
Ref Level 26.	50 dBm Offse	et 6.50 dB 🖷 RB	W 50 kHz						
<ul> <li>Att</li> </ul>	20 dB 🖷 SWT	1 s 👄 VB	<b>W</b> 200 kHz 🛛 <b>M</b>	ode Auto Sweep					
1 Frequency Sv	weep					1		1	O1Rm View
								M1[1]	-25.00 dBm
20 dBm-									87.00600 MHz.
10 dBm									
man	man - man		month						
0 dBm									
			· · · · · · · · · · · · · · · · · · ·						
-10 dBm									
13									
-20 dBm				Standard and					
-20 UBIII				- manual -	11				
					and a contraction of the second				
-30 dBm					a a generally	Munphe d.			
							all man	montanten	monnor
-40 dBm									
-50 dBm									
-60 dBm				-					
-70 dBm									
CF 787.0 MHz			1001 pt:	s	20	0.0 kHz/			Span 2.0 MHz
							Measuring		<pre>\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$</pre>

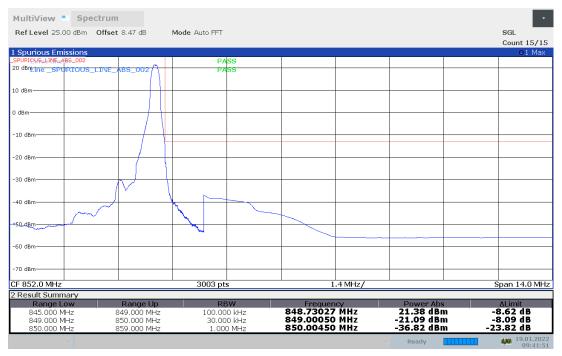




# LTE band 26(824MHz-849MHz) LOW BAND EDGE BLOCK-1RB-low_offset

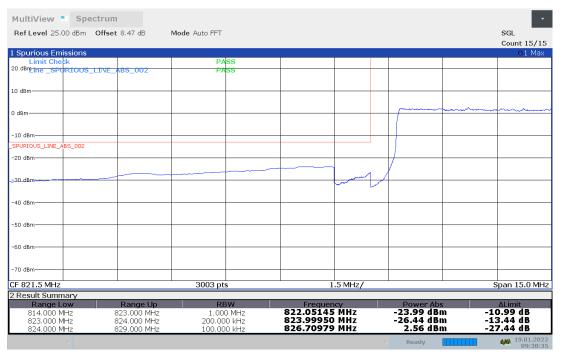


# HIGH BAND EDGE BLOCK-1RB-high_offset





# LOW BAND EDGE BLOCK-15MHz-100%RB



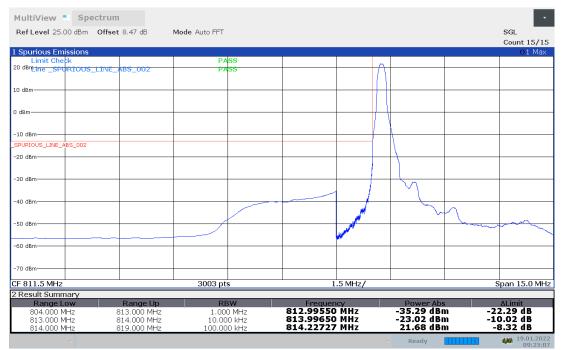
#### HIGH BAND EDGE BLOCK-15MHz-100%RB



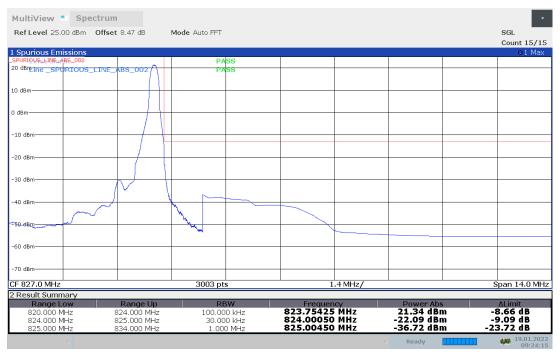




# LTE band 26(814MHz-824MHz) LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset



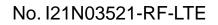


# LOW BAND EDGE BLOCK-5MHz-100%RB



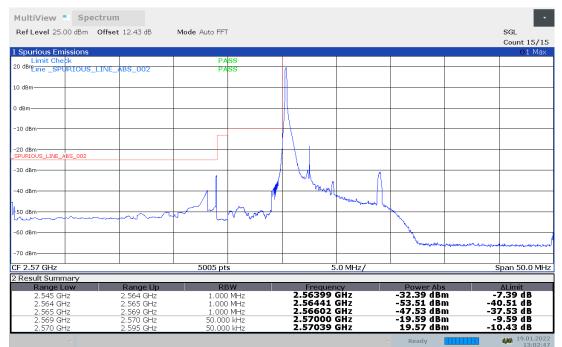
#### HIGH BAND EDGE BLOCK-5MHz-100%RB







# LTE band 38 LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset



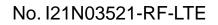


# LOW BAND EDGE BLOCK-20MHz-100%RB



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

MultiView Spectrum Ref Level 25.00 dBm Offset		de Auto FFT				SGL Count 15/15
1 Spurious Emissions						o1 Max
_SPURIOUS_LINE_ABS_002		PASS				
20 dBm_ine _SPURIOUS_LINE_/	ABS_002	PASS				
10 dBm						
0 dBm	ny makalan ya haki suwa dala falar	herewall and a second second second	Aura			
-10 dBm						
-20 dBm						
-30 dBm						
						$\sim$
-40 dBm						
-50 dBm						
-60 dBm						
-70 dBm						
CF 2.62 GHz		5005 pts	5	5.0 MHz/		Span 50.0 MHz
2 Result Summary						
Range Low	Range Up	RBW	Freque	nev	Power Abs	∆Limit
	2.620 GHz	50.000 kHz	2.61599		0.25 dBn	
	2.621 GHz	50.000 kHz	2.62001	GHz	-38.32 dBn	
	2.625 GHz	1.000 MHz	2.62100		-27.14 dBn	
2.625 GHz	2.626 GHz	1.000 MHz	2.62500	GHz	-30.48 dBn	
2.626 GHz	2.645 GHz	1.000 MHz	2.62620	GHz	-29.09 dBn	n -4.09 dB
~				~	Ready	19.01.2022 12:49:20





# LTE band 66 LOW BAND EDGE BLOCK-1RB-low_offset



# HIGH BAND EDGE BLOCK-1RB-high_offset





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



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



Note: Expanded measurement uncertainty is U = 0.49dB(100KHz-2GHz)/1.21dB(2GHz-26.5GHz), k = 1.96



# A.7 CONDUCTED SPURIOUS EMISSION

# Reference

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53, 90.691.

# A.7.1 Measurement Method

The following steps outline the procedure used to measure the conducted emissions from the EUT.

- Determine frequency range for measurements: From CFR 2.1051 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the mobile station equipment tested, this equates to a frequency range of 13 MHz to 9 GHz, data taken from 10 MHz to 25 GHz.
- 2. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.
- 3. The number of sweep points of spectrum analyzer is set to 30001 which is greater than span/RBW.

# A. 7.2 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  $43 + 10 \log(P) dB$ .

The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

Part 27.53(m)(4) 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 that 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(a) states for mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands: By a factor of not less than: 43 +10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB onall frequencies between 2328 and 2337MHz;

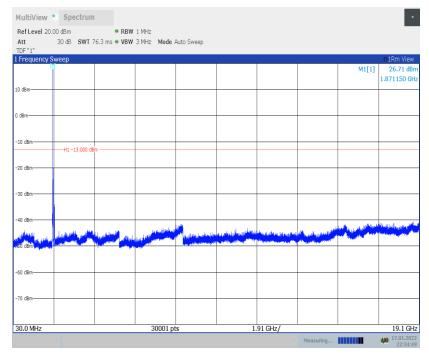


By a factor of not less than  $43 + 10 \log (P) dB$  on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.



A. 7.3 Measurement result Only worst case result is given below LTE band 2 : 30MHz – 19.1GHz Spurious emission limit –13dBm.

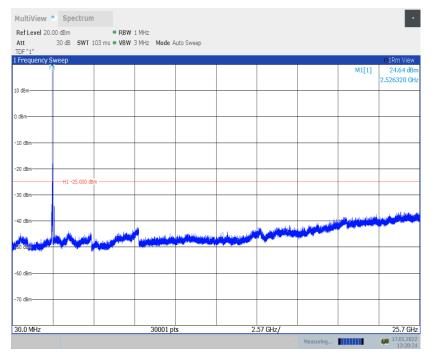
# NOTE: peak above the limit line is the carrier frequency.



# LTE band 7 20MHz QPSK: 30MHz – 25.7GHz

Spurious emission limit –25dBm.

NOTE: peak above the limit line is the carrier frequency.

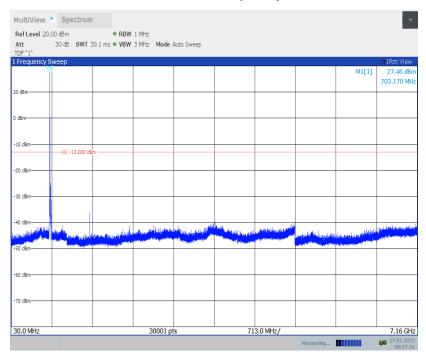




### LTE band 12: 30MHz - 7.16GHz

Spurious emission limit -13dBm.

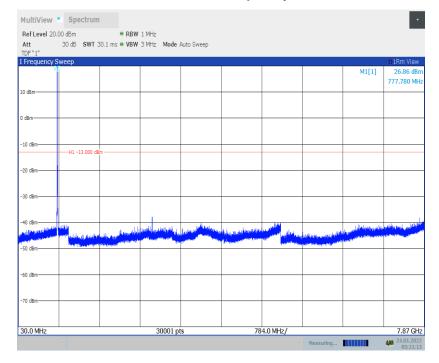
# NOTE: peak above the limit line is the carrier frequency.



#### LTE band 13: 30MHz – 7.87GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.

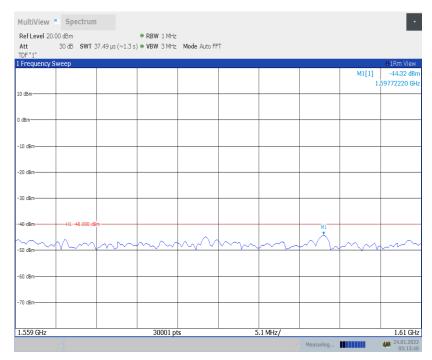






# LTE band 13: 1559MHz – 1610MHz

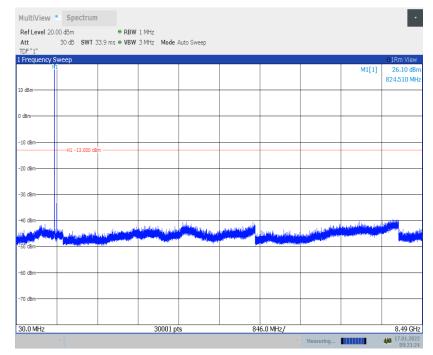
Spurious emission limit -40dBm.



### LTE band 26(814MHz-824MHz): 30MHz - 8.49GHz

Spurious emission limit –13dBm.

### NOTE: peak above the limit line is the carrier frequency.



# LTE band 26(824MHz-849MHz): 30MHz – 8.49GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.



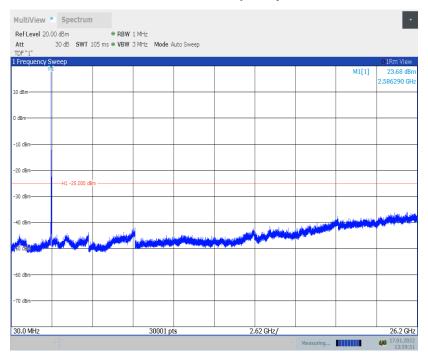
MultiView	Spectrum								•
Ref Level 20 Att	0.00 dBm 30 dB <b>SWT</b> 3	<ul> <li>RBW</li> <li>3.9 ms</li> <li>VBW</li> </ul>		Auto Sweep					
TDF "1" I Frequency									01Rm View
								M1[1]	21.02 dBr 826.200 MH
10 dBm									
0 dBm									
-10 dBm	H1 -13.000 dB	m							
-20 dBm	10,000 00								
30 dBm									
40 dBm				hann				ily, and the second	ungin al
50 dBm			a ha a fa		Jacob Barran Barran Barran Barran B		All of the second s	al y para ang para a Pang pang pang pang pang pang pang pang p	ungenten Salar Mark Salar Salar
60 dBm									
-70 dBm									
30.0 MHz			30001 pt	is	84	6.0 MHz/			8.49 GH
	7						Measuring		40 17.01.202 09:28:5



#### TE band 38: 30MHz - 26.2GHz

Spurious emission limit -25dBm.

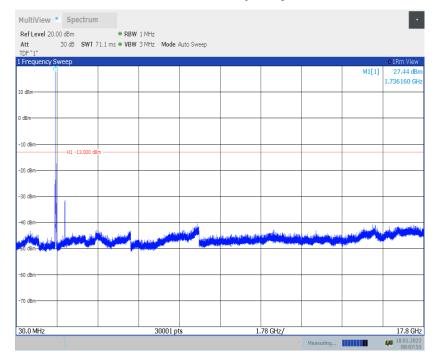
#### NOTE: peak above the limit line is the carrier frequency.



### LTE band 66: 30MHz – 17.8GHz

Spurious emission limit –13dBm.

NOTE: peak above the limit line is the carrier frequency.



Note: Expanded measurement uncertainty is U = 0.49dB(100KHz-2GHz)/1.21dB(2GHz-26.5GHz), k = 1.96



# A.8 PEAK-TO-AVERAGE POWER RATIO

#### Reference

FCC: CFR Part 24.232, 27.50(d), KDB971168 D01(5.7).

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

a)Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth  $\geq$  signal' s occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval to 1 ms

e)Record the maximum PAPR level associated with a probability of 0.1%

#### A.8.1 Measurement limit

not exceed 13 dB

- A.8.2 Measurement results
- Only worst case result is given below

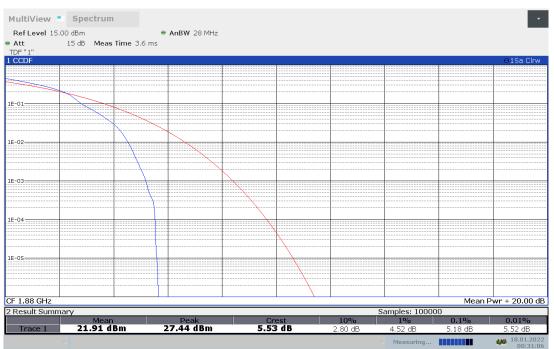
#### LTE band 2

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
1880.0	20	4.96	5.18

#### LTE band 2, 20MHz Bandwidth, QPSK (PAPR)







### LTE band 2, 20MHz Bandwidth, 16QAM (PAPR)



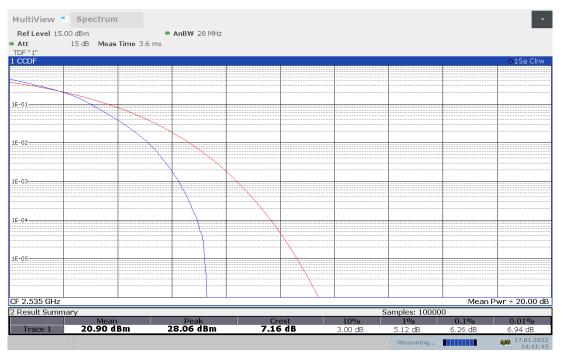
### LTE band 7

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
2510.0	20	5.74	6.26

# LTE band 7, 20MHz Bandwidth, QPSK (PAPR)



# LTE band 7, 20MHz Bandwidth, 16QAM (PAPR)

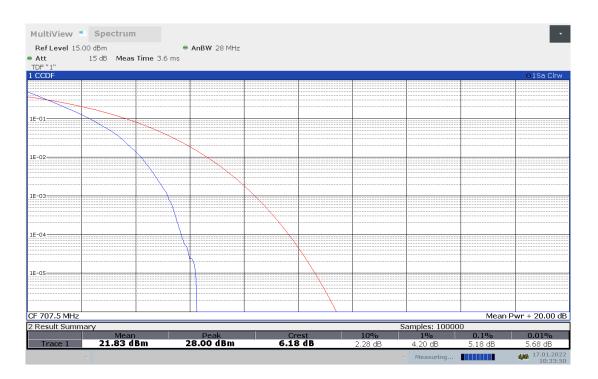




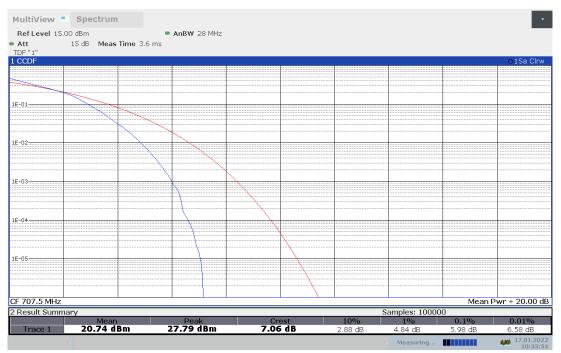
### LTE band 12

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
707.5	10	5.18	5.98

# LTE band 12, 10MHz Bandwidth, QPSK (PAPR)



# LTE band 12, 10MHz Bandwidth, 16QAM (PAPR)





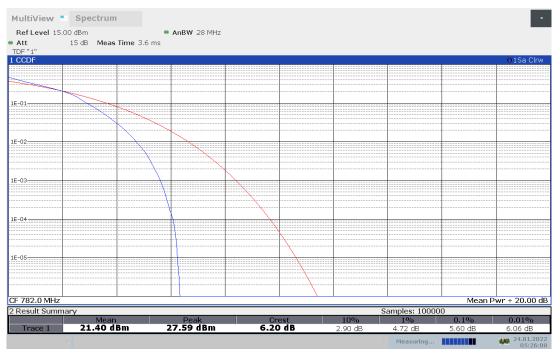
### LTE band 13

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
782.0	10	4.80	5.60

# LTE band 13, 10MHz Bandwidth, QPSK (PAPR)



# LTE band 13, 10MHz Bandwidth, 16QAM (PAPR)





### LTE band 26(824MHz -849MHz)

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
836.5	10	5.84	6.42

### LTE band 26(824MHz -849MHz), 10MHz Bandwidth, QPSK (PAPR)



LTE band 26(824MHz -849MHz), 10MHz Bandwidth, 16QAM (PAPR)

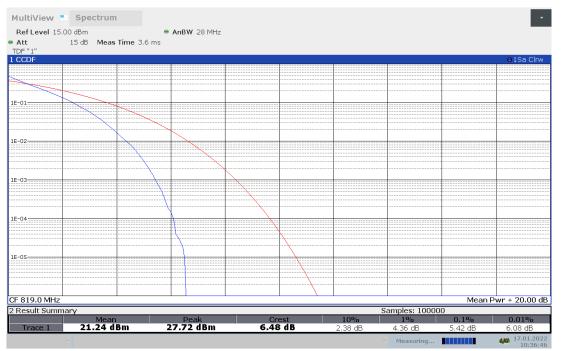




### LTE band 26(814MHz -824MHz)

	Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
			QPSK	16QAM
	819.0	15	5.42	6.18

### LTE band 26(814MHz -824MHz), 15MHz Bandwidth, QPSK (PAPR)



LTE band 26(814MHz -824MHz), 15MHz Bandwidth, 16QAM (PAPR)





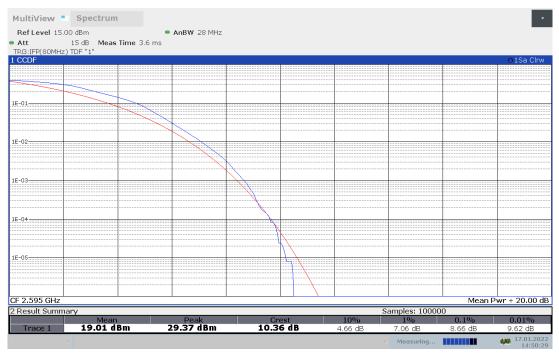
#### LTE band 38

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
2595.0	20	8.02	8.66

# LTE band 38, 20MHz Bandwidth, QPSK (PAPR)



# LTE band 38, 20MHz Bandwidth, 16QAM (PAPR)

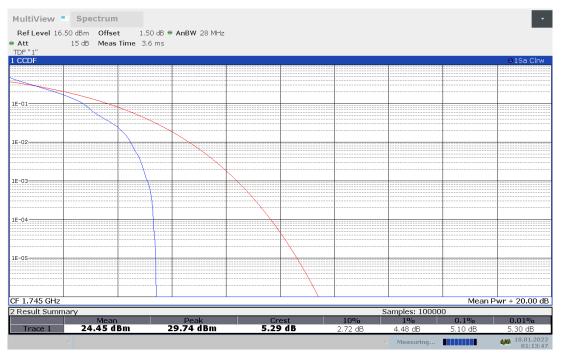




#### LTE band 66

Frequency(MHz)	Bandwidth(MHz)	PAPR(dB)	
		QPSK	16QAM
1745.0	20	5.10	5.70

### LTE band 66, 20MHz Bandwidth, QPSK (PAPR)



# LTE band 66, 20MHz Bandwidth, 16QAM (PAPR)



Note: Expanded measurement uncertainty is U = 0.48, k = 2

#### ***END OF REPORT***