



# LTE Band 66+NR n78L

#### n78L,80MHz(-26dBc)

	Emission Bandwidth (-26dBc) (MHz)				
	DFT-s-pi/2 BPSK	DFT-s-QPSK			
3500.01	82.240	82.480			

#### n78L,80MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



10:13:35 23.12.2021

### n78L,80MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



©Copyright. All rights reserved by CTTL.





# LTE Band 66+NR n78L

#### n78L,90MHz(-26dBc)

	Emission Bandwidth (-26dBc) (MHz)				
	DFT-s-pi/2 BPSK	DFT-s-QPSK			
3500.01	91.710	92.250			

#### n78L,90MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



10:15:06 23.12.2021

### n78L,90MHz Bandwidth,DFT-s-QPSK (-26dBc BW)







# A.6 Band Edge Compliance

#### A.6.1 Measurement limit

Part 27.53(h) specifies 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 + 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(n) states for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz 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, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. 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.

Part 27.53(I) states for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Compliance with this paragraph (I)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. 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 spectrum analyzer readings are corrected by [10 log (1/duty cycle)] for the non-continuous transmitting scenario.





# A.6.2 Measurement result NR n77L

# OBW: 1RB-LOW\_offset



18:25:21 22.12.2021

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



18:26:02 22.12.2021





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



18:26:42 22.12.2021





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



18:27:20 22.12.2021

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



18:28:01 22.12.2021





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



18:28:41 22.12.2021





#### LOW BAND EDGE BLOCK-90M-100%RB



08:38:36 23.12.2021

#### LOW BAND EDGE BLOCK-90M-100%RB

MultiView	Spectrum								
Ref Level 26.	00 dBm Offset 27 dB • SWT	: 8.50 dB ● RB\ 3 s ● VB\	V 500 kHz V 3 MHz Mo	de Auto Sweep					
1 Frequency S	weep								01Rm View
20 dBm								M1[1]	-39.53 dBm 148 868 30 GHz-
10.10									
10 dBm-									
0 dBm			-						
-10 dBm			[						
limit1_for_trace1									
-20 dBm									
-30 dBm									
									M1
-50 dBm									
-60 dBm									
-70 dBm									
3.445 GHz			501 pts		40	0.0 kHz/			3.449 GHz
	~					2	Measuring		23.12.2021 08:39:16

08:39:16 23.12.2021





#### HIGH BAND EDGE BLOCK-90M-100%RB



#### HIGH BAND EDGE BLOCK-90M-100%RB

MultiView Ref Level 26	Spectrum	t 8.50 dB • RBV	<b>V</b> 500 kHz						•
Att TDF "5G"	27 dB 🖷 SWT	3 s 👄 VBV	V 3 MHz Mo	de Auto Sweep					
1 Frequency S	Sweep			-			1	MILTI	1Rm View
20 dam-								MILI	-40.91 dBm
20 0011								U.C.	51 115 00 002
10 dBm									
0 dBm			-						
-10 dBm									
limit1_for_trace1									
-20 dBm									
-30 dBm									
M1									
-tu tem		·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····	·····	·····	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		·····
-50 dBm									
-60 dBm									
-70 dBm									
3.551 GHz			501 pts		40	0.0 kHz/			3.555 GHz
							Measuring		23.12.2021

08:41:02 23.12.2021





# NR n77H OBW: 1RB-LOW\_offset



18:33:07 22.12.2021

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



18:33:49 22.12.2021





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



18:34:29 22.12.2021





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



18:35:59 22.12.2021

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



18:36:41 22.12.2021





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



18:37:21 22.12.2021





#### LOW BAND EDGE BLOCK-100M-100%RB



#### HIGH BAND EDGE BLOCK-100M-100%RB



18:39:42 22.12.2021





# NR n78H OBW: 1RB-LOW\_offset



18:40:27 22.12.2021

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



18:41:08 22.12.2021