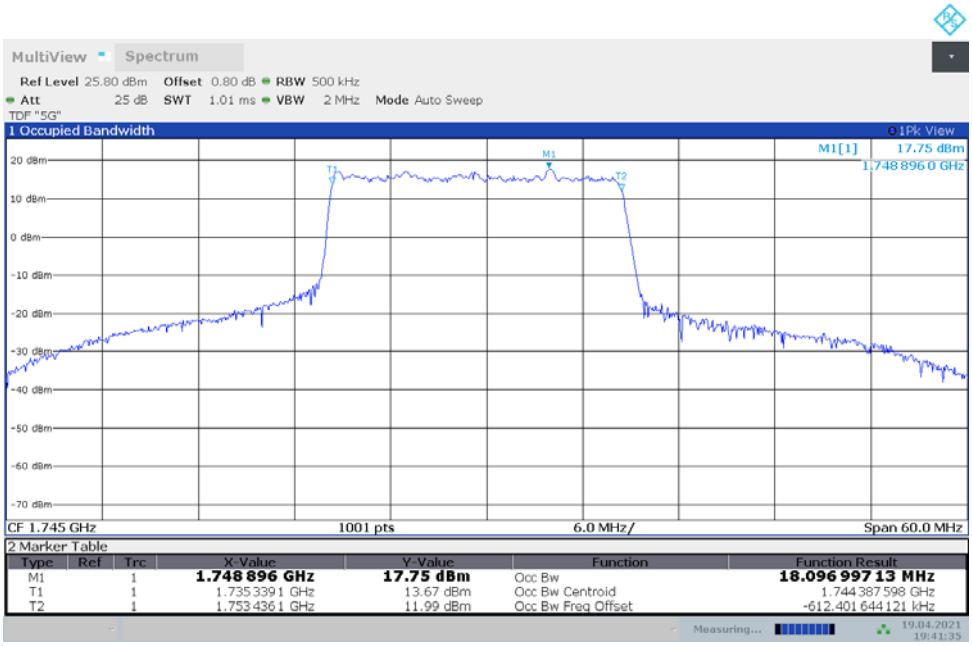
LTE Band 12+NR n66

n66,20MHz(99%)

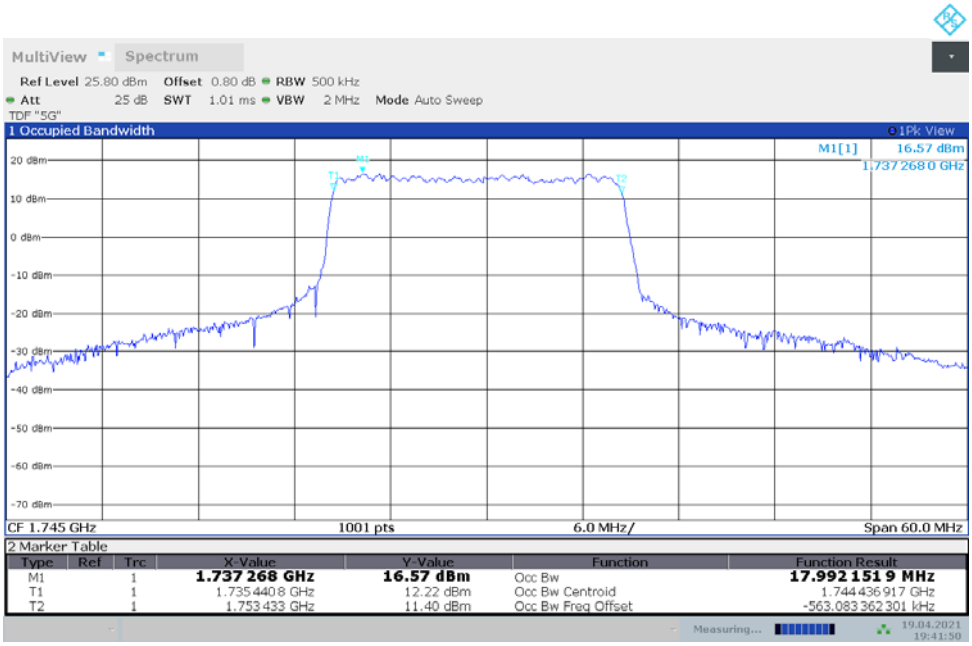
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	18.097	17.992

n66,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



Date:19.APR.2021 19:41:36

n66,20MHz Bandwidth,DFT-s-QPSK (99% BW)



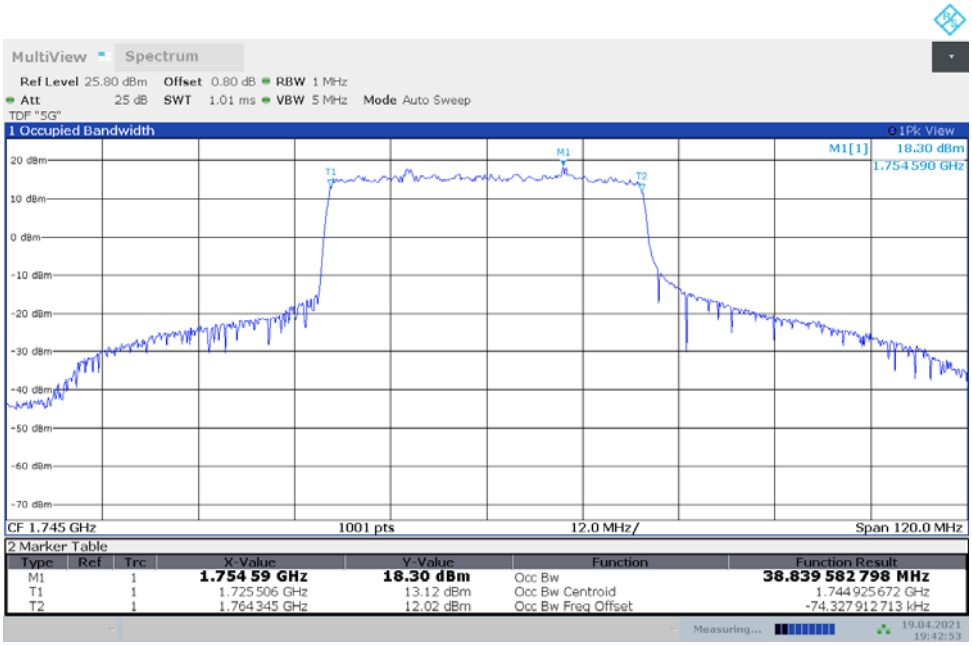
Date:19.APR.2021 19:41:50

LTE Band 12+NR n66

n66,40MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	38.840	38.839

n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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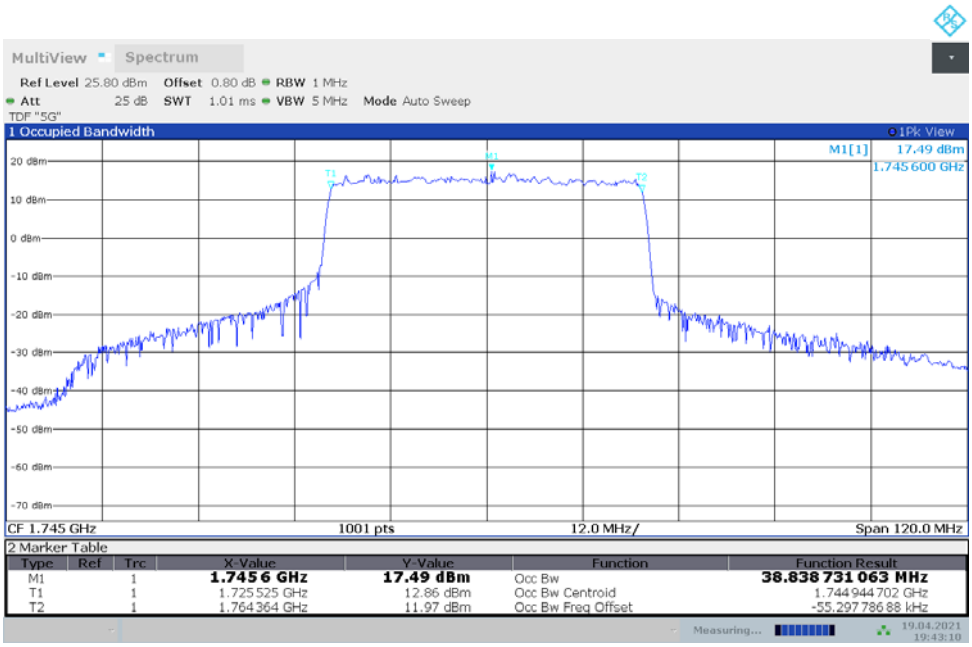
n66,40MHz Bandwidth,DFT-s-QPSK (99% BW)



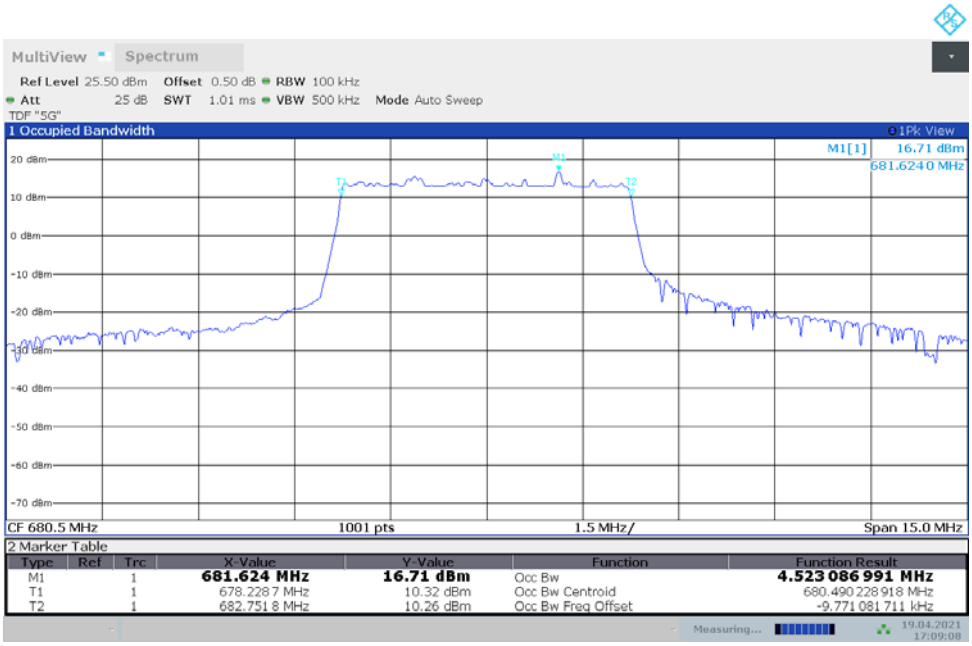
Date:19.APR.2021 19:43:10

LTE Band 66+NR n71

n71,5MHz(99%)

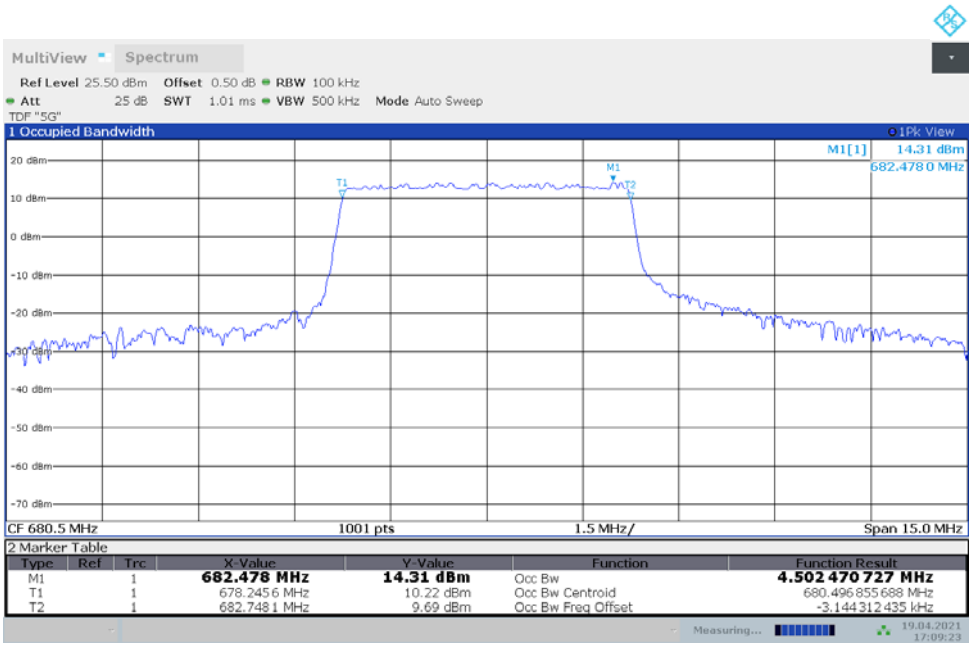
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	4.523	4.502

n71,5MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



Date: 19.APR.2021 17:09:09

n71,5MHz Bandwidth,DFT-s-QPSK (99% BW)



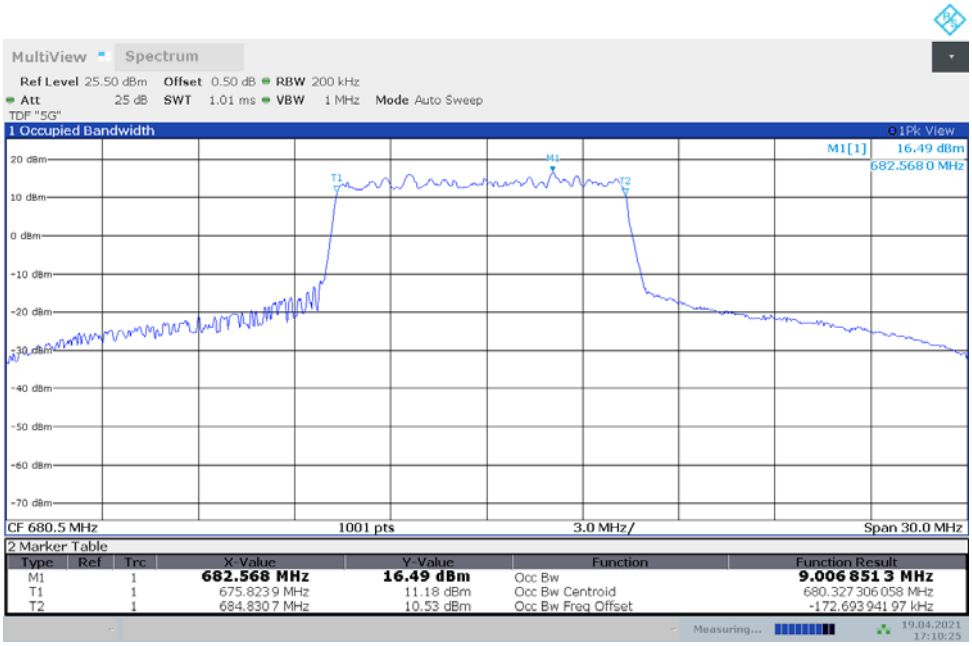
Date: 19.APR.2021 17:09:24

LTE Band 66+NR n71

n71,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	9.007	9.023

n71,10MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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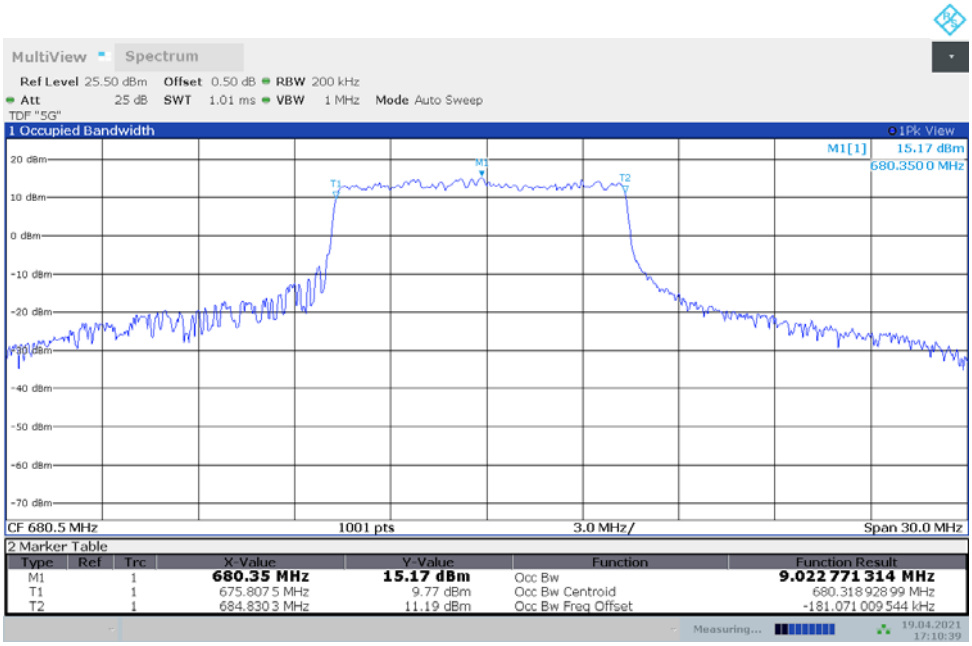
n71,10MHz Bandwidth,DFT-s-QPSK (99% BW)



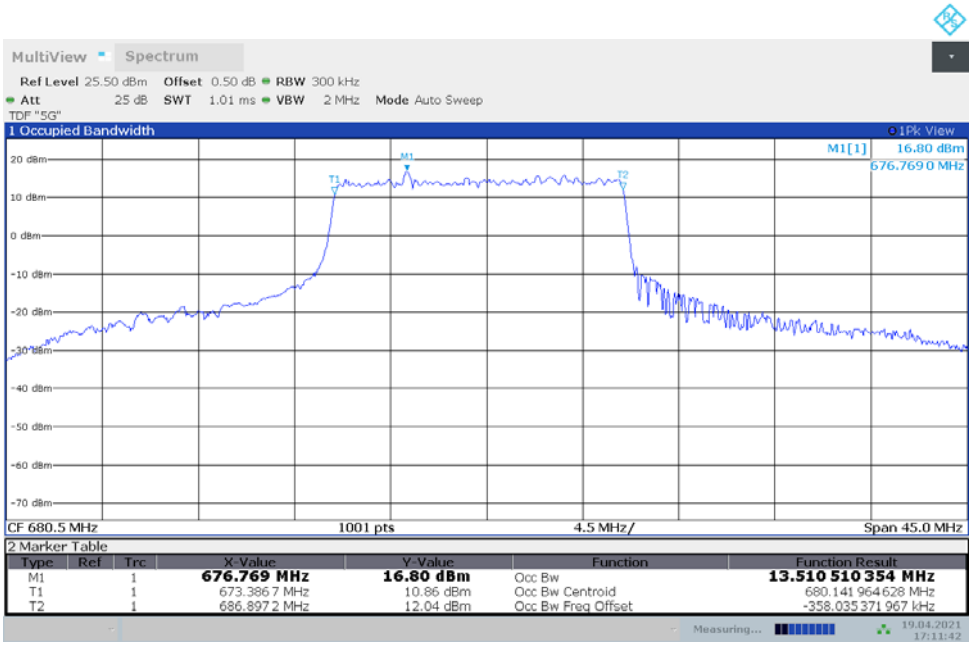
Date:19.APR.2021 17:10:40

LTE Band 66+NR n71

n71,15MHz(99%)

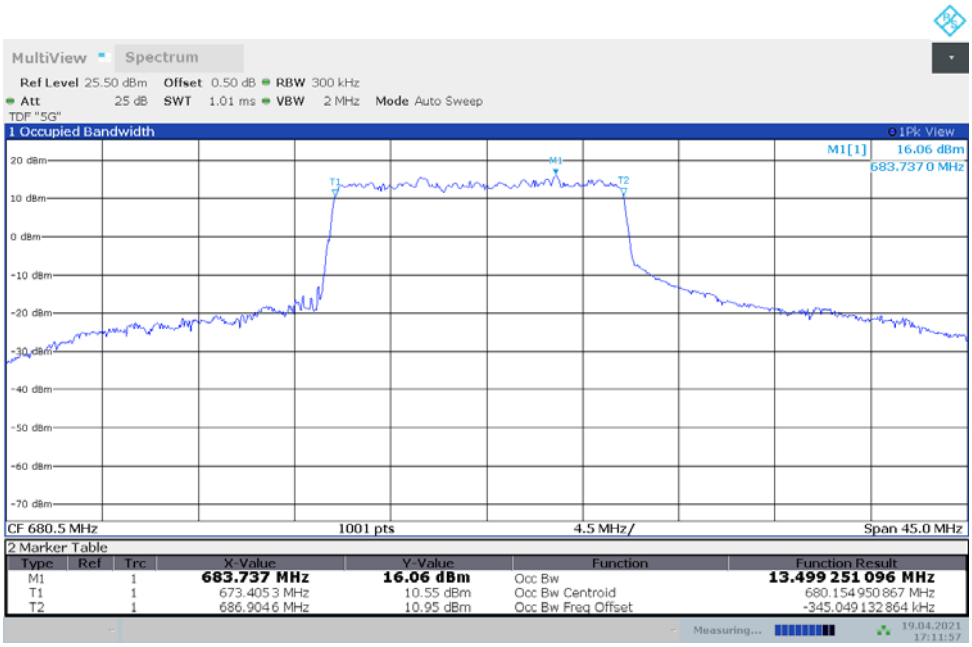
Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	13.511	13.499

n71,15MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



Date:19.APR.2021 17:11:42

n71,15MHz Bandwidth,DFT-s-QPSK (99% BW)



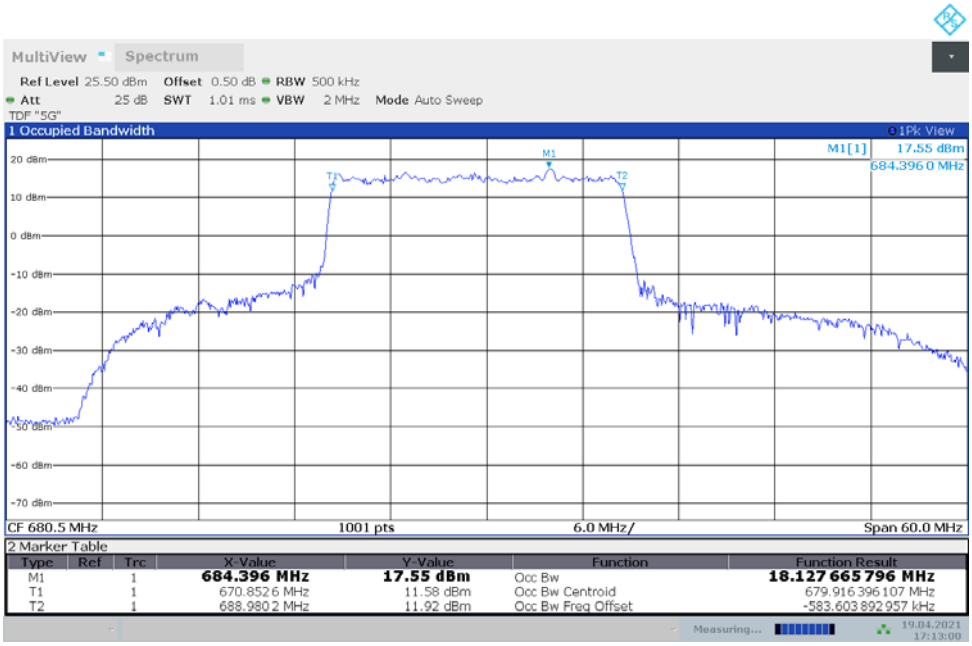
Date:19.APR.2021 17:11:57

LTE Band 66+NR n71

n71,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	18.128	18.026

n71,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



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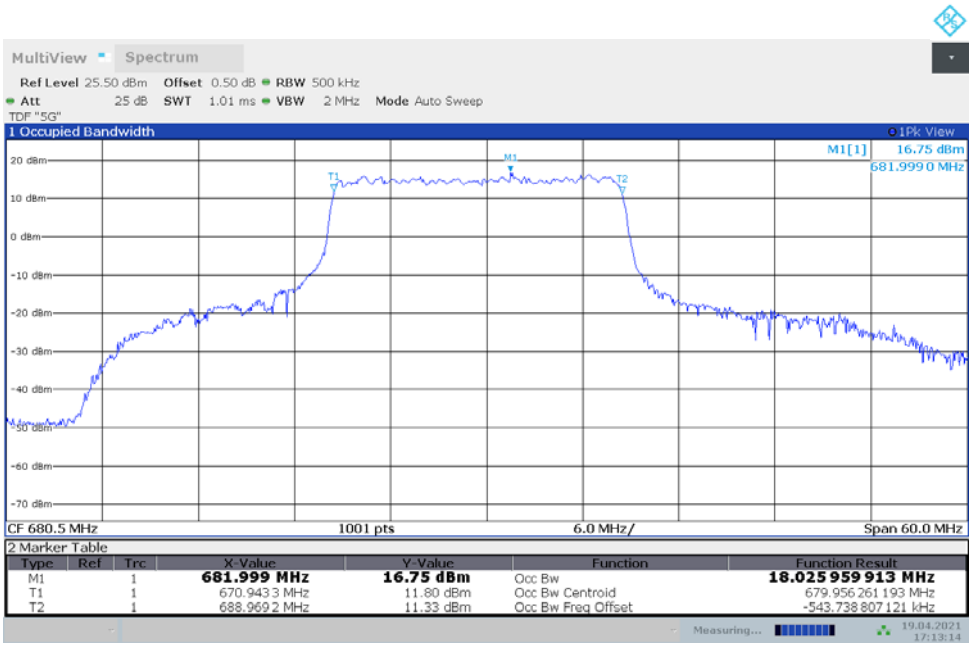
n71,20MHz Bandwidth,DFT-s-QPSK (99% BW)



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A.5 Emission Bandwidth

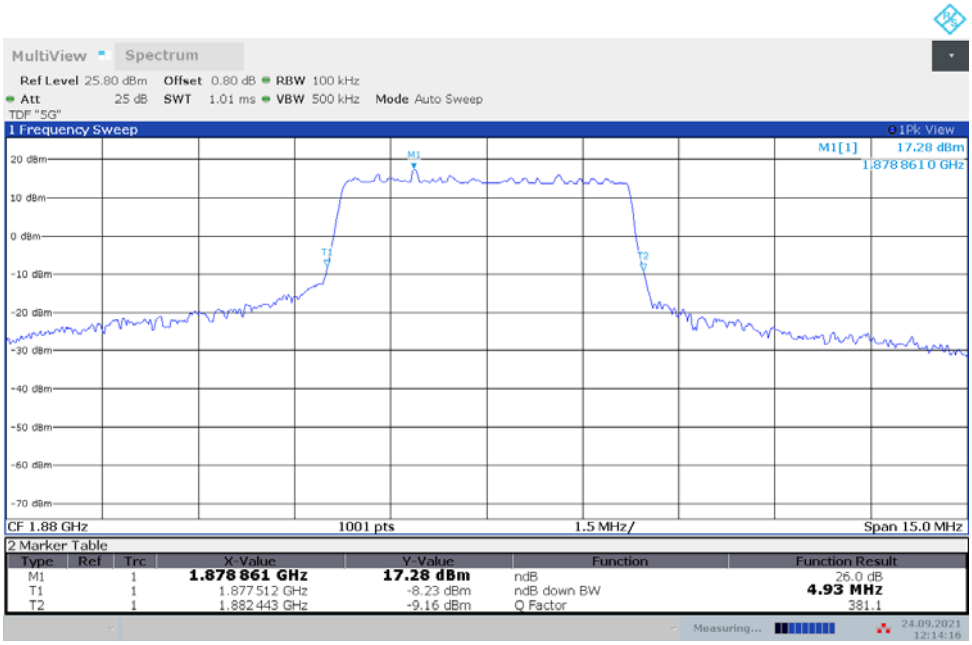
The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.
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.

LTE Band 12+NR n2

n2,5MHz(-26dBc)

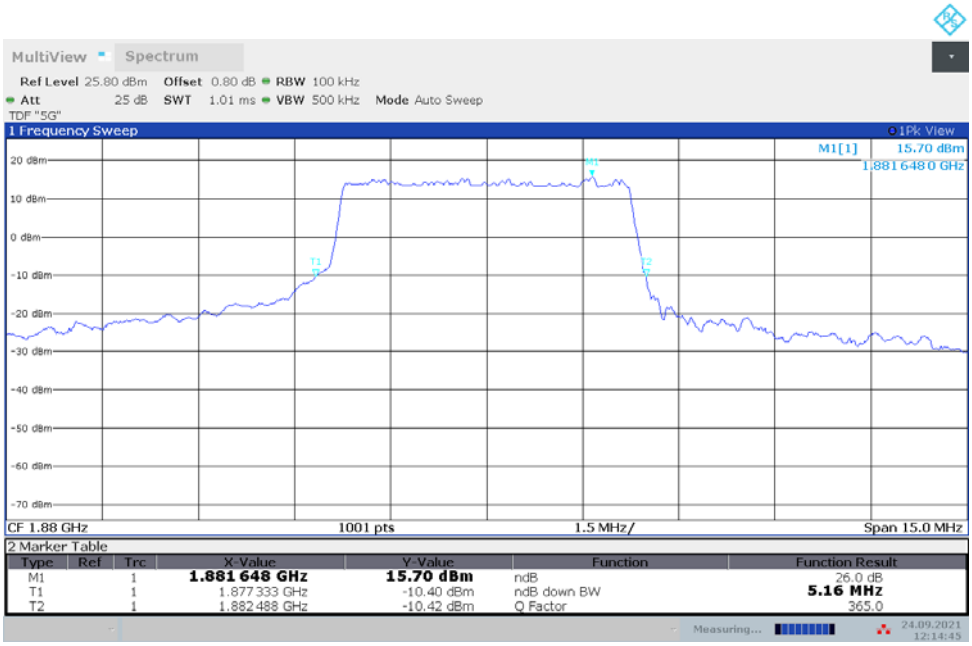
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	4.930	5.155

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



Date: 24.SEP.2021 12:14:16

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



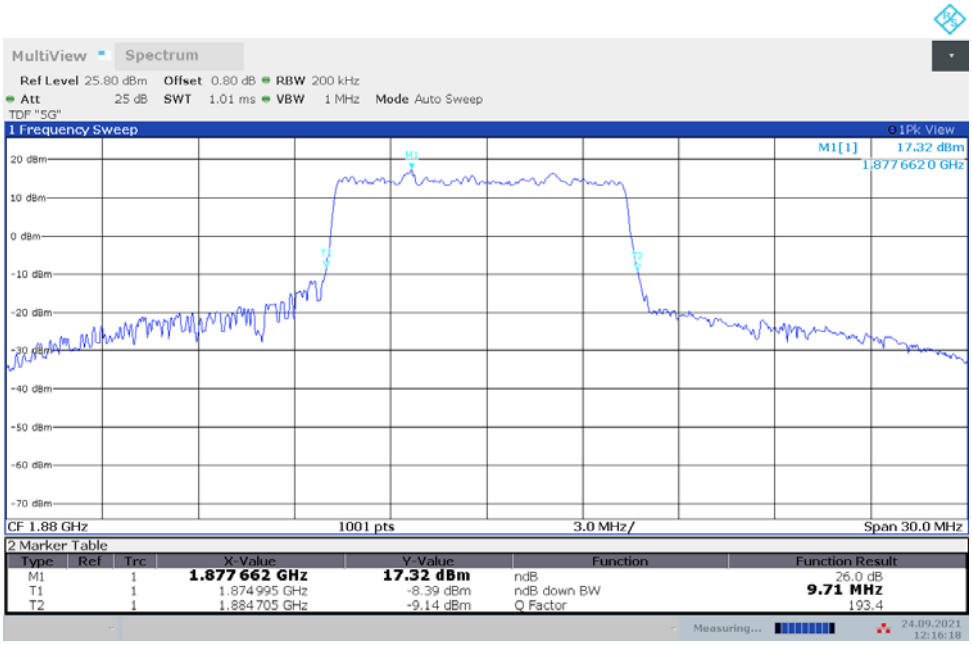
Date: 24.SEP.2021 12:14:45

LTE Band 12+NR n2

n2,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	9.710	9.740

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



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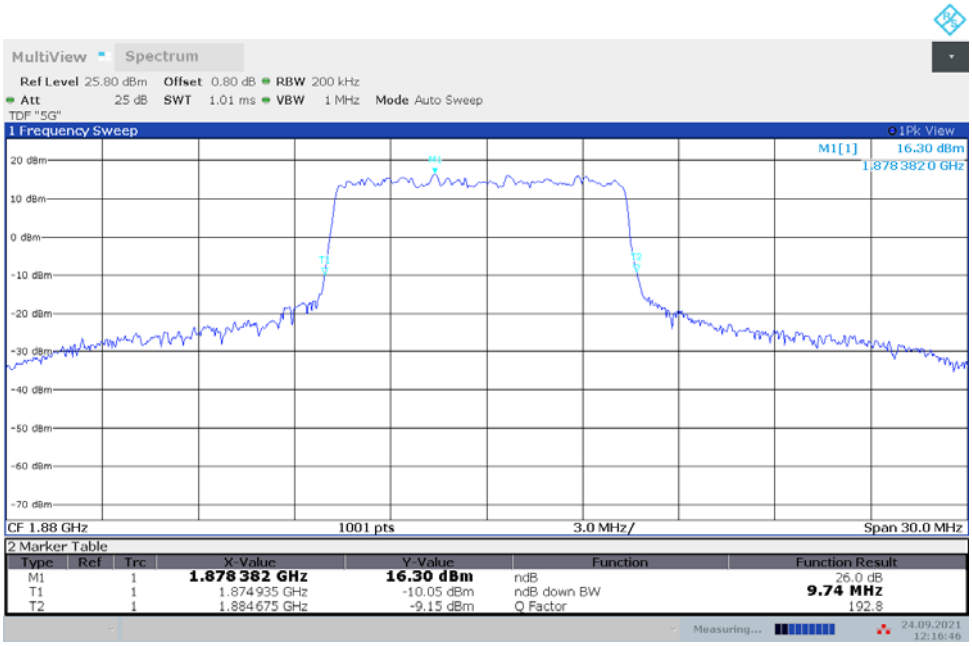
n2,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



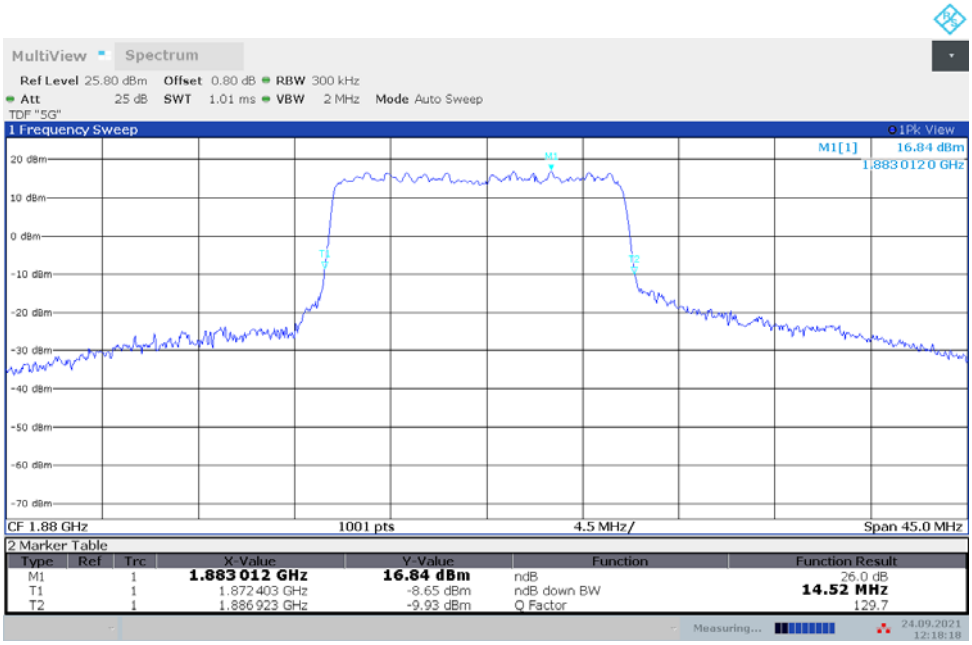
Date: 24.SEP.2021 12:16:47

LTE Band 12+NR n2

n2,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	14.520	14.520

n2,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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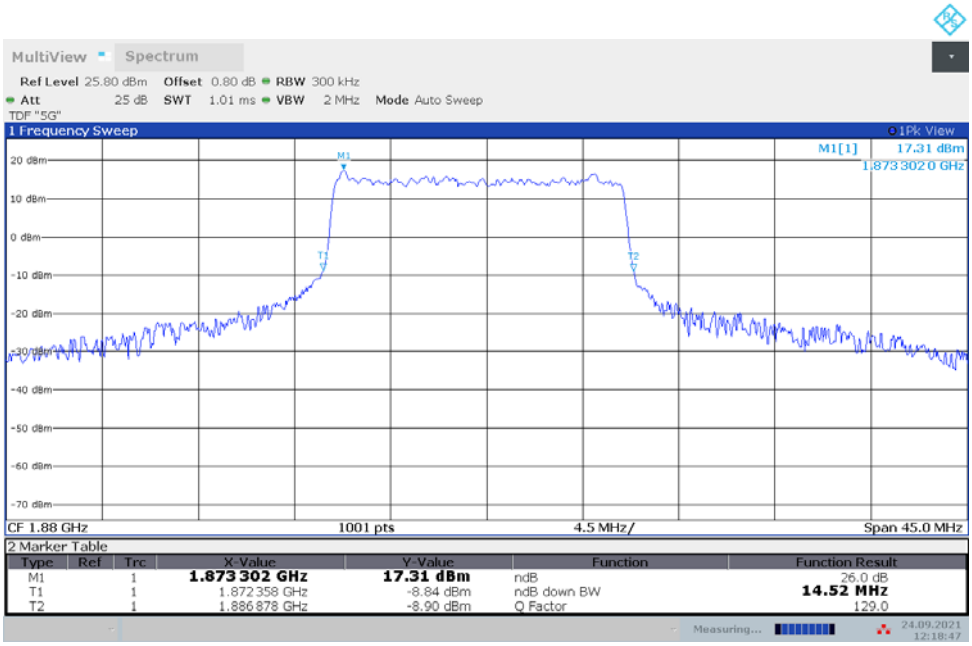
n2,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



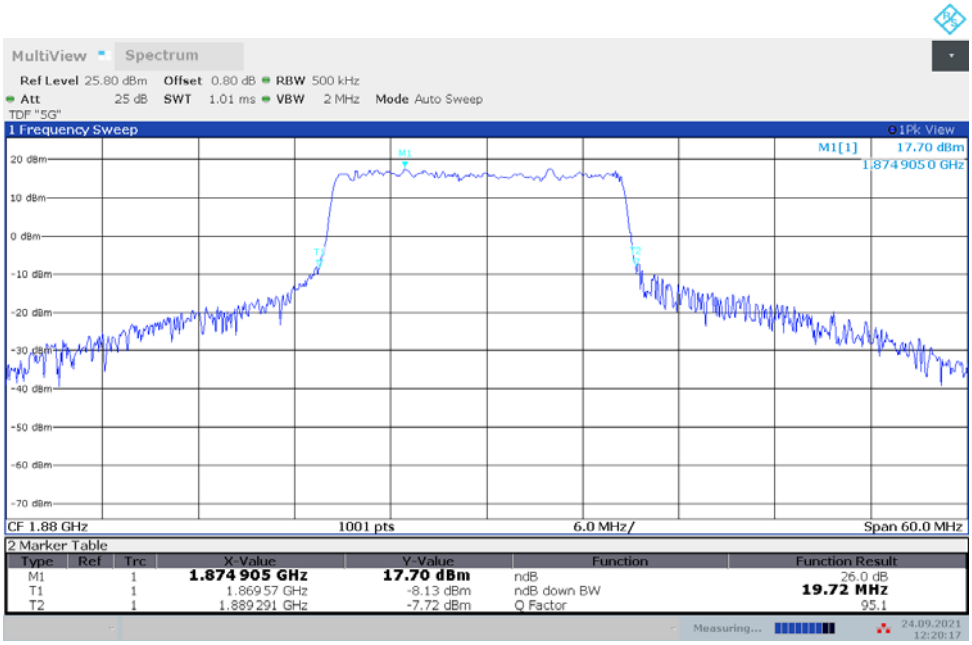
Date: 24.SEP.2021 12:18:47

LTE Band 12+NR n2

n2,20MHz(-26dBc)

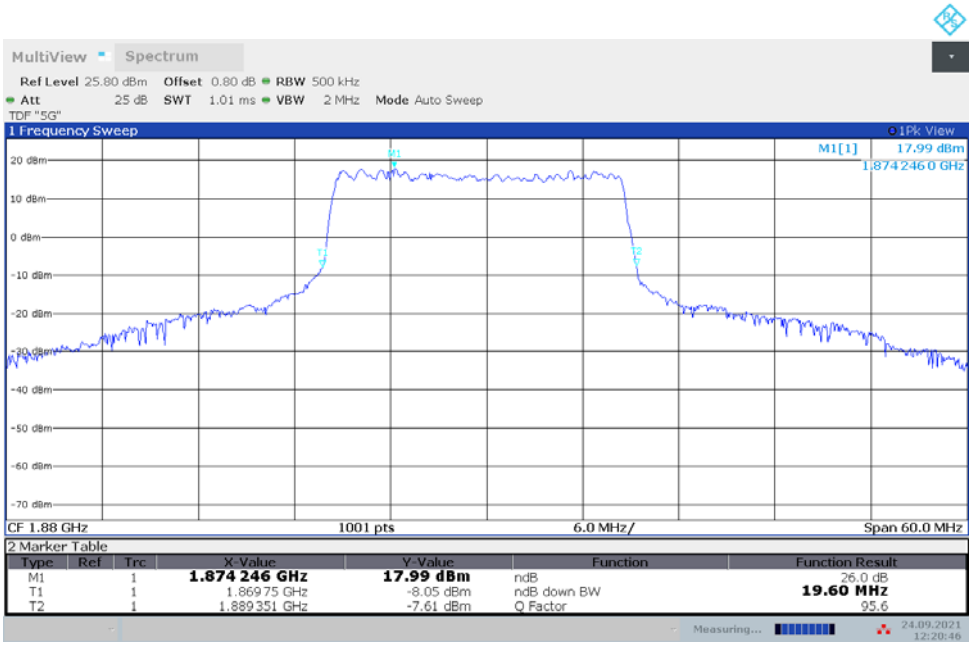
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1880	19.720	19.600

n2,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 24.SEP.2021 12:20:18

n2,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



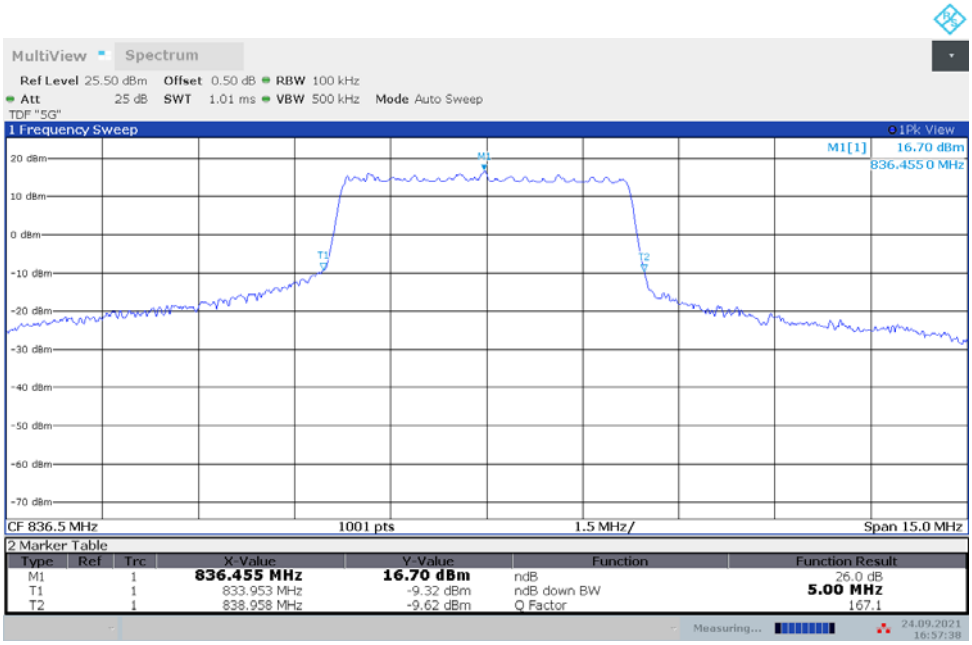
Date: 24.SEP.2021 12:20:46

LTE Band 66+NR n5

n5,5MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	5.005	5.350

n5,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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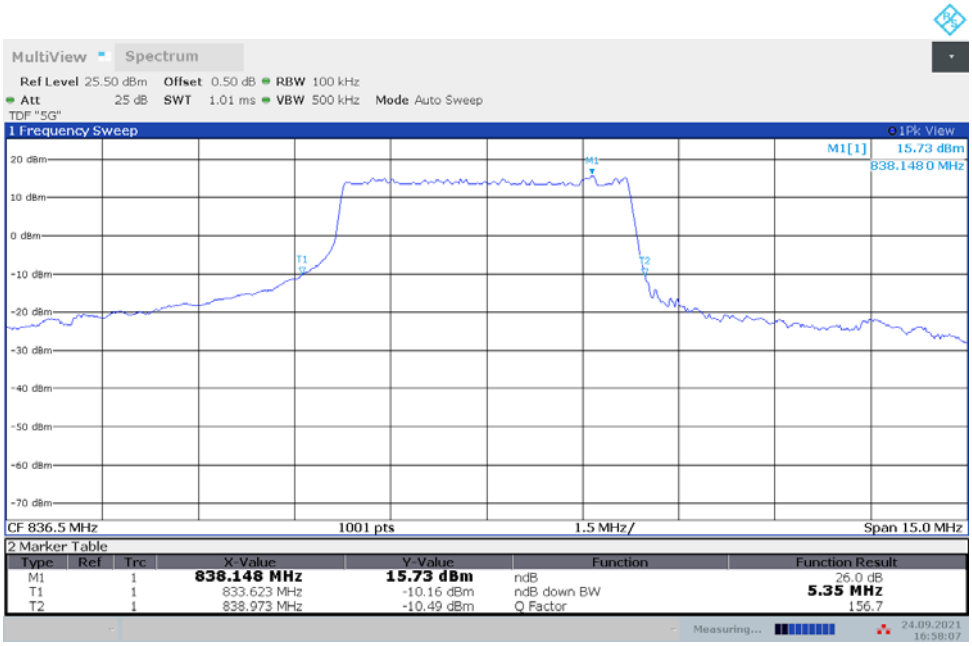
n5,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



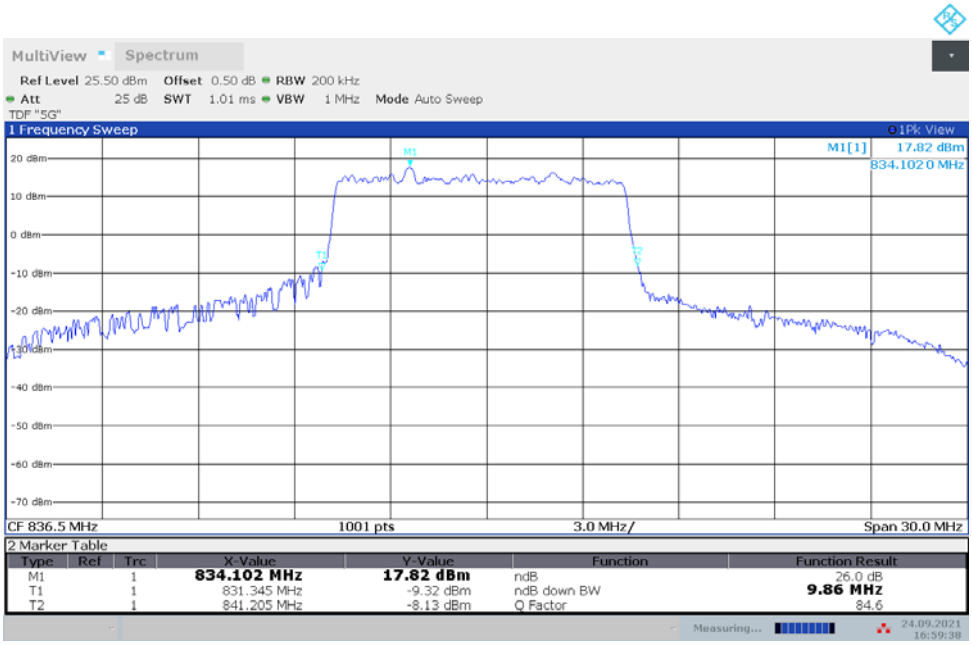
Date: 24.SEP.2021 16:58:07

LTE Band 66+NR n5

n5,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	9.860	9.680

n5,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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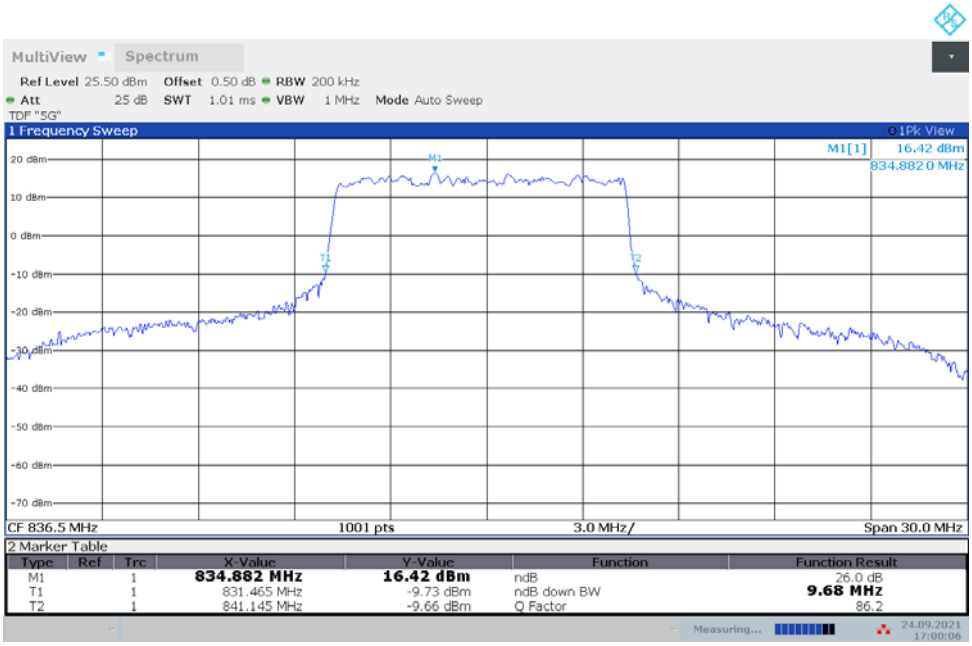
n5,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



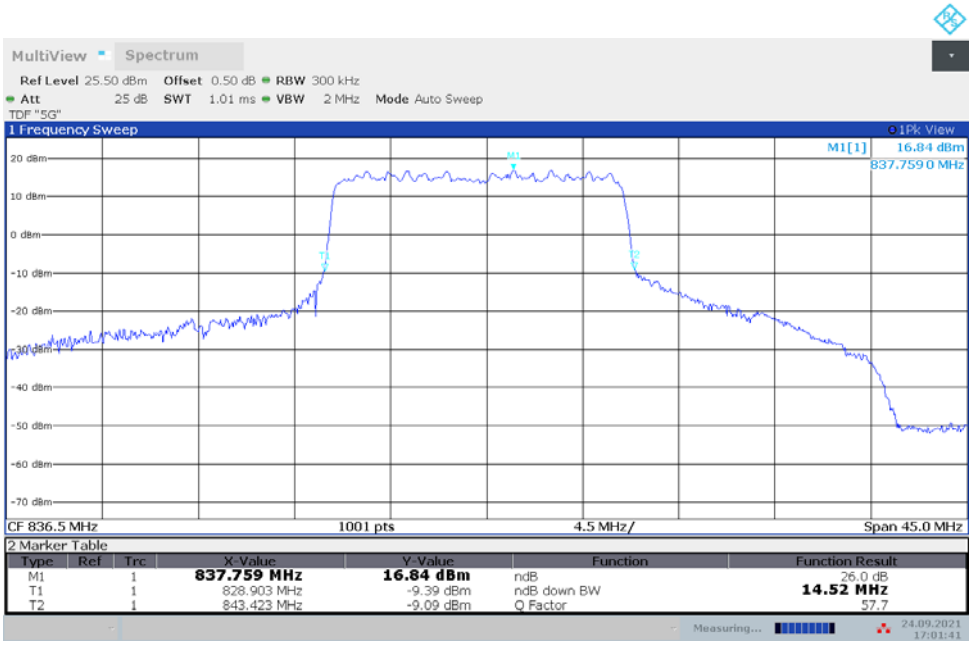
Date: 24.SEP.2021 17:00:07

LTE Band 66+NR n5

n5,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	14.520	15.195

n5,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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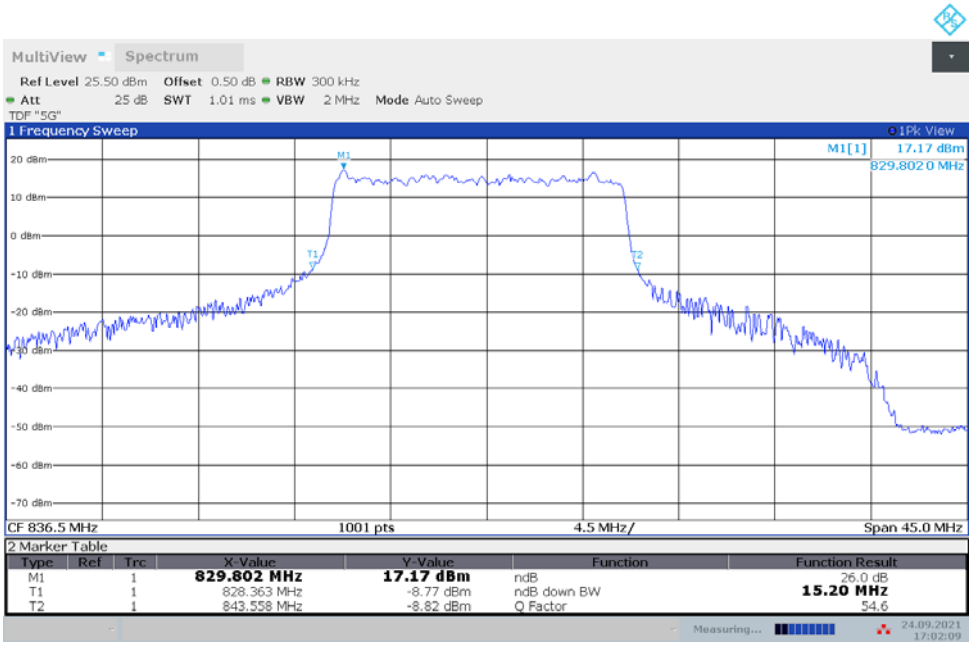
n5,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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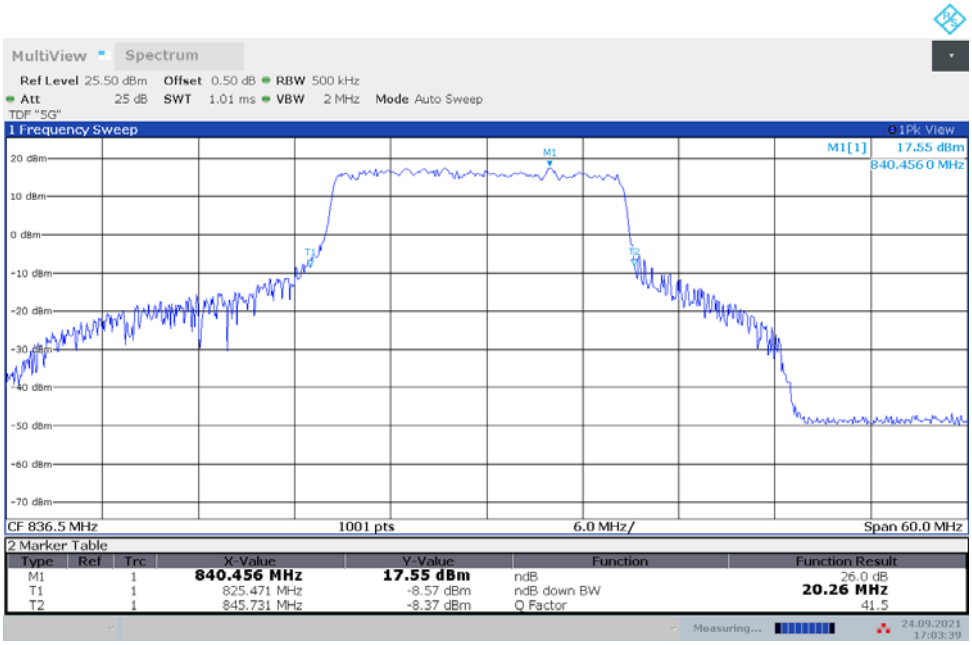
LTE Band 66+NR n5

n5,20MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
836.5	20.260	20.500

n5,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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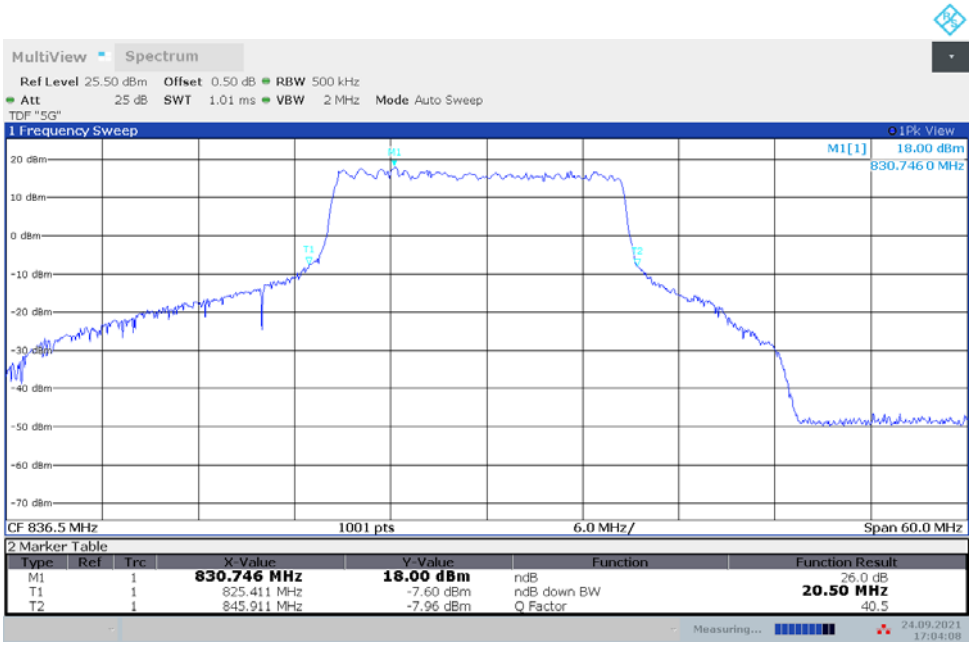
n5,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



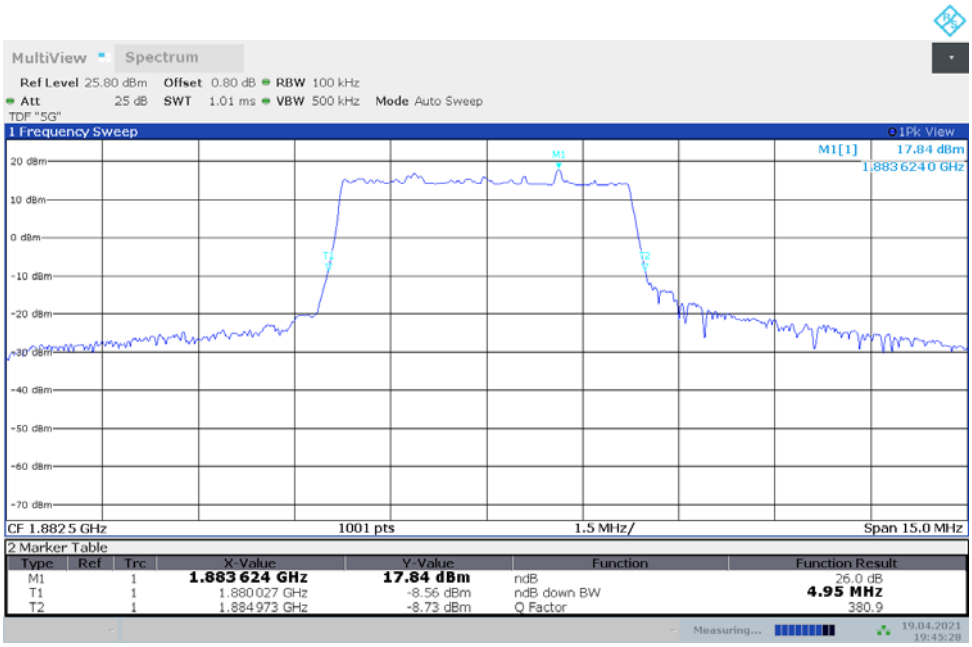
Date: 24.SEP.2021 17:04:08

LTE Band 12+NR n25

n25,5MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	4.945	4.975

n25,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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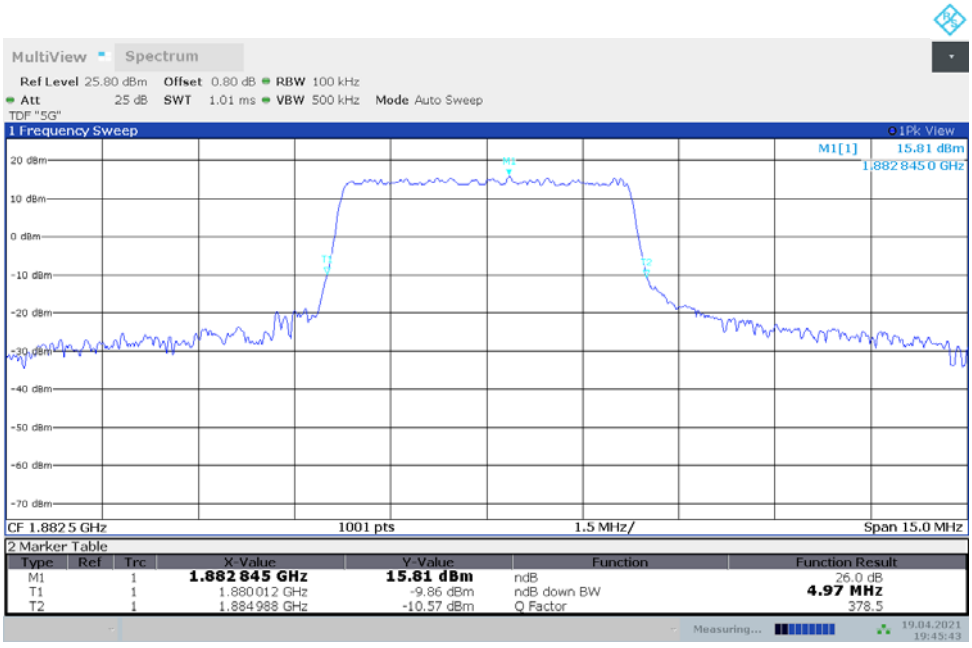
n25,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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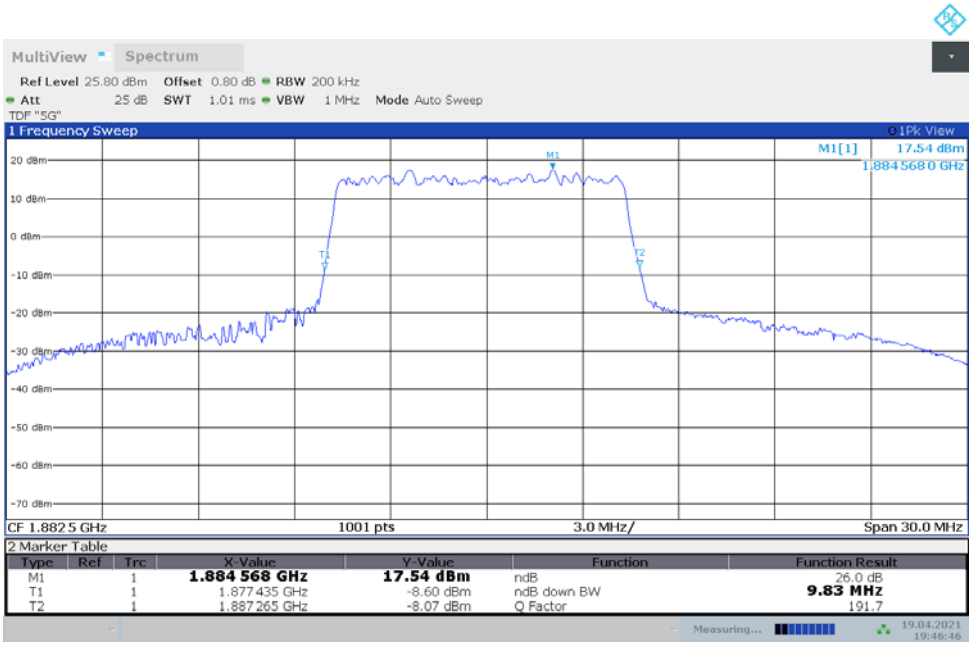
LTE Band 12+NR n25

n25,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	9.830	9.860

n25,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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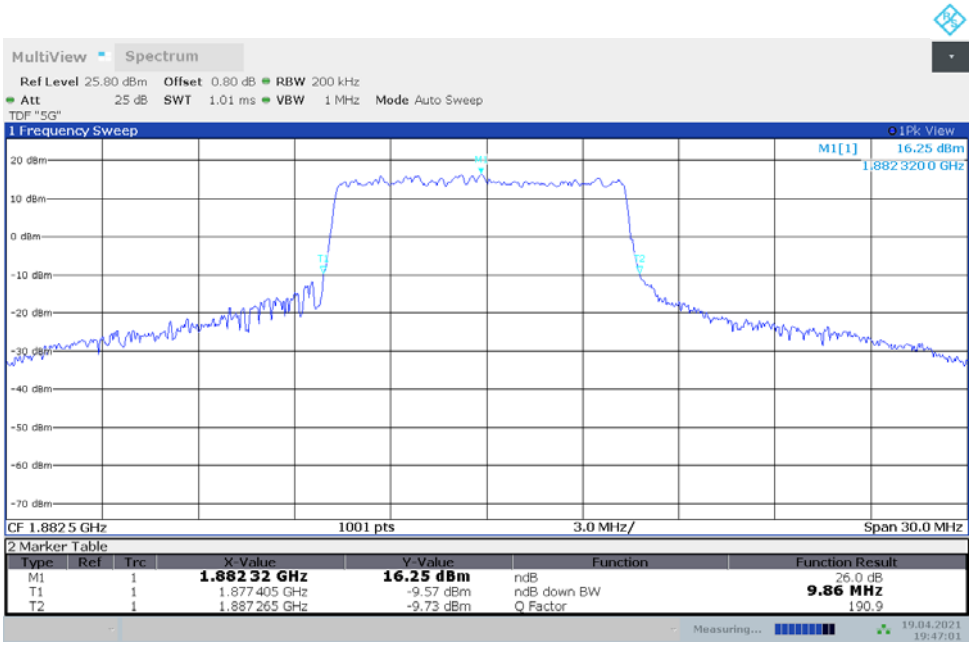
n25,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



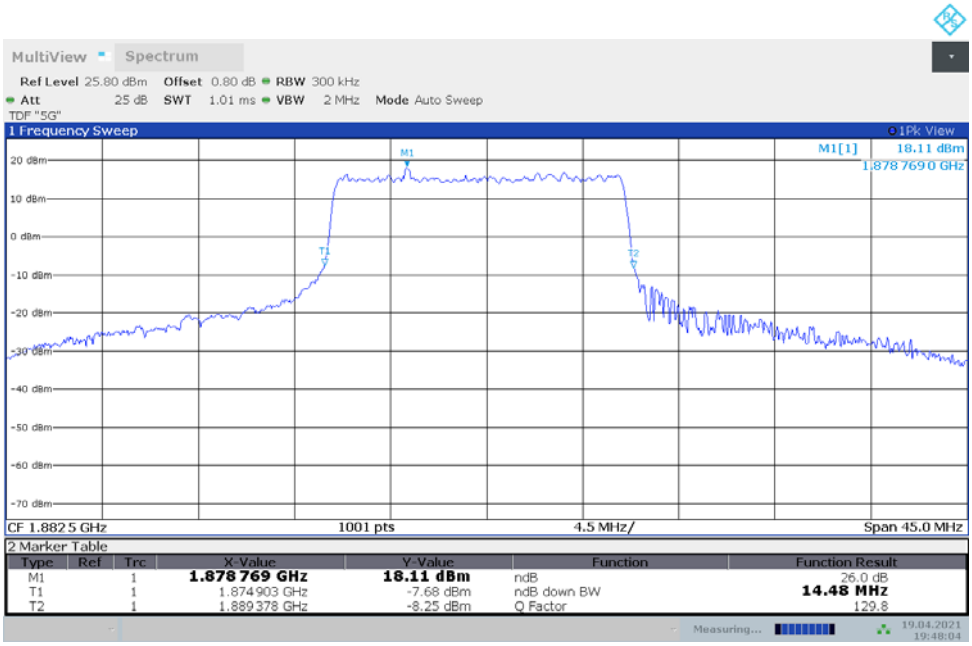
Date: 19.APR.2021 19:47:01

LTE Band 12+NR n25

n25,15MHz(-26dBc)

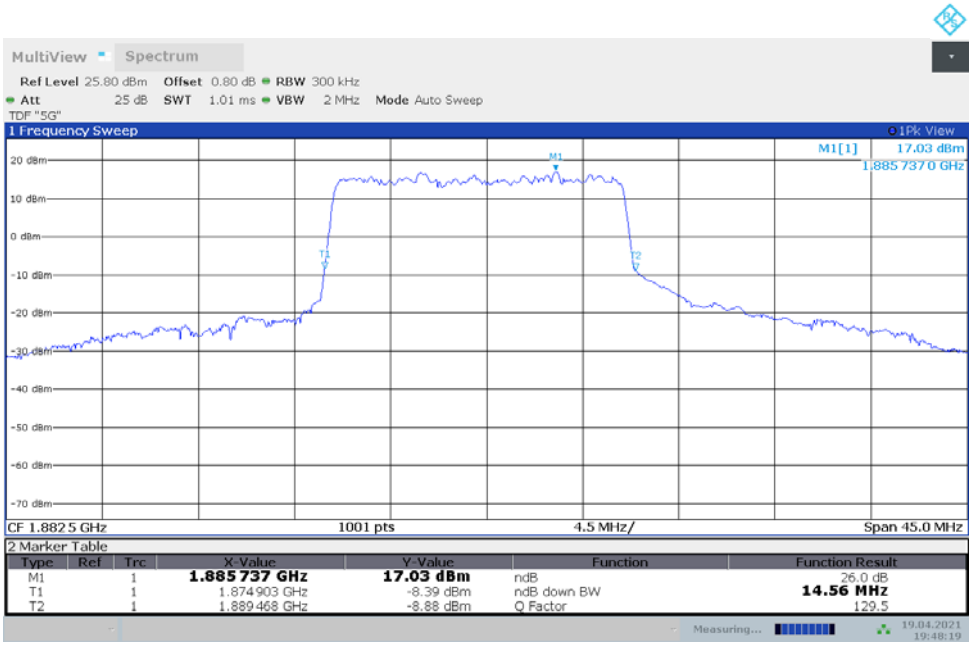
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	14.476	14.565

n25,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:48:04

n25,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



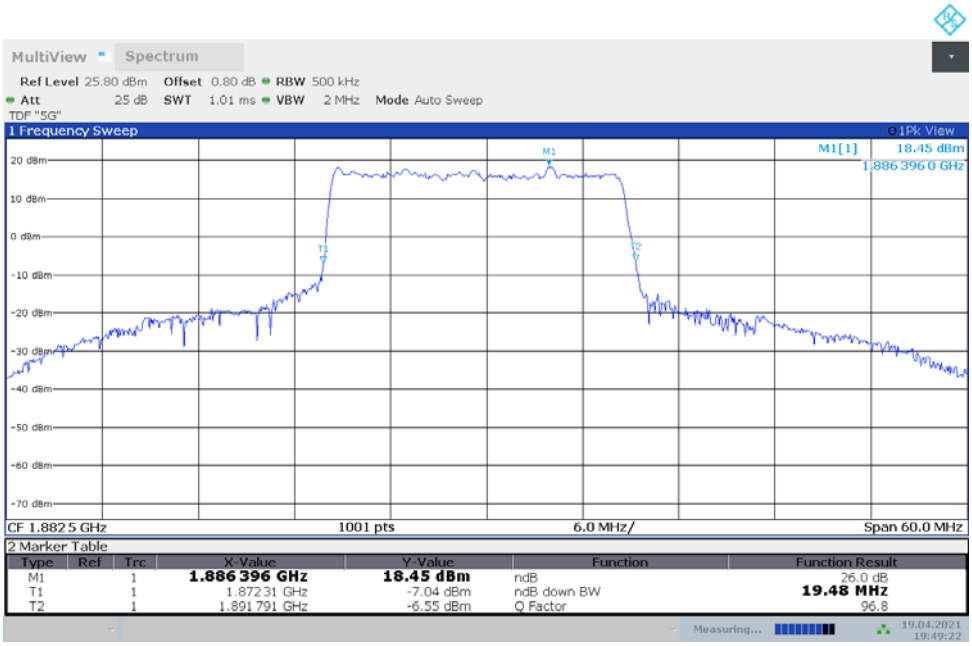
Date: 19.APR.2021 19:48:19

LTE Band 12+NR n25

n25,20MHz(-26dBc)

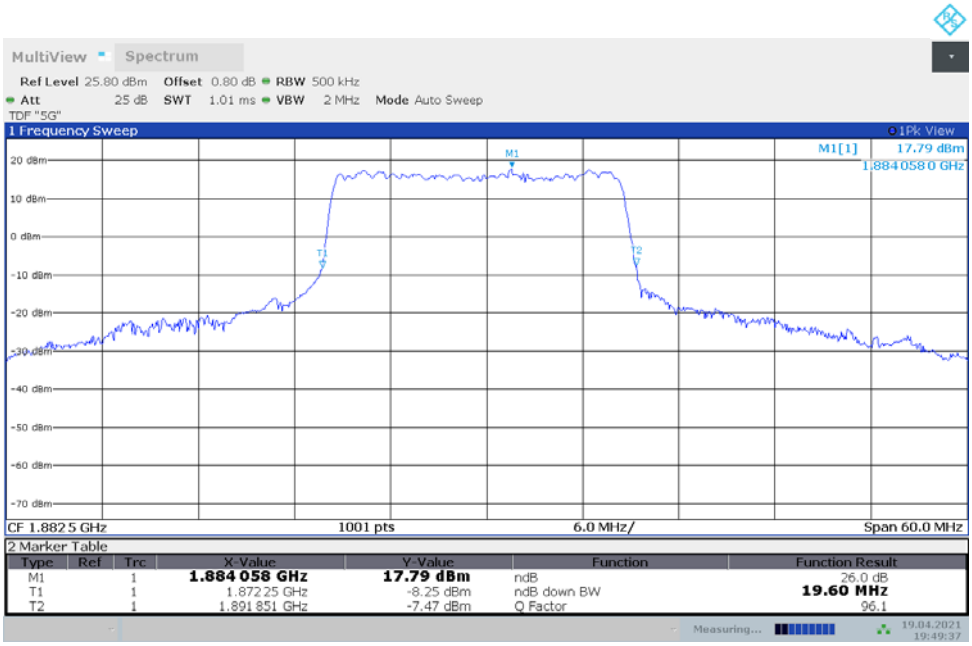
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1882.5	19.481	19.600

n25,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:49:22

n25,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



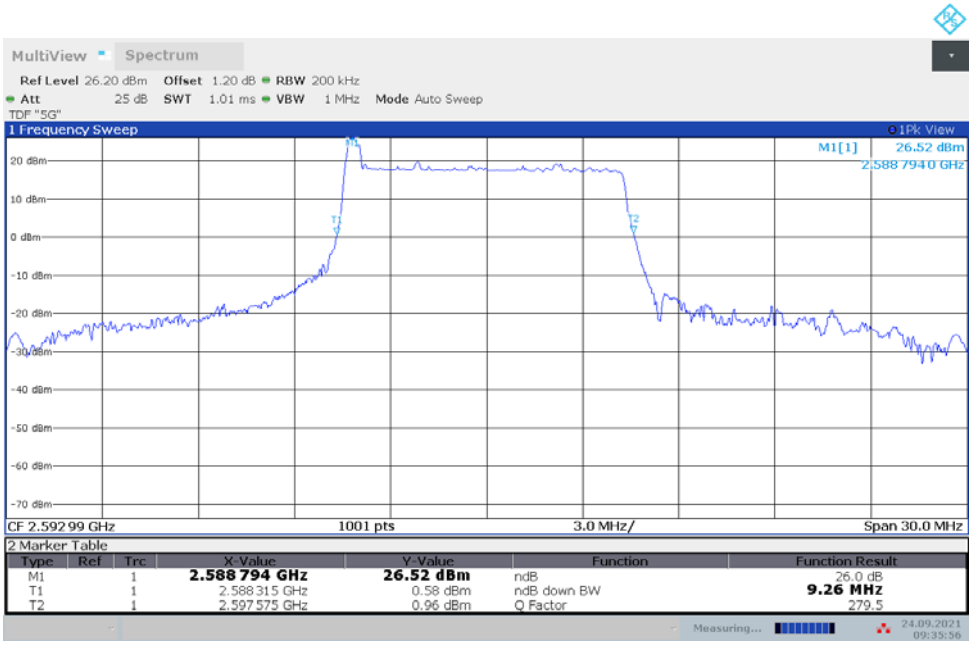
Date: 19.APR.2021 19:49:38

LTE Band 66+NR n41

n41,10MHz(-26dBc)

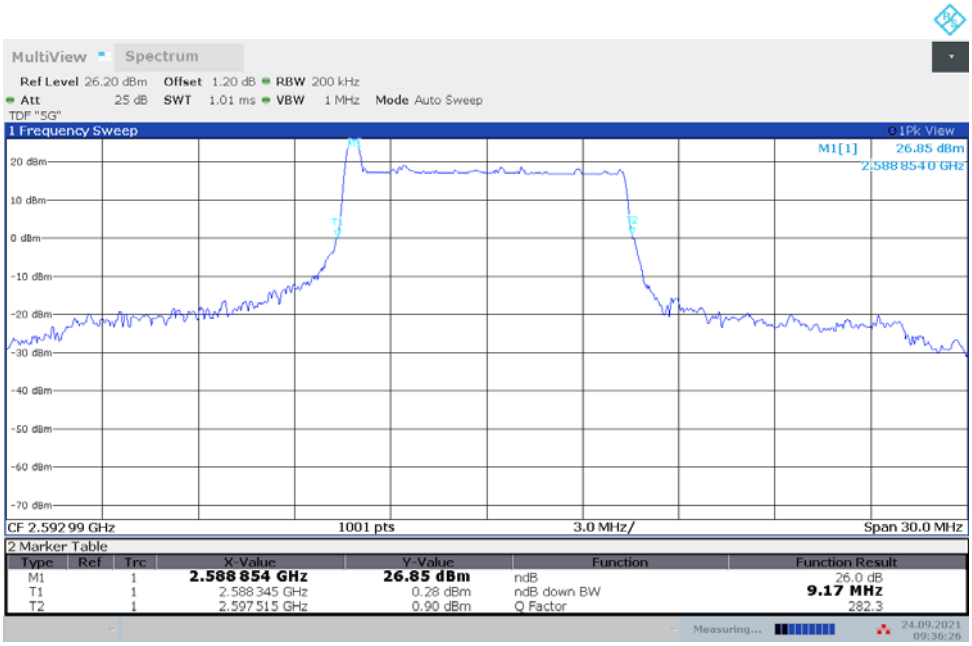
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	9.261	9.171

n41,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 24.SEP.2021 09:35:57

n41,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



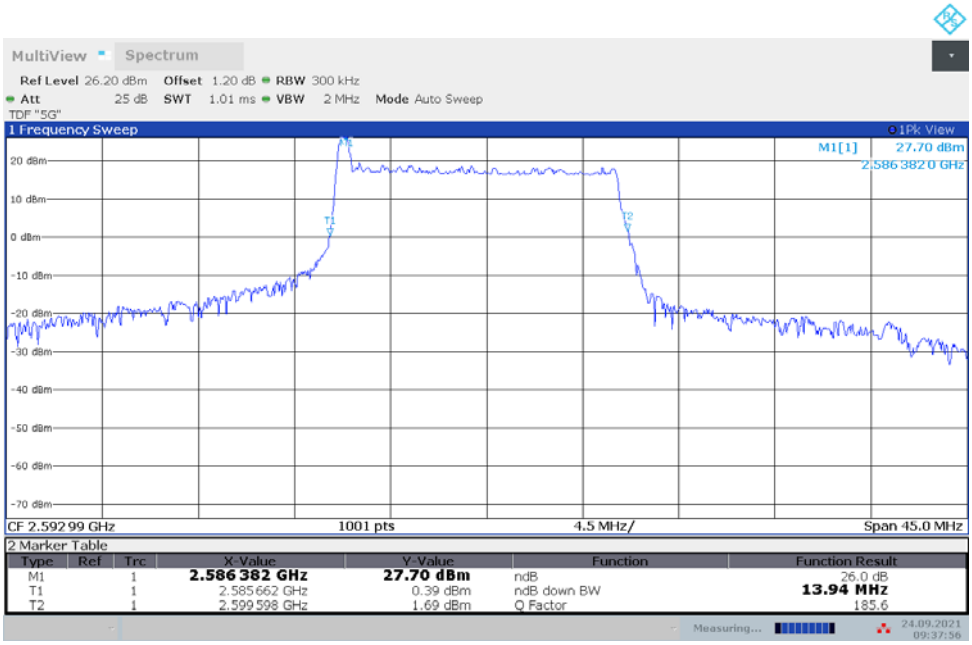
Date: 24.SEP.2021 09:36:26

LTE Band 66+NR n41

n41,15MHz(-26dBc)

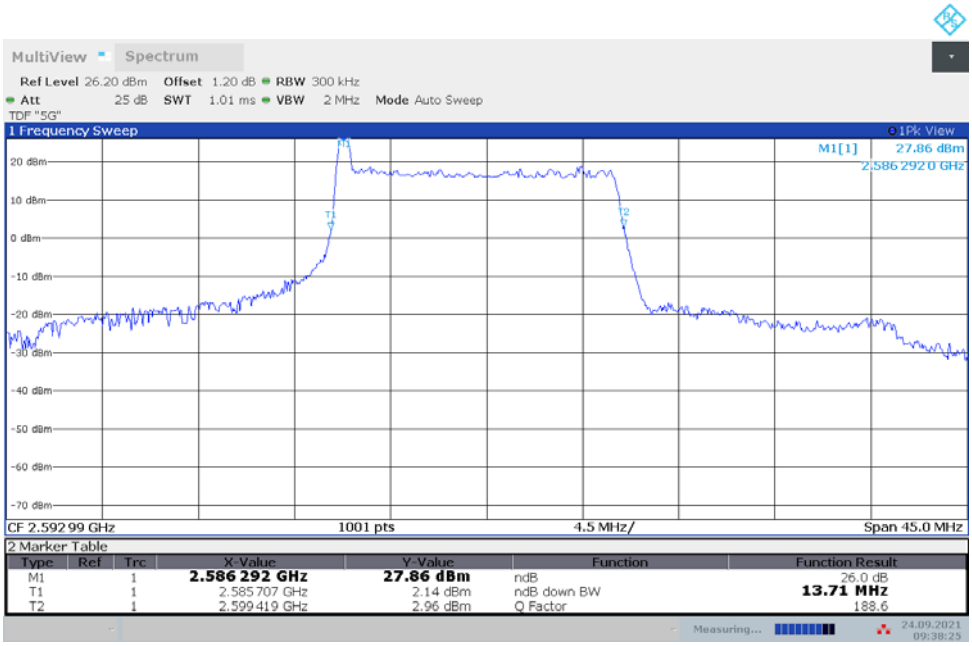
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	13.936	13.711

n41,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 24.SEP.2021 09:37:57

n41,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



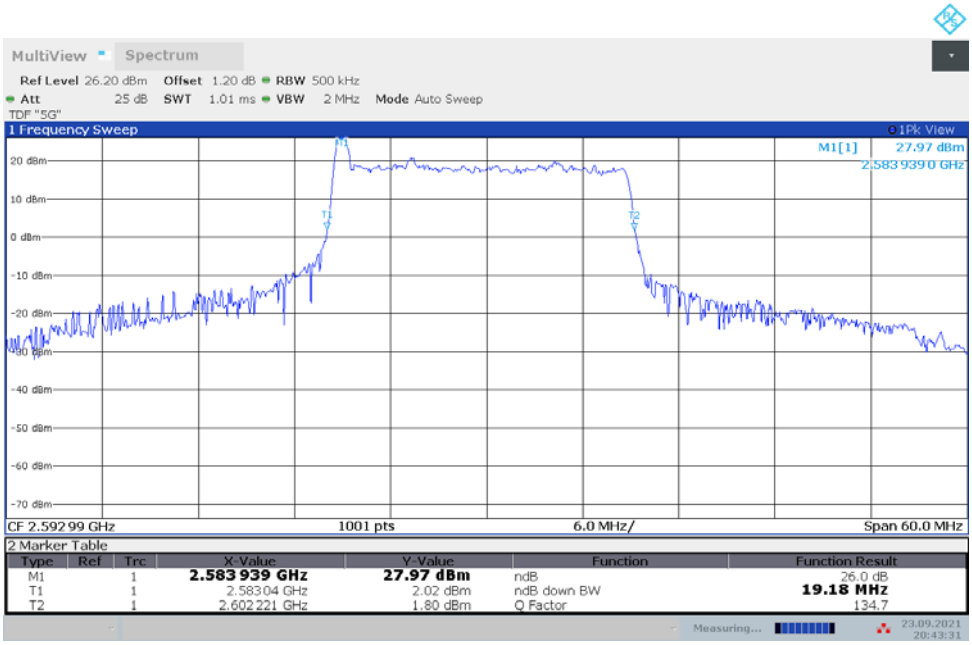
Date: 24.SEP.2021 09:38:26

LTE Band 66+NR n41

n41,20MHz(-26dBc)

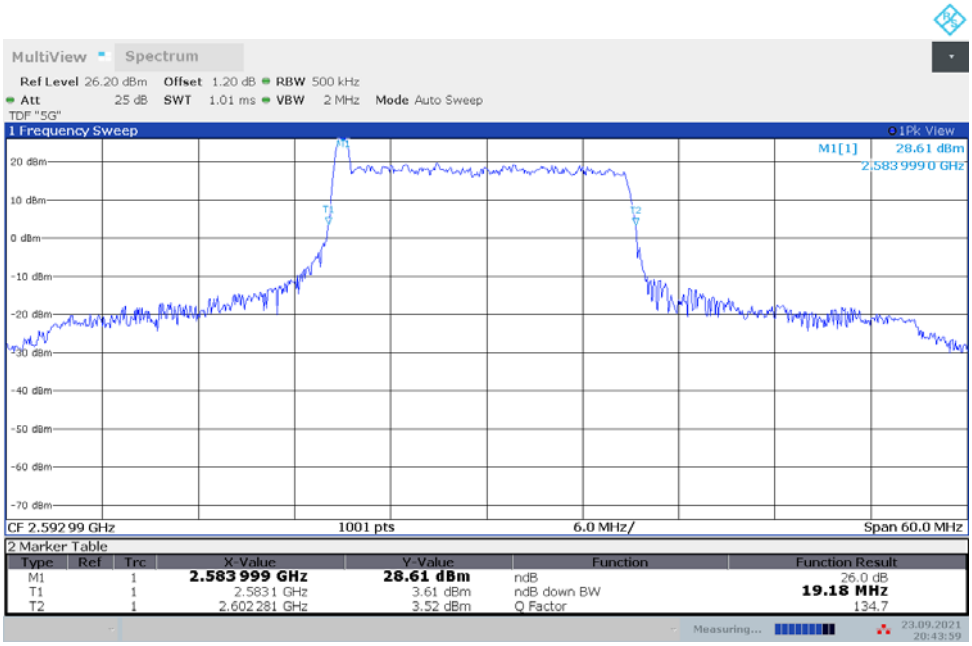
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	19.181	19.181

n41,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:43:31

n41,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



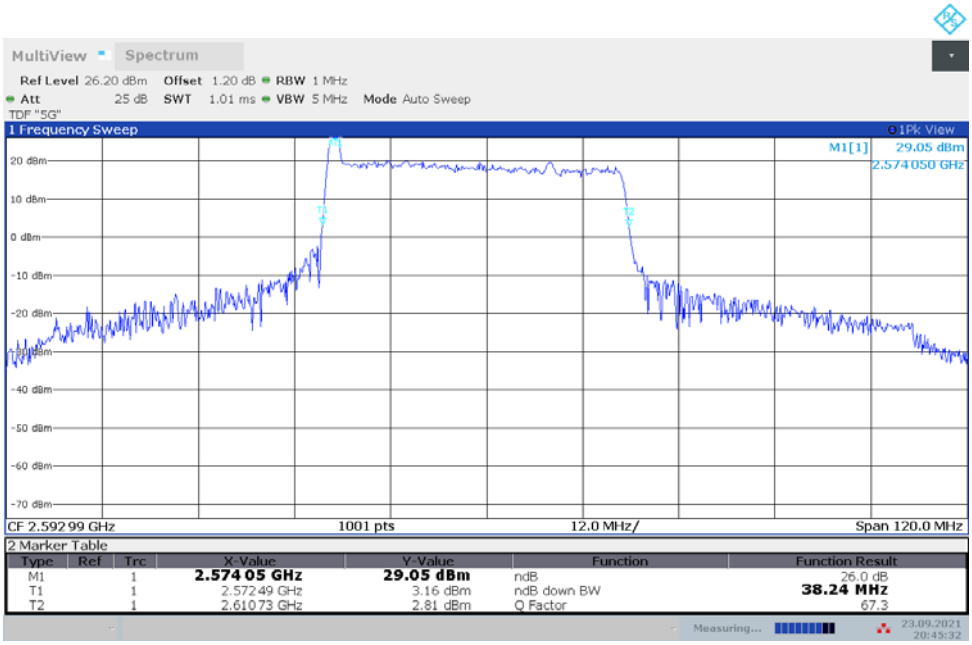
Date: 23.SEP.2021 20:44:00

LTE Band 66+NR n41

n41,40MHz(-26dBc)

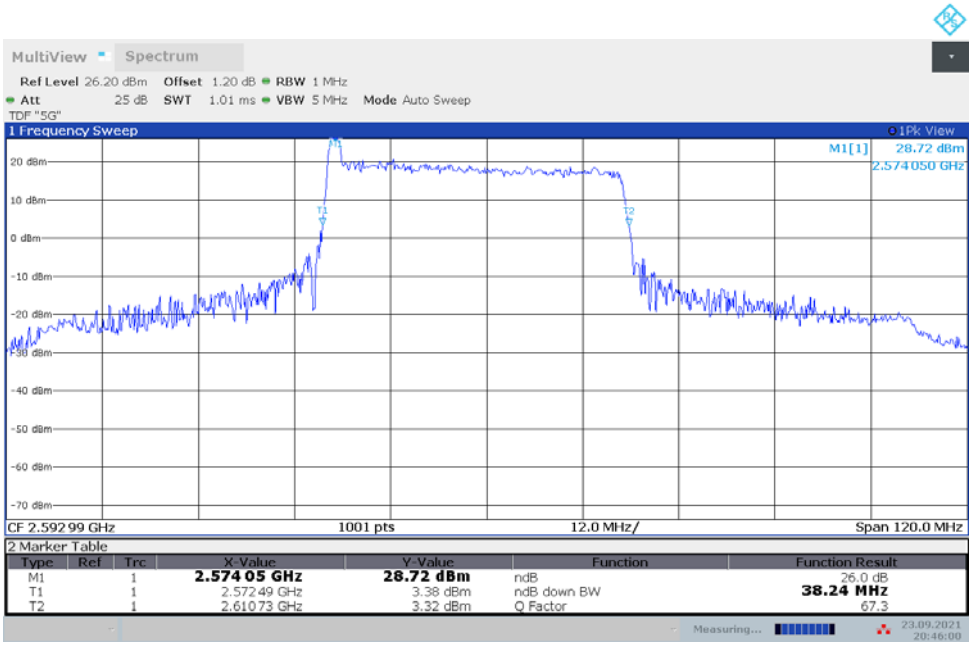
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	38.240	38.240

n41,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:45:32

n41,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



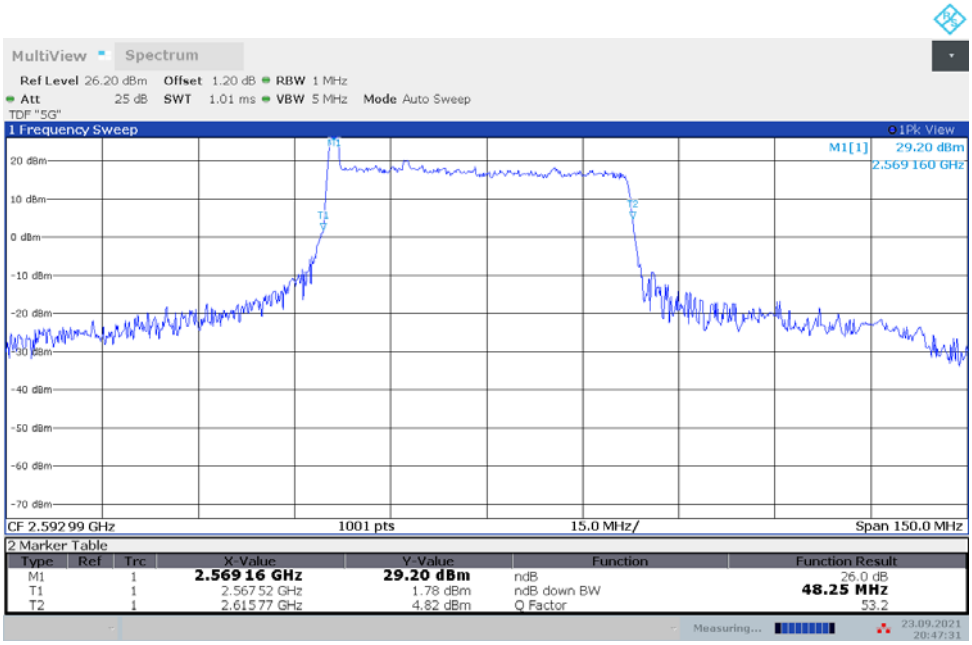
Date: 23.SEP.2021 20:46:01

LTE Band 66+NR n41

n41,50MHz(-26dBc)

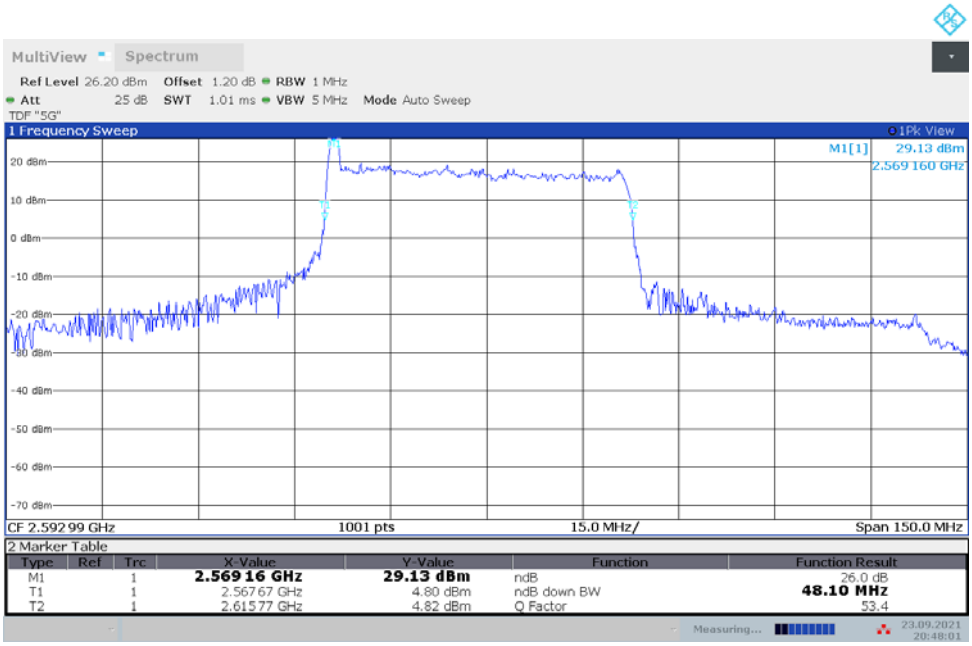
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	48.250	48.100

n41,50MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:47:32

n41,50MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



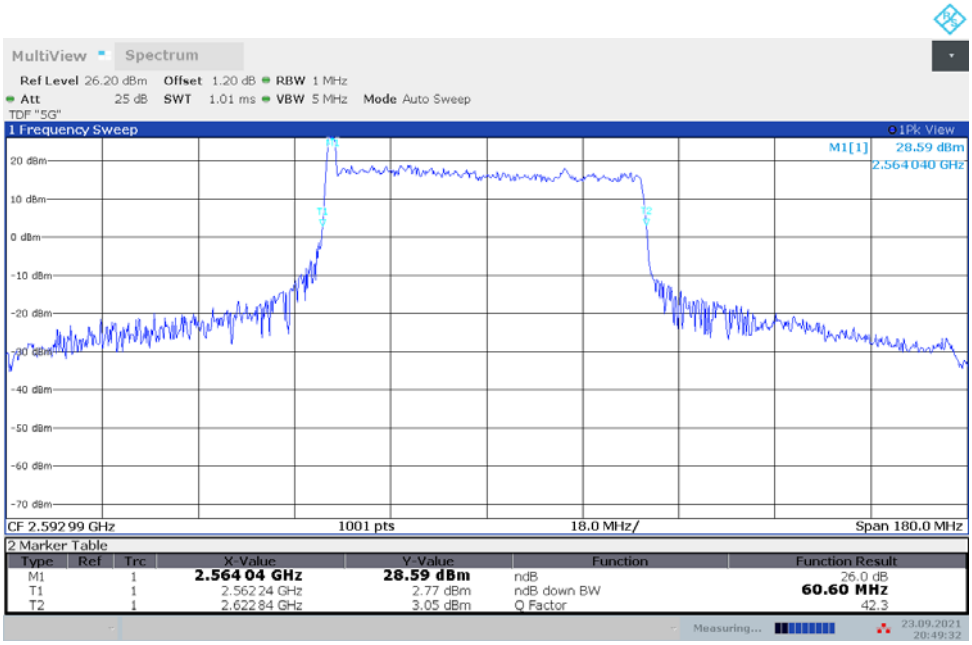
Date: 23.SEP.2021 20:48:01

LTE Band 66+NR n41

n41,60MHz(-26dBc)

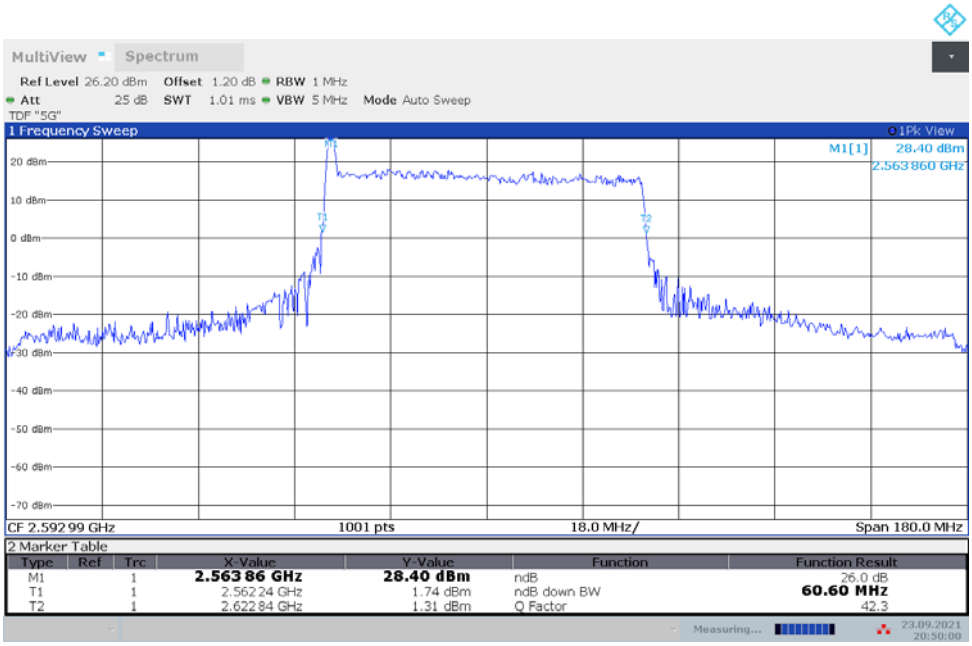
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	60.600	60.600

n41,60MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:49:32

n41,60MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



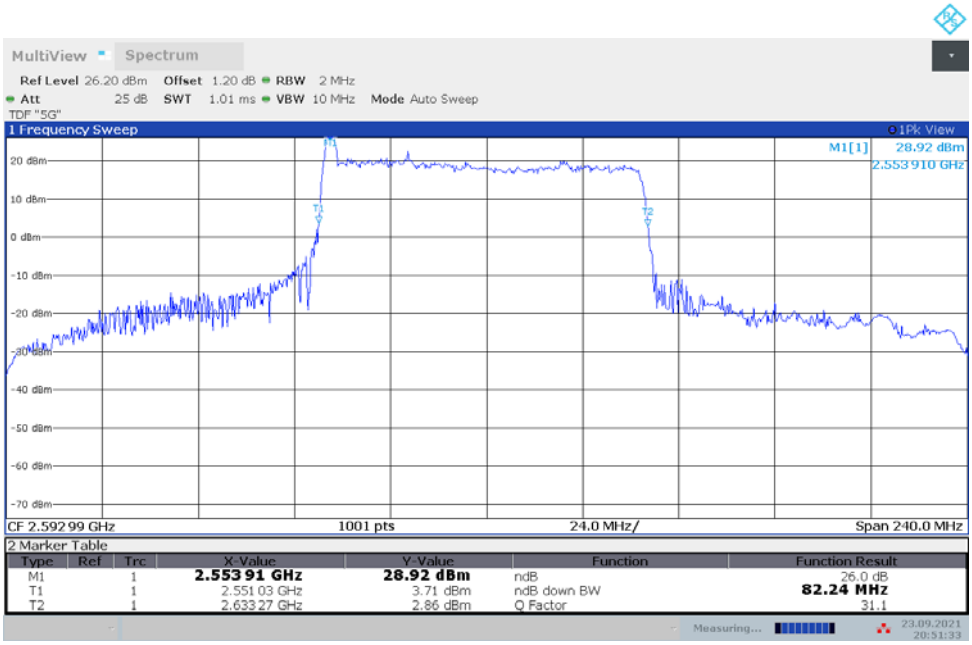
Date: 23.SEP.2021 20:50:01

LTE Band 66+NR n41

n41,80MHz(-26dBc)

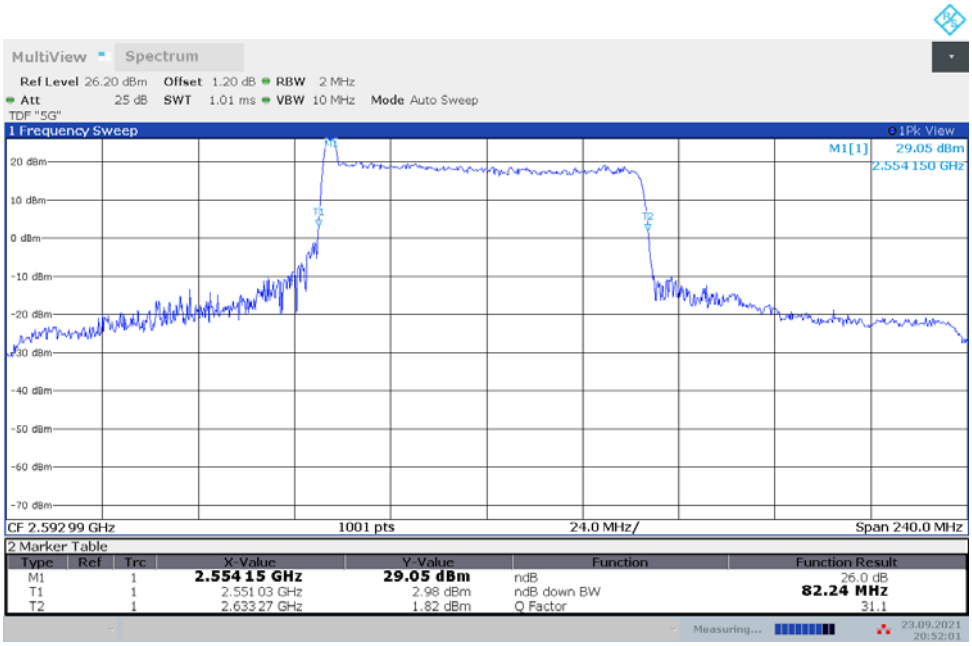
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	82.240	82.240

n41,80MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:51:33

n41,80MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



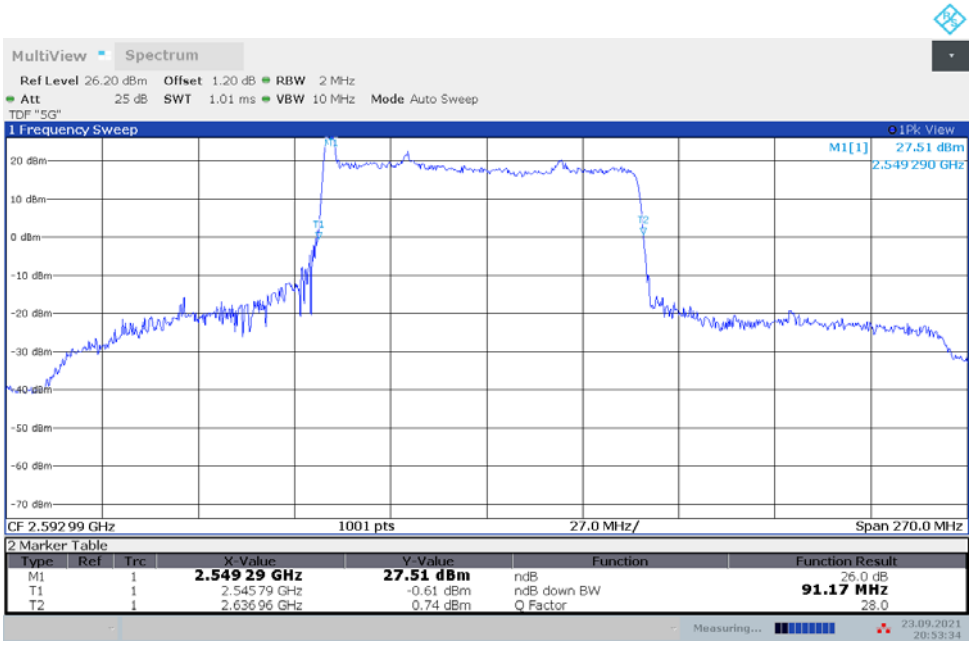
Date: 23.SEP.2021 20:52:02

LTE Band 66+NR n41

n41,90MHz(-26dBc)

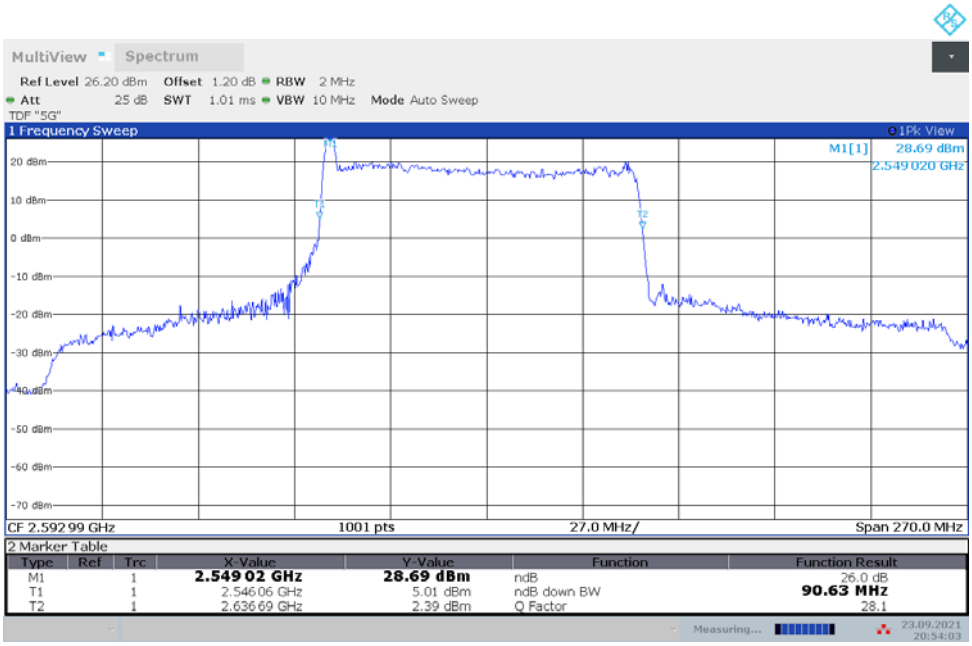
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	91.170	90.630

n41,90MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:53:34

n41,90MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



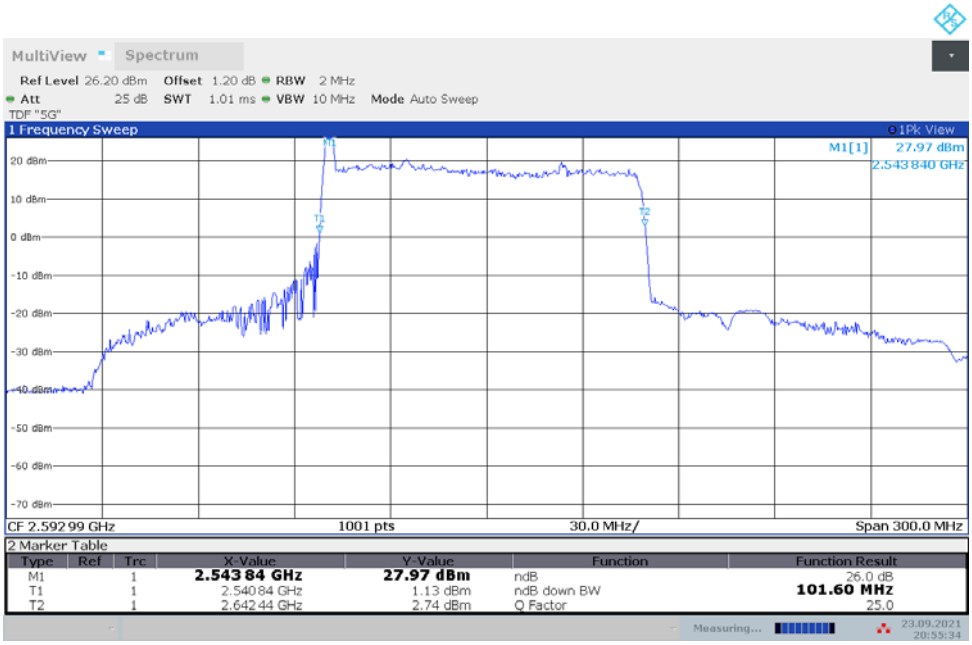
Date: 23.SEP.2021 20:54:03

LTE Band 66+NR n41

n41,100MHz(-26dBc)

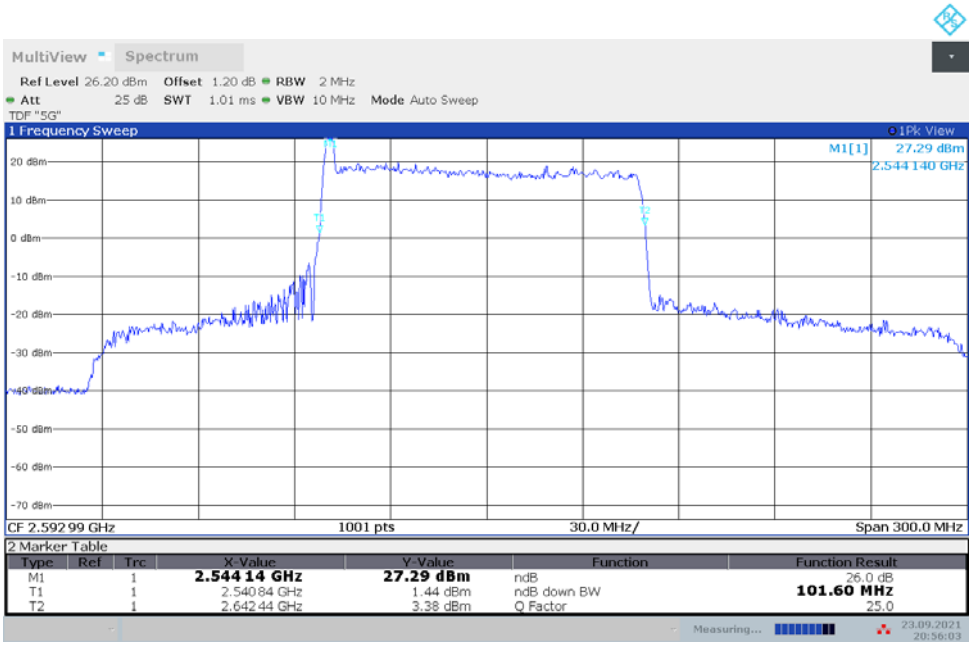
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
2592.99	101.600	101.600

n41,100MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 23.SEP.2021 20:55:35

n41,100MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



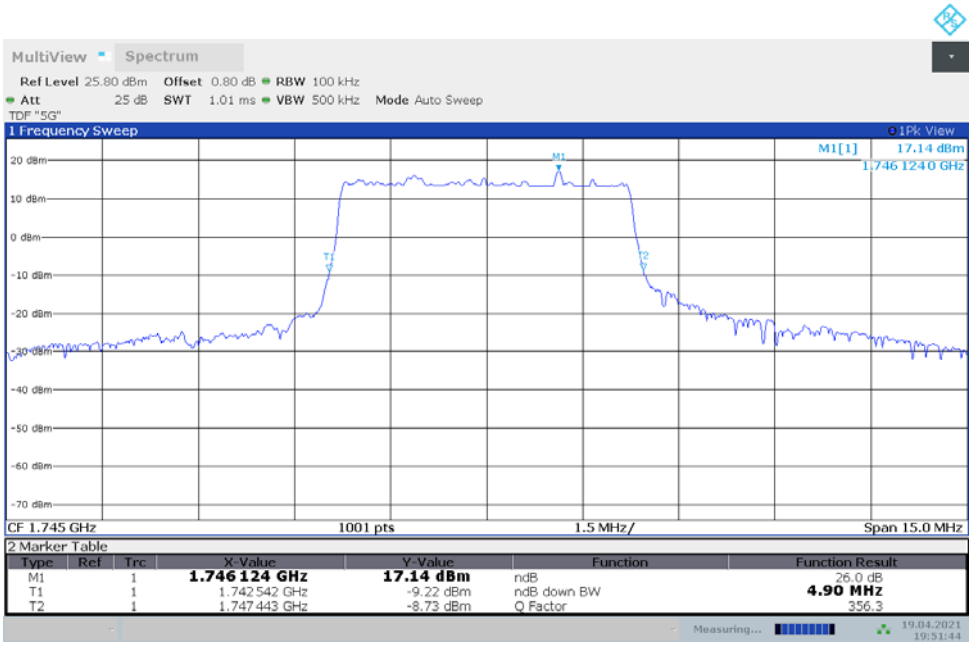
Date: 23.SEP.2021 20:56:04

LTE Band 12+NR n66

n66,5MHz(-26dBc)

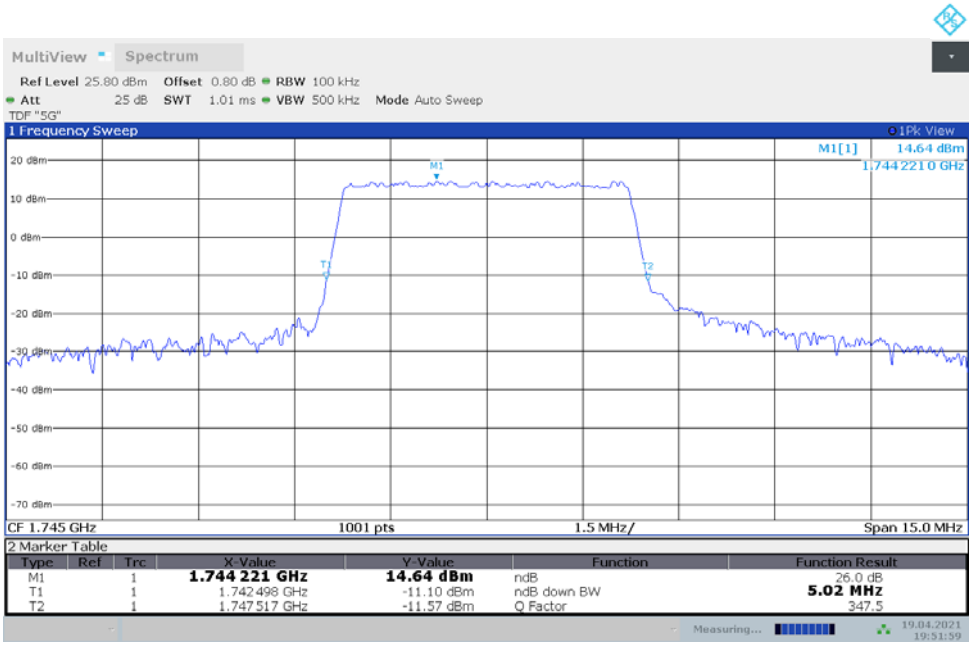
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	4.900	5.020

n66,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:51:44

n66,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



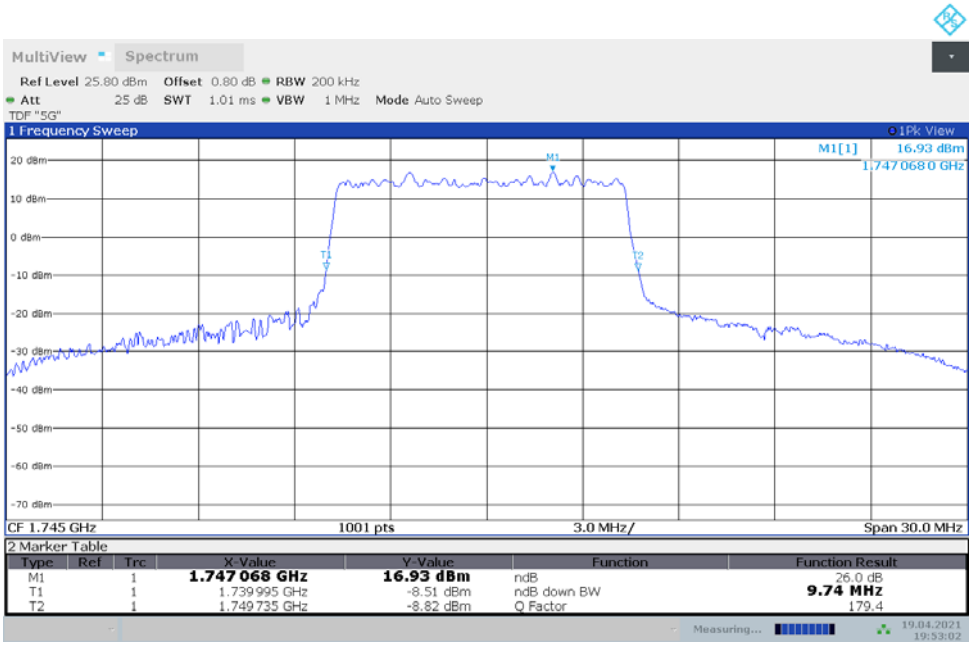
Date: 19.APR.2021 19:52:00

LTE Band 12+NR n66

n66,10MHz(-26dBc)

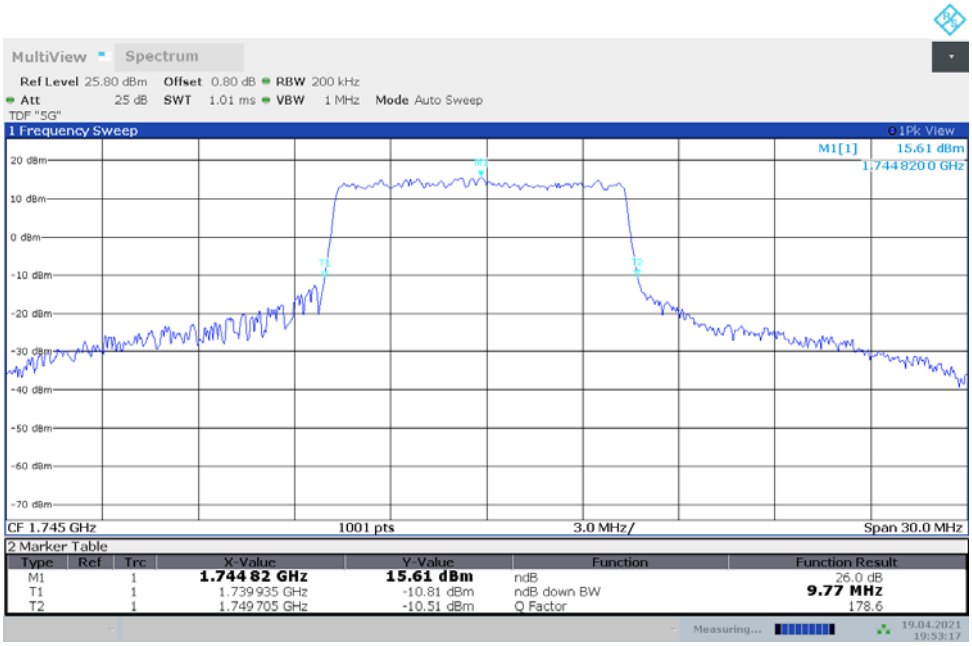
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	9.740	9.770

n66,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:53:02

n66,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



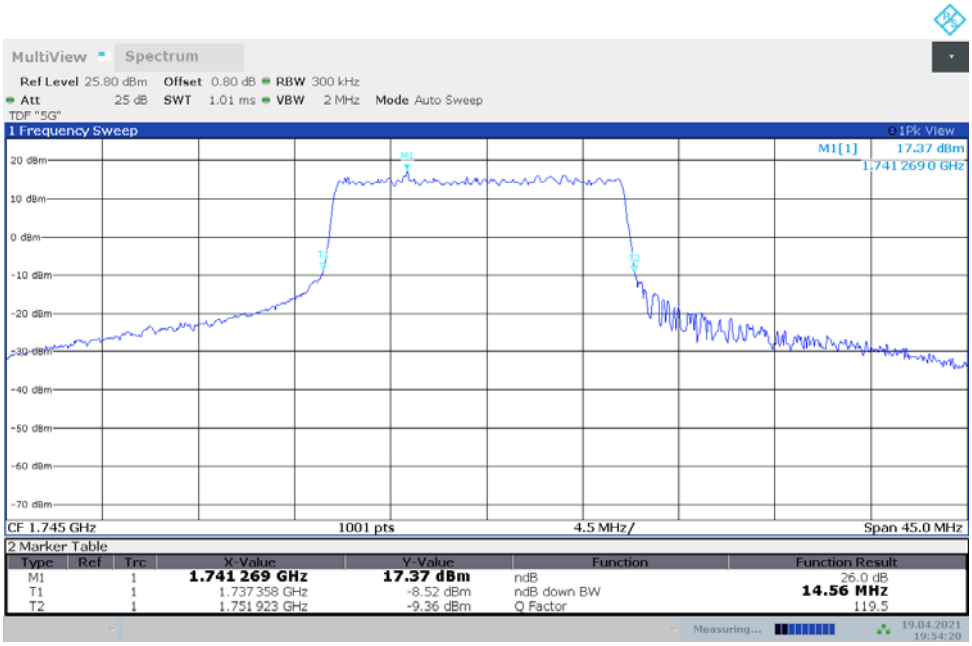
Date: 19.APR.2021 19:53:17

LTE Band 12+NR n66

n66,15MHz(-26dBc)

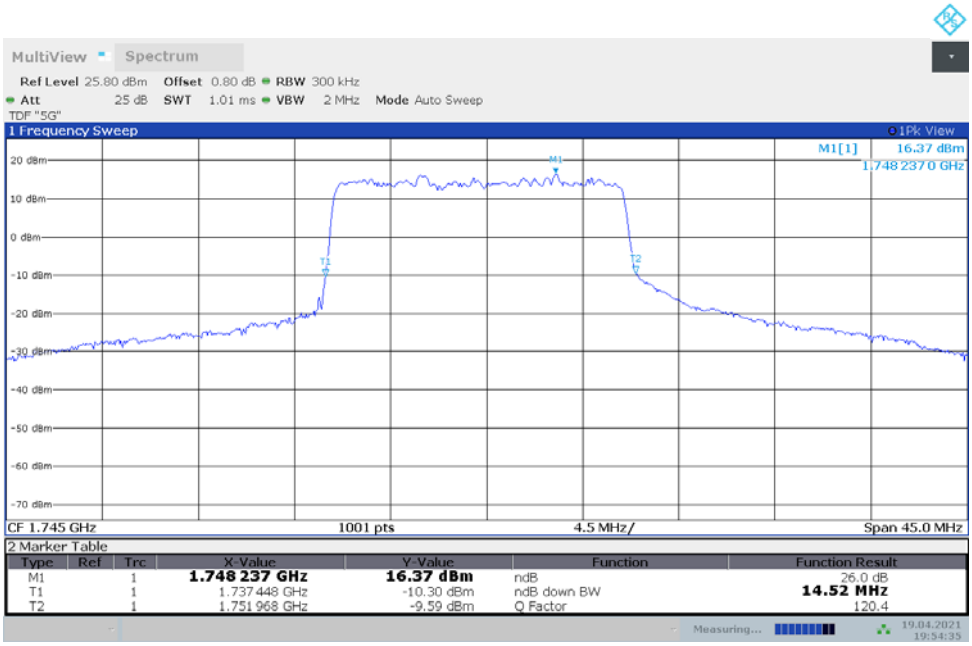
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	14.565	14.520

n66,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date:19.APR.2021 19:54:20

n66,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



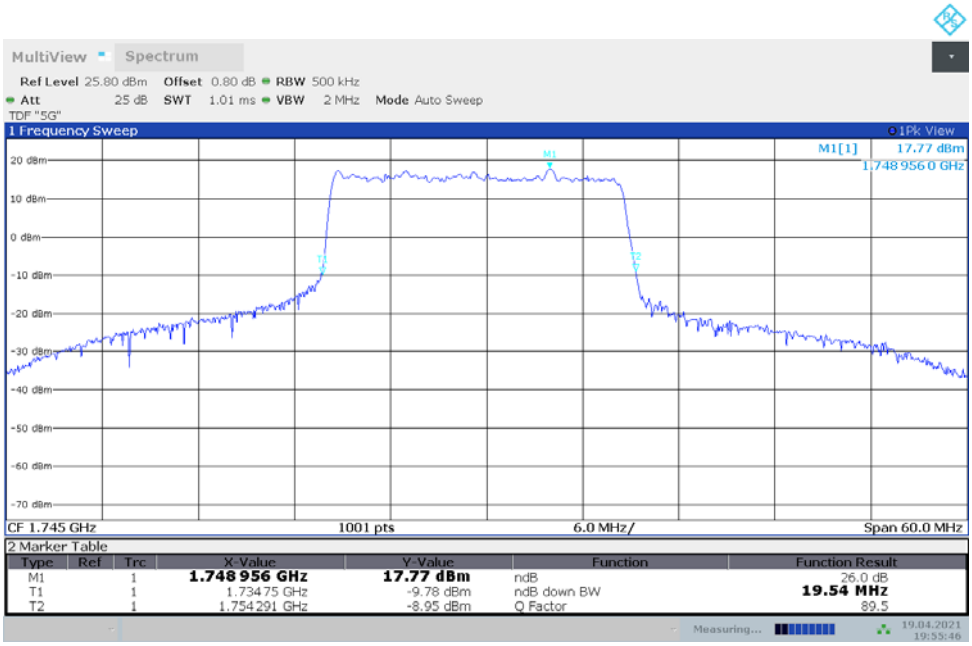
Date:19.APR.2021 19:54:36

LTE Band 12+NR n66

n66,20MHz(-26dBc)

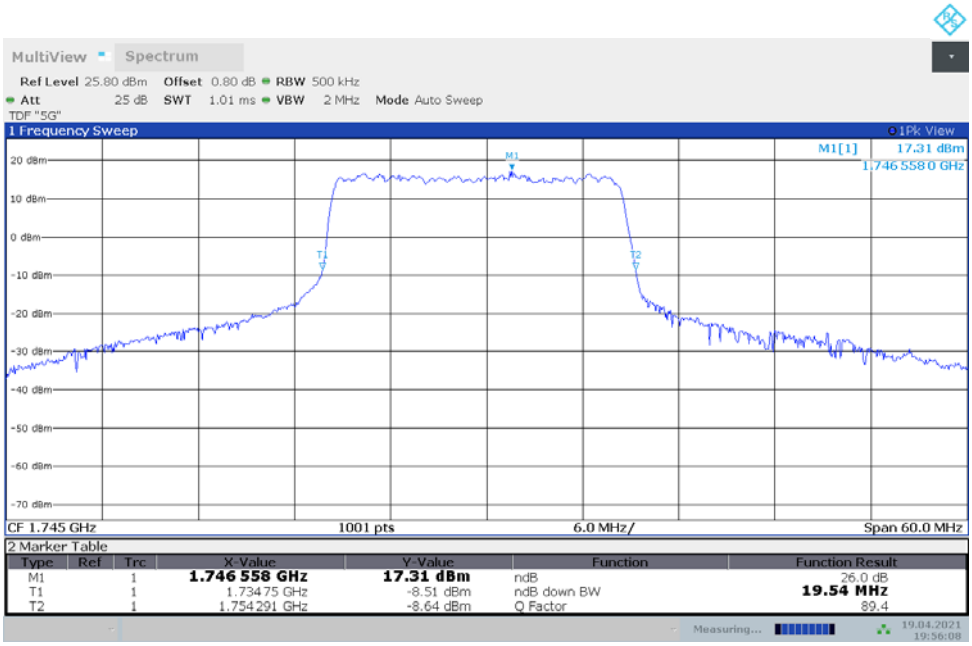
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	19.540	19.540

n66,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:55:46

n66,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



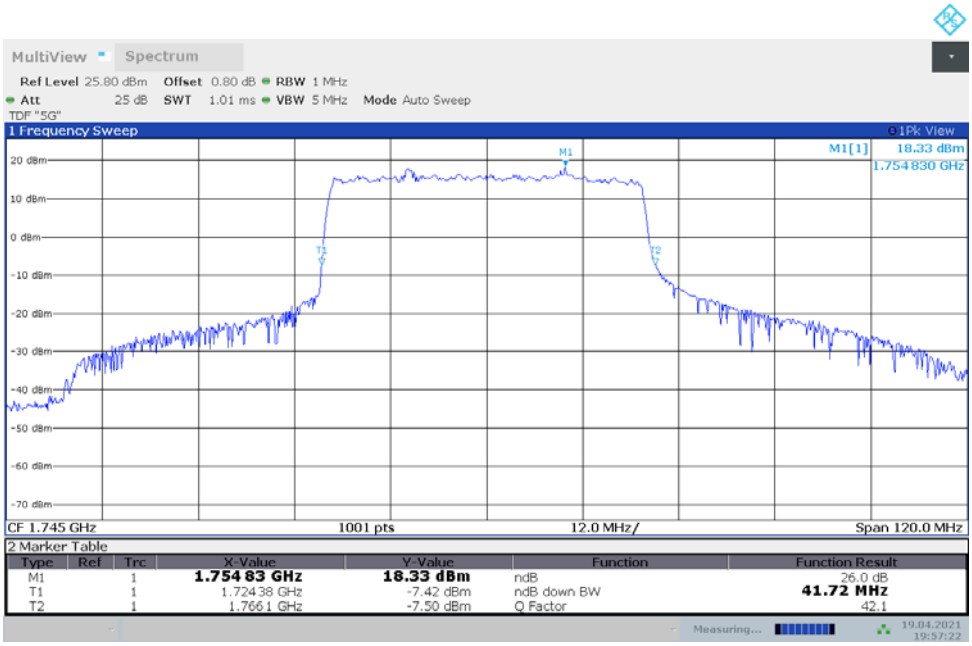
Date: 19.APR.2021 19:56:09

LTE Band 12+NR n66

n66,40MHz(-26dBc)

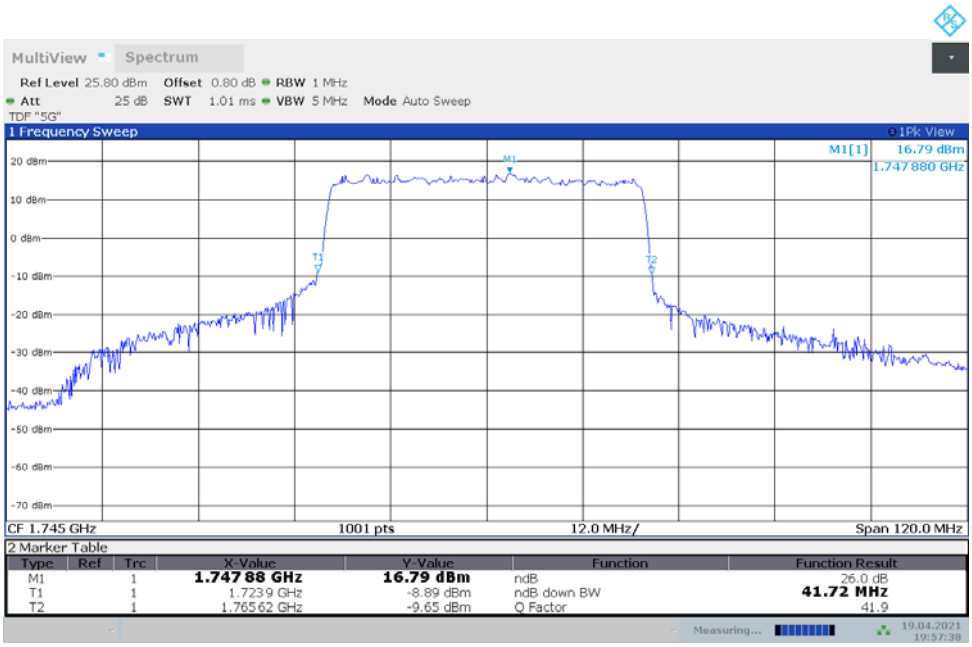
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	41.720	41.720

n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date: 19.APR.2021 19:57:22

n66,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



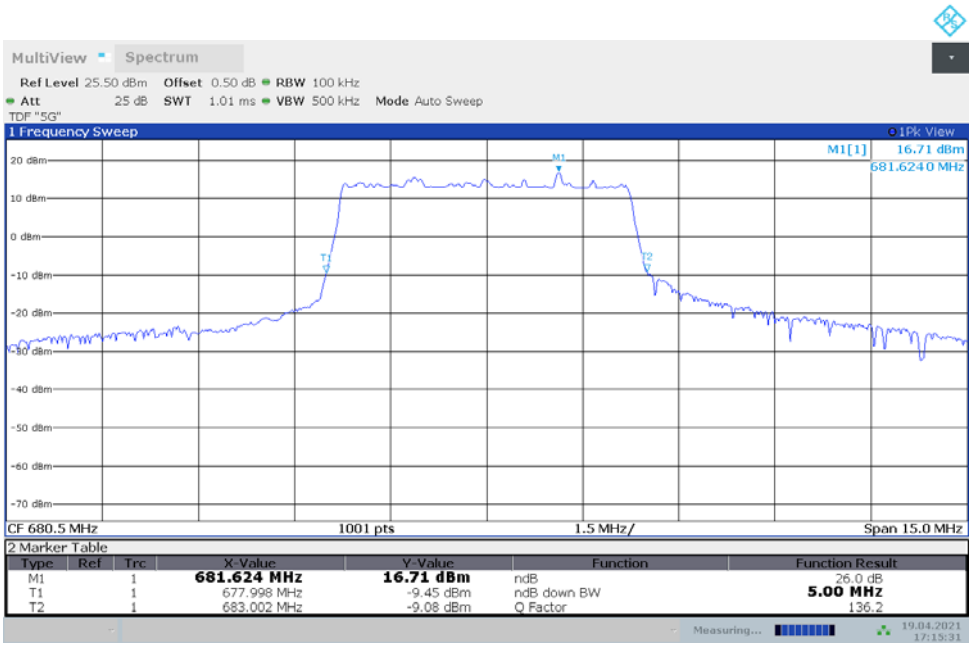
Date: 19.APR.2021 19:57:38

LTE Band 66+NR n71

n71,5MHz(-26dBc)

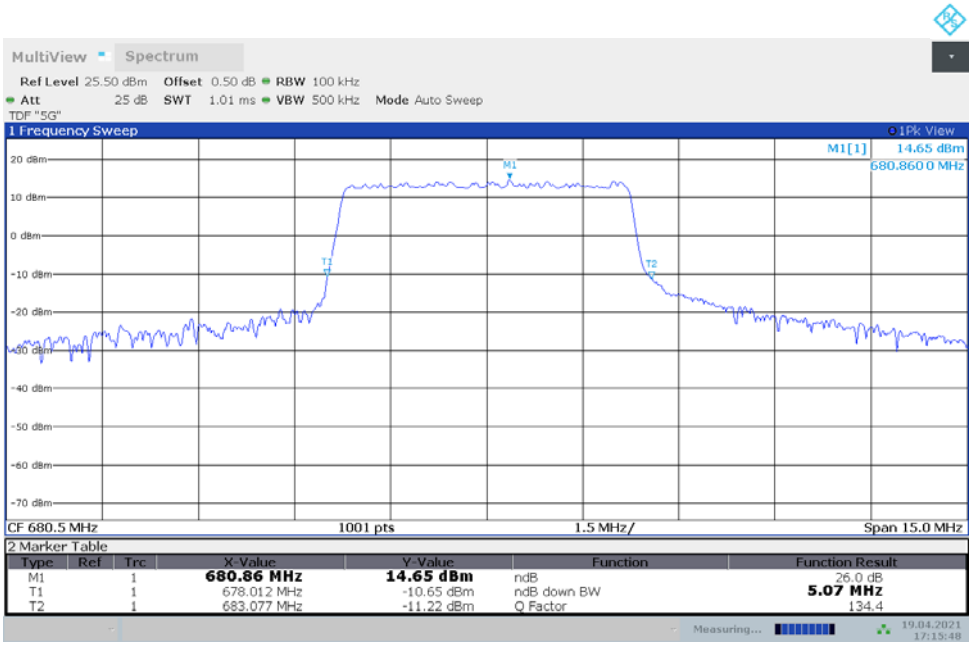
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	5.005	5.065

n71,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date:19.APR.2021 17:15:32

n71,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



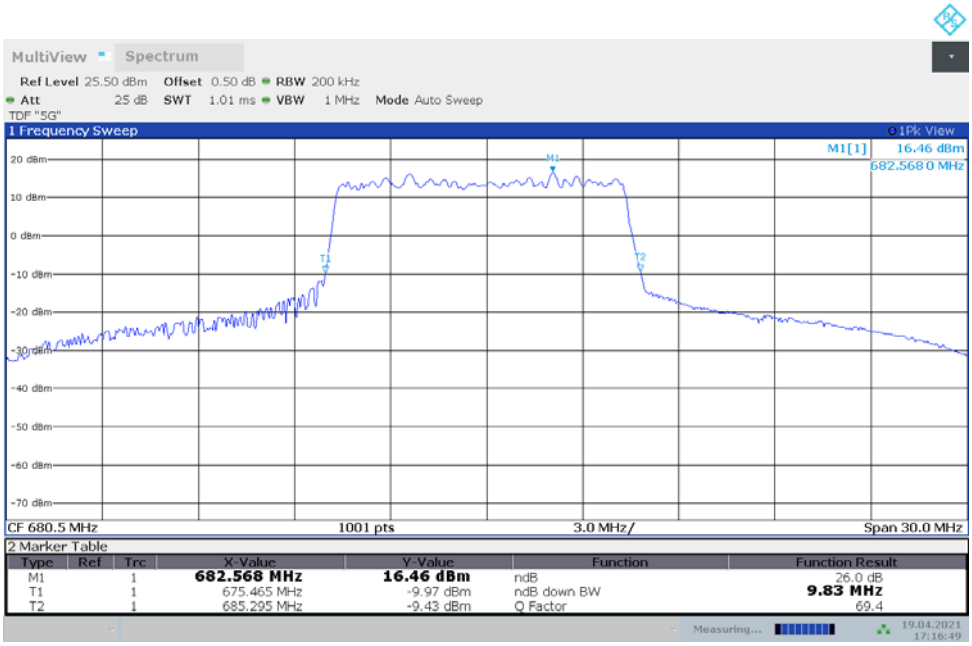
Date:19.APR.2021 17:15:48

LTE Band 66+NR n71

n71,10MHz(-26dBc)

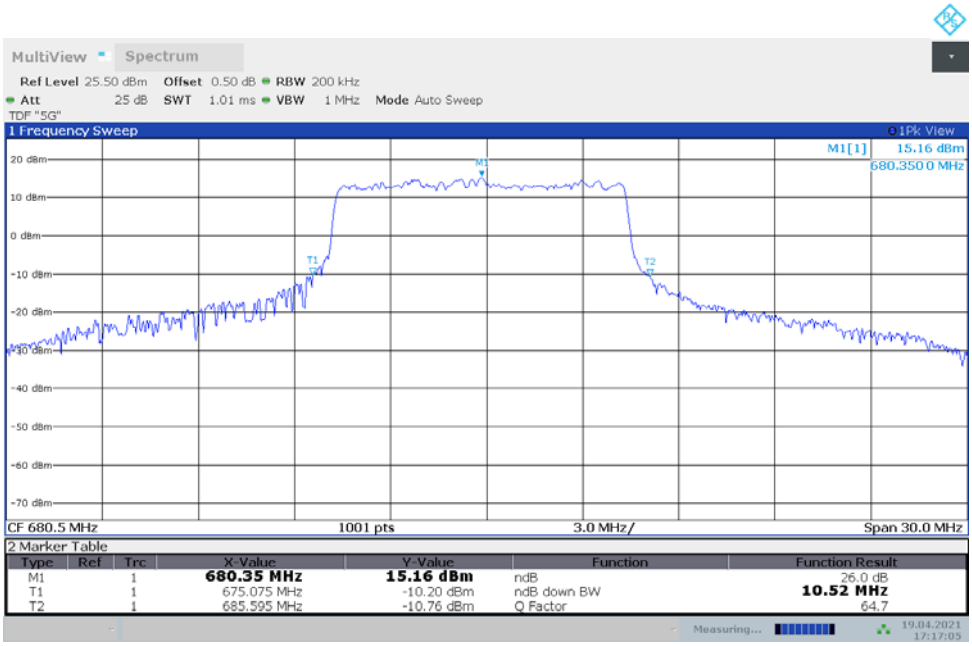
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	9.830	10.519

n71,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date:19.APR.2021 17:16:50

n71,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



Date:19.APR.2021 17:17:05

LTE Band 66+NR n71

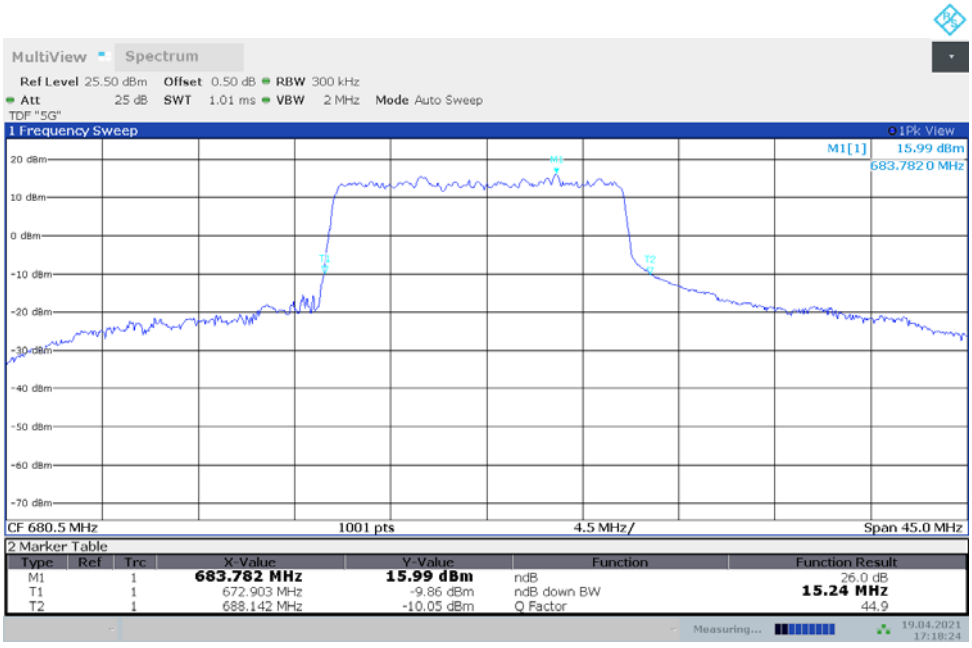
n71,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	14.925	15.240

n71,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)

Date: 19.APR.2021 17:18:08

n71,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



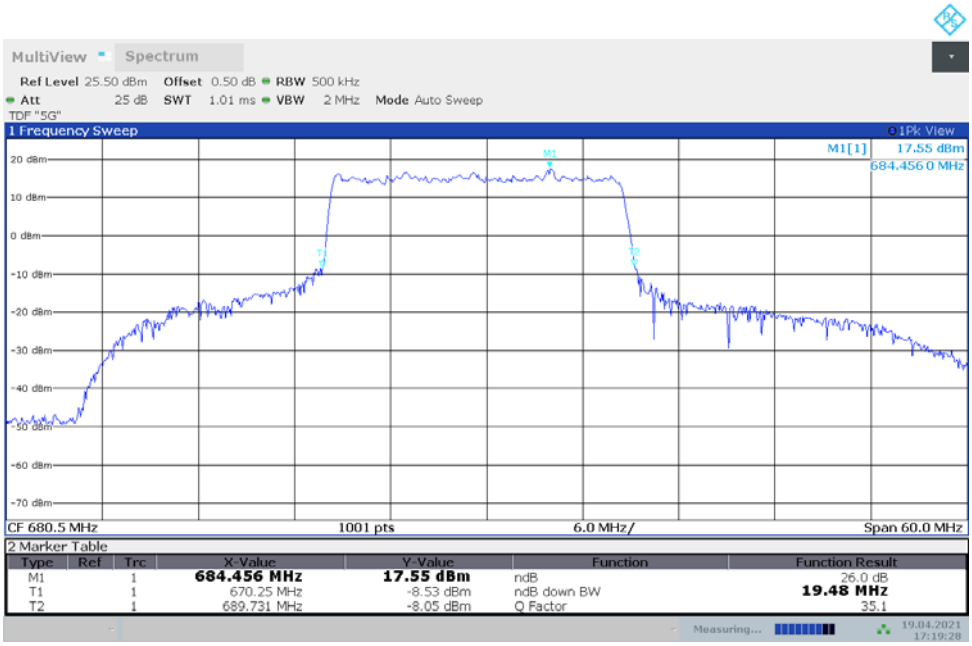
Date: 19.APR.2021 17:18:24

LTE Band 66+NR n71

n71,20MHz(-26dBc)

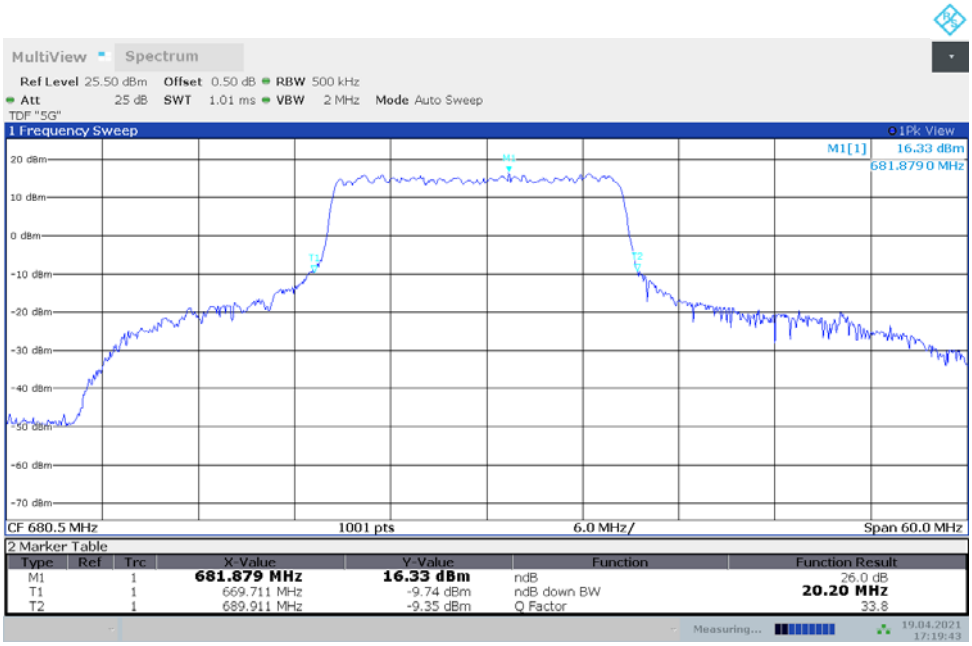
Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
680.5	19.481	20.200

n71,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



Date:19.APR.2021 17:19:28

n71,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



Date:19.APR.2021 17:19:43

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 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.

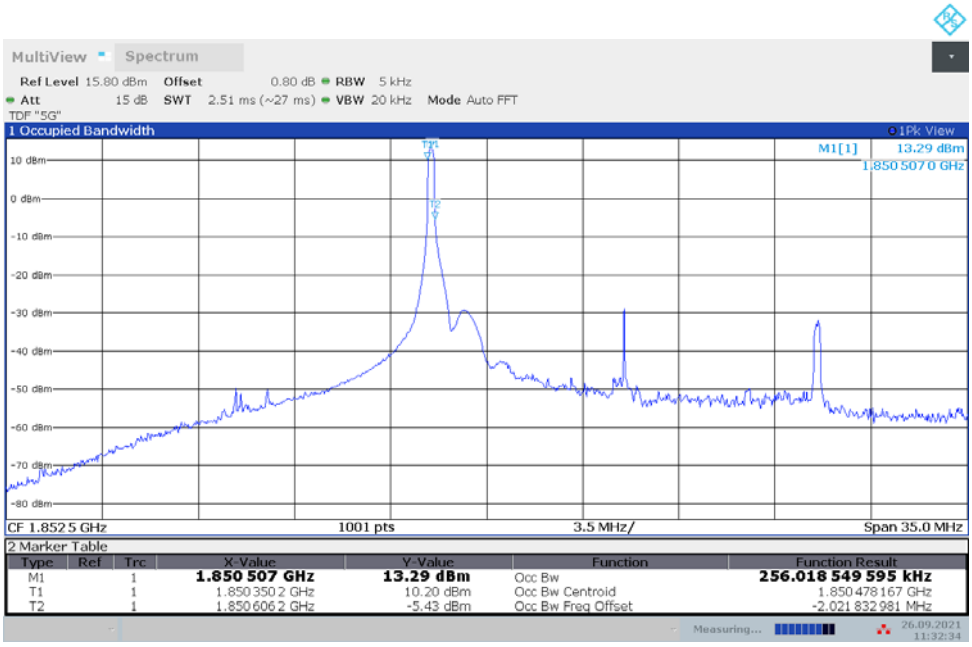
Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) 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.

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

A.6.2 Measurement result

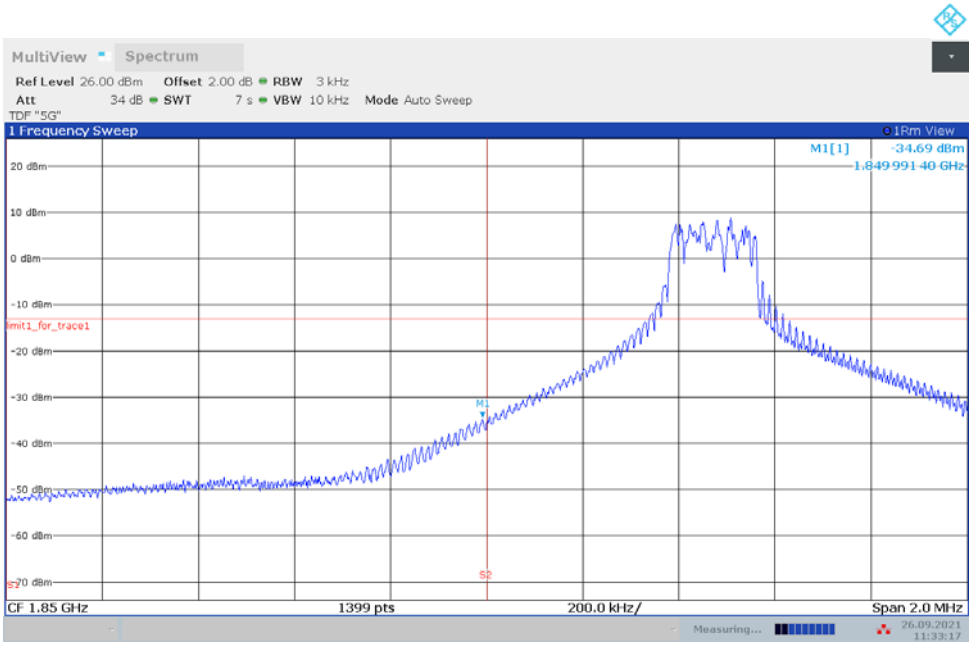
LTE Band 12+NR n2

OBW: 1RB-LOW_offset



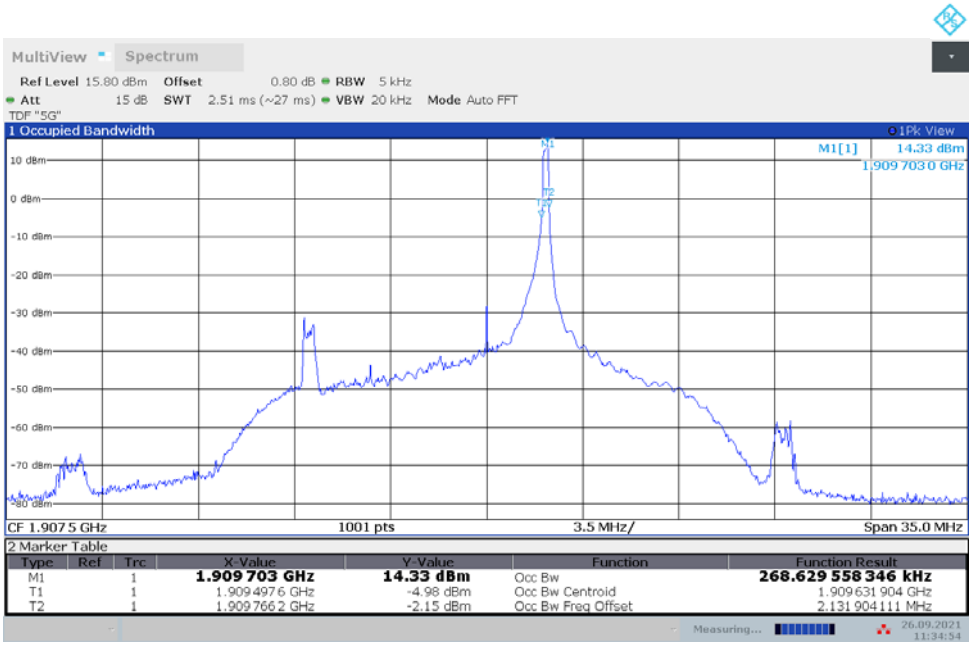
Date: 26.SEP.2021 11:32:34

LOW BAND EDGE BLOCK-1RB-LOW_offset



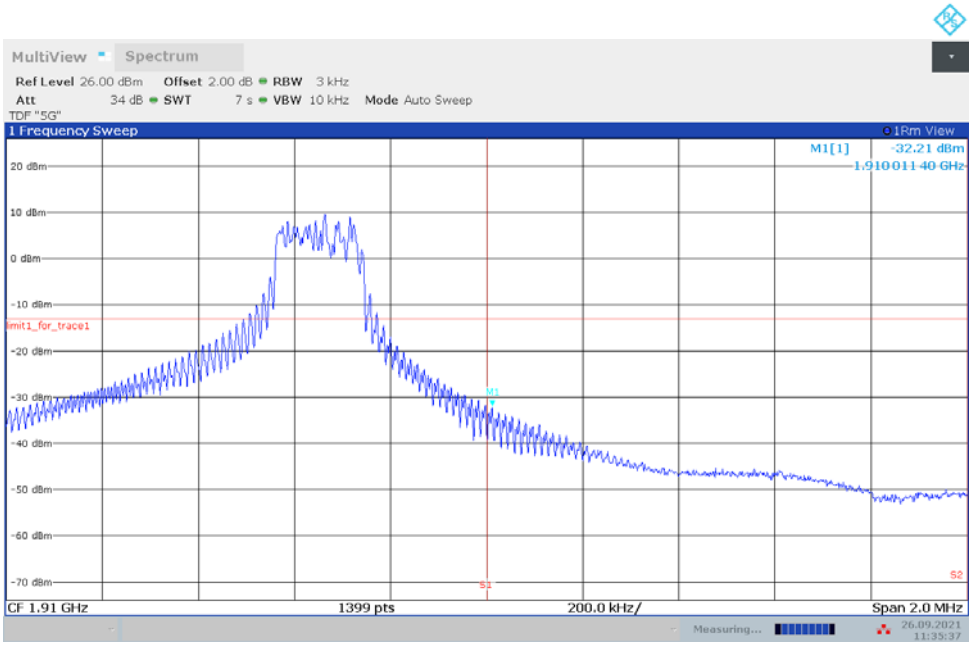
Date: 26.SEP.2021 11:33:18

OBW: 1RB-HIGH_offset



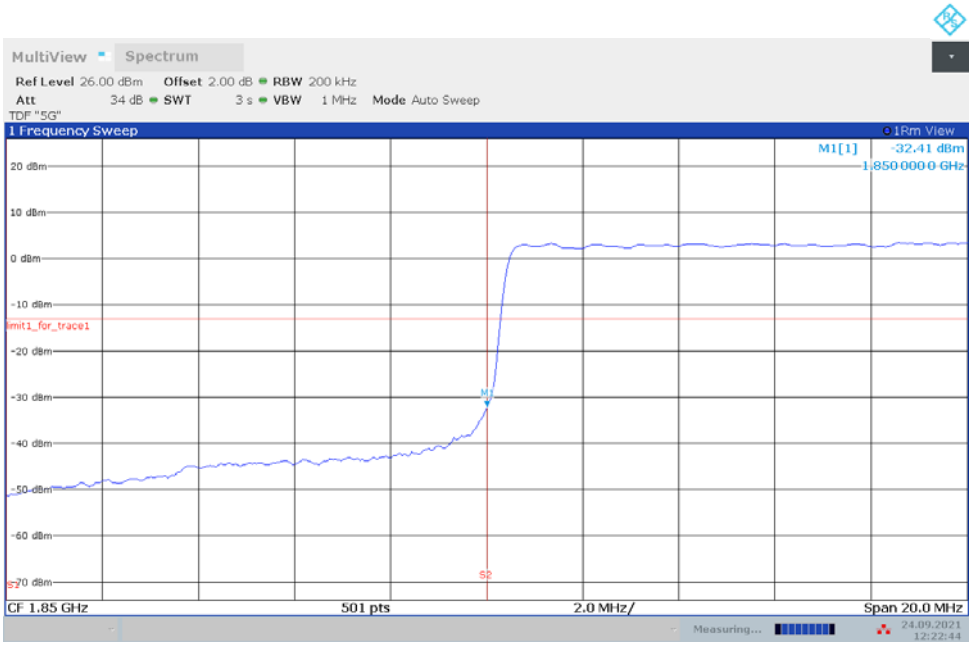
Date: 26.SEP.2021 11:34:54

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



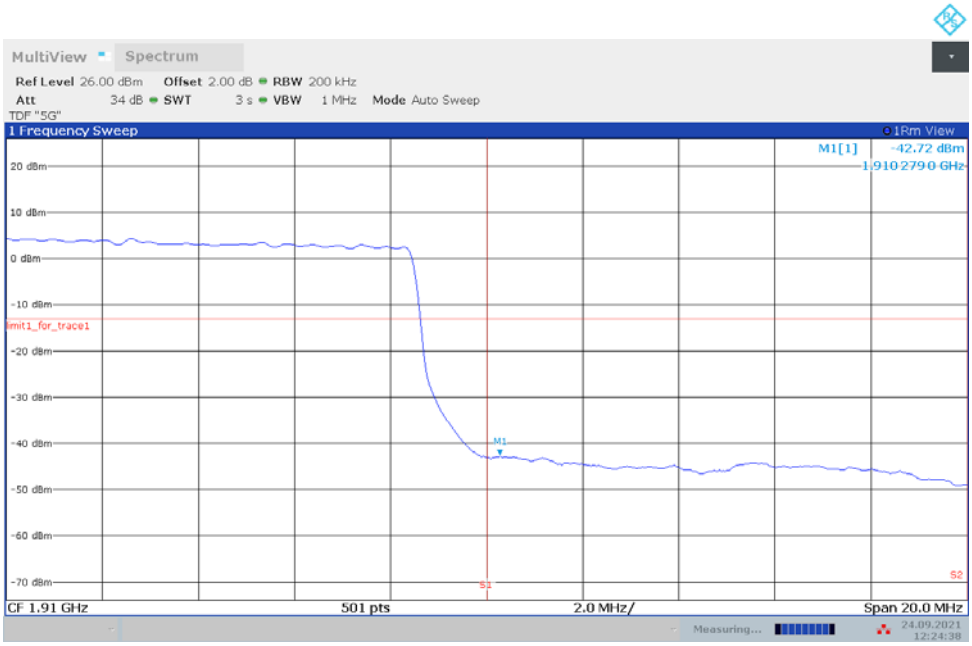
Date: 26.SEP.2021 11:35:38

LOW BAND EDGE BLOCK-20M-100%RB



Date: 24.SEP.2021 12:22:45

HIGH BAND EDGE BLOCK-20M-100%RB



Date: 24.SEP.2021 12:24:38