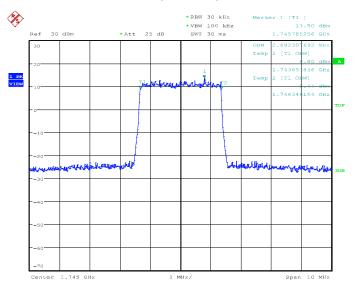
LTE band 66, 3MHz (99% BW)

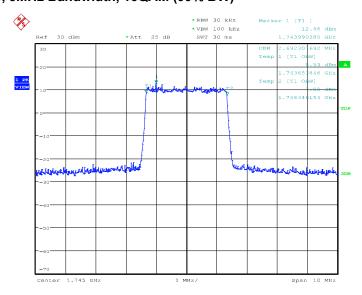
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
4745.0	QPSK	16QAM	64QAM
1745.0	2692.31	2692.31	2692.31

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



Date: 9.NOV.2021 10:28:16

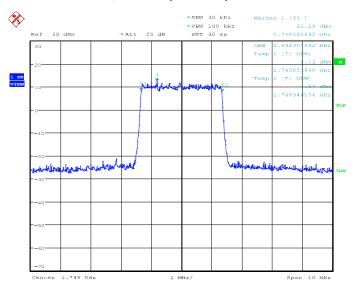
LTE band 66, 3MHz Bandwidth, 16QAM (99% BW)



Date: 9.NOV.2021 10:28:30



LTE band 66, 3MHz Bandwidth, 64QAM (99% BW)

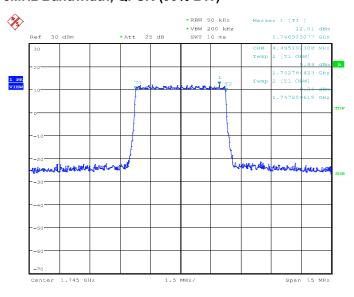


Date: 9.NOV.2021 13:20:20

LTE band 66, 5MHz (99% BW)

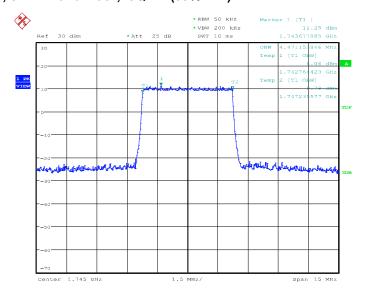
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1745.0	QPSK	16QAM	64QAM
	4495.19	4471.15	4471.15

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



Date: 9.NOV.2021 10:31:25

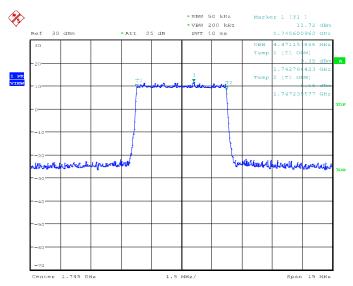
LTE band 66, 5MHz Bandwidth,16QAM (99% BW)



Date: 9.NOV.2021 10:31:39



LTE band 66, 5MHz Bandwidth,64QAM (99% BW)

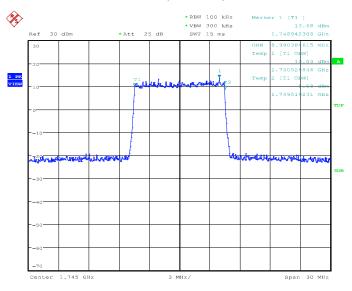


Date: 9.NOV.2021 13:22:53

LTE band 66, 10MHz (99% BW)

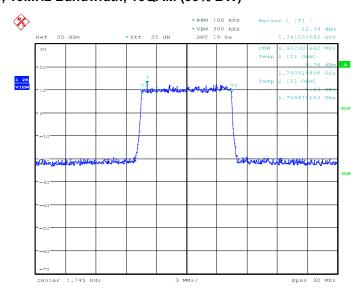
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1745.0	QPSK	16QAM	64QAM
	8990.38	8942.31	8942.31

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



Date: 9.NOV.2021 10:34:34

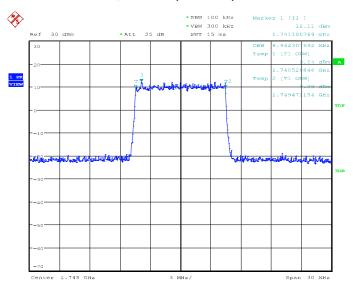
LTE band 66, 10MHz Bandwidth, 16QAM (99% BW)



Date: 9.NOV.2021 10:34:48



LTE band 66, 10MHz Bandwidth, 64QAM (99% BW)

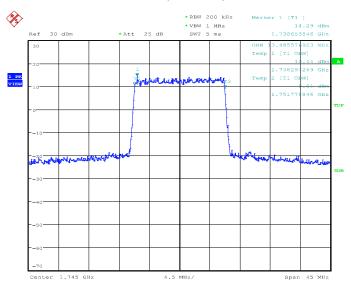


Date: 9.NOV.2021 13:25:26

LTE band 66, 15MHz (99% BW)

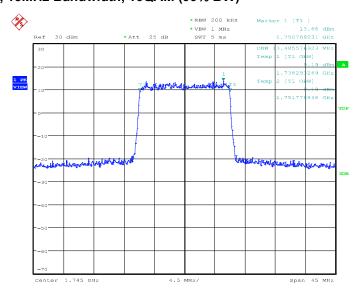
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
4745.0	QPSK	16QAM	64QAM
1745.0	13485.58	13485.58	13485.58

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



Date: 9.NOV.2021 10:37:43

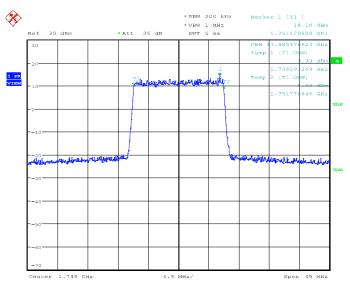
LTE band 66, 15MHz Bandwidth, 16QAM (99% BW)



Date: 9.NOV.2021 10:37:57



LTE band 66, 15MHz Bandwidth, 64QAM (99% BW)

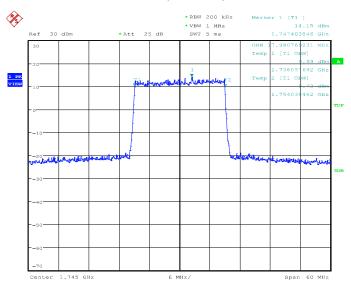


Date: 9.NOV.2021 13:27:59

LTE band 66, 20MHz (99% BW)

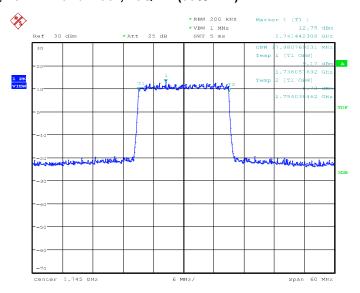
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
1745.0	QPSK	16QAM	64QAM
	17980.77	17980.77	17980.77

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



Date: 9.NOV.2021 10:40:52

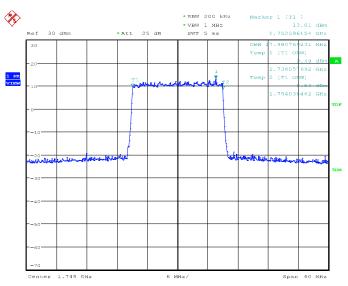
LTE band 66, 20MHz Bandwidth, 16QAM (99% BW)



Date: 9.NOV.2021 10:41:06



LTE band 66, 20MHz Bandwidth, 64QAM (99% BW)



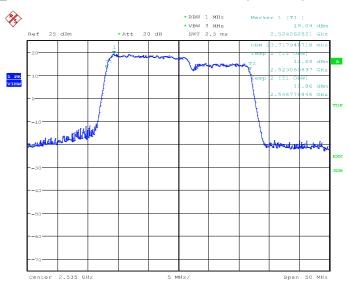
Date: 9.NOV.2021 13:30:32



LTE Band CA_7C, 15MHz+10MHz (99% BW)

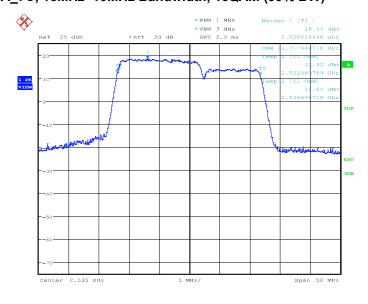
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	23717.95	23717.95	23637.82

LTE Band CA_7C, 15MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 11:56:11

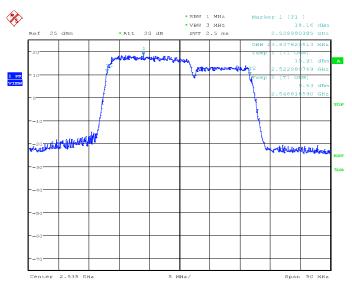
LTE Band CA_7C, 15MHz+10MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 11:57:30



LTE Band CA_7C, 15MHz+10MHz Bandwidth, 64QAM (99% BW)



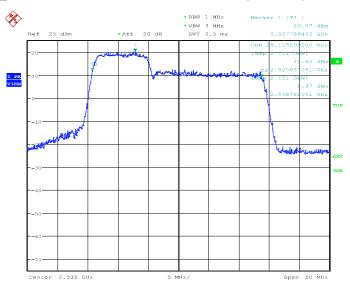
Date: 14.NOV.2021 11:57:43



LTE Band CA_7C, 10MHz+20MHz (99% BW)

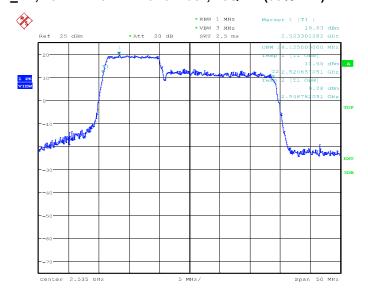
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	28125.00	28125.00	28205.13

LTE Band CA_7C, 10MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 12:03:47

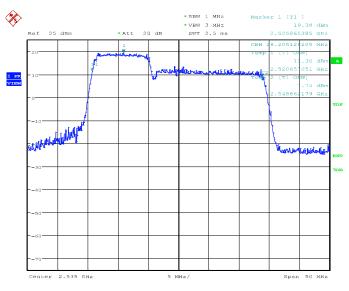
LTE Band CA_7C, 10MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:04:08



LTE Band CA_7C, 10MHz+20MHz Bandwidth, 64QAM (99% BW)

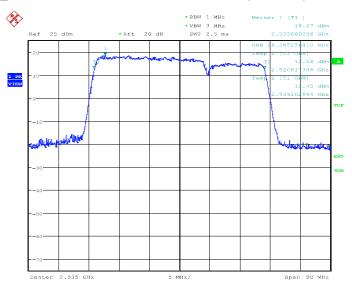


Date: 14.NOV.2021 12:04:22

LTE Band CA_7C, 20MHz+10MHz (99% BW)

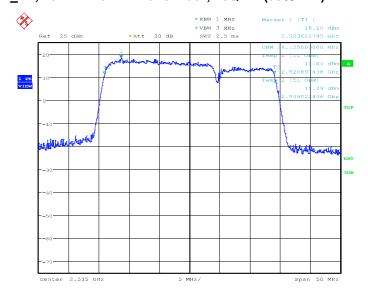
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	28285.26	28125.00	28285.26

LTE Band CA_7C, 20MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 12:07:17

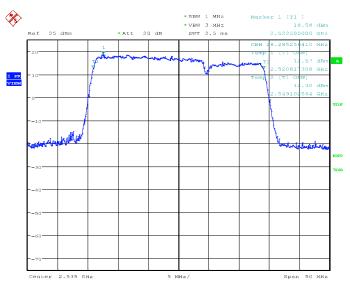
LTE Band CA_7C, 20MHz+10MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:06:42



LTE Band CA_7C, 20MHz+10MHz Bandwidth, 64QAM (99% BW)

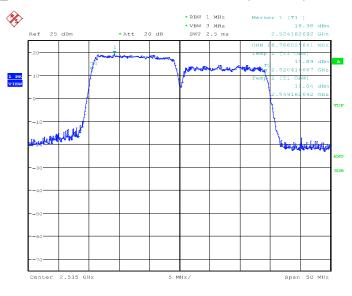


Date: 14.NOV.2021 12:06:12

LTE Band CA_7C, 15MHz+15MHz (99% BW)

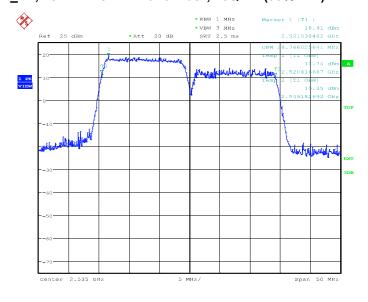
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
2555.0	28766.03	28766.03	28605.77

LTE Band CA_7C, 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 12:13:03

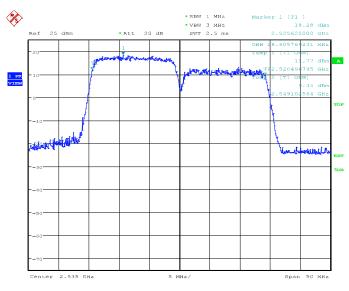
LTE Band CA_7C, 15MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:13:18



LTE Band CA_7C, 15MHz+15MHz Bandwidth, 64QAM (99% BW)

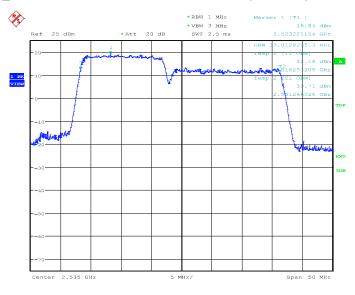


Date: 14.NOV.2021 12:12:31

LTE Band CA_7C, 15MHz+20MHz (99% BW)

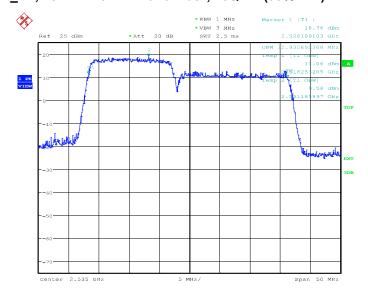
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	33012.82	32932.69	32932.69

LTE Band CA_7C, 15MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 12:14:17

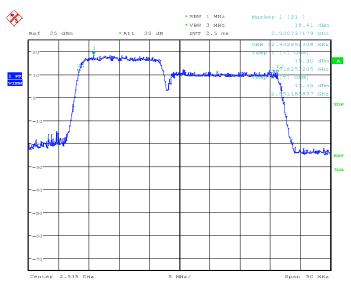
LTE Band CA_7C, 15MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:14:34



LTE Band CA_7C, 15MHz+20MHz Bandwidth, 64QAM (99% BW)



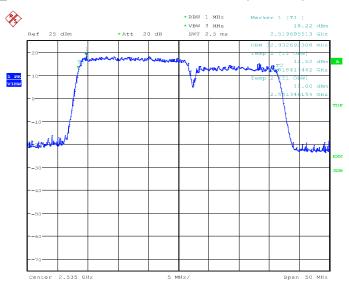
Date: 14.NOV.2021 12:14:57



LTE Band CA_7C, 20MHz+15MHz (99% BW)

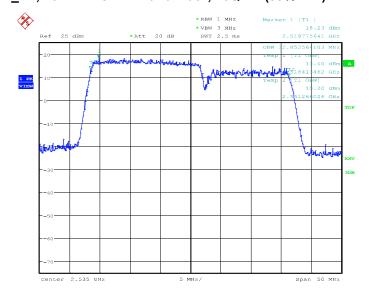
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	32932.69	32852.56	32932.69

LTE Band CA_7C, 20MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 12:18:37

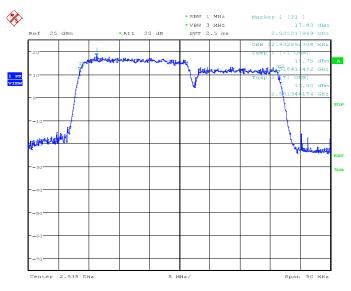
LTE Band CA_7C, 20MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:18:20



LTE Band CA_7C, 20MHz+15MHz Bandwidth, 64QAM (99% BW)



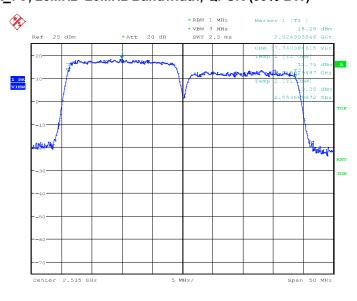
Date: 14.NOV.2021 12:18:05



LTE Band CA_7C, 20MHz+20MHz (99% BW)

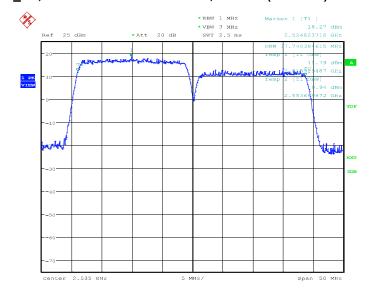
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2535.0	QPSK	16QAM	64QAM
	37740.38	37740.38	37740.38

LTE Band CA_7C, 20MHz+20MHz Bandwidth, QPSK (99% BW)



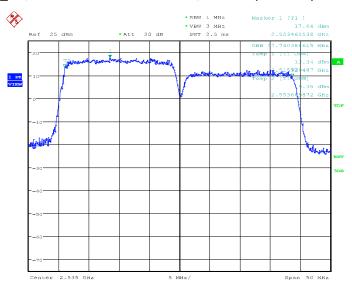
Date: 14.NOV.2021 12:19:25

LTE Band CA_7C, 20MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 12:19:39

LTE Band CA_7C, 20MHz+20MHz Bandwidth, 64QAM (99% BW)



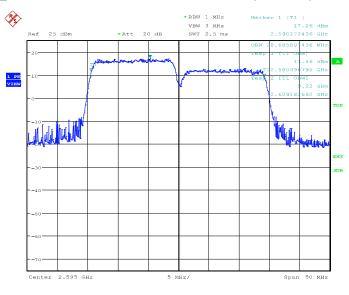
Date: 14.NOV.2021 12:20:03

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

LTE Band CA_38C, 15MHz+15MHz (99% BW)

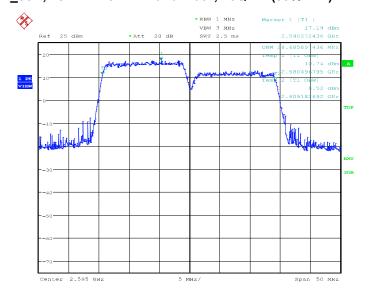
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2595.0	QPSK	16QAM	64QAM
	28685.90	28685.90	28685.90

LTE Band CA_38C, 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 15:19:57

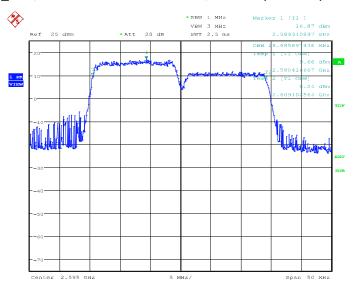
LTE Band CA_38C, 15MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 15:20:21



LTE Band CA_38C, 15MHz+15MHz Bandwidth, 64QAM (99% BW)



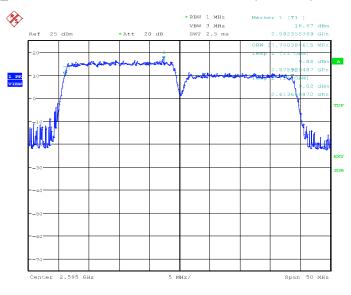
Date: 14.NOV.2021 15:22:20



LTE Band CA_38C, 20MHz+20MHz (99% BW)

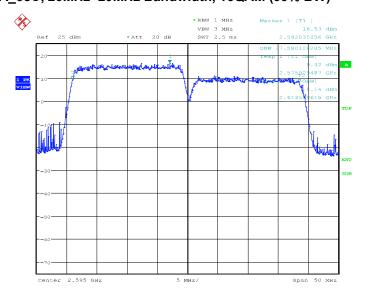
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2595.0	QPSK	16QAM	64QAM
	37740.38	37580.13	37660.26

LTE Band CA_38C, 20MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 15:28:36

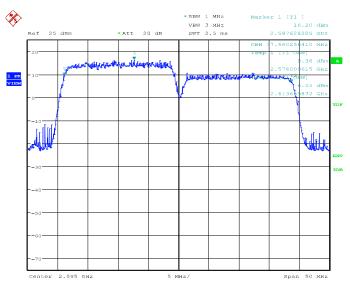
LTE Band CA_38C, 20MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 15:28:50



LTE Band CA_38C, 20MHz+20MHz Bandwidth, 64QAM (99% BW)



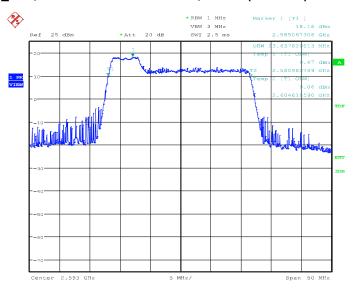
Date: 14.NOV.2021 15:29:04



LTE Band CA_41C, 5MHz+20MHz (99% BW)

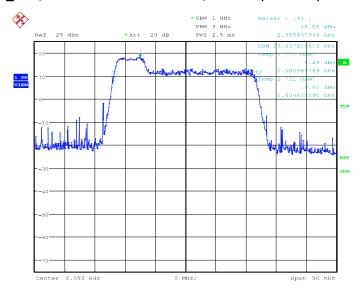
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2593.0	QPSK	16QAM	64QAM
	23637.82	23637.82	23637.82

LTE Band CA_41C, 5MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:02:43

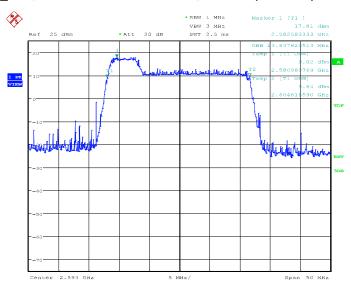
LTE Band CA_41C, 5MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:02:58



LTE Band CA_41C, 5MHz+20MHz Bandwidth, 64QAM (99% BW)



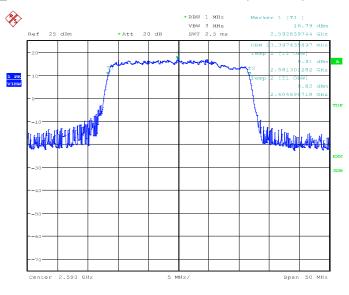
Date: 14.NOV.2021 16:03:17



LTE Band CA_41C, 20MHz+5MHz (99% BW)

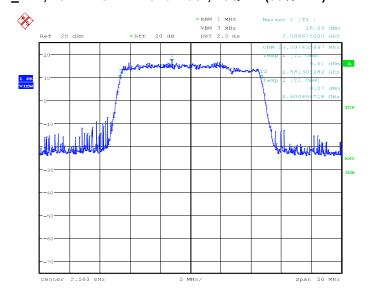
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2593.0	QPSK	16QAM	64QAM
	23397.44	23397.44	23317.31

LTE Band CA_41C, 20MHz+5MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:10:02

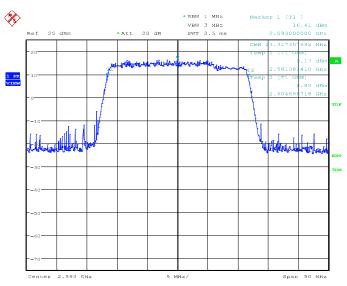
LTE Band CA_41C, 20MHz+5MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:10:20



LTE Band CA_41C, 20MHz+5MHz Bandwidth, 64QAM (99% BW)



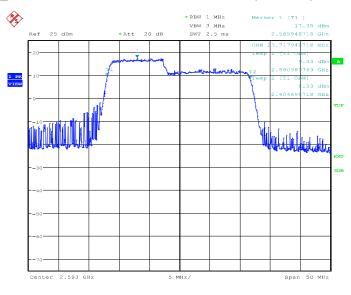
Date: 14.NOV.2021 16:10:56



LTE Band CA_41C, 10MHz+15MHz (99% BW)

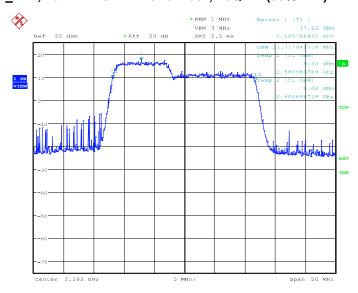
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2593.0	QPSK	16QAM	64QAM
	23717.95	23717.95	23637.82

LTE Band CA_41C, 10MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:14:29

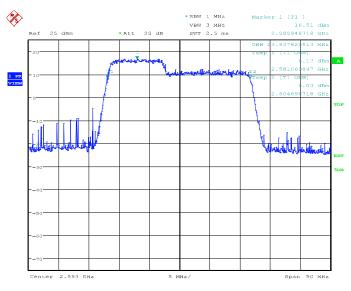
LTE Band CA_41C, 10MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:14:41



LTE Band CA_41C, 10MHz+15MHz Bandwidth, 64QAM (99% BW)



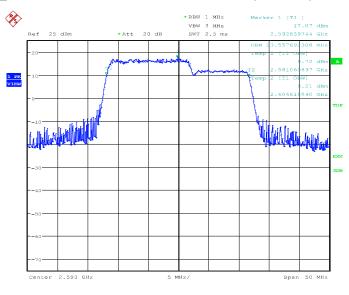
Date: 14.NOV.2021 16:14:53



LTE Band CA_41C, 15MHz+10MHz (99% BW)

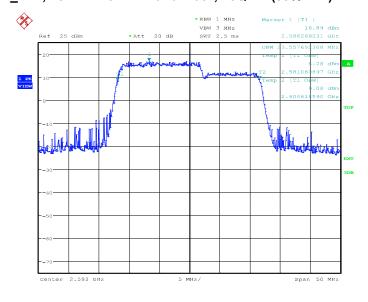
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2593.0	QPSK	16QAM	64QAM
	23557.69	23557.69	23557.69

LTE Band CA_41C, 15MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:15:45

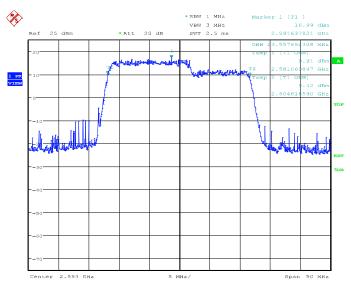
LTE Band CA_41C, 15MHz+10MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:15:57



LTE Band CA_41C, 15MHz+10MHz Bandwidth, 64QAM (99% BW)



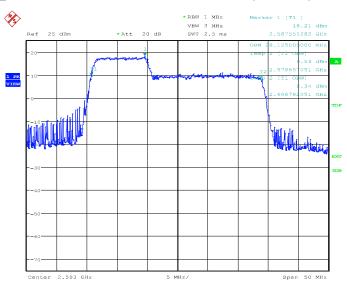
Date: 14.NOV.2021 16:16:11



LTE Band CA_41C, 10MHz+20MHz (99% BW)

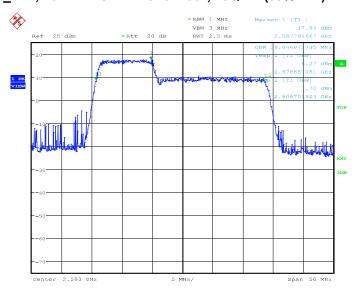
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2502.0	QPSK	16QAM	64QAM
2593.0	28125.00	28044.87	28044.87

LTE Band CA_41C, 10MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:19:01

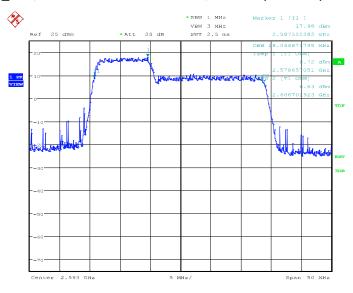
LTE Band CA_41C, 10MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:19:16



LTE Band CA_41C, 10MHz+20MHz Bandwidth, 64QAM (99% BW)



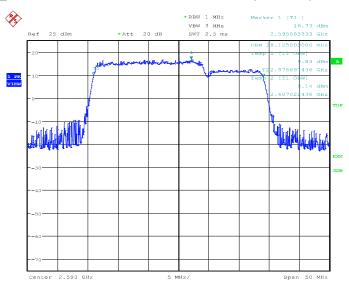
Date: 14.NOV.2021 16:19:41



LTE Band CA_41C, 20MHz+10MHz (99% BW)

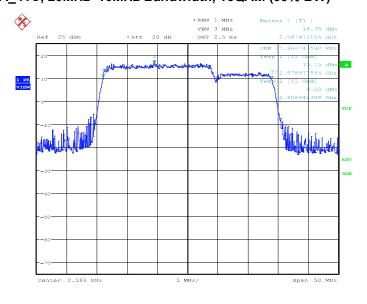
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2502.0	QPSK	16QAM	64QAM
2593.0	28125.00	27964.74	28125.00

LTE Band CA_41C, 20MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:20:30

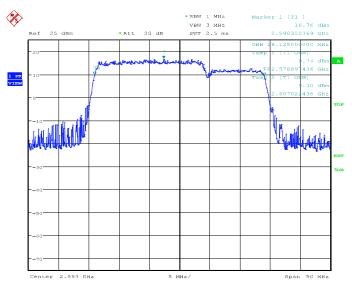
LTE Band CA_41C, 20MHz+10MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:20:47



LTE Band CA_41C, 20MHz+10MHz Bandwidth, 64QAM (99% BW)



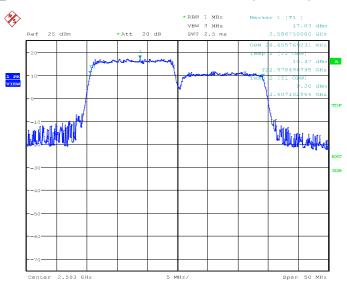
Date: 14.NOV.2021 16:21:06



LTE Band CA_41C, 15MHz+15MHz (99% BW)

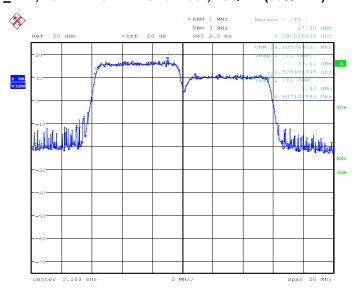
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2502.0	QPSK	16QAM	64QAM
2593.0	28605.77	28605.77	28605.77

LTE Band CA_41C, 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:23:45

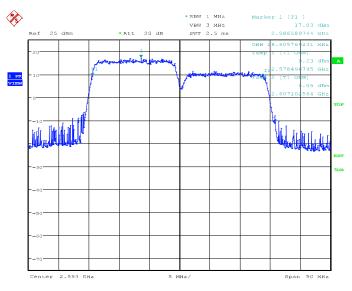
LTE Band CA_41C, 15MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:24:00



LTE Band CA_41C, 15MHz+15MHz Bandwidth, 64QAM (99% BW)



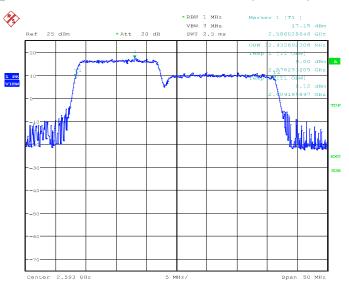
Date: 14.NOV.2021 16:24:13



LTE Band CA_41C, 15MHz+20MHz (99% BW)

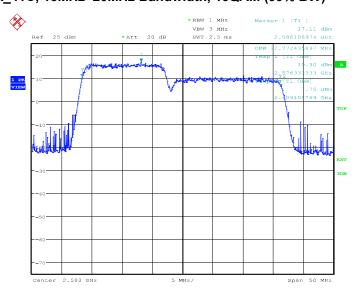
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		BW)(kHz)
2502.0	QPSK 16QA	16QAM	64QAM
2593.0	32932.69	32772.44	32772.44

LTE Band CA_41C, 15MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:25:10

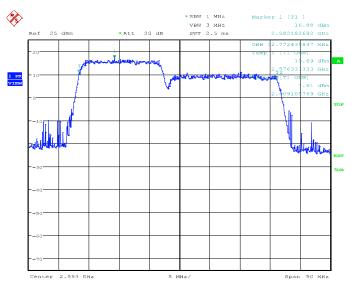
LTE Band CA_41C, 15MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:25:24



LTE Band CA_41C, 15MHz+20MHz Bandwidth, 64QAM (99% BW)



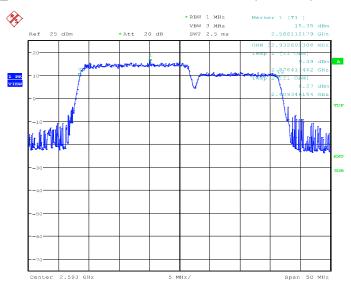
Date: 14.NOV.2021 16:25:36



LTE Band CA_41C, 20MHz+15MHz (99% BW)

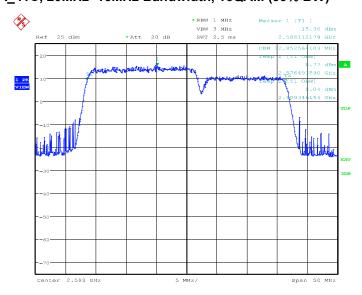
Frequency(MHz)	Occupied Bandwidth (99% BW)(kHz)		
2502.0	QPSK	16QAM	64QAM
2593.0	32932.69	32852.56	32852.56

LTE Band CA_41C, 20MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 14.NOV.2021 16:28:23

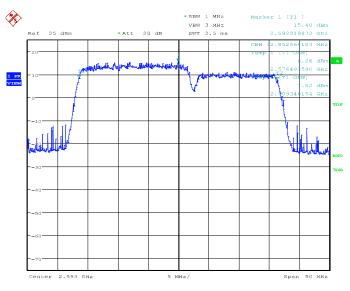
LTE Band CA_41C, 20MHz+15MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:28:36



LTE Band CA_41C, 20MHz+15MHz Bandwidth, 64QAM (99% BW)



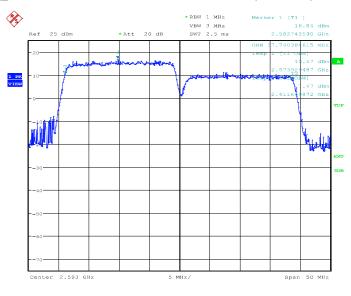
Date: 14.NOV.2021 16:28:56



LTE Band CA_41C, 20MHz+20MHz (99% BW)

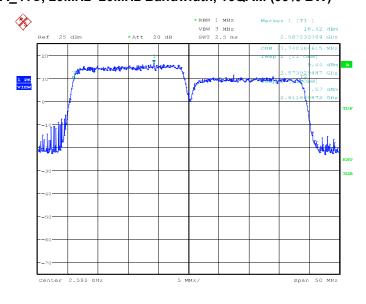
Frequency(MHz)	Occupied	Bandwidth (99%	BW)(kHz)
2503.0	QPSK	16QAM	64QAM
2593.0	37740.38	37740.38	37660.26

LTE Band CA_41C, 20MHz+20MHz Bandwidth, QPSK (99% BW)



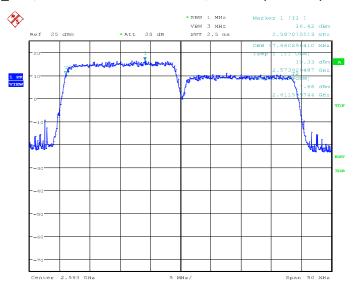
Date: 14.NOV.2021 16:29:33

LTE Band CA_41C, 20MHz+20MHz Bandwidth, 16QAM (99% BW)



Date: 14.NOV.2021 16:29:46

LTE Band CA_41C, 20MHz+20MHz Bandwidth, 64QAM (99% BW)



Date: 14.NOV.2021 16:29:59

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



A.5 EMISSION BANDWIDTH

Reference

FCC: CFR Part 2.1049, 22.917, 24.238, 27.53, 90.1215.

A.5.1 Measurement Procedure

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.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.
- d) Set the detection mode to peak, and the trace mode to max hold.
- e) Use the 26dB bandwidth function of the spectrum analyzer and report the measured bandwidth.

A.5.2Emission Bandwidth Results

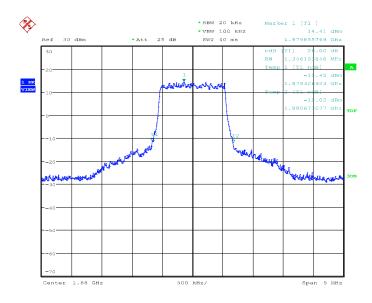
Similar to conducted emissions; Emission bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

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

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(kHz)		c BW)(kHz)
1880.0	QPSK	16QAM	64QAM
1860.0	1346.15	1314.10	1306.09

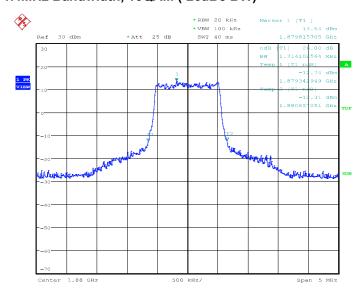
LTE band 2, 1.4MHz Bandwidth, QPSK (-26dBc BW)





Date: 9.NOV.2021 08:44:25

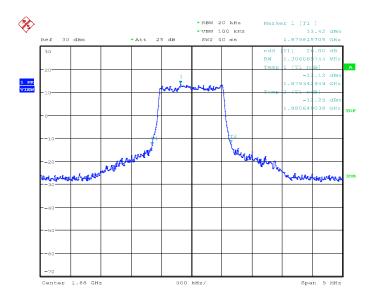
LTE band 2, 1.4MHz Bandwidth, 16QAM (-26dBc BW)



Date: 9.NOV.2021 08:44:41

LTE band 2, 1.4MHz Bandwidth, 64QAM (-26dBc BW)





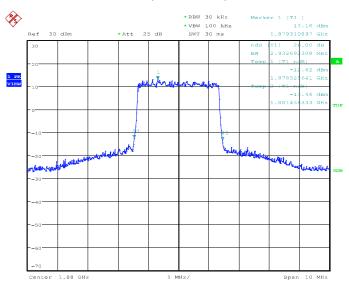
Date: 9.NOV.2021 11:59:16



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

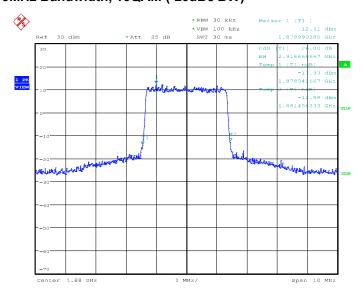
Frequency(MHz)	Emission Bandwidth (-26dBc BW)(kHz)		
4000.0	QPSK	16QAM	64QAM
1880.0	2932.69	2916.67	2916.67

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



Date: 9.NOV.2021 08:47:33

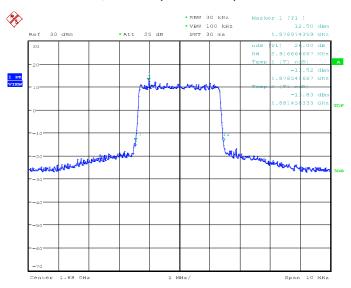
LTE band 2, 3MHz Bandwidth, 16QAM (-26dBc BW)



Date: 9.NOV.2021 08:47:49



LTE band 2, 3MHz Bandwidth, 64QAM (-26dBc BW)



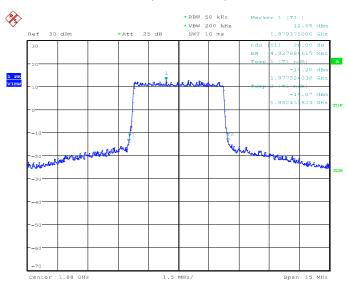
Date: 9.NOV.2021 12:01:49



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

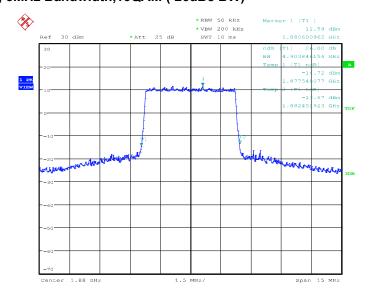
Frequency(MHz)	Emission Bandwidth (-26dBc BW)(kHz)		
1990.0	QPSK	16QAM	64QAM
1880.0	4927.88	4903.85	4927.88

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



Date: 9.NOV.2021 08:50:42

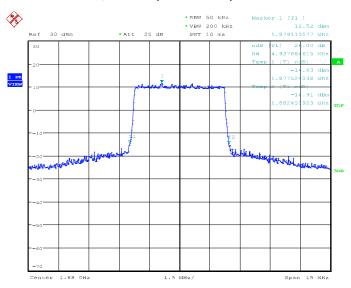
LTE band 2, 5MHz Bandwidth,16QAM (-26dBc BW)



Date: 9.NOV.2021 08:50:58



LTE band 2, 5MHz Bandwidth,64QAM (-26dBc BW)



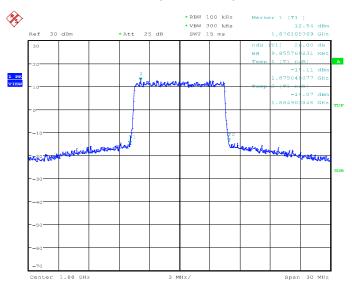
Date: 9.NOV.2021 12:04:23



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

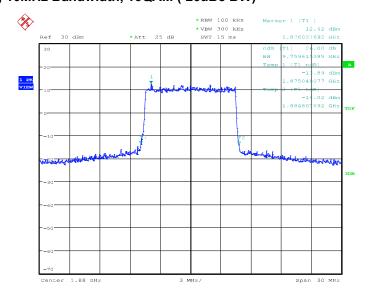
Frequency(MHz)	Emission Bandwidth (-26dBc BW)(kHz)		
4000.0	QPSK	16QAM	64QAM
1880.0	9855.77	9759.62	9711.54

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



Date: 9.NOV.2021 08:53:51

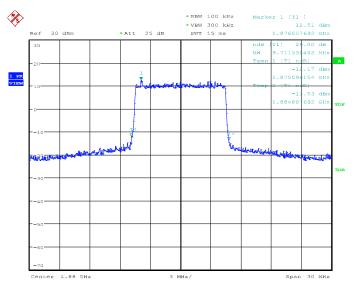
LTE band 2, 10MHz Bandwidth, 16QAM (-26dBc BW)



Date: 9.NOV.2021 08:54:07



LTE band 2, 10MHz Bandwidth, 64QAM (-26dBc BW)



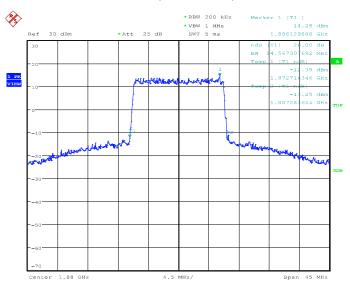
Date: 9.NOV.2021 12:06:56



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

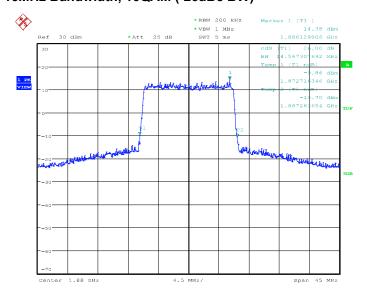
Frequency(MHz)	Emission Bandwidth (-26dBc BW)(kHz)		
1990.0	QPSK	16QAM	64QAM
1880.0	14567.31	14567.31	14711.54

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



Date: 9.NOV.2021 08:57:00

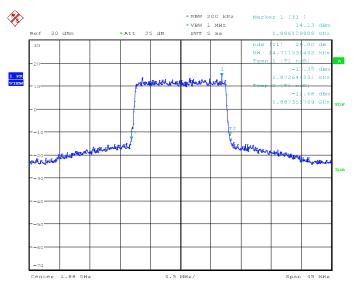
LTE band 2, 15MHz Bandwidth, 16QAM (-26dBc BW)



Date: 9.NOV.2021 08:57:16



LTE band 2, 15MHz Bandwidth, 64QAM (-26dBc BW)



Date: 9.NOV.2021 12:09:30