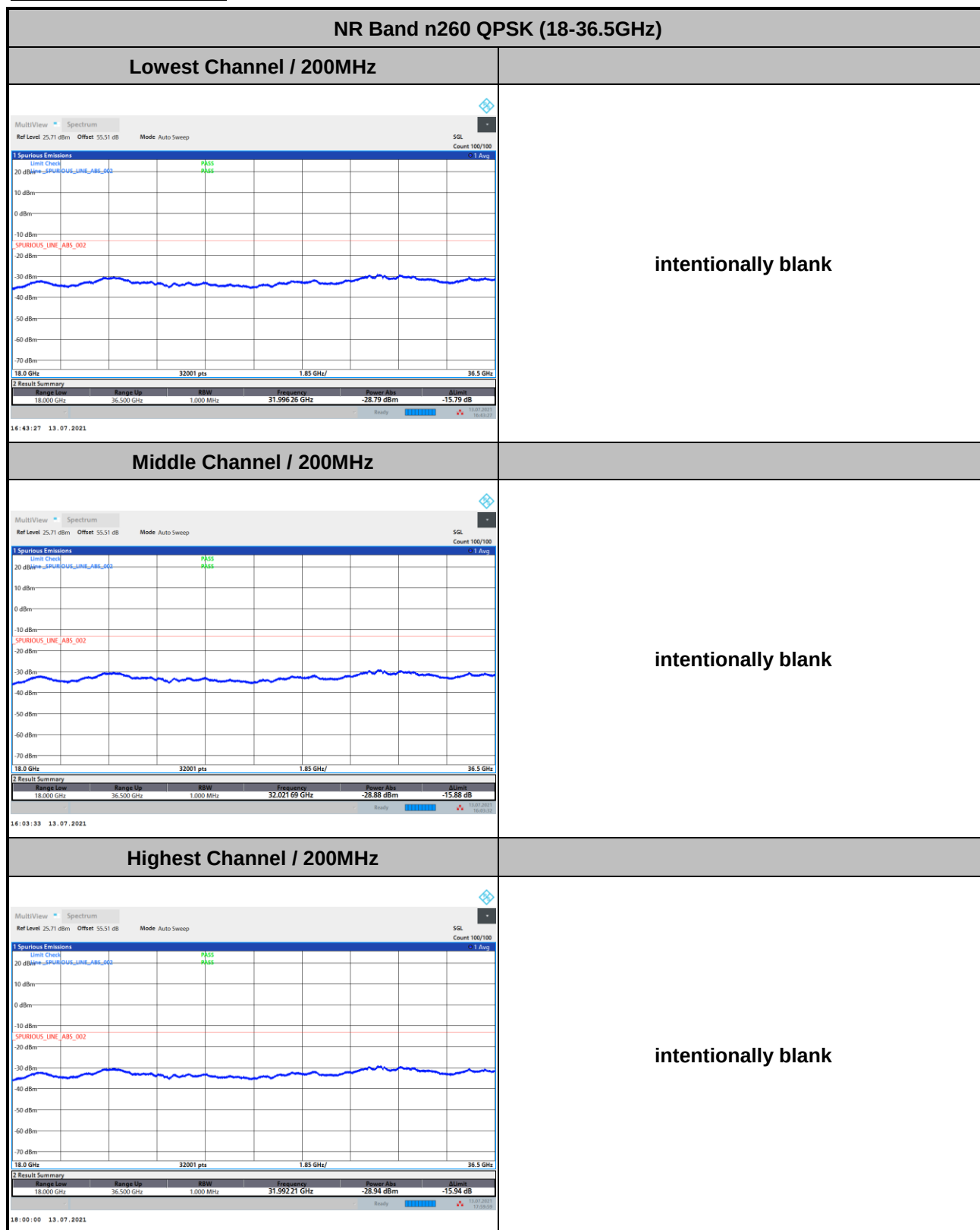


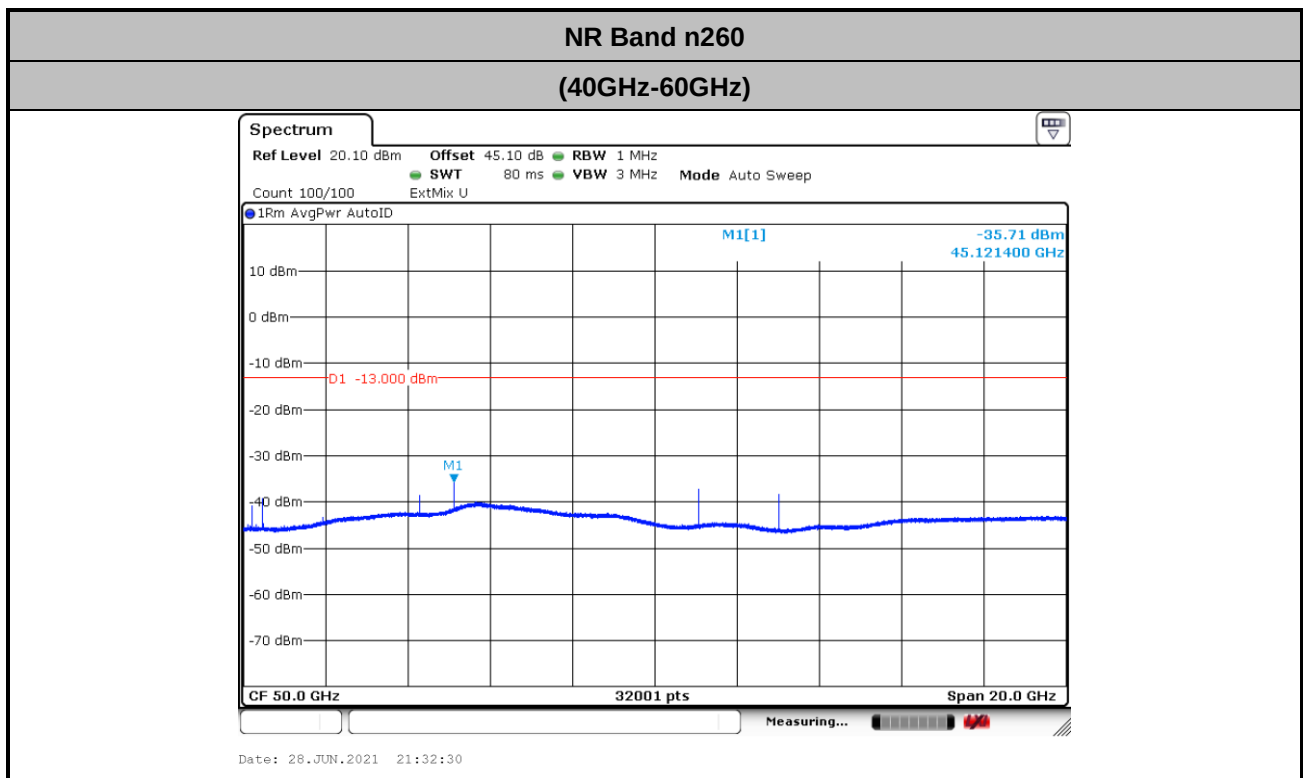


DFT-s-OFDM Module 1

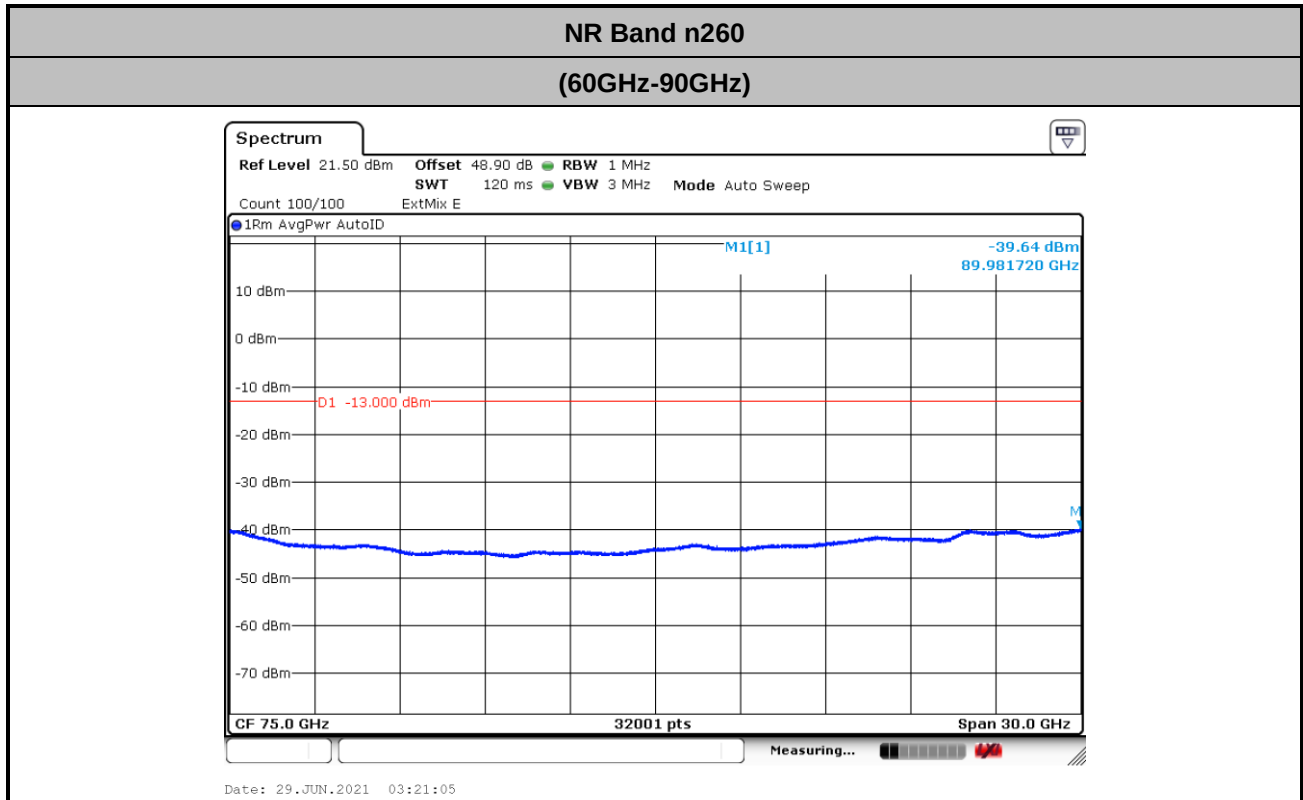


Remark: In band and out of band frequencies are omitted.

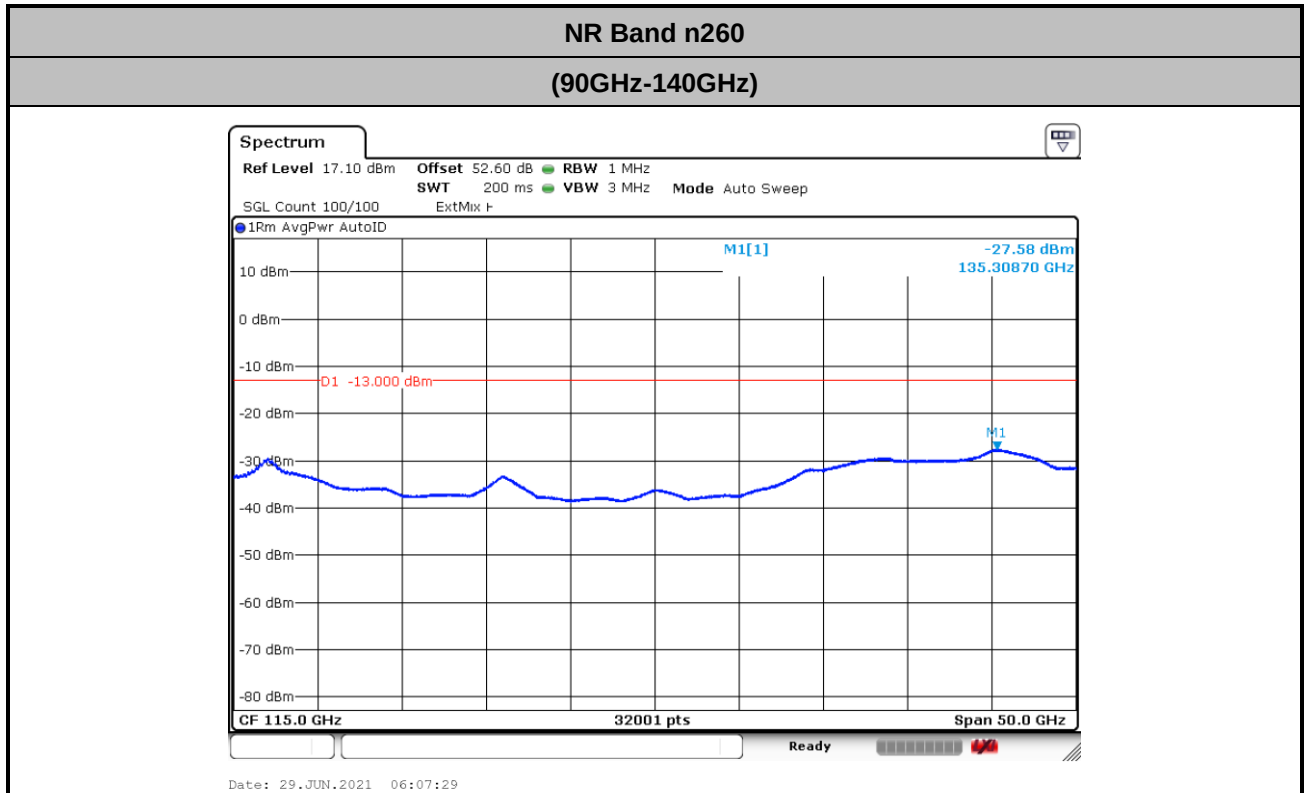
There is no significant spurious emission signal found for frequency started from 40GHz up to 200GHz. Only the noise floor is reported.



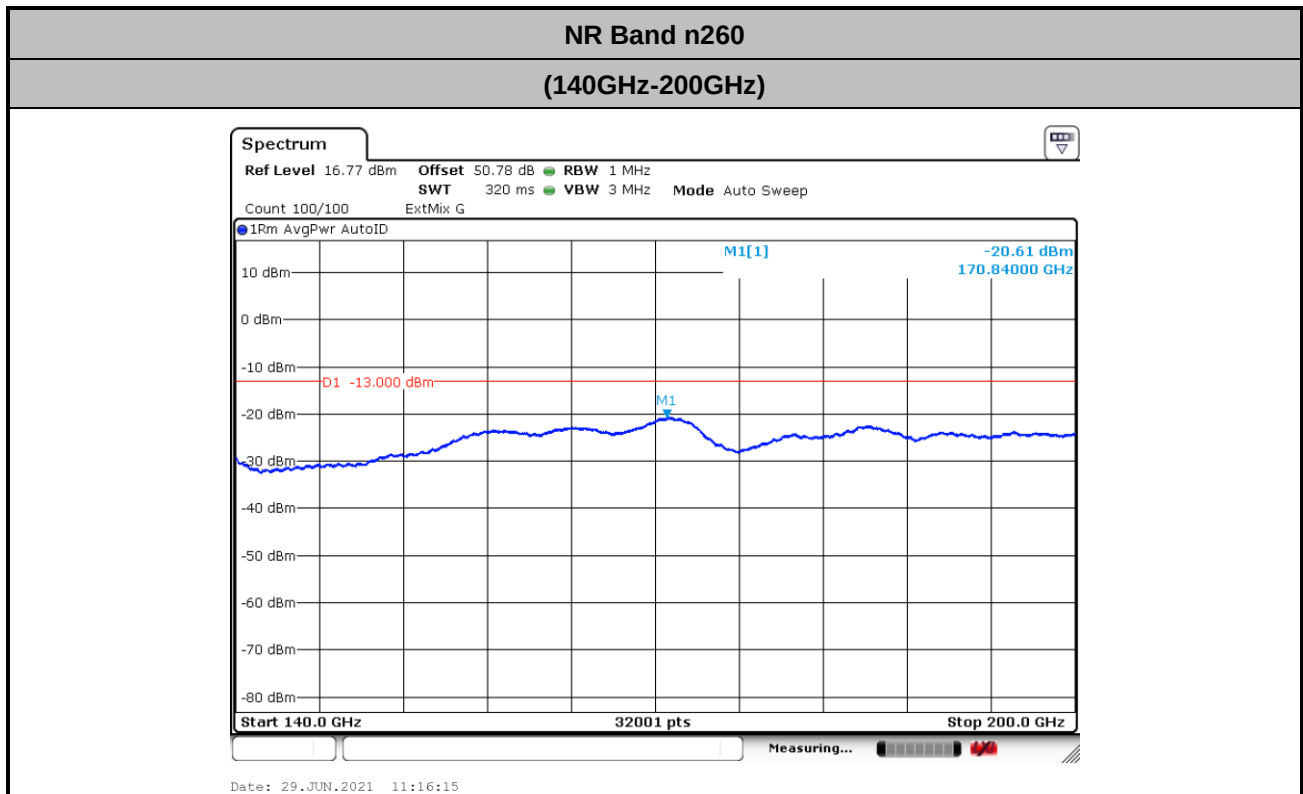
$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.5 + 0.4 + 107 + 20\log(1) - 104.8 = 45.1 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 46.3 + 0.4 + 107 + 20\log(1) - 104.8 = 48.9 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 50 + 0.4 + 107 + 20\log(1) - 104.8 = 52.6 \text{ (dB)} \end{aligned}$$



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 54.2 + 2 + 107 + 20\log(0.5) - 104.8 = 50.78 \text{ (dB)} \end{aligned}$$

Remark: The spurious emissions were measured from 18GHz to 36.5GHz and 40GHz to 200GHz. The test results within the omitted frequency 36.5GHz to 40GHz were measured and reported in the section of Radiated Out of Band Emission with frequency range, 36.5GHz to 40GHz, and all spurious comply with limits.

Frequency Stability

Test Conditions		NR Band n260 / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	38.4999051	94.900	2.465	PASS
40	Normal Voltage	38.4999375	62.500	1.623	
30	Normal Voltage	38.4999815	18.500	0.481	
20(Ref.)	Normal Voltage	38.5	0.000	0.000	
10	Normal Voltage	38.50011693	-116.930	3.037	
0	Normal Voltage	38.5002038	-203.800	5.294	
-10	Normal Voltage	38.5002663	-266.300	6.917	
-20	Normal Voltage	38.5003068	-306.800	7.969	
-30	Normal Voltage	38.5003415	-341.500	8.870	
20	Maximum Voltage	38.50000145	-1.450	0.038	
20	Normal Voltage	38.5	0.000	0.000	
20	Battery End Point	38.49999493	5.070	0.132	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the operation band.



NR Band n261 Module 0

AG0

Occupied Bandwidth

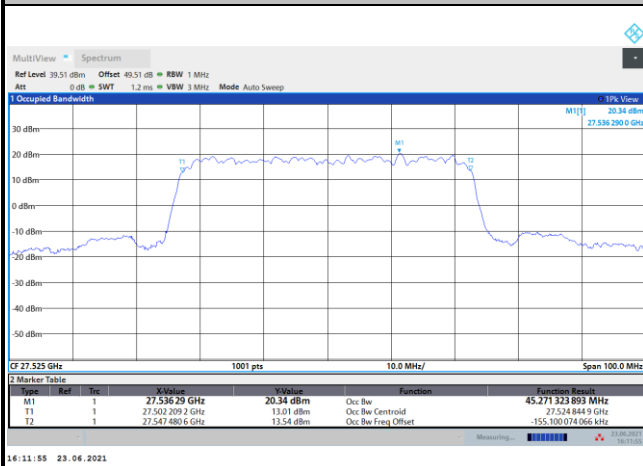
Mode	DFT-s-OFDM Module 0 NR Band n261 : 99%OBW(MHz)											
BW	50MHz				100MHz				200MHz			
Mod.	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Lowest CH	45.27	45.26	45.23	45.12	90.31	90.48	90.63	90.41	183.70	183.59	183.88	184.57
Middle CH	45.28	45.33	45.24	45.17	90.43	90.68	90.72	90.43	184.92	185.35	184.96	184.80
Highest CH	45.27	45.27	45.23	45.15	90.62	90.67	90.60	90.58	183.94	183.81	184.29	184.95



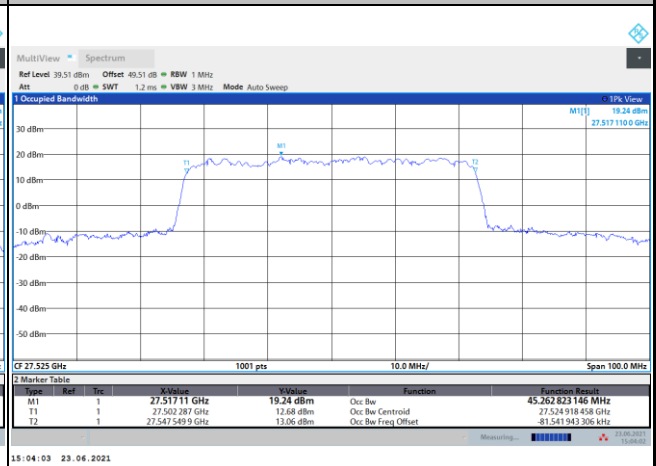
DFT-s-OFDM Module 0

NR Band n261

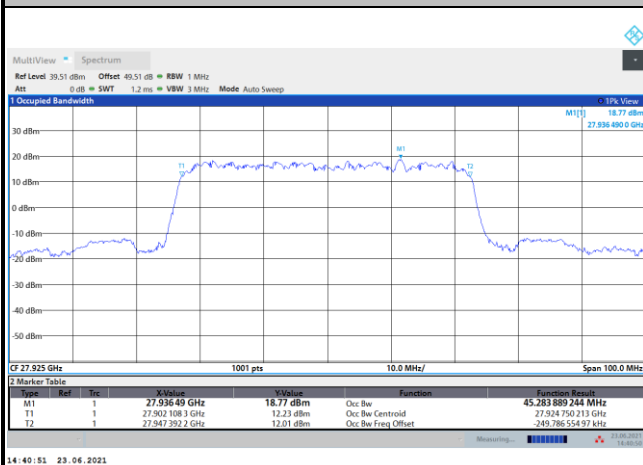
Lowest Channel / 50MHz / BPSK



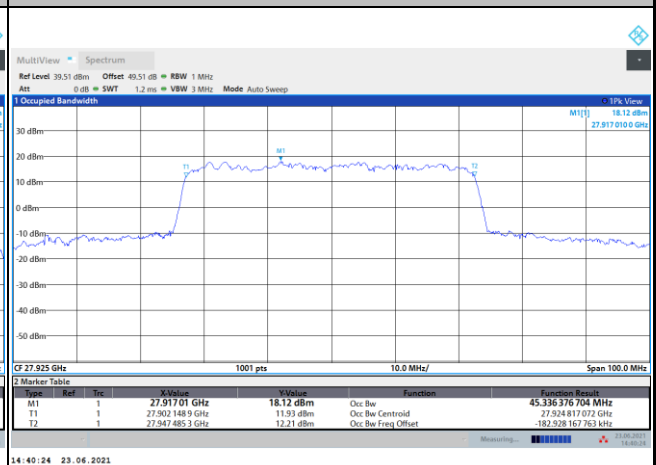
Lowest Channel / 50MHz / QPSK



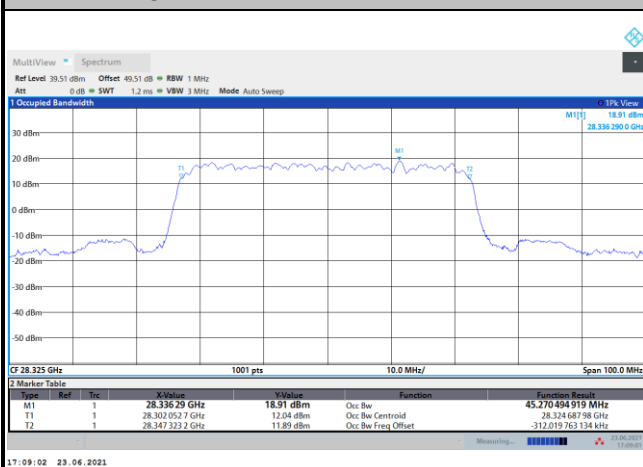
Middle Channel / 50MHz / BPSK



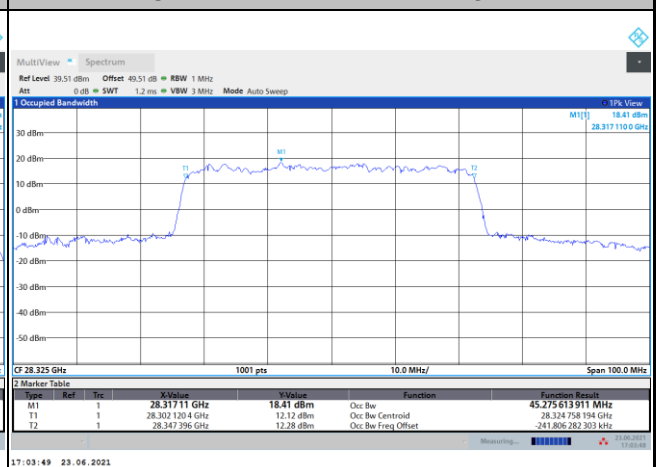
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

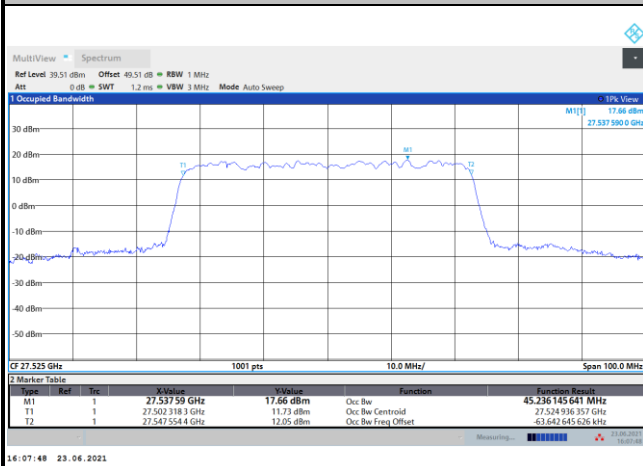




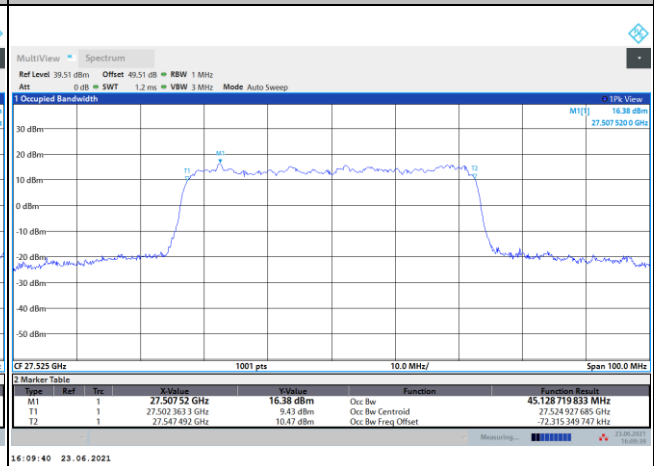
DFT-s-OFDM Module 0

NR Band n261

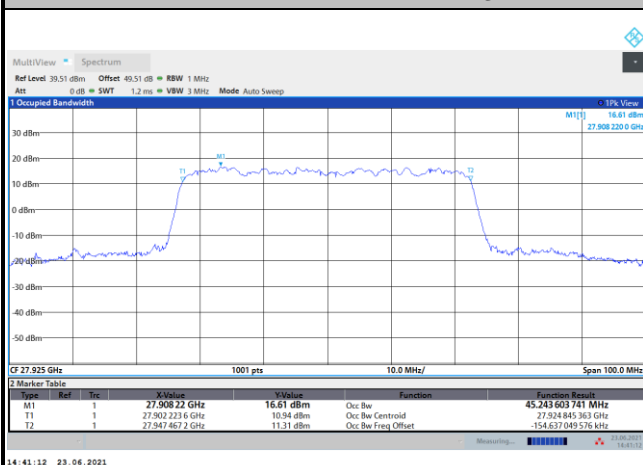
Lowest Channel / 50MHz / 16QAM



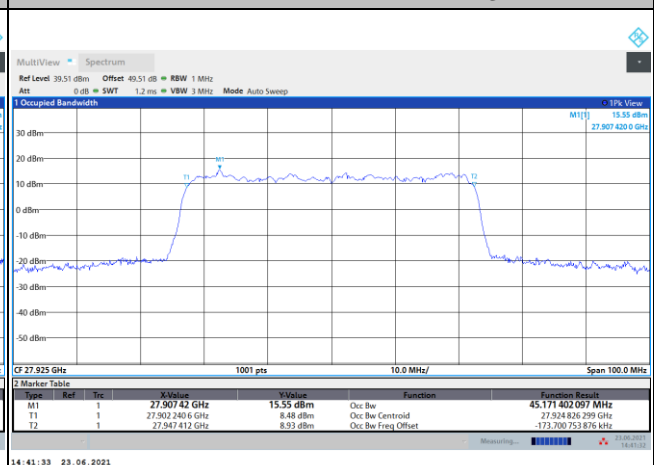
Lowest Channel / 50MHz / 64QAM



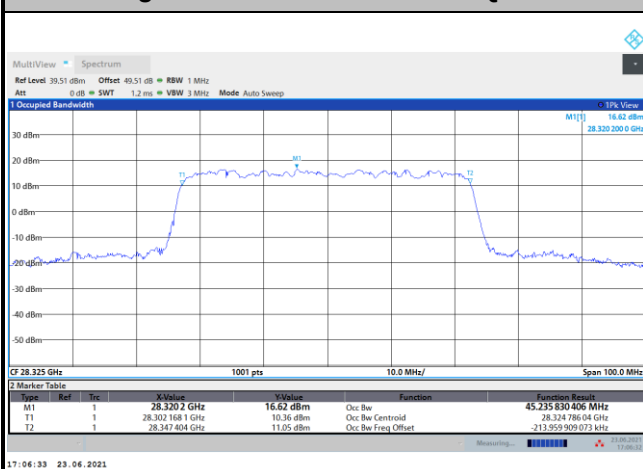
Middle Channel / 50MHz / 16QAM



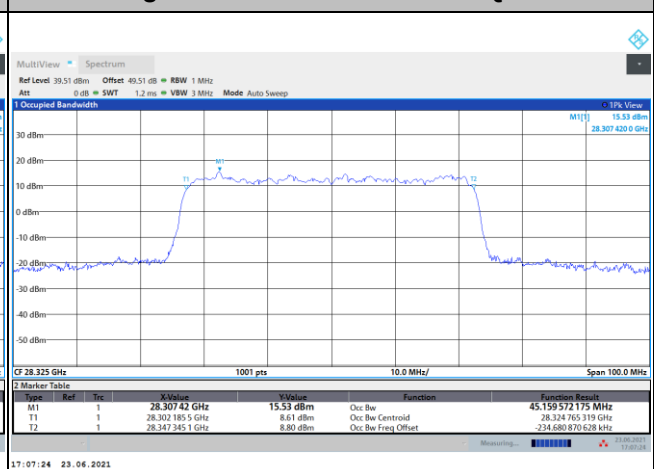
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

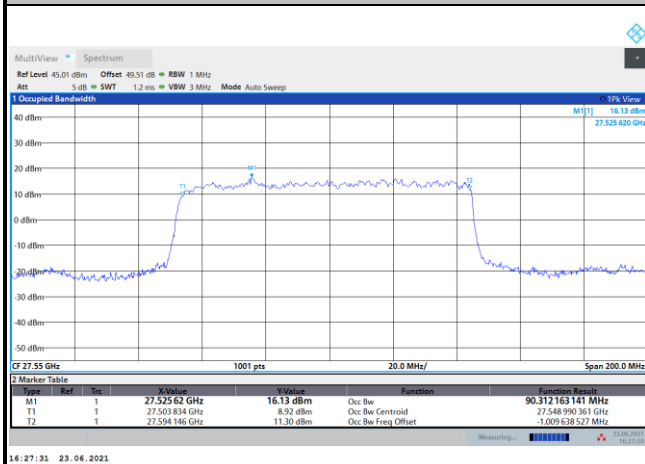




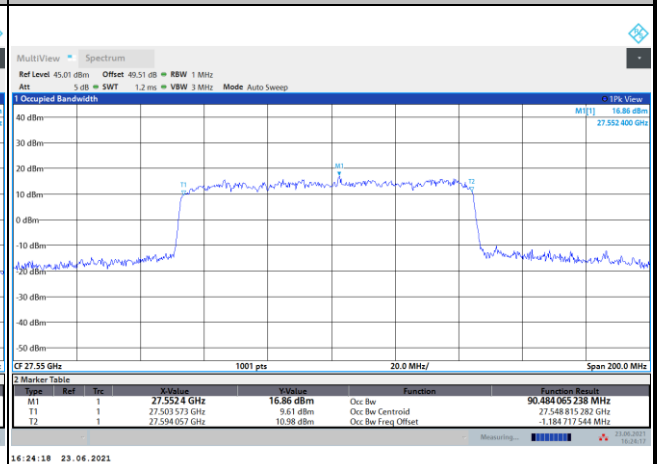
DFT-s-OFDM Module 0

NR Band n261

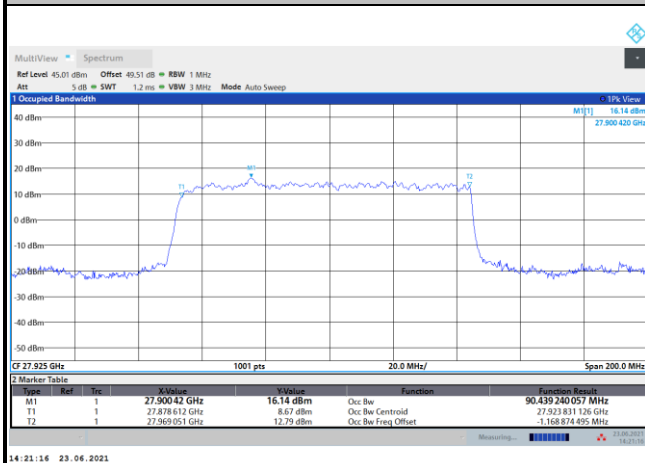
Lowest Channel / 100MHz / BPSK



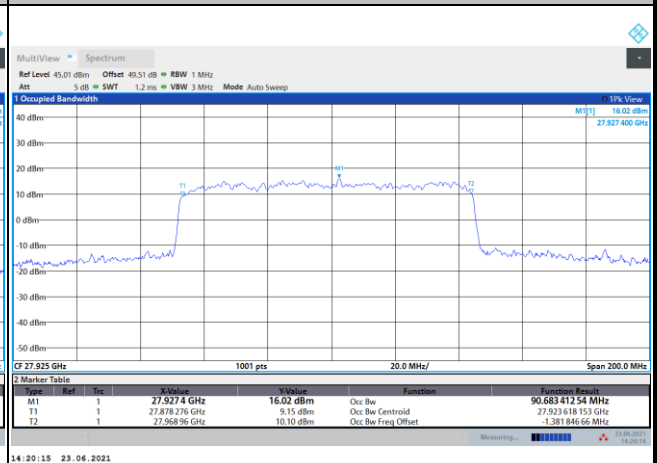
Lowest Channel / 100MHz / QPSK



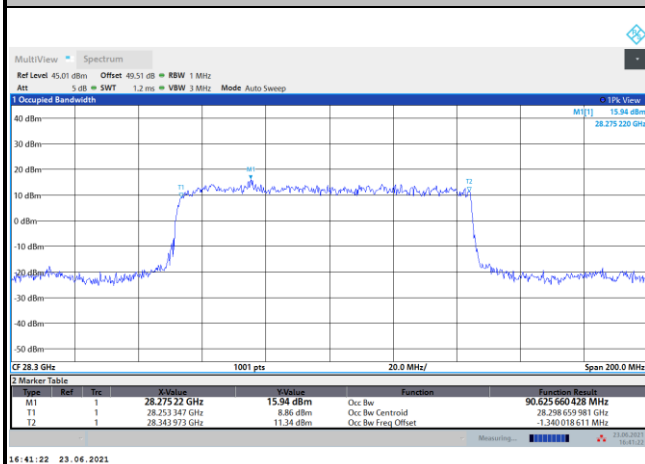
Middle Channel / 100MHz / BPSK



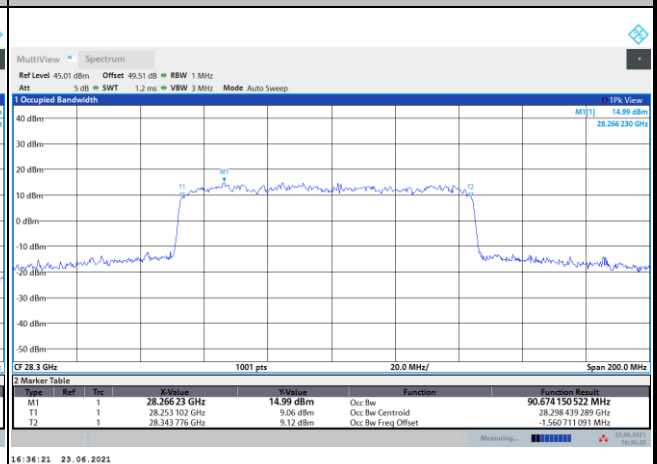
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

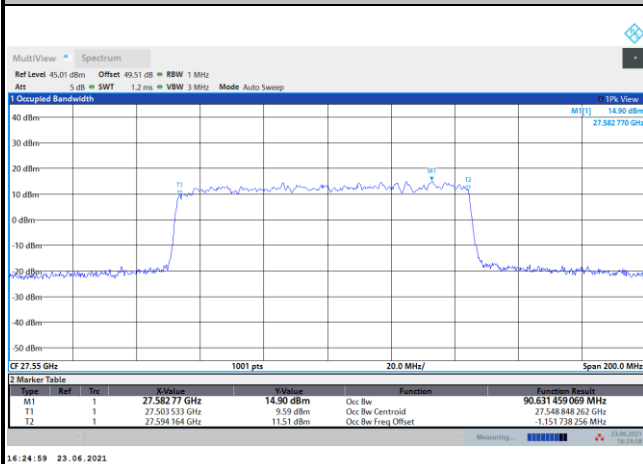




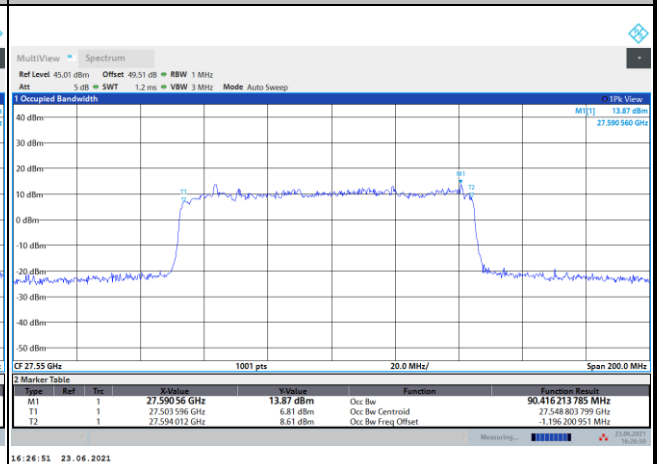
DFT-s-OFDM Module 0

NR Band n261

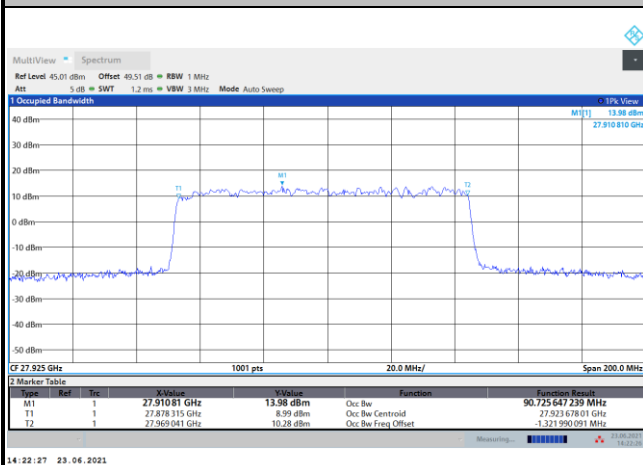
Lowest Channel / 100MHz / 16QAM



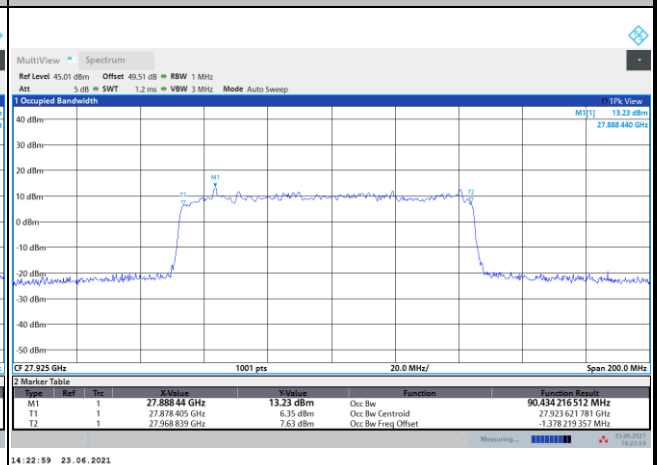
Lowest Channel / 100MHz / 64QAM



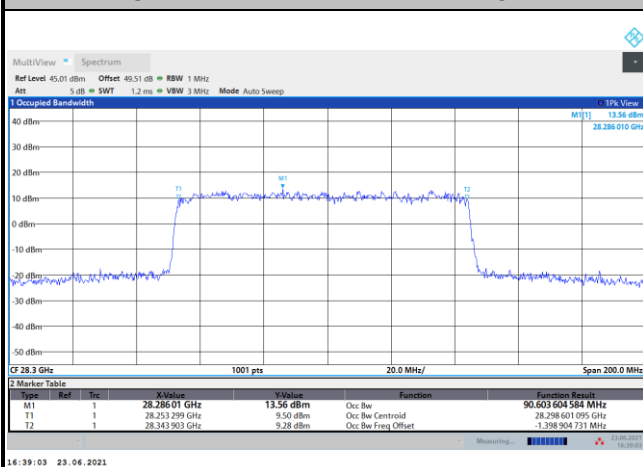
Middle Channel / 100MHz / 16QAM



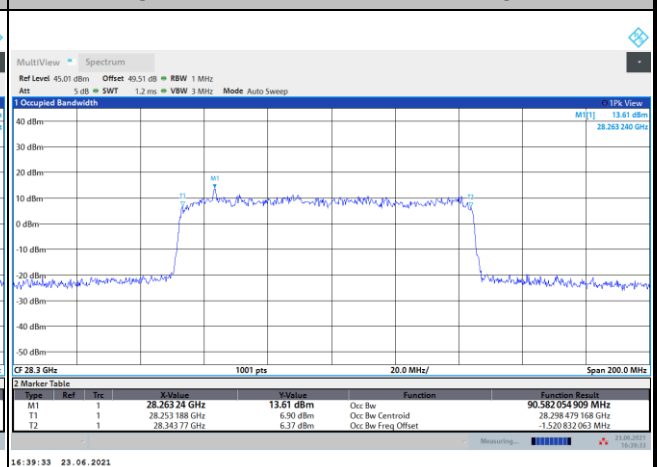
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

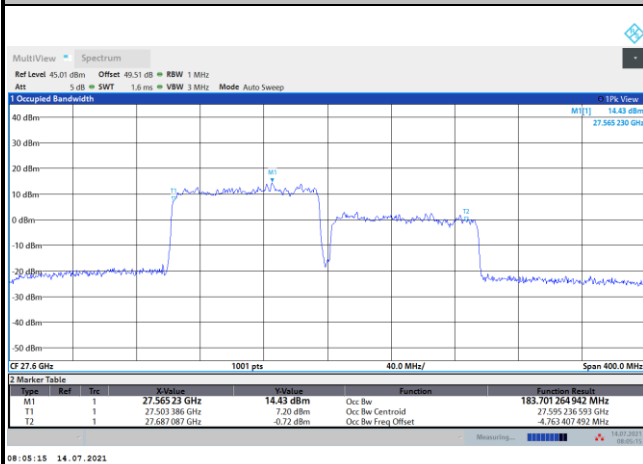




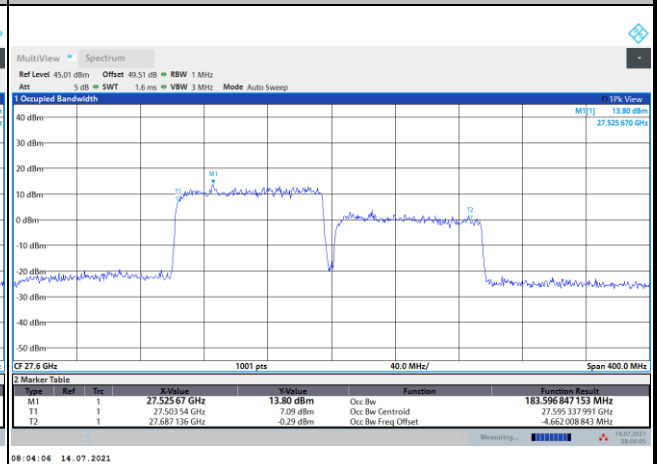
DFT-s-OFDM Module 0

NR Band n261

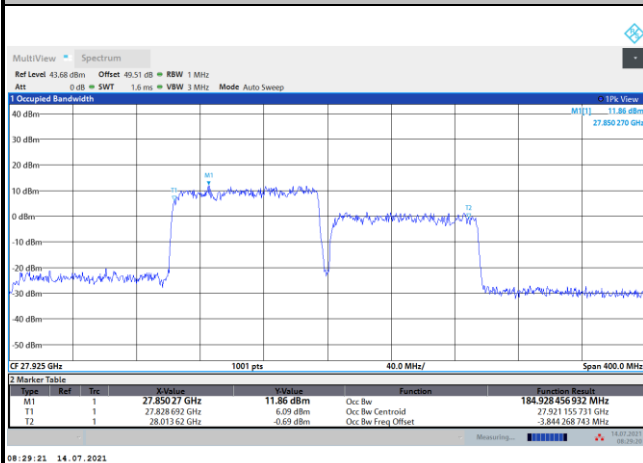
Lowest Channel / 200MHz / BPSK



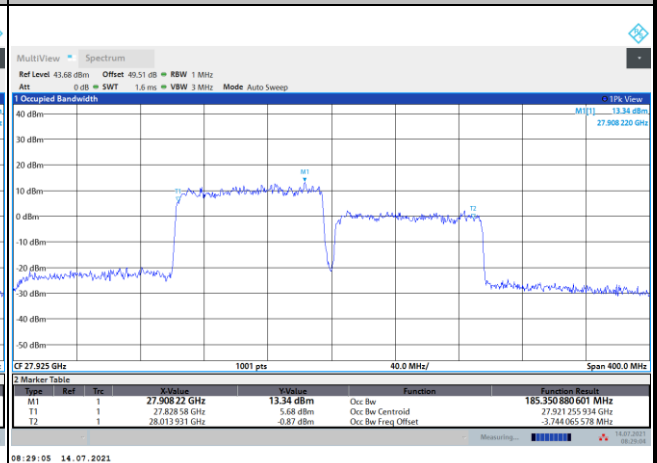
Lowest Channel / 200MHz / QPSK



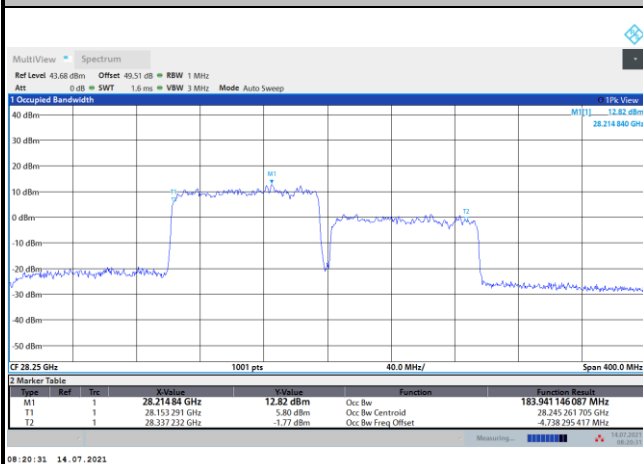
Middle Channel / 200MHz / BPSK



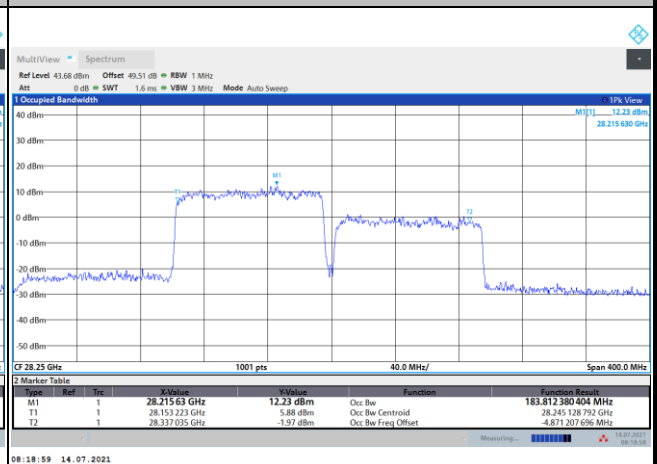
Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / BPSK



Highest Channel / 200MHz / QPSK

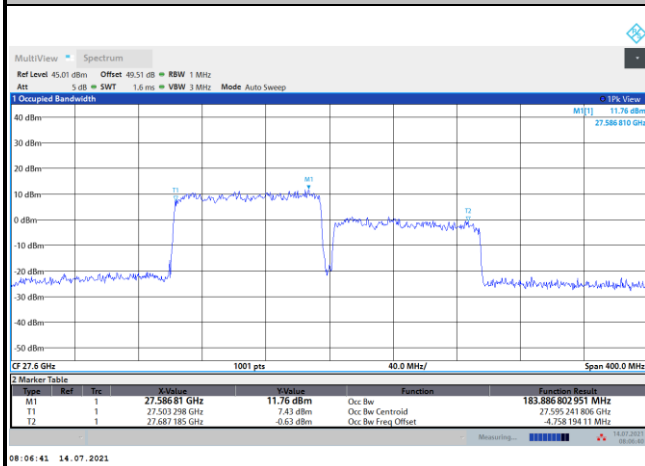




DFT-s-OFDM Module 0

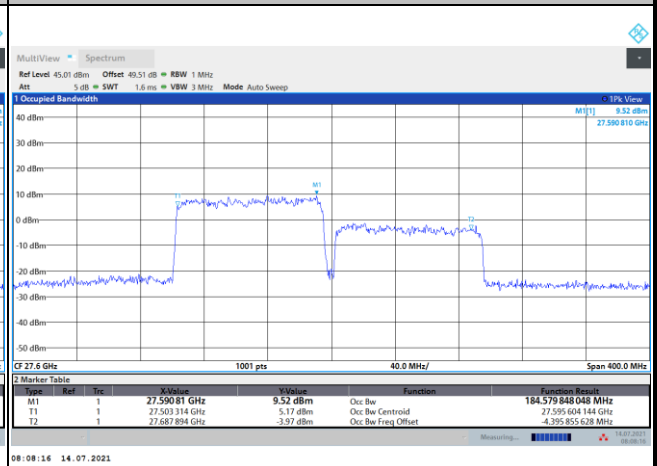
NR Band n261

Lowest Channel / 200MHz / 16QAM



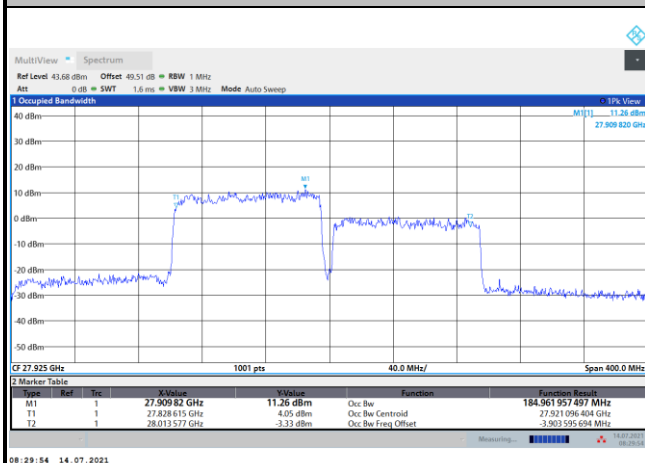
08:06:41 14.07.2021

Lowest Channel / 200MHz / 64QAM



08:08:16 14.07.2021

Middle Channel / 200MHz / 16QAM



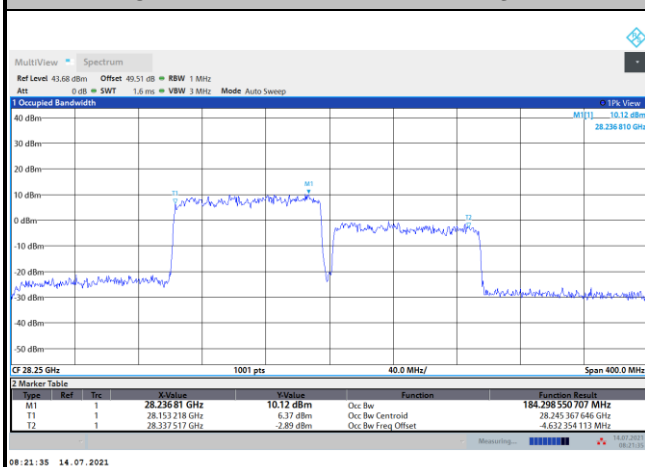
08:29:54 14.07.2021

Middle Channel / 200MHz / 64QAM



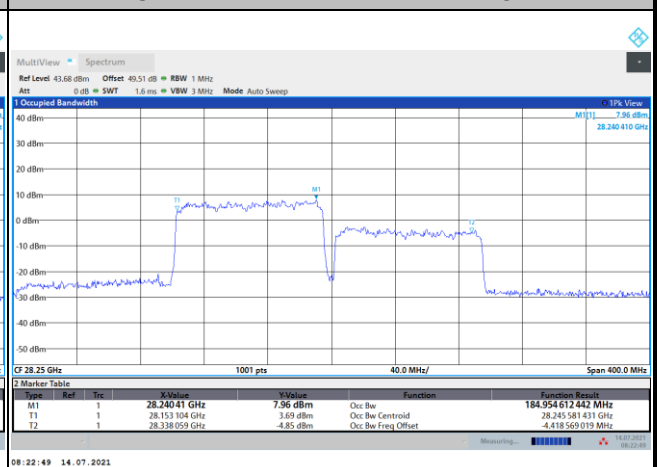
08:30:12 14.07.2021

Highest Channel / 200MHz / 16QAM



08:21:35 14.07.2021

Highest Channel / 200MHz / 64QAM



08:22:49 14.07.2021

**Radiated Out of Band Emissions**

Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-10.73	-10.15	-8.06	-11.13	-8.15	-12.87	-9.74	-9.28	-16.79	-16.63	-17.93	-18.12
	>10%OB	≤ -13	-26.67	-26.39	-25.91	-28.34	-28.29	-31.49	-29.84	-29.22	-25.79	-25.53	-26.45	-25.94
High CH	0~10%OB	≤ -5	-10.68	-11.26	-13.36	-13.01	-10.25	-11.01	-12.19	-13.19	-33.64	-33.51	-34.08	-32.89
	>10%OB	≤ -13	-23.7	-24.26	-26.21	-28.25	-30.04	-30.38	-31.15	-31.11	-32.68	-32.83	-32.56	-33.07
Result			Compliance											

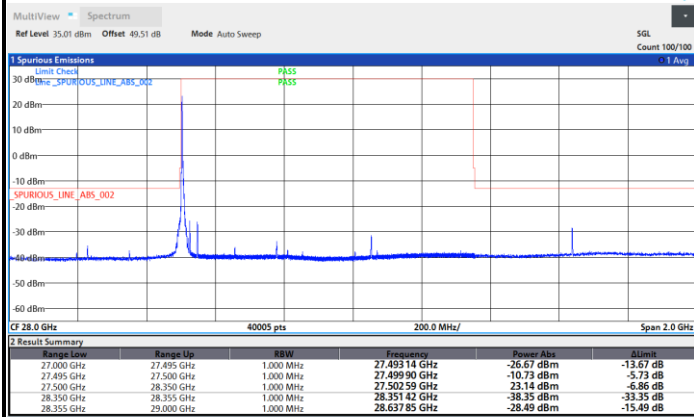
Mode			DFT-s-OFDM Module 0 NR Band n261 : BE (dBm) Full RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM	BPSK	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤ -5	-18.48	-16.15	-21.53	-23.56	-21.28	-19.8	-24.71	-26.56	-28.68	-28.8	-30.49	-32.07
	>10%OB	≤ -13	-21.54	-17.24	-23.73	-26.55	-25.84	-21.01	-26.39	-28.27	-29.25	-29.58	-31.43	-32.69
High CH	0~10%OB	≤ -5	-19.47	-16.1	-21.91	-25.29	-23.93	-20.02	-25.03	-27.7	-34.67	-34.69	-35.64	-36.1
	>10%OB	≤ -13	-22.71	-18.25	-24.5	-27.76	-27.1	-22.89	-27.3	-29.06	-35.55	-35.42	-35.96	-36.21
Result			Compliance											



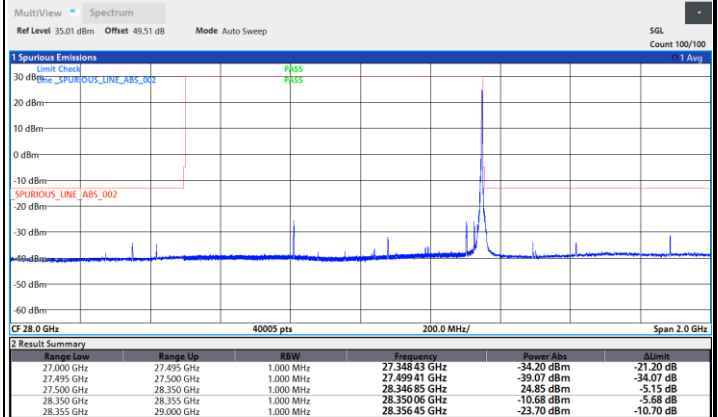
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / 1 RB

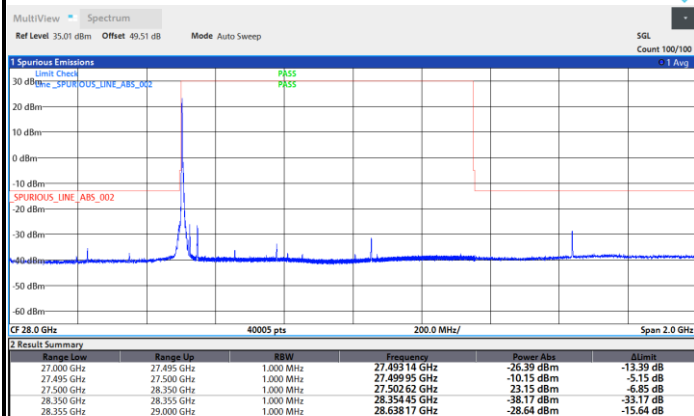


Highest Band Edge / 1 RB

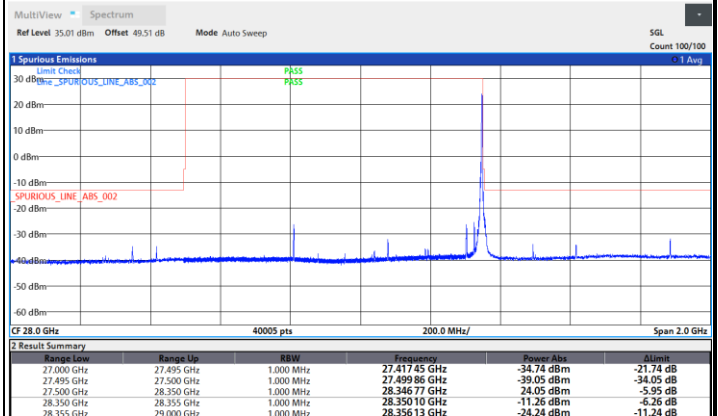


NR Band n261 / 50MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

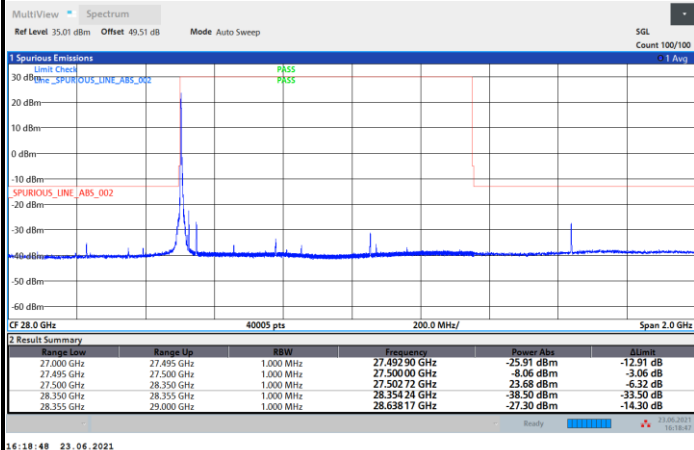




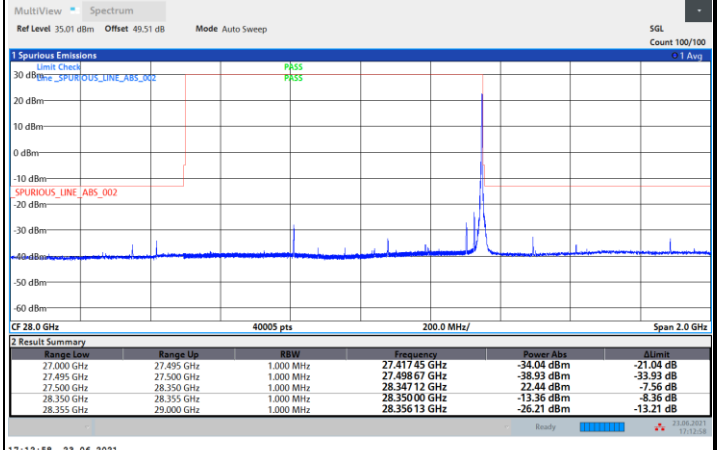
DFT-s-OFDM Module 0

NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / 1 RB

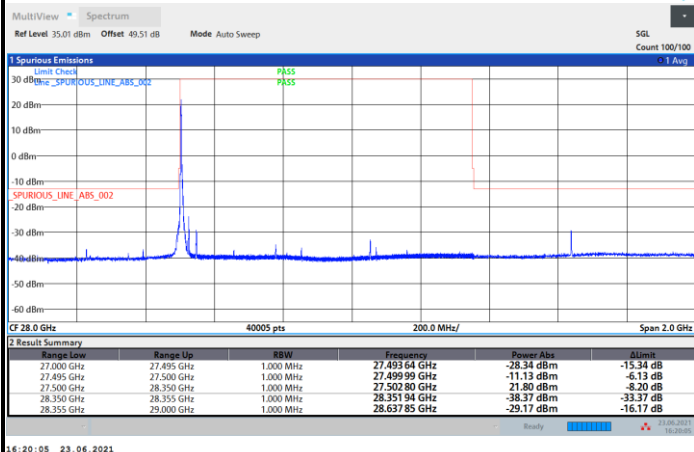


Highest Band Edge / 1 RB

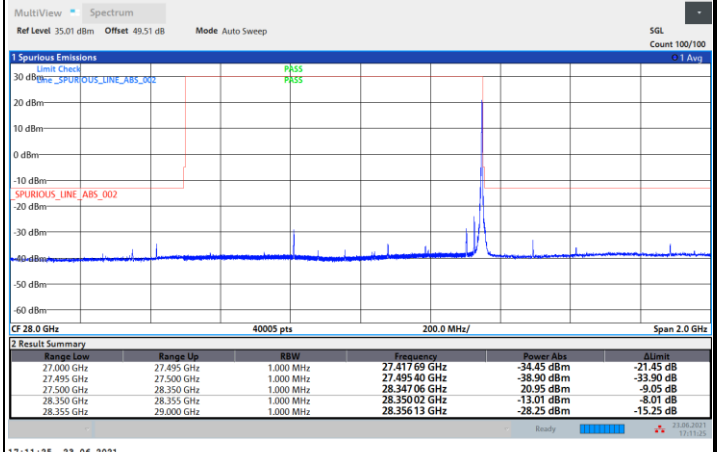


NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

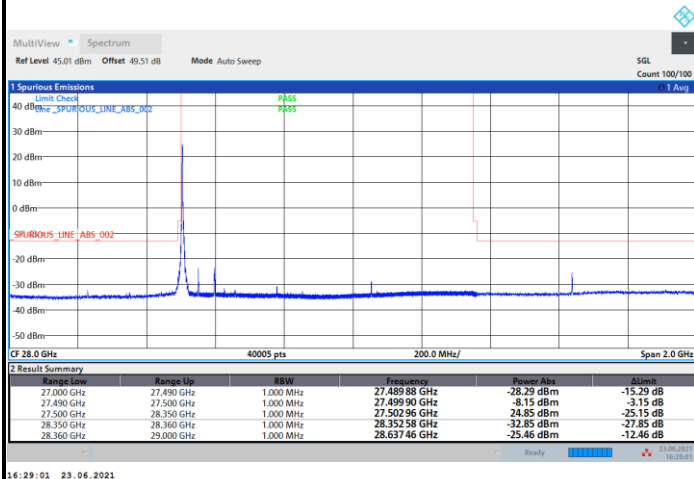




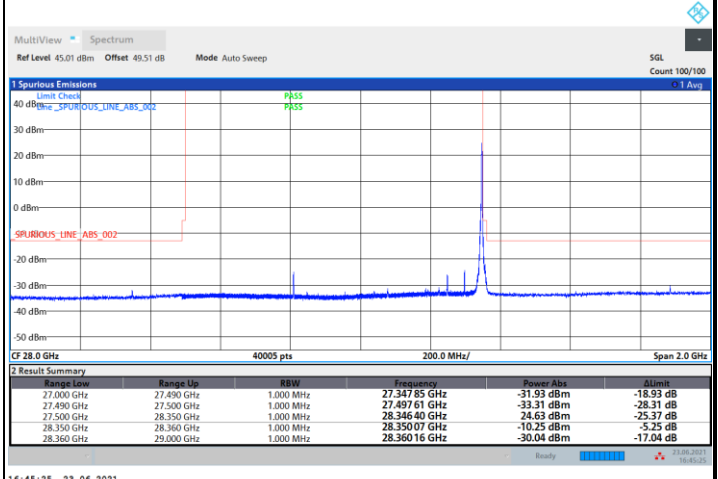
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / BPSK

Lowest Band Edge / 1 RB

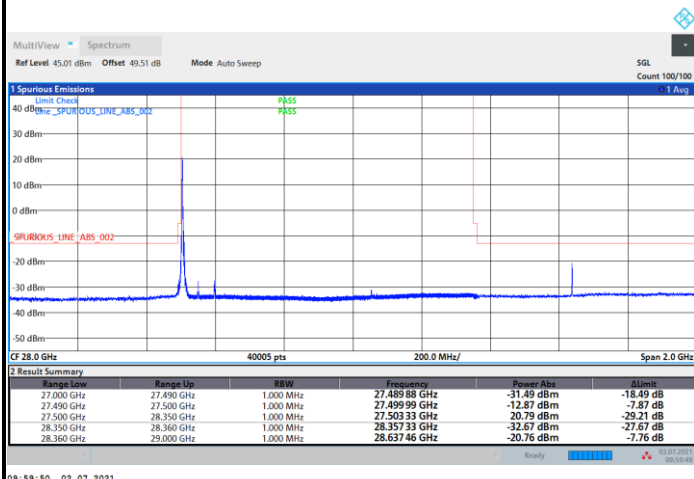


Highest Band Edge / 1 RB

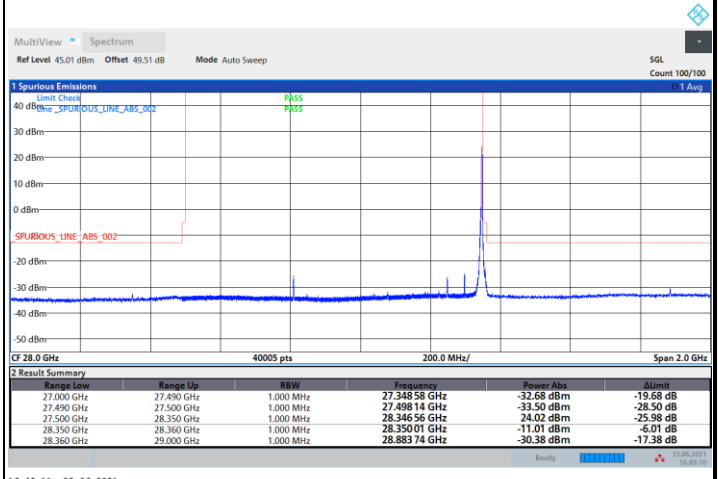


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

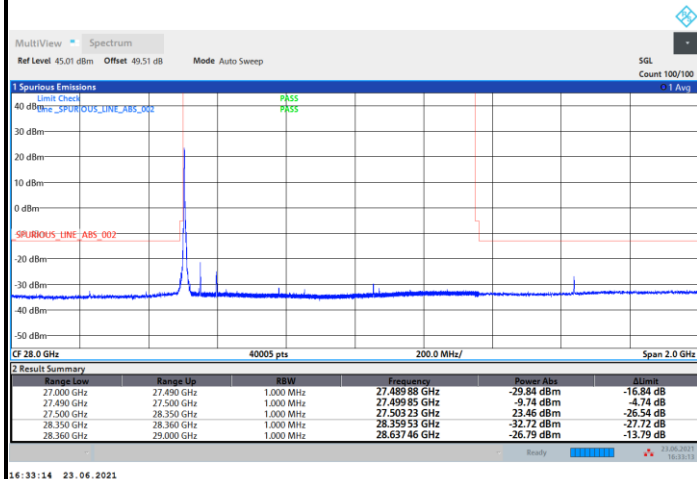




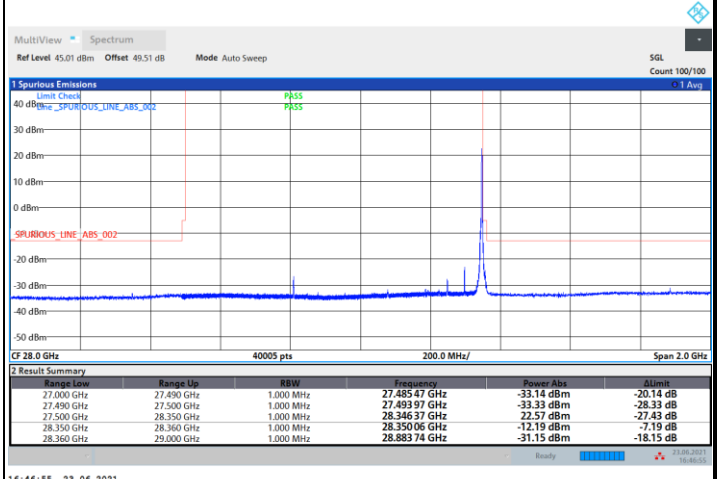
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / 1 RB

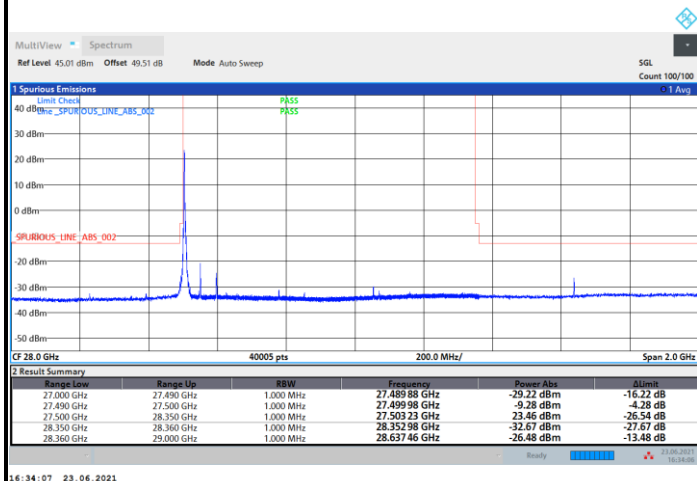


Highest Band Edge / 1 RB

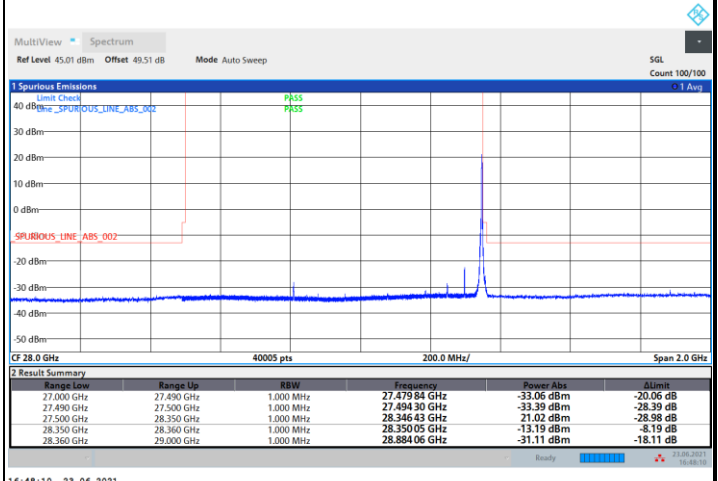


NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

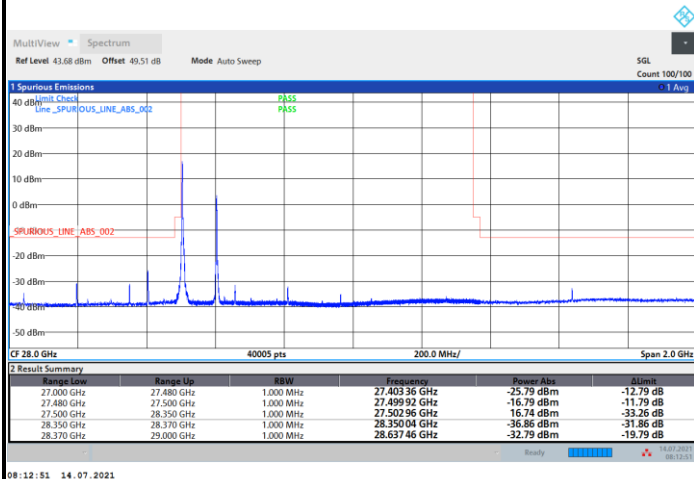




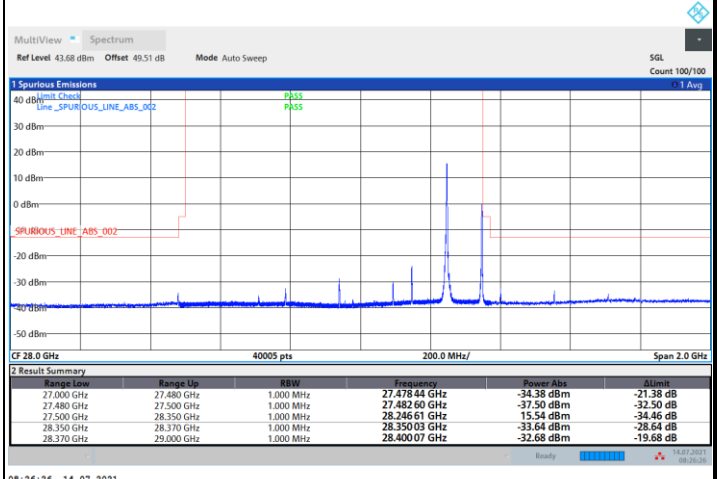
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / BPSK

Lowest Band Edge / 1 RB

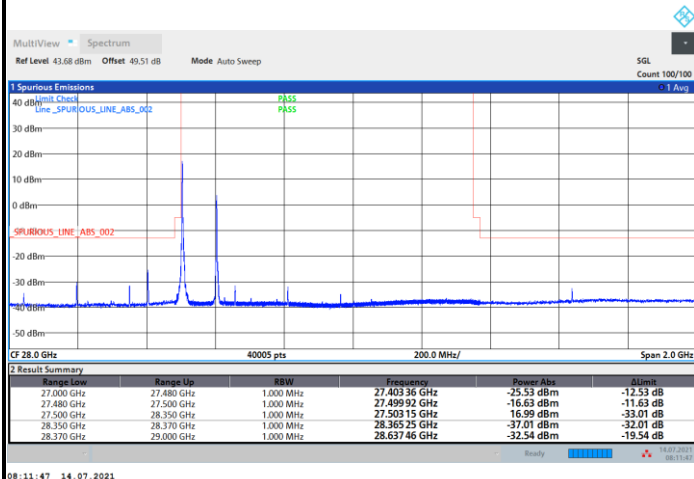


Highest Band Edge / 1 RB

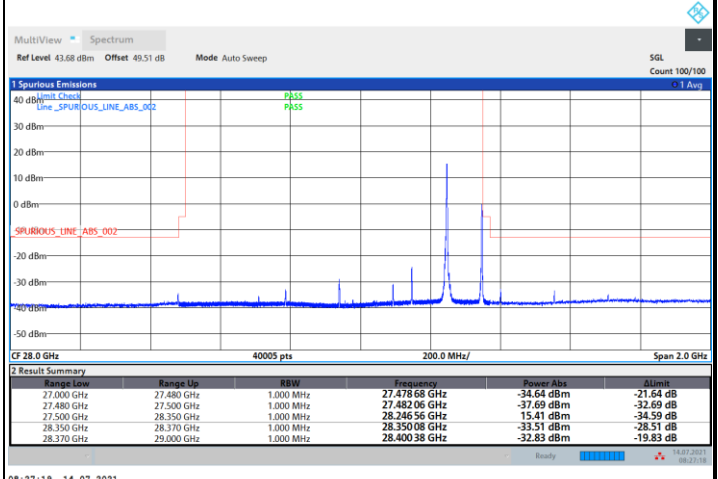


NR Band n261 / 200MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

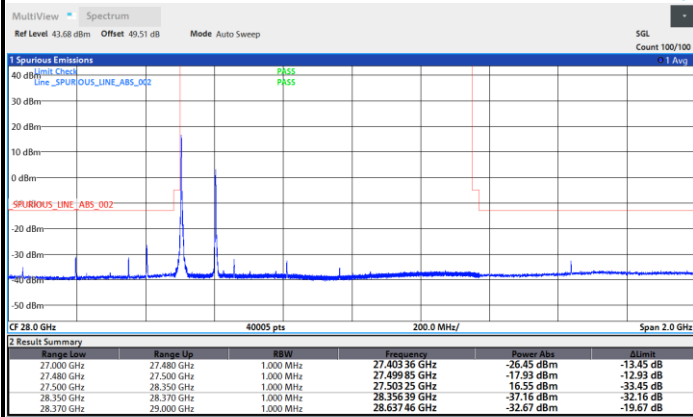




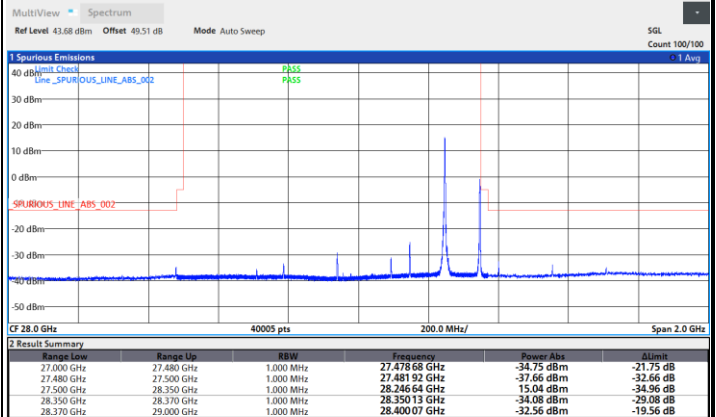
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / 16QAM

Lowest Band Edge / 1 RB

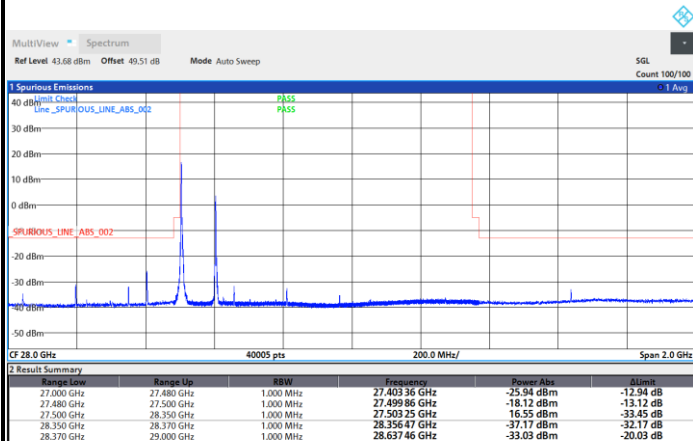


Highest Band Edge / 1 RB

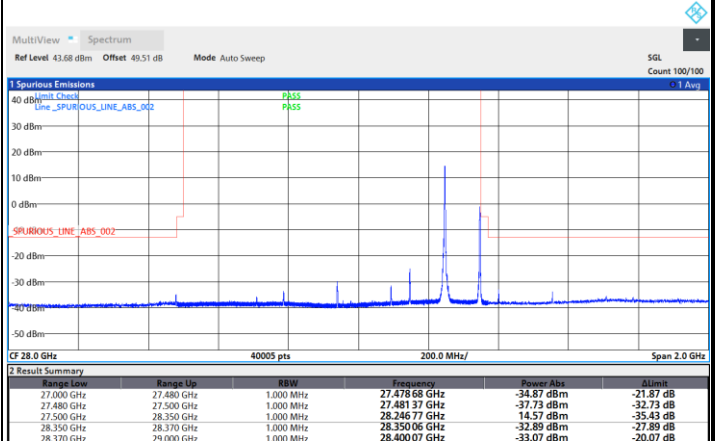


NR Band n261 / 200MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

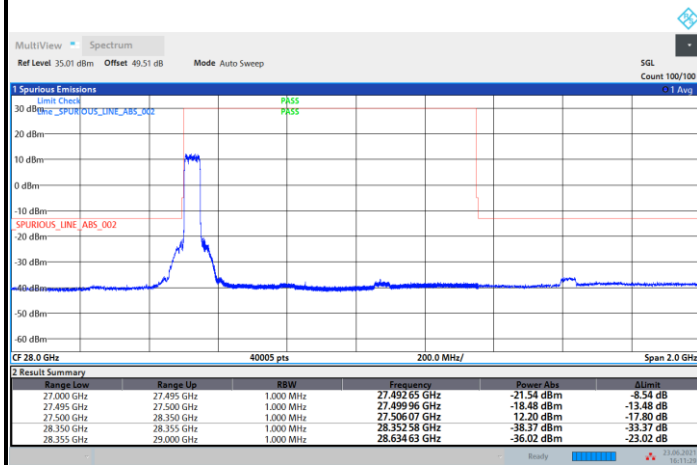




DFT-s-OFDM Module 0

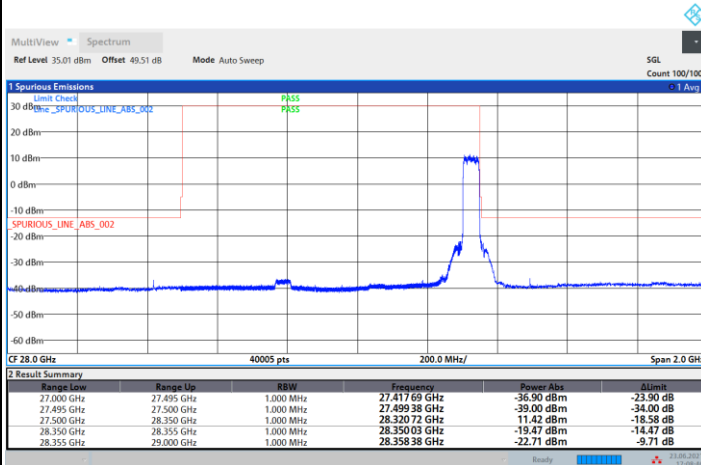
NR Band n261 / 50MHz / BPSK

Lowest Band Edge / Full RB



16:11:30 23.06.2021

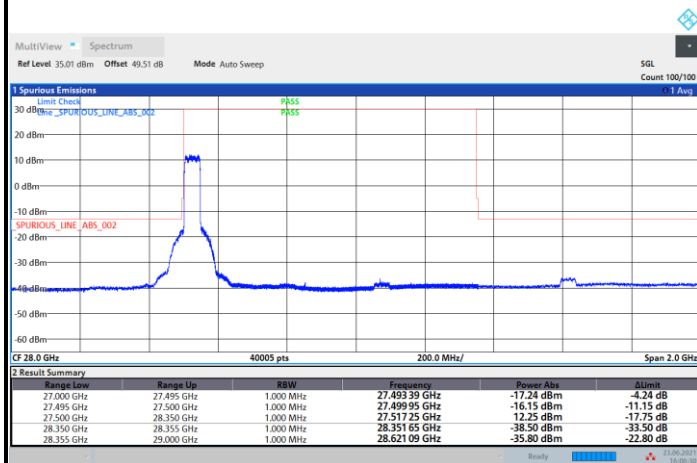
Highest Band Edge / Full RB



17:08:47 23.06.2021

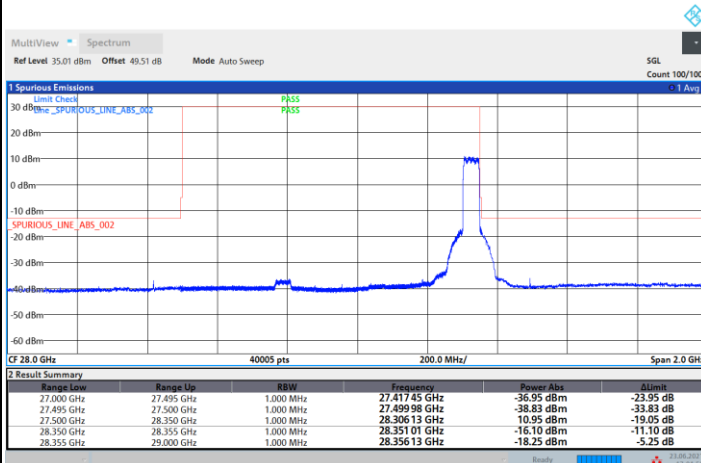
NR Band n261 / 50MHz / QPSK

Lowest Band Edge / Full RB



16:06:30 23.06.2021

Highest Band Edge / Full RB



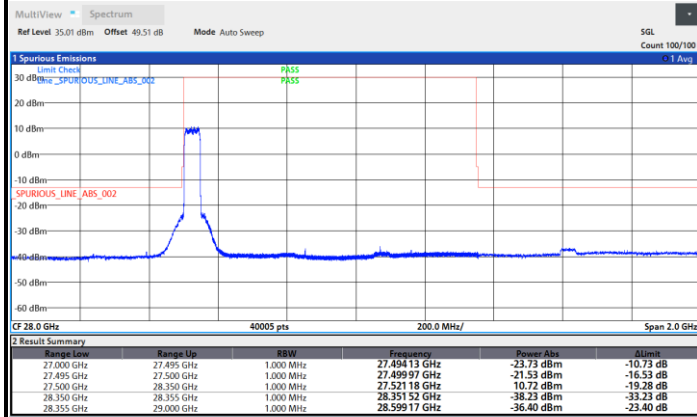
17:04:51 23.06.2021



DFT-s-OFDM Module 0

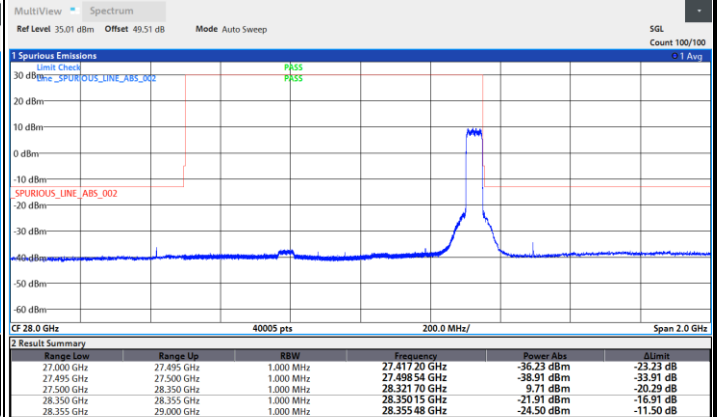
NR Band n261 / 50MHz / 16QAM

Lowest Band Edge / Full RB



16:07:28 23.06.2021

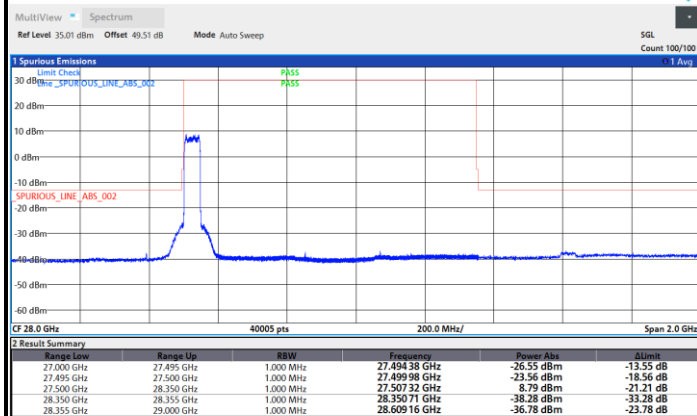
Highest Band Edge / Full RB



17:06:14 23.06.2021

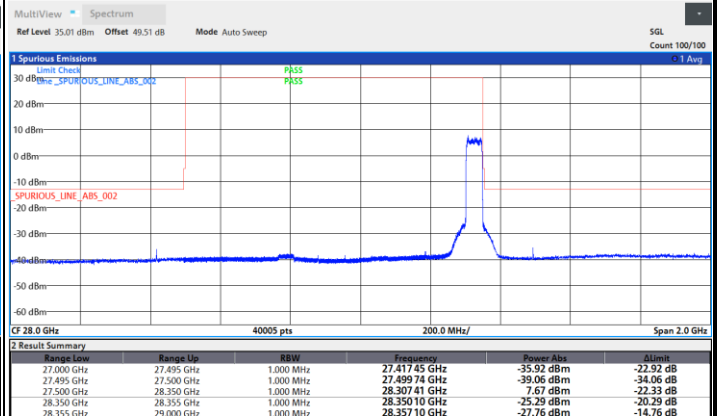
NR Band n261 / 50MHz / 64QAM

Lowest Band Edge / Full RB



16:10:22 23.06.2021

Highest Band Edge / Full RB



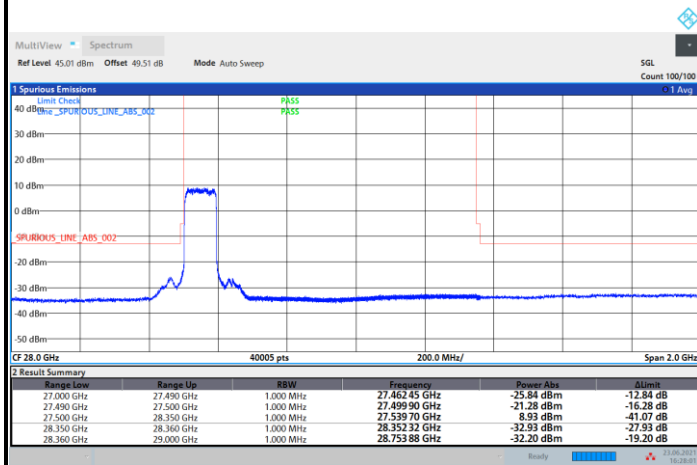
17:07:54 23.06.2021



DFT-s-OFDM Module 0

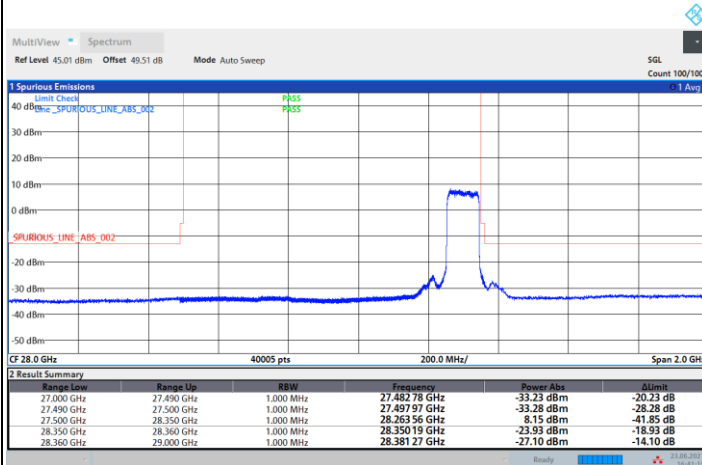
NR Band n261 / 100MHz / BPSK

Lowest Band Edge / Full RB



16:28:02 23.06.2021

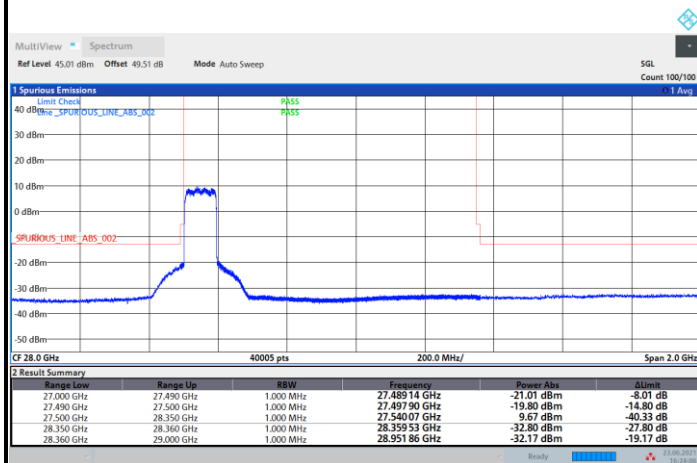
Highest Band Edge / Full RB



16:41:15 23.06.2021

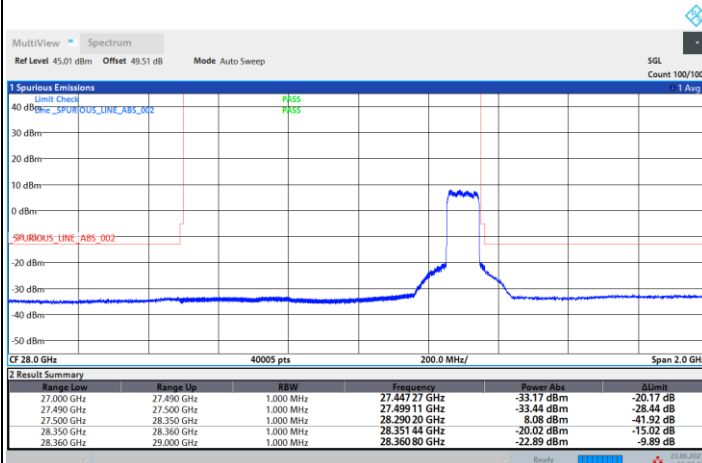
NR Band n261 / 100MHz / QPSK

Lowest Band Edge / Full RB



16:24:06 23.06.2021

Highest Band Edge / Full RB



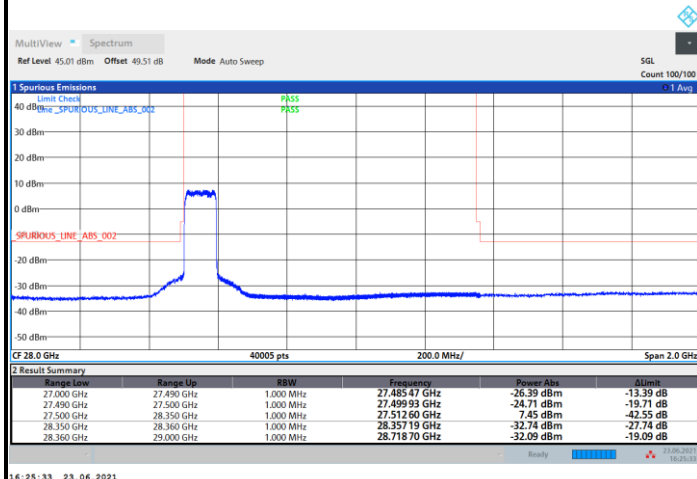
16:37:21 23.06.2021



DFT-s-OFDM Module 0

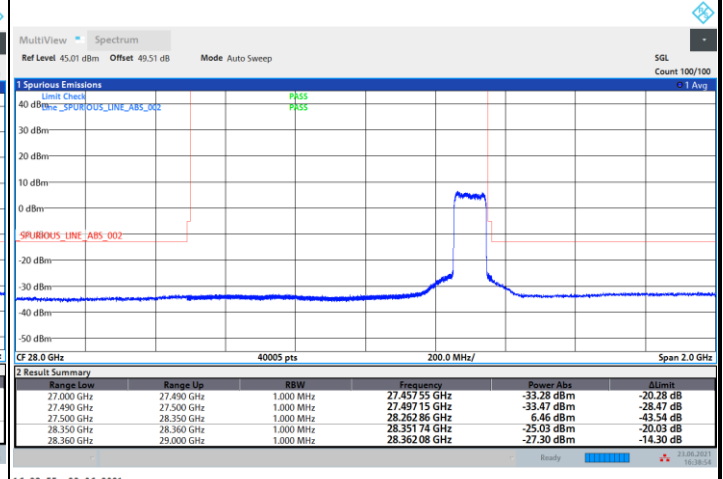
NR Band n261 / 100MHz / 16QAM

Lowest Band Edge / Full RB



16:25:33 23.06.2021

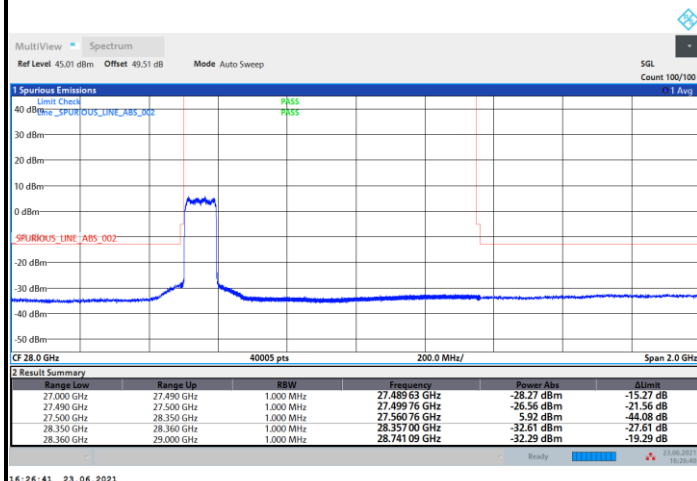
Highest Band Edge / Full RB



16:38:55 23.06.2021

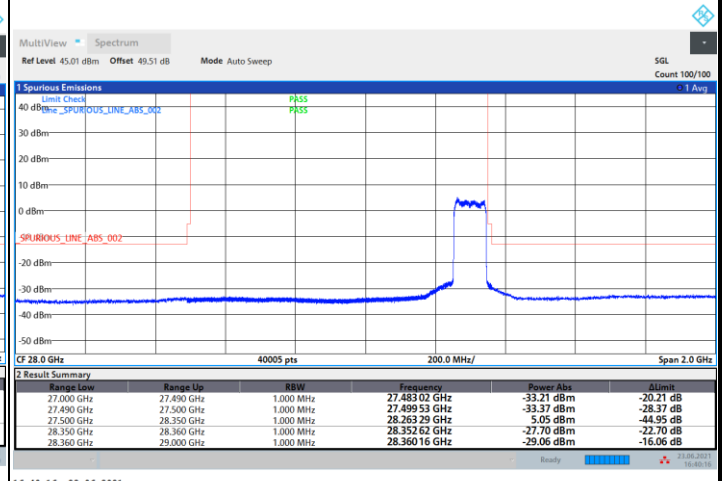
NR Band n261 / 100MHz / 64QAM

Lowest Band Edge / Full RB



16:26:41 23.06.2021

Highest Band Edge / Full RB



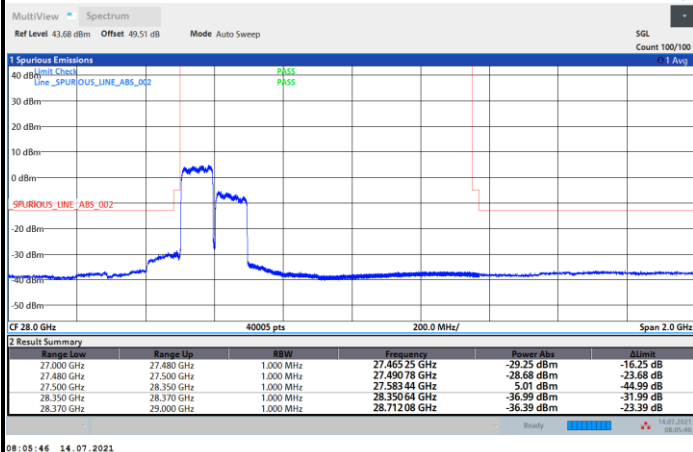
16:40:16 23.06.2021



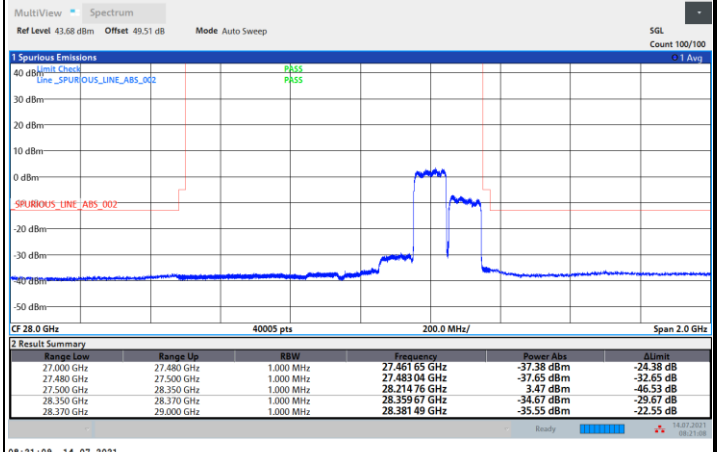
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / BPSK

Lowest Band Edge / Full RB

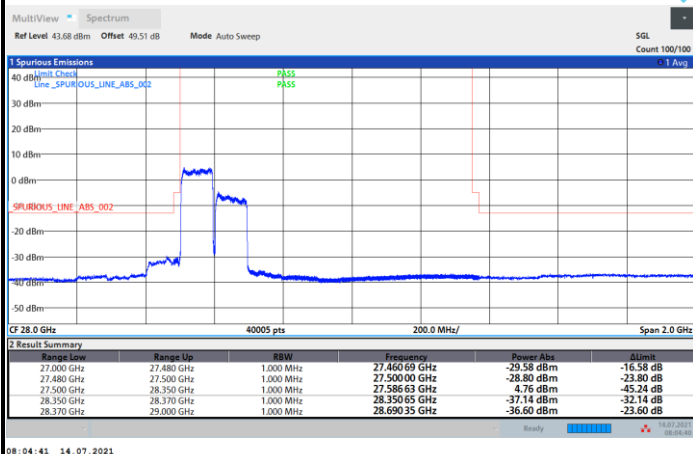


Highest Band Edge / Full RB

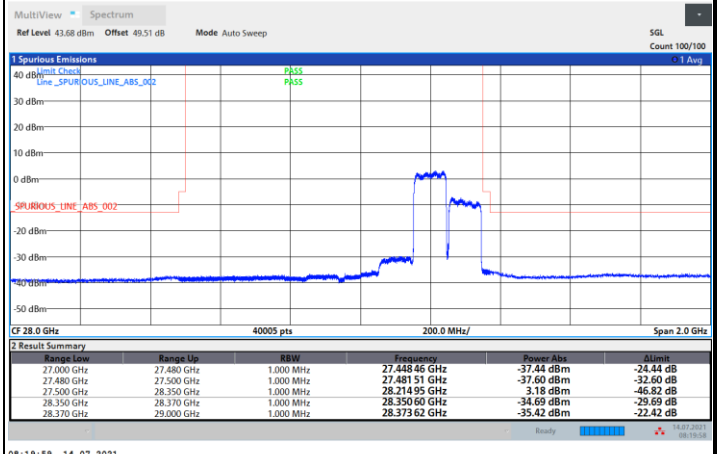


NR Band n261 / 200MHz / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

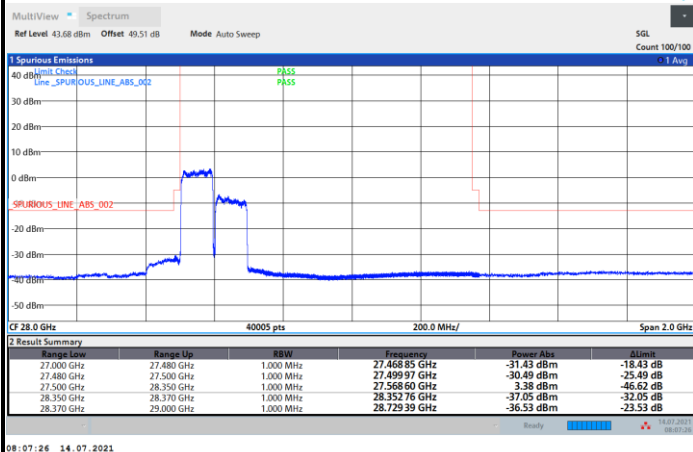




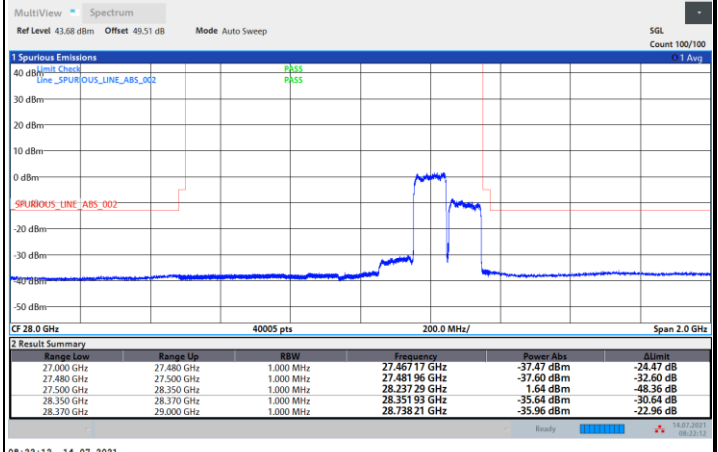
DFT-s-OFDM Module 0

NR Band n261 / 200MHz / 16QAM

Lowest Band Edge / Full RB

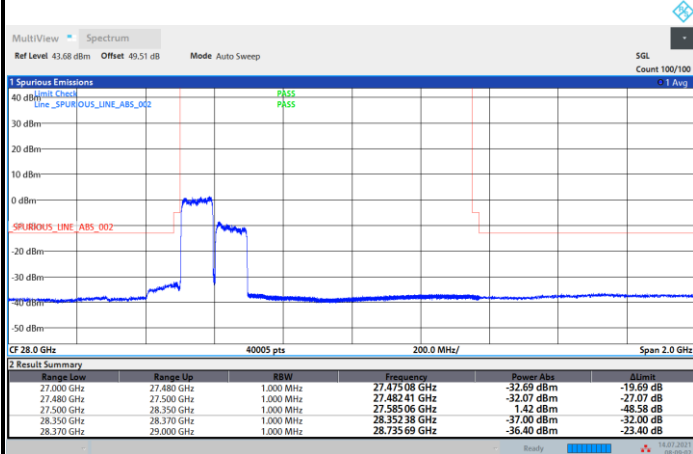


Highest Band Edge / Full RB



NR Band n261 / 200MHz / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

