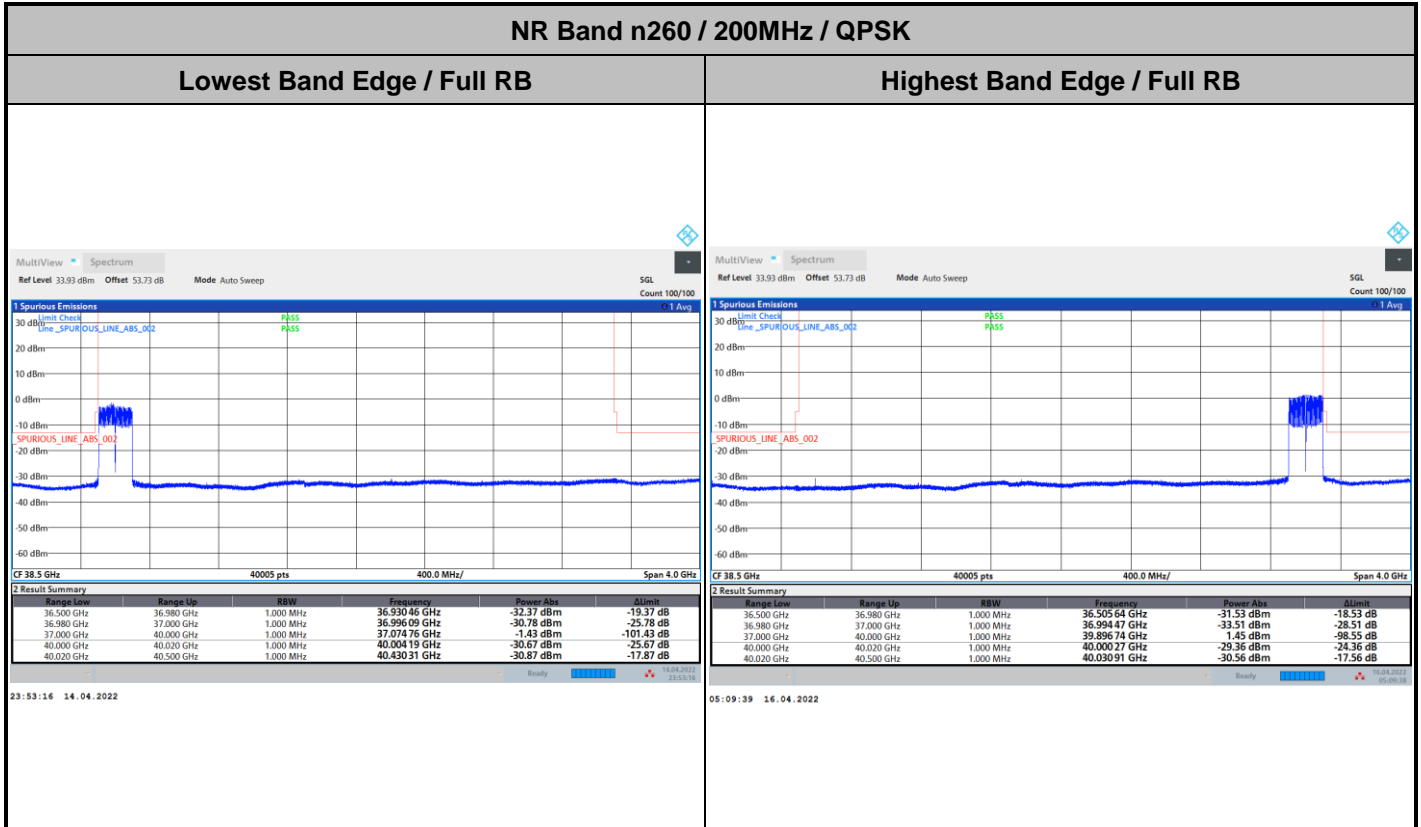




CP-OFDM Module 1

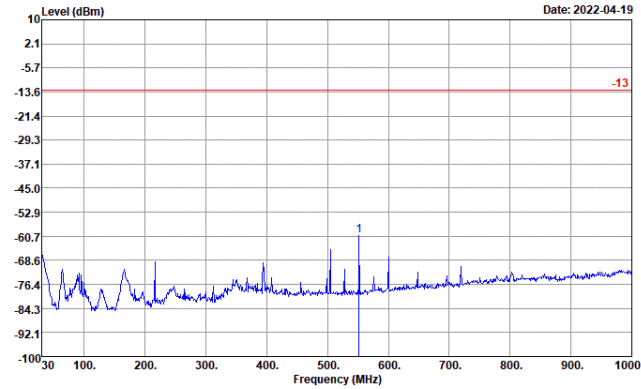




Spurious Emission

NR Band n260 (30MHz-1GHz)

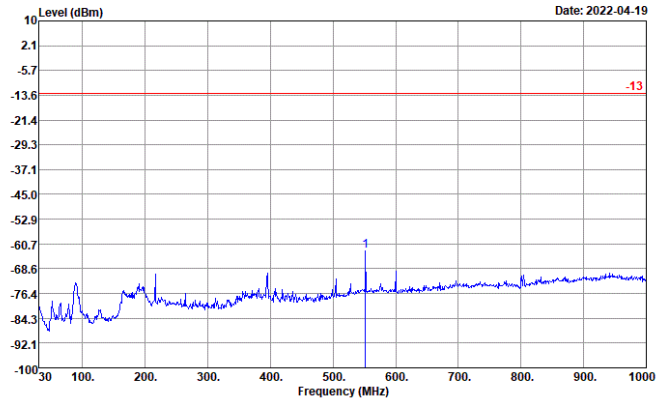
Horizontal



Site : 03CH19-HY
 Condition : -13 ERP EIRP_20210305 HORIZONTAL
 Project : ID2414
 : n260 MI

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1	551.86	-60.47	-13.00	-60.71

Vertical



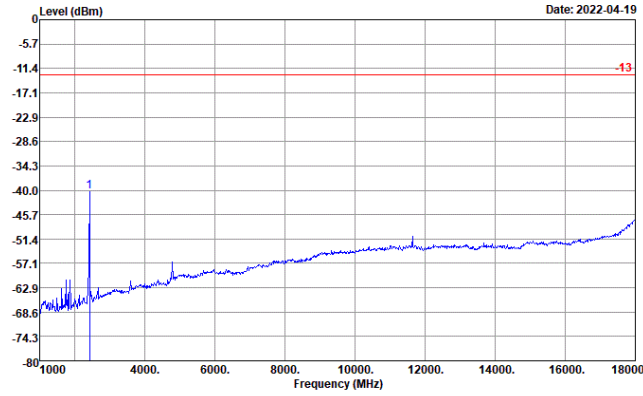
Site : 03CH19-HY
 Condition : -13 ERP EIRP_20210305 VERTICAL
 Project : ID2414
 : n260 MI

Freq	Level	Over	Limit	Read
MHz	dBm	dB	dBm	dBm
1	551.86	-63.04	-13.00	-67.07



NR Band n260 (1GHz-18GHz)

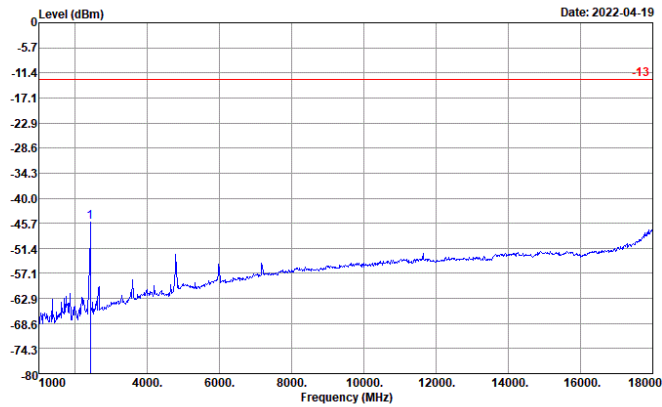
Horizontal



Site : 03CH19-HY
 Condition : -13 ERP EIRP_20210305 HORIZONTAL
 Project : 1D2414
 : n260 M1

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	2428.00	-40.24	-27.24	-13.00	-51.31

Vertical



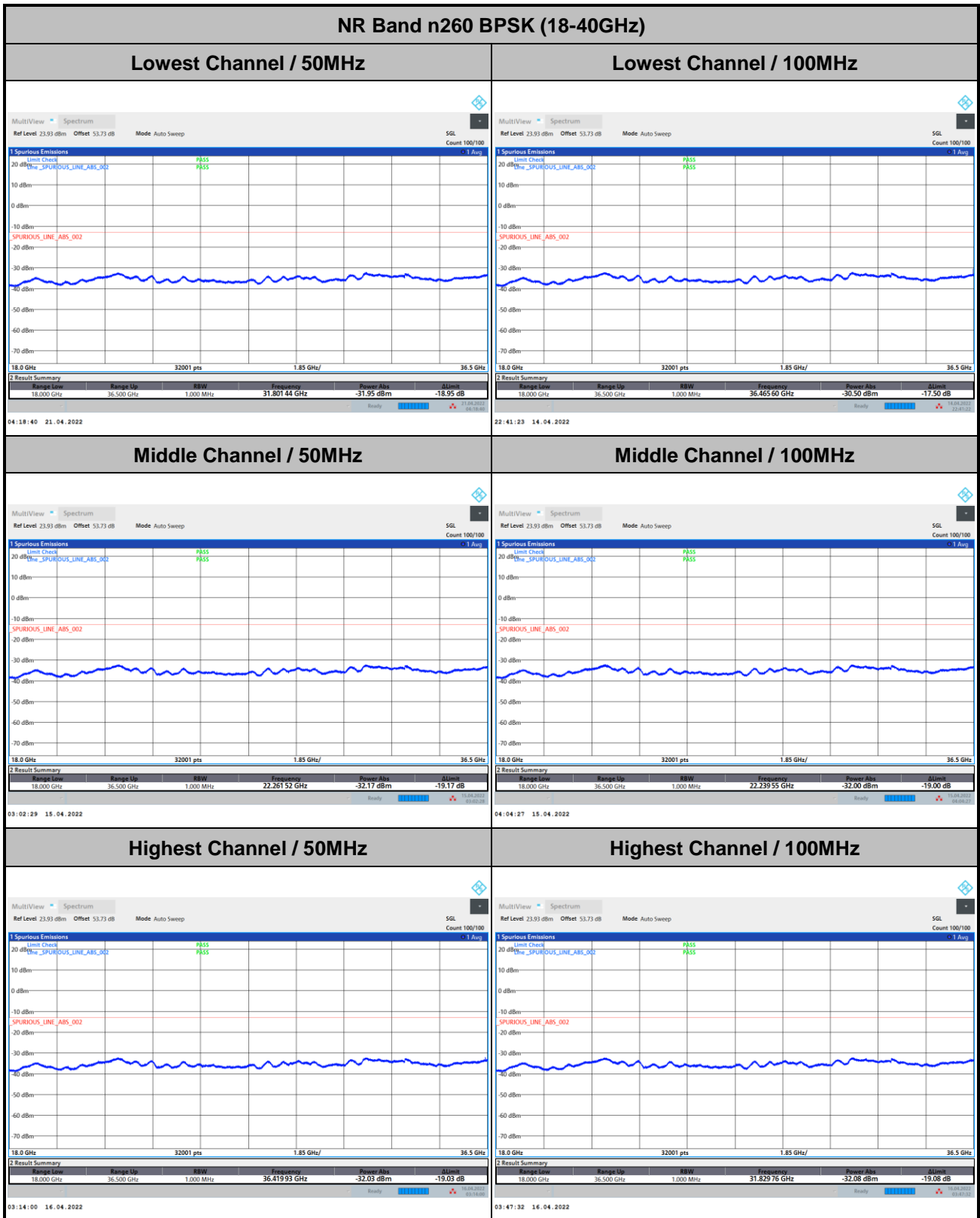
Site : 03CH19-HY
 Condition : -13 ERP EIRP_20210305 VERTICAL
 Project : 1D2414
 : n260 M1

Freq	Level	Over	Limit	Read	
MHz	dBm	dB	dBm	dBm	
1	2428.00	-45.37	-32.37	-13.00	-56.07



Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module 1



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



DFT-s-OFDM Module 1

NR Band n260 BPSK (18-40GHz)	
<p>Lowest Channel / 200MHz</p>	<p>intentionally blank</p>
<p>Middle Channel / 200MHz</p>	<p>intentionally blank</p>
<p>Highest Channel / 200MHz</p>	<p>intentionally blank</p>

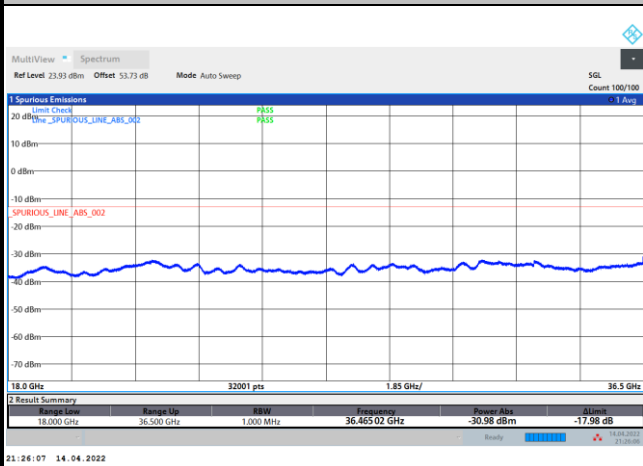
Remark: In band and out of band frequencies are omitted.



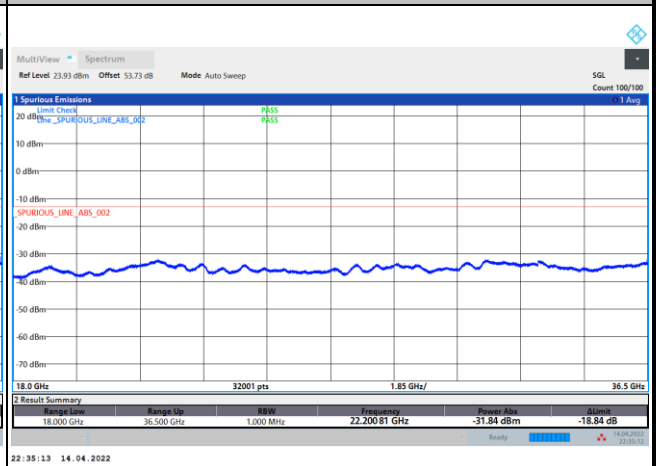
DFT-s-OFDM Module 1

NR Band n260 QPSK (18-40GHz)

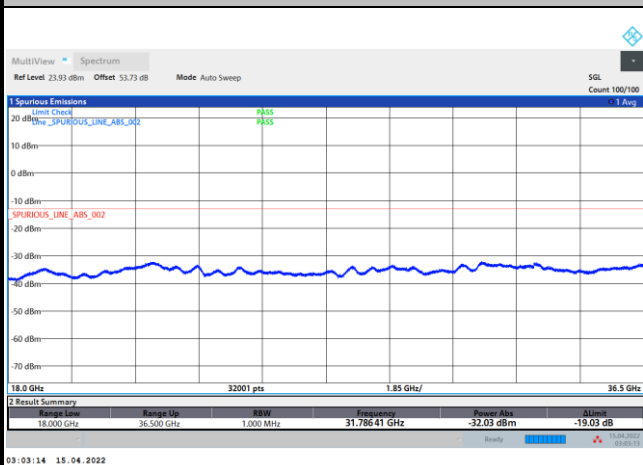
Lowest Channel / 50MHz



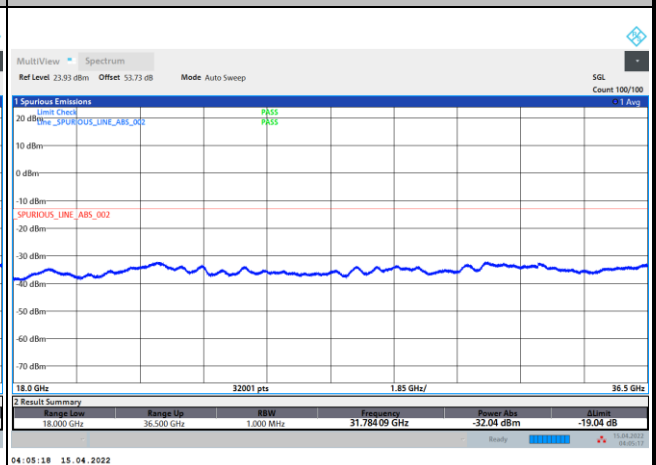
Lowest Channel / 100MHz



Middle Channel / 50MHz



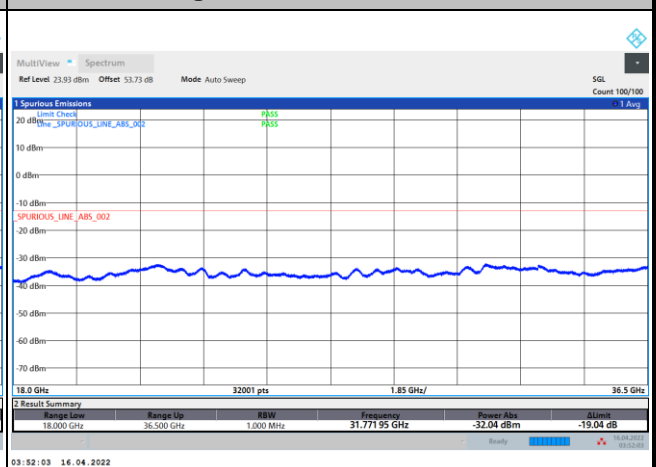
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



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



DFT-s-OFDM Module 1

NR Band n260 QPSK (18-40GHz)	
Lowest Channel / 200MHz	
<p>MultiView Spectrum Ref Level 23.93 dBm Offset 53.73 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check 20 dBm SPURIOUS_LINE_ABS_001 PASS 10 dBm 0 dBm -10 dBm -20 dBm SPURIOUS_LINE_ABS_002 -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm 18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <p>Result Summary Range Low Range Up RBW Frequency Power Abs Limit 18.000 GHz 36.500 GHz 1.000 MHz 31.760 39 GHz -32.00 dBm -19.00 dB</p> <p>23:40:32 14.04.2022</p>	intentionally blank
Middle Channel / 200MHz	
<p>MultiView Spectrum Ref Level 23.93 dBm Offset 53.73 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check 20 dBm SPURIOUS_LINE_ABS_001 PASS 10 dBm 0 dBm -10 dBm -20 dBm SPURIOUS_LINE_ABS_002 -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm 18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <p>Result Summary Range Low Range Up RBW Frequency Power Abs Limit 18.000 GHz 36.500 GHz 1.000 MHz 31.791 61 GHz -32.10 dBm -19.00 dB</p> <p>04:41:53 15.04.2022</p>	intentionally blank
Highest Channel / 200MHz	
<p>MultiView Spectrum Ref Level 23.93 dBm Offset 53.73 dB Mode Auto Sweep SGL Count 100/100</p> <p>Spurious Emissions Limit Check 20 dBm SPURIOUS_LINE_ABS_001 PASS 10 dBm 0 dBm -10 dBm -20 dBm SPURIOUS_LINE_ABS_002 -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm 18.0 GHz 32001 pts 1.85 GHz/ 36.5 GHz</p> <p>Result Summary Range Low Range Up RBW Frequency Power Abs Limit 18.000 GHz 36.500 GHz 1.000 MHz 31.799 70 GHz -32.14 dBm -19.10 dB</p> <p>05:07:20 16.04.2022</p>	intentionally blank

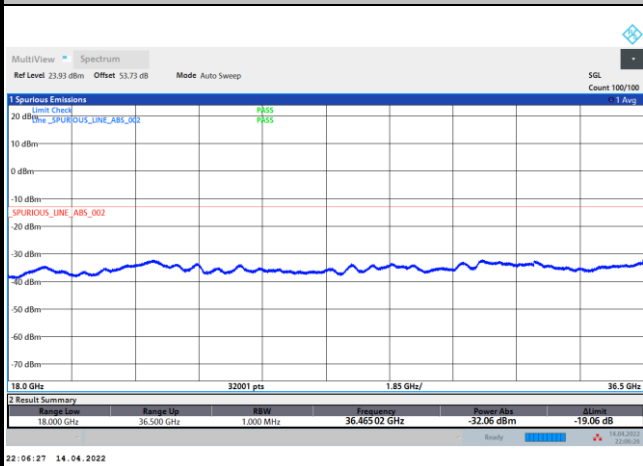
Remark: In band and out of band frequencies are omitted.



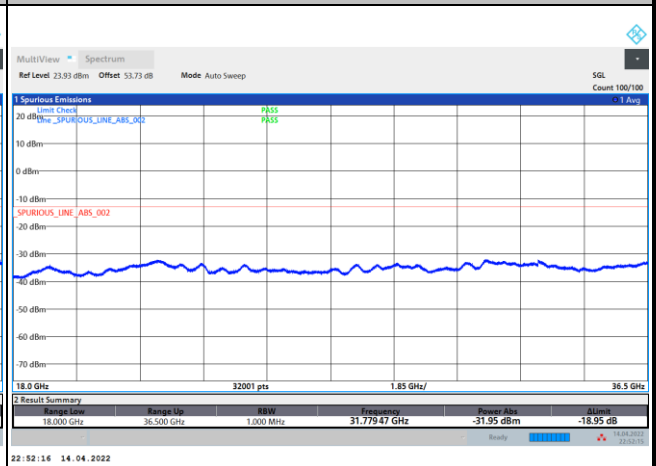
CP-OFDM Module 1

NR Band n260 QPSK (18-40GHz)

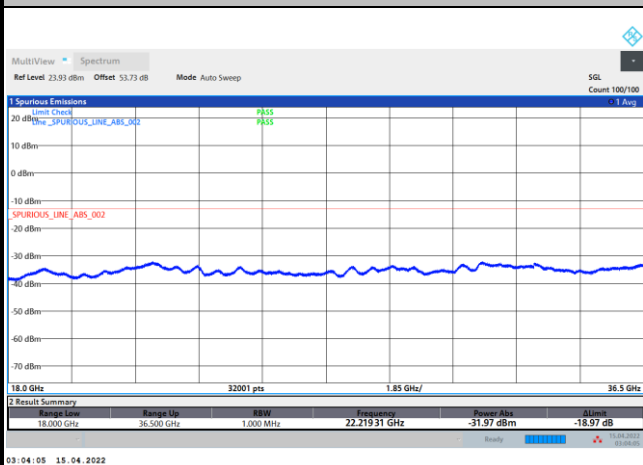
Lowest Channel / 50MHz



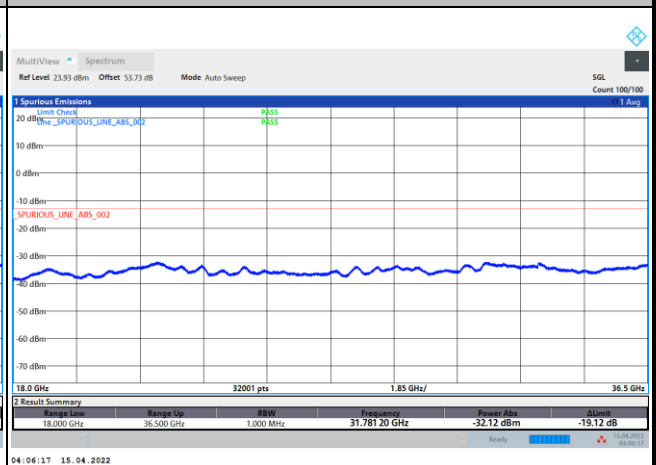
Lowest Channel / 100MHz



Middle Channel / 50MHz



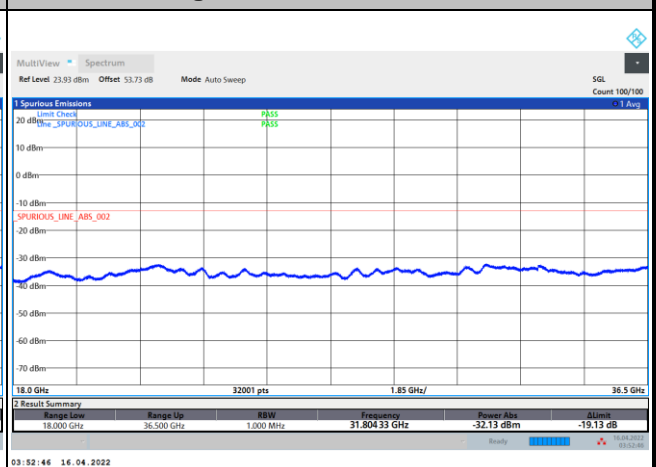
Middle Channel / 100MHz



Highest Channel / 50MHz



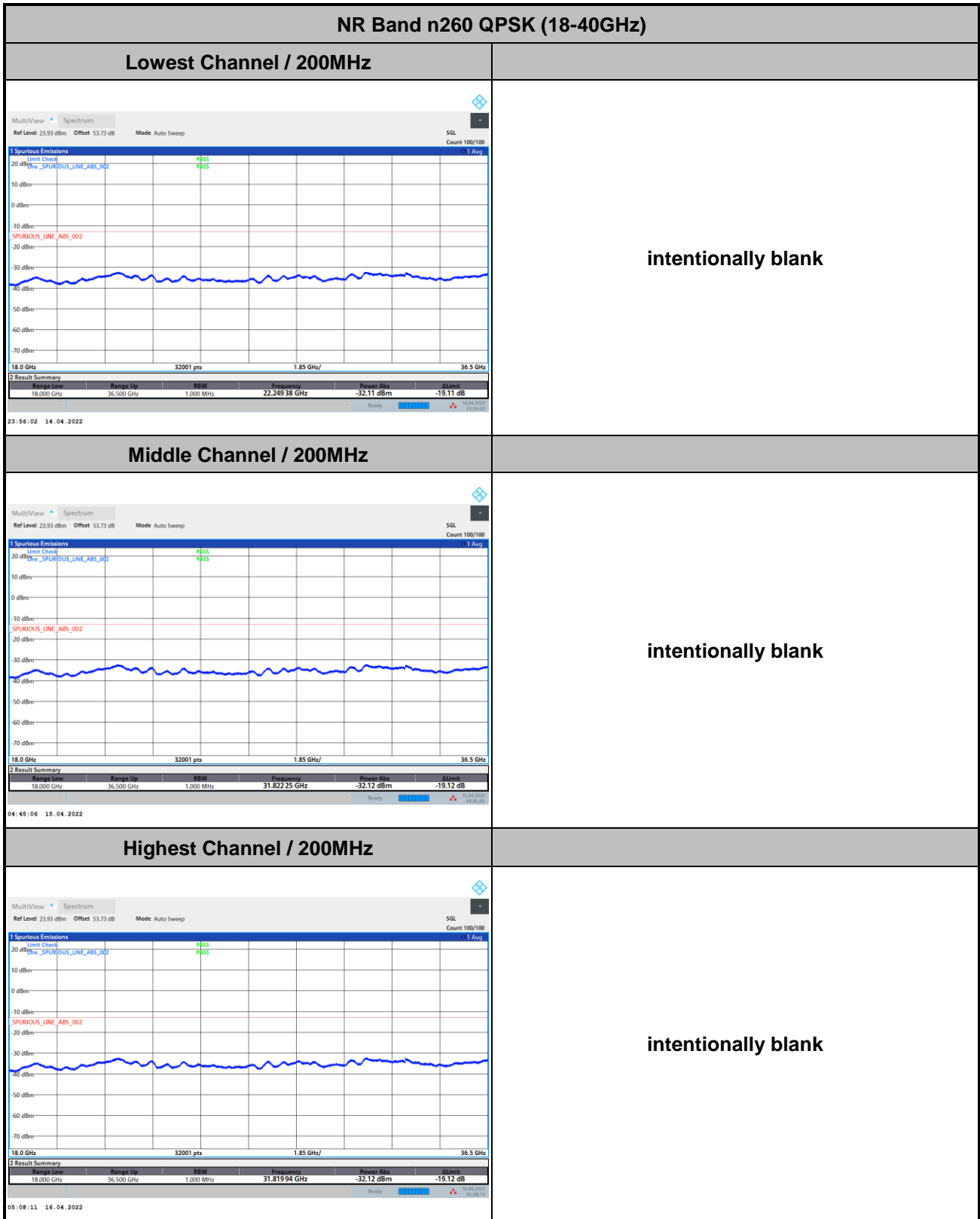
Highest Channel / 100MHz



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



CP-OFDM Module 1

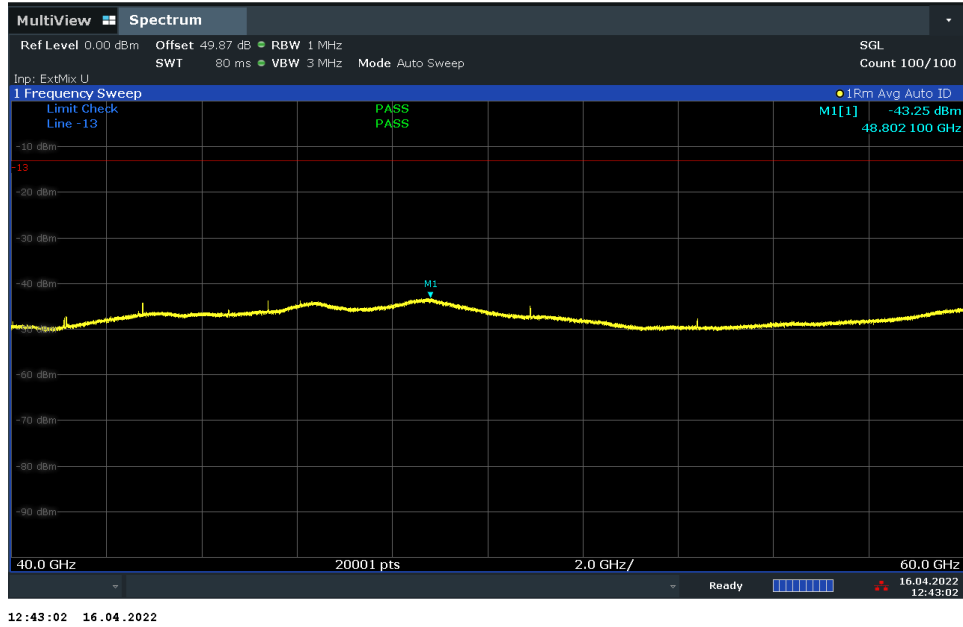


Remark: In band and out of band frequencies are omitted.



NR Band n260

(40GHz-60GHz)

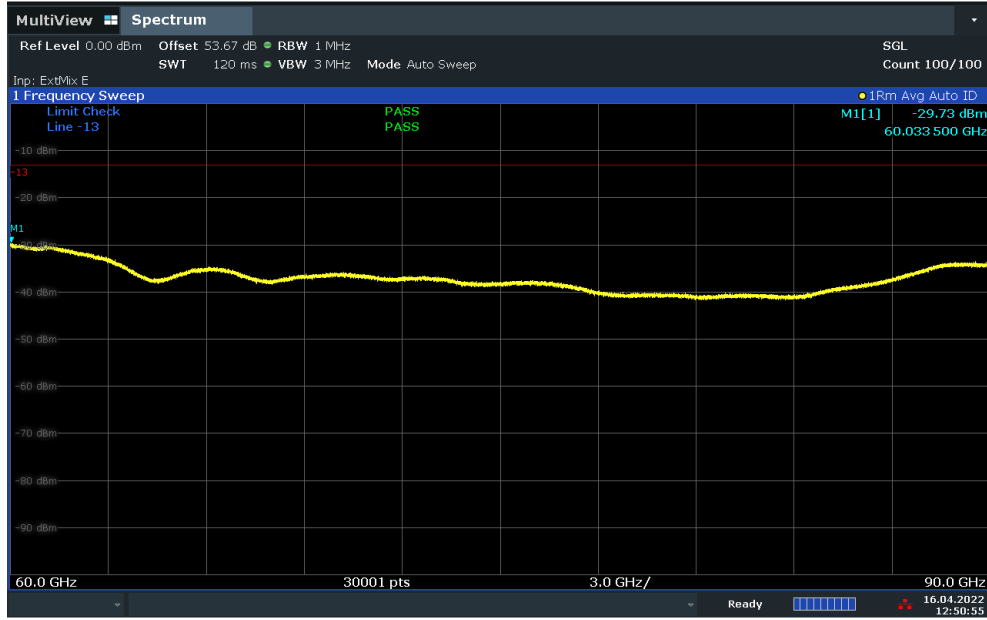


$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 43.1 + 0.54 + 107 + 20\log(1) - 104.8 + 4.03 = 49.87 \text{ (dB)}$$



NR Band n260

(60GHz-90GHz)



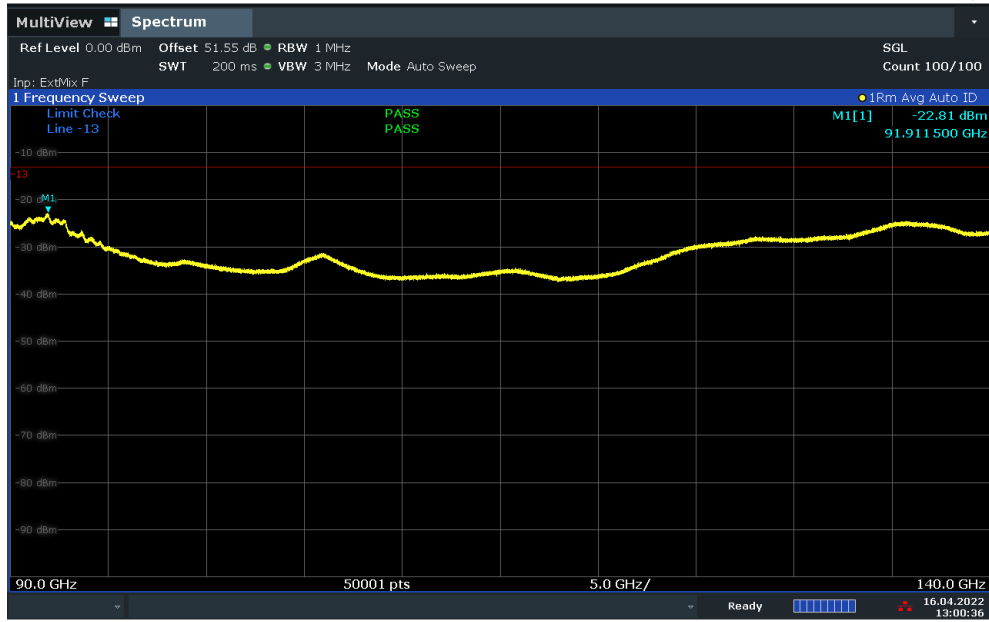
12:50:56 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 46.9 + 0.54 + 107 + 20\log(1) - 104.8 + 4.03 = 53.67 \text{ (dB)}$$



NR Band n260

(90GHz-140GHz)

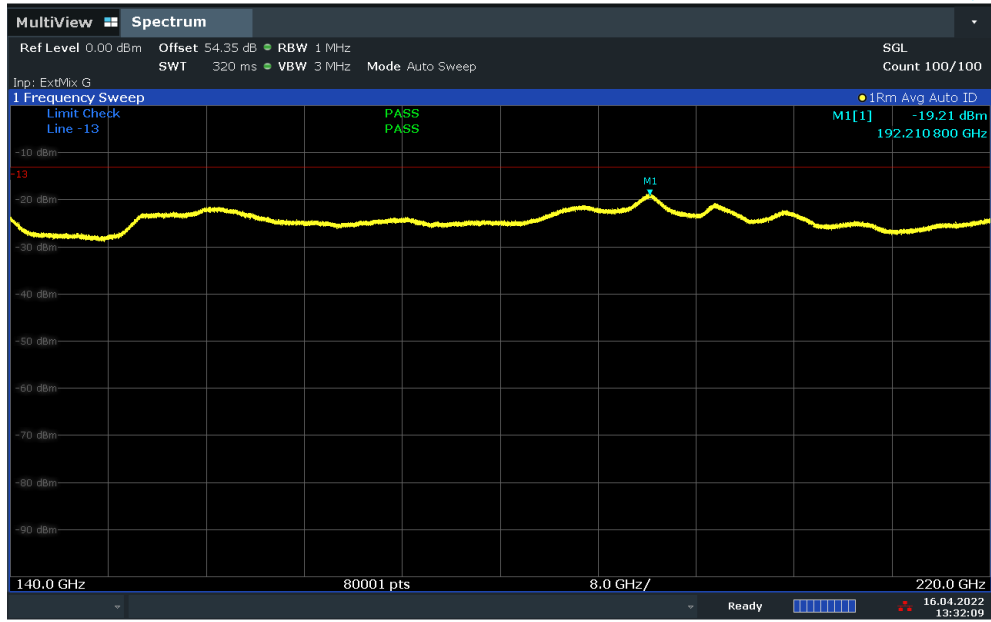


13:00:37 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 50.8 + 0.54 + 107 + 20\log(0.5) - 104.8 + 4.03 = 51.55 \text{ (dB)}$$

NR Band n260

(140GHz-200GHz)



13:32:09 16.04.2022

$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$

$$= 53.6 + 0.54 + 107 + 20\log(0.5) - 104.8 + 4.03 = 54.35 \text{ (dB)}$$



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	38.4998	200.000	5.195	PASS
40	Normal Voltage	38.4998	200.000	5.195	
30	Normal Voltage	38.49985	150.000	3.896	
20(Ref.)	Normal Voltage	38.5	0.000	0.000	
10	Normal Voltage	38.49985	150.000	3.896	
0	Normal Voltage	38.50005	-50.000	1.299	
-10	Normal Voltage	38.5001	-100.000	2.597	
-20	Normal Voltage	38.50015	-150.000	3.896	
-30	Normal Voltage	38.50025	-250.000	6.494	
20	Maximum Voltage	38.4999	100.000	2.597	
20	Normal Voltage	38.49995	50.000	1.299	
20	Battery End Point	38.50005	-50.000	1.299	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.30 V. ; Maximum Voltage =4.25 V.
2. The frequency fundamental emissions stay within the operation band.



NR Band n261 Module 0 AG0+1

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	46.16	46.02	45.98	46.04	92.01	91.99	91.94	91.67	190.65	190.96	190.76	190.56
Middle CH	46.22	46.21	46.09	46.23	91.77	91.95	91.92	91.74	190.79	190.68	190.55	190.41
Highest CH	46.35	46.24	46.13	46.14	92.02	91.82	91.82	91.78	190.34	190.42	190.22	190.51

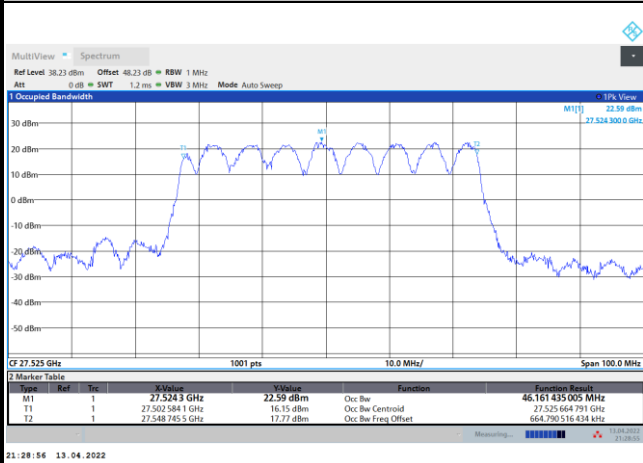
Mode	CP-OFDM Module 0 NR Band n261 : 99%OBW(MHz)					
BW	50MHz		100MHz		200MHz	
Mod.	QPSK		QPSK		QPSK	
Lowest CH	46.08		93.49		192.22	
Middle CH	46.24		93.79		192.22	
Highest CH	46.14		93.94		192.34	



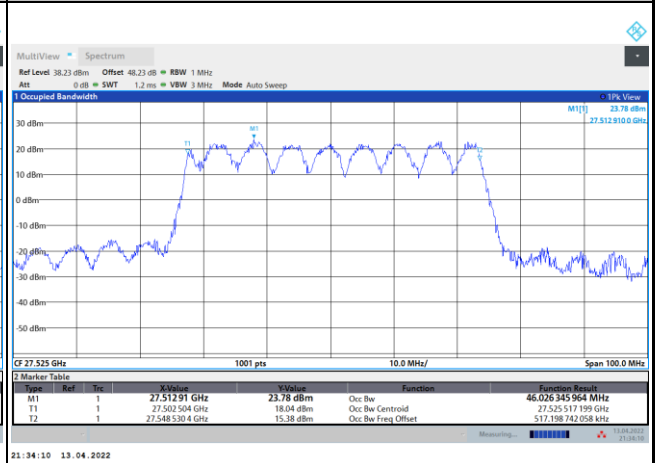
DFT-s-OFDM Module 0

NR Band n261

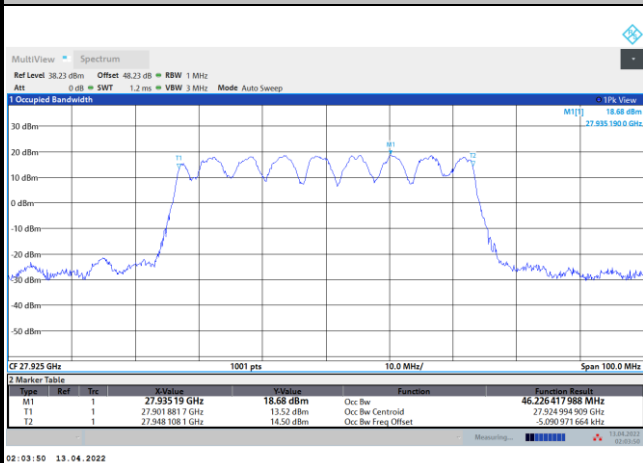
Lowest Channel / 50MHz / BPSK



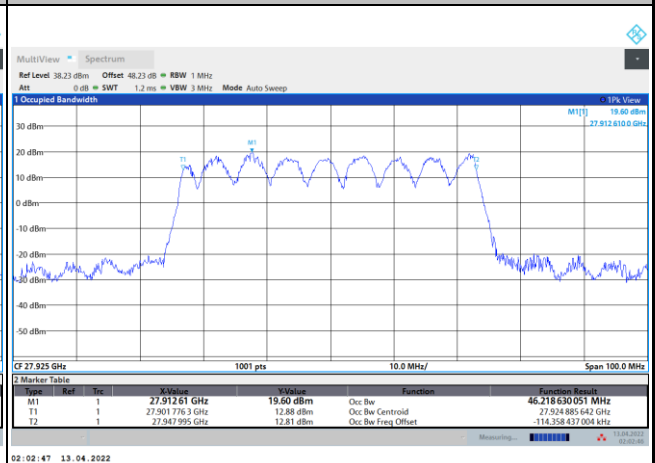
Lowest Channel / 50MHz / QPSK



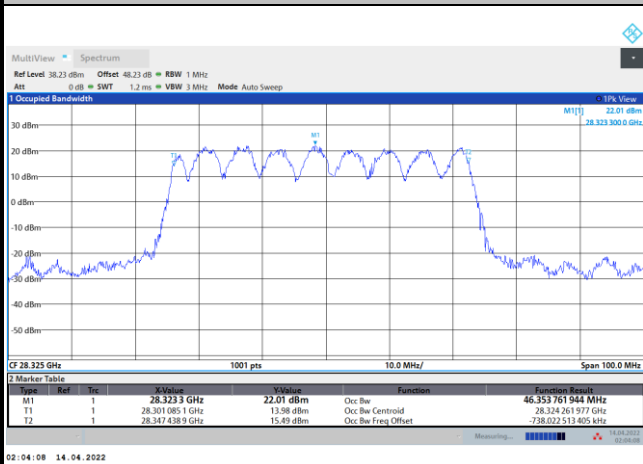
Middle Channel / 50MHz / BPSK



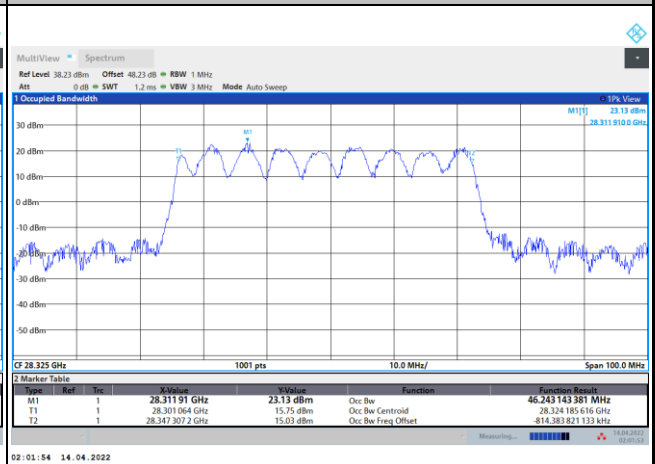
Middle Channel / 50MHz / QPSK



Highest Channel / 50MHz / BPSK



Highest Channel / 50MHz / QPSK

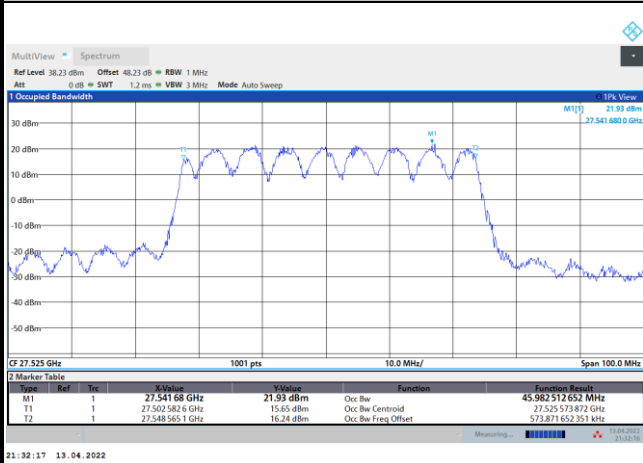




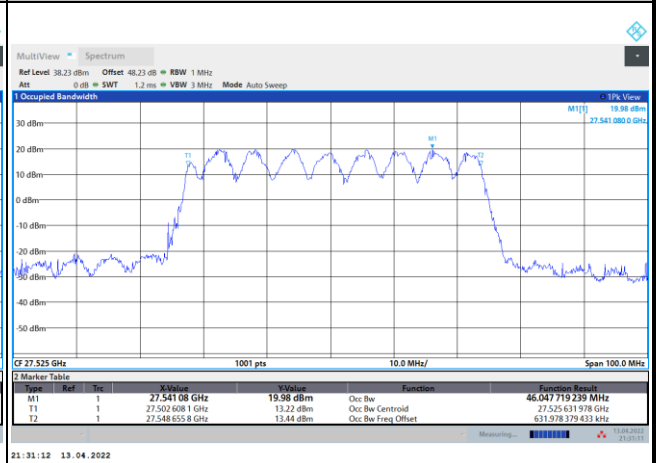
DFT-s-OFDM Module 0

NR Band n261

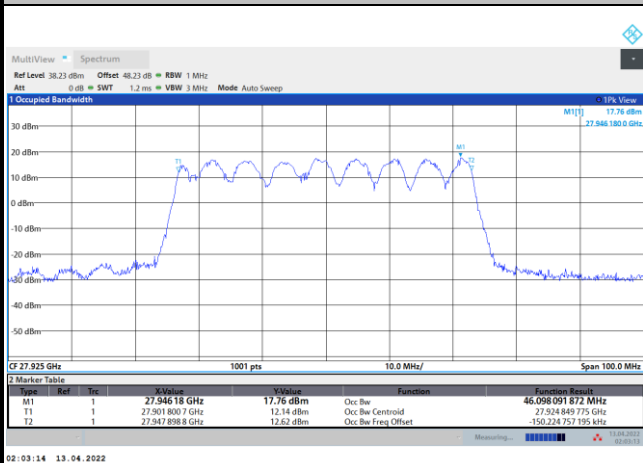
Lowest Channel / 50MHz / 16QAM



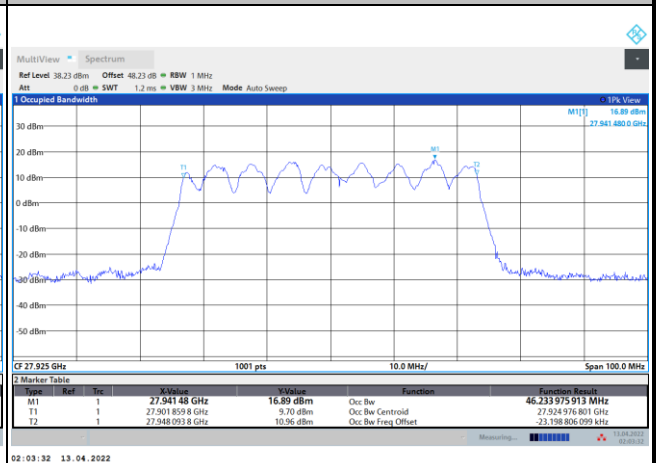
Lowest Channel / 50MHz / 64QAM



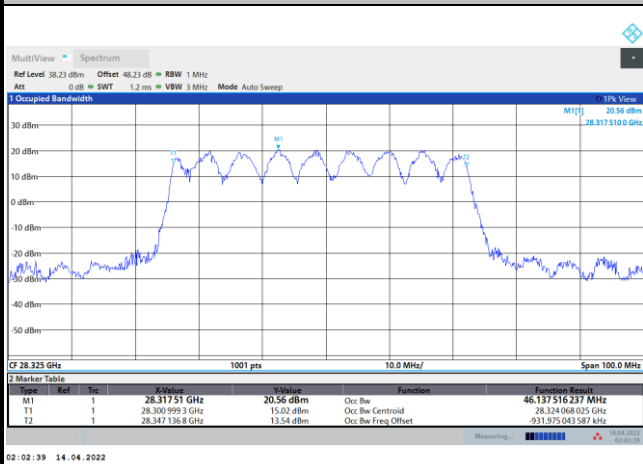
Middle Channel / 50MHz / 16QAM



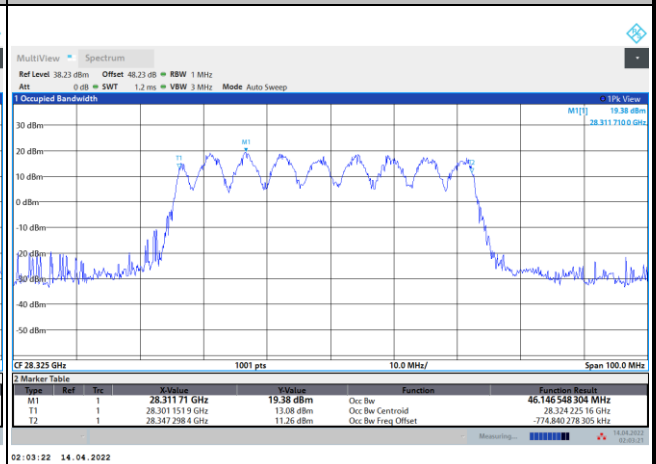
Middle Channel / 50MHz / 64QAM



Highest Channel / 50MHz / 16QAM



Highest Channel / 50MHz / 64QAM

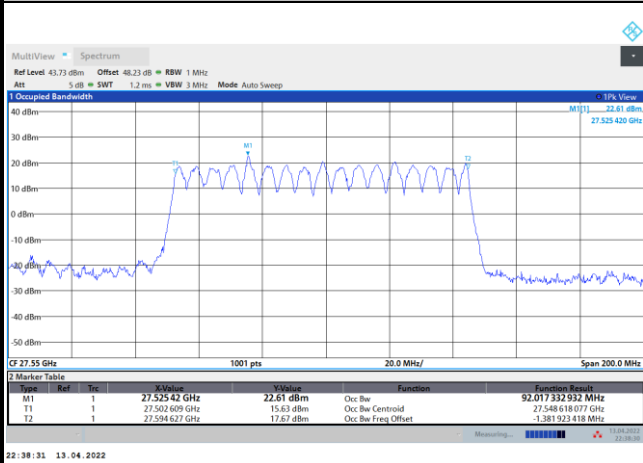




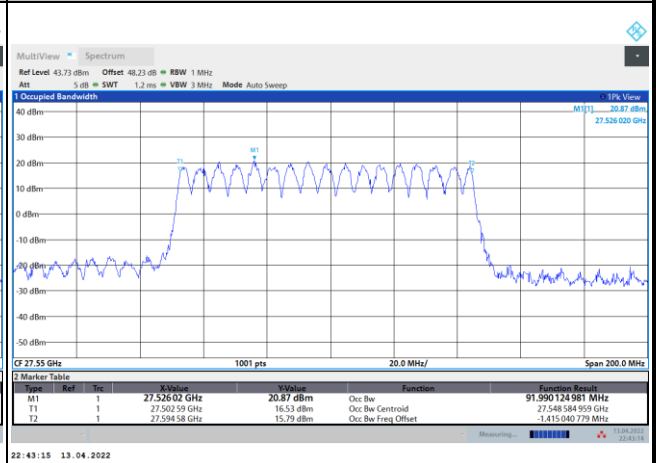
DFT-s-OFDM Module 0

NR Band n261

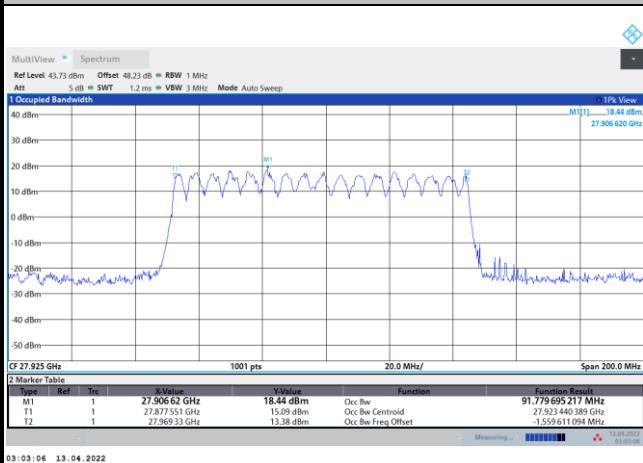
Lowest Channel / 100MHz / BPSK



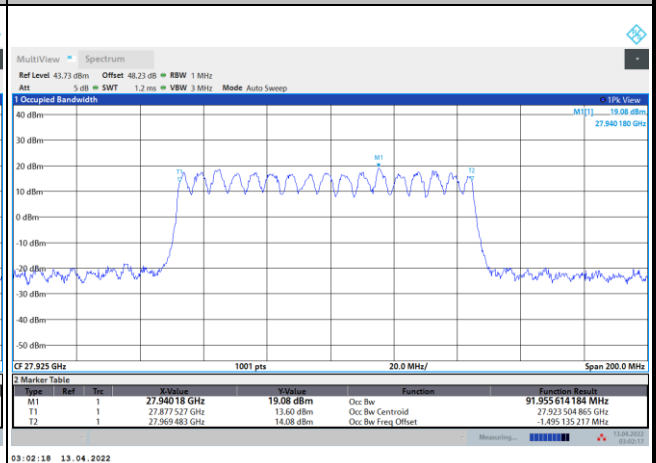
Lowest Channel / 100MHz / QPSK



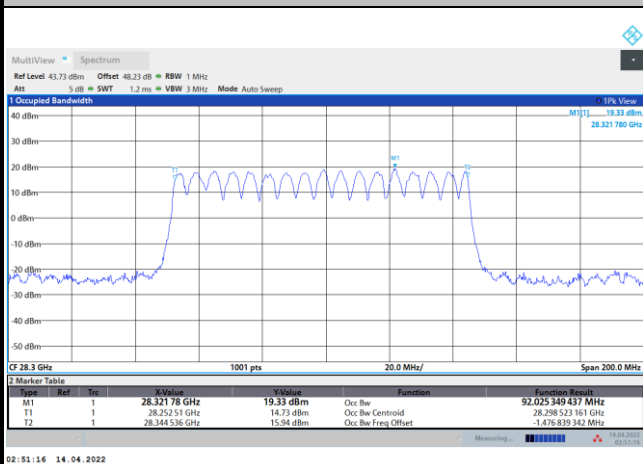
Middle Channel / 100MHz / BPSK



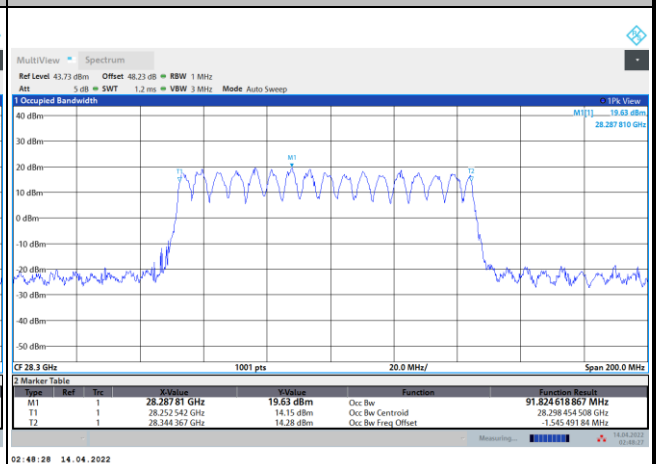
Middle Channel / 100MHz / QPSK



Highest Channel / 100MHz / BPSK



Highest Channel / 100MHz / QPSK

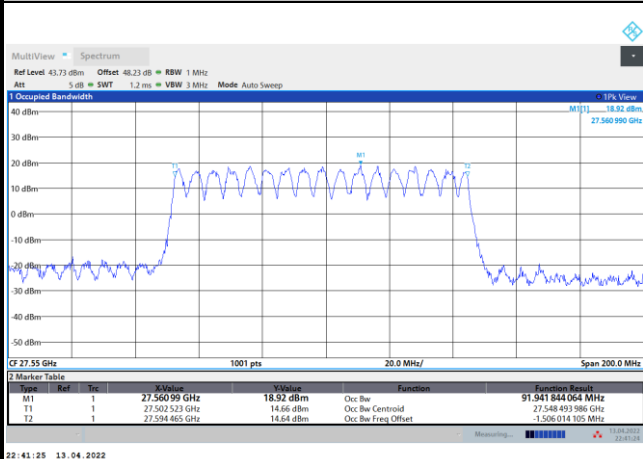




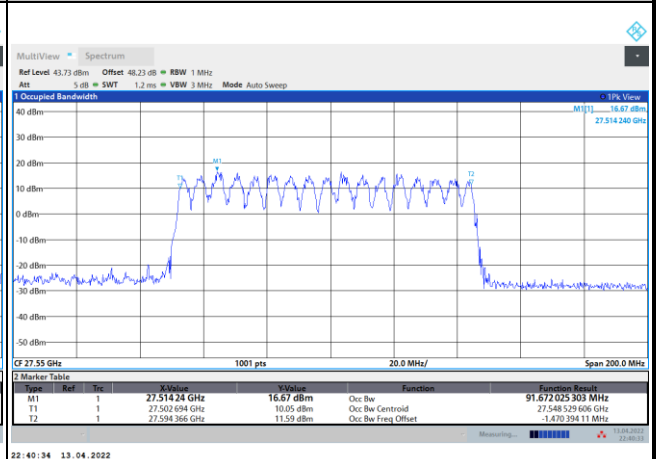
DFT-s-OFDM Module 0

NR Band n261

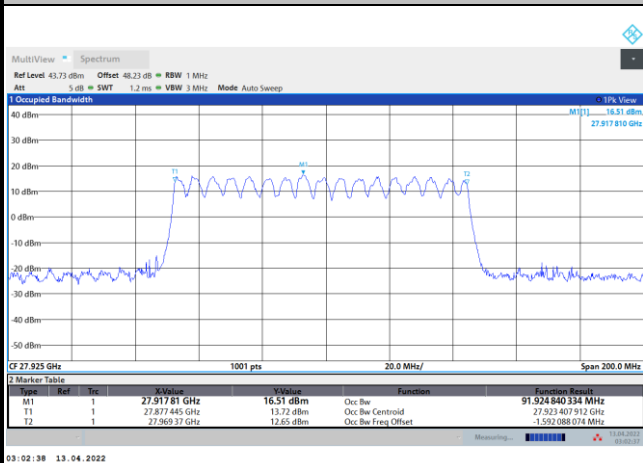
Lowest Channel / 100MHz / 16QAM



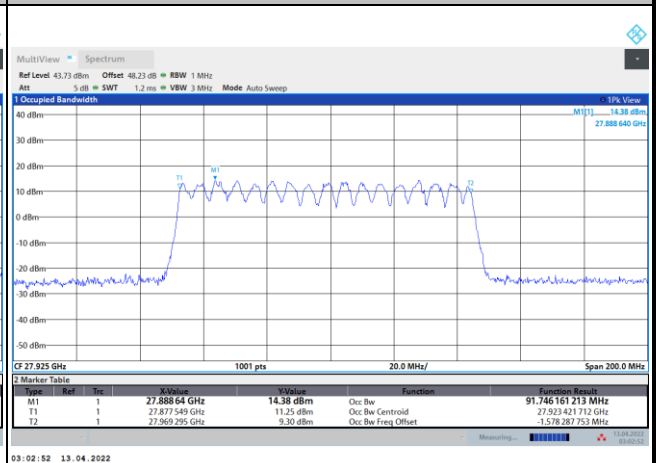
Lowest Channel / 100MHz / 64QAM



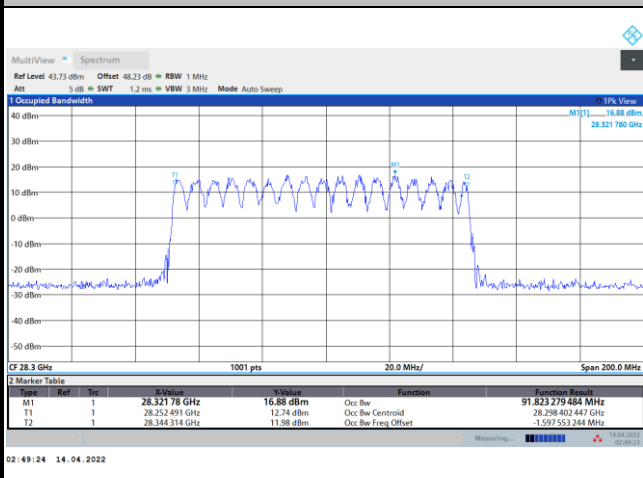
Middle Channel / 100MHz / 16QAM



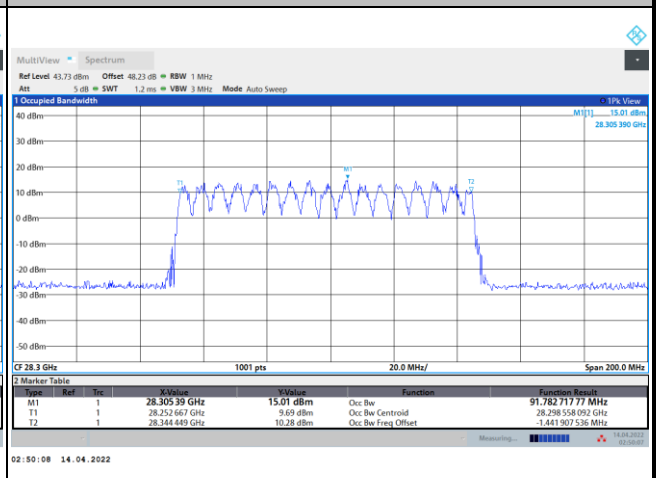
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

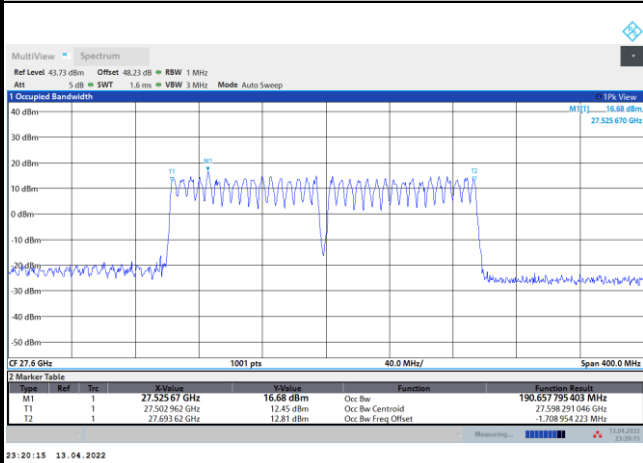




DFT-s-OFDM Module 0

NR Band n261

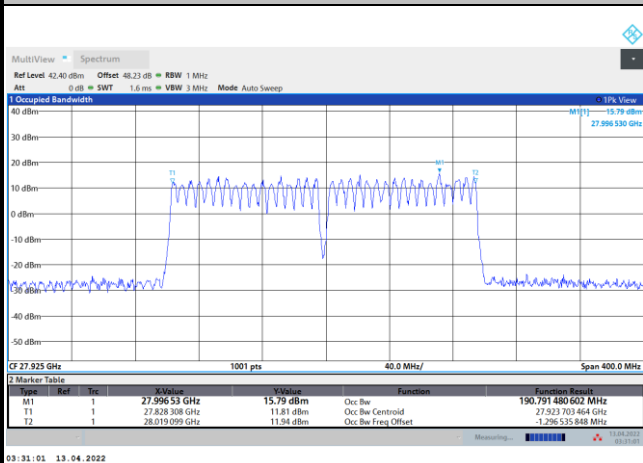
Lowest Channel / 200MHz / BPSK



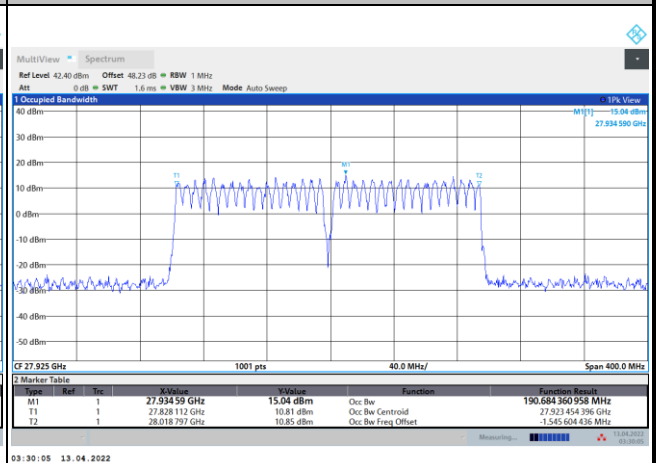
Lowest Channel / 200MHz / QPSK



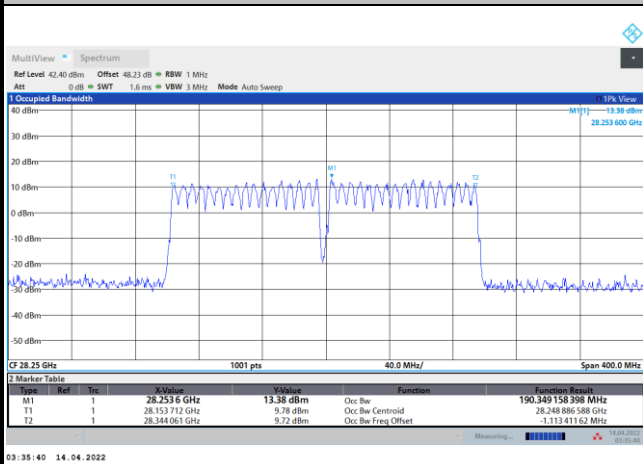
Middle Channel / 200MHz / BPSK



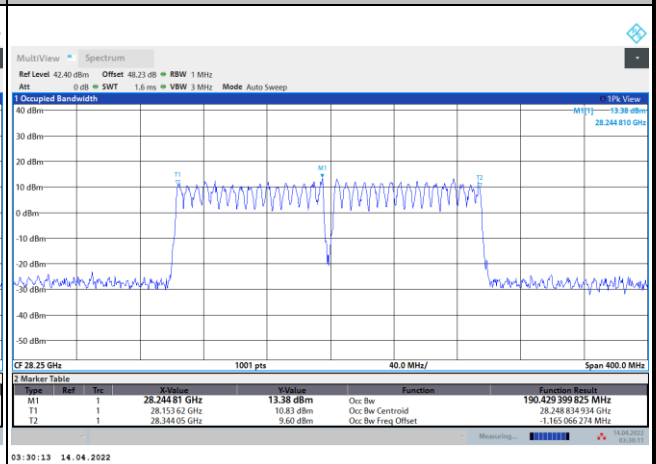
Middle Channel / 200MHz / QPSK



Highest Channel / 200MHz / BPSK



Highest Channel / 200MHz / QPSK

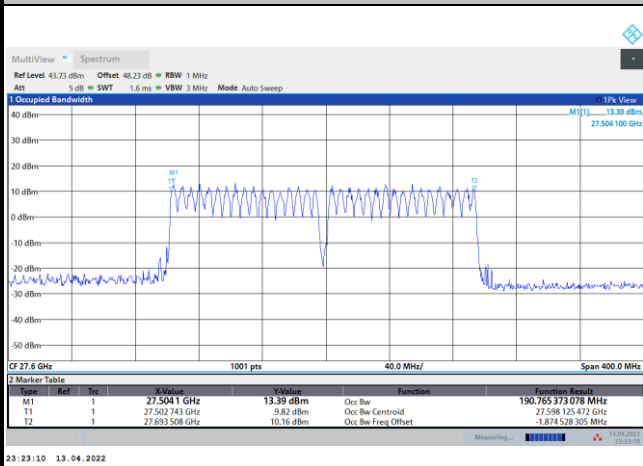




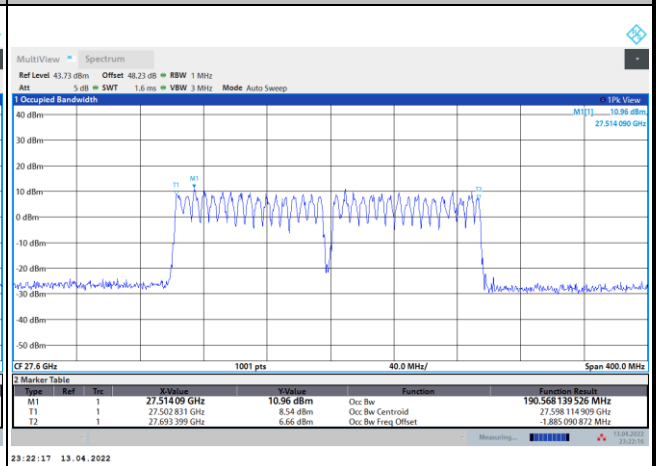
DFT-s-OFDM Module 0

NR Band n261

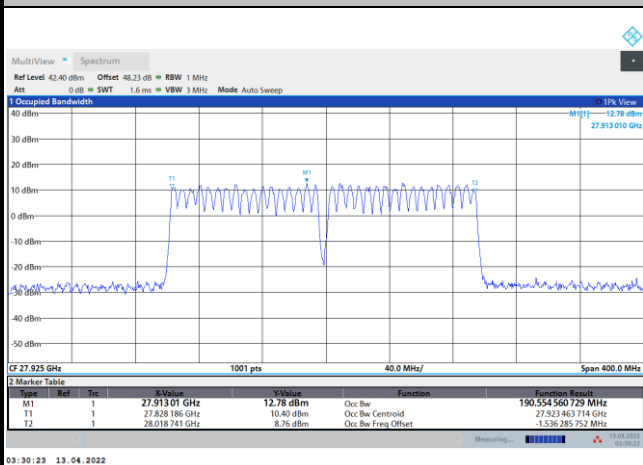
Lowest Channel / 200MHz / 16QAM



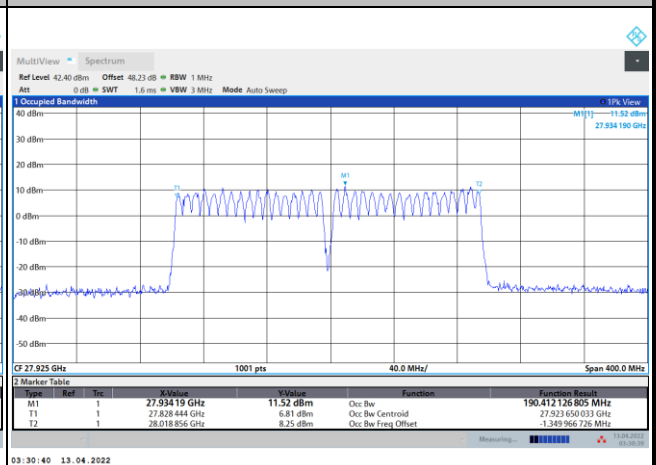
Lowest Channel / 200MHz / 64QAM



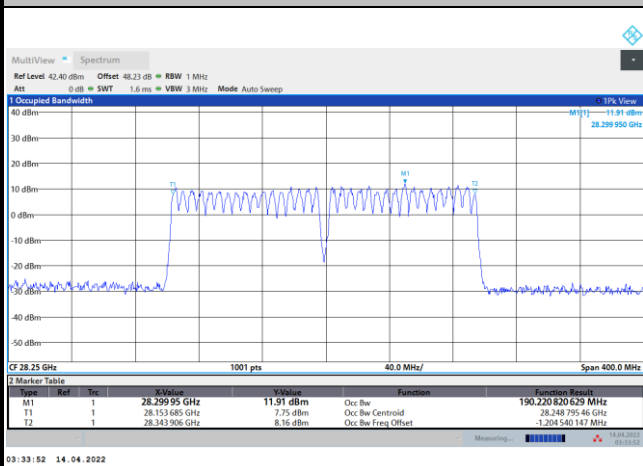
Middle Channel / 200MHz / 16QAM



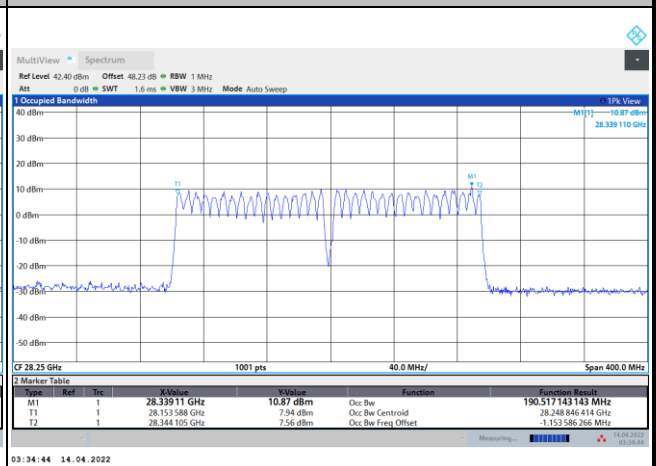
Middle Channel / 200MHz / 64QAM



Highest Channel / 200MHz / 16QAM



Highest Channel / 200MHz / 64QAM

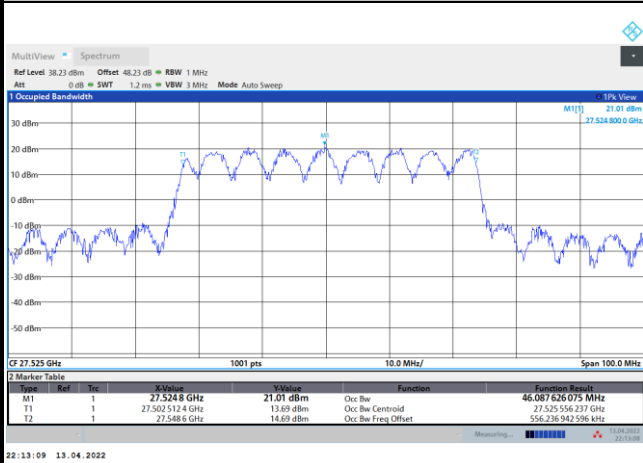




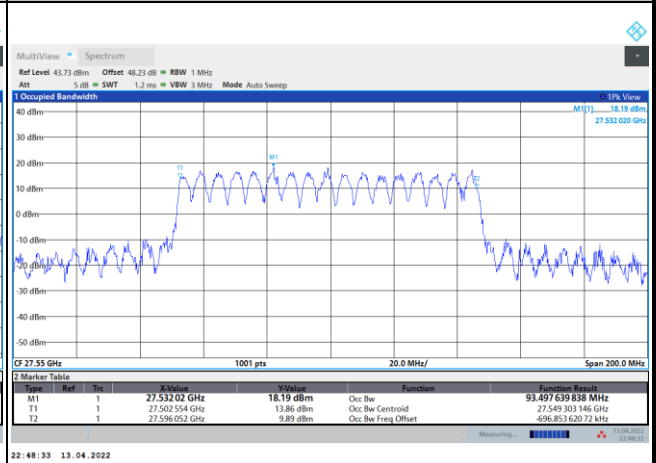
CP-OFDM Module 0

NR Band n261

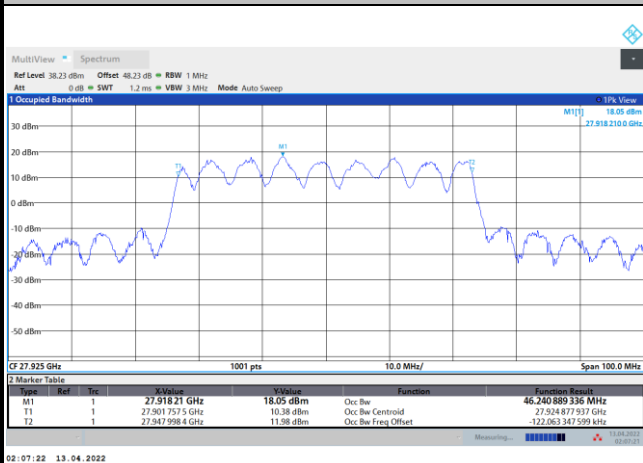
Lowest Channel / 50MHz / QPSK



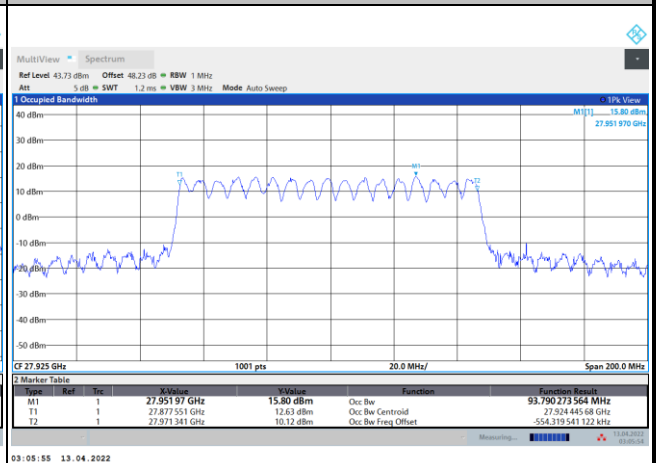
Lowest Channel / 100MHz / QPSK



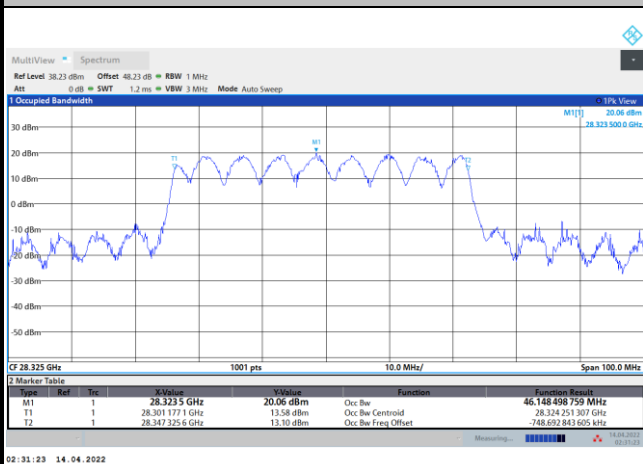
Middle Channel / 50MHz / QPSK



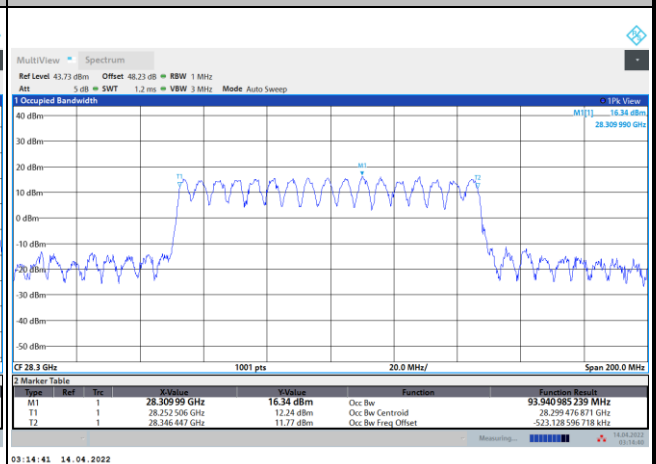
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

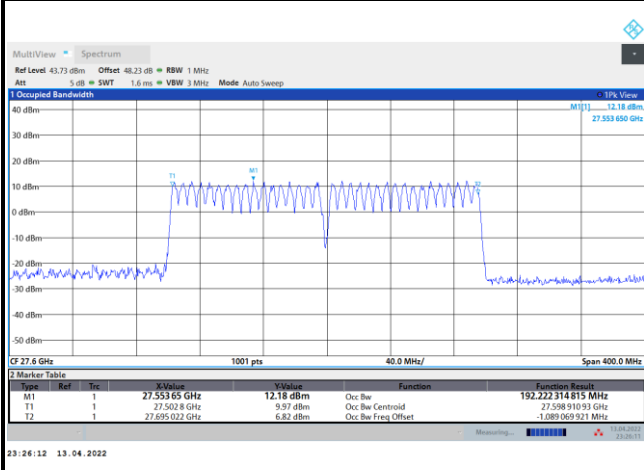




CP-OFDM Module 0

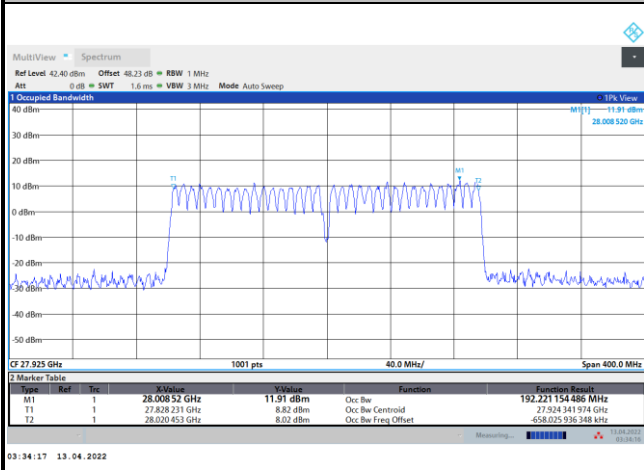
NR Band n261

Lowest Channel / 200MHz / QPSK



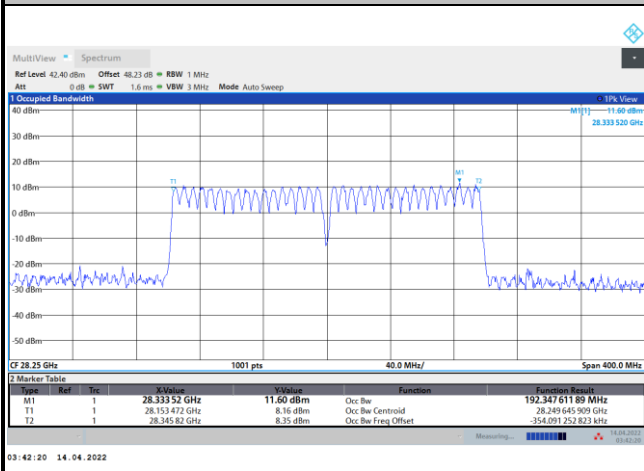
intentionally blank

Middle Channel / 200MHz / QPSK



intentionally blank

Highest Channel / 200MHz / QPSK



intentionally blank



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	-12.62	-11.83	-13.67	-17.78	-8.87	-8.12	-9.37	-11.82	-12.33	-11.78	-16.18	-22.87
	>10%OB	≤ -13	-26.95	-24.95	-24.49	-30.04	-31.76	-32.67	-32.32	-32.92	-14.86	-14.62	-19.68	-31.87
High CH	0~10%OB	≤ -5	-16.00	-15.45	-17.62	-18.82	-17.33	-18.91	-18.47	-20.97	-24.44	-24.55	-25.03	-27.72
	>10%OB	≤ -13	-27.05	-25.52	-27.20	-29.53	-33.31	-33.38	-33.31	-33.38	-25.35	-26.89	-28.40	-31.02
Result			Compliance											

Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) 1 RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			QPSK				QPSK				QPSK			
Low CH	0~10%OB	≤ -5	-19.01				-9.30				-15.60			
	>10%OB	≤ -13	-30.96				-30.15				-15.78			
High CH	0~10%OB	≤ -5	-17.00				-21.65				-24.51			
	>10%OB	≤ -13	-29.09				-33.56				-25.97			
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	-24.25	-24.95	-27.27	-27.77	-21.86	-23.56	-24.21	-27.31	-28.00	-24.73	-32.42	-33.08
	>10%OB	≤ -13	-26.42	-25.51	-30.21	-32.27	-27.50	-26.48	-28.97	-30.80	-30.35	-29.82	-36.71	-37.93
High CH	0~10%OB	≤ -5	-27.36	-25.82	-27.32	-30.41	-28.41	-27.42	-30.18	-32.91	-34.16	-34.13	-36.55	-37.57
	>10%OB	≤ -13	-29.77	-27.81	-31.03	-34.24	-31.18	29.28	-31.10	-33.66	-34.19	-34.55	-37.10	-37.53
Result			Compliance											

Mode			CP-OFDM Module 0 NR Band n261 : BE (dBm) Full RB											
BW			50MHz				100MHz				200MHz			
Limit (dBm)			QPSK				QPSK				QPSK			
Low CH	0~10%OB	≤ -5	-21.67				-24.18				-30.55			
	>10%OB	≤ -13	-24.65				-26.98				-34.47			
High CH	0~10%OB	≤ -5	-24.24				-26.39				-35.04			
	>10%OB	≤ -13	-28.01				-27.96				-36.98			
Result			Compliance											

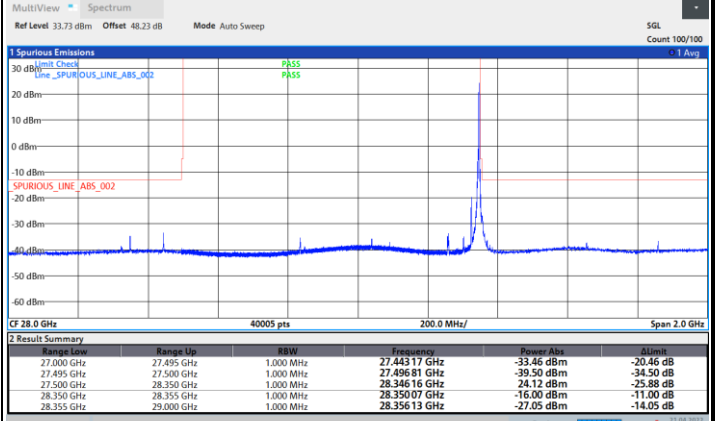
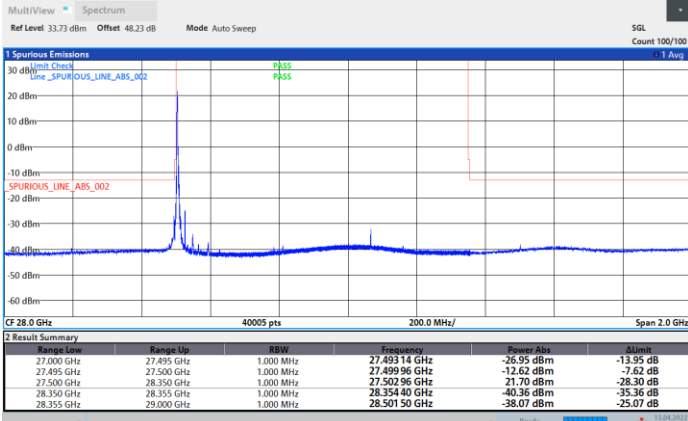


DFT-s-OFDM Module 0

NR Band n261 / 50MHz / BPSK

Lowest Band Edge / 1 RB

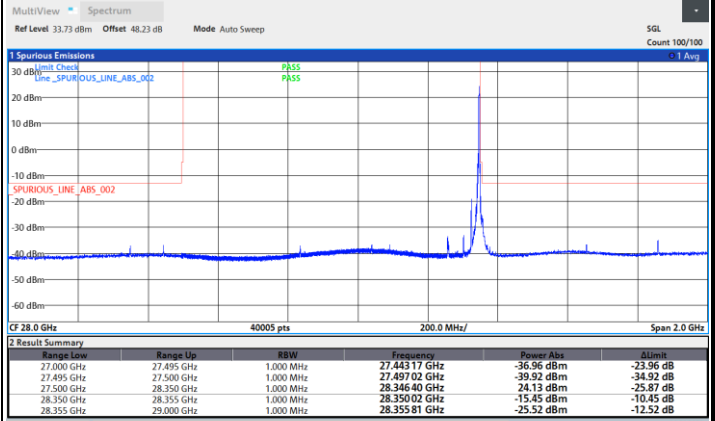
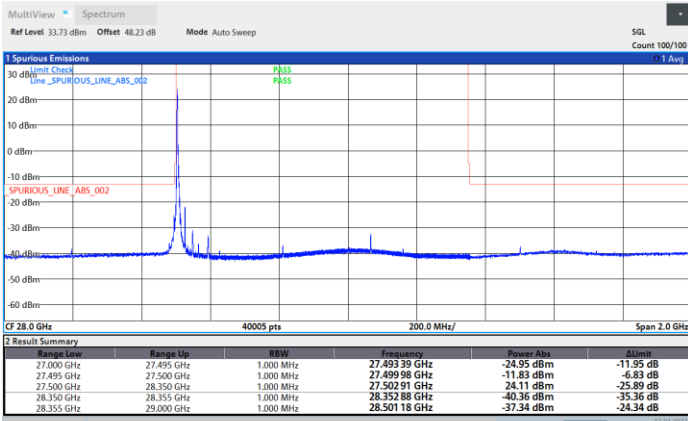
Highest Band Edge / 1 RB



NR Band n261 / 50MHz / QPSK

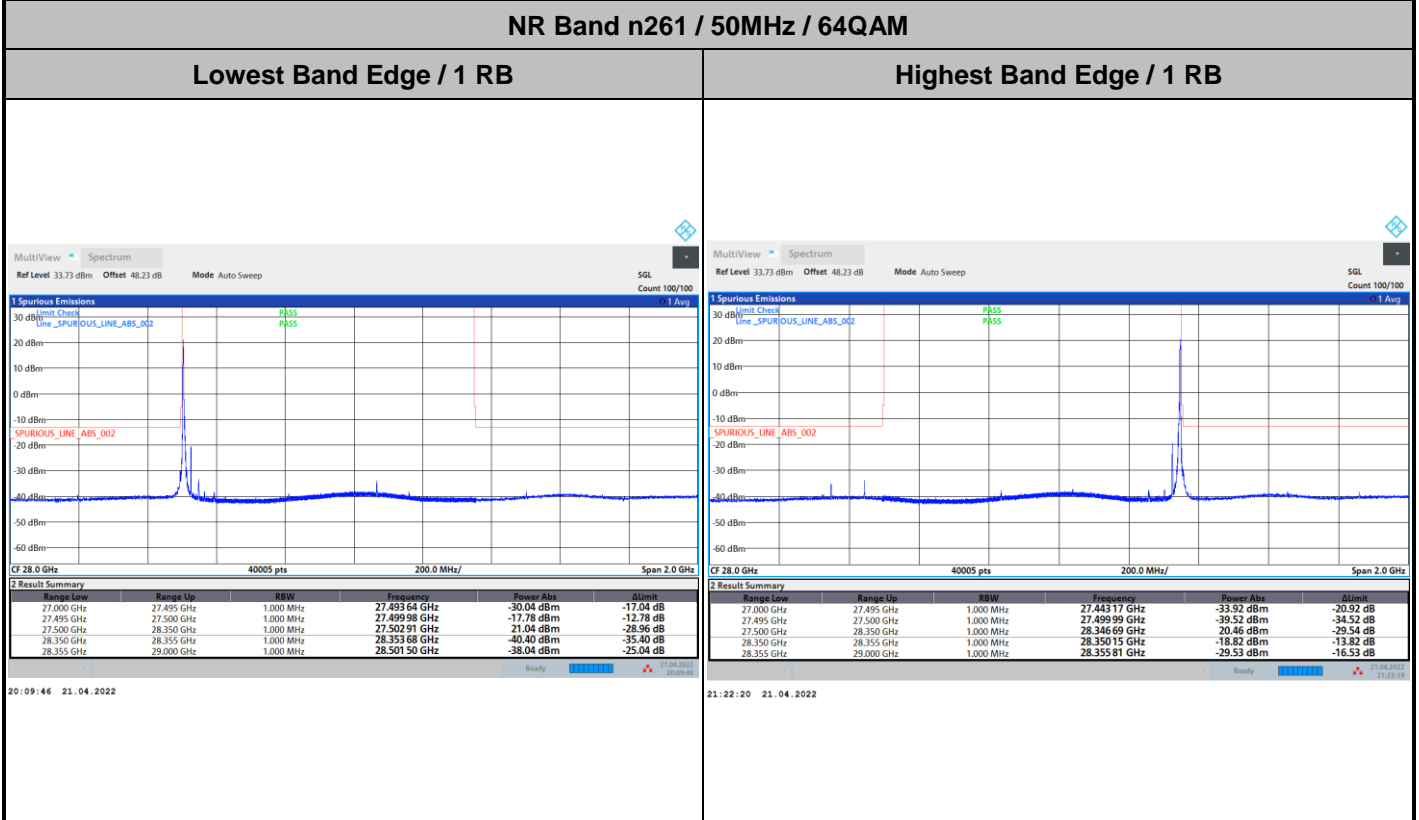
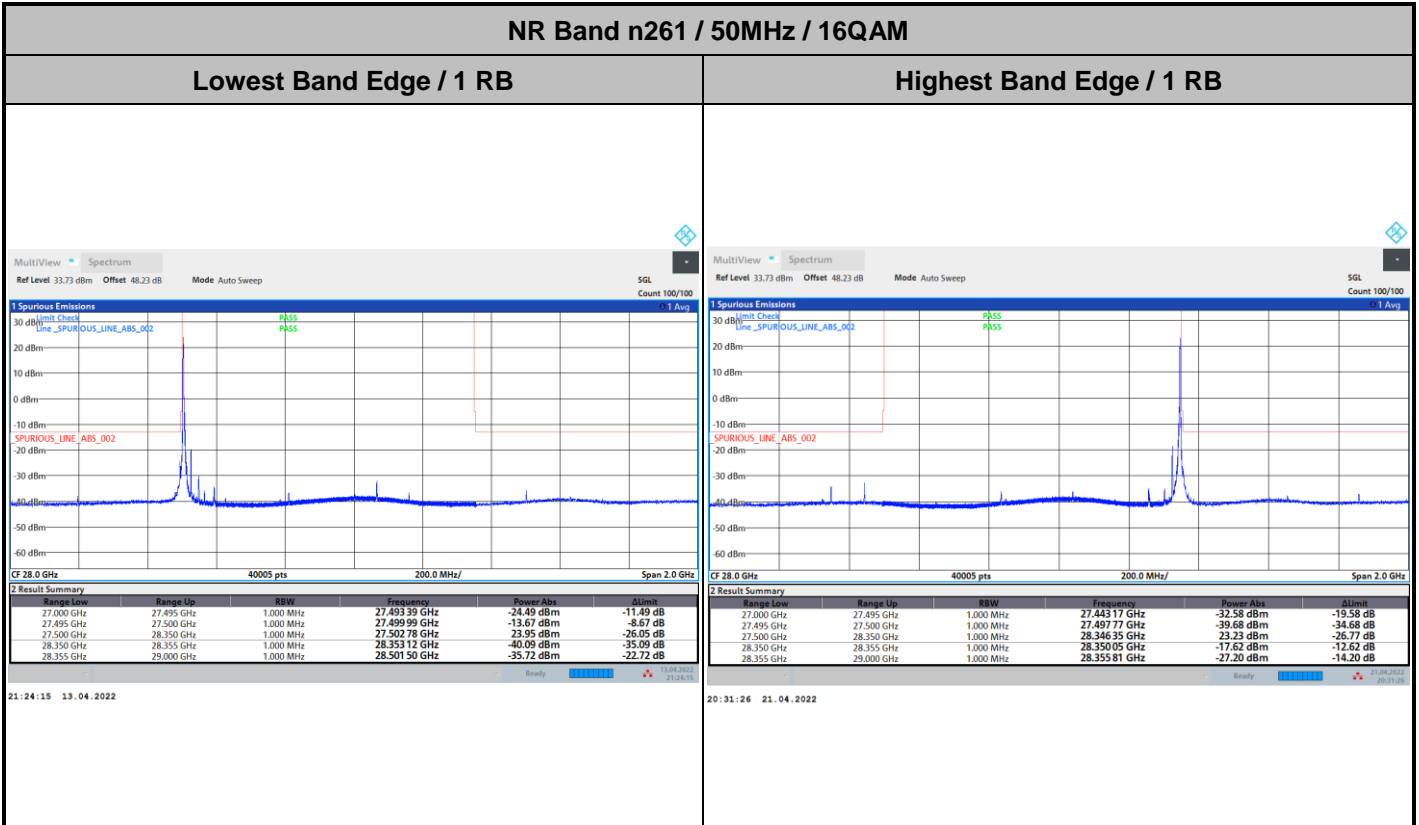
Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB





DFT-s-OFDM Module 0





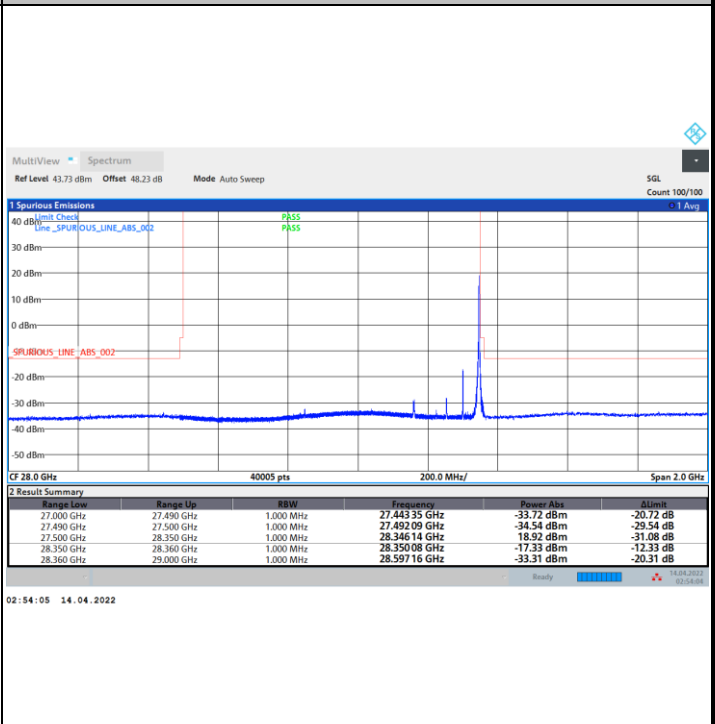
DFT-s-OFDM Module 0

NR Band n261 / 100MHz / BPSK

Lowest Band Edge / 1 RB

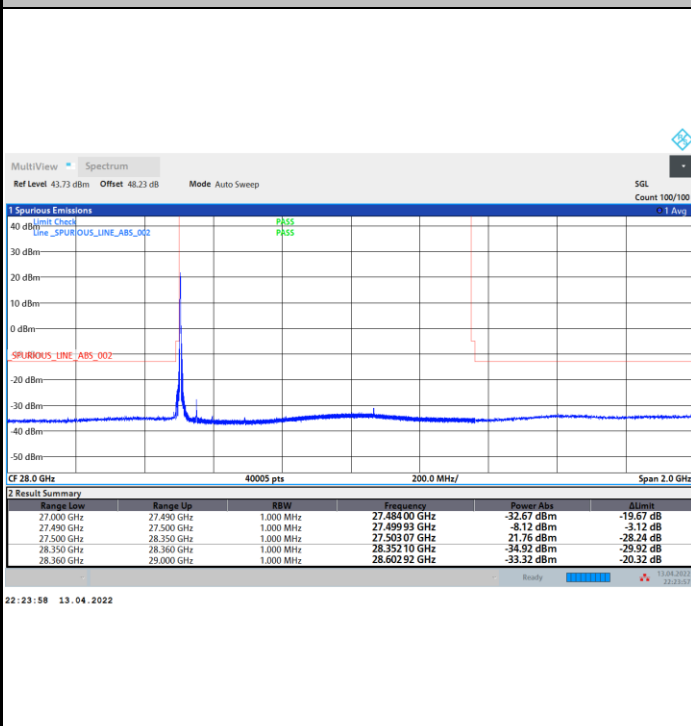


Highest Band Edge / 1 RB

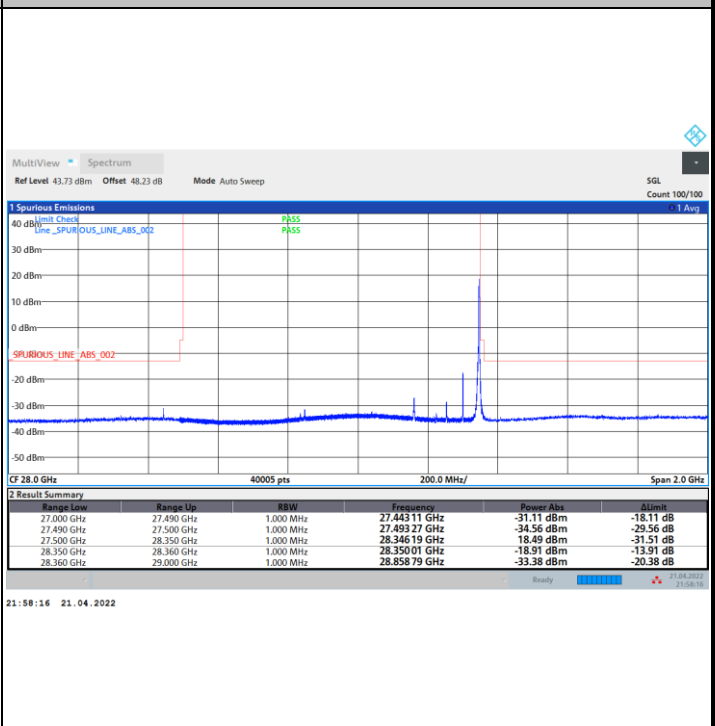


NR Band n261 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB





DFT-s-OFDM Module 0

