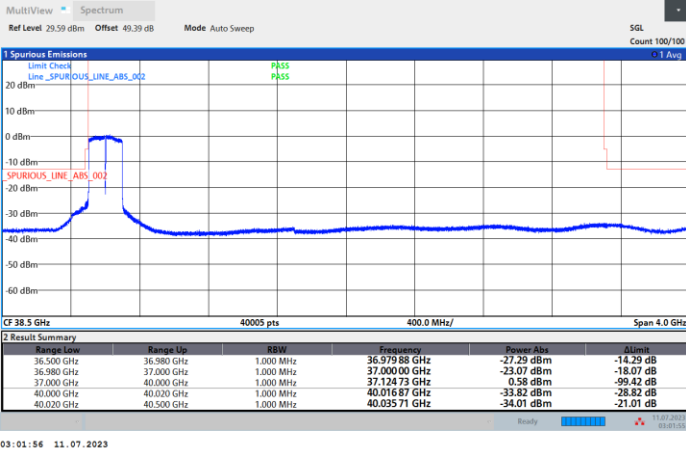




CP-OFDM Module A

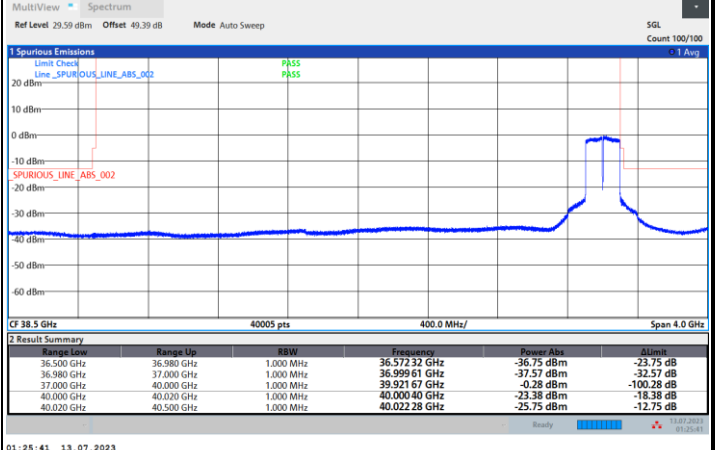
NR Band n260 / 200MHz / QPSK

Lowest Band Edge / Full RB



03:01:56 11.07.2023

Highest Band Edge / Full RB



01:28:41 13.07.2023

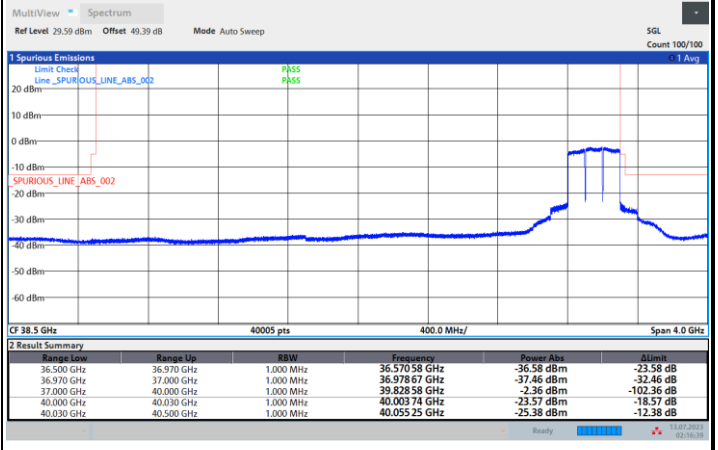
NR Band n260 / 300MHz / QPSK

Lowest Band Edge / Full RB



14:55:02 11.07.2023

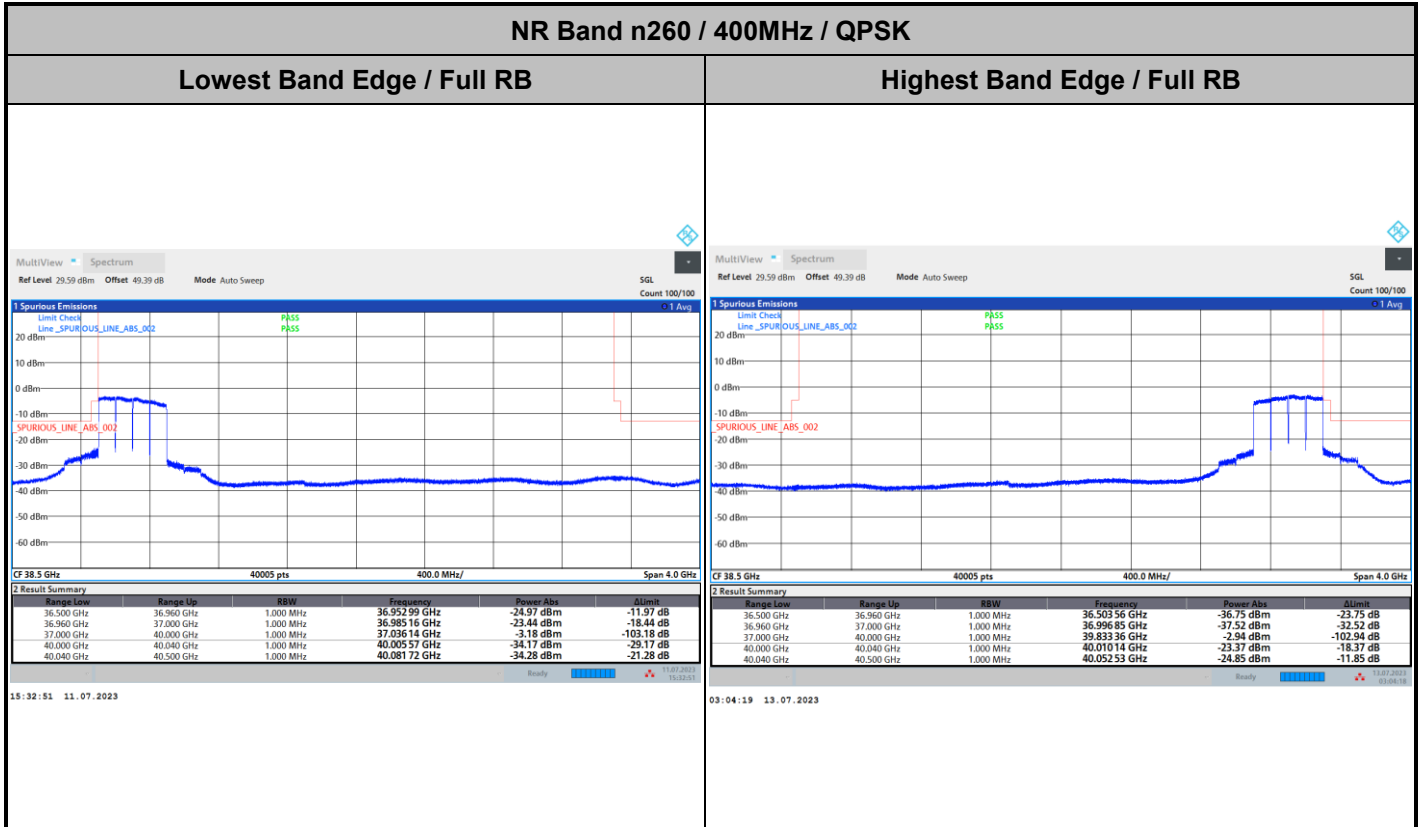
Highest Band Edge / Full RB



02:16:40 13.07.2023



CP-OFDM Module A



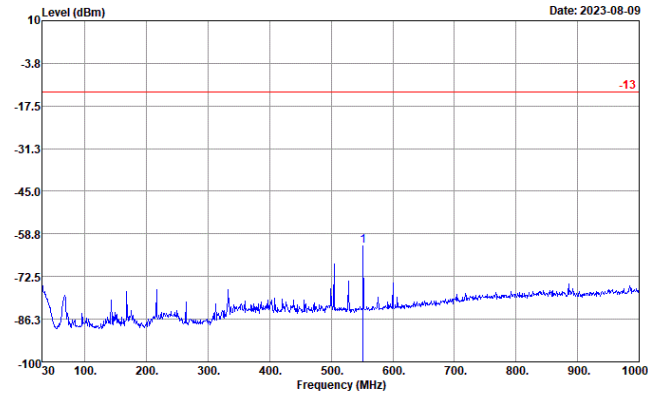


Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz. Only the noise floor is reported.

NR Band n260 (30MHz-1GHz)

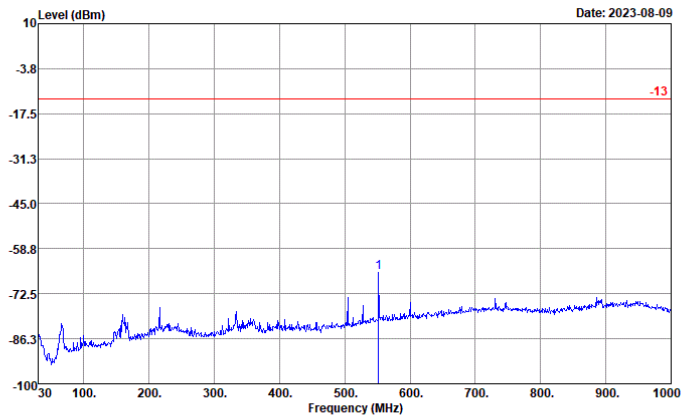
Horizontal



Site : 03CH10-HY
 Condition : -13 EIRP_WO HORIZONTAL
 Project : 380306
 : n260 MA

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	551.86	-62.49	-49.49 -13.00

Vertical



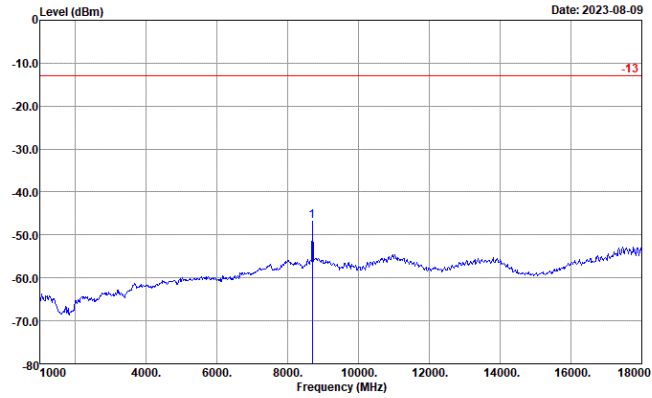
Site : 03CH10-HY
 Condition : -13 EIRP_WO VERTICAL
 Project : 380306
 : n260 MA

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1	551.86	-66.14	-53.14 -13.00



NR Band n260 (1GHz-18GHz)

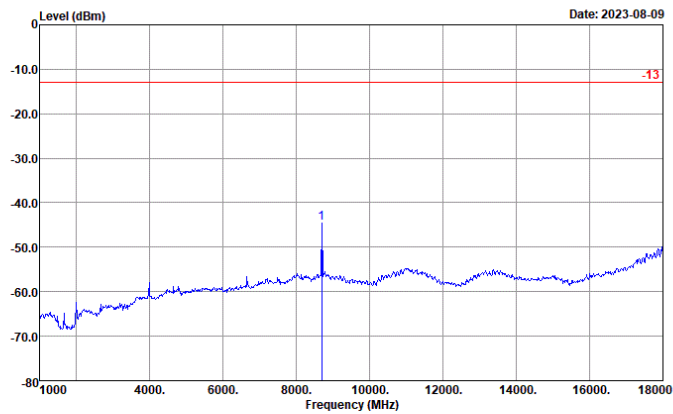
Horizontal



Site : 03CH10-HY
 Condition : -13 EIRP_WO HORIZONTAL
 Project : 380306
 : n260 MA

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1 8701.00	-46.86	-33.86	-13.00

Vertical



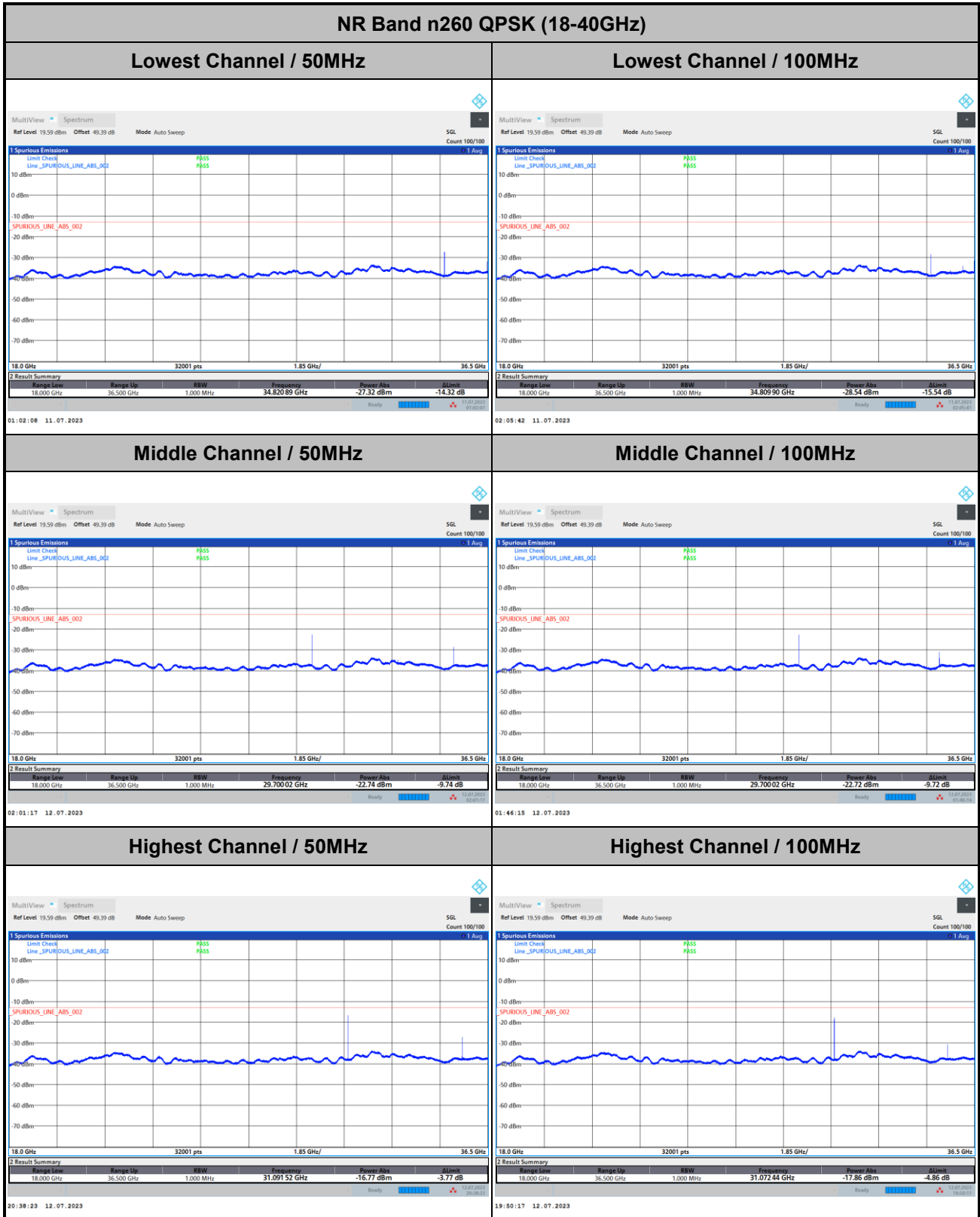
Site : 03CH10-HY
 Condition : -13 EIRP_WO VERTICAL
 Project : 380306
 : n260 MA

Freq	Level	Over	Limit
MHz	dBm	dB	dBm
1 8701.00	-44.48	-31.48	-13.00



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

DFT-s-OFDM Module A



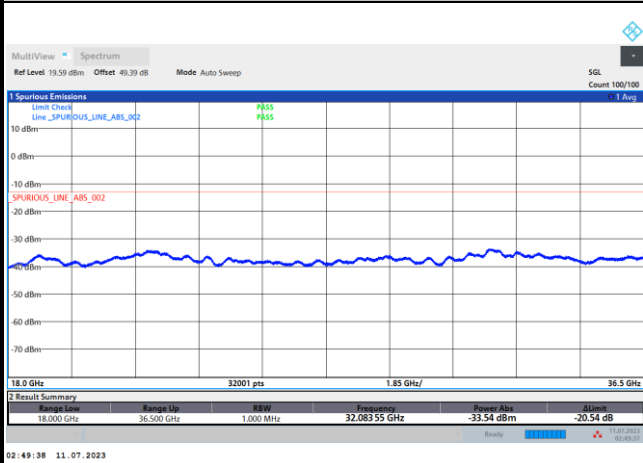
Remark: In band and out of band frequencies are omitted.



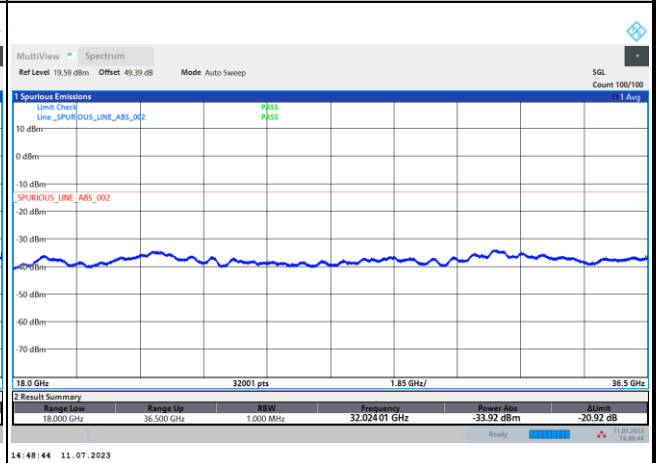
DFT-s-OFDM Module A

NR Band n260 QPSK (18-40GHz)

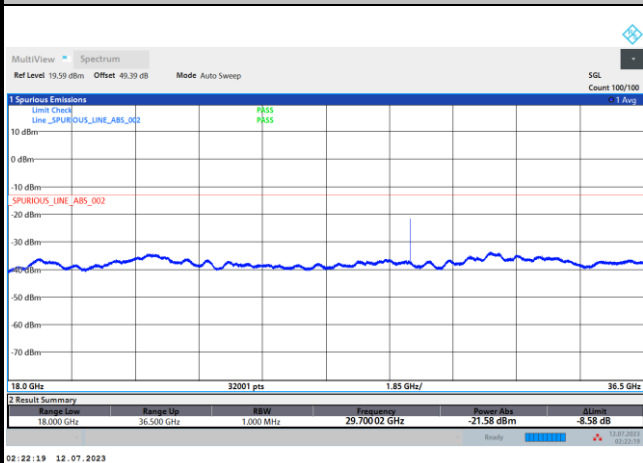
Lowest Channel / 200MHz



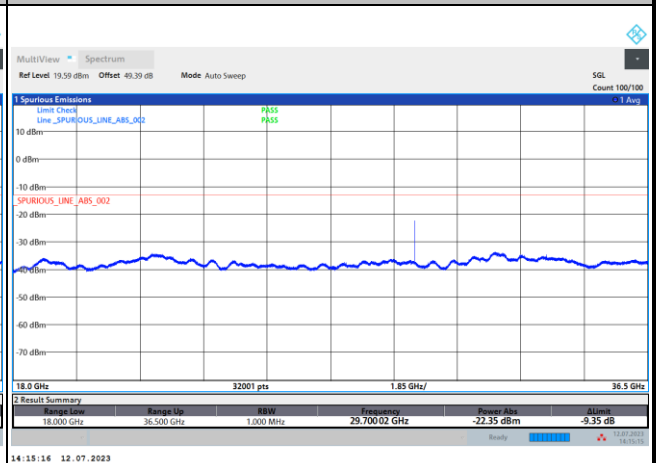
Lowest Channel / 300MHz



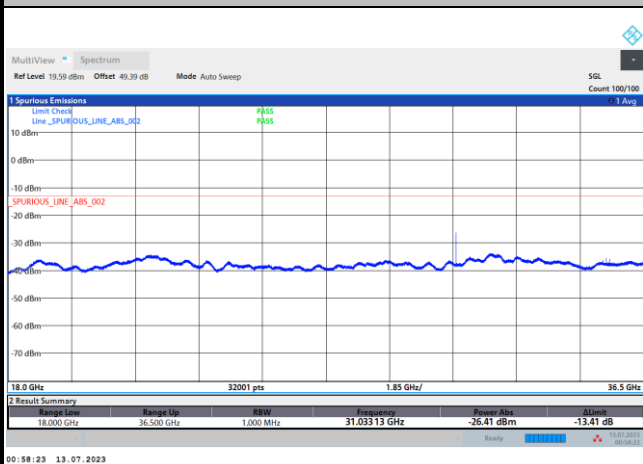
Middle Channel / 200MHz



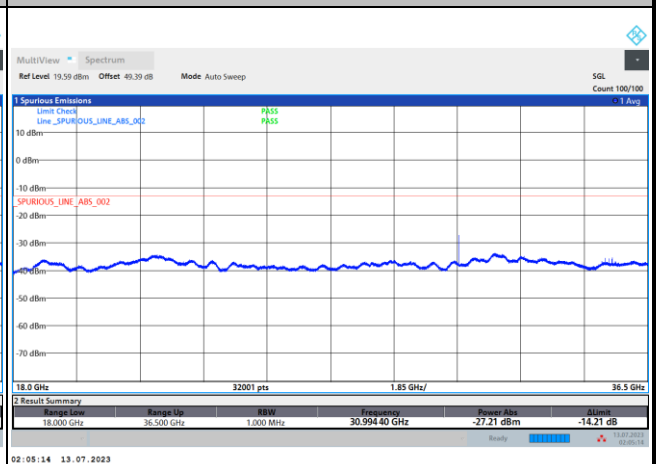
Middle Channel / 300MHz



Highest Channel / 200MHz



Highest Channel / 300MHz



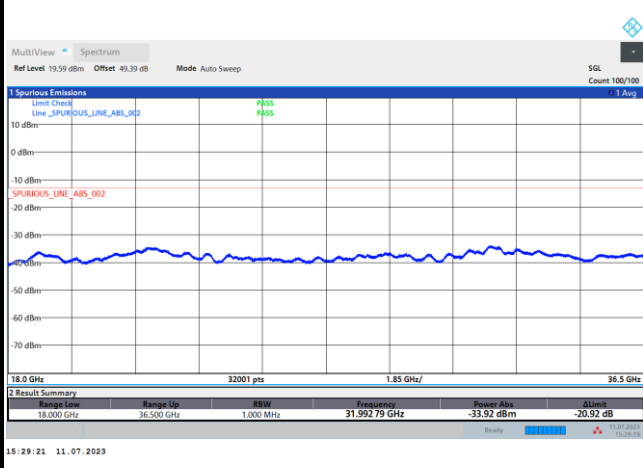
Remark: In band and out of band frequencies are omitted.



DFT-s-OFDM Module A

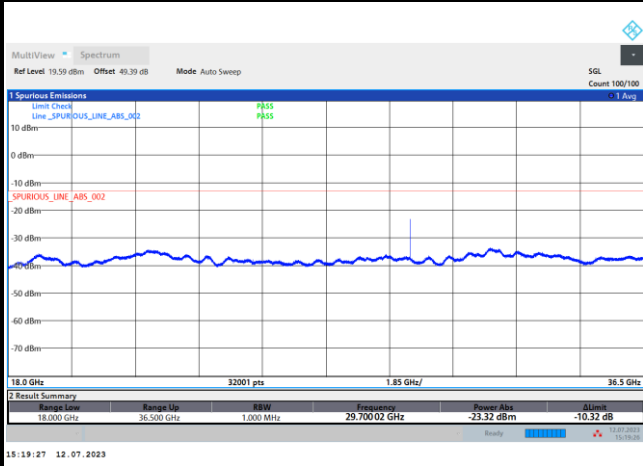
NR Band n260 QPSK (18-40GHz)

Lowest Channel / 400MHz



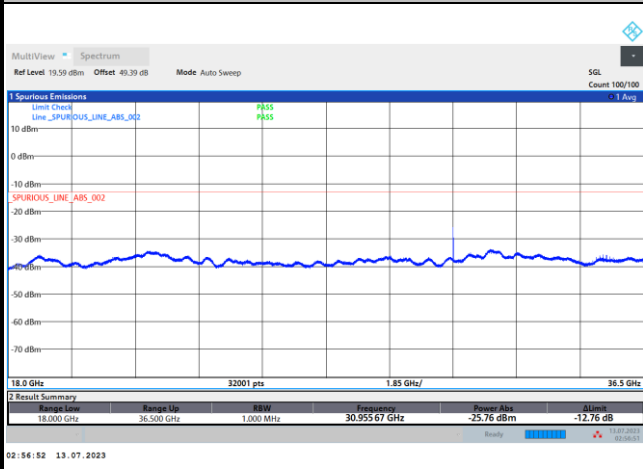
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz



intentionally blank

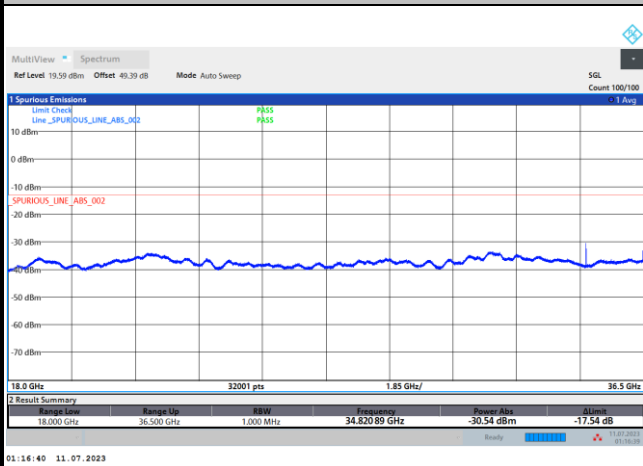
Remark: In band and out of band frequencies are omitted.



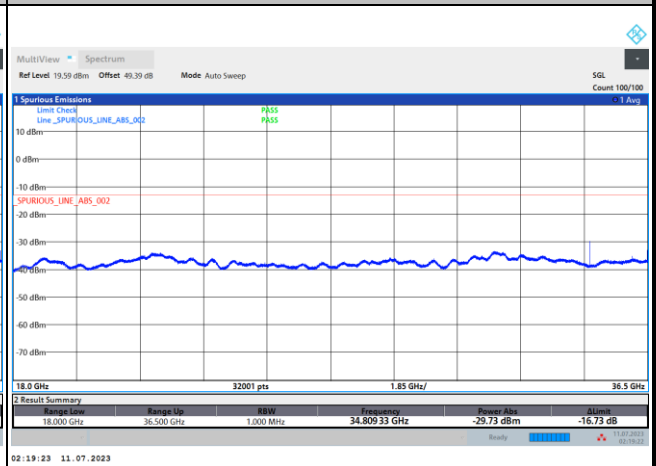
CP-OFDM Module A

NR Band n260 QPSK (18-40GHz)

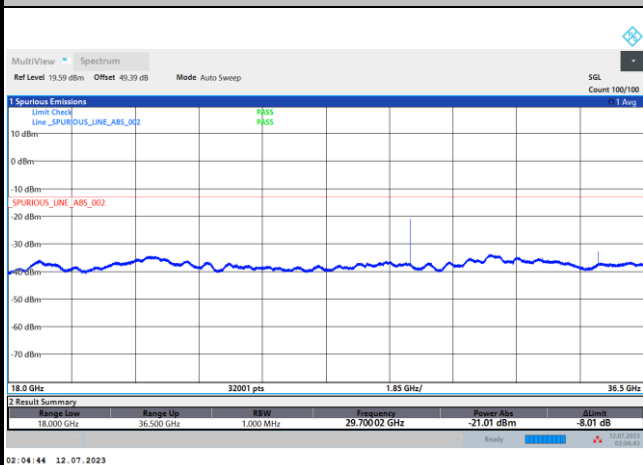
Lowest Channel / 50MHz



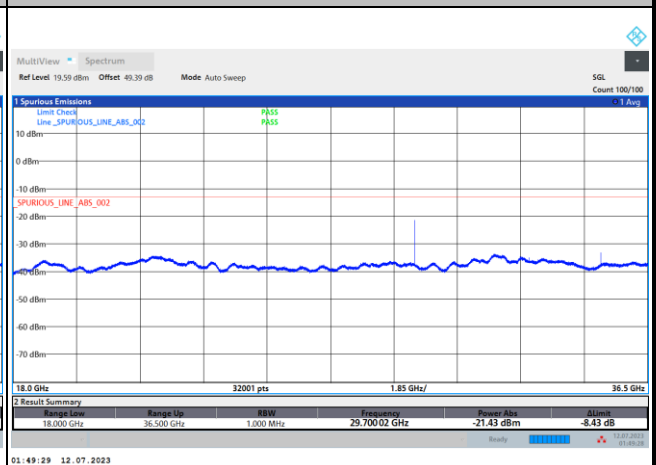
Lowest Channel / 100MHz



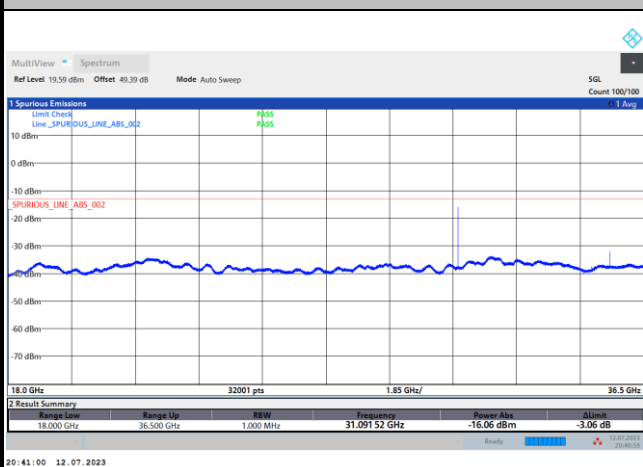
Middle Channel / 50MHz



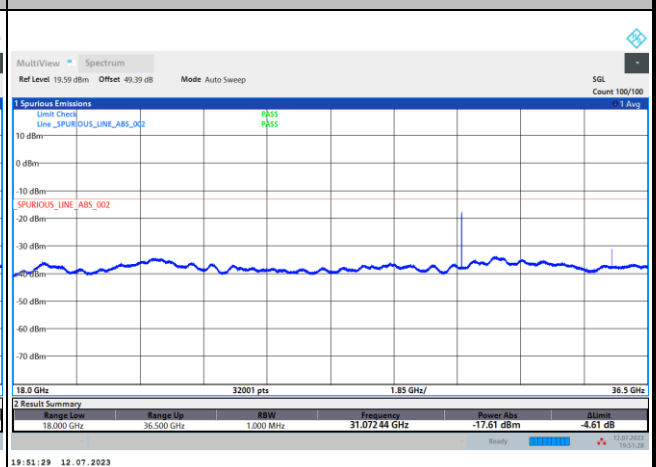
Middle Channel / 100MHz



Highest Channel / 50MHz



Highest Channel / 100MHz



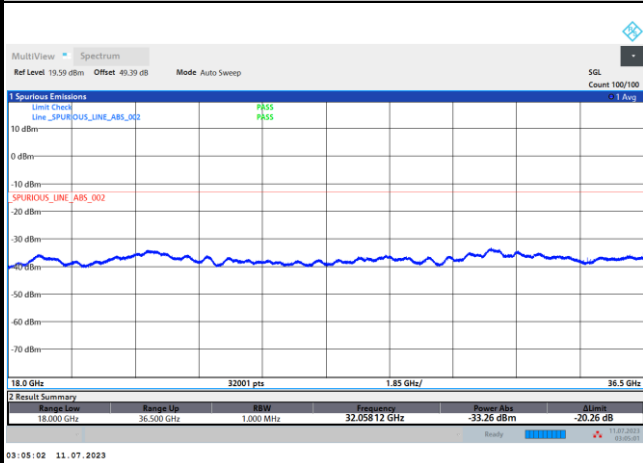
Remark: In band and out of band frequencies are omitted.



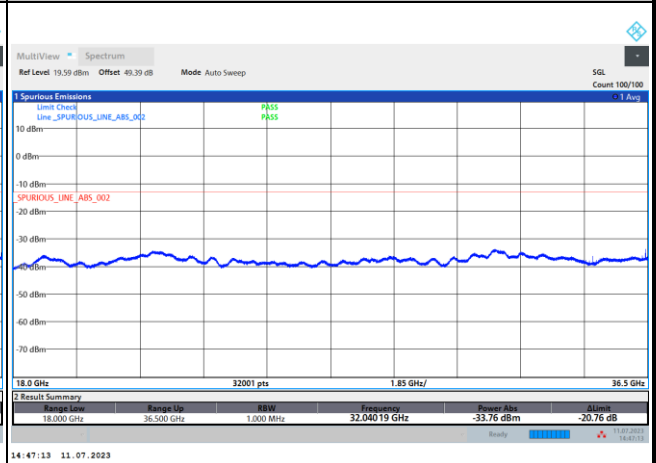
CP-OFDM Module A

NR Band n260 QPSK (18-40GHz)

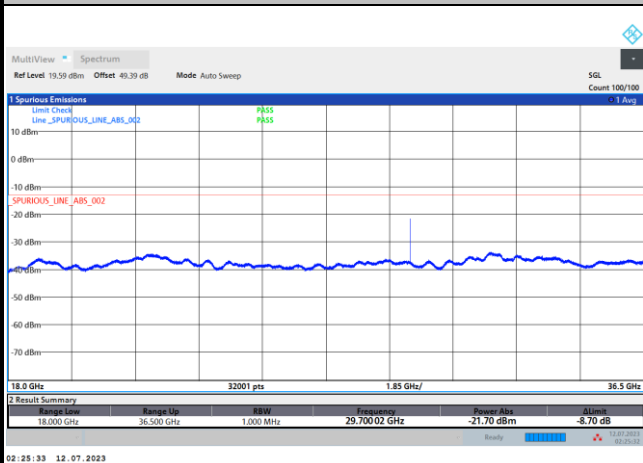
Lowest Channel / 200MHz



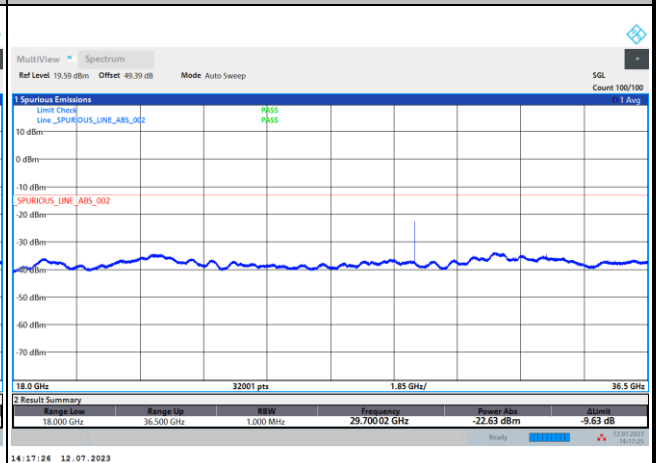
Lowest Channel / 300MHz



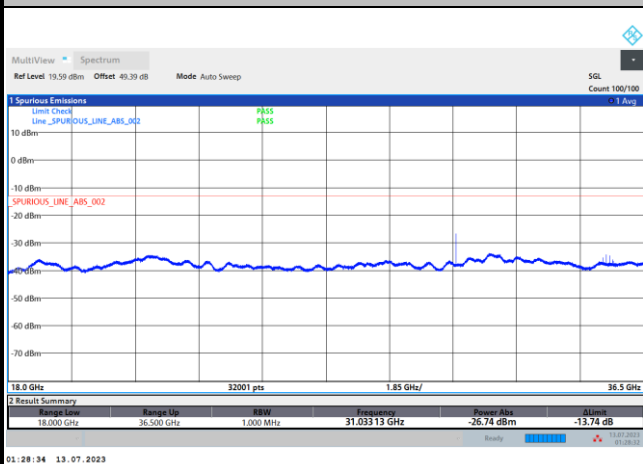
Middle Channel / 200MHz



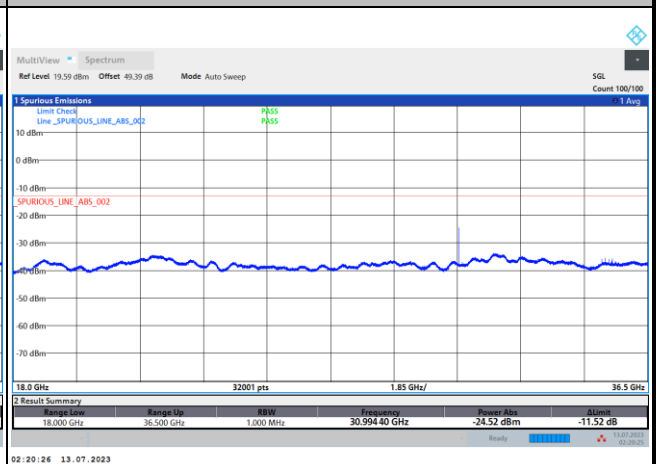
Middle Channel / 300MHz



Highest Channel / 200MHz



Highest Channel / 300MHz



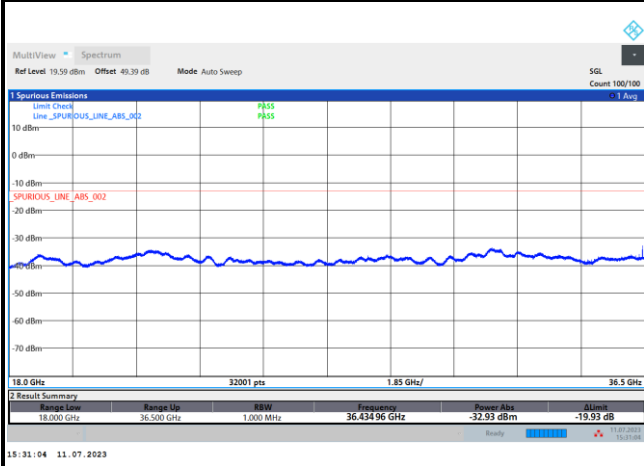
Remark: In band and out of band frequencies are omitted.



CP-OFDM Module A

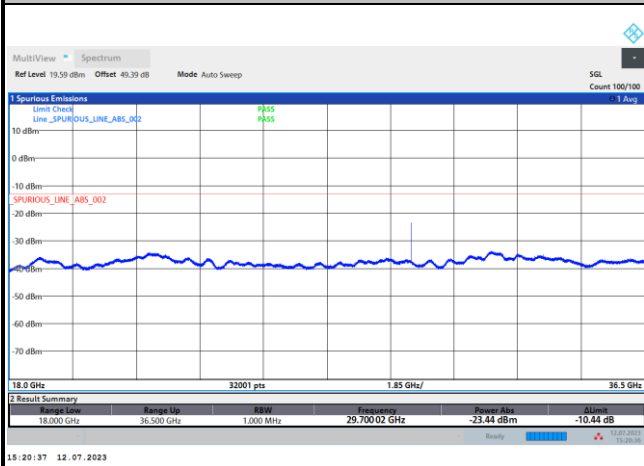
NR Band n260 QPSK (18-40GHz)

Lowest Channel / 400MHz



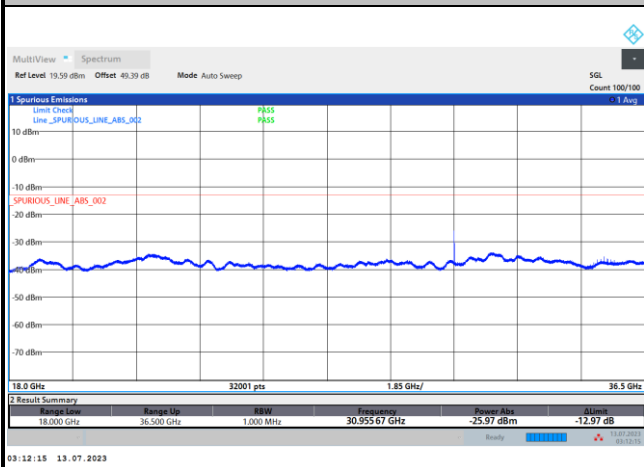
intentionally blank

Middle Channel / 400MHz



intentionally blank

Highest Channel / 400MHz

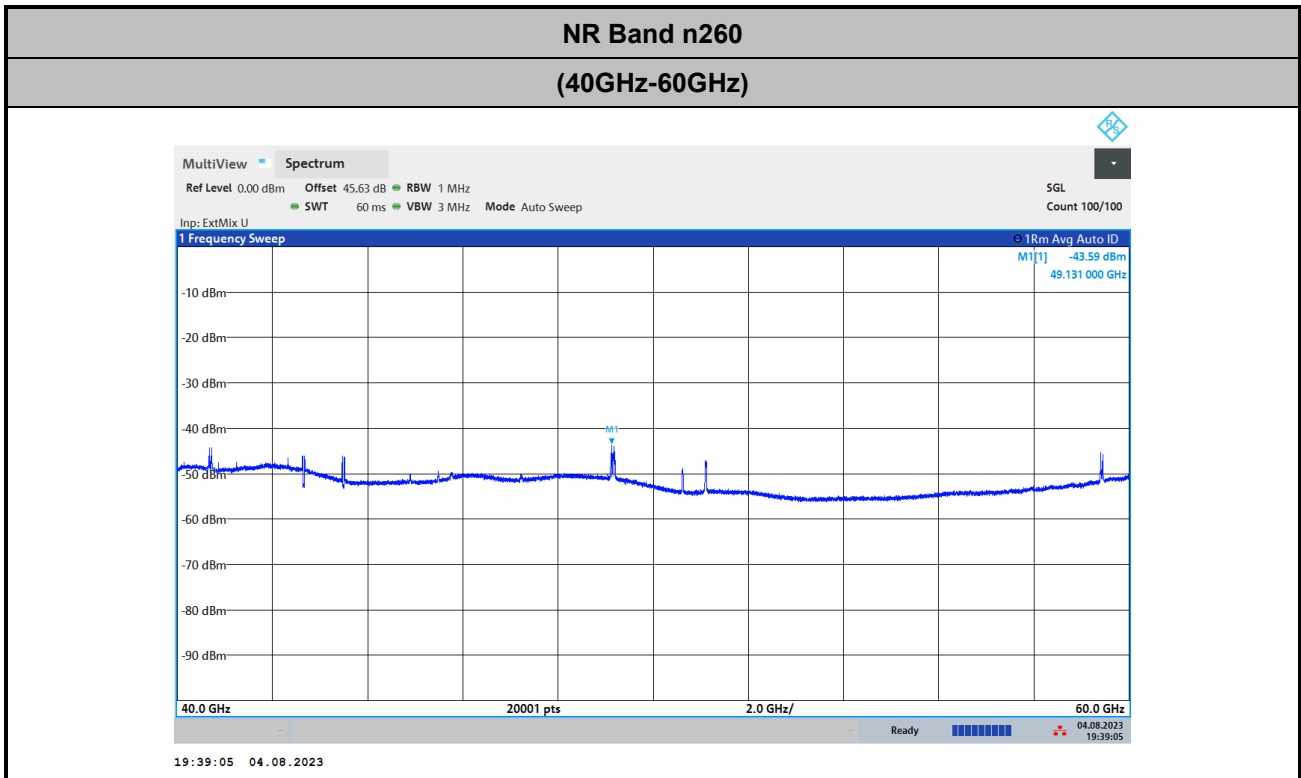


intentionally blank

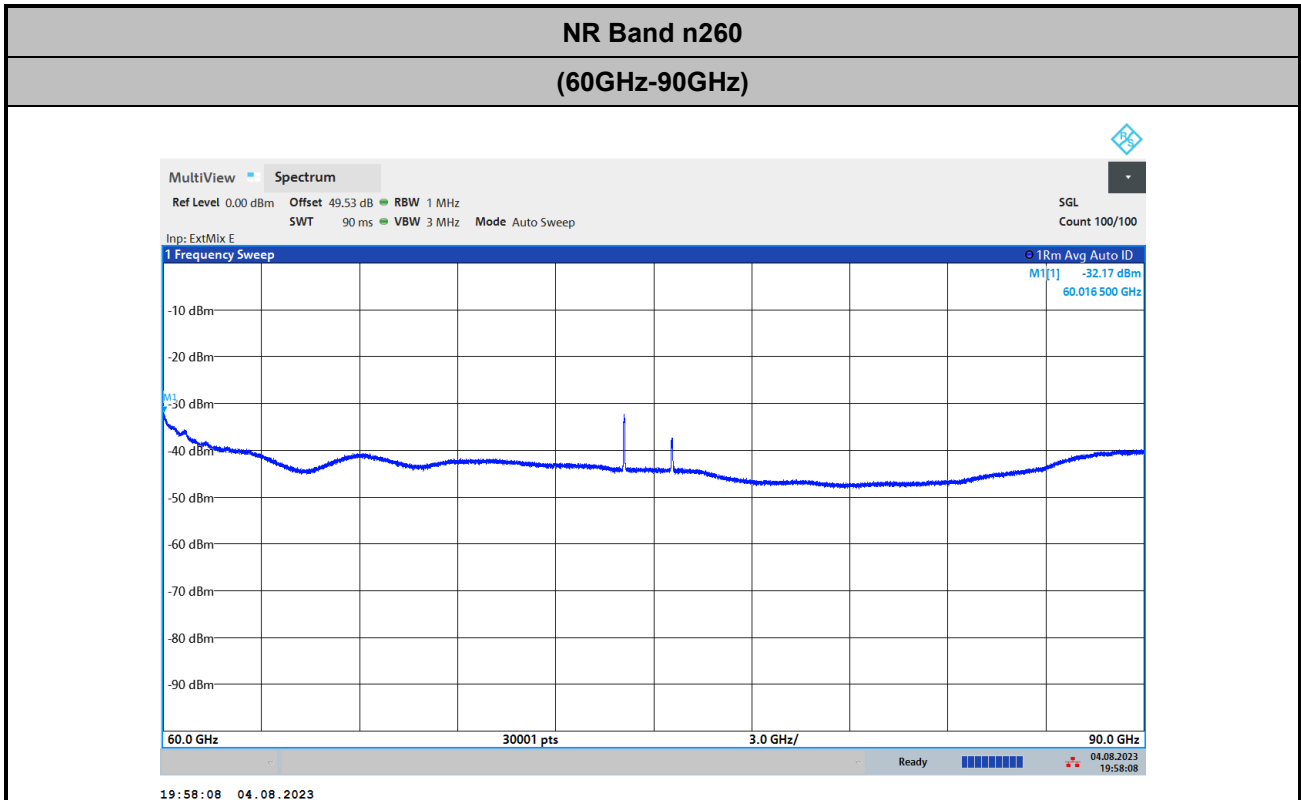
Remark: In band and out of band frequencies are omitted.



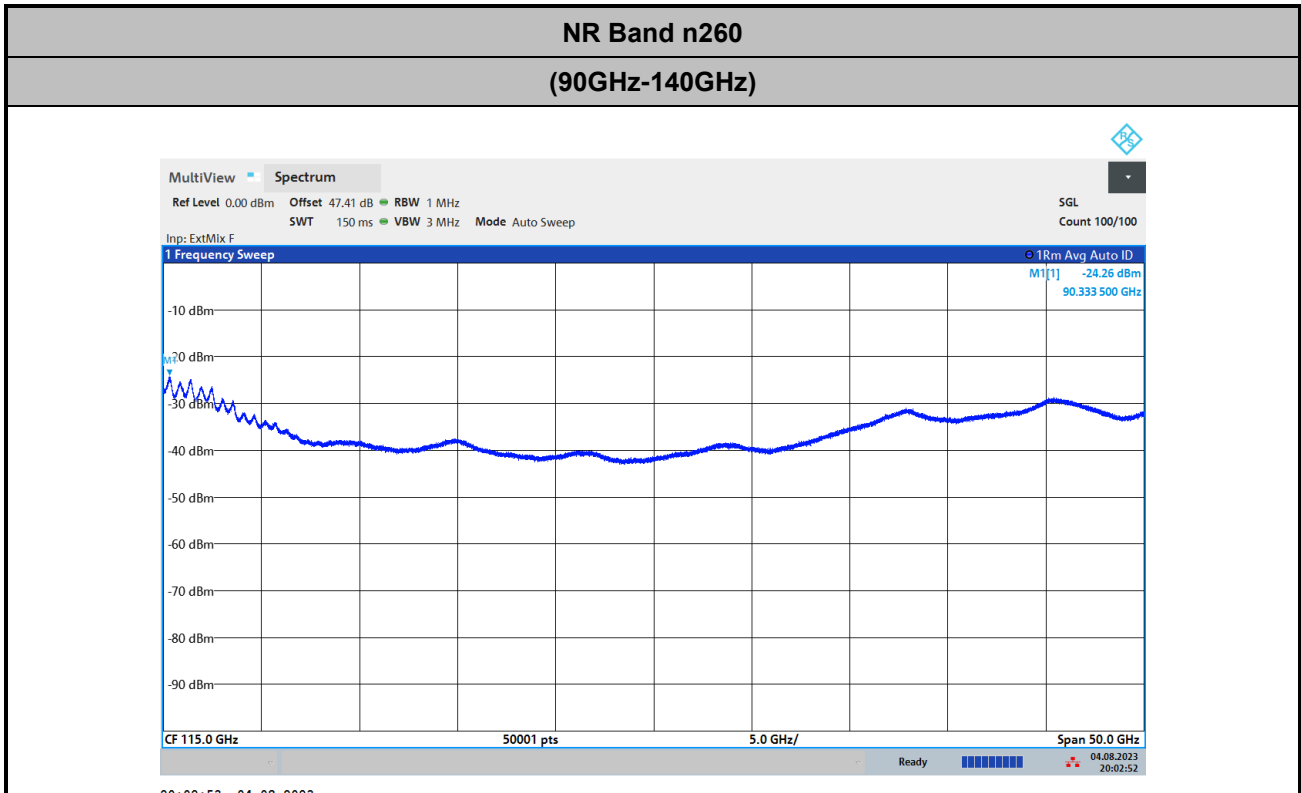
There is no significant spurious emission signal found for frequency started from 40GHz up to 200GHz.
Only the noise floor is reported.



$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 43 + 0.43 + 107 + 20\log(1) - 104.8 = 45.63(\text{dB})$$



$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 46.9 + 0.43 + 107 + 20\log(1) - 104.8 = 49.53 \text{ (dB)}$$

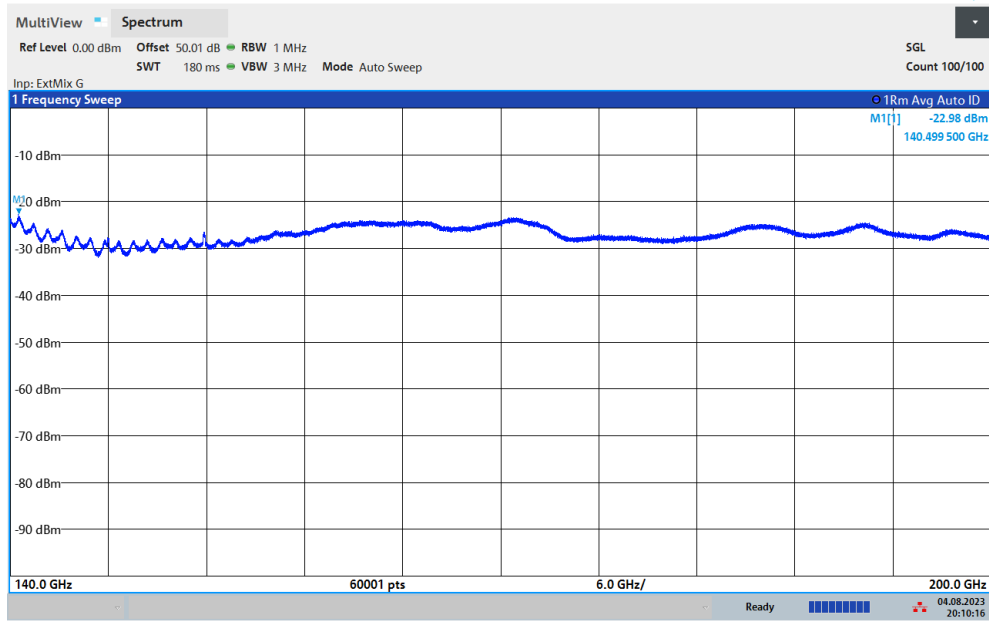


$$\text{Offset} = \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 + \text{Duty Factor}$$
$$= 50.80 + 0.43 + 107 + 20\log(0.5) - 104.8 = 47.41 \text{ (dB)}$$



NR Band n260

(140GHz-200GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log(D) – 104.8 + Duty Factor
 = 53.4 + 0.43 + 107 + 20log(0.5) – 104.8 = 50.01(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	38.499945	92.000	2.390	Pass
40	Normal Voltage	38.499985	52.000	1.351	
30	Normal Voltage	38.50002	17.000	0.442	
20(Ref.)	Normal Voltage	38.500037	0.000	0.000	
10	Normal Voltage	38.500058	-21.000	0.545	
0	Normal Voltage	38.500138	-101.000	2.623	
-10	Normal Voltage	38.500186	-149.000	3.870	
-20	Normal Voltage	38.500182	-145.000	3.766	
-30	Normal Voltage	38.500135	-98.000	2.545	
20	Maximum Voltage	38.500031	6.000	0.156	
20	Normal Voltage	38.500039	-2.000	0.052	
20	Battery End Point	38.500035	2.000	0.052	

Note:

1. Normal Voltage = 3.87 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the operation band.



NR Band n261 Module A AGH+V

Occupied Bandwidth

Mode	DFT-s-OFDM Module A NR Band n261 : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	46.02	46.13	45.92	91.51	91.33	91.32	191.33	191.26	190.64
Middle CH	45.96	46.11	45.96	91.61	91.35	91.37	191.16	191.06	190.35
Highest CH	45.95	45.98	45.84	91.55	91.31	91.4	191.07	190.85	190.16

Mode	DFT-s-OFDM Module A NR Band n261 : 99%OBW(MHz)					
BW	300MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	290.39	290.07	289.19	389.06	388.62	388.21
Middle CH	290.59	290.09	289.63	389.44	389.17	388.3
Highest CH	289.80	289.47	288.60	390.2	390.1	389

Mode	CP-OFDM Module A NR Band n261 : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.13	94.14	193.76
Middle CH	46.33	94.32	194.05
Highest CH	46.29	94.05	193.82

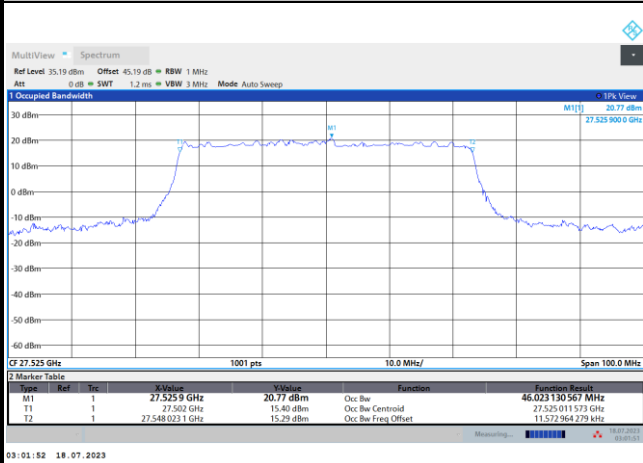
Mode	CP-OFDM Module A NR Band n261 : 99%OBW(MHz)	
BW	300MHz	400MHz
Mod.	QPSK	QPSK
Lowest CH	293.46	394.27
Middle CH	294.35	393.79
Highest CH	293.28	393.76



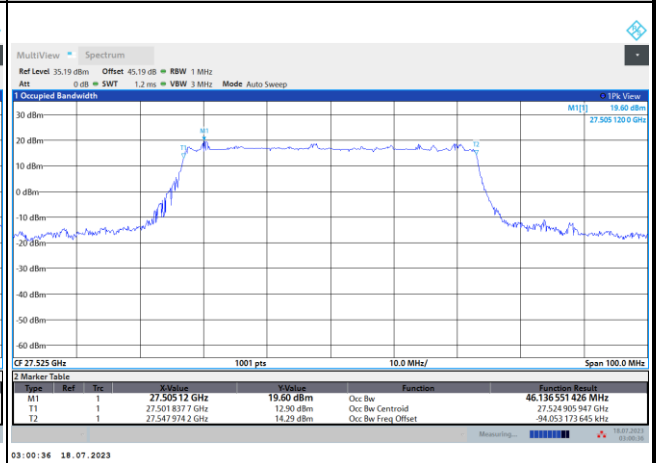
DFT-s-OFDM Module A

NR Band n261

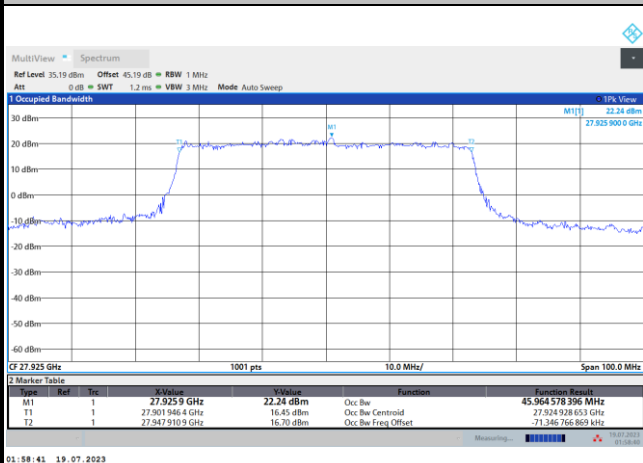
Lowest Channel / 50MHz / QPSK



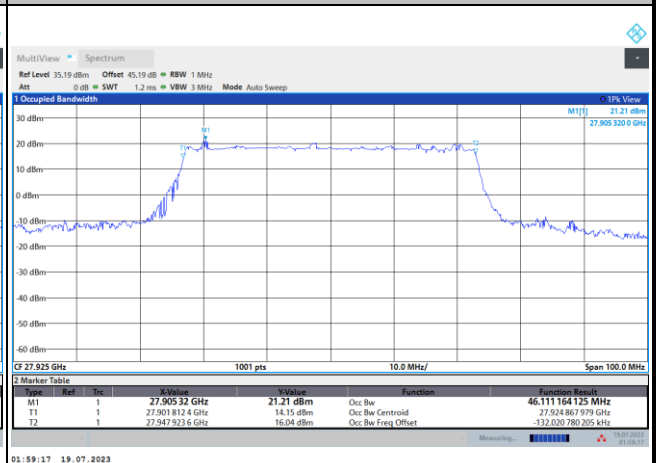
Lowest Channel / 50MHz / 16QAM



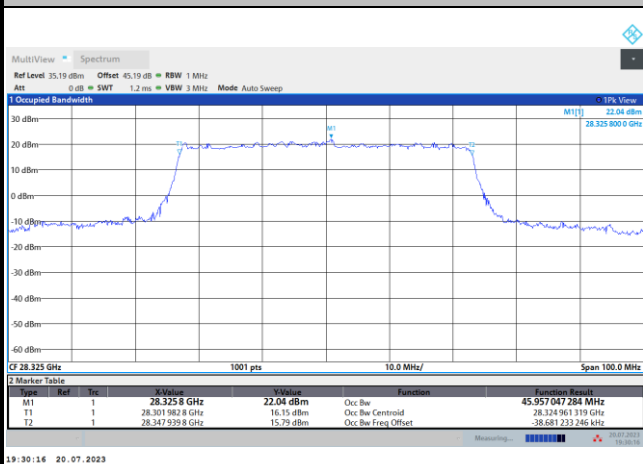
Middle Channel / 50MHz / QPSK



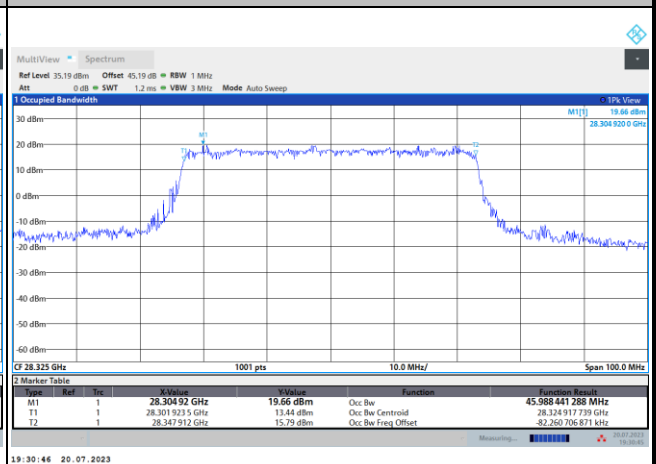
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

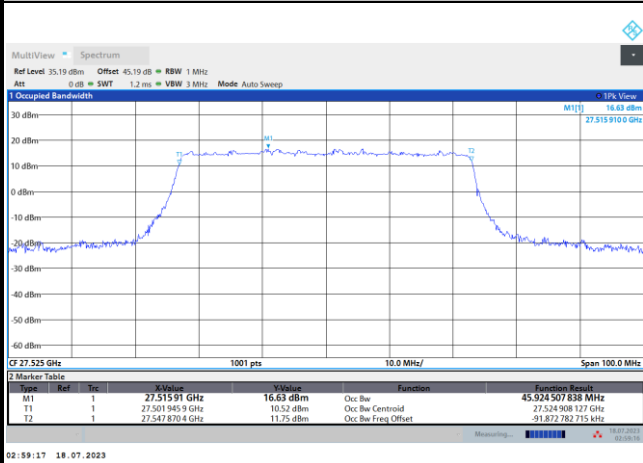




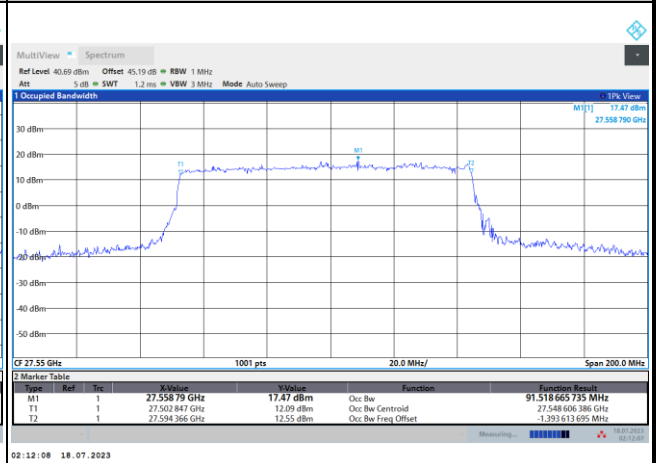
DFT-s-OFDM Module A

NR Band n261

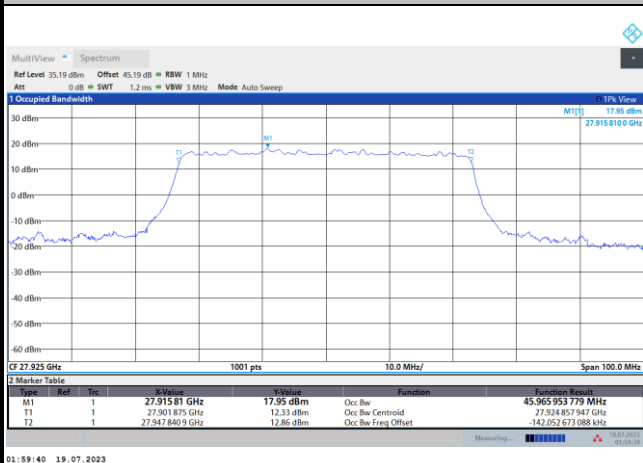
Lowest Channel / 50MHz / 64QAM



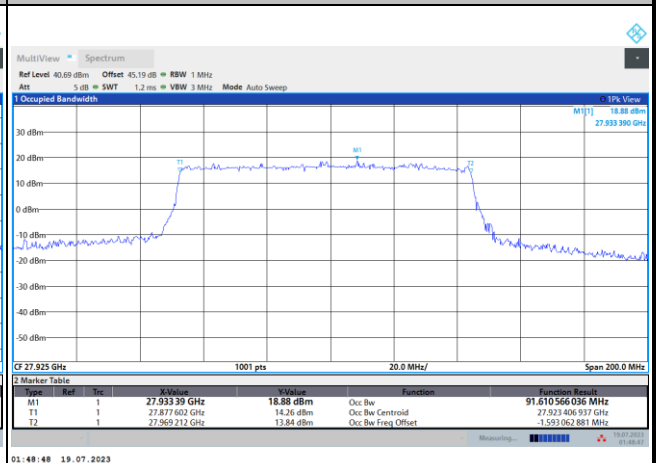
Lowest Channel / 100MHz / QPSK



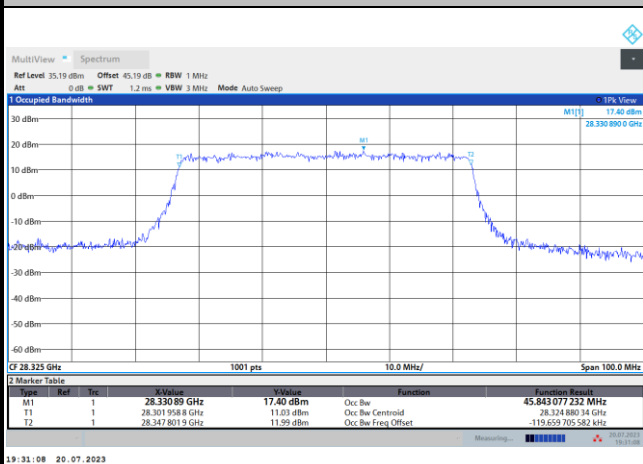
Middle Channel / 50MHz / 64QAM



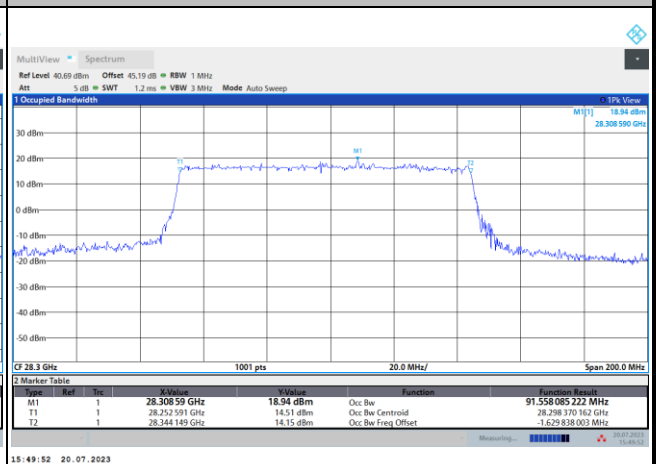
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

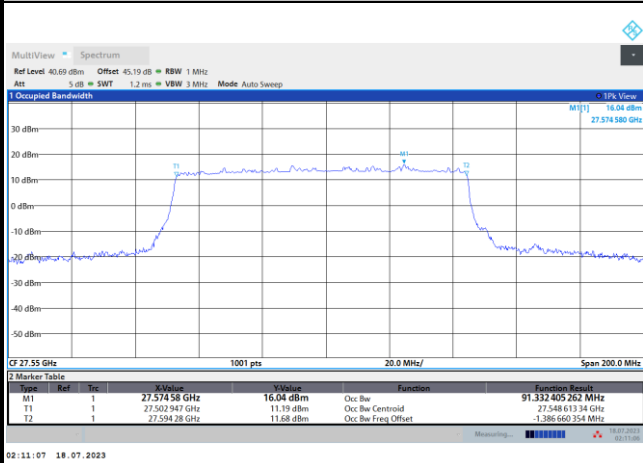




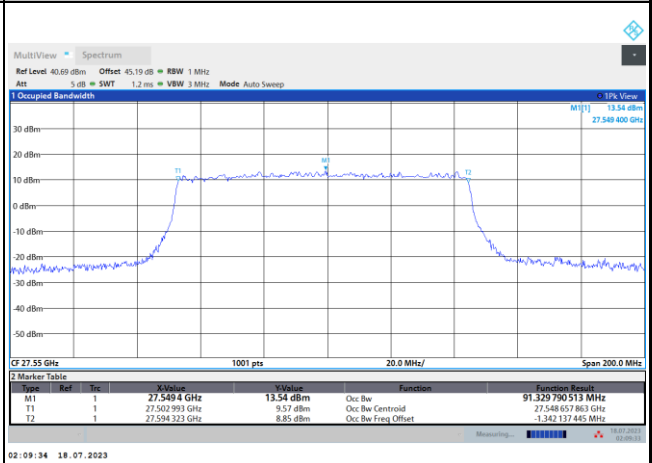
DFT-s-OFDM Module A

NR Band n261

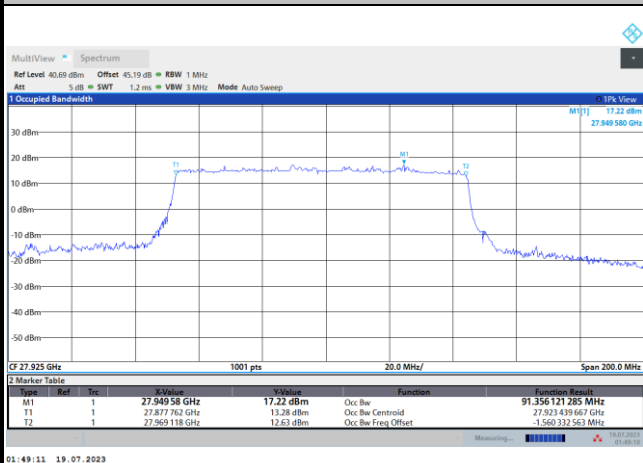
Lowest Channel / 100MHz / 16QAM



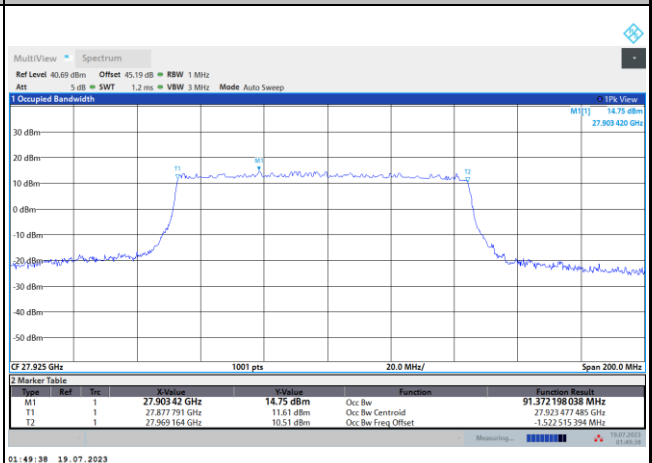
Lowest Channel / 100MHz / 64QAM



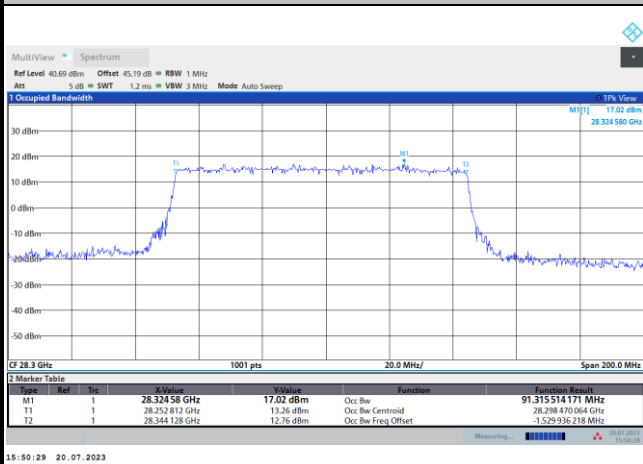
Middle Channel / 100MHz / 16QAM



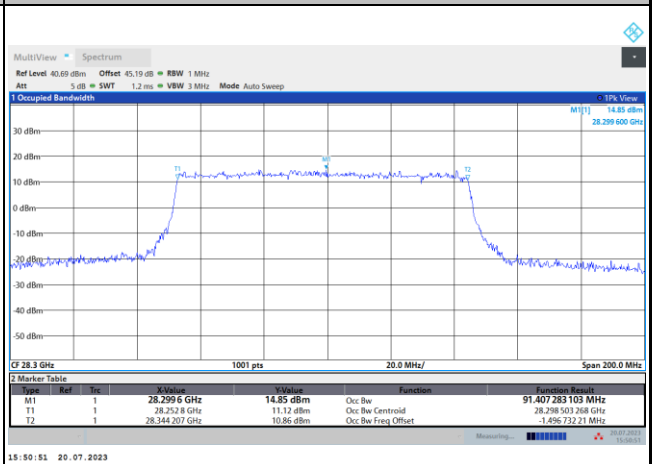
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM

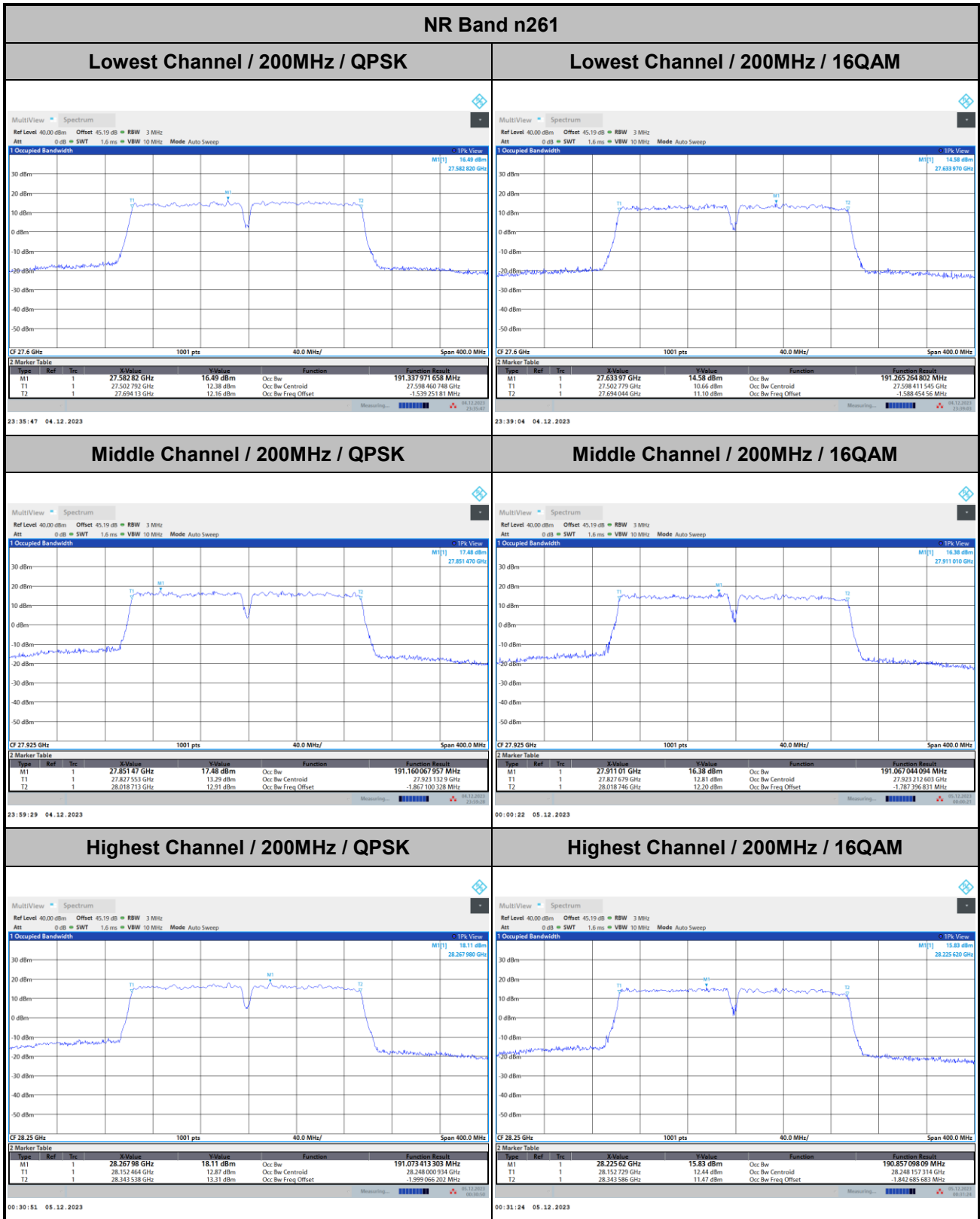


Highest Channel / 100MHz / 64QAM





DFT-s-OFDM Module A

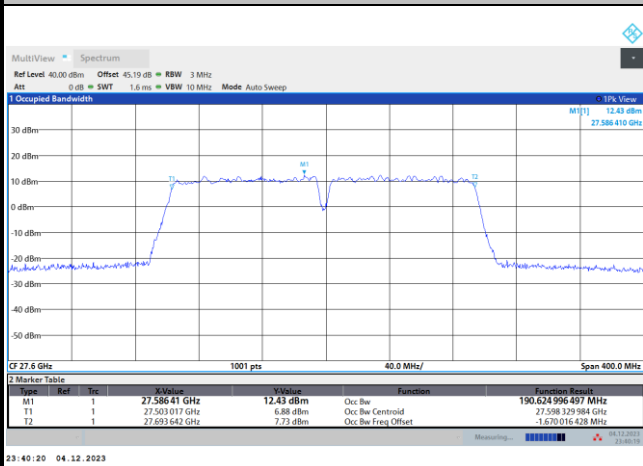




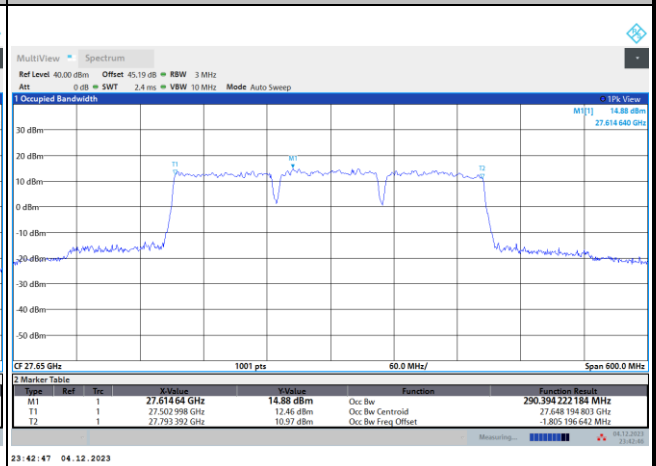
DFT-s-OFDM Module A

NR Band n261

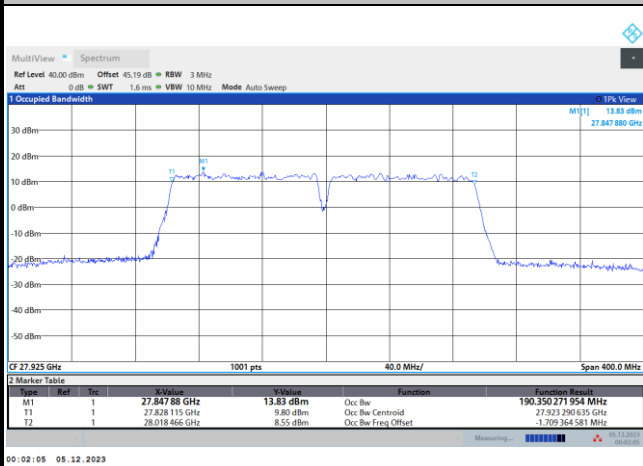
Lowest Channel / 200MHz / 64QAM



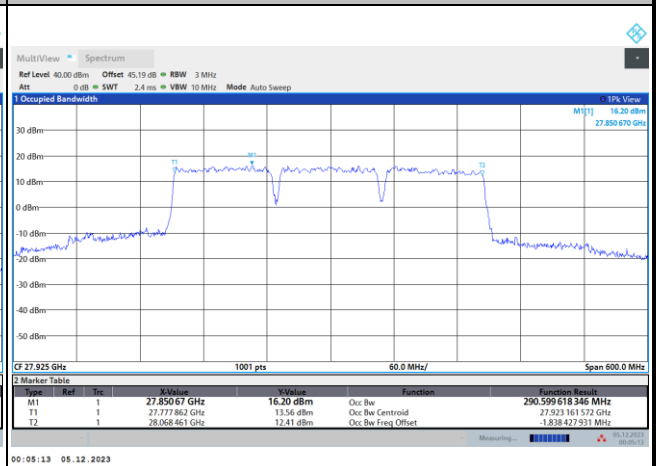
Lowest Channel / 300MHz / QPSK



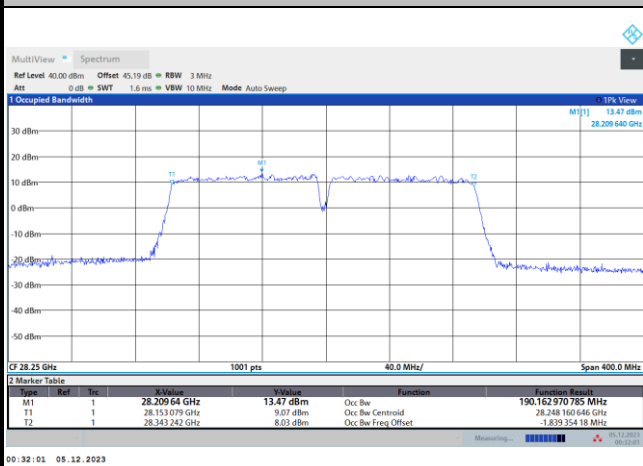
Middle Channel / 200MHz / 64QAM



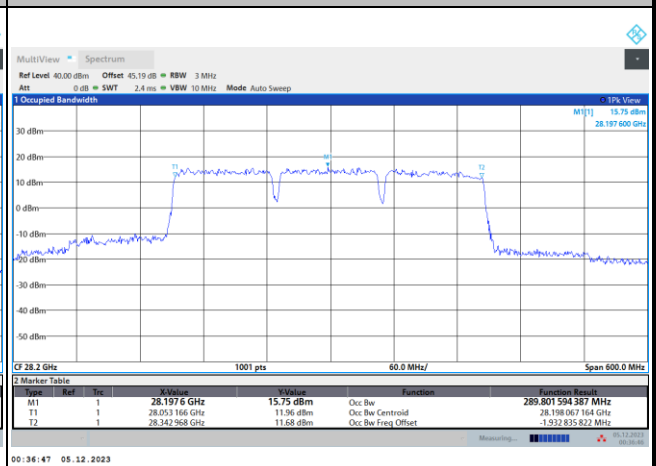
Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / 64QAM



Highest Channel / 300MHz / QPSK

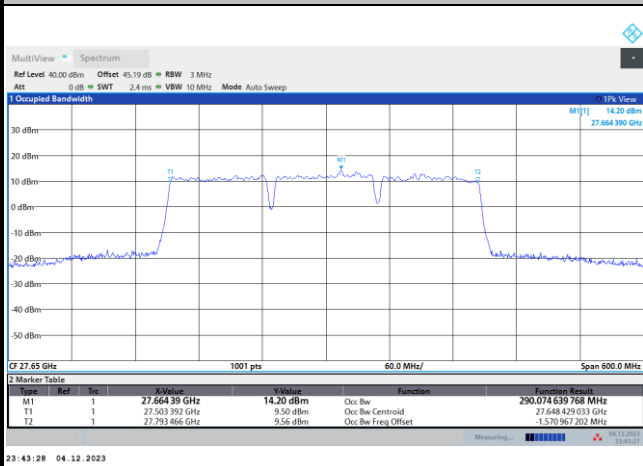




DFT-s-OFDM Module A

NR Band n261

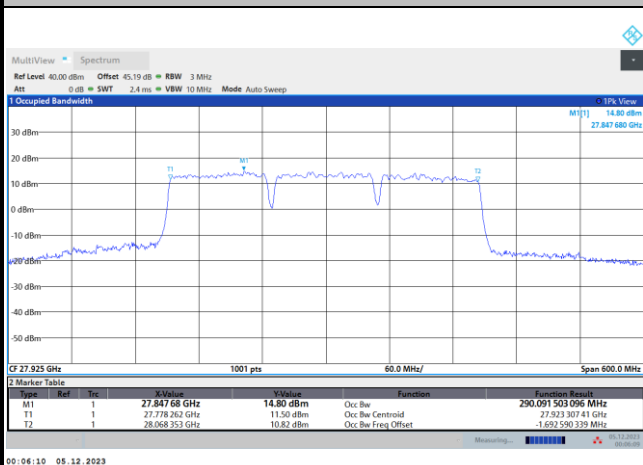
Lowest Channel / 300MHz / 16QAM



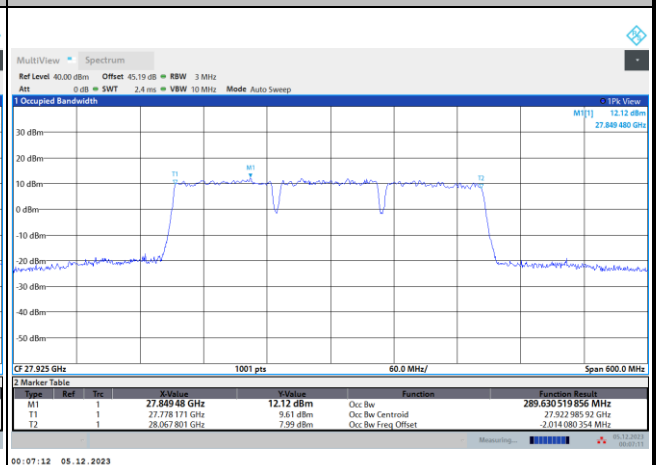
Lowest Channel / 300MHz / 64QAM



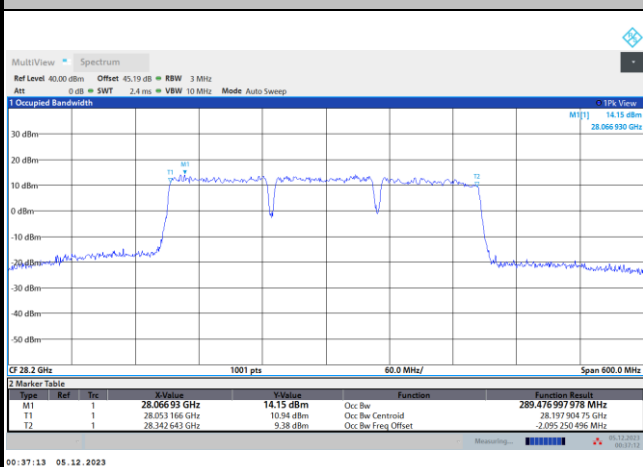
Middle Channel / 300MHz / 16QAM



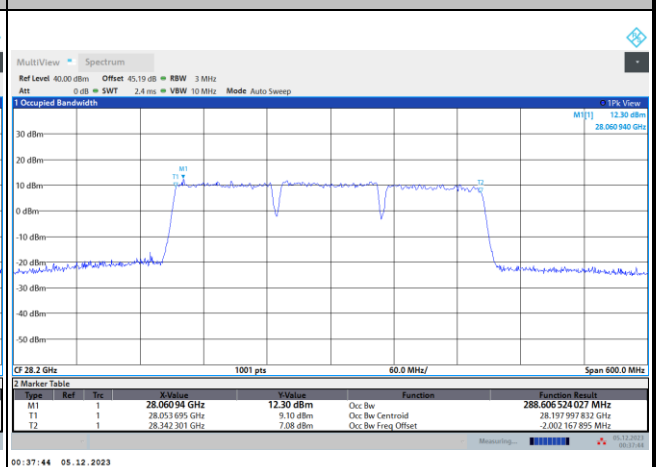
Middle Channel / 300MHz / 64QAM



Highest Channel / 300MHz / 16QAM



Highest Channel / 300MHz / 64QAM

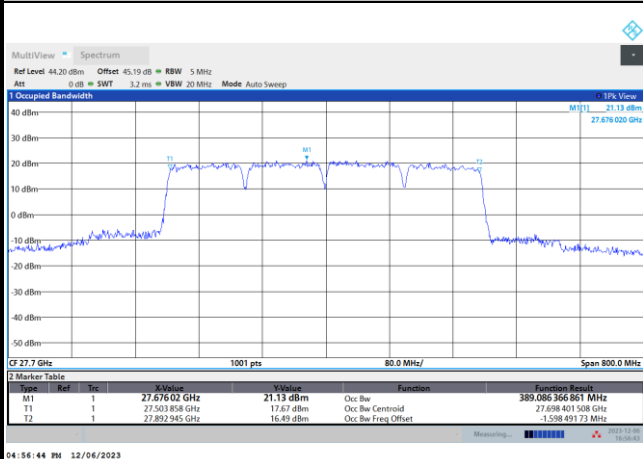




DFT-s-OFDM Module A

NR Band n261

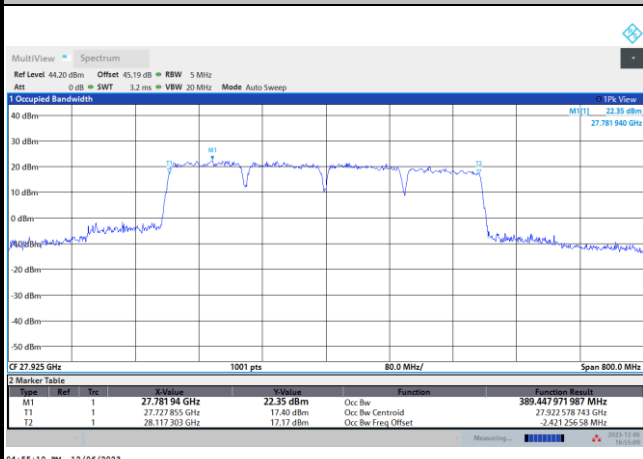
Lowest Channel / 400MHz / QPSK



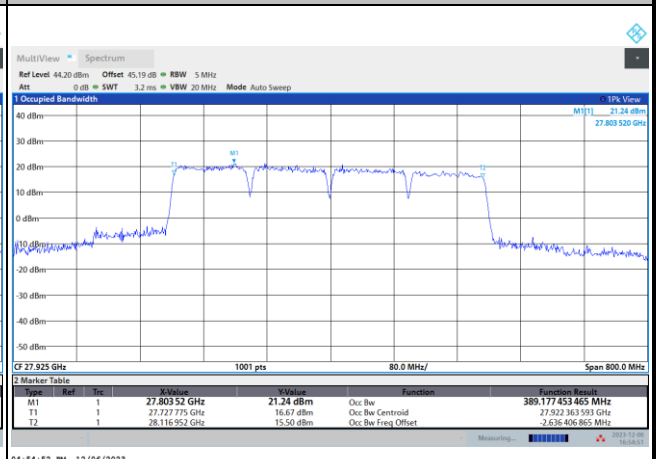
Lowest Channel / 400MHz / 16QAM



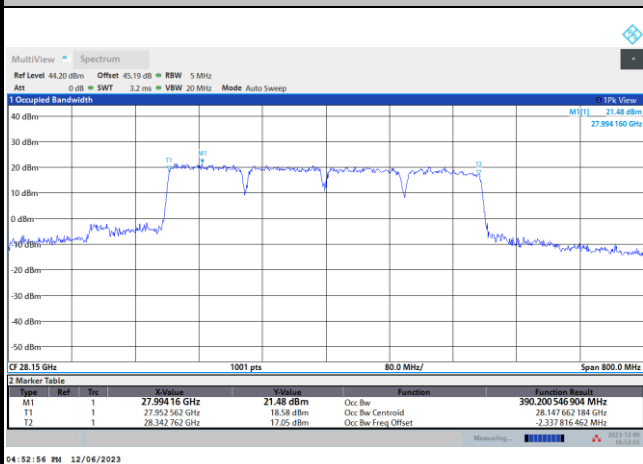
Middle Channel / 400MHz / QPSK



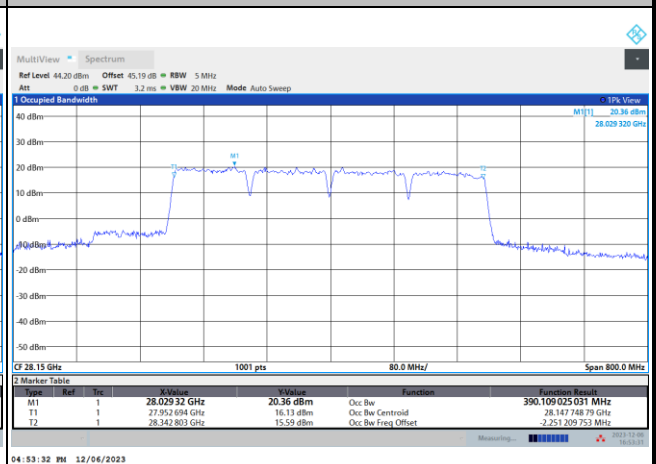
Middle Channel / 400MHz / 16QAM



Highest Channel / 400MHz / QPSK



Highest Channel / 400MHz / 16QAM

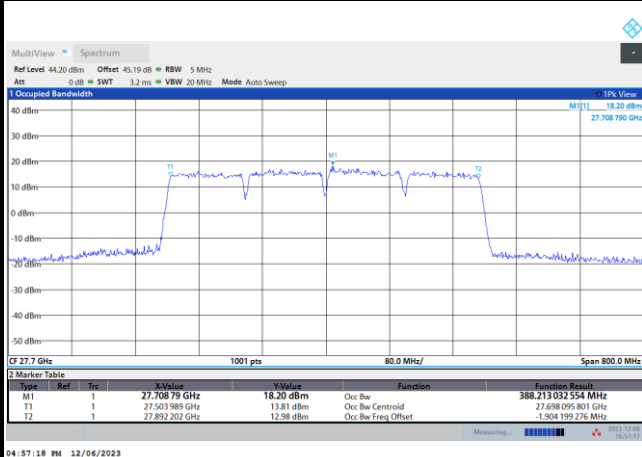




DFT-s-OFDM Module A

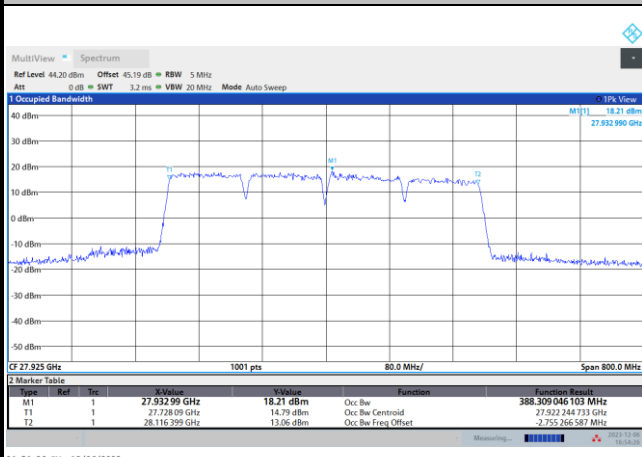
NR Band n261

Lowest Channel / 400MHz / 64QAM



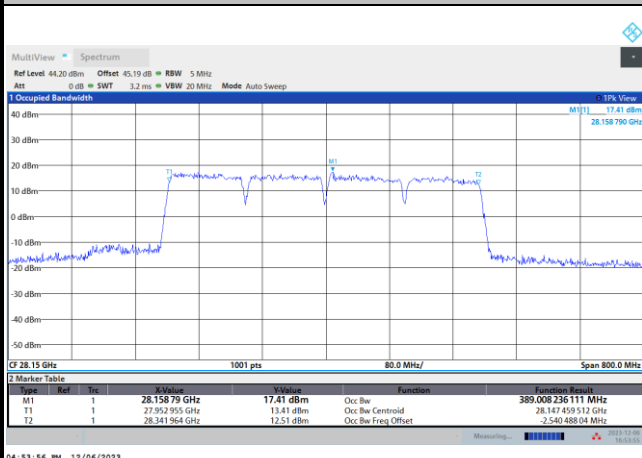
intentionally blank

Middle Channel / 400MHz / 64QAM



intentionally blank

Highest Channel / 400MHz / 64QAM



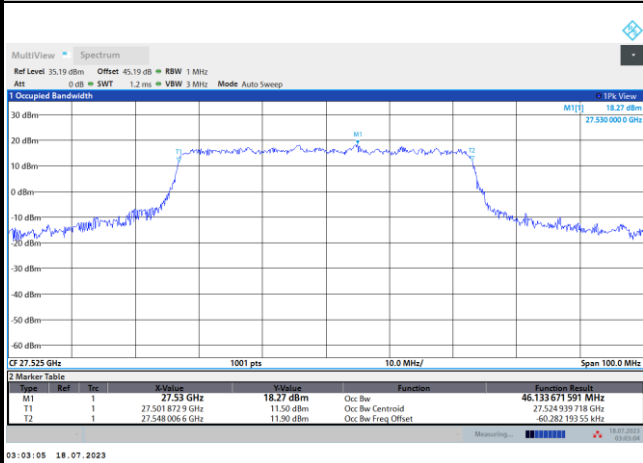
intentionally blank



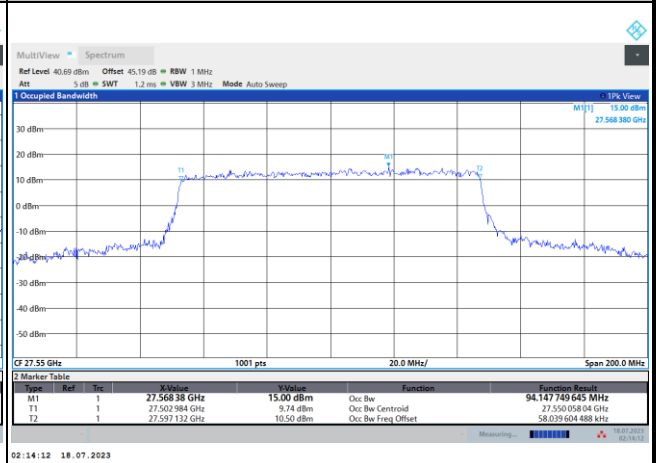
CP-OFDM Module A

NR Band n261

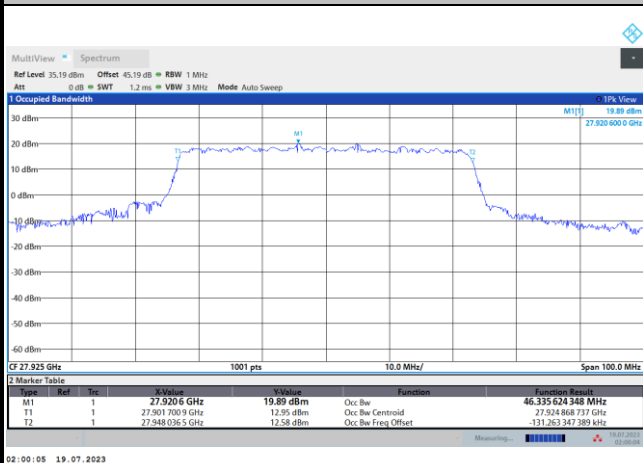
Lowest Channel / 50MHz / QPSK



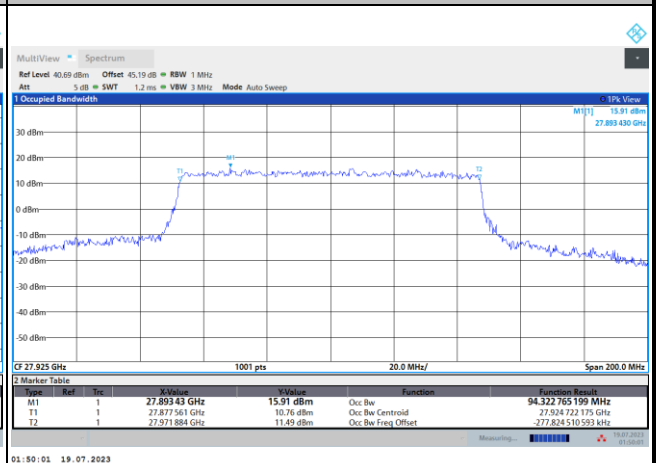
Lowest Channel / 100MHz / QPSK



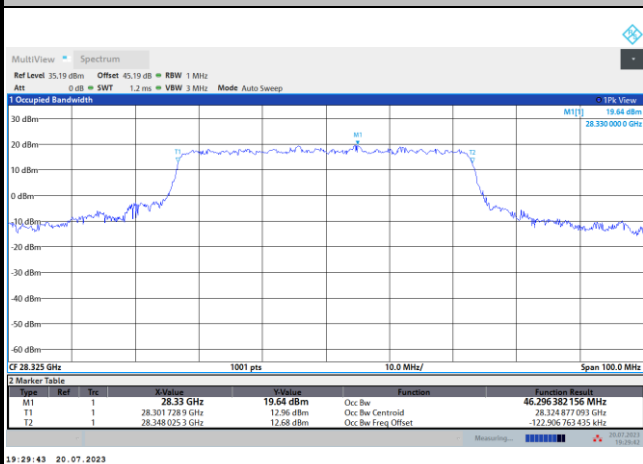
Middle Channel / 50MHz / QPSK



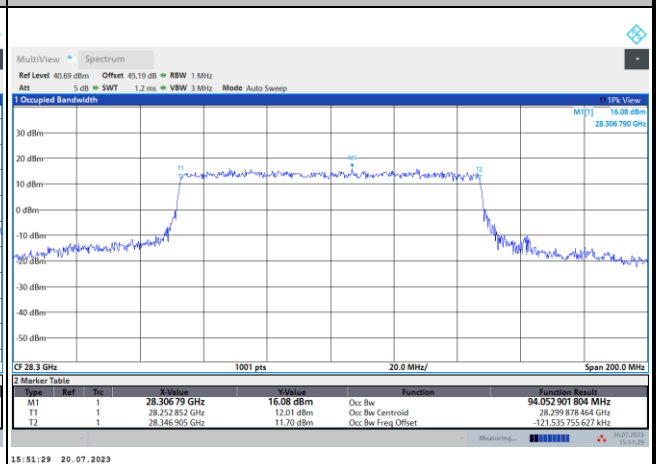
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

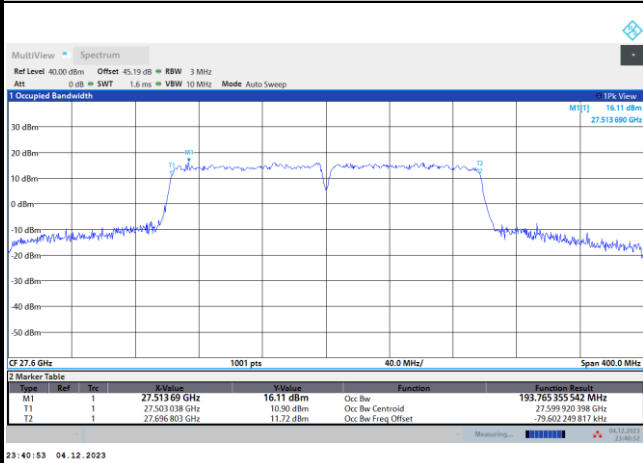




CP-OFDM Module A

NR Band n261

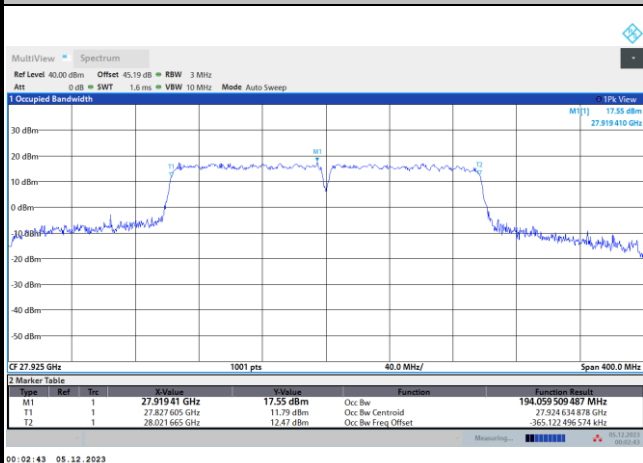
Lowest Channel / 200MHz / QPSK



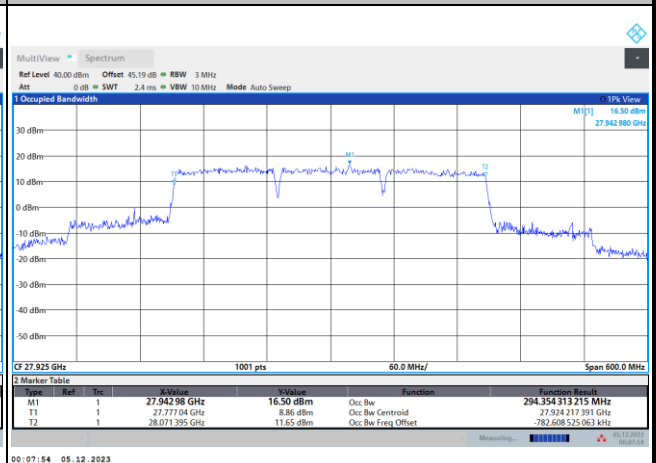
Lowest Channel / 300MHz / QPSK



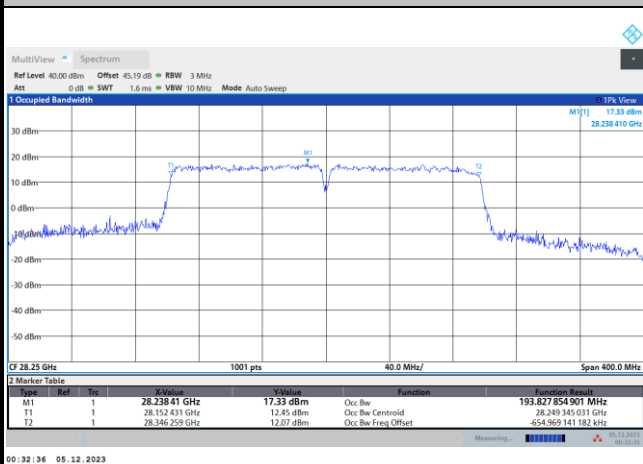
Middle Channel / 200MHz / QPSK



Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / QPSK



Highest Channel / 300MHz / QPSK

