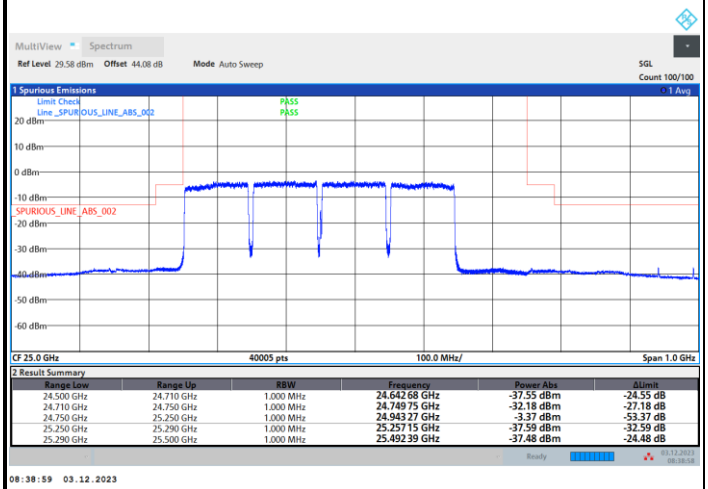
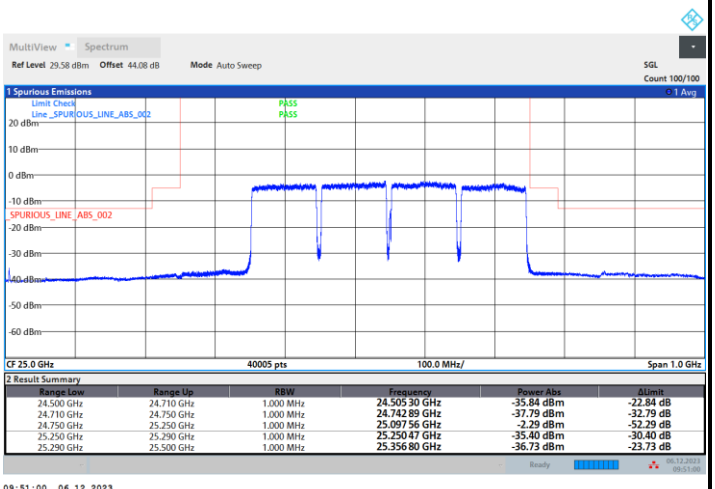
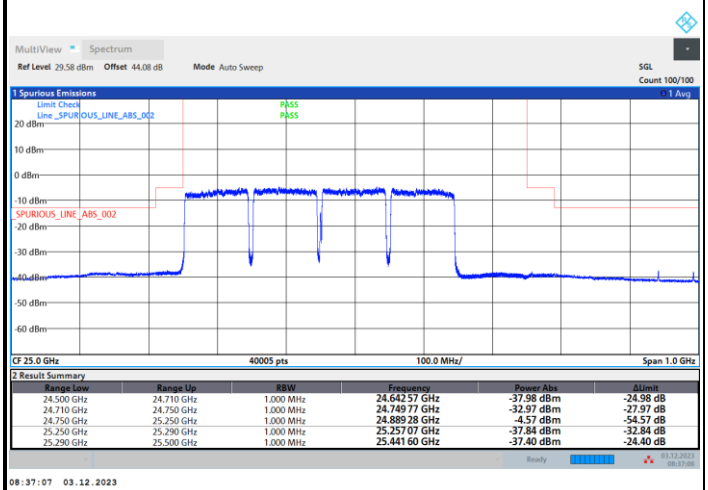
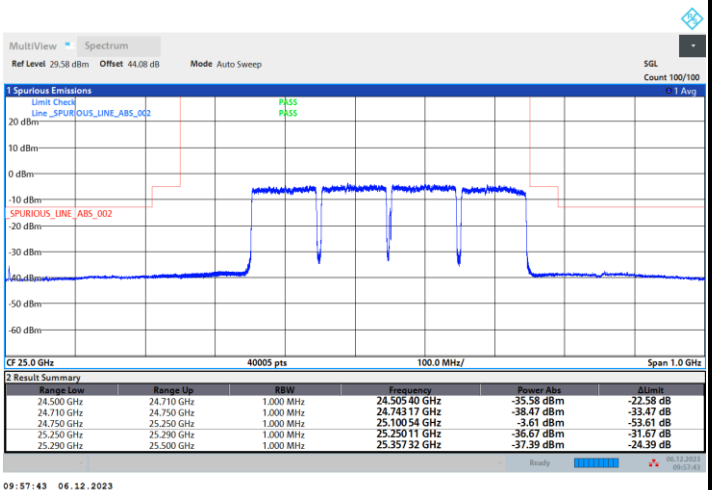
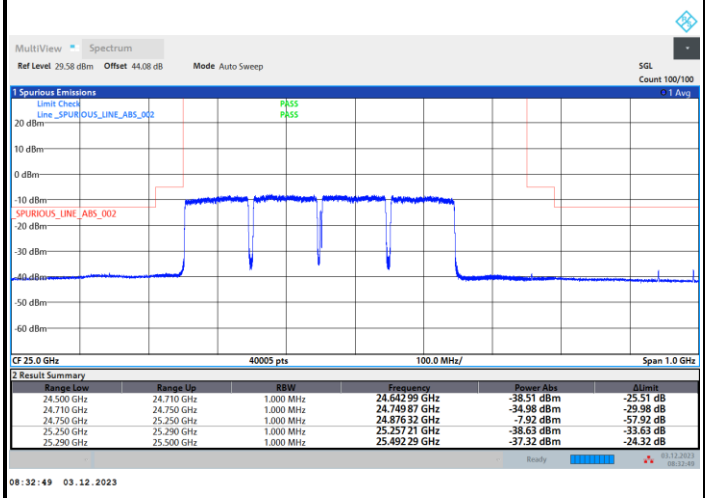
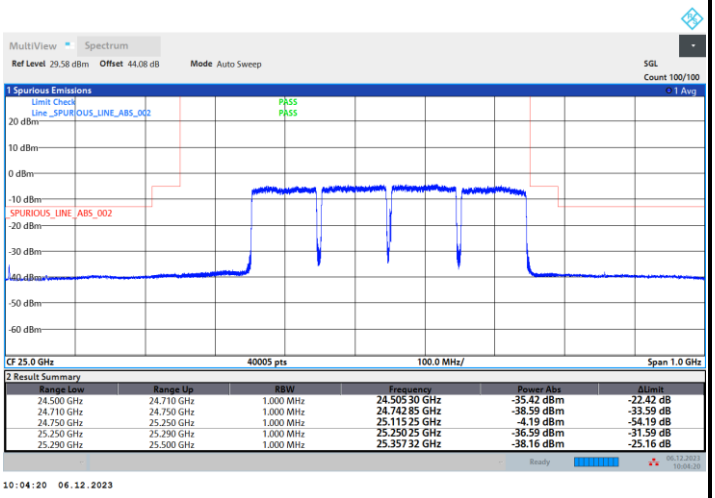
DFT-s-OFDM Module A

NR Band n258b / 400MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	
08:38:59 03.12.2023	09:51:00 06.12.2023

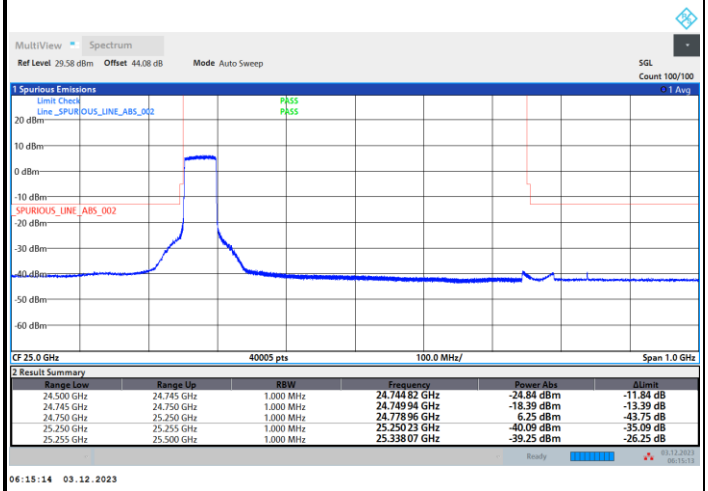
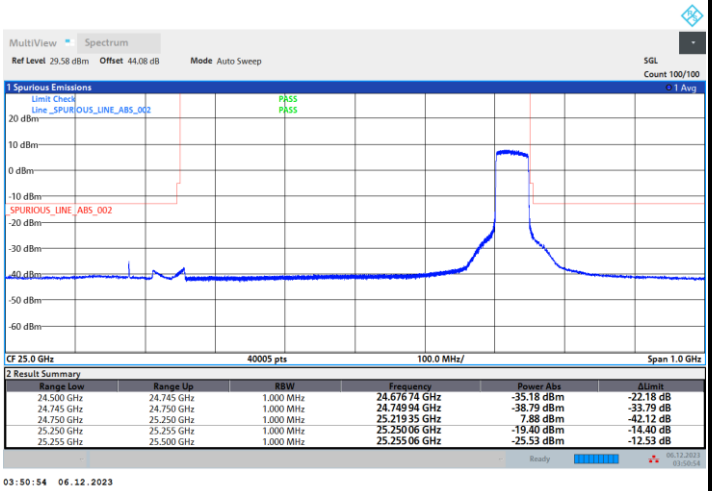
NR Band n258b / 400MHz / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	
08:37:07 03.12.2023	09:57:43 06.12.2023

DFT-s-OFDM Module A

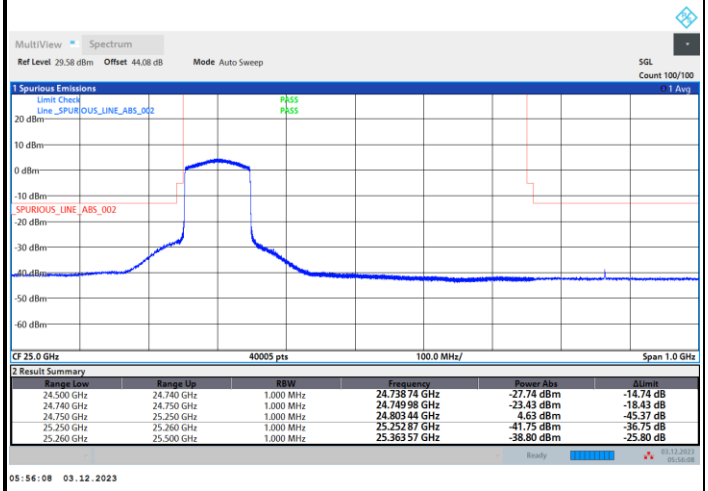
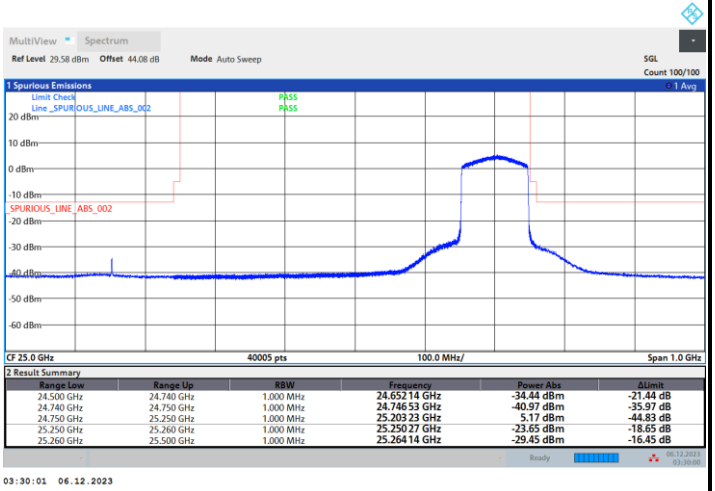
NR Band n258b / 400MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

CP-OFDM Module A

NR Band n258b / 50MHz / QPSK

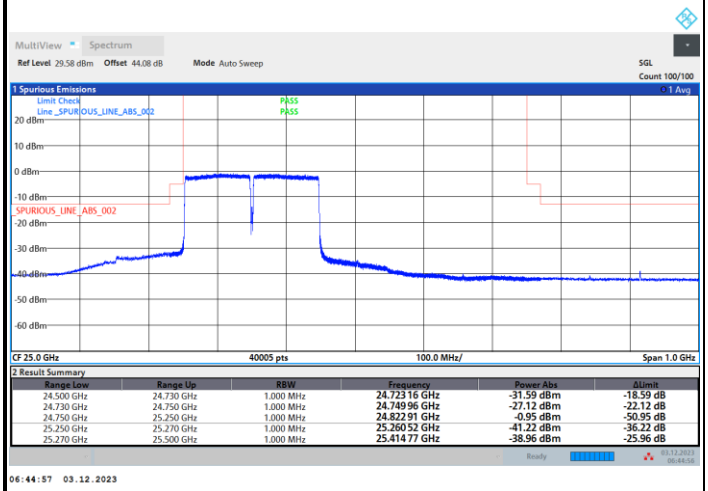
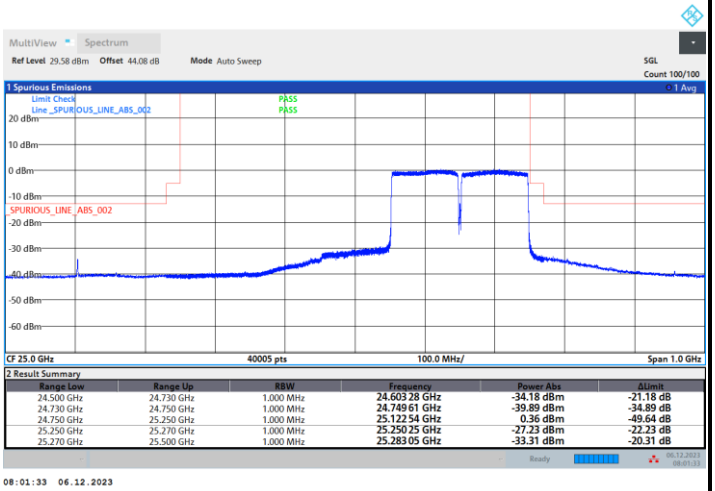
Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

NR Band n258b / 100MHz / QPSK

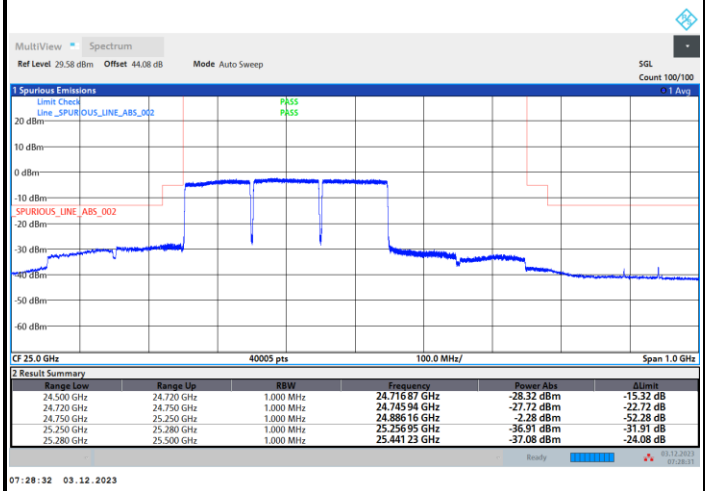
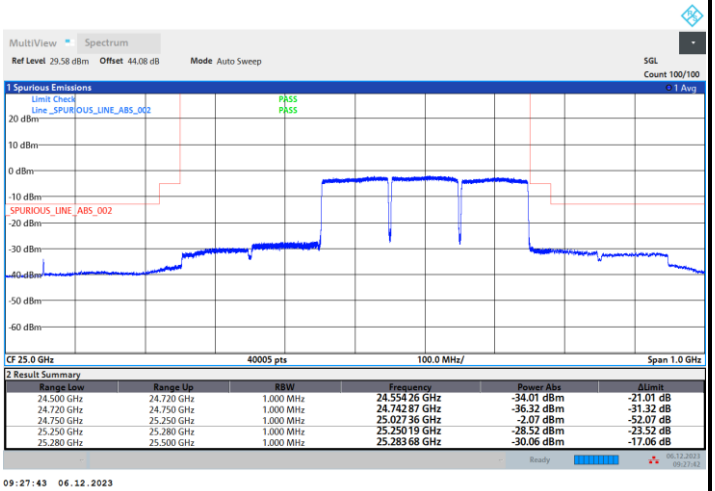
Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

CP-OFDM Module A

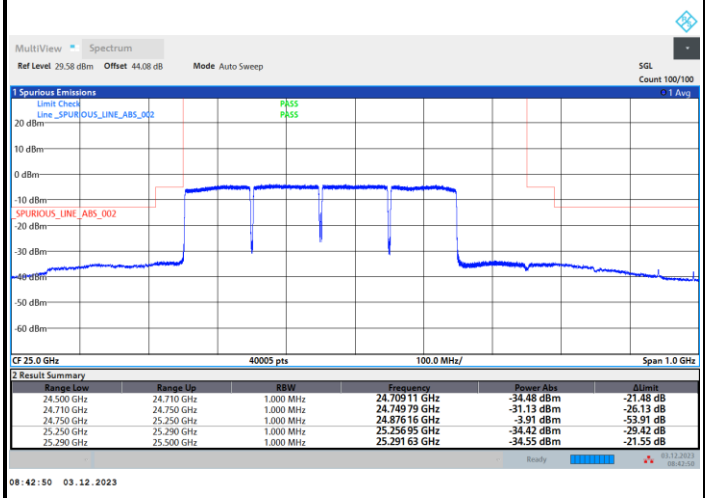
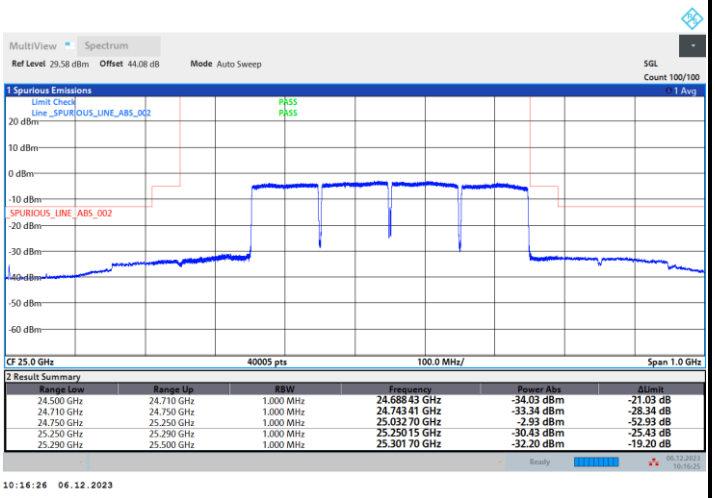
NR Band n258b / 200MHz / QPSK

Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

NR Band n258b / 300MHz / QPSK

Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

CP-OFDM Module A

NR Band n258b / 400MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

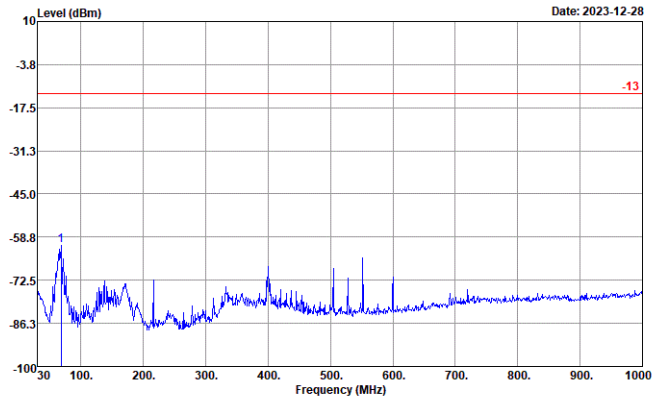
Spurious Emission

There is no significant spurious emission signal found for frequency started from 30MHz up to 18GHz.

Only the noise floor is reported.

NR Band n258b (30MHz-1GHz)

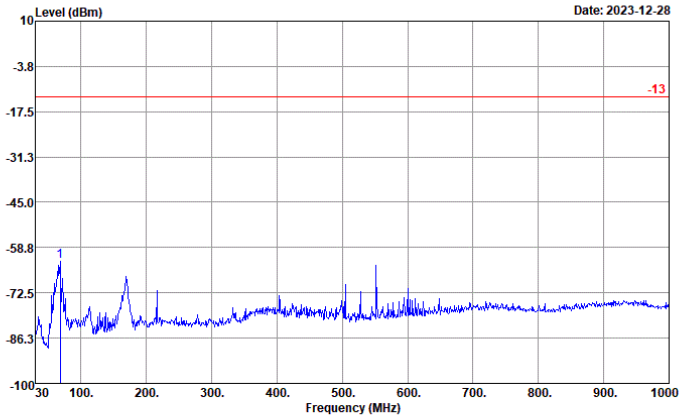
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 3N2327
: n258b MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	67.83	-61.31	-48.31	-13.00

Vertical

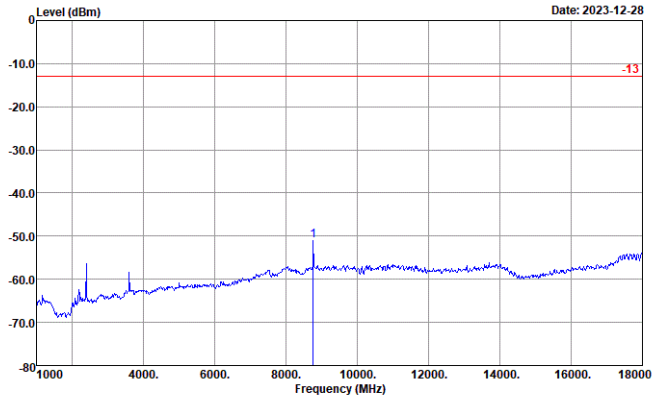


Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 3N2327
: n258b MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	67.83	-62.96	-49.96	-13.00

NR Band n258b (1GHz-18GHz)

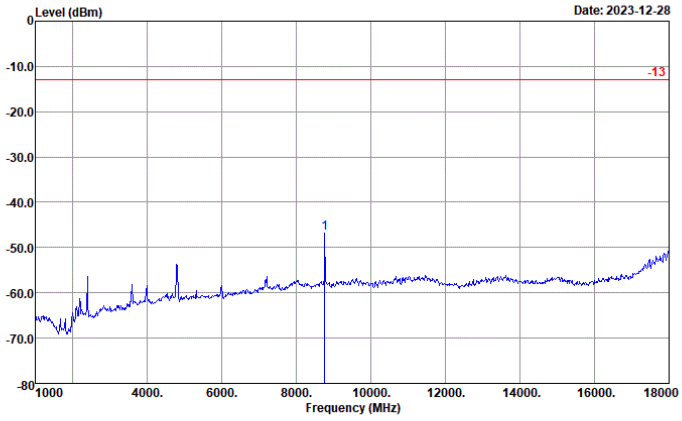
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 3N2327
: n258b MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	8769.00	-51.11	-38.11	-13.00

Vertical

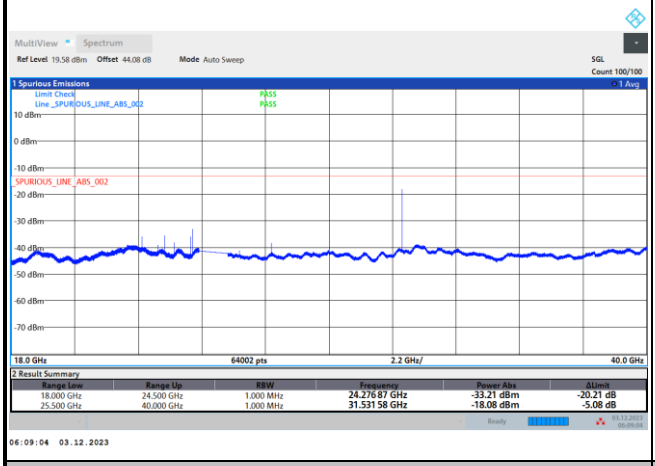
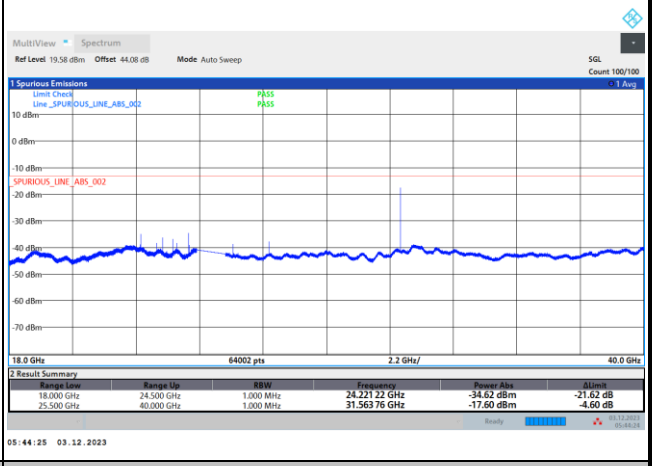
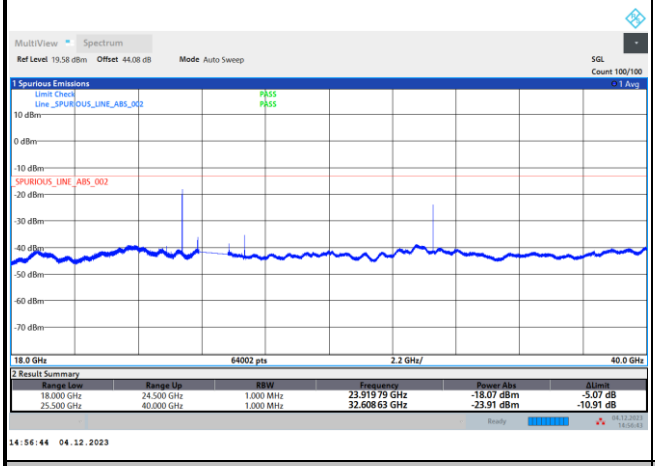
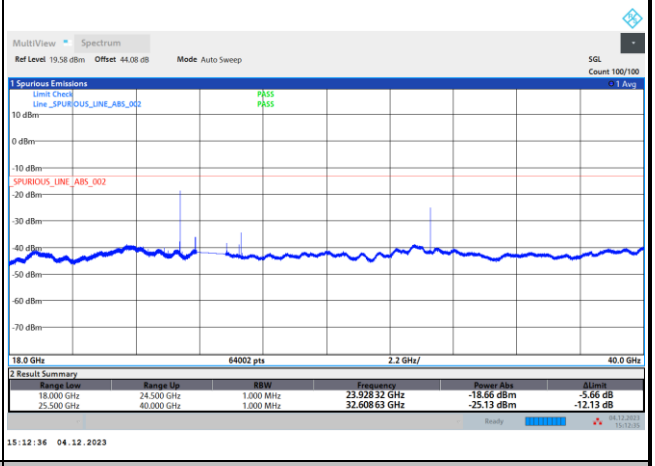
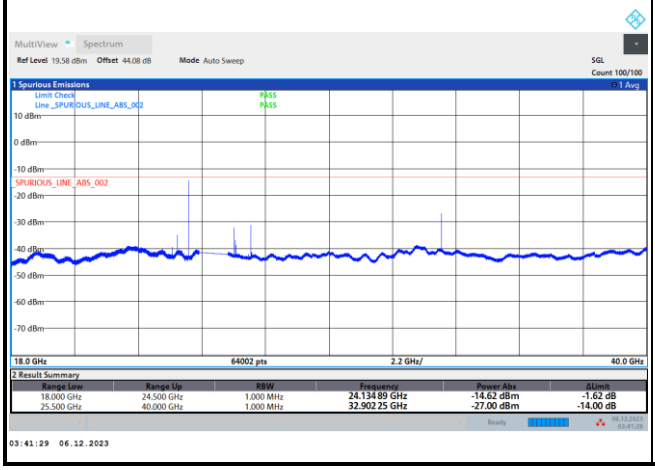
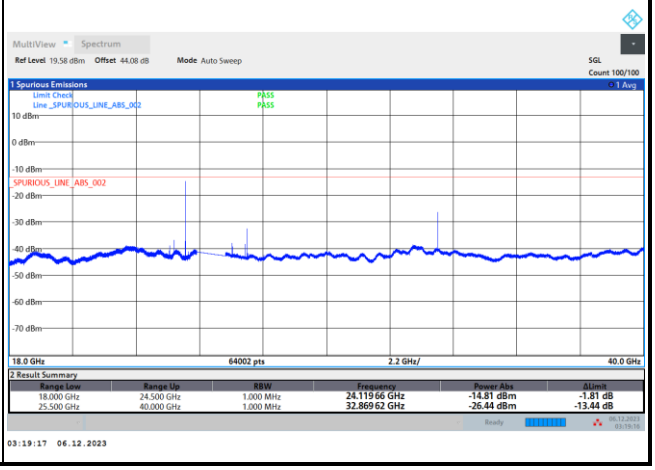


Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 3N2327
: n258b MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	8769.00	-46.75	-33.75	-13.00

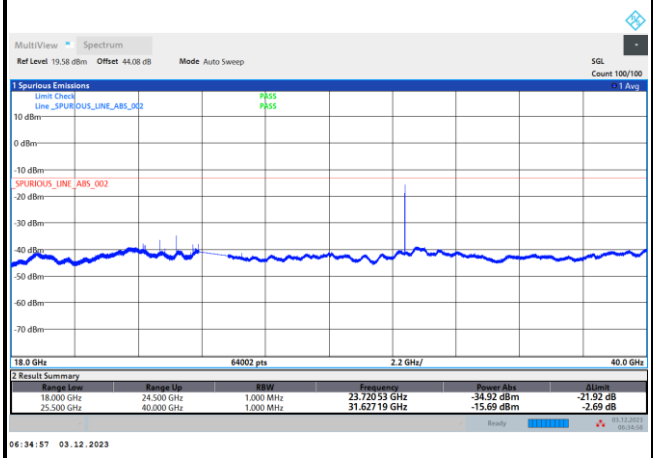
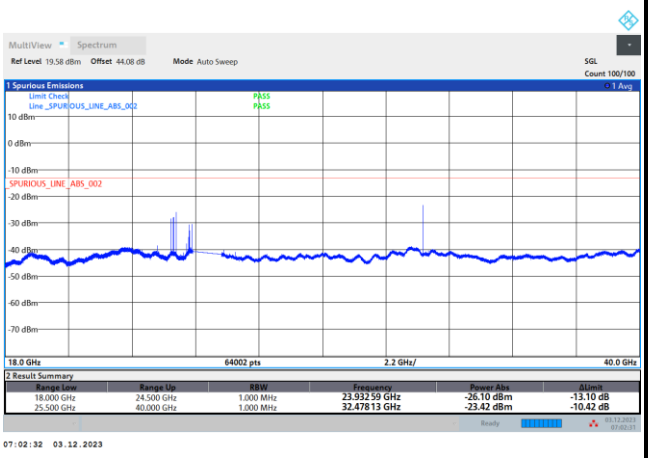
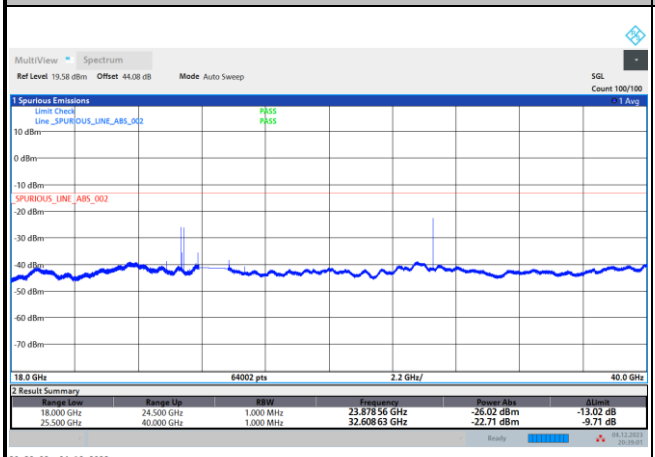
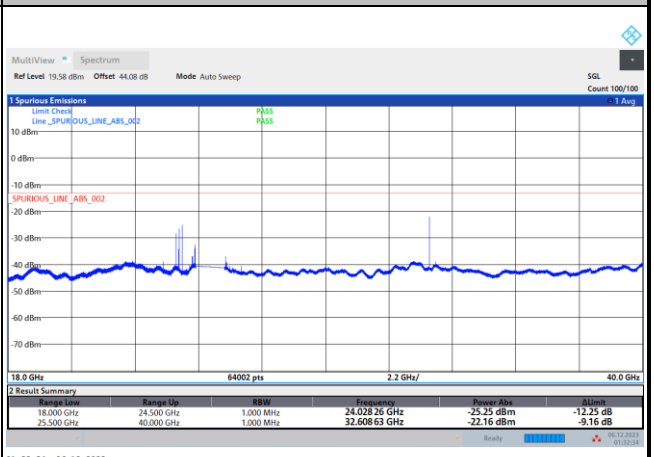
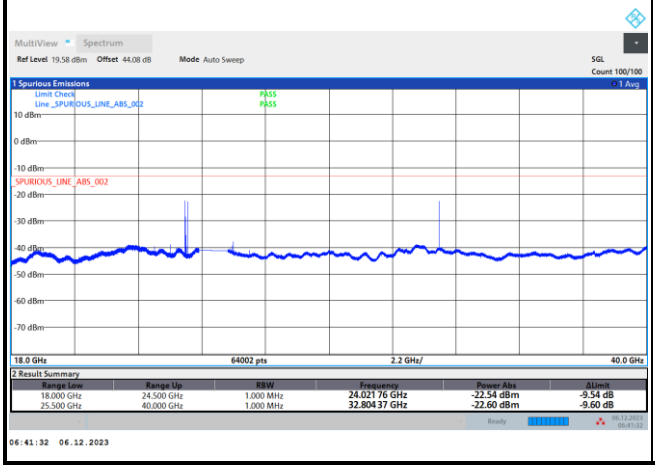
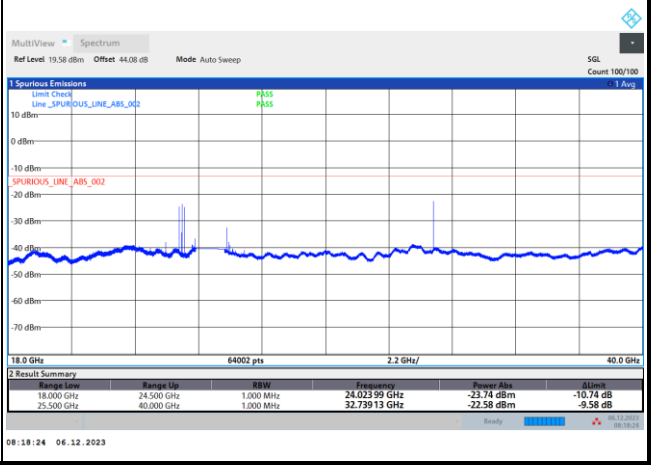
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module A

NR Band n258b QPSK (18-40GHz)	
Lowest Channel / 50MHz	**Lowest Channel / 100MHz**
	
Middle Channel / 50MHz	**Middle Channel / 100MHz**
	
Highest Channel / 50MHz	**Highest Channel / 100MHz**
	

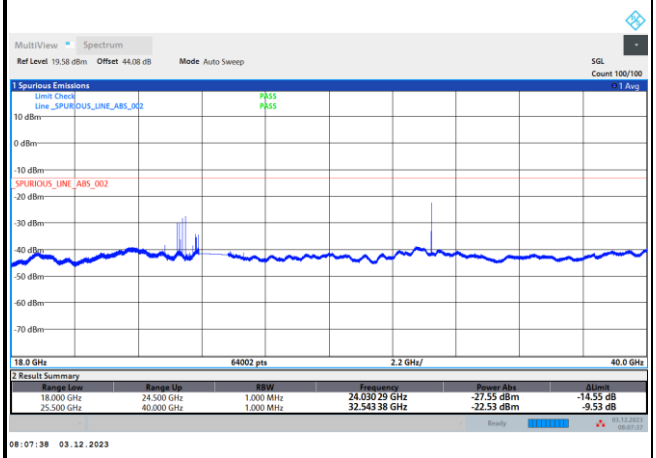
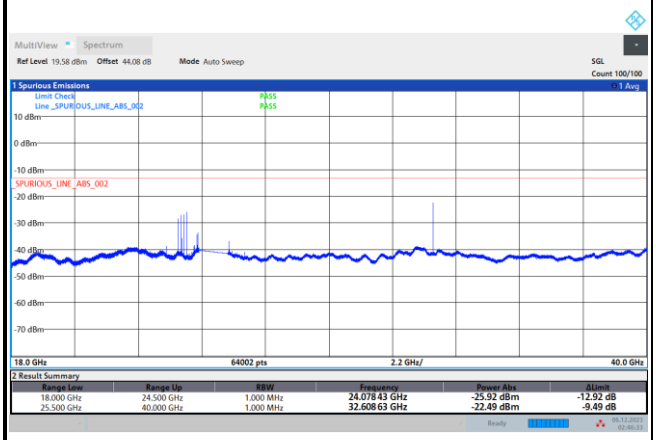
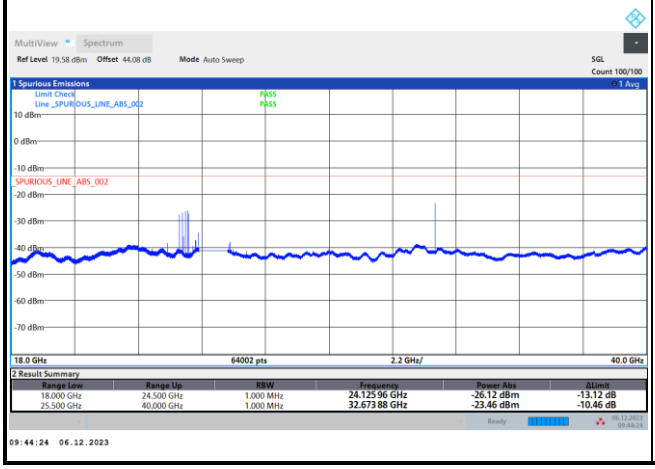
Remark: In band and out of band frequencies are omitted.

DFT-s-OFDM Module A

NR Band n258b QPSK (18-40GHz)	
Lowest Channel / 200MHz	**Lowest Channel / 300MHz**
	
Middle Channel / 200MHz	**Middle Channel / 300MHz**
	
Highest Channel / 200MHz	**Highest Channel / 300MHz**
	

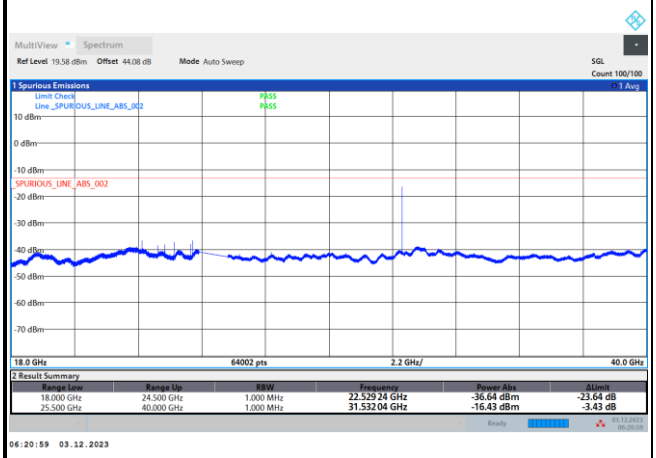
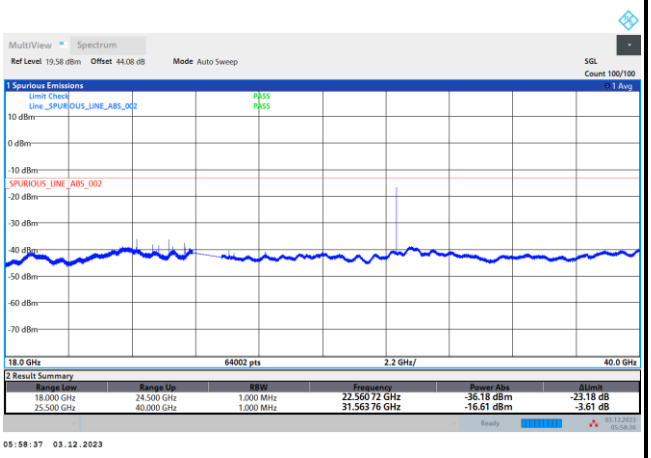
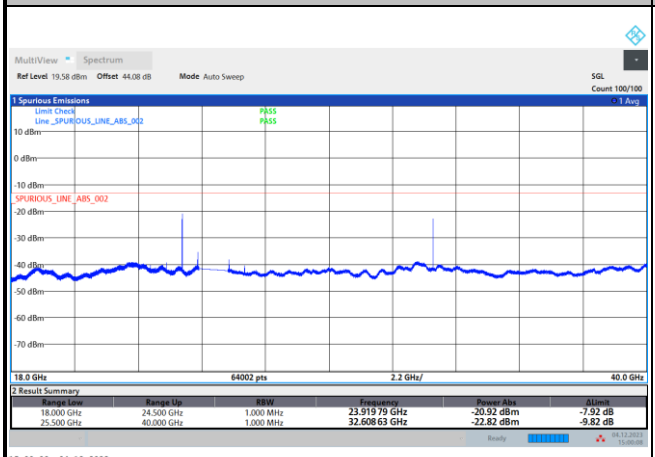
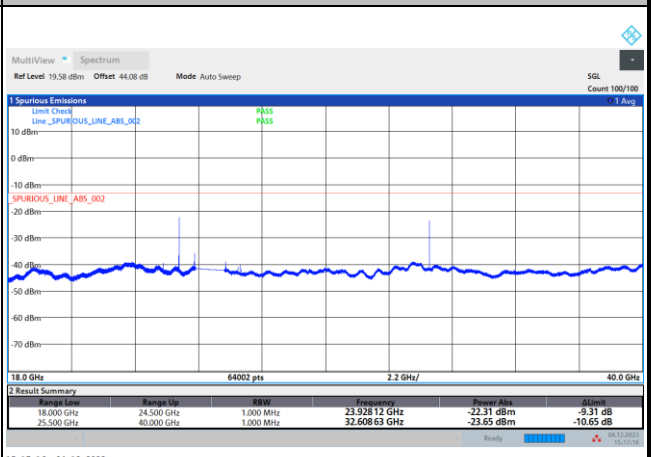
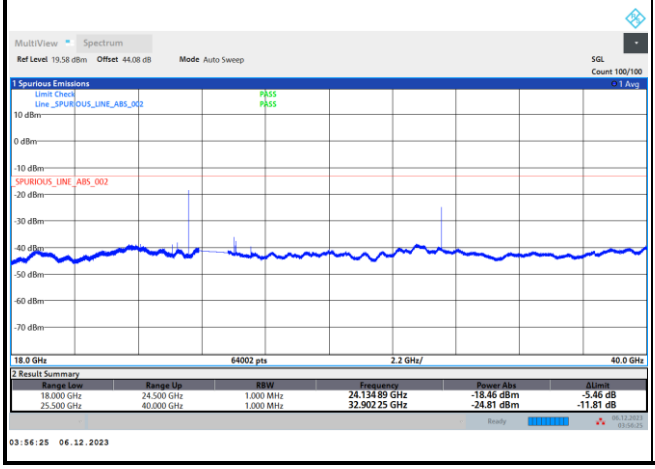
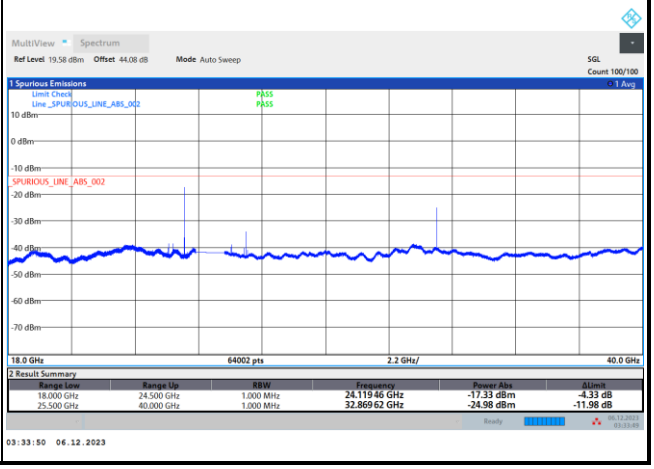
Remark: In band and out of band frequencies are omitted.

DFT-s-OFDM Module A

NR Band n258b QPSK (18-40GHz)	
Lowest Channel / 400MHz	
	**intentionally blank**
Middle Channel / 400MHz	
	**intentionally blank**
Highest Channel / 400MHz	
	**intentionally blank**

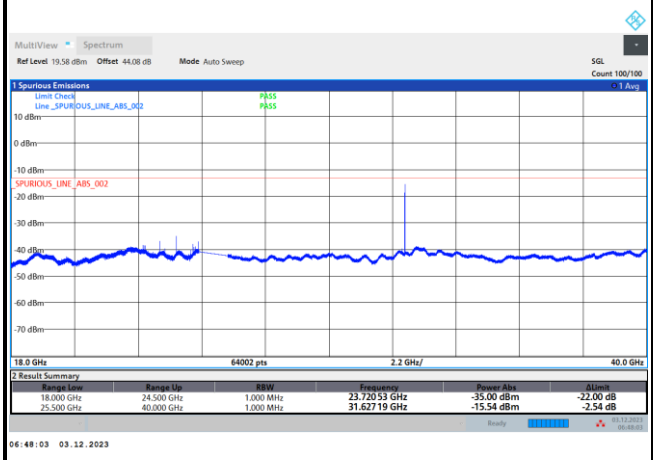
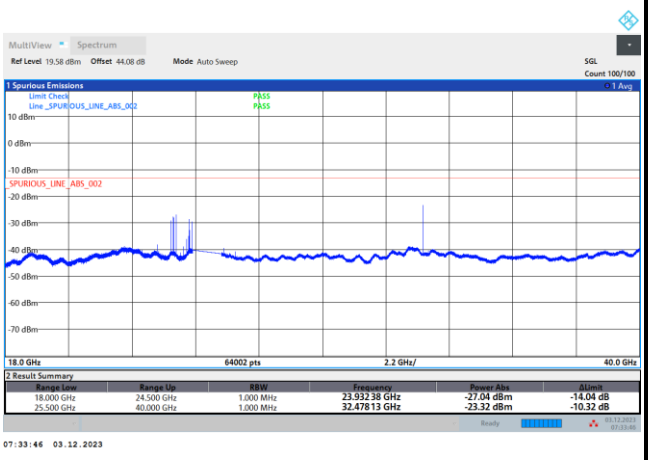
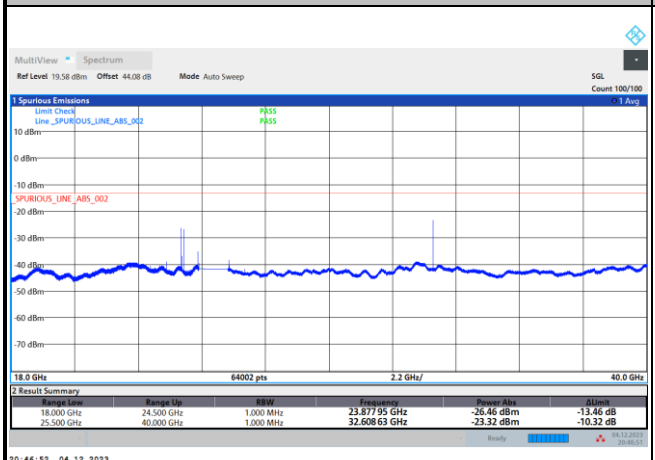
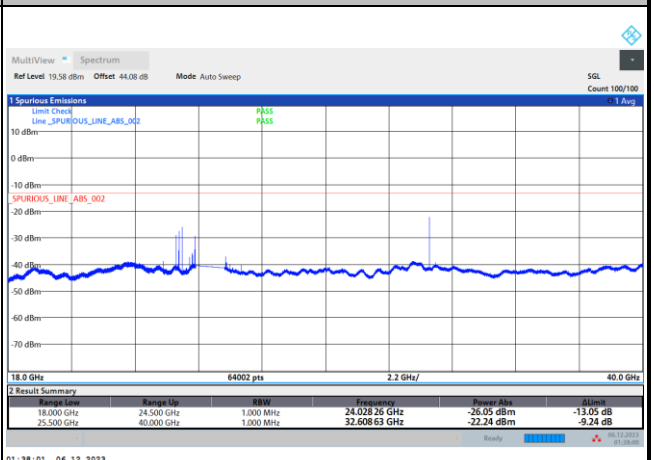
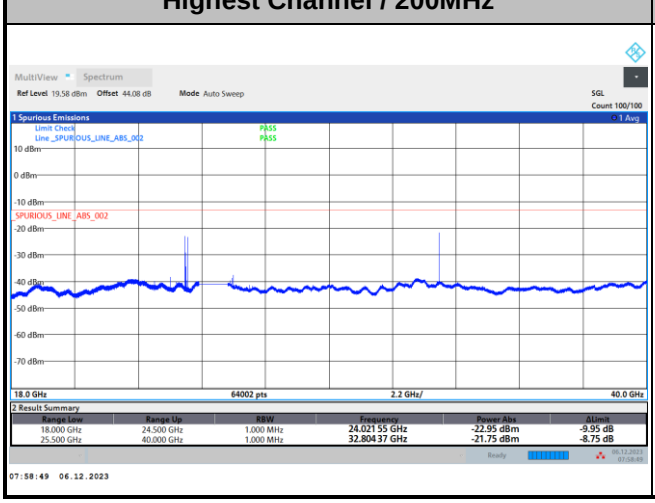
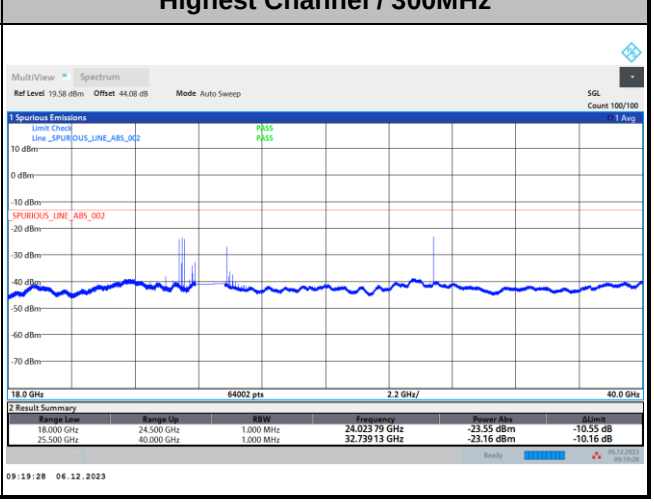
Remark: In band and out of band frequencies are omitted.

CP-OFDM Module A

NR Band n258b QPSK (18-40GHz)	
Lowest Channel / 50MHz	**Lowest Channel / 100MHz**
	
Middle Channel / 50MHz	**Middle Channel / 100MHz**
	
Highest Channel / 50MHz	**Highest Channel / 100MHz**
	

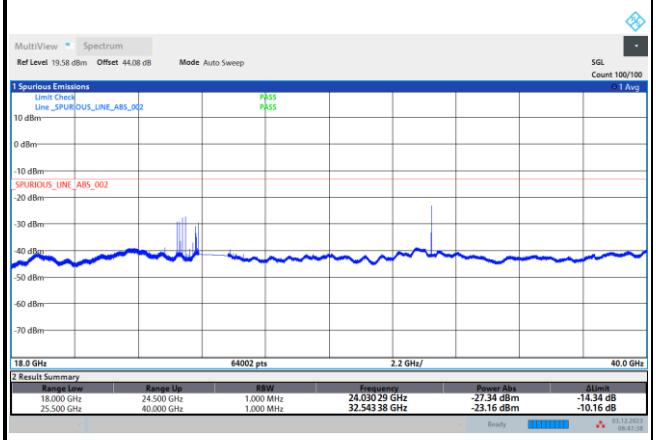
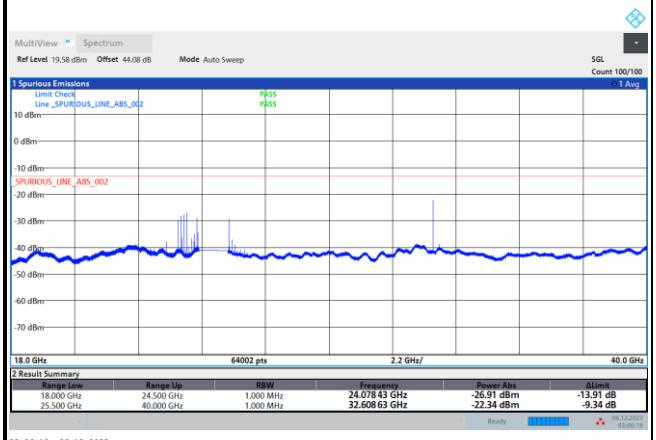
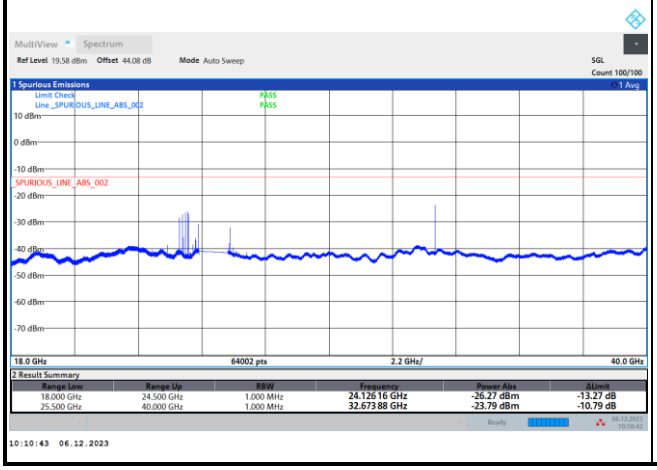
Remark: In band and out of band frequencies are omitted.

CP-OFDM Module A

NR Band n258b 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

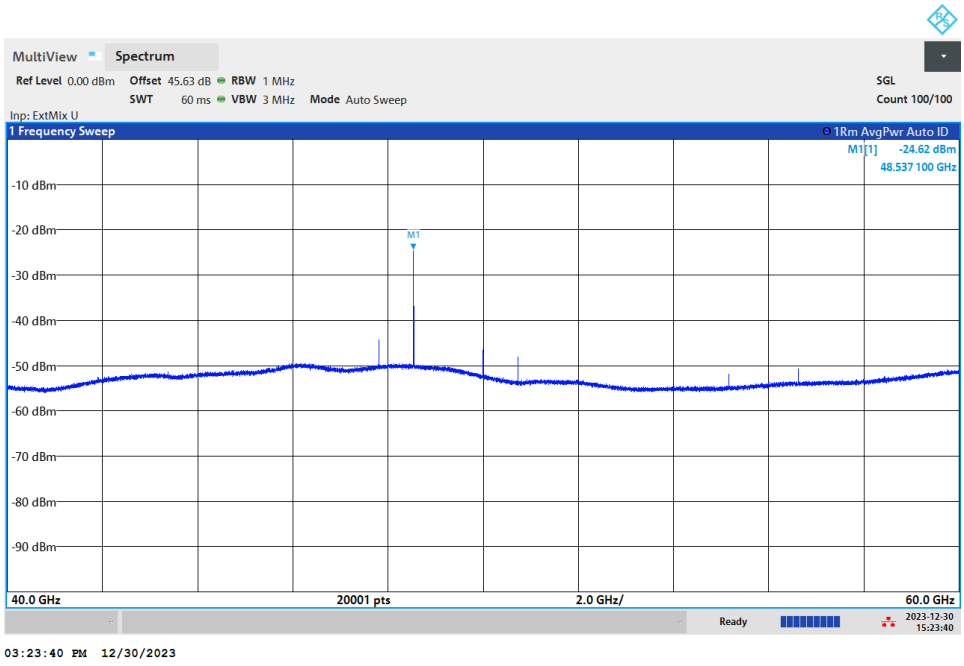
NR Band n258b QPSK (18-40GHz)	
Lowest Channel / 400MHz	
	**intentionally blank**
Middle Channel / 400MHz	
	**intentionally blank**
Highest Channel / 400MHz	
	**intentionally blank**

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.

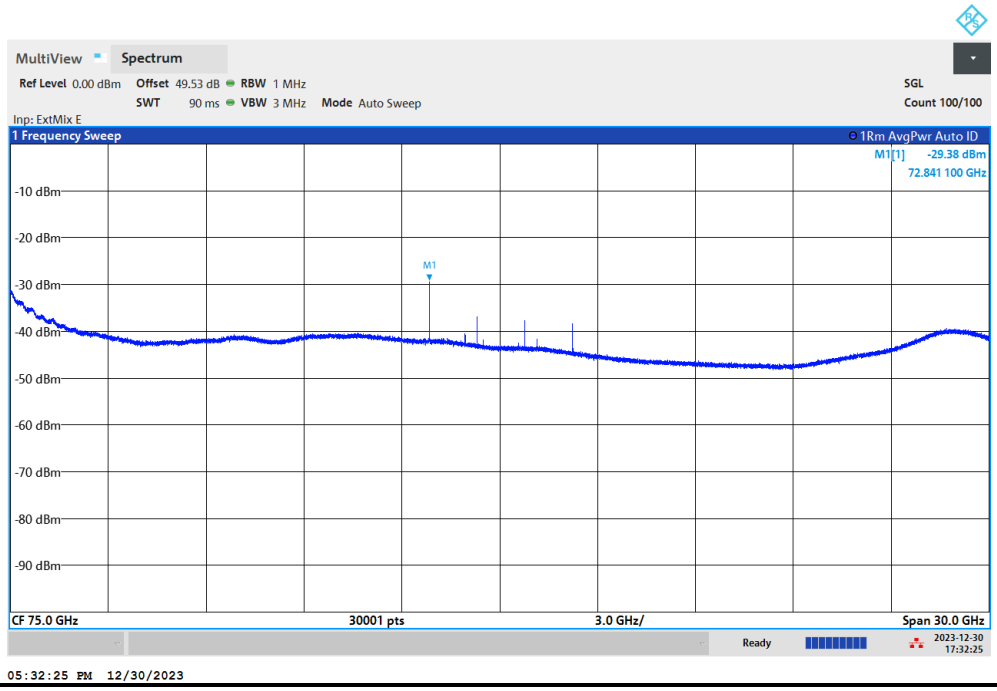
NR Band n258b
(40GHz-60GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 43 + 0.43 + 107 + 20log(1) – 104.8 = 45.63(dB)

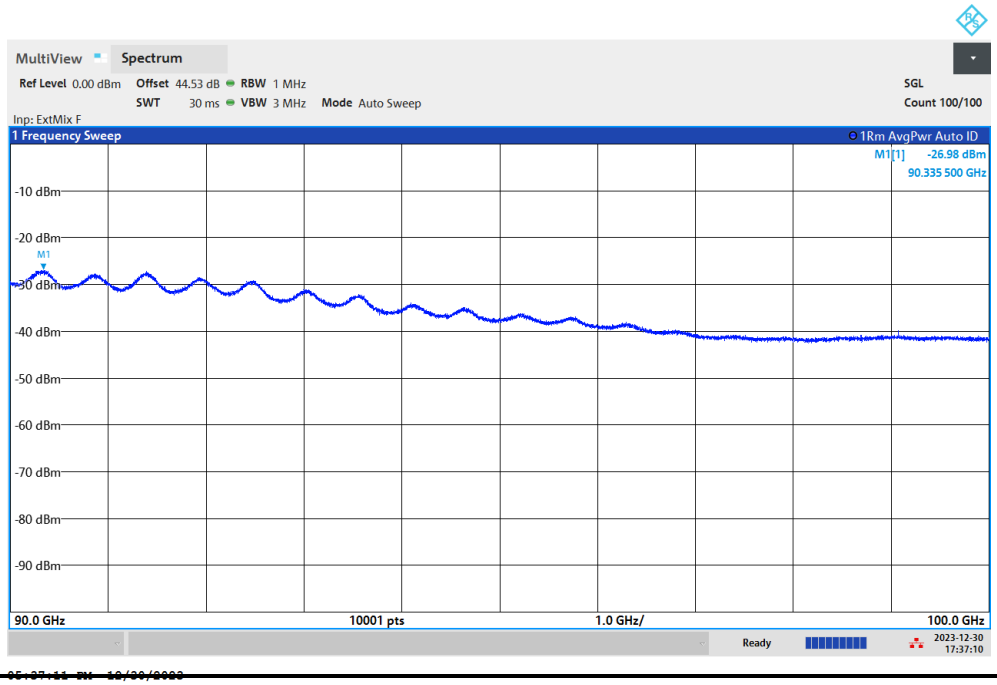
NR Band n258b
(60GHz-90GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 46.9 + 0.43 + 107 + 20log(1) – 104.8 = 49.53 (dB)

NR Band n258b
(90GHz-100GHz)



Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) – 104.8

= 47.92 + 0.43 + 107 + 20log(0.5) – 104.8 = 44.53 (dB)

Frequency Stability

Test Conditions		NR Band n258b / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	24.999979	41.000	1.640	Pass
40	Normal Voltage	24.999989	31.000	1.240	
30	Normal Voltage	25.000022	-2.000	0.080	
20(Ref.)	Normal Voltage	25.00002	0.000	0.000	
10	Normal Voltage	24.999977	43.000	1.720	
0	Normal Voltage	24.999976	44.000	1.760	
-10	Normal Voltage	24.999974	46.000	1.840	
-20	Normal Voltage	24.999974	46.000	1.840	
-30	Normal Voltage	24.999968	52.000	2.080	
20	Maximum Voltage	25.000024	-4.000	0.160	
20	Normal Voltage	25.000032	-12.000	0.480	
20	Battery End Point	25.000029	-9.000	0.360	

Note:

1. Normal Voltage = 3.89 V.；Battery End Point (BEP) = 3.6 V.；Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the operation band.

NR Band n258b Module B AGH+V

Occupied Bandwidth

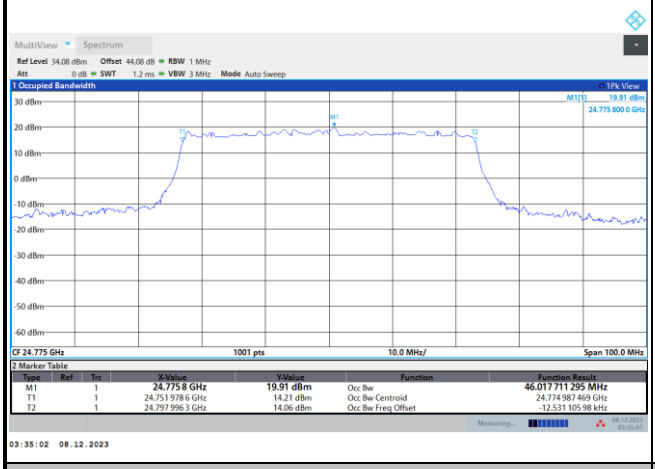
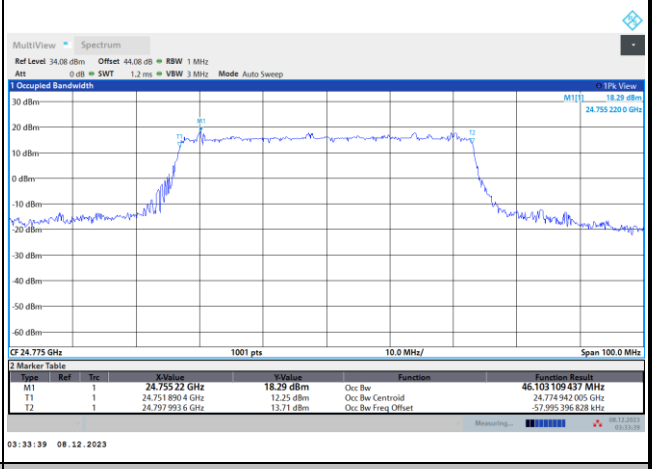
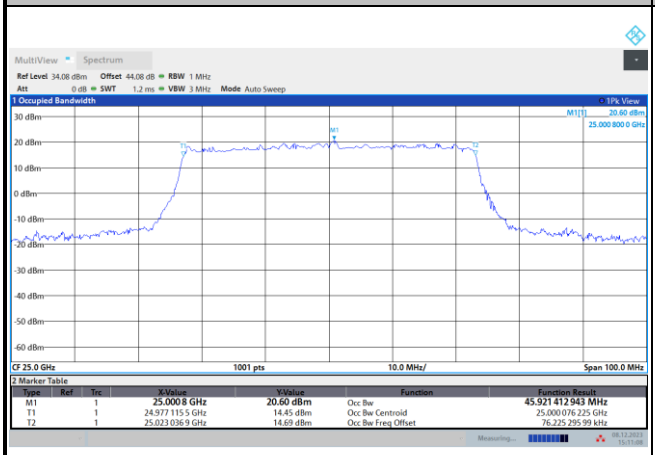
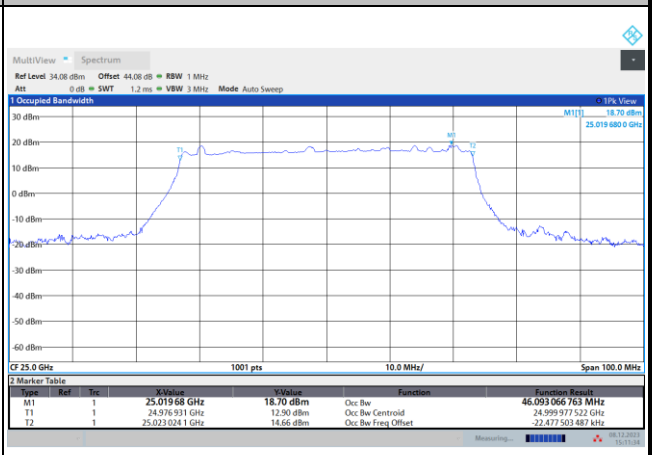
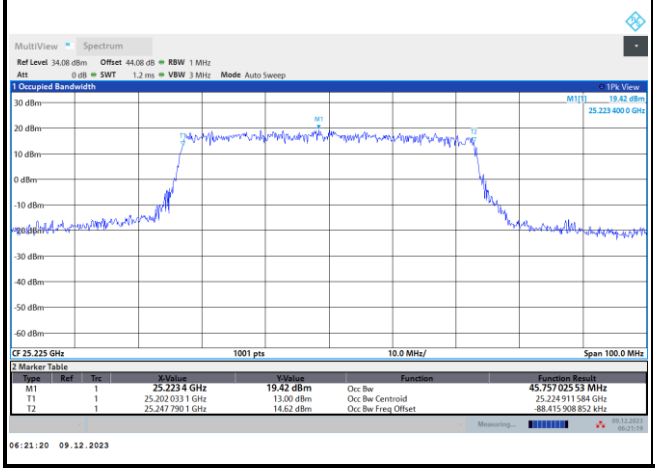
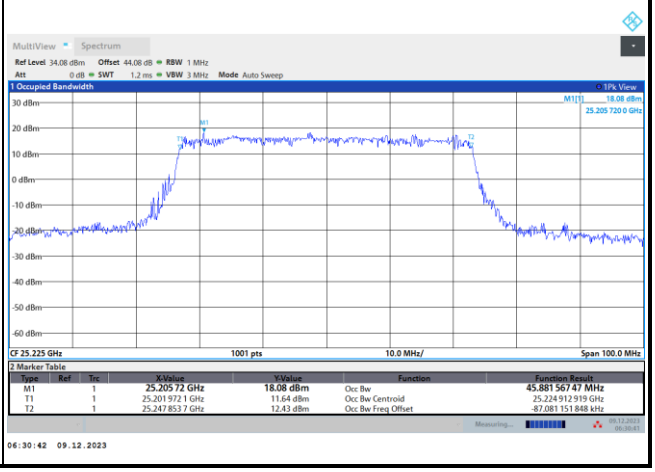
Mode	DFT-s-OFDM Module B NR Band n258b : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	46.01	46.10	45.91	91.23	91.08	91.07	191.11	191.26	190.73
Middle CH	45.92	46.09	45.88	91.05	90.95	90.96	191.09	191.06	190.80
Highest CH	45.75	45.88	45.73	90.77	90.80	90.75	191.23	190.99	190.60

Mode	DFT-s-OFDM Module B NR Band n258b : 99%OBW(MHz)					
BW	300MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	290.47	290.26	289.39	389.09	388.64	388.42
Middle CH	290.33	290.11	289.31	389.52	389.55	389.01
Highest CH	290.73	290.58	289.28	389.06	389.28	388.25

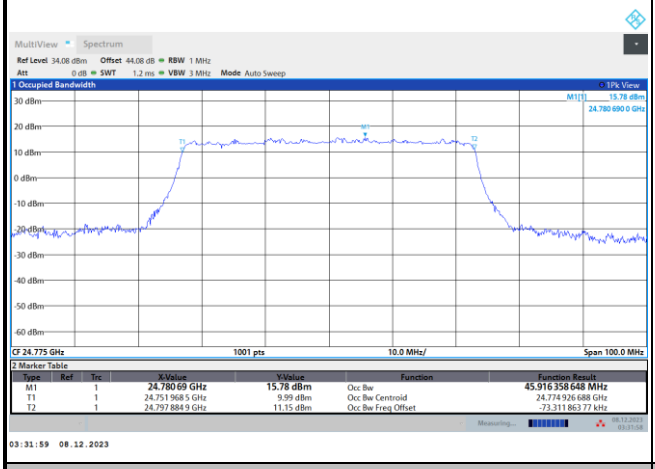
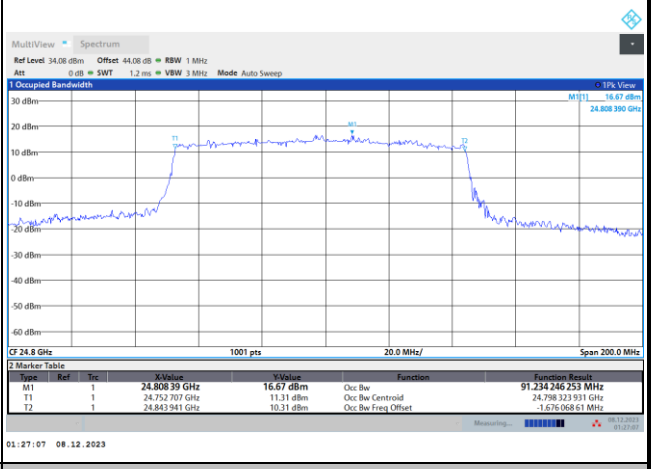
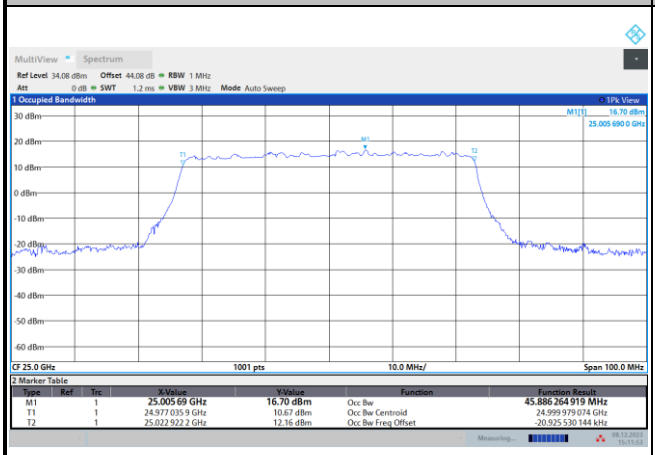
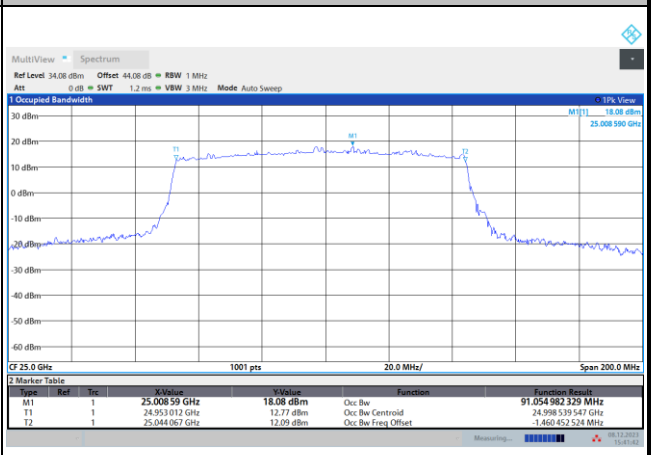
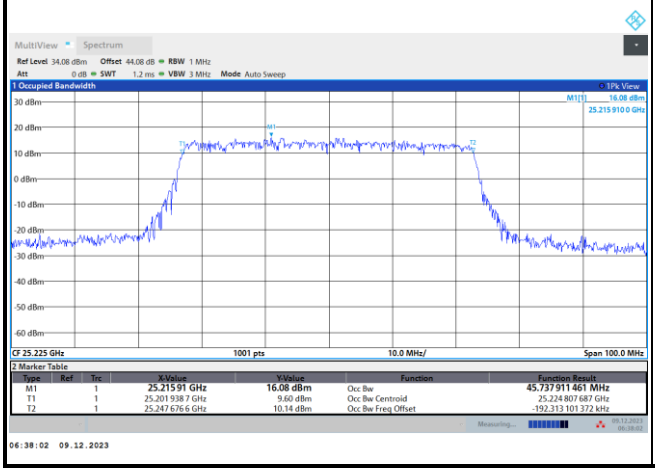
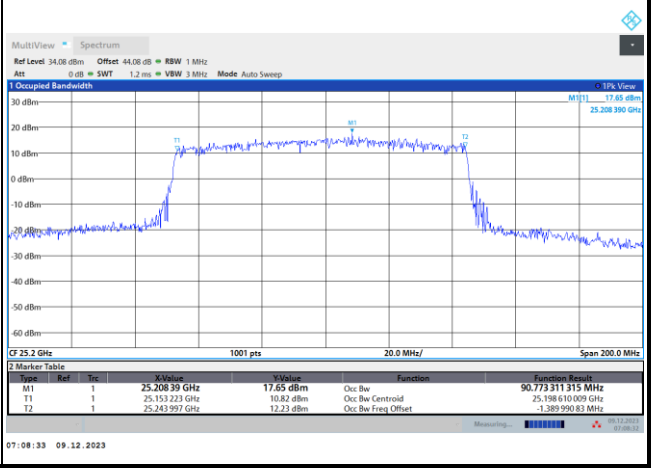
Mode	CP-OFDM Module B NR Band n258b : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.16	93.99	194.03
Middle CH	46.06	93.63	193.96
Highest CH	45.97	93.65	193.60

Mode	CP-OFDM Module B NR Band n258b : 99%OBW(MHz)	
BW	300MHz	400MHz
Mod.	QPSK	QPSK
Lowest CH	294.04	391.95
Middle CH	293.81	394.61
Highest CH	293.62	392.76

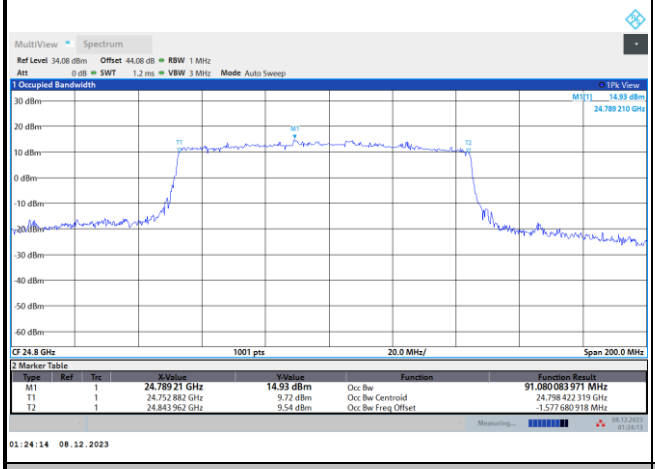
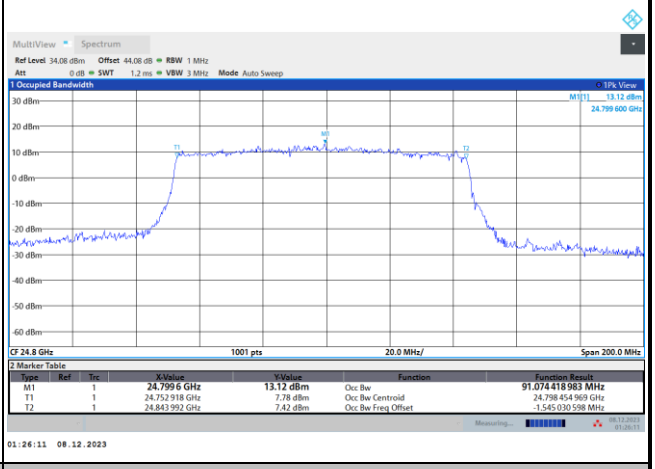
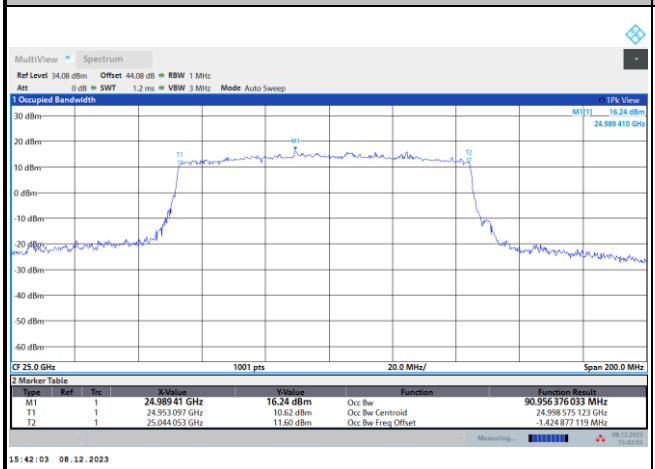
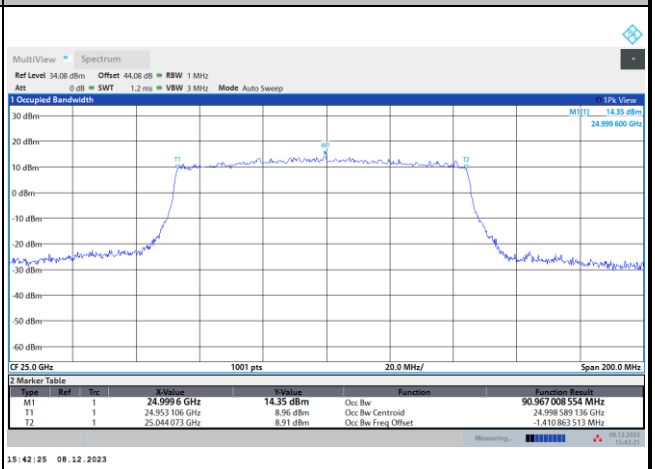
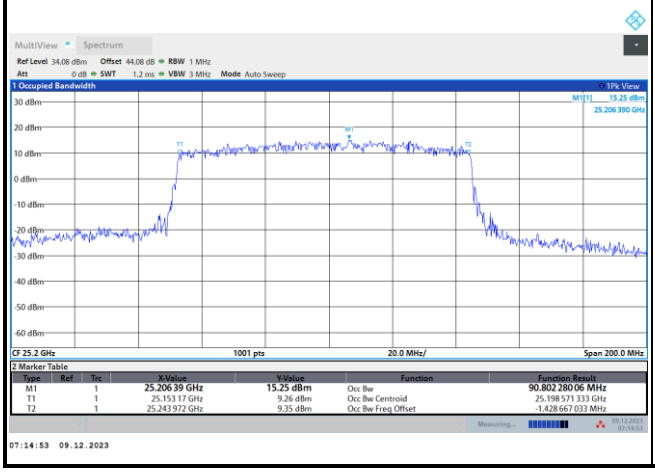
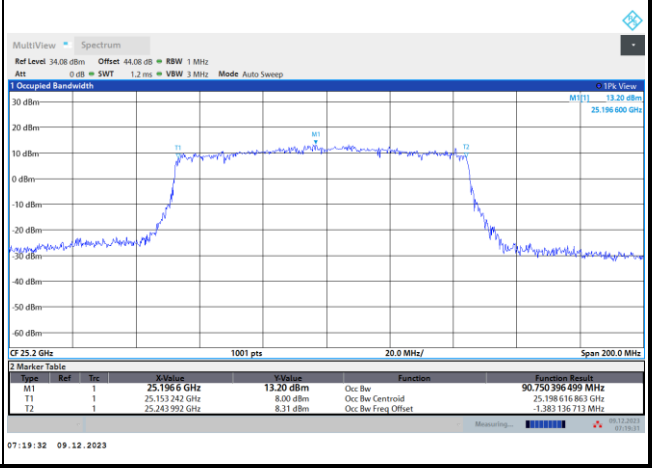
DFT-s-OFDM Module B

NR Band n258b	
Lowest Channel / 50MHz / QPSK	**Lowest Channel / 50MHz / 16QAM**
	
Middle Channel / 50MHz / QPSK	**Middle Channel / 50MHz / 16QAM**
	
Highest Channel / 50MHz / QPSK	**Highest Channel / 50MHz / 16QAM**
	

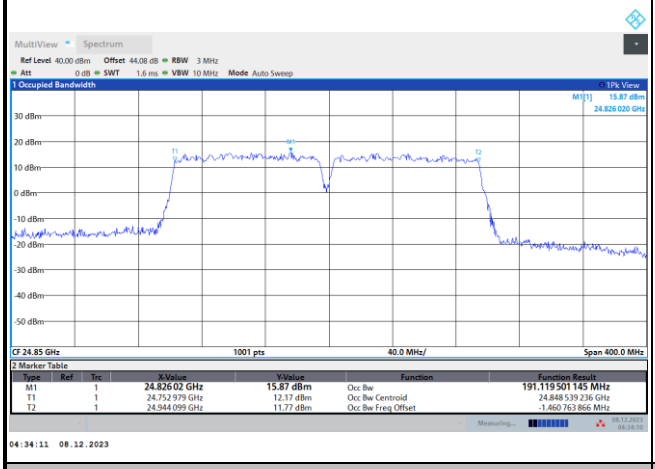
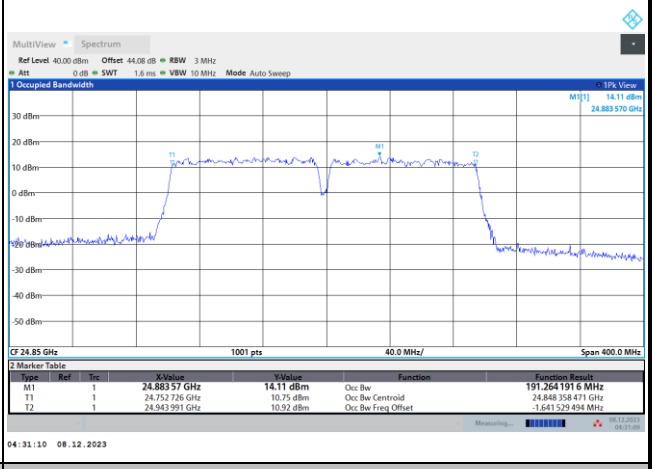
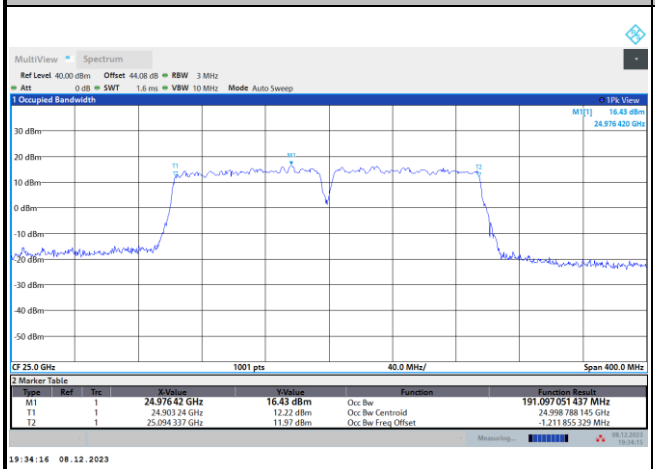
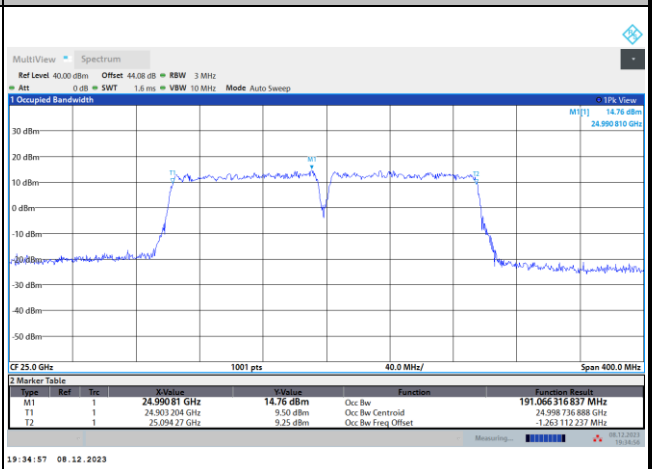
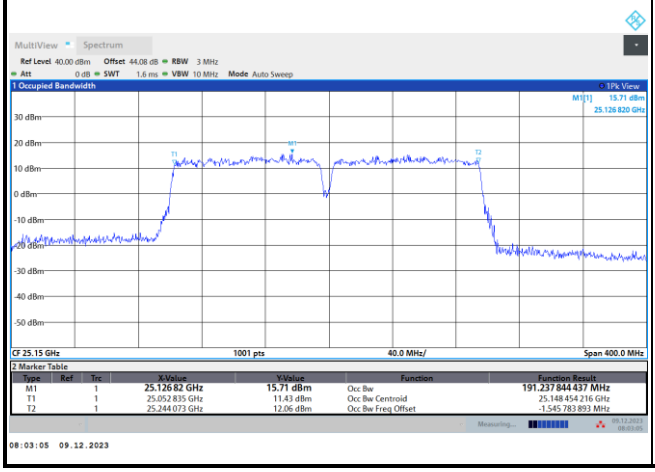
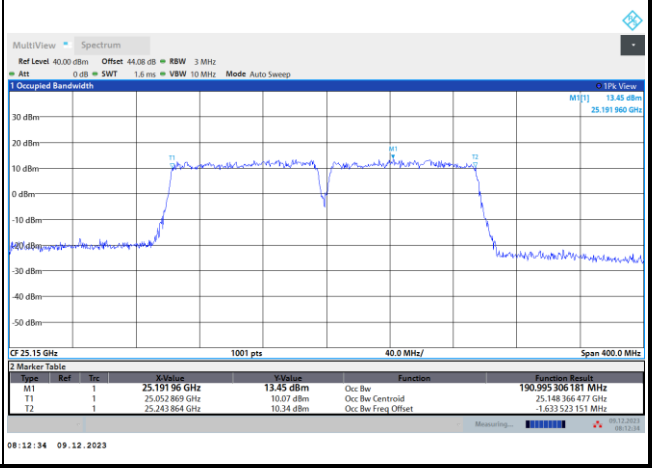
DFT-s-OFDM Module B

NR Band n258b	
Lowest Channel / 50MHz / 64QAM	**Lowest Channel / 100MHz / QPSK**
	
Middle Channel / 50MHz / 64QAM	**Middle Channel / 100MHz / QPSK**
	
Highest Channel / 50MHz / 64QAM	**Highest Channel / 100MHz / QPSK**
	

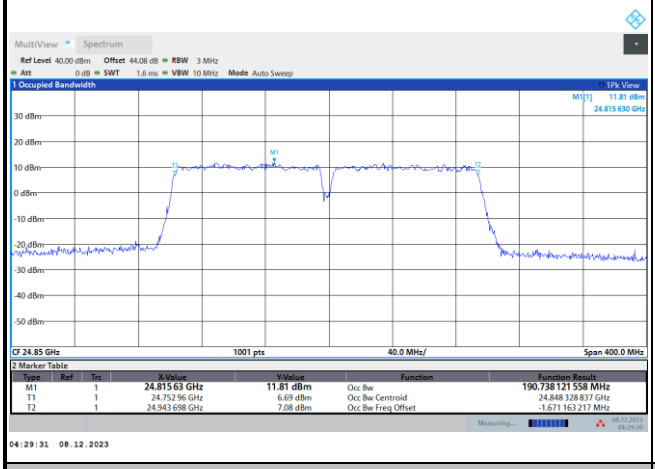
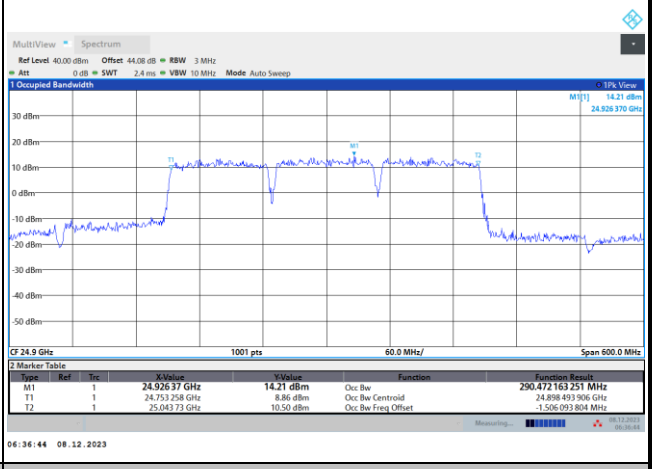
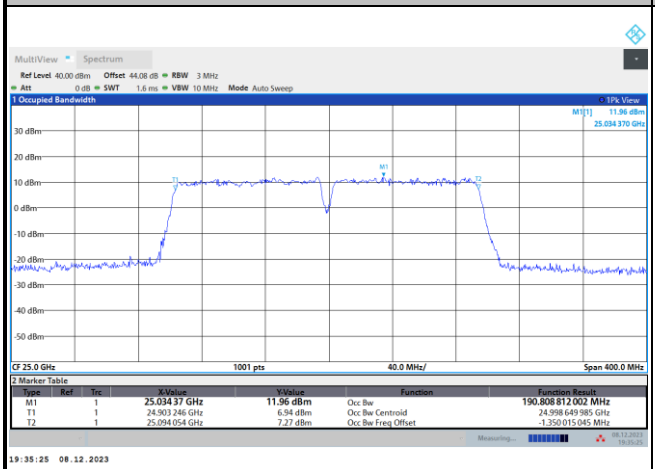
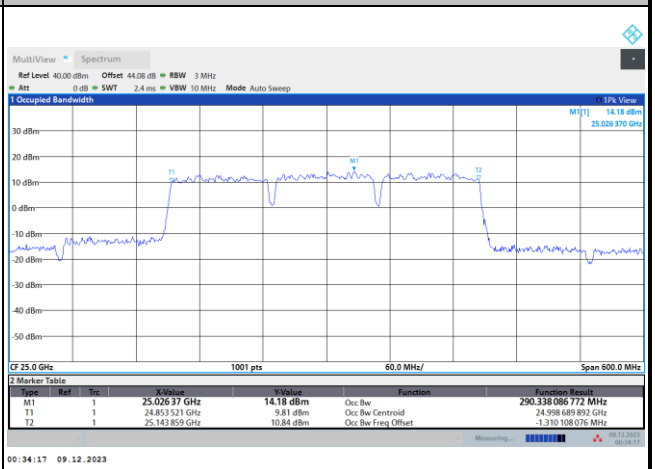
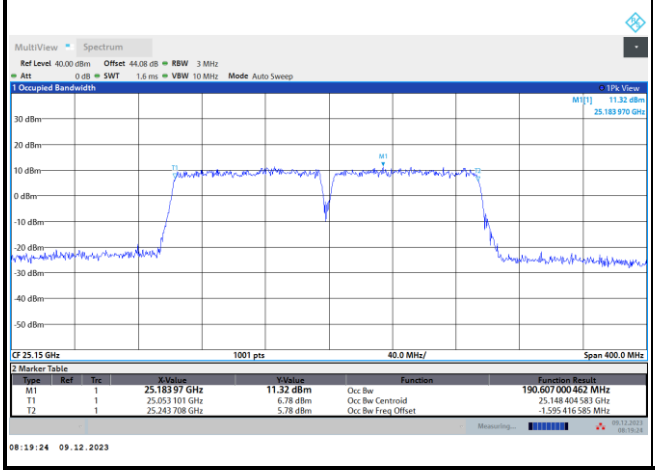
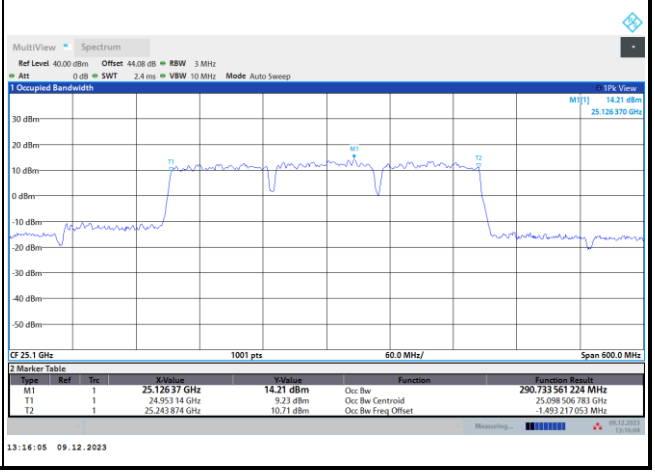
DFT-s-OFDM Module B

NR Band n258b	
Lowest Channel / 100MHz / 16QAM	**Lowest Channel / 100MHz / 64QAM**
	
Middle Channel / 100MHz / 16QAM	**Middle Channel / 100MHz / 64QAM**
	
Highest Channel / 100MHz / 16QAM	**Highest Channel / 100MHz / 64QAM**
	

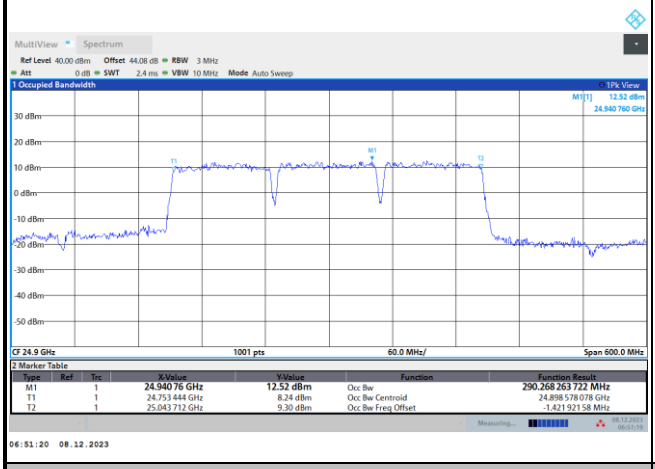
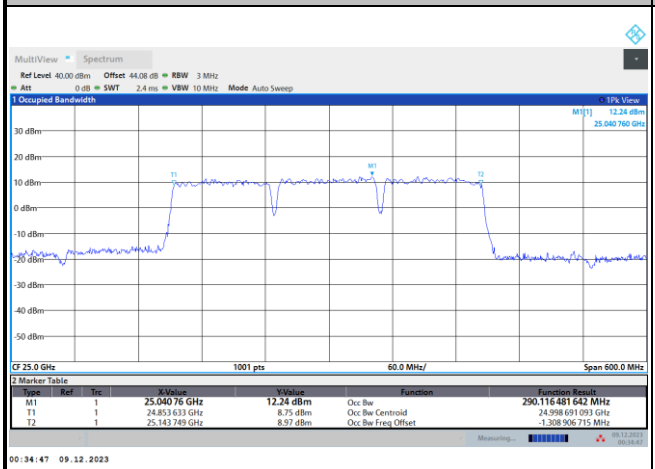
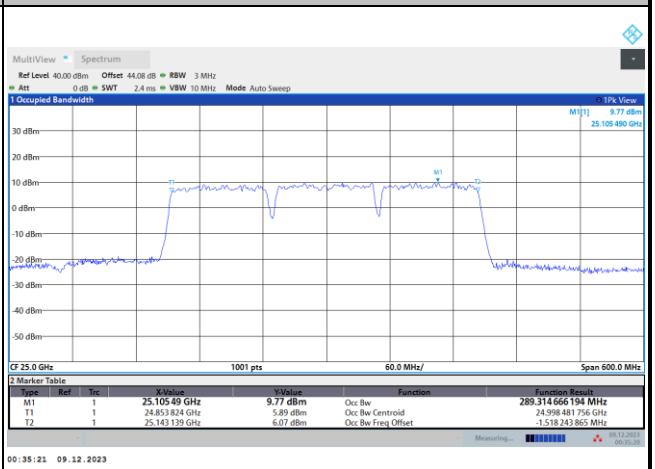
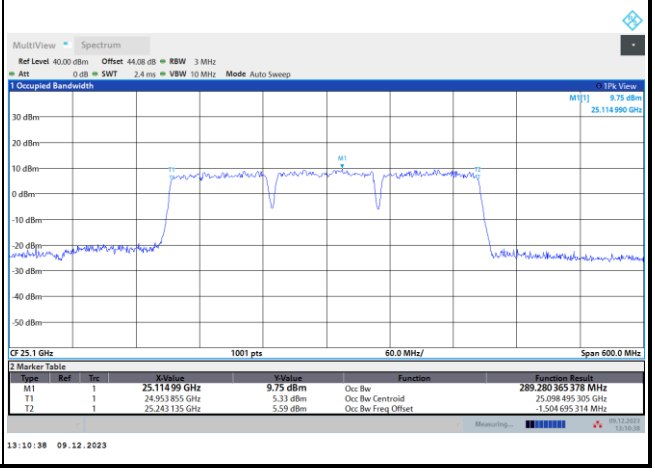
DFT-s-OFDM Module B

NR Band n258b	
Lowest Channel / 200MHz / QPSK	**Lowest Channel / 200MHz / 16QAM**
	
Middle Channel / 200MHz / QPSK	**Middle Channel / 200MHz / 16QAM**
	
Highest Channel / 200MHz / QPSK	**Highest Channel / 200MHz / 16QAM**
	

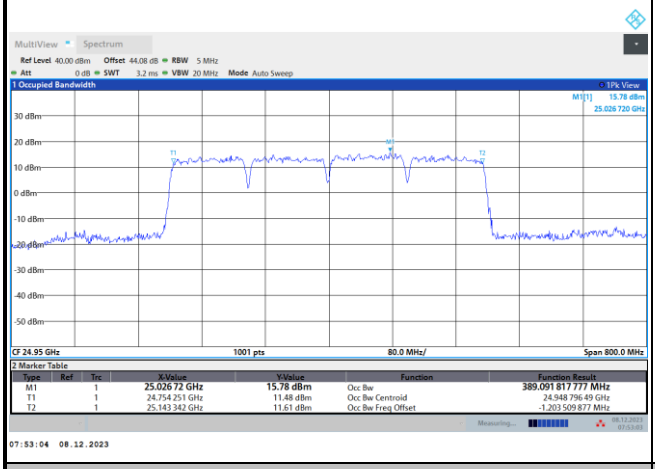
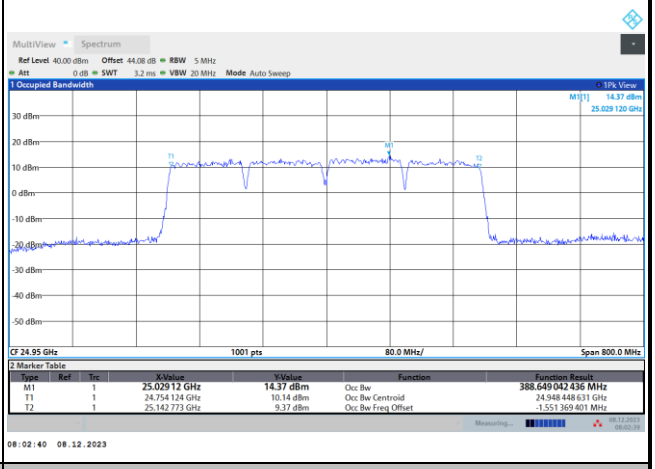
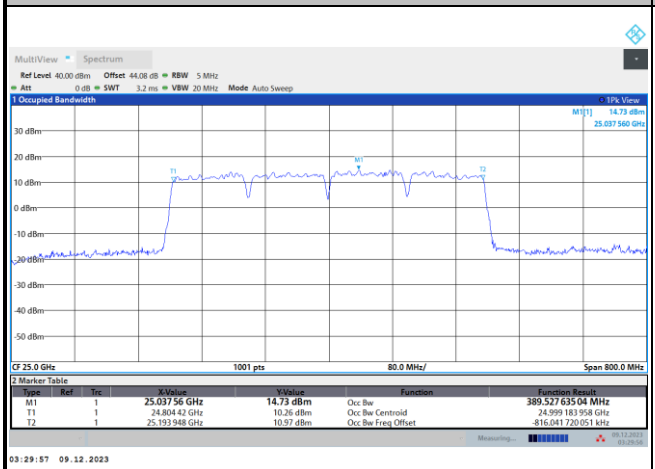
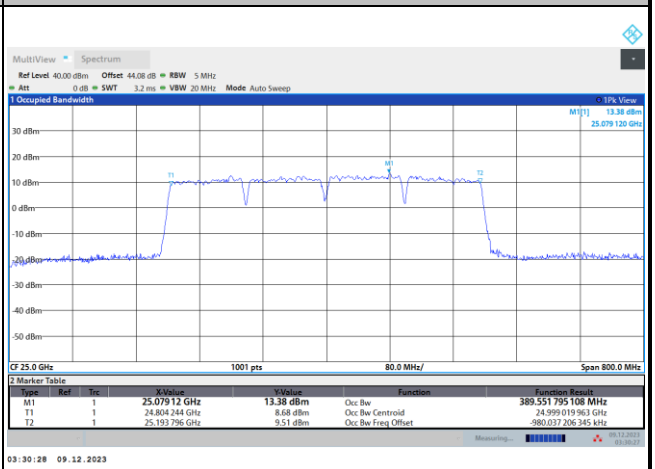
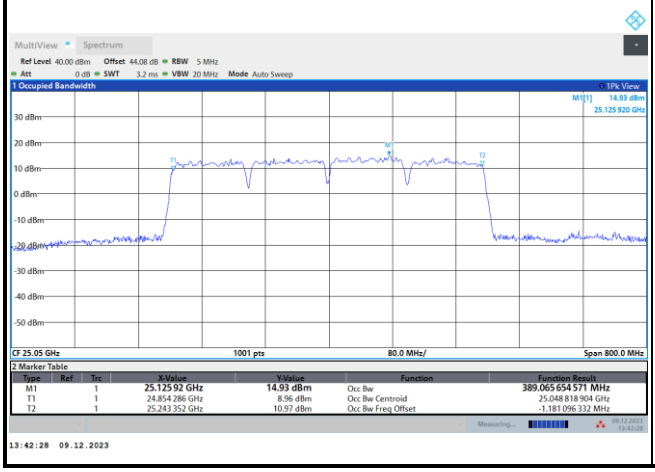
DFT-s-OFDM Module B

NR Band n258b	
Lowest Channel / 200MHz / 64QAM	**Lowest Channel / 300MHz / QPSK**
	
Middle Channel / 200MHz / 64QAM	**Middle Channel / 300MHz / QPSK**
	
Highest Channel / 200MHz / 64QAM	**Highest Channel / 300MHz / QPSK**
	

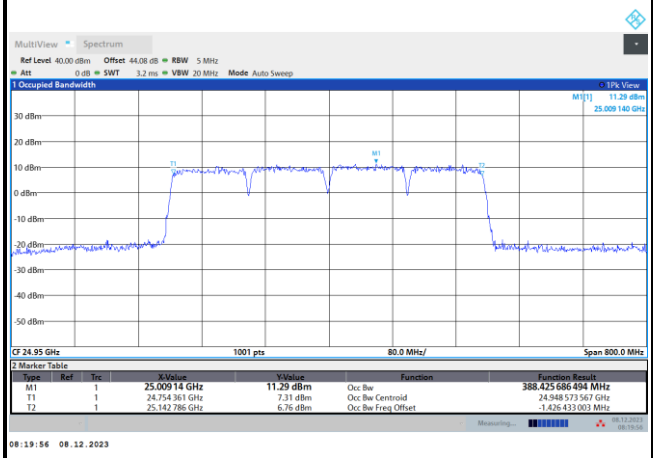
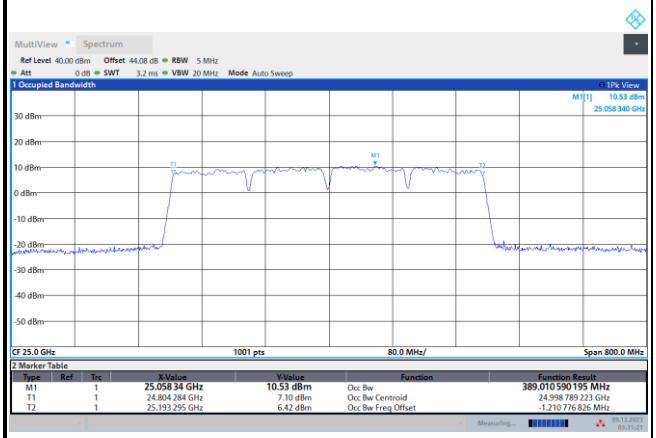
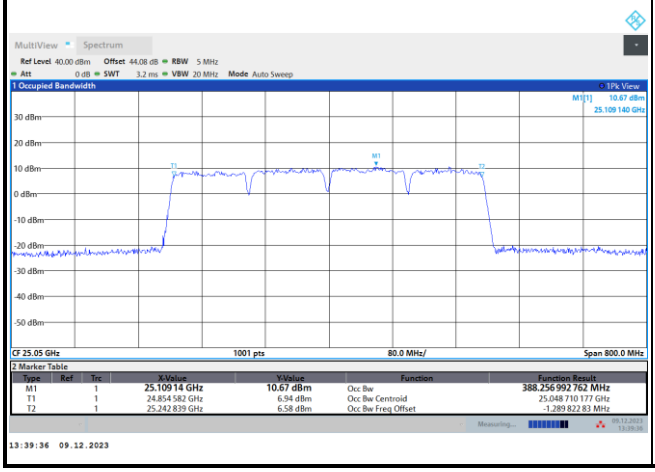
DFT-s-OFDM Module B

NR Band n258b	
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 B

NR Band n258b	
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 B

NR Band n258b	
Lowest Channel / 400MHz / 64QAM	
	**intentionally blank**
Middle Channel / 400MHz / 64QAM	
	**intentionally blank**
Highest Channel / 400MHz / 64QAM	
	**intentionally blank**