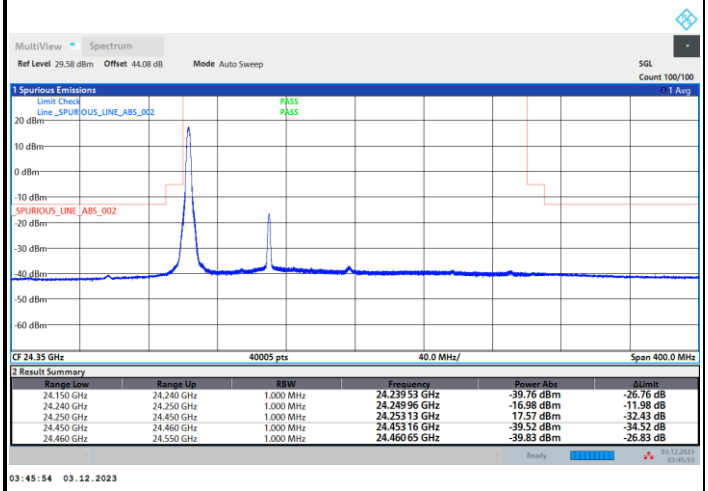
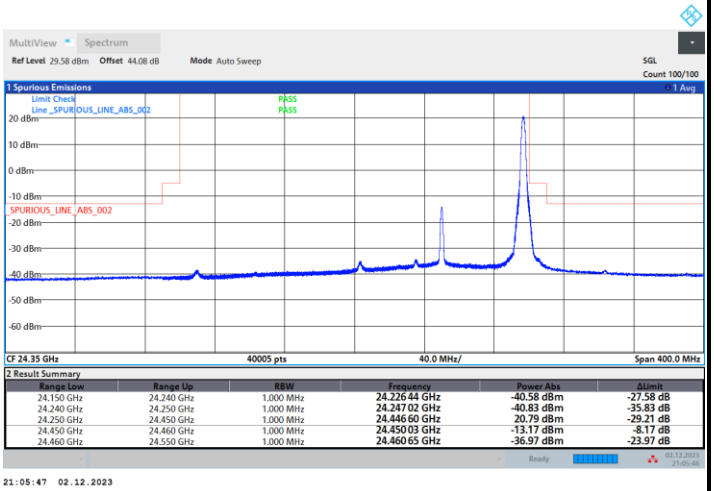
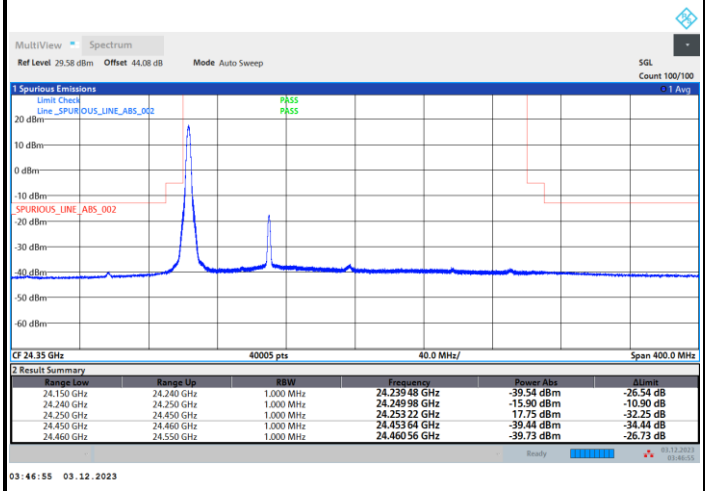
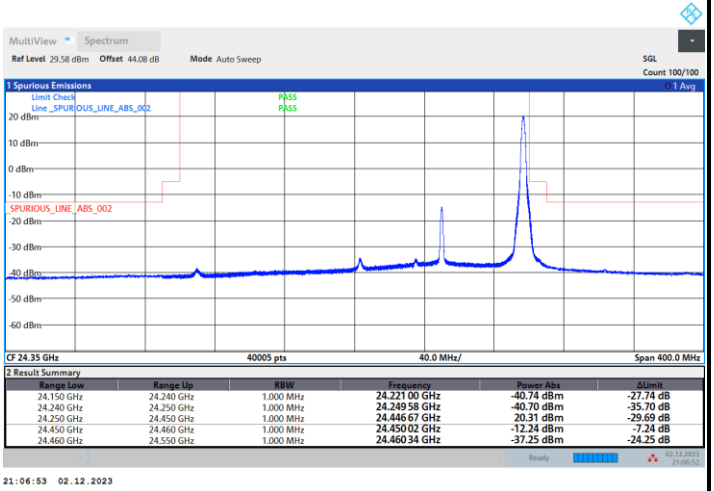
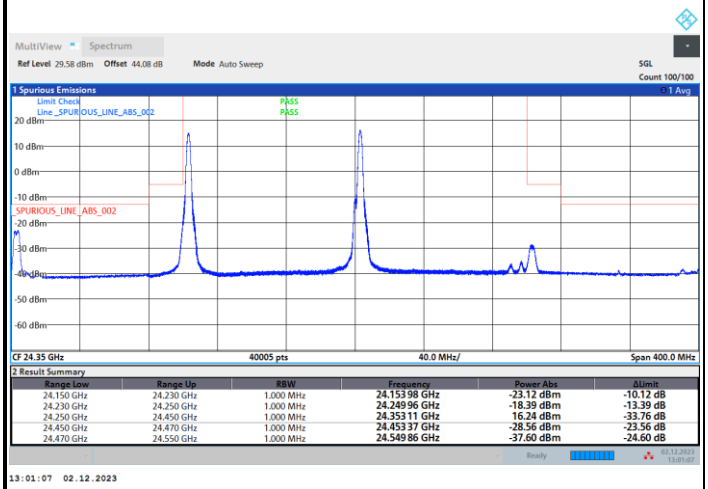
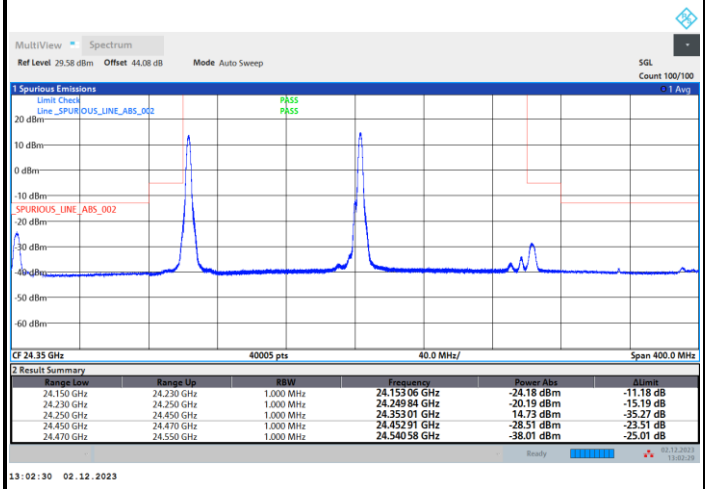
DFT-s-OFDM Module A

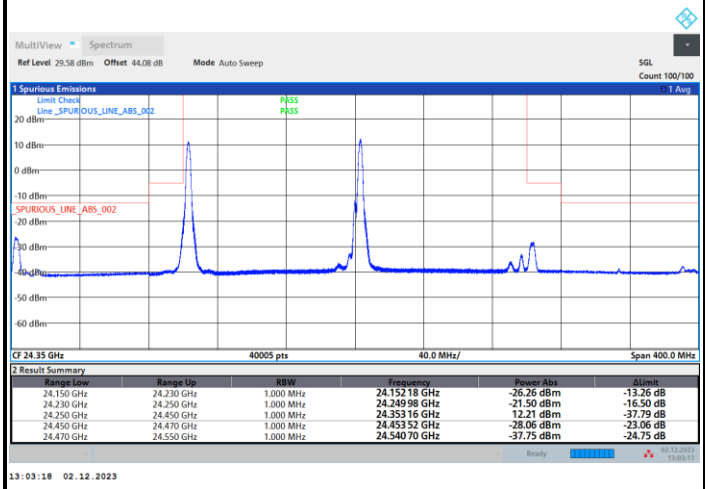
NR Band n258A/ 100MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
03:45:54 03.12.2023	21:05:47 02.12.2023

NR Band n258A/ 100MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
03:46:55 03.12.2023	21:06:53 02.12.2023

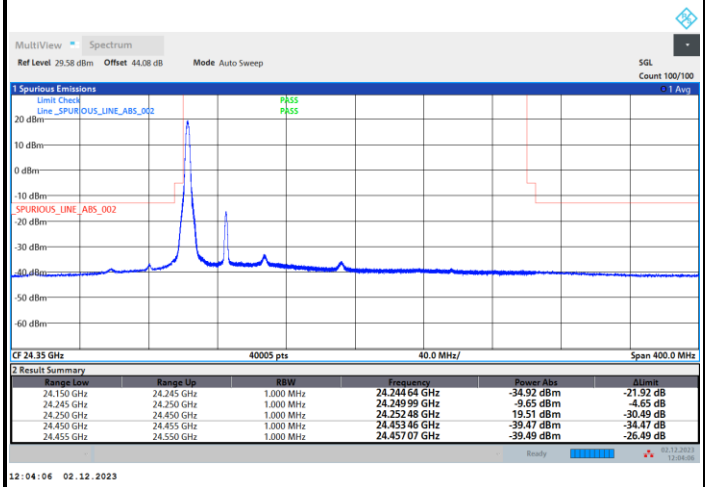
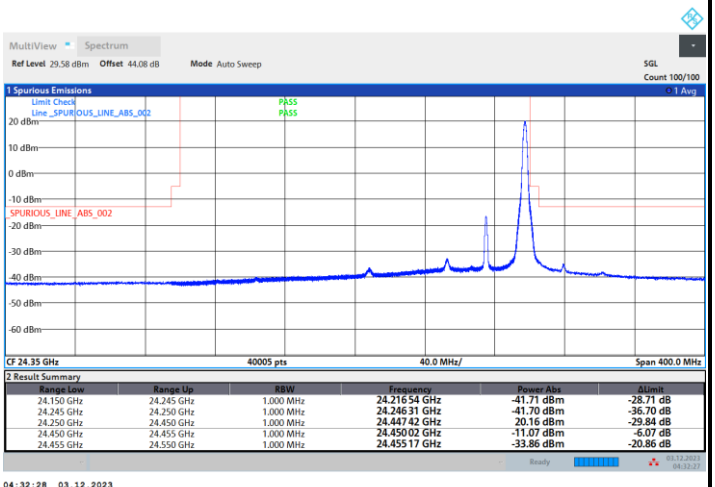
DFT-s-OFDM Module A

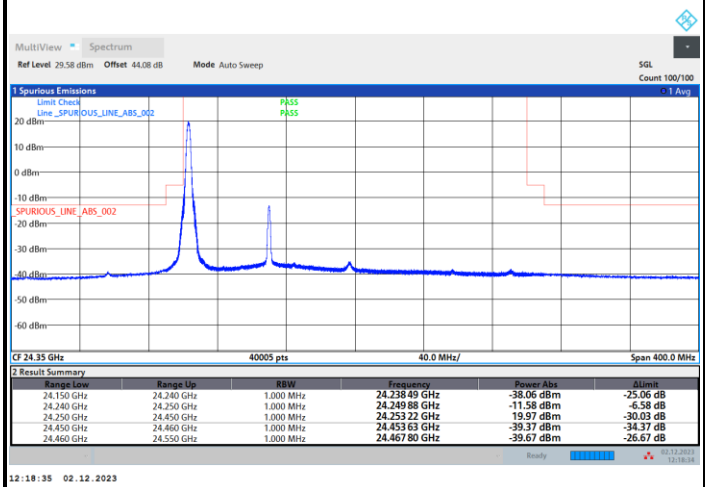
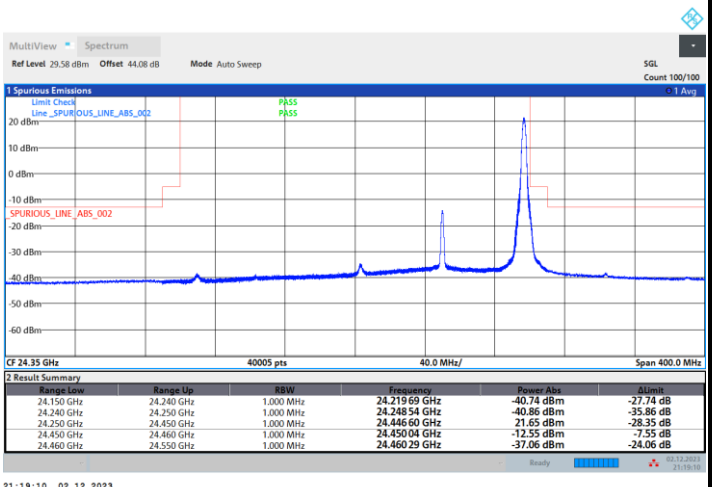
NR Band n258A/ 200MHz / QPSK	
Middle Band Edge / 1 RB	
	**intentionally blank**
NR Band n258A/ 200MHz / 16QAM	
Middle Band Edge / 1 RB	
	**intentionally blank**

DFT-s-OFDM Module A

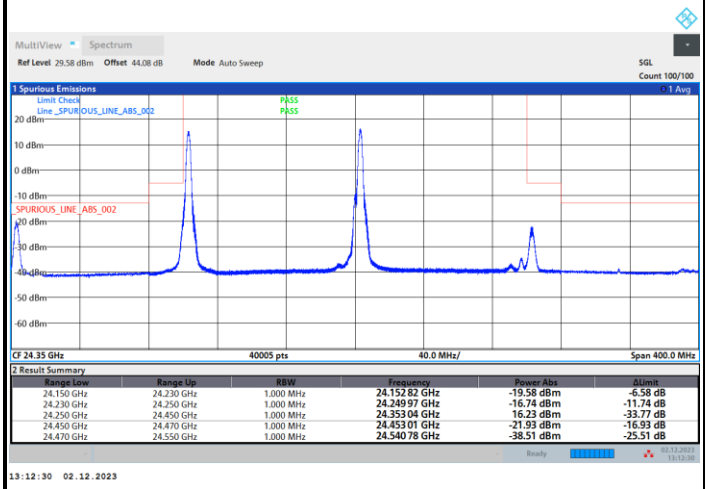
NR Band n258A/ 200MHz / 64QAM	
Middle Band Edge / 1 RB	
	**intentionally blank**

CP-OFDM Module A

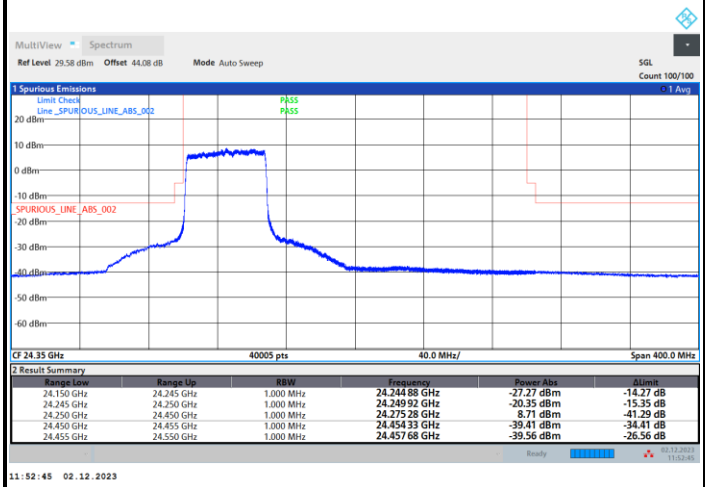
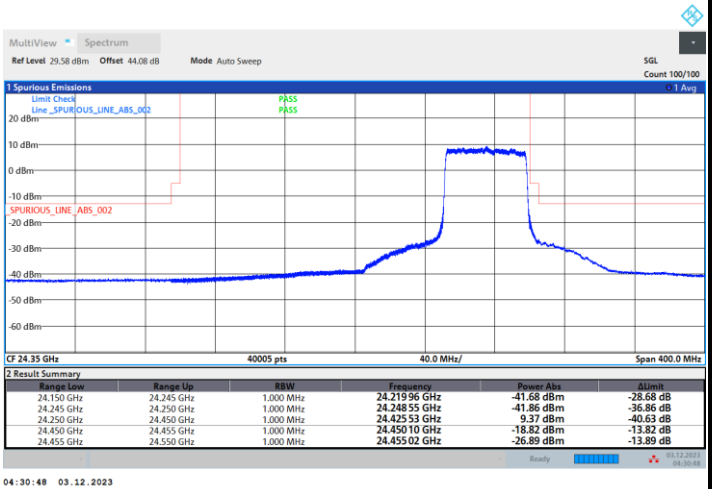
NR Band n258A/ 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
12:04:06 02.12.2023	04:32:28 03.12.2023

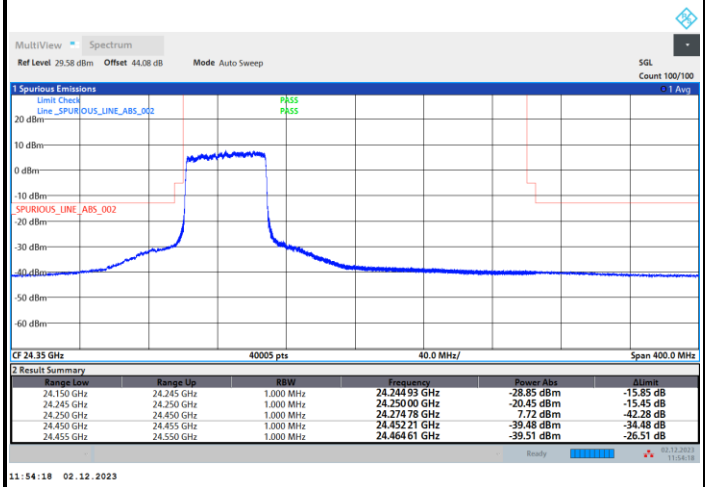
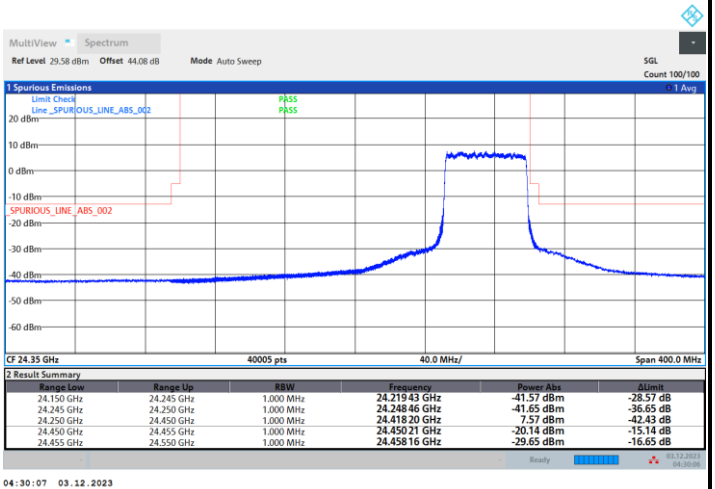
NR Band n258A/ 100MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
12:18:35 02.12.2023	21:19:10 02.12.2023

CP-OFDM Module A

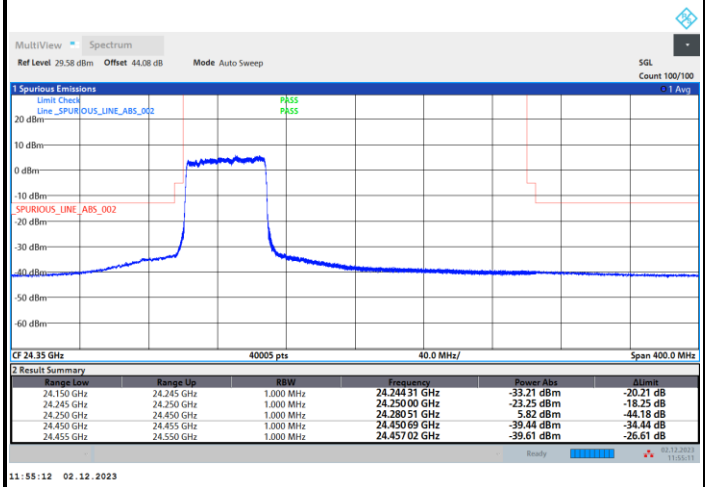
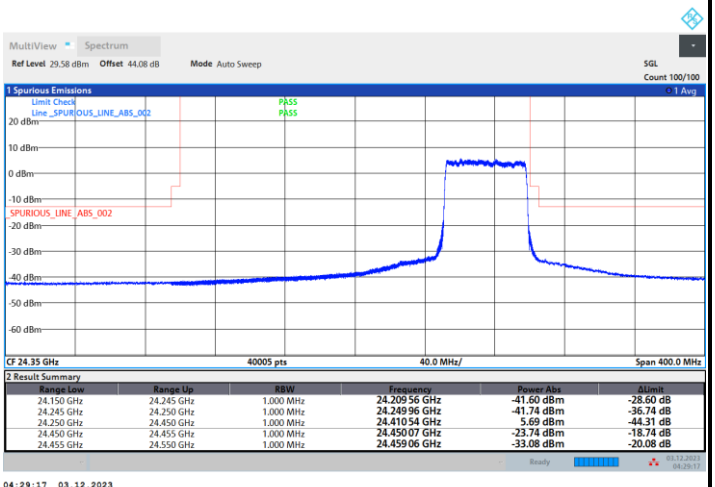
NR Band n258A/ 200MHz / QPSK	
Middle Band Edge / 1 RB	
	**intentionally blank**

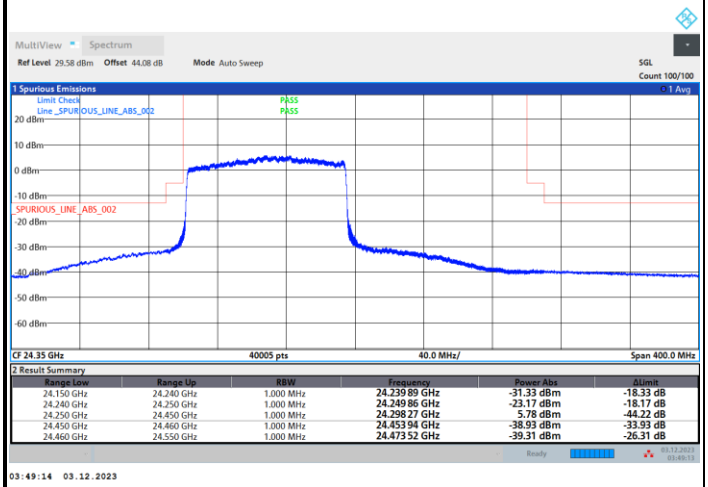
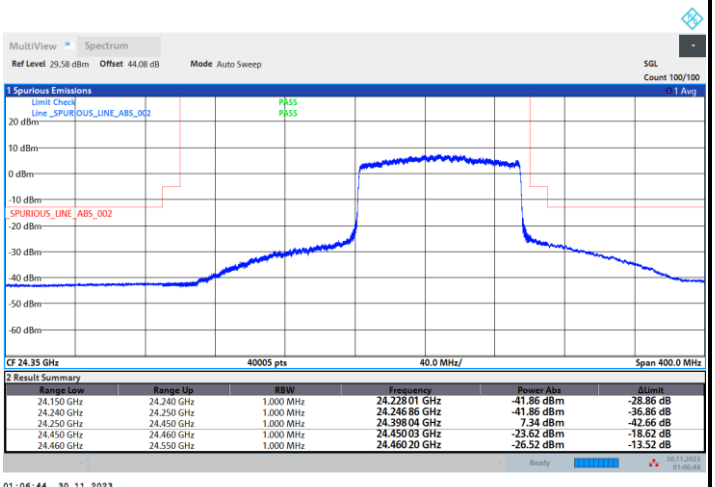
DFT-s-OFDM Module A

NR Band n258A/ 50MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	
11:52:45 02.12.2023	04:30:48 03.12.2023

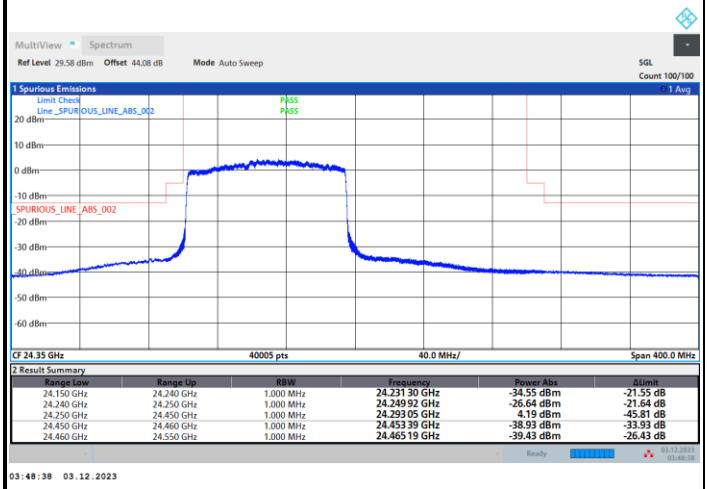
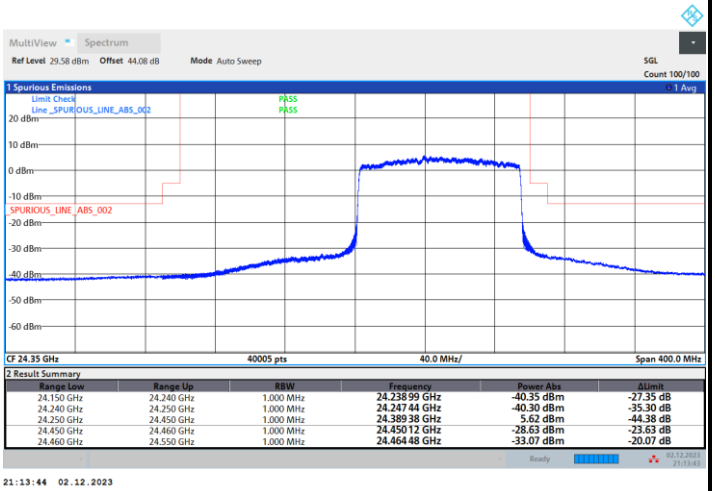
NR Band n258A/ 50MHz / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	
11:54:18 02.12.2023	04:30:07 03.12.2023

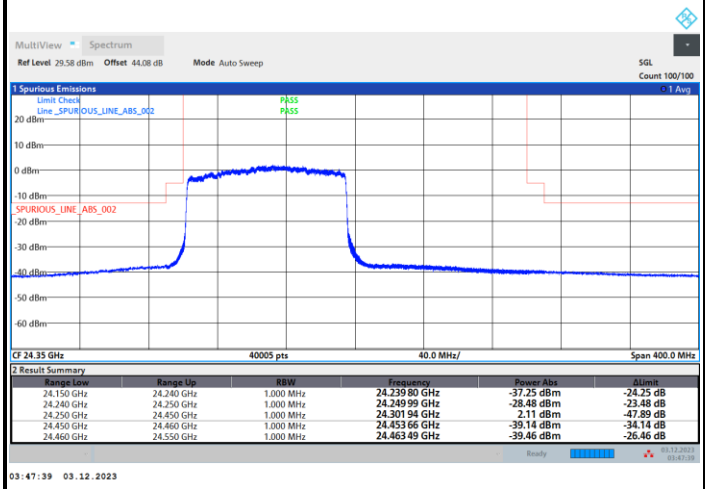
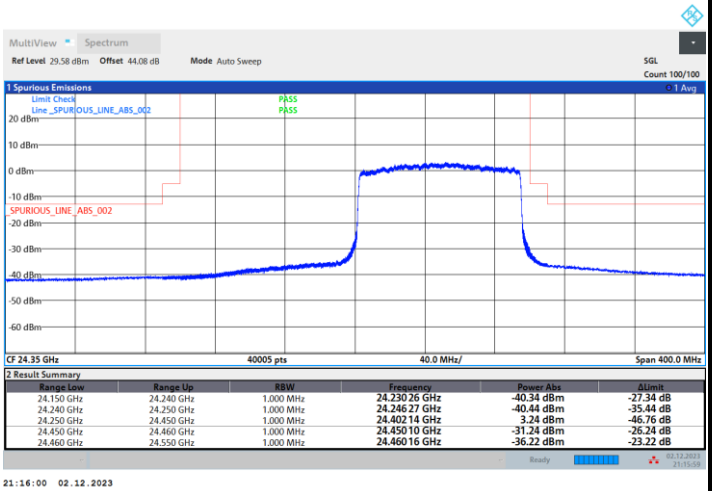
DFT-s-OFDM Module A

NR Band n258A/ 50MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

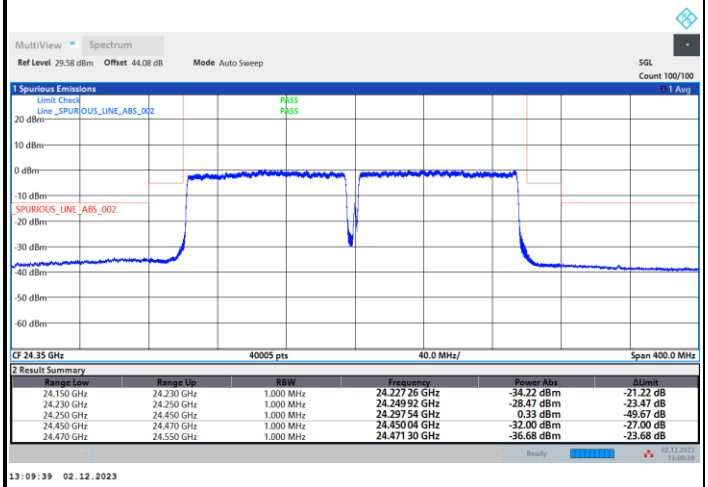
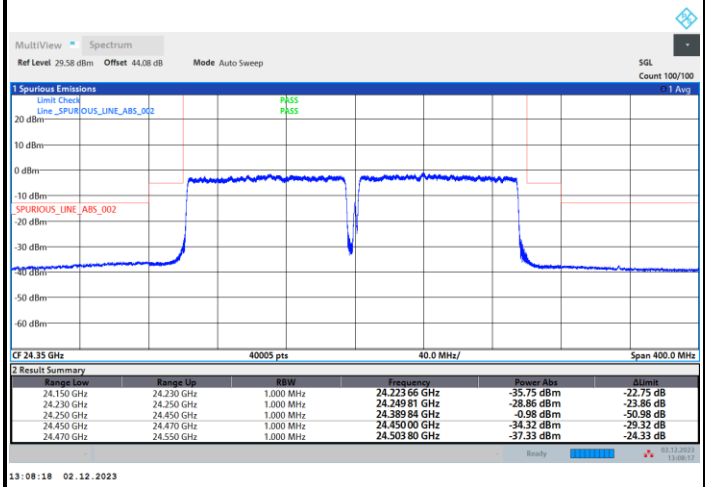
NR Band n258A/ 100MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

DFT-s-OFDM Module A

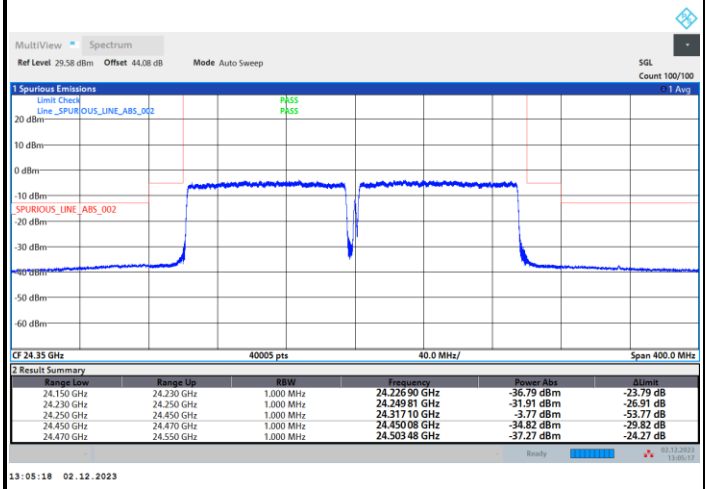
NR Band n258A/ 100MHz / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

NR Band n258A/ 100MHz / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

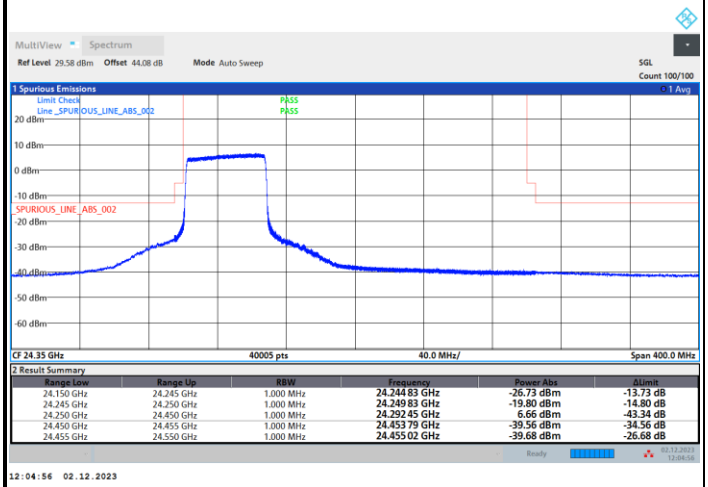
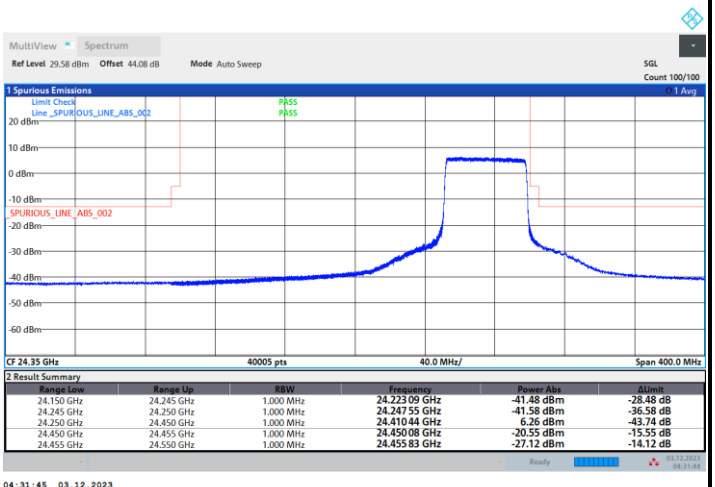
DFT-s-OFDM Module A

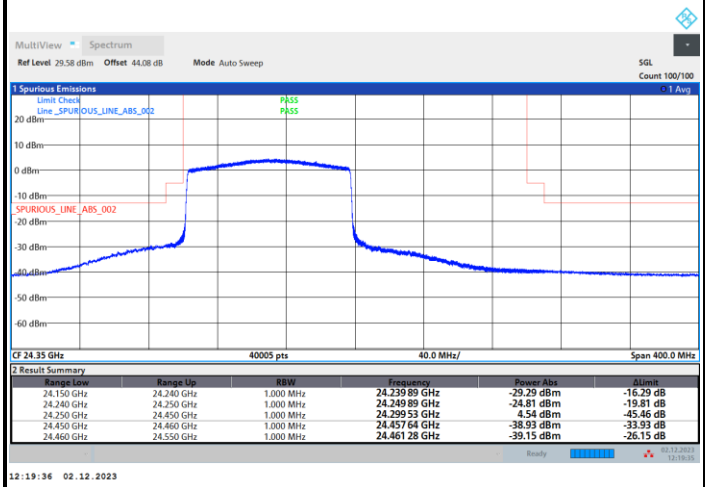
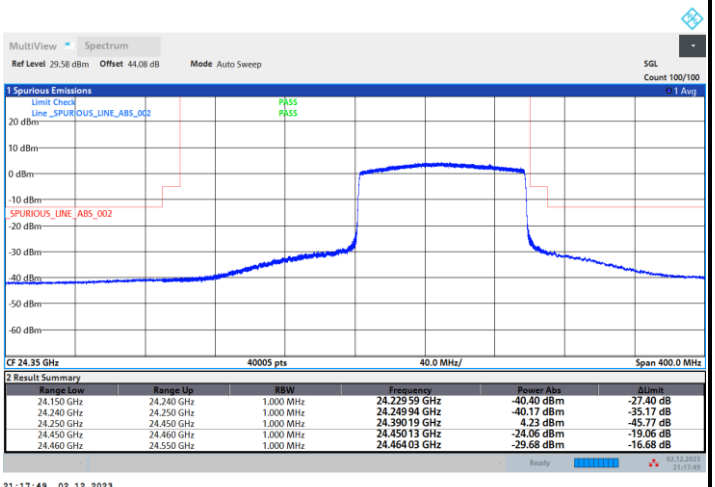
NR Band n258A/ 200MHz / QPSK	
Middle Band Edge / Full RB	
	**intentionally blank**
NR Band n258A/ 200MHz / 16QAM	
Middle Band Edge / Full RB	
	**intentionally blank**

DFT-s-OFDM Module A

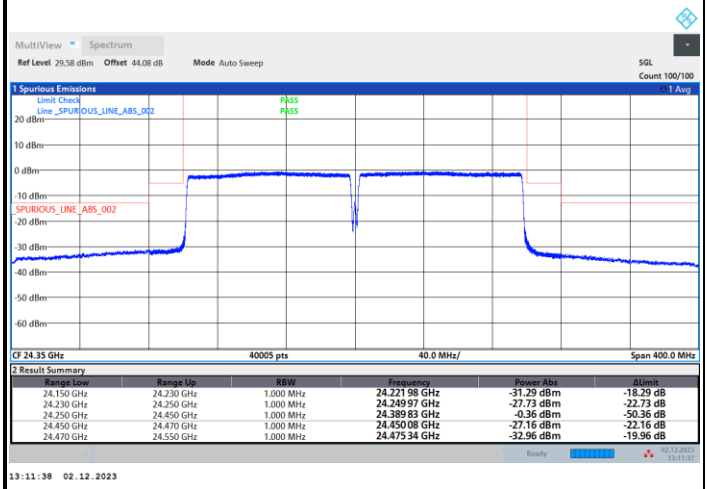
NR Band n258A/ 200MHz / 64QAM	
Middle Band Edge / Full RB	
	**intentionally blank**

CP-OFDM Module A

NR Band n258A/ 50MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

NR Band n258A/ 100MHz / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

CP-OFDM Module A

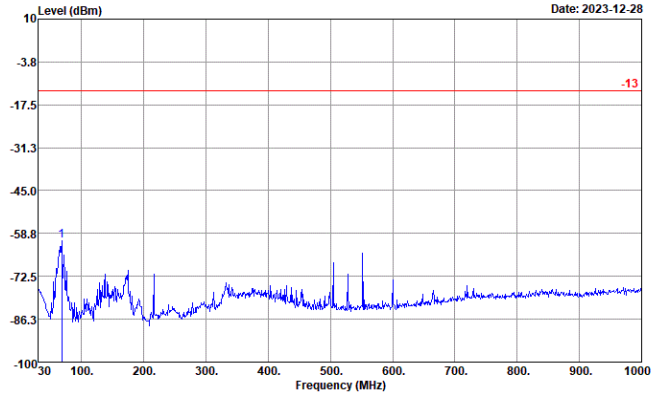
NR Band n258A/ 200MHz / QPSK	
Middle Band Edge / Full RB	
	**intentionally blank**

Spurious Emission

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

Only the noise floor is reported.

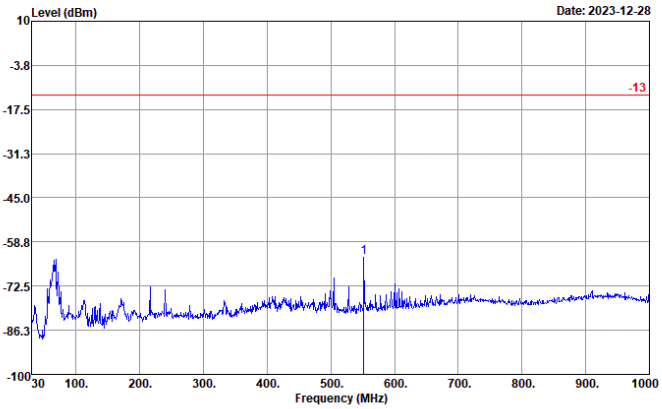
NR Band n258A (30MHz-1GHz)
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 3N2327
: n258a MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	67.83	-61.01	-48.01	-13.00

Vertical

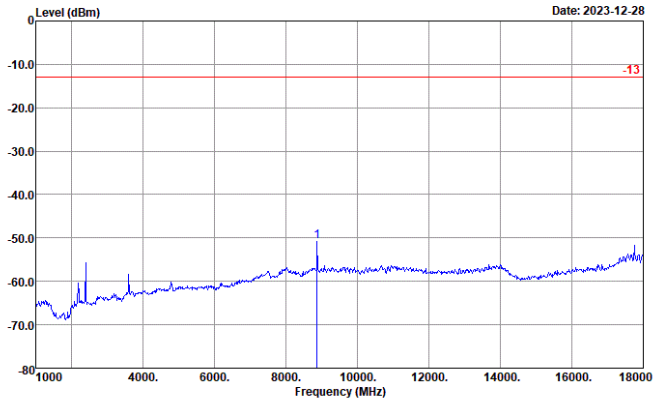


Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 3N2327
: n258a MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	551.86	-63.62	-50.62	-13.00

NR Band n258A (1GHz-18GHz)

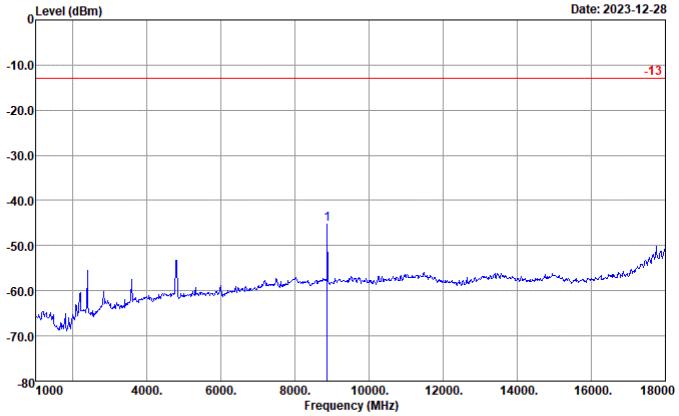
Horizontal



Site : 03CH10-HY
Condition : -13 EIRP_WO HORIZONTAL
Project : 3N2327
: n258a MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	8871.00	-50.73	-37.73	-13.00

Vertical

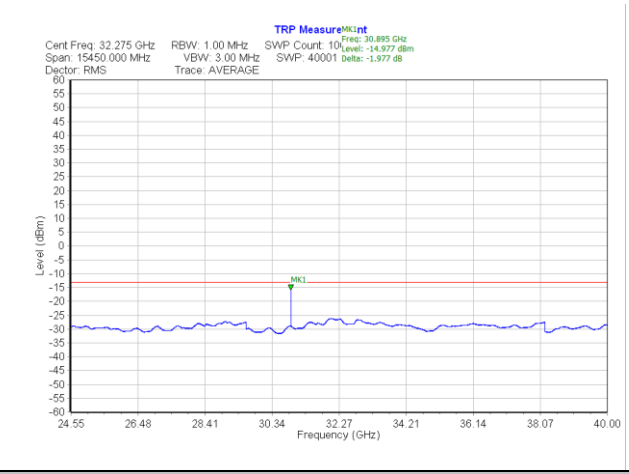
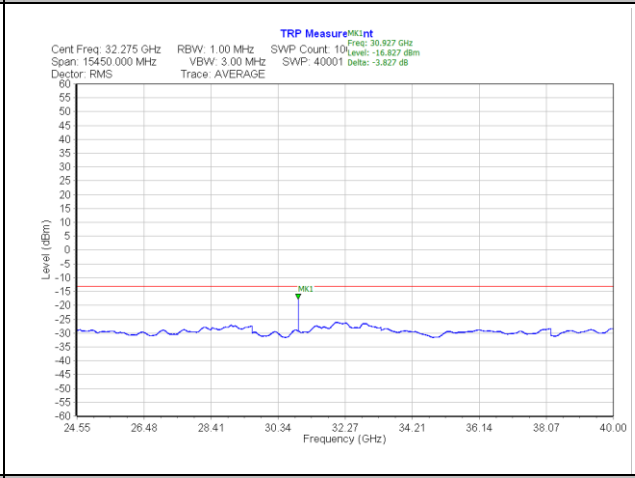
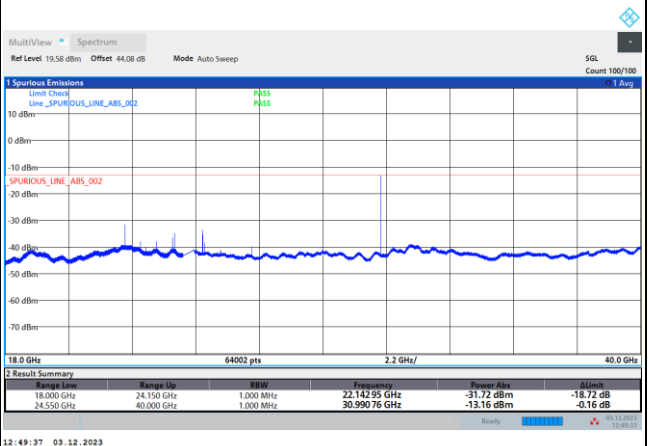
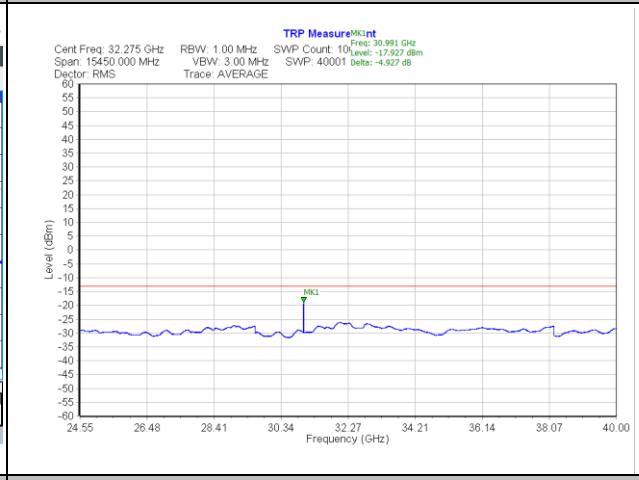
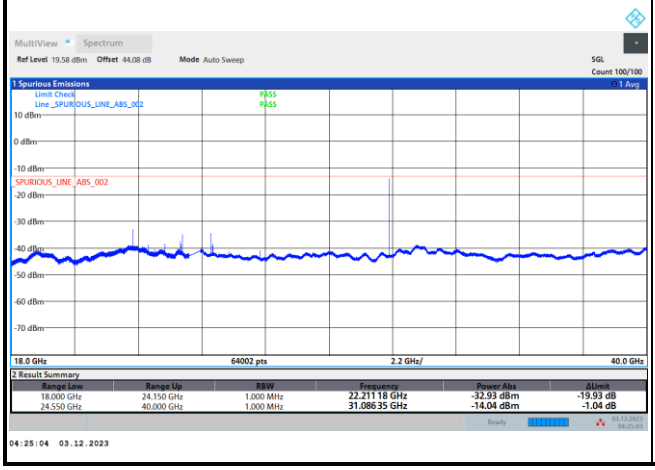
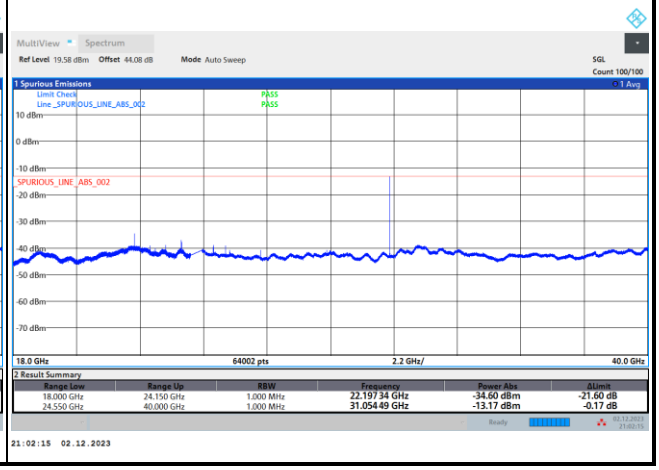


Site : 03CH10-HY
Condition : -13 EIRP_WO VERTICAL
Project : 3N2327
: n258a MA

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	8871.00	-45.28	-32.28	-13.00

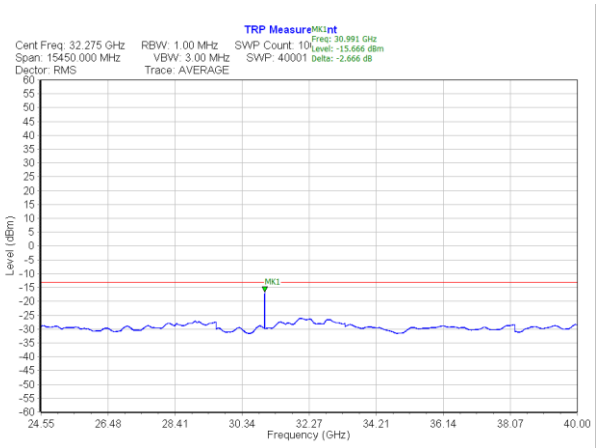
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM Module A

NR Band n258A QPSK (18-40GHz)	
Lowest Channel / 50MHz	**Lowest Channel / 100MHz**
	
Middle Channel / 50MHz	**Middle Channel / 100MHz**
	
Highest Channel / 50MHz	**Highest Channel / 100MHz**
	

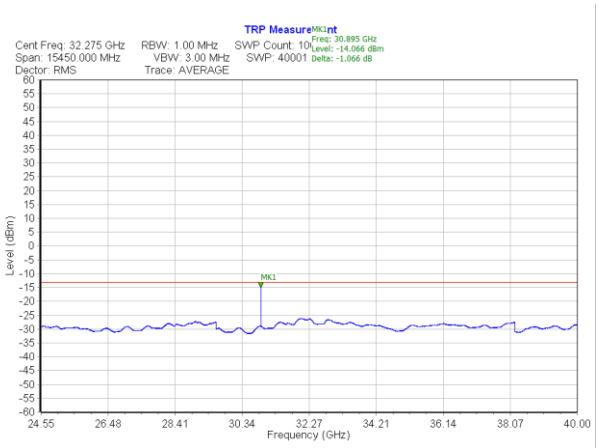
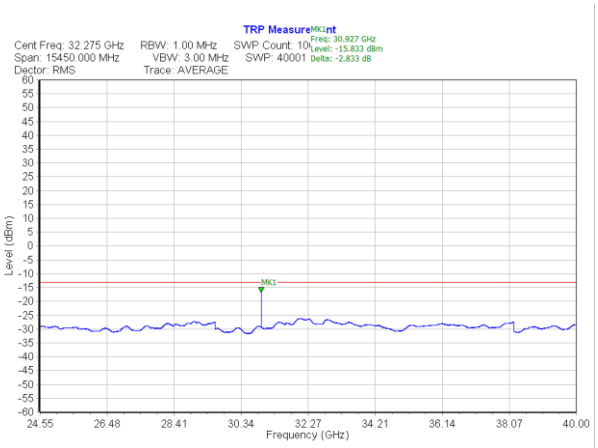
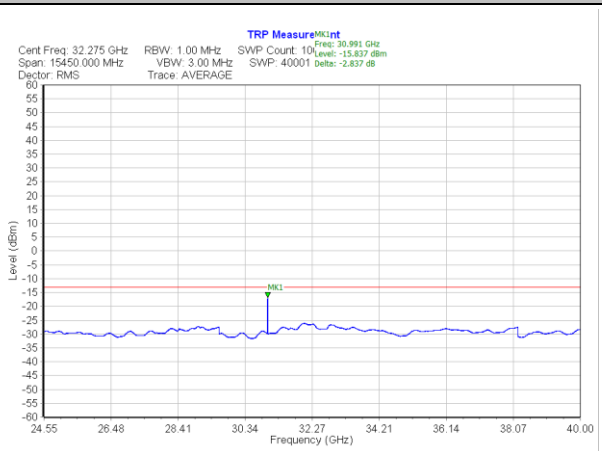
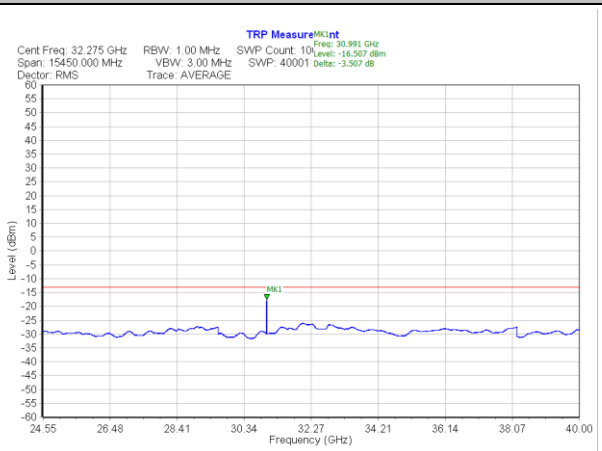
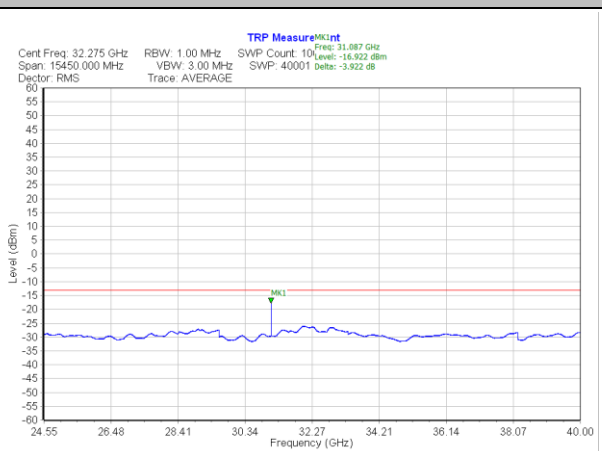
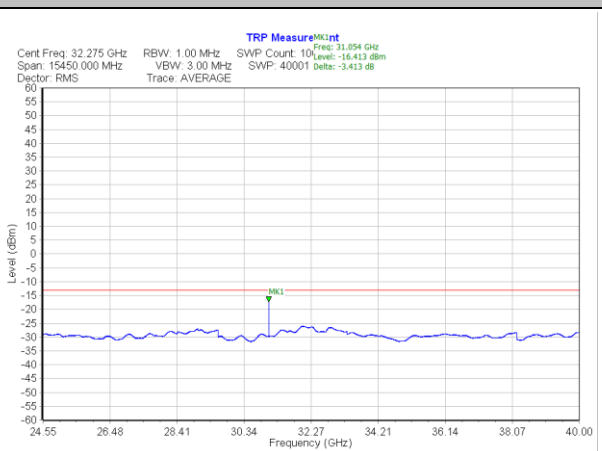
Remark: In band and out of band frequencies are omitted.

DFT-s-OFDM Module A

NR Band n258A QPSK (18-40GHz)	
Middle Channel / 200MHz	
	**intentionally blank**

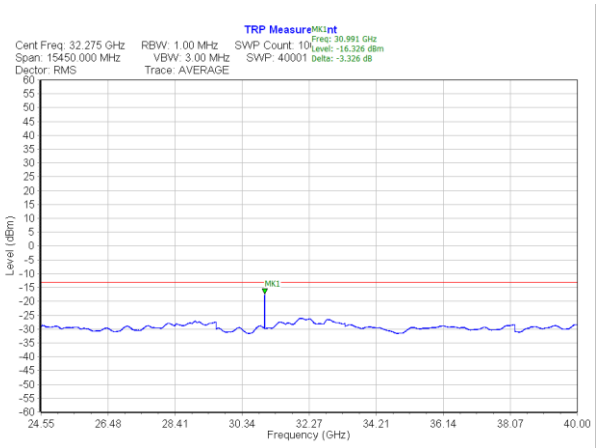
Remark: In band and out of band frequencies are omitted.

CP-OFDM Module A

NR Band n258A 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

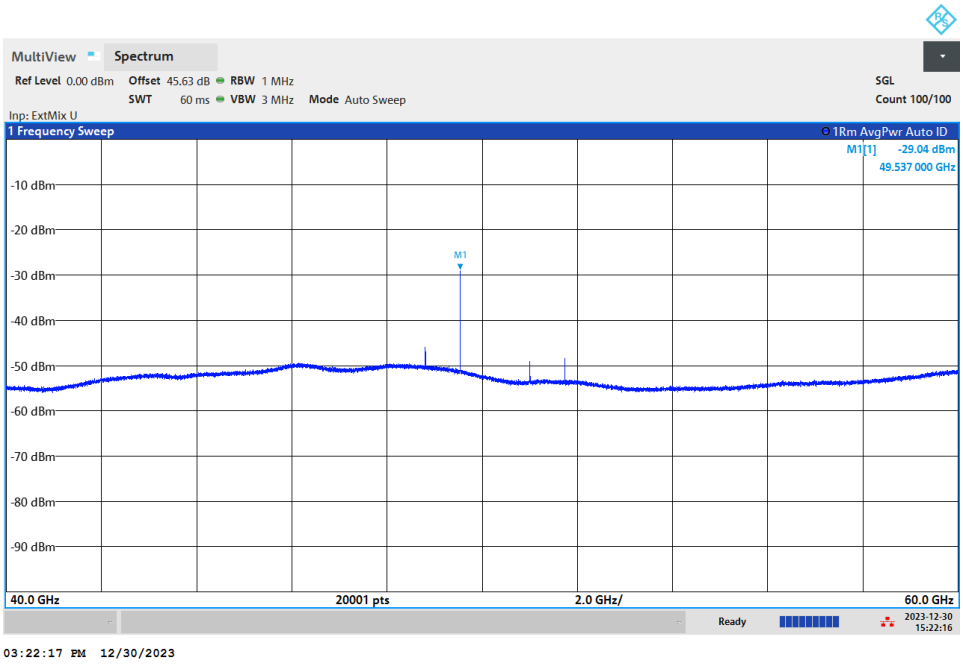
NR Band n258A QPSK (18-40GHz)	
Middle Channel / 200MHz	
	**intentionally blank**

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 100GHz.

Only the noise floor is reported.

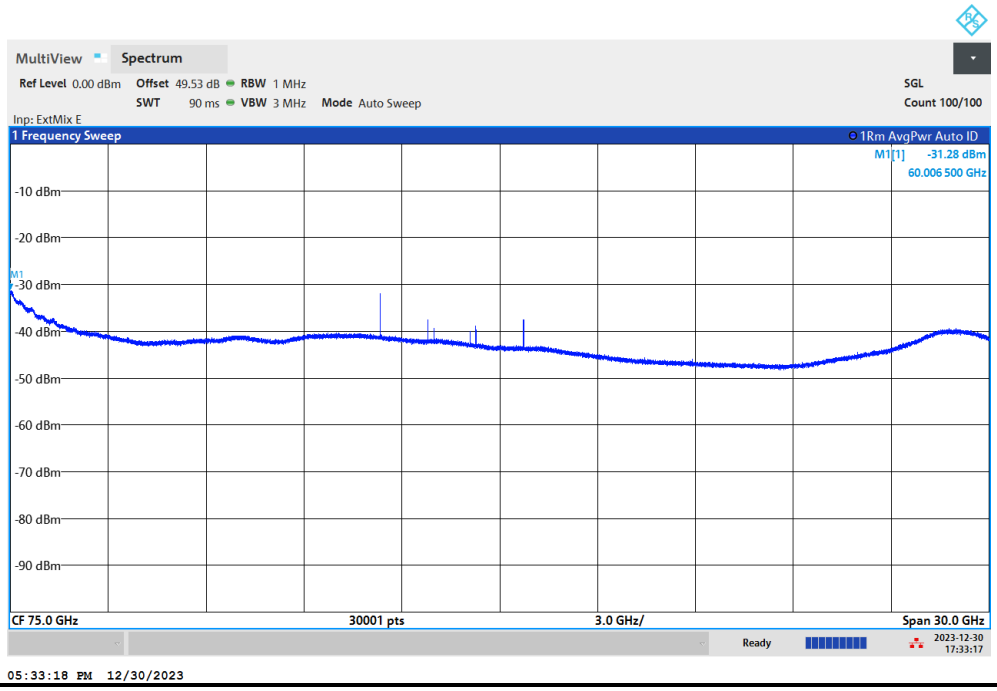
NR Band n258A
(40GHz-60GHz)



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

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

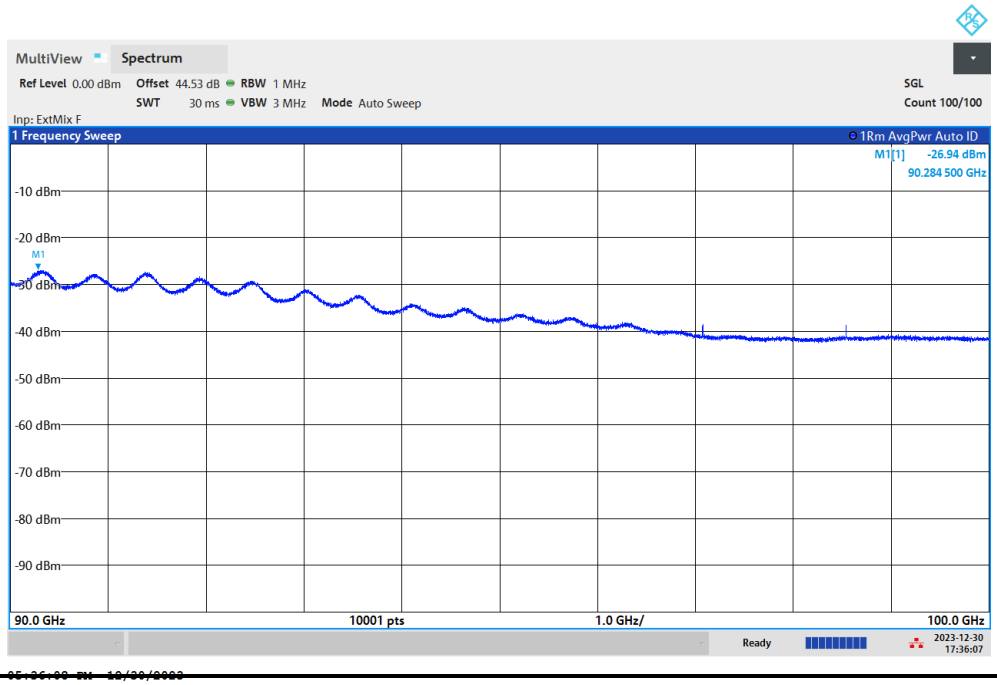
NR Band n258A
(60GHz-90GHz)



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 n258A
(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 n258A / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	24.34996	62.000	2.546	Pass
40	Normal Voltage	24.349969	53.000	2.177	
30	Normal Voltage	24.34999	32.000	1.314	
20(Ref.)	Normal Voltage	24.350022	0.000	0.000	
10	Normal Voltage	24.350012	10.000	0.411	
0	Normal Voltage	24.350026	-4.000	0.164	
-10	Normal Voltage	24.350045	-23.000	0.945	
-20	Normal Voltage	24.3501189	-96.900	3.979	
-30	Normal Voltage	24.3501215	-99.500	4.086	
20	Maximum Voltage	24.350005	17.000	0.698	
20	Normal Voltage	24.350005	17.000	0.698	
20	Battery End Point	24.350005	17.000	0.698	

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.

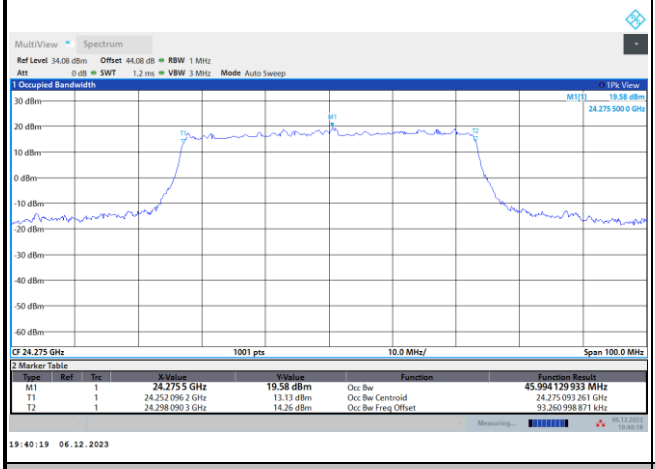
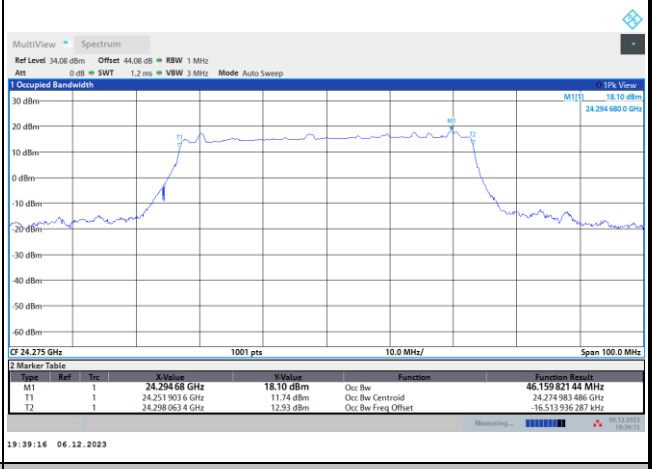
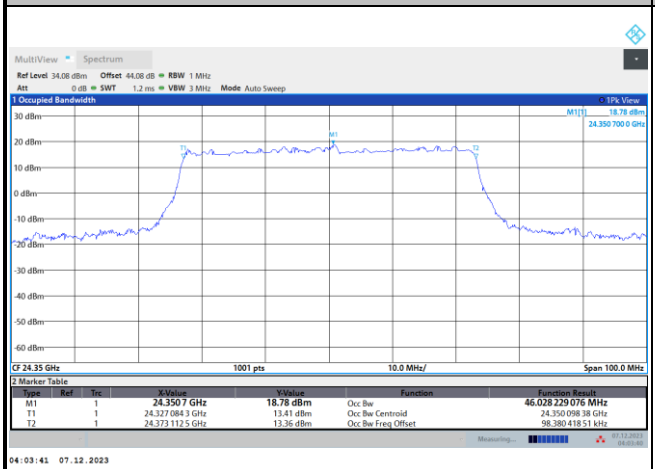
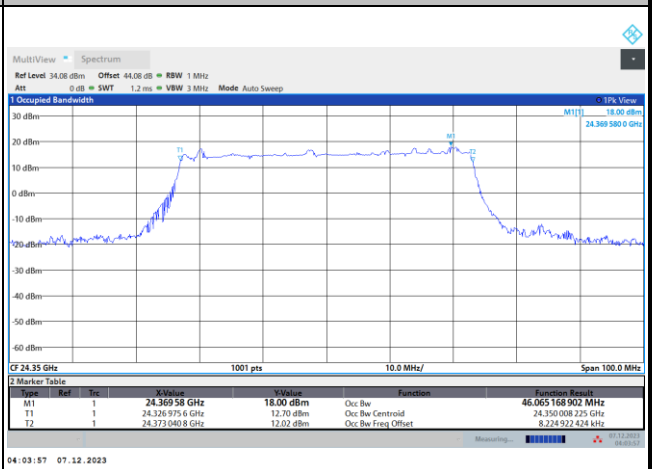
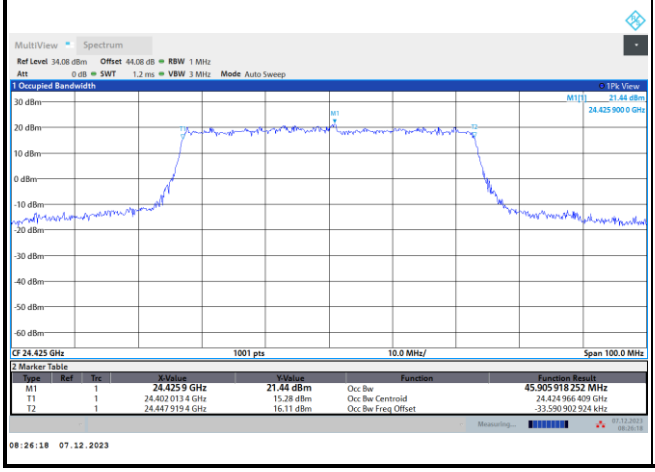
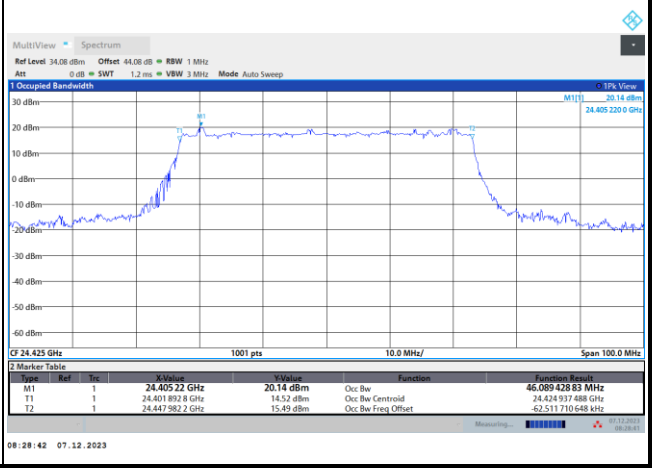
NR Band n258A Module B AGH+V

Occupied Bandwidth

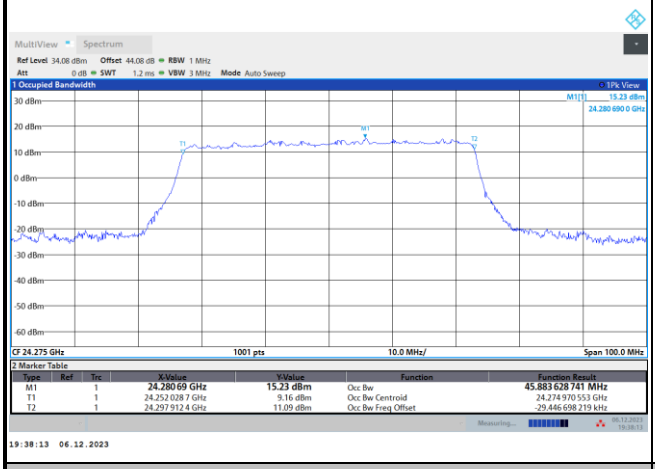
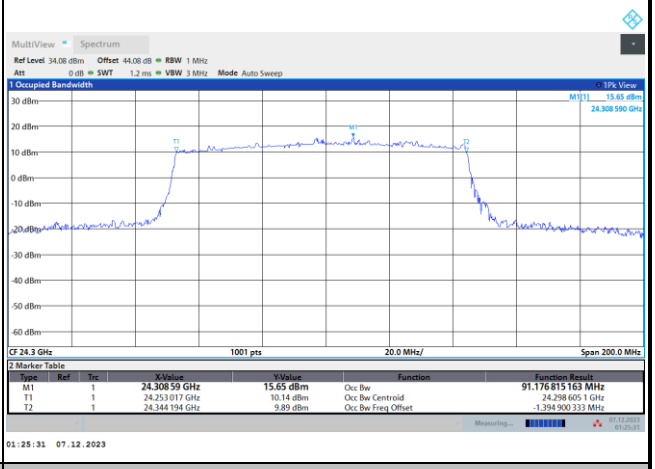
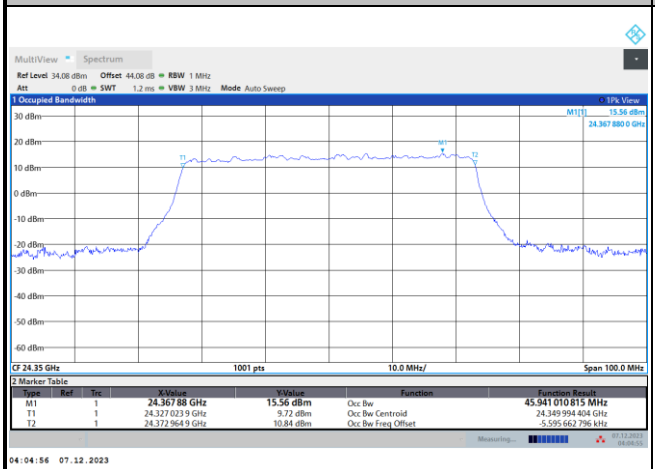
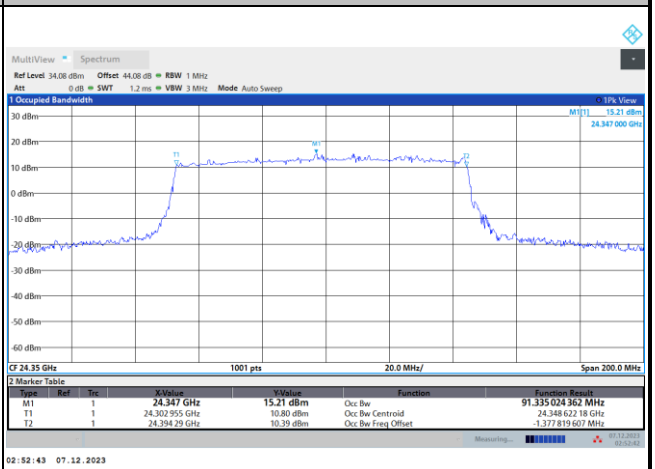
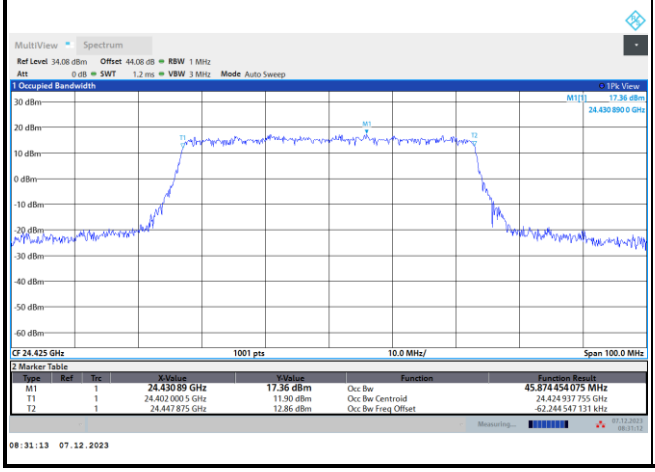
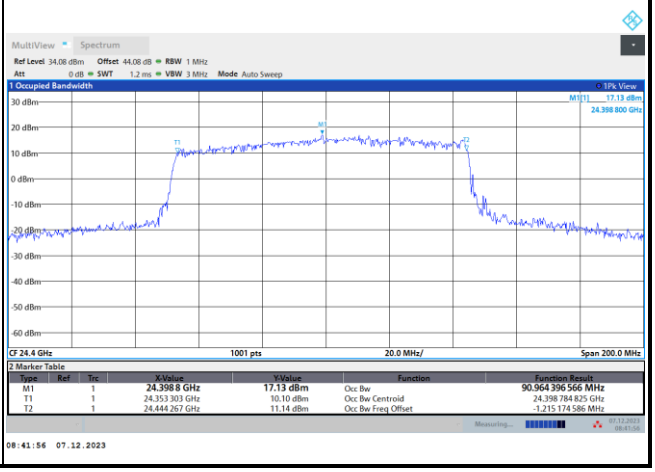
Mode	DFT-s-OFDM Module B NR Band n258A : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	45.99	46.15	45.88	91.17	91.06	91.02	-	-	-
Middle CH	46.02	46.06	45.94	91.33	91.10	91.23	191.08	191.37	190.93
Highest CH	45.90	46.08	45.87	90.96	90.82	90.87	-	-	-

Mode	CP-OFDM Module B NR Band n258A : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.15	93.77	-
Middle CH	46.20	94.08	193.75
Highest CH	46.07	93.45	-

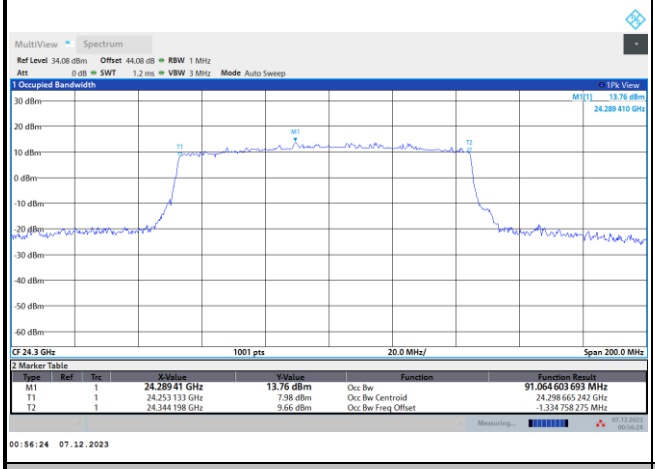
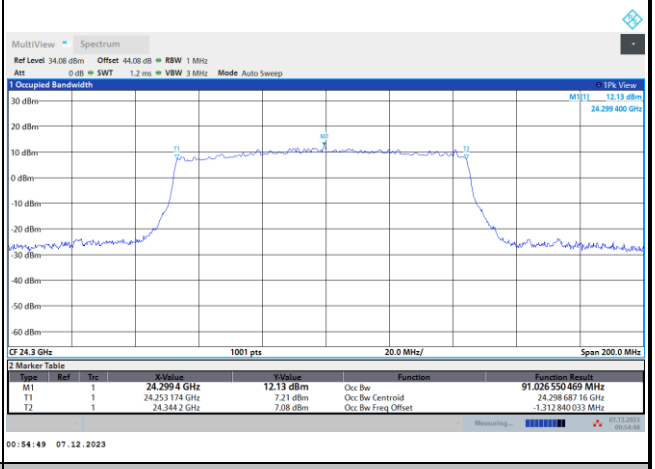
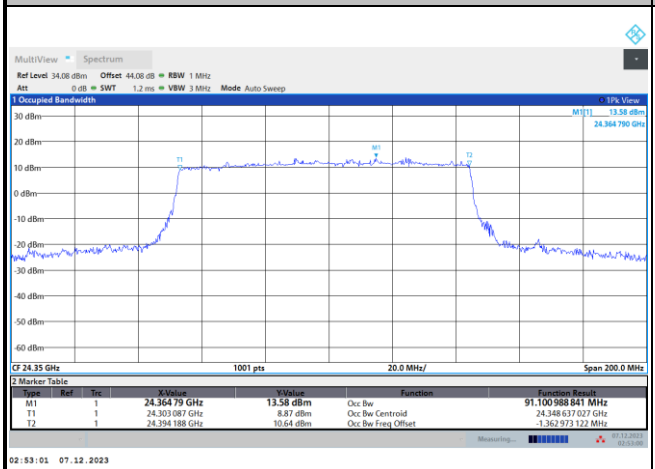
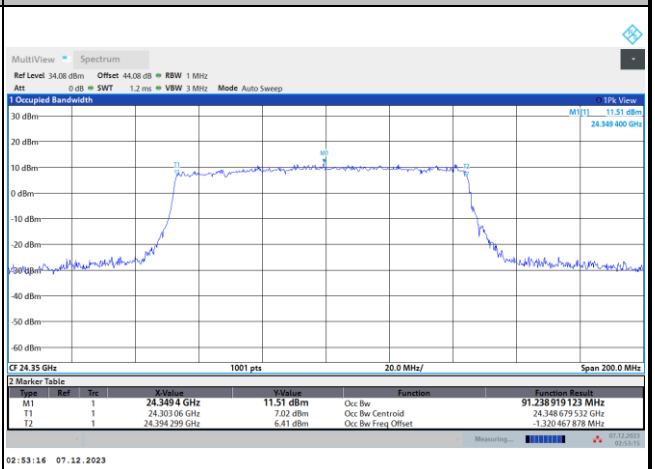
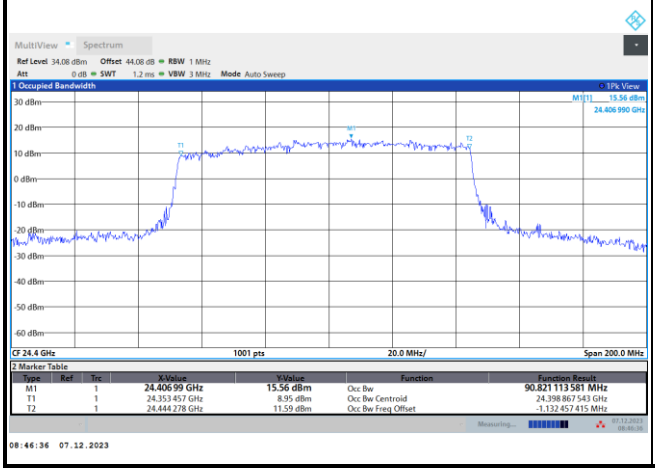
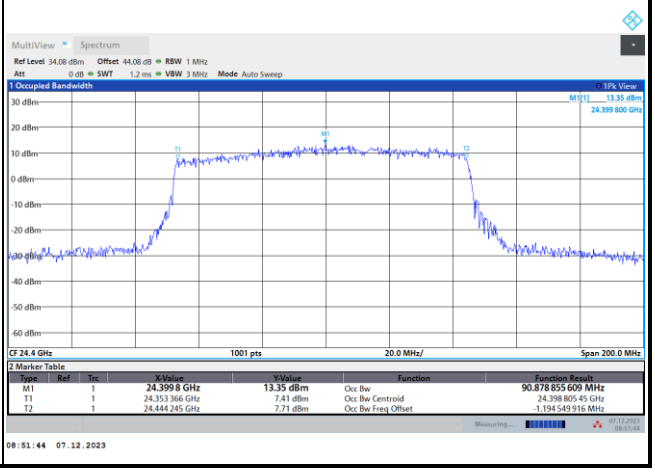
DFT-s-OFDM Module B

NR Band n258A	
Lowest Channel / 50MHz / QPSK	**Lowest Channel / 50MHz / 16QAM**
	
Middle Channel / 50MHz / QPSK	**Middle Channel / 50MHz / 16QAM**
	
Highest Channel / 50MHz / QPSK	**Highest Channel / 50MHz / 16QAM**
	

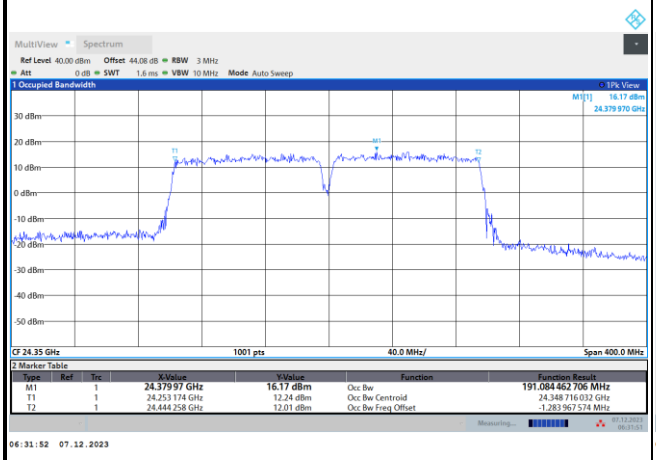
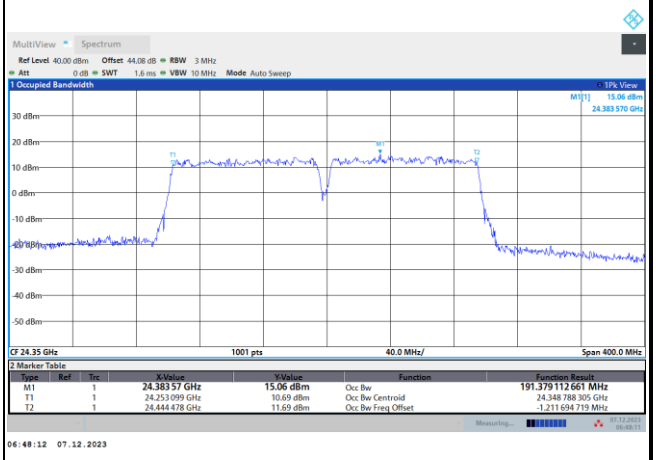
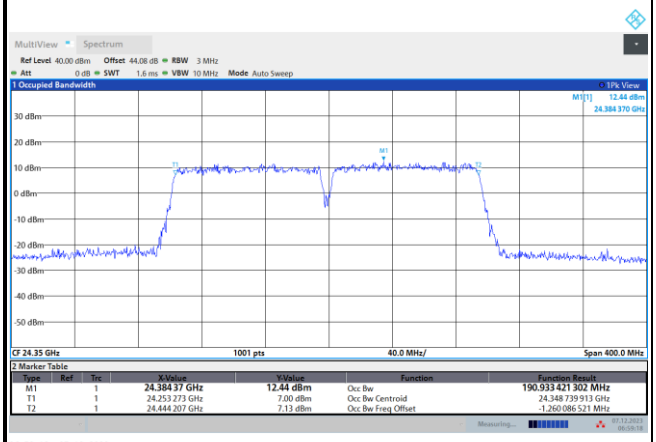
DFT-s-OFDM Module B

NR Band n258A	
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 n258A	
Lowest Channel / 100MHz / 16QAM	**Lowest Channel / 100MHz / 64QAM**
	
Middle Channel / 100MHz / 16QAM	**Middle Channel / 100MHz / 64QAM**
	
Highest Channel / 100MHz / 16QAM	**Highest Channel / 100MHz / 64QAM**
	

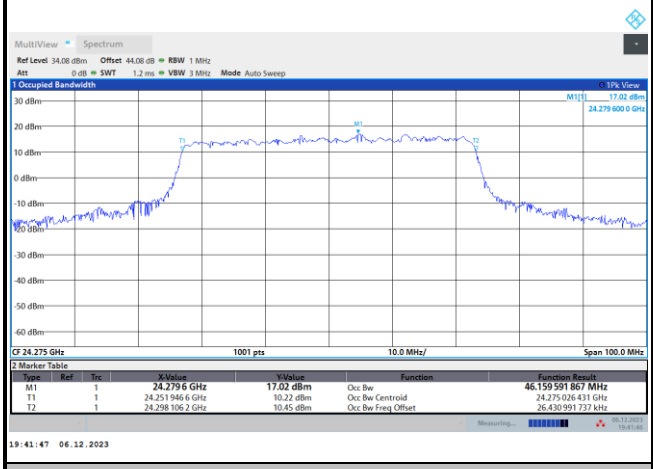
DFT-s-OFDM Module B

NR Band n258A	
Middle Channel / 200MHz / QPSK	**Middle Channel / 200MHz / 16QAM**
	
Middle Channel / 200MHz / 64QAM	
	**intentionally blank**

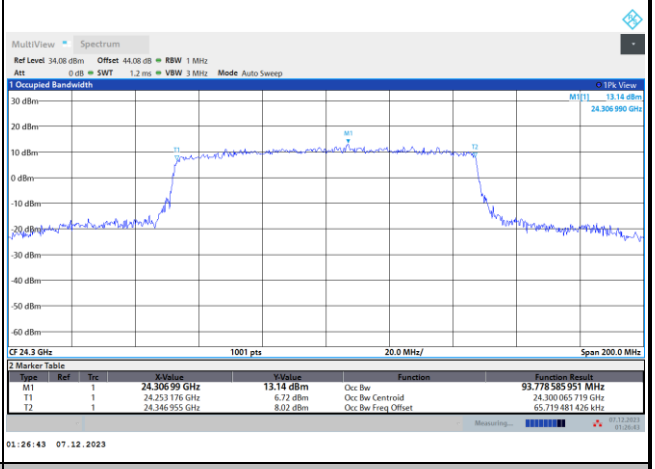
CP-OFDM Module B

NR Band n258A

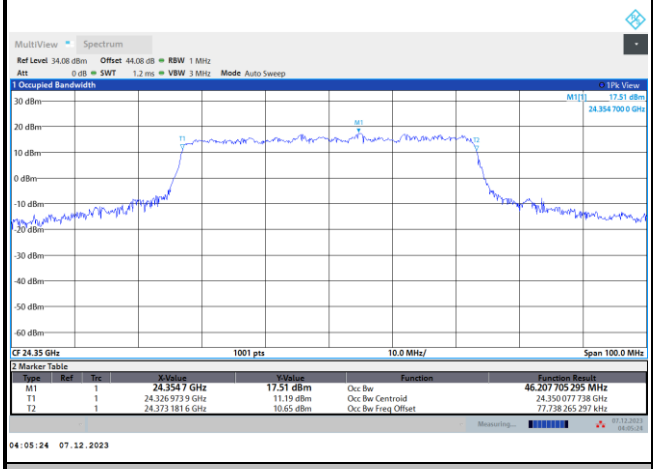
Lowest Channel / 50MHz / QPSK



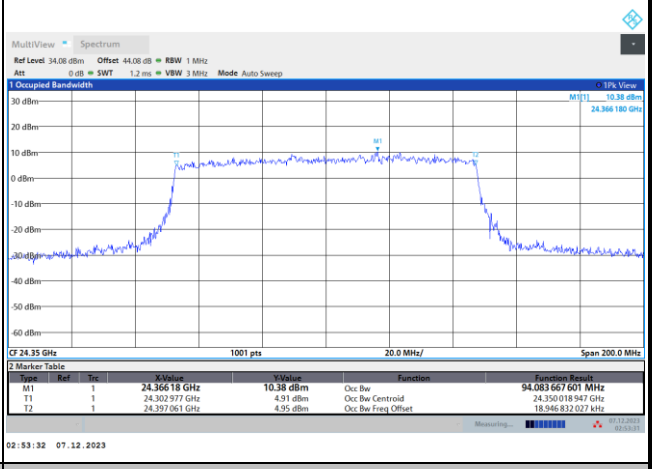
Lowest Channel / 100MHz / QPSK



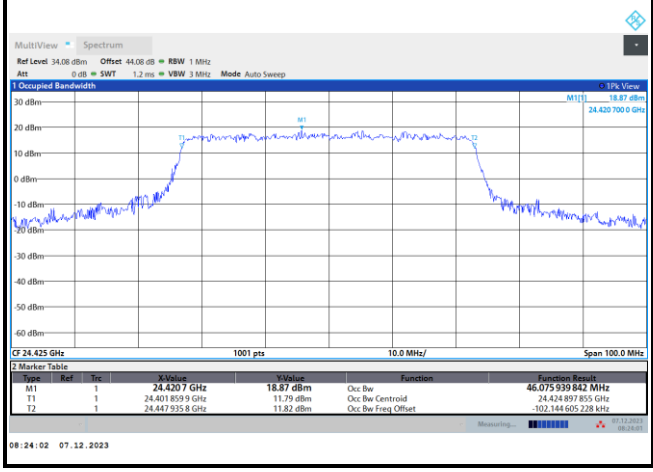
Middle Channel / 50MHz / QPSK



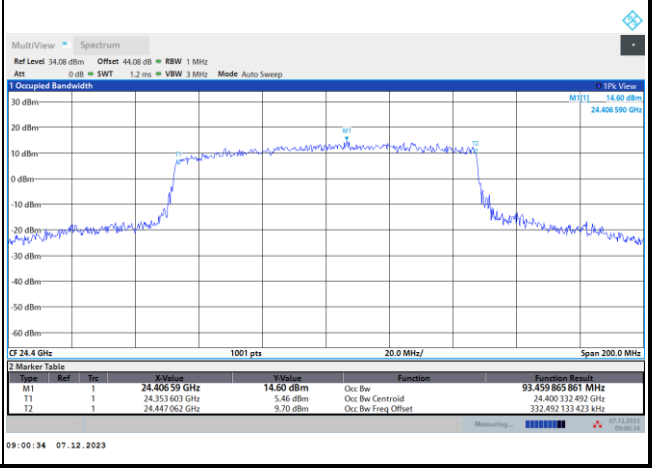
Middle Channel / 100MHz / QPSK



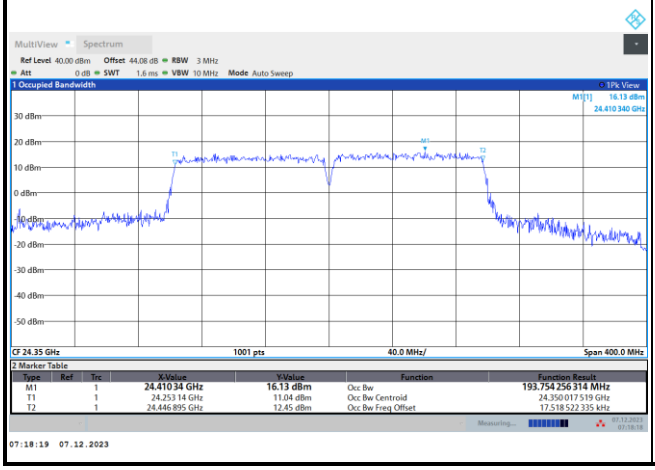
Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK



CP-OFDM Module B

NR Band n258A	
Middle Channel / 200MHz / QPSK	
	**intentionally blank**

Radiated Out of Band Emissions

Mode			DFT-s-OFDM Module B NR Band n258A : BE (dBm) 1 RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-5.63	-6.70	-7.43	-9.79	-11.43	-11.76
	>10%OB	≦-13	-26.78	-33.63	-31.90	-37.18	-37.15	-38.05
High CH	0~10%OB	≦-5	-18.360	-7.33	-8.06	-9.83	-11.20	-11.97
	>10%OB	≦-13	-40.639	-32.25	-33.24	-36.29	-37.25	-37.37
Result			Compliance					

Mode			CP-OFDM Module B NR Band n258A : BE (dBm) 1 RB	
BW			50MHz	100MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≦-5	-5.56	-8.17
	>10%OB	≦-13	-31.25	-37.78
High CH	0~10%OB	≦-5	-7.40	-10.83
	>10%OB	≦-13	-31.72	-36.99
Result			Compliance	

Mode			DFT-s-OFDM Module B NR Band n258A : BE (dBm) 1 RB		
BW			200MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Mid CH	0~10%OB	≦-5	-15.72	-16.06	-17.11
	>10%OB	≦-13	-15.95	-16.64	-20.92

Mode			CP-OFDM Module B NR Band n258A : BE (dBm) 1 RB
BW			200MHz
Limit (dBm)			QPSK
Mid CH	0~10%OB	≦-5	-25.795
	>10%OB	≦-13	-24.405

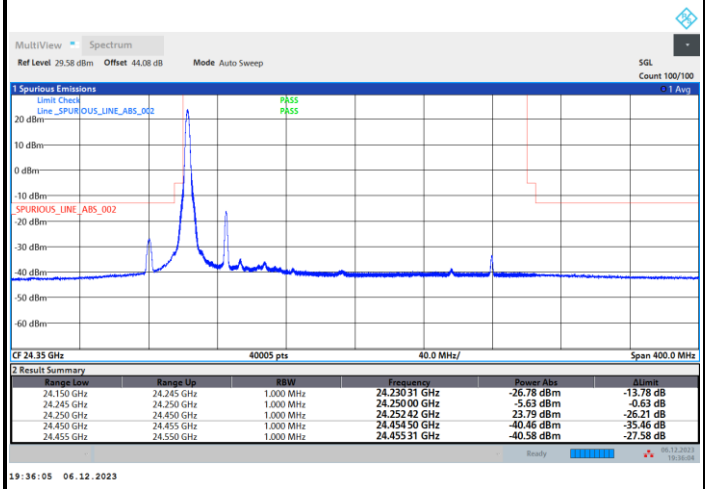
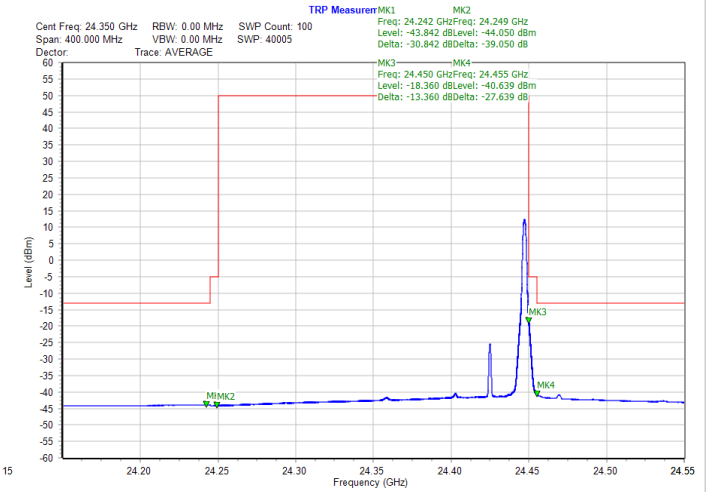
Mode			DFT-s-OFDM Module B NR Band n258A : BE (dBm) Full RB					
BW			50MHz			100MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-15.54	-15.46	-19.45	-17.79	-21.63	-31.21
	>10%OB	≦-13	-19.38	-22.22	-28.33	-23.01	-25.90	-23.82
High CH	0~10%OB	≦-5	-15.03	-16.84	-20.87	-21.32	-24.97	-28.83
	>10%OB	≦-13	-20.46	-22.89	-29.37	-24.71	-28.43	-34.54
Result			Compliance					

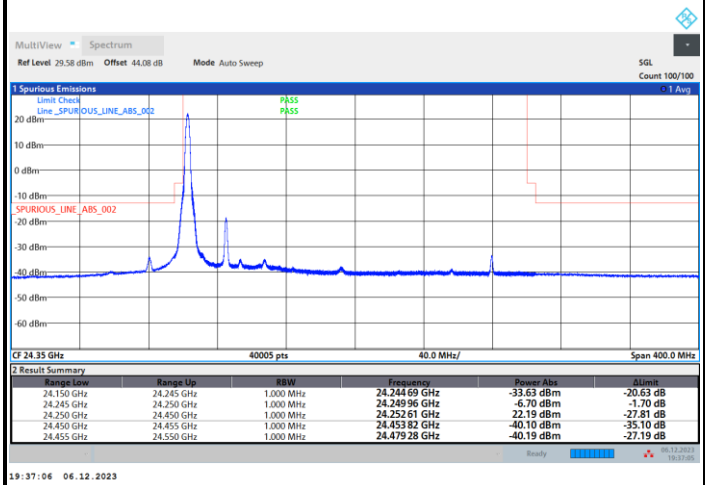
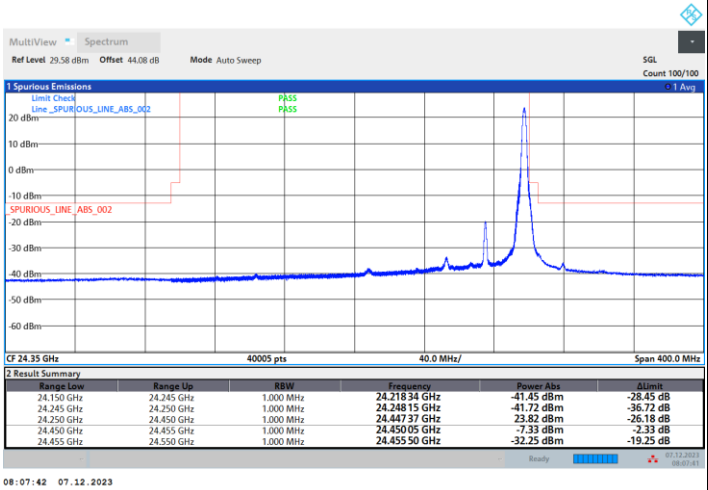
Mode			CP-OFDM Module B NR Band n258A : BE (dBm) Full RB	
BW			50MHz	100MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≦-5	-16.05	-21.11
	>10%OB	≦-13	-20.64	-24.09
High CH	0~10%OB	≦-5	-16.74	-21.00
	>10%OB	≦-13	-21.43	-25.28
Result			Compliance	

Mode			DFT-s-OFDM Module B NR Band n258A : BE (dBm) Full RB		
BW			200MHz		
Limit (dBm)			QPSK	16QAM	64QAM
Mid CH	0~10%OB	≦-5	-24.76	-26.48	-29.15
	>10%OB	≦-13	-28.85	-31.57	-35.09

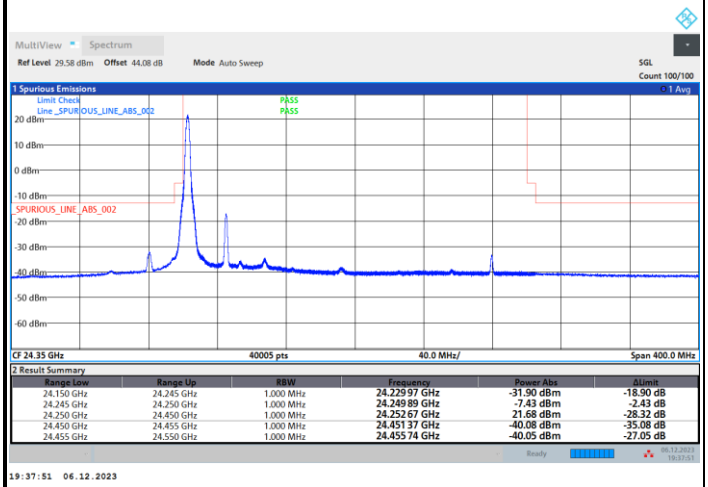
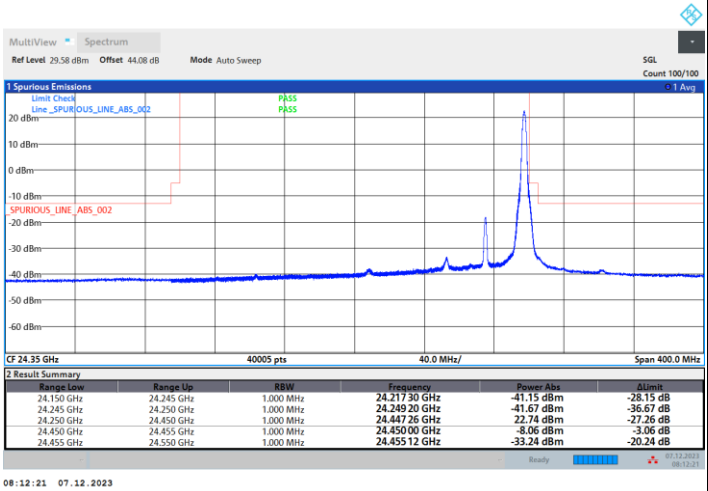
Mode			CP-OFDM Module B NR Band n258A : BE (dBm) Full RB
BW			200MHz
Limit (dBm)			QPSK
Mid CH	0~10%OB	≦-5	-23.47
	>10%OB	≦-13	-24.60

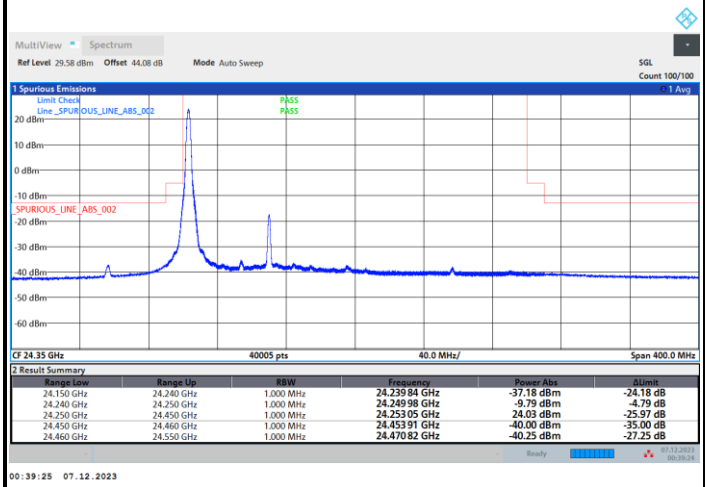
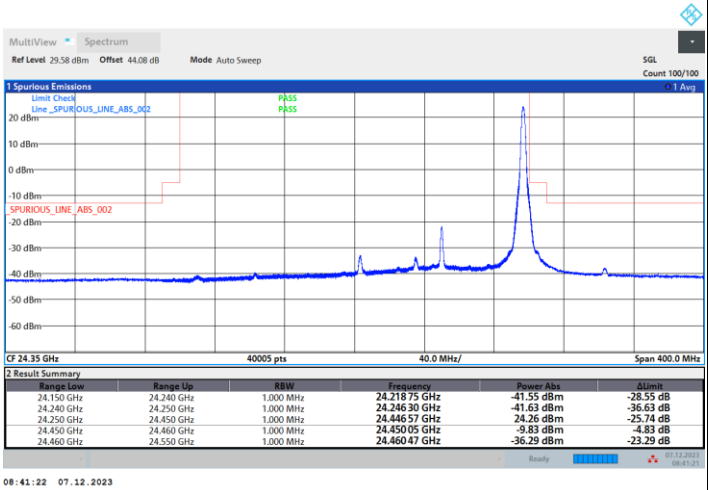
DFT-s-OFDM Module B

NR Band n258A/ 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

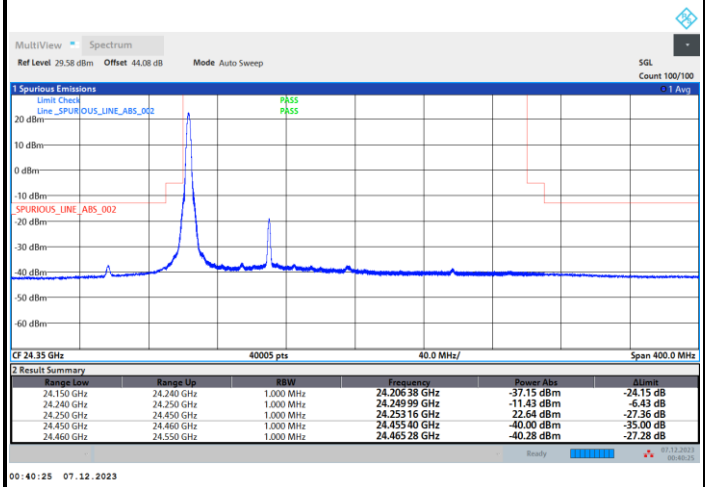
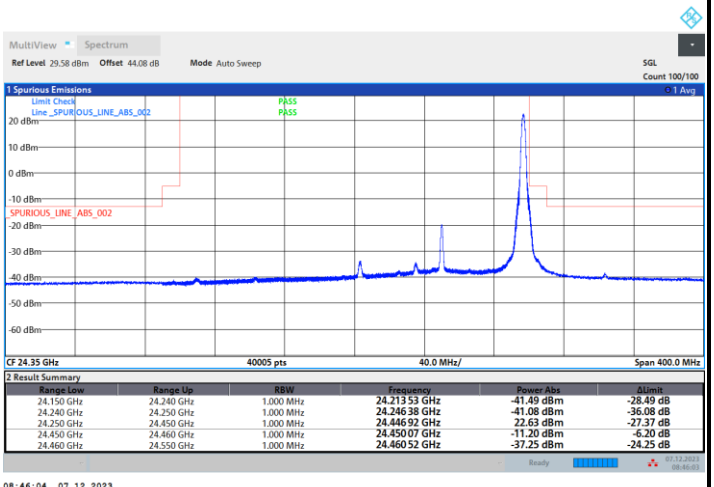
NR Band n258A/ 50MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

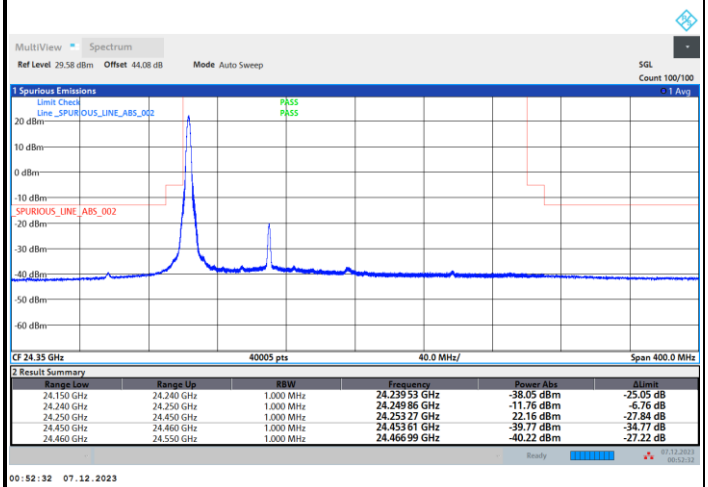
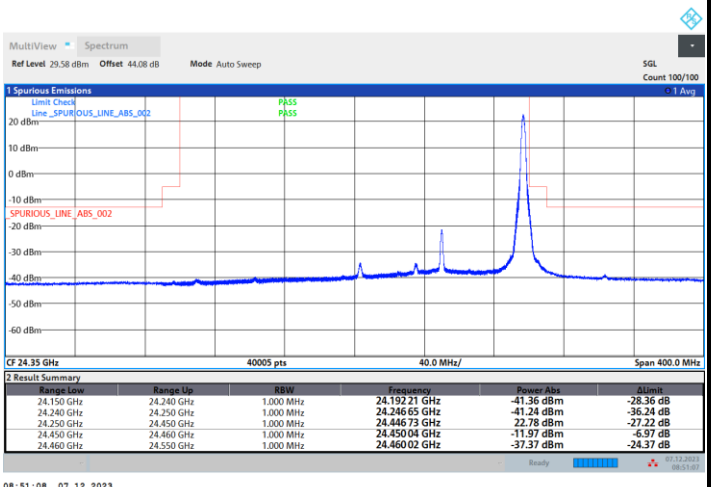
DFT-s-OFDM Module B

NR Band n258A/ 50MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
19:37:51 06.12.2023	08:12:21 07.12.2023

NR Band n258A/ 100MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
00:39:25 07.12.2023	08:41:22 07.12.2023

DFT-s-OFDM Module B

NR Band n258A/ 100MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
00:40:25 07.12.2023	08:46:04 07.12.2023

NR Band n258A/ 100MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	
00:52:32 07.12.2023	08:51:08 07.12.2023