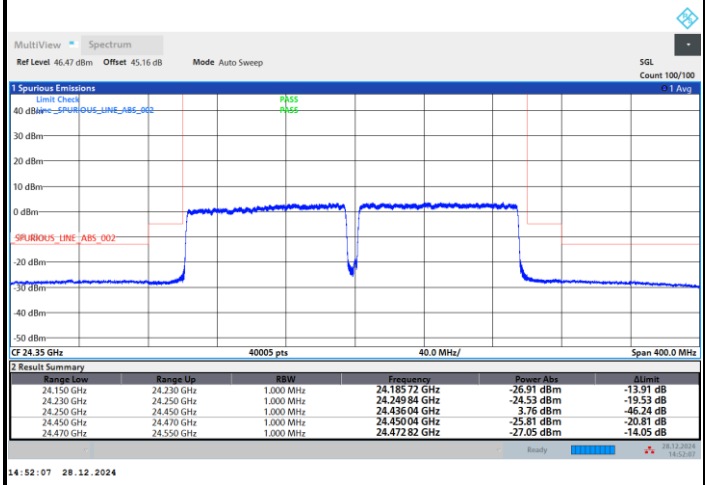
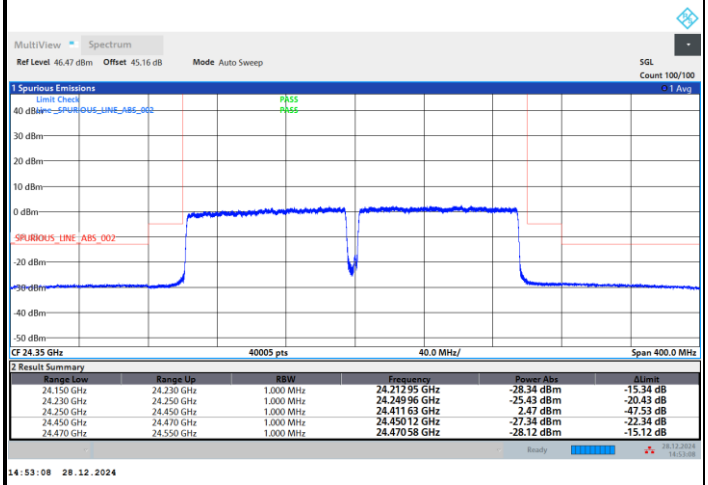
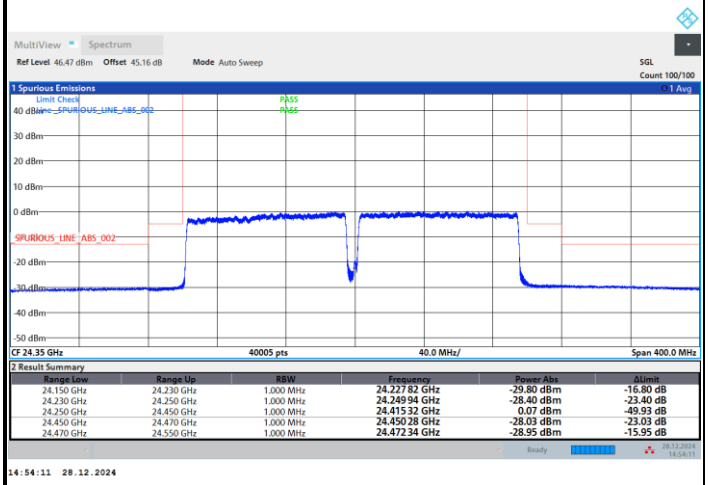
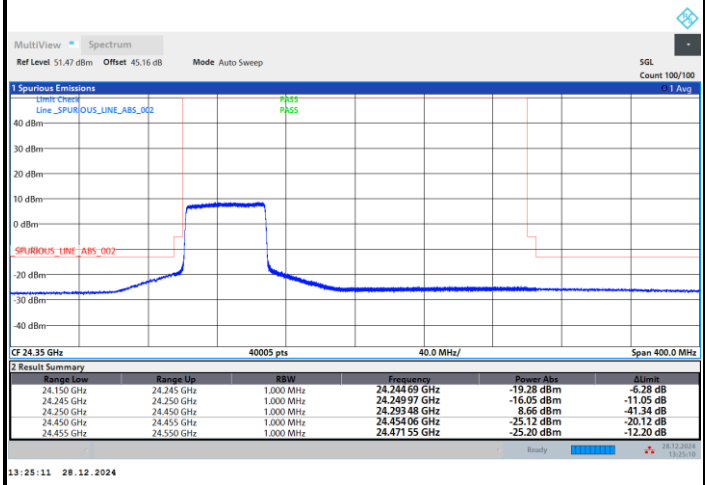
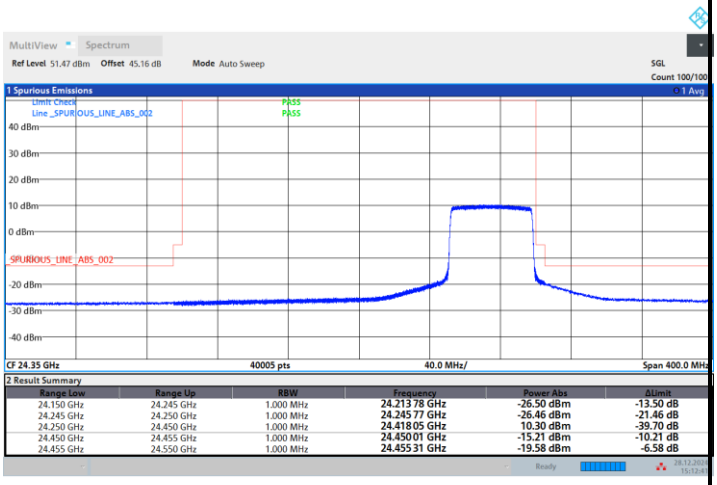
DFT-s-OFDM

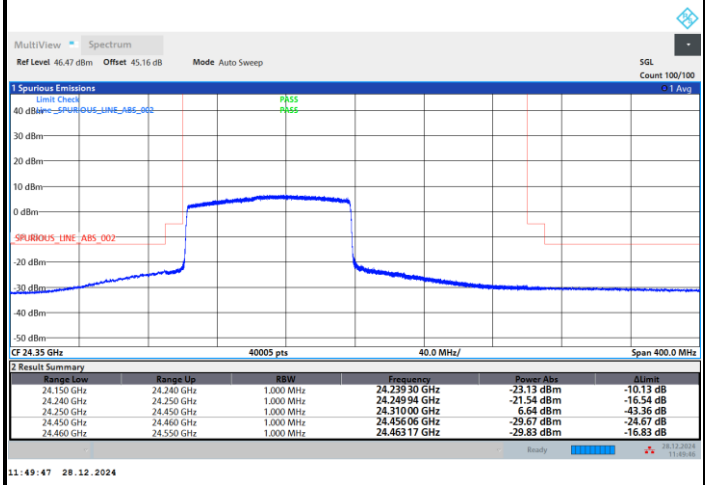
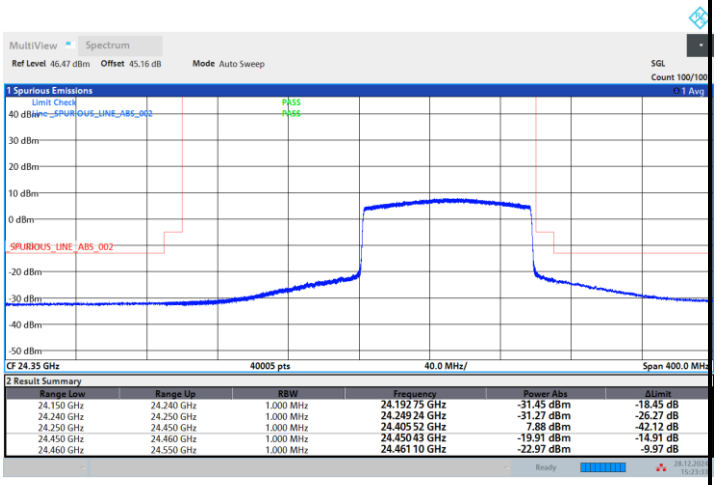
NR Band n258A/ 200MHz / QPSK	
Middle Band Edge / Full RB	
	**intentionally blank**
NR Band n258A/ 200MHz / 16QAM	
Middle Band Edge / Full RB	
	**intentionally blank**

DFT-s-OFDM

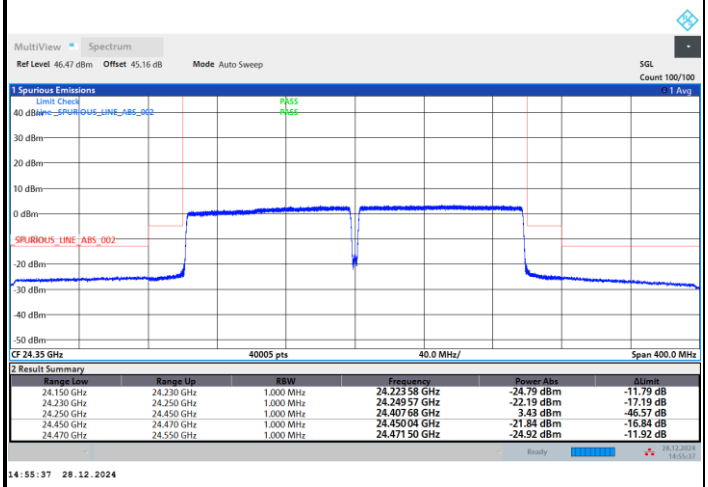
NR Band n258A/ 200MHz / 64QAM	
Middle Band Edge / Full RB	
	**intentionally blank**

CP-OFDM

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**
	

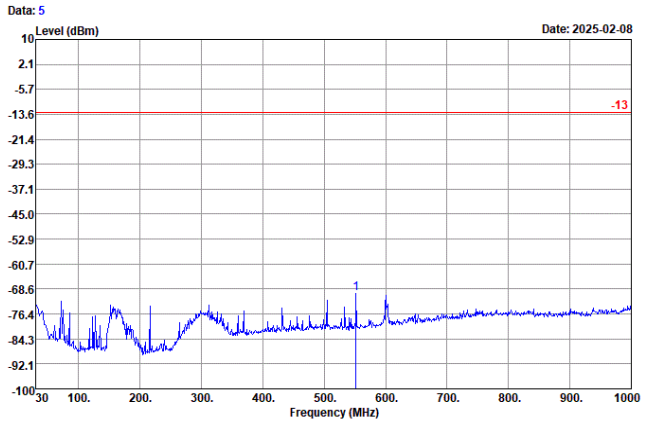
CP-OFDM

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

Spurious Emission

NR Band n258A (30MHz-1GHz)

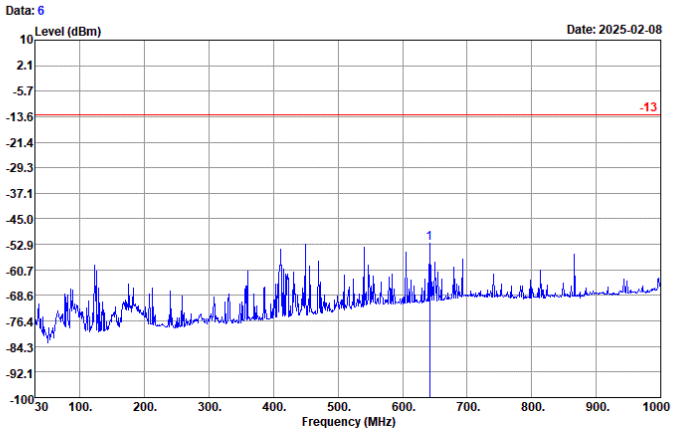
Horizontal



Site : 03CH23-HY
Condition : -13 ERP_20241229 HORIZONTAL
Projet : 4N0917
: n258a

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	551.86	-70.11	-57.11	-13.00

Vertical

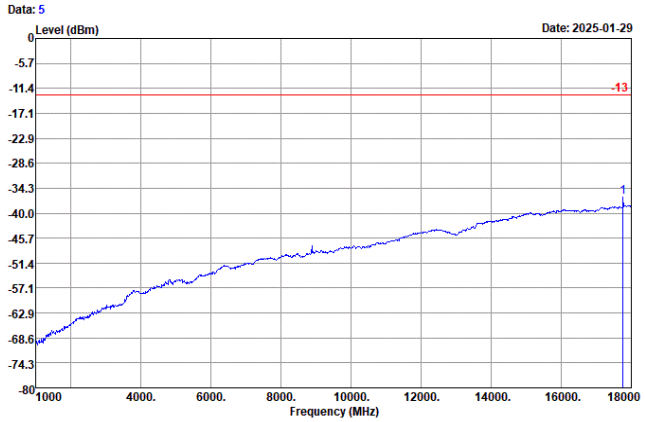


Site : 03CH23-HY
Condition : -13 ERP_20241229 VERTICAL
Projet : 4N0917
: n258a

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	642.07	-52.37	-39.37	-13.00

NR Band n258A (1GHz-18GHz)

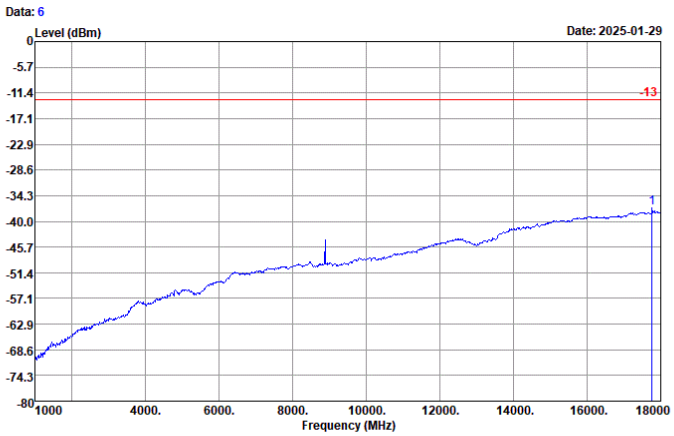
Horizontal



Site : 03CH23-HY
Condition : -13 EIRP_20241229 HORIZONTAL
Projet : 4N0917
: n258a

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	17762.00	-36.21	-23.21	-13.00

Vertical

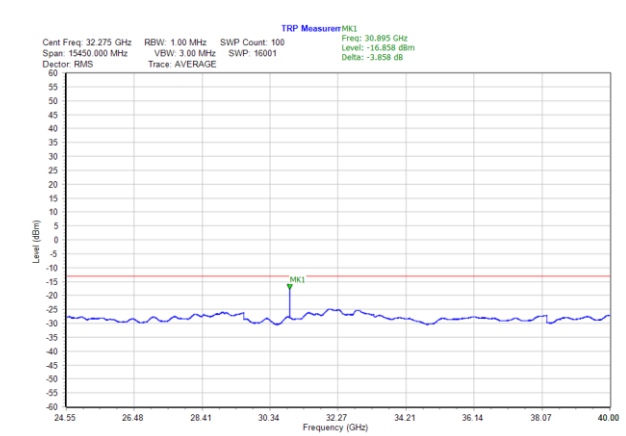
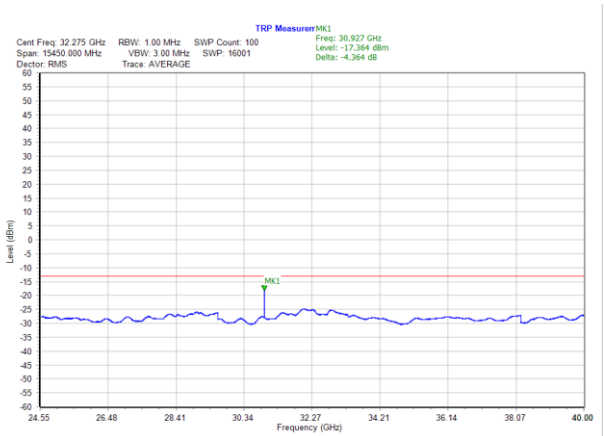
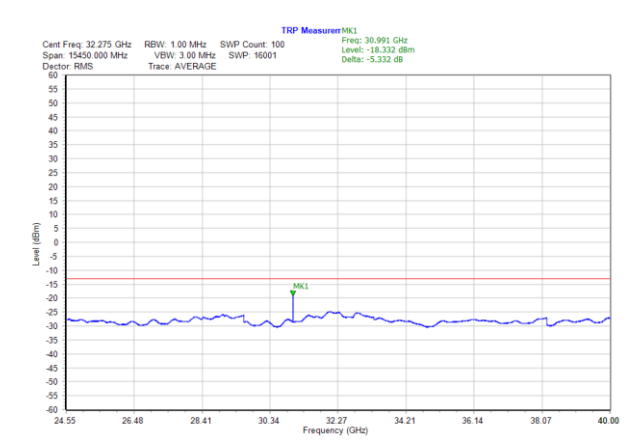
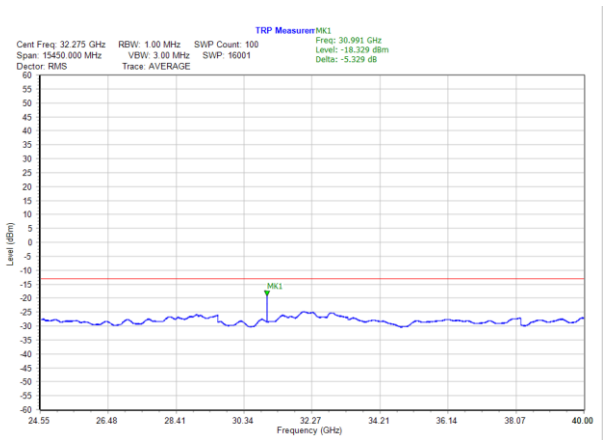
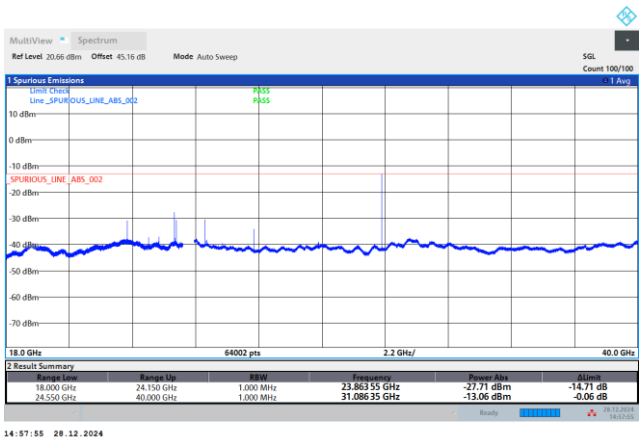
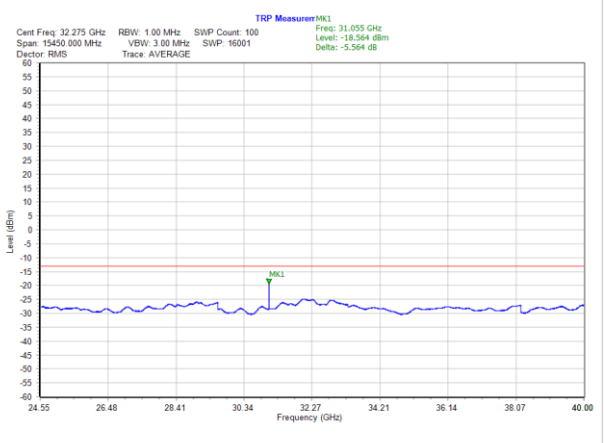


Site : 03CH23-HY
Condition : -13 EIRP_20241229 VERTICAL
Projet : 4N0917
: n258a

	Freq	Level	Over Limit	Limit Line
	MHz	dBm	dB	dBm
1	17762.00	-37.03	-24.03	-13.00

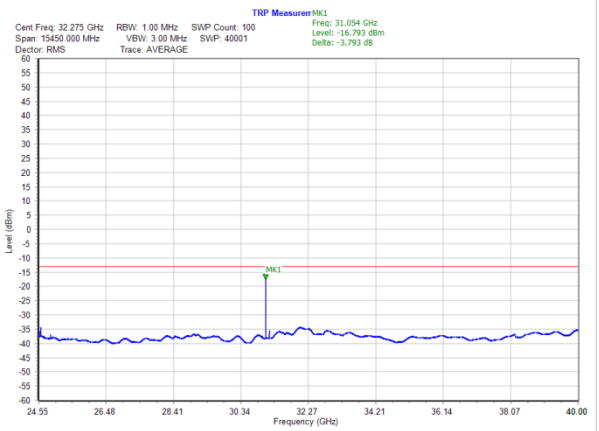
Spurious emission between 18GHz to 40GHz worst case plot is reported as following.

DFT-s-OFDM

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

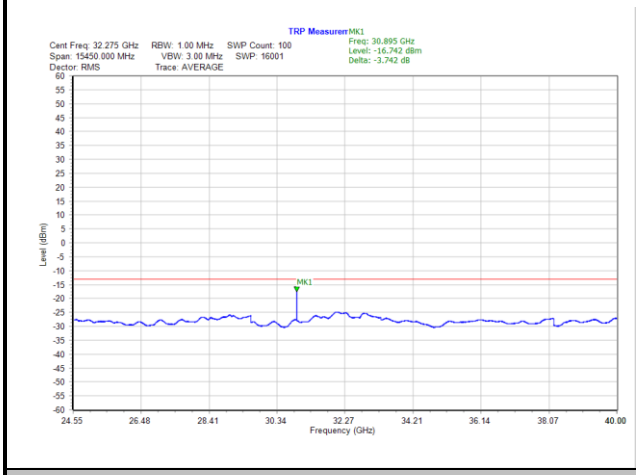
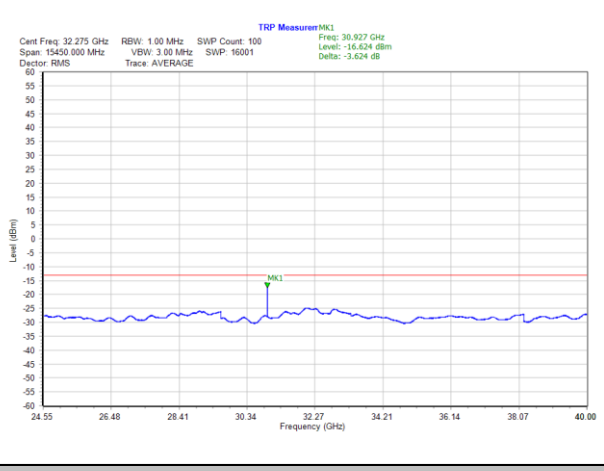
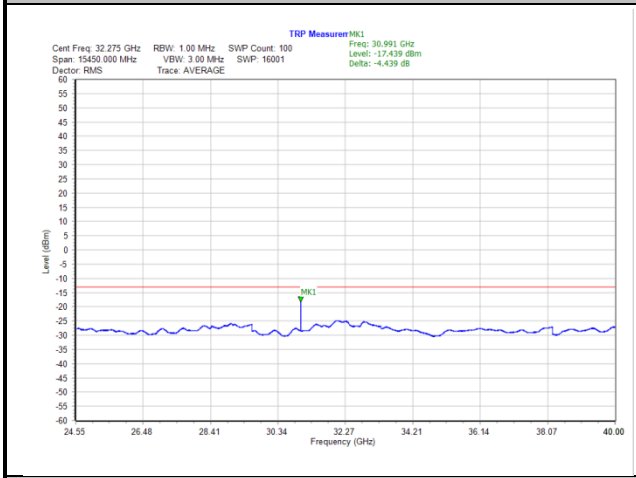
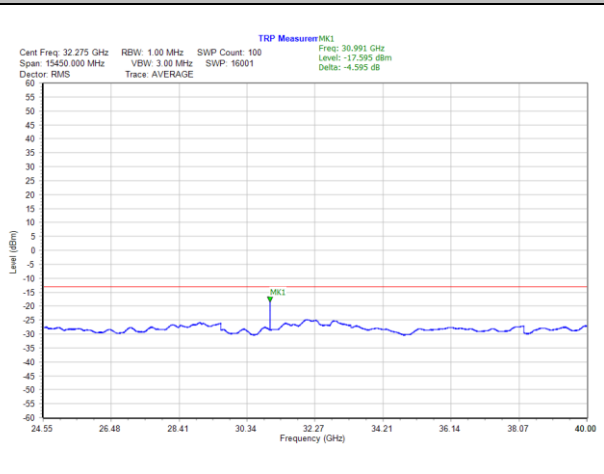
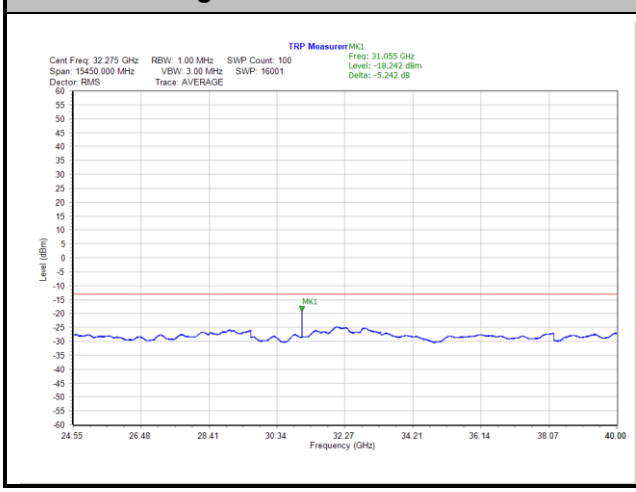
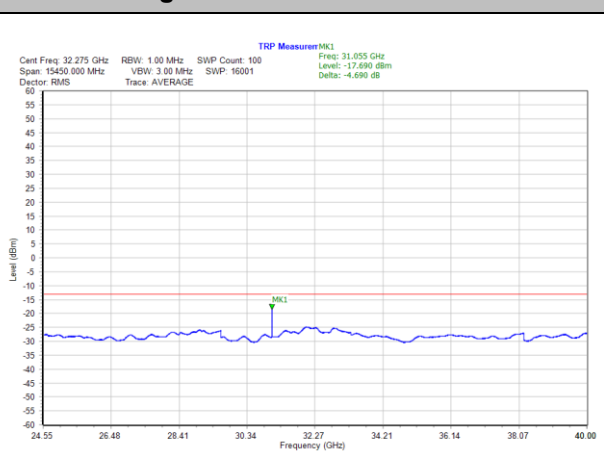
Remark: In band and out of band frequencies are omitted.

DFT-s-OFDM

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

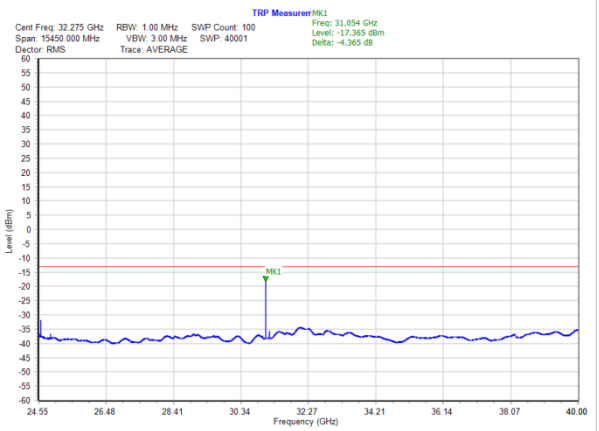
Remark: In band and out of band frequencies are omitted.

CP-OFDM

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

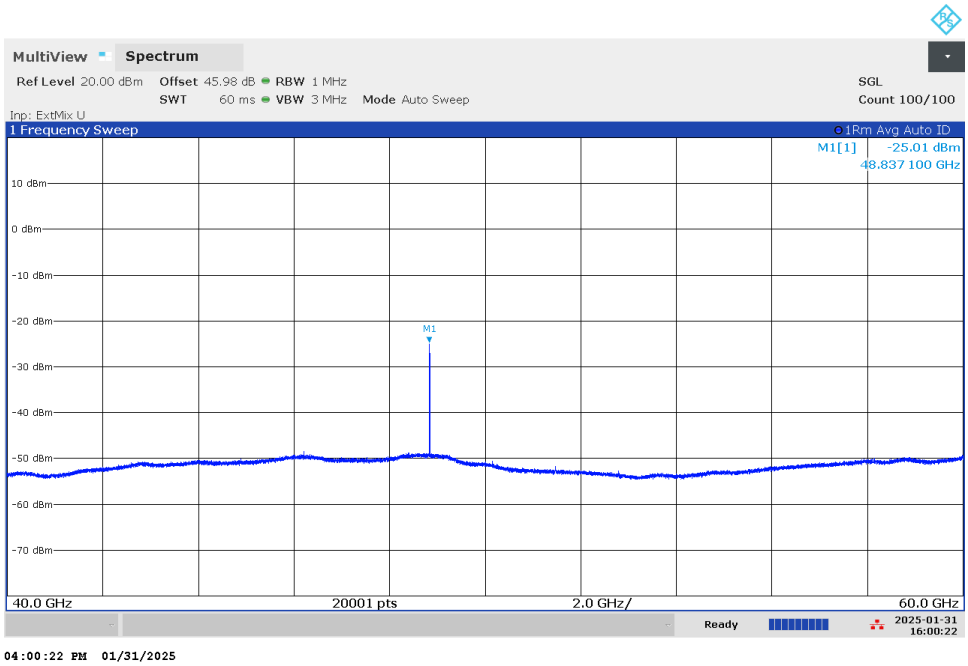
Remark: In band and out of band frequencies are omitted.

CP-OFDM

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

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

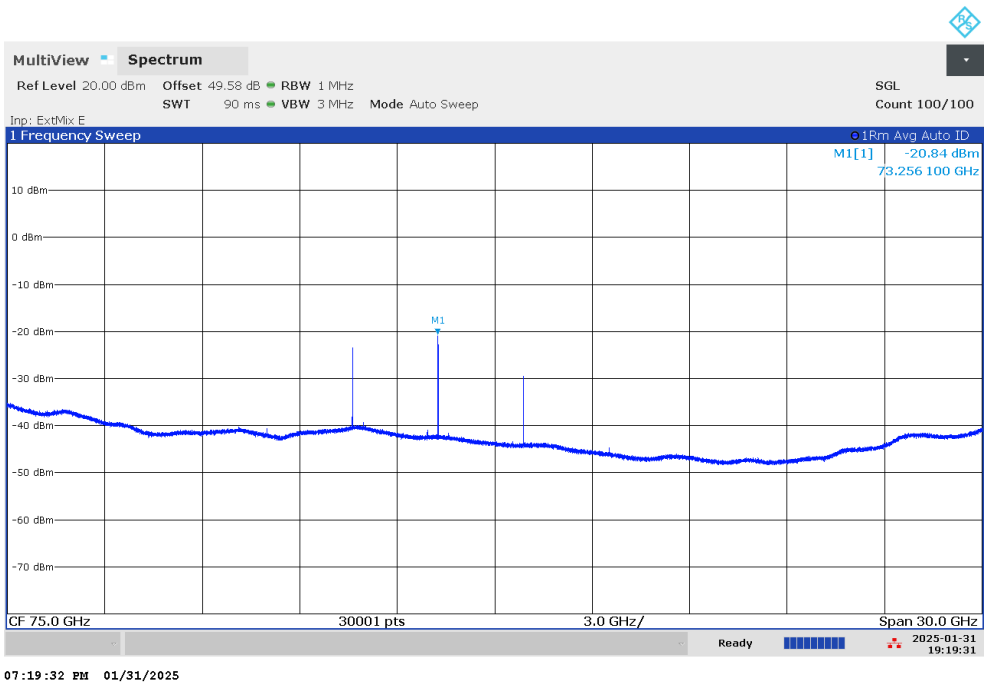
NR Band n258A
(40GHz-60GHz)
Limit -13dBm/MHz, PASS



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

= 42.6 + 1.18 + 107 + 20log(1) – 104.8 = 45.98(dB)

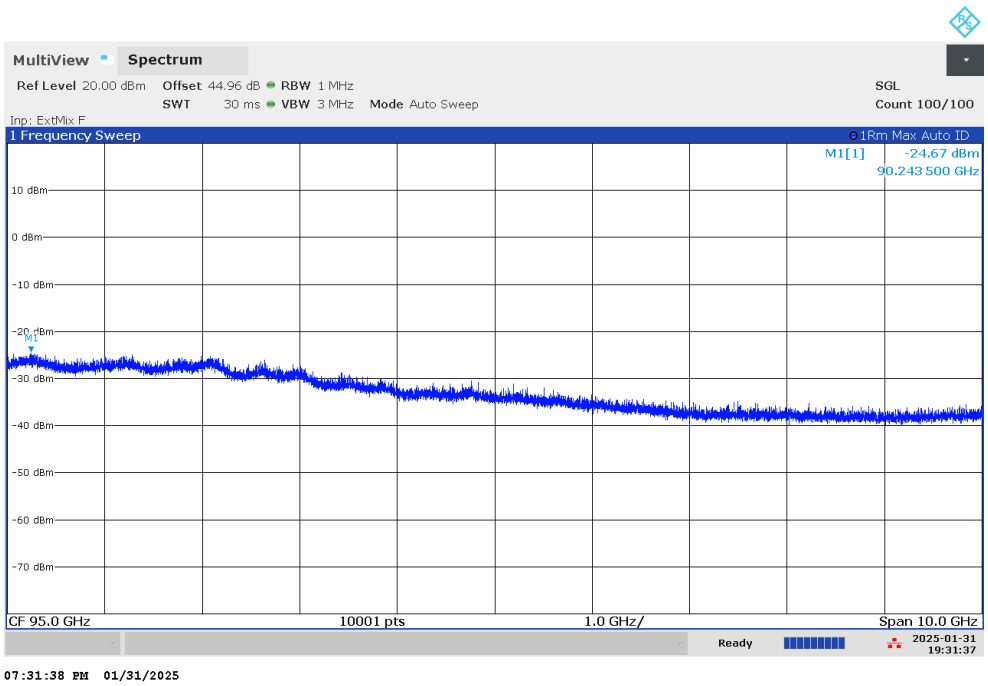
NR Band n258A
(60GHz-90GHz)
Limit -13dBm/MHz, PASS



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

= 46.2 + 1.18 + 107 + 20log(1) – 104.8 = 49.58 (dB)

NR Band n258A
(90GHz-100GHz)
Limit -13dBm/MHz, PASS



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

= 47.6 + 1.18 + 107 + 20log(0.5) – 104.8 = 44.96 (dB)

Additional requirement for 24GHz bands: Limits of 47 CFR 30.203(d)(2) is applied.

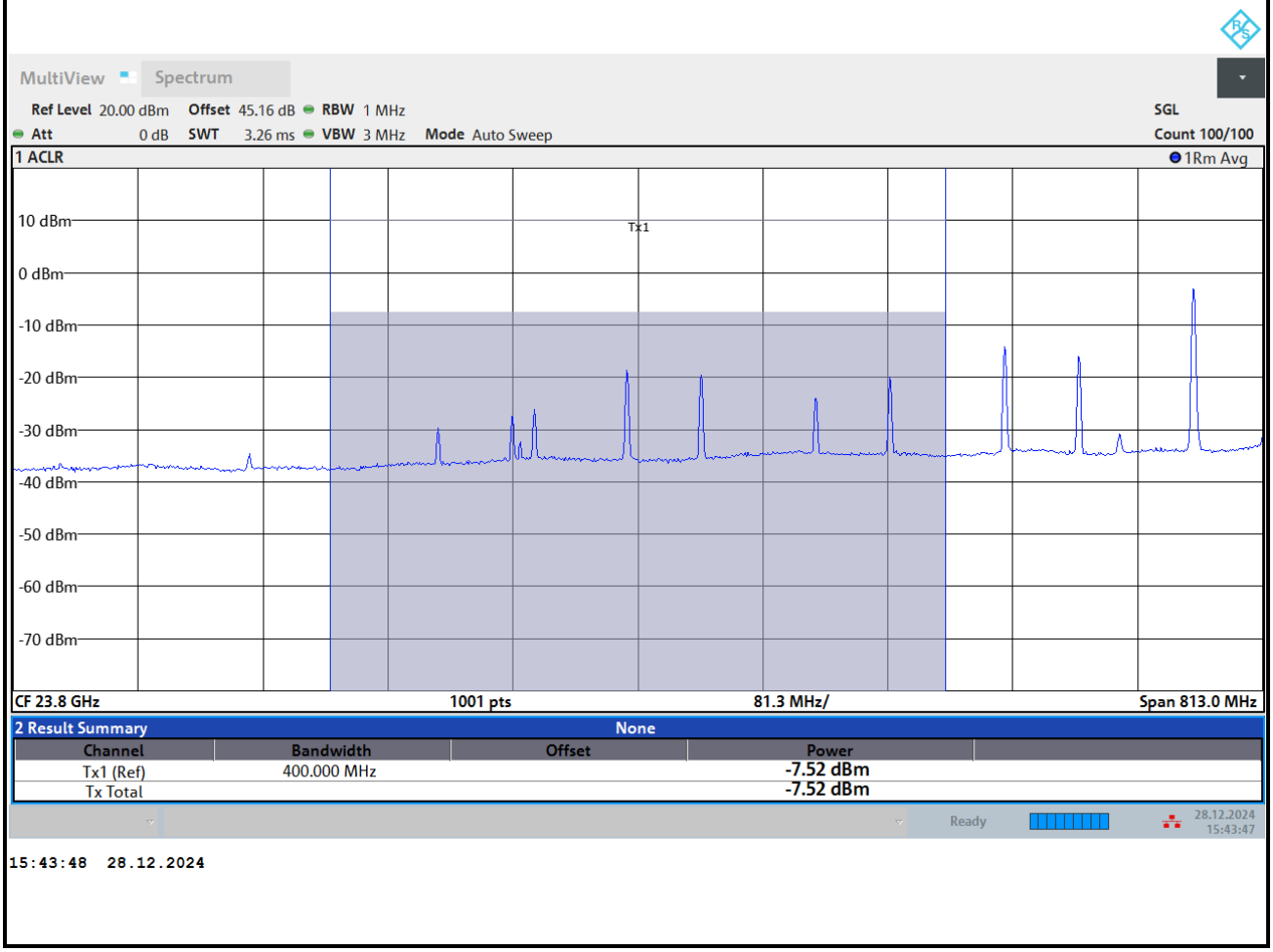
For mobile equipment brought into use after September 1, 2027, the maximum conducted output power or the total radiated power of emissions in any 200 MHz of the 23.6-24.0 GHz band shall not exceed −39 dBW (for base stations) or −35 dBW (for mobile stations).

NR Band n258A

23.6-24GHz Worst Case Plot

Middle Channel / 200MHz / DFT / QPSK / 1RB22

TRP Limit -35dBW/200MHz = -5dBm/200MHz > -7.52dBm, PASS



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

= 39.5 + 3.46 + 107 + 20log(1) – 104.8 = 45.16(dB)

Note: Channel power integration method is used to measure total power over 400MHz from 23.6GHz to 24GHz in order to show compliance against limit within any 200MHz interval.

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	24.349964	87.900	3.610	Pass
40	Normal Voltage	24.349988	63.900	2.624	
30	Normal Voltage	24.350024	27.900	1.146	
20(Ref.)	Normal Voltage	24.3500519	0.000	0.000	
10	Normal Voltage	24.3500969	-45.000	1.848	
0	Normal Voltage	24.3501089	-57.000	2.341	
-10	Normal Voltage	24.3501259	-74.000	3.039	
-20	Normal Voltage	24.3501099	-58.000	2.382	
-30	Normal Voltage	24.3500549	-3.000	0.123	
20	Maximum Voltage	24.3500698	-17.900	0.735	
20	Normal Voltage	24.3501209	-69.000	2.834	
20	Battery End Point	24.3500744	-22.500	0.924	

Note:

1. Normal Voltage = 3.9 V.；Minimum Voltage = 3.6 V.；Maximum Voltage = 4.5 V.
2. The frequency fundamental emissions stay within the operation band.

NR Band n258B AGH+V

Occupied Bandwidth

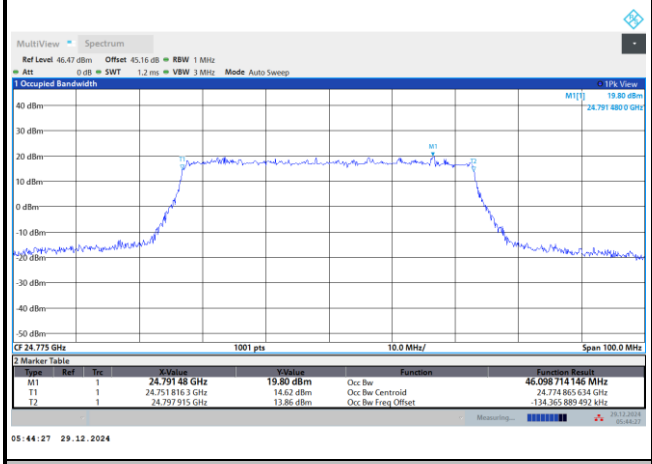
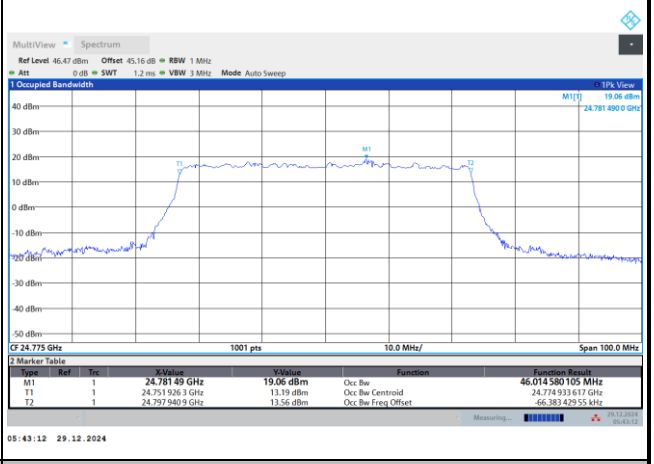
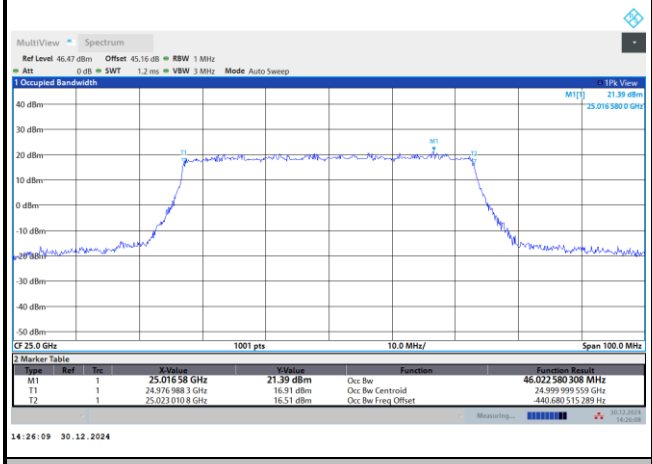
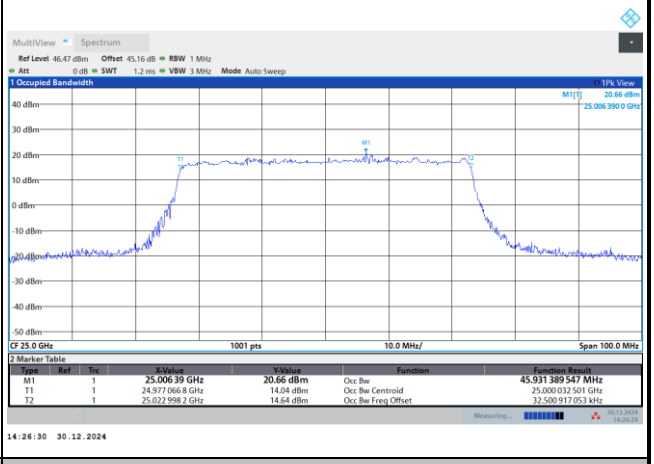
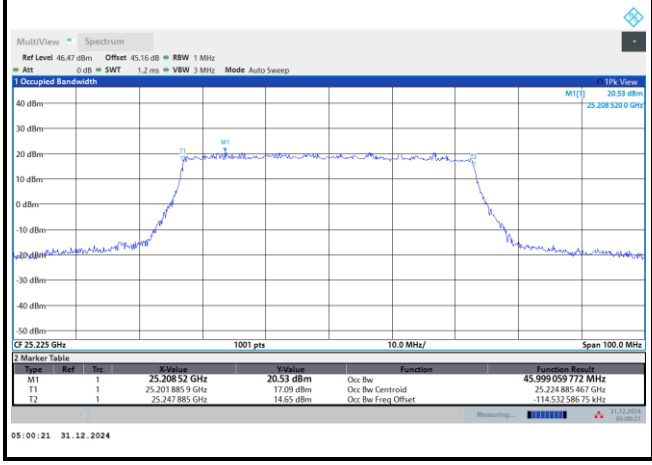
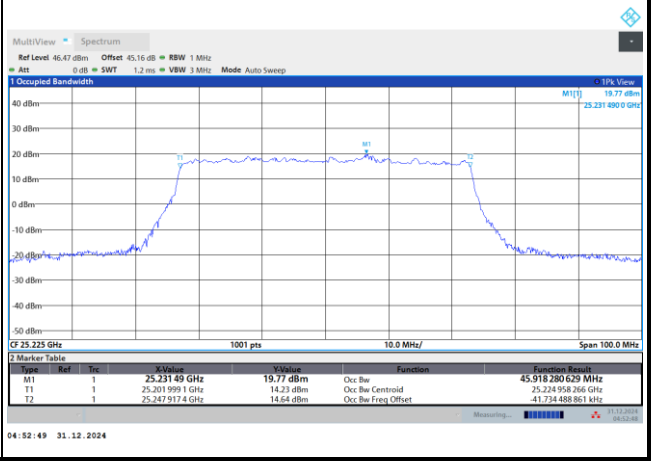
Mode	DFT-s-OFDM NR Band n258B : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	46.09	46.01	46.17	91.11	91.17	91.18	190.94	190.87	191.05
Middle CH	46.02	45.93	46.06	91.27	91.18	91.20	190.75	190.58	190.90
Highest CH	45.99	45.91	46.05	90.91	91.02	91.03	191.24	191.17	191.32

Mode	DFT-s-OFDM NR Band n258B : 99%OBW(MHz)					
BW	300MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	290.17	290.30	290.43	389.90	389.19	389.25
Middle CH	289.28	289.52	289.58	389.73	389.91	389.28
Highest CH	290.12	290.58	290.16	390.05	389.35	388.99

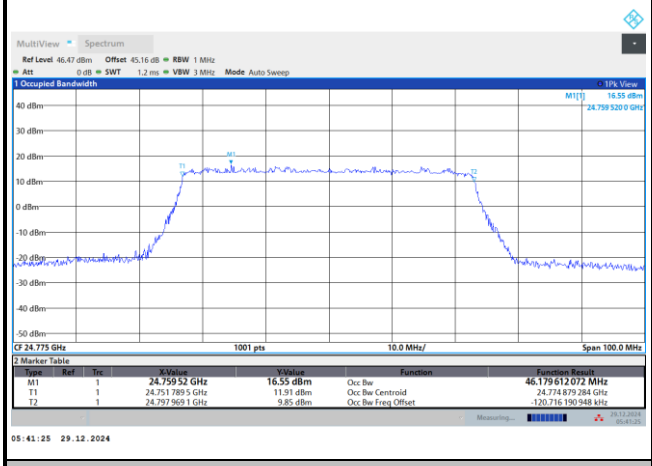
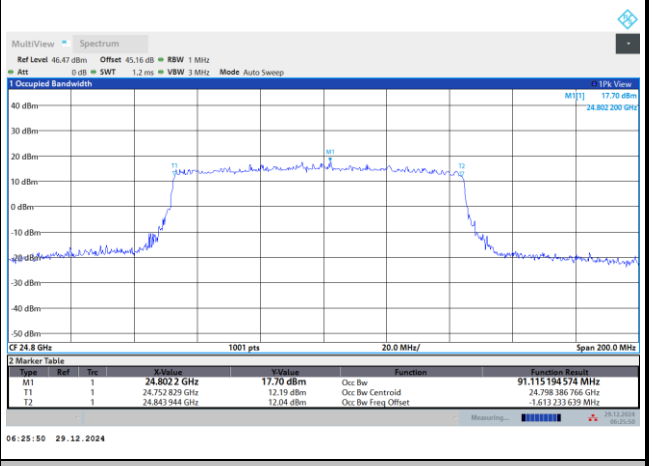
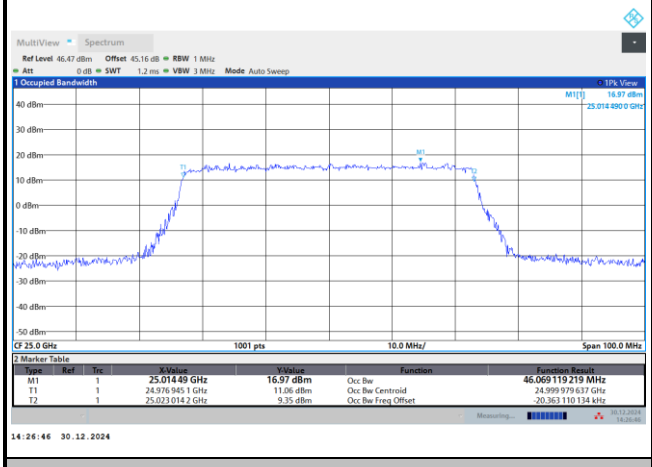
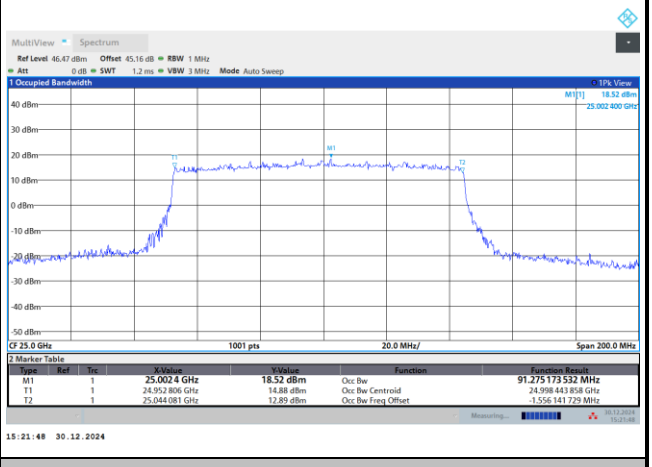
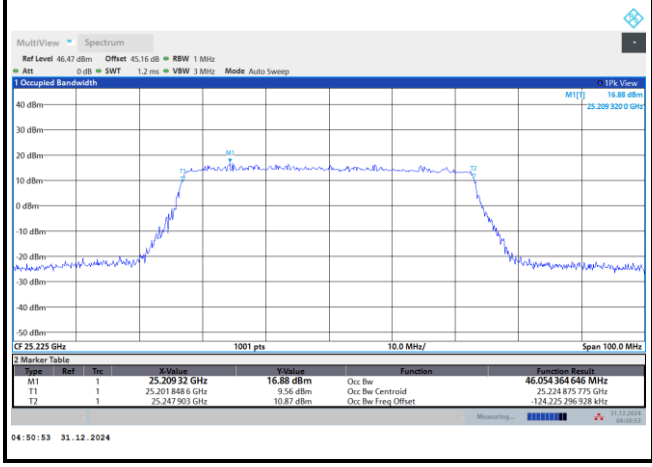
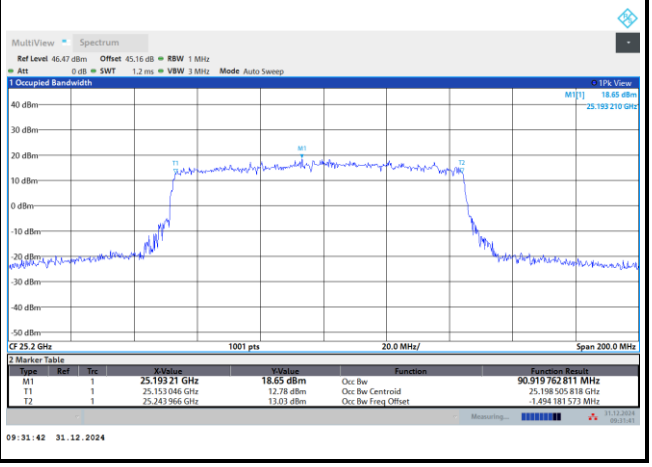
Mode	CP-OFDM NR Band n258B : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.05	93.88	194.08
Middle CH	45.81	93.99	193.76
Highest CH	45.84	93.83	194.22

Mode	CP-OFDM NR Band n258B : 99%OBW(MHz)	
BW	300MHz	400MHz
Mod.	QPSK	QPSK
Lowest CH	295.60	392.68
Middle CH	292.30	392.69
Highest CH	294.13	392.25

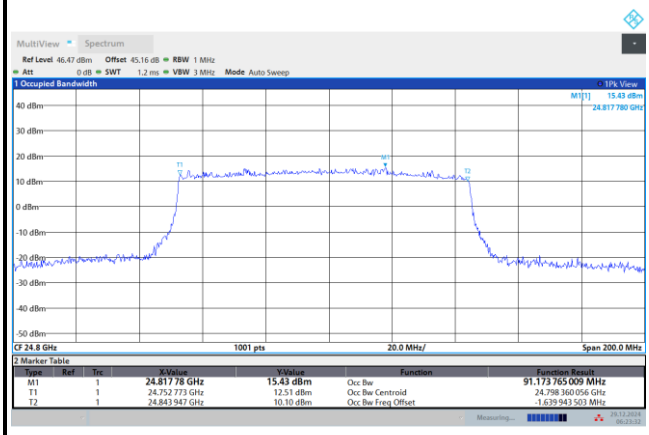
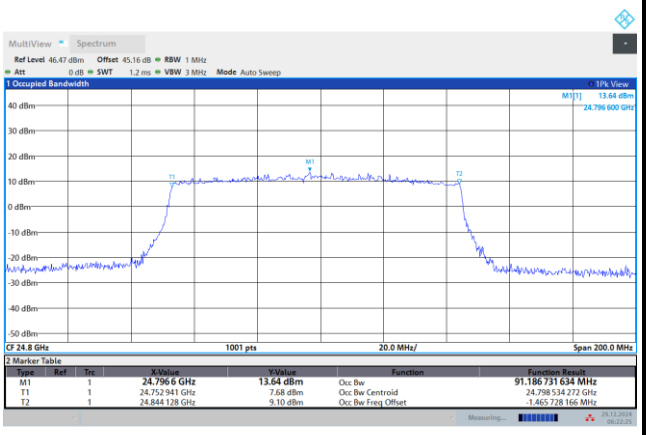
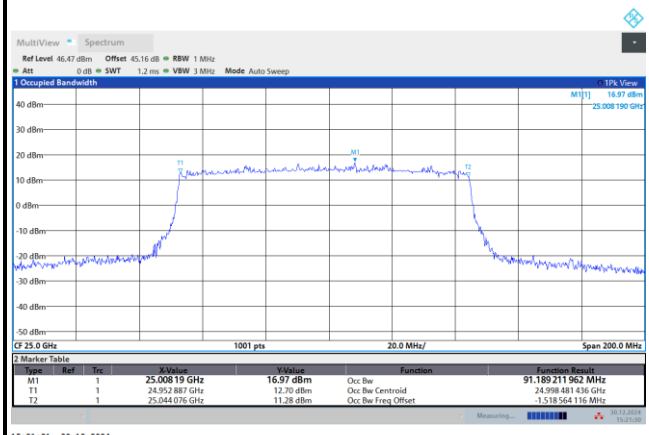
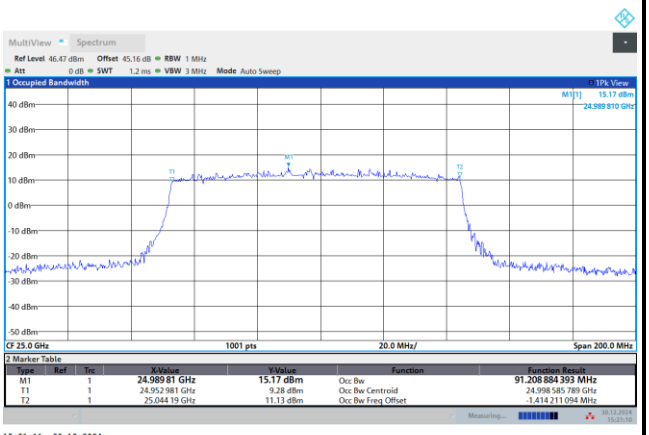
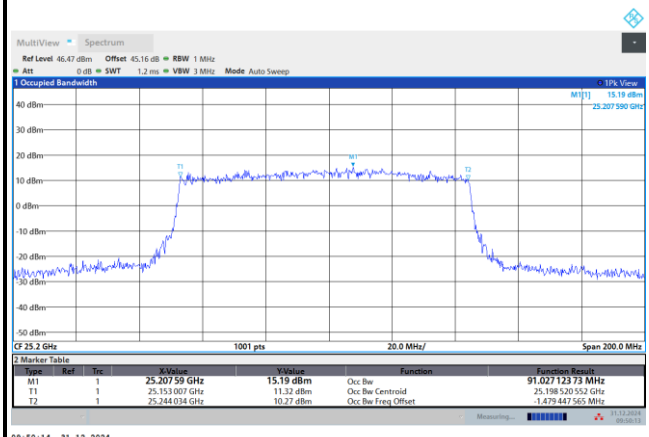
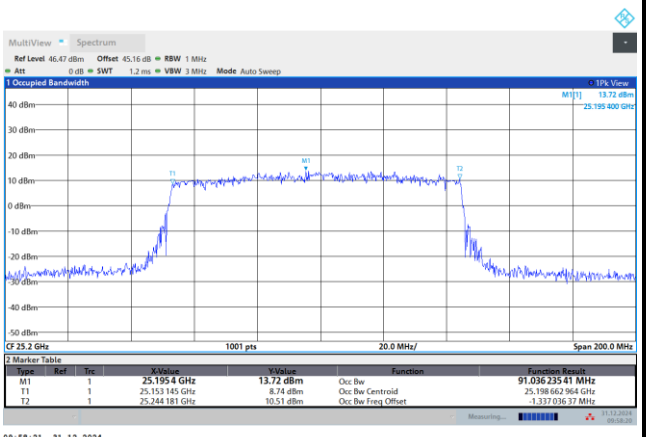
DFT-s-OFDM

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**
	

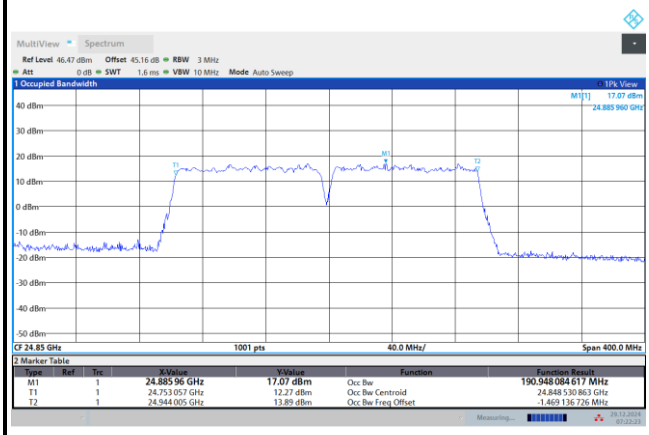
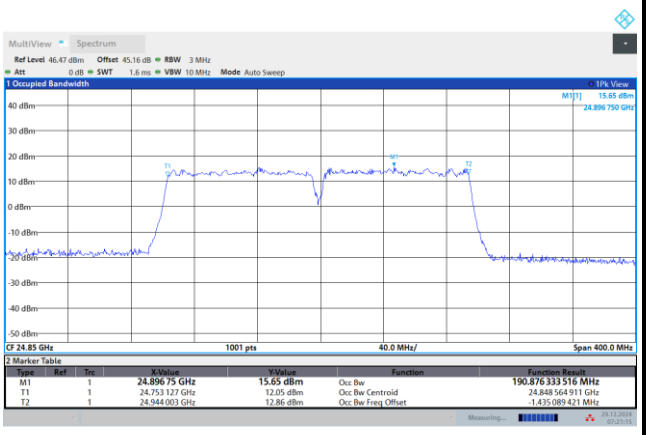
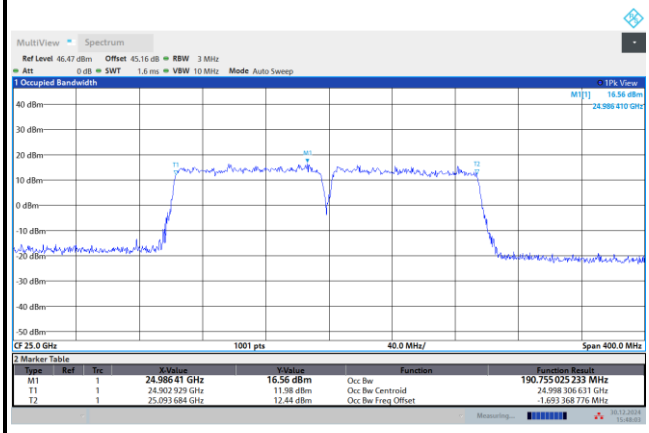
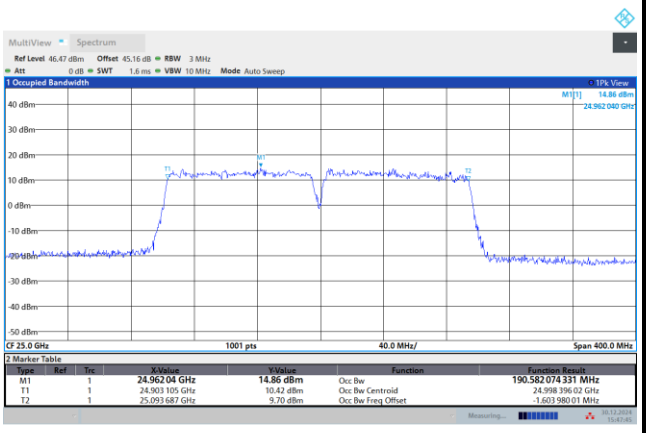
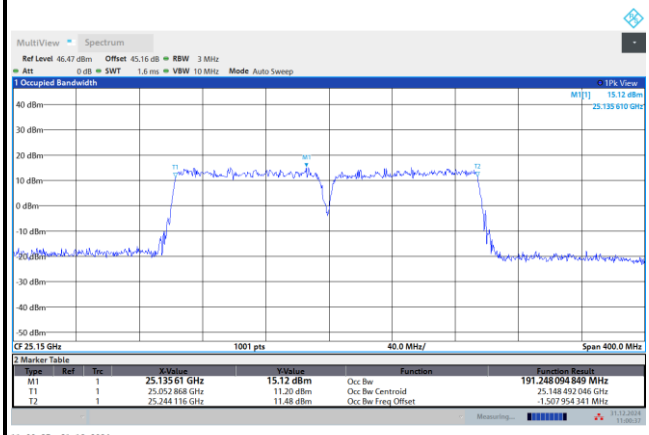
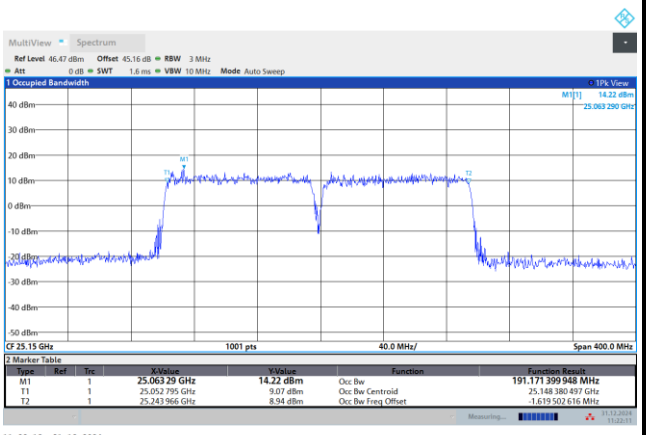
DFT-s-OFDM

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**
	

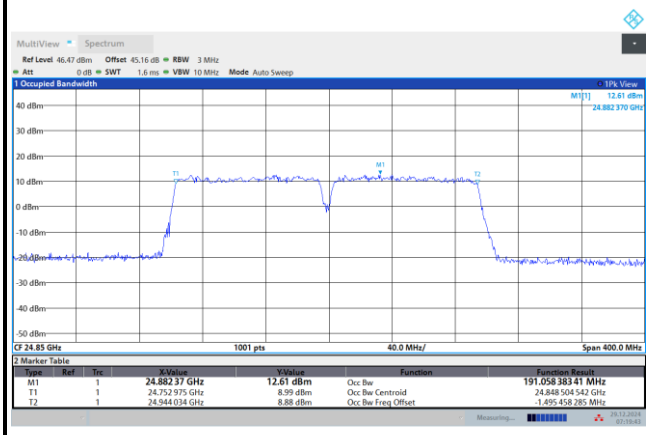
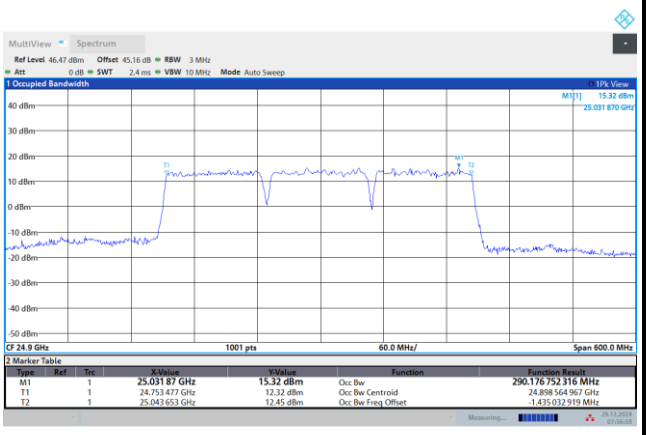
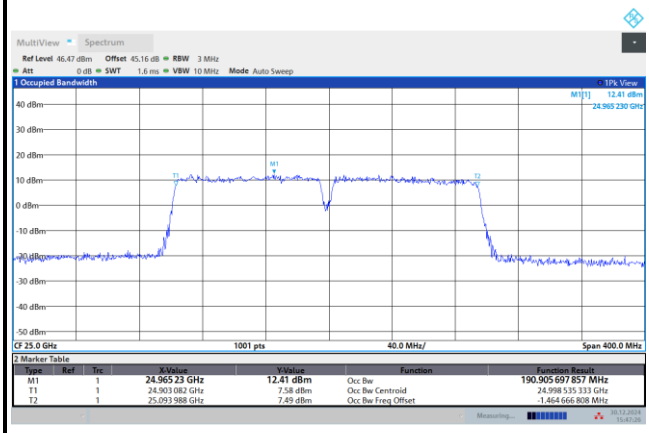
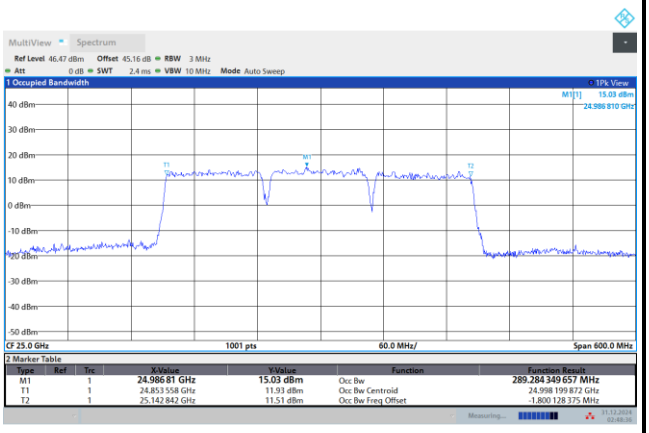
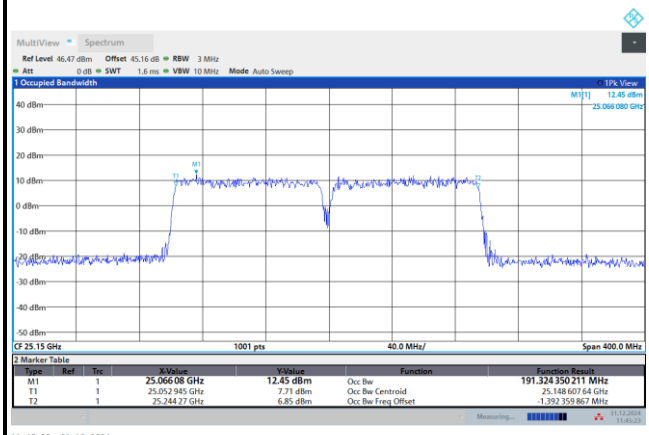
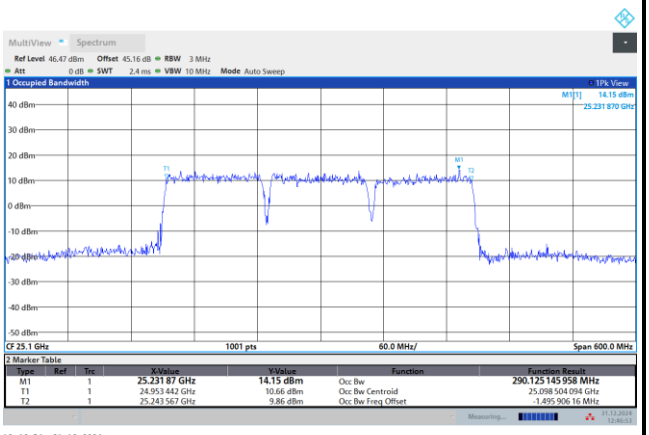
DFT-s-OFDM

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**
	

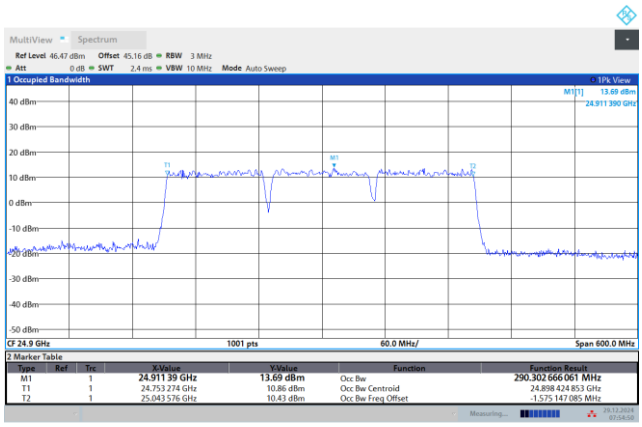
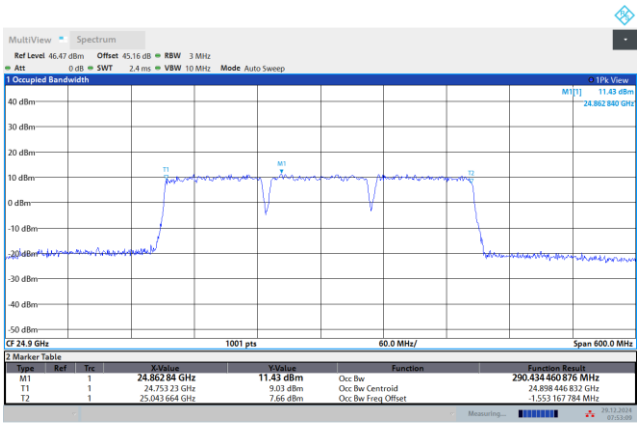
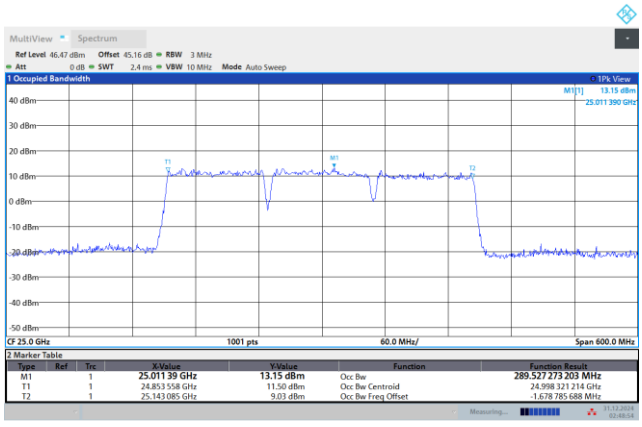
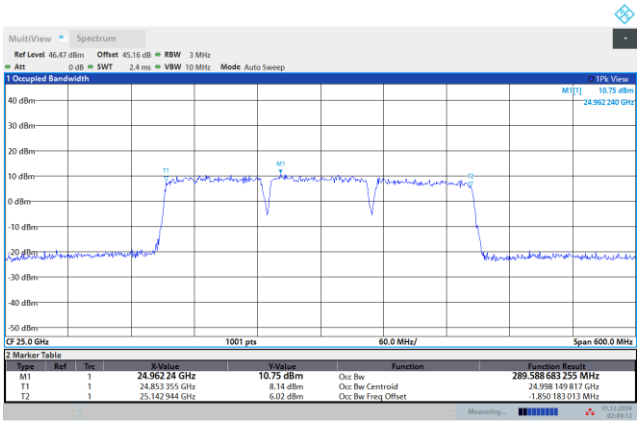
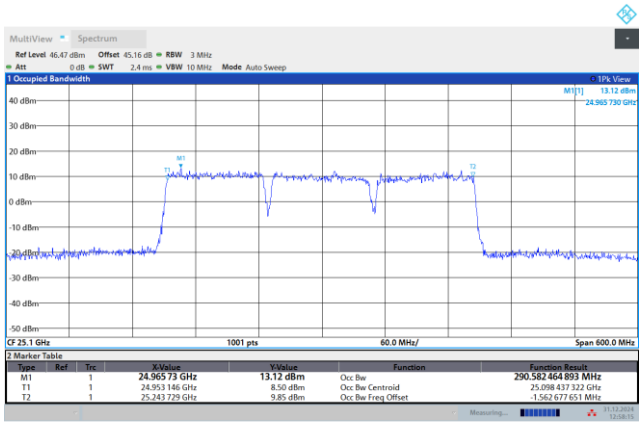
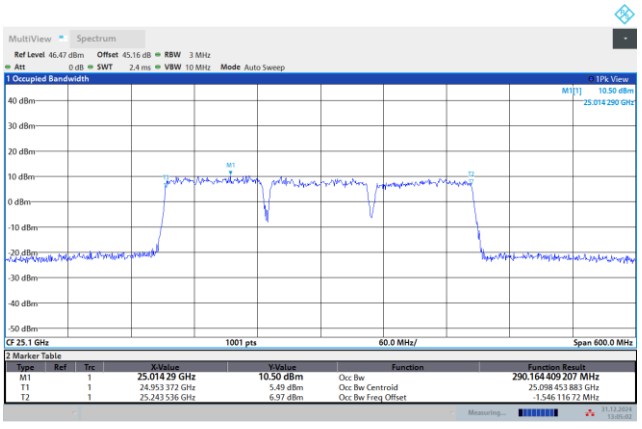
DFT-s-OFDM

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**
	

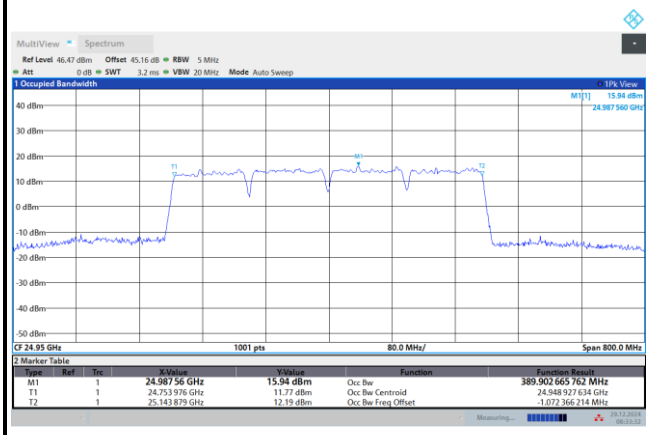
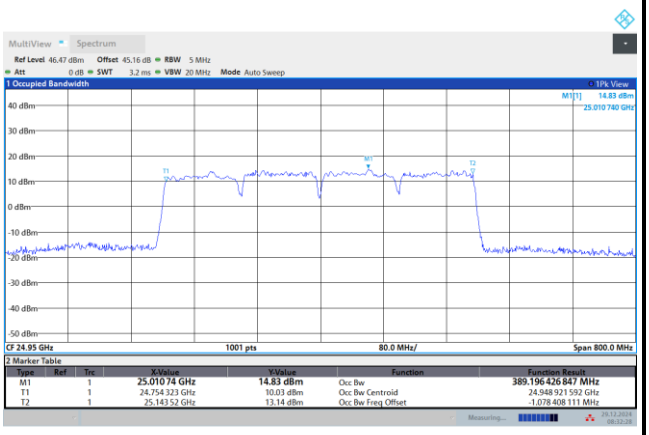
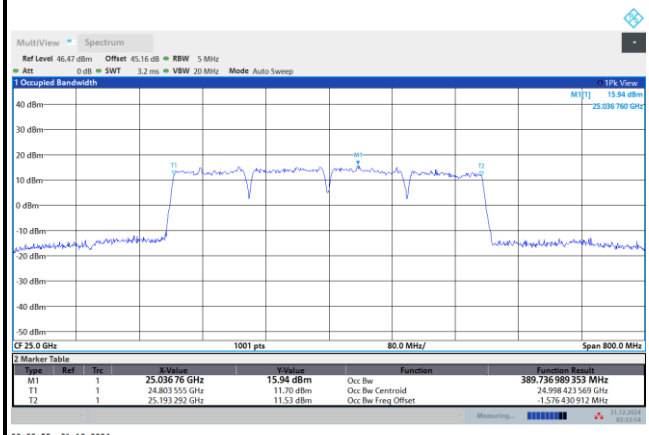
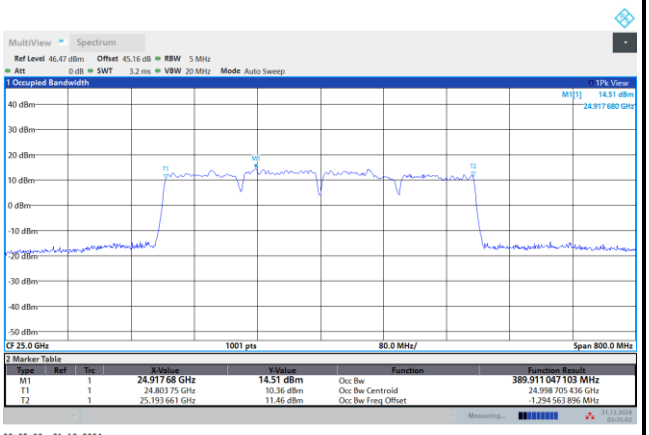
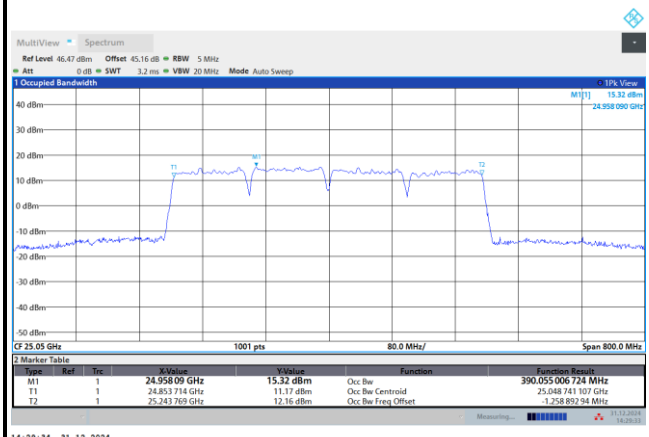
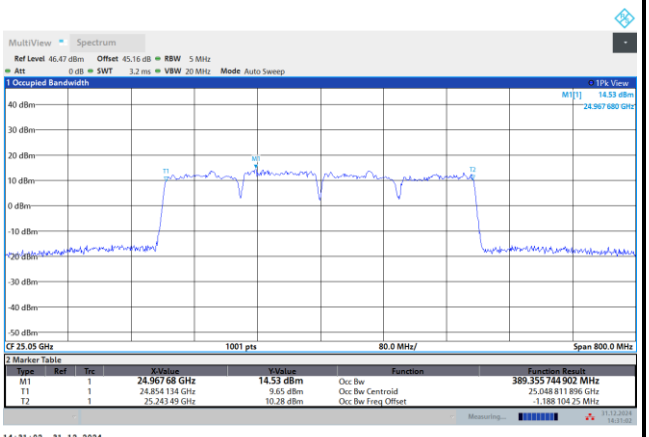
DFT-s-OFDM

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**
	

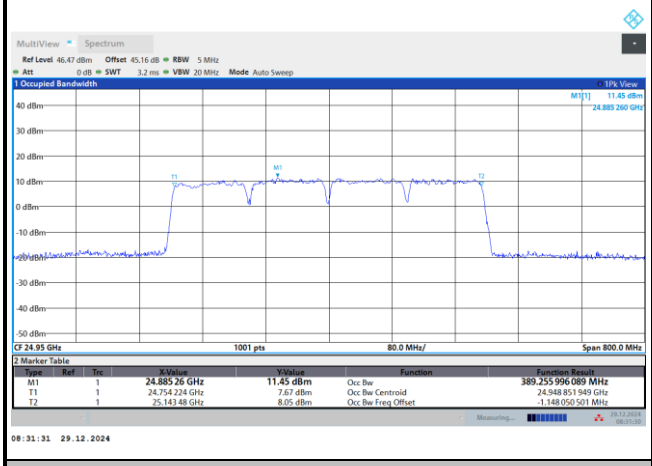
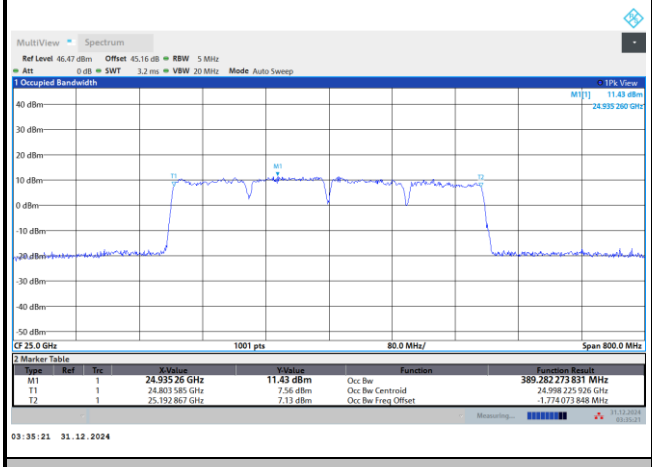
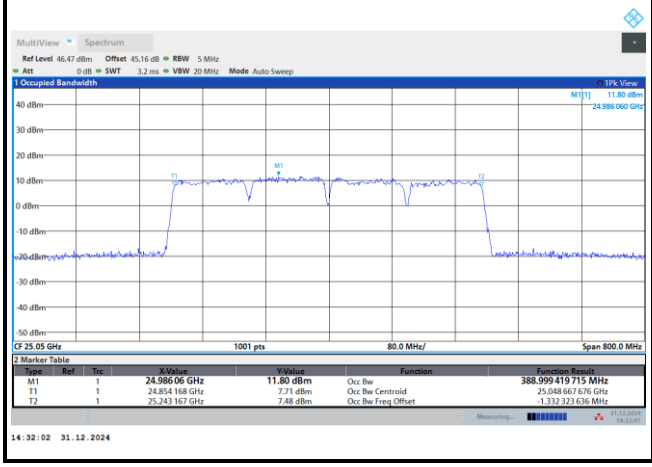
DFT-s-OFDM

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**
	

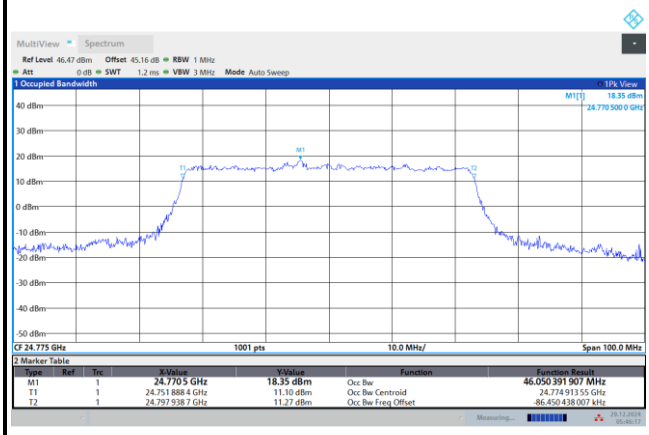
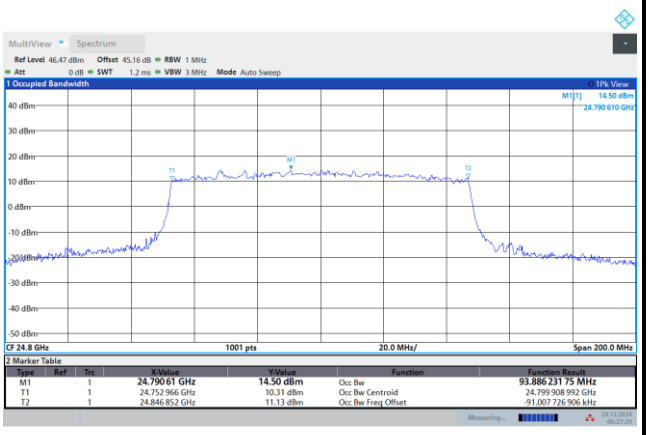
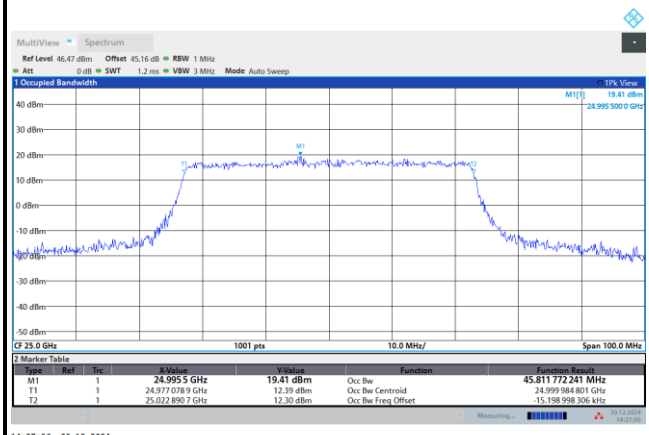
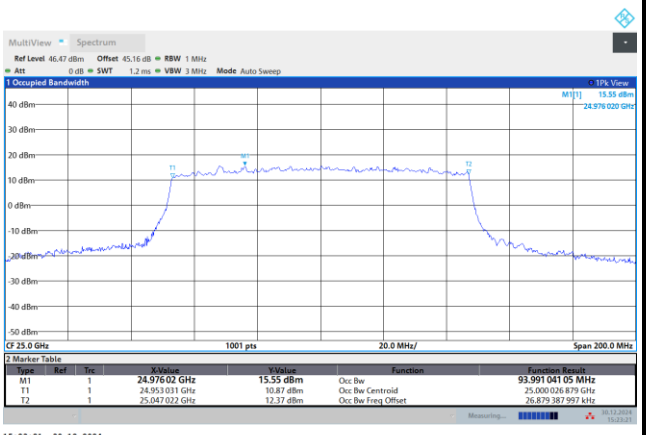
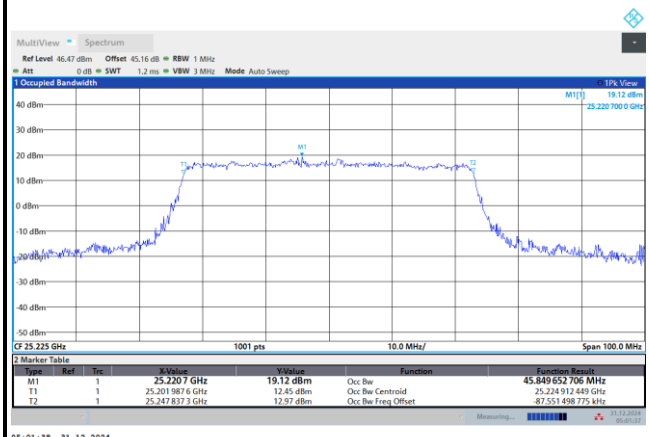
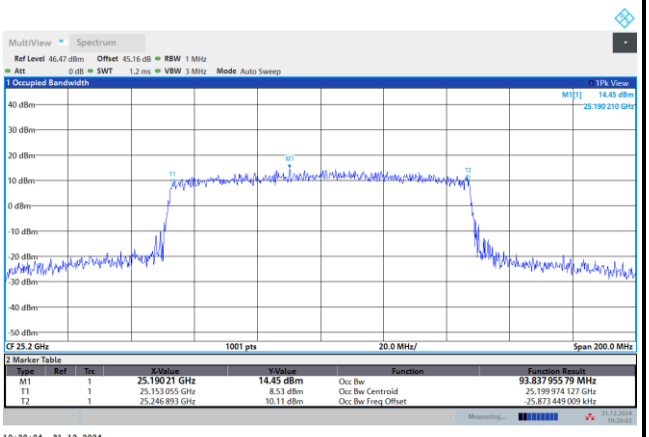
DFT-s-OFDM

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**
	

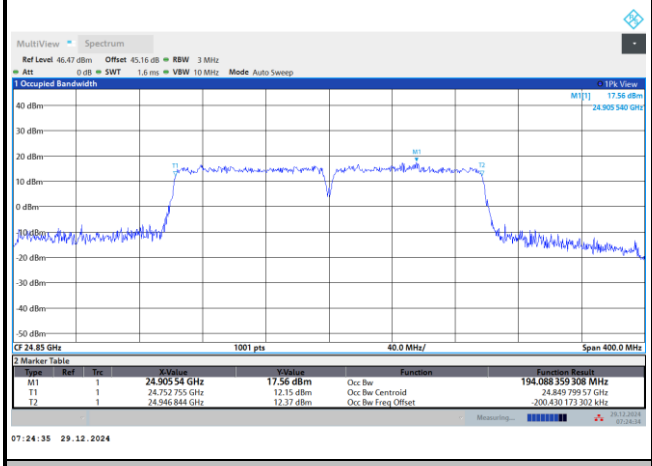
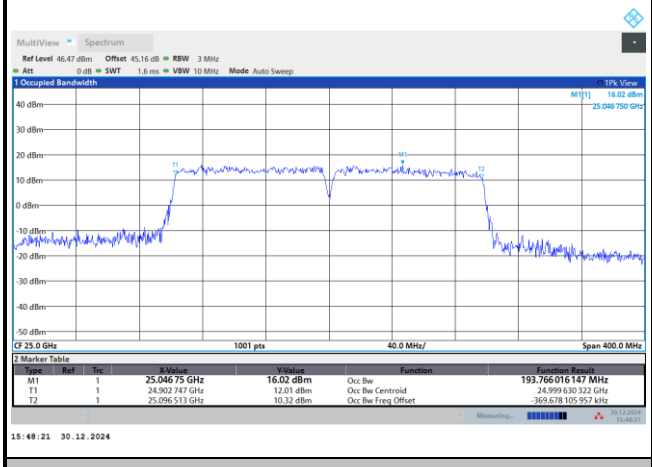
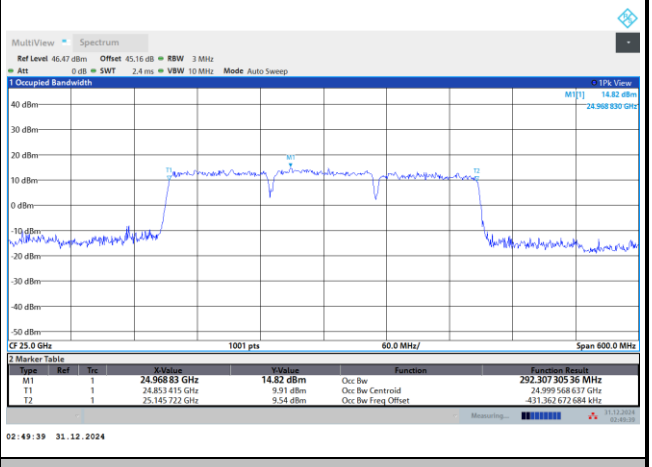
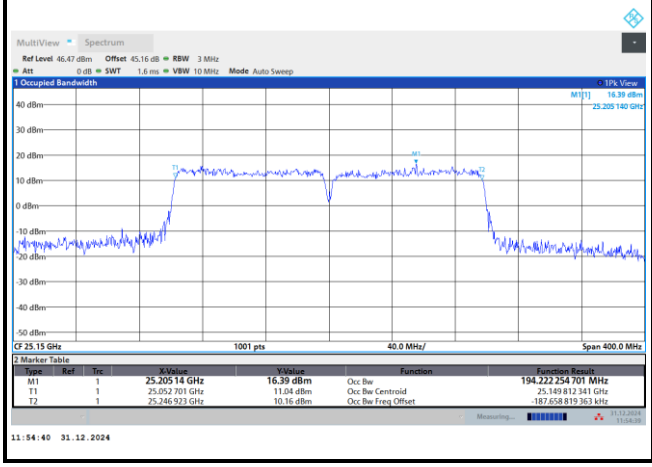
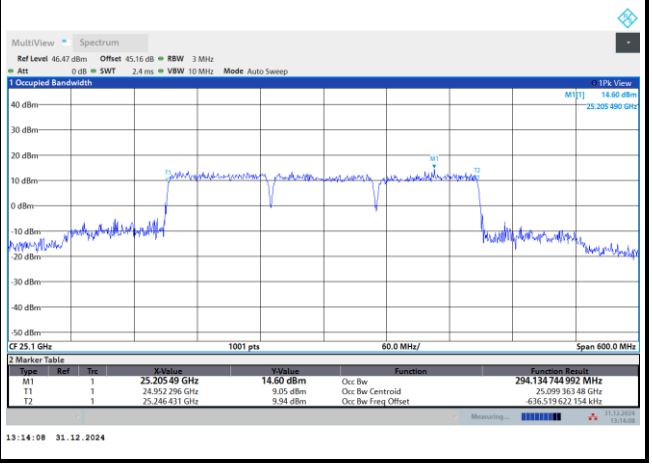
DFT-s-OFDM

NR Band n258B	
Lowest Channel / 400MHz / 64QAM	
	**intentionally blank**
Middle Channel / 400MHz / 64QAM	
	**intentionally blank**
Highest Channel / 400MHz / 64QAM	
	**intentionally blank**

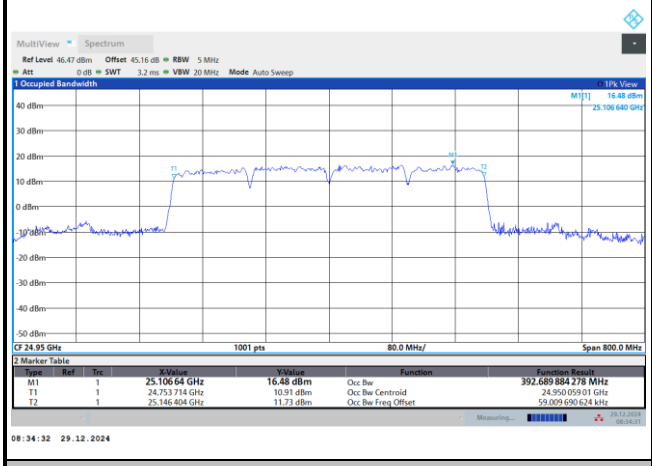
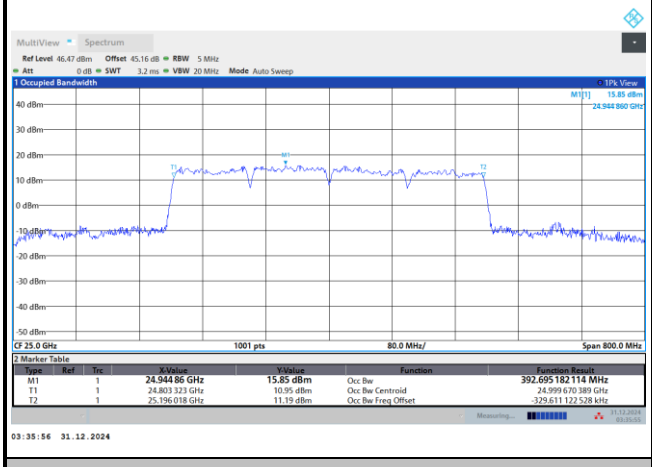
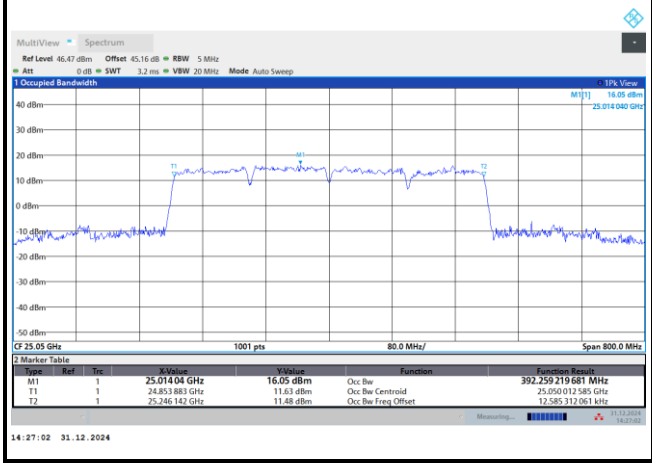
CP-OFDM

NR Band n258B	
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

NR Band n258B	
Lowest Channel / 200MHz / QPSK	**Lowest Channel / 300MHz / QPSK**
	
Middle Channel / 200MHz / QPSK	**Middle Channel / 300MHz / QPSK**
	
Highest Channel / 200MHz / QPSK	**Highest Channel / 300MHz / QPSK**
	

CP-OFDM

NR Band n258B	
Lowest Channel / 400MHz / QPSK	
	**intentionally blank**
Middle Channel / 400MHz / QPSK	
	**intentionally blank**
Highest Channel / 400MHz / QPSK	
	**intentionally blank**

Radiated Out of Band Emissions

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) 1 RB								
BW			50MHz			100MHz			200MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-5.21	-6.60	-6.43	-6.73	-5.40	-12.74	-25.956	-30.12	-30.14
	>10%OB	≦-13	-26.30	-28.45	-28.83	-29.52	-29.52	-29.88	-23.374	-17.05	-19.80
High CH	0~10%OB	≦-5	-5.44	-6.03	-8.14	-8.04	-10.03	-12.94	-14.25	-17.33	-18.81
	>10%OB	≦-13	-28.09	-28.32	-29.00	-27.94	-28.49	-29.59	-18.44	-23.07	-22.18
Result			Compliance								

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) 1 RB					
BW			300MHz			400MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-29.313	-17.23	-20.09	-17.34	-19.36	-22.71
	>10%OB	≦-13	-22.734	-13.32	-18.28	-16.89	-21.35	-23.65
HighCH	0~10%OB	≦-5	-17.02	-19.28	-21.32	-15.70	-19.91	-21.62
	>10%OB	≦-13	-19.25	-22.88	-24.00	-15.11	-22.52	-23.99
Result			Compliance					

Mode			CP-OFDM NR Band n258B : BE (dBm) 1 RB		
BW			50MHz	100MHz	200MHz
TRP Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≦-5	-5.36	-8.97	-25.621
	>10%OB	≦-13	-28.05	-29.88	-21.510
High CH	0~10%OB	≦-5	-5.68	-9.43	-15.39
	>10%OB	≦-13	-27.97	-28.77	-16.19
Result			Compliance		

Mode			CP-OFDM NR Band n258B : BE (dBm) 1 RB	
BW			300MHz	400MHz
TRP Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≦-5	-29.133	-25.391
	>10%OB	≦-13	-17.431	-20.897
High CH	0~10%OB	≦-5	-31.284	-13.98
	>10%OB	≦-13	-25.425	-14.35
Result			Compliance	

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

= 39.5 + 3.46 + 107 + 20log(1) – 104.8 = 45.16(dB)

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) Full RB								
BW			50MHz			100MHz			200MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-14.84	-17.88	-19.02	-19.64	-21.20	-21.82	-23.68	-24.51	-27.58
	>10%OB	≦-13	-22.32	-24.69	-27.35	-24.49	-26.74	-28.60	-27.46	-28.57	-29.46
High CH	0~10%OB	≦-5	-15.31	-18.85	-19.81	-23.89	-26.22	-26.95	-27.90	-29.06	-28.99
	>10%OB	≦-13	-23.81	-25.93	-28.12	-23.64	-27.99	-29.60	-29.61	-29.75	-29.41
Result			Compliance								

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) Full RB					
BW			300MHz			400MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≦-5	-25.19	-26.02	-28.07	-26.81	-27.66	-29.72
	>10%OB	≦-13	-25.54	-28.03	-29.31	-27.20	-28.77	-29.75
High CH	0~10%OB	≦-5	-28.27	-29.32	-29.74	-28.42	-29.65	-29.85
	>10%OB	≦-13	-28.61	-28.69	-29.02	-28.69	-28.86	-29.20
Result			Compliance					

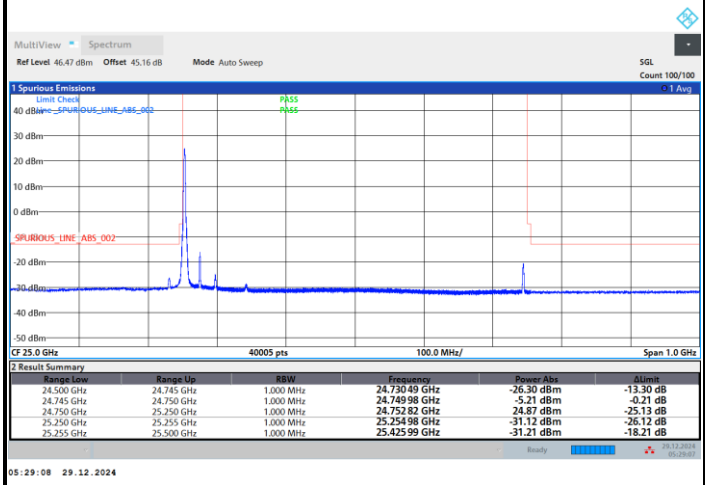
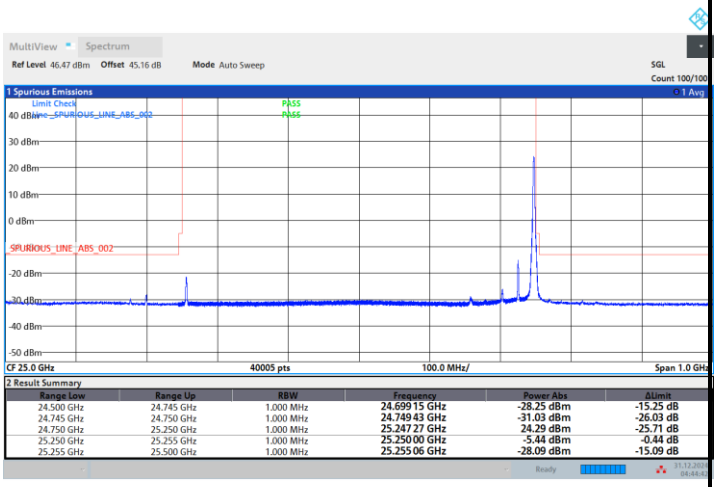
Mode			CP-OFDM NR Band n258B : BE (dBm) Full RB		
BW			50MHz	100MHz	200MHz
TRP Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≦-5	-16.18	-21.79	-21.75
	>10%OB	≦-13	-23.21	-25.31	-25.89
High CH	0~10%OB	≦-5	-17.96	-22.03	-23.10
	>10%OB	≦-13	-24.44	-27.13	-28.32
Result			Compliance		

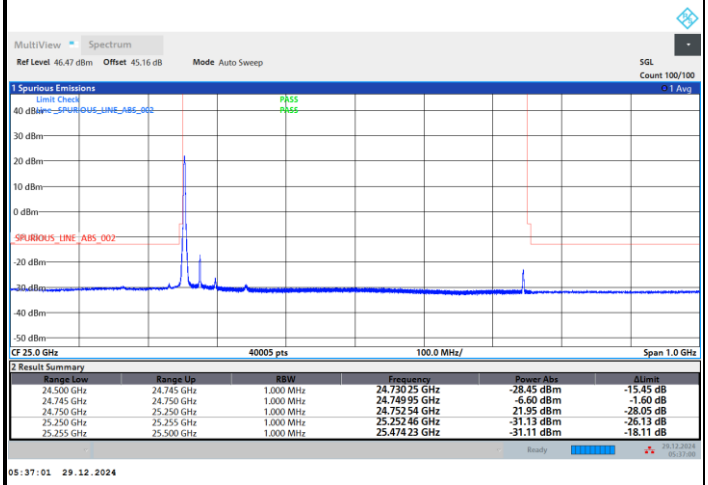
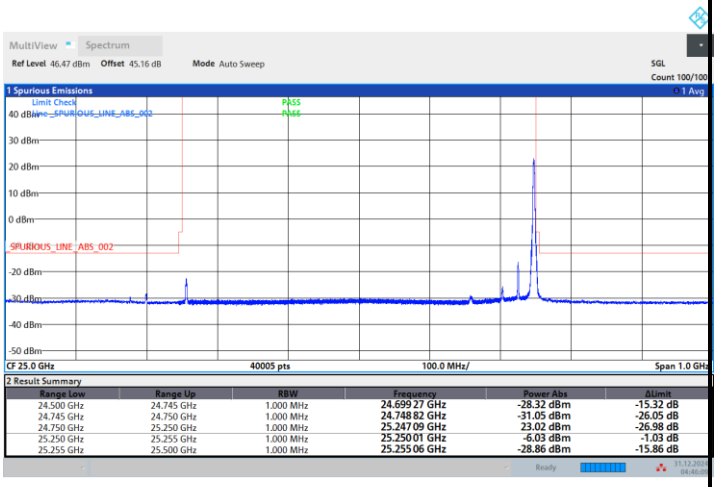
Mode			CP-OFDM NR Band n258B : BE (dBm) Full RB	
BW			300MHz	400MHz
TRP Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≦-5	-22.64	-24.87
	>10%OB	≦-13	-22.60	-26.29
High CH	0~10%OB	≦-5	-25.01	-26.04
	>10%OB	≦-13	-26.57	-27.45
Result			Compliance	

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

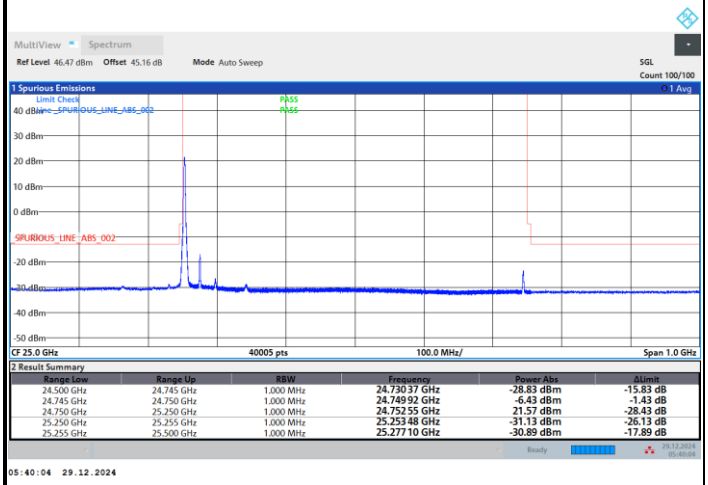
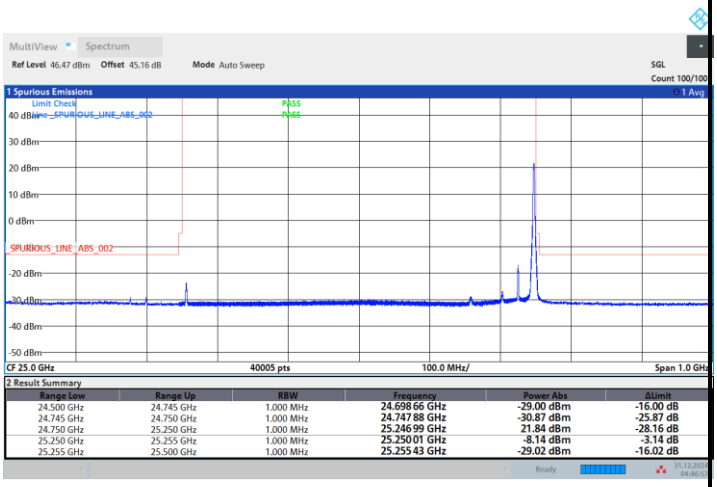
= 39.5 + 3.46 + 107 + 20log(1) – 104.8 = 45.16(dB)

DFT-s-OFDM

NR Band n258B / 50MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

NR Band n258B / 50MHz / 16QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

DFT-s-OFDM

NR Band n258B / 50MHz / 64QAM	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**
	

NR Band n258B / 100MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**