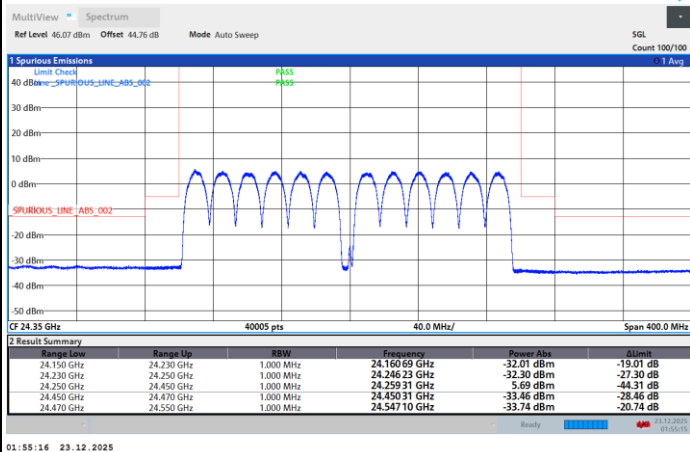




DFT-s-OFDM

NR Band n258A/ 200MHz / 64QAM

Middle Band Edge / Full RB



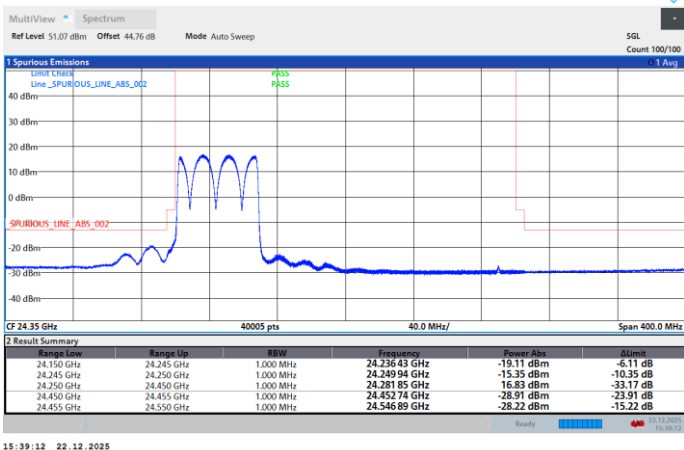
intentionally blank



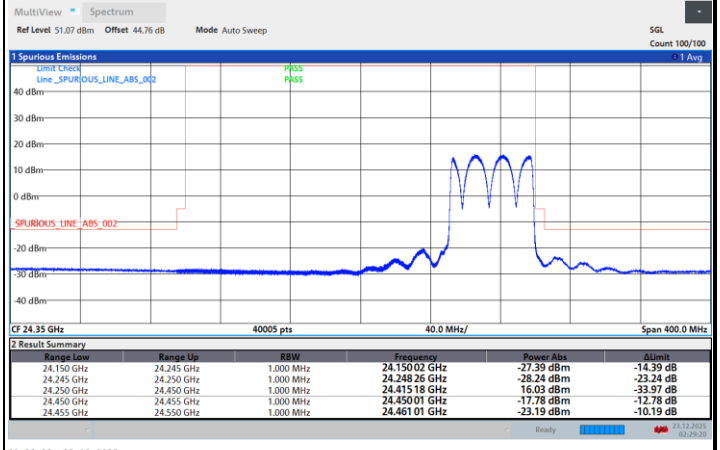
CP-OFDM

NR Band n258A/ 50MHz / QPSK

Lowest Band Edge / Full RB

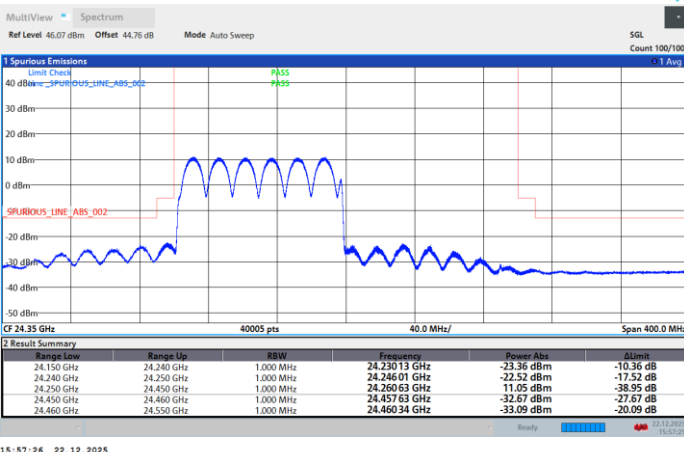


Highest Band Edge / Full RB

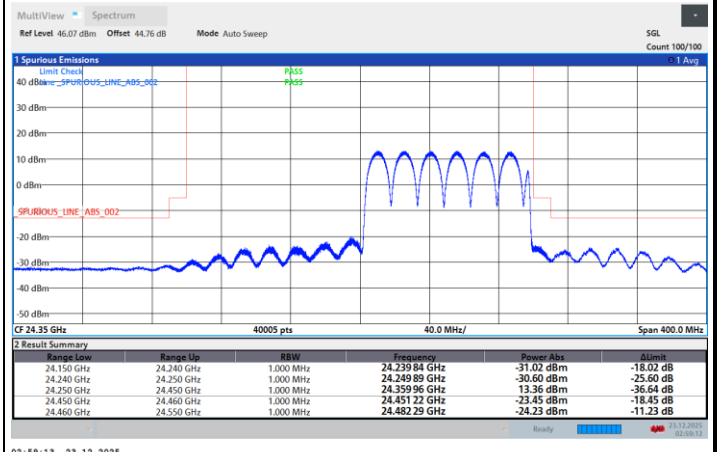


NR Band n258A/ 100MHz / QPSK

Lowest Band Edge / Full RB

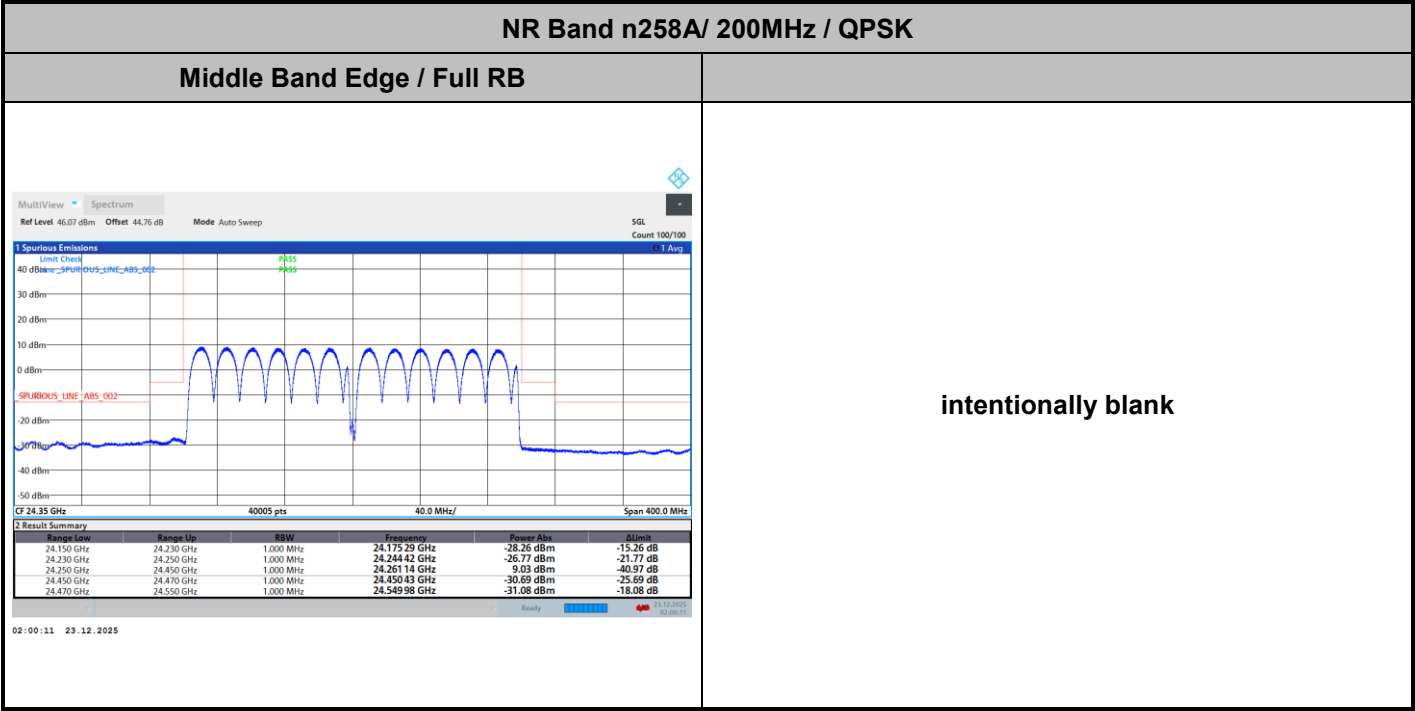


Highest Band Edge / Full RB





CP-OFDM



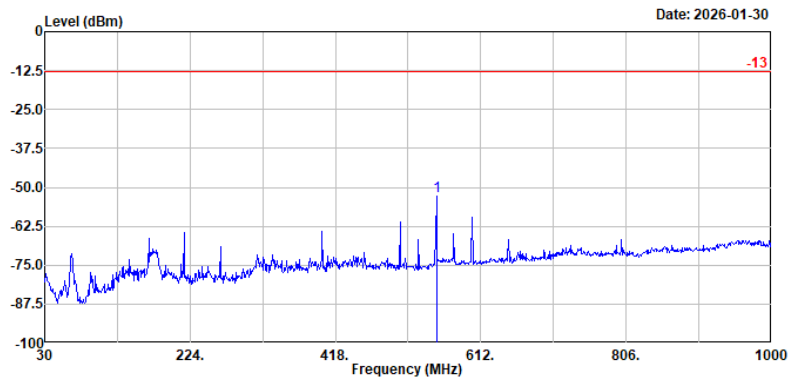
Spurious Emission

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)

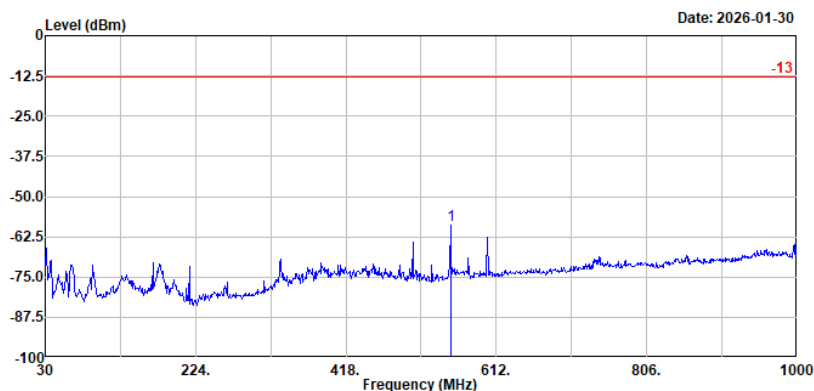
Horizontal



Site : 03CH23-HY
Condition: -13 3m CBL6111D_62028 & 003_251126 Horizontal
: n258a 50M L DFT QPSK

Freq	Level	Detector	Ant Factor	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm						g			
1	552.83	-52.82	RMS	25.57	-29.77	0.14	-95.23	46.47	-13.00	-39.82 Horizontal

Vertical



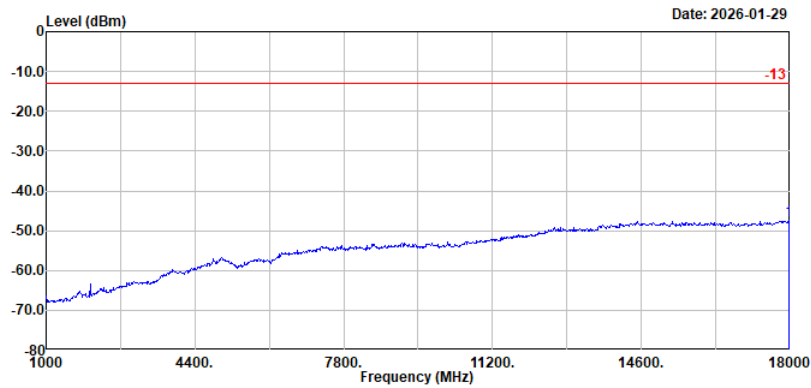
Site : 03CH23-HY
Condition: -13 3m CBL6111D_62028 & 003_251126 Vertical
: n258a 50M L DFT QPSK

Freq	Level	Detector	Ant Factor	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
MHz	dBm						g			
1	552.83	-58.80	RMS	25.57	-29.77	0.14	-95.23	40.49	-13.00	-45.80 Vertical



NR Band n258A (1GHz-18GHz)

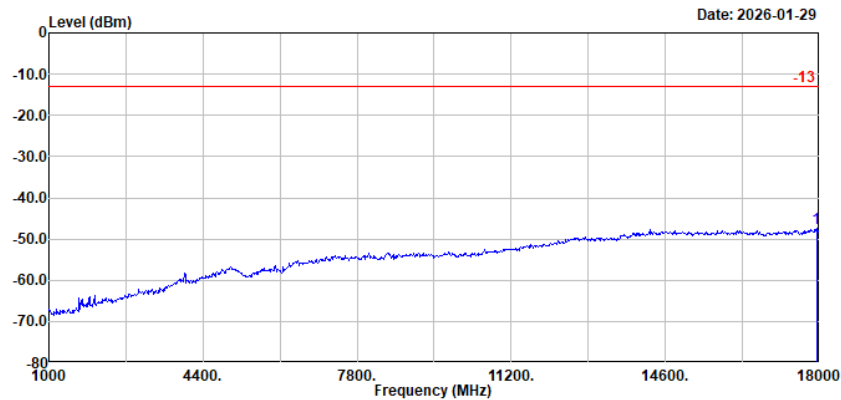
Horizontal



Site : 03CH23-HY
Condition: -13 3m DRH18-E_LE2C05A18EN_250702 Horizontal
: n258a 50M L DFT QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin Limit		Margin	Pol
			Factor	1		g			
MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1 17966.00	-47.50	RMS	40.50	-26.67	4.07	-95.23	29.83	-13.00	-34.50 Horizontal

Vertical



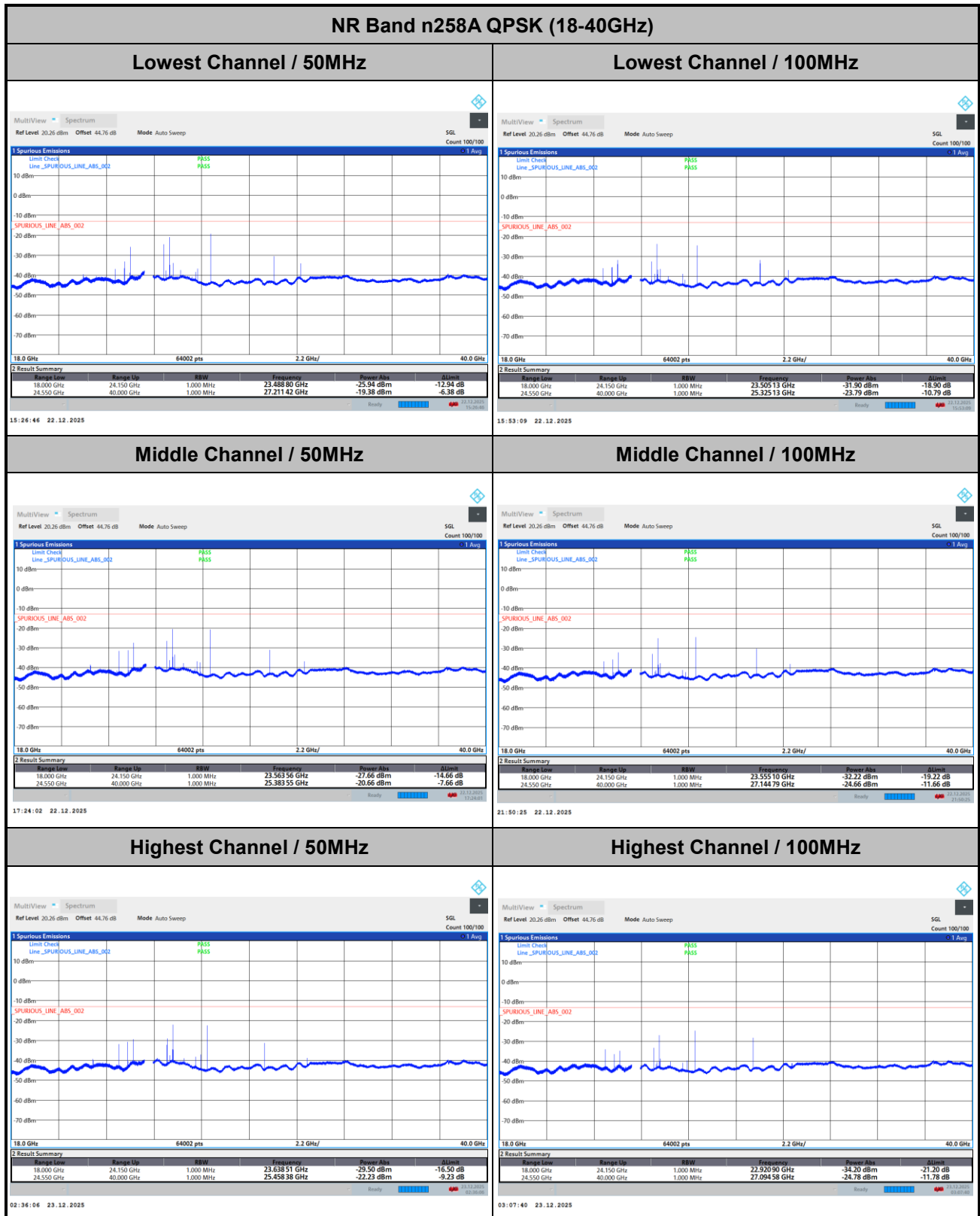
Site : 03CH23-HY
Condition: -13 3m DRH18-E_LE2C05A18EN_250702 Vertical
: n258a 50M L DFT QPSK

Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin Limit		Margin	Pol
			Factor	1		g			
MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1 17932.00	-47.50	RMS	40.50	-26.68	4.06	-95.23	29.85	-13.00	-34.50 Vertical



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

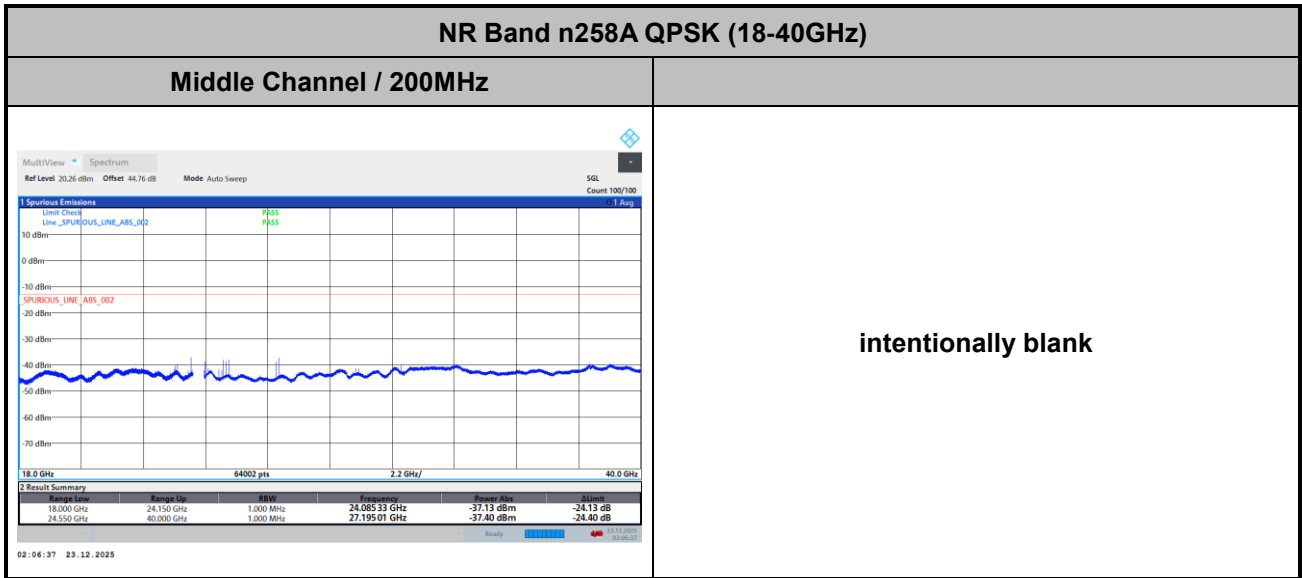
DFT-s-OFDM



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



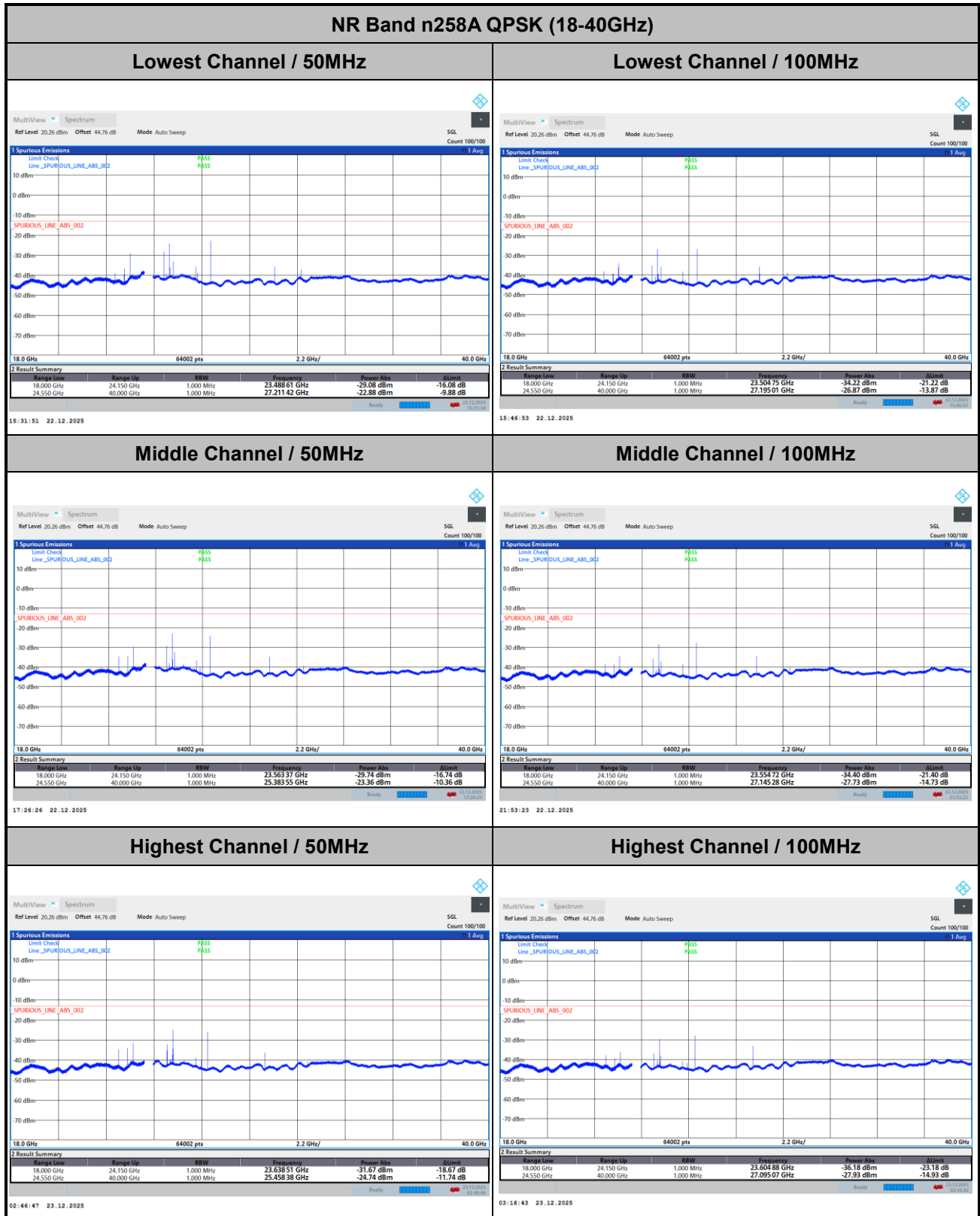
DFT-s-OFDM



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



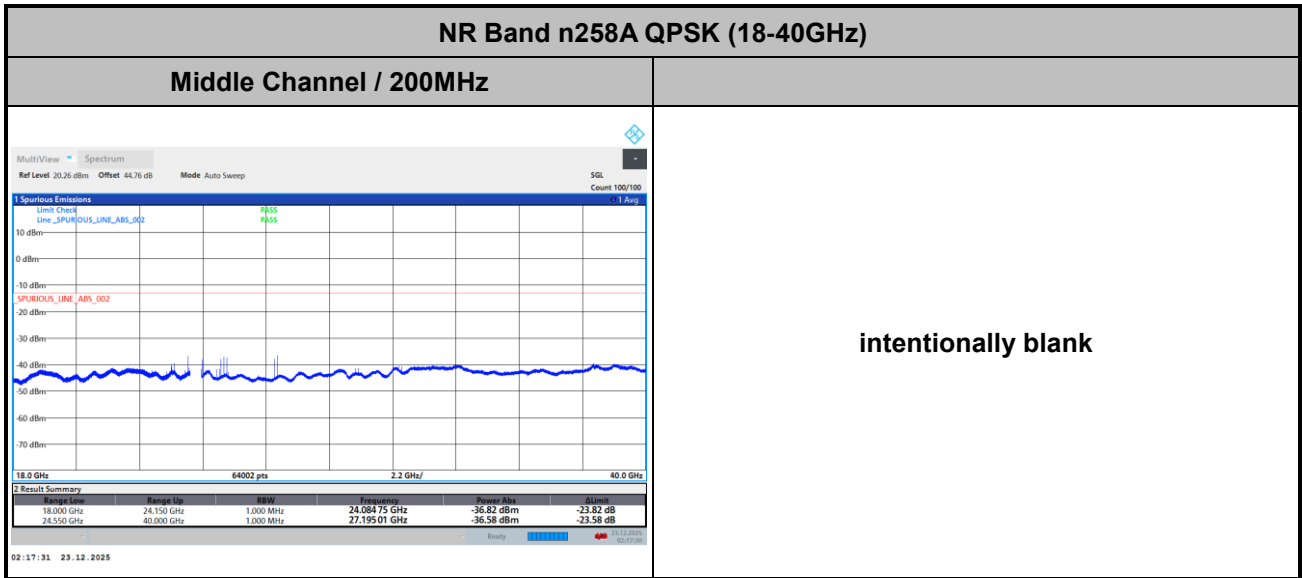
CP-OFDM



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



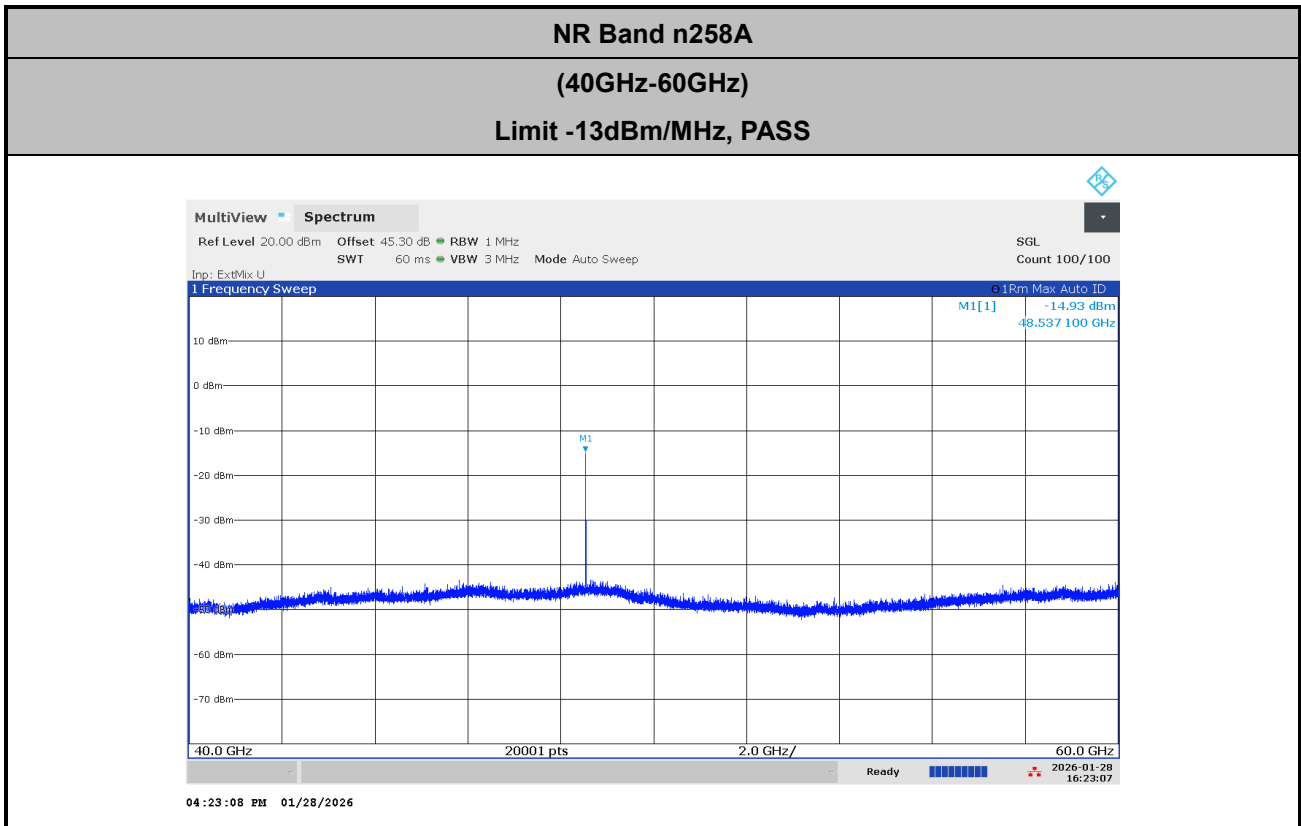
CP-OFDM



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.



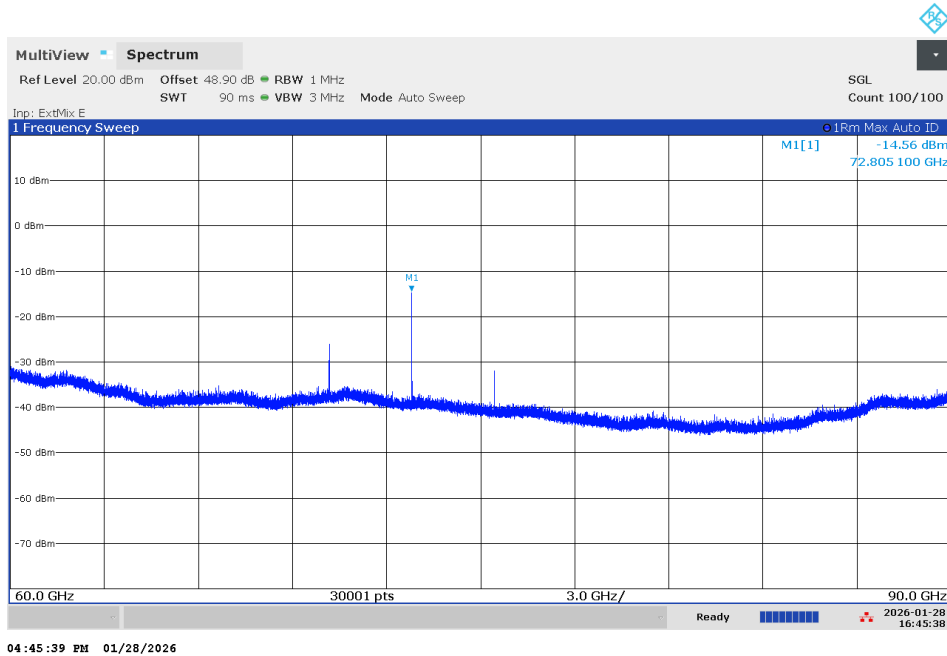
$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.6 + 0.5 + 107 + 20\log(1) - 104.8 = 45.3(\text{dB})\end{aligned}$$



NR Band n258A

(60GHz-90GHz)

Limit -13dBm/MHz, PASS



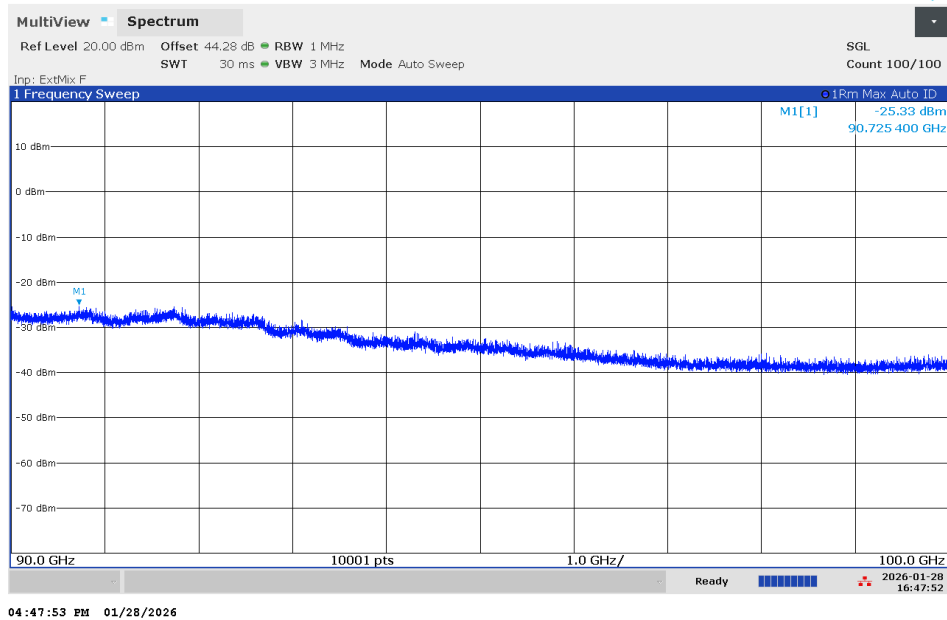
$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 46.2 + 0.5 + 107 + 20\log(1) - 104.8 = 48.9(\text{dB}) \end{aligned}$$



NR Band n258A

(90GHz-100GHz)

Limit -13dBm/MHz, PASS

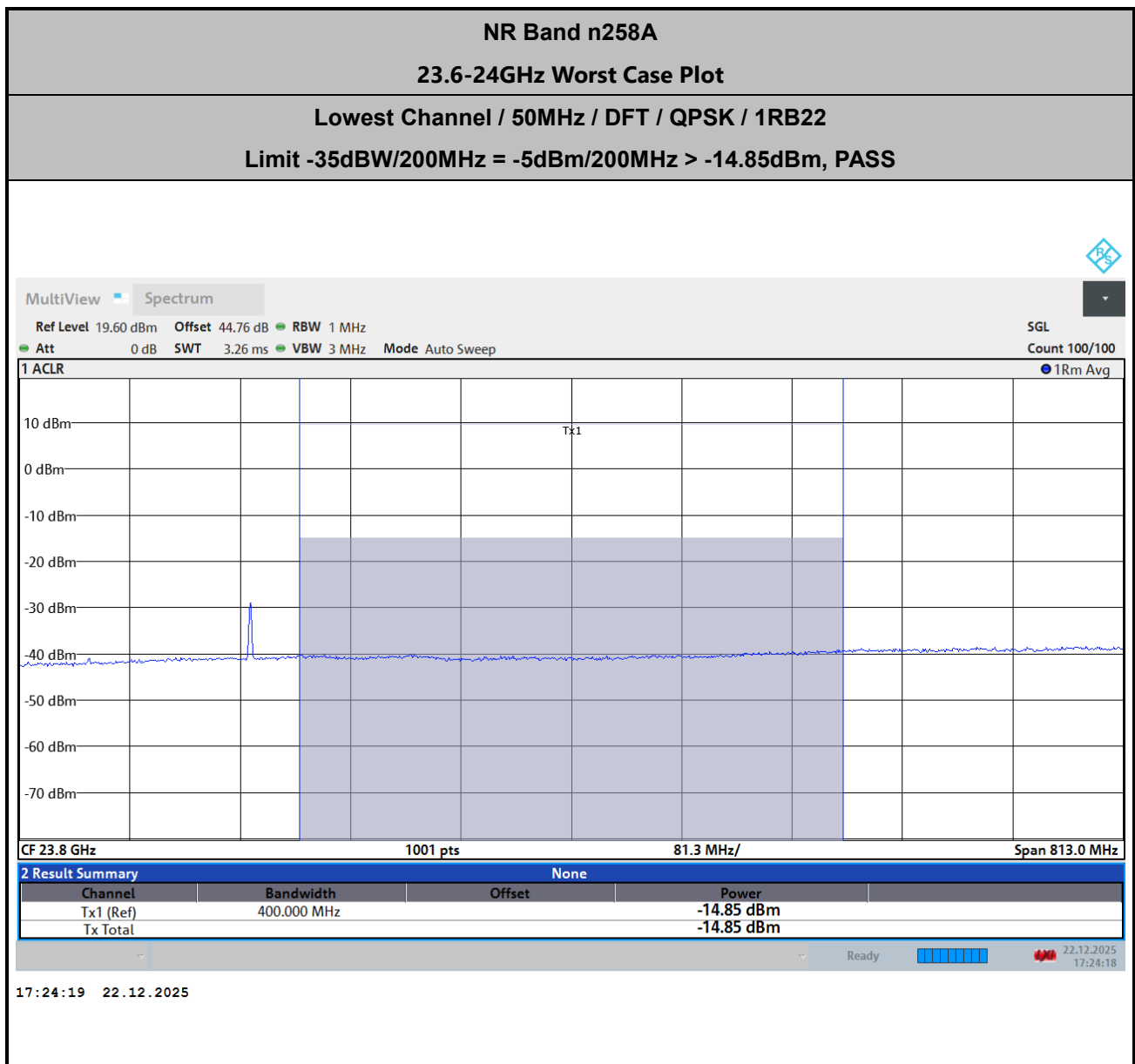


$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 47.6 + 0.5 + 107 + 20\log(0.5) - 104.8 = 44.28(\text{dB}) \end{aligned}$$



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).



$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 39.1 + 3.46 + 107 + 20\log(1) - 104.8 = 44.76(\text{dB}) \end{aligned}$$

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	24.350031000	11.000	0.452	Pass
40	Normal Voltage	24.350030000	12.000	0.493	
30	Normal Voltage	24.350039000	3.000	0.123	
20(Ref.)	Normal Voltage	24.350042000	0.000	0.000	
10	Normal Voltage	24.350043000	-1.000	0.041	
0	Normal Voltage	24.350053900	-11.900	0.489	
-10	Normal Voltage	24.350052900	-10.900	0.448	
-20	Normal Voltage	24.350053900	-11.900	0.489	
-30	Normal Voltage	24.350052900	-10.900	0.448	
20	Maximum Voltage	24.350043000	-1.000	0.041	
20	Normal Voltage	24.350042000	0.000	0.000	
20	Battery End Point	24.350043000	-1.000	0.041	

Note:

1. Normal Voltage = 3.9 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the operation band.

NR Band n258B

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	46.40	46.59	46.46	86.84	87.53	86.90	186.80	186.70	186.48
Middle CH	46.32	46.49	46.37	87.41	87.09	86.82	186.06	185.30	185.35
Highest CH	46.45	46.55	46.49	87.09	87.55	87.28	186.87	187.23	186.44

Mode	DFT-s-OFDM NR Band n258B : 99%OBW(MHz)					
BW	300MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	283.60	287.46	283.23	386.93	386.36	387.42
Middle CH	286.34	286.95	286.60	386.75	387.24	385.37
Highest CH	286.70	287.14	285.48	387.40	386.42	387.88

Mode	CP-OFDM NR Band n258B : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	46.35	90.30	186.61
Middle CH	46.31	88.23	186.40
Highest CH	46.36	88.90	186.95

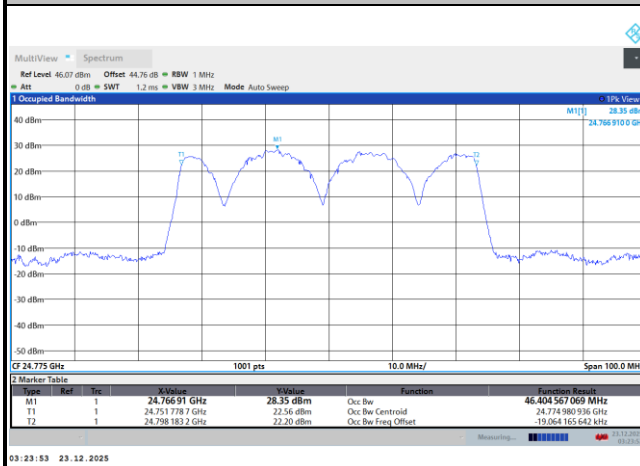
Mode	CP-OFDM NR Band n258B : 99%OBW(MHz)	
BW	300MHz	400MHz
Mod.	QPSK	QPSK
Lowest CH	286.73	386.36
Middle CH	286.57	386.86
Highest CH	286.34	387.48



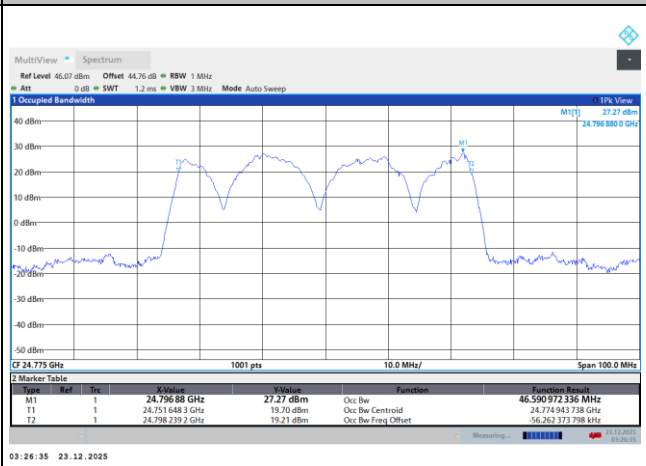
DFT-s-OFDM

NR Band n258B

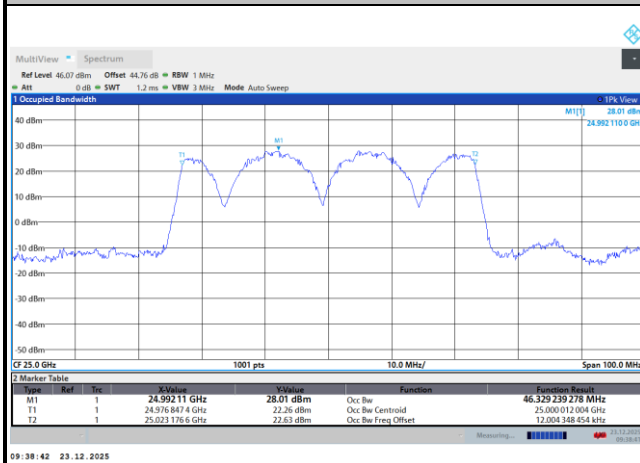
Lowest Channel / 50MHz / QPSK



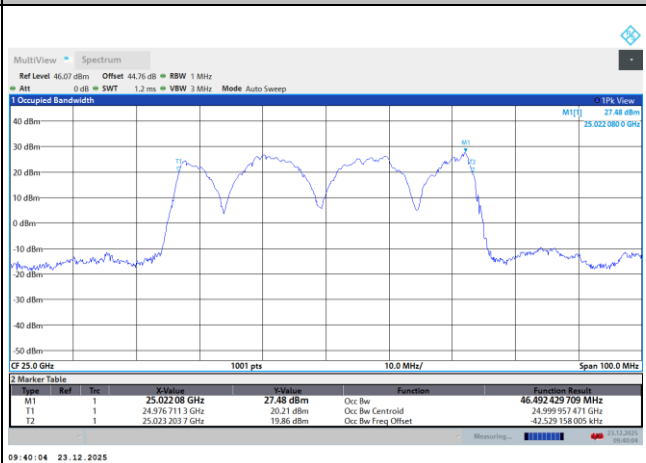
Lowest Channel / 50MHz / 16QAM



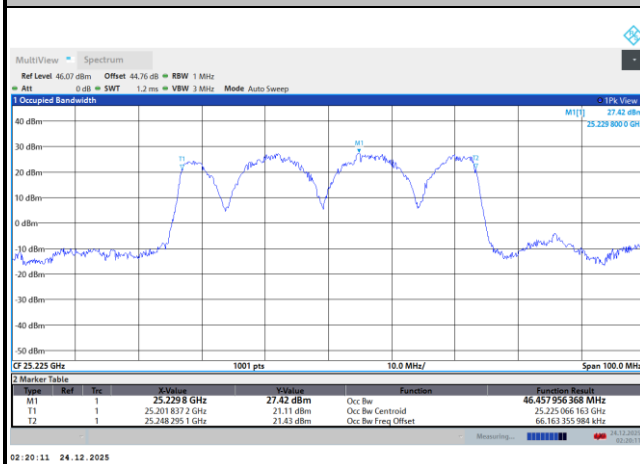
Middle Channel / 50MHz / QPSK



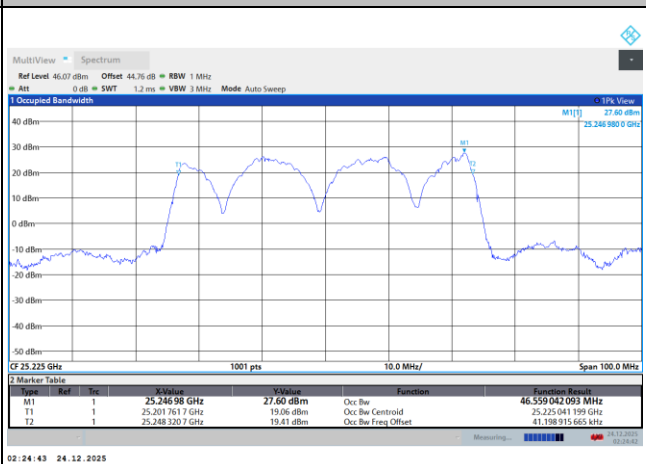
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

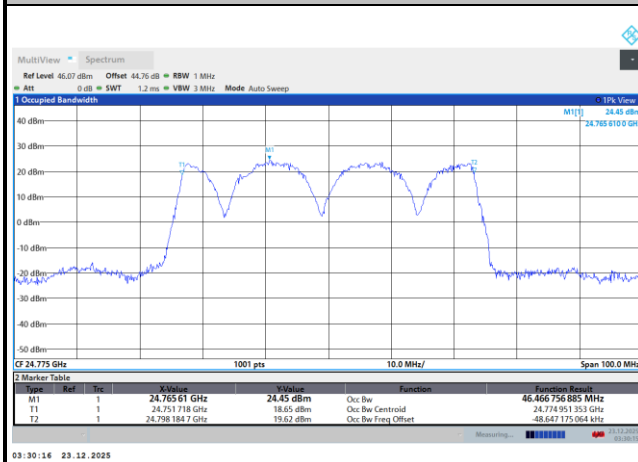




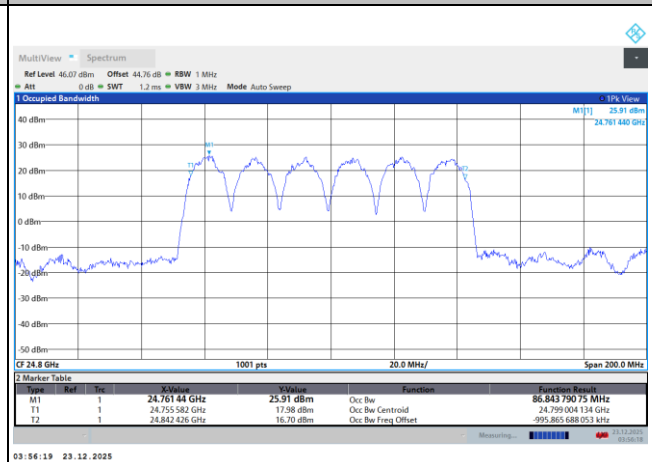
DFT-s-OFDM

NR Band n258B

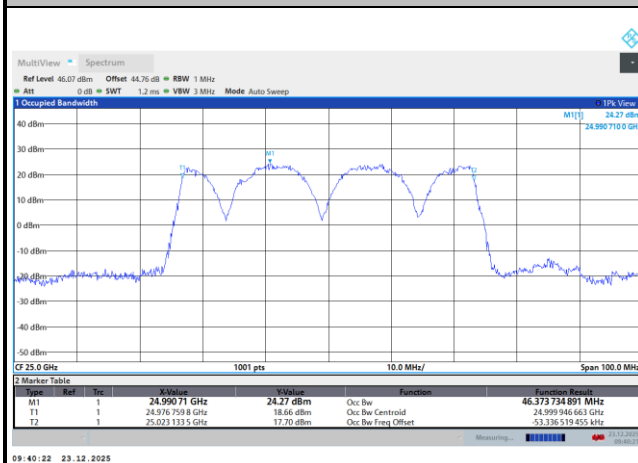
Lowest Channel / 50MHz / 64QAM



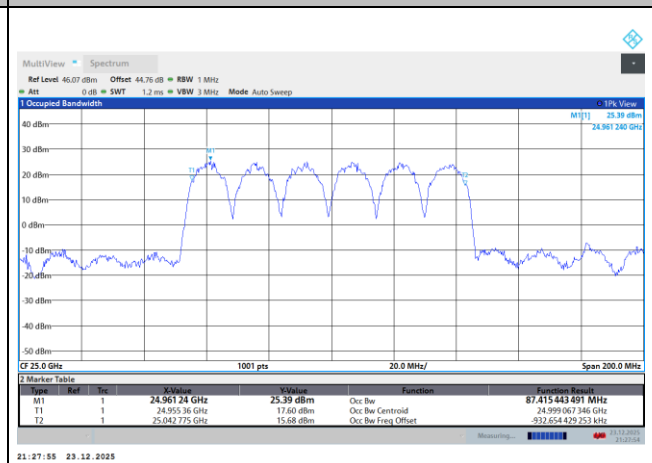
Lowest Channel / 100MHz / QPSK



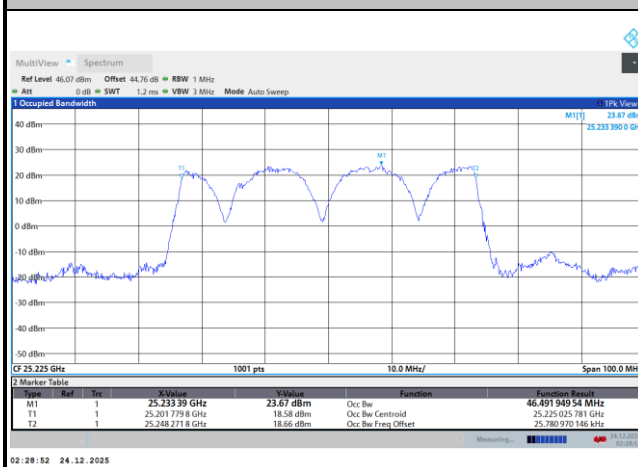
Middle Channel / 50MHz / 64QAM



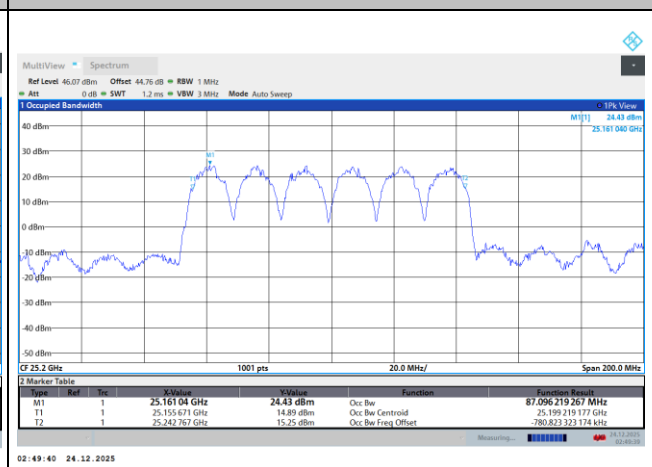
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

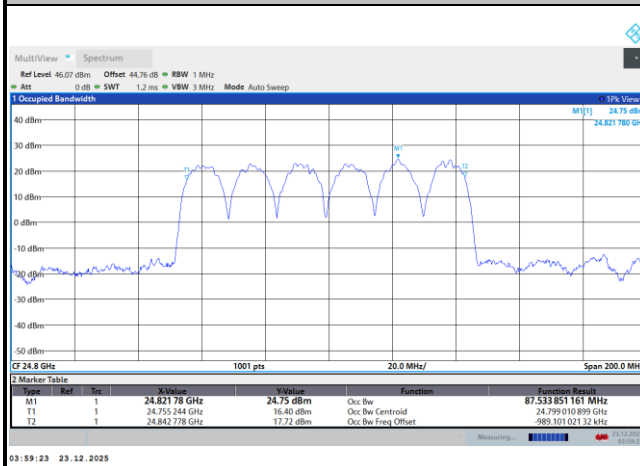




DFT-s-OFDM

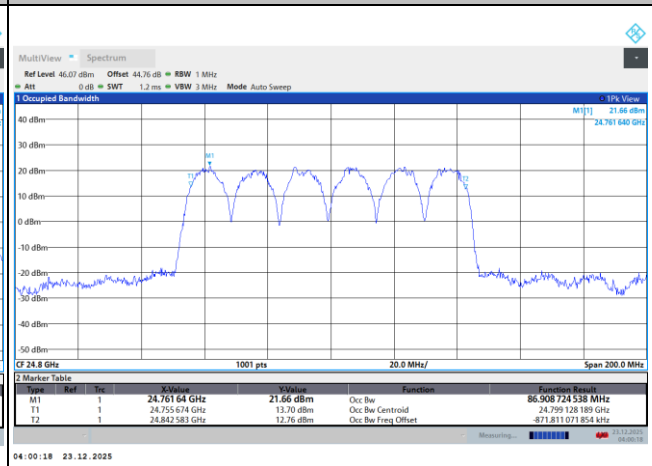
NR Band n258B

Lowest Channel / 100MHz / 16QAM



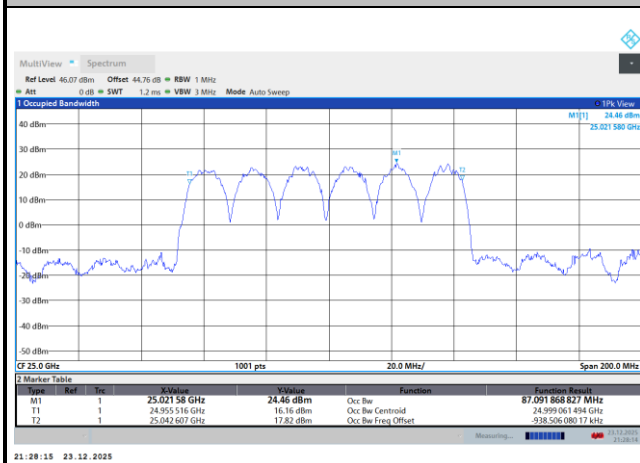
03:59:23 23.12.2025

Lowest Channel / 100MHz / 64QAM



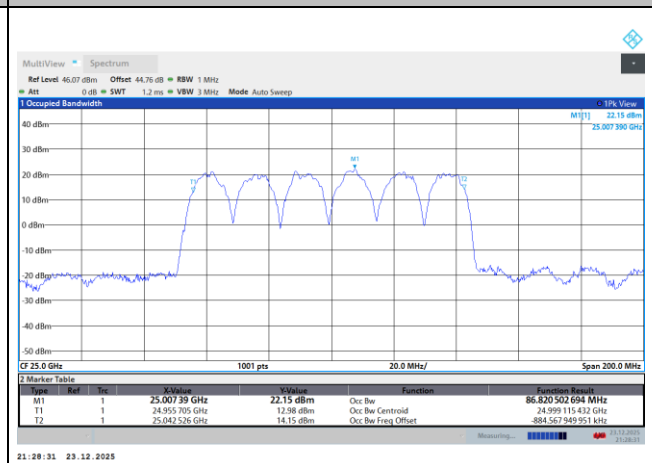
04:00:18 23.12.2025

Middle Channel / 100MHz / 16QAM



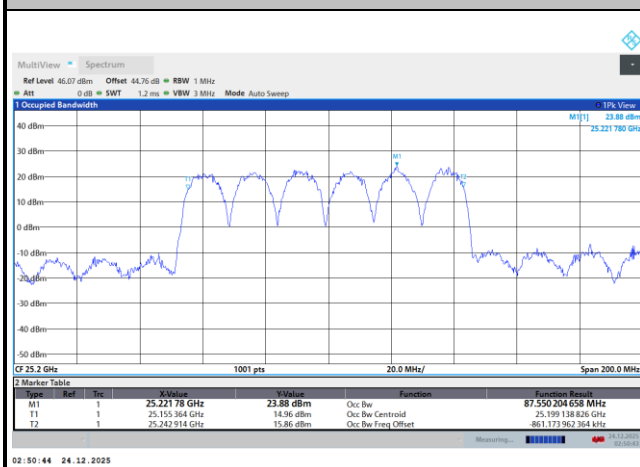
21:28:15 23.12.2025

Middle Channel / 100MHz / 64QAM



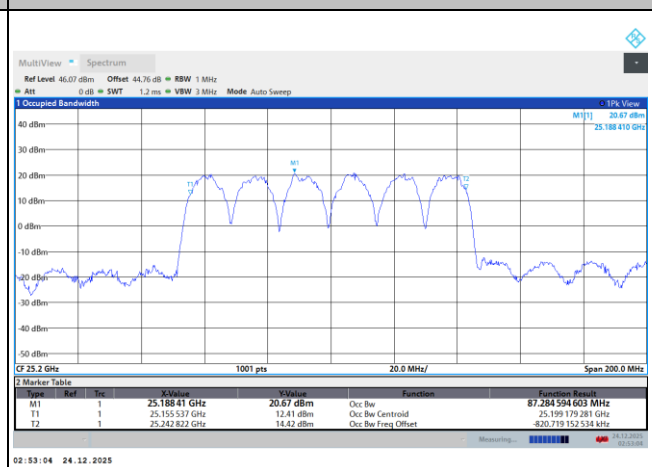
21:28:31 23.12.2025

Highest Channel / 100MHz / 16QAM



02:50:44 24.12.2025

Highest Channel / 100MHz / 64QAM



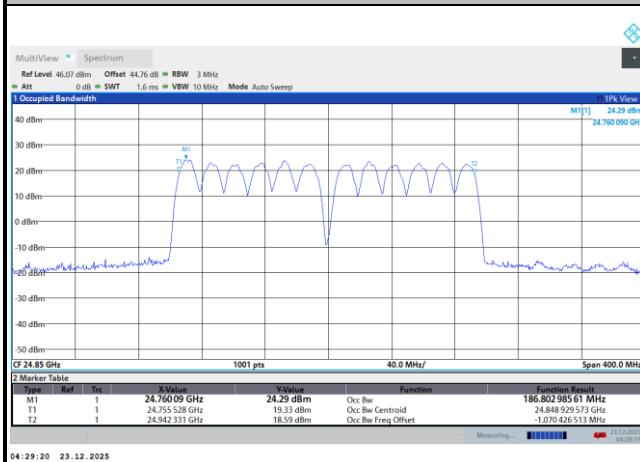
02:53:04 24.12.2025



DFT-s-OFDM

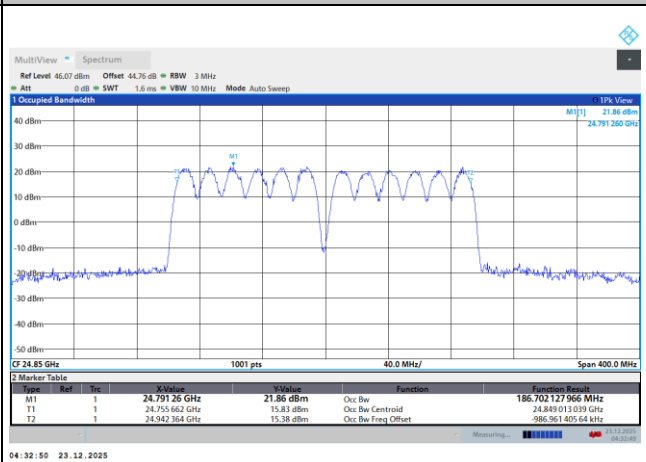
NR Band n258B

Lowest Channel / 200MHz / QPSK



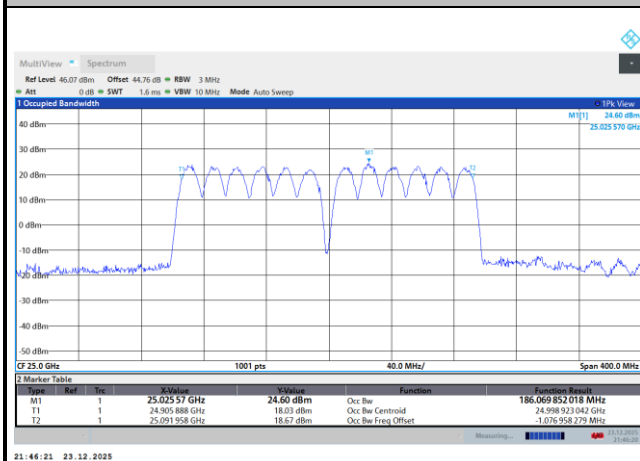
04:29:20 23.12.2025

Lowest Channel / 200MHz / 16QAM



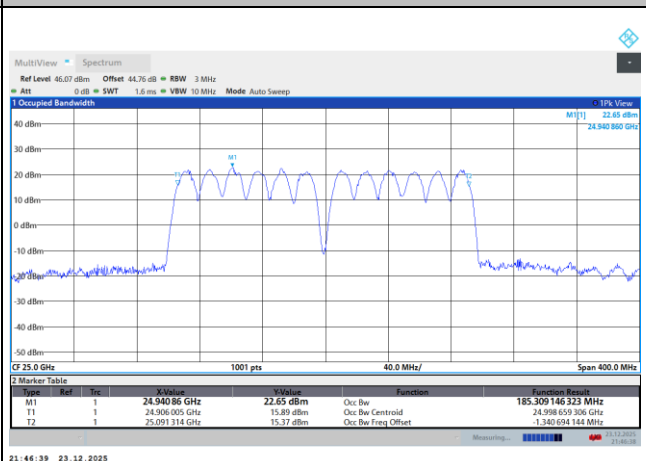
04:32:50 23.12.2025

Middle Channel / 200MHz / QPSK



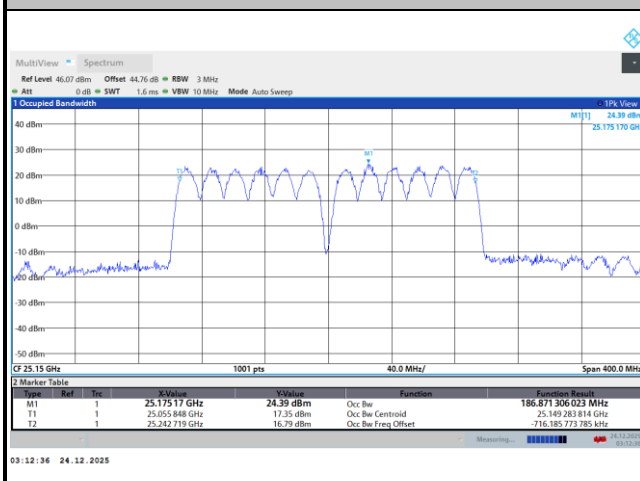
21:44:21 23.12.2025

Middle Channel / 200MHz / 16QAM



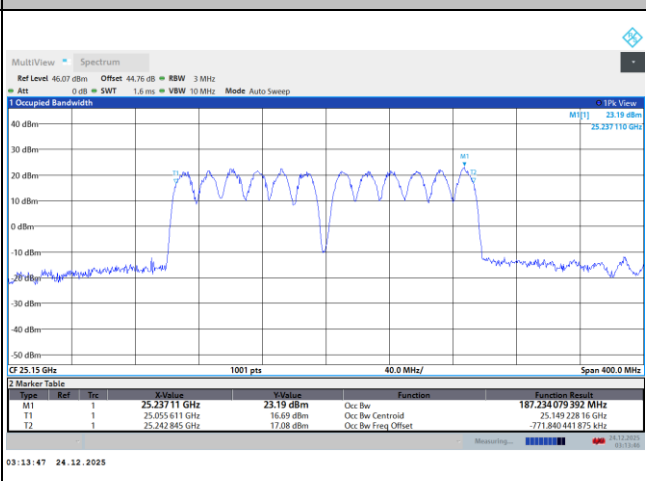
21:44:39 23.12.2025

Highest Channel / 200MHz / QPSK



03:12:36 24.12.2025

Highest Channel / 200MHz / 16QAM



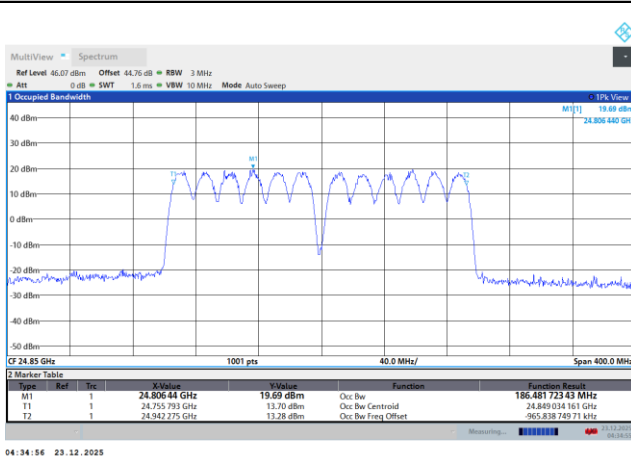
03:13:47 24.12.2025



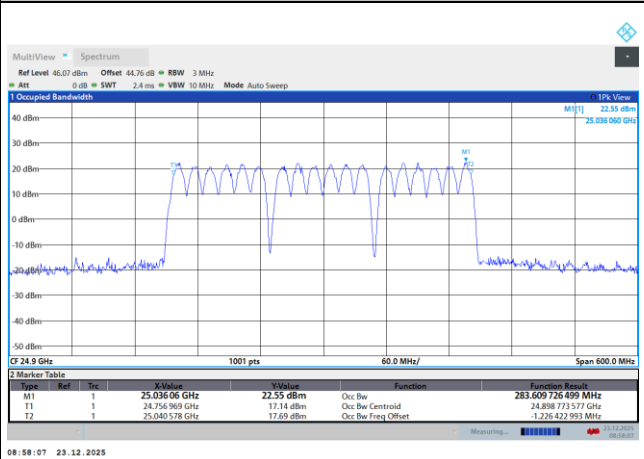
DFT-s-OFDM

NR Band n258B

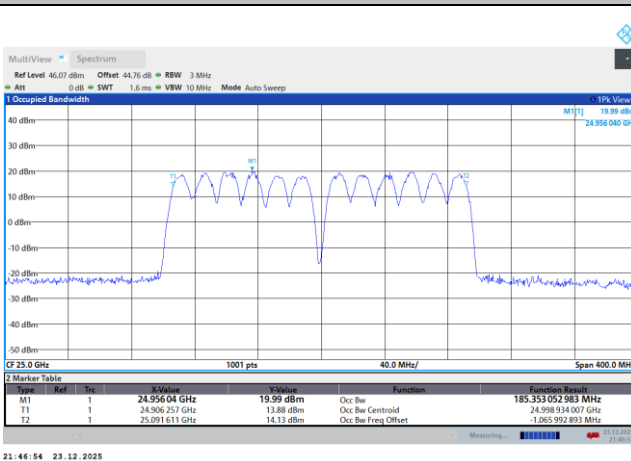
Lowest Channel / 200MHz / 64QAM



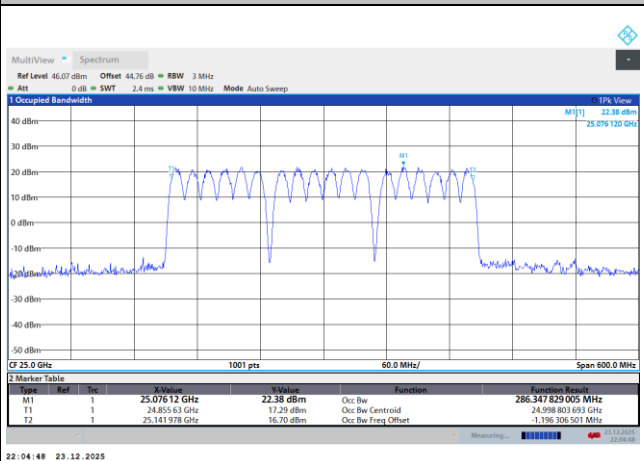
Lowest Channel / 300MHz / QPSK



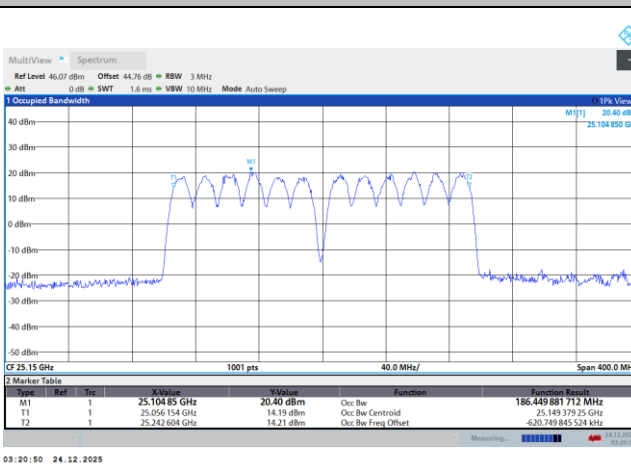
Middle Channel / 200MHz / 64QAM



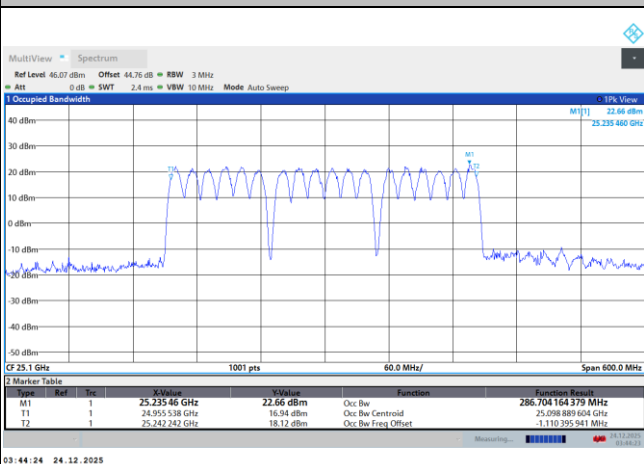
Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / 64QAM



Highest Channel / 300MHz / QPSK

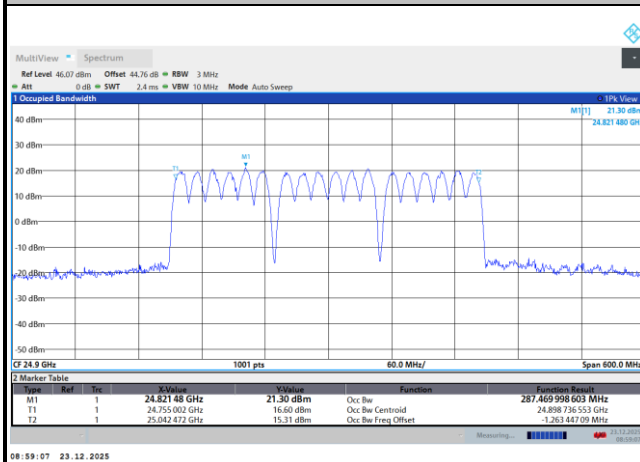




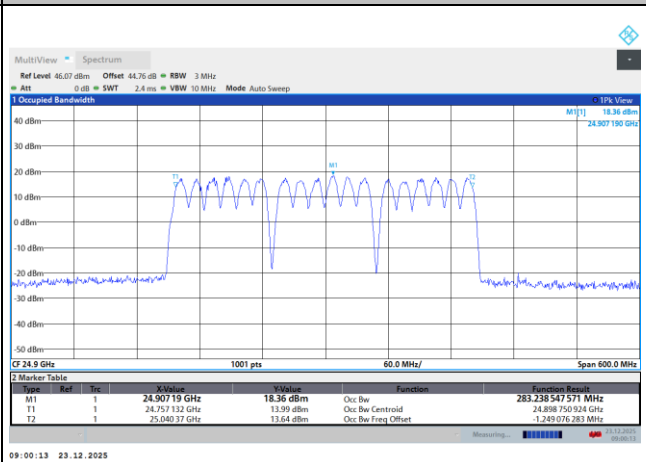
DFT-s-OFDM

NR Band n258B

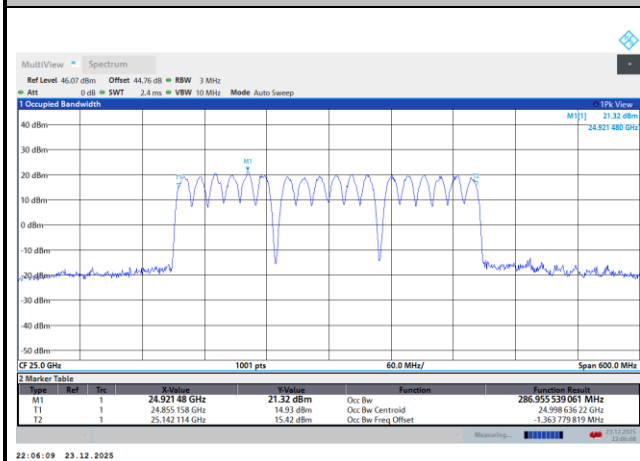
Lowest Channel / 300MHz / 16QAM



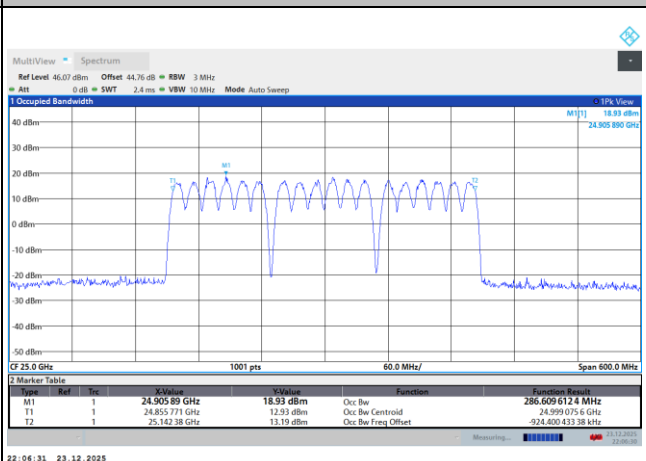
Lowest Channel / 300MHz / 64QAM



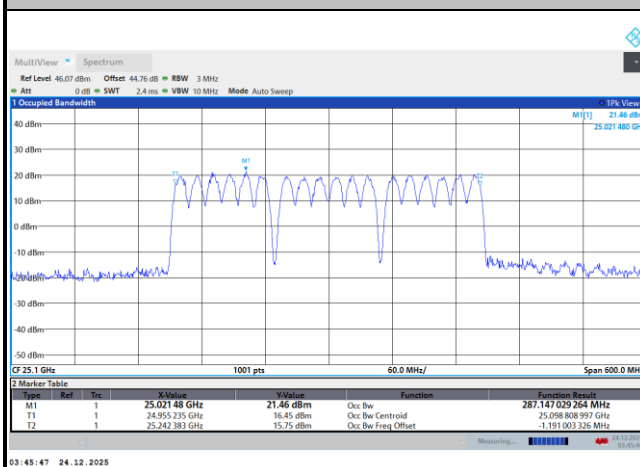
Middle Channel / 300MHz / 16QAM



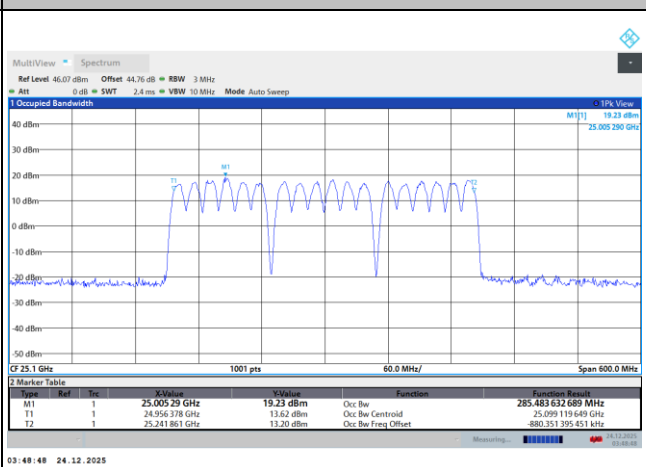
Middle Channel / 300MHz / 64QAM



Highest Channel / 300MHz / 16QAM



Highest Channel / 300MHz / 64QAM

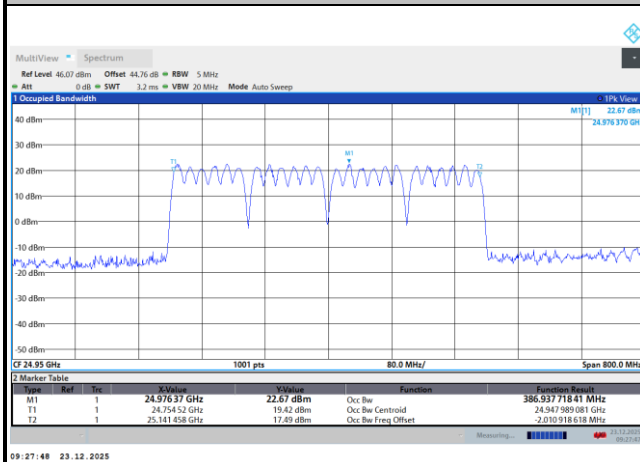




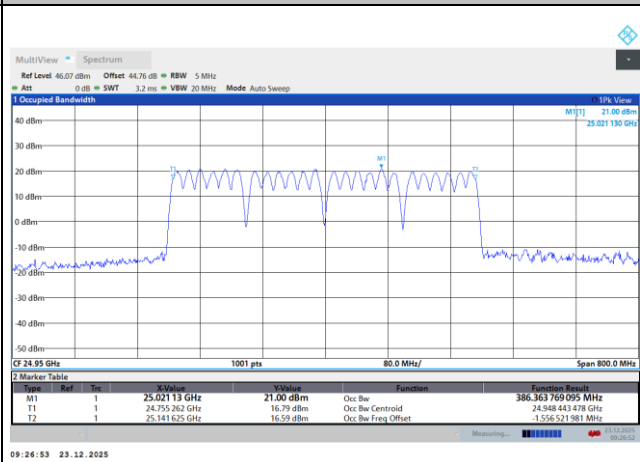
DFT-s-OFDM

NR Band n258B

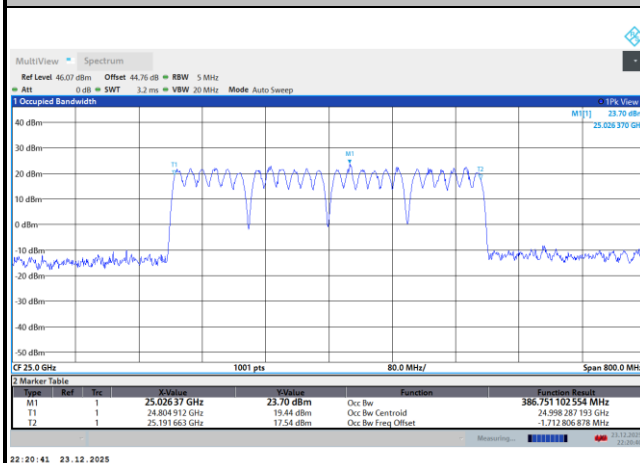
Lowest Channel / 400MHz / QPSK



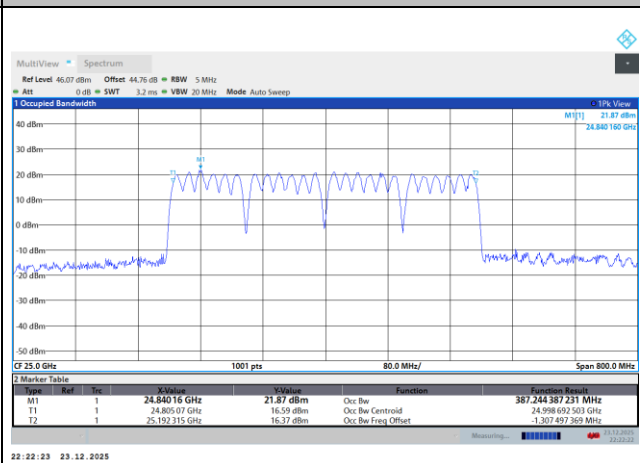
Lowest Channel / 400MHz / 16QAM



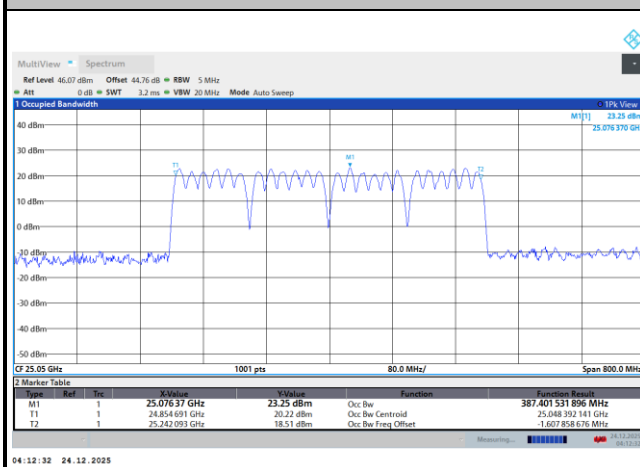
Middle Channel / 400MHz / QPSK



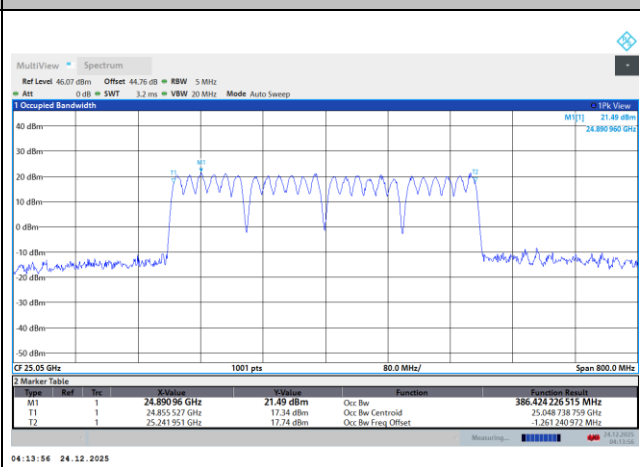
Middle Channel / 400MHz / 16QAM



Highest Channel / 400MHz / QPSK



Highest Channel / 400MHz / 16QAM

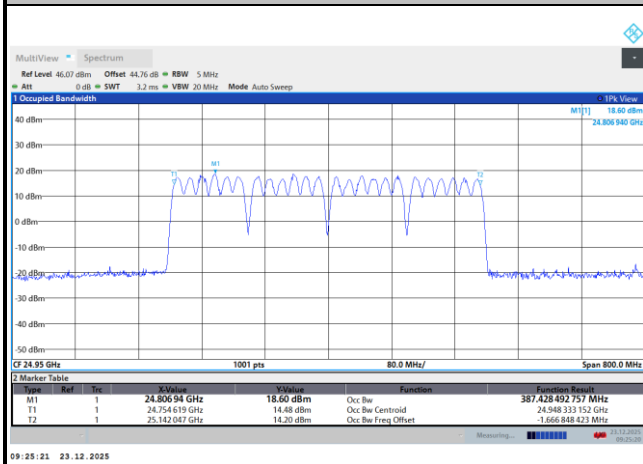




DFT-s-OFDM

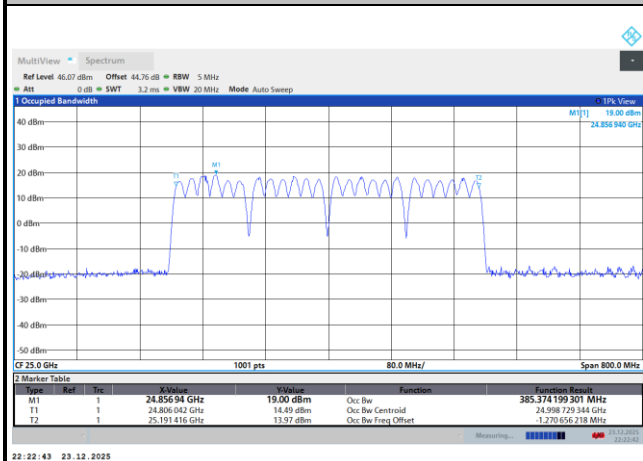
NR Band n258B

Lowest Channel / 400MHz / 64QAM



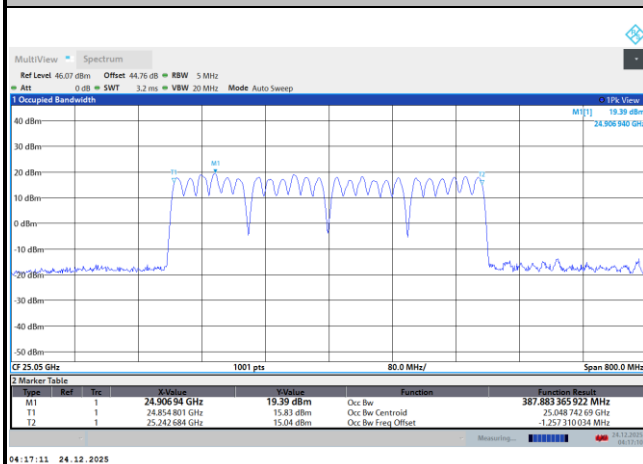
intentionally blank

Middle Channel / 400MHz / 64QAM



intentionally blank

Highest Channel / 400MHz / 64QAM



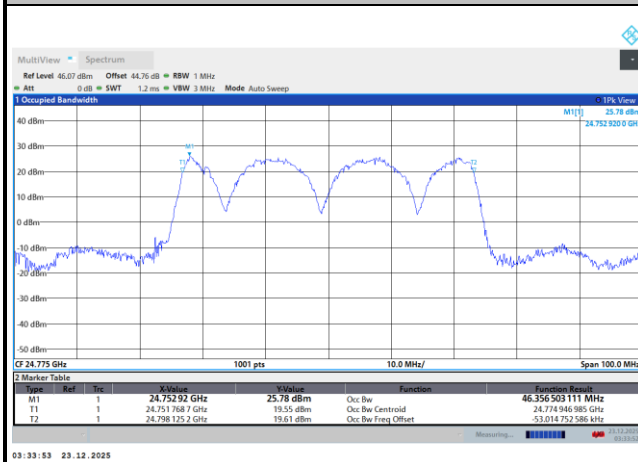
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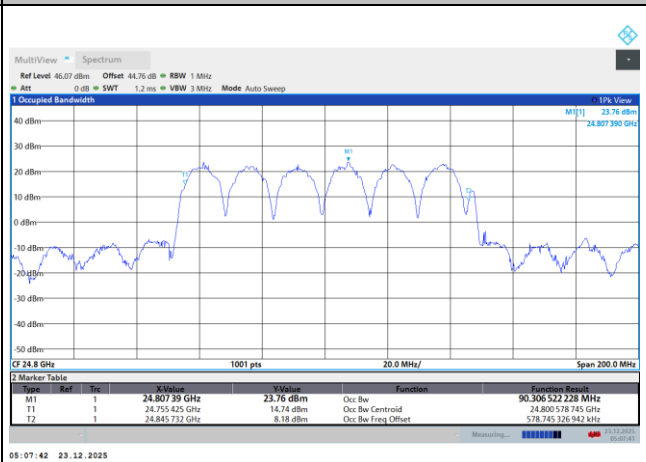
CP-OFDM

NR Band n258B

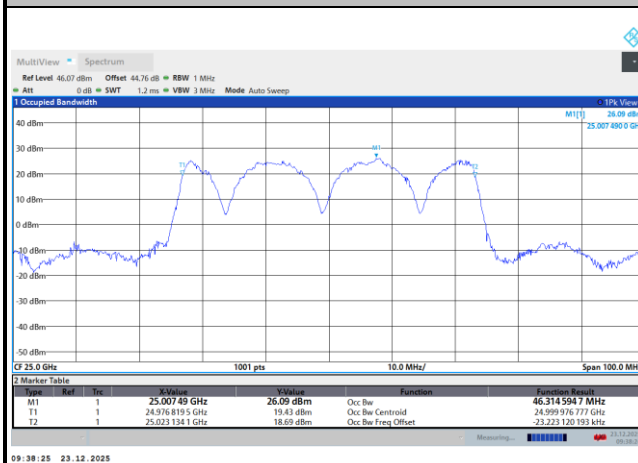
Lowest Channel / 50MHz / QPSK



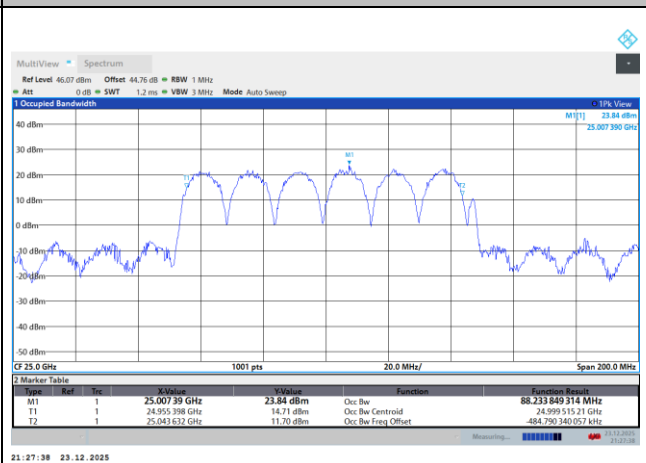
Lowest Channel / 100MHz / QPSK



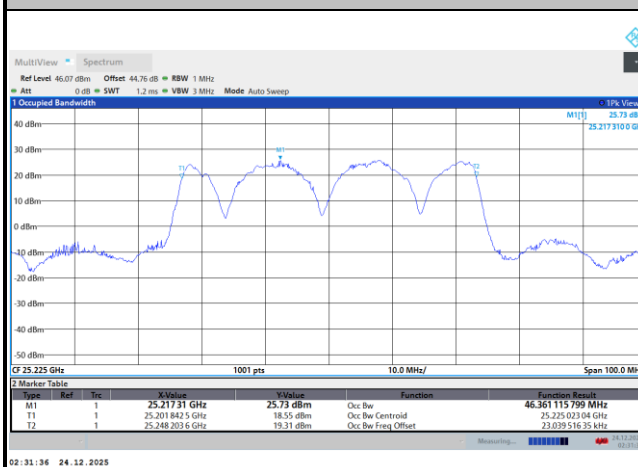
Middle Channel / 50MHz / QPSK



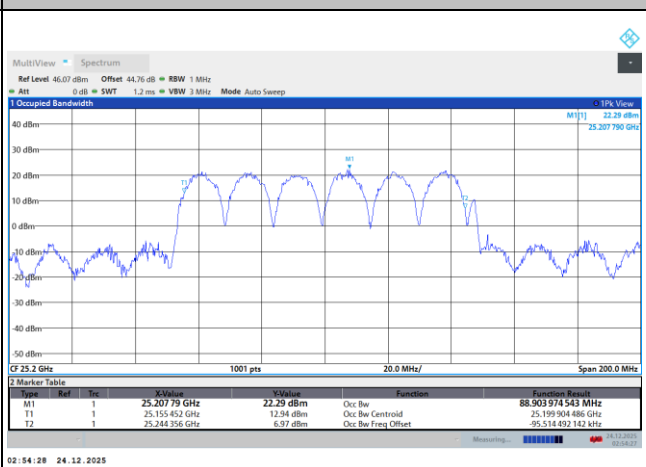
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

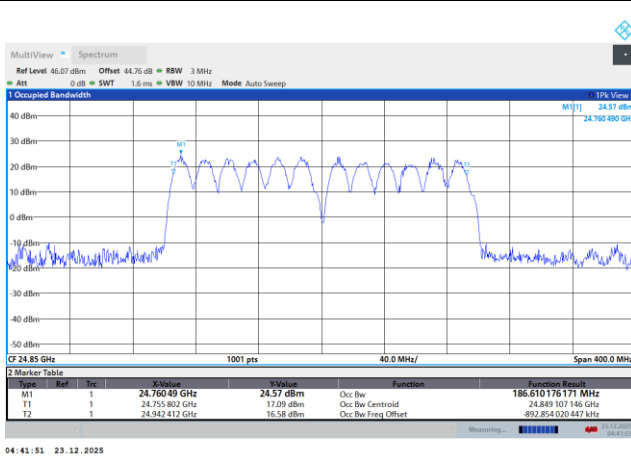




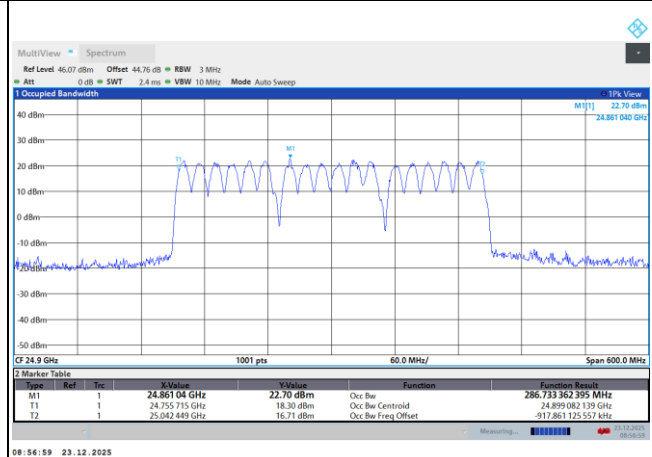
CP-OFDM

NR Band n258B

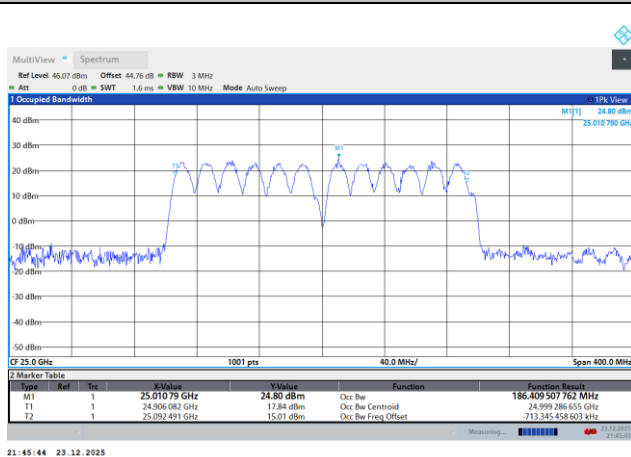
Lowest Channel / 200MHz / QPSK



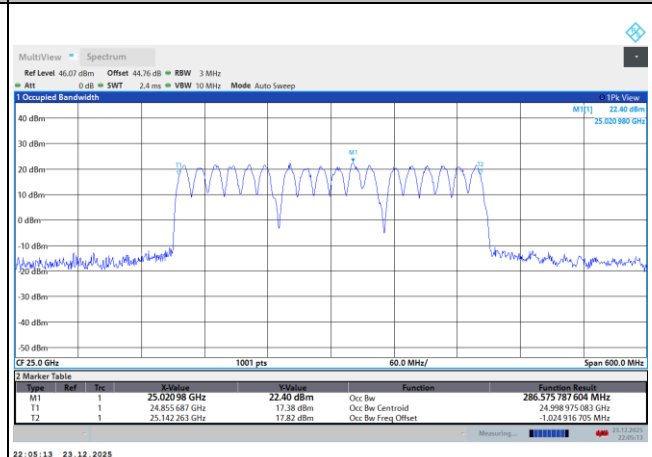
Lowest Channel / 300MHz / QPSK



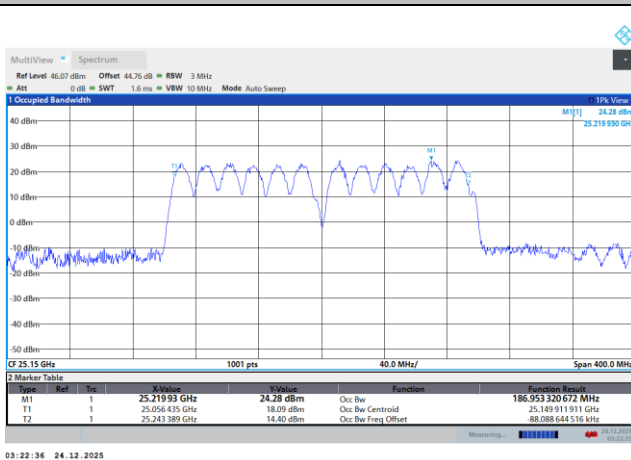
Middle Channel / 200MHz / QPSK



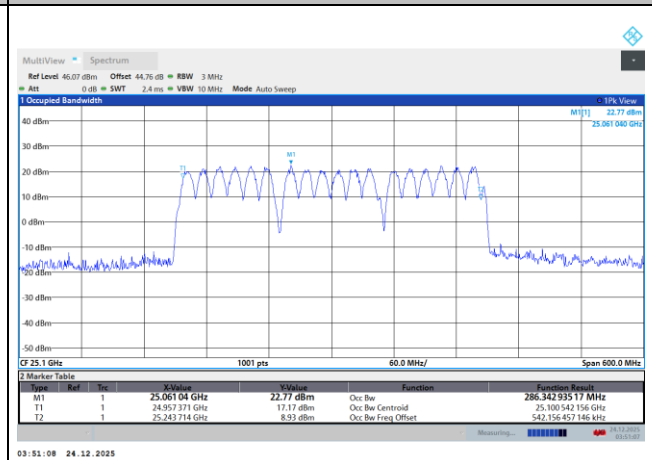
Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / QPSK



Highest Channel / 300MHz / QPSK

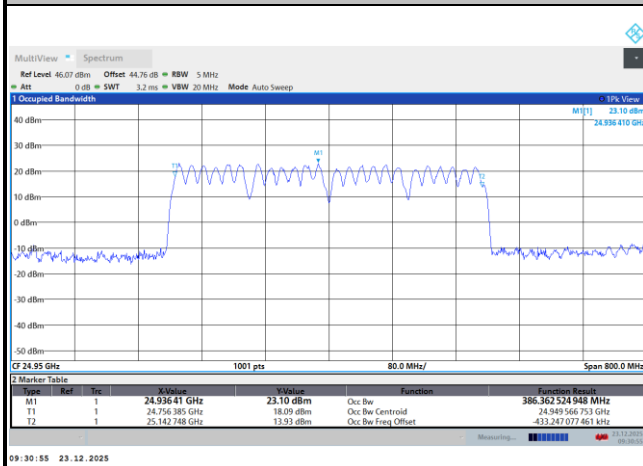




CP-OFDM

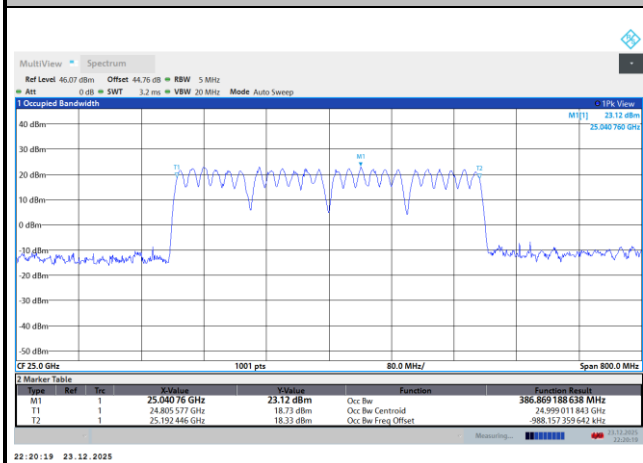
NR Band n258B

Lowest Channel / 400MHz / QPSK



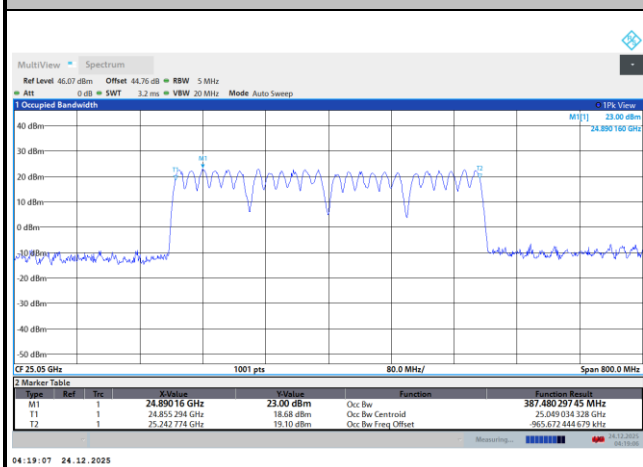
intentionally blank

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		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-18.45	-20.03	-19.87	-11.22	-11.68	-13.87	-17.98	-18.49	-20.22
	>10%OB	≤-13	-33.20	-33.64	-34.55	-30.29	-30.54	-30.85	-26.07	-25.27	-27.17
High CH	0~10%OB	≤-5	-19.79	-19.93	-7.25	-15.53	-13.57	-16.91	-21.45	-32.38	-24.22
	>10%OB	≤-13	-33.32	-33.80	-28.15	-30.75	-30.93	-30.93	-16.53	-18.41	-22.45
Result			Compliance								

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) 1 RB					
BW			300MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-18.74	-19.04	-21.15	-20.33	-19.79	-22.97
	>10%OB	≤-13	-22.30	-24.30	-25.61	-24.39	-21.50	-27.33
High CH	0~10%OB	≤-5	-25.96	-27.25	-26.92	-23.71	-21.71	-26.81
	>10%OB	≤-13	-19.22	-18.54	-24.79	-16.35	-19.33	-26.87
Result			Compliance					

Mode			CP-OFDM NR Band n258B : BE (dBm) 1 RB		
BW			50MHz	100MHz	200MHz
Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≤-5	-17.61	-12.61	-18.58
	>10%OB	≤-13	-33.82	-30.54	-24.03
High CH	0~10%OB	≤-5	-18.76	-13.01	-33.49
	>10%OB	≤-13	-34.28	-30.86	-18.18
Result			Compliance		

Mode			CP-OFDM NR Band n258B : BE (dBm) 1 RB	
BW			300MHz	400MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤-5	-18.82	-18.87
	>10%OB	≤-13	-24.07	-20.32
High CH	0~10%OB	≤-5	-24.85	-19.22
	>10%OB	≤-13	-15.21	-19.10
Result			Compliance	

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) Full RB								
BW			50MHz			100MHz			200MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-14.08	-13.85	-16.60	-21.52	-23.23	-25.99	-28.07	-29.04	-30.33
	>10%OB	≤-13	-19.63	-22.12	-24.80	-21.13	-24.66	-27.33	-28.91	-29.73	-30.61
High CH	0~10%OB	≤-5	-14.18	-15.63	-17.15	-14.47	-17.12	-21.64	-25.62	-26.84	-31.09
	>10%OB	≤-13	-14.85	-16.71	-21.44	-16.08	-17.36	-22.35	-24.20	-26.29	-30.89
Result			Compliance								

Mode			DFT-s-OFDM NR Band n258B : BE (dBm) Full RB					
BW			300MHz			400MHz		
Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-29.20	-29.26	-30.84	-28.34	-29.17	-30.94
	>10%OB	≤-13	-29.56	-29.67	-30.92	-26.56	-28.78	-31.07
High CH	0~10%OB	≤-5	-24.74	-27.61	-30.79	-26.83	-27.82	-30.52
	>10%OB	≤-13	-25.19	-28.15	-30.69	-24.80	-27.34	-30.45
Result			Compliance					

Mode			CP-OFDM NR Band n258B : BE (dBm) Full RB		
BW			50MHz	100MHz	200MHz
Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≤-5	-13.99	-19.80	-27.16
	>10%OB	≤-13	-19.75	-21.10	-28.59
High CH	0~10%OB	≤-5	-15.20	-16.13	-23.58
	>10%OB	≤-13	-16.06	-16.28	-23.14
Result			Compliance		

Mode			CP-OFDM NR Band n258B : BE (dBm) Full RB	
BW			300MHz	400MHz
Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤-5	-28.69	-28.23
	>10%OB	≤-13	-29.26	-26.05
High CH	0~10%OB	≤-5	-25.92	-26.65
	>10%OB	≤-13	-27.00	-24.45
Result			Compliance	

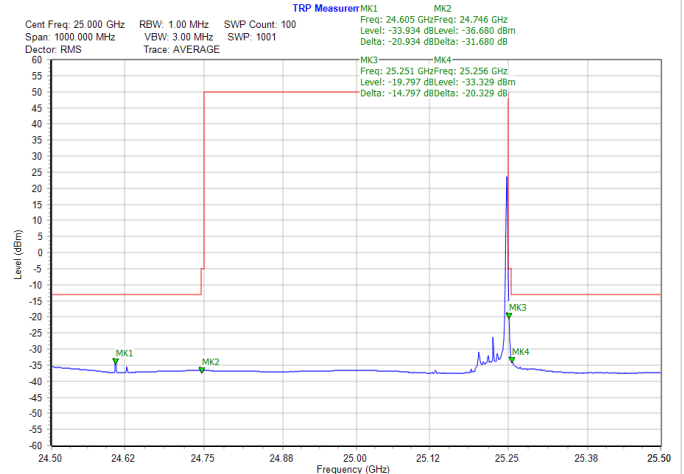
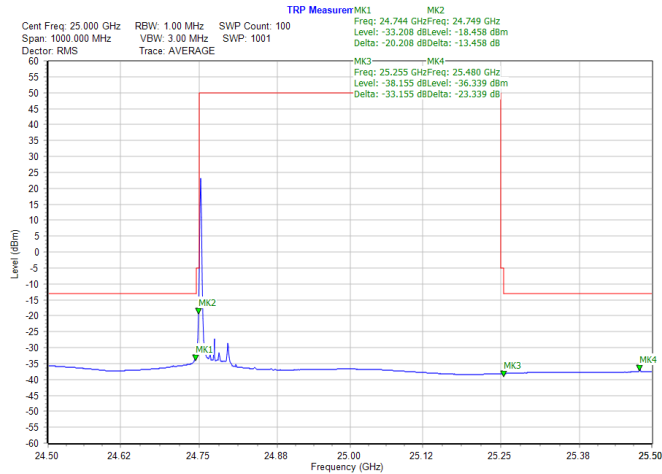


DFT-s-OFDM

NR Band n258B / 50MHz / QPSK

Lowest Band Edge / 1 RB

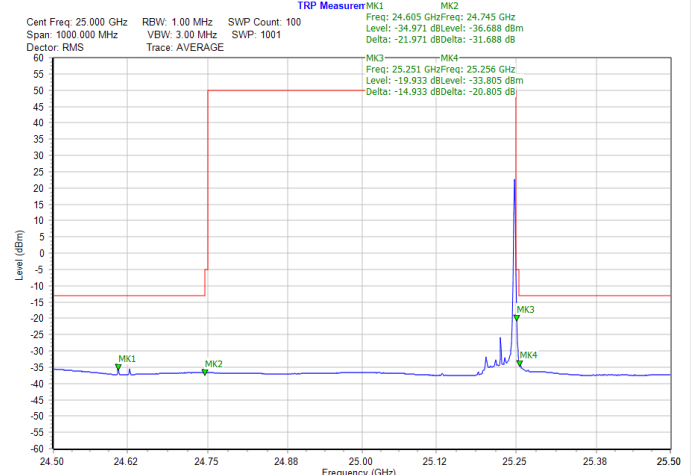
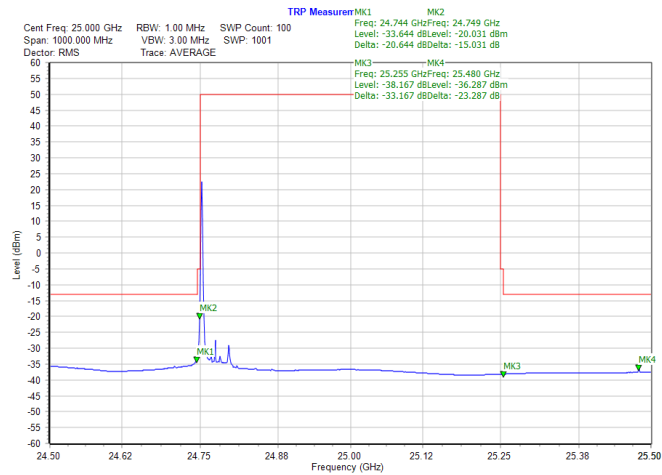
Highest Band Edge / 1 RB



NR Band n258B / 50MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



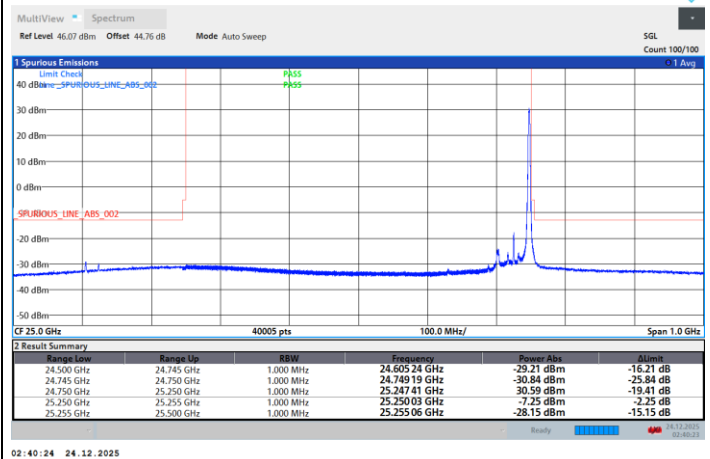
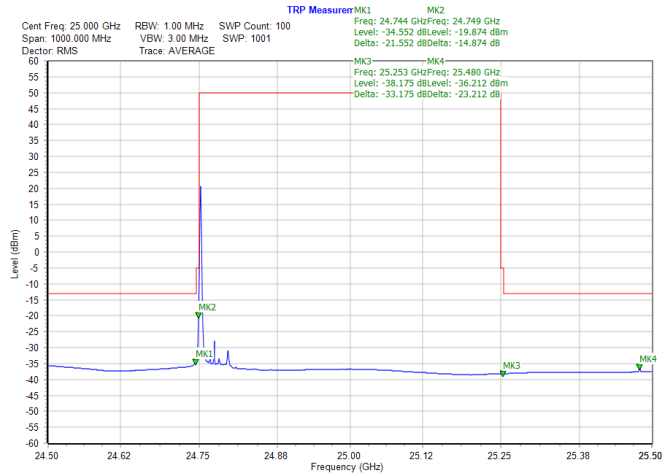


DFT-s-OFDM

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

