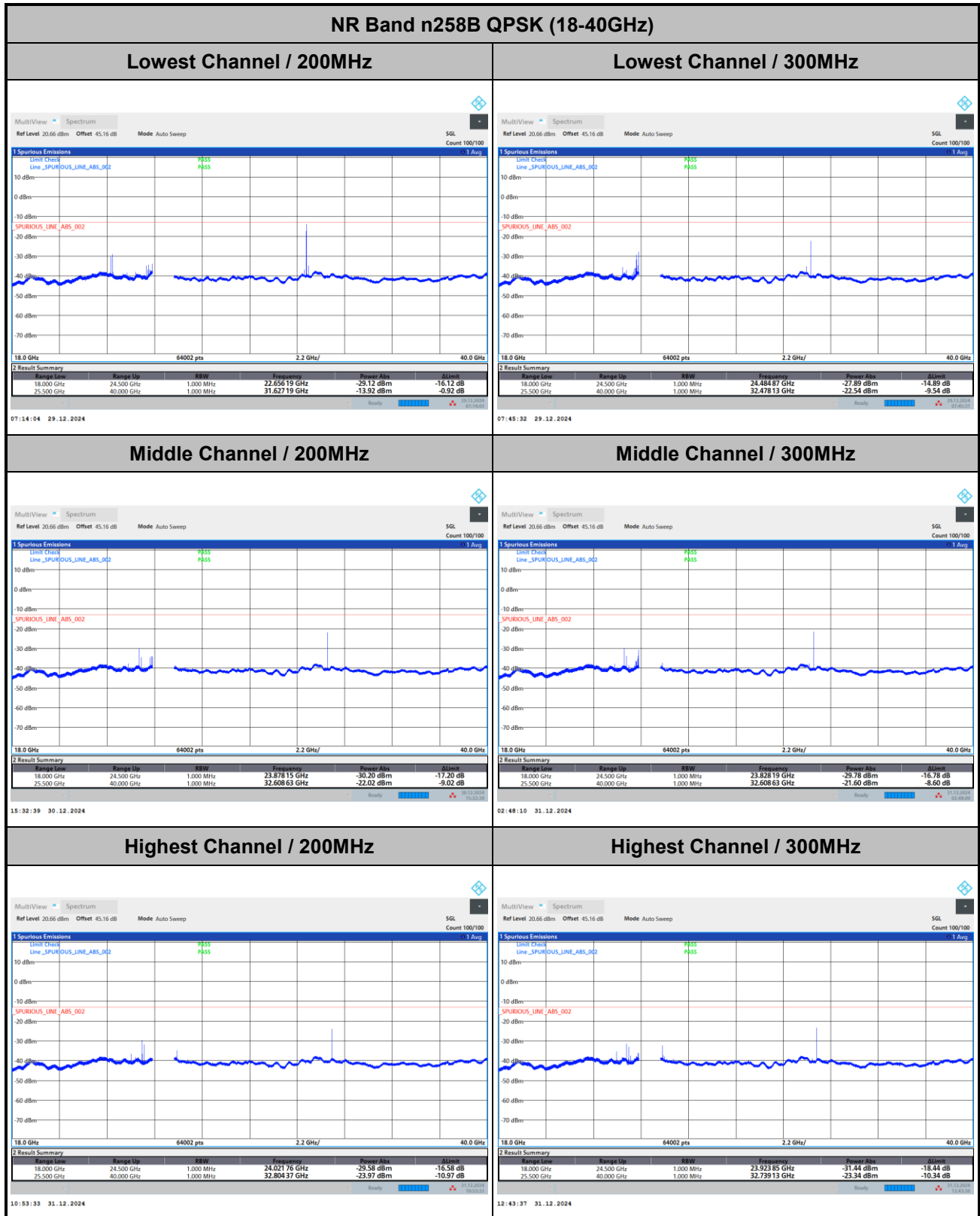




DFT-s-OFDM



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



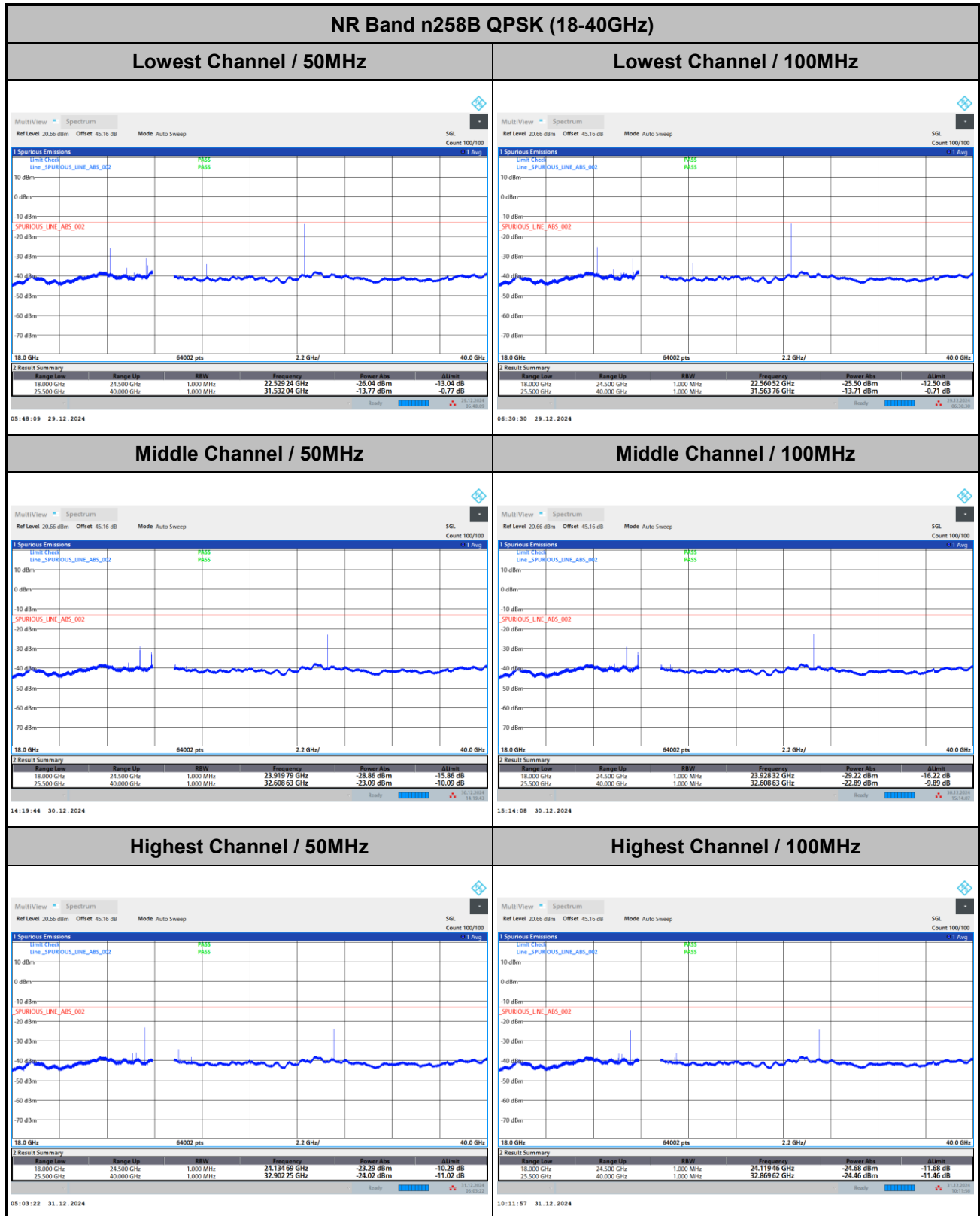
DFT-s-OFDM

NR Band n258B QPSK (18-40GHz)																			
Lowest Channel / 400MHz MultiView Spectrum Ref Level 20.66 dBm Offset 45.16 dB Mode Auto Sweep SQL Count 100/100 Spurious Emissions Limit Check Line_SPURIOUS_LINE_ABS_002 PASS PASS SPURIOUS_LINE_ABS_002 -20 dBm 18.0 GHz 64002 pts 2.2 GHz/ 40.0 GHz Result Summary <table><tr><th>Range Low</th><th>Range Up</th><th>RBW</th><th>Frequency</th><th>Power Abs</th><th>Limit</th></tr><tr><td>18.000 GHz</td><td>24.500 GHz</td><td>1.000 MHz</td><td>24.484 66 GHz</td><td>-25.59 dBm</td><td>-13.59 dB</td></tr><tr><td>25.500 GHz</td><td>40.000 GHz</td><td>1.000 MHz</td><td>32.543 38 GHz</td><td>-22.13 dBm</td><td>-9.13 dB</td></tr></table> 08:25:00 29.12.2024	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	24.500 GHz	1.000 MHz	24.484 66 GHz	-25.59 dBm	-13.59 dB	25.500 GHz	40.000 GHz	1.000 MHz	32.543 38 GHz	-22.13 dBm	-9.13 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	24.500 GHz	1.000 MHz	24.484 66 GHz	-25.59 dBm	-13.59 dB														
25.500 GHz	40.000 GHz	1.000 MHz	32.543 38 GHz	-22.13 dBm	-9.13 dB														
Middle Channel / 400MHz MultiView Spectrum Ref Level 20.66 dBm Offset 45.16 dB Mode Auto Sweep SQL Count 100/100 Spurious Emissions Limit Check Line_SPURIOUS_LINE_ABS_002 PASS PASS SPURIOUS_LINE_ABS_002 -20 dBm 18.0 GHz 64002 pts 2.2 GHz/ 40.0 GHz Result Summary <table><tr><th>Range Low</th><th>Range Up</th><th>RBW</th><th>Frequency</th><th>Power Abs</th><th>Limit</th></tr><tr><td>18.000 GHz</td><td>24.500 GHz</td><td>1.000 MHz</td><td>23.778 22 GHz</td><td>-32.00 dBm</td><td>-19.00 dB</td></tr><tr><td>25.500 GHz</td><td>40.000 GHz</td><td>1.000 MHz</td><td>32.608 63 GHz</td><td>-21.38 dBm</td><td>-8.38 dB</td></tr></table> 03:33:31 31.12.2024	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	24.500 GHz	1.000 MHz	23.778 22 GHz	-32.00 dBm	-19.00 dB	25.500 GHz	40.000 GHz	1.000 MHz	32.608 63 GHz	-21.38 dBm	-8.38 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	24.500 GHz	1.000 MHz	23.778 22 GHz	-32.00 dBm	-19.00 dB														
25.500 GHz	40.000 GHz	1.000 MHz	32.608 63 GHz	-21.38 dBm	-8.38 dB														
Highest Channel / 400MHz MultiView Spectrum Ref Level 20.66 dBm Offset 45.16 dB Mode Auto Sweep SQL Count 100/100 Spurious Emissions Limit Check Line_SPURIOUS_LINE_ABS_002 PASS PASS SPURIOUS_LINE_ABS_002 -20 dBm 18.0 GHz 64002 pts 2.2 GHz/ 40.0 GHz Result Summary <table><tr><th>Range Low</th><th>Range Up</th><th>RBW</th><th>Frequency</th><th>Power Abs</th><th>Limit</th></tr><tr><td>18.000 GHz</td><td>24.500 GHz</td><td>1.000 MHz</td><td>24.485 07 GHz</td><td>-30.27 dBm</td><td>-17.27 dB</td></tr><tr><td>25.500 GHz</td><td>40.000 GHz</td><td>1.000 MHz</td><td>32.673 88 GHz</td><td>-24.13 dBm</td><td>-11.13 dB</td></tr></table> 14:04:47 31.12.2024	Range Low	Range Up	RBW	Frequency	Power Abs	Limit	18.000 GHz	24.500 GHz	1.000 MHz	24.485 07 GHz	-30.27 dBm	-17.27 dB	25.500 GHz	40.000 GHz	1.000 MHz	32.673 88 GHz	-24.13 dBm	-11.13 dB	intentionally blank
Range Low	Range Up	RBW	Frequency	Power Abs	Limit														
18.000 GHz	24.500 GHz	1.000 MHz	24.485 07 GHz	-30.27 dBm	-17.27 dB														
25.500 GHz	40.000 GHz	1.000 MHz	32.673 88 GHz	-24.13 dBm	-11.13 dB														

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



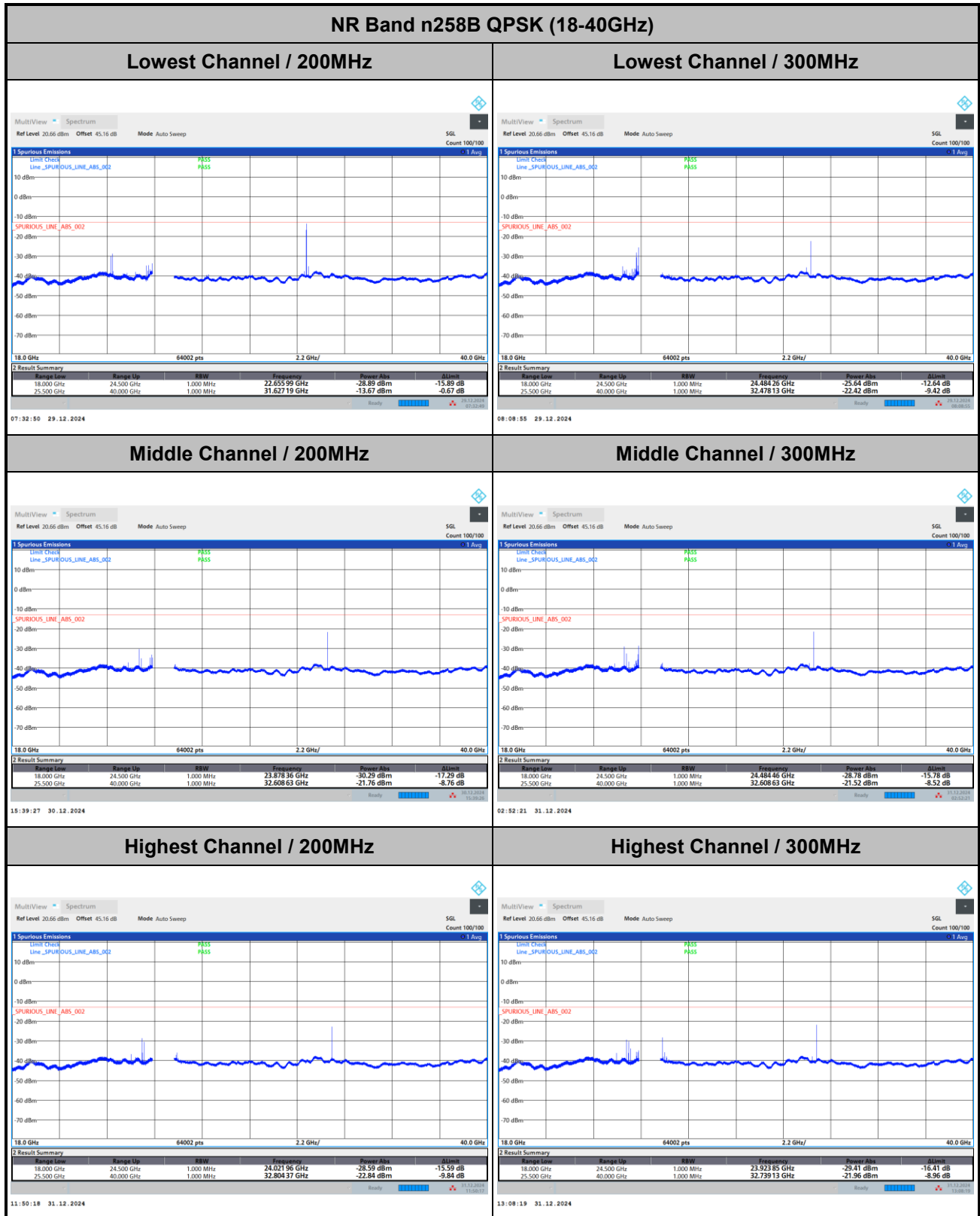
CP-OFDM



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



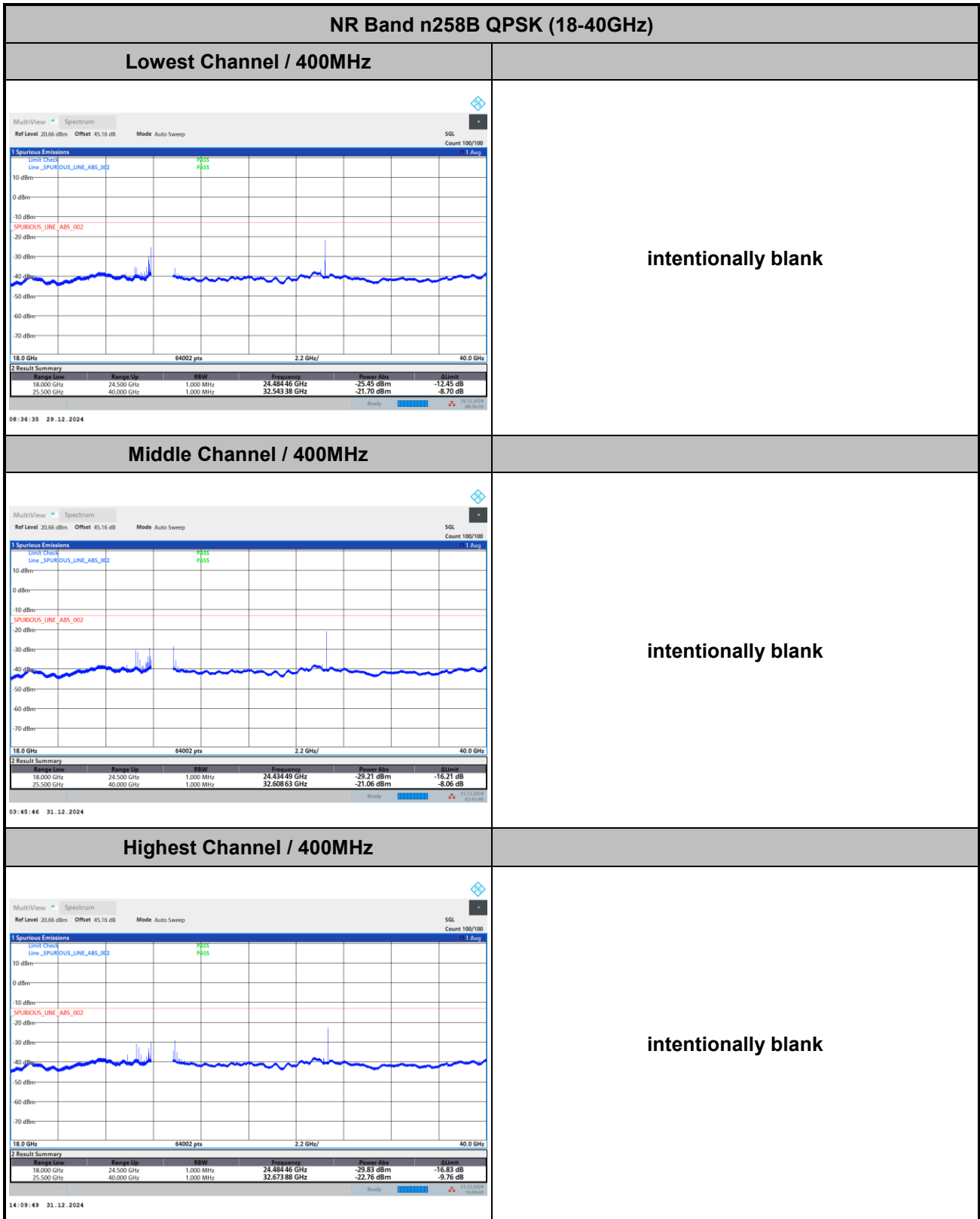
CP-OFDM



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



CP-OFDM



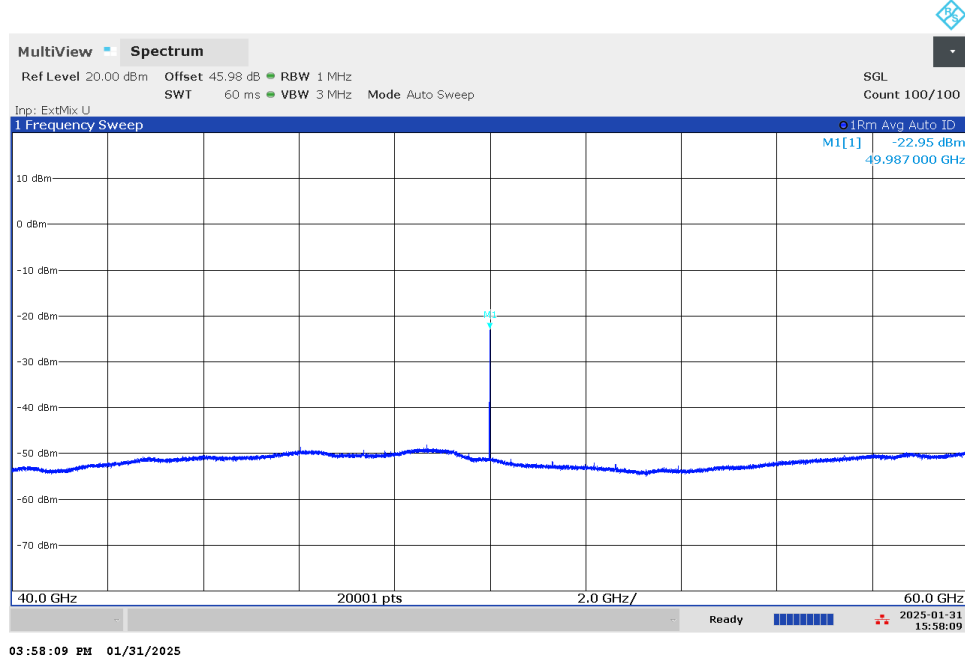
Remark: In band and out of band frequencies are omitted.



NR Band n258B

(40GHz-60GHz)

Limit -13dBm/MHz, PASS



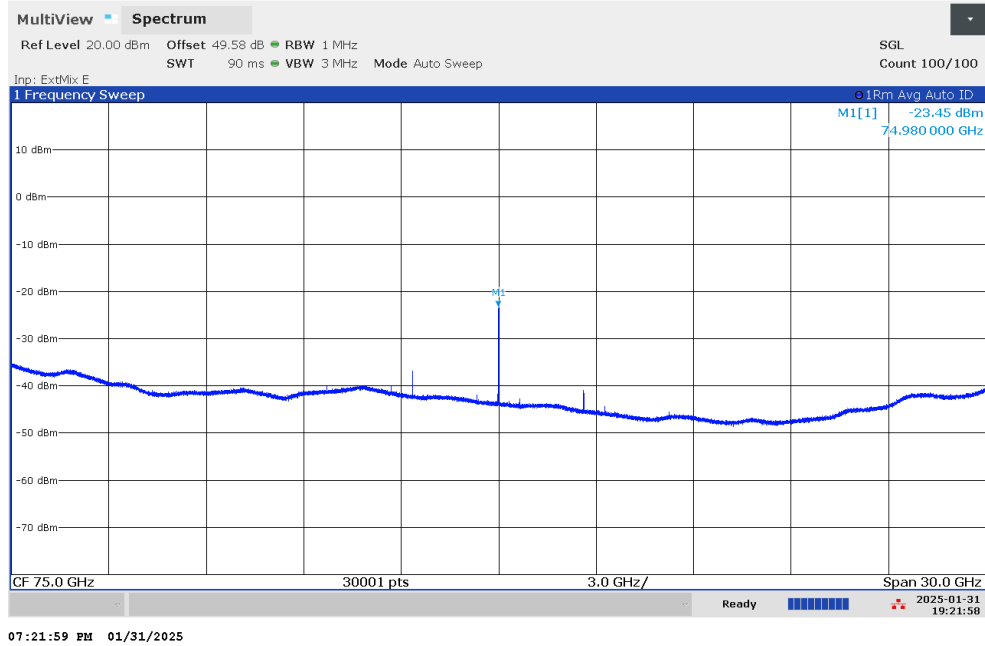
$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 42.6 + 1.18 + 107 + 20\log(1) - 104.8 = 45.98(\text{dB}) \end{aligned}$$



NR Band n258B

(60GHz-90GHz)

Limit -13dBm/MHz, PASS



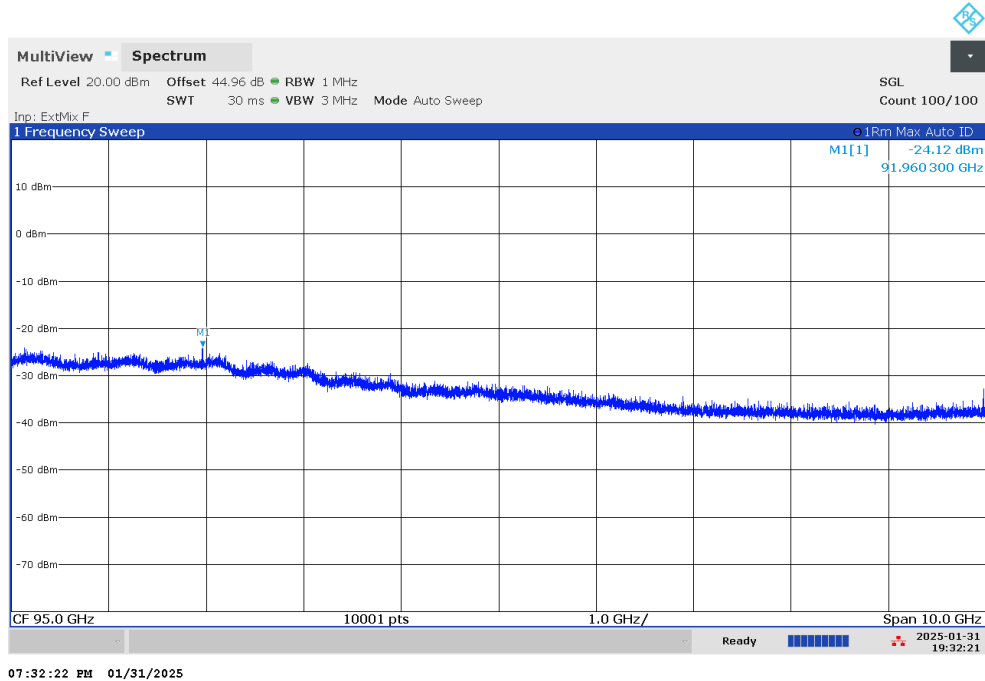
$$\begin{aligned} \text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 46.2 + 1.18 + 107 + 20\log(1) - 104.8 = 49.58 \text{ (dB)} \end{aligned}$$



NR Band n258B

(90GHz-100GHz)

Limit -13dBm/MHz, PASS



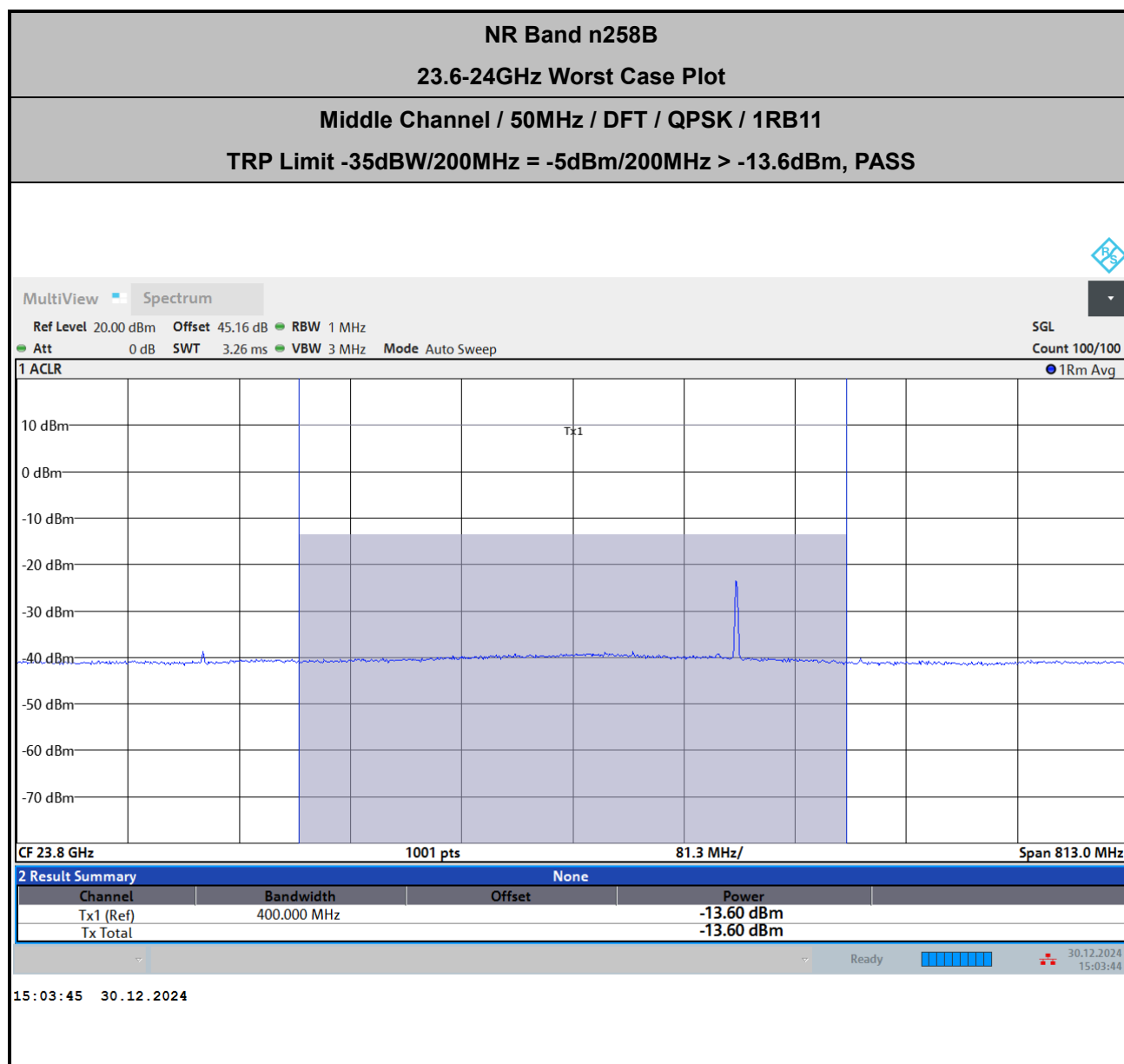
$Offset = Antenna\ Factor\ (dB/m) + Cable\ Loss\ (dB) + 107 + 20\log(D) - 104.8$

$= 47.6 + 1.18 + 107 + 20\log(0.5) - 104.8 = 44.96\ (dB)$



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).



$$\begin{aligned}\text{Offset} &= \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} + 107 + 20\log(D) - 104.8 \\ &= 39.5 + 3.46 + 107 + 20\log(1) - 104.8 = 45.16(\text{dB})\end{aligned}$$

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 n258B / Middle Channel			Limit
Temperature (°C)	Voltage (Volt)	CW tone			Note 2.
		Frequency (GHz)	Deviation (kHz)	Deviation (ppm)	Result
50	Normal Voltage	24.999963	66.000	2.640	Pass
40	Normal Voltage	24.999992	37.000	1.480	
30	Normal Voltage	25.000039	-10.000	0.400	
20(Ref.)	Normal Voltage	25.000029	0.000	0.000	
10	Normal Voltage	25.0000699	-40.900	1.636	
0	Normal Voltage	25.0001159	-86.900	3.476	
-10	Normal Voltage	25.0001289	-99.900	3.996	
-20	Normal Voltage	25.0001109	-81.900	3.276	
-30	Normal Voltage	25.0000509	-21.900	0.876	
20	Maximum Voltage	25.0000126	16.400	0.656	
20	Normal Voltage	25.0000073	21.700	0.868	
20	Battery End Point	25.0000017	27.300	1.092	

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 n260 AGH+V

Occupied Bandwidth

Mode	DFT-s-OFDM NR Band n260 : 99%OBW(MHz)								
BW	50MHz			100MHz			200MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	46.04	45.90	46.02	91.03	91.04	91.13	190.93	190.75	191.05
Middle CH	45.80	45.94	46.12	91.15	90.95	90.99	190.65	190.57	190.79
Highest CH	46.10	45.99	46.20	91.16	91.08	91.19	190.82	190.74	191.02

Mode	DFT-s-OFDM NR Band n260 : 99%OBW(MHz)					
BW	300MHz			400MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	290.11	290.05	290.27	389.79	388.70	389.25
Middle CH	289.31	289.35	290.22	390.22	390.18	390.21
Highest CH	289.94	290.39	290.71	390.53	390.21	390.46

Mode	CP-OFDM NR Band n260 : 99%OBW(MHz)		
BW	50MHz	100MHz	200MHz
Mod.	QPSK	QPSK	QPSK
Lowest CH	45.97	93.96	194.06
Middle CH	45.79	93.85	193.52
Highest CH	46.18	94.05	193.65

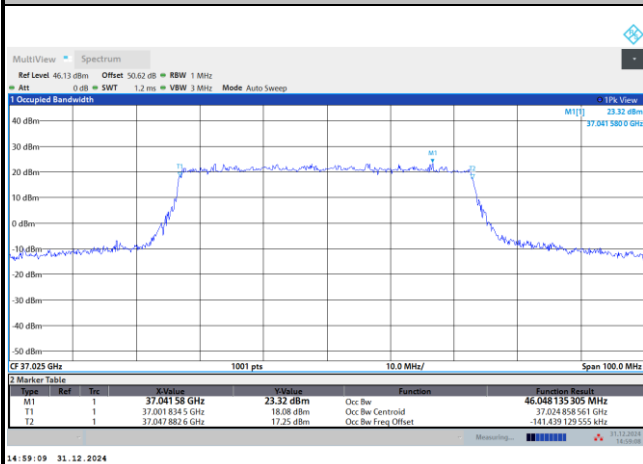
Mode	CP-OFDM NR Band n260 : 99%OBW(MHz)	
BW	300MHz	400MHz
Mod.	QPSK	QPSK
Lowest CH	293.44	393.30
Middle CH	293.28	394.68
Highest CH	294.25	393.15



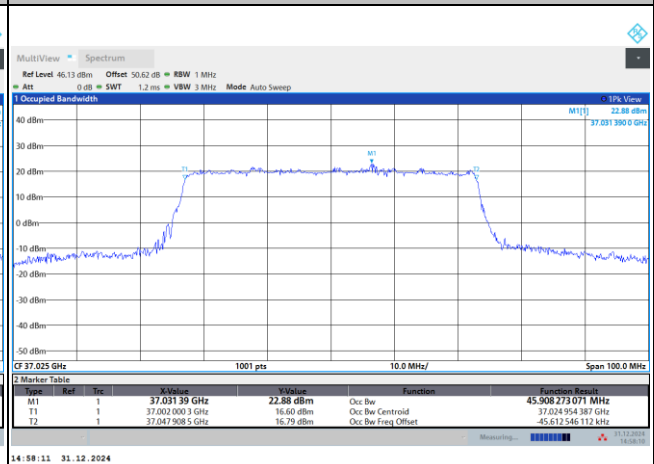
DFT-s-OFDM

NR Band n260

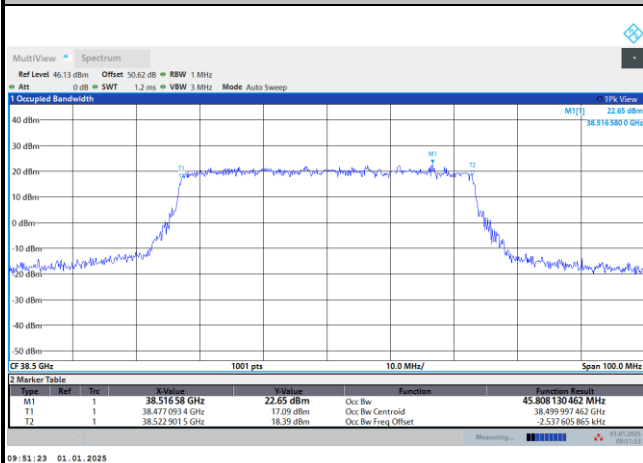
Lowest Channel / 50MHz / QPSK



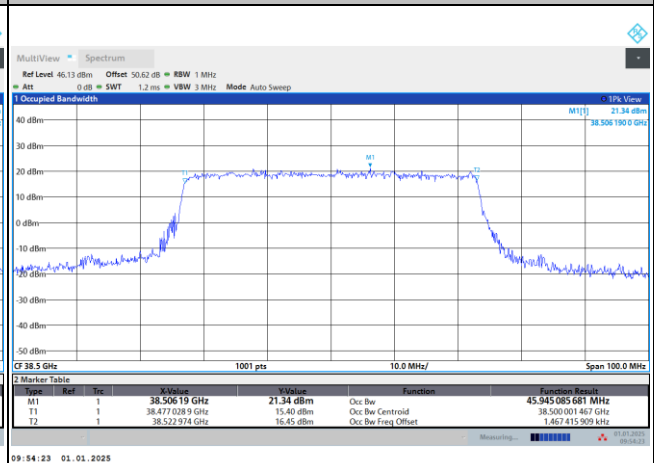
Lowest Channel / 50MHz / 16QAM



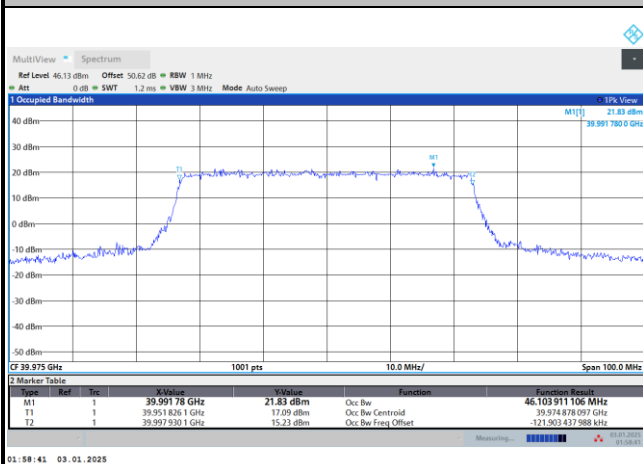
Middle Channel / 50MHz / QPSK



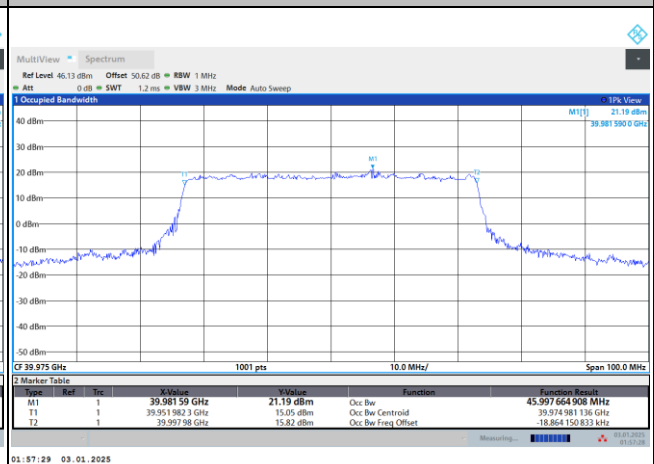
Middle Channel / 50MHz / 16QAM



Highest Channel / 50MHz / QPSK



Highest Channel / 50MHz / 16QAM

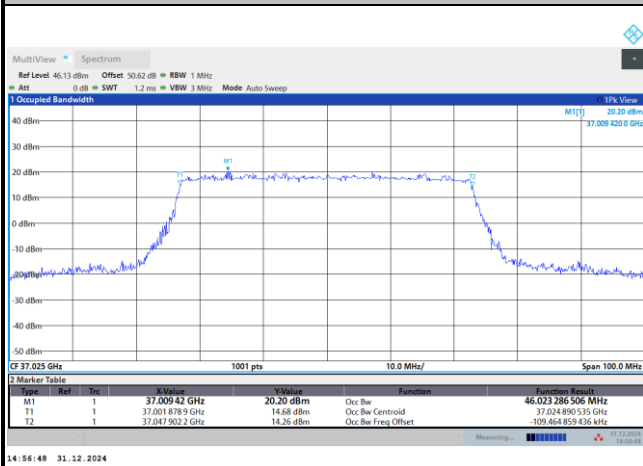




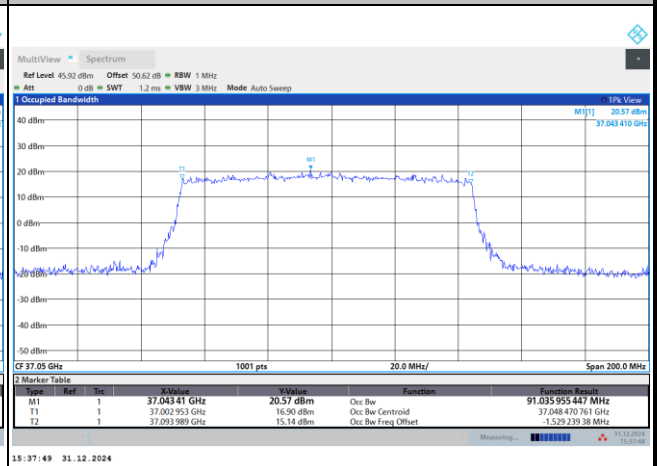
DFT-s-OFDM

NR Band n260

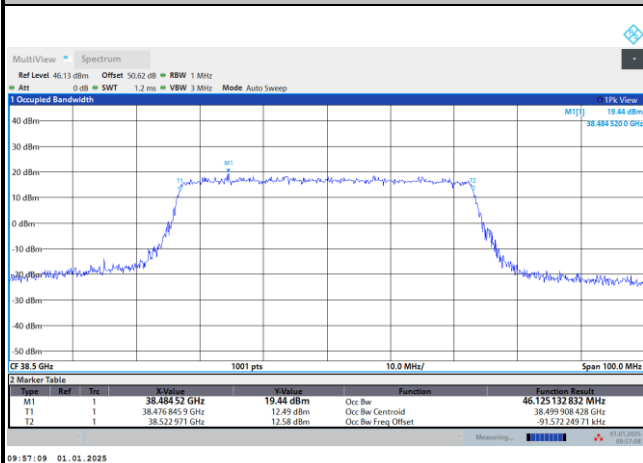
Lowest Channel / 50MHz / 64QAM



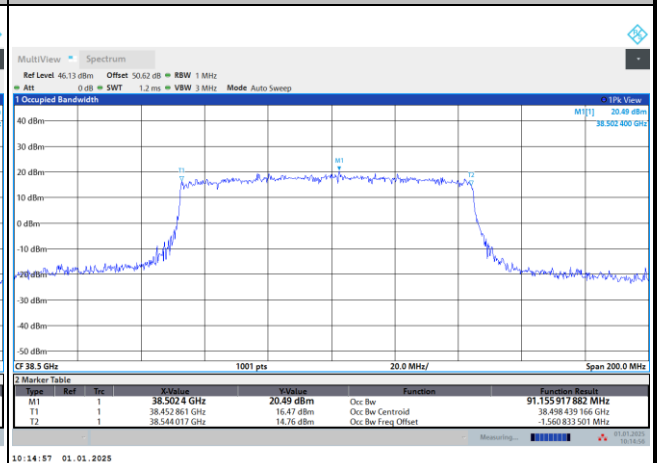
Lowest Channel / 100MHz / QPSK



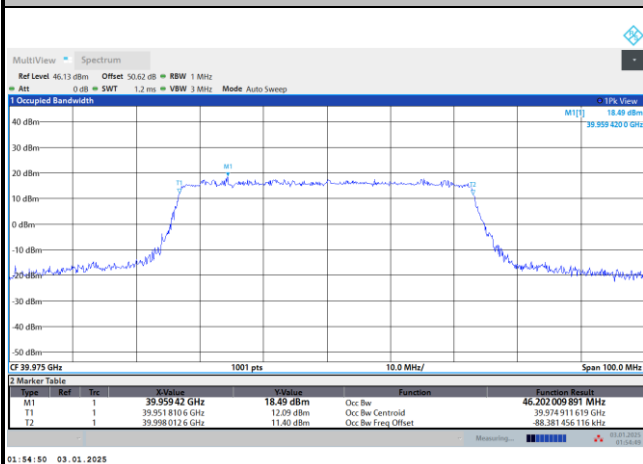
Middle Channel / 50MHz / 64QAM



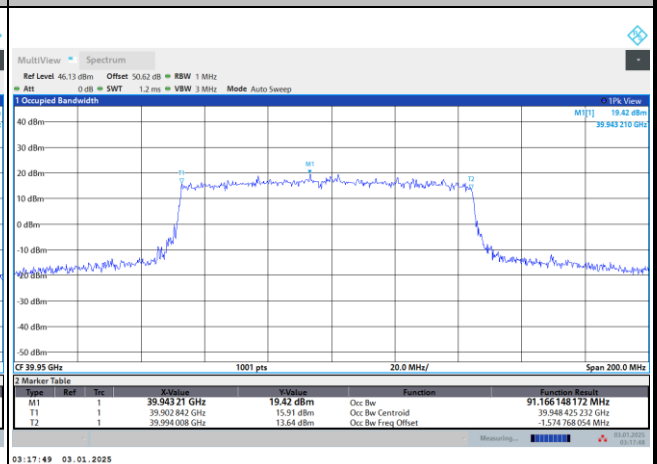
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / 64QAM



Highest Channel / 100MHz / QPSK

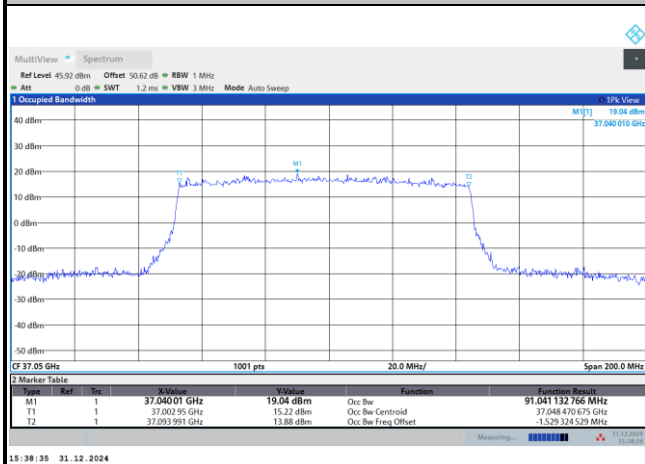




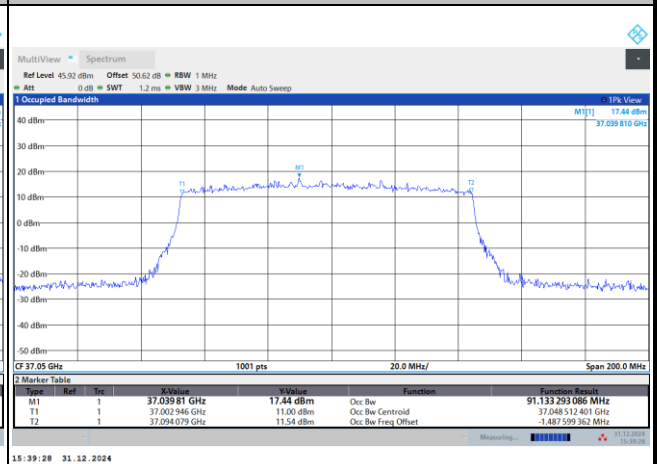
DFT-s-OFDM

NR Band n260

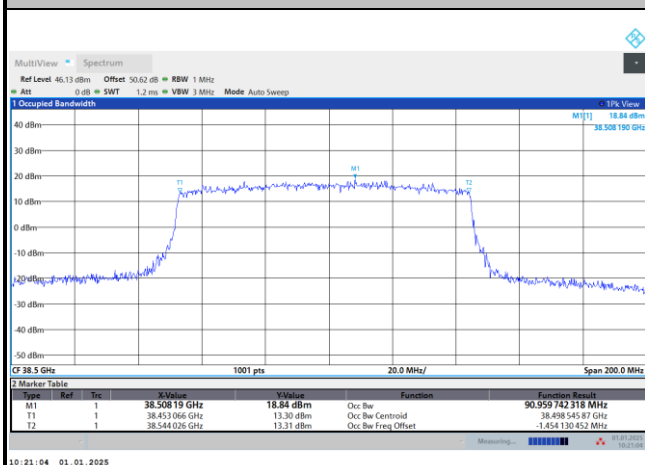
Lowest Channel / 100MHz / 16QAM



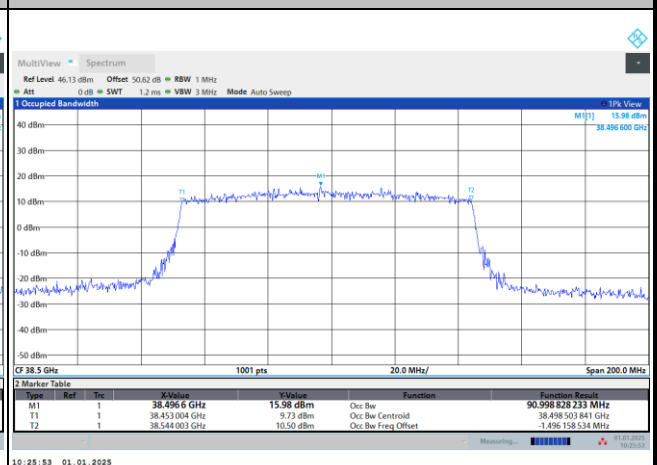
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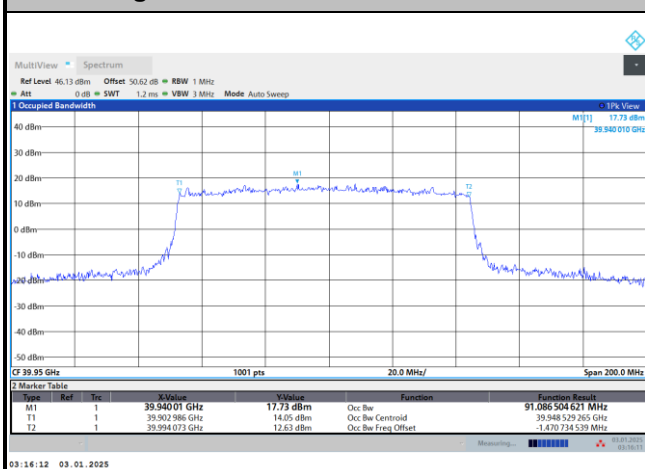
Middle Channel / 100MHz / 16QAM



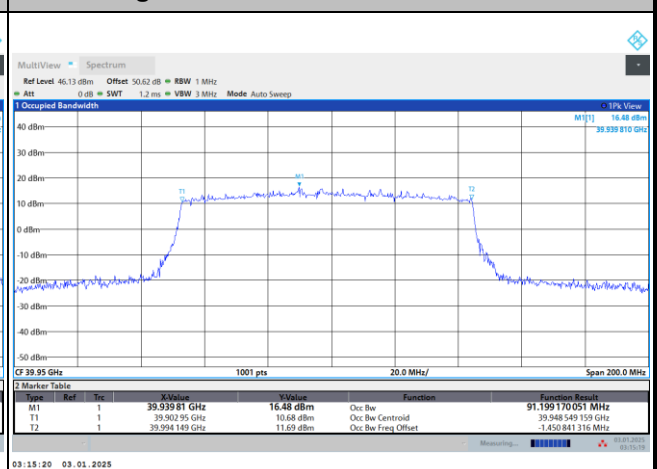
Middle Channel / 100MHz / 64QAM



Highest Channel / 100MHz / 16QAM



Highest Channel / 100MHz / 64QAM

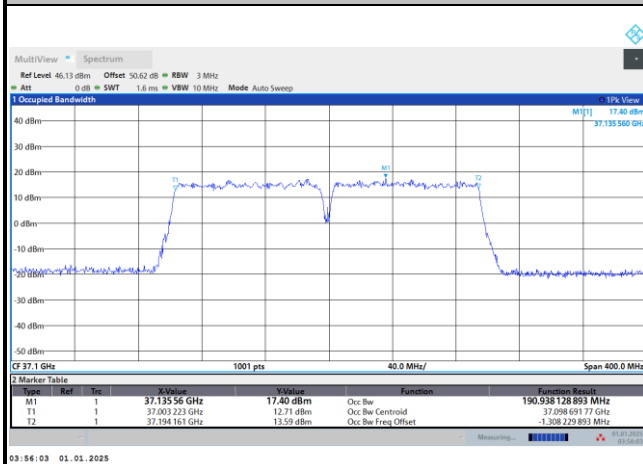




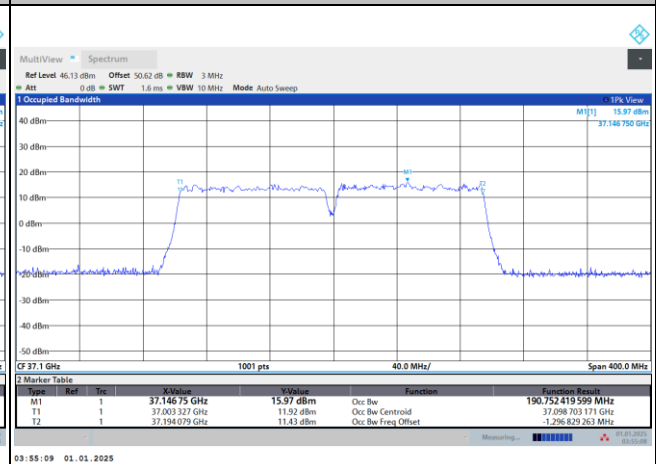
DFT-s-OFDM

NR Band n260

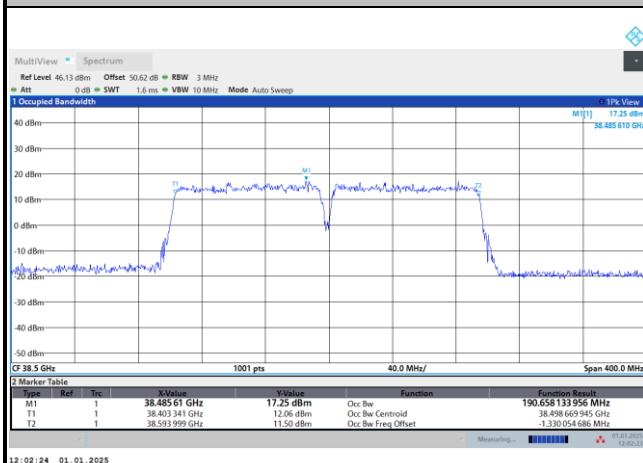
Lowest Channel / 200MHz / QPSK



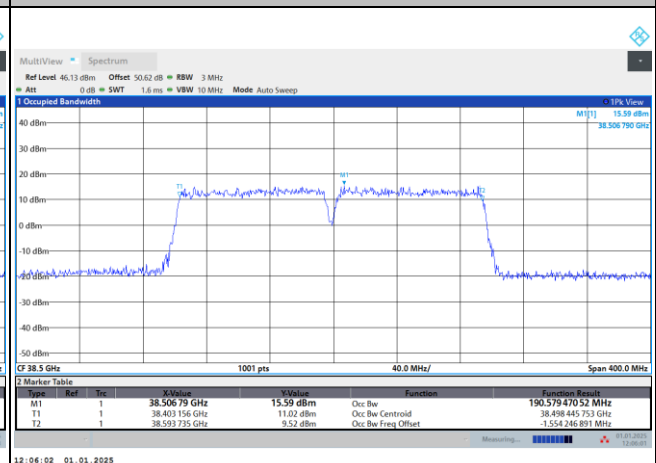
Lowest Channel / 200MHz / 16QAM



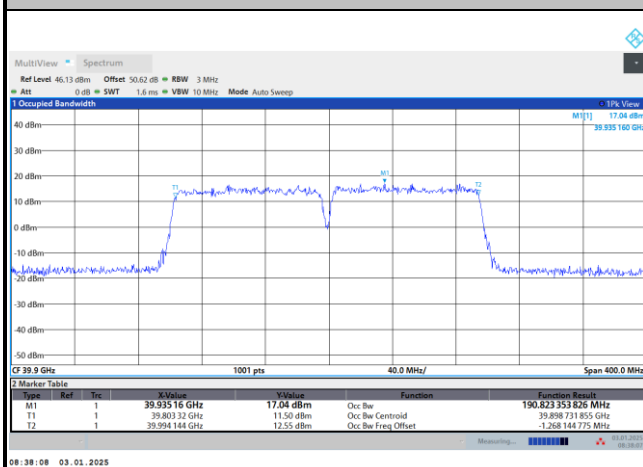
Middle Channel / 200MHz / QPSK



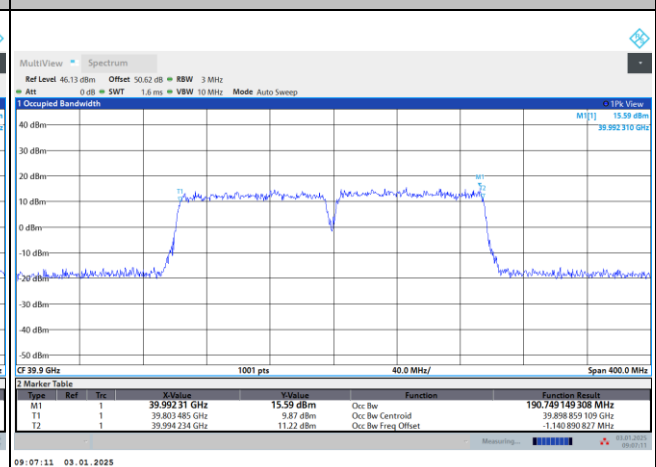
Middle Channel / 200MHz / 16QAM



Highest Channel / 200MHz / QPSK



Highest Channel / 200MHz / 16QAM

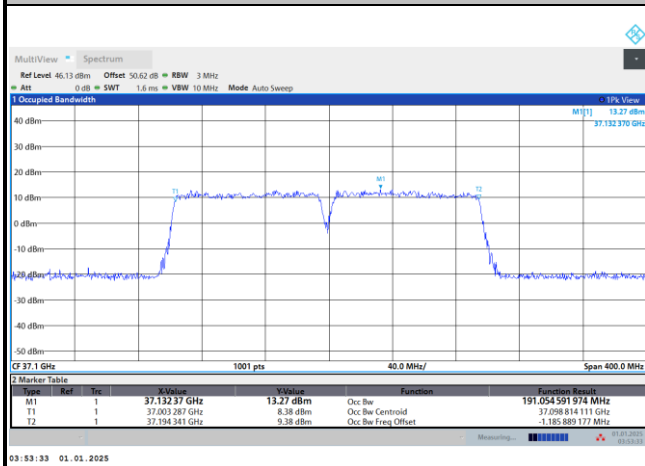




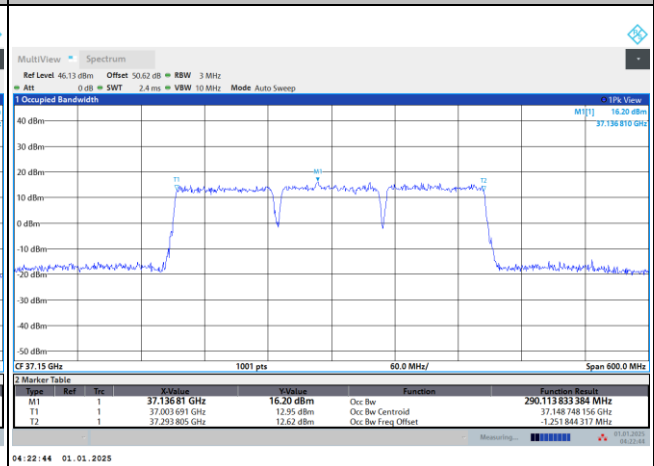
DFT-s-OFDM

NR Band n260

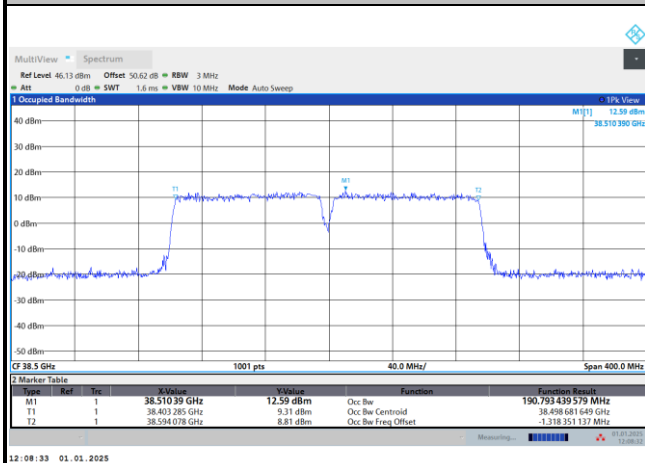
Lowest Channel / 200MHz / 64QAM



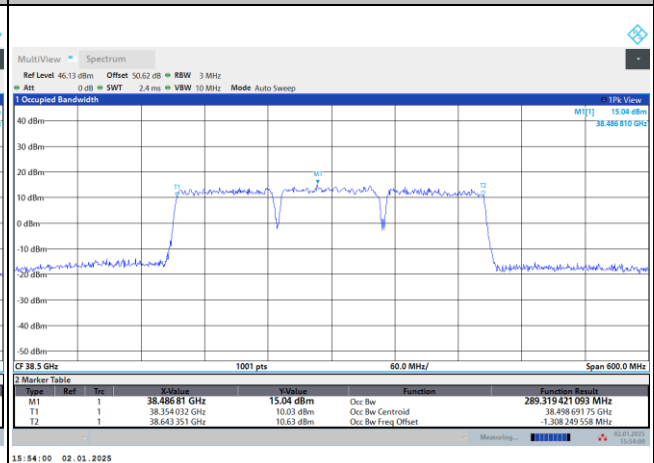
Lowest Channel / 300MHz / QPSK



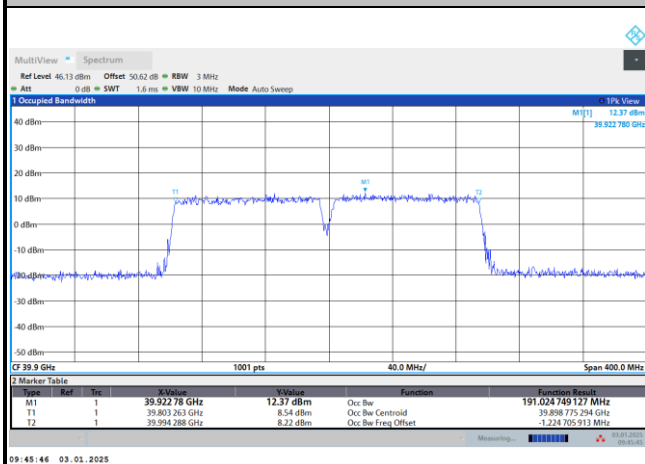
Middle Channel / 200MHz / 64QAM



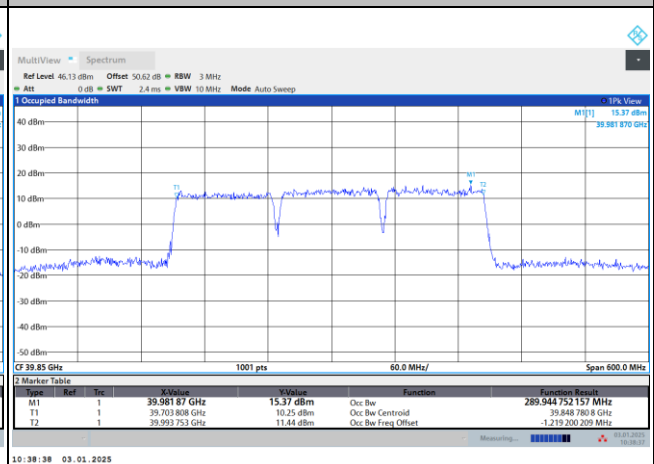
Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / 64QAM



Highest Channel / 300MHz / QPSK

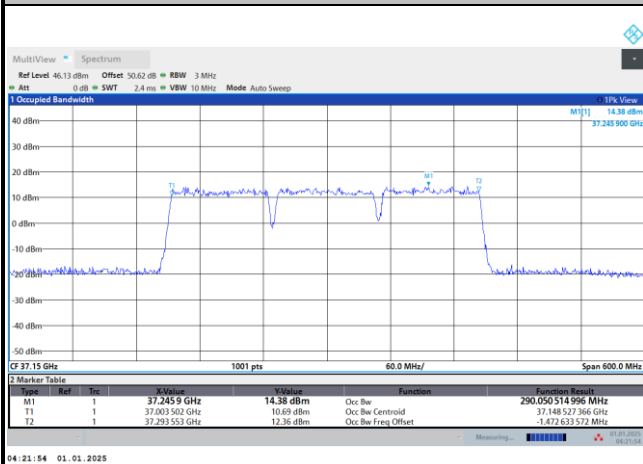




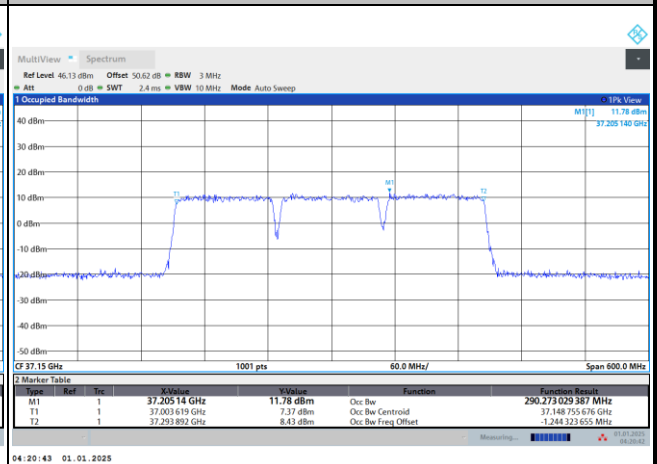
DFT-s-OFDM

NR Band n260

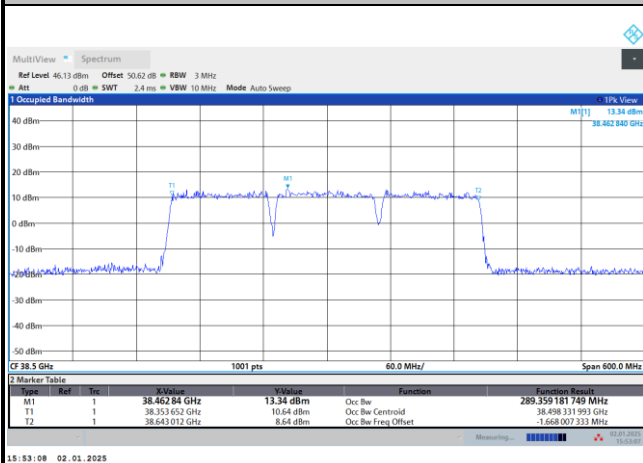
Lowest Channel / 300MHz / 16QAM



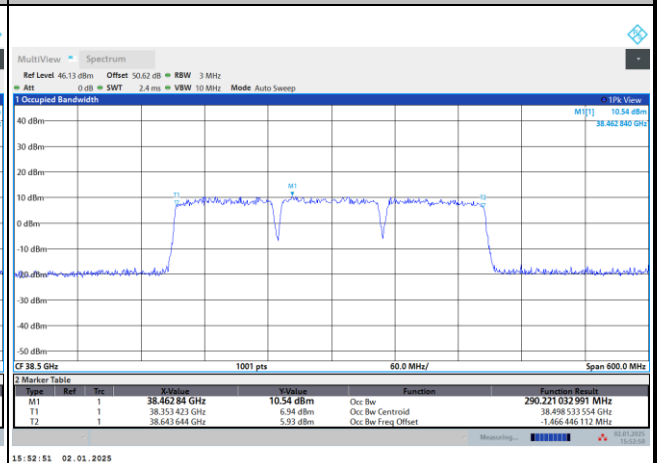
Lowest Channel / 300MHz / 64QAM



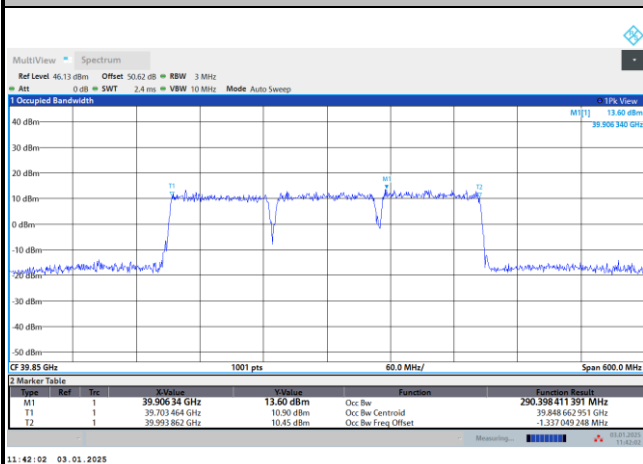
Middle Channel / 300MHz / 16QAM



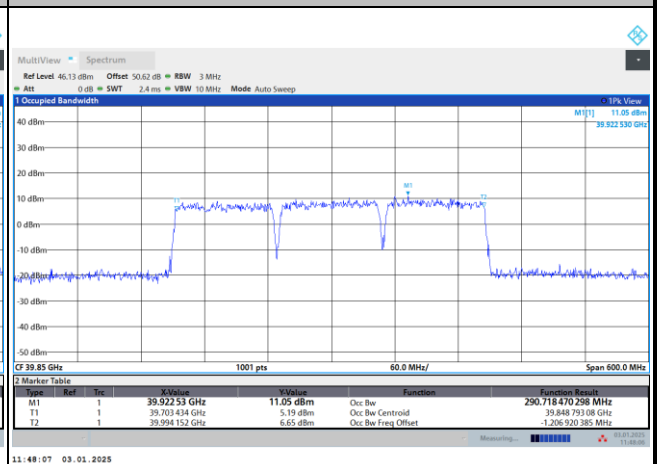
Middle Channel / 300MHz / 64QAM



Highest Channel / 300MHz / 16QAM



Highest Channel / 300MHz / 64QAM

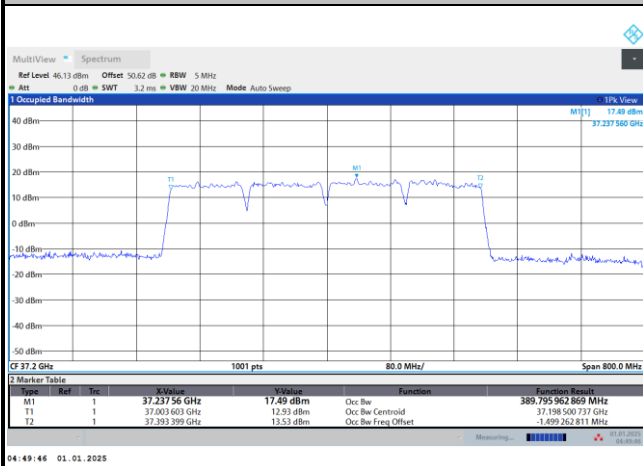




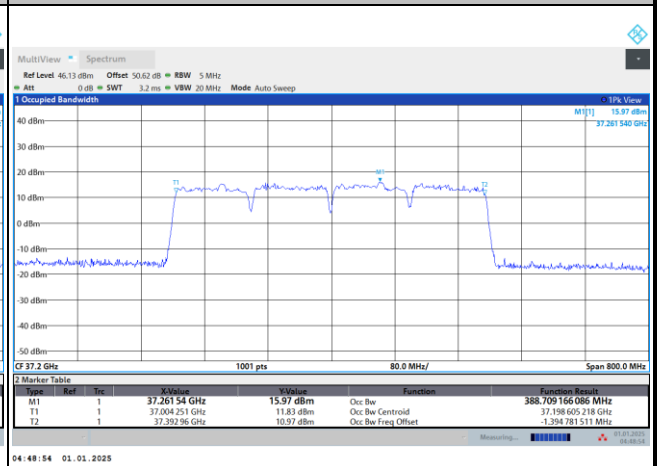
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NR Band n260

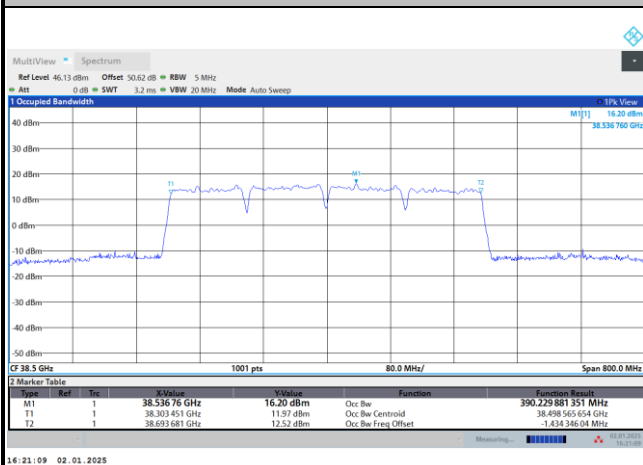
Lowest Channel / 400MHz / QPSK



Lowest Channel / 400MHz / 16QAM



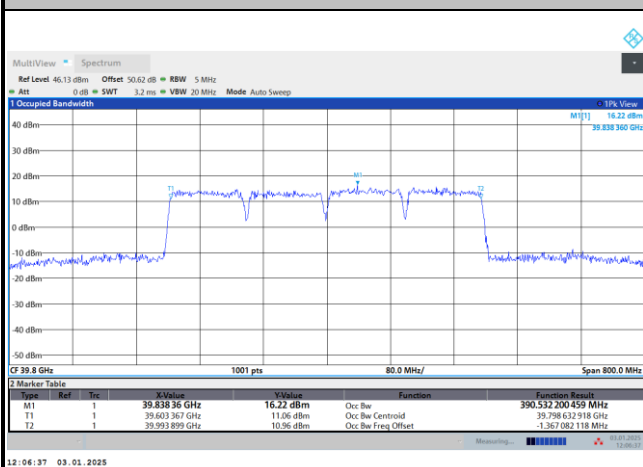
Middle Channel / 400MHz / QPSK



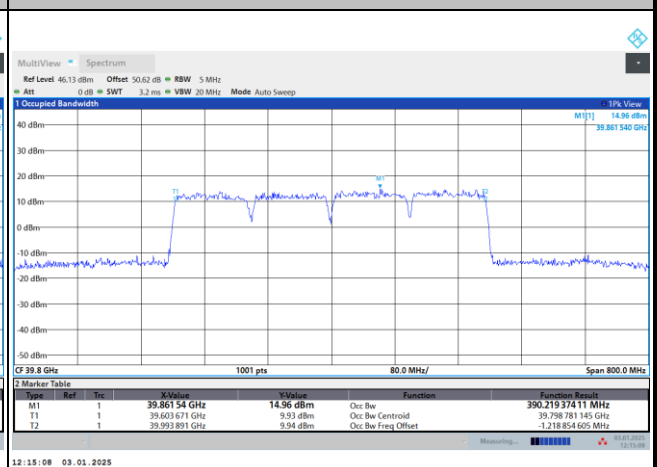
Middle Channel / 400MHz / 16QAM



Highest Channel / 400MHz / QPSK



Highest Channel / 400MHz / 16QAM

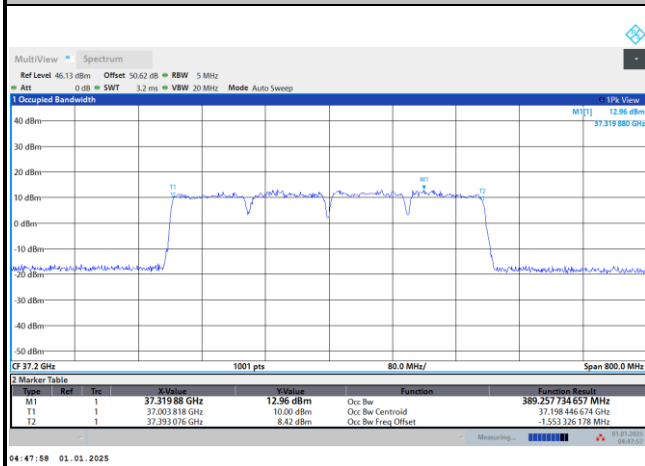




DFT-s-OFDM

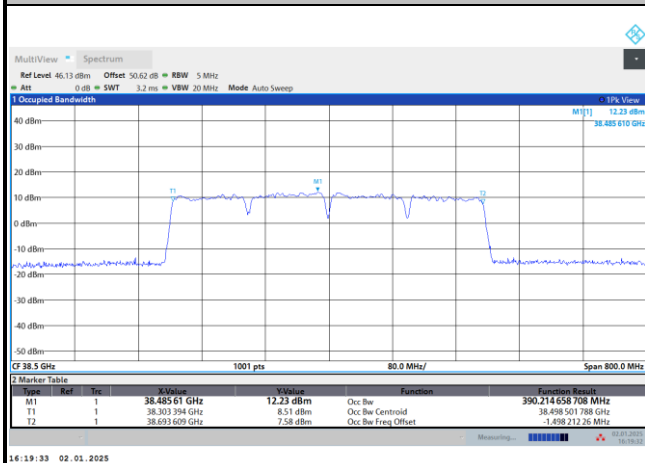
NR Band n260

Lowest Channel / 400MHz / 64QAM



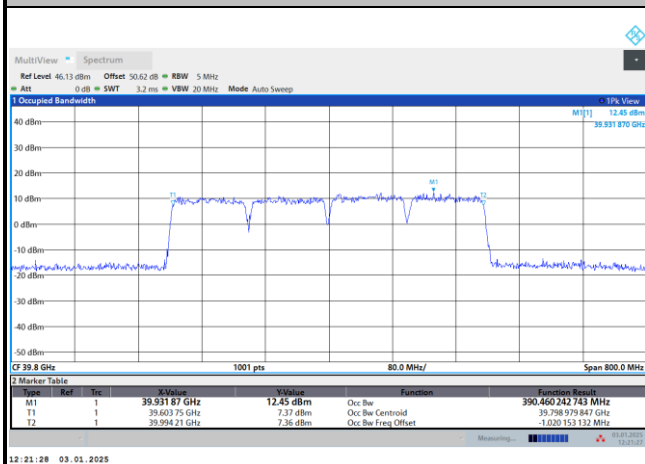
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Middle Channel / 400MHz / 64QAM



intentionally blank

Highest Channel / 400MHz / 64QAM



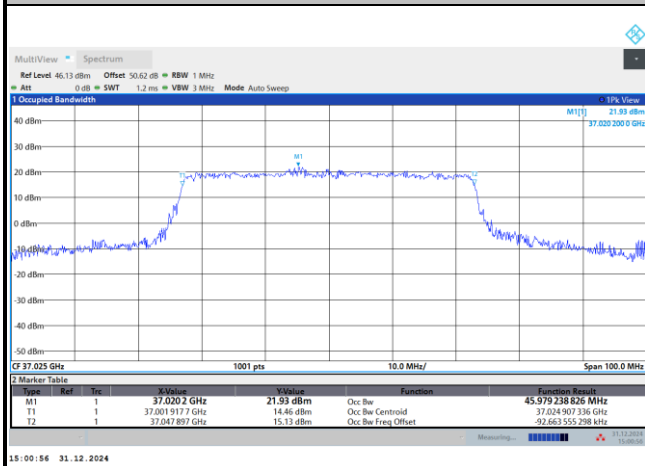
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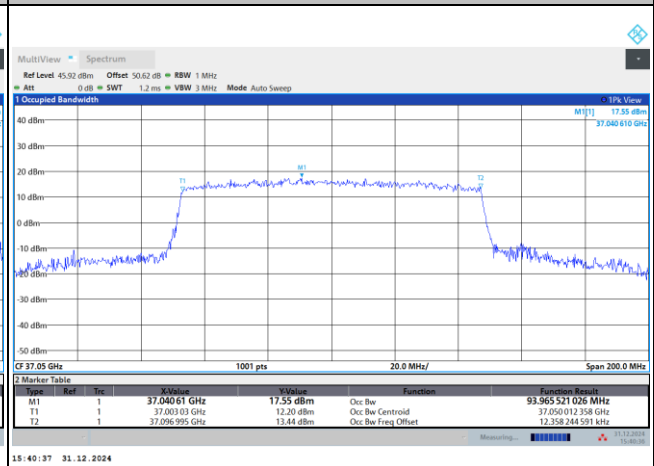
CP-OFDM

NR Band n260

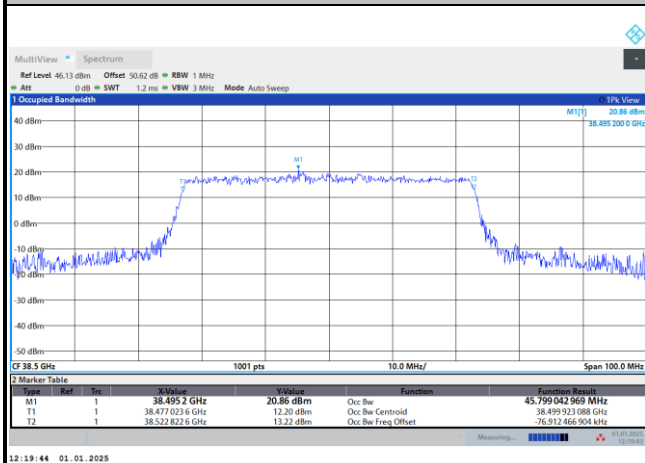
Lowest Channel / 50MHz / QPSK



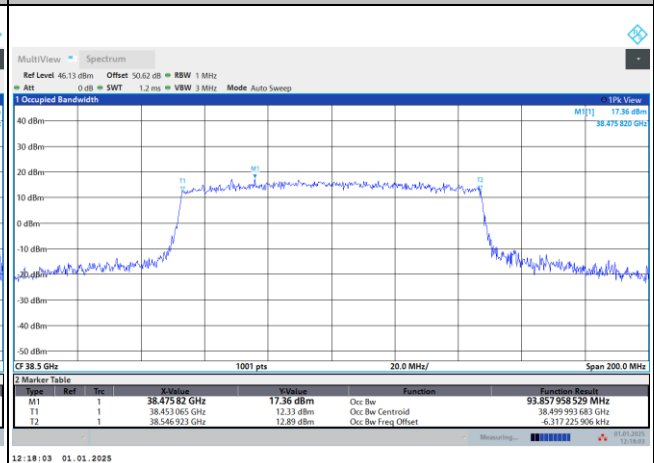
Lowest Channel / 100MHz / QPSK



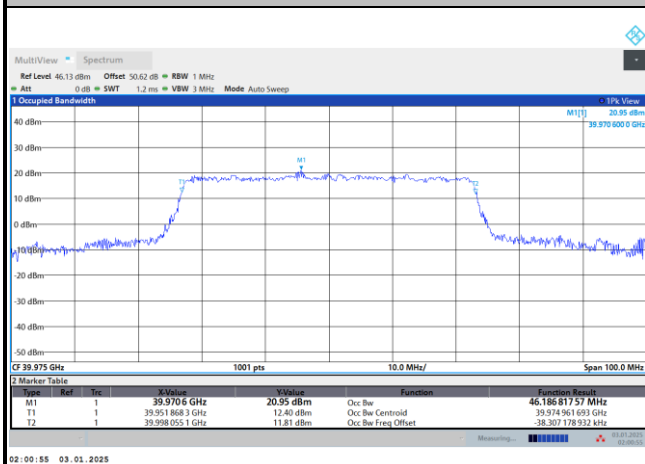
Middle Channel / 50MHz / QPSK



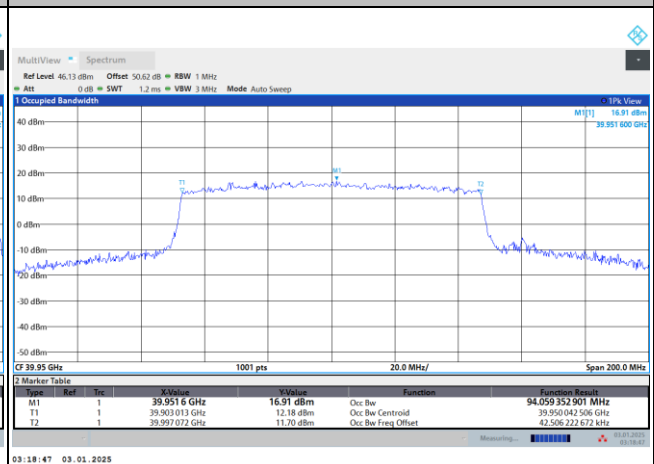
Middle Channel / 100MHz / QPSK



Highest Channel / 50MHz / QPSK



Highest Channel / 100MHz / QPSK

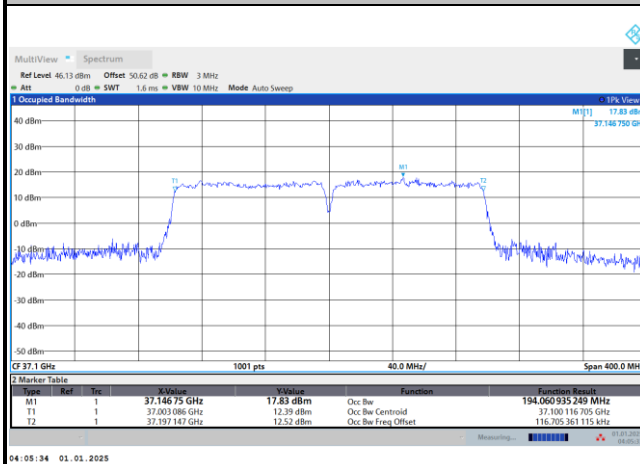




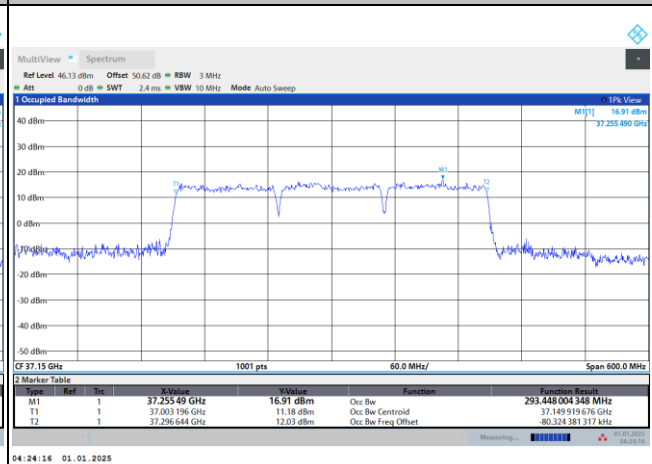
CP-OFDM

NR Band n260

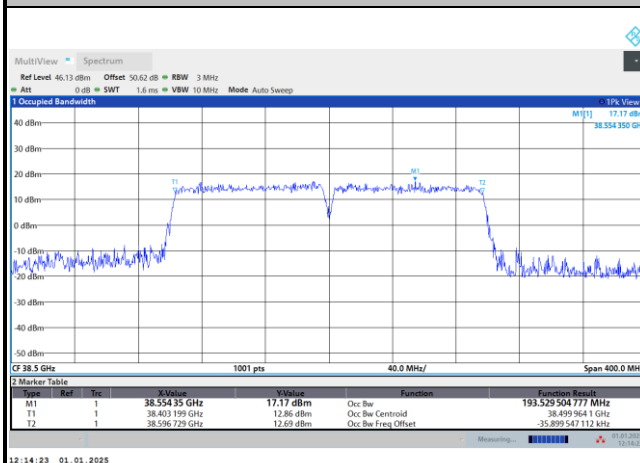
Lowest Channel / 200MHz / QPSK



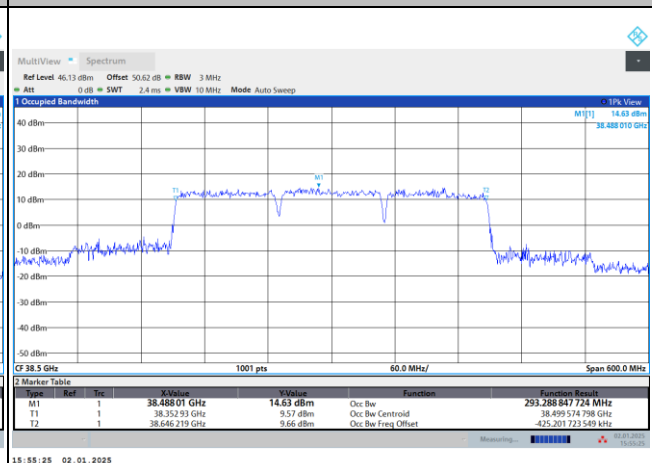
Lowest Channel / 300MHz / QPSK



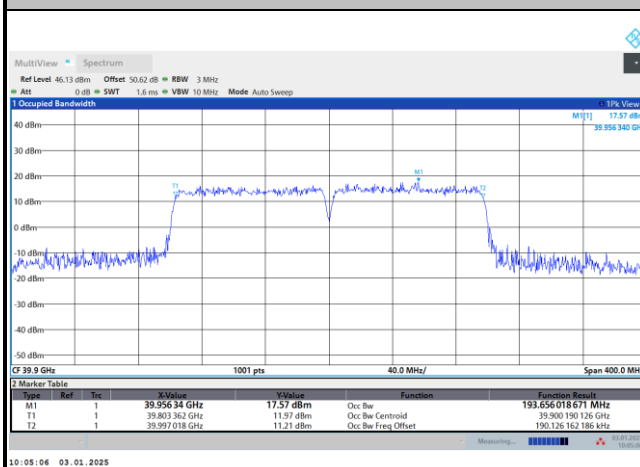
Middle Channel / 200MHz / QPSK



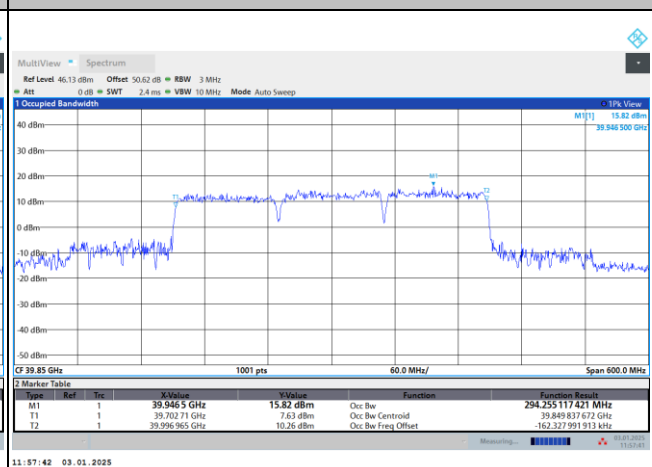
Middle Channel / 300MHz / QPSK



Highest Channel / 200MHz / QPSK



Highest Channel / 300MHz / QPSK

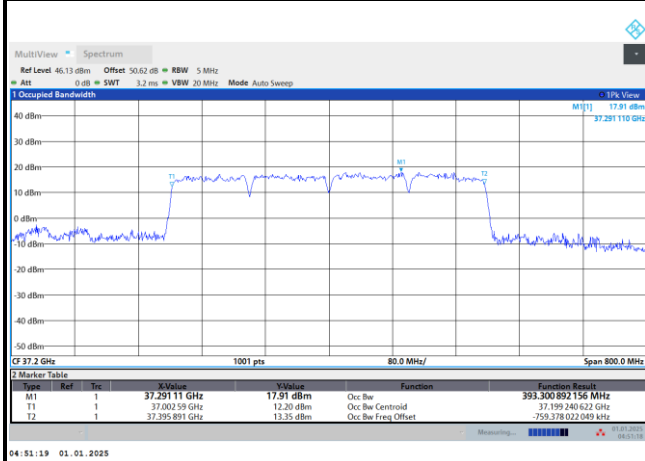




CP-OFDM

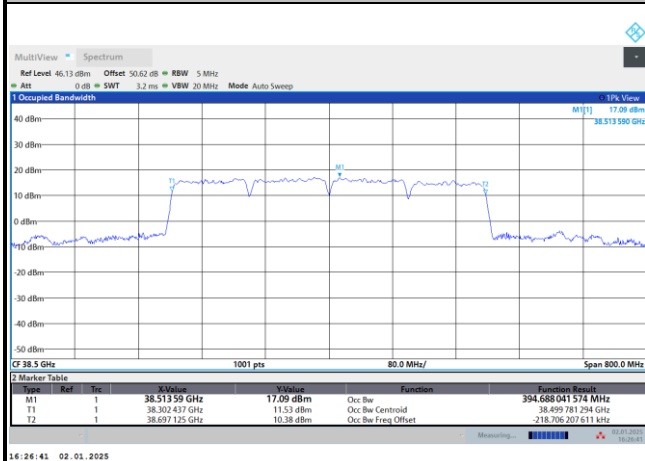
NR Band n260

Lowest Channel / 400MHz / QPSK



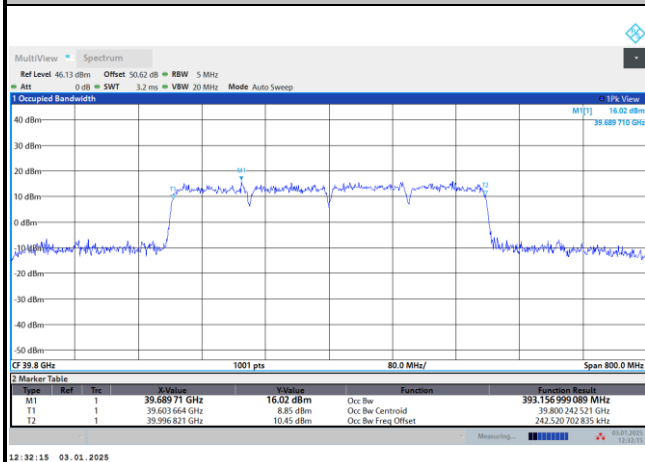
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Middle Channel / 400MHz / QPSK



intentionally blank

Highest Channel / 400MHz / QPSK



intentionally blank

Radiated Out of Band Emissions

Mode			DFT-s-OFDM NR Band n260 : 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	-21.322	-5.91	-6.63	-5.17	-7.99	-8.69	-11.21	-12.82	-15.63
	>10%OB	≤-13	-30.075	-22.35	-24.32	-27.59	-29.40	-30.27	-17.42	-22.01	-24.92
High CH	0~10%OB	≤-5	-20.229	-5.85	-8.92	-5.75	-8.28	-12.71	-11.46	-14.51	-15.94
	>10%OB	≤-13	-26.279	-21.42	-23.25	-25.28	-26.66	-29.02	-18.51	-22.63	-22.04
Result			Compliance								

Mode			DFT-s-OFDM NR Band n260 : BE (dBm) 1 RB					
BW			300MHz			400MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-31.175	-14.20	-18.32	-14.77	-15.04	-19.80
	>10%OB	≤-13	-23.329	-17.98	-20.67	-14.17	-21.11	-24.07
High CH	0~10%OB	≤-5	-15.27	-17.19	-20.03	-29.776	-16.93	-20.77
	>10%OB	≤-13	-15.16	-17.89	-21.25	-25.128	-18.36	-21.29
Result			Compliance					

Mode			CP-OFDM NR Band n260 : BE (dBm) 1 RB		
BW			50MHz	100MHz	200MHz
TRP Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≤-5	-22.471	-5.69	-10.26
	>10%OB	≤-13	-31.051	-28.74	-17.86
High CH	0~10%OB	≤-5	-7.75	-7.84	-11.09
	>10%OB	≤-13	-20.59	-26.97	-15.08
Result			Compliance		

Mode			CP-OFDM NR Band n260 : BE (dBm) 1 RB	
BW			300MHz	400MHz
TRP Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤-5	-31.770	-31.758
	>10%OB	≤-13	-21.053	-24.960
High CH	0~10%OB	≤-5	-15.38	-29.521
	>10%OB	≤-13	-13.49	-23.422
Result			Compliance	

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

= 43.8 + 4.62 + 107 + 20log(1) -104.8 = 50.62 (dB)

Mode			DFT-s-OFDM NR Band n260 : 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	-12.88	-16.55	-17.85	-17.18	-19.31	-19.73	-22.36	-24.14	-28.40
	>10%OB	≤-13	-17.92	-21.46	-25.90	-26.21	-28.10	-30.98	-30.65	-32.19	-32.31
High CH	0~10%OB	≤-5	-13.03	-15.90	-17.87	-18.82	-21.39	-24.70	-26.87	-28.49	-29.18
	>10%OB	≤-13	-16.83	-19.30	-23.52	-21.70	-24.25	-27.81	-29.57	-30.42	-31.25
Result			Compliance								

Mode			DFT-s-OFDM NR Band n260 : BE (dBm) Full RB					
BW			300MHz			400MHz		
TRP Limit (dBm)			QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Low CH	0~10%OB	≤-5	-24.62	-25.17	-27.41	-24.83	-27.01	-30.93
	>10%OB	≤-13	-29.08	-31.66	-32.25	-28.40	-31.37	-32.12
High CH	0~10%OB	≤-5	-27.46	-28.68	-29.79	-26.83	-28.70	-30.47
	>10%OB	≤-13	-27.34	-29.16	-30.83	-26.10	-28.10	-29.74
Result			Compliance					

Mode			CP-OFDM NR Band n260 : BE (dBm) Full RB		
BW			50MHz	100MHz	200MHz
TRP Limit (dBm)			QPSK	QPSK	QPSK
Low CH	0~10%OB	≤-5	-15.05	-18.15	-21.71
	>10%OB	≤-13	-18.99	-24.80	-28.79
High CH	0~10%OB	≤-5	-13.86	-18.38	-21.94
	>10%OB	≤-13	-16.20	-20.74	-28.49
Result			Compliance		

Mode			CP-OFDM NR Band n260 : BE (dBm) Full RB	
BW			300MHz	400MHz
TRP Limit (dBm)			QPSK	QPSK
Low CH	0~10%OB	≤-5	-22.45	-22.08
	>10%OB	≤-13	-26.30	-25.16
High CH	0~10%OB	≤-5	-23.95	-24.63
	>10%OB	≤-13	-26.03	-25.39
Result			Compliance	

Note: Spectrum Offset = Antenna Factor (dB/m) + Cable Loss (dB) + 107 + 20log (D) -104.8
= 43.8 + 4.62 + 107 + 20log(1) -104.8 = 50.62 (dB)

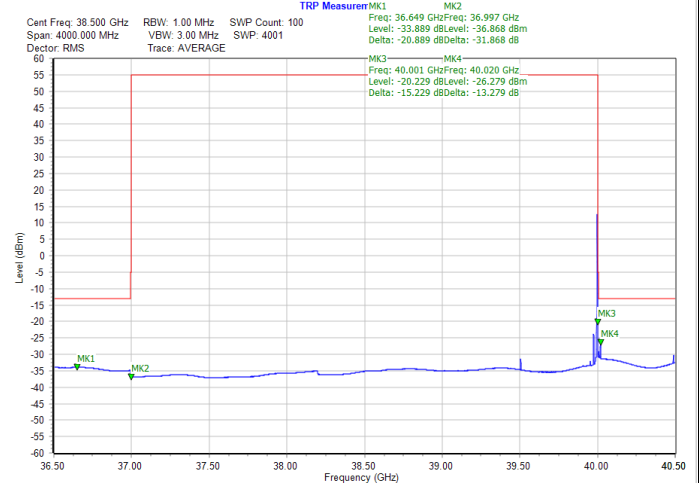
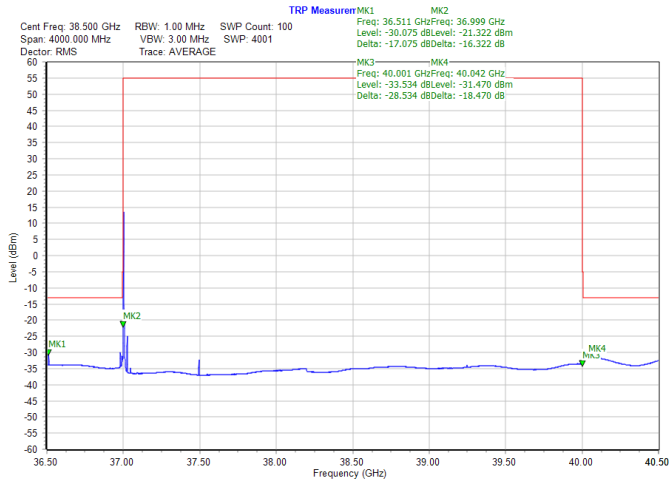


DFT-s-OFDM

NR Band n260 / 50MHz / QPSK

Lowest Band Edge / 1 RB

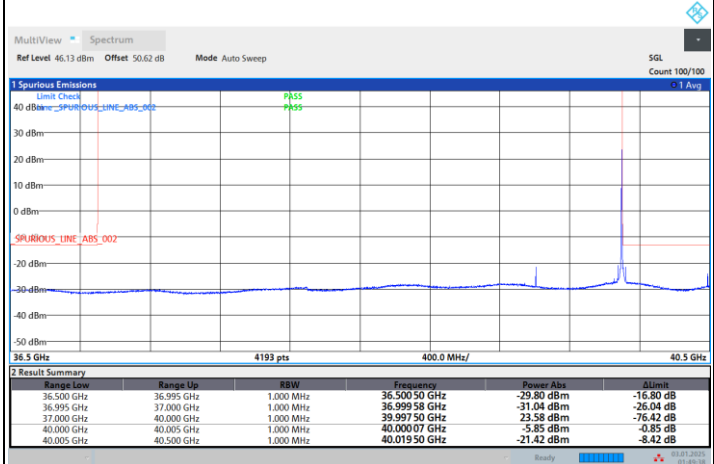
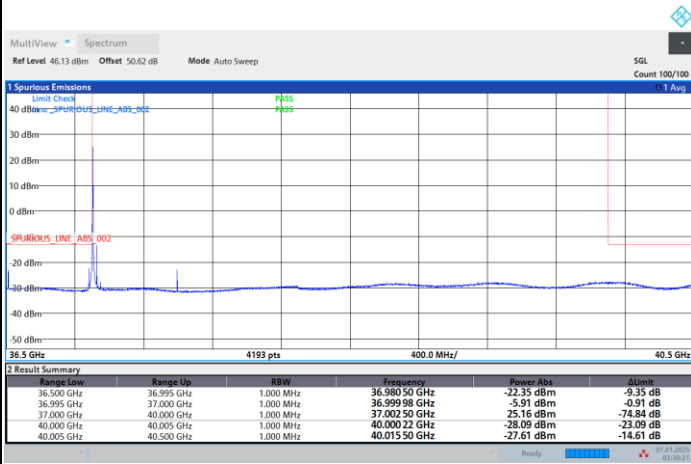
Highest Band Edge / 1 RB



NR Band n260 / 50MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

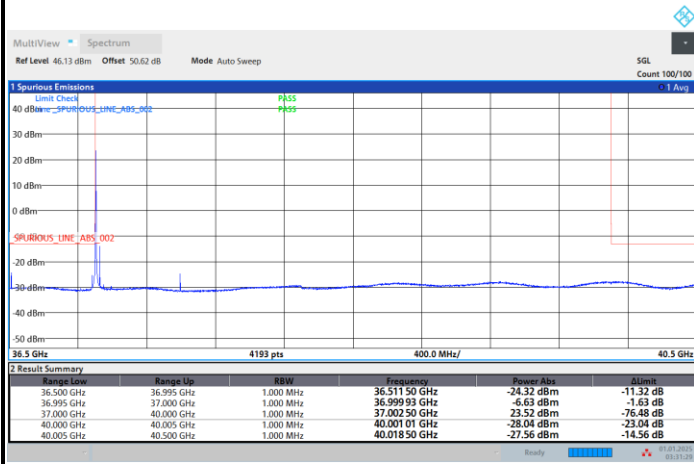




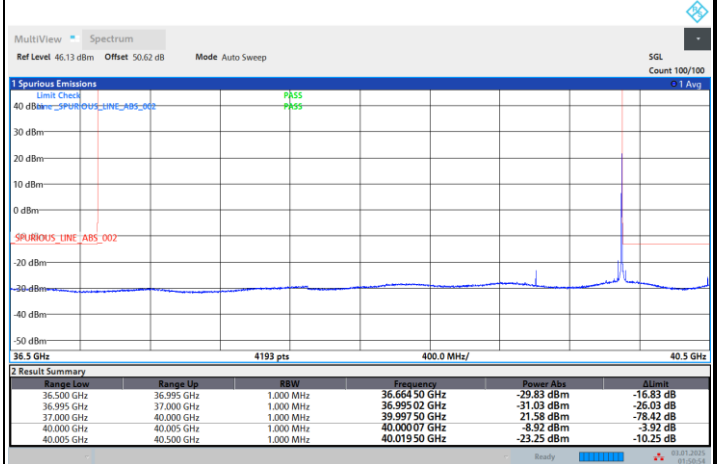
DFT-s-OFDM

NR Band n260 / 50MHz / 64QAM

Lowest Band Edge / 1 RB

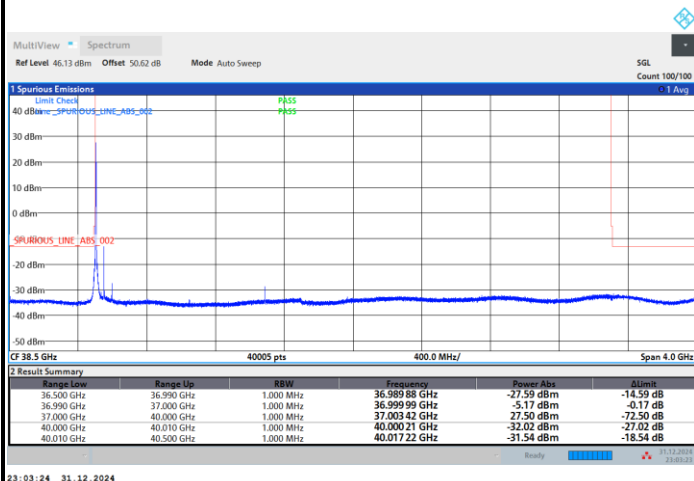


Highest Band Edge / 1 RB



NR Band n260 / 100MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB

