

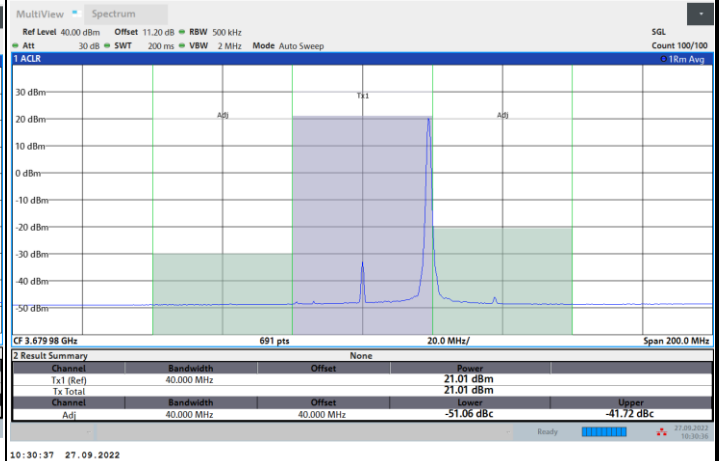
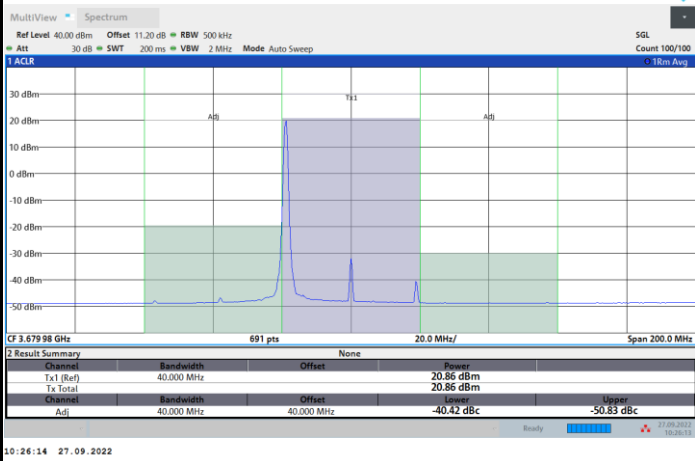


FR1 n48 / 40MHz / DFT-S OFDM / PI/2 BPSK

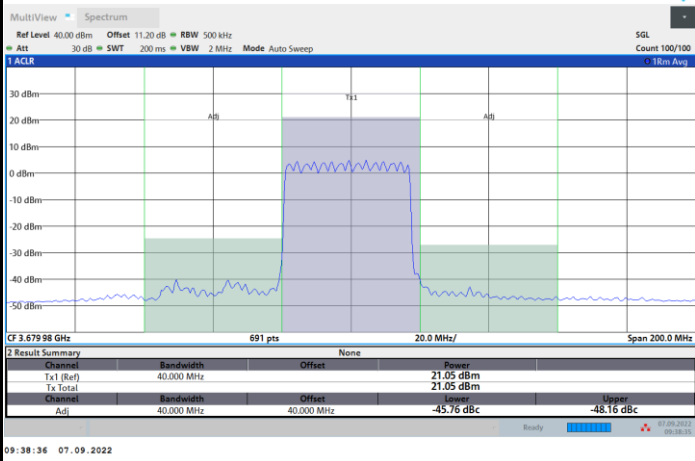
Highest Channel

1RB0

1RBmax



Full RB



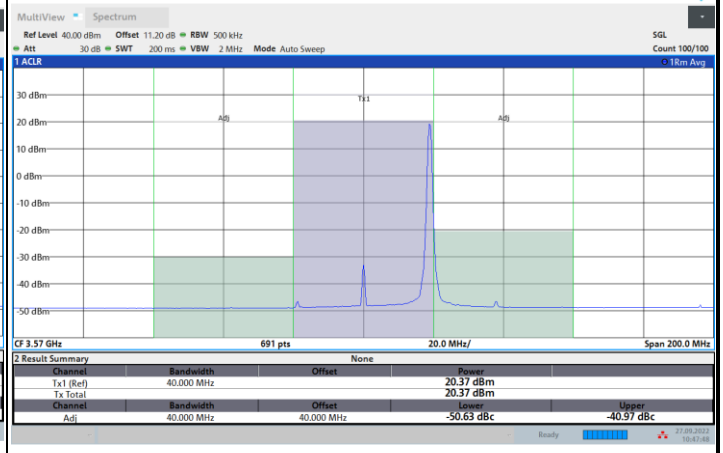
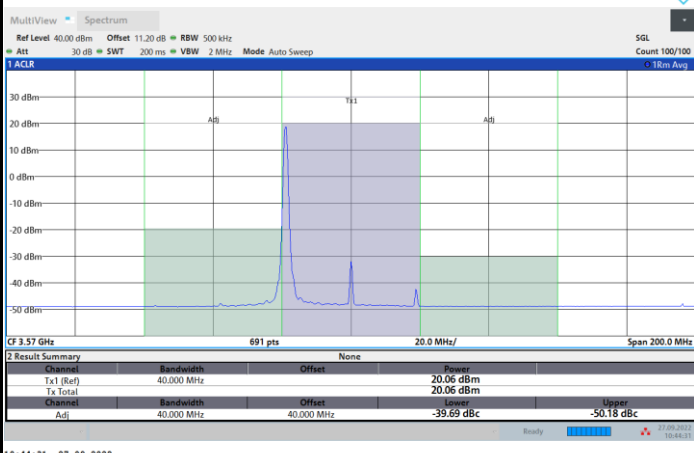


FR1 n48 / 40MHz / DFT-S OFDM / QPSK

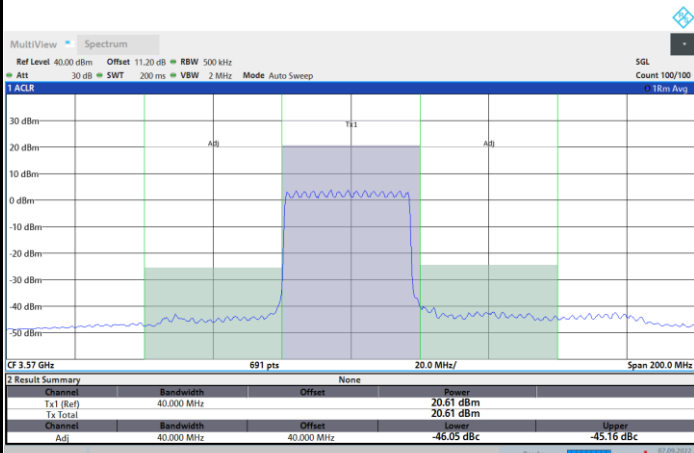
Lowest Channel

1RB0

1RBmax



Full RB



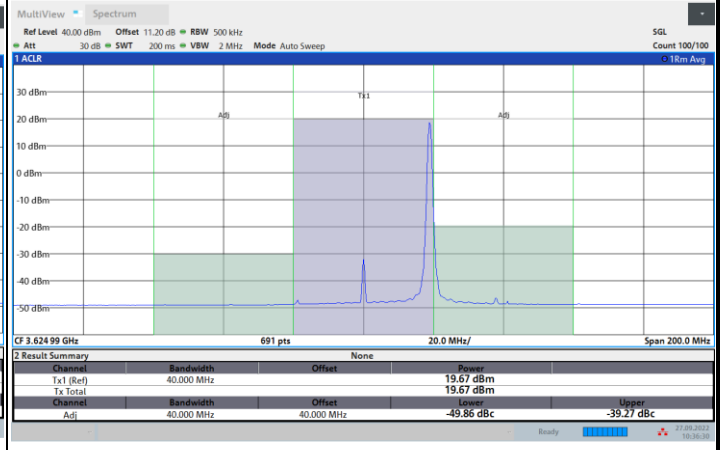
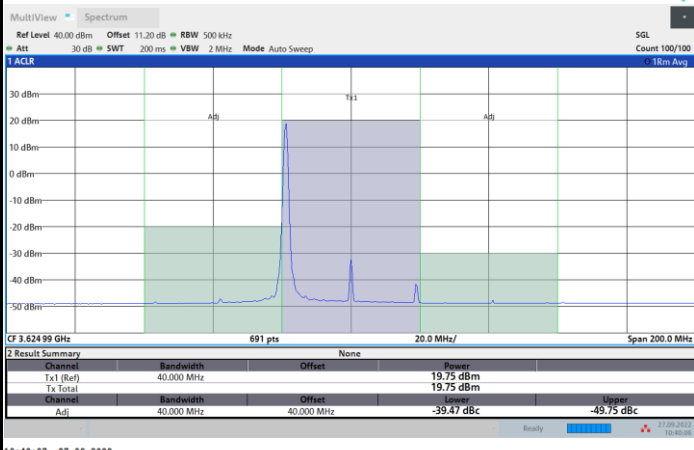


FR1 n48 / 40MHz / DFT-S OFDM / QPSK

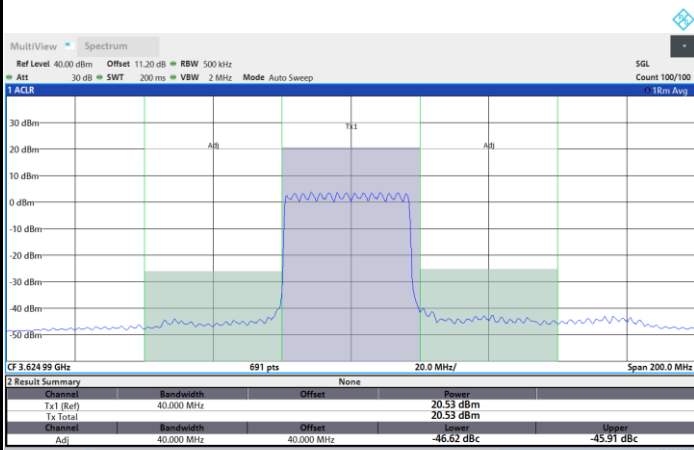
Middle Channel

1RB0

1RBmax



Full RB



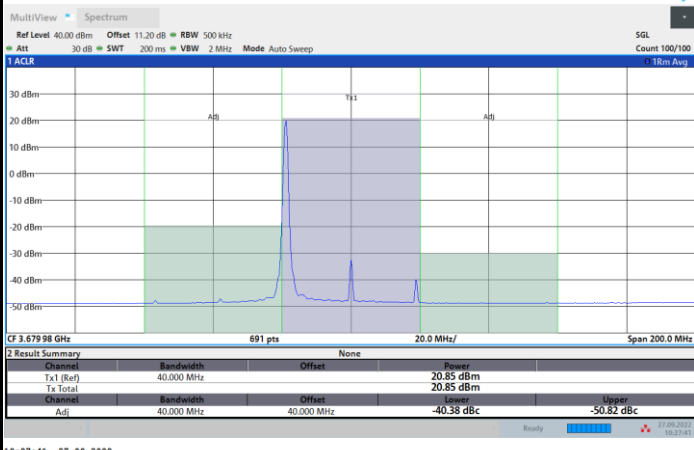


FR1 n48 / 40MHz / DFT-S OFDM / QPSK

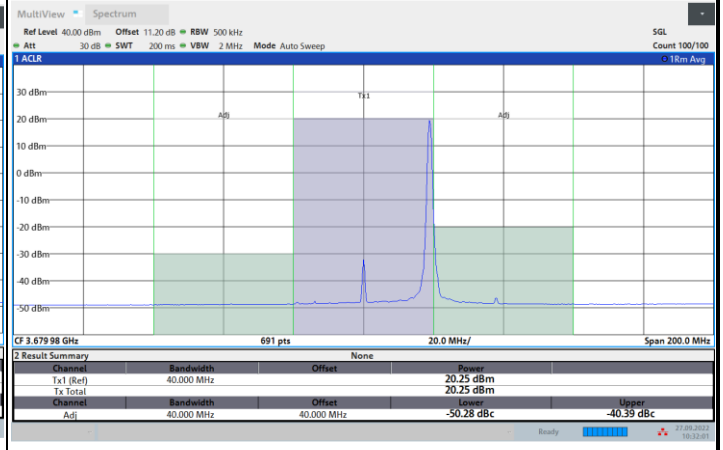
Highest Channel

1RB0

1RBmax

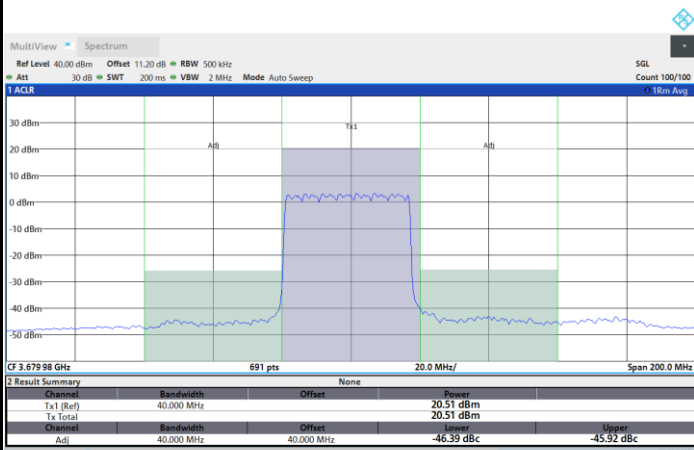


10:27:41 27.09.2022



10:32:02 27.09.2022

Full RB



09:39:33 07.09.2022

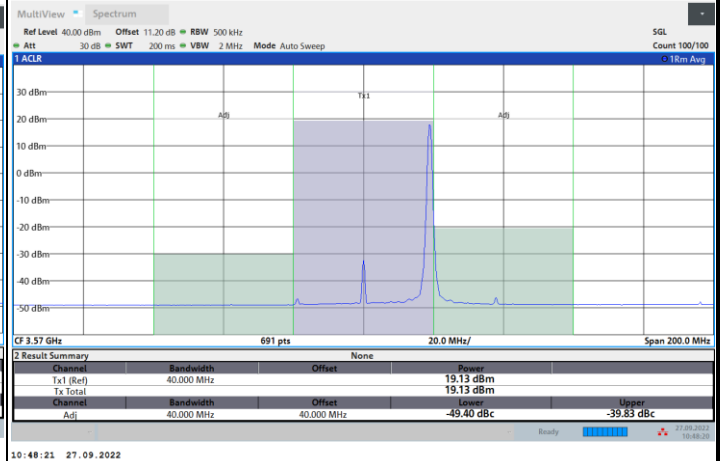
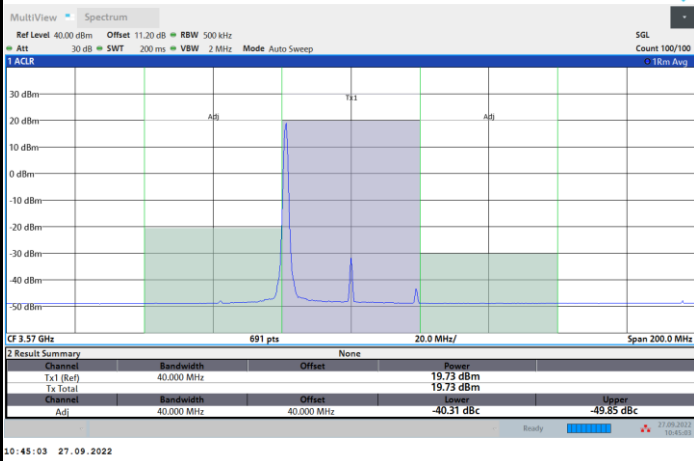


FR1 n48 / 40MHz / DFT-S OFDM / 16QAM

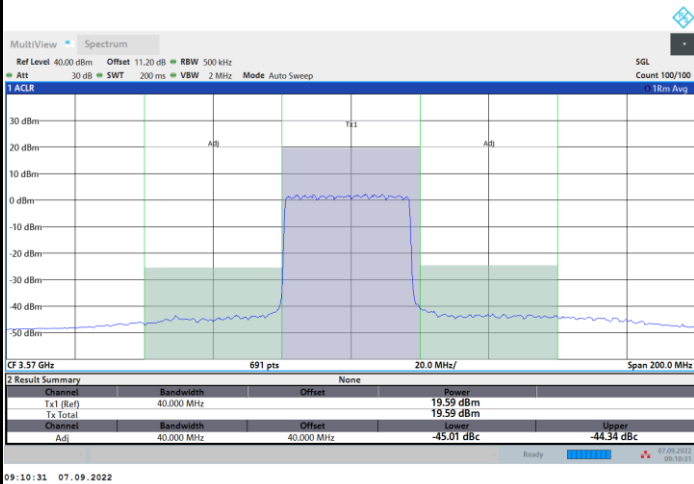
Lowest Channel

1RB0

1RBmax



Full RB



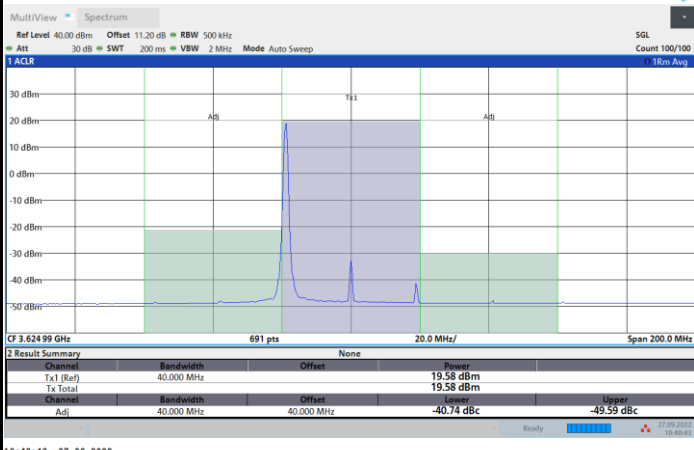


FR1 n48 / 40MHz / DFT-S OFDM / 16QAM

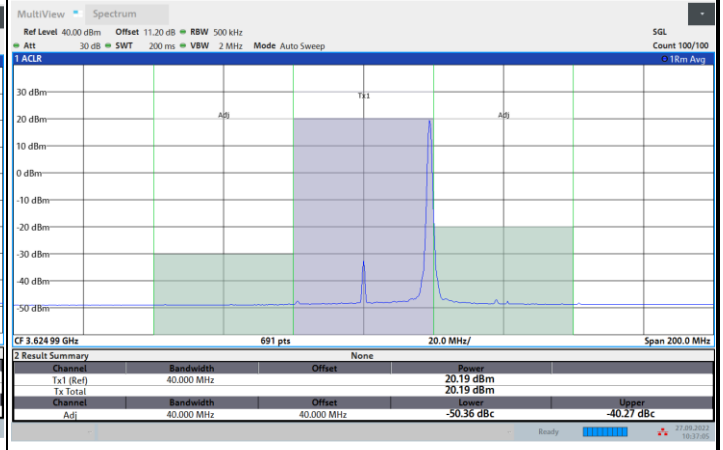
Middle Channel

1RB0

1RBmax

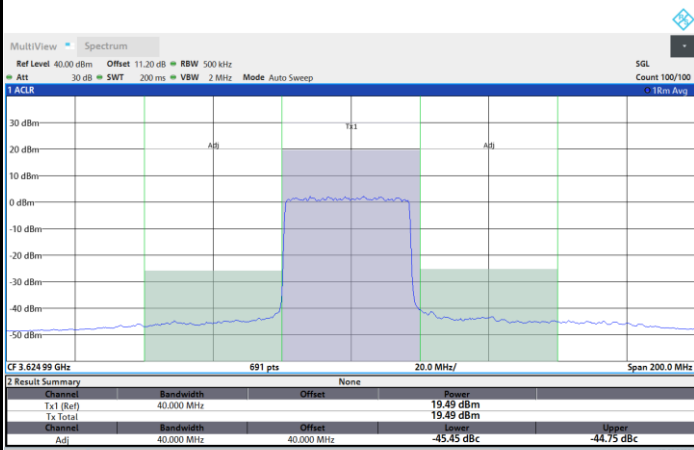


10:40:43 27.09.2022



10:37:06 27.09.2022

Full RB



09:27:38 07.09.2022

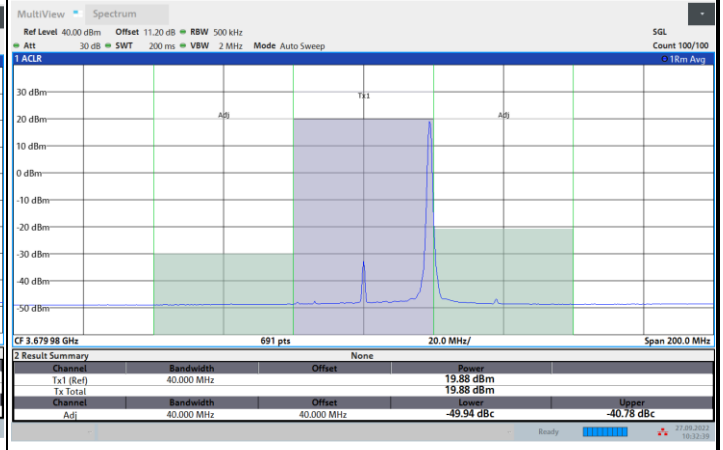
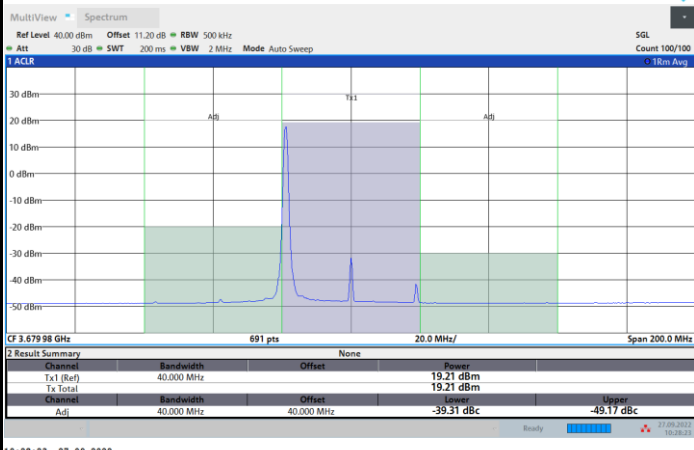


FR1 n48 / 40MHz / DFT-S OFDM / 16QAM

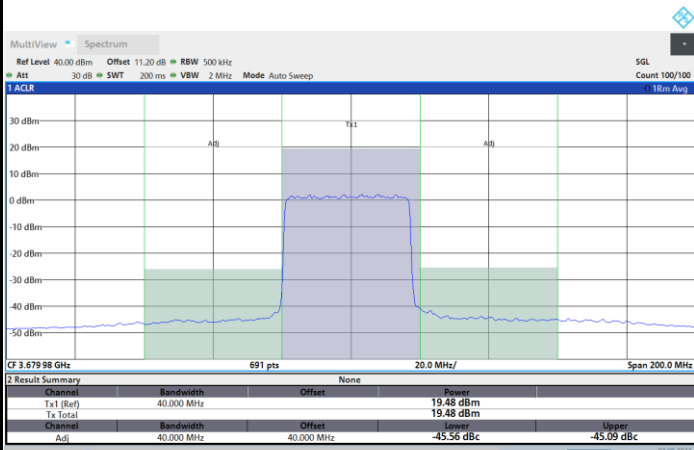
Highest Channel

1RB0

1RBmax



Full RB



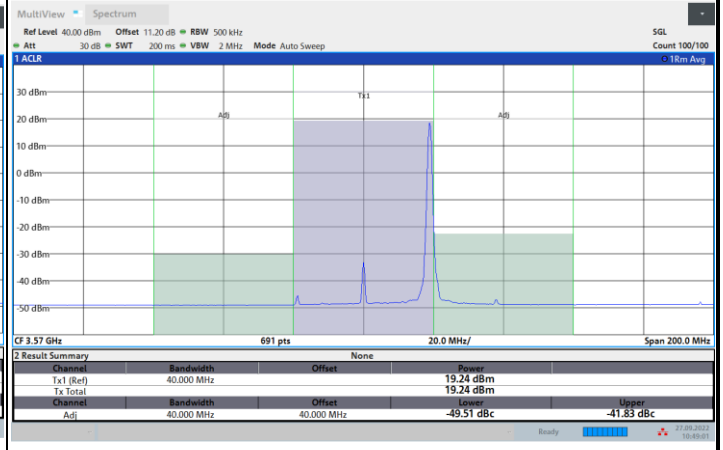
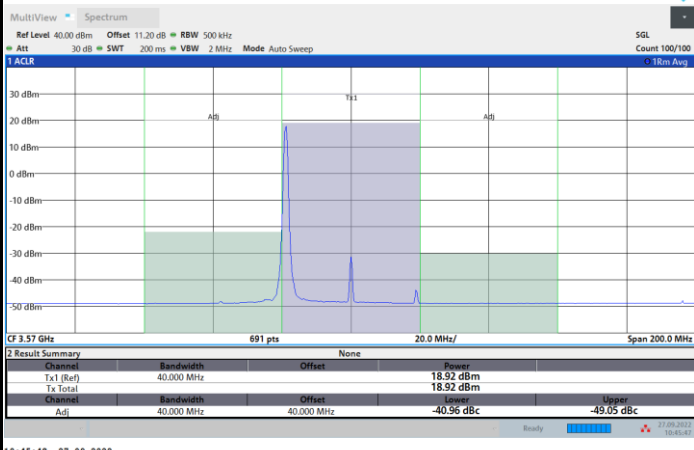


FR1 n48 / 40MHz / DFT-S OFDM / 64QAM

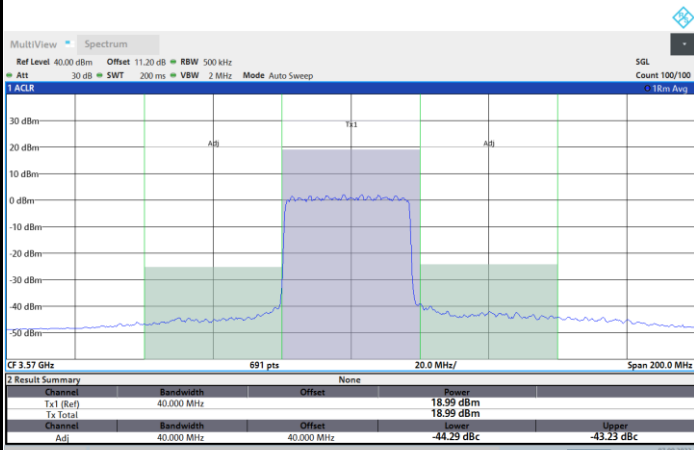
Lowest Channel

1RB0

1RBmax



Full RB



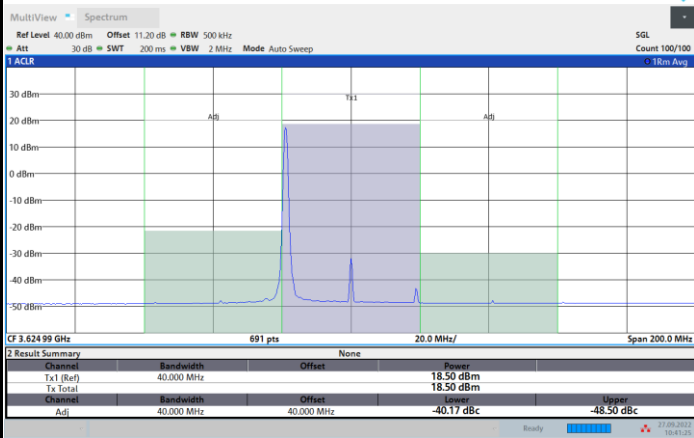


FR1 n48 / 40MHz / DFT-S OFDM / 64QAM

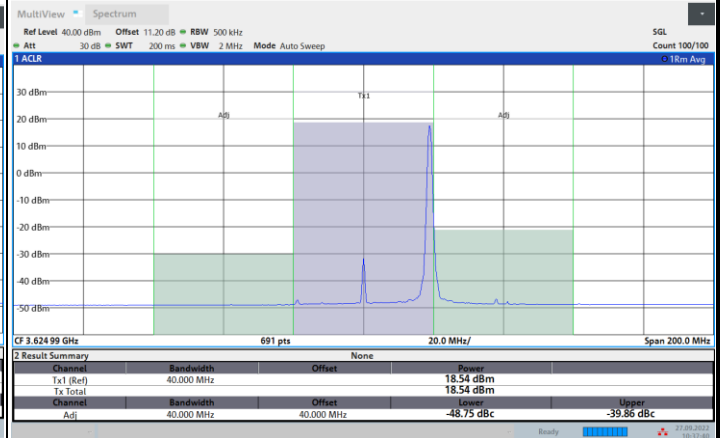
Middle Channel

1RB0

1RBmax

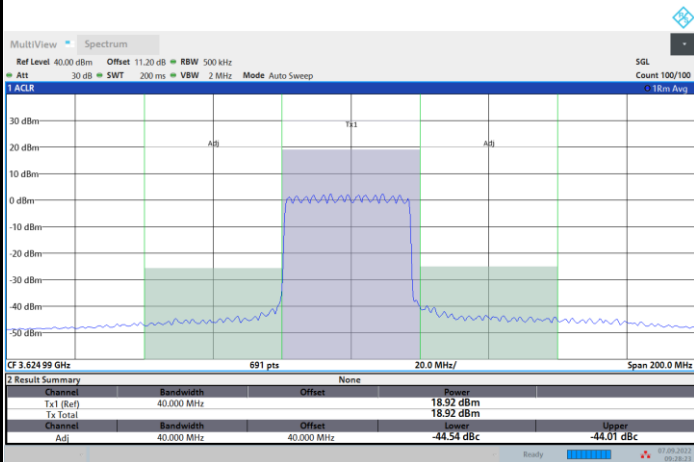


10:41:26 27.09.2022



10:37:40 27.09.2022

Full RB



09:28:23 07.09.2022

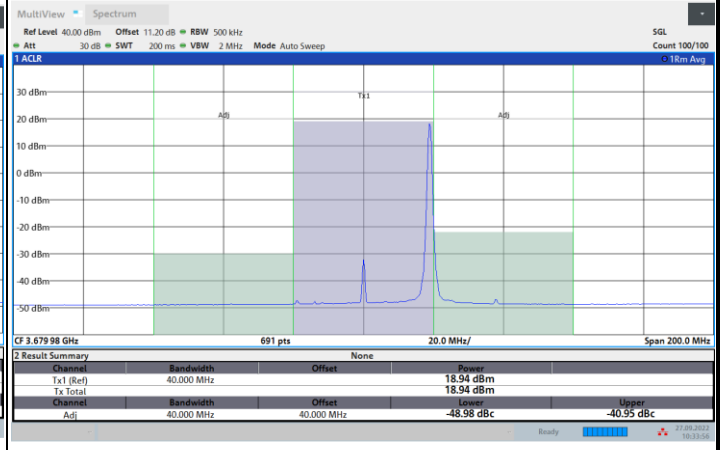
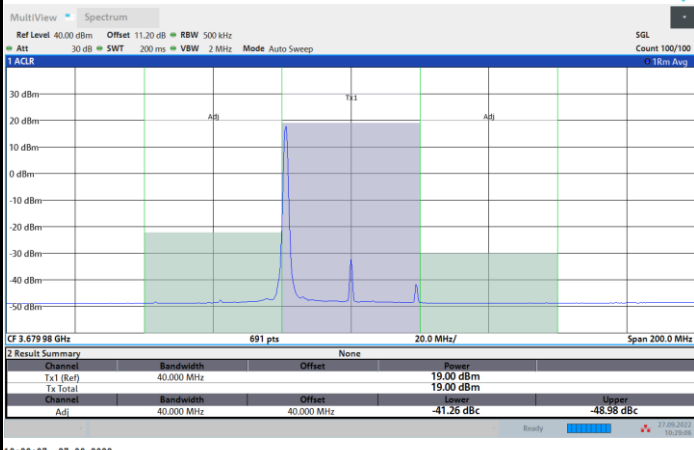


FR1 n48 / 40MHz / DFT-S OFDM / 64QAM

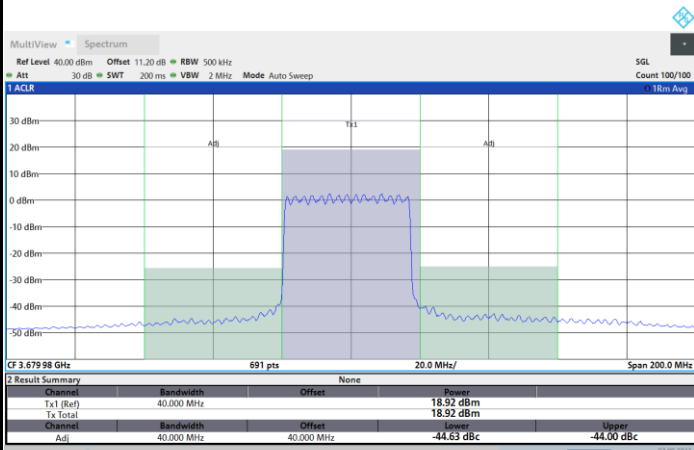
Highest Channel

1RB0

1RBmax



Full RB



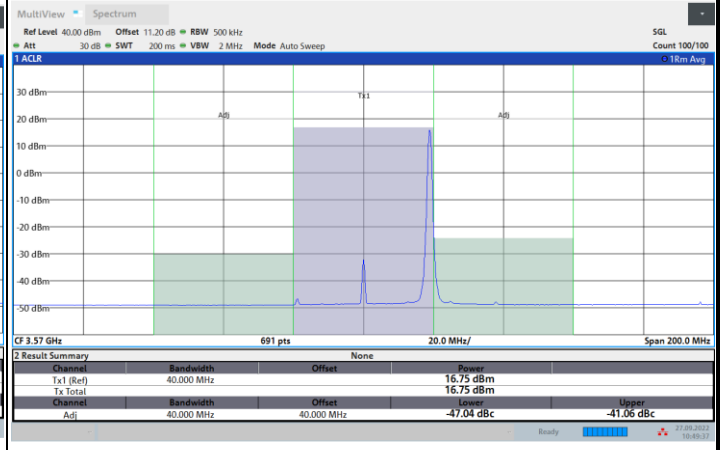
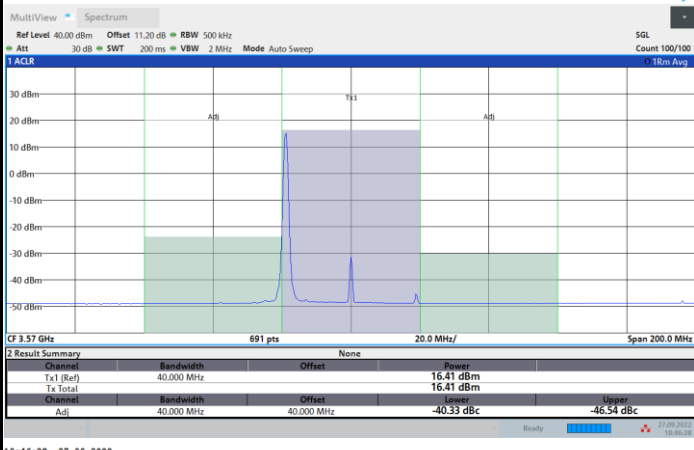


FR1 n48 / 40MHz / DFT-S OFDM / 256QAM

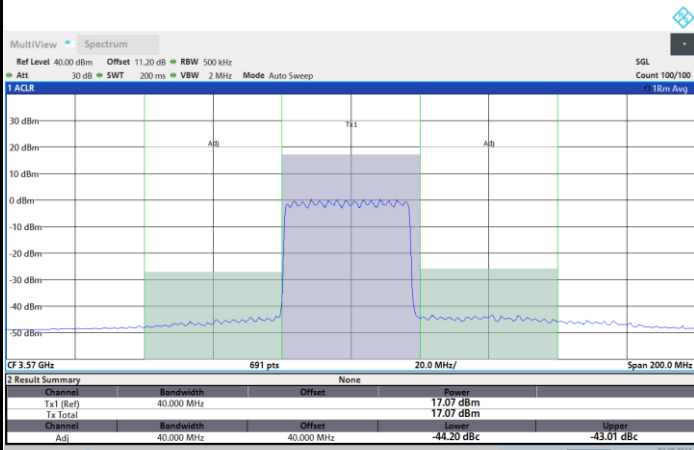
Lowest Channel

1RB0

1RBmax



Full RB



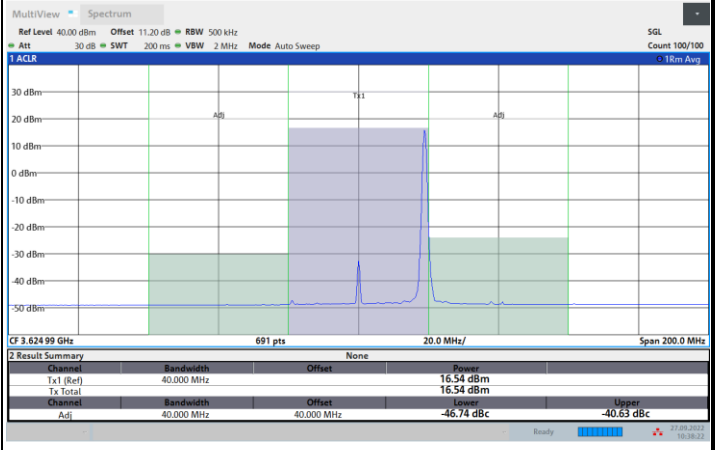
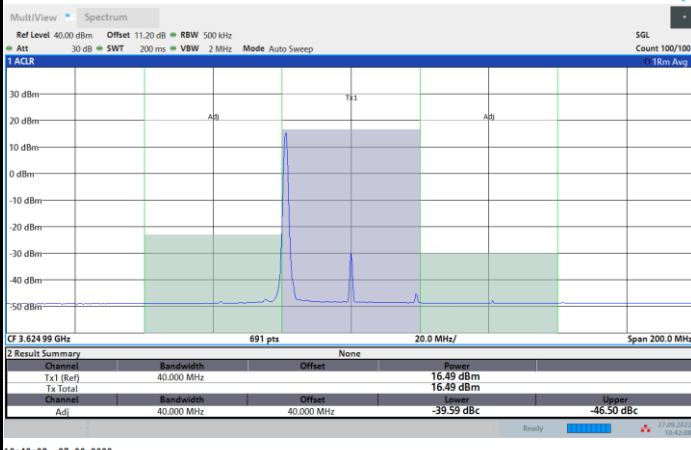


FR1 n48 / 40MHz / DFT-S OFDM / 256QAM

Middle Channel

1RB0

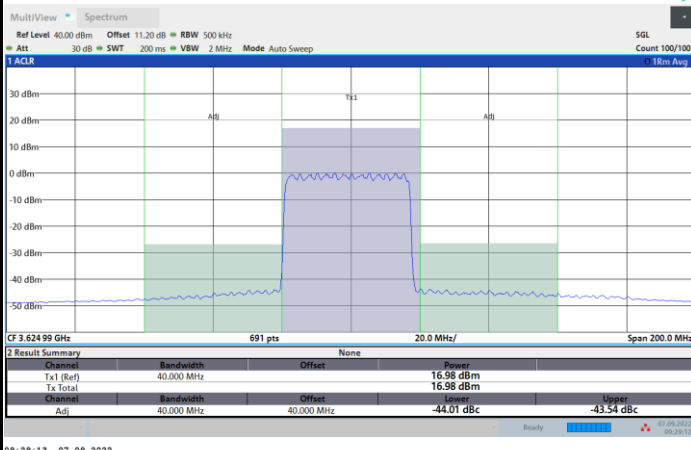
1RBmax



10:42:08 27.09.2022

10:38:23 27.09.2022

Full RB



09:29:13 07.09.2022

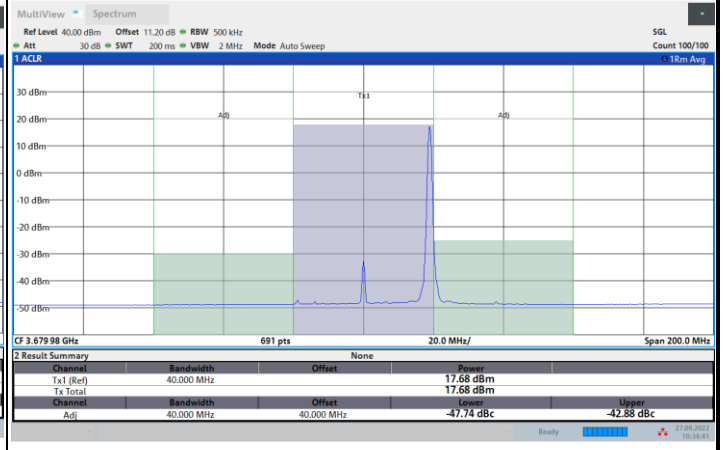
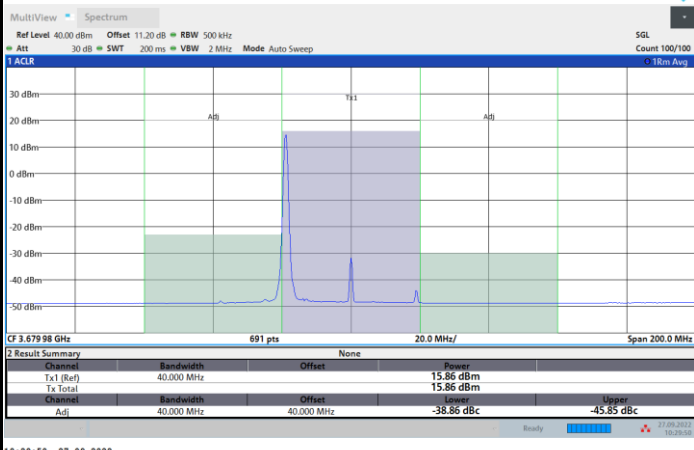


FR1 n48 / 40MHz / DFT-S OFDM / 256QAM

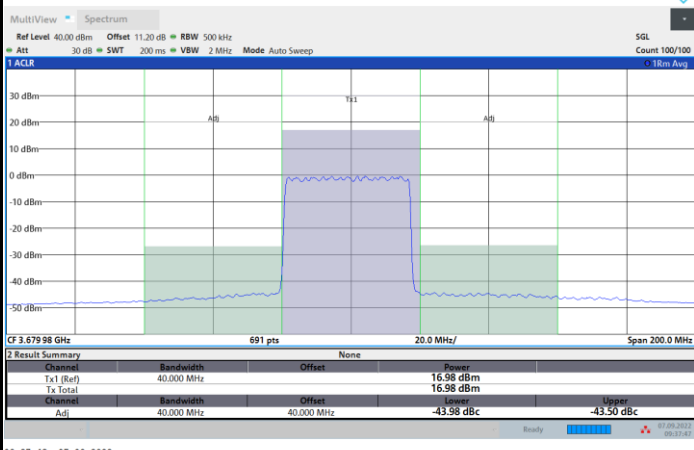
Highest Channel

1RB0

1RBmax



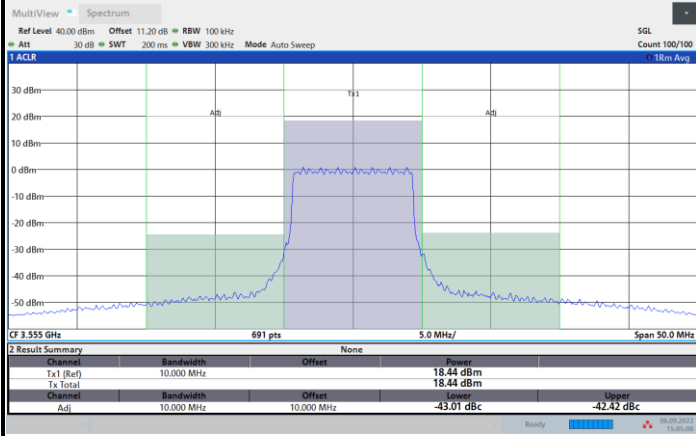
Full RB





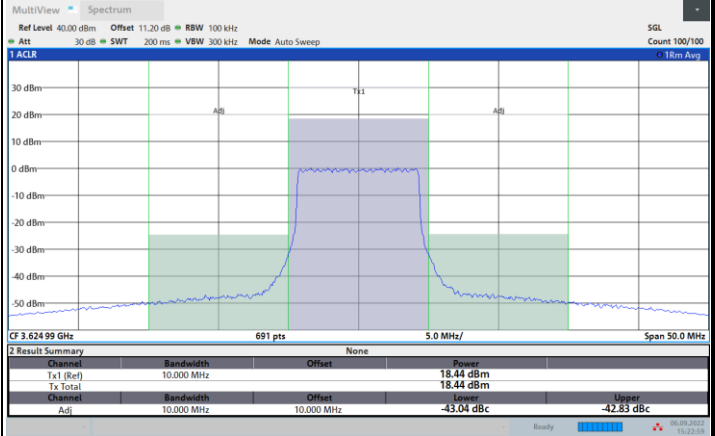
FR1 n48 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Channel



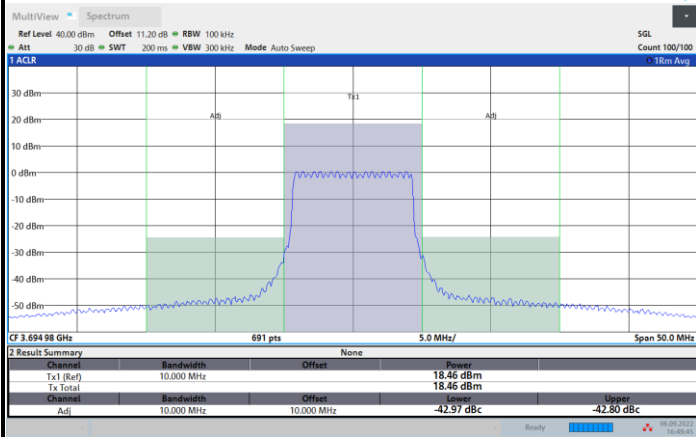
15:05:07 06.09.2022

Middle Channel



15:22:59 06.09.2022

Highest Channel

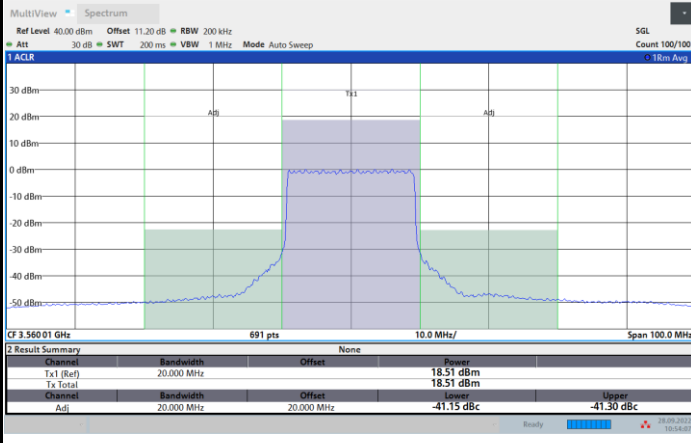


16:49:45 06.09.2022



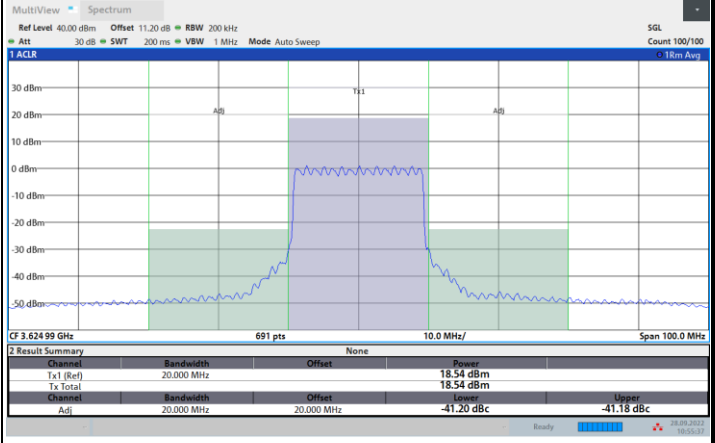
FR1 n48 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Channel



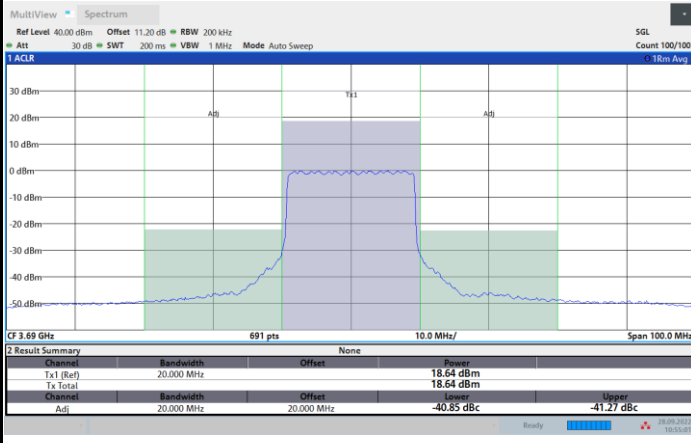
10:54:08 28.09.2022

Middle Channel



10:55:38 28.09.2022

Highest Channel



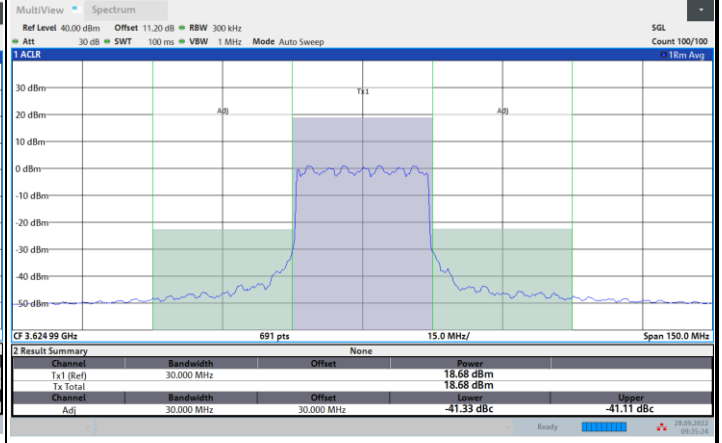
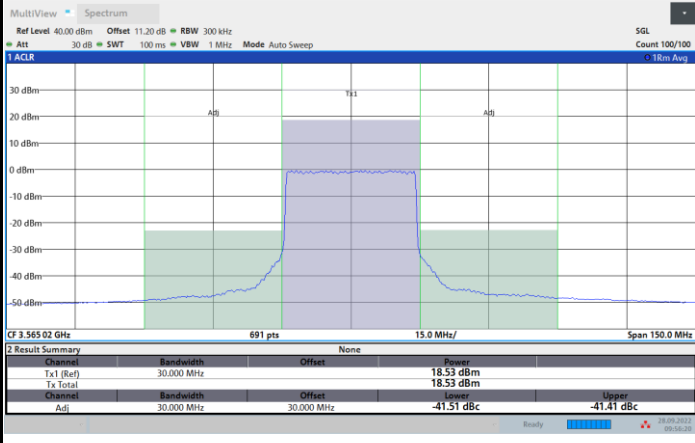
10:55:01 28.09.2022



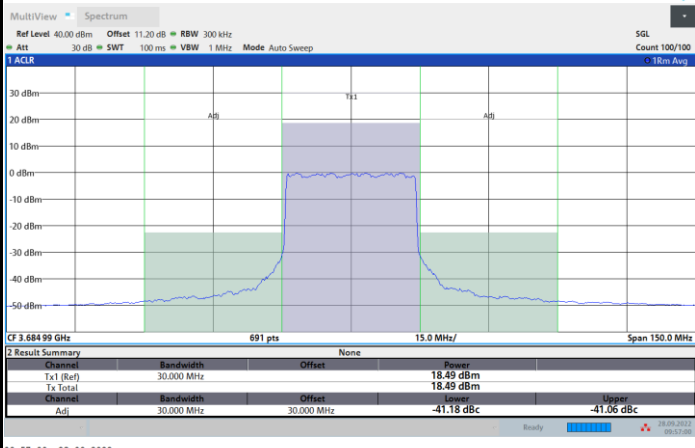
FR1 n48 / 30MHz / CP OFDM / QPSK / Full RB

Lowest Channel

Middle Channel



Highest Channel

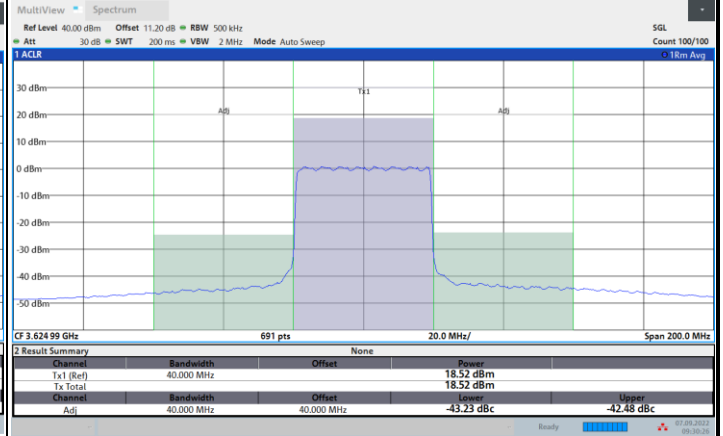
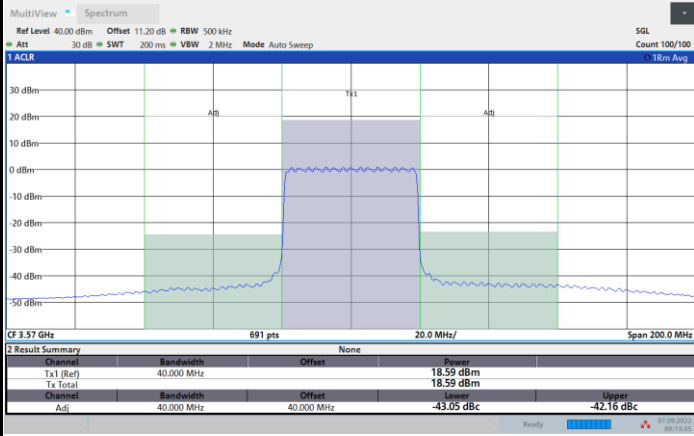




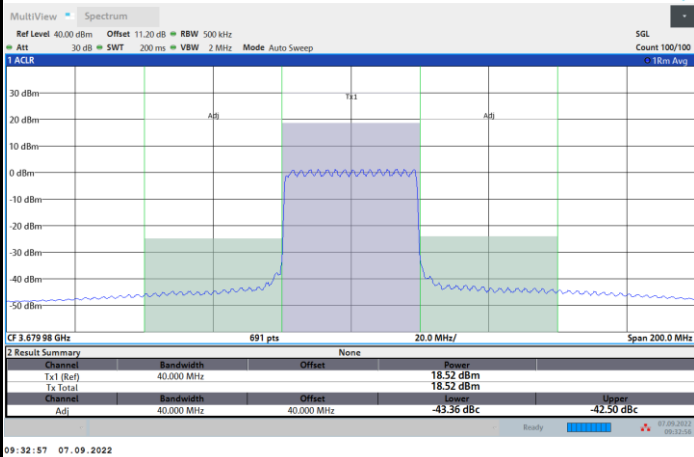
FR1 n48 / 40MHz / CP OFDM / QPSK / Full RB

Lowest Channel

Middle Channel



Highest Channel



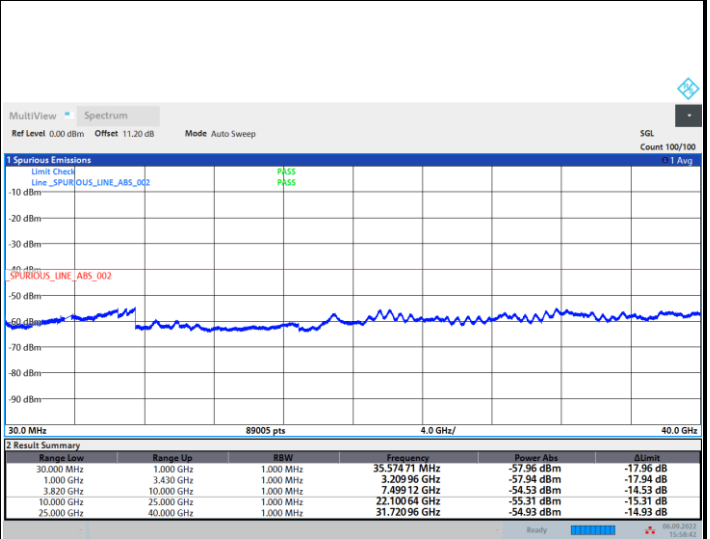
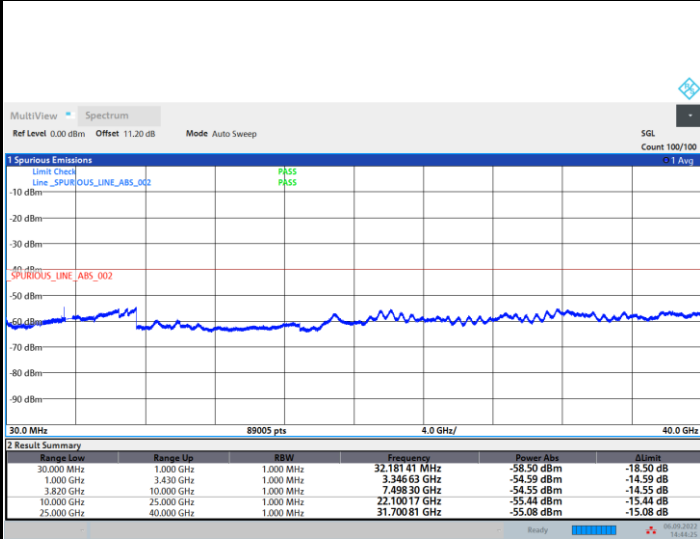


Conducted Spurious Emission

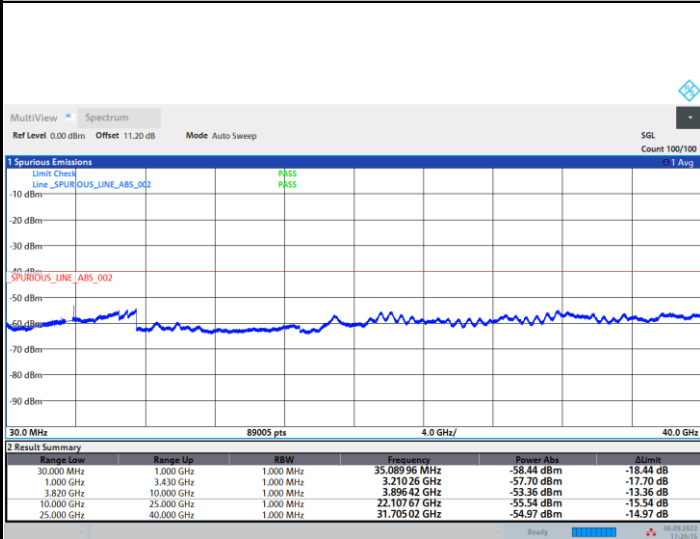
FR1 n48 / 10MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel



**Frequency Stability**

Test Conditions		FR1 n48 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0039	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0049	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0054	
20	Maximum Voltage	0.0033	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

Note:

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 3.63 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n77

<SISO Mode>

Peak-to-Average Ratio

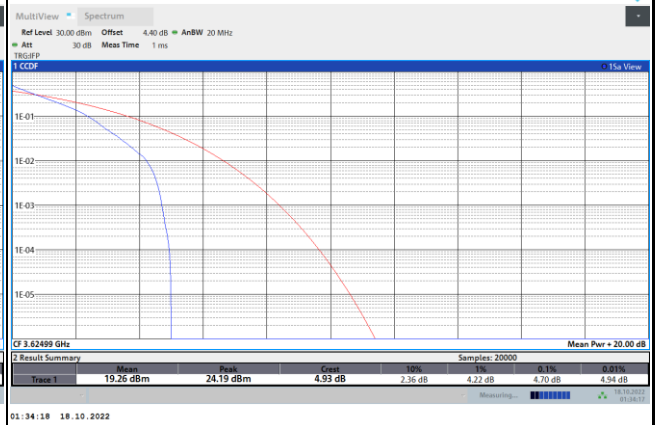
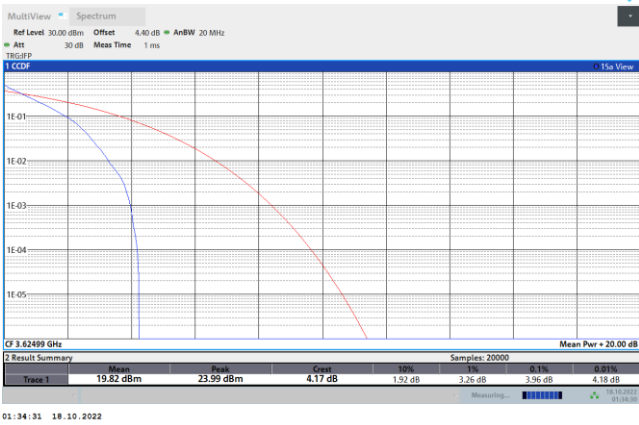
Mode	FR1 N77 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.96	4.70	5.68	6.08	PASS
Mode	FR1 N77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.46				PASS



FR1 N77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

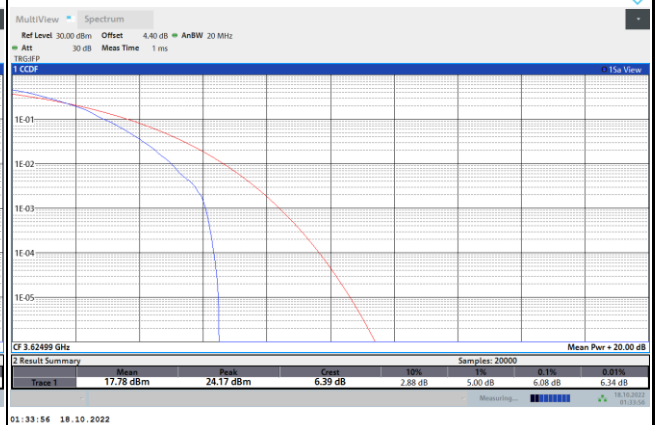
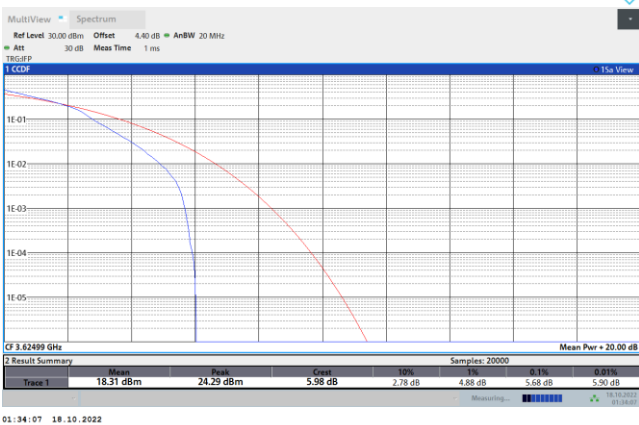
PI/2 BPSK

QPSK

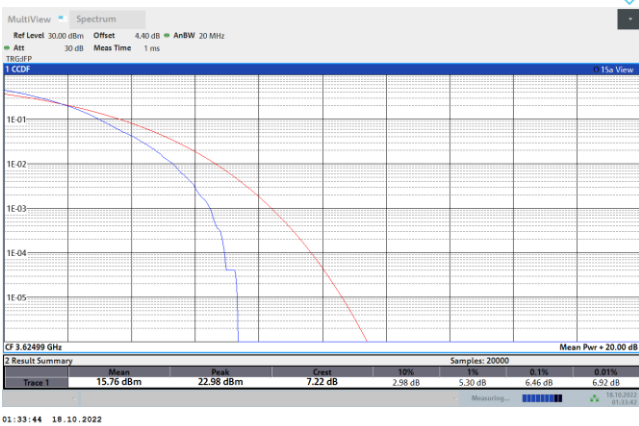


16QAM

64QAM



256QAM





26dB Bandwidth

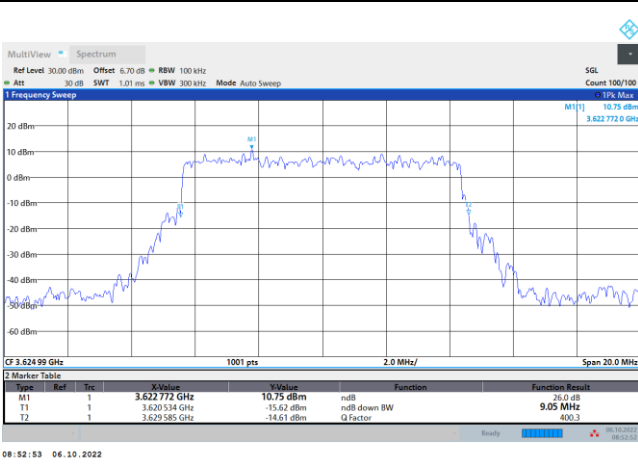
Mode	FR1 N77 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz	30MHz	40MHz	50MHz	60MHz	70MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	9.05	14.09	18.78	28.05	38.36	48.45	60.54	66.85
BW	80MHz	90MHz	100MHz					
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK					
Middle CH	79.92	89.73	99.50					

Mode	FR1 N77 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		30MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	9.29	9.35	14.60	14.60	19.10	19.18	29.37	29.13
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	9.63	9.29	14.36	14.33	19.18	19.46	29.01	29.07
BW	40MHz		50MHz		60MHz		70MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	40.28	40.36	50.05	50.25	60.78	60.42	70.21	70.21
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	40.36	40.36	50.25	50.15	60.42	60.42	70.21	70.21
BW	80MHz		90MHz		100MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	80.40	80.24	90.63	90.91	100.90	100.50		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	80.40	80.40	90.63	90.63	100.50	100.70		



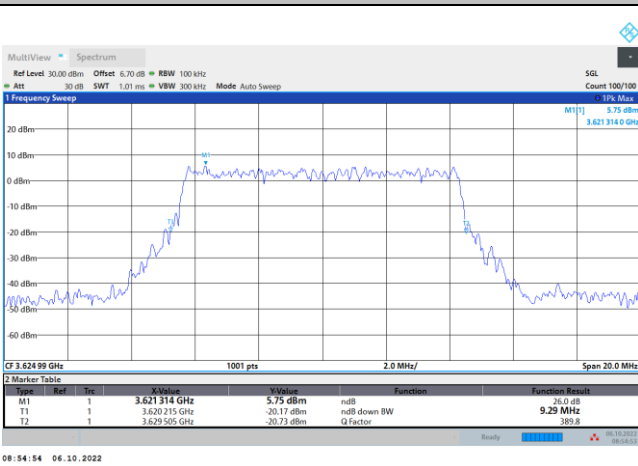
FR1 N77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

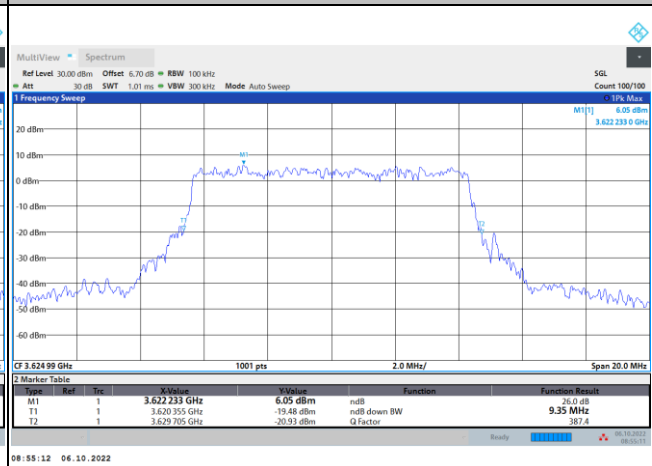


FR1 N77 / 10MHz / CP OFDM / Middle Channel / Full RB

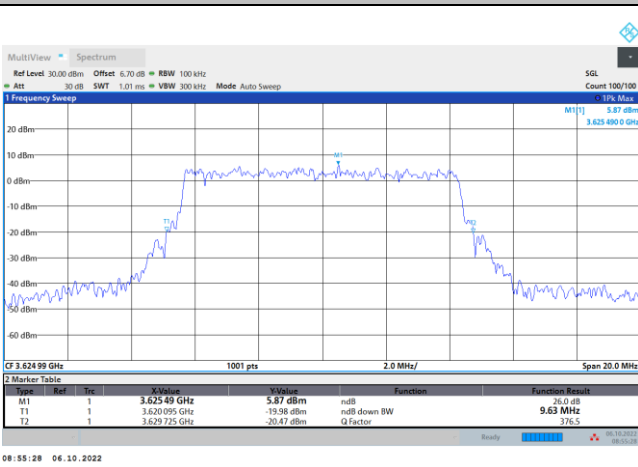
QPSK



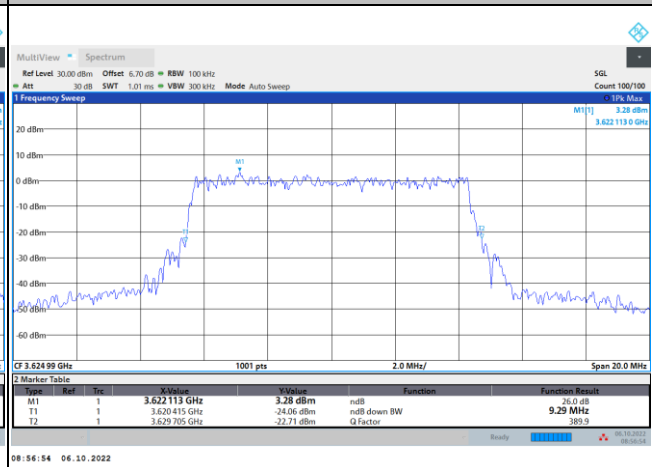
16QAM



64QAM



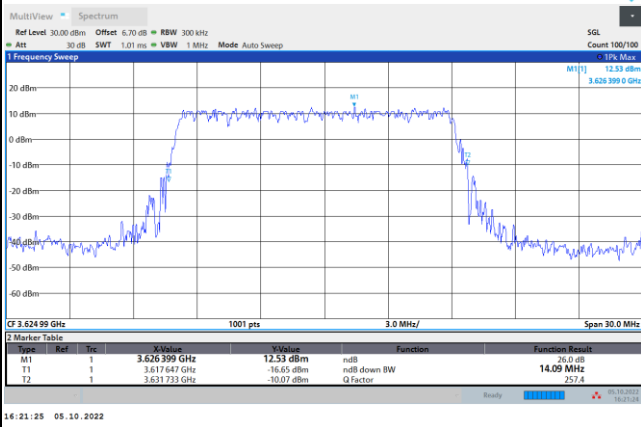
256QAM





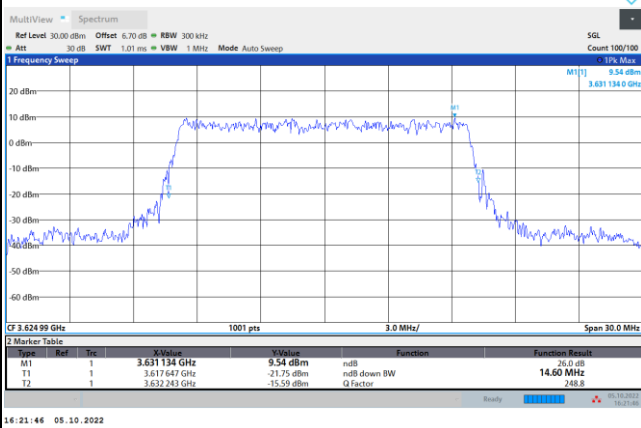
FR1 N77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

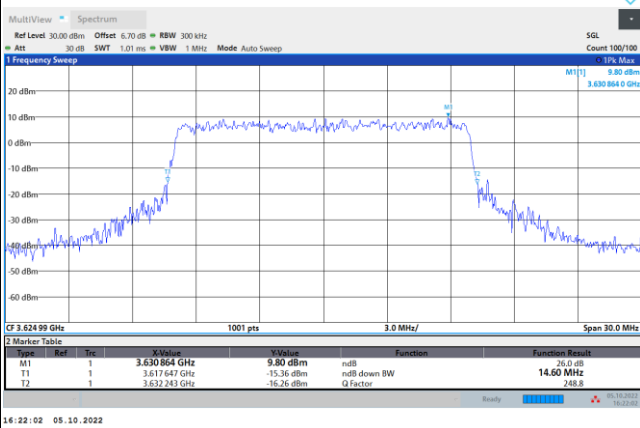


FR1 N77 / 15MHz / CP OFDM / Middle Channel / Full RB

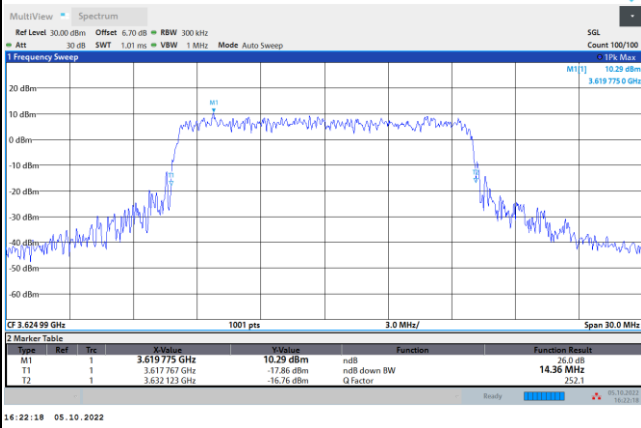
QPSK



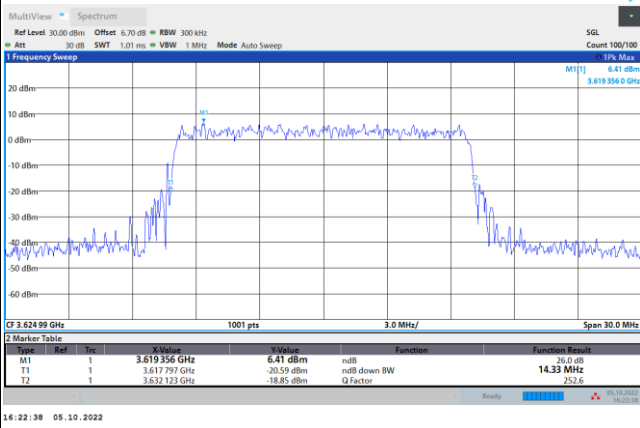
16QAM



64QAM



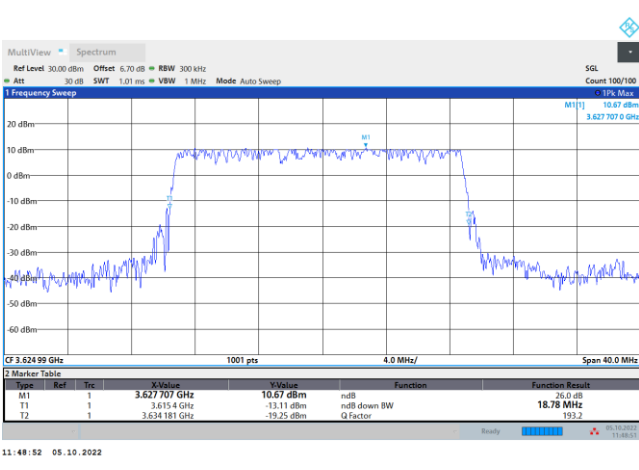
256QAM





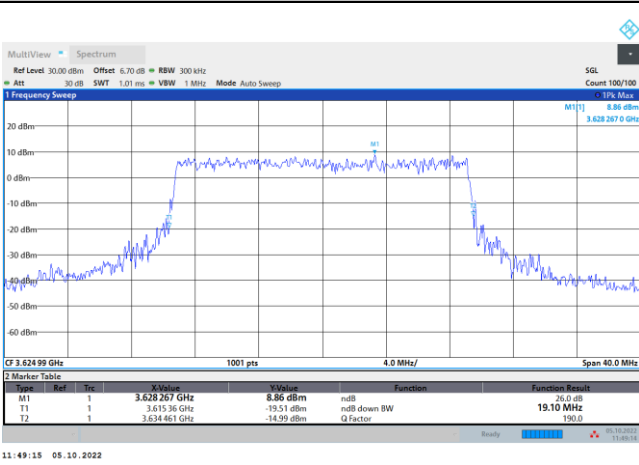
FR1 N77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

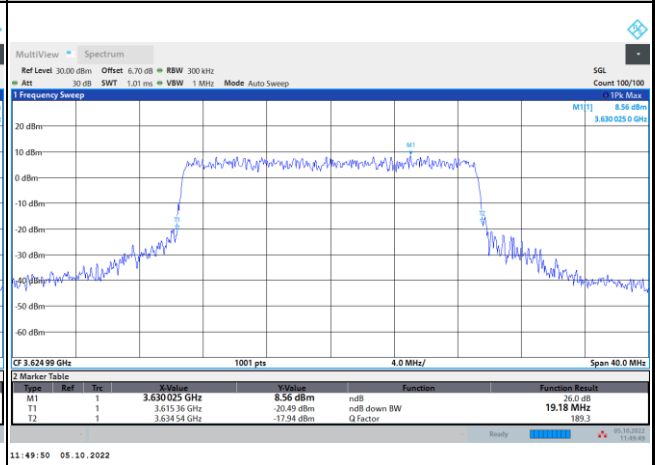


FR1 N77 / 20MHz / CP OFDM / Middle Channel / Full RB

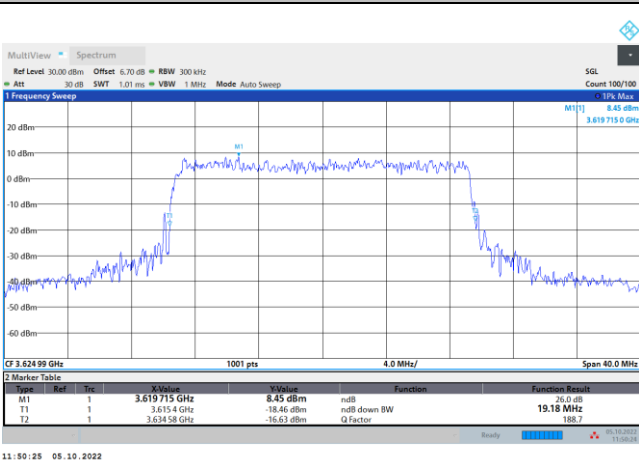
QPSK



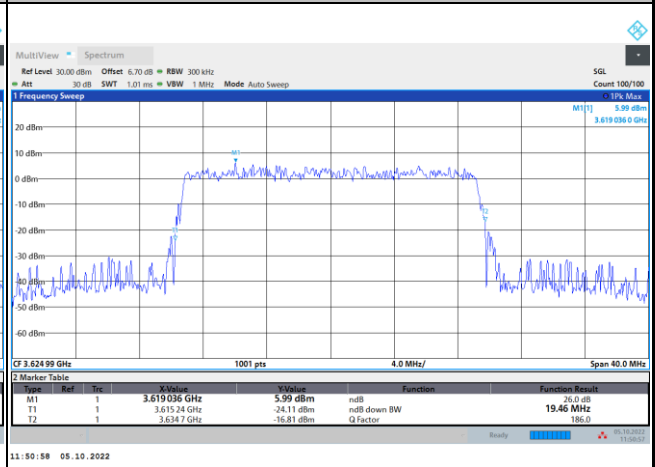
16QAM



64QAM



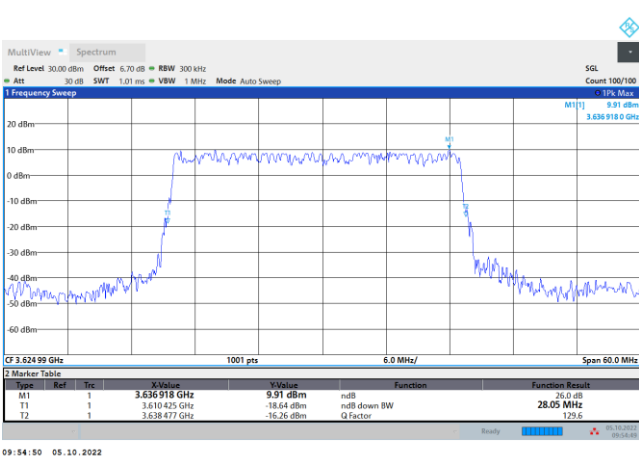
256QAM





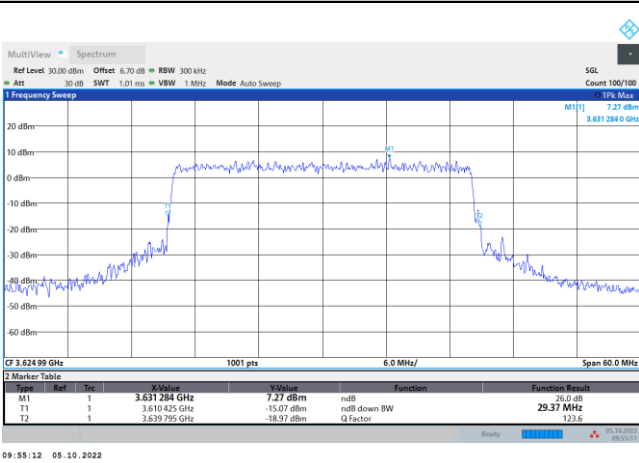
FR1 N77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

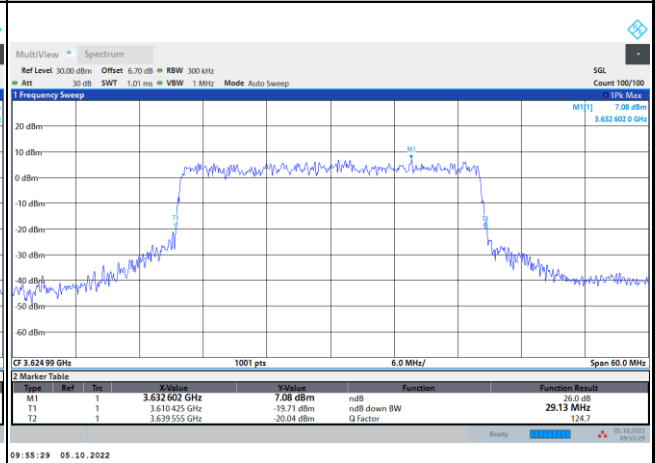


FR1 N77 / 30MHz / CP OFDM / Middle Channel / Full RB

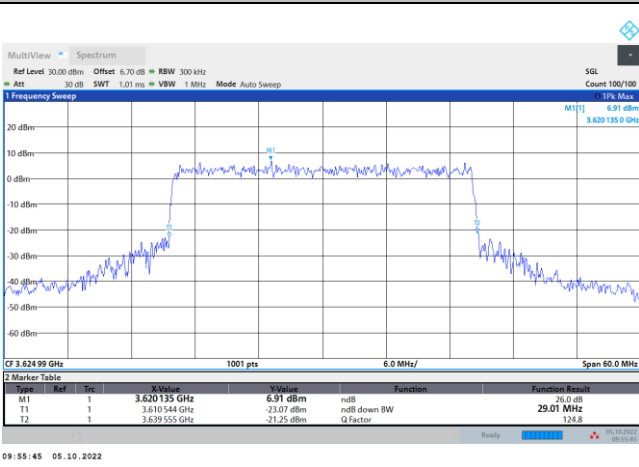
QPSK



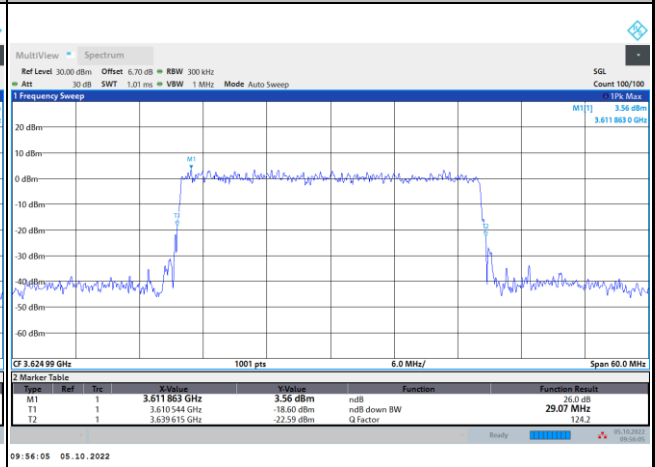
16QAM



64QAM



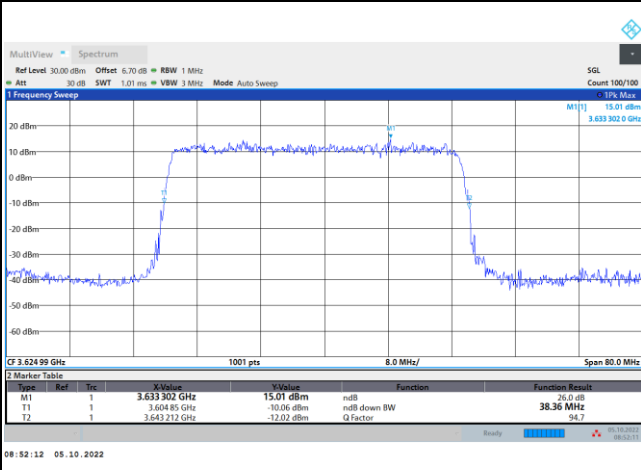
256QAM





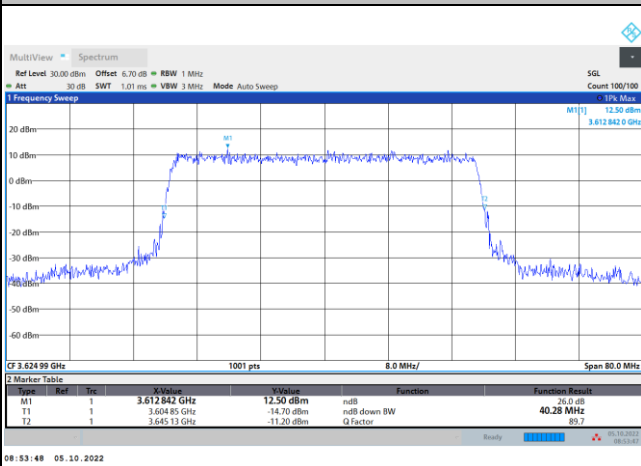
FR1 N77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

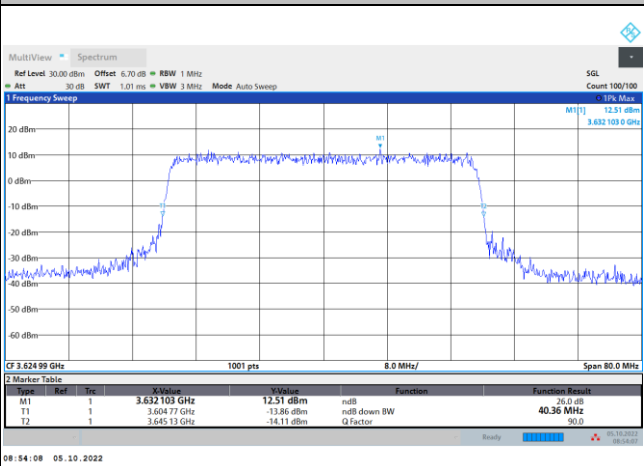


FR1 N77 / 40MHz / CP OFDM / Middle Channel / Full RB

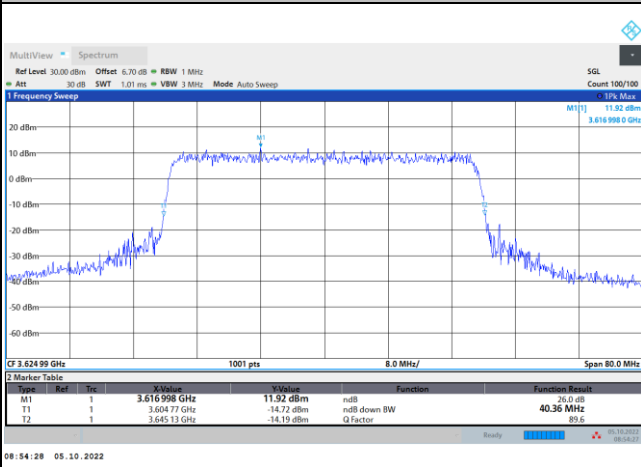
QPSK



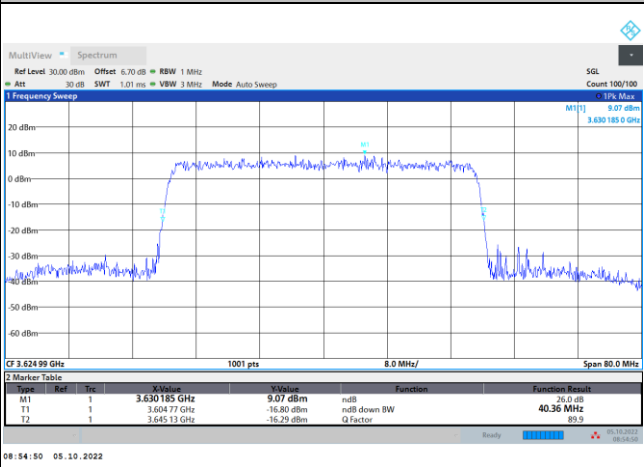
16QAM



64QAM



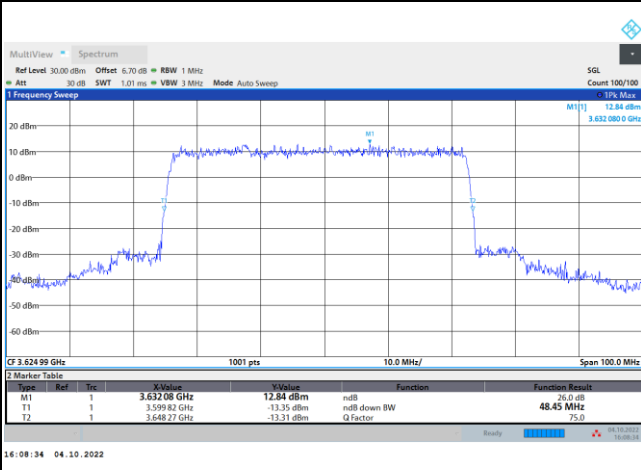
256QAM





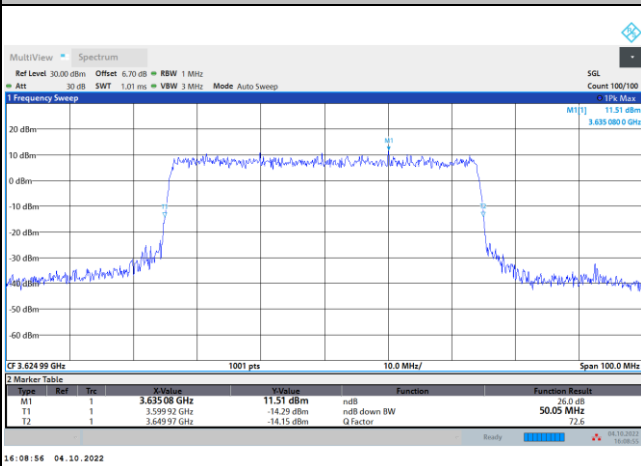
FR1 N77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

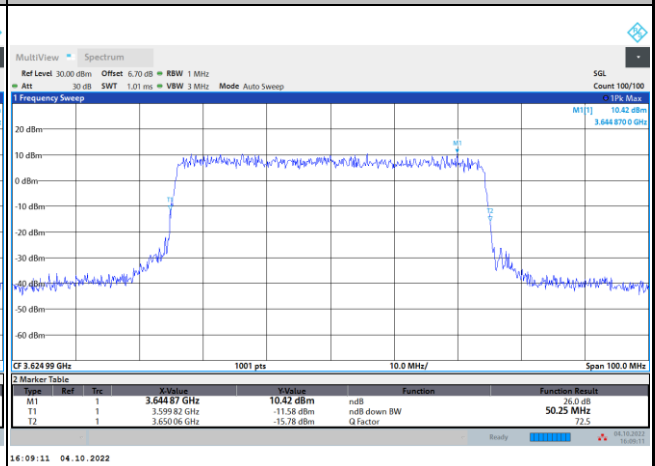


FR1 N77 / 50MHz / CP OFDM / Middle Channel / Full RB

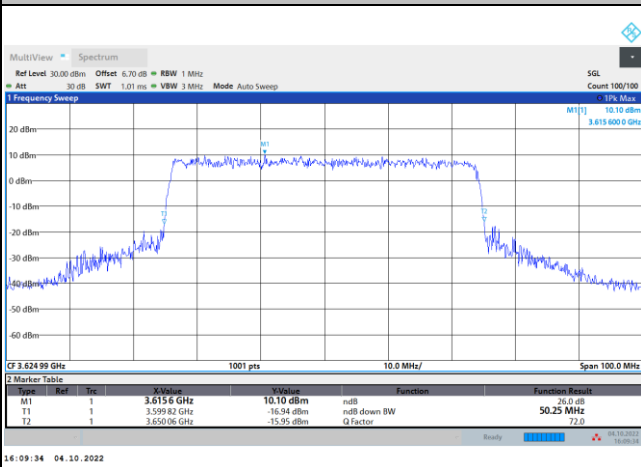
QPSK



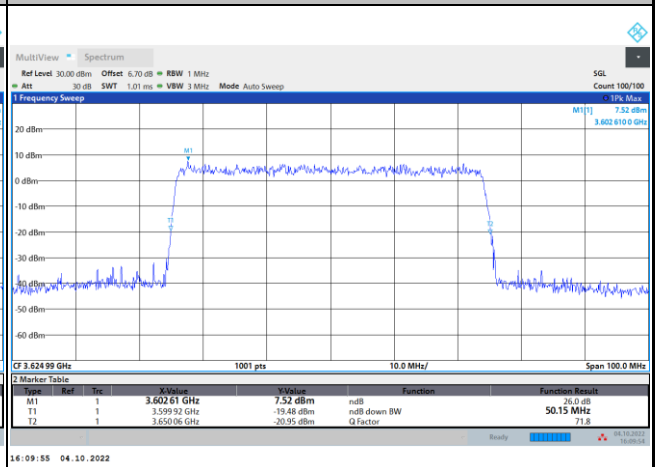
16QAM



64QAM



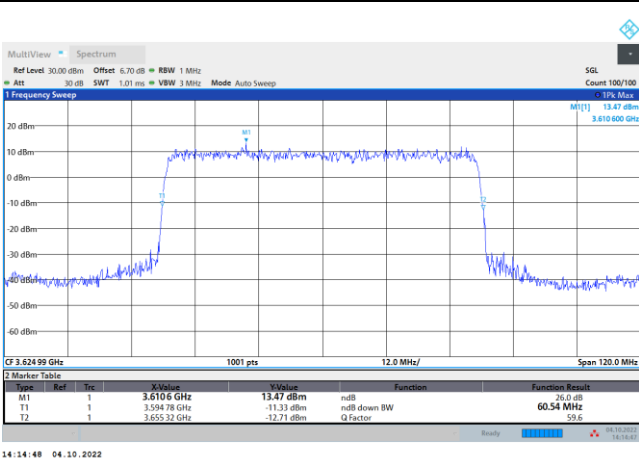
256QAM





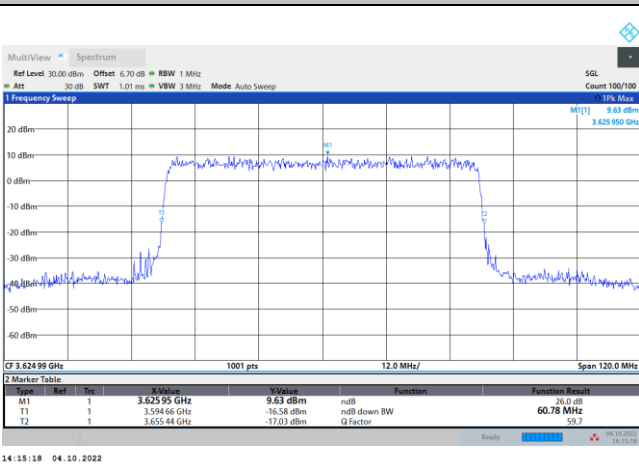
FR1 N77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

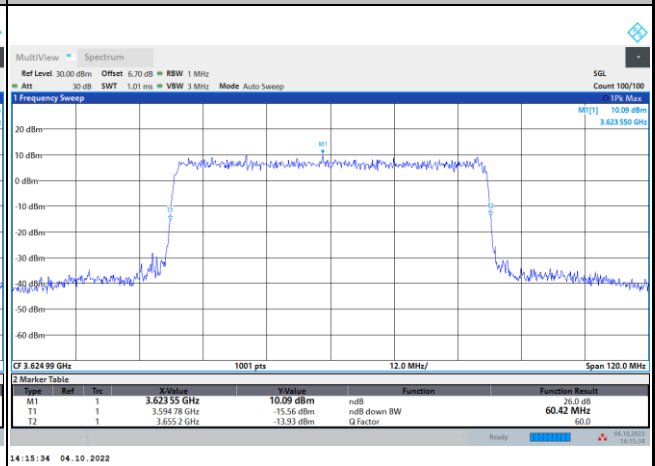


FR1 N77 / 60MHz / CP OFDM / Middle Channel / Full RB

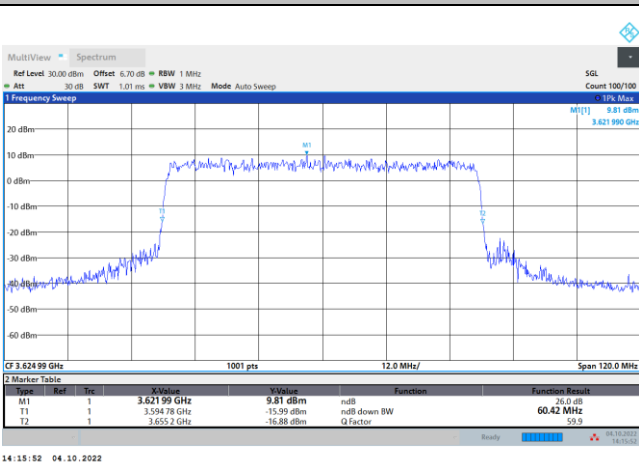
QPSK



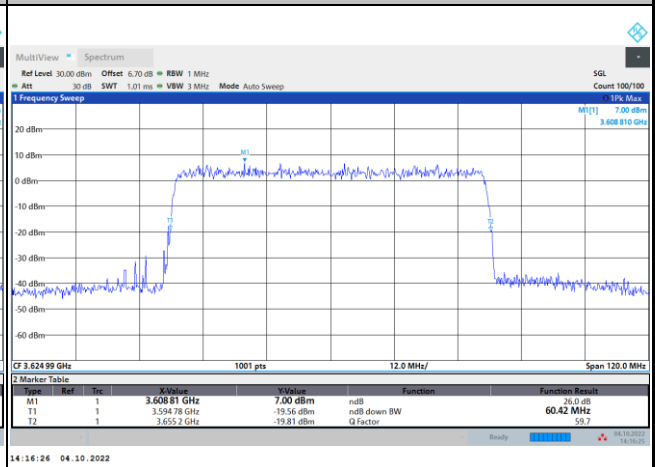
16QAM



64QAM



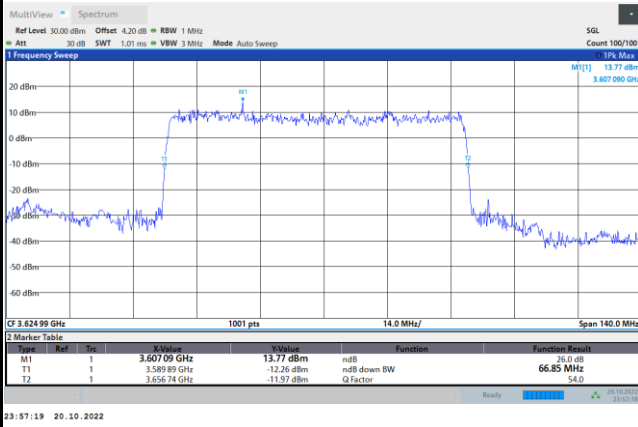
256QAM





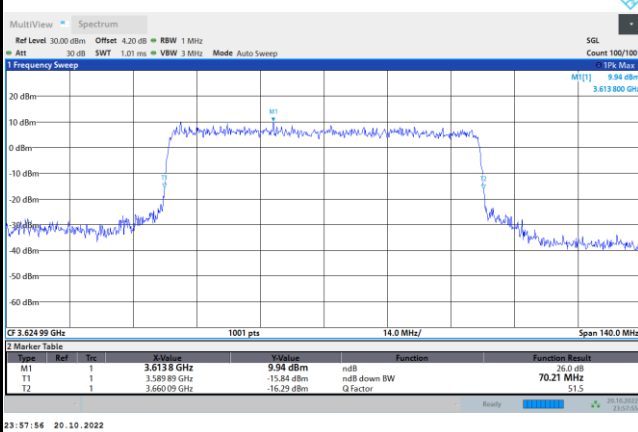
FR1 N77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

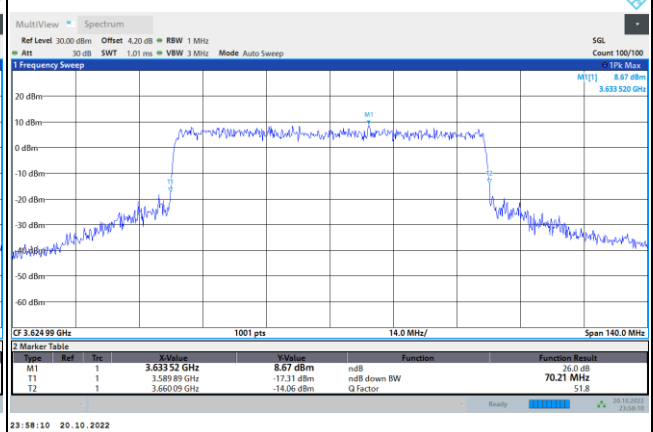


FR1 N77 / 70MHz / CP OFDM / Middle Channel / Full RB

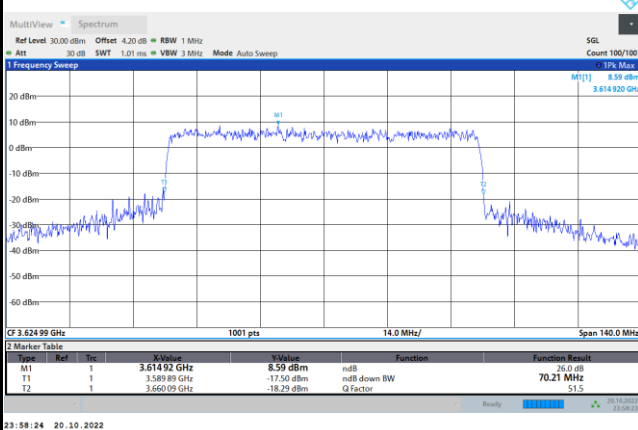
QPSK



16QAM



64QAM



256QAM

