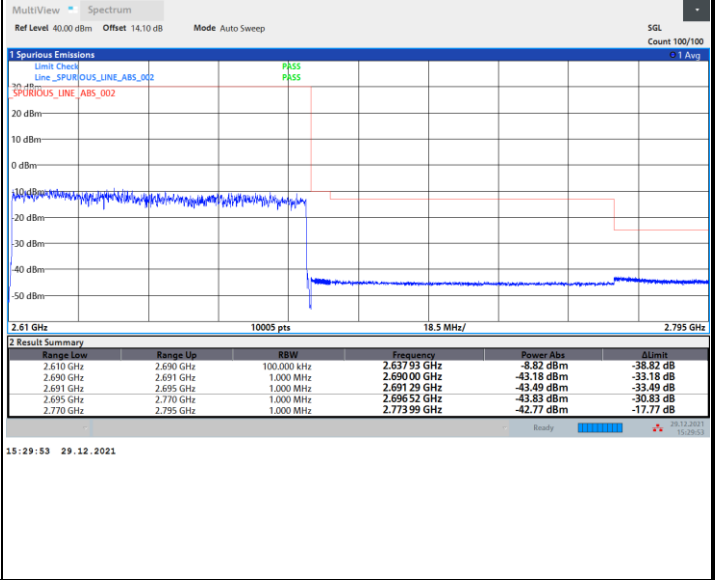
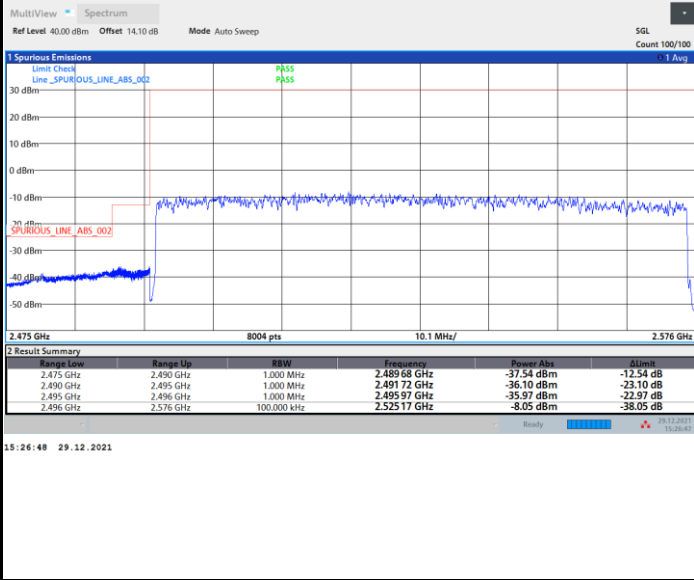




FR1 n41 / 80MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

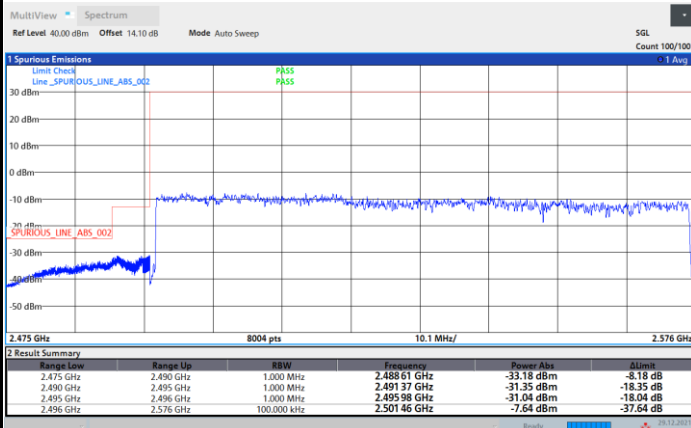




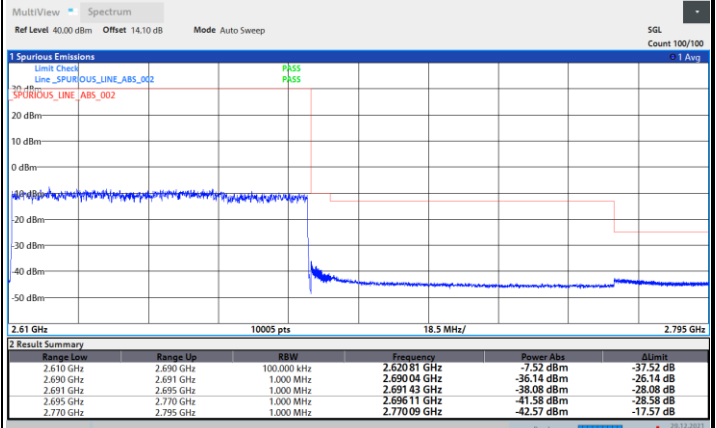
FR1 n41 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

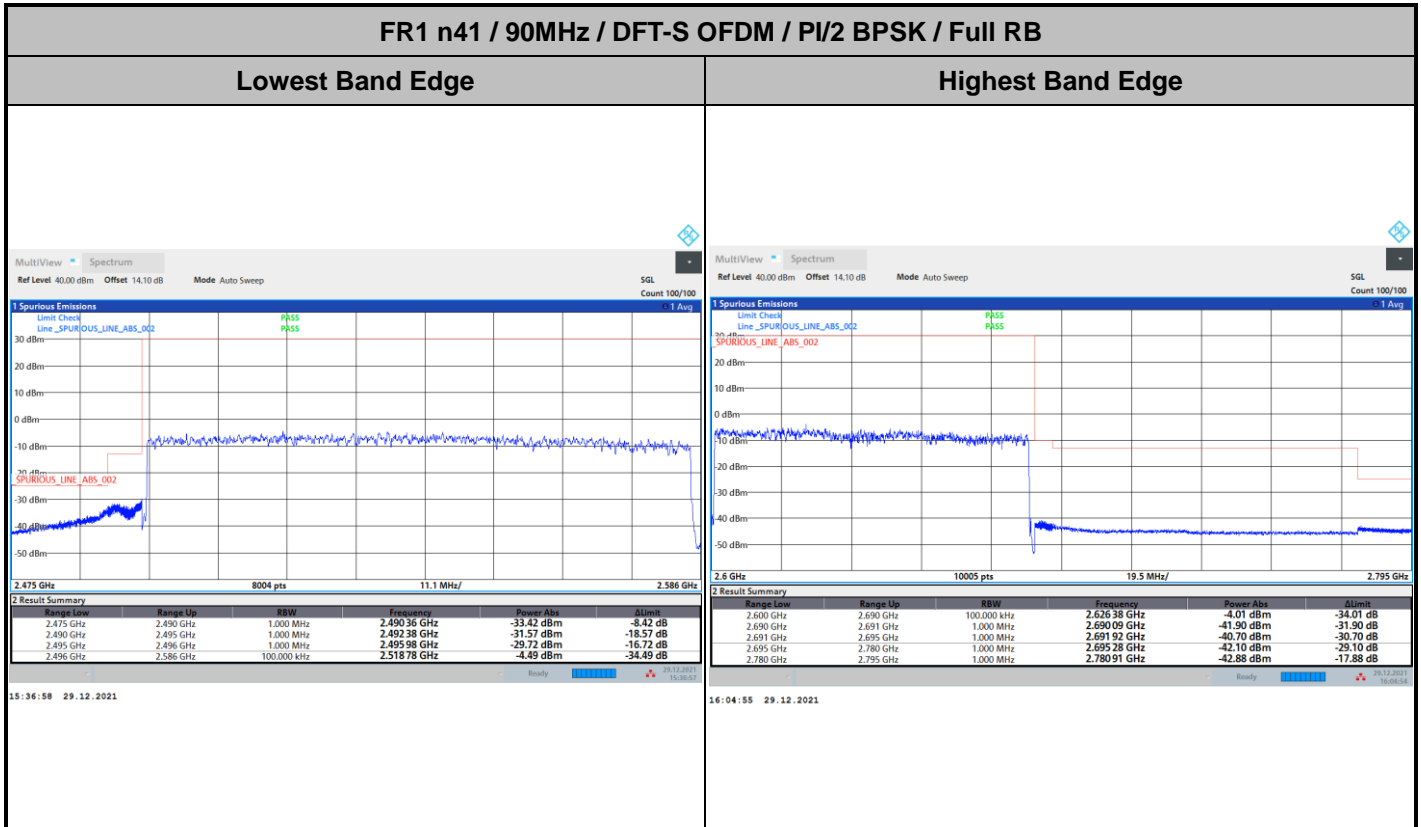
Highest Band Edge

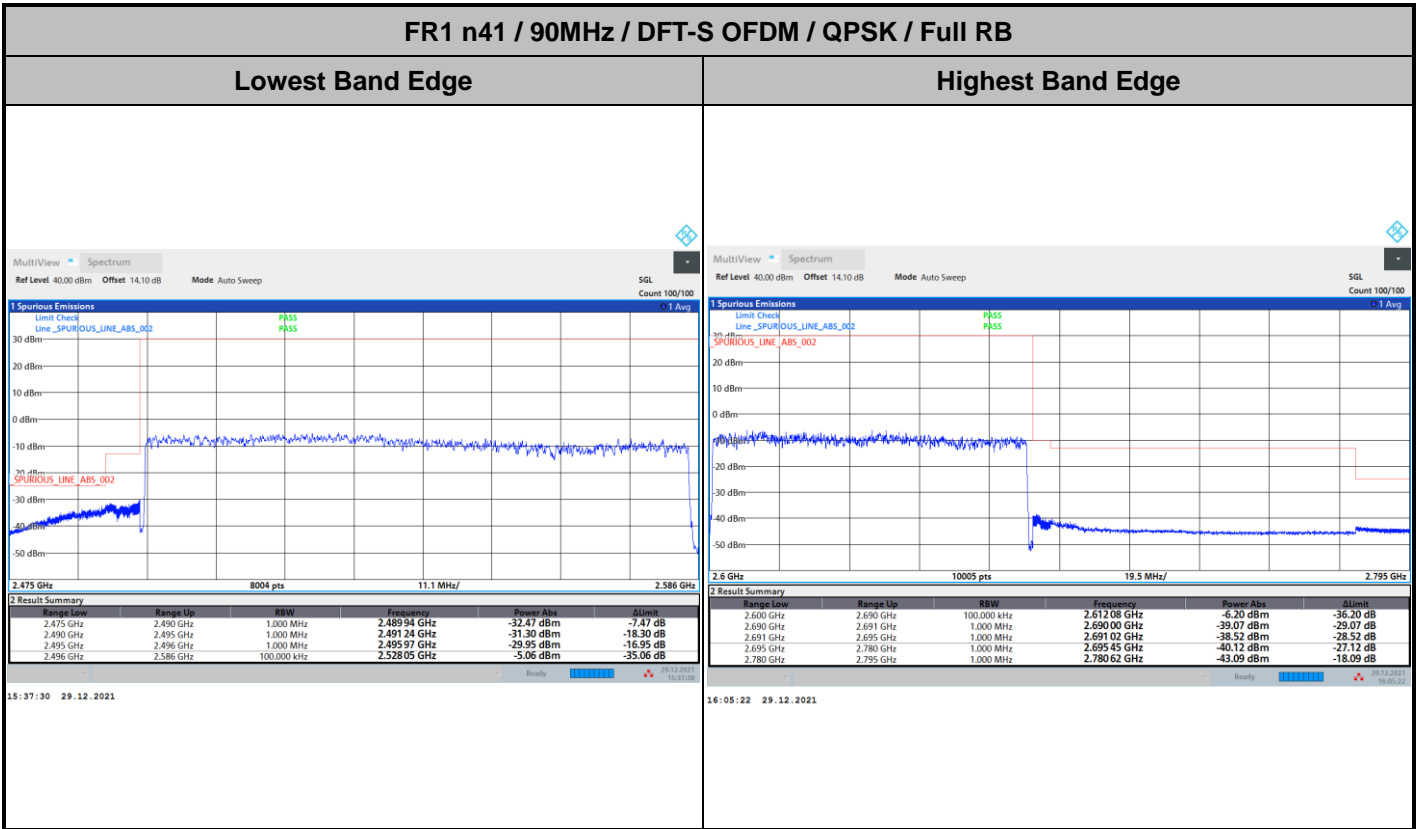


15:27:50 29.12.2021



15:28:51 29.12.2021



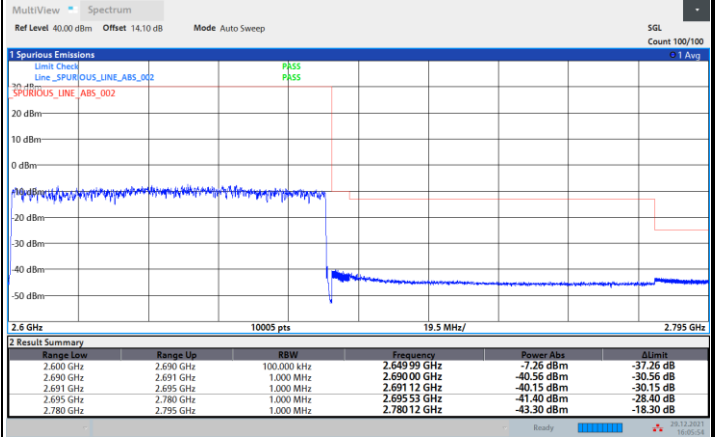
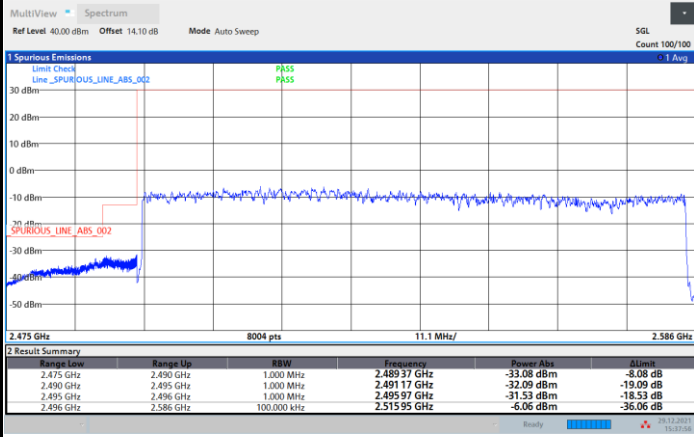




FR1 n41 / 90MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge

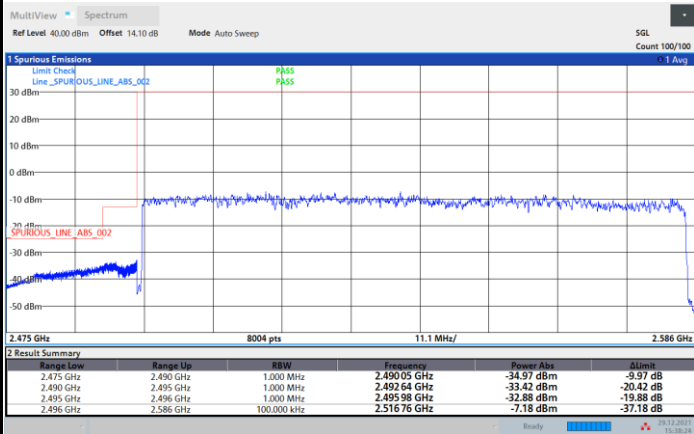




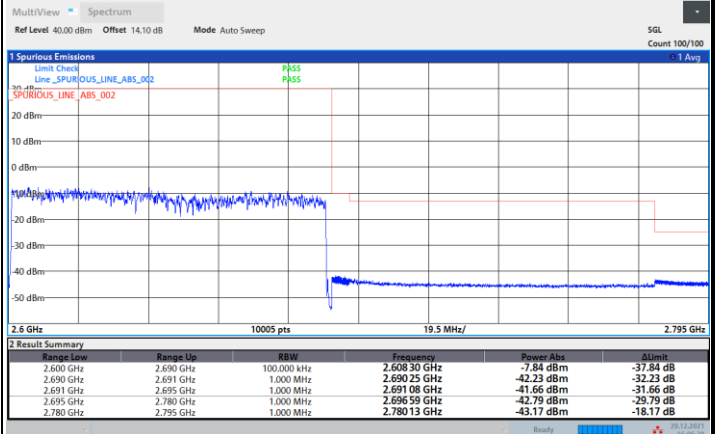
FR1 n41 / 90MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:38:25 29.12.2021



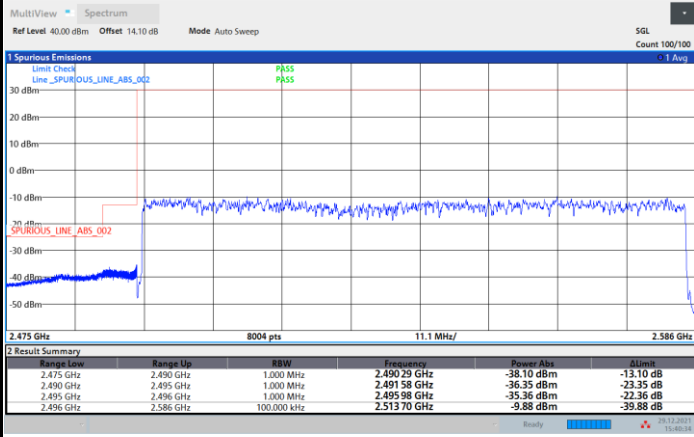
16:06:28 29.12.2021



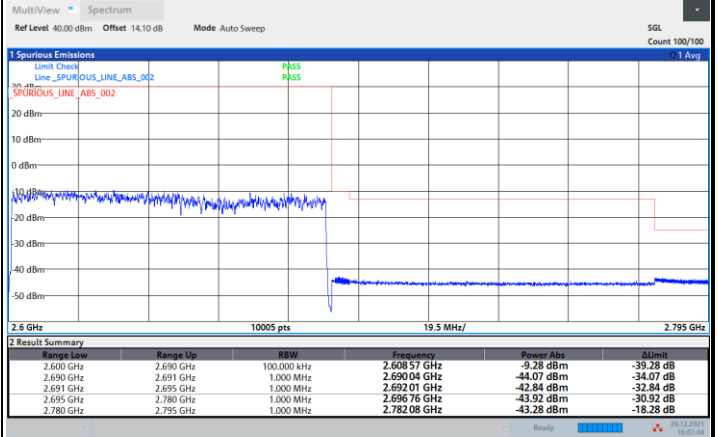
FR1 n41 / 90MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:40:35 29.12.2021



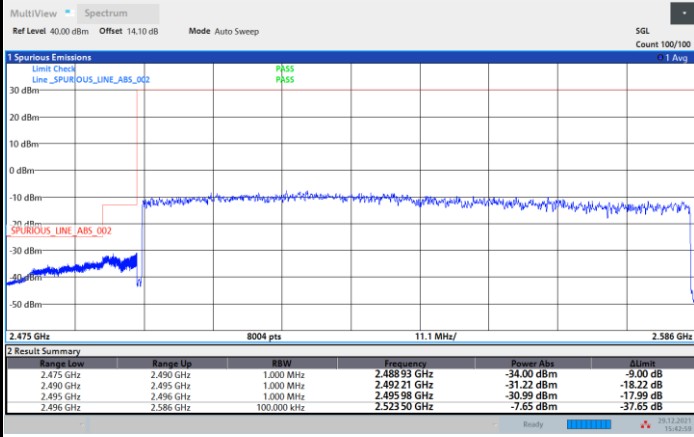
16:07:05 29.12.2021



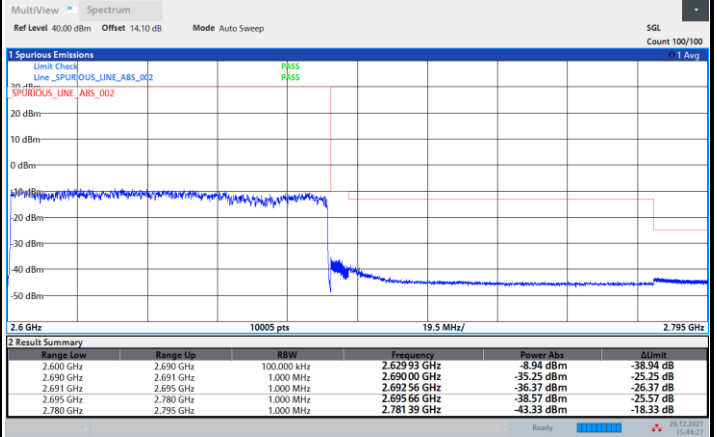
FR1 n41 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



15:42:59 29.12.2021



15:44:28 29.12.2021

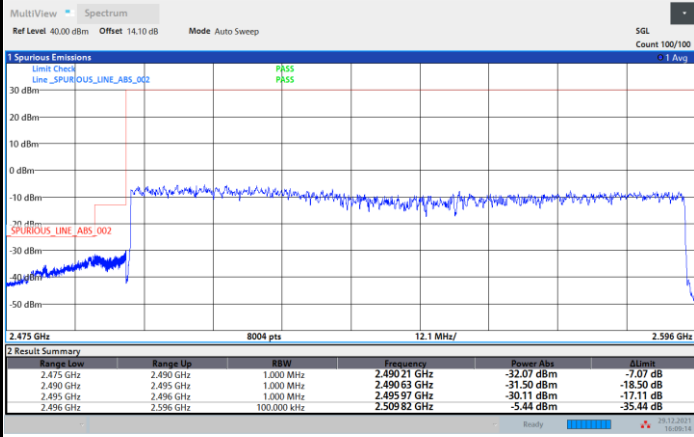




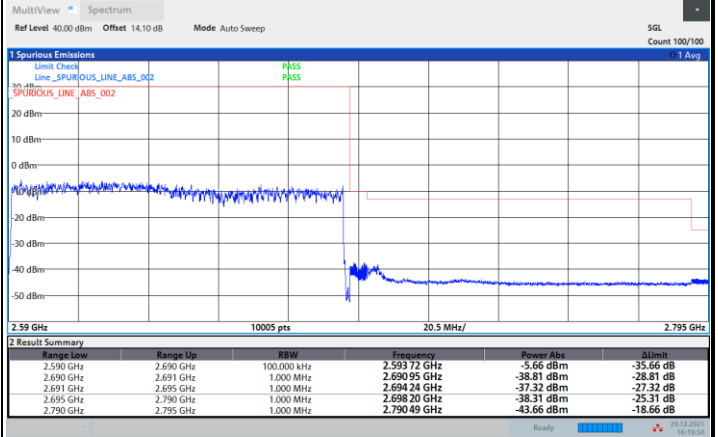
FR1 n41 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



16:09:14 29.12.2021



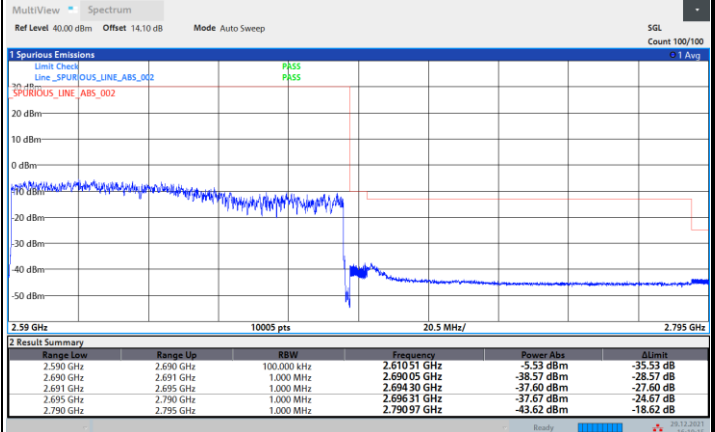
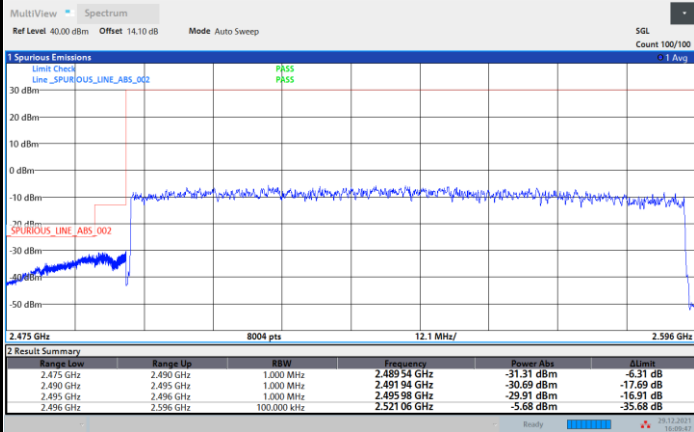
16:19:51 29.12.2021



FR1 n41 / 100MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



16:09:48 29.12.2021

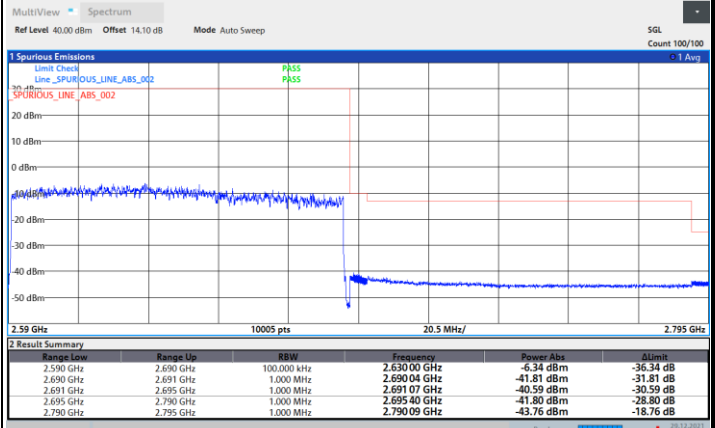
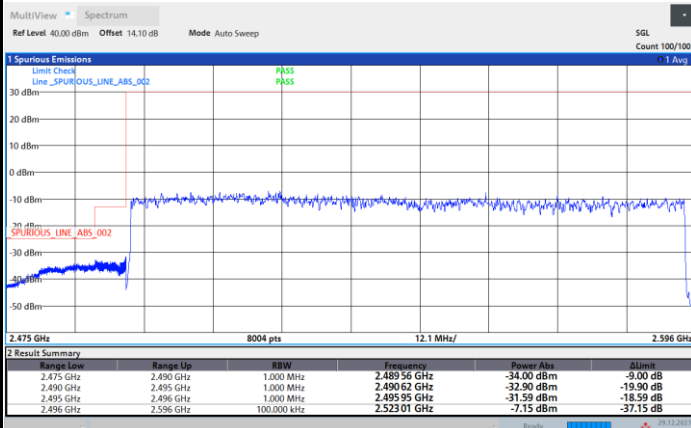
16:19:16 29.12.2021



FR1 n41 / 100MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



16:10:21 29.12.2021

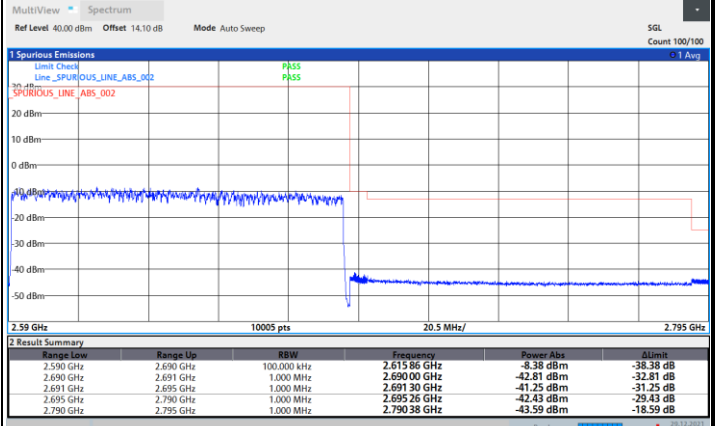
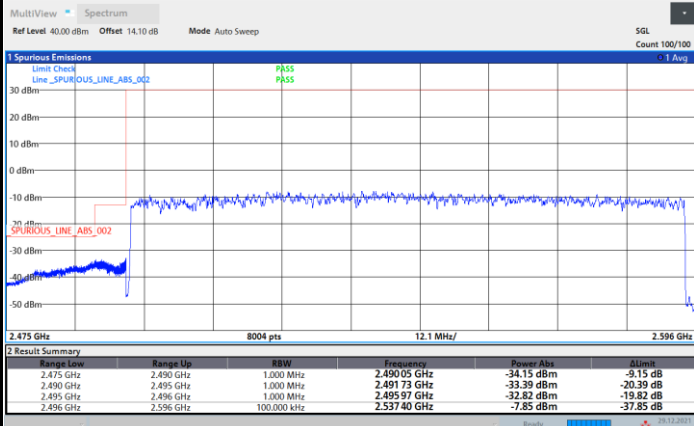
16:10:26 29.12.2021



FR1 n41 / 100MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



16:12:28 29.12.2021

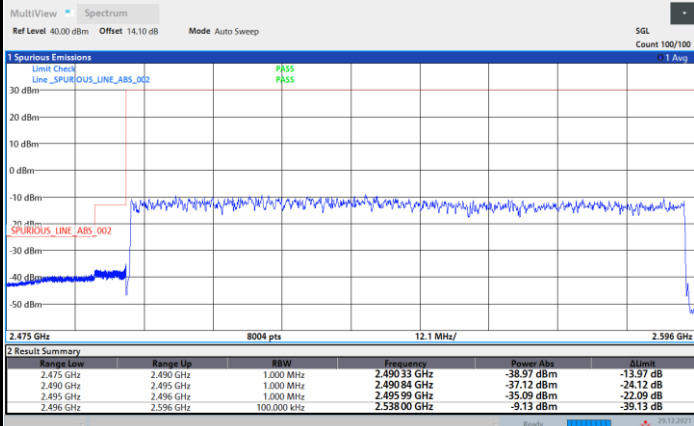
16:17:50 29.12.2021



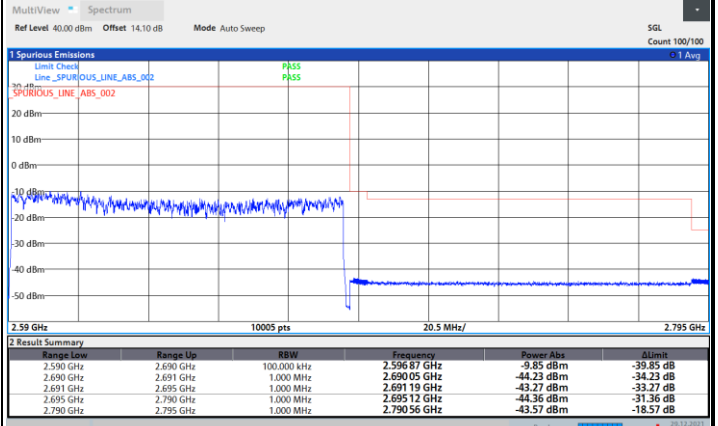
FR1 n41 / 100MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



16:13:21 29.12.2021



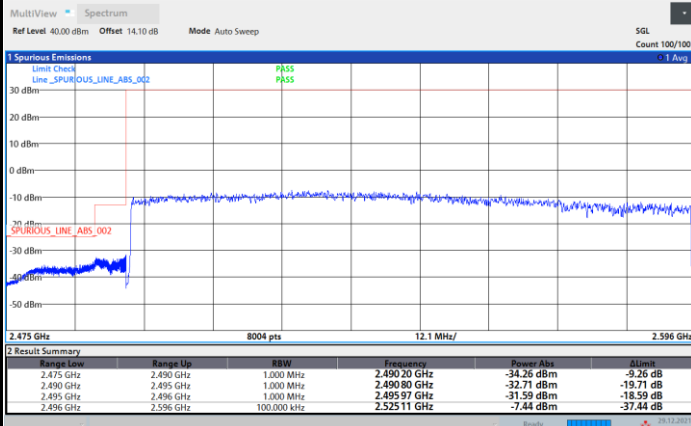
16:17:06 29.12.2021



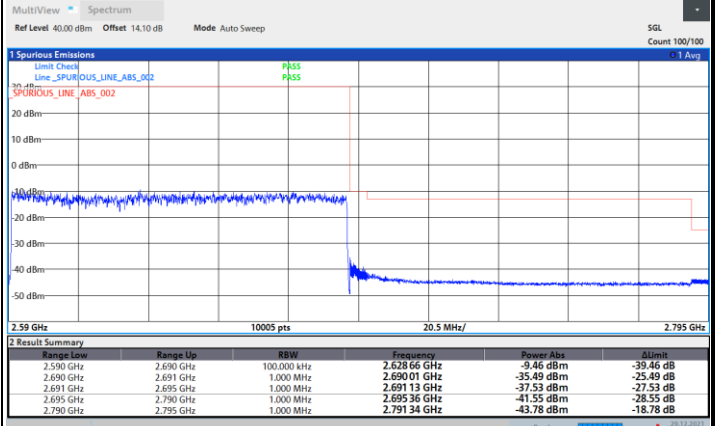
FR1 n41 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



16:14:17 29.12.2021



16:16:07 29.12.2021

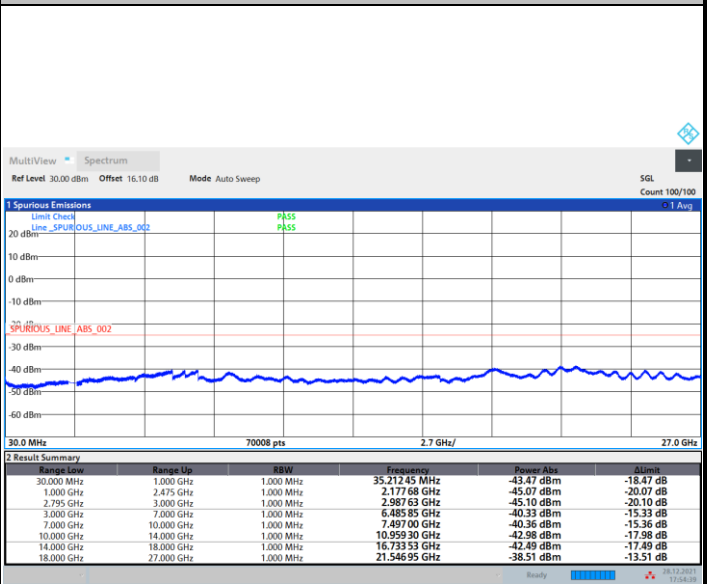
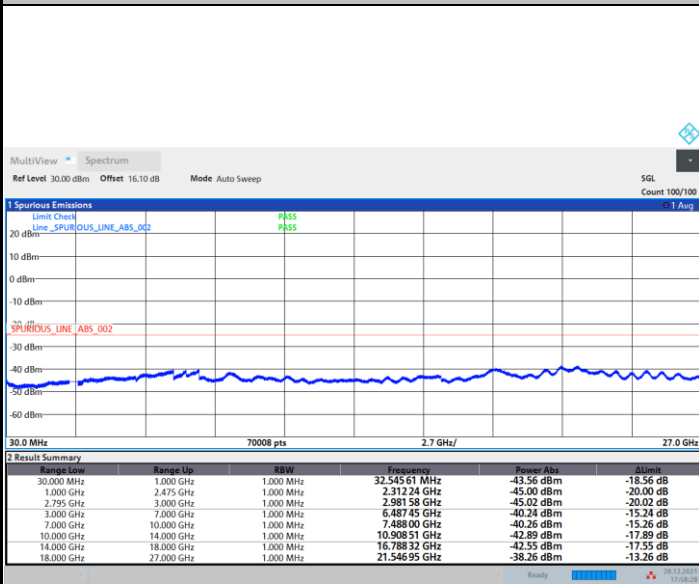


# Conducted Spurious Emission

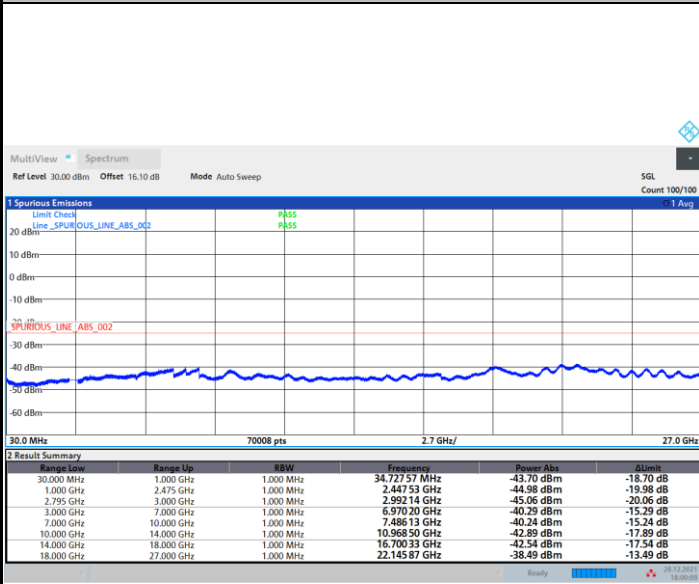
FR1 n41 / 20MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n41 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0032	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0007	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage =14 V. ; Battery End Point (BEP) = 12 V. ; Maximum Voltage =16 V.
2. The frequency fundamental emissions stay within the authorized frequency block.





# FR1 n66

## Peak-to-Average Ratio

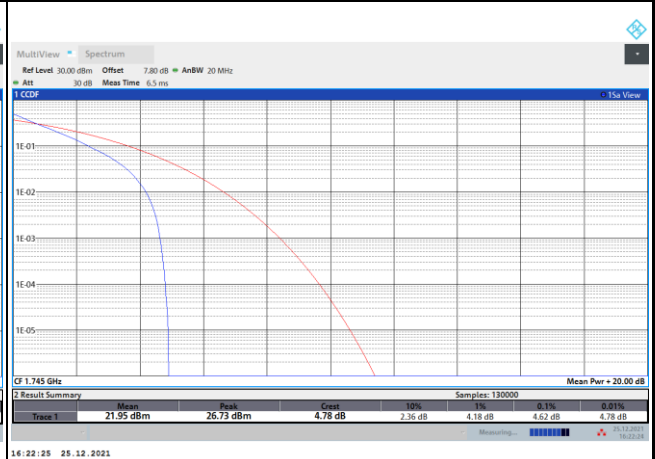
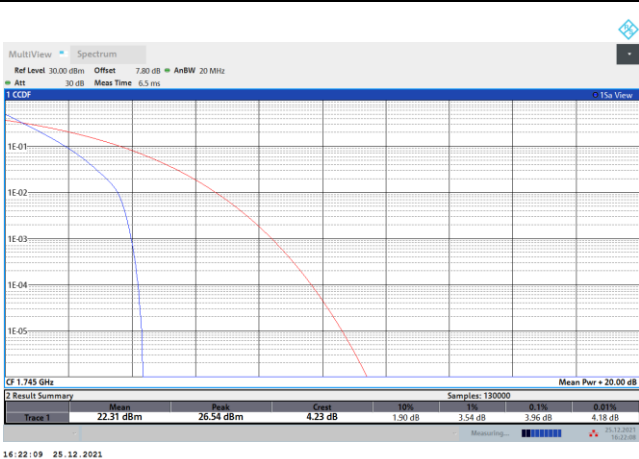
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.96	4.62	5.54	6.02	PASS
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.86				PASS



FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

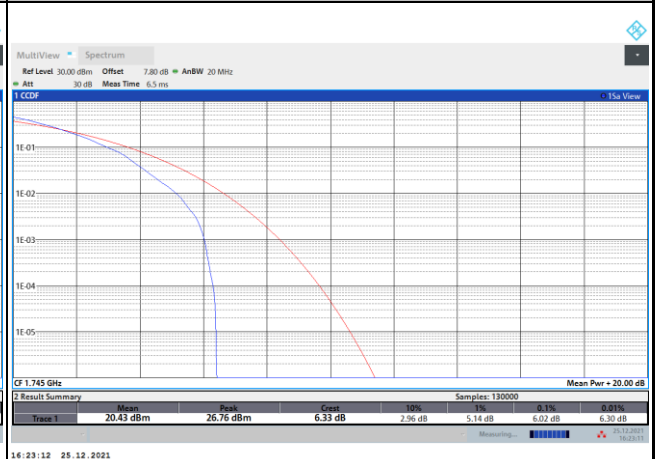
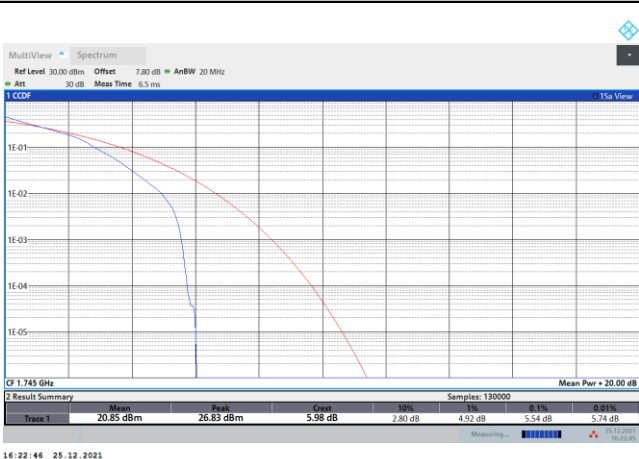
PI/2 BPSK

QPSK

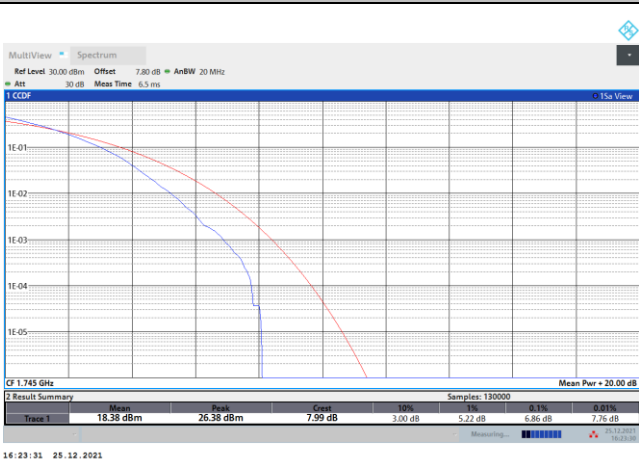


16QAM

64QAM



256QAM





**26dB Bandwidth**

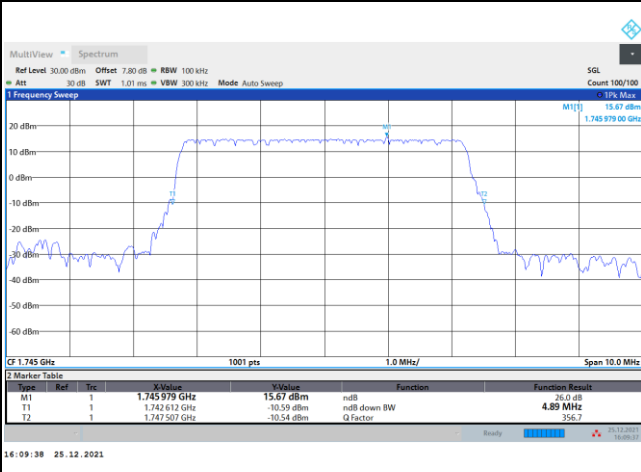
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.89		9.39		14.26		18.94	
BW	25MHz		30MHz		40MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	-		29.60		39.71			

Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.95	4.93	9.86	9.81	14.95	15.01	19.86	19.94
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.94	4.96	9.81	9.86	14.92	14.95	19.82	19.86
BW	25MHz		30MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	-	-	29.49	29.49	39.56	39.64		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	-	-	29.49	29.67	39.64	39.56		



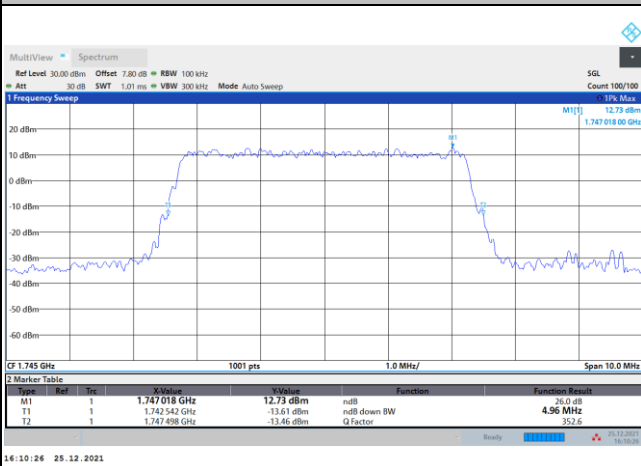
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

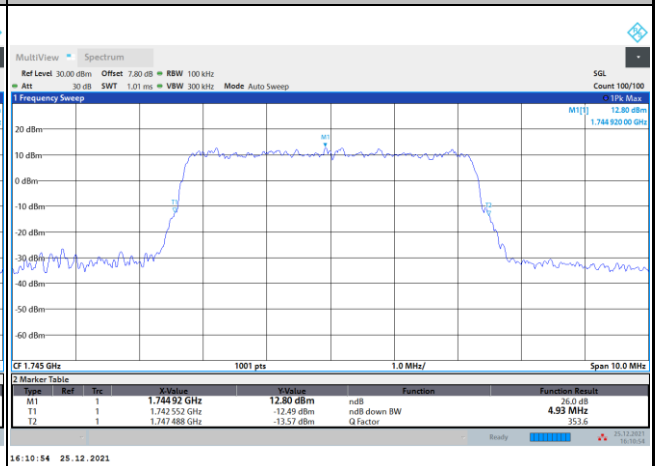


FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

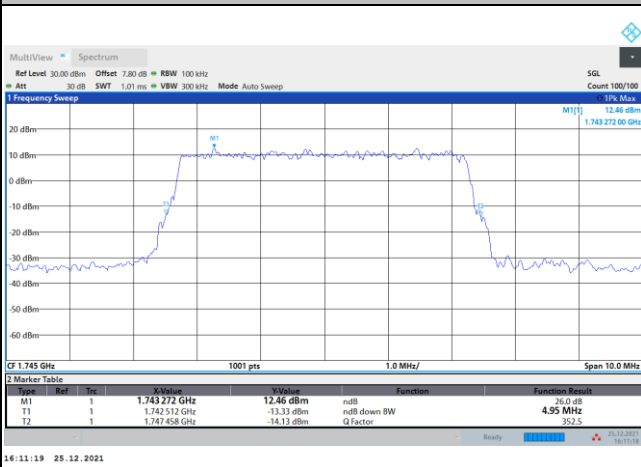
QPSK



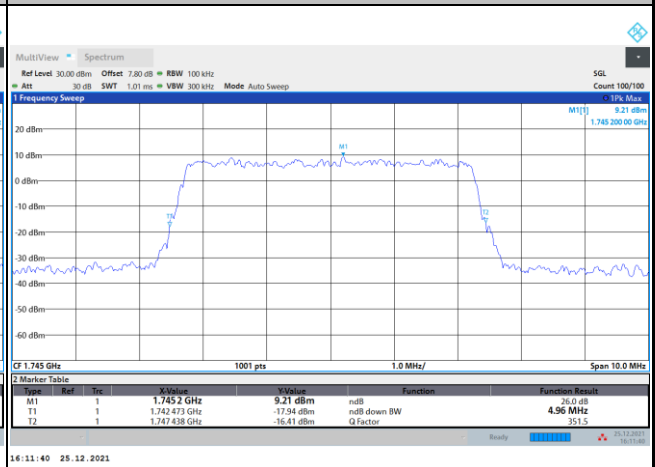
16QAM



64QAM



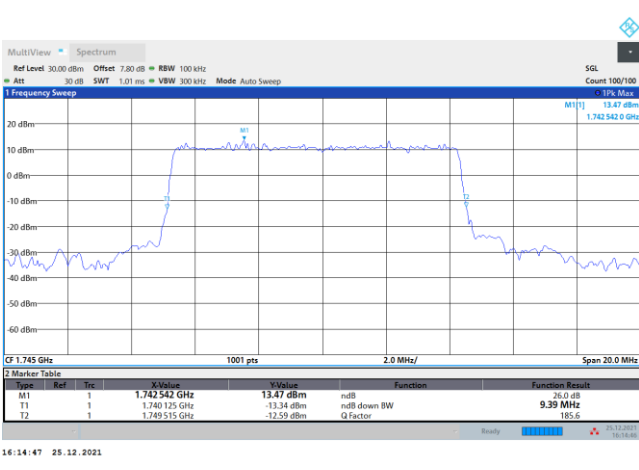
256QAM





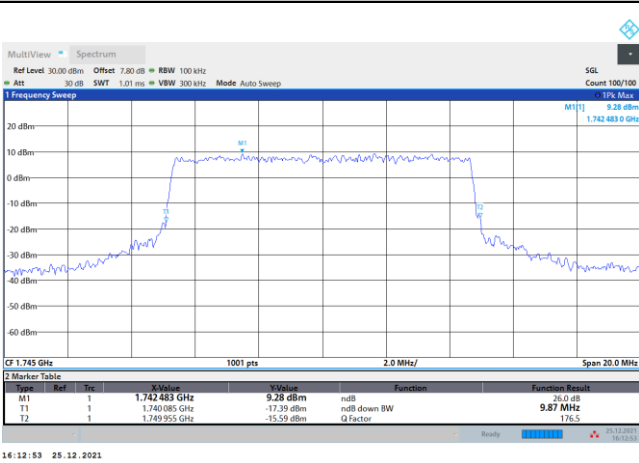
FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

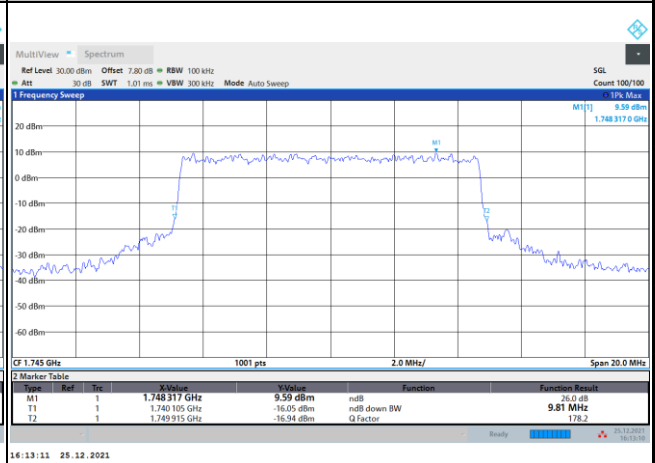


FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

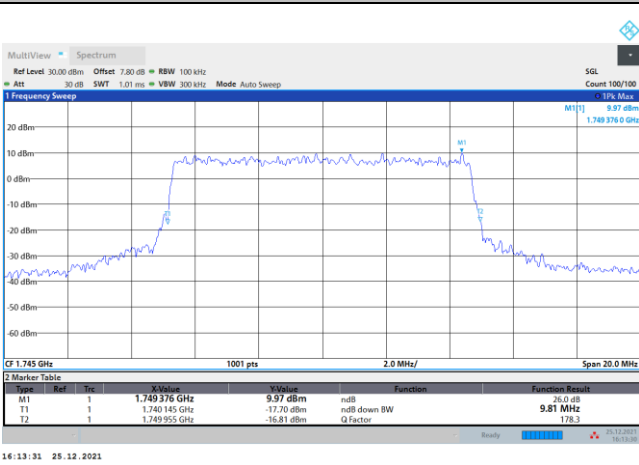
QPSK



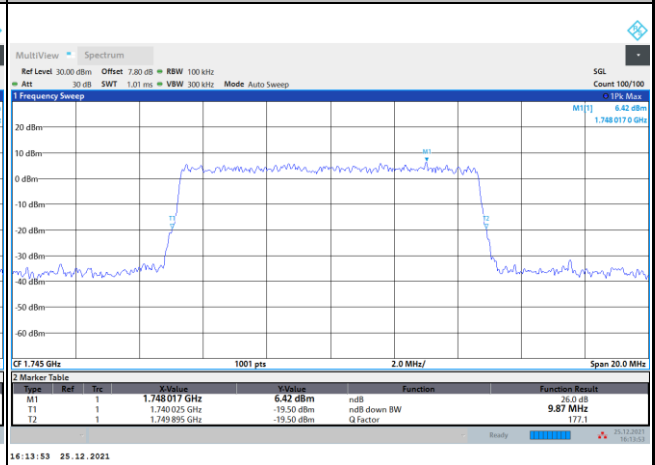
16QAM



64QAM



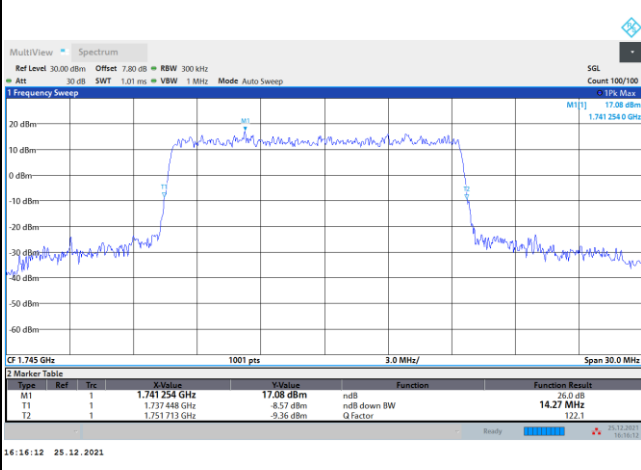
256QAM





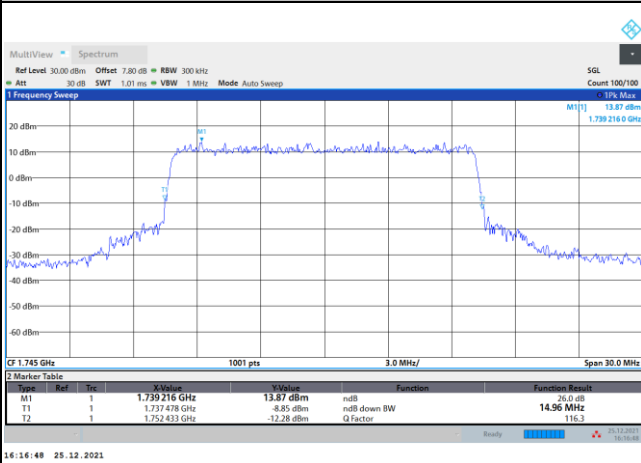
FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

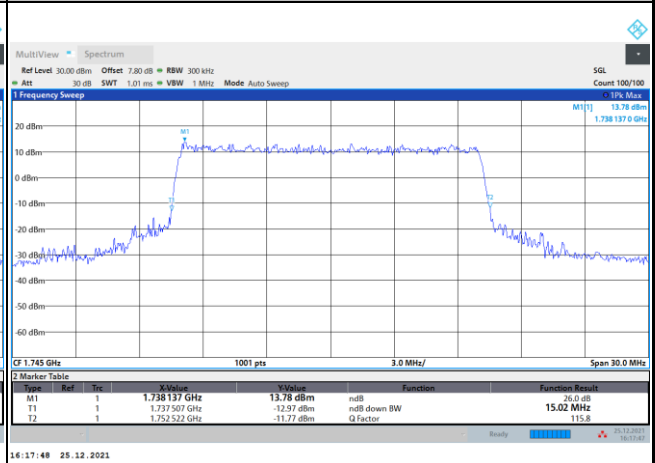


FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

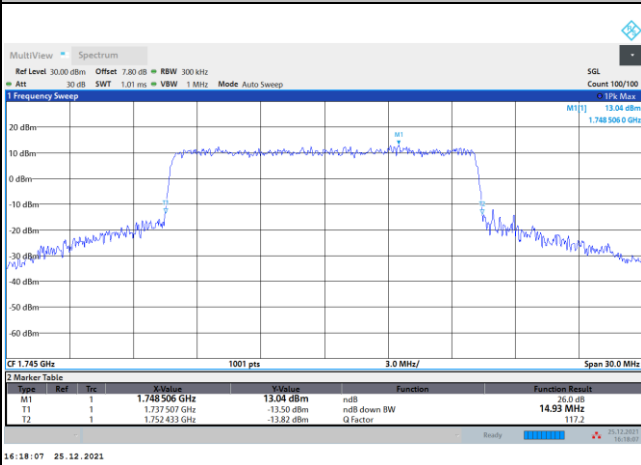
QPSK



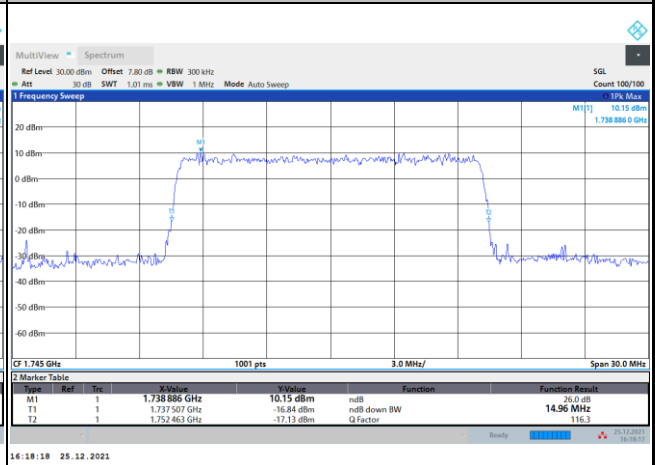
16QAM



64QAM



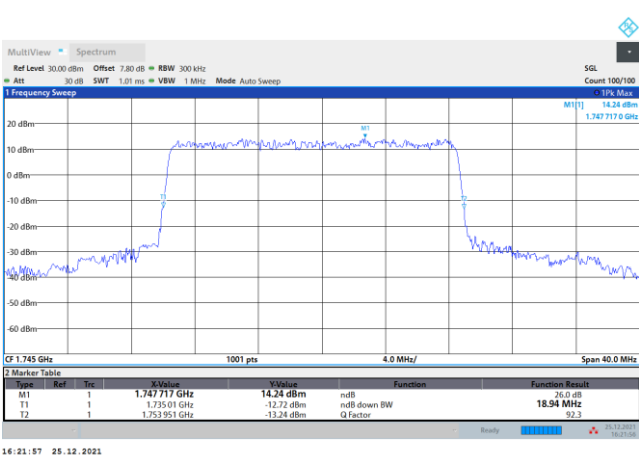
256QAM





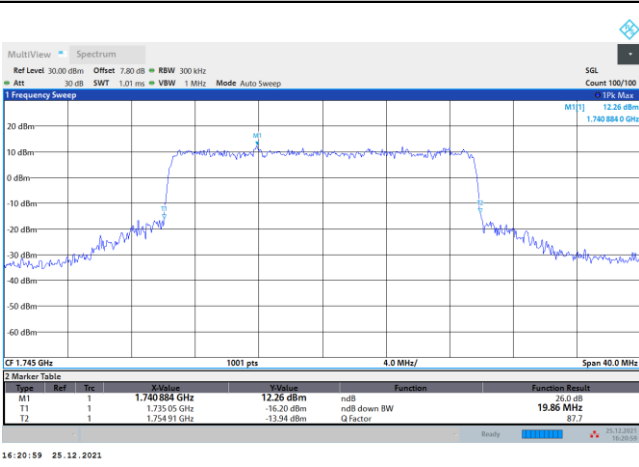
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

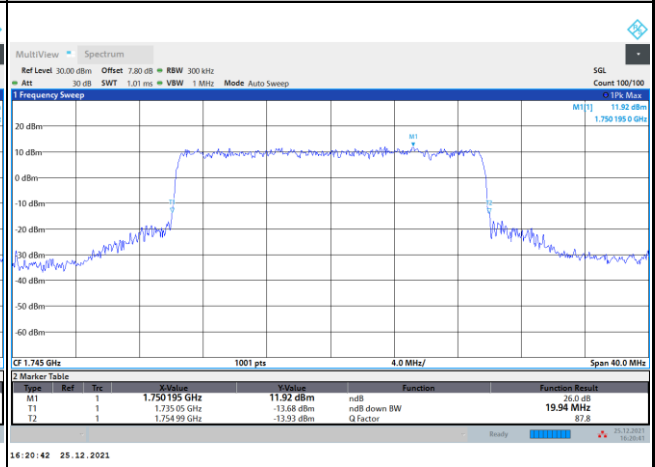


FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

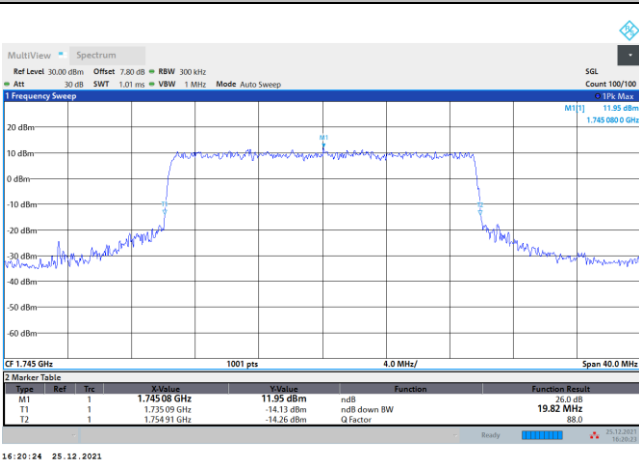
QPSK



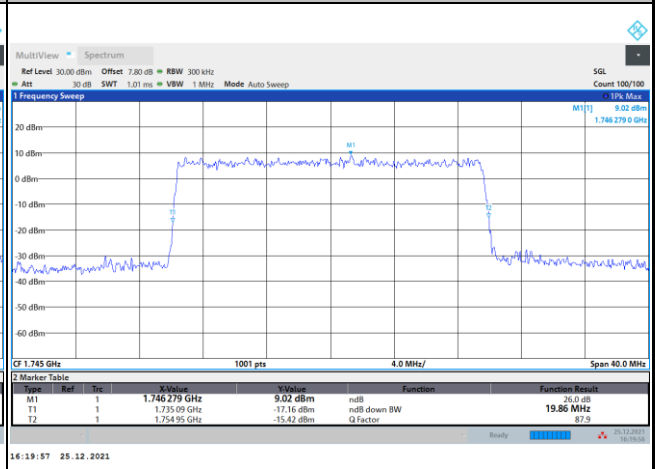
16QAM



64QAM



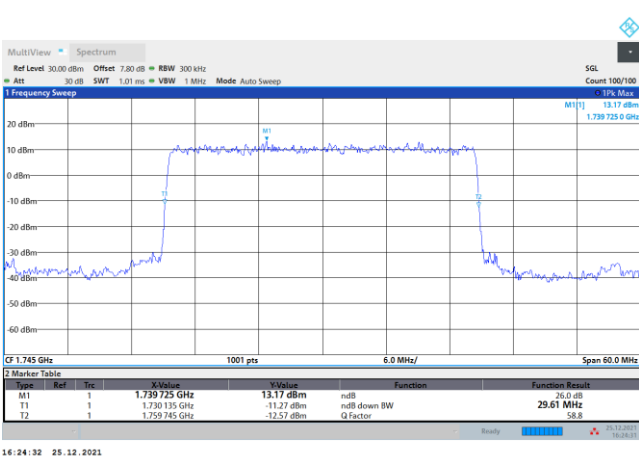
256QAM





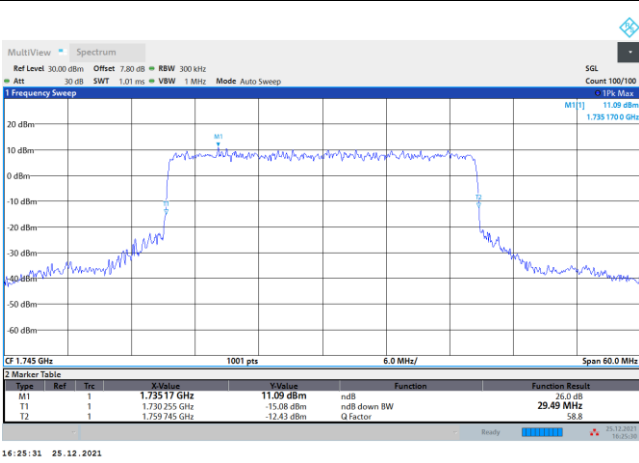
FR1 n66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

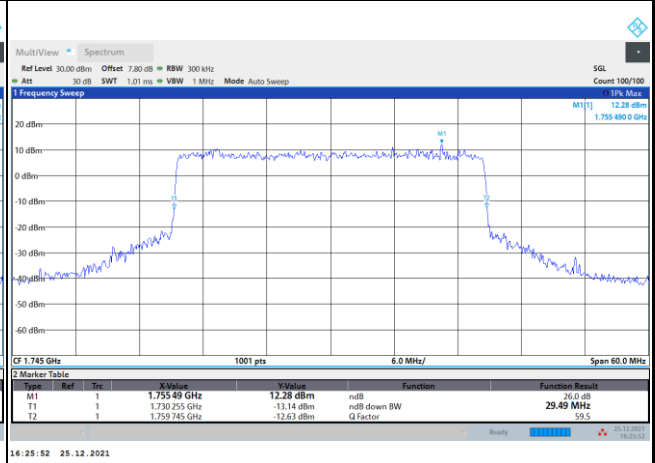


FR1 n66 / 30MHz / CP OFDM / Middle Channel / Full RB

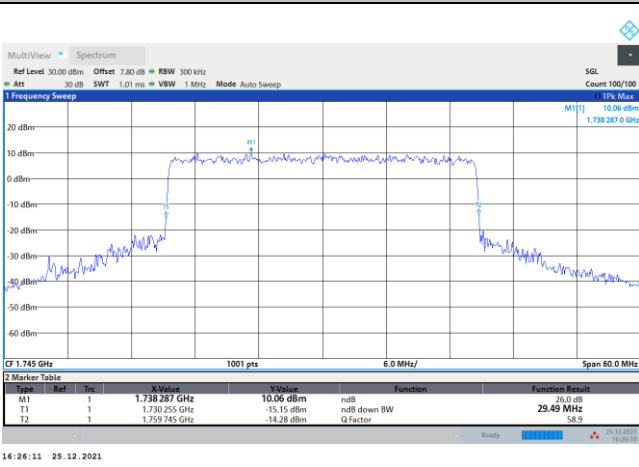
QPSK



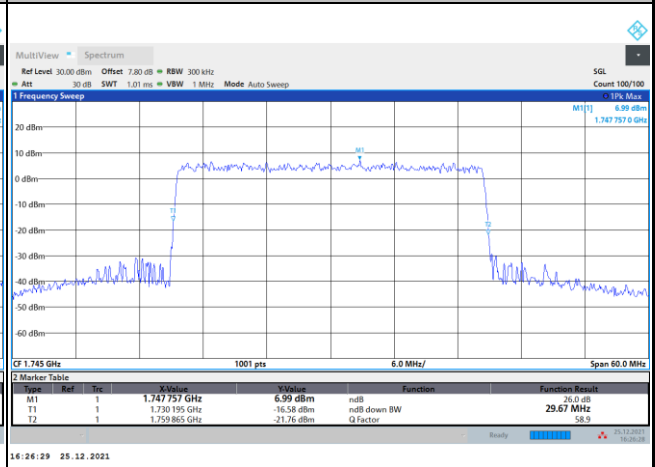
16QAM



64QAM



256QAM

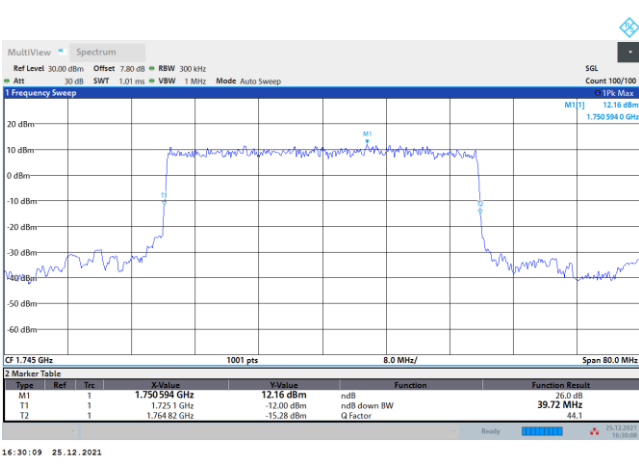






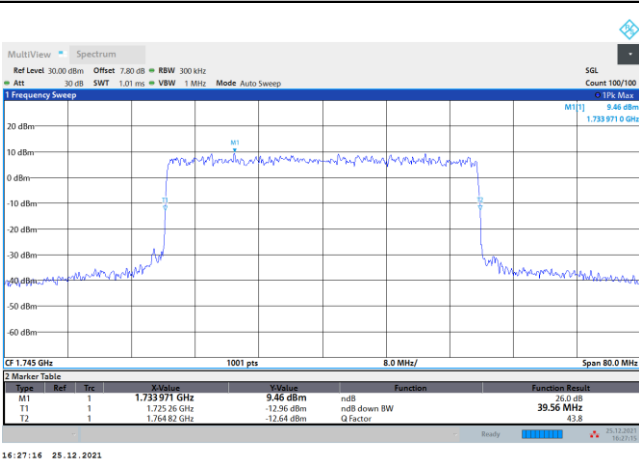
FR1 n66 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

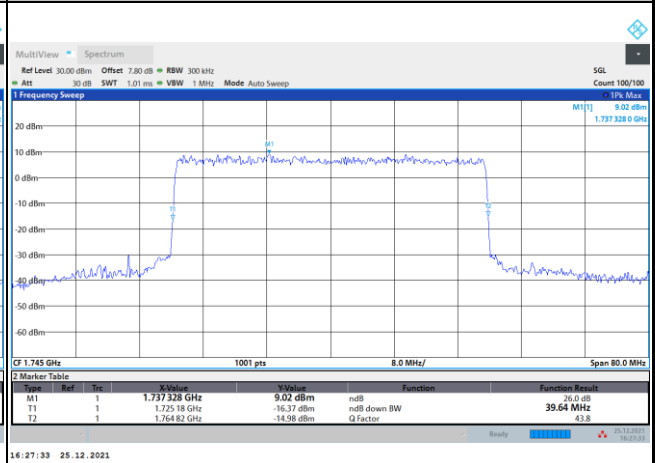


FR1 n66 / 40MHz / CP OFDM / Middle Channel / Full RB

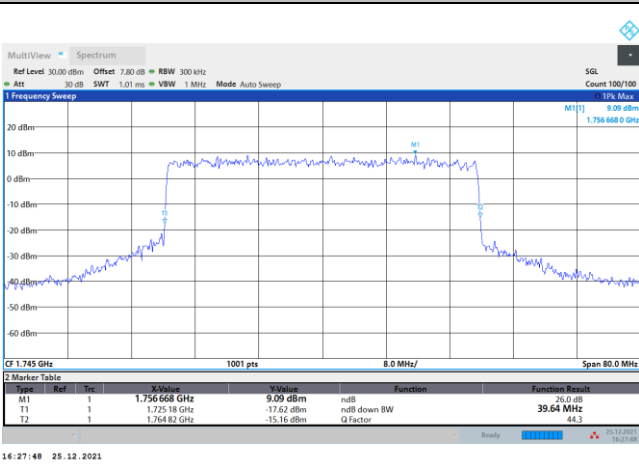
QPSK



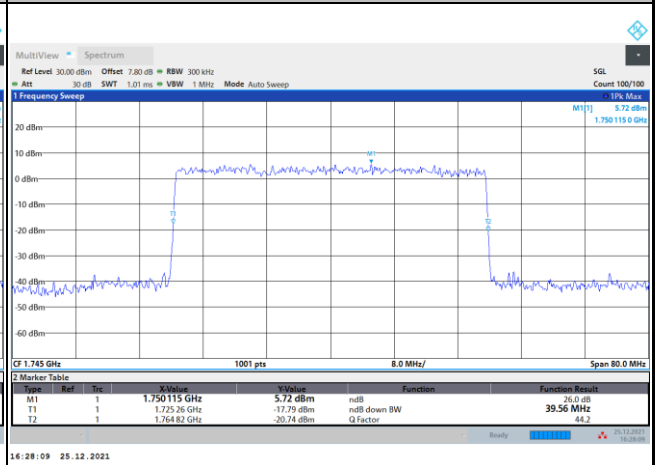
16QAM



64QAM



256QAM





**Occupied Bandwidth**

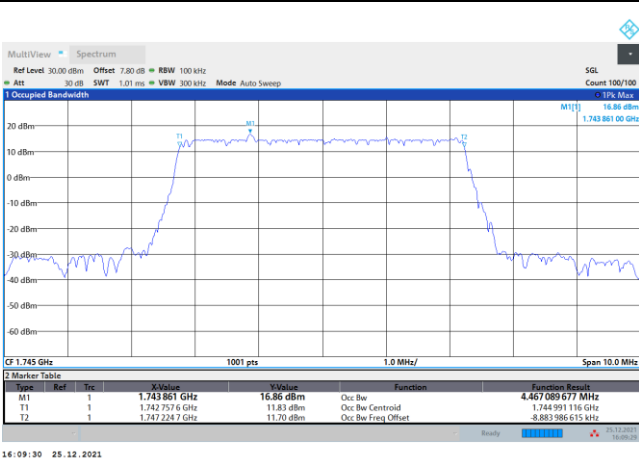
Mode	FR1 n66 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.46		8.90		13.48		17.89	
BW	25MHz		30MHz		40MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	-		28.58		38.57			

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.50	4.48	9.27	9.27	14.15	14.12	18.92	18.96
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.47	4.49	9.28	9.30	14.17	14.12	18.92	18.93
BW	25MHz		30MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	-	-	28.54	28.57	38.52	38.49		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	-	-	28.52	28.57	38.53	38.47		



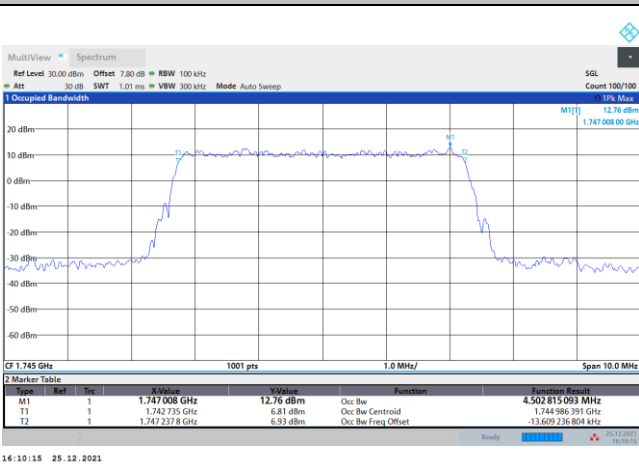
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

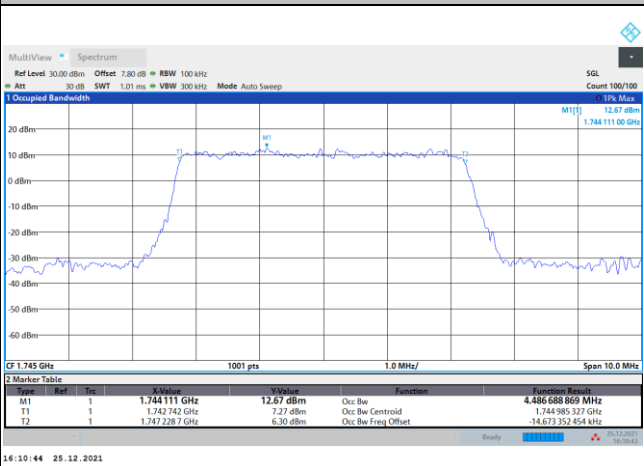


FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

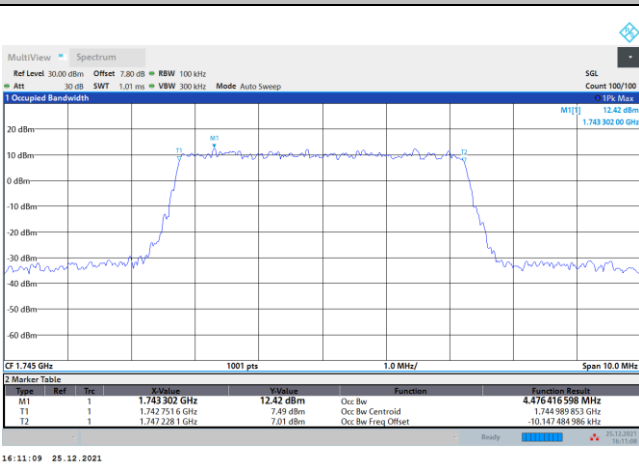
QPSK



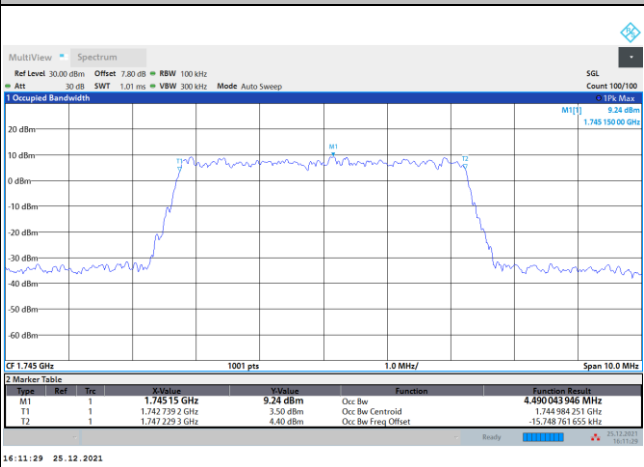
16QAM



64QAM



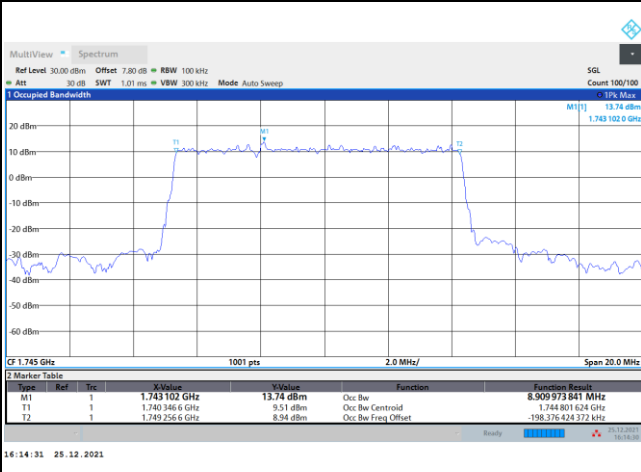
256QAM





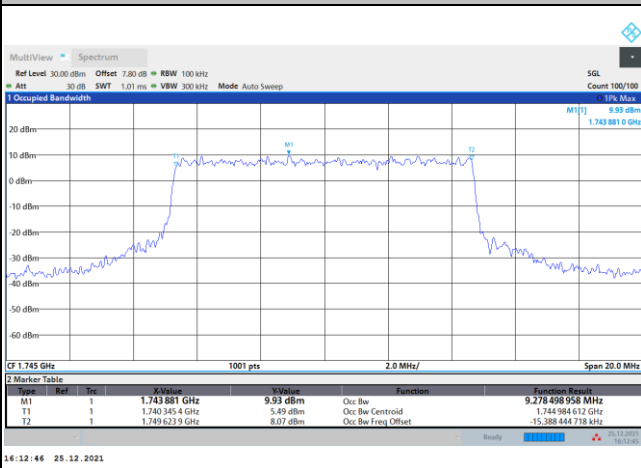
FR1 n66 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

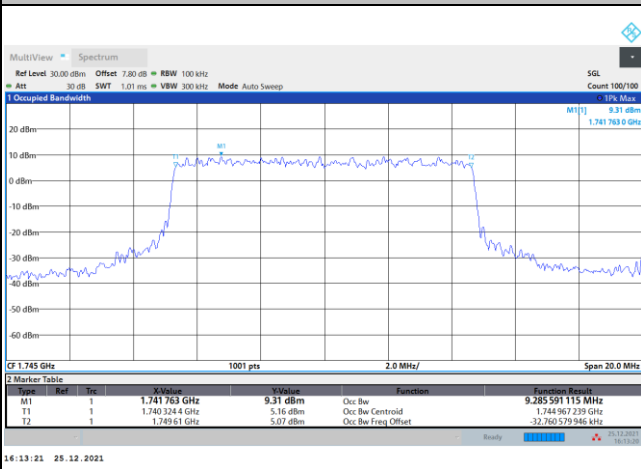
QPSK



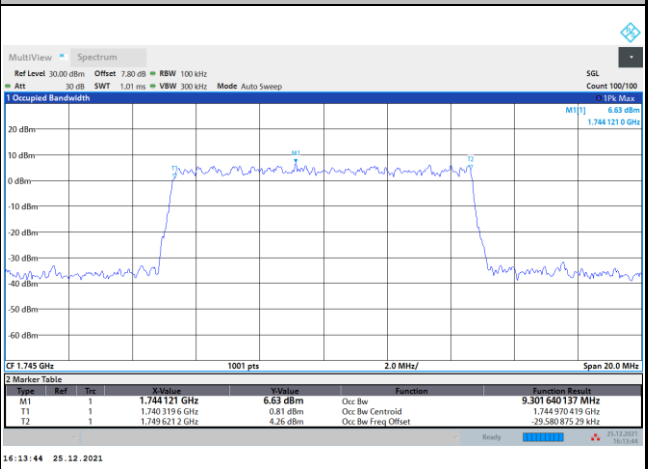
16QAM



64QAM



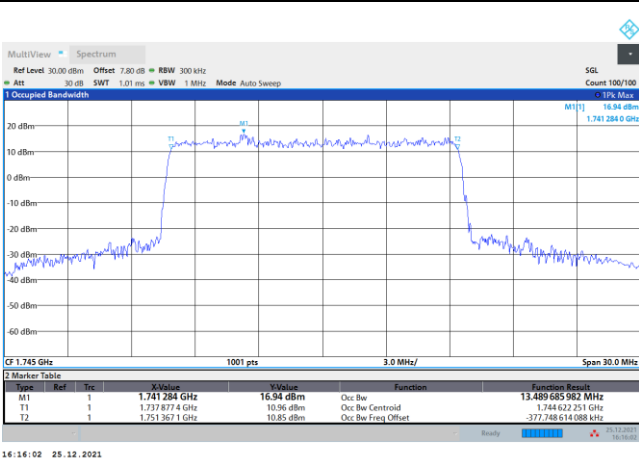
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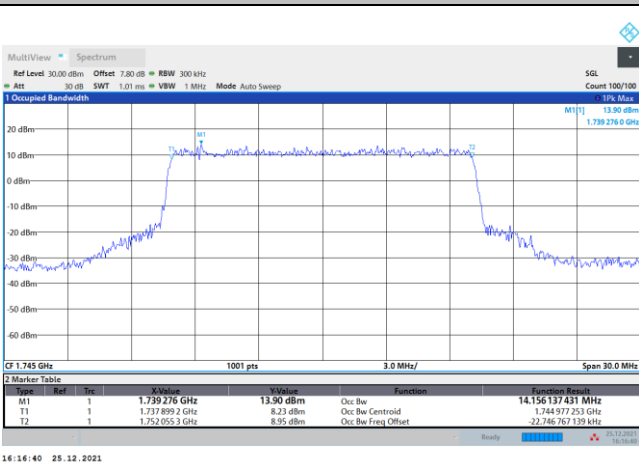
FR1 n66 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

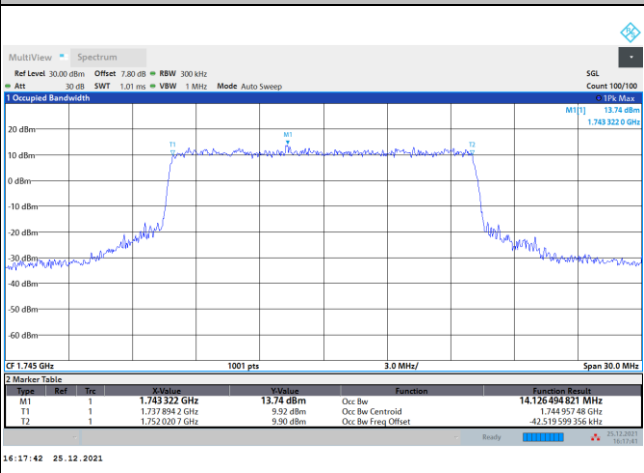


FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

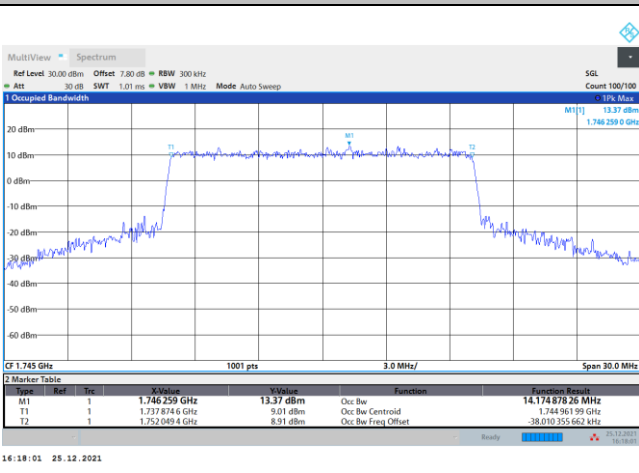
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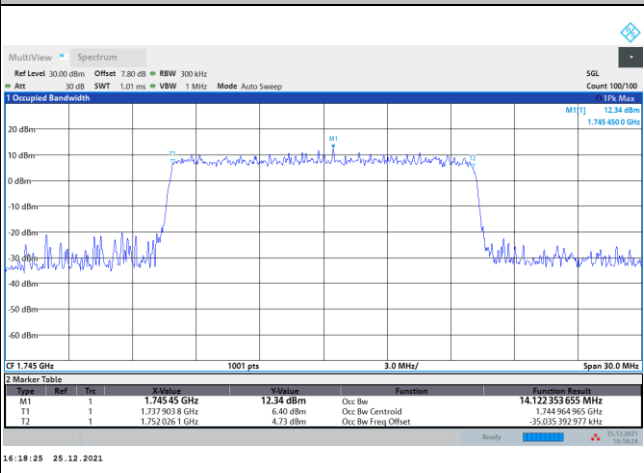
16QAM



64QAM



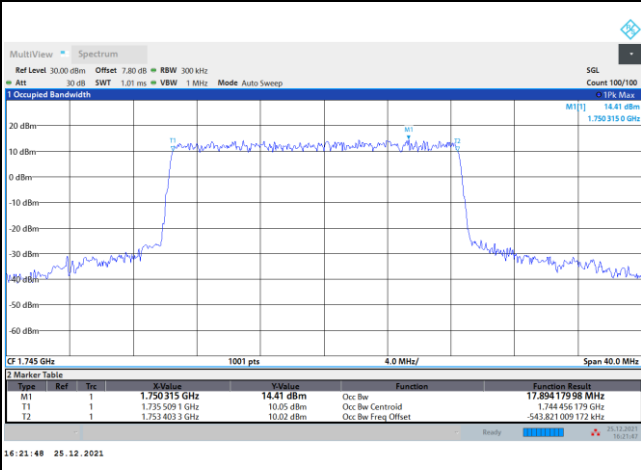
256QAM





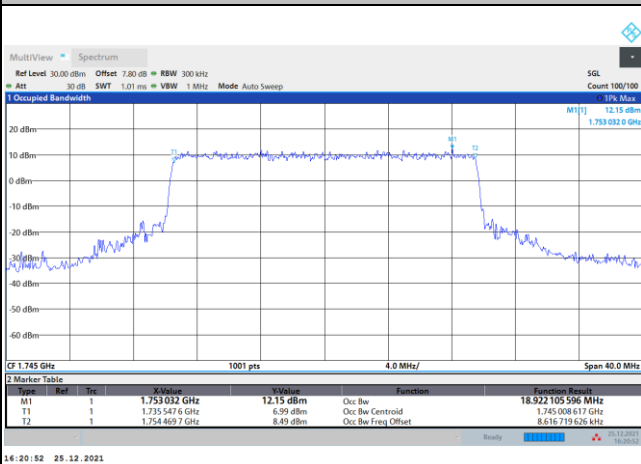
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

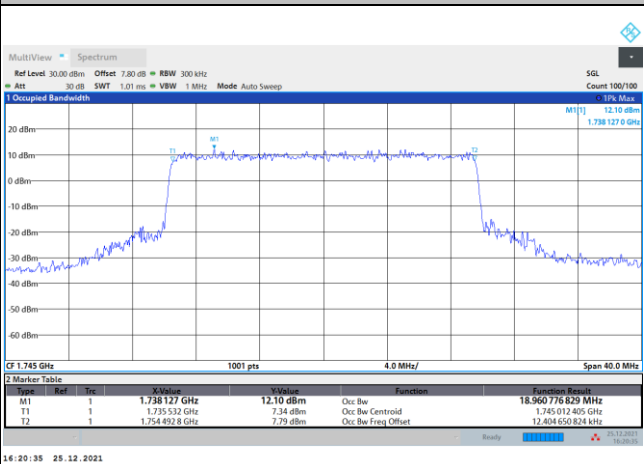


FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

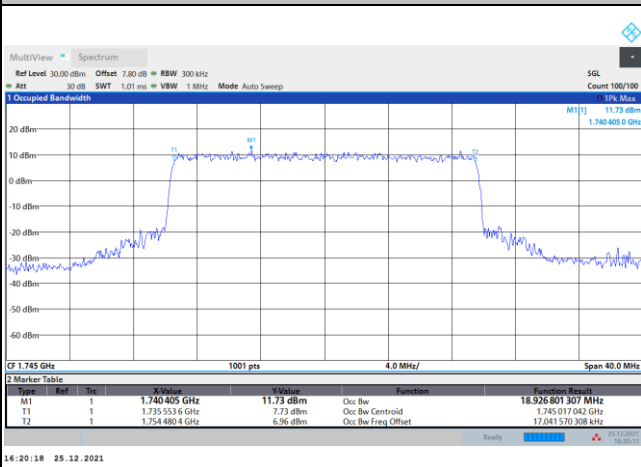
QPSK



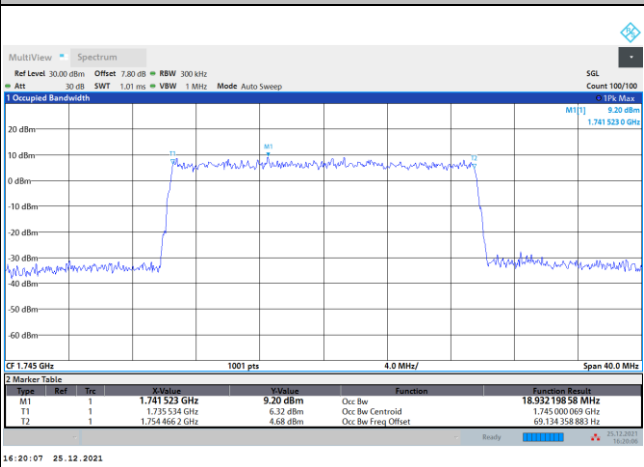
16QAM



64QAM



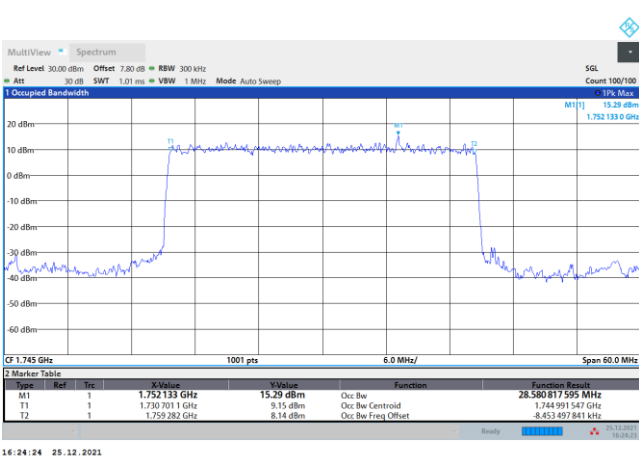
256QAM





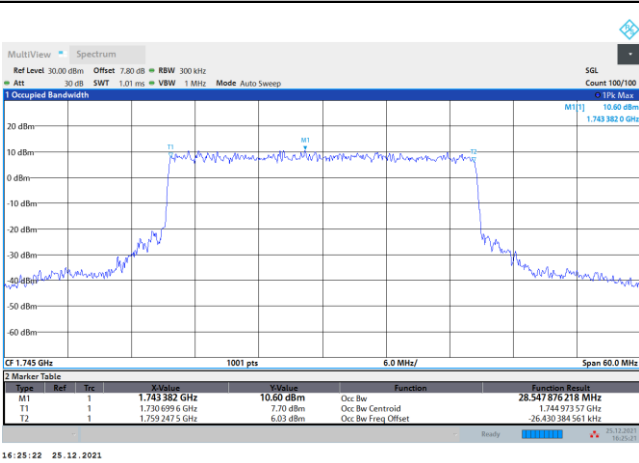
FR1 n66 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

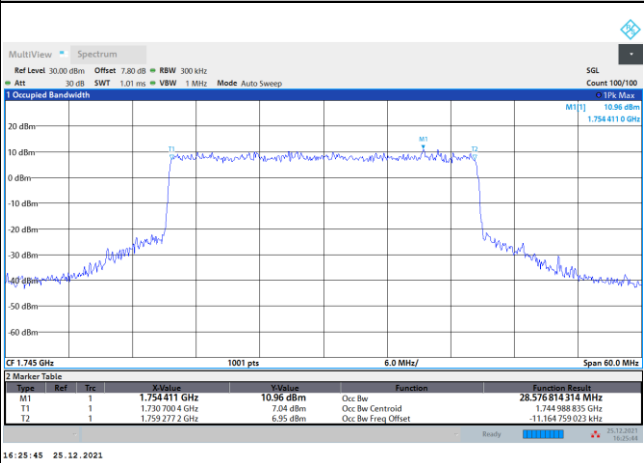


FR1 n66 / 30MHz / CP OFDM / Middle Channel / Full RB

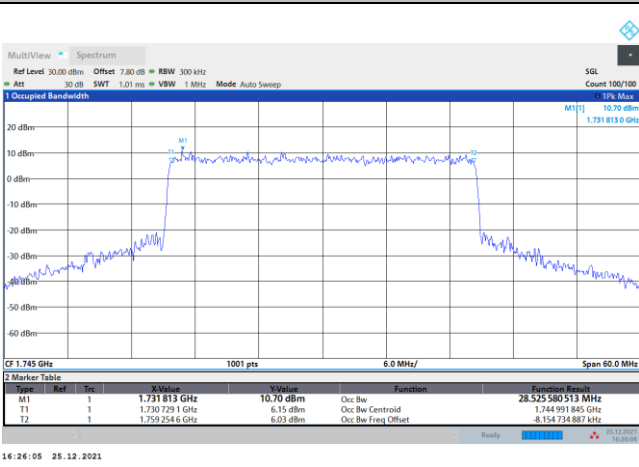
QPSK



16QAM



64QAM



256QAM

