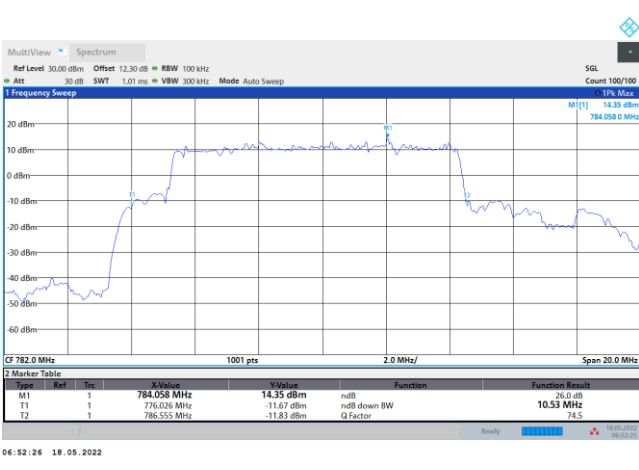




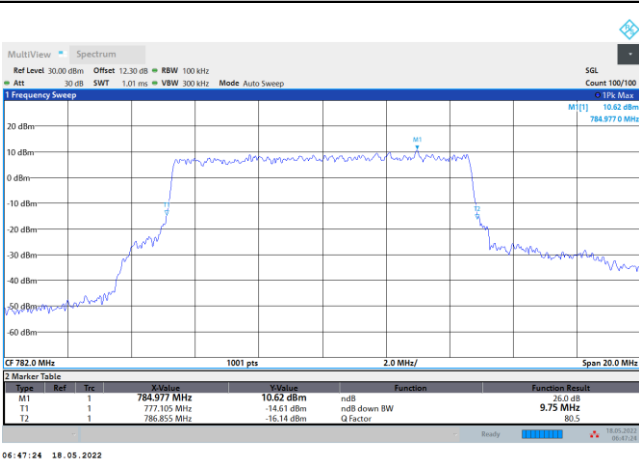
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

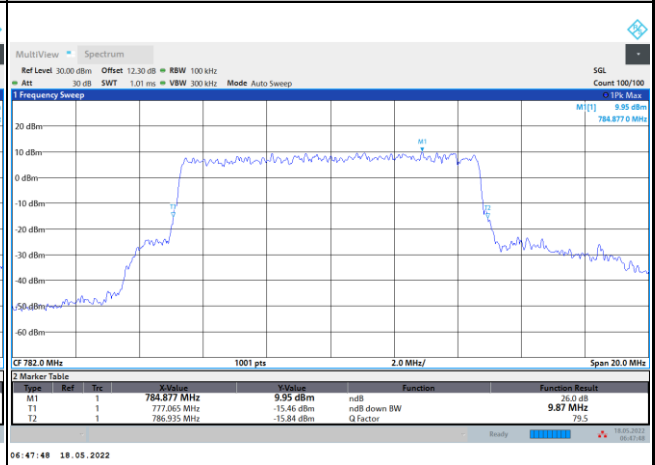


FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

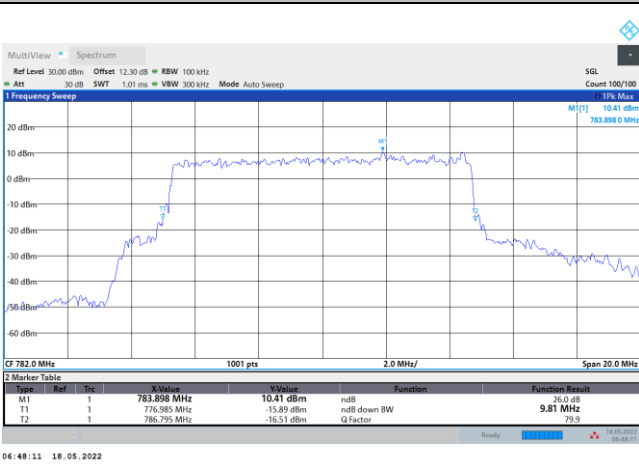
QPSK



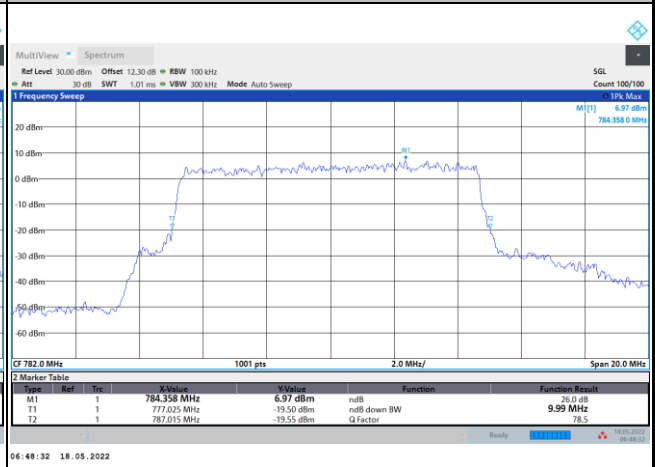
16QAM



64QAM



256QAM





Occupied Bandwidth

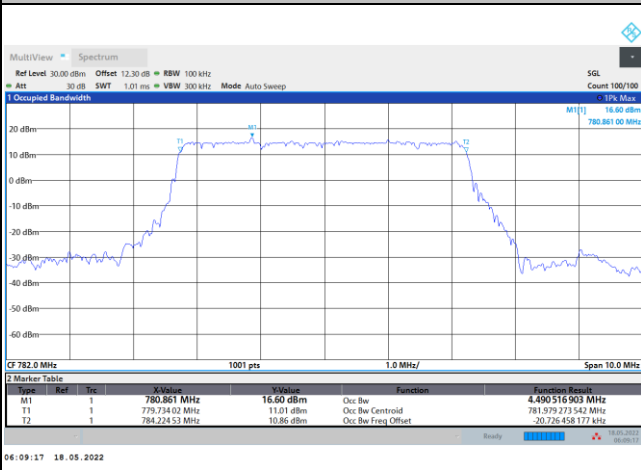
Mode	FR1 n13 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.49		8.91					

Mode	FR1 n13 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.50	4.47	9.27	9.27				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.50	4.51	9.27	9.28				



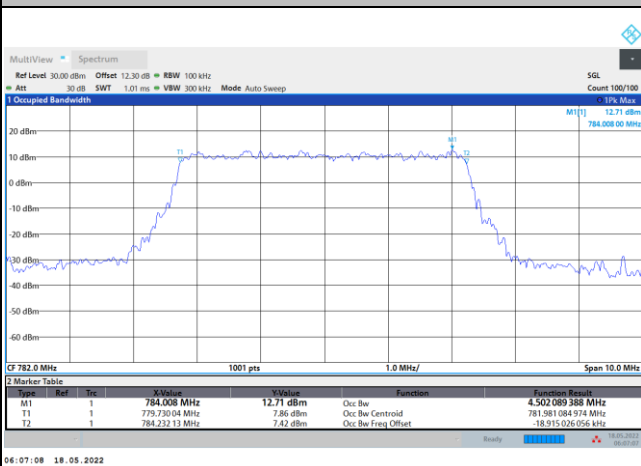
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

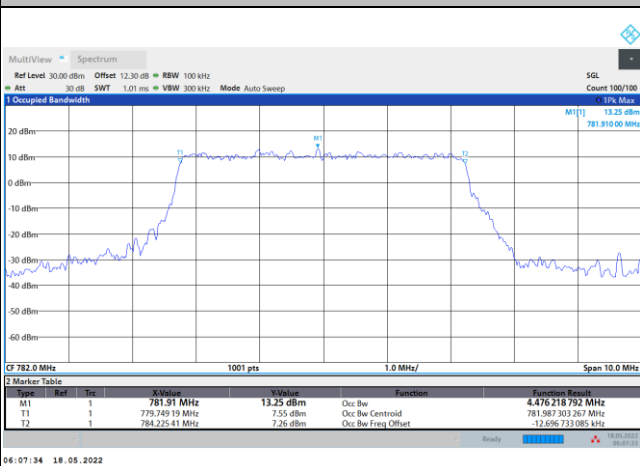


FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB

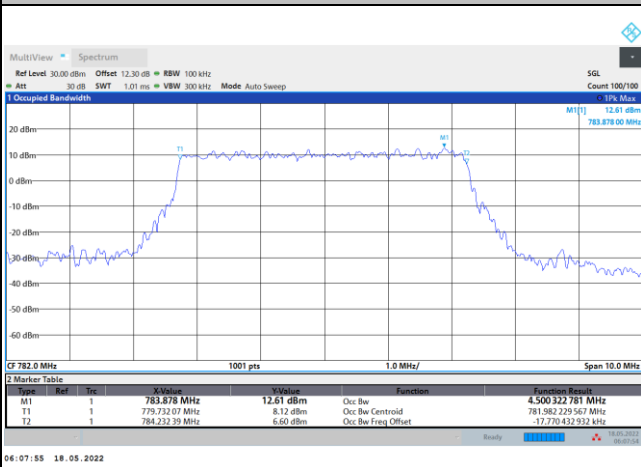
QPSK



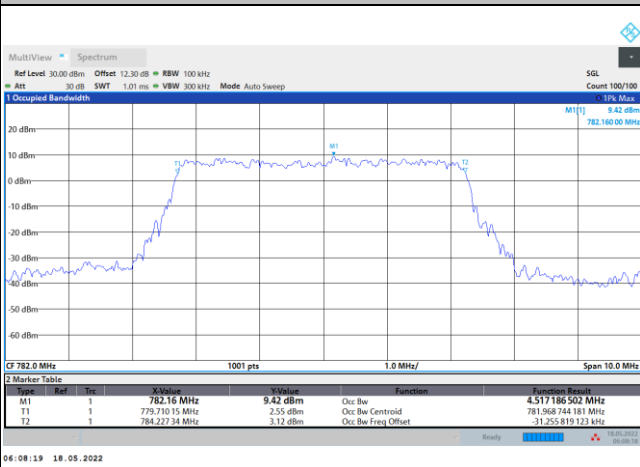
16QAM



64QAM



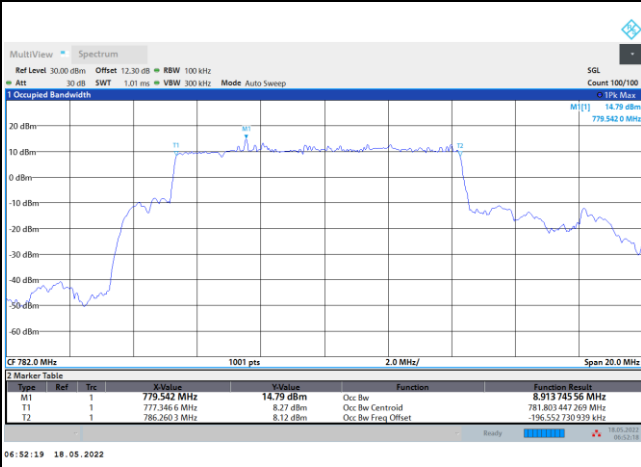
256QAM





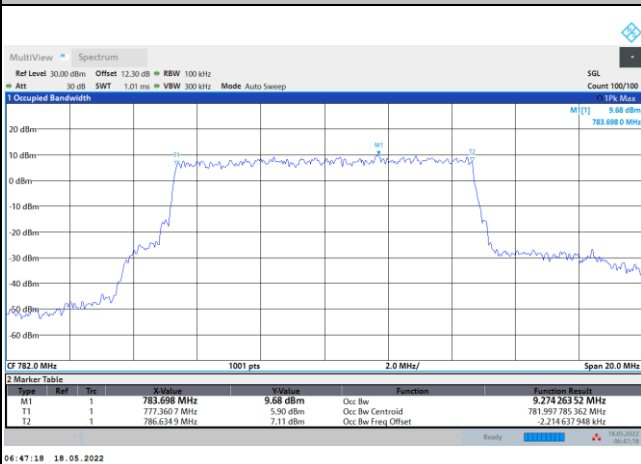
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

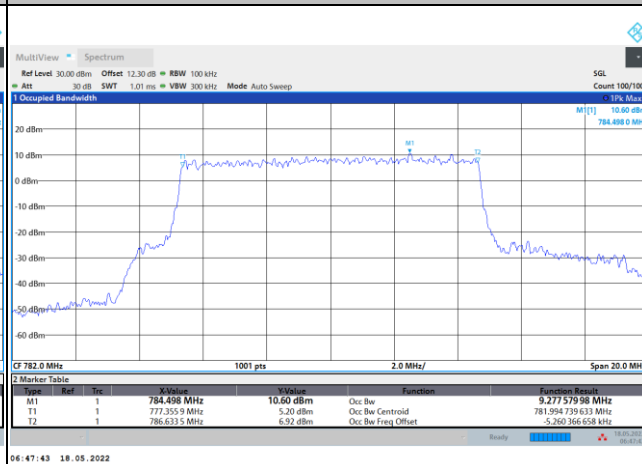


FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

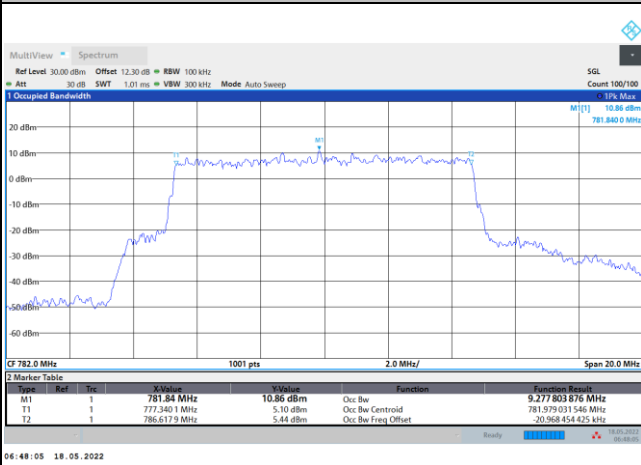
QPSK



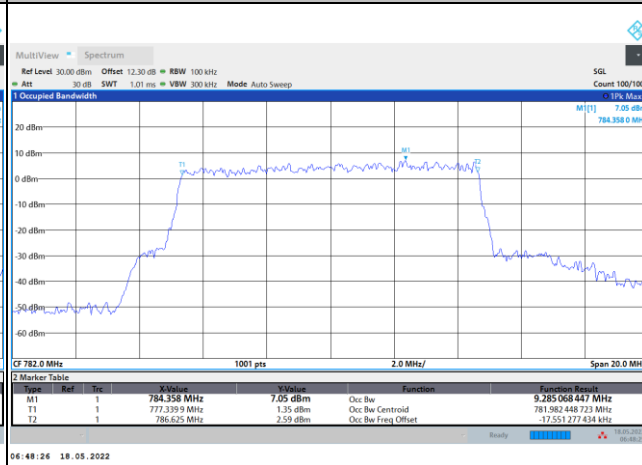
16QAM



64QAM



256QAM



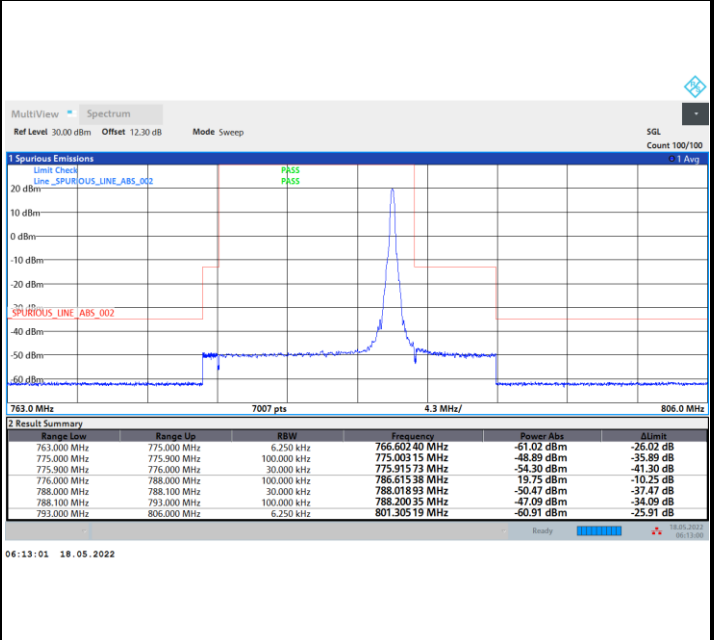
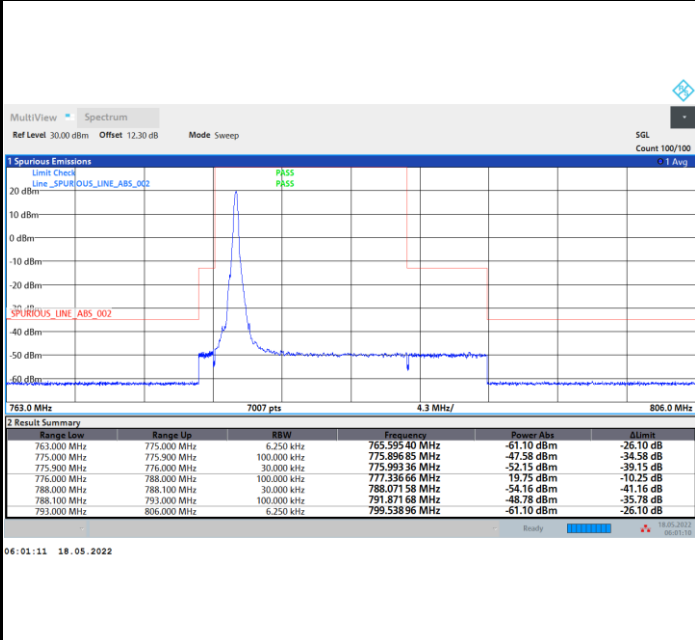


Conducted Band Edge

FR1 n13 / 5MHz / DFT-S OFDM / PI/2 BPSK

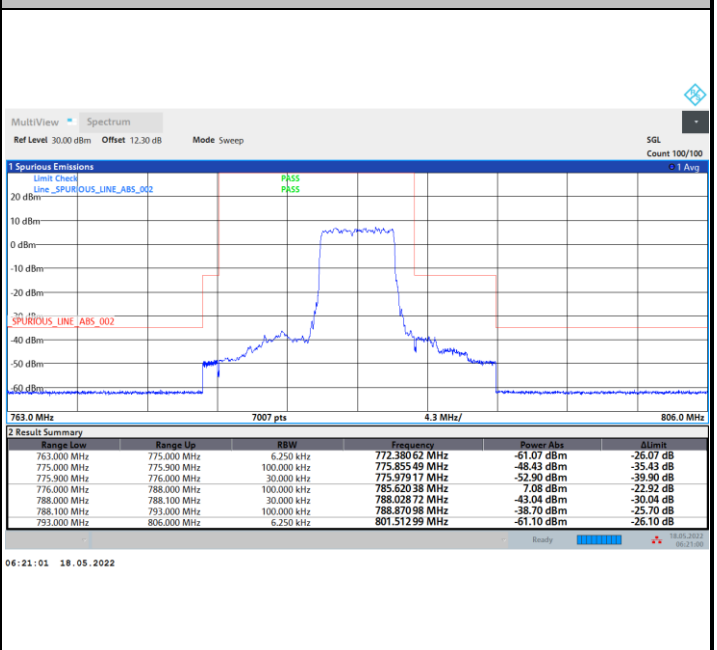
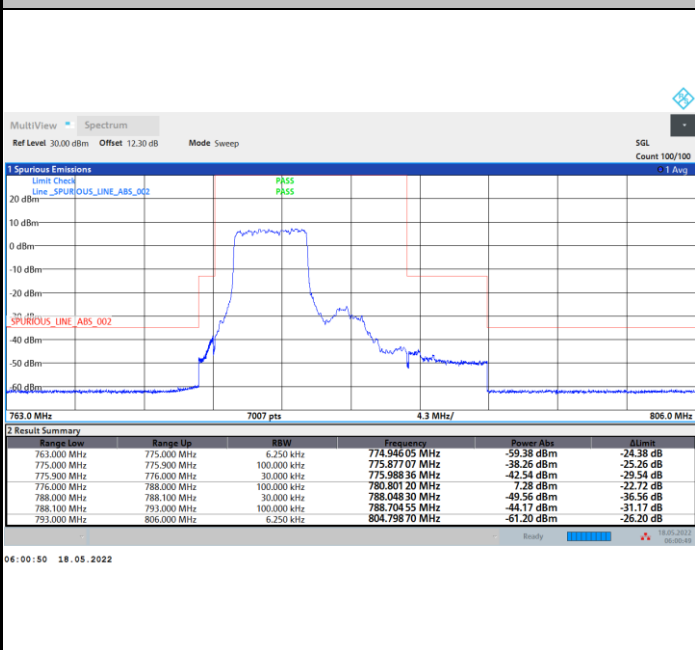
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

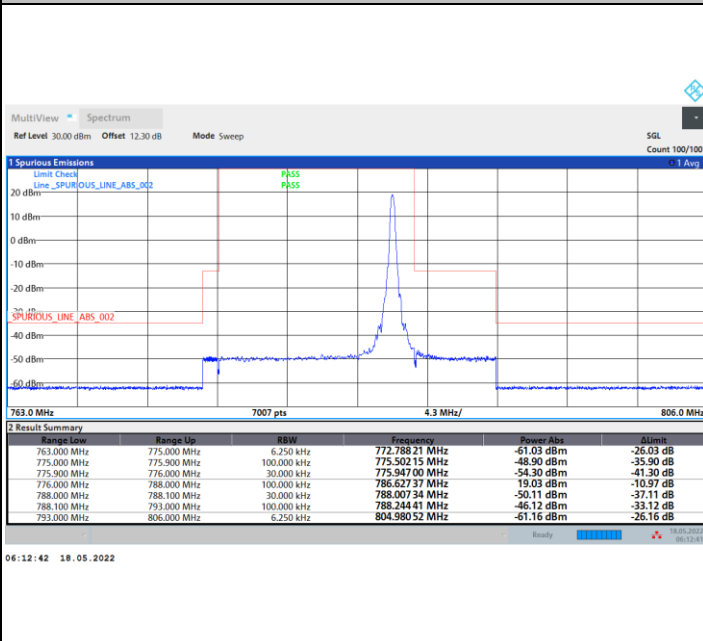
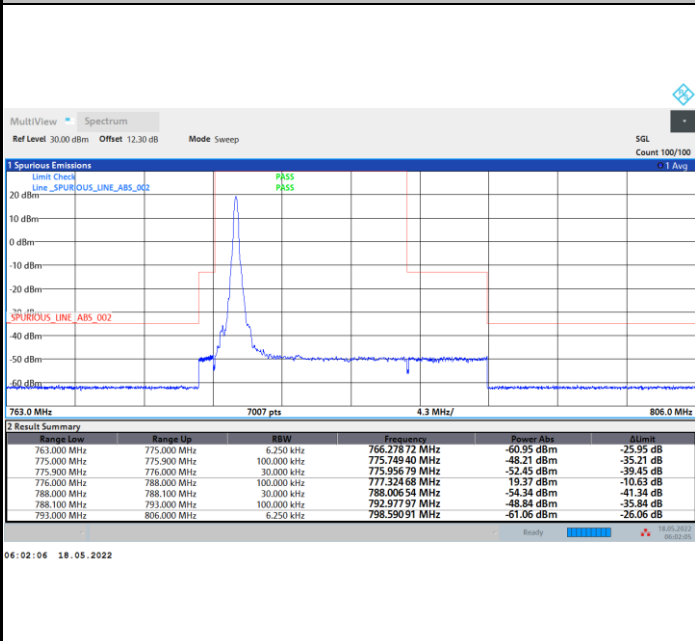




FR1 n13 / 5MHz / DFT-S OFDM / QPSK

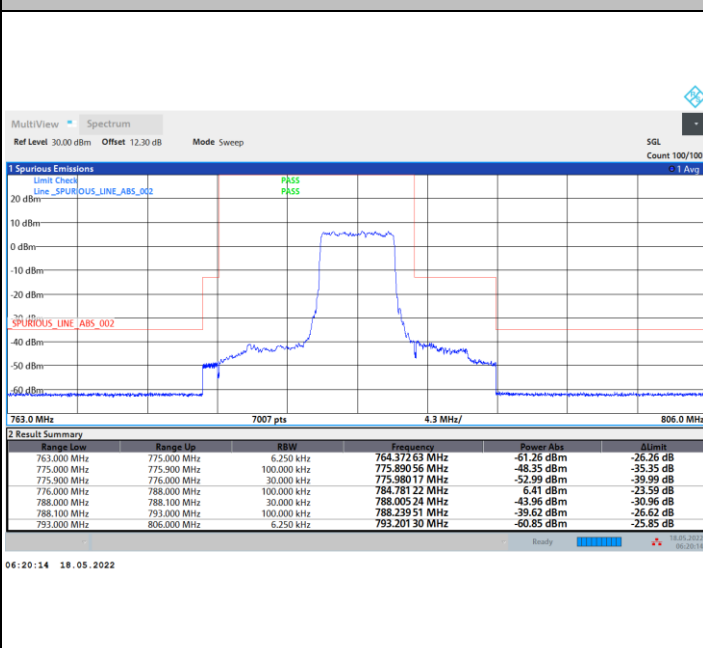
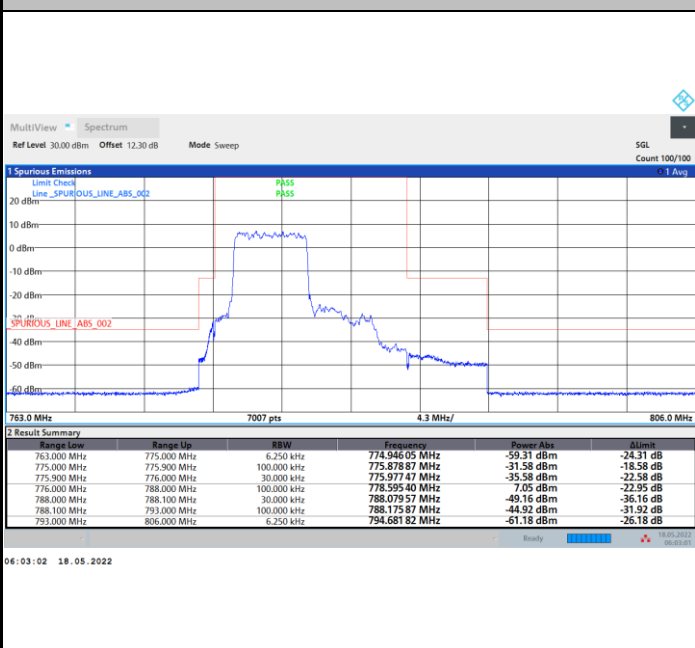
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

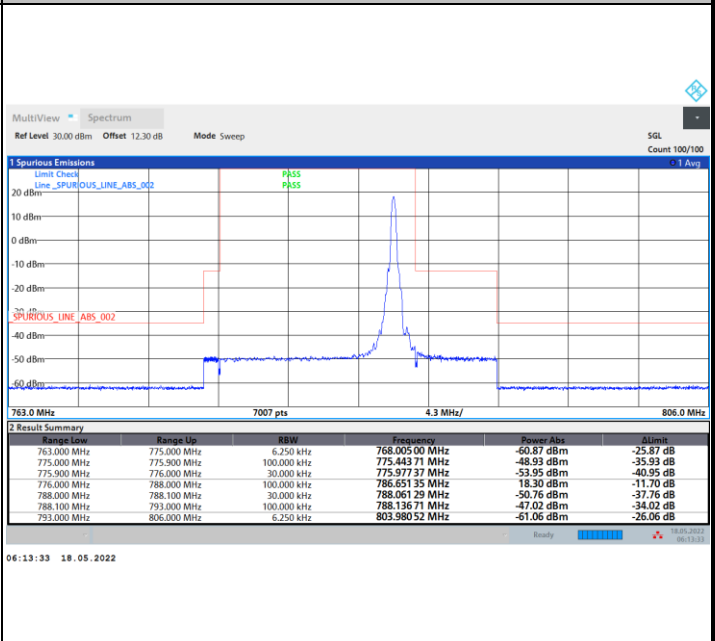
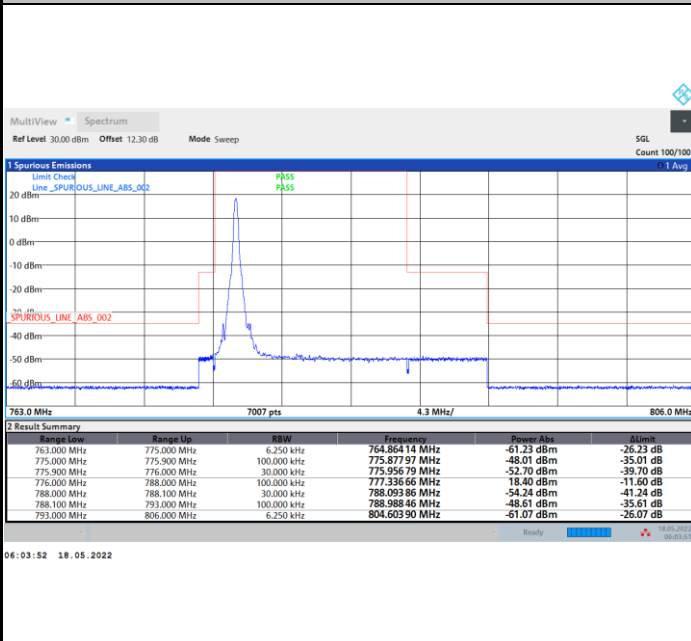




FR1 n13 / 5MHz / DFT-S OFDM / 16QAM

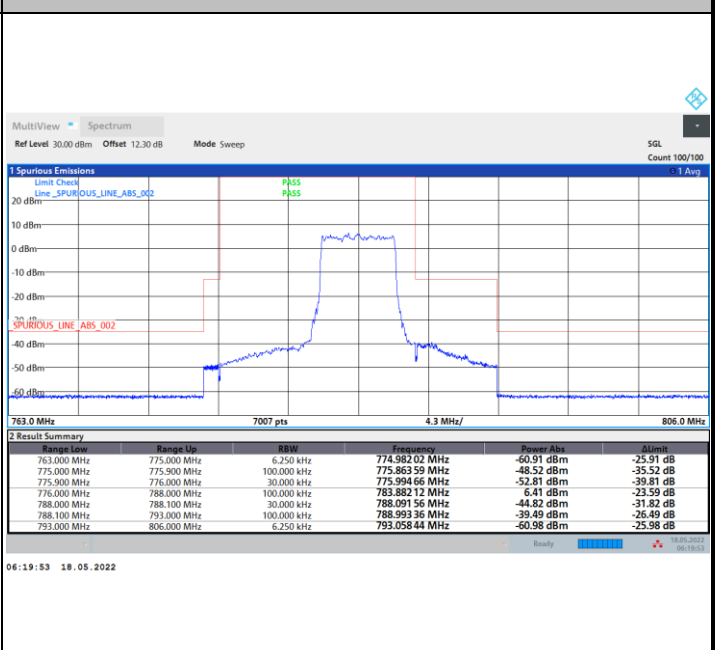
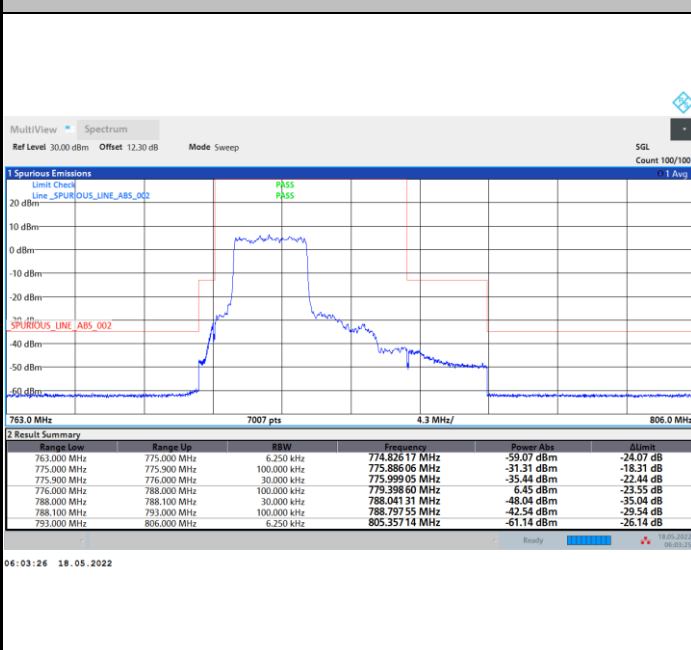
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

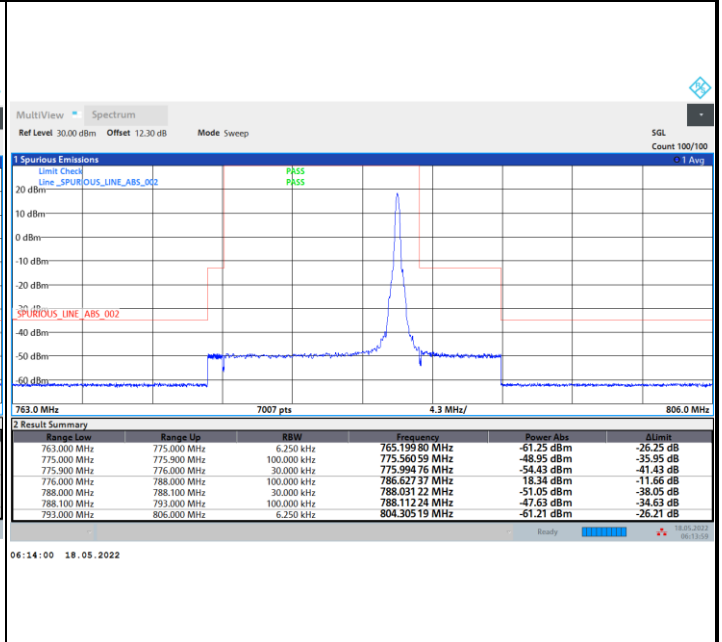
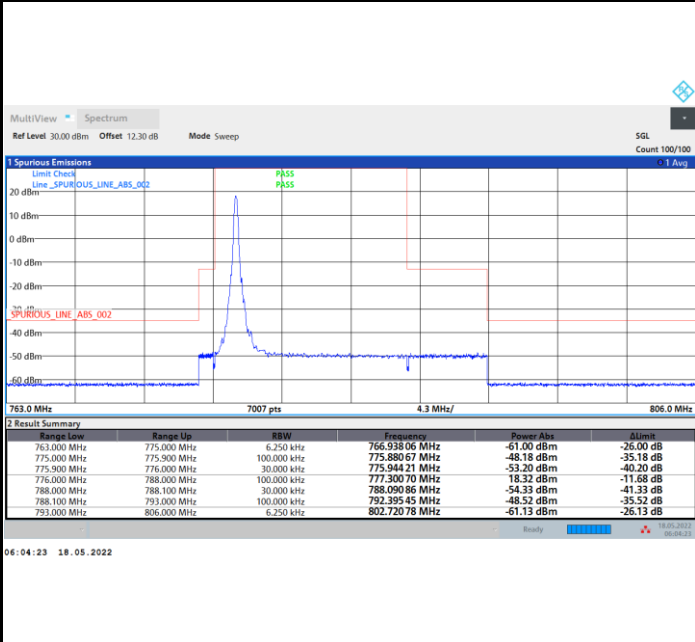




FR1 n13 / 5MHz / DFT-S OFDM / 64QAM

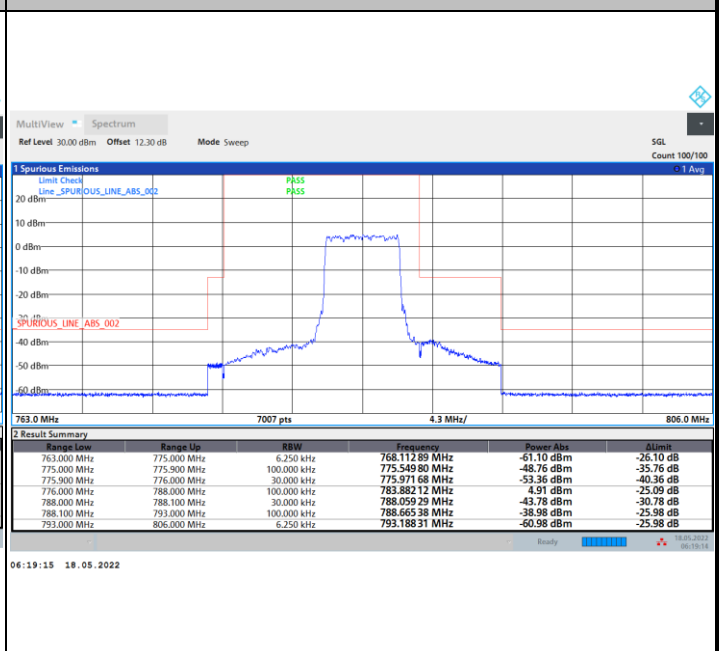
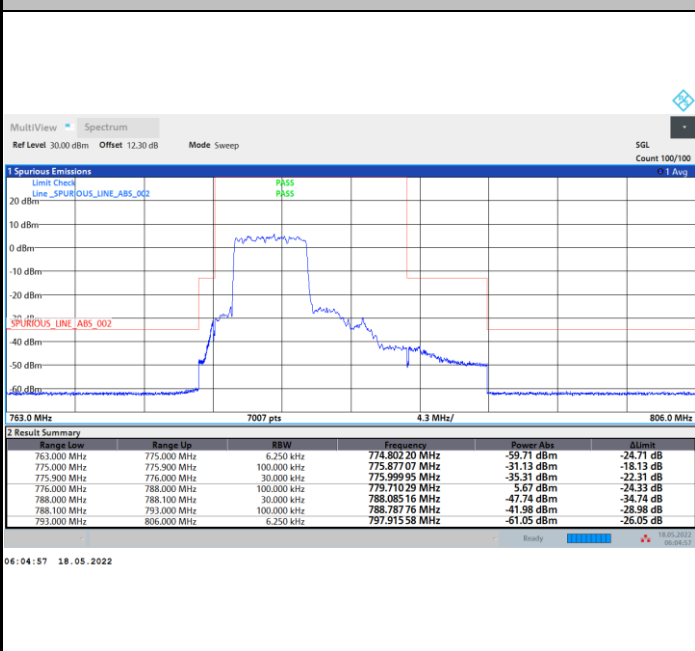
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

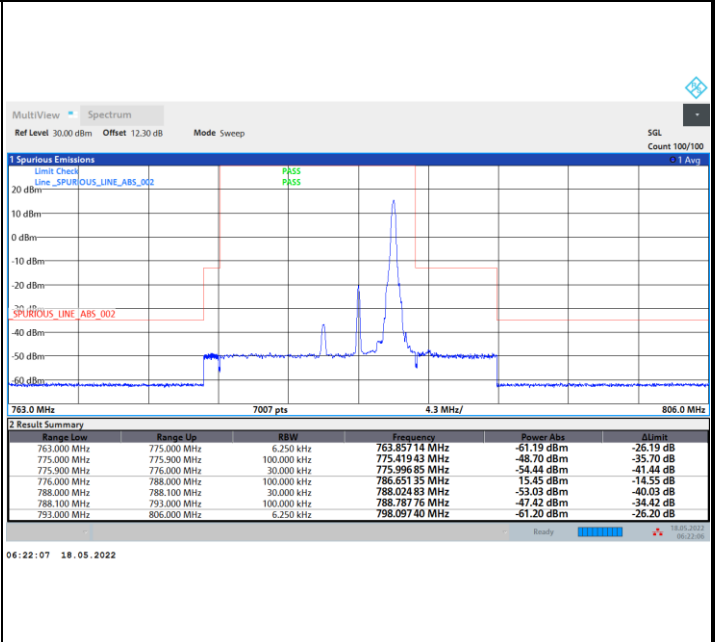
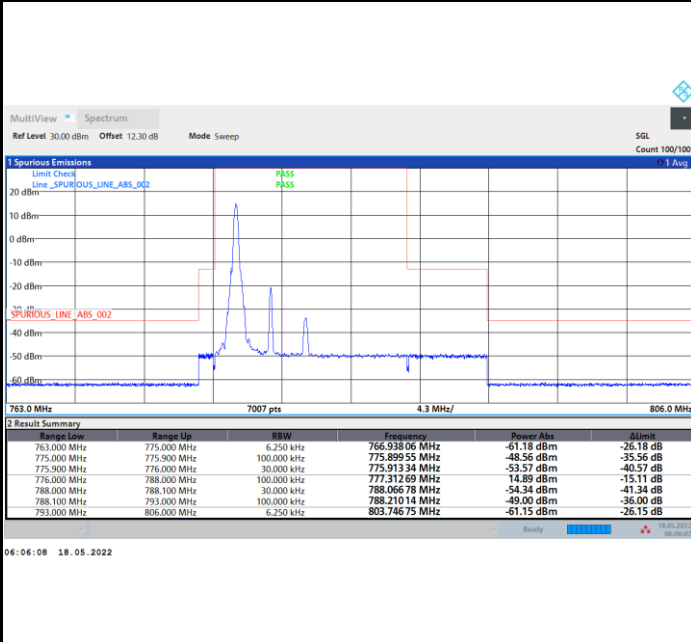




FR1 n13 / 5MHz / DFT-S OFDM / 256QAM

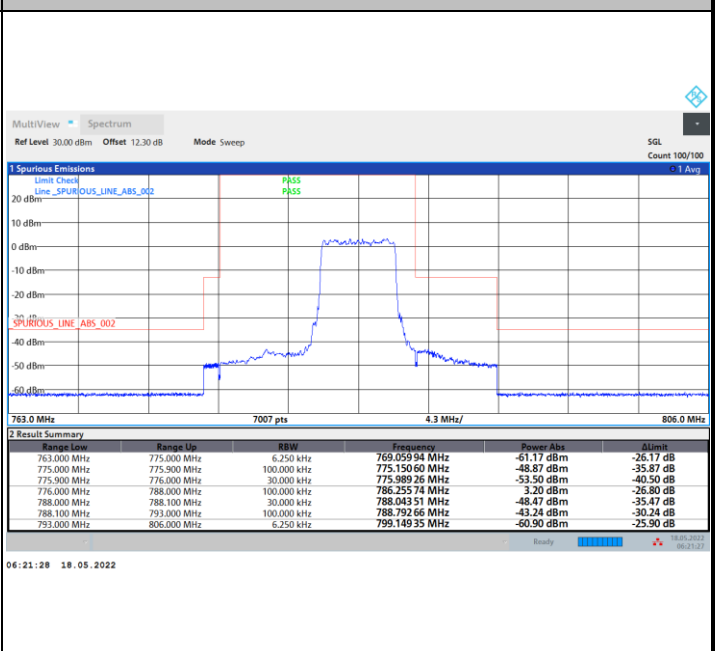
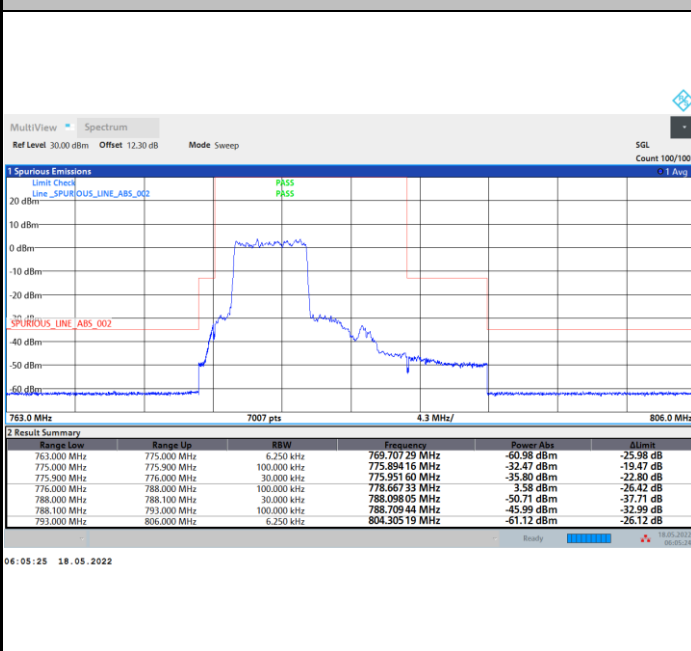
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

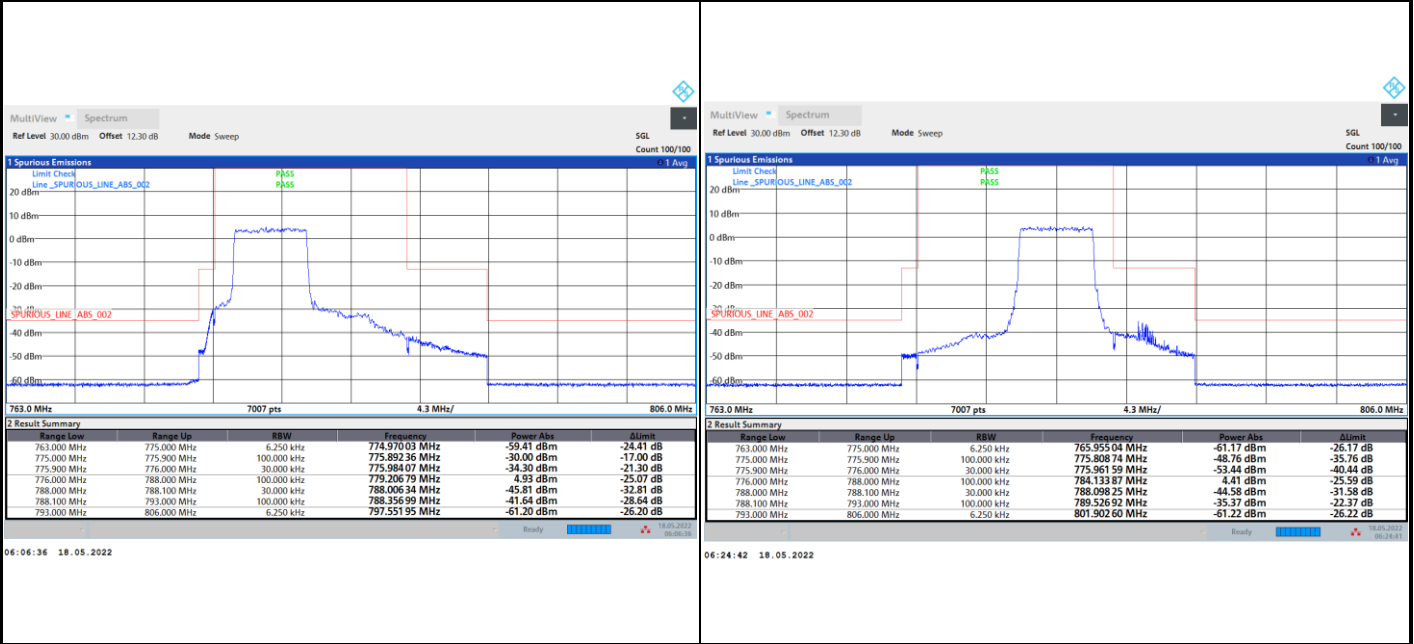




FR1 n13 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

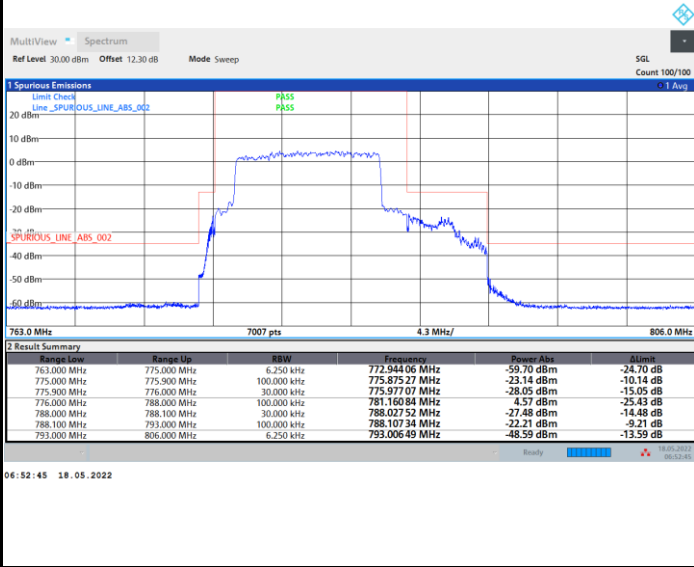
Highest Band Edge





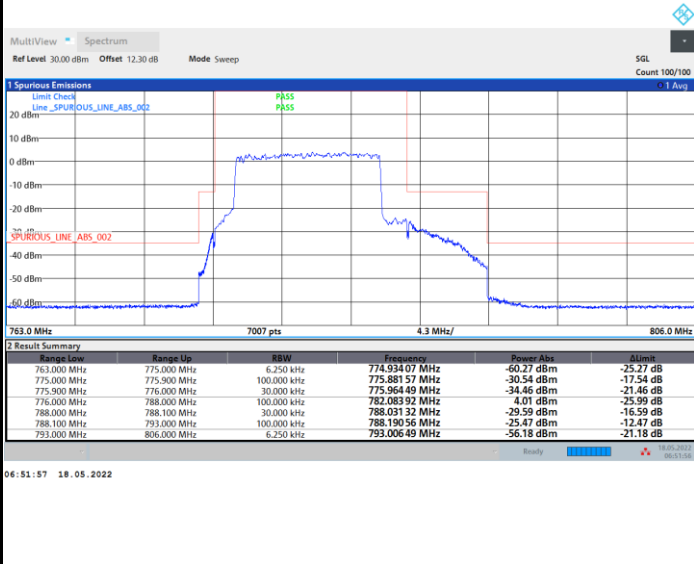
FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / QPSK

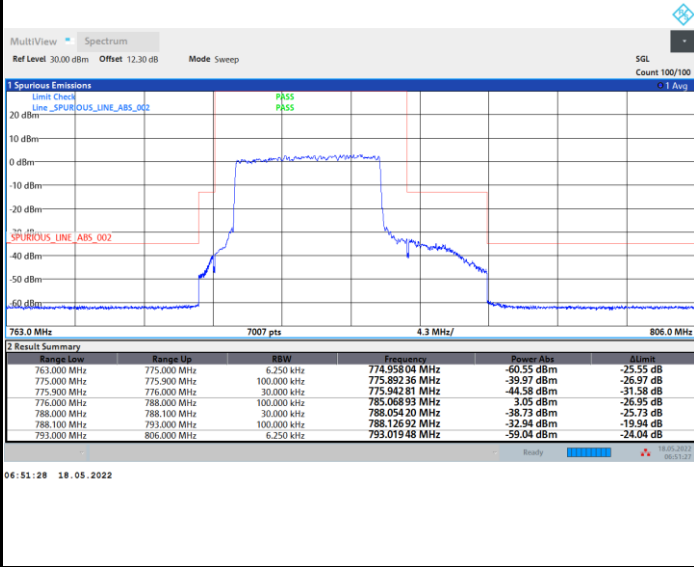
Middle Band Edge / Full RB





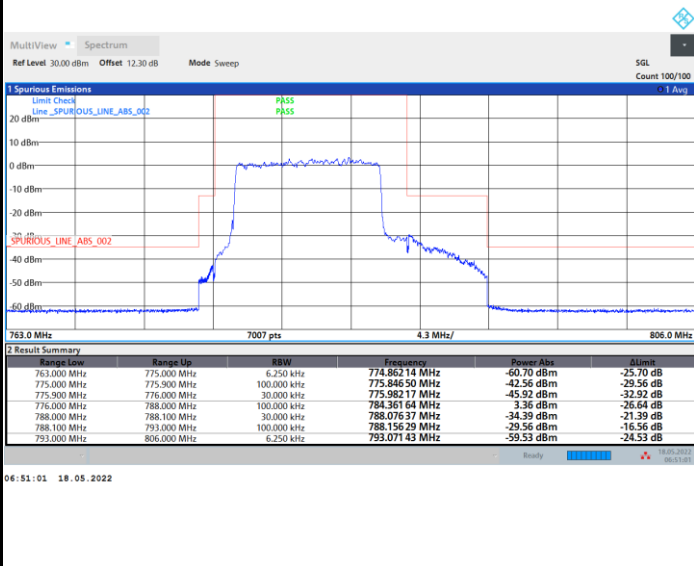
FR1 n13 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / 64QAM

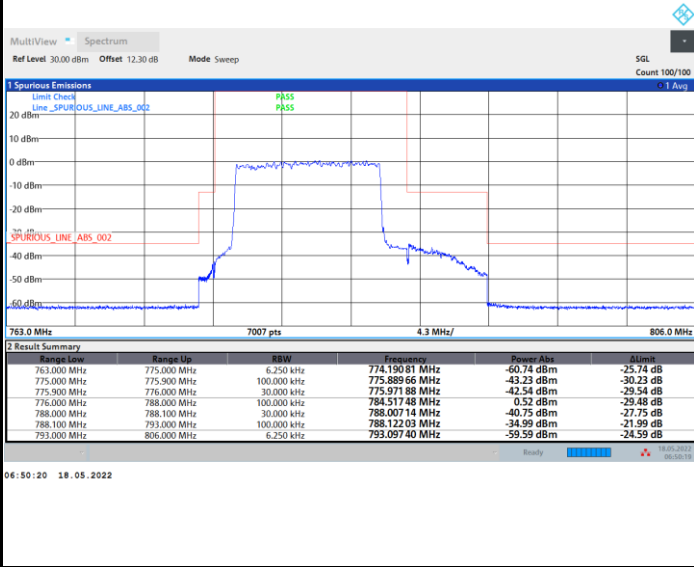
Middle Band Edge / Full RB





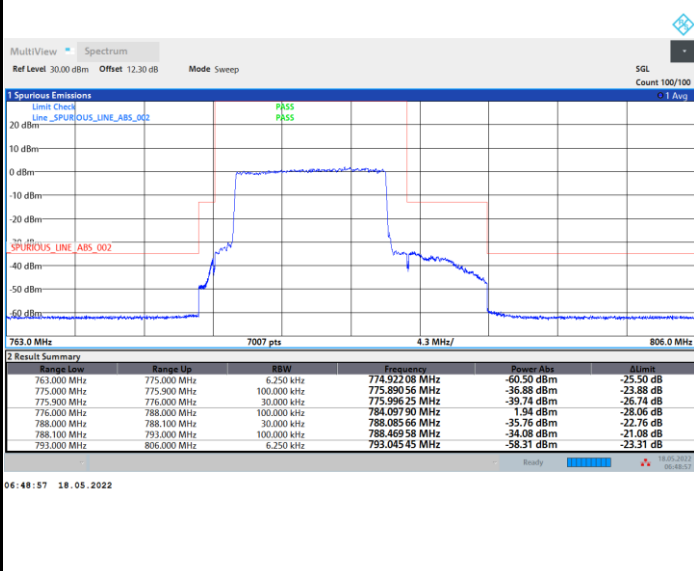
FR1 n13 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / CP OFDM / QPSK / Full RB

Middle Band Edge / Full RB

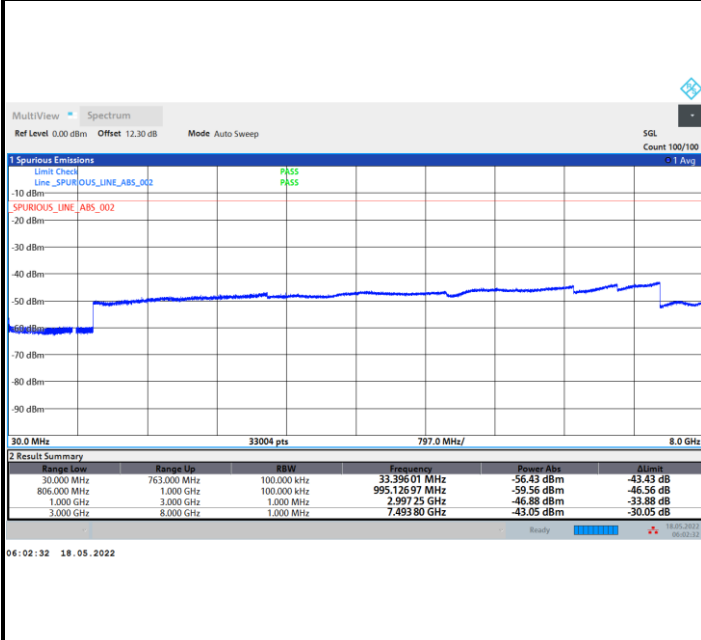




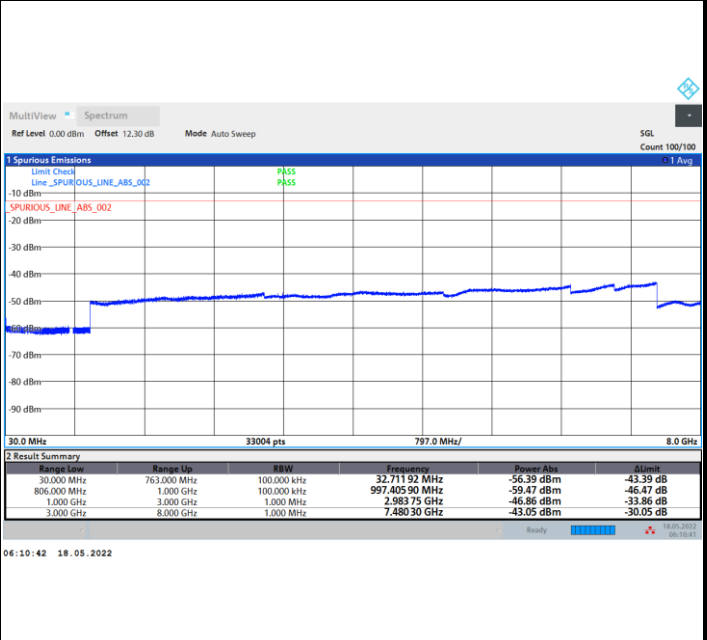
Conducted Spurious Emission

FR1 n13 / 5MHz / DFT-S OFDM / QPSK / 1RB1

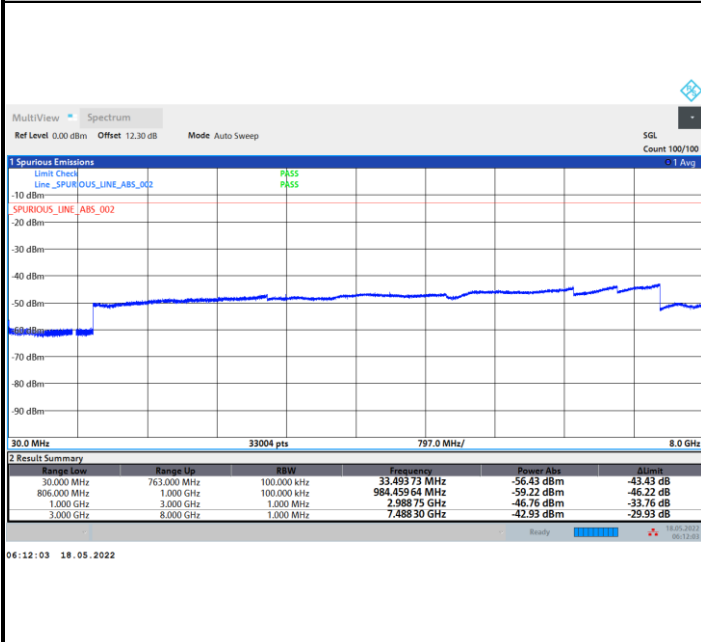
Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n13 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0042	PASS
40	Normal Voltage	0.0032	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0040	
0	Normal Voltage	0.0055	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0033	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0055	

Note:

- 1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.30 V. ; Maximum Voltage = 4.25 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n25

Peak-to-Average Ratio

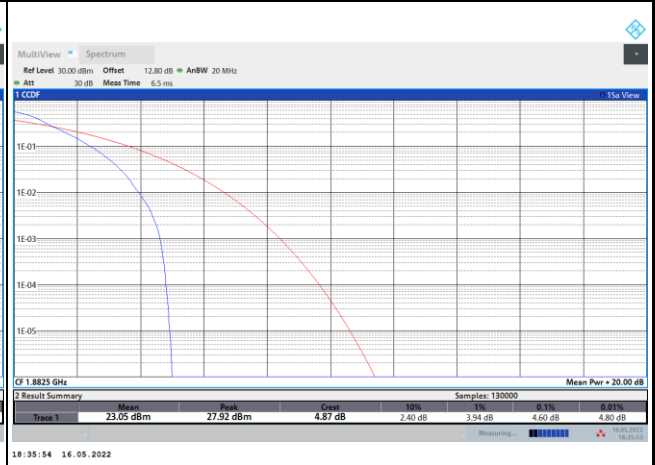
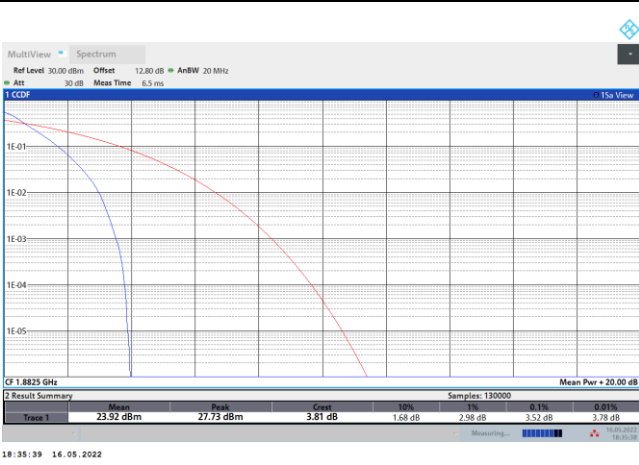
Mode	FR1 n25 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.52	4.60	5.06	5.16	PASS
Mode	FR1 n25 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.22				PASS



FR1 n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

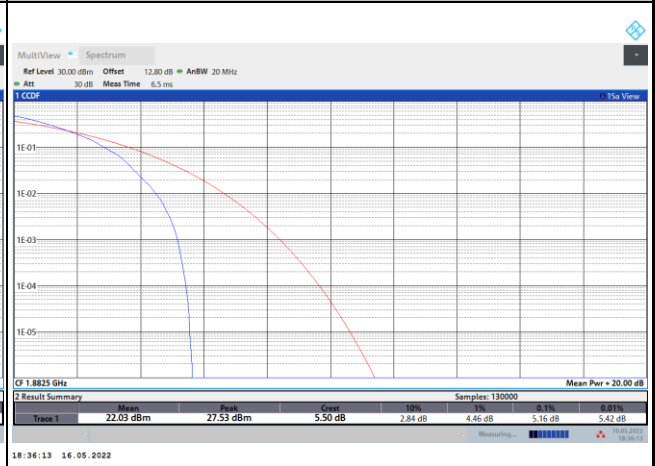
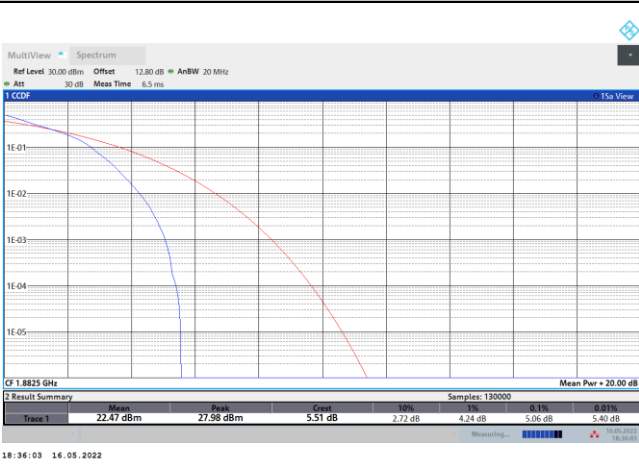
PI/2 BPSK

QPSK

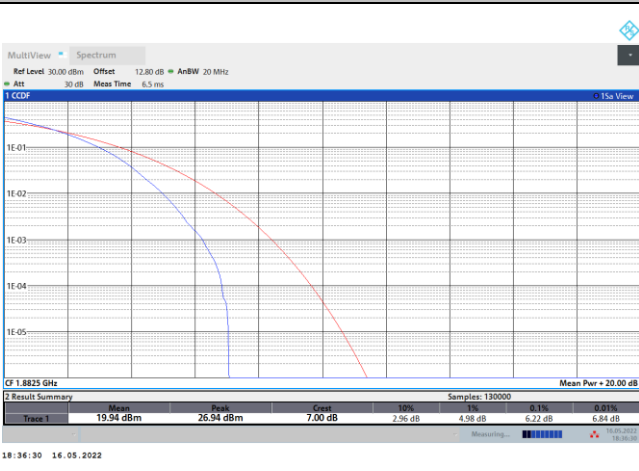


16QAM

64QAM



256QAM





26dB Bandwidth

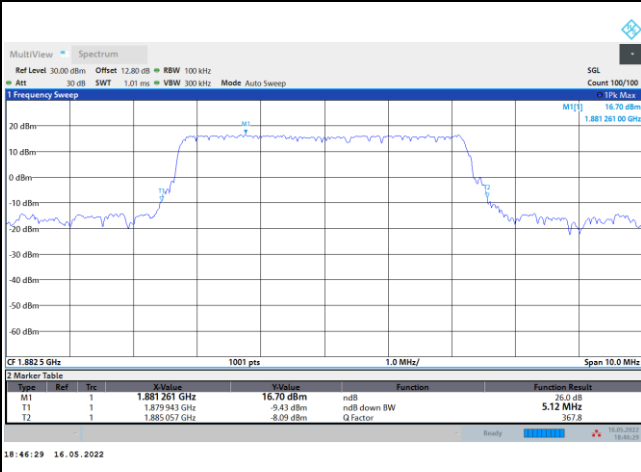
Mode	FR1 n25 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.12		9.55		14.39		18.94	
BW	25MHz		30MHz		40MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	-		29.67		41.16			

Mode	FR1 n25 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.29	5.15	9.93	10.03	15.14	15.17	19.94	20.10
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.97	5.10	9.93	9.99	15.05	15.08	19.94	20.02
BW	25MHz		30MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	-	-	30.03	29.61	41.24	41.32		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	-	-	29.61	29.67	41.24	41.00		



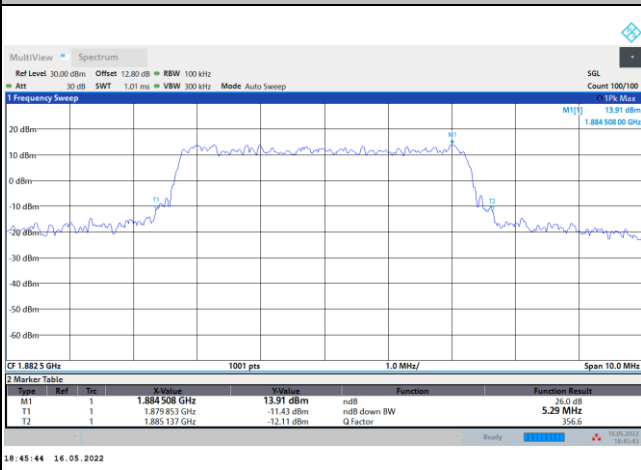
FR1 n25 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

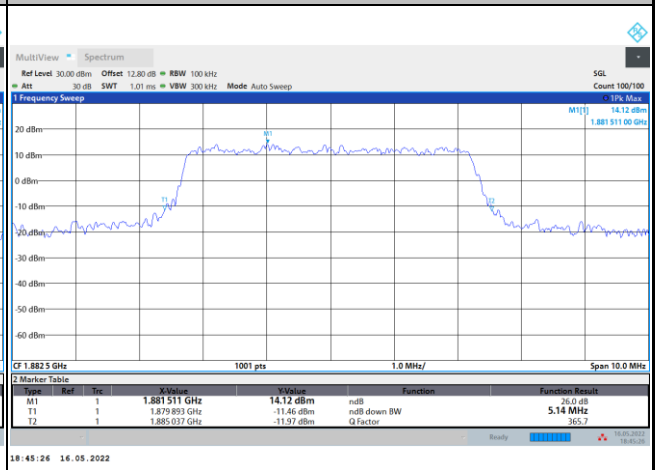


FR1 n25 / 5MHz / CP OFDM / Middle Channel / Full RB

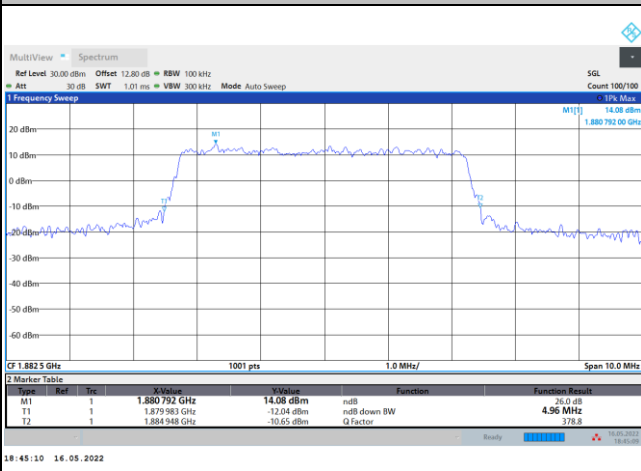
QPSK



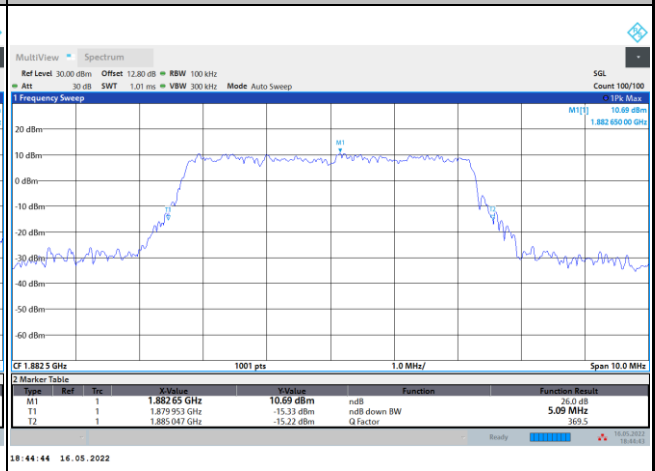
16QAM



64QAM



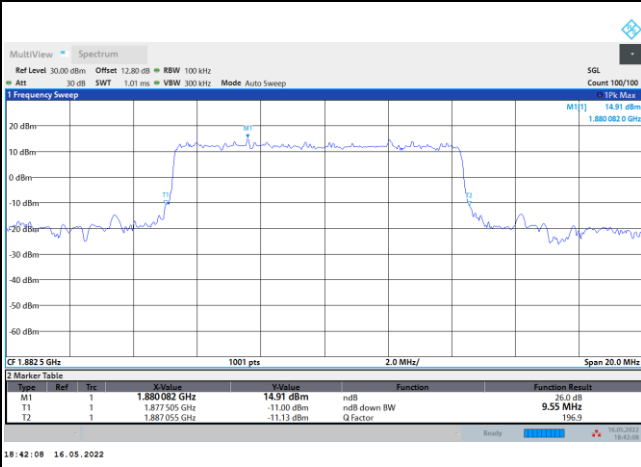
256QAM





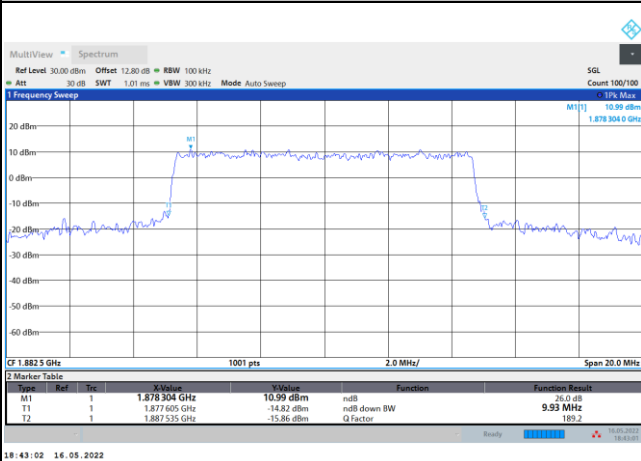
FR1 n25 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

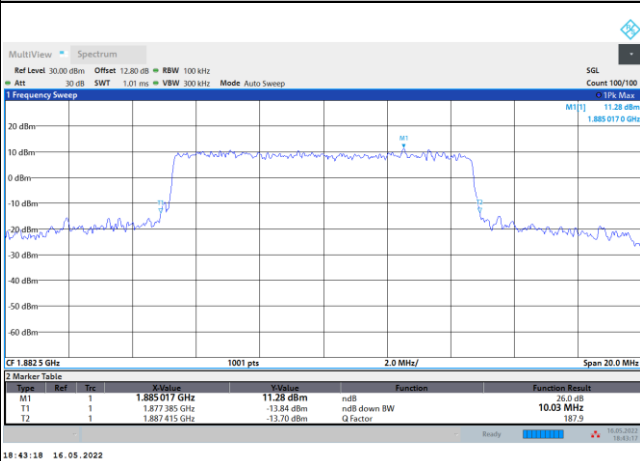


FR1 n25 / 10MHz / CP OFDM / Middle Channel / Full RB

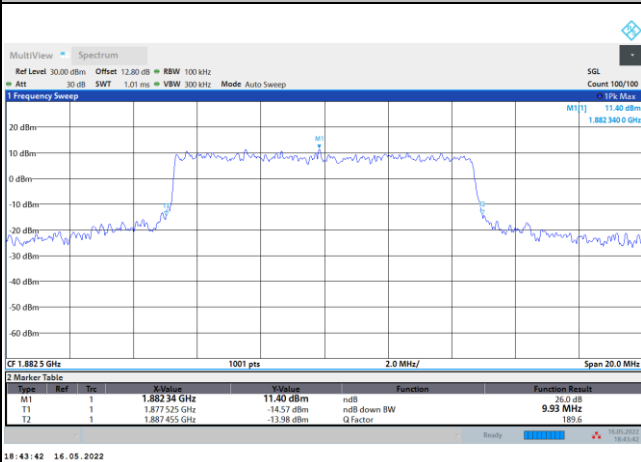
QPSK



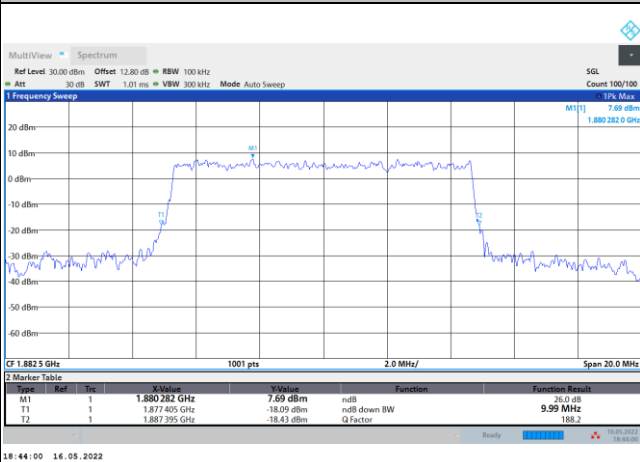
16QAM



64QAM



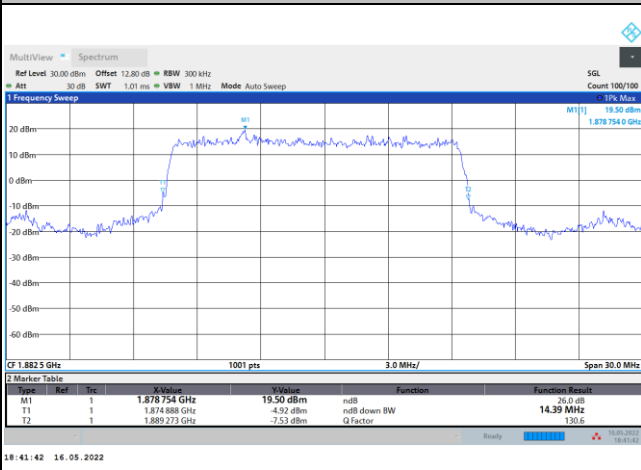
256QAM





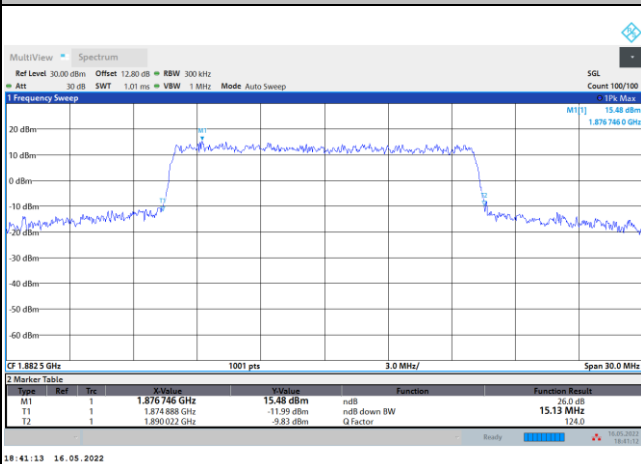
FR1 n25 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

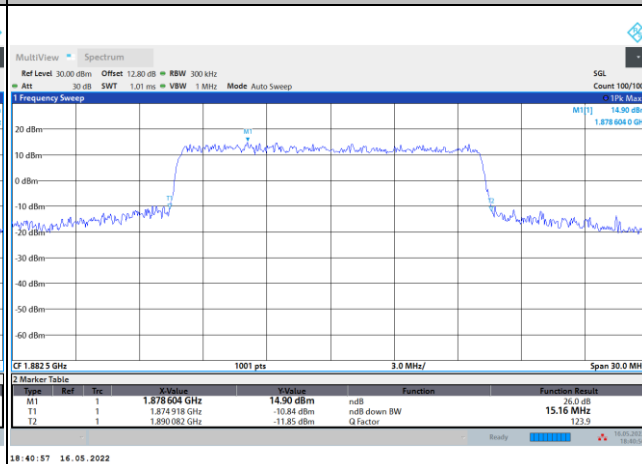


FR1 n25 / 15MHz / CP OFDM / Middle Channel / Full RB

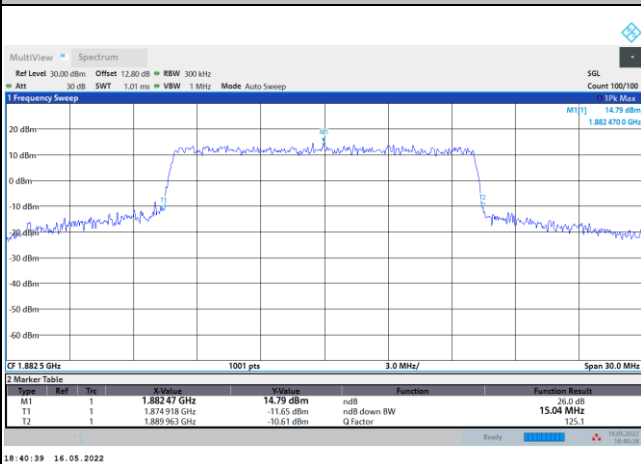
QPSK



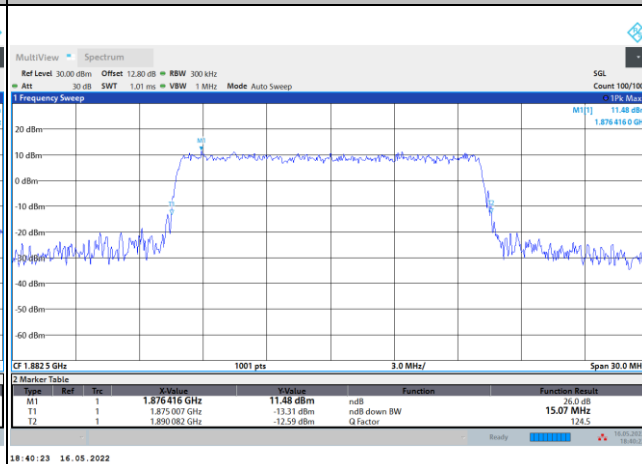
16QAM



64QAM



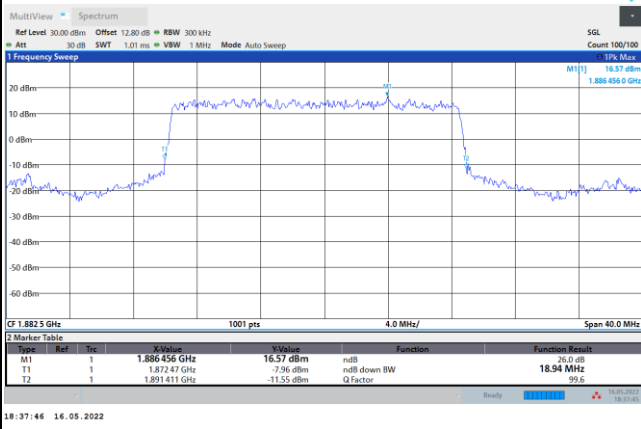
256QAM





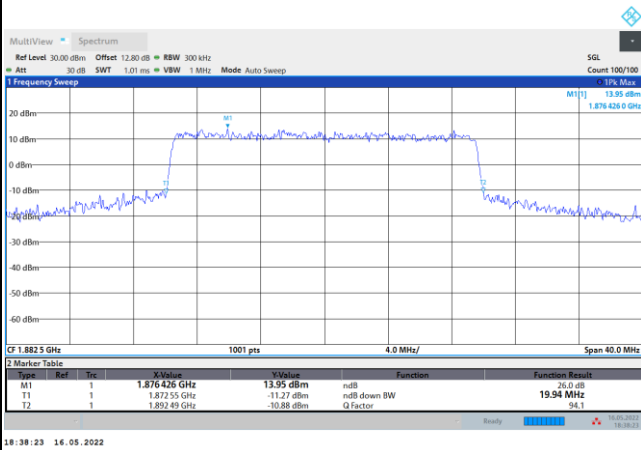
FR1 n25 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

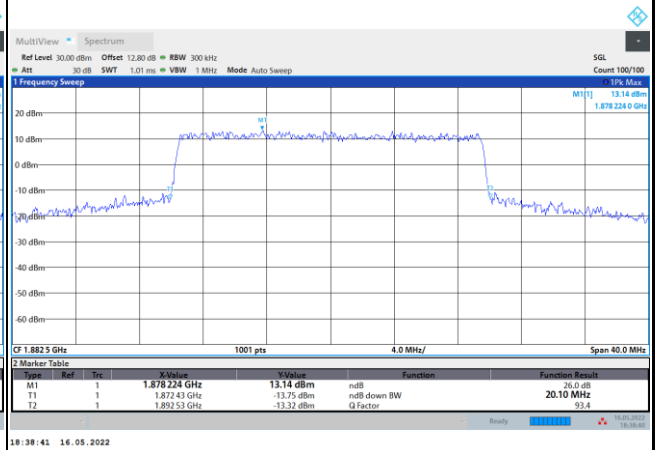


FR1 n25 / 20MHz / CP OFDM / Middle Channel / Full RB

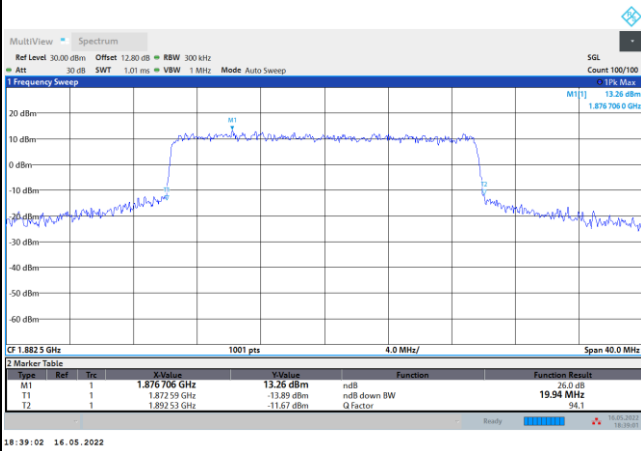
QPSK



16QAM



64QAM



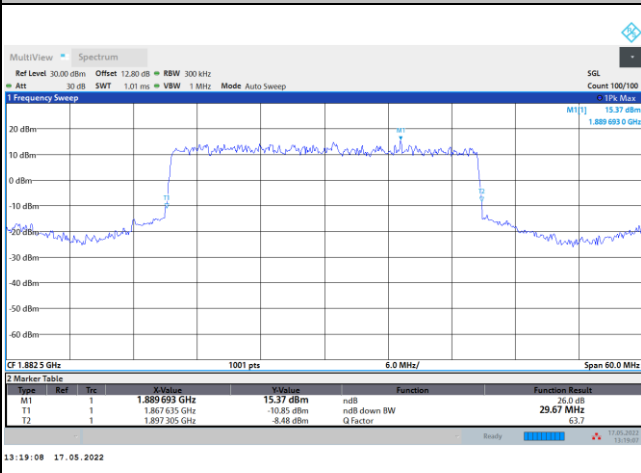
256QAM





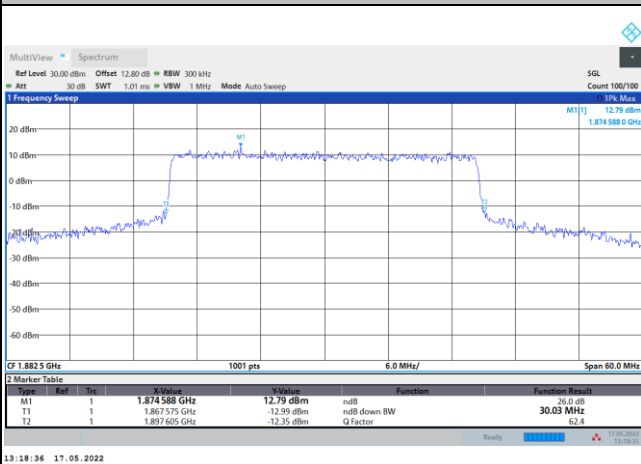
FR1 n25 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

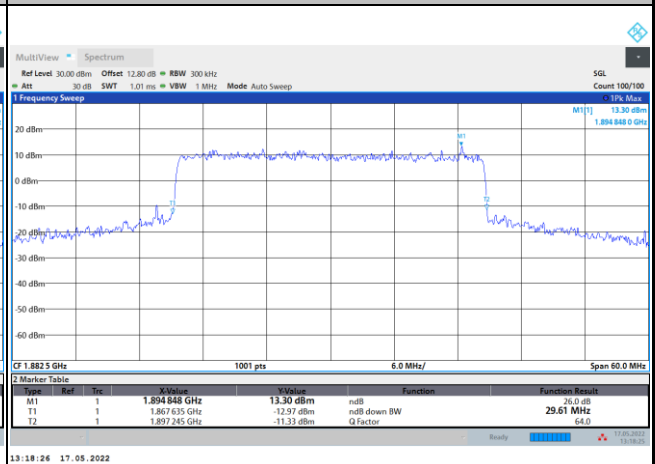


FR1 n25 / 30MHz / CP OFDM / Middle Channel / Full RB

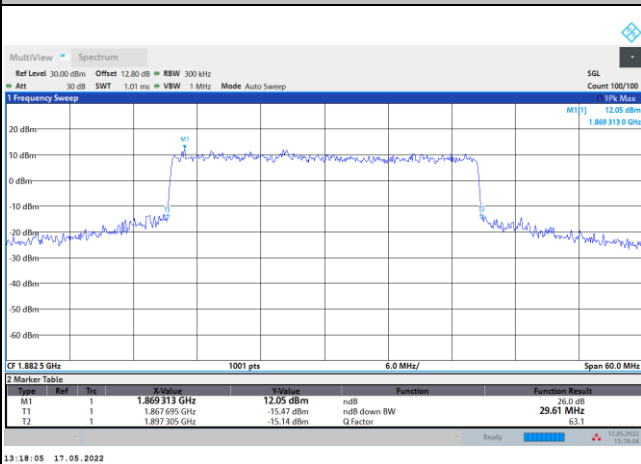
QPSK



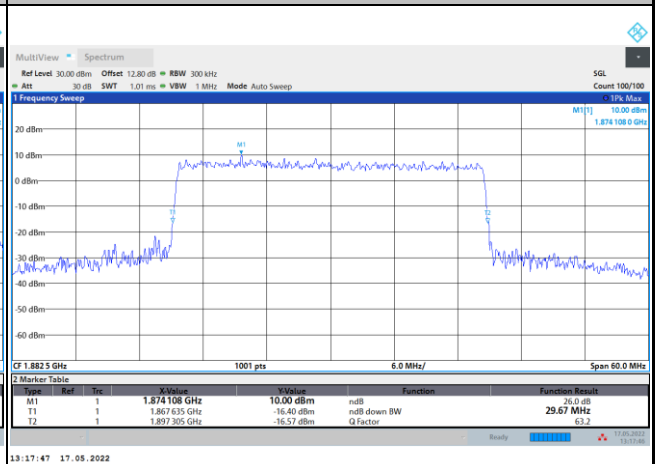
16QAM



64QAM



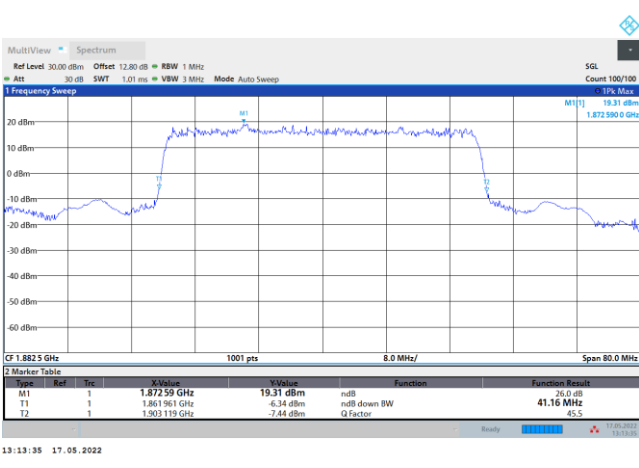
256QAM





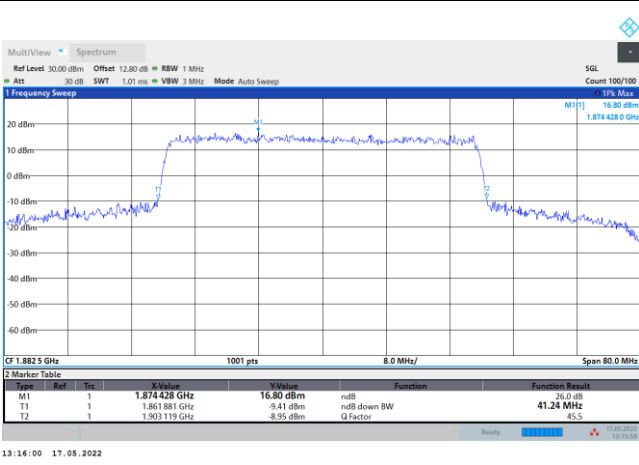
FR1 n25 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

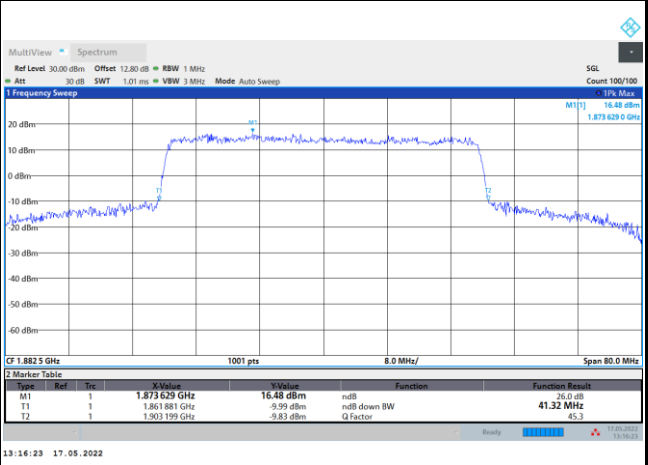


FR1 n25 / 40MHz / CP OFDM / Middle Channel / Full RB

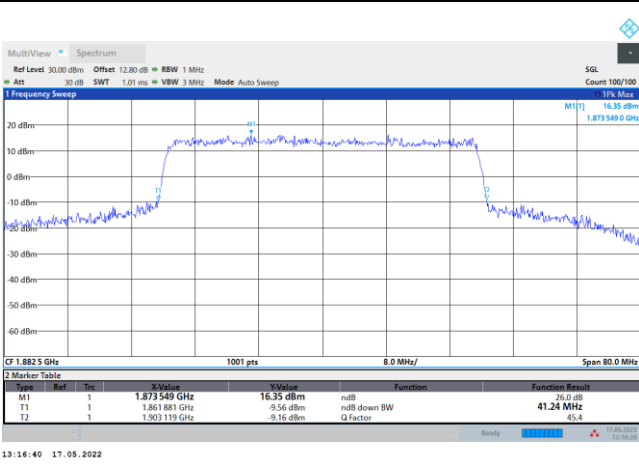
QPSK



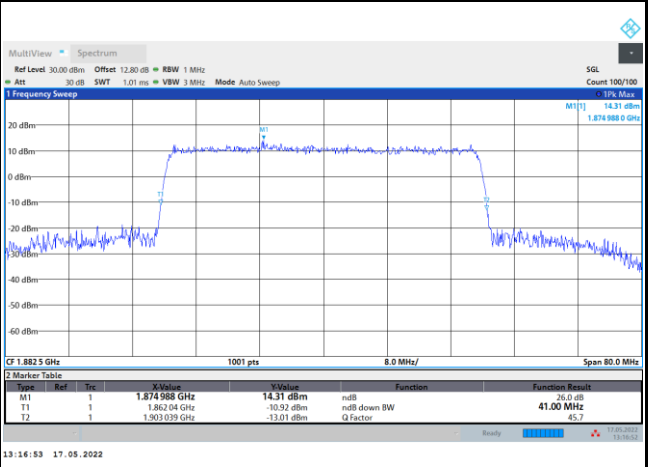
16QAM



64QAM



256QAM





Occupied Bandwidth

Mode	FR1 n25 : 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	4.48		8.91		13.49		17.91	
BW	25MHz		30MHz		40MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	-		28.60		38.70			

Mode	FR1 n25 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.52	4.51	9.29	9.30	14.17	14.13	18.97	18.95
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.50	4.52	9.29	9.28	14.23	14.17	18.97	18.94
BW	25MHz		30MHz		40MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	-	-	28.63	28.56	38.78	38.82		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	-	-	28.58	28.55	38.80	38.75		