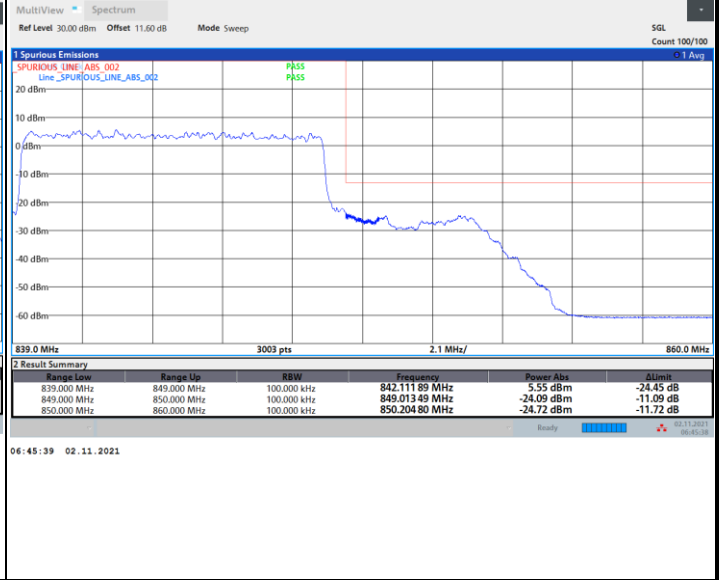
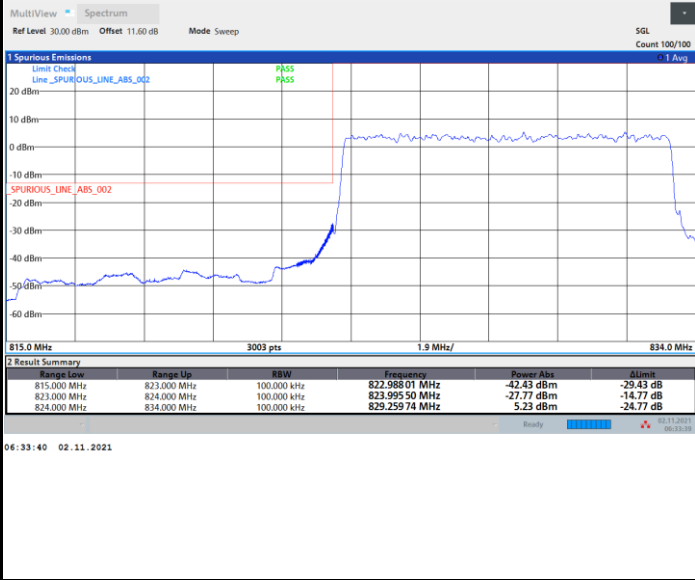




FR1 n5 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge

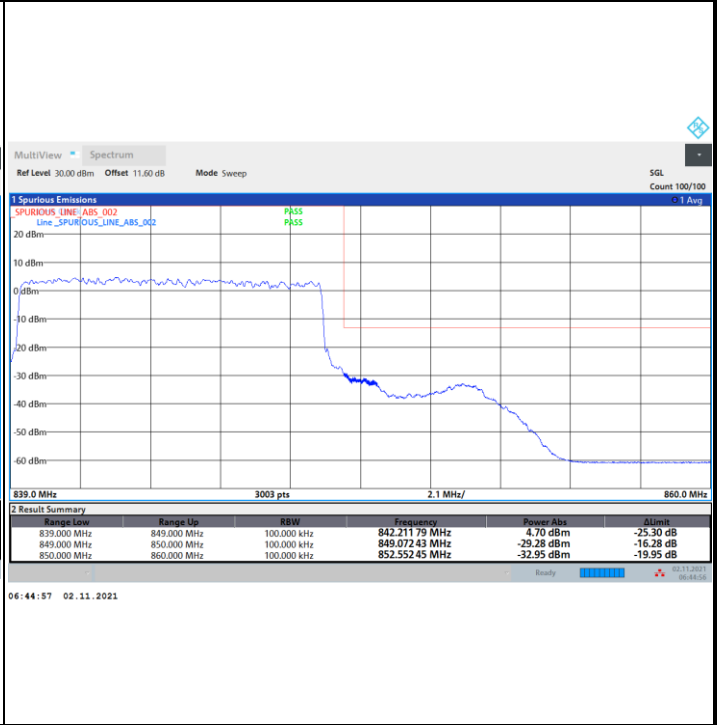
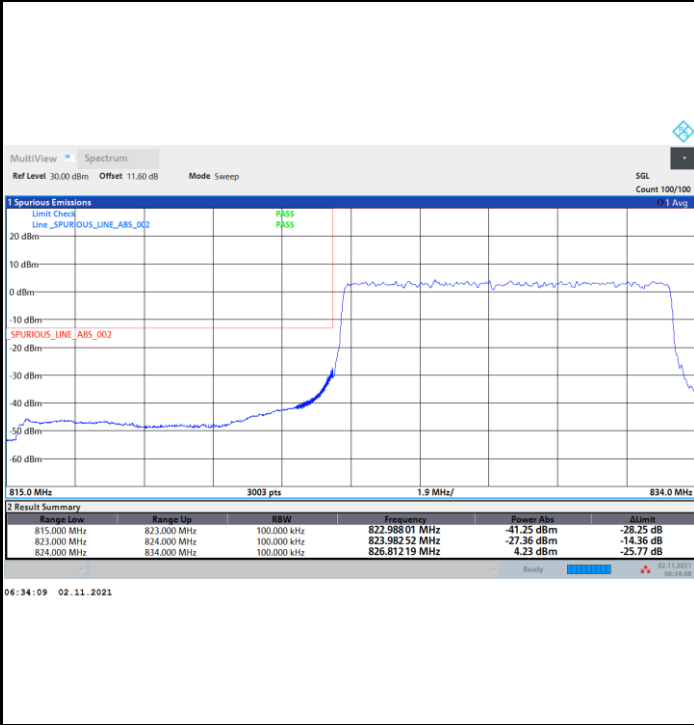


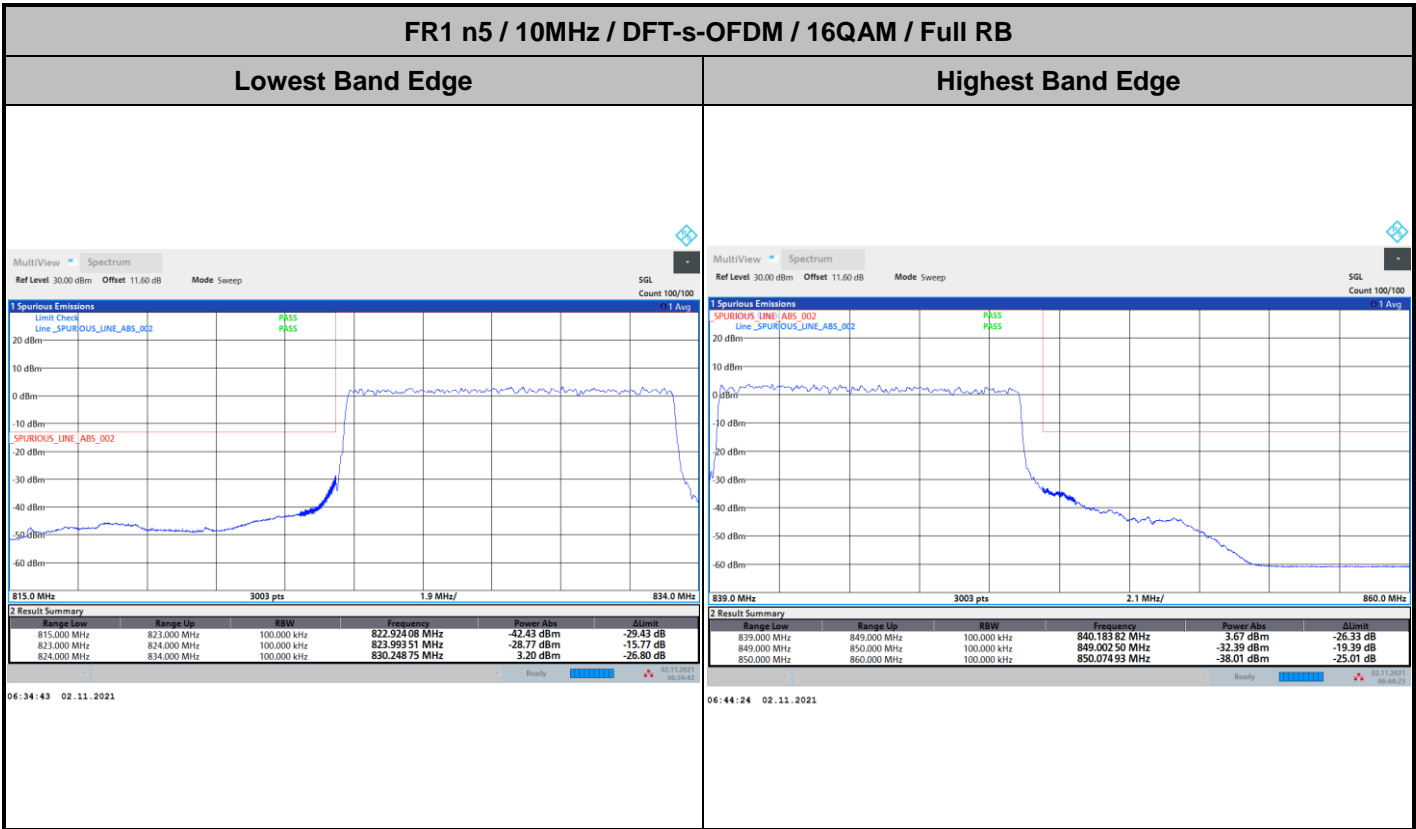


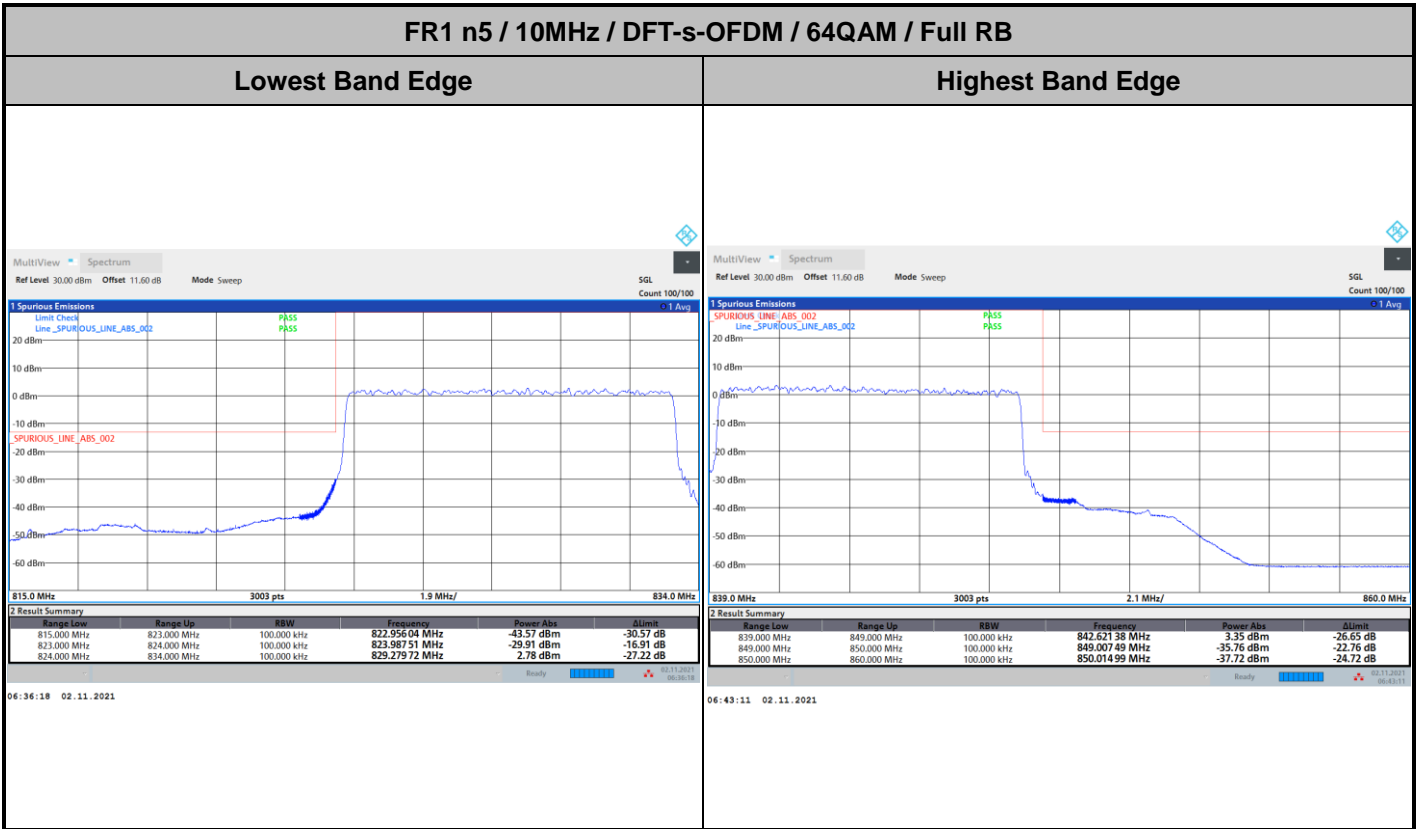
FR1 n5 / 10MHz / DFT-s-OFDM / QPSK / Full RB

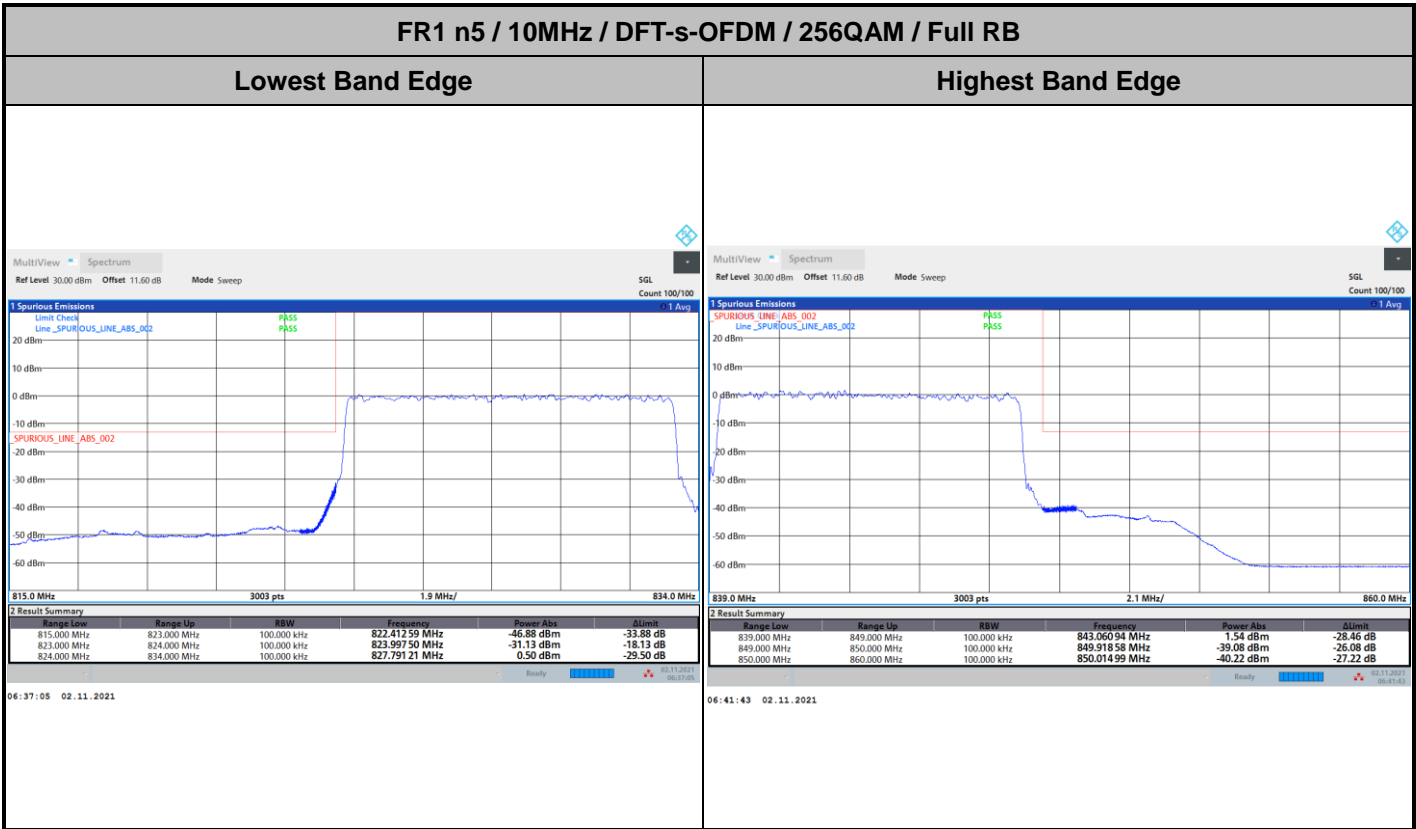
Lowest Band Edge

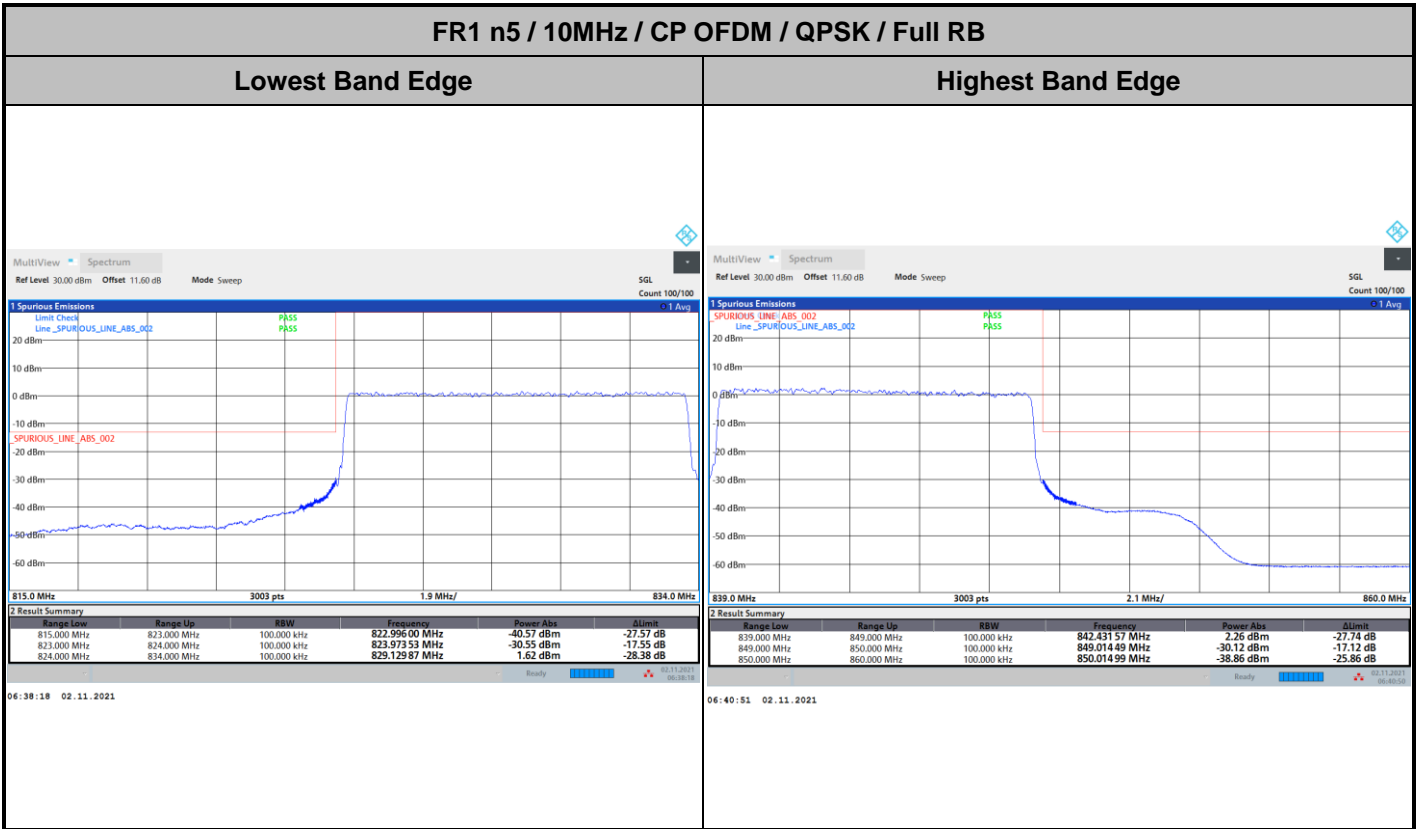
Highest Band Edge









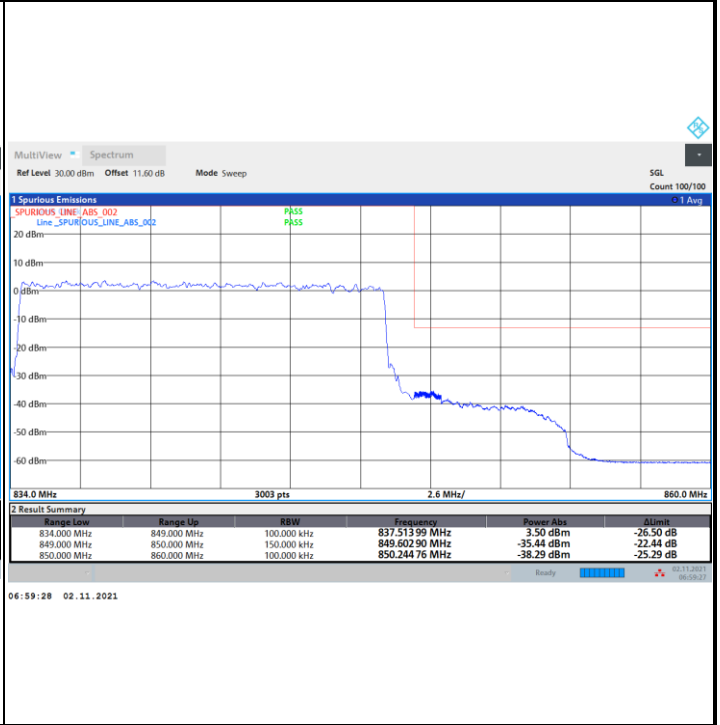




FR1 n5 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge

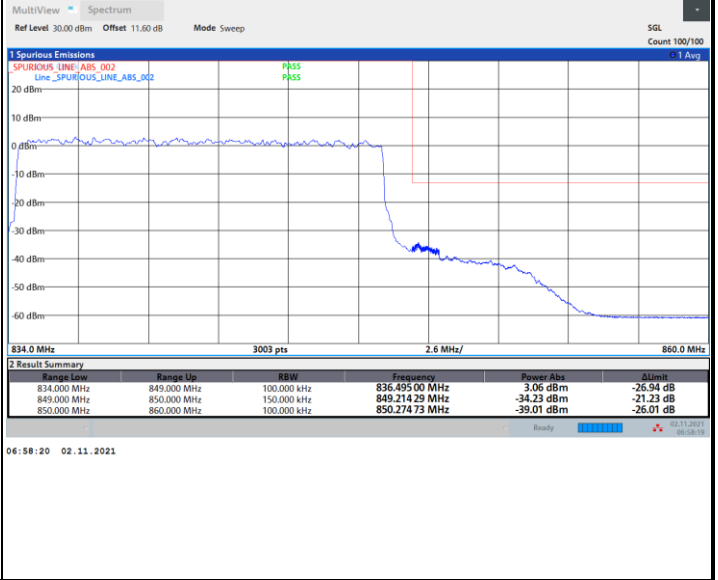
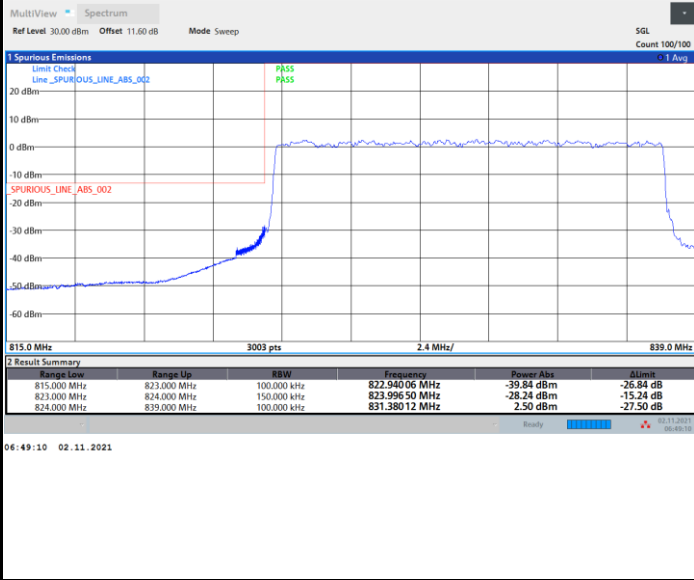


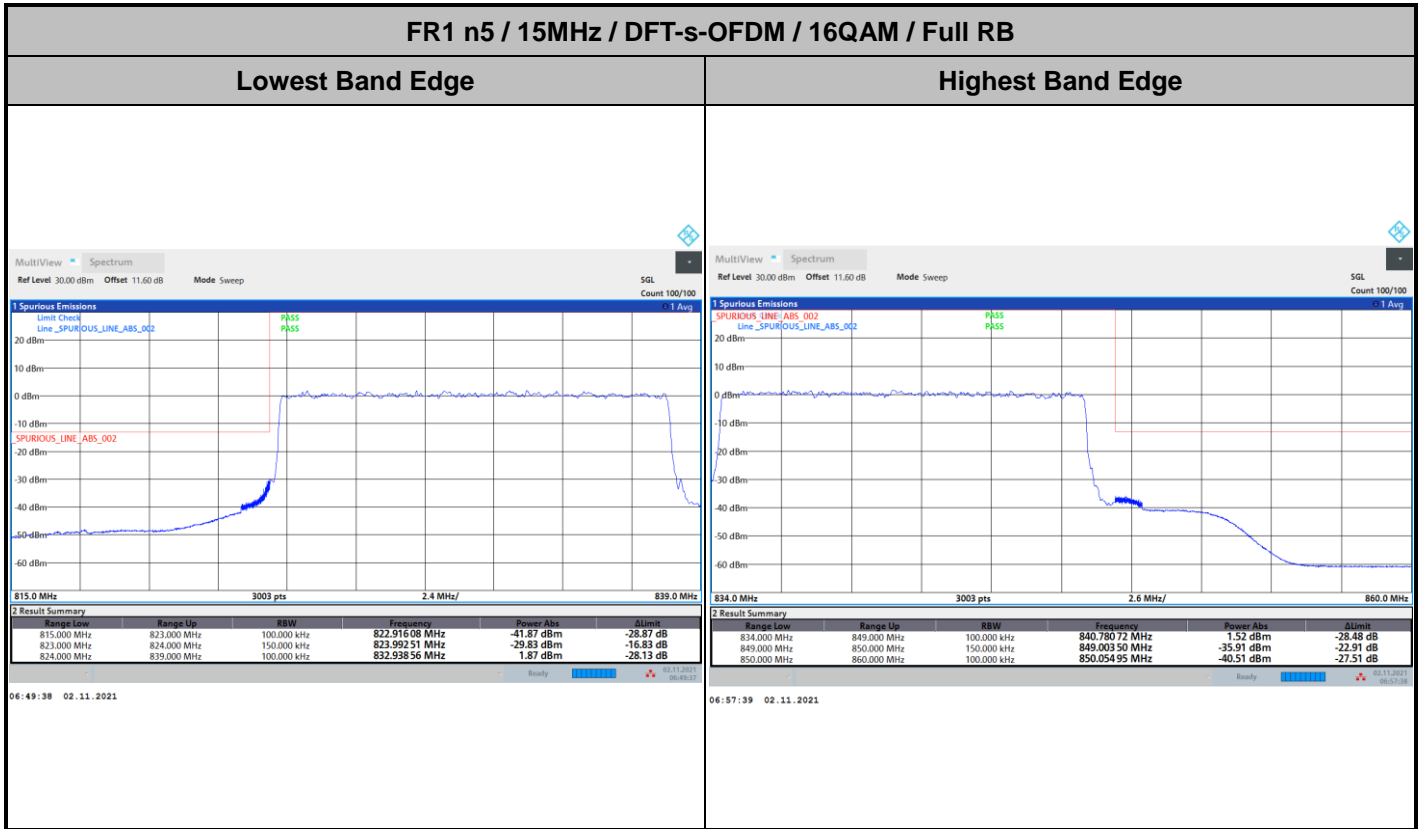


FR1 n5 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



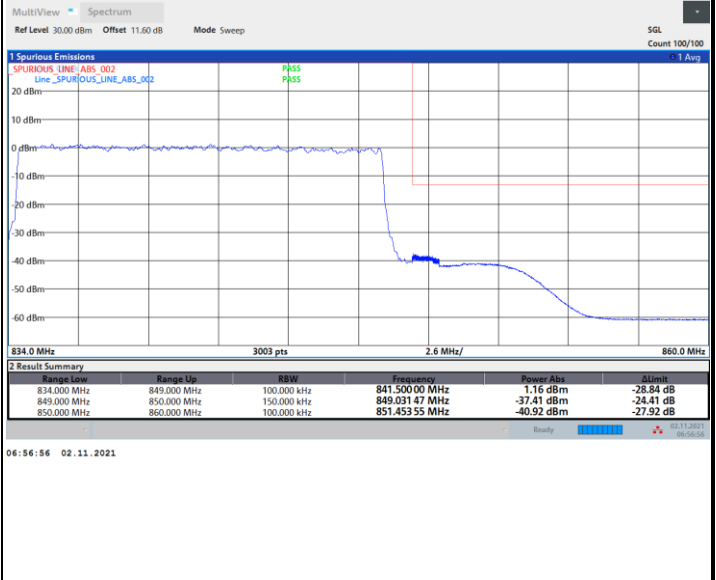
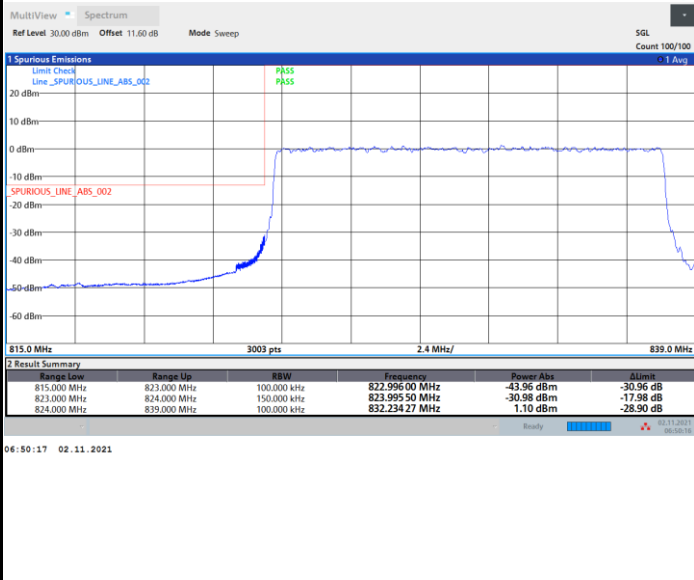




FR1 n5 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge

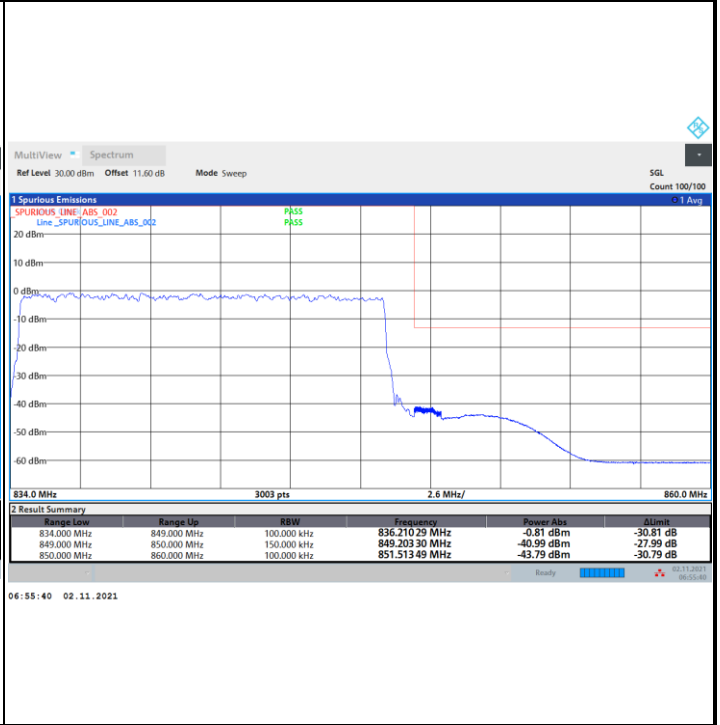
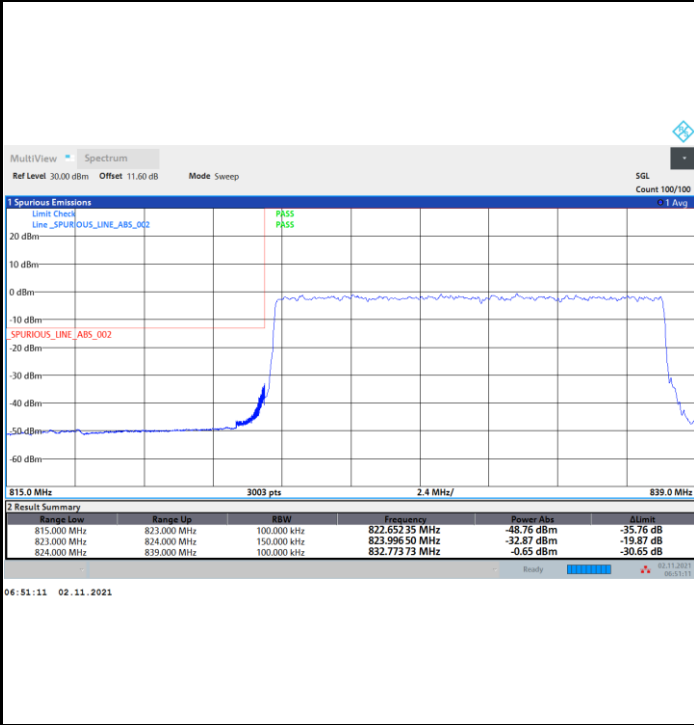




FR1 n5 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

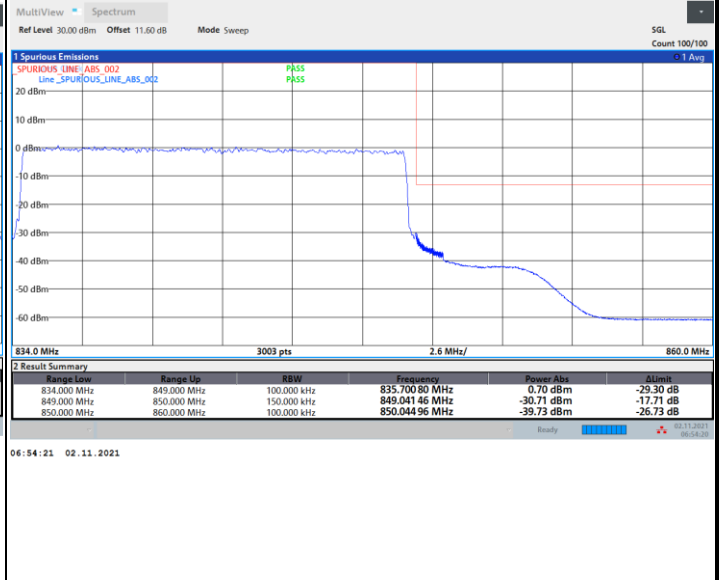




FR1 n5 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

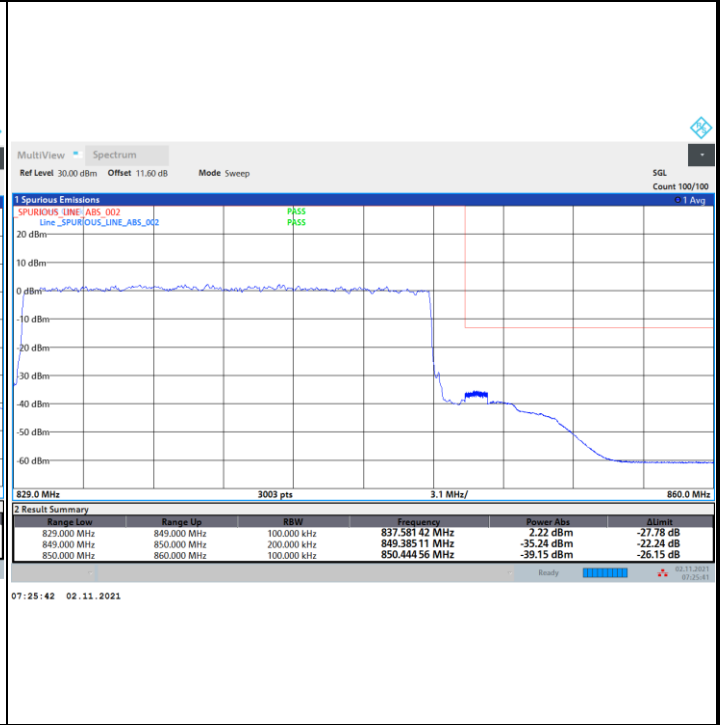
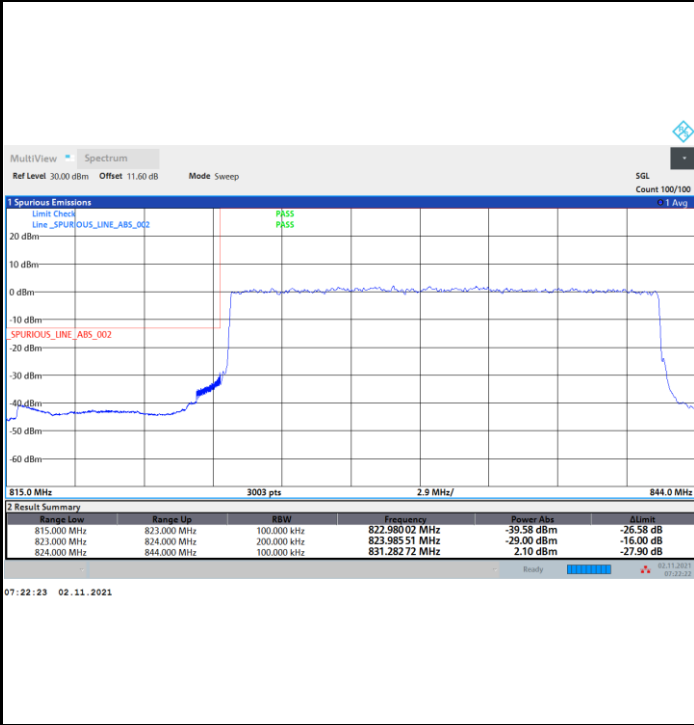




FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge

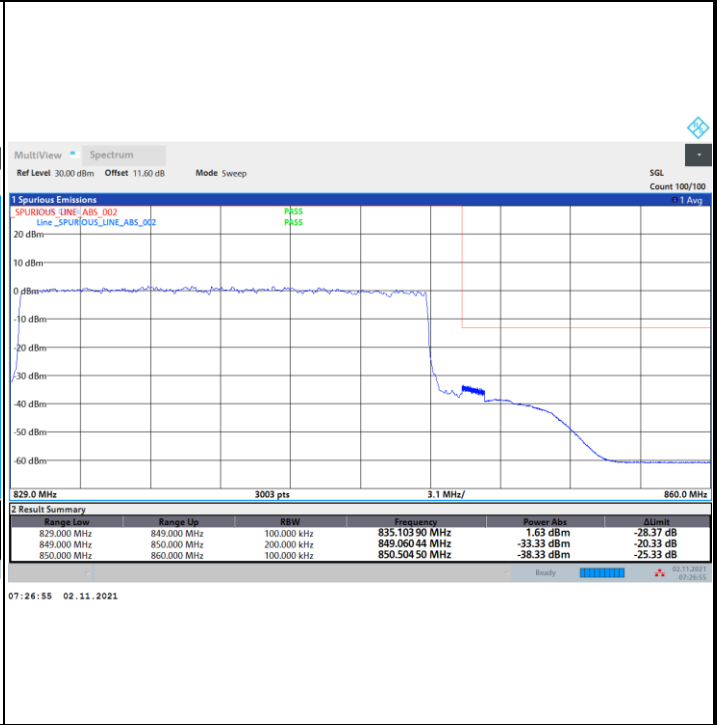
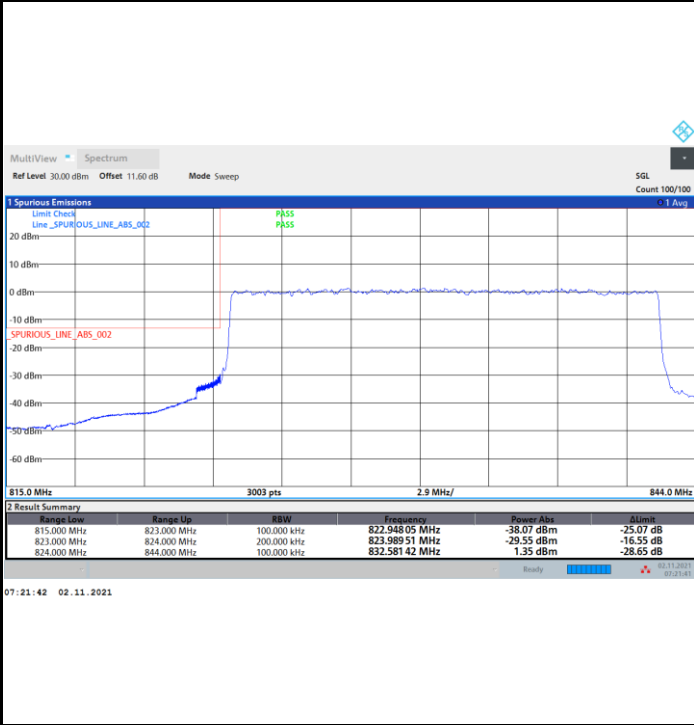


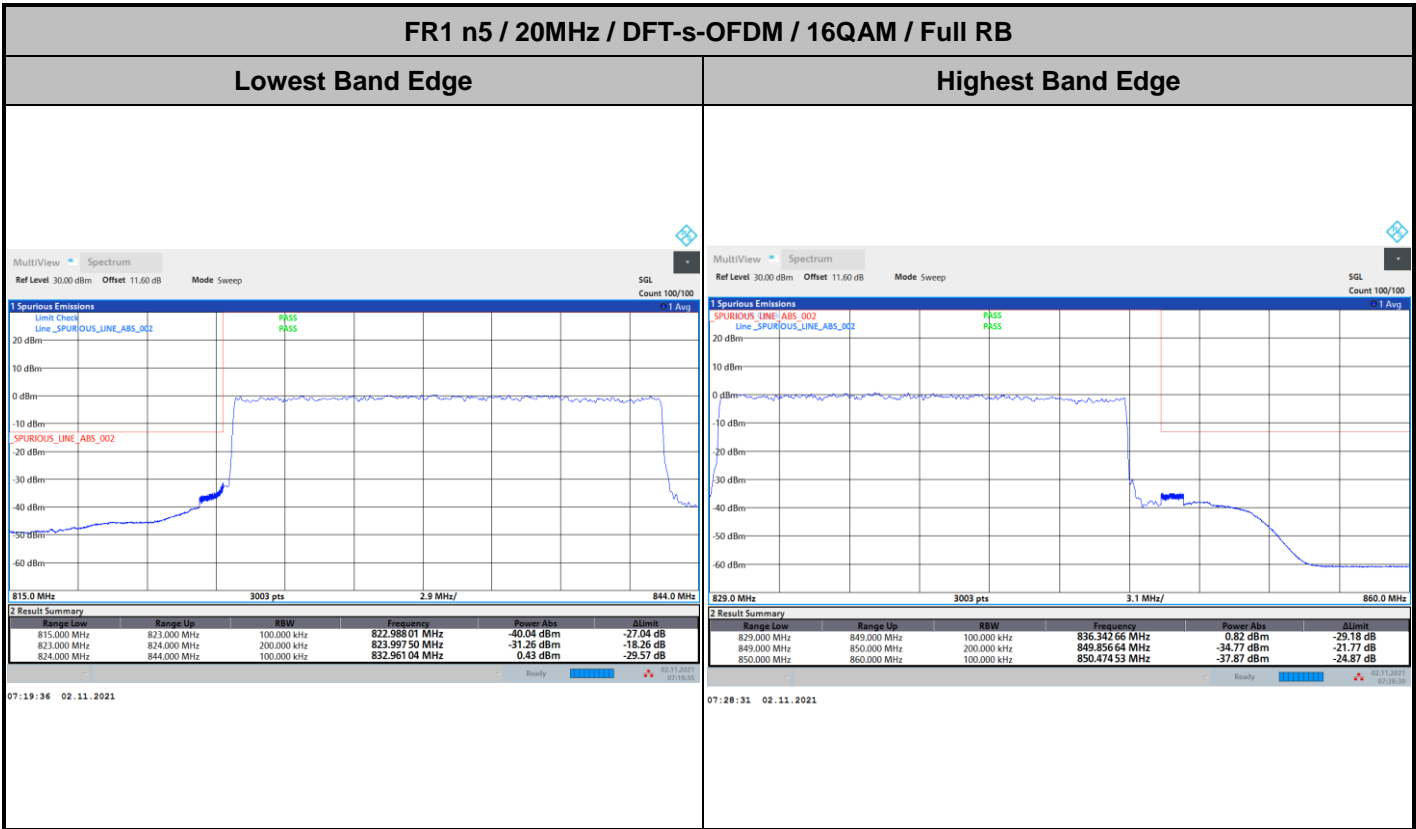


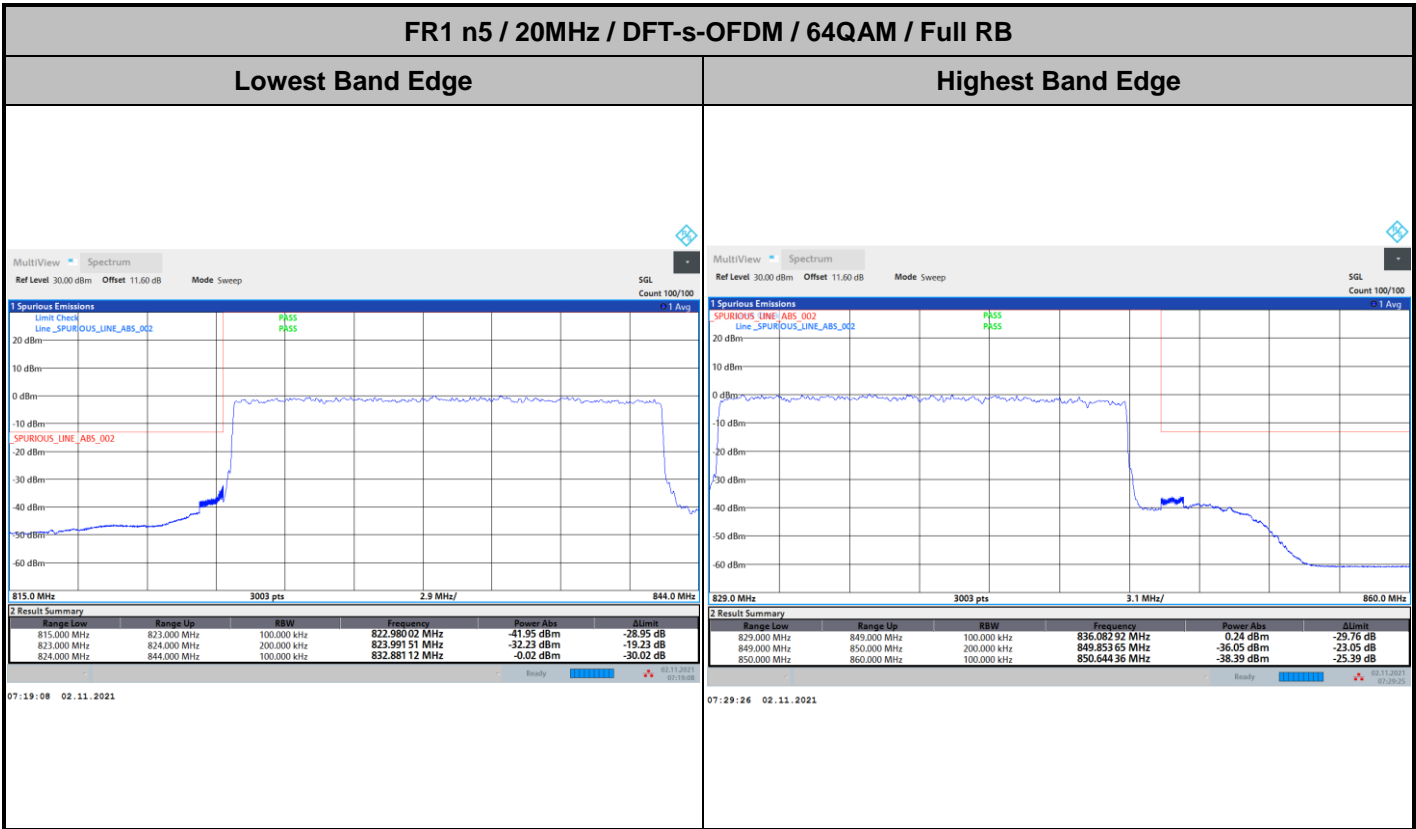
FR1 n5 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge





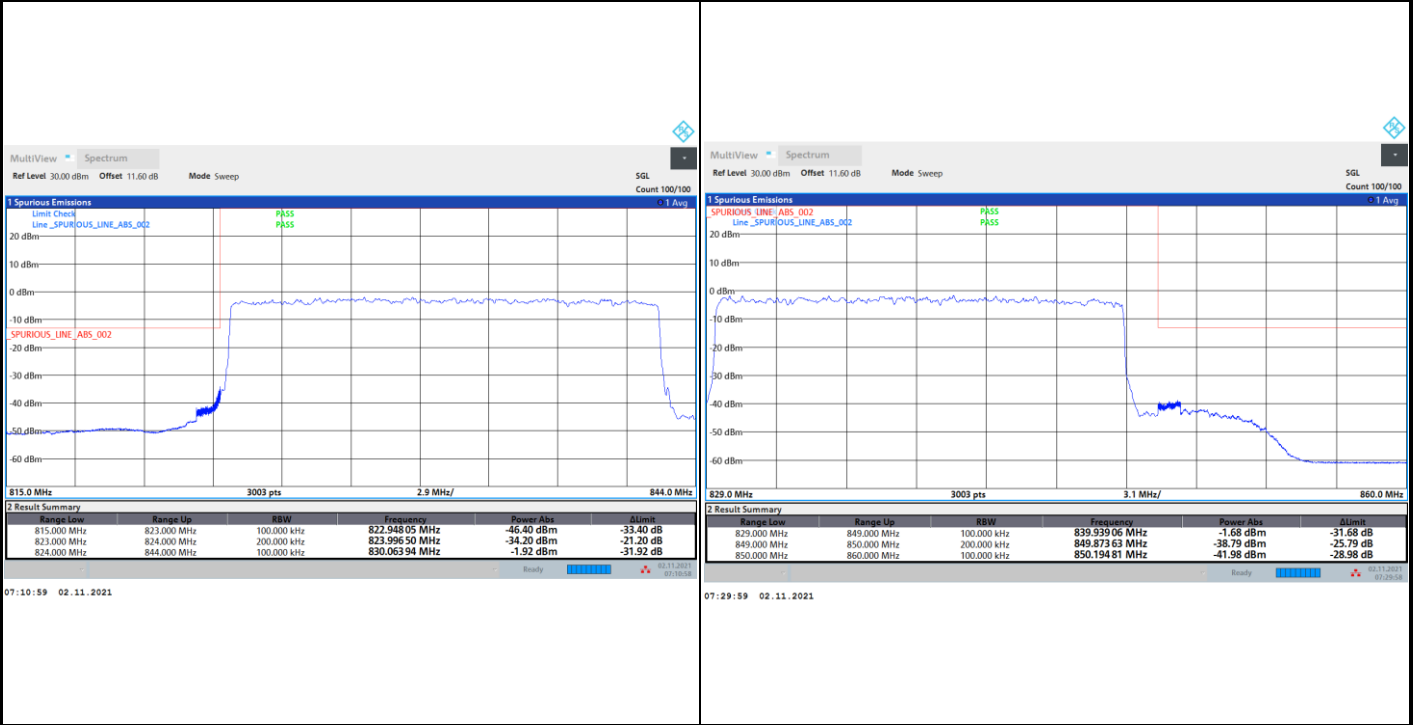


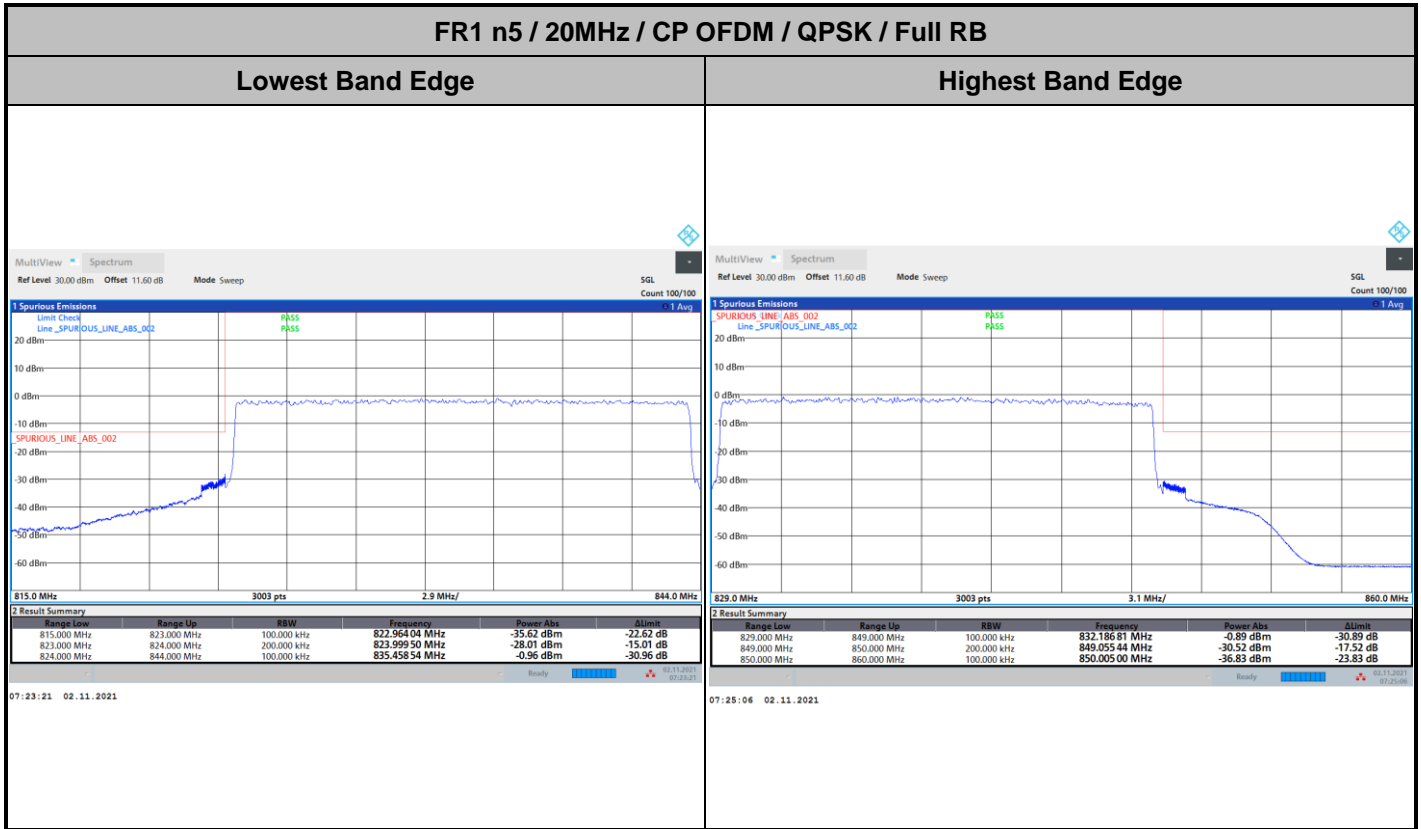


FR1 n5 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

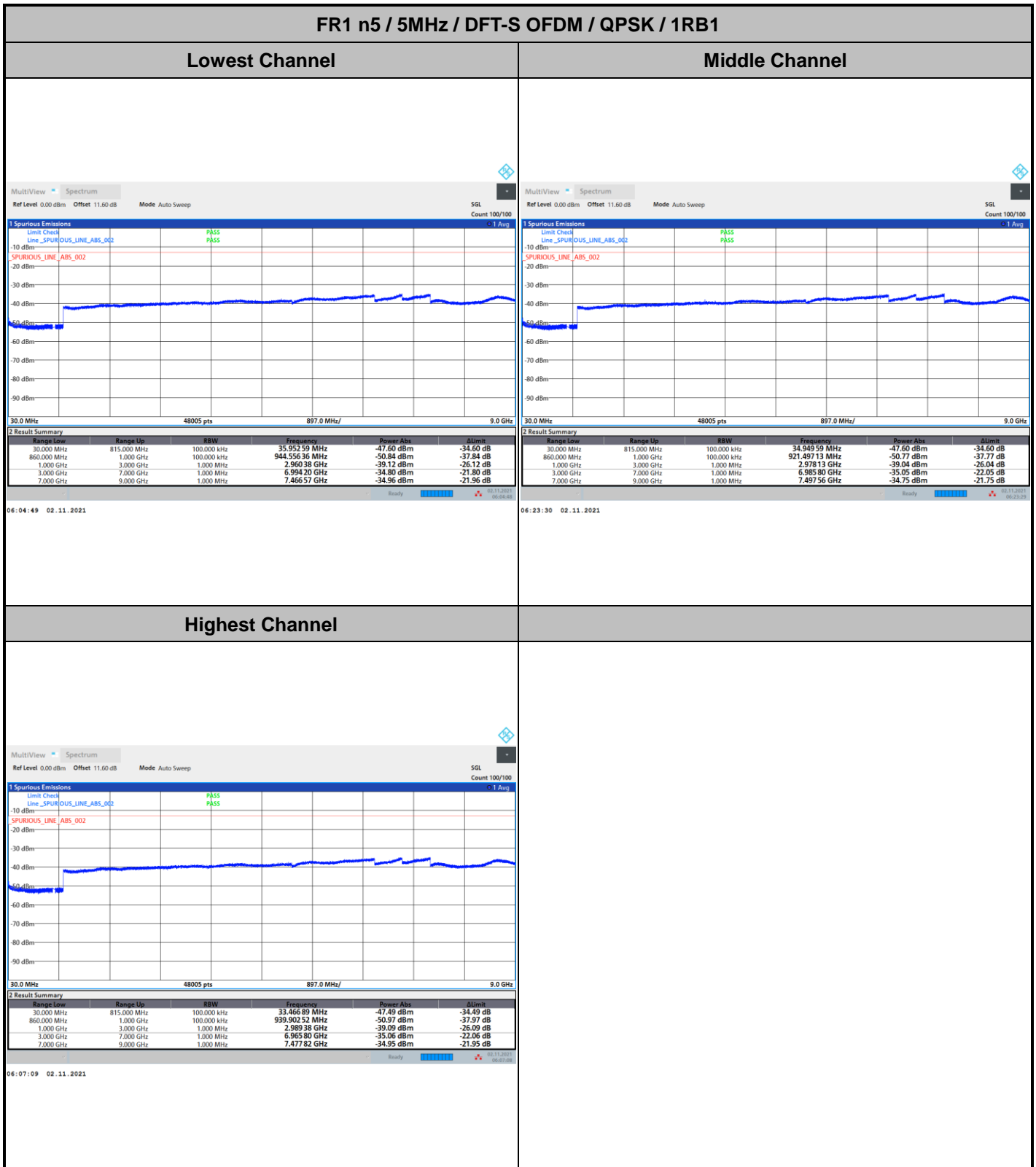
Highest Band Edge







Conducted Spurious Emission





Frequency Stability

Test Conditions		FR1 n5 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0188	PASS
40	Normal Voltage	0.0110	
30	Normal Voltage	0.0059	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0178	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0130	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0047	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.40 V. ; Maximum Voltage =4.40 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



FR1 n12

Peak-to-Average Ratio

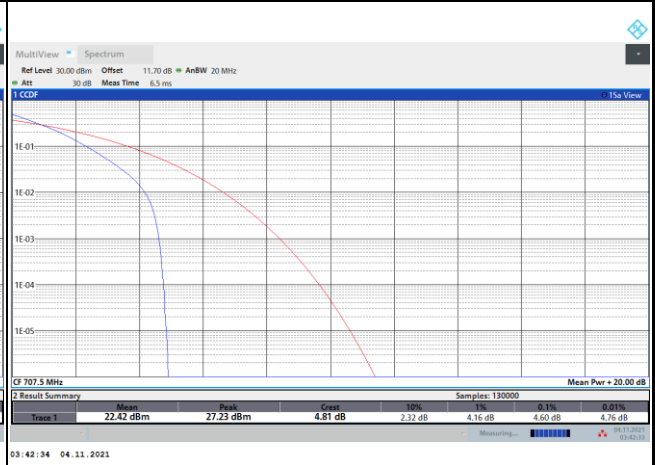
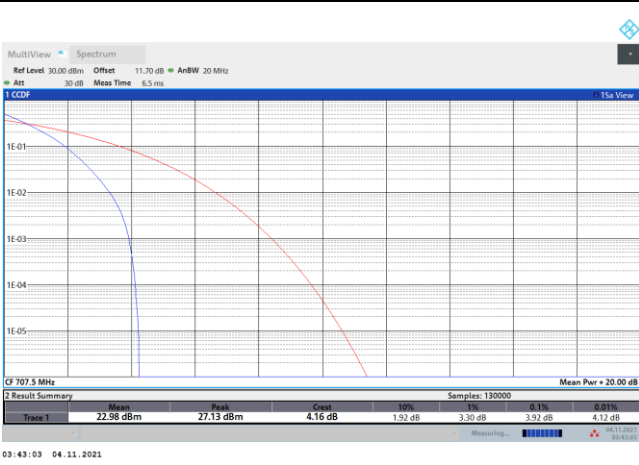
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.92	4.60	5.46	5.86	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.54				PASS



FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

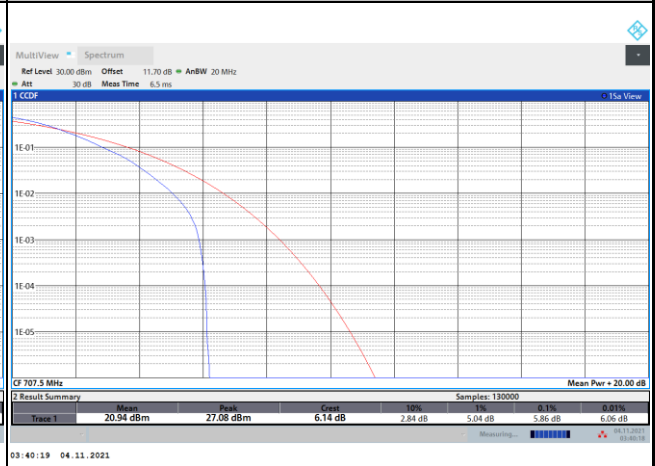
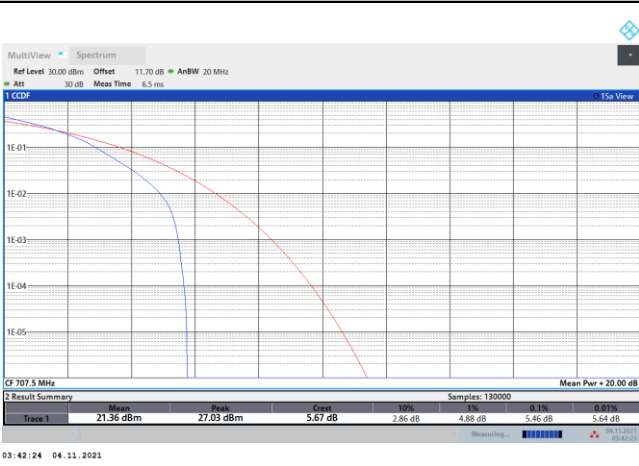
PI/2 BPSK

QPSK

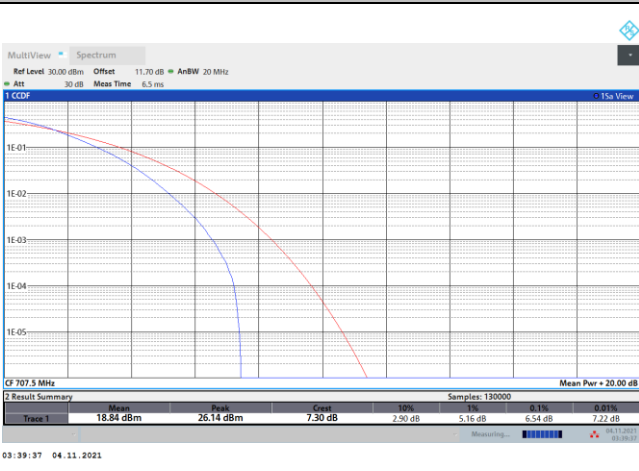


16QAM

64QAM



256QAM





26dB Bandwidth

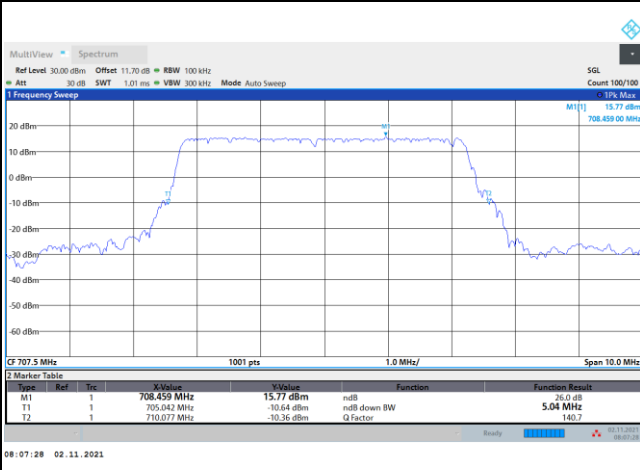
Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	5.04		9.49		14.27			

Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	5.09	5.04	9.95	9.83	15.02	14.98		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	5.08	5.05	9.87	9.89	14.96	15.11		



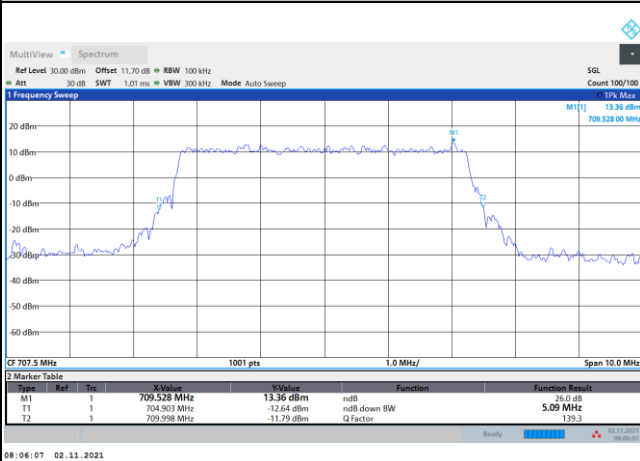
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

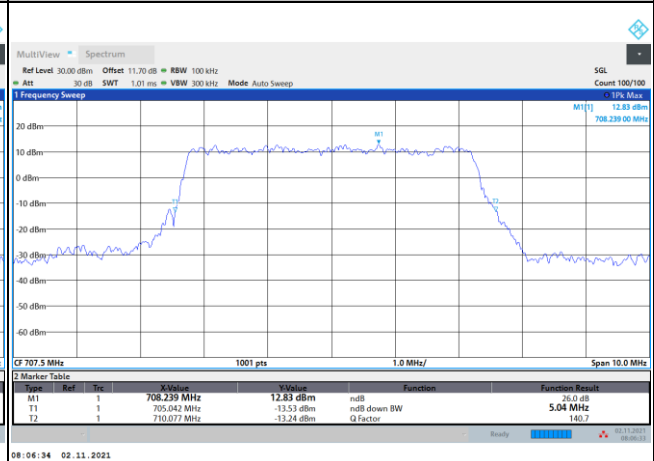


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

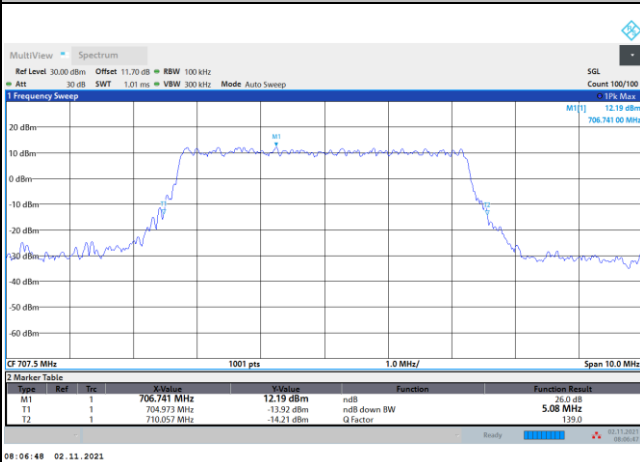
QPSK



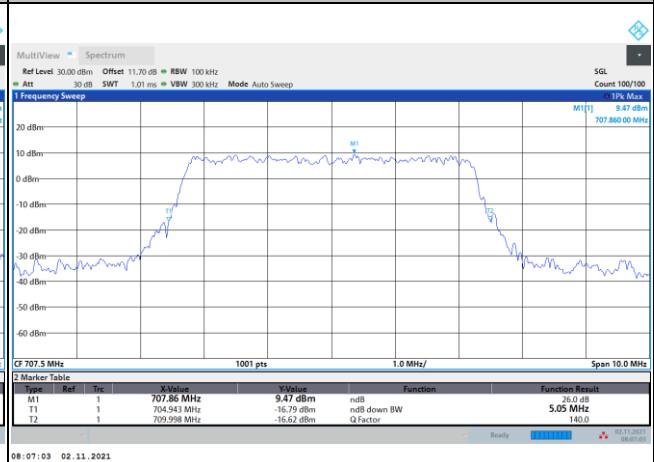
16QAM



64QAM



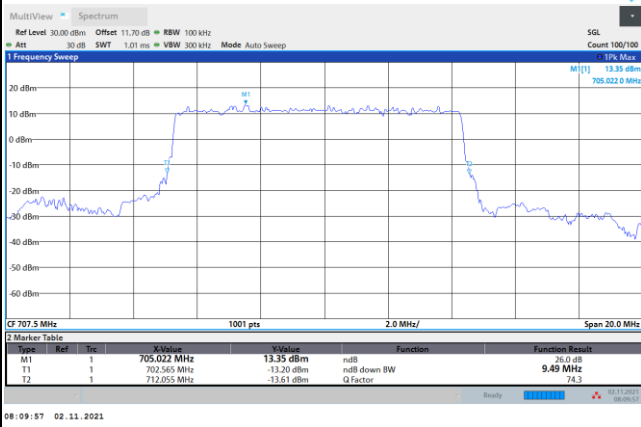
256QAM





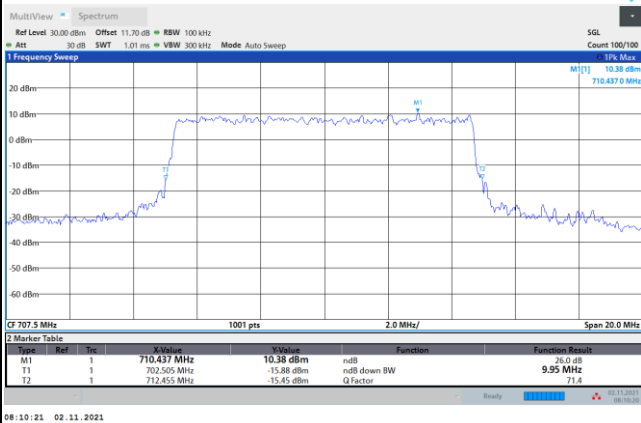
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

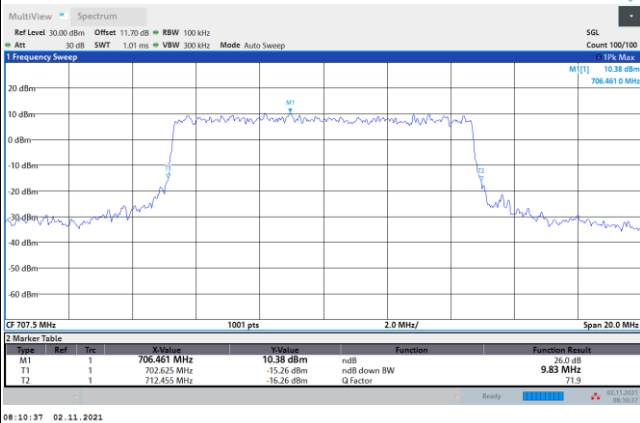


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

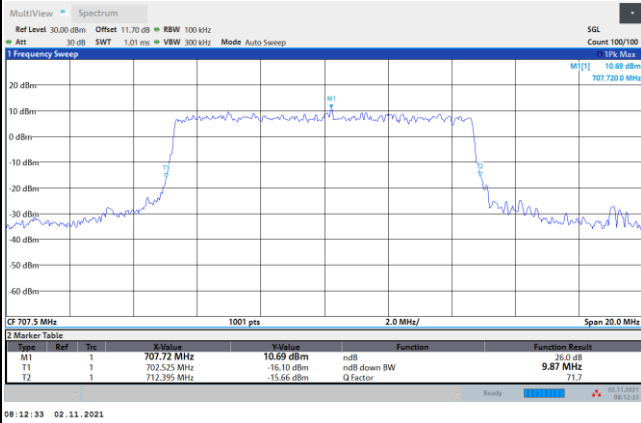
QPSK



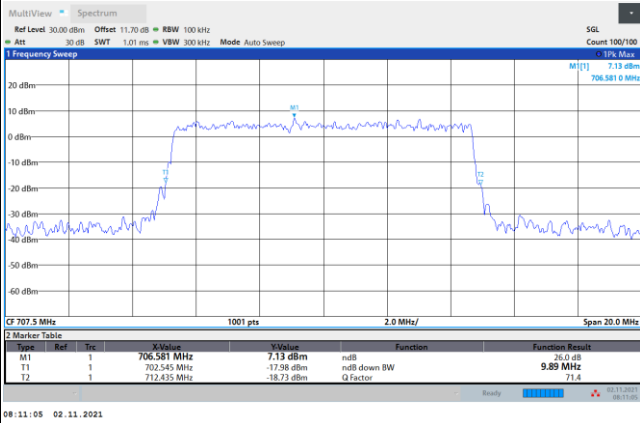
16QAM



64QAM



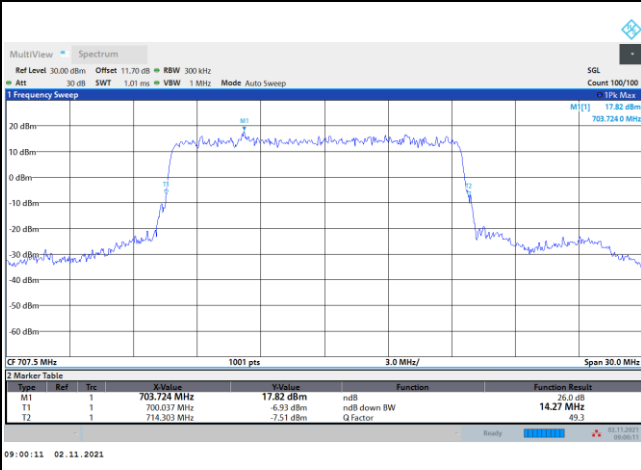
256QAM





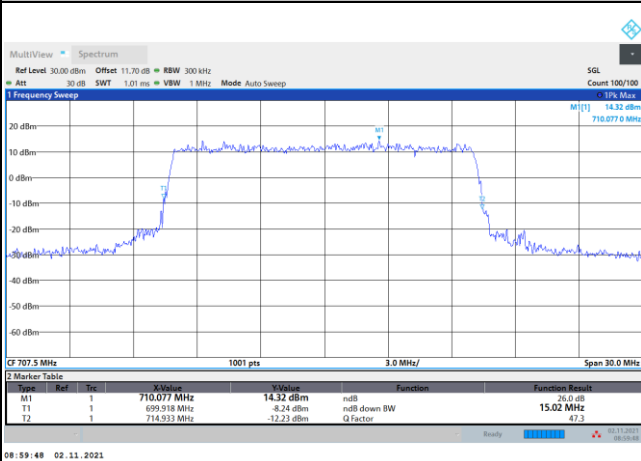
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

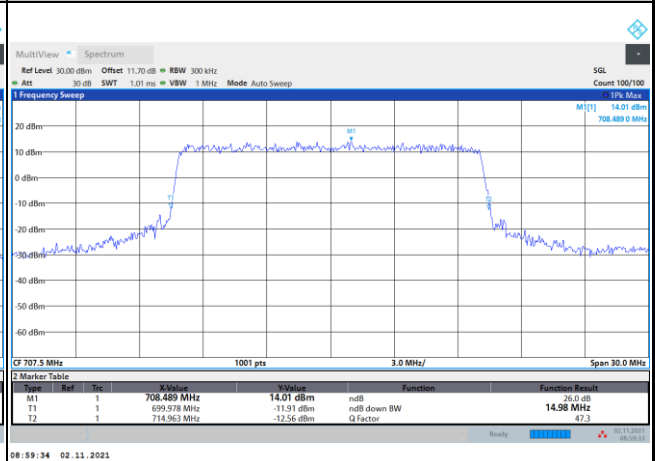


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

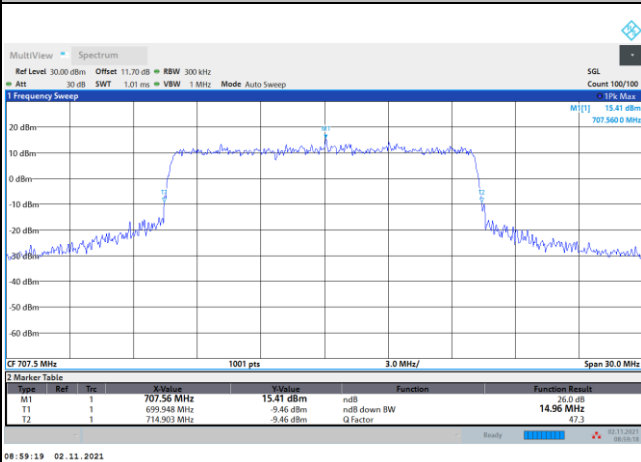
QPSK



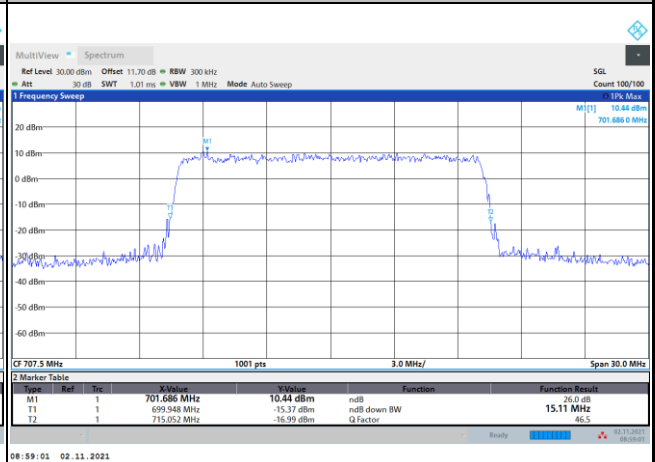
16QAM



64QAM



256QAM





Occupied Bandwidth

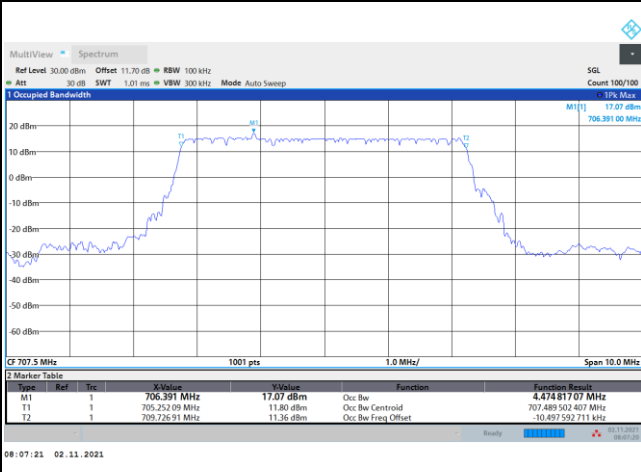
Mode	FR1 n12 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	4.47		8.90		13.46			

Mode	FR1 n12 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.50	4.50	9.29	9.27	14.13	14.15		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.50	4.51	9.28	9.30	14.12	14.15		



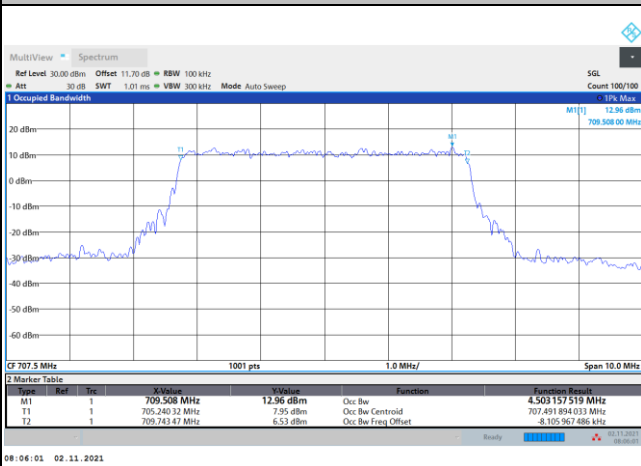
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

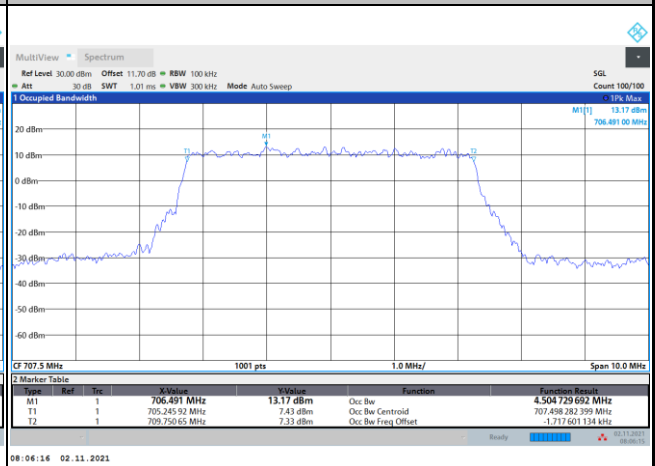


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

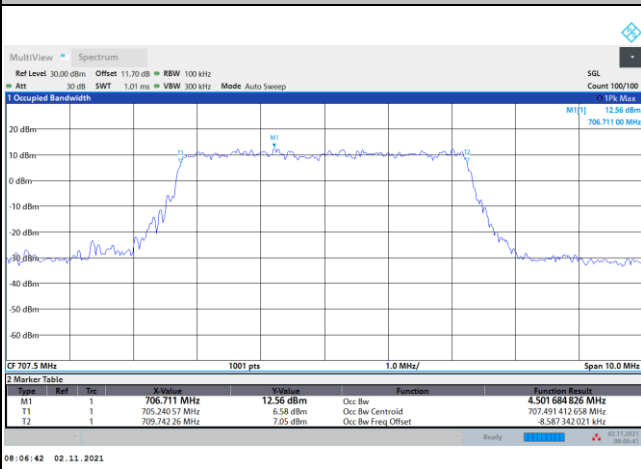
QPSK



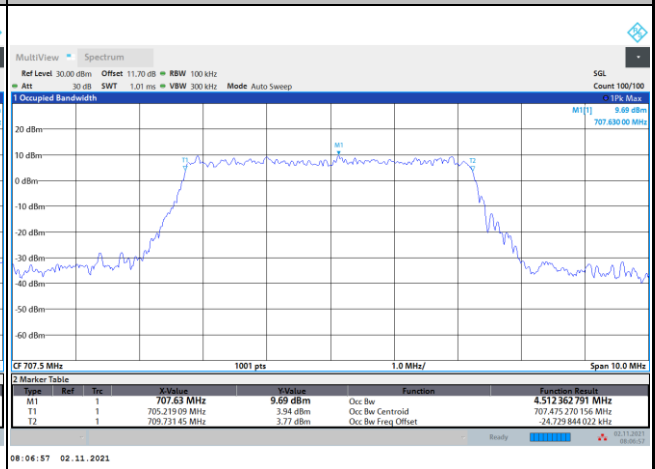
16QAM



64QAM



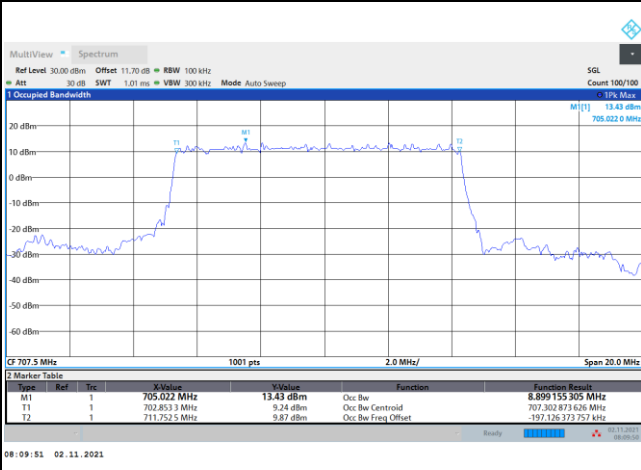
256QAM





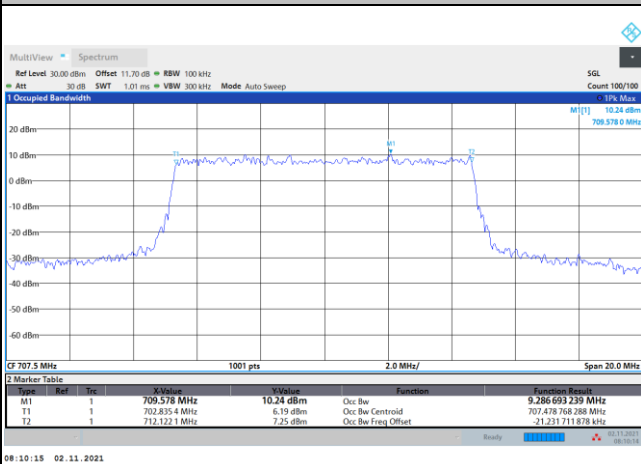
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

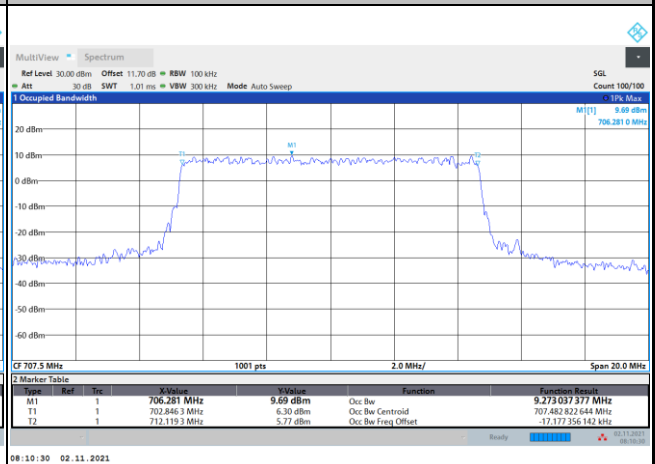


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

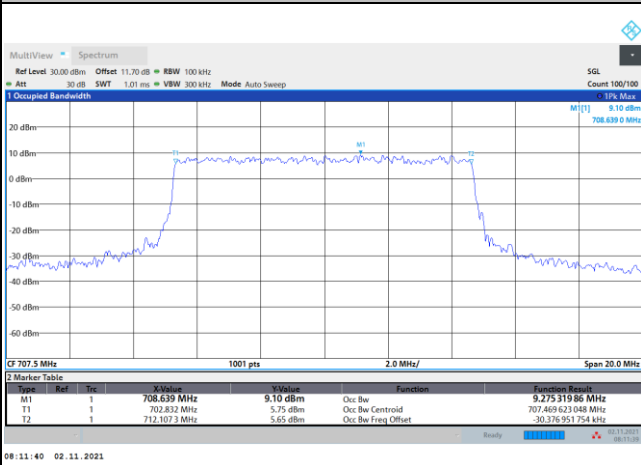
QPSK



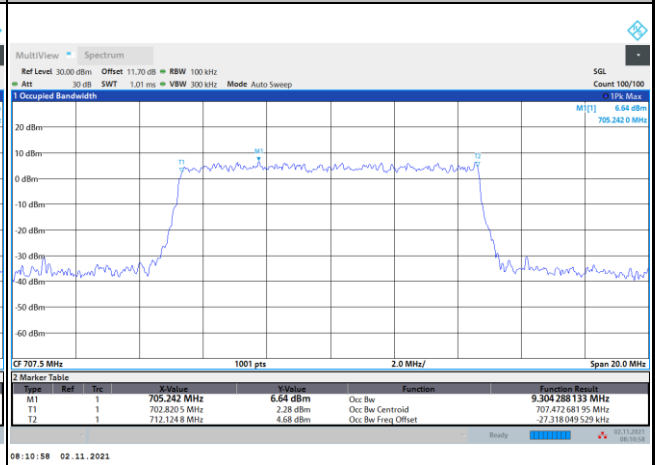
16QAM



64QAM



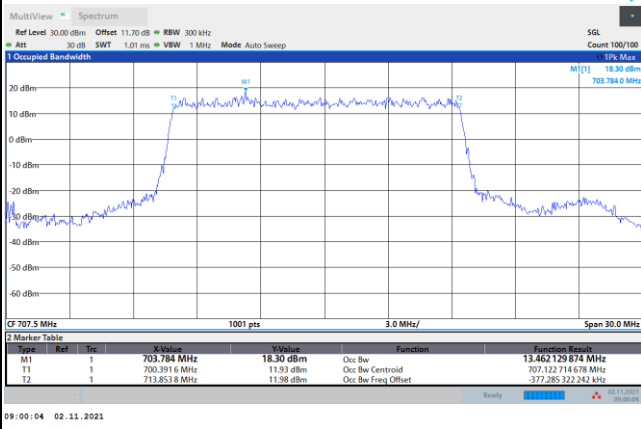
256QAM





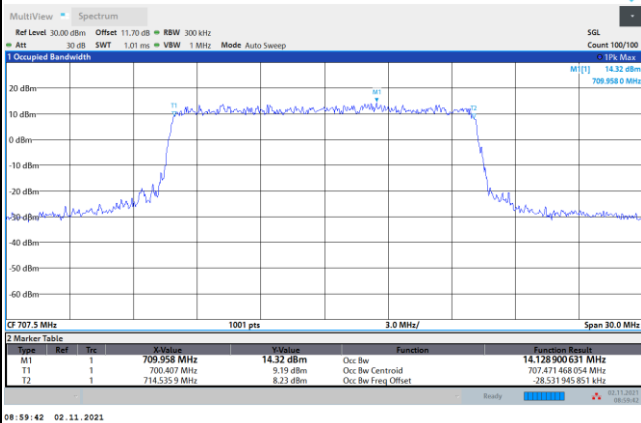
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

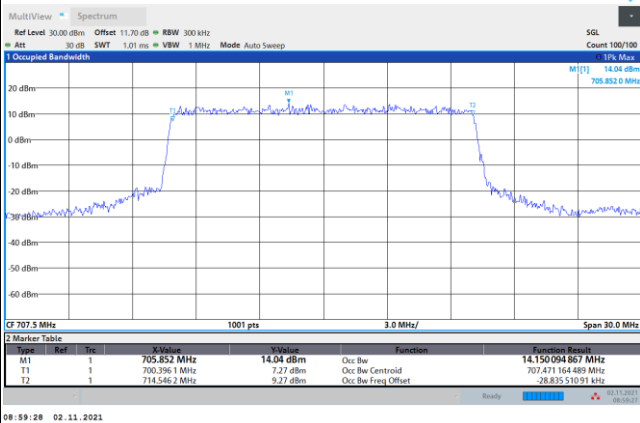


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

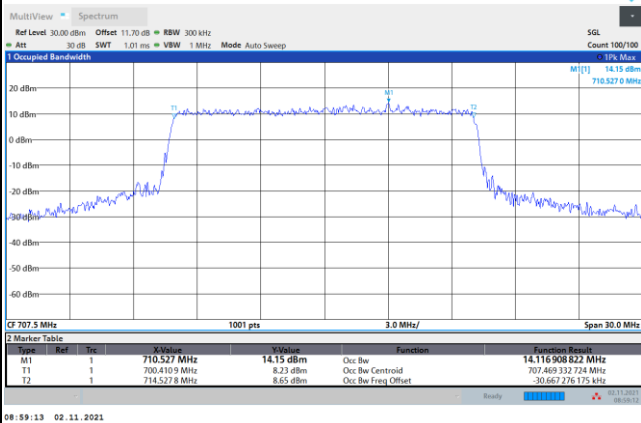
QPSK



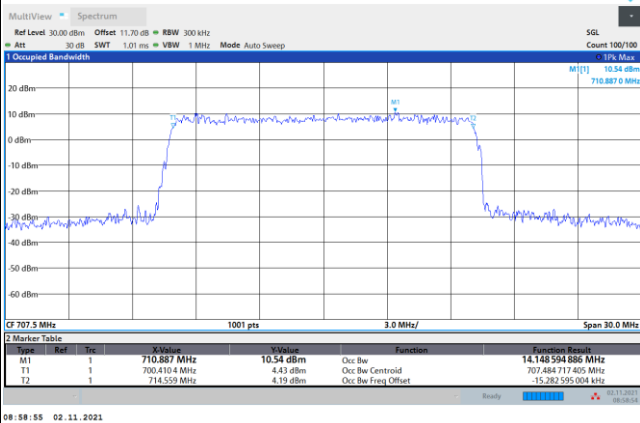
16QAM



64QAM



256QAM



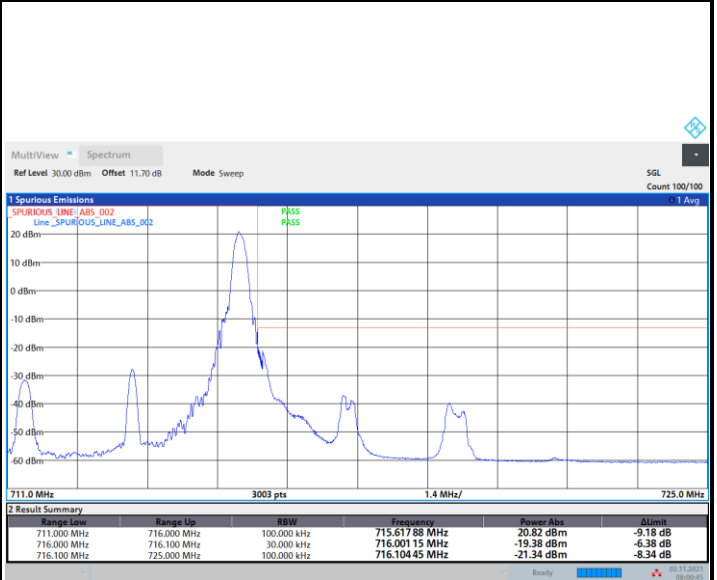
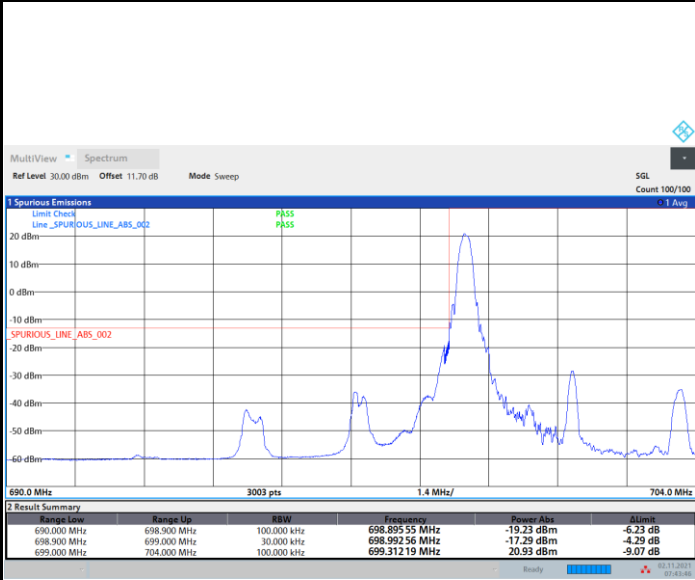


Conducted Band Edge

FR1 n12 / 5MHz / DFT-S OFDM / PI/2 BPSK

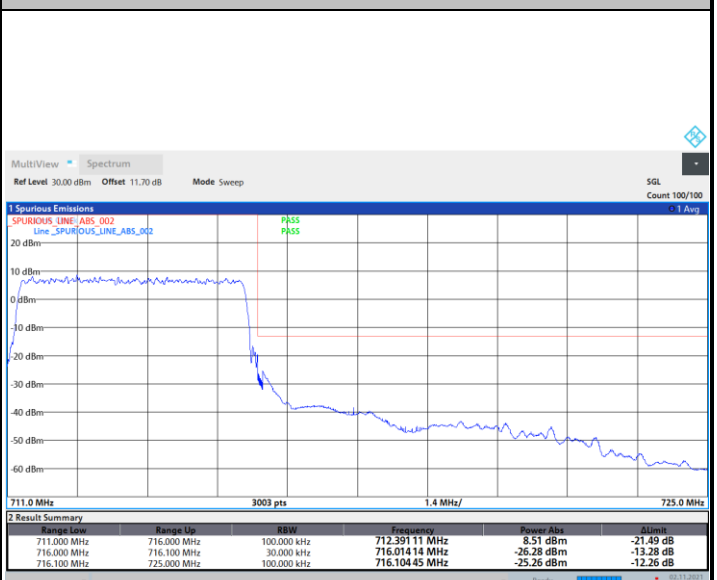
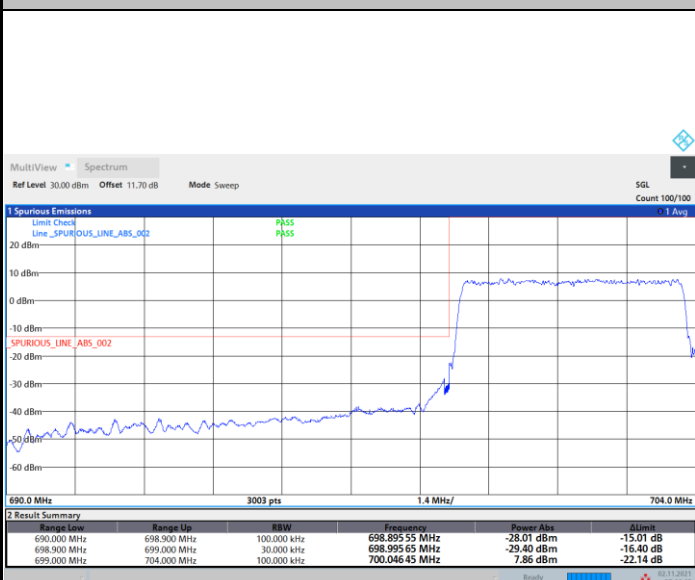
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

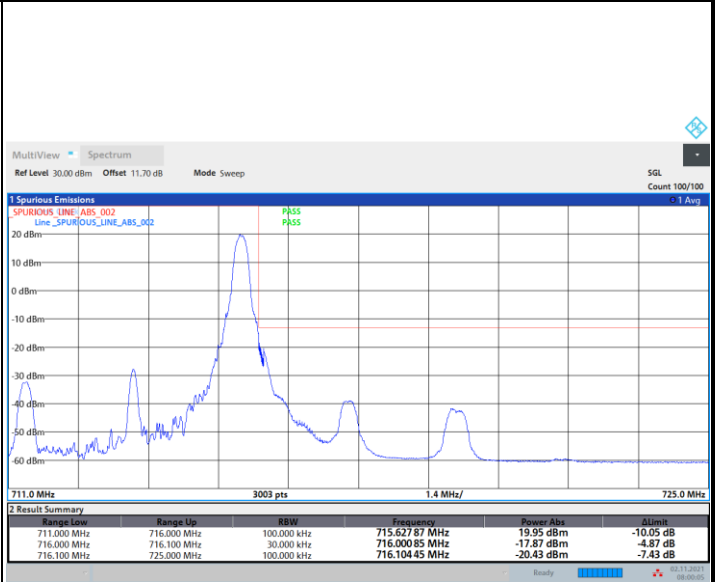
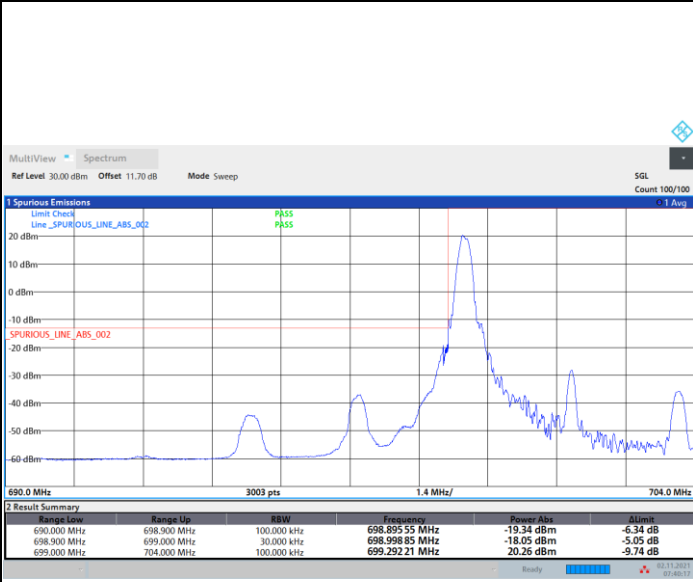




FR1 n12 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

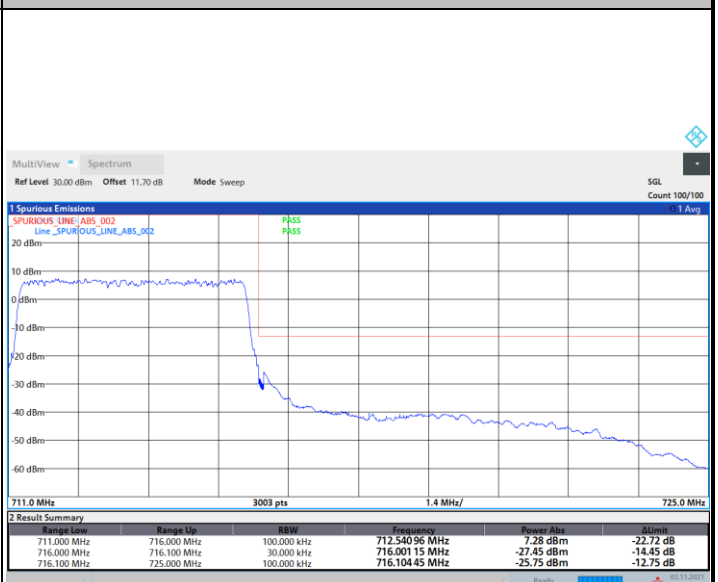
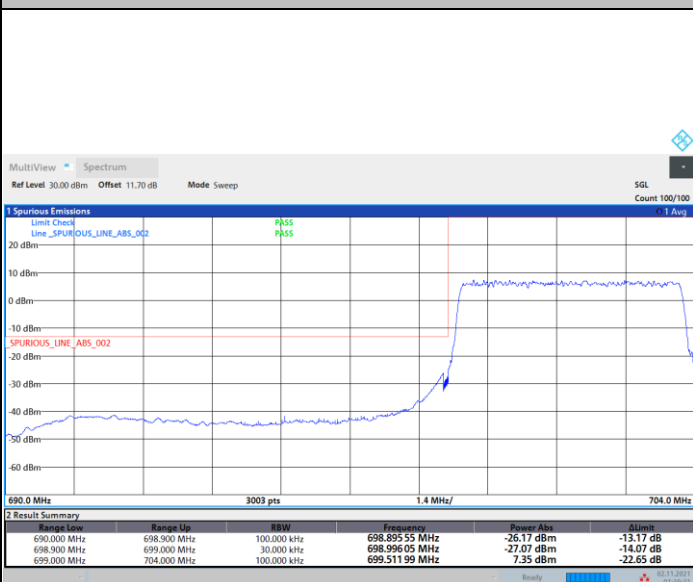


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-19.34 dBm	-6.34 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99885 MHz	-18.05 dBm	-5.05 dB
699.000 MHz	704.000 MHz	100.000 kHz	699.29221 MHz	20.26 dBm	-9.74 dB

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	715.62787 MHz	19.95 dBm	-10.05 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00085 MHz	-17.87 dBm	-4.87 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-20.43 dBm	-7.43 dB

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-26.17 dBm	-13.17 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99605 MHz	-27.07 dBm	-14.07 dB
699.000 MHz	704.000 MHz	100.000 kHz	699.51199 MHz	7.35 dBm	-22.65 dB

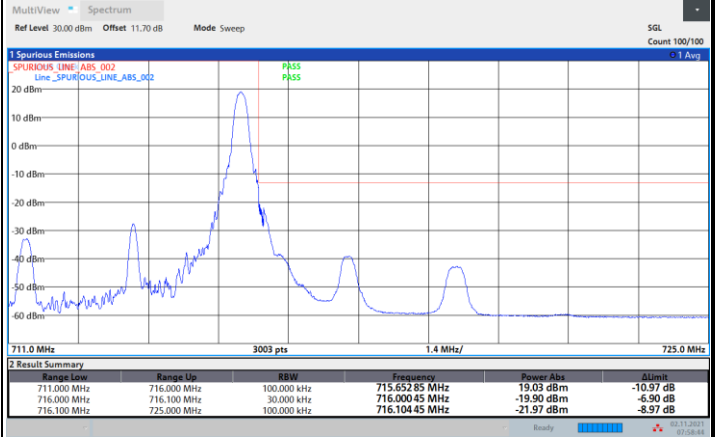
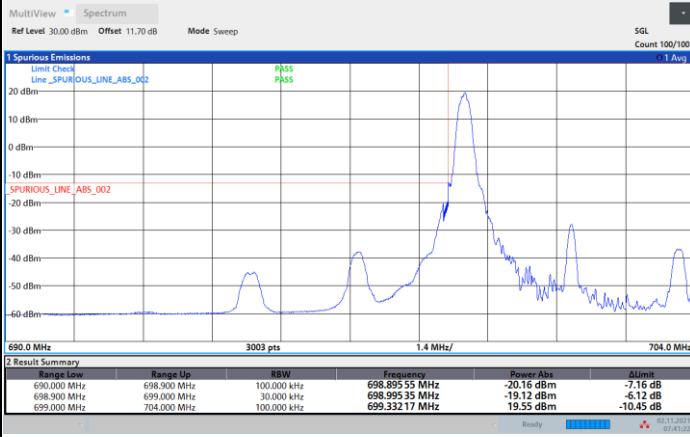
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
711.000 MHz	716.000 MHz	100.000 kHz	712.54096 MHz	7.28 dBm	-22.72 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00115 MHz	-27.45 dBm	-14.45 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-25.75 dBm	-12.75 dB



FR1 n12 / 5MHz / DFT-S OFDM / 16QAM

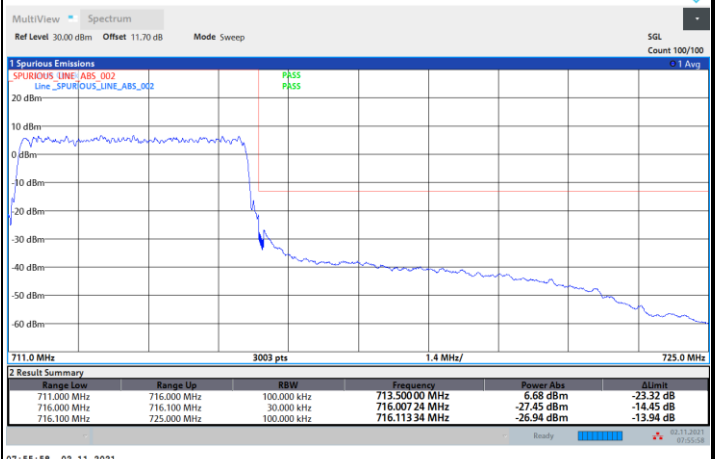
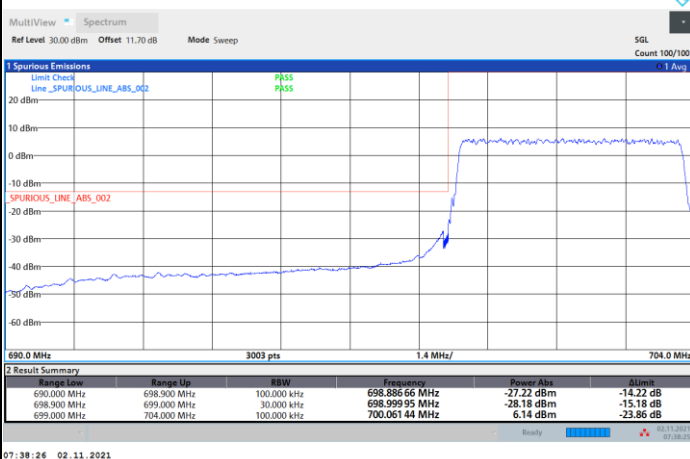
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

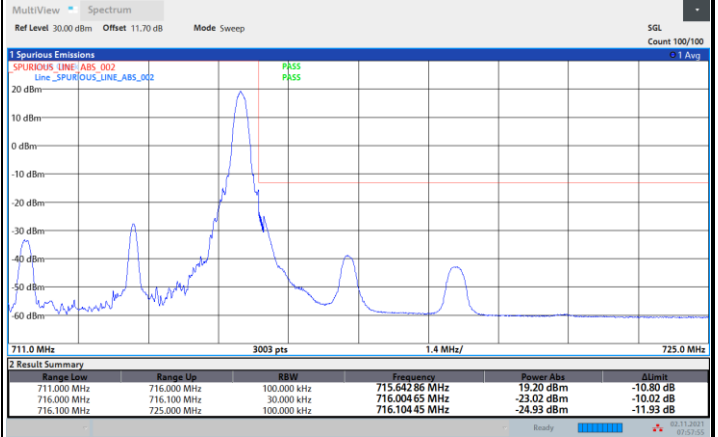
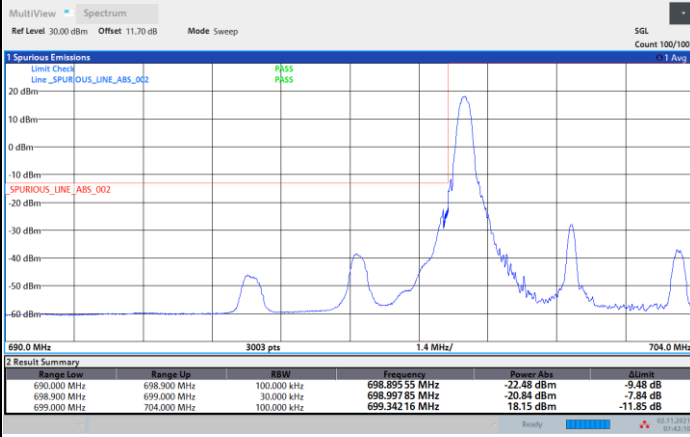




FR1 n12 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

