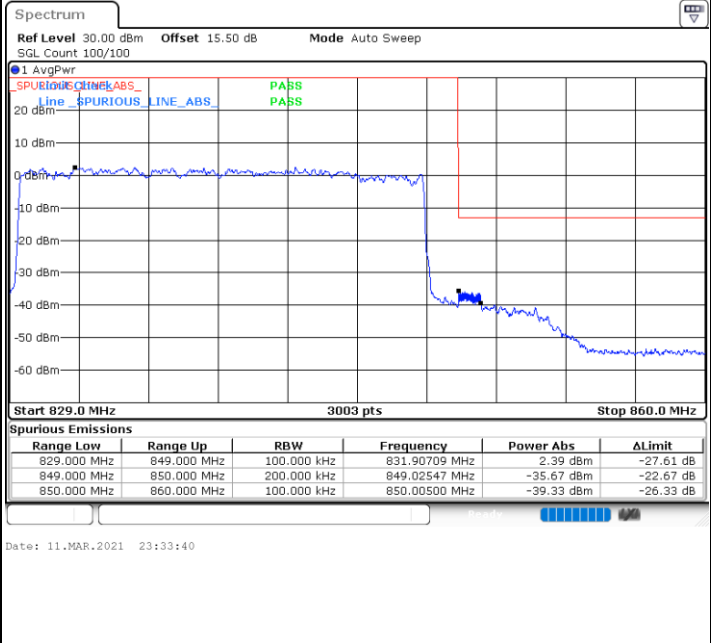
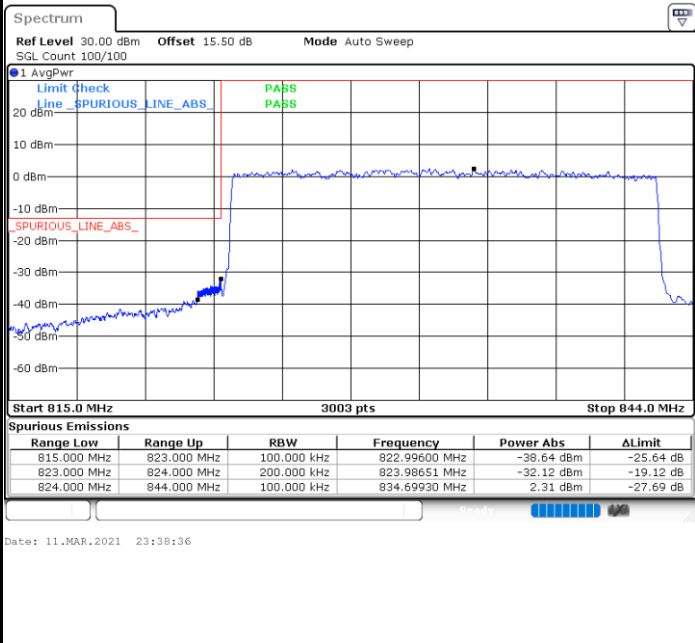




FR1 n5 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

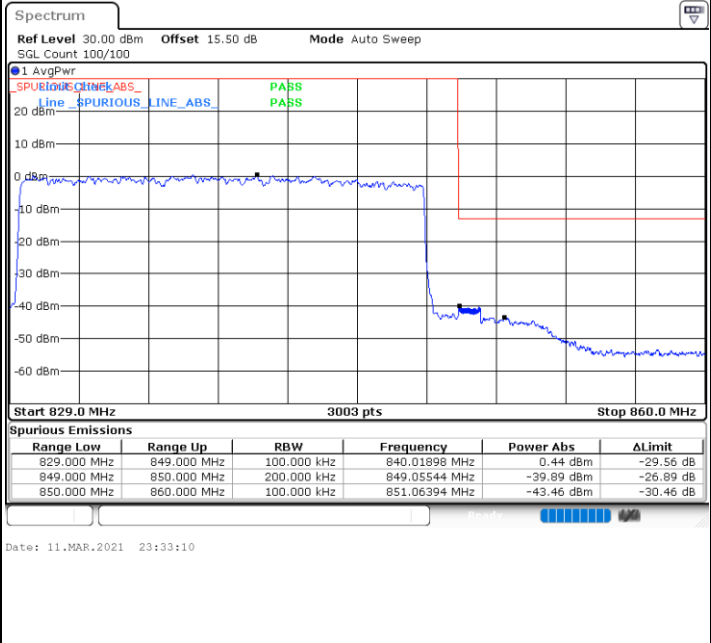
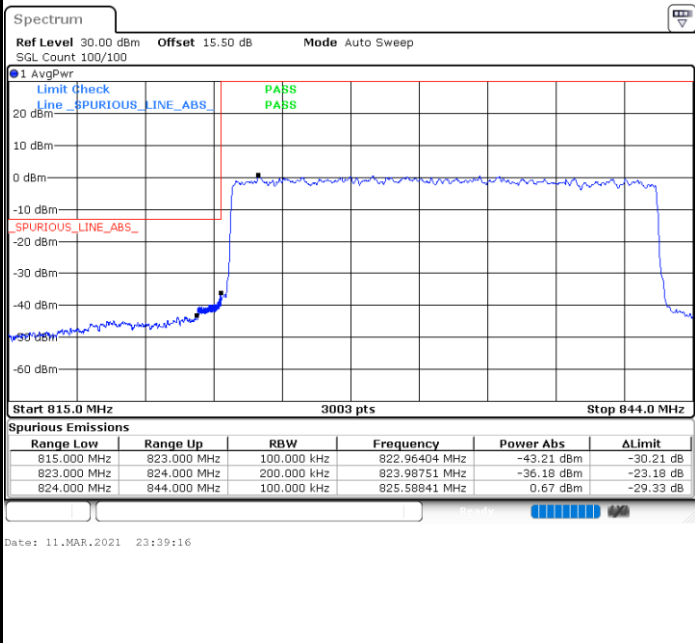
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

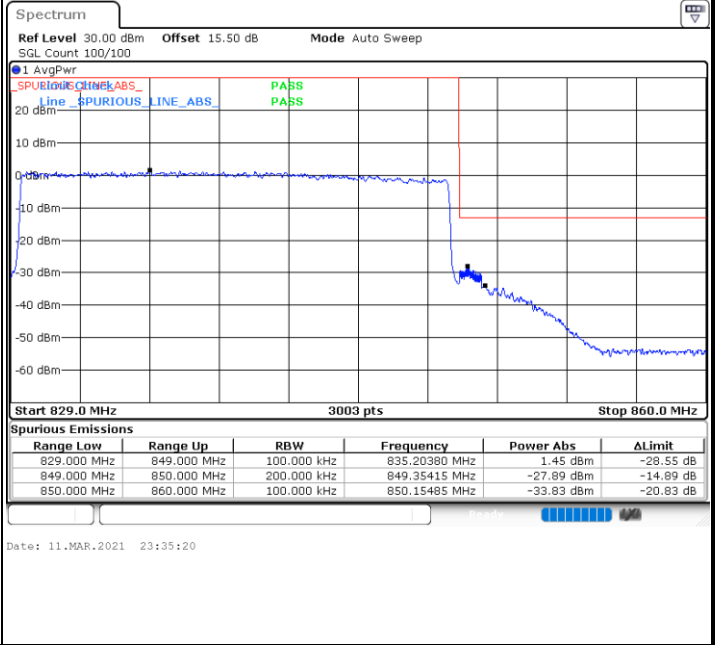
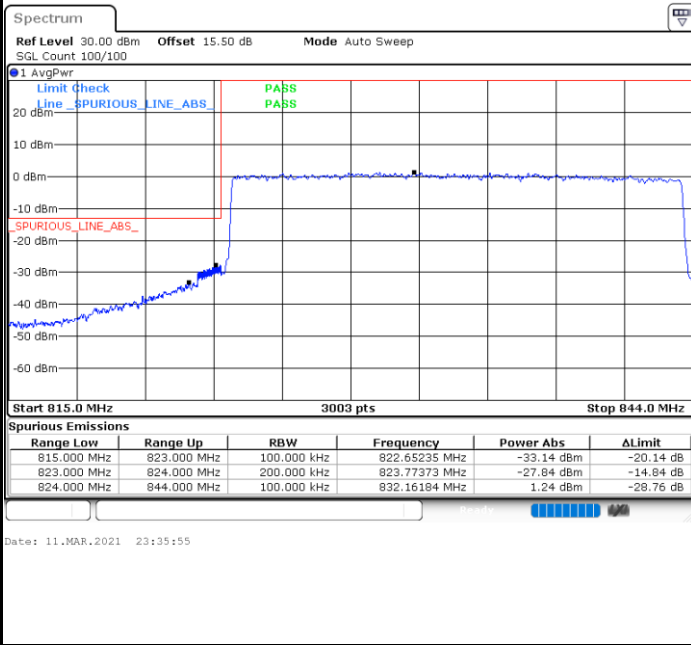




FR1 n5 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

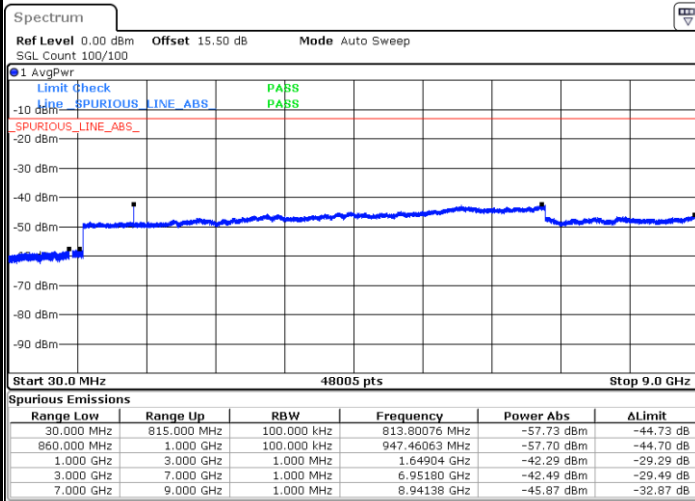




# Conducted Spurious Emission

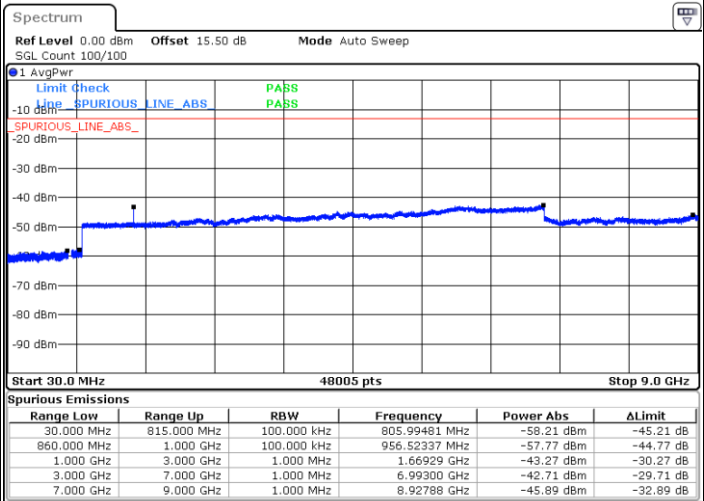
FR1 n5 / 5MHz / DFT-S OFDM / QPSK / 1RB1

## Lowest Channel



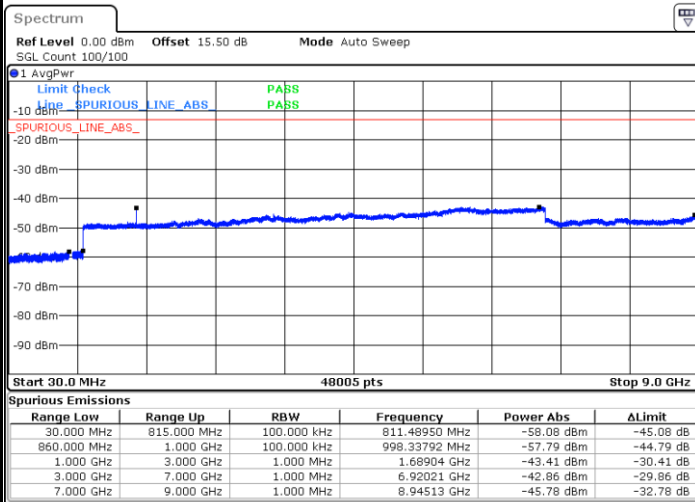
Date: 11.MAR.2021 23:41:01

## Middle Channel



Date: 11.MAR.2021 23:42:07

## Highest Channel



Date: 11.MAR.2021 23:42:47



Frequency Stability

Test Conditions		FR1 n5 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0050	
30	Normal Voltage	0.0215	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0038	
20	Maximum Voltage	0.0048	
20	Normal Voltage	0.0044	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =11.6 V. ; Maximum Voltage =12.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n66

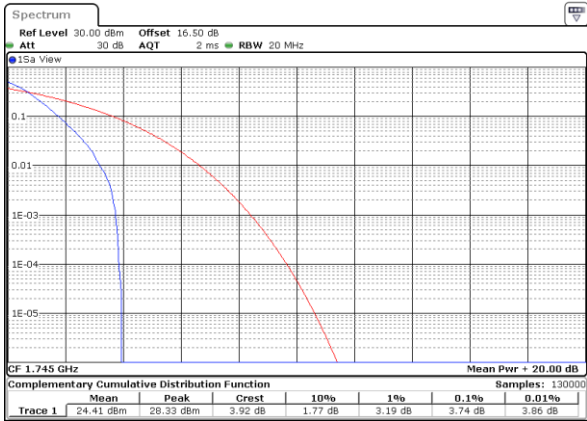
## Peak-to-Average Ratio

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	3.74	4.32	5.42	5.80	PASS
Mode	FR1 n66 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.55				PASS



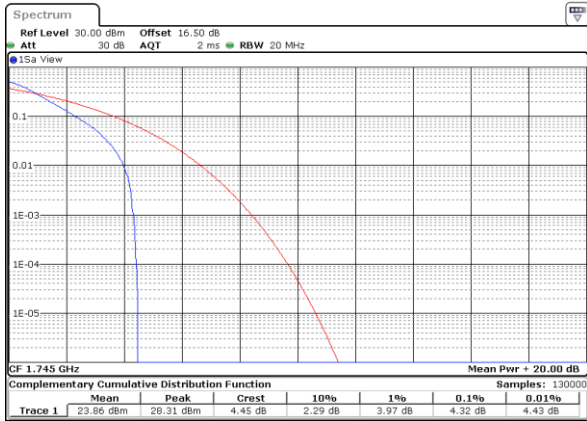
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



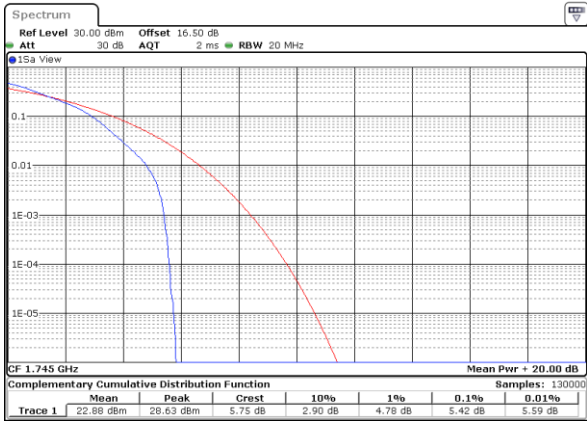
Date: 12.MAR.2021 20:00:25

QPSK



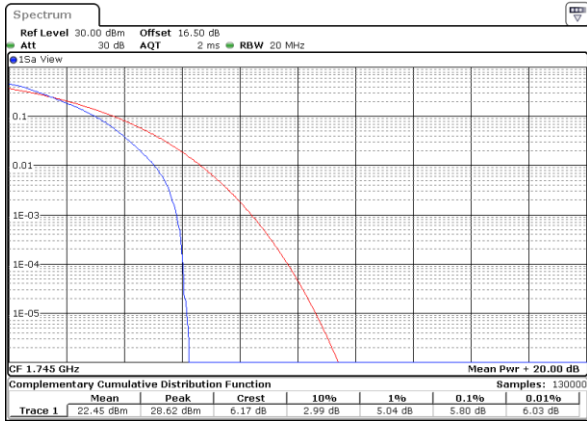
Date: 12.MAR.2021 20:00:42

16QAM



Date: 12.MAR.2021 20:01:02

64QAM



Date: 12.MAR.2021 20:01:20

256QAM



Date: 12.MAR.2021 20:01:41



**26dB Bandwidth**

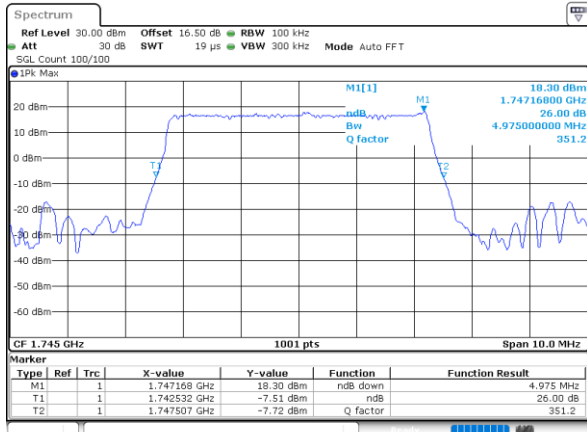
Mode	FR1 n66 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.97		9.41		14.24		18.86	

Mode	FR1 n66 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.91	4.97	9.83	9.87	15.02	15.02	19.94	19.98
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.97	4.88	9.63	9.77	14.96	14.93	19.90	20.02



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

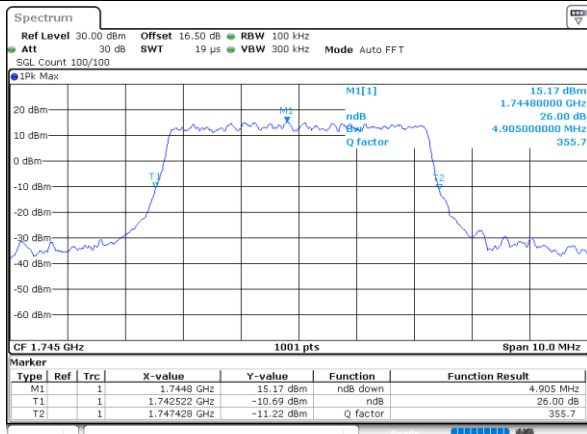
PI/2 BPSK



Date: 12.MAR.2021 20:59:29

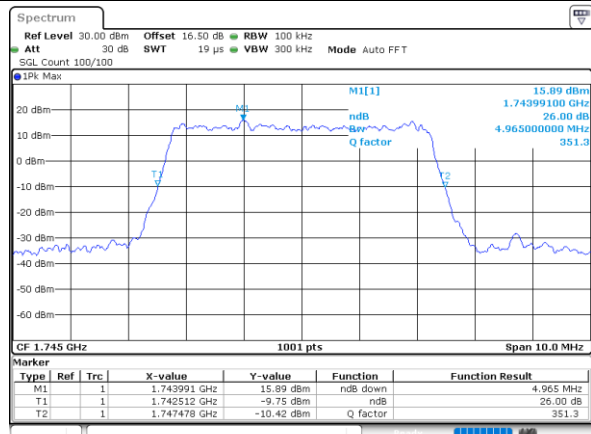
FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



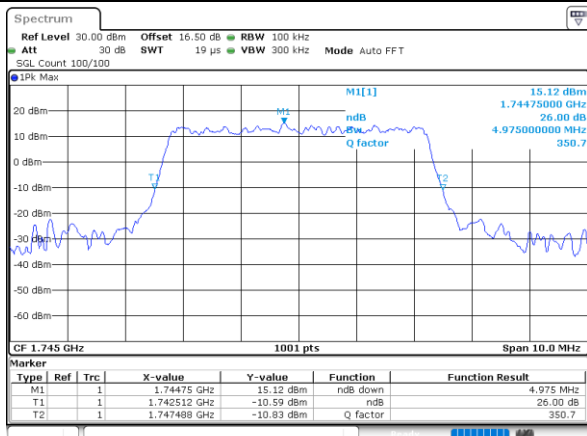
Date: 12.MAR.2021 20:58:49

16QAM



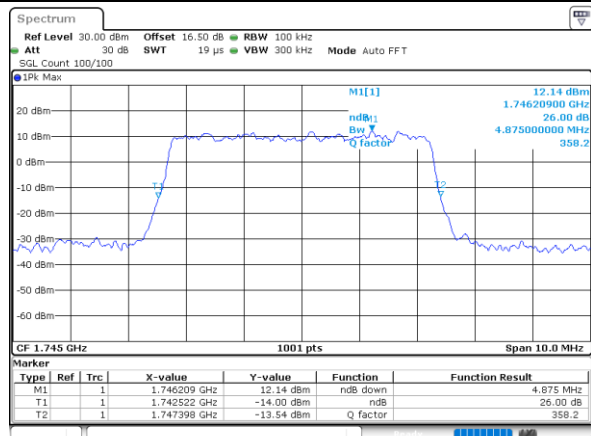
Date: 12.MAR.2021 20:58:12

64QAM



Date: 12.MAR.2021 20:58:09

256QAM



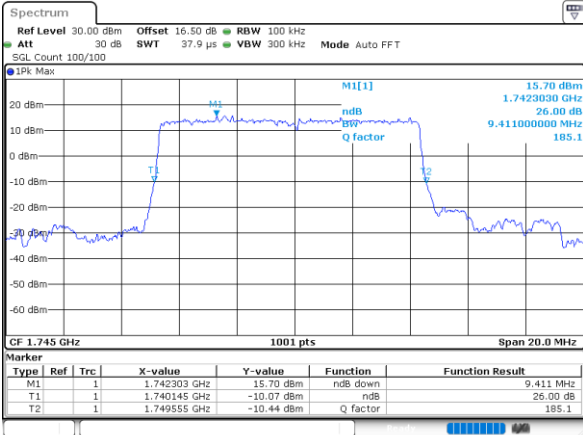
Date: 12.MAR.2021 20:56:12





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

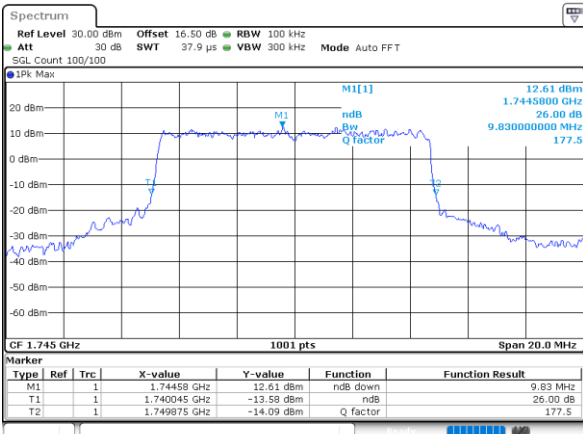
PI/2 BPSK



Date: 12.MAR.2021 20:50:58

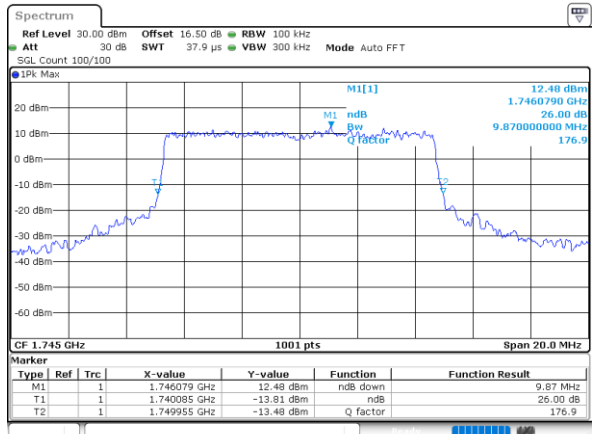
FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



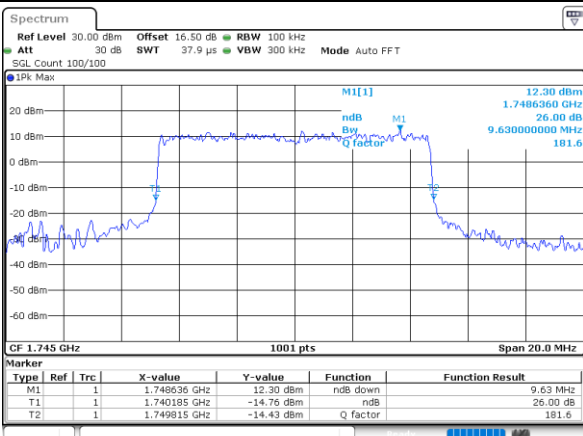
Date: 12.MAR.2021 20:52:35

16QAM



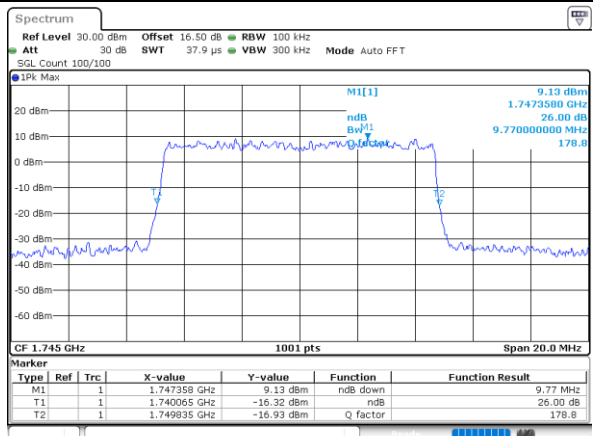
Date: 12.MAR.2021 20:52:53

64QAM



Date: 12.MAR.2021 20:54:12

256QAM

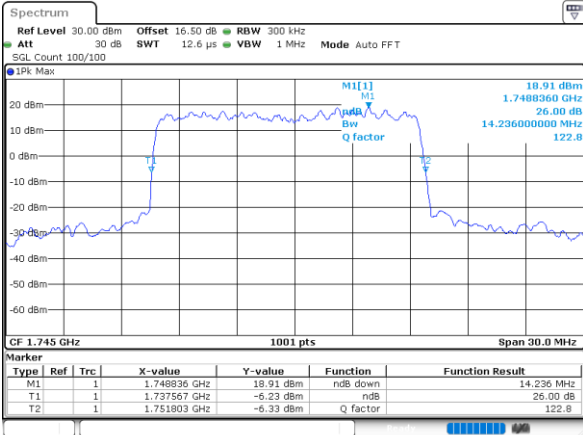


Date: 12.MAR.2021 20:54:31



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

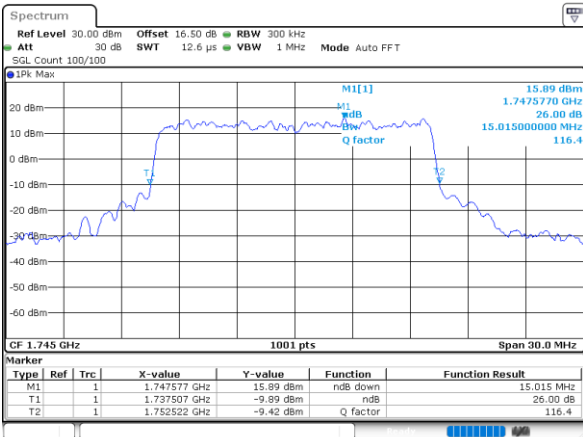
PI/2 BPSK



Date: 12.MAR.2021 20:45:49

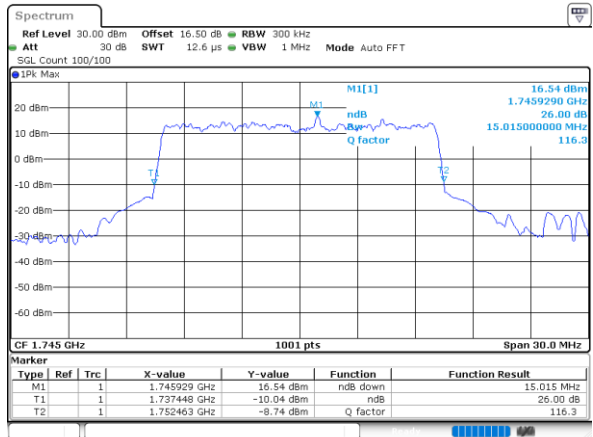
FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



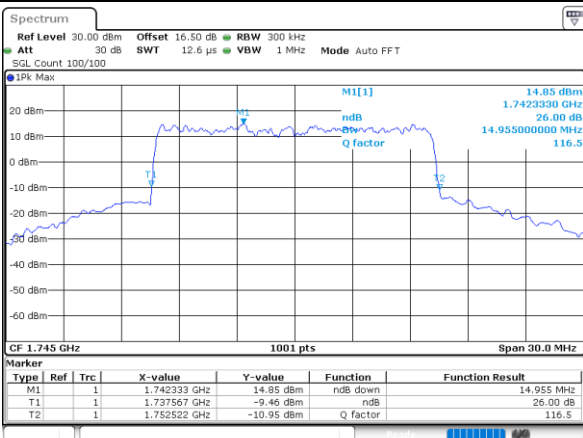
Date: 12.MAR.2021 20:41:52

16QAM



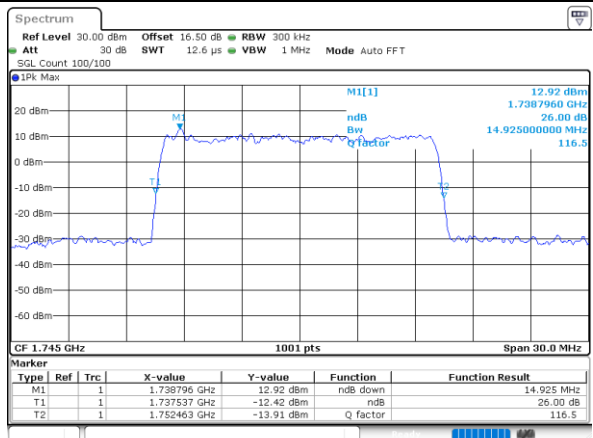
Date: 12.MAR.2021 20:41:32

64QAM



Date: 12.MAR.2021 20:40:54

256QAM

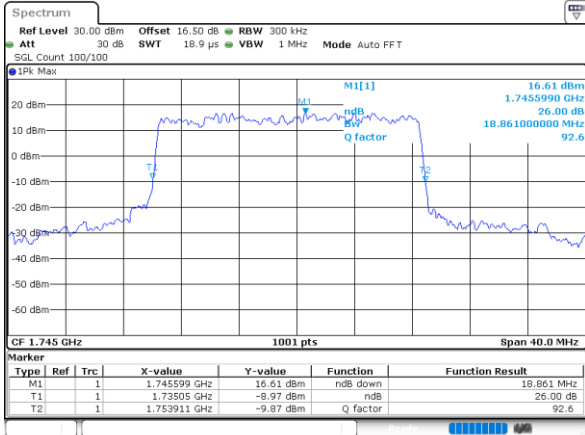


Date: 12.MAR.2021 20:40:31



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

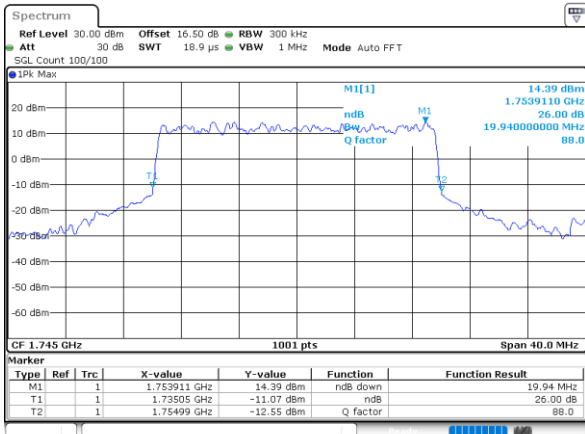
PI/2 BPSK



Date: 12.MAR.2021 20:10:20

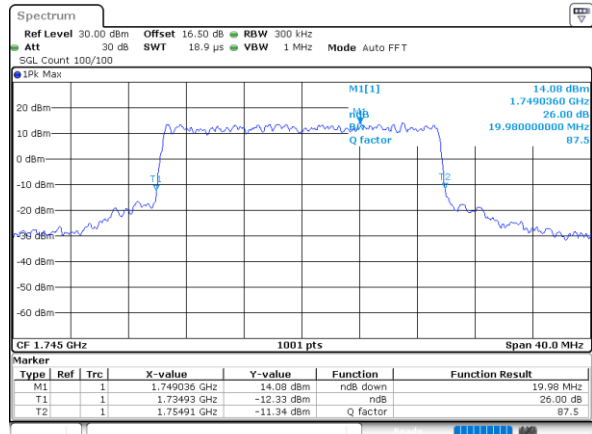
FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



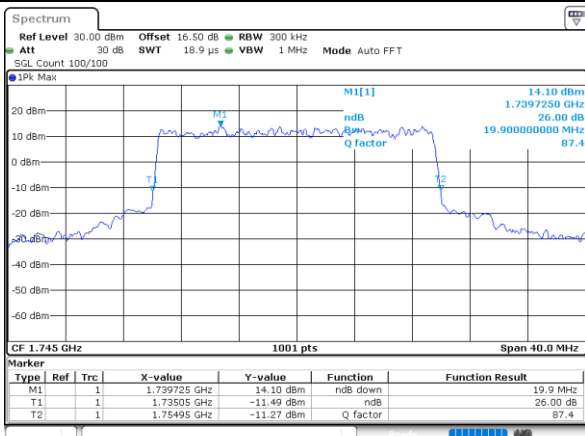
Date: 12.MAR.2021 20:11:29

16QAM



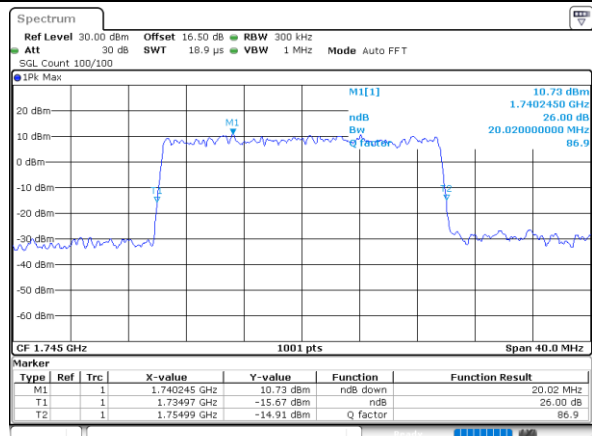
Date: 12.MAR.2021 20:11:59

64QAM



Date: 12.MAR.2021 20:12:35

256QAM



Date: 12.MAR.2021 20:12:57



Occupied Bandwidth

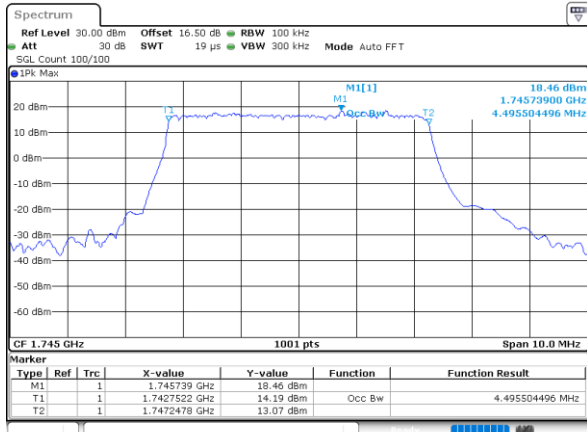
Mode	FR1 n66 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.50		8.91		13.49		17.90	

Mode	FR1 n66 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.48	9.25	9.25	14.15	14.12	18.94	19.06
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.48	4.48	9.29	9.27	14.18	14.15	19.02	18.98



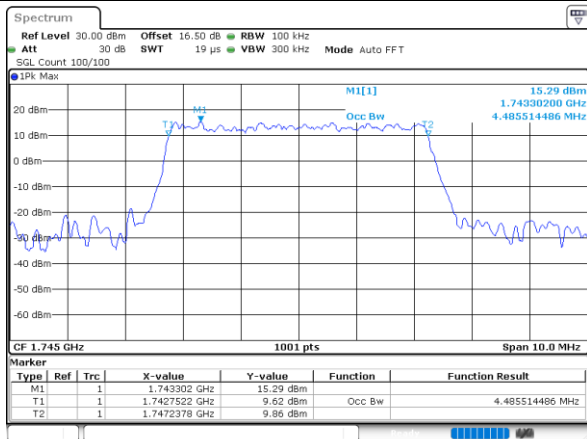
FR1 n66 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

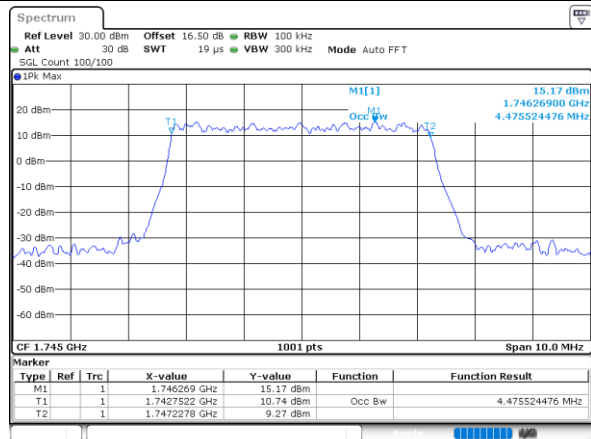


FR1 n66 / 5MHz / CP OFDM / Middle Channel / Full RB

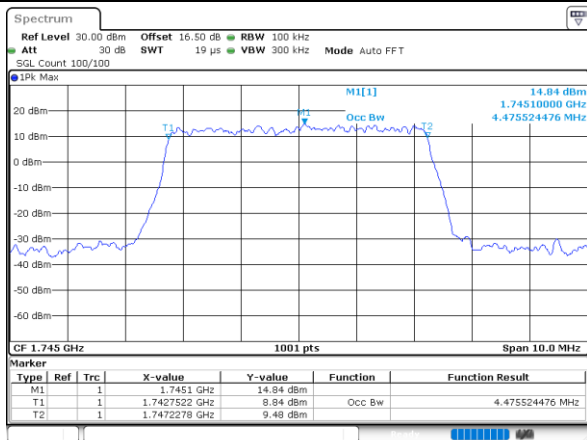
QPSK



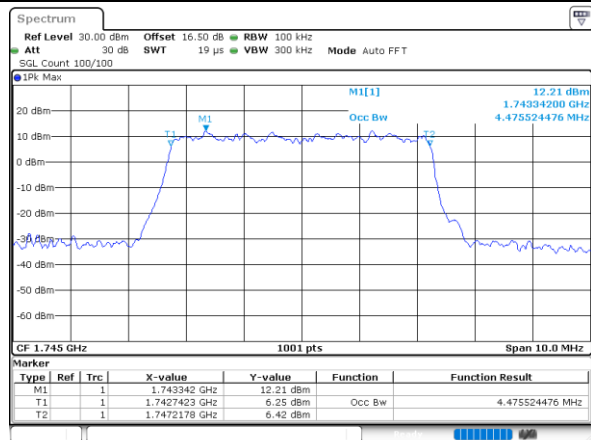
16QAM



64QAM



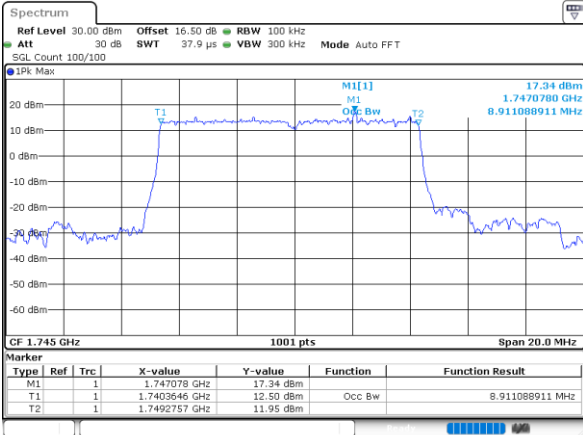
256QAM





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

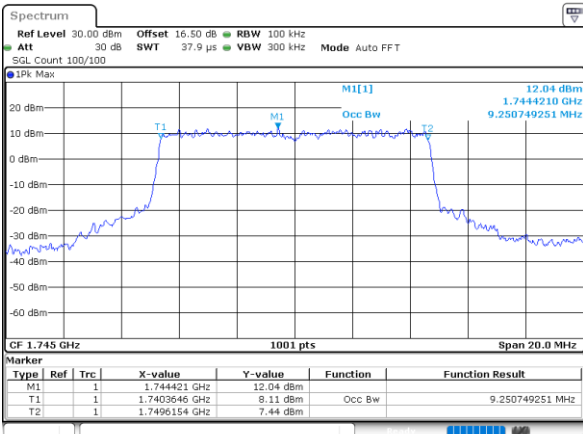
PI/2 BPSK



Date: 12.MAR.2021 20:50:52

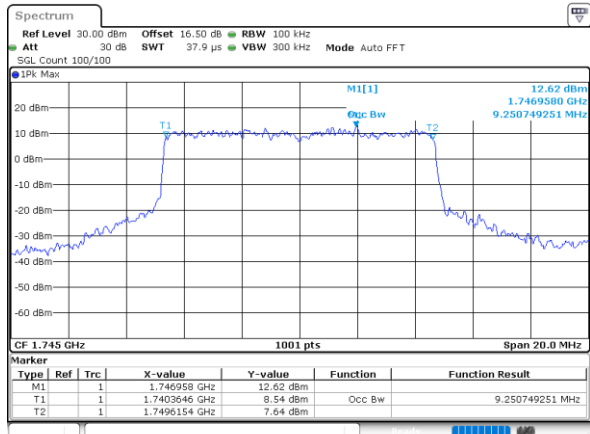
FR1 n66 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



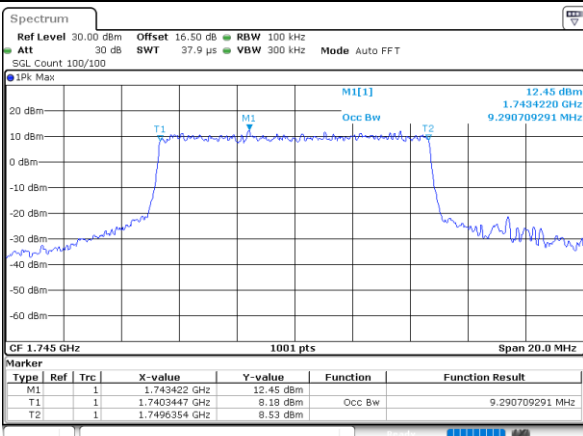
Date: 12.MAR.2021 20:52:29

16QAM



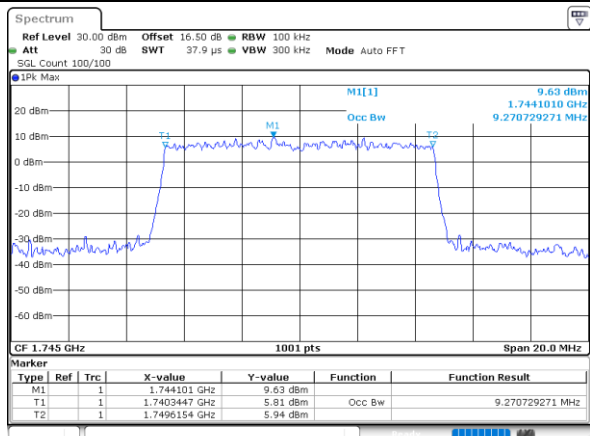
Date: 12.MAR.2021 20:52:47

64QAM



Date: 12.MAR.2021 20:54:07

256QAM

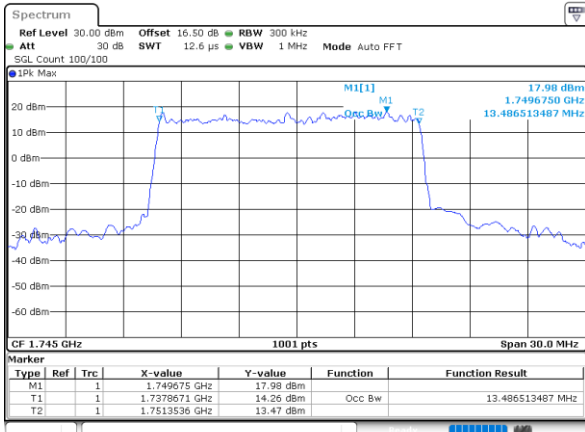


Date: 12.MAR.2021 20:54:26



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

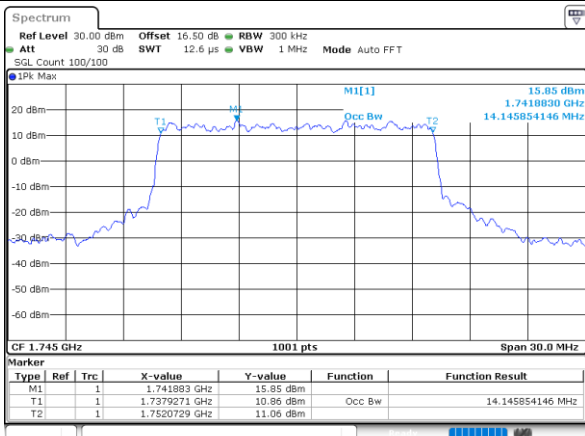
PI/2 BPSK



Date: 12.MAR.2021 20:45:41

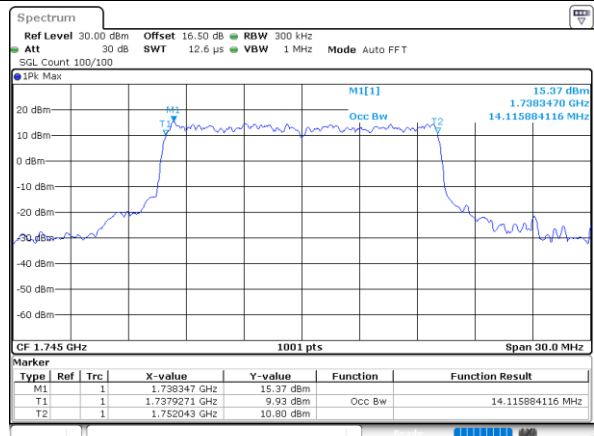
FR1 n66 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



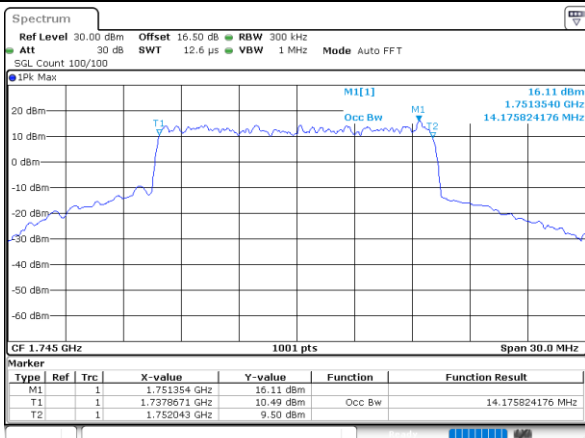
Date: 12.MAR.2021 20:41:45

16QAM



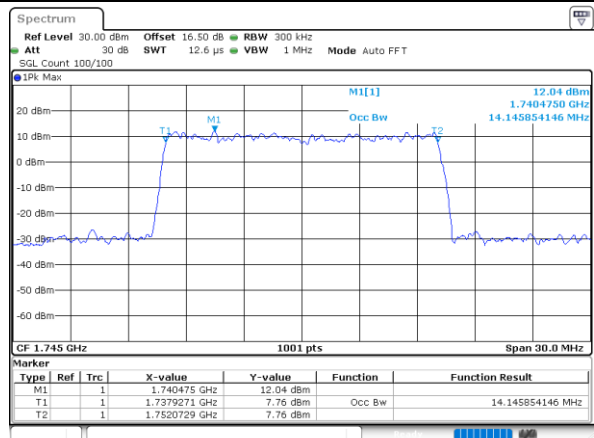
Date: 12.MAR.2021 20:41:24

64QAM



Date: 12.MAR.2021 20:40:46

256QAM

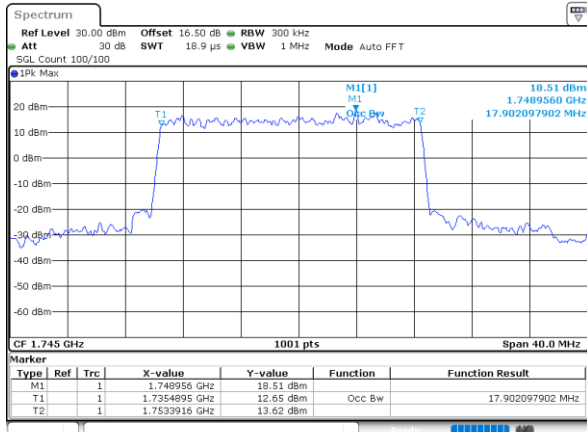


Date: 12.MAR.2021 20:40:21



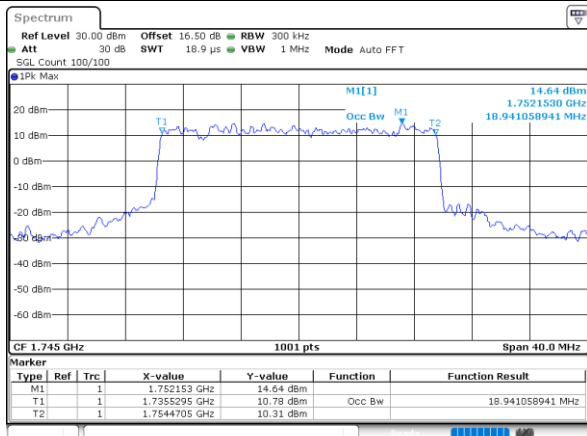
FR1 n66 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

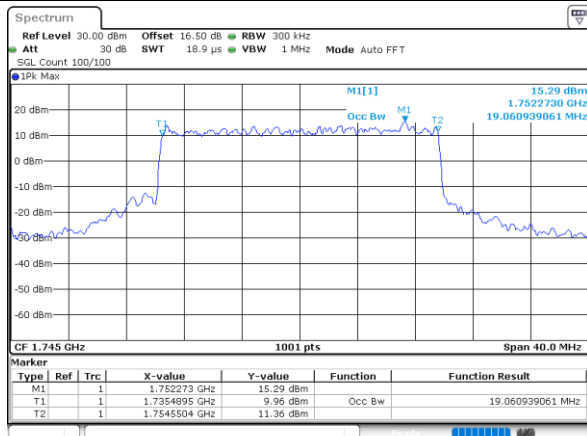


FR1 n66 / 20MHz / CP OFDM / Middle Channel / Full RB

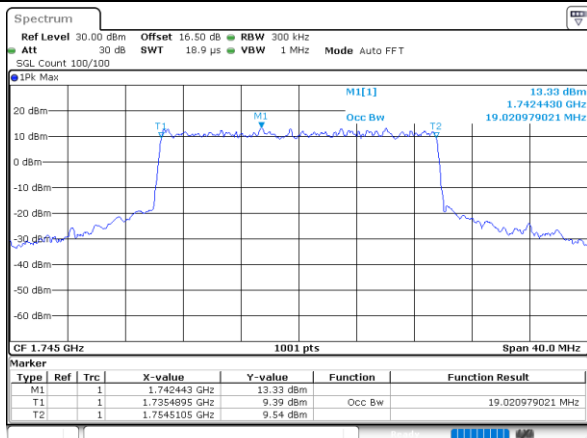
QPSK



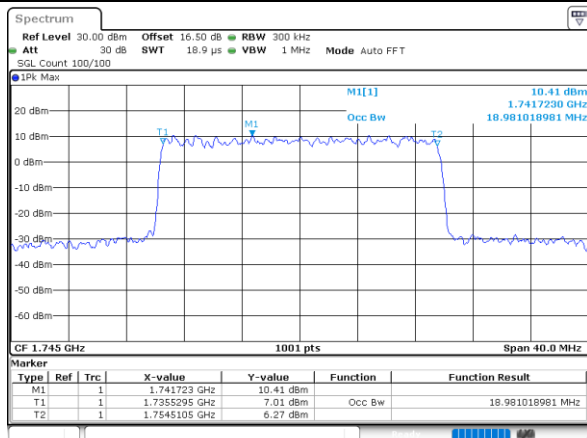
16QAM



64QAM



256QAM





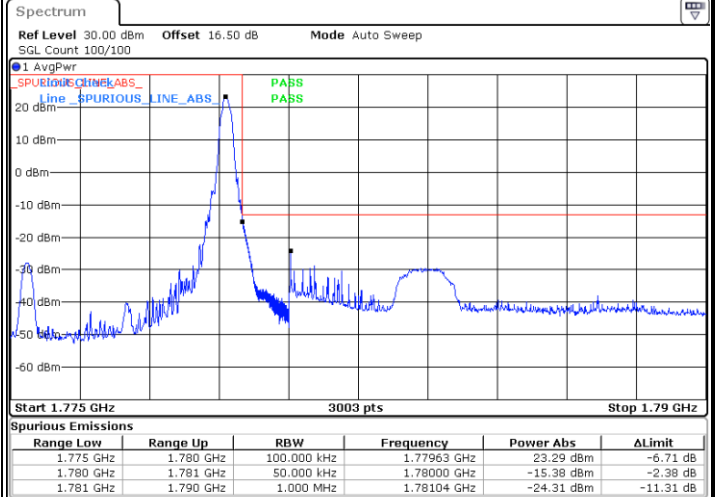
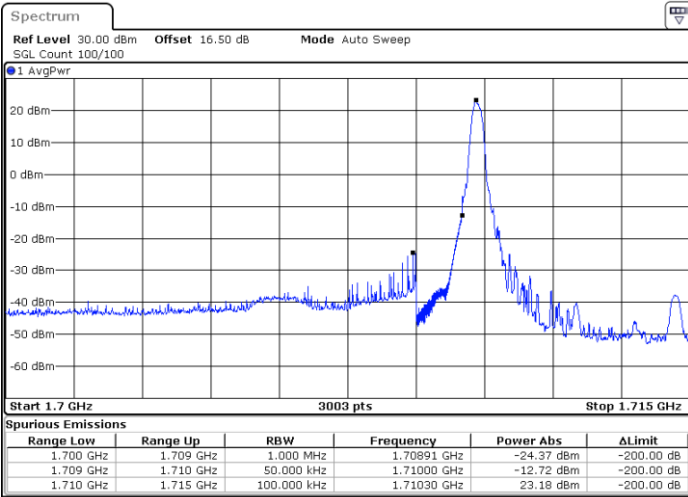


# Conducted Band Edge

FR1 n66 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

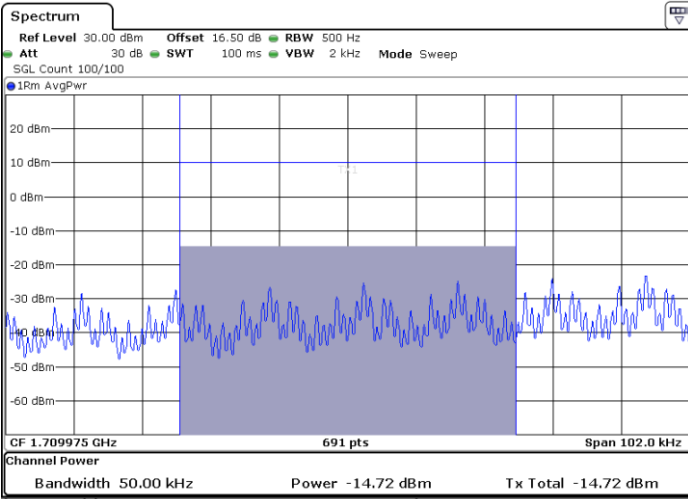
Highest Band Edge / 1RBmax



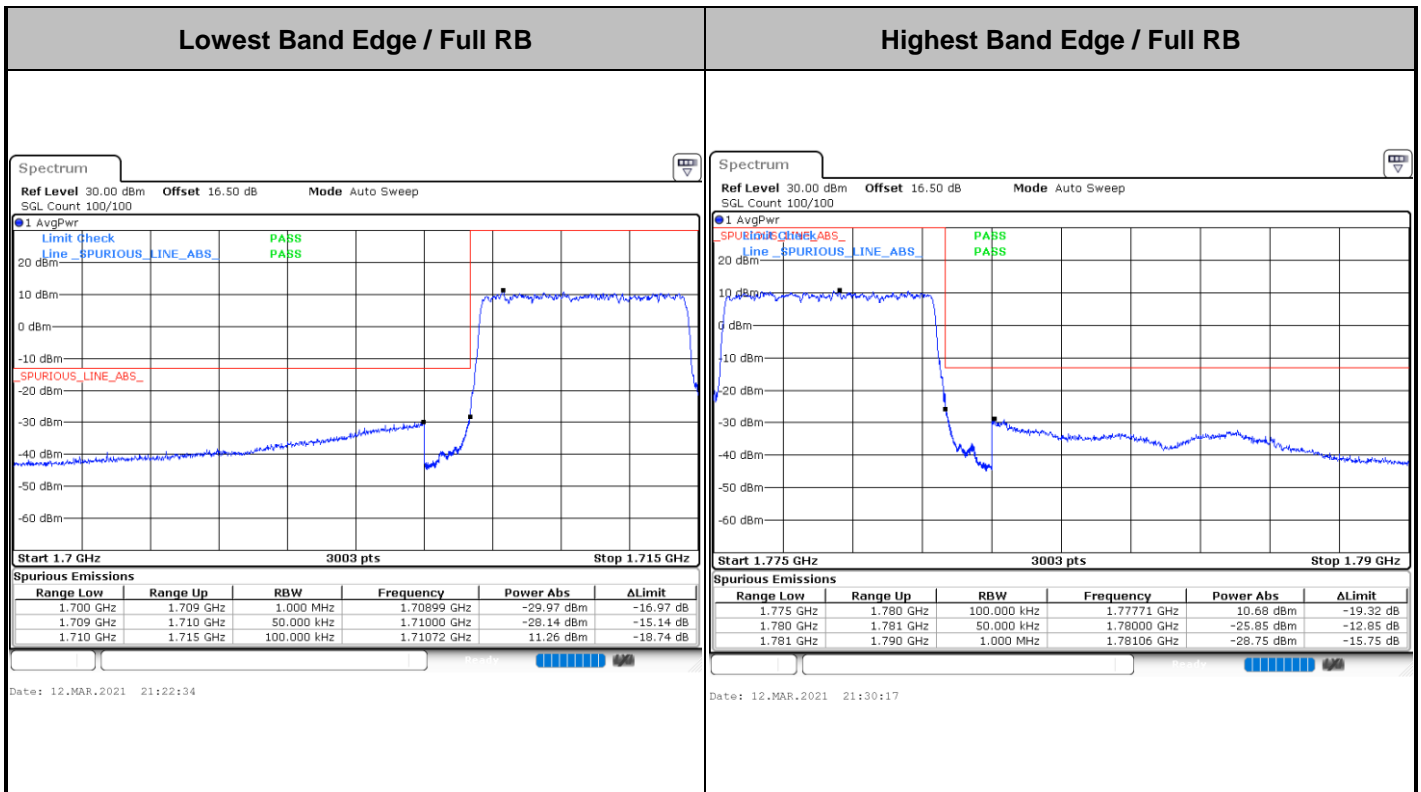
Date: 12.MAR.2021 22:38:53

Date: 12.MAR.2021 21:25:41

Channel Power -13dBm > -14.72dBm (Pass)



Date: 13.MAR.2021 00:32:00

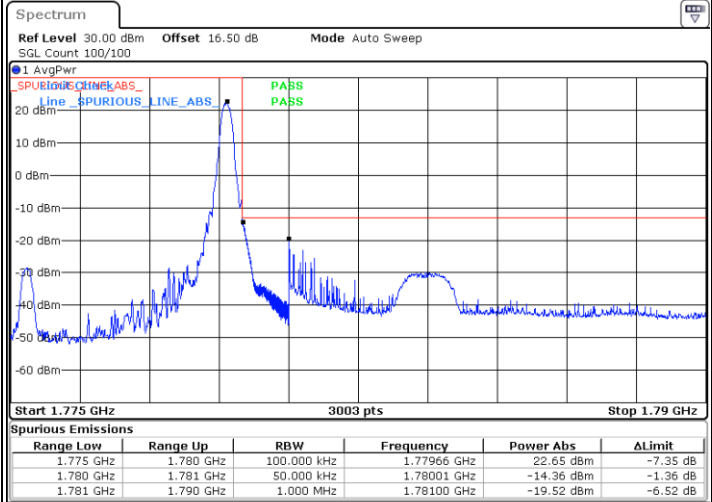
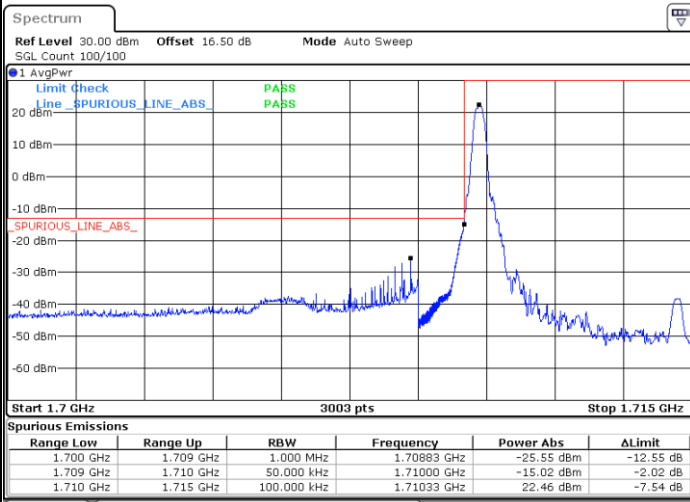




FR1 n66 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

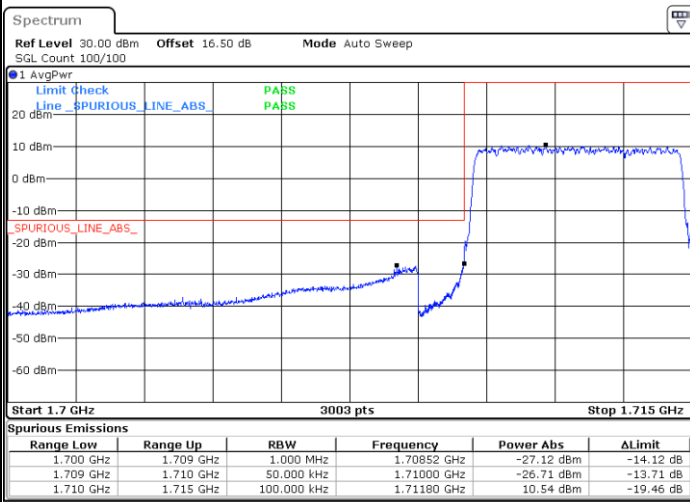


Date: 12.MAR.2021 21:13:51

Date: 12.MAR.2021 21:26:13

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.MAR.2021 21:21:59

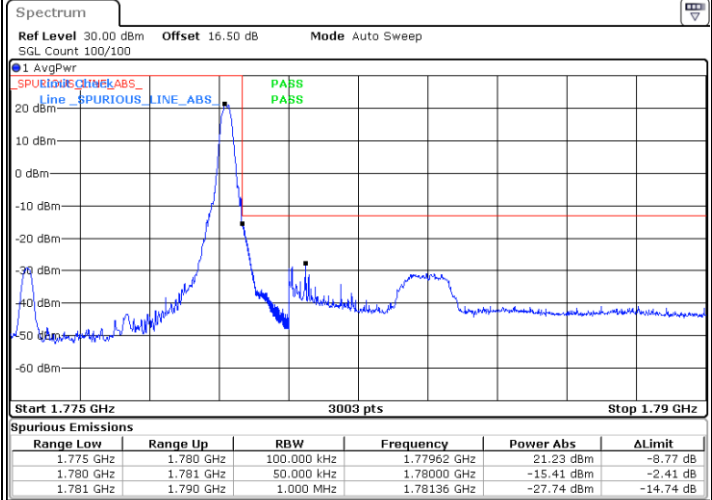
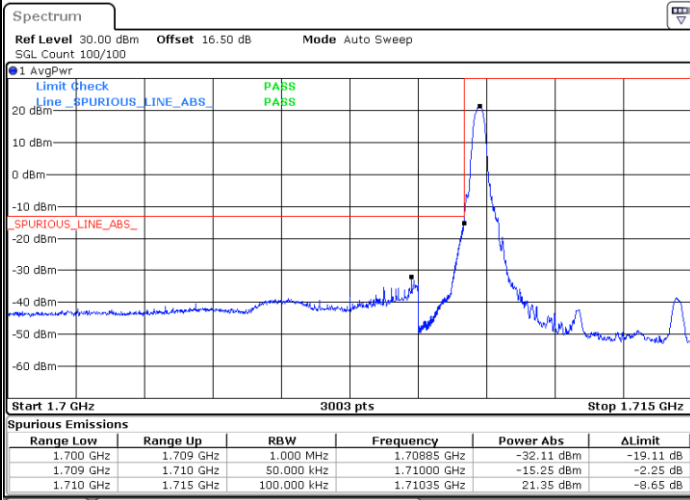
Date: 12.MAR.2021 21:29:48



FR1 n66 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

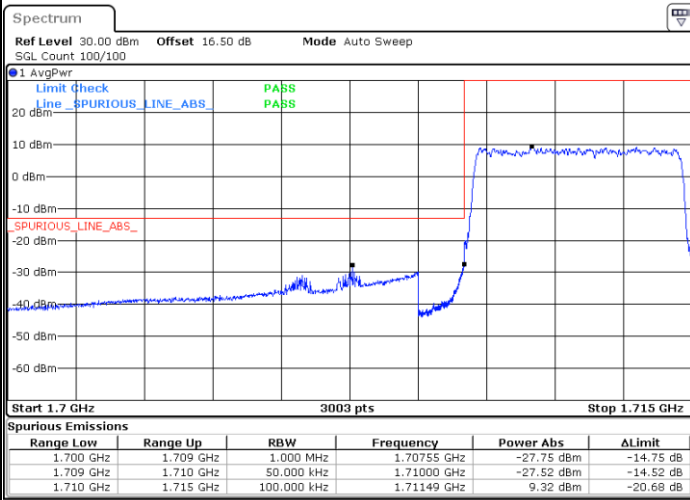


Date: 12.MAR.2021 21:14:51

Date: 12.MAR.2021 21:26:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.MAR.2021 21:21:29

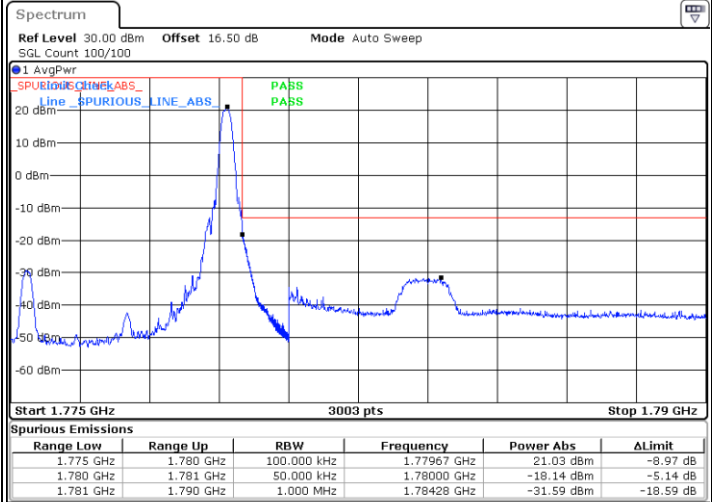
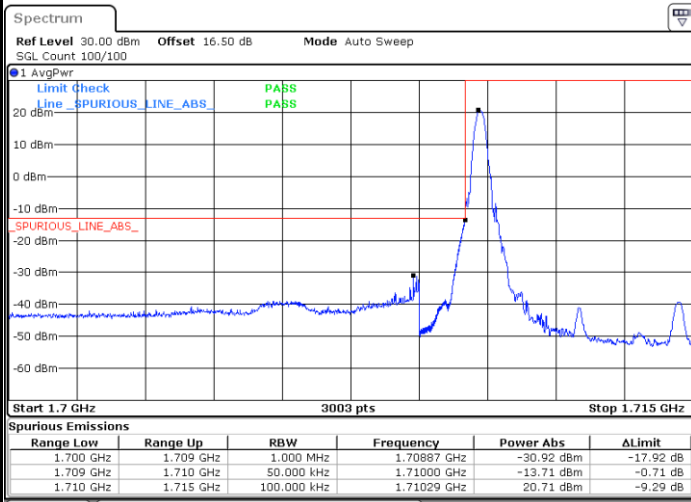
Date: 12.MAR.2021 21:29:17



FR1 n66 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

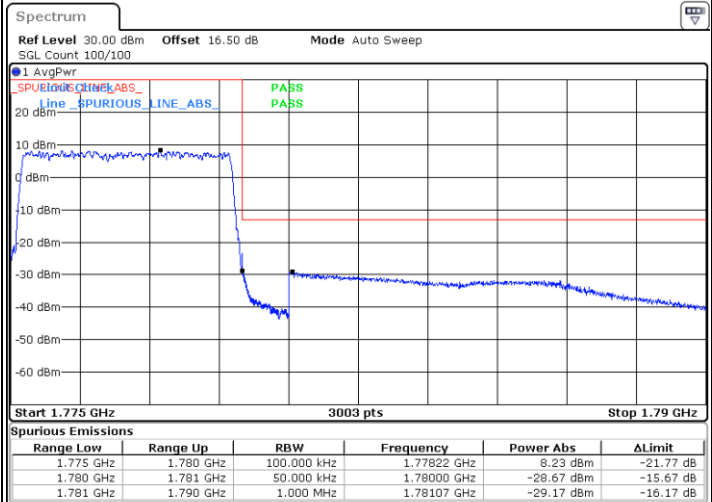
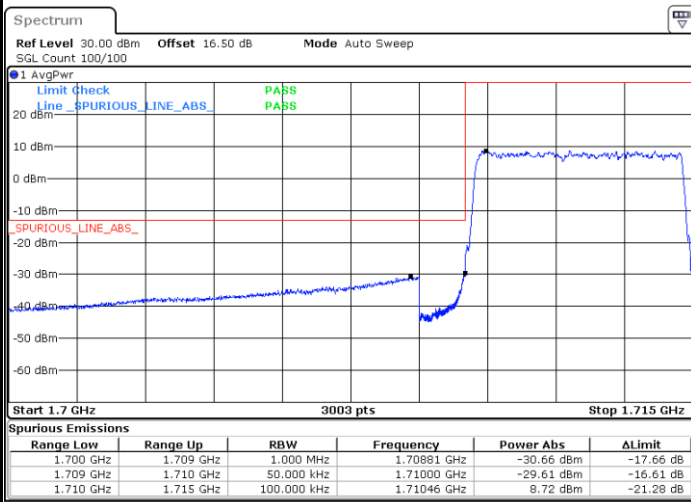


Date: 12.MAR.2021 21:15:22

Date: 12.MAR.2021 21:27:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.MAR.2021 21:20:58

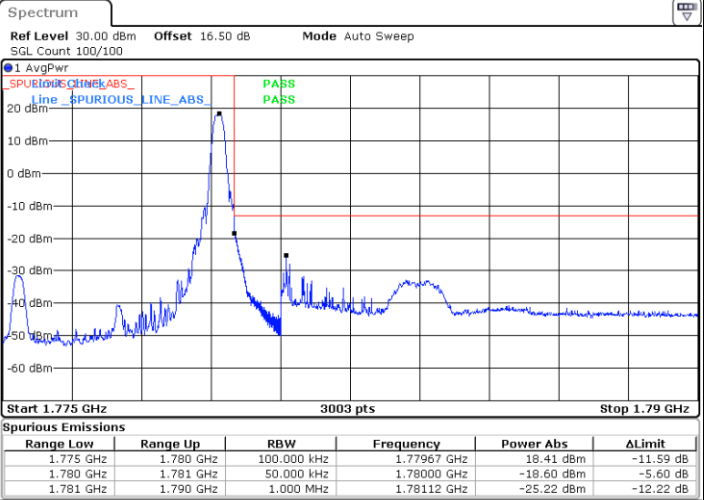
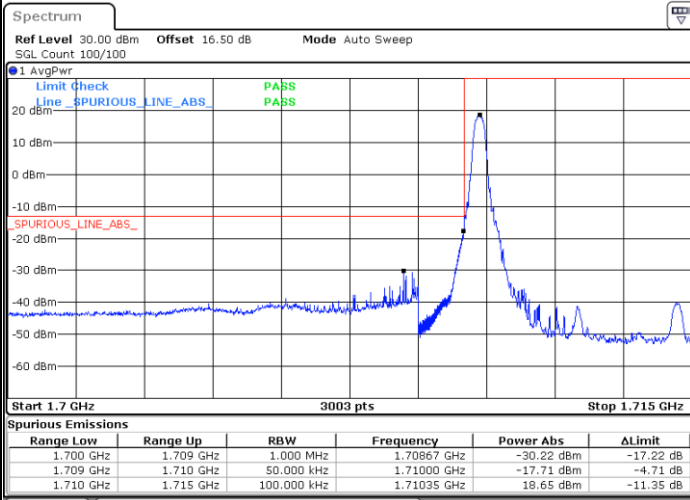
Date: 12.MAR.2021 21:28:47



FR1 n66 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

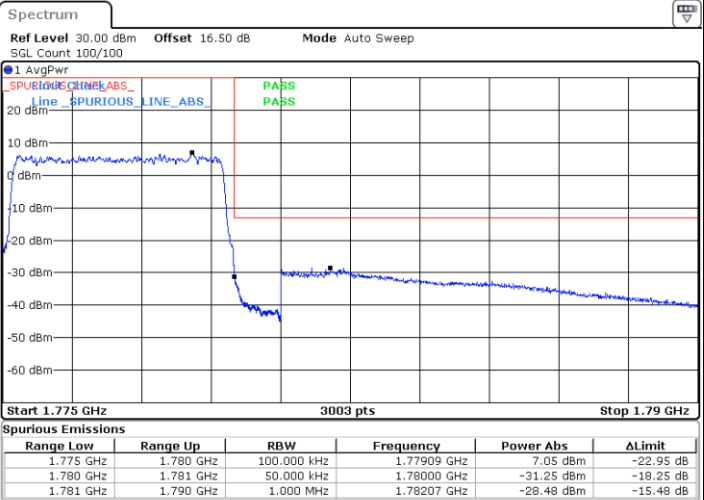
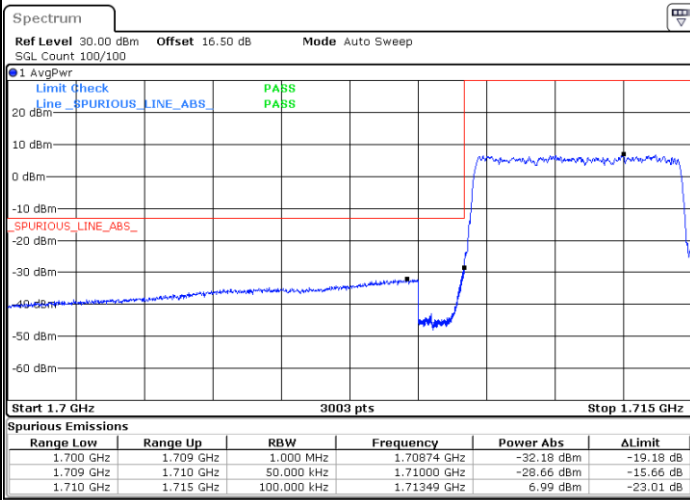


Date: 12.MAR.2021 21:16:07

Date: 12.MAR.2021 21:27:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12.MAR.2021 21:17:14

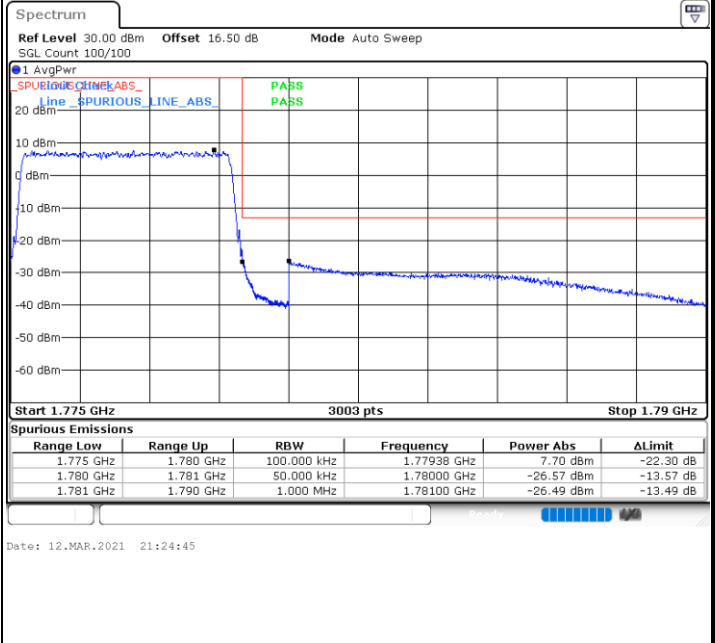
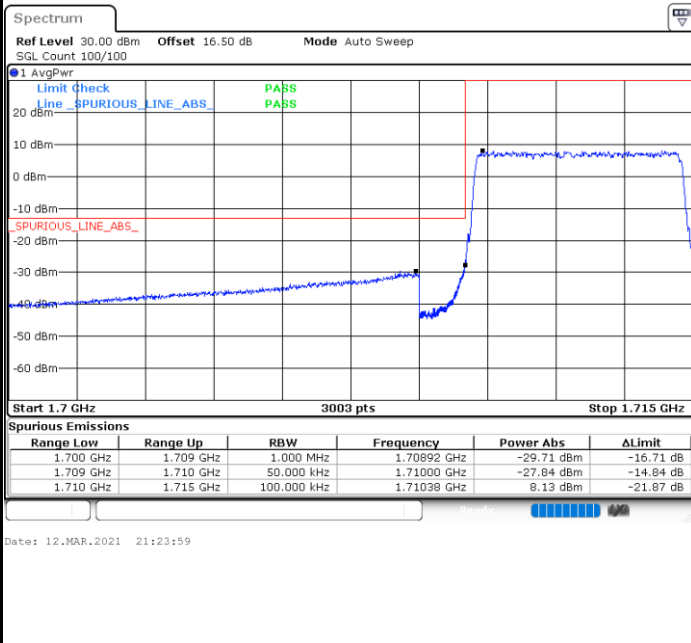
Date: 12.MAR.2021 21:28:15



FR1 n66 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

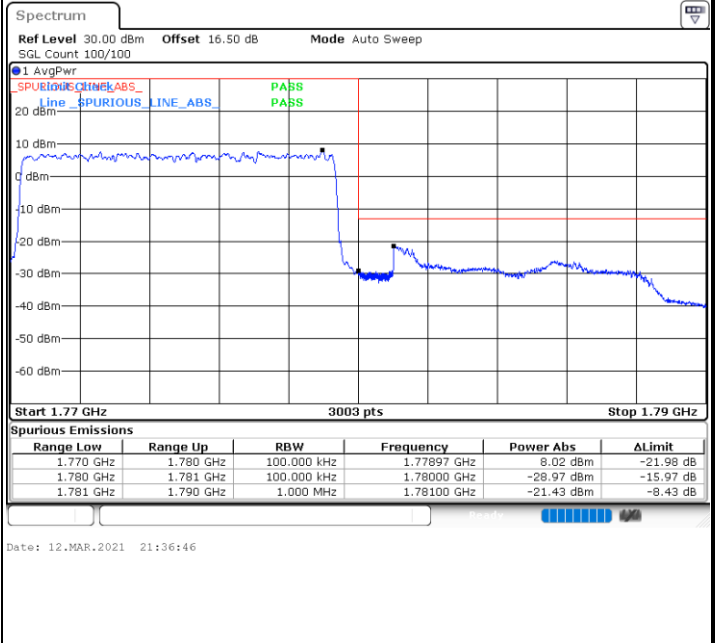
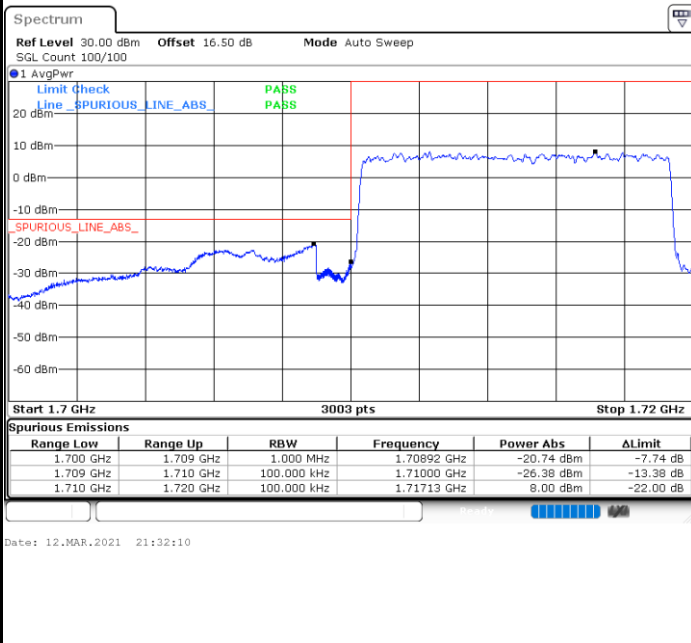
Highest Band Edge



FR1 n66 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge

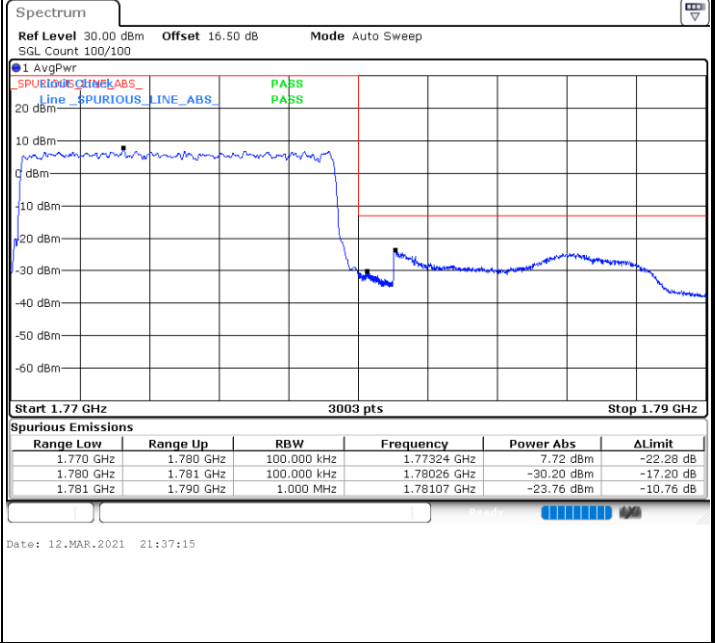
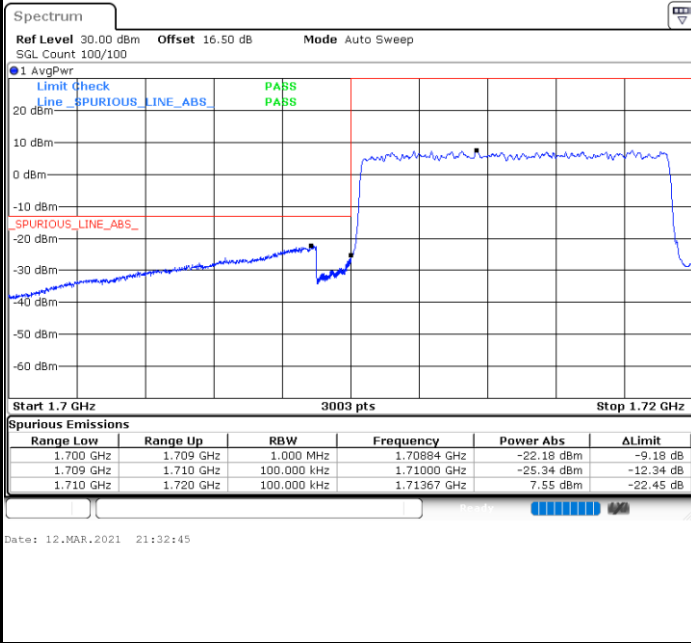




FR1 n66 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

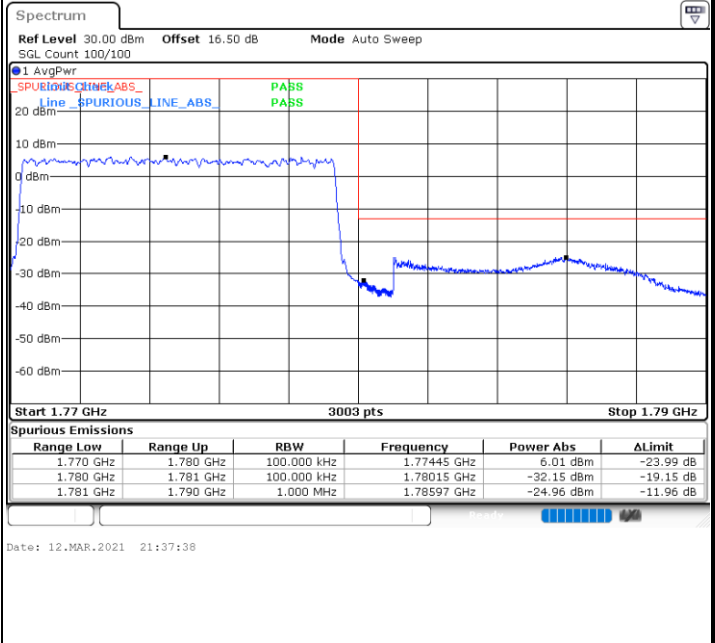
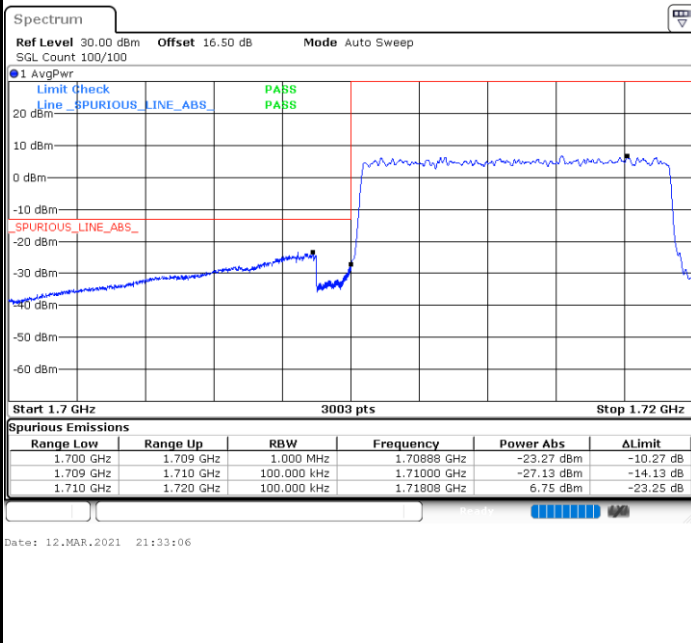
Highest Band Edge



FR1 n66 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



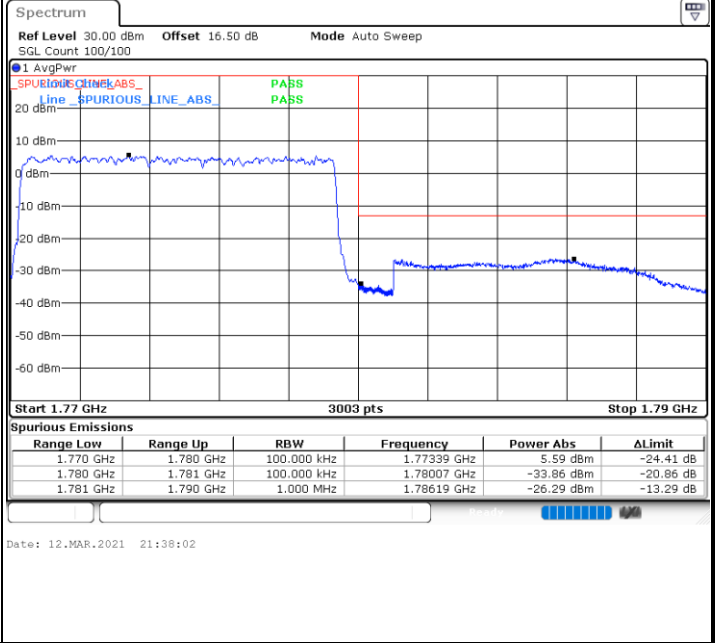
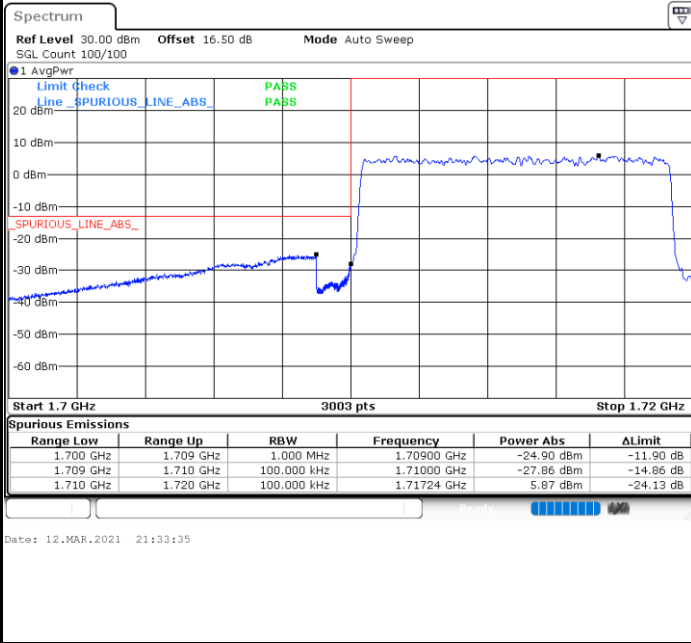




FR1 n66 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

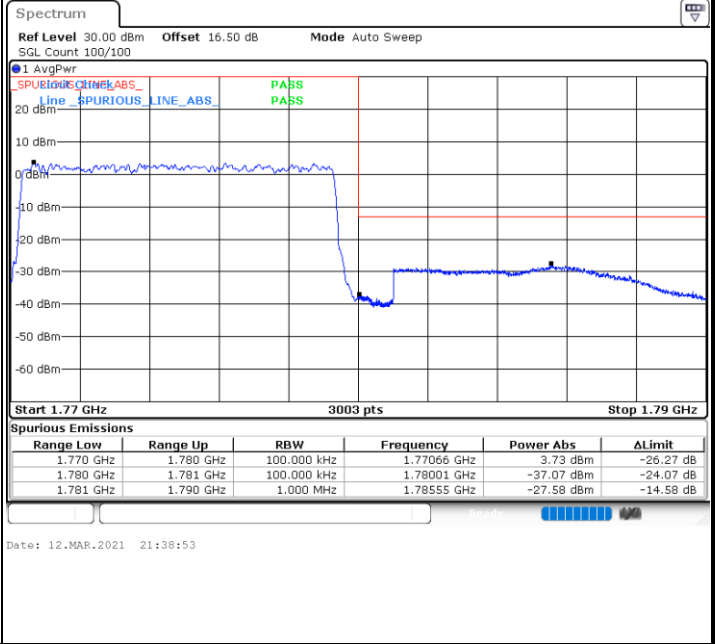
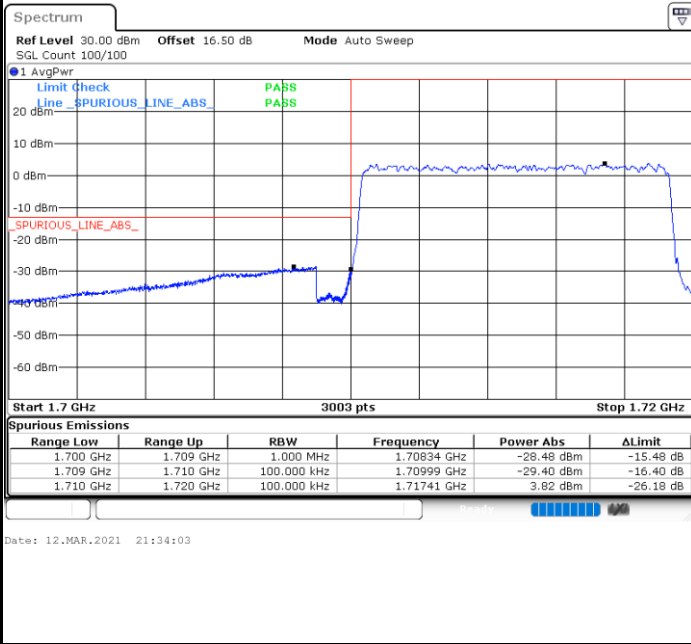
Highest Band Edge



FR1 n66 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

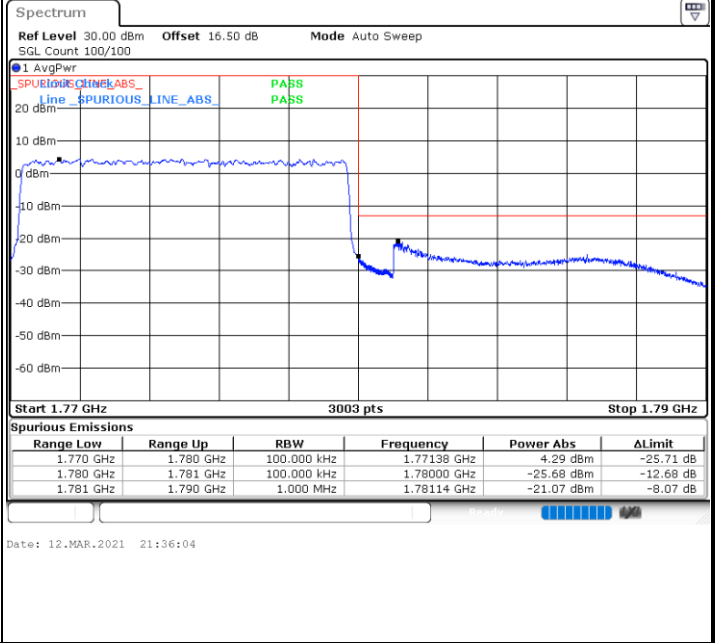
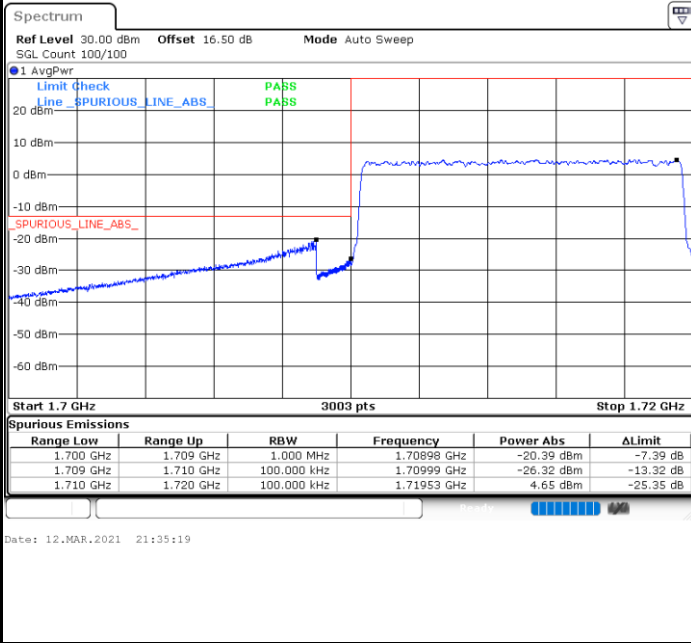




FR1 n66 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

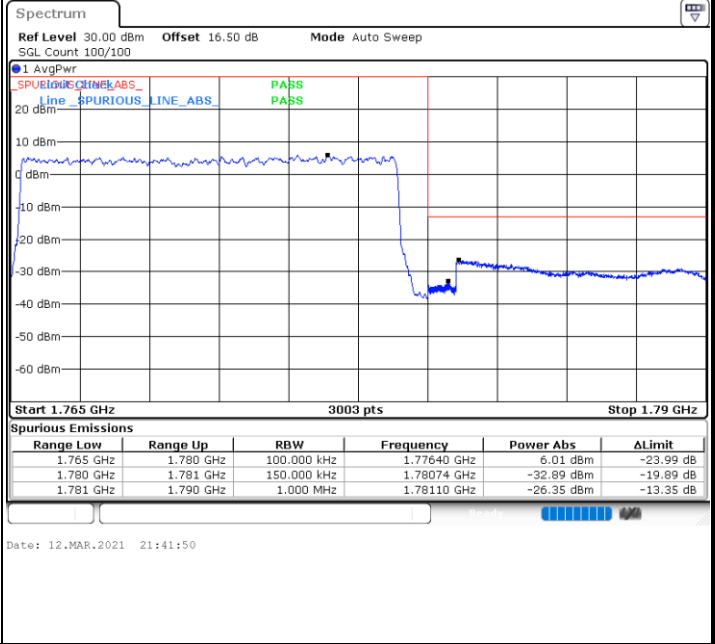
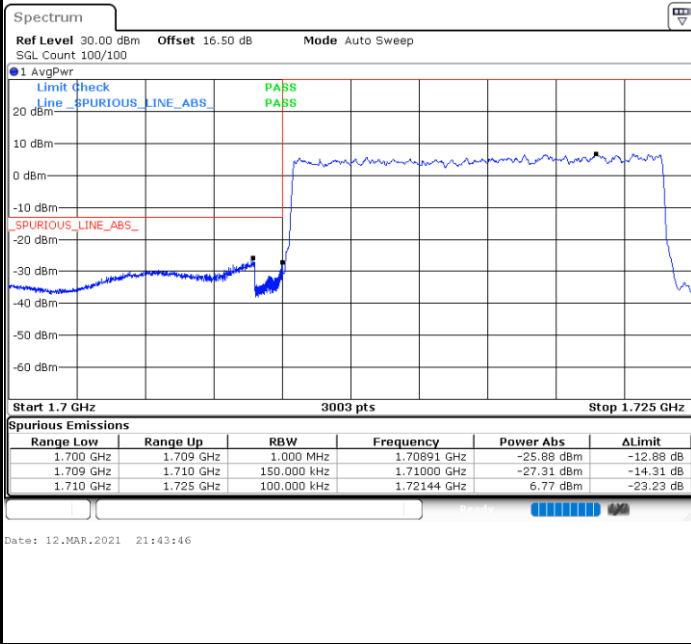
Highest Band Edge



FR1 n66 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge

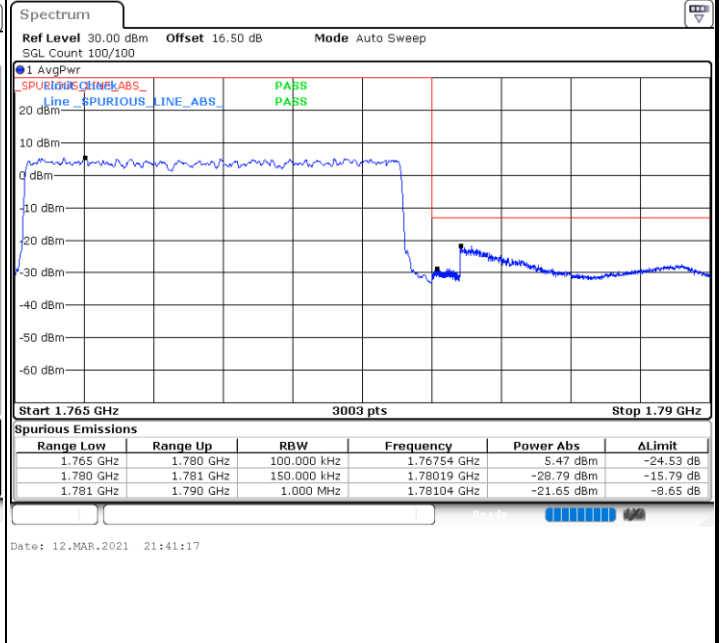
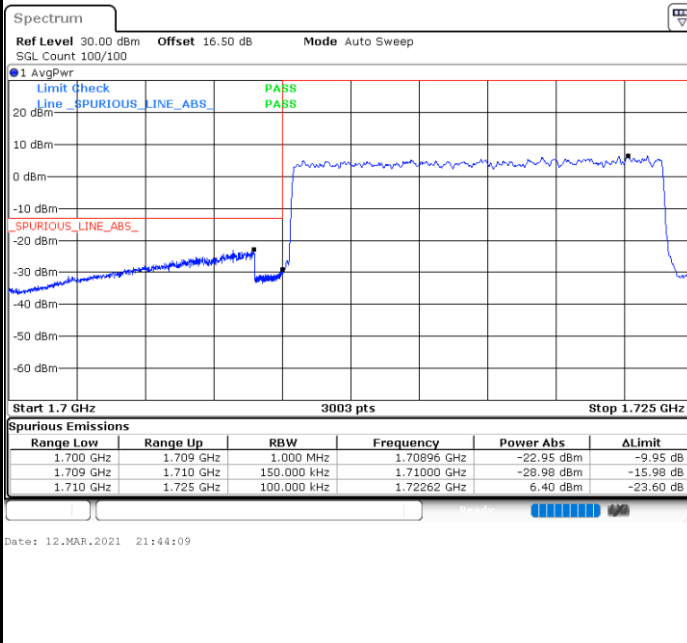




FR1 n66 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

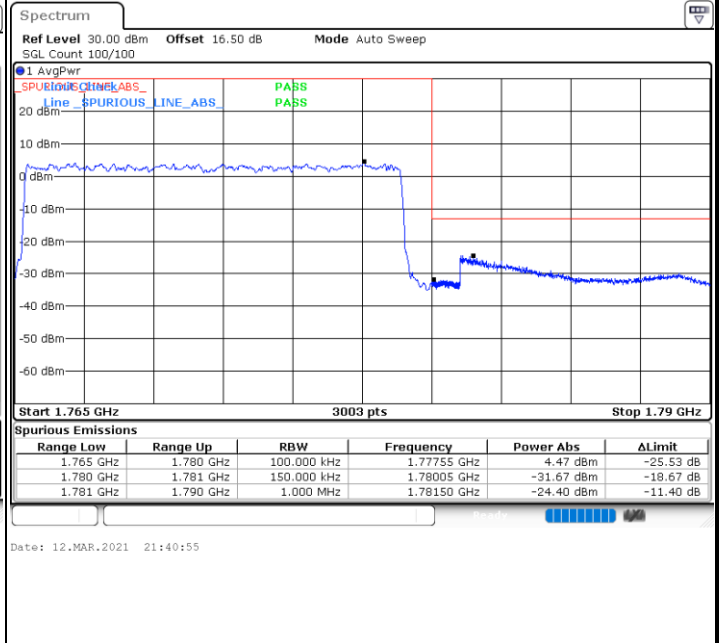
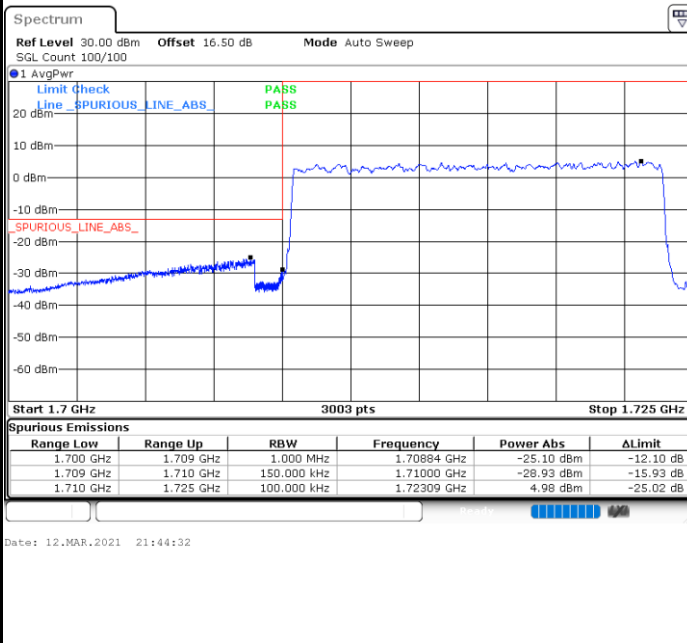
Highest Band Edge



FR1 n66 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge

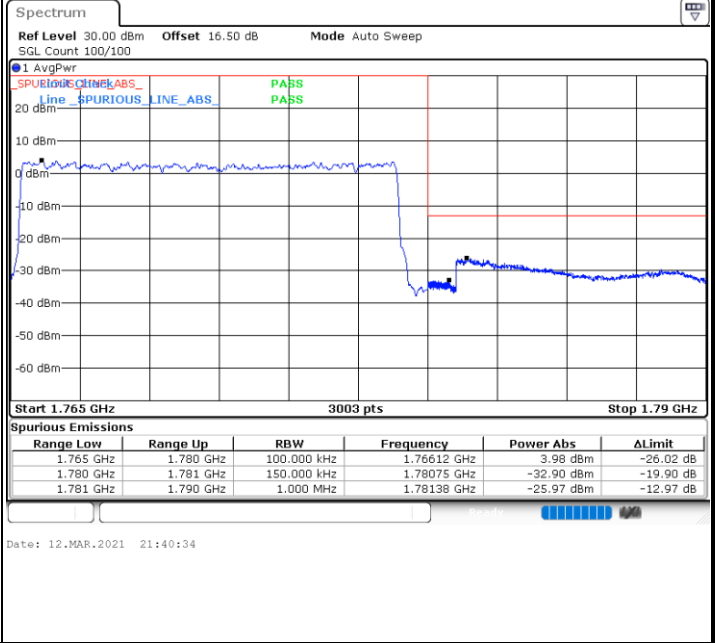
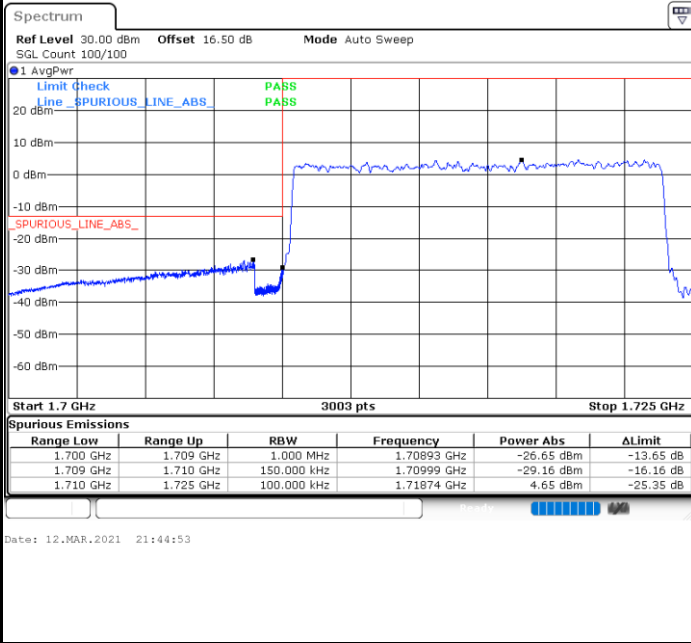




FR1 n66 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

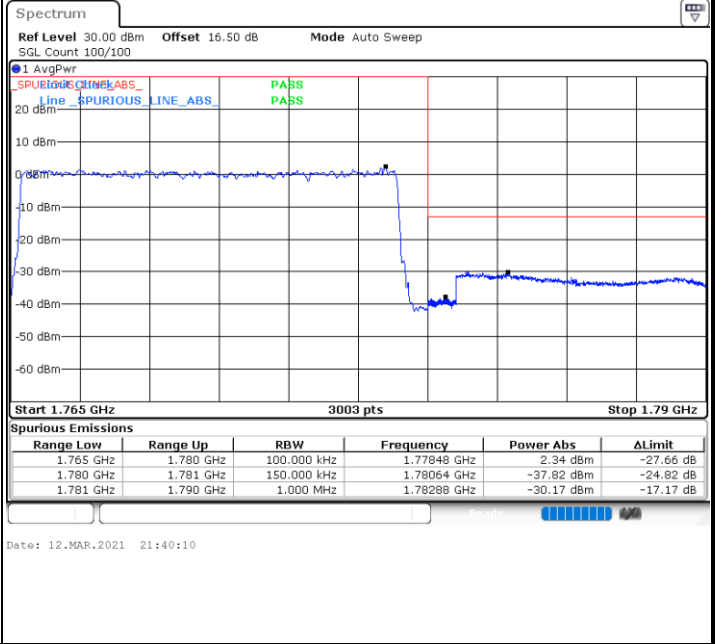
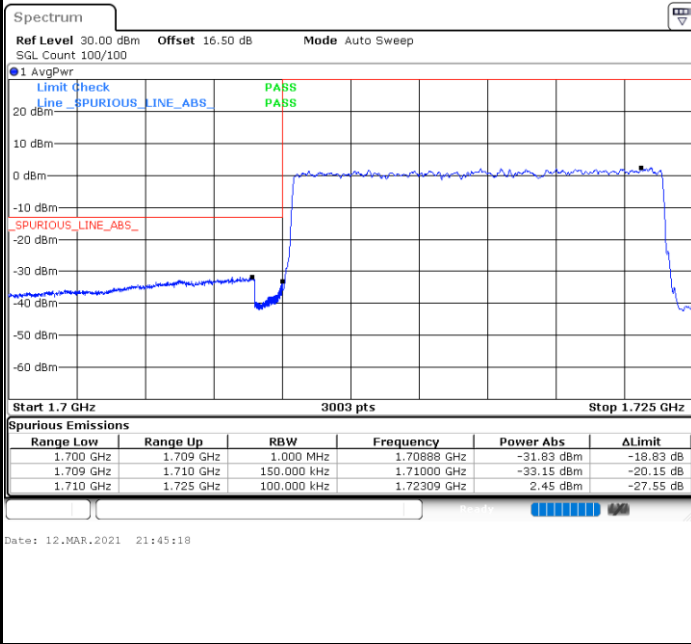
Highest Band Edge



FR1 n66 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

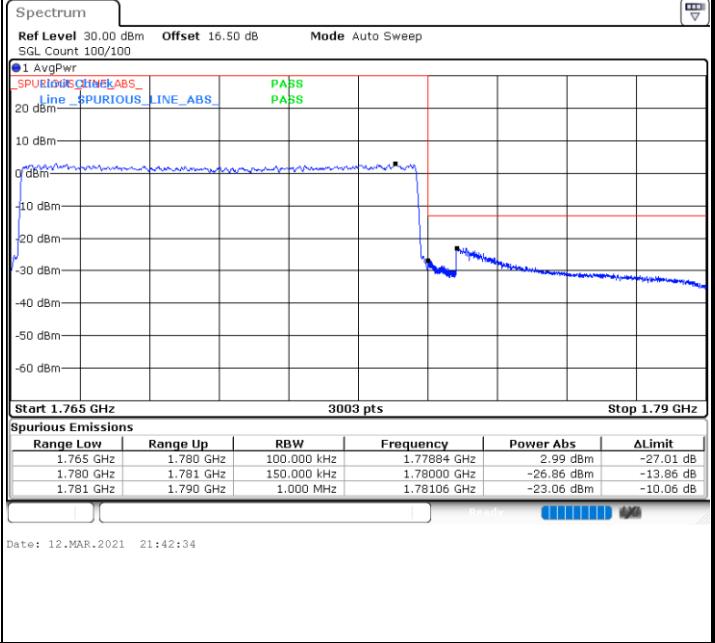
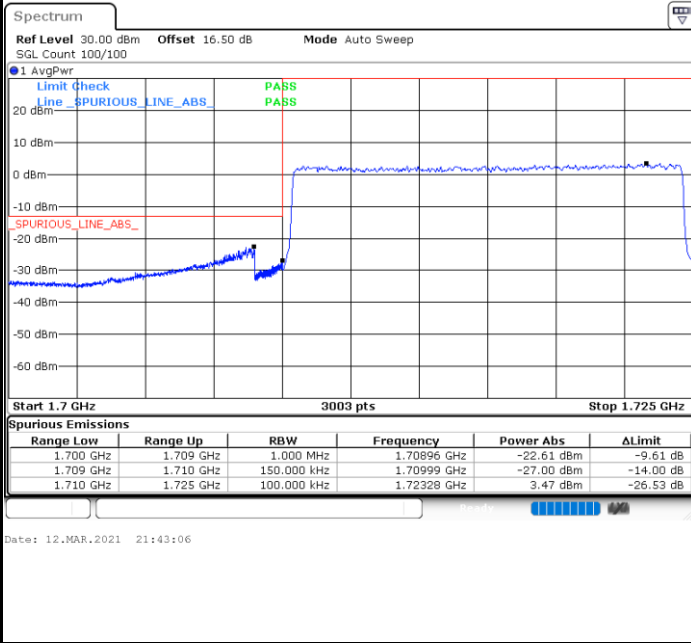




FR1 n66 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

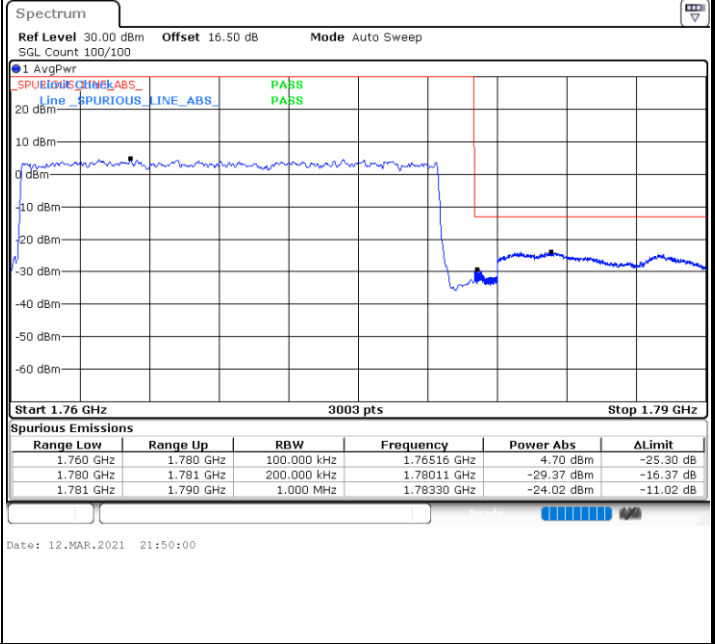
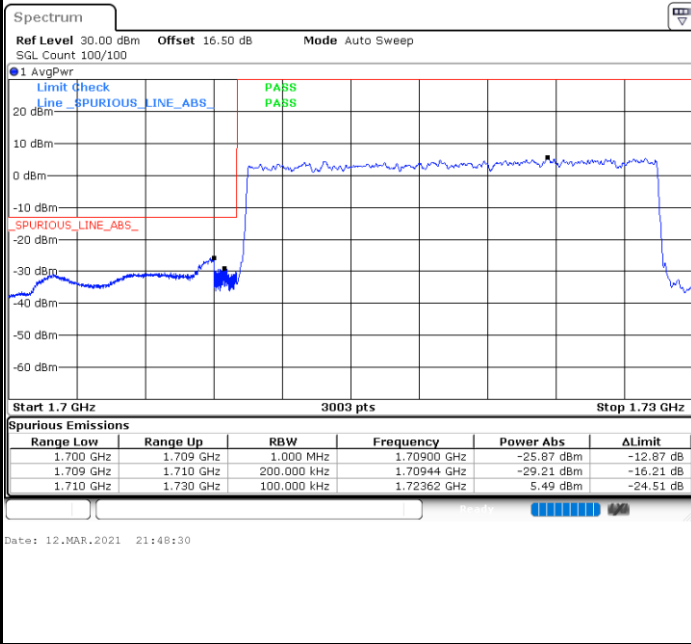
Highest Band Edge

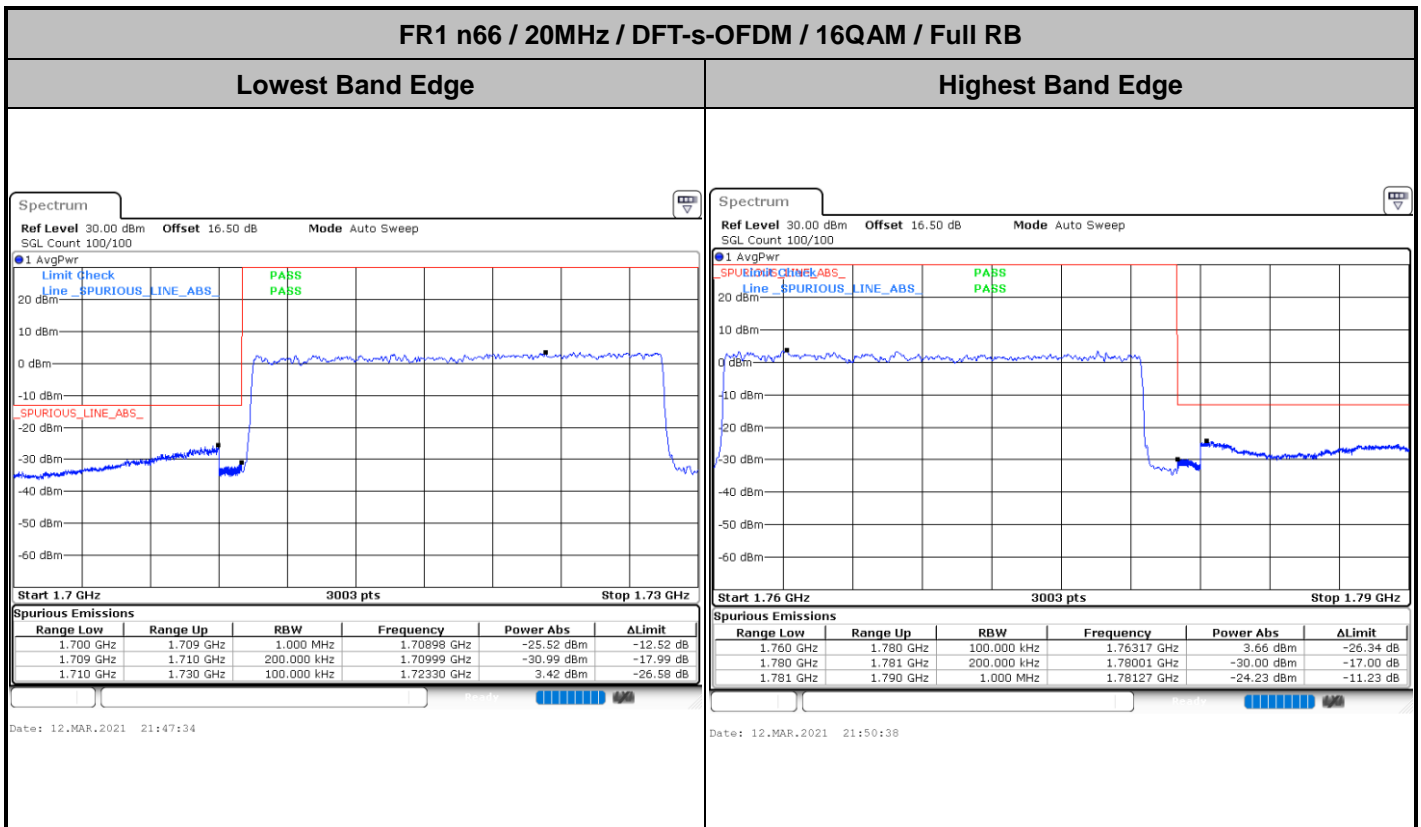
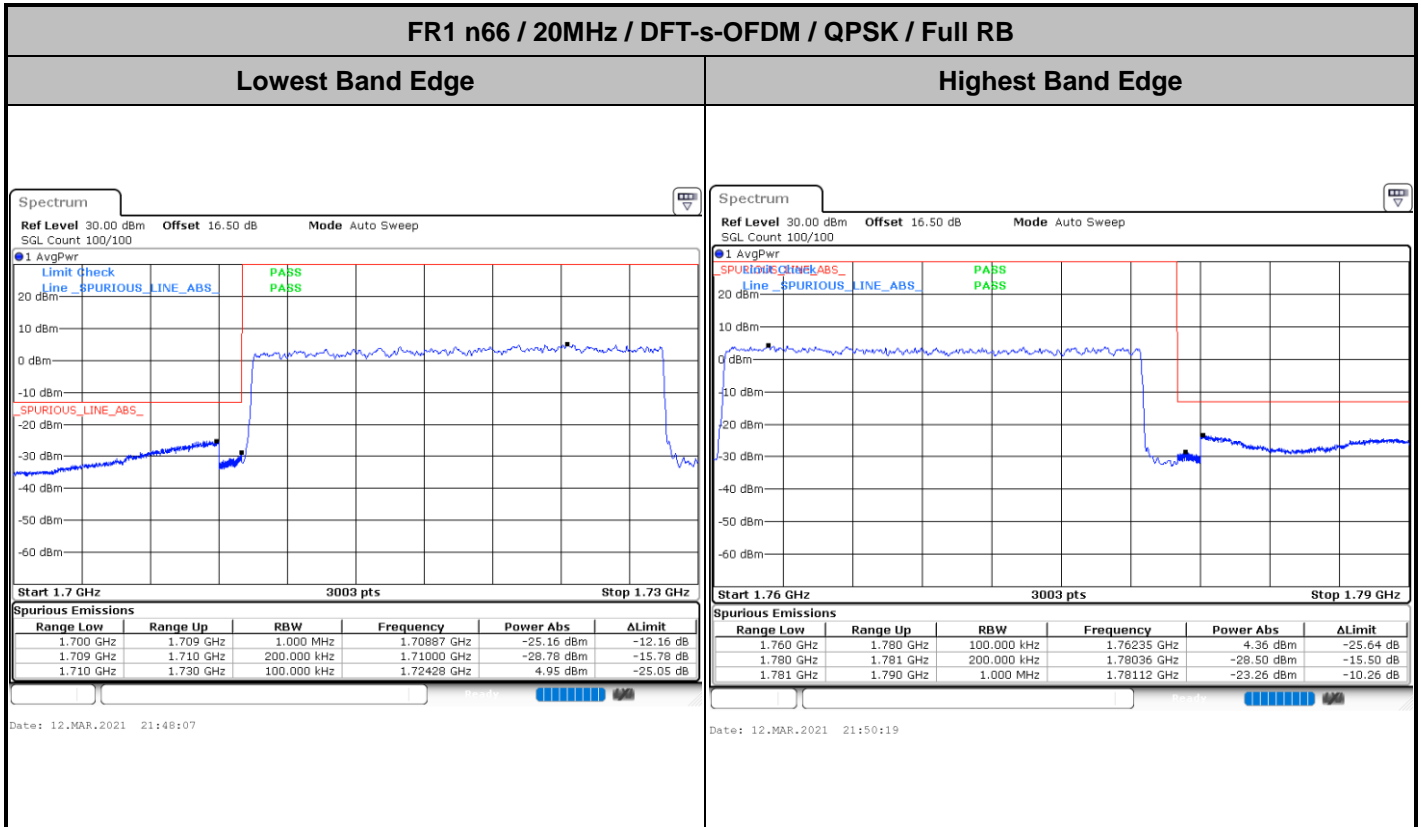


FR1 n66 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



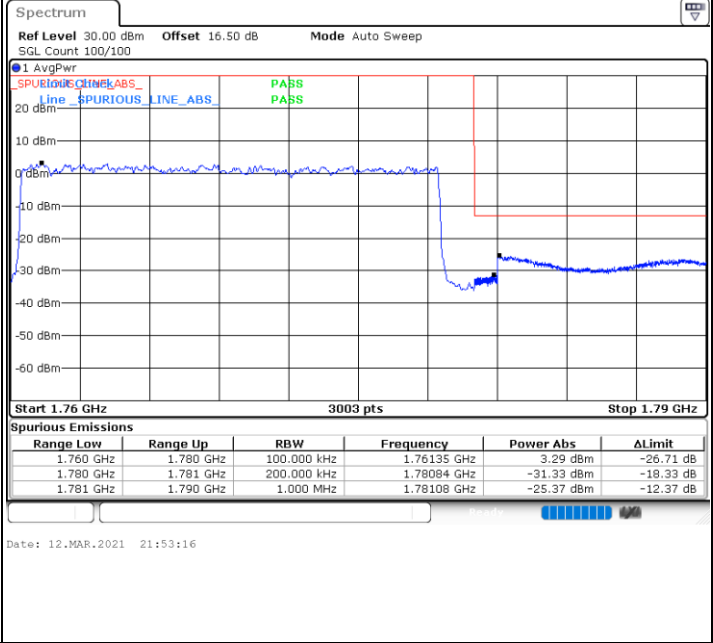
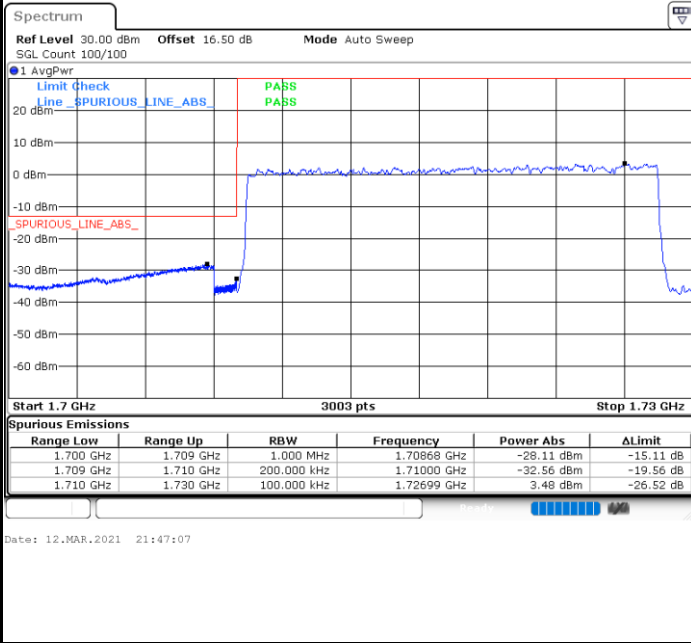




FR1 n66 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



FR1 n66 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

