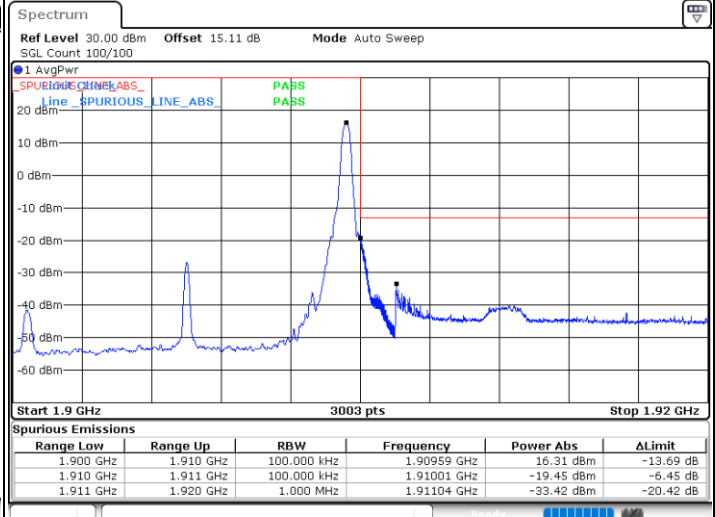
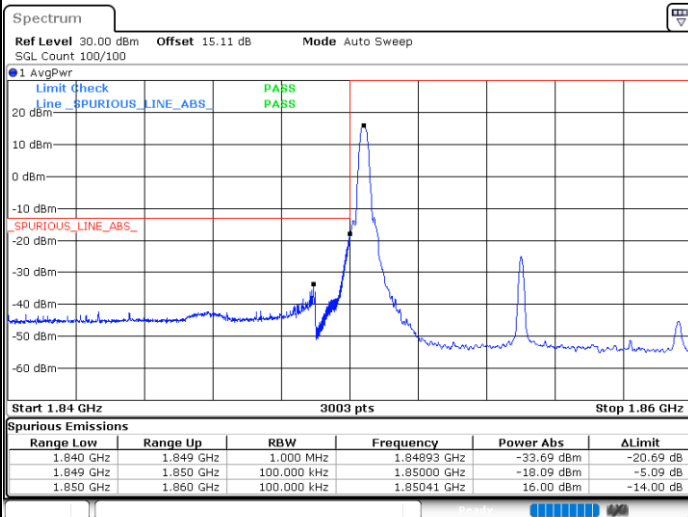




FR1 n2 / 10MHz / DFT-s-OFDM / 256QAM

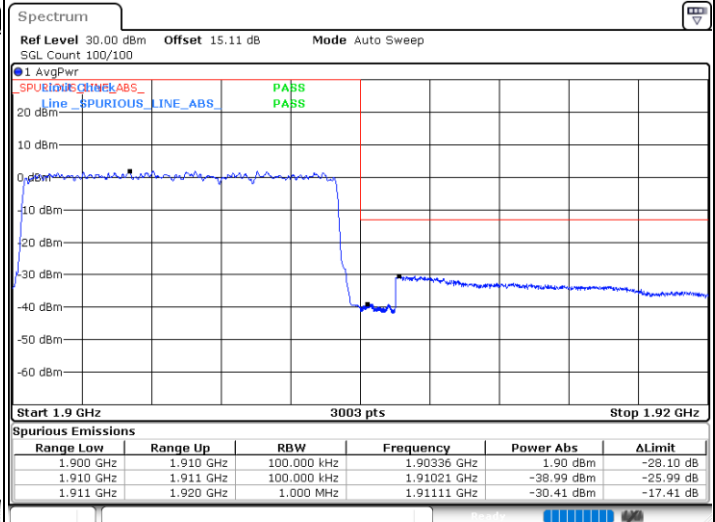
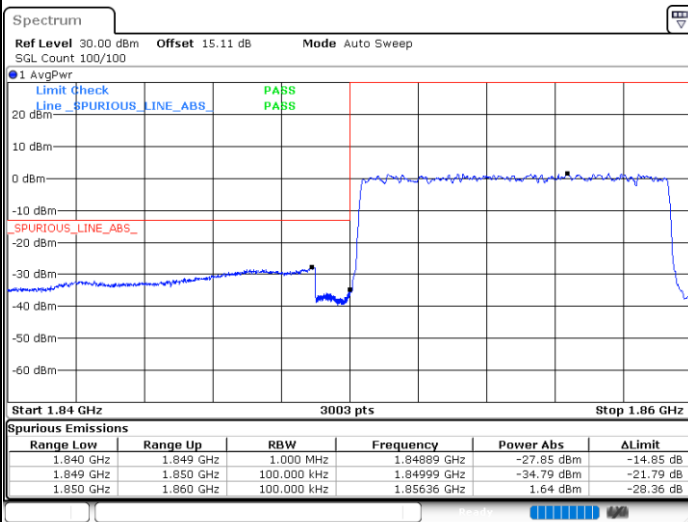
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

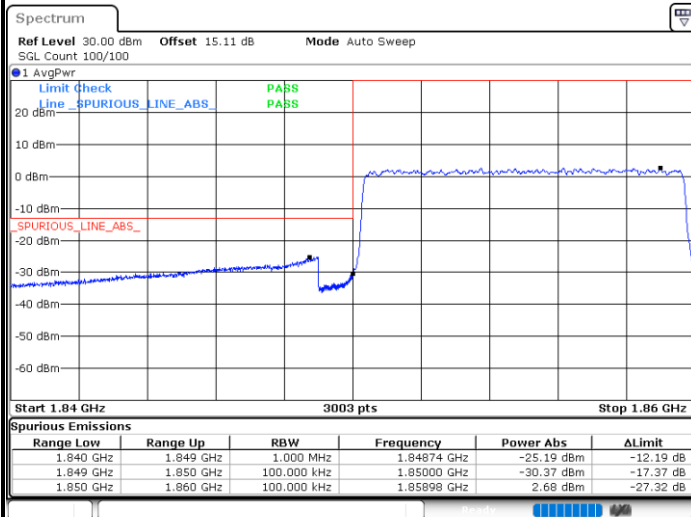
Highest Band Edge / Full RB



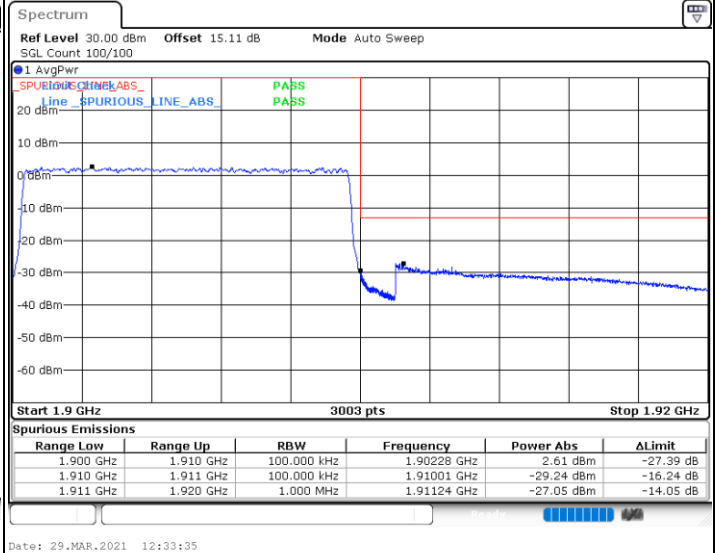


FR1 n2 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

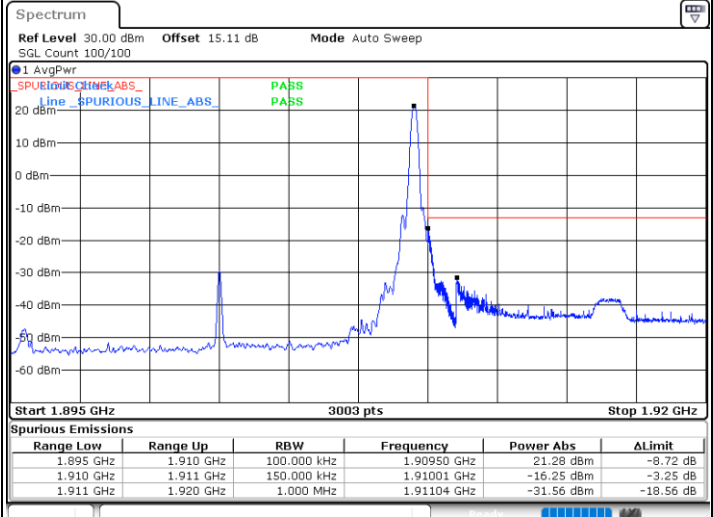
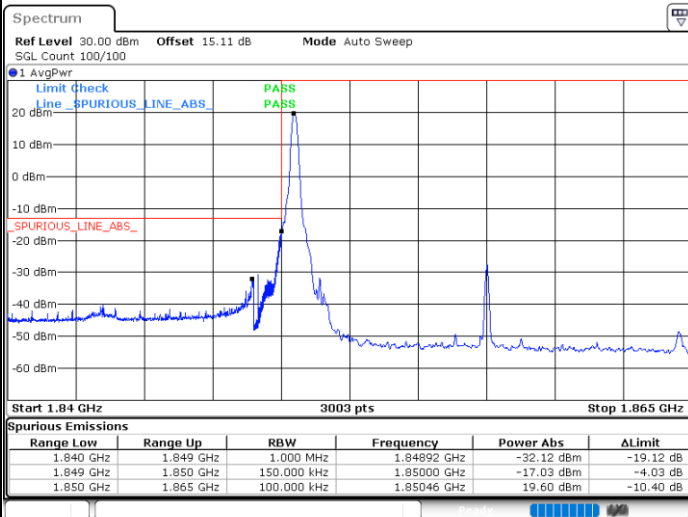




FR1 n2 / 15MHz / DFT-s-OFDM / PI/2 BPSK

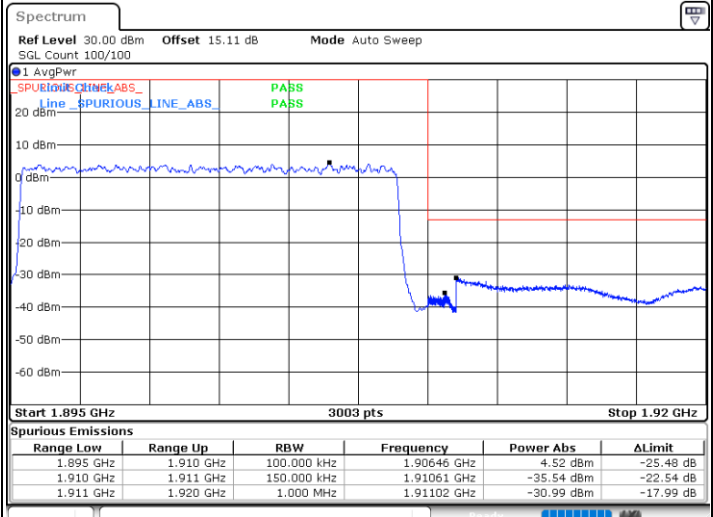
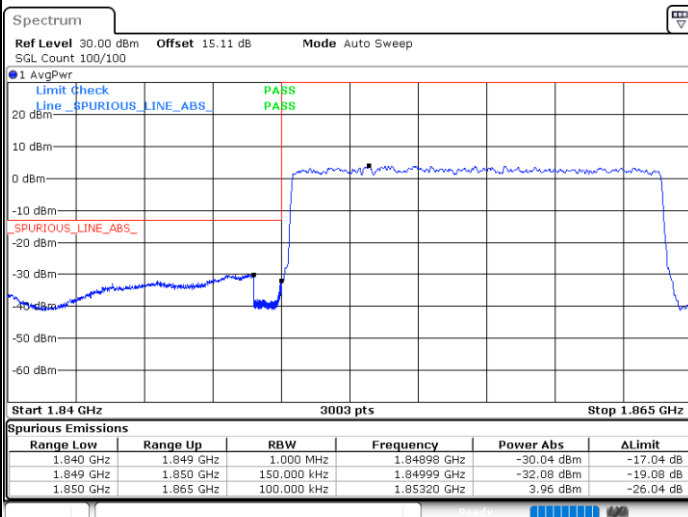
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

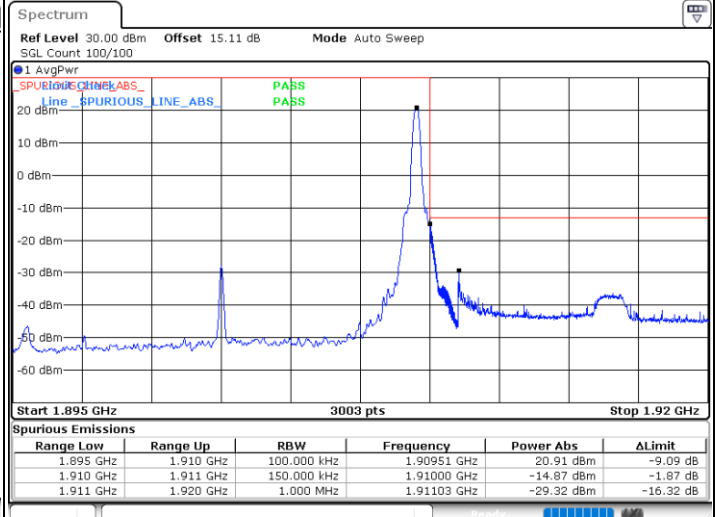
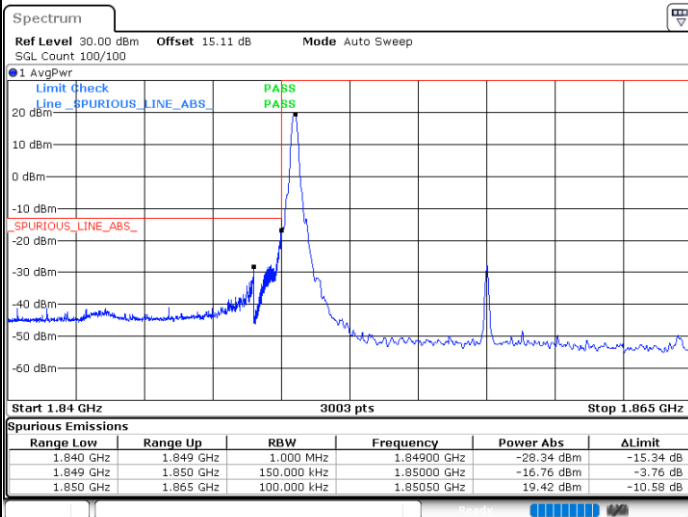




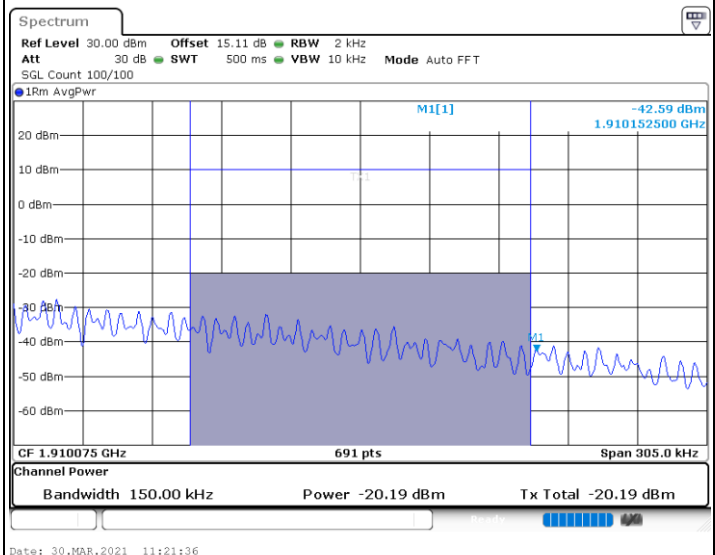
FR1 n2 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



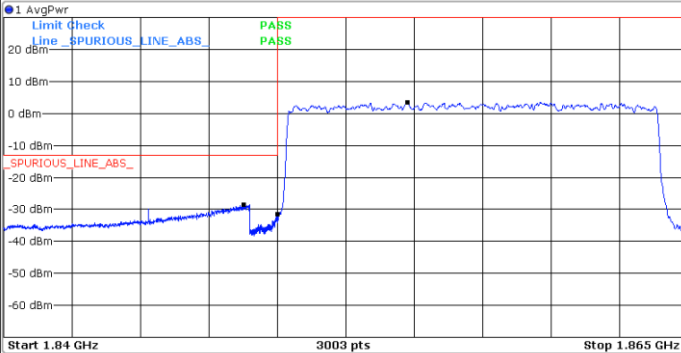
Channel Power -20.19dBm < -13dBm (Pass)





Lowest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 15.11 dB Mode Auto Sweep
SGL Count 100/100

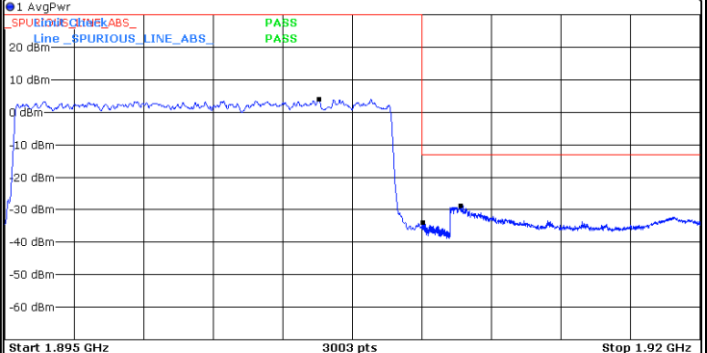
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.840 GHz	1.849 GHz	1.000 MHz	1.84876 GHz	-28.57 dBm	-15.57 dB
1.849 GHz	1.850 GHz	150.000 kHz	1.84999 GHz	-31.48 dBm	-18.48 dB
1.850 GHz	1.865 GHz	100.000 kHz	1.85476 GHz	3.55 dBm	-26.45 dB

Date: 29.MAR.2021 12:43:03

Highest Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 15.11 dB Mode Auto Sweep
SGL Count 100/100

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.895 GHz	1.910 GHz	100.000 kHz	1.90631 GHz	4.00 dBm	-26.00 dB
1.910 GHz	1.911 GHz	150.000 kHz	1.91005 GHz	-34.04 dBm	-21.04 dB
1.911 GHz	1.920 GHz	1.000 MHz	1.91140 GHz	-28.82 dBm	-15.82 dB

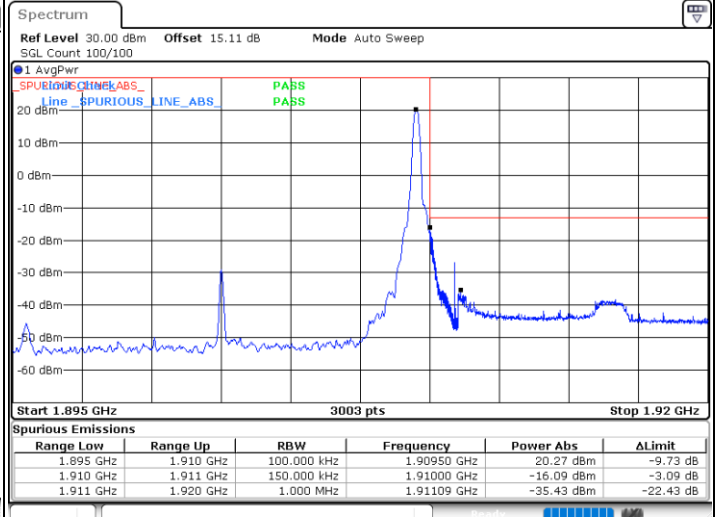
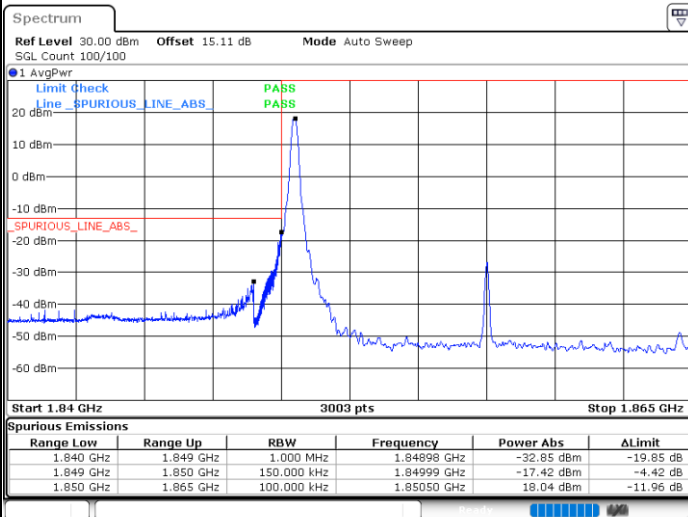
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FR1 n2 / 15MHz / DFT-s-OFDM / 16QAM

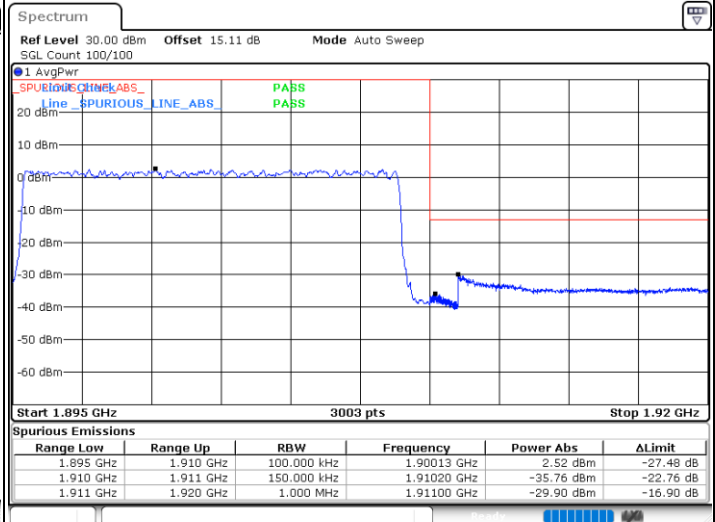
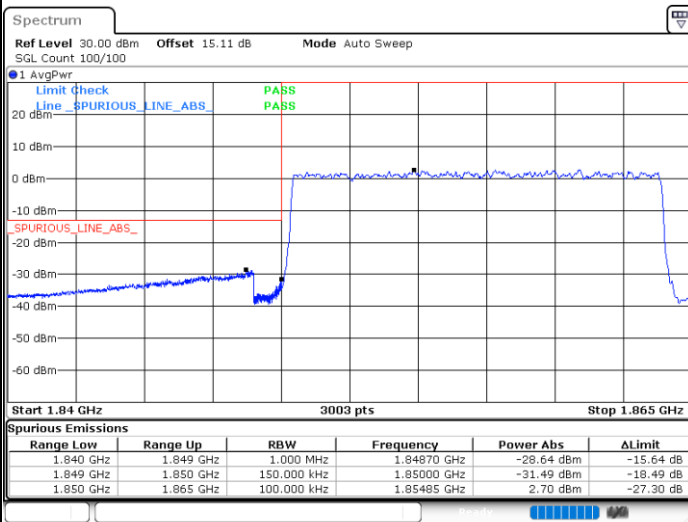
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

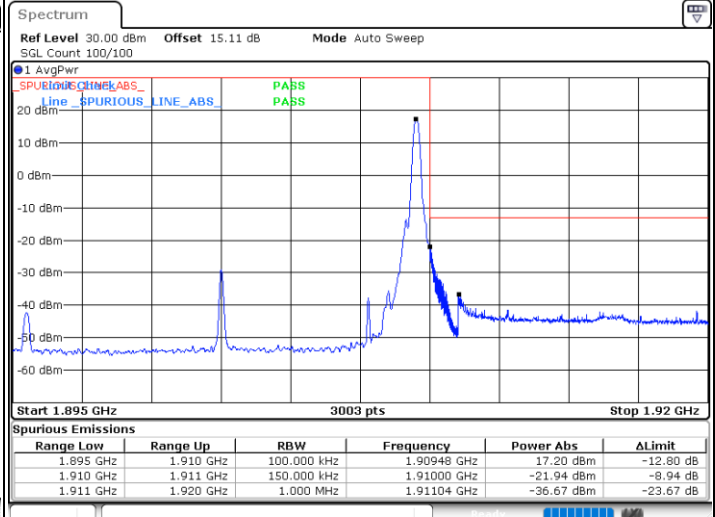
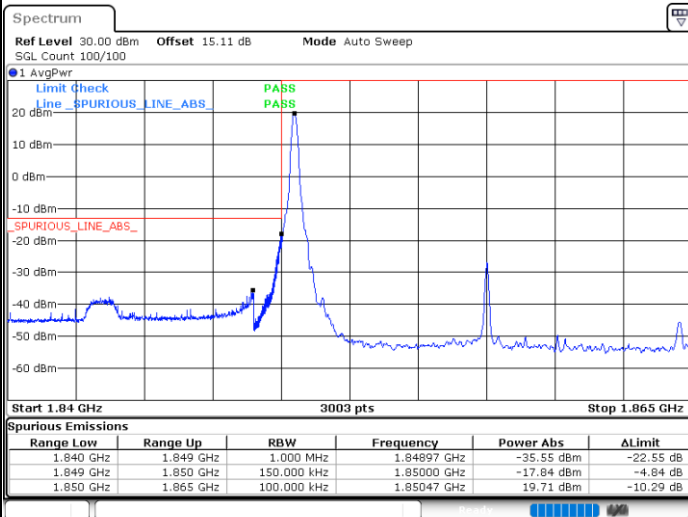




FR1 n2 / 15MHz / DFT-s-OFDM / 64QAM

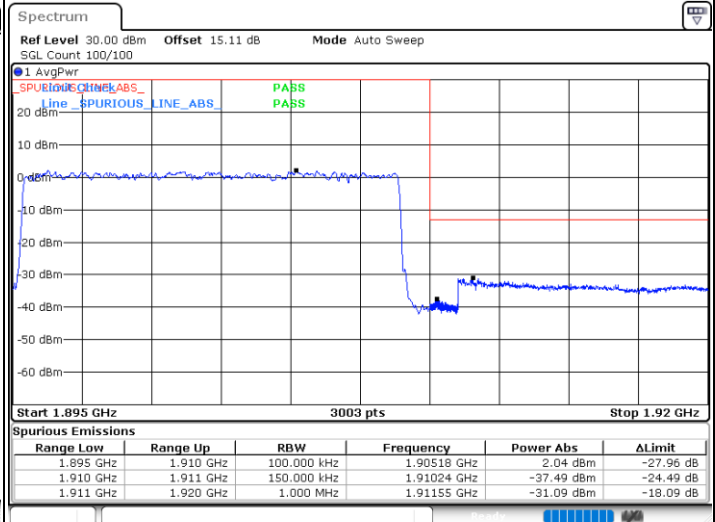
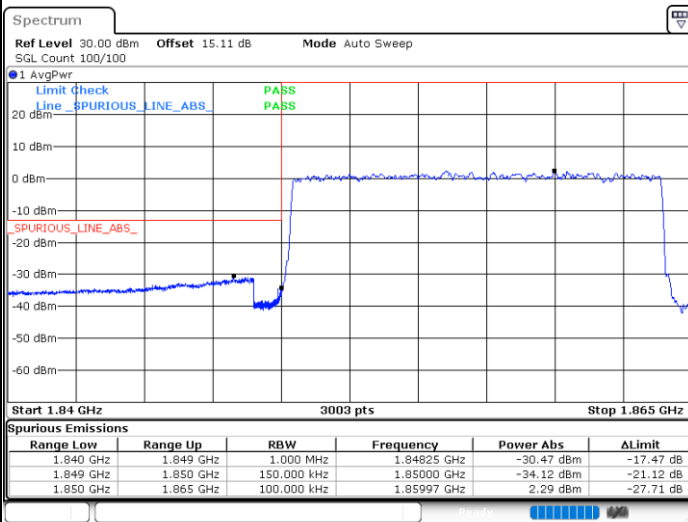
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

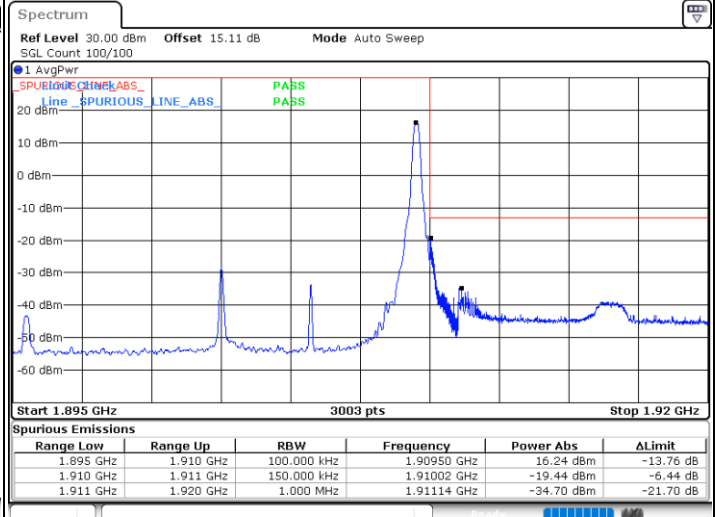
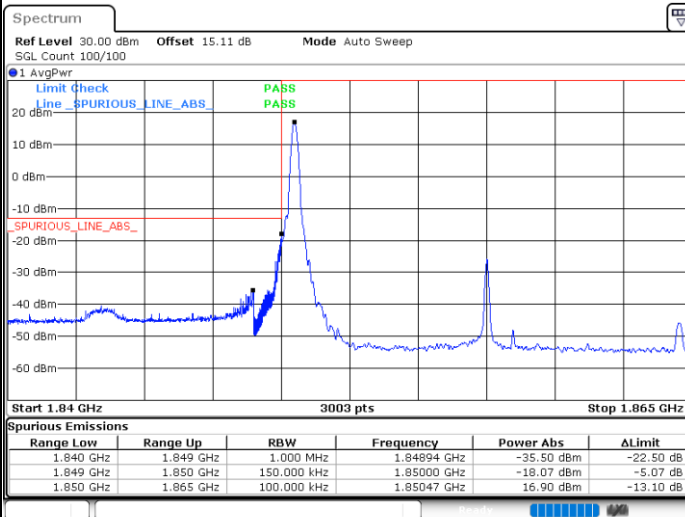




FR1 n2 / 15MHz / DFT-s-OFDM / 256QAM

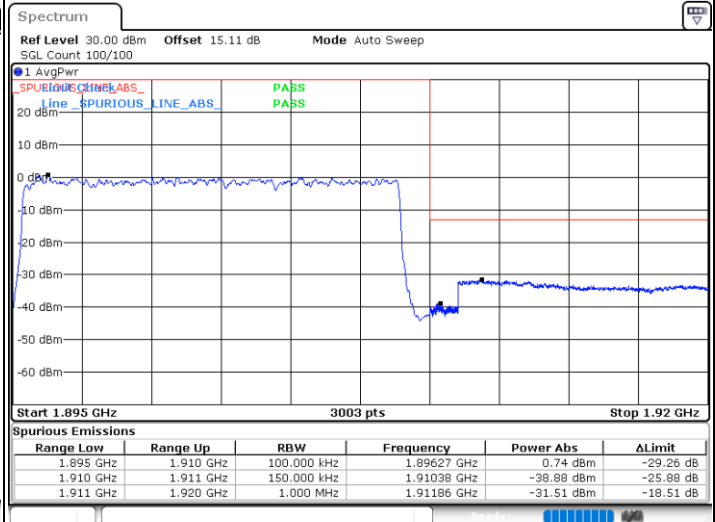
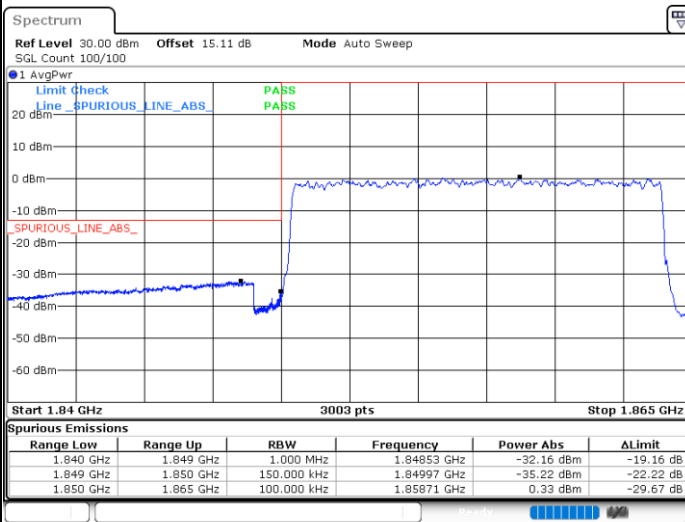
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

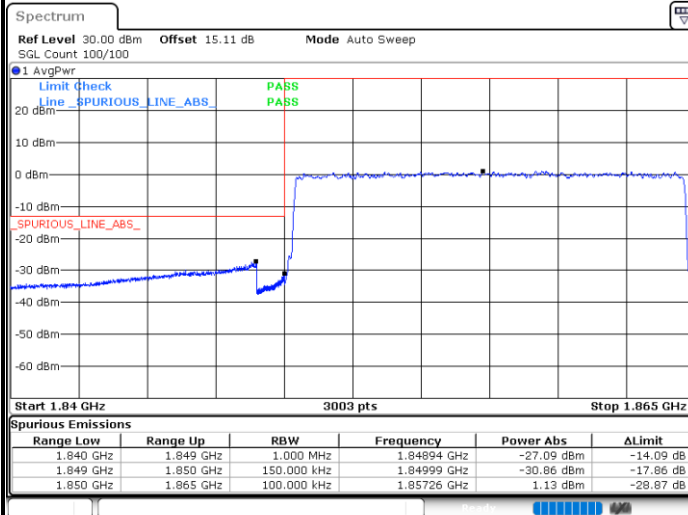
Highest Band Edge / Full RB



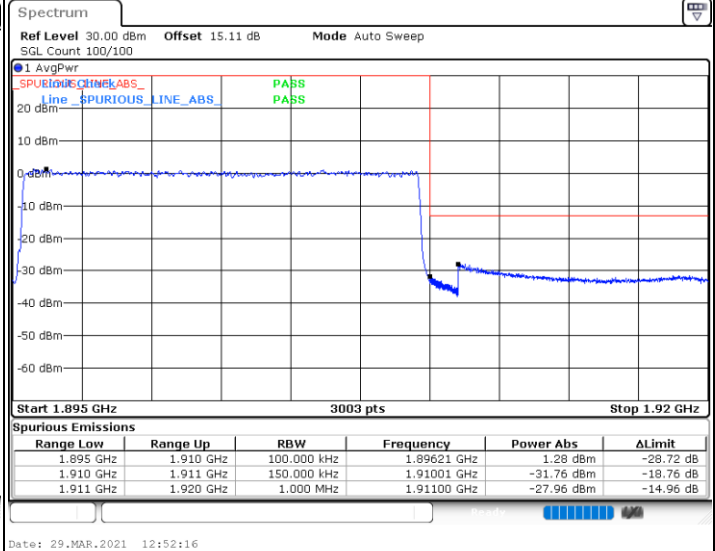


FR1 n2 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

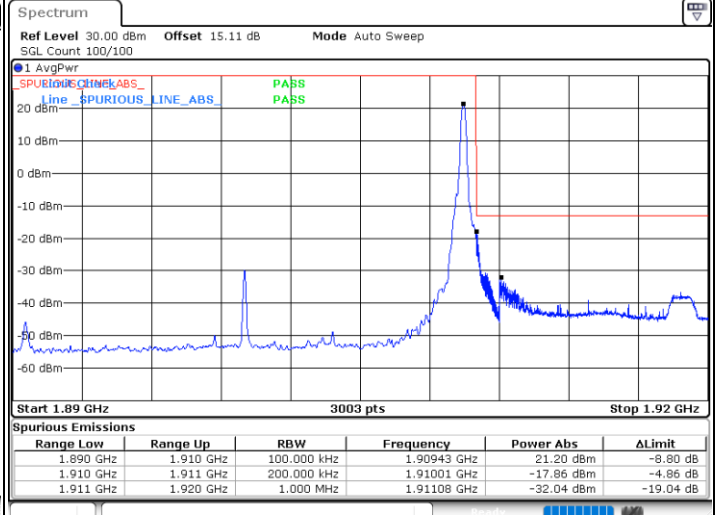
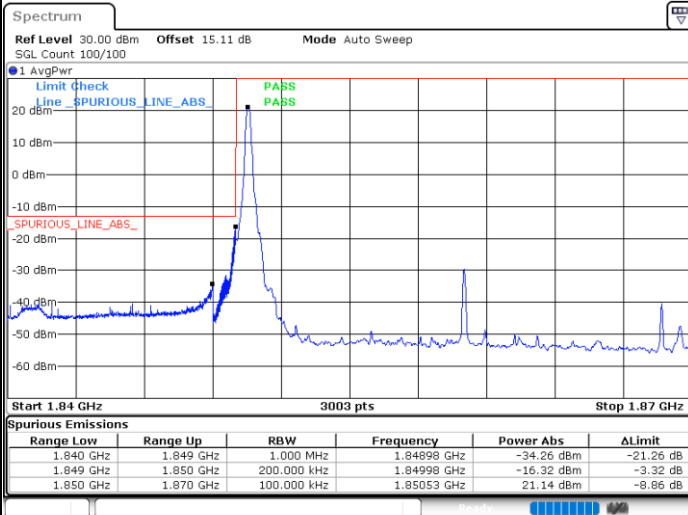




FR1 n2 / 20MHz / DFT-s-OFDM / PI/2 BPSK

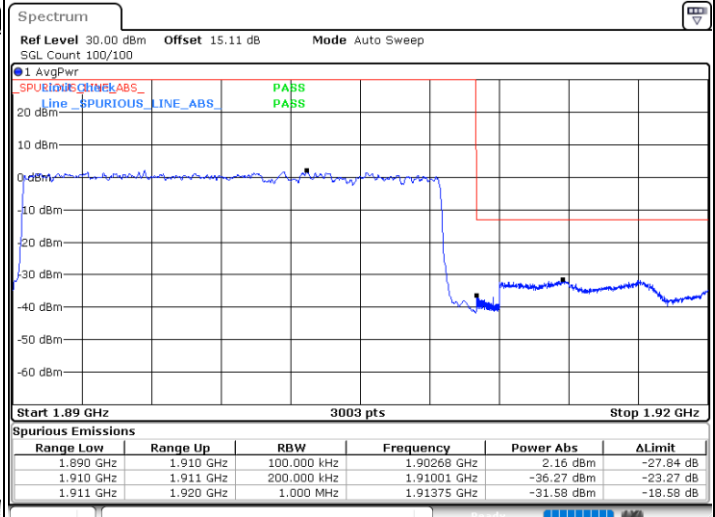
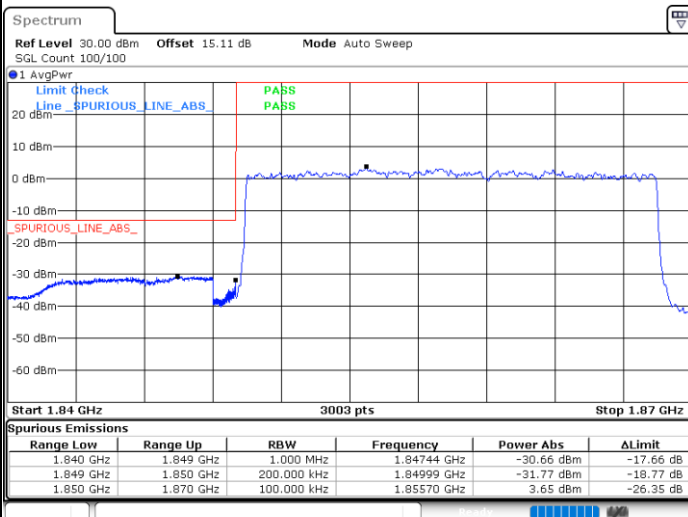
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

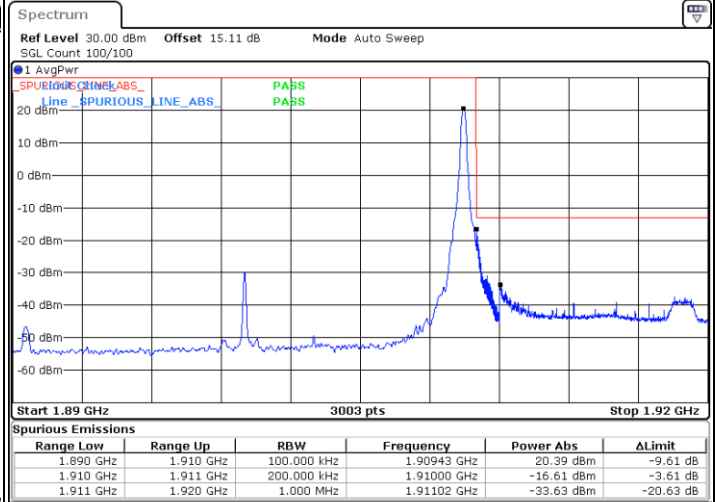
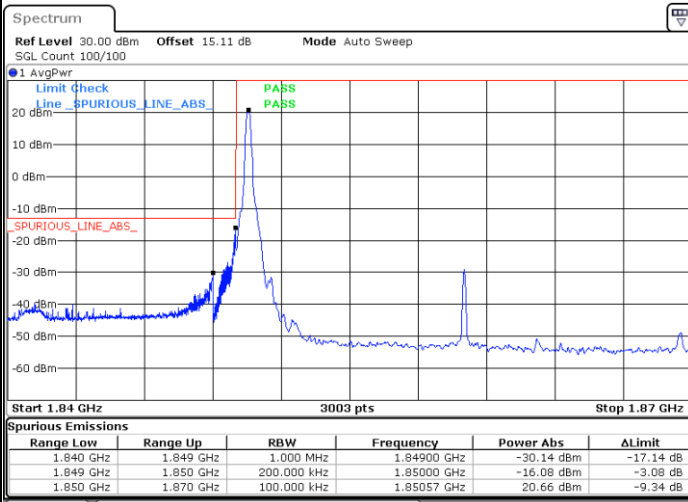




FR1 n2 / 20MHz / DFT-s-OFDM / QPSK

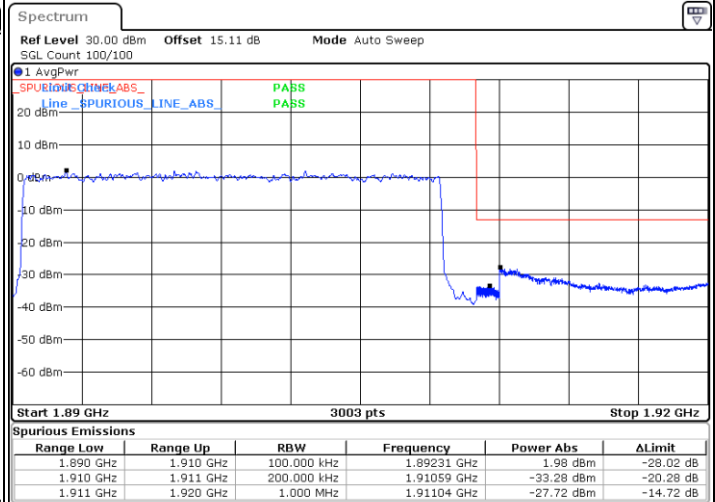
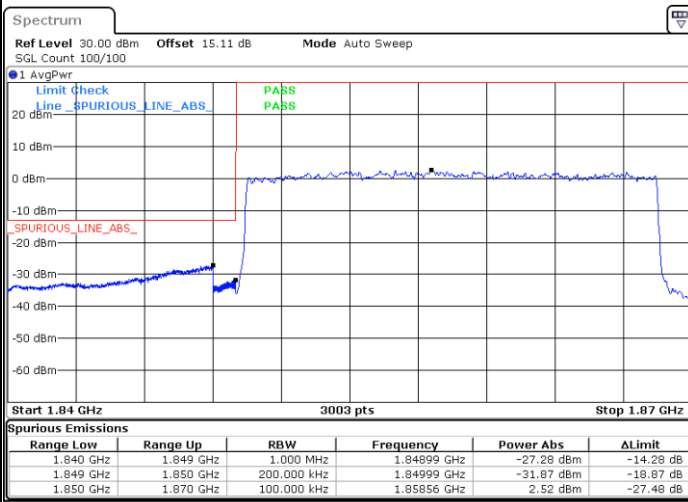
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

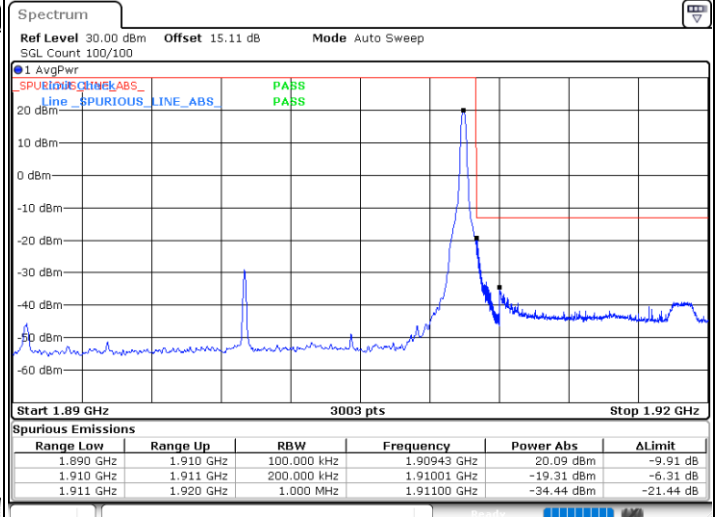
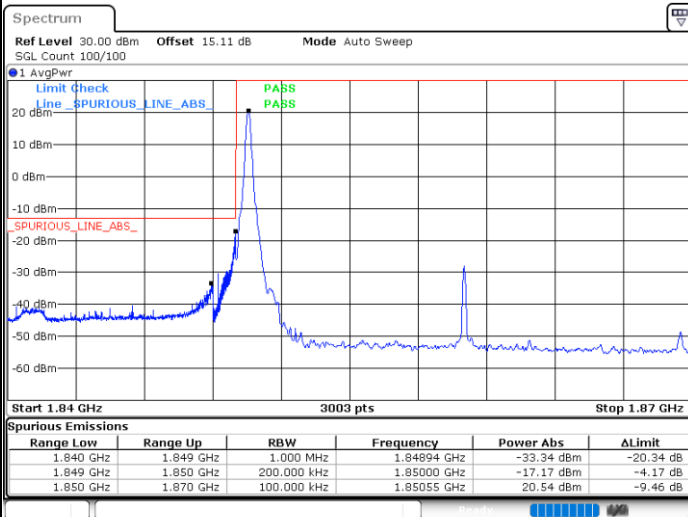




FR1 n2 / 20MHz / DFT-s-OFDM / 16QAM

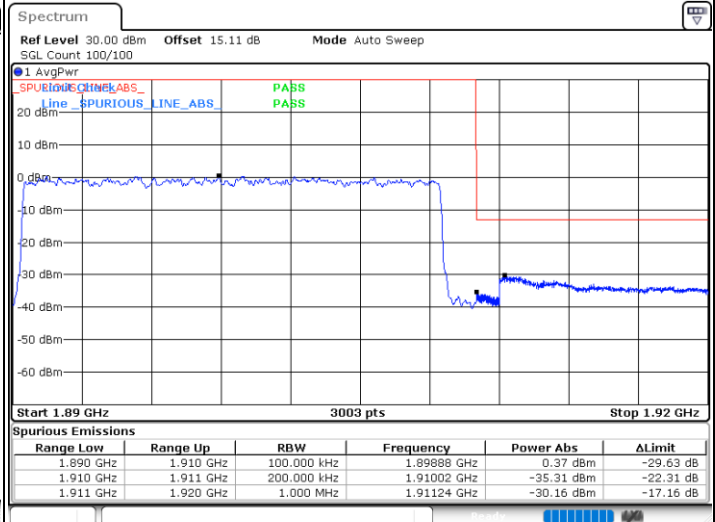
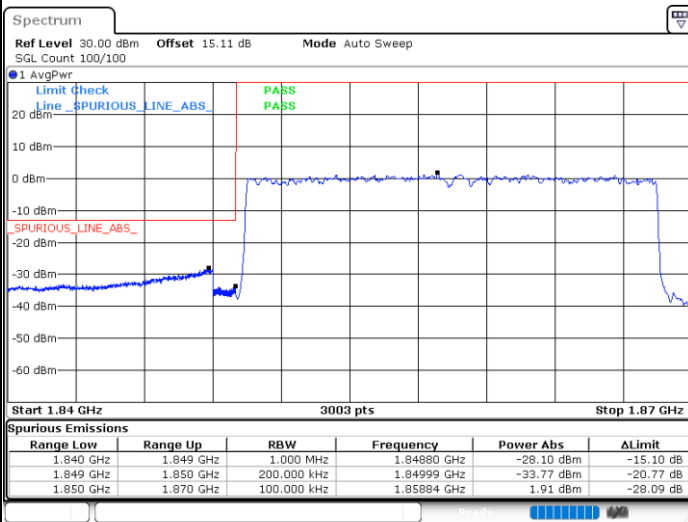
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

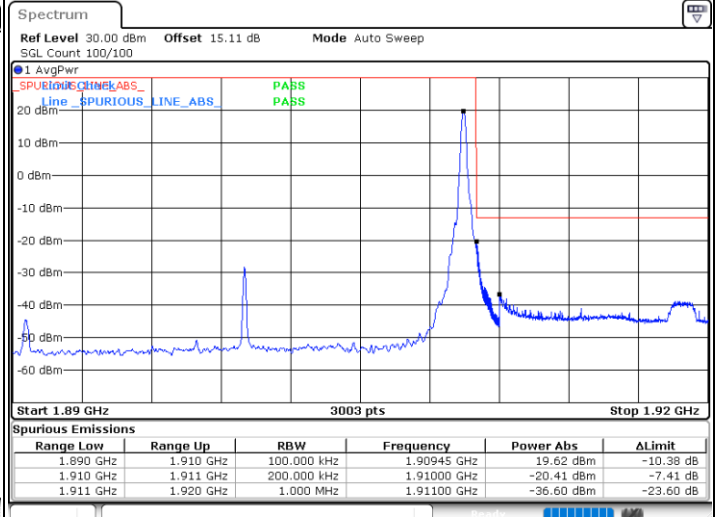
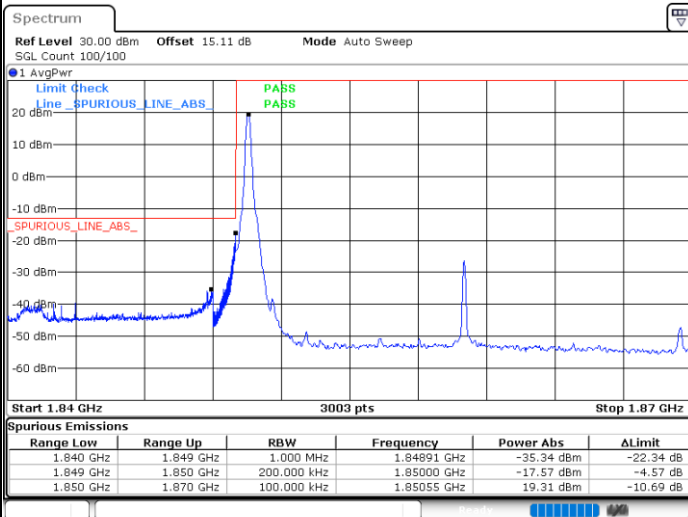




FR1 n2 / 20MHz / DFT-s-OFDM / 64QAM

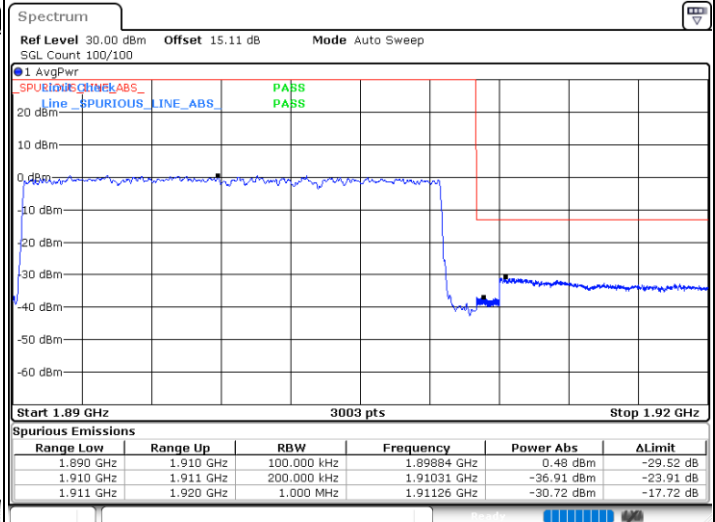
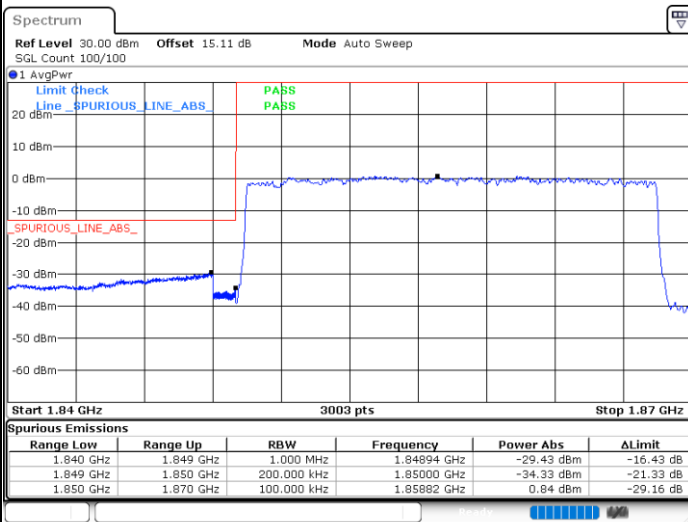
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

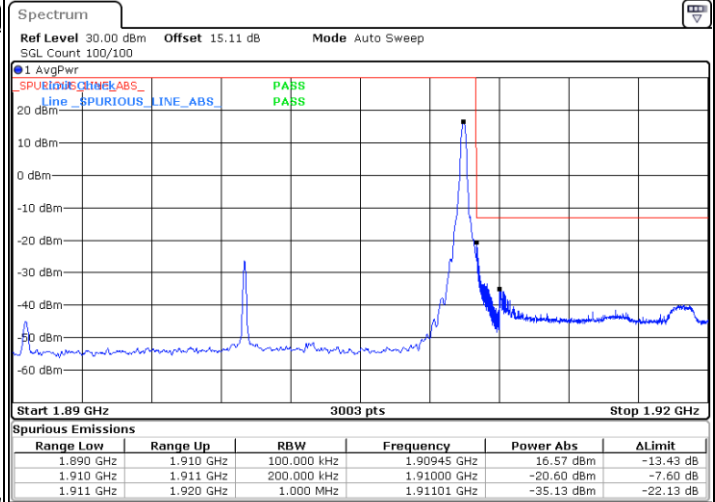
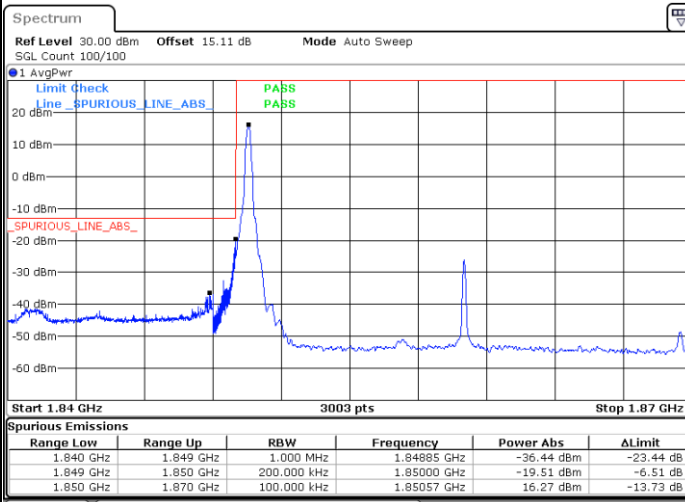




FR1 n2 / 20MHz / DFT-s-OFDM / 256QAM

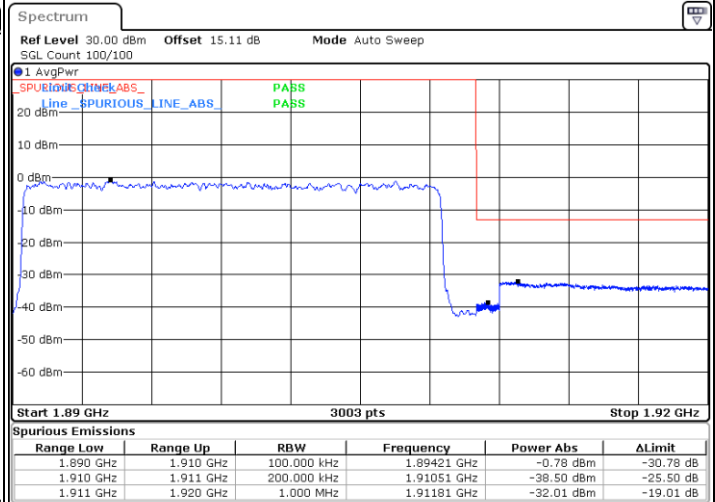
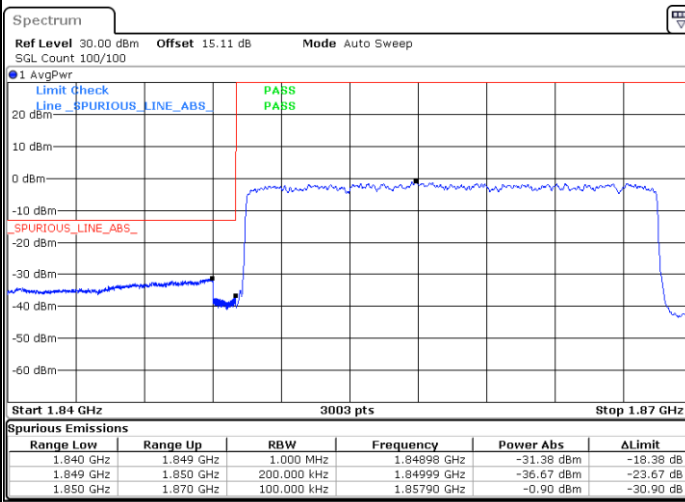
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

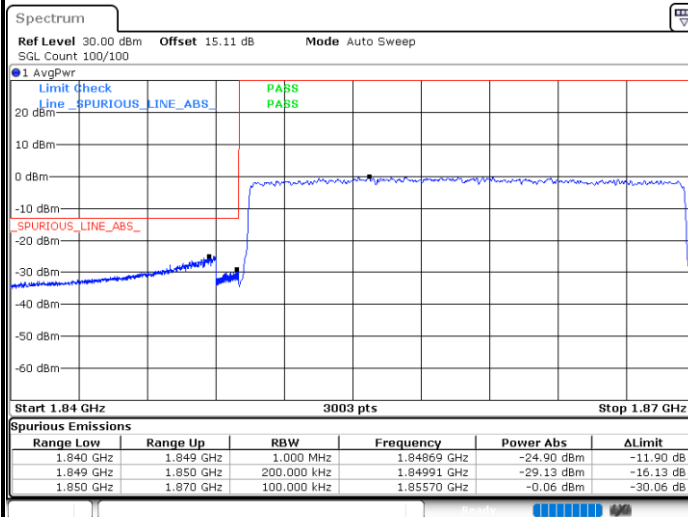
Highest Band Edge / Full RB





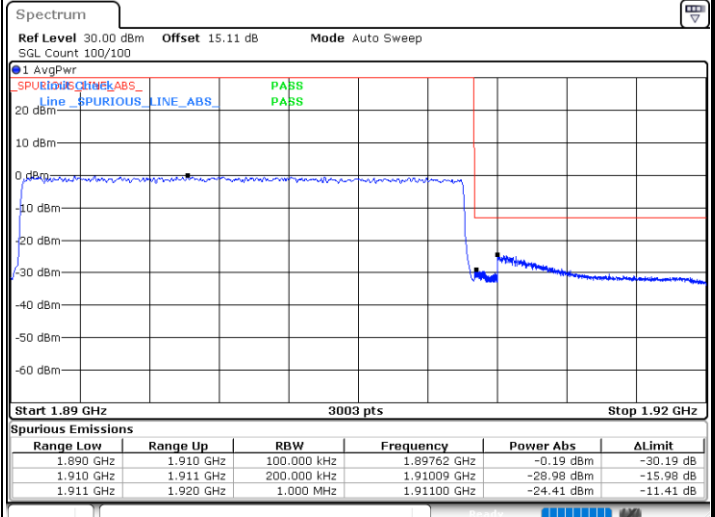
FR1 n2 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Date: 29.MAR.2021 12:53:11

Highest Band Edge



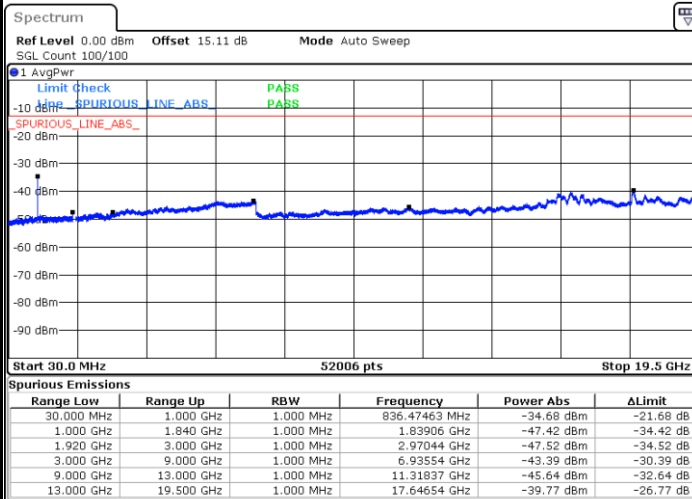
Date: 29.MAR.2021 14:36:20



Conducted Spurious Emission

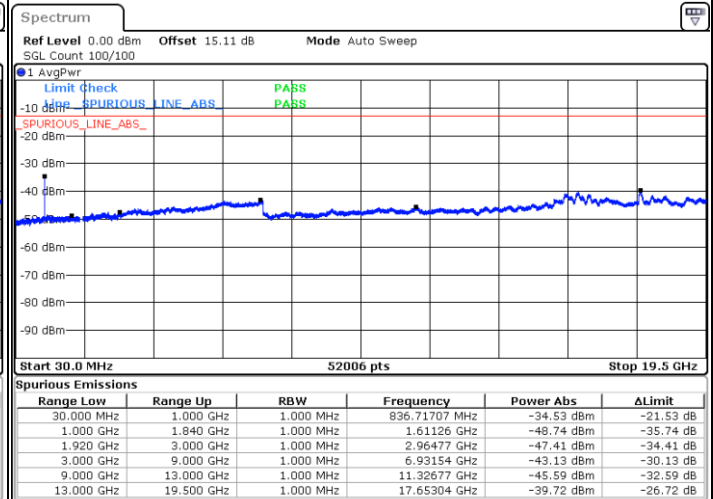
FR1 n2 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



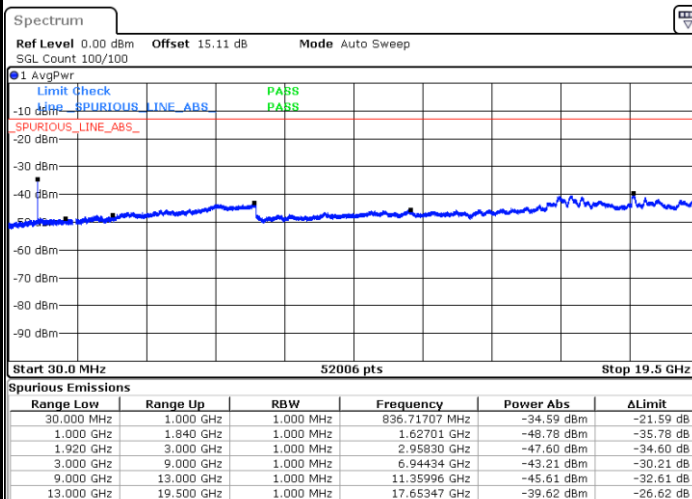
Date: 29.MAR.2021 12:08:27

Middle Channel



Date: 29.MAR.2021 12:09:42

Highest Channel



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

Frequency Stability

Test Conditions		FR1 n2 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0005	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.67 V. ; Maximum Voltage =4.26 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

**FR1 n5**

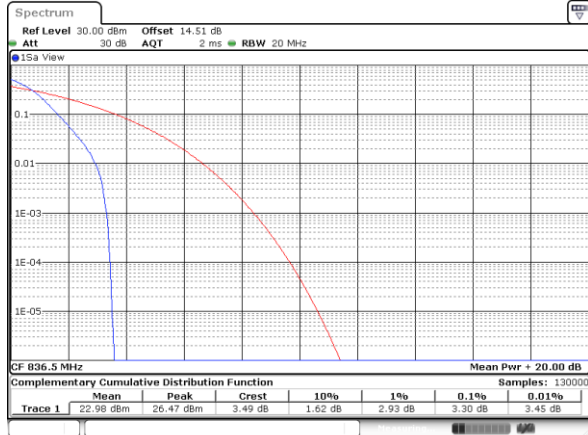
<Main>

Peak-to-Average Ratio

Mode	FR1 n5 / 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	3.30	4.38	5.54	5.86	PASS
Mode	FR1 n5 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.58				PASS

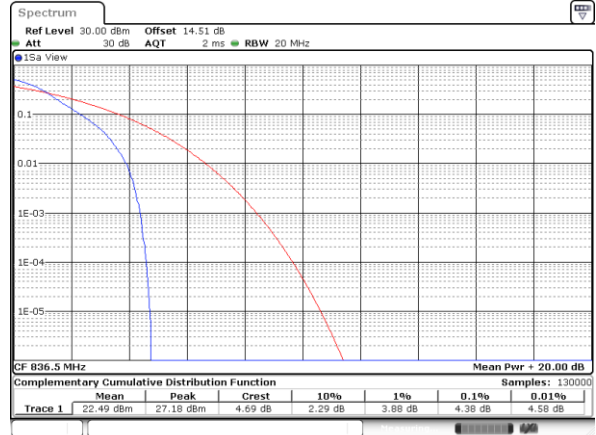
FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



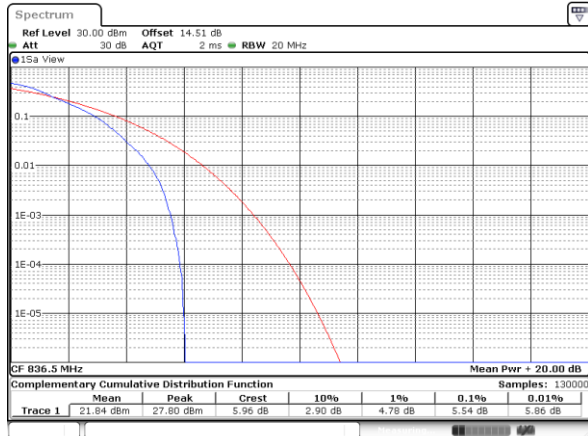
Date: 29.MAR.2021 14:59:11

QPSK



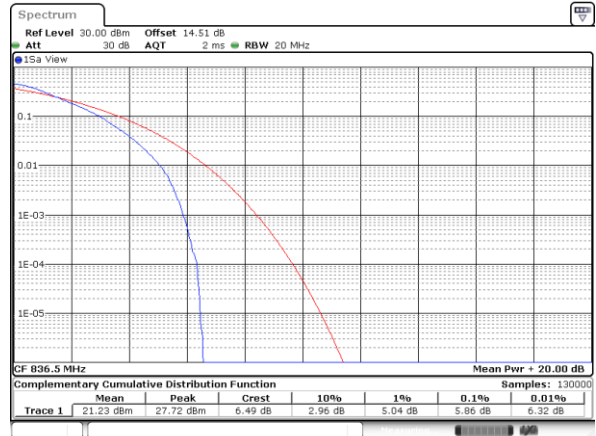
Date: 29.MAR.2021 14:59:33

16QAM



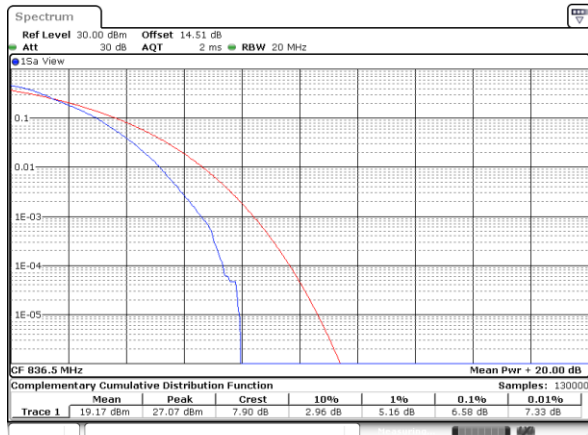
Date: 29.MAR.2021 14:59:42

64QAM



Date: 29.MAR.2021 14:59:50

256QAM



Date: 29.MAR.2021 15:00:05

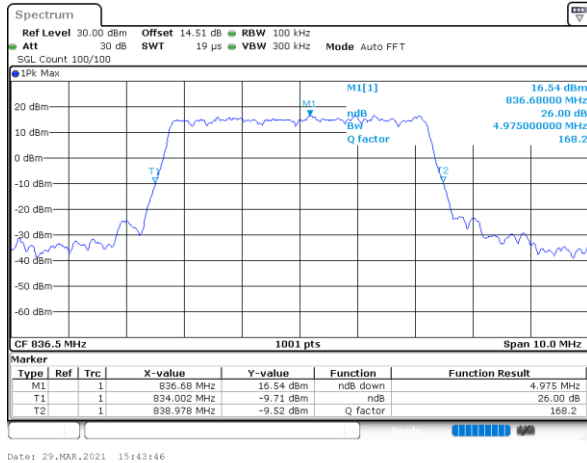
**26dB Bandwidth**

Mode	FR1 n5 : 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		9.45		14.18		18.82	

Mode	FR1 n5 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.92	4.92	9.87	9.85	14.93	14.87	19.70	19.90
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.01	4.96	9.79	9.77	14.87	14.99	19.82	19.70

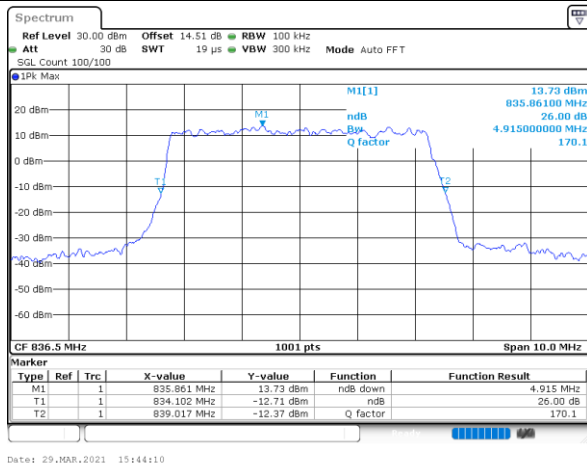
FR1 n5 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

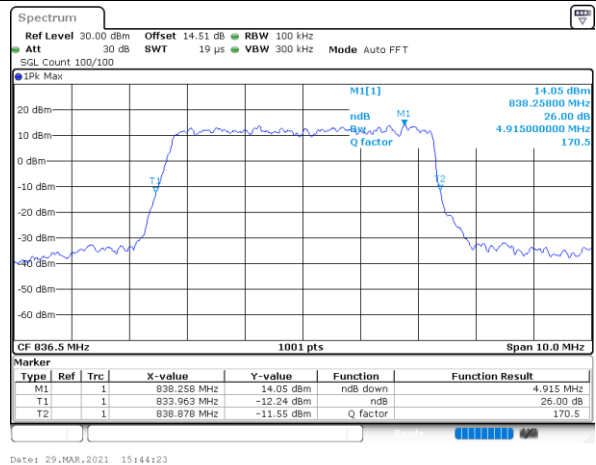


FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

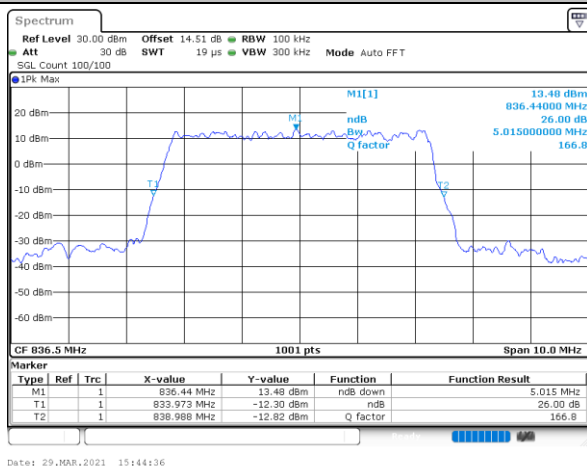
QPSK



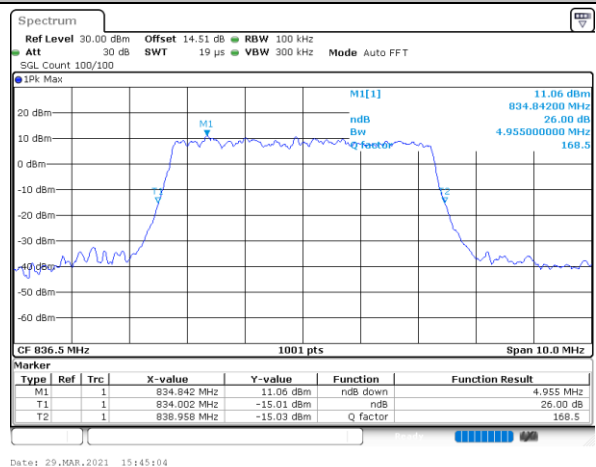
16QAM

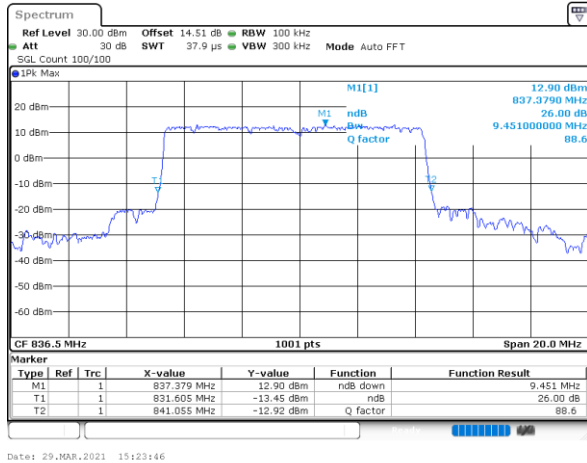
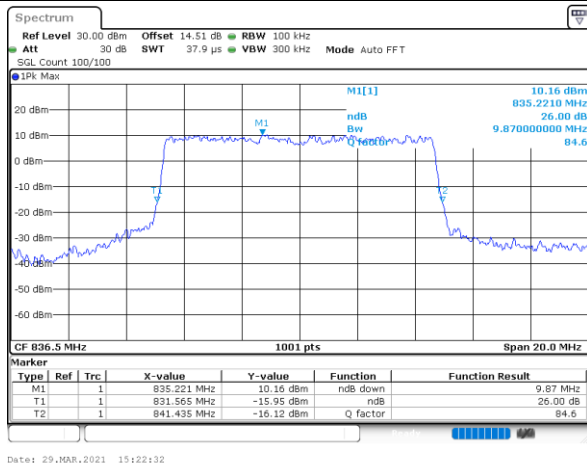
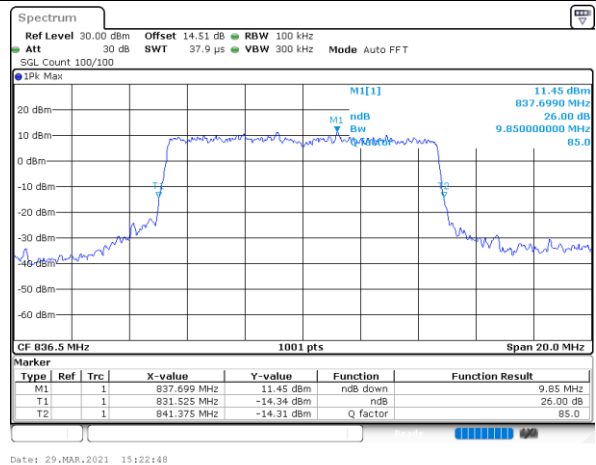
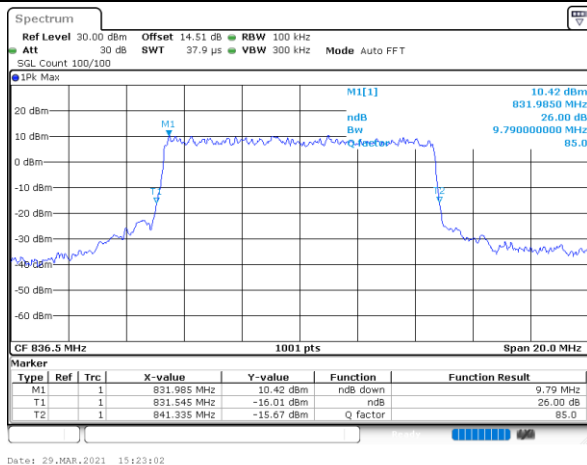
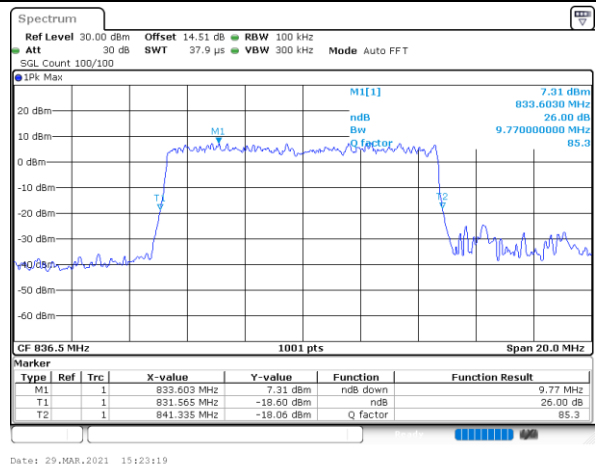


64QAM



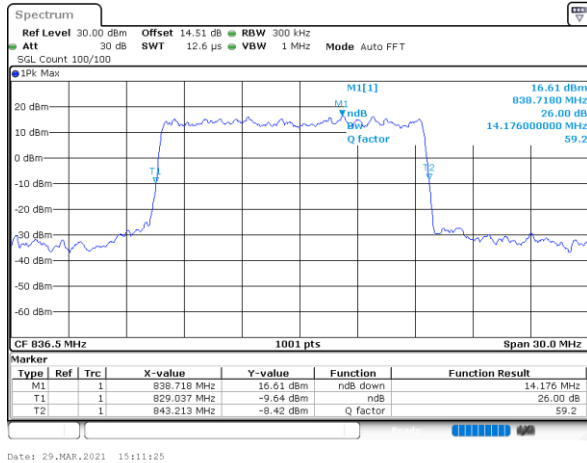
256QAM



FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB
QPSK

16QAM

64QAM

256QAM


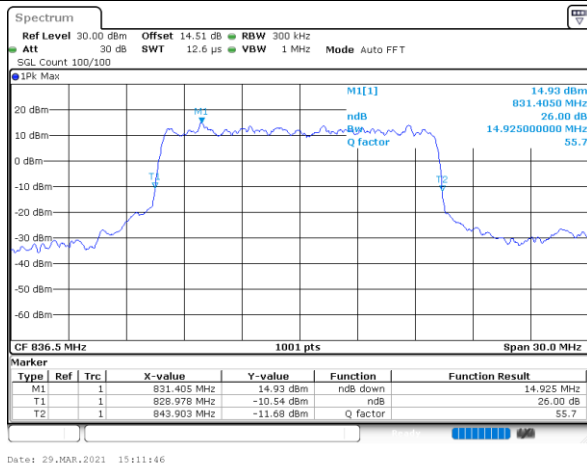
FR1 n5 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

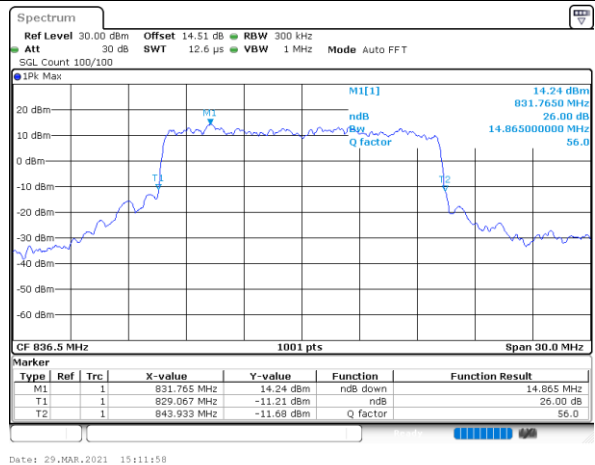


FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

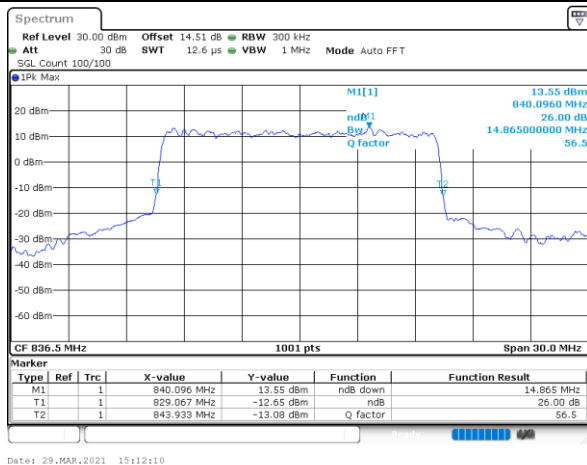
QPSK



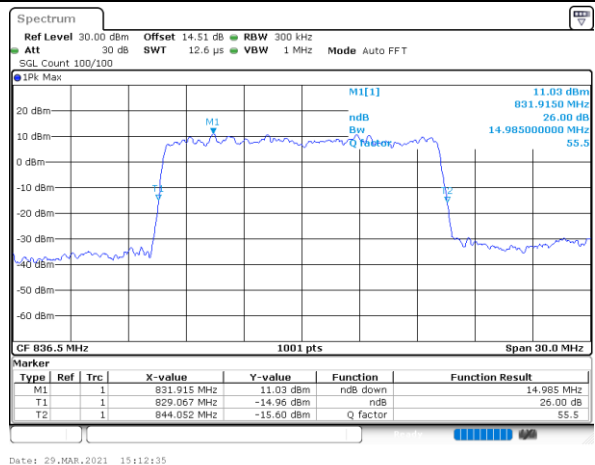
16QAM



64QAM



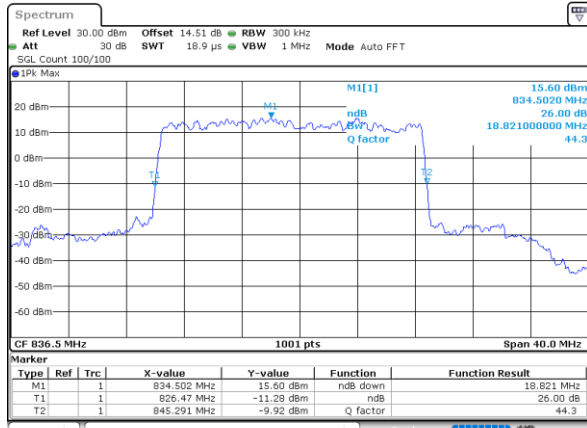
256QAM





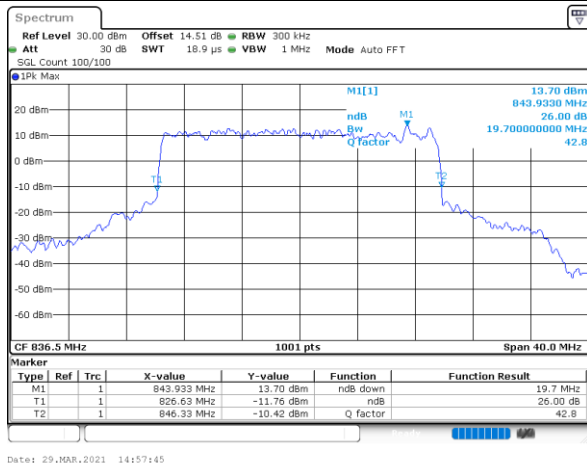
FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

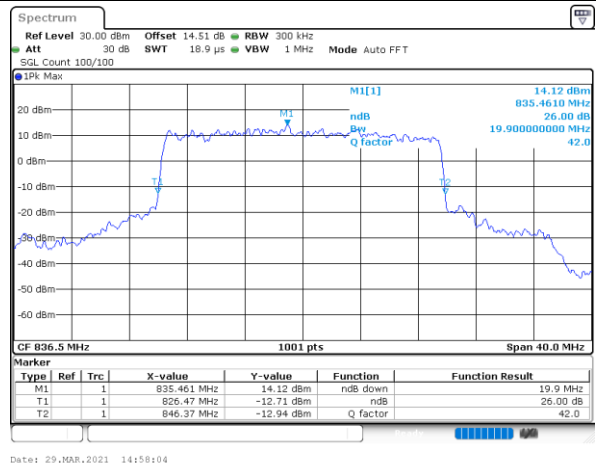


FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

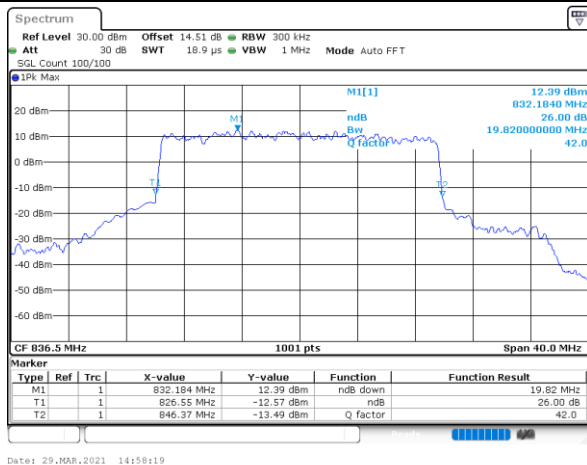
QPSK



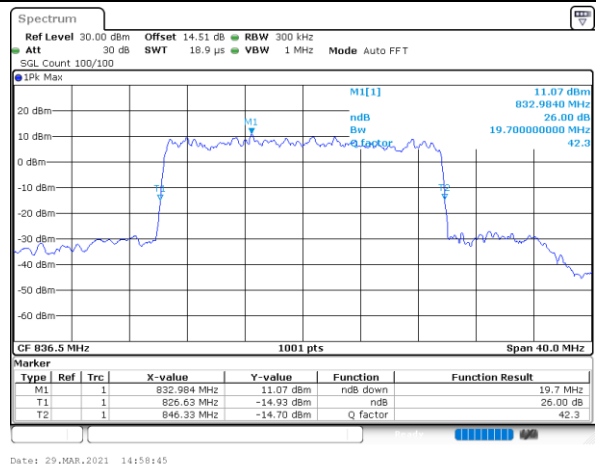
16QAM



64QAM



256QAM



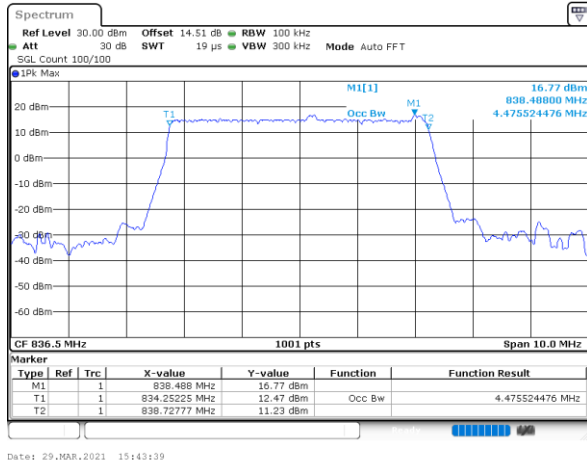
**Occupied Bandwidth**

Mode	FR1 n5 : 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		8.93		13.46		17.90	

Mode	FR1 n5 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.48	4.49	9.27	9.25	14.12	14.12	18.86	18.90
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.51	4.49	9.29	9.29	14.15	14.18	18.82	18.90

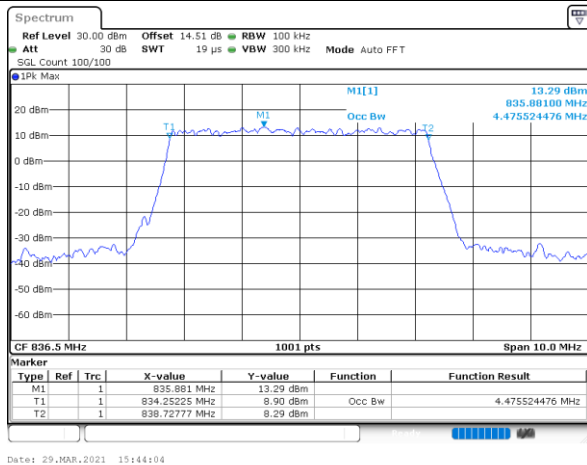
FR1 n5 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

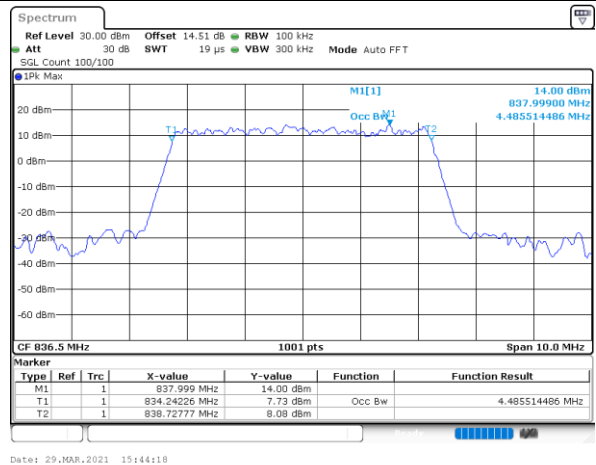


FR1 n5 / 5MHz / CP OFDM / Middle Channel / Full RB

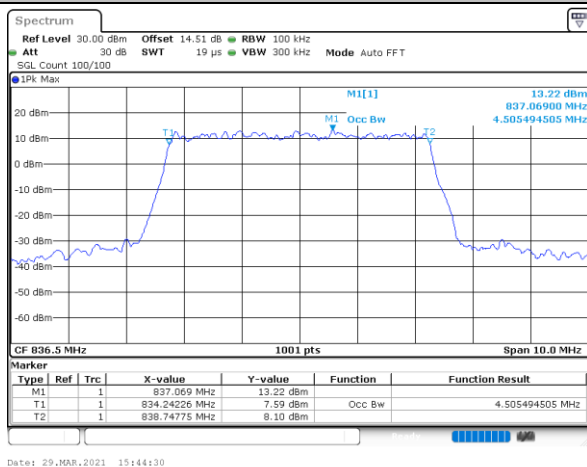
QPSK



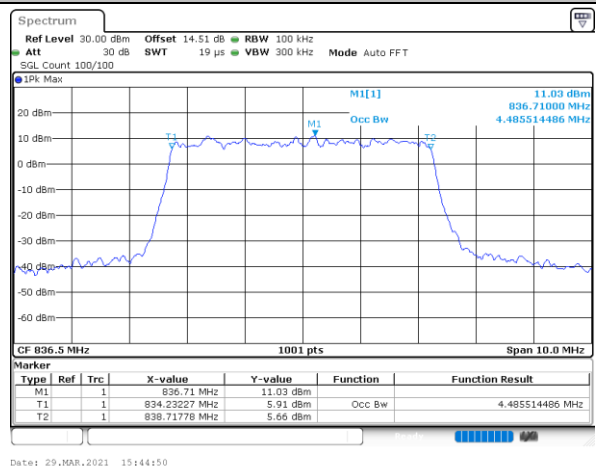
16QAM



64QAM



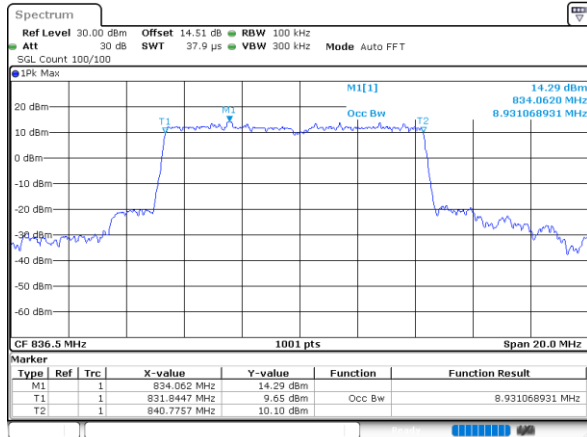
256QAM





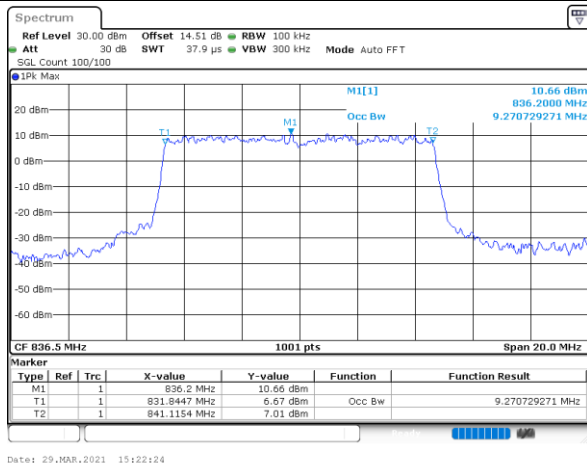
FR1 n5 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

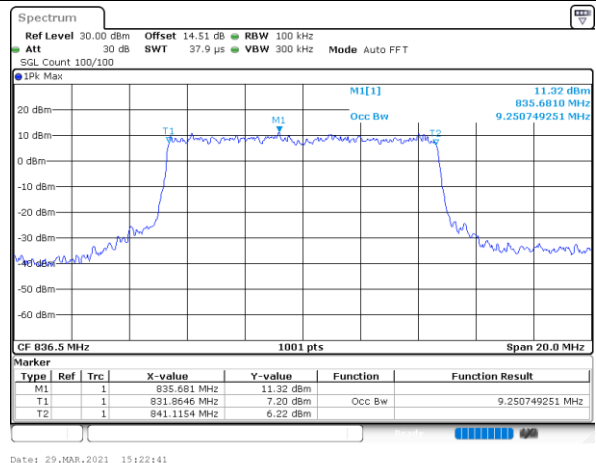


FR1 n5 / 10MHz / CP OFDM / Middle Channel / Full RB

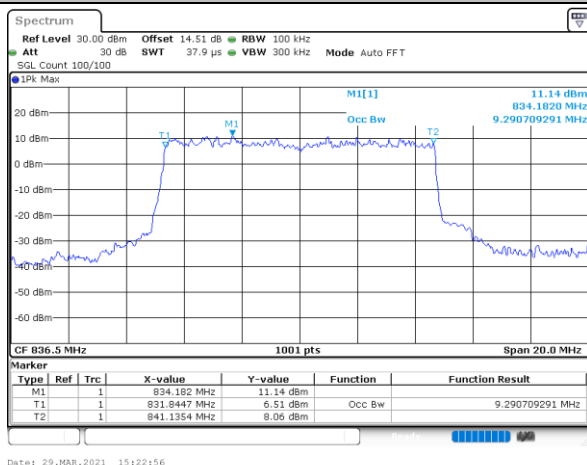
QPSK



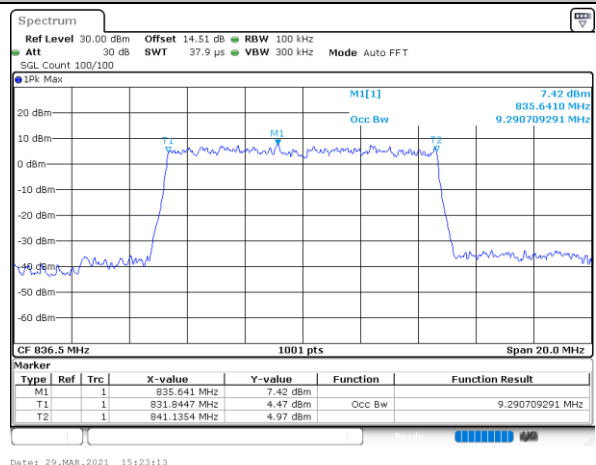
16QAM



64QAM

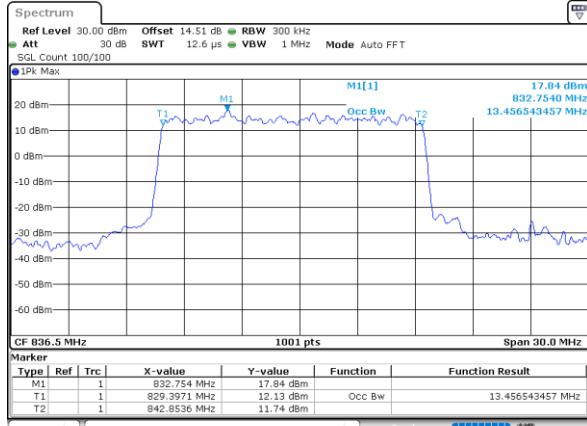


256QAM



FR1 n5 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

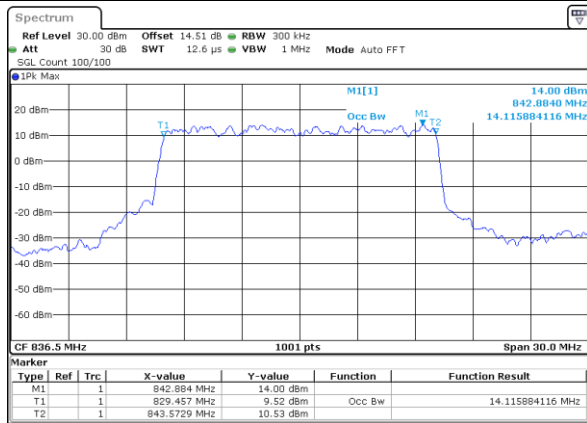
PI/2 BPSK



Date: 29.MAR.2021 15:11:18

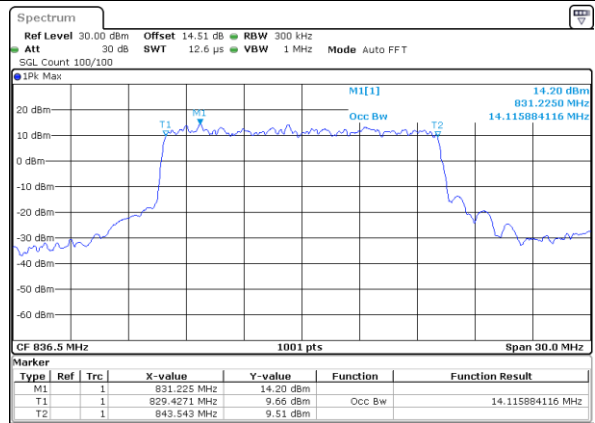
FR1 n5 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK



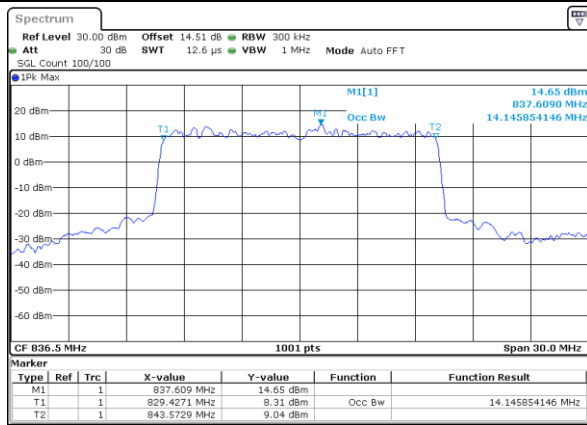
Date: 29.MAR.2021 15:11:40

16QAM



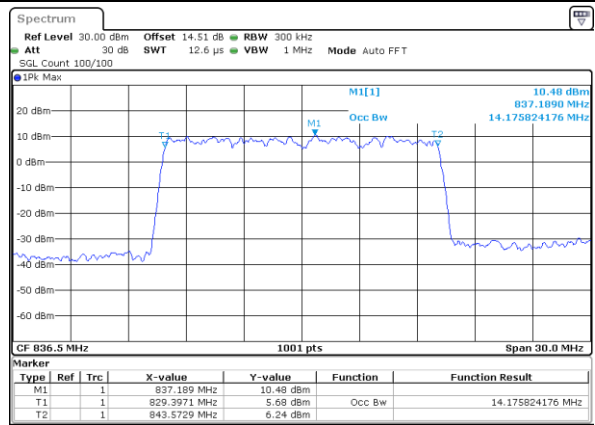
Date: 29.MAR.2021 15:11:53

64QAM



Date: 29.MAR.2021 15:12:05

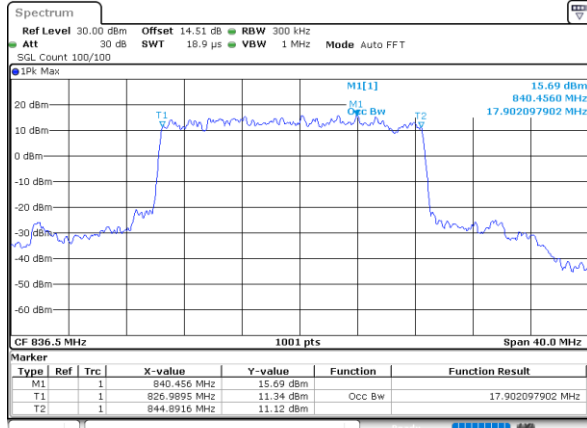
256QAM



Date: 29.MAR.2021 15:12:22

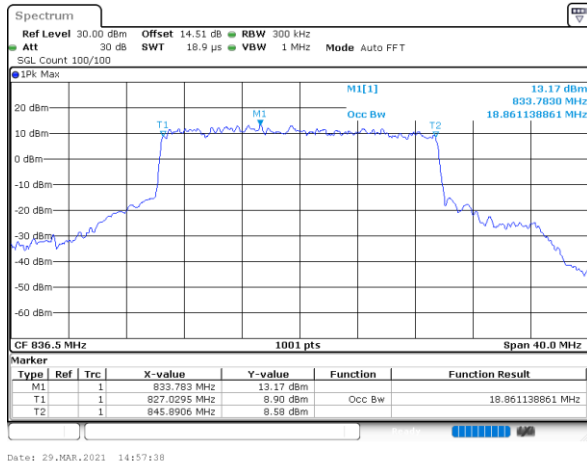
FR1 n5 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

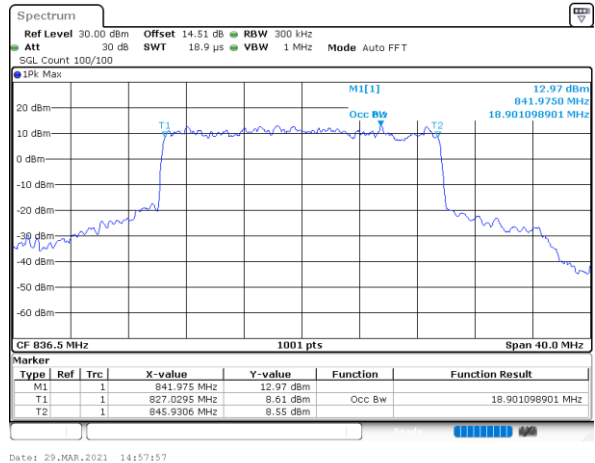


FR1 n5 / 20MHz / CP OFDM / Middle Channel / Full RB

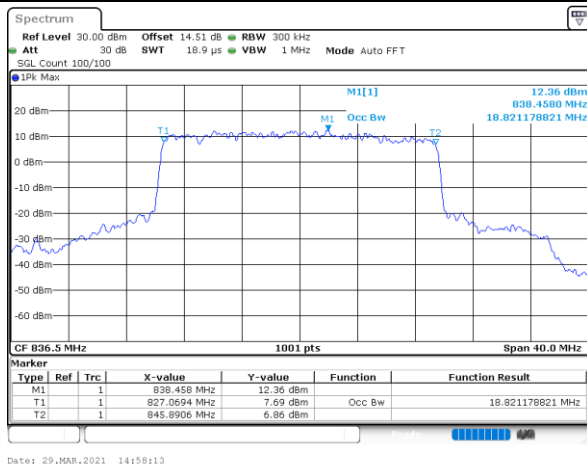
QPSK



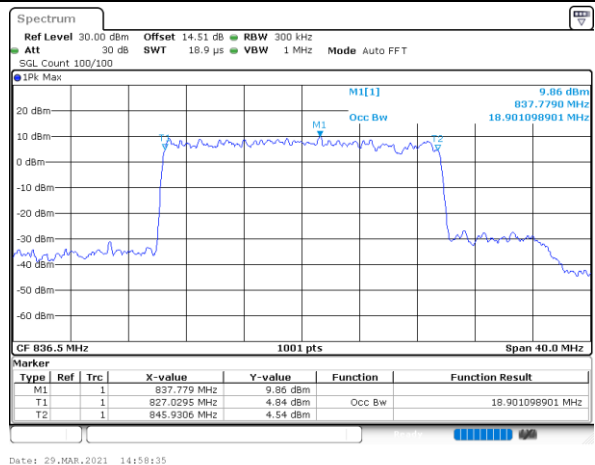
16QAM



64QAM



256QAM



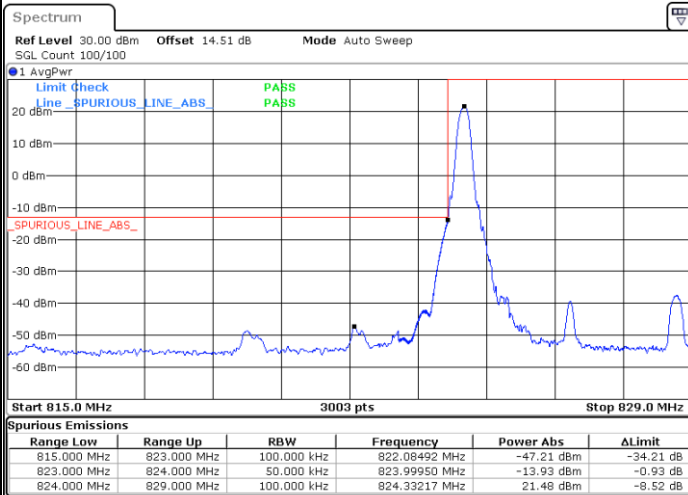


Conducted Band Edge

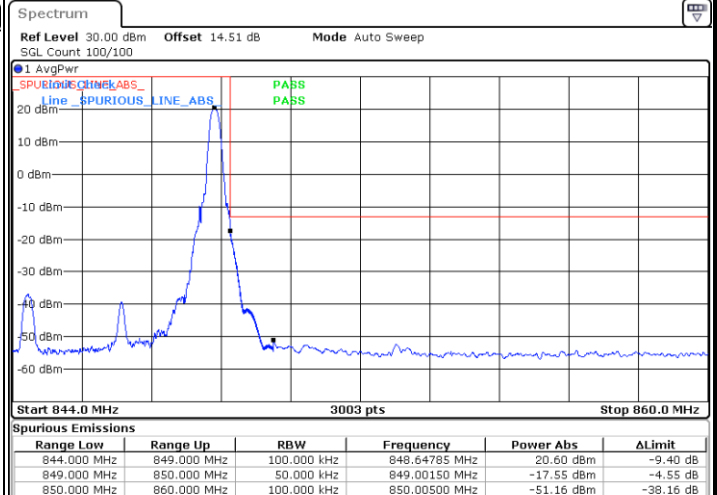
FR1 n5 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

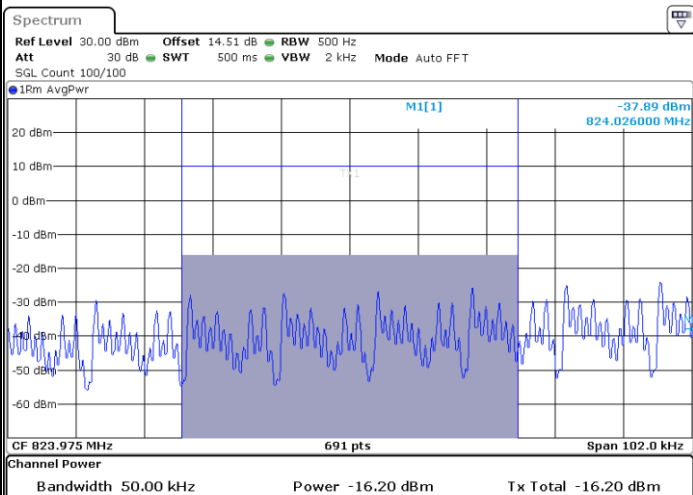


Date: 29.MAR.2021 15:40:44



Date: 29.MAR.2021 15:50:53

Channel Power -16.20dBm < -13dBm (Pass)

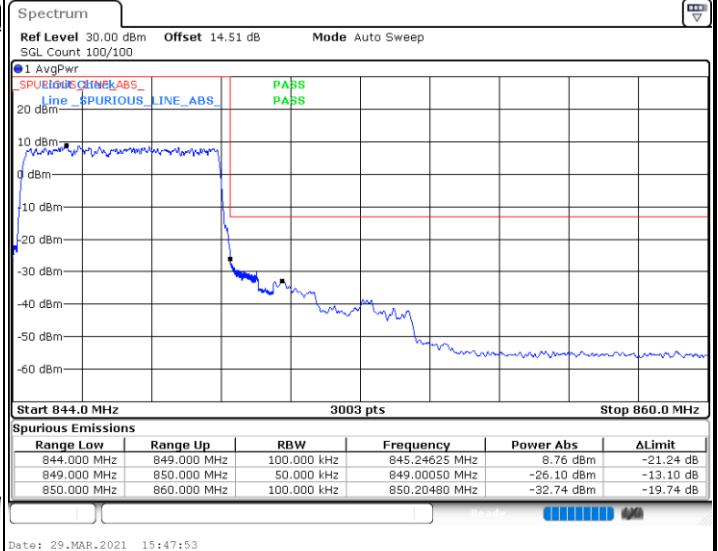
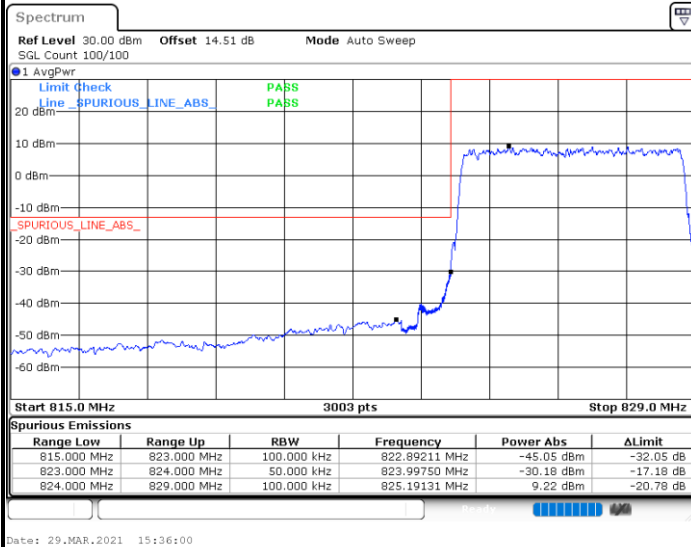


Date: 30.MAR.2021 11:37:55



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

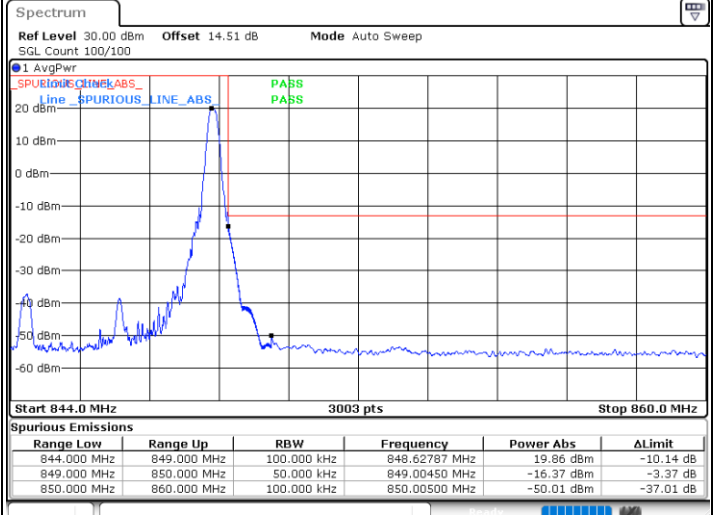
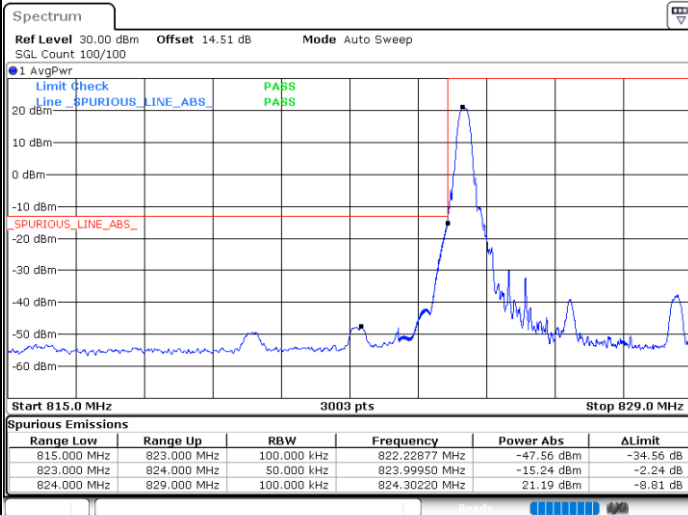




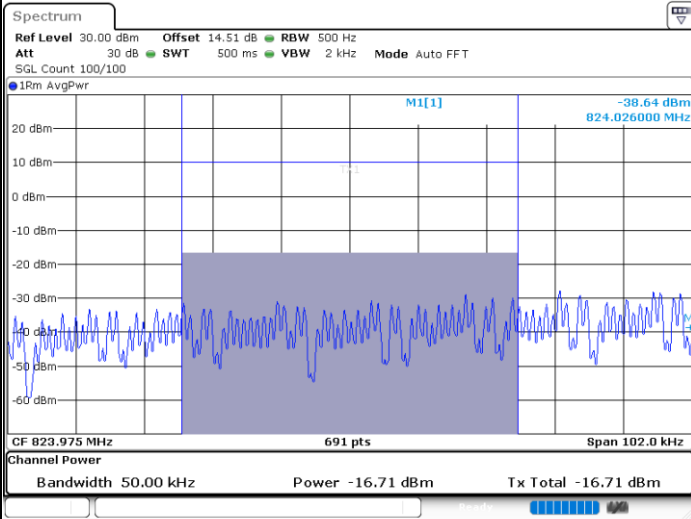
FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



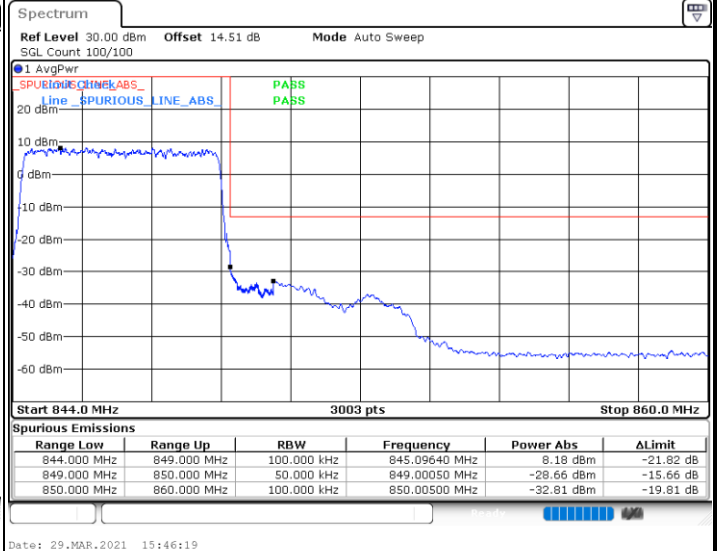
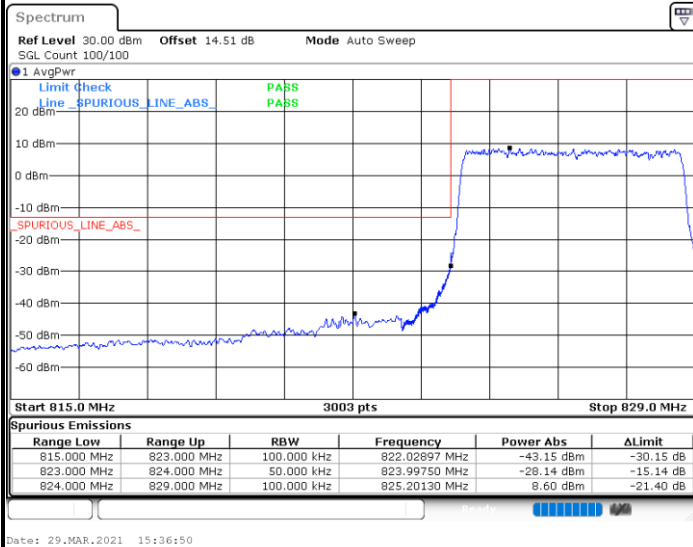
Channel Power -16.71dBm < -13dBm (Pass)





Lowest Band Edge / Full RB

Highest Band Edge / Full RB

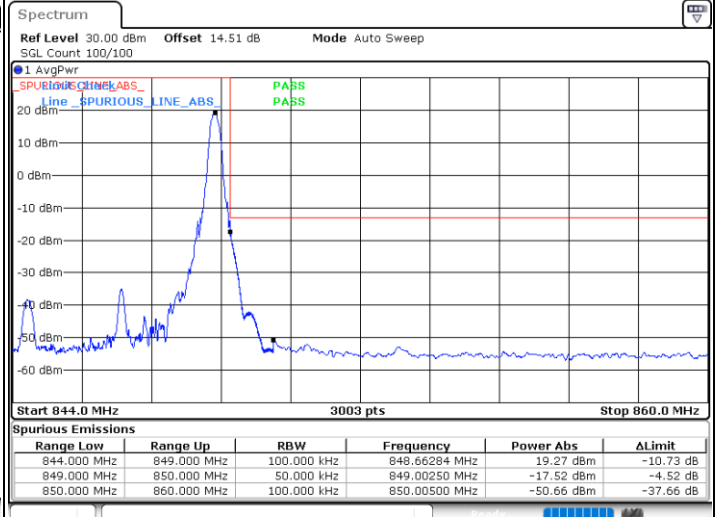
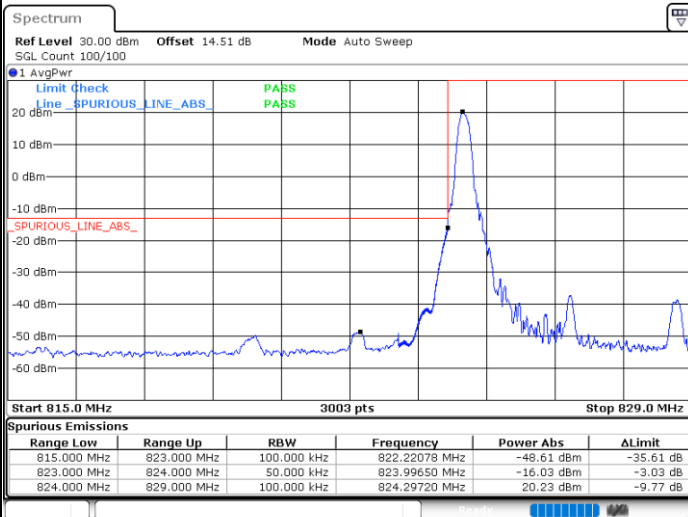




FR1 n5 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

