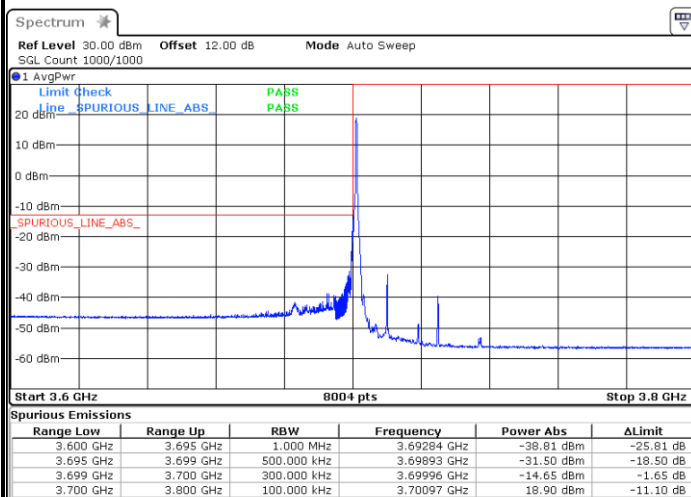




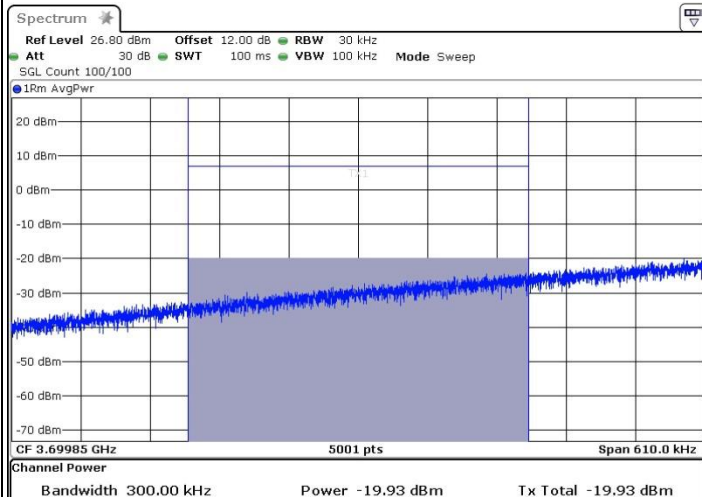
Conducted Band Edge

FR1 n77 / 20MHz / DFT-S OFDM BPSK

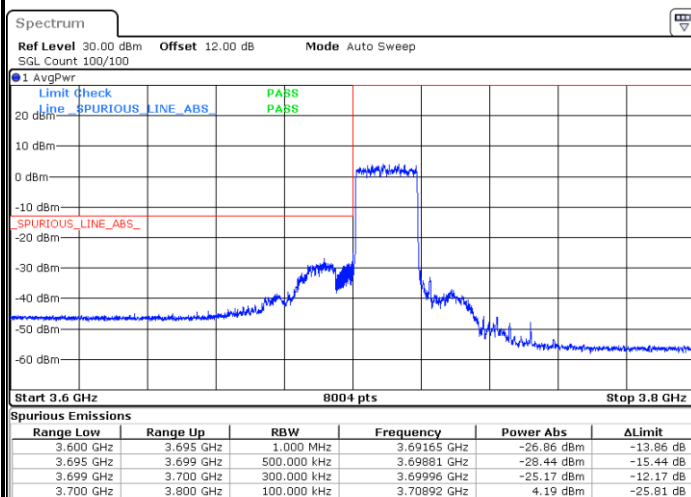
Lowest Band Edge / 1 RB



Channel Power < -13dBm Pass



Lowest Band Edge / Full RB



Channel Power < -13dBm Pass

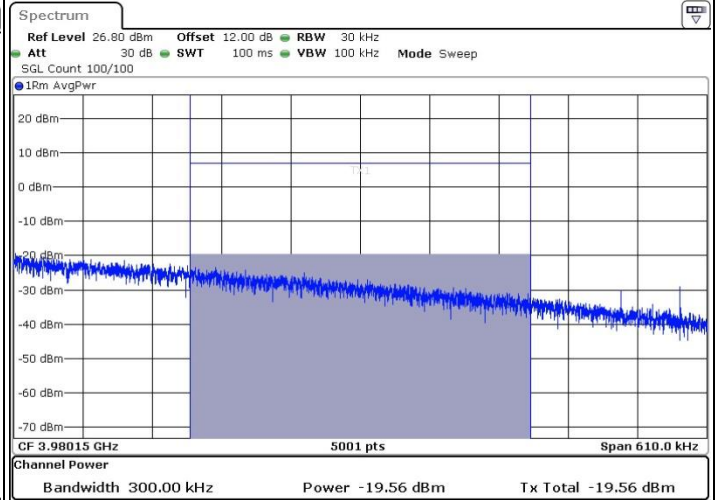
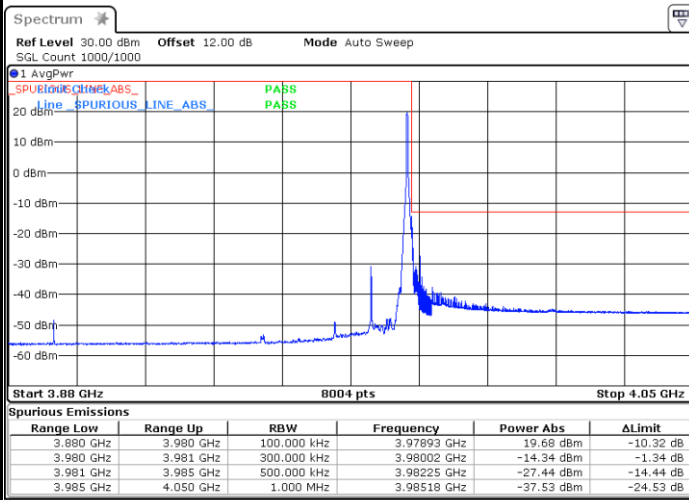
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FR1 n77 / 20MHz / DFT-S OFDM BPSK

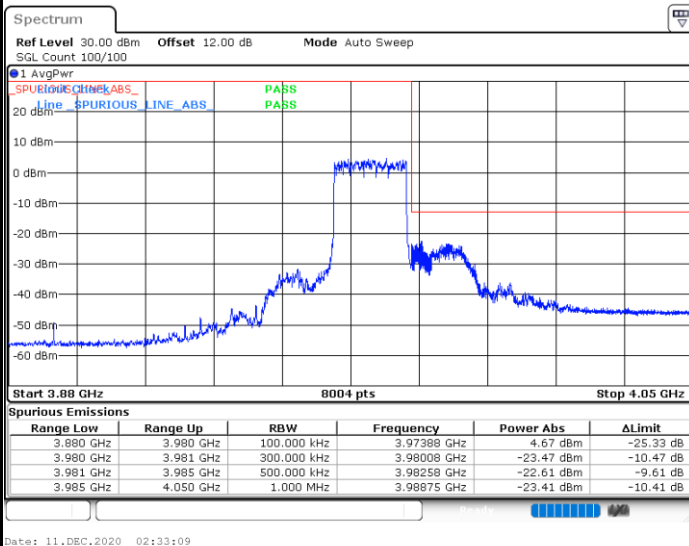
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass

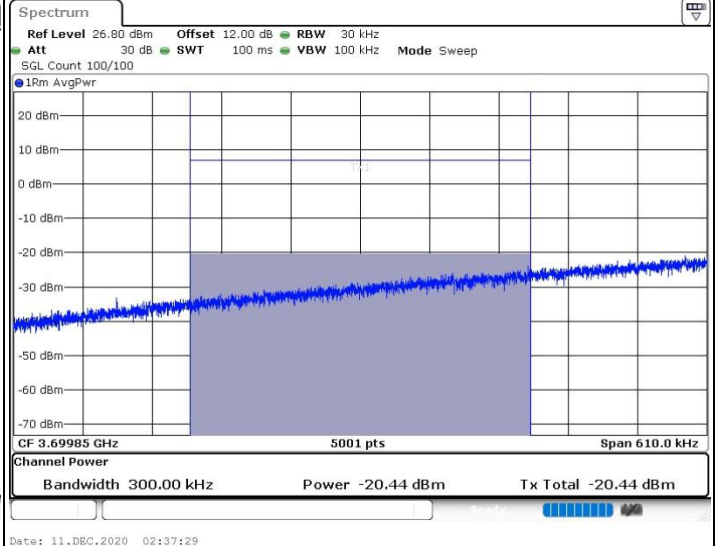
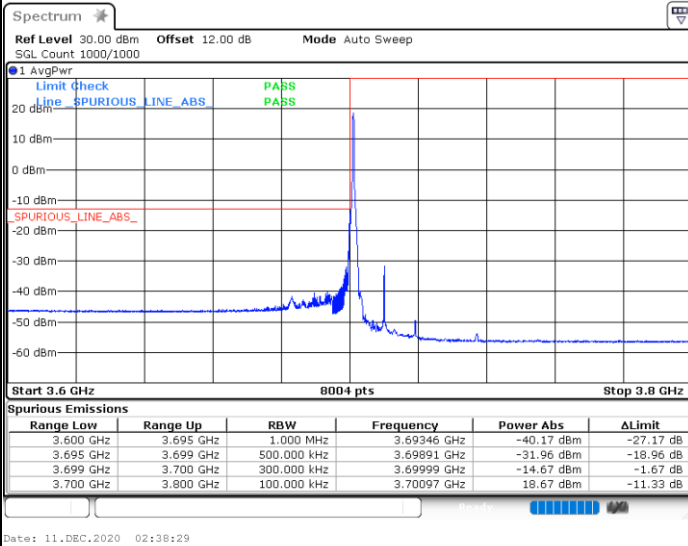




FR1 n77 / 20MHz / DFT-S OFDM QPSK

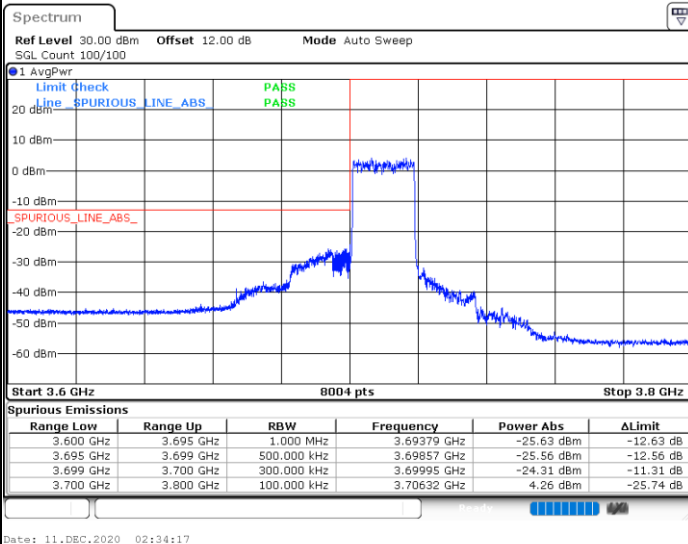
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

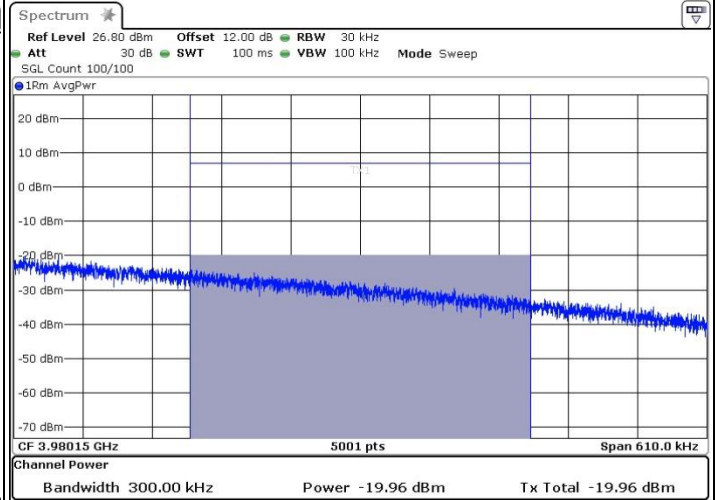
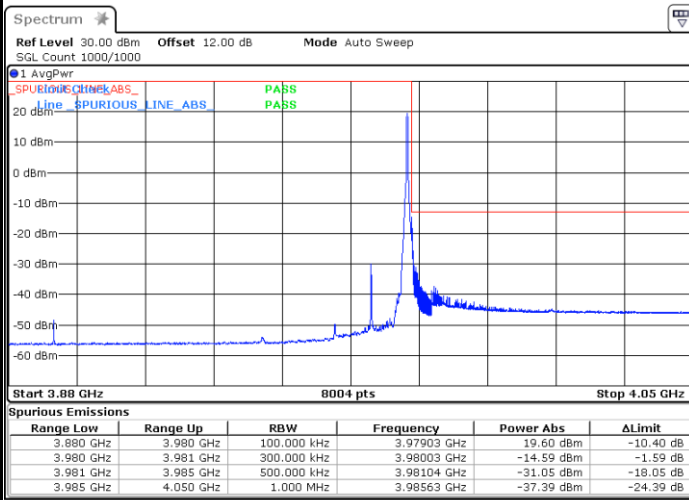




FR1 n77 / 20MHz / DFT-S OFDM QPSK

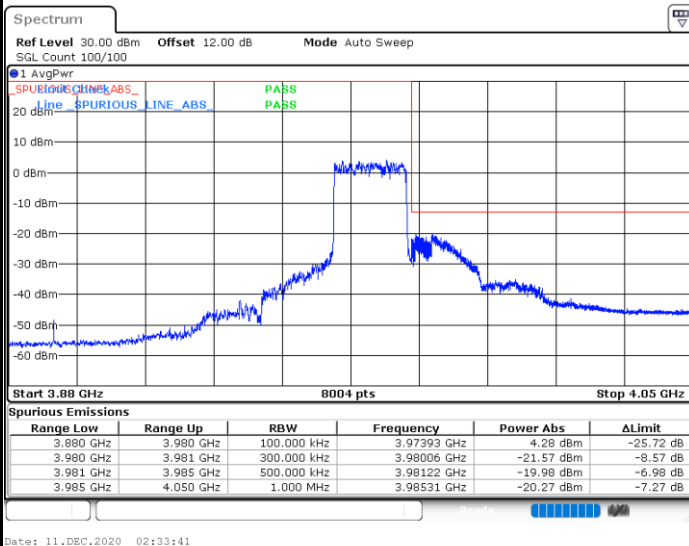
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass

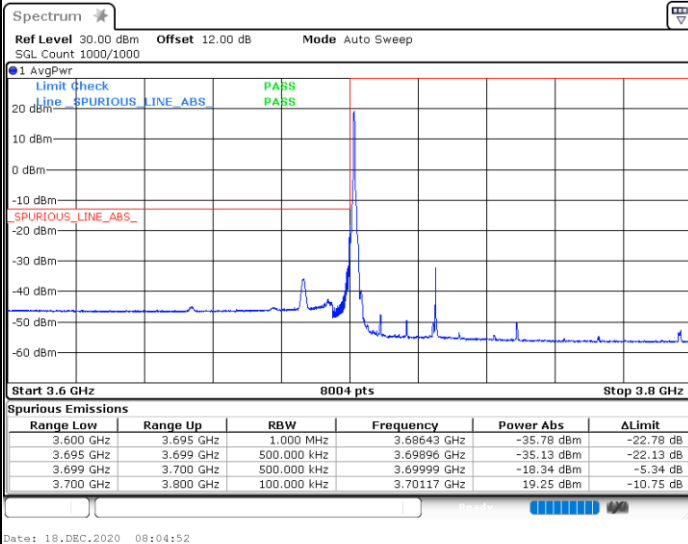




FR1 n77 / 50MHz / DFT-S OFDM BPSK

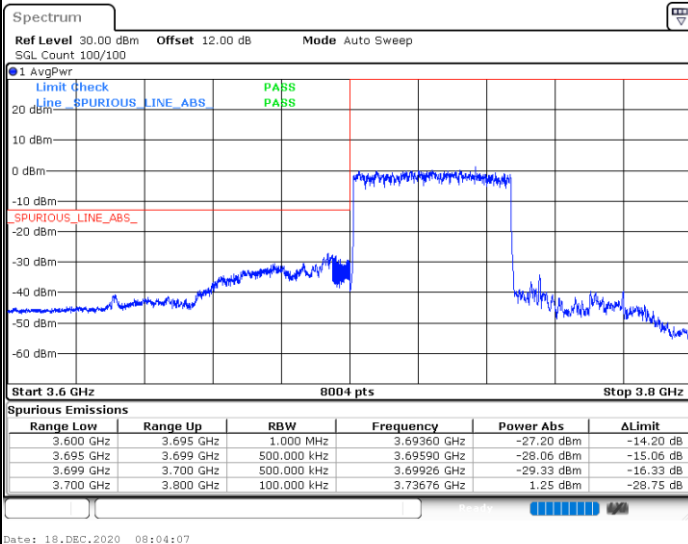
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

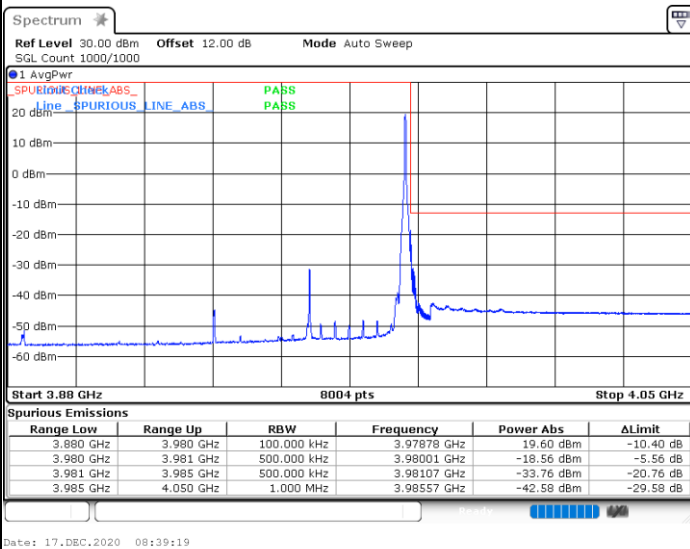




FR1 n77 / 50MHz / DFT-S OFDM BPSK

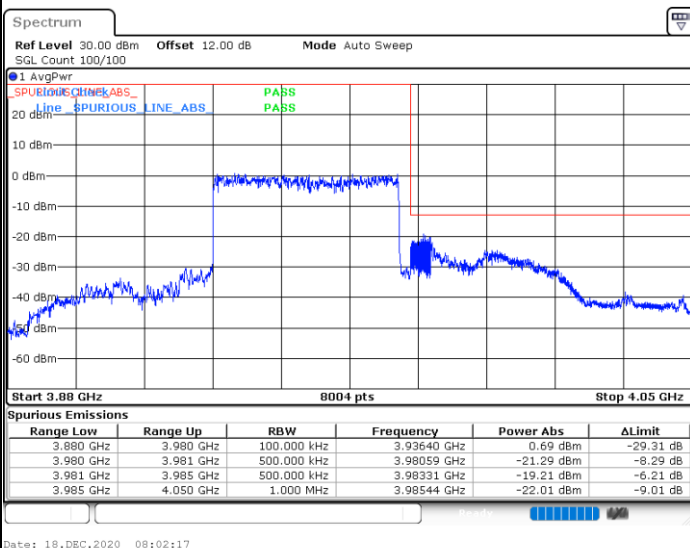
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass

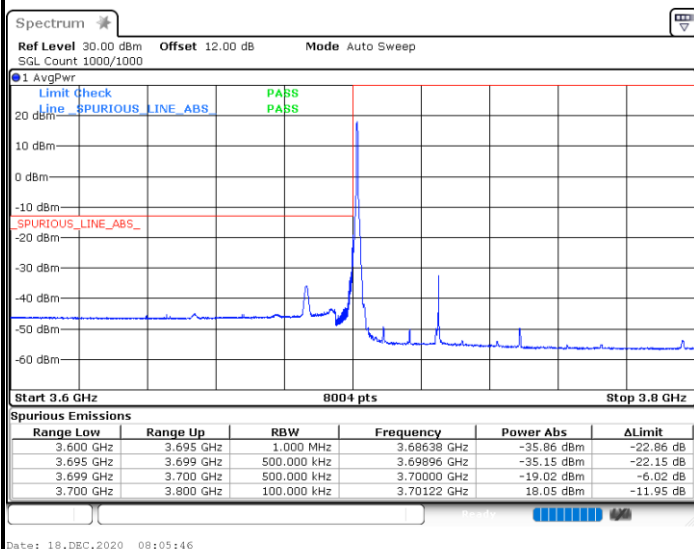




FR1 n77 / 50MHz / DFT-S OFDM QPSK

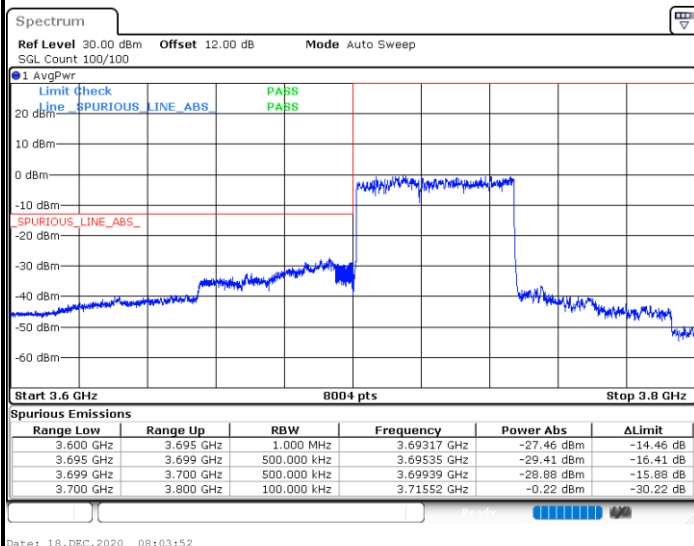
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

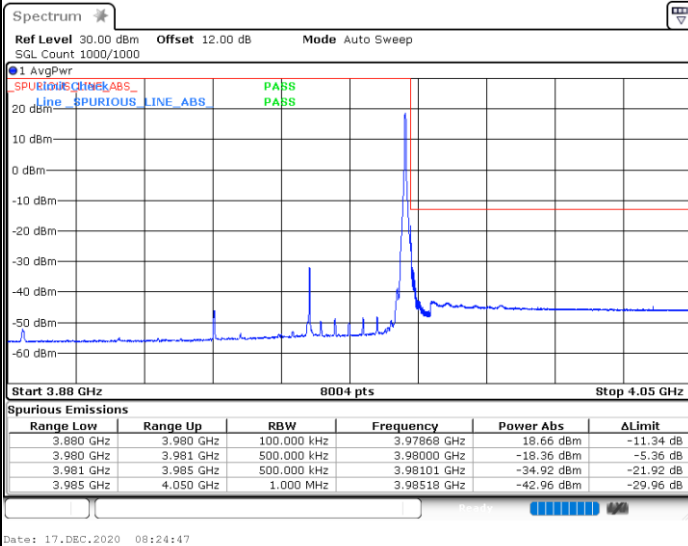




FR1 n77 / 50MHz / DFT-S OFDM QPSK

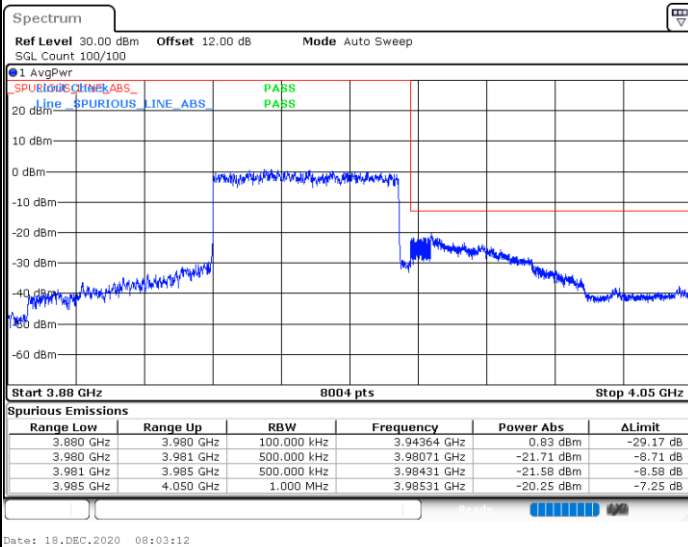
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

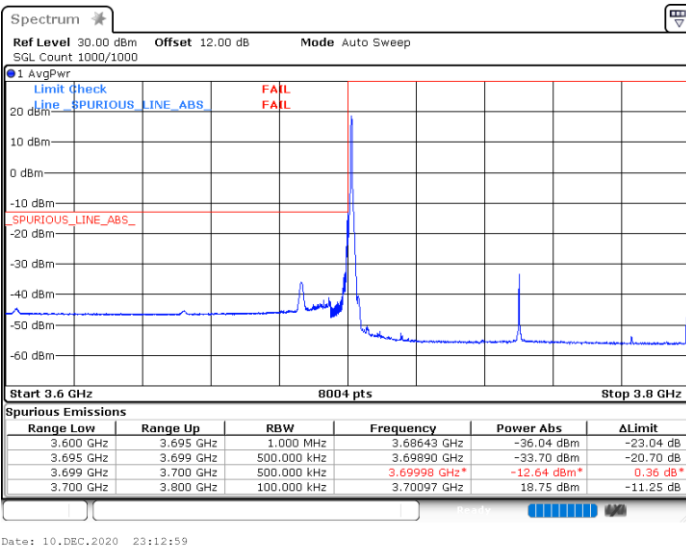
Channel Power < -13dBm Pass



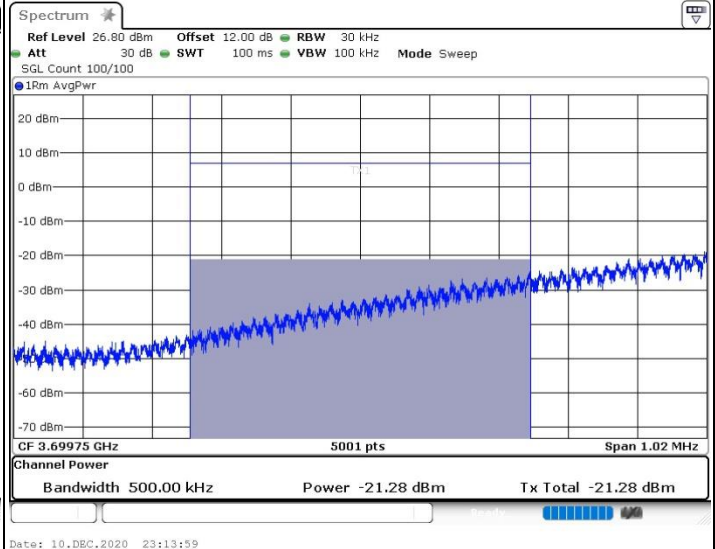


FR1 n77 / 100MHz / DFT-S OFDM BPSK

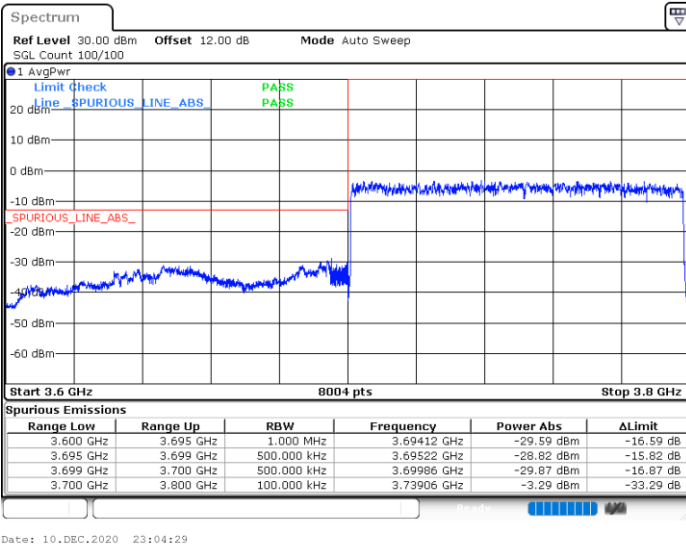
Lowest Band Edge / 1 RB



Channel Power < -13dBm Pass



Lowest Band Edge / Full RB



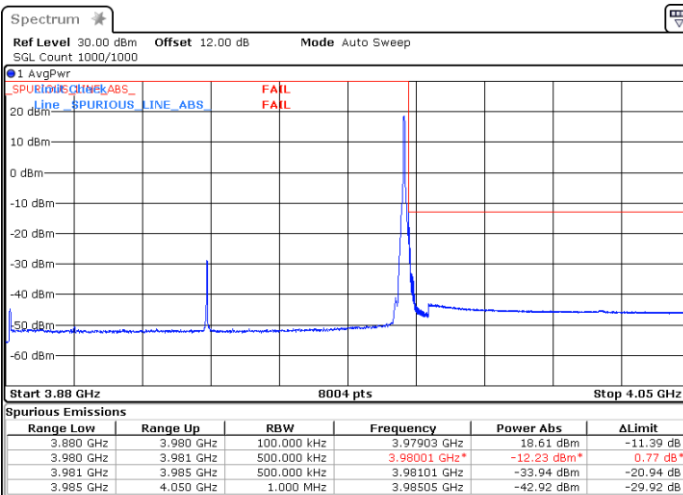
Channel Power < -13dBm Pass

/



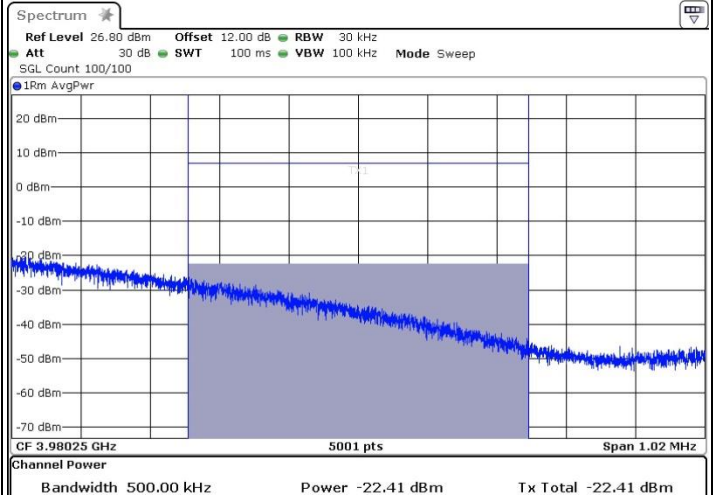
FR1 n77 / 100MHz / DFT-S OFDM BPSK

Highest Band Edge / 1 RB



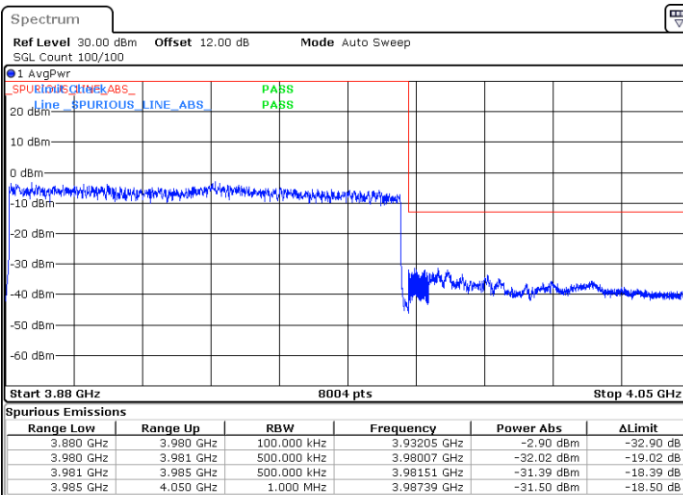
Date: 11.DEC.2020 02:15:03

Channel Power < -13dBm Pass



Date: 11.DEC.2020 02:15:57

Highest Band Edge / Full RB



Date: 11.DEC.2020 02:09:34

Channel Power < -13dBm Pass

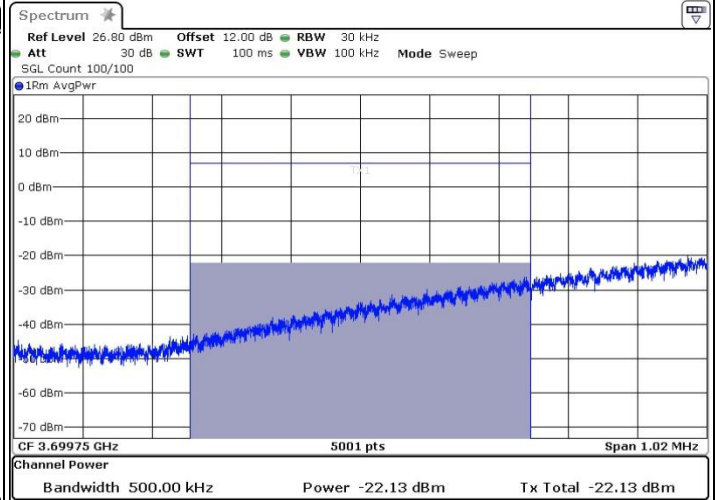
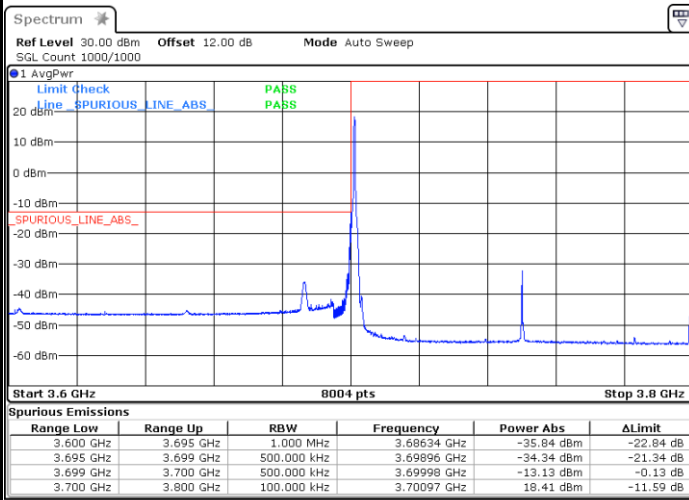
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FR1 n77 / 100MHz / DFT-S OFDM QPSK

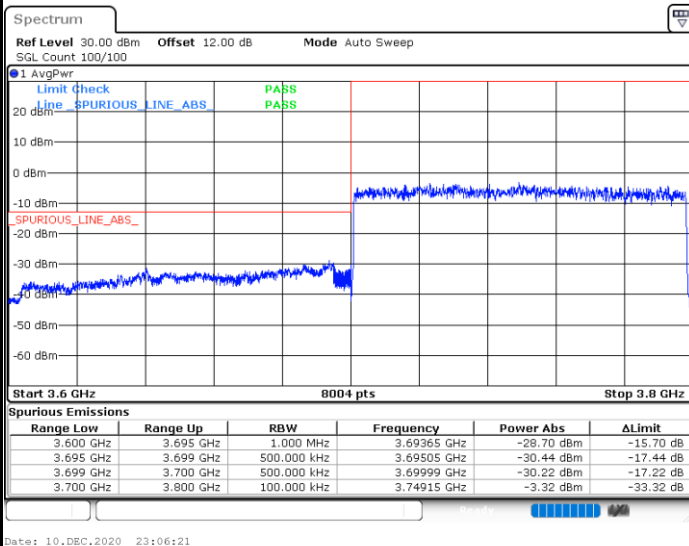
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

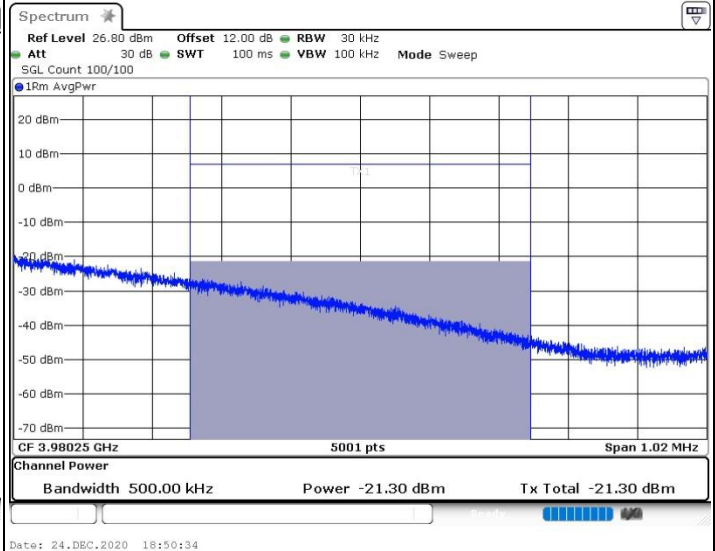
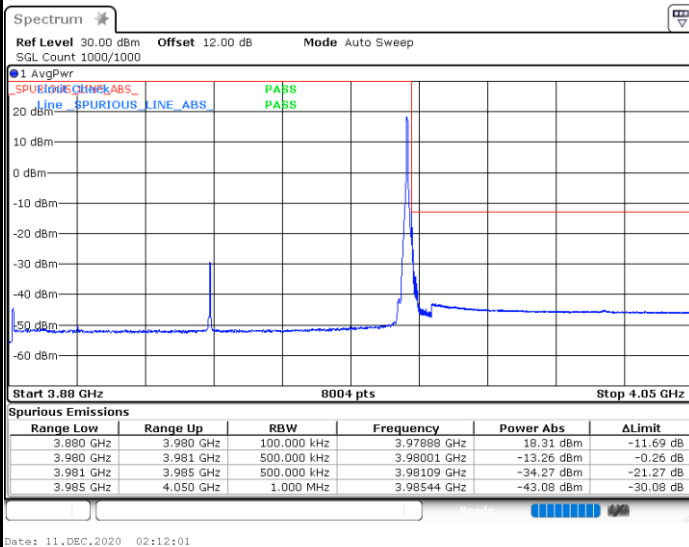




FR1 n77 / 100MHz / DFT-S OFDM QPSK

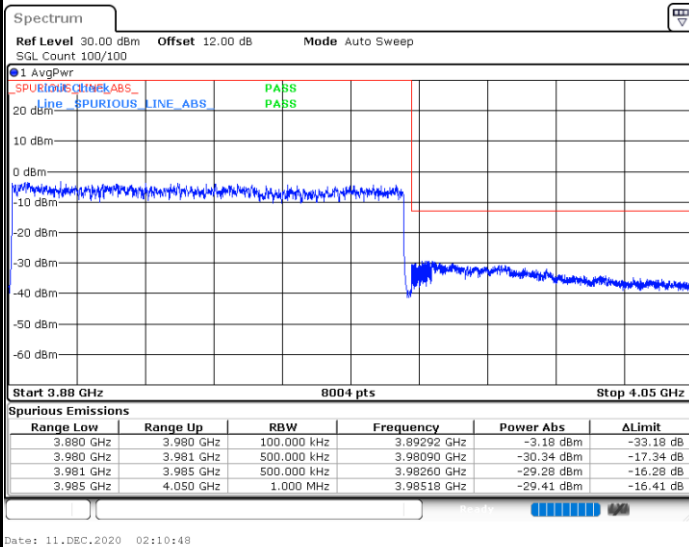
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

Channel Power < -13dBm Pass



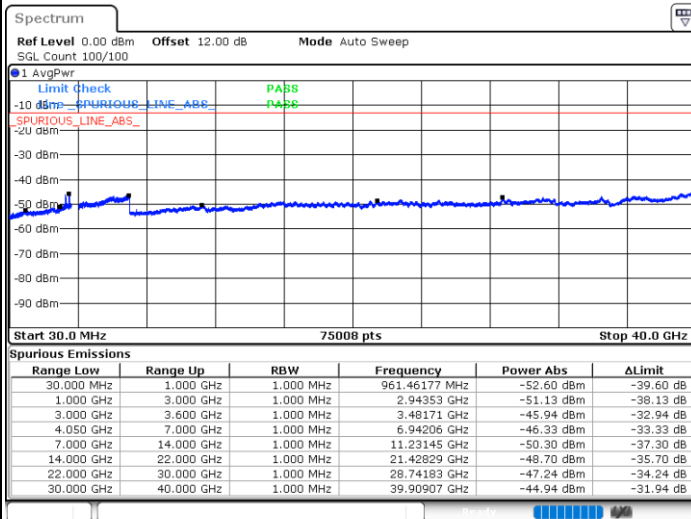


Conducted Spurious Emission

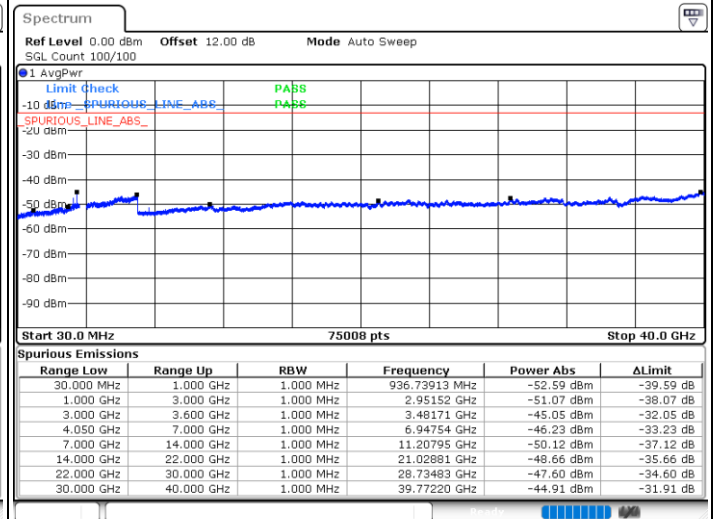
FR1 n77 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

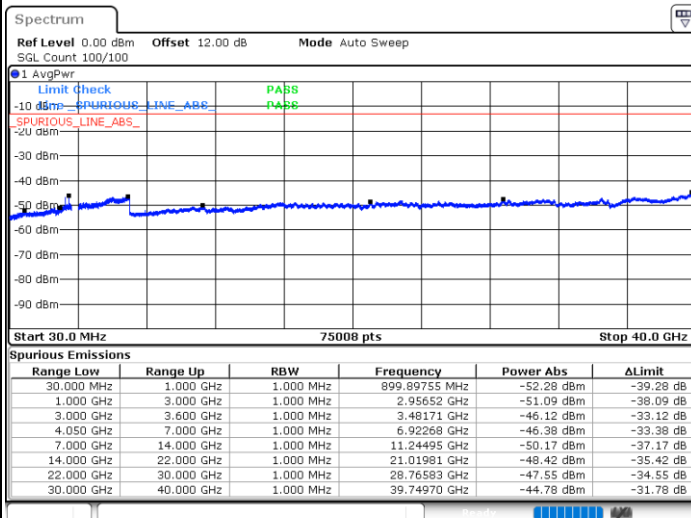


Date: 11.DEC.2020 02:19:42



Date: 11.DEC.2020 02:24:12

Highest Channel / 1RB



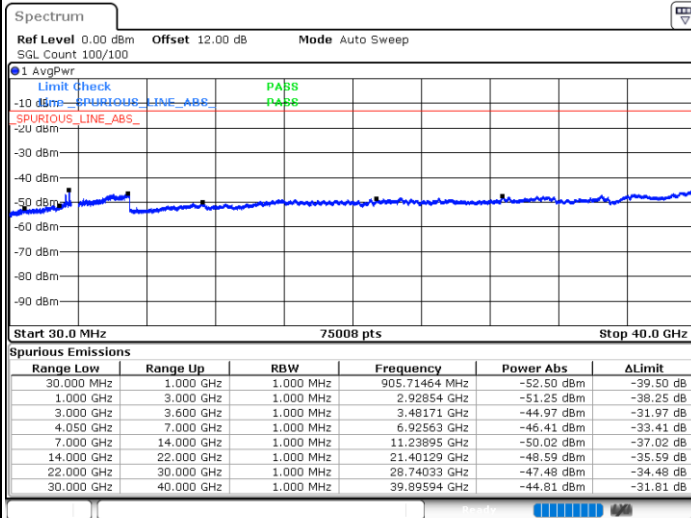
Date: 11.DEC.2020 02:26:37



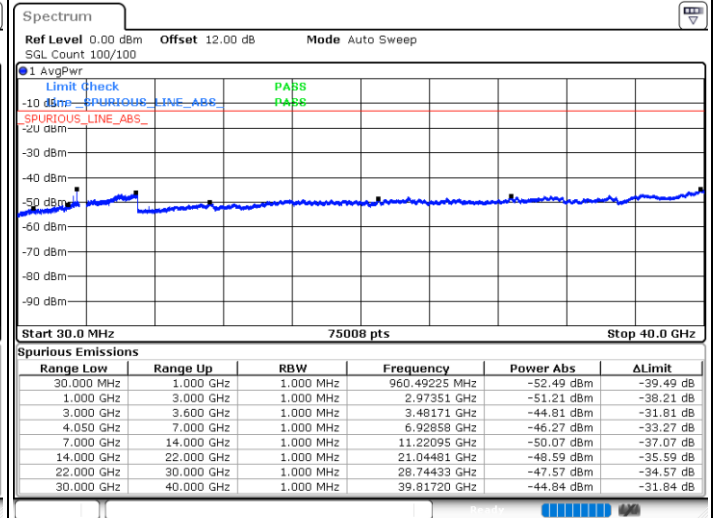
FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

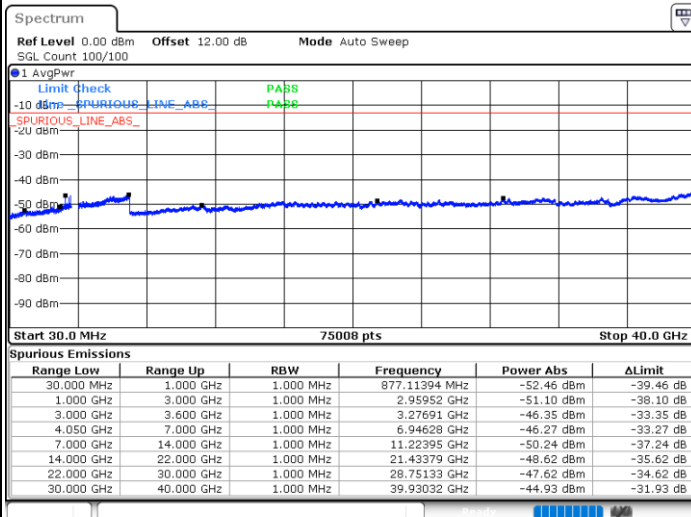


Date: 11.DEC.2020 02:21:09



Date: 11.DEC.2020 02:22:35

Highest Channel / 1RB



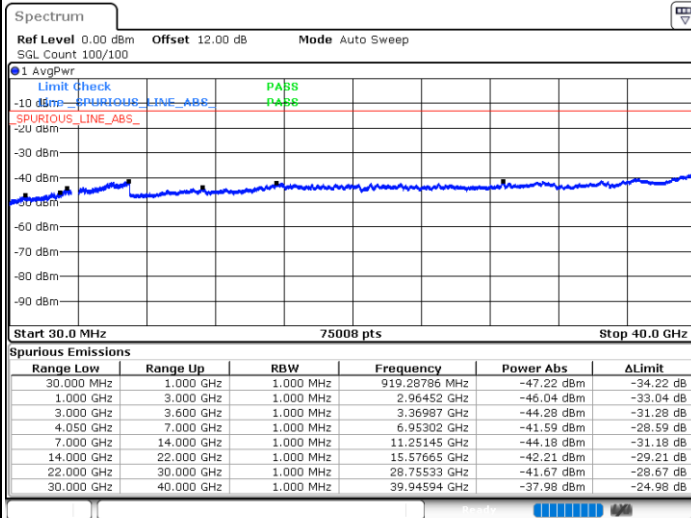
Date: 11.DEC.2020 02:27:54



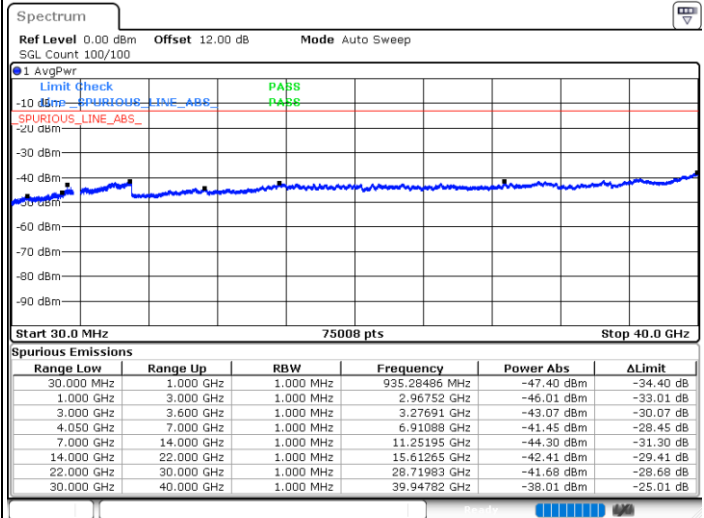
FR1 n77 / 50MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB

Middle Channel / 1RB

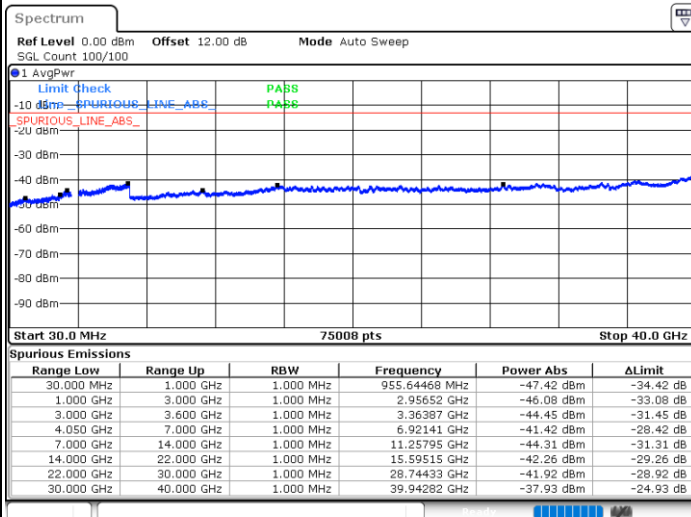


Date: 17.DEC.2020 07:58:32



Date: 17.DEC.2020 08:17:38

Highest Channel / 1RB



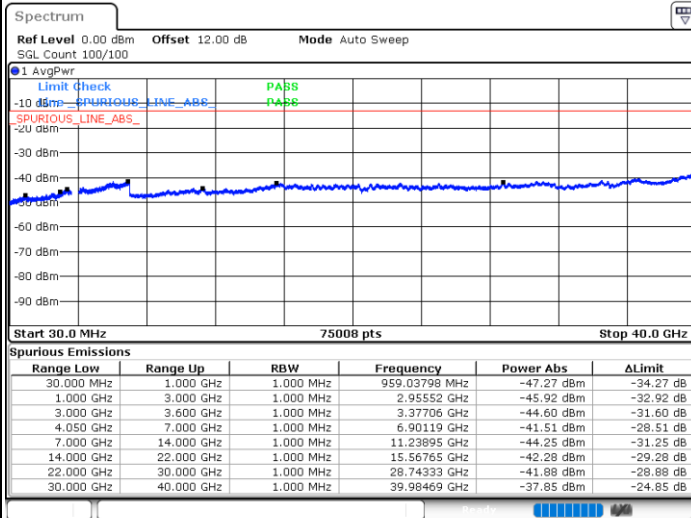
Date: 17.DEC.2020 08:21:47



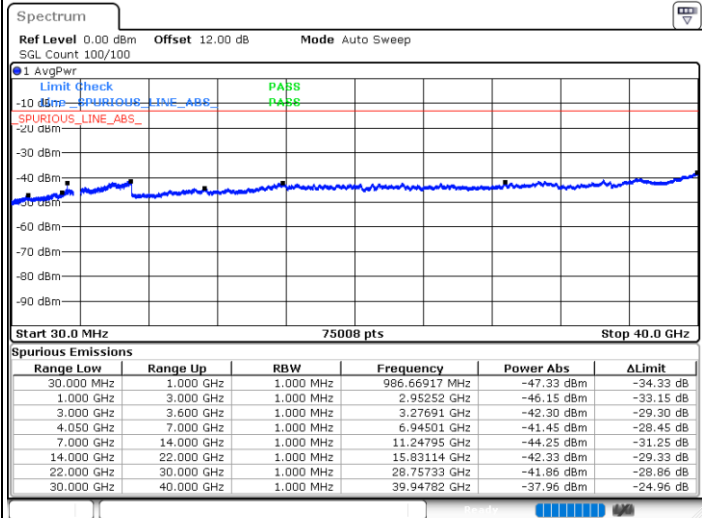
FR1 n77 / 50MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB

Middle Channel / 1RB

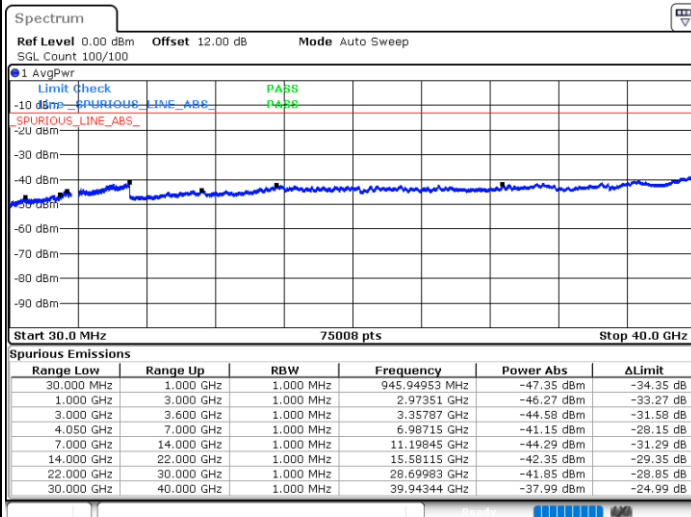


Date: 17.DEC.2020 07:59:46



Date: 17.DEC.2020 08:10:02

Highest Channel / 1RB

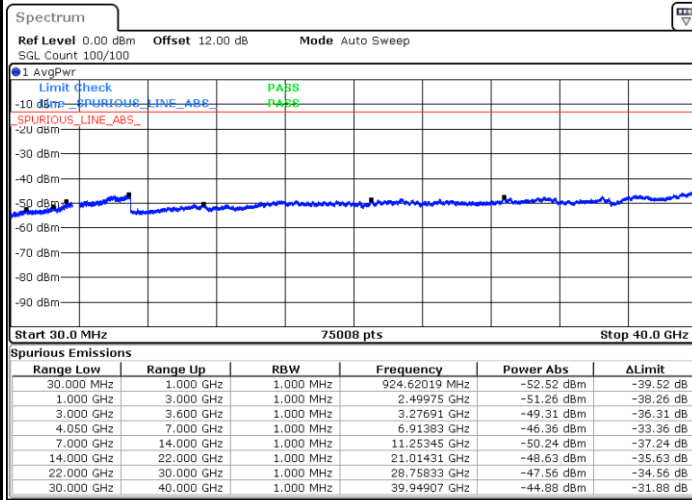


Date: 17.DEC.2020 08:23:17



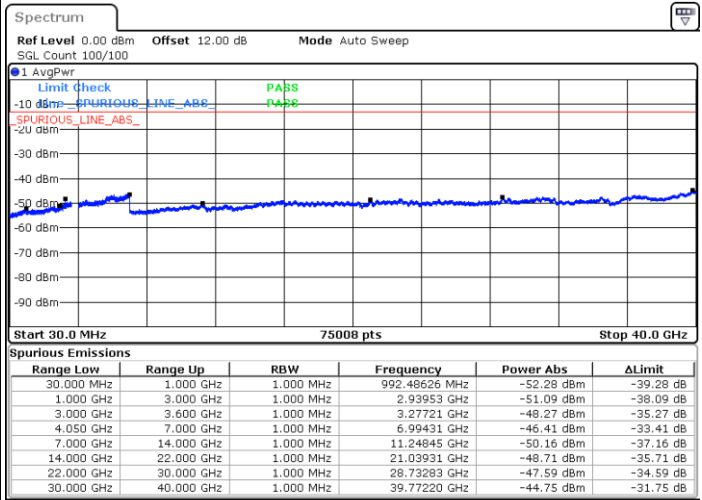
FR1 n77 / 100MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB



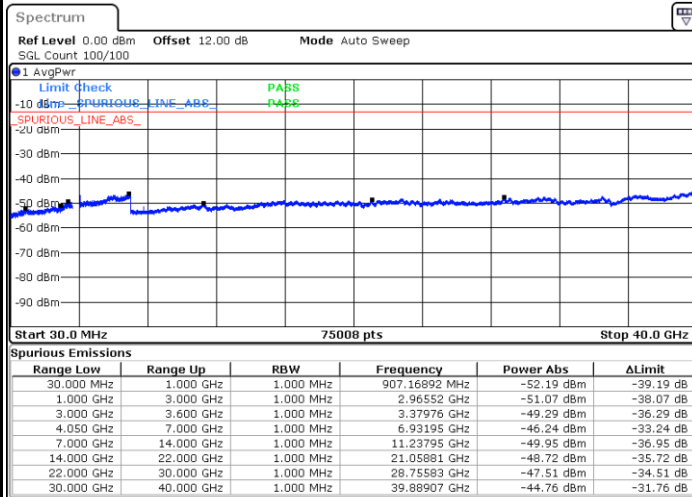
Date: 10.DEC.2020 22:48:18

Middle Channel / 1RB



Date: 10.DEC.2020 22:46:46

Highest Channel / 1RB

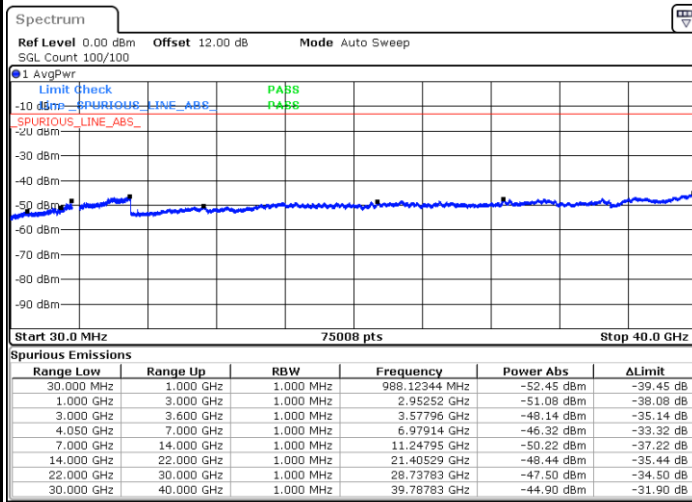


Date: 10.DEC.2020 22:54:34



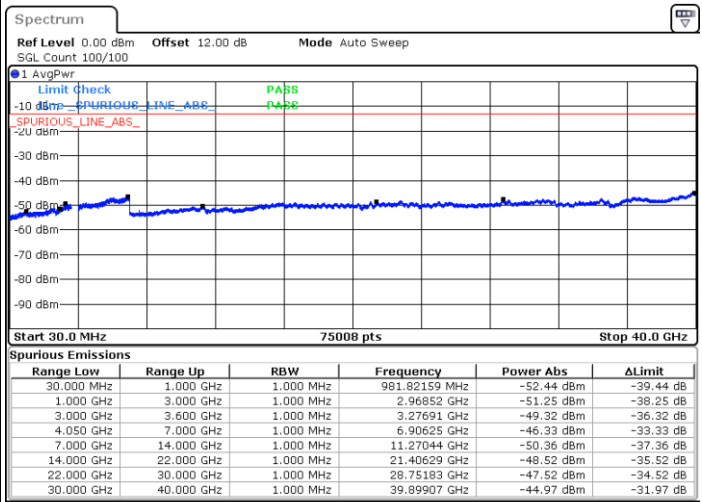
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB



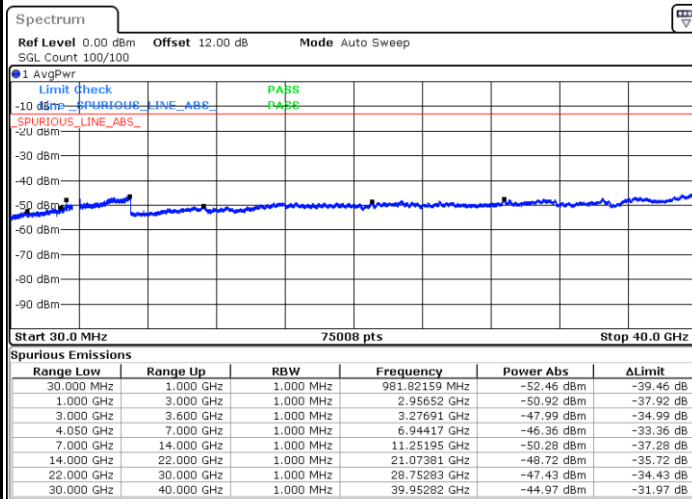
Date: 10.DEC.2020 22:50:16

Middle Channel / 1RB



Date: 10.DEC.2020 22:45:35

Highest Channel / 1RB



Date: 10.DEC.2020 22:52:23

**Frequency Stability**

Test Conditions		NR n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0018	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.2 V. ; Maximum Voltage =8.9 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



5G NR n71 NSA

Peak-to-Average Ratio

Mode	FR1 n71+2A / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	PI/2 BPSK	QPSK	QPSK	Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.77	3.42	5.65	5.22	PASS
Middle CH	3.57	3.94	5.25	5.1	
Highest CH	3.59	3.83	5.39	4.64	



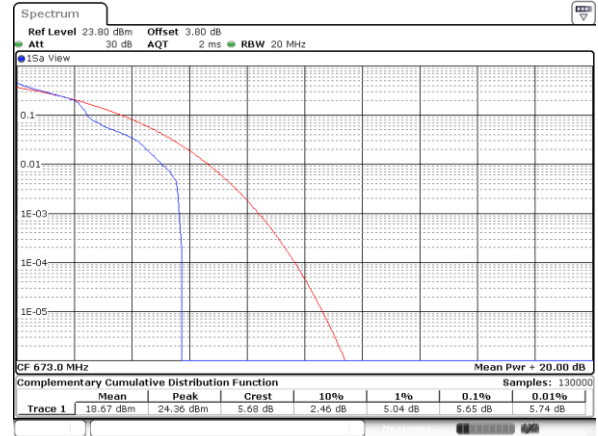
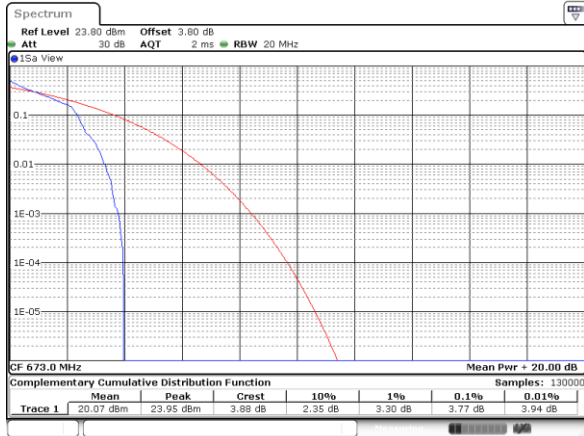
FR1 n71+2A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

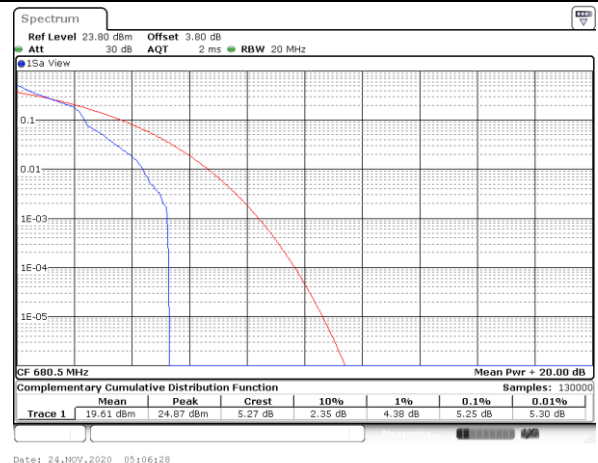
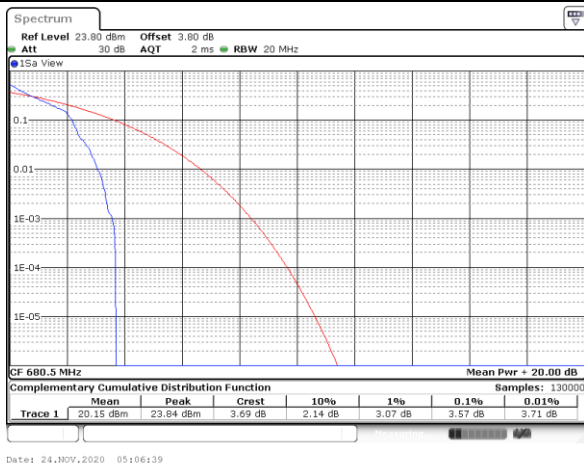
Lowest Channel / 1RB

Lowest Channel / 1RB



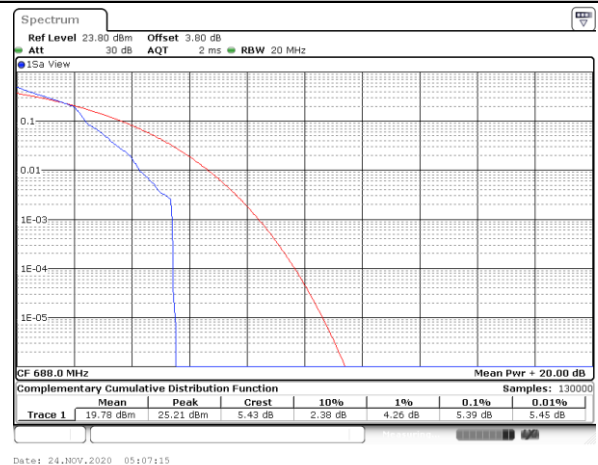
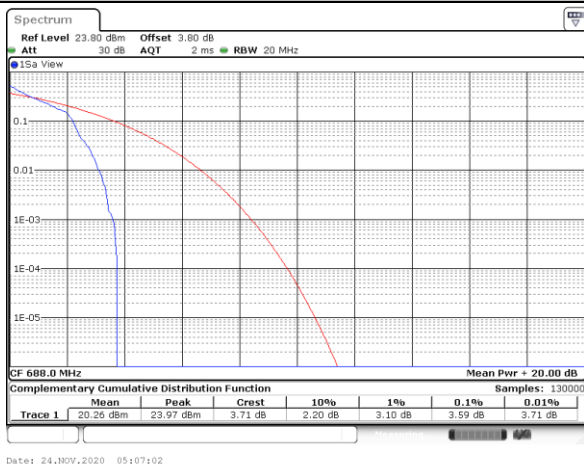
Middle Channel / 1 RB

Middle Channel / 1 RB



Highest Channel / 1 RB

Highest Channel / 1 RB





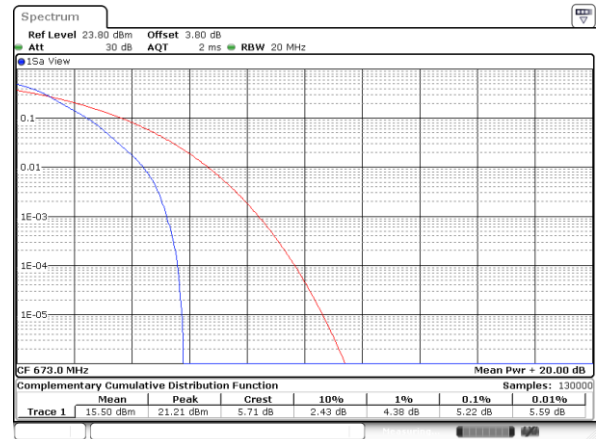
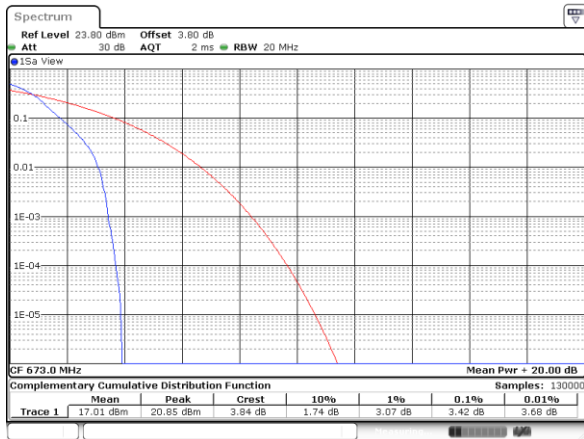
FR1 n71+2A / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

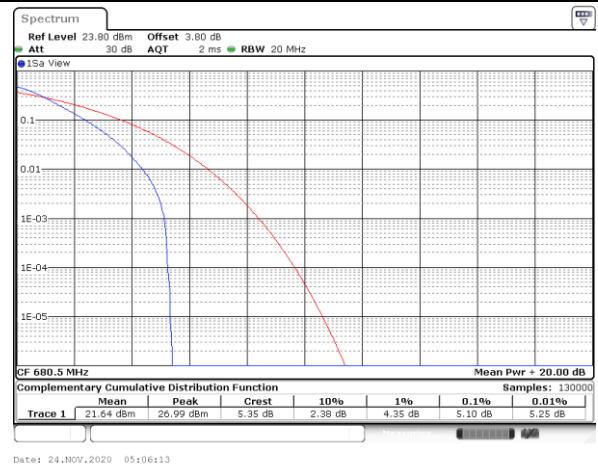
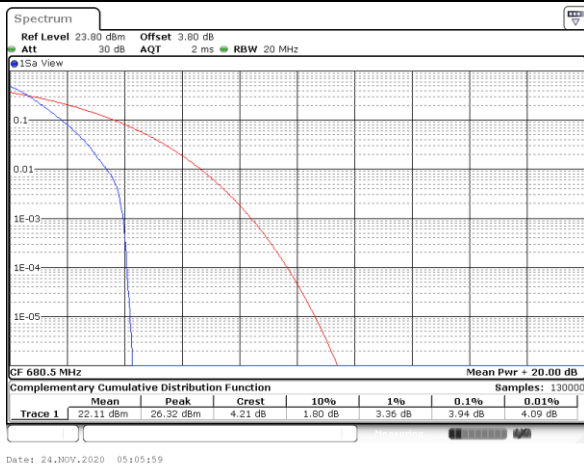
Lowest Channel / Full RB

Lowest Channel / Full RB



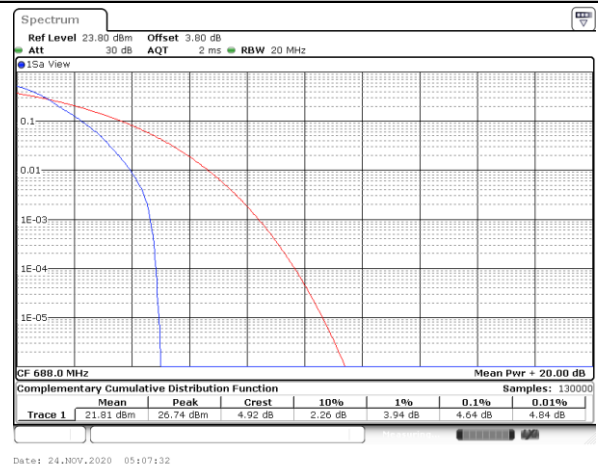
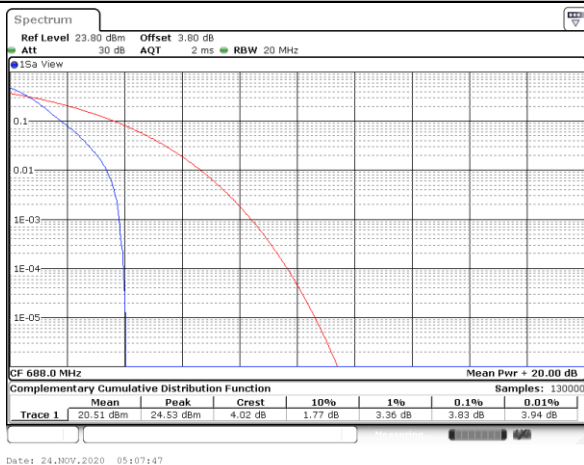
Middle Channel / Full RB

Middle Channel / Full RB



Highest Channel / Full RB

Highest Channel / Full RB



**26dB Bandwidth**

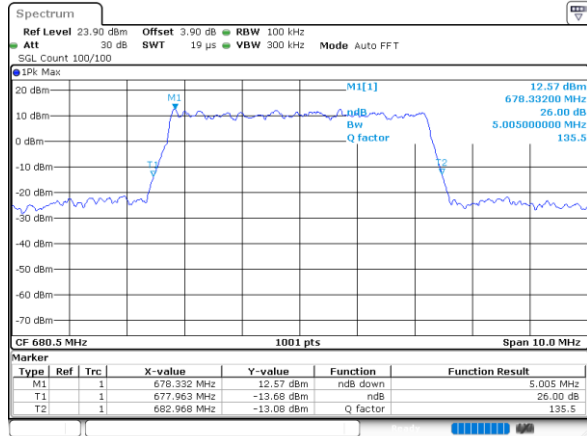
Mode	FR1 n71+2A : 26dB BW(MHz) / CP-OFDM			
BW	5MHz	5MHz	5MHz	5MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	5	4.87	4.94	4.9
BW	10MHz	10MHz	10MHz	10MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.77	9.81	9.83	9.91
BW	15MHz	15MHz	15MHz	15MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	14.89	15.04	15.04	15.1
BW	20MHz	20MHz	20MHz	20MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	19.94	19.94	19.9	19.74



FR1 n71+2A / 5MHz / CP-OFDM

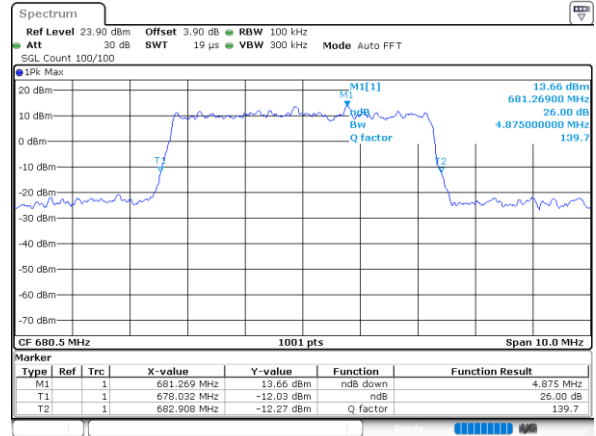
QPSK

Middle Channel



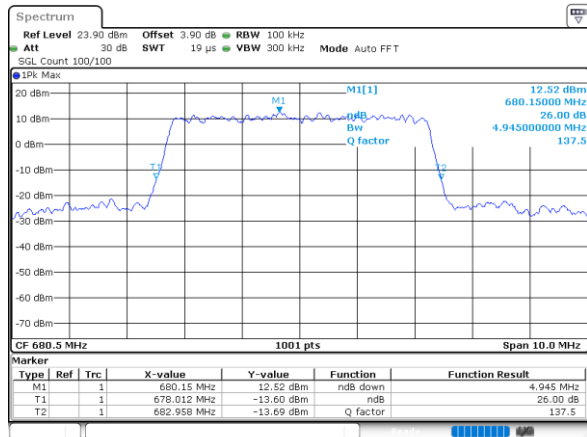
16QAM

Middle Channel



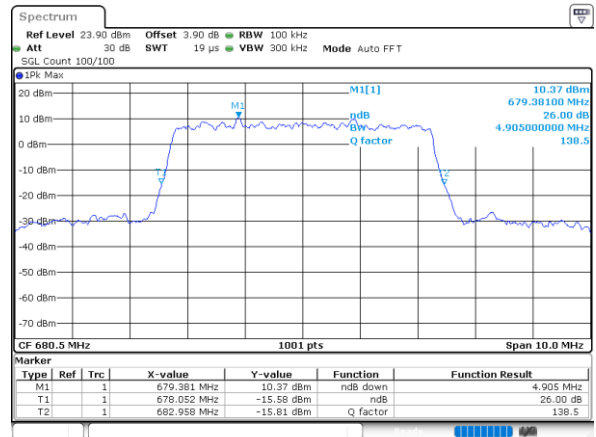
64QAM

Middle Channel



256QAM

Middle Channel

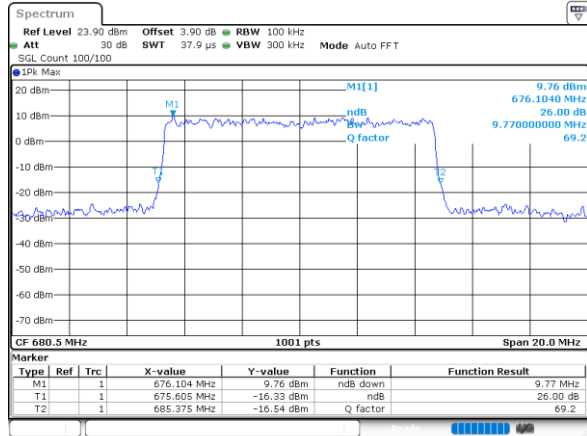




FR1 n71+2A / 10MHz / CP-OFDM

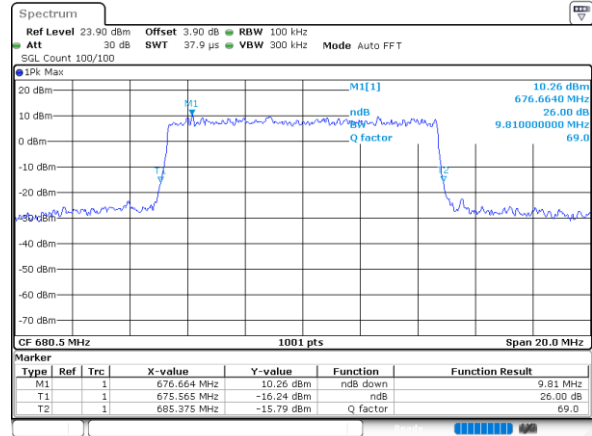
QPSK

Middle Channel



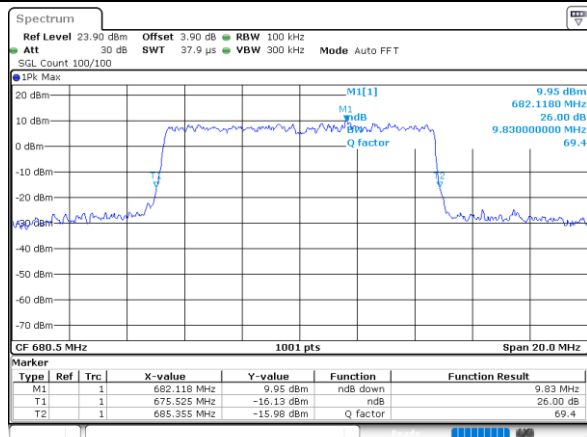
16QAM

Middle Channel



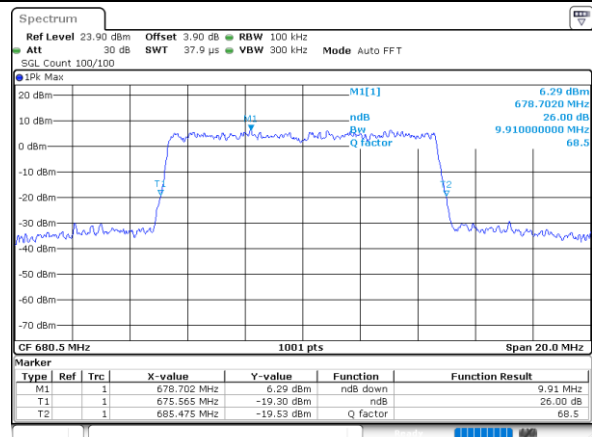
64QAM

Middle Channel



256QAM

Middle Channel

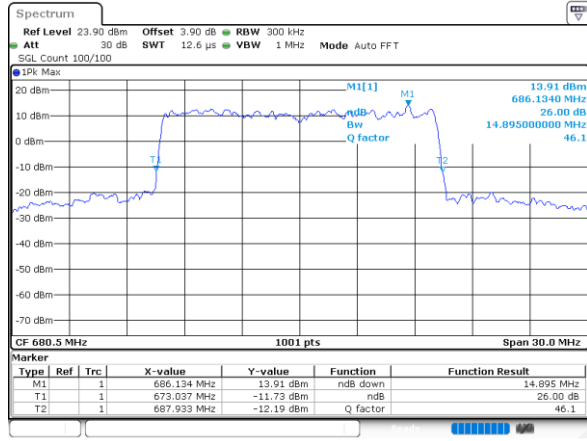




FR1 n71+2A / 15MHz / CP-OFDM

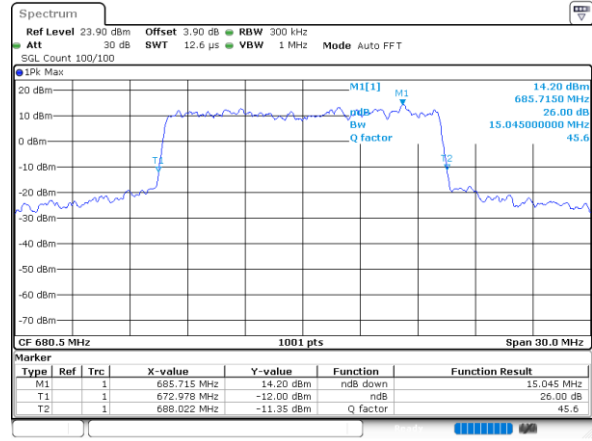
QPSK

Middle Channel



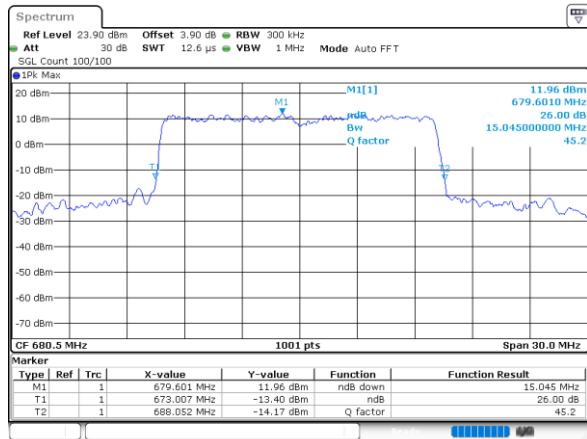
16QAM

Middle Channel



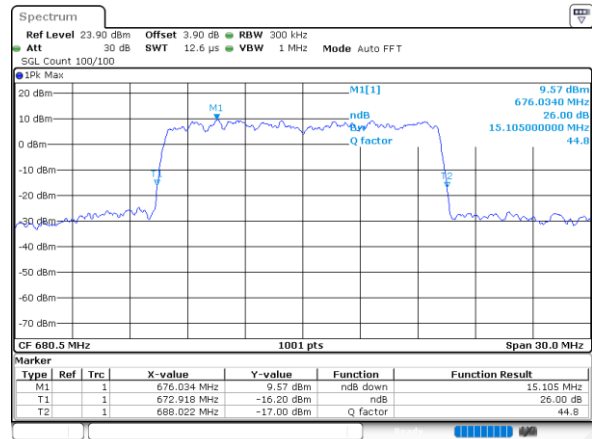
64QAM

Middle Channel



256QAM

Middle Channel

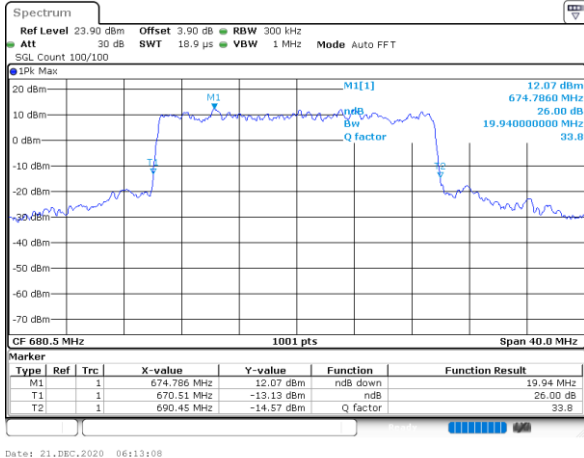




FR1 n71+2A / 20MHz / CP-OFDM

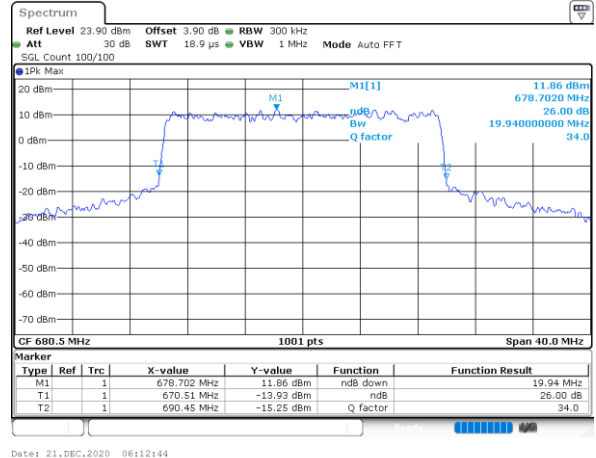
QPSK

Middle Channel



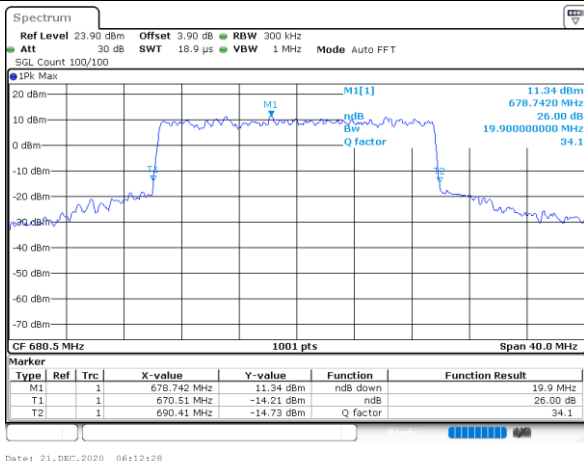
16QAM

Middle Channel



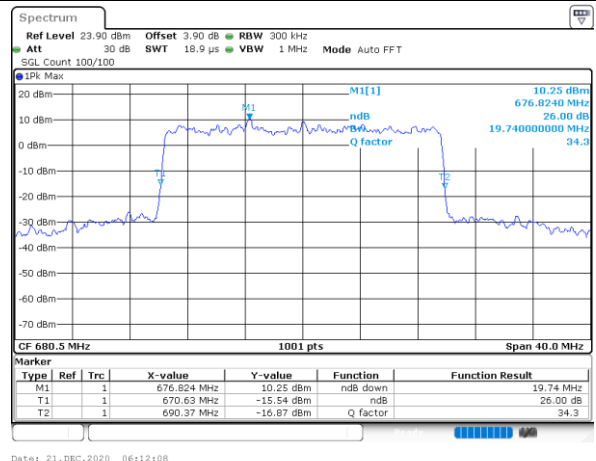
64QAM

Middle Channel



256QAM

Middle Channel



**Occupied Bandwidth**

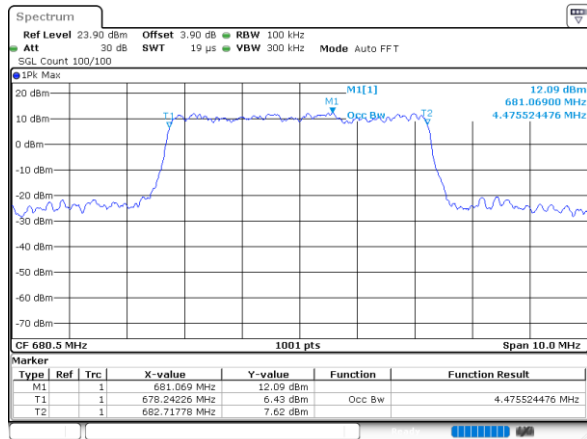
Mode	FR1 n71+2A : OBW(MHz) / CP-OFDM			
BW	5MHz	5MHz	5MHz	5MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	4.47	4.47	4.5	4.49
BW	10MHz	10MHz	10MHz	10MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	9.31	9.29	9.27	9.27
BW	15MHz	15MHz	15MHz	15MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	14.11	14.14	14.2	14.2
BW	20MHz	20MHz	20MHz	20MHz
Mod.	QPSK	16QAM	64QAM	256QAM
Middle CH	18.9	18.9	18.98	18.94



FR1 n71+2A / 5MHz / CP-OFDM

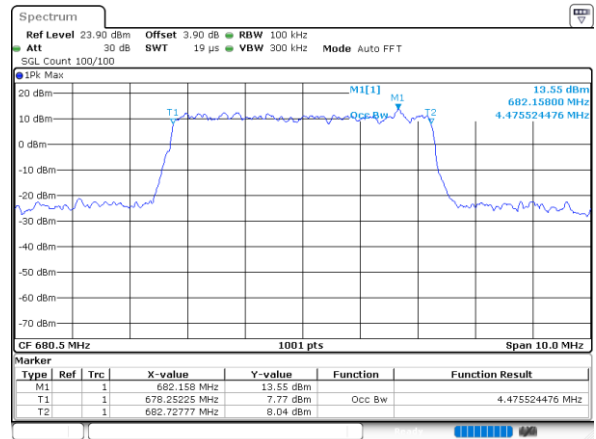
QPSK

Middle Channel



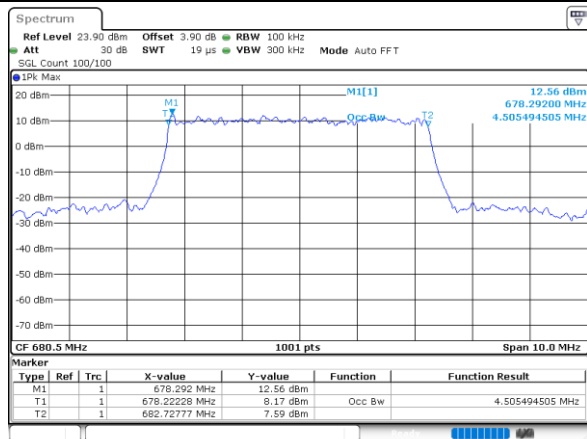
16QAM

Middle Channel



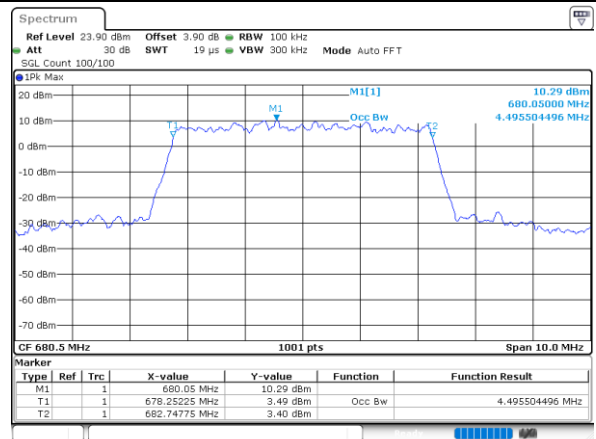
64QAM

Middle Channel



256QAM

Middle Channel

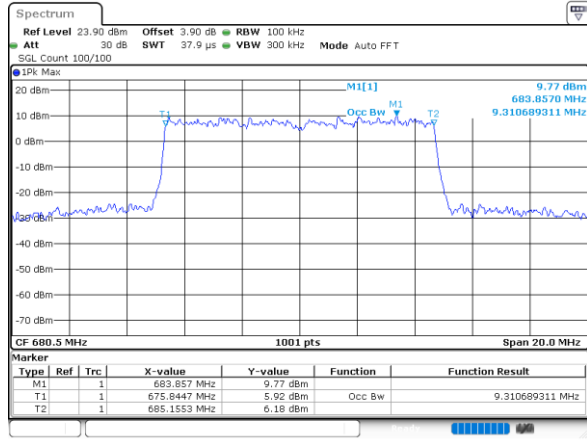




FR1 n71+2A / 10MHz / CP-OFDM

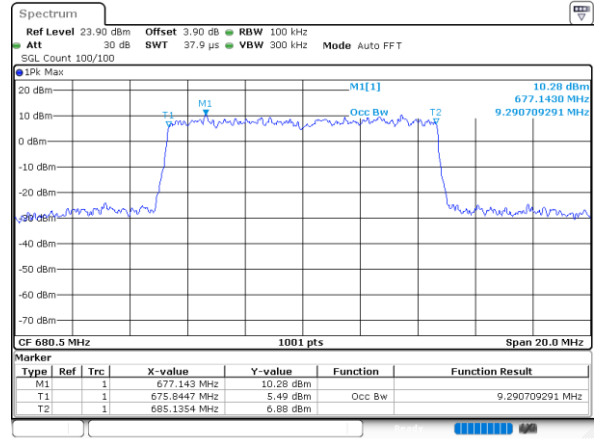
QPSK

Middle Channel



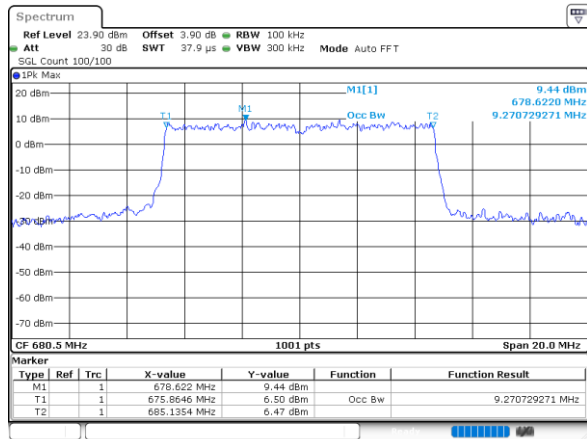
16QAM

Middle Channel



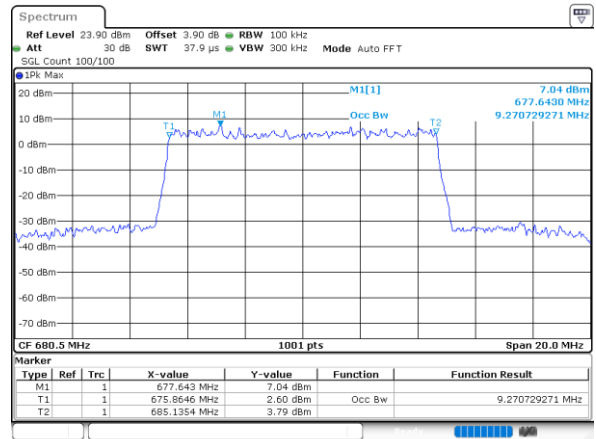
64QAM

Middle Channel



256QAM

Middle Channel

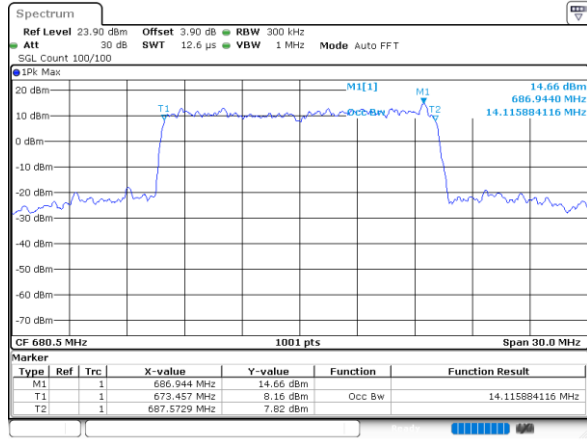




FR1 n71+2A / 15MHz / CP-OFDM

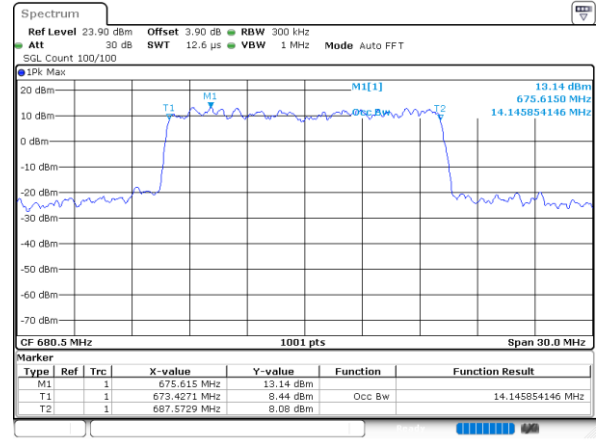
QPSK

Middle Channel



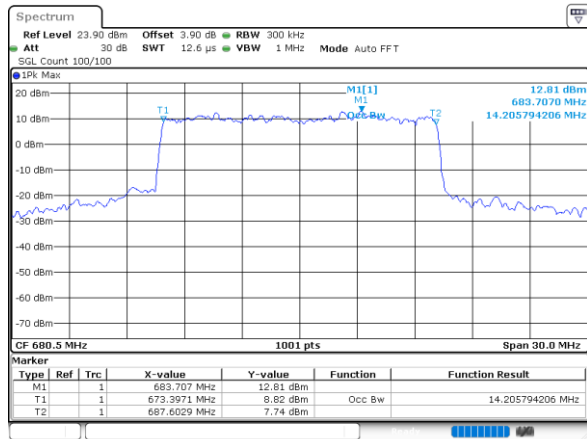
16QAM

Middle Channel



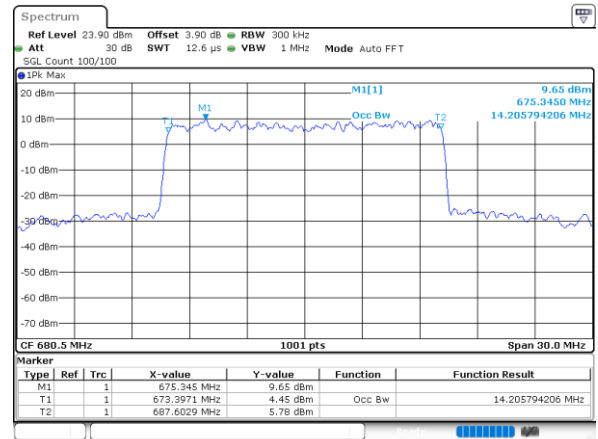
64QAM

Middle Channel



256QAM

Middle Channel

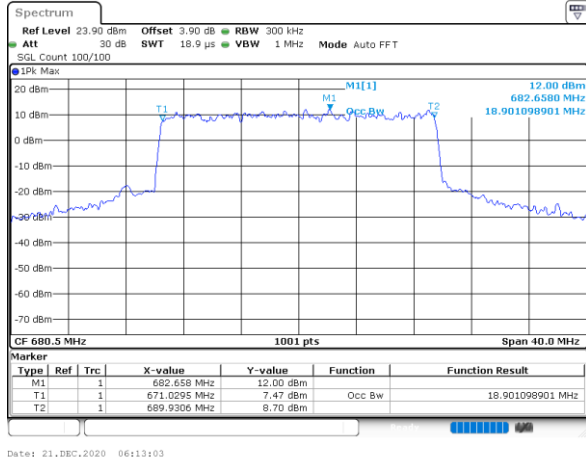




FR1 n71+2A / 20MHz / CP-OFDM

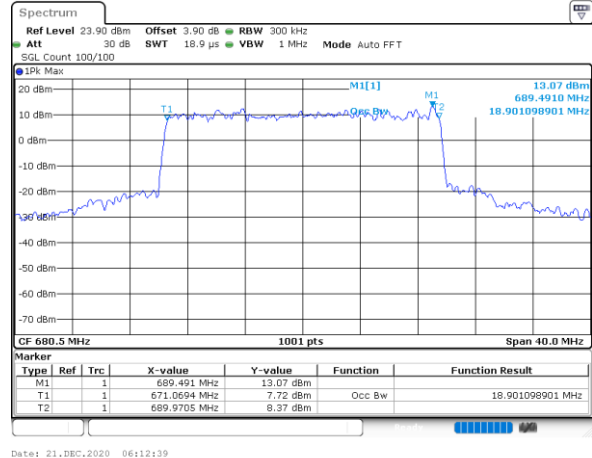
QPSK

Middle Channel



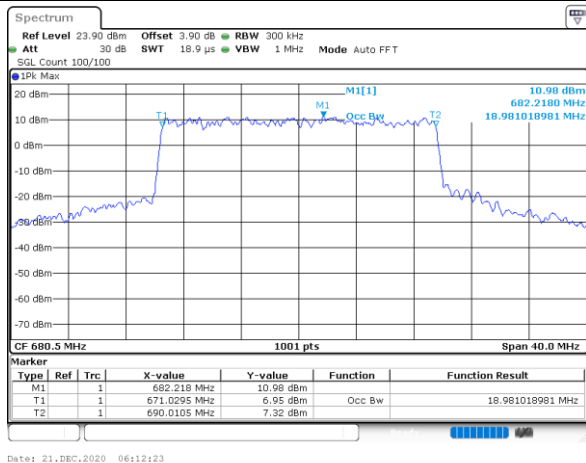
16QAM

Middle Channel



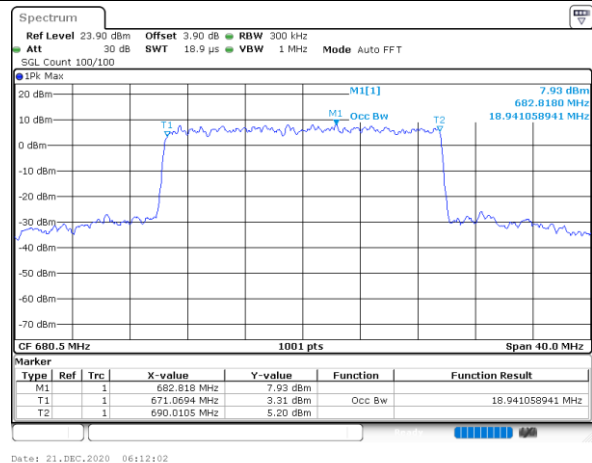
64QAM

Middle Channel



256QAM

Middle Channel

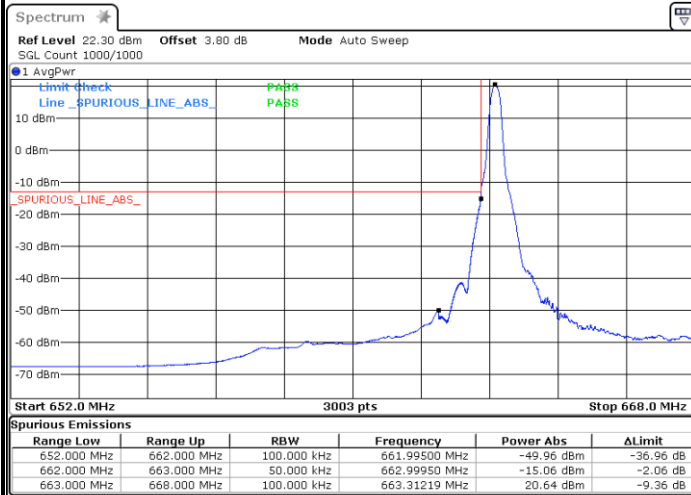




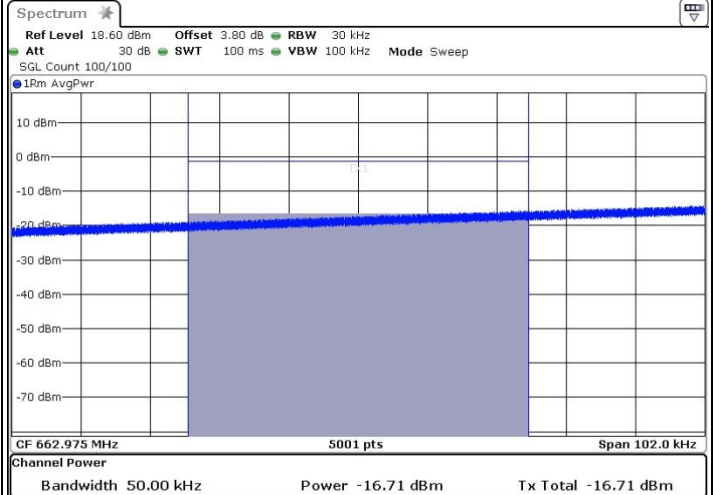
Conducted Band Edge

FR1 n71+2A / 5MHz / DFT-S OFDM BPSK

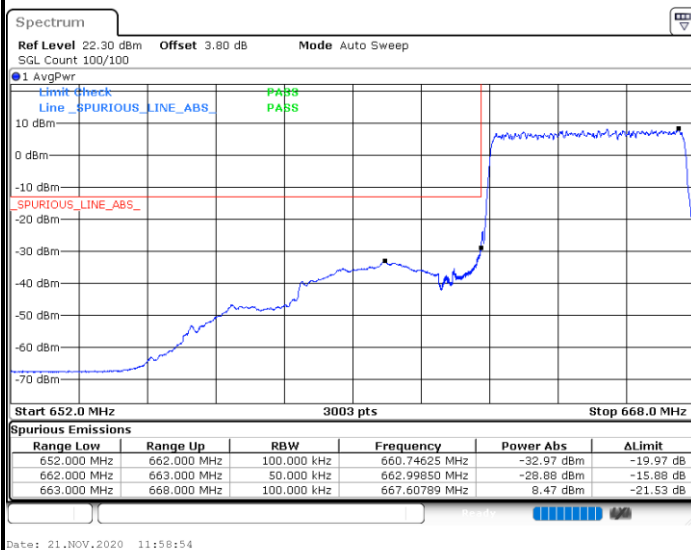
Lowest Band Edge / 1 RB



Channel Power < -13dBm Pass

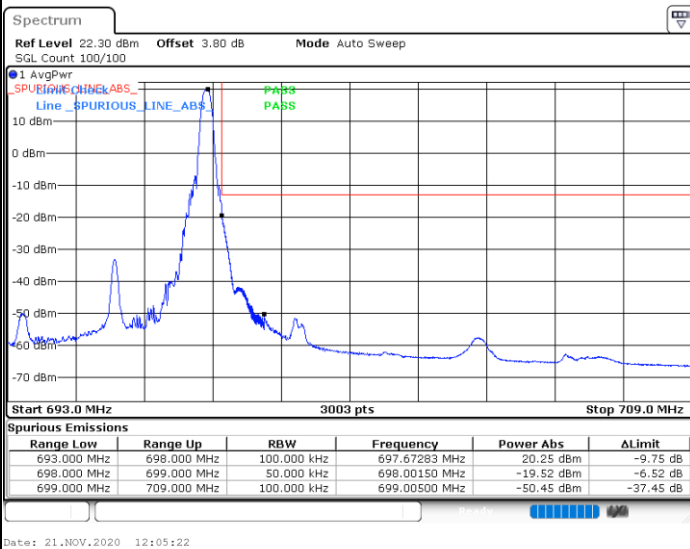


Lowest Band Edge / Full RB



Channel Power < -13dBm Pass

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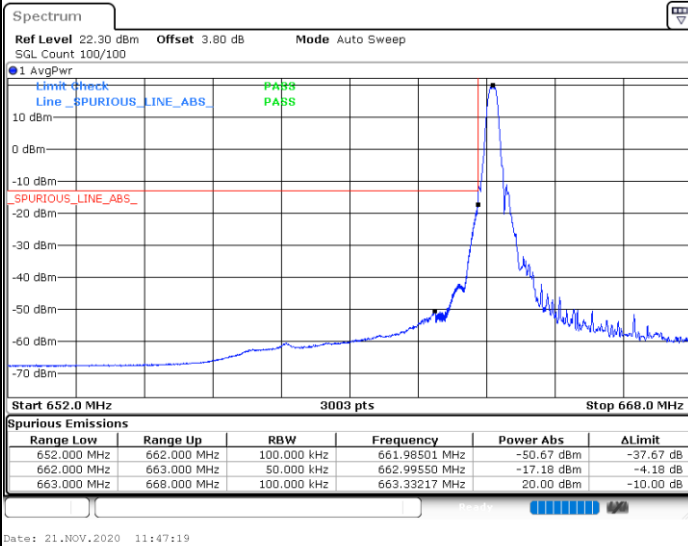
**FR1 n71+2A / 5MHz / DFT-S OFDM BPSK****Highest Band Edge / 1 RB****Channel Power < -13dBm Pass****Highest Band Edge / Full RB****Channel Power < -13dBm Pass**



FR1 n71+2A / 5MHz / DFT-S OFDM QPSK

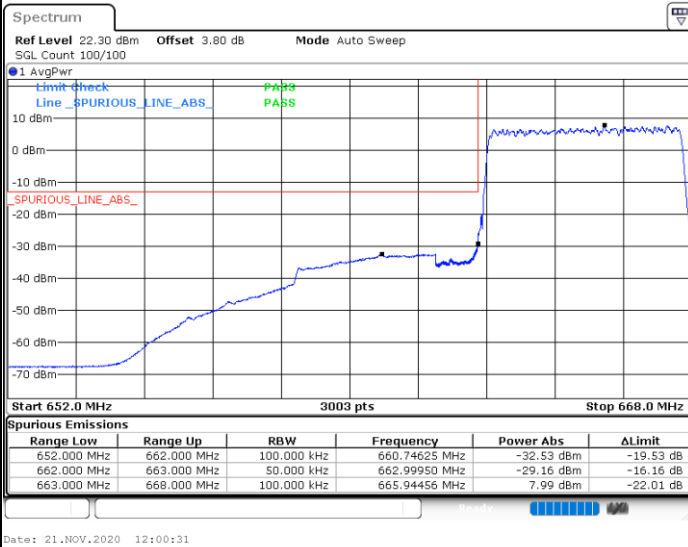
Lowest Band Edge / 1 RB

Channel Power < -13dBm Pass



Lowest Band Edge / Full RB

Channel Power < -13dBm Pass

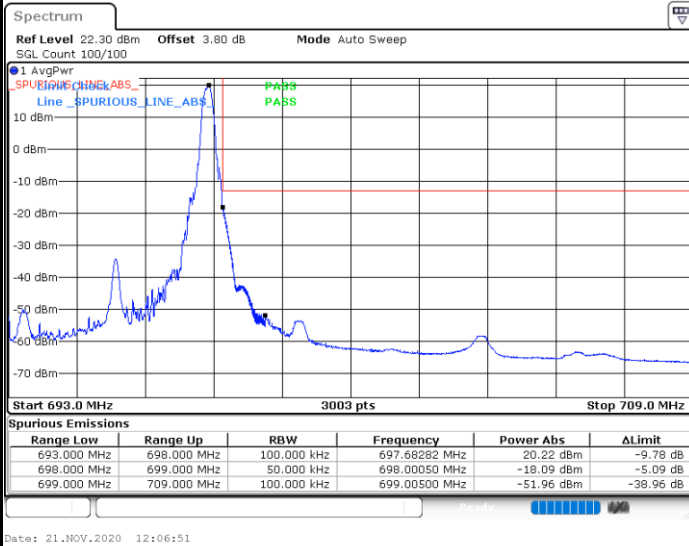




FR1 n71+2A / 5MHz / DFT-S OFDM QPSK

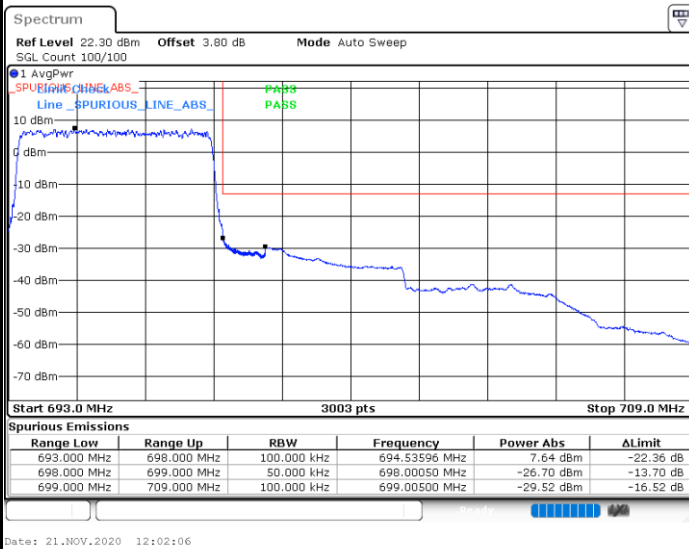
Highest Band Edge / 1 RB

Channel Power < -13dBm Pass



Highest Band Edge / Full RB

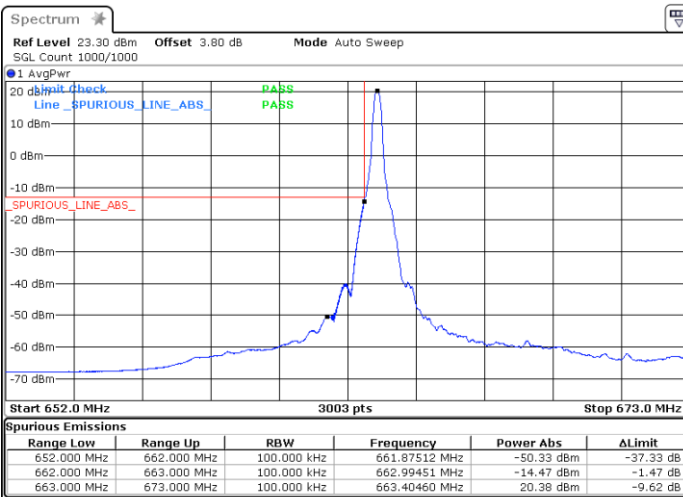
Channel Power < -13dBm Pass



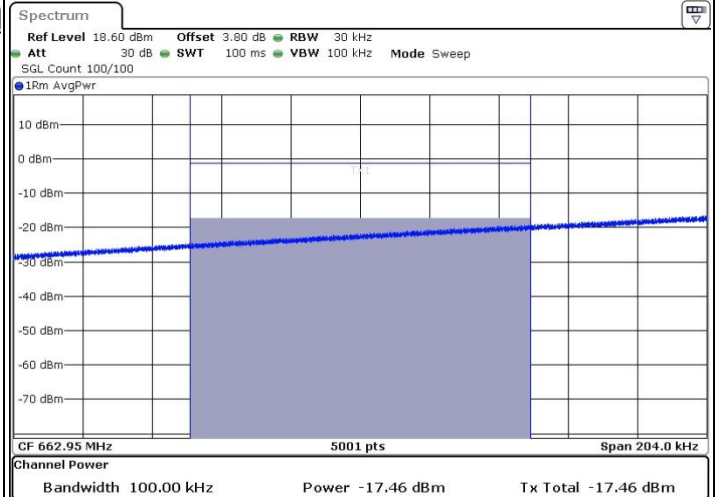


FR1 n71+2A / 10MHz / DFT-S OFDM BPSK

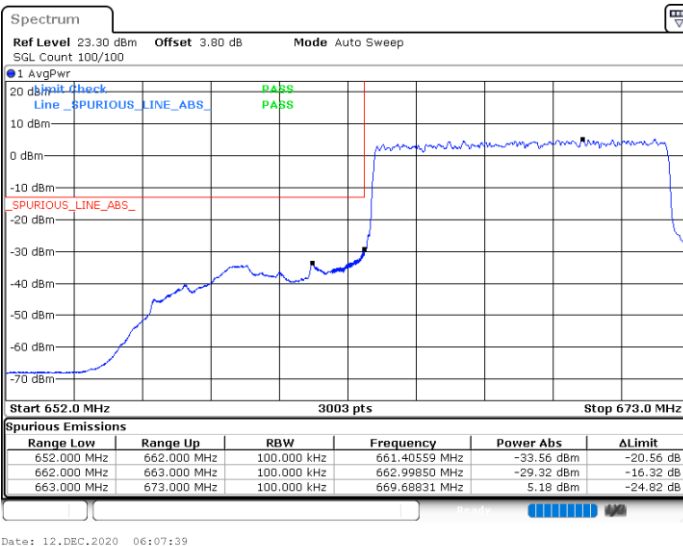
Lowest Band Edge / 1 RB



Channel Power < -13dBm Pass



Lowest Band Edge / Full RB



Channel Power < -13dBm Pass

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