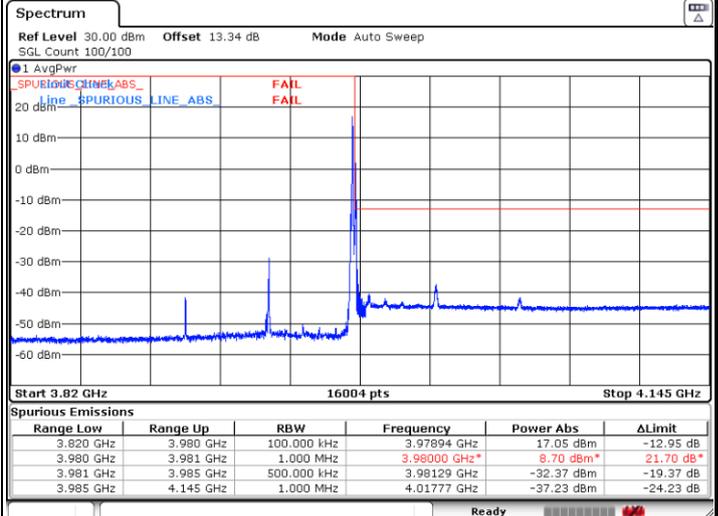
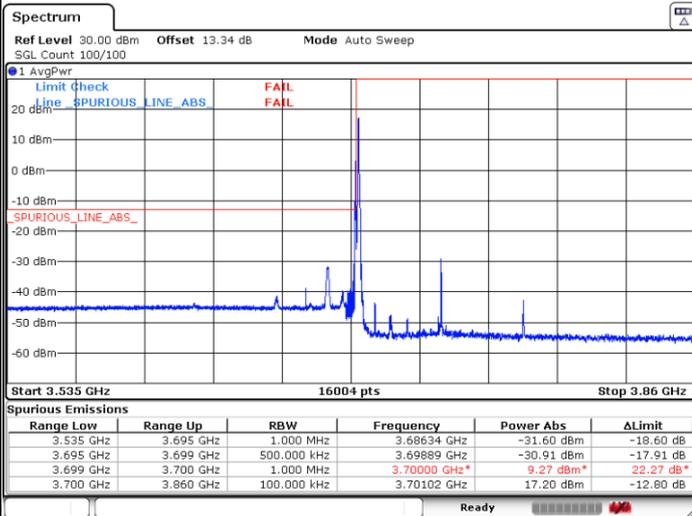




FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

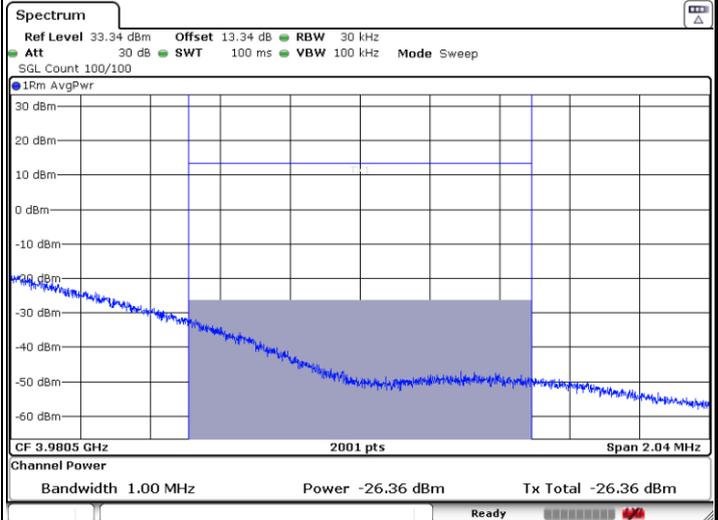
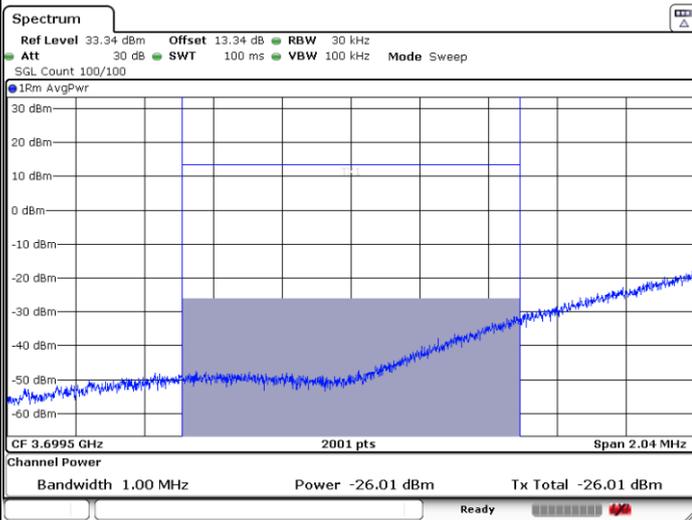


Date: 4 DEC.2020 19:40:38

Date: 4 DEC.2020 19:47:12

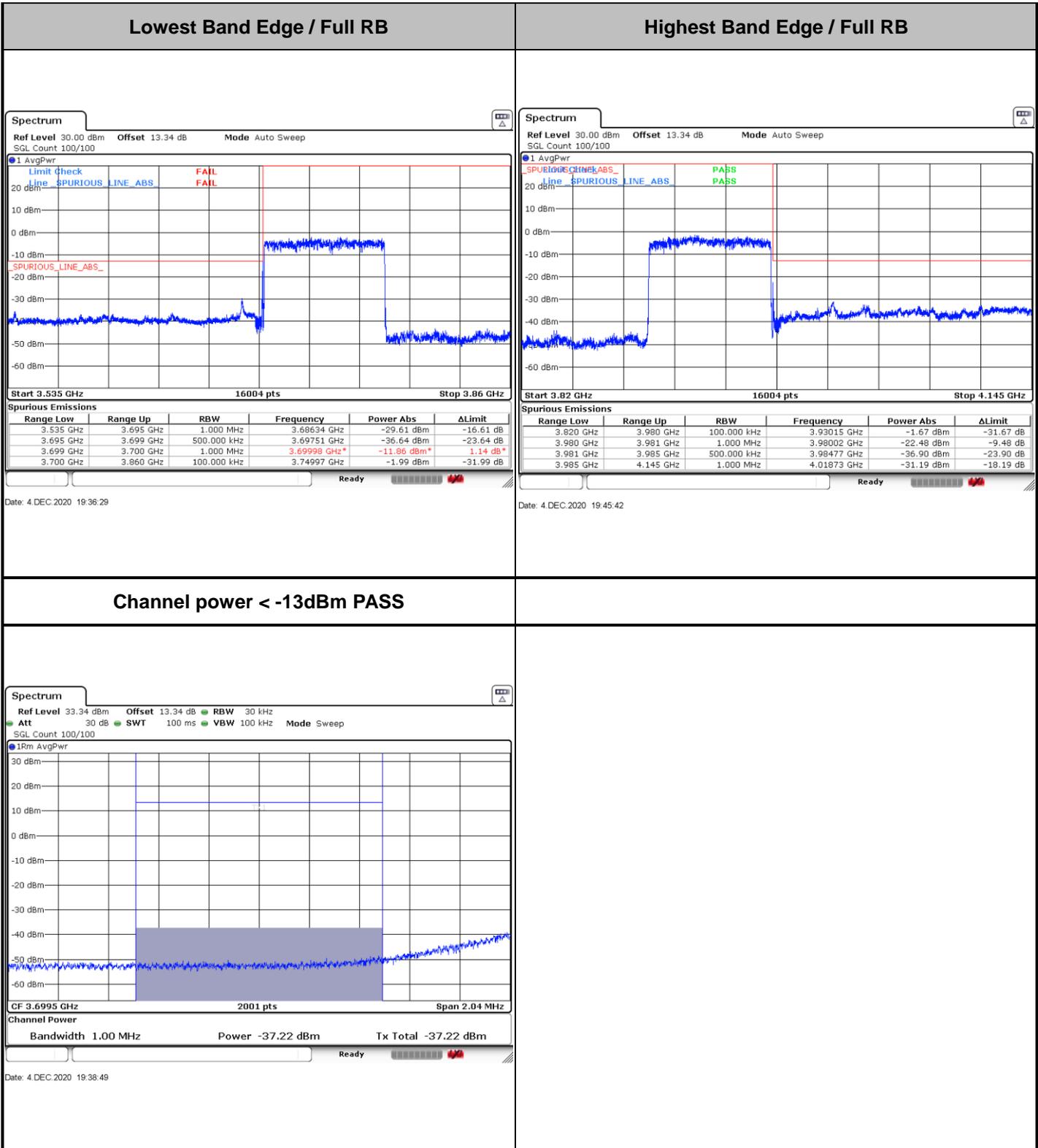
Channel power < -13dBm PASS

Channel power < -13dBm PASS



Date: 4 DEC.2020 19:42:21

Date: 4 DEC.2020 19:49:54

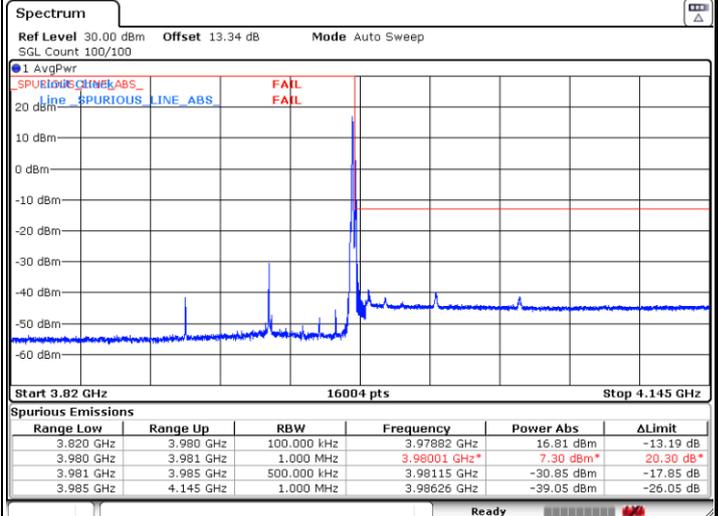
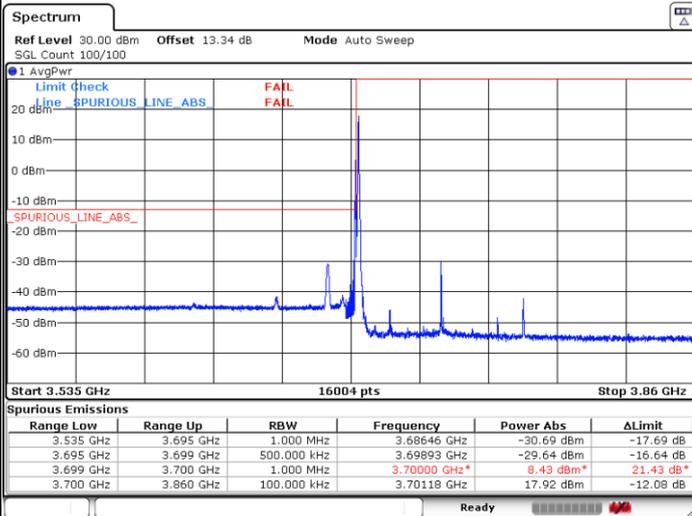




FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

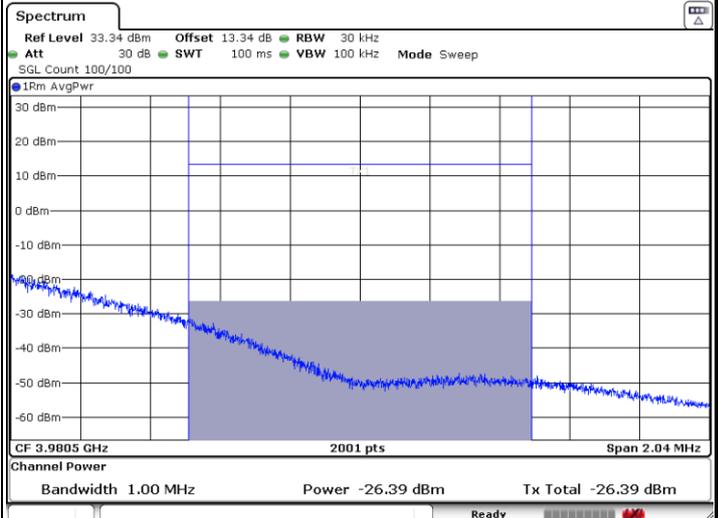
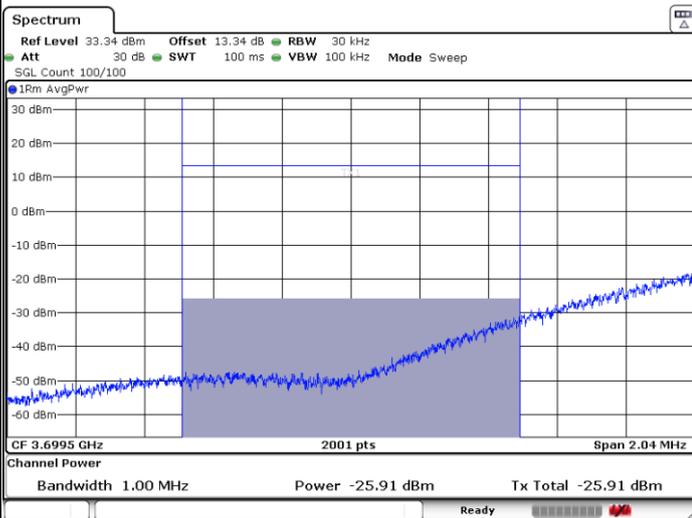


Date: 4 DEC.2020 19:40:52

Date: 4 DEC.2020 19:47:26

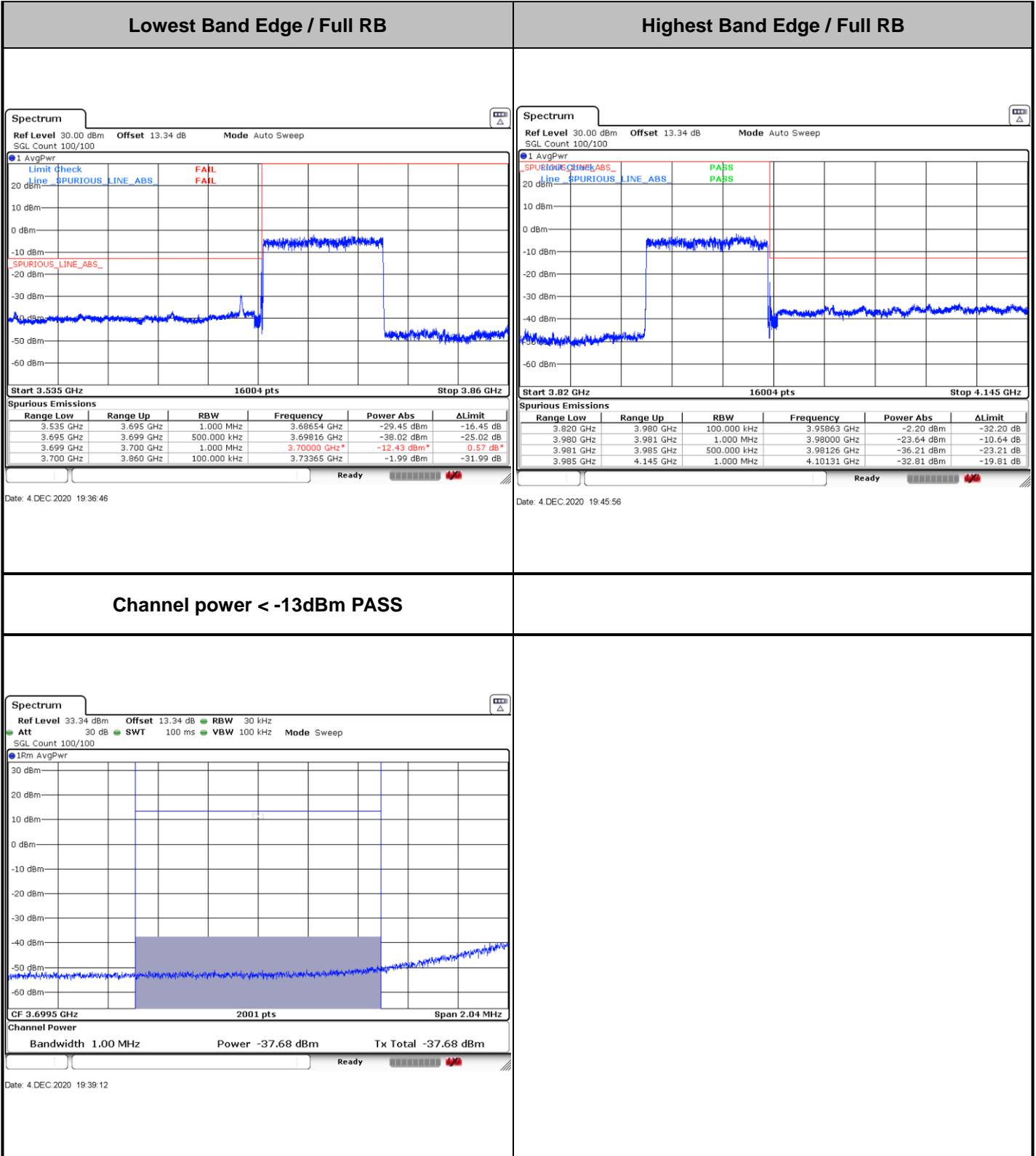
Channel power < -13dBm PASS

Channel power < -13dBm PASS



Date: 4 DEC.2020 19:42:42

Date: 4 DEC.2020 19:50:18

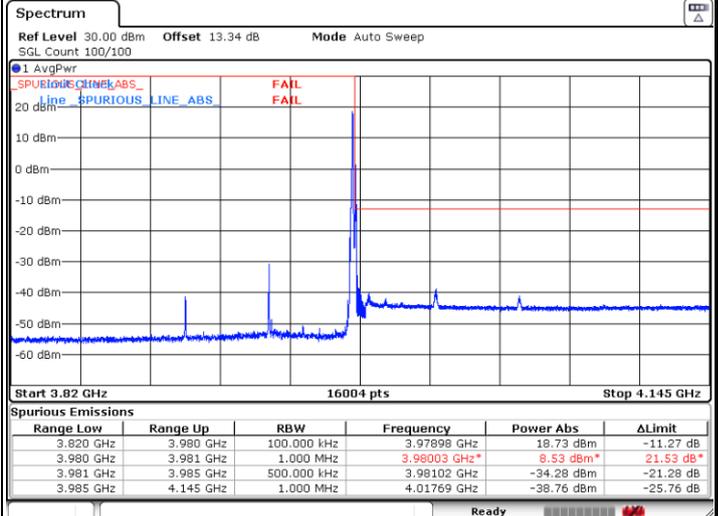
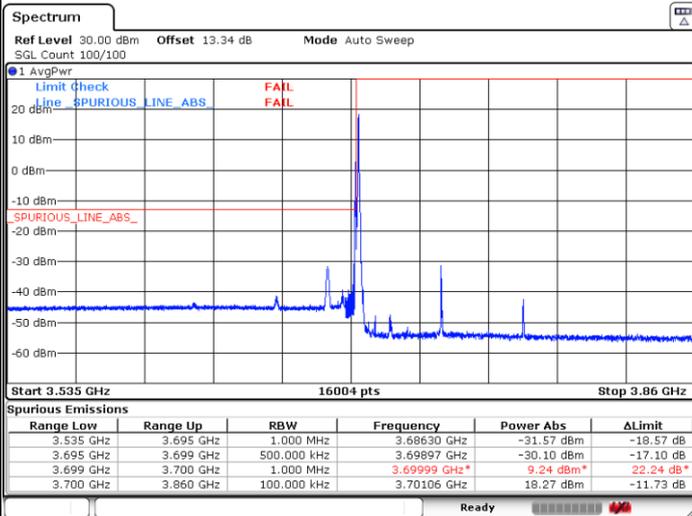




FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

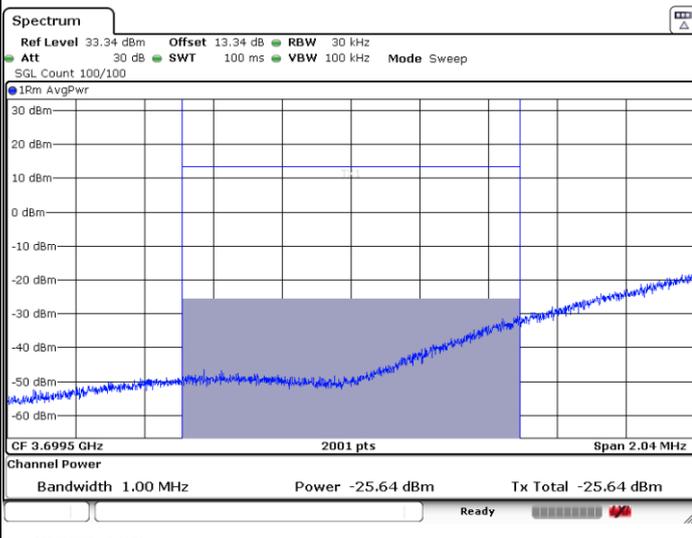


Date: 4 DEC.2020 19:41:05

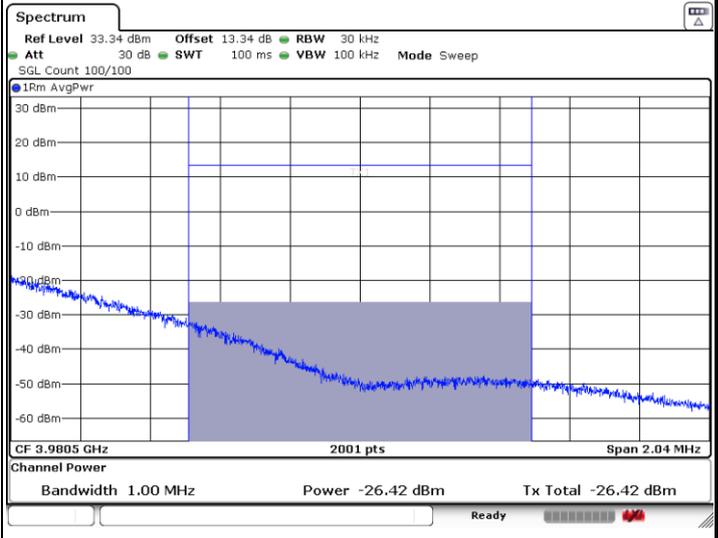
Date: 4 DEC.2020 19:47:52

Channel power < -13dBm PASS

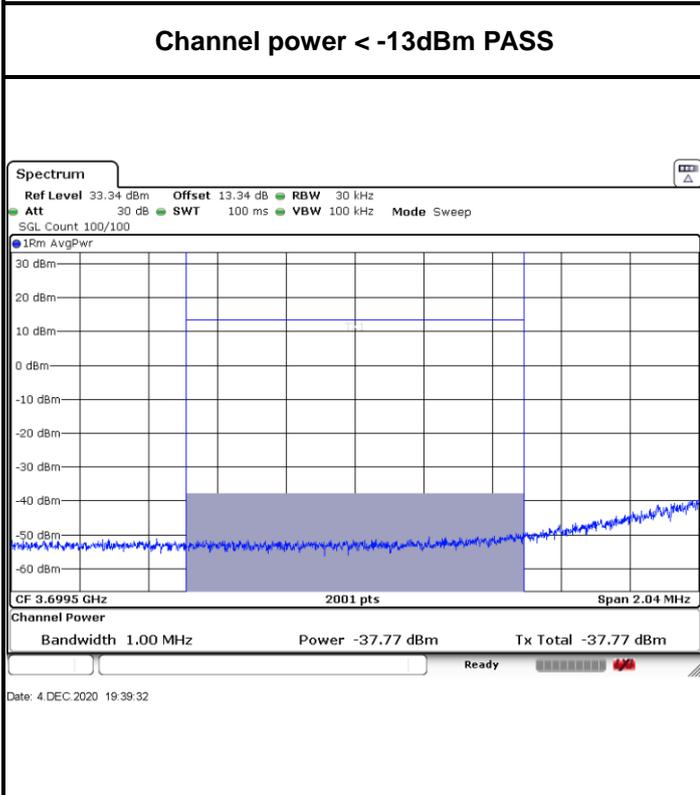
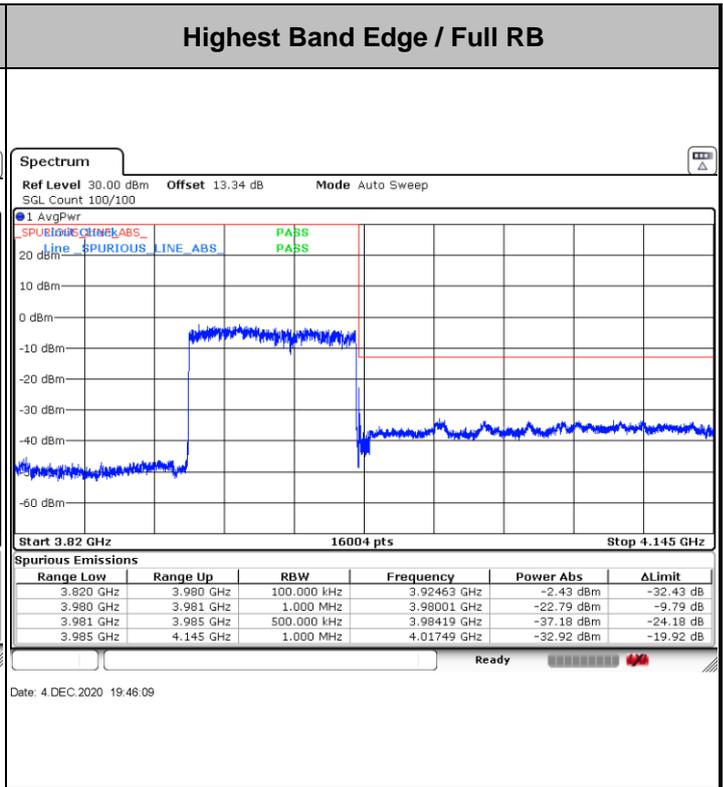
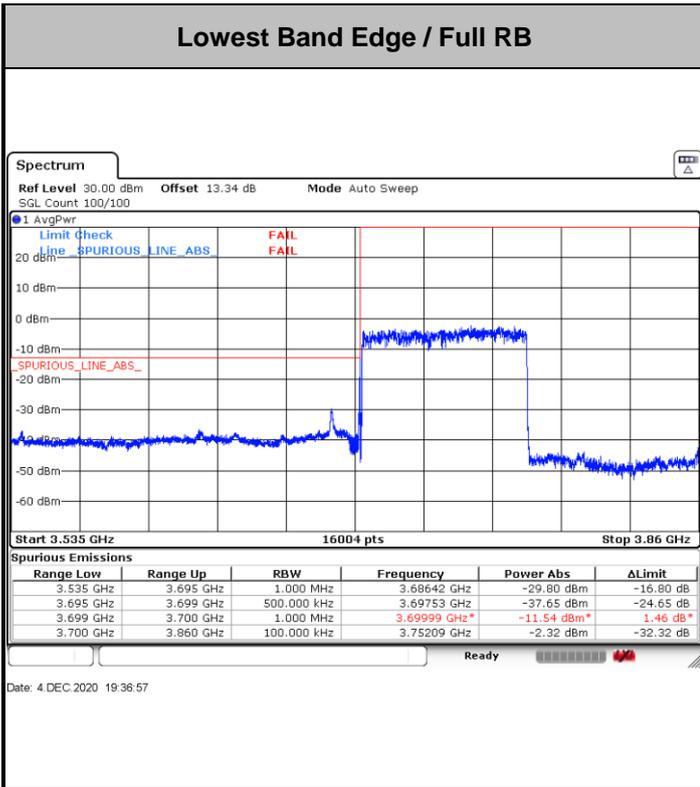
Channel power < -13dBm PASS



Date: 4 DEC.2020 19:43:01



Date: 4 DEC.2020 19:50:37

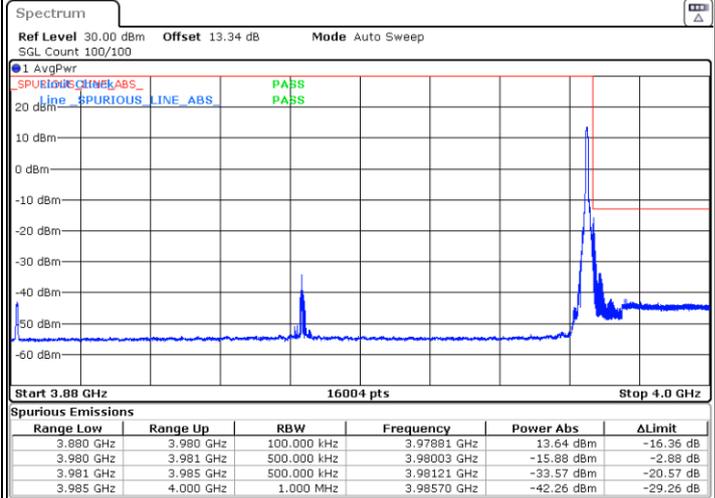
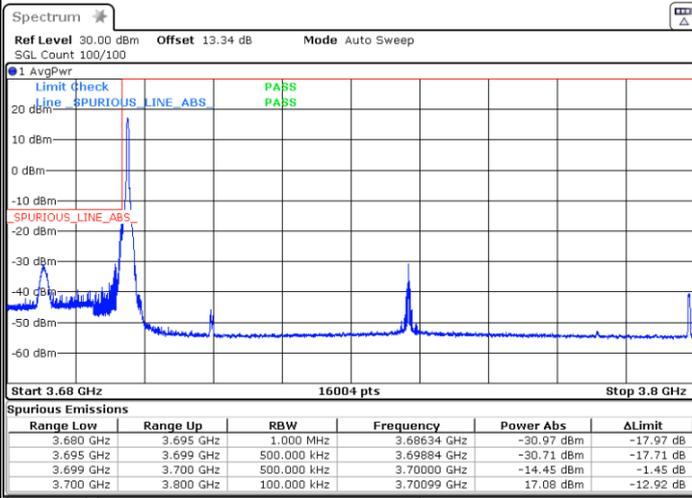




FR1 n77 / 100MHz / DFT-S OFDM / BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

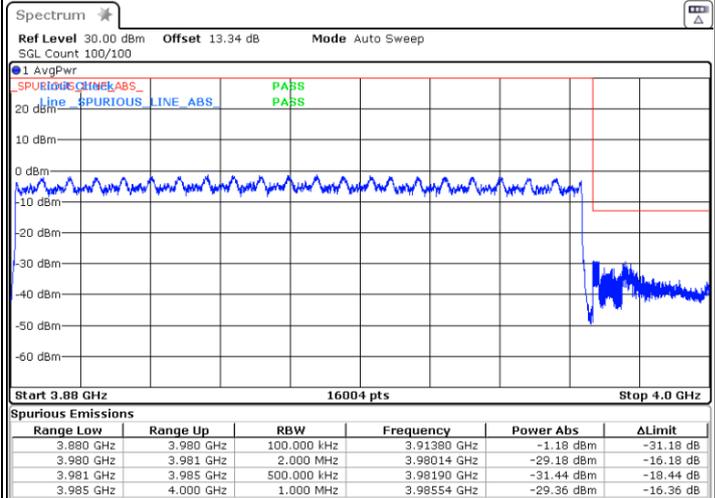
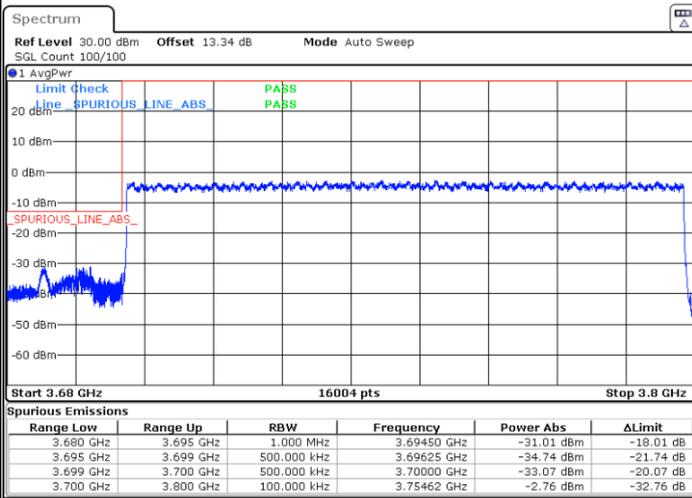


Date: 4 DEC.2020 21:32:36

Date: 4 DEC.2020 21:46:51

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 DEC.2020 20:59:02

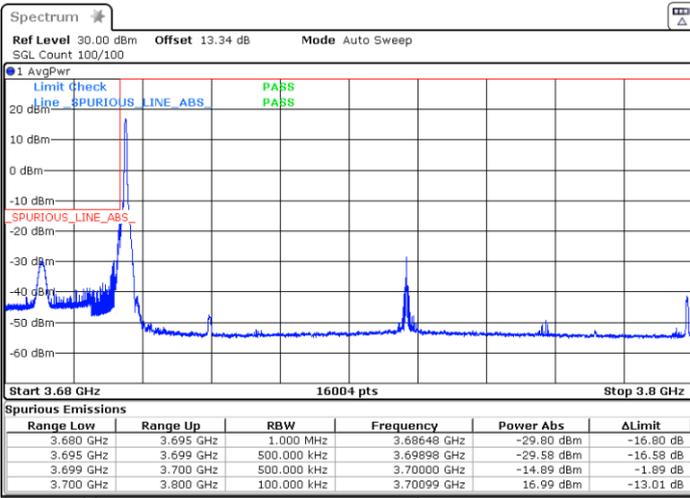
Date: 4 DEC.2020 22:53:45



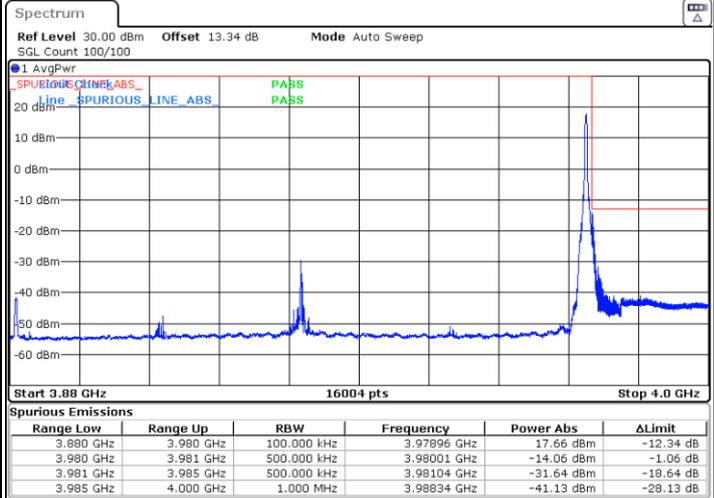
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



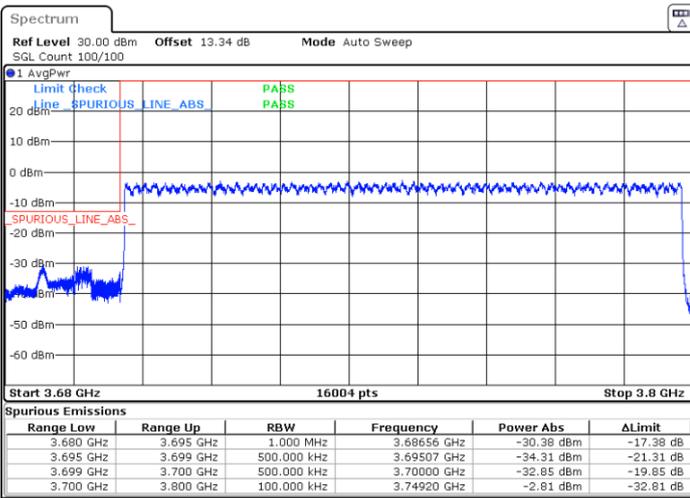
Date: 4 DEC.2020 21:34:06



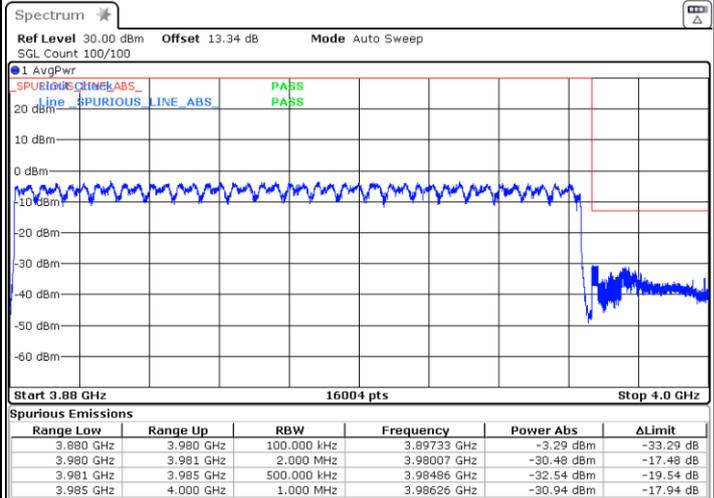
Date: 4 DEC.2020 21:47:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 DEC.2020 21:00:15



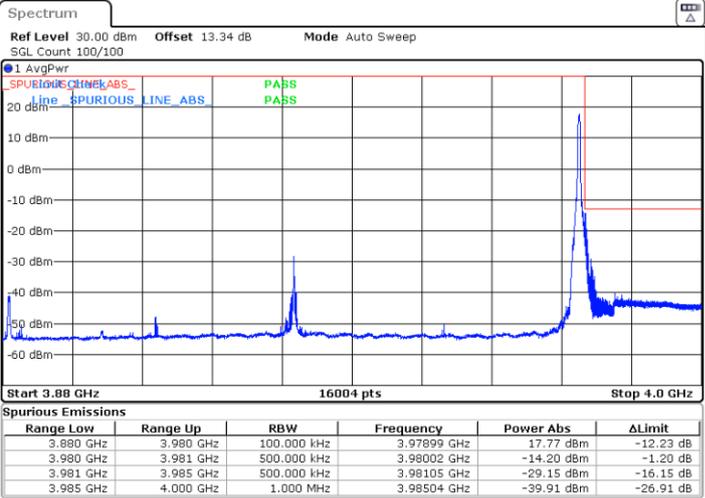
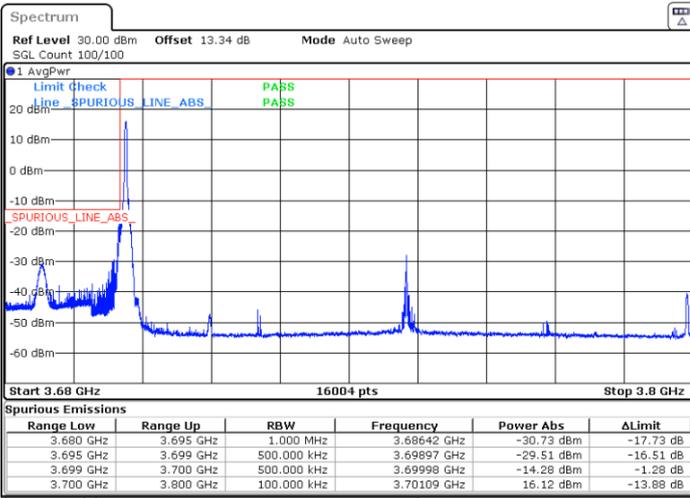
Date: 4 DEC.2020 22:56:09



FR1 n77 / 100MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

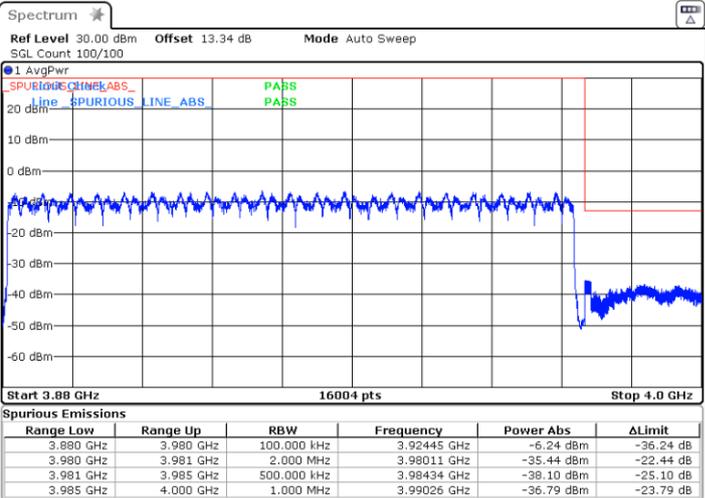
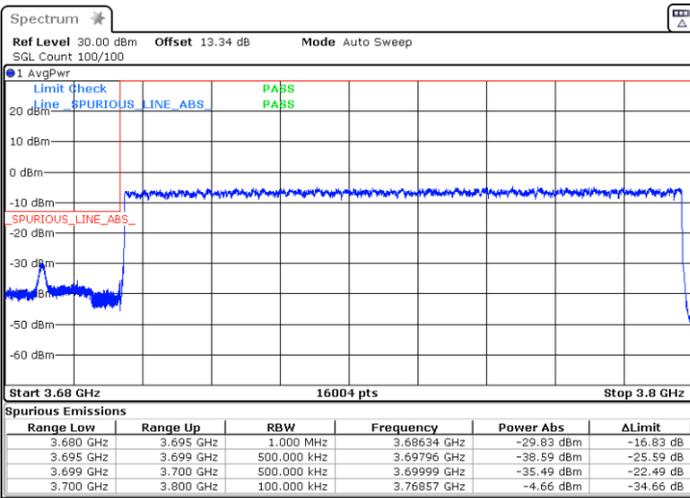


Date: 4 DEC.2020 21:35:08

Date: 4 DEC.2020 21:49:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 DEC.2020 21:01:44

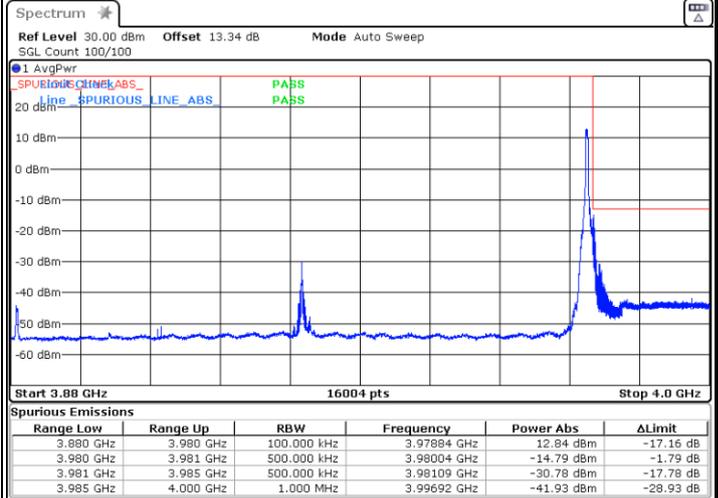
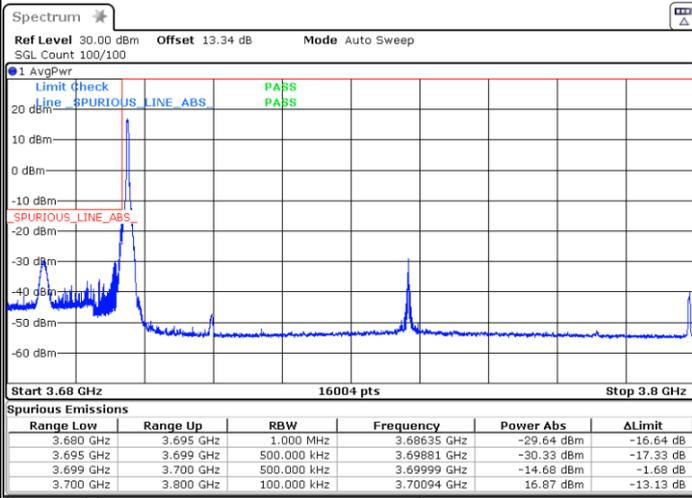
Date: 4 DEC.2020 23:00:09



FR1 n77 /100MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

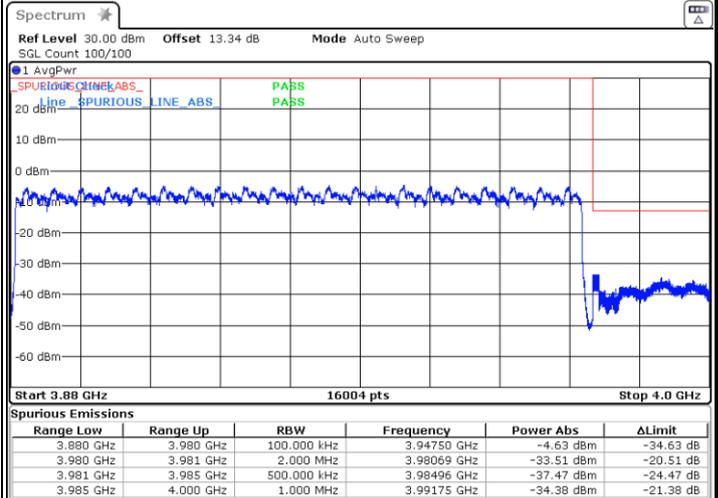
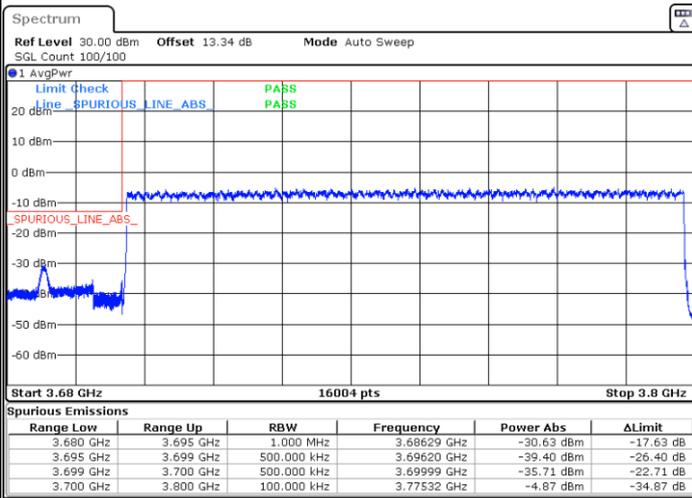


Date: 4 DEC.2020 21:38:16

Date: 4 DEC.2020 21:52:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4 DEC.2020 21:02:31

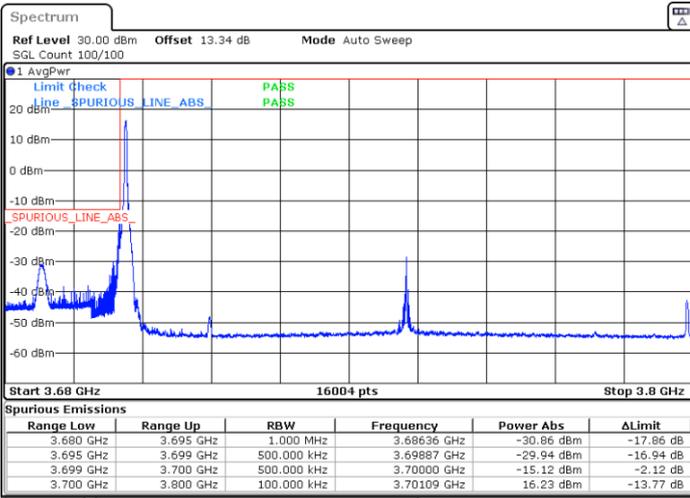
Date: 4 DEC.2020 22:58:58



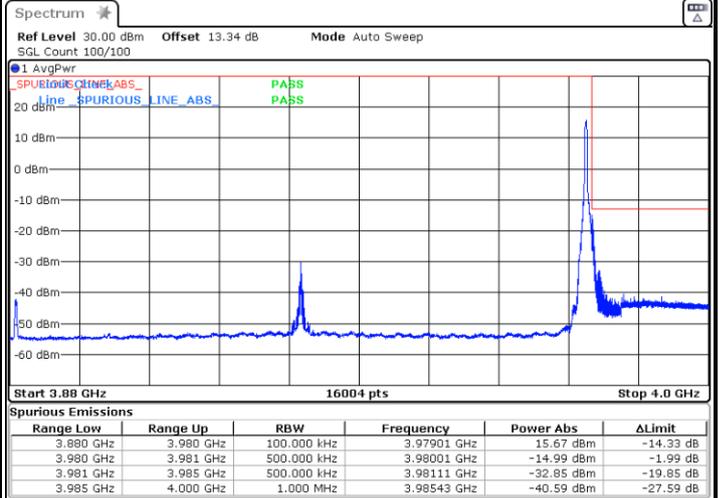
FR1 n77 /100MHz / DFT-S OFDM / 256Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



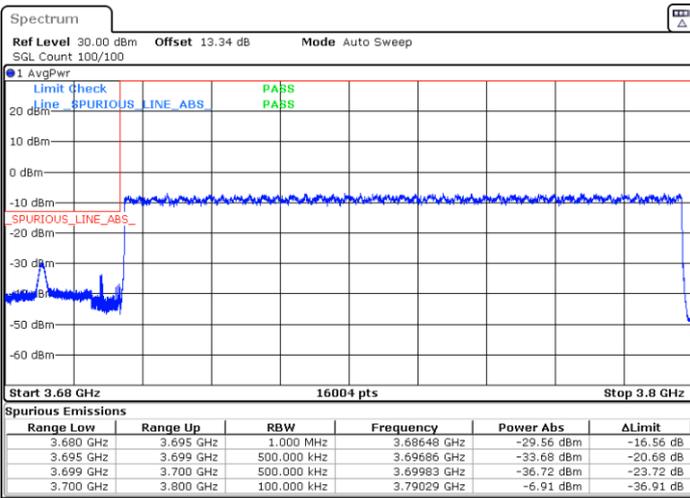
Date: 4 DEC.2020 21:08:02



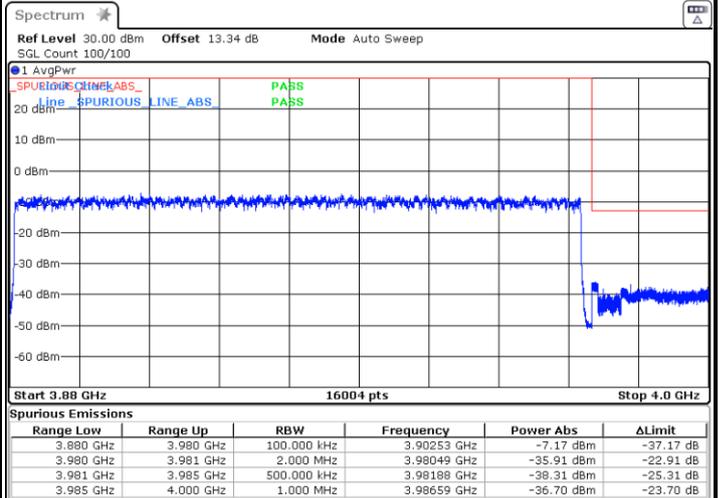
Date: 4 DEC.2020 22:18:28

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



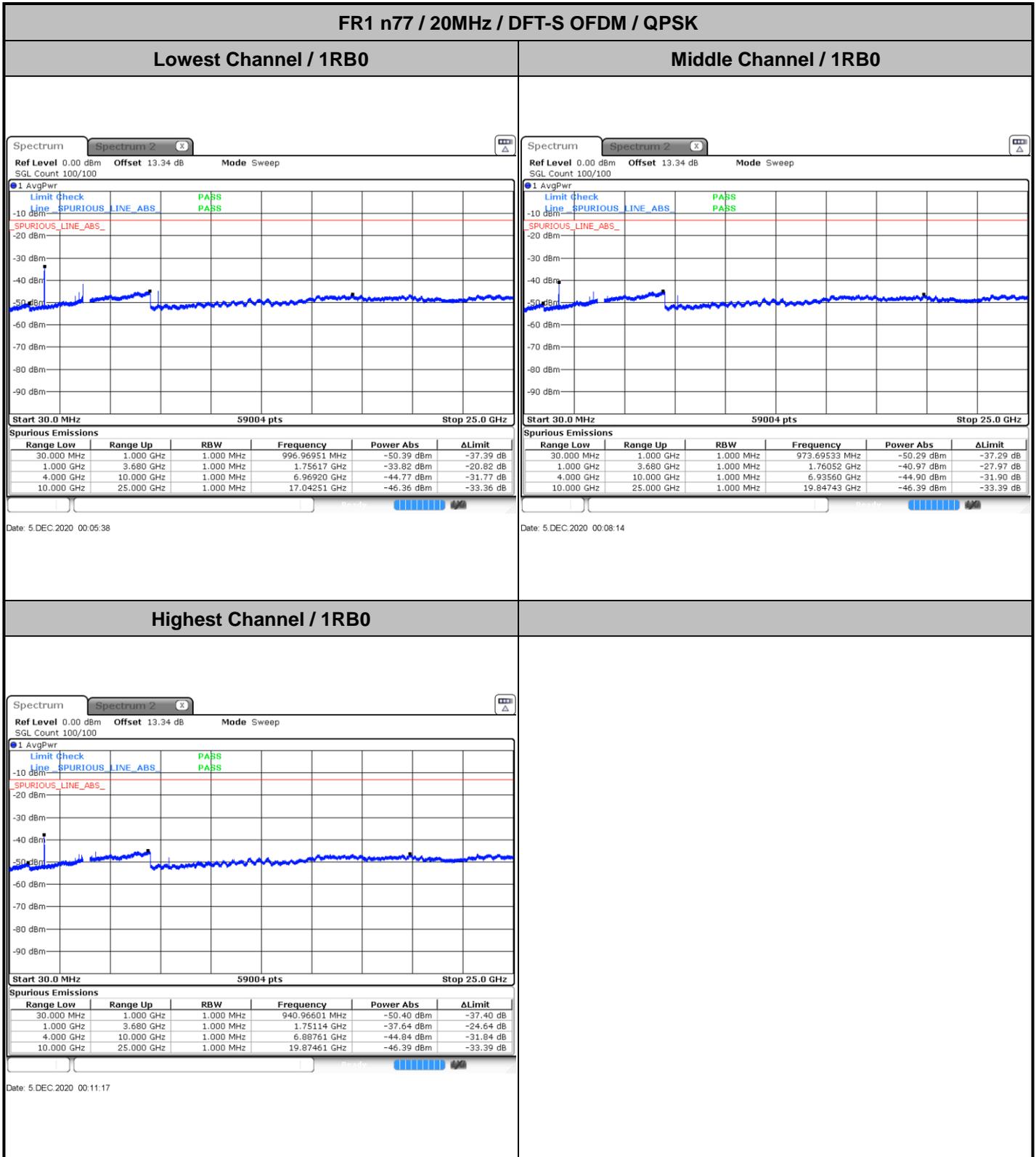
Date: 4 DEC.2020 21:07:14



Date: 4 DEC.2020 23:01:19



Conducted Spurious Emission

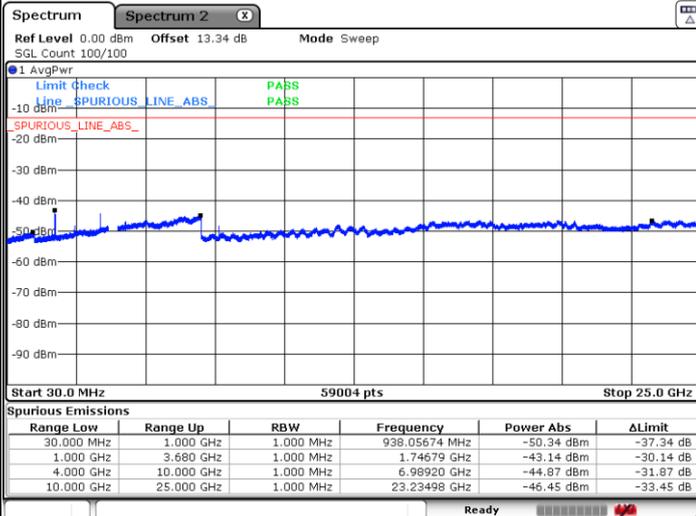




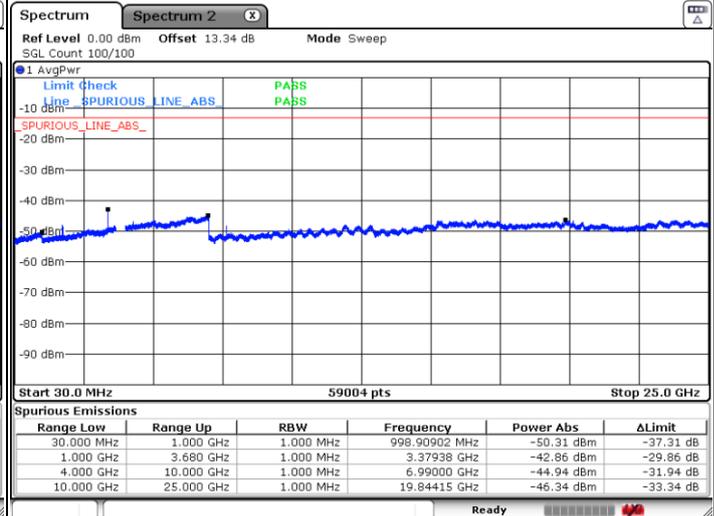
FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

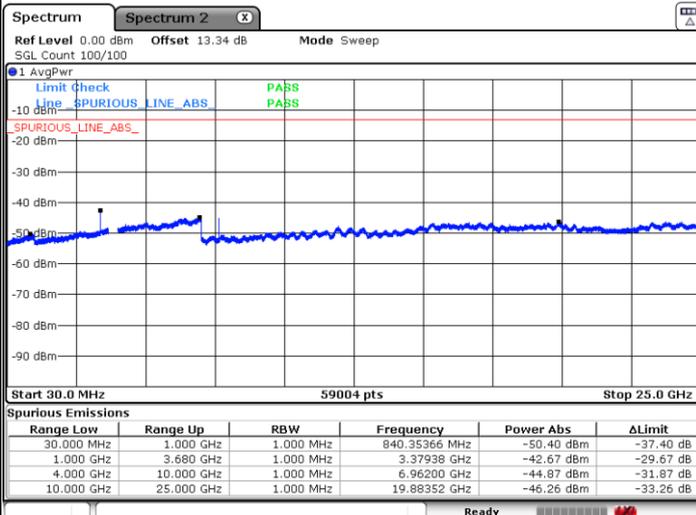


Date: 5 DEC.2020 00:42:29



Date: 5 DEC.2020 00:40:54

Highest Channel / 1RB0



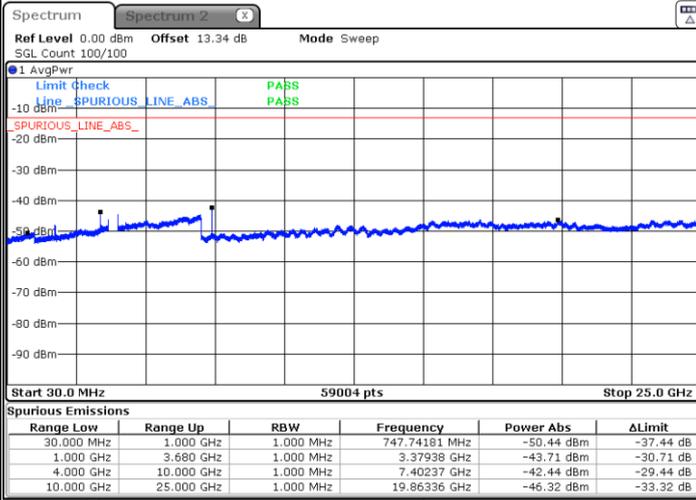
Date: 5 DEC.2020 00:43:18



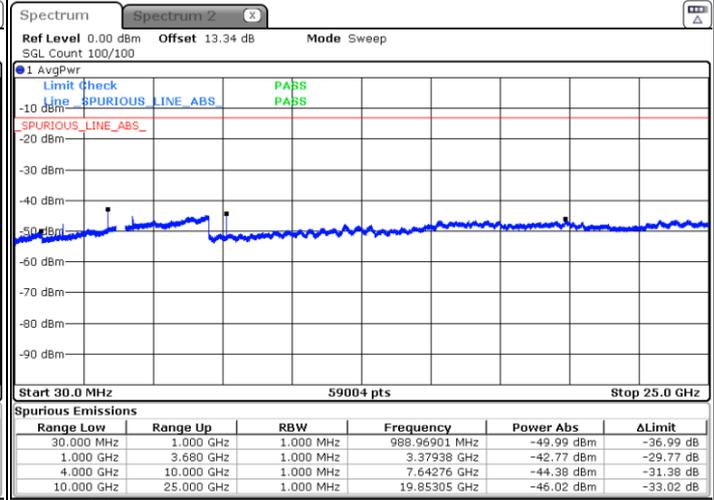
FR1 n77 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

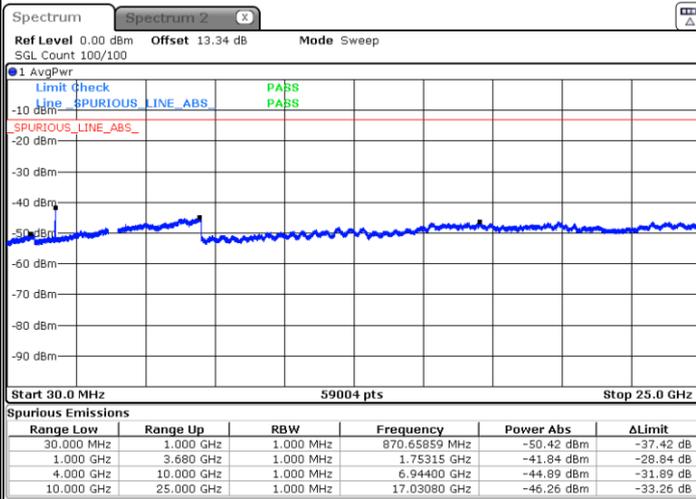


Date: 5 DEC.2020 00:15:45



Date: 5 DEC.2020 00:14:23

Highest Channel / 1RB0



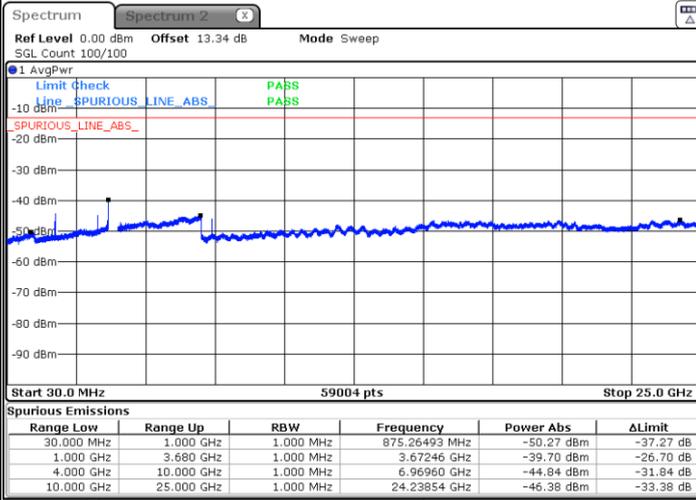
Date: 5 DEC.2020 00:22:10



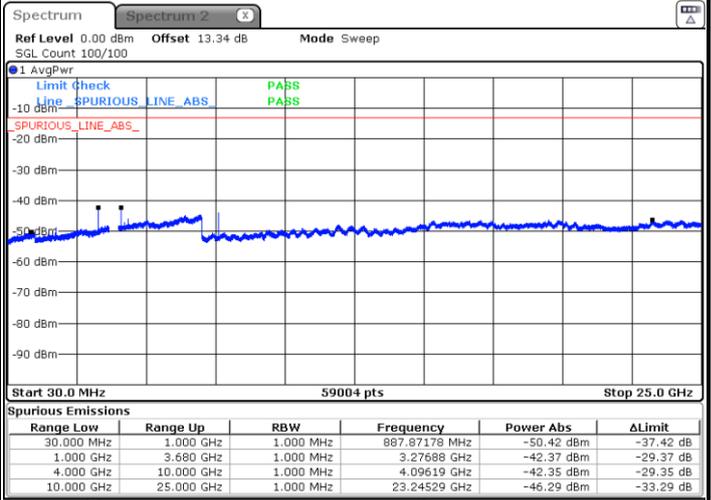
FR1 n77 / 60MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

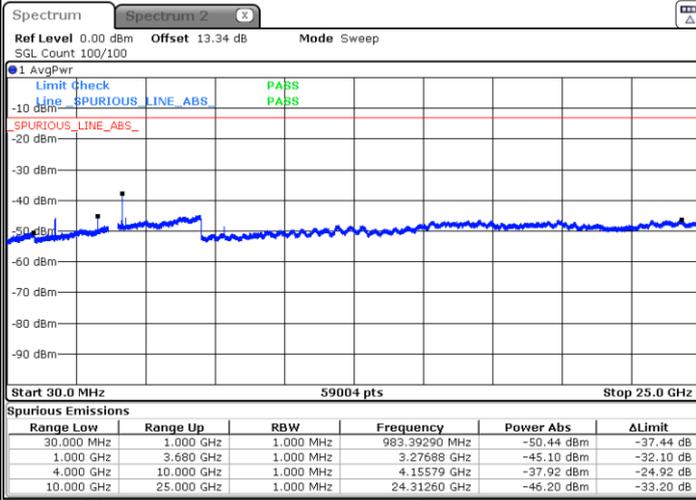


Date: 5 DEC.2020 00:24:57



Date: 5 DEC.2020 00:23:53

Highest Channel / 1RB0



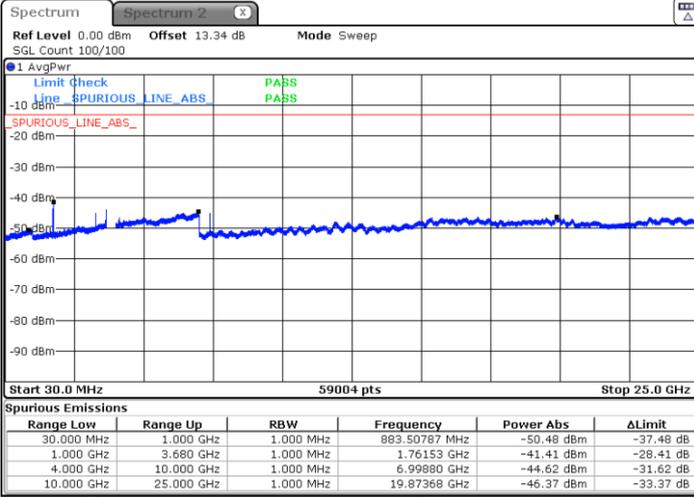
Date: 5 DEC.2020 00:26:14



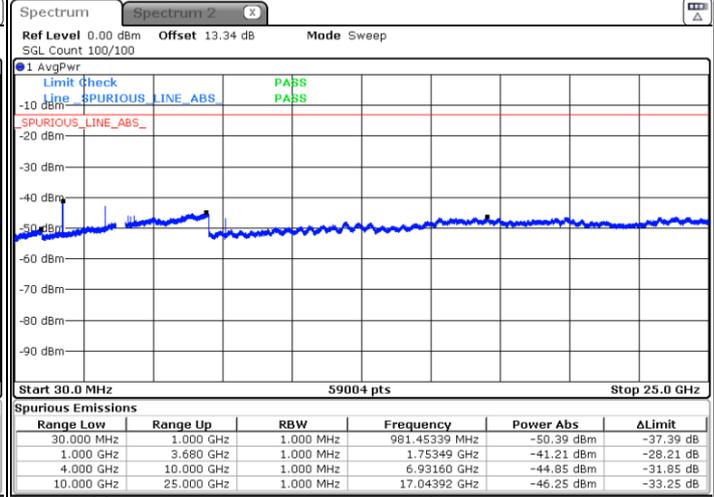
FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

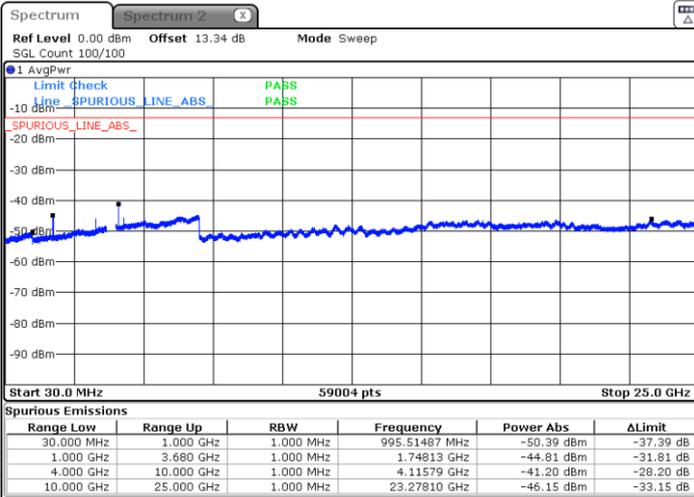


Date: 5 DEC.2020 00:29:01



Date: 5 DEC.2020 00:27:44

Highest Channel / 1RB0



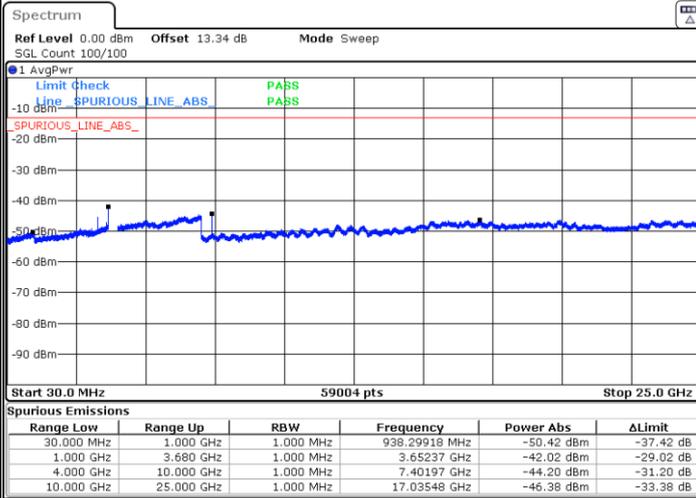
Date: 5 DEC.2020 00:31:44



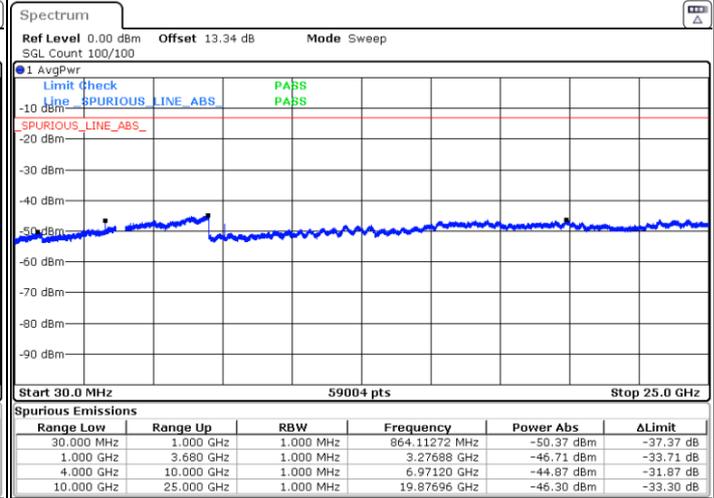
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB0

Middle Channel / 1RB0

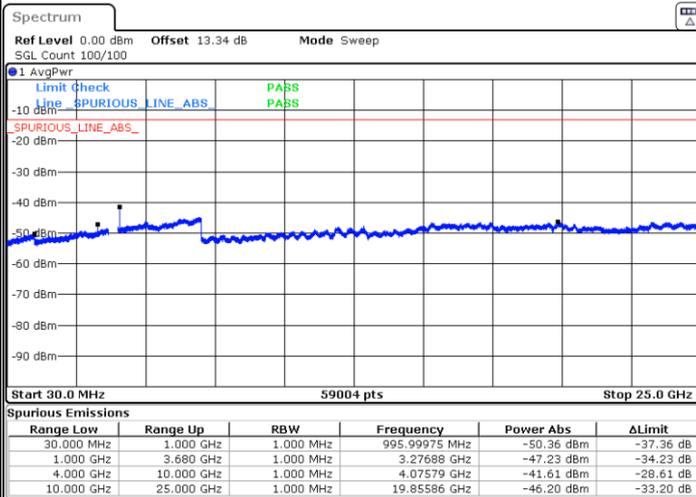


Date: 4 DEC.2020 21:40:23



Date: 4 DEC.2020 21:43:30

Highest Channel / 1RB0



Date: 4 DEC.2020 21:45:34



Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. .Note: The frequency fundamental emissions stay within the authorized frequency block.

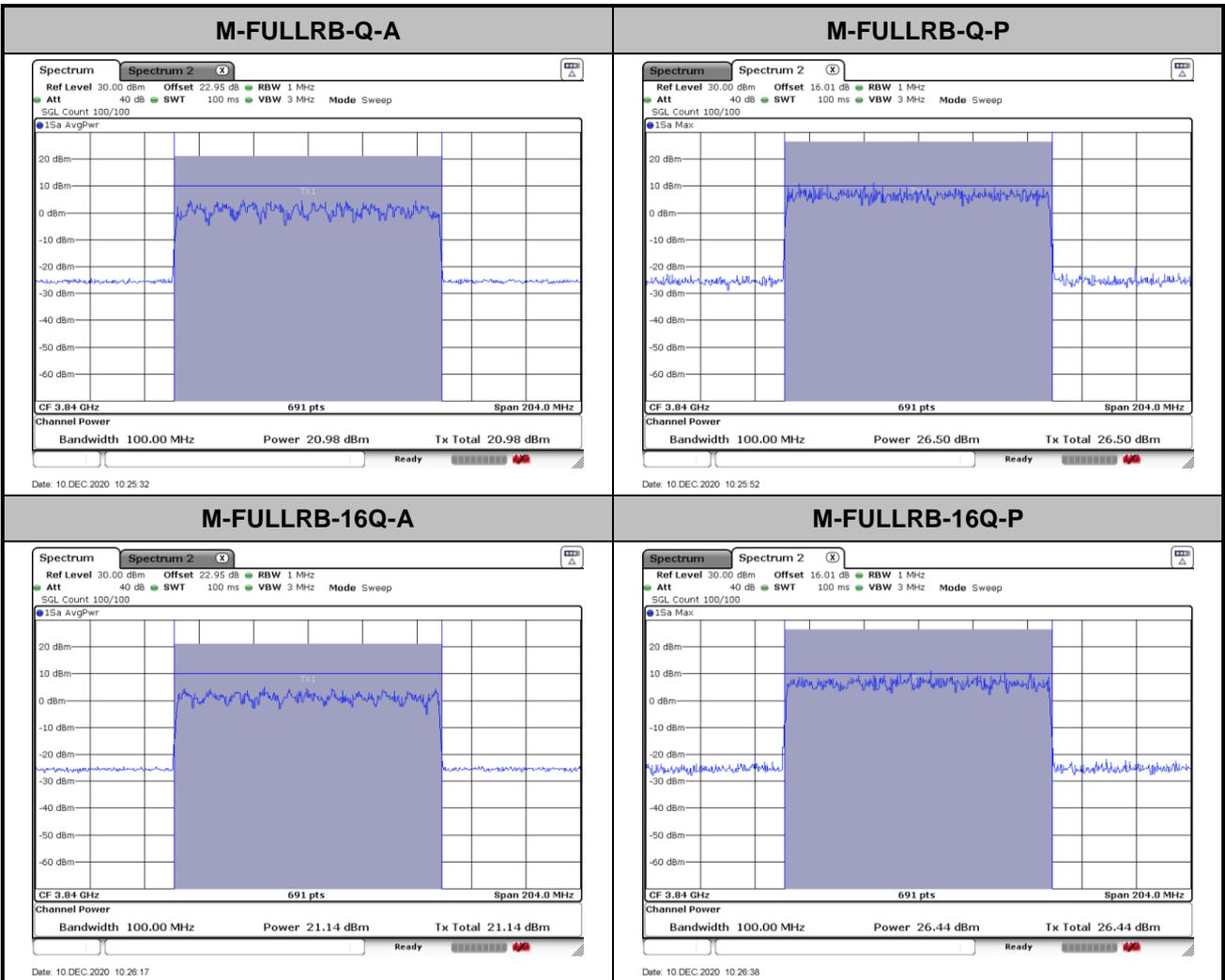


5G NR n77_UL_MIMO

Peak-to-Average Ratio

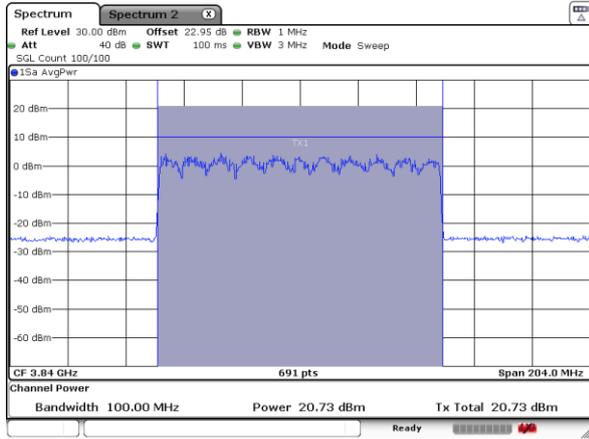
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.52	5.3	5.58	5.52	PASS

Note: PAR=Peak-Average



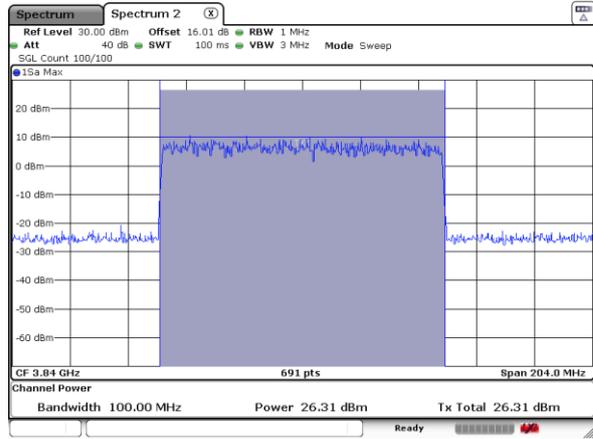


M-FULLRB-64Q-A



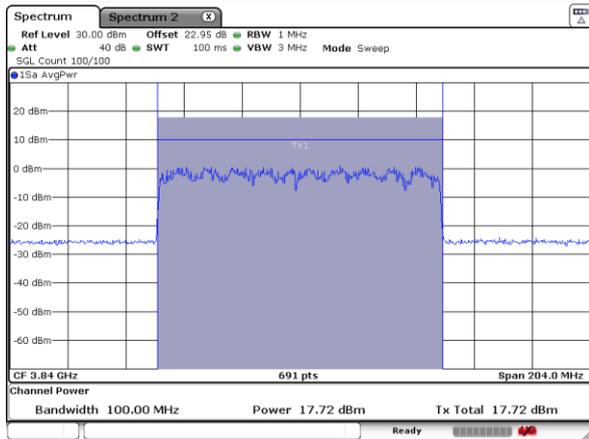
Date: 10 DEC 2020 10:27:02

M-FULLRB-64Q-P



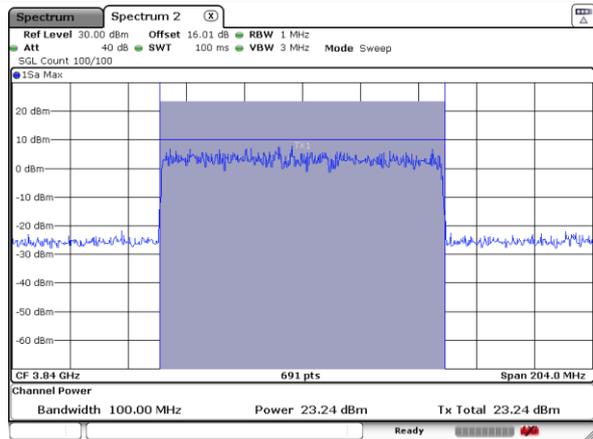
Date: 10 DEC 2020 10:27:25

M-FULLRB-256Q-A



Date: 10 DEC 2020 10:27:50

M-FULLRB-256Q-P

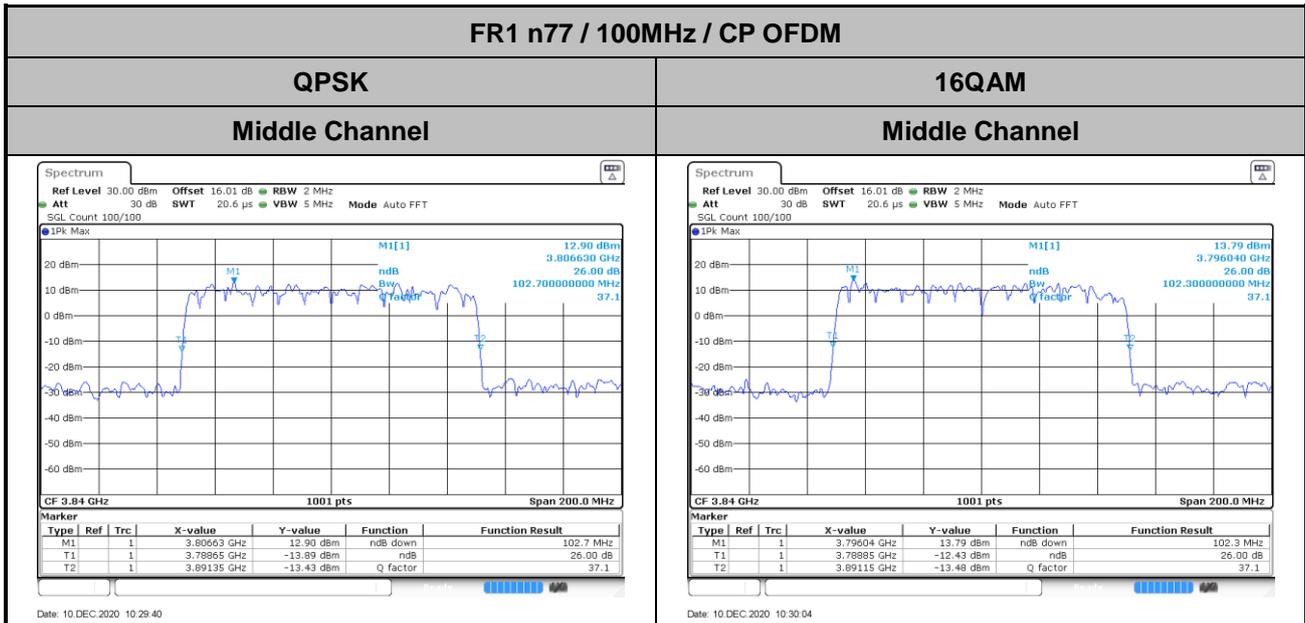


Date: 10 DEC 2020 10:28:26



26dB Bandwidth

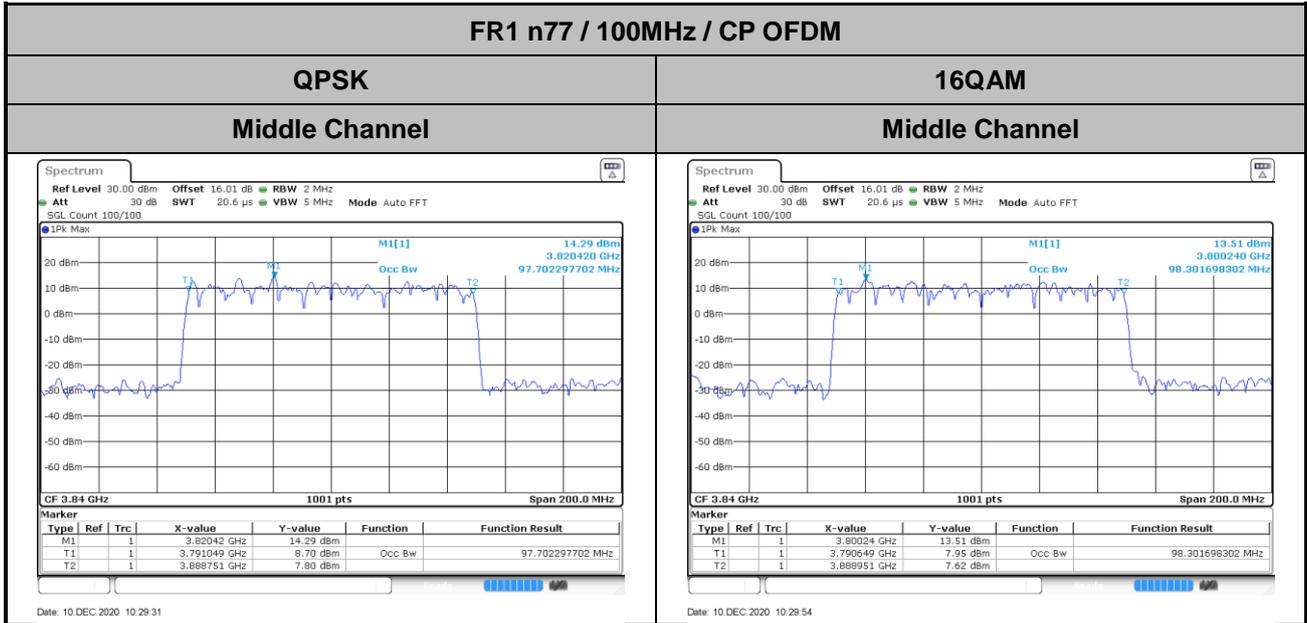
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	102.7	102.3





Occupied Bandwidth

BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	97.702	98.302



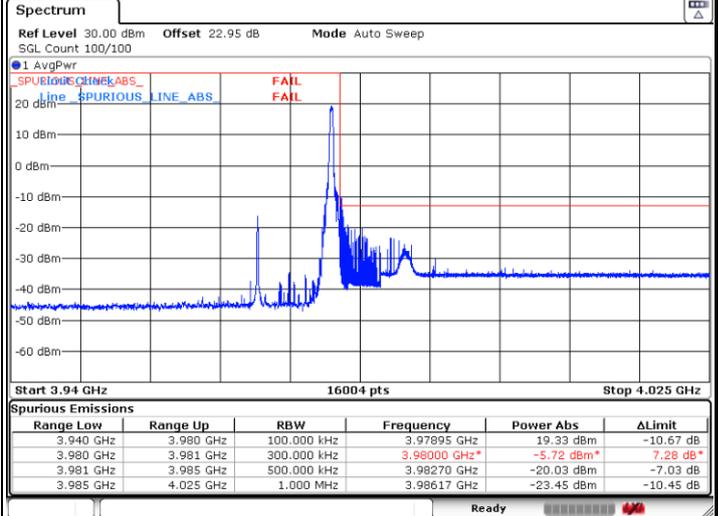
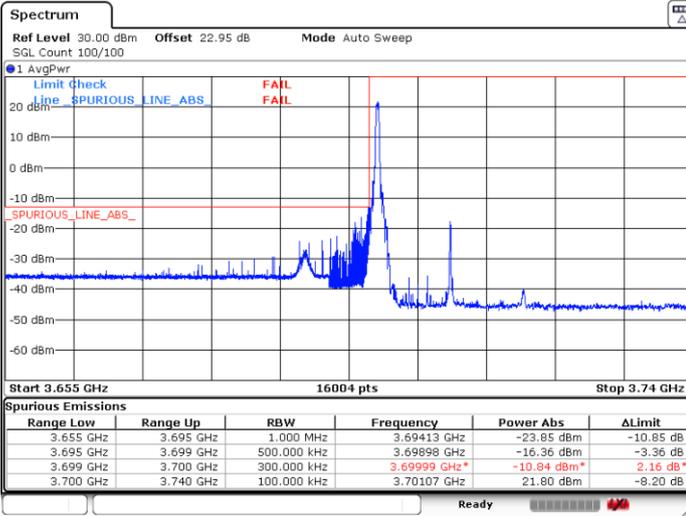


Conducted Band Edge

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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

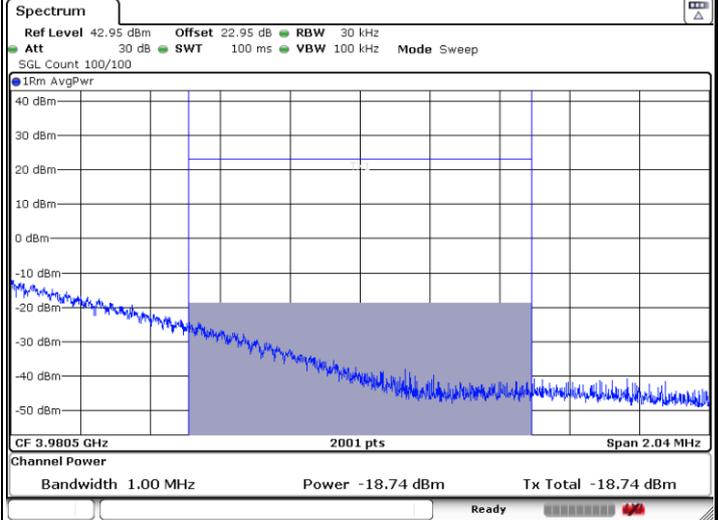
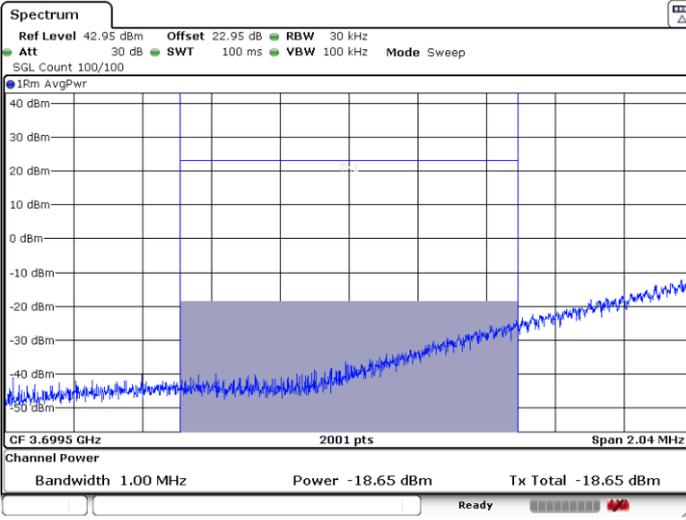


Date: 9 DEC.2020 14:38:39

Date: 9 DEC.2020 14:44:19

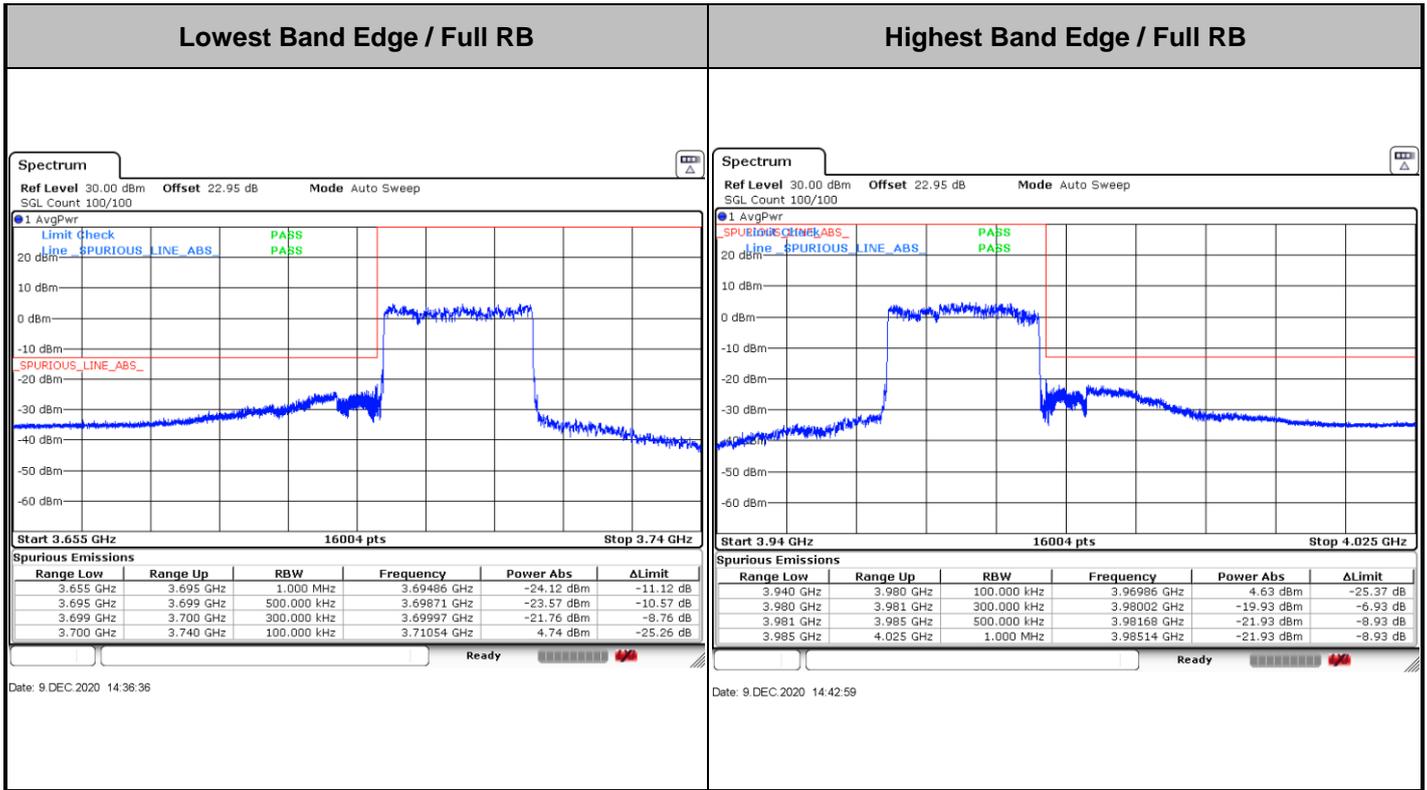
Channel power < -13dBm PASS

Channel power < -13dBm PASS



Date: 9 DEC.2020 14:40:47

Date: 9 DEC.2020 14:46:06

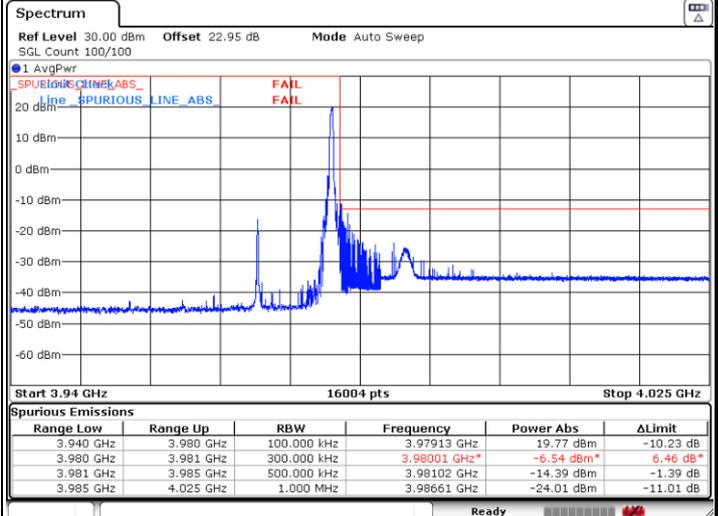
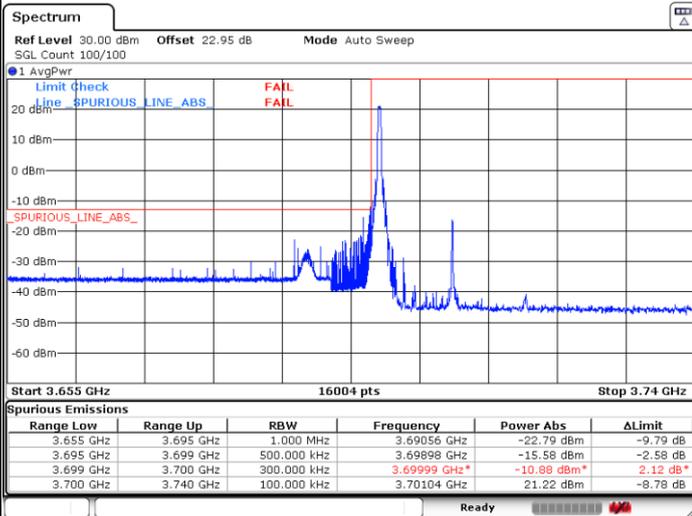




FR1 n77 / 20MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

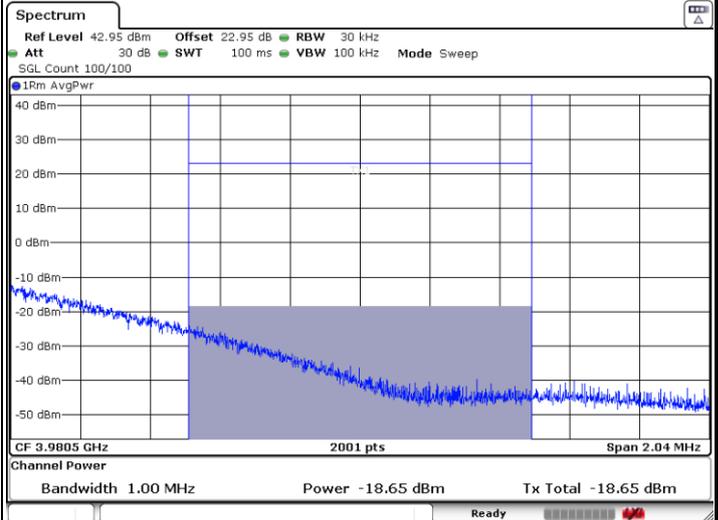
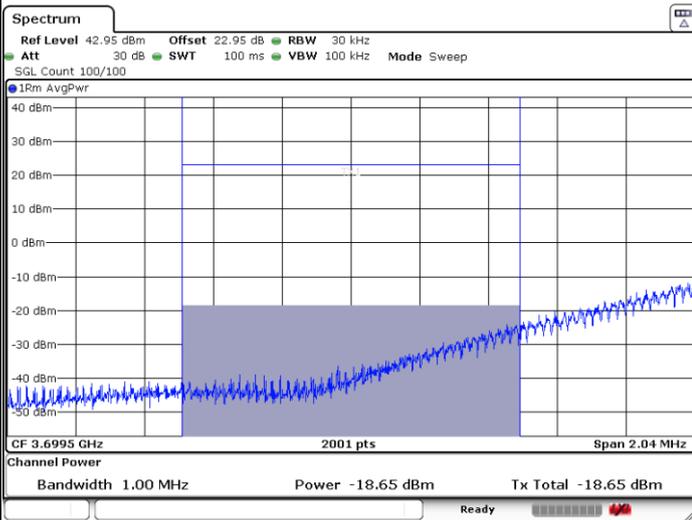


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Date: 9 DEC.2020 14:44:45

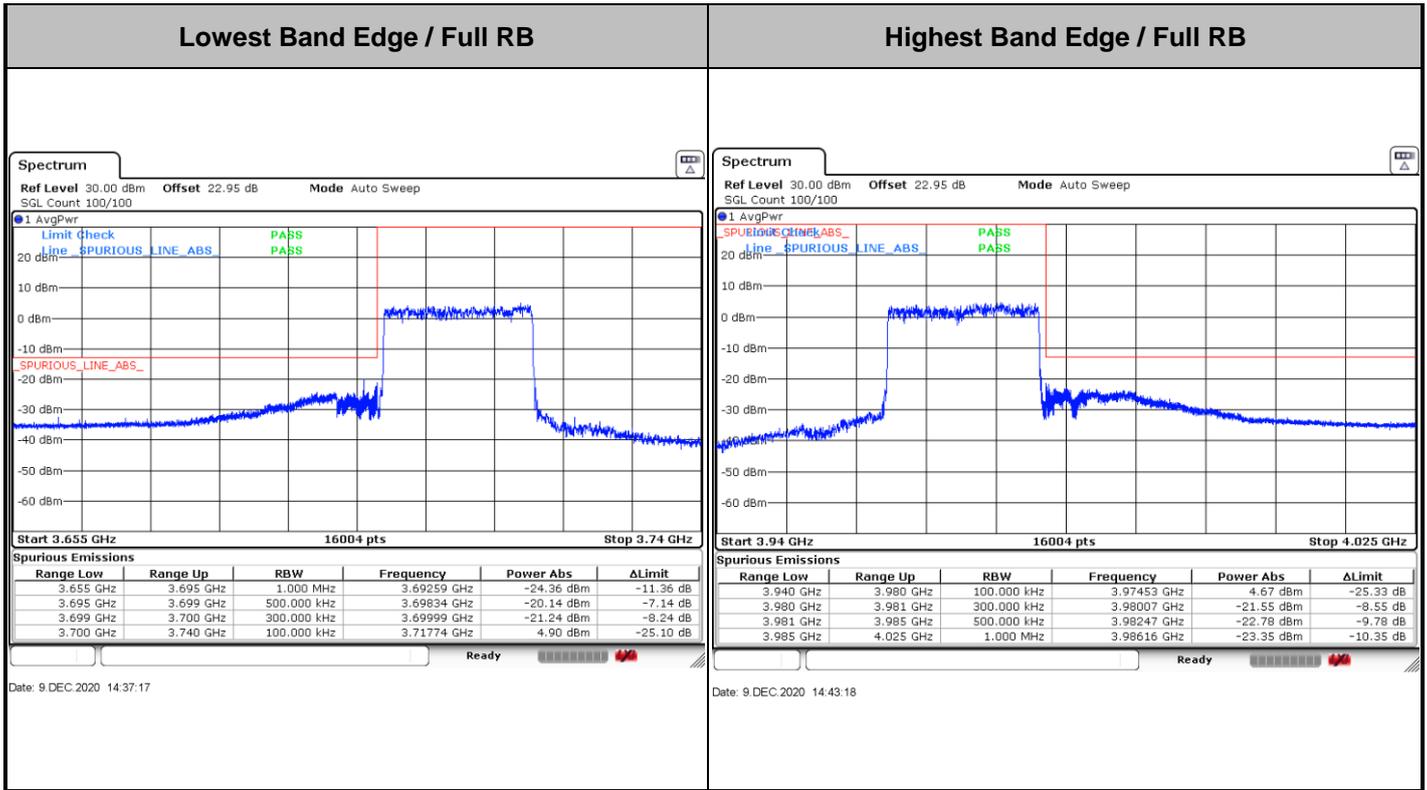
Channel power < -13dBm PASS

Channel power < -13dBm PASS



Date: 9 DEC.2020 14:41:10

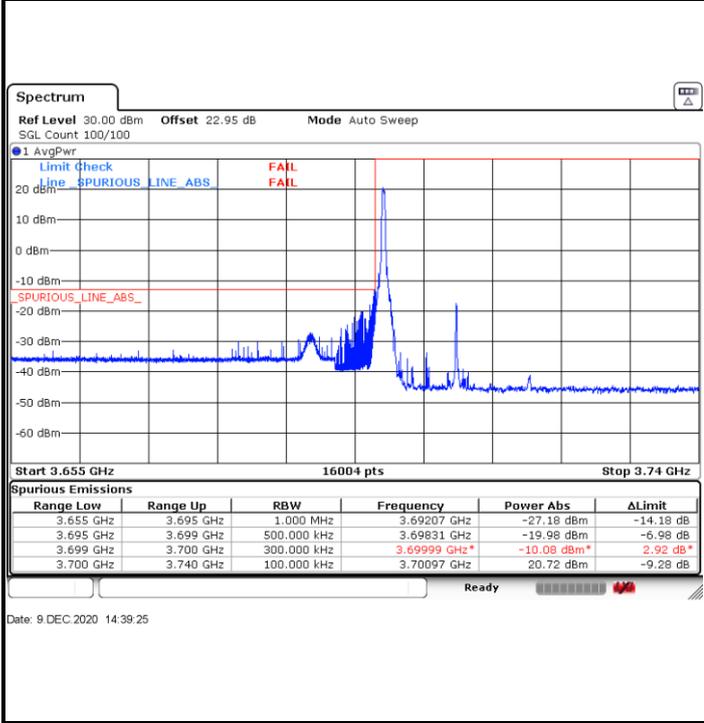
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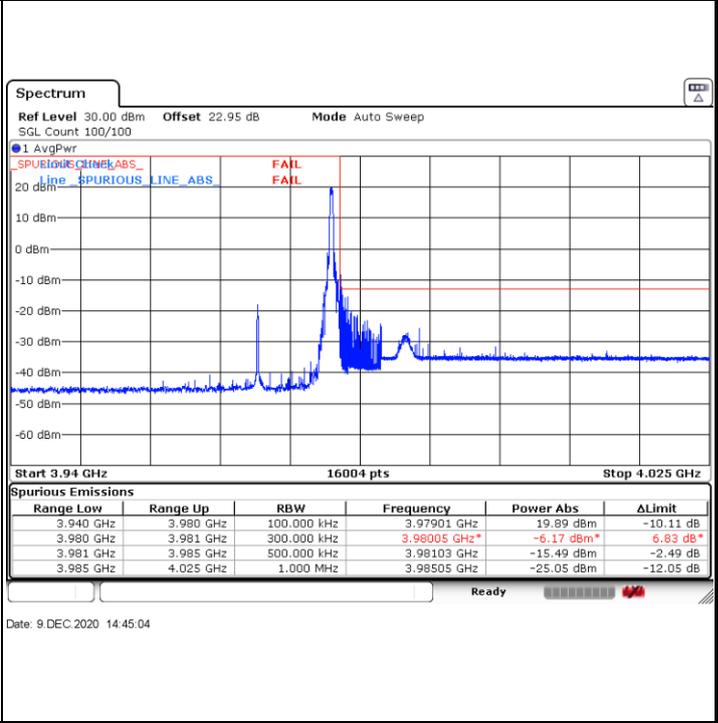


FR1 n77 /20MHz / DFT-S OFDM / 64Q

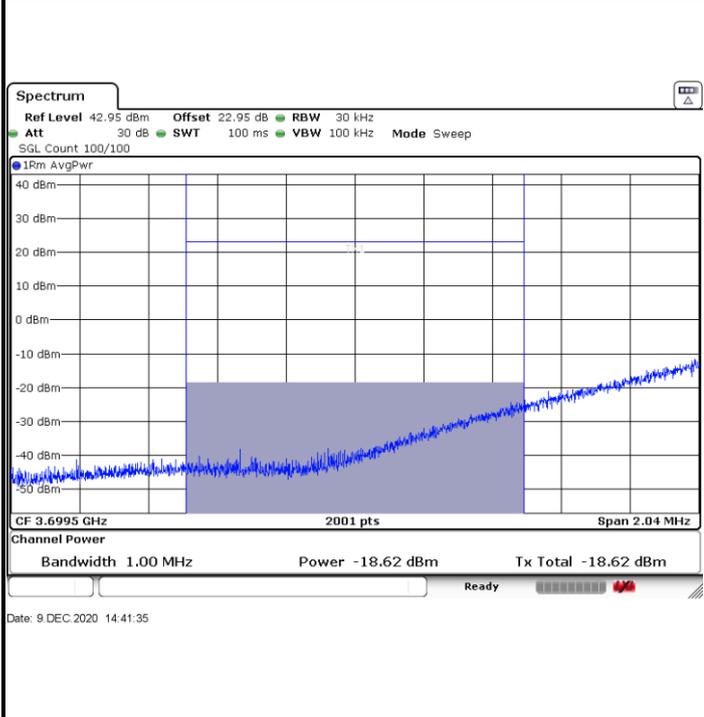
Lowest Band Edge / 1RB0



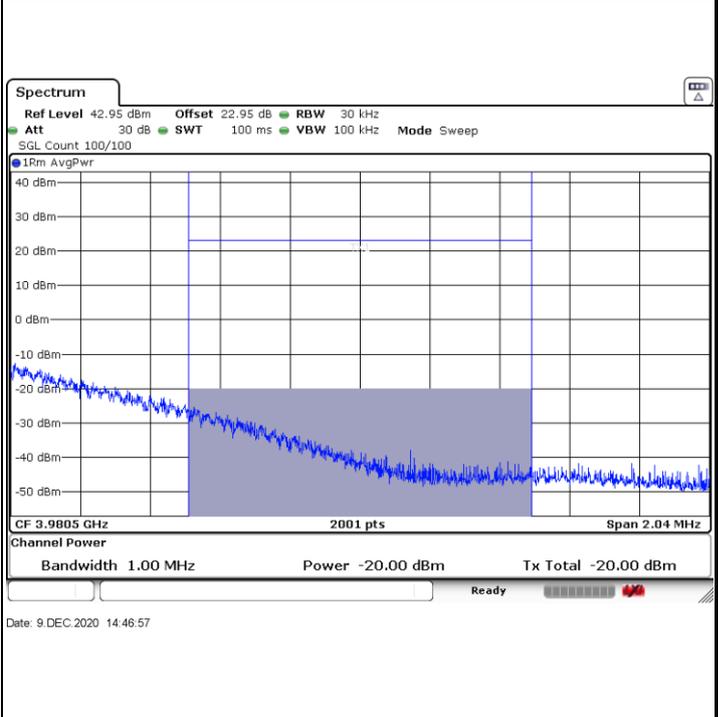
Highest Band Edge / 1RBmax

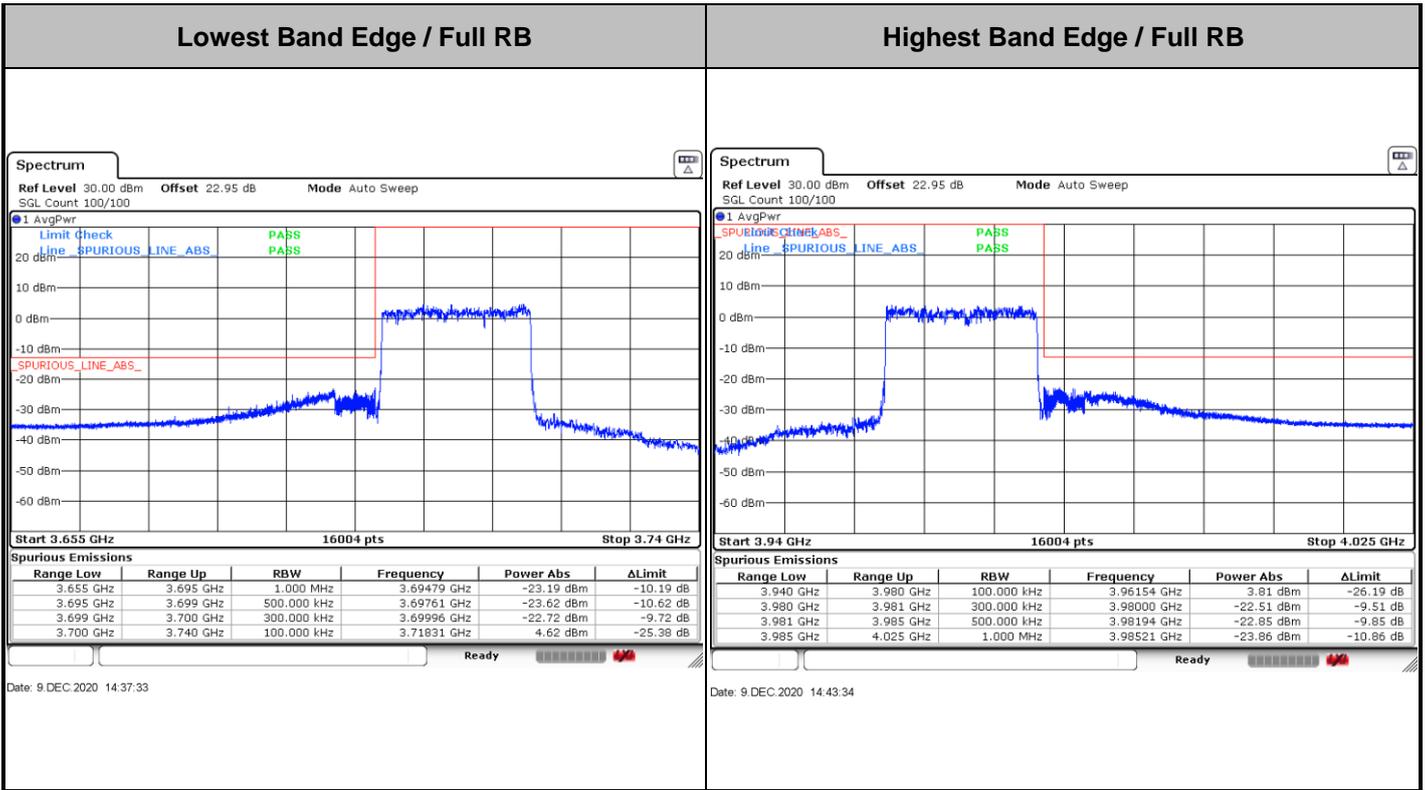


Channel power < -13dBm PASS



Channel power < -13dBm PASS



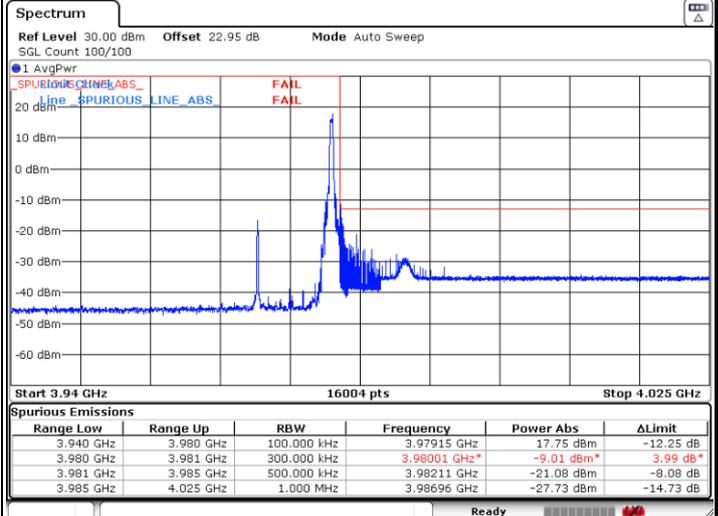
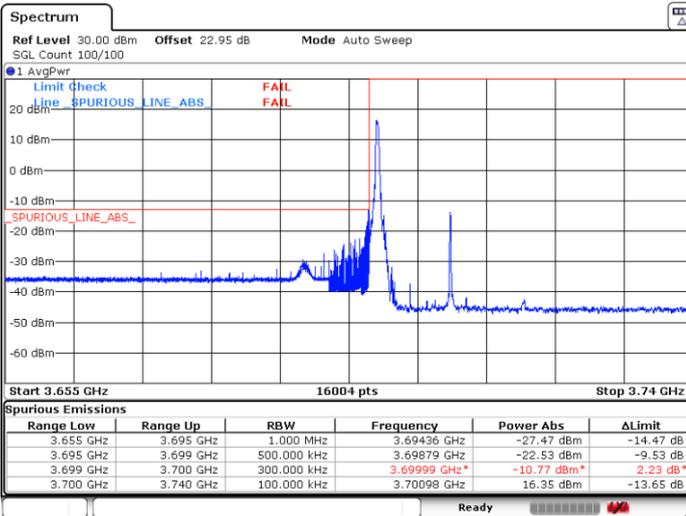




FR1 n77 /20MHz / DFT-S OFDM / 256Q

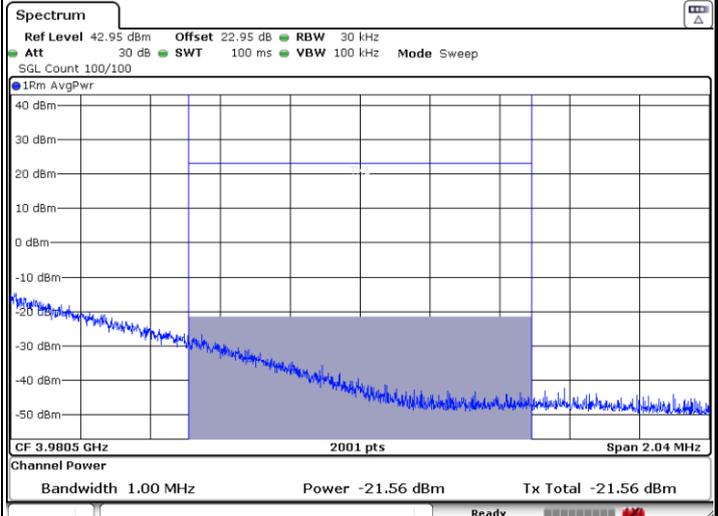
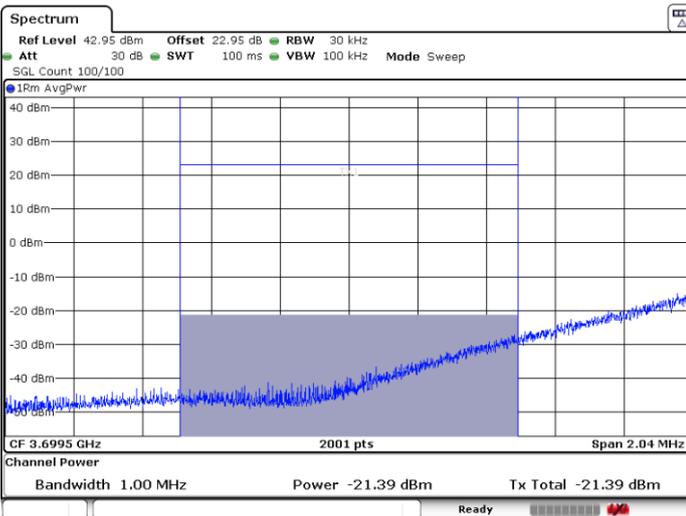
Lowest Band Edge / 1RB0

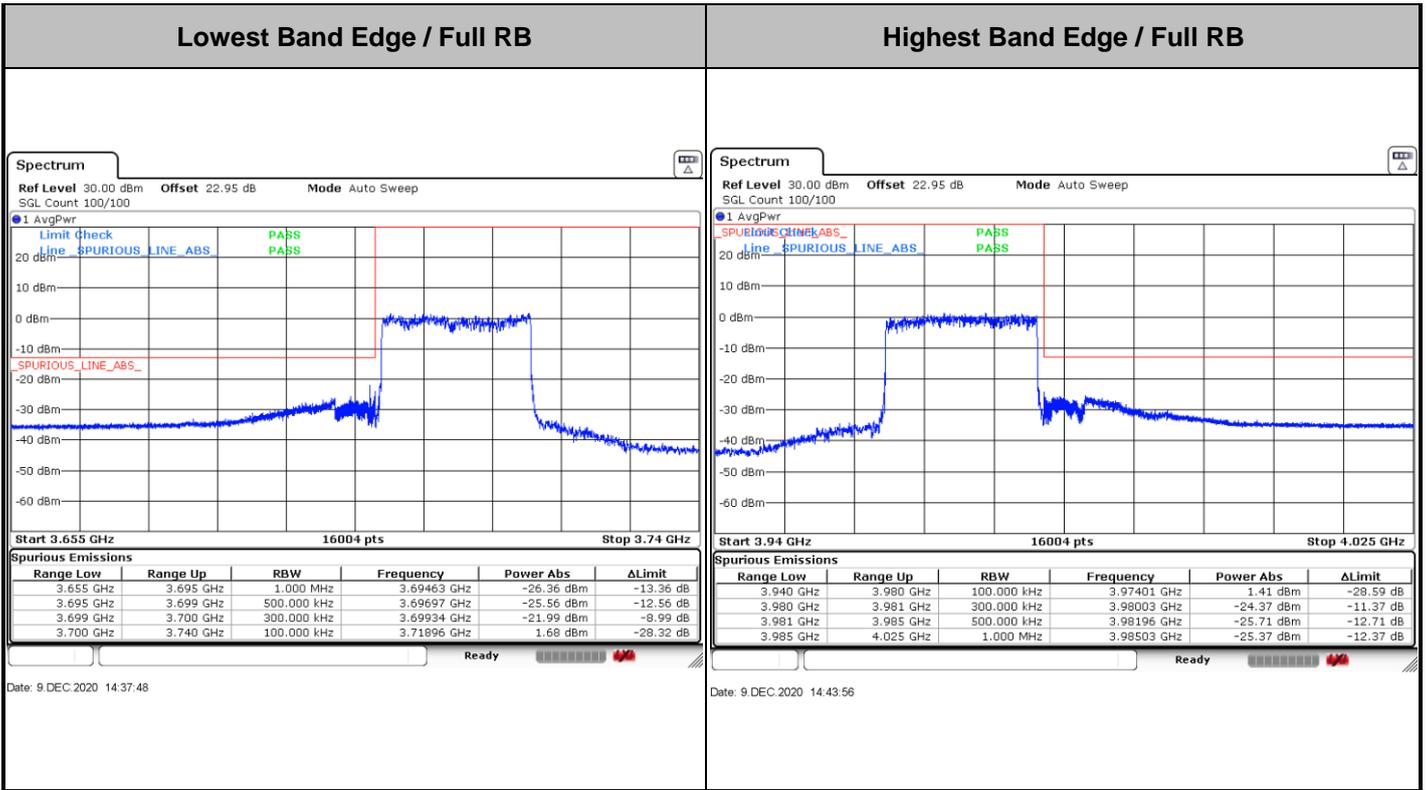
Highest Band Edge / 1RBmax



Channel power < -13dBm PASS

Channel power < -13dBm PASS



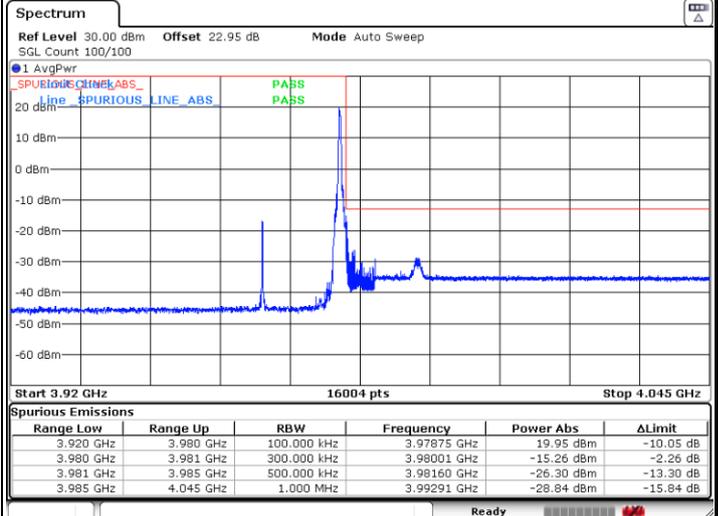
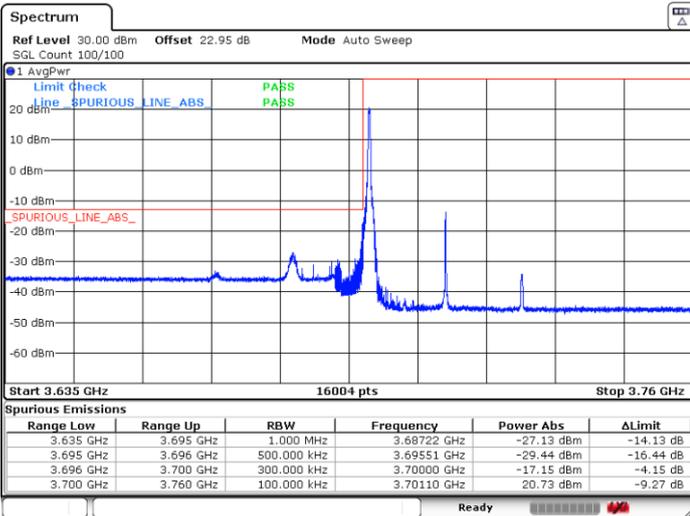




FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

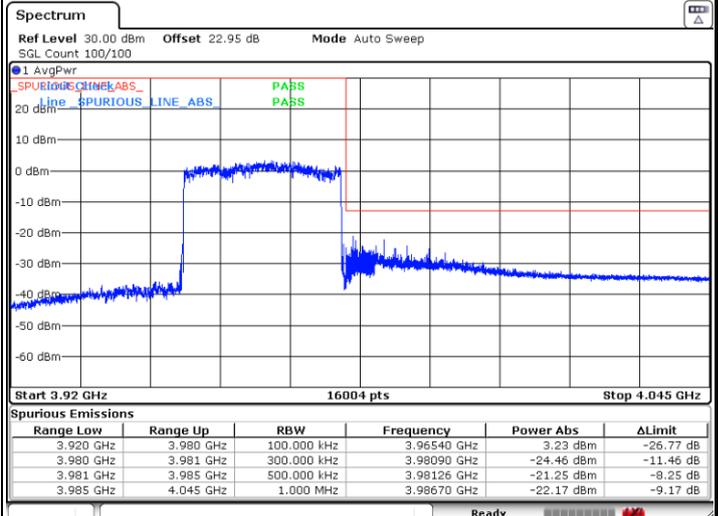
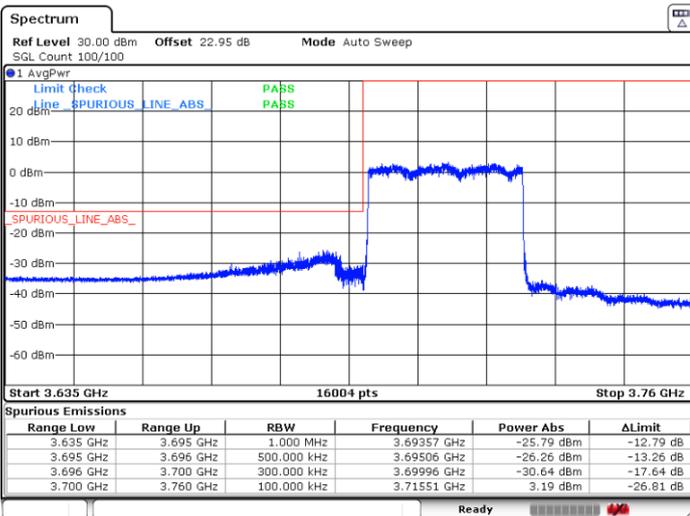


Date: 9 DEC.2020 14:23:01

Date: 9 DEC.2020 14:27:07

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9 DEC.2020 14:20:35

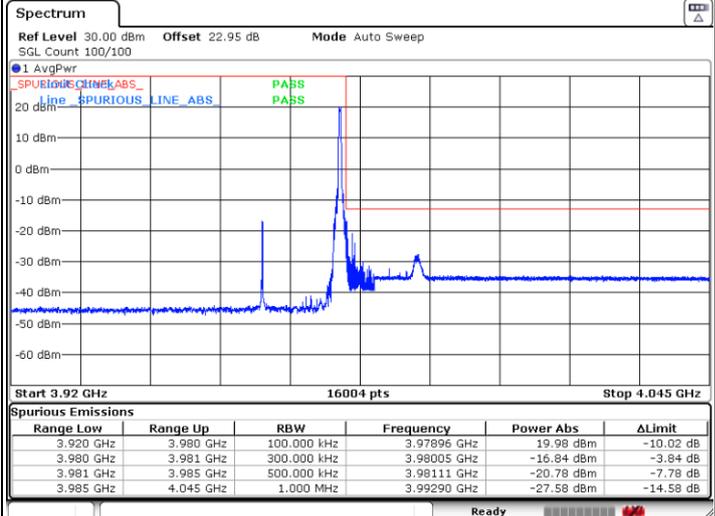
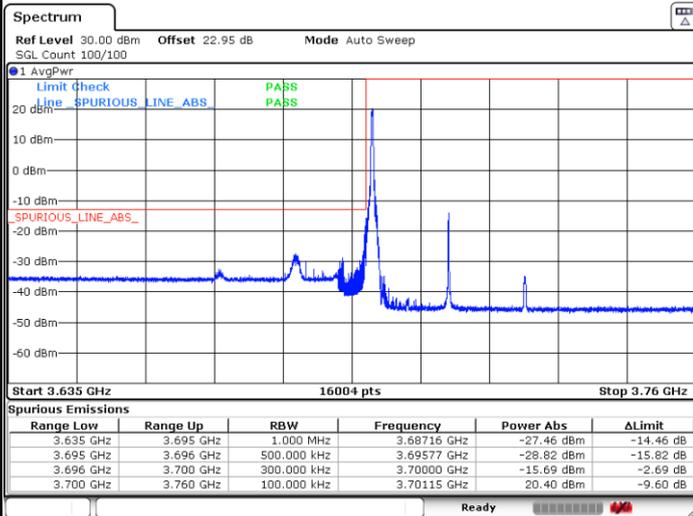
Date: 9 DEC.2020 14:25:03



FR1 n77 / 30MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

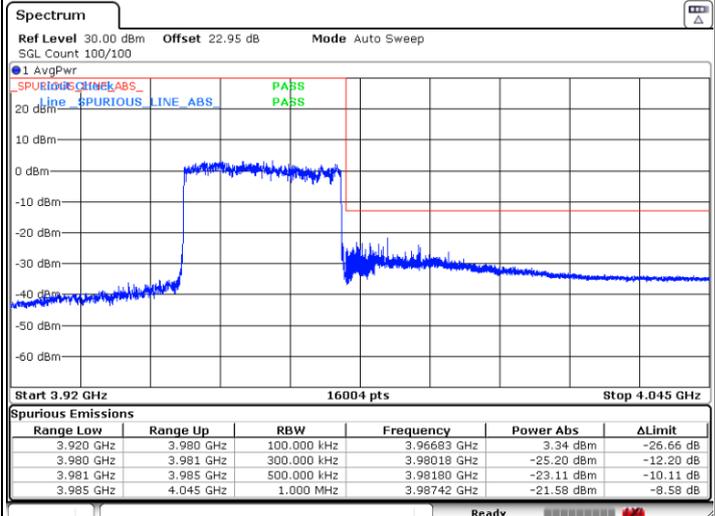
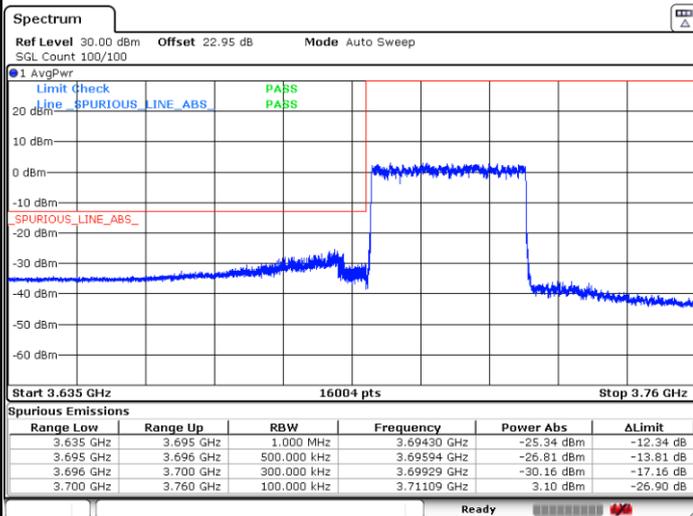


Date: 9 DEC.2020 14:23:22

Date: 9 DEC.2020 14:27:31

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 9 DEC.2020 14:21:26

Date: 9 DEC.2020 14:25:20