

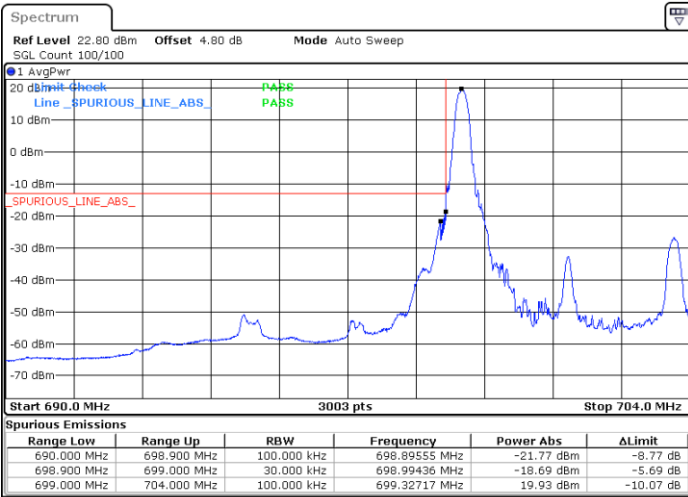


# Conducted Band Edge

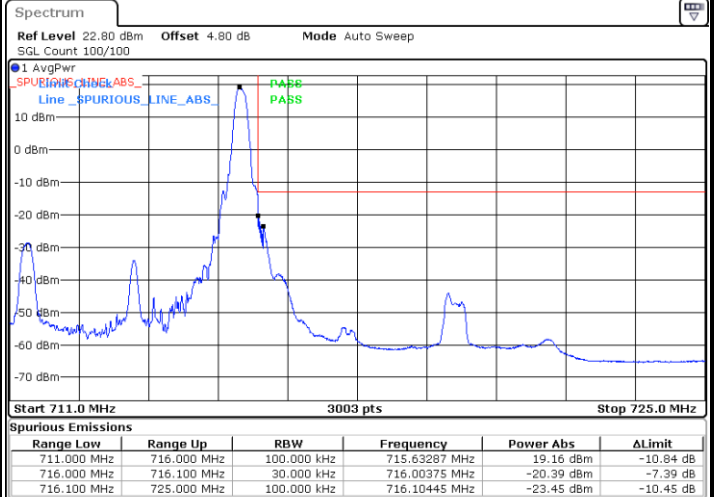
FR1 n12 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



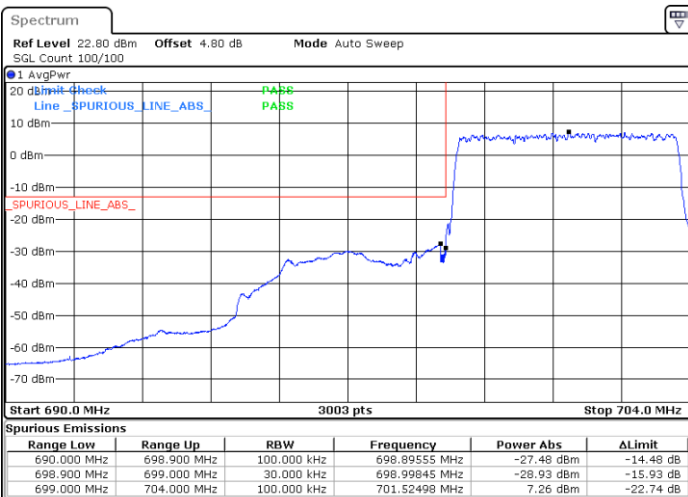
Date: 19 DEC 2020 16:38:59



Date: 19 DEC 2020 16:45:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:35:52



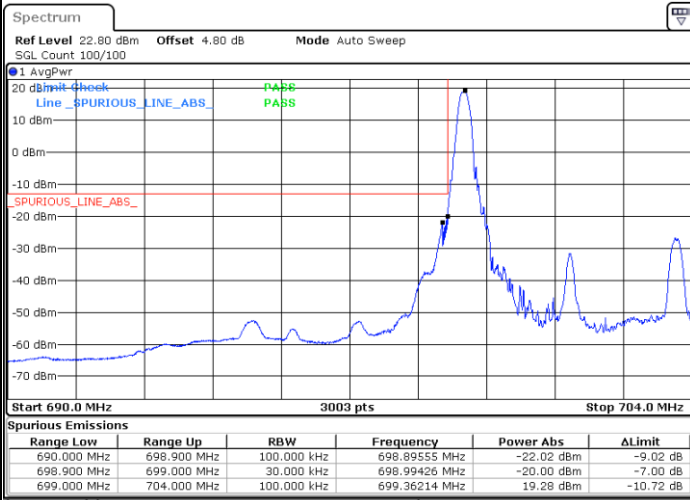
Date: 19 DEC 2020 16:42:28



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

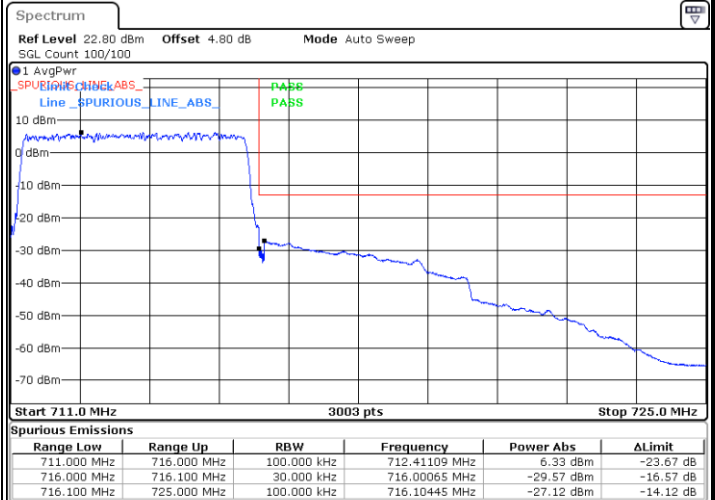
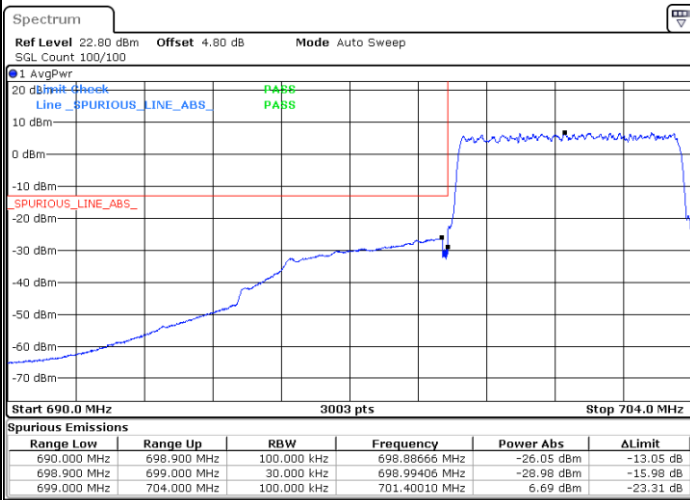


Date: 19 DEC 2020 16:39:38

Date: 19 DEC 2020 16:46:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:36:26

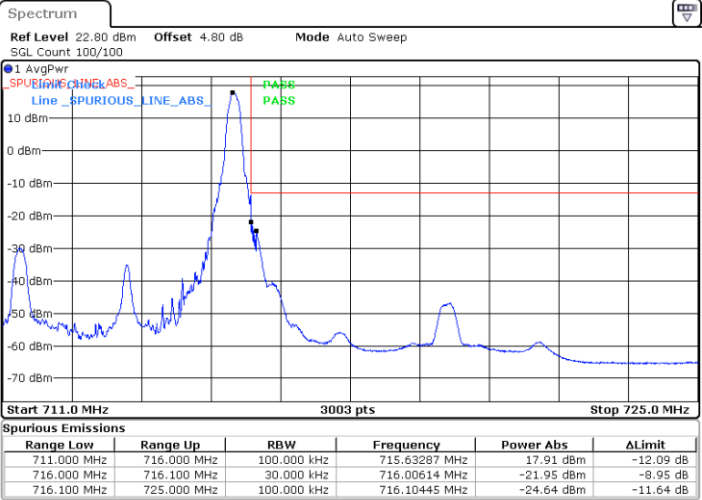
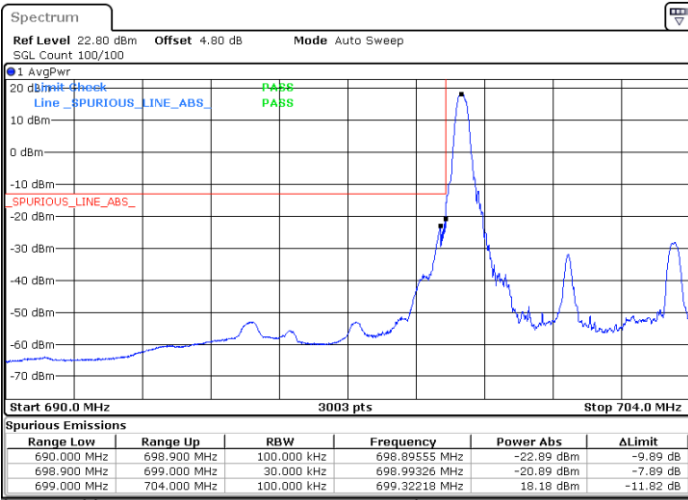
Date: 19 DEC 2020 16:43:03



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

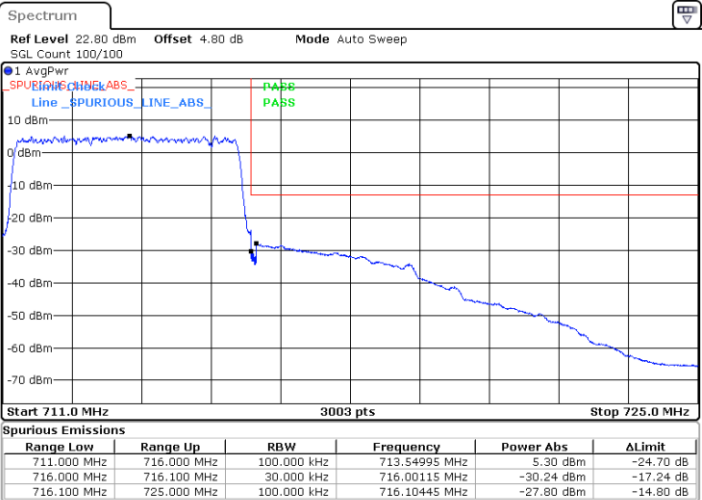
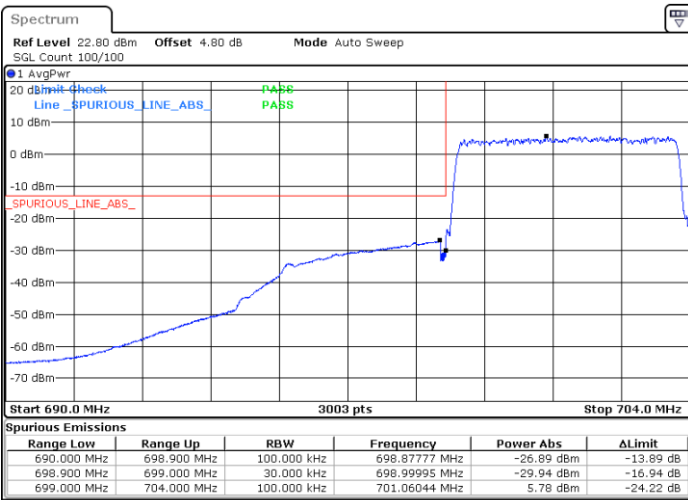


Date: 19 DEC 2020 16:40:11

Date: 19 DEC 2020 16:47:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:37:04

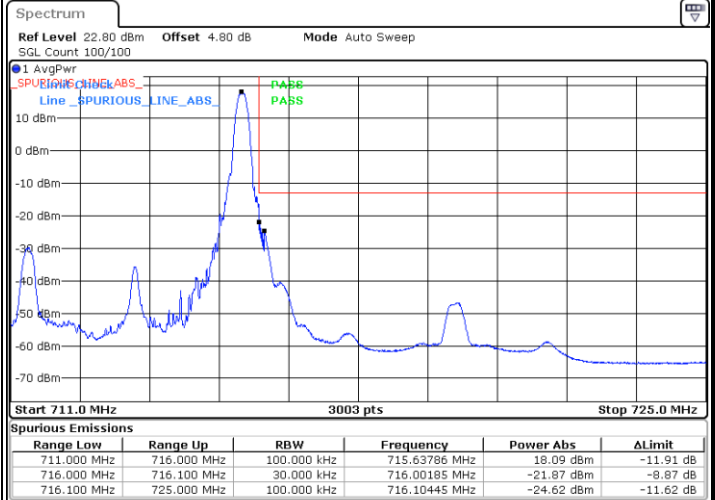
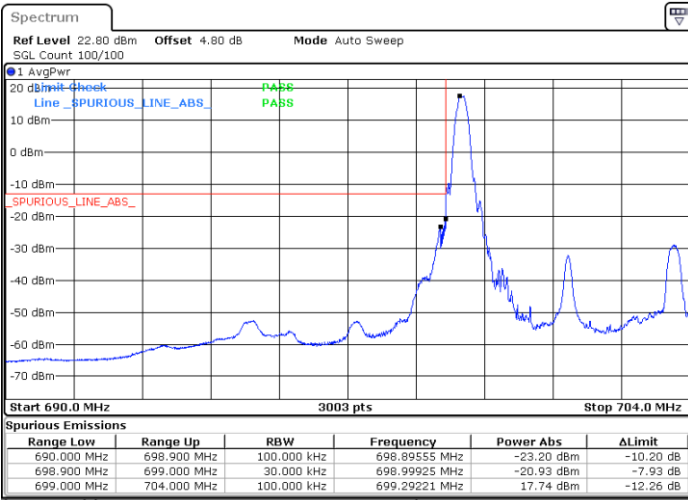
Date: 19 DEC 2020 16:43:37



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

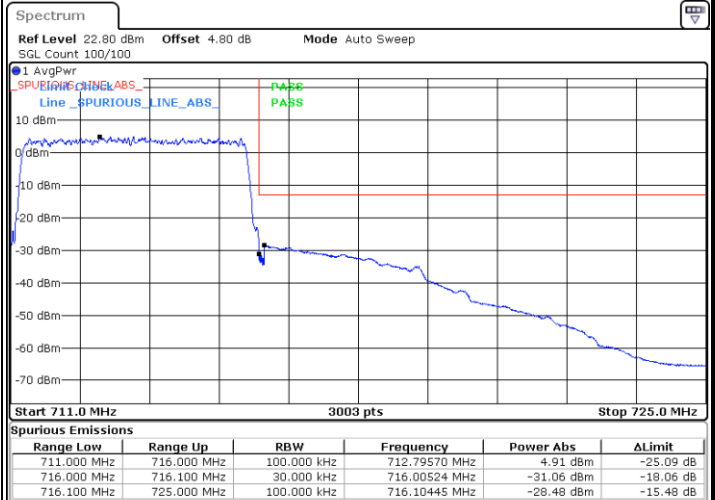
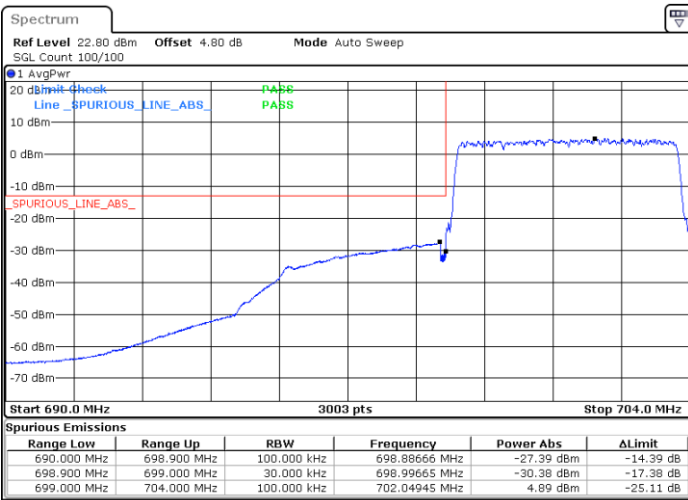


Date: 19 DEC 2020 16:40:47

Date: 19 DEC 2020 16:47:45

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:37:38

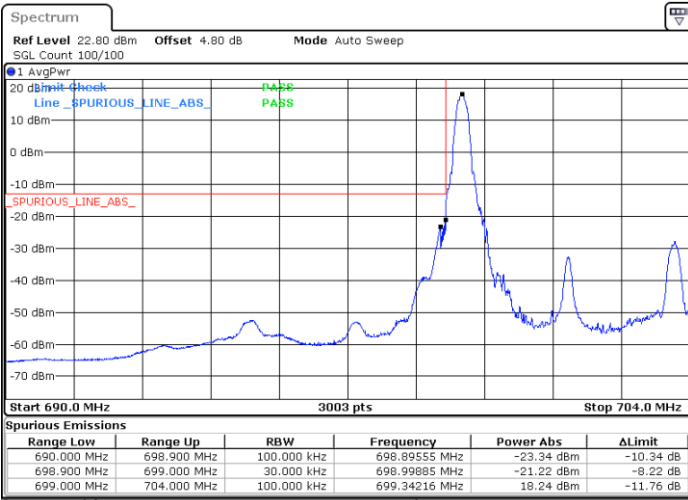
Date: 19 DEC 2020 16:44:11



FR1 n12 / 5MHz / DFT-S OFDM / 256Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

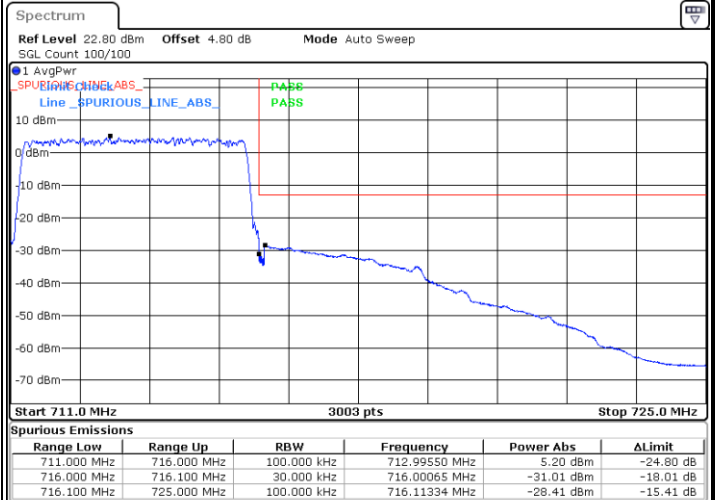
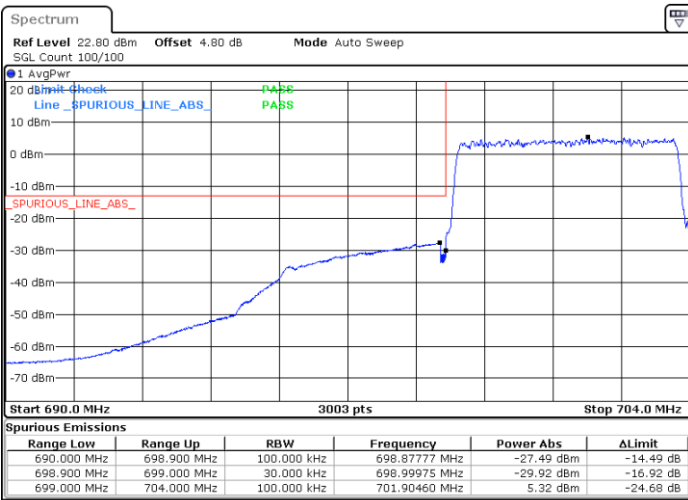


Date: 19 DEC 2020 16:41:25

Date: 19 DEC 2020 16:48:27

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:38:14

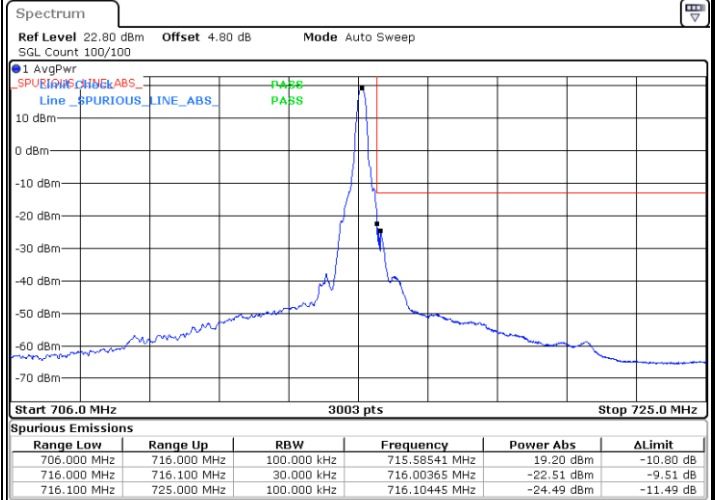
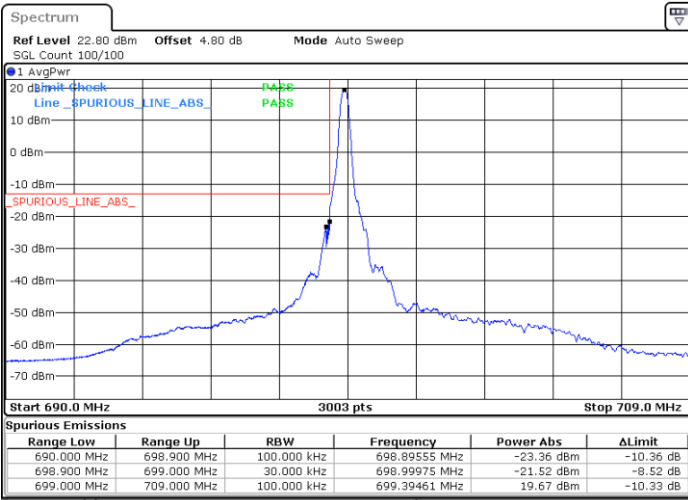
Date: 19 DEC 2020 16:44:45



FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

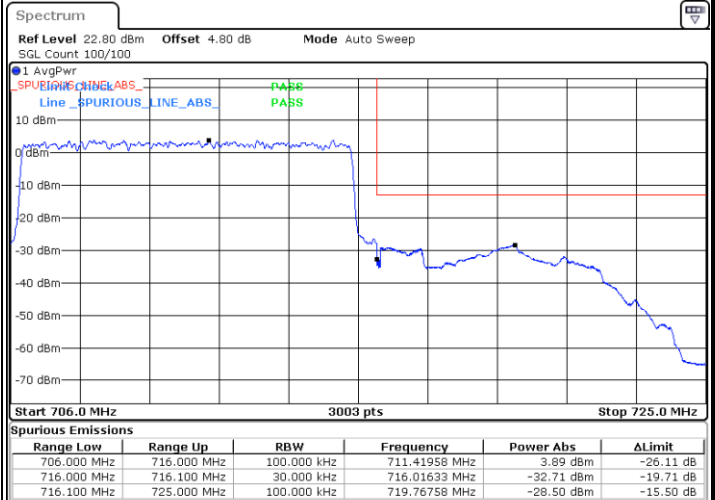
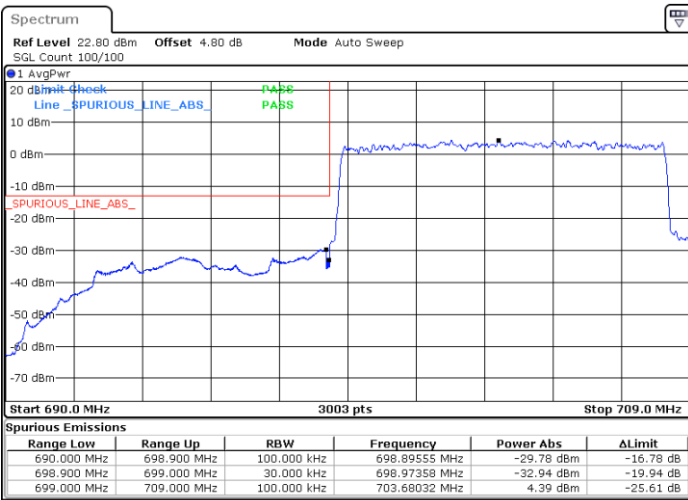


Date: 19 DEC 2020 16:24:59

Date: 19 DEC 2020 16:31:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 17:30:08

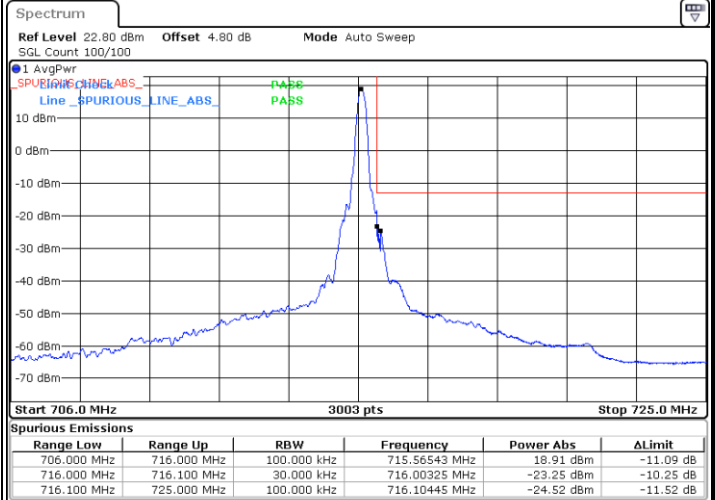
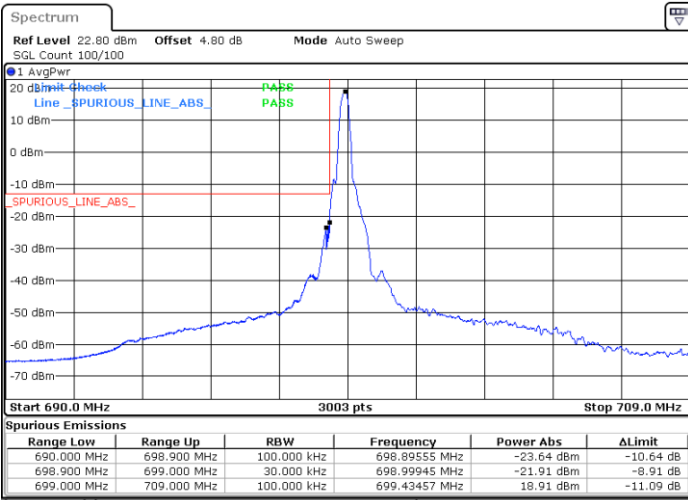
Date: 19 DEC 2020 16:28:32



FR1 n12 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

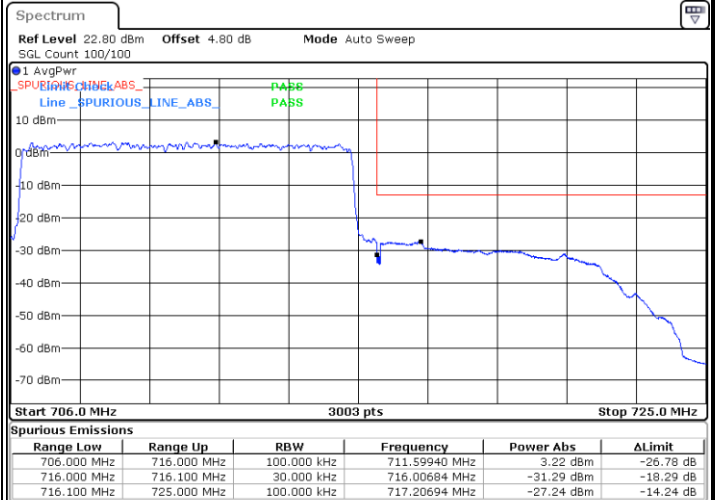
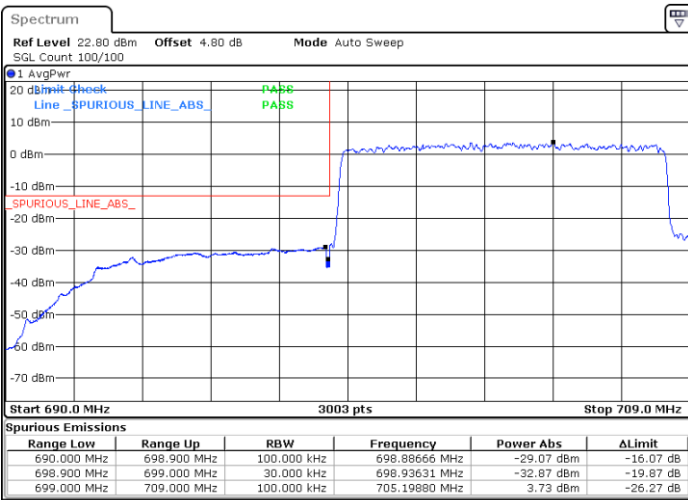


Date: 19 DEC 2020 16:25:35

Date: 19 DEC 2020 16:32:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:22:27

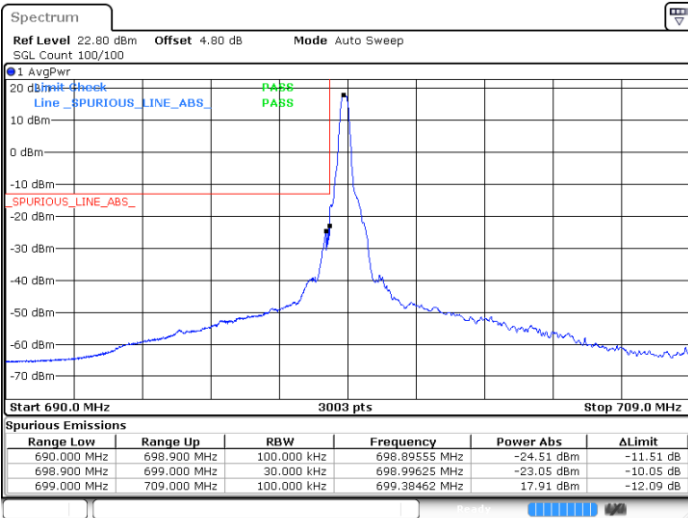
Date: 19 DEC 2020 16:29:06



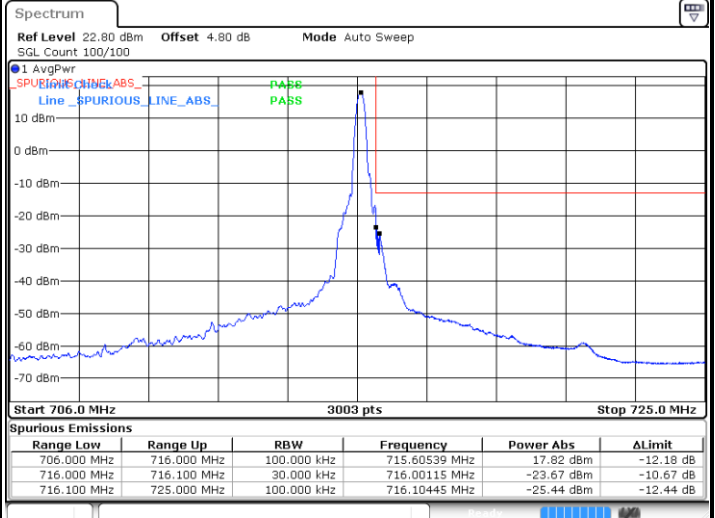
FR1 n12 / 10MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



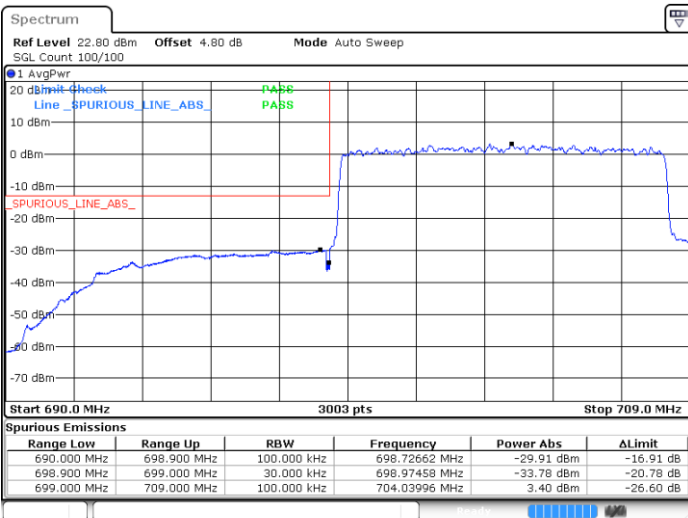
Date: 19 DEC 2020 16:26:09



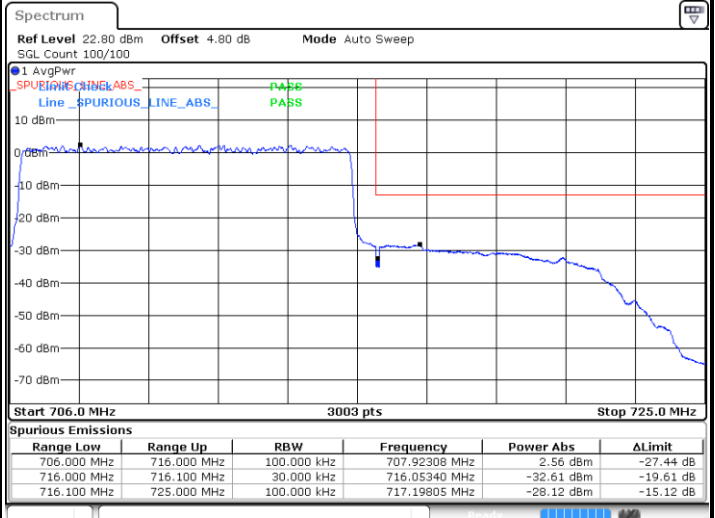
Date: 19 DEC 2020 16:32:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:23:04



Date: 19 DEC 2020 16:29:40

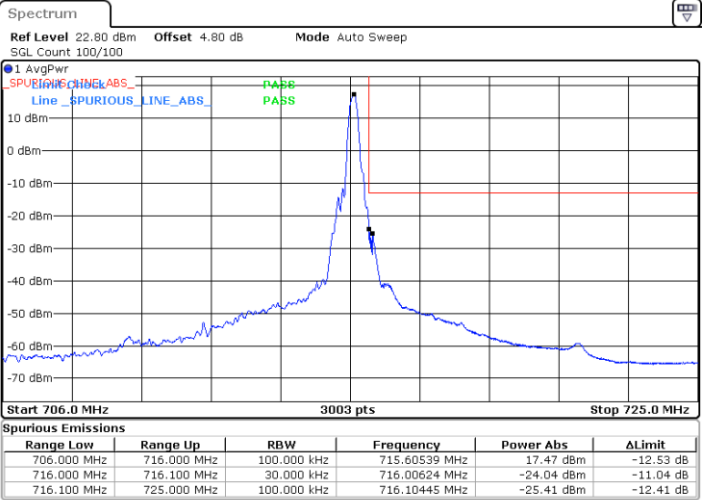
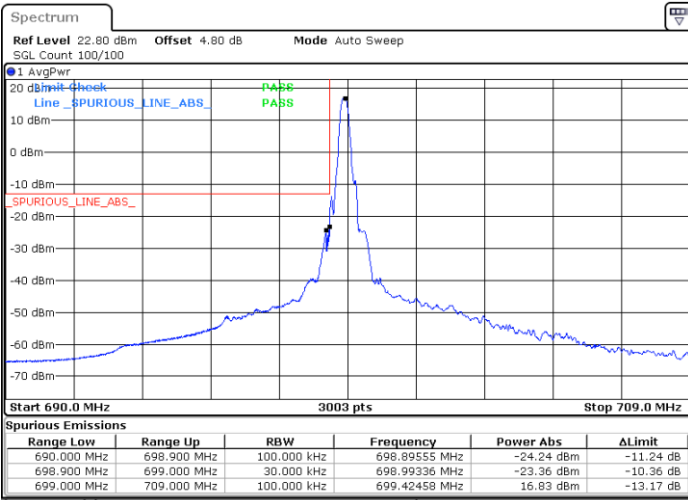




FR1 n12 / 10MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

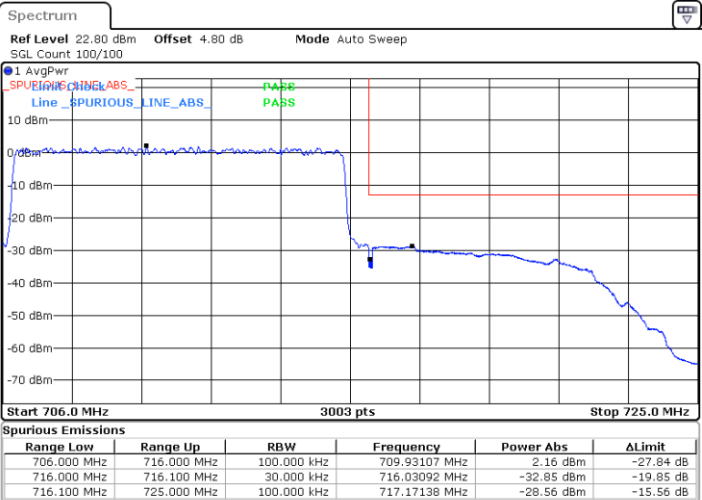
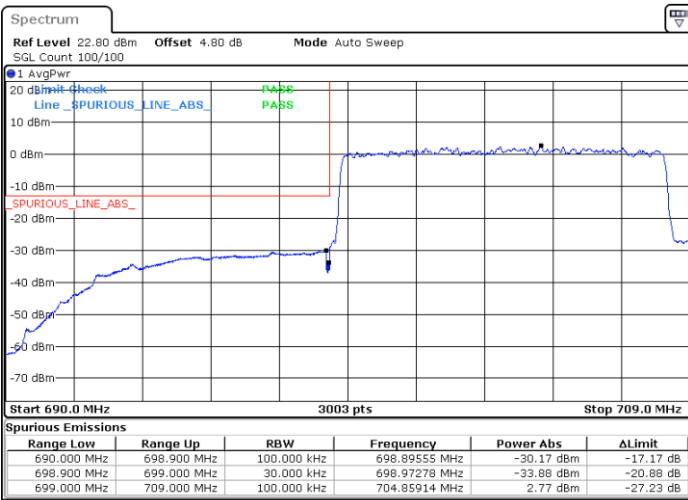


Date: 19 DEC 2020 16:26:43

Date: 19 DEC 2020 16:33:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:23:44

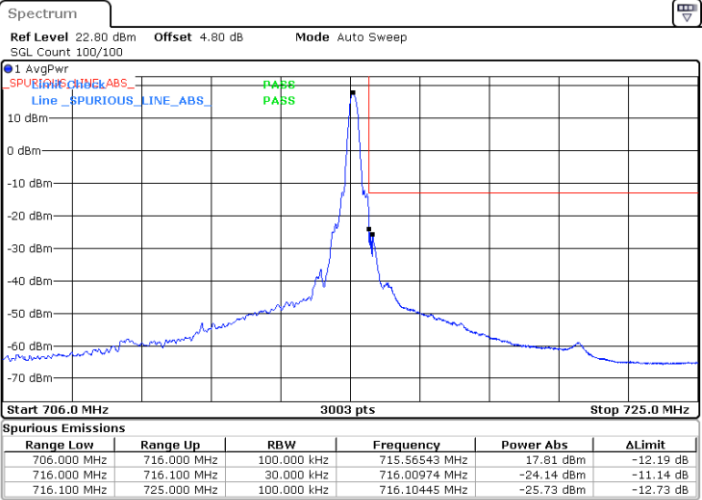
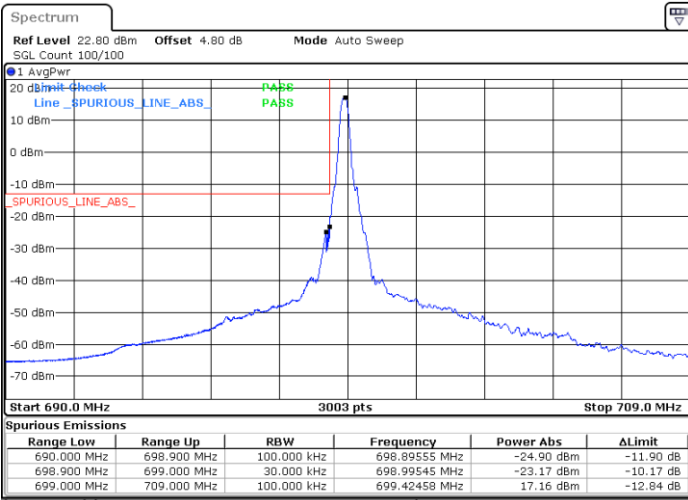
Date: 19 DEC 2020 16:30:21



FR1 n12 / 10MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

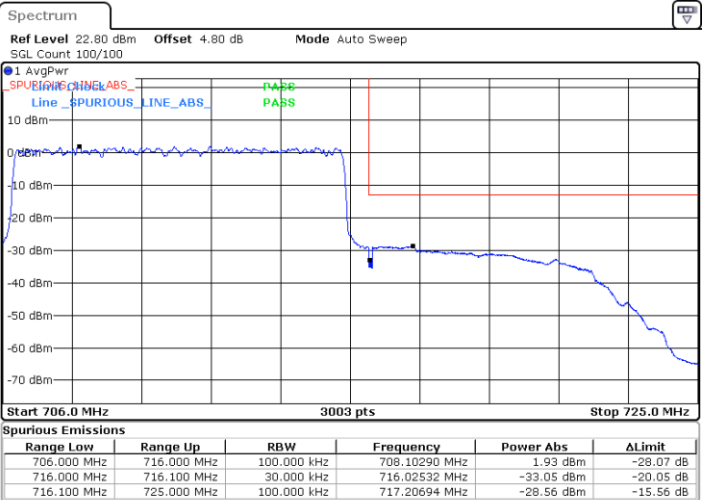
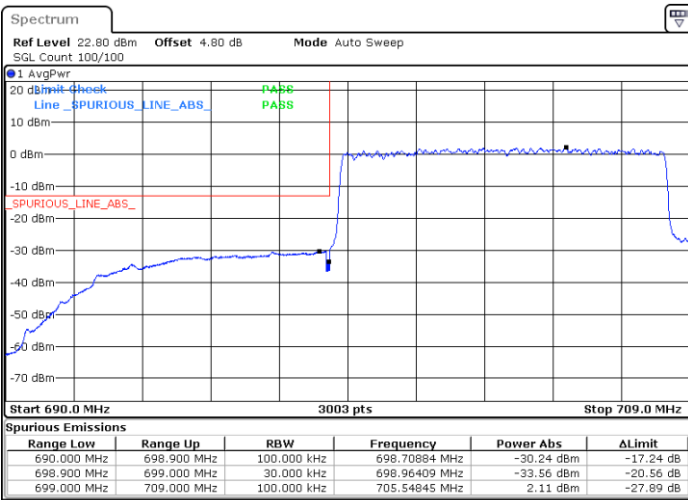


Date: 19 DEC 2020 16:27:25

Date: 19 DEC 2020 16:34:31

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 16:24:18

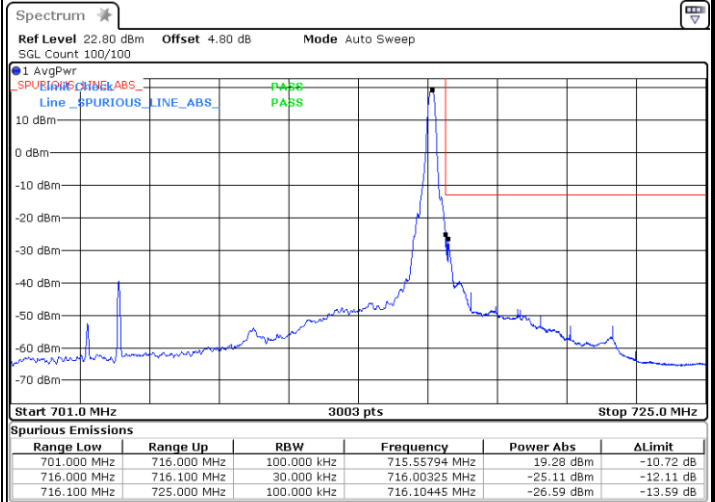
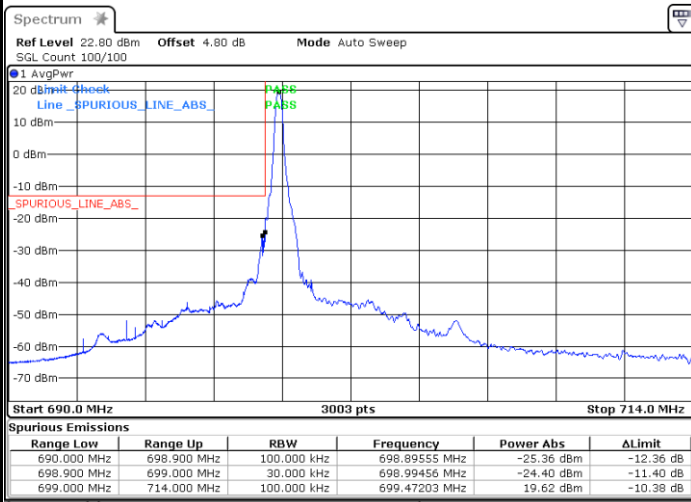
Date: 19 DEC 2020 16:30:55



FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

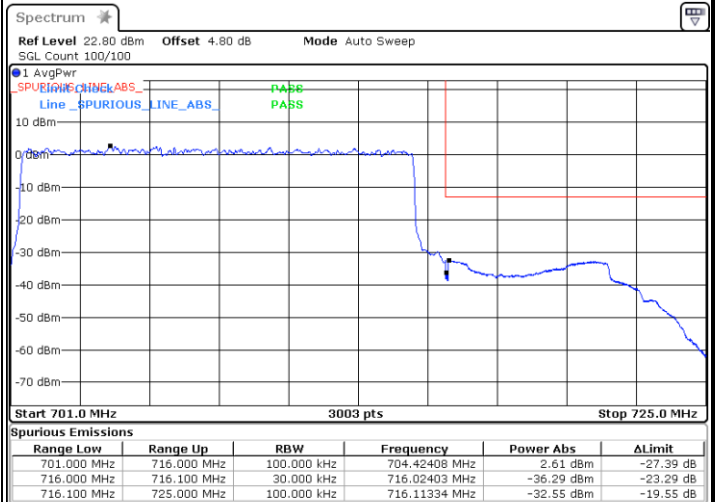
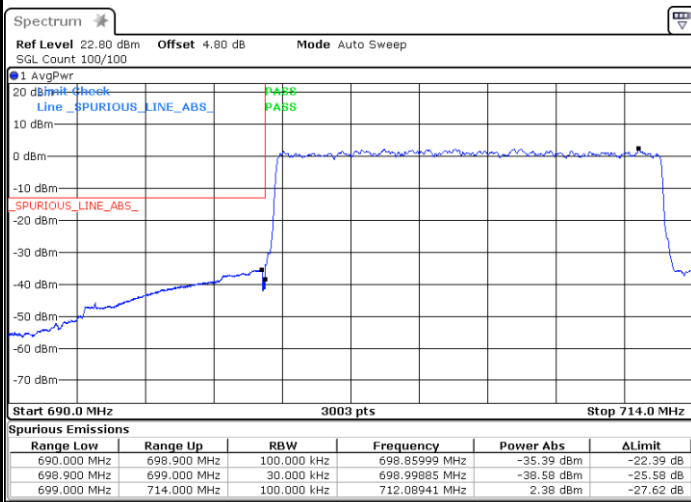


Date: 19 DEC 2020 17:31:39

Date: 19 DEC 2020 17:42:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 17:35:08

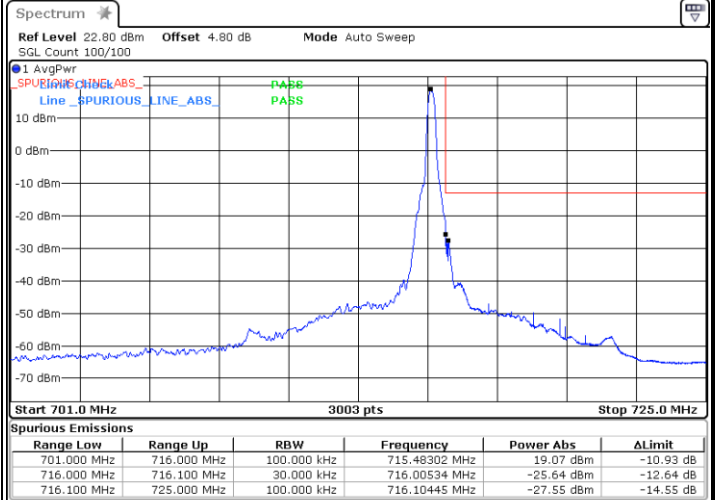
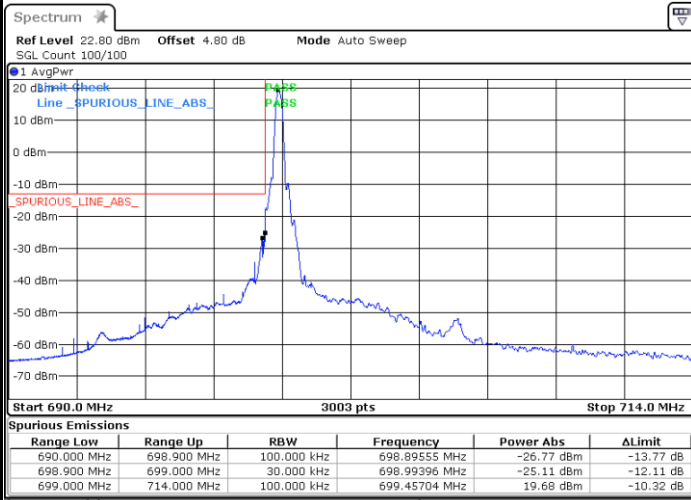
Date: 19 DEC 2020 17:39:01



FR1 n12 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

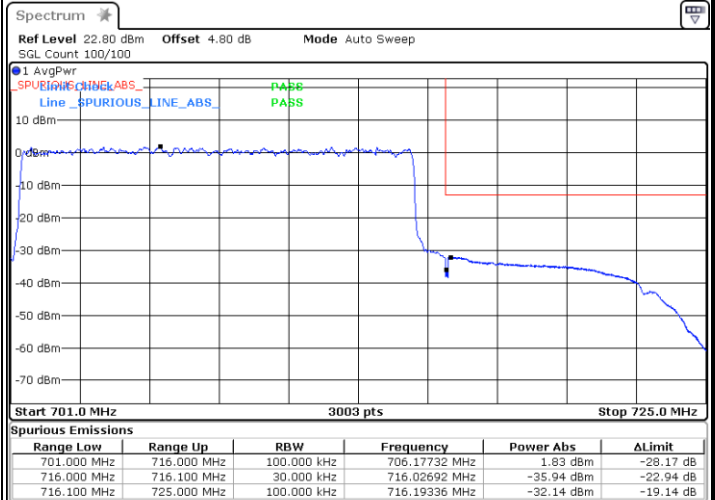
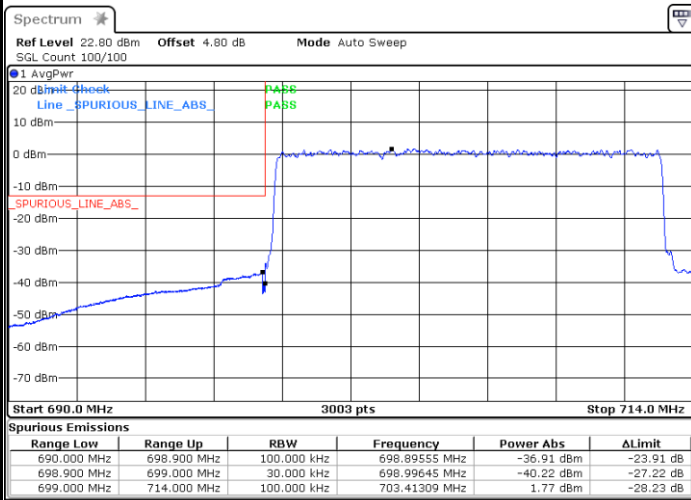


Date: 19 DEC 2020 17:32:17

Date: 19 DEC 2020 17:42:55

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 17:35:45

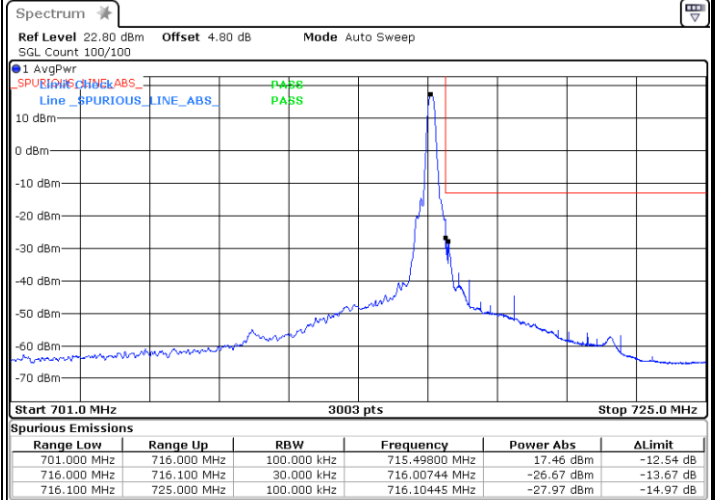
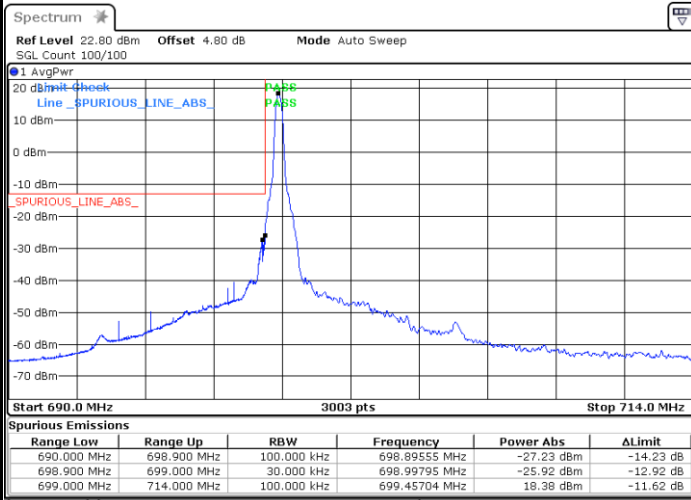
Date: 19 DEC 2020 17:39:38



FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

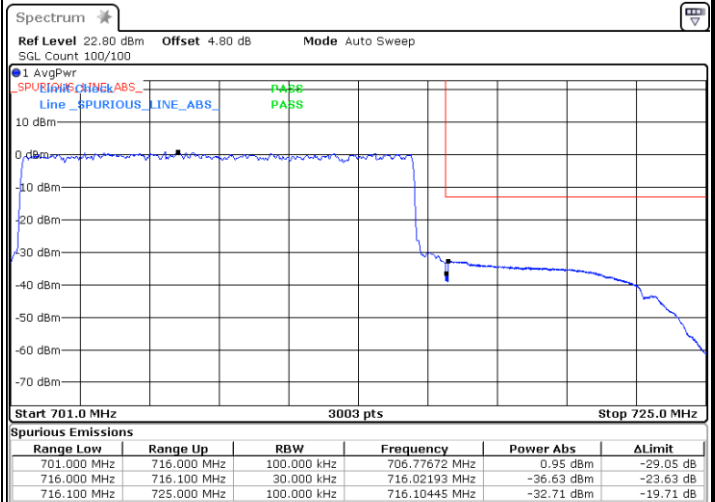
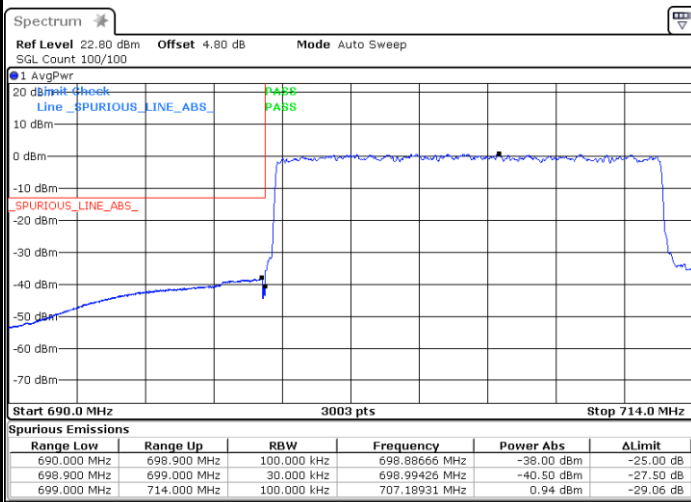


Date: 19 DEC 2020 17:32:54

Date: 19 DEC 2020 17:43:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 17:36:21

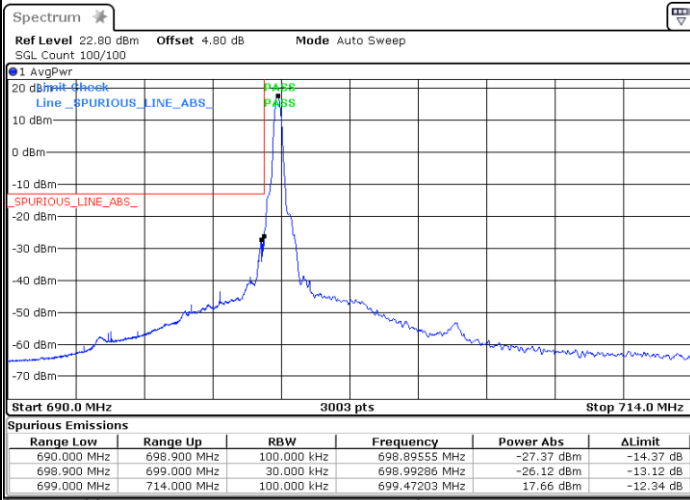
Date: 19 DEC 2020 17:40:14



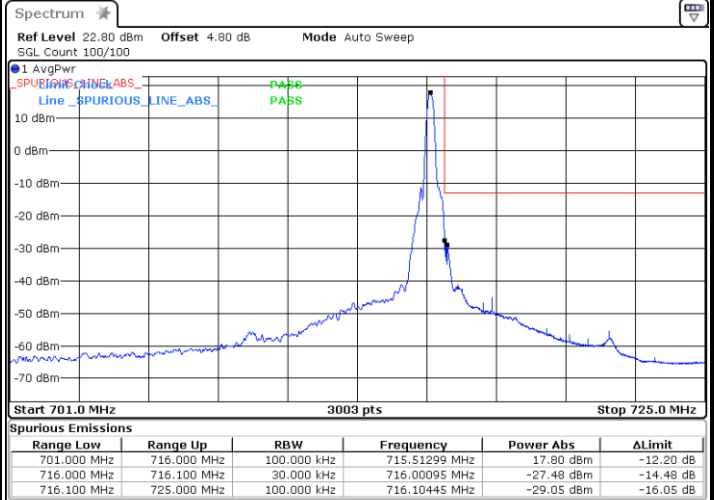
FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



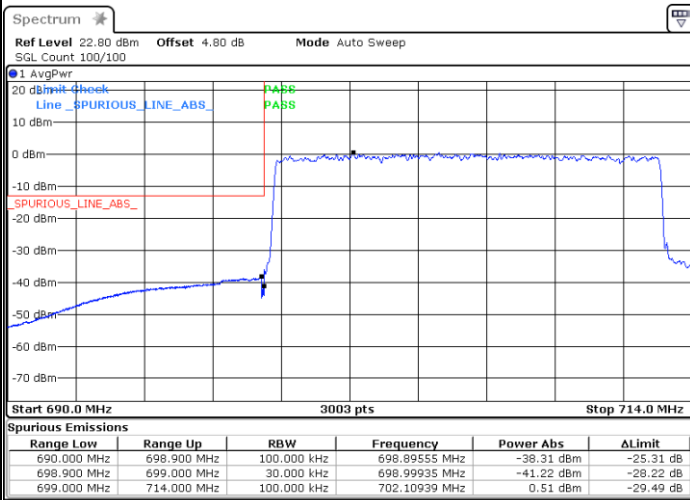
Date: 19 DEC 2020 17:33:31



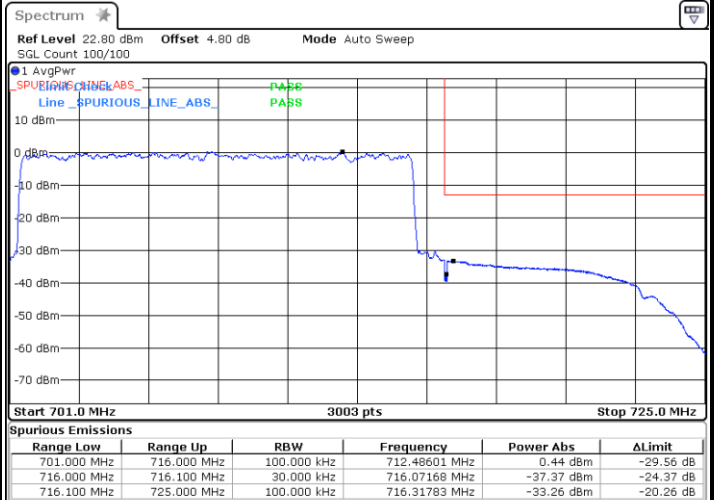
Date: 19 DEC 2020 17:44:12

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 DEC 2020 17:37:11



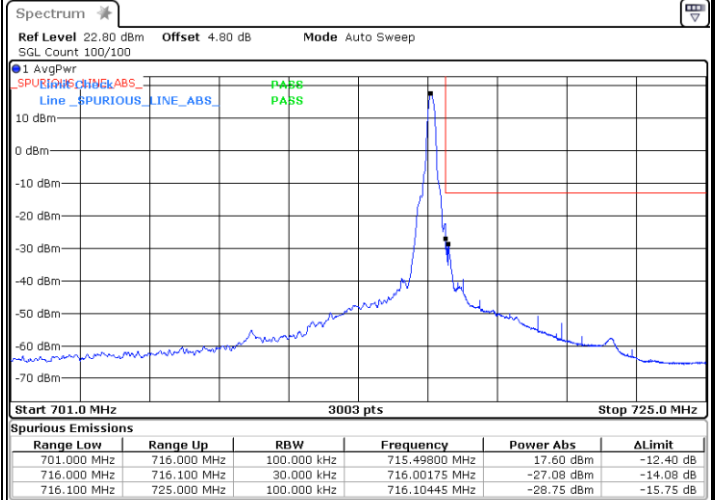
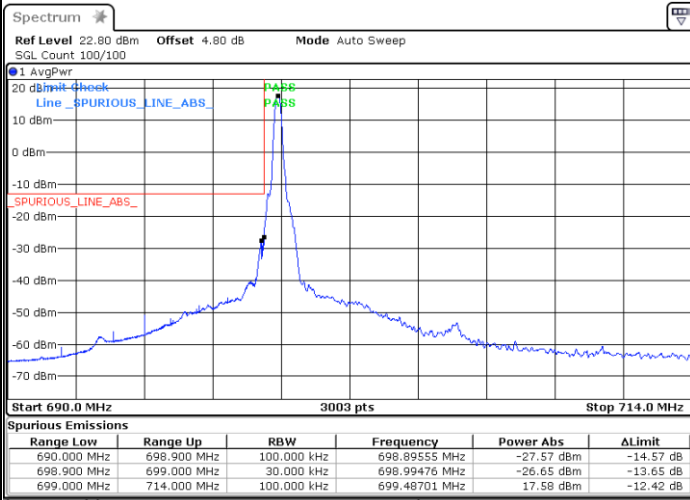
Date: 19 DEC 2020 17:40:49



FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

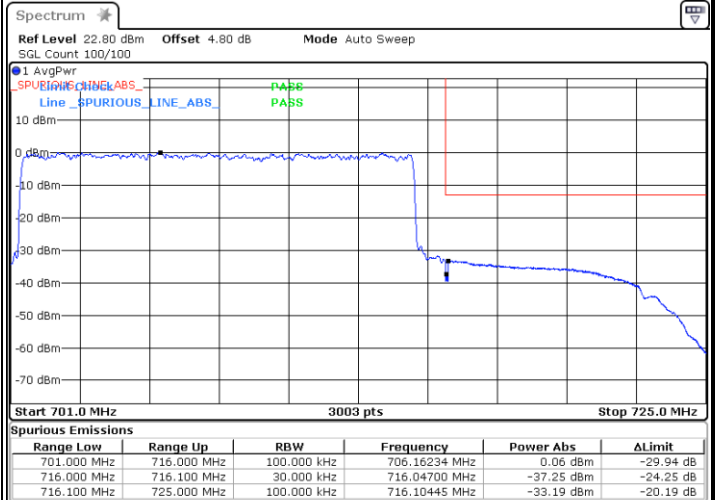
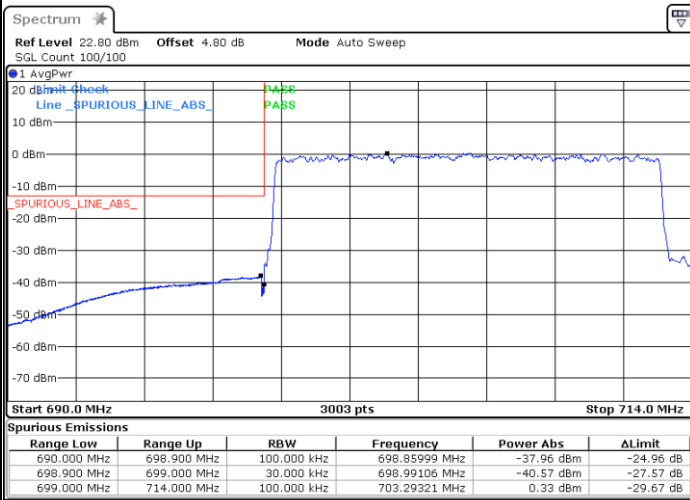


Date: 19 DEC 2020 17:34:09

Date: 19 DEC 2020 17:44:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

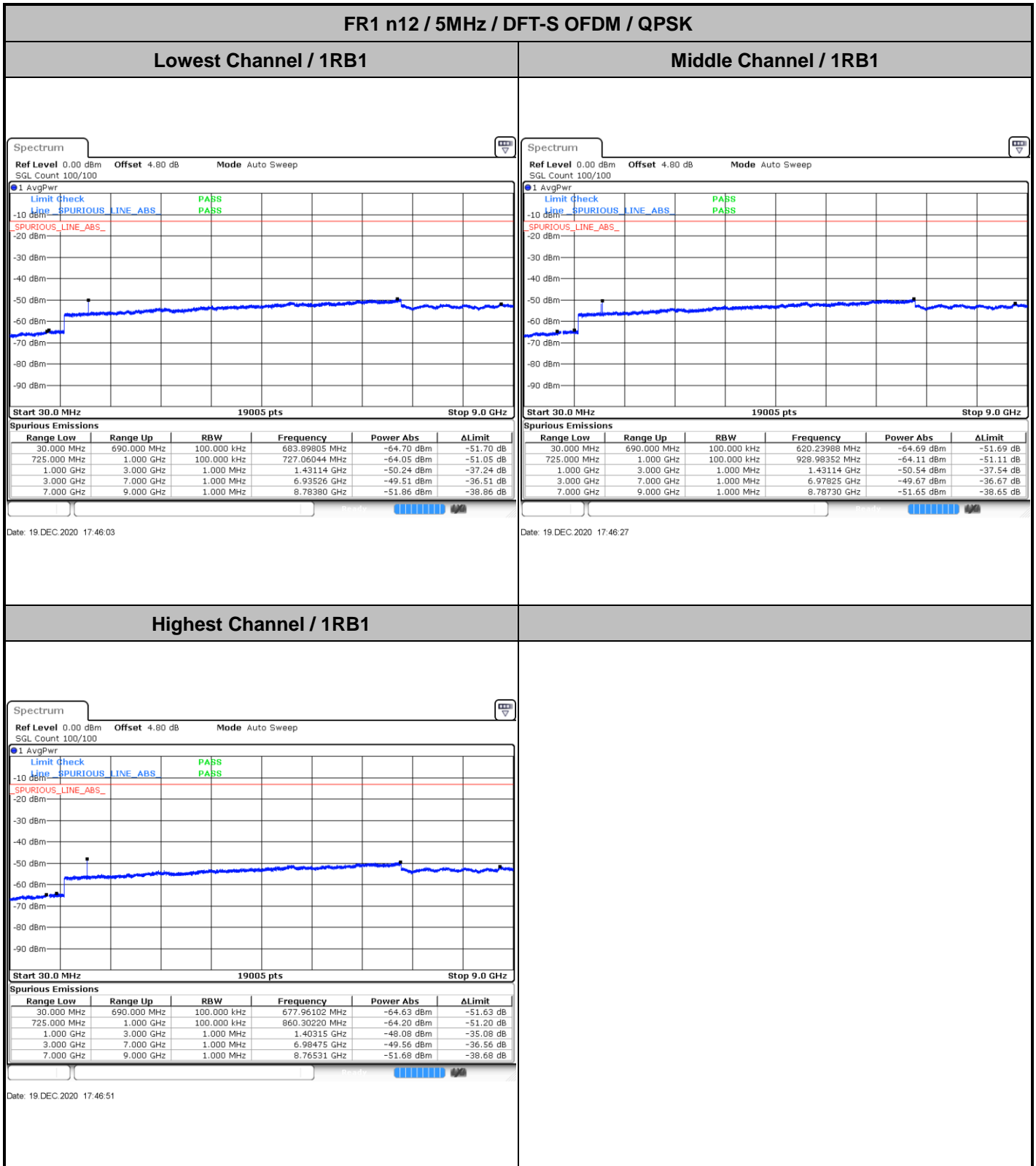


Date: 19 DEC 2020 17:37:50

Date: 19 DEC 2020 17:41:24



# Conducted Spurious Emission



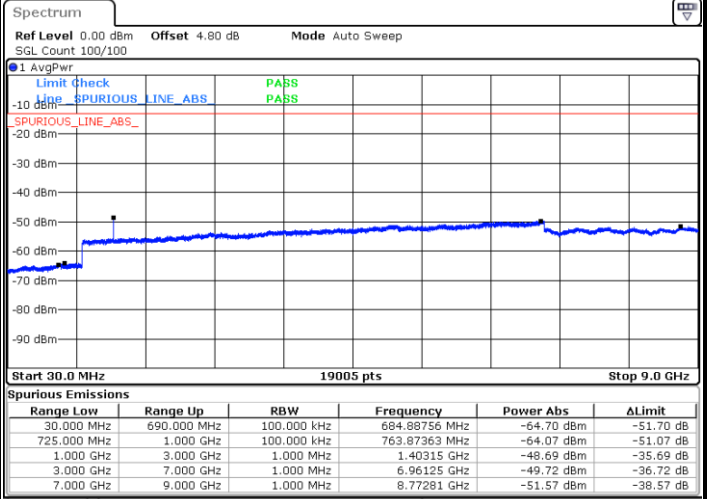
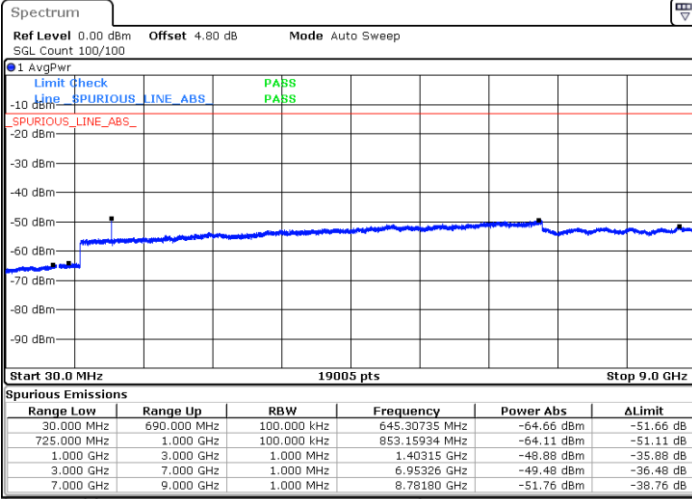




FR1 n12 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

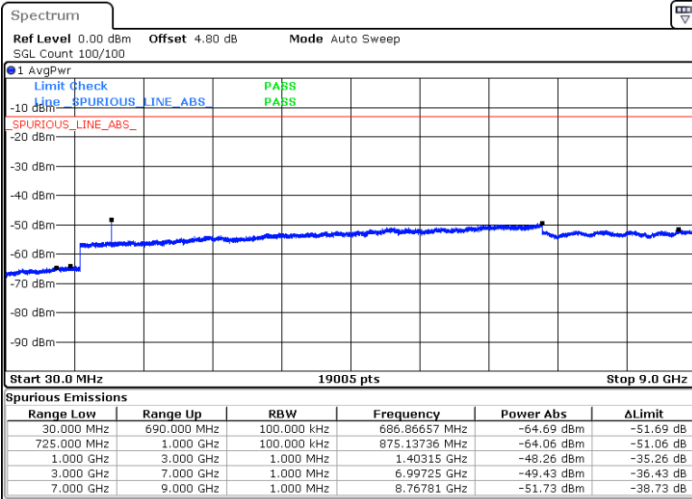
Middle Channel / 1RB1



Date: 19.DEC.2020 17:47:23

Date: 19.DEC.2020 17:47:48

Highest Channel / 1RB1



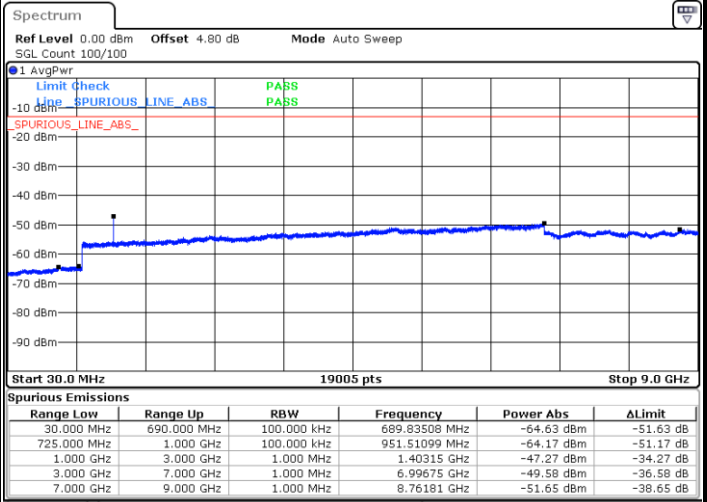
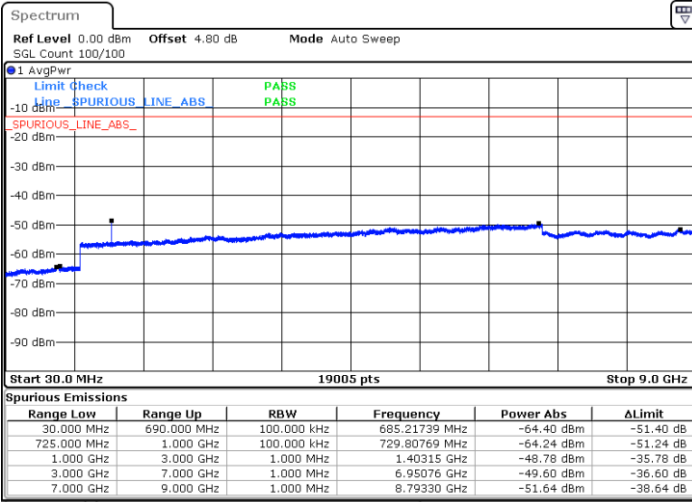
Date: 19.DEC.2020 17:48:12



FR1 n12 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

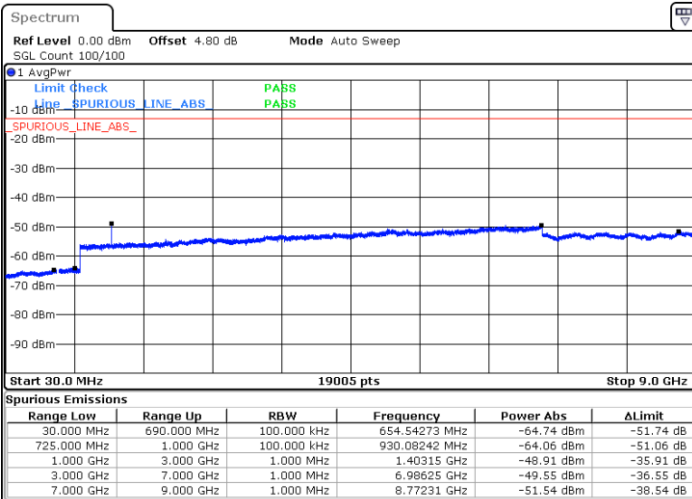
Middle Channel / 1RB1



Date: 19.DEC.2020 17:48:38

Date: 19.DEC.2020 17:57:14

Highest Channel / 1RB1



Date: 19.DEC.2020 18:18:27



### Frequency Stability

Test Conditions		FR1 n12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0020	PASS
40	Normal Voltage	0.0055	
30	Normal Voltage	0.0072	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0064	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0054	
-30	Normal Voltage	0.0048	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0092	

**Note:**

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.3 V. ; Maximum Voltage =8.7 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## 5G NR n41 SA

### Peak-to-Average Ratio

Mode	FR1 n41 / 100MHz / 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	5.5	5.16	5.14	5.28	PASS
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	5.36				PASS

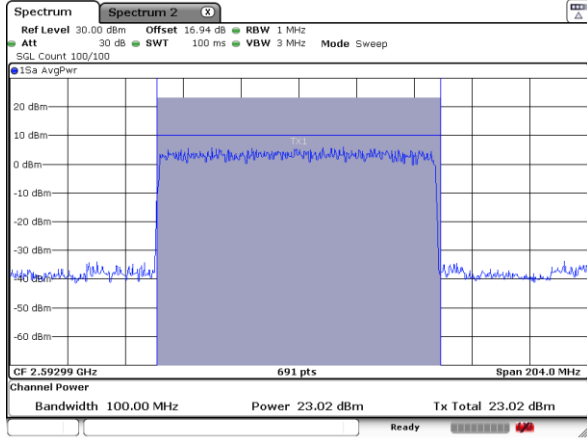
Note: PAR=Peak-Average



FR1 n41 / 100MHz / DFT-S OFDM

Middle Channel / Full RB

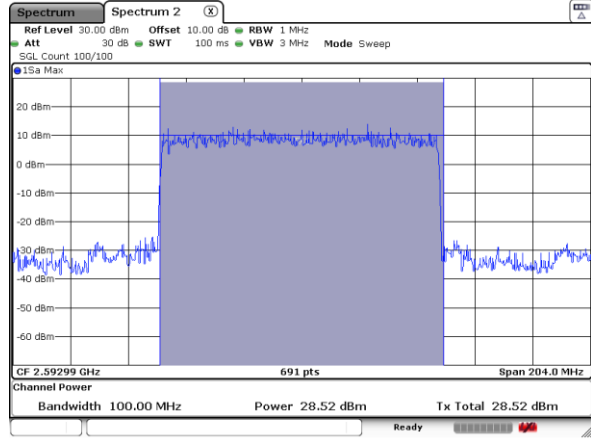
BPSK-Average



Date: 23 DEC 2020 14:20:37

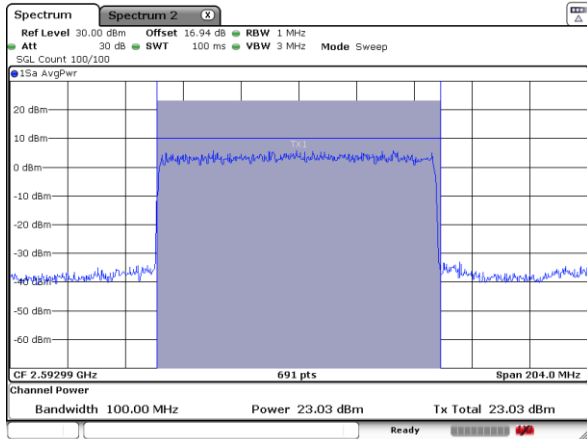
Middle Channel / Full RB

BPSK-Peak



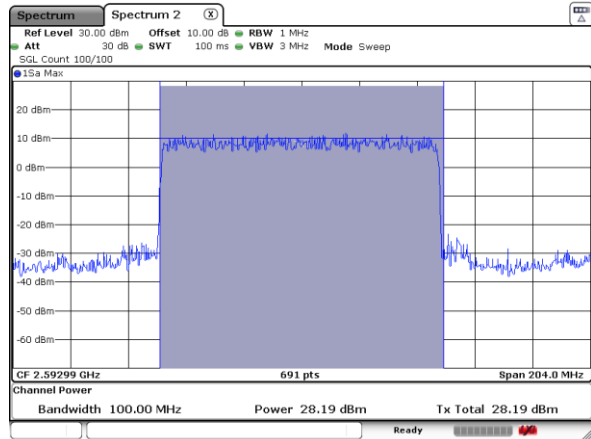
Date: 23 DEC 2020 14:20:59

QPSK-Average



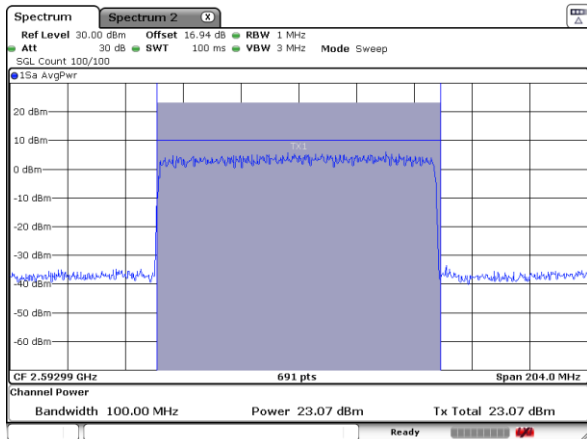
Date: 23 DEC 2020 14:21:20

QPSK-Peak



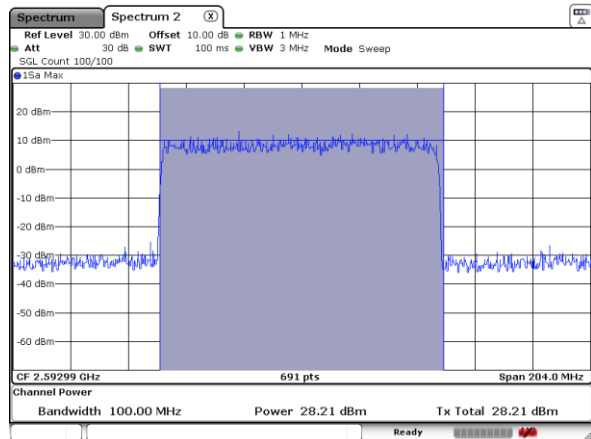
Date: 23 DEC 2020 14:21:42

16QAM-Average

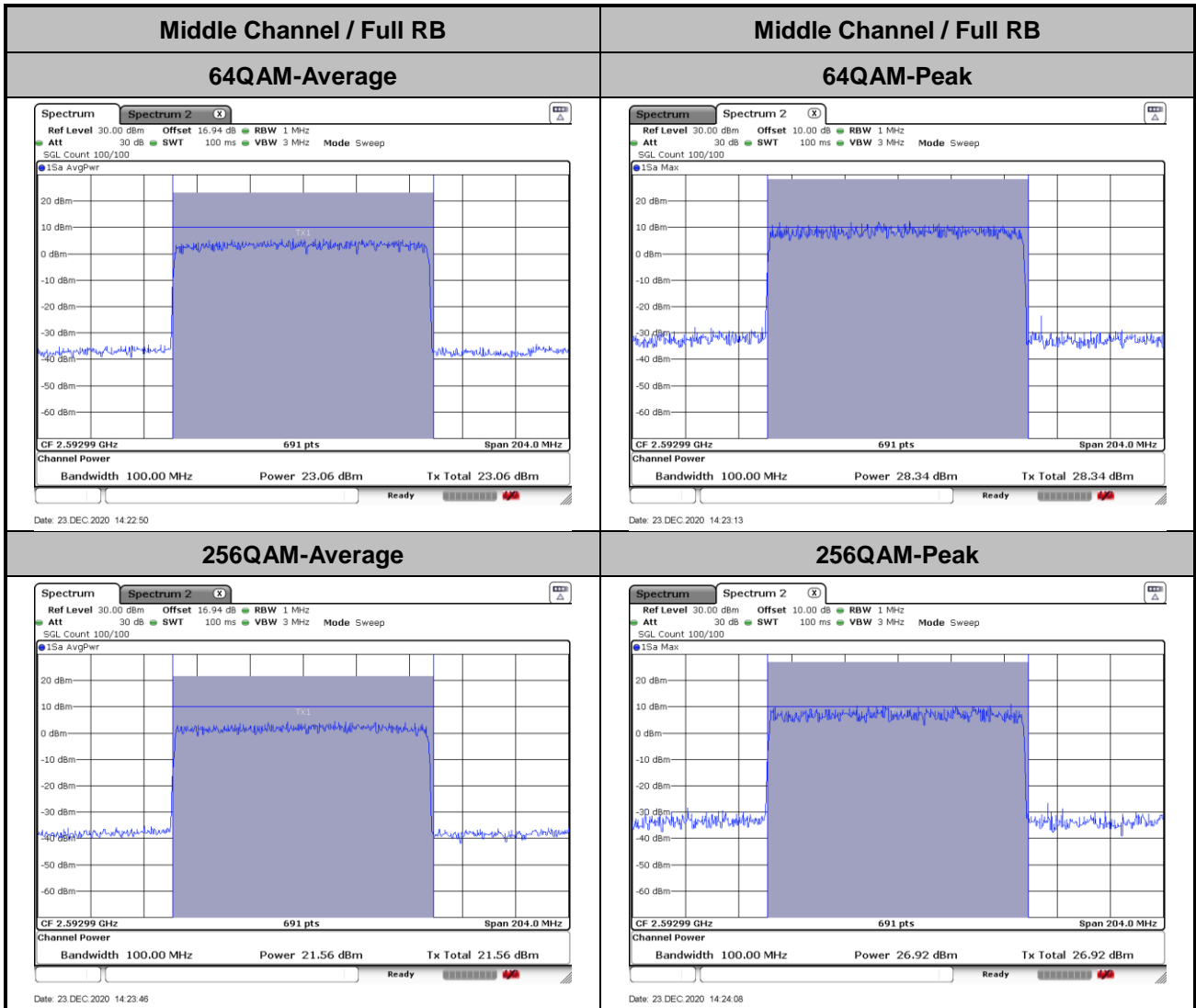


Date: 23 DEC 2020 14:22:06

16QAM-Peak



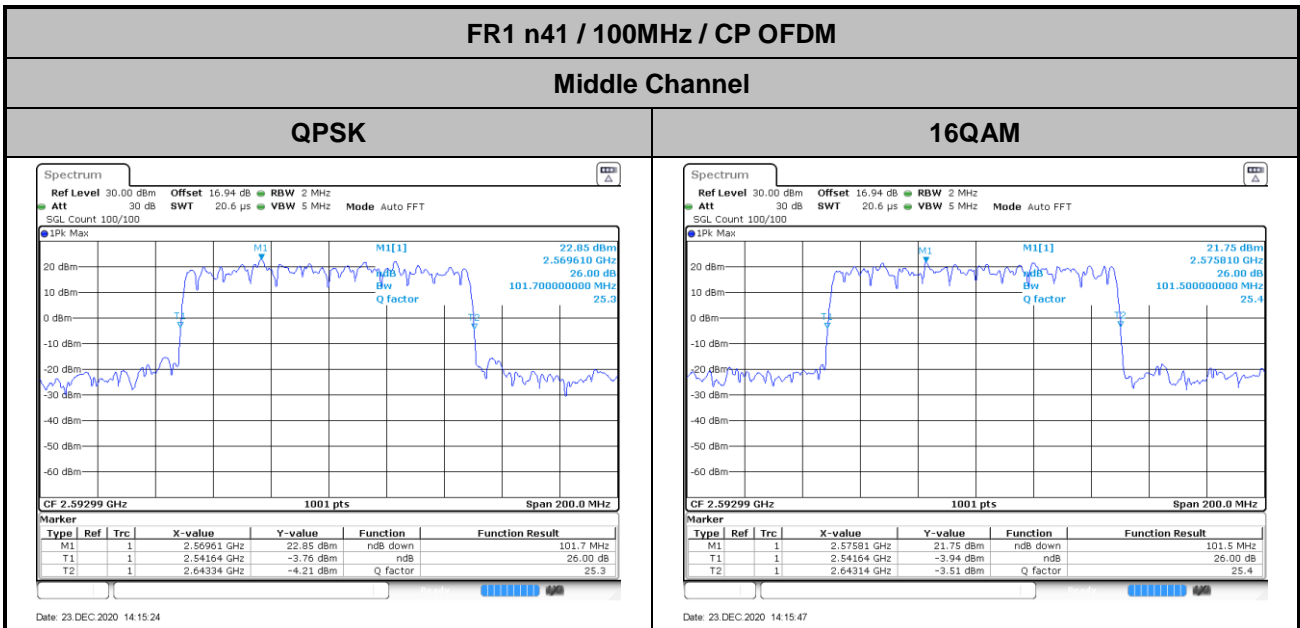
Date: 23 DEC 2020 14:22:27





**26dB Bandwidth**

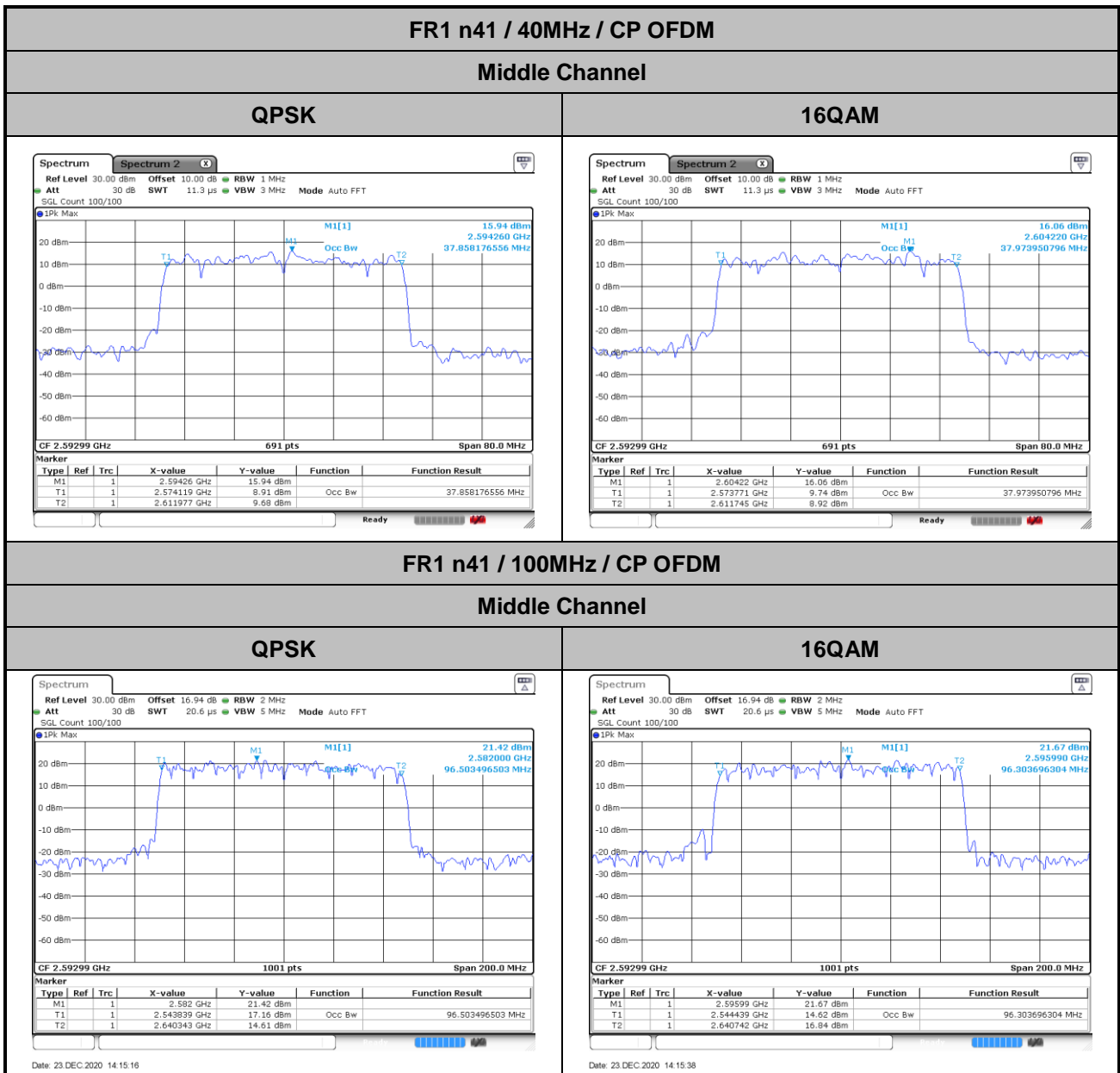
Mode	FR1 n41 : 26dB BW(MHz) / CP OFDM	
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	101.7	101.5





# Occupied Bandwidth

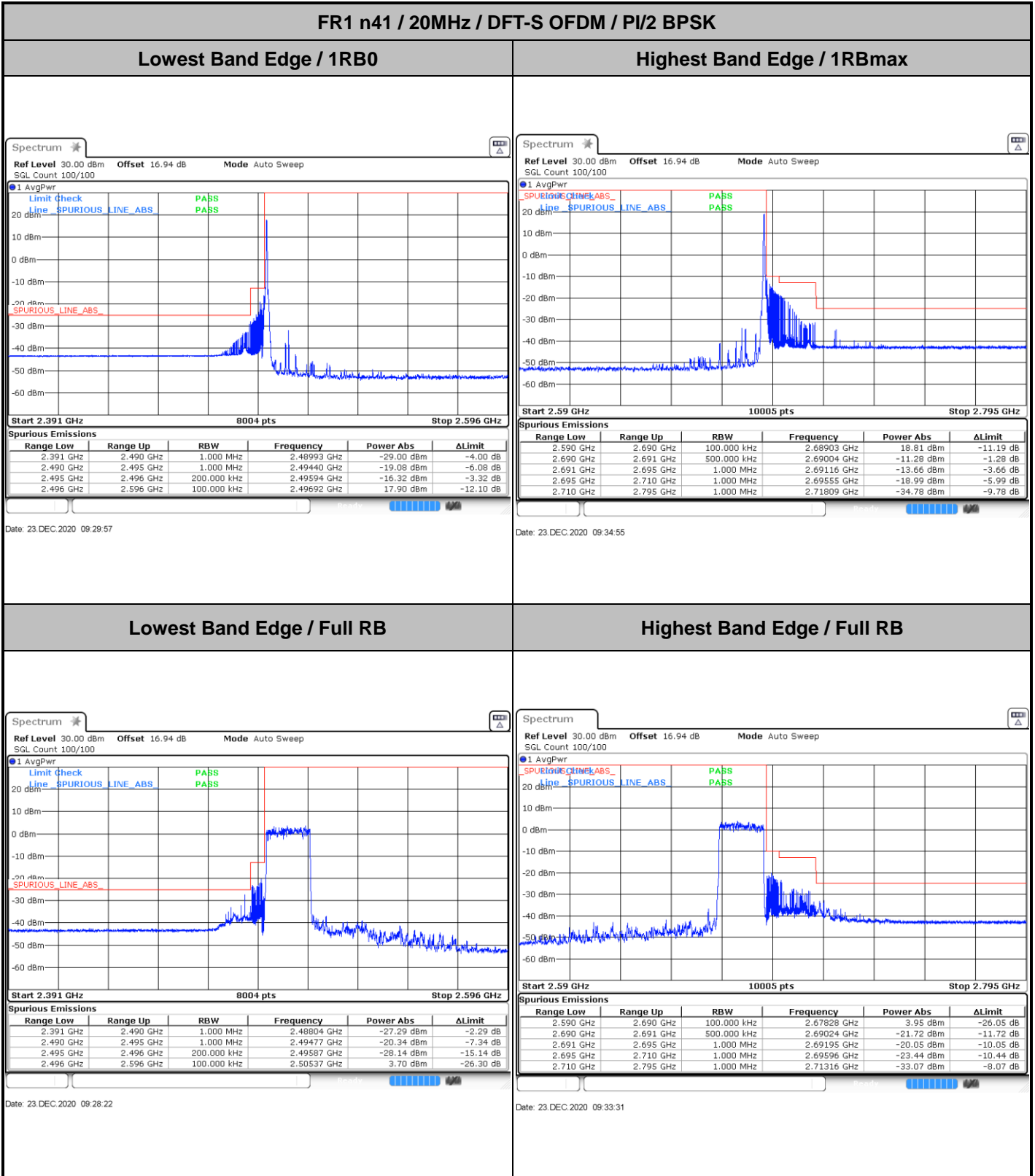
Mode	FR1 n41 : OB BW(MHz) / CP OFDM			
BW	40MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	37.858	37.974	96.503	96.304







# Conducted Band Edge

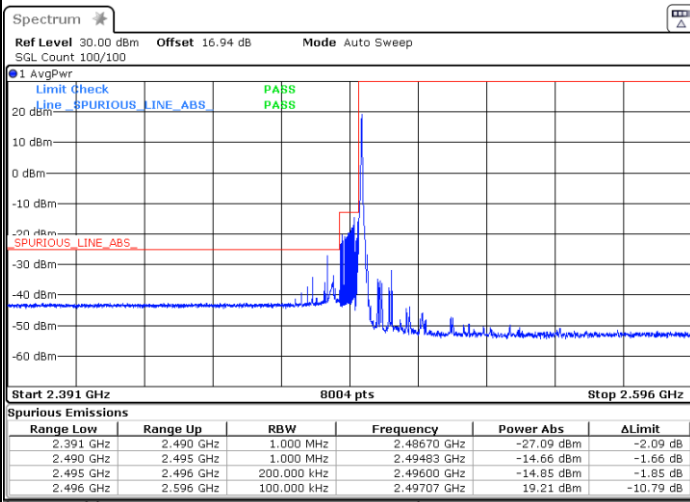




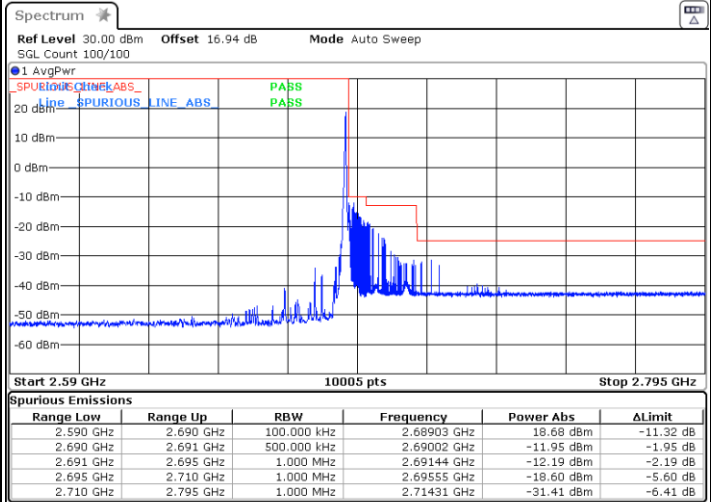
FR1 n41 / 20MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



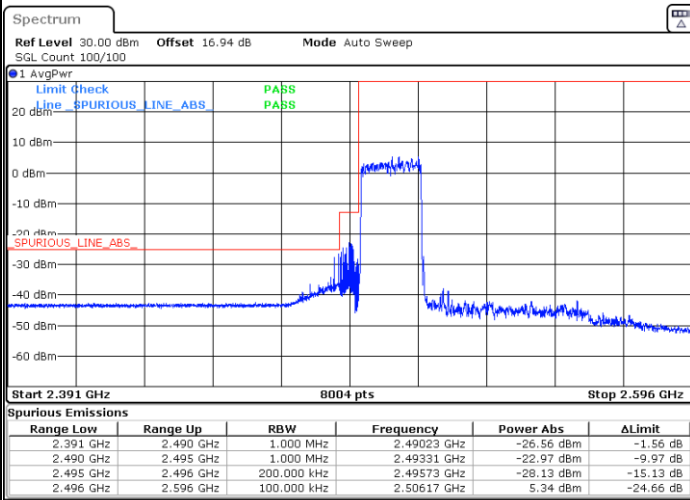
Date: 23 DEC 2020 09:30:26



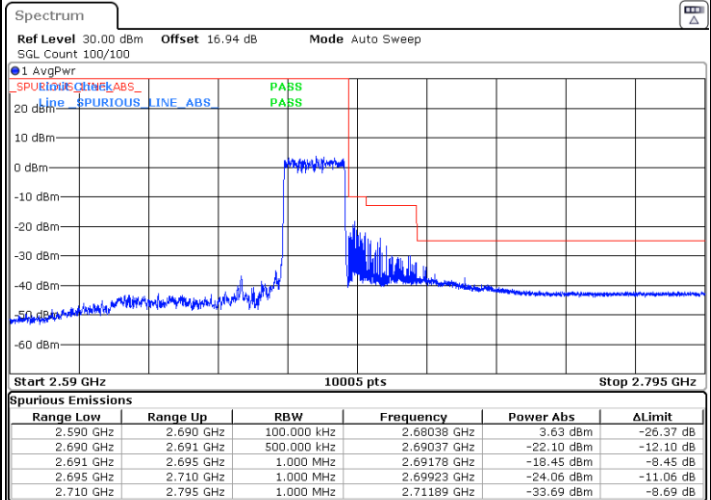
Date: 23 DEC 2020 09:35:19

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23 DEC 2020 09:28:34



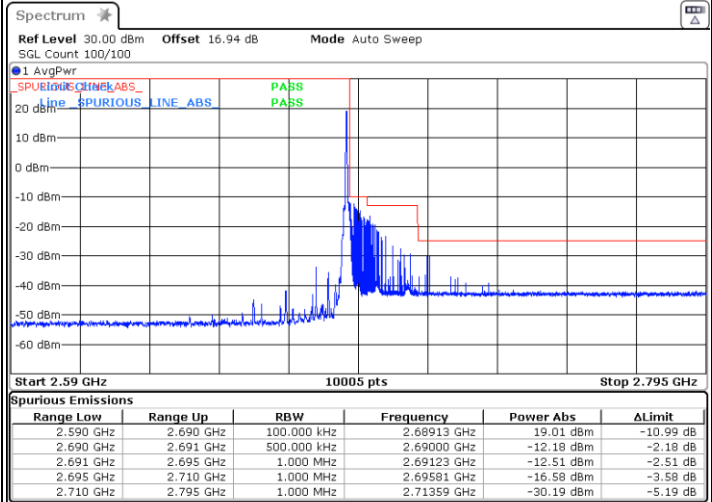
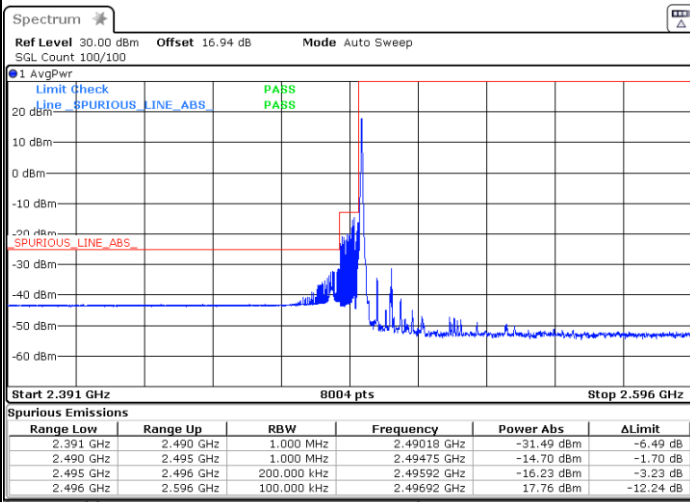
Date: 23 DEC 2020 09:33:43



FR1 n41 / 20MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

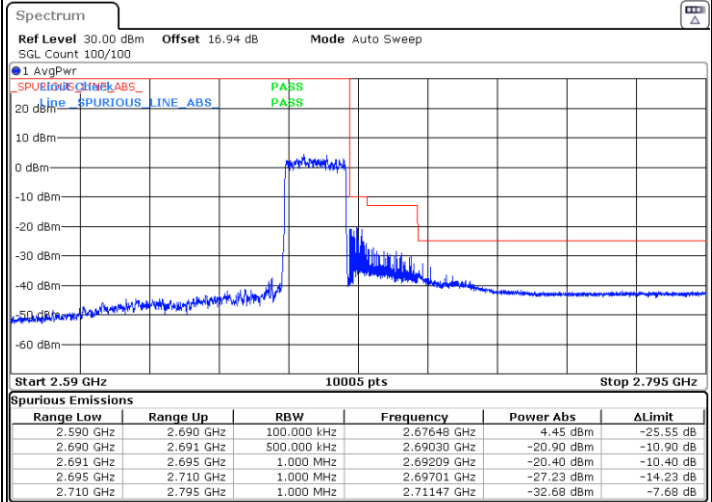
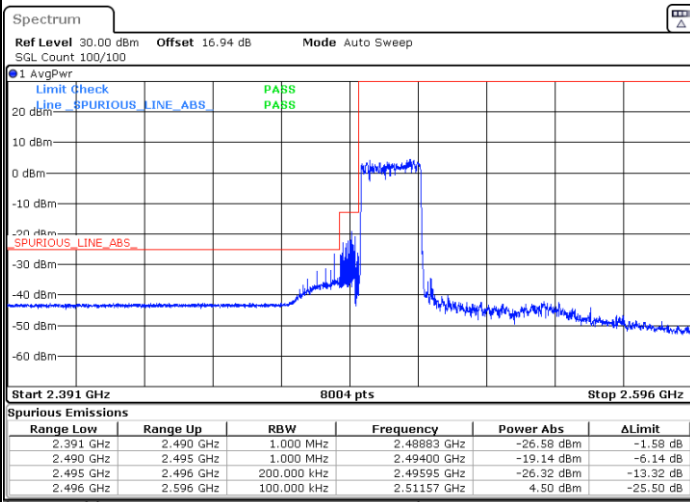


Date: 23 DEC 2020 09:30:53

Date: 23 DEC 2020 09:45:55

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



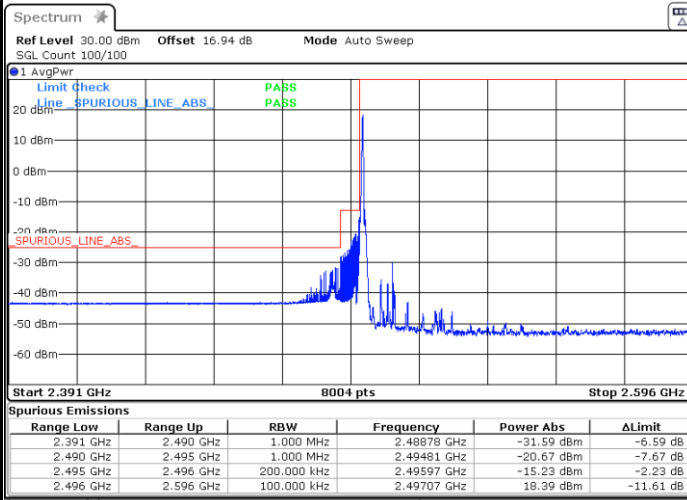
Date: 23 DEC 2020 09:28:44

Date: 23 DEC 2020 09:33:54



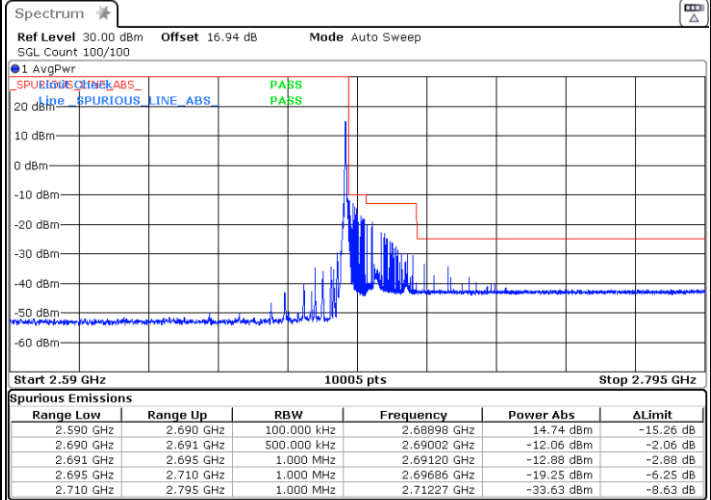
FR1 n41 / 20MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0



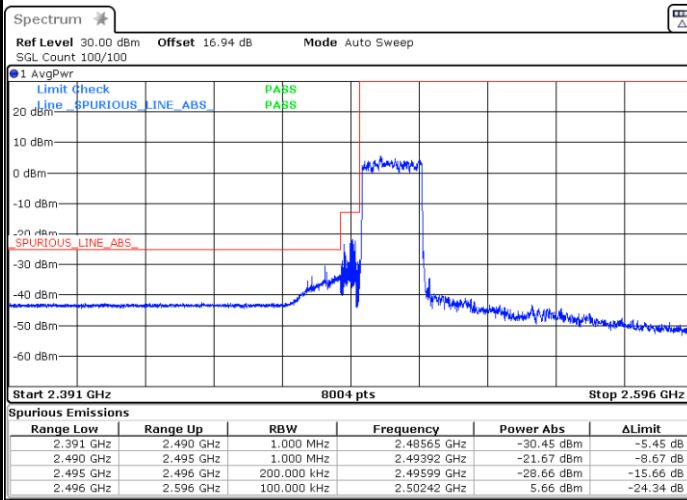
Date: 23 DEC 2020 09:31:21

Highest Band Edge / 1RB24



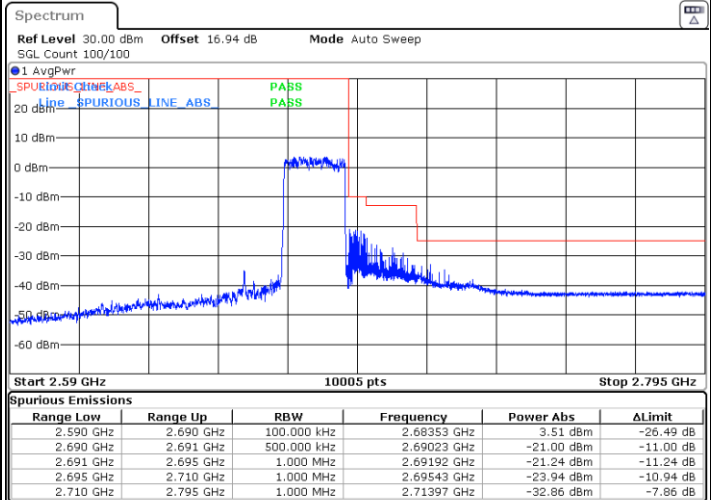
Date: 23 DEC 2020 09:46:17

Lowest Band Edge / Full RB



Date: 23 DEC 2020 09:29:03

Highest Band Edge / Full RB



Date: 23 DEC 2020 09:34:07