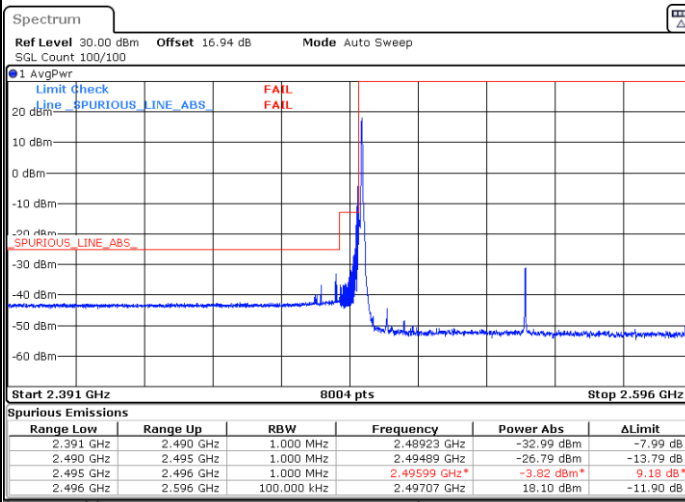




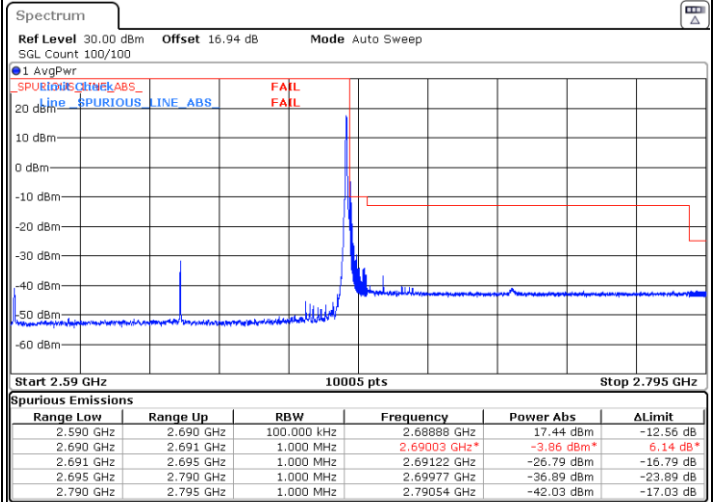
FR1 n41 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



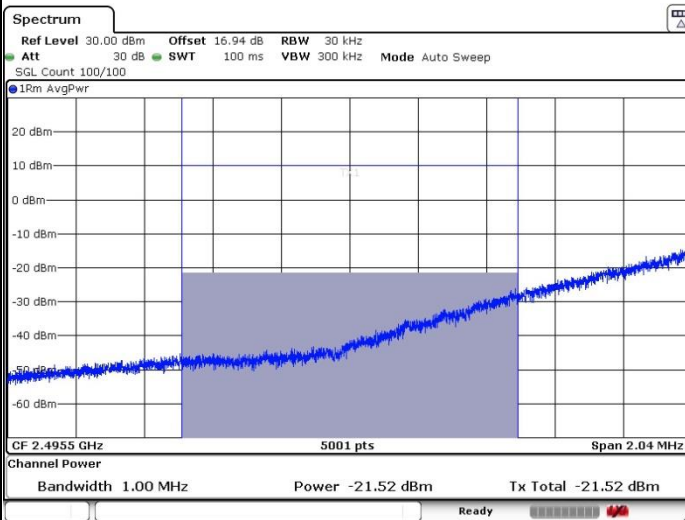
Date: 23 DEC 2020 14:05:27



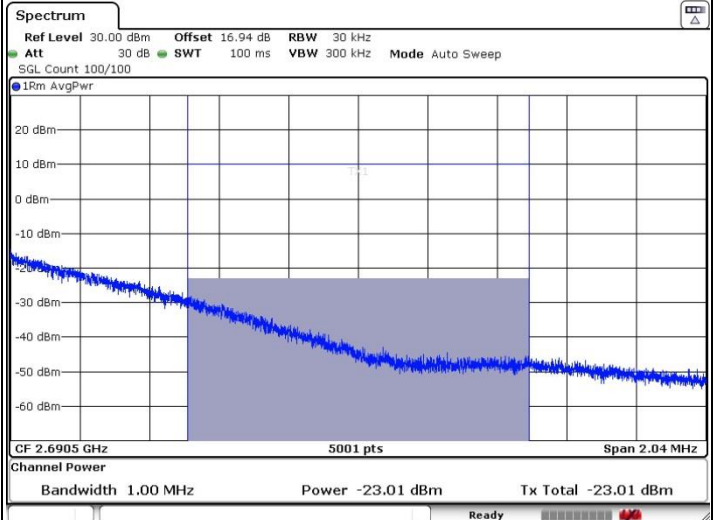
Date: 23 DEC 2020 14:11:01

Channel Power < -13dBm Pass

Channel Power < -10dBm Pass



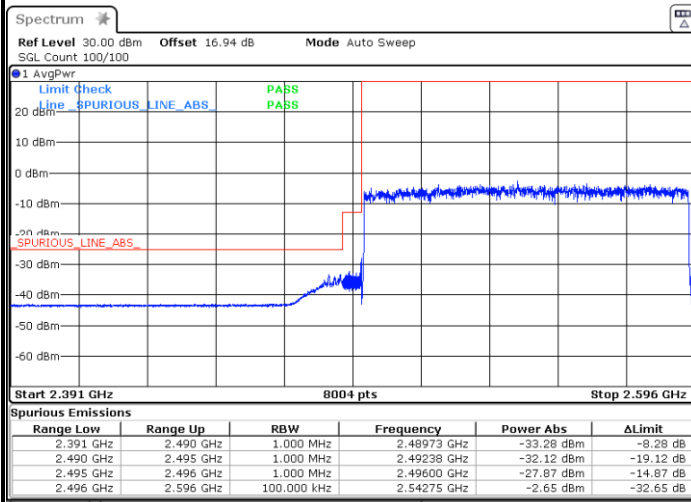
Date: 23 DEC 2020 14:07:22



Date: 23 DEC 2020 14:12:32

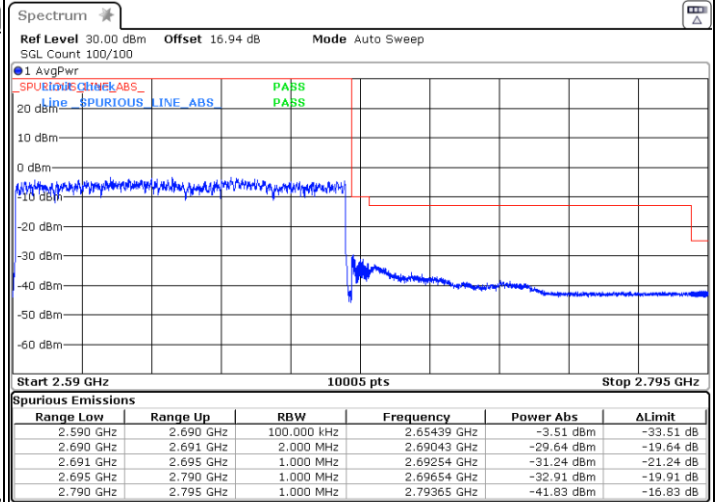


Lowest Band Edge / Full RB



Date: 23 DEC 2020 14:03:39

Highest Band Edge / Full RB



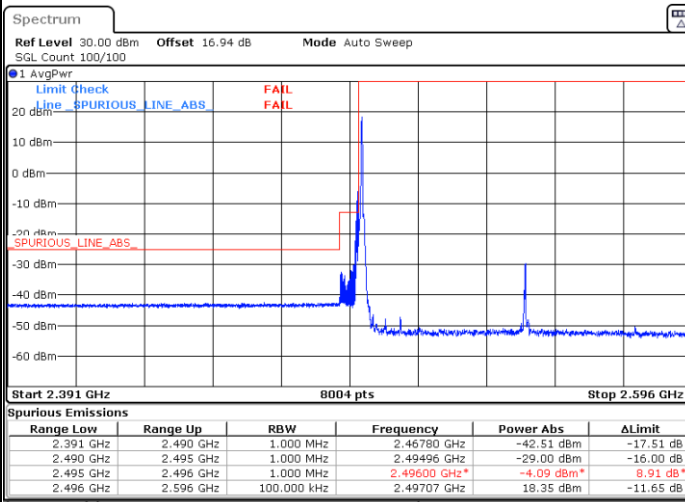
Date: 23 DEC 2020 14:09:41



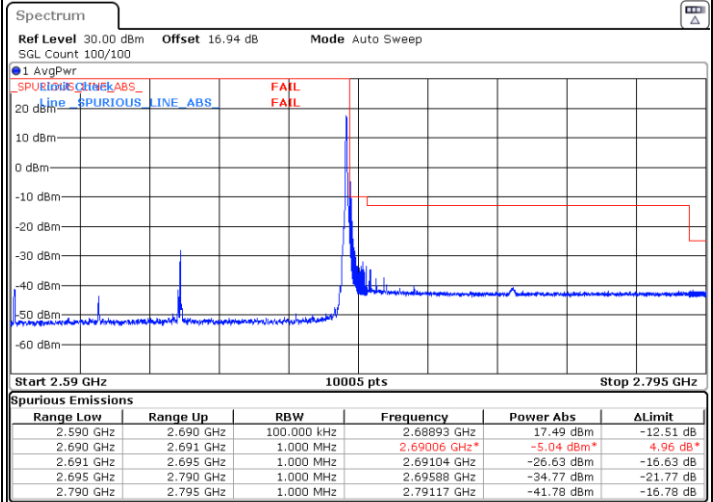
FR1 n41 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



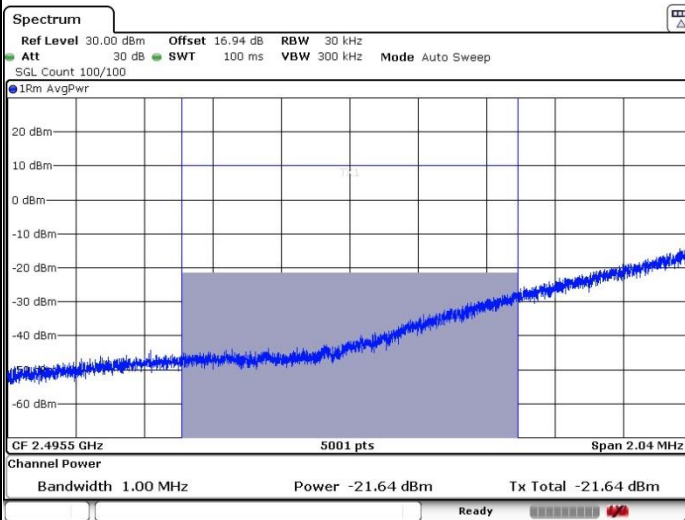
Date: 23 DEC 2020 14:05:37



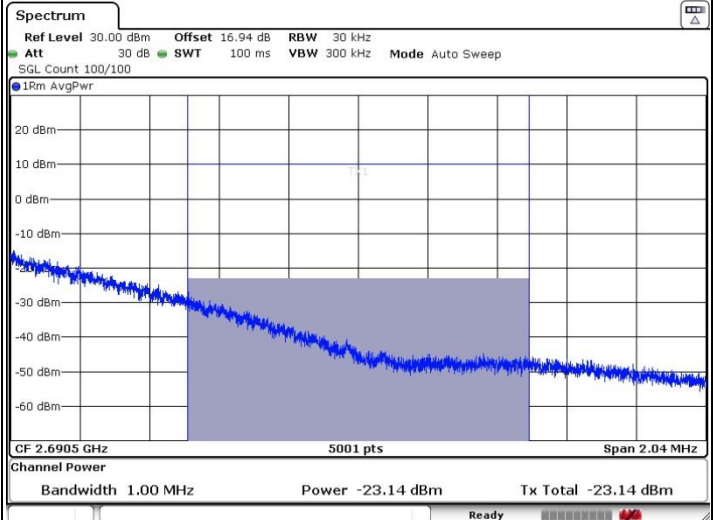
Date: 23 DEC 2020 14:11:12

Channel Power < -13dBm Pass

Channel Power < -10dBm Pass



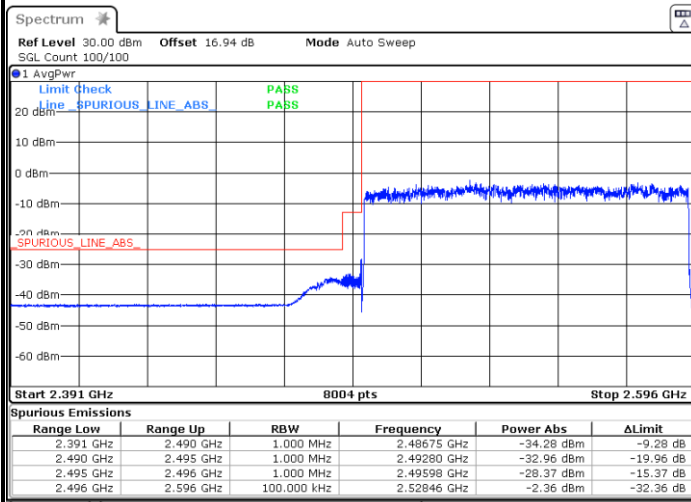
Date: 23 DEC 2020 14:07:42



Date: 23 DEC 2020 14:12:53

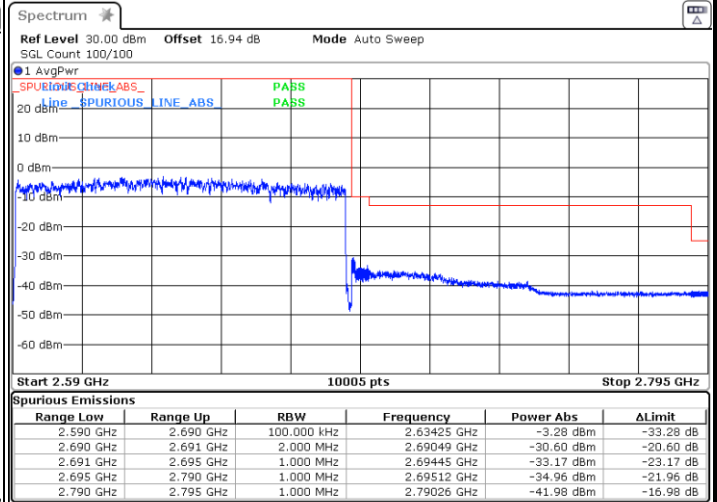


Lowest Band Edge / Full RB



Date: 23.DEC.2020 14:04:04

Highest Band Edge / Full RB

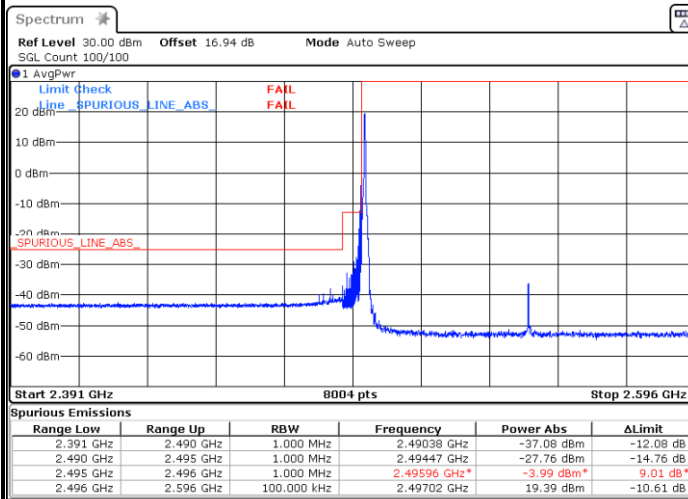


Date: 23.DEC.2020 14:09:57



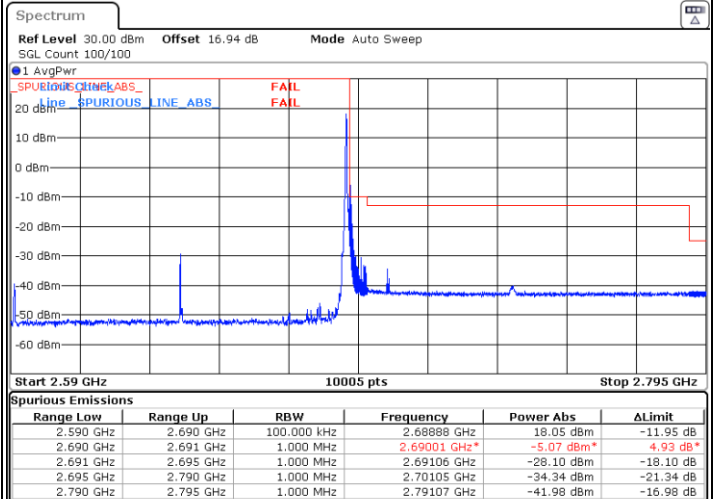
FR1 n41 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0



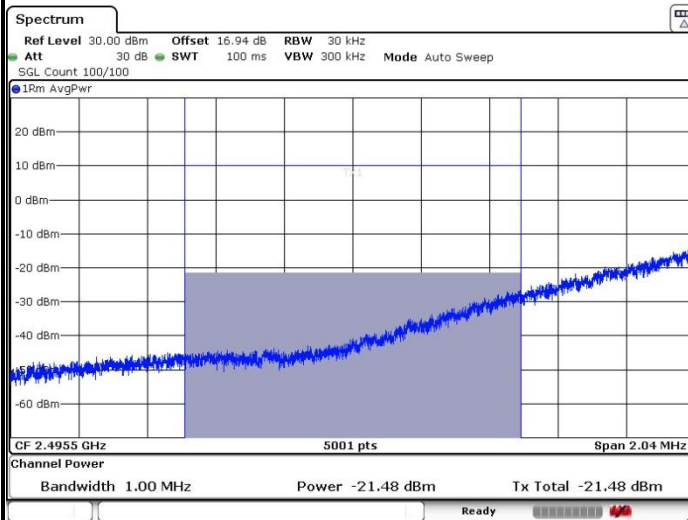
Date: 23 DEC 2020 14:06:00

Highest Band Edge / 1RB24



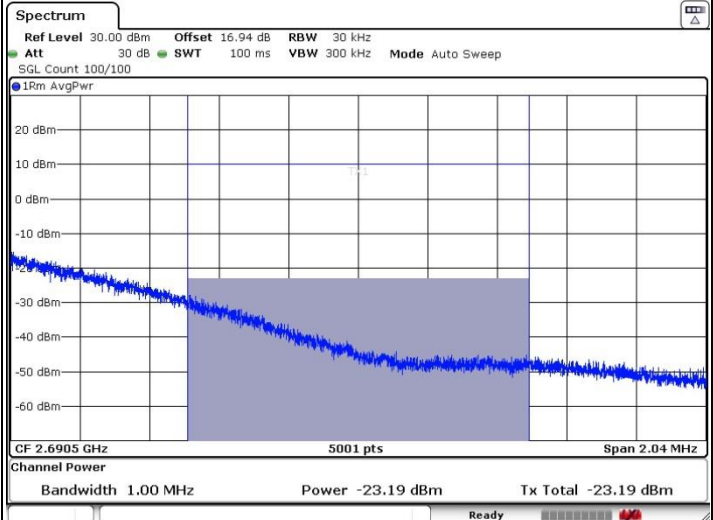
Date: 23 DEC 2020 14:11:22

Channel Power < -13dBm Pass



Date: 23 DEC 2020 14:08:04

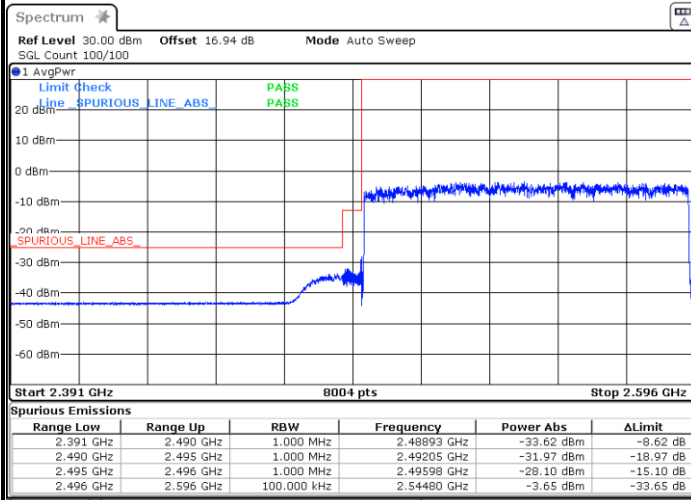
Channel Power < -10dBm Pass



Date: 23 DEC 2020 14:13:15

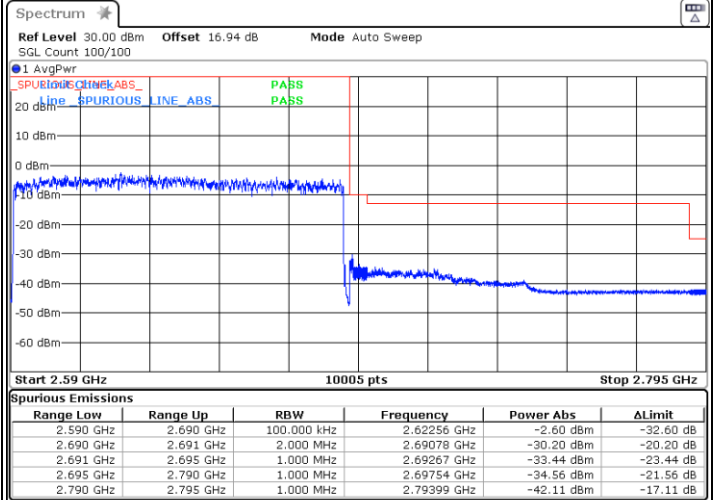


Lowest Band Edge / Full RB



Date: 23.DEC.2020 14:04:31

Highest Band Edge / Full RB

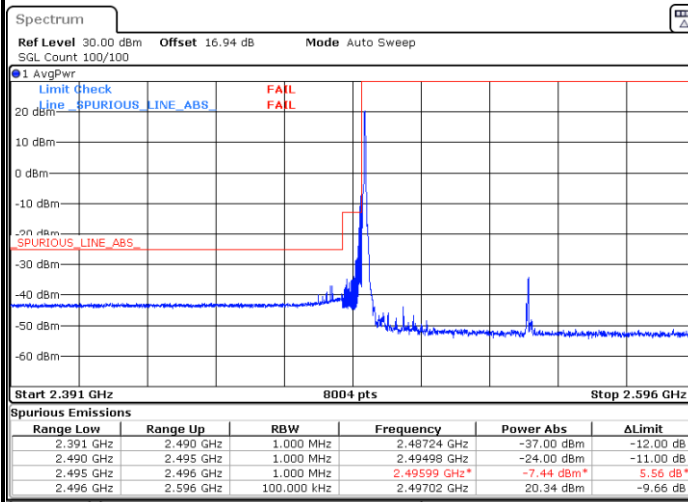


Date: 23.DEC.2020 14:10:12



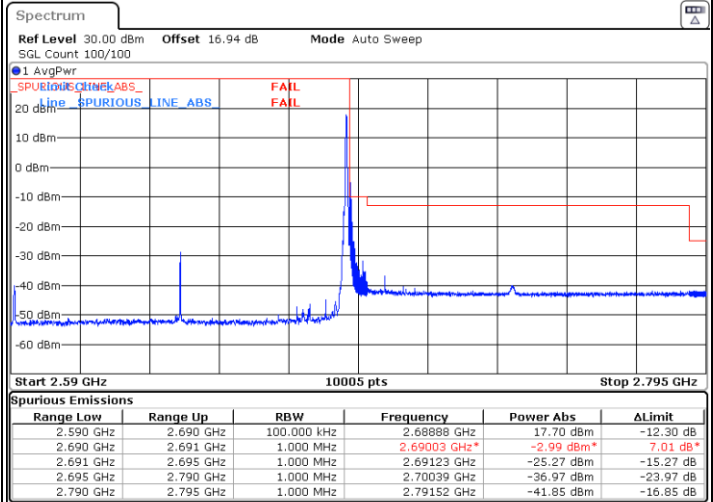
FR1 n41 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0



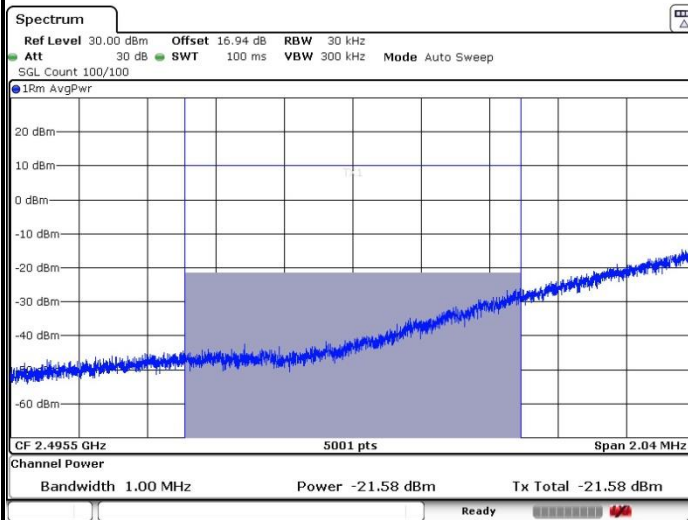
Date: 23 DEC 2020 14:06:10

Highest Band Edge / 1RB24



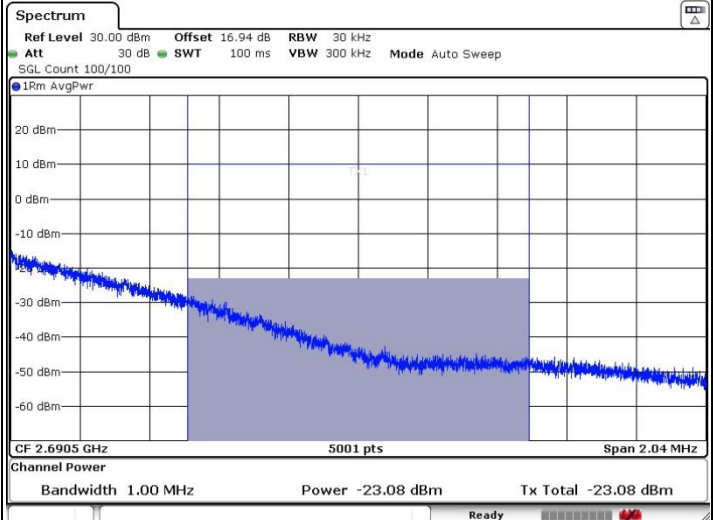
Date: 23 DEC 2020 14:11:32

Channel Power < -13dBm Pass



Date: 23 DEC 2020 14:08:21

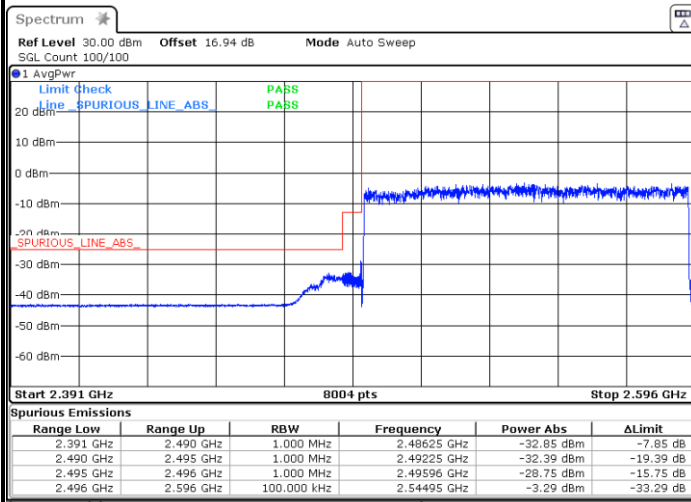
Channel Power < -10dBm Pass



Date: 23 DEC 2020 14:13:32

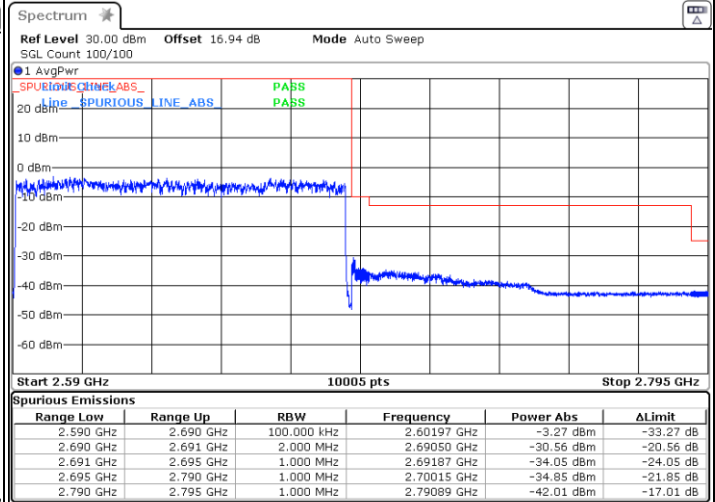


Lowest Band Edge / Full RB



Date: 23.DEC.2020 14:04:53

Highest Band Edge / Full RB



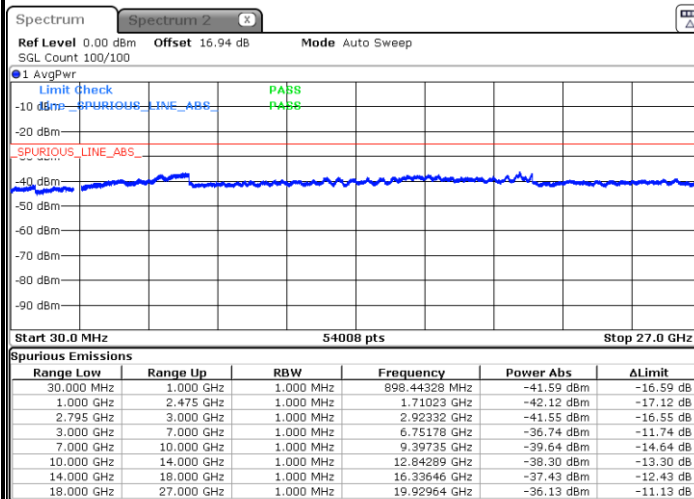
Date: 23.DEC.2020 14:10:28



Conducted Spurious Emission

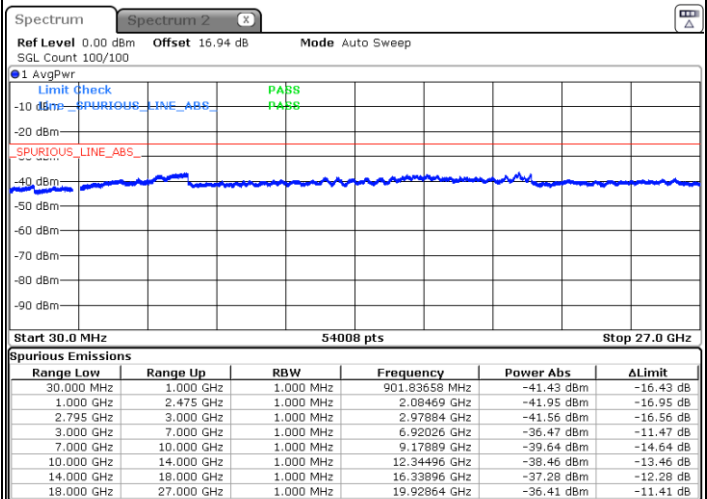
FR1 n41 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



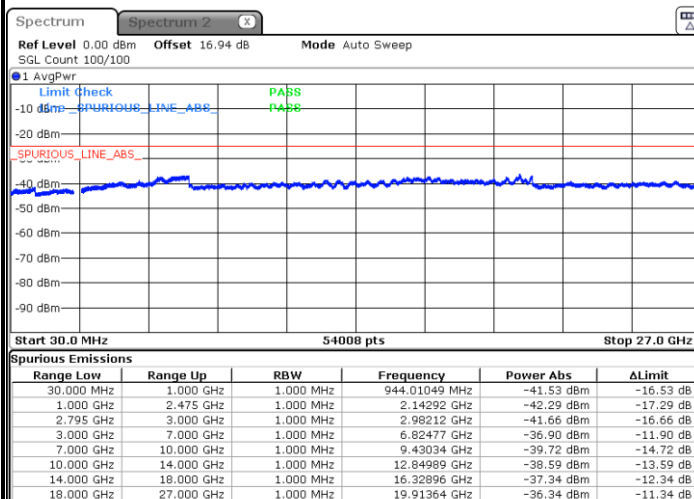
Date: 23 DEC 2020 14:27:37

Middle Channel / 1RB1



Date: 23 DEC 2020 14:38:31

Highest Channel / 1RB1

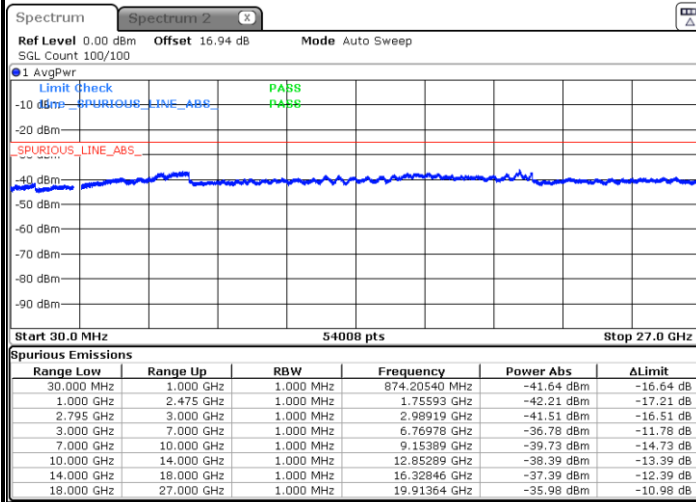


Date: 23 DEC 2020 14:41:12



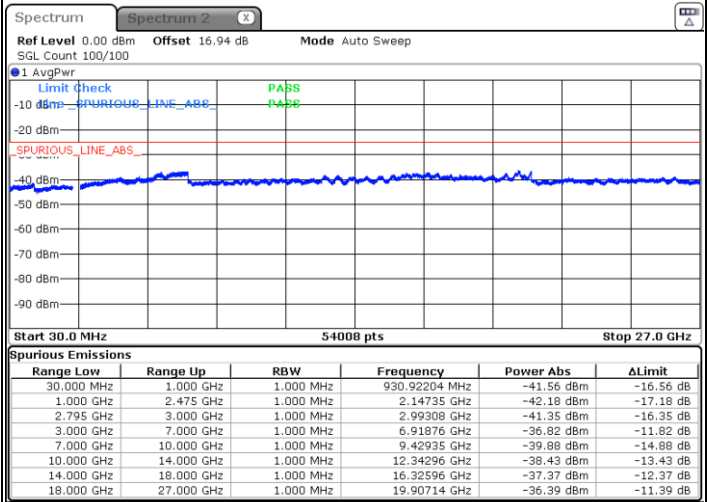
FR1 n41 / 30MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



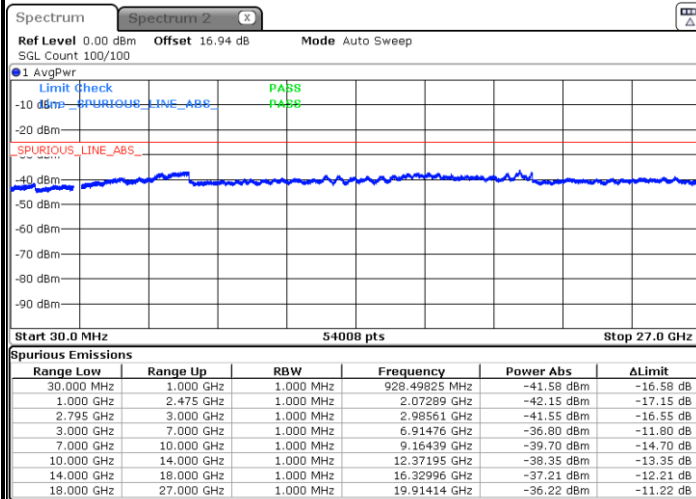
Date: 23 DEC 2020 14:50:40

Middle Channel / 1RB1



Date: 23 DEC 2020 14:51:41

Highest Channel / 1RB1

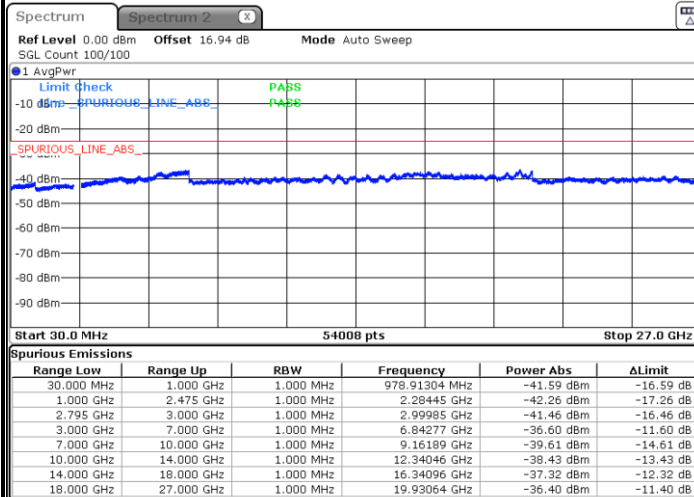


Date: 23 DEC 2020 14:57:39



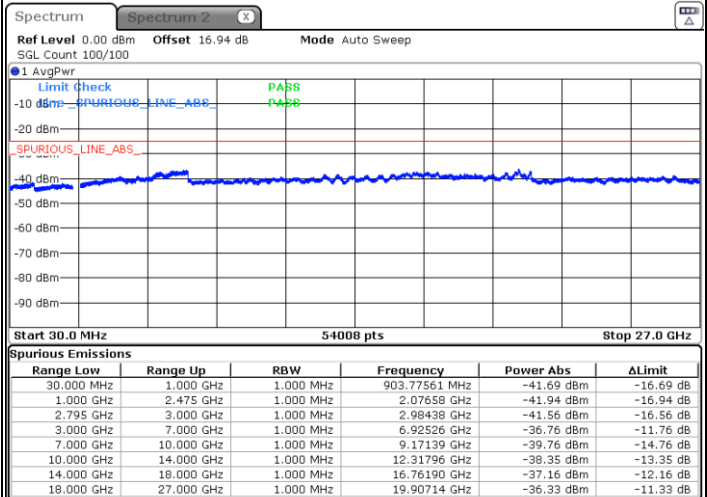
FR1 n41 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



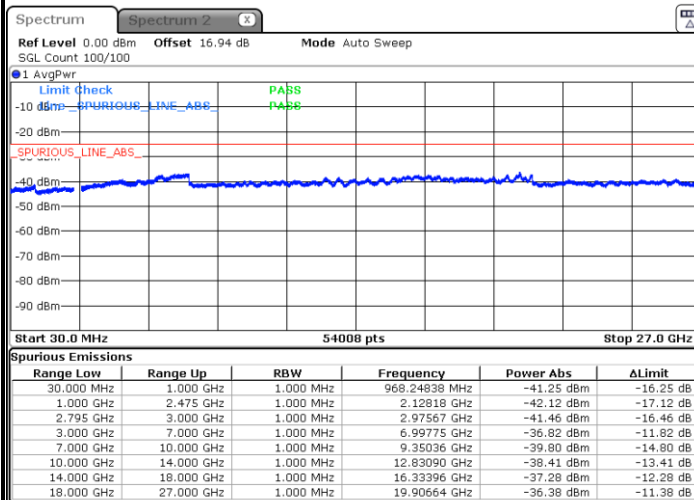
Date: 23 DEC 2020 15:01:11

Middle Channel / 1RB1



Date: 23 DEC 2020 15:02:21

Highest Channel / 1RB1

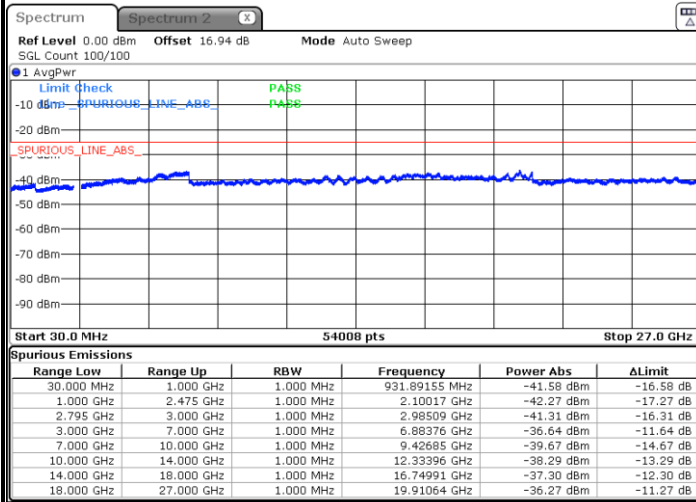


Date: 23 DEC 2020 15:07:44



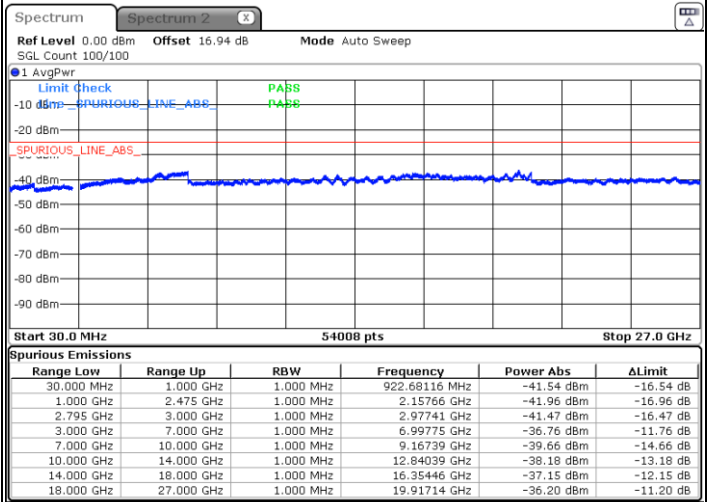
FR1 n41 / 50MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



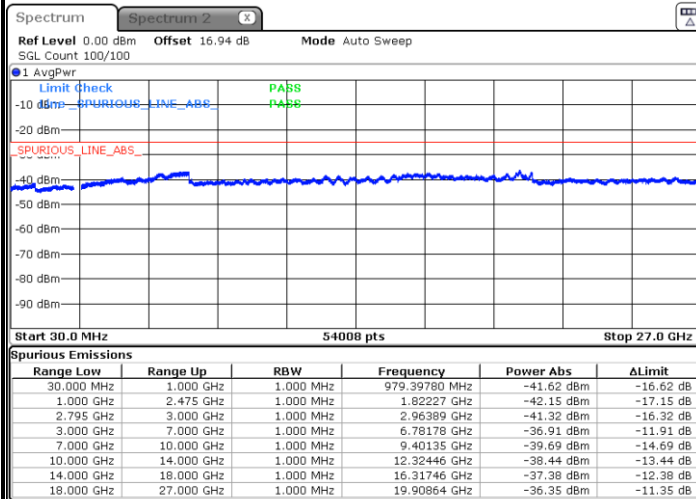
Date: 23 DEC 2020 15:10:40

Middle Channel / 1RB1



Date: 23 DEC 2020 15:14:20

Highest Channel / 1RB1

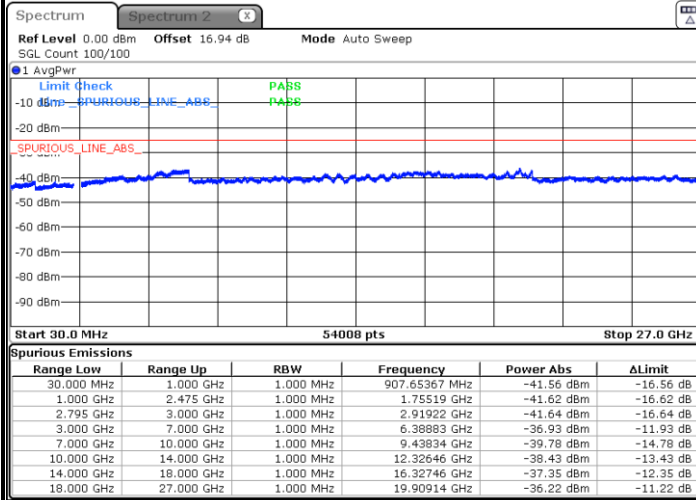


Date: 23 DEC 2020 15:15:33



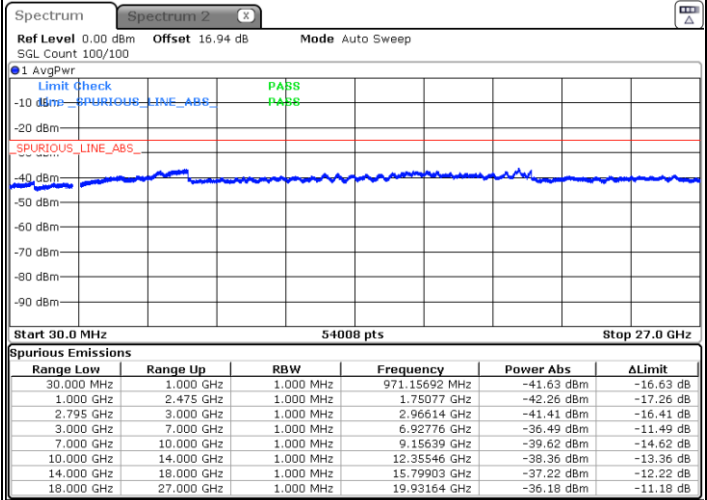
FR1 n41 / 60MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



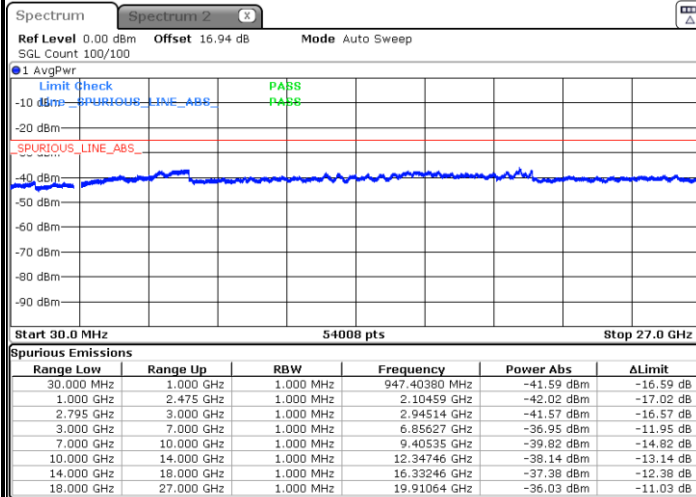
Date: 23 DEC 2020 15:23:07

Middle Channel / 1RB1



Date: 23 DEC 2020 15:25:54

Highest Channel / 1RB1

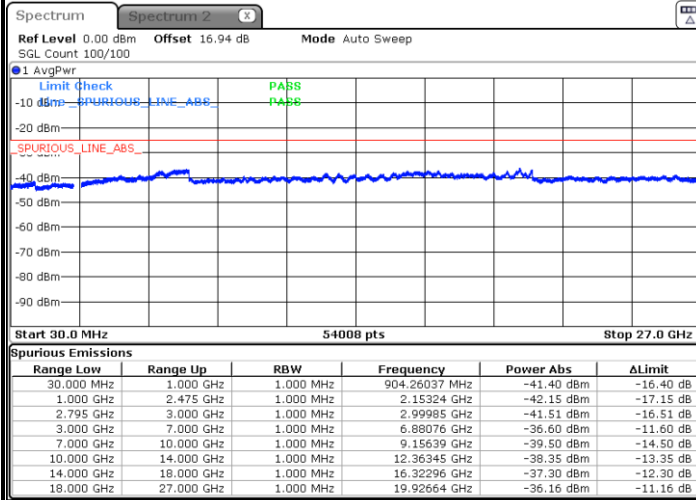


Date: 23 DEC 2020 15:28:51



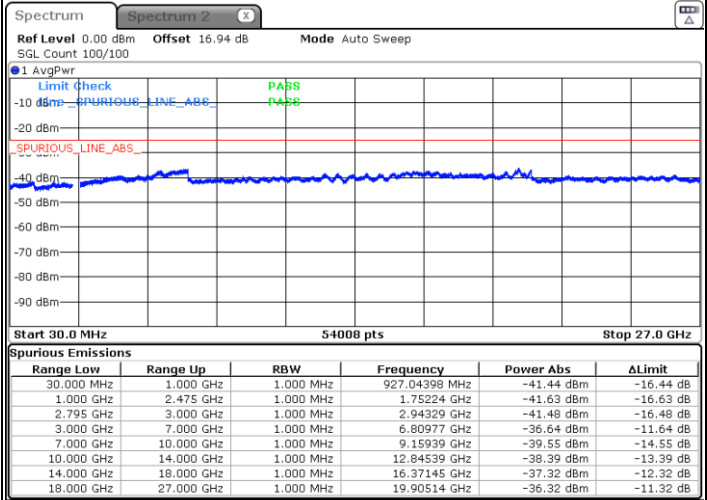
FR1 n41 / 80MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



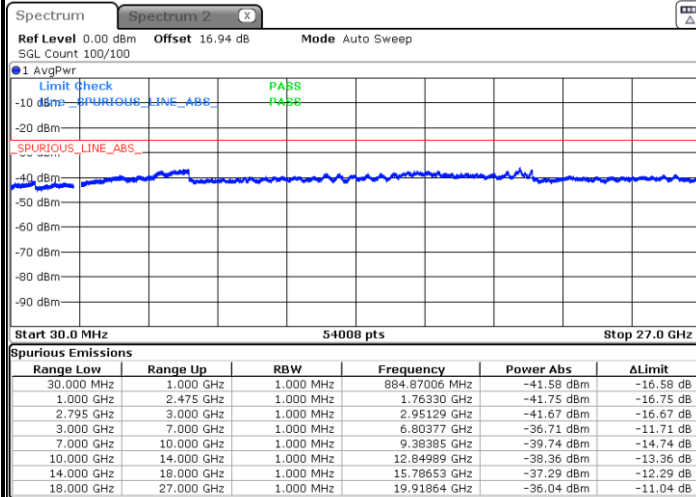
Date: 23 DEC 2020 15:30:23

Middle Channel / 1RB1



Date: 23 DEC 2020 15:31:27

Highest Channel / 1RB1

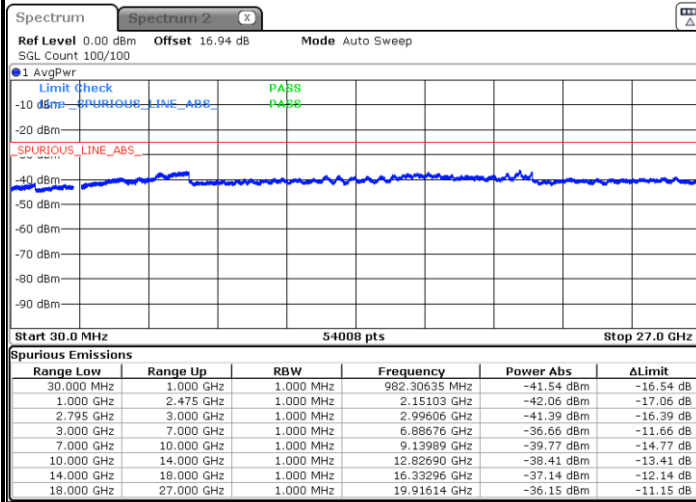


Date: 23 DEC 2020 15:32:26



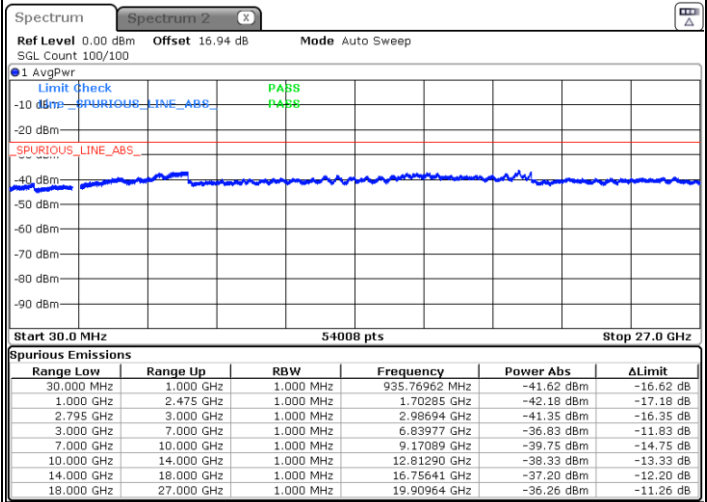
FR1 n41 / 90MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



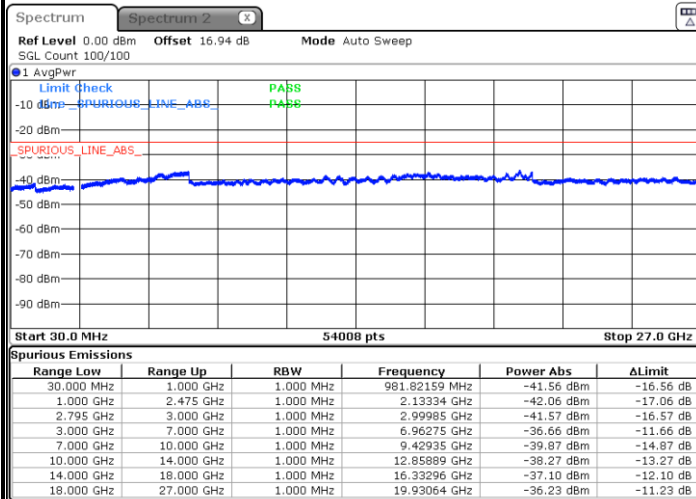
Date: 23 DEC 2020 15:35:56

Middle Channel / 1RB1



Date: 23 DEC 2020 15:37:51

Highest Channel / 1RB1

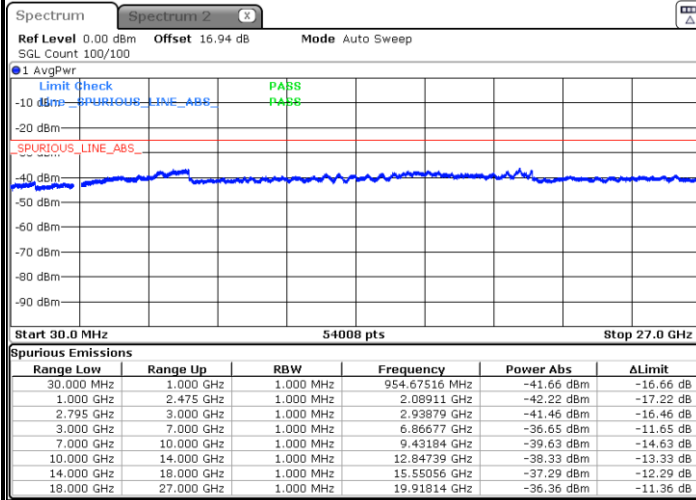


Date: 23 DEC 2020 15:40:08



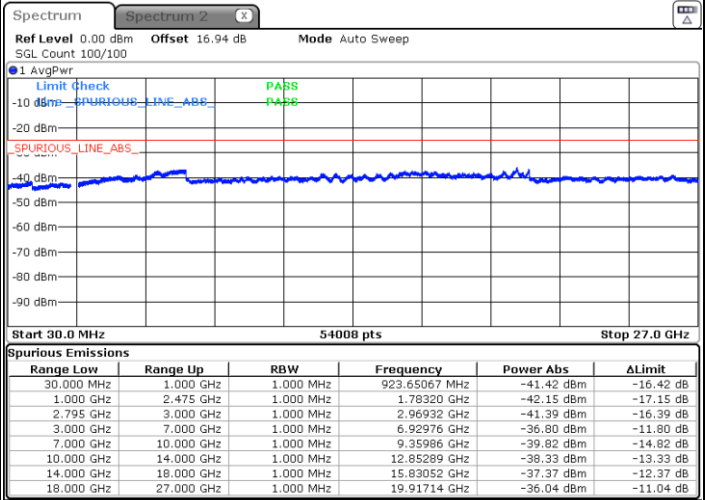
FR1 n41 / 100MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



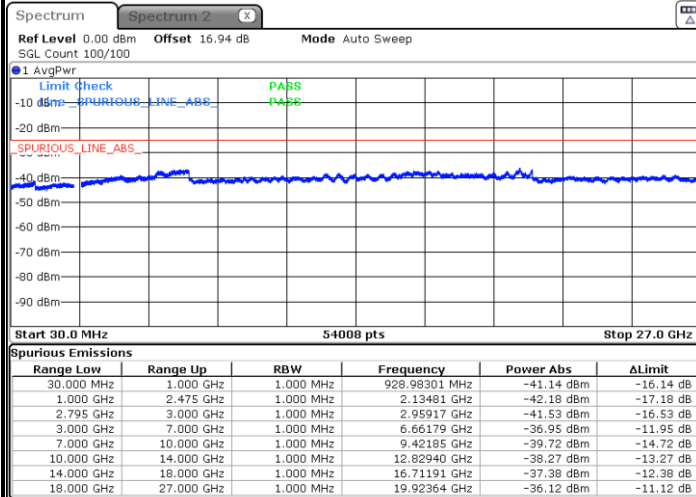
Date: 23 DEC 2020 15:58:38

Middle Channel / 1RB1



Date: 23 DEC 2020 15:59:22

Highest Channel / 1RB1



Date: 23 DEC 2020 16:00:26

**Frequency Stability**

Test Conditions		FR1 n41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

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.

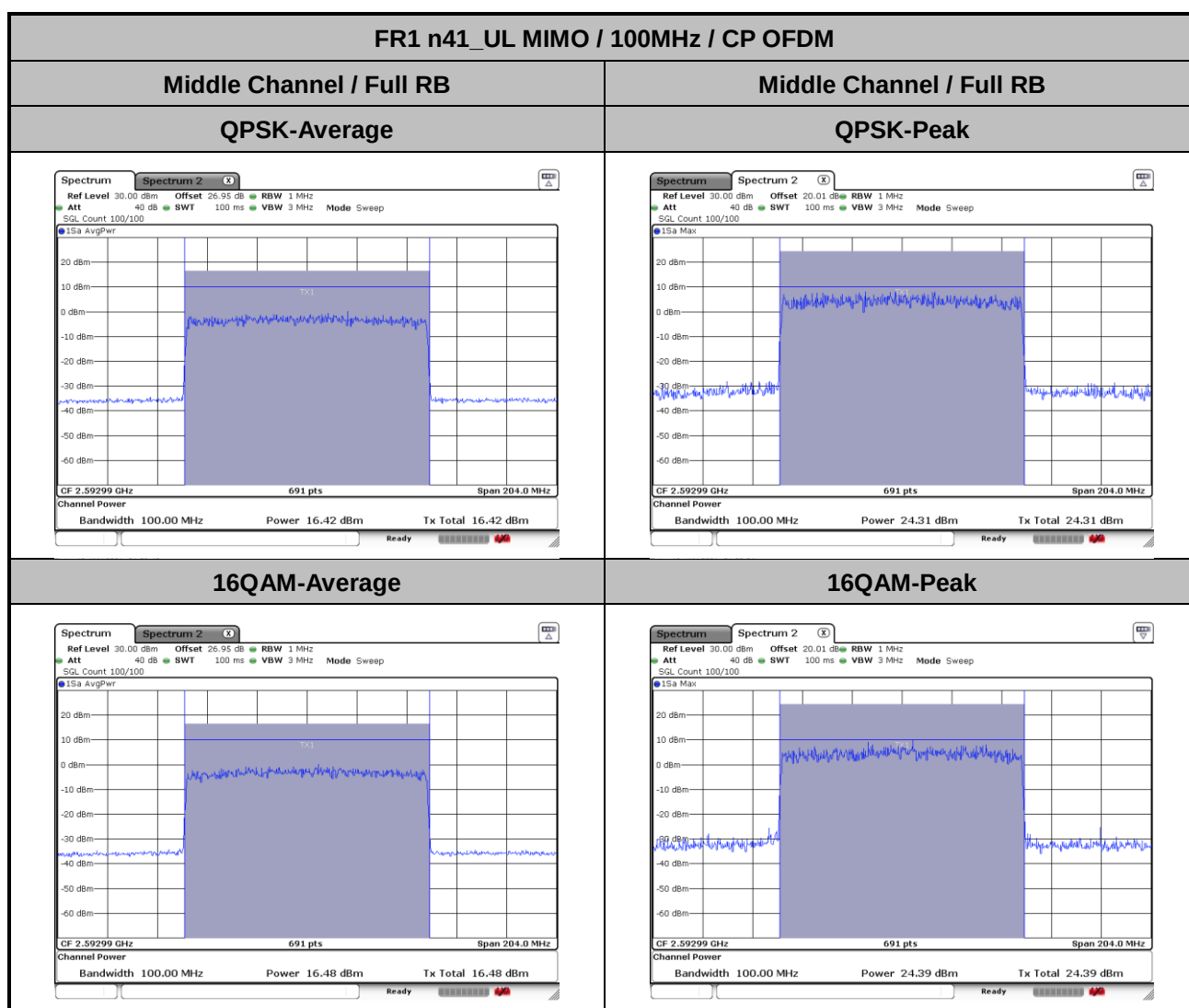


5G NR n41 UL MIMO

Peak-to-Average Ratio

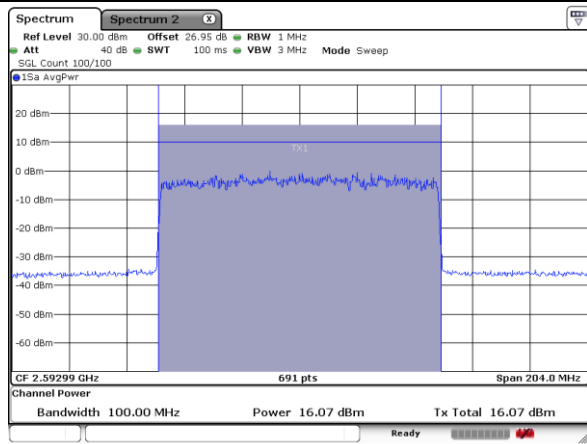
Mode	FR1 n41_UL MIMO / 100MHz / CP OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	7.89	7.91	7.75	7.91	PASS

Note: PAR=Peak-Average



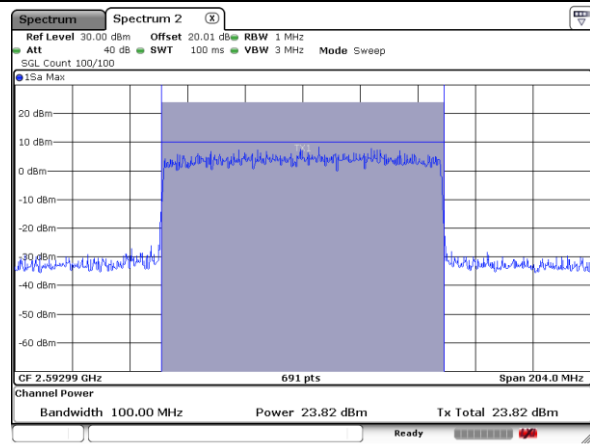


64QAM-Average



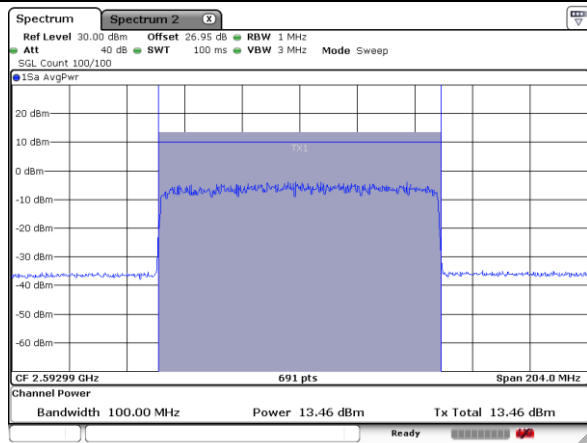
Date: 13 JAN 2021 02:00:10

64QAM-Peak



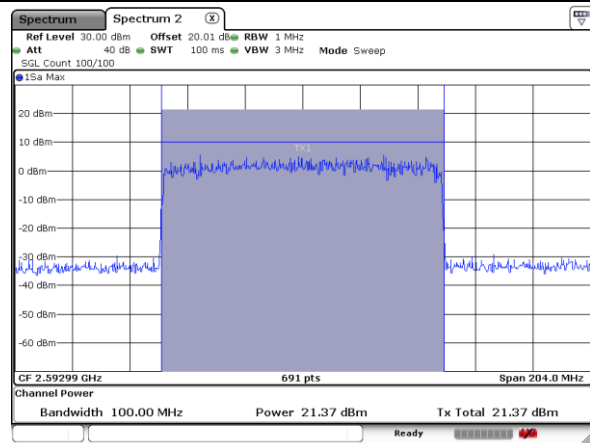
Date: 13 JAN 2021 02:00:29

256QAM-Average



Date: 13 JAN 2021 02:00:51

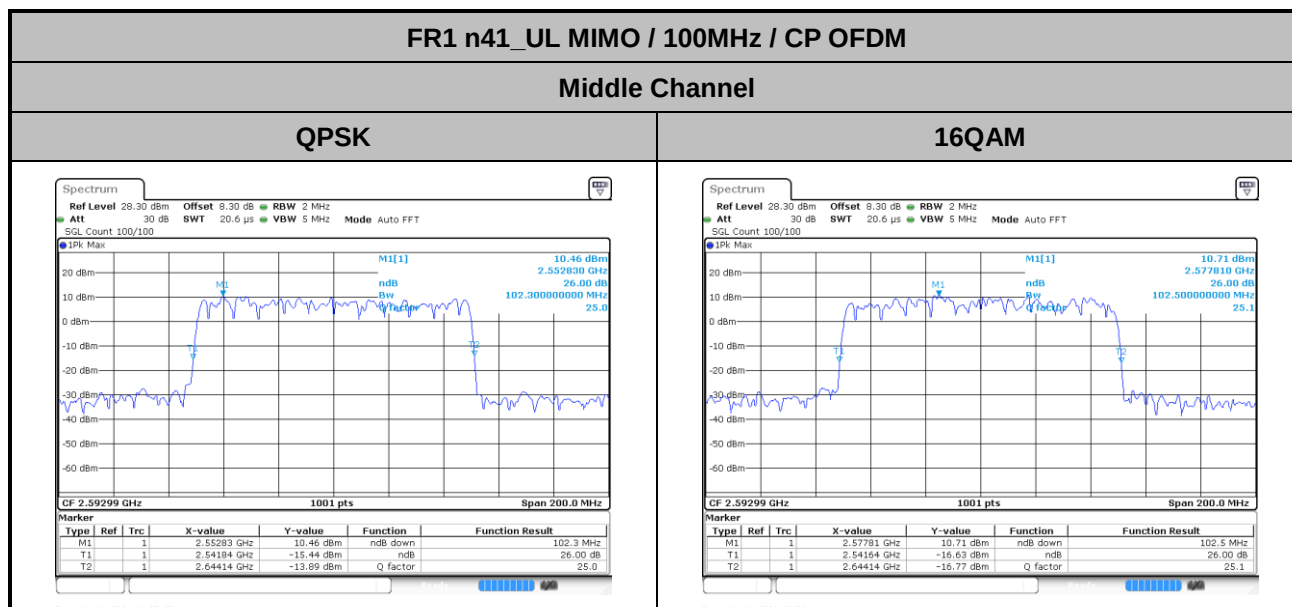
256QAM-Peak



Date: 13 JAN 2021 02:01:13

**26dB Bandwidth**

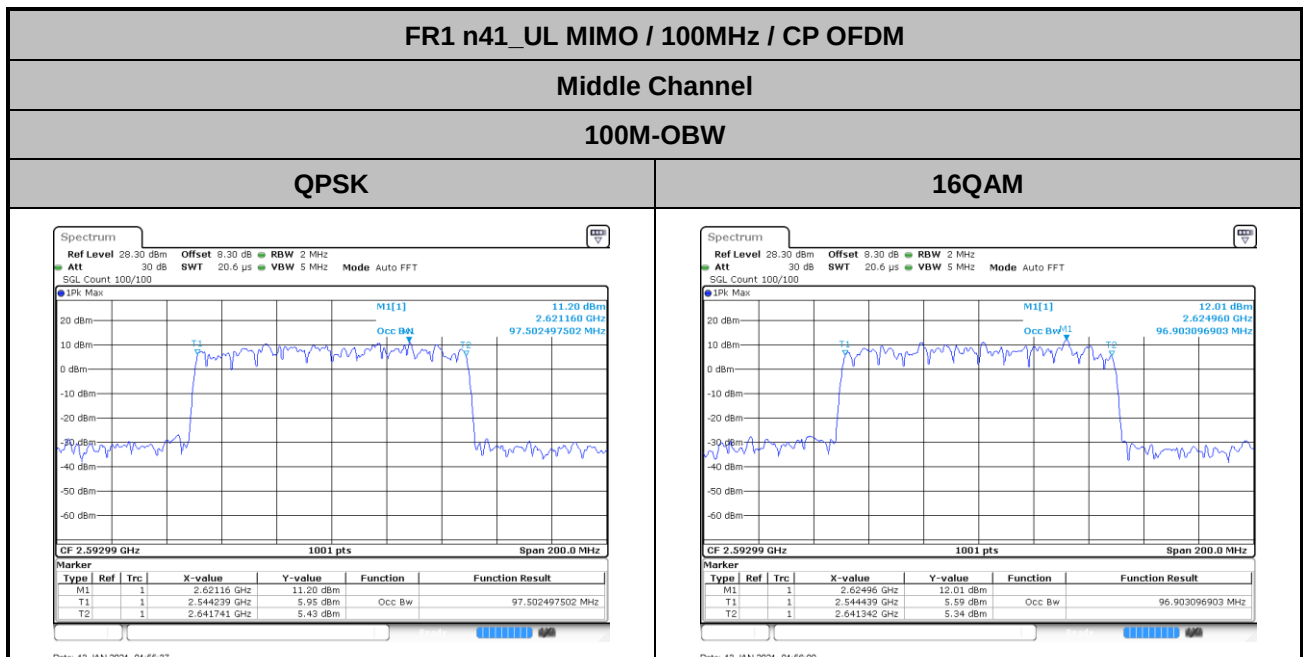
Mode	FR1 n41_UL MIMO : 26dB BW(MHz) / CP OFDM	
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	102.3	102.5

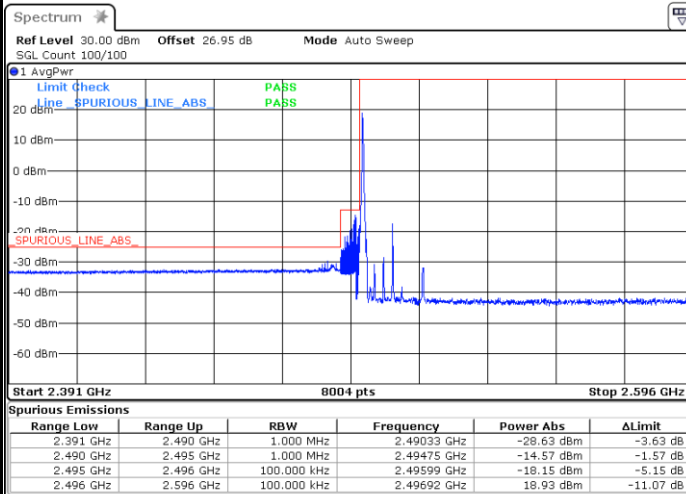
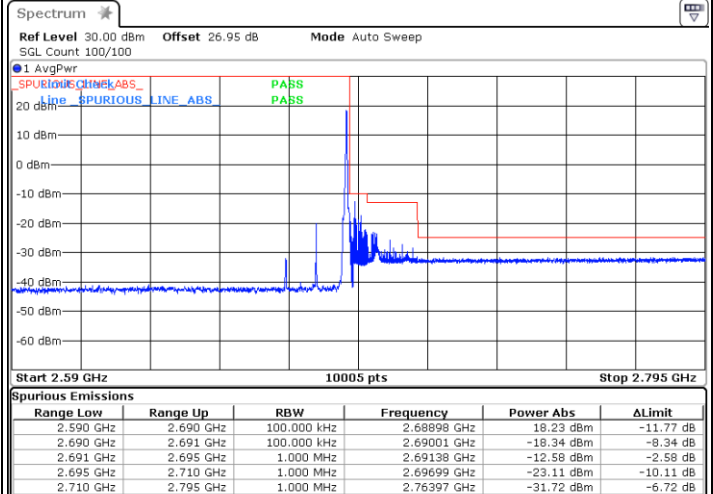
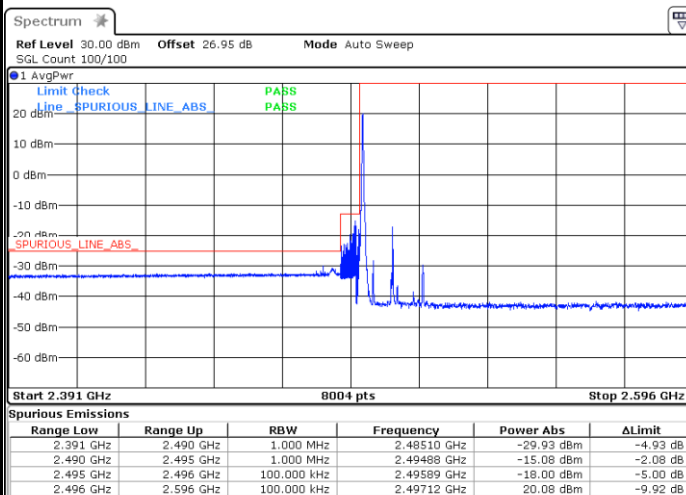
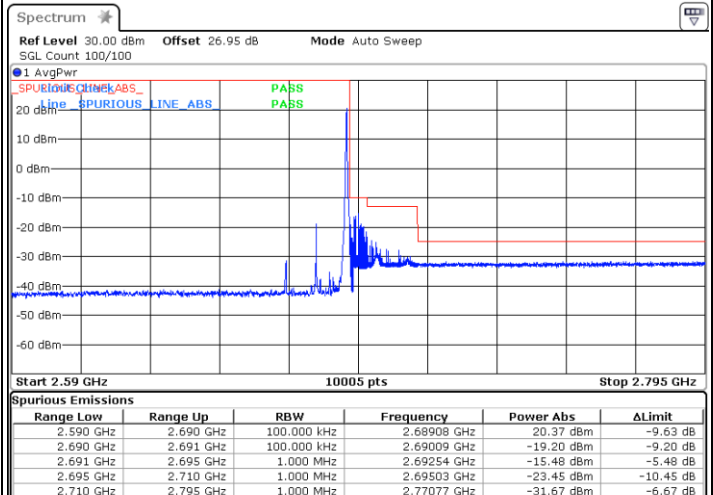




Occupied Bandwidth

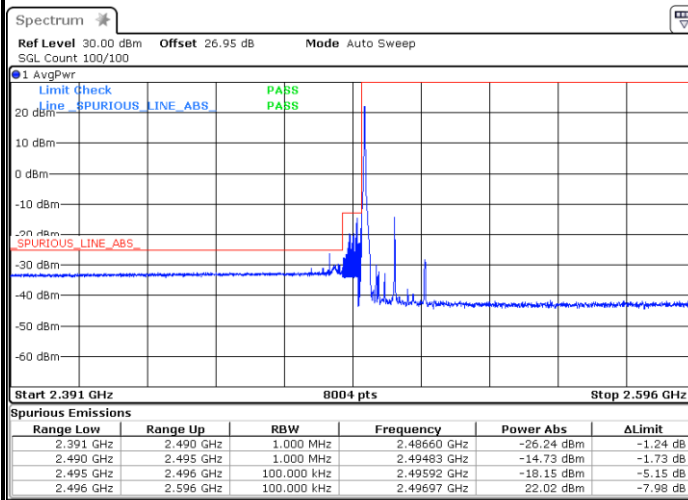
Mode	FR1 n41_UL MIMO : OB BW(MHz) / CP OFDM	
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	97.502	96.903



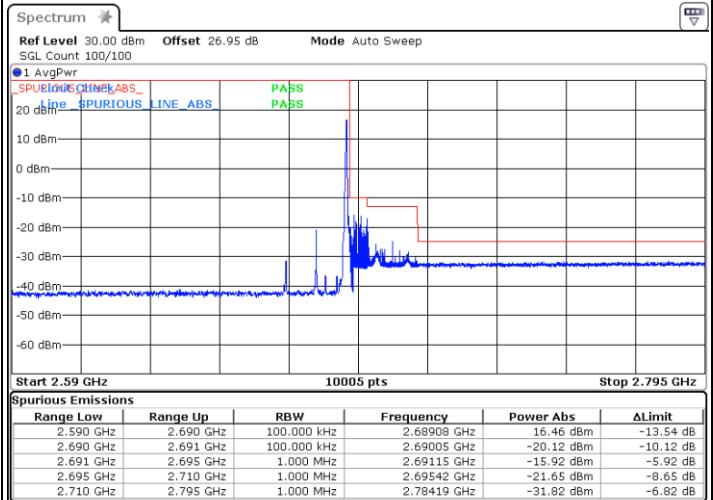
**Conducted Band Edge****n41_UL MIMO / NR 20MHz****20M-L-1RB0-QPSK****20M-H-1RBMAX-QPSK****20M-L-1RB0-16QAM****20M-H-1RBMAX-16QAM**



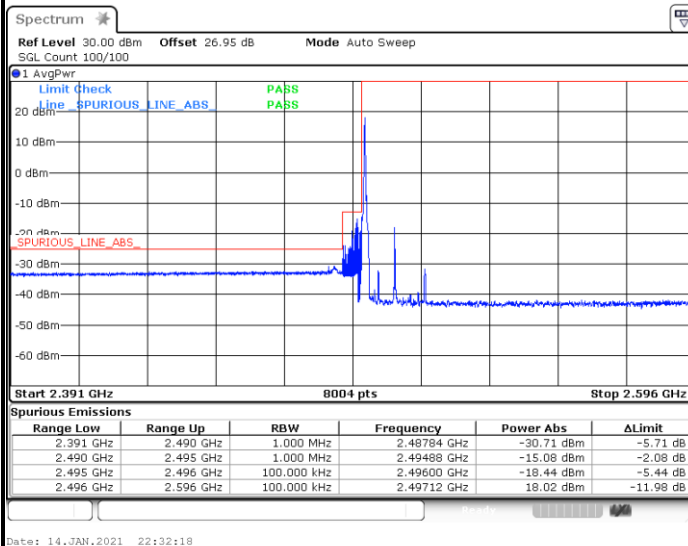
20M-L-1RB0-64QAM



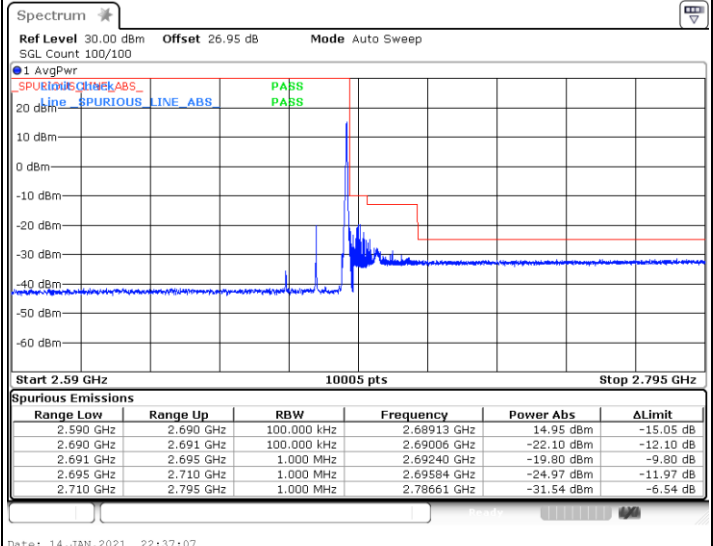
20M-H-1RBMAX-64QAM



20M-L-1RB0-256QAM

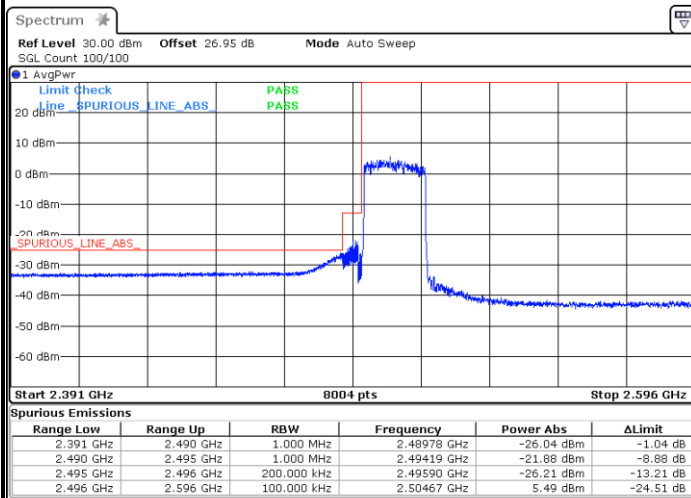


20M-H-1RBMAX-256QAM



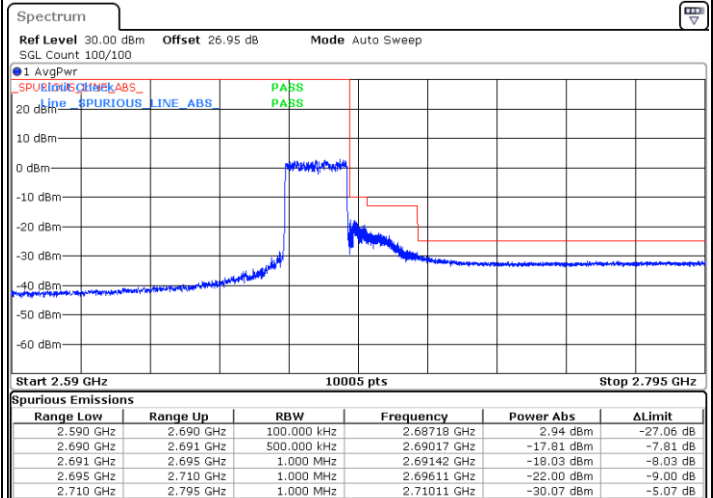


20M-L-FULLRB-QPSK



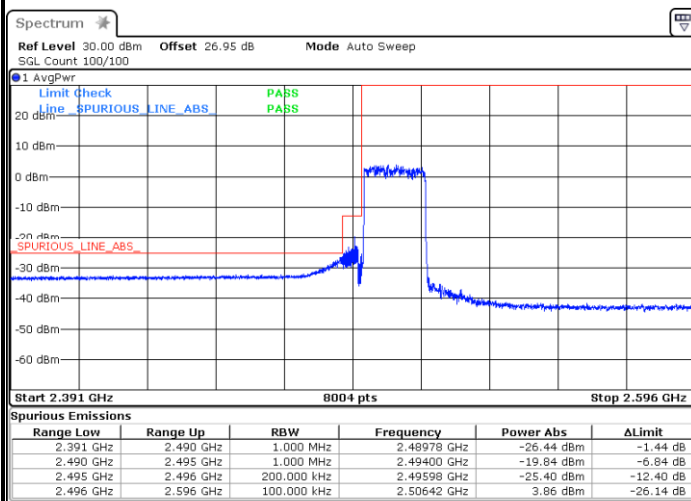
Date: 14.JAN.2021 22:32:50

20M-H-FULLRB-QPSK



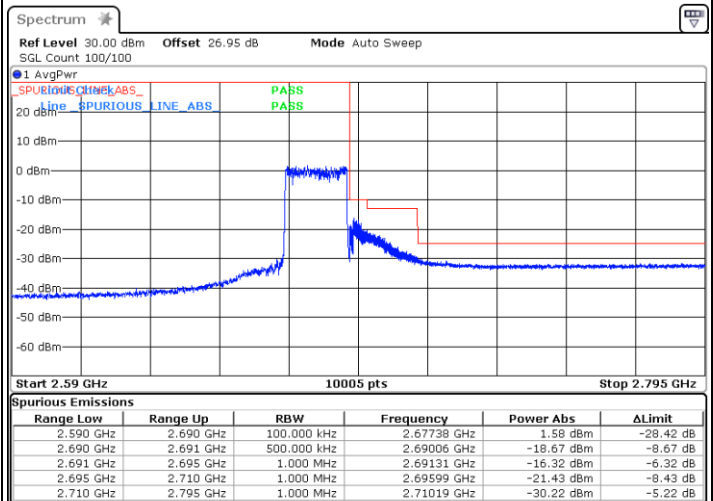
Date: 14.JAN.2021 22:34:30

20M-L-FULLRB-16QAM



Date: 14.JAN.2021 22:33:09

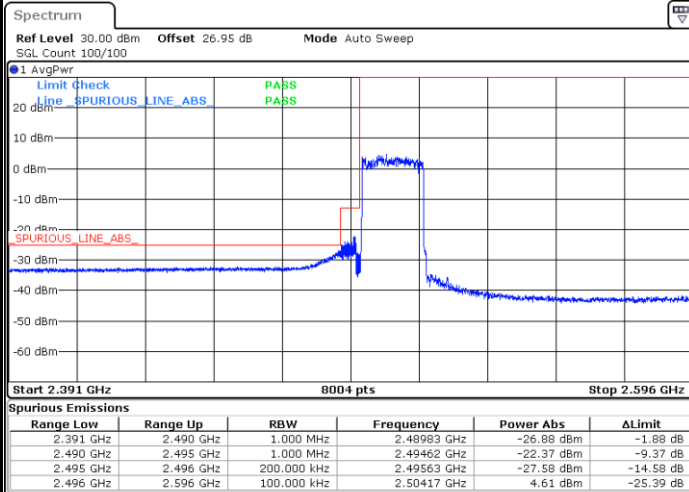
20M-H-FULLRB-16QAM



Date: 14.JAN.2021 22:34:48

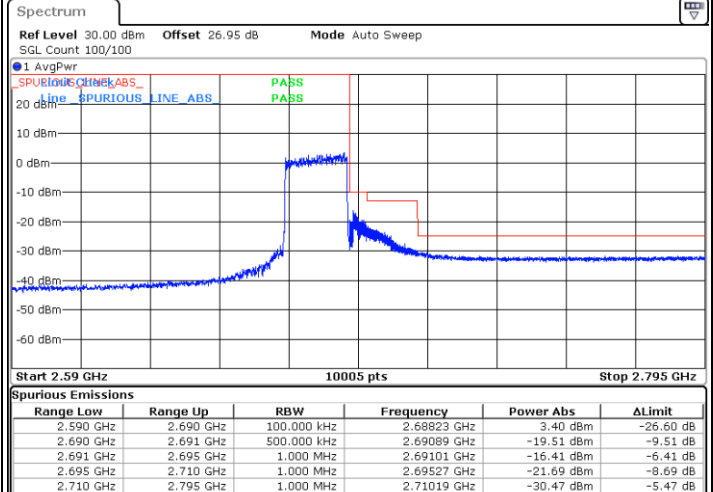


20M-L-FULLRB-64QAM



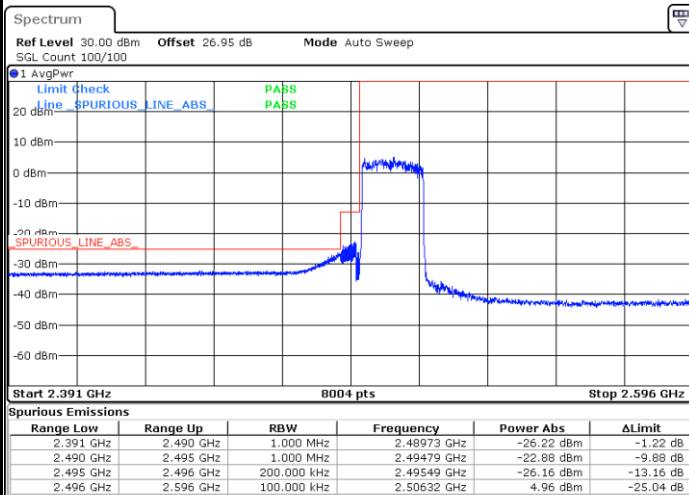
Date: 14.JAN.2021 22:33:24

20M-H-FULLRB-64QAM



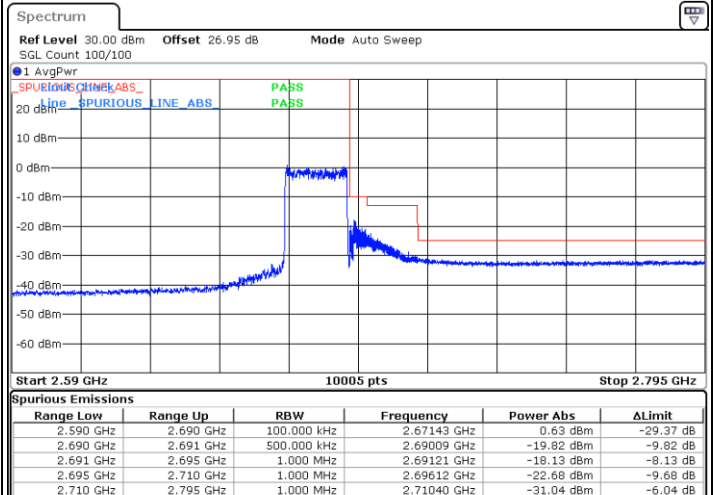
Date: 14.JAN.2021 22:35:03

20M-L-FULLRB-256QAM



Date: 14.JAN.2021 22:33:41

20M-H-FULLRB-256QAM

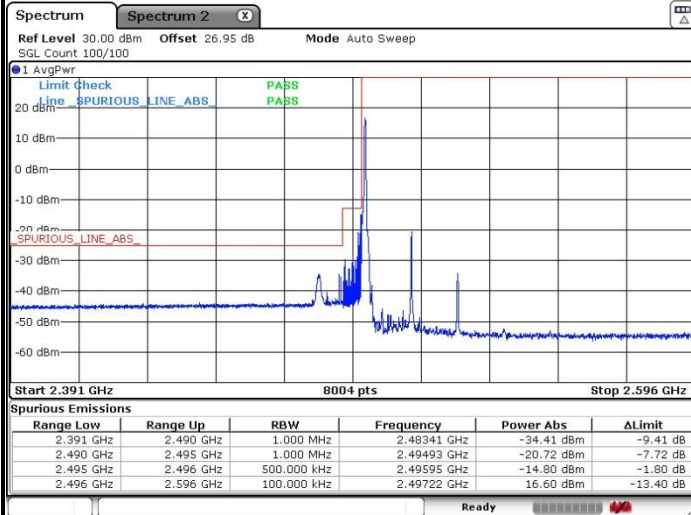


Date: 14.JAN.2021 22:35:21



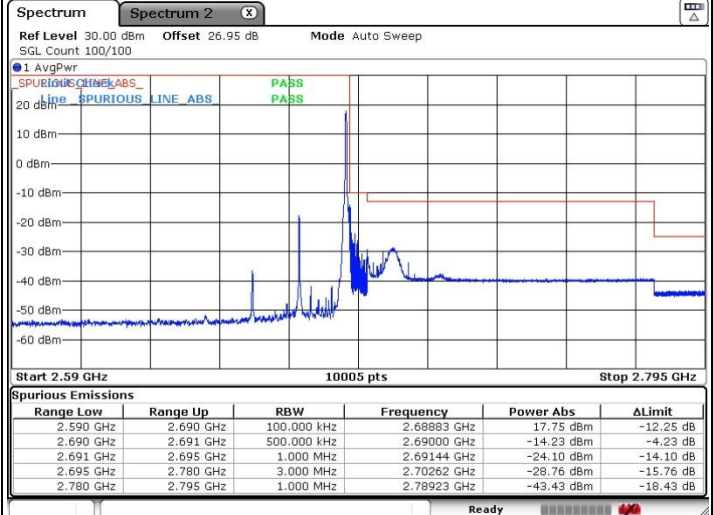
n41_UL MIMO / NR 30MHz

30M-L-1RB0-QPSK



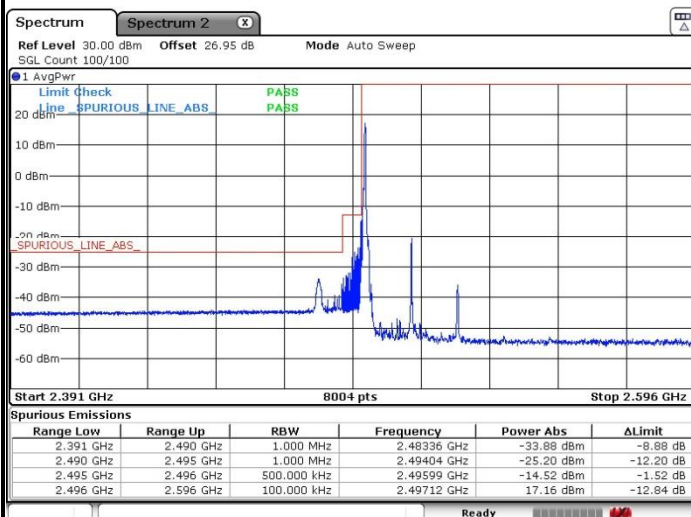
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30M-H-1RBMAX-QPSK



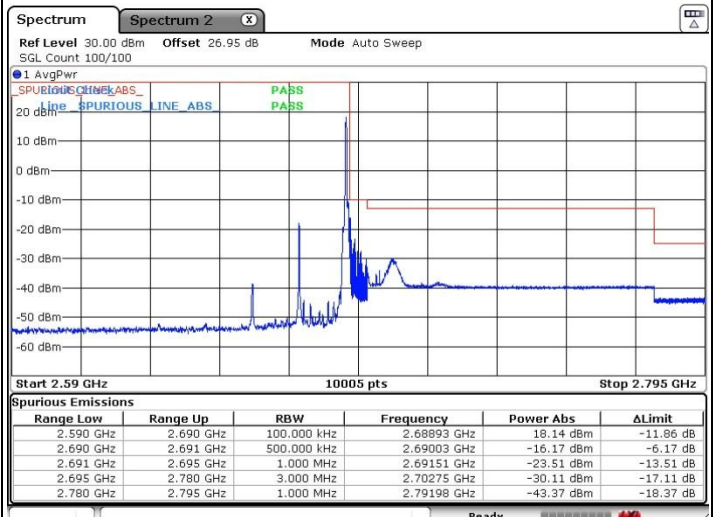
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30M-L-1RB0-16QAM



Date: 12 JAN 2021 22:44:20

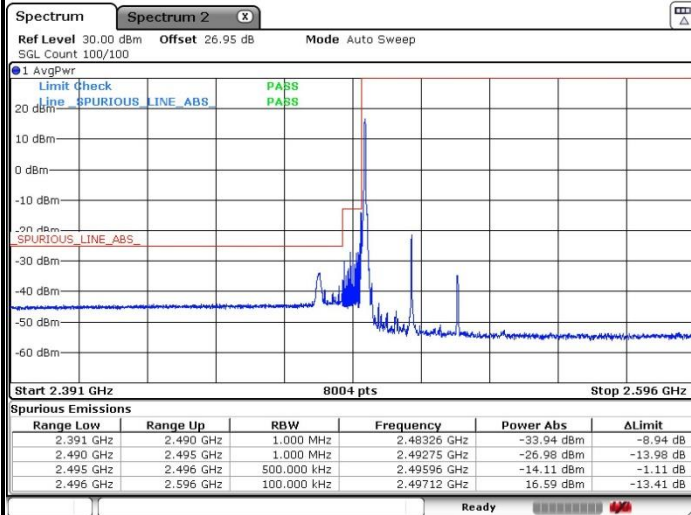
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Date: 12 JAN 2021 22:48:08

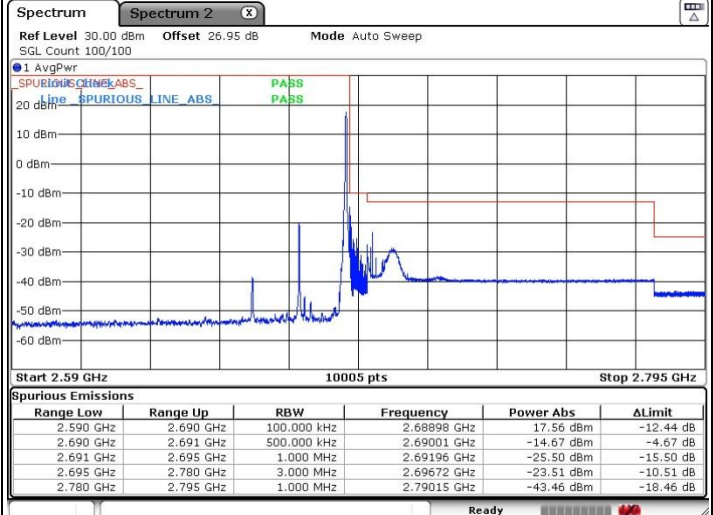


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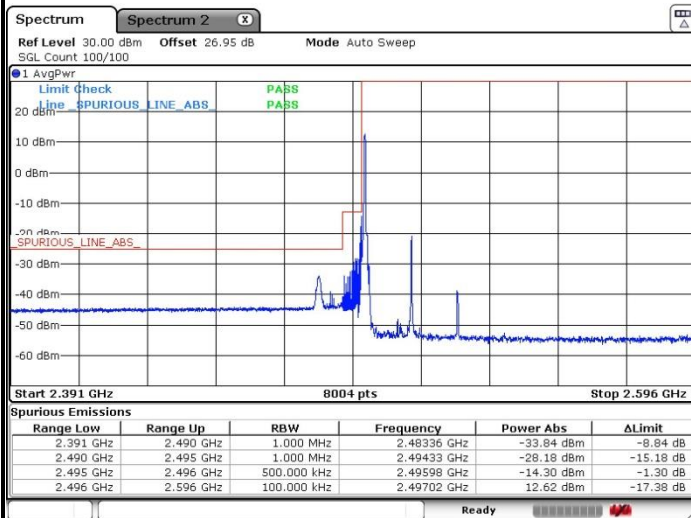
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30M-H-1RBMAX-64QAM



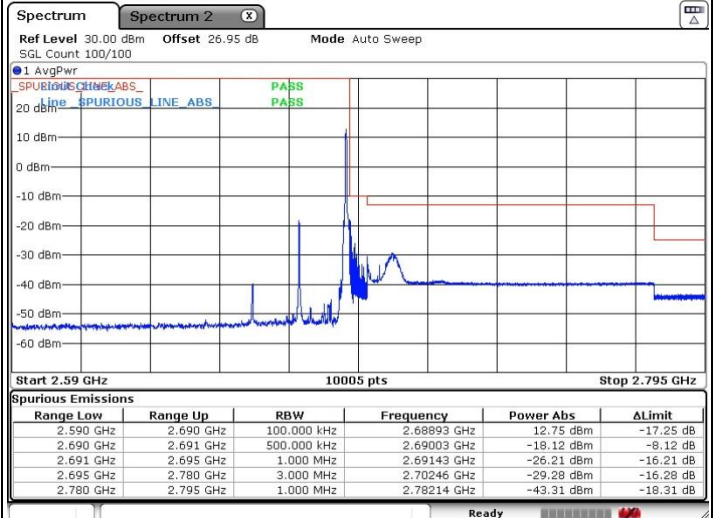
Date: 12 JAN 2021 22:48:29

30M-L-1RB0-256QAM



Date: 12 JAN 2021 22:44:58

30M-H-1RBMAX-256QAM



Date: 12 JAN 2021 22:49:15