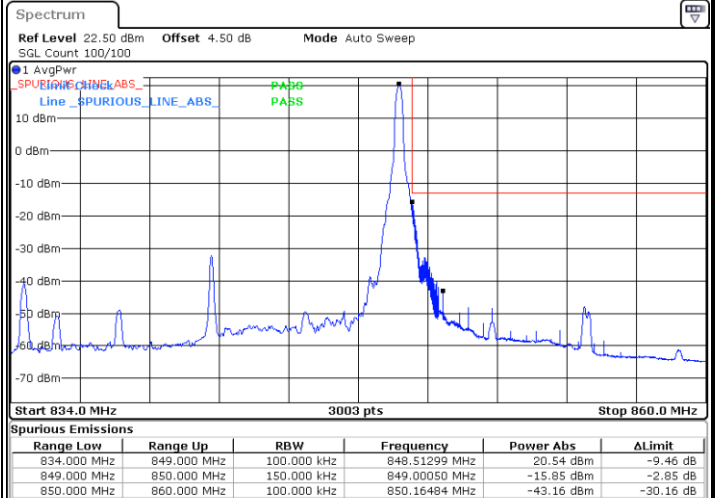
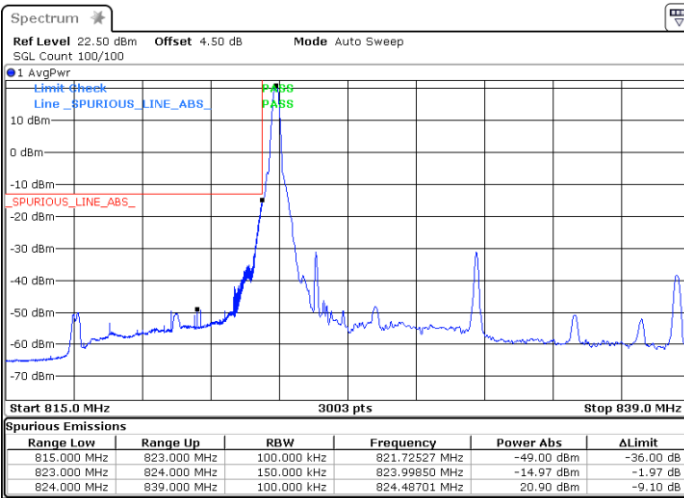




FR1 n5 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

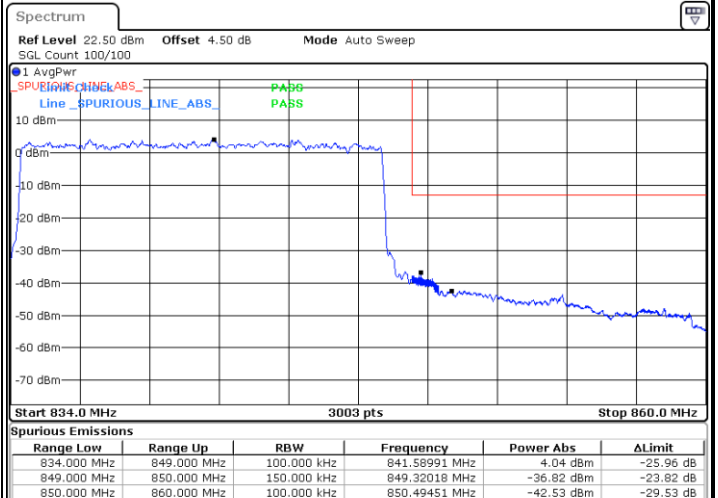
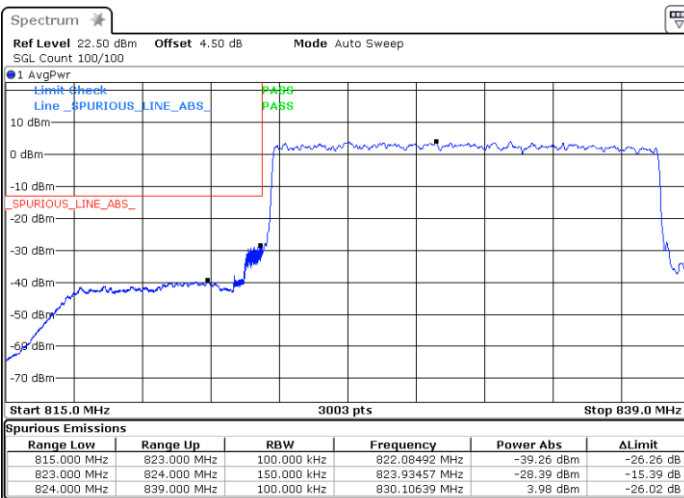


Date: 21.NOV.2020 13:09:51

Date: 21.NOV.2020 13:05:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 13:08:57

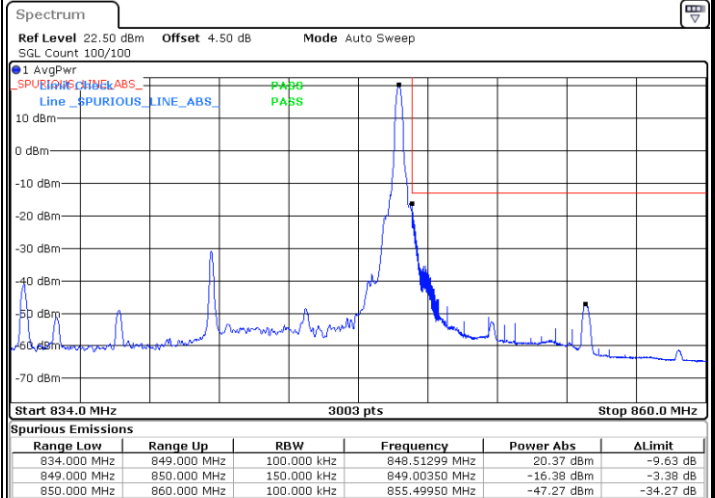
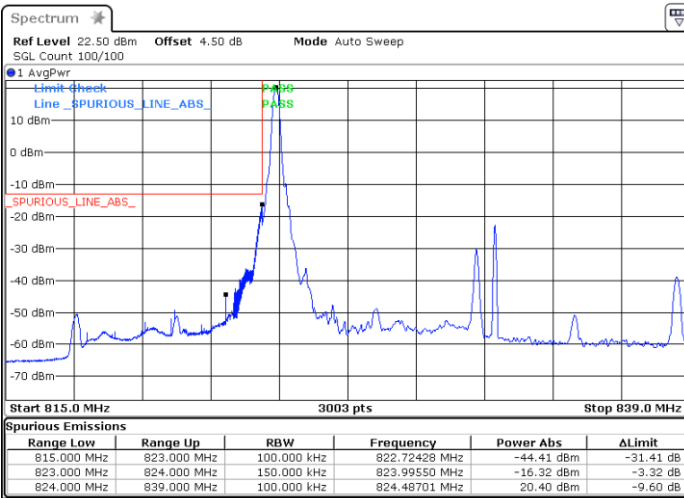
Date: 21.NOV.2020 13:06:40



FR1 n5 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

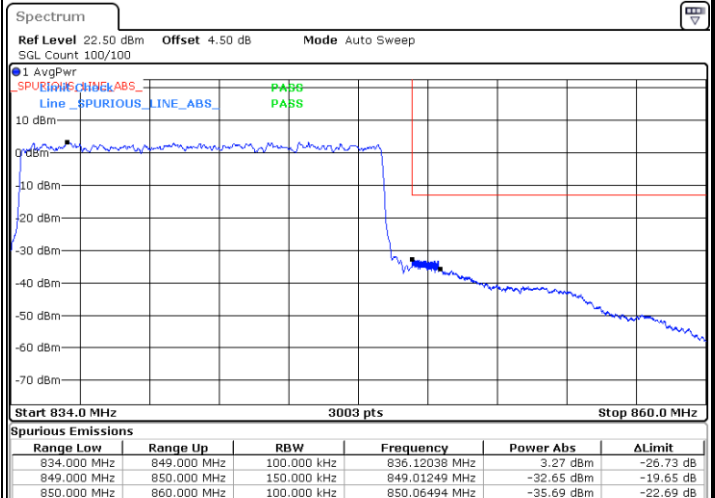
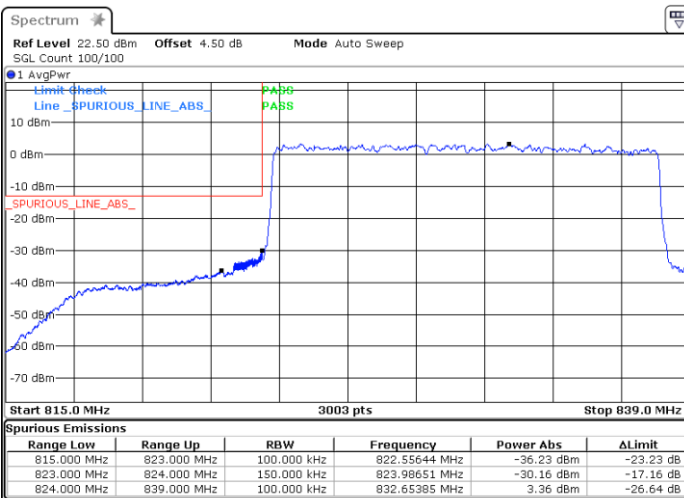


Date: 21.NOV.2020 13:37:48

Date: 21.NOV.2020 13:04:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 13:42:53

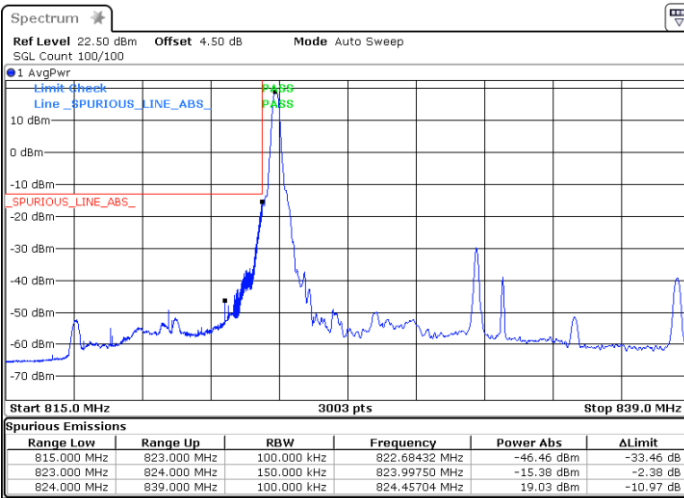
Date: 21.NOV.2020 13:07:31



FR1 n5 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



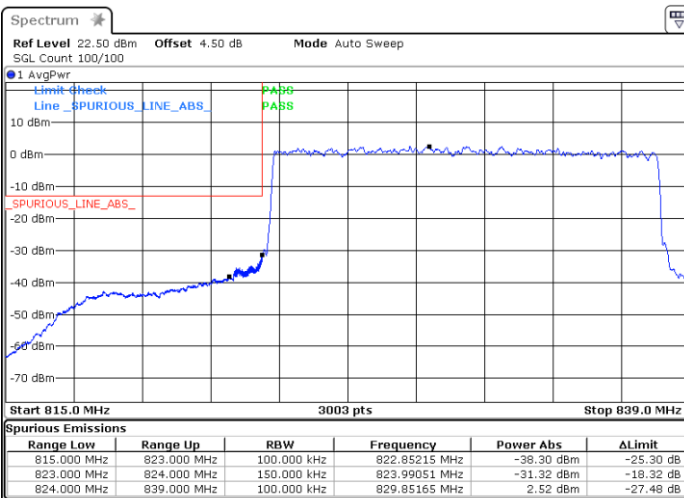
Date: 21.NOV.2020 13:38:38



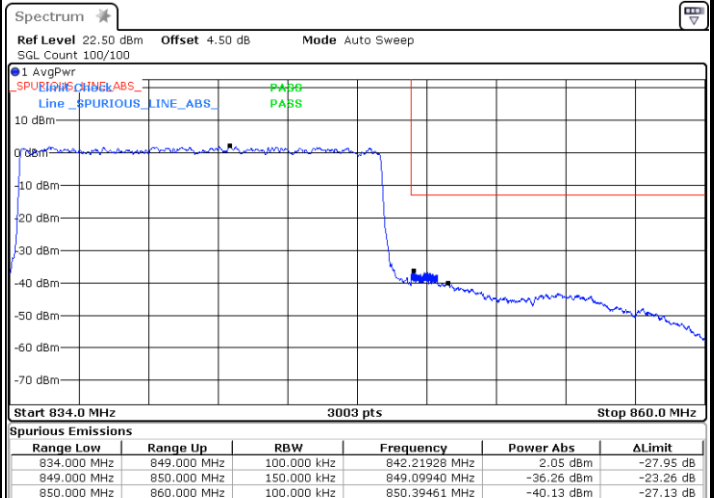
Date: 21.NOV.2020 13:03:57

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 13:42:16



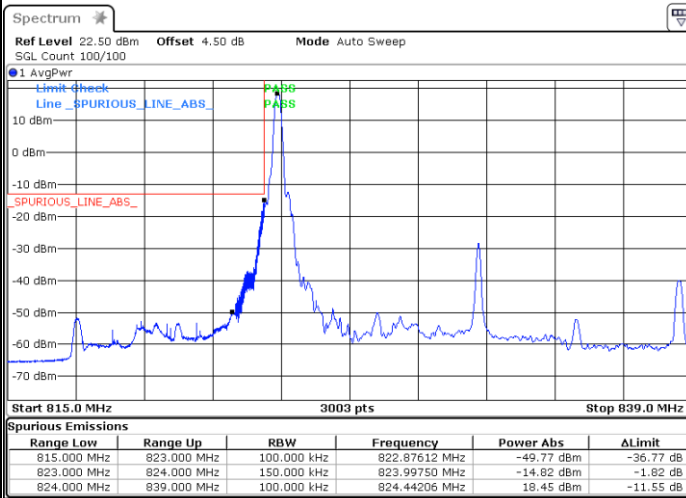
Date: 21.NOV.2020 13:03:12



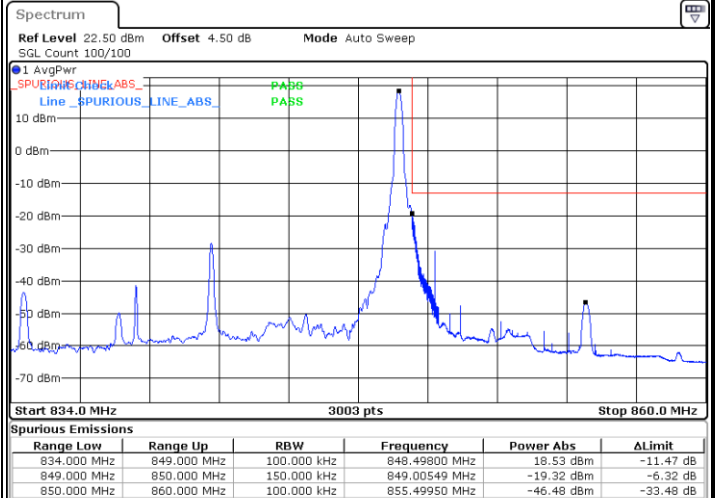
FR1 n5 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



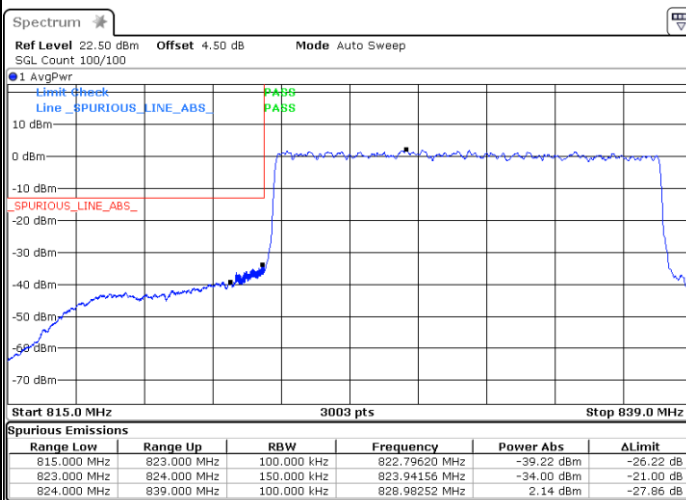
Date: 21.NOV.2020 13:39:34



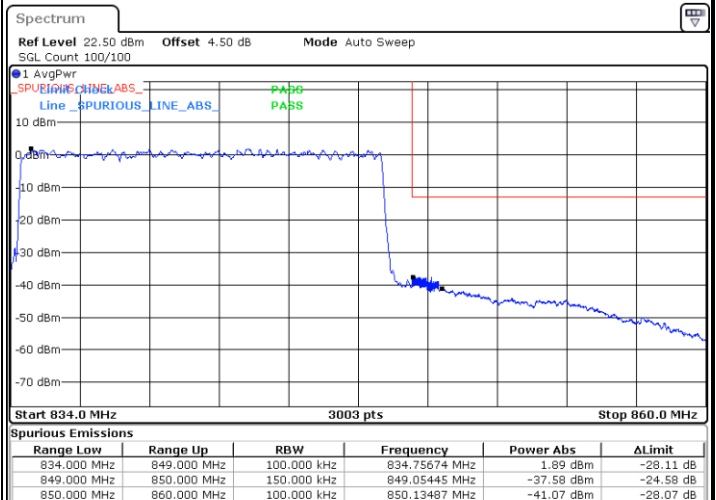
Date: 21.NOV.2020 13:01:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 13:41:39



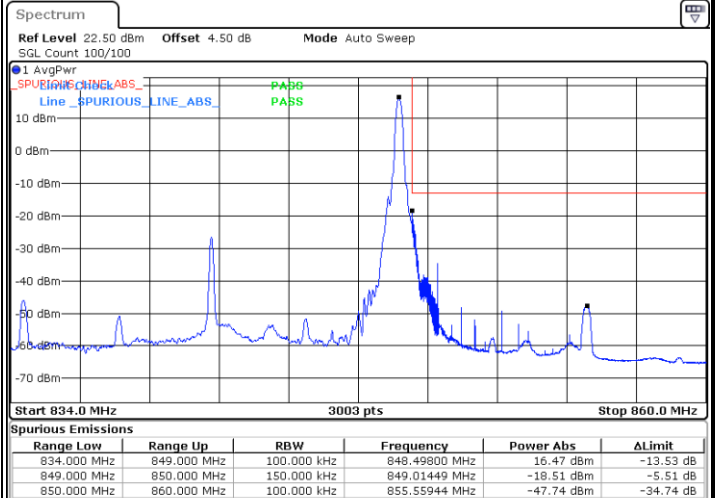
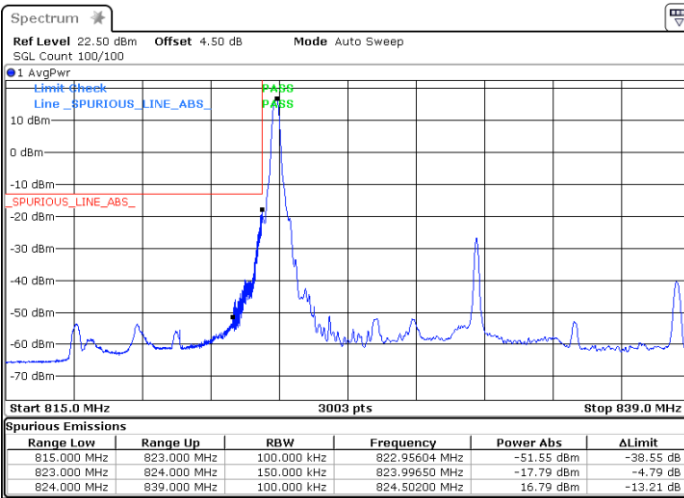
Date: 21.NOV.2020 13:02:18



FR1 n5 / 15MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

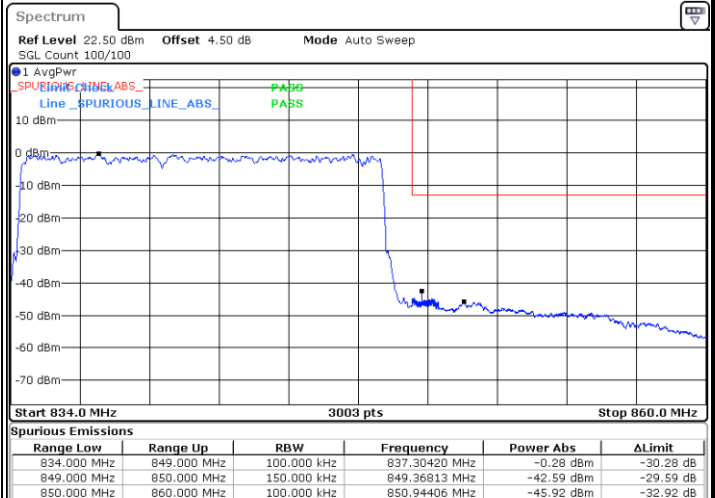
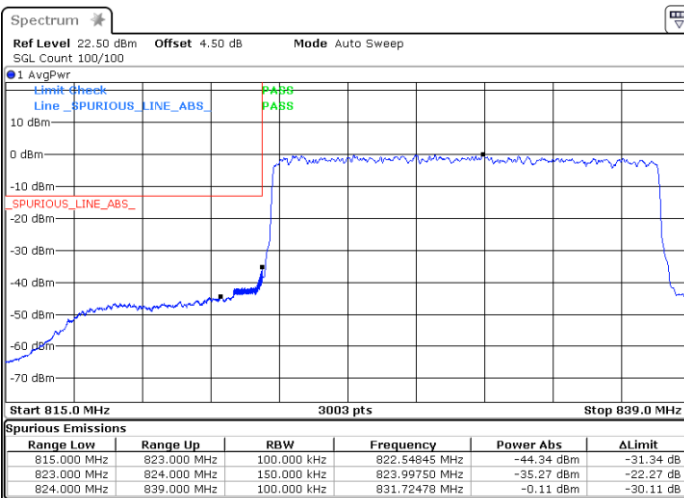


Date: 21.NOV.2020 13:40:14

Date: 21.NOV.2020 13:00:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 13:40:57

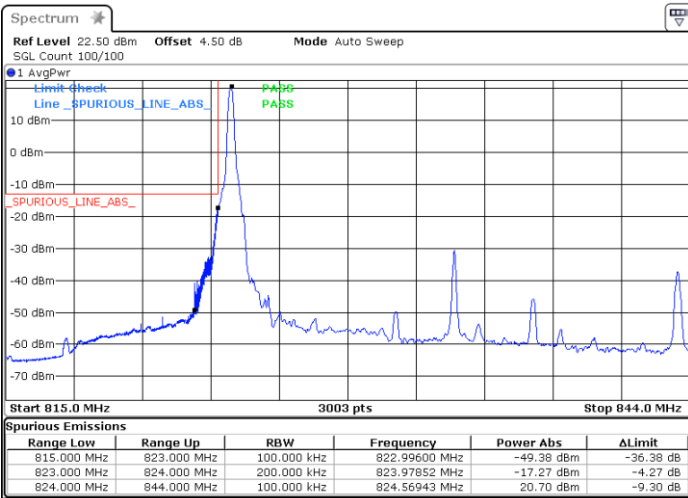
Date: 21.NOV.2020 12:59:37



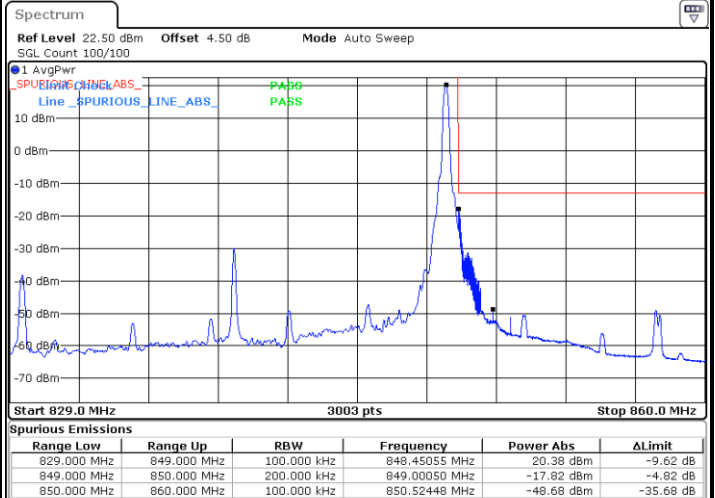
FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



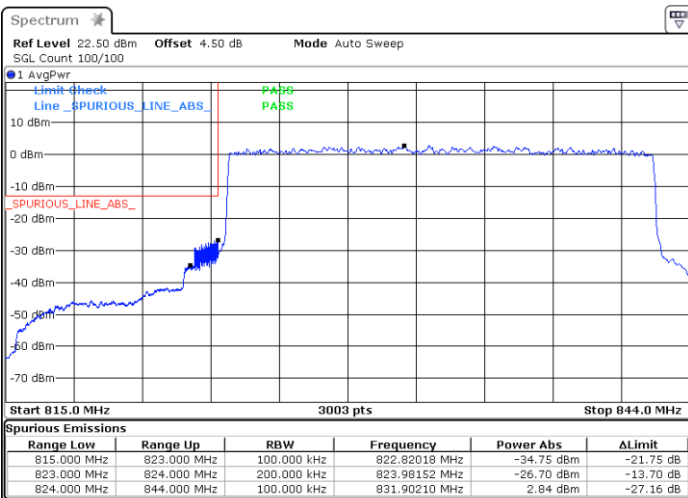
Date: 21.NOV.2020 14:42:53



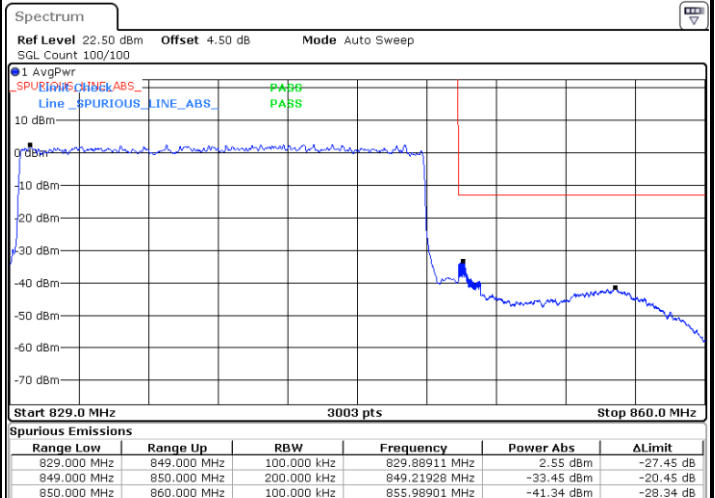
Date: 21.NOV.2020 14:35:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 14:43:49



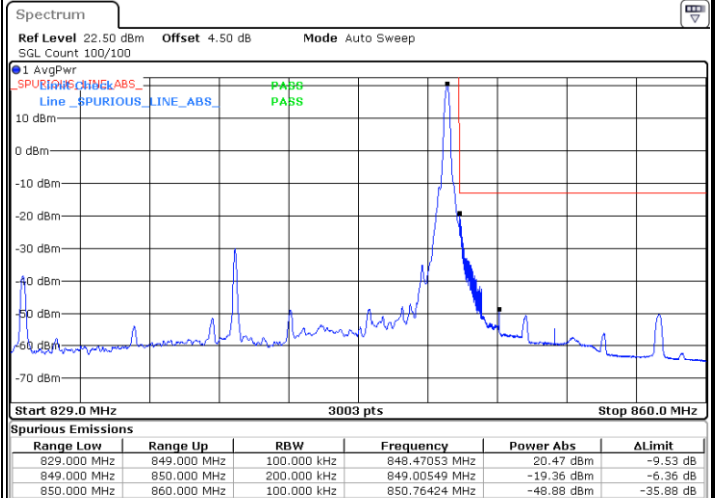
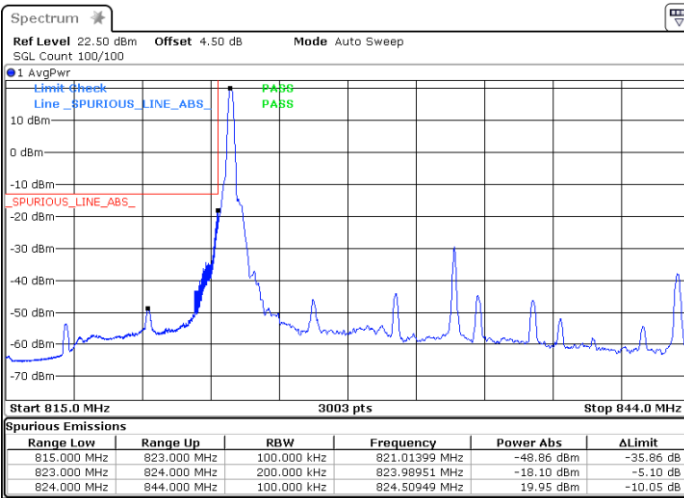
Date: 21.NOV.2020 14:34:13



FR1 n5 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

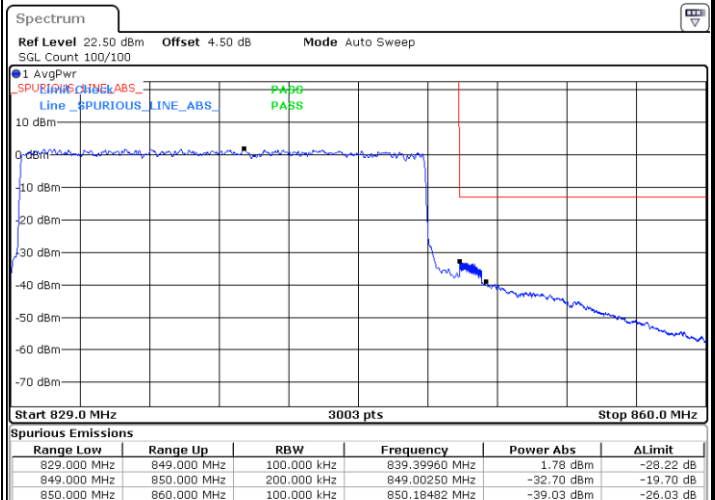
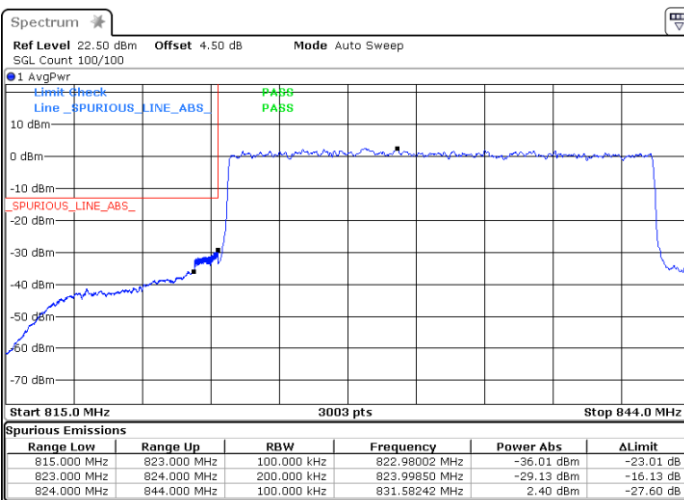


Date: 21.NOV.2020 14:42:06

Date: 21.NOV.2020 14:35:53

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 14:44:27

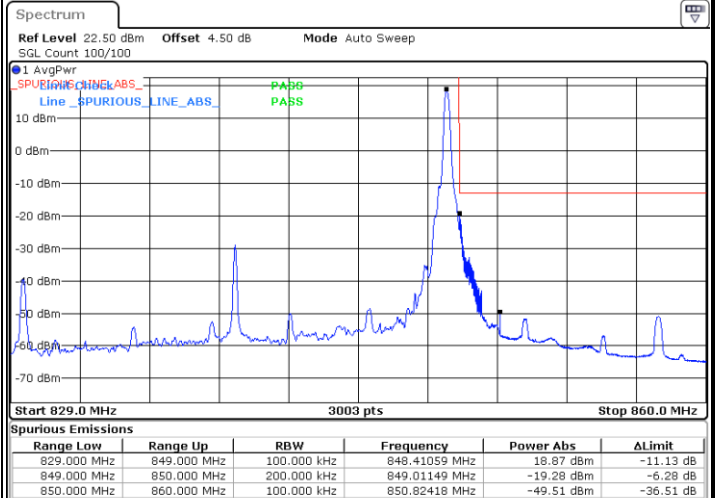
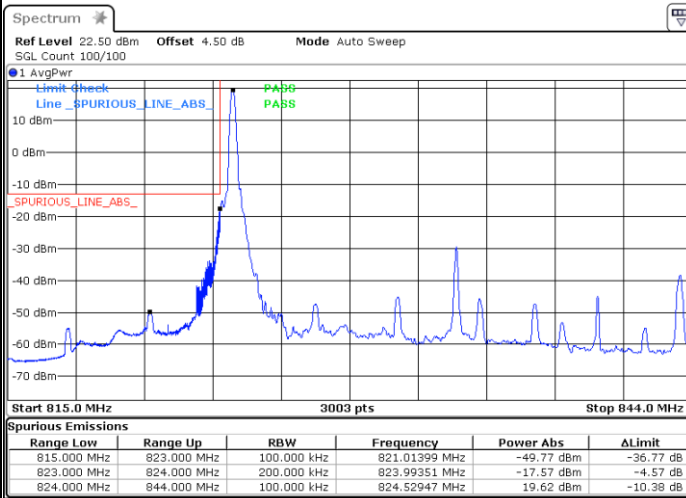
Date: 21.NOV.2020 14:33:23



FR1 n5 / 20MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

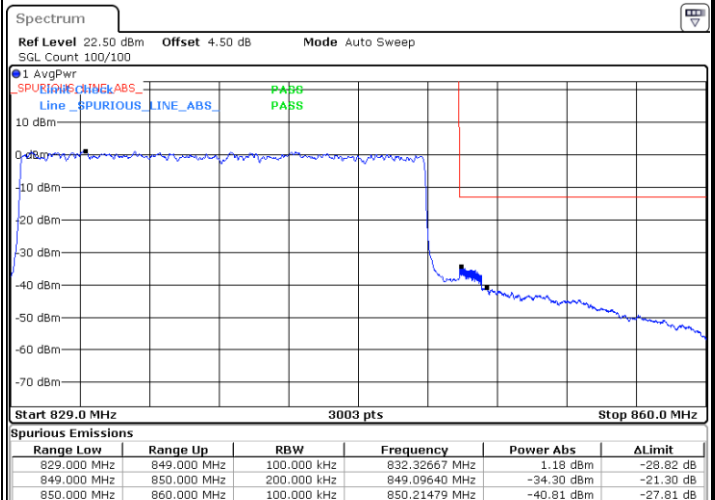
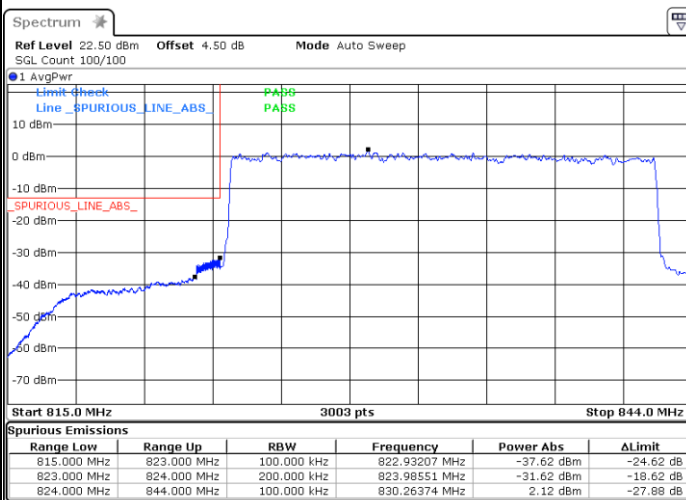


Date: 21.NOV.2020 14:41:23

Date: 21.NOV.2020 14:36:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 14:45:19

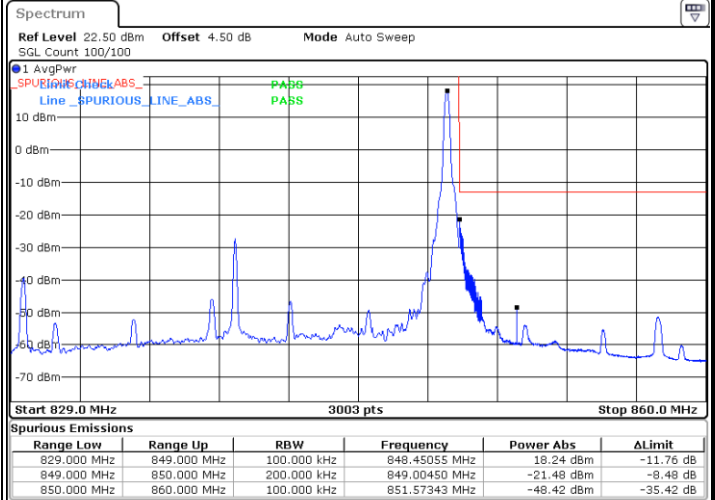
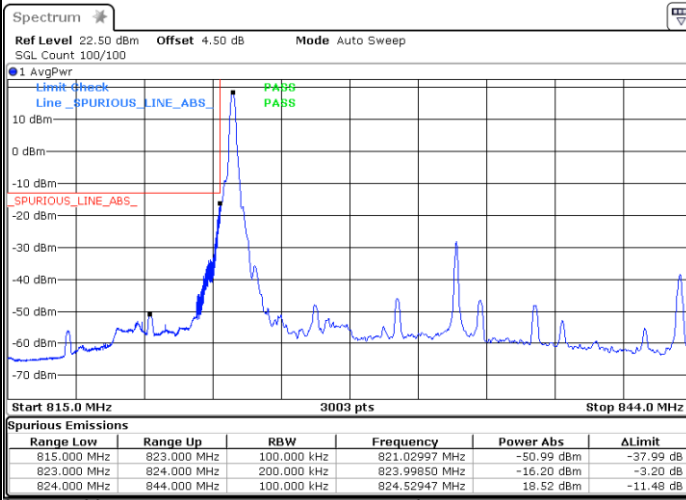
Date: 21.NOV.2020 14:32:43



FR1 n5 / 20MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

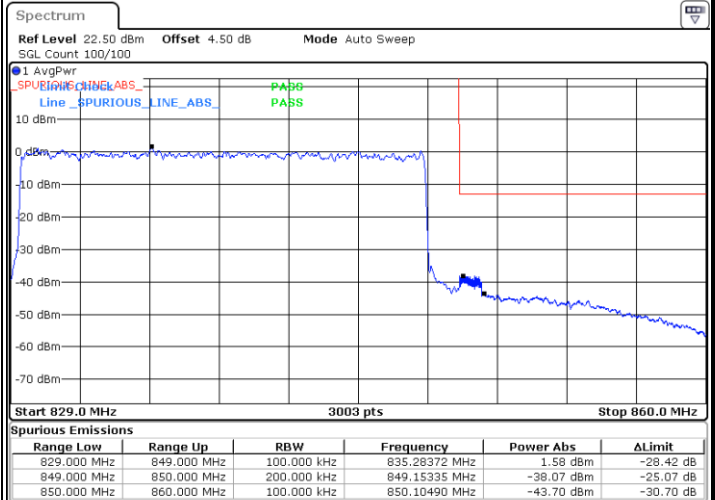
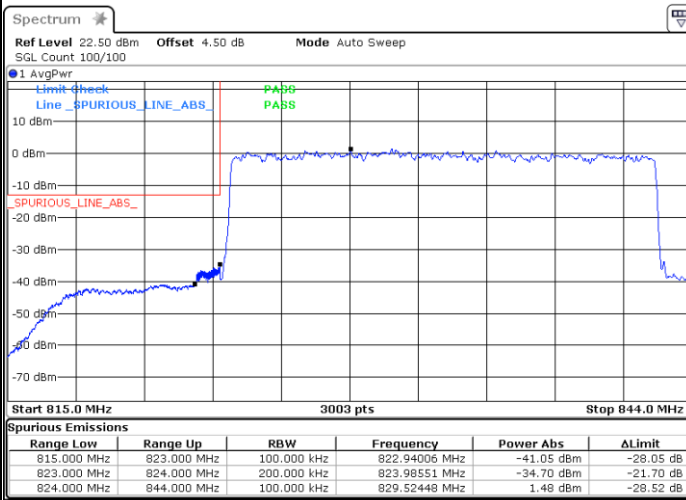


Date: 21.NOV.2020 14:40:36

Date: 21.NOV.2020 14:37:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 14:45:58

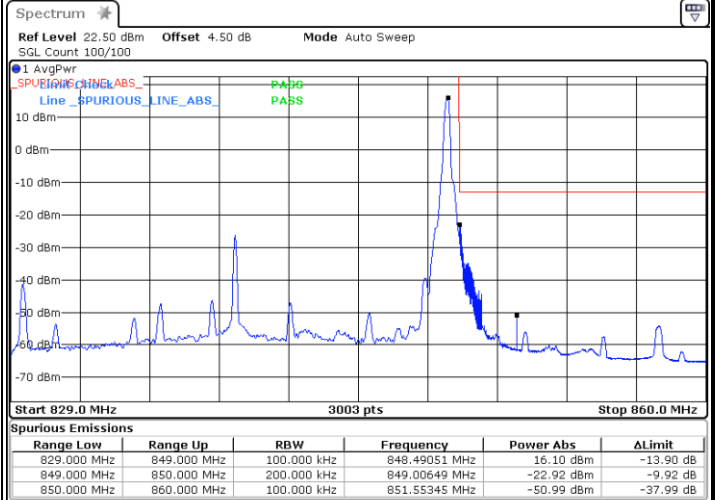
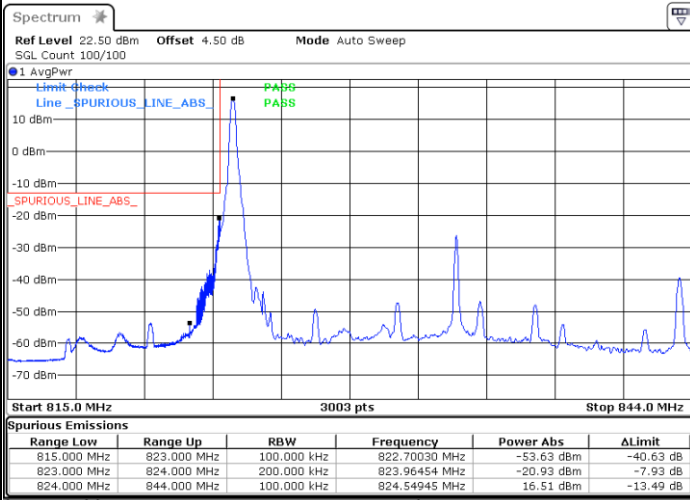
Date: 21.NOV.2020 14:32:08



FR1 n5 / 20MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

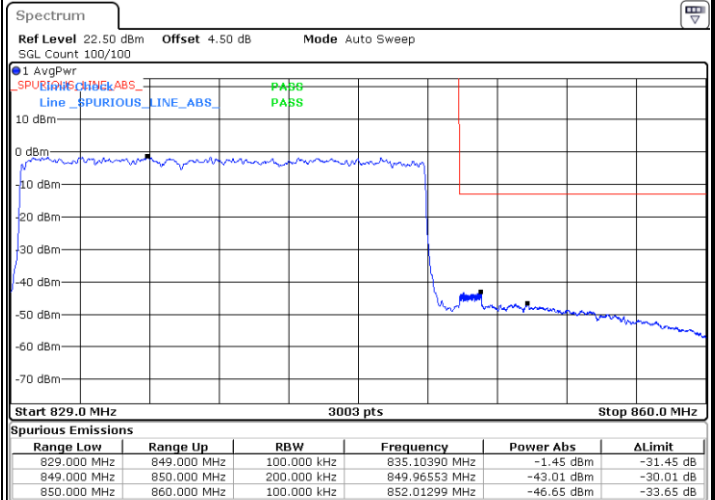
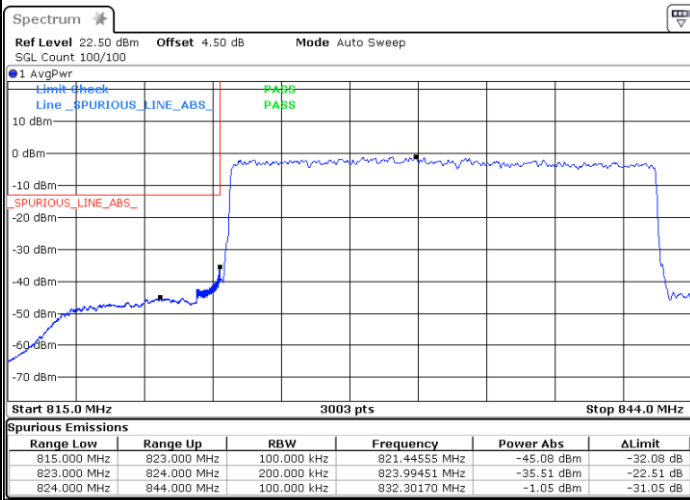


Date: 21.NOV.2020 14:39:58

Date: 21.NOV.2020 14:38:45

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.NOV.2020 14:46:40

Date: 21.NOV.2020 14:31:34

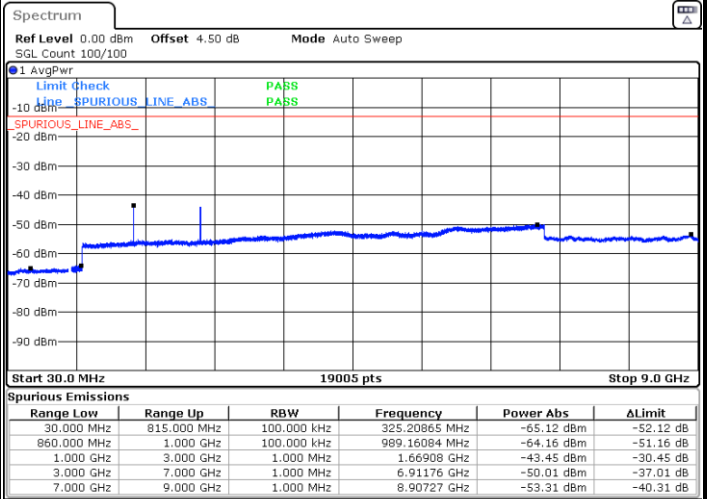
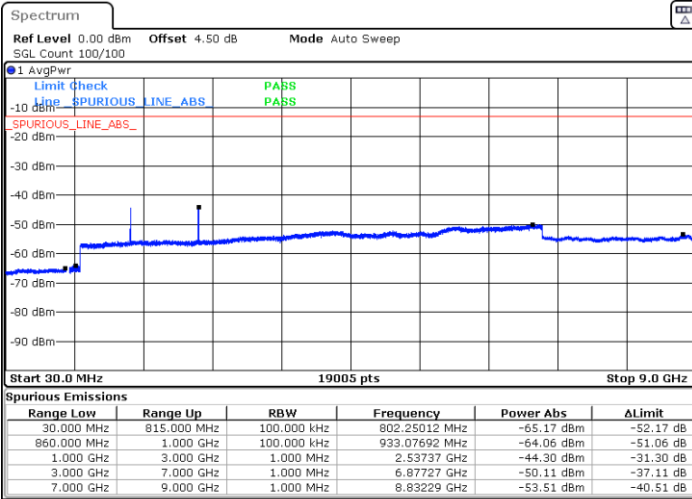


Conducted Spurious Emission

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

Lowest Channel / 1RB1

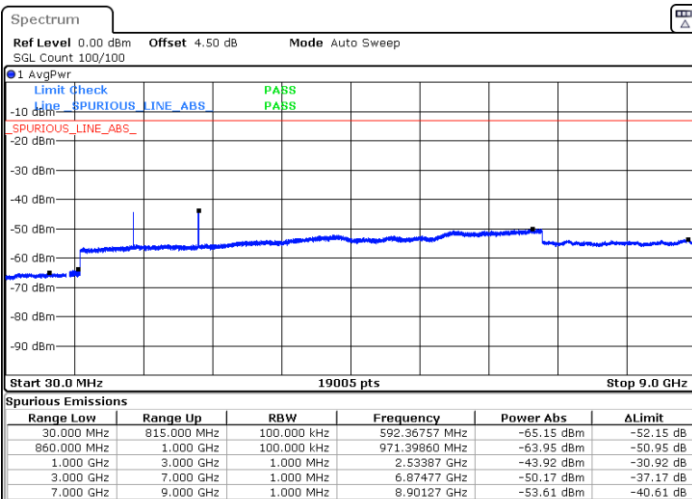
Middle Channel / 1RB1



Date: 1 DEC.2020 17:19:54

Date: 1 DEC.2020 17:28:51

Highest Channel / 1RB1

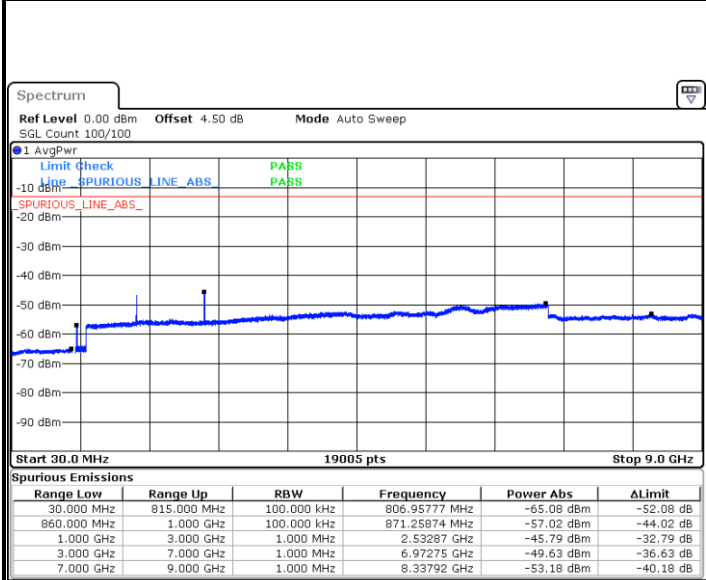


Date: 1 DEC.2020 17:31:25



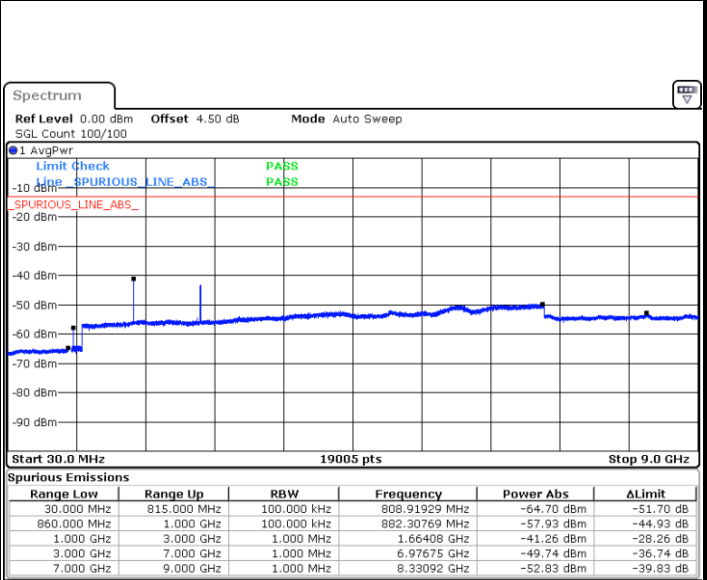
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



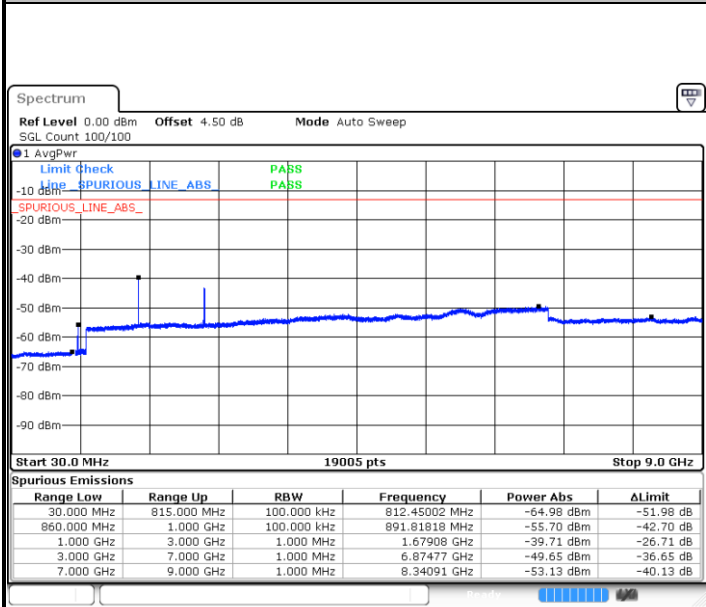
Date: 21.NOV.2020 12:43:44

Middle Channel / 1RB1



Date: 21.NOV.2020 12:46:04

Highest Channel / 1RB1



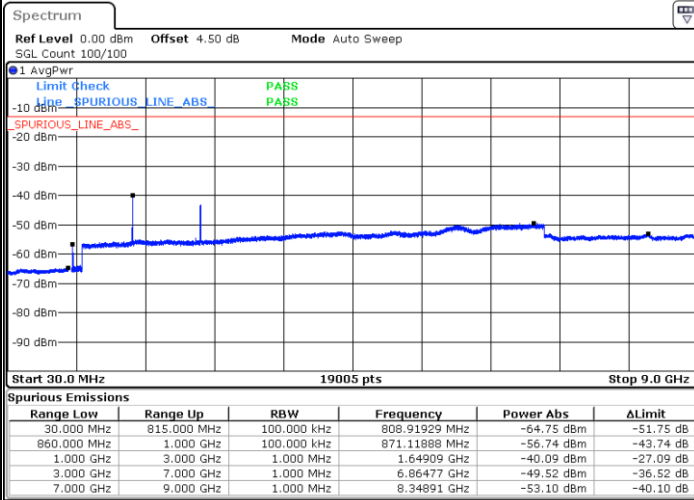
Date: 21.NOV.2020 12:49:58



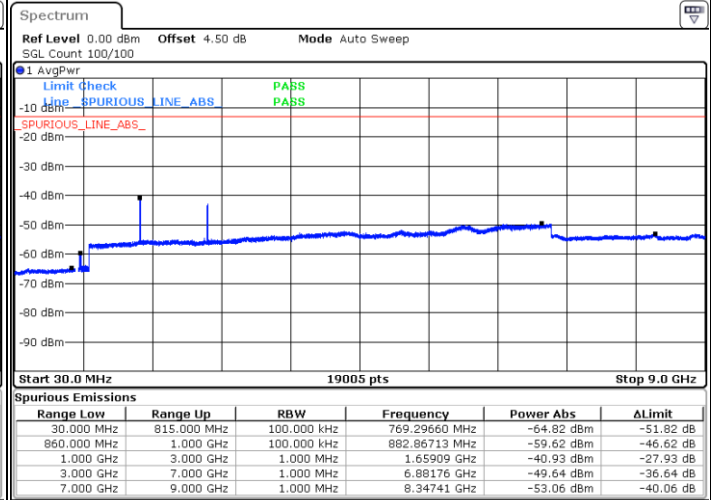
FR1 n5 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

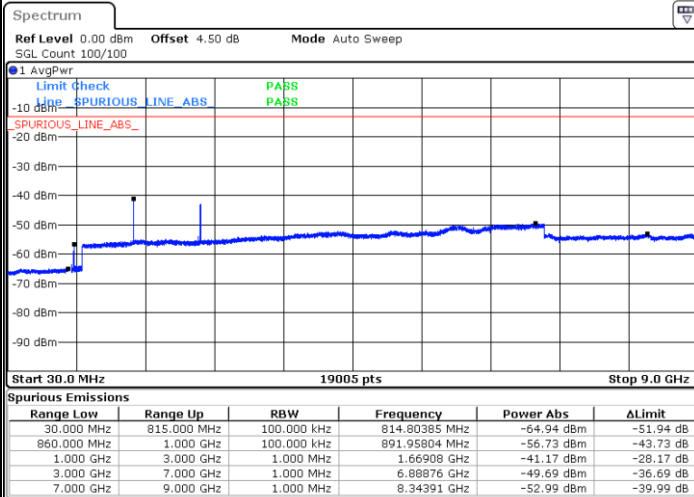


Date: 21.NOV.2020 13:46:21



Date: 21.NOV.2020 13:47:55

Highest Channel / 1RB1



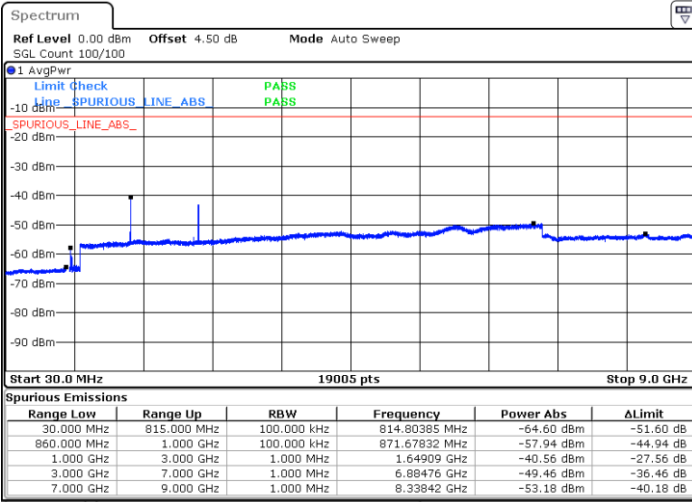
Date: 21.NOV.2020 13:52:21



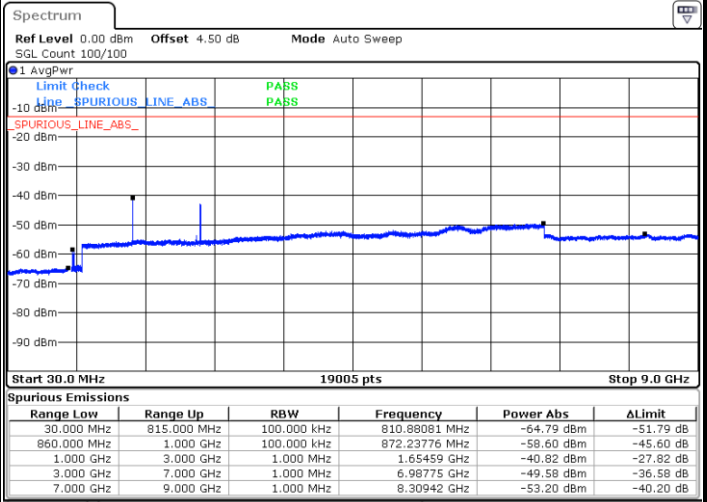
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

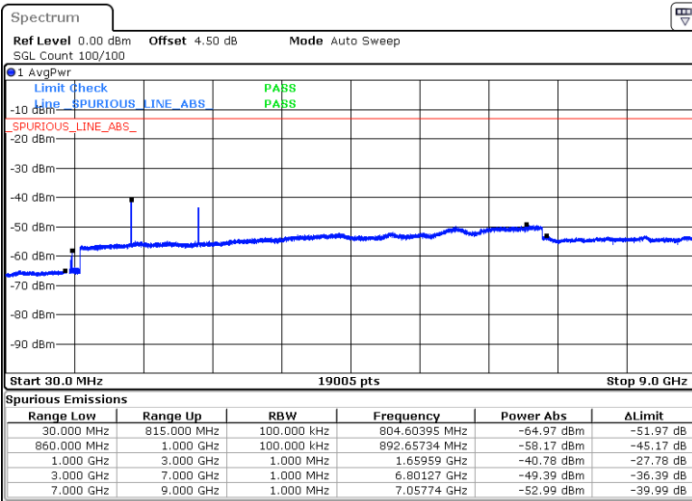


Date: 21.NOV.2020 15:07:52



Date: 21.NOV.2020 15:04:11

Highest Channel / 1RB1



Date: 21.NOV.2020 15:01:52



Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0041	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0038	
0	Normal Voltage	0.0067	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note: Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.



5G NR n7

Peak-to-Average Ratio

Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Lowest CH	3.36	4.23	5.19	5.86	PASS
Middle CH	3.39	4.23	5.48	5.88	
Highest CH	3.45	4.32	5.54	5.74	
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Lowest CH	6.29				PASS
Middle CH	6.35				
Highest CH	6.41				



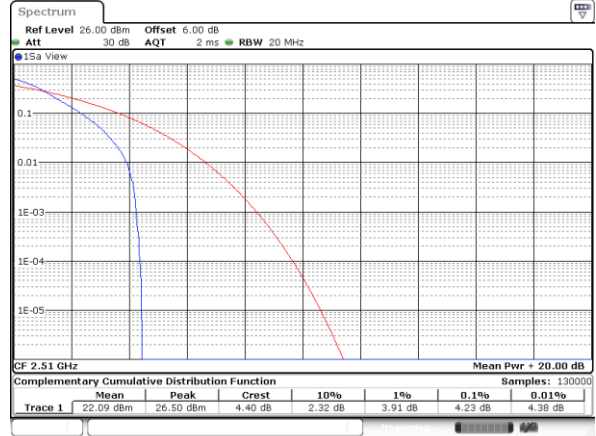
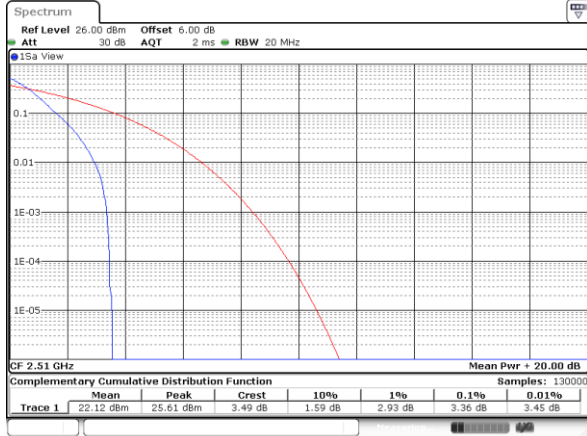
FR1 n7 / 20MHz / DFT-S OFDM

PI/2 BPSK

QPSK

Lowest Channel / Full RB

Lowest Channel / Full RB

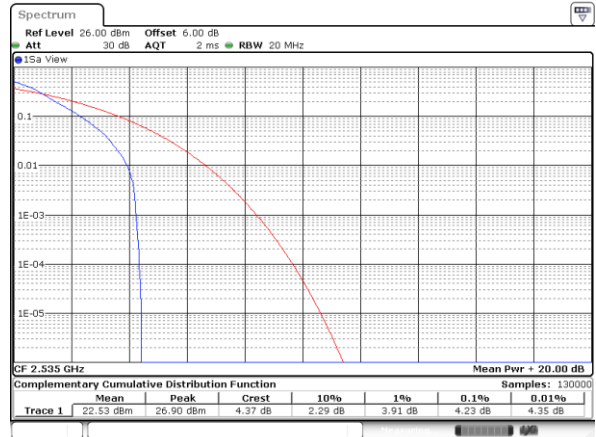
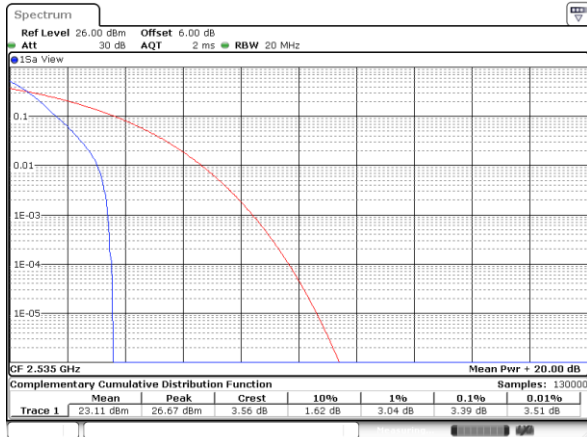


Date: 21 NOV 2020 19:22:36

Date: 21 NOV 2020 19:22:45

Middle Channel / Full RB

Middle Channel / Full RB

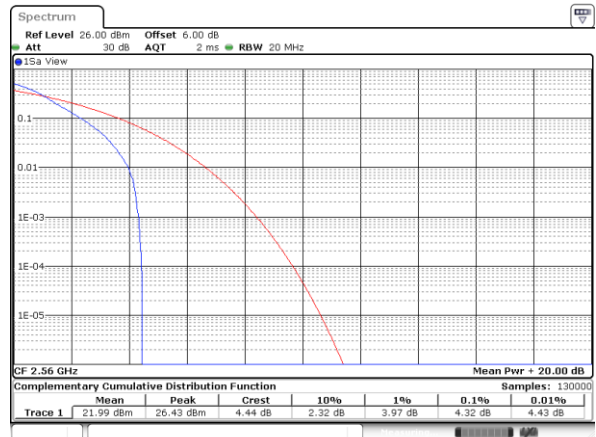
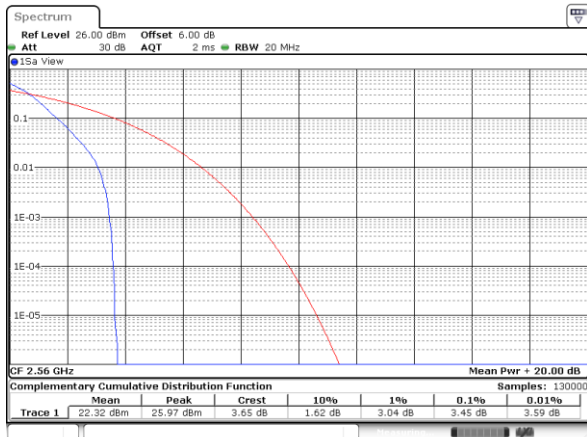


Date: 21 NOV 2020 19:21:27

Date: 21 NOV 2020 19:21:36

Highest Channel / Full RB

Highest Channel / Full RB



Date: 21 NOV 2020 19:18:05

Date: 21 NOV 2020 19:18:14



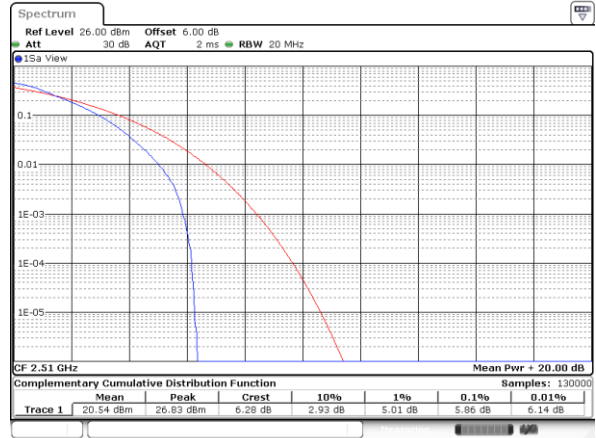
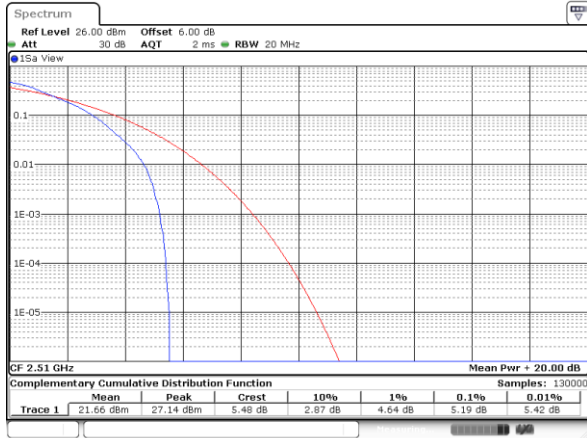
FR1 n7 / 20MHz / DFT-S OFDM

16QAM

64QAM

Lowest Channel / Full RB

Lowest Channel / Full RB

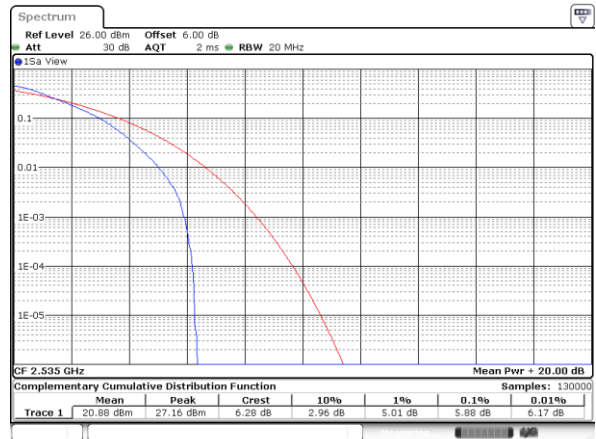
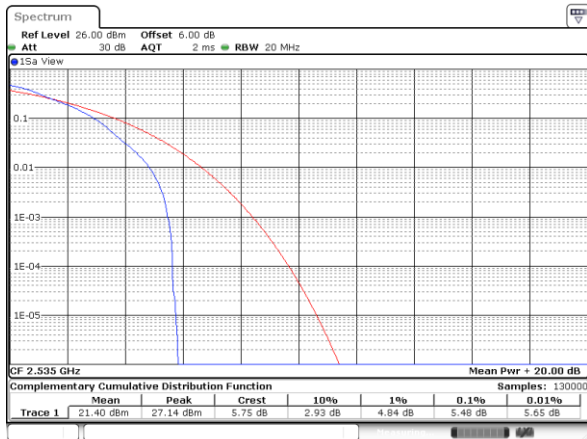


Date: 21 NOV 2020 19:22:54

Date: 21 NOV 2020 19:23:03

Middle Channel / Full RB

Middle Channel / Full RB

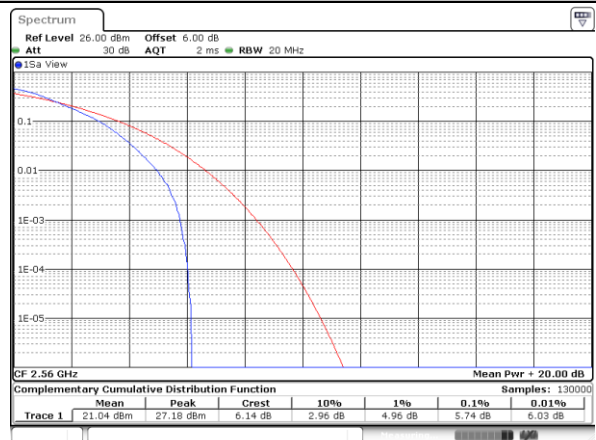
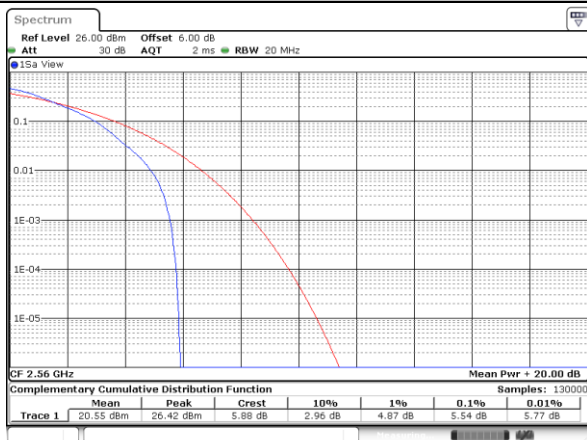


Date: 21 NOV 2020 19:22:01

Date: 21 NOV 2020 19:22:11

Highest Channel / Full RB

Highest Channel / Full RB



Date: 21 NOV 2020 19:18:29

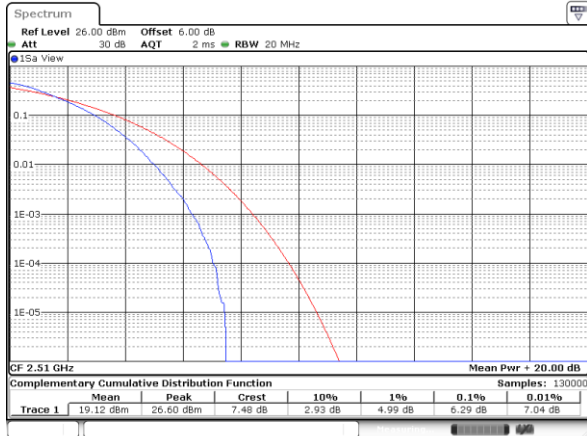
Date: 21 NOV 2020 19:18:39



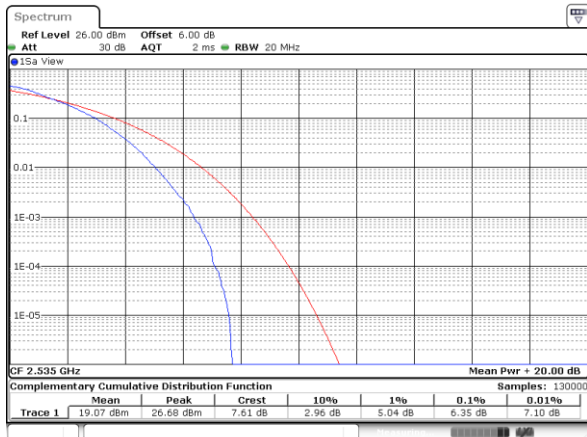
FR1 n7 / 20MHz / DFT-S OFDM

256QAM

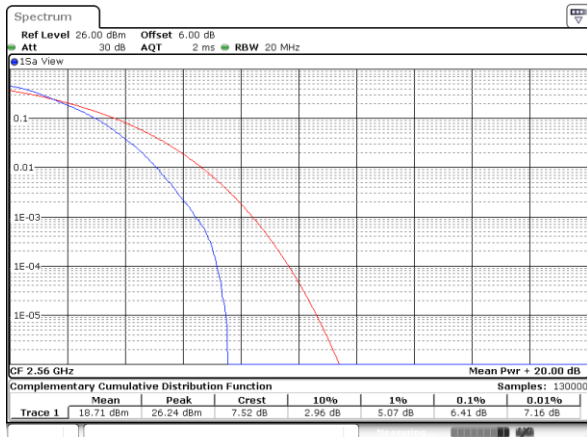
Lowest Channel / Full RB



Middle Channel / Full RB



Highest Channel / Full RB





26dB Bandwidth

Mode	FR1 n7 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.965	5.045	9.99	10.17	14.985	14.925	21.379	21.459



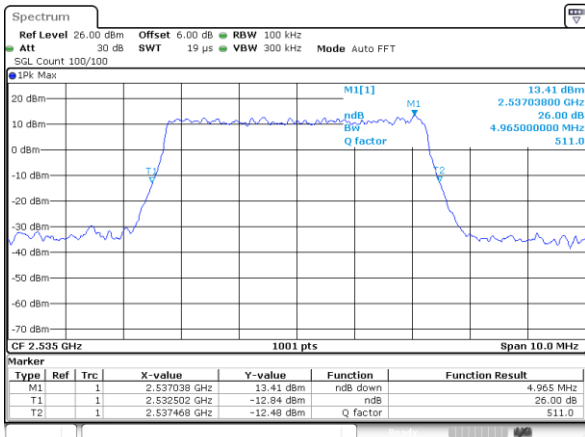
FR1 n7 / 5MHz / DFT-S OFDM

QPSK

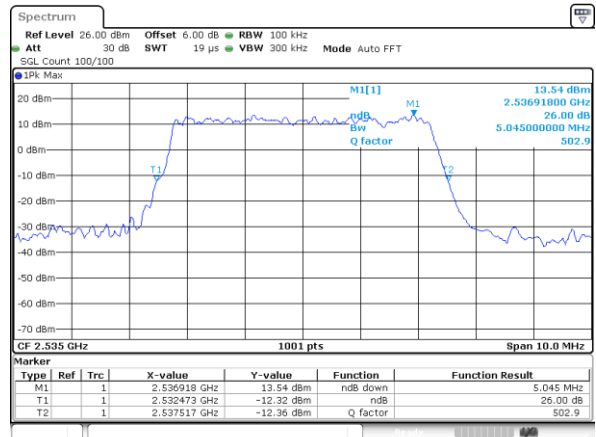
16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:44:31



Date: 3,DEC,2020 17:44:52



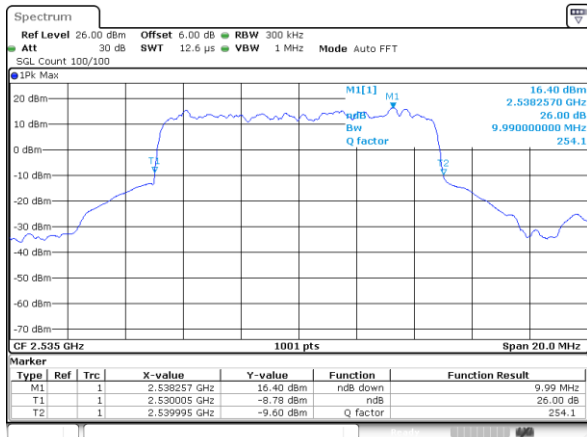
FR1 n7 / 10MHz / DFT-S OFDM

QPSK

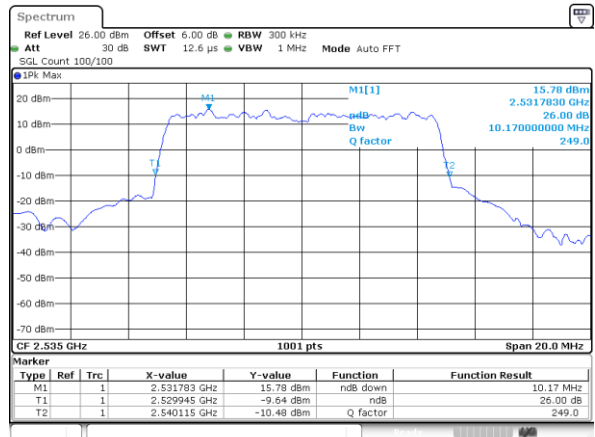
16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:46:32



Date: 3,DEC,2020 17:46:46



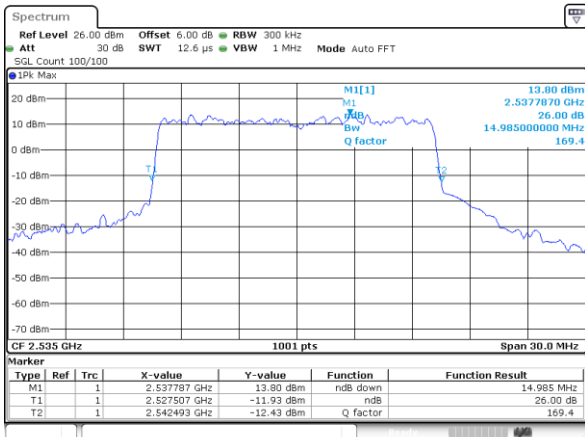
FR1 n7 / 15MHz / DFT-S OFDM

QPSK

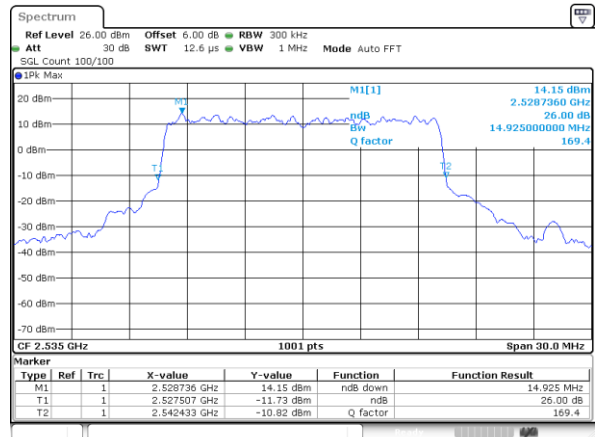
16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:51:13



Date: 3,DEC,2020 17:51:29



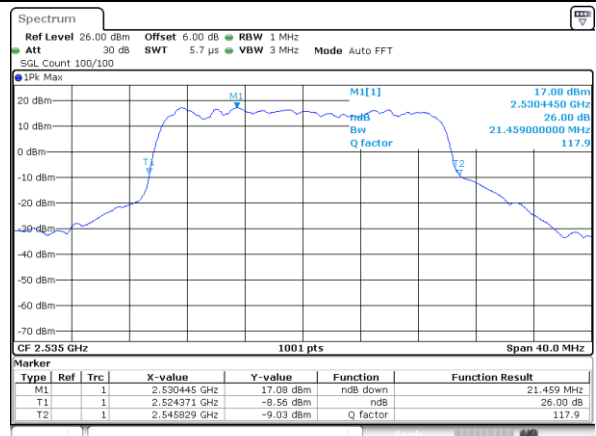
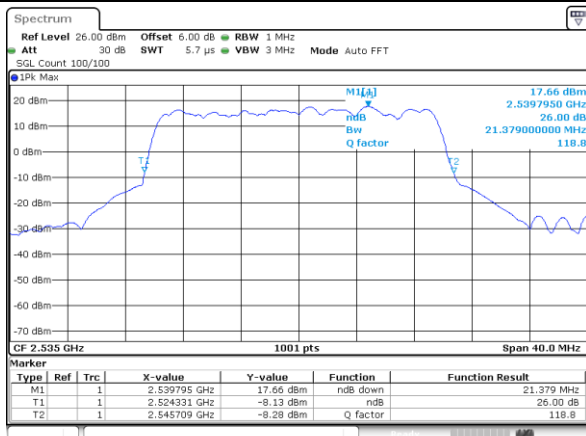
FR1 n7 / 20MHz / DFT-S OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:52:49

Date: 3,DEC,2020 17:53:28



Occupied Bandwidth

Mode	FR1 n7 : 99%OBW (MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.456	4.476	9.451	9.351	14.176	14.116	19.421	19.461



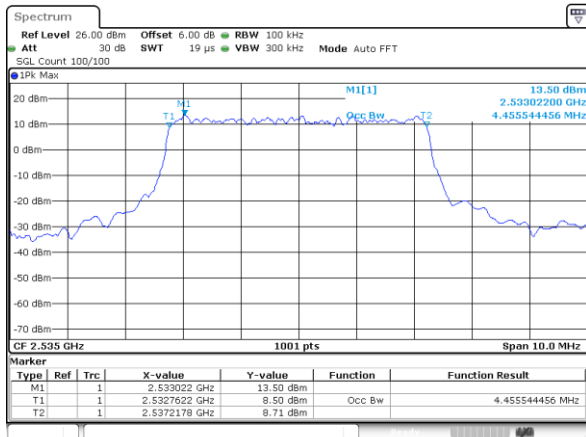
FR1 n7 / 5MHz / DFT-S OFDM

QPSK

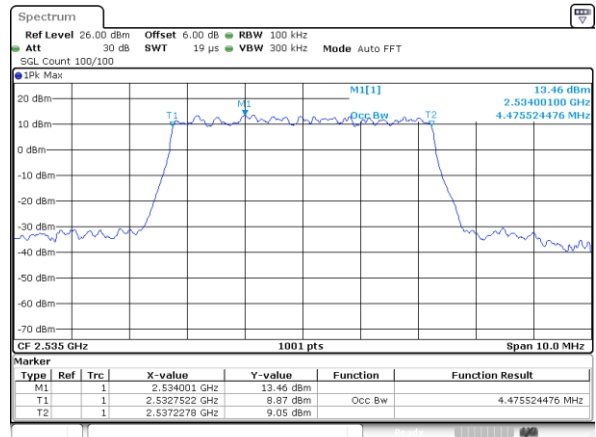
16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:44:37



Date: 3,DEC,2020 17:44:46



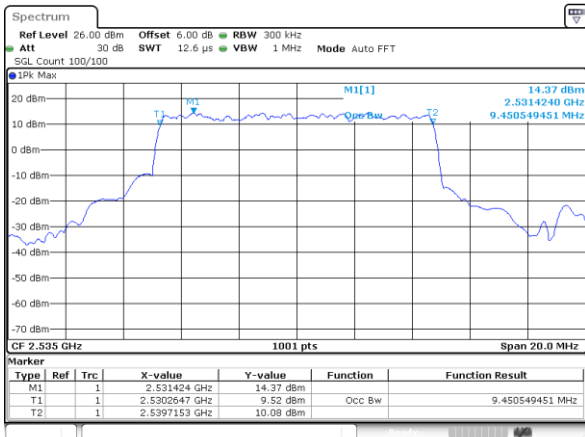
FR1 n7 / 10MHz / DFT-S OFDM

QPSK

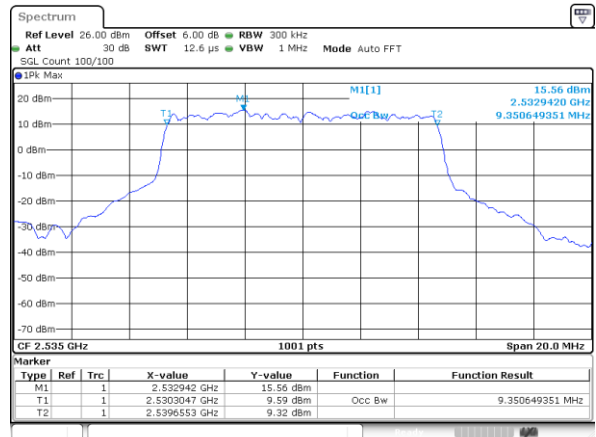
16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:46:21



Date: 3,DEC,2020 17:46:41



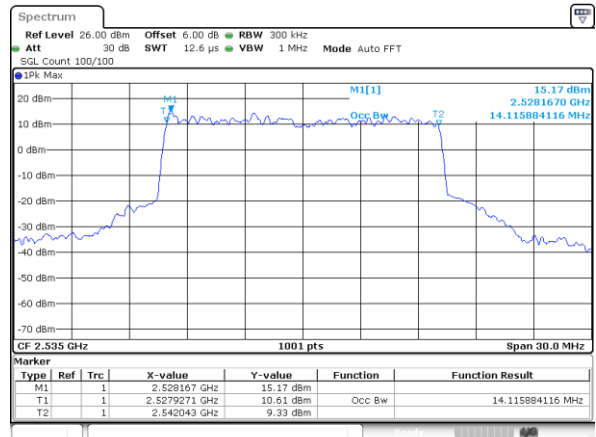
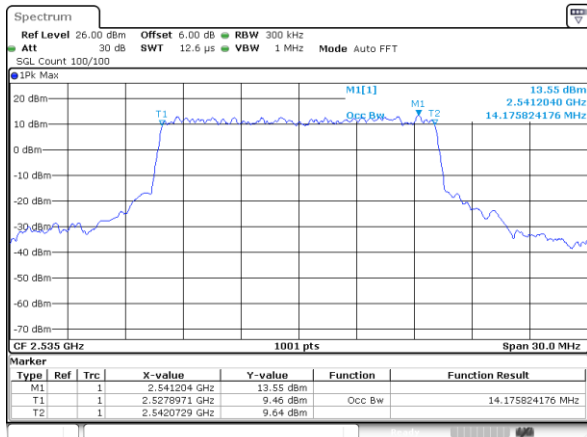
FR1 n7 / 15MHz / DFT-S OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:51:06

Date: 3,DEC,2020 17:51:24



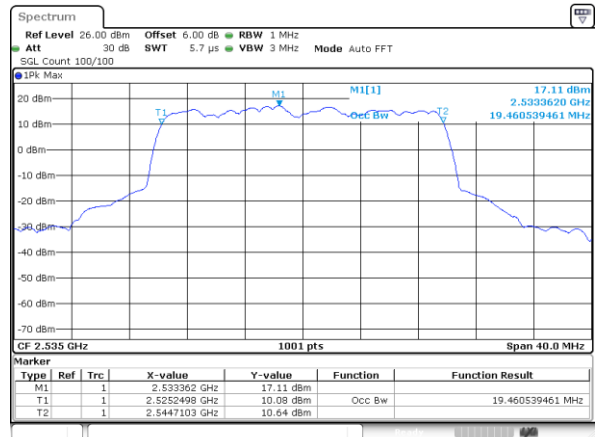
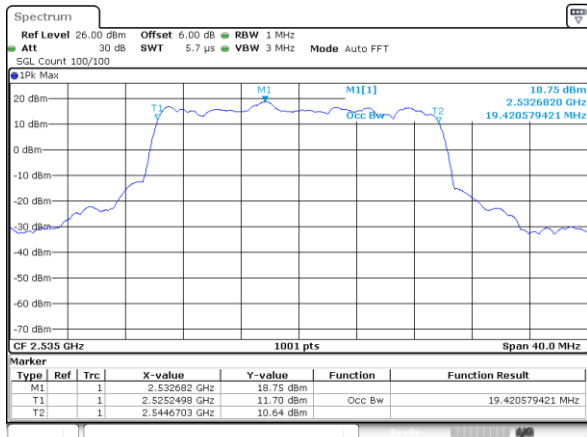
FR1 n7 / 20MHz / DFT-S OFDM

QPSK

16QAM

Middle Channel

Middle Channel



Date: 3,DEC,2020 17:52:43

Date: 3,DEC,2020 17:53:22

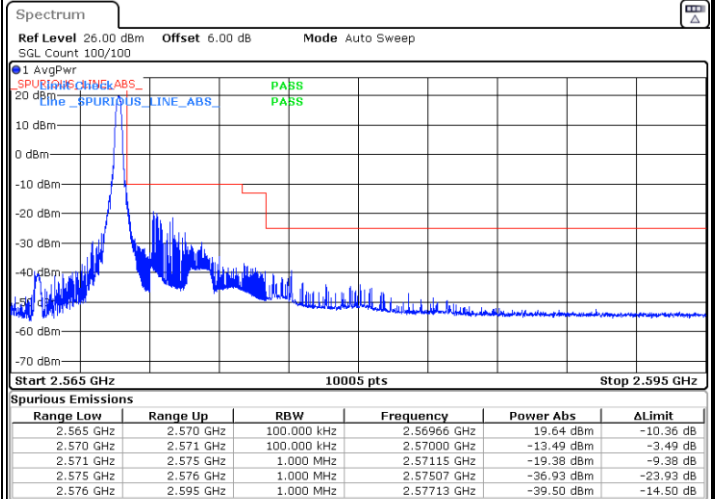
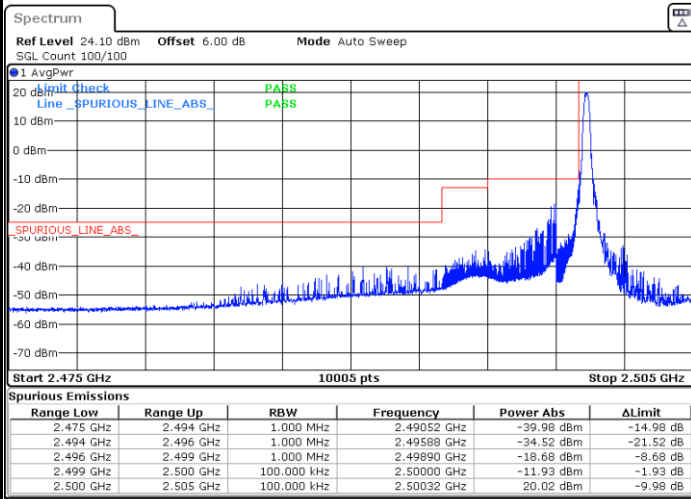


Conducted Band Edge

FR1 n7 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

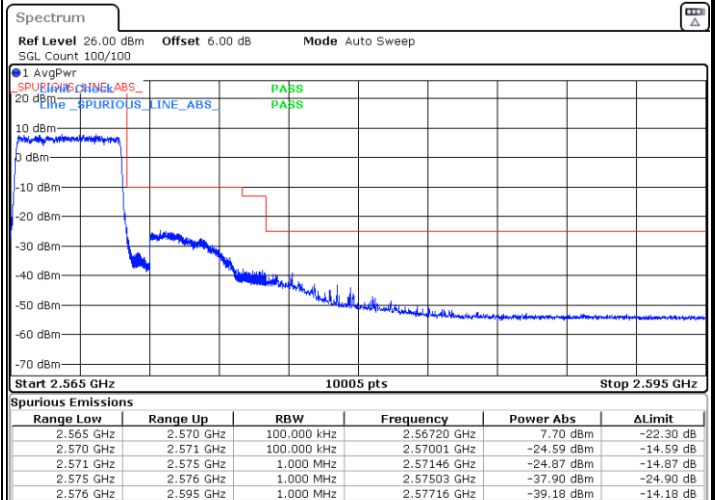
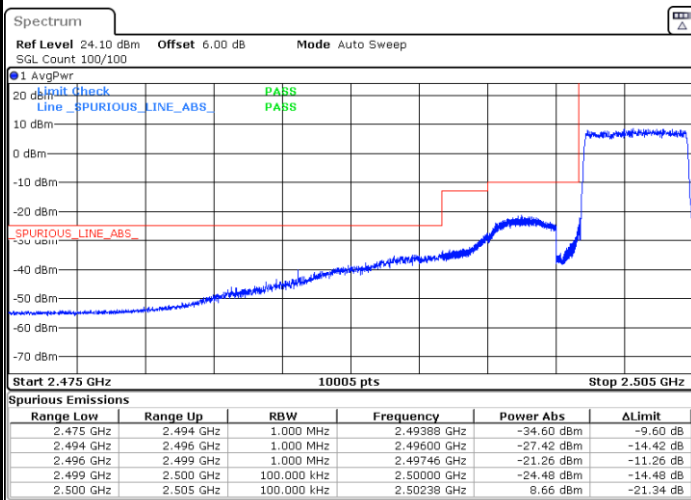


Date: 1 DEC.2020 18:51:07

Date: 1 DEC.2020 18:46:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1 DEC.2020 18:49:39

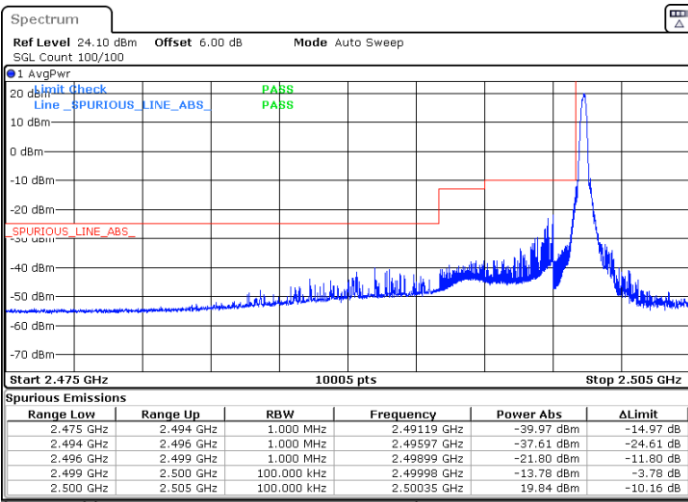
Date: 1 DEC.2020 18:44:27



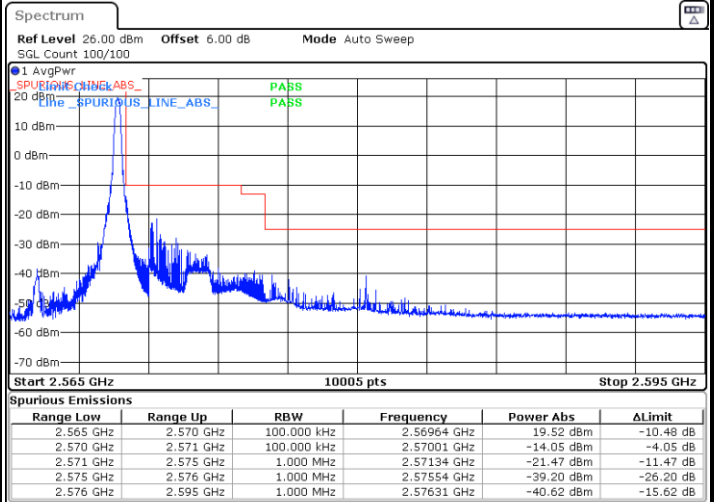
FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



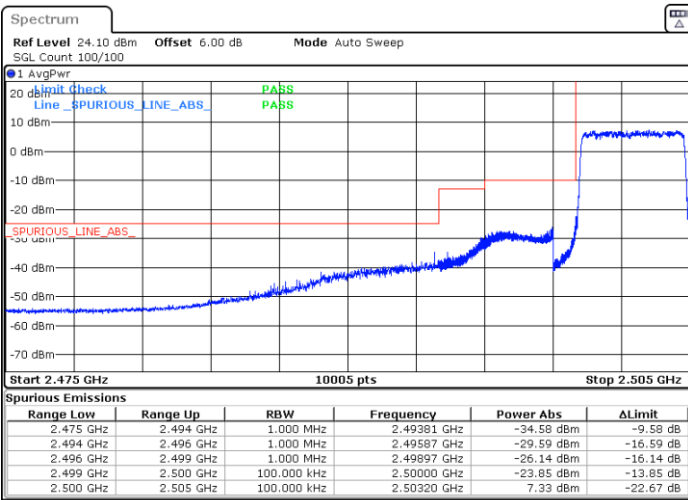
Date: 1 DEC.2020 18:51:23



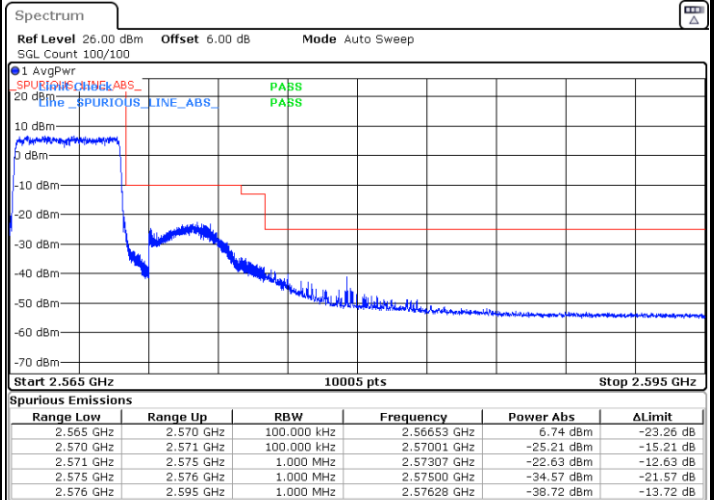
Date: 1 DEC.2020 18:47:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1 DEC.2020 18:49:56



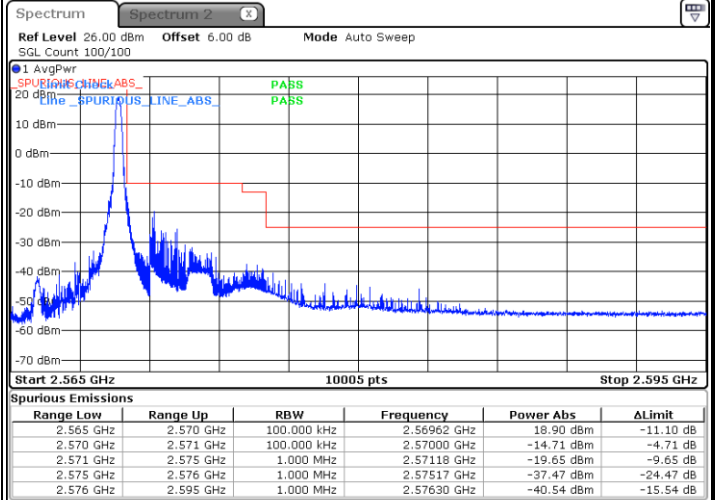
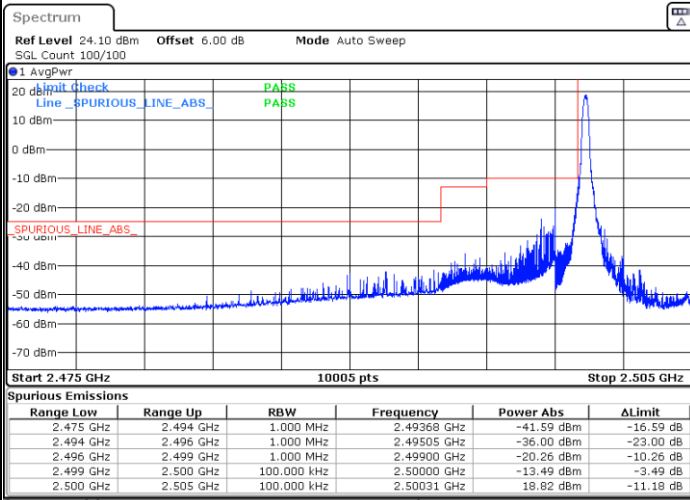
Date: 1 DEC.2020 18:45:45



FR1 n7 / 5MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

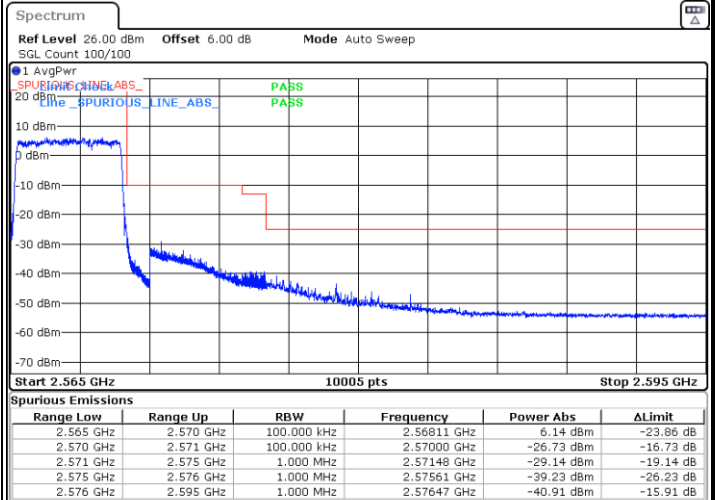
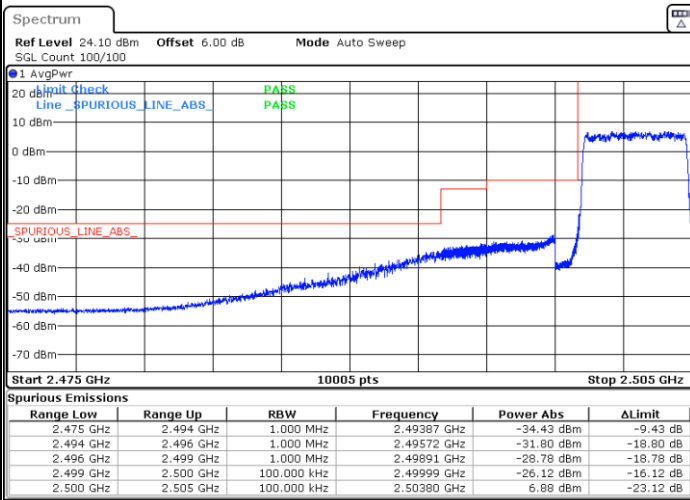


Date: 1 DEC.2020 18:51:39

Date: 2 DEC.2020 09:29:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1 DEC.2020 18:50:13

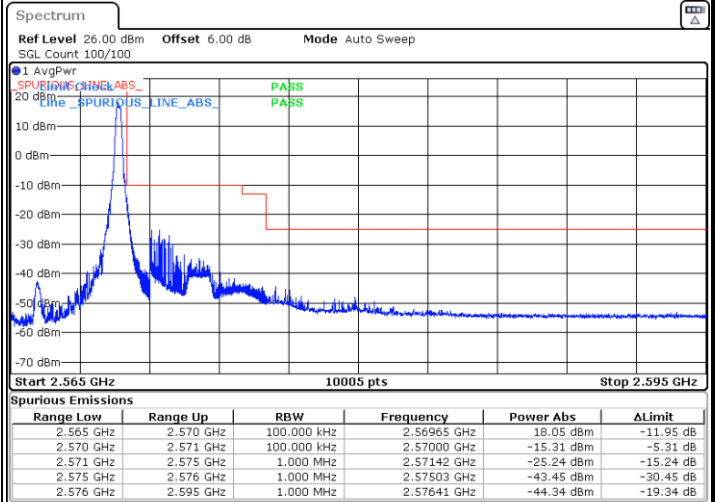
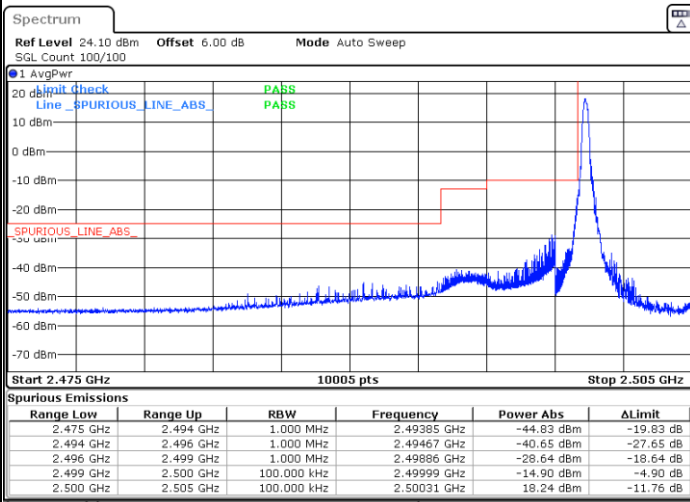
Date: 1 DEC.2020 18:46:03



FR1 n7 / 5MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

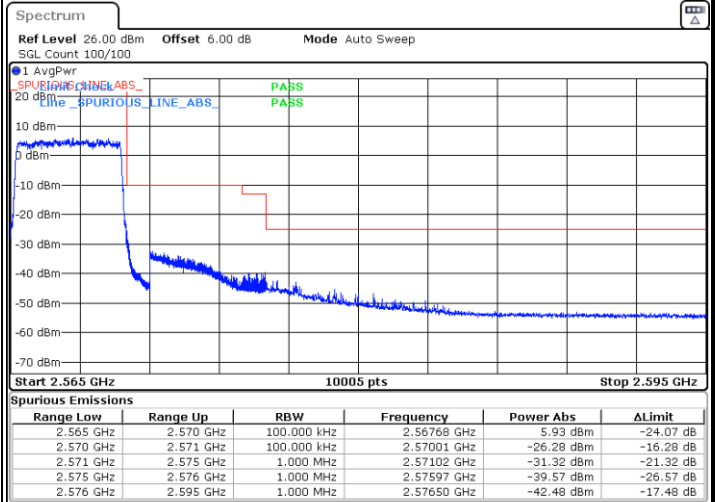
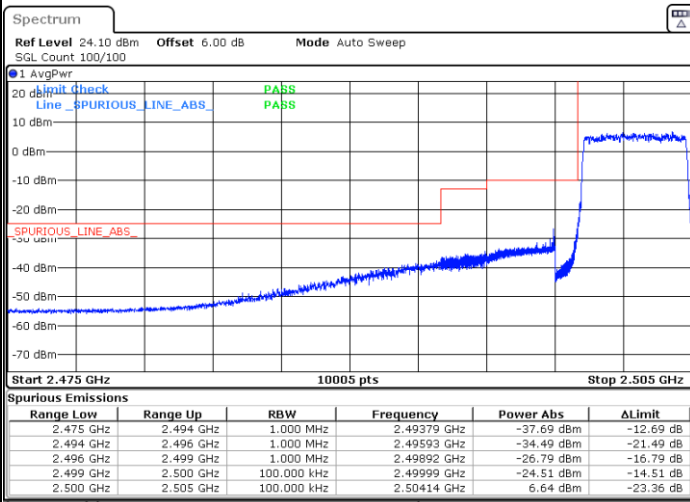


Date: 1 DEC.2020 18:51:57

Date: 1 DEC.2020 18:48:37

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1 DEC.2020 18:50:29

Date: 1 DEC.2020 18:46:18