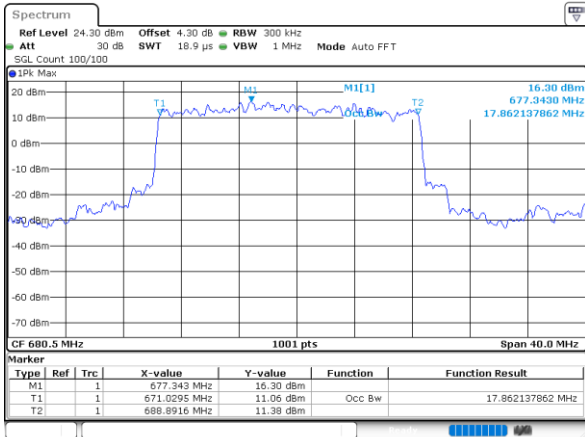




FR1 n71 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

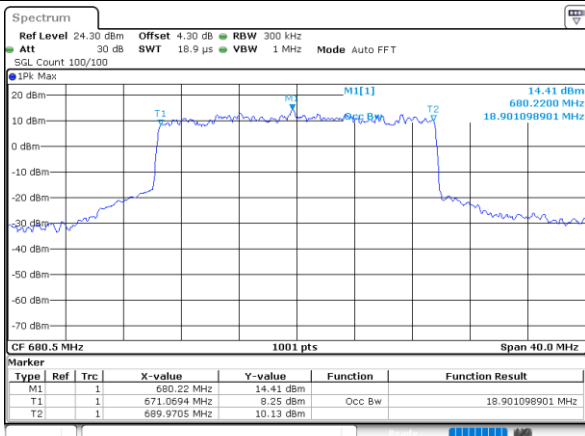
PI/2 BPSK



Date: 25, DEC, 2020 13:20:21

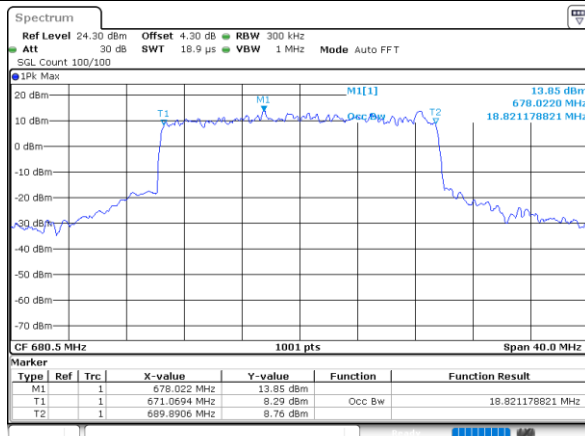
FR1 n71 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



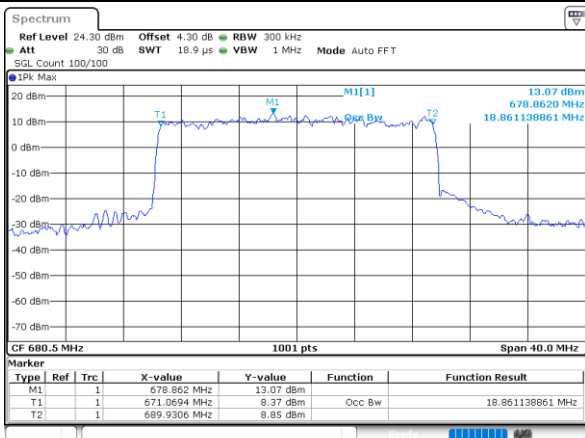
Date: 25, DEC, 2020 13:20:56

16QAM



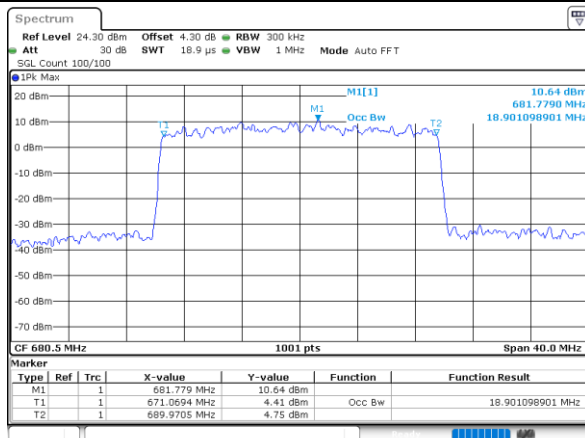
Date: 25, DEC, 2020 13:22:53

64QAM



Date: 25, DEC, 2020 13:23:20

256QAM



Date: 25, DEC, 2020 13:35:49

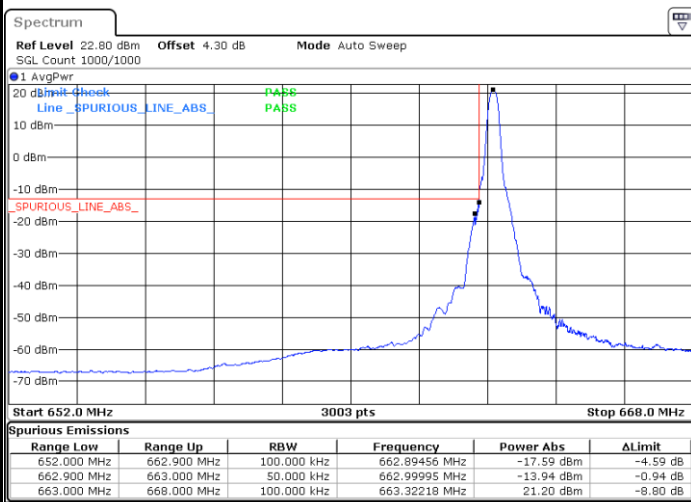


Conducted Band Edge

FR1 n71 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

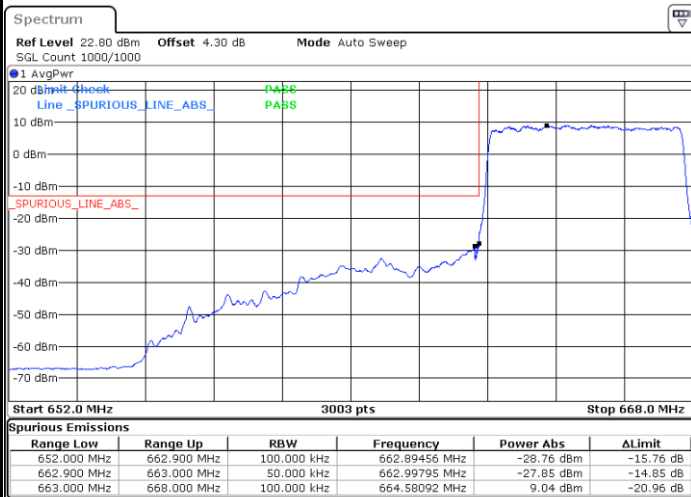


Date: 16.DEC.2020 13:38:45

Date: 25.DEC.2020 10:37:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.DEC.2020 12:33:38

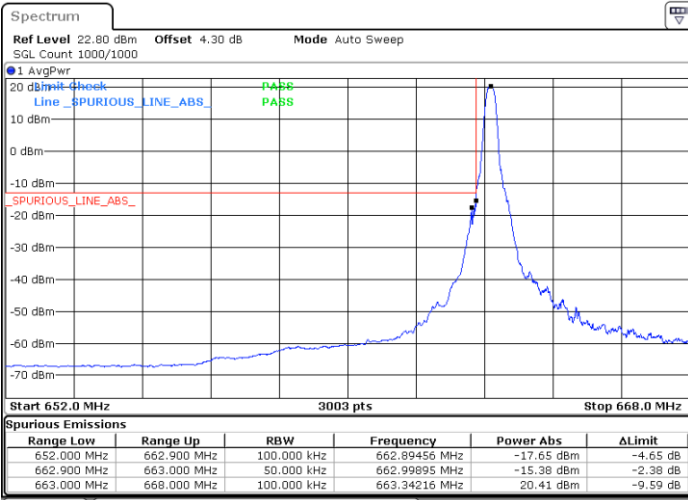
Date: 25.DEC.2020 10:24:32



FR1 n71 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

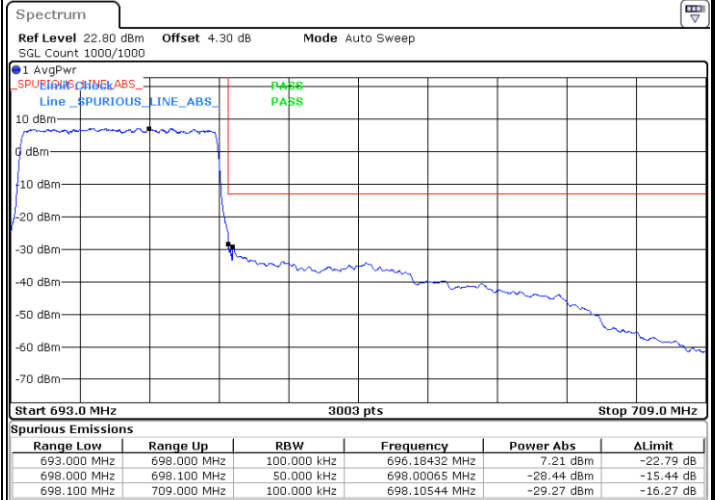
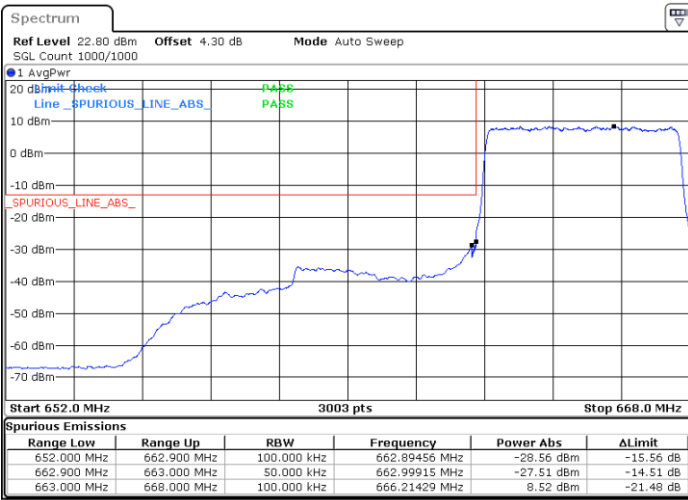


Date: 16.DEC.2020 13:37:33

Date: 25.DEC.2020 10:34:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.DEC.2020 13:11:36

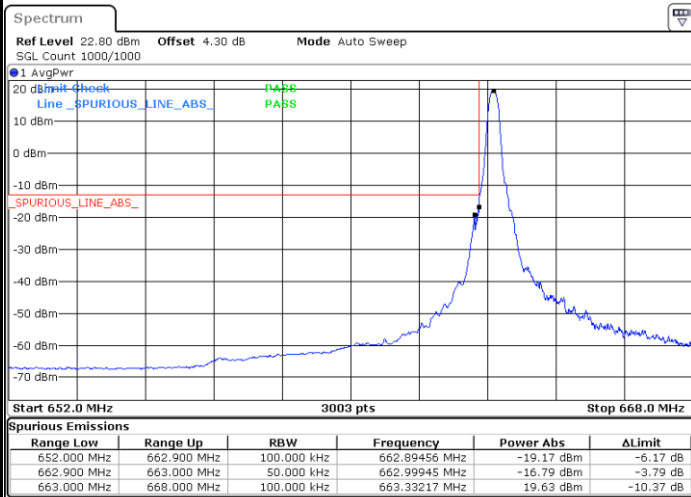
Date: 25.DEC.2020 10:25:28



FR1 n71 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

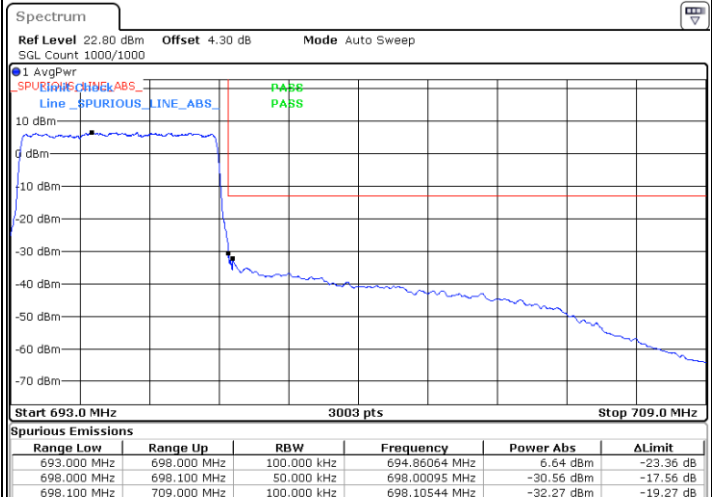
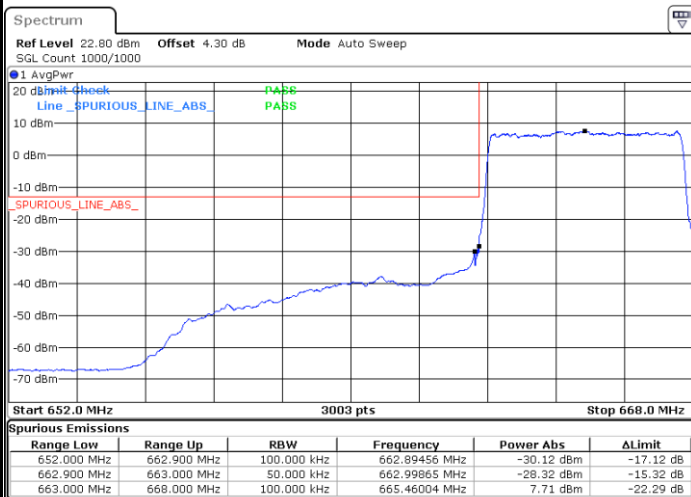


Date: 16.DEC.2020 13:34:17

Date: 25.DEC.2020 10:33:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.DEC.2020 13:13:48

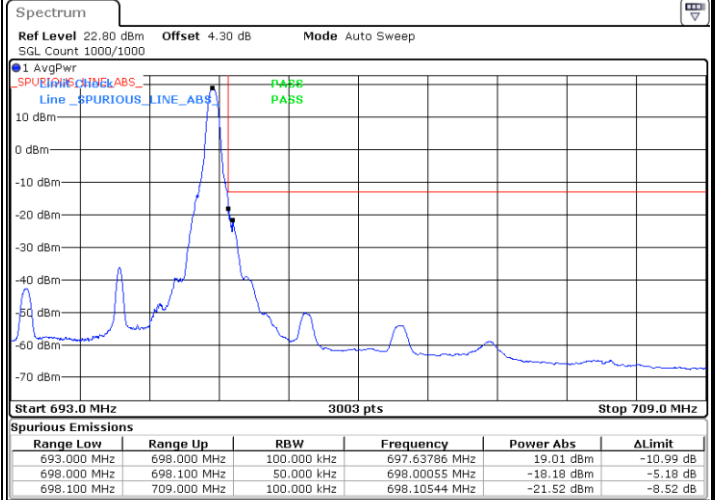
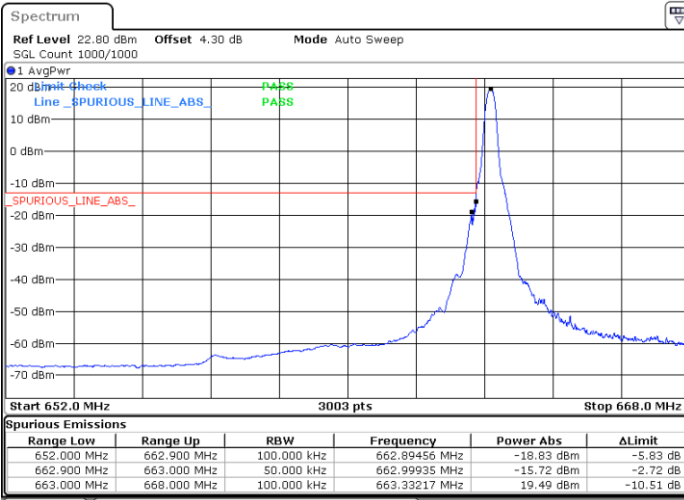
Date: 25.DEC.2020 10:26:28



FR1 n71 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

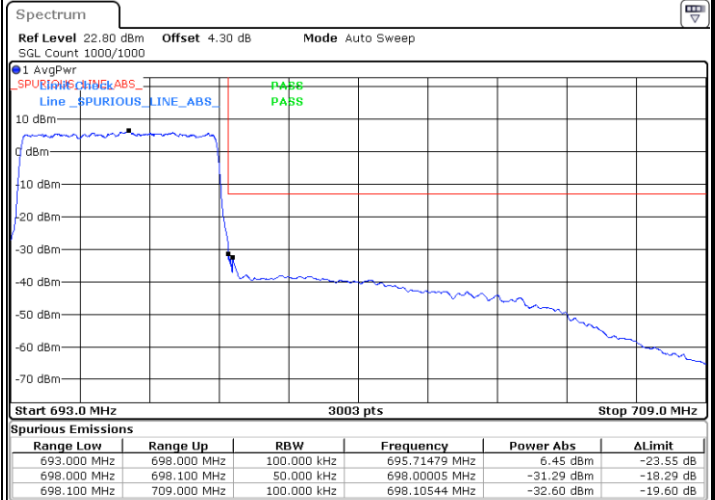
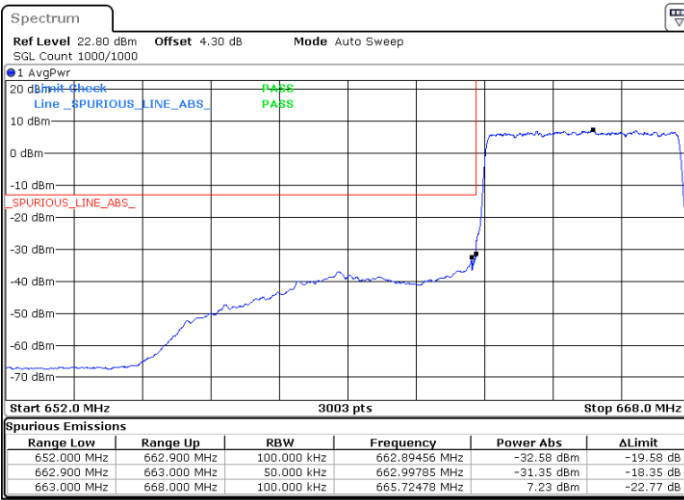


Date: 16.DEC.2020 13:32:48

Date: 25.DEC.2020 10:31:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.DEC.2020 13:21:35

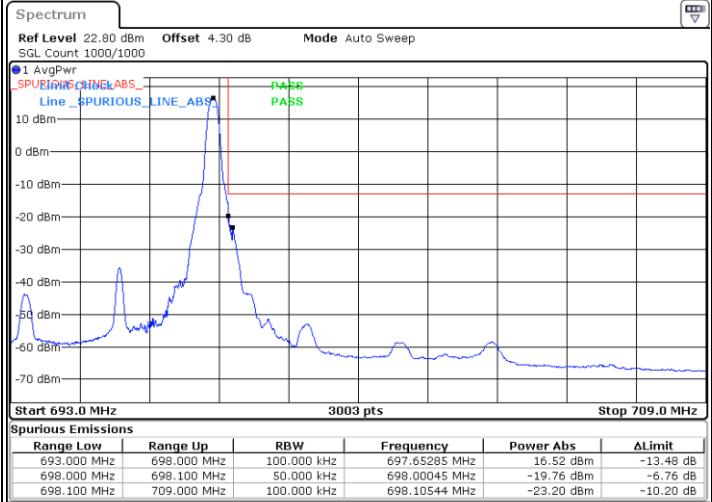
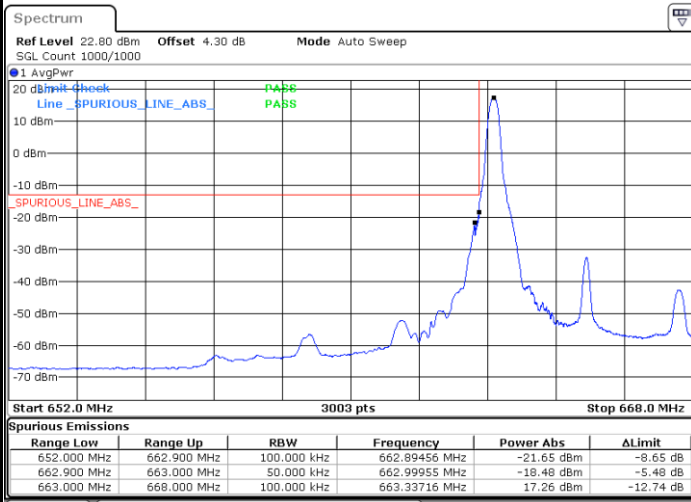
Date: 25.DEC.2020 10:30:01



FR1 n71 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

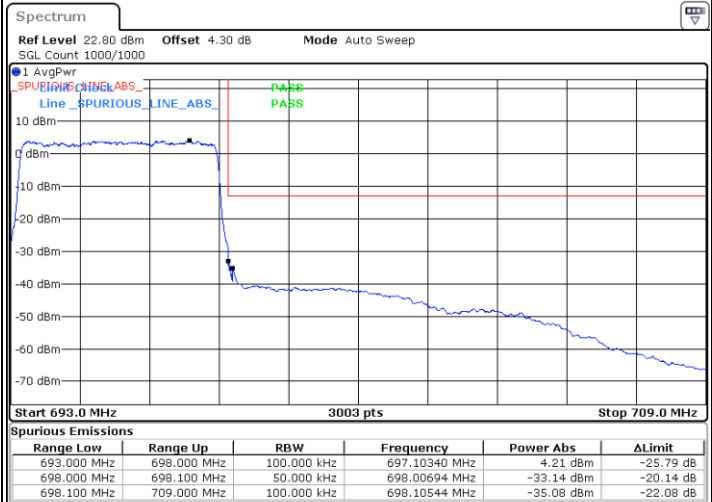
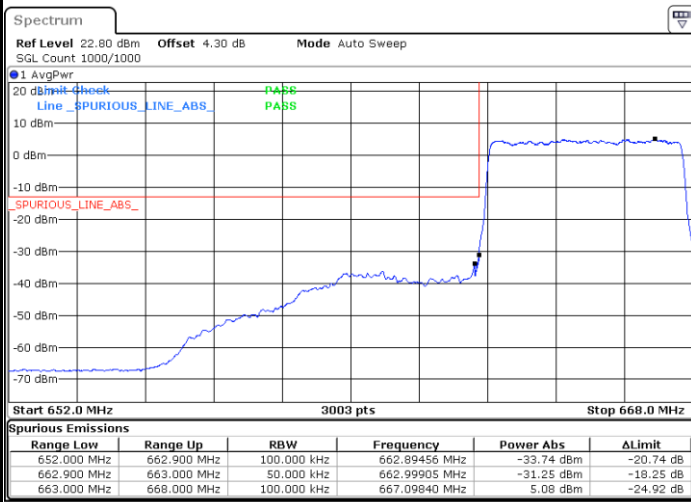


Date: 16.DEC.2020 13:47:11

Date: 25.DEC.2020 10:39:07

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 16.DEC.2020 13:49:22

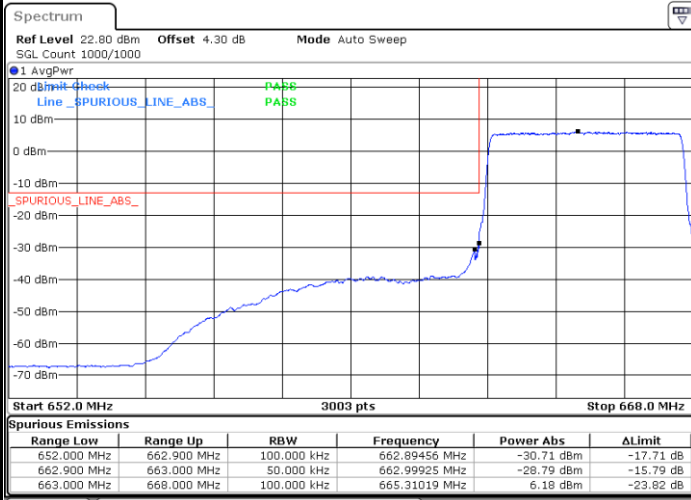
Date: 25.DEC.2020 10:41:18



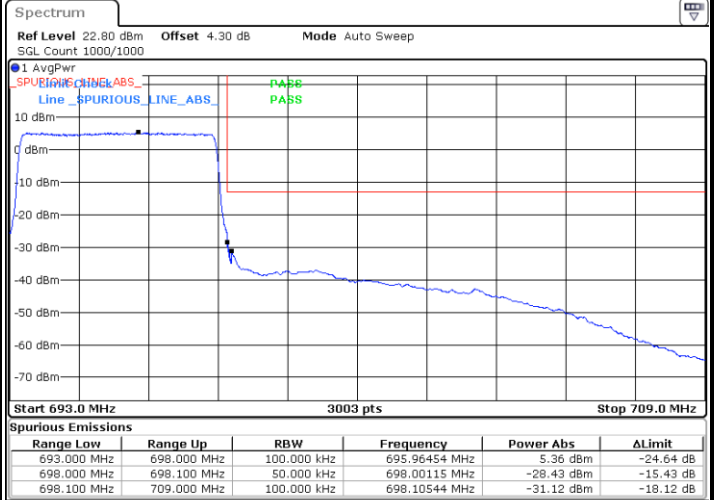
FR1 n71 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 16.DEC.2020 10:56:35



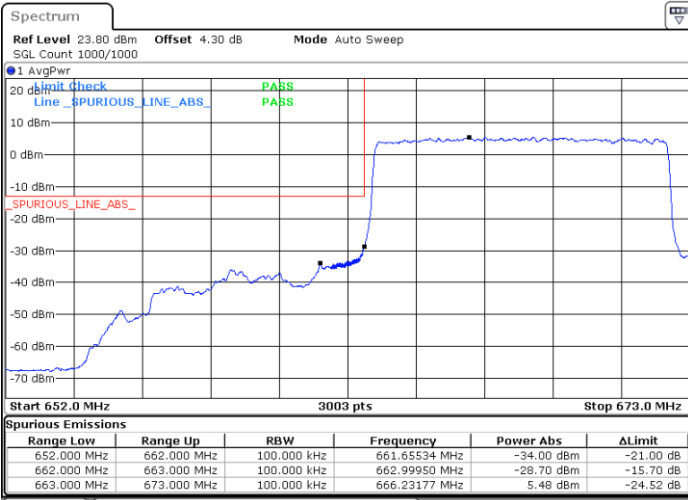
Date: 25.DEC.2020 10:22:36



FR1 n71 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

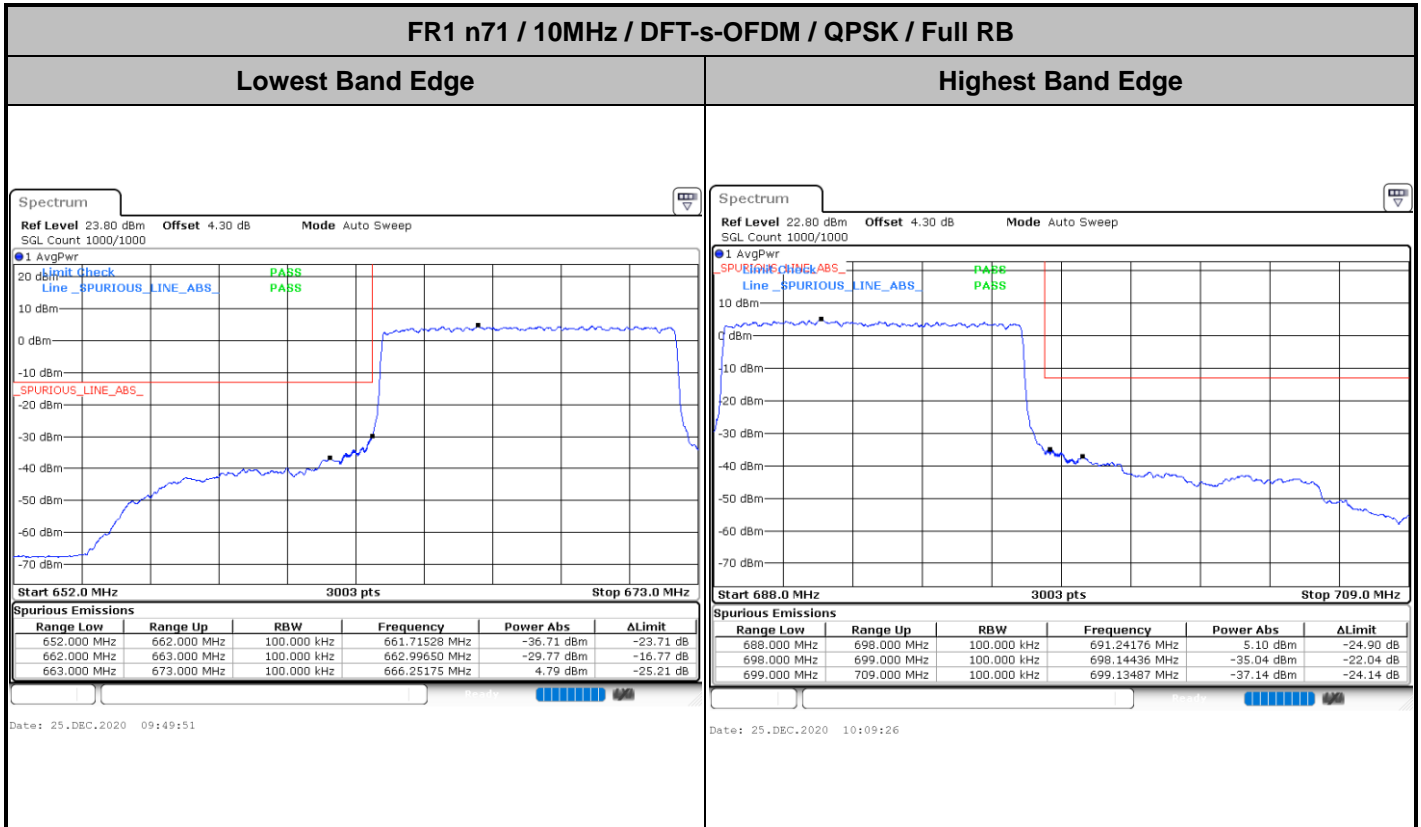
Lowest Band Edge

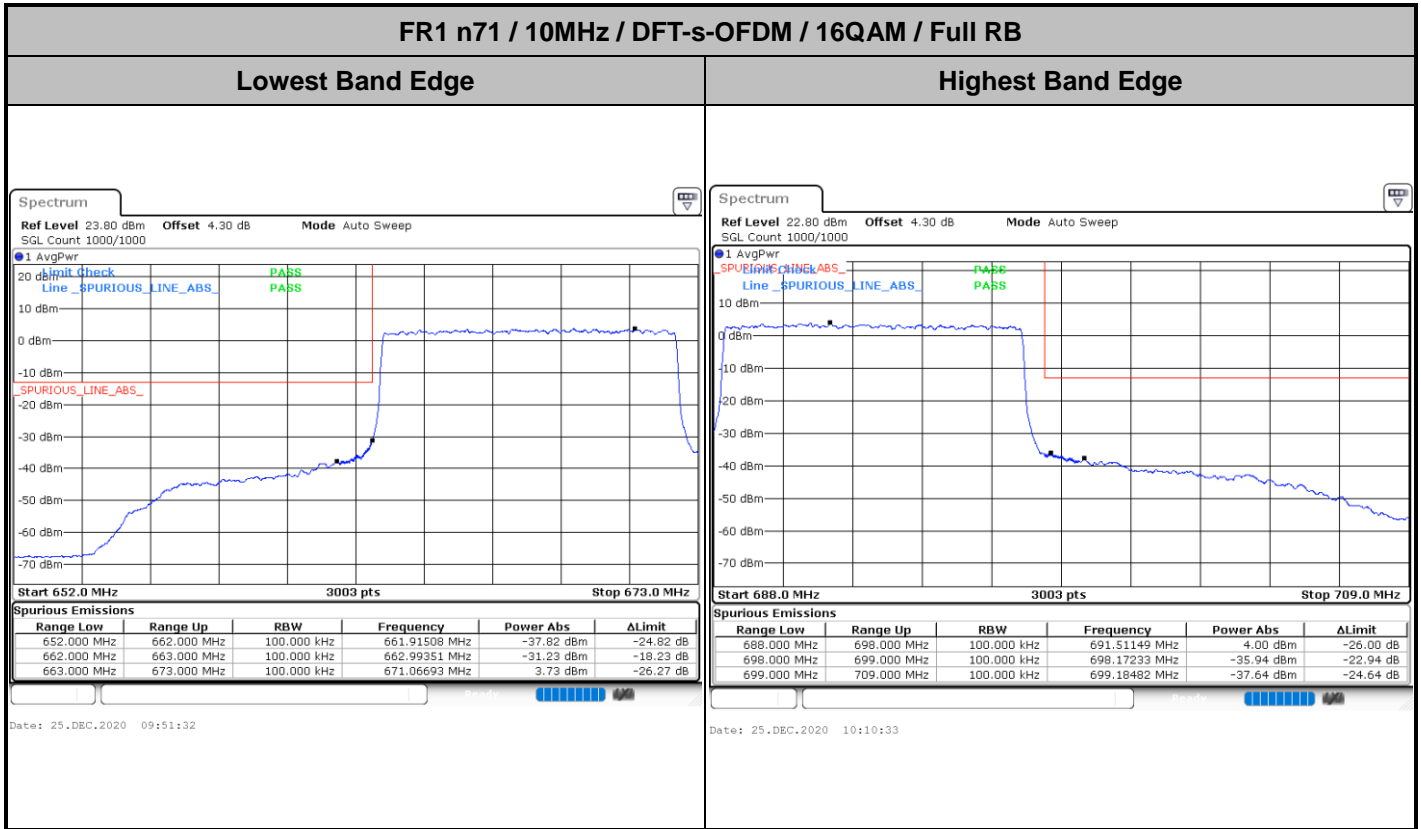
Highest Band Edge

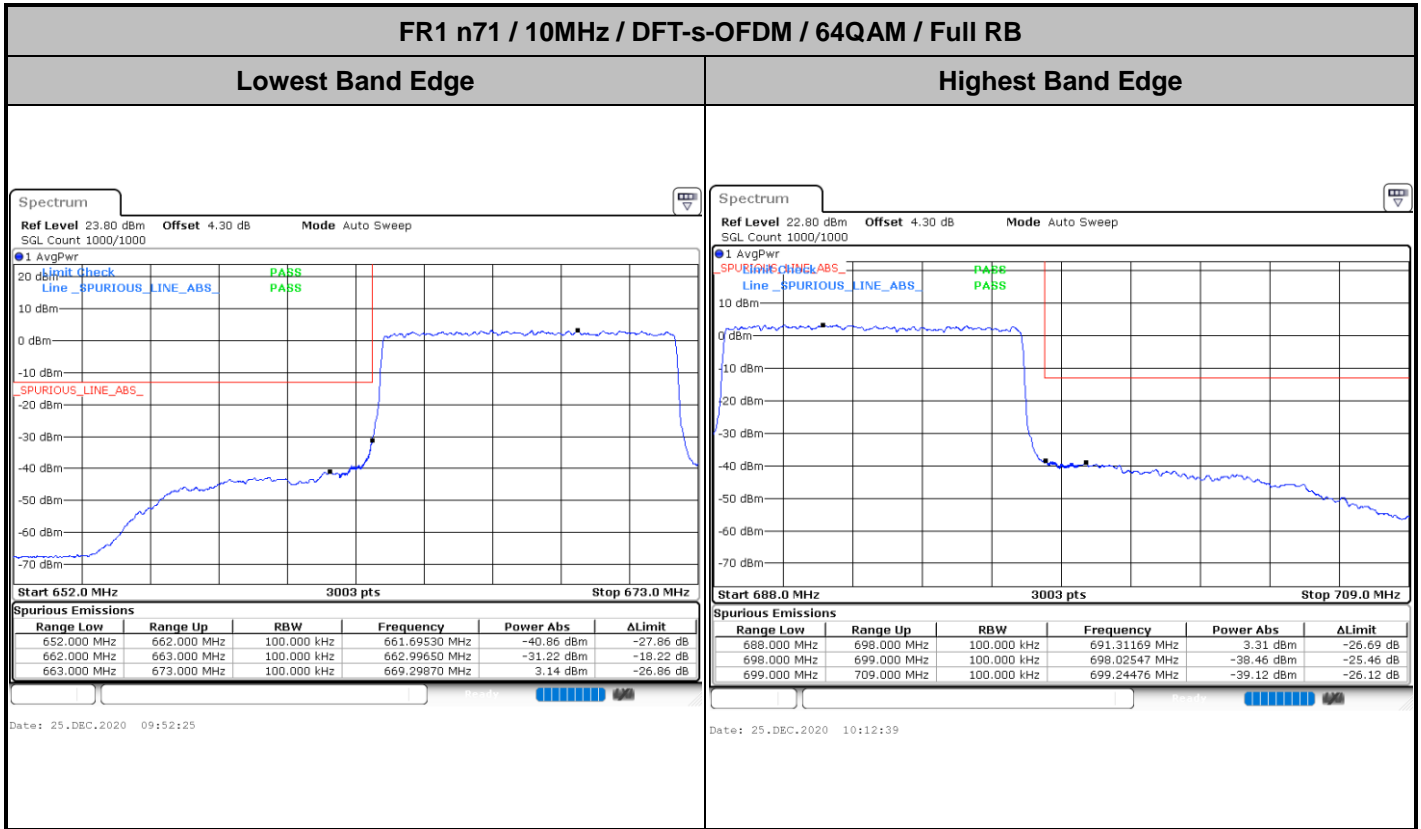


Date: 25.DEC.2020 09:48:45

Date: 25.DEC.2020 10:08:11





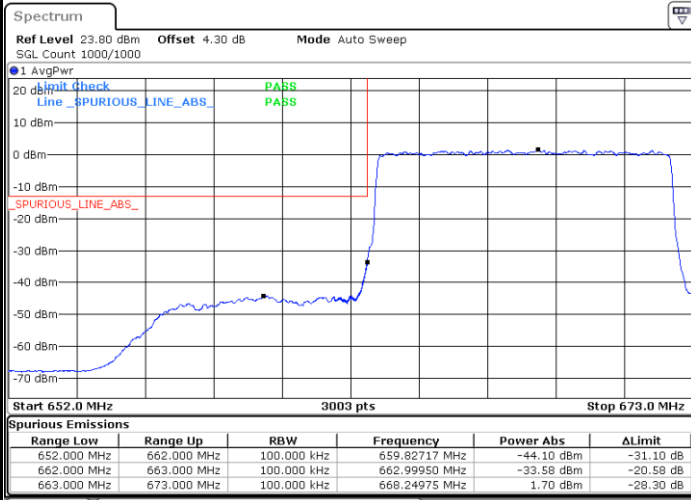




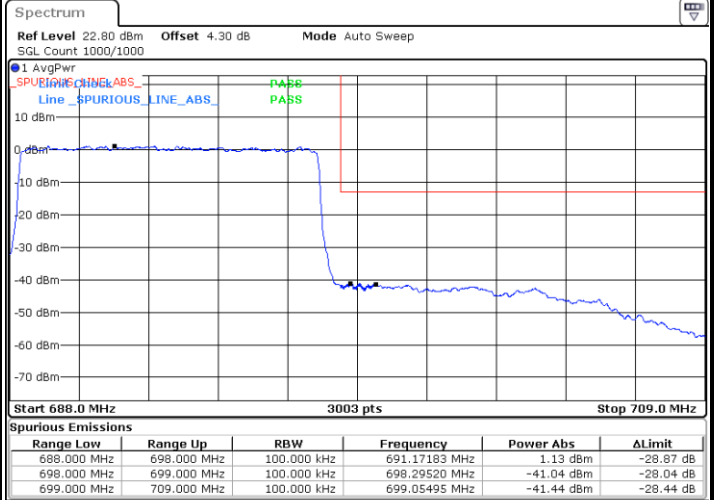
FR1 n71 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 09:53:44



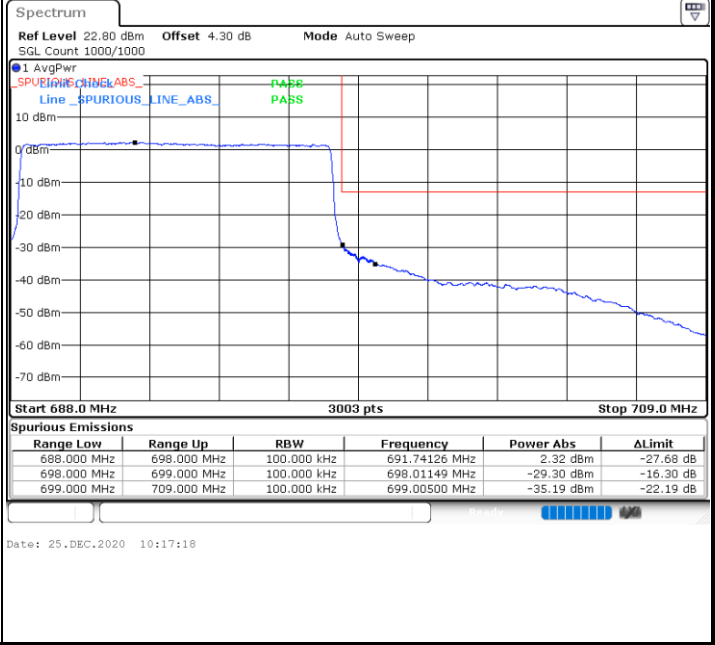
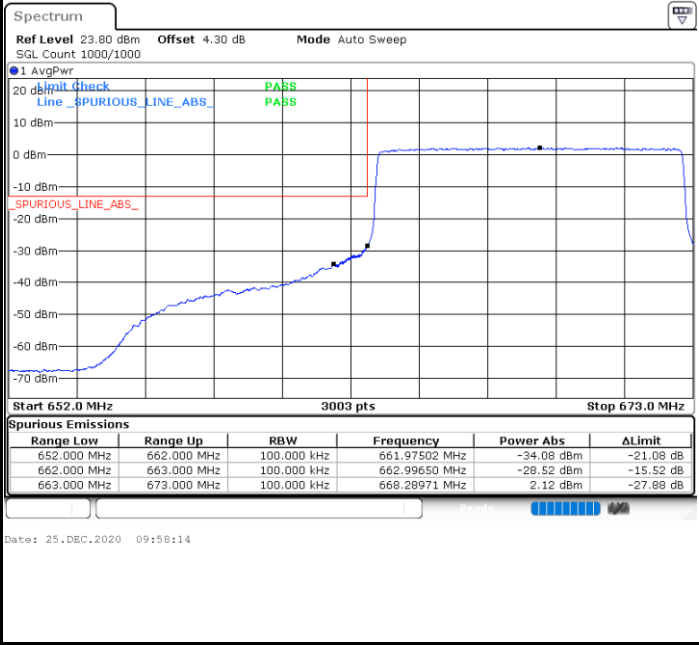
Date: 25.DEC.2020 10:14:44



FR1 n71 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

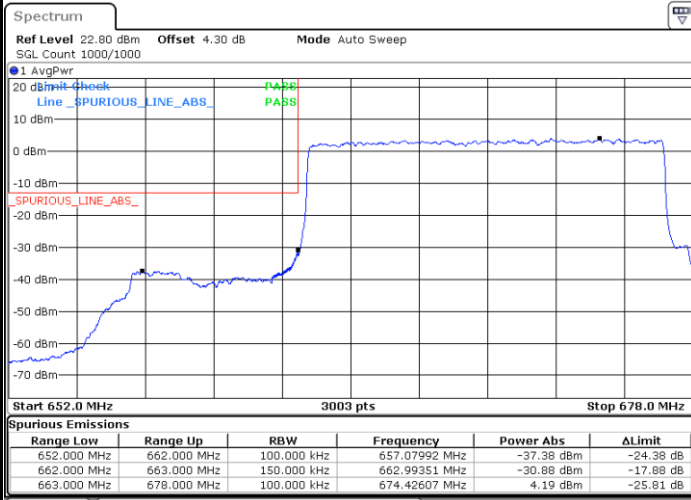




FR1 n71 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 14:55:32

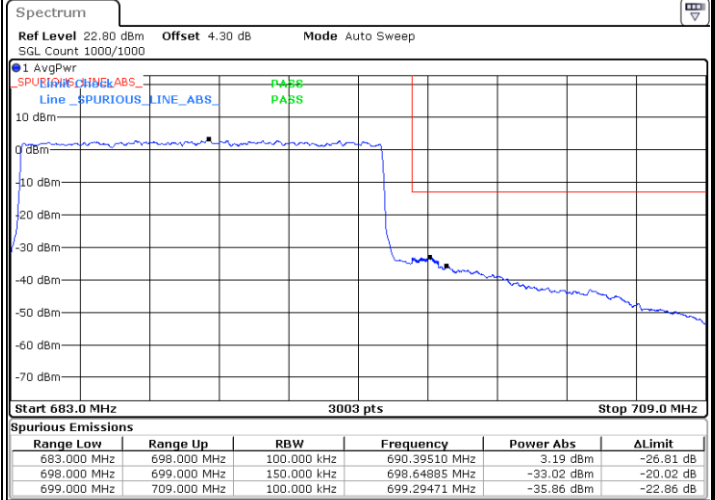
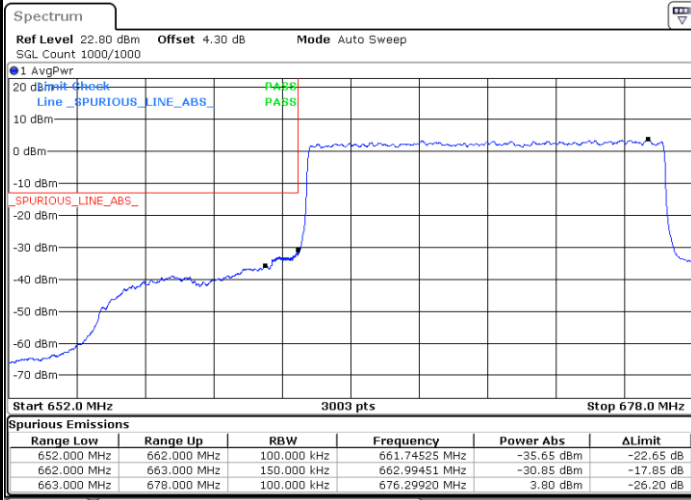
Date: 25.DEC.2020 15:05:29



FR1 n71 / 15MHz / DFT-s-OFDM / QPSK / Full RB

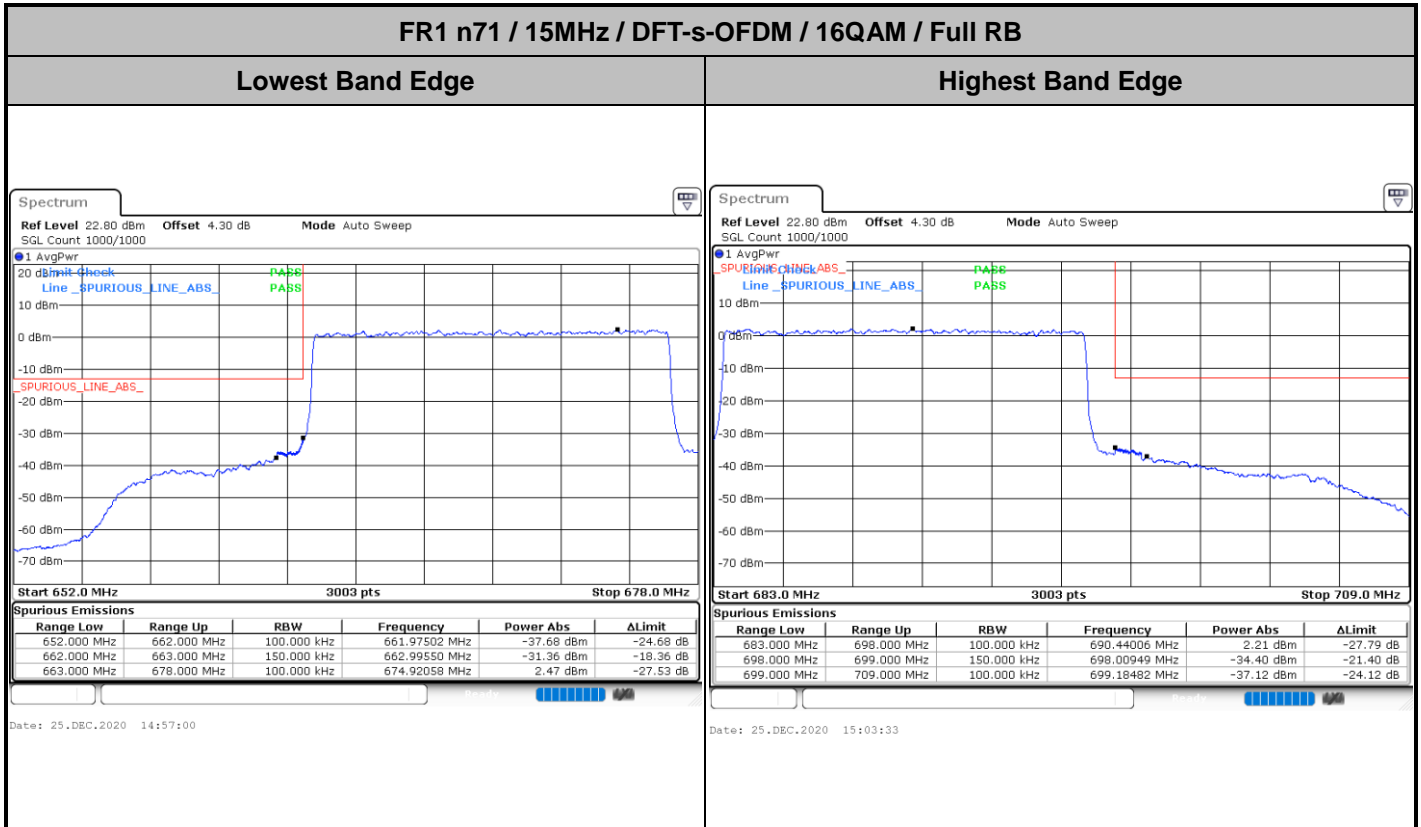
Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 14:56:15

Date: 25.DEC.2020 15:04:26

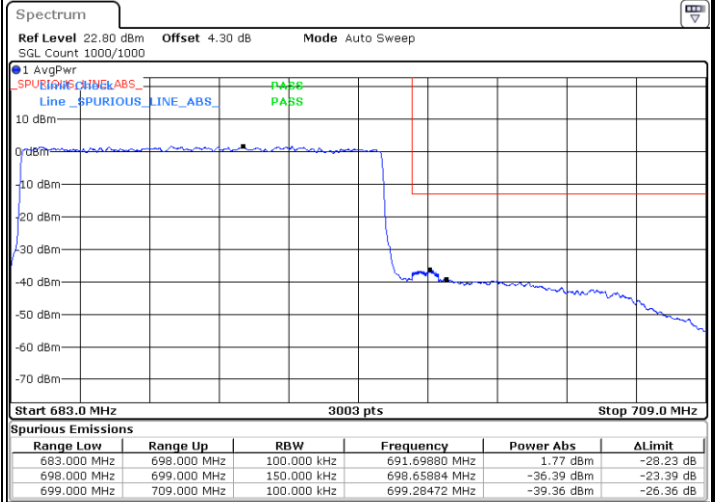
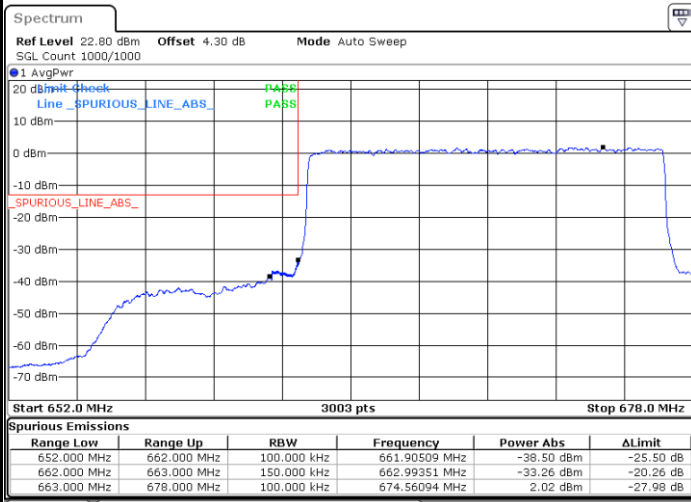




FR1 n71 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 14:57:44

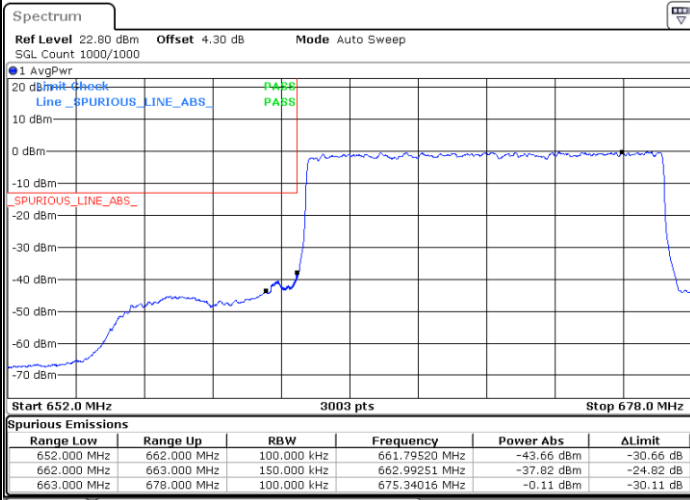
Date: 25.DEC.2020 15:02:23



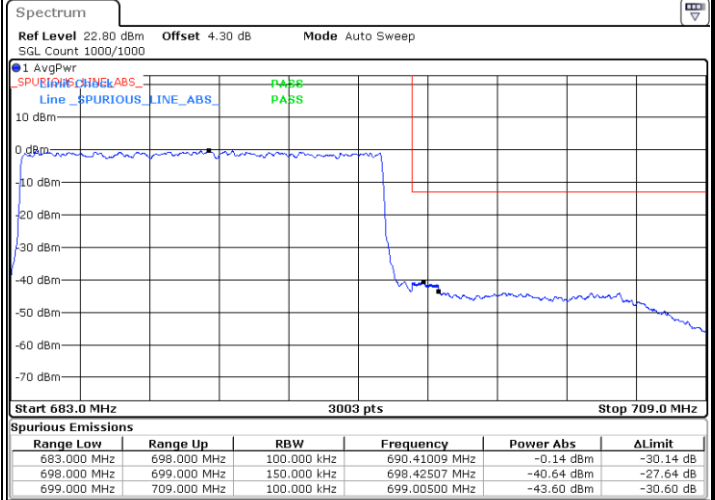
FR1 n71 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

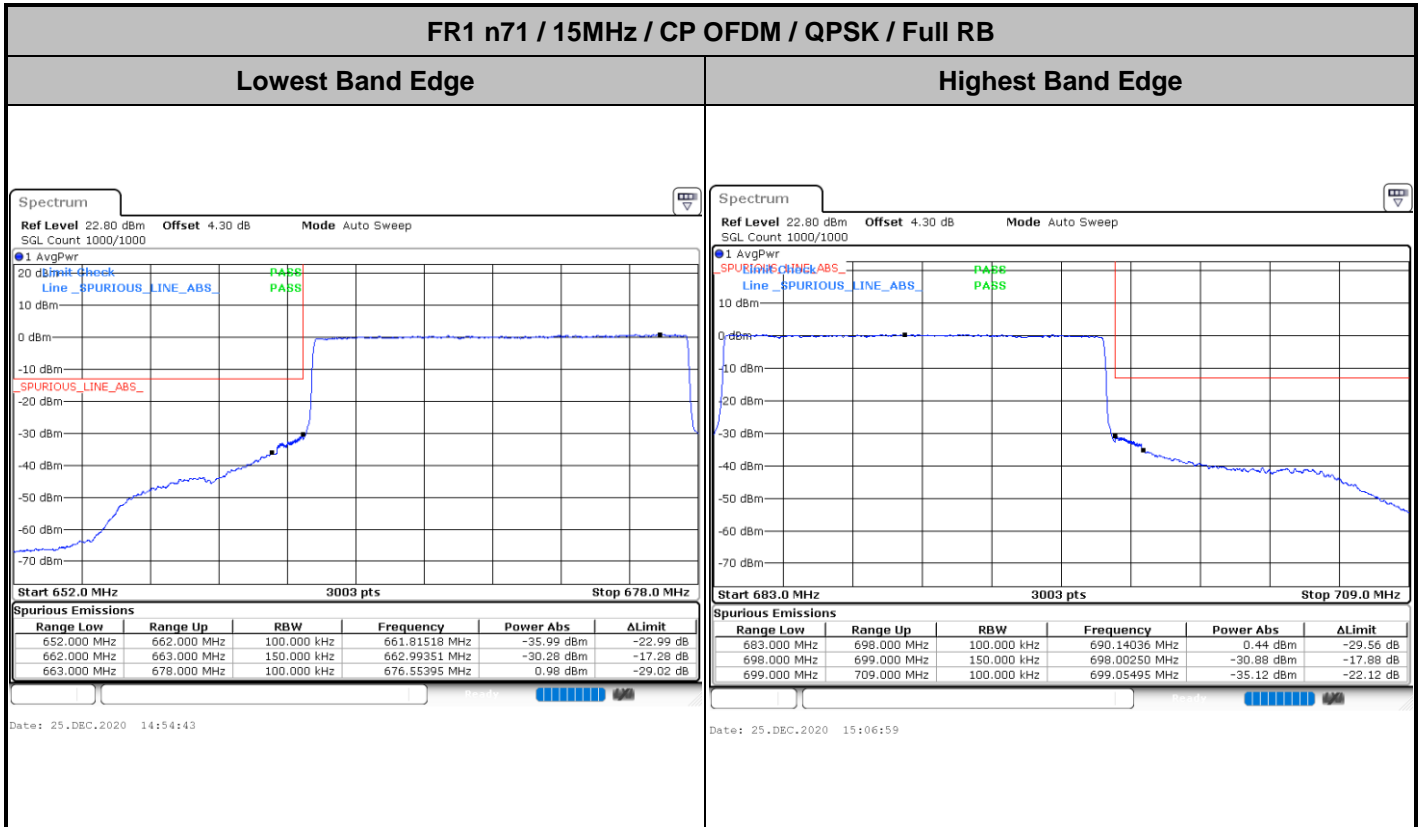
Highest Band Edge



Date: 25.DEC.2020 14:59:54



Date: 25.DEC.2020 15:01:26

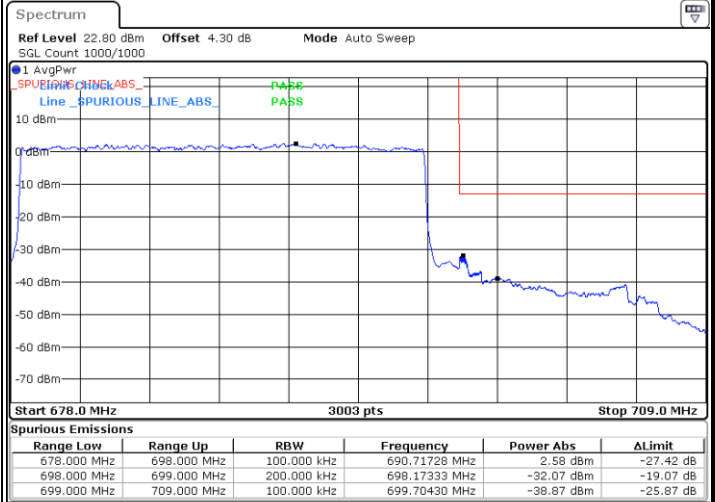
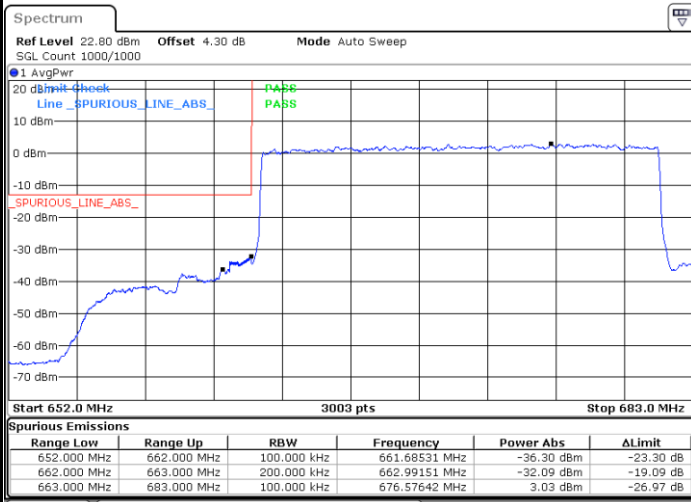




FR1 n71 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 12:40:35

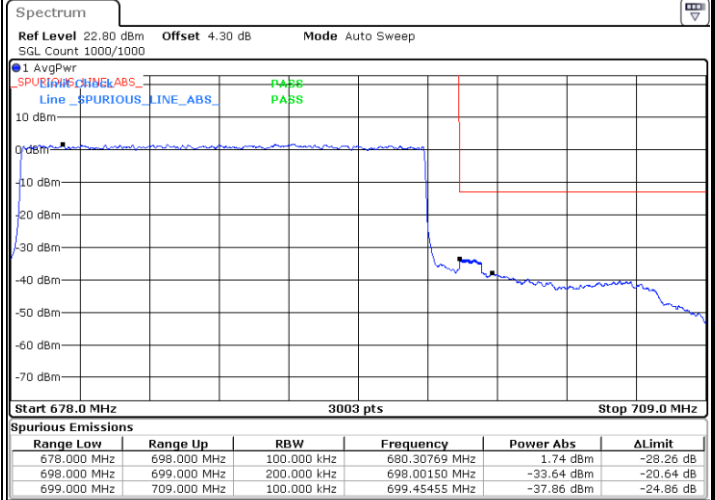
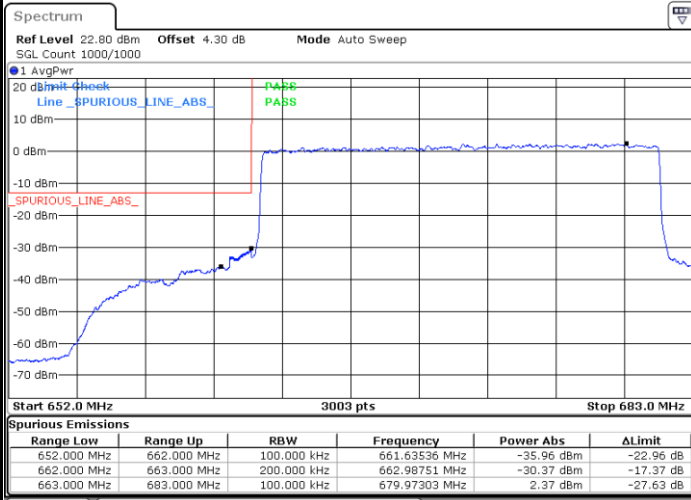
Date: 25.DEC.2020 13:38:23



FR1 n71 / 20MHz / DFT-s-OFDM / QPSK / Full RB

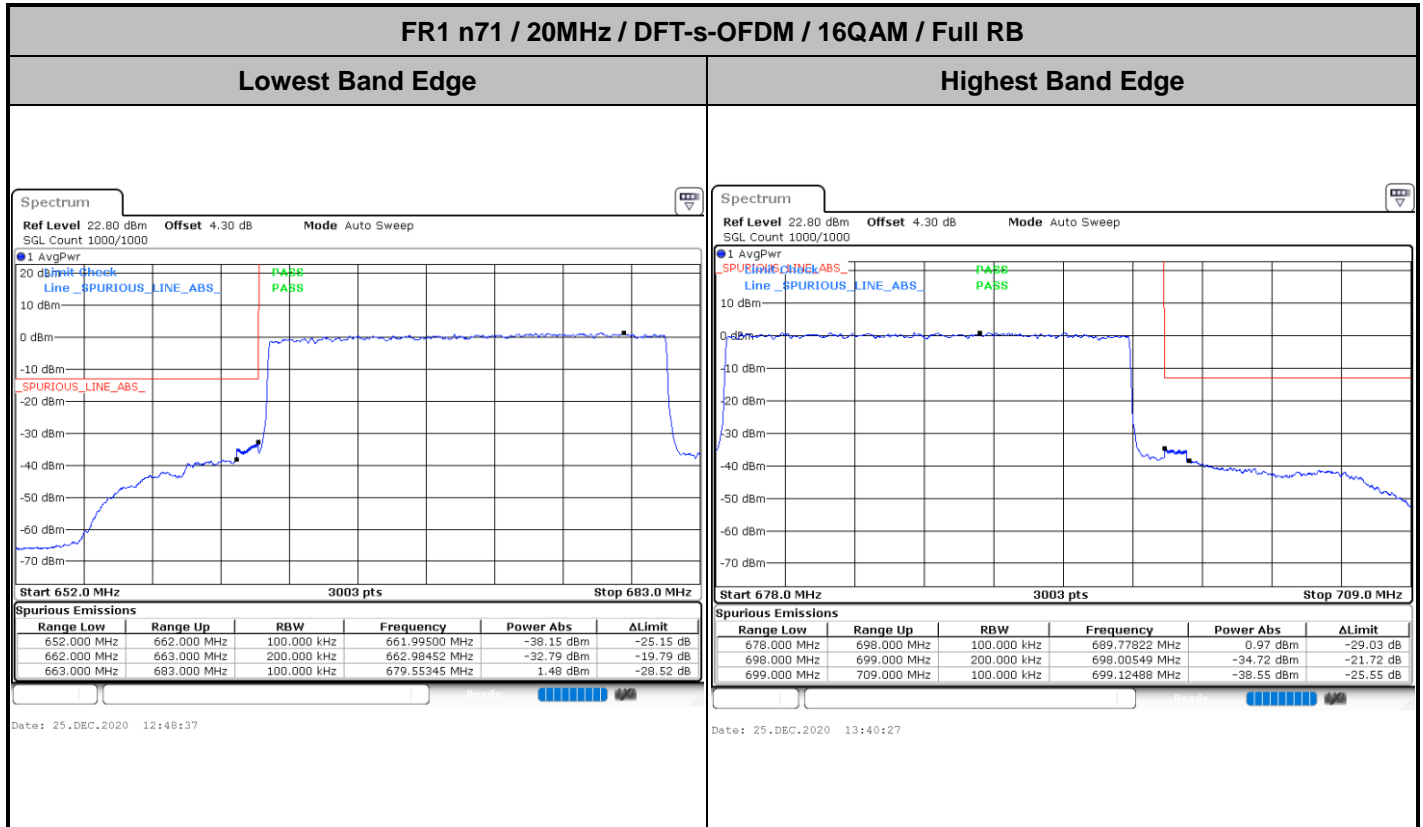
Lowest Band Edge

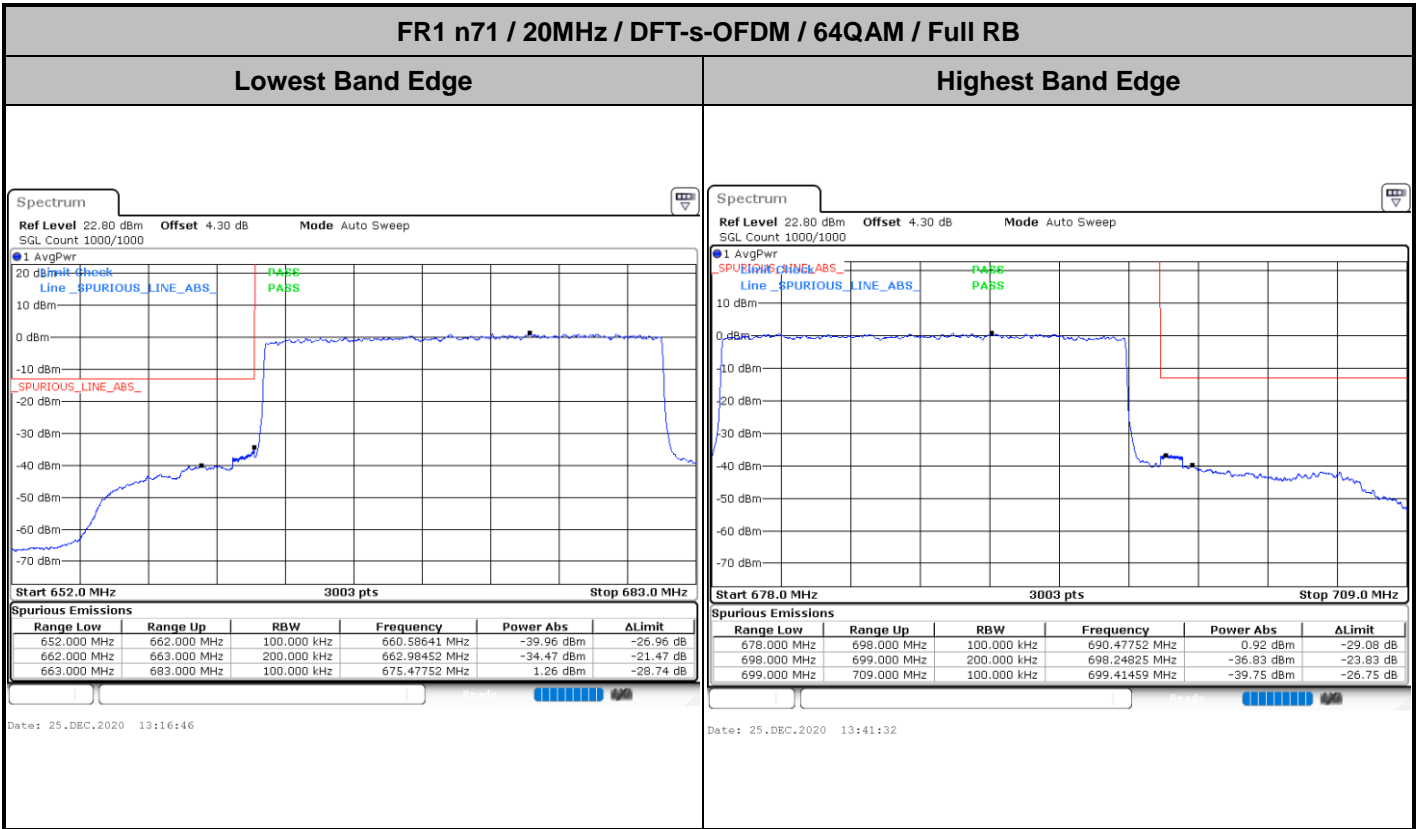
Highest Band Edge



Date: 25.DEC.2020 12:42:12

Date: 25.DEC.2020 13:39:33



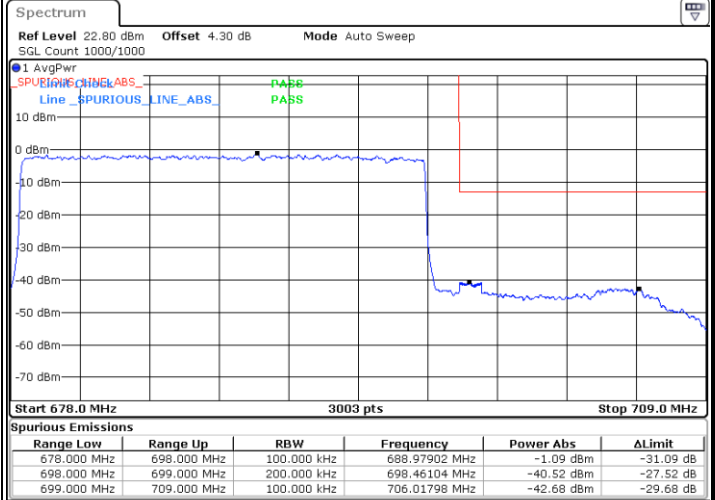
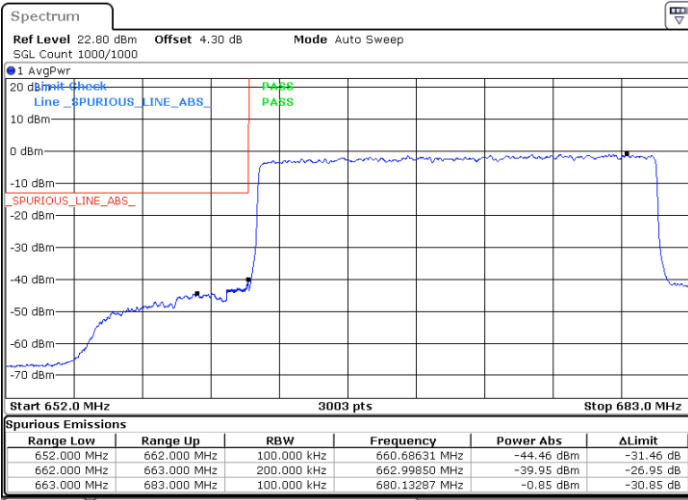




FR1 n71 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 13:04:26

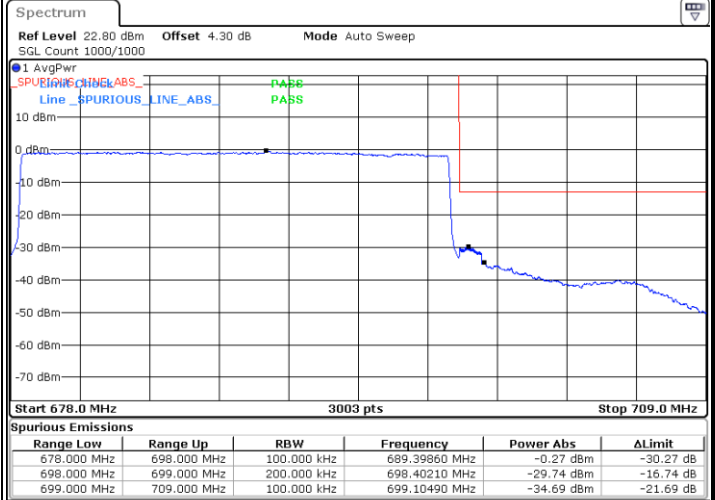
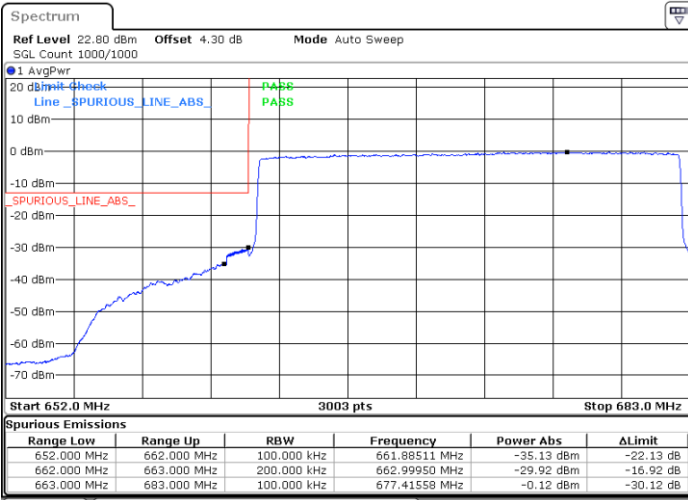
Date: 25.DEC.2020 13:43:32



FR1 n71 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



Date: 25.DEC.2020 13:11:44

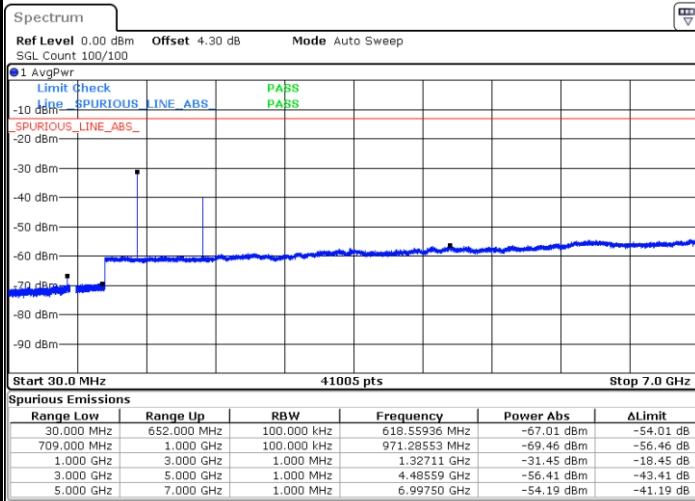
Date: 25.DEC.2020 13:44:41



Conducted Spurious Emission

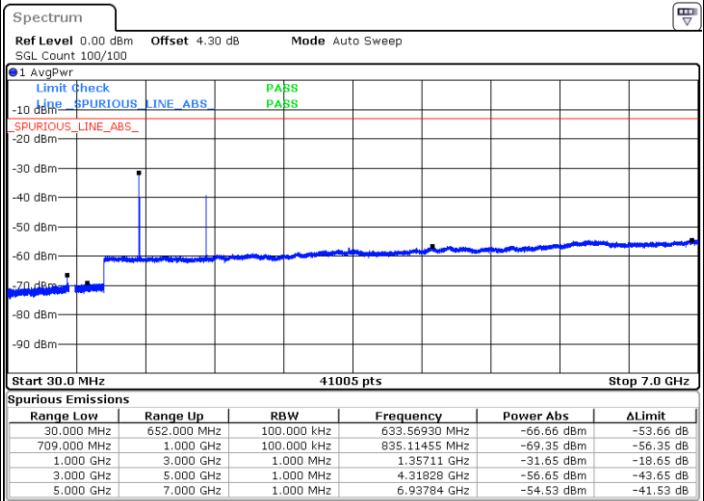
FR1 n71 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



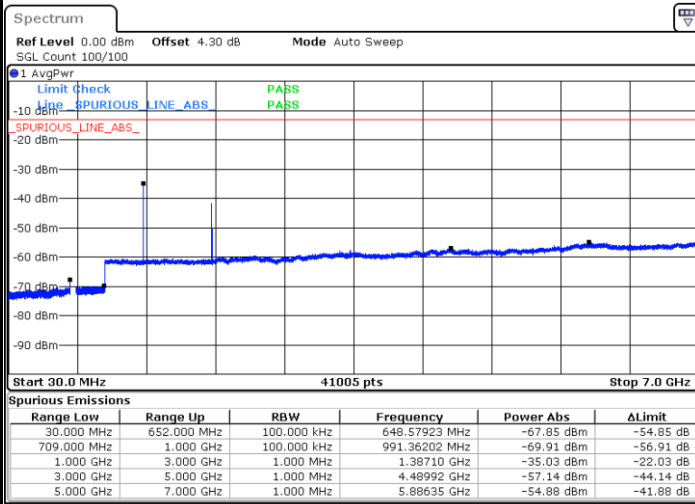
Date: 16.DEC.2020 13:52:25

Middle Channel



Date: 16.DEC.2020 13:51:37

Highest Channel



Date: 25.DEC.2020 09:39:44



Frequency Stability

Test Conditions		FR1 n71 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0304	PASS
40	Normal Voltage	0.0287	
30	Normal Voltage	0.0279	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0260	
0	Normal Voltage	0.0309	
-10	Normal Voltage	0.0285	
-20	Normal Voltage	0.0257	
-30	Normal Voltage	0.0069	
20	Maximum Voltage	0.0297	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0326	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.60 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n77_HPUE

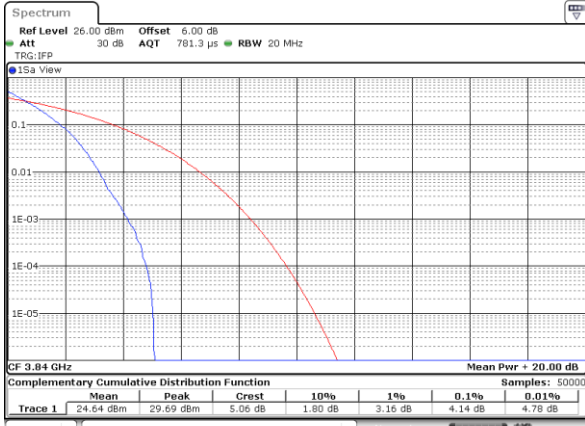
Peak-to-Average Ratio

Mode	FR1 n77 / 20MHz / 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	4.14	5.42	6.32	6.64	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.49				PASS



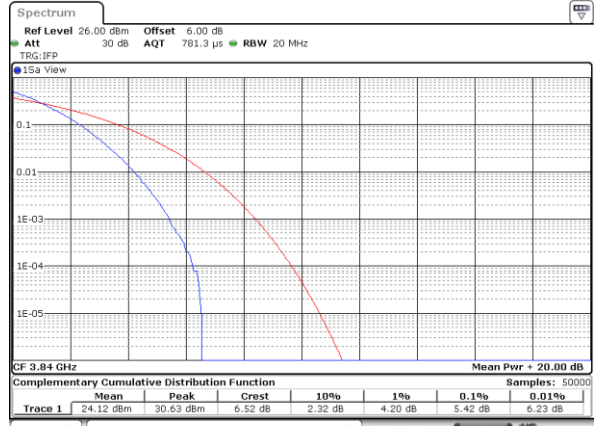
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



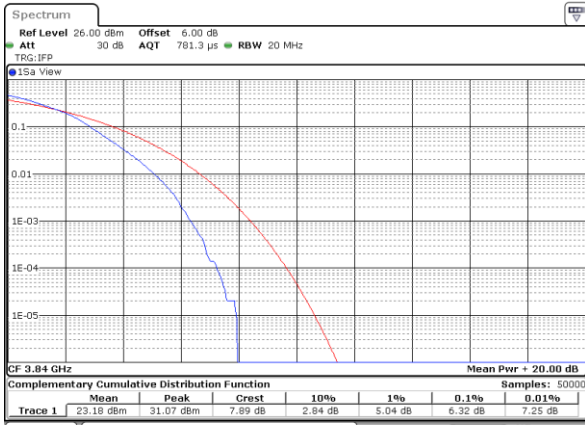
Date: 21.DEC.2020 13:01:39

QPSK



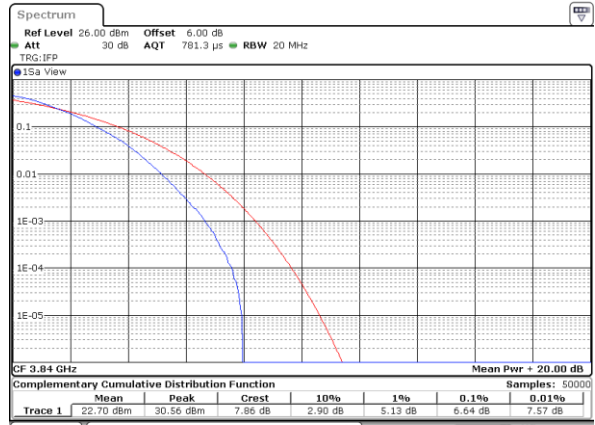
Date: 21.DEC.2020 13:02:08

16QAM



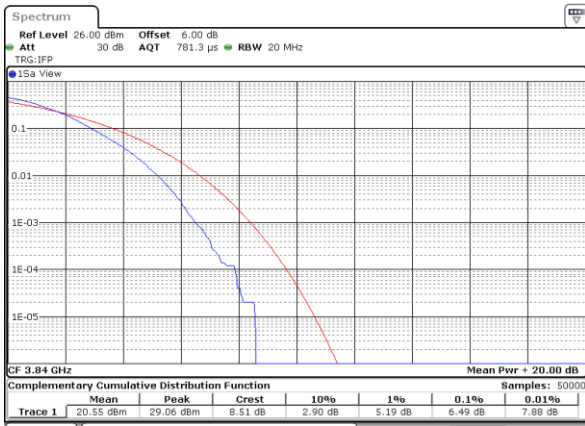
Date: 21.DEC.2020 13:02:42

64QAM



Date: 21.DEC.2020 13:03:09

256QAM



Date: 21.DEC.2020 13:03:36



26dB Bandwidth

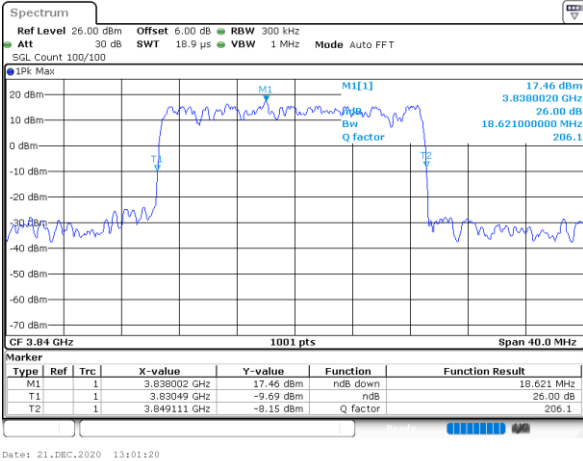
Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	20MHz	40MHz	50MHz	60MHz	80MHz	90MHz	100MHz	
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	
Middle CH	18.62	38.28	N/A	N/A	N/A	N/A	99.30	

Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	20MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	19.26	19.46	40.20	40.28	N/A	N/A	N/A	N/A
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	19.50	18.98	40.36	40.20	N/A	N/A	N/A	N/A
BW	80MHz		90MHz		100MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	N/A	N/A	N/A	N/A	100.30	100.30		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	N/A	N/A	N/A	N/A	100.50	100.30		



FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

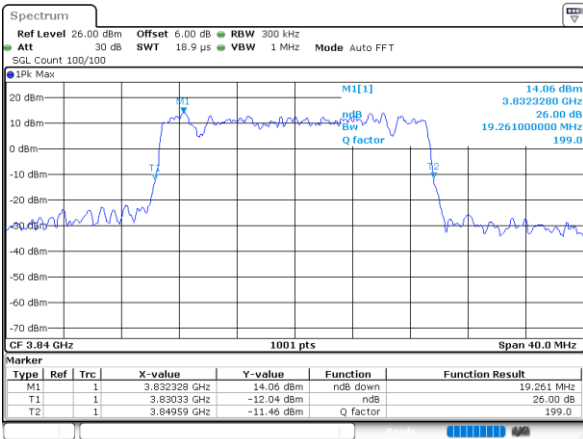
PI/2 BPSK



Date: 21.DEC.2020 13:01:20

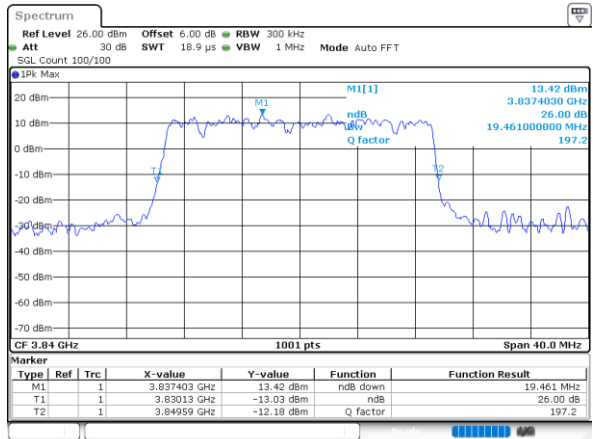
FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



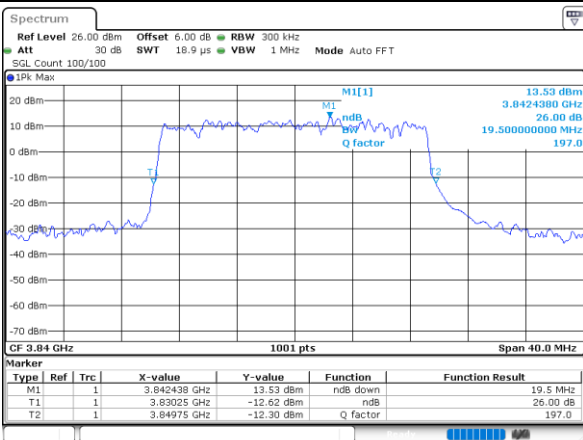
Date: 21.DEC.2020 13:07:32

16QAM



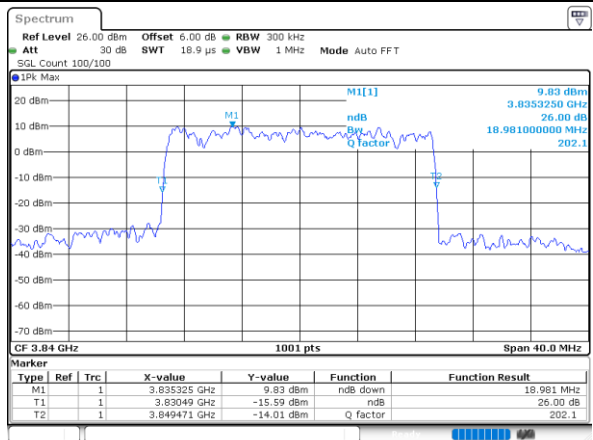
Date: 21.DEC.2020 13:07:09

64QAM



Date: 21.DEC.2020 13:06:50

256QAM

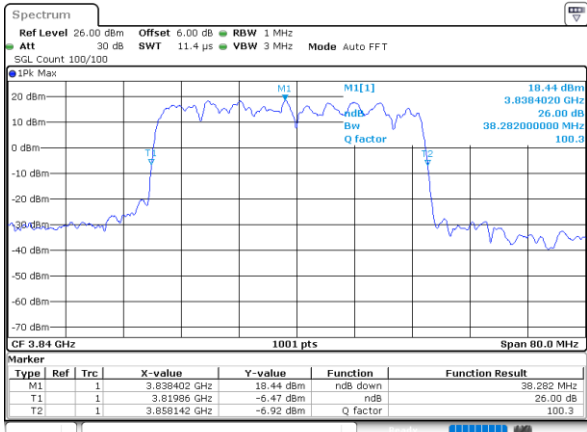


Date: 21.DEC.2020 13:06:16



FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

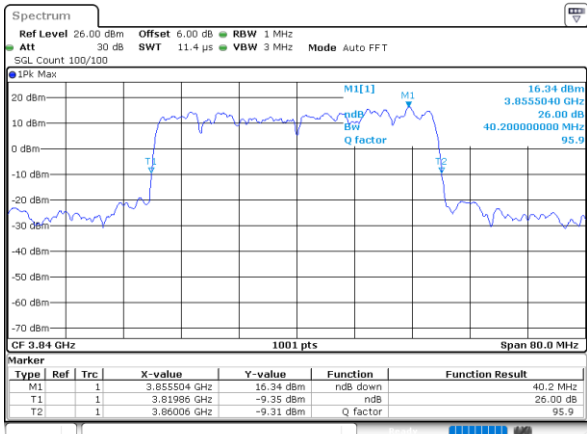
PI/2 BPSK



Date: 21.DEC.2020 12:59:17

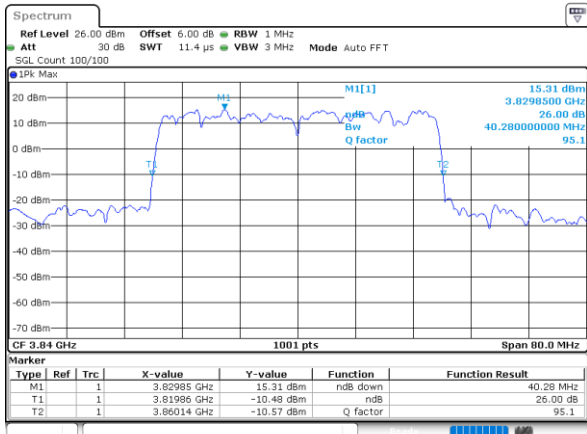
FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



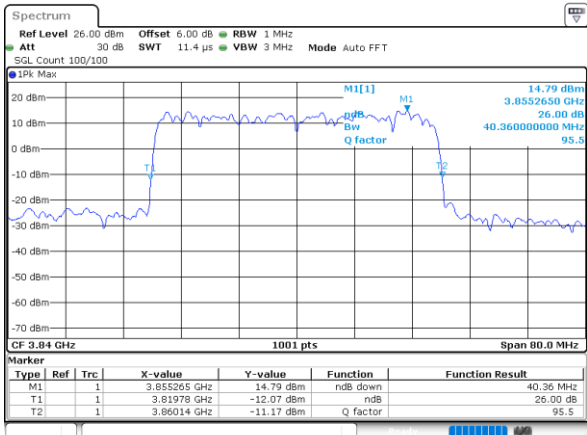
Date: 21.DEC.2020 12:57:38

16QAM



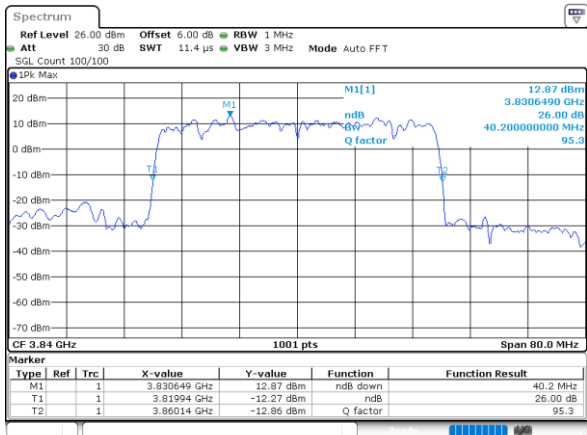
Date: 21.DEC.2020 12:58:03

64QAM



Date: 21.DEC.2020 12:58:20

256QAM

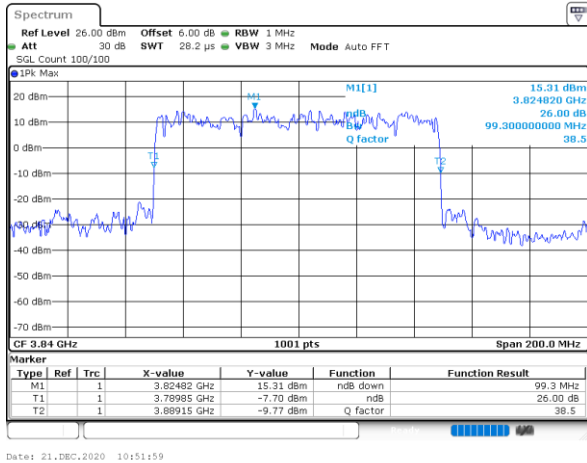


Date: 21.DEC.2020 12:58:42



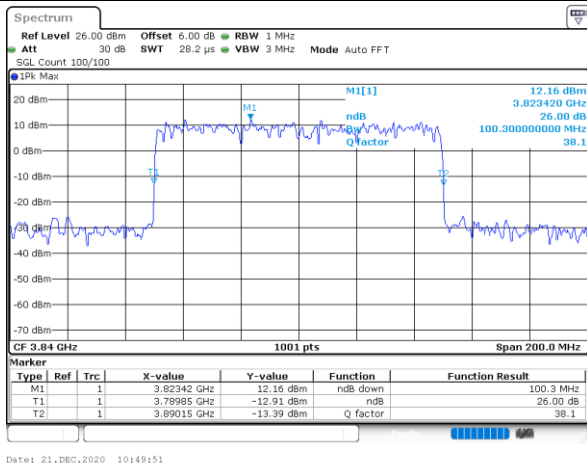
FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

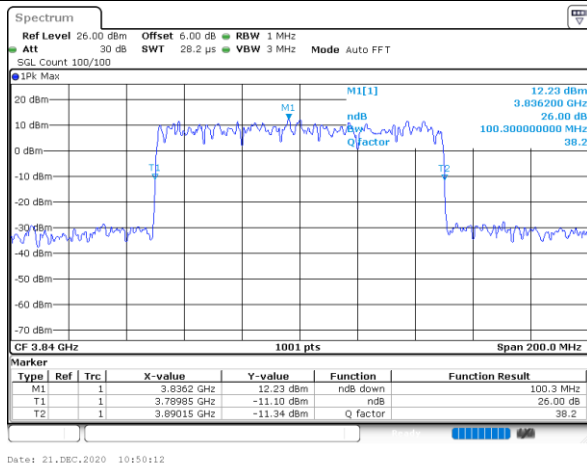


FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

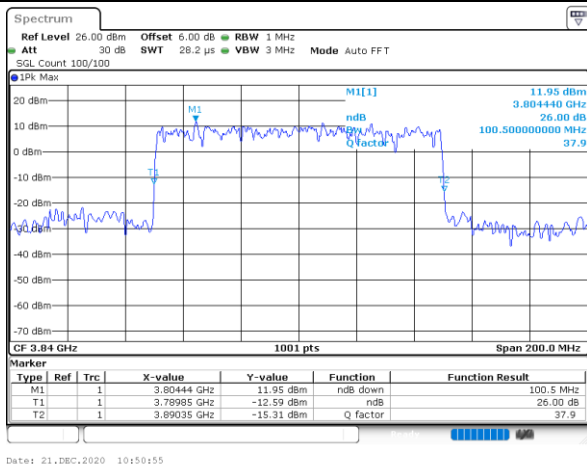
QPSK



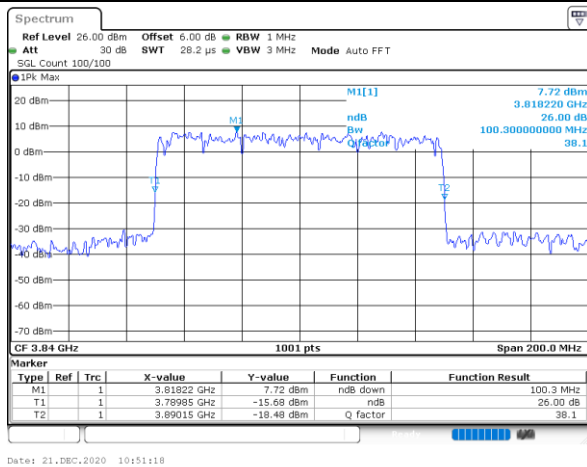
16QAM



64QAM



256QAM





Occupied Bandwidth

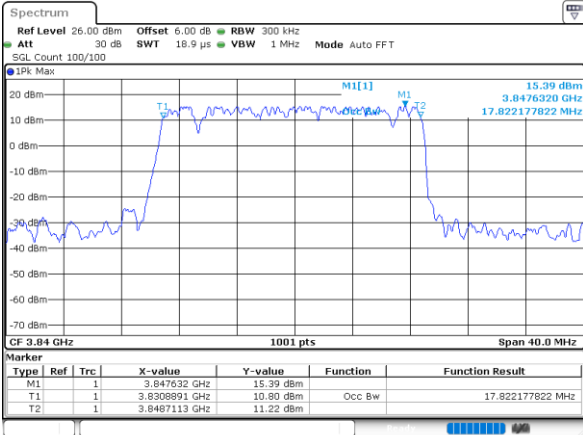
Mode	FR1 n77 : OB BW(MHz) / DFT-S OFDM							
BW	20MHz	40MHz	50MHz	60MHz	80MHz	90MHz	100MHz	
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	
Middle CH	17.82	35.96	N/A	N/A	N/A	N/A	96.70	

Mode	FR1 n77 : OB BW(MHz) / CP OFDM							
BW	20MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	18.22	18.18	38.12	38.36	N/A	N/A	N/A	N/A
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	18.18	18.18	37.96	37.96	N/A	N/A	N/A	N/A
BW	80MHz		90MHz		100MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	N/A	N/A	N/A	N/A	97.10	97.30		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	N/A	N/A	N/A	N/A	97.50	97.30		



FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

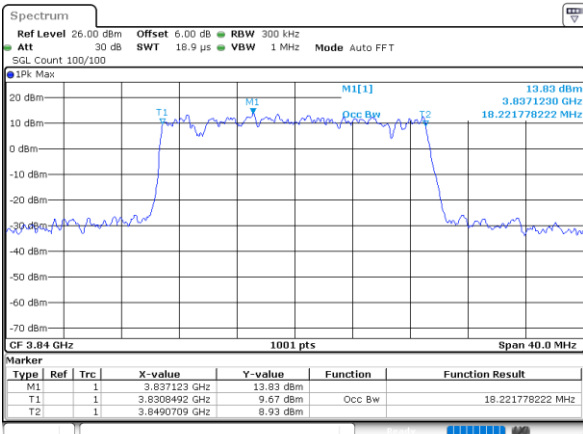
PI/2 BPSK



Date: 21.DEC.2020 13:01:13

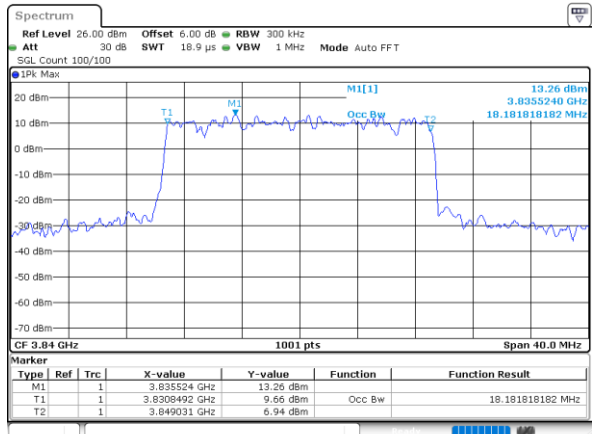
FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

QPSK



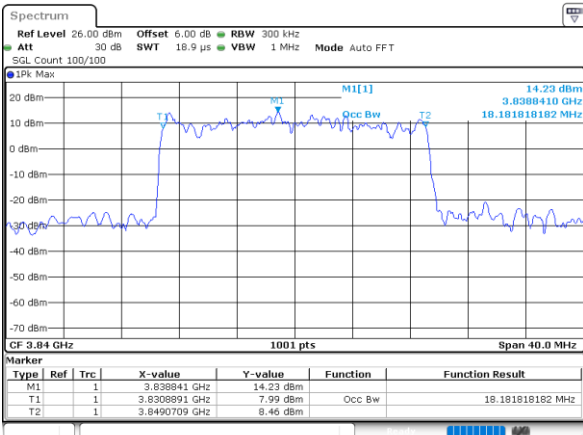
Date: 21.DEC.2020 13:07:26

16QAM



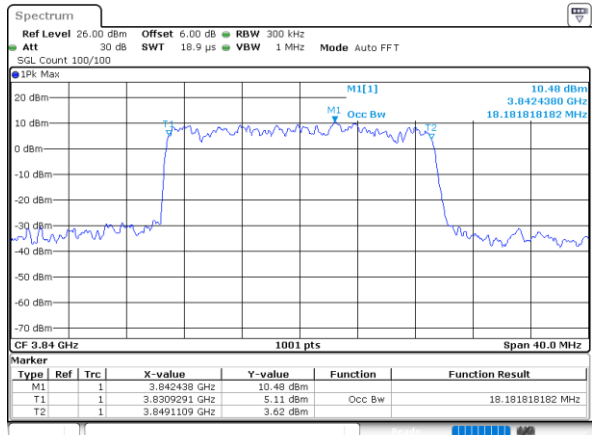
Date: 21.DEC.2020 13:07:02

64QAM



Date: 21.DEC.2020 13:06:42

256QAM

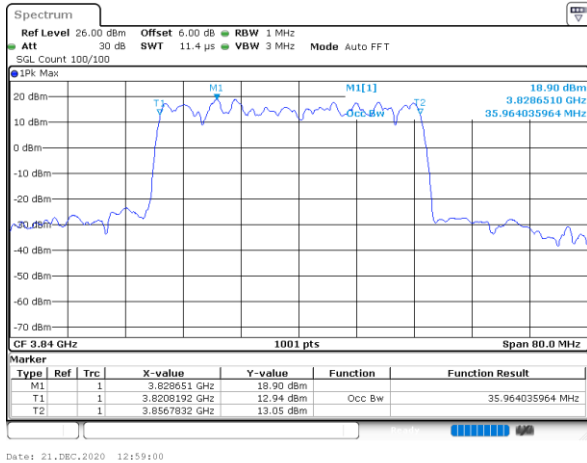


Date: 21.DEC.2020 13:06:11



FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

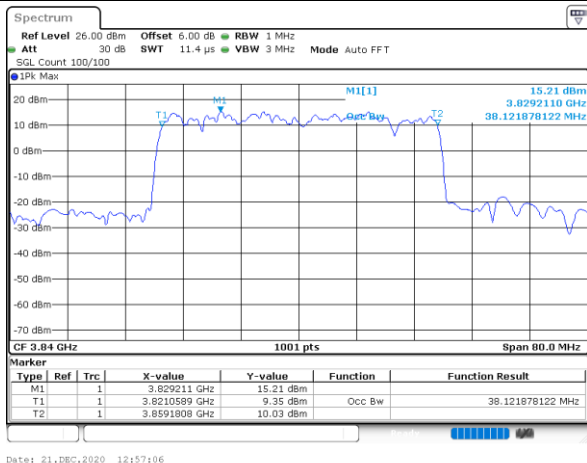
PI/2 BPSK



Date: 21.DEC.2020 12:59:00

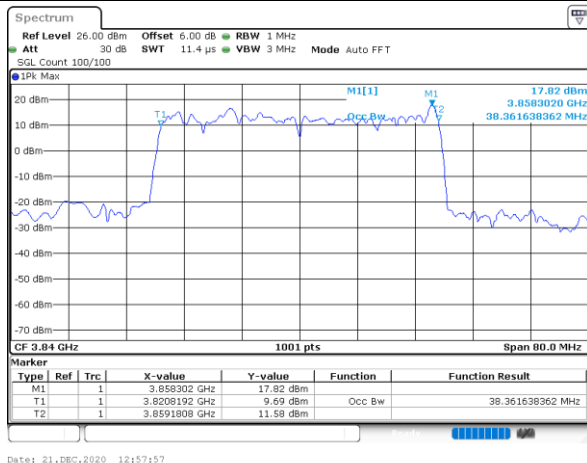
FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

QPSK



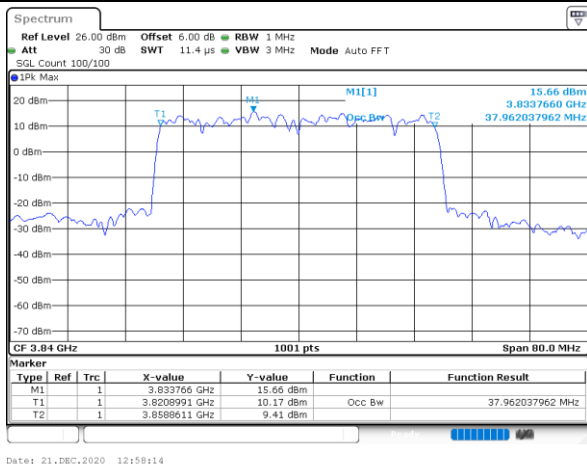
Date: 21.DEC.2020 12:57:06

16QAM



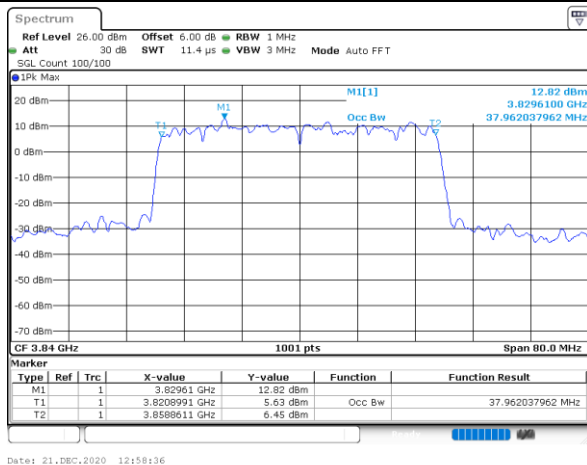
Date: 21.DEC.2020 12:57:57

64QAM



Date: 21.DEC.2020 12:58:14

256QAM

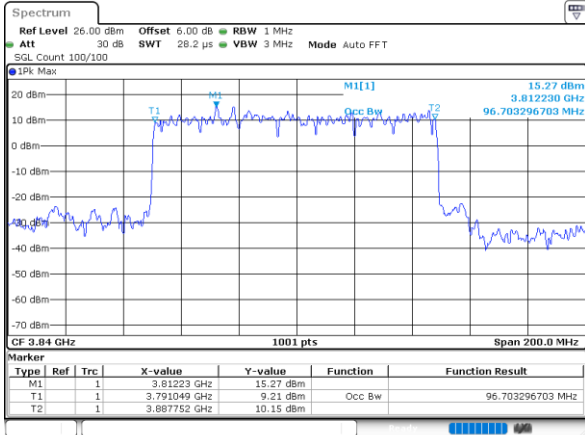


Date: 21.DEC.2020 12:58:36



FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

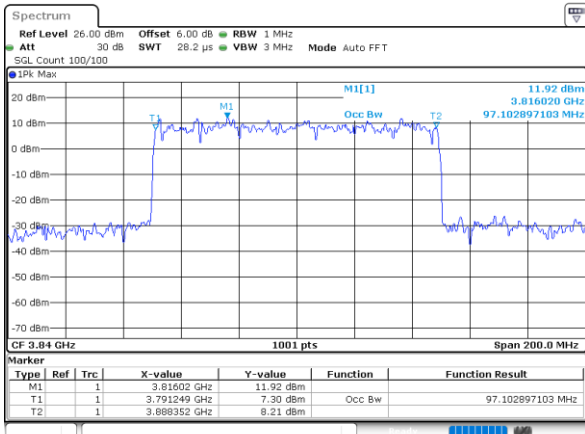
PI/2 BPSK



Date: 21. DEC. 2020 10:51:46

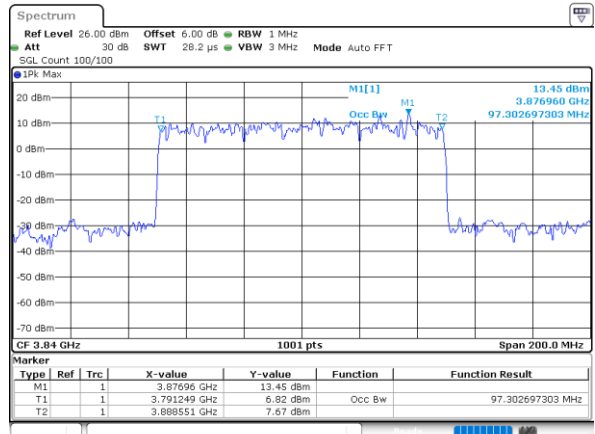
FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

QPSK



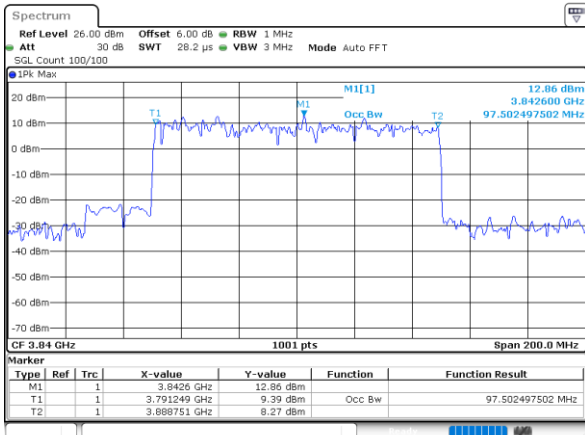
Date: 21. DEC. 2020 10:49:44

16QAM



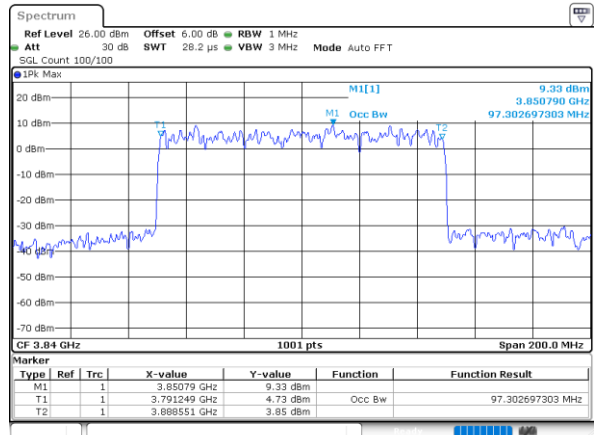
Date: 21. DEC. 2020 10:51:04

64QAM



Date: 21. DEC. 2020 10:50:33

256QAM



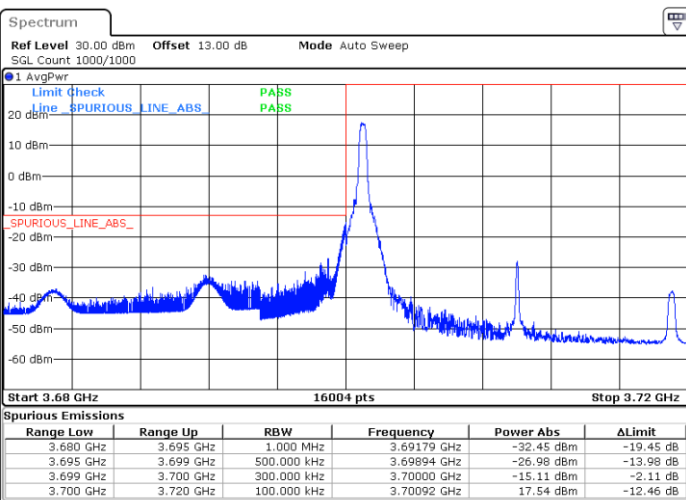
Date: 21. DEC. 2020 10:51:11



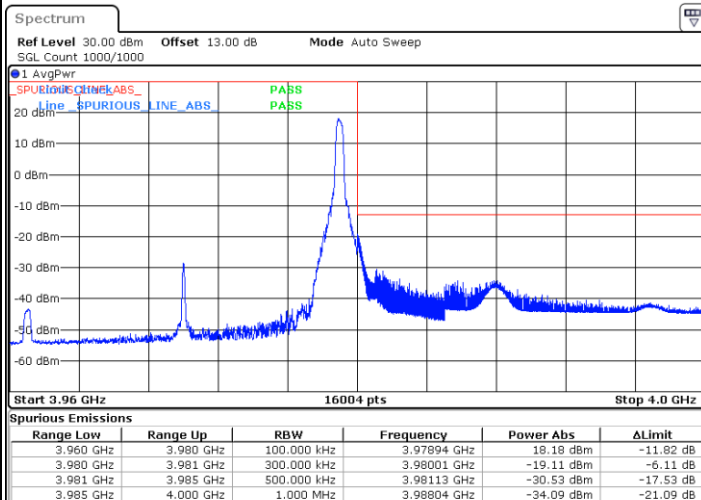
Conducted Band Edge

FR1 n77 / 20MHz / DFT-S OFDM / PI/2 BPSK

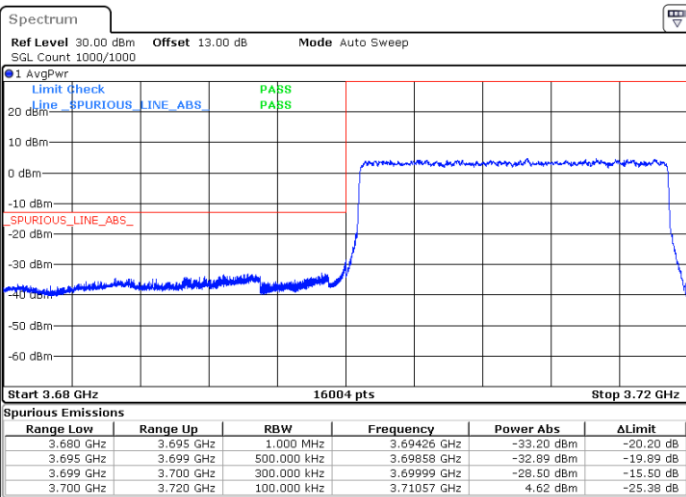
Lowest Band Edge / 1RB0



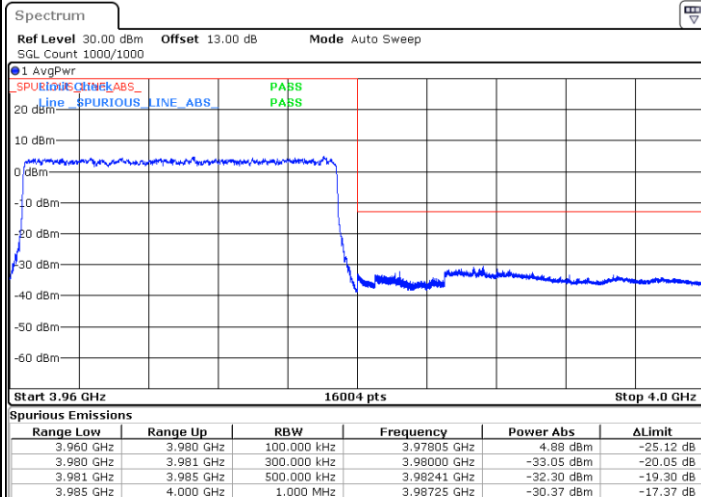
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

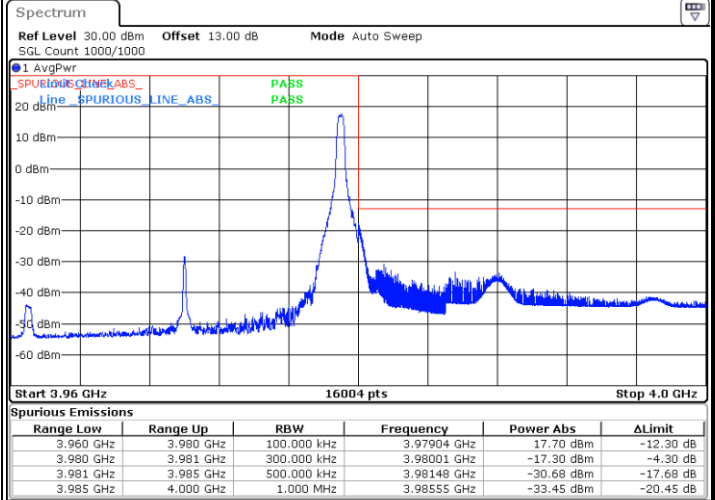
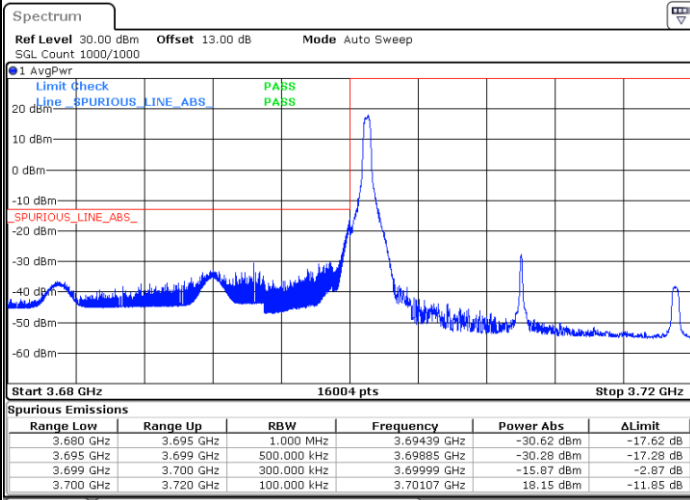




FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

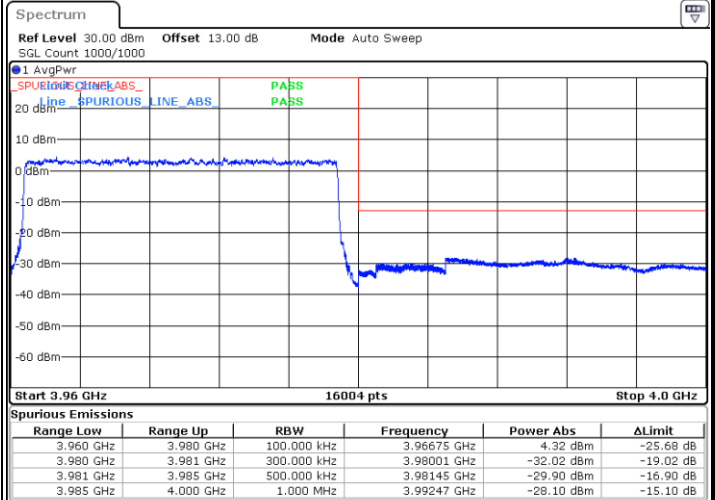
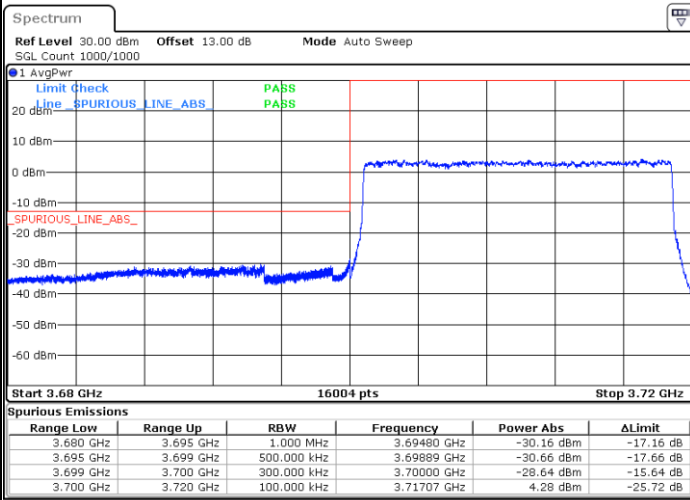


Date: 21.DEC.2020 13:23:46

Date: 21.DEC.2020 14:09:07

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.DEC.2020 13:38:31

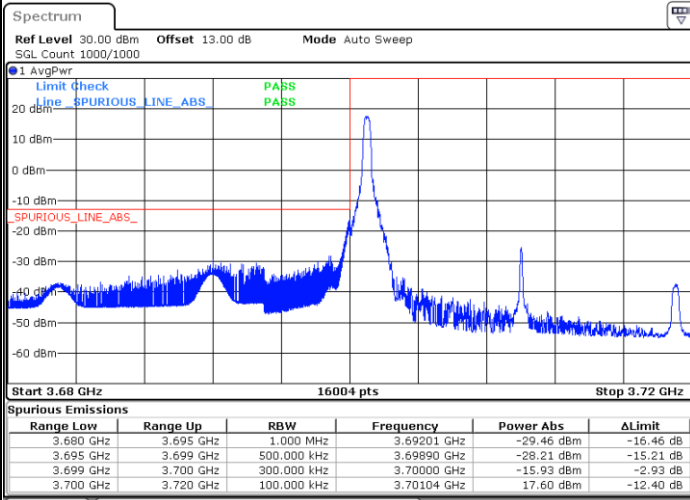
Date: 21.DEC.2020 14:01:01



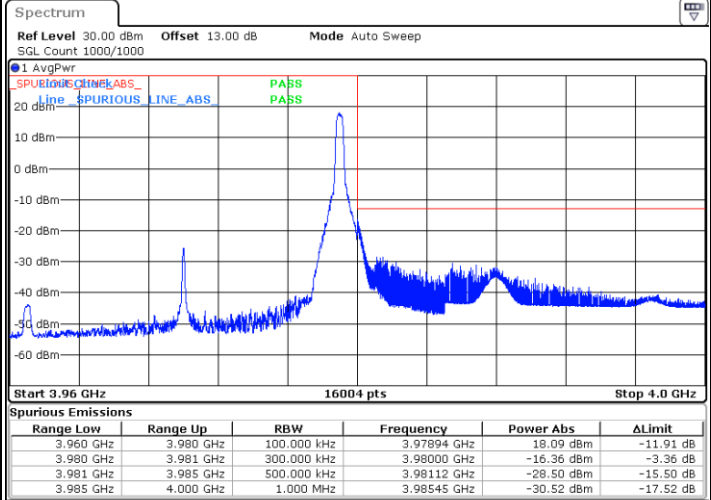
FR1 n77 / 20MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



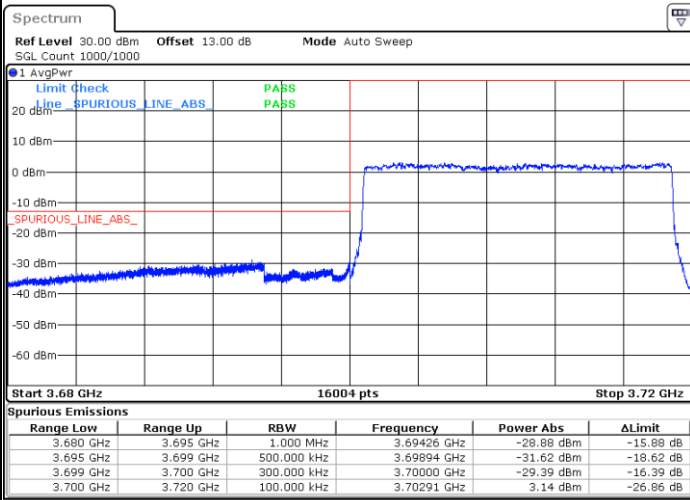
Date: 21.DEC.2020 13:25:42



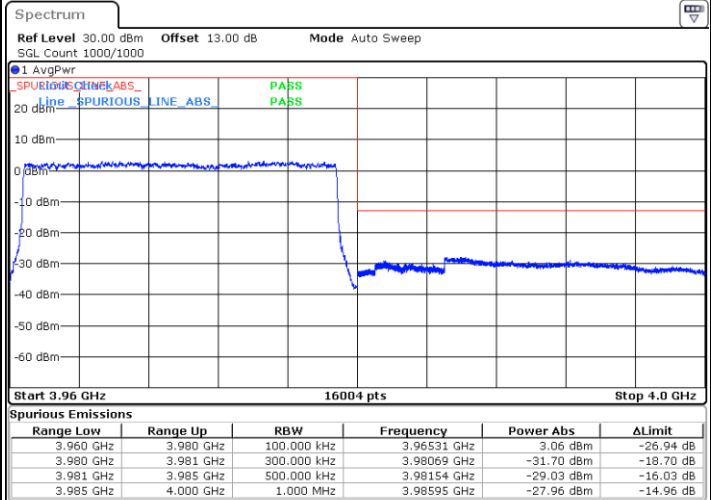
Date: 21.DEC.2020 14:13:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.DEC.2020 13:34:10



Date: 21.DEC.2020 14:02:41